Brownsburg Community School Corporation
2025 Cardinal Elementary School & Delaware Trail Elementary School Central Plant Upgrades

DATE: December 17, 2025

This Addendum issued prior to bidding, alters, amends, corrects or clarifies the Proposal Documents to the extent stated herein and does hereby become a part of the Proposal Documents, and will become a part of the Contract Documents of the successful bidder.

GENERAL

A. SPECIFICATIONS

1. 23 09 00 – Instrumentation and Control for HVAC
   a. Delete paragraph 1.1, E., in its entirety.
2. 23 23 00 – Refrigerant Piping
   a. Delete paragraph 1.1, B., in its entirety.
3. 23 51 00 – Breeching, Chimneys and Stacks
   a. Replace this section in its entirety with section included as a part of this addendum.
4. 23 52 16 – Condensing Boilers
   a. Delete paragraph 3.4, B., in its entirety.
5. 23 64 02 – Packaged Air-Cooled Water Chillers
   a. Delete paragraph 3.7, A., in its entirety.
6. 26 29 23 – Variable Frequency Motor Controllers
   a. Delete paragraph 1.1, A., and replace with the following:
      "A. This section includes Variable-Frequency Drives."
   b. Delete paragraph 1.1, B., in its entirety.

END OF ADDENDUM

SECTION 23 51 00 – BREECHINGS, CHIMNEYS AND STACKS

PART 1 – GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Listed double-wall gas vents.

1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

B. Section 23 52 16 Condensing and Non-Condensing Boilers

1.3 SUBMITTALS

A. Product Data: For the following:

1. Type B and BW vents where applicable to equipment.
2. Positive pressure special gas vents.

B. Shop Drawings: For vents, breechings, chimneys, and stacks. Include plans, elevations, sections, details, and attachments to other work. Horizontal and vertical separation distances shall be indicated on drawings as applicable. Consult equipment manufacturer for specific requirements.

PART 2 - PRODUCTS

2.1 GAS VENT – TYPE B

A. Prefabricated system listed to UL-441 Standard for Gas Vents made with aluminum alloy inner liner, insulating air space, and galvanized steel or galvalume outer jacket. Vent shall be designed for maximum 480°F and negative pressures only.

B. Complete with: factory appliance flue connector, elbows, gas vent supports, roof flashings, and termination. All items specifically as specified by Appliance and Gas Vent manufacturers installation instructions.

C. Submit CAD Drawings with Draft Calculations showing that the exhaust vent system is in complete compliance with both the Appliance and Vent manufacturers' installation instructions.

D. Provide the following options:

1. Roof Curb or Roof Thimble.
2. Storm Collar.
3. Rain Cap or Exit Cone. (Contractor to verify with Boiler Manufacturer.)

E. Manufacturers:

1. Selkirk Metalbestos
2. Metal Fab
3. Ampco
4. Van Packer
5. Heat Fab
6. Jeremias
7. Duravent

2.2 GAS VENT – DUAL WALL POSITIVE PRESSURE

A. Provide positive pressure vent for boilers and water heaters as approved by equipment manufacturer unless specified, otherwise, on Drawings.

B. Intake vents constructed of Schedule 40 CPVC piping.

C. Flue vents shall be a factory-built, all metal, pressure-sealed chimney system using a combination of modular components for a complete installation.

D. For condensing boilers, the vent pipe shall be UL 1738 Listed for Category II, III, and IV appliances, constructed of AL29-4C or other UL 1738 approved stainless. The outer jacket shall be constructed of stainless steel with a one (1) inch insulating air space. Provide special alloys as required by the boiler manufacturer. The vent system shall be listed by UL and having passed UL test 1738 for thermal shock, temperature tests and structural integrity. System shall be rated for use up to 550^{o}F.

E. The vent system material shall be specifically designed to work with the boilers and water heater being provided. Use of PVC and CPVC venting materials are permissible only when expressly approved by the Engineer prior to bid.

F. The vent system shall be complete with guides at roof penetration for lateral support. Provide tie-downs as required by manufacturer.

G. All flanged joints shall also have a male-female inner liner to ensure condensate does not leak from joints. In addition, all flange joints to be sealed.

H. Provide a complete, dimensioned shop drawing with a complete parts list to the Engineer for review prior to fabrication. Submit Draft Calculations showing that the exhaust vent system is in complete compliance with both the Appliance and Vent manufacturers' installation instructions.

I. Shop drawing shall be certified by boiler/water heater manufacturer as indicating all fittings, dampers, sizing, etc. have been properly engineered and acceptable for use with the respective appliance.

J. Provide the following options:

1. Roof Curb or Roof Thimble.
2. Storm Collar.
3. Rain Cap or Exit Cone. (Contractor to verify with Boiler Manufacturer.)

K. Manufacturers:

1. Selkirk Metalbestos
2. Metal Fab
3. Ampco
4. Van Packer
5. Heat Fab
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PART 3 - EXECUTION

3.1 APPLICATION

A. Listed Type B and BW Vent.

B. Listed Special Gas Vents: Condensing gas appliances.

3.2 INSTALLATION OF LISTED VENTS AND CHIMNEYS

A. Locate to comply with minimum clearances from combustibles and minimum termination heights according to product listing or NFPA 211, whichever is most stringent. Maintain minimum separation vertically and horizontally to adjacent roof penetrations to prevent recirculation of products of combustion, as recommended by manufacturer.

B. Seal between sections of positive-pressure vents and grease exhaust ducts according to manufacturer's written installation instructions, using sealants recommended by manufacturer. Provide proper flashing with sealant at roof curbs and roof thimbles to prevent water infiltration into the building.

C. Support vents at intervals recommended by manufacturer to support weight of vents and all accessories, without exceeding appliance loading. Install tie-wire support anchored to roof for all penetrations where recommended by venting system manufacturer whether or not indicated on the Drawings.

D. Slope breechings down in direction of appliance, with condensate drain connection at lowest point piped to nearest drain. Never install boiler “Y” taps into bottom of horizontal breeching. 90 boiler breeching horizontal then side tap into main breeching with “Y” fitting. “Y” fittings will leak if installed vertically into bottom of horizontal main.

E. Lap joints in direction of flow.

F. After completing system installation, including outlet fittings and devices, inspect exposed finish. Remove burrs, dirt, and construction debris and repair damaged finishes.

G. Clean breechings internally, during and after installation, to remove dust and debris. Clean external surfaces to remove welding slag and mill film. Grind welds smooth and apply touchup finish to match factory or shop finish.

H. Provide temporary closures at ends of breechings, chimneys, and stacks that are not completed or connected to equipment.

I. Manufacturers rep to witness boiler vent installation and sign off in the installation.

END OF SECTION 23 51 00