DOCUMENT 00 90 00
ADDENDUM

ADDENDUM NO. [1] **Date: April 9, 2020**

RE: **SCHOOL DISTRICT OF LA CROSSE**
CENTRAL HIGH SCHOOL SUTTON GYM COOLING
LA CROSSE, WISCONSIN 54601
HSR PROJECT NO. 20008

FROM: HSR Associates, Inc
100 Milwaukee Street
La Crosse, WI 54603
(608) 784-1830

To: Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated March 2020. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of [1] page and [1] specification section.

CHANGES TO DRAWINGS:

1. Sheet M100 HVAC REMODEL SHEET
    a. Add a condensate pump for new cooling coils. See attached specification for condensate pump requirements. Pump shall be installed within existing air handling unit. Condensate from drain pans shall drain into condensate pump. Pump discharge shall route to roof and discharge onto roof with splash block. Condensate pipe shall use same roof housing as refrigerant piping.
    b. Electrical contractor to provide new 120v/1ph 20A GFI receptacle from nearest 120/1 panel to serve new condensate pump.

CHANGES TO SPECIFICATIONS:

2. Section 23 21 19 COOLING COIL CONDENSATE SYSTEMS
    a. Section attached hereto as part of contract documents.

END OF DOCUMENT 00 90 00

Page Intentionally Left Blank

SECTION 23 21 19

COOLING COIL CONDENSATE SYSTEMS

PART 1: GENERAL

1.01 RELATED DOCUMENTS

A. Conditions of the Contract and portions of Division One of this Project Manual apply to this Section as though repeated herein.

B. The requirements of Section 23 05 00 apply to this Section.

C. See IMC Section 307 Condensate Disposal.

1.02 SUBMITTALS

A. Submit in accord with Section 01 30 00.

1. Shop drawings and descriptive product data describing all material furnished under Part 2 of this Section.

PART 2: PRODUCTS

2.01 CONDENSATE DRAIN PIPING

A. Type M or L (Hard) copper with wrought copper fittings.

B. PVC piping is acceptable for condensate drainage.

2.02 CONDENSATE PUMPS (CP-#)

A. Based on product by Little Giant.

1. Beckett, Hartell Pumps, or Liberty equals are acceptable.

B. Pump shall be model VCL-45ULS, 1/5 HP, 120v/1ϕ, 30 feet of lift at 300 gallon/hour.

C. Description: Packaged units with corrosion-resistant pump, 1 gallon plastic tank with cover, and automatic controls. Include factory- or field-installed check valve and a 72-inch minimum, electrical power cord with grounded plug.

1. Low voltage safety switch with float.

PART 3: EXECUTION

3.01 PIPING

A. If copper piping is used, mechanically formed tee connections may be used in lieu of wrought copper fittings.

B. Pipe to be straight, true and free of defects - full lengths of pipe shall be used; short lengths coupled together will not be permitted.

C. All piping shall be arranged to permit free expansion and contraction without injuring the connections. Pipe anchors, expansion loops, etc. shall be installed where required.

D. Whenever copper and steel piping are joined, insulated unions shall be used; unions shall have plastic or neoprene isolator. Use insulators where copper piping rests on steel. No dissimilar metal shall come in contact with the copper piping.

E. Provide unions in all piping, at connections to equipment.

F. Condensate drain piping shall pitch a minimum of 1/8 inch per foot (1-percent slope) from air handling unit drain pans.

G. Use reducing fittings at all changes in pipe size; bushings are not permitted.

H. Fill openings in walls, floors and ceilings between piping and sleeves, with non-combustible material, where piping passes out of equipment rooms, or through fire-rated walls and floors.

I. Insulate condensate drain piping that is routed in walls, above ceilings and in occupied spaces.
   1. Insulate with 1/2" PolyOlefin or Black Rubber.
   2. Insulate all plastic piping that is routed through ceiling supply and return air plenums with 3M Fire Barrier Plenum Wrap 5A or equal, in addition to the insulation required to meet Energy Code.

3.02 COOLING COILS

A. Provide condensate drain piping with "P" traps from cooling coils to nearest floor drain as indicated on plans. Provide air gap between condensate drain and open site drain. See detail on plans for trap depth, clean out and vent locations.

B. Small fan coils with less than 0.25" ESP and a trap at the point of disposal do not need a trap at coil drain pan.

C. Condensate drain lines shall be configured to permit the cleaning of blockages and performance of maintenance without requiring the drain line to be cut.

3.03 PIPE SIZING

A. Condensate drain line size shall not be less than 3/4-inch internal diameter and shall not decrease in size from the drain pan connection to the point of condensate disposal.

B. One ton of cooling equals 12,000 BTUH. For systems with multiple units connected together use the following table for pipe sizes.

Connected Load	Minimum Size
Up to 5 tons	3/4" pipe
Up to 10 tons	1" pipe
Up to 30 tons	1-1/4" pipe
Up to 50 tons	1-1/2" pipe
Up to 170 tons	2" pipe

3.04 CONDENSATE PUMPS

A. Install per manufacturer's instructions.

B. Pumps shall be connected to equipment served such that when the pump fails the equipment will be prevented from operating.

END OF SECTION 23 21 19