



San Juan Water District  
9935 Auburn Folsom Road  
Granite Bay, California 95746  
(916) 791-0115  
www.sjwd.org

## Position Description

### Engineering Technician III

**Status:** Non-Exempt, Safety Sensitive  
**Supervisor:** Engineering Services Manager  
**Effective Date:** July 30, 2018

#### **Supervision Received and Exercised**

Reports to and receives direction and assignments from the Engineering Services Manager. Coordinates assignments with the Senior Engineer and Construction Inspector. Provides support for and coordinates engineering-related work with other District departments, and with outside consultants, engineers, contractors, vendors, developers, and county and city entities.

#### **Primary Function**

To organize, prepare and review work as assigned involving a variety of technical field and office engineering tasks; to perform duties requiring specialized knowledge; and to provide administrative support to the Engineering Services Manager and the Engineering Department. Directly assists Engineers with application of principles, methods and techniques of engineering and engineering technology. Supports capital improvement and development projects, construction management and inspection tasks. Completes work using computers, plotters, office, surveying, and other engineering equipment, devices and tools. Researches records and documents. Maintains and updates department records, equipment and supplies. Performs other duties as assigned

#### **Essential Duties** - *Duties may include, but are not limited to, the following:*

- Prepares accurate and quality work products using technical training, and engineering methodology and skills, as well as computer applications and engineering equipment.
- Performs detailed dimensional drafting using AutoCAD and other methods for the design and construction of pipelines and other water facilities improvements and projects.
- Assists with the preparation of plans, technical specifications and contract documents for purposes of bidding and construction.
- Prepares engineering calculations, including dimensional analysis, plans and profiles, materials quantities and take-offs and cost estimates.
- Assists, updates, revises, reviews, and maintains documents in a variety of technical engineering areas including mapping, drawings, agreements, and property documents.
- Performs a wide variety of office-related functions including preparing correspondence, figures, presentation materials, brochures, field documents, and other documents and materials for the Engineering department and other District departments.

#### **Other Duties**

- Receive and coordinate Department phone calls, mail and other communications.

- Maintain a schedule as required to coordinate and complete work assignments in a timely manner.
- Update, document, and maintain the District's water system map (using AutoCAD).
- Conduct research of records, maps, and other sources of information to obtain necessary engineering and property data, and utility locations as needed for design and construction.
- Assist with coordination of design, permitting and construction with outside consultants, contractors, utilities, agencies, cities, and county departments as necessary to submit, obtain and implement approvals and permits including encroachments and easements.
- Conduct preliminary plan reviews of submitted development projects to ensure quality and conformance with District standards.
- Assist with project administration and documentation for construction and improvement projects, and for development projects.
- Assist with construction management and inspection for both capital improvement projects and development projects, to ensure conformance with design intent, specifications and standards.
- Prepare, organize and maintain engineering-related field and office information, data, reports, construction project and development project file records, as well as as-built and record drawings and other documents. Responsible for organization, maintenance, updating, check-out, tracking and retrieval of as-built records, maps, facility and project documents, development and property records, construction records, and other files and records.
- Entry of data and information in computer applications for analysis and for reference.
- Maintain records of Engineering equipment and facilities, maintain functionality and coordinate servicing of office equipment including surveying equipment, plotter and copier, and maintenance of department supplies.
- Provide support to other District divisions and departments as directed.
- Performs other related duties as assigned.

### **Minimum Qualifications**

*Knowledge of and the ability to apply:*

- Technical and functional engineering principles, practices and methods of civil engineering, design, construction.
- Principles and practices of engineering mathematics with speed and accuracy, and the understanding of use of mathematics to analyze problems.
- Drafting principles, methods and techniques, and the layout of plans, including plans and profiles for pipelines.
- Computer-based applications including MS Office Suite (Word, Excel, Access, etc.), and AutoCAD. Ability to use or learn to use GIS software; H2O Net hydraulic modeling and other related software is desired.
- Sound understanding of the preparation of Contract Documents (plans and technical specifications).
- Surveying principles and methods.
- Cross connection control; backflow preventer testing; valve control and maintenance.
- Principles and practices of customer service.
- Modern office procedures, practices and computer equipment.

*Ability to:*

- Provide high quality technical and functional support.
- Interpret and comprehend plans and specifications, engineering details and sketches, designs, and engineering-related documents.
- Perform quantity take-offs, and the application of cost estimating methods.
- Multi-task and work independently to complete complex technical field and office engineering tasks, with varying schedules, concurrently. And ability to plan and carry out activities and assignments efficiently and on time.
- Prepare accurate plans, specifications, cost estimates, figures, and technical documents and other work products.
- On a continuous basis, know and understand operations, and observe safety rules; intermittently analyze problems; identify and locate equipment; interpret work orders; remember equipment location; and explain jobs to others.
- Intermittently, sit while studying or preparing reports; bend, squat, climb, kneel and twist when performing field engineering duties; perform simple and power grasping, pushing, pulling, and fine manipulation.
- Perform complex duties related to technical field and office engineering work.
- Apply administrative and operational regulations, policies, procedures, and standards.
- Exercise considerable discretion to plan and carry out activities.
- Efficiently use computer and applicable software; operate surveying and engineering equipment; perform high level drafting; prepare drawing from notes and sketches.
- Initiate and maintain effective safety practices.
- Communicate clearly and concisely, orally and in writing.
- Establish and maintain effective working relationships with co-workers, and those otherwise who are contacted in the course of work.

*Education and Experience:*

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

Education:

High school graduate with a minimum of an equivalent to an Associate's degree (2-year) from an accredited college with major course work in engineering technology, CAD, civil engineering, environmental engineering, or related field.

Experience:

Five years (minimum) of progressively responsible work experience equivalent to Engineering Technician III within a water utility or consulting engineering environment related to the duties and employment standards of the position.

*License or Certificate:*

Possession of, or the ability to obtain and maintain, a California Driver's License with a satisfactory driving record. Individuals who do not meet this requirement due to a physical disability will be considered on a case-by-case basis.

Possession of a Grade DII Water Distribution Operator's Certificate issued by the State of California Department of Health Services are requirements of the position and must be possessed or obtained within two years of the hire date.

**Physical Capabilities**

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 functions.

The employee in this position must be able to sit for long periods while reviewing or preparing documents; intermittently bend, squat, climb, kneel and twist to reach equipment surrounding desk, and when performing office and field engineering duties; perform simple and power grasping, pushing, pulling, and fine manipulation.

<i>Physical Requirements</i>	<i>Rarely (0-12%)</i>	<i>Occasionally (12-33%)</i>	<i>Frequently (34-66%)</i>	<i>Regularly (67-100%)</i>
Seeing				✓
Hearing				✓
Standing/Walking		✓		
Climbing/Stooping/Kneeling		✓		
Lifting/Pulling/Pushing	✓			
Approximate Maximum Weight to Lift	50 Pounds			
Fingering/Grasping/Feeling				✓
Describe Working Conditions	10 to 75 Percent Outdoors, 25 to 90 Percent Indoors			