Bid Waiver Form

Revised 01/2025

Short Description of Goods/Services	Courthouse Chiller Replacement Design	**Total Cost**	$59,850.00

Vendor Name	JDR Engineering, Inc.	**MUNIS #**	17693	**Req #**	

Purchasing Officer	Pete Patten	**Date**	06/11/2025
Department	Public Works Engineering	**Email**	Draper.Todd@DaneCounty.gov
Name	Todd Draper	**Phone**	608.575.2667

A VENDOR QUOTE MUST BE ATTACHED TO THE WAIVER FOR APPROVAL

Provide a detailed description of the goods/services intended to be purchased:

Professional design and engineering services provided by JDR Engineering for the Courthouse Chiller Replacement Project. This includes, but is not limited to: Finalization of chiller equipment selection based on site-specific criteria,mechanical design and layout for installation of the new chiller system, coordination of utility connections, control systems, and integration into existing infrastructure, preparation of construction-ready plans and specifications, ongoing technical consultation through procurement, construction, and commissioning phases, and coordination with facility staff regarding installation phasing and site access logistics. JDR Engineering has already provided preliminary services related to chiller selection and procurement strategy, and has a deep understanding of the facility's existing mechanical systems, spatial constraints, and operational requirements. The scope of this work is time-sensitive, as the new chiller must be installed and fully operational prior to the 2026 cooling season. This includes design, bidding (for installation), equipment procurement, and installation coordination, all of which must be completed on an expedited schedule.

Send to a Purchasing Officer Once Completed

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Procurement Exception List
☐ Emergency Procurement
☐ Unique and specific technical qualifications are required
☐ A special adaptation for a special purpose is required
☒ A unique or opportune buying condition exists
☒ Only one vendor possesses the unique and singularly available ability to meet the Department's requirements

Provide a detailed explanation as to why the competitive bidding (RFB/RFP) process cannot be used. Also provide a detailed justification in relation to the Procurement Exception(s) chosen:

Engaging in a formal RFP process at this time would result in significant delays to the project schedule. Given the critical role of the chiller system in maintaining climate control within the Courthouse, any delay in design, procurement, or installation could impact court operations during the summer of 2026. If the new chiller is not installed and operational by April 2026, the County may be forced to lease and install a temporary chiller system to maintain building operations. These systems come with high rental, setup, and utility costs, potentially resulting in a significant unplanned expenditure. Avoiding these costs is a key driver in maintaining the current project schedule and minimizing unnecessary financial impact on the County. Additionally, the competitive bidding process would require a restart in design familiarity, site coordination, and mechanical analysis by any new engineering firm. This would result in duplicated effort, increased cost, and inefficiencies due to lack of site knowledge, ultimately extending the project timeline.

Procurement Exceptions Justification: JDR Engineering has already been engaged in preliminary work on the Courthouse chiller system and is uniquely familiar with the building's existing mechanical infrastructure, equipment history, electrical load constraints, and operational needs. JDR's knowledge of site logistics and phasing requirements is critical to designing a system that fits within these constraints without service interruptions. Long lead times on chiller equipment, pumps, and associated components necessitate finalizing the design early to allow for procurement within the limited window. Engaging another vendor through a standard RFP would significantly delay this process and put the April 2026 installation deadline at risk. For these reasons, we are requesting approval to proceed directly with JDR Engineering to ensure continuity, minimize project risk, and maintain critical schedule milestones.

Bid Waiver Approval (For Purchasing Use Only)	
☐ Under $45,000 (Controller)	
☐ $45,000+ (Personnel & Finance Committee)	**Date Approved:**

Send to a Purchasing Officer Once Completed

JDR ENGINEERING, INC.

JDR PROPOSAL

PREPARED FOR:
Dane County Public Works Engineering Division
Todd Draper, Director of Public Works

PROJECT
Dane County Courthouse
Cooling System Upgrades
215 S. Hamilton St
Madison, WI 53703

DATE
June 11th, 2025

JDR ENGINEERING, INC.

CONTENTS

JDR FEE PROPOSAL

JDR ENGINEERING, INC.

June 11, 2025

Mr. Todd Draper
Director of Public works
Dane County Public Works Division
1919 Alliant Energy Center Way
Madison, WI 53713

Re: Dane County Courthouse – Cooling System Upgrades

Hi Todd!

Thank you for the opportunity to submit an engineering proposal for the Dane County Courthouse Cooling System Upgrade project in Madison. Based on existing system review, discoveries and equipment selections made during our Chiller Procurement phase, we propose providing a continuation of engineering services for total system design, bidding, construction administration and commissioning at the following lump sum fee:

Discipline	Fee
HVAC and Electrical Engineering	**$ 59,850**

We intend to assign the following staff to support this project:

- Timothy D. Meeker – Project Manager / HVAC Lead Engineer
- William D. Pahman – HVAC Engineer
- Mike Klubertanz – Electrical Designer
- Lucas Henson – Electrical Designer

Our staff availability and current workload are aligned with the urgency of this project.

This proposal is based on the following:

General Tasks and Assumptions:

1. Project Description
    a. Replacement of the existing water-cooled chilled water plant that provides cooling for the Dane County Courthouse. The plant replacement includes:
        i. New water-cooled chillers (either rotary or centrifugal depending on capacity, equipment selections and discussion with Dane County staff during the procurement process).
        ii. New cooling towers with variable frequency drives for tower fans.
            1. Cooling towers are not to exceed the height of the existing cooling towers if possible.
        iii. New condenser water pumps.
        iv. New chilled water primary pumps with variable frequency drives (if applicable).
        v. The existing chilled water secondary pump(s) are to remain.
        vi. New tower basin / condenser water cleaning system (as applicable and needed).
        vii. New refrigerant leak detection system.
        viii. New DDC controls, integrated into the existing Dane County Courthouse DDC system using the appropriate controls protocol.
        ix. Provide documentation and professional engineering stamps for submittal of the project to required code authorities for review and approval.
2. General Assumptions

a. Existing electrical and HVAC drawings for the building will be provided by Dane County.
b. The new chillers and pumps will be at the same general location of the existing equipment.
c. The new cooling towers will be at the same general location as the existing cooling tower.
    i. Note that this proposal does not include any structural analysis or design for cooling tower supports. It is assumed that the existing supports will be used for the new cooling towers.
d. The weight of the new chiller will be similar to the chiller removed.
    i. Note that this proposal does not include any structural analysis or design for the existing mechanical room floor.
e. The project will not be phased.
f. The project will not pursue LEED Certification.
g. All drawings will be provided in AutoCAD or Revit format.
h. Dane County to provide all "front end" specifications and bid documents.

3. JDR Engineering services will include:
    a. Design Phase
        i. Field verification of existing conditions to the extent possible.
        ii. Attendance at (2) meetings on-site and (4) virtual meetings.
        iii. Bid drawings in electronic format.
        iv. Bid "Technical" specifications in "project manual" format.
    b. Bidding Phase:
        i. Respond to bidder inquiries.
        ii. Issue project Bidding Addendum(s) as required.
        iii. Attend pre-bid walk thru.
        iv. Sealing of HVAC drawings, as required, by a Registered Designer or Engineer for State and Local Plan Review Approval.
    c. Construction Administration:
        i. Attendance at Pre-Construction meeting.
        ii. Review of contractor provided equipment submittals.
        iii. Answer contractor RFI's / questions, provide clarifications and issue construction bulletins (CB) as required.
        iv. Attendance at (4) construction meetings.
        v. (1) intermediate site visit and meeting.
        vi. (1) final site visit ("Punchlist") at the completion of construction with follow-up site visit report.
        vii. Review final closeout documentation including test and balance reports, operation and maintenance manuals, start-up reports, etc.
        viii. File close-out "Compliance Statement" with the State.
    d. Commissioning
        i. Provide functional performance testing of chillers, cooling towers and new pumps.
            1. Testing will be witness testing after the project contractors have completed and tested all work.
            2. Follow-up summary report of commissioning findings.

    e. This proposal is also based on the following additional discipline specific assumptions:
        i. HVAC
            1. A cooling load calculation will not be performed on the Courthouse to confirm/verify the new chiller water plant size. Chiller size is based on existing system size.
            2. New cooling towers as identified above.
            3. New condenser water and chiller primary pumping systems as identified above.
            4. New refrigeration detection system/sensors. It is assumed that the existing ventilation will remain unaltered and can accommodate the replacement chiller.

ii. Electrical
    1. The project scope is currently limited to:
        a. Disconnecting the existing equipment (chillers, cooling towers and associated pumps).
        b. Providing new power connections to new chiller, cooling tower and associated pumps.
            i. The existing motor control center will be used for new power connections for pumps and chillers.
            ii. The existing panel on the eighth floor will be used for new power connections for cooling towers.
            iii. The existing service is anticipated to have adequate capacity for the new equipment.
    2. If the existing service size or main distribution panels to not have capacity or space to service the new/updated electrical loads, a request for additional services would be submitted.
    3. Update or replacement of the existing motor control center (MCC) or any electrical components of the existing MCC are not included in this proposal.

i. Plumbing
    1. The plumbing scope of work is limited to updating the make-up water system, valving and piping serving the closed loop chilled water system and cooling tower.

ii. Fire Protection
    1. No fire protection work is included in this proposal.

iii. Structural
    1. No structural work is included in this proposal.
    2. If the system design process indicates that structural analysis or design is required regarding support for the new cooling towers or chillers, a change order for structural services would be issued..

I will be the project manager. Please contact me with all information concerning the project schedule, meeting dates, requests for information, and project directives.

The following Project related expenses will be billed as reimbursable expenses:

- Fees paid for securing approvals of authorities having jurisdiction over the Project.

JDR Engineering requires a signed proposal, contract, purchase order or written authorization to proceed prior to performing services on projects.

Please don't hesitate to contact me with any questions, comments or concerns regarding our proposal. We appreciate the opportunity and look forward to working with you on this project!

Sincerely,

JDR ENGINEERING INC.
CONSULTING ENGINEERS

Timothy D. Meeker, PE
Senior Partner

Built on Integrity, Trust and Loyalty

In 2004, out of their garage office, Dan Pliner, Jim Yurs, and Robb Stone formed JDR Engineering. In 2008, JDR welcomed Tim Meeker as a Senior Partner. In 2022, Michael Klubertanz, James Vander Zanden, Michael Jochman, and Nicholas Cleaver were welcomed to the leadership team and named partners with the firm. Celebrating 18 years of steady growth, JDR has over 30 talented and experienced staff of Licensed Professional Engineers, Licensed Designers of Engineering Systems, and LEED Accredited Professionals.

Specializing in Commercial, Industrial, Institutional and Healthcare building projects. We provide Plumbing, Fire Protection, HVAC, Electrical, Technology, and Structural engineering services in-house. We also provide energy consulting services, including energy audits on new and existing buildings as well as building energy modeling and simulation construction and review. We offer building information modeling (BIM) using AutoCAD MEP (Building Systems) and Revit software.

Our passion, combined with our expertise, has allowed us to establish long-standing relationships, and deliver outstanding project designs. JDR prides itself on these long-standing working relationships. Our Principals are involved from start to finish on ALL projects.

JDR Engineering is a true partner, with a proven track record of transforming challenges into solutions.

JDR ENGINEERING, INC.

Design Services

Dedicated to outstanding service and quality design, our enthusiasm for each project illustrates our commitment to the highest level of service in the industry.

MECHANICAL SYSTEMS

HVAC Systems

Central Air Handling Systems
Central Hot Water/Steam/Chilled Water
Central Utility Distribution Design
Variable Refrigerant Flow (VRF) Systems
Dedicated Outside Air Systems -(DOAS)
Low/High-Pressure Steam Systems
Ground Source Systems
Hot Water Boiler Systems
Hydronic Piping Systems
Pumping Systems
Ice Storage Systems
Heat Exchangers
Process Piping
Laboratory Hood Design
Heat Pump Systems
Variable Air Volume Systems
Under-floor Air Distribution Systems
Hot Water Radiant Systems
Ventilation Systems
Solar
Building Automation Systems
Mechanical System Study

Plumbing & Fire Protection Systems

Storm and Roof Drainage
Sanitary Waste and Vent
Clear Water Waste and Vent
Domestic Hot and Cold Water
Non-Potable Hot and Cold Water
Laboratory Hot and Cold Water
Reverse Osmosis Systems (RO)
Make-up Water Systems
Compressed Air Systems
Laboratory Air Piping Systems
Medical Piping Systems
Automatic Sprinkler Systems
Standpipe Systems
Central Utilities Design
Facilities Engineering for Industrial Sites
Renewable Energy Systems
Rainwater Harvesting Systems
Facilities Analysis
Energy Modeling and System Design

ELECTRICAL ENGINEERING

Mission Critical Systems Design
Power Distribution Systems Design
Lighting System Design
Specialty Systems (fire alarm, paging, a/v, and security)
Facilities Analysis
Internet Hosting Facilities and Data Center Design
Site Lighting
Coordination/ARC Flash Analysis
Energy Modeling
Electrical Study

COMMISSIONING

New Building Commissioning
Retro-Commissioning on Existing Buildings/Systems
Measurement and Verification

TECHNOLOGY

Structured Cabling Design
Wireless Communications
Backbone Infrastructure Design
Equipment Evaluation
Data Center Design and Project Management
Telecommunications System Design and Implementation
PBX/VoIP and Voice Mail Systems Evaluation and Design
Technology Planning
Long Distance Analysis
Disaster Recovery Planning
Local and Wide Area Networks
Video Surveillance and Monitoring Networks
Security and Access control

SUSTAINABLE DESIGN

LEED
Energy Star
Focus on Energy

ENERGY ENGINEERING

Building Energy Use Simulation*
Building Systems Optimization and Evaluation
Lighting Upgrades
Day-Lighting
Ice Storage
Motor Replacements
Water Conservation Opportunities
Photovoltaic Systems
Solar Heating Systems
Underfloor Air Systems Design
Geothermal Heating/Cooling
Variable Refrigerant Flow Systems
Temperature Control System Review/ Optimization
Review and Optimization of:
- Boiler Systems (Steam and Hot Water)
- Chiller/Chilled Water Systems
- Condenser Water Systems
- Air Handling Systems
- Building Envelope

Energy Recovery Implementation
Energy Engineering Study

BUILDING INFORMATION MODELING

Revit

OTHER DESIGN OR DRAFTING

AutoCAD/BIM Service
BIM Coordination
Floor Plan Drafting
Historical Design

JDR STAFF INFORMATION

JDR ENGINEERING, INC.

JDR STAFF

JDR Engineering, Inc. is a Madison-based, multi-discipline, consulting engineering firm with a group of highly experienced team members that are led by our three managing principals and five partners. Our Engineering Team includes:

Mechanical

• Daniel E. Pliner, P.E. LEED®	Principal: HVAC and Energy Modeling	36 years
• James E. Yurs, P.E.	Principal: HVAC and Plumbing	32 years
• Robert C. Stone, P.E. LEED®	Principal: HVAC and Plumbing	31 years
• Timothy D. Meeker, P.E. LEED®	Senior Partner: HVAC and Energy Modeling	28 years
• Samuel L. King, D.E.	Licensed HVAC Designer	27 years
• Ryan S. Lindemann, D.E., LEED®	Licensed HVAC Designer / BIM Manager	26 years
• Benjamin R. Eyring-Green, P.E., LEED®	Mechanical Engineer	22 years
• James R. Vander Zanden, P.E.	Partner: Mechanical Engineer	16 years
• Nicholas S. Cleaver, P.E. LEED BD+C	Partner: Mechanical Engineer	15 years
• Michael J. Jochman, P.E.	Partner: Mechanical Engineer	15 years
• Brendon T. Stubbe, P.E.	Mechanical Engineer	11 years
• Brian R. Elmer	Mechanical Engineer	5 years
• Tyler Patterson	Mechanical Engineer	4 years
• Andrew J. Rowe	Mechanical Engineer	3 years
• Matteo Matijasic	Mechanical Engineer	4 years
• William Pahman	Mechanical Engineer	2 years
• Pete T. Boersma	CADD/Revit Designer	36 years
• Christopher D. Bootz	CADD/Revit Designer	1 year
• Robert Portnoy	Mechanical Engineer	1 year
• Jamison Roche	Mechanical Engineer	<1 year
• Victoria Alber	Mechanical Engineer	<1 year

Electrical

• Michael Klubertanz, D.E., LC, IESNA	Partner: Licensed Electrical Designer	31 years
• Joseph A. Mullvain, P.E.	Electrical Engineer	8 years
• Wesley W. Cirves	Electrical Engineer	6 years
• Robert D. Ginter	Electrical Designer	7 years
• Erick Powell	Electrical Designer	10 years
• Lucas Henson, D.E.	Licensed Electrical Designer	19 years

Plumbing/Fire Protection

• Christopher M. Gehrke, D.E.	Licensed Plumbing Designer	25 years
• Carlos R. Ruef, D.E.	Licensed Plumbing Designer	16 years
• Michael T. McDaniel, P.E.	Plumbing Engineer	9 years
• Charlette Jaegler	Plumbing Designer	9 years
• Collette Hillebrecht	Plumbing Designer	3 years
• Tom Wilson	Plumbing Designer	36 years
• Sam Marchesi	Plumbing Designer	5 years

Our principals are all senior-level, professional engineers with a broad range of experience in both new and retrofit projects. We have 12 Professional Engineers, 6 Licensed Designers, and 6 LEED accredited professionals on staff providing energy-efficient alternatives for HVAC, plumbing, and electrical systems design. Our principals are involved from start to finish on all projects, providing service from schematic design through final project closeout. Our experience and relationships are what differentiate JDR Engineering as we endeavor to provide a high level of service and quality.

STRATEGIC PARTNER INFORMATION

JDR ENGINEERING, INC.

Project	Project Scope
Alliant Energy Center **Expo Center – Chiller Replacement** **Project Details** Owner: Dane County Location: Madison, Wisconsin Project Cost (Approximate): $700,000 Completion Date: On-Going Services: HVAC and Electrical Contact: Brandon Braithwaite, Dane County (608) 279-8934	This project replaced an existing water-cooled chiller with new rotary water-cooled chiller. Additionally, a new secondary chilled water pump was added to provided system pumping redundancy. Lastly, the existing primary chilled water pump and condenser water were each replaced as part of building maintenance.
City County Building **Cooling Tower Replacement** **Project Details** Owner: Dane County Location: Madison, Wisconsin Project Cost (Approximate): Not Available Completion Date: April 2018 Services: HVAC and Electrical Contact: Todd Draper, Dane County Public Works (608) 267-0119	JDR Engineering provided HVAC and electrical engineering services for this project which replaced two existing cooling towers on the roof of the City County Building. • Two new cooling towers were installed to replace existing cooling towers. • New condenser water piping was installed on the roof to replace existing/aging condenser water piping. • A new cooling tower basin sweeping and condenser water cleaning system was installed to help keep condenser/tower water clean from debris.
Madison Gas and Electric **Chiller Replacement Project** **Project Details** Owner: Madison Gas and Electric Location: Madison, WI Project Cost (Approximate): $400,000 Completion Date: March, 2015 Services: HVAC Contact: Tim Bliefernicht – Manager – Facilities Management (608) 252-5687	JDR Engineering provided HVAC design and construction administration for this project which added additional and redundant chilled water cooling to the existing ice making chilled water plant. This project included: • Adding two new packaged air-cooled chillers each with a nominal 150 ton cooling capacity to support the existing ice making plant. • The new chillers were sized to handle the entire building load in the event that the ice making plant was not available for cooling. Future plans also called out for eventual removal of the ice making plant altogether. • All new primary and secondary chilled water pumps, including variable frequency drives, to replace existing aging equipment. • New glycol management system to eliminate the connection to city water. • New and additional direct digital controls to allow the new chilled water plant to serve the existing data room cooling needs.

STRATEGIC PARTNER INFORMATION

JDR ENGINEERING, INC.

Private Client

3,000 Ton Chiller Plant Update

Project Details
Owner: Private
Location: Southeastern Wisconsin
Project Cost: Private / Not Available
Completion Date: August 2017
Services: HVAC, Plumbing, Fire Protection and Commissioning
Contact: Private

The project upgraded an existing research campus chilled water plant capacity and redundancy. The scope includes the following:

Phase 1
- Develop campus chilled water flow/control schematic
- Evaluate projected master plan loads and provide recommendations for capacity change
- The existing Plant included 950 TR and 500 TR chillers
- Add (2) 750 TR chillers with Variable Speed Drives
- New Primary Pumps with 20% over-pumping ability on VFD's
- New Secondary Pumps with VFD's
- Full LonWorks integration of new chillers and VFD's
- New 3,500-amp substation for chiller plant

Phase 2
- Update campus chilled water flow/control schematic
- Update projected master plan loads and provide recommendations for capacity change
- Demolish existing 950 TR and 500 TR chillers
- Add (1) 750 TR chillers with Variable Speed Drives
- New Primary Pump with 20% over-pumping ability on VFD's
- Full LonWorks integration of new chillers and VFD's

Phase 3
- Update campus chilled water flow/control schematic
- Update projected master plan loads and provide recommendations for capacity change
- Add circulated condenser water pumping sized for future cooling tower installation.

The project scope was developed with the Owner through a detailed campus master plan. This master plan included a review of energy records, condition review of existing campus systems, life cycle cost analysis, and energy modeling. Based on their corporate long-term goal to achieve reliable chilled water supply to their facility, this project provided capacity and redundancy to allow for centralization of chilled water production to one plant. The project started with a plant that was 1,450 TR and had no redundancy. The project resulted in an N+1 redundant plant with 2,250 TR of capacity and a maximum building out the capacity of 3,000 TR.

The construction of this project was completed in August 2017. JDR Engineering provided commissioning services for the project. The controls system design included state-of-the-art energy tracking for long-term documentation of energy savings continuously.