

PROPOSAL

*For
Professional
Consulting
Design Services*



Replacement of 25T RTU at the City of Mequon City Hall

11333 North Cedarburg Road
Mequon, WI 53092

December 20, 2023



Henneman Engineering Inc.

Samantha Bakke, PE
20855 Watertown Road, Suite 170
Waukesha, WI 53186-1834

262.230.2845

sbakke@henneman.com



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Henneman Engineering is a leader in the design of municipal, education, healthcare, commercial and industrial facilities, having successfully delivered high-quality services on thousands of challenging projects.



December 20, 2023

Mr. Tim Weyker
Deputy Director of Public Works
City of Mequon City Hall
11333 W. Cedarburg Road
Mequon, WI 53092

Re: Replacement of 25T RTU at the City of Mequon City Hall

Dear Mr. Weyker,

Henneman Engineering is pleased to present our team's qualifications for the 25T RTU replacement project at Mequon City Hall. Our qualifications, and more importantly, our enthusiasm for this type of project, are a great match to help ensure the successful design and construction bidding for the RTU replacement. We have assembled the most qualified team with a passion for client service and decades of industry experience, backed by our firm's 60+ years of award-winning design engineering services. We feel our commitment to the community combined with our extensive experience and project knowledge will allow us to be a valuable asset to your team.

Skilled Team. Henneman Engineering's knowledge in the design of air handling unit installation and renovation has been well demonstrated in Wisconsin facilities. Our experienced team of engineering experts are senior-level professionals with extensive HVAC design backgrounds and are proficient working with Wisconsin state code requirements. Additionally, we have teamed with Allume Architects of Elm Grove for the architectural and historic preservation requirements of the project. Allume and Senior Architect Nick Migan, AIA, bring extensive experience in office remodels and historic restoration to this effort, having worked on remodels and restorations at the Zablocki VA Medical Center, Carroll University and the Medical College of Wisconsin.

Expertise. At Henneman Engineering, our experienced professionals design buildings to meet facility demands today and in the future. Using the latest technology, we design "intelligent" mechanical and electrical systems, creating an environment that conserves valuable resources and improves energy efficiency. Our extensive knowledge of controls and sophisticated data/communications networks results in buildings with carefully integrated systems that help our clients accomplish their mission.

A Deep Bench. Our project approach is centered on one dedicated team for the project. We are able to supply the City of Mequon with experts in engineering this project and the entire firm's resources, enabling us to immediately and effectively scale our team to meet your needs. This custom approach will drive value during the project and was built to ensure speed of execution, quality documentation, and the scalable resources necessary to meet the project schedule.

In closing, thank you for the opportunity to submit our qualifications to you. Our team is committed to collaborating with your outstanding team, and we are excited to make a significant impact on your facility and the community!

Respectfully Submitted,

Henneman Engineering



Samantha Bakke
Director of Engineering, WI Division

Henneman Engineering Inc. is a multi-discipline engineering firm with more than six decades of experience in mechanical, electrical, plumbing, fire protection, information technology and structural design for new and renovated facilities. We offer comprehensive engineering design services from master planning through construction administration and commissioning and retro-commissioning. Specific systems and components designed by Henneman Engineering include, but are not limited to:

MECHANICAL ENGINEERING

- Clean Room and Lab Environment
- HVAC Systems
- Ventilation/IAQ/Infection Control
- Environmental Control Systems
- Chilled Water Systems
- Refrigeration Systems
- Ammonia Systems
- CFC Coolants
- Plumbing and Fire Protection
- Medical Gas Systems
- Special Gas Systems Utility Piping
- Boiler Systems & Power Plant Design
- Steam Distribution Systems
- Compressed Air Systems

Energy Services

Information Technology

Commissioning

Procurement

Project/Construction Management

Long Range Planning

Environmental Monitoring

Economic Feasibility Analysis

Value Analysis Life Cycle Cost Analysis

ELECTRICAL ENGINEERING

- Building Power Systems
- Secondary Power Distributions
- Emergency Power Systems
- Communications Data Systems
- Fire Protection Systems
- Energy Management Systems
- Control/Instrumentation
- Lighting Design
- Power Studies & Primary Power Design
- Substations and Distribution
- Security
- Nurse Call

STRUCTURAL ENGINEERING

- Steel and Concrete Structures
- Structural Analysis
- Building Evaluations
- Equipment Support Structures
- Masonry Systems
- Wood Framing
- Foundation Systems

Site Development

Emergency Preparedness Planning & Design

Industrial Services



Building on
60 Years
of Success

OUR MISSION

The mission of Henneman Engineering Inc. is to provide innovative, cost effective, quality engineering solutions that are responsive to our clients' needs in a professional and profitable manner. We accomplish this by following our founding principles: trust, integrity, mutual respect and service to our clients, employees and community.

WBE CERTIFIED

Henneman Engineering is a WBE company certified both in the State of Wisconsin and nationally.



AFFILIATIONS

ACEC, AFE, AIA, APEC, ASHE, ASHRAE, ASME, CSI, DBIA, IEEE, IES, ISPE, NFPA, NSPE

PROFESSIONAL PRACTICE

Since 1961 | USGBC Member

The Henneman Difference



- ◆ Engineering specialty from programming through operations & warranty.
- ◆ ISO 9001 compliant.

- ◆ Henneman Engineering principals involved in every aspect of project design & delivery.
- ◆ Committed to keeping the same team on the project throughout its duration.

- ◆ Proven record of developing accurate budgets & delivering a quality project within budget.
- ◆ Henneman Engineering is an employee-owned company.

DELIVERING HIGH-QUALITY SERVICE & INNOVATIVE SOLUTIONS IN MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION & IT

Henneman Engineering is a women-owned, multi-discipline design engineering firm with more than six decades of experience in mechanical, electrical, plumbing, fire protection and information technology for new and renovated facilities. Focus markets include healthcare, education, commercial, municipal and industrial design.

We have successfully delivered high-quality services on thousands of challenging projects for the public and private sectors. Henneman Engineering specializes in solving the challenges presented by facility and systems design. From sophisticated HVAC and electrical installations, to systems requirements for state-of-the-art equipment, to advanced voice and data infrastructure design, our outstanding engineers work collaboratively with clients to achieve flexible, efficient and cost-effective environments.

WE DESIGN COST-EFFECTIVE, HIGH-PERFORMANCE SYSTEMS FOR LONG-TERM EFFICIENCY

Henneman Engineering offers comprehensive engineering design services from master planning through construction administration. We have continued to evolve in order to meet the needs and challenges of our clients. Today this includes creating or renovating structures that are energy efficient, sustainable and prepared for the challenges of a 21st century economy.

With our experience and a holistic approach, we design and commission high-performance systems that are efficient and reliable. Having operations experts ensures a quality design process and provides a seamless transition from design to final occupation. Our goal is the long-term operating efficiency of your facility and systems.

Founded in 1961 in Champaign, Illinois, Henneman Engineering has four office locations, including offices in Waukesha and Madison to meet the needs of our Wisconsin clients. It is our commitment to excellence in engineering and ability to build long-term client relationships while evolving to meet our clients' needs that has led the firm to a long history of success.



Professional Practice. Since 1961. | www.henneman.com

MILWAUKEE AREA OFFICE

20855 Watertown Road, Suite 170
Waukesha, Wisconsin 53186
262.230.2845

MADISON OFFICE

1241 John Q Hammons Dr., Suite 503
Madison, Wisconsin 53717-1960
608.833.7000



Henneman Engineering is a licensed engineering corporation certified in the State of Wisconsin.

EXPIRES: 01/31/2024

NO. 2527 - II

The State of Wisconsin
Department of Safety and Professional Services
EXAMINING BOARD OF ARCHITECTS, LANDSCAPE ARCHITECTS, PROFESSIONAL ENGINEERS,
DESIGNERS, AND PROFESSIONAL LAND SURVEYORS

Hereby certifies that

HENNEMAN ENGINEERING INC

has complied with the provisions of Section 443.08, Wisconsin Statutes and is hereby issued this

ARCHITECTURAL OR ENGINEERING CORP - CERTIFICATE OF AUTHORIZATION

in the State of Wisconsin in accordance with Wisconsin Law

on the 17th day of January in the year 2001.

The authority granted herein must be renewed each biennium by the granting authority.

In witness thereof, the State of Wisconsin


Examining Board of Architects, Landscape Architects, Professional Engineers, Designers, and Professional Land Surveyors

has caused this certificate to be issued under

the seal of the Department of Safety and Professional Services




Dawn B. Curi
Secretary


Rosemary Szymanski
Chairperson


Tom F. P...
Secretary

This certificate was printed on the 16th day of February in the year 2022

Henneman Engineering Project Manager Samantha Bakke, PE is a licensed Professional Engineer certified in the State of Wisconsin.

EXPIRES: 07/31/2024

NO. 46009 - 6

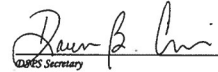
The State of Wisconsin
Department of Safety and Professional Services
EXAMINING BOARD OF ARCHITECTS, LANDSCAPE ARCHITECTS, PROFESSIONAL ENGINEERS,
DESIGNERS, AND PROFESSIONAL LAND SURVEYORS

Hereby certifies that
SAMANTHA N BAKKE
was granted a certificate of registration as a
PROFESSIONAL ENGINEER
in the State of Wisconsin in accordance with Wisconsin Law
on the 11th day of January in the year 2018.

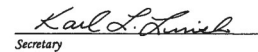
The authority granted herein must be renewed each biennium by the granting authority.

In witness thereof, the State of Wisconsin
Examining Board of Architects, Landscape Architects, Professional Engineers, Designers, and Professional Land Surveyors
has caused this certificate to be issued under
the seal of the Department of Safety and Professional Services




Dawn B. Livi
Secretary


Chairperson


Karl L. Luvish
Secretary

This certificate was printed on the 26th day of July in the year 2022



Oconomowoc Memorial Hospital, AHU-15 Replacement

Oconomowoc, WI

Henneman Engineering initially provided an analysis of AHU-15 and its associated distribution to identify the scope of work associated with replacing it at ProHealth Care's Oconomowoc Memorial Hospital.

Henneman was then retained to provide HVAC and electrical design services for the replacement of the AHU-15. This AHU was in a penthouse suspended above med gas equipment. The unit is being relocated so that it is outdoors on the roof adjacent to the penthouse. The area it serves also requires ductwork revisions, piping and controls to have it operate independently from AHU-16. Also included is replacement of the steam-to-hot water heat exchanger and associated hydronic system, to be sized to anticipate the needs for the future AHU-16 replacement. VAV terminal units are also being replaced that will be served off of the new AHU-15.

\$1.04M Construction Cost | 2023 Project Completion



REFERENCE

ProHealth Care
Dawn Fredrick
Facilities Project Manager
725 American Ave.
Waukesha, WI 53188
262.928.2307



Stoughton Hospital, AHU-8 Replacement Stoughton, WI

Henneman Engineering provided HVAC design and construction administration services to upgrade and expand the AHU-8 system at the Stoughton Hospital. The project included replacing the AHU-8 system completely and updating controls and balancing based on the earlier study analysis conducted by Henneman. Electrical design included upgrades to AHU-8 fans, smoke dampers and controls.

\$150K Project Cost | 2021 Project Completion

REFERENCE

Stoughton Hospital

Dwayne Strandlie

Facility Manager

900 Ridge St.

Stoughton, WI 53589

608.873.2241



SSM Health–Pharmacy, Rooftop Air Handling Unit Columbus, WI



Henneman Engineering provided mechanical, electrical and plumbing design services for SSM Health’s new pharmacy space in Columbus, WI. The project included design for a new rooftop air handling unit dedicated to the pharmacy area. The rooftop air handling unit integrated with new terminal units and return system serving the pharmacy space. Other services included design for two new redundant exhaust fans and demolition drawings to remove the pharmacy system from the existing building rooftop air handling unit.

The project also included redesign of Conference Room 244, Office Room 245 and Storage Room 250 into a waiting room with a nurse station.

\$36K Project Cost | 2020 Project Completion

REFERENCE

Ideal Builders
Jeff Duesterbeck
Project Manager
1406 Emil Street
Madison, WI 53713
617.922.7691

(Phone number is for Jeff’s new employer, Huffman Keel)



Waterloo School District, Addition & Renovation Waterloo, WI

This project included design and construction of a new athletic facility and major renovations to existing facilities for the Waterloo School District K-12 building. In addition, security systems were upgraded.

The mechanical systems for the new athletic facility included rooftop units to serve the addition. The ventilation systems were designed to allow increased ventilation and increased filtration. The new commons area of the addition is served by a new rooftop unit with variable air volume terminal units arranged to allow for a future addition adjacent to the space.

The renovated areas of the original elementary school area of the building included replacement of existing unit ventilators with new units to allow for added air conditioning, increased ventilation rates and improved filtration within the units. The project also included the replacement of the outdated pneumatic temperature controls with direct digital controls with electric actuation.

Henneman Engineering provided mechanical, electrical, plumbing, fire protection, and technology systems design services.



REFERENCE

FEH Design

Kevin Eipperle

President, Architect

951 Main Street

Dubuque, IA 52001

563.583.4900

\$10.8M Project Cost | 2020 Project Completion



UW Hospitals and Clinics, AHU-37 Replacement

Madison, WI

The AHU-37 Replacement project for the University of Wisconsin Hospital and Clinics replaced an aging air handler which served 17,000 square feet of operating rooms, a PACU recovery area, and support areas.

This project replaced an indoor air handling unit with a new custom roof-mounted air handling unit with a service vestibule. The new unit was sized to handle an additional three units, as requested by the Owner. The original air handling unit was 80% outside air which was extremely inefficient. To help increase indoor air comfort and energy efficiency, Henneman Engineering converted the existing 80% outside air system to a return air system while only exhausting the areas required by code.

In addition to replacing the existing air handling unit, the existing general exhaust fan, operating room humidifiers, and operating room controls were replaced as well. The general exhaust fan serving this area was replaced by switching to a return air system, due to the large reduction in airflow. Each of the operating room booster humidifiers were replaced and the associated controls serving each room were converted from pneumatic controls to direct digital controls.

\$1.2M Project Cost | 2015 Project Completion



Education

M.S., Architectural Engineering –
Thermal Systems,
University of Kansas

B.S., Architectural Engineering,
Milwaukee School of Engineering

Licenses

Registered Professional Engineer,
Wisconsin

SAMANTHA BAKKE, PE

Project Manager

Director of Engineering, Wisconsin Division

Senior Mechanical Engineer

Samantha has 15 years of engineering and business expertise including building mechanical, plumbing, electrical, fire protection systems, and project management. Samantha provides high-quality engineering services related to healthcare, higher education, entertainment, hospitality, and commercial projects and specializes in the design of HVAC systems, such as central energy plants, healthcare facilities and commercial kitchens.

ProHealth Care Oconomowoc Memorial Hospital, Air Handling Unit-15 Replacement, Oconomowoc, Wisconsin

North Shore Country Club, Clubhouse Renovations and Remodel, Mequon, Wisconsin

Milwaukee Public Schools, Golda Meir School Upper Campus Chiller Replacement, Milwaukee, Wisconsin

South Suburban College, New Allied Health Facility, South Holland, Illinois

Racine Unified School District, Racine, Wisconsin

- Mitchell School Remodel Phase 2
- Olympia Brown School Renovation & Addition

University of Wisconsin-Parkside, Elevator Modernization, Kenosha, Wisconsin

Aurora West Allis Medical Center, Imaging Holding Room, West Allis, Wisconsin



Education

B.S., Mechanical Engineering,
Minors in Mathematics
& Physics,
Southern Illinois University,
Carbondale, Illinois

Licenses

Registered Professional Engineer,
Wisconsin

RICHARD HENNESSEY, PE

Mechanical Engineer

Richard brings 9 years of mechanical engineering knowledge working on educational, manufacturing, commercial and municipal/state government facilities. His experience includes sheet metal manufacturing, HVAC-R systems design, seismic/wind load restraint systems, and vibration isolation systems. He has conducted site visits, scoped out projects, performed replace vs. repair cost assessments, and written analytical reports.

University of Wisconsin-Whitewater, Student Athletic Complex, Air Conditioning Unit Replacement, Whitewater, Wisconsin

Galesburg Public Library, New Library, Galesburg, Illinois

Department of Corrections, Waupun Correctional Facility, Food Service Cooling Tower Replacement, Waupun, Wisconsin

Wisconsin Department of Military Affairs, Camp Williams Washbay Utilities Improvements, Camp Douglas, Wisconsin

Individual Project Experience (partial)

Von Maur, HVAC Rooftop Equipment Replacement, and Seismic/Wind Load Restraint Design, Brookfield, Wisconsin

Verizon, Air Handling Unit and Piping Installation, Lawrence, New Jersey

Brownsville ISD, HVAC Rooftop Equipment Replacement, Seismic/Wind Load Restraint Design, Brownsville, Texas



BRITTANY ARDREY

Electrical Designer

Brittany brings 10 years of experience in the power/electrical industry to your project. Her experience encompasses a range of projects that include administration and higher education buildings, offices, retail, apartments, warehouses, medical factories, CCTV, data, receptacles, lighting and fire detection. She also has experience in virtual design and construction.

Some of the projects that Brittany is currently working on include:

North Shore Country Club, Clubhouse Renovation with Interior Bar Remodel and New Outdoor Bar, Mequon, Wisconsin

Wisconsin Department of Military Affairs, National Guard Readiness Center Replacement, Viroqua, Wisconsin

University of Wisconsin-Green Bay, Studio Arts & WCPA Reno, Green Bay, Wisconsin

Aram Public Library, Renovation and Addition, Delavan, Wisconsin

University of Wisconsin-Madison, Madison, Wisconsin

- Ingraham Hall HVAC System Replacement
- School of Business, Grainger Hall 2nd and 5th Floor Renovations

Education

B.A., African American Studies,
University of Wisconsin-Madison

Associate in Applied Science,
Architectural Technology,
Milwaukee Area Technical College

Certificates

Construction Project Management,
Columbia University



SCOTT MORRISON, SE

Structural Engineer

Scott has more than 40 years of experience in projects ranging from municipal and education buildings to the design of commercial and industrial structures. He has extensive knowledge in structural design and investigation as a design structural engineer and project manager. His experience also includes bridges, water and wastewater facilities, towers, foundations, sheet pile design, and special structures with public works applications. Construction material experience includes concrete, precast/ prestressed concrete, steel, aluminum and wood.

University of Illinois, Army Corps of Engineers Research Laboratory, AHU Replacement, Urbana-Champaign, Illinois

University of Illinois, Florida Avenue Residence, Oglesby Residence, and Trelease Residence Halls – AHU Replacements, Urbana-Champaign, Illinois

University of Wisconsin-Madison, Veterinary Medicine AHU Enclosure, Madison, Wisconsin

Purdue University, Tarkington Hall AHU Replacement, West Lafayette, Indiana

University of Illinois, Henry Administration Building Renovation, Urbana-Champaign, Illinois

Kankakee Armory, HVAC Renovation, Kankakee, Illinois

Paris School District, Crestwood Junior High School HVAC Upgrade, Paris, Illinois

Caterpillar Inc., Engineering Office and Metlab – HVAC/Sprinkler/Lighting, Aurora, Illinois

Education

M.S., Civil Engineering,
University of Illinois at Urbana-Champaign

B.S., Architectural Studies,
University of Illinois at Urbana-Champaign

Licenses

Registered Professional Engineer
(Structural), WI, IL, FL, IA, IN, KS, TX

Henneman Engineering is contracting with Allume Architects for architectural and historic preservation services on the project.

Allume Architects was founded by Andrea Nemecek in 2013. Prior to starting Allume Architects, Andrea held the position as Staff Architect and Project Manager for the Medical College of Wisconsin. Allume serves clients throughout the state of Wisconsin and Illinois. Firm specialties include tenant build-outs, educational and healthcare spaces, offices, historic preservation, manufacturing and warehouse facilities. Certifications and licenses include:

- Licensed in Wisconsin and Illinois
- WBE certified by the State of Wisconsin
- SBE certified by the City of Milwaukee
- American Institute of Architects
- National Council of Architects Registration Board

Leading architectural services for the project will be Nick Migan, AIA, Senior Architect and Project Manager at Allume Architects. Nick has more than 30 years of experience working on a wide range of building types throughout the Midwest and across the country.

Among his historic project experience, Nick led a 2+ year contract with the Zablocki VA Medical Center in Milwaukee, collaborating with a team of nationally recognized preservation experts to facilitate the repair, restoration and historic preservation of multiple buildings on this National Historic Landmark campus.



Rankin Hall Historic Rehabilitation
Carroll University, Waukesha, WI



Board Room Upgrade
Medical College of Wisconsin, Milwaukee, WI



ALLUME ARCHITECTS

890 Elm Grove Rd, Suite 106
Elm Grove, WI 53122
262.825.4787

allumearchitects.com



Restoration & Historic Preservation
Zablocki VA Medical Center, Milwaukee, WI

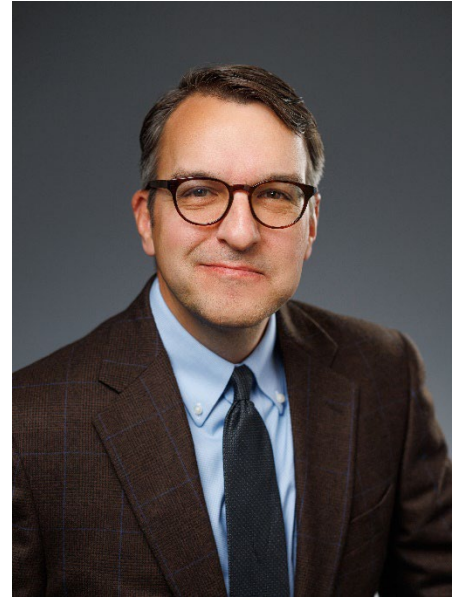
Resume

nick migan, aia, ncarb, leed ap | senior project architect + project manager

Nick has over 33 years of experience in the construction and design industry and currently holds a Senior Project Architect position for Allume Architects. In this role, he is responsible for day-to-day project leadership of the team and project responsibilities.

Nick's responsibilities include ongoing client relationship management, initial project programming through construction administration to occupancy, and post-occupancy follow-up. Nick works closely with our team and all stakeholders on our projects to assure that our clients' needs are met and exceeded.

Nick has been the primary project manager on many of Allume's non-profit and community projects. Nick is passionate about serving on multiple levels, including volunteer work for many organizations. Our clients appreciate his attention to detail, thoroughness, and experience.



Education:

University of Detroit
Bachelor of Architecture

Contact:

nmigan@allumearchitects.com

Registered Architect: A-10133
State of Wisconsin and Illinois

Sample Relevant Projects:

- Clement J Zablocki VA Medical Center – Extensive Historic Preservation Work
- Register of Deeds
- HVAC upgrades for MCTS Fond du Lac buildings
- Lighting upgrades for MKE County Parks
- War Memorial Restroom Remodeling
- Trimborn Farm Bunkhouse

- The MKE County CJF modeling we did with GRAEF and Venture Architects
- MKE County Zoo OEM (Proposal under review by MKE County)

Clement J Zablocki VA Medical Center – Milwaukee, Wisconsin
Historic Preservation Projects by Nick Migan and Miller Dunwiddie



Building 2 - "Old Main"

Originally designed for use as a domiciliary for Civil War veterans, this iconic building was one of the earliest buildings on this historic campus. Our team completed a comprehensive building assessment for full restoration of this one-of-a-kind structure. Our assessment became the basis for restoration documents that are being implemented under an Enhanced Use Lease. This Lease will enable Zablocki VAMC to again provide housing for current veterans who would otherwise be homeless or at risk of homelessness.





Building 6 – Original Hospital Building

Our team completed a comprehensive assessment of this structure also. This assessment was the basis for drawings and documents used to fully restore the exterior of the building. The interior of this building is fully occupied providing office space for a range of VA staffed services.



Building 41 – Ward Memorial Hall | Theatre

The exterior of this incredibly important and beautiful facility has been faithfully restored based on an exhaustive set of restoration assessment documents and drawings prepared by our team. Urgent work began on the building following the collapse of a major timber roof truss in 2011. The truss was fully repaired, and a portion of the roof was patched. Following this, the roof was fully restored including the monumental galvanized iron eave components. Once the roof had been stabilized and fully enclosed, work began on the full restoration of the windows, masonry, and wrapped veranda.

B41 Prior to Restoration (c 2012)



B41 Fully Restored Exterior

Scope of Work: We will provide mechanical, electrical, and structural design for the design and install of a new 25 ton rooftop unit. This proposal is based on the following:

Phases: Schematic Design, 100% Design Development, 100% Construction Documents, Bidding, Construction Administration

Assumptions:

- Our fee is based on one bid package for the entire scope of work. Additional bid packages requested by the Architect or Owner may be cause for additional services.
- It is assumed that there is appropriate system capacity for the renovations.
- Project will be setup with (1) plan set and specification book for the project.
- Specifications shall be provided in a book format.
- We have assumed the project will be developed in Autodesk Revit 2022 or newer. Our MEP Revit model will be shared with the project team for coordination. The Revit model will be consistent with AIA G101-2013 Level of Development (LOD) 200/ The model element is graphically represented with the model with approximate quantities, size, shape, location and orientation.
- This proposal is based on the assumption that the owner will provide us with required architectural plans in a Revit or CAD compatible format for our use in developing our plans.
- Bid phase services include answering contractor questions, issuing addenda and reviewing bids received.
- Response to permit officials comments.
- Includes (1) site visit to survey the existing facilities and equipment.
- Includes (2) site visits to review progress and quality of construction work during construction.
- Includes (1) site visit for final punchlist.
- Additional site visits can be provided for \$1,000 per visit including a field report.
- Electrical design work includes disconnecting rooftop units and associated power connections and providing a new power connection for the replacement rooftop unit.
- Owner to provide reliable and accurate existing drawings for all architectural, mechanical, electrical and structural systems.
- Owner to provide any special engineering survey limitation considerations, notably areas where asbestos is present within the facility.
- An existing systems pre-balance report will be provided to determine if the existing units are meeting capacity.
- An existing control point and HVAC equipment output report will be provided by the Owners controls representative for status of existing system.
- Document changes after completed work or partially completed work is reviewed or approved by Owner or Architect may be cause for additional services.
- Permit Fees will be a reimbursable expense.
- No changes will be made to the plumbing system.
- Current Wisconsin ICC code version is 2015. The ICC 2015 code allows R-410A refrigerant. However due to new EPA/AIM Act requirements if the new rooftop unit is not shipped before January 1, 2025 the rooftop unit will be supplied with the new refrigerant.
- Existing structure will be evaluated with regards to placement of the new roof top unit.
- Existing pipe insulation will be replaced as required with new piping connections.
- New equipment controls will tie into the existing system. Existing controls system is not being upgraded.
- Structural system evaluation and design is included.

Assumptions (Cont.):

- Provide a construction cost estimate.
- Henneman assumes that the existing HVAC and electrical have the sufficient load to incorporate the replacement of the existing equipment. Any modifications to the existing electrical panel or HVAC upgrades due to unforeseen code requirements have not been included.
- Henneman will review the 2018 EMG Facilities Condition Assessment study done when reviewing the current status of the HVAC equipment as it relates to the install of the new 25T roof top unit.

Base Bid A: Replacement of the 6T and 15T AHUs and condensing units in their current configuration with updated local controls

- Henneman and Allume have reviewed this option at great length. Due to this building being a historical building great caution must be taken in maintaining the existing structure.
- After much review we have determined that the best way to perform this is removing a section of the exterior brick wall and install temporary shoring to allow the existing units to be removed from the attic space and the new units installed. After the work is complete the wall will be filled back in with the existing brick to maintain the historical building integrity.
- This will require intensive structural design and potential added steel internal to the building to support the new units in the attic space.
- New condensing units will be placed in the same location as the existing condensing units.
- This is the least recommended option.

Base Bid B: Replacement of the 6T and 15T AHU with a 25T RTU that will be placed outside.

- It is assumed that there is appropriate electrical system capacity to install the new 25T unit.
- The new proposed location for 25T will be placed in the existing maintenance parking spots. The duct for the new unit will be fairly large, Henneman does not believe running the duct on the interior of the building will be cost effective or feasible to run both a supply and return duct. Further investigation on this will need to be performed upon contract award.
- The new location of the 25T unit may require a screen.
- We recommend in lieu of keeping the handicap spaces at the maintenance bay a ramp be added to the main entrance for handicap accessibility. This improves the maintenance accessibility and access of the new unit.
- Two options for the existing units are to abandon in place or to cut the unit apart and bring them out piece by piece.
- Henneman and Allume would like to have a further conversation with the Historical society on the new ductwork entrance into the building. The 25T unit will be fairly large as will the associated ductwork. It will need to be reviewed if it is feasible to run the supply and return duct on the interior or if possible the exterior and go in through the existing louver openings.

Additive 1: Replacement of the popcorn ceiling in the Common Council Chambers with a modern alternative.

- It is assumed that the mechanical, electrical, plumbing and fire protection will be required to adjust existing systems to the new ceiling.

Additive 2: Lighting/electrical upgrades/ replacements in the Common Council Chambers, both overhead and wall units.

Additive 3: Window replacement throughout the Common Council Chambers, vinyl windows are not allowed, and any windows chosen will meet all buildings architectural standards.

Additive 4: Flooring replacement in the Common Council Chambers should include two (2) options. 4a: Replacing floor with carpet squares. 4b: Hardwood floor with city logo embedded in the center.

Pricing:

- Base Bid A:
 - Henneman proposed fee for engineering services is \$80,220 on a lump sum basis.
- Base Bid B:
 - Henneman proposed fee for engineering services is \$69,230 on a lump sum basis.
- Additive 1:
 - Total lump sum fee: \$35,600 on a lump sum basis
 - Henneman proposed fee for engineering services is \$18,800 on a lump sum basis.
 - Allume proposed fee for architectural services is \$16,800 on a lump sum basis.
- Additive 2:
 - Henneman proposed fee for engineering services is \$12,400 on a lump sum basis.
- Additive 3:
 - Total lump sum fee: \$22,800 on a lump sum basis
 - Henneman proposed fee for engineering services is \$8,000 on a lump sum basis.
 - Allume proposed fee for architectural services is \$14,800 on a lump sum basis.
 - This fee includes submittal to WI—SHPO and local historical architectural review board.
- Additive 4:
 - Total lump sum fee: \$9,900 on a lump sum basis
 - Henneman proposed fee for engineering services is \$8,000 on a lump sum basis.
 - Allume proposed fee for architectural services is on a lump sum basis.
 - 4a: Carpet Squares \$1,500
 - 4b: Hardwood Flooring w/ Logo \$1,900
- Additional site visits may be provided for an additional \$1,000 per site visit.
- Upon determination of what will be included in the final scope of services there are opportunities to reduce the fee as there would be overlap between administrative costs, coordination items, and site visits. There are more efficiencies that can be realized the more scope that is included.

Fee Proposal



Thank you for the opportunity to provide this proposal. We are looking forward to teaming with you on this important project. We have the resources, the staff and the commitment in our office to provide you with high quality design and service for this project.

If you have any questions or need any additional information, please do not hesitate to contact us.

Best Regards,
Henneman Engineering Inc.

A handwritten signature in blue ink, appearing to read "S. Bakke".

Samantha Bakke
Director of Engineering, WI Division

Please sign below as an indication of your acceptance of this proposal and return a signed copy to our office for our records. This proposal does not substitute a contract.

**This proposal is valid for 60 days after which the fee may be subject to change.

Approval Name and Date

Cc: Jason McGillivray, Jim Zehner

