

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.	
2. Employee's Name (Last, First, M.I.)	8. Department/Agency TRANSPORTATION CENTRAL OFFICE
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission) Highway Operations
4. Civil Service Position Code Description Land Surveyor-E	10. Division North Region
5. Working Title (What the agency calls the position) Land Surveyor	11. Section Development
6. Name and Position Code Description of Direct Supervisor RATERINK, CALEB; LAND SURVEYOR MANAGER-2	12. Unit North Region Design Surveys
7. Name and Position Code Description of Second Level Supervisor MCCAW, DAVID W; STATE ADMINISTRATIVE MANAGER-1	13. Work Location (City and Address)/Hours of Work TBD - North Region (Alpena, Gaylord, or Traverse City) / Mon - Fri (Hours to be discussed with Supervisor)
14. General Summary of Function/Purpose of Position This position performs technical land surveying assignments within the North Region while working toward obtaining professional licensing. Duties include conducting land surveys for road and bridge design, completing global positioning system (GPS) topographic mapping, processing field data, and performing calculations of measurements. Operate a motor vehicle or vehicle/trailer combination with a Gross Weight Rating (GVWR) of between 10,001 and 26,000 pounds when performing field work.	

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary:

Percentage: 55

Conduct land surveys for road and bridge design.

This duty requires operating a vehicle or vehicle/trailer combination with a GVWR of between 10,001 and 26,000 pounds.

Individual tasks related to the duty:

- Work with and become proficient with the operation and diagnostics of survey equipment such as Total Stations, Global Positioning Systems, Digital Levels, and Data Collectors.
- Complete total station and GPS topographic mapping. Perform data collection and stakeout procedures. Record survey measurements and descriptive data in various forms and formats per MDOT Standards.
- Set and witness horizontal and vertical control point monuments based upon project needs considering both design and construction.
- Locate section corners, property irons, and other property control.
- Set existing and/or proposed right-of-way (ROW) monuments under the direction of licensed Professional Surveyor.
- Report progress of survey projects to Region Surveyor and Project Managers.
- Make decisions in the field to accomplish the survey projects.
- Assist in planning to establish an approach to complete the survey scope from beginning to end, with direction from the Region Surveyor.
- Provide survey assistance and support to other Michigan Department of Transportation (MDOT) units.
- Ensure safe working practices are used in all operations following federal, state, and department policies (MDOT Design Survey Standards of Practice Manual) to complete projects efficiently and safely.
- Maintain favorable public relations while conducting survey assignments.
- Train seasonal and other employees.

Duty 2

General Summary:

Percentage: 30

Performs survey office duties, processes field data, and prepare projects for final deliverables.

Individual tasks related to the duty:

- Perform surveying procedures, calculations, and processing methods in compliance with the MDOT Design Survey Standards of Practice Manual to complete projects efficiently and safely.
- Work with and become proficient with current survey software used by MDOT, including but not limited to Open Roads Designer (ORD), Leica Captivate, Leica Infinity, and StarNet.
- Utilize computer and survey software to assemble electronic deliverables and survey information. This includes, but is not limited to, the use of ORD to prepare planimetric drawings, topographic survey models, and digital terrain models.
- Perform reduction, analysis, and adjustment of survey measurements with Region Surveyor guidance.
- Prepare and submit all final calculations, data files, drawings, survey Reference Information Documents (RID) files and reports to be reviewed by Region Surveyor.
- Work with and become proficient using Geographic positions, State Plane Coordinates, and scale factors including converting between the two systems and ground coordinates.
- Analyze and reduce survey data from different media and place into computer mapping files (ORD) with minimal guidance from Region Surveyor.
- Assist in preparing PA 132 Certificate of Survey drawings for the division and purchase of real property.
- Assist in writing Land Corner Recordation Certificates.
- Assist in reviewing legal descriptions.

Duty 3

General Summary:

Percentage: 5

Assist with Geographic Information System (GIS) data collection.

This duty requires operating a vehicle or vehicle/trailer combination with a GVWR of between 10,001 and 26,000 pounds.

Individual tasks related to the duty:

- Use GIS field collection equipment and software for field data collection.
- Collect GIS field data with attributes of various assets as instructed following MDOT safety standards.
- Assemble GIS information from field collected data or existing electronic data.

Duty 4

General Summary:

Percentage: 10

Other duties as assigned.

Individual tasks related to the duty:

- Ensure equipment is in proper working order.
- Keep equipment and survey supplies organized, clean, in stock, and ready to use.
- Calibrate and perform routine checks on total station, levels, tribraches and laser plummets.
- Inform Region Surveyor of all equipment failures and repairs.
- Schedule routine maintenance for survey vehicles and equipment.
- Remain current in new surveying technologies.
- Attend meetings and/or trainings deemed helpful for advancement toward obtaining licensure as a Professional Surveyor.
- Other duties as assigned.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

Make decisions that concern safety for self and other crew members such as proper placement of traffic control devices (i.e. signs, traffic cones, placement of vehicles on site) and how to move within and around moving traffic. Evaluate evidence in the field to accurately document and survey to level of detail required. Make decisions for the type of survey equipment to use and methods of collecting survey data.

17. Describe the types of decisions that require the supervisor's review.

When there is a deviation from an established procedure or department policy. Unanticipated issues causing a change in budget or additional time to complete the project. Matters involving high perceived risk of litigation. To clarify instructions, or when issues arise, or regarding department policy.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Physical effort to traverse various terrain, reaching for plans, transporting heavy or bulky loads up to 50 pounds, and remaining in a stationary position for long periods of time using a computer or traveling in a vehicle may be required. Position performs frequent field reviews of proposed or active road/bridge survey projects requiring traversing irregular terrain. Environmental conditions include exposure to dirt, fumes, heavy and high-speed traffic or adverse weather conditions. This position is required to operate a motor vehicle or a vehicle/trailer combination with a GVWR of between 10,001 and 26,000 pounds. Be available outside normal working hours for maintenance operations, in all weather conditions.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

N Complete and sign service ratings.
N Provide formal written counseling.
N Approve leave requests.
N Approve time and attendance.
N Orally reprimand.

N Assign work.
N Approve work.
N Review work.
N Provide guidance on work methods.
N Train employees in the work.

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes.

23. What are the essential functions of this position?

This position performs technical land surveying assignments within the North Region while working toward obtaining professional licensing. Duties include conducting land surveys for road and bridge design, completing global positioning system (GPS) topographic mapping, processing field data, and performing calculations of measurements.

Operate a motor vehicle or vehicle/trailer combination with a Gross Weight Rating (GVWR) of between 10,001 and 26,000 pounds when performing field work.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

25. What is the function of the work area and how does this position fit into that function?

This position performs and coordinates all duties to deliver design surveys necessary for Region projects and activities. This position must ensure communication and coordination with project managers, design engineers, Region, and statewide survey crews, TSC survey crews, and consultant surveyors and engineers. This position also provides office support duties and review of consultant survey contracts.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of a bachelor's degree with a major in surveying.

EXPERIENCE:

Land Surveyor 9

No specific type or amount is required.

Land Surveyor 10

One year of professional experience conducting land surveys equivalent to a Land Surveyor 9.

Land Surveyor P11

Two years of professional experience conducting land surveys equivalent to a Land Surveyor, including one year equivalent to a Land Surveyor 10.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- basic math and computations
- use/care of surveying instruments/equipment
- survey computer programs
- applicable state laws

Ability to:

- plan, coordinate and expedite work projects
- interpret complex rules and regulations

- communicate effectively
- organize/coordinate personnel and resources for multiple projects
- promote and maintain favorable public relations
- meet and work effectively with others
- organize priorities
- collect and analyze data
- maintain records
- read plans
- prepare reports

**CERTIFICATES, LICENSES,
REGISTRATIONS:**

- This position is a Test-Designated Position. The employee is subject to random drug and alcohol testing while employed in this position.
- Possession of a valid driver's license is required and must be maintained throughout employment in the position.
- Subclass Code Requirement: CMVOSSP – A safety-sensitive position in which the employee is required to operate a commercial vehicle. Requires a valid Medical Examiners Certificate for Commercial Driver Medical Certification and must maintain throughout employment in the position.

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

N/A

I certify that the entries on these pages are accurate and complete.

Appointing Authority

Date

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee

Date