



Position Title: Principal Engineer
Department: Public Works
Reports To: City Engineer
FLSA Status: Exempt

Summary

This position is responsible for assisting the City Engineer with various technical, project management, and operational oversight tasks related to public works improvements, as well as construction management and inspection of these projects.

Essential Position Duties & Responsibilities

The duties and responsibilities listed are intended only as examples of the types of work performed by employees in this position and are not intended to be all-inclusive. 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. The City reserves the right to revise or change job duties as organizational needs and job requirements change.

- Direct staff, consultants, and contractors for the annual street and utility reconstruction program from preliminary investigation to public engagement, during engineering design, and through construction administration.
- Lead all Computer Aided Design (CAD) functions and maintain currency of CAD systems, data, and software functionality.
- Senior role in ensuring adequate construction observation of assigned public works improvements.
- Assist the City Engineer in the preparation of plans, specifications, bid advertisements, contracts, feasibility reports, and preliminary studies.
- Supervise the Engineer Technicians.
- Assist in the preparation of public informational items to ensure the public affected by City reconstruction projects are kept informed.
- Perform engineering activities such as coordinating the updating of record plans and files, and the coordination of projects between other agencies, utility companies, developers, and contractors.
- Assist with the management of and make recommendations for departmental computer needs, including CAD and GIS systems, to ensure sufficient computer support to the department.
- Procure record drawings from City infrastructure projects and link that information to the GIS asset management system.
- Oversee Engineering Technicians in the review and issuance of Right of Way permits; oversee the field inspection process to assure compliance with permit conditions.

- Prominent lead role in the construction administration of major infrastructure projects (i.e., pay estimate preparation, weekly progress updates to the public, ensure conformance to plans and specs).
- Assist and support the City Engineer and Public Works Director with the preparation of the utility systems Capital Improvement Plan.
- Prepare Stormwater Pollution Prevention Plan for major projects (certified plan preparer).
- Maintain and update City design standards, such as standard plates, specifications, and publications.
- Coordinate, design, and manage sanitary sewer lining program.
- Assist the City Engineer with the preparation and implementation of the departmental budget.
- Interpret City ordinances, State codes, and specifications.
- Keep accurate and timely records of public works projects.
- Provide technical advice and assistance as required, and represent the department in meetings, public forums, and work groups.
- Keep current and informed on specifications, regulations, codes, construction practices, and generally accepted engineering standards.
- Update City utility GIS maps and embedded infrastructure record data.
- Serve as City representative on the Dakota County GIS users' group.
- Perform other duties as required, assigned, apparent, or delegated.
- Regular attendance is required.

Knowledge, Skills & Abilities

- Working knowledge of the principles and practices of civil engineering as applied to the development, construction, and maintenance of municipal engineering projects.
- Thorough knowledge of modern methods and techniques of civil engineering as applied to the design, construction, and maintenance of public works facilities.
- Considerable knowledge of land and engineering survey systems, methods, and techniques.
- Knowledge of the laws and regulations relating to the planning, construction, and operation of public works and utility facilities.
- Knowledge of current developments and literature in the field of civil engineering.
- Ability to make complex engineering computations, to design and supervise the construction of a variety of public works projects.
- Ability to secure adherence with construction plans, specifications, and codes.
- Ability to establish and maintain effective working relationships with officials, employees, representatives of other agencies and departments, and the general public.
- Ability to plan, organize, supervise, and coordinate the work of several people.
- Ability to prepare technical reports, correspondence, and memoranda.
- Ability to proficiently utilize the computer system to perform engineering functions; familiarity with AutoCAD and Civil 3D.
- Working knowledge of maps, assessment methods, construction procedures, materials and equipment surveying.
- Ability to manage conflict effectively and professionally.
- Ability to express oneself clearly and concisely, both orally and in writing.

Minimum Qualifications

- Bachelor's Degree in Civil Engineering or a closely related field from an accredited college or equivalent.
- Three years of municipal street and utility construction management, inspection, and plan preparation experience.
- One-year supervisory experience or project management experience.
- AutoCAD 3D design software experience.
- Engineering in Training (EIT) Certificate.
- Registered as a Professional Engineer in the State of Minnesota or have the ability to obtain within one year of appointment.
- Possession of a valid Driver's License.

Preferred Qualifications

- Professional Engineering License in the State of Minnesota.
- Experience working for a municipal government.
- GIS Software experience.

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 the 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 regularly required to drive, sit, talk and/or hear, stand, walk, use hands to finger, handle, or operate objects, tools, or equipment; reach with hands and arms; climb or balance; stoop, kneel, crouch or crawl; taste and smell. Good hand-eye coordination is necessary to operate computers, survey equipment, and various pieces of office equipment. While performing the duties of this position, the employee is occasionally required to lift up to 25 pounds and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral 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.

A significant portion of this work is in a typical office environment, although the position will spend time in the field in varying weather conditions. It will use common office supplies and equipment, and the noise level in the office is generally quiet. Exposure to computer monitors in the office is regular and expected. This position works closely with others. Duties performed may be outside in climatic extremes. Travel to various street locations within the City is required. Noise level in the field can be loud. In the field, the employee occasionally works near moving mechanical parts and can be subject to vibration.

Supervision of Others

This position is responsible for the supervision of other Engineering Staff.

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. 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.