



City of Cloquet Job Description

POSITION: Engineering Technician - Grade II
DEPARTMENT: Public Works-Engineering
REPORTS TO: Assistant City Engineer

SUMMARY

Participates in the day-to-day operations of the Engineering Department by providing technical assistance with the planning, design, construction, operation and maintenance of various street and utility improvement projects.

ESSENTIAL FUNCTIONS OF THE JOB

Performs preliminary and construction field surveys for various Public Works improvements including baseline alignment, cross sections, profiles, topography, roadway and utility grade staking, vertical control, horizontal curves, blue topping, slope staking, etc.

Assists with the design and cost estimating of proposed Public Works improvements including the construction or reconstruction of sanitary and storm sewers, water distribution systems, streets, street lighting, parks and other related municipal projects.

Performs drafting and design services for the preparation of construction plans, specifications, bidding documents, technical reports, As-Built drawings, permanent utility drawings, maps and records.

Performs construction inspection services and material testing for various Public Works improvements and oversees contractor's personnel to ensure all construction meets with approved plans, specifications, and contract requirements.

Completes required construction project documentation to include daily and weekly progress reports, construction diaries, and monthly pay estimates.

Receives, investigates, and resolves complaints from the public relative to the Public Works Department operations or services.

Works with other Public Works personnel to assist with the coordination of routine daily operations and maintenance.

Performs planning and ongoing maintenance of the City's Geographic Information System (GIS) including database management, map updates, tool, and data development. Ensures data accuracy and user technical support and training.

Confers with and provides information to other department staff, developers, consultants, contractors and the general public regarding City owned utilities, Public Works services and policies.

Assigns and directs the work of engineering trainees.

Performs other duties as apparent or assigned.

QUALIFICATION REQUIREMENTS

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

EDUCATION AND/OR EXPERIENCE

Graduation from a two (2) year Vocational Technical school with an Applied Science Degree in Civil Engineering Technology. Minimum three (3) years experience working in municipal engineering, or a construction related field.

LANGUAGE SKILLS

Ability to read, interpret and prepare construction plans, specifications, contract documents, technical manuals, legal descriptions, deeds, easements, written reports, and correspondence. Ability to communicate effectively in both oral and written forms. Ability to write concise, accurate field survey notes and daily reports. Ability to establish and maintain effective working relationships with supervisors, co-workers, private and public agencies, and the public.

MATHEMATICAL SKILLS

Ability to make complex mathematical computations to include geometry, trigonometry, and algebra with the use of both english and metric units.

REASONING ABILITY

Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

OTHER KNOWLEDGE, SKILLS AND ABILITIES

Ability to use various engineering survey instruments, including transits, levels, lasers, total station instruments, and survey GPS/GNSS receivers.

Working knowledge of the methods, techniques, tools, materials and equipment used in street

and utility pipeline construction.

High level of knowledge and proficiency in use of computers including Microsoft Office (Word, Excel, Access, One Note, Publisher) or Adobe and software applications including AutoCAD, Arcview, GIS, and related engineering design software.

Knowledge and understanding of applicable work safety standards.

Ability to establish and maintain positive and effective working relationships with co-workers, other city personnel, elected officials, contracts and the general public.

Ability to work independently and as part of a team to achieve the objectives of the department.

CERTIFICATES, LICENSES AND REGISTRATIONS

Minnesota Department of Transportation (MnDOT) Construction Technician Certification in Bituminous, Concrete, Grading and Base.

Minnesota Class D Driver's License.

University of MN Stormwater Construction Site Management Certification.

Must have, or be able to obtain within six (6) months of hire, Competent Person Training Certificate in compliance with Confined space, trenching and Excavation procedures.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to stand, walk, sit, and talk or hear. The employee is occasionally required to use hands to finger, handle, or feel objects, tools, or controls; reach with hands and arms; climb or balance; stoop, kneel, crouch, or crawl; and taste or smell.

The employee must regularly lift and/or move up to 10 pounds, frequently lift and/or move up to 25 pounds, and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee regularly works in outside weather conditions. The employee is frequently exposed to fumes or airborne particles. The employee occasionally works near moving mechanical parts and in high, precarious places and is occasionally exposed to toxic or caustic chemicals, risk of electrical shock, and vibration.

The noise level in the work environment is usually moderate.