



Quote No. 24704

Dec 15, 2023

Richmond K-8 School, Controls

Submitted To:

IL Texas
Attn: Charles Klein

Service Address:

1120 FM 359
Richmond, Texas 77406

We hereby propose to furnish the materials and perform the labor for the completion of:

I. SERVICE(S) : Provide and install the following:

- A. Provide and install one new Computrols Building Automation System (CBAS) platform for automation system control of the Richmond K-8 Charter School.
 - 1. Provide and install one new CBAS server in the IDF room. (Coordinate with IT for location).
 - 2. Provide and install CBAS software with required licenses for the integration of all automation system components.
 - 3. Provide the CBASweb interface module to allow remote access for control and monitoring.
 - 4. Provide 6 new controls enclosures with Computrols 8LX interface controllers in IDF and electrical rooms. One for each wing of the facility. Included with cabling conduit raceways to keep all cabling in the room secure and all required labor for the installation.
 - 5. Provide the required power supplies with each enclosure and all required 120volt power for operations.
 - 6. Provide CAT 6 cabling and terminations from the IDF rooms into each of the 8LX controllers for network interconnection.

- B. Provide and install fifty-four (54) new DDC controllers for control of roof-top units.
 - 1. Provide Honeywell Spyder controllers for each of the DX RTU systems shown on the drawings.
 - 2. Start/stop Scheduling of the Units
 - 3. Discharge air temperature
 - 4. Return air temperature
 - 5. Return air CO2
 - 6. Return air humidity
 - 7. Compressor relay start/stop
 - 8. Compressor status via analog amperage
 - 9. Dehumidification Activation Relay
 - 10. Supply fan relay start/stop
 - 11. Supply fan air flow status
 - 12. Fan Speed Control via VFD software communications integration as available.
 - 13. Outside air Damper Control via demand-based ventilation.
 - 14. Gas heating start and ignition control

15. As applicable, Verify the duct smoke detector integration into the unit shutdown sequence. (Duct detector provided and installed by others).
 16. Cabling and terminations as required.
 17. Graphical Images for each unit.
- C. Providing and install controls for seven (7) new Carrier DX Split system units being provided in the administration area.
1. Provide Honeywell Spyder controllers for each of the DX Split systems with gas fired heaters as shown on the drawings.
 2. Start/stop Scheduling of the Units
 3. Discharge air temperature
 4. Return air temperature
 5. Return air CO2
 6. Space temperature with adjustable set point control.
 7. Space humidity
 8. Compressor relay start/stop
 9. Compressor status via analog amperage
 10. Supply fan relay start/stop
 11. Supply fan air flow status
 12. Gas heating start and ignition control
 13. As applicable, Verify the duct smoke detector integration into the unit shutdown sequence. (Duct detector provided and installed by others).
 14. Cabling and terminations as required.
 15. Graphical Images for each unit.
- D. Provide and install five (5) new DDC expansion controllers for control of ERU units.
1. Provide Honeywell Spyder expansion modules connected and integrated to the correct RTU for each of the ERU units as shown on the drawings.
 2. Start/stop Scheduling of the Units
 3. Discharge air temperature
 4. Return air temperature
 5. Supply and exhaust fan relay start/stop
 6. Supply and exhaust fan status
 7. Heat wheel motor relay start/stop
 8. Heat wheel motor status
 9. Cabling and terminations as required.
 10. Graphical Images for each unit.
- E. Providing space temperature sensors in critical areas to monitor the temperatures for alarms. Both IDF rooms, the Fire Riser room, the front utility room. Providing two wall mounted thermostats on each side of the stage area for additional temperature monitoring and control sequencing.
- F. Providing alarm monitoring only to the Captive Air kitchen hood system and status of the kitchen exhaust fan. Start/stop of the kitchen fans is thru the Captive Air Hood Control System.
- G. Provide BACnet IP integration of the lighting control systems.
- H. Providing all required programming, testing, and commissioning of the new direct digital controls equipment.
- I. Providing two days of software and hardware training for all interested facilities staff.
- J. Providing warranty coverage of all controls systems related issues for a period of 1 year from start-up and Cx completion.
- K. Provide all required graphical interface for the BAS system.

L. All controls work quoted is based on drawings dated 04-28-23.

II. COST(S): Base Bid:

A. Materials and Labor	\$341,925.00
B. Sales Tax (Exempt)	\$ 0.00
C. Total Project Costs	\$341,925.00

III. SPECIAL NOTE(S):

A. All controls work quoted is based on drawings dated 04-28-23

All material is guaranteed to be as specified, and the above, described work will be performed and completed in a substantial workmanlike manner according to standard practices. Unless noted above, the above, described work will be performed during regular daytime business hours.

Regulated by the Texas Department of Licensing and Registration, P.O. Box 12157, Austin, Texas 78711, 1-800-803-9202.

Respectfully Submitted,

Charlie Bozeman
Director, Controls Division
A/W MECHANICAL SERVICES, L.P.
TACLA002812C

Terms and Conditions:

- A. This proposal may be withdrawn by us if not accepted within 30 days.
- B. The following work is by others and not included in the scope of this proposal:
- C. This proposal only includes mechanical equipment or work shown on the mechanical plans. A/W Mechanical makes no attempt to interpret notes, details, specifications, or intent pertaining to work not specifically shown on the mechanical ("M") plans unless otherwise noted in the scope of services above.
- D. **Additional Service:** Services or parts requested by the customer in addition to those specified in this agreement will be provided upon receipt of the Customer's written authorization and invoiced at A/W Mechanical's prevailing labor rates and parts charges. Additional services or parts shall be supplied under the terms of this agreement.
- E. **Warranty:** A/W Mechanical does not warrant products, but it does pass on to the customer any available manufacturer's warranty for those products. All labor is warranted for a period of one (1) year from the date of Substantial Completion.
- F. **Insurance:** Upon request, A/W Mechanical will furnish evidence of its standard insurance coverage.

ACCEPTANCE OF PROPOSAL

The above prices, specifications, and conditions are satisfactory as stated and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

SIGNATURE: _____ **DATE:** _____

PRINTED NAME: _____