

PROPOSAL

PROFESSIONAL SERVICES

Weber HVAC Replacement (TAB) Lucas Gym Addition (Cx & TAB)

Iowa City Community School District
Jamie Slay, Construction Project Manager



SystemWorksLLC
Commissioning Sustainable Buildings

Fee Proposal

By and Between:

Project: 2024 Weber TAB, Lucas TAB & Cx

SystemWorks LLC
409 5th St
West Des Moines, IA 50265

and

Iowa City Community School District
1137 South Riverside Drive
Iowa City, IA 52246

SystemWorks is pleased to provide this Professional Services proposal for review and consideration.

PROFESSIONAL SERVICES

Project	Fee	Reimbursables	Accepted
Weber Elementary HVAC Replacement Testing, Adjusting & Balancing	\$ 39,875	Included	Yes No
Lucas Gym Addition Commissioning	\$ 22,680	Included	Yes No
Lucas Gym Addition Testing, Adjusting & Balancing	\$ 7,500	Included	Yes No

ADDITIONAL SERVICES

SystemWorks will not perform additional work beyond that which is outlined in this proposal, without prior approval of the contract holder. For work that is requested beyond the proposed Scope of Work, SystemWorks will provide additional labor at \$135/hour for Commissioning Services and \$125/hour for TAB Services, per person, plus material and expenses. Reimbursable expenses are included.

This proposal, dated February 12, 2024, is effective through April 1, 2024.

We appreciate your consideration of this proposal and hope to have the opportunity to work with you on these projects. Please contact us if you have any questions or concerns.

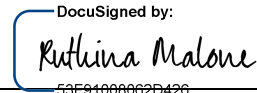
SystemWorks LLC



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Iowa City Community School District

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Approved By

Ruthina Malone, Board President

Title

February 27, 2024

Date



Lucas Gym Addition – Commissioning Scope of Work

SYSTEMS TO BE COMMISSIONED

- Energy Recovery Unit
- Geothermal Heat Pumps (5, 100% testing)
- Storm Shelter Supply Fan
- Electric Cabinet Unit Heater
- Verification of BAS Control System Features (Graphics, Trending, Alarming, Operations, etc.)
- Lighting & Daylighting Controls (sampling)

DESIGN PHASE SCOPE

- Perform a Commissioning Design Review of the 95% CD documents. This review will focus on constructability, maintainability, and clarity of the drawings and specifications. Participation in a design team meeting to review the comments, as well as a back-check of the 100% CDs is included.
- Provide a Commissioning Specification, 01 91 00, for inclusion in the project documents.

CONSTRUCTION PHASE SCOPE

- Develop Pre-Functional “Construction Checklist” forms. These forms will be submitted to the GC/CM, completed by the appropriate installing contractor and reviewed by SystemWorks.
- Lead and document a Commissioning Kickoff Meeting with the contractors.
 - Review the commissioning requirements
 - Distribute and review the Commissioning Plan
- Review and provide written comments on major equipment submittals pertaining to the Systems to be Cx
- Coordinate a Building Automation System Review Meeting. This is one of the most beneficial meetings to insure the owner gets what they want. The purpose of this meeting is to review the sequence of operation of the building’s systems with the mechanical engineer, owner, control contractor and commissioning agent. This offers an opportunity for the team to discuss, resolve questions and ensure that the controls programming is written with the engineer’s intent and owner’s requirements in mind.
 - This is typically performed as part of the BAS submittal review process, however this may be held closer to controls installation and programming to better ensure the design intent is implemented.
- SystemWorks will visit the site during construction prior to function testing to review the mechanical systems installation. These Cx site visits will be documented with a report sent to the owner, design and construction teams.
 - Emphasis will be placed on mechanical system installation details to identify potential issues during construction before installation is complete, systems are covered or filled.
 - SystemWorks will witness Equipment Start-Ups at discretion during site visits.
 - Two (2) total Site Observations are anticipated
- Commissioning Status Meeting – Prior to start of functional testing
- SystemWorks will provide documented meeting minutes for each commissioning meeting.



FIELD TESTING PHASE SCOPE

SystemWorks will verify that the building's energy related systems are installed, calibrated and perform according to the owner's requirements, basis of design (BOD), control sequences and construction documents. SystemWorks will perform functional tests based on the sequences of operation to verify functional performance of the systems outlined in the Commissioning Plan.

SystemWorks will:

- Step through the controls programming to verify sequences of operation for the HVAC systems to be commissioned. Summaries and random sampling will be utilized for like-equipment.
 - Simulate alarm/failure conditions
 - Sample verify sensor calibration and point-to-point mapping
 - Utilize our own NIST certified test equipment as needed during testing
- Review system installation compared with plans and approved drawings
- Generate and utilize an Issue Log to track deficiencies and verify corrections are accomplished. Facility Grid online commissioning software will be used to maintain an on-going Issue Log accessible to all parties.

ACCEPTANCE PHASE SCOPE

- Compile the Final Commissioning Report with all deliverables, final Issues Log, and completed FTPs

OPPOSITE SEASON TESTING AND 10-MONTH REVIEW

SystemWorks will return to the site to perform additional testing during the winter of 2025 – 2026 to perform additional functional testing on the ERUs and heat pumps under winter conditions. Many of the operating conditions are simulated during the initial tests, and this provides an opportunity to verify performance under actual conditions. Additionally, SystemWorks will use random sampling and trend data reviews to re-verify systems are functioning as expected.

COMMISSIONING CLARIFICATIONS

- Design responsibility remains with the engineer of record.
- Subcontractor Coordination – SystemWorks will coordinate commissioning activities with the construction manager. SystemWorks will not be responsible for providing direction to subcontractors.
- SystemWorks has not included time to participate in weekly construction meetings.
- Reasonable time has been included for re-testing. If issues require multiple retests or back-checks after being stated complete by the responsible contractor, time required will be considered additional services.
- SystemWorks will require assistance from the control contractor's technician testing complex sequences.
- Systems not included in SystemWorks' scope at this time: fire alarm and fire/smoke damper testing, electrical, telecom or security systems. If you are interested in these services, we can provide them.



Lucas Gym Addition & Weber HVAC Replacement Air and Hydronic Systems Balancing Scope of Work

SystemWorks' scope of work is designed to be comprehensive. We have included SystemWorks' TABB Technicians and Supervisors with NIST-certified balancing equipment to accomplish this scope of work during normal working hours.

- Prepare a TAB plan and reports with pertinent design data
- Complete measurement and adjustment of CFM, GPM, RPM, amps and Total Static Pressure
- Calibrate and set required BAS parameters (flow, static, etc.)
- Proportionally balance all diffusers and balancing dampers per the design documents
- Generate a final Certified Test and Balance Report

SYSTEMS TO BE TESTED, ADJUSTED AND BALANCED – LUCAS GYM ADDITION

- Energy Recovery Unit (1)
- Water-sourced Heat Pumps (4)
- Storm Shelter Supply Fan (1)

SYSTEMS TO BE TESTED, ADJUSTED AND BALANCED – WEBER HVAC REPLACEMENT

Phased balancing is expected, with finalization of the water loop upon completion of the last phase.

- Energy Recovery Units (3)
- Rooftop Unit (1)
- Blower Coil Unit (1)
- Wellfield and New Geothermal Loop Pumps (2)
- Water-Cooled VRF Units (12)
- VRF Unit Ventilators (24)
- VRF Terminal Units (25)

TEST AND BALANCE CLARIFICATIONS

- This proposal is based upon all equipment being operational and ready for balance while on site.
- This proposal is based upon an unoccupied space during normal working hours (7 a.m. to 4 p.m.).
- SystemWorks will not be responsible for providing direction to subcontractors.
- SystemWorks has not included time for meetings at this time.
- SystemWorks has not included time for control technician assistance.
- SystemWorks has not included time for any repairs. All repairs will be considered additional work outside of our Scope of Work.

