Missouri Department of Transportation Job Description

Job Title: Intermediate Materials Specialist

Title Code: R05651

Salary Grade: 8

Exemption Status: Non-Exempt

Supervisory Responsibilities: Lead Worker

District/Division: Central Office – Construction and Materials

Effective Date: 05-01-2025

Replaces (Effective Date): 07-01-2022

General Summary

The intermediate materials specialist performs or conducts investigations relating to materials and methods used in construction and repair of the highway system. Responsibilities are performed under moderate supervision.

Minimum/Required Qualifications

- Bachelor's degree in engineering from an ABET-certified college or university curriculum.
- Two years of experience in highway or transportation engineering.
- OSHA 10-Hour Certification required within 90 days.
- Successful completion of a work simulation examination and a medical-physical examination.

Special Working Conditions/Job Characteristics

- Job requires regular, statewide, overnight travel.
- Job requires moderate physical activity.
- Job requires exposure to physical hazards, health and safety risks, and/or adverse or otherwise undesirable characteristics in the environment.
- Job may require operation of vehicles to plow snow and spread ice control materials.
- A postsecondary degree is the best measure to ensure candidates possess required engineering knowledge, including in applied physics and mathematics, drafting, engineering processes and procedures, project management, industry ethical standards, and analyzing and modeling data.

Examples of Work

- 1. Reviews contract mix designs for proposed projects and transfers of asphalt mix designs; reviews contract proposals and specifications to ensure mix designs meet the required criteria; inputs data into spreadsheet for laboratory testing and creating job mix formulas.
- 2. Evaluates new products and makes recommendations for possible use by the department.
- 3. Contacts district personnel and contractors to resolve issues and answer questions regarding mix designs, materials, and specifications.
- 4. Provides technical supervision of field observations and special tests; directs staff in the mixing and molding of the material specimens; assembles and operates special test equipment used in investigations.
- 5. Prepares, tabulates, and processes test data on aggregates, concrete, asphaltic concrete, and general materials for specification compliance; prepares reports on investigation results and develops recommendations for specific problems.
- 6. Attends highway engineering related conferences, seminars, and workshops.
- 7. Performs lead worker responsibilities, which may include providing general instruction, assigning and reviewing work, coaching and training, providing guidance and instruction in the proper and most efficient methods of accomplishing tasks, and providing input to the direct supervisor on staffing decisions and performance development.
- 8. Performs other responsibilities as required or assigned.