

ASSISTANT ENGINEER

DEFINITION

Under general supervision, performs professional and technical engineering assignments related to the planning design, construction, and commissioning of water and wastewater capital improvement projects and/or private development projects; gathers and compiles data and prepares designs, plans, details, estimates, and specifications for construction, operation, and maintenance of District projects; participates in conducting plan check services; responds to questions and inquiries from the public, developers, contractors, other engineering professionals, and District staff; and performs related duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned supervisory or management personnel. Exercises no direct supervision over staff.

CLASS CHARACTERISTICS

This is the entry-level classification in the Engineer series. Initially under close supervision, incumbents learn and perform routine professional and technical engineering assignments. As experience is gained, assignments become more varied, complex, and difficult; close supervision and frequent review of work lessen as an incumbent demonstrates skill to perform the work independently. Positions at this level typically exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. This class is distinguished from the Associate Engineer in that the latter performs the full range of project administration duties including developing and administering project budgets, managing change in scope of work, and directing and reviewing the work of District consultants/contractors.

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 typical functions of the job.

- Reviews plans, specifications, technical memorandums, and/or reports submitted for correct concept, engineering principles, and economic design for capital improvement or private development projects; reviews construction phase submittals and requests for information.
- Participates in the procurement process of contractors and consultants; prepares Invitation for Bid, Requests for Proposals, bid analysis, and evaluation documents; verifies compliance with applicable codes, regulations, and/or funding agreements; completes and coordinates the annual prequalification of contractors.
- Provides support in preparing and administering contracts with contractors and consultants; creates, reviews, and issues change orders and amendments.
- Assists in developing and monitors project budgets and schedules; reviews invoices to ensure compliance with contract and scope of work.
- Provides support in managing District-funded capital projects from initial planning stages through commissioning and start-up of new facilities and/or private development projects with consultants; performs construction management on smaller scale projects.

- Responds to utility requests from developers, Operations and Maintenance department, and surrounding public agencies including providing exhibit and record drawings.
- Responds to technical customer service issues in person or on the telephone; explains projects and procedures, interprets codes, and coordinates with outside agencies, contractors, consultants, committees, and others.
- Gathers, reviews, and analyzes data and prepares reports; prepares exhibits using geographic information system (GIS); prepares and/or updates plans for smaller scale projects using AutoCAD.
- Attends and/or leads a variety of meetings; prepares and provides information for meetings including agendas, minutes, Board reports, presentations, and exhibits.
- Monitors legal and regulatory changes and court decisions which may affect engineering services, projects, and programs; provides updates and recommended changes to supervisor.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Applicable federal, state, and local laws, codes, and ordinances relevant to the area(s) of responsibility.
- Principles and practices of civil engineering with emphasis on the design and construction of water and wastewater facilities.
- Basic principles and practices of process, mechanical, electrical, control, and instrumentation design and construction in water and wastewater facilities.
- Principles of engineering economics and their practical application to construction, water supply, and wastewater and/or water treatment projects.
- Project and contract development and administration.
- Recent developments, current literature, and sources of information related to innovation and trends in civil engineering and design, construction, and maintenance of water and wastewater facilities.
- Computer drafting, GIS, and hydraulic analysis.
- Principles and practices of business correspondence and technical report preparation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Coordinate assigned engineering projects with internal and external agencies and individuals.
- Gather and compile data and prepare routine designs, plans, details, estimates, and specifications for construction, operation, and maintenance of capital improvement and/or development projects.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Prepare clear, concise, and accurate reports, contracts, drawings, maps, notes, correspondence, and other written materials.

- Coordinate and participate in meetings with governmental agencies, community groups, and various business, professional, and regulatory organizations.
- Make accurate mathematical and statistical computations.
- Establish and maintain a variety of filing, record keeping, and tracking systems.
- Organize work, set priorities, meet critical deadlines and follow-up on assignments.
- Use tact, initiative, prudence, and judgment within general policy and procedural 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.

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:

Education:

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

Experience:

- One (1) year of experience in the field of engineering, preferably in water and wastewater planning, water and sewer utility engineering design and construction or project management.

Licenses and Certifications:

- Possession of a valid California Class C driver's license, to be maintained throughout employment.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

ENVIRONMENT

Standard office setting; some exposure to temperature variations, noise, fumes, toxic agents, dust, and traffic hazards may occur while at construction sites.

PHYSICAL

- Level One

Incumbents require sufficient mobility to work in an office setting; stand or sit for prolonged periods of time; push, pull, lift, and/or carry light amounts of weight; bend, stoop, and kneel; operate office equipment including use of a computer keyboard; ability to verbally communicate to exchange information.

VISION

See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

HEARING

Hear in the normal audio range with or without correction.