



## **ASSOCIATE ENGINEER**

**DISTINGUISHING CHARACTERISTICS:** This is the fully qualified level in the professional engineering series. Incumbents typically have overall responsibility for a technical or professional program area such as operation and maintenance of county water systems or State Funded Road Projects, including the preparation of engineering designs and specifications as well as project management for such programs. Incumbents may have responsibility for the preparation of engineering designs and specifications for other public works facilities such as roads, bridges, structures, airports, utilities, and other related projects. Incumbents may coordinate and/or supervise the work of other engineering staff in the preparation of designs or the performance of other engineering work on an assigned project basis.

**ESSENTIAL JOB DUTIES:** Under limited direction, plans, assigns, and directs the work of nonprofessional engineering personnel or personally performs work in the planning, design, survey, and construction of public works projects such as water systems, roads, bridges, structures, airports, utilities, and related structures; assigns and supervises or personally performs the more difficult phases of design and layout on these projects; supervises or personally performs the preparation of maps, plans, charts, estimates, or diagrams; supervises the maintenance of various engineering records and performs engineering office work in connection with cost analyses and progress reports; coordinates with regulatory agencies and prepares reports and documents required for operations and maintenance of water systems; confers with supervisor during preliminary and design stages of work and discusses technical and policy problems; provides technical information to other engineers and the public; works with utilities and land and water companies in matters of relocation and rights of way; supervises or personally performs inspection and testing required under county contracts and all inspections for highway projects under the Federal Aid Program; supervises traffic surveys; coordinates survey work and material testing; trains and evaluates the performance of personnel; prepares complex engineering reports; and other duties as needed.

### **EMPLOYMENT STANDARDS**

**Education/Experience:** Four years of professional civil engineering experience with an emphasis public works, or a related field. Valid certificates as a Water Distribution Operator, Grade D2 or higher, and a Water Treatment Operator, Grade T2 or higher, issued by the California Department of Health Services; or Registration as a Professional Land Surveyor; or registration as Registered Geologist; or comparable professional or technical license as determined by the Personnel Director is required.

**Knowledge of:** Basic principles, practices, and methods of civil engineering as applied to the planning designing, construction, operations and maintenance of public water systems and other public works facilities such as roads, bridges, structures, airports, utilities, and related systems; methods, materials, and equipment used in water system construction and highway, building, and bridge construction; properties and uses of materials used in the construction thereof; regulatory requirements and standards for water system operation and maintenance; common descriptions of real property; and engineering surveying.

**Ability to:** Plan, design, and supervise the construction of public works facilities such as water systems, highways, bridges, structures, utilities, and related systems; train and supervise professional and nonprofessional engineering personnel; prepare accurate plans, specifications, cost estimates, quantity estimates, and comprehensive engineering reports; establish and maintain project files and records, including financial records; prepare clear, concise reports; analyze complex problems, evaluating alternatives and make sound recommendations; exercise sound independent judgment within general policy guidelines; work cooperatively with those contacted in the course of work; ability to stand, sit, bend, squat, climb, kneel, twist, and lift and carry up to 50 pounds in the course of work.