# ASSISTANT IN CIVIL ENGINEERING II

#### DEFINITION

Under general supervision, to perform a variety of difficult and complex technical and paraprofessional civil engineering work in the field and in the office; to prepare plans, designs, and specifications for projects; to review work prepared by outside consultants; to prepare a variety of reports; and to do related work as required.

### **DISTINGUISHING CHARACTERISTICS**

This is an experienced level classification for the performance of a variety of paraprofessional engineering assignments. This level is distinguished from Assistant In Civil Engineering I by the performance of a broader range of more complex assignments with greater independence. Incumbents at this level should perform work at a level expected of an EIT. They may provide lead direction for other technical staff.

### **REPORTS TO**

Deputy County Engineer.

### CLASSIFICATIONS DIRECTLY SUPERVISED

None.

### **EXAMPLES OF DUTIES**

Designs, prepares, and evaluates preliminary and final plans and specifications for a variety of road, bridge, drainage, and related public works projects, requiring paraprofessional engineering expertise; performs a variety of project development and coordination assignments: performs resident engineering work, including contract administration, inspection, and coordination; ensures that contractors meet proper standards, specifications, cost control, and time requirements; approves change orders and progress payments; performs foundation and hydrology studies; receives and researches a variety of inquiries; collects, organizes, summarizes, and analyzes a variety of technical engineering data; prepares grant proposals; assists with the review of environmental impact reports; prepares preliminary reports for tentative subdivision map conditions; performs field surveys; uses a computer to reduce survey data; prepares earth volume and other calculations; develops data for the acquisition of right-of-way; prepares cost estimates; reviews laboratory analyses and materials reports for compliance; performs traffic studies; develops and proposes solutions to engineering problems; receives applications and reviews, approves, and issues permits, providing a variety of technical engineering advice to the public and other agencies; may oversee water quality programs; may serve as a member of the County Technical Advisory Committee; may provide some work direction for maintenance and support staff; provides some training for support staff; represents the County Public Works Agency in meetings with contractors, engineers, developers, property owners, attorneys, and representatives of other public agencies.

# TYPICAL PHYSICAL REQUIREMENTS

Sit for extended periods; frequently stand and walk; normal manual dexterity and eye-hand coordination; corrected hearing and vision to normal range; verbal communication; use of office equipment including computers, telephones, calculators, copiers, and FAX.

### **TYPICAL WORKING CONDITIONS**

Work is usually performed in an office environment; occasionally works outside; some exposure to variations in temperature and humidity; continuous contact with staff and the public.

# **DESIRABLE QUALIFICATIONS**

### Knowledge of:

- Principles, practices, and methods of Civil Engineering as applied to the design, construction, and maintenance of roads and Public Works facilities.
- Pertinent State, Federal, and local laws, regulations, and ordinances related to public works engineering.
- Preparation of designs, plans, and specifications for the development of roads, bridges, drainage, erosion control, and public works facilities.
- Construction methods, materials, and equipment.
- Proper inspection methods and procedures.
- Research and statistical methods.
- Principles of project development and coordination.
- Use of computers and computer applications related to engineering work.

# Ability to:

- Prepare plans, designs, and specifications for public works facility development, construction, and maintenance projects.
- Perform comprehensive engineering reviews of designs, plans, and specifications prepared by others.
- Perform a wide scope of paraprofessional engineering work.
- Develop and coordinate assigned projects.
- Prepare comprehensive engineering reports.
- Analyze and evaluate engineering and statistical data and information, developing sound recommendations.
- Develop accurate records, sketches, and notes.
- Perform construction and project administration, ensuring compliance with contracts, plans, and specifications.
- Make accurate engineering calculations.
- Operate a computer and use appropriate software in the performance of public works engineering responsibilities.
- Effectively represent the County Public Works Agency with the public and other government agencies.
- Establish and maintain cooperative working relationships.

<u>Training and Experience</u>: Any combination of training and experience which would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Two (2) years of increasingly responsible paraprofessional engineering experience in planning, development, construction and maintenance of Public Works facilities at a level equivalent to Assistant In Civil Engineering I with Amador County.

Educational training and background equivalent to an EIT.

<u>Special Requirements</u>: Possession of an appropriate California Driver's License issued **b** the California Department of Motor Vehicles.