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	Philadelphia Phillies
Contact Person	Ken Rienstra
Contact Email	krienstra@lfdriscoll.com
Contact Phone	N/A
Contract Type	Proposal
Request Type	Proposal
Date Invited	5/15/2025
Date Due	5/28/2025

Project Information

Project Name	Citizens Bank Park - Right Field Club
Location	One Citizens Bank Way, Philadelphia, PA 19148
Start Date	N/A
Completion Date	N/A
Budget	N/A
Scope	Furnish and install air-cooled rotary-screw water chiller for the Right Field Club renovation project, including all necessary accessories, controls, and vibration isolation as specified in technical specifications.
Project ID	20240795
Project URL	BuildVision Project Link
Architect	EwingCole
Architect Project Number	20240795
Engineer Of Record	EwingCole
Construction Manager	LF Driscoll
Bid Status	BuildingConnected Lead
Project Phase	Bidding

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-Cooled, Rotary-Screw Water Chiller

Equipment Tag	Manufacturer	Model
CH-4	York	YVAA0456

Notes

Chiller shall operate using R-513A refrigerant. Unit shall include twin screw compressors, direct expansion type evaporator, air-cooled condenser, and integral pump module.

Suppliers

Air-Cooled, Rotary-Screw Water Chiller

Manufacturer	Model	Representative	Compatibility Notes	BoD
York	YVAA0456	N/A	Basis of Design	**Yes**
Trane	RTAC Series	Trane	SUGGESTED ALTERNATIVE: Helical rotary screw compressor technology with comparable efficiency ratings. Available with VFD options, dual refrigerant circuits, and can be configured with similar pump packages to match specifications.	No
Carrier	30XA Series	Carrier	SUGGESTED ALTERNATIVE: AquaForce series offers similar capacity range and can be configured with VFDs and integrated hydronic packages to match specifications. Screw compressor technology with good part-load performance.	No

Daikin	AGZ Series	Daikin	SUGGESTED ALTERNATIVE: Pathfinder series offers high efficiency with VFD-driven screw compressors. Can be configured with similar pump packages and dual-circuit design for redundancy.	No
Aermec	NRB Series	Highmark	SUGGESTED ALTERNATIVE: European manufacturer with growing US presence. NRB series offers high efficiency and quiet operation with screw compressors. Available with integrated hydronic packages.	No
McQuay/Daikin	AWS Series	Daikin	SUGGESTED ALTERNATIVE: AWS series offers good efficiency with semi-hermetic screw compressors. Available with VFD options and dual-circuit design for redundancy.	No

BuildVision Recommendations

1. Request competitive pricing from alternative chiller suppliers

Rationale: While the York YVAA0456 is specified as the basis of design, multiple alternatives from Trane, Carrier, Daikin, Aermec, and McQuay have been identified as viable options. Obtaining competitive quotes could produce significant cost savings while still meeting the technical requirements.
Estimated Impact: Potential cost savings of 5-15% on major equipment purchase, representing tens of thousands of dollars on a 350-ton chiller system. May also reveal advantageous warranty terms or delivery schedules.
Implementation: 1. Prepare technical submittal requirements that enable fair comparison across manufacturers. 2. Contact all identified manufacturer representatives to request quotes. 3. Create a comparison matrix evaluating cost, performance, delivery time, and warranty terms. 4. Submit top alternatives for engineer approval.
Priority: High

2. Evaluate lifecycle cost of ultra-low harmonic VFDs versus standard VFDs with external harmonic mitigation

Rationale: The specified York unit includes factory-installed ultra-low harmonic VFDs, which may carry a premium cost. External harmonic filters or line reactors combined with standard VFDs might provide comparable harmonic mitigation at lower total cost.
Estimated Impact: Potential 5-8% savings on the VFD components while still meeting IEEE-519 harmonic distortion requirements. Improved serviceability if using standardized components rather than proprietary solutions.
Implementation: 1. Request pricing for both options from York and alternative suppliers. 2. Consult with electrical engineer to verify that external solutions meet project harmonic requirements. 3. Compare initial costs, efficiency impacts, and long-term maintenance considerations. 4. Present findings to design team for approval.
Priority: Medium

3. Pre-purchase the chiller to secure favorable pricing and delivery schedule

Rationale: Large mechanical equipment like chillers often has long lead times (12-20 weeks) that could impact the project schedule. Pre-purchasing can lock in current pricing and ensure timely delivery, while potentially providing leverage for better terms.
Estimated Impact: Protects against potential price increases (3-5% annually is common), ensures equipment availability for the scheduled installation timeframe, and provides longer warranty period by starting at purchase rather than project completion.
Implementation: 1. Finalize equipment selection based on competitive bidding. 2. Negotiate favorable payment terms with manufacturer (e.g., minimal deposit, progress payments). 3. Secure storage agreement if needed. 4. Coordinate with project schedule to optimize delivery timing.
Priority: High

4. Negotiate extended warranty and service agreement at time of purchase

Rationale: Standard warranties for chillers typically cover 1 year for parts and labor, 5 years for compressors. Negotiating extended coverage during the procurement phase provides maximum leverage and ensures long-term protection for this critical stadium system.
Estimated Impact: Reduces long-term maintenance costs and provides budget certainty for 5-10 years. Eliminates risk of catastrophic repair costs during the extended coverage period. Improves system reliability through regular manufacturer-certified maintenance.
Implementation: 1. Request extended warranty options from all bidding suppliers (5-10 year terms). 2. Compare coverage details, including parts, labor, refrigerant loss, and preventive maintenance. 3. Evaluate inclusion of remote monitoring capabilities. 4. Calculate ROI based on typical repair costs versus extended warranty premium.
Priority: Medium

5. Consolidate chiller and pump package procurement

Rationale: While the specified York unit includes an integral pump module, some alternatives may offer the pumps as separate components. Ensuring the entire system is procured as a package improves coordination, reduces interfaces, and streamlines responsibility for system performance.
Estimated Impact: Eliminates potential coordination issues between separate vendors, reduces installation time by 2-3 days, simplifies warranty claims by having a single point of responsibility, and potentially reduces costs through package pricing.
Implementation: 1. Specify integral pump modules in RFQs to all manufacturers. 2. If separate pumps are proposed, request clear scope definitions and interface requirements. 3. Compare pricing of integrated versus separate solutions. 4. Include pump curves, VFDs, and controls in the procurement package regardless of configuration.
Priority: Medium

Conclusion

Key Findings

- The specified York chiller offers excellent energy efficiency (1.05 kW/ton) with environmentally-friendly R-513A refrigerant, exceeding ASHRAE 90.1 minimum requirements
- Redundancy is built into the system with twin screw compressors (dual refrigerant circuits) and an integrated pump module with active/spare configuration
- Several qualified alternatives from reputable manufacturers (Trane, Carrier, Daikin, Aermec) are available if needed, though cost differences are still to be determined
- Installation considerations including clearance requirements, structural support, electrical requirements, and sound levels are critical to successful implementation
- The project timeline indicates bidding phase with proposal due 5/28/2025

Highest Priority Actions

- Conduct a thorough site survey to verify available space, clearances, and structural capacity for the chiller installation
- Coordinate electrical requirements focusing on dual point power connections and harmonics mitigation (MCA of 882.4 amps)
- Request detailed pricing from alternative suppliers to establish competitive bidding and potential cost savings
- Develop a comprehensive commissioning and water treatment plan to ensure optimal system performance and longevity

Summary

The Citizens Bank Park - Right Field Club project involves the procurement of an air-cooled rotary-screw water chiller (York YVAA0456) with 350 tons capacity. The system features twin screw compressors, R-513A refrigerant, and an integrated pump module with redundancy. The procurement strategy focuses on high-efficiency equipment with advanced features including ultra-low harmonic VFDs. While York is specified as the basis of design, several qualified alternatives from manufacturers like Trane, Carrier, Daikin, and Aermec are available through established representatives, providing competitive options if needed.

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

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

Date: 2025-05-20