



## Associate Civil Engineer

Department/Division:	Development Services
Reports To:	Director of Development Services
Provides Direction To:	Not applicable
Exemption Status:	Exempt
Date Prepared:	June 14, 2007

### GENERAL PURPOSE

Under general supervision, performs varied professional engineering work involving the research, design and construction of public works, private development, transportation, and sewer construction and maintenance projects; reviews plans, evaluates costs, conducts field reviews, and participates in the preparation of engineering reports; and performs related duties as assigned.

### CLASS CHARACTERISTICS

The Associate Engineer is the full journey-level classification in the professional engineering series. This classification performs varied engineering assignments requiring knowledge of civil engineering principles, design standards, and construction regulations. The job does not have the same breadth of responsibility, knowledge, and supervisor authority as the Director of Development Services, which has responsibility for all Engineering Divisions.

### ESSENTIAL FUNCTIONS

*The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the class.*

1. Researches and identifies project design requirements for particular elements, including grading plans, sewer plans, streets plans, traffic studies, and other documents, and involving plans, parcel and tract maps, and related engineering documents; reviews drawings and details of construction and implementation plans; drafts and prepares conditions for approval.
2. Participates in the preparation, review and coordination of submitted cost estimates and construction specifications, including those for various development, engineering, and special capital projects; ensures project compliance with plan specifications.

## **ESSENTIAL FUNCTIONS (continued)**

3. Calculates plan check and development fees; sends out and monitors status of plan check review packages with consultants and developers.
4. Reviews development construction plans and sub-parcel tract maps for conformance with City standards; coordinates work performed on development and public works construction projects.
5. Conducts field reviews and prepares quarterly progress reports and staff reports; reviews and processes change orders under the direction of the City Engineer.
6. Monitors project progress and budget expenses; prepares progress payment requests for City Engineer's review.
7. Assists and provides technical guidance to inspectors and aides in studying field problems and incorporating design revisions during grading and construction phases on the basis of site inspections.
8. Conducts special studies of street lighting, traffic control needs, sewer maintenance, and similar programs.
9. Prepares construction inspection reports, non-compliance letters, bond and fee letters, and public education materials; provides information regarding projects and conditions to developers, contractors, and the general public.
10. Investigates field problems affecting property owners, contractors and maintenance operations; Reviews and coordinates the submission and approval of construction specifications; ensures project compliance with plan specifications.

## **QUALIFICATIONS GUIDELINES**

### **Knowledge of:**

Theory, principles and practices of civil and structural engineering design and construction practices; mechanical engineering principles; basic provisions of Subdivision Map Act and sub-division design principles; hydrology, hydraulics and soil mechanics principles; surveying principles; strength, properties and uses of construction materials; legal guidelines for construction and environmental engineering projects; communications techniques; cost estimation practices; technical report presentation methods; customer service techniques.

**Ability to:**

Review and prepare engineering plans, specifications and design requirements; analyze and interpret legal contract and work agreements; prepare and evaluate engineering data; organize and prioritize tasks to meet deadlines; prepare clear and concise reports, drawings, maps, notes, correspondence and other written materials; establish and maintain cooperative working relationships with staff, management, public and private representatives, contractors, architects, developers, and others in the course of work; operate computer terminal and use computer-aided design, mapping, spreadsheet and word processing programs.

**Education/Training/Experience:**

Graduation from a four-year college or university with a Bachelor's degree in civil engineering; and three or more years of responsible professional civil engineering work, preferably including municipal experience involving public works projects; or an equivalent combination of training and experience.

**Licenses; Certificates; Special Requirements:**

A valid Class C California driver's license and the ability to maintain insurability under the City's Vehicle Insurance Policy. Must be able to attend project development, construction management, and public meetings related to engineering construction, transportation, and development projects.

Registration as a Professional Engineer with the California State Board of Registration for Civil and Professional Engineers.

**PHYSICAL AND MENTAL DEMANDS**

*The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

**Physical Demands**

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee uses finger dexterity in order to operate computer hardware for extended periods of time. The employee is required to constantly sit and occasionally walk and stand to access counters, work areas and files; stoop, kneel, or crouch to access or place records or files; lift and carry records and documents, typically weighing less than 20 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.

## **Mental Demands**

While performing the duties of this class, the incumbent is regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve complex problems; use math and mathematical reasoning; perform highly detailed work under changing, intensive deadlines, on multiple concurrent tasks; work with constant interruptions; and interact with developers, contractors, staff, department managers, and the general public.

## **WORK ENVIRONMENT**

The employee typically works in both office and field settings. Within the office, the noise level is frequently quiet or moderately quiet. In the field, the employee may be exposed to construction noise and traffic. Occasional driving is required to attend meetings and perform field inspections.