

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) Highways
4. Civil Service Position Code Description ELECTRICIAN LICENSED-E	10. Division University Region
5. Working Title (What the agency calls the position) License Electrician	11. Section Operations
6. Name and Position Code Description of Direct Supervisor PALMER, STEPHANIE R; ENGINEER MANAGER LICENSED-3	12. Unit Traffic & Safety
7. Name and Position Code Description of Second Level Supervisor SORENSEN, SAMUEL; ENGINEER MANAGER LICENSED-4	13. Work Location (City and Address)/Hours of Work 4701 W. Michigan Ave., Jackson, MI 49201 / M-F, 7:00am-3:30pm (hours may vary)

14. General Summary of Function/Purpose of Position

Responsible for the maintenance of all roadway electrical devices and electrical equipment for the University Region. This position is an experienced level that performs work independently or as part of an electrician work group to address the state trunkline electrical needs within the University Region. Responsibilities include installing, upgrading, and performing routine and emergency repair of signals, freeway lighting, and related electronic equipment. This position may inspect the work of contractors hired by MDOT to install signals and freeway lighting to assure that all work conforms to specifications and the electrical code as regulated by the Michigan Department of Licensing and Regulatory Affairs and accept the contracted work. May also inspect preventative maintenance work of contractors and contract agencies.

Operate a vehicle or vehicle/trailer combination with a Gross Vehicle Weight Rating (GVWR) of 26,001 pounds or more (e.g., aerial bucket truck, work trailer, arrow board) when installing and/or repairing aerial traffic signal equipment, setting poles and pedestals, installing an/or repairing overhead wires and cables, and installing and/or repairing lighting at MDOT facilities.

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: 70

As a Region Electrician, perform maintenance, installation and repair, and inspection of electrical devices including traffic signals, freeway lighting, and other electronic traffic control equipment. Most repairs and maintenance on electrical devices must be performed while circuits are energized. Pull permits when necessary. Act independently or as part of an electrical work group to address the assigned task.

This duty requires operating a vehicle or vehicle/trailer combination with a GVWR of 26,001 pounds or more.

Individual tasks related to the duty:

- Troubleshoot, install, and repair electrical and electronic field hardware in the field or the shop. This requires knowledge of special circuits, equipment, their operation, timing, and software as related to traffic control signals.
- Perform routine maintenance on a continuous basis for all electrical traffic control devices.
- Perform special requests for temporary and permanent traffic control timing changes or improvements as requested by Region or Lansing Traffic & Safety.
- Assist or perform work on new or modernized traffic control equipment and freeway lighting installations.
- Layout and complete installations of traffic control equipment and freeway lighting equipment.
- Set up temporary traffic control for motorist safety and to maintain proper closures according to MDOT procedures.
- Obtain required permits as needed.
- Measure, cut, bend, thread, assemble and install electrical conduit, junction switches, outlet boxes, and handholes utilizing hand tools and special equipment such as mechanical drills, cutters, benders, and threaders.
- Perform emergency maintenance on a 24 hour/7 day a week basis for the system and pumphouses, providing response in all weather conditions.
- Operate equipment including, but not limited to, aerial lift.

Duty 2

General Summary:

Percentage: 15

Procure and maintain accurate records for work on all traffic control equipment and maintenance activities. This includes, but is not limited to, electrician job reports, billing and invoice documentation, emergency repair documentation, timing permits, inventory stores, and equipment documentation.

Individual tasks related to the duty:

- Maintain stores and equipment/maintenance activities documentation.
- Order and stock materials with supervisor's approval.

Duty 3

General Summary:

Percentage: 10

Inspect the work of MDOT contractors involved in installations and on preventative maintenance on signals, controllers, freeway lighting, and related electronic equipment on MDOT trunklines.

Individual tasks related to the duty:

- Provide direction on placement of detectors and verify location in the field.
- Inspect newly installed signal and freeway lighting work which has been performed by contractors. Inspection may be done by visual observation and/or by use of testing equipment to assure that work has been performed in conformance with the state electrical code. Issue written notice of code violation, if applicable, which requires corrective action and includes gathering evidence and the preparation of necessary reports.
- Review all preventative maintenance performed by contractors on MDOT trunkline. This includes reviewing quality of work, compliance with contract, and making recommendations for payment.

Duty 4

General Summary:

Percentage: 5

Other duties as assigned.

Individual tasks related to the duty:

- 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.

Decisions made in performing regular maintenance activities including a complete inspection of the entire electrical system. If any deficiencies are found, a decision is made as to the importance and whether it needs immediate repair or a repair scheduled for a later date. Scheduling repairs is very important because, if a traffic control device malfunctions or is inoperable, the safety of the motoring public may be jeopardized. When troubleshooting an electrical problem, decisions are made as to materials, manpower, and equipment needed. Whenever 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.

On unclear issues and items that affect personnel, budget, policy changes, and traffic impacts.

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.

The ability to work in all types of weather conditions and a willingness to work non-standard hours in emergency situations. Ability to lift/transport up to 100 pounds; twist, bend, and stoop; stand for long periods of time; work in confined spaces; work in and around heavy and fast-moving traffic; operate heavy equipment; and work from aerial towers and ladders. Manual labor such as digging, installing conduit, and use of other common hand tools and equipment used in electrical construction. Hazards of working around primary electrical lines and working with secondary voltages in adverse weather conditions. Be available outside normal working hours for maintenance/emergency operations, in all weather conditions.

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

Responsible for the maintenance of all roadway electrical devices and electrical equipment for the University Region. This position is an experienced level that performs work independently or as part of an electrician work group to address the state trunkline electrical needs within the University Region. Responsibilities include installing, upgrading, and performing routine and emergency repair of signals, freeway lighting, and related electronic equipment. This position may inspect the work of contractors hired by MDOT to install signals and freeway lighting to assure that all work conforms to specifications and the electrical code as regulated by the Michigan Department of Licensing and Regulatory Affairs and accept the contracted work. May also inspect preventative maintenance work of contractors and contract agencies.

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?

Responsible for the maintenance of all roadway electrical devices and electrical equipment in the University Region area. This position performs work independently or as part of an electrician work group to address the state trunkline electrical needs within the University Region.

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

EDUCATION:

Education typically acquired through completion of high school.

EXPERIENCE:

Electrician Licensed E9

No specific type or amount is required beyond that required for licensure.

KNOWLEDGE, SKILLS, AND ABILITIES:

Ability to:

- Work from electrical diagrams/wiring schematics.
- Set up traffic control schemes.
- Operate equipment.
- Maintain favorable public relations and effective working relationships.
- Interpret and apply blueprints, schematics, maintenance manuals, and assembly instructions.
- Comprehend new technologies.
- Make mathematical computations.
- Organize and prioritize work.

Knowledge of:

- Applicable federal, state, and local codes including electrical codes and standards.

Skill in:

- The use of tools of electrical trade.
- Installing electrical devices.
- Diagnosing cause of electrical breakdowns.
- Repairing and adjusting electrical devices.

CERTIFICATES, LICENSES, REGISTRATIONS:

- Possession of a journeyman electrician's license issued by the State of Michigan.
- Possession of a Commercial Learner's Permit upon appointment to the position. Continuing employment requires possession of a Commercial Driver's License (CDL) Group A with either an N or X endorsement and no air brake restrictions which must be obtained within 12 months of the date of hire into 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.

None

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

KELSEA COLE

11/1/2024

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.

RUSTY HOLDRIDGE

Employee

Date