

EXHIBIT "A"

GENERAL OVERVIEW & SCOPE OF SERVICES

General Overview

This proposal is based on our understanding of the project as discussed in our previous meetings and conversations. This proposal consists of providing engineering design and construction phase services associated with the reconstruction of St. Christopher Avenue between FM 518 and FM 270, a distance of approximately 2300 linear feet. The existing street is an open-ditch asphalt type roadway, and is planned to be improved to a concrete curb and gutter street, approximately 31 feet wide, with new 5 foot wide sidewalks, and a new water line. Based on preliminary cost estimates prepared by ARKK, the estimated construction cost for the proposed improvements is \$2.527 million. Based on the available budget, the City will make adjustments to the project. The estimated construction cost does not include costs associated with right of way acquisition.

This proposal includes engineering design, construction phase services, geotechnical engineering services, and surveying services. During construction of the project, the City of League City will provide a project site representative to observe the progress of the street reconstruction. Therefore, construction inspection services by ARKK Engineers personnel are not part of the scope of this project. However, a limited budget for project support services to assist and aid the City's project site representative during construction is included in this proposal. This proposal does not include performing any Environmental Studies. Should the need arise during the design phase to perform any environmental investigations, a separate proposal will be submitted to the City. Construction material testing is also not included and the City will contract directly with a material testing firm during construction. The proposal is separated into Basic Services (expected normal engineering services) and Special Services.

SCOPE OF SERVICES

A. Design Phase

- Research and gather existing data on the project such as existing utility information, and pipeline crossings.
- Plot survey data of the project alignment.
- Provide design for the paving, drainage, and any required water improvements for the project areas.
- Obtain any available record drawings from the City.

- Evaluate existing utilities to determine the impact of the proposed improvements on the existing utilities.
- Coordinate with the City during the design phase.
- Prepare 30% Preliminary Engineering Plans and meet with City staff at the 30% Design Phase.
- Proceed with the 60% engineering design based on input/direction from the City during the 30% Design Meeting.
- Provide two (2) draft sets of 60% plan drawings and specifications to the City for review and comments.
- Coordinate and submit 60% plan drawings to the utility companies for review and comments.
- Incorporate comments from the City and the utility companies into the bid documents.
- Coordinate with the various pipeline companies and submit drawings for review and approval.
- Provide two (2) draft sets of 90% plan drawings and specifications to the City for review and comments.
- Incorporate comments from the City and various entities into the final bid documents. Finalize a bid document package comprising of plan drawings and specifications showing the proposed improvements.
- Prepare final project specifications, drawings, bid documents and construction drawings based on anticipated improvements to be bid as a single construction package.
- Obtain utility companies signatures on the final drawings.
- Prepare a final cost estimate for the project.
- Furnish two (2) sets of construction documents to the City.

Special Services

Traffic Control Plans

- Prepare a Traffic Control Plan for the routing of traffic within the project areas. This plan will include standard traffic control details and additional details as necessary to complete the proposed improvements.

Storm Water Pollution Prevention Plan

- Prepare a 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 for all project areas.

Permitting

- Coordinate with Texas Department of Transportation for improvements performed in their right-of-ways (FM 518 and FM 270) and to obtain approval for improvements within their right of way.
- Furnish necessary documentation to TxDOT for their review. Please note that this is a preliminary permit. The construction contractor will submit pertinent documentation during the construction phase and obtain approval to proceed with construction.

Surveying Services

- Coordinate with the surveying firm and authorize the topographic survey for the project.
- Obtain topographical survey for the improvements within the on right of way of the St. Christopher Avenue street improvements area. The approximate length of survey for this project is 3,400 feet.
- Utilize a surveyor mutually agreeable to ARKK and the City.
- A budget for preparing easement documents for proposed roadway work on St. Christopher Ave. is included.

Reproduction

- Costs for reproduction i.e., reproduction of plans, specifications will be invoiced under this item.

- Reproduction for review sets, submittals to the City, governmental agencies, and utility companies will be included in the cost for reproduction.

B. Bid Phase Services

- Assist the City in obtaining bids for the project. The City will advertise the projects and will absorb all related advertising costs. ARKK will assist the City in developing the wording of the advertisements.
- Prepare and dispense construction documents to the potential bidders for the project through CIVCAST.
- Notify local contractors and provide them with information on the project.
- Prepare an agenda for the pre-bid conference.
- Prepare a summary of meeting minutes for the pre-bid conference and distribute to all attendees.
- Conduct a pre-bid conference for potential bidders for the project.
- During the bidding phase, provide information to and answer questions from prospective bidders regarding the Project's construction documents.
- Prepare project addendums as necessary.
- Prepare a bid tabulation of the bids received for this project.
- 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 for award of the project.

C. Construction Administration Services:

- Prepare contract documents for execution by the successful bidder.
- Prepare an agenda for the pre-construction conference.
- Conduct a pre-construction conference for the project.
- Prepare a summary of meeting minutes for the pre-construction conference and distribute to all attendees.

- Review and respond accordingly to all submittals as required by the contract specifications.
- Conduct monthly progress meetings for the project.
- Prepare a summary of meeting minutes for the progress meetings and distribute to all attendees.
- Prepare change orders as necessitated by field conditions.
- Review the contractor's pay estimates, coordinate with the City's inspector, and make payment recommendations to the City.
- Visit the site at intervals appropriate to the 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. City of League City will be providing an inspector to observe the work.
- ARKK will not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor(s) or the safety precautions and programs incident to the work of the Contractor(s). ARKK'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 ARKK will not be responsible for the failure of Contractor(s) to perform the work in accordance with the Contract Documents. During site visits and on the basis of on-site observations ARKK shall keep the City informed of the progress of the work, shall 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 prepare a punch list item summary.
- Obtain close-out documents from the Contractor and make a recommendation for Final Payment on the project.
- Prepare one set of reproducible record plans based on drawings provided by the construction contractor.

D. Construction Phase Support:

- Provide support to the City's project representative during the construction phase.

- Provide engineering and technical office personnel support during construction. These office personnel, consisting of Professional Engineers and design staff, provide on-site support to address contractor's questions, resident's concerns and any conflicts uncovered in the field.

EXHIBIT 'B' - FEE

FEE

Design Services: the lump sum amount of:	\$148,435.00
Topographic Surveying (Cost plus 10%):	\$14,245.00
Easement Document Preparation Budget: (Cost plus 10%)	\$7,260.00
Traffic Control Plan: lump sum amount of	\$7,500.00
Storm Water Pollution Prevention Plan: lump sum amount of	\$2,000.00
Geotechnical Engineering: (Cost Plus 10%):	\$5,390.00
TxDOT Permitting: The lump Sum amount of:	\$2,000.00
Reproduction Budget: (Cost Plus 10%):	\$ 1,500.00
Public Meeting: The lump sum amount of:	\$2,000.00
Bid Phase Services: the lump sum amount of:	\$ 3,940.00
Construction Administration Services: the lump Sum amount of:	\$38,265.00
Construction Phase Support Services: Lump sum amount of:	<u>\$5,000.00</u>
Total Fee	\$237,535.00

EXHIBIT 'C'

RATE SCHEDULE

<u>Employee Classification</u>	<u>Billing Rate per hr.</u>
Principal	\$175.00
Project Manager	\$140.00 – \$165.00
Project Engineer	\$100.00 – \$125.00
CADD Operator	\$ 85.00 – \$110.00
Site Representative/Construction Administrator	\$ 90.00 – \$115.00
Clerical	\$ 45.00 – \$75.00

Hourly billed services will be invoiced based on direct labor cost times a multiplier of 2.99. Reimbursable Expenses will be charged at cost plus 10%. Mileage will be charged at the prevailing federal rate.

EXHIBIT 'D'

SUBMITTAL SCHEDULE

The following is a submittal schedule estimate for each design milestone:

- 30% design submittal – 75 days from Notice to Proceed Date (Includes 45 days for topographic survey).
- 60% design submittal – 60 days from approval of 30% submittal
- 90% design submittal – 60 days from approval of 60% submittal
- 100% design submittal – 30 days from approval of 90% submittal

**ARKK Engineers will endeavor to complete the project and meet the schedule. However, this schedule is dependent on TXDOT's approval of the proposed improvements in their right of way and right of way acquisition.*