



THE SCHOOL DISTRICT OF PHILADELPHIA

BOARD OF EDUCATION
Office of Capital Programs
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Addendum No. 4

Subject: Cook-Wissahickon HVAC Plant Replacement B-147C, B-148C, B-149C, B-150C

Location: Cook-Wissahickon

This Addendum, dated January 3, 2020, shall modify and become part of the Bid Documents. Any items not mentioned herein, or affected by, shall remain strictly in accordance with the original document.

Questions and Answers

1. Question:

In looking at the specifications for the above mentioned project, there are two “Summary of Work” specs, two “Lists of Drawings” specs and two “Table of Contents” specs. The front end contains the School Districts specs, while from page 364 on contain the specs supplied by Gannett Fleming.

RESPONSE:

The Summary of Work, Table of Contents, and List of Drawings included with the technical specifications (page 364+) are redundant and were removed with Addendum #2.

2. Question:

Who is responsible for the Asbestos abatement?

RESPONSE:

The Mechanical Contractor shall be responsible for all Asbestos Abatement.

3. Question:

Who has the roof warranty we are to comply with?

RESPONSE:

The Mechanical Contractor shall be responsible for the roof repair scope of work and warranty of work for one year..

4. Question:

Note 3 on M101 has the MC replacing the Ceilings, A103 Has the GC installing. Which one is correct?

RESPONSE:

Per sheet A-103, Ceiling Plan General Notes, the General Contractor (B-147c) is responsible for “All Items Related to Ceiling Work”.

Per general Note 3 of M-101, the MC (B-148c) is responsible for an *additional* 500 linear feet of replacement-in-kind ceiling grid and 100 replacement-in-kind ceiling tiles as directed by the SDP construction project manager.

Addendum No. 4 (cont'd)

5. Question:

Which contract is responsible for the roofing, roof openings and infill?

RESPONSE:

The MC (B-148c) is responsible for the roofing, roof openings, and infill.

6. Question:

Do you want one or two water heaters? Detail shows (2) Plan shows (1)

RESPONSE:

Provide one permanent gas water heater and one temporary electric water heater per water heater schedule and new work plan of P-401. The contractor will disconnect the electric water heater once the gas water heater is operational and give it to the SDP Building engineer.

7. Question:

On drawing M401 the MOD's are removed but not replaced on M402.

RESPONSE:

MOD-1 is located in electrical room 019. Refer to M-108 keynote 11.

8. Question:

As it relates to Spec Section 23 0719, there is nothing specified for the condensate drain piping. Please provide a specification and insulation schedule.

RESPONSE:

Provide 1" thick condensate drain piping insulation to all new condensate drain piping. This note is documented on Addendum No. 2.

9. Question:

There is no insulation schedule for the various sheet metal systems. Please provide.

RESPONSE:

Provide all new ductwork, including exhaust duct, with R-6 insulation.

10. Question:

As it relates to Spec Section 23 0713 3.01B the exposed sheet metal calls for wrap with a PVC jacket. This is not the standard or typical application. Can you please confirm this specification?

RESPONSE:

Per Specification Section 23 0713 3.01B and drawings M-108, M-109, and M-110 General Sheet Notes 1, Provide PVC Jacket on all Ductwork in Mechanical Rooms or exposed within 8'-0" of finished floor.

11. Question:

Kindly confirm per the summary of work 01 100 paragraph 2 the General Contractor will be responsible for all abatement, not the Mechanical Contractor as the lead prime contractor.

RESPONSE:

As stated in Question # 2, the mechanical contractor shall be responsible for all abatement.

Addendum No. 4 (cont'd)

12. Question:

Are plumbing and mechanical separate contracts?

RESPONSE:

Yes. This project will consist of separate contracts.

- B-148c – Mechanical Contractor
- B-150c – Plumbing Contractor

13. Question:

Has a phasing plan been developed?

RESPONSE:

Refer to Specification 01-1300.

14. Question:

Do the unit vents have two coils or a single dual temp coil? If one coil, what do you balance the coil for hot water or chilled water?

RESPONSE:

Unit ventilators are single dual temp coils. Refer to the Mechanical Drawings and Specification.

15. Question:

Piping riser shows four pipe in lieu of dual temp piping.

RESPONSE:

Refer to the note of Detail '5' on M-503 that "Detail similar for dual temperature, two-pipe system." This is a dual pipe system.

16. Question:

Does the abatement contractor remove the ceiling tiles in order to access the pipe fittings? Who is responsible to re install?

RESPONSE:

Per sheet A-103, Ceiling Plan General Notes, the General Contractor (B-147c) is responsible for "All Items Related to Ceiling Work".

Per general Note 3 of M-101, the MC (B-148c) is responsible for an *additional* 500 linear feet of replacement-in-kind ceiling grid and 100 replacement-in-kind ceiling tiles as directed by the SDP construction project manager.

17. Question:

Is the abatement contractor scraping any loose and flaking lead based paint above the ceiling tiles that were removed when they access the asbestos?

RESPONSE:

The Mechanical Contractor shall be responsible for the scraping of any and all loose and flaking lead based paint.

18. Question:

Please confirm the General Contractor will demo concrete pads and pour new concrete pads as required.

RESPONSE:

The General Contractor (B-147c) is responsible for equipment pad removal per Demo Keynote D1.2 of A-101 and new pads per Keynote A-1.27 and A-1.27a of A-102.

Addendum No. 4 (cont'd)

19. Question:

Please confirm the General Contractor is responsible for all patching and painting as required.

RESPONSE:

The General Contractor (B-147c) is responsible for painting and patching of mechanical spaces per A-102. The MC (B-148c) is responsible for other miscellaneous, repair, patching, and painting per contract documents.

20. Question:

Is the General Contractor responsible for the removal and reinstallation of the elevator equipment cage?

RESPONSE:

Per M-101 keynote 16 and M-105 keynote 16, the Mechanical Contractor (B-148c) is responsible for disassembly and reassembly of the elevator equipment cage.

21. Question:

Please provide a Plumbing Bid Form.

RESPONSE:

The Plumbing Bid Form was issued under Addendum No. 1

22. Question:

Kindly see the attached [boiler] substitution request.

RESPONSE:

No mechanical equipment substitutions shall be permitted.

23. Question:

Can additional building survey be scheduled with the School District prior to 12/17/19 bid.

RESPONSE:

The additional building survey shall be scheduled with the SDP Design Project Manager, Jerry Lamina, 609-304-1360 Mobile/Cell Number.

24. Question:

Please clarify Installations means & methods:

Installation shall be in accordance with appropriate requirements of Division 26.

- All exposed control wiring shall be provided in wire mold.
- All control wiring in mechanical rooms and back of house rooms shall be provided in rigid metal conduit (RMC).
- All concealed control wiring shall be provided in electrical metallic tubing (EMT).

RESPONSE:

Refer to Control Wiring Raceway Schedule per the appropriate Specifications sections.

25. Question:

Please Clarify Occupancy sensors for UV's: Shows for AC units and all UV's Dwg M-701, sequence only addresses AC units

RESPONSE:

See specifications for control sequence for the Unit Ventilators.

Addendum No. 4 (cont'd)

26. Question:

Please clarify control requirement for UV's. Are UV's to get factory mounted controls or retrofit existing: New units shall have factory sensor, Damper actuator and freeze stat, all existing units shall get new sensor, steam valve, damper actuators and freeze-stat. note: All OAD must be spring return fail closed actuators. contractor to replace old wiring and verify control transformer and fan. Switches are wired and working correctly, replace, if needed

RESPONSE:

Provide factory-mounted controls with all new equipment per specifications.

27. Question:

Please Clarify: On drawing M-701 calls for "remote T-Stat" on some items are those units to be controlled stand-alone or DDC? Spec does not say "DDC" as UV's do.

RESPONSE:

Provide a Direct-Digital Control System for all new HVAC Equipment per 23 09 23.

28. Question:

The Duct Insulation Schedule on pg. M-501 of the drawings states to insulate ALL NEW DUCTWORK with R-Value = 12. In the written specs, the only Insulation material that is listed is Fiberglass Duct Wrap, which they do not make for R-Value = 12. What do you want the Indoor Concealed and Exposed Duct to be insulated with?

RESPONSE:

Drawing M-501 Schedule revised to accept a minimum of R-6 for all new ductwork. The specification has been modified to accept rigid duct insulation.

29. Question:

The spec calls for ALL Exposed Duct in Mechanical Rooms or Finished Spaces below 8'0" above finished floor to be finished with PVC Jacket." Sec. 230713 Pg. 2 Part 3.01 B. "This does not seem correct, please advise."

RESPONSE:

Provide PVC Jacketing per contract documents.

30. Question:

On sheet M-402 There is reference to installing 6" CHWS & 6" CHWR lines in trench. Is this new trench & sump in the general construction contract?

RESPONSE:

The General Contractor (B-147c) shall provide the chilled water piping trench per Keynote D1.9 of A-101, Keynote A1.13 of A-102, and Detail 14 of A-501.

31. Question:

On sheet M-110 there are details depicting three (3) conditions of Typical Relief Air Soffits. Is this work the responsibility of the general construction contract ?

RESPONSE:

The General Contractor (B-147c) shall provide relief air soffits (inclusive of louvers, flashing, studs, framing, gypsum board, acoustical ceiling tiles, etc.) per Details A, B, and C of A-501. The Mechanical Contractor (B-148c) shall provide motor operated dampers, relief air grilles, and insulated plenums for all relief air assemblies per details 2, 3, and 4 of M-110.

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32. Question:

Is ceiling removal and replacement the responsibility of the General Contractor?

RESPONSE: Per sheet A-103, Ceiling Plan General Notes, the General Contractor (B-147c) is responsible for "All Items Related to Ceiling Work".

Per general Note 3 of M-101, the MC (B-148c) is responsible for an *additional* 500 linear feet of replacement-in-kind ceiling grid and 100 replacement-in-kind ceiling tiles as directed by the SDP construction project manager.

33. Question:

On sheet M-111 Note # 11 Modify existing lightning system. Is this work by the electrical or mechanical contractor. And is there a contact for the company that did the original certification.

RESPONSE:

Lightning protection modification is the responsibility of the electrical contractor. The Electrical Contractor (B-149c) shall modify the lightning protection system per E-204. No documents from the original certification will be made available at this time.

Specifications

All Specifications

Summary of Work -

- ADD definition of Plumbing Contract B-150C 17/18 as... SEE ADDENDUM ONE

Table of Contents

- REMOVE "02 4119 – Minor Electrical Demolition

23 0713 Duct Insulation

- ADD 2.03 PVC Insulation defining the product requirements for PVC Duct Jacketing.

2.03 JACKETS

A. PVC Plastic

1. Manufacturers:

- a. Proto Corporation
- b. Johns Manville Corporation

2. Jacket: Sheet or Roll material; white.

- a. Minimum Service Temperature: 0 degrees F (minus 18 degrees C).
- b. Maximum Service Temperature: 150 degrees F (66 degrees C).
- c. Moisture Vapor Permeability: 0.002 perm inch (0.0029 ng/Pa s m), maximum, when tested in accordance with ASTM E96/E96M.
- d. Thickness: 10 mil (0.25 mm).
- e. Connections: Brush on welding adhesive.

3. Covering Adhesive Mastic: Compatible with insulation.

- ADD 2.04 defining product requirements for rigid duct fiberboard insulation.

2.04 GLASS FIBER, RIGID

A. Insulation: ASTM C612: rigid; noncombustible blanket.

1. Manufacturer:

- a. Johns Manville: www.jm.com/#sle.
- b. JP Lamborn Co; www.jpflex.com/#sle.

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c. Knauf Insulation; www.knaufinsulation.com/#sle.

d. Owens Corning Corporation: www.ocbuildingspec.com/#sle.

e. CertainTeed Corporation: www.certainteed.com/#sle.

2. K (KSI) Value: 0.24 at 75 degrees F when tested according to ASTM C518.

B. Vapor Barrier Jacket

1. Kraft paper with glass fiber yarn and bonded to aluminized film or vinyl.

2. Secure with pressure-sensitive tape.

23 0993 SEQUENCE OF OPERATIONS FOR HVAC CONTROLS

- ADD 3.06.M defining occupancy controls for unit ventilators

3.06. Unit Ventilators

...

M. Occupancy Based Ventilation and Temperature Control:

1. When occupancy sensor(s) indicate that a room has been unoccupied for 15 minutes (adjustable), the outside air damper shall close.

2. When occupancy sensor(s) indicate that a room has been unoccupied for 15 minutes (adjustable), the space temperature setpoint shall be setback 2°F.

3. When occupancy sensor(s) indicate that a room is occupied, the outside air damper shall modulate to minimum position.

4. When occupancy sensor(s) indicate that a room is occupied, the unit shall maintain space temperature set point.

- DELETE "all existing units shall get new sensor, steam valve, damper actuators, and freeze-stat." from 3.06.A.

Drawings

A-101

- ADD keynote D1.12 to unit ventilators of classrooms 105, 106, and 107: "REMOVE EXISTING CMU UNIT VENTILATOR PLATFORM/SUPPORT. PIPES/DUCTS/WIRING ARE TO REMAIN UNHARMED/UNCHANGED. COORDINATE WITH MC FOR NEW PLATFORM/SUPPORT REQUIREMENTS.
- ADD keynote D1.13 to southeast wall of Electric Room 019: "REMOVE LOUVER FROM EXISTING OPENING AND PREPARE OPENING FOR NEW LOUVER."

A-102

- ADD keynote A5.2 to southeast wall of Electric Room 019.
- ADD keynote A5.3 to unit ventilators of classrooms 105, 106, and 107: "PROVIDE NEW MASONRY UNIT VENTILATOR PLATFORM/SUPPORT TO SUPPORT NEW MECHANICAL EQUIPMENT. COORDINATE WITH MC FOR NEW PLATFORM/SUPPORT REQUIREMENTS AND DIMENSIONS"

M-105

- ADD keynote #16 next to AC-4.

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M-101

- ADD keynote 17 to louver/MOD assembly on southeast wall of Electric Room 019:
"REMOVE LOUVER AND ASSOCIATED DUCTWORK, DAMPER, CONTROLS, ETC. PREPARE INTAKE OPENING FOR REUSE."

M-501

- ADD row to piping insulation schedule to define condensate drain piping as 1" thickness.
- REVISE/ADD ductwork insulation schedule to provide all new ductwork with minimum R-6 insulation.

End of Addendum #4