

City of Mission Job Description

Job Title: **Traffic Signal Technician I**

Classification: **Non- Exempt**

Department: Streets



Division:

Supervisor: Streets Director

Effective: 12/03/2008

I. JOB SUMMARY

The individual performs journey level work in the installation, repair, and maintenance of traffic signal control devices. Individual works independently and exercises skilled judgment in performing all assigned duties. Instructions will be oral or written and are often accompanied by sketches or blueprints. Duties are performed under the supervision of a supervisor who evaluates work effectiveness through conferences, observations, and the review of reports. Performs all work activities in accordance with proper safety procedure in accordance with job. Performs all repair project assignment (s) to be in compliance with **All City**, county, and state building codes. This position has no supervisory responsibilities. Individual will perform other duties assigned by department head/supervisor when needed.

II. EDUCATION REQUIREMENTS/KNOWLEDGE/EXPERIENCE

- High school diploma or G.E.D required.
- Must have oral and written communication skills in English and Spanish to at least the 8th grade level.
- Basic Electronic Certification preferred.
- One (1) year certificate from a college or technical school; or six to nine months related experience and/or training, or equivalent combination of education and experience.
- Must have considerable progressively working knowledge and experience in the installation, maintenance, and repair of electrical and electronic traffic control devices.
- Considerable knowledge of the occupational hazards and safety precautions involved in the work.

III. EMPLOYMENT REQUIREMENTS

- Applicant will be subject to a complete background investigation. Incomplete, inaccurate and/or failure to report information will cause the applicant rejection from consideration.
- Applicant must take and pass a drug, physical, and pre-placement screening administered by the City of Mission doctor at the City's expense.
- Applicant must have a current valid class "C" driver's license from the Department of Public Safety with no more than two (2) moving traffic violations within the past two (2) years.

IV. SKILL AND ABILITY REQUIREMENTS

- Ability to diagnose and supervise the repair of malfunctions in traffic signal and related equipment.
- Ability to perform electrical and electronic repair work.



- Ability to establish and maintain effective working relationships as necessitated by work assignments and with the general public, supervisor, and co-workers.
- Ability to interpret City policies and procedures as related to the job.
- Ability to perform independent of constant supervision.
- Ability to make decisions based on personal judgment.
- Ability to communicate effectively in the English language orally and in writing.
- Ability to understand and follow verbal or written instructions in the English language.
- Ability to control manipulations of small objects, such as wiring a control cabinet.
- Ability to exercise safety precautions and conform to safety rules and regulations
- Ability to perform a variety of different types of tasks without the variety itself causing a loss of efficiency.
- Ability to use graphic instructions, such as schematic diagrams and blueprints.
- Skill in the use and care of tools, equipment, and materials used in the work.

V. ESSENTIAL JOB FUNCTIONS

- Troubleshoots in the field and restores operation to traffic signal control devices that have undergone electrical, electronic equipment or electrical wire/cable failure due to vehicular accidents, vandalism, adverse weather, or construction crews.
- Installs traffic signs and removes signs no longer required.
- Operates test equipment such as oscilloscopes, and Volt Ohm meters in troubleshooting components or assemblies.
- Programs various types of computerized traffic signal controllers.
- Writes daily reports to keep records of all job related activities.
- Performs preventative maintenance traffic control and related electronic equipment on a routine basis.
- Takes traffic counts/data to inform City engineers or current traffic flow for additional proceedings.
- Operates City vehicle to transport self and materials to/from job sites.
- Observes all safety regulations and communicates unsafe conditions or accidents/inquiries to supervisor in order to facilitate prompt correction or reporting.
- Demonstrates continuous effort to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly to provide quality seamless customer service.
- Follow detailed instructions involving location, work to be done, methods, materials and equipment to be used.
- Individual will also be doing manual labor when necessary.



- Using power equipment and hand tools to perform the tasks/repairs on traffic lights.
- Individual will need to calculate and estimate materials needed to complete projects.
- Keep accurate record of all materials and time used on each job performed for the City.
- Repair /fix damaged or broken parts and equipment.
- Enter data or information into a computer terminal, laptop computer, or other keyboard device.
- Keep accurate record of jobs performed as directed by supervisor.
- Determine proper tools and materials necessary for work to be performed on assigned maintenance projects.
- Follows directed sequence of work activities for smooth and correct integration of all disciplines to be working on the project (s).
- Interprets City policy and procedures as related to assigned job.
- Perform activities on project (s) to be in compliance with **ALL CITY** , count, and state building and safety codes.
- Perform **all** job functions with special attention to good public relations, safety, and proper procedures.
- During weather emergencies individual will be doing sand bags and any other duties assigned by the supervisor.

VI. NON-ESSENTIAL JOB FUNCTIONS

- **None**

VII. EQUIPMENT/MATERIALS

Safety equipment/materials to include but not limited to the following:

- City vehicle, Telephone, 2-way radio
- Beeper, Street cones, Cell phone
- Electrician tools, Clip board, Pens & pencils
- Safety glasses, Raincoats, Rain boots
- Safety orange vests, Different size ladders, Different size wire
- Tool pouch, Power tools, Drills
- Wire cutters, Pliers, Screwdrivers
- Policy & procedure handbook- Safety gloves , Uniform
- Electronic diagnostic instruments



VIII. WORK ENVIRONMENT

Exposure to the following environmental conditions are required for this job.

		Amount of Time		
		Under 1/3	1/3 to 2/3	Over 2/3
	None			
Wet humid conditions (non-weather)			X	
Work near moving mechanical parts			X	
Work in high, precarious places		X		
Extreme cold (non-weather)		X		
Extreme heat (non-weather)				X
Fumes or airborne particles		X		
Outdoor weather conditions			X	
Toxic or caustic chemicals		X		
Risk of electrical shock			X	
Work with explosives	X			
Risk of radiation	X			
Extreme Noise		X		
Vibration		X		

IX. MANUAL DEXTERITY

Gross and fine finger dexterity are required to perform essential job functions. Gross hand manipulation is performed to grip carpentry, plumbing, and electrical tools. Fine finger dexterity is required to hand write notes and repair traffic lights.



X. PHYSICAL DEMAND ANALYSIS

MATERIAL HANDLING ACTIVITIES

Task	Weights	Frequency	Performance
LIFTING	Up to 5 lbs	C	Pick up tool pouch, hammer, drills, screw drivers.
	6-10 lbs	C	Tool box, tool pouch, hammer, drills, screw drivers.
	11-20 lbs	C	Tool box, tool pouch, ladder, drill, safety equipment.
	21-25 lbs	F	Tool box, tool pouch, ladder, drill, safety equipment.
	26-50 lbs	F	Tool box, ladder, safety equipment, electrical tools.
	51-75 lbs	O	Tool box, ladder, safety equipment, electrical tools.
	76-100 lbs	N	
	Over 100 lbs	N	
CARRYING	Up to 5 lbs	C	Pick up tool pouch, hammer, drills, screw drivers.
	6-10 lbs	C	Tool box, tool pouch, hammer, drills, screw drivers.
	11-20 lbs	C	Tool box, tool pouch, ladder, drill, safety equipment.
	21-25 lbs	F	Tool box, tool pouch, ladder, drill, safety equipment.
	26-50 lbs	F	Tool box, ladder, safety equipment, electrical tools.
	51-75 lbs	O	Tool box, ladder, safety equipment, electrical tools.
	76-100 lbs	N	
	Over 100 lbs	N	
PUSH/PULLING	Up to 5 lbs	C	Pick up tool pouch, hammer, drills, screw drivers.
	6-10 lbs	C	Tool box, tool pouch, hammer, drills, screw drivers.
	11-20 lbs	C	Tool box, tool pouch, ladder, drill, safety equipment.
	21-25 lbs	F	Tool box, tool pouch, ladder, drill, safety equipment.
	26-50 lbs	F	Tool box, ladder, safety equipment, electrical tools.
	51-75 lbs	O	Tool box, ladder, safety equipment, electrical tools.
	76-100 lbs	N	
	Over 100 lbs	N	

N-Never O-Occasional 1-33% F-Frequent 34-66% C-Constant 67-100%



NON-MATERIAL HANDLING ACTIVITIES

Task	Frequency	Performance
CLIMBING	O	Electric ladder to repair traffic light.
BALANCE	O	Electric ladder
STOOPING (bending at waist)	F	Check controller box
KNEELING (one or both knees)	F	Doing repairs to controller
CROUCHING (bending at hips/knees)	F	To check trenching and wiring of building.
CRAWLING	F	To check trenching and wiring of building.
REACHING	F	Reach from ground level to overhead with up to 25 pounds of weight for maintenance on traffic light and buildings.
TWISTING/TURN (rotation)	C	Up to 180 degrees and waist to shoulder, need to be level to perform inspections as needed to do job and while driving a city vehicle.
HANDLING (manipulated objects)	C	Tools during repairs and maintenance, work orders, reports, wires, drill, screw drivers, pen, pencil, electrical equipment.
STANDING	F	During inspections and while doing repairs in general.
WALKING	F	Job site, meetings, inspections
SITTING	F	While driving city vehicle, meetings, taking breaks.
FINGERING (finger dexterity)	F	Work orders and reports and handle tools, materials, and equipment necessary to perform work activities which have been assigned.
GRASPING (w hole hand activities)	F	Work orders and reports and handle tools, materials, and equipment necessary to perform work activities which have been assigned.

I, _____ understand the physical demands, work environment factors and mental functions of this job. I can fulfill the essential functions of this position as described in this job description.

Applicant Signature

Date