Missouri Department of Transportation Job Description

Job Title: Intermediate Traffic Signal and Lighting Technician

Title Code: R02350

Salary Grade: 7

Exemption Status: Non-Exempt

Supervisory Responsibilities: None

District/Division: District Offices – Traffic

Effective Date: 10-01-2026

Replaces (Effective Date): 01-16-2025

General Summary

The intermediate traffic signal and lighting technician performs duties related to the installation, maintenance and repair of traffic signals, roadway lighting, communications equipment, and other electronic devices. Responsibilities are performed under moderate supervision.

Minimum/Required Qualifications

- High school diploma or GED/HiSET.
- One of the following:
    - Completion of a formal-secondary technical training program in one or more of the following: electrical, electronics, or networking (of at least 30 credit hours or one school year in duration), AND two years of experience in signal, lighting, and/or radio maintenance,
    - Completion of both phases of the department's traffic signal and lighting apprenticeship program which is only available to internal employees, AND two years of experience in signal, lighting, and/or radio maintenance,
    - Three years of experience in signal, lighting, and/or radio maintenance.
- Certification of discipline applying for: International Municipal Signal Association Level I Certification Traffic Signals and/or International Municipal Signal Association Level I Certification Roadway Lighting.
- Valid Class B commercial driver's license with no air brake restriction and interstate status (either Excepted Interstate [EI] or Non-Excepted Interstate [NI].
- Successful completion of a work simulation examination and a medical-physical examination.

Special Working Conditions/Job Characteristics

- Job requires heavy physical exertion and effort, including the ability to move materials by hand, operate hand tools, and perform stationary flagging.
- Job requires exposure to physical hazards, health and safety risks, and/or adverse or otherwise undesirable characteristics in the environment.
- Job requires exposure to working at heights requiring the use of fall protection and aerial boom equipment.
- Job may require operation of vehicle to plow snow and spread ice control materials.

Examples of Work

1. Responds to emergency calls, such as malfunctioning equipment and traffic crashes involving equipment for signals, lighting, Intelligent Transportation System (ITS), aviation and navigational lighting, and communication systems, and takes appropriate action.
2. Investigates and responds to customer service reports regarding signal and lighting operations and other electronic/electrical traffic control devices.
3. Responds to routine and emergency utility locate requests from Missouri One Call.
4. Schedules and checks the installation, repair, and maintenance of traffic signal equipment, radio communication equipment, ITS, roadway, aviation and navigational lighting, and other electronic/electrical traffic control devices.
5. Provides training to employees on safety, fleet equipment, technical procedures, and related topics.
6. Provides expertise in signal, lighting, or other electronic/electrical traffic control devices during construction project development and implementation.
7. Reads and interprets signal circuit plans and schematics for troubleshooting problems with electronic/electrical components.
8. Serves as lead in utilizing software to communicate with and program electronic traffic control devices and radio communication equipment.
9. Attends contract meetings and oversees the inspection of contracts regarding signal and lighting equipment or other electronic/electrical traffic control devices.
10. Performs advanced installation, repair, and troubleshooting of communication devices including fiber networks, wireless devices, and radios.

11. Makes recommendations regarding equipment and material needs, maintains inventory of electronic/electrical parts and supplies, and orders or purchases replacement parts.

12. Ensures completion of the department's signal and lighting preventative maintenance programs.

13. Maintains required records and documentation on the installation, maintenance, repair, or replacement of signals, lighting, and communication equipment.

14. Performs other responsibilities as required or assigned.