BUILDVISION

Custom Procurement Report

Control How You Source Building Systems

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

Key Benefits

T **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	Structure Tone Southwest
Contact Person	Kelly Ioannou
Contact Email	kelly.ioannou@structuretone.com
Contact Phone	N/A
Bid Status	BuildingConnected Lead
Date Invited	4/4/2025
Rf Is Due	4/10/2025
Date Due	5/13/2025
Request Type	Proposal

Project Information

Project Name	Project Meadow
Location	2323 North Field Street, Dallas, TX 75201
Start Date	N/A
Completion Date	27 March 2025
Budget	N/A
Scope	HVAC Systems including air handling units, fan coil units, ductwork, piping, and controls
Project ID	23406.0000
Project URL	BuildVision Project Link
Project Size	600000 sq. ft.
Created	5/15/2025
Design Development	25 November 2024
Construction Documents	27 March 2025

Prepared By

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

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

Date: 2025-05-20

Project Equipment

Indoor Central-Station Air-Handling Units

Equipment Tag	Manufacturer	Model
AHU-1A-01	York	XTI-63X69
AHU-1C-01	York	XTI-75X69
AHU-2A-01	Temtrol	CUSTOM
AHU-2A-02	Temtrol	CUSTOM
AHU-2A-03	York	XTI-33X54
AHU-2C-01	York	XTI-96X96
AHU-2C-02	York	XTI-75X69
AHU-2C-03	York	XTI-84X84
AHU-2C-04	York	XTI-48X63

Notes

Modular air-handling units for indoor installations with coils and various configurations

Fan Coil Units

Equipment Tag	Manufacturer	Model
FCU-14A-01	Enviro-Tec	HDD-16
FCU-14A-02	Enviro-Tec	HDD-30
FCU-14A-03	Enviro-Tec	HDD-16
FCU-14A-04	Enviro-Tec	HDD-08
FCU-14A-05	Enviro-Tec	HDD-16
FCU-1C-01	Enviro-Tec	HDD-40
FCU-1C-02	Enviro-Tec	HDD-20
FCU-1C-03A	Enviro-Tec	HDD-40
FCU-1C-03B	Enviro-Tec	HDD-40
FCU-2C-01	Enviro-Tec	HDD-20
FCU-2C-02	Enviro-Tec	HDD-08
FCU-2C-03	Enviro-Tec	HDD-20
FCU-8C-01	Enviro-Tec	HDD-40
FCU-B1-18	Enviro-Tec	HDD-16

Notes

Floor-mounted and suspended fan coil units for various building areas

HVAC Fans

Equipment Tag	Manufacturer	Model
DBF-2C-01	LF Systems	DEF035
EF-2C-01		
KEF-1C-01	Loren Cook	135CA-SWSI

Notes

Various exhaust and transfer fans for building ventilation systems

Suppliers

Indoor Central-Station Air-Handling Units

Manufacturer	Model	Representative	Compatibility Notes	BoD
York	XTI Series	N/A	Basis of Design	**Yes**
Temtrol	CUSTOM	Nortek Air Solutions	Listed alternate in specifications with comparable performance.	Listed
Daikin	Vision Indoor AHUs	Daikin Applied	Listed alternate in specifications with comparable performance.	Listed
Trane	Climate Changer	Trane Technologies	SUGGESTED ALTERNATIVE: Industry standard modular design with flexible configurations, high efficiency motors, and similar performance characteristics.	No
Carrier	Aero AHUs	Carrier Corporation	SUGGESTED ALTERNATIVE: Compatible with specified requirements, provides similar performance characteristics and reliability.	No

Fan Coil Units

Manufacturer	Model	Representative	Compatibility Notes	BoD
Enviro-Tec	HDD Series	N/A	Basis of Design	**Yes**

First Company	Horizontal Series	First Co.	Listed alternate in specifications with comparable performance.	Listed
Titus	Horizontal Fan Coil Units	Titus HVAC	Listed alternate in specifications with comparable performance.	Listed
Nailor	35 Series	Nailor Industries	SUGGESTED ALTERNATIVE: Compatible with project requirements, provides good quality construction with potential cost savings.	No
Williams	Basic Series	Williams Comfort Products	SUGGESTED ALTERNATIVE: Economy option that meets fundamental performance requirements but with fewer premium features.	No

HVAC Fans

Manufacturer	Model	Representative	Compatibility Notes	BoD
Loren	Cook 135CA-SWSI and 225SQN Series	N/A	Basis of Design	**Yes**
LF Systems	DEF035 Series	LF Systems Inc.	Listed as basis of design for dryer exhaust fans, but appears to be secondary to Loren Cook for general HVAC fans.	Listed
Greenheck	SQ/USQ and CSP Series	Greenheck Fan Corporation	Listed alternate in specifications with comparable performance.	Listed
Twin City Fan	BSI/BSIE Series	Twin City Fan Companies	SUGGESTED ALTERNATIVE: Comparable performance to specified fans with potential cost savings.	No
Penn Ventilation	Domex Series	PennBarry	SUGGESTED ALTERNATIVE: Lower cost alternative with acceptable performance but may have slight differences in sound characteristics.	No

BuildVision Recommendations

1. Standardize on Premium Efficiency Motors for All HVAC Equipment

Rationale: The project documents specify premium efficiency motors complying with ASHRAE 90.1, but standardizing on specific motor manufacturers can improve reliability and reduce maintenance costs. Additionally, specifying motors with higher efficiency than required by code can result in operational savings over the equipment lifecycle.
Estimated Impact: Annual energy savings of approximately 3-5% on motor operation costs. For a 600,000 sq. ft. building, this could represent $5,000-10,000 in annual energy savings. Standardization will also reduce spare parts inventory by approximately 25%.
Implementation: 1. Specify ABB, Baldor, or WEG premium efficiency motors for all HVAC equipment. 2. Require documentation of motor efficiency at various loading points (50%, 75%, 100%). 3. Request extended 5-year warranties for all motors above 5 HP.
Priority: High

2. Implement Bulk Purchasing Strategy for Fan Coil Units

Rationale: The project includes at least 14 Enviro-Tec fan coil units of varying sizes (HDD series). Consolidating the purchase order with a single supplier can yield significant volume discounts and ensure consistent delivery schedules.
Estimated Impact: Potential cost reduction of 8-12% through volume pricing, representing approximately $15,000-25,000 in savings based on typical fan coil unit pricing. Additional savings from reduced procurement overhead and streamlined delivery scheduling.
Implementation: 1. Identify all fan coil units needed for the project (currently 14+ Enviro-Tec units are specified). 2. Negotiate volume pricing directly with manufacturer rather than through distributors. 3. Consider pre-purchasing to lock in pricing and ensure availability. 4. Request consistent model features across all units to simplify maintenance.
Priority: High

3. Secure Early Procurement of York and Temtrol Air Handling Units

Rationale: The project specifies York and Temtrol air handling units, which typically have long lead times (16-30 weeks). Current market conditions show extended manufacturing delays for custom HVAC equipment, particularly for larger units like the XTI-96X96 models specified.
Estimated Impact: Avoiding schedule delays of 4-6 weeks by early procurement. For a project of this size, each week of delay typically costs approximately $20,000-30,000 in extended general conditions, making this a $80,000-180,000 risk mitigation strategy.
Implementation: 1. Issue early purchase orders for all air handling units, particularly the custom Temtrol units. 2. Secure manufacturing slots with a deposit (typically 15-25%). 3. Establish intermediate inspection points to verify production progress. 4. Arrange for climate-controlled storage if units arrive before the building is enclosed.
Priority: High

4. Evaluate Alternative Suppliers for Control Valves

Rationale: Section 230923.11 specifies Belimo as the primary control valve supplier. While Belimo produces high-quality valves, alternative suppliers like Honeywell, Johnson Controls, and Siemens may offer competitive pricing while maintaining compatibility with the BMS system specified in Section 230900.
Estimated Impact: Potential savings of 10-15% on valve costs, representing approximately $8,000-12,000 based on typical project valve requirements. May also improve delivery schedules by 2-3 weeks compared to potentially constrained supply chains.
Implementation: 1. Request pricing from multiple approved control valve manufacturers. 2. Verify compatibility with specified Tridium Niagara N4 BMS system. 3. Evaluate each alternative based on price, delivery timeline, and warranty terms. 4. Perform lifecycle cost analysis including maintenance requirements.
Priority: Medium

5. Optimize Coil Selection for Air Handling Units

Rationale: The specifications call for copper tubes and aluminum fins for water coils. By carefully analyzing the required performance data and selecting optimized coil configurations (row depth, fin spacing, circuiting), material costs can be reduced without sacrificing performance.
Estimated Impact: Optimized coil selections can reduce material costs by 5-8%, representing approximately $10,000-15,000 in savings across all air handling units. May also reduce water-side pressure drop, saving pumping energy costs of approximately $2,000-3,000 annually.
Implementation: 1. Request detailed coil selection data from manufacturers. 2. Analyze options for tube diameter, wall thickness, fin spacing, and row depth. 3. Select configurations that minimize material while meeting performance requirements. 4. Consider partial coat of corrosion-resistant coating rather than full coating where appropriate.
Priority: Medium

6. Consolidate Variable Frequency Drive Procurement

Rationale: The project specifications indicate variable frequency drives (VFDs) for air handling units. By consolidating the purchase of all VFDs to a single manufacturer and model series, significant volume discounts can be achieved while also simplifying maintenance and spare parts inventory.
Estimated Impact: Potential savings of 12-18% on VFD costs through volume purchasing, representing approximately $10,000-15,000. Standardization will also reduce future maintenance costs by an estimated 20% and improve system reliability.
Implementation: 1. Identify all VFD requirements across the project. 2. Select ABB, Danfoss, or Yaskawa as preferred suppliers based on competitive pricing and reliability. 3. Standardize on a single VFD series across similar horsepower ranges. 4. Pre-purchase VFDs to lock in pricing and ensure availability.
Priority: Medium

7. Implement Direct Digital Control Valve Package Procurement

Rationale: The control valve specifications in Section 230923.11 indicate ball-style control valves with various actuator options. By ordering pre-assembled and factory-tested valve packages rather than separate components, installation time and potential field issues can be reduced.
Estimated Impact: Reduction in installation labor by approximately 25% for control valves, representing estimated savings of $5,000-8,000. Additionally, factory testing will reduce commissioning time and warranty issues by an estimated 30%.
Implementation: 1. Order complete valve assemblies including valve, actuator, and linkages as factory-assembled packages. 2. Require factory testing documentation for each valve assembly. 3. Specify consistent pressure ratings and connection types across similar applications. 4. Consider incorporating flow metering capability in critical valve locations.
Priority: Medium

8. Evaluate MERV 13 Filter Supplier Alternatives

Rationale: The specifications require MERV 13 filters for air handling units and fan coil units. The filter market has seen significant price volatility, and establishing relationships with multiple suppliers can mitigate supply chain risks while potentially reducing costs.
Estimated Impact: Potential savings of 8-12% on filter costs both for initial installation and ongoing replacement, representing approximately $3,000-5,000 initially and similar annual savings. Reduced risk of project delays due to filter availability issues.
Implementation: 1. Identify total filter requirements across all air handling units and fan coil units. 2. Request pricing from multiple filter manufacturers including AAF, Camfil, and Flanders. 3. Consider standardizing filter sizes across equipment where possible to reduce inventory requirements. 4. Evaluate bulk purchasing for both initial filters and one replacement set.
Priority: Medium

9. Consider Factory-Mounted Controls Package for Air Handling Units

Rationale: The project specifies a BMS system using Tridium Niagara N4 Framework. Having the air handling unit manufacturer pre-install and test controls components at the factory can reduce field installation time and potential coordination issues.
Estimated Impact: Reduction in field labor for controls installation by approximately 30%, representing savings of $8,000-12,000. Reduced commissioning time by approximately 20%, and lower risk of integration issues between equipment and controls.
Implementation: 1. Coordinate with the controls contractor to provide required components to the air handling unit manufacturer. 2. Specify factory mounting of control panels, sensors, actuators, and associated wiring. 3. Require factory testing documentation for all control components. 4. Establish clear division of responsibility between equipment and controls vendors.
Priority: Medium

10. Optimize Stainless Steel Drain Pan Selection

Rationale: The specifications require stainless steel drain pans for both air handling units and fan coil units. By carefully selecting 304 stainless steel rather than more expensive 316 stainless for non-corrosive environments, material costs can be reduced without compromising durability.
Estimated Impact: Potential savings of 15-20% on drain pan costs, representing approximately $3,000-5,000 across all equipment. No significant impact on equipment performance or maintenance requirements expected.
Implementation: 1. Specify 304 stainless steel drain pans for standard indoor applications.
2. Reserve 316 stainless steel only for specialized areas with potential chemical exposure.
3. Require double-wall construction with proper insulation regardless of material selection.
4. Maintain proper slope and connection requirements per specifications.
Priority: Low

Conclusion

Key Findings

- The project requires a mix of manufacturer-specific equipment including York and Temtrol AHUs, Enviro-Tec FCUs, and Loren Cook fans, with emphasis on quality and performance compliance to ASHRAE standards
- Control systems utilize Tridium Niagara Framework N4 BMS with open protocol requirements for complete device level interoperability
- Emphasis is placed on high-efficiency equipment, with Premium efficiency motors required and specific insulation and material requirements throughout
- The project has a 2-year warranty period from Substantial Completion for equipment, materials, and workmanship

Highest Priority Actions

- Submit detailed product data and shop drawings for all equipment with technical specifications and performance ratings for approval
- Coordinate installation requirements with other trades, particularly for electrical connections, structural supports, and control systems integration
- Ensure all equipment meets the specified efficiency requirements and control system compatibility
- Prepare for comprehensive commissioning, testing, and balancing of all installed systems

Summary

Project Meadow involves a comprehensive HVAC system procurement for a 600,000 sq. ft. facility in Dallas, TX. The project includes the installation of air handling units (AHUs), fan coil units (FCUs), mechanical equipment, control systems, and associated piping/ductwork. The procurement approach follows standard industry practices with specific requirements for quality assurance, materials, testing, and warranties.

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

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

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