

ADDENDUM TO THE CONTRACT

for the

DZANTIK'I HEENI SCHOOL HVAC CONTROL UPGRADE Contract No. BE18-205

ADDENDUM NO.: ONE <u>CURRENT DEADLINE FOR BIDS</u>:

April 6, 2018

PREVIOUS ADDENDA: NONE

ISSUED BY: City and Borough of Juneau

ENGINEERING DEPARTMENT 155 South Seward Street Juneau, Alaska 99801

DATE ADDENDUM ISSUED:

April 2, 2018

The following items of the contract are modified as herein indicated. All other items remain the same. This addendum has been issued and is posted online. Please refer to the CBJ Engineering Contracts Division webpage at: http://www.juneau.org/engineering ftp/contracts/Contracts.php

BIDDER QUESTIONS:

1. There are new 6" 2-way valves shown on detail 2, sheet M-141 on the boiler return lines (3 total). These valves are not listed in the Valve Schedule on sheet M-002 and are not mentioned as to their control in the sequence of operation. Please clarify the operation of these valves for the sequence of operations.

PDC Response:

Boiler Return 2-way control valves are to be controlled by Boiler Control Panel and shall proof-open prior to boiler firing or heating element is engaged.

2. There is a new 3-way control valve for building heat served by a 6" supply line shown on sheet M-141. The valve is not listed in the Valve Schedule on Sheet M-002 and is not mentioned in the sequence of operation. The sequence states to maintain a boiler header temperature of 180 degrees F with the boiler control panel, however there is no mention of this 3-way valve. Please clarify this valve in the sequence of operations.

PDC Response:

See M-151 sequence "2.4.4 Pump Loop 3-Way Mixing Valve" for Building Heating Pump Loop 3-way valve control.

For sequence 2.3 AHU-1 Coil Heating Pump Loop 3-way valve control follow sequence described in section 2.4.4 "2.4.4 Pump Loop 3-Way Mixing Valve"

3. Specifications section 23093-3.3-J state that room temperature sensors are to be mounted at 48" AFF unless otherwise noted. If the existing sensors are 60", will this height be OK if adjustment of the temperature is not possible from the sensor? Specifications section 230900-2.5-A-1 states "Not desired per request by Owner: Temperature setpoint adjustment, temperature display, and temporary occupancy button."

PDC Response:

The owner's preference is for flat plate or no setpoint dial room temp sensors. For these sensors since no adjustment is possible, a mounting height greater than ADA heights is allowable since no interaction with the temperature setpoint dial is necessary.

4. CUH-3 is shown in vestibule A-119. CUH-2 is shown in corridor C-116. Is there a CUH-1? A valve is shown for the CUH's per detail 5 on sheet M-144, however CUH valves are not listed on the Valve Schedule on sheet M-002.

PDC Response:

See Detail 1/M-131, CUH-1 is located in near AHU-2 in Mech Room A102. Provide control valves to serve CUH per flowrates listed below:

CUH-1: 1.0 gpm CUH-2: 1.8 gpm CUH-3: 1.5 gpm

5. Per the sequence of operation on drawing M-152 under section 23 09 93 sub section 2.11.5.2.1 and 2.12.5.2.1 it states, EACH ROOM SHALL MONITOR CO2 LEVELS. MONITORING SHALL BE COMPLETED THROUGH CENTRAL AIRQUITY AIR MONITORING STATIONS. Will an approved equal central CO2 air monitoring stations be accepted in lieu of the central Airquity air monitoring stations?

PDC Response:

No exceptions taken to approved equal to Airquity brand CO2 monitoring station.

PROJECT MANUAL:

- Item No. 1 SECTION 00005 TABLE OF CONTENTS. **Delete** in its entirety and **replace** with the attached SECTION 00005 TABLE OF CONTENTS, labeled Addendum No. 1.
- Item No. 2 SECTION 00030 NOTICE INVITING BIDS, DEADLINE FOR BIDS. *Change* the deadline for receiving bids *from* April 6, 2018, *to* April 10, 2018.
- Item No. 3 SECTION 220100 GENERAL PLUMBING REQUIREMENTS. *Delete* Section 220100 in its entirety.
- Item No. 4 SECTION 220523 GENERAL-DUTY VALVES FOR PLUMBING PIPING. **Delete** Section 220523 in its entirety.
- Item No. 5 SECTION 220553 IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT. **Delete** Section 220553 in its entirety.

- Item No. 6 SECTION 220700 PLUMBING INSULATION. *Delete* Section 220700 in its entirety.
- Item No. 7 SECTION 230100 GENERAL MECHANICAL REQUIREMENTS, PART 1 GENERAL, Article 1.2 SCOPE, Paragraph B. **Delete** Subparagraphs 1 thru 6 and **replace** with "Hydronic Systems".
- Item No. 8 SECTION 230100 GENERAL MECHANICAL REQUIREMENTS, PART 1 GENERAL, Article 1.6 SUBMITTALS, Paragraph B, Subparagraph 2. **Delete** items b, c, d, e.

Paragraph B, Subparagraph 2, Item f. *Delete* lines 1), 3), 4), 5), 6), 7).

Paragraph B, Subparagraph 2. *Delete* Items g, and h.

Paragraph B, Subparagraph 3. **Delete** Items b thru w and **replace** with the following:

- "b. Building Level Control Panels
- c. Field-Level Controllers
- d. Variable Frequency Drives
- e. DDC Operator Workstation".
- Item No. 9 SECTION 230100 GENERAL MECHANICAL REQUIREMENTS, PART 1 GENERAL, Article 1.11 ELECTRICAL REQUIREMENTS, Paragraph C, Table Row VFD Starters: a, Column Furnished Under Division. *Delete* "26" and *replace* with "23".

Paragraph C. Table Row, VFD Starters: b, Column – Furnished Under Division. *Delete* "21,22,23" and *replace* with "23".

Paragraph C. Table Row, Magnetic Motor Starters: i. **Delete** "UAF" and **replace** with "Juneau School District".

Item No. 10 SECTION 230100 – GENERAL MECHANICAL REQUIREMENTS, PART 1 - GENERAL, Article 1.14 – OPERATING AND MAINTENANCE DATA, Paragraph A. *Delete* Items 3, 6, and 7.

Paragraph B, Subparagraph 11. **Delete** lines c,d,e,f,g.

Paragraph C, Subparagraph 1. *Delete* lines a, b, c, d, e.

- Item No. 11 SECTION 230100 GENERAL MECHANICAL REQUIREMENTS, PART 2 PRODUCTS, Article 2.1 MATERIALS AND EQUIPMENT, Paragraphs C and F. *Delete* in their entirety.
- Item No. 12 SECTION 230100 GENERAL MECHANICAL REQUIREMENTS, PART 3 EXECUTION, Article 3.4 STARTUP/DEMONSTRATION, Paragraph A. *Delete* Items 1 and 3.
- Item No. 13 SECTION 230503 PIPES AND TUBES FOR HVAC PIPING AND EQUIPMENT, PART 1 GENERAL, Article 1.1 SUMMARY, Paragraph A. *Delete* Subparagraphs 2 and 3.
- Item No. 14 SECTION 230503 PIPES AND TUBES FOR HVAC PIPING AND EQUIPMENT, PART 3 EXECUTION, Article 3.4 FIELD QUALITY CONTROL, Paragraph A. **Delete**

- "Section 01 40 00 Quality Requirements" and *replace* with "Section 01 600 Product Requirements".
- Item No. 15 SECTION 230523 GENERAL DUTY VALVES FOR HVAC PIPING, PART 1 GENERAL, Article 1.3 SUBMITTALS, Paragraph A. **Delete** "Section 01 33 00 Submittal Procedures" and **replace** with "Section 01 310 Project Management & Coordination".
- Item No. 16 SECTION 230523 GENERAL DUTY VALVES FOR HVAC PIPING, PART 2 PRODUCTS, Article 2.2 GLOBE VALVES, Paragraph B. **Delete** in its entirety.
- Item No. 17 SECTION 230523 GENERAL DUTY VALVES FOR HVAC PIPING, PART 3 EXECUTION, Article 3.3 VALVE APPLICATIONS, Paragraph A. **Delete** reference to "gate valves" and **replace** with "butterfly valves".
 - Paragraph B. **Delete** reference to "gate valves" and **replace** with "butterfly valves".
- Item No. 18 SECTION 230553 IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT, PART 1 GENERAL, Article 1.1 SUMMARY, Paragraph A. *Delete* Subparagraphs 3, 4 and 5.
- Item No. 19 SECTION 230553 IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT, PART 2 PRODUCTS, Article 2.3 STENCILS. *Delete* in its entirety.
 - PART 2 PRODUCTS, Article 2.5 PIPE MARKERS. *Delete* in its entirety.
 - PART 2 PRODUCTS, Article 2.6 CEILING TACKS. *Delete* in its entirety.
- Item No. 20 SECTION 230553 IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT, PART 3 EXECUTION, Article 3.1 PREPARATION, Paragraph B. **Delete** in its entirety.
- Item No. 21 SECTION 230553 IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT, PART 3 EXECUTION, Article 3.2 INSTALLATION, Paragraphs A, E, L and M. **Delete** in their entirety.
- Item No. 22 SECTION 230593 TESTING, ADJUSTING, AND BALANCING FOR HVAC, PART 1 GENERAL, Article 1.1 SUMMARY. *Add* the following Paragraph B.
 - "B. TAB Scope of Work
 - 1. Base Bid Measure total airflow at each VAV terminal unit. Calibrate VAV controller to provide required airflow.
 - 2. Base Bid Measure total airflow at AHU-1 and AHU-2. Set VFD to provide required air volume.
 - 3. Base Bid Measure and set required outdoor airflow during Heating mode (minimum AHU airflow) and Cooling mode (maximum AHU airflow).
 - 4. Base Bid Test and adjust hydronic pumps
 - 5. Base Bid Set P-2A and P-2B hydronic pumps to provide total required flow rate. Set differential pressure control.
 - 6. Base Bid Assist Control Contractor in setting differential pressure sensors, calibrating VAV controllers, setting VFD speeds, setting minimum outdoor airflow rates.
 - 7. Alternate DZ1 Measure and adjust terminal unit balancing valves including VAV reheat coils, UH and CUH units, FP units.

- 8. Alternate DZ2 Measure and adjust heating coil balancing valves, including HC-1 through HC-5.
- 9. Provide reports as indicated in 230593 schedules"
- Item No. 23 SECTION 230593 TESTING, ADJUSTING, AND BALANCING FOR HVAC, PART 1 GENERAL, Article 1.3 SUBMITTALS, Paragraph A. **Delete** "Section 01 33 00 Submittal Procedures" and **replace** with "Section 01 310 Project Management & Coordination".
- Item No. 24 SECTION 230593 TESTING, ADJUSTING, AND BALANCING FOR HVAC, PART 3 EXECUTION, Article 3.5 AIR SYSTEM PROCEDURE, Paragraphs A, F, I, J, K, and O. **Delete** in their entirety.
- Item No. 25 SECTION 230593 TESTING, ADJUSTING, AND BALANCING FOR HVAC, PART 3 EXECUTION, Article 3.7 SCHEDULES, Paragraph A. *Delete* Subparagraphs 1, 5, and 7.
 - Paragraph B. *Delete* Subparagraph 7 in its entirety and all related items.
 - Paragraph B. **Delete** Subparagraph 13 in its entirety and all related items.
- Item No. 26 SECTION 230700 HVAC INSULATION, PART 3 EXECUTION, Article 3.2 INSTALLATION, Paragraphs B, C, E and F. *Delete* in their entirety.
- Item No. 27 SECTION 232116 HYDRONIC PIPING SPECIALTIES, PART 1 GENERAL, Article 1.1 SUMMARY, Paragraph A. *Delete* Subparagraphs 1, 2 and 5.
- Item No. 28 SECTION 232116 HYDRONIC PIPING SPECIALTIES, PART 2 PRODUCTS, Article 2.2 RELIEF VALVES. **Delete** and **replace** with the following:

"2.2 STRAINERS

- A. Manufacturers
- B. Bell & Gossett or Pre-approved Equal
- C. Size 2 inch and Smaller:
 - Screwed brass or iron body for 175 psig working pressure, Y pattern with 1/32 inch stainless steel perforated screen.
- D. Size 2-1/2 inch to 4 inch:
 - a. Flanged iron body for 175 psig working pressure, Y pattern with 3/64 inch stainless steel perforated screen.
- E. Size 5 inch and Larger:
 - a. Flanged iron body for 175 psig working pressure, basket pattern with 1/8 inch stainless steel perforated screen."
- Item No. 29 SECTION 232116 HYDRONIC PIPING SPECIALTIES, PART 3 EXECUTION, Article 3.2 INSTALLATION, Paragraphs A, B, C, D, H, I, J and K. **Delete** in their entirety.
- Item No. 30 SECTION 232123 HYDRONIC PUMPS, *Remove* "HYDRONIC" from section title.

- Item No. 31 SECTION 232123 PUMPS, PART 2 PRODUCTS, Article 2.1 CLOSE COUPLED, INLINE CENTRIFUGAL PUMPS. *Delete* in its entirety.
- Item No. 32 SECTION 232123 PUMPS, PART 2 PRODUCTS, Article 2.2 SMALL WET ROTOR PUMPS, Paragraph A. *Add "PMP-7 Domestic Hot Water Circ"*.

Paragraph C, Subparagraph 1. **Remove** "Body: Cast Iron" and **replace** with "Body: Cast Bronze".

Paragraph C, Subparagraph 2. **Remove** "Impeller: Composite or Noryl" and **replace** with "Impeller: Stainless Steel".

- Item No. 33 SECTION 232123 PUMPS, PART 2 PRODUCTS, Article 2.3 LARGE WET ROTOR PUMPS, Paragraph A. *Add* "PMP-1 Boiler Header Circ, PMP-5A Boiler B-1 Bypass, and PMP-5B Boiler B-1 Bypass".
- Item No. 34 SECTION 232123 PUMPS, PART 2 PRODUCTS, Article 2.4 PUMP SPECIALTY FITTINGS. *Delete* in its entirety.
- Item No. 35 SECTION 232123 PUMPS, PART 3 EXECUTION, Article 3.1 EXAMINATION, Paragraph C. *Delete* in its entirety.
- Item No. 36 SECTION 232123 PUMPS, PART 3 EXECUTION, Article 3.2 PUMP INSTALLATION, Paragraph D. *Delete* in its entirety.
- Item No. 37 SECTION 232123 PUMPS, PART 3 EXECUTION, Article 3.3 ALIGNMENT. *Delete* in its entirety.
- Item No. 38 SECTION 232123 PUMPS, PART 3 EXECUTION, Article 3.4 CONNECTIONS. *Delete* in its entirety.
- Item No. 39 SECTION 232123 PUMPS, PART 3 EXECUTION, Article 3.5 STARTUP SERVICE, Paragraph A. *Remove* "Engage a factory-authorized service representative"
- Item No. 40 SECTION 232123 PUMPS, PART 3 EXECUTION, Article 3.6 DEMONSTRATION. **Delete** in its entirety.
- Item No. 41 SECTION 234000 HVAC AIR CLEANING DEVICES. *Delete* in its entirety.

Greg Smith,

Contract Administrator

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