

City of Shakopee
POSITION DESCRIPTION

TITLE: Graduate Engineer
DEPARTMENT: Engineering
CLASSIFICATION: Analyst
REPORTS TO: ~~Assistant City Engineer~~ Project Engineer
STATUS: Full-Time, Non-Exempt
PAY GRADE: 6
LAST REVIEWED: 05.22.2017

SUMMARY

Performs entry-level professional engineering work related to the design and installation of a variety of municipal infrastructure projects.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Design municipal improvement projects, including the preparation of cost estimates, engineering plans, specifications, design documents, and surveying for review and approval by the Assistant City Engineer. Perform administration of projects in order to evaluate progress and ensure conformance with engineering plans and specifications and construction and safety standards.
- Review construction plans and specifications for developer-installed public improvements including grading, drainage and erosion control, streets, sidewalks and trails, sanitary sewer, water distribution, and storm sewer for conformance with City standards, specifications and policies.
- Performs field inspections on public roadway, sanitary sewer, storm sewer and water main construction and reconstruction projects, ensuring that the contractor conforms to specifications and plans. Works closely with developers, engineers, contractors and property owners to address unique or unanticipated field issues.
- Prepare and present intersection control studies and coordinate traffic improvements with the City's Transportation Plan and perform field investigations to ensure that traffic controls are consistent with City policies and the Minnesota manual on Uniform Traffic Control Devices (MMUTCD).
- Collect pertinent data from developers and engineers and coordinate review of Stormwater Management Plans and Wetland Conservation Act submittals to City consultant.
- Respond to requests from the general public for information relating to grading and drainage concerns, existing and proposed public improvements, construction projects and other engineering related issues.
- Collects road accident data, resident and City staff traffic safety concerns, and creates reports and maps and the agenda for the Traffic Safety Review Committee to ensure the safe and efficient functioning of the City's traffic system.
- Collect and organize data and prepare reports to meet the Municipal State Aid and Minnesota Department of Transportation reporting requirements (i.e. Certification of Mileage, Needs Update, Traffic Volumes, etc.)
- Perform review of Certificates of Survey and as-built Certificates of Survey and maintain as-built record plans of public improvements.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

- Knowledge of engineering and survey practices; maps and records; equipment and techniques of drafting.
- Proficiency in the use of AutoCAD Civil 3D to create surface models, alignments, profiles, corridors, assemblies, cross sections, pipe networks and generate plan and profile sheets. and ability to utilize pavement management and GIS programs.
- Ability to work with mathematical concepts, making calculations rapidly and accurately.
- Ability to communicate ideas and explanations clearly in English, both orally and in writing.
- Ability to write reports and correspondence, that conform to prescribed style and format
- Knowledge of and ability to apply proper English, spelling, and punctuation.

- Ability to create, read and interpret engineering plans and specifications.
- Ability to comprehend and communicate policies, practices and services of the Engineering Division to co-workers and members of the public.
- Ability to define problems, collect data, establish facts, and draw valid conclusions.
- Ability to use common Microsoft Office programs, such as Word, Excel and PowerPoint, as well as web-based email and timesheet software.
- Ability to establish and maintain positive, professional working relationships with co-workers and supervisors.
- Ability to work with the public in a friendly, tactful manner.
- Ability to effectively work with and provide direction to consultants, developers, and contractors.
- Ability to complete plan reviews and written reports that are complete, accurate and timely.

INTERNAL/EXTERNAL CONTACTS

- Daily contact with Administrative Department and other departmental staff.
- Daily contact with the public.
- Some interaction with Department Heads to provide support and assistance.
- Daily contact with developers, consultants and contractors.

QUALIFICATIONS

Minimum Qualifications

Bachelor of Science degree in Civil Engineering from an accredited college, university or technical school and a valid driver's license. Must possess an Engineer-In-Training (EIT) Certificate or the ability to obtain certification within six months of hire.

Desirable Qualifications

Fluency in a second language, in addition to English, that has a recognized presence in the community (Spanish, Russian, Hmong, etc.).

WORKING CONDITIONS

Position involves a combination of office and field work. Includes exposure to seasonal weather conditions, uneven terrain, and construction-related dust, noise and machinery. The employee is occasionally exposed to wet and/or humid conditions, fumes or airborne particles, toxic or caustic chemicals, risk of electrical shock, and vibration. The noise level is usually moderate in the office environment but can be loud in the field.

PHYSICAL DEMANDS

While performing the duties of this job, the employee is regularly required to sit, stand and walk, and to bend, twist, lift and reach, as well as climb and balance. The employee must use hands to finger, handle or feel objects, tools or controls. The employee must talk, hear and see to communicate with co-workers, receive information and instructions, and fully inspect the work of others. The employee must lift and/or move up to 50 pounds. Items may include manhole castings, surveying/gps equipment or aggregate, bituminous and concrete samples.

EQUIPMENT REQUIRED TO PERFORM JOB

- Desktop, Laptop or Tablet Computer
- Desktop and Mobile Phone
- Copy/Scanner/Fax Machine
- Surveying/GPS Instruments, Level, Measuring Wheels and Tape Measures

The City of Shakopee is an Equal Opportunity Employer.