



Building Automation Proposal

Hernando County Facilities Building Controls Upgrade

Prepared For: Hernando County Government
Coop Contract: Omnia Racine #3341
Coop Quote: H5-OH4AAO-23-001

Date: December 11, 2024
Proposal ID: 7464714

Scope of Work:

This scope includes the installation of a new Trane Tracer SC+ Building Controller and expand existing Trane Tracer Ensemble Building Management System (BMS). This work includes controls material and installation associated with three (3) DX VAV AHUs/CUs, and thirty-seven (37) VAV Boxed w/ELRH. Connection of building controllers via wired BACnet MS/TP communication links.

This scope is based on the site walk conducted on September 14, 2023.

Trane Control System:

Central Control and Engineering

- Provide a Trane Tracer® SC+ & Ensemble Platform Control System based Building Automation System (BAS) complete with custom graphics and SC+ software licenses for control and monitoring of the scope of work below. System interface to be web based with user access via any standard internet browser.
- Tracer® Ensemble™ Server to facilitate system wide communication interface, data, and trend logging purposes. Server setup and activation of Trane Ensemble Cloud in a secure Amazon Web Service environment. Trane Tracer Ensemble Cloud instance is fully maintained by the Tracer Ensemble Cloud Team fulfillment team. Trane to coordinate with owner IT department for requirements.
- Removal of existing unit controllers to be returned to owner.
- Includes Trane Ensemble Cloud and SC+ software maintenance plan (SMP) for a period of one (1) year, then the subscription fee for the Trane Ensemble Cloud will have to be renew annually.
- Engineered control drawings including submittal information and point-by-point as-built documentation.
- Reuse the existing engineered control sequence of operation to remain in its entirety.
- Set up alarming, trending, and schedules based off customer recommendations.
- All other existing controllers, sensors, relays, wiring, conduit, enclosures, interlocks, actuators, and end devices not mentioned above will remain as-is.
- Remote BAS Digital Inspections annually to provide analytics reports to customers for a one-year period.
- All work to be performed during normal business hours.
- **Reuse existing communication wiring and space sensors wiring.**
- **The equipment in the B & C Building is on the same communication link, so the controls upgrade must be completed at the same time to reuse existing wiring.**

Building A Systems:

DX VAV Air Handling Unit with Condensing Unit (AHU/CU-1)

- Provide and install the following:
 - Trane Tracer SC+ Building Controller with enclosure (Total of 1).
 - Uninterruptible Power Supply (UPS) with enclosure, 120v from nearest source (Total of 1).
 - Trane BACnet MS/TP Symbio Controller for DX Split System, use existing enclosure (Total of 1).
 - Return air temperature and humidity duct sensor (Total of 1).
 - Mixed air temperature sensor (Total of 1).
 - Supply air temperature duct sensor (Total of 1).

VAV boxes w/ ELRH

- Provide and install the following:
 - Trane BACnet MS/TP Symbio Controller (Total of 17).
 - Supply air temperature duct sensor for all VAV boxes (Total of 17).
 - Trane Space temperature sensor w/ display (Total of 17).

Building B Systems:

DX VAV Air Handling Unit with Condensing Unit (AHU/CU-2)

- Provide and install the following:
 - Trane BACnet MS/TP Symbio Controller for DX Split System, use existing enclosure (Total of 1).
 - Return air temperature and humidity duct sensor (Total of 1).
 - Mixed air temperature sensor (Total of 1).
 - Supply air temperature duct sensor (Total of 1).

VAV boxes w/ ELRH

- Provide and install the following:
 - Trane BACnet MS/TP Symbio Controller (Total of 14).
 - Supply air temperature duct sensor for all VAV boxes (Total of 14).
 - Trane Space temperature sensor w/ display (Total of 14).

Building C Systems:

DX VAV Air Handling Unit with Condensing Unit (AHU/CU-3)

- Provide and install the following:
 - Trane BACnet MS/TP Symbio Controller for DX Split System, use existing enclosure (Total of 1).
 - Return air temperature and humidity duct sensor (Total of 1).
 - Mixed air temperature sensor (Total of 1).
 - Supply air temperature duct sensor (Total of 1).

VAV boxes w/ ELRH

- Provide and install the following:
 - Trane BACnet MS/TP Symbio Controller (Total of 6).
 - Supply air temperature duct sensor for all VAV boxes (Total of 6).
 - Trane Space temperature sensor w/ display (Total of 6).

Miscellaneous Points, Systems, Interfaces, and Interlocks:

- Global outside air temperature and humidity sensor (Total of 1)

Value:

- The latest generation of BAS supervisory hardware is scalable, upgradable and BACnet compliant.
- Begin planned progress toward a fully updated controls platform.
- Will better allow for staged planning of future necessary unit controller replacements.
- Secure, remote connectivity for better operational control and occupant comfort.
- Updated user interface with intuitive graphical navigation, alarms, data logs, dashboards, etc.
- Reduce risk of outages by replacing aging and obsolete equipment.

Clarifications and Exclusions:

- Includes on-site system training for owner personnel as required.
- 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)
- Excluded 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 30 days from December 11, 2024. In accordance with our standard terms, conditions and standard project general exclusions, the investment for the project listed in this proposal is:

Building A System Net Price:	\$ 69,825.00
Building B System Net Price:	\$ 32,500.00
Building C System Net Price:	\$ 21,060.00
Total Net Price:	\$ 123,385.00

Proposed By:

Frankie Rosario
Controls Account Manager
902 N. Himes Avenue Tampa, FL. 36609
cell: 813-790-9605
email: frankie.rosario@tranetechnologies.com

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	TRANE ACCEPTANCE
	TRANE U.S. INC.
Authorized Representative	Authorized Representative
Printed Name	Printed Name
Title	Title
Purchase Order	Signature Date
Acceptance Date:	License Number:

HERNANDO COUNTY PURCHASE ORDER TERMS AND CONDITIONS

GENERAL

The condition of this order may not be changed by Vendor/Contractor. If order is not acceptable, return to Hernando County Purchasing and Contracts Department. Failure of a Vendor/Contractor to deliver according to this purchase order awarded to him or to comply with any of the terms and conditions therein may disqualify him from receiving future orders.

QUALITY

All material or services furnished on this order must be as specified and subject to County inspection and approval within a reasonable time after delivery at destination. Variations in materials or services from those specified in this order must not be made without written authority from the Chief Procurement Officer. Materials rejected will be returned at the Vendor/Contractor's risk and expense.

QUANTITY/PRICE

The quantity of materials ordered or the prices specified must not be exceeded without written authority being first obtained from the Chief Procurement Officer.

INDEMNITY AND INSURANCE

The Vendor/Contractor agrees to indemnify and hold harmless Hernando County, including its officers, agents and employees, from all claims, damages, losses and expenses, including reasonable attorneys' fees, and costs brought or incurred on account of injuries or damages sustained by any party due to the operations of the Vendor/Contractor under this contract. The Vendor/Contractor further agrees to provide workers' compensation for all employees, and to maintain such general and auto liability insurance as is deemed necessary by the County for the particular circumstances and operations of the Vendor/Contractor. The Vendor/Contractor further agrees to provide the County with Certificates of Insurance, indicating the amount of coverage in force, upon request.

PACKING

Packages must be plainly marked with shipper's name and purchase order number; charges are not allowed for boxing or crating unless previously agreed upon in writing.

DELIVERY

All materials must be shipped F. O. B. destination. The County will pay no freight or express charges, except by previous agreement. If specific purchase is negotiated on the basis of F.O.B. shipping point, VENDOR/CONTRACTOR ARE TO PREPAY SHIPPING CHARGES AND ADD TO INVOICE. Delivery must actually be affected within the time stated on purchase made between 8:00 AM and 5:00 PM Monday to Friday inclusive unless otherwise stated. In case of default by the Vendor/Contractor, Hernando County may procure the articles or services covered by this order from other sources and hold the Vendor/Contractor responsible for any excess occasioned thereby.

PAYMENT

Partial billing will be accepted only for items received within the specified delivery period. Payments for items delivered after this specified delivery period will be made after the entire order is completed and accepted by Hernando County. Payment shall be made in accordance with Florida Statute 218, Florida Prompt Payment Act. Payment for accepted equipment/supplies/services will be accomplished by submission of an invoice, in duplicate; to the Ship To Address on the front of the purchase order unless otherwise indicated.

MATERIAL SAFETY DATA SHEET

The Vendor/Contractor agrees to furnish Hernando County with a current Material Safety Data Sheet (MSDS) on or before delivery of each and every hazardous chemical or substance purchased which is classified as toxic under Florida Statute 442. Appropriate labels and MSDSs shall be provided for all shipments. Send MSDSs and other pertinent data to: Hernando County Purchasing and Contracts Department, 20 North Main Street, Room 365, Brooksville, FL 34601-2828.

OSHA REQUIREMENT

The Vendor/Contractor or contractor hereby guarantees Hernando County that all materials, supplies and equipment as listed on the purchase order meet the requirements, specifications and standards as provided for under the Federal Occupations Safety and Health Administration Act of 1970, as from time to time amended and in force at the date thereof.

LEGALLY AUTHORIZED WORKFORCE

VENDOR/CONTRACTOR represents and warrants that VENDOR/CONTRACTOR is in compliance with all applicable federal, state and local laws, including, but not limited to, the laws related to the requirement of an employer to verify an employee's eligibility to work in the United States. VENDOR/CONTRACTOR is encouraged (but not required) to incorporate the IMAGE best practices into its business and, when practicable, incorporate verification requirements into its agreements with subcontractors. The IMAGE Best Practices can be found on the COUNTY'S website at www.hernandocounty.us/pur/.

INSURANCE

Unless otherwise specified, the Contractor shall, at its sole expense, maintain in effect at all times during the performance of the services insurance coverage with limits not less than those set forth below (unless limits have been lowered) and with insurers and under forms of policies satisfactory to COUNTY.

<u>Coverage</u>	<u>Minimum Amounts and Limits</u>
(a) Worker's Compensation Employer's Liability	Statutory requirements at location of work \$ 100,000 each accident \$ 100,000 by employee \$ 500,000 policy limit
(b) Commercial General Liability (Additional Insured & Wavier Of Subrogation)	\$ 2,000,000 General Aggregate \$ 2,000,000 Products-Comp. Ops Agg. \$ 1,000,000 Each Occurrence \$ 5,000 Medical Expense
(c) Automobile Liability Option of Split Limits: (1.) Bodily Injury	\$ 1,000,000 Combined Single Limit (owned, hired and non-owned) \$ 1,000,000 Per Person or \$1,000,000 Per Accident