

STATE OF MONTANA

JOB DESCRIPTION

Montana state government is an equal opportunity employer. The State shall, upon request, provide reasonable accommodations to otherwise qualified individuals with disabilities.

Job Title: Highways Engineer Position Number: 30005 Location: Helena

Department: Transportation

Division and Bureau: Engineering Division/Highways Bureau

Job Overview: This position is the Highways Engineer and is responsible for the administration, management and coordination of all work involving the Road Design, Hydraulics, and Survey & Photogrammetry sections. This position reports to the Preconstruction Engineer and is responsible for the management of approximately 80 FTE. Duties include highway program development, oversight of engineering projects and administration of Bureau resources. Duties also involve the creation, review and revision of engineering policies, standards and practices. This position bears professional engineering responsibility for all plans prepared by the Highways Bureau and the District Road Design staff.

Essential Functions (Major Duties or Responsibilities):

Program Oversight and Administration – 30%

- Assesses resources in conjunction with Districts to develop project priorities and establish deadlines for program delivery
- Ensures that project development complies with federal design, administrative criteria, and is cost-effective and timely.
- Directs the bureau's involvement with cooperative projects, research, technical reviews, and adherence to design standards/criteria.
- Provides recommendations for the implementation of new design principles, software and materials.
- Identifies methods to improve the bureau's responsiveness and effectiveness.
- Establishes policies and recommends changes in policies, specifications, standards, and design criteria
- Assesses changes in national standards and criteria to ensure contemporary practices and technology are utilized
- Develops or participates in the development of business plans for implementation of new policies, technology, etc.
- Oversees development and implementation of general procedures and design criteria to ensure technical validity and uniformity in application
- Provides MDT representation and technical consultation in the development of national specifications and engineering methods (e.g. AASHTO Subcommittee on Design)
- Reviews and approves or denies atypical methods or procedures.

Highway Project Oversight – 30%

- Stamps and signs all plans prepared by the Highways Bureau and the District Road Design staff as the Professional Engineer on behalf of the Chief Engineer of the Montana Department of Transportation.

- Provides professional engineering oversight and technical direction for the Road Design, Hydraulics, and Photogrammetry & Survey Sections.
- Provides statewide engineering review and oversight of project plans, designs, proposals and project documentation and ensures statewide and national consistency.
- Determines project feasibility and design alternatives.
- Assesses geometric controls and reviews designs to ensure they can provide adequate level of service.
- Assesses impacts to natural and man-made features to determine that all practical avoidance and minimization of impacts are utilized
- Provides engineering design direction and technical assistance to Helena, District and consultant design personnel.
- Directs the bureau's involvement in various studies such as corridor studies, systems impact evaluations, value analyses, environmental assessments and environmental impact statements.
- Directs the implementation of changes to engineering practices (AASHTO, FHWA guidance), specifications and materials.

Bureau Administration – 25%

- Directs, plans, and coordinates the Bureau's involvement in MDT's planning, design, construction and maintenance programs
- Upgrades design processes to ensure that they are current with national standards and guidelines
- Directs implementation of new FHWA and MDT directives
- Assesses potential impacts to the Road Design, Hydraulics and Photogrammetry & Survey programs due to proposed changes in processes, software, materials and specifications
- Administers Highways Bureau budget, policies, and equipment to ensure efficient and safe program operations, compliance with statutory responsibilities and related laws, and compliance with state, federal, and national standards.
- Develops and manages budgets and resource allocations for Highways Bureau activities to ensure adequate funding for planned and active projects, maximize federal funding, and ensure that Department resources are used in the most efficient possible manner.
- Reviews and approves all requisitions, payrolls, expense claims, vendor claims, etc. for the bureau.

Staff Management – 10%

- Manages approximately 80 FTE in the Road Design, Hydraulics, and Photogrammetry & Survey Sections.
- Directs bureau staff in the implementation of human resource policies and requirements.
- Develops and directs recruitment and succession plans involving comparisons of the Preconstruction program long-term requirements with available staffing and meeting these requirements through justification for hiring and use of design consultants.
- Develops short- and long-range training plans to address existing limitations in employees' skills
- Establishes and approve overall responsibilities, organizational structures, and allocation of positions within sections of the bureau.
- Determines training needs of bureau staff through analysis of program effectiveness, new technology and policies, and staff performance.
- Evaluates the performance of all positions directly supervised and complete performance evaluations.

Management of Tort Claims – 5%

- Reviews claims involving allegations of negligent design, construction or maintenance, analyzes the bases for the claims, performs research to determine the relevant issues for the defense of the State and MDT.

- Provides expert testimony and represents the State and MDT as an expert witness for multiple engineering and safety concerns.

Supervision:

- The number of employees supervised is: 4 Directly, approximately 75 Indirectly
- The position number for each supervised employee is: 32085, 35001, 50008, and 30003

Physical and Environmental Demands:

- Sitting for long periods of time
- Reading technical publications, in hard copy and electronic formats
- Managing data on computers – hand and eye strain possible
- Travel across the state for various department and district meetings
- Stress from the responsibility of managing multiple projects and personnel

Knowledge, Skills and Abilities (Behaviors):

- Comprehensive knowledge of the theory, principles, methods and techniques of civil engineering and associated mathematics and physical sciences.
- Knowledge of the methods and practices of the appropriate specialty such as planning design, construction materials.
- Knowledge and understanding of the engineering policy, methods and procedures of the Department of Transportation and applicable regulations, standards and specifications.
- Considerable knowledge of the practices and regulations of personnel management and supervision; administrative and management concepts and practices, organizational theory and budget development.
- Comprehensive knowledge of program requirements, contract administration, risk management and tort liability.
- Skill and the ability to communicate effectively orally and in writing; to make engineering presentations to the public.
- Skill in applying analysis and professional judgment in complex situations to arrive at solutions and make appropriate choices among options and alternatives.
- Skill in solving unusual and difficult engineering problems.
- Ability to plan, organize and direct multiple engineering activities.
- Ability to manage and supervise a staff of professional, technical and support personnel in varied engineering and survey disciplines.
- Ability to establish and maintain effective working relationships with employees, MSU-Bozeman, other agencies and the public.
- Ability to work effectively in a multi-task environment.
- Ability to evaluate resources and assess risks to achieve Departmental goals.
- Ability to make timely, technical decisions to meet project deadlines and budget.

Minimum Qualifications (Education and Experience):

- The required knowledge and skills are typically acquired through a combination of education and experience equivalent to bachelor’s degree in civil engineering, Construction Engineering Technology, Mechanical Engineering, Geotechnical or Mining Engineering, or a related field.
- This position requires a minimum of 5 years of related experience. This position requires a minimum of 3 years of supervision or team lead experience.
- Certifications, licensure, or other credentials include Certification as a Professional Engineer is required.
- Alternative qualifications include: Any combination of additional related work experience and education equivalent to the minimum qualifications.

Special Requirements:

The ability to travel throughout the state, including occasional overnight stays.

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|--|--|
| <input type="checkbox"/> Fingerprint check | <input checked="" type="checkbox"/> Valid driver’s license |
| <input type="checkbox"/> Background check | <input type="checkbox"/> Other; Describe |
| Union Code | Yes, Safety Responsibilities |

The specific statements shown in each section of this description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to perform the job successfully.

Signatures

My signature below indicates the statements in the job description are accurate and complete.

Immediate Supervisor	Title	Date
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Administrative Review	Title	Date
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My signature below indicates that I have read this job description.

Employee	Title	Date
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Human Resources Review

Job Code Title: Engineering Manager Job Code Number: A9401B

My signature below indicates that Human Resources has reviewed this job description for completeness and has made the following determinations:

- | | |
|---|--|
| <input checked="" type="checkbox"/> FLSA Exempt | <input type="checkbox"/> FLSA Non-Exempt |
| <input checked="" type="checkbox"/> Telework Available | <input type="checkbox"/> Telework Not Available |
| <input checked="" type="checkbox"/> Classification Complete | <input type="checkbox"/> Organizational Chart attached |

Human Resources:

Tiffany Thornton	HR Generalist	1/9/2025
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Signature	Title	Date
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