ENGINEERING DRAFTER

Definition

Under general supervision; to perform technical drafting and computation work related to the location, design and construction of District structures and facilities; and to do related work as required. This may be a part time position.

Examples of Duties

- Develops and maintains maps and map systems for use in water line maintenance and water system planning.
- Prepares maps of distribution system, including pipelines, valves, regulators, fire hydrants, tanks, and pumping stations.
- Reviews and integrates information from existing public and private agency maps and databases.
- Uses information from field crews to update and improve existing District maps.
- Develops and maintains Geographical Information System (GIS) databases and links.
- Prepares and plots maps, plans and detail drawings.
- Distributes maps and mapping products including GIS data.
- Makes field surveys.
- Prepares drawings for the design, installation, replacement and location of District facilities and structures.
- Researches and implements methods of map drafting most conducive to effective support of field and engineering activities and making appropriate use of state-of-the-art information management and retrieval systems.
- Maintains computer software for CAD and GIS and supporting applications.
- Updates District valve books, sketches, drawings and databases.
- Assists with review of engineering issues as regards meter availability, developer projects, system pressure, flows, etc.

Typical Physical Activities

- Travels occasionally by motor vehicle in conducting District business.
- Communicates occasionally with District management, coworkers, and the public in face-to-face, one-to-one and group settings.
- Occasionally uses a telephone or two-way radio for communication.
- Uses office equipment such as computer terminals, copiers, and fax machines.
- Occasionally walks in uneven terrain, in an outdoor environment, locating District structures and facilities.
- Sits for extended time periods.
- Hearing and vision within normal ranges.

ENGINEERING DRAFTER

Special Requirements

Possession of an appropriate California operator's license, Class C, issued by the State Department of Motor Vehicles. Possession and proof of a good driving record as evidenced by freedom from multiple or serious traffic violations or accidents far at least two (2) years duration. The driving record will not contribute to an increase in the District's automobile rates.

Employment Standards

Knowledge of:

- Basic knowledge of engineering methods and practices.
- Algebra, geometry, trigonometry.
- Mapping concepts and standard coordinate systems.
- Basic knowledge of personal computer systems including operating systems, basic applications and general principals of data coding, storage and retrieval.
- AutoCAD, release 13 or later, preferably AutoCAD Map.
- Principles, methods, instruments, and symbols used in mapping and engineering drawing.

Ability to:

- Interpret District policies and regulations.
- Learn the geography of the District and the location of District facilities.
- Perform complex and precise drafting and mapping work.
- Prepare construction drawings and maps from field notes.
- Use computer systems and software packages related to engineering drafting and GIS.
- Assist with the development and preparation of engineering reports.
- Effectively represent the District's engineering functions with the public, other government agencies, contractors and developers.
- Establish and maintain cooperative working relationships.

Desirable Education and Experience

Any combination of education and experience that would likely provide the necessary knowledge and abilities is qualifying.

A typical way to obtain the knowledge and abilities would be:

Completion of courses in algebra, geometry, trigonometry and CAD drafting.

One (1) year of responsible technical experience in performing engineering drafting work.

The specific statements shown in each section of this description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.