

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: Land Survey Tech Position Number: TBD Location: District Offices

Department: Montana Department of Transportation

Division and Bureau: Engineering Division/ Highways Bureau

Section and Unit: Photogrammetry & Survey Section/Land Survey Unit

Job Overview: This position serves as an entry level Surveying Technician within the District and is responsible for performing a variety of technical and pre-professional survey duties. Examples of duties position will assist with include: making measurements, collecting and recording survey data, operating survey equipment, setting stakes/monuments, researching records, recovering survey evidence, making rudimentary survey calculations, drafting at an entry level, maintaining survey equipment and sustaining an inventory of survey supplies. This will include control, topographic and land boundary cadastral surveys.

Essential Functions (Major Duties or Responsibilities):

Field & Office Survey Duties - 70%

Performs a variety of technical and pre-professional field, office and administrative duties in support of ongoing land survey projects and operations.

- Research public and private records (i.e., Bureau of Land Management, National Geodetic Survey, United States Geological Survey, county courthouse, county surveyors, private surveyors, etc.) under the direction of a Surveyor II or Professional Land Surveyor to recover title, monument, and/or other survey histories pertinent to the survey being conducted.
- Contacts landowners to notify them when survey crews will be on their property and finds out if there are any special circumstances survey crews need to be aware of since the right-of-entry forms were completed.
- Conducts field survey activities by recovering monuments and other survey evidence, operating survey instruments, recording data, setting stakes and monuments and performing other related field survey tasks. Operates machinery and equipment required to accomplish survey tasks including: vehicles, electronic total stations, engineering/digital levels, data collectors, GPS equipment, calculators, computers and software, other standard survey tools and equipment, and various hand tools used for digging, cutting, marking, etc.
- Assists in organizing, computing, and adjusting survey data to be used in compiling reports, maps, plats and exhibits. Examples of these duties include: reducing field notes, making section break-down

calculations, making proportionate measurement calculations, adjusting traverses and level notes, drafting, completing corner recordation forms and calculating surveys.

- Prepares documents (i.e. - maps, plats, exhibits, control diagrams, certificates of survey, reports, control abstracts, coordinate listings, etc.) to be used in engineering planning and design, right-of-way acquisition and/or for submission to other agencies.
- Performs survey reviews for compliance with established standards and for computational accuracy. Identifies areas of non-conformance or substandard work, makes recommendations for resolution and refers them to the Land Survey Manager or appropriate District Land Survey Manager for final action.

Assist Survey Party Chief - 20%

Assist the party chief for routine field surveys by observing field activities under the guidance of a Surveyor II or Professional Land Surveyor.

- Observes project background information by reviewing scope of project with professional surveyor. Identifies and discusses what data needs to be gathered in the field, the resources needed for those activities and information needed to complete the survey. Researches and gathers required existing survey background documentation and determines data collection activities for project through discussion with the crew chief and/or professional land surveyor. Assess project requirements to available staff and their related expertise/abilities to determine time estimates-to complete assigned tasks.
- Performs the following land surveying tasks under the supervision of the party chief or a professional land surveyor: property corner search, retracing General Land Office and Bureau of Land Management surveys, retracing property boundaries, retracing highway right-of-way, writing legal descriptions, preparing plats, preparing corner recordations, staking property boundaries, making land survey calculations, etc.
- Submits completed tasks to the professional land surveyor for review, approval, signature, and distribution.

Equipment Maintenance - 5%

Maintains equipment and supply inventories to ensure availability and proper functioning to support survey operations.

- Schedules repair and maintenance work for the survey vehicle.
- Evaluates, organizes, and prepares equipment to be used in surveys conducted by the Survey Unit.
- With oversight, adjusts, maintains, and cleans survey equipment to assure proper alignment, operation, and safety. This includes pegging levels, adjusting tribrachs, checking electronic survey distance measurement equipment on calibration baselines, etc.
- Orders and maintains an inventory of survey supplies to assure availability when needed.

Other Duties - 5%

Performs a variety of other duties as assigned in support of Section, Bureau and MDT goals and objectives. Examples of other duties are:

- Assisting with other MDT programs on special projects.
- Attending training and educational sessions as required
- As assigned by the Land Survey Manager or appropriate District Land Survey Manager, conducts training sessions for district survey crews on complex survey procedures and the use of state-of-the-art survey equipment and methods.
- Participate in maintaining the National Geodetic Survey (NGS) vertical control network by replacing NGS benchmarks, running levels in accordance with NGS specifications, and preparing level data for submission to NGS.

Supervision

The number of employees supervised is: N/A

The position number for each supervised employee is: N/A

Physical and Environmental Demands:

- Extensive statewide travel (travel is estimated to range from 10% to 30% of the time)
- Lifting objects more than 30 lbs.
- Ability to walk over uneven terrain or in water.
- Continual walking or standing.
- Exposure to extreme weather conditions and high-speed traffic.
- Operation of motor vehicles and survey related equipment.

Knowledge, Skills and Abilities (Behaviors):

Basic map and legend reading skills. Can read and transcribe cursive writing as used in historic original survey field notes.

Basic math skills using a hand-held calculator. Basic computer skills for data entry and editing in a word processor or spreadsheet. Online search engine operation, beginning CADD drafting is a plus.

Personal safety awareness and driving skills.

Minimum Qualifications (Education or Experience):

The required knowledge and skills are typically acquired through a combination of education or work experience. The position prefers aptitudes or experience in construction or agricultural related fields.

Certifications, licensure, or other credentials include: Valid Driver's License

Special Requirements:

Fingerprint check

Valid driver's license

Background check

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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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 Support All Other Job Code Number: D32J01

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

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

Human Resources:

Signature	Title	Date
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