

## **SENIOR ENGINEER**

### **DEFINITION**

Under general direction, plans, schedules, assigns, and reviews the work of professional engineering staff within the City's Engineering Department; serves as project manager for complex professional engineering activities including environmental program planning and compliance, design, construction, land development engineering, traffic engineering, , and other programs; ensures that functions meet all applicable laws, regulations, and City policies related to the City's Capital Improvement Program (CIP), land development, traffic and transportation, and public works infrastructure; provides complex staff assistance to departmental management staff in areas of expertise; performs and takes lead role in coordinating assignments involving a highly-developed area of expertise within the CIP; and performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general direction from assigned management staff. Exercises general and direct supervision over assigned staff.

### **CLASS CHARACTERISTICS**

This is the full supervisory or highly-advanced level class in the professional engineering series. Incumbents are responsible for planning, organizing, supervising, reviewing, and evaluating the work of professional engineering staff as well as providing professional-level support to assigned management staff in a variety of areas of expertise. Incumbents may also have highly-developed and clearly-distinguishable skillsets in an area of expertise. Performance of the work requires the use of considerable independence, initiative, and discretion within established guidelines. This class is distinguished from the City Engineer in that the latter has overall responsibility for all functions of the department and for developing, implementing, and interpreting public policy.

### **EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)**

*Management reserves the right to add, modify, change or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.*

- Plans, organizes, assigns, supervises, and reviews the work of professional engineering staff in the Engineering department; trains staff in work procedures; evaluates employee performance, counsels employees, and effectively recommends initial disciplinary action; assists in selection and promotion.
- Monitors activities of the work unit; recommends improvements and modifications and prepares various reports on activities and projects; recommends and assists in the implementation of goals and objectives; implements policies and procedures.

- Determines and recommends staffing needs for assigned activities and projects; participates in the annual budget preparation; prepares detailed cost estimates with appropriate justifications, as required; maintains a variety of records and prepares routine reports of work performance.
- Oversees the development of consultant requests for proposal for professional and/or construction services and the advertising and bid processes; evaluates proposals and recommends project award; negotiates and administers contracts after award; ensures contractor compliance with City standards and specifications, time and budget estimates; analyzes and resolves complex problems that may arise; recommends and approves field changes as required.
- May autonomously oversee programs within the department as delegated by the City Engineer.
- Conducts CIP planning activities; provides oversight and prepares designs of engineering projects; investigates and resolves problems with scope of work or cost issues of major facility upgrade and replacement projects; ensures that projects are completed on time and within budget.
- Analyzes civil engineering plan design, specifications, consultant and staff comments in accordance with design requirements and municipal and intergovernmental standards and regulations; recommends approval or additional engineering conditions and changes.
- Meets and confers with contractors, engineers, developers, architects, a variety of outside agencies, and the general public in acquiring information and coordinating engineering matters; provides information regarding City development requirements.
- Responds to and resolves various issues with residents, other department representatives, and outside agencies in a professional manner; identifies and reports findings and takes necessary corrective action.
- Serves as a liaison for an assigned functional area with other City departments, divisions, and outside agencies; attends meetings, as necessary; participates on a variety of boards, commissions, committees, and task forces; attends and participates in professional groups and committees; stays abreast of new trends and innovations.
- Conducts a variety of organizational studies, investigations, and operational studies; assists in developing policies and procedures such as procedure guidelines, design standards, and standard plans and specifications while ensuring that operation and maintenance, financial, regulatory and legal requirements are met.
- Develops and reviews staff reports related to engineering activities and services; may present information to the City Council and various commissions, committees and boards; performs a variety of public relations and outreach work related to assigned activities.
- Acts as the City Engineer in his/her absence
- Performs other duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

- Principles and practices of employee supervision, including work planning, assignment, review and evaluation, discipline, and the training of staff in work procedures.
- Basic principles and practices of program development, administration, and accountability.

- Principles and practices of civil engineering as applied to the planning, design, cost estimating, construction, installation, and inspection of a wide variety of municipal facilities, miscellaneous buildings and structures, and traffic and transportation systems.
- Civil engineering principles, concepts, standards, and practices associated with public works programs and private development projects.
- Principles and practices of environmental impact assessment and related regulatory processes.
- Methods, materials and techniques used in the construction of public works projects.
- Contract management practices in a public agency setting.
- Applicable Federal, State, and local laws, codes, regulations, procedures, and subdivision agreements and conveyances.
- Practices of researching engineering and design issues, evaluating alternatives, making sound recommendations and preparing and presenting effective staff reports.
- Recent and on-going developments, current literature, and sources of information related to the operations of the assigned functional area.
- Safety principles and practices.
- Record keeping principles and procedures.
- Modern office practices, methods, and computer equipment and applications related to the work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for effectively representing the City in contacts with governmental agencies, community groups and various business, professional, educational, regulatory and legislative organizations.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors and City staff.

**Ability to:**

- Assist in developing and implementing goals, objectives, practices, policies, procedures, and work standards.
- Supervise, train, plan, organize, schedule, assign, review, and evaluate the work of staff.
- Conduct complex civil engineering research projects, evaluate alternatives, make sound recommendations and prepare effective technical reports.
- Analyze and interpret engineering plans and specifications in accordance with design requirements and applicable standards and regulations.
- Manage and monitor complex projects, on-time and within budget.
- Research, analyze, and evaluate new service delivery methods, procedures, and techniques.
- Prepare clear and concise reports, correspondence, policies, procedures and other written materials.
- Analyze, interpret, summarize and present administrative and technical information and data in an effective manner.
- Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, and regulations, technical written material, and City engineering policies and procedures.
- Conduct complex research projects, evaluate alternatives, make sound recommendations and prepare effective technical staff reports.

- Effectively represent the department and the City in meetings with governmental agencies, community groups and various businesses, professional, and regulatory organizations and in meetings with individuals.
- Establish and maintain a variety of filing, record-keeping, and tracking systems.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities and meet critical time deadlines.
- Operate modern office equipment including computer equipment and specialized software applications programs.
- Use English effectively to communicate in person, over the telephone and in writing.
- Use tact, initiative, prudence and independent judgment within general policy, procedural and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Education and Experience:**

*Any combination of training and experience that would provide the required knowledge, skills and abilities is qualifying. A typical way to obtain the required qualifications would be:*

Equivalent to graduation from an accredited four-year college or university with major coursework in civil engineering or a related engineering field and five (5) years of responsible experience in civil engineering with emphasis in public works capital improvements with at least one (1) year of supervisory experience.

**Licenses and Certifications:**

- Possession of, or ability to obtain, a valid California Driver's License by time of appointment.
- Possess and maintain a valid certificate or registration as a Professional Engineer in the State of California.

**PHYSICAL DEMANDS**

Work is performed in an office environment and in the field. The office environment requires the mobility to work in a standard office setting and use standard office equipment, including a computer, vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push and pull materials and objects weighing up to 25 pounds. The field environment requires the mobility to walk long distances, traverse uneven, hilly terrain, climb ladders, and stairs. The field work requires the agility to inspect temporary, unfinished, construction sites and access points, which may include entry into confining spaces and inspecting sites of significant height. Requires the ability to operate a motor vehicle to visit various City development and meeting sites.

### **ENVIRONMENTAL ELEMENTS**

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees also work in the field and may be exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, rough terrains, vibration, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

### **WORKING CONDITIONS**

Must be willing to work a varied schedule of hours, which may include evenings, and/or weekends, as needed.