CITY OF SAN CARLOS ADOPTED CC: 6/22/98 REVISED CC: 06/22/15

## CIVIL ENGINEERING ASSISTANT

## **DEFINITION**

This classification is responsible for performing basic civil engineering work in the field and in the office. The Civil Engineering Assistant is assigned specific engineering projects and works for the Engineering Division of the Public Works Department.

## DISTINGUISHING CHARACTERISTICS

The Civil Engineering Assistant applies professional engineering knowledge and skills to engineering projects. It is typical that engineering knowledge is gained through considerable working experience in the engineering field.

## SUPERVISION EXERCISED AND RECEIVED

Reports to the Public Works Director or City Engineer. Is not responsible for any direct supervision but does indirectly supervise contractors and consultants.

### ESSENTIAL AND IMPORTANT DUTIES

- Prepares or assists in the preparation of specifications, plans, estimates and reports pertaining to the construction, maintenance and operation of a variety of engineering projects.
- Performs design and drafting duties in connection with street, sewer, storm drain, traffic facilities and other Public Works projects.
- Provides field inspection of public/private improvements in the public right of way for compliance with established City standards and procedures.
- Provides information regarding existing infrastructure to satisfy inquiries from staff, developers and citizens.
- Plan checks parcel maps, tract maps and private/public agency development plans.
- Provides technical advice and counsel to developers and others in the interpretation of City Ordinances and established City policies relative to land development.
- Reviews and processes all Public Works permits.
- Computes appropriate fees for engineering permits, plan checks and related functions.
- Disseminates, modifies, and maintains all Public Works records, maps, files, databases and associated GIS base map.
- Provides backup and supports general services division as needed.
- Independently plans work details for technical determinations.
- Assists in traffic calming and transportation design related activities.

# **JOB-RELATED AND ESSENTIAL QUALIFICATIONS**

**Knowledge of:** principles and practices of civil engineering as related to the design of a wide variety of public works projects; surveys principles and practices; street, highway, sewer and storm drainage construction and practices, methods and techniques; approved standards of safety as related to structural projects; environmental engineering principles and low impact development designs.

**Ability to:** understand and comply with the Municipal Regional Stormwater Permit including tracking deadlines for implementation, inspection, and reporting, and integrating permit requirements with capital projects; analyze data and a variety of problems by determining options with the use of engineering methodology. Work effectively as part of a group or team; secure the cooperation of construction

contractors and developers. Prepare reports and maintain records, logs and databases; make mathematical calculations and accurate engineering computations and drawings; make oral and written presentations for professional meetings with consultants, contractors, staff and project teams. Deal tactfully and effectively with others to provide excellent customer service to the public, and other City employees. Operate standard office equipment including typewriter, photocopier, facsimile machine and personal computer; knowledge of word processing, spreadsheet, and computer aided drafting software.

**Skills to**: instruct subordinate engineering personnel in proper work methods and to supervise their work; adapt approved engineering methods and standards to the design and construction of a variety of public works project. Travel to various and remote sites within the city; follow complex written or verbal instructions and procedures; ability to work independently as well as in collaboration with others; operate a motor vehicle or motorized equipment; communicate over telephone or two-way radio and work occasional overtime and irregular hours.

### **EDUCATION AND TRAINING**

Any combination of education and experience equivalent to graduation from an accredited engineering college with major work in Civil Engineering, experience in professional or paraprofessional engineering work some of which shall have been at the level of Engineering Intern or higher.

### LICENSE/REGISTRATION

Possession of a valid California Class C driver's license and have a satisfactory driving record. Possession of an Engineer-In-Training certificate highly desirable

## SPECIAL REQUIREMENTS

Position requires prolonged sit, stand, walk, kneel, crouch, jump; physical mobility to negotiate difficult construction terrain; mental alertness and comprehension to learn and retain technical and administrative information, terminology, equipment, policies, procedures and safety practices. Ability to operate a motor vehicle and to visit various City and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups and over the telephone. The need to lift, drag, and push files, paper, and documents weighing up to 25 pounds also is required. Ability to maintain cooperative working relationship with all those contacted in the course of work.

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

## WORK ENVIRONMENT

Incumbent generally works in an office setting. The noise level in the work environment is generally moderate to quiet. On occasion, incumbents may work in outside weather conditions and be exposed to wet and/or humid conditions.