TRAFFIC SIGNAL/STREET LIGHTING TECHNICIAN

DEFINITION

Install, inspect, test, maintain, calibrate, troubleshoot, upgrade and repairs City-owned and shared-serviced traffic signal devices, illuminated crossing, street lights and various facility electrical systems.

SUPERVISION RECEIVED AND EXERCISED

General supervision is provided by the Electrical/Signs and Markings Supervisor or his/her designee. This is a journey level position and may include lead supervision of less experienced personnel.

EXAMPLES OF DUTIES

The following are typical of duties encompassed by the position, not an all-inclusive or limiting list:

ESSENTIAL JOB FUNCTIONS

Install, inspect, test, maintain, troubleshoot, repair, upgrade and calibrate, a wide variety of electrical and electronic equipment and software related to traffic control devices, street lights, recreational lighting and facilities; research, design, procure and install equipment and/or upgrade existing electrical/electronic systems; verify equipment compatibility with existing devices; conduct routine maintenance on electrical/electronic equipment, traffic control devices and street light systems; keep accurate and up-to-date records and notes on all related assignments; inspect contract construction projects and submittals; inspect and test equipment; proficiently reads and interprets circuit diagrams, traffic signal timing and construction drawings, and service and repair manuals; prepares plans and specifications for the procurement of parts and supplies on assigned projects; ensures that proper safety precautions and safe work methods are followed; assists with the preparation of standard operating procedures; inspect contract construction projects and submittals; inspect and test equipment; develop punch lists for work to be completed or corrected during construction, and perform other duties as assigned. Regular, predictable, consistent and timely attendance is an essential function of the position, in that Employee must be present to work on facilities and equipment impacting the public’s traffic safety.

OTHER JOB FUNCTIONS

Prepares and maintains accurate maintenance and repair records; presents oral and written reports; performs electrical Inspections; use and maintain a variety of tools and test equipment; answer emergency calls and performs emergency repairs; meet all standby program
requirements; take standby duty, work any shift including weekends and holidays. Perform related duties as assigned.

QUALIFICATIONS:

Knowledge of:

In depth knowledge of electrical and electronic equipment, as it relates to traffic signals, street lights and facilities; fundamental principles of industrial controls and application needs, personal computers and their operational and maintenance software programs; methods, tools, and equipment used to maintain, repair, test, troubleshoot, calibrate and perform preventative maintenance on a wide variety of electrical and electronic systems; safe work practices, applicable codes, laws and ordinances, circuit diagrams, and shop mathematics.

Skill to:

Use electrical and electronic tools and equipment skillfully and safely; read and follow electrical and electronic plans and specifications; examine and diagnose causes of electrical and electronic failures; respond quickly in emergencies; interact effectively and courteously with the public; communicate clearly and concisely, orally and in writing; keep accurate records.

Ability to:

Work independently and exercise good judgment; diagnose malfunctions in a variety of electrical/electronic systems related to facilities, traffic control and street light devices; use and care for tools and test equipment used in maintaining and repairing electrical and electronic systems; make cost estimates of labor and materials, maintain detailed records, and make oral and written reports; follow oral and written directions; read and interpret electrical control drawings, plans and specifications; establish and maintain effective work relationships with those contacted in the performance of required duties; maintain effective audio-visual discrimination and perception needed for making observations, communication with others; proficiently read, write, and operate assigned equipment; ability to setup efficient and safe traffic control worksites in high volume vehicle traffic areas while applying good judgment and practical knowledge to help resolve unusual or irregular problems in the area of work assigned.

Minimum Education and Experience:

Education:

High school diploma or equivalent is required. Associate degree in electrical/electronic technology or closely related field in highly desirable.

Experience:

Three years of recent experience as a Traffic Signal/Street Lighting Technician is required.

License and Certificates:
Possession of a valid California Driver's License and International Municipal Signal Association (IMSA) Traffic Signal Level II (Field) Certification completion of the probationary period as a condition of employment. Possession of a valid IMSA Traffic Signal Level III (Field and/or Bench) certificate, IMSA Roadway Lighting Level I certificate and completion of a State of California approved electrical apprenticeship program is highly desirable.

**ADA COMPLIANCE**

**Physical Ability:** Positions in this class typically require: climbing, balancing, stooping, kneeling, crouching, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, talking, hearing, seeing, and repetitive motions.

Very Heavy Work: Exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.

**Other Requirements:**

**Sensory Requirements:** Requires the ability to recognize and identify similarities and differences between shade, degree or value of colors, shapes, sounds, forms, textures or physical appearance associated with objects and people.

**Environmental Factors:** May be subjected to moving mechanical parts, electrical currents, vibrations, fumes, odors, dusts, gases, poor ventilation, chemicals, oils, extreme temperatures, work space restrictions, intense noises, and environmental dangers.

Council Action: