Missouri Department of Transportation Job Description

Job Title: Field Materials Engineer

Title Code: R05768

Salary Grade: 11

Exemption Status: Exempt

Supervisory Responsibilities: None

District/Division: Central Office - Construction and Materials

Effective Date: 01-01-2025

Replaces (Effective Date): 08-01-2023

General Summary

The field materials engineer investigates construction and material concerns, develops specifications and procedures, reviews technical standards, and conducts investigations of materials, processes, and equipment used in the preparation of bituminous and portland cement mixtures. Responsibilities are performed under general supervision.

Minimum/Required Qualifications

- Bachelor's degree in Engineering from an ABET-accredited college or university curriculum.
- Licensed as a Professional Engineer in the State of Missouri.
- Five years of experience in highway or transportation engineering.
- OSHA 10-Hour Certification required within 90 days.

Special Working Conditions/Job Characteristics

- Job requires regular, statewide, overnight travel.
- Job requires exposure to moderately adverse and undesirable environmental conditions.
- This title requires advanced accreditation or licensure which is only available to holders of specific postsecondary degrees.

Examples of Work

1. Delivers technical expertise for construction/materials related issues for department and industry personnel through correspondence, site visits and forensic investigations.

- 2. Reviews and approves asphalt and concrete mixture designs; evaluates field performance of mixtures.
- **3.** Makes recommendations to address material and constructability issues that fiscally impact current and future projects.
- **4.** Develops and revises specifications, special provisions, and manuals, including those through new process evaluations.
- **5.** Partners with other states, the federal government, industry, organizations, and research facilities to cooperatively develop products and processes and exchange information through presentations at technical meetings and conferences.
- **6.** Analyzes and makes recommendations regarding contractor claims and disputes.
- 7. Examines and approves construction change orders.
- **8.** Develops and delivers training that enables materials inspectors to uniformly apply specifications and procedures.
- **9.** Performs other responsibilities as required or assigned.