
California Special Districts Association

SAMPLE POLICY HANDBOOK

POLICY TITLE: Job Description – Engineering Technician

POLICY NUMBER: 2930

2930.1 General Job Description

Under the direction of the Operations and Maintenance Manager [*“Division Manager” or other appropriate supervisory position name*] and with a minimum of supervision:

- (a) performs a variety of duties related to the mapping of District facilities, including the development and maintenance of the District's geographical information system (GIS);
- (b) drafts detailed construction drawings and related maps and specifications used in planning and construction of public works projects such as potable water treatment and delivery systems, together with non-potable water delivery systems;
- (c) performs a variety of duties relating to grant application and management, evaluation of environmental impacts, and easements and rights-of-way;
- (d) reviews plan proposals from consulting engineers for compliance with District standards, rules and regulations; and,
- (e) effectively works as a member of a problem-solving team to resolve, within set time schedules, a variety of engineering tasks in support of the Operations and Maintenance Manager and General Manager.

2930.2 Prerequisite Qualifications

2930.2.1 Associate's degree (A.A.) from community college or technical school; or, three years experience and/or training in drafting technology, surveying, or civil engineering.

2330.2.2 One year experience with AutoCad and GIS or equivalent systems; or, equivalent combination of education and experience.

2930.2.3 Valid California driver license and satisfactory driving record.

2930.3 Basic Work Hours: 8:00 AM to 5:00 PM, Monday through Friday.

2930.4 Hourly Compensation Range:

2930.5 Essential Job Duties:

2930.5.1 Task: Prepares drawings for various District projects, including plotting maps, charts, graphs, plans; drafts detailed drawings of structures and installations involved in potable and non-potable water distribution systems; and, checks and updates as-built drawings.

Physical Demand: Sitting, close vision, use of hands to finger, handle, or feel objects, tools or controls.

2930.5.2 Task: Computes volumes and quantities; prepares estimates of construction materials and costs; develops spreadsheets, charts, and graphs.

Physical Demand: Sitting, close vision, use of hands to finger, handle, or feel objects, tools or controls.

2930.5.3 Task: Reviews plans and specifications for water delivery systems prepared by consulting engineers and recommends revisions for compliance with District standards and rules and regulations.

Physical Demand: Sitting, standing, close vision, speaking, hearing, use of hands to finger, handle, or feel objects, tools or controls.

2930.5.4 Task: Prepares reports, forms, questionnaires, etc., in response to inquiries or requirements of other county, state or federal agencies.

Physical Demand: Sitting, standing, close vision, speaking, hearing, use of hands to finger, handle, or feel objects, tools or controls.

2930.5.5 Task: Assists as member of survey crew in field to establish construction control points, locate property monuments, right-of-way alignment control points, or to collect data for mapping purposes.

Physical Demand: Sitting, standing, walking over uneven ground, close and distance vision, speaking, use of hands to operate surveying equipment, driving vehicle.

2930.5.6 Task: Interacts with other special districts, county, state and federal agencies, to obtain permits, authorizations and information, and to respond to inquiries for information from same.

Physical Demand: Sitting, standing, walking, close and distance vision, speaking, hearing, driving vehicle.

2930.5.7 Task: Coordinates other District personnel and assists in the locating of District facilities for the purpose of incorporating the facility location data into the District Facilities Atlas.

Physical Demand: Sitting, standing, walking over uneven ground, close and distance vision, speaking, hearing, use of hands to operate locating equipment, driving vehicle.

2930.5.8 Task: Creates and maintains District Facilities Atlas and GIS.

Physical Demand: Sitting, close vision, use of hands to finger, handle, or feel objects, tools or controls.

2930.5.9 Task: Coordinates other District personnel and assists in the development and updating of information related to the GIS.

Physical Demand: Sitting, close vision, speaking, hearing, use of hands to finger, handle, feel objects, tools or controls.

2930.5.10 Task: Inspects and evaluates on-going projects to assure compliance with plans and specifications.

Physical Demand: Sitting, standing, walking over uneven ground, distance vision, speaking, hearing, use of hands to finger, handle, feel objects, tools or controls, driving vehicle.

2930.6 Marginal Job Duties:

2930.6.1 Task: Operates various pieces of equipment, including computers, various printers and plotters, blueprint and copy machines, calculators, etc.

Physical Demand: Sitting, close vision, use of hands to finger, handle, feel objects, tools or controls.

2930.7 Environmental Demands:

2930.7.1 Outside: Works outside on occasion in a variety of weather conditions ranging from snow to +100°F.

2930.7.2 Inside: Usually works indoors in temperature-controlled environment.

2930.7.3 Fumes/Gases: Exposure to various colognes/perfumes; infrequent exposure to ammonia gas from blueprinting machine, and fumes/dust from printing cartridges.

2930.7.4 Noise/Vibration: None.

2930.8 Mental Requirements:

2930.8.1 Reading: Reads complex manuals and instructions for computer software and hardware, letters, reports, memos and messages.

2930.8.2 Writing: Writes reports, memos, messages, and fills out information forms. Needs ability to use or quickly learn WordPerfect 5.1 for Windows word processing software.

2930.8.3 Math: Ability to work with mathematical concepts such as fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations. Ability to use or quickly learn Excel for Windows spreadsheet software.

2930.8.4 Attention to Detail: High level concentration and attention to detail for extended periods of time required to produce reports and drawings.

2930.8.5 Repetition: Repetitive data entry to computer system for drawings and text.

2930.8.6 Judgment: Ability to work independently, prioritize work and make decisions regarding correct formatting of work and implementation of same. Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables. Ability to work with others and formulate appropriate instructions to achieve desired goals

2930.8.7 Social Skills: Ability to relate cooperatively with members of the public, Directors, and District personnel.

2930.8.8 Communication Skills: Ability to quickly organize and communicate thoughts orally, written or graphically. Ability to understand communications from others.