

CITY OF LATHROP

ASSISTANT/ASSOCIATE 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 general supervision, performs professional engineering work in the design, evaluation and construction of streets, traffic controls, landscaping, parks, storm drains, sewer, water and other public works projects; serves as a project manager on medium or less complex Capital Improvement Projects; reviews engineering reports, drawings, specifications and calculations for buildings, structures, streets, sewers and other public works facilities to ensure compliance with current industry practices, codes, regulations and ordinances; performs other related duties as required.

DISTINGUISHING CHARACTERISTICS:

Assistant Engineer

The **Assistant Engineer** is the journey level class in the professional civil engineering series. Under general supervision, incumbents perform a broad range of more routine assignments within an established procedural framework where there are minimal consequences of error, including a wide variety of less complex professional engineering tasks. This classification is alternatively staffed with Associate Engineer and incumbents may advance to the higher level after gaining experience and demonstrating a level of proficiency that meets the qualifications of the higher level class.

Associate Engineer

The **Associate Engineer** is the first licensed engineer level in the professional engineering series and is responsible for performing the more complex design, plans review and construction management 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 Principal Civil Engineer, which performs the more complex and difficult of assignments, and exercises supervisory responsibilities within the Engineering division.

SUPERVISION RECEIVED/EXERCISED:

Assistant Engineer

Receives general supervision from higher level management staff. May exercise technical and functional supervision over lower level public works and office support staff.

Associate Engineer

Receives general supervision from higher level management staff. Exercises direct and indirect supervision over lower level professional, technical and office support staff.

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

- Performs a broad range of construction project management and design activities on a variety of Capital Improvement Projects, including streets, lighting, storm drains, sewers, water, parks and landscape.
- Reviews and/or prepares plans and specifications; prepares quantity and cost estimates; assists in the development of design procedures; interprets the application of design criteria; checks plans and specifications for accuracy of design and completeness; coordinates required advertising for bids.
- Assists higher level engineers on large and complex public works construction projects and acts as a project management engineer on construction projects; coordinates Capital Improvement Projects with contractors, utility companies, other agencies and the general public.
- Interprets, plots and supervises field survey data; reviews laboratory tests of construction materials; performs field inspections; provides assistance and training to construction inspectors in the interpretation of plans and resolution of problems during construction; reviews as-built plans to ensure compliance with original plans and specifications.
- Reviews subdivision plans and site plans for conformance with City ordinances and State law; reviews private contract projects for conformance with City ordinances, policies, standards and accepted engineering practices; meets with architects, engineers and developers to provide preliminary review of development concept and design.
- Administers design and construction contracts; maintains logs and tracks bond expiration dates; prepares reports for the Finance Department as required; collects all required inspection approvals; prepares staff reports for Council; monitors progress on assigned projects to ensure compliance with time and cost schedules for completion; prepares change orders; reviews contractors estimates and prepares and reviews progress payments.
- Interprets codes and regulations in the performance of plan check activities; calculates building valuation; coordinates plan review process with other departments and agencies.
- Administers and enforces City codes and standards on engineering projects; addresses and responds to citizen concerns related to engineering problems.
- Establishes positive working relationships with representatives of community organizations, state/local agencies and associations, City management and staff, and the public.

PHYSICAL, MENTAL AND ENVIRONMENTAL 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.

Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

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 **Assistant/Associate Engineer**. A typical way of obtaining the required qualifications is to possess the equivalent of:

Assistant Engineer

Two years of professional engineering experience in civil engineering, traffic engineering, surveying or related areas, and a bachelor's degree in Civil Engineering or a related field. Possession of a valid certificate of registration as a Civil Engineer can be substituted for a bachelor's degree.

Associate Engineer

In addition to the above, one year of experience equivalent to that of an Assistant Engineer in the City of Lathrop.

License/Certificate:

Assistant Engineer

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

Associate Engineer

Possession of, or ability to obtain, a valid Class C California driver's license; 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. The level and scope of the knowledge and abilities listed below vary between the Assistant and Associate levels.)*

Knowledge of:

Modern principles and practices of Capital Improvement Project construction project management; principles, procedures, practices, and standards of municipal engineering; surveying methods and techniques; strength of materials and stress analysis; CEQA requirements; municipal engineering laws, ordinances, codes, specifications and plans; applicable federal, state and local laws, codes and regulations, including the Lathrop Municipal Code, ordinances and codes related to building construction; engineering project inspection methods; contract administration; basic principles of mathematics; methods and techniques of scheduling work assignments; standard office procedures, practices and equipment; modern office practices, methods and equipment, including a computer and applicable software; methods and techniques for record keeping and report preparation and writing; proper English, spelling and grammar; occupational hazards and standard safety practices.

Ability to:

Serve as the project manager on one or more Capital Improvement Projects; prepare accurate plans, specifications, cost estimates, change orders and engineering reports; make accurate engineering computations; analyze and evaluate design drawings and specifications; prepare and manage project budgets; negotiate with citizens, property owners, contractors and other agencies; maintain detailed project management records and documentation; learn and apply established principles and practices of municipal civil engineering; manage the work of outside consultants; administer programs involving federal, state and local grants; promote and enforce safe work practices; perform mathematical calculations quickly and accurately; interpret, explain and apply applicable laws, codes and regulations; read, interpret and record data accurately; organize, prioritize and follow-up on work assignments; work independently and as part of a team; make sound decisions within established guidelines; analyze a complex issue, and develop and implement an appropriate response; follow written and oral directions; observe safety principles and work in a safe manner; 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, design and engineering software applications; safely and effectively operate engineering tools and equipment.