

**SOUTH PLACER MUNICIPAL UTILITY DISTRICT  
JOB DESCRIPTION**

Job Title:	GIS/IT Technician/Analyst	Department:	Technical Services
Department Head:	District Engineer	FLSA:	Non-Exempt
Salary Range:	Tech 34 Analyst 45	Reports To:	District Engineer
Probationary Period:	1 year	Revision Date:	09/07/2023

**Position Overview:**

Under general direction from the District Engineer, performs a variety of specialized, technical work in the administration, design, creation, implementation, and maintenance of the District's Geographic Information System (GIS); operates and maintains the District's Information Technology (IT) systems including, GIS software/database, asset management software/database, desktop systems, local area and wide area networks (LAN & WAN), telecommunication and website; evaluates and participates in the functions necessary to implement, sustain, and expand GIS and IT systems to improve efficiency throughout the District; performs related work as required.

**Education/Experience:**

Any combination of training and experience which would provide the required knowledge, skills and abilities is qualifying. A typical way to obtain the required qualifications would be:

GIS/IT Technician

	Education	Experience
A	Associate Degree from an accredited College or University with a degree in geographic information systems, information systems, computer science, engineering, or a related field.	Five (5) years of progressively responsible experience in the development of geographic information systems, computer network maintenance, hardware/software maintenance, and technical training and support.
B	Bachelor's Degree or higher from an accredited College or University with a degree in geographic information systems, information systems, computer science, engineering, or a related field.	Two (2) years of progressively responsible experience in the development of geographic information systems, computer network maintenance, hardware/software maintenance, and technical training and support.

GIS/IT Specialist

Education		Experience
A	Associate Degree from an accredited College or University with a degree in geographic information systems, information systems, computer science, engineering, or a related field.	Six (6) years of professional experience in the development of geographic information systems, computer network maintenance, hardware/software maintenance, and technical training and support.
B	Bachelor's Degree or higher from an accredited College or University with a degree in geographic information systems, information systems, computer science, engineering, or a related field.	Three (3) years of professional experience in the development of geographic information systems, computer network maintenance, hardware/software maintenance, and technical training and support.

**Licenses and Certifications:**

1. Valid California Class C Driver's License.
2. California Water Environment Association Certification in Collection System Maintenance at the Grade I Level within 12 months.

**Knowledge and Abilities:**

This position performs a variety of responsible duties relating to the operation and maintenance of the District's GIS/IT systems and applications within general policy and procedural guidelines and, under direction from a supervisor, has the ability to adapt specific program procedures and activities to meet the needs of the District, other agencies, and technological advances. The work requires public contact, the frequent use of tact and judgment, good knowledge of departmental operations, project and program development, implementation, and maintenance, and the ability to work independently.

Essential Job Functions:

1. Coordinates and maintains the development, implementation, policies, and procedures related to the District's Geographic Information System (GIS) program; monitors GIS system utilization and recommends appropriate revisions to processes and procedures.
2. Identifies, designs, and develops GIS applications and procedures for integrating the GIS program with existing District databases.
3. Creates and maintains a variety of maps and tabular data from a variety of sources; explains technical information to non-technical system users, including assisting them in accessing and interpreting GIS information; develops quality control procedures.
4. Write SQL queries to create reports and display data as requested by District staff.
5. Represents the District in inter-District coordination activities relating to GIS.

6. Attends meetings, conferences, workshops, and training sessions, reviews, publications and audio-visual materials to become and remain current on principles, practices, and new developments pertinent to GIS and the District.
7. Serves as a technical resource to all District departments, including providing assistance and training in the proper use of data and systems, and recommending, troubleshooting and providing support for software, databases and other related applications.
8. Works closely with the District's contracted information system and network administrator.
9. Provides a variety of responsible support for specialized applications throughout the District; establishes policies, procedures, and standards to ensure District-wide consistency and carryover of applications for multiple users.
10. Sets up workstations, including supplying computer terminal, data connection, and telephone; installs desktop equipment, software, and operating systems; installs, maintains, and troubleshoots voice connections, cabling, instruments, and switches; tests each installed connection; works with various vendors to support these systems.
11. Assists users in LAN and WAN procedures and programs and in efficiently accessing networking resources.
12. Consults with other District departments and management regarding department IT and data management needs; evaluates current technology and databases; recommends software and hardware acquisition.
13. Adds, modifies, and deletes content from the District's website and intranet.
14. Prepares a variety of written correspondence, reports, procedures, and other materials.
15. Monitors changes in technology and applications, recommends improvements and upgrades, and implements changes after approval.
16. Performs other duties as assigned.

Knowledge of:

1. The District's Mission, Vision and Core Values.
2. District Standard Specifications and Improvement Standards for Sanitary Sewers.
3. District policies and procedures.
4. Safe work practices as defined by Cal-OSHA.
5. Applications and functions of computer hardware, software, and peripheral devices.
6. Principles of database management and system development.
7. Local area network (LAN) and wide area network (WAN) design, operations, and support, such as printers, modems, scanners, routers, switches, and other network devices and various applications.
8. Computer and peripheral equipment maintenance methods and procedures.
9. The function and role of the District in developing and coordinating a broad-based GIS program with applications for District departments, public agencies, and the general public.

10. Technology, hardware, and software and current applications related to GIS systems, including database management, mapping and report generation and desktop publishing systems.
11. Principles and practices of identifying technology needs and issues, researching and evaluating technology, applications and the most effective courses of action and implementing solutions.
12. Applicable Federal, State, and local laws, codes, and regulations.
13. Modern office practices, methods, and computer equipment.
14. Record keeping principles and procedures.
15. Computer applications related to the work.
16. English usage, grammar, spelling, vocabulary, and punctuation.
17. Business letter writing formats and technical report preparation. English usage, spelling, punctuation and grammar.
18. Techniques for dealing effectively with the public, vendors, contractors, and District staff, in person, in writing, and over the telephone.
19. Techniques for providing a high level of customer service to the public and District staff, in person, in writing, and over the telephone.
20. Techniques for effectively representing the District in contacts with governmental agencies, community groups and various business, professional, educational, regulatory, and legislative organizations.
21. ESRI, ArcMAP software, the District's asset management software, Microsoft operating systems, Exchange Server, MS Office Applications, SQL Server, Microsoft Access, HTML, and network security.
22. Principles for the operation, maintenance, construction, inspection, and repair of sanitary sewer systems.
23. Sewer construction principles, practices, methods, techniques, and terminology.

Ability to:

1. Analyze, diagnose, and troubleshoot information technology networks, servers, and systems and workstation hardware and software using logic to solve problems.
2. Operate, install, maintain, configure, and troubleshoot a variety of highly technical computer equipment and peripherals.
3. Analyze and evaluate data, formulate proposals, and implement computer system plans.

4. Establish and maintain a computer maintenance schedule.
5. Write system procedures.
6. Learn to use new and existing software and hardware.
7. Present effective training programs and train users in the application and use of computer hardware and software.
8. Develop and implement goals, objectives, policies and procedures related to the District's Geographic Information Systems (GIS) program.
9. Develop and administer a broad-based GIS program that includes effective database development and management for District departments and the public.
10. Assess user needs and recommend appropriate hardware, software, and systems to meet those needs.
11. Perform complex modeling, mapping, database maintenance and other GIS professional level tasks.
12. Develop documentation and informational materials and train users in GIS applications.
13. Interpret, apply, and explain technical materials to non-technical users.
14. Interpret, apply, and explain complex Federal, State, and local laws, codes, regulations, departmental policies, and procedures.
15. Understand the organization and operation of the assigned department and of outside agencies as necessary to assume assigned responsibilities.
16. Prepare clear and effective reports, correspondence, policies, procedures, and other written material.
17. Make accurate arithmetic, financial, and statistical computations.
18. Analyze situations and identify pertinent problems/issues; collect relevant information; evaluate realistic options; and recommend appropriate course of action.
19. Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner, set priorities, and meet critical time deadlines.
20. Operate modern office equipment including computer equipment and specialized software applications programs.
21. Use English effectively to communicate in person, over the telephone, and in writing.
22. Use tact, initiative, prudence, and independent judgement within general policy, procedural, and legal guidelines.

23. Establish and maintain effective working relationships with those contacted in the course of work.
24. Provide pertinent information including research of records, location of sewer lines, and easements.
25. Locate and mark District facilities as required through the Underground Service Alert System (utility locations).
26. Maintain, develop, and improve District databases for use by District staff.
27. Conduct field surveys, using various types of surveying equipment (e.g., GPS, total station, level), to determine elevations, locations, and other sewer characteristics for additions and revisions to the collection system mapping and databases.
28. Create and revise GIS maps and data to produce web maps that illustrate the District's sewer collection system, easements, access roads, notes, FOG facilities, and other pertinent data.
29. Review maps, right-of-way easements, and property descriptions.

**Physical Demands and Working Environment:**

The physical demands described here 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 functions. Employees must have the ability to safely perform the necessary functions of the position with reasonable accommodations unless such accommodation is impracticable or otherwise presents a safety hazard for other employees or the general public.

Specific Physical Requirements to Perform Duties:

- a. Capable of meeting the basic job duties as defined in Physical Demand Assessment PD-102.
- b. Stand, walk, reach with hands and arms, stoop, or kneel.
- c. Sit at a computer workstation for extended periods of time and occasionally climb a flight of stairs.
- d. Ability to carry equipment for field work.
- e. Occasionally work on rough, uneven and slippery surfaces, occasionally working around machinery with moving parts or stationery equipment with exposure to noise.
- f. Occasionally climb ramps or ladders.
- g. Occasionally work in adverse weather conditions with reasonable accommodations.

- h. Ability to drive a company vehicle off road in rough terrain.

Ability to Successfully Pass Medical Examination Based On:

- a. Ability to safely perform required physical duties, and
- b. Ability to safely perform required physical duties with “reasonable accommodation; that does not create a safety hazard for other employees or the public.

**This job description is not intended to be all-inclusive. Employee may perform other related duties as negotiated to meet the ongoing needs of the organization.**