

# 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: Surveyor III      Position Number: 32054; 35003; 35013, 92518, 92598, 90768, 90408, 91948, 91308, 91318, 90098**

**Location: Helena      Department: Transportation**

**Division and Bureau: Engineering Division/Highways Bureau**

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

### **Job Overview:**

This position is a professional land surveyor (Surveyor III) for the MDT. The position is responsible for planning and performing professional survey work. Examples of duties include: organizing and overseeing straightforward survey projects, signing off on uncomplicated survey projects, analyzing evidence to determine boundary locations, staking/monumenting property boundaries, coordinating survey reviews to ensure quality, consistency, efficiency, and compliance with established standards and policies, making professional level survey calculations, carrying out complex drafting, providing training to field survey crews and coordinating the operation and maintenance of survey equipment within the Unit. The Survey III is in responsible charge of all survey work being performed under their PLS license.

The position reports directly to the Land Survey Manager or District Land Survey Manager.

### **Essential Functions (Major Duties or Responsibilities):**

#### **Survey Project Management      - 70%**

Plans and performs a variety of professional level survey duties in support of ongoing land survey projects and operations.

- Researches 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 LSI or PLS to recover title, monument, and/or other survey histories pertinent to the survey being conducted.

- Makes landowner contacts to solicit and provide survey related information, to obtain permission to survey and to identify and resolve minor survey related complaints and concerns
- Coordinates and manages land surveys to establish lost or obliterated property and property controlling corners. Establishes proper corner search methods and procedures for survey crews, researches and analyzes public and private corner location records and recovers and evaluates corner location evidence in the field. Perpetuates public land survey corners in accordance with the Corner Recordation Act by compiling, completing, and certifying corner recordation documentation.
- Approves and signs routine survey documents. Signature and authorization of the most complicated documents will be handled by District Survey Manager, Survey Project Manager or Land Survey Manager.
- Directs and oversees the investigation and recovery of field evidence to establish reference points and determine boundary and/or monument locations. Comparatively analyzes historical records; makes professional judgments as to the character and validity of monuments (historical monuments include stream banks, trees, boulders, etc.); perpetuates corners in accordance with the Corner Recordation Act; ensures new monuments match the legal deeds as filed in public records; and preparing and publishing all required documentation.
- Solves problems that arise during surveys. Corrects inaccuracies in surveys, identifies and obtains missing data, communicates with landowners, troubleshoots survey software, and resolves a variety of other ambiguities, problems or issues.

### **Survey Review and Approval - 10%**

Coordinates review of in-house surveys to ensure quality, consistency, efficiency, and compliance with standards and policies. This position has sign-off authority and responsibilities for corner recordations and unambiguous certificates of survey. Signature and authorization of more complicated documents will be handled by District Survey Manager or Survey Project Manager or Land Survey Manager.

- Determines the validity of evidence and methods used in reestablishing corner positions, reviews accompanying legal documents, makes final computations and adjustments, and organizes and outlines survey information in a format usable by others.
- Reviews, modifies as necessary and signs off on certificates of surveys and corner recordations. Reviews legal documents, exhibits, deeds, ROW plans, etc. to ensure the accuracy and compliance of all documentation. Analyzes existing documentation to define parcel boundaries, writes legal descriptions, reviews plans and deeds, etc.

## **Survey Crew Oversight and Training - 10%**

Oversees and trains field survey crews to ensure the timely and efficient collection and recordation of survey data.

- Directs and oversees surveys to ensure survey data is collected in the proper sequence and manner to support survey and project development operations. Consults with section staff and management, evaluates survey staff and equipment resources, and evaluates survey methods, sequencing and time requirements to plan multiple and concurrent survey projects.
- Reviews survey requests to determine manpower, time, equipment and informational data needed to complete the survey. Determines duty assignments on the site and provides oversight.
- Observes survey crews to determine compliance with established methods and techniques, and survey and recording requirements. Notifies individual or appropriate supervisor of improper practices or safety concerns. Reports on performance to the supervisor on a daily basis and as part of the formal evaluation process.
- Provides technical assistance to survey crews on adjustment and operation of survey equipment to assure the full potential of the equipment is being realized.

## **Equipment Maintenance - 5%**

Directs and coordinates the operation and maintenance of survey equipment within the Section, including vehicles, electronic total stations, theodolites, engineering levels, digital levels, data collectors, CADD workstations, automated systems, GPS survey equipment, and other tools and technologies to ensure effective operations.

- Develops and establishes equipment development and maintenance plans to ensure that modern technologies are available and appropriately utilized and maintained.
- Tests new survey procedures and equipment to provide the Land Survey Manager information necessary to incorporate time efficient and cost-effective survey methods and procedures into the survey program. Ensures accurate calibration, determines measurements/features and their practical application to survey work, makes recommendations to District Survey Manager or Survey Project Manager.
- Adjusts, maintains and cleans survey equipment to assure proper alignment, operation, and safety.
- Orders and maintains an inventory of survey supplies to assure availability when needed.
- Responsible for reviewing calibration baseline reports for all MDT survey grade electronic measuring devices and maintaining a record of these reports to establish an adjustment and performance history for each instrument.

## **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 bench marks, 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 in excess of 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 and related equipment

## **Knowledge, Skills and Abilities (Behaviors):**

Predominant work of this position requires professional knowledge of the concepts, principles, and applications of land surveying and related mathematics (e.g., geometry, trigonometry, statistics, etc.); legal principles, guidelines, and precedents related to surveying (e.g., Montana Subdivision and Platting Act, Sanitation in Subdivisions Act, Uniform Standards for Monumentation, etc.); case law related to property boundaries; survey computation and data analysis; State and federal survey policy and procedures; and specialized applications of various instrumentation.

This position requires skill in directing and organizing survey crews and projects; operate standard office software applications (e.g., word processing, database, etc.), and strong written and verbal



My signature below indicates that I have read this job description.

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**Employee**

**Title**

**Date**

**Human Resources Review**

**Job Code Title: Surveyor 2**

**Job Code Number: D12012**

**Level: 2**

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

FLSA Exempt

FLSA Non-Exempt

Telework Available

Telework Not Available

Classification Complete

Organizational Chart attached

**Human Resources:**

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**Signature**

**Title**

**Date**