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DELAWARE STATE POLICE FIRING RANGE HVAC UPGRADE
OMB/DFM CONTRACT # MJ1002000012
ADDENDUM #3

QUESTIONS:

1. Drawing E-101 calls for new Duct Detectors at AHU-3. Note 15 requires the contractor to coordinate with existing Fire Alarm vendor. Can you provide the name and contact person for the existing Fire Alarm vendor?

Answer:

The existing fire alarm vendor is Wayman Fire Protection.

2. Note 3 on Drawing E-101 requires Hi-Pot testing on the new High Voltage cable between the junction box and new transformer. This to me seems like overkill considering this cable is only about 25 feet long. Also we would need to have a testing agency come out on a Saturday. Can we wave that requirement?

Answer:

Drawings E-101 and E-400 call for the primary service cables to be high-potential tested *after splicing is complete*. This means that the existing primary cables, once spliced to the new 25-foot extensions, need to be tested from the utility pole on Clark Farm Road through the splices to the new transformer location in order to ensure the integrity of the splices. This test was requested by the electrical utility and will remain part of the project. All testing requirements must be coordinated with the electrical utility.

3. Is this Kent or New Castle County public wages?

Answer: New Castle County.

4. The sonotubes shown on S-100 have rebar showing, but no sizes, amounts, or how many verticals, etc...Please clarify.

Answer: For the sonotube piers, reinforce with (6) #8 vertical; #3 hoop ties at 12".

5. Drawing M-101 shows new bollards around the Mechanical equipment and refers to a detail on M-501 showing a removable bollard. On drawing E-301, they show another type of bollard which is a cast in place type. I assume the removable bollards are for the Mechanical equipment and the cast in place ones are for the Electrical transformer/SMDS pad? Is this correct?

Answer: Yes. The detail on M-501 is intended only for the bollards shown on drawing M-101. The detail on E-301 is intended only for the bollards shown on E-100.

SUBSTITUTION REQUESTS

- Trane RTAC air cooled rotary screw chillers were submitted for approval. Trane RTAC air cooled rotary screw chillers were found **not** equal (CH-1&2).



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- Energy Labs Inc. custom air handling unit was submitted for approval. Energy Labs Inc. custom air handling unit was found as equal (ERU-1).*
- Air Zone International custom air handling unit was submitted for approval. Energy Labs Inc. custom air handling unit was found as equal (ERU-1).*
- Aquatherm was submitted for approval. Aquatherm was found **not** equal.
- * It is the contractor's responsibility for any costs associated with deviating from the basis of design that subsequently become apparent or that are apparent now. Costs associated could include but are not limited to additional structure, space constraints for equipment service, electrical power requirements (breaker/fuse sizing and wire sizing changes), and piping connection location modifications. The contractor shall ensure approved as equal equipment meets or exceeds all requirements found both on the drawings and in the specifications provided for this project. Any approved as equal equipment submitted may be rejected that does not satisfy the specifications. The engineer has not redesigned the project around this substitution.

CLARIFICATIONS

- The chilled water system is to be 30% propylene glycol. The chillers and all chilled water coils shall be sized for this.
- Electrical Phase 1 installed cabling to maintain dry, water tight condition and prevent moisture wicking into the cable ends.
- Record drawings from an HVAC renovation in 2007 are included with this addendum.
- Refer to detail 6/M-501 for all required appurtenances to be installed with the new hot and chilled water pumps.
- The factory temperature sensor shown on drawing M-401 (TS6) should be moved to the hot water return header. The contractor is responsible for installing this sensor in the header.
- In specification sections 01 91 13, sections 2.01-2.06 are intended to be sections 3.01-3.06.
- Engage a factory-trained and factory-employed service representative to adjust and operate the boiler and chillers during Commissioning activities (startup, checkout, and troubleshooting during functional performance testing). Factory representative must be knowledgeable of the equipment and systems and capable of assisting with troubleshooting and making unit adjustments as required to support the owner's commissioning process.
- The basis of design chillers come with a factory supplied temperature sensor and well for the chilled water supply (TS5). Contractor is responsible for installing and wiring this temperature sensor.
- The chillers are to be controlled by internal chiller controls that interface with the BAS. These controls are described on drawing M-402. The contractor is responsible for all necessary wiring to install these chillers and their control systems.
- On drawing M-402, the chiller flow rate meter (FM1) shall be "370 GPM" minimum.
- On drawing M-403, under "Discharge Temperature Control", there shall be a time delay of 15 minutes (ADJ.) after return air relative humidity rises above 55% (ADJ.) before the unit enters into dehumidification mode.



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- There shall be a filter runtime point (ADJ. to be determined at TAB) added to the ERU-1 controls sequence. A high limit filter runtime alarm point (ADJ. to be determined at TAB) shall also be included.
- Contractor is responsible for securing the services of an underground surveying company for determining any underground piping or wiring prior to excavating.
- The ERU vendor is responsible for providing insulated piping thru the top of the unit that is to be terminated outside of the unit (building side) and within the service corridor with a flanged connection. This piping is shown on drawing M-204 and is called out in Drawing Note 2. This is also called out in specification section 23 73 14 2.04G 3.
- Contractor shall provide and install a condensate neutralization kit with the new boiler.
- All duct assemblies to be rated for 2” WG. These assemblies are identified in section 23 31 00 3.01G.
- Specification section 23 09 59 3.11C shall read “three (3) 8-hour days”.

DRAWING REVISIONS:

M-102

- Revised fan coil elevation.

S-100

- Revised pier footing detail.

S-103

- Added turn down detail.

Addendum #3

1. Addendum #3 (this document) (3 pages)
2. Revised Drawings (3 pages)
 - M-102
 - S-100
 - S-103
3. Previous renovation drawings (13 pages)

Summarized By:

DEDC, LLC

Matt Lano

Date:

December 9, 2016

DRAWINGS REDACTED