

Senior Civil Engineer

Reports To: Assistant City Engineer
FLSA Status: Exempt
Grade: E4
Department: Public Works

Summary: The Senior Civil Engineer is an advanced professional engineer exercising full responsibility for planning and organizing a variety of assigned public works projects. The Senior Civil Engineer plans and conducts work requiring judgment in the independent evaluation, selection, and substantial adaptation and modification of standard techniques, procedures, and criteria. The incumbent in this position devises new approaches to problems encountered. This position requires professional experience to assure competence as an engineering supervisor, program manager, and licensed professional engineer. The employee serves as a project and team leader in the field and office on projects including but are not limited to land development, planning, design standards and regulations, streets and street improvements, traffic, storm drainage facilities, sanitary sewer facilities, municipal facilities, bridges, retaining walls, grading and drainage, review and processing of private development plans and development actions, and construction and maintenance. Those in this position display leadership and provides supervision, oversight, and guidance to Engineering Division staff. The Senior Civil Engineer serves as a liaison between individuals and units within or outside the organization with responsibility for acting independently on technical matters pertaining to this field. Work at this level usually requires extensive progressive experience. Work is performed with considerable independence under the general direction of the City Engineer/Assistant City Engineer, and is subject to review by conferences, reports submitted, and through the observation of results achieved.

Essential Functions: This list may not include all tasks and/or knowledge which may be expected of the employee, nor does it cover all specific duties which may be required. Other duties may be assigned.

Supervises the implementation of the design and construction of public works projects; coordinates the acquisition of field data; acquires right-of-way and easements; researches property histories and old project plans; designs improvements; implements bid process; computes quantities built and prepares pay estimates; supervises drafting of as-built quantities and field changes.

Plans, delegates, assigns, coaches, mentors, and evaluates the work of Civil Engineers, Engineering Technicians, and part-time personnel.

Provides input for long range planning to establish future equipment and manpower needs.

Supervises and manages project engineering consultants; prepares and manages timetable activities; coordinates the design and preparation of construction plans and specifications.

Provides technical support for projects to various City departments; plans, coordinates, and leads project related public meetings; presents project material and information at committee and City Council meetings.

Reviews project documentation and reports prepared by divisional staff for accuracy and completeness.

Develops and recommends standard operating procedures utilized by the Division.

Monitors operations and activities in the field to help assure standing operating procedures are followed and performance standards are met.

Manages pay item bid-price data; determines estimated prices to be used by Civil Engineers in contract estimating and long-range planning.

Provides for contract management oversight to ensure successful project completion in a timely manner that is cost effective. Works with contractors and staff to develop and complete punch lists, progress payments, provide for consistent enforcement of standards, and resolve disputes.

Maintains files of bidding proposals, correspondence, documentation, and payments on projects for Division.

Assists in the management of activities relating to construction of new and replacement municipal infrastructure such as sanitary and storm sewers, streets, sidewalks, and bridges.

Establishes and maintains effective working relationships, strategic partnerships and contacts with community representatives, external agencies, and other organizations to respond as a representative of the City.

Communicates technical and non-technical information clearly and effectively, both orally and in writing, with other City staff, public officials, external entities, external professionals, and the public.

Familiar with the rules and standards associated with various funding alternatives such as motor fuel tax funds, federal urban funds, etc.

Handles request for information, service or complaints over the phone, via electronic or regular mail and in person, or makes referrals to appropriate staff in a concerned manner that reflects effort to be helpful while at the same time acting responsibly on behalf of the City; all calls are promptly returned.

Serves as the Public Works Department/Engineering representative on special intergovernmental and interagency committees.

Performs other related duties assigned.

General Skill Levels:

Knowledge of:

- Modern principles, practices, methods, materials, and techniques of civil engineering as applied to private development projects and public works, utilities, and construction projects.
- Modern principles, practices, methods, materials, and techniques of traffic engineering.
- Hydraulics, water supply, wastewater engineering, and drainage.
- Highway standards and specifications used in public works projects applied to municipal type civil engineering projects.
- Principles and practices of land surveying and mapping.
- City, county, state, and federal regulations as they pertain to the division and department.
- Project scoping, cost estimating, and project planning principles.
- Managing within a budget.
- Principles of supervision, training, performance evaluation, coaching and mentoring.
- Report preparation methods and techniques.
- Computer spreadsheet, word processing, email and other programs related to performance of the essential functions of the job.
- Operating standards of a variety of equipment used in civil engineering.

Skills in:

- Applying the principles of civil engineering to assigned work.
- Planning, designing, detailing, and modifying engineering documents.
- Reviewing, analyzing, coordinating, and delivering of small to large engineering projects.
- Effectively and efficiently administering programs and procedures.

- Working independently in resolving highly complex questions and problems.
- Organizing work, setting priorities, meeting critical deadlines, and following up on assignments with minimum direction.
- Communicating effectively, clearly, concisely, and professionally in writing and verbally with other employees, engineers, contractors, outside agencies and members of the general public.
- Applying knowledge of fiscal resource and contract management sufficient to assist with budget preparation and program/project execution.
- Using concepts and principles of negotiation to achieve program/project objectives.
- Working with consultants and consulting teams to develop and manage projects.
- Supervising, directing, coaching, mentoring, and training direct reports.
- Using tact, discretion, initiative, and independent judgment within established guidelines.
- Utilizing mathematics required for engineering work, budget, and report preparation.

Ability to:

- Work independently under general guidance.
- Make responsible decisions in accordance with applicable laws, established policies and procedures.
- Translate standards, protocols, and procedures into operational practices to obtain desired results.
- Share responsibilities and delegate responsibilities as appropriate.
- Establish and maintain effective working relationships with a variety of individuals.
- Communicate effectively verbally and in writing with direct reports, other City staff, public officials, external entities, external professionals, and the public.
- Explain complicated technical matters in non-technical terms.
- Coach and mentor subordinate staff.
- Use word processing, spreadsheet, e-mail, database, computer-aided design (CAD) software and the Internet.
- Handle multiple projects at the same time in a dynamic environment.
- Organize, analyze, interpret, and evaluate engineering problems and provide practical, cost-effective solutions.
- Use graphic instructions, such as blueprints, schematic drawings, layouts, or other visual aids.
- Work effectively and cooperatively with others and monitor contractors.
- Facilitate public meetings to gather input from various stakeholders.
- Stay current with professional standards, think critically, solve problems efficiently, and manage time well.
- Make complex engineering computations quickly and accurately.
- Detect and locate defective workmanship and materials during various phases of completion.
- Review, examine, and prepare construction drawings, geographical information system (GIS) maps, specifications, and shop drawings.
- Consult with others, meet, and correspond with consultants, contractors, the general public and others to resolve issues.
- Manage work to conform to project scope, schedule, and budget.
- Plan, layout, and supervise the work of multiple subordinates engaged in various assignments.
- Anticipate personnel, equipment, and material requirements to complete various programs.
- Adapt to changing situations and/or priorities.
- Read, analyze, and interpret professional reports and studies, technical procedures, professional guidelines, and government regulations as appropriate to area of responsibility.
- Visually assess work products in an office setting and in the field.
- Prepare detailed reports, correspondence, and protocols.
- Use mathematics required for engineering work and in preparing budgets and reports.
- To work with and evaluate the work of traffic engineering consultants.
- Attend meeting outside of normal office/work hours.
- Work with confidential information.
- Interpret and explain City policies and procedures.

- Perform other related duties as assigned.

Education/Experience:

- Required - Bachelor of Science degree in Civil Engineering or related engineering field from an Accredited Board of Technology, Inc. (ABET)/Engineering Accreditation Commission (EAC) accredited program. A degree in Agriculture, General or Systems Engineering may be considered depending on the courses taken and major emphasis. Minimum of eight years of experience in municipal, county, state, or federal engineering or engineering consulting.
- Preferred - Previous experience in municipal, county, state, or federal engineering or engineering consulting. Minimum of two years of supervisory responsibility.

Certificates and Licenses:

- Possess or obtain a valid State of Illinois Class D driver's license within fifteen (15) days of employment.
- Active Illinois Professional Engineer (P.E.) license, or active registration in another state with the ability to reciprocate within six months of beginning employment, or ability to obtain license within twelve (12) months of employment.

Physical Requirements/Working Conditions: Reasonable accommodations may be available to assist individuals with disabilities to perform the essential functions of the position.

- Work is performed in both office and field environments. Requires traveling to other locations for meetings and attending meetings outside of normal work hours. Work includes visually inspecting work products in office and field settings. The physical demands on this position may include lifting and manipulation of heavy objects, primarily for demonstration and training, but in most cases physical activity is of an oversight nature. Oversight activities may take place in dusty, moist, or humid conditions and in a range of outdoor temperatures.

Equal Employment Opportunity

We value diversity and the many contributions that are made to our City by people from all walks of life. Therefore, it is our policy not to discriminate against any employee or applicant for employment because of race, color, religion, age, sex, sexual orientation, national origin, disability or any other attribute or characteristic protected by law.

ADAAA

It is the policy of the City to comply with all federal and state laws concerning employment of persons with disabilities and act in accordance with regulations and guidance issued by the Equal Employment Opportunity Commission (EEOC). Furthermore, it is the policy of the City not to discriminate against qualified individuals with disabilities regarding application procedure, hiring, advancement, discharge, compensation, training or other terms, conditions, and privileges of employment. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position.