Sacramento Suburban Water District Classification Specification

Job Class: Geographic Information System (GIS) Technician I/II

Temporary Position

FLSA Status: Non Exempt

Supervisor: GIS Coordinator

Effective Date: September 2022

Definition

Under general supervision, performs a variety of technical office and field work duties related to the creation and maintenance of maps and/or data, tables, graphs, and other geographic source data related to the location, design, updates, and construction of District infrastructure through the use of assigned Geographic Information Systems (GIS); performs data collection and data creation.

Distinguishing Characteristics

GIS Technician I - This is the entry-level class in the GIS Technician series. Positions in this class may have little or no directly related work experience. The GIS Technician I class is distinguished from the II Level by the performance of less than the full range of duties assigned. Initially under direct supervision, incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processed of assigned area of responsibility are learned.

GIS Technician II – This is the journey-level class in the GIS Technician series and is distinguished from the I level by the ability to perform the full range of duties assigned with only occasional instruction or assistance as new, unusual, or unique situations arise and are fully aware of the operating procedures and policies within the work unit.

Examples of Essential Duties

The following duties are typical for this classification. Depending upon the assignment, the employee may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices. Management retains the right to add, remove, or change duties at any time.

- Produces maps, tables and graphs for internal and external use; performs GIS maintenance responsibilities with Environmental Systems Research Institute (ESRI) and ArcMap/ArcGIS Pro software, including incorporating new electronic data into existing map layers, making data corrections, performing quality control, and developing and maintaining associated base map control.
- Updates water facility GIS data using ESRI software as necessary to include as-built and redline information from field and other staff.
- Enters valve and service locations into GIS mapping system using ESRI software.

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- Coordinates with key staff in various departments to create tabular data, or perform data analysis, update data and maps, and generate a variety of specific cartographic and thematic maps and exhibits.
- Generates custom GIS data queries and analysis as requested by District staff.
- Utilizes the Global Positioning System (GPS) to collect and record geographic information; locates District assets, resolves accuracy issues using GPS, and integrates GPS data into GIS database.
- Receives and formats data records and/or facilitates transfer of electronic CAD files into GIS database.
- Maintains regular attendance and adheres to prescribed work schedule to conduct job responsibilities.

Minimum Qualifications

Knowledge Of:

- Cartographic, surveying, and engineering principles related to GIS.
- Standard engineering terminology, symbols, mathematics (algebra, geometry and trigonometry as applied to computation of angles, areas and traverses) and recordkeeping.
- Principles and techniques of complex, technical GIS analysis and mapping using ESRI software and preliminary knowledge of AutoCAD software.
- Methods and techniques used in the collection and analysis of data obtained from GIS.
- Methods and techniques used for the design and construction of public water facilities.
- ESRI ArcMap/ArcGIS Pro editing software.
- Common office computer software and database programs, including the Microsoft Office Suite of Programs (Word, Excel, Outlook, Access and PowerPoint).

Ability To:

- Apply GIS technology.
- Read and interpret graphic presentations of water system infrastructure.
- Perform a variety of technical duties to support the District's GIS application and production of reports, maps, and graphics, including data collection, basic mathematical, geometrical, spatial and statistical computations and analysis.
- Organize and coordinate complex tasks required by multiple departments.
- Use computer systems, tools and equipment, and software related to engineering drafting and computations, including GPS and other related applications, and basic AutoCAD.
- Perform detailed work thoroughly, neatly, accurately and efficiently.
- Learn to interpret and prepare maps by accurately delineating feature locations and boundaries.
- Communicate clearly and concisely both verbally and in writing.

Experience and Education:

GIS Technician I

Experience: No experience required.

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Education:

An Associate's degree or 60 semester units of college level course work including 18 units in a major field of study, with course work in geography, cartography, geographic information systems, computer aided drafting, computer science or related field. Two years of related work experience can substitute for an Associate's Degree.

GIS Technician II

Experience: Two (2) years of experience in the use and operation of GIS, applications, software and maintaining databases, preferably in a public utility setting.

AND

Education:

An Associate's degree or 60 semester units of college level course work including 18 units in a major field of study, with course work in geography, cartography, geographic information systems, computer aided drafting, computer science or related field. Two years of related work experience can be substituted for an Associate's Degree.

License and/or Certifications:

 Valid California Driver's License issued by the California Department of Motor Vehicles and proof of good driving record as evidenced by freedom from multiple or serious traffic violations or accidents for at least two (2) years duration. The driving record will not contribute to an increase in the District's automobile rates. Individuals who do not meet this requirement due to a physical disability will be considered for accommodation on a case-by-case basis.

Working Conditions and Physical Demands

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.

- Regularly communicates verbally with District management, coworkers, and the public in face-to-face, one-on-one and group settings.
- Regularly uses a telephone and email for communication.
- Regularly uses office equipment such as computers and copiers.
- Sits or stands for extended time periods.
- Ability to carry, reach and lift supplies and equipment weighing up to 50 pounds.
- Ability to push, pull and maneuver supplies and equipment of varying weights and configurations.
- Hearing and vision within normal ranges with or without correction.
- Occasionally may be required to change working hours or work overtime.

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

APPROVED:	
Date: 9/22/2022	
By: Dan York General Manager	
Employee Statement: I certify I have read, understand, and acknowledge receiving a copy of this class specification.	
Employee Signature	Date