

ADDENDUM No. 3
Request for Competitive Sealed Proposals (CSP)
19CSP134 HVAC Services at Austin High School

June 24, 2019

Received by bidder:

Date: _____

Name: _____

Signature: _____

Item 1: Questions and Answers

1. Austin High School HVAC project to see if there are any union requirements, an estimated value, or an estimated start date.

RESPONSE: There are no union requirements. An estimated value is provided in the bid documents as an Estimated Project Budget is \$2,000,000. Also an estimated Start Date for Construction Phase according to Project Schedule in bid documents is February 4, 2020.

PART I COMMENTS

1. The completion dates for this project are published and understood. Please publish the anticipated dates for the:
 - a) Notice of Award or the Notice to Proceed (whichever comes first) on this project.
 - b) permitted to mobilize and, install temporary chillers and support systems).

RESPONSE: Please refer to the attached Addendum No. 3 document prepared by the Engineer. Please re

2. Please issue a drawing depicting where the temporary air-cooled chillers, relative to the mechanical room and the cooling towers, are to be set.

RESPONSE: Please refer to the attached Addendum No. 3 document prepared by

3. 1M-FP-01 Mechanical (Chiller) Room: Please issue sectional drawings looking North, South, East and West.

RESPONSE: Please refer to the attached Addendum No. 3 document prepared by

the installation of isolation valves/fittings for temporary cooling of spaces requiring this additional temporary cooling.

RESPONSE: Please refer to the attached Addendum No. 3 drawings prepared by

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Please refer to the attached Addendum No. 3 document prepared by the Engineer.

times during the course of this work as required to comply with the required

- a) Please verify that the HW system is NOT required to be flushed (there is mention of the HW system being drained and filled as a requirement, with emphasis on the CHW system being drained and flushed).
 - b) To avoid flushing of the entire CHW system will the Owner/PSP permit the provision of new isolation valves so that the flushing of the new CHW piping, only, can be accomplished?
 - c) Since the HW system is not being modified, and perhaps may not be required to be drained & filled/flushed and valves are perhaps permitted to isolate the modified CHW from the pre-existing CHW systems Would new isolation valves be required
 - d) Please verify that the drain down and flush is intended to be a clear water flush of the systems, or if the flushing is to be performed with chemically treated water.
 - e) Please verify that the house pumps can be used for the flushing of the systems.
 - f) If the house pumps cannot be used for the flushing of the systems, please specify pump requirements for the flushing process.
 - g) The SOW required of Note #1 appears to be very subjective and costly, especially for bidding purposes, therefore:
 - i. Will the Owner/PSP please publish the number of times the CHW systems and (HW systems) need to be drained down so that costs for the drain-downs and system fill are accurately proposed.
- OR**
- ii. Respectfully - Will the Owner please consider/publish an allowance for this SOW which the contractors can include in their proposal cost?
Depending on the final requirement (of drain to sanitary v/s capture in Frac tanks for disposal; and the number of drain-downs/refills; and if the HW system is also to be drained/flushed) **this cost allowance could be at least as much as \$100,000.00 - \$150,000.00.**

RESPONSE: Please refer to the attached Addendum No. 3 drawings prepared by

EXISTING CHILLED WATER AND WATER TREATMENT OF EXISTING

GEN-

are not required for this Work. The existing chilled water system shall be flushed as

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shown on the mechanical drawings and piping schematic. Drain down and flushing activities of the closed loop system and sequences shall be as directed by the closed loop water treatment service provider, including the use or lack-thereof of chemicals

-GEN-

1111 West 6th Street

- a) Epoxy coats of paint are indeed required for ONLY the new CHW (and NOT the existing CHW piping) piping.
- b) Epoxy coats of paint are indeed required for new copper systems to be insulated

RESPONSE: Please refer to the attached Addendum No. 3 document prepared by the Engineer. Pleas

9.

1111 West 6th Street

Given that the entire CHW & HW hydronic piping systems are required to be flushed while, in particular, the CHW system is being operated to maintain cooling for the school:

- a) Please issue a detailed flushing sequence, to include but not limited to, the sequence indicating precisely how the contractor is to flush the system while maintaining cooling of the school also stipulating the time-frames for each of the flushes which need to occur.

PLEASE NOTE THAT THIS IS NOT A MEANS/METHODS IMPLEMENTATION OF THE CONTRACTOR.

RESPONSE: Please refer to the attached Addendum No. 3 drawings prepared by

EXISTING CHILLED WATER AND WATER TREATMENT OF EXISTING

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are not required for this Work. The Contractor, at their discretion, may maintain the hydronic system energized during flushing if complying with the schedule of Time Restricted Activities and the maximum fresh water flow rate requirements

-GEN-

18. M-Gen-03 -

facility entire chilled

Given the requirement for flushing of the entire CHW & HW piping systems, please issue a pipe flushing specification for this project, including but not limited to:

- a) Will the House pumps be permitted for this flushing process?
- b) Required flushing specifics as related to flow-rates, etc.

RESPONSE: Please refer to the attached Addendum No. 3 drawings prepared by

EXISTING CHILLED WATER AND WATER TREATMENT OF EXISTING

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the requirements with regard to the fresh water flow rate during flushing.

19. Drawing M-FP-01 and Drawing M-PSC-01 appears to depict all new piping drawn in bold is piping that is to be replaced.

Please verify that all piping and valves, drawn in bold in the afore-referenced drawings, are indeed required to be new for both the CHW and the condenser water systems.

RESPONSE: Please refer to the attached Addendum No. 3 document prepared by

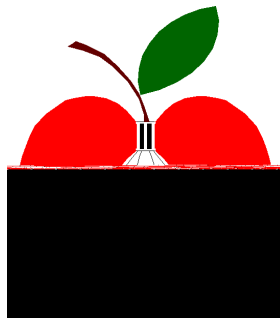
ADDENDUM NO. 3

FOR

**HVAC Improvements at
Austin High School**

AISD PROJECT NO. 19-0041-AUSTN

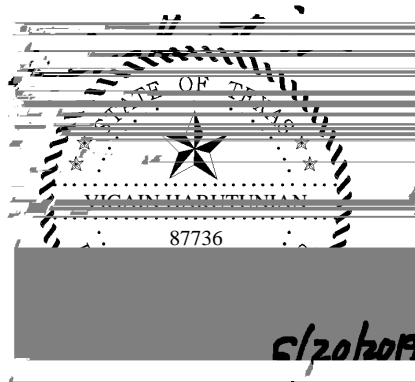
Prepared for:



AUSTIN INDEPENDENT SCHOOL DISTRICT

Prepared by:

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Addendum Date: June 20, 2019

Total Number of Pages (including this sheet): 11

This Addendum forms a part of the Contract and clarifies, corrects or modifies original Contract Documents, dated May 17, 2019. Acknowledge receipt of this addendum in space provided in proposal form. Failure to do so may subject responder to disqualification.

E. TEMPORARY COOLING EQUIPMENT TO SERVE THE LIBRARY:

1. Please refer to Drawing M-GEN-02, under "GENERAL RENOVATION/DEMOLITION NOTES", note #26 for temporary cooling equipment requirements to serve the existing school library, and when such temporary cooling would be required.

F. HEAT TRACE OF PIPING SYSTEMS:

1. Please refer to the Drawings, including, but not limited to, M-FP-02, M-EL-01, M-EL-02, M-SCH-01, E-FP-03, and SCH-01 and Specification Section 230533 "Heat Tracing for HVAC Piping" for heat trace requirements. The requirements are applicable to the make-up water supply piping, condenser drain and blow-down piping, and the condenser water supply, return and bypass piping. Please note, the equalization piping is not shown/scheduled to be heat traced.

G. TEMPORARY CHILLER REQUIREMENTS:

1. Please refer to sheet M-GEN-02 for rental equipment requirements.
2. Please refer to note #4 under "General Requirements for Rental Equipment" regarding the placement/location of the rental equipment.
3. Please refer to Section 015000 "Temporary Facilities and Controls" for additional requirements, including the submission of a site plan for temporary facilities. Rental equipment are part of the temporary facilities to be provided by the Contractor for this Work.
4. The temporary air-cooled chillers shall provide cooling for the chilled water system currently being served by the two (2) water-cooled chillers that are scheduled to be replaced.

H. MECHANICAL DRAWINGS:

1. Demolition of elements is noted on the drawings. Please refer to the mechanical drawings for the demolition of mechanical elements.
2. The Contractor shall prepare shop drawings of the proposed mechanical piping installations. Please refer to drawing sheet M-GEN-03 for shop drawing requirements and additional requirements in the respective specification sections.
3. Please note the chillers and associated chilled water piping to be demolished in

I. CONNECTION POINTS FOR RENTAL EQUIPMENT:

1. Please refer to the mechanical drawings for the installation of connections points in the chilled water piping near the chillers for the connection of temporary chillers. Please refer to sheet M-FP-01 Key Note #11 and M-PSC-01 Key Note #13.
2. The temporary chilled water system connection points shall require a shutdown of the chilled water system and therefore is a time restricted activity. Please refer to the attached revised Sheet G-GEN for additional requirements of when time restricted activities may be performed.

J. EXISTING CHILLED WATER AND CONDENSER WATER PUMPS:

1. Please refer to the Drawings for the extent scope and services for this Work. Please note, the Drawings do not show the replacement of the existing building chilled water condenser water pumps. Work does include the balancing of the hydronic piping systems, control system renovations, strainer cleaning, etc. as related to the chilled water and condenser water hydronic piping/pumping elements.

K. NEW PROPOSED PIPING:

1. Please refer to the Drawings for the extent of piping renovations, including the provision of new chilled water hydronic piping and condenser water piping. Please note, as noted on Sheet M-GEN-02, under "GENERAL PROPOSED RENOVATION NOTES:", per Note #2, on renovation drawings, shaded linework depicts existing conditions; dark linework depicts renovated conditions.

L. FACILITY MANAGEMENT SYSTEM (FMS) HVAC CONTROLS:

1. Please refer to Section 230926a "Direct Digital Controls for Local Building Systems (Tridium-BACnet)" for requirements related to the Facility Management System (FMS) HVAC Control System requirements, including, but not limited to, Article 1.4 "ACCEPTABLE CONTRACTORS".

M. DIVISION 27 AND 28 REQUIREMENTS:

1. Please refer to the individual Division 27 and 28 specification sections, as applicable, for certifications/experience requirements for the individual providers of the subject systems.

1.02 SECTION 015000 "TEMPORARY FACILITIES AND CONTROLS"

Under 3.02 "TEMPORARY UTILITY INSTALLATION" Paragraph A ADD

facility restrooms, janitorial closets, etc. are not allowed unless approved in advance in writing by the Owner.

1.03 SECTION 236514.14 "OPEN-CIRCUIT, INDUCED-DRAFT, CROSSFLOW COOLING TOWERS"

Under Article 1.12 "MAINTENANCE MATERIAL SUBMITTALS", ADD the following sub-paragraphs:

B. Digital Protractor for Fan Blade Adjustment:

1. Furnish Two (2) Exact-A-Pitch Model 360 digital protractors as manufactured by the Hudson Products Corporation, ~~or an~~ engineer approved equal, to allow the Owner to measure and set each fan blade ~~of the~~ of the cooling tower cell. Furnish complete with required ~~batter~~ batteries for fully operating units.
 - a. Note: Cooling tower blades shall be factory set to comply with unit scheduled performance requirements ~~to~~ to their shipment from the factory. Setting by Owner is for future use as desired/required by Owner.

Under Article 3.07 "DEMONSTRATION AND TRAINING", Paragraph ADD the following sub-paragraph:

5. Training shall include, at a minimum, how to address motor/belt issues, including, but not limited to, how to use the crane to remove/reinstall motors, how to remove/reinstall motors, ~~how to~~ remove/reinstall fan blades as required to remove motors, how to adjust the angle/pitch of fan blades to match the original factory set positions, how to use the fan blade protractor, how to replace belts, etc.

1.04 SECTION 312000 "EARTH MOVING"

In 1.09 "GENERAL REQUIREMENTS" REPLACE paragraph A with the following:

- A. Work within the excavation areas is considered a Time Restricted Activity and shall occur only within the time periods allowed for Time Restricted Activities as noted on the Drawings The Contractor shall coordinate a minimum of four (4) weeks in advance with the Owner, including local ~~if any~~ local personnel, to determine what times are available to conduct all Work related activities, including, but not limited to, excavation, trenching, conduit duct bank construction, ~~and~~ and asphalt/concrete repairs, etc. required for this Work.

1.05 GENERAL PLANS

- A. SHEET G-GEN-02: REPLACE with the attached sheet noted with "6/20/2019 ADDENDUM 3" in the Issues and Revisions portion of the title block.

1.06 MECHANICAL PLANS

- A. SHEET M-GEN-02: REPLACE with the attached sheet noted with "6/20/2019 ADDENDUM 3" in the Issues and Revisions portion of the title block.

- B. SHEET M-GEN-03: REPLACE with the attached sheet noted with “6/20/2019 ADDENDUM 3” in the Issues and Revisions portion of the title block.
- C. SHEET M-FP-01: REPLACE with the attached sheet noted with “6/20/2019 ADDENDUM 3” in the Issues and Revisions portion of the title block.
- D. SHEET M-PSC-01: REPLACE with the attached sheet noted with “6/20/2019 ADDENDUM 3” in the Issues and Revisions portion of the title block.

END OF ADDENDUM

GENERAL PROJECT NOTES (CONTINUED):

20. FOR PORTION OF DEMOLITION WORK CONDUCTED IN OCCUPIED SPACES INCLUDING BUT NOT LIMITED TO CLASS ROOMS, CORRIDORS AND STORAGE SPACES, CONTRACTOR SHALL CAREFULLY INSTALL SHEETS OF 6 MIL THICKNESS MINIMUM PLASTIC.

22.

SEQUENCE OF CONSTRUCTION:

GENERAL RENOVATION/DEMOLITION NOTES:

1. LOCATION AND SIZES OF EQUIPMENT SHOWN ON DRAWINGS ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS PRIOR TO COMMENCING CONSTRUCTION.
2. NOT ALL ELECTRICAL/MECHANICAL/STRUCTURAL/CIVIL COMPONENTS ARE SHOWN ON DRAWINGS.
3. REFER TO ELECTRICAL/STRUCTURAL/CIVIL/ARCHITECTURAL DRAWINGS, A
- 4.
- 5.
- 7.
- 8.
- 9.

ALL PIPING SHALL BE INSTALLED AS IN

