



**CITY OF TACOMA
TACOMA PUBLIC LIBRARY**

ADDENDUM NO. 02

DATE: May 6, 2022

REVISIONS TO:

**Request for Bids Specification No. LB21-0631F
Library HVAC Replacement**

NOTICE TO ALL BIDDERS:

This addendum is issued to clarify, revise, add to or delete from, the original specification documents for the above project. This addendum, as integrated with the original specification documents, shall form the specification documents. The noted revisions shall take precedence over previously issued specification documents and shall become part of this contract.

REVISIONS TO THE SUBMITTAL DEADLINE:

The submittal deadline remains the same as updated via Addendum No 1.

REVISIONS TO THE GENERAL INFORMATION AND REQUIREMENTS:

Updated plan information as advised in Addendum 01 is included below.

NOTE: Acknowledge receipt of this addendum by initialing the corresponding space as indicated on the signature page. Vendors who have already submitted their bid/proposal may contact the Purchasing Division at 253-502-8468 and request return of their bid/proposal for acknowledgment and re-submittal. Or, a letter acknowledging receipt of this addendum may be submitted in an envelope marked Request for Bids Specification No. LB21-0631F Addendum No. 02. The City reserves the right to reject any and all bids, including, in certain circumstances, for failure to appropriately acknowledge this addendum.

cc: Phil Torgerson, Library Facilities Manager
Tina Eide, Senior Buyer

**TACOMA PUBLIC LIBRARIES
HVAC REPLACEMENT
BRANCH LOCATIONS: FERN HILL, SWASEY, WHEELLOCK**

ADDENDUM NO. 2
MAY 6, 2022

This Addendum forms a part of the Contract Documents and modifies the original Contract Documents as described. Acknowledge receipt of this Addendum in the space provided on the Form of Proposal. Failure to do so may subject Bidder to disqualification. There are 4 pages to this addendum including all attachments. This Addendum is issued to all known Plan Holders.

DRAWINGS

1. Sheet M0.2, Boiler Schedule, **REVISE** B-1 to read as follows: B-1; Lochinvar Model BWK1-105C; Electric Boiler; 105kW input; 105kW output; N/A Efficiency; 80 PSI; 291 FLA; 208V/3PH; Remarks: 1 step at 15 kW and 3 steps at 30kW.
2. Sheet M0.2, Boiler Schedule, **DELETE** Boiler B-2.
3. Sheet E0.1, Mechanical Equipment Connection Schedule – Wheelock, **REVISE** B-1 to: B-1; Electric Boiler; Basement; N/A HP; 105 KVA; 291 FLA; 364 MCA; 400 MOC; 208V/3PH; Feeder 4”C 3#600KCMIL #3GND; Circuit Main Switch Board; Disconnect by Div 26; Toggle Type Disconnect; N/A Controls; Remarks Fusing for 65k Amp Short Circuit Current Rating.
4. Sheet E0.1, Mechanical Equipment Connection Schedule – Wheelock, **DELETE** Boiler B-2.
5. Sheet E0.2, Panel ‘P1’, **REVISE** circuit 25 to from “Boilers B-1 & B-2” to “Spare”.
6. Sheet ME3.0, **DELETE** gas piping and all site work associated with the gas piping. (Boiler is revised from gas to electric).
7. Sheet ME3.1, Electrical Notes, **ADD** Electrical Note 2 as follows: “Demolish Disconnect. Existing 4-inch conduit and conductors to source (Main Switch Board on floor above) may be re-used.”
8. Sheet ME3.1, Electrical Notes, **ADD** Electrical Note 3 as follows: “Disconnect Equipment and demolish conduit and conductors to Existing Boiler Disconnect.”
9. Sheet ME3.1, Enlarged Plan – Demo, At Existing Boiler Electrical Disconnect, **REVISE** Electrical Note call out from Electrical Note 1 to Electrical Note 2.
10. Sheet ME3.1, Enlarged Plan – Demo, At Existing Boiler B-1, **REVISE** Electrical Note call out from Electrical Note 1 to Electrical Note 3.
11. Sheet ME3.3, General Notes, **DELETE** General Note 4.
12. Sheet ME3.3, General Notes, ADD the following to General Note 5: “Adjust locations of equipment to suit code required clearances at items (
13. Sheet ME3.3, Electrical Notes, **ADD** Electrical Note 3 as follows: Existing 4-inch conduit and conductors served by existing 400A breaker in Main Switch Board (located in Elec Room on Floor

- above) may be modified to allow re-use. Terminate and connect to new fused disconnect for Boiler B-1. Provide new conduit and conductors from fused disconnect to Boiler B-1.
14. Sheet ME3.3, Enlarged Mechanical Room Plan **REVISE** as follows: Indicate Boiler B-1 to be located on a new concrete (6-inches wider than unit on all sides). Delete Boiler B-2. Revise Backflow and Makeup water assembly to be further north than shown (to allow space for new disconnect). Add new fused disconnect to serve B-1 (located same as location of demolished disconnect); Add Electrical Note 3 to fused disconnect. Delete 3" flues.
 15. Sheet ME3.3, Section A, **REVISE** as follows: Indicate Boiler B-1 to be mounted on new concrete pad. Delete Boiler B-2.
 16. Sheet M3.6, WSHP Schematic 2, **DELETE** Boiler B-2.
 17. Sheet M3.7, **DELETE** sheet in entirety.

SPECIFICATIONS

1. Section 23 11 23, **DELETE** section in entirety.
2. Section 23 52 16, **REVISE** specification title to "Electric Boilers"
3. Section 23 52 16, paragraph 1.02 **DELETE** paragraphs B, C, and D.
4. Section 23 52 16, paragraph 1.03 A **DELETE** "Gas train"
5. Section 23 52 16, paragraph 2.01 B, **ADD**: "Cleaver Brooks."
6. Section 23 52 16, paragraph 2.01 C **DELETE** paragraph.
7. Section 23 52 16, paragraphs 2.02, 2.03, 2.04, and 2.05 **REVISE** to read as follows:

2.02 BOILERS

- A. Type: High efficiency, electric hot water boiler, compact type.
- B. General:
 1. Complete Unit: Factory assembled, self-contained readily transported unit complete with all accessories and ready for automatic operation except for connection of water and electrical services.
 2. Design Certification: The boiler vessel shall be constructed in accordance with Section IV of the ASME Boiler and Pressure Vessel Code requirements, "H" stamped and registered with the National Board of Boiler and Pressure Vessels.
- C. Capacity: No less than that indicated on the plans. Ratings shall be in accordance with AGA or CGA standards.
- D. Construction:
 2. Support: Boiler shall be mounted on a steel support frame with drilled provisions to allow for seismic anchoring.
 3. Jacket: Min 16-gauge steel jacket, insulated with minimum 4-inch thick insulation. Boiler jacket shall have an acrylic enamel finish. Jacket shall have a full-length hinged access door with key lock for access to heating elements and controls
- E. Service Access: Provide with access covers for accessing all serviceable components.

- F. Electrical: All field electrical wiring connections to the boiler shall be made to a main terminal block. All internal wiring shall be made to solderless terminal lug wiring connections. Wiring to be color coded or numbered for ease of servicing. All power circuits to heating elements shall be fused with cartridge type fuses having a minimum 100,000 amp interrupting capacity. Operation of the heating elements shall be switched by a three pole magnetic contactors operated by a 120 volt control circuit. The control circuit shall use a built-in transformer to reduce line voltage to 120 volts for operation of the control circuit components. The control circuit shall be fused on the primary side as well as fused and grounded on the secondary side.

2.03 BOILER TRIM

- A. Pilot Switch: On-Off pilot switch with pilot light to manually operate the 120 volt control circuit.
- B. Pilot Light: Status pilot light for each stage of operation,
- C. Low Water Cut-Off: Probe type electronic low water cut-off.
- D. Gauge: Pressure gauge with cock and temperature indicator
- E. Drain: Drain valve
- F. Meter: Ammeter/Voltmeter/KWH.
- G. Relief Valve: ASME rated pressure relief valve, set at boiler working pressure indicated psi, capacity no less than boiler maximum output.
- H. High Temperature Cut-off: High temperature cut-out with manual reset to prevent unit operation if boiler water temperature rises to an unsafe level.
- I. Alarm: Visual and audible alarm, factory mounted on control panel with audible silence switch; shall sound audible and visual alarm for boiler alarm condition.
- J. Controls: See below

2.04 HEATING ELEMENTS

- A. The immersion heating elements shall be low watt density with an incoloy outer sheath material for long life. The heating elements shall be a three beam design and mount in individual tank flanges.

2.05 BOILER CONTROLS

- A. General: Boiler shall have controls to allow operation in a stand alone "local" mode or as part of a master boiler control scheme by the building EMCS. When operating in "local" mode, each boiler shall operate to a fixed setpoint.
- B. Controls: Electronic control system, provided integral with each boiler to control stage of boiler, to maintain system water temperature setpoint.
- C. Failsafe Mode: When a building EMCS is controlling setpoint. If communications is lost, the boiler/system shall run off the local fixed Setpoint.
- D. EMCS Interface:
1. Provide controls to allow enable/disable control of each boiler by the building EMCS system.
 2. Provide contacts to indicate alarm condition to the EMCS.
 3. Provide terminal unit controller, with BACnet or LonWorks protocol type to match building EMCS and to allow connection to building EMCS and transmission of boiler operating parameters to EMCS. Coordinate protocol with Division 25 to confirm compatibility.
- E. Emergency Shutdown: Provide boiler with connections and components to allow for remote shut-down of boiler by emergency wall switch in accordance with code.

8. Section 23 52 16, paragraphs 2.06 and 2.07, **DELETE** paragraphs in entirety.

9. Section 23 52 16, paragraphs 3.01 D, **DELETE** paragraph in entirety.

10. Section 23 52 16, paragraphs 3.02 **DELETE** paragraph in entirety.

END OF ADDENDUM