

## CITY OF BRISBANE

### SENIOR CIVIL ENGINEER

#### **Definition**

Under general supervision of the Public Works Director/City Engineer, 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.

#### **Class Characteristics**

This is an advanced-level engineering classification requiring professional registration that performs a wide variety of engineering duties that require exercising independent judgment and initiative in prioritizing, scheduling, and assigning and coordinating work. This class is distinguished from other engineering classes in that it provides direction and supervision to professional and technical 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.

#### **Examples of Duties** (Illustrative Only)

- Supervises and participates in the design and development of engineering plans and specifications for public works projects such as streets, street lighting, traffic signals, parks and recreation facilities, storm, sanitary sewer and water systems, and other public structures.
- Prepares plans, specifications and cost estimates for construction projects; makes feasibility and economic studies of alternative plans.
- Prepares and/or reviews professional civil engineering designs for assigned projects utilizing a variety of computer software programs; performs detailed calculations and computations; prepares and/or reviews the adequacy and accuracy of computations, preliminary layouts and design work from field and survey data.
- Assists, supervises and reviews work of subordinate engineering staff engaged in compiling data relating to and in design and preparation of drawings, maps, profiles, estimates, surveys, studies, and reports relating to a wide variety of municipal engineering projects.
- Reviews plans for conformance to established engineering standards and practices; approves changes to approved plans and specifications; processes a variety of permits.
- Reviews standard specifications and inserts special provisions for unusual engineering projects.
- Performs a wide variety of engineering projects, including planning and studies; conducting surveys; investigating complaints; and presenting written and oral reports to elected and appointed officials.
- Assists in evaluating the need for and developing plans and schedules for long-range engineering and public works projects.

- Supervises, directs and participates in the inspection of public works and capital projects; ensures compliance with applicable codes and regulations; provides resolutions to construction problems.
- Provides continuing technical assistance to staff; supervises and participates in the work of lower-level engineering staff in preparation of project plans, specifications, cost estimates and contract administration for capital projects.
- Assists in the preparation, coordination, and control of the operating and capital improvement budget.
- Responds to questions from the general public and attends meetings with representatives of other departments and agencies.
- Directs the work of the division in the absence of the department head.
- Performs related duties and responsibilities as assigned.

### **Qualifications**

#### **Knowledge of:**

- Principles, methods and practices of civil engineering as applied to the planning, designing and construction of municipal public works facilities, including streets, sewers, traffic and construction projects.
- Design principles, methods, materials, and techniques used in the construction and maintenance of public works, utilities or building construction projects.
- Design principles, strengths of materials, stress analysis and principles of mechanical, electrical and structural engineering and surveying as they apply to the design of public works structures.
- 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.
- Applicable Federal, state and local laws, legal issues and regulatory codes related to design and construction.
- Principles and practices of municipal management, including supervision and evaluation of personnel, budget planning and preparation and public relations.

#### **Skill in:**

- Preparing engineering estimates, plans, drawings and specifications.
- Performing difficult engineering work in design and construction of public works facilities.
- Interpreting and accurately applying applicable Federal, state, and local policies, procedures, codes, laws, ordinances and regulations.
- Understand and implement laws, regulations, policies and procedures.
- Preparing construction contracts and requests for proposal; administer contracts.
- Planning, organizing and supervising the work or engineering projects.
- Planning, supervising, directing, scheduling and evaluating the work of subordinate staff.
- 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 and the public.
- Communicating clearly and concisely, both verbally and in writing; preparing clear and concise written reports.
- Applying computer programs related to the work, including presentation, project management, GIS, and data management applications; using a personal computer, the Internet and other engineering technological resources.
- Making effective oral presentations.
- Establishing and maintaining cooperative and effective working relationships with those contacted in the course of the work, such as with employees, contractors, consultants, elected and appointed officials, and the public.

**Education and Experience:**

Education:

Graduation from an accredited college or university with a Bachelor's Degree in civil engineering or a closely related field.

Experience:

Five years of increasingly responsible professional civil engineering experience involving design, plan checking, project management and construction management. Municipal professional engineering and supervisory experience is highly desirable.

**License:**

Possession of a valid certificate of registration as a Civil Engineer issued by the State Department of Registration for Professional Engineers. Possession of, or the ability to obtain, a valid California Class C driver's license and have a satisfactory driving record. Such licenses and certifications shall be maintained during employment.

**Working Conditions:**

Work in a standard office environment with some exposure to outdoors, mechanical hazards, traffic, and electrical hazards. Travel to different sites and locations.

**Physical Demands:**

Sufficient mobility and physical flexibility to negotiate difficult project sites and construction terrain where crouching, bending, stooping, climbing and/or kneeling would be required. Vision to adequately and quickly review plans and specifications, read printed materials, and a computer screen. Mental alertness and comprehension to learn and retain technical and administrative information, terminology, equipment, policies, procedures and safety practices. Physical stamina to work extended or irregular hours and attend lengthy meetings and attentively follow proceedings. Ability to maintain sustained posture in a seated position for prolonged periods of

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time. Hearing and speech to communicate in person and over the telephone. Ability to speak clearly and write clear and concise English.

Approved Date: November 13, 2001  
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Resolution: 2001-94

Former Titles:

Abolished: