SOUTH COAST WATER DISTRICT

ASSOCIATE CIVIL ENGINEER

DEFINITION

Under direct or general supervision, performs professional field and office engineering work, which includes assisting in the management, planning, design, construction and maintenance of District capital improvement projects, District infrastructure, and daily departmental operations; confers with developers, contractors and representatives of other agencies regarding facility and infrastructure development and project review; assists in administering professional services and construction contracts; provides complex assistance to the higher-level, professional engineers and department management 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 direct or general supervision from the Director of Engineering. No direct supervision is exercised. May provide technical and functional direction to technical support staff.

CLASS CHARACTERISTICS

Associate Civil Engineer: This is the fully experienced class in the professional engineering series, with responsibilities spanning the entire spectrum of the District’s engineering function, including project management. Successful performance of the work requires an extensive professional background as well as skills in coordinating work with those of other District departments and public agencies as well as dealing with the public. This class is distinguished from the Senior Civil Engineer in that the latter is the highest-level class in the professional engineering series with responsibility for capital improvement project management and design functions and activities.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS

Duties may include, but are not limited to, the following:

- Assists engineering staff with studies relating to the planning, design, construction and operation of District facilities; prepares construction plans, contract specifications, and design calculations for a variety of District facilities, and estimates construction costs.
- Administers construction contracts; communicates with contractors, processes payment requests, documents progress of construction, negotiates contract change order, addresses claims, and performs other related duties.
- Designs and inspects District engineering projects, including 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.
- Reviews building plans prepared by consulting engineers and private contractors to verify compliance with District 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.
- Reviews and prepares maps, deeds, and legal descriptions, including ensuring that maps are current, performing related research duties, resolving discrepancies in map and deed information, and discerning land-use history from conflicting historical records.
Coordinates assigned activities with consultants, engineers, developers, contractors, other District departments and divisions, and with outside agencies.
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.
Responds to questions and comments from the public in a courteous and timely manner.
Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency of interdepartmental operations and activities.
Prepares a variety of written correspondence, reports, procedures, ordinances and other written materials.
Maintains accurate records and files.
Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Civil engineering principles, techniques, policies, and procedures.
- Basic principles, practices, procedures and standards related to utilities and related infrastructure development and maintenance.
- Basic principles and practices of capital improvement program budgeting, cost estimation, funding, project management and contract administration.
- Design, layout, and construction practices for capital improvement projects.
- 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.
- 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.
- Methods and techniques of effective technical report preparation and presentation.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for dealing effectively with the public, vendors, contractors and District staff, in person and over the telephone.
- Techniques for providing a high level of customer service to public and District staff, in person and over the telephone.

Ability to:

- Prepare, understand, and interpret basic to routine engineering construction plans, specifications, and other contract documents.
- Assist in developing and administering contracts for professional services and construction in a public agency setting.
- Learn, interpret, apply and explain technical written material and laws, codes, regulations, ordinances, and District engineering policies and procedures.
- Read and understand basic technical drawings and specifications.
- Perform basic design and planning using a variety of techniques.
Perform mathematical and basic engineering computations with precision.
Make and record accurate field engineering observations.
Prepare and present clear, concise and logical written and oral reports, correspondence, and other written materials.
Work with the public in providing information, answer questions, and provide customer service.
Prepare clear and concise reports, correspondence 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.
Use tact, initiative, prudence and independent judgment within general policy, procedural and legal guidelines.
Establish and maintain effective working relationships with those contacted in the course of the work.

EXPERIENCE AND TRAINING GUIDELINES
Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Three (3) years of professional engineering design, plan review, and project administration experience.

Training:

Equivalent to graduation from an accredited four-year college or university with major coursework in civil engineering or a related engineering field.

License or Certificate:

Possession of a valid California Class C driver license with good driving record.

Possession of Registration as a Professional Civil Engineer issued by the State of California is desired.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to inspect District development sites, to operate a motor vehicle and to visit various District 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 weighing up to 25 pounds.
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.

The specific statements shown in each section of this classification description are not intended to be all-inclusive. They represent the essential functions and minimum qualifications necessary to successfully perform the assigned functions. 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.