



CITY OF WACO

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Date: 11/10/2021
RFB No: 2021-061
Commodity: Health District HVAC Replacement
Purchasing Agent: Mr. Kasey Gamblin

Closing Time: 2:00 P.M. CST, Tuesday, November 16, 2021
Opening Time: 2:01 P.M. CST, Tuesday, November 16, 2021

RFB Opening Location: Operations Center, Purchasing Services Office, 1415 N. 4th St.,
 Waco, TX 76707

Addendum No: 1
Clarifications
Questions and Answers

The above-mentioned RFB invitation has been changed in the following manner. **Sign and return addendum to the Purchasing Office by the closing time and date with your RFB response.** Returning this page signed by your authorized agent will serve to acknowledge this change. All other requirements of the invitation remain unchanged. If you have any questions, please call or stop by the Purchasing Office at the above address.

Firm: _____

Address _____

Signature of Person
 Authorized to Sign Bid: _____

Signor's Name and Title
 (print or type): _____

E-mail Address: _____

Date: _____ Telephone: _____ Fax: _____

**ADDENDUM NUMBER ONE (1)
TO THE PLANS AND SPECIFICATIONS FOR:**

Project Title: THE CITY OF WACO HEALTH DEPARTMENT HVAC REPLACEMENT

Project No.: RFB 2021-061

Specification Items:

Section 23 81 26 – Split System Air Conditioning Units – Modify as follows:

2.1.A.1. Acceptable manufacturers: Carrier, Daikin, Trane, York/JCI.

2.1.A.2. Delete in its entirety.

Drawing Items:

Sheet ME0.1 – KEYED NOTES: SITE DEMO

KEYED NOTE 1 – Change as follows:

- 1 TWO RECENTLY INSTALLED CARRIER CONDENSING UNITS SERVING AHU-1 SHALL HAVE THE REFRIGERANT PUMPED INTO THE CONDENSING UNITS AND REMAINING REFRIGERANT RECOVERED, THE REFRIGERANT VALVES SEALED, DISCONNECTED FROM ALL SERVICES AND PROVIDED FOR OWNER'S REMOVAL FROM THE SITE.

Sheet M1.1 – KEYED NOTES: MECHANICAL PLAN

KEYED NOTE 6 – Change as follows:

- 6 PROVIDE AND INSTALL A NEW 30 GALLON, 4.5KW, 240V/1PH, ELECTRIC WATER HEATER ON NEW HOUSEKEEPING PAD. CONNECT TO EXISTING COLD AND HOT WATER PIPING. INSULATE NEW HW PIPING. ROUTE T&P RELIEF TO FLOOR DRAIN.

Sheet M5.1 – MECHANICAL DETAILS

ADD DETAIL E/M5.1 CONTROL NOTES as follows:

E CONTROL NOTES:

- A. THE TEMPERATURE CONTROL SYSTEM IS PART OF THE WORK OF THIS PROJECT AND SHALL BE INCLUDED IN THE BID PRICE. THE CONTROL SYSTEM SUBCONTRACTOR SHALL BE ENVIROMATIC SYSTEMS. SUBSTITUTIONS WILL NOT BE ACCEPTABLE.
- B. THE BUILDING IS PRESENTLY EQUIPPED WITH A WEB-BASE RELIABLE BRAND DDC CONTROL SYSTEM THAT WAS INSTALLED BY ENVIROMATIC SYSTEMS.
- C. CONTROL COMPONENTS THAT ARE EXISTING AND VIABLE FOR REUSE MAY BE USED IN THIS PROJECT. WARRANTY OF MATERIAL AND LABOR SHALL INCLUDE BOTH NEW AND EXISTING

COMPONENTS THAT ARE BEING REUSED AND BE PROVIDED FOR ONE YEAR FROM SUBSTANTIAL COMPLETION DATE(S).

- D. THE EXISTING DDC CONTROL SYSTEM BASICALLY CONSISTS OF A CENTRAL UNIT CONTROLLER(S) AT EACH EXISTING MULTIZONE AHU WITH ROOM TEMPERATURE SENSORS CONTROLLING ZONE DAMPER ACTUATORS. RETURN AND OUTSIDE AIR DAMPERS ARE CONTROLLED BY DRY-BULB SENSORS.
- E. CONTROL DEVICES ATTACHED TO DEMOLISHED EQUIPMENT AND SYSTEMS SHALL BE REMOVED AND RETAINED FOR POSSIBLE REUSE BY THE CONTROL SUBCONTRACTOR.
- F. MODIFY EXISTING GRAPHIC USER INTERFACE SOFTWARE TO CONFORM TO NEW SYSTEM CONFIGURATION.
- G. PACKAGED CONTROLS FOR CONDENSING UNIT AND AHU SPEED STAGING AND BOILER HW TEMPERATURE SETTINGS WILL BE PROVIDED WITH THE EQUIPMENT PACKAGES. PROVIDE APPROPRIATE INTERFACE TO DDC CONTROL SYSTEM SO THAT EQUIPMENT IS VISIBLE AND ACCESSIBLE IN THE GRAPHICS.
- H. PROVIDE COMPONENTS AND CONFIGURATION TO ACHIEVE THE FOLLOWING SEQUENCE OF OPERATION:

SEQUENCE OF OPERATION:

- A. START AND STOP INDIVIDUAL UNITS BY SCHEDULE FROM DDC CONTROLLER.
- B. INDICATE STATUS OF EACH AHU, CU, PUMP AND BOILER.
- C. WHEN AHU IS OFF, CLOSE OA DAMPERS AND HW CONTROL VALVE.
- D. UPON INDIVIDUAL SYSTEM START, OPEN OA DAMPERS TO MINIMUM SCHEDULED AIRFLOW POSITION.
- E. CYCLE AND/OR STAGE COOLING BY ROOM TEMPERATURE SENSORS TO MAINTAIN ROOM TEMPERATURE.
- F. PROVIDE 4DEGF (ADJ) DEADBAND BETWEEN COOLING AND HEATING.
- G. UPON A CALL FOR HEATING FROM ANY ROOM TEMPERATURE SENSOR FOR OVER 5 MINUTES (ADJ), THE HEATING WATER PUMP SHALL START AND BOILER SHALL FIRE TO MAINTAIN HW TEMPERATURE AS CONTROLLED BY THE BOILER'S PACKAGE CONTROLS.
- H. MODULATE HEATING COIL VALVES TO MAINTAIN ROOM TEMPERATURE.
- I. UPON NO CALL FOR HEATING FROM ANY ROOM SENSOR FOR OVER 20 MINUTES (ADJ), THE BOILER SHALL BE DEENERGIZED AND THE HW PUMP SHALL STOP 5 MINUTES (ADJ) AFTER BOILER SHUTDOWN.
- J. ECONOMIZER SEQUENCE FOR AHUs WITH 100% OA CAPABILITY:
 - a. UPON OAT FALL BELOW 60DEGF (ADJ) AND A CALL FOR COOLING FROM AN INDIVIDUAL AHU, THE FIRST STAGE OF COOLING SHALL FULLY OPEN THE UNIT'S OA DAMPER AND CLOSE THE RA DAMPER TO PROVIDE COOLING FROM THE OA SOURCE.
 - b. A CALL FOR SECOND STAGE COOLING SHALL BRING ON THE FIRST STAGE OF MECHANICAL COOLING.
 - c. UPON A DROP IN AHU DISCHARGE TEMPERATURE BELOW 52DEGF (ADJ), ANY MECHANICAL COOLING SHALL STOP AND THE OA AND RA DAMPERS SHALL MODULATE TO MAINTAIN 52DEGF (ADJ) DISCHARGE TEMPERATURE WHEN IN A CALL FOR COOLING.

- d. A BUILDING PRESSURE SENSOR INSTALLED IN THE BUILDING FIRST FLOOR CENTRAL CORRIDOR SHALL MONITOR BUILDING PRESSURE AND STAGE THE 2 EXISTING RELIEF AIR FANS TO MAINTAIN 0.03 INCHES WATER COLUMN (ADJ).
- e. UPON A RISE IN OAT ABOVE 64DEGF (ADJ) THE SYSTEM SHALL REVERT BACK TO MECHANICAL COOLING.

Sheet M5.2 – HW PIPING DIAGRAM

CHANGE KEYED NOTE 10 as follows:

Change the first word 'TALE' to the word 'TAP'

Sheet E2.1 – PLAN 1/E2.1 – FIRST FLOOR – MECHANICAL ROOM (BASE BID)

ADD INDICATION OF NEW ELECTRIC WATER HEATER AT LOCATION SHOWN ON MECHANICAL PLAN 1/M1.1. SHOW CIRCUIT LEADER WITH 2#10, #10G, ½”C TO PANEL 1M-16,18.

Sheet E6.2 – PANEL SCHEDULE 1M

ADD 30A/2P CB IN SPACES 16,18, WITH 2250VA IN LOAD COLUMNS.

Bidder Questions with Responses:

1. 2nd Floor-West Mechanical room (Alt 3) has no exterior access. The interior door may not be wide enough to accommodate bringing in new equipment. The current logistics would make temporary A/C capability suspect because of available power for individual units. Would there be an option to open an area on the existing wall approximate for access and egress of demo and new equipment, then and install a louver to cover the access?

RESPONSE: Acceptable.

2. Per the site walk, it was stated that the new equipment and controls are to be proprietary. Please provide requirements.

RESPONSE: Reference Specification and Drawing Items above.

Controls are to be Reliable Controls

Contact for Controls:

Enviromatic Systems, Attn: Jim Bonham

Office: (972) 206-2590

Email: jbonham@enviromaticsystems.com

3. Is there a current Asbestos, LBT, Mold survey available?

RESPONSE: Asbestos survey will be transmitted to the contractor prior to start of work.

4. Please provide directions for staging of Temp cooling unit.

RESPONSE: Contractor is responsible for determining the staging, means, and methods of providing temporary heating and air conditioning as required.

5. Please confirm that the city will be salvaging CUs. Please identify the units and where contractor is to place units when CUs are demoed.

RESPONSE: Reference Specification and Drawing Items above.

6. Will this be weekend work, due to not being able to install new AHU's and Ductwork around existing AHU's? If weekend work is not allowed how are we to do demo/install and keep the users comfortable?

RESPONSE: This work will be performed during regular business hours. If weekend work is necessary, prior approval and authorization is required.

7. Hot water piping drawings are inadequate, please advise

RESPONSE: Question is not understood. Piping appears to be well defined on Drawings and Specifications.

8. Flow meter and Differential Pressure Gauge attached to the Filter Feeder are not in the Specs, please advise.

RESPONSE: Provide components as described on the Drawings.

9. Boiler connection detail is missing, please advise.

RESPONSE: Provide boiler connection per boiler manufacturer's instructions.

10. The Schedules are difficult to read, can better schedules be provided?

RESPONSE: The Waco Purchasing website 'DrawingsPlans' pdf file was opened in Adobe Acrobat Reader and another pdf software package with schedules appearing completely legible.

11. Will the piping from the boiler to the building be exposed?

RESPONSE: Yes. Reference Sheet ME0.1 2 Site Plan, KN16.

12. If alternate bids are not done how is new heated water piping to be connected to existing?

RESPONSE: HW piping connects to existing as shown on Sheet M5.2, KN11

13. If the contractor is to provide temporary heat/air in lieu of the exterior temp cooling unit, will the buildings electrical outlets be capable of handling the additional load of portable heating and cooling units?

RESPONSE: If the question is related to the 120v convenience outlet, probably not. It will be up to the Contractor to provide temporary power for the temporary heat/air that will not cause disruption of normal business for the building occupants. It may be necessary that temporary generator(s) of sufficient capacity will be required.

END OF ADDENDUM NO. 1