



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	Gilbane Building Company
Contact Person	Gregory Garvin
Contact Email	ggarvin@gilbaneco.com
Contact Phone	N/A

Project Information

Project Name	RI DCYF: New Female Youth Residential Facility
Location	160 Main Street, Exeter, RI 02822
Start Date	6/17/2024
Completion Date	N/A
Budget	N/A
Scope	HVAC Systems Installation
Project ID	fffe0884-e5d2-4f6d-9c91-7a96d6cbf65f
Project URL	BuildVision Project Link

Prepared By

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

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

Date: 2025-05-20

Project Equipment

Air-to-Air Energy Recovery Equipment

Equipment Tag	Manufacturer	Model
ERV-101	Aldes	E1800L-FI-N
ERV-102	Aldes	E1800L-FI-N
ERV-103	Aldes	E1800L-FI-N
ERV-104	Aldes	E1800L-FI-N
ERV-105	Aldes	E1800L-FI-N
ERV-201	Aldes	E1800L-FI-N
ERV-301	Aldes	E1800L-FI-N
ERV-302	Aldes	E1800L-FI-N
ERV-401	Aldes	E1800L-FI-N
ERV-501	Aldes	E1000L-FI-N
ERV-601	Aldes	E1800L-FI-N

Notes

High latent transfer static core energy recovery units. AHRI certified. Insulated wall construction. Supply and exhaust blower motors. MERV 13 intake filters, MERV 8 exhaust filters. Units ERV-101 through ERV-105 run continuously 24/7. Other units have occupied and unoccupied modes per owner's hours of operation.

Variable Refrigerant Flow Systems

Equipment Tag	Manufacturer	Model
AH-101	Mitsubishi Electric	PVIFY-P018AM4-E1A
AH-102	Mitsubishi Electric	PVIFY-P012AM4-E1A
AH-103	Mitsubishi Electric	PVIFY-P012AM4-E1A
AH-104	Mitsubishi Electric	PEFY-P008MA-E4A
AH-105	Mitsubishi Electric	PEFY-P012MA-E4A
AH-106	Mitsubishi Electric	PEFY-P008MA-E4A
AH-107	Mitsubishi Electric	PVIFY-P012AM4-E1A
AH-108	Mitsubishi Electric	PVIFY-P012AM4-E1A
AH-109	Mitsubishi Electric	PVIFY-P018AM4-E1A
AH-201	Mitsubishi Electric	PEFY-P024MA-E4A
AH-202	Mitsubishi Electric	PEFY-P006MA-E4A
AH-203	Mitsubishi Electric	PEFY-P012MA-E4A
AH-204	Mitsubishi Electric	PEFY-P006MA-E4A
AH-205	Mitsubishi Electric	PEFY-P012MA-E4A
AH-206	Mitsubishi Electric	PEFY-P015MA-E4A

AH-207	Mitsubishi Electric	PEFY-P012MA-E4A
AH-208	Mitsubishi Electric	PEFY-P008MA-E4A
AH-209	Mitsubishi Electric	PEFY-P018MA-E4A
AH-210	Mitsubishi Electric	PEFY-P012MA-E4A
AH-211	Mitsubishi Electric	PEFY-P015MA-E4A
AH-301	Mitsubishi Electric	PVFY-P024AM4-E1A
AH-302	Mitsubishi Electric	PVFY-P018AM4-E1A
AH-303	Mitsubishi Electric	PVFY-P024AM4-E1A
AH-304	Mitsubishi Electric	PVFY-P018AM4-E1A
AH-305	Mitsubishi Electric	PVFY-P008AM4-E1A
AH-306	Mitsubishi Electric	PVFY-P030AM4-E1A
AH-307	Mitsubishi Electric	PEFY-P006MA-E4A
AH-308	Mitsubishi Electric	PEFY-P006MA-E4A
AH-309	Mitsubishi Electric	PVFY-P018AM4-E1A
AH-401	Mitsubishi Electric	PEFY-P012MA144A4
AH-402	Mitsubishi Electric	PEFY-P012MA144A4
AH-403	Mitsubishi Electric	PEFY-P008MA144A
AH-404	Mitsubishi Electric	PVFY-P048M141A
AH-405	Mitsubishi Electric	PVFY-P048M141A
AH-406	Mitsubishi Electric	PEFY-P006MA144A
AH-407	Mitsubishi Electric	PEFY-P006MA144A
AH-408	Mitsubishi Electric	PEFY-P008MA144A
AH-501	Mitsubishi Electric	PEFY-P012MA144A4
AH-502	Mitsubishi Electric	PEFY-P015MA144A
AH-503	Mitsubishi Electric	PEFY-P012MA144A4
AH-504	Mitsubishi Electric	PEFY-P018MA144A
AH-505	Mitsubishi Electric	PEFY-P012MA144A4
AH-506	Mitsubishi Electric	PEFY-P015MA144A
AH-601	Mitsubishi Electric	PVFY-P036M141A
AH-602	Mitsubishi Electric	PVFY-P036M141A
AH-603	Mitsubishi Electric	PVFY-P036M141A
AH-604	Mitsubishi Electric	PVFY-P036M141A

Notes

VRF air handlers connected to water-source heat pumps. BACnet integration with facility management system. Includes both vertical air handlers (PVFY models) and ceiling-concealed ducted air handlers (PEFY models).

VRF Branch Selectors

Equipment Tag	Manufacturer	Model
BC-101	Mitsubishi Electric	CMB-P1012NU-JA1

BC-201	Mitsubishi Electric	CMB-P1012NU-JA1
BC-301	Mitsubishi Electric	CMB-P1012NU-JA1
BC-401	Mitsubishi Electric	CMB-P1012NU-JA1
BC-501	Mitsubishi Electric	CMB-P108NU-J1

Notes

Branch circuit controllers for VRF system. Allow simultaneous heating and cooling operation. Connected to water-source heat pumps.

Water-Source Heat Pumps

Equipment Tag	Manufacturer	Model
WHP-1	Mitsubishi Electric	PQRY-P120TLMU-A1
WHP-2	Mitsubishi Electric	PQRY-P144TLMU-A1
WHP-3	Mitsubishi Electric	PQRY-P144TLMU-A1
WHP-4	Mitsubishi Electric	PQRY-P144TLMU-A1
WHP-5	Mitsubishi Electric	PQRY-P72TLMU-A1
WHP-6	Mitsubishi Electric	PQRY-P144TLMU-A1

Notes

Ground water source heat pump systems with heat recovery. All systems tie into a new touch screen central controller with BACnet interface.

In-Line Centrifugal Hydronic Pumps

Equipment Tag	Manufacturer	Model
VCP-1	Taco Comfort Solutions	VR20L
VCP-2	Taco Comfort Solutions	VR20M
VCP-3	Taco Comfort Solutions	VR20M
VCP-4	Taco Comfort Solutions	VR20M
VCP-5	Taco Comfort Solutions	VR20L
VCP-6	Taco Comfort Solutions	VR20M
DCP-1	Taco Comfort Solutions	VR15M
DCP-2	Taco Comfort Solutions	VR15M

Notes

In-line variable speed circulators with ECM motors for water-source heat pump circulation. 40% propylene glycol at 50°F. Connection to building management system via BACnet.

Base-Mounted, Centrifugal Hydronic Pumps

Equipment Tag	Manufacturer	Model
GTP-1	Taco Comfort Solutions	SKY3009D-1760-5.00
GTP-2	Taco Comfort Solutions	SKY3009D-1760-5.00

Notes

Vertical in-line pumps for geothermal well field. All iron construction. ANSI B16.1 Class 125. VFD motors to maintain loop temperature. Lead/lag operation between GTP-1 and GTP-2.

Automatic Condensate Pump Units

Equipment Tag	Manufacturer	Model
CP-1	Little Giant	VCL-14ULS

Notes

Commercial grade automatic condensate pump. 6' power cord. Safety switch for equipment shut down. Integral check valve. Plenum rated UL listed.

Suppliers

Air-to-Air Energy Recovery Equipment

Manufacturer	Model	Representative	Compatibility Notes	BoD
Aldes	E Series	N/A	Basis of Design	Yes
Greenheck	ERV Series	N/A	Equivalent performance specifications. Verify physical dimensions and connection locations.	Listed
RenewAire	EV Series	N/A	Verify recovery effectiveness and physical dimensions.	Listed
Ventacity	VS Series	N/A	SUGGESTED ALTERNATIVE: High-efficiency energy recovery units with similar performance characteristics. Compatible with building automation systems via BACnet.	No

Semco	FV Series	N/A	SUGGESTED ALTERNATIVE: Premium energy recovery solution with potentially higher effectiveness ratings. Verify physical dimensions and connection points.	No
-------	-----------	-----	--	----

Variable Refrigerant Flow Systems

Manufacturer	Model	Representative	Compatibility Notes	BoD
Mitsubishi	Electric PVFY/PEFY Series	N/A	Basis of Design	Yes
Trane	TVR Series	N/A	Equivalent performance specifications. Verify physical dimensions, connection locations, and refrigerant piping requirements.	Listed
Daikin	VRV Series	N/A	Verify controls compatibility with BMS and refrigerant piping requirements.	Listed
LG	Multi V Series	N/A	SUGGESTED ALTERNATIVE: Well-established VRF manufacturer with water-source heat pump options. Compatible with the project's water-source system requirements.	No
Samsung	DVM S Series	N/A	SUGGESTED ALTERNATIVE: Water-source VRF system with BACnet capability. May offer cost savings but verify service network availability in the region.	No

Water-Source Heat Pumps

Manufacturer	Model	Representative	Compatibility Notes	BoD
Mitsubishi	Electric PQRY Series	N/A	Basis of Design	Yes

Trane	Water-Source VRF Series	N/A	Equivalent performance specifications. Verify physical dimensions, connection locations, and refrigerant piping requirements.	Listed
Daikin	VRV-W Series	N/A	Verify controls compatibility with BMS and refrigerant piping requirements.	Listed
LG	Multi V Water Series	N/A	SUGGESTED ALTERNATIVE: Compatible with geothermal applications and offers similar BACnet integration capabilities. Verify service support availability in the region.	No
Climaveneta	W3000 Series	N/A	SUGGESTED ALTERNATIVE: European manufacturer with high-quality water-source VRF systems. Premium brand with excellent performance but verify U.S. support infrastructure.	No

VRF Branch Selectors

Manufacturer	Model	Representative	Compatibility Notes	BoD
Mitsubishi	Electric CMB Series	N/A	Basis of Design	Yes
Trane	Refrigerant Distribution Units	N/A	Verify compatibility with VRF system and refrigerant piping requirements.	Listed
Daikin	BS Units	N/A	Verify compatibility with VRF system and refrigerant piping requirements.	Listed
LG	Heat Recovery Units	N/A	SUGGESTED ALTERNATIVE: Compatible with LG Multi V Water systems. Must be used as part of complete LG system.	No
Samsung	MCU Units	N/A	SUGGESTED ALTERNATIVE: Mode control units for Samsung DVM S systems. Cost-effective but requires full Samsung system implementation.	No

In-Line Centrifugal Hydronic Pumps

Manufacturer	Model	Representative	Compatibility Notes	BoD
Taco	Comfort Solutions VR Series	N/A	Basis of Design	Yes
Bell & Gossett	ecocirc XL Series	N/A	Equivalent performance. Verify physical dimensions and connection locations.	Listed
Grundfos	Magna3 Series	N/A	Verify ECM motor compatibility and BACnet connectivity.	Listed
Armstrong	IVS Series	N/A	Equivalent performance. Verify physical dimensions.	Listed
Wilo	Stratos MAXO Series	N/A	SUGGESTED ALTERNATIVE: Premium smart pumps with integrated controls and excellent efficiency. Higher initial cost but potentially lower operating costs.	No

Base-Mounted, Centrifugal Hydronic Pumps

Manufacturer	Model	Representative	Compatibility Notes	BoD
Taco	Comfort Solutions SKY Series	N/A	Basis of Design	Yes
Bell & Gossett	e-1510 Series	N/A	Equivalent performance. Verify physical dimensions and connection locations.	Listed
Armstrong	Design Envelope Series	N/A	Verify VFD compatibility and BACnet connectivity.	Listed
Grundfos	TP Series	N/A	Verify physical dimensions and impeller size.	Listed
Patterson	HVAC Series	N/A	SUGGESTED ALTERNATIVE: Reliable centrifugal pumps with good efficiency ratings. May offer competitive pricing.	No

Automatic Condensate Pump Units

Manufacturer	Model	Representative	Compatibility Notes	BoD
Little	Giant VCL Series	N/A	Basis of Design	Yes

Diversitech	CP-Series	N/A	Equivalent performance. Verify UL listing for plenum applications.	Listed
Hartell	A Series	N/A	Verify safety switch compatibility and tank volume.	Listed
DiversiTech	ClearVue Series	N/A	Verify physical dimensions and safety switch compatibility.	Listed
Aspen	Mini Orange Series	N/A	SUGGESTED ALTERNATIVE: Low-profile design suitable for tight spaces. Verify safety switch compatibility.	No

BuildVision Recommendations

1. Bundle Mitsubishi VRF Equipment Purchase for Volume Discount

Rationale: The project includes 46 Mitsubishi VRF air handlers, 6 water-source heat pumps, and 5 branch selectors. Consolidating this large equipment order with a single supplier creates negotiating leverage for volume pricing.

Estimated Impact: Potential 8-12% cost savings on equipment, representing significant reduction in overall HVAC procurement costs. May also lead to improved warranty terms and priority scheduling.

Implementation:

1. Identify total Mitsubishi equipment needs across all project areas
2. Request comprehensive package pricing from multiple authorized Mitsubishi distributors
3. Negotiate additional value-adds such as extended warranty, startup assistance, and training
4. Secure early order commitment to lock in pricing and ensure availability

Priority: High

2. Evaluate Alternate Manufacturers for Air-to-Air Energy Recovery Units

Rationale: All 11 energy recovery ventilators are currently specified as Aldes models. The approved alternates (Greenheck, RenewAire, Ventacity) may offer competitive pricing while meeting performance requirements.

Estimated Impact: Potential 5-10% savings on the ERV equipment package. Given the large quantity of identical units (10 E1800L-FI-N models), savings could be substantial while maintaining system performance.

Implementation:

1. Request detailed quotes from all approved alternate manufacturers
2. Verify technical compliance with specifications including recovery effectiveness, filtration, and controls compatibility
3. Consider factors beyond initial cost including local support, parts availability, and warranty
4. Evaluate lifecycle costs including energy efficiency and maintenance requirements

Priority: Medium

3. Consolidate Pump Procurement with Single Manufacturer

Rationale: The project requires 10 pumps (8 in-line centrifugal and 2 base-mounted centrifugal) currently specified from Taco. Consolidating this purchase with one of the approved alternates (Bell & Gossett, Grundfos, Armstrong, or Wilo) may yield better pricing and simplified maintenance.

Estimated Impact: 5-8% cost savings on pump package, streamlined parts inventory, and consistent maintenance procedures. Single-source responsibility also simplifies warranty claims.

Implementation: 1. Request package pricing from Taco and all approved alternate manufacturers

2. Evaluate bids based on first cost, efficiency ratings, and local support

3. Verify BACnet compatibility for building management system integration

4. Confirm physical dimensions and connection requirements

Priority: Medium

4. Secure Early Equipment Procurement for Long Lead Items

Rationale: Water-source VRF equipment and specialized components typically have extended lead times. Early procurement can prevent project delays, particularly for the Mitsubishi water-source heat pumps which are critical path items.

Estimated Impact: Prevention of potential schedule delays of 2-4 weeks. Avoids costly project extensions and ensures equipment availability at required installation milestones.

Implementation: 1. Identify equipment with longest lead times (typically water-source heat pumps and branch selectors)

2. Secure storage arrangements if equipment arrives before installation is possible

3. Negotiate progressive payment terms to minimize financial impact of early procurement

4. Coordinate delivery scheduling with project timeline

Priority: High

5. Consider Bulk Purchase of Condensate Pumps from Alternate Manufacturers

Rationale: The specification allows for multiple condensate pump alternates (Diversitech, Hartell) which may offer cost advantages over the specified Little Giant model, especially when purchased in quantity for the numerous air handlers.

Estimated Impact: Though a smaller cost item individually, the large number of VRF units requiring condensate pumps makes this a potential 15-20% savings opportunity on this component.

Implementation: 1. Verify exact quantity of condensate pumps required across all air handler installations

2. Request bulk pricing from all approved manufacturers

3. Verify UL listing for plenum applications and safety switch compatibility

4. Consider standardizing on a single model for simplified maintenance

Priority: Low

Conclusion

Key Findings

- Multiple alternate manufacturers are available for all major equipment categories, providing opportunities for competitive bidding and cost savings
- Water-source VRF system components from Mitsubishi Electric form the core of the HVAC design, with specific certification requirements affecting procurement
- Energy recovery ventilators require continuous operation capabilities for specific units (ERV-101 through ERV-105)
- Manufacturer-certified installation is required for warranty validation, impacting contractor selection
- BACnet integration capability is critical across all equipment selections for facility management system compatibility

Highest Priority Actions

- Develop a coordinated procurement schedule that aligns with the June 2024 project start date, prioritizing long-lead items such as water-source heat pumps and VRF components
- Verify that all alternate equipment selections maintain essential compatibility with the integrated systems design, particularly BACnet connectivity requirements
- Establish procurement qualification criteria requiring bidders to demonstrate manufacturer certification for installation and commissioning
- Create a consolidated equipment package approach to leverage volume purchasing and ensure system component compatibility

Summary

The procurement strategy for the RI DCYF New Female Youth Residential Facility's HVAC system centers on water-source variable refrigerant flow (VRF) equipment, energy recovery ventilators, and supporting hydronic components. The project requires specialized equipment from primary manufacturers including Mitsubishi Electric, Aldes, and Taco Comfort Solutions, with several viable alternate manufacturers identified for cost optimization. Proper coordination between equipment suppliers is essential to ensure system compatibility and seamless integration with the building management system.



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

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

Date: 2025-05-20