

City of South San Francisco  
Human Resources Department

**Senior Civil Engineer**  
Class Description

**Definition**

Under general direction, performs advanced professional engineering assignments on a wide range of municipal projects of a complex nature, including civil, sanitary, traffic, and other municipal public works, maintenance, and construction projects; serves as project manager on a variety of projects; supervises staff performing design, inspection, and surveying duties; assists in the administration and supervision of the division; and does related work as required.

**Distinguishing Characteristics**

This is an advanced-level engineering classification requiring professional registration, performing a wide variety of engineering duties in civil, sanitary, traffic, and other municipal public works, maintenance, and construction engineering projects. This class is distinguished from other lower-level engineering classes in that it provides direction to staff and performs the more complex engineering and project management assignments. Assignments and projects may be long-term or may constitute a major portion of a continuous or comprehensive engineering or construction program.

**Typical and Important Duties**

1. Acts as project manager for major construction projects, which includes contract administration; project schedule coordination; manage the work of consultants and staff; coordinate the work of consultants, utilities, staff, other public agencies, elected officials, and the public; communicating with the consultants, staff, public, other agencies, and elected officials; ensuring quality control of the project, including conducting field inspections; preparing and presenting a variety of reports and studies.
2. Prepares plans, specifications, and cost estimates for construction projects; makes feasibility and economic studies of alternative plans.
3. Coordinates work projects requiring both engineering office and field work.
4. Assists, supervises, and reviews work of subordinate engineering staff engaged in compiling data relating to and in the design and preparation of drawings, maps, profiles, estimates, surveys, studies, and reports relating to a wide variety of municipal engineering projects.
5. Reviews plans for conformance to established engineering standards and practices.
6. Reviews standard specifications and inserts special provisions for unusual engineering projects.
7. Performs a wide variety of traffic engineering projects, including planning and studies; conducts surveys; investigates complaints; and presents written and oral reports to elected and appointed officials.

8. Assists in evaluating the need for, and developing plans and schedules for long-range engineering and public works projects.
9. Provides continuing technical assistance to staff and personally participates in assigned engineering projects.
10. Assists in the preparation, coordination, and control of the operating and capital improvement budget.
11. Directs the inspection of public works projects for conformance to established plans and specifications.
12. Responds to questions from the general public and attends meetings with representatives of other departments and agencies.
13. Directs the work of the division in the absence of the division head.
14. Performs related duties and responsibilities as assigned.

### **Job-related Qualifications**

#### *Knowledge of:*

- Principles, methods, and practices of civil, sanitary, traffic, seismic, and mechanical engineering for planning, designing, and constructing municipal public works facilities, including sewers, streets, traffic, and construction projects.
- Design principles, methods, materials, and techniques used in the construction and maintenance of public works, utilities, or building construction projects.
- Engineering and construction management methods.
- Technical, legal, financial, and public relations aspect of municipal government.
- Modern developments, current literature, and sources of information on engineering laws and regulations.
- Principles of management, supervision, training, and employee development.

#### *Ability to:*

- Prepare engineering estimates, plans, drawings, and specifications.
- Perform difficult engineering work in design and construction of public works facilities.
- Interpret and accurately apply applicable Federal, state, and local policies, procedures, codes, laws, ordinances, and regulations.
- Administer contracts.
- Conduct technical engineering research, make analysis, and write comprehensive reports.
- Prepare construction contracts and requests for proposal.
- Plan, organize, and supervise the work of engineering projects and staff.
- Analyze, interpret, and apply information, choose among alternative courses of action, and arrive at a recommendation.
- Understand and implement laws, regulations, policies, and procedures.
- Plan, supervise, direct, schedule, and evaluate the work of subordinate staff.
- Communicate effectively in writing, orally, and with others to assimilate, understand, and convey

information, in a manner consistent with job functions.

- Make effective oral presentations.
- Develop and implement improvements to systems, organization, and operations within the division.
- Represent the City and the department effectively in contacts with representatives of other agencies, City departments, and the public.
- Establish and maintain cooperative relationships with those contacted in the course of the work, such as with employees, labor unions, contractors, consultants, elected and appointed officials, and the public.
- Apply computer programs related to the work, including presentation, project management, GIS, and data management applications.
- Take a proactive approach to customer service issues.
- Maintain confidentiality regarding sensitive information.
- Work in a safe manner following City safety practices and procedures in a variety of environments; model and coach others in correct City safety practices; identify, correct, and report safety hazards.

*Skill in:*

- Using a personal computer and associated applications, and other engineering resources.

### **Experience and Training**

Any combination of experience and training that would provide the required knowledge, skills, and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be:

*Experience:* Five years of progressively more responsible professional civil engineering experience, with at least two years in municipal professional engineering and two years in project management providing direction to other engineering staff.

*Training:* A bachelor's degree from an accredited college or university with a major coursework in civil, sanitary, or mechanical engineering.

### **Licenses and Certificates**

All licenses and certificates must be maintained as a condition of employment.

- Possession of, or ability to obtain, an appropriate valid California driver's license, and a satisfactory driving record.
- Possession of a valid certificate of registration as a Civil Engineer issued by the State Department of Registration for Professional Engineers.

### **Special Requirements**

Essential duties require the following physical skills and work environment:

*Physical Skills:* Able to use standard office equipment, including using a computer sit, stand, walk, kneel, crouch, stoop, squat, twist, climb, lift and carry 35 pounds; maintain sustained posture in a seated

or standing position for prolonged periods of time; vision to read a computer screen and printed materials, including maps and plans; hearing and speech to communicate in person, over the telephone, and to make presentations; walk construction sites.

*Work Environment:* Mobility to work in a typical office setting and occasional field environment; exposure to traffic and traffic hazards; cold, heat, outdoors, chemicals, explosive materials, mechanical hazards, and electrical hazards.

*Ability to:* Travel to different sites and locations; drive safely to different sites and locations; maintain a safe driving record; work protracted and irregular hours; and available for evening meetings.

Approved:	July 1995
Revised Date:	June 2001, June 2003
Former Titles:	
Abolished:	
Bargaining Unit:	Mid-management
ADA Review:	April 2002, 2003
DOT:	No
Physical:	Class 3
Status:	Classified/Exempt
EEOC Category:	EF2\EJ2
Job Code:	M340

**ADA Documentation of Essential Duties**

1. SDE
2. SDE
3. SDE
4. SDE
5. MWE
6. MME
7. MME
8. MME
9. SDE
10. SDE
11. OAE
12. SDE
13. SDE