

CIVIL ENGINEERING ASSOCIATE

DEFINITION

Under general direction, to perform a variety of advanced technical and paraprofessional office and field engineering work; to prepare plans, designs, and specifications for a variety of City projects; to review work prepared by outside consultants; to prepare engineering reports; and to do related work as required. Serves as Disaster Service Worker. FLSA Status: Non-exempt.

DISTINGUISHING CHARACTERISTICS

This is an advanced, experienced level classification for the performance of paraprofessional technical engineering support work. Incumbents have considerable training in engineering theory and principles and/or technical engineering work experience related to public works. Incumbents perform a wide variety of paraprofessional and complex engineering support work. This class is distinguished from Civil Engineering Assistant by the performance of a broader range of more complex technical engineering support work. It is distinguished from full professional engineering classifications by not requiring registration as a professional engineer.

REPORTS TO

Assistant City Manager/Community Development Director or as assigned.

CLASSIFICATIONS SUPERVISED

This is not a supervisory position.

ESSENTIAL FUNCTIONS

Under the direction of the City Engineer, prepares and evaluates designs, surveys, estimates, studies, and preliminary and final plans and specifications for a variety of street, drainage system, water and sewer facilities, and related capital improvement projects; performs a variety of project development and planning assignments; performs field reviews and surveys of various engineering projects; performs complex engineering calculations; performs resident engineer work, performing contract administration, construction inspection, and project administration; ensures that contractors meet proper standards, specification requirements, cost controls, and time requirements; prepares contracts, change orders, and progress payments; performs drafting and design work on computer aided drafting software and other related computer design equipment; assists the public and contractors at the counter and provides information on engineering requirements and service area operations; informs the public of application and plan checking procedures, traffic flow, and related questions; performs inspections for public works improvements and other public works

structures and facilities; determines fees for public works, subdivision, and parcel map applications; issues permits; checks and reviews appropriate licenses and plans; assists with foundation and hydrology studies; receives public inquiries regarding City engineering standards; researches data and provides consultation to engineers and contractors; collects, organizes, summarizes, and analyzes a variety of technical engineering data; assists with grant proposals; administers public works construction contracts; under the direction of the City Engineer, prepares legal descriptions related to City rights-of-way and easements; processes encroachment requests into City easements and rights-of-way; assists with engineering reviews of environmental impact reports; prepares preliminary reports for tentative subdivision map conditions; performs field surveys; uses a computer to reduce survey data; performs engineering calculations; develops data for the acquisition of rights-of-way; prepares engineering cost estimates; reviews laboratory reports and analyzes the quality and compliance of materials; assists with traffic studies; develops and proposes solutions to engineering problems; reviews applications and approves the issue of permits; provides a variety of technical engineering advice to the public and other agencies; may represent the City Engineer in meeting with contractors, engineers, developers, property owners, attorneys, and representatives of other public agencies.

TYPICAL PHYSICAL REQUIREMENTS

Sit for extended periods; frequently stand and walk; normal manual dexterity and eye-hand coordination; lift and move objects weighing up to 25 lbs.; corrected hearing and vision to normal range; verbal communication; use of engineering and office equipment including computer, telephone, calculator, copiers, and FAX.

TYPICAL WORKING CONDITIONS

Work is performed in an office and outside environment; some exposure to weather and temperature variances; exposure to dust; continuous contact with staff and the public.

MINIMUM QUALIFICATIONS

Knowledge of:

- Theory, principles, and practices of civil engineering and their application to the design, preparation of engineering specifications, and construction of public works facilities including roads, bridges, drainage systems, and water facilities.
- Laws, rules, regulations, and policies affecting public works engineering such as CALTRANS procedures and manuals.
- Nomenclature, symbols, methods, practices, techniques, and instruments used in engineering and mapping.
- Surveying equipment, principles, problems, techniques, and practices.
- Construction methods, materials, and equipment.
- Proper inspection methods and procedures.
- Contract development and administration.

- Uses of computers and computer applications in technical engineering support work.

Ability to:

- Perform complex paraprofessional engineering work in the preparation of plans, designs, and specifications for public works and City facility development, construction, and maintenance.
- Under the direction of the City Engineer or a licensed land surveyor, review subdivision maps and plans for conformance to City requirements and standards.
- Assist with planning, organizing, and completing a variety of engineering projects.
- Prepare a variety of engineering reports.
- Prepare maps, plans, and drawings neatly and accurately.
- Assist with engineering reviews of designs, plans, and specifications prepared by others.
- Gather, organize, analyze, and present a variety of technical engineering and statistical data.
- Use a computer and appropriate software in technical engineering support and administrative work.
- Effectively represent the City Engineer in contacts with the public, other City staff, and other government agencies.
- Establish and maintain cooperative working relationships.

Training and Experience:

- Three (3) years of increasingly responsible technical engineering support experience in the planning, development, construction, and maintenance of public works facilities comparable to Civil Engineering Assistant with the City of Atwater; or
- Completion of advanced educational training equivalent to a Bachelor's degree in Civil Engineering from an accredited college or university.

SPECIAL REQUIREMENTS

- Possession of, or ability to obtain, appropriate certification and licenses as designated by the City of Atwater.

Education:

- Graduation from an accredited community or junior college with an AA degree in civil engineering; or,
- Possession of an Engineering in Training Certificate as issued by the State of California.

License:

- Possession of a valid California driver's license.

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