

EXHIBIT “A”

SCOPE OF SERVICES & COMPENSATION

WATER UTILITIES FACILITY IMPROVEMENTS - PHASE 2 STORAGE BUNKER SITE CONSTRUCTION

The project will consist of providing drawings, specifications, and construction phase services for a new material storage bunker building and additional concrete pavement at the existing Water Utilities Facility located at 620 Small Hill Street, Grand Prairie, Texas; hereinafter referred to as “the Facility”.

BASIC ENGINEERING SERVICES

Part 1: Preliminary Design Phase

Prepare construction details for the new material storage bunker building and plans and profiles for paving improvements based on discussions of the project needs with Water Utilities Staff. Preliminary plans will be submitted to the City for review at the 30% and 60% completion level together with an Engineer’s Opinion of Probable Construction Cost as described below. Preliminary plans and specifications, including bid item descriptions and contract documents will be submitted to the City for review at the 90% completion level with an Engineer’s Opinion of Probable Construction Cost. Proposal is based on a new material storage bunker building with a concrete foundation and walls and steel roof. Outside dimensions are approximately 150’ x 36’ with five covered material storage bins and one covered bin for drying excavated materials.

30% Completion Level

Plans for the new material storage bunker building, concrete pavement and retaining wall (if necessary) shall be submitted including the following preliminary design information:

- a) Existing water lines, sanitary sewer lines and storm sewer lines in the construction site based on record drawings from Phase 1 Improvements, supplemental information provided by the City and field surveys.
- b) Existing overhead power lines, utility poles and other above ground utilities based on record drawings from Phase 1 Improvements, supplemental information provided by the City and field surveys.
- c) Proposed preliminary layout and sections of the new material storage bunker building.
- d) Proposed preliminary Site Plan sheet with dimensions of additional concrete pavement and spot elevations for concrete pavement and retaining wall (if necessary) with approximate locations of proposed relocated drop inlet (if necessary).
- e) Attend one review meeting to discuss the 30% complete submittal.

60% Completion Level

Plans for the new material storage bunker building, concrete pavement and retaining wall (if necessary) shall be submitted including the following preliminary design information:

- a) All items included at the 30% completion level revised to address comments provided by the City from the review of the 30% submittal.
- b) Proposed preliminary grading plan for proposed additional reinforced concrete pavement with a 0.50-foot contour interval.
- c) Preliminary structural details for the new material storage bunker building, including foundation, walls and roof structure.
- d) Preliminary plan and profile and details for retaining wall (if necessary).
- e) Preliminary drainage area map with runoff calculations and inlet calculations.
- f) Preliminary landscaping and irrigation plans along 5th Street.
- g) Preliminary geotechnical report with design recommendations.
- h) Engineer's Opinion of Probable Construction Cost based on 60% completion.
- i) Attend one review meeting to discuss the 60% complete submittal.

Part 2: Final Design Phase

90% Completion Level

Plans for the new material storage bunker building, concrete pavement and retaining wall (if necessary) shall be submitted including the following preliminary design information:

- a) All items included at the 60% completion level revised to address comments provided by the City from the review of the 60% submittal.
- b) Assist the City in obtaining a Building Permit.
- c) Final preliminary special details for items included in construction. Miscellaneous Standard City of Grand Prairie details.
- d) Specifications and contract document booklet with bid items and technical notes.
- e) Attend one review meeting to discuss the 90% complete submittal.

Final Completion Level

Provide thirty sets of final plans, specifications and contract documents revised to address the 90% complete submittal review comments. These sets of plans and specifications to be used as bidding documents are provided under Additional Services.

Part 3: Bidding and Construction Administration Assistance

- 1) Assist the City in addressing questions during the advertisement and pre-bid process.
- 2) Prepare and issue addenda to the construction contract documents when required.
- 3) Assist the City during bid opening, completing a tabulation of bids, and reviewing bid submittals for completeness.
- 4) Review and evaluate the qualifications of the apparent successful bidder and the proposed major or specialty subcontractors. The review and evaluation will include such factors as work previously completed, equipment that is available for the work, technical experience, and responses from references.
- 5) Prepare a letter of recommendation for award based on review of bidder qualifications.
- 6) Prepare bid summary and bid tabulation sheets.
- 7) Provide one half-size (11-inch x 17-inch) set of conformed drawings for construction together with one conformed unbound specification and contract document with all addenda issued for the project. Conformed drawings and specifications will also be provided in electronic (pdf) format. Mylar plan sheets can be provided for construction drawings as described under Additional Services.
- 8) Engineer will assist in project administration services during the construction phase of the project. By performing these services, Engineer shall not have authority or responsibility to supervise, direct, or control the Contractor's work or the Contractor's means, methods, techniques, sequences, or procedures of construction. Engineer shall not have authority or responsibility for safety precautions and programs incident to the Contractor's work or failure of the Contractor to comply with laws, regulations, rules, ordinances, codes or orders applicable to the Contractor furnishing and performing the work. Specific services to be performed by Engineer are as follows:
 - a) The Engineer shall prepare an agenda for a pre-construction conference, with assistance from the City. At a date and time selected by the City and at a facility provided by the City, attend the pre-construction conference and assist the City during the conference. The pre-construction conference shall include a discussion of the Contractor's tentative schedules, procedures for transmittal and review of the Contractor's submittals, processing payment applications, critical work sequencing, change orders, record documents, and the Contractor's responsibilities for safety and first aid.
 - b) Review and comment on the Contractor's initial and updated construction schedule and advise the City as to acceptability.
 - c) Make periodic visits to the construction site (approximately one per month) to observe progress of the work and consult with the City and the Contractor concerning problems and progress of the work.

- d) Review drawings and other data submitted by the Contractor as required by the construction contract documents. Engineer's review shall be for general conformity to the construction contract documents and shall not relieve the Contractor of any of his contractual responsibilities. Such reviews shall not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions and programs incident thereto. Engineer shall maintain a log of all submittals. The log shall include the submittal number, title, date received, summary of review comments, date returned, date resubmitted, etc. Shop drawings will be processed in electronic (pdf) format.
- e) Interpret construction contract documents when requested by the City or the Contractor. The Engineer shall maintain a log of the requests for information (RFI log). The log will include the date of the request, a brief description, reviewer, and date of response.
- f) Provide documentation and administer the processing of change orders, including applications for extension of construction time. Evaluate the cost and scheduling aspects of all change.
- g) Upon substantial completion, attend the City's final inspection of the construction work and prepare a punch-list of those items to be completed or corrected before the project is considered finally complete.
- h) Upon completion or correction of the items of work on the punch-list, coordinate with the City's inspector and Contractor to determine if the work was completed.
- i) Upon completion of the project, revise the construction contract drawings to conform to the construction records. Submit two copies of 11-inch x 17-inch prints and an electronic (pdf) version of both Drawings and Specifications on compact disk. Submit one set of full-size (22-inch x 34-inch) plots on mylar of the record drawings as described under Additional Services.

ADDITIONAL SERVICES

Additional services shall be reimbursed to the **PROFESSIONAL** and shall include the following:

- 1) Provide field survey crew to locate existing topographic features and elevations, confirmation of record drawings and to establish temporary benchmarks and control for construction.
- 2) Arrange for a Geotechnical Investigation by Terracon including two soil borings 30 to 35 feet deep for design information for the new storage bunker building. Groundwater observations will be made at boring completion. Provide three copies of the geotechnical report to the City, a pdf copy will also be provided.
- 3) Provide one set of final construction plans (22-inch x34-inch) on mylar and one set of specifications to be used as bidding documents.

- 4) Provide one set of construction plan sheets (22-inch x34-inch) on mylar that are revised to conform to addenda to be used as construction documents.
- 5) Provide one set of construction plans (22-inch x34-inch) on mylar revised to conform to construction records.

EXCLUSIONS

The intent of this scope of services is to include only the services specifically listed herein and none others. Services specifically excluded from this scope of services include, but are not necessarily limited to the following:

- Providing on-site observation of construction.
- Fees for permitting or advertising.
- Lighting and electrical design.
- Certification work was completed in accordance with the plans and specifications.
- Environmental Assessment or cleanup.
- Floodplain reclamation plans.
- Trench safety designs.
- Quality control and testing services.
- Services in connection with condemnation hearings.
- On-site safety precautions, programs and responsibility.
- Scheduling of Contractor's work.
- Title searches and detailed property surveys outside the Facility.
- Environmental Assessment.
- Notifications, Setup, Arrangement and other related items for public meetings.
- 404 Permits.
- HEC-RMS Hydrologic and HEC-RAS Hydraulic Models.
- Submittals to FEMA.
- Submittals to TCEQ regarding ADA Compliance.
- Fiduciary responsibility to Client.

Some excluded services may be included by an amendment to this agreement, if requested by the City.

PROJECT TEAM

The Project Team shall include Joe R. Carter, P.E. as Project Manager (Birkhoff, Hendricks & Carter, L.L.P.) and other employees of Birkhoff, Hendricks & Carter, L.L.P. together with Terracon performing the geotechnical investigation and report and Ronald A. Roberts, Associates, Inc. providing structural engineering assistance.

COMPENSATION

For all items outlined in “**Exhibit “A” Scope of Services**”, for Basic Engineering Services, Parts 1, 2 and 3 and Additional Services, City agrees to pay an amount not to exceed **\$110,390.00** without expanded scope of services approved by the City.

PROFESSIONAL will accomplish the work outlined in the tasks described under Part 1, Part 2, and Part 3 and Additional Services. Compensation for services in this agreement shall be based on actual salary cost times a multiplier of 2.40, with expenses at actual invoice amount times 1.15 and compensation for Field Surveys shall be based on \$165.00 per hour, plus mileage at the maximum rate allowed by the IRS. Billings shall be posted monthly based the time worked on the contract and expenses incurred. A monthly progress report summarizing the work accomplished will be provided with each invoice.

The following is an approximate breakdown of the fees anticipated for this agreement:

Design, Bidding and Construction Phases

Part 1: Preliminary Design Phase (To 60% Submittal Rounded to Nearest \$10)	\$41,880
Part 2: Final Design Phase (90% and Final Submittal Rounded to Nearest \$10)	\$37,010
Part 3: Bidding and Construction Phases (Rounded to Nearest \$100)	<u>\$18,840</u>
Design, Bidding and Construction Phase Total:	\$97,730

Additional Services

Field Surveys (Rounded to Nearest \$10)	\$ 2,810
Geotechnical Investigation and Report (Rounded to Nearest \$10)	\$ 8,050
Mylar Plans for Bidding (Rounded to Nearest \$10)	\$ 600
Mylar Plans for Construction (Rounded to Nearest \$10)	\$ 600
Mylar Plans for Record Drawings (Rounded to Nearest \$10)	<u>\$ 600</u>
Additional Services Total Budget:	\$12,660

An approximate manhour takeoff is shown on the following page.

CITY OF GRAND PRAIRIE, TEXAS
WATER UTILITIES FACILITY SMALL HILL ROAD

PHASE 2 IMPROVEMENTS - MATERIAL STORAGE BUNKER BUILDING
ESTIMATE OF TIME AND CHARGES

Description of Task	Approximate Hours to Complete Tasks												Total Design Charges	Subconsultant & Expenses	Design Plus Expenses
	Project Manager		Design Engineer		EIT / Sr. CAD Tech.		AutoCAD Tech I/II		Clerical		Survey Crew				
	Hours	per Hour \$232	Hours	per Hour \$175	Hours	per Hour \$169	Hours	per Hour \$135	Hours	per Hour \$110	Hours	per Hour \$170			
[1] Field Surveys	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	12	\$2,040			
SUBTOTAL:	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	12	\$2,040	\$2,040	\$62	\$2,102
[2] 30% Complete Submittal	12	\$2,784	32	\$5,600	24	\$4,056	12	\$1,620	0	\$0	0	\$0		\$4,700	
SUBTOTAL:	12	\$2,784	32	\$5,600	24	\$4,056	12	\$1,620	0	\$0	0	\$0	\$14,060	\$4,781	\$18,841
[3] 60% Complete Submittal	16	\$3,712	42	\$7,350	36	\$6,084	18	\$2,430	1	\$110	0	\$0		\$11,300	
SUBTOTAL:	16	\$3,712	42	\$7,350	36	\$6,084	18	\$2,430	1	\$110	0	\$0	\$19,686	\$11,401	\$31,087
[4] 90% Complete Submittal	16	\$3,712	42	\$7,350	36	\$6,084	18	\$2,430	8	\$880	0	\$0		\$6,470	
SUBTOTAL:	16	\$3,712	42	\$7,350	36	\$6,084	18	\$2,430	8	\$880	0	\$0	\$20,456	\$6,591	\$27,047
[5] Final Plans & Specifications	6	\$1,392	16	\$2,800	16	\$2,704	8	\$1,080	4	\$440	0	\$0		\$1,550	
SUBTOTAL:	6	\$1,392	16	\$2,800	16	\$2,704	8	\$1,080	4	\$440	0	\$0	\$8,416	\$2,150	\$10,566
[6] Bidding Phase	4	\$928	4	\$700	2	\$338	2	\$270	2	\$220	0	\$0		\$440	
SUBTOTAL:	4	\$928	4	\$700	2	\$338	2	\$270	2	\$220	0	\$0	\$2,456	\$1,071	\$3,527
[6] Construction Phase & Record Dwgs.	16	\$3,712	20	\$3,500	16	\$2,704	8	\$1,080	2	\$220	4	\$680		\$4,600	
SUBTOTAL:	16	\$3,712	20	\$3,500	16	\$2,704	8	\$1,080	2	\$220	4	\$680	\$11,896	\$5,324	\$17,220
TOTAL:	70		156		130		66		17		16		\$79,010	\$31,380	\$110,390
Not to Exceed Phase 2 Contract Amount:															\$110,390