



Assistant Engineer

DEFINITION

Under direction of a responsible in charge engineer, performs professional and technical engineering work directly and indirectly related to the planning, design, construction, operation and maintenance of water system facilities; and performs related work as required.

DISTINGUISHING CHARACTERISTICS

This class is distinguished from the class of Junior Engineer by the assignment of more responsible professional tasks and the relatively greater degree of independence with which such tasks are performed. In addition, an incumbent of this class may be assigned to oversee a portion of the daily operation of the engineering office serving as the initial contact for the general public, vendors, private engineers, architects and developers. The Assistant Engineer is further distinguished from the class of Associate Engineer in that the latter functions as a project manager and is responsible for ensuring projects are completed on time and within budget.

Positions in the Engineer class series are flexibly staffed; positions at the Associate Engineer level are normally filled by advancement from the Assistant Engineer level; progression to the Associate Engineer level is dependent on (i) management affirmation that the position is performing the full range of duties assigned to the classification; (ii) satisfactory work performance; (iii) the incumbent meeting the minimum qualifications for the classification including any licenses and certifications; (iv) the incumbent satisfactorily meeting the internal promotional criteria; and (v) management approval for progression to the Associate Engineer level.

EXAMPLES OF DUTIES

Typical duties may include but are not limited to the following:

- Performs professional engineering work related to the preparation of plans and specifications for pipelines, pump stations, tanks, water treatment system planning, and other water system facilities under a responsible in charge engineer;
- directs the inspection of and may inspect contract construction for compliance with approved plans and specifications;
- may prepare or assist in the preparation of economic and engineering planning and/or design studies;
- assists in the long range planning of pipelines, pump stations, tanks, water treatment, and other water system facilities;
- may serve as project engineer on construction projects;
- may analyze and work with developers on pipeline extension requirements;
- gathers, compiles and analyzes engineering and statistical data;
- may prepare operational manuals and recommend procedures;
- may provide functional direction to subordinate staff; and
- interprets and applies safety rules and regulations to work assignments.

QUALIFICATIONS FOR EMPLOYMENT

Knowledge of:

- Engineering principles, practices and methods applicable to the planning, design, construction, operations and maintenance of a variety of water system projects;
- engineering office procedures;
- preparation of project budget and schedule information and materials;
- specification and technical report writing and estimate preparations;
- proper spelling, grammar, punctuation and writing practices; and
- construction practices and materials.

Ability to:

- Prepare accurate plans, specifications, cost estimates and engineering reports;
- make accurate engineering computations and drawings;
- travel to off-site locations depending on assignment;
- maintain neat and organized records of work performed;
- use a computer to perform various tasks such as spreadsheets, word processing, database applications;
- establish and maintain effective working relationships with those contacted in the course of work;
- understand and carry out written and oral instructions;
- depending upon job assignment, drive a vehicle; and
- travel to alternative work locations and offsite meetings.

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

- A Bachelor's degree in an engineering curriculum which is accredited by the Engineers' Council for Professional Development; and,
- two years of technical engineering experience.

INTERNAL PROMOTIONAL CRITERIA:

- For non-competitive internal promotional criteria, please refer to the Flex Criteria Matrix for the applicable classification series.

OTHER REQUIREMENTS

- Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100 "all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law."

LICENSES AND/OR CERTIFICATIONS

- Depending upon assignment, possession of or the ability to obtain an appropriate California driver's license issued by the State Department of Motor Vehicles and a satisfactory driving record.
- Possession of a valid California Engineer-in-Training Certificate

PHYSICAL DEMANDS AND WORKING CONDITIONS

During the course of performing job duties the employee will need the mobility to work in a standard office setting, operate equipment, which may include office and/or field equipment, or specialized instruments or tools requiring repetitive arm/hand movement and/or the coordinated movement of more than one limb simultaneously; enter and retrieve data from personal computers and terminals via keyboards which is often performed while sitting for extended periods of time. The employee frequently stands, walks, bends at neck and waists, twists at neck and waist, uses simple and power grasping with both hands, uses fine manipulation of both hands and fingers, and may require use of the arms above the shoulder, climb or balance; stoop, kneel or crouch. While working in the field the employee may walk on uneven or un-level ground surfaces such as hills, slopes, ditches or trenches, on or in tanks, and may work at heights up to ten to twelve feet climbing ladders or stairs. The employee is occasionally required to lift and carry short distances objects such as reams of copier paper, office supplies, files, books, printed materials and other packages or equipment weighing up to 10 to 25 pounds. This position requires that the employee demonstrate adequate hearing and speech to converse in person and over the telephone, and vision to read printed materials and use a computer screen. The employee may be required to travel to alternative work locations and off-site meetings.

In order to drive, individuals must be physically capable of operating the vehicles and equipment safely.

The noise level in the work environment is quiet to moderate noise. The employee is exposed to outdoor temperature, humidity, wetness and dust. The position may require the ability to work overtime and weekends as needed.

To be successful in this job, an individual must be able to satisfactorily perform each of the listed duties. These duties are representative of the knowledge, skill and/or ability required for the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the duties and functions of the position. Requests for reasonable accommodation should be directed to the Human Resources Manager.

Established: July 1985
Revised: October 2008, November 2021
Approved by: Human Resources Manager