

CIVIL ENGINEERING TECHNICIAN

DEFINITION

Under general supervision, performs technical engineering-related work in support of District activities; prepares sewer lateral inspection reports; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

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

CLASS CHARACTERISTICS

This classification is responsible for performing the full range of paraprofessional engineering office and field work. Incumbents are expected to work independently and exercise judgment, discretion, and initiative within established guidelines. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit.

EXAMPLES OF TYPICAL FUNCTIONS (Illustrative Only)

The following functions are typical for this classification. Incumbents may not perform all of the listed functions and/or may be required to perform additional or different functions from those set forth below to address business needs and changing business practices.

- Assists with implementation of the sewer lateral inspection program by reviewing inspection videos and drafting letters and reports of inspection findings for management review and approval.
- Researches District as-built drawings and as-built drawings from other agencies to identify potential conflicts and assist in accurately locating utilities, easements, and property lines.
- Performs field investigations at project sites and surrounding areas to verify locations of existing utilities and infrastructure; takes measurements, field samples, and photos and documents findings.
- Uploads bid documents to the District's website; receives bid inquiries and provides factual information regarding the project and bid process and results.
- Prepares draft contract agreements; requests, reviews, and ensures receipt of proper certificates of insurance and compliance documentation; compiles, organizes, and maintains documents.
- Reviews invoices and processes progress payments.
- Uses District Ordinance and fee schedules to calculate connection and other related fees for developers' projects.

- Performs basic drafting duties in connection with sewer lines, laterals, and other projects using AutoCAD or related software.
- Prepares a variety of written correspondence, reports, grant applications, and other written materials.
- Organizes and maintains databases and files, including plans, studies, inspections, surveys, maps, and other data related to engineering projects.
- Organizes and maintains real property maps, surveys, legal documents, easements, and other related real-property documents.
- Investigates field problems affecting property owners, contractors, and maintenance and operations staff; resolves problems, coordinates field work or refers to other District staff and management as appropriate.
- Receives and responds to requests from other public agencies, developers, contractors, private engineers, title companies, and others.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Basic engineering principles, practices, and standards including engineering drafting, surveying, and construction inspection.
- Basic equipment, materials, and methods used in the construction and maintenance of wastewater treatment, collection system, and recycled water facilities.
- Operational characteristics of surveying equipment and AutoCAD applications.
- Principles of mathematics and its application to engineering work.
- Applicable federal, state, and local laws, regulatory codes, ordinances, policies, and procedures relevant to assigned area of responsibility.
- Occupational hazards and safety principles, practices, and procedures including the use of protective protection equipment as needed.
- 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:

- Apply basic engineering principles, practices, concepts, and standards to engineering problems.
- Review and interpret a variety of plans, specifications, maps, graphs, cost estimates, and technical engineering reports.
- Use drafting and field surveying equipment, instruments, and tools.
- Make accurate engineering mathematical and statistical computations.

- Safely and effectively use and operate a vehicle and tools and equipment required for the work.
- Learn and understand the organization and operation of the District and of outside agencies as necessary to assume assigned responsibilities.
- Interpret, apply, explain, and ensure compliance with applicable federal, state, and local policies, procedures, laws, and regulations, and District engineering policies and procedures.
- Prepare clear and concise reports and other written materials.
- Maintain accurate files and records.
- Organize own work, set priorities, and meet critical time deadlines.
- Operate modern office equipment including computer equipment and software programs.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy and procedural guidelines.
- Understand and adhere to established District standards, policies, and procedures.
- 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:

Equivalent to completion of twelfth (12th) grade with supplemental coursework in civil engineering, mechanical drawing, algebra, geometry, or trigonometry and three (3) years of technical experience in drafting, surveying, construction, inspections, or a related field.

Licenses and Certifications:

- Possession of a valid California Driver's License by time of appointment and satisfactory driving record consistent with requirements established by the District.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment including a computer; must possess mobility to work in the field to inspect sites including traversing uneven terrain, climbing ladders, stairs, and other access points; to operate a motor vehicle to visit various District and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. This is primarily a sedentary office classification, although standing and walking between work areas is required. Finger dexterity is needed to access, enter and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, and kneel to gather field data and conduct inspections, and 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 work in an office setting and in the field and may be exposed to pollen, dust, loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspaces, chemicals, mechanical, and/or electrical hazards, and hazardous physical substances and fumes.

OTHER REQUIREMENTS

Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100, "all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law."

Must be available for regular and emergency standby, weekend assignments, shift assignments, and to be called back and work emergency overtime as needed.