

Addendum No. 3

**Township of Hampton
Contract Nos. 2019-01 and 2019-02
Glannons Pump Station and Force Main Upgrade**

March 25, 2020

All prospective Bidders interested in the above construction work are herein advised of the following additions, deletions and/or modifications of the plans, specifications and Bidding Documents:

1. **Receipt of Bids:** In compliance with Commonwealth of Pennsylvania mandates related to the Covid-19 virus pandemic, all bids shall be submitted via UPS, Fed-Ex, USPS, etc. and shall be addressed in care of the Township of Hampton Police Department at 3101 McCulley Road, Allison Park PA 15101. **NO BIDS SHALL BE DELIVERED IN PERSON.** Envelopes containing bids shall be clearly identified as bids for Contract 2019-01 or 2019-02. To this end, receipt of bids shall be closed at 10:00 am April 6, 2020. Information regarding the opening and reading of the bids will follow via subsequent addenda.
2. **Addendum No. 2 and Specification Section B6:** The second paragraph of Specification Section B6 is hereby revised as follows:

"The ENGINEER will receive and respond to inquiries, questions, clarifications and/or Requests for Information until **4:00 pm EST April 6, 2020 April 2, 2020** as time dated by the ENGINEER's digital server. Inquiries posted after this time may not receive response.
3. **Specification Section 15505:** Specification Section 15505 shall be removed and replaced with the attached and revised Section 15505-R.
4. **Addendum No. 1 item #9 and Specification Section 08330:** The previously amended item on Addendum No. 1, specifically item #9, regarding the classification of equipment and NEMA enclosure. The garage door operator shall not be required to be NEMA Type 7, it shall be supplied NEMA Type 4X or equal.
5. **Addendum No. 1 item #10:** The previously amended item on Addendum No. 1, specifically item #10, regarding the scope of work and responsibility on equipment. Contract 2019-02 shall be responsible for supplying the Garage Door's NEMA Type 4X disconnect switch and local control station.

6. **Contract Drawing D1:** Clarification: The existing Pump Station, sanitary manhole and wet well scheduled for demolition shall consist of the removal of the top of each structure to an elevation approximately 3'-0" feet below grade and placement of structural fill to grade in the void after all other demolition efforts are complete:
-) With respect to the Pump Station to be demolished:
 - o The top of the man way is at elevation 1004.16.
 - o Grade at the man way is 1001.0+/-.
 - o The man way is 3'-0" in diameter and extends to approximate elevation 997.5+/-.
 - o The pump room chamber is 7'-0" in diameter and has an approximate invert of 987.5+/-.
 -) With respect to the sanitary manhole to be demolished:
 - o The top of the manhole is at elevation 1001.61
 - o The manhole is 4'-0" in diameter and has an approximate invert elevation 989.7+/-.
 -) With respect to the wet well to be demolished:
 - o The top of the wet well is at elevation 1002.19
 - o The wet well is 6'-0" in diameter and has an approximate invert elevation 989.7+/-.
7. **Contract Drawing GPSE2:** Plan GPSE2-A references Note 1 on the same drawing. As the wet well will be classified as Class I Division 2 as a result of forced air changes into the wet well, the Pump Room shall be Non-Classified. To this end Note 1 shall be ignored and all electrical work and equipment in the Pump Room shall be provided as previously specified with all materials per Division 16 Specifications. Where not provided in the specifications, all equipment shall be NEMA Type 4X or equal.
8. **Contract Drawing GPSE2:** Plan GPSE2-A identifies that the Garage Door Opener Disconnect Switch and Local Control Station to be NEMA 7. Both items shall be NEMA Type 4X.

All bidders shall acknowledge receipt of this Addendum No. 3 in the space provided on the Bid Form corresponding to the appropriate contract.

**End of Addendum No. 3
Contract Nos. 2019-01 and 2019-02**

KLH Engineers, Inc.
5173 Campbells Run Road
Pittsburgh, PA 15205
Phone: 412-494-0510
Fax: 412-494-0426

SECTION 15505-R

ELECTRIC HEATERS

PART 1: GENERAL

1.01 WORK INCLUDED

- A. The CONTRACTOR shall furnish all labor, equipment and materials necessary to install complete and place into operation the unit heaters listed on the drawings and herein.
- B. Units shall be UL listed for safe operation, construction, and performance. Units shall be listed for use in U.S. for commercial and industrial installations.
- C. Refer to Division 11 for the requirements that the equipment in this Division must meet the specific requirements of other Divisions and that the CONTRACTOR is responsible for informing manufacturers of these requirements.
- D. Explosion proof units shall be 60 Hertz models and be Underwriters Laboratories Inc. listed for use in Class I, Division 1, and Group D Hazardous Locations, and shall be rated for National Electrical Code Temperature Code T3B, 165°F.
- E. Unit heaters shall be manufactured under a registered ISO 9002 quality system.
- F. Temperature limitations: Operational: -49°F to 104°F, Storage: -49°F to 176°F, Short term to 248°F

PART 2: PRODUCTS

2.01 ELECTRIC UNIT HEATER

- A. Cabinet
 - 1. Units shall have a steel casing. Casing shall be treated to prevent corrosion and painted with a corrosion resistant, polyester powder coat grey-green finish.

2. Top of casing shall have two 3/8" threaded holes for threaded rod suspension, see section E Mounting.
3. Bottom of casing shall have a hinged panel for service access to wiring and controls. Heater and supply wiring diagram shall be permanently attached to the inside of the access door.
4. An internal shroud shall be provided around the heating element to ensure uniform airflow delivery across the entire face of heating elements. The enclosed motor and fan shall be isolated to minimize vibration and noise level.
5. Supply air shall be drawn and discharged through an outward draw venturi. Adjustable discharge louvers shall be provided to control the direction of airflow.

B. Elements

1. Elements shall consist of a nickel-chromium resistance wire surrounded with magnesium oxide and sheathed in steel spiral-finned tubes. Elements shall have kilowatt rating as specified.

C. Motors

1. Heaters shall have a single 480 volt motor and propeller. The motor shall be totally enclosed, continuous duty, with automatic resetting, thermal overload protection.
2. Propeller fan shall be directly connected to the motor shaft and be statically balanced. Motor mounted to unit with rubber vibration absorbing material.

D. Electrical

1. Units shall have built-in contactors and control circuit transformers where required to provide single-source power connection.
2. Built-in fuse blocks and factory-supplied fuses shall be installed on all models where applicable.

3. Heaters shall be designed for a single circuit with elements, motor and control circuits wired in accordance with the latest national electric code or applicable local codes and listed under UL Standard 2021. All three-phase heaters shall have balanced equal phases.
4. A wiring diagram and grounding lug shall be included in each control compartment.
5. Transformers shall be factory installed on all models with 480 volt, 3 phase power supply to permit 230 volt motor operation.

E. Mounting

1. Unit heaters shall be mounted for horizontal discharge using either threaded rod, pipe or wall mount bracket.
2. If ceiling suspension is not an option a wall mount bracket shall be used according to the manufactures requirements.
3. Threaded pipe suspension shall be used in conjunction with the pipe adaptor kit supplied by the manufacturer.
4. CONTRACTOR shall verify all mounting applications with the Manufacturer to ensure the correct installation of a particular model.

F. Manufacturer

1. Unit heaters designated for use in non classified areas shall be equivalent to Modine Model HER.
2. All be equivalent to Modine HEX series.

2.02 ELECTRIC BASEBOARD UNIT HEATER

A. Cabinet

1. Units shall be fabricated of minimum .024 inch steel with minimum .035 inch steel control boxes.

2. Junction box enclosure shall have provisions for incoming and outgoing cable with cable clamp for restraining without additional hardware. Ground wire pigtail shall be provided in each box.
3. Front cover shall be fabricated of minimum 0.26 inch pre-painted steel.

B. Elements

1. Heating Element wire shall consist of 80% nickel, 20% chromium, and shall be encased in a steel sheath to assure long and trouble free life. Aluminum fins shall be designed as to block sheath radiation to front and back of heater body and pressure bonded to the steel sheath.

C. Controls

1. Heaters shall include a built in tamper proof thermostat. Thermostats shall be supplied by the manufacturer and factory installed.

D. Mounting

1. CONTRACTOR shall verify all mounting applications with the Manufacturer to ensure the correct installation of a particular model.

E. Manufacturer

1. All baseboard unit heaters designated for use in non classified areas shall be equivalent to QMark 2500 series.

PART 3: EXECUTION

3.01 ELECTRIC HEATERS

- A. The Electric heaters shall be installed and wired in accordance with the manufacturers recommendations.
- B. CONTRACTOR shall follow Division 16 requirements for all wiring and control specification in addition to this specification.
- C. The installation of heaters shall conform to the following schedules:

Schedule 15505-A Center Street Pump Station/Screen Building Electric Heating Schedule							
ID	Location	Btu/Hr	kW	Air Flow (CFM)	Heat Throw (FT)	Model No.	Amps
UH-101	Control Room	68,200	20	1300	25	HER 200B 3301	24.1
UH-102	Rest Room	3412	1	-	-	2514W	8.34

NOTES:

Unit Heaters shall be 480 Volt 3 Phase 60 Hertz

Baseboard Heater shall be 120 Volt 1 Phase 60 Hertz

* Classified Area requires an explosion proof unit heater.

End of Section

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