

City of Watsonville

Job Description



JOB TITLE:	Principal Engineer	DATE APPROVED: December 1993
DEPARTMENT:	Public Works & Utilities	SUPERSEDES: N/A
REPORTS TO:	Assistant Director of Public Works & Utilities	
SUPERVISION:	May oversee lower level professional and technical Engineers, Inspectors, and other subordinate staff	
EMPLOYEE UNIT:	Management	
FLSA :	Exempt	

JOB SUMMARY:

Plans, organizes, directs, assigns, manages, and coordinates the work of an engineering section within the Public Works & Utilities Department; directs and coordinates the work of engineering and construction consultants in the design and construction of major public works projects and other projects; applies for, administers, and manages project funding grants; and provides highly responsible and complex staff assistance to the Assistant Director of Public Works & Utilities.

DISTINGUISHING CHARACTERISTICS:

This job class functions at a program/project management level and is responsible for the effective administration of assigned engineering areas as well as for providing general assistance in the administration of the Public Works & Utilities Department.

EXAMPLES OF ESSENTIAL DUTIES:

The following duties are performed personally, in cooperation with the City Manager, and/or in coordination with other City employees, operating partners, community groups, and other public and private organizations. Additional duties may be assigned.

- Plans, organizes, assigns, manages, and evaluates the activities of an engineering section within the Public Works & Utilities Department; clarifies roles and responsibilities of staff in meeting an engineering division's goals and facilitates goal setting, scheduling and monitoring of public works projects.
- Analyzes complex issues and problems related to areas of responsibility, evaluates alternatives, and develops and recommends effective courses of action.
- Participates in the development, planning, financing, design, administration, and construction of significant and complex public works projects.
- Directs, assigns, supervises, and reviews the work of subordinate engineering and/or technical support assistants engaged in the preparation of designs, specifications, estimates, and technical reports related to the construction of public works projects.
- Performs the most difficult and complex professional engineering assignments in the design and construction of projects

- Serves as project manager on the most complex public works construction projects and oversees staff assigned less complex projects; administers project from inception to completion including planning, design, review, public meetings, bidding and construction; develops scope of work; serves as liaison to City staff, developers, engineers, consultants, the general public and external agencies on proposed projects; develops project timelines and sets priorities; assigns work tasks and oversees the services of consultant staff.
- Prepares and reviews specialized technical studies, investigations, reports, contracts, specifications, documents, and correspondence related to division activities and operations and as required by laws, codes, and regulations.
- Reviews and evaluates private improvement plans for impact on public works projects; approves plans as appropriate; issues permits as necessary.
- Reviews, evaluates, and monitors commercial, industrial, subdivision, or other project development plans for specification compliance; recommends approval/denial.
- Prepares and reviews bid request packages; reviews received bids and makes recommendations; reviews contract change proposals.
- Reviews and directs the work of consulting engineers and surveyors; ensures conformance with City and state requirements; reviews progress payment requests and administers contract costs.
- May attend and participate in professional organization meetings; maintains awareness of new trends and developments in the field of civil engineering; incorporates new developments as appropriate into programs.
- May function as Traffic and/or Transportation Engineer performing technical engineering work, coordinating efforts with state and federal regulatory agencies and attending the regional transportation committee meetings.
- Serves as City Engineer as assigned.
- Makes presentations and serves on a variety of committees to work with regulatory agencies, the public, elected officials, and other agencies.
- May serve as Assistant Director of Public Works and Utilities in their absence
- Performs related duties as required.

EMPLOYMENT STANDARDS

Knowledge of:

- Operational characteristics, services and activities of a comprehensive engineering program.
- Principles and techniques of supervision including staffing, employee development, and planning and organizing work.
- Principles and practices of civil engineering and construction including the design, specification, and estimating of projects related to public works.
- Advanced principles and practices of project management and administration including budget, schedule, and scope control.
- Advanced knowledge and implementation of public contracting codes and contract administration.
- Advanced methods and techniques of engineering plan review and analysis.
- Principles and practices of business correspondence and technical report writing.
- Occupational hazards and standard safety procedures.
- Office procedures, methods, and equipment including computers and applicable software applications as needed to perform engineering duties.
- Pertinent federal, state and local laws, codes and regulations.

Ability to:

- Plan, organize, coordinate, and manage an engineering team including the supervision of professional engineering and technical assistance staff.
- Serve as project manager on Capital Improvement Projects.
- Conduct thorough technical engineering research work.
- Prepare engineering plans, designs, estimates, and specifications for a variety of public works projects.
- Perform engineering computations and calculations.
- Interpret, apply, and ensure compliance with pertinent federal, state, and local laws, codes, and regulations.
- Manage deviations from plans and mitigate impacts to cost, quality, schedule, and budget.
- Prepare comprehensive technical reports and correspondence.
- Formulate, evaluate, and make recommendations on policies and procedures affecting the provision of public works services.
- Review and evaluate technical engineering and maintenance information, reports, and recommendations.
- Deal tactfully and courteously with the public, contractors, engineers, and representatives of other agencies in providing professional engineering information and assistance.
- Make effective presentations to elected officials, the public, city executives, businesses, and other agencies.
- Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.
- Communicate clearly and concisely both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

EDUCATION/TRAINING AND EXPERIENCE:

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

Education/Training:

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

Experience:

Six years of increasingly responsible professional engineering experience in the design and construction of municipal public works projects with two years in a management or supervisory capacity preferred.

LICENSE & CERTIFICATION:

- Possession of a valid California Class C driver's license and a safe driving record.
- Possession of a valid certificate of registration as a Civil Engineer issued by the State Board of Registration for Civil Engineers.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

- **Environment:** Standard office setting with some travel to conduct site investigations and field survey work; occasional exposure to outside weather conditions; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain.
- **Physical:** Primary functions require sufficient physical ability and mobility to work in an office setting and field environment; to walk, stand, and sit for prolonged periods of time; to frequently stoop, bend, kneel, crouch, crawl, climb, reach, twist, grasp, and make repetitive hand movement in the performance of daily duties; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate assigned equipment and vehicles; and to verbally communicate to exchange information.
- **Vision:** See in the normal visual range with or without correction.
- **Hearing:** Hear in the normal audio range with or without correction.