Position Summary

This summary describes the organization, duties, and requirements of a State of Michigan vacancy. The official position description for this position is available from the HR office for the agency.

Position Code: TRNSTCHAD36R

Civil Service Class and Level: Transportation Technician-A

Working Title (What the agency calls the position): Office Technician

Name and Position Code Description of Direct Supervisor: BATES, SHAUN; ENGINEER MANAGER LICENSED-3

Department/Agency: TRANSPORTATION CENTRAL OFFICE

Work Area: Bay Region

Work Location/Hours of Work: 1212 Corporate Drive, Mt. Pleasant, MI 48858 / 7:00am – 3:30 p.m. Mon-Fri (hours may vary)

General Summary of Function/Purpose of Position: This position serves as the recognized resource Office Technician assisting the Mt Pleasant Transportation Service Center (TSC) construction engineer with the most complex duties in administration, oversight, and close-out of all Michigan Department of Transportation (MDOT) projects utilizing specialized technical knowledge. This position participates in a full range of duties for road, bridge and associated transportation construction projects using the current construction documentation system and e-Construction delivery methods. Perform field inspection, material testing and surveying/data collection as required and ensure construction contracts are constructed in accordance with the plans, specifications, and related contract documents.

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

Assigned duties and tasks for each duty.

Duty 1 **Percentage: 80**

Serve as the recognized resource performing all office technician functions required to support field construction activities.

- Manage the construction project file system with AASHTOWare and ProjectWise and/or other current construction documentation systems and e-Construction delivery methods from project start through final project closeout.
- Generate and review Daily Work Reports, including material usage and approval, pay item postings and quantities, and all other tasks associated with specification adherence.
- Confirm all required testing documents and material certifications are in place prior to generating pay estimates.
- Manage all processes required to confirm all contract requirements are met for Disadvantaged Business Enterprises (DBE) subcontracts, prompt payment, and payment of appropriate wage rates.
- Correspond with personnel employed by contractors, consultants, other MDOT offices, etc. for the purpose of reconciling project file documentation needs and/or resolving issues.
- Prepare construction reports (e.g., progress reports, estimates, work orders, change orders, and FHWA 1365 forms) when applicable.
- Oversee maintenance of project files and records supporting contractor payment and quality of work.
- Perform quality assurance (QA)/quality control (QC) on Daily Work Reports (DWRs) for all technicians.
- Review change orders and provide TSC Construction Engineers with recommendations.
- Ensure project close out timelines are met, and projects are closed out within 180 calendar days.
- Coordinate interim and final project record reviews.
- Facilitate project closeout and prepare the final estimate package.
- Attend project progress meetings and other associated project meetings.
- Share concepts and knowledge with other staff (Office, Region, Lansing Central Office) for future e-project and AASHTOWare goals.
- Train lower-level technicians in the use of e-Construction and AASHTOWare.

Duty 2 **Percentage: 15**

Perform construction and quality control inspection activities designed to ensure that highways, bridges, and allied transportation facilities are constructed to the plans and specifications contained in contractual construction agreements.

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

- Record work completed by the contractor with the latest digital mapping tools (e.g., Total Station, Global Positioning System (GPS), Bluebeam) and address all project correspondence through the current paperless construction documentation system (e.g., ProjectWise).
- Perform concrete testing including, but not limited to, air content and slump.
- Inspect construction items including, but not limited to, culverts, sewers and drainage structures, base or surface course, guardrail placement, bridges, sodding and seeding, erosion control, and pavement patching.
- Monitor and/or inspect construction projects to maintain contract compliance.
- Perform testing on concrete or bituminous paving materials to assure quality control specifications are met.
- Confer with contractors, public utilities, city/county engineering departments, or consultants regarding coordination of construction project activities.
- Inspect construction projects to ensure work is completed per specifications including sampling and testing materials to be used, proper certification of materials, maintaining records, preparing daily reports, and project progress reports, and inform supervisor of problems.
- Inspect phases of assigned bridge, grading, and paving projects and prepare written inspection reports and records.
- Inspect soil erosion and sedimentation control devices.
- Perform wage rate interviews on contractor's employees.
- Train seasonal and other employees.

Duty 3 **Percentage: 5**

Perform assignments in various divisions of the department. Participate in in-service training to maintain and upgrade job skills. Suggest, implement, and administer process improvements. Be aware of and be an active participant in all phases of on-the-job safety.

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

- Oversee proper use of personal protective equipment. Be knowledgeable of current safety regulations and requirements. Follow all safety procedures and policies. Review on-the-job safety issues with the contractor.
- Remain current with changes in technology and industry methods and certifications. Attend classes, seminars, conferences, and other forms of training. Keep current with department procedures and policies. Participate in training and review of all information relating to the position.
- Participate in employee teams to improve TSC business processes.
- Monitor, maintain, adjust, and document all work zone operations.
- Assist local governmental units in proper documentation requirements by answering questions and providing guidance on what local agencies need to perform on change orders, pay estimates, and tasks that need to be done in AASHTOware, etc.
- Other duties as assigned.

Types of decisions made independently and whom or what those decisions affect: As the senior worker performing the most complex assignments, this position makes independent decisions based on existing policy, guidelines, and contract documents. If area of question is not covered, this position would make a recommendation to the engineer responsible for the work.

Types of decisions that require the supervisor's review: Where resolution of a situation is not covered by existing policy, guidelines, or contract documents or when existing policy or specifications are unclear.

Physical effort used to perform this job and environmental conditions of this position: Duties associated with an office environment include extensive use of a computer and remaining in a stationary position for extended periods of time. Field work includes exposure to weather, traffic, construction hazards, noise, dirt, operating equipment, and other conditions associated with heavy construction work. Operating equipment and transporting objects weighing 50 pounds. May be required to wear specialized safety equipment such as a respirator. Ability to inspect or investigate varied construction or activity sites, including traversing all types of terrain and various highway structures in all types of weather and traffic conditions. This position requires possession of a valid driver’s license. Position may require availability outside normal work hours based on operational need.

Names and classes and levels of employees whom this position immediately supervises:

Essential functions of this position: This position serves as the recognized resource Office Technician assisting the Mt Pleasant Transportation Service Center (TSC) construction engineer with the most complex duties in administration,

oversight, and close-out of all Michigan Department of Transportation (MDOT) projects utilizing specialized technical knowledge. This position participates in a full range of duties for road, bridge and associated transportation construction projects using the current construction documentation system and e-Construction delivery methods. Perform field inspection, material testing and surveying/data collection as required and ensure construction contracts are constructed in accordance with the plans, specifications, and related contract documents.

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

Function of the work area: Provides customer service to the public by providing quality assurance for highway, bridge and associated transportation facility construction projects and permits. Ensures the contractor is fulfilling contract requirements.

Education, experience, and credentials typically needed to perform the position's essential functions [Equivalent combinations of education and experience can also be evaluated on an individual basis for applications providing sufficiently detailed descriptions of the other experience.]:

EDUCATION:
Possession of an associate degree in concrete technology, civil technology, construction technology, surveying technology, construction management, mathematics, or computer science.

EXPERIENCE:
Transportation Technician 11
Three years of experience equivalent to a Transportation Technician, including one year equivalent to a Transportation Technician E10.

Alternate Education and Experience

Transportation Technician 8 - 12
Possession of a bachelor's degree or higher in an Applied Science or Science with 16 semester hours (24 term) credits in job specific or related course work qualifies for the Transportation Technician E10 level.

OR

Completion of 60 semester (90 term) credits including 24 semester (36 term) credits in any combination of course work in the following areas: structures, materials, soils, hydrology, surveying, design, drafting, bituminous, concrete, aggregate, chemistry, physics, geology, environmental science, computer science, highway or traffic technology, construction management, engineering, or mathematics may be substituted for the education requirement.

OR

Four years of technician level experience consisting of quality control inspections, drafting, materials and testing, surveying, or traffic may be substituted for the education requirement.

OR

Current certification in bituminous (hot mix), concrete, density testing, or aggregate gradation and one year of technician level field experience may be substituted for the education requirement.

OR

Three years of experience equivalent to a Transportation Maintenance Worker 9, Transportation Maintenance Supervisor, or Transportation Maintenance Coordinator may be substituted for the education requirement.

OR

Current certification in bituminous (hot mix), concrete, density, or aggregate and two years of experience equivalent to an Engineering Assistant may be substituted for the education requirement.

OR

Current certification in bituminous (hot mix), concrete, density, or aggregate and completion of 16 semester (24 term) credits in any combination of course work in the following areas: structures, materials, soils, hydrology, surveying, design, drafting, bituminous, concrete, aggregate, chemistry, physics, geology, environmental science, computer science, highway or traffic technology, construction management, engineering, or mathematics may be substituted for the education requirement.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- source documents such as proposals, plans, specifications, standard plans, supplements, memorandums, and manuals
- personal and construction safety practices
- math including algebra, geometry, and trigonometry

Skill in:

- the use of safety equipment, testing equipment, and survey equipment

Ability to:

- oversee and coordinate work in progress
- communicate effectively
- maintain favorable public relations
- train others
- work under extreme weather conditions and environmental conditions of a work site
- perform various kinds of inspections and prepare documentation
- operate a computer

CERTIFICATES, LICENSES, REGISTRATIONS:

- Possession of a valid driver's license is required.
- Possession of Computerized Office Technician or possession within 12 months of the date of hire.
- Possession of Comprehensive Soil Erosion and Sedimentation Control certification or possession within 12 months of the date of hire.
- Possession of 3 of 4 industry certifications (Bituminous (Hot Mix), Concrete, Density Testing, Aggregate Gradation) or possession within 12months of the date hire.
    - NOTE: Any positions performing sampling and testing of highway materials for federal aid projects on the National Highway System (NHS), subsequent to June 29, 2000, must be performed by qualified technicians, certified in the requisite Bituminous (Hot Mix), Concrete, Density Testing, or Aggregate Gradation per a Civil Technician qualification program to ensure compliance with the Quality Assurance Procedures for Construction.