



<b>Department:</b>	<b>Engineering</b>
<b>Reports To:</b>	<b>Engineering Manager</b>
<b>Status:</b>	<b>Full Time</b>
<b>FLSA:</b>	<b>Non-Exempt</b>
<b>Revision Date:</b>	<b>August 8, 2017</b>
<b>Union Status:</b>	<b>Non-Union</b>
<b>Supervises:</b>	<b>None</b>

**PURPOSE OF THE POSITION:**

This position is responsible for providing technical engineering expertise in design, drafting, and specifications of public works' projects. Duties and responsibilities include drafting services, providing technical support in areas of road and infrastructure construction, performing site inspections, data collection, right-of-way management, pavement management and estimating project costs.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

Customer Service

- Provides service to ensure customer service consistent with City's Mission and Vision statements.
- Responds to inquiries from developers, builders, and the general public.
- Complaint resolution within parameters of project specifications.
- Communicates and problem solves with contractors within parameters of project specifications.
- Responds to complaints concerning the City. Investigates citizen inquiries and complaints, informs management, solves problems when appropriate and maintains good relations with the citizens.
- Keeps Engineering Manager informed and makes recommendations on issues.
- Coordinates activities with committees, other agencies and the general public as assigned.
- Represents City at meetings and events.
- Performs other duties consistent with the tasks of the position as may be assigned by the City.
- Contacts property owners to notify them of imminent construction activities, to confirm utility service locations, and to coordinate ingress/egress constraints.

Technical engineering assistance

- Uses AutoCAD Civil 3D Computer Aided Design (CAD) software to produce construction drawings, compute alignments and grades, quantities and other information necessary for a comprehensive set of plans for the construction of streets, utilities, water resources or other engineering related projects.
- Responsible for preparing and checking design computations.
- Manages the City's pavement management system.
- Assists in the preparation of the Capital Improvements Program.
- Works with computer aided design and Microsoft office software.
- Assists in final design functions for public utility, street, and park improvement projects.
- Assists in the preparation of assessments, project feasibility reports, and project specifications and provisions.
- Coordinates the design and drafting of road and infrastructure construction plans utilizing Civil 3D software.
- Responsible for preparing and checking design computations.
- Assembles final Engineering plans for Construction.
- Prepares project cost estimates and payment requests.

- Assists in the preparation of the Capital Improvements Program.
- Manages the City's right-of-way ordinance and permitting process. Works with private utility companies on repair and placement of utilities in City right-of-way and easements.
- Reviews and approves Certificate of Survey's and other submitted plans for compliance with adopted City standards.

#### Construction observation

- Performs quantity calculations and verifies quality of materials as specified.
- Communicates, consults and informs Engineering Manager of deviations.
- Performs construction observation on all types of infrastructure projects to ensure that construction is consistent with project specifications, plans, and codes.
- Coordinates testing on materials used in construction projects and oversees tests performed by contractors for conformance to specifications.
- Coordinates construction surveying activities with survey crew.
- Responsible for on-site inspection and verification of permit operations on public-rights-of-way, public easements, and public property are in compliance with the requirements of the permit.
- Performs pavement inspections necessary to update the Pavement Management Program.

#### Reports and records

- Performs data collection and prepares reports and documents as appropriate.
- Assists in the preparation of MPCA and MDH permit submittals.
- Maintains complete daily and weekly work records and prepares monthly estimates of quantities for contractor payments.
- Assists with the yearly Certification of Mileage and Needs Updates required by Municipal State Aid Streets System.
- Assists with the preparation of Feasibility Reports.

#### Organizational Responsibilities

- Maintains a high level of confidentiality and complies with all legal requirements of the job. Adheres to all city and department policies and procedures and requirements.
- Demonstrates proper & safe use & maintenance of any assigned City vehicle, equipment, property, etc. Observes & practices safe work habits.
- Maintains and monitors all training departmental & safety requirements to be legal, safe, & compliant with laws & regulations.
- Ensures compliance with pertinent Federal, State and local codes, laws and regulations including the Minnesota Data Practices Act, (OSHA) Occupational Safety and Health Act and complies with all city and departmental policies and procedures.
- Assists city departments, divisions, and outside agencies as directed.
- Functions as a team member with all City employees, and effectively interacts with all levels of City personnel.
- Actively participates in and promotes all activities, meetings, training sessions, etc.
- Serves on committees as assigned.

#### **MINIMUM TRAINING AND EXPERIENCE REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS:**

- Associate Degree in civil engineering technology, construction management or related field.
- Five (5) years of experience with administration of construction contracts, construction inspections, material testing and record plans.
- Minnesota Department of Transportation Certification in the following practice areas, or ability to obtain within 1 year of hire:

- Concrete Field: Level I and II
- Grading & Base: Level I and II
- Bituminous Street: Level I and II
- Aggregate: Certification
- Construction Site Management
- Proficient in the use of AutoCAD Civil 3D software and preparing construction plan sets for municipal improvement projects.
- Proficient in the use of Microsoft Office software, including MS Word and Excel.
- Proficient in the use of One Office/eGram Construction Management Software.
- Demonstrated knowledge of technical principles and design standards for civil engineering.
- Demonstrated ability to communicate effectively, both orally and in writing, directly, honestly, respectfully and in a professional manner with all employees, the general public, and elected officials.
- Ability to establish and maintain effective working relationships with City staff in all departments, City Administrator, City Council, City commissions, contractors, owners, consultants, architects, and the general public.
- Valid driver's license and good driving record.

**WORKING HOURS:**

Normal business/office hours are from 7:00 a.m. to 3:30 p.m., Monday through Friday. Overtime hours required when necessary for weekends, holidays, early morning and evening hours to meet project deadlines. Timely reporting to work with a minimum of absences.

**TOOLS AND EQUIPMENT USED:**

Motor vehicles, tools, equipment, machinery and supplies used in an Engineering Department environment including, but not limited to: computers, telephone, mobile radio, survey equipment, copy machines, fax machine, and calculators.

**PHYSICAL DEMANDS:**

Must be physically capable of moving about on construction work sites and under adverse field conditions.

Requires the ability to operate, maneuver and/or control the actions of equipment, machinery, tools, and/or materials requiring complex and rapid adjustments such as automatic computer-aided design software.

Tasks involve the ability to exert moderate, though not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, and crawling, reaching above shoulder level, and/or pulling of objects, materials of moderate weight (12-20 pounds).

Ability to recognize and identify degrees of similarities or differences between characteristics of colors, shapes, sounds, tastes, odors and textures associated with job-related objects, materials and tasks.

**ENVIRONMENTAL ADAPTABILITY:**

Tasks are regularly performed without exposure to adverse environmental conditions, such as dirt, dust, pollen, odors, wetness, humidity, rain, fumes, temperature and noise extremes, machinery, vibrations,

electric currents, traffic hazards, animals/wildlife, toxic/poisonous agents, violence, disease, or pathogenic substances.

**JUDGEMENT AND SITUATIONAL REASONING ABILITY:**

Requires the ability to apply principles of rational systems. Ability to interpret instructions furnished in written, oral, diagrammatic, or schedule form. Ability to exercise independent judgment to adopt or modify methods and standards to meet variations in assigned objectives.

Requires the ability to exercise the judgment, decisiveness and creativity required in situations involving the evaluation of information against sensory, judgmental, or subjective criteria, as opposed to that which is clearly measurable or verifiable.

**MATHEMATICAL ABILITY:**

Requires the ability to perform addition, subtraction, multiplication and division; ability to calculate decimals and percentages; may include ability to perform mathematical operations with fractions; may include ability to compute metric conversions; may include ability to perform basic geometry for determining volume, area, distance, and angles; may include ability to calculate surface areas, volumes, weights, and measures.

**LANGUAGE ABILITY AND INTERPERSONAL COMMUNICATION:**

Requires the ability to review, classify, categorize, prioritize, and/or analyze data and/or information. Includes exercising discretion in determining data classification, and in referencing such analysis to established standards for the purpose of recognizing actual or probable interactive effects and relationships.

Requires the ability to provide guidance, assistance, and/or interpretation to others on how to apply procedures and standards to specific situations.

Requires the ability to utilize a wide variety of reference, descriptive, advisory and/or design data and information such as codes, plans, maps, manuals, project specifications, and computer applications.

NOTE: The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

The City of Northfield is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.