

San Benito County Water District

Classification Unit:	Field and Office
Salary Range:	Choice of Either 76 or M46
Last Revision:	October 2007

ENGINEER

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

DEFINITION

Under general direction, perform a variety of professional engineering work in the operation, design, construction, maintenance and repair of structures and facilities for the District's water supply, water distribution activities including technical support of the operation and maintenance activities of the District; performs other work as required. This is an emergency response position.

SUPERVISION RECEIVED AND EXERCISED

Receives immediate supervision from District Engineer or Deputy District Engineer. May provide technical supervision of Engineering, Water Resources and Groundwater Technicians.

ESSENTIAL FUNCTION STATEMENTS

Essential responsibilities and duties may include, but are not limited to, the following:

- ❖ Reviews studies, plans and environmental impact statements for proposed public and private programs and projects for impact on the District and the programs and projects of the District.
- ❖ Provide information to agencies, engineering firms, landowners and other related to District standards and approval procedures for right-of-way and encroachment permit requests.
- ❖ Provide information to landowners, engineers and other related to District standards for subsystem expansions and procedures for the design and construction of such expansions.
- ❖ Perform engineering work, surveys and inspections.
- ❖ Research files and records; prepare reports and correspondence.
- ❖ Perform basic mathematical computations and gather design data for various engineering projects.
- ❖ Prepare and revise detailed drawings, maps and schematics from sketches and/or verbal instructions.

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- ❖ Analyze and refine field data, prepare estimates of materials and quantities and develop plans, profiles, maps and drawings for construction, installation, maintenance and repair projects.
- ❖ Prepare requests for proposals, specifications for construction contracts and procurement contracts.
- ❖ Prepare comprehensive technical reports, budget estimates and informational data for District projects and programs.
- ❖ Under professional supervision, design pipelines, pipeline structures, drainage facilities, roads, canal structures and embankments.
- ❖ Inspects construction work by others (subsystem expansion and encroachments on District or USBR Hollister Conduit Right-of-Way) for compliance with encroachment permits and/or other approval documents, drawings and agreements.
- ❖ Perform hydrologic measurements along District canals, San Benito River, Tres Pinos Creek and other streams, channels and structures.
- ❖ Perform pump efficiency and pump flow tests, assist in sounding of various reservoir and other water-way facilities.
- ❖ Provide technical support of operation and maintenance personnel in the installation, construction, maintenance and repair of District canals, pipelines, roads, drainage facilities, etc.
- ❖ Provide technical assistance to operation and maintenance personnel in water measurement, metering and meter repair activities.
- ❖ Review operational procedures including computerized data gathering and operations systems and recommend changes and improvements to those systems.
- ❖ Assist the District Engineer, Deputy District Engineer and consultants retained by the District.
- ❖ Other duties as required

EMPLOYMENT STANDARDS

Knowledge of:

- ❖ Engineering principles, practices with emphasis on flood control, water quality and water supply.
- ❖ Environmental engineering principles, practices and methods.
- ❖ Principles of hydraulic engineering related to flood control, water quality and water supply.
- ❖ Engineering mathematics and economics.
- ❖ Construction methods, materials and equipment.
- ❖ Principles and methods of statistical analysis.
- ❖ Computer programs and languages and their engineering applications.

Ability to:

- ❖ Perform civil or agricultural engineering functions including pipeline design, hydraulic analysis, structural design, hydrology and surveying.
- ❖ Anticipate technical problems and develop solutions.

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- ❖ Prepare clear and concise reports and presentations; communicate effectively orally and in writing.
- ❖ Effectively represent the District, its projects, programs and policies with landowners, customers, the public and with other agencies.
- ❖ Follow instructions, work independently and cooperatively with others.

Experience and Training Guidelines:

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

Experience

Two years professional experience in civil or agricultural engineering in the areas of water systems, pipelines, pumping stations, canals. Irrigation and groundwater. experience are pluses.

Training

Graduation from an accredited college or university with a Bachelor of Science degree in civil or agricultural engineering or a related field. Possession of EIT Certificate a plus.

WORKING CONDITIONS

Environmental Conditions

Office environment; exposure to computer screens; and field environment; travel from site to site; work in or with water; access and work in confined spaces and high areas; work in or around deep or fast moving waters; exposure to noise, dust, grease, smoke, fumes, gases, inclement weather conditions.

Physical Conditions

Ability to work in a standard office environment with the ability to sit, stand, walk, kneel, crouch, stoop, squat, crawl, twist, climb, and lift 70 pounds; exposure to noise, outdoors, vibration, confining work space, chemicals, mechanical hazards, and electrical hazards; ability to travel to different sites and locations.

SPECIAL REQUIREMENTS

- ❖ Possession of a valid California Driver's License, Class C, as issued by the State of California Department of Motor Vehicles; and a driving record acceptable to the District's auto insurance provider.
- ❖ Obtain and maintain defensive drivers training certification (training provided by the District)
- ❖ Obtain and maintain CPR and First Aid training certification (training provided by the District)