

# CITY OF SCOTTS VALLEY CLASS SPECIFICATION

## CIVIL ENGINEER

### **JOB PURPOSE**

Under general direction, performs difficult and responsible professional civil engineering work in the field and office; may act as resident engineer on very large or complex construction projects; may supervise subordinate professional and sub-professional engineering personnel engaged in such work; and performs related duties as required.

### **EXAMPLES OF DUTIES**

The Civil Engineer may perform any of the duties set forth in the Class Specification for Associate Civil Engineer. In addition:

#### **Essential Duties:**

- May prepare, coordinate, review and/or supervise the preparation of: preliminary cost estimates for major streets; sanitary sewer and storm drain projects; construction plans and specifications, reports, correspondence, plats, petitions, diagrams, profiles, and cross-sections; material and cost estimates after initial determination has been made and general alignment of major street/sewer/storm drain improvements has been established; rights-of-way maps and boundary descriptions; obtaining necessary data to make accurate and complete computations, and performing studies to determine grades and drainage; making computations requiring the use of advanced engineering mathematics; and traffic operations studies, surveys, and investigations;
- Computes progress payments for construction projects;
- Supervises the checking of maps and improvement plans of subdivisions for compliance with local and state regulations;
- Reviews environmental documents for engineering related problems;
- Develops methods of relating and applying formulae to standard design and other engineering problems;
- Estimates values of property for City acquisition;
- Participates in the negotiation and acquisition of rights-of-way and easements;
- Supervises the design of such engineering structures as arterial highways, streets, parking lots, storm drains, sewer systems, buildings, and appurtenant structures;
- Proposes and prepares cost estimates of alternative City capital improvement projects;
- Develops priority lists of various City programs and projects;
- Coordinates preparation of the Public Works portion of the capital improvement program budget;
- Reviews and monitors the various sources of Public Works facilities funding;
- Reviews and supervises the formation and operation of assessment districts, open space districts, and development impact fee programs;
- Attends meetings and serves on committees;
- Serves as liaison with other public, state, and private agencies for the planning, preparation and completion of Public Works projects, grants and disaster relief funds;

- May represent the Engineering Division on the Project Review Committee to establish requirements regarding public infrastructure needed for private development.
- Prepare and present recommendations concerning public works projects and related matters to pertinent individuals, committees, and organizations such as the Planning Commission and City Council.
- Prepares, or coordinates preparation of, documents related to contract administration, monitors public works construction projects to assure quality of construction and conformance with contract requirements.

**Marginal Duties:**

- Performs other related duties as assigned.

**EMPLOYMENT STANDARDS**

**Education, Experience and Licenses:** Any combination equivalent to graduation from college or university with a major in Civil Engineering and three years experience in civil engineering involving one or more of the following areas: design, construction inspection, surveying, preliminary project planning, subdivision map/plan review, traffic operations and planning, or other phases of engineering related to public works in a municipality. Must possess a valid certificate of registration as a Civil Engineer issued by the California Board of Registration for Civil and Professional Engineers, and a valid California motor vehicle "C" operator's license.

**Ability to:** Perform the essential functions of this position; must be able to read and interpret highly technical and/or complex documents, write complex reports and simple reports on complex subjects; interpret data and color coded graphs; input information via computer; communicate clearly and effectively in large meetings and over a telephone to technically and non-technically oriented individuals.

**Knowledge of:** The principles, practices and procedures of civil engineering relating to the design, construction and inspection of streets, storm drains, sanitary sewers and related public improvements and appurtenances; drafting, design, and mapping principles and techniques; surveying methods, principles and practices; assessment district practices; skill in using computer equipment and civil engineering and CAD software; making calculations and determining cost estimates; preparing and writing reports; ability to supervise and train professional and sub-professional engineering personnel; ability to prepare plans, specifications and technical reports; supervise and inspect construction projects and apply engineering policy when determining compliance with specifications; and ability to establish and maintain effective working relationships with City personnel and the public.

**CITY COUNCIL APPROVAL DATE:** August 18, 1999