# ADDENDUM NO. 1

Project:      2019 Water Well #23 Ground Storage Tank Replacement         Owner:       City of Kingsville         Engineer:      Rutilio P. Mora, Jr., P.E.         Addendum No.	
Engineer: Rutilio P. Mora, Jr., P.E.     Addendum No1 Specifications Section:131000	Project:2019 Water Well #23 Ground Storage Tank Replacement
Addendum No       Specifications Section:13100       Issue Date: 05/17/19         Acknowledge receipt of this Addendum in the BID PROPOSAL submitted for this Project. Failure to acknowledge receipt of this Addendum in the BID PROPOSAL may render the BID as non-responsive and serve as the basis for rejecting the BID.         Approved by: Rutilio P. Mora, Jr., P.E.         Mame	Owner: City of Kingsville
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<ol> <li>Addendum Items:         <ol> <li>Project Completion Time revised from 120 to 210 consecutive calendar days. Revised pertain to Bid Proposal, Standard form of Agreement between City and Contractor, and General Conditions (Item 39)-Contract Period.</li> <li>Revised Technical Specifications on section 131000 – Galvanized Steel Water Storage Tank – Wind Speed</li> <li>Revised Bid Proposal posted on May 17,2019.</li> <li>City will hire electrician to disconnect and connect level indicator to ground storage tank.</li> <li>Revised Storage Tank Detail A, Sheets 4.</li> </ol> </li> </ol>	Approved by: Rutilio P. Mora, Jr., P.E.
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<ol> <li>City will hire electrician to disconnect and connect level indicator to ground storage tank.</li> <li>Revised Storage Tank Detail A, Sheets 4.</li> </ol>	2. Revised Technical Specifications on section 131000 – Galvanized Steel Water Storage Tank – Wind Speed
5. Revised Storage Tank Detail A, Sheets 4.	3. Revised Bid Proposal posted on May 17,2019.
RUTILIO P. MORA, JR.	4. City will hire electrician to disconnect and connect level indicator to ground storage tank.
	5. Revised Storage Tank Detail A, Sheets 4.

Revised 5/17/19

BID	PROPOSAL
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Proposal of\_\_\_\_\_

a \*\_\_\_\_\_ (hereinafter called "BIDDER"), organized and existing under the laws of the State of Texas to <u>City of Kingsville, Texas</u> (hereinafter called "OWNER.)"

BIDDER hereby proposes to perform all WORK for the construction of the "2019 Water Well #23 Ground Storage Tank Replacement" in accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within  $\underline{210}$  consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of  $\underline{\$ 200.00}$  for each consecutive calendar day thereafter as provided in the General Conditions.

BIDDER acknowledges receipt of the following ADDENDUM:

\*Insert "a corporation", "a partnership", or "an Individual" as applicable.

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**BID SCHEDULE** 

ITEM	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL PRICE
BASE I	BID – 2019 WAT	ER WELL	#23 GROUND STORAGE	TANK REPLACEMEN	<u>TT</u>
B-1)	1	LS	REMOVE/DISPOSE OF EXISTING GROUND STORAGE TANK AT WATER WELL #23 AN ALL RELATED APPURTENENCES per plans and specification	D	
B-2)	1	LS	complete in place. INSTALL NEW 84,000 GALLON BOLTED GR	OUND	
			STORAGE TANK AT W WELL #23 INCLUDING TESTING, DISINFECTI CLEAN UP AND ALL RELATED APPURTEN per plans and specification complete in place.	NG, ENCES	
ΤΟΤΑΙ	L BASE BID – (I	<b>FEMS B-1</b> -	- <b>B-2</b> ) \$		
ITEM	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL PRICE
ALTER	RNATE BID NO.	1 – 2019 V	VATER WELL #23 GROUN	ND STORAGE TANK R	REPLACEMENT
A1-1)	1	LS	CONCRETE FOUNDAT RING AND ALL RELAT APPURTENENCES (IN OF GALV. TANK RING per plans and specification complete in place.	TED LIEU )	
ΤΟΤΑΙ	LALTERNATE	BID – (ITE	MA1-1) \$		

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ITEM	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL PRICE
ALTERNATE BID NO. 2 – 2019 WATER WELL #23 GROUND STORAGE TANK REPLACEMENT					
A2-1)	1	LS	<b>POWDER COATED FINISH</b> <b>STEEL TANK (IN LIEU</b> <b>OF GALV. FINISH)</b> per plans and specifications, complete in place.		
TOTAL ALTERNATE BID NO. 2 – (ITEM A2-1)			(ITEM A2-1)	\$	
ΤΟΤΑΙ	L BASE BID + AI	TERNATE	BID NO. 1	\$	
TOTAL BASE BID + ALTERNATE BID NO. 2			BID NO. 2	\$	24
TOTAI	L BASE BID + AI	TERNATE	BID NO. 1 & 2	\$	
	Respectfully subm	itted:			
	S	ignature		Address	
	T	itle		Date	
	License n	umber (if apj	pliæble)	Date	

# **GENERAL CONDITIONS**

item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000 as long as such procurement is economically feasible.

#### 36. [For Contracts > \$100K] Overtime Requirements

No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of 40 hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of 40 hours in such work week, as the case may be.

## 37. [For Contracts > \$150K] Clean Air Act and the Federal Water Pollution Control Act

The Contractor or subcontractor shall comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

#### 38. <u>Contract Documents and Drawings</u>

The City will furnish the Contractor without charge <u>5</u> copies of the Contract Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.

#### 39. <u>Contract Period</u>

The work to be performed under this contract shall commence within the time stipulated by the City in the Notice to Proceed, and shall be fully completed within  $\underline{210}$  calendar days thereafter.

#### 40. Liquidated Damages

Since the actual damages for any delay in completion of the work under this contract are impossible to determine, the Contractor and his Sureties shall be liable for and shall pay to the City the sum of <u>Two-</u><u>Hundred</u> Dollars (\$200) as fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated time for completion.

## SECTION 131000

# GALVANIZED STEEL WATER STORAGE TANK

## 1. <u>SCOPE</u>:

The specifications presented are intended to present a minimum level of quality in procedure which must be equaled or exceeded by installation of an 84,000-gallon hot dip galvanized and or factory powder coated bolted steel water storage tank for which this set of specifications is applicable. The bolted steel tank shall conform to the requirements of A.W.W.A. D103-09 and TCEQ.

# 2. <u>GENERAL</u>:

The Engineer's selection of galvanized bolted steel tank construction for this facility has been predicated upon the design criteria and construction methods specified. Deviations from the specified design and construction details will not be permitted.

## 3. <u>SUBMITTALS</u>:

Three (3) copies of the shop drawings covering tank, anchorage, accessories, and appurtenances provided shall be submitted to the Engineer.

Shop Drawings: Submit shop drawings of the bolted steel reservoir and all accessories for review and approval by the engineer prior to beginning any related shop fabrication or erection. Include sufficient data to show that the reservoir and accessories conform to the requirements to these Specifications.

Submittals shall include:

- a. Design calculations signed by a civil or structural engineer registered in the state of Texas.
- b. Fabrications and erection drawings and details for the reservoir and all accessories.
- c. Certified mill tests on steel plates and structural members demonstrating that the physical and chemical requirements of this specifications have been met.

# 4. QUALIFICATIONS OF TANK MANUFACTURER:

The tank manufacturer shall be a specialist in the design, fabrication, and erection of factory-

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powder coated bolted steel tanks. The manufacturer shall be quality certified, having an active API-Q1 Certification and ISO-9001 Registration. The tank manufacturer must have a minimum of five years' experience in the manufacturing of bolted steel tanks and have in the last two years manufactured at least five tanks of similar size and use.

#### **DESIGN CRITERIA:**

The following data and information are supplied as a basis for design and erection of the tank and appurtenances:

Job Site Location:	Kingsville Water well No. 23
1. Product to be stored:	Potable Water
2. Storage Capacity:	84,000 gallons (Nominal)
3. Tank Diameter:	29'-8 1/2" I.D.
4. Tank Height:	16'-1 (minimum)
5. Minimum freeboard:	6" (minimum)
6. Deck Load:	15 PSF
7. Design Standard:	A.W.W.A. D103-09
8. Allowable Soil Bearing:	2500 PSF
9. Wind speed:	130 MPH (when erected)

## 5. PRODUCTS:

<u>A, Tank Structure</u>: The materials, design, fabrication, and erection of the galvanized bolted steel tank shall conform to AWWA D103-97, to the Principles of Standard Specification 12B of the American Petroleum Institute, Components such as bottom sections, wall sections and roof section shall conform to the dimensional standards for the principles of the Standard Specification 12B of the American Petroleum Institute. Walls are to be composed of standard side sheets having normal dimensions of 5 feet in width and 8 feet in height. Special heights or width may be used with standard API joint details. Tank Wall shall be properly design to resist the maximum anticipated dead and live loads, both when thank is empty and when filled with water, having a specific gravity of 1.0. Bottoms and roofs are to be composed of API standard pie shaped sections. Anchor bolts, if required, are recommended to be set outside of the tank bottom with suitable lugs to be attached to the tank wall.

#### 1. Coating (Inside and Outside):

A. General: All metal plates, supports, members and miscellaneous parts, except bolts, shall be either Hot Dip Galvanized (Section 10.3) or Factory Powder Coated (Section 10.6) in accordance with A.W.W.A. D103-09, Section 10: Coatings. Field coating, other than touch-up, will not be permitted.

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### B.Surface Preparation for Factory Powder Coated System:

- a. Prior to application of coating, all metal plate, supports, members and miscellaneous parts, other than fasteners shall be thoroughly cleaned by a hot-rinse wash process followed immediately by hot air drying.
- b. All steel surfaces shall be sandblasted to equivalent of a SP 6 commercial blast metal finish. The surface anchor pattern shall be no less than 1.5 mils.
- c. All steel surfaces shall receive an iron phosphate coating applied with a power spray washer with not less than 25 psi pressure, followed by a warm water rinse and by an acidulated sealant. Then spray a final De-ionized water rinse to prevent rusting prior to the powder coating application.
- d. All steel surfaces shall drip dry for seven (7) minutes prior to entering the dry off oven for eight (8) minutes at 425 degrees F.

#### C.Coating:

- All interior steel surfaces, support members and miscellaneous parts shall receive
   5 mils minimum average dry film thickness using Dupont "Tank Tan" (An NSF 61 Approved, Thermal Set Epoxy Powder Coating).
- All exterior steel surfaces, support members and miscellaneous parts shall receive
   3 mils minimum average dry film thickness using Dupont "Superior Sand" (A Thermal Set TGIC-Polyester Powder Coating).
- c. "Factory Powder Coated System". All interior and exterior surfaces including edges are to be "Holiday Free".

### 2. <u>Steel</u>

- a. <u>Sheet.</u> Steel sheets shall conform to or shall be at least equal to hot-rolled quality per ASTM A570 Grade 33 with a minimum yield strength of 33,000 psi. Minimum thickness shall be 12 gauge (0.0972" minimum).
- b. <u>Plate</u>. Steel plates shall conform to or at least be equal to the requirements of ASTM A36 with a minimum yield strength of 36,000 psi.
- c. <u>Rolled Structural Shapes</u>. Rolled structural shapes shall conform to ASTM A36.
- 3. Bolts
  - a. Galvanized bolts, nuts and washers used in tank joints shall be minimum h inch bolt diameter and shall meet the minimum requirements of API 12B, Appendix A, except that bolt heads and nuts may be other than square at the option of tank manufacturer.

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- b. Other bolts shall conform to or at least be equal to the latest revision of ASTM A307.
- 4. <u>Gaskets:</u> All bolted connections shall incorporate EPDM prefabricated gasket minimum width 1-3/4". A single piece double-punched gasket shall be used at vertical seams which require two vertical rows of punching. Field caulking will be allowed when joining a discontinuous gasket section and at certain joint connections. Neoprene backed steel washers shall be provided at all bolts in contact with the stored liquid.
- 5. <u>Multiple Row Punching</u>: All sheets in the shell of the tank that require multiple vertical row punching (double or triple) must be in single stroke to insure proper alignment.
- <u>B.</u> <u>Accepted Manufacturers</u>: The steel tank and accessories furnished under this section shall be as manufactured by Columbian TecTank Company, Kansas City, Kansas, Superior Tank Co. Inc, or an approved equal.

## 6. <u>APPURTENANCES</u>:

- A. The contractor shall furnish and install the appurtenances as shown on the contract drawings and as specified below. Unless otherwise noted, standard appurtenances shall be as follows:
  - 1. <u>Hatch:</u> The tank roof hatch shall have a curbed, upward opening 30" square. The curb shall extend at least four inches above the roof surface. The hatch cover lip shall be hinged and provisions made for locking. The hatch cover lip should extend for a distance of two inches down on the outside of the curb.
  - 2. <u>Inlet and Outlet Connections:</u> Inlet, outlet, and overflow connections shall conform to the sizes and locations specified on the plan sheets. Also provide a 1-inch NPT tank connection for sampling.
  - 3. <u>Vent</u>: A mushroom-screened vent shall be furnished above maximum water level and shall conform to the size specified on the plan sheets. The overflow pipe shall not be considered to be a tank vent. The vent shall be 316 stainless steel 16 x 16 x 0.018 wire and so designed and constructed as to prevent the entrances of birds, animals, or insects.
  - 4. <u>Outside Tank Ladder:</u> An outside galvanized steel welded ladder with safety cage, meeting OSHA specifications, shall be furnished at the location designated on the plans. Latter shall have lockable closure at the bottom.

- 5. <u>Perimeter Deck Rail:</u> Galvanized handrails & toe board for the deck perimeter shall be furnished on each side of the ladder entry at the location designed on the plans. Handrails and toe board shall meet OSHA requirements.
- 6. <u>Interior Tank Ladder:</u> An inside OSHA galvanized steel welded ladder with a Safe T-Climb assembly shall be furnished at the location designated on the plans. Contractor shall place Buna N prefabricated gaskets between the ladder and tank wall at all areas in contact with the stored liquid.
- 7. <u>Level Indicator</u>: A liquid level indicator with Type 316 stainless steel internals and complete with float and target board assembly.
- 8. <u>Internal Nozzle with Overflow Weir Cone</u>: The internal galvanized nozzle with overflow weir shall conform to the size and location specified on the plan sheets. Overflow pipe assembly shall be coated per project requirements.
- 9. Shell Manhole: Provide a 30"x46" flush cleanout.

## B. Tank Foundation

- 1. <u>Steel Bottom Tanks</u>: The foundation shall be installed per AWWA D03-87, Section
- 2. The existing foundation shall be leveled with differential not exceeding V 1/8 inch in any 30-foot circumference under the shell. The levelness on the circumference shall not vary more than Y 1/4 inch from an established plane.
- C. Shipping: All plates, supports, members, and miscellaneous parts shall be packaged for shipment in such manner to prevent abrasion or scratching of the tank surface. Erection: Field erection of galvanized bolted steel tanks shall be in strict accordance with the tank manufacturer's recommendations. Particular care shall be exercised in handling and bolting of the tank plates, supports, and members to avoid abrasion or scratching of the tank surface.

F. <u>Testing</u>: Following completion of erection and cleaning of the tank, the tank shall be tested for liquid-tightness in accordance with Technical Specification 151100. Any leaks disclosed by this test shall be corrected by the erection contractor in accordance with the tank manufacturer's recommendations. The Owner shall provide clean water free of charge at the time of erection completion, for hydrostatically testing the tank. Filling and emptying the tank shall be the responsibility of the Contractor. For the Factory Powder Coated System. Prior to placing water in the tank, a "holiday" inspection of the entire tank, corners included, will be provided and performed by the manufacturer in the presence of the owner.

# 7. WARRANTY:

The tank manufacturer shall warrant the tank against any defects in workmanship and materials for a period of one (1) year from date of shipment. In the event a defect should appear, it shall be reported in writing to the manufacturer during the warranty period.

# 8. MEASUREMENT AND PAYMENT:

Measurement and payment for this item shall be made by lump sum and shall include but not be limited to foundation, piping, fittings, filling, disinfection, testing, concrete splash blocks, and incidentals required to fully complete the work as intended.

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