# State of Michigan Civil Service Commission

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

1. TRALSPL2A18R

## **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. 8. Department/Agency 2. Employee's Name (Last, First, M.I.) 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 Design 5. Working Title (What the agency calls the position) 11. Section Project Manager 6. Name and Position Code Description of Direct Supervisor 12. Unit MAHDAVI, ALI; ENGINEER MANAGER LICENSED-3 Design Squad #4 - Mahdavi 13. Work Location (City and Address)/Hours of Work 7. Name and Position Code Description of Second Level Supervisor WAGNER, BRADLEY; STATE ADMINISTRATIVE 425 W Ottawa Street, Lansing MI 48909 / 7:30-4:30 M-F (or MANAGER-1 as approved by supervisor)

## 14. General Summary of Function/Purpose of Position

The Bureau of Bridges and Structures (BOBS) serves as the statewide bridge authority for both MDOT owned bridges as well as local agency bridges tasking every BOBS team member with efficient and innovative design, construction, and active preservation of our State of Michigan structural assets throughout the Great Lakes State.

This position functions as a statewide specialist to manage the plan development process of projects varying from complex to simple for Bridge Rehabilitation, Bridge Replacement or New Bridge Construction as prepared by contracted Consultant Design Professionals or in-house unit projects. Consultant coordination duties are the primary responsibility, however, this position will assist in the design of the most complex and unusual design projects assigned to the design unit including preparation of proposal material, review of project related documents, and checks plans, as available. Oversees the work activities of professional transportation engineers.

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: 40

Manage multiple consultants employed to perform design of MDOT bridge rehabilitation, replacement or new construction to assure the work is done in conformance with Design Standards and practices, staying within the contract schedule and budget, and assembling the bids letting package

#### Individual tasks related to the duty:

- Schedule, attend and facilitate meetings such as project kick off meetings, utility meetings, Plan Review meetings, Omissions and Errors Meetings.
- Track the project progress toward meeting the schedule requirements. Communicate both in writing and verbally with the consultant to keep the project on schedule.
- Review the plans and specifications at key milestones to assure the quality of the documents.
- Communicate project status to MDOT management through written and oral project data. Addresses project deficiencies in writing to the Consultant.
- Review and approve progress payment invoices to assure requests for payment correlate to work performed.
- Approve final project plans and specifications for department for construction letting. Sign Plan Sheet as Project Manager of project. Requires State of Michigan Professional Engineer's License.
- Prepare an evaluation of the consultant's performance on the project. This includes assembling of any intermediate performance documents that were developed during the project progress.
- Provide technical assistance to consultants and serves as liaison between MDOT Consultant and MDOT.
- · Review alternative designs, when appropriate, and make recommendations to management.

Duty 2

General Summary: Percentage: 40

Prepare and review the design of bridge projects of various complexity, normally on most complex and unusual design projects assigned to the unit. Prepare proposal material, review project related documents, and check final plans. Oversee work activities of professional Transportation Engineers. Assist unit supervisor in the review and coordination of the unit projects.

#### Individual tasks related to the duty:

- Perform the more complicated and unusual design projects.
- Prepare cost comparisons of alternative bridge design studies, and prepares engineer estimates for projects.
- Review bridge plans, special designs, and utility conflicts for coordination with the unit's project.
- Participate in on-site reviews, Plan Review and Omission/Errors (OEC) meetings and receive input. Implement recommendations into project plans.
- Access and use design computer programs utilizing engineering workstation and personal computers.
- Assist the unit supervisor overseeing the work, oversee and ensure the work quantity and quality flow by directing the engineer's adherence to methods and procedures.
- Train subordinate engineers in various phases of bridge design, plan preparation and reviews work assignments.
- Assist in keeping unit records, estimating person-hour requirements, setting dates for completing phases of work and preparing status of plans. Advise the unit supervisor on the progress being made to assure compliance with production schedules.
- Check and review final plans for accuracy and completeness.

### Duty 3

General Summary: Percentage: 10

Develop multiple scopes of work statements and budgets for trunkline bridge rehabilitation or new bridge construction projects to be prepared by contracted Consultant.

## Individual tasks related to the duty:

- Develop a scope of work document that reflects the identified work in the project concept statement.
- Develop an estimate of the person hours required to perform the identified work in the scoping document.
- Select an Indefinite Delivery Consulting Firm or begin the process for requesting proposals from Consulting Firms for projects with Preliminary Engineering costs estimated to be greater than one million dollars.
- Negotiate the Contract Terms with the Determined Consulting Firm.
- Initiate the contracting process.
- Develop overall project work plans and monitors the plan to insure process.
- Monitor activities on multiple projects ranging from complex to simple to assure effective operation and progress.
- Conduct briefings to familiarize consultants with project's scope of work.
- Clarify expected responsibilities, identify target dates of critical states of plan preparation.
- Acquaint consultants with department policies and procedures related to design of structure projects and expected plan preparation format.

### Duty 4

General Summary: Percentage: 5

Develop and maintain the Program & Project Management System (P/PMS) networks for assigned projects.

## Individual tasks related to the duty:

• Use Michigan Project Information System (MPINS) and Michigan Financial Obligation System (MFOS) to complete project programming responsibilities of project manager on assigned projects.

## Duty 5

General Summary: Percentage: 5

Coordinate projects within MDOT, other state agencies and outside entities. Initiate the preparation of agreements with participating cities, counties, railroads. Initiate the preparation of applications for permits from the Department of Environmental Quality (MDEQ), Corps of Engineers, Unite States Coast Guard, and local authorities for assigned projects.

## Individual tasks related to the duty:

- Prepare agreements with participating cities, counties, and railroads.
- Prepare applications for permits from the Department of Environmental Quality (MDEQ), Corps of Engineers, Unite States Coast Guard, and local authorities for assigned projects.
- · Other duties as assigned.

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

Those based on past practice for similar situations. Answering engineering questions at public meetings. Development of special provisions or special details when standard plans or specifications do not apply. Developing scope of work documents based on project concept statements.

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

Unique situations with no past policy or when existing policy is unclear. Assistance in mitigating controversies. Revision of program schedule

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; overtime, 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. Travel with possible overnight stavs. Valid 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**

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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 Provide formal written counseling.
 N Approve leave requests
 N Review work.

N Approve leave requests. N Review work.

N Orally reprimand. N Train employees in the work.

Ν

Provide guidance on work methods.

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?

Approve time and attendance.

Writing Consultant scope of work statements, managing Consultant Design Contracts including tracking project schedules, performing quality assurance reviews of plans and specifications, documenting Consultant Performance, and coordinating projects with other MDOT staff and outside entities.

Prepares the design for bridges of various complexity assigned to the unit. Prepares proposal material, reviews project related documents, and checks plans. Oversees the work activities of professional transportation engineers.

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

General Summary: Added additional detail regarding coordination of consultant projects. Added BOBS mission related statement and the tie-in to the duties/functions of this position. Rearranged duties and changed percentage of time performed.

Previous Duty 1 - Now Duty 3 - Updated to 10%.

Previous Duty 2 - Now Duty 1 - Updated to 40%

Previous Duty 3 - Now Duty 4 - Updated to 5%

Previous Duty 4 - Now Duty 5 - No Change.

Added Duty 2 - 40% - This function serves in the unit wide supervisor assistant capacity; overseeing unit projects, plans, etc. This is in an oversight capacity for the unit. This duty was assigned initially back in 2011 when the consultant coordinators were moved into the bridge unit. Prior to that point, the position resided in a different unit in which consultant coordination was intended to be the only function of the position. Previous to this change, this duty was being performed by an additional staff member that resided in the bridge unit that is no longer in the unit. Several incremental changes to the units have been made over the last nine years to meet changing needs of the bridge units and the bureau as a whole.

There is limited interaction with the Assistant Region Design Engineer position (TRALSPL2B75R) on projects that both units are working on. The Assistant Region Engineer is a specialist with road expertise, and the Bridge Design Project Consultant position is a specialist with bridge expertise. Although they both follow department processes, thus similar duties, the technical basis of their work is very different.

Preparation of plans and contract documents for the construction and rehabilitation of highway structures of all classifications. To manage and coordinate multiple consultants that have been contracted by MDOT to design transportation bridge projects varying from complex to simple. This position independently manages multiple consultant/in-house design projects to assure timely completion, within budget and according to department standards.	
26. What are the minimum education and experience qualifications neede	d 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:	
Ability to effectively communicate both verbally and in writing. Thorough knowledge of MDOT and AASHTO bridge design standards and guidelines. Knowledge of PPMS, MPINS, MFOS, and their functions.	
CERTIFICATES, LICENSES, REGISTRATIONS:	
Possession of a registered professional engineering license as required by the State of Michigan.	
Possession of a valid driver's license.	
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.	
KELLEY SCHMITT	2/5/2020
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