Approved: December 2020

INDIAN WELLS VALLEY WATER DISTRICT Essential Function Job Description

- 1. <u>Position Title:</u> ASSOCIATE ENGINEER (E.I.T. Required) SENIOR ENGINEER (P.E. Required)
- 2. <u>Employment Classification:</u> Exempt
- 3. <u>Department:</u> Engineering
- 4. Reports To: Chief or District Engineer
- **Fundamental Objectives:** Under the general direction of the Chief or District Engineer, performs diverse and complex engineering work, which may include design, proposal review, preparation of plans/bid documents, contract administration, inspection and assist in the maintenance of engineering and GIS databases. Also provides chemical, bacteriological, and biological reviews, regulatory compliance, and related technical and administrative assistance to other staff.
- **Level of Supervision Required:** Minimal. Direction is provided by the Chief or District Engineer.
- 7. <u>Supervisory Responsibilities:</u> None. In absence of Chief Engineer/District Engineer, may be assigned to supervise subordinate Engineering Department staff.

8. Essential Job Duties and Responsibilities:

- A. Prepares construction 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.** Participates in review of plans, specifications and reports received by District for comment and approval.
- **D.** Participates in the maintenance of the District's 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.** Administers construction contracts; communicates with contractors, processes payment requests, documents progress of construction, negotiates contract change orders, addresses claims, and performs other related duties.

- **F.** Provides direction and assistance to other District departments when needed and coordinates engineering design projects with other departments and agencies.
- **G.** Represents the District in coordination with other utilities, regulatory agencies, governmental bodies, planning agencies, technical groups and developers.
- **H.** Assist with water quality testing programs and reporting.
- I. Prepare technical reports, engineering studies, and administrative information.
- J. Manage, update, and maintain District standard drawings, specifications and AutoCAD standards.
- **K.** Assist with various Committee and Board meetings, as assigned.
- L. Assist in development of budgets and monitoring of Capital projects.
- M. Assist in performing rate studies, water production and consumption analysis; annual water consumption/production/quality reporting to respective agencies.
- **N.** Maintain sound client/customer relationship to ensure customer satisfaction with quality and quantity of service.
- **O.** Provide information and training to other personnel on various technical topics
- P. Perform other duties as assigned.

9. Skills and Abilities:

A. Knowledge of:

- 1. Principles and practices of civil engineering and other engineering disciplines used in the utility industry with particular emphasis on the design and construction of water treatment and distribution and other water related projects and facilities.
- **2.** Drafting principles, methods and equipment, including AutoCAD and GIS.
- 3. Basic principles and practices of capital improvement program budgeting, cost estimation, funding, project management and contract administration.
- 4. Practices of researching engineering and design issues, evaluating

- alternatives, making sound recommendations and preparing and presenting staff reports.
- 5. Hydraulic principles and operation of computerized hydraulic modeling
- **6.** Field survey methods, procedures and instruments
- 7. Statistics and graphic presentation of materials.
- 8. General research and technical report writing methods including proper English usage, grammar, spelling, vocabulary and punctuation.
- **9.** Engineering economics and cost estimating
- **10.** Construction management and inspection methods.
- 11. Plan check methods
- 12. 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. Research, design, prepare and evaluate plans, maps and specifications for accuracy and conformance with accepted engineering standards.
- 2. Make complex engineering computations and check, design and inspect/supervise the construction of a wide variety of projects.
- 3. Develop and administer contracts for professional services and construction in a public agency setting.
- **4.** Read and utilize field survey notes in the preparation of maps and plans
- 5. Use computer systems and AutoCAD to produce and maintain plans and profiles of pipeline systems, facility maps and site plans.
- 6. Conduct complex civil engineering research projects, evaluate alternatives, make sound recommendations and prepare effective technical reports.
- 7. Establish and maintain cooperative working relationships with those contacted in the course of work.

- **8.** Interpret, apply and explain complex laws, codes, regulations, and ordinances.
- 9. Effectively represent the District's engineering functions with the public, other governmental agencies, contractors, developers and professional engineering consultants.
- **10.** Maintain accurate records and files.
- 11. Operate modern office equipment including computer equipment and specialized software applications.

10. Education and Experience:

<u>Associate Engineer</u>: must possess education equivalent to graduation from an accredited four-year college or university with major coursework in civil engineering or a related engineering field and at least three (3) years of professional engineering design, plan review and project administration experience, preferably in a public agency setting.

<u>Senior Engineer</u>: This is a professional position requiring five (5) years of professional engineering design, plan review and project administration experience, preferably in a public agency setting. Must also possess the education equivalent to graduation from an accredited four-year college or university with major coursework in civil engineering or a related engineering field

Professional License:

<u>Associate Engineer</u>: Possess an Engineer-in-Training (E.I.T.) Certificate. Possess a California Water Resources Control Board Distribution Operator 2 (D2) certification or ability to obtain such within 12 months.

<u>Senior Engineer:</u> A valid license as a Professional Engineer in Civil Engineering issued by the State of California or ability to obtain reciprocity within 12 months of hire. Possess a California Water Resources Control Board Distribution Operator 2 (D2) certification or ability to obtain such within 12 months.

Either position must also successfully complete a 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/SENIOR ENGINEER JOB DESCRIPTION APPROVAL

Department Manager Recommendation:
Signature: Gener Mygreeles
Date: 2-1-21
General Manager Approval:
Signature: \ \alpha\telev \ \ \alpha\telev \ \ \ \alpha\telev \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Date: 1 February 2021
Received and Recorded by Human Resources:
Signature:
Date: Fzbeugey 1,202