

# **EXHIBIT A**

## **Engineer's Scope of Services**

The following provides an outline of the services to be provided by the **Engineer** in the development of the **Project**.

The **Engineer** will provide to the **Owner** the following:

The **Engineer** will provide services for the development of plans, specifications and estimate for the construction of an 8-inch waterline and related appurtenances in downtown San Juan, Texas.

More specifically, the Engineer shall render specific management and engineering services for the development of the Project and fulfillment of this Agreement as follows:

- I. PRELIMINARY PHASE - GENERAL PROJECT MANAGEMENT AND ADMINISTRATION**
- II. DESIGN PHASE - FINAL DESIGN AND PLANS, SPECIFICATIONS, AND ESTIMATES (PS&E)**
- III. CONSTRUCTION PHASE - CONSTRUCTION MANAGEMENT, & SUPPORT & INSPECTIONS**

### **I. PRELIMINARY PHASE**

- a. Attend preliminary conferences with the Owner and, if requested, with the funding agency and other government agencies or interested parties regarding the project.
- b. As work may be required, comply and receive the Owner and the funding agencies approval on all work.
- c. Prepare preliminary engineering plans on the Project in sufficient detail to indicate clearly the problems involved and solutions recommended with the cost estimates.
- d. Obtain the Owner's approval of the work of this Preliminary Phase before proceeding with the next phase.

## **II. DESIGN PHASE**

- a. Attend the respective Owner's meetings as requested for the purpose of explaining completed design work activities.
- b. Advise the Owner of any soil investigations or tests which, in the opinion of the Engineer, may be required for the proper execution of the Project.
- c. Provide all field information and surveys required for the design of the Project.
- d. Plot field data and other survey information for the design of the Project.
- e. Prepare detailed plans, specifications and contract documents and drawings for construction authorized by the Owner.
- f. Furnish, if requested, the engineering data necessary for the Owner to obtain permits required by local, state, and federal authorities.
- g. Prepare cost estimates of authorized construction, based on prices for work. If such estimated costs exceed the monies available, the Owner shall be consulted so that revisions can be made to reduce the cost as required.
- h. Prepare all documents required for the advertisement and bidding of the Project in cooperation with the Owner's staff.
- i. Preparation of any property or easement descriptions that may be required (additional service).

## **III. CONSTRUCTION PHASE**

The Construction Phase will commence with the execution of the prime construction contract(s). The Owner will issue a ten (10) day commence work notice which will signal the commencement of work under any construction contracts and will terminate upon the Owner's approval of the Engineer's written approval of final payment to the Contractor(s). During the Construction Phase, the Engineer will:

- a. Assist the Owner in opening and tabulating bids for the construction of the Project, and advise the Owner in establishing the procedure for entering into construction phase.
- b. Prepare the formal Contract Documents for the Contractor.
- c. Furnish to the Owner six (6) sets of plans and six (6) sets of specifications and contract documents.

- d. Make periodic visits to the site as required pursuant to the standards of Professional Engineers on projects of this nature; provide visits by the Project Engineer or a competent representative of the Engineer to the site of construction for the purpose of monitoring the Contractor's progress and conformance to the construction contract plans and specifications.
- e. Resident Engineer and/or Construction Inspector(s). If requested and authorized by Owner, the Engineer will furnish the services of a Resident Engineer and/or Construction Inspector(s) for continuous on the site inspection of construction to monitor/inspect the Contractor's daily progress and conformance to PS&E specifications. Such services will be negotiated as an Additional Service.
- f. Consult and advise with the Owner and issue all instructions and Change Orders to the Contractor requested by the Owner.
- g. During the progress of actual construction, Engineer will keep the Owner informed with brief and concise information. A monthly progress report will be prepared which will give the Owner a quick glance at the Project insofar as monies spent, construction time elapsed, percent of Project completed, a brief narrative of what problems have been encountered and the anticipated completion date.
- h. Review shop and working drawings furnished by Contractors for general compliance with design concept and with information given in contract documents.
- i. Review and provide a recommendation concerning samples, catalog data, schedules, shop drawings, laboratory, shop and mill tests of material and equipment and other data which the Contractor is required to submit, in compliance with the Contract Documents.
- j. Prepare monthly and final estimates for payments to Contractors.
- k. Upon receipt of notification by the Owner that the work has been completed, the Engineer shall accompany the Owner on the Final Inspection to assure that the total work has been completed in accordance with the Contact Documents.
- l. Prior to the Owner's dispersal of any retainage of funds, render a written opinion to the Owner that the constructions has been completed according to the Contact Documents and provide the Owner with a certificate of completion and release of liens documents from subcontractors.
- m. Provide the Owner with as-built drawings of the constructed improvements, when requested.
- n. The Engineer will be responsible for the interim and final inspection.