SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: ENTERPRISE GEOGRAPHIC INFORMATION SYSTEMS (EGIS) MANAGER

DATE: 07/01/2025 JOB CODE: 2100

FLSA STATUS: EXEMPT UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under the general direction of the Engineering Manager, manages the Enterprise Geographic Information Systems (EGIS) designed for large scale systems, databases, and related EGIS technology within the Water Department. The Department's EGIS is a highly integrated complex enterprise system based on an ESRI platform. It is an enterprise geodatabase supporting any number of users and runs on computers of any size and configuration. This position delivers EGIS services to all stakeholders supporting the Department's mission and objectives including Water Utility, Water Reclamation, and Sewer Collections and is responsible for the overall vision, design, management, and leadership of the Department's EGIS program including management of EGIS technology, services, and large EGIS spatial datasets; performs technology infrastructure integration design and services administration between EGIS and other business systems; provides comprehensive planning and system architecture design of EGIS databases, applications, and systems for all EGIS integrated business systems; develops and manages the EGIS group budget and related contracts; and performs related duties as required..

DISTINGUISHING CHARACTERISTICS

The EGIS Manager is a mid-management supervisory classification responsible for planning and directing the design, development, implementation, and management of a comprehensive EGIS program for the Water Department. Work involves responsibility for the application of highly technical, complex, and professional knowledge and skills in various areas of EGIS. This position provides technical expertise in an advisory role to employees, supervisors, and management staff; performs difficult and complex work involving research, analysis, and the preparation of sound recommendations at a policy level and provides technical and functional supervision of technical staff. The incumbent in this class is expected to use independent judgment and frequently independently carry out technical administrative assignments. Supervision is received from the Engineering Manager. Supervision is exercised over EGIS staff and other Department employees as designated by the Engineering Manager and/or the Director of Water Utility.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

Provide courteous and expeditious customer service to the general public and City Department staff;

- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Lead, organize, control, and evaluate the work of the EGIS group; establish performance requirements and personal development targets; regularly monitor performance and provide coaching for performance improvement and development;
- Participate in the development and management of budgets and contracts for the EGIs group;
- Manage, define, and monitor the services of the EGIS; coordinate all data standards, processes, and workflow to ensure that EGIS data and services meet requirements; enforce data standards, procedures, and workflow for all information in the EGIS;
- Perform complex spatial analysis and solve complex technical EGIS-related issues using the Department's EGIS, CAD, modeling, and other information technology tools, including the preparation, entry, analysis, and plotting of data, production of high-quality maps, drawings, exhibits, tabular, and statistical reports;
- Create, implement, and/or maintain databases for storage, manipulation, and retrieval of information;
 evaluate and revise database structures; define database information, access, and file structure
 elements through discussions with users; validate input sources of data into EGIS layers and tables;
- Serve as project manager on newly developed EGIS solutions and provide support for these solutions;
 manage EGIS contracts and performance of the EGIS related service providers;
- Attend and participate in professional group meetings; serve as Department EGIS representative on various information technology-related committees; stay abreast of new trends and innovations in the field of EGIS technology and research possible technological tools to improve efficiency;
- Compose correspondence and interoffice memoranda; compile information from SQL Server to support the Department's monthly and annual reports required by the State;
- Provide day-to-day leadership and work with staff to ensure a high performance, customer oriented work environment to achieve the Department's strategic priorities, objectives, and values;
- Coordinate, develop, communicate, and train staff on Department EGIS standards and practices;
- Perform other related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- ESRI enterprise software solutions including ArcGIS Pro, ArcGIS Server, ArcSDE, ArcGIS Portal and Online to include map files (.mxd and aprx), and enterprise geodatabases, other software: AutoCAD, Innovyze Infowater, and InfoSWWM, Microsoft Windows and Server, Microsoft Office Products, Microsoft SQL Server, and Adobe Acrobat or Bluebeam;
- EGIS practices and technology solutions to include database design and programming;
- Principles and practices of contract administration and project management, including planning, scheduling, and costing;

- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly;
- Spatial data analysis and procedures and geometric/utility network expertise;
- AutoCAD engineering symbology in AutoCAD drawings;
- Cartographic techniques, principles, and procedures;
- Basic principles of Civil, Water Utility, Sewer Collections, and Water Reclamation engineering;
- Problem solving/troubleshooting skills to provide a high level of customer service by effectively dealing with local agencies, vendors, consultants, and other Department staff;
- Using computer systems, software applications, and other business equipment to perform a variety of EGIS tasks:
- Basic principles of supervision.

Ability to:

- Manage, supervise, and/or lead EGIS employees to accomplish set goals;
- Participate in the budgeting process for EGIS/CAD and technological needs;
- Operate a variety of computer hardware and software including, but not limited to, desktops, laptops, tablets or other mobile computers, EGPS devices, printers, scanners, and copiers;
- Interpret and analyze technical information;
- Write clear and concise technical reports;
- Coordinate, design, implement, maintain, and utilize an EGIS system to meet critical deadlines and follow up on assignments;
- Manage EGIS mapping and analysis needs for multiple concurrent projects; design and produce high quality maps for reports and presentations;
- Understand and edit complex engineering plans and drawings utilizing AutoCAD;
- Understand and carry out oral, written, and intuitive instructions;
- Establish and maintain effective relationships with those contacted in the course of work;
- Establish and maintain a positive attitude toward City and Department goals;
- Work under moderate stress conditions;
- Operate a vehicle observing legal and defensive driving practices;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier;
- Perform related work as required.

MINIMUM QUALIFICATIONS

An employee within this classification may be designated as a "key responder" and as such shall be required to respond to non-normal working hour emergency operational conditions.

Education:

Bachelor's degree or equivalent from an accredited college or university (120 semester or 180 quarter units) in engineering, computer science, computer information systems, geography, architectural or other graphical/spatial design, data information systems, or closely related field, and

Experience:

Minimum of five (5) years of professional experience involving the design, implementation, and use of ESRI software, AutoCAD, and enterprise databases such as SQL server and/or Oracle;

And

Minimum of two (2) years of experience managing and successfully implementing EGIS projects;

And

General knowledge of and experience with network system design and operation which may include applications in a cloud-based environment.

Municipal government experience is highly desirable.

Certifications: Desired certifications include Geographical Information Systems Professional (GISP), ESRI Enterprise Administration Professional, and ArcGIS Utility Network Specialty. Most competitive applicants will hold one or more industry recognized GIS certifications.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class "C" California Motor Vehicle Operator's License. For out of state applicants, a valid Driver's License is required and a valid Class "C" California Motor Vehicle Operator's License must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Incumbents may be required to perform occasional moderately heavy physical labor. Incumbents require sufficient mobility to work in an office setting and operate office equipment, transport materials and supplies weighing up to 25 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodation(s) for physical or mental disabilities will be considered on a caseby-case basis.

Job Description:

BOWC Approved: 6/24/2003 Rev: 3/22/2005 Rev/Title Chg from WU Technology Coord: Rev/Title Chg from GIS Coord 8/15/2017 Rev/Title Chg from GIS Mgr. 6/24/2025 Testing Standards: App Review/ Supp App Review