



WATERVILLE-ELYSIAN-MORRISTOWN PUBLIC SCHOOLS

Additions and Alterations Commissioning Services

April 9, 2020

Proposal #8902

Providing
Trusted
Health and
Safety
Solutions

IEA PROPOSAL CONTACT

Garett Karalus, P.E., CCP
Professional Engineer

Garett.Karalus@ieasafety.com 763-315-7900



April 9, 2020

Joel Whitehurst
Superintendent
Waterville-Elysian-Morristown Public Schools
500 East Paquin Street
Waterville, MN 56096

**RE: Proposal for Waterville-Elysian-Morristown Public Schools
Additions and Alterations**

Dear Mr. Whitehurst:

Thank you for the opportunity to submit our proposal for the Waterville-Elysian-Morristown Public Schools – Additions and Alterations Commissioning Services. IEA is appreciative of the opportunity to work with Waterville-Elysian-Morristown Public Schools and to provide support as part of the project team.

IEA's commissioning team and service culture is based upon implementing a project that focuses on maintaining clear communication and documentation. Our team strives to ensure project consistency as well as adhering to the project timelines and closeout.

If you have any questions or concerns regarding our proposal, please contact Garrett Karalus at 763-315-7900 or at garrett.karalus@ieasafety.com. Thank you for considering IEA's qualified commissioning services.

Regards,

A handwritten signature in black ink, appearing to read "Garrett Karalus".

Garrett Karalus, P.E., CCP
Professional Engineer
IEA, Inc.

GK/wb 040920



PROVIDING
TRUSTED
HEALTH
AND
SAFETY
SOLUTIONS



Table of Contents

Company Profile	1
Project Team	2
Project Management Approach	4
Communication Plan	5
Scope of Work	6
Systems to Commission.....	8
References & Project Experience	10
Proposal Terms.....	11
Authorization to Proceed	12
Appendices	
A – Commissioning Firm Experience Form	
B – Key Staff Resumes	
C – General Insurance	
D – General Conditions	



PROVIDING
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SOLUTIONS

COMPANY PROFILE

59 years of IEA team
Commissioning experience

IEA CLIENT BASE

Colleges/Universities
K-12 Education
Government Agencies
Hospitals & Medical
Insurance Companies
Property Management
Construction Companies
Architect/Design Firms
Attorneys

IEA QUALIFIED STAFF

Professional Engineers
Certified Cx Agents
Certified Safety Professionals
Certified Industrial Hygienists
Certified Asbestos Designers
Certified Lead Designers
Certified School Risk
Managers

The Institute for Environmental Assessment, Inc. (IEA) is a small business founded in 1984. With offices in Brooklyn Park, Rochester, Mankato, Brainerd, Marshall, and Virginia, Minnesota, IEA has a staff of over 60 professionals who provide consultative services in specialized areas. IEA's service areas include asbestos/lead, health and safety, indoor air quality and ventilation commissioning/recommissioning.

IEA's commissioning team has been providing services to educational facilities throughout Minnesota for over 15 years. Through our expertise, experience, and reputation, IEA's team delivers the most practical, thorough, and up-to-date services in the ever-changing dynamics of commissioning services. IEA is a member of the AABC Commissioning Group (ACG), the Building Commissioning Association (BCxA), and ASHRAE. Our commissioning agent certifications include ACG Certified Commissioning Authority (CxA), BCxA Certified Commissioning Professional (CCP), and University of Wisconsin Qualified Commissioning Process Provider (QCxP).

IEA has provided commissioning services on over 150 education facility projects in the last 10 years. Our experience working with educational clients has resulted in a dedication to providing a commissioning project that focuses on the adherence to design, installation and functionality requirements of the systems and how the ventilation operation will impact the building operators, occupants and curriculum. IEA's communication between the design engineer, installation contractors and the building operators is key to a successful commissioning project.

The core of our company services is based upon investigation, consultation and commissioning of facility challenges and IEA is dedicated to this mindset regardless if the client needs are focused on hazardous materials, health and safety, indoor air quality or ventilation function. **We are dedicated to identifying and minimizing risk for our facility clients.**



**IEA MN Dept of
Administration Vendor
ID:
VN 207361**

Lead Commissioning Authority

Steve Zechmeister, P.E., CxA, QCxP, LEED AP O+M

Our Engineering Manager and Lead Commissioning Authority, **Steve Zechmeister**, is a **Professional Engineer, ACG Certified Commissioning Authority (CxA), Certified Qualified Commissioning Process Provider (QCxP) and USGBC LEED O+M accredited**. Steve has over 25 years of experience in engineering and project management and has personally commissioned over 120 projects. Steve has been with IEA for 12 years. He brings a valuable expertise on complex ventilation systems through his commissioning of industrial, manufacturing, medical, government and educational buildings.

Steve oversees the commissioning team and project status. He brings dedication and strives to continually improve the commissioning process. Steve's project goal is to always provide a commissioning service that meets and exceeds client expectations for communication, valuable reporting, and project closeout.

Project Commissioning Agent

Garett Karalus, P.E., CCP

Garett is a Professional Engineer and has been a commissioning agent for 6 years with IEA. He has been directly involved in all aspects of the commissioning process for IEA clients. He has extensive experience managing commissioning projects and has extensive experience with HVAC equipment controls, including design and submittal reviews of sequences of operation, functional testing and troubleshooting. In addition to commissioning, Garett conducts building assessments to solve a wide variety of issues related to indoor air quality and temperature control. He manages energy efficiency projects and has worked on many recommissioning projects involving K-12 schools. He also has prior experience in the design of air-handling units and HVAC equipment. Garett has a Bachelor of Mechanical Engineering Degree from the University of Minnesota. He is a BCxA Certified Commissioning Professional (CCP).

Project Commissioning Agent

Mathew Mason

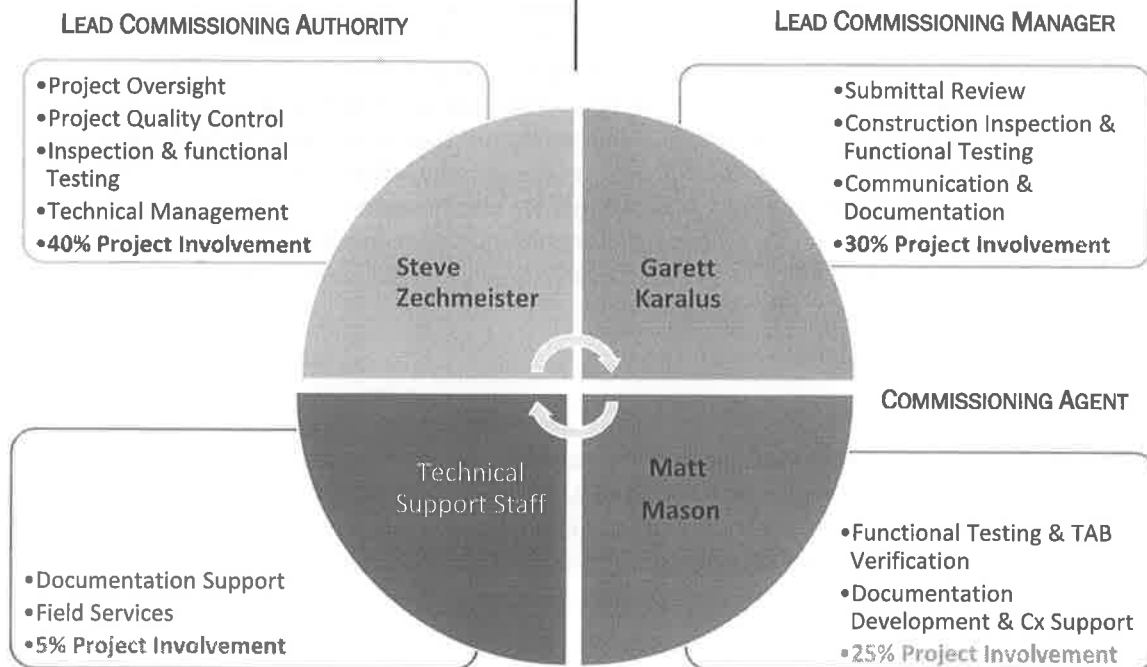
Mathew has a Bachelor of Mechanical Engineering Degree from the University of Minnesota and has been assisting with **IEA commissioning projects for 3 years**. He has gained extensive experience with testing of building automation systems and writes the BAS functional tests. Mathew conducts commissioning site inspections and IAQ investigation services to IEA clients. He also has experience overseeing owner training and O&M documentation.

PROJECT TEAM



Chain of Command

Architect/Engineer Design Team Representatives
Owner Appointed Contractors/Representatives



PROJECT MANAGEMENT APPROACH

The primary role of commissioning is to represent the owner's best interest by providing expertise for independent inspections and testing of the building Heating, Ventilation, and Air Conditioning Equipment. **By having an independent agent, the owner can ensure that the design and installation is not biased to benefit the designers or installers rather than the owner.**

The IEA commissioning staff have the licenses or commissioning certification credentials needed to ensure the level of expertise required to understand the complex building systems. **IEA executes the testing and verification following a Technical Commissioning Approach as opposed to simply observing the contractors performing their own verification.** The following outline provides a brief overview of the process IEA will follow in commissioning the Waterville-Elysian-Morristown – Additions and Alterations Commissioning project.

Through the experience of our team, IEA has had the benefit of commissioning designs of a wide variety of mechanical engineering firms. Typically, engineering firms will repeat similar designs and details in which IEA experience can identify which design pieces will best work and what may be potential design issues that may impact the operation of the facility.

By involving IEA in the commissioning design process, we are able to assist with minimizing the risk of potential problems and change orders can possibly be avoided.

One of the most frustrating challenges with the commissioning process can be issue resolution. IEA has devised a system that has proven effective over the past ten years in expediting resolution of issues resulting in quicker closeout. Some keys to effective commissioning that IEA utilizes are:

- Issues logs are clear and concise making it easy to understand what the problem is, who is responsible, and exactly what needs to be done to resolve the issue.
- Issues are illustrated with pictures
- Logs are kept well organized with dates and history of resolution process.
- Ensure that the issues log is communicated to the responsible party(s) and strict follow-up to verify when the contractor will be handling the issue.
- Look out for the owner's best interest.
- Give the identified issue the proper expectations for priority so minor issues are not overly focused on.

COMMUNICATION PLAN

Communication is Priority

The overall result of IEA's commissioning and communication approach is to ensure IEA represents as an advocate maintaining the best interests of the Owner, and ultimately the people who will occupy the facility.

IEA's approach to effectively managing commissioning projects focuses on communication with results.

- Commissioning agent handles aspects of commissioning process including management and correspondence. Single point of contact improves efficiency and accuracy of communication.
- In addition to documenting communications through the proper channels, IEA communicates directly with the engineer, general contractor, mechanical contractor, controls contractor, and test and balance contractor to resolve issues.
- Inspections, testing, and reporting performed with goal of helping the team members to provide the best system for the Owner as designed and specified.
- Issues are communicated with proposed solutions and the responsible party indicated.
- Based on extensive experience commissioning facilities, IEA is able to identify and thoroughly test potential problem areas. Areas of potential concern that are uncovered receive additional attention and extensive testing. Emphasis is given to issues that are most detrimental to proper function of the system from the Owner's perspective.
- Priority is given to working with the schedules of contractors to complete testing and inspections without causing delay. IEA coordinates with contractors in order to be on site during critical installation and testing. Inspections are conducted during construction to catch and correct issues early.

The primary role of the System Inspector is to review the design-intent and construction documents, observe that construction is performed according to the design documents, develop and coordinate the execution of a testing plan, and document testing results in order to be reasonably assured that the installed systems operate according to design-intent and in accordance with the contract documents.

Construction & Acceptance Phase

1. Coordinate and direct the Commissioning activities in a logical, sequential and efficient manner using consistent protocols and forms, centralized documentation, clear and regular communications and consultations with all necessary parties, frequently updated timelines and schedules and technical expertise.
2. Request and review additional information required to perform review tasks, including O&M materials, contractor start-up and checkout procedures.
3. Review submittals (shop drawings) for testability of ventilation equipment, temperature controls, and other water and air flow control devices. Review the test and balancing plan/procedures, concurrent with the A/E reviews.
4. Observe HVAC installation and its compliance with the plans, specifications and ASH RAE 62-2010 (or most recent version). Attend selected planning and job-site meetings to obtain information on construction progress. Review construction meeting minutes for revisions/substitutions relating to the Commissioning process. Assist in resolving any discrepancies.
5. Observe and validate hydronic system flushing, cleaning, filling of system, testing of water chemistry and glycol solution as outlined in the Specification, Section 23 25 31.
6. Before startup, gather and review the current control sequences (from the approved submittals as provided by the controls contractor) and interlocks and work with contractors and design engineers until sufficient clarity has been obtained, in writing, to be able to write detailed testing procedures.
7. Verify systems startup by reviewing start-up reports and by selected site observation.
8. Validate the test and balance report by randomly checking (with contractor assistance) 10% of the occupied rooms to determine that the air flow supplied to the rooms matches the test and balance report as well as the engineer's design intent, Also check (with contractor assistance) 100% of the ventilation equipment which supplies outdoor air to the occupants to determine that the quantities of outdoor air brought into the building match the test and balance report as well as the engineer's design intent.
9. Write the functional performance test procedures from the design engineer's approved control shop drawings submittals.
10. Validate through witness testing and review of validated Test and Balance reports that the specified minimum outdoor air volumes are being provided for all ventilation equipment that introduces outdoor air into the building, throughout the full operational range of the equipment and during all seasonal modes of control. Verification is to occur through a validated test and balance report and functional performance tests.

SCOPE OF WORK

11. Direct, witness and document the verification of the sequence of operation for all of equipment and systems including all terminal units. Verification is performed by the contractor and witnessed by the Commissioning Agent and shall be done for all operational and seasonal modes of control. Verification includes a visual determination that all components and systems respond as called for in the sequences and function in accordance with the design requirements. The Commissioning Agent shall provide the contractors the necessary functional test forms and procedures for these tests. The Commissioning Agent shall personally witness these tests.
12. Provide to the project team written progress reports and test results with recommended actions.
13. Coordinate retesting as necessary until satisfactory performance is achieved.
14. Verify water systems balancing by site observation, spot testing and by reviewing completed balancing reports.
15. Compile and maintain a system verification report log.
16. Review the preparation of the O&M manuals.
17. Provide a final commissioning report, including an executive summary, brief building description, overview of testing scope and a general description of testing and verification methods, along with a summary of the process used. Provide an appendix which includes the final test and balance report, test procedures that include pass/fail notation and design intent documentation. Each non-compliance issue shall be referenced to the specific functional test, trend log, etc. where the deficiency is documented. Appendices shall contain acquired sequence documentation, logs, meeting minutes, progress reports, deficiency lists, site visit reports, findings, unresolved issues, communications, commissioning plan, etc.

One-Year Correction Period

1. Supervise any seasonal or deferred testing and deficiency corrections required by the specifications.
2. Return to the site during the one-year correction period and review with facility staff the current building operation and the condition of outstanding issues related to the original and seasonal system tests. Also interview facility staff and identify problems or concerns they have with operating the building as originally intended. Make suggestions for improvements and for recording these changes in the O&M manuals. Identify areas that may come under warranty or under the original construction contract. Assist facility staff in developing reports, documents and requests for services to remedy outstanding problems.

SYSTEMS TO COMMISSION

The following systems, including all components and controls, will be commissioned:

MORRISTOWN SITE:

- New Front-end Central building automation system (*Alerton*), including remote monitoring and control sites (this excludes any security-related control systems or interlocks).
- (6) Indoor Air Handling Units
 - Three (3) existing AHUs and three (3) new AHUs
- (6) New remote air-cooled condensing units
- (3) Relief Fans
- (18) New VAV Boxes (Test 18 of the 18 boxes)
- (3) Hot Water Boilers
- (2) Stand-by fuel oil pumps (serve dual-fuel burners)
- (3) Power Roof Ventilators
- (6) Destratification fans (All serve the Gymnasium)
- (3) Primary Hot Water Pumps
- (2) Secondary Hot-Water Heating Pumps
- (1) Existing Kitchen Exhaust Hood
- (2) Gas Fired Domestic Water Heaters
- (1) Domestic Water Mixing Station with Associated Circulation Pump
- (1) Domestic 120" Circulation Pump
- Review balancing of domestic recirculating loops and return back to water heaters
- (12) New unit heaters
- New Baseboard radiation (Located in the remodeled office area)
- Miscellaneous BAS Monitoring points (Listed in spec)
- Observe and validate hydronic system flushing, cleaning, filling of system, testing of water chemistry and glycol solution as outlined in the Specification. Refer to Section 23 25 31.
- Demolition work

WATERVILLE SITE:

- New Front-end Central building automation system (*Alerton*), including remote monitoring and control sites (this excludes any security-related control systems or interlocks).
- (12) Indoor Air Handling Units
 - Eight (8) existing AHUs and four (4) new AHUs
- (9) New, remote air-cooled condensing units
- (2) New Rooftop units with packaged OX cooling and heat recovery
- (23) New floor-set, vertical-type unit ventilators (Future OX cooling provisions)
- (9) Relief Fans
- (23) New VAV Boxes (Test 23 of the 23 boxes)
- (36) New Dual duct boxes (Test 36 of the 36 boxes)
- (4) Duct Heating Coils
- (3) Hot-Water Boilers

SYSTEMS TO COMMISSION

- (2) Stand-by fuel oil pumps (Serve dual-fuel burners)
- (5) Power Roof Ventilators
- (1) Utility set-type fan and science fume hood
- (10) Destratification fans (All serve the Gymnasium)
- (3) Primary Hot Water Pumps
- (2) Secondary Hot Water Heating Pumps (Phase 2)
- (1) Steam-to-water heat exchanger (Installed under Phase 1 and removed under Phase 2)
- (2) Hot water Heating Pumps (Phase 1 location near boiler room)
- (2) Tertiary Heating Pumps (Relocated from heat exchanger under Phase 2)
- (1) Existing Kitchen Exhaust Hood
- (2) Gas Fired Domestic Water Heaters
- (1) Domestic Water Mixing Station with Associated Circulation Pump
- (1) Domestic 120" Circulation Pump
- Review balancing of domestic recirculating loops and return back to water heaters
- (16) New unit heaters
- Existing unit heaters with new electric controls - refer to the plans
- New and existing Baseboard radiation (Refer to the plans)
- Miscellaneous BAS Monitoring points (Listed in spec)
- Observe and validate hydronic system flushing, cleaning, filling of system, testing of water chemistry and glycol solution as outlined in the Specification. Refer to Section 23 25 31
- Under Phase 1, observe and validate existing pneumatic systems and tubing are removed and tubing capped to allow systems that are remaining under this phase to remain functioning until Phase 2 work begins. Also, under Phase 1, observe and validate newly installed HVAC equipment is functioning and controlled utilizing the new DDC frontend.
- Demolition work

REFERENCES & PROJECT EXPERIENCE

Osseo Public Schools Commissioning & Recommissioning – Brooklyn Park, Minnesota

Project consisted of the commissioning and/or recommissioning of 14 school district buildings from 2016 to present. The total building area commissioned or recommissioned was more than 2,374,000 square feet. Osseo Public Schools is one of the largest school districts in the state with 29 total buildings. They have used multiple commissioning firms in the past but currently use IEA exclusively for their commissioning projects due to our record of performance.

Coordinator of Maintenance Services

Jeff Arthurs 763-391-7197
Arthursj@district279.org

Assistant Coordinator of Maintenance Services

Craig Wokson 763-391-7198
woksonc@district279.org

Rochester Public Schools – Rochester, Minnesota

Provided commissioning or recommissioning services for 10 buildings totaling more than 1,000,000 SF from 2010-2020. Worked simultaneously on the projects with the district controls contractor to improve the school building automation systems. Commissioned a \$16,500,000 renovation of a 91,450 SF elementary school in 2019.

Health and Safety Coordinator

Mike Stock 507-328-4507
mistock@rochester.k12.mn.us

Paape Energy Services (District Controls)

Joe Coffman 507-289-4874 et. 102
joec@paape.com

Austin Public Schools – Austin, Minnesota

IEA commissioned or recommissioned eight schools each ranging in project size from 34,769 SF to 593,357 SF, for a total of 1,294,300 SF. The projects ranged from the renovations of a high school originally constructed in 1921, to building of a new intermediate school, and renovations to create the MacPhail Center for Music.

Buildings and Grounds: Brian Beasley 507-460-1929

brian.beasley@austin.k12.mn.us

St. Louis Park Public Schools – St. Louis Park, Minnesota

IEA commissioned a 2019-2020 Middle School project that included renovations and a large two story addition.

Facilities Manager / Health & Safety / Construction:

Tom Bravo 952-928-6004

bravo.thomas@slpschools.org

Tri City United Public Schools – Montgomery, Minnesota

Seven school projects were commissioned and four projects in 2019.

Director of Information Technologies & Facilities:

Carl Menk 507-364-8415

cmenk@tcu2905.us

PROPOSAL TERMS

Limitations and Assumptions

It is assumed that IEA will have full access to the building automation system to execute functional testing.

IEA is not responsible for the construction schedule or the contractor's work.

Change in Personnel: If IEA's personnel or subconsultants change for this project, the Owner must review and approve the replacement personnel. The replacement personnel shall have, at a minimum, equivalent qualifications as the original personnel.

General Insurance

IEA shall provide the specified liability insurance as required. IEA's general liability insurance coverage is found in Appendix C.

Proposal Fee

Our proposed fee for services identified in the above described Scope of Work is **\$83,900**.

This fee includes reimbursables, equipment costs, project coordination and management, and final report. Fees for investigative work outside the above scope of work will be additional. IEA will issue a Change Order and get approval from the Owner before proceeding with additional work. Monthly invoices for services conducted during that billing period will be provided until project completion (partial billing). This price offering is valid 60 days from the date of this proposal.

AUTHORIZATION TO PROCEED

We appreciate the opportunity to present this proposal for Building Commissioning. Please sign this authorization to proceed and e-mail garett.karaus@ieasafety.com. Retain the original for your records. We will begin the project at the time we receive this written documentation to proceed.

Regards,



Garett Karalus, P.E., CCP
Professional Engineer
IEA, Inc.



Jeff Athmann, CEO

* * *

Please proceed according to the above stated fees, terms, attached General Conditions, and proposal #8902 dated April 9, 2020.

Printed Name

Authorized Signature

Date

UFARS code or PO number

APPENDIX A

Commissioning Firm Experience Form

Commissioning Agent Qualifications

<u>IEA</u> Company Name	<u>Steve Zechmeister</u> Contact Person	<u>Mechanical Engineer</u> Title	
<u>9201 West Broadway N., #600</u> Address	<u>Brooklyn Park</u> City	<u>MN</u> State	<u>55445</u> Zip/Postal Code
<u>763-315-7900</u> Telephone	<u>763-315-7920</u> Fax	<u>steve.zechmeister@ieainstitute.com</u> E-mail	

Description of Business

Commissioning Activities

Percentage of overall business devoted to system inspections and/or commissioning services. 90% of ENG Division %

How long has the firm offered system inspections and/or commissioning services? 15 Years

Average number of system inspections and/or commissioning projects performed each year? 16

Systems (technologies) for which firm has provided system inspections or commissioning services (check all that apply):

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Pkg. or Split HVAC | <input checked="" type="checkbox"/> Day Lighting | <input checked="" type="checkbox"/> Commercial Refrigeration |
| <input checked="" type="checkbox"/> Chiller System | <input checked="" type="checkbox"/> Electrical, General | <input checked="" type="checkbox"/> Telecommunications |
| <input checked="" type="checkbox"/> Boiler System | <input checked="" type="checkbox"/> Electrical, Emerg. Power | <input checked="" type="checkbox"/> Thermal Energy Storage |
| <input checked="" type="checkbox"/> Energy Mgmt. System | <input checked="" type="checkbox"/> Envelope | <input checked="" type="checkbox"/> Labs & Clean Rooms |
| <input checked="" type="checkbox"/> Variable Freq. Drives | <input checked="" type="checkbox"/> Fire/Life Safety | |
| <input checked="" type="checkbox"/> Lighting Controls | <input checked="" type="checkbox"/> Plumbing | |

Number of qualified professionals on staff who have directed commissioning projects: 3

List qualifications: BME, PE, LEED AP O+M, CxA, QCxP, CCP, ASHRAE

Prior Projects:

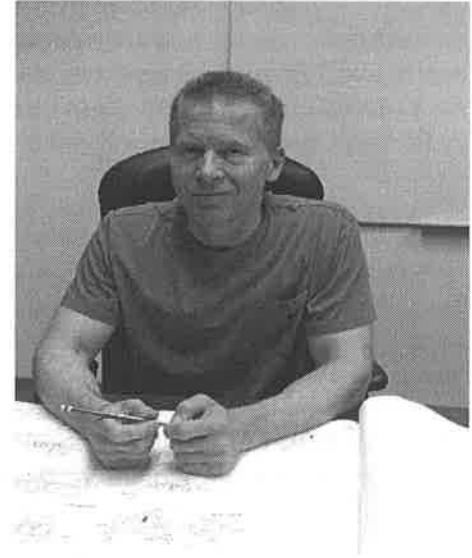
Building Name	Location	Type of Project (new, addition or remodeling)	Contact Name	Contact Phone Number
New Ulm High School	New Ulm, MN	New	Pat Lang Buildings & Grounds	507-359-8440
Fridley	Fridley, MN	Remodel	Jason Bichler Director of Buildings & Grounds	763-502-5008
Willow River Area School	Willow River, MN	Remodel	Bill Peel Superintendent	218-372-3131 Ext: 214
Chatfield High School	Chatfield, MN	Addition & Remodel	Edward Harris Superintendent	507-867-3240 Ext: 5011

APPENDIX B
Key Staff Resumes

STEVE ZECHMEISTER P.E., CxA, QcXP, LEED AP O+M COMMISSIONING AUTHORITY

Steve Zechmeister, PE, is a mechanical engineer and commissioning agent with over 25 years of experience engineering and commissioning of large and small construction projects. He has commissioned over 150 projects while with IEA.

Steve brings a consulting approach to commissioning. He is dedicated to ensuring that clear communication between client, design engineer and contractors remains a priority while remaining diligent to the commissioning service expectations.



 12 Years with IEA

EXPERIENCE

District Building Commissioning | Rochester Public Schools

Provided commissioning services for 9 buildings totaling over 1,000,000 SF. Worked simultaneously with the controls contractor to resolve building automation system issues.

District Building Commissioning | Albert Lea Area Schools

Provided commissioning services for six district addition/renovation projects over a 3-year construction timeframe. Total size of building commissioning exceeded 500,000 SF.

Building Commissioning | MPLS Patrick Henry High School

Commissioned Minneapolis Patrick Henry High School renovations over a two-year construction timeline. Troubleshoot controls issues and TAB issues, reviewed O&M documents for accuracy, and provided commissioning during design phase.

District Building Commissioning & Recommissioning | Osseo Area Schools

Provided commissioning services for thirteen district HVAC renovation projects and recommissioning services for ten buildings. Projects included commissioning during the design phase for optimal control strategy and energy efficient design.

CERTIFICATIONS

Licensed Professional Engineer -MN and other Various States

- ACG Commissioning Authority (CxA)
- University Wisconsin Qualified Commissioning Process Provider (QcXP)
- USGBC AP O+M

Personal Reference

Steve has provided Commissioning Project Lead for most IEA projects. This includes project and personnel management, communication and documentation presentation.

Mike Stock-Health and Safety Coordinator
Rochester Public Schools

Contact:

507.328.4507/mstock@rochester.k12.mn.u

GARETT KARALUS PE, CCP

LEAD COMMISSIONING AGENT

Garett Karalus is a PE and CCP certified Commissioning Agent with 7 years of experience and is focused on Educational and technical client commissioning field verification, project management and documentation.

Garett is proficient in all aspects of the commissioning process and is an asset to the IEA Service Team. He has extensive experience verifying test, adjust, and balancing in buildings and troubleshooting HVAC control issues. He has managed numerous recommissioning projects in schools, working with the building owner and maintenance staff to increase efficiency and temperature control through O&M practices, repairs, and optimized control sequences.



 7 Years with IEA

EXPERIENCE

District Building Commissioning & Recommissioning | Osseo Area Schools

Provided commissioning services for thirteen district HVAC renovation/addition projects and recommissioning services for ten district buildings. Projects included commissioning during the design phase for optimal control strategy and energy efficient design.

District Building Commissioning & Recommissioning | Austin Public Schools

Provided design and construction commissioning services for renovations and new construction projects for HVAC systems including ice storage chilled water and chilled beam systems. Included troubleshooting controls issues for new and existing equipment. Recommissioning services provided for 3 buildings and commissioning services for 3 projects.

District Recommissioning | STMA Schools

Lead recommissioning services for 5 projects spanning 3 years which included HVAC controls troubleshooting and identifying energy savings opportunities.

District Commissioning & Recommissioning | Spring Lake Park Area Schools

Commissioned 2 school renovation and HVAC upgrade projects and recommissioned 2 other school buildings.

CERTIFICATIONS

Licensed Professional Engineer-MN

- CCP – BCxA Certified Commissioning Professional

Personal Reference

Garett has provided project management, communication, meeting involvement and field document correspondence for Osseo Area Schools Commissioning.

Jeff Arthurs-Coord. Maintenance Services

Contact:

763.391.7197/arthursj@district279.org

MATHEW MASON

COMMISSIONING AGENT

Matt Mason is a recent graduate in mechanical engineering with a strong interest in building ventilation functionality and controls. Matt has assisted on over 40 commissioning and recommissioning projects at IEA.

His responsibilities include writing and performing functional tests, performing job site inspections, verifying air and water test and balancing, and verifying start-up procedures. He also has experience working to ensure proper O&M training is received by the building owners.



 **3 Years with IEA**

EXPERIENCE

District Building Renovations | Tri-City United Schools

Lead commissioning services at four district building renovations/additions. Helped manage TAB as a subcontractor and lead TAB verification, functional testing, and controls troubleshooting.

District Building Renovations | Fridley Public Schools

Matt was primary field lead on many of the 7 school renovation commissioning projects. He assisted in all aspects of the commissioning process.

New Processing Facility | Faribault Foods

Involved with field verification of industrial systems and controls integrate to the building function. Worked in coordination with the mechanical contractor.

St. Michael High School Recommissioning | St. Michael-Albertville Public Schools

Provided recommissioning services to identify the overall ventilation system function, based upon original design and building usage, as well as identifying energy saving opportunities. Worked to optimize control sequences for energy efficiency.

CERTIFICATIONS

- Bachelor of Engineering -University of Minnesota

Personal Reference

Matt has provided communication, meeting involvement and field document correspondence for Tri-City United Schools Commissioning.

Carl Menk-Director of IT and Facilities

Contact: 507.364.8415/cmenk@tcu2905.us

APPENDIX C
General Insurance



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
12/23/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).


PRODUCER AssuredPartners of Minnesota LLC 2361 Hwy 36 W St. Paul MN 55113		CONTACT NAME: Kim Rowe PHONE (A/C, No, Ext): (651) 287-1161 FAX (A/C, No): (651) 644-9137 E-MAIL ADDRESS: krowe@apminnesota.com	
INSURED Institute for Environmental Assessment Inc 9201 West Broadway No #600 Brooklyn Park MN 55445		INSURER(S) AFFORDING COVERAGE INSURER A: Colony Insurance Company NAIC # 39993 INSURER B: Accident Fund Insurance Co of America 10166* INSURER C: INSURER D: INSURER E: INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 2020-21 Master **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR		POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
		INSD	WVD					
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			PACE4223626	01/01/2020	01/01/2021	EACH OCCURRENCE	\$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 100,000
	<input checked="" type="checkbox"/> Professional Liability						MED EXP (Any one person)	\$ 10,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							PERSONAL & ADV INJURY
	<input checked="" type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC						GENERAL AGGREGATE	\$ 2,000,000
	OTHER:						PRODUCTS - COMP/OP AGG	\$ 2,000,000
A	AUTOMOBILE LIABILITY			PACE4223626	01/01/2020	01/01/2021	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	<input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY						BODILY INJURY (Per person)	\$
	<input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY						BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR			EXC306555	01/01/2020	01/01/2021	EACH OCCURRENCE	\$ 5,000,000
	<input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE						AGGREGATE	\$ 5,000,000
	DED	RETENTION \$						\$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			WCV8012893	01/01/2020	01/01/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y/N	N/A				E.L. EACH ACCIDENT	\$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
A	Pollution Liability			PACE4223626	01/01/2020	01/01/2021	Aggregate	1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
FOR INFORMATION ONLY

CERTIFICATE HOLDER FOR INFORMATION ONLY	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

APPENDIX D
General Conditions

General Conditions

The word "Consultant" refers to the Institute for Environmental Assessment ("IEA"), the contracting company is referred to as the "Client". Client agrees to be bound by these General Conditions by accepting the Proposal and engaging Consultant.

The Agreement with you, the Client, is comprised of this Agreement and accompanying written proposal.

1. Scope of Work

Consultant will furnish and perform the professional services specified in Consultant's proposal (the "Proposal"). The services as set forth in the Proposal (the "Services") will be provided by Consultant's personnel at the location of the Client (the "Site") (hereinafter referred to as the "Project"). If any portion of the Proposal is inconsistent with this Agreement, the terms of this Agreement shall control:

Consultant's obligation to perform the Services shall terminate upon delivery of a final report within 45 days of Project completion.

In addition to the Proposal, Consultant and Client agree as follows:

A. Right of Access

Unless otherwise agreed in writing, Client will furnish Consultant with right-of-access to the Site and accurate information necessary to conduct the Services, as requested by Consultant.

B. Confidential & Proprietary Information

The Consultant and Client agree not to disclose to others or use any confidential or proprietary information or trade secrets of the other, which may become known to each prior to, during or after the performance of this Agreement without the prior written consent of the other. "Confidential or propriety information" and "trade secrets" shall mean any information about the other which is neither publicly known nor legally accessible to the other parties from third parties. Prior to the disclosure of any such confidential or proprietary information or trade secrets, each shall obtain the written approval of the other.

C. General

Consultant warrants that the Services it performs under this Agreement will be performed with the care and skill ordinarily exercised

by reputable members of its profession practicing under similar conditions during the period of this Agreement and in the same or similar locality. The AIHA-certified IEA laboratory will perform PCM analysis if specified. Other field PCM analysis will be completed by laboratory-approved field technicians, generally under AAR Guidelines.

2. Payment for Services

A. Fee Schedule & Maximum

Costs

The fee schedule in the Proposal specifies the amounts due to Consultant from Client for its Services performed under this Agreement.

B. Schedule of Payment

Invoices will be submitted to Client once a month for services performed during the prior month. Payment to Consultant is due upon presentation to Client, and past due after thirty (30) days of receipt of the invoice, in which case a service fee of 1.5% monthly shall be added to the invoice, unless specifically arranged otherwise by Consultant and communicated in writing. Client reserves the right to question any item on any invoice and Consultant agrees, upon Client's request, to supply such documentation as is necessary to reasonably justify such invoice amount to Client's reasonable satisfaction. Client agrees to pay Consultant any costs of collection including reasonable attorneys' fees and costs if payment for Services are not made when due.

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Consultant warrants that the Services it performs under this Agreement will be performed with the care and skill ordinarily exercised by reputable members of its profession practicing under similar conditions during the period of this Agreement and in the same or similar locality. The AIHA-certified IEA laboratory will perform PCM analysis if specified. Other field PCM analysis will be completed by laboratory-approved field technicians, generally under AAR Guidelines.

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C. Expert Fee Expenses

If Client requests Consultant to participate on behalf of Client in litigation regarding the subject matter of this Agreement, Client agrees to pay all of Consultant's expenses arising therefrom at the prevailing rate for Consultant's time plus out-of-pocket costs and expenses, including reasonable attorney fees incurred by Consultant in conjunction with the participation.

3. Indemnity & Insurance

A. Indemnity

Consultant shall indemnify and hold harmless Client against losses, damages and claims, demands, actions, costs (including reasonable attorney fees), and fines of any kind resulting from any breach of this Agreement by Consultant, its employees, agents, subcontractors or licensees, of their obligation under this Agreement, or from any negligence or misconduct by Consultant, its employees, agents, subcontractors or licensees, but only for the proportion of damages which is equal to Consultant's proportion of the total fault which directly caused the damages. Client shall indemnify and hold harmless Consultant against losses, damages and claims, demands, actions, costs (including reasonable attorney fees), and fines of any kind resulting from any breach of this Agreement by Client, its

General Conditions

employees, agents, subcontractors or licensees, of their obligation under this Agreement, or from any negligence or misconduct by Client, its employees, agents, subcontractors or licensees, but only for the proportion of damages which is equal to Client's proportion of the total fault which directly caused the damages.

B. Limitation of Liability

EXCEPT AS EXPRESSLY SET FORTH IN SECTION 1(C) HEREOF, CONSULTANT DISCLAIMS ALL WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL EITHER CONSULTANT OR CLIENT BE LIABLE TO THE OTHER PARTY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHETHER FOR BREACH OF ANY WARRANTY, FOR BREACH OR REPUDIATION OF ANY OTHER TERM OR CONDITION OF THIS AGREEMENT, FOR NEGLIGENCE ON THE BASIS OF STRICT LIABILITY OR OTHERWISE.

C. Insurance

- (1) Consultant carries coverage and limits of liability insurance as follows:
 - (a) Workers Compensation with statutory limits.
 - (b) Employers' Liability with a minimum policy limit of \$1,000,000.00.
 - (c) Comprehensive General Liability with the following coverage:
 - I. Limit \$1,000,000.00 per occurrence
 - II. \$2,000,000.00 general aggregate
 - III. \$2,000,000.00 products completed/operations aggregate
 - IV. \$1,000,000.00 personal and advertising injury
 - V. \$300,000.00 fire Damage (any one fire)
 - VI. \$25,000.00 medical expenses (any one person)
 - (d) Automobile insurance covering all owned, non-owned or hired

automobiles used in connection with the work covering bodily injury and property damage with a minimum combined occurrence limit of \$1,000,000.00

- (e) Professional Liability (claims made) with the following coverage: \$1,000,000.00 per occurrence
 - (f) Contractor Pollution Liability (claims made): \$1,000,000.00 each occurrence
 - (g) Umbrella Liability. \$5,000,000.00 each occurrence
- (2) Client (or Owner if applicable), Subcontractors and Agents agree to provide Consultant, upon request, Certificate(s) of Insurance signed by the insurer evidencing insurance for premise liability, general liability, auto and workers comp. equal or greater than those limits carried by the Consultant.

- (3) Consultant shall promptly deliver to Client (or Owner if applicable), upon request, certificate(s) of insurance signed by the insurer for the policies described in (3) (C) above, or certified copies of such insurance policies indicating the existence of such coverage. IEA must be listed as both certificate holder and insured, or additional insured on each certificate of insurance.

4. Assignment

This Agreement shall not be assigned by Consultant without prior written consent of the Client.

5. Independent Contractor

Consultant is an independent Contractor and shall not be considered an employee, partner or joint venturer of the Client for any purpose.

6. Restriction to hire employees of Consultant

Client agrees to refrain from hiring, contracting, or retaining the services of Consultant's employees during or within 12 months after the termination of Consultant's services. If Client hires an employee of Consultant in

violation of this Section 6 without Consultant's written consent, Client shall pay Consultant a placement fee equal to twenty-five percent (25%) of such employee's annual wages.

7. Notices

Any notice under this Agreement shall be in writing and shall be deemed to be properly given when delivered to an officer of Client or the Consultant's Chief Financial Officer, as the case may be, at their addresses as set forth in the Proposal. The courts located in the State of Minnesota shall have exclusive jurisdiction in any actions commenced by Consultant or Client in connection with this Agreement, the Project or the Services.

8. Applicable Law

This Agreement shall be governed by and construed under the laws of the State of Minnesota. Parties agree to participate in pre-suit mediation prior to commencement of an action.

9. Extent of Agreement

This Agreement, together with the Proposal, represents the entire Agreement between Client and Consultant, and supersedes all prior obligations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument, dated and executed by both Client and Consultant.

10. Termination

Upon completion of the Project, Consultant will, at Client's request, deliver to Client or its designee all records, documents or materials in its possession or control of Consultant which are owned by Client. The obligations and provisions of Sections 1B, 2, 3, 5, 6 and 10 shall survive completion of the Project or termination of this Agreement.