

# ADDENDUM NO. 3

Town of Windsor  
Wilson Fire Station HVAC Renovations  
Windsor, CT 06095

Date: March 20, 2020

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## CLARIFICATIONS

1. Reference DPME -1, a note refers to remove the existing duct and air diffusers typical. Only one of the diffusers are shaded for removal in the training room 109. Is the design intent to remove all diffusers, or simply the one in this room?  
RESPONSE: **Remove grilles and diffusers in room 109 only.**
2. Reference DPME -1, alternate, the exhaust fan references "to be serviced".  
RESPONSE: **Please clarify the scope of work associated with this? Fan shall be cleaned, belts replaced and bearing greased. Notify owner of any concerns found with fan.**
3. Please provide an approximate weight of the existing rooftop AHU?  
RESPONSE: **Unknown, appears to be an approximately 20 Ton, York unit circa early 90s.**
4. For the drain pipe / hand dig work shown, for bidding purposes should we figure this piping to approximately 6" below the concrete slab?  
RESPONSE: **Exact depth is unknown.**
5. Please confirm the size of the suction and liquid refrigerant lines?  
RESPONSE: **Provide in accordance with manufacturer's recommendation.**
6. Please confirm the only fire dampers required, are the ones shown in the new boiler room / training room?  
RESPONSE: **Provide one(1) 16"x10" fire damper (FD/AD) at lounge 106.**
7. Is the new 48 x 14 louver in the boiler room required to be installed above the existing window?  
RESPONSE: **Louver shall be installed below windows.**
  - a. If not, please provide a detail for the installation within the window?
8. Please confirm that we are required to clean all existing ductwork, grilles, and registers?  
RESPONSE: **Yes, provide in accordance with NADCA standards and requirements.**
9. Notes on the drawings refer to modifying existing sprinkler piping for the new ductwork. As there is no information regarding the sprinkler system, please provide an allowance for this work?  
RESPONSE: **Any fire sprinkler work shall be provided by owner.**
10. The new boilers require a domestic cold water (DCW) line supplied to them. Please advise where this line can be located, so that we can pipe from it to the new boilers?  
RESPONSE: **Connect to the DCW water supply to water cooler in hall adjacent to "new boiler room".**

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11. Do you have a contact at automated logic so we can get a scope. For example, are they providing the control dampers on the new air handler? NO awarded contractor will provide control dampers.

RESPONSE: Autologic DDC Controls is for HVAC controls only. All valves, dampers, linkages, etc by awarded contractor.

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**END OF ADDENDUM #3.**

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**Town of Windsor  
50 Pine Lane  
Wilson Fire Station Controls**

Attn: Whit Przech

As Prepared by:  
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Proposal Date: February 20, 2020

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## **Overview:**

The following Building Management System is based on an Open Protocol, BACnet integrated BMS network of DDC controllers manufactured by Automated Logic. The Scope of Work for the Town of Windsor Wilson Fire Station project, as per Salamone and Associates drawings dated 11/28/2019, and an owner's project meeting 01/06/2020 is as follows:

## **Project Base Scope:**

### Network:

1. Furnish (Qty.1) 38"x26" Panel
2. Furnish (Qty.1) 300VA 120vac to 24v power supply/stepdown transformer
3. Furnish (Qty.1) G5CE Router
4. Furnish (Qty.1) AAR (ARCnet to ARCnet Router)
  - a. AARs not necessarily to be located in the main panel
5. Furnish (Qty.1) Global Outdoor Air Temp/RH/Co2 Sensor
6. Sequence of Operations
7. Systems and Equipment Logic Programming
8. Systems Graphics
9. Floor Plans Graphics

### AHU-1:

#### Control and Monitoring of AHU-1:

1. Furnish (Qty.1) Control enclosure
2. Furnish (Qty.1) 100VA stepdown transformer
3. Furnish (Qty.1) ME812u and (Qty.1) MEx88u Control Modules
4. Supply Fan VFD Points (AO,AI, DO, DI)
  - a. Furnish (Qty.1) RIB and (Qty.1) Current Transducer
  - b. Interlock wiring to Outdoor Condensing Unit by Electrician
    - i. Furnish (Qty.1) RIB and (Qty.1) Current Transducer
5. AHU Dampers
  - a. Furnish (Qty.1) NFB24-MFT-S Outdoor Air Damper Actuator with End Switch
  - b. Furnish (Qty.1) NFB24-MFT-S Return Air Damper Actuator with End Switch
6. Circulator Pumps
  - a. Furnish (Qty.1) AMR Router
  - b. Pump Start/Stop/Status (typical of 2):
    - i. Furnish (Qty.1) RIB Relay
    - ii. Furnish (Qty.1) Current Sensor
7. Temperature Sensors
  - a. Furnish (Qty.3) Duct Temp Sensors (OA, Supply, Mixed)
8. DX Cooling (Qty.2) Stages
  - a. Furnish (Qty.2) RIB Relays
  - b. Furnish (Qty.2) Current Sensors
9. Furnish (Qty.1) Differential Pressure Sensor (Filter)
10. Furnish (Qty.1) Freezestat
11. Furnish (Qty.1) Duct Static Pressure Sensors
12. Furnish (Qty.1) Belimo DDC Valve for HW Coil (HC-1)
  - a. Valve body installed in piping by Mechanical Contractor, wired by Electrician



## VAVs (Typical of 10):

### Control and Monitoring of VAV Boxes:

1. Furnish (Qty.1) 120v to 24v stepdown transformer
2. Furnish (Qty.1) ZN141 Controller
3. Furnish (Qty.1) Discharge Air Temp Sensor
4. Furnish (Qty.1) ZS2PL-C--ALC Zone Sensor Combo Temp/Co2/Occ.

## Exhaust Fans (Typical of 3):

### Control and Monitoring of Exhaust Fans:

1. Furnish (Qty.1) 120v to 24v stepdown transformer
2. Furnish (Qty.1) ZN220 Controller
3. Exhaust Fan Start/Stop/Status
  - a. Furnish (Qty.1) RIB Relay
  - b. Furnish (Qty.1) Current Sensor
4. Furnish (Qty.1) ZSP-ALC Zone Sensor

## Boilers (Typical of 2):

### Control and Monitoring of Boilers:

1. ARCnet wiring to Integrate to Factory Supplied BACnet Boiler Controllers by Electrician
  - a. Furnish (Qty.1) AMR Router
2. Furnish (Qty.1) 120v to 24v stepdown transformer
3. Furnish (Qty.1) ZN551 Controller
4. Boiler Start/Stop/Status
  - a. Furnish (Qty.1) RIB Relay
  - b. Furnish (Qty.1) Current Sensor
    - i. NOTE: Lochinvar Boilers to come with a Factory supplied set of controls end devices. As per Salamone and Associates, all of these devices will be Furnish and Installed by the Mechanical Contractor.

## Generator ATS:

### Monitoring of Generator ATS:

1. Furnish (Qty.1) Controls Enclosure
2. Furnish (Qty.1) 120v to 24v stepdown transformer
3. Furnish (Qty.1) ZN220 Controller
4. Furnish (Qty.2) Current sensors
  - a. Common Alarm (DI)
  - b. ATS Emergency Position (DI)

## Exterior Lighting:

### Control and Monitoring of Exterior Lighting:

1. Furnish (Qty.1) 100VA stepdown transformer
2. Furnish (Qty.1) ZN220 Controller
3. Furnish (Qty.1) RIB Relay
4. Furnish (Qty.1) Current Sensor
  - a. (Qty.1) Lighting Circuit to be controlled

**Alternate 1:**

Apparatus Bay Ventilation and Tox Alert System:

Control and Monitoring of Apparatus Bay Conditions:

1. Furnish (Qty.1) 120v to 24v stepdown transformer
2. Furnish (Qty.1) ZN551 Controller
3. Furnish (Qty.4) ZSP-ALC Zone Sensors
  - a. Sensors to be located at each respective corner of the App. Bay
4. Exhaust Fan Start/Stop/Status
  - a. Furnish (Qty.1) RIB Relay
  - b. Furnish (Qty.1) Current Sensor
5. Make-Up Air Units Start/Stop/Status (Typical of 2)
  - a. Furnish (Qty.1) RIB Relay
  - b. Furnish (Qty.1) Current Sensor
  - c. Furnish (Qty.1) NFB24-MFT-S Belimo Damper Actuator
    - i. NOTE: MAUs and EF are to be Interlocked to work in conjunction with each other based on Air Quality Conditions
6. Furnish (Qty.1) Tox Alert System and Panel
  - a. Tox Alert System to be wired to MAUs and EF so those units work to ventilate upon request from Tox Alert reading Levels

Infrared Heaters (Typical of 2):

Control and Monitoring of Infrared Heaters:

1. Factory supplied controller included with the Heaters
  - a. Factory Heater Controls panel to be Furnish and Installed by others
2. Furnish (Qty.1) 120v to 24v stepdown transformer
3. Furnish (Qty.1) ZN220 Controller
4. IR Heater Start/Stop/Status to the Factory Controller (typical of 2):
  - a. Furnish (Qty.1) RIB Relay
  - b. Furnish (Qty.1) Current Sensor

**General Notes:**

1. All Automated Logic Controllers are “Buy American” & are BTL Certified.
2. As-Built documents showing communications riser to be submitted when job is completed.
3. One year warranty on labor and two year warranty on automated logic parts.
4. This will be an addition to the onsite WebCTRL System.
5. All applicable graphics and floorplans will be added to the site using the latest ALC graphical standards.

**PROPOSAL EXCLUSIONS:**

1. Low-voltage communication wiring of any kind
  - a. Brian’s Electric to be contracted directly with Town of Windsor
2. 120v or higher power wiring of any kind
3. Carrying of Low Voltage Electrician to Install Controllers and Controls End Devices
4. Overtime labor if required for access to work areas.
5. Work beyond scope of work as described above.
6. Supplying of controls monitoring devices or water valves unless explicitly otherwise stated above.
7. Supplying of Dampers
8. Mechanical installation or repair of any kind.
9. Provisions for temporary heating or cooling.
10. Testing or Abatement of Materials suspected of containing harmful substances such as Asbestos.
11. Installation of dampers or control valve bodies.
12. Furnishing or installation of variable frequency/speed drives.
13. CT taxes in this proposal (tax exempt)
14. This proposal does not include cutting, painting, patching or repairing any penetrations to the roof.
15. Provision or installation of indoor/outdoor lighting equipment.
16. Provision or installation of any and all smoke detection devices or dampers.