#### SENIOR CIVIL ENGINEER - WATER

# **Definition**:

Under general direction, supervises and participates in a variety of complex, advanced registered professional civil engineering work in the planning, design, operation, and construction of municipal water facilities and infrastructure, capital improvement, maintenance, and construction projects; serves in a project manager capacity on assigned projects to ensure compliance with City contracted services, specifications and quality; coordinates projects with contractors, consultants, and other stakeholders; and performs related work as required.

# **Essential Duties and Responsibilities:**

The following responsibilities and essential duties are performed on a frequent and recurring basis by an incumbent. These are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.

Assigns, supervises, provides direction, and participates in the resolution of matters related to engineering standards, drawing preparation, specifications, estimates and a variety of designs.

Plans, organizes, and evaluates the work of staff responsible for providing engineering planning and design for capital construction and improvement programs for the City's water systems and facilities.

Participates in the development of goals, policies, and procedures for City water engineering services and programs including project design and management, plan checking, environmental review, planning, right-of-way management, geographic information systems (GIS) mapping, surveying, and inspecting.

Oversees the design and preparation of capital improvement projects, including long-term and master plans and reports; supervises the work of City staff and external consultants; prepares cost estimates and establishes the scope, schedule, and budget for design projects.

Operates a personal computer and applicable software for various water system calculations, modeling, design, drafting, database updates and a variety of reports.

Oversees the preparation and administration of construction contracts; reviews and approves construction progress payments and prepares and/or recommends approval of construction change orders; oversees the resolution of field construction and contractor issues and discrepancies.

Prepares or reviews a variety of technical correspondence and documents including technical studies, reports, requests for proposals, staff reports, legal agreements, and advertisements.

Prepares and/or oversees the preparation of plans and specifications for the construction of a variety of water utility systems and facilities; reviews the most complex drawings and specifications for compliance with City standards; interprets specifications and City policies.

Prepares periodic project status reports; seals final plans, evaluates and recommends necessary resources, staffing, organizational structure, and strategies.

Coordinates departmental activities related to areas of assignment with those of other departments, governmental agencies, and outside organizations; responds to inquiries from the public and resolves the most complex issues and complaints.

Negotiates complex agreements and contracts, including consultant contracts; prepares, reviews, and interprets agreements and contracts; implements final contract terms.

Reviews proposed and new regulations and legislation to determine potential impact on City operations, practices, and policies; makes appropriate recommendations and implements changes.

Assists in the preparation of the division budget, forecasts budget and staffing needs.

Prepares and/or directs the preparation and evaluation of specialized technical studies, reports, and analyses related to water engineering services; analyzes and evaluates study results and implements findings.

Presents engineering design and project plans to the Board of Directors and community as needed.

Establishes performance standards and motivates assigned staff; monitors performance, provides feedback, and addresses performance deficiencies; implements disciplinary action in accordance with the City's policy.

Provides professional staff assistance to management staff; research, prepares, and presents comprehensive reports, and other correspondence.

Manages the selection, training, supervision, and evaluation of assigned staff.

Observes and complies with all City and mandated safety rules, regulations, and protocols.

#### Other Duties and Responsibilities:

Performs other projects/tasks as assigned.

#### **Class Characteristics:**

The Senior Civil Engineer - Water is the working supervisory-level class in the Water Engineer series. Incumbents perform the most complex and advanced work of the unit and are responsible for planning, organizing, supervising, reviewing, and evaluating the work of professional and technical staff. Performance of the work requires the use of considerable knowledge, independence, initiative, and discretion within established guidelines. Assignments are given with general guidelines and incumbents are responsible for establishing objectives, timelines, and methods to deliver work products or services, and for ensuring the efficient and effective functioning of assigned projects and programs.

Bargaining Group: FMA

### **Qualification Guidelines:**

The following generally describes the knowledge and ability required to enter the job and/or be learned within a reasonable period of time in order to successfully perform the assigned duties:

### Knowledge of:

Principles and practices of employee supervision, including work planning, assignment review and evaluation, discipline, and the training of staff in work procedures.

Principles and practices of leadership.

Modern principles and practices of engineering design and construction as it relates to water infrastructure and facilities.

Principles and practices of project management.

Methods and techniques of negotiating and administering contracts.

Principles and practices of construction management, including engineering, surveying and inspection methods and materials.

Applicable federal, state, and local laws, rules, regulations, and procedures relevant to assigned areas of responsibility.

Project documentation and development techniques including mapping, drafting, drawings and specifications.

Principles and procedures of record keeping.

Hydraulic system analysis, calculations, and simulation.

Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.

Principles and practices of project budget administration and monitoring.

Methods and techniques of applying advanced mathematics principles to engineering work.

Recent developments and trends in the field of engineering and construction management.

City and mandated safety rules, regulations, and protocols.

Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and City staff.

Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.

### **AND**

### Ability to:

Select and supervise staff, provide training and development opportunities, ensure work is performed effectively, and evaluate performance in an objective and positive manner.

Explain complex design criteria, policies, ordinances, and procedures to consultants, outside agencies, and members of the public.

Perform a diverse range of registered professional engineering tasks in support of the City's capital improvement water projects and operations.

Prepare and/or review engineering estimates, plans, and specifications for proposed City water projects.

Perform professional registered engineering work in the design and construction of City water infrastructure and associated facilities.

Research and evaluate engineering methods and techniques for assigned project work.

Prepare accurate estimates of costs, schedules, materials, and staffing resources required for assigned projects.

Prepare detailed analysis and comprehensive technical engineering reports and recommendations.

Serve as a project lead or project manager on the most complex projects and oversee the work of contracted service providers.

Analyze, interpret, summarize, and present technical and administrative information and data in an effective manner.

Read and interpret maps, plans, sketches, schematics, diagrams, and blueprints.

Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.

Effectively represent the department and the City in meetings with governmental agencies; community groups; various business, professional, and regulatory organizations; and in meetings with individuals.

Independently organize work, set priorities, meet critical deadlines, handle multiple projects, and follow-up on assignments; think clearly, logically, and rationally under pressure; handle job stress and maintain composure in public settings.

Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.

Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.

Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.

Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work; meet and serve the public with professionalism, courtesy and tact.

### **Education:**

Any combination of training and experience, which provides the required knowledge, skills, and abilities, is considered qualifying. A typical way to obtain the required qualifications is:

Equivalent to a bachelor's degree from an accredited college or university in civil engineering, mechanical engineering, or a related field.

#### **AND**

Six (6) years of increasingly responsible experience performing registered professional engineering duties in assigned engineering program, of which a minimum of three (3) years should be in municipal capital water projects in a lead or project management capacity equivalent to the Civil Engineer-Water classification at the City of Fullerton.

#### **Special Requirements:**

Valid and appropriate California Driver's License and acceptable driving record at time of appointment and throughout employment in this position. Employees in this classification will be enrolled in the Department of Motor Vehicles Government Employer Pull Notice Program.

Registration as a Professional Civil Engineer in the State of California in good standing at the time of appointment and throughout employment in this position.

Must be able to work a flexible schedule to accommodate City needs.

California Government Code §3100 – 3109 requires that all public employees are to be declared disaster service workers and shall take and subscribe to the related oath or affirmation as required.

# **Physical Tasks and Working Conditions Include the Following:**

Work is performed in an office environment and on-site at various locations depending on the assignment/project. Office work requires sitting for periods of time and the use of a computer keyboard and screen. Providing support to the front counter may require standing for periods of time and direct interaction with the public. When on-site, the incumbent may be exposed to the elements and vehicular traffic and may walk on slippery/uneven surfaces or slopes. The

incumbent stands, kneels, bends, crouches, twists and may grasp, lift, carry, push, pull and drag boxes of files and records weighing 50 pounds or less and, depending on area assigned, drive a vehicle on City business. The incumbent must be able to meet the physical requirements of the class and have mobility, vision, hearing, and dexterity levels appropriate to the duties to be performed.

Fair Labor Standards Act Designation: Exempt

Established December 2023