



Title: Senior Highway Engineer & Drainage Inspector

FLSA Status: Non-Exempt

Department: Highway

Updated: 11/2022

General Definition of Work

Performs difficult work preparing and maintaining maps, developing construction plans and inspecting construction projects for specification compliance, ensuring compliance with plans, specifications and standards, ordinances, rules and regulations; coordinating the inspection and maintenance of drainage ditches in the County; organizing, supervising and participating in County ditch proceedings, inspections, maintenance and repair; maintaining related records, reports and files, and related work as apparent or assigned. Work is performed under the general direction of the County Engineer.

Supervision may be exercised over assigned personnel.

Essential Functions

To perform this job successfully, an individual must be able to perform each essential function satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable an individual with disabilities to perform the essential functions.

- Prepares construction plans and proposals, including developing project design structure, alignment and cross section; calculating project item estimates; developing project proposal for federal, state and local projects to include all applicable specifications, standards, rules, ordinances and permits.
- Compiles and collects information used for designing road projects, including topography, cross sections, alignments, elevations for benchmarks and culvert sizes; verifies property corner locations; meets with public and governmental agencies regarding projects.
- Supervises contractors work and performance and provides guidance to contracts and plan specifications, as needed; has authority to suspend portions of contractor's work that require a decision by the Engineer for interpretation of contract requirements, performance of unacceptable or unauthorized work or safety.
- Inspects highway construction projects, including verifying lines, grades and widths for compliance with the plans; collecting and testing required construction materials to ensure compliance with Minnesota Department of Transportation and Federal Highway Administration specifications; performing wage compliance reviews, and verifying project compliance to environmental, storm water and wetland specifications.
- Coordinate and Administer inspection and maintenance of all public drainage ditches in the county; including ditch proceedings, inspection, maintenance, repair reporting, record keeping, financial accounting and distribution, contractor coordination and oversight and related work as apparent or assigned.
- Prepares, maintains and files required documentation for highway construction project contract administration including bidding documents, item record accounts, project diaries, construction status reports, contractor payments, etc.



- Assists in the development and planning of the five-year improvement program; prepares and maintains maps.
 - Identifies activities and functions that may be appropriate for grants; researches and refines information for grant submission; coordinates submission with other counties and agencies.
 - Coordinates and provides information, schedules and conducts negotiations and assists in determining established Right of Way and property information from legal documents, plans, section corners; creates and maintains all county road right of way files.
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Knowledge, Skills and Abilities

Thorough knowledge of the techniques and methods of construction design; general knowledge of the materials, methods and techniques of road construction; thorough knowledge of surveying and drafting instruments and methods; thorough knowledge of the principles and practices of land surveying; general knowledge of engineering mathematics; general knowledge of standard office software; general knowledge of the principles and practices of civil engineering as related to assignments; skill in the use of surveying and drafting instruments and related appliances and equipment; skill in the use of engineering computer applications; ability to read and understand construction plans and design documents; ability to establish and maintain effective working relationships with associates, contractors, and the general public.

Minimum Qualifications

Associate or Technical degree and extensive experience, or a combination of equivalent education and experience.

Special Qualifications

Necessary MnDOT Construction Technician Certification. (Aggregate Production, Grading and Base, Bituminous Plant I, Bituminous Street I and II, Concrete Field I, Bridge Construction I and II, Erosion Control Construction Installer, Erosion Control Construction Site Management, and Erosion Control Design of Construction SWPPP)

Valid driver's license in the State of Minnesota.



Working Conditions

The characteristics listed below are representative of the physical demands, physical agility, sensory requirements, and environmental exposures required by an individual to successfully perform the essential duties of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties.

- Employees sit some of the time but may walk or stand for most periods of time.
- This classification regularly involves physical agility requirements such as: climbing, stooping, kneeling, crouching, crawling, reaching, pushing, pulling, repetitive motions and manual dexterity.
- Sensory requirements include standard vision requirements; vocal communication is required for conveying detailed or important instructions to others accurately, loudly or quickly; and hearing is required to receive detailed information through oral communication and/or to make fine distinctions in sound.

Physical Exertion (Pounds)	
Up to 10	Regular
Up to 25	Frequent
Up to 50	Occasional
Up to 100	Seldom
100 or more	Seldom

Environmental Exposures	
Work near moving mechanical parts	Frequent
Work in high, precarious places	Seldom
Toxic or caustic chemicals	Seldom
Outdoor weather conditions	Frequent
Extreme Cold, non-weather	Occasional
Extreme Heat, non-weather	Occasional
Noise Level	Loud

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related, or a logical assignment to the position.