

# Water Plant No. 2 Improvements City of Montgomery

This proposal is submitted pursuant to and in accordance with that certain Professional Services Agreement dated May 25, 2021, by and between Ward, Getz & Associates, PLLC and the City of Montgomery (the "City").

WGA understands the City plans to make improvements to the existing Water Plant No. 2. The improvements consist of the following elements:

- 1. Blast and recoat hydro pneumatic tank (HPT), booster pumps, above ground piping and valves.
- 2. Abandon and plug the existing jasper well.
- 3. Drill new jasper well with a capacity of 500 gpm on existing site.
- 4. Demolish existing ground storage tank (GST).
- 5. Install a new 125,000-gallon factory coated bolted steel GST.
- 6. Evaluate the condition of the existing GST concrete pad and make any necessary improvements to use for the installation of the new GST.

#### **ASSUMPTIONS AND EXCLUSIONS:**

- 1. This proposal does not include municipal agency review fees or impact fees.
- 2. Site survey, subsurface investigation, and geotechnical services are part of this project.
- 3. Landscape and Irrigation Plans are not included in this scope of service.
- 4. Client will examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by WGA, obtain advice of an attorney, insurance counselor and other consultants as Client deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of WGA.
- Client will attend the pre-bid conference, bid opening, preconstruction conferences, construction progress and other job-related meetings and substantial completion inspections and final payment inspections.
- 6. Client will give prompt written notice to WGA whenever Client observes or otherwise becomes aware of any development that affects the scope or timing of WGA's services, or any defect or nonconformance of the work of any Contractor.
- 7. Preparation of applications and supporting documents for government grants, TWDB or other funding, or for planning advances is an Additional Service.
- 8. Client recognizes and expects that certain Change Orders may be required. WGA recommends that the Client budget a minimum of 10% of the estimated project cost for construction change orders. Any responsibility of WGA for the costs of Covered Changed Orders will be determined based on applicable contractual obligations and professional liability standards. For purposes of this paragraph, the cost of Covered Change Orders will not include:
  - any costs that Client would have incurred if the Covered Change Order work had been included originally in the Contract Documents and without any other error or omission of WGA related thereto.



- Any costs that are due to unforeseen site conditions, or
- Any costs that are due to changes made by the Client.
- Any costs that are due to the Contractor

#### **SCOPE OF WORK**

- Design Phase Services
  - o Conduct one project kick-off meeting with the Client to confirm scope of work.
  - o Conduct monthly progress meetings, up to a maximum of five (5) meetings during the final design phase.
  - Prepare drawings, specifications, and layouts of improvements to be constructed for design milestone (50% and 100%) submittal and for the final construction contract documents.
  - Prepare front end documents, including bid documents, general conditions, and special conditions for the construction contract documents.
  - Prepare and submit a Technical Memorandum evaluating the GST concrete pad and its suitability for bearing additional loads.
  - o Prepare application for and TCEQ approval for the project.
  - o Prepare application for and TCEQ approval for the new groundwater well.
  - 50% Submittal: Prepare drawings, specifications, designs, and layouts of improvements to be constructed. Prepare bid forms. 50% submittal documents will include dimensional layout drawings, plans, sections, and elevations for all the trades, typical details, and most of the special details. The draft specifications will include major equipment items. WGA will receive comments from Client and address comments in the 100% submittal. The 50% submittal shall be defined and consist of the minimum level of completion by the following disciplines:
    - General and Standard Sheets to 90%
    - P&IDs to 90%
    - Process Mechanical to 50%
    - Civil to 50%
    - Structural to 30%
    - Instrumentation and Control to 30%
    - Electrical to 30%
    - Specifications to 50%
    - Sheet List to 90%
  - 100% Submittal: Review documents will include all plans and specifications with minor corrections and notes remaining. WGA will receive comments from Client and address comments in the Final Construction Contract Documents. The 100% submittal shall be defined and consist of the minimum level of completion by the following disciplines:
    - General and Standard Sheets to 100%
    - P&IDs to 100%
    - Process Mechanical to 105%
    - Civil to 100%
    - Structural to 100%



- Instrumentation and Control to 100%
- Electrical to 100%
- Specifications to 100%
- Sheet List to 100%
- Final Construction Contract Documents: The plans and specifications will be finalized based on one set of compiled comments from Client. Engineer will seal and sign the completed documents. Engineer shall update plans and specifications with any final comments prior to finalizing for construction.
- Prepare revised opinion of probable construction cost for the 75% and 100% design completion levels.
- Furnish Client with one electronic PDF copy of drawings and specifications for each submittal for review and approval by Client. Upon final approval by Client, WGA will provide Client one electronic PDF copy of "Final" sealed drawings and in CAD file format.
- Bid Phase Services: Upon completion of design services and approval of "Final" drawings and specifications by Client, WGA shall provide professional services in this phase as follows:
  - Assist Client in securing bids. Issue a Notice to Bidders to prospective contractors and vendors and to selected plan rooms. Provide a copy of the notice to bidders for Client to use in notifying construction news publications and publishing appropriate legal notice. The cost for publications shall be paid by Client.
  - Maintain information on entities that have been issued a set of bid documents.
    Distribute information on plan holders to interested contractors and vendors on request.
  - Assist Client by responding to questions and interpreting bid documents. Prepare and issue addenda to the bid documents to plan holders if necessary.
  - At Client request, WGA will assist Client in the opening, tabulating, and analyzing the bids received. Review the qualification information provided by the apparent low bidder to determine if, based on the information available, they appear to be qualified to construct the project. Recommend award of contracts or other actions as appropriate to be taken by the Client.
  - Assist the Client in conducting a pre-bid conference for the construction projects and coordinate responses with Client. Response to the pre-bid conference will be in the form of addenda issued after the conference.
  - Assist Client in the preparation of Construction Contract documents. Provide ten (10) sets of Construction Contract Documents which include information from the apparent low bidder bid documents, legal documents, and addenda bound in the documents for execution by the Client and construction contractor.
- Construction Administration
  - o Issue notice to proceed and hold pre-construction meeting.
  - The Consultant shall review the Contractor's submittal schedule and shall not unreasonably delay or withhold approval concerning any civil design related submittals. The Consultant's action in reviewing submittals shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Consultant's professional



- judgement to permit adequate review. The basis of the scope of work assumes 20 contractor submittal reviews, including resubmittal reviews.
- O The Consultant shall review and respond to requests for information about the Contract Documents. Requests for information shall include, at a minimum, a detailed written statement that indicates the specific Drawings or Specification in need of clarification and the nature of the clarification requested. The Consultant's response to such requests shall be made in writing in a reasonably timely manner as to not adversely affect the Owner's schedule. If appropriate, the Consultant shall prepare and issue supplemental Drawings and Specifications in response to requests for information. The basis of the scope of work assumes no more than a total of 25 responses to the following: requests for information (RFI), change order (CO) reviews, and contract modification requests (CMR).
- Preparation of monthly pay estimates during construction phase. The basis of scope of work assumes no more than a total of six (6) pay estimates.
- The Consultant shall make a periodic site visits to the construction site. The number of site visits shall not exceed six (6) during the construction phase. This includes the site visit during start-up.

## • Field Project Representation

 Onsite inspection by a Field Project Representative for approximately 10 hours per week (including travel time) for a total of 180 hours for the duration of the projected contract period (estimated to be 6 months).

#### • Additional Services and Reimbursable Expenses

- o Includes construction staking, construction materials testing, advertising expenses, and other reimbursable expenses.
- Any additional site visits during the construction phase by the Consultant beyond listed above is an additional service.
- Any water quality field sampling required during the design phase is an additional service.
- Revising drawings, specifications or other documents when such revisions are not consistent with approvals or instructions previously given by Client or due to other causes not solely within the control of WGA.
- Providing consultation concerning the replacement of any Work damaged by fire or other cause during the construction, and providing services as may be required regarding the replacement of such Work.
- Investigations involving consideration of operation, maintenance and overhead expenses, and the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals, evaluations, assessment schedules, and material audits or inventories required for certification of force account construction performed by Client.
- Preparing applications and supporting documents for government grants, loans, or planning advances and providing data for detailed applications.
- Providing shop, mill, field or laboratory inspection of materials and equipment. Observe factory tests of equipment at any site remote to the project or observing tests required as a result of equipment failing the initial test.



- Conducting pilot plant studies or tests.
- Preparing data and reports for assistance to Client in preparation for hearings before regulatory agencies, courts, arbitration panels or any mediator, giving testimony, personally or by deposition, and preparations therefore before any regulatory agency, court, arbitration panel or mediator.
- Furnishing Special Inspections required under chapter 17 of the International Building Code.
- Assisting Client in preparing for, or appearing at litigation, mediation, arbitration, dispute review boards, or other legal and/or administrative proceedings in the defense or prosecution of claims disputes with Contractor(s).
- Performing investigations, studies and analyses of substitutions of equipment and/or materials or deviations from the drawings and specifications.
- Assisting Client in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this Agreement. Such services, if any, shall be furnished by WGA on a fee basis negotiated by the respective parties outside of and in addition to this Agreement.
- Performing investigations, studies, and analysis of work proposed by construction contractors to correct defective work.
- Design, contract modifications, studies or analysis required to comply with local, State,
  Federal or other regulatory agencies that become effective after the date of this agreement.
- o Services required to resolve bid protests or to rebid the projects for any reason.
- Any services required because of default of the contractor(s) or the failure, for any reason, of the contractor(s) to complete the work within the contract time.
- Providing services after the completion of the construction phase not specifically listed in the scope of services.
- Providing services on an accelerated time schedule. The scope of this service includes cost for overtime wages of employees and consultants, inefficiencies in work sequence and plotting or reproduction costs directly attributable to an accelerated time schedule directed by the Client.
- Providing services made necessary because of unforeseen, concealed, or differing site conditions or due to the presence of hazardous substances in any form.
- o Providing services to review or evaluate construction contractor(s) claim(s), provided said claims are supported by causes not within the control of WGA.
- Providing value engineering studies or reviews of cost savings proposed by construction contractors after bids have been submitted.
- o Construction services over 20% of original contract period of performance.



#### **ENGINEERING COST**

The cost to perform the scope of services described above is as follows:

Final Design Phase Services -	\$109,000	(Lump Sum)
Bid Phase Services	\$7,500	(Lump Sum)
Construction Administration Services -	\$35,000	(Time and Materials)
Field Project Representation -	\$45,000	(Time and Materials)
Additional Services & Reimbursable Expenses -	\$33,000	(Time and Materials)

WGA requests City Council's authorization to proceed with the preparation of the design plans for the Water Plant No. 2 Improvements on a lump sum basis, as described above.

### **SCHEDULE**

TOTAL DURATION	376	calendar days
Construction	180	calendar days
Contracts	30	calendar days
Bidding	30	calendar days
Design	120	calendar days
Survey	45	calendar days
Authorization to Proceed	1	calendar days*

<sup>\*</sup>If approved, the effective start date is the following business day from the date of acceptance.



# Preliminary Cost Estimate FOR

# Water Plant No. 2 Improvements

10/5/2023

Item No.	Description	Quantity	Unit	<b>Unit Price</b>		Cost
<u>General</u>						
1	Mobilization, Bonds & Insurance	1	LS	\$ 30,000	\$	30,000
2	Blast and Recoat Piping, Valves, Supports, & Pumps	1	LS	15,000		15,000
3	Blast and Recoat Hydropneumatic Tank	1	LS	40,000		40,000
4	Demolition of Existing Water Well	1	LS	20,000		20,000
5	New 500 GPM Water Well	1	LS	950,000		950,000
6	New 125,000 Gallon Bolted Steel Tank	1	LS	125,000		125,000
7	Stormwater Pollution Protection Plan	1	LS	2,000		2,000
8	Electrical and Instrumentation	1	LS	50,000		50,000
				-		
	Construction Subtotal				\$	1,232,000
	Contingencies (20%)					247,000
				Engineering	\$	151,500
			Field Project	Representation	\$	45,000

#### Notes:

- 1 All values rounded up to the nearest thousand.
- This estimate is based on my best judgement as a design professional familiar with the construction industry. We cannot and do not guarantee that bids will not vary from this cost estimate.

Reimbursables \$ 33,000

Total \$ 1,708,500

This includes geotechnical investigation, construction materials testing, reproduction, advertising expenses, and other miscellaneous reimbursable costs.