State of Michigan
Civil Service Commission

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

Position Code
1. TRAENGED99R

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 Bridges and Structures
4. Civil Service Position Code Description Transportation Engineer-E	**10. Division** Structure Preservation and Management
5. Working Title (What the agency calls the position) Ancillary Structures Engineer	**11. Section** Structure Preservation
6. Name and Position Code Description of Direct Supervisor O'NEILL, MICHELLE L; ENGINEER MANAGER LICENSED-3	**12. Unit** Ancillary Structures
7. Name and Position Code Description of Second Level Supervisor ZAKRZEWSKI, BRIAN D; ENGINEER MANAGER LICENSED-4	**13. Work Location (City and Address)/Hours of Work** 6333 Old Lansing Road, Lansing, MI 48917 / M-F, 7:30am-4:30pm (hours may vary)

14. General Summary of Function/Purpose of Position

Ancillary structures include retaining walls, sound walls, cantilever signs, truss signs, Intelligent Transportation Systems (ITS) structures, lighting towers, non-frangible and frangible lights, strain poles, mast arms, culverts, wood poles, and traffic signals.

This position serves as statewide engineer supporting asset management, inspection, and design activities related to ancillary assets. Duties include, but are not limited to, assisting with preparing and reviewing basic and intermediate level contract plans and specifications (e.g., bid letting plans and proposals, engineering estimates, unique Special Provisions), asset management documents, manuals and reports, shop drawings, and requests for information for ancillary structures. This position performs data analysis of structure condition information; monitors structure condition including open requests for action (RFA) and work recommendations and prepares reports for the Program Manager; participates in field inspection work including initial inspections, routine inspections, and special inspections and follows the Michigan Ancillary Structure Inspection Manual (MiASIM); and participates in coordinating asset management workflows between the Bureau of Transportation Planning (Asset Management and Policy Division) and the Bureau of Bridges and Structures Ancillary Structures Unit.

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**

Work with the Program Management Consultant (PMC) and appropriate staff to carry out tasks related to the ancillary structure asset management plan.

Individual tasks related to the duty:

- Assist the PMC/Program Manager in updating the asset database with new inventory information from the capital program using established workflows. Continuously work to improve the asset inventory by updating the database with new/newly discovered assets utilizing various software such as GIS, AASHTOWARE Suite, ProjectWise and Microsoft Suite.
- Review as-constructed project files and information to ensure accurate inventory data is maintained in the database and report discrepancies to the PMC and Program Manager.
- Locate new asset inventory information which includes traveling to field locations and updating the asset database.
- Office populate data in the inventory that is incomplete. Examples of office populated data include, but are not limited to, project number constructed under, year of construction, design specification at time of construction, etc. as defined in the MiASIM data dictionary.
- Assist with the development of inspector training guides or videos for staff to use to capture new assets being placed in the field and inspection of in-service assets.
- Assist the PMC with the deployment of new workflows and/or software.
- Review the Quality Assurance/Quality Control (QA/QC) report submittals from the PMC for adherence to the program guidelines and report any deviations to the Program Manager.
- Communicate proposed process changes, data dictionary updates, and workflow improvements between the PMC and MDOT staff.

Duty 2

General Summary: **Percentage: 30**

Provide statewide support and engineering assistance to the asset owners (Regions/Specialty Areas) for urgent needs, preservation, rehabilitation, reconstruction, and replacement of ancillary structures.

Individual tasks related to the duty:

- Travel statewide to structure field inspections, assist in documenting and measuring structure repairs including, but not limited to, deterioration and/or vehicular impact.
- Compile and provide structure field inspection information for the PMC to be used in the preparation of structure repair detailed engineer drawings.
- Review basic and intermediate level quantity calculations as referenced in the MDOT Road Design Manual and development Wiki site for materials included in repair design details.
- Review preliminary and final repair costs prepared by the PMC and report costs exceeding the budgeted amount to the Program Manager.
- Manage documents utilizing ProjetWise, BlueBeam Revu, JobNet, Microstation, Microsoft Office Suite, etc.
- Participate in meetings and on-site reviews as needed.
- Provide basic and intermediate level engineering services and inspection assistance on emergency projects. Examples of these services include, but are not limited to, coordinating repairs between the asset owner and statewide maintenance crews, developing concepts for emergency traffic control for the Region/Transportation Service Center (TSC) consideration, facilitating contracting of repairs with statewide contracted agencies such as the culvert repair contract, communicating utility coordination needs with the TSC Utility Engineer, and other tasks that are helpful to the responding MDOT office in the event of structure emergency.
- Provide efficient and timely resolution on construction issues for all emergency repair and urgent repair projects that have been coordinated through the ancillary structure unit.

Duty 3

General Summary: **Percentage: 20**

Provide asset management support services.

Individual tasks related to the duty:

- Attend monthly Ancillary Structures RFA Committee meetings.
- Monitor activities related to asset condition and ensure that RFA’s are closed in a timely manner.

- Assist the Program Manager/Program Manager Assistant in tasks related to the development of reports related to asset condition. Examples of reports include basic condition related summary reports by region, work recommendation reports by corridor, open RFA reports, etc.
- Assist Regions in developing prioritized maintenance work recommendation lists.
- Assist in maintaining region level asset condition information.
- Provide condition data to regions for the purpose of capital planning and project development on an as needed basis.
- Assign new structure inventory numbers as defined by the Michigan Ancillary Structure Inspection Manual on an as needed basis when new inventory is added to the database.
- Assist in developing presentations to stakeholders by compiling photos and information for the creation of PowerPoint slides.
- Regularly monitor ancillary structures condition information and communicate findings associated with structures rated poor or worse to the ancillary team at staff meetings.
- Create pivot tables for reporting purposes utilizing Microsoft Excel.
- Participate in the annual review of the statewide asset condition assessments for each asset class.
- Assist the Program Manager in developing asset condition goals statewide and requests for funding using the statewide condition reports and performance targets.
- Serve as the Ancillary Unit liaison with the Geographic Information Systems (GIS) team to perform GIS mapping and analysis on asset data for the ancillary assets.

Duty 4

General Summary: **Percentage: 10**

Other duties as assigned by the supervisor.

Individual tasks related to the duty:

- Attend meetings related to Ancillary Structures program development including, but not limited to, meetings with internal stakeholders (Region Coordination Meetings), statewide groups, meetings with industry partners, and bi-weekly staff meetings.
- Participate in unit led training activities and attend necessary training to obtain ancillary asset inspection qualifications.
- Participate in the development and deployment of innovative tools and concepts.
- Assist with file management and document control.
- Provide information for research projects when requested.
- Participate in special studies and prepare technical reports as assigned.
- Perform other duties as needed.

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

The employee provides direction to field crews statewide that impact the work performed on the ancillary structures. The employee discerns and uses independent judgement to keep the Program Manager apprised of inventory and condition related issues with ancillary structures within dynamic situations. Decisions to close a roadway to traffic due to risk to public safety.

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

Unique situations with no past policy or when policy is unclear. Assistance in mitigating controversy. When issues are found in the QA/QC process. When the complexity of the situation requires a subject matter expert or licensed engineer to evaluate and make recommendation.

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 occasional statewide travel and periodic out of state travel for periods of time up to several days as well as travel to attend meetings, project locations, or other work-related activities. The position requires performing inspections in the field which may include exposure to outdoor weather elements, traversing various types of terrain, working from ladders, an aerial bucket, or traversing under culverts, over water, wading in water to probe footings, and continually working near heavy traffic. Must be able to wear personal protective equipment. Ability to operate a computer. 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):

N	Complete and sign service ratings.	N	Assign work.
N	Provide formal written counseling.	N	Approve work.
N	Approve leave requests.	N	Review work.
N	Approve time and attendance.	N	Provide guidance on work methods.
N	Orally reprimand.	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 statewide engineer supporting asset management, inspection, and design activities related to ancillary assets. Duties include, but are not limited to, assisting with preparing and reviewing basic and intermediate level contract plans and specifications (e.g., bid letting plans and proposals, engineering estimates, unique Special Provisions), asset management documents, manuals and reports, shop drawings, and requests for information for ancillary structures. This position performs data analysis of structure condition information; monitors structure condition including open RFA and work recommendations and prepares reports for the Program Manager; participates in field inspection work including initial inspections, routine inspections, and special inspections and follows the MiASIM; and participates in coordinating asset management workflows between the Bureau of Transportation Planning (Asset Management and Policy Division) and the Bureau of Bridges and Structures Ancillary Structures Unit.

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 work area's function is life cycle management of ancillary structures. The role of this position is providing MDOT ancillary structure asset management customer/user support, providing communication and information to the asset owners, and serving as a liaison between the Ancillary Unit and asset owners. This position serves as an engineer support staff member for the development of that life cycle including inspection, inventory, planning, and design. This position is responsible for participating in physical field inspections on ancillary assets.

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.

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 and practices used in the maintenance of ancillary structures.

Ability to:

- Make mathematical computations.
- Read and interpret engineering plans, specifications, and technical reports.
- Maintain records and prepare reports and correspondence related to the duties.
- Utilize geospatial software applications.
- Communicate effectively with others.
- Maintain favorable public relations.

CERTIFICATES, LICENSES, REGISTRATIONS:

Possession of a valid driver's license is required.

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.

KELSEA COLE 6/13/2024

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**