



CITY OF EAST PROVIDENCE
DEPARTMENT OF PUBLIC BUILDINGS
REPLACEMENT OF AIR CONTROL SYSTEM FOR POLICE STATION
SPECIFICATIONS
REQUEST FOR PROPOSALS
RFP NO. EP19/20-38

BID OPENING DATE WEDNESDAY, OCTOBER 28, 2020 AT 11AM

This scope of work outlines a complete replacement of the pneumatic control system, VAV box replacement, cleaning and air balancing of the Police Station's HVAC system. This work will ensure that the building is receiving the correct amount of outdoor air to the building occupants and will also improve comfort throughout the building. At this time the amount of outdoor air being delivered to the spaces is unknown and due to the condition of the VAV dampers, controls and coils it is very likely the minimum required outdoor air per building codes for the occupants is not being met. The recommended HVAC control system will include a graphic that will allow global adjustments of the ventilation rate of the police station to increase or decrease ventilation rates in response to the current pandemic.

I. HVAC CONTROL SYSTEM AND VAV REPLACEMENTS

This scope includes the replacement 27 VAV boxes with new Price VAV terminal boxes with new hot water coils control valves. Install new controls for new VAV boxes. Install new controls and programming for RTU#1. Install new controls for AHU-2 (Locker room). Install new control for the boilers, pumps and combustion air dampers. Balance new VAV systems. Perform cleaning and preventative maintenance of all equipment to remain in operation.

This work will include the removal and replacement of 30 VAV boxes serving interior areas and exterior areas heated by hot water coils. This work will include installation of new electronic VAV controls and wiring. This work also included the replacement of 30 pneumatic control valves serving the hot water coils and FCUs. Controls serving AHU-2 will be changed to DDC and will also be tied to the new EMS system. All of the HVAC equipment that will remain will be cleaned and preventative maintenance will be performed. After completion of the controls and preventative maintenance the systems will be balanced by a certified testing and balancing firm.

VAV AND CONTROLS REPLACEMENT

- a. Removal of ceiling to facilitate the removal of the existing VAV terminal units
- b. Demolish and haul away existing VAV terminal units
- c. Install new VAV terminals units
- d. Provide and install new electronic VAV controllers
- e. Provide and install 30 new 24 Volt control valves to replace existing VAV and AHU control valves
- f. Install new controls for RTU#1 to allow operation of the unit via the new EMS system.
- g. Install new controls for AHU-2 serving the locker room tie new controls to the new EMS system
- h. Install new control for the boilers , pumps and combustion air dampers
- i. Add VFD to control AHUs fan
- j. Add VFDs to control HWP-1 and HWP-2
- k. Provide cleaning and preventative maintenance for all remaining HVAC equipment
- l. Installation of a JACE-8 controller with a Tridium front end to allow remote operation of the building, scheduling, trending and remote alarming
- m. Balance new VAV box to specified minimum and maximum CFM
- n. Testing of the controllers and adjustment of sequences
- o. Reinstallation of ceiling
- p. All Mechanical and Electrical Permits
- q. Warranty for one year on parts and labor

II. 10-TON CONDENSING UNIT & AHU SERVING THE LOCKER ROOM AREA REPLACEMENT

This work will include the removal and replacement of a 10-ton condensing unit and AHU serving the locker room. This work will also include all necessary electrical, mechanical and general construction work to provide a turn-key installation of the 10-ton condensing unit serving the locker room areas.

The scope of the condenser replacement includes the following:

- a. Removal of refrigerant cutting of refrigeration lines
- b. Demolish and haul away existing condensing unit including crane services
- c. Supply rig and install new 10-ton condensing unit
- d. Flush and clean refrigerant lines
- e. Remove and haul away of the 10-ton AHU
- f. Provide and install new 10-ton AHU with hot water coil
- g. Charge and test refrigerant piping
- h. Insulation of refrigeration piping
- i. Power wire new condensing unit including new disconnect
- j. Start-up and test new unit
- k. Mechanical and Electrical Permits
- l. Warranty for one year on parts and labor

A pre-bid walk through will be held on **WEDNESDAY, OCTOBER 14, 2020 at 2 PM** at the East Providence Police Station, 750 Waterman Avenue, East Providence, RI 02914. Any questions regarding this RFP may be directed to Andrew Baum, HVAC Tech at 401-302-1665 or at ABaum@eastprovidenceri.gov