

## **CITY OF EL CERRITO**

### **ENGINEERING TECHNICIAN**

*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.*

#### **DEFINITION**

Under general supervision, performs a variety of specialized paraprofessional engineering and transportation field research, report writing, file maintenance, public relations and office administrative duties for professional engineering staff and departmental management; receives and responds to complaints; performs studies and prepares reports; researches engineering topics, prepares basic engineering calculations; maintains engineering and transportation/traffic records; performs field observations and surveys; updates maps and drawings and performs related work as required.

#### **DISTINGUISHING CHARACTERISTICS**

This is the entry paraprofessional level of the engineering classification series, providing technical assistance and support to professional staff and handling specialized project and program assignments. The work requires extensive public contact and conducting independent projects. This class is distinguished from the next higher class of Assistant Engineer in that the Assistant is the first level in the professional engineering series with responsibilities spanning the full spectrum of the City's engineering function and the equivalent of an appropriate degree in an engineering curriculum.

#### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the Public Works Director, Senior, Associate and/or Assistant Engineer.

#### **ESSENTIAL FUNCTIONS STATEMENT**

##### **Essential Functions:**

Perform specialized paraprofessional technical engineering work which may involve plan and permit review, preparing and revising maps and standard details; perform progress pay estimates and change orders; conduct basic engineering studies and research; maintain websites and computer-assisted engineering programs; manage and coordinate City-wide traffic management and pedestrian safety programs and maintain engineering files and maps.

Respond to complaints, requests and concerns, including answering questions directly and over the telephone; take action in responding to inquiries and complaints, following established guidelines, policies and procedures.

**CITY OF EL CERRITO  
ENGINEERING TECHNICIAN**

Perform field, office and computer-aided studies; perform field work such as conducting observations, making traffic counts and analyzing traffic flow; review accidents and other documentation and take measurements, research records and other data used to compile information for decision making.

Prepare periodic and special reports based on findings from research, studies and surveys; make recommendations based on findings; draft ordinances and resolutions and submit for approval.

Maintain engineering and traffic/transportation files, including plans, studies, inspections, surveys, maps and other data related to engineering and transportation projects; update traffic maps and engineering drawings and other information recorded in GIS.

Coordinate/conduct meetings with constituents to identify issues and develop suggestions for resolution to problems; give presentations and participate in regular staff and advisory committee meetings.

Process encroachment permits involving plan review to ensure compliance with City policy, codes and regulations, fee calculation, communications with contractors, residents, inspectors and building department staff.

Receive and respond to requests from developers, contractors, private engineers, title companies, real estate brokers and others for base maps, property line information, encroachment permits, benchmarks, copies of maps, confirming street information and other geographical data.

Prepare and update maps on GIS; draft maps and standard drawings using AutoCad and MicroStation; may serve on the GIS and MIS committees.

**Marginal Functions:**

Perform related duties and responsibilities as assigned.

May give presentations for the Planning Commission, City Council, or courts of law.

**QUALIFICATIONS**

**Knowledge of:**

Principles of engineering, and algebra and trigonometry.

Surveying techniques and practices.

Terminology, methods, practices and techniques of drafting.

Office equipment used for reproducing maps, charts and other graphics.

Engineering maps and records.

**CITY OF EL CERRITO  
ENGINEERING TECHNICIAN**

Modern office methods and procedures.

Occupations hazards and standard safety procedures.

Computer aided design (CAD) software.

**Ability to:**

Communicate clearly and concisely both verbally and in writing.

Maintain accurate and detailed records.

Work on multiple projects and effectively set priorities.

Operate a variety of office equipment.

Establish and maintain cooperative and effective working relationships and deal tactfully with a variety of people contacted in the course of work, including residents, property and business owners, contractors, design professionals and City staff.

Maintain physical and mental capacities appropriate to the performance of assigned duties and responsibilities.

Complete assigned tasks in an accurate and timely manner.

Prepare clear and concise reports.

Read and interpret drafted, graphic and written materials including plans and maps.

Perform engineering drafting work.

Focus on results which are highly valued by customers.

Organize regulatory and control functions to win compliance, rather than to control or constrain those being regulated.

**Experience and Training Guidelines:**

*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:**

Three years of engineering technical support or drafting experience;

**Training:**

A high school diploma or G.E.D. equivalent supplemented by some directly related college level work.

**CITY OF EL CERRITO  
ENGINEERING TECHNICIAN**

**Licenses/Certificates/Other Requirements:**

Possession of a valid California Driver’s License and satisfactory driving record as determined by the City.

**PHYSICAL DEMANDS**

Sitting:	Frequently	Lifting:	
Standing:	Occasionally	up to 10 lbs:	Frequently
Walking:	Frequently	11 to 25 lbs:	Occasionally
Bending:	Occasionally	26 to 50 lbs:	Occasionally
Crouching:	Occasionally	51 to 75 lbs:	Never
Stooping:	Occasionally	76 to 100 lbs:	Never
Kneeling:	Occasionally	100 + lbs:	Never
Crawling:	Occasionally	Carrying:	
Climbing:	Occasionally	up to 10 lbs:	Occasionally
Balancing:	Occasionally	11 to 25 lbs:	Occasionally
Running:	Occasionally	26 to 50 lbs:	Occasionally
Twisting:	Occasionally	51 to 75 lbs:	Never
Turning:	Occasionally	76 to 100 lbs:	Never
Jumping:	Occasionally	100 + lbs:	Never
Pushing/Pulling:			
Up to 10 lbs:	Occasionally		
11 to 25 lbs:	Occasionally		
26 to 50 lbs:	Never		
51 to 75 lbs:	Never		
76 to 100 lbs:	Never		
100 + lbs:	Never		
Grasping – firm:	Occasionally		
Finger dexterity:	Occasionally		
Reaching forward:	Occasionally		
Reaching overhead:	Occasionally		
Pinch grasp:	Occasionally		
Grasp – light:	Occasionally		
Coordination -	Eye-hand:	Occasionally	

**CITY OF EL CERRITO  
ENGINEERING TECHNICIAN**

		Eye-hand-foot: Driving:	Occasionally Occasionally
Talking	-	Face-to-face: Verbal contact: Public:	Frequently Frequently Frequently
Vision	-	Acuity far: Acuity, near: Depth perception: Field of vision: Accommodation: Color vision:	Required Required Required Required Required Required
Hearing	-	Conversation: Telephone: Earplugs:	Frequently Frequently Occasionally

**MENTAL REQUIREMENTS**

Abstract variables, interpret instructions, problems-standard, detailed-uninvolved instructions, one or two-step instructions, reading-simple, reading-complex, writing-simple, writing-complex, math skills-simple, math skills-complex, clerical, coordination, analyzing, compiling, computing, copying, comparing, negotiating, instructing, supervising, persuading, speaking-signaling, serving, taking instructions-helping, setting up, comprehend/follow instructions, perform simple-repetitive tasks, maintain work pace, relate to others, influence other people, perform varied-complex tasks, generalizations/evaluations, responsibility for direction.

**WORK ENVIRONMENT**

Indoors, outdoors, unprotected heights, moving machinery, slippery/uneven surfaces, below ground, using computer/computer monitor screen, works around others, works alone, works with others.