

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: Bridge Inspection Team Leader 2 **Position Number:** 50019, 50038

Location: Various **Department:** Transportation

Division and Bureau: Engineering / Bridge Bureau

Section and Unit: Bridge Management Section / Bridge Inspection Unit

Job Overview: A Bridge Inspection Team Leader 2 is a technical expert in structure condition, safety inspection, and Federal reporting. The Bridge Inspection Team Leader 2 inspects most types of in-service structures including bridges, tunnels and culverts to protect critical infrastructure, maintain public safety and fulfill the Department's legal responsibilities. Duties include structure inspection and assessment, bridge condition documentation and reporting, bridge inspection planning and program operations, and bridge inspection quality control to ensure accuracy of legal records of structure inspections. This position is supervised by the Area Bridge Inspection Manager.

Essential Functions (Major Duties or Responsibilities):

Structure Inspection – 80%

- Inspects most types of structures to identify conditions, defects and operational safety. Ensures that bridge inspections are thorough, high quality, efficient, and cost-effective, and meet all Federal requirements.
- Assesses complex structural conditions and problems and their effect on public safety.
- Identifies and addresses bridge inspection resource needs, and coordinates the timing of inspections with MDT personnel, county road supervisors, railroad flaggers, and local law enforcement as needed.
- Develops accurate, high quality bridge inspection reports that document structural condition and meet inspection program requirements and Federal regulations.
- Reports critical bridge safety issues to the Bridge Inspection Engineer and the Area Bridge Inspection Manager when they are identified. Makes recommendations to close or restrict a bridge if necessary to protect public safety.
- Recognizes and reports bridge components that need repair to maintain bridge safety and avoid the need for costly replacement.
- Ensures adherence to safety standards and procedures to protect staff, materials, and the public from hazards associated with bridge inspection.

- Responds to emergency assistance and other requests from local/county officials, Department staff, FHWA personnel, and members of the public.

Structure Inspection Program Operations – 15%

- Complies with established operational policies and procedures and progress toward inspection program goals.
- Works toward achieving program goals, meeting Federal requirements, and ensuring public safety.
- Assists the Area Bridge Inspection Manager in determining supply, equipment, and vehicle procurement needs for inspections, including developing specifications, ensuring compliance with department procurement practices, developing budget justifications, and integrating equipment into inspection practices to ensure maximization of resources.
- Assists the Area Bridge Inspection Manager with evaluating current and projected workflow, relative complexity of inspections (e.g. fracture critical, pin and hanger, UBIV, emergency, etc), and available resources to determine priorities.
- Coordinates with the Area Bridge Inspection Manager to train new inspectors in all aspects of bridge inspection. Emphasizes the importance of safety for the inspector and the public. Explains basic structural engineering principles and bridge inspection techniques.
- Uses bridge inspection software for data collection and management, and trains other personnel on best practices with software and documentation practices.
- Represents the Department at professional conferences and workgroups, formal hearings, legal proceedings, and other events to explain, promote, and defend Department positions, actions, and interests on various issues related to bridge inspection and safety.
- Builds and maintains relationships with Bridge Management Section personnel and District Personnel to facilitate communication, safe and positive work environment, and effective response in emergent situations.

Other Duties – 5%

This position performs a variety of other duties as assigned by the Area Bridge Inspection Manager.

Supervision - The number of employees supervised is: 0

Physical and Environmental Demands:

Physical:

- Lifting objects weighing up to 50 lb.
- Walk over uneven terrain or in water, climb structures spanning significant heights (i.e., 100+ feet), and use safety equipment (e.g., ropes, hardhats, etc.)
- Travel extensively within the state to project locations (1,500 miles or more per month).
- Remain seated for extended period, with occasional walking, standing and bending.
- Operate the bucket of an Under Bridge Inspection Vehicle over water and at significant heights.

- Ability to see small bridge defects within arm's reach and at a distance.

Environmental:

- Work in the office and in the field
- Endure exposure to heavy vehicles and equipment, extreme heights, high speed traffic, dynamic weather conditions, and enclosed spaces

Knowledge, Skills and Abilities (Behaviors):

Knowledge:

- Civil engineering principles and associated mathematics and physical sciences.
- Extensive knowledge of the principles and practices of structural inspection.
- Knowledge of inspection practices for Fracture Critical Bridges.
- Familiarity with the AASHTO Manual for Bridge Evaluation, National Bridge Inspection Standards, and Element Level inspection standards and procedures.
- Non-destructive testing techniques for structural materials.
- Methods and techniques of highway construction.
- Safety practices and OSHA regulations.

Skills:

- Coordinating multiple inspection projects.
- Operating inspection equipment.
- Adapting to changes in plans and site conditions.
- Effective written and verbal communication.
- Operating computer software, including standard Microsoft Office software and bridge inspection applications.
- Managing, comparing and compiling large amounts of data.
- Communicating tactfully with other agency officials and with the public.
- Applying engineering concepts to a variety of situations.
- Evaluating structural problems by examining evidence, discussions with peers and structural engineers.
- Solving problems for multiple types of structural and logistical issues.
- Using inspection experience to make decisions on structural stability and safety.

Abilities:

- Effectively communicates in a high stress and multi-task environment.
- Establishes and maintains effective working relationships with others.
- Creates a positive work environment through cooperation and communication.
- Motivated to take action to achieve results without being told.
- Supports team decisions and outcomes through actions and communication.
- Highly observant and pays attention to detail.
- Adjusts to meet inflexible deadlines.
- Makes sound decisions that affect public health and safety.
- Committed to workplace safety for self and others.

Minimum Qualifications (Education and Experience):

The required knowledge and skills are typically acquired through a combination of education and experience equivalent to a Bachelor’s Degree in Civil Engineering, Construction Technology, or a related field from an ABET accredited program, and proof of passage of the Fundamentals of Engineering (FE) exam, and 4 years of in-service bridge inspection experience with a minimum of 2 years of experience as a Bridge Inspection Team Leader, and meets current Federal requirements to be a Bridge Inspection Team Leader.

Alternative qualifications include: Registration as a Professional Engineer in Montana, and 2 years of in-service bridge inspection experience with a minimum of 1 year of experience as a Bridge Inspection Team Leader, and meets current Federal requirements to be a Bridge Inspection Team Leader; or 7 years of in-service bridge inspection experience with a minimum of 2 years of experience as a Bridge Inspection Team Leader, and meets current Federal requirements to be a Bridge Inspection Team Leader; or 5 years of in-service bridge inspection experience and 2 years of bridge inspection related experience with a minimum of 2 years of experience as a Bridge Inspection Team Leader, and meets current Federal requirements to be a Bridge Inspection Team Leader. In-Service bridge inspection experience must be under the guidance of Bridge Inspection Team Leader. Bridge inspection related experience means any combination of bridge inspection, bridge design, or bridge construction experience.

Any combination of education and related work experience equivalent to the minimum qualifications.

Certifications, licensure, or other credentials include successful completion of a Federal Highway Administration (FHWA) approved comprehensive bridge inspection training course and successful completion of a FHWA approved Fracture Critical Inspection Techniques for Bridges Course.

Special Requirements:

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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 | 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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