

**State of Michigan
Civil Service Commission**
Capitol Commons Center, P.O. Box 30002
Lansing, MI 48909

Position Code

1.

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) Highway Operations
4. Civil Service Position Code Description Transportation Engineer 9-P11	10. Division Grand Region
5. Working Title (What the agency calls the position) Staff Engineer – Construction	11. Section Muskegon Transportation Service Center
6. Name and Position Code Description of Direct Supervisor FREDRICKSON, MARC P, ENGINEER MANAGER LICENSED-4	12. Unit Administration-Operations
7. Name and Position Code Description of Second Level Supervisor KIND, ERICK J, SENIOR POLICY EXECUTIVE 19	13. Work Location (City and Address)/Hours of Work 2225 Olthoff Dr., Muskegon MI 49444 / 7:30 a.m. - 4:30 p.m. M-F Hours may vary

14. General Summary of Function/Purpose of Position

This position functions as a Staff Engineer within the Muskegon Transportation Service Center (MTSC) responsible for construction administration tasks as well as other duties in the areas of maintenance administration, traffic and safety engineering, utility and permit right of way review, and design plan preparation. This position also assists the Construction Engineer in developing and delivering all aspects of the transportation program as it relates to these areas.

This position requires possession of a valid driver's license to perform field inspections and reviews.

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: 45

Assist the Construction Engineer Manager of record in the administration of construction and consultant contracts.

This duty requires possession of a valid driver's license to perform field reviews.

Individual tasks related to the duty:

- Work on Resurfacing, Restoration, and Rehabilitation (3R) construction projects of limited scope, which only focus on top layer of road construction.
- Ensure administrative compliance and compliance with design/construction standards for local government oversight projects that include federal funding where the Michigan Department of Transportation (MDOT) is responsible for overseeing the project. Process paperwork as necessary.
- Work with the Construction Engineer to review engineering plans and schedules and make sure they are appropriate for field conditions.
- Prepare written work orders for the Construction Engineer Manager that outlines changes to schedule and contract quantities.
- Assist with final project documentation reviews on construction projects by scheduling reviews, observing, taking notes, reviewing previously submitted documentation, and providing a list of concerns to the Engineer of Record with the documentation that will be needed to resolve issues.
- Assist with arranging pre-construction meetings. Notifying attendees of date, time and place and assisting with preparing any materials to be disseminated at said meeting.
- Review requests from contractors for changes, extras, and adjustments to contracts and discuss with Construction Engineer Manager.
- Work with the Construction Engineer Manager to coordinate projects with many ongoing jobs involving high impact traffic control issues. Work with consultants, utility companies, and prime contractors.
- Utilize organizational methods that ensure the timeliness of project paperwork such as spreadsheets, filing systems and other methodologies accepted as best practice.
- Formulate construction estimates and construction budgets and submit to the Construction Engineer Manager for review.
- Assist in overseeing the TSC's warranty projects including field reviews and timely document any deficiencies and update the Department's spreadsheet.
- Assist with arranging project status meetings. Notifying attendees of date, time and place and assisting with preparing any materials to be disseminated at said meeting.

Duty 2

General Summary:

Percentage: 30

Utilize traffic engineering standards, guides, principles, and techniques to recommend solutions to traffic concerns and questions. Develop and review work zone plans, staging plans and Maintenance of Traffic (MOT) contract documents for program and maintenance projects within the TSC area in collaboration with TSC staff. Participate with coordination of signing and pavement marking program and operational needs.

This duty requires possession of a valid driver's license to perform field reviews.

Individual tasks related to the duty:

- Assist in the resolution of traffic and safety related issues. Perform traffic calculations, gather data, and use IT programs and reports from others to recommend traffic flow and operations to the Project Manager. Make recommendations to improve traffic flow and safety on projects that involve minimum traffic restrictions. Develop maintenance of traffic plans and make recommendations to the project manager.
- Attend work zone reviews to verify adherence to standards.
- Work with local government agencies, customers, and stakeholders to gather details for traffic related issues. This includes traffic, bicycle, and pedestrian safety. Gather information to support road safety audits for specific locations.
- Research crash data information to determine the trends of crashes per category and time. Recommend further analysis to determine the time of return for potential traffic and safety funding.
- Identify roadside hazards that could be eliminated as part of safety upgrading program on state trunk lines.
- Perform field reviews with Construction personnel to determine methods of handling traffic during construction to minimize adverse impacts on traffic.
- Prepare a recommendation in coordination with the Traffic & Safety Engineer, Operations Engineer, and/or Project Manager at the TSC on special traffic problems which arise during active projects.
- Participate in field reviews and take measurements, collect traffic volume data, turning movements, delays, etc.
- Participate in the annual Call for Projects (CFP) process related to Operations project creation and selection, including project estimating, scoping and field project site evaluation.

- Develop and review work zone staging and operations plans in collaboration with TSC construction and projects and contracts staff.
- Assist TSC Construction and Projects & Contracts staff in the review, tracking, and reporting of work zone crashes/fatalities to Region and central office.
- Review of construction work zone safety and mobility reporting annually, in accordance with the MDOT Work Zone Safety and Mobility Manual and individual projects' Transportation Management Plans (TMPs) in collaboration with TSC and Region operations staff.
- Coordinate and assist TSC and Region operations staff in the utilization of the Regional Integrated Transportation Information System (RITIS) to review and provide mobility data and reports for projects and MOT planning.
- Consult with TSC operations staff and prepare project TMP and Road Safety Audit (RSA) process needs and deliverables.
- Assist in the coordination of traffic safety related activities for permit and utility projects to ensure permit conditions accurate to the project site and traffic and are followed in the field.
- Assist all areas of the TSC with signing and pavement marking program and operational needs related to design, layout and planning.

Duty 3

General Summary:

Percentage: 20

Review construction plans and contract documents. Implement and monitor the effectiveness of the Work Zone Safety and Mobility Policy on all projects.

Individual tasks related to the duty:

- Review any unusual items in plans or proposals with the Construction Engineer prior to meeting with contractors.
- Work with the Construction Engineer Manager to formulate recommended changes in plans and contract provisions to the Design Division and/or consultants to avoid construction phase problems.
- Prepare contract provisions as required and discuss with other members of the construction team for guidance and accuracy.
- Review the Traffic Management Plan (TMP) and the project constructability during the development phase of the project. Ask other team members for clarification and assistance when needed.
- Learn about our Work Zone Safety and Mobility Policy so you can effectively monitor and document the TMP. Review staff's documentation of the TMP.
- Review the proposed Temporary Traffic Control Plan (TTCP) for each project stage and prepare changes if needed.
- Work with the contractor and the TSC Traffic and Safety Engineer to understand the capacity analysis and how staging plans affect the variables of traffic volume, travel time, and level of service.
- Take on responsibilities for the implementation and successful use of the public information plan.
- Prepare orders for internal Traffic Control Plan (TCP) to minimize delays and improve work zone safety.
- Maintain records of employee training in our safety program to ensure required training is offered to employees. Help employees understand our accident prevention program and ensure a copy is available at the worksite.

Duty 4

General Summary:

Percentage: 5

Other duties as assigned.

Individual tasks related to the duty:

- Represent the department in meetings and phone contact with the general public.
- Attend meetings with internal customers working in other areas of MDOT
- Attend meetings with outside stakeholders and vendors
- Attend training as requested/needed
- Serve on committees and teams as needed.
- 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.

Personal judgment based on prior experience. Wherever possible, identify, recommend, and implement improvements in the work methods and materials utilized in the position.

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

When a decision involves a significant amount of money and/or the consequences of the action may be severe. Also, on issues that may have Region-wide impact, could be precedent-setting decisions, or where 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.

This position requires field work for site reviews, with exposure to high-speed traffic, the natural elements, and active construction sites. Requires ability to traverse various types of terrain, transport equipment weighing up to 25 pounds, and to remain in a stationary position for extended periods of time while working on a computer. May require travel to meetings outside the normal working hours, and heavy workloads with specific deadlines. This position requires possession of a valid driver's license. 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):

- | | |
|---|--|
| ☐ Complete and sign service ratings. | ☐ Assign work. |
| ☐ Provide formal written counseling. | ☐ Approve work. |
| ☐ Approve leave requests. | ☐ Review work. |
| ☐ Approve time and attendance. | ☐ Provide guidance on work methods. |
| ☐ Orally reprimand. | ☐ 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 functions as a Staff Engineer within the Muskegon Transportation Service Center (MTSC) responsible for construction administration tasks as well as other duties in the areas of maintenance administration, traffic and safety engineering, utility and permit right of way review, and design plan preparation. This position also assists the Construction Engineer in developing and delivering all aspects of the transportation program as it relates to these areas.

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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?

This work area is responsible for providing the transportation services which meet the operational needs in the service centers geographic area. The service center is responsible for monitoring transportation issues to ensure they conform to federal, state, and local requirements. The engineer in this position must use experience and knowledge to administer the services handled at the TSC.

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 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.

Transportation Engineer 12

Three years of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer, including one year equivalent to a Transportation Engineer P11.

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:

Knowledge of

- engineering principles, practices, standards, and specifications
- engineering office practices and procedures
- Total Quality Methodology principles
- computer programs used in road design

Skill in

- organization
- communication

Ability to

- interpret and prepare engineering plans, specifications, and technical reports
- organize, evaluate, and present information effectively
- negotiate favorable solutions to complex issues
- provide exceptional customer service
- meet with and work effectively with others
- communicate effectively with other employees, contractors, and the general public

**CERTIFICATES, LICENSES,
REGISTRATIONS:**

- Possession of a valid driver's license is required and must maintain throughout employment in the position.

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.

I certify that the entries on these pages are accurate and complete.

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