



Department:	Public Works/Engineering
Bargaining Unit:	SEIU
Salary Range:	E79
Last Revision:	April 1999

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## UTILITY ENGINEER

### **DEFINITION:**

Under general direction, perform a variety of professional civil engineering work in the operation, design, construction, maintenance, and repair of structures and facilities for the City=s water supply, water distribution, water treatment, wastewater treatment, and wastewater collection activities including technical support of the Operation and Maintenance Division activities of the Public Works Department; performs other civil engineering work as required.

### **SUPERVISION EXERCISED:**

Exercises technical and functional supervision over less experienced professional and technical staff.

### **EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES:**

Review and check plans related to the City=s water supply, water distribution, water treatment, wastewater treatment, and wastewater collection structures and facilities.

Review and issue street opening permits, construction water meter applications, and wastewater discharge permits; maintain necessary records.

Prepare progress reports on projects under construction; maintain records of changes and field notes; prepare necessary correspondence, daily inspection report, and punch lists.

Investigate field problems affecting property owners, contractors, and maintenance operations.

Coordinate assigned activities with consultants, engineers, developers, contractors, other City departments and divisions, and outside agencies.

Develop plans, specifications, requests for proposals, and other contract documents.

Review and evaluate bids; make recommendations to the City Council on acceptance of standard projects; negotiate contract addenda and additional expenses.

**EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES:**

Review contractor billing; approve progress payments; ensure completion of work in accordance with contract provisions and perform other related contract administration duties.

Prepare comprehensive special engineering studies and reports; perform special assignments on engineering problems as necessary.

Calculate the quantity, quality, and cost of materials used for various projects.

Compile report, and prepare graphs and table, of utility operations system data.

Review engineering calculations of other engineers or engineering technicians.

Monitor the status of projects for compliance to City procedures and construction and engineering standards; recommend corrective actions as needed.

Provide information to the general public; participate in public awareness programs; respond to citizen inquiries and complaints.

Conduct public works inspection of workmanship, materials, and methods for capital improvement, subdivision, and permit projects.

Participate in the selection of assigned staff; assist in providing staff training and supervision including in the areas of work methods, techniques and the use and operation of equipment.

May participate in the preparation and administration of the assigned budgets including Department and project budgets.

**OTHER JOB RELATED DUTIES**

Perform related duties and responsibilities as assigned.

**JOB RELATED AND ESSENTIAL QUALIFICATIONS**

**Knowledge of:**

Civil engineering principles, practices, and terminology with emphasis on water supply, water distribution, water treatment, wastewater treatment, and wastewater collection.

Environmental engineering principles, practices and methods.

**Knowledge of:**

Principles of hydraulic engineering related water supply, water distribution, water treatment, wastewater treatment, and wastewater collection.

Engineering mathematics and economics.

Construction methods, materials and equipment.

Principles and methods of statistical analysis.

Computer programs and languages and their engineering applications.

**Ability to:**

Apply knowledge of civil engineering including pipeline design, hydraulic analysis, structural design, hydrology and control systems.

Anticipate technical problems and develop solutions.

Create, operate, and maintain infrastructure master plan and mapping database.

Prepare clear and concise reports and presentations; communicate effectively orally and in writing.

Effectively represent the City, its projects, programs and policies with citizens, customers, the public and other agencies.

Follow instruction, work independently and cooperatively with others.

**Skill to:**

Operate modern office equipment including computer equipment.

Operate a motor vehicle safely.

**Experience and Training Guidelines:**

*Any combination equivalent to 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:**

Three (3) years increasingly responsible professional experience in civil engineering with at least two (2) years experience specifically related to water supply, water distribution, water treatment, wastewater treatment, and wastewater collection.

**Training:**

Equivalent to a Bachelor=s degree from an accredited college or university with major course work in civil engineering, environmental engineering, sanitary engineering, or a related field.

**License or Certificate:**

Possession of, or ability to obtain, an appropriate, valid driver=s license.

Possession of Registration as Civil Engineer is highly desirable.

Possession of a certificate as an Engineer in Training (EIT) is desirable.

Possession of a Grade II Water Operator Certificate is desirable.

Possession of a Grade II Water Treatment Certificate is desirable.

Possession of a Grade II Waste Water Operator Certificate is desirable.

Possession of a Grade II Waste Water Treatment Certificate is desirable.

**Special Requirements:**

*Essential duties require the following physical skills and work environment:*

Ability to work in a standard office environment with the ability to sit, stand, walk, kneel, crouch, stoop, squat, crawl, twist, climb, and lift 35 lbs.; some exposure to noise, outdoors, vibration, confining work space, chemicals, unsanitary materials, mechanical hazards, and electrical hazards; ability to travel to different sites and locations.

**Dated: April 5, 1999**