

CITY OF MADERA

ELECTRICIAN III

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.*

DEFINITION:

Under general supervision, performs the full array of skilled tasks assigned to the Electrician classification including electrical maintenance, repair and installation; demonstrates a full understanding of all applicable policies, procedures and work methods associated with assigned duties; performs other related duties as required.

DISTINGUISHING CHARACTERISTICS:

The **Electrician III** is the advanced journey level class responsible for a wide variety of electrical maintenance and installation tasks. This classification is distinguished from the next higher classification of Electrical & Facilities Operations Manager in that the latter is responsible for supervision of the work unit.

SUPERVISION RECEIVED/EXERCISED:

Receives general supervision from the Electrical & Facilities Operations Manager.

ESSENTIAL FUNCTIONS: *(include but are not limited to the following)*

- Performs a variety of tasks in the installation, maintenance, repair and alteration of electrical and electronic systems in City facilities; installs and replaces electrical components, underground conduits, lighting fixtures, ball park lights, airport lighting systems, wiring and other equipment including traffic signals and street lights; prepares project cost estimates of materials.
- Installs, maintains and repairs water well motor controls and chlorinating equipment, storm drain motor pumps and sewage treatment plant motors; installs and calibrates control and measurement loops for water well systems; repairs, replaces and maintains alarm systems, telemetry devices, recording devices, power supplies and battery backups.
- Installs computer network cabling and systems; programs and troubleshoots PLC motor controllers; installs and maintains backup generators and engine controllers; responds to emergency calls.
- Demonstrates a full understanding of applicable policies, procedures and work methods associated with assigned duties; responds to questions and concerns from the general public; provides information as is appropriate and resolves public service complaints.
- Establishes positive working relationships with representatives of community organizations, state/local agencies, City management and staff, and the public.

WORKING CONDITIONS:

Position requires sitting, standing, walking on level and slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, grasping and making repetitive hand movement in the performance of daily duties. The position also requires both near and far vision when inspecting work and operating assigned equipment. The need to lift, carry and push tools, equipment and supplies weighing 25 pounds or more is also required. Additionally, the incumbent in this outdoor position works in all weather conditions including wet, hot and cold. The position entails working in situations that may expose the employee to fumes or airborne particles, electrical shock or mechanical hazards. The nature of the work also requires the incumbent to climb ladders, use power and noise producing tools and equipment, drive motorized vehicles, work in heavy vehicle traffic conditions and often work with constant interruptions.

QUALIFICATIONS: *(The following are minimal qualifications necessary for entry into the classification)*

Education and/or Experience:

Any combination of education and experience that has provided the knowledge, skills and abilities necessary for a **Electrician III**. A typical way of obtaining the required qualifications is to possess the equivalent of two years of advanced journey level experience in the electrical trade or five years experience in semiskilled electrical maintenance and repair and a high school diploma or equivalent. Confined space entry experience is desirable.

License/Certificate:

Possession of, or ability to obtain, a valid class C California driver's license and possession of, or ability to obtain, a Confined Space Entry Certificate. Possession of a valid General Electrician certification by the State of California, Department of Industrial Relations, Division of Apprenticeship Standards.

KNOWLEDGE/ABILITIES/SKILLS: *(The following are a representative sample of the KAS's necessary to perform essential duties of the position)*

Knowledge of:

Practices, techniques and materials used in installation, maintenance, and repair of electrical equipment; calibration and maintenance of instrument control loops; programming and trouble shooting of PLC controllers; methods, materials, practices and tools of the electrical trade; work methods of the electrical trade; confined space work safety rules; principles of mathematics; occupational hazards and standard safety procedures.

Ability to:

Perform maintenance, repair and installation of complex and highly specialized electronic systems; operate a variety of tools and equipment used in installation, maintenance and repair of electrical and electronic systems; observe safety principles and work in a safe manner; follow written and oral directions; communicate clearly and concisely, both orally and in writing; and establish and maintain effective working relationships.

Skill to:

Safely and effectively operate a variety of power and hand tools used in electrical installation and repair.