December 2022 **FLSA: EXEMPT**

ASSOCIATE CIVIL ENGINEER

DEFINITION

Under general supervision, performs various professional field and office engineering work related to the management, planning, design, construction and maintenance of City capital improvement and other public works projects, City public works infrastructure, and daily divisional operations; provides project management and administration; performs traffic engineering activities; confers with developers, contractors and representatives of other agencies regarding facility and infrastructure development; administers professional services and construction contracts; administers Federal and State grant funds associated with construction projects; provides highly complex staff assistance to the City Engineer, Deputy City Engineer, and others in areas of expertise; performs a variety of studies and prepares and presents staff reports; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned supervisory or management personnel. Exercises general and direct supervision over assigned staff.

CLASS CHARACTERISTICS

This is the fully experienced class in the professional engineering series, with responsibilities spanning the entire spectrum of the City's engineering function. Successful performance of the work requires an extensive professional background as well as skills in project management and administration of capital improvement projects, coordinating work with other City departments and public agencies, as well as dealing with the public. This class is distinguished from City Engineer in that the latter is the highest-level class in the professional engineering series with managerial responsibility for all functions and activities in the Engineering Division of Public Works.

EXAMPLES OF ESSENTIAL 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, designs, and inspects all phases of civil engineering public works construction projects, including defining the scope of the project; securing adequate funding from Federal and State grant programs and other funding sources; coordinating with permitting and public utility agencies; performing historical document research and review; surveying, engineering analysis

of alternatives; preparing plans, specifications, and cost estimates; performing research, map and field studies, surveys; drafting site plans with specialized computer software; applying engineering principles and practices to specific problems; coordinating construction schedules with other projects and agencies, preparing and reviewing cost estimates, and inspecting construction of projects to ensure compliance with construction documents; and other related planning and design work.

- Reviews construction plans prepared by consulting engineers and private contractors to verify compliance with City sidewalk, public utility, and improvement requirements; checks plans for conformance with regulations regarding line, grade, size, elevation and location of structures; reviews engineering calculations of other engineers or engineering technicians; participates in pre-design, construction and utility coordination meetings and issues construction permits.
- Provides construction administration, public relations, management, and inspection of public works construction projects, including coordinating work with other divisions and City departments, reviewing and inspecting work to ensure conformance with plans and specifications, tracking and maintaining all project accounting, coordinating schedules, and providing public notices of projects.
- Provides technical direction and training to other engineering and technical staff, including assisting in selecting, training, evaluating, and recommending disciplinary action of staff.
- Prepares, administers, and monitors Division budget relative to assigned areas of responsibility.
- Investigates field problems affecting property owners, contractors and maintenance operations; responds to citizen inquiries and complaints; provides information to the public at the front counter in person, via telephone or other means of communication regarding grading, encroachment permits, right-of-way and property line information, utility information, slope stability and groundwater issues, improvement plan check and payment processes.
- Keeps immediate supervisor and designated others accurately informed concerning work progress, including present and potential work problems and suggestions for new or improved ways of addressing such problems.
- Attends meetings, conferences, workshops, and training sessions and reviews publications and audio-visual materials to become and remain current on principles, practices, and new developments in assigned work areas.
- Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency of interdepartmental operations and activities.
- Participates in the selection, training, supervision, work evaluation, and scheduling of assigned staff.
- Assists in the coordination of the City's traffic signal system, and conducts traffic engineering studies to determine the need for traffic control devices, including coordinating the City computer transportation model, collecting and analyzing traffic data, producing written reports, recommending traffic control devices, and arranging for their installation and implementation.
- Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Civil engineering principles, techniques, policies, and procedures.
- Traffic engineering principles, techniques, policies, and procedures.

- Methods, materials and techniques used in the construction of public works projects, including water and wastewater systems, stormwater, street, and traffic systems design.
- Basic principles, practices, procedures and standards related to City public works and engineering infrastructure development and maintenance.
- Basic principles and practices of capital improvement program budgeting, cost estimation, funding, project management and contract administration.
- General design, layout, and construction practices for public improvements such as streets, storm drains, grading, and landscaping.
- Subdivision engineering, plan review, mapping, and construction practices.
- Bidding requirements for public works projects.
- Project management and contract administration principles and techniques.
- Engineering plan types, review practices, and permit filing and approval procedures.
- Applicable Federal, State and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Basic principles of employee supervision and training.
- Modern office practices and technology, including personal computer hardware and software, such as computer applications related to the work, including computer-aided drafting concepts and applications, and Geographical based Information Systems (GIS) programs.
- Modern developments, current literature and sources of information regarding engineering.
- Principles of advanced mathematics and their application to engineering work.
- Practices of researching engineering and design issues, evaluating alternatives, making sound recommendations and preparing and presenting effective staff reports.
- Principles and practices of safety management and training.
- Methods and techniques of effective technical report preparation and presentation.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for effectively representing the City in contacts with governmental agencies, community groups, various business, professional, educational and regulatory organizations and with property owners, developers, contractors and the public.
- Techniques for dealing effectively with the public, vendors, contractors and City staff, in person and over the telephone.
- Techniques for providing a high level of customer service to public and City staff, in person and over the telephone.

Ability to:

- Conduct complex civil engineering research projects, analyze complex problems, evaluate alternatives, make sound recommendations and prepare effective technical staff reports.
- Prepare, understand, and interpret engineering construction plans, specifications, and other contract documents.
- Conduct comprehensive engineering studies and prepare reports with recommendations.
- Assist in and develop and administer contracts for professional services and construction in a public agency setting.
- Read, interpret, apply and explain technical written material and complex laws, codes, regulations, ordinances, and City engineering policies and procedures.
- Design engineering projects.
- Read and understand technical drawings and specifications.

- Perform mathematical and engineering computations with precision.
- Recognize discrepancies from as-built to contract specifications, and recommend reconciliation of the two.
- Make engineering design computations and check, design, and prepare engineering plans and studies.
- Effectively represent the department and the City in meetings with governmental agencies, community groups, various business, professional, and regulatory organizations and individuals.
- Coordinate assigned activities with other City departments and agencies as required.
- Plan, organize, schedule, assign, review and evaluate the work of staff.
- Train staff in work procedures.
- Direct the work of contract consultants.
- Prepare and present clear, concise and logical written and oral reports, correspondence, policies, procedures and other written materials.
- Establish and maintain a variety of filing, record-keeping, and tracking systems.
- Make sound, independent decisions within established policy and procedural guidelines.
- 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.
- Establish and maintain effective working relationships with those contacted in the course of the 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 four (4) years of professional engineering design, plan review and project administration experience, preferably in a public agency setting. Requires at least one year of lead or supervisory experience. Possession of an advanced degree is desirable.

License:

- Valid California class C driver's license with satisfactory driving record.
- Registered Professional Civil Engineer license in the State of California.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to inspect City development sites, to operate a motor vehicle and to visit various City and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups and over the telephone. This is partially a sedentary office

classification; the job also involves field inspection work requiring frequent walking at inspection site areas to monitor performance and to identify problems or hazards; standing in work areas and walking between work areas may be required. Finger dexterity is needed to access, enter and retrieve data using a computer keyboard, typewriter 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 necessary to perform job functions.

ENVIRONMENTAL ELEMENTS

Employees partially work in an office environment with moderate noise levels and controlled temperature conditions, and partially in the field and may occasionally be exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, 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

May be required to work on evenings, weekends and holidays.