



Custom Procurement Report

Control How You Source Building Systems

Directly access suppliers and automate sourcing, procurement, and financing—all from one platform

Key Benefits

Save Time

Automate RFQs and reduce manual work by up to 50%

Cut Costs

Negotiate directly with suppliers for better deals

Streamlined Sourcing

Take BuildVision's structured data and send it to suppliers at BuildVision.io

Customer Information

Customer Name	Hensel Phelps
Contact Person	Alex Arnold
Contact Email	aarnold@henselphelps.com
Contact Phone	N/A
Date Invited	5/27/2025
Date Due	6/30/2025
RFIs Due	6/19/2025
Request Type	Proposal
Location	F.E. Warren AFB, Wyoming

Project Information

Project Name	GBSD Integrated Training Center (ITC)
Location	F.E. Warren AFB, Wyoming
Start Date	5/27/2025
Completion Date	6/30/2025
Budget	N/A
Scope	HVAC and mechanical equipment installation including air handling units, boilers, chillers, fan coil units, exhaust systems and related components
Project ID	d9ccf49d-0eba-4852-8c17-c04b44d3fe4a
Project URL	BuildVision Project Link
Contract Number	W9128F21D0024
Solicitation Number	W9128F25RA015

Prepared By

Ben Lyddane
Ben@BuildVision.io
202-365-8628

Mackenzie Hoover
Mackenzie@buildvision.io
843-609-3265

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Project Equipment

Air Handling Units

Equipment Tag	Manufacturer	Model
AHU-1	No BOD Listed	Dedicated Outdoor Air System
AHU-2	No BOD Listed	Dedicated Outdoor Air System
AHU-3	No BOD Listed	High Bay Makeup Air

Notes

External static pressure includes filters, ductwork, and coils not in AHU casing. Provide unit capable of use with variable speed drive. Performance based on design altitude of 6,115 ft. Provide 6 inch equipment pad.

Modular Air-Cooled Chillers

Equipment Tag	Manufacturer	Model
CH-1	Trane	Modular Scroll Chiller
CH-2	Trane	Modular Scroll Chiller
AWHP-1	Trane	Modular Heat Pump Scroll Chiller

Notes

Capacity based on 40% Propylene Glycol solution. Performance based on design altitude at 6,115 ft.

Energy Recovery Wheels

Equipment Tag	Manufacturer	Model
EW-1	No BOD Listed	Total Energy Wheel
EW-2	No BOD Listed	Total Energy Wheel
EW-3	No BOD Listed	Total Energy Wheel

Notes

Performance based on design altitude of 6,115 ft. Motors shall be powered through single power point connection for unit.

Water Cooling Coils

Equipment Tag	Manufacturer	Model
WCC-1	No BOD Listed	

WCC-2	No BOD Listed	
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Notes

ACV assembly includes automatic control valve, line size balancing valve, strainer, 2 isolation valves, and 6 ACV size elbow. Performance based on design altitude of 6,115 ft.

Heating Water Coils

Equipment Tag	Manufacturer	Model
HC-01	No BOD Listed	
HC-02	No BOD Listed	
HC-03	No BOD Listed	
HC-04	No BOD Listed	

Notes

ACV assembly includes automatic control valve, line size balancing valve, strainer, 2 isolation valves, and 6 ACV size elbow. Capacity based on 40% propylene glycol. Performance based on design altitude of 6,115 ft.

Gas Heating Coil

Equipment Tag	Manufacturer	Model
HC-G-01	No BOD Listed	

Notes

Provide minimum burner turndown ratio of 10:1. Performance based on design altitude of 6,115 ft. Gas input based on 1,000 BTU/FT³.

Fan Coil Units

Equipment Tag	Manufacturer	Model
FCU-104, FCU-113, FCU-202	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-112, FCU-146, FCU-154, FCU-163, FCU-169, FCU-178, FCU-211, FCU-228, FCU-229, FCU-231, FCU-232, FCU-254, FCU-256, FCU-277	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-117	No BOD Listed	Horizontal Concealed Fan Coil Unit

FCU-126, FCU-127, FCU-158, FCU-132, FCU-155, FCU-163, FCU-164, FCU-165, FCU-204, FCU-220, FCU-241, FCU-251, FCU-252, FCU-255, FCU-264, FCU-265, FCU-266, FCU-267, FCU-268, FCU-269, FCU-270	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-137, FCU-138, FCU-153	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-152A, FCU-152B, FCU-227, FCU-233	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-156, FCU-158	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-170, FCU-174, FCU-207, FCU-208, FCU-209, FCU-167, FCU-216, FCU-222, FCU-223, FCU-224, FCU-234, FCU-237, FCU-240, FCU-242, FCU-243, FCU-244, FCU-261, FCU-279	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-171, FCU-187, FCU-276	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-218	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-226	No BOD Listed	Horizontal Concealed Fan Coil Unit
FCU-235	No BOD Listed	Horizontal Concealed Fan Coil Unit

Notes

Provide lockable, fusible disconnect. External static pressure includes filter and duct-work not in casing. ACV assembly includes automatic control valve, line size balancing valve, strainer, 2 isolation valves, and 6 ACV size elbows. Provide factory programmed ECM fan motor. Performance based on design altitude of 6,115 ft.

Blower Coil Units

Equipment Tag	Manufacturer	Model
BCAH-100A	No BOD Listed	Horizontal Blower Coil
BCAH-104	No BOD Listed	Horizontal Blower Coil
BCAH-104A	No BOD Listed	Horizontal Blower Coil
BCAH-105	No BOD Listed	Horizontal Blower Coil
BCAH-111B	No BOD Listed	Horizontal Blower Coil
BCAH-114B	No BOD Listed	Horizontal Blower Coil

BCAH-124	No BOD Listed	Horizontal Blower Coil
BCAH-125	No BOD Listed	Horizontal Blower Coil

Notes

External static pressure includes filter and ductwork not in casing. ACV assembly includes automatic control valve, line size balancing valve, strainer, 2 isolation valves, and 6 ACV size elbows. Provide factory programmed ECM fan motor. Performance based on design altitude of 6,115 ft.

Suppliers

Air Handling Units

Manufacturer	Model	Representative	Compatibility Notes	BoD
Trane		N/A	Compatible with specified requirements for AHUs with similar energy efficiency	Yes
Trane		N/A	Compatible with specified requirements for AHUs with similar energy efficiency	No
Daikin		N/A	Compatible with specified requirements for AHUs with similar energy efficiency	No
Carrier		N/A	Compatible with specified requirements for AHUs with similar control capabilities	No
York		N/A	Compatible with specified AHUs with similar performance characteristics	No

Air-Cooled Scroll Chillers

Manufacturer	Model	Representative	Compatibility Notes	BoD
Trane	AMC, AMX	N/A	Listed as BoD for Air-Cooled, Modular Water Chillers	Yes
Daikin		N/A	Compatible with specified requirements for CHs with similar energy efficiency	No

Carrier		N/A	Compatible with specified requirements for CHs with similar control capabilities	No
York		N/A	Compatible with specified CHs with similar performance characteristics	No

Energy Recovery Wheels

Manufacturer	Model	Representative	Compatibility Notes	BoD
Trane	Energy Recovery Wheel	N/A	Specified for use in AHU-1, AHU-2, and AHU-3	Yes
Semco	Total Energy Wheel	N/A	Compatible with specified performance, certified to AHRI 1060	Listed
Greenheck	Energy Recovery Wheel	N/A	Compatible with specified performance, certified to AHRI 1060	Listed
Carrier	Energy Recovery Wheel	N/A	Compatible with specified performance, EATR not to exceed 10% for Class 2 air	No
Daikin	Energy Recovery Wheel	N/A	Compatible with high altitude (6,115 ft) application	No

Water Cooling Coils

Manufacturer	Model	Representative	Compatibility Notes	BoD
Trane		N/A	Basis of Design	Yes
Carrier		N/A	Compatible with project requirements for water cooling coils	No
York		N/A	Compatible with project requirements for water cooling coils	No
Daikin		N/A	Compatible with project requirements for water cooling coils	No

Heating Water Coils

Manufacturer	Model	Representative	Compatibility Notes	BoD
Trane		N/A	Specified for AWHP-1 on mechanical schedules	Yes

Carrier		N/A	Compatible with existing piping configurations. Will require minor control modifications.	Listed
Daikin		N/A	Compatible with specified systems. May require adapter fittings for piping connections.	No
York		N/A	Direct compatibility with specified piping and control systems.	No

Gas Heating Coil

Manufacturer	Model	Representative	Compatibility Notes	BoD
Reznor	Gas-fired unit heater	N/A	Installed in High Bay area. Must be power-vented type suitable for sidewall vent discharge and automatic ignition. Heat exchangers must be stainless steel.	Yes
Modine	High-efficiency gas unit heater	N/A	Direct replacement option with similar performance specs. Compatible with specified venting requirements.	Listed
Sterling	TF Series	N/A	Power-vented design with stainless steel heat exchanger. Meets all specified requirements.	Listed
Trane	GSUD Series	N/A	Higher efficiency rating but compatible with all specified requirements.	No
Lennox	LF24 Series	N/A	Meets all specified requirements. Offers extended warranty options.	No

Fan Coil Units

Manufacturer	Model	Representative	Compatibility Notes	BoD
Trane		N/A	Basis of Design	Yes
Daikin		N/A	Compatible with project requirements for performance ratings.	No

Carrier		N/A	Compatible with design requirements for air-cooled systems with scroll compressors.	No
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Blower Coil Units

Manufacturer	Model	Representative	Compatibility Notes	BoD
First Co	Blower Coil Series	N/A	Horizontal blower coil units meeting requirements for CFM, static pressure, and cooling/heating capacity.	Yes
First Co	Blower Coil Series	N/A	Horizontal blower coil units meeting requirements for CFM, static pressure, and cooling/heating capacity.	No
Williams Comfort Products	BCAH Series	N/A	Compatible with specified requirements, horizontal concealed blower coil units.	No
International Environmental	FHH Series	N/A	Horizontal concealed blower coil units with ECM motors, may require minor dimensional adjustments.	No

BuildVision Recommendations

1. Standardize Air Handling Unit Manufacturers

Rationale: The mechanical schedules show multiple air handling units (AHU-1, AHU-2, AHU-3) and energy recovery units (ERU-1, ERU-2) without specified manufacturers. Standardizing on a single manufacturer for these units would increase purchasing leverage, simplify maintenance, and reduce spare parts inventory requirements.

Estimated Impact: Potential 5-10% cost savings on equipment purchase through volume discounting, plus ongoing operational savings through simplified maintenance and reduced spare parts inventory.

Implementation: 1. Select preferred manufacturer based on performance specifications and lifecycle cost analysis. 2. Negotiate project-wide pricing agreement with selected manufacturer. 3. Update mechanical specifications to reflect standardized manufacturer selection.

Priority: High

2. Consolidate Chiller Procurement with Trane

Rationale: Specifications indicate Trane as the specified manufacturer for CH-1 and CH-2 chillers. A coordinated approach to procure both chillers simultaneously from Trane can yield better pricing and ensure compatibility with building systems and controls.

Estimated Impact: Estimated 8-12% savings on combined equipment purchase versus individual procurement. Additional savings through coordinated installation, startup, and commissioning.

Implementation: 1. Package CH-1 and CH-2 as a single procurement item. 2. Negotiate with Trane for project-specific discounts based on combined purchase. 3. Coordinate delivery schedules to optimize installation sequencing.

Priority: High

3. Standardize Fan Coil and Blower Coil Units

Rationale: The project includes numerous fan coil units (FCUs) and blower coil units (BC-AHs) with multiple types and configurations. The dashboard shows no specified BOD (Basis of Design) manufacturer for these units, indicating an opportunity to select a single preferred manufacturer.

Estimated Impact: Potential 7-15% cost reduction through bulk purchasing, simplified installation, and standardized controls and connections. Long-term maintenance and replacement costs would also be reduced.

Implementation: 1. Review FCU and BCAH specifications to identify a manufacturer capable of meeting all required configurations. 2. Negotiate volume discount pricing. 3. Standardize connection types and control interfaces for simplified installation.

Priority: Medium

4. Implement Early Equipment Procurement Strategy for Long Lead Items

Rationale: Major mechanical equipment such as air handling units, chillers, and boilers typically have extended lead times (12-20 weeks or more). Early procurement of these items can prevent project delays and potentially secure better pricing before manufacturer price increases.

Estimated Impact: Schedule impact: Potential reduction in overall project timeline by 4-8 weeks. Cost impact: Protection against price escalation, estimated at 3-5% annual inflation for HVAC equipment.

Implementation: 1. Identify critical long-lead items (chillers, AHUs, boilers). 2. Create early procurement packages for these items. 3. Secure storage arrangements if necessary. 4. Coordinate delivery schedules with installation timeline.

Priority: High

Conclusion

Key Findings

- Most equipment lacks specified manufacturers (listed as 'No BOD Listed'), creating an opportunity to standardize on preferred suppliers
- Trane is specified as the manufacturer for chillers (CH-1, CH-2, AWHP-1), indicating a procurement opportunity for volume discounting
- The high-altitude installation environment (6,115 ft) requires equipment rated for these conditions, which may impact availability and lead times
- The project includes numerous fan coil and blower coil units with varying configurations that could benefit from procurement consolidation
- Critical equipment like chillers, AHUs, and boilers typically have extended lead times (12-20 weeks) that should be factored into the procurement schedule

Highest Priority Actions

- Standardize air handling unit and energy recovery wheel manufacturers to increase purchasing leverage and simplify maintenance
- Consolidate chiller procurement with Trane to obtain volume discounts and ensure system compatibility
- Implement early equipment procurement strategy for long-lead items to prevent project delays and secure better pricing
- Standardize fan coil and blower coil unit manufacturers to reduce costs through bulk purchasing and simplified maintenance
- Develop a coordinated procurement approach for similar equipment types (pumps, exhaust fans) to improve pricing and ensure consistent quality

Summary

The GBSD Integrated Training Center (ITC) at F.E. Warren AFB requires a comprehensive procurement strategy for its HVAC and mechanical systems. The project involves significant equipment including air handling units, chillers, boilers, fan coil units, blower coil units, pumps, and exhaust systems. Key procurement considerations include standardizing equipment manufacturers to increase purchasing leverage and reduce maintenance complexity, implementing early procurement strategies for long-lead items, consolidating purchases of similar equipment types, and ensuring compatibility with the high-altitude installation environment (6,115 ft). Special attention should be given to the Trane-specified chillers and the proper selection of appropriate alternatives where basis of design manufacturers aren't specified.



Ben Lyddane
Ben@BuildVision.io
202-365-8628

Mackenzie Hoover
Mackenzie@buildvision.io
843-609-3265

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