DEFINITION

Under general supervision and direction, performs the full array of duties assigned to classes in the Engineering Assistant series, including performing para-professional work in support of civil engineering projects, surveying, mapping and traffic engineering; assists in the preparation of engineering plans, maps and specifications; may operate computer assisted drafting (CAD) and geographical information systems (GIS); demonstrates a full understanding of all applicable policies, procedures and work methods associated with assigned duties; performs other related duties as required.

DISTINGUISHING CHARACTERISTICS

**Engineering Assistant**--This is the journey level class in the para-professional Engineering Assistant series responsible for the more routine and less complex assignments within an established procedural framework, including a variety of research, drafting, office and field engineering work that does not require previous specialized experience. This classification is alternatively staffed with Senior Engineering Assistant 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.

**Senior Engineering Assistant**--This is the advanced journey level class within the Engineering Assistant series. Incumbents in this class perform the full range of complex procedures in carrying out a variety of drafting, surveying, traffic, office and field engineering work. This classification is distinguished from the next higher classification of Supervising Engineering Assistant in that the latter performs the more difficult and complex assignments and has supervisory responsibilities.

SUPERVISION RECEIVED/EXERCISED

**Engineering Assistant**
Receives general supervision from the Senior Engineering Assistant. Incumbents in this class do not routinely exercise supervision.

**Senior Engineering Assistant**
Receives direction from the City Engineer or Capital Project Manager. May exercise functional and technical supervision over lower level staff.
EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES
(may include but are not limited to the following)

Performs the full array of duties assigned to classes in the Engineering Assistant series, including a broad range of office, field, surveying and traffic engineering work; may perform CAD drafting and computing operations in the preparation of a wide variety of engineering drawings, plans and computations.

Designs plans for a variety of engineering and public improvement projects, including sewer, water and storm drain pipelines, streets, roadways and alleys; calculates the quantity, quality and costs of needed materials.

Reviews engineering construction plans for conformance with City standards and specifications.

Oversees and administers the Disadvantage Business Enterprise (DBE) program.

Performs engineering calculations; prepares sketches and designs from instructions and design data; interprets and converts survey notes to various types of drawings; develops, modifies and maintains computer programs required to provide graphics, maps and overlays for engineering drawings.

Performs fieldwork; inspects Public Works Capital Improvement Projects; prepares engineering considerations for design review, conditional use permits, parcel maps and tentative subdivisions; may serve as project manager over Capital Improvement Projects; oversees contractors; writes change orders; ensures work is being performed in compliance with ADA, OSHA and other regulations.

Reviews residential, commercial and industrial building permits with conformance to City codes, standards and regulations; reviews grading and site plans; reviews and inspects Storm Water Pollution Prevention Plans (SWPPP); oversees Storm Water NPDES.

Calculates development impact fees, subdivision fees for new developments, and estimates on proposed developments; reports collect fees and account numbers to the Finance Department.

Prepares bid documents; collects and analyses bids; makes recommendations to the City Engineer; writes grant applications; monitors spending; prepares related reports; files appropriate grant paperwork; serves as the point of contact for CDBG program; prepares all CDBG paperwork.

Performs minor traffic studies for signals, stop signs and warrants; assists with traffic control plans; prepares and submits paperwork for the Caltrans Local Assistant program; serves as the liaison with Caltrans.
EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

Performs title searches; researches right-of-way and easements based on legal descriptions; contracts with right-of-way appraisers; checks and writes routine legal descriptions; reviews, recommends and issues utility, curb, sidewalk, street and encroachment permits; calculates permit fees.

Prepares a variety of reports, including annual reports to DBE, SWPPP and Caltrans; writes resolutions and staff reports; maintains engineering records and files.

Provides information related to project design to the general public, contractors and developers; provides information regarding City standards and development approval procedures and requirements; checks subdivision maps, parcel maps and other engineering documents for conformance to State laws and local ordinances.

Demonstrates a full understanding of applicable policies, procedures and work methods associated with assigned duties; may provide training to lower level staff; responds to questions and concerns from the general public, contractors and developers; provides information as is appropriate and resolves public service concerns.

Establishes positive working relationships with representatives of community organizations, state/local agencies and associations, City management and staff, and the public.

OTHER JOB RELATED DUTIES

Perform other related duties and responsibilities as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS:

Knowledge of:

City standards, standard drafting symbols, methods, practices, techniques and instruments used in engineering and mapping;

Basic principles and practices of civil engineering; project management; design work; grant writing and administration; disadvantage business enterprise programs; operational characteristics of standard engineering equipment; basic principles of mathematics;

Applicable federal, state and local laws, codes and regulations;

Methods and techniques of scheduling work assignments;

Standard office procedures, practices and equipment;
Knowledge of:

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:

Use computer aided drafting and design systems, databases, GIS systems and other programs related to engineering design;
Review plans and documents for conformance with regulations;
Prepare plans and specifications neatly and accurately;
Serve as project manager over CIP projects;
Oversee the Disadvantage Business Enterprise program;
Write and administer grants;
Prepare and maintain accurate records and reports;
Understand, interpret and prepare legal descriptions, engineering reports and maps;
Work effectively with City staff, contractors, developers and the general public;
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;
City of Reedley
Engineering Assistant, Senior Engineering Assistant

**Ability to:**

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 various equipment and tools required to perform engineering technician work, including surveying instruments, computer equipment and a variety of software applications, such as CAD.

Operate a motor vehicle safely.

**Experience and Training Guidelines:**

*Any combination of education and experience that has provided the knowledge, skills and abilities necessary for an Engineering Assistant/Senior Engineering Assistant. A typical way of obtaining the required qualifications is to possess the equivalent of:*

**Engineering Assistant**

**Experience:**

Two years of experience performing duties comparable to those of an Engineering Technician. Auto CAD drafting skills required.

**Training:**

A high school diploma or equivalent supplemented by specialized course work in construction technology, civil engineering, or a related field. Associate’s Degree in a related field is highly desirable.

**Senior Engineering Assistant**

In addition to the above,

**Experience:**

One year of increasingly responsible work experience equivalent to that of an Engineering Assistant with the City of Reedley.
Training:

A minimum of the Equivalent to an associate’s degree in drafting, pre-engineering, surveying or a related field

License/Certificate:

Possession of, or ability to obtain a valid, class C California driver’s license.

Special Requirements:

Essential duties require the following physical skills and work environment:

Position requires prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting, and stooping in the performance of daily activities.

The position also requires grasping, repetitive hand movement, and fine coordination in preparing reports and drawings using a computer keyboard.

Additionally, the position requires near and far vision in reading written reports and work related documents.

Acute hearing is required when providing phone and personal service. When working in field assignments the incumbent may be required to lift, carry and push tools, equipment and supplies weighing in excess of 25 pounds.

The nature of the work may require working around heavy construction equipment and 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.