

REQUEST FOR COMMISSIONING SERVICES

Sesquicentennial Hall University of Wisconsin - Platteville DFDM Project No. 17H1X

FOR THE STATE OF WISCONSIN
DEPARTMENT OF ADMINISTRATION, DIVISION OF FACILITIES DEVELOPMENT & MANAGEMENT
STATE ADMINISTRATION BUILDING, 101 EAST WILSON STREET,
MADISON, WISCONSIN 53703

PROJECT INFORMATION

UW-Platteville Sesquicentennial Hall project (DFDM project #17H1X) will address the instructional and research space needs of the College of Engineering, Mathematics, and Sciences (EMS) by providing much needed instructional laboratories for the Mechanical, Civil, Environmental Engineering, and Computer Science and Software Engineering programs; as well as creating computer labs, makerspaces, departmental and faculty offices, student study spaces, and other support functions.

Sesquicentennial Hall is envisioned to be approximately 100,000 gross square feet in area. It will be attached to the existing, three story Engineering Hall building located at the intersection of Longhorn Drive and Southwest Road in the South Campus section of the University of Wisconsin-Platteville campus. Engineering Hall will not be renovated as part of this project; only minor modifications will be made to it to accommodate connections for the Sesquicentennial Hall additions.

Special commissioning requirements: There are none at this time. However, there may be a decision to seek LEED certification.

The owner's project requirements are described in the Program Statement prepared by BWBR Architects, Inc. dated November 26, 2018.

The construction estimate is \$ **41,345,000** with a total project budget of \$ **55,189,000**.

Proposed Schedule

Start of Design:	January 2019
Start of Construction	November 2020
Substantial Completion	June 2022

Project Design Team

Prime A/E:	Architectural:	BWBR, Madison
Primary subconsultants:	Structural:	GRAEF, Milwaukee
	Civil:	Oneida Total Integrated Enterprises, Madison
	Landscape:	Saiki Design, Inc., Madison
	Plumbing:	AEI, Madison
	Fire Protection:	AEI, Madison
	HVAC:	AEI, Madison
	Electrical:	AEI, Madison
	A/V/IT :	Shen, Milsom & Wilke, Chicago
	Cost Estimating:	Middleton Construction Consulting, Milwaukee
	Constructability:	Hunzinger Construction, Milwaukee

Agency Contact: Douglas Stephens, Senior campus planner, UW-Platteville

COMMISSIONING SERVICES

Commissioning services will be in accordance with DFDM [Policy and Procedure Manual for A/E and Consultants](#), Section Two - Commissioning. The intent is to verify that systems and equipment are installed and performs according to the owner's project requirements, basis of design, and construction documents and that the building operator has received equipment and systems documentation and training.

The commissioning services provider (CxP) will be independent of the design team and will report directly to DFDM. DFDM expects commissioning services to commence at design phase.

Scope of commissioning activities and commissioned systems are indicated on the two attached tables.

Deliverables

Distribute the Commissioning Report as one hard copy and one electronic copy in PDF format to DFDM, the Agency and A/E.

LETTER OF INTEREST

Proposed commissioning team: Identify who will be providing commissioning services, their roles and any sub consultants.

Qualifications: Provide documentation of expertise, qualifications and descriptions of relevant past projects for the consulting firm and for the individual(s) who will be performing the services.

COMMISSIONING ACTIVITIES / SERVICES

The following activities correspond to DFDM's Commissioning policy and procedures that can be found in Section Two of the [Policy and Procedure Manual for A/E and Consultants](#). Reference the manual for a more detailed description of the required services.

Commissioning Requirement		Cx Policy Reference	Table 2.1 & 2.2 Ref.
Design Phase			
<input checked="" type="checkbox"/>	Review Basis of Design/Design Concept to evaluate if construction documents meet Owner's Project Requirements and DFDM guidelines.	2.E.2.a	4.
<input checked="" type="checkbox"/>	Provide input to A/E for inclusion in the Construction Verification Checklists and Functional Performance Test forms into the project manual.	2.E.2.b	5.
<input checked="" type="checkbox"/>	Review Preliminary Design documents to evaluate and comment on the design meeting the Owner's Project Requirements and project goals.	2.E.2.b	5.
<input checked="" type="checkbox"/>	Review Final Design documents to ensure incorporation of preliminary review comments, elimination of construction ambiguities and completeness of the Construction Verification Checklists and Functional Performance Test forms.	2.E.2.b	5.
<input checked="" type="checkbox"/>	Review Bid documents for inclusion of DFDM & CxP comments.	2.E.2.b	5.
<input checked="" type="checkbox"/>	Develop a Commissioning Plan identifying the commissioning team, procedures, system tests, test sampling, milestones and responsibilities.	2.E.2.c	8.
Construction Phase			
<input checked="" type="checkbox"/>	Attend and participate in the Construction Progress Meetings and lead the commissioning team of contractors and consultants. Provide Commissioning Plan overview at the Pre-construction Conference.	2.E.3.a/c	10.
<input checked="" type="checkbox"/>	Review Contractor's Quality Control Plan, comment to DFDM and incorporate into the Commissioning Plan.	2.E.3.a	9.
<input checked="" type="checkbox"/>	Conduct regularly scheduled Commissioning Meetings and regularly update the Commissioning Plan tracking status and responsibilities.	2.E.3.d	9.
<input checked="" type="checkbox"/>	Enter construction, functional performance, design discrepancies, etc. into the WisBuild Issues List. Track the issues to help move the issue to correction. When Contractor, A/E or DFDM indicates an issue is corrected, verify and close the issue within WisBuild.	2.E.3.e	11.
<input checked="" type="checkbox"/>	Perform field checks of the Contractor completed Construction Verification Checklists. Enter non-conformance items into the Issues List. If there is more than a 10% deficiency, Contractor to correct and CxP to recheck.	2.E.3.f	12.
<input checked="" type="checkbox"/>	Establish sampling protocol for Functional Performance Testing. Witness, record and document the testing and report any deficiencies on the Issues List.	2.E.3.g	13.
<input checked="" type="checkbox"/>	Review HVAC testing, adjusting and balancing report, field verify with contractor, report deficiencies on the Issues List, track issues to resolution, verify corrections and close the Issues.	2.E.3.h	14.
<input checked="" type="checkbox"/>	Review Operations and Maintenance Manuals and provide comments to the A/E so they can include with the A/E's review comments.	2.E.3.i	16.
<input checked="" type="checkbox"/>	Attend Agency training sessions, provide and collect attendee evaluation forms and evaluate training to ensure Agency training is adequate.	2.E.3.k	19.
<input checked="" type="checkbox"/>	Complete draft Commissioning Report and distribute to DFDM, A/E, Contractors and Agency Contact.	2.E.4.a	19.
Post Construction Phase			
<input checked="" type="checkbox"/>	Witness the Seasonal Functional Performance Testing, document the results and enter deficiencies into the Issues List and provide follow-up through closure.	2.E.4.c	23.
<input checked="" type="checkbox"/>	Within 10 months of substantial completion coordinate and facilitate a substantial completion review meeting and document findings to complete the final commissioning report.	2.E.4.d	22.
<input checked="" type="checkbox"/>	Complete final Commissioning Report and distribute to DFDM, A/E and Agency Contact.	2.E.4.c	21.
Optional Commissioning Activities/Services			
<input type="checkbox"/>	Complete an Energy Modeling Review	2.E.4.d	24.
<input type="checkbox"/>	Complete a M&V One-Year Report	2.E.4.d	24.
<input type="checkbox"/>	Complete Systems Manual	2.E.3.j	17.
<input type="checkbox"/>			

COMMISSIONED SYSTEMS - The following systems will be commissioned:

Divisions 3 thru 14 - General Construction

- Concrete
- Masonry
- Waterproofing
- Thermal Protection
- Building Envelope Sealing and Infiltration
- Roofing
- Doors and Windows
- Division 11 Equipment
- Division 13 Equipment
- Elevators
-
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Division 21 - Fire Suppression

- Sprinkler and Standpipe Systems
- Fire Pumps and Controls
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Division 22 - Plumbing

- Domestic Water Systems
- Domestic Hot Water Systems*
- Plumbing Equipment
- Plumbing Fixtures
- Lab and Healthcare Gas and Vacuum Systems
- Laboratory and Healthcare Pure Water Systems
- Fuel Piping Systems
- Solar Thermal Systems
- Food Service Equipment
- Swimming Pool Equipment
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Division 23 – HVAC*

- Temp. Control and Building Automation Systems*
- Testing and Balancing
- Variable Frequency Drives
- Piping Systems, Valves and Specialties
- Pumps
- Ductwork, Duct Accessories and Casing Systems
- Air Inlets and Outlets
- Filtration
- Coils and Heat Exchangers
- Fans and Air Handlers
- Compressors and Condensing Units
- Chillers and Cooling Towers
- Computer Room Air Conditioning Equipment
- Heat Pumps
- Dry Coolers and Heat Rejection Equipment

- Boilers and Fuel Fired Equipment
- Boiler Feedwater and Blowdown Systems
- Terminal Units
- Fan Coils, Unit Ventilators, Unit Heaters
- Energy Recovery Systems
- Humidifiers
- Smoke Control Systems
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Division 26 – Electrical

- Lighting Controls*
- Lighting Fixtures and Contactors
- Exterior Site Lighting Controls
- Conductors, Conduit, Raceway and Cable Tray
- Grounding and Bonding
- Switchboards and Panelboards
- Motor Starters and Motor Control Centers
- Disconnect Switches and Circuit Breakers
- Wiring Devices, Switches, Receptacles, Etc.
- Generators and Transfer Switches
- Metering
- Surge Protective Devices
- Transformers
- Unit Substations
- Medium Voltage Switchgear
- Medium Voltage Cable
- Fire Alarm Systems
- Communication Cabling, Outlets and Equipment
- Audio/Visual Systems
- Access Control Systems
- Video Surveillance Systems
- Nurse Call Systems
- Solar Photovoltaic Systems
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Divisions 32 & 33 – Exterior Improvements & Utilities

- Soil Preparation, Seeding and Plantings
- Bioretention and Bioinfiltration Systems
- Correctional Fencing
- Water Distribution Systems
- Sanitary Sewer and Storm Drainage Systems
- Steam and Condensate Systems
- Chilled Water and Hot Water Systems
- Fuel Storage and Distribution Systems
- Geothermal Well Systems
- Renewable Energy Systems*
- Underground Storm Water Retention
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Systems followed by an asterisk (*) are required to be commissioned in LEED® projects.