

VALLEY CENTER MUNICIPAL WATER DISTRICT
GIS/MAPPING TECHNICIAN

DEFINITION

Under general lead of the GIS Analyst, incumbents are responsible for performing a variety of routine to difficult Geographic Information System (GIS) and Computer Aided Design and Drafting (CADD) assignments in developing, operating and maintaining the GIS system.

CLASS CHARACTERISTICS

Initially under close supervision, incumbents are fully competent and are expected to perform entry to journey level duties related to GIS activities to include: reading and interpreting topographic maps and drawings, performing fieldwork, editing and creating digital data.

ESSENTIAL DUTIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related, or a logical assignment to this position.

Creates maps, drawings and designs such as site plans, grading and drainage plans, pump and piping plans, conceptual route maps for construction projects, and pressure zone maps for reports, presentations and Board meetings.

Collects data, maps and information from existing District records and field information for conversion to graphical and database computer storage.

Reads, interprets, revises and updates topography maps, "as-builts" and valve detail drawings, and other related engineering drawings as well as various facility databases.

May perform fieldwork using a Global Positioning System (GPS) to collect surface data.

Maintains the District's computer mapping CADD and GIS systems; assists District personnel with use of specific GIS applications and projects; maintains graphic and database information on GIS system; edits and creates digital data; prepares and updates metadata.

Prepares detailed automated drawings of existing facilities; prepares prints of various original plans and District records for internal and external agency use; provides complete and accurate record drawings and other information to departments and to other public and private agencies and organizations.

Manages assigned projects, mapping and GIS timelines; provides status reports for progress of mapping updates, GIS applications and GIS and mapping workflow.

Develops, maintains and disseminates reliable and well-documented GIS data.

Prepares copies of documents, as needed by the public and other District departments.

Assists in addressing complex integration issues and long-term GIS and mapping goals.

Performs other duties as assigned.

QUALIFICATIONS GUIDELINES

Knowledge of: Principles, practices, methods and materials of civil engineering/GIS support work, including utility mapping systems, database development, drafting design and specifications, estimation and construction as related to District systems; GIS and CAD system and drafting media; algebra, geometry and trigonometry as applied to mapping processes; data collection and analysis methods; troubleshooting hardware and software problems; standard office practices and procedures; operation of standard office and engineering equipment including computers, calculators, reproduction equipment, drafting tools, and related equipment; and, software programs including word processing, spreadsheets, CAD and GIS.

Ability to: Perform technical engineering/GIS support work in a variety of areas; use drafting tools and equipment in preparing charts, graphs, skilled layouts, design maps and related materials; analyze engineering, technical and statistical information, evaluate alternatives and make sound recommendations; prepare accurate records and notes, clear and concise reports, correspondence and other written materials; troubleshoot program problems; work independently as well as part of a team; read and interpret plans and specifications, maps, legal descriptions and related complex regulatory and technical information; communicate effectively, orally and in writing, follow and apply oral and written work instructions, and be understood while using the District's radio communication system; establish and maintain effective working relationships with other employees and those contacted in the course of the work.

EDUCATION, EXPERIENCE, LICENSES AND CERTIFICATIONS

Education: Equivalent to a High School Diploma. An Associate's Degree or completion of college-level coursework in GIS, Civil Engineering, or a related field, is highly preferred.

Experience: Two years of experience as an Engineering Technician I with an emphasis in GIS, or its equivalent; or an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

License and Certifications: California Class C Driver's License

PHYSICAL DEMANDS AND WORK ENVIRONMENT

The physical demands and work environment described here are representative of those that must be met by an incumbent to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands: While performing the duties of this job, incumbents are regularly required to use hands to finger, grasp, feel, and use repetitive motions in order to operate office equipment. Incumbents are frequently required to sit, talk and hear. Incumbents are occasionally required to stand, walk, stoop, kneel, crouch or reach and may occasionally be required to lift up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

Work Environment: While performing the duties of this job, Incumbents are not substantially exposed to adverse environmental conditions. Work is performed mostly in office settings. The noise level is usually quiet to moderate.

POSITION DESCRIPTION APPROVED:



General Manager



9/9/2020

Date