

CITY OF MADERA

ASSOCIATE CIVIL ENGINEER

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.*

DEFINITION:

Under direction, performs the more complex professional and technical civil engineering work in the design, investigation, inspection, and construction of street, storm, sewer, parks, park irrigation systems, buildings, and other projects; maintains appropriate work records; performs other related duties as required.

DISTINGUISHING CHARACTERISTICS:

The **Associate Civil Engineer** is the advanced journey level class in the professional civil engineering series and is the first licensed engineer level responsible for performing the more complex design and construction of capital improvement projects and for reviewing private development projects for design conformance and accuracy. Incumbents perform complex professional engineering assignments requiring considerable knowledge of various aspects of civil engineering including land development, planning, design standards and regulations, construction and maintenance. This classification is distinguished from the next higher classification of Senior Civil Engineer which performs the most complex and difficulty of assignments, and the performance of supervisory responsibilities.

SUPERVISION RECEIVED/EXERCISED:

Receives direction from the Director of Community Development/City Engineer or Senior Civil Engineer. May exercise over functional and technical supervision over assigned staff.

ESSENTIAL FUNCTIONS: *(include but are not limited to the following)*

- Performs a broad range of design activities on a variety of public works projects including street, storm, sewer and park irrigation systems; assists in the administration of construction contracts; performs field inspections; assists in the development of design procedures; prepares plans, specifications, project budget and cost estimates; interprets the application of design criteria; checks plans and specifications for accuracy of design and completeness; makes recommendations for the engineering budget and monitors the approved budget.
- Assists in the coordination of capital improvement projects with contractors, utility companies and other agencies; performs field inspections; plans, coordinates, prioritizes, monitors and participates in the work of staff responsible for reviewing design conformance and accuracy of public and private development projects.
- Prepares and provides complex engineering reports, correspondence, staff reports, ordinances, and resolutions to the City Administrator, City Council, committees, City departments, outside agencies and the public; develops and reports statistics; participates in division budget development; makes

oral presentations and participates in organizational and community group meetings; responds to questions and inquiries, and investigates complaints concerning engineering problems.

- Assists in the design and development of public works and utility structures and the preparation of project specifications; consults with contractors; reviews plans submitted by consultants and developers to ensure conformity with established standards and regulations; assists in providing advice and instruction to subordinates on design standards and problems from the construction phase to completion of the project; prepares, reviews and recommends change orders.
- Establishes positive working relationships with representatives of community organizations, state/local agencies, City management and staff, and the public.

WORKING CONDITIONS:

Position requires sitting, standing, walking on level and slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, grasping, crawling and making repetitive hand movement in the performance of daily duties. The position also requires both near and far vision when inspecting work and operating assigned equipment, and acute hearing is required when providing phone and face-to-face service. The need to lift, carry, pull and push tools, supplies and other equipment weighing up to 25 pounds is also required. Additionally, the incumbent in this position works outdoors in all weather conditions including wet, hot and cold. The position entails working in situations that may expose the employee to fumes or airborne particles, electrical shock or mechanical hazards. The nature of the work also requires the incumbent to climb ladders and drive motorized vehicles.

QUALIFICATIONS: *(The following are minimal qualifications necessary for entry into the classification)*

Education and/or Experience:

Any combination of education and experience that has provided the knowledge, skills and abilities necessary for an **Associate Civil Engineer**. A typical way of obtaining the required qualifications is to possess the equivalent of three years of increasingly responsible Civil Engineering experience, and a Bachelor's degree in Civil Engineering.

License/Certificate:

Possession of, or ability to obtain, a valid Class C California driver's license and possession of a valid certificate of registration as a Civil Engineer, issued by the California State Board of Registration for Civil and Professional Engineers.

KNOWLEDGE/ABILITIES/SKILLS: *(The following are a representative sample of the KAS's necessary to perform essential duties of the position)*

Knowledge of:

Principles, procedures, practices and standards of municipal civil engineering; surveying methods and techniques; strength of materials and stress analysis; methods and techniques of supervision, training and motivation; municipal engineering laws, ordinances, codes, specifications and plans; applicable federal, state and local laws, codes, and regulations including Madera Municipal Code, ordinances, and codes related to building construction; engineering project inspection methods;

working knowledge of contract administration; modern office practices, methods and equipment, including a computer and applicable software; operational characteristics and use of standard equipment used in the engineering profession; occupational hazards and standard safety procedures.

Ability to:

Interpret and apply applicable laws, codes and regulations; negotiate and manage construction contracts; perform the full range of professional civil engineering tasks; exercise sound independent judgment; prepare and administer a project budget; promote and enforce safe work practices; communicate clearly and concisely, both orally and in writing; establish and maintain effective working relationships.

Skill to:

Operate an office computer and a variety of word processing and software applications; safely and effectively operate engineering tools and equipment.