ADDENDUM #2

December 3, 2007

Re: HACC – Central Pennsylvania’s Community College
Welding Area Electrical Modifications
Midtown 1 – CCTA
Community Center for Technology and the Arts
Solicitation #08-28

From: Eastern pcm, LLC
Construction Manager – HACC
212 Locust Street, Suite 604
Harrisburg, PA 17110

To: All Plan Holders

This Addendum is hereby made part of the Contract Documents dated November 15, 2007 (RFP, Project Manual and Drawings) for the above referenced project. The provisions of this Addendum are intended to supplement the provisions of the Contract Documents and/or supersede them where contradictory thereto.

This Addendum contains changes to the requirements of the Contract Documents. Such changes shall be incorporated into the Contract Documents and shall apply to work with the same meaning and force as if they had been included in the original Contract Documents. Where this Addendum modifies a portion of a paragraph or phrase of the RFP or Project Manual, the remaining unmodified portion of the paragraph or phrase shall remain in force.

The conditions and terms of the Contract Documents shall govern work described in this Addendum. Whenever the conditions of work, or the quality or quantity of materials or workmanship are not fully described in this Addendum, the conditions of work etc. included in the Contract Documents for similar items of work shall apply to the work described in this Addendum. If no similar items of work are included in the Contract Documents, the quality of material and workmanship shall be subject to the written acceptance of the Engineer.

Item 2.1 CLARIFICATIONS

1. Q. Is this a prevailing wage project? If so, what is the rate?
   A. Yes. Wages are available for download from www.dli.state.pa.us, serial # 07-6382.

2. Q. On Drawing E1.1: the Disconnect Switches shown at item #3 and #4. Does the Owner supply these? If not, what are the amps?
   A. The contractor is to provide the disconnects. Item 3 is to have a 60 Amp, non-fused disconnect. Item 4 to have a 60 Amp, non-fused disconnect. Coordinate mounting with Owner, mount disconnects to allow the existing welding booths to be relocated.
3. Q. There is no schedule for feeding panels W1 and W2. What is the conduit size and wire size for these panels?
   
   A. Panel W1 feeder (3) 500 kcmil, 500 kcmil, N, #3 AWG G, 4" C.
   Panel W2 feeder (3) 4/0 AWG, 4/0 AWG, N, #4 AWG G, 2 ½” C

4. Q. Drawing E1.1: Are the conduit drops on items #1, #2, #3 and #4 from ceiling or SO cord?
   
   A. These items are for welders that are not planned to be moved. These items are to be conduit drops from the ceiling. Conduits and conduit supports for items #3 and 4 must allow for the existing welding booths to be relocated.

5. Q. Drawing E2.1: Are the new outlets on welding booths to be SO cord drops, similar to Phase 1 work?
   
   A. Yes, connect using SO cord. All cord drops to have strain relief where required.

6. Q. Drawing E2.1: Is the conduit drop for item #1 from the ceiling or SO cord?
   
   A. Connect with cord drops. Cord drops to have strain relief where required.

7. Q. Please clarify the use of the proper raceway for this installation, per Specifications Section 16130, 3.01.A. This installation calls for Rigid Steel conduit. However, there are several new conduit runs in the facility that are currently EMT Conduit. Please clarify if the Rigid Steel conduit is the desired product for this total installation.
   
   A. EMT is allowed where it is 10 feet above the finished floor and in the existing electrical mezzanine.
8. Q. Panel W1 Circuit 20, 22, 24 shows a 50 Amp circuit fed with #10 wire. Panel W1 Circuit 1, 3, & 5, 7, & 9, 11, shows a 125 Amp circuit fed with #3 wire. Panel W1 Circuit 31, 33, 35 & 37, 39, 41 shows a 60 Amp circuit fed with #8 wire. Are these correct?

A. Reference Section 630.32(B) of the National Electric Code "Conductors that supply one or more welders shall be protected by an overcurrent device rated or set at not more than 300 percent of the conductor rating."

The conductors are sized on the rated input current of the welder and the OCP device is sized at least 150% of the rated input current.

1. The plasma cutter has an input current of 29 Amps, therefore, #10 AWG.
2. The Miller Synchrowave TIG's have input current of 85 Amps, therefore, #3 AWG.
3. The Miller XMT 350's have an input current of 40 Amps, therefore, #8 AWG.

9. Q. Panel W2 Circuit 26, 28, 30 shows a 60 Amp circuit fed with #8 wire. Is this correct?

A. The welding air filter motor is a 208 Volt, 10 hp motor with FLA of 30.8 Amps, multiplied by 125% = 38.5 Amps, therefore, #8 AWG for conductors, the OCP can be set as high as 250%. Using 150% times the 38.5 = 57.75 Amps using the next higher size breaker the OCP is 60 Amps.

END OF ADDENDUM #2