

ASSOCIATE ENGINEER

Definition:

Under general supervision performs professional civil engineering work of above average difficulty to include reviewing plans related to public works construction projects; performs a variety of engineering work to include the preparation of plans, estimates, specifications and other documents; serves as project engineer as assigned and performs related work as required.

Essential Duties and Responsibilities:

The responsibilities and essential duties performed on a frequent and recurring basis by an incumbent include the following:

Reviews plans related to public works construction to include streets, sidewalks, curbs, gutters, sanitary sewers and storm drains.

Obtains necessary data to prepare plans in conformance with regulations and/or policy regarding line, grade, size, elevation and location.

Develops and prepares specifications, reports, correspondence, plans, petitions, diagrams, profiles, cross-sections and estimates.

Performs and checks complex engineering calculations to include hydrology, hydraulic, super elevation and other calculations for a variety of projects.

Establishes technical criteria and standards and makes technical engineering decisions.

Coordinates assigned activities with consultants, other engineers, developers, contractors, other City departments and outside agencies as needed.

Manages projects as assigned and recommends approval of progress payments and change orders.

Prepares project progress reports during the design phase and maintains records of all plans and contract documents.

Coordinates the preparation of right-of-way maps and boundary descriptions.

Prepares requests for proposals and contracts for consulting services.

Makes oral and written presentations.

Trains, provides technical direction to, monitors the work of and assists in the supervision of assigned staff.

Investigates site conditions in the field and assists in the construction inspection of assigned projects.

Operates a personal computer and uses applicable software.

Responds to a variety of inquiries from a variety of individuals related to assigned projects.

Lifts and moves boxes of records weighing 30 pounds or less.

Drives a vehicle on City business.

Other Duties and Responsibilities:

Performs other projects/tasks as assigned.

Class Characteristics:

Associate Engineer is a multi-incumbent professional engineering class in the Engineering Department. Assignments are normally broad in scope and require the use of judgment and initiative. Associate Engineer is differentiated from the lower level of Assistant Engineer by the Associate's broader scope of responsibility, difficulty and complexity of projects assigned and level of experience. In addition, an Associate Engineer may provide technical guidance to and assist in the supervision of staff within the assigned division.

Contacts and Relationships:

An Associate Engineer establishes and maintains contact with staff in the Engineering Department and staff in other City Departments. Additional contact will occur with other governmental agencies, consultants, contractors, vendors and the public.

Qualification Guidelines:

The knowledge and abilities which are required to perform the duties and responsibilities of this class are as follows:

Knowledge of:

Civil engineering principles and practices as applied to the design, construction and inspection of streets, storm drains, sanitary sewers, water lines and related public works projects.

Surveying methods and drafting and mapping principles and techniques.

Methods, materials and techniques used in the construction of public works projects.

Advanced mathematics and their application to engineering work.

Applicable laws, regulations, codes and ordinances applicable to area assigned including Federal and State laws/requirements.

Rules and regulations governing supplemental funding sources for public works construction and/or studies.

Recent developments, literature and sources of information regarding civil engineering matters.

Basic supervisory techniques.

English usage, spelling, grammar and punctuation.

Computer applications as they relate to area assigned.

AND

Ability to:

Make engineering design computations and check, design and prepare engineering plans, specifications, studies and technical reports.

Conduct comprehensive engineering studies, prepare related reports and recommendations.

Understand and interpret engineering construction plans, specifications and other contract documents.

Train and assist in the supervision of staff as assigned.

Perform technical research and solve difficult engineering problems.

Coordinate phases of construction projects, ensure project compliance with applicable rules and regulations and prepare progress reports.

Interpret and apply pertinent laws, rules and regulations.

Communicate effectively orally and in writing.

Understand and carry out oral and written instructions and use independent judgment and initiative.

Establish and maintain effective relationships with those contacted in the course of work.

Operate a personal computer and use applicable software.

Meet the public with courtesy and tact.

A typical way to obtain the knowledge and abilities is as follows:

Education:

Bachelors Degree in Engineering or a closely related field from an accredited college or university.

AND

Experience:

Three years of experience involving the design, construction, inspection and surveying of public works projects.

Special Requirements Include:

Valid and appropriate California Drivers License and acceptable driving record at time of appointment and throughout employment in this position.

Possession of a State of California Engineer in Training Certificate.

Must be able to work a flexible schedule to accommodate City needs.

Physical Tasks and Working Conditions Include the Following:

Work is performed indoors in an office environment and on-site in the field. When work is performed outdoors there is full exposure to the elements. An incumbent uses a computer, keyboard and related equipment, drives a vehicle on City business, sits for extended periods of time, uses standard drafting tools, stands, walks, reaches, bends, twists, kneels, crouches and grasps, lifts and carries boxes of records weighing 30 pounds or less. In the field an incumbent may walk on slippery/uneven surfaces and slopes and be exposed to construction materials and dust. An incumbent must be able to meet the physical requirements of the class and have mobility, balance, coordination, vision, hearing and dexterity levels appropriate to the duties to be performed.

Fair Labor Standards Act Designation: Exempt.

Revised August 2004

Revised July 1990