POSITION DESCRIPTION

August 2026

Common Name:	ELECTRICAL ENGINEERING PROJECT MANAGER
Classification:	CAPITAL PROJECTS PRINCIPAL MANAGEMENT
Team / Section:	Electrical Team / Engineering Section
Bureau / Division:	Architecture and Engineering / Facilities Development

POSITION SUMMARY

[Position Specific Information & Responsibilities]
This is a professional engineering position which manages, directs and leads the activities of architects, engineers, contractors and suppliers in the delivery of construction projects. This position is responsible for a broad range of electrical engineering project management functions on capital improvement projects authorized by the State of Wisconsin Building Commission. The projects this position supports include medium voltage electrical distribution systems, building power and lighting, security, life safety, generator systems, fire alarm, data and telecommunications systems. This position has the authority to commit funds.

The primary responsibilities of this professional engineering position include managing complex infrastructure and facilities projects from developing project scope, design through construction, the review and analysis of designs prepared by outside consultants, providing technical support to state agencies, providing site inspections and troubleshooting analysis, developing and maintaining design guidelines and specifications, and developing design and bidding documents. The position is a member of the Electrical Team and will participate in the team's assignments and provide other services to the Division and other state agencies as directed.

This position requires engineering experience, knowledge and skills for effective decision making and management of complex technical project issues. Wisconsin Registration as a Professional Engineer is preferred for this position which is responsible for providing professional services for investigation, evaluation, planning, design or responsible supervision of construction where the safeguarding of public health and safety is required.

[Team/Section Specific Information]
Under the general supervision of a Team Leader in the Engineering Section, the incumbent functions with a high degree of independence within the framework of laws, rules and general policy of the Division and State. The Engineering Section and Electrical Team is responsible for providing efficient enterprise electrical engineering services to stakeholders including agencies, contractors and consultants for a wide range of electrical, fire alarm, security and telecommunication projects.

[Division/Bureau Specific Information]
Wisconsin Statute 16.85 requires the department “To take charge of and supervise all engineering or architectural services or construction work, as defined in s. 16.87, performed by, or for, the state, or any department, board, institution, commission, or officer of the state…”. As staff to the State of Wisconsin Building Commission, the Division of Facilities Development carries out this mission through managing a statewide planning, design and construction program for a portfolio of over 6800 facilities serving all agencies. Facilities include research facilities, higher education, K-12 schools, performance, athletic, parking, detention, military, historic, skilled nursing, treatment (medical, psychiatric, developmental disability), agriculture, process (fish rearing, food service, laundry, metal industries, etc.), recreation, dams, wastewater treatment, boiler/chiller plants, wells, roads and parking lots. On average, the Division is responsible for a $1 billion biennial building program with 2000 active projects at any given time.

This position is part of an extensive and highly diverse central architectural, engineering, project delivery and construction oversight program within the Bureau of Architecture and Engineering. The Bureau and

this position is responsible for development and application of State Building Program technical standards, guidelines and policies; managing contracts and directing the activities of architects, engineers, suppliers and contractors.

(Time%) GOALS AND RESPONSIBILITIES

A. (35%) PROVIDE CAPITAL CONSTRUCTION PROJECT MANAGEMENT SERVICES FOR ELECTRICAL PROJECTS.

A1. **[Project]** Manage scope, schedule and budget of assigned projects to ensure design and construction are completed in accordance with the approved project request, and in compliance with applicable codes, laws, regulations and Division Policy and Procedures.

A2. **[Management]** Manage, direct and lead teams made up of A/E firms, consultants, contractors, construction management firms, agency representatives and users and other DFD staff in the successful implementation and completion of projects.

A3. **[Portfolio]** Simultaneously manage, direct and lead multiple assigned projects of various sizes and complexity for state agencies served by the Division of Facilities Development including but not limited to UW System, Corrections, Health Services, Natural Resources, Military Affairs, Administration, Historical Society, State Fair Park, Transportation, Public Instruction and Veterans Affairs.

A4. **[Scope]** Manage the design development of project programs and scope, including technical requirements, directing A/E consultants and technical DFD staff. Serve as the single point of responsibility for delivery of project scope within DFD requirements and Agency programs. Manage the design and construction process to deliver cost effective solutions that meet the needs and requirements of the project.

A5. **[Schedule]** Manage, direct and lead the development of the project schedule, including task planning, milestones and critical path. Report on project status and manage project progress to ensure the project is completed in accordance with the approved schedule.

A6. **[Budget]** Manage and control the development of the project budget and project expenditures to ensure the project is completed within the authorized budget. Review all project expenditures and payment requests and approve after verifying that completed work meets contract requirements.

A7. **[Contracts]** Manage the development of A/E and contractor contract scope, lead A/E contract negotiations and enforce A/E and Contractor contract compliance. Manage, direct and lead project stakeholders, including the A/E and contractors, to deliver projects to meet Division requirements and Agency programs.

A8. **[Change]** Manage project changes by negotiating, documenting, reviewing and approving all changes to A/E and construction contracts in accordance with DFD Policy and Procedures.

A9. **[Approval]** Review Agency project requests, modify as needed and make recommendations for the approval of requested projects.

A10. **[Coordination]** Collaborate on project management activities within the Team, Section, Bureau and Division to ensure projects are delivered consistently and efficiently under general supervision and according to DFD Policy and Procedures.

B. (30%) REVIEW OF DESIGN AND ANALYSIS WORK PREPARED FOR CAPITAL CONSTRUCTION PROJECTS FOR ALL STATE AGENCIES.

B1. **[Document Quality]** Provide critical detailed technical review of electrical, fire alarm, security and telecommunication drawings and specifications prepared by consultants, agencies and DFD staff for completeness, clarity, constructability, coordination between trades, and code compliance.

B2. **[Concepts]** Provide critical detailed technical review of designs to insure that electrical, fire alarm, security and telecommunication systems and concepts are technically sound, appropriate for the application, cost effective, energy efficient and compliant with DFD standards.

B3. **[Complexity]** Evaluate proposed electrical, fire alarm, security and telecommunication systems, materials and equipment to determine if they represent the level of quality and sophistication appropriate for the program and the institution's ability to operate and maintain.

B4. **[Coordination]** Coordinate design review with reviews performed by other DFD specialized technical staff and agency staff to ensure outstanding issues are addressed and reviews provide consistent design direction to the A/E.

B5. **[Overall Review]** Provide a detailed review of the bidding and contract documents and a general overall review of all technical documents for projects managed.

B6. **[Reports, Studies and Analysis]** Provide a detailed technical review of analysis work and reports completed by consultants, agencies and DFD staff.

B7. **[Formal Comments]** Prepare written review comments and enter them into the DFD database. Meet with and/or communicate with consultants and agency staff to resolve concerns and conflicts and to clarify review comments and directives.

B8. **[Evaluate AE]** Evaluate the quality and completeness of each consultant's work and enter evaluation scoring in the DFD database.

C. (10%) PROVIDE TECHNICAL SUPPORT TO STATE AGENCIES AND DFD.

C1. **[Projects and Programs]** Provide technical data, recommendations and budgets necessary to assist agencies with the preparation of programs for presentation to the State of Wisconsin Building Commission. Also provide technical expertise to agencies for development of project requests for the Small Project Program.

C2. **[Best Practices]** Provide education and insight to agency staff on new products, methods and operating procedures to keep them abreast of the latest technology advances.

C3. **[Sustainability]** Investigate and evaluate new products, systems and operating methods that will reduce energy demands in state buildings. Provide recommendations for improving energy efficiency and encourage energy conservation in all state owned facilities.

C4. **[Operations]** Assist agencies in developing reliable operating plans, in resolving operating problems and in the development of operations and maintenance standards.

C5. **[Emergency Response]** Respond to agency requests for emergency technical assistance. Provide professional expertise and recommendations in emergency situations to protect public health, safety and state property and develop remedial solutions.

C6. **[Codes]** Provide technical assistance to agencies on building and safety code compliance and enforcement requirements.

C7. **[Project Requests]** Review agency project requests and make recommendations on project need, scope, schedule and budget.

C8. **[Issue Resolution]** Provide technical expertise to DFD Project Managers when required to arbitrate design and construction issues.

C9. **[Construction]** Assist and support DFD Construction Representatives in solving construction problems and resolving project conflicts.

C10. **[Capital Budget]** Evaluate biennial project requests from all agencies. Analyze need, scope, schedule and budget. Formulate recommendations and adjust scope and budget to match recommendations. Rank project priority within overall requests by agency.

D. (10%) PROVIDE ON-SITE FACILITY EVALUATIONS TO STATE AGENCIES.

D1. **[Evaluation]** Provide on-site examinations of state owned facility failures and/or problems as assigned and analyze their causes and identify deficiencies. Provide professional expertise and recommendations to protect public health and safety, and state property.

D2. **[Agency Requests]** Analyze and confirm code violations or deficiencies referred to in agency project requests. Evaluate existing physical conditions, and make recommendations.

D3. **[Evaluation]** Evaluate buildings, components and/or sites and determine feasibility of proposed projects. Provide appropriate recommendations and budgets.

D4. **[Preservation]** Evaluate historic buildings. Direct or prepare condition reports and make recommendations relative to demolition, stabilization, preservation, restoration, renovation, rehabilitation and adaptive reuse. Provide recommendations for feasibility and cost.

D5. **[Planning]** For the purpose of planning, provide comprehensive investigation and evaluation of existing deficiencies and agency needs. Establish program requirements and scope of work, which addresses problems and needs consistent with DFD policy.

D6. **[Troubleshooting]** Provide on-site examination and analysis of design, installation or operational problems of new and existing facilities. Determine appropriate corrective measures. Provide recommendations to agency and DFD staff involved.

D7. **[Energy Conservation]** Periodically inspect and monitor performance of energy consuming equipment and energy conservation features. Review total performance and make recommendations for improvements or corrective action where necessary.

D8. **[Risk Avoidance]** Review insurance carrier, Risk Management and similar reports. Analyze reports, provide technical advisory support and take steps necessary to attain safe, code compliant conditions.

E. (10%) DEVELOP, ANALYZE, REVIEW AND UPDATE STANDARDS, SPECIFICATIONS AND GUIDELINES.

E1. **[Content Manager]** Manage the content of all technical documents in assigned area of expertise. This includes writing, editing, and proofreading technical content and maintaining document standards.

E2. **[Standards]** Develop and maintain technical standards, design guidelines, master specifications and details, and serve as the Content Manager for these documents. Review and recommend updates and changes to all divisions of the master specifications.

E3. **[Expertise]** Research and evaluate new techniques, methods, materials, products and equipment in specific assigned areas of technical expertise. Recommend new processes, delivery methods, products, equipment and systems that will provide improved project delivery, reliabilities, reduced maintenance, greater durability, longevity and energy efficiency in new and existing state facilities. Expand personal knowledge base to be recognized as an expert in the design and construction industry. Utilize experience from past projects by incorporating lessons learned from failures and successes.

E4. **[Update]** Update and keep current technical design requirements, standards, and master specifications for specific assigned areas of technical expertise. Revise or delete incorrect, obsolete, or otherwise undesirable technical design requirements, standards, and master specifications.

E5. **[Laws and Regulations]** Research laws, codes, and regulations, and make recommendations to update DFD standards, specifications and guidelines for compliance with the requirements. This task requires knowledge of newly adopted codes and regulations passed by state and federal authorities.

E6. **[Resource]** Present technical knowledge to DFD staff, agencies, consultants and others as appropriate and necessary to insure high quality capital projects. Serve as the bureau technical resource and provide guidance and support to division staff, A/E consultants and contractors for assigned areas of technical expertise.

F. (5%) PROVIDE A/E DESIGN AND CONSTRUCTION DOCUMENTS FOR CAPITAL PROJECTS.

F1. **[Requirements]** Plan and determine the requirements for project specific bidding documents including but not limited to project specification manual and drawings.

F2. **[Design]** Develop design documents for projects which can be completed more economically in-house, where in-house expertise is required, where necessary to meet project schedules, or address emergency situations.

F3. **[Drawings]** Provide drawings that set forth the requirements for construction including but not limited to specific details, materials, products, and finishes.

F4. **[Specifications]** Provide specifications that present written requirements for materials, equipment, and construction systems as well as standards for products, workmanship, and the construction services required to produce the work. Include bidding requirements, contract forms, and conditions of the contract.

F5. **[Addenda]** Provide addenda as required during the bidding process.

F6. **[Bidding Requirements]** Provide project specific Title Page, Table of Contents, Invitation to Bid, Instructions to Bidders, Bid Forms, Supplementary General Condition, Prevailing Wage Rate Determination, General Requirements, Construction Waste Management, and other project specific bidding requirement information. Include site security and access requirements and limitations.

F7. **[Special Requirements]** Identify all special requirements. Recommend modifications to standard documents to meet specific needs of the project. Include all special requirements for any technical section of the specifications.

F8. **[Division of Work]** Clearly define divisions of work for the project including architectural, structural, fire protection, plumbing, mechanical, electrical, civil, landscape, interior design, asbestos abatement, other specialty work and work by owner.

F9. **[Quality]** Coordinate documents to clearly and consistently describe what is to be built. Issue complete contract documents including all necessary details required to bid and complete the construction that will result in a project meeting approved scope, schedule, and budget.

F10. **[Construction Administration]** Provide point of contact to support construction phase technical design oversight of project including reviewing submittals and shop drawings, and answering RFI's. Submit documents to regulatory agencies as required. Make final inspections at completion of project and provide record documents at project completion.

KNOWLEDGE, SKILLS AND ABILITIES

1. Knowledge, skills and demonstrated experience in complex and diverse electrical engineering design and construction work including medium voltage electrical distribution systems, building power and lighting, security, life safety, fire alarm, data and telecommunications systems.

2. Knowledge of and experience with electrical, fire alarm, security and telecommunication design and construction standards, construction methods, materials, building systems and codes. Ability to read and interpret building and building system plans, details, schedules and specifications. Skills in building site inspections and building systems troubleshooting and analysis.

3. Demonstrated skills and experience in effective construction project management including project development and adherence to scope, schedule, and budget. Ability to manage, direct and lead A/E firms, consultants, contractors, construction management firms and stakeholders. Ability to manage multiple complex construction projects simultaneously.

4. Knowledge across all disciplines and technical areas of design and construction including electrical engineering, mechanical engineering, plumbing and fire protection, civil engineering, structural engineering and architecture.

5. Experience and ability to identify and analyze complex technical infrastructure deficiencies, develop engineering solutions, evaluate options and implement solutions.

6. Skills and demonstrated experience in effective project leadership, team building, setting achievable goals and expectations, assigning work, establishing priorities and capitalizing on team strengths, monitoring workload assignment progress and performance.

7. Knowledge of and ability to manage architect/engineer and construction contracts.

8. Skills in interpersonal, communications, negotiation and conflict resolution skills.

9. Proficiency in computer skills including word processing, spreadsheet applications, E-Mail applications and document management.