

## JOB DESCRIPTION

City of Patterson



Human Resources

## ASSISTANT ENGINEER

## JOB SUMMARY

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

To perform a variety of professional level duties and responsibilities in support of the City's current and advanced engineering functions including research and analysis for design, land development, capital improvements and other duties as assigned; to provide information and assistance to applicants, developers, consultants, the general public, and outside agencies and organizations regarding City codes, policies, standard, and process related to engineering, building and capitol projects related matters; to participate in planning and implementation of projects.

## DISTINGUISHING CHARACTERISTICS

This is the entry level class in the Engineering series. Positions in this class typically have little or no directly related work experience. The Assistant Engineer class is distinguished from the Engineering Associate by the performance of less than the full range of duties as assigned to the Associate Engineer level. Incumbents work under general supervision while learning job tasks, progressing to direction as procedures and processes of assigned area of responsibility are learned.

## SUPERVISION RECEIVED AND EXERCISED

The Assistant Engineer receives general supervision from the Director of Engineer, Building, and Capital Project and the Capital Projects Manager. This position exercises no supervision, but may be assigned lead work responsibility for training, assigning, and reviewing the work of less experience and/or lower-level employees.

## ESSENTIAL DUTIES

Essential and other important responsibilities may include, but are not limited to, the following:

Perform professional and technical engineering work relative to assigned area of responsibility, such as design, land development, and capital improvements

Design and prepare plans and specifications for public works projects including pumping stations, streets, storm drains, sewer lines, and related projects; research project design requirements; perform calculations and prepare estimates of time and material costs

Develop revised design and construction standards for public works structures and appurtenances

Serve as construction inspector to ensure compliance on City projects, subdivisions, and encroachments

Investigate field problems affecting property owners, contractors, and maintenance operations; resolve problems or refer as appropriate; coordinate or perform field work associated with infrastructure projects

Write legal descriptions for right of way and easement dedications

Issue encroachment, water, and sewer permits

Request and participate in the collection of survey and mapping data

Prepare estimates and feasibility reports for new or modified services and structures

Attend and participate in professional group meetings; maintain awareness of new trends and developments in the field of municipal engineering; incorporate new developments as appropriate into programs

Prepare visual presentations and reports

Prepare special engineering studies and reports

Coordinate public works activities with other City departments, divisions and sections and with outside agencies

Perform related duties as assigned.

## **MINIMUM QUALIFICATIONS**

### **Knowledge of:**

Principles and practices of engineering as applied to public works, utilities, transportation or land development.

Methods and techniques of effective technical report preparation and presentation

Proficient in Computer Aided Design & Drafting, Civil 3D experience preferred.

Mathematical concepts applicable to engineering.

Operation, principals, and practices of engineering drafting and computer programs

Topographic and construction surveying

Engineering construction materials

Modern office equipment, methods, procedures, and computer hardware and software.

Pertinent federal, state, and local laws, codes, and regulations.

**Ability to:**

Prepare plans and drawings neatly and accurately

Prepare and present oral and visual presentations to a variety of internal and external customers.

Learn and understand City engineering requirements, policies and procedures

Administer contracts, coordinate and review the work of outside consultants

Learn pertinent federal, state, and local codes, laws, and regulations

Prepare quantity and cost estimates

Use and care of engineering and drafting instruments and equipment

Understand and follow oral and written instructions

Operate a personal computer and a variety of software applications

Communicate clearly, effectively and concisely, both orally and in writing

Establish and maintain effective working relationships with co-workers and the general public

**EXPERIENCE AND EDUCATION**

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

**Experience:** Two years of increasingly responsible engineering experience equivalent to that of an Engineering Senior Technician in the City of Patterson.

**Education:** Equivalent to a Bachelor's degree from an accredited college or university with major course work in civil engineering or a related field considered useful in City engineering. (Substitution: A Master's degree in civil engineering or a related field may be substituted for one year of the required experience above).

**LICENSE OR CERTIFICATE**

Possession of an EIT Certificate

Possession of a valid Class C California Driver's License.

**NECESSARY SPECIAL REQUIREMENTS**

Must be 18 years of age or older

Must successfully pass a pre-employment medical examination, including a drug screen, fingerprint, background check, and reference check.

Must be able to provide proof of U.S. citizenship or legal right to work in the United States.

## **MENTAL AND PHYSICAL REQUIREMENTS**

**Mental Requirements:** The mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is regularly required to review documents related to department operations; observe, identify and problem solve office operations and procedures; understand, interpret and explain department policies and procedures; explain operations and problem solve office issues for the public and with staff.

**Physical Requirements:** The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is regularly required to sit at a desk and/or stand for long periods of time; intermittently twist and bend to reach office equipment; use simple grasping and fine manipulation; and write or use a keyboard to communicate through written means; run errands; lift or carry weight of 20 pounds or less.

**Environmental Conditions:** The work environment characteristics described here are representative of those employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee regularly works in an office environment.