

**State of Michigan
Civil Service Commission**

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

Position Code

1. DEPTALTA

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 Field Services
4. Civil Service Position Code Description Departmental Analyst-A	10. Division Construction Field Services Division
5. Working Title (What the agency calls the position) Construction Management Software Analyst – Recognized Resource	11. Section Field Operations Section
6. Name and Position Code Description of Direct Supervisor BURNS, DANIEL; ENGINEER MANAGER LICENSED-3	12. Unit Construction Technology Administration Unit
7. Name and Position Code Description of Second Level Supervisor RENNER, LINDSEY L; ENGINEER MANAGER LICENSED-4	13. Work Location (City and Address)/Hours of Work Various / 7:30 a.m. - 4:30 p.m.

14. General Summary of Function/Purpose of Position

This position serves as the recognized resource for construction management software systems (FieldManager, FieldNet, AASHTOWare Construction & Materials) and the construction technology help desk call ticketing system. MDOT lets over \$1.6 billion worth of construction work on more than 700 contracts every year. Each contract is a unique combination of projects, funding categories, pay item quantities, material quantities, contractual deadlines, specifications, and other contract documents. These contracts are managed using the construction management software systems and the variability of each contract leads to complex issues effecting contractor payment that must be analyzed and resolved following federal and state documentation and contract management policies. These issues must also be resolved in a timely manner to meet federal and state timely payment guidelines. When system issues are encountered as a result of user error or system malfunction, this position provides statewide programmatic oversight and expertise in the timely analysis and resolution of these complex contractor payment issues. This position also serves as the business owner for the construction technology help desk call ticketing system software system (SalesForce). Develops and provides construction management field documentation and oversees the creation and implementation of testing plans on a statewide basis for MDOT, consultant, local agency, and industry staff. Collects and analyzes data to support the federal and state administrated highways program. Attends various conferences and workshops and collaborates closely with DTMB IT programmer specialists and analysts.

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: 65

Serve as the recognized resource MDOT Construction Management Help Desk analyst responsible for providing programmatic oversight and expertise to internal staff, local government agencies, engineering consultant firms, construction contractor firms, and other system users regarding MDOT's construction management software, call ticketing system software, and complex issues affecting contractor payments.

Individual tasks related to the duty:

- Establish criteria, standards and guidelines for the construction management help desk to ensure compliance with federal and state construction management and documentation requirements.
- Interpret existing laws, policies, and procedures as they relate to construction management and documentation requirements.
- Analyze and resolve time sensitive issues relating to system errors and contractor payment errors.
- Analyze system issues and recommend processes to resolve issues to DTMB agency services IT programmer specialist and analysts. Some examples of system issues and resolutions include:
 - Inconsistencies are discovered in contractor payment data across FieldManager, FieldNet, and CAS. An internal audit of the pay item quantities will need to be performed and the appropriate corrective action could include recommending DTMB to manually update or overriding data via direct access to the databases.
 - Users are unable to locate the correct contractors in FieldManager and report that contractors are missing from the system. The issue will have to be verified and the missing contractors will have to be researched to ensure that they are eligible to perform work on MDOT contracts. DTMB may have to be directed to update and distribute statewide reference data via software processes that require elevated rights.
 - FieldManager contract files can be assigned to the wrong office, go missing, damaged or be lost due to human error on the part of the managing office or become locked due to expiring software licenses. This position is expected research the cause of misplaced, locked, damaged or lost files and determine the appropriate corrective action that may include recommending that DTMB use various backup or read-only data to reconstruct the missing or damaged files.
- Review contract documentation such as construction payment estimates, inspector daily work reports, contractor performance evaluations, contract modifications, materials testing reports and subcontracts to determine resolutions for contractor payment and other system errors that cannot be resolved by contract management staff.
- Develop policy materials, operations manuals, and supporting instructions, for solutions to be used at the help desk and internal and external customers.
- Maintain support records to follow up on complaints and determine potential need for further review/action.
- Coordinate internal and external staff with DTMB Agency Services IT Programmers and Analysts in the distribution and installation of all required construction management software and their components.
- Coordinate the MDOT Construction Technology help desk and provide assistance to engineers and other field staff at MDOT facilities, local government agencies, engineering consultant firms, construction contractor firms, and other system users by resolving contractor payment and other system errors that cannot be resolved by contract management staff.
- Develop policy materials, operations manuals, supporting instructions, and training for MDOT and DTMB Agency Services staff on the use of the call-ticket software used by the unit.
- Attend Construction Technology Administration Team Meetings to propose changes to policies and procedures regarding construction management systems.
- Analyze contract special provisions, other changes to standard specifications for construction, policies and procedures regarding the construction management systems and recommend changes to the documents or the software systems when inconsistencies are found.
- Evaluate construction contracts for compliance by conducting internal audits requested by management.
- Assist Contract Services Division staff as requested with field compliance issues.
- Develop and maintain MDOT's Construction Technology information websites (internal and external).
- Administer user access to needed construction management software applications, granting appropriate access level to internal and external users including but not limited to SOM employees, FHWA staff, Contractors, Consultants, Local Agencies, etc.
- Serve as the owner for the AASHTOWare Project Construction & Materials user request form and other forms owned by the Construction Technology unit, making updates as needed to match business process changes.
 - Oversee the internal quarterly Inactive User audit for AASHTOWare Project Construction and Materials and prepare and document the associated report for future program auditors.
 - Oversee the Annual FieldNet ID audit process and prepare and document the associated report for future program auditors.
 - Oversee the bi-annual FieldManager user account audit and prepare the associated report for future program auditors.
 - Oversee the Construction Fiscal Year End Payable reporting process for construction field staff and prepare reports for use by Contract Services Division.
 - Prepare various reports for management.

Duty 2

General Summary:

Percentage: 15

Serve as the department analyst and resource for quality control testing and regression testing for construction management software systems.

Individual tasks related to the duty:

- Conduct research studies and analyses to test and validate the latest releases of construction management software systems.
- Provide technical support and training for statewide personnel appointed to test construction management software systems.
- Analyze and make recommendations regarding interface issues between construction management software and other MDOT enterprise software.
- Review, analyze, and recommend changes to DTMB Agency Services IT Programmers and Analysts regarding construction management software test plans.
- Develop training materials for statewide construction management software testing including videos, users' guides, presentations, and other training publications.
- Design and conduct surveys for software testing and provide recommendations for business or software changes based on the survey results.
- Analyze various software related instructions for uniformity, clarity, and to ensure software instructions are still valid after software updates.
- Coordinate with DTMB Agency Services IT Programmers and Analysts in the preparation of test data for use in software testing.
- Ensure software and hardware resources are available and ready for testing. Coordinate the procurement and installation of computer workstations used by testers, ensuring the workstations meet the minimum system requirements to run needed software.
- Identify, document, and track solutions for testing errors using MDOT error reporting procedures.
- Prepare testing and quality control reports for management.
- Conduct User Group feature request surveys to establish priority for needed changes to software to meet user needs, prioritize requested features and compare and analyze those requests to other Ticket Maintenance Request from other states and prepare a Field Feature Request Report for management.
- Make recommendations for Annual Project User Group balloting and Ticketed Maintenance Requests for purchase by the State of Michigan.

Duty 3

General Summary:

Percentage: 15

Review, evaluate and maintain statewide construction contract administration and training documents and system data related to construction management software systems.

Individual tasks related to the duty:

- Coordinate and support the MDOT help desk team in the set-up of user accounts in the software training environment.
- Assign training contracts to user accounts.
- Prepare various training related reports for management.
- Assist with and present at the annual Construction Technology Users Group Conference.
- Attend and present at various AASHTOWare workshops, meeting and conferences both statewide and nationally to create, review and modify software specifications used to develop construction management software systems that meet MDOT's needs.
- Administer the AASHTOWare Project Construction and Materials Gov Delivery account by ensuring the mailing list is up to date with active users.
- Create and send statewide user notifications via the AASHTOWare Project Construction and Materials Gov Delivery account and FieldNet.
- Recommend changes in policy and its impact to software system operations; assist the MDOT help desk team with development and revisions of procedures to accommodate business process enhancements.
- Review construction management software system user documentation to ensure consistency and that quality standards are followed.
- Review documents, such as procedure manuals and guidance documents to determine if they comply with State and Federal rules, regulations, and laws.
- Propose enhancements and revisions to rules, regulations and procedures manuals.
- Recommend updates or corrections where appropriate to all construction management software related documentation.
- Analyze various construction management related data and recommend modifications to system data tables.
- Maintain system critical data tables by performing updates and changes to construction management system data.

Duty 4

General Summary:

Percentage: 5

Other duties as assigned

Individual tasks related to the duty:

- Assist with related Construction Technology functions as assigned.

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

Daily decisions are made regarding options for software end users along with decisions regarding the updating of software documentation such as training manuals, user guides. These decisions affect construction management software users at MDOT, local agencies, consultant and contracting firms, and the Bureau of Finance and Administration, Contract Services Division, and Bureau of Development. The construction management system produces substantial budgetary savings and issues the payments to contractors. Performs assignments and uses judgment in making decisions where alternatives are determined by established policies and procedures.

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

Decisions that may conflict with established policies and procedures of the office and/or MDOT. Decisions that may set precedent.

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, and stand. Occasional bending, twisting, and stooping may be required. Daily work on a personal computer required. Inflexible deadlines and attention to detail.

Must be able to travel throughout the state with overnight stays as needed.

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 serves as the recognized resource for construction management software systems (FieldManager, FieldNet, AASHTOWare Construction & Materials) and the construction technology help desk call ticketing system. MDOT lets over \$1.6 billion worth of construction work on more than 700 contracts every year. Each contract is a unique combination of projects, funding categories, pay item quantities, material quantities, contractual deadlines, specifications, and other contract documents. These contracts are managed using the construction management software systems and the variability of each contract leads to complex issues effecting contractor payment that must be analyzed and resolved following federal and state documentation and contract management policies. These issues must also be resolved in a timely manner to meet federal and state timely payment guidelines. When system issues are encountered as a result of user error or system malfunction, this position provides statewide programmatic oversight and expertise in the timely analysis and resolution of these complex contractor payment issues. This position also serves as the business owner for the construction technology help desk call ticketing system software system (SalesForce). Develops and provides construction management field documentation and oversees the creation and implementation of testing plans on a statewide basis for MDOT, consultant, local agency, and industry staff. Collects and analyzes data to support the federal and state administrated highways program. Attends various conferences and workshops and collaborates closely with DTMB IT programmer specialists and analysts.

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

New position

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

The Construction Field Services Division, Construction Technology Unit provides guidance and expertise to both internal and external customers in all areas of road construction, materials testing, research, and bridge and pavement operations. This position provides support of construction management software systems which include FieldManager, FieldNet, and AASHTOWare Project Construction and Material.

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

EDUCATION:

Possession of a bachelor's degree in any major.

EXPERIENCE:

Departmental Analyst 12

Three years of professional experience, including one year of experience equivalent to the experienced (P11) level in state service.

Educational Substitution: College credits may be substituted on a proportional basis (one year of college education may substitute for one quarter of the required experience) for up to one half of the required experience.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of rules, regulations, policies, procedures, and terminology used in the workplace. Ability to operate a personal computer and be fluent in the use of departmental software programs including Microsoft Word and Excel. Experience using FieldManager and FieldNet suite of software, working knowledge of construction/materials documentation and a collaborative relationship with MDOT and of MDOT partners statewide is highly desirable. Knowledge of AASHTOWare Project Construction and Material system. Knowledge of the techniques of using reference materials. Knowledge of organizations, workflow, staffing, forms, and procedures. Ability to mine/abstract information from data. Ability to interpret and apply laws, rules, and regulations. Ability to analyze data and operations and make recommendations for change. Ability to conduct training and information sessions. Ability to communicate effectively written and orally. Ability to determine work priorities.

CERTIFICATES, LICENSES, REGISTRATIONS:

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.

N/A

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

STACI ERICKSON

1/13/2021

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