

INDIAN WELLS VALLEY WATER DISTRICT
Essential Function Job Description

1. **Position Title:** ASSOCIATE ENGINEER
2. **Employment Classification:** Exempt
3. **Department:** Engineering
4. **Reports To:** Chief or District Engineer
5. **Fundamental Objectives:** Under the direct supervision of the Chief or District Engineer, performs professional engineering work, which may include design, proposal review, contract administration, construction survey and inspection. Also provides chemical, bacteriological, and biological reviews, regulatory compliance, and related technical and administrative assistance to other staff.
6. **Level of Supervision Required:** Minimal. Direction is provided by the Chief or District Engineer.
7. **Supervisory Responsibilities:** None. In absence of Chief Engineer/District Engineer, he/she may be required to supervise the Engineering Department support staff.
8. **Essential Job Duties and Responsibilities:**
 - A. Prepares plans, specifications, and contract documents for District construction projects under the direction of the District/Chief Engineer.
 - B. Inspects work performed by contractors to ensure that District standards are met.
 - C. Reviews plans, specifications, calculations, reports and submittals received by District for comment and approval.
 - D. Participates in the implementation of a Geographic Information System (GIS) for water facilities, including the creation, maintenance and updating of databases and CAD drawings and researches and compiles information for input.
 - E. Manages projects as assigned by the District/Chief Engineer
 - F. Prepares and maintains water system, asphalt, and concrete specifications for the installation of water mains, hydrants, services, tanks, wells, booster stations, asphalt patching, concrete structures, etc.
 - G. Conduct hydraulic modeling and evaluate results to determine optimal capital improvement plans or project-specific facility requirements and parameters.

- H. Provides direction and assistance to other District departments when needed.
- I. Represents the District in coordination with other utilities, regulatory agencies, governmental bodies, planning agencies, technical groups and developers.
- J. Assist with water quality testing programs, quality and production record-keeping and reporting.
- K. Prepare technical reports, engineering studies, and administrative information including, but not limited to, service connection, usage, classification, submittals etc.
- L. Maintain Engineering drawings, records, and Valve Book that pertain to all District Facilities.
- M. Assist with various committee and Board meetings, as assigned.
- N. Assist in development of budgets and monitor Capital projects.
- O. Assist in performing rate studies, water production and consumption analysis; annual water consumption/production/quality reports with respective agencies.
- P. Assist the District's conservation and cross-connection programs.
- Q. Maintain sound client/customer relationship to ensure customer satisfaction with quality and quantity of service.
- R. Prepare various technical correspondences in support of above duties.
- S. Perform other duties as assigned.

9. **Skills and Abilities:**

A. **Knowledge of:**

- 1. Principles and practices of civil engineering with particular emphasis on the design and construction of water treatment and distribution and other water related projects and facilities.
- 2. Mathematics, physics and chemistry as applied to engineering, topography, construction, and surveying for the design of pipelines, structures and construction principles.
- 3. Computer-aided drafting (CAD), surveying and hydraulic modeling software.
- 4. Technical report writing.

5. Contract development and administration.
6. Principles and practice of water supply and treatment including chemical and biological aspects of water pollution and their relationship to State and regional plans and regulations.

B. Ability to:

1. Communicate clearly and effectively in English, both orally and in writing.
2. Prepare, develop, design, survey and coordinate District engineering projects under the direction of the Chief Engineer or Licensed Surveyor.
3. Review, and update various elements of the District's Master Plans and/or related planning studies.
4. Resolves problems during all phases of design and construction.
5. Use computer systems and AutoCAD software to produce and maintain plans and profiles of pipeline systems, facility maps and site plans.
6. Prepare and update project schedules, cost estimations, and other project documentation, as necessary.
7. Coordinate survey findings with the work of engineering and architectural personnel, clients, and others concerned with projects.
8. Adjust surveying instruments in order to maintain their accuracy.
9. Inspect construction projects and detect flaws in construction and materials.
10. Establish and maintain cooperative working relationships.
11. Make engineering calculations on a variety of projects based on sound engineering practices.
12. Interpret and apply laws, codes, regulations, policies, and procedures.
13. Effectively represent the District's engineering functions with the public, other governmental agencies, contractors, developers and professional engineering consultants.
14. Assess technical inquiries and provide reasonable solutions.

15. Assess incoming assignments and manage tasks according to assessed priority.
16. Interpret submitted drawings and specifications and assess their adequacy to District specifications.

10. Minimum Qualifications:

This is a professional position requiring experience in the work items described above. This position requires design, construction survey and drafting experience using AutoCAD, Trimble Business Center, hydraulic modeling software, GPS Technology and experience in inspecting construction projects involving water/wastewater facilities.

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

Experience: Minimum of three years of increasingly responsible experience performing civil engineering design work including work in water or wastewater infrastructure. Familiarity with the codes and regulations related to drinking water is desirable. Must possess strong oral and written communication skills.

Education: Bachelor of Science Degree in Civil, Environmental or Mechanical Engineering from an ABET accredited engineering program.

License: Possess an Engineer-in-Training Certificate issued by the State of California. Registration as a Civil Engineer in the State of California is desirable, or the ability to obtain registration within 3 years of hire/promotion. Possess a California Water Resources Control Board Distribution 2 (D2) certification or ability to obtain such within 18 months.

Must also successfully complete physical examination and drug screen, and possess a valid California driver's license with a driving record acceptable to the District's insurance underwriter.

11. Physical Demands/Requirements:

The physical requirements and physical demands placed upon this position are outlined separately. A copy of these requirements is to be attached to this job description.

ASSOCIATE ENGINEER
JOB DESCRIPTION APPROVAL

Department Manager Recommendation:

Signature: 


Date: 5/10/16

General Manager Approval:

Signature: 

Date: 10 May 2016

Received and Recorded by Human Resources:

Signature: 

Date: 5/12/16