

# Phelan Piñon Hills Community Services District Job Description

JOB TITLE: GIS Specialist/Engineering Technician

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EXEMPT:	No	SALARY LEVEL : 27
DEPARTMENT:	Engineering	APPROVED: Yes
REPORTS TO:	Engineering Manager/Assistant General Manager	

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## **SUMMARY:**

Under general supervision of the Engineering Manager/Assistant General Manager, the GIS Specialist/Engineering Technician performs technical duties related to the design, implementation, operation, maintenance, and presentation of the District's Enterprise Geographical Information System (GIS). The position supports planning, engineering, operations, and administrative functions through spatial data management, mapping, analysis, and reporting.

This position also performs engineering-related technical support using CAD systems, assists with administration of the District's water availability program, provides GIS-related information to District staff, outside agencies, and the public, and performs other related duties as assigned.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:** Responsibilities and duties may include, but are not limited to, the following:

## **GIS ADMINISTRATION AND ANALYSIS:**

- Administer and maintain the District's enterprise GIS environment, including Esri Portal, Server, Datastore, ArcGIS Online, ArcGIS Pro, SQL Server, and related applications, ensuring reliability, security, and scalability.
- Develop, edit, and maintain authoritative GIS datasets including infrastructure, parcels, customer accounts, and operational assets
- Implement quality assurance/quality control (QA/QC) procedures to ensure data accuracy, consistency, and integrity.
- Oversees GPS/GNSS field data collection programs and ensures proper integration into enterprise databases.
- Design, configure, and deploy ESRI applications, dashboards, and tools (e.g., Field Maps, Survey123, Story Maps, Web AppBuilder, Experience Builder) to streamline workflows, improve staff productivity, and enhance public transparency.
- Perform advanced spatial analysis and modeling to support engineering, planning, operations, and customer service functions
- Produce maps, dashboards, and reports supporting capital improvement planning, fire flow modeling, and asset management.
- Establish District-wide GIS standards, documentation, and procedures to ensure compliance with industry best practices, regulatory requirements, and data governance policies.
- Evaluate and recommend GIS-related technologies, software, and hardware improvements.
- Provide GIS training and technical support to District staff.
- Maintain public-facing GIS applications to support transparency and information access.

- Stay current with GIS principles, practices, and trends through training, conferences, workshops, and professional development opportunities.

**ENGINEERING SUPPORT:**

- Develop maps and exhibits using AutoCAD and related applications.
- Assist in planning and development of engineering programs and projects.
- Support mobile device deployment, management, and recovery.
- Assist in analyzing maps, reports, drawings, blueprints, terrain, hydrological data for project planning and review.
- Assist with field data collection, analysis, and preparation of graphs, charts, reports, and exhibits.
- Support preparation and modification of reports, specifications, maps, and engineering documents.
- Assist in coordination with contractors, consultants, inspectors, and internal staff to ensure compliance with District standards.
- Utilize CAD, GIS, and related software to maintain system mapping and design documentation.
- Perform basic IT-related support tasks in coordination with IT staff.
- Utilize GIS-based modeling software for fire flow testing.
- Evaluate hardware, software, and vendor solutions.
- Operate large-format plotters and manage custom printing configurations.

**PUBLIC RELATIONS/CUSTOMER SERVICE:**

- Provide courteous and professional assistance to District staff, agencies, consultants, and the public.
- Respond to water-related inquiries and provide accurate information.
- Coordinate with internal staff, external agencies, and consultants on assigned projects.
- Represents the District at meetings, presentations, and industry events as assigned.

**COST ESTIMATING AND ADMINISTRATIVE SUPPORT**

- Prepare cost estimates using established unit pricing for plan checks, bonding, inspection fees, and District projects.
- Assist in compiling reports related to water system improvements and infrastructure projects.
- Support administrative engineering functions and special projects as assigned.

**MINIMUM QUALIFICATIONS:**

To perform this job successfully, an individual must be able to perform the essential duties satisfactorily, with or without reasonable accommodations.

**Education and Experience:**

- Two (2) years of college-level coursework in civil engineering, GIS, or a related field; **and/or**
- Three (3) years of progressively responsible experience in GIS, water utility engineering, inspection, project coordination, or related technical work

- Experience with water distribution systems and pipeline design is desirable

### **Certificates and Licenses**

- Valid California Driver's License with a satisfactory driving record

### **KNOWLEDGE, SKILLS, AND ABILITIES:**

#### **Knowledge of:**

- Principles and practices of Geographic Information Systems (GIS), including ESRI platforms and spatial data management,
- Water utility systems including pipelines, valves, meters, reservoirs, and related infrastructure
- Basic civil engineering concepts, construction practices, and drafting standards
- Computer-Aided Design (CAD) systems and mapping standards
- Asset management principles and utility data practices
- Basic SCADA system concepts related to water utility operations
- Mathematical principles including algebra and geometry

#### **Ability to:**

- Interpret engineering drawings, maps, legal descriptions, and technical documents
- Collect, manage, analyze, and maintain spatial and tabular data with accuracy
- Operate GPS/GNSS and field data collection equipment effectively
- Develop accurate maps, reports, dashboards, and technical documentation
- Solve practical technical problems using sound judgment and established procedures
- Communicate clearly and effectively both orally and in writing
- Read and interpret technical documents, safety rules, and procedural manuals
- Prepare routine and technical reports and correspondence
- Present information effectively to staff, management, or external stakeholders
- Perform mathematical calculations involving area, volume, percentages, and proportions
- Apply algebraic and geometric concepts in technical work
- Interpret written, oral, diagrammatic, and schedule-based instructions
- Work independently and manage multiple priorities
- Establish and maintain effective working relationships

#### **Computer Skills:**

- Proficiency in ArcGIS Pro and ArcGIS Online
- Proficiency with GIS Enterprise databases (SDE/SQL Server)
- Proficiency in Microsoft Office Suite (Excel, Word, PowerPoint, Access)
- Basic familiarity with SCADA systems
- General knowledge of GPS/GIS field applications and mobile data collection tools

**PHYSICAL DEMANDS AND WORK ENVIRONMENT:**

- Work is performed in both office and field environments, primarily in an office setting with extended periods of sitting and computer use
- Field work may include exposure to outdoor weather conditions, including extreme heat or cold, traffic, noise, dust, and uneven terrain.
- Regularly required to use hands and fingers, reach, talk, and hear.
- Occasionally required to stand, walk, stoop, kneel, crouch, crawl, climb, or balance.
- Occasional exposure to fumes, airborne particles, moving mechanical parts, and toxic or caustic chemicals.

**Lifting Requirements:**

- Up to 25 pounds regularly
- Up to 50 pounds frequently
- Up to 100 pounds occasionally

**Vision Requirements:**

- Close, distance, color, peripheral, depth perception, and the ability to adjust focus.

**Noise Requirements:**

- Typically moderate, with variation in field environments.

**OTHER REQUIREMENTS:**

- Must comply with all District policies, procedures, and the Employee Personnel Manual.
- Must pass background check, pre-employment physical, and, if applicable, drug screening.
- May be required to attend training sessions, emergency response activities, and occasional evening or weekend meetings