

DEFINITION

Performs professional engineering office and field work and accomplishes planning, design, engineering, and construction management and administration tasks for the repair and construction of street, water, sewer, storm drain, and other public works facilities. Acts as project manager on assigned capital projects; acts as program manager for assigned programs; and performs related work as assigned.

DISTINGUISHING CHARACTERISTICS

Associate Engineer is the journey-level engineering position in the Engineering class series. Incumbents perform and complete a variety of complex engineering assignments and manages projects and programs requiring the use of judgment and initiative in developing solutions to problems, interpreting general policies, and determining work tasks. Incumbents may provide oversight and guidance to technical and support staff and to contractors on a project basis. The incumbent works with a great degree of independence. This class is distinguished from the Assistant Engineer position because the Associate Engineer possesses registration as a Professional Engineer and performs a wider variety of more complex work.

SUPERVISION EXERCISED AND RECEIVED

Receives general supervision from supervisory or management staff in Public Works Department.

DUTIES AND RESPONSIBILITIES

The duties listed below are illustrative only and are not meant to be a full and exhaustive listing of all of the duties and responsibilities of the position.

- Confers with inspectors and private engineers/builders on technical details of contract construction of public works projects;
- Receives, supervises, or personally conducts investigations of complaints;
- Plans, designs, reviews, and prepares detailed engineering plans, drawings, specifications, cost estimates, contracts, and related documents for public works projects;
- Reviews project estimates and project information obtained from various public records;
- Administers major public works construction and repair projects from conceptualization to filing of the notice of completion;
- Reviews and checks parcel, subdivision, and condominium maps, construction plans, deeds, property descriptions, master plans, and improvement plans for accuracy of calculations, compliance with design criteria, special conditions, and City standards;
- Conducts plan reviews and field inspections of public works facilities and improvements planned, designed, and installed by developers/contractors for compliance with City codes;
- Uses computers for word processing, spreadsheets, and database analysis as well as computer-aided drafting;
- Prepares and/or checks legal descriptions including bounds, easements, maps, sketches, etc. as required by legal proceedings;
- Issues various permits;
- Provides engineering support to other City departments as needed;
- Receives, researches, and responds to public inquiries in person, over the phone, and/or in writing;
- Prepares correspondence, budget documentation, and other administrative documents as required, and manages assigned budgets;
- Trains and instructs others in the work of the Public Works Department;
- Administers and manages programs assigned such as the Permit Programs, Street Repair Program,

Newsrack Ordinance, and Sidewalk Repair Program;

- Acquires and manages design/engineering consultant services;
- Serves as staff to City commissions and committees, and prepares and presents City Council reports as assigned;
- Conducts traffic engineering studies; and
- Performs related duties as assigned.

JOB-RELATED QUALIFICATIONS

Knowledge of: Principles, practices, and methods of civil engineering as applied to the planning, design, budgeting, and construction of municipal public works projects; design principles, strengths of materials, and stress analysis required in planning public construction projects; principles of the various engineering disciplines; surveying as it applies to the design and construction of public works facilities; general procedures and processes involved with municipal engineering operations; effective report and technical specification writing and techniques; operation of personal computers including applications for engineering, design, drafting, and mapping such as geographic information system (GIS) and computer-aided design (CAD); drafting instruments; English usage, spelling, punctuation, and grammar; techniques for effectively coordinating the work of others; effective communication techniques, including verbal and written; principles and practices of capital improvement cost estimation and contract administration; practices related to surveying, including reviewing and preparing maps and legal descriptions; practices of preparing and presenting effective staff reports; modern office procedures, methods, and related equipment; arithmetic, mathematical, and statistical calculations related to the work; CEQA documentation; current practices and laws affecting the work; and program and project management principles and methods.

Ability to: Plan and manage assigned programs and projects; organize, prioritize, and coordinate work activities and meet deadlines; perform complex civil engineering studies, analyses, and design; identify problem areas and develop alternative solutions and recommendations; prepare accurate plans, specifications, cost estimates, staff and engineering reports; make accurate engineering computations and drawings; communicate effectively orally and in writing; effectively negotiate; understand, interpret, and explain applicable City policies and procedures; read, interpret, and apply applicable rules, regulations, standards, and procedures; use electronic tools and equipment including computer, calculator, telephone, facsimile machine, and photocopy machine; establish and maintain effective working relationships with those contacted in the course of the work; make accurate engineering computations and drawings; learn, retain, and apply various laws and regulatory codes relevant to assigned area of responsibility; derive standard design formulas and text table information; use initiative and sound independent judgment within scope of responsibility.

EDUCATION AND TRAINING GUIDELINES

Any combination of experience and training that would likely provide the required knowledge and abilities. A typical way would be:

Education: Bachelor's degree in Civil Engineering or a closely related field from a recognized college or university.

Experience: Four (4) years of professional engineering work experience with at least two (2) years equivalent to an Assistant Engineer with the City of Millbrae.

Licenses: Registration as a Professional Engineer issued by the State of California. Possession of a valid Class C California Driver's License with a satisfactory driving record as determined by California Motor Vehicle guidelines.

SPECIAL REQUIREMENTS

The duties and responsibilities of the position require the mental and/or physical ability to work in a standard office environment; drive a vehicle; read fine print on blueprints and computer monitors; converse by telephone, two-way radio, in person, and around the noise of heavy construction equipment, and be heard and clearly understood; use drafting instruments, calculators, and personal computers; and strength to safely lift and maneuver office supplies, blueprints, and boxes weighing up to 30 pounds. Ability to sit, stand, walk, kneel, crouch, and jump as may be required; physical mobility to negotiate difficult construction terrain, climb in and out of trenches, climb ladders up to 25 feet in height, walk up and down several flights of stairs; mental alertness and comprehension to learn and retain technical and administrative information, terminology, equipment, policies, procedures, and safety practices; interact effectively with co-workers, the public, elected officials, and contractors.

Other Requirements: Willingness and ability to work scheduled and emergency hours in excess of normal work hours; attend meetings, conferences, and seminars during and outside of regular work hours; work under adverse conditions including in traffic, construction sites, and inclement weather.