

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) Bureau of Development
4. Civil Service Position Code Description Transportation Engineer-E	10. Division Design Division
5. Working Title (What the agency calls the position) Quality Assurance Engineer	11. Section Quality Assurance Section
6. Name and Position Code Description of Direct Supervisor SHULICK, MARK A; ENGINEER MANAGER LICENSED-4	12. Unit Administration Unit
7. Name and Position Code Description of Second Level Supervisor SCHUSTER, KRISTIN A; STATE DIVISION ADMINISTRATOR	13. Work Location (City and Address)/Hours of Work 425 W. Ottawa St., Lansing, MI 48933 / M-F 8am - 5pm (or as approved by supervisor)
14. General Summary of Function/Purpose of Position This position assists the Quality Assurance Section with the development, improvement and maintenance of the AASHTOWare Project Preconstruction (APPC), the Quality Assurance Database System (QUADS), the Project Quantity Spreadsheet (PQS), and the Project Delivery Risk (PDR) engineering applications. Preparing engineer estimates, maintaining standard plans and special details, and reviewing plans and proposals. Participate in technical and non-technical training, meetings, seminars, and conferences to aid in career development and preparation for registration as a Professional Engineer.	

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: 80

This position assists the Quality Assurance Section with the development, improvement and maintenance of engineering applications, preparing engineer estimates, maintaining standard plans and special details, and reviewing plans and proposals.

Individual tasks related to the duty:

- Assist with the development, improvement and maintenance of the APPC, QUADS, PQS and PDR applications including researching and troubleshooting concerns with MDOT staff.
- Submit tickets regarding new developments and improvements to Department of Technology Management and Budget (DTMB) for programming into the corresponding application.
- Test software enhancements prior to implementation and approve or make further recommendations.
- Meet with the DTMB programming team bi-weekly to determine status and priority of tickets submitted.
- Prepare preliminary and final engineer estimates for capital preventive maintenance and reconstruction projects at the various milestone meetings of project development.
- Upon plan review completion, send recommendations to the Project Manager for review and incorporation.
- Assist the Design Standards unit on maintaining the Standard Plans, Special Details, and Design Manuals.
- Process addenda and memoranda for both pre-letting and post-letting Quality Assurance business processes.
- Assist with the unbalanced bid review team and the technical committee on cost estimating team with project review.

Duty 2

General Summary:

Percentage: 10

Participate in technical and non-technical training, meetings, seminars, and conferences to aid in career development and preparation for registration as a Professional Engineer.

Individual tasks related to the duty:

- Actively engage in discussions about career goals, technical interests, and career development needs.
- Participate in technical training provided by MDOT and the State of Michigan Learning Center.
- Participate in leadership, professional practice, and other training provided by MDOT and the State of Michigan.
- Develop technical knowledge with the goal to become a Registered Professional Engineer.

Duty 3

General Summary:

Percentage: 10

Other duties as assigned.

Individual tasks related to the duty:

- Assist with the other Units in the Quality Assurance Section based on operational needs.
- 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.

This position makes independent decisions during the development, improvement and maintenance of engineering applications, when preparing engineer estimates, when processing addenda and justification memoranda, when maintaining standard plans and special details, and when reviewing plans and proposals. The Project Managers and Construction Engineers are affected by those decisions by having to incorporate those changes into their projects prior to advertising, bidding, and the awarding of projects to the lowest bidder.

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

Daily work assignments will be made by the supervisor. When there is a need for interpretation of MDOT guidelines, policies, or procedures or when an existing policy is unclear.

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.

Typical duties associated with an office setting. Position requires extensive use of a computer and applications. Position may require availability outside normal working hours based on operational needs.

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):

- | | | | |
|----------------------------|------------------------------------|----------------------------|-----------------------------------|
| <input type="checkbox"/> N | Complete and sign service ratings. | <input type="checkbox"/> N | Assign work. |
| <input type="checkbox"/> N | Provide formal written counseling. | <input type="checkbox"/> N | Approve work. |
| <input type="checkbox"/> N | Approve leave requests. | <input type="checkbox"/> N | Review work. |
| <input type="checkbox"/> N | Approve time and attendance. | <input type="checkbox"/> N | Provide guidance on work methods. |
| <input type="checkbox"/> N | Orally reprimand. | <input type="checkbox"/> 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?

This position assists the Quality Assurance Section with the development, improvement and maintenance of the APPC, QUADS, PQS, and the PDR engineering applications. Preparing engineer estimates, maintaining standard plans and special details, and reviewing plans and proposals. Participate in technical and non-technical training, meetings, seminars, and conferences to aid in career development and preparation for registration as a Professional Engineer.

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 Quality Assurance Section is responsible for processing road and bridge plans, specifications, and estimates for advertising. Performing road and bridge base plan, plan review, and final project coordination reviews. Updating road and bridge design manuals, guides, standard plans, and special details. Processing, reviewing, and approving trunkline special provisions and supplemental specifications. Producing monthly letting reports for MDOT leadership and the State Transportation Commission. This position assists the Quality Assurance Section with the development and maintenance of the APPC, QUADS, PQS, and PDR engineering applications.

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.

Possession of a bachelor of science degree in civil engineering is preferred.

EXPERIENCE:

Transportation Engineer 9

No specific type or amount is required.

Transportation Engineer 10

One year of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer 9.

Transportation Engineer P11

Two years of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer, including one year equivalent to a Transportation Engineer 10.

Alternate Education and Experience

Transportation Engineer 9 - 12

Possession of a registered professional engineer license as required by the State of Michigan may be substituted for 6 months of experience at the Transportation Engineer 9-12 levels. This substitution may only be used once for any employee for qualification of appointment or early reclassification.

KNOWLEDGE, SKILLS, AND ABILITIES:

Basic engineering knowledge and the ability to communicate effectively..

**CERTIFICATES, LICENSES,
REGISTRATIONS:**

N/A

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.

ASHLEY PARSONS

11/13/2024

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