# SENIOR ENGINEER

### **DEFINITION**

Under direction, to plan, coordinate, and participate in the performance of professional engineering activities of a complex nature relative to assigned area(s) of responsibility; to actively pursue and administer state and federal grant funds associated with construction projects; to provide staff assistance to the Division Manager and others on highly complex issues or projects; and to perform related work as required.

# **CLASS CHARACTERISTICS**

This is the advanced journey level classification in the series responsible for assisting with the management of the Engineering Division and for capital improvement project management and administration. Incumbents receive general direction from the Division Manager and are expected to possess the skills and abilities necessary to perform all duties and responsibilities of the classification with little supervision. Incumbent has responsibility for supervision of assigned subordinate staff.

## **EXAMPLES OF DUTIES** (Illustrative Only)

- Provides senior level direction in the design of public works, capital improvements, street utility, storm drain improvement projects, and land development and construction
- Prepares and/or oversees preparation of specifications and estimates for various types of construction projects
- Interprets specifications and City policies; applies relevant codes, ordinances, rules and regulations
- Reviews and processes tentative maps and improvement drawings for residential, commercial, and industrial projects
- Reviews plans for construction prepared by private engineers
- Prepares and administers construction contracts for capital improvement projects and federally funded projects; prepares bid documents
- Coordinates the activities of utility companies, contractors and developers within the context of assigned projects; meets with engineers and developers to review project design and impacts
- Reviews and approves construction change order requests; approves contractor pay requests
- Inspects projects to ensure safety and compliance with plans, specifications, codes and regulations, and standards
- Supervises, trains, and assists assigned professional, technical and administrative staff
- Reviews structural calculations and hydrology reports for accuracy and completeness
- Maintains accurate, complete and up-to-date project records
- Assists in the preparation of the division budget; represents the Division Manager in his/her absence.

- Initiates and conducts engineering planning studies to identify public works facility needs
- Administers state and federal grant funds associated with construction projects
- Prepares and/or presents City Council resolutions and staff reports
- Attends various staff and regional technical advisory meetings
- Provides technical and professional assistance/support to other City departments and divisions, Planning Commission, and City Council as necessary

## **QUALIFICATIONS**

## Knowledge of:

- Civil engineering principles and practices as applied to municipal public works, including planning and development, design and construction, and operations
- Methods of project management and contract administration
- Materials and techniques used in the construction of public works projects
- Modern developments, current literature and sources of information regarding engineering
- Administrative principles and methods, including goal setting, program and budget development and implementation, personnel management and supervision
- Methods and techniques of effective technical report preparation and presentation
- Applicable federal, state and local laws, codes and ordinances
- Modern office practices and technology, including personal computer hardware and software
- English usage, spelling, grammar and punctuation

# <u>Skill in:</u>

- Planning, organizing, supervising, reviewing and evaluating the activities of assigned program areas
- Coordinating assigned activities with other City departments and agencies as required
- Performing difficult technical research, analyzing complex problems, evaluating alternatives, and making sound recommendations related to assigned activities
- Reading, interpreting and applying technical written material and applicable laws, rules, regulations and codes
- Professionally and effectively administering construction contracts
- Ensuring project compliance with plans, specifications, laws/codes/ordinances, and applicable standards
- Setting priorities and meeting deadlines with minimal supervision
- Reading and understanding technical drawings and specifications
- Performing mathematical and engineering computations with precision
- Communicating clearly and concisely, both orally and in writing
- Using computer technology and applications in the performance of daily activities
- Preparing and presenting clear, concise and logical written and oral reports
- Interpreting and applying City and Department policies, procedures, rules and regulations
- Establishing and maintaining effective working relationships with those contacted in the course of work

A typical way of gaining the knowledge and skills outlined above is:

 Equivalent to a Bachelor's degree with major coursework in civil engineering or a closely related field and eight (8) years of increasingly responsible professional civil engineering experience.

#### LICENSES AND CERTIFICATES

Possession of a valid California driver's license Current Registration as a Civil Engineer in the State of California

#### PHYSICAL DEMANDS

Mobility to work in a standard office or field environment, use standard office equipment and attend off-site meetings. On an intermittent basis, operate a motor vehicle on surface streets with occasional exposure to weather conditions, and construction and traffic hazards. Requires mobility to traverse uneven terrain, periodically standing, stooping, bending, climbing and kneeling to perform fieldwork; on an intermittent basis, sit at desk for long periods of time; lift light to moderately heavy weights. Vision to read handwritten and printed materials and a computer screen; hearing and speech to communicate in person and by telephone; manual dexterity to operate small equipment, tools and standard office equipment and supplies, and to manipulate both single sheets of paper and large document holders (binders, manuals, etc.).

#### FLSA: E

This job specification should not be construed to imply that these requirements are the exclusive standards of the position. Not all duties are necessarily performed by each incumbent. Additionally, incumbents may be required to follow any other instructions and to perform any other related duties as may be required by their supervisor.