

CITY OF FONTANA
TRAFFIC SIGNAL MAINTENANCE TECHNICIAN I/II

DEFINITION: Under general supervision, performs skilled electrical and electronic maintenance duties in the installation, maintenance, repair and adjustments of electrical and electronic traffic signals within the Traffic Section of the Engineering Department. This position also serves as an integral member of the on-call afterhours emergency standby rotation program

DISTINGUISHING CHARACTERISTICS

Traffic Signal Maintenance Technician I – This is the entry level class in the Traffic Signal Maintenance Technician series. This class is distinguished from the Traffic Signal Maintenance Technician II by the performance of the more routine tasks and duties assigned to positions within the series including routine maintenance work that does not require previous specialized experience. Work is observed and reviewed both during performance and upon completion, and changes in procedures or exceptions to rules are explained in detail as they arise. Since this class is typically used as a training class, employees may have only limited related work experience.

Traffic Signal Maintenance Technician II – This is the full journey level in the Traffic Signal Maintenance Technician series. Employees within this class are distinguished from the Traffic Signal Maintenance Technician I by the performance of the full range of duties as assigned including the moderately complex duties of skilled electrical maintenance work. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. Appointment to the II level requires that the employee be performing the full range of duties assigned to the class.

ESSENTIAL FUNCTIONS: The employee must have the ability to:

- Performs preventative maintenance checks on traffic controller operations and traffic signal related systems. Conducts visual checks and inspections on traffic signal facilities.
- Construct, install, maintain, inspect, and diagnose malfunctions and repair traffic signal systems, including traffic sensing devices, traffic signal circuits, signal controllers, and pre-emption systems.
- Assist in evaluating the work done by signal contractors and evaluating the quality of contractor maintenance.
- Repair, replace or modify signal head components, relays, switches, fuses and other signal cabinet parts.
- Conduct maintenance and upkeep of traffic signal storage facility. Keep accurate work records; order supplies, parts and materials.
- Investigate complaints and reports of signal malfunctions; adjust, repair or remove defective equipment.

- Serve as an integral member of the on-call afterhours emergency standby rotation program.
- Works from ladder heights and heights up to 40' in the air with the aid of an aerial lift truck.
- Participate in the Dig Alert program locating and marking underground facilities pertaining to traffic signal related equipment.
- Performs graffiti removal from traffic signal facilities.
- Operate a fork lift to receive oversized shipments.
- Assist in the development of time and labor saving improvements to the signal system and signal maintenance records.
- Utilize computer for evaluating maintenance situations and transferring data to and from signal system components in the field and office.
- Adhere to administrative and departmental policies and procedures.
- Establish and maintain cooperative working relationships with those contacted in the course of work.
- Communicate clearly and concisely, both orally and in writing.
- Employee must perform any other tasks or functions deemed necessary to the daily operations of the employer.

THE ABOVE LIST OF ESSENTIAL FUNCTIONS IS NOT EXHAUSTIVE AND MAY BE SUPPLEMENTED AS NECESSARY BY THE EMPLOYER.

WORKING CONDITIONS: Position requires prolonged standing, walking on uneven and slippery surfaces, reaching twisting, turning, kneeling, bending, stooping, and squatting, crouching, grasping and performing repetitive hand movements in the performance of daily duties. Employees in this position may be required to lift, carry and/or push objects weighing twenty-five (25) pounds or more. The position requires near and far vision when inspecting or performing work. Incumbents work in all weather conditions, use cleaning and lubricating chemicals which may expose the employee to fumes, dust and air contaminants, drive motorized vehicles, work around moving traffic and often work with constant interruptions. Incumbents are also required to climb ladders, as well as use power and noise producing tools and equipment.

EXPERIENCE AND TRAINING GUIDELINES

A combination of experience and training that would likely provide the required knowledge and abilities is qualifying. The employee must have the knowledge of:

Traffic Signal Maintenance Technician I

- Use maintenance equipment and maintenance supplies and tools.
- Set up traffic control work zones.
- Interpret electrical wiring diagrams and schematics.
- Communicate clearly and effectively, both orally and in writing.
- Exercise judgement and initiative within established guidelines.

Traffic Signal Maintenance Technician II

In addition the qualifications of Traffic Signal Maintenance Technician I, knowledge of:

- Cabinet wiring and malfunction diagnosis for Econolite equipment
- Maintenance procedures for traffic signals
- Maintenance equipment and maintenance supplies and tools
- Maintenance costs and maintenance operations
- Loop detection methods; loop types and preventive maintenance for loop detections systems.

Experience: Traffic Signal Maintenance Technician I – A minimum of one year of direct experience in the electrical/electronic field to include the installation, operation, and maintenance of electrical/electronic circuits and equipment. Prior experience in traffic signal maintenance is preferred but not required to be considered a candidate.

Traffic Signal Maintenance Technician II – A minimum of three years of direct experience in the installation, operation and maintenance of traffic signal equipment and control systems. Prior experience in Econolite Traffic Signal Equipment, including ASC2 and ASC3 controllers and TS-1 and TS-2 Specifications preferred.

Education: Completion of the twelfth grade or equivalent along with courses in the electrical/electronic field of study.

Licenses/Certifications: The incumbent assigned to this position must have the ability to become certified, within a six (6) month period, by Econolite Control Products, Inc., in the operation of Econolite traffic control equipment and in the wiring and diagnosis of the types of controller cabinets in use by the City. Possession of, or ability to obtain, an appropriate, valid Class C California driver's license.

Incumbent must possess a valid certification as a Level I Traffic Signal Technician through the International Municipal Signal Association or the ability to obtain within twelve months of employment.