



Building Automation Proposal

Hernando County Gov Center Courthouse PH2 Controls

Prepared For: Hernando County BOCC
Coop Contract: OMNIA Recine #3341
Coop Quote: H5-OH4AAO-24-002

Date: January 17, 2025
Proposal ID: 7032160

Scope of Work:

This scope includes the expansion of the existing Trane Tracer Ensemble Building Management System (BMS). This work includes controls material and installation associated for the replacement of the existing Old Legacy Trane Controllers. Controllers shall be inter-connected to the existing Trane Tracer SC+ System Controller(s) via wired BACnet MS/TP communication link(s).

Trane Control System:

Central Control and Engineering

- Use existing Trane Tracer SC+ System Controller, Trane Ensemble Building Management System (BMS) complete and SC+ software licenses for control and monitoring of the scope of work below.
- Engineered control drawings including submittal information and point-by-point as-built documentation.
- Reuse existing user interface custom graphics and update if needed.
- Control wiring installation, supervision, labor, and material (i.e. conduit, wire, cable, etc.) as required to install new controllers, sensors, communication cabling, etc.
- All exposed wiring or wiring in new walls shall be in EMT conduit. Conduits exposed to weather shall be rigid galvanized pipe. Plenum rated wire shall be used in concealed accessible locations neatly tied off.
- Reuse of the existing engineered control sequence of operation to remain in its entirety.
- Set up alarming, trending, and schedules based off customer recommendations.
- Remove existing old legacy Trane controller (s) and return them to the Owner.
- All other existing controllers, sensors, relays, wiring, conduit, enclosures, interlocks, actuators, and end devices not mentioned below will remain as-is.
- Reuse existing comm link assuming is in good condition.
- Project will be progress billed each month based on the percent complete through that month.
- One-year (1) labor and materials warranty.
- All work is to be performed during normal business hours.

Trane Control Systems - Provide and install the following:

- **Phase 2: Controllers Trane Tracer SC+ (SC-2/BCU-2)**
 - Trane UC/SY BACnet Controller(s) with metal enclosure serving Penthouse East (Total of 1).
Replace and install all the new water temperature sensors located at Penthouse Chiller Plant.
 - Trane UC/SY BACnet Controller with metal enclosure serving Penthouse West (Total of 1).
Replace and install new water temperature sensors located at Penthouse West Chiller Plant.
 - Trane UC/SY BACnet Controllers with 16in metal enclosure to control CHW AHU-1~6 (Total of 6).
Replace and install new air temperature sensors located at CHW AHU-1~6
 - Trane UC/SY BACnet Controllers (reuse unit enclosure) to control CHW RTU-2&3 (Total of 2).
Replace and install new air temperature sensors located at CHW RTU-2&3
 - Trane UC/SY BACnet Controller with metal enclosure Boiler and Hot Water Pumps, 2-Pumps (Total of 1).
Connect existing 3-way Valves and related temperature sensor into new Trane Controller.
 - Existing Chiller Communication Links to remain.
 - Trane UC/SY BACnet Controller with metal enclosure Desiccant Outdoor Units (Total of 6).
Replace and install new air temperature and humidity sensors located at Desiccant Outdoor Units

Clarifications and Exclusions:

- Includes on-site system training for owner personnel.
- Floor plan CAD / PDF files to be provided by the owner if required.
- Building LAN drops for the BAS system are necessary and provided by others.
- Excludes LAN wiring, LAN hardware (computers, servers, routers etc.), internet service/access or the static IP address required by the Tracer BAS for communication and/or web access.
- Installation based on plenum rated cable. Conduits were required by code only. Excludes special provisions of any kind to accommodate wiring located in inaccessible locations.
- Existing communication networks and conduit will be reused wherever feasible.
- Provisions for Davis-Bacon Act or prevailing wage scales are not included.
- Trenching or directional boring of any kind.
- Excludes furnishing, installing, controlling, or wiring of smoke dampers, combination fire/smoke dampers, reset stations, duct detectors, smoke detectors, or other fire alarm system devices.
- Excludes hardwired interlocked into safety shut-down circuit (all required wiring provided and installed by others)
- Excludes all wiring at or above 110/120 volts.
- Excludes provision and or programming of computer hardware of any kind. System interface to be achieved through standard internet browser on owner provided equipment.
- Excludes HOA switches and potentiometers w/ LEDs on controllers.
- Excludes Air or Water Test & Balancing.
- Excludes installation of control dampers, valve bodies, flow sensors, flow meters, wells, gauges, or pressure taps.
- Excludes furnishing, installing, or power wiring of VFDs and starters, unless mentioned above.
- Excludes networking or tie into any equipment not mentioned in scope of work.
- Excludes core drilling, fire stopping, patching, and painting.
- Excludes installation of duct or piping specialty devices.
- Issues or repairs needed related to these devices found during the project are not included but will be reported to the customer.
- The existing equipment to be replaced with this proposal will be removed for disposal.
- Trane may invoice customers for all equipment or material furnished, whether delivered to the installation site or to an off-site storage facility and for all work performed on-site or off-site.
- Project will be progress billed each month based on the percent complete through that month.
- All work to be performed during normal business hours. Occupant disruptions not expected.
- After Hours or Overtime labor will be coordinate and proposed separate based on-site requirements, unless is mentioned above.
- One-year parts and labor warranty on all new hardware and software.
- Exclude demolition of any kind not specifically listed above, including but not limited to, work related to the existing control system.
- Trane will not perform any work if working conditions could endanger or put at risk the safety of our employees or subcontractors.
- Does not include any labor or materials not specifically mentioned in this proposal.

Price:

This proposal is valid for 60 days from January 17, 2025. In accordance with our standard terms, conditions and standard project general exclusions, the investment for the project listed in this proposal is:

Total Net Base Price (Phase 2): \$ 203,245.00
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Proposed By:

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Financial items not included.

- Applicable tax is excluded.
- Permits
- Bid Bond
- Payment and Performance Bond
- Liquidated Damages
- Demurrage or Storage Charges
- Participation in OCIP or CCIP Insurance Programs

CUSTOMER ACCEPTANCE Hernando County Facilities	TRANE ACCEPTANCE TRANE U.S. INC.
Authorized Representative <i>Craig W. Becker</i>	Authorized Representative <i>Frankie Rosario</i>
Printed Name Craig W Becker	Printed Name Frankie Rosario
Title Facilities Manager	Title Controls Account Manager
Purchase Order Acceptance Date: 1/17/2025	Signature Date 01/17/25 License Number: