



ELECTRICIAN

DEFINITION

Under general supervision, maintains, diagnoses, modifies, installs and repairs electrical systems and equipment including buildings, street lights, traffic signals and water pumping facilities control systems.

SUPERVISION EXERCISED

None

EXAMPLES OF DUTIES

Duties may include but are not limited to:

Inspect, maintain, diagnose and repair street light and traffic signal electrical source power, building electrical, generators and water pumping control systems.

Install, modify, maintain, repair (routine and emergency), test and survey street light, traffic signal, building electrical, generators and water pumping systems; analyze data and document and maintain files on work performed.

Take meg and amp readings; test and calibrate electrical equipment using digital, ohm, voltage and amp meters; overhaul and clean motors and related equipment.

Prepare and interpret electrical plans, schematics, diagrams and specifications; consult with electrical contractors on projects.

Respond to and maintain records for Underground Service Alert program.

Order parts, materials and equipment for street lights, traffic signals, building electrical and water systems; maintain inventory.

Meet with contractors; administer contracts for repairs/improvements to electrical systems.

Perform related duties as assigned.

KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of:

National Electrical Code and related standards and regulations

Principles, methods, materials, tools and equipment used in the installation, maintenance and repair of lighting systems and electrical equipment

High voltage water pumping equipment and facilities.

Standard safety practices required by Cal OSHA in the maintenance of electrical equipment.

Ability and Skill to:

Test, troubleshoot, maintain and repair electrical equipment

Read and interpret drawings, blueprints, schematics and plans.

Prepare records and reports.

Respond to questions from the public and staff.

Plan and organize work to meet schedules and timelines.

Communicate clearly both orally and in writing.

Perform duties of an emergency worker in the event of a natural or other disaster

QUALIFICATIONS

Any combination of education and experience that would provide the required knowledge, abilities and skills is qualifying. A typical way to obtain the qualifications would be:

High school graduation and five (5) years electrical experience including street light and traffic signal maintenance. College level course work in electricity and electrical codes and experience with telemetry and SCADA equipment highly desirable.

LICENSE OR CERTIFICATE

Must possess or have the ability to obtain an appropriate CA DL and a satisfactory driving record; American Red Cross certifications in C.P.R./ First Aid and Automated External Defibrillator (AED) Essentials.

Work Zone Traffic Control certificate issued by the International Municipal Signal Association.



ESSENTIAL JOB FUNCTIONS/A.D.A.

Ability to operate computer, calculator, telephone, portable radio, copying machine and tools, equipment and vehicles used in street light and traffic signal installation, maintenance and repair.

Ability to understand and respond to the public's and staff's requests for assistance both on the phone and in person.

Ability to prepare reports, perform mathematical calculations and sort/file documents.

Ability to sit, stand and walk for two hours at a time.

Ability to lift up to 50 pounds.

Ability to get from one location to another in the course of doing business

Ability to work outdoors in all weather conditions including hot with sun exposure, cold and wet.

