



CITY COMMISSION STAFF REPORT

DEPARTMENT: Public Works

SUBJECT: Motion to approve an agreement with TRANE U.S. Inc. to replace an existing 40-Ton split Heating Ventilation and Air Conditioning (HVAC) System of like-size and capacity at the Cooper City/BSO Police station utilizing the OMNIA Partners Contract #15-JLP-023. – **Public Works**

CITY MANAGER RECOMMENDATION:

The City Manager recommends approval of an agreement for a turnkey design and complete replacement of the 40-Ton split HVAC System from TRANE U.S. Inc. for the Cooper City/BSO Police Station.

BACKGROUND OF ITEM:

The original Construction of the BSO Law Enforcement Facility included two HVAC systems that provide cooling for the entire building: 1 south unit with a 30-Ton rating, and 1 north unit with a 40-Ton rating. Both units were originally installed in 2000. Ever since the building was constructed the north unit has required an excessive amount of maintenance, including premature replacements of compressor units. Over the years attempts were made to correct the malfunctions of the north unit, but to no avail. To complicate maintenance activities, the R-22 refrigerant that the system operates on is being phased out completely and requires new refrigerant lines between the outside compressor and indoor air handler.

In 2021 staff began the process to replace the north condensing unit, refrigerant line and indoor air handler due to failures and excessive energy consumption. During the process of bringing in vendors for proposals it was discovered that the refrigerant lines are too long and do not meet the American Society of Refrigerant Engineers (ASRE) standards. All vendors indicated that they would not offer any warranty for direct replacement of the north HVAC system. Vendors recommended a Roof Top Unit (RTU) to meet the required ASRE standards in order to obtain a warranty. Vendors provided a rough cost estimate of \$125,000 to replace the north HVAC system. This was the amount of requested ARPA funds prior to the FY 2022 budget approval for the HVAC replacement.

At the March 22, 2022 Commission meeting, staff introduced the north HVAC system problem and potential solution for the replacement of the north HVAC unit. Commission directed staff to find a “turnkey” process to reduce the time for install and one that incorporated HVAC industry specialists. Staff identified a national cooperative contract where TRANE, which has a local office in Miramar FL, was a qualified contractor. Staff provided TRANE with necessary building plans for the facility and conducted multiple site visits with the entire engineering and technical TRANE team over several weeks for the replacement of the north HVAC. TRANE was asked to provide a review and proposal for both a ground mount compressor unit and a roof mounted compressor unit.

ANALYSIS:

TRANE has completed their review and provided a cost proposal for a turnkey HVAC replacement. The proposal includes both a ground mounted compressor unit option and a roof mounted compressor unit option. The Cost for the roof mount option is \$321,245 and the cost for the ground mount \$492,430. TRANE strongly endorses the roof mount option based on the following reasons:

- Ground mount option still leaves the refrigerant piping run length longer than factory/industry guidelines. The roof mount option is the shortest refrigeration piping run length closest to the air handling unit.
- Because the ground mount option requires more material, concrete work and intensive labor, the roof mount option is substantially more cost effective.
- The roof mount option is less invasive since piping and electrical wires do not have to be routed throughout the building causing a longer project duration where disruption/noise can interfere with facility operations.
- Roof mount units have less impact from surrounding ground environment (crash damages, grounds chemical applications, falling branches and flying debris/objects during storms).

Based on costs and industry specialist input, staff recommends to replace the existing north HVAC system with the roof mount option. Staff has coordinated with Procurement and the Attorney’s Office to utilize the Omnia cooperative contract# 15-JLP-023. In addition, TRANE has provided a 3rd party auditor letter that provides confirmation that the proposal is in accordance with the Omnia contract.

Should this agreement be approved, TRANE will provide a performance bond for 100% of the contract value. It will take approximately 44 weeks for completion upon a notice to proceed. This is primarily due to the lead time for manufacturing of the HVAC system components.

STRATEGIC PLAN:

Operational cost efficiency and effectiveness strategies are optimized when building envelopes function properly. The replacement of the HVAC unit is expected to significantly improve proper air flow, reduce energy consumption and increase the operational reliability of the north HVAC system for the Cooper City BSO Police station.

FISCAL IMPACT:

The total cost for the recommended award for the HVAC replacement is \$321,245. The replacement cost exceeds the planned original budget due to the scope of work for system replacement, supply chain issues and hyperinflation.

General Ledger Acct. Number	Original Budget	Additional Amount Requested	Amended Budget
110-160-566 000-519-HVAC1 (ARPA)	\$125,000	\$196,245	\$321,245

ATTACHMENTS:

1. Master Agreement – Trane RFP #15-JLP-023
2. Agreement – Trane U.S. Inc. and City of Cooper City.
3. Trane/OMNIA Proposal
4. Third Party Audit Letter confirming OMNIA contract compliance.
5. Vendor Compliance – Trane U.S. Inc.

Workflow History



User	Task	Action	Date/Time
Figallo, Maryann	NEW ITEM: Not Yet Routed	Forward to Public Wo...	10/13/22 04:23 PM
Good, Thomas	Assigned to Public Works Dire...	Return to Finance Dir...	10/13/22 04:24 PM
Kendrick, Aaron	Assigned to Finance Director	COMPLETE: Forwar...	10/13/22 04:36 PM
Horowitz, Jacob	Assigned to Attorney	COMPLETE: Forwar...	10/13/22 06:05 PM
Allen, Tedra	Assigned to City Manager	COMPLETE: Forwar...	10/13/22 06:35 PM
Allen, Tedra	Assigned to City Clerk	APPROVE ITEM: En...	10/14/22 09:59 AM
Allen, Tedra	END WORKFLOW - APPROV...		10/14/22 10:05 AM