



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

Position Description

Engineering Technician I/II

Status: Non-Exempt, Safety Sensitive
Supervisor: Engineering Services Manager
Effective Date: August 2, 2018

Supervision Received and Exercised

Engineering Technician I - Receives immediate supervision from the Engineering Services Manager and receives technical and functional supervision from the Engineering Technician III. Does not provide supervision to others.

Engineering Technician II - Receives general supervision from the Engineering Services Manager and receives technical and functional supervision from the Engineering Technician III. Does not provide supervision to others

Primary Function

To perform technical office and field engineering duties related to drafting, surveying, mapping, and maintaining historical maps and technical drawings.

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

- Perform civil engineer drafting of pipeline and other water facilities using pen, pencil, and AutoCAD; prepare plans for new installations, modifications, or repairs of water facilities; prepare sketches for staff and Board meetings; revise District subdivision and water system maps using AutoCAD; prepare and maintain log book and maps displaying the location of distribution mains valves, fire hydrants, backflow preventers and pump stations..
- Record historical data regarding materials age; file records and enter data in computer programs for reference.
- Obtain county encroachment permits for service and pipeline construction.
- Update the District's hydraulic model using H2O Net hydraulic modeling software.
- Perform construction staking, topographical work, leveling and other related surveying duties for pipeline design.
- Assist the construction inspector with hydrostatic testing of new pipeline construction and with inspecting and approving the installation of backflow prevention assemblies on high-hazard services and fire lines; assist with on-site inspections during pressure/leak tests.
- Maintain records of inspections and report safety hazards.
- Backup other Engineering Technician positions when required.
- Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.
- Perform related duties as assigned.

Minimum Qualifications

Engineering Technician I

Knowledge of:

- Basic knowledge of engineering mathematics.
- Basic principles, methods and techniques of drafting and surveying.
- AutoCAD software.
- Principles and practices of customer service.
- Safe work practices.
- Modern office procedures, methods and computer equipment.

Ability to:

- Exercise some discretion to plan and carry out activities.
- 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.
- Efficiently use computer and applicable software.
- Operate surveying and engineering equipment.
- Prepare drawings from notes and sketches; perform drafting.
- Initiate and maintain effective safety practices.
- Establish and maintain effective working relations with those contacted in the course of work.
- Communicate clearly and concisely, both orally and in writing.

Experience and Education:

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:

Equivalent to an Associate's Degree from an accredited college with major course work in engineering or related field.

Experience:

None required.

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 I Water Distribution Operator's Certificate issued by the State of California Department of Health Services.

Engineering Technician II

In addition to the qualifications for Engineering Technician I:

Knowledge of:

- Working knowledge of engineering mathematics.
- Principles, methods and techniques of drafting and surveying.

- AutoCAD and GIS software.
- H2O Net hydraulic modeling software.
- Cross connection control.
- Valve control and maintenance.
- Backflow preventer testing.

Ability to:

- Apply administrative and operational regulations, policies, procedures, and standards.
- Exercise considerable discretion to plan and carry out activities.
- Operate surveying and engineering equipment.
- Perform drafting.
- Prepare drawings from notes and sketches.
- Apply District, State and Federal policies, procedures, rules and regulations.

Experience and Education:

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:

Equivalent to an Associate's Degree from an accredited college with major course work in engineering or related field.

Experience:

One year of experience performing duties equivalent to Engineering Technician I with San Juan Water District. Positions in this class are flexibly staffed and are normally filled by advancement from the I level if incumbents have met the minimum qualifications and have demonstrated the ability to perform the responsibilities required at the higher level.

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 II Water Distribution Operator's Certificate issued by the State of California Department of Health Services.

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.

<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	40 Pounds			
Fingering/Grasping/Feeling				√
Describe Working Conditions	25 Percent Outdoors, 75 Percent Indoors			