



Title: Engineering Technician

FLSA Status: Non-Exempt

Department: Highway

Updated: 11/2022

General Definition of Work

Performs intermediate work preparing and maintaining maps; developing construction plans and specifications and performing inspections of construction projects for compliance with plans and specifications, and related work as apparent or assigned. Work is performed under the limited supervision of County Engineer.

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, such as: 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.
- 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 highway 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.
- 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.

Knowledge, Skills and Abilities

Thorough knowledge of construction practices, techniques, materials and equipment relating to public works and utilities; thorough knowledge of the methods and techniques involved in preparing engineering plans, specifications and drawings; ability to read and interpret plans, specifications and blueprints and to compare them with various aspects of construction in progress; ability to detect errors in construction projects; ability to establish and maintain effective working relationships with contractors, property owners and others to effect satisfactory compliance with specifications and standards; ability to maintain accurate records; skill in the use of computerized drafting and surveying equipment; ability to communicate effectively both orally and in writing; 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 within six months.
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 seldom 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.