

ADDENDUM NO. 1

**CONSTRUCTION OF
WATER SUPPLY PLANT
DISINFECTION CONVERSION
CITY OF TEXAS CITY BID #2012-252**

FEBRUARY 6, 2012

LJA JOB NO. 1892-1001 (9.4)

The following changes will be considered part of the Construction Plans, Bid Proposal and Contract Documents:

1.) Reference: **Contract Documents – Bid Form**

Replace: Pages 1 through 11 of 11 with revised Pages 1 through 11 of 11 (attached).

2.) Reference: **Technical Specifications – Section 11305 – Metering Pumps**

Replace: Pages 1 and 2 of 2 with revised Pages 1 and 2 of 2 (attached).

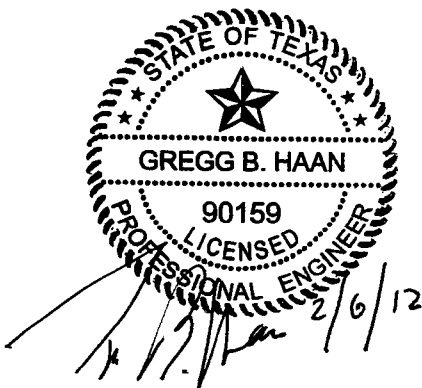
3.) Reference: **Technical Specifications – Section 11356 – Ammoniation Equipment**

Replace: Pages 1 through 3 of 3 with revised Pages 1 through 2 of 2 (attached).

4.) Reference: **Construction Plans – Sheet 11 of 11**

Clarification: LAS tank sizes shall be: Godard 85 gal, 32nd St. 120 gal, Orchid St. 85 gal, 9th St. 120 gal, District 14 165 gal, Heights 85 gal, Attwater 40 gal.

There are no other changes or revisions to the Construction Plans, Bid Proposal and Contract Documents at this time.



III

BID FORM

TO: The Mayor and City Council, City of Texas City, Texas City, Texas, for the Construction of "Water Supply Plant Disinfection Conversion".

The undersigned, as bidder, declares that the only person or parties interested in this proposal as principals are those named herein, that this proposal is made without collusion with any other person, firm or corporation; that he has carefully examined the Invitation to Bidders, the Instruction to Bidders, this Bid Form, the Agreement, the General Conditions, the Special Provisions, the Supplementary Conditions, the Technical Specifications, and the Plans therein referred to and has carefully examined the locations, conditions, and classes of materials of the proposed work; and agrees that he will provide all necessary labor, machinery, tools, apparatus, and other items incidental to construction, and will do all the work and furnish all the materials called for in the Contract and Specifications in the manner prescribed herein and according to the requirements of the Engineer as therein set forth.

It is understood that the following quantities of work to be done at unit prices are approximate only, and are intended principally to serve as a guide in evaluating bids. It is further understood that all items of work for which there are no specific pay items are included in the bid items shown on this Bid Form.

It is further agreed that the quantities of work to be done at unit prices and materials to be furnished may be considered necessary, in the opinion of the Engineer, to complete the work fully as planned and contemplated, and that all quantities of work, whether increased or decreased are to be performed at the unit prices set forth below except as provided for in the specifications.

It is further agreed that lump sum prices may be increased to cover additional work ordered by the Engineer, but not shown on the plans or required by the specifications, in accordance with the provisions of the General Conditions. Similarly, they may be decreased to cover deletion of work so ordered.

It is understood and agreed that the work is to be complete in full within _____
() working days after the date stated in the work order on which work is to be commenced.

Accompanying this Bid Form is a Certified or Cashier's Check or Bidder's Bond in an amount of at least five percent (5%) of the maximum amount bid, payable to the Owner for _____ Dollars (\$_____).

ADDENDUM NO. 1

Usual disposition of bid securities is cited in paragraph 3 of Section I, Invitation to Bidders and paragraph C.2 of Section II, Instructions to Bidders; however, if bidder whose bid is accepted by Owner fails to execute the Agreement and/or fails to execute a performance bond and a payment bond within fifteen days after its acceptance, the bid security shall become the property of the Owner, and shall be considered as payment for damages due to delay and other inconveniences suffered by the Owner on account of such failure of bidder. Further, should the Owner bring suit in court to enforce any terms of this bid, it is agreed that the bidder or his surety shall pay to the Owner his cost and reasonable attorney's fees. It is understood that the Owner reserves the right to reject any and all bids.

Bid Form

BASE BID ITEMS

GODDARD WATER SUPPLY PLANT

| ITEM NO. | QTY. | UNIT | ITEM DESCRIPTION | UNIT PRICE | AMOUNT |
|----------|------|------|--|------------|----------|
| 1. | 1 | LS | Site Work, Including Re-Seeding and Re-Grading Disturbed Areas, Hose Bib, 1" Water Line, and Tap to Existing Potable Water Line, Complete in place | \$ _____ | \$ _____ |
| 2. | 1 | LS | Emergency Eyewash Station mounted on wall of existing building, Complete in place | \$ _____ | \$ _____ |
| 3. | 1 | LS | 85 Gallon Double Walled UV Resistant LAS Storage Tank, with leak detection and visual level indicator, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 4. | 1 | LS | LAS Feed System, Including Adjustable Metering Pump, 3/8-Inch Poly Tubing LAS Feed Lines in 1-Inch Sch. 80 PVC Pipe, Chemical Injection Assembly, Labeling, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 5. | 1 | LS | LAS Metering Station Pad, 4' x 4' Min. (Larger if Needed for Equipment Size), 6" Thick, 3,000 psi Concrete with #4 Bars @ 12" Centers Each Way on 4" Compacted Bank Sand Base, Complete in place | \$ _____ | \$ _____ |

GODDARD WSP BASE BID ITEMS

\$ _____

32nd STREET WATER SUPPLY PLANT

| ITEM NO. | QTY. | UNIT | ITEM DESCRIPTION | UNIT PRICE | AMOUNT |
|--|-------------|-------------|--|-------------------|---------------|
| 1. | 1 | LS | Site Work, Including Re-Seeding and Re-Grading Disturbed Areas, Hose Bib, 1" Water Line and Tap to Existing Potable Water Line, Complete in place | \$ _____ | \$ _____ |
| 2. | 1 | LS | Emergency Eyewash Station mounted on wall of existing building, Complete in place | \$ _____ | \$ _____ |
| 3. | 1 | LS | 120 Gallon Double Walled UV Resistant LAS Storage Tank, with leak detection and visual level indicator, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 4. | 1 | LS | LAS Feed System, Including Adjustable Metering Pump, 3/8-Inch Poly Tubing LAS Feed Lines in 1-Inch Sch. 80 PVC Pipe, Chemical Injection Assembly, Labeling, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 5. | 1 | LS | LAS Metering Station Pad, 4' x 4' Min. (Larger if Needed for Equipment Size), 6" Thick, 3,000 psi Concrete with #4 Bars @ 12" Centers Each Way on 4" Compacted Bank Sand Base, Complete in place | \$ _____ | \$ _____ |
| 6. | 1 | LS | Precast concrete meter box for LAS Injection Vault, Complete in place | \$ _____ | \$ _____ |
| 32nd STREET WSP BASE BID ITEMS | | | | \$ _____ | |

ORCHID WATER SUPPLY PLANT

| ITEM NO. | QTY. | UNIT | ITEM DESCRIPTION | UNIT PRICE | AMOUNT |
|----------------------------------|-------------|-------------|--|-------------------|---------------|
| 1. | 1 | LS | Site Work, Including Re-Seeding and Re-Grading Disturbed Areas, Hose Bib, 1" Water Line and Tap to Existing Potable Water Line, Complete in place | \$ _____ | \$ _____ |
| 2. | 1 | LS | Emergency Eyewash Station mounted on wall of existing building, Complete in place | \$ _____ | \$ _____ |
| 3. | 1 | LS | 85 Gallon Double Walled UV Resistant LAS Storage Tank, with leak detection and visual level indicator, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 4. | 1 | LS | LAS Feed System, Including Adjustable Metering Pump, 3/8-Inch Poly Tubing LAS Feed Lines in 1-Inch Sch. 80 PVC Pipe, Chemical Injection Assembly, Labeling, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 5. | 1 | LS | LAS Metering Station Pad, 4' x 4' Min. (Larger if Needed for Equipment Size), 6" Thick, 3,000 psi Concrete with #4 Bars @ 12" Centers Each Way on 4" Compacted Bank Sand Base, Complete in place | \$ _____ | \$ _____ |
| 6. | 1 | LS | Precast concrete meter box for LAS Injection Vault, Complete in place | \$ _____ | \$ _____ |
| ORCHID WSP BASE BID ITEMS | | | | \$ _____ | |

9th STREET N WATER SUPPLY PLANT

| ITEM NO. | QTY. | UNIT | ITEM DESCRIPTION | UNIT PRICE | AMOUNT |
|--|-------------|-------------|--|-------------------|---------------|
| 1. | 1 | LS | Site Work, Including Re-Seeding and Re-Grading Disturbed Areas, Hose Bib, 1" Water Line and Tap to Existing Potable Water Line, Complete in place | \$ _____ | \$ _____ |
| 2. | 1 | LS | Emergency Eyewash Station mounted on wall of existing building, Complete in place | \$ _____ | \$ _____ |
| 3. | 1 | LS | 120 Gallon Double Walled UV Resistant LAS Storage Tank, with leak detection and visual level indicator, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 4. | 1 | LS | LAS Feed System, Including Adjustable Metering Pump, 3/8-Inch Poly Tubing LAS Feed Lines in 1-Inch Sch. 80 PVC Pipe, Chemical Injection Assembly, Labeling, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 5. | 1 | LS | LAS Metering Station Pad, 4' x 4' Min. (Larger if Needed for Equipment Size), 6" Thick, 3,000 psi Concrete with #4 Bars @ 12" Centers Each Way on 4" Compacted Bank Sand Base, Complete in place | \$ _____ | \$ _____ |
| 9TH STREET N. WSP BASE BID ITEMS | | | | \$ _____ | |

DISTRICT 14 WATER SUPPLY PLANT

| ITEM NO. | QTY. | UNIT | ITEM DESCRIPTION | UNIT PRICE | AMOUNT |
|---------------------------------------|-------------|-------------|--|-------------------|---------------|
| 1. | 1 | LS | Site Work, Including Re-Seeding and Re-Grading Disturbed Areas, Hose Bib, 1" Water Line and Tap to Existing Potable Water Line, Complete in place | \$ _____ | \$ _____ |
| 2. | 1 | LS | Emergency Eyewash Station mounted on wall of existing building, Complete in place | \$ _____ | \$ _____ |
| 3. | 1 | LS | 165 Gallon Double Walled UV Resistant LAS Storage Tank, with leak detection and visual level indicator, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 4. | 1 | LS | LAS Feed System, Including Adjustable Metering Pump, 3/8-Inch Poly Tubing LAS Feed Lines in 1-Inch Sch. 80 PVC Pipe, Chemical Injection Assembly, Labeling, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 5. | 1 | LS | LAS Metering Station Pad, 4' x 4' Min. (Larger if Needed for Equipment Size), 6" Thick, 3,000 psi Concrete with #4 Bars @ 12" Centers Each Way on 4" Compacted Bank Sand Base, Complete in place | \$ _____ | \$ _____ |
| DISTRICT 14 WSP BASE BID ITEMS | | | | \$ _____ | |

HEIGHTS STREET WATER SUPPLY PLANT

| ITEM NO. | QTY. | UNIT | ITEM DESCRIPTION | UNIT PRICE | AMOUNT |
|--|-------------|-------------|--|-------------------|---------------|
| 1. | 1 | LS | Site Work, Including Re-Seeding and Re-Grading Disturbed Areas, Hose Bib, 1" Water Line and Tap to Existing Potable Water Line, Complete in place | \$ _____ | \$ _____ |
| 2. | 1 | LS | Emergency Eyewash Station mounted on wall of existing building, Complete in place | \$ _____ | \$ _____ |
| 3. | 1 | LS | 85 Gallon Double Walled UV Resistant LAS Storage Tank, with leak detection and visual level indicator, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 4. | 1 | LS | LAS Feed System, Including Adjustable Metering Pump, 3/8-Inch Poly Tubing LAS Feed Lines in 1-Inch Sch. 80 PVC Pipe, Chemical Injection Assembly, Labeling, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 5. | 1 | LS | LAS Metering Station Pad, 4' x 4' Min. (Larger if Needed for Equipment Size), 6" Thick, 3,000 psi Concrete with #4 Bars @ 12" Centers Each Way on 4" Compacted Bank Sand Base, Complete in place | \$ _____ | \$ _____ |
| 6. | 1 | LS | Precast concrete meter box for LAS Injection Vault, Complete in place | \$ _____ | \$ _____ |
| HEIGHTS STREET WSP BASE BID ITEMS | | | | \$ _____ | |

ATTWATER WATER SUPPLY PLANT

| ITEM NO. | QTY. | UNIT | ITEM DESCRIPTION | UNIT PRICE | AMOUNT |
|------------------------------------|-------------|-------------|--|-------------------|---------------|
| 1. | 1 | LS | Site Work, Including Re-Seeding and Re-Grading Disturbed Areas, Hose Bib, 1" Water Line and Tap to Existing Potable Water Line, Complete in place | \$ _____ | \$ _____ |
| 2. | 1 | LS | Emergency Eyewash Station mounted on wall of existing building, Complete in place | \$ _____ | \$ _____ |
| 3. | 1 | LS | 40 Gallon Double Walled UV Resistant LAS Storage Tank, with leak detection and visual level indicator, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 4. | 1 | LS | LAS Feed System, Including Adjustable Metering Pump, 3/8-Inch Poly Tubing LAS Feed Lines in 1-Inch Sch. 80 PVC Pipe, Chemical Injection Assembly, Labeling, and All Appurtenances, Complete in place | \$ _____ | \$ _____ |
| 5. | 1 | LS | LAS Metering Station Pad, 4' x 4' Min. (Larger if Needed for Equipment Size), 6" Thick, 3,000 psi Concrete with #4 Bars @ 12" Centers Each Way on 4" Compacted Bank Sand Base, Complete in place | \$ _____ | \$ _____ |
| ATTWATER WSP BASE BID ITEMS | | | | \$ _____ | |

GODDARD WSP BASE BID ITEMS \$ _____

32nd STREET WSP BASE BID ITEMS \$ _____

ORCHID WSP BASE BID ITEMS \$ _____

9th STREET N WSP BASE BID ITEMS \$ _____

DISTRICT 14 WSP BASE BID ITEMS \$ _____

HEIGHTS STREET WSP BASE BID ITEMS \$ _____

ATTWATER WSP BASE BID ITEMS \$ _____

TOTAL AMOUNT BID: \$ _____

Signed: _____

By: _____
(Print Name of Company)

(Print Individual Name & Title)

ATTEST:

(Seal, if Bidder is Corporation)

_____ **Mailing Address**

_____ **City, State and Zip**

_____ **Delivery Address**

_____ **City, State and Zip**

_____ **Phone Number**

_____ **Fax Number**

_____ **E-Mail Address (if available)**

Substitutions:

1. _____ \$ _____
(Add) (Deduct)
2. _____ \$ _____
(Add) (Deduct)
3. _____ \$ _____
(Add) (Deduct)

In the event of the award of a contract to the undersigned, the undersigned will furnish a performance bond for the full amount of the contract, to secure proper compliance with the terms and provisions of the contract, to insure and guarantee the work until final completion and acceptance, and will furnish a payment bond in the same amount to guarantee payment of all lawful claims for labor performed and materials furnished in the fulfillment of the contract.

The work proposed to be done shall be accepted when fully complete and finished in accordance with the Plans and Specifications to the satisfaction of the Engineer.

The undersigned certified that the bid prices contained in this bid form have been carefully checked and are submitted as correct and final.

NOTE: Unit and lump sum prices must be shown in words and figures for each item listed in this proposal, and in the event of discrepancy, the words shall control. Should bid prices on any items be omitted, the right is reserved to apply the lowest prices submitted by any other bidders for the omitted items in payment for work done under this proposal.

Receipt is hereby acknowledged of the following addenda to the contract documents:

Addendum No. 1 dated _____ Received _____

Addendum No. 2 dated _____ Received _____

Addendum No. 3 dated _____ Received _____

“Under Texas Family Code, Section 231.006 a sole proprietorship, corporation, or other entity in which a sole proprietor, partner, a majority shareholder of a corporation or an owner of 10% or more of an other business entity is 30 days or more delinquent in paying child support under a court order or a written repayment agreement is not eligible to bid on or receive a state contract.” To comply with Section 231.006, the affidavit below must be signed by the person who is authorized to sign and submit a bid, and thereby bind the bidder, and it must be returned with the bid. A failure to do so will result in the disqualification of the bid.

“I, _____ am authorized to sign this bid on behalf of
(Name and Title)

_____, a
(Name of bidder)

(insert type of business, i.e., sole proprietorship,
partnership, corporation, or other)

I certify that no _____

is 30 days or more delinquent in child support payment required by court order or written
repayment agreement.”

(Date)

(Signature)

Given under my hand and seal of office this ____ day of _____, A.D. 2011.

_____ County, Texas

ADDENDUM NO. 1

**SECTION 11305
METERING PUMPS**

PART 1 GENERAL

1.01 SCOPE

- A. This section describes the requirements for chemical metering pumps.
- B. Under this item, the contractor shall furnish and install the equipment and accessories as indicated on the plans and as here in specified.

1.02 SUBMITTALS

- A. The following information shall be included in the submittal for this section:
 - 1. Data sheets and catalog literature for the pumps and accessories.
 - 2. Connection diagrams for equipment wiring.
 - 3. List of spare parts and optional equipment.
- B. Submit in accordance with Section 01300.

PART 2 PRODUCTS

2.01 CHEMICAL METERING PUMP SYSTEM

- A. Chemical metering pumps shall be positive displacement, Liquiframe type pumps with mounting brackets.

2.02 MANUFACTURER

A. LMI Metering Pumps, Model B-72-100psig (6.9 bar) 2.5 GPH. **(120 VAC W/ US Plug)**

B. Or equal.

C. OUTPUT

- 1. Adjustable while pumps are in operation from zero to maximum capacity of 2.5 GPH (9.5 liters/hr).
- 2. Pumps shall be capable of injecting solutions against pressures up to 100 psig without a hydraulically backed diaphragm.
- 3. Controls shall be selectable between internal and external pulsing by means of a three (3) position center-off switch
- 4. External pulsed mode units shall accept signals from Micropace Controls and circuit voltage shall not exceed 16 volts.

D. DRIVE

- 1. Type: Totally enclosed with no exposed moving parts.
- 2. Solid state electronic pulser shall be fully encapsulated with no exposed printed circuit etch and with quick connect terminals at least 3/16" (4.75 mm) wide.
- 3. Electronics shall be housed in chemical resistant enclosure at the rear of the pump.
- 4. Electrical power consumption shall not exceed 29 watt hours per hour under full speed and maximum pressure conditions.

2.02 AUTOMATIC PRESSURE RELIEF

- A. Pressure relief is provided through use of the Liquifram which shall automatically stop pulsating when discharge pressure exceeds pump pressure by not more than 35%

2.03 MATERIALS

- A. Chemically resistant glass fiber reinforced thermoplastic with a glass fiber reinforced polypropylene EPU carrier.
- B. Stainless steel exposed fasteners.
- C. Ball type valves with ceramic balls seated on combination valve seat and seal ring.
- D. Valve seat and seal ring shall be replaced by only replacing the seal-seat ring.
- E. Fittings and connections shall be PVDF.
- F. Provide a minimum of 16 ft (4.8 m) of polyethylene tubing per pump complete with compression connections.

2.04 CHECK VALVES

- A. Provide a foot valve with integral one piece strainer on suction line and an injection/back pressure check valve with 1/2" NPT male connection for the injection point.
- B. Injection check valve shall have a dilating orifice to inhibit accumulation of crystalline deposits.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install equipment in accordance with manufacturer's written instructions and approved submittals – **Shall be bolted to concrete pad.**
- B. **110V outdoor, weatherproof outlet shall be provided and connected to power as per Division 16.**

END OF SECTION

SECTION 11356
AMMONIATION EQUIPMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. **Liquid Ammonia Sulfate (LAS) storage tanks and** solution piping, valves and required accessories.

1.02 SYSTEM DESCRIPTION

A. Design Requirements:

1. Design system for manual feed rate control and equipment for **manual** start/stop operation for well water.

B. Performance Requirements:

1. Design components for stresses occurring during continuous operation and for additional stresses occurring during fabrication or erection.
2. Construct components of materials resistant to LAS.

1.03 SUBMITTALS

A. Shop Drawings and Product Data:

1. **Tank.**

B. Submit in accordance with Section 01300.

C. Operation and Maintenance (O&M) Data:

1. Submit in accordance with Section 01730.

PART 2 PRODUCTS

2.01 LAS CHEMICAL HOLDING TANK

A. Manufacturers/Model:

1. Poly Processing Company / Safe Tank (**Size as shown on drawings**)
2. Or equal.

- B. Tank shall be rotationally-molded with one-piece seamless construction using high density cross-linked polyethylene. Tank shall be double walled, and flat bottomed. The assembly shall consist of one cylindrical, closed top inner primary tank and one cylindrical, open top containment outer tank. Tank shall be adequately vented in the roof of the tank with corrosive resistant screening. The outer

AMMONIATION EQUIPMENT

containment tank shall have only one appurtenance for installation of a chemical resistant drain valve. The appurtenance shall be located as close to the vertical wall's bottom as feasible without compromising the integrity of the outer containment tank. Tanks shall be permanently embossed to identify the manufacturer, date of construction and serial numbers of the tank. The six vertical inch freeboard level shall be marked on the tank so that the tank is not filled past that mark. **Tank shall include visual level indicator.**

- C. **Materials:**
 - a. Tank shall be manufactured from virgin cross-linked polyethylene materials.
 - b. Tank shall be manufactured from materials certified to NSF/ANSI Standard 61 for chemical storage.
- D. Tank shall come with a 5 year full replacement warranty.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's written instructions and approved submittals.

3.02 LAS TUBING

- A. Install LAS tubing from **metering pump** unit to point of application in well header.
- B. Install tap and 1 in. corporation cock for **LAS** solution diffuser entry.
- C. Install 2-in. conduit for conducting **LAS** tubing. Install conduit under floor in slabs on grade and in floor in structural slabs. Use galvanized steel conduit as specified in Division 16.
- D. Install seal around vacuum tubing at point of entry and exit from conduit using 3M Scotch cast.

3.04 FIELD QUALITY CONTROL

- A. **Manufacturer's Field Services:**
 - 1. Supplier's or manufacturer's technician for equipment specified herein shall be present at job site for minimum of 1 manday, travel time excluded, for training of OWNER'S personnel for plant and maintenance. Supplier or manufacturer shall direct services to specific system and equipment operation, maintenance, and troubleshooting.
 - 1. As part of set-up, provide a Hach Pocket Colorimeter II Kit.

END OF SECTION