State of Michigan Civil Service Commission

Capitol Commons Center, P.O. Box 30002 Lansing, MI 48909 Position Code

1. TRALSPL2B90R

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position. 2. Employee's Name (Last, First, M.I.) 8. Department/Agency TRANSPORTATION CENTRAL OFFICE 3. Employee Identification Number 9. Bureau (Institution, Board, or Commission) **Bridges and Structures** 4. Civil Service Position Code Description 10. Division TRANSPORTATION ENGLIC SPL 2 Structure Preservation and Management 5. Working Title (What the agency calls the position) 11. Section Statewide Ancillary Structures Development Specialist Structure Preservation 6. Name and Position Code Description of Direct Supervisor 12. Unit O'NEILL, MICHELLE L; ENGINEER MANAGER LICENSED-**Ancillary Structures** 7. Name and Position Code Description of Second Level Supervisor 13. Work Location (City and Address)/Hours of Work ZAKRZEWSKI, BRIAN D; STATE ADMINISTRATIVE 6333 Old Lansing Rd, Lansing MI 48917 / 7:30 am - 4:30 pm MANAGER-1 (hours may vary)

14. General Summary of Function/Purpose of Position

The Bureau of Bridges and Structures (BOBS) serves as the statewide structural authority for MDOT owned ancillary structures tasking the ancillary structure's team with efficient and innovative design, construction, and active preservation of our State of Michigan structural assets throughout the Great Lakes State. This position serves as the Department's statewide ancillary structures development specialist and consultant project manager in compliance with federal legislation requirements. Ancillary structures include retaining walls, sound walls, cantilever signs, truss signs, Intelligent Transportation Systems (ITS) structures, lighting towers, non-frangible and frangible lights, strain poles, mast arms, culverts, wood poles, and traffic signals. This position serves as the statewide specialist for ancillary structures for development including inspection, asset management, and design activities. This includes preparing plans, specifications, special studies, and reports and performing research and training. Review preliminary and final plans associated with ancillary structure, road, and bridge design projects and perform complex assignments requiring knowledge of structural capabilities, limitations, and proper applications of materials related to design, inspection, and inventory. Manage consultants for innovative consultant contracts including Ancillary Structure Program Manager Consultant Contract responsible for coordination of Ancillary Structures design, inspection, and inventory development activities. Serve as the statewide staff specialist for ongoing management of the annual ancillary structure program ensuring strategic direction and progress toward ancillary structure program performance goals.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary: Percentage: 30

Serve as the statewide specialist for ancillary structures for development including: inspection, asset management, and design activities. This includes preparing plans, specifications, special studies, and reports and performing research and training. Review preliminary and final plans associated with ancillary structure, road, and bridge design projects and perform complex assignments requiring knowledge of structural capabilities, limitations, and proper applications of materials.

Individual tasks related to the duty:

- Provide guidance, performance measurements of assigned tasks, quality control review and direction to various work groups for projects including specifications, special provisions, and supplemental specification for various highway projects related to ancillary structure design, inspection, and inventory development.
- Responsible for the engineering and calculations for ancillary structures as outlined in the American Association of State Highway Transportation
 Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design Specifications, the AASHTO LRFD Bridge Construction
 Specifications, and the AASHTO's LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals to ensure
 statewide alignment throughout MDOT Regions, Bureaus, and Sections.
- Ensure regional and statewide alignment by maintaining expert knowledge base to function as the statewide resource on state and national best
 practices for development of ancillary structures. Develop and maintain MDOT standards, materials, and specifications for design and plan
 development.
- Support MDOT Specialty areas (Signals, Signing, ITS) in the maintenance of MDOT standards, materials, and specifications for design and plan
 development with current code requirements.
- Statewide expert for complex and unusual design projects for ancillary structures managing consultant project plan development in support of region, bureaus, and sections.
- Review, prepare, analyze, interpret, and ensure accuracy for final plans ensuring decisions are made consistently and in line with statewide
 policies.
- Administer projects and program areas for the design and development of ancillary structures monitoring the phases of work ensuring plans and processes are followed while ensuring compliance with production schedules.
- Monitor activities on multiple development projects ranging from complex to simple ancillary structures to ensure effective operation and progress.
- Participate and conduct on-site-reviews, Plan Review, and meetings to receive input. Implement recommendations in project plans.
- Oversee and ensure the workflow and quality by providing direction to technicians and engineers regarding adherence to section methods and procedures for ancillary structures plans and specifications.
- Keep up to date with innovations in ancillary structure design and construction and implement best practices into assigned project designs, inspection, and inventory.
- Work with appropriate staff within MDOT to develop and maintain an inventory of ancillary structures.
- Coordinate inspection and design of ancillary structures.
- Participate on Ancillary Structure Request for Action (RFA) Committee and Statewide Ancillary Structures Steering Committee ensuring deadlines and quality of response to statewide projects.
- Perform quality assurance of the ancillary structure inspections and inventory management.
- Make recommendations to improve the ancillary structure inspections and inventory management based on quality assurance (QA) findings to appropriate work groups including regions, and local and state agencies.
- Develop and implement plans to continuously improve ancillary structure inspections and inventory management.

Duty 2

General Summary: Percentage: 30

Serve as the Project Manager for innovative consultant contracts (such as Ancillary Structure Program Manager Consultant Contract) coordinating Ancillary Structures development activities.

Individual tasks related to the duty:

- Serve as the Project Manager for innovative consultant contracts (such as Ancillary Structure Program Manager) to assist in the asset management of ancillary structures coordinating development functions including: inspection, asset management, and design and making recommendations to ensure timely completion and MDOT specifications are being followed.
- Identify tasks needed to meet the Ancillary Structure Strategic Goals. Make recommendations to Structure Preservation Engineer as to which
 tasks should be consulted based on available MDOT resources.
- Develop scope of service for innovative consultant contracts for providing management of ancillary structures for inspections, inventory, and asset management.
- Review price proposal with selected consultant and coordinate negotiations.
- Lead or participate on consultant selection teams reviewing scope of services through to selections of services.
- Administer and manage innovative consultant contracts for ancillary structures including inspection, inventory, asset management, and design
 ensuring cost allocations are within set parameters, deadlines are met, and quality of data for inventory reporting.
- Review and evaluate work prepared by contract consultants to ensure compliance with specifications, policies, and standards of MDOT.
- Review and approve payment, invoices, and progress reports and make recommendations for payment of services completed.

- Compile and maintain all vendor contract records.
- Prepare an evaluation of the Consultant's performance on the project. This includes assembling intermediate performance documents that were developed during the project progress. This includes any subconsultants.
- Represent MDOT in building positive working relationships with consultant partners.
- Conduct expert review and approve final project plans and specifications for the Department. Sign Plan Sheet as Project Manager of project.
- Program jobs in Job Net, make change requests as necessary and submit in Phase Initiator (PI) as required.

Duty 3

General Summary: Percentage: 30

Serve as the statewide staff specialist for ongoing management of the annual ancillary structure program. Monitor strategic direction and progress toward ancillary structure program performance goals.

Individual tasks related to the duty:

- Perform analysis and prepare reports communicating the ongoing ancillary structure program strategic direction and network level condition status to bureaus, regions, and local agencies.
- Develop guidelines, policies, and procedures for the Ancillary Structures Capital Program ensuring statewide alignment for MDOT area, regions, and local agencies.
- Coordinate with Regions in development and implementation ensuring the incorporation of the Ancillary Structure needs into their existing capital programs.
- Assemble a constrained, prioritized annual ancillary program project list based on risk-based strategies.
- Regularly evaluate the effectiveness of the ancillary structure capital program and recommend modifications.
- Respond to inquiries concerning the Department's ancillary structure capital program from MDOT areas, regions, and local agencies.
- Provide technical expertise and guidance to MDOT areas, regions, and local agencies relative to ancillary structure strategies (mix of fixes) and fix life.
- Review Program Revision Requests (change requests) and coordinate those requests for the appropriate System Manager's approval.
- Monitor and recommend changes to MDOT leadership for the ancillary structure budgets to ensure template allocation constraint.
- Work with MDOT Transportation Planning personnel to plan and coordinate the annual Ancillary Structure project selection.
- Maintain a high degree of knowledge and working experience relative to MiBridge and AASTHOWare BrM.
- Maintain a high degree of knowledge and working experience relative to project programming software such as JobNet, SMART, and SIGMA.
- Maintain a high degree of knowledge and working experience relative to ArcGIS, Fieldmaps, and Esri Solutions.

Duty 4

General Summary: Percentage: 5

Conduct liaison activities with industry representatives or suppliers pertaining to design and inspection of ancillary structures.

Individual tasks related to the duty:

- Coordinate and conduct liaison and training activities with government agencies; private individuals; and bureaus, divisions, transportation service centers (TSC's), and other sections within MDOT to obtain and disseminate information for preparation of plans and specifications.
- Contact outside agencies, local governments, Federal Highway Administration (FHWA) division engineers, and regional FHWA engineers on special projects relating to statewide design of ancillary structures. Maintain records of these contacts.
- Coordinate and conduct liaison and training activities with private industry such as ancillary structure material producers and manufacturers.
- Participate on state and national committees and task forces related to ancillary structures inspection, inventory, asset management, and design.
- Research best practices among other states and agencies in the areas of ancillary structure development. Develop and maintain standard details, special provisions, and design criteria. Educate and support other MDOT staff developing ancillary structures projects.
- Participate on the New Materials Committee and collect data relevant to the successful output of ancillary structure design.

Duty 5

General Summary: Percentage:

Other duties as assigned by the supervisor.

Individual tasks related to the duty:

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

This position requires making decisions based on structural/soil envelope/hydraulic/design knowledge and experience affecting the progress of design projects, quality of inspections, and accurate statewide inventory of ancillary structures where consequences of inaction effects the quality of these structures jeopardizing the safety of the motoring public.

17. Describe the types of decisions that require the supervisor's review.

Decisions that would impact departmental policy or standards involving the establishment of departmental priorities.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Work involves normal physical effort to sit, walk, or stand at will; exposure to dirt, fumes, heavy and high-speed traffic, or adverse weather conditions; bending, stooping, and reaching for plans; carrying heavy or bulky loads; sitting for long periods of time in front of a computer; and overtime and heavy workloads working with specific deadlines. Must be able to communicate both orally and in writing. Occasional field reviews of proposed or active road/bridge construction projects requires walking over irregular terrain. Must have corrected vision to read plans or perform field related duties. Valid Michigan driver's license is required.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

N Complete and sign service ratings.

N Assign work.

N Provide formal written counseling.

N Approve work.

N Approve leave requests.

N Review work.

N Approve time and attendance.

N Provide guidance on work methods.

N Orally reprimand.

N Train employees in the work.

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes.

23. What are the essential functions of this position?

Serve as the statewide specialist for ancillary structures for development including: inspection, asset management, and design activities. This includes preparing plans, specifications, special studies and reports and performing research and training. Review preliminary and final plans associated with ancillary structure, road, and bridge design projects and perform complex assignments requiring knowledge of structural capabilities, limitations, and proper applications of materials. Manage consultants for innovative consultant contracts (such as Ancillary Structure Program Manager Consultant Contract) to assist in Ancillary Structures development activities. Serve as the statewide staff specialist for ongoing management of the annual ancillary structure program. Monitor strategic direction and progress toward ancillary structure program performance goals.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

25. What is the function of the work area and how does this position fit into that function?

The work area's function is life cycle management of ancillary structures. This position serves as the specialist for the development portion of that life cycle including inspection, inventory, planning (project selection and prioritization), and design.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of a Bachelor of Science degree in engineering.

EXPERIENCE:

Transportation Engineering Licensed Specialist 13

Four years of professional experience equivalent to a Transportation Engineer, including two years equivalent to a Transportation Engineer P11 or one year equivalent to a Transportation Engineer 12 or Transportation Engineer Licensed 12

KNOWLEDGE, SKILLS, AND ABILITIES:

Thorough knowledge of:

- MDOT design policies, procedures, and practices.
- Materials, methods, and techniques used in the design, construction, and maintenance of highways, bridges, and related structures.
- Procedures and practices applied in the inspection and testing of materials in highway and bridge construction and the design of such materials.

Ability to:

Communicate effectively in a professional manner.

CERTIFICATES, LICENSES,

REGISTRATIONS:

- Possession of a valid Michigan driver's license.
- Michigan licensure as a registered professional engineer.

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.	
Supervisor	Date
TO BE FILLED OUT BY APPOINTING AUTHORITY	
Indicate any exceptions or additions to the statements of employee or supervisors. None	
I certify that the entries on these pages are accurate and complete.	
KELSEA COLE	1/23/2023
Appointing Authority	Date
I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.	
Employee	Date