



August 2000

SENIOR ELECTRICAL COMMUNICATIONS SPECIALIST

DEFINITION

Under general direction of the Director of Maintenance & Operations, performs a variety of lead and journey-level electrical, telecommunications, data, computer wiring and fiber-optic work.

DISTINGUISHING CHARACTERISTICS

The incumbent to this job class is distinguished from other journey-level maintenance job classes in that the incumbent has lead responsibility over other District personnel. In addition, this job class will perform the more difficult or complex tasks, independently carry out work assignments to completion, train and inservice other District personnel, and assist in work planning, purchasing, record keeping, and report preparation associated with vendors, consultants, architects, and inspectors.

ESSENTIAL FUNCTIONS

Inspects, repairs, troubleshoots, services and maintains electrical and lighting systems for both low (110) and high (480) voltage; installs and maintains power circuits and breaker panels; interprets electrical plans and specifications to insure compliance with codes; installs telephone lines and wall jacks for data systems, quick mail, telephone and computer lines and data network; troubleshoot, diagnose and make repairs on desk telephones and analog telephone switching system; installs fire alarm systems, diagnoses malfunctions of alarm systems and makes repairs as needed; installs, troubleshoots, programs and maintains intercom and digital telephone systems and wall clocks as well as school bells; installs computer wiring ranging from simple to complex integrated local and wide area networks; reads technical manuals, interprets schematics and blueprints, provides estimates on projects and makes recommendations and coordinates work with outside vendors, contractors and utility providers; train and inservice District personnel; coordinates the work of skill and semi-skilled workers for the installation of communication cables and equipment; and performs other related functions.

Special Requirements

Possession of the category of valid California driver's license required to meet performance requirements of the position as determined by the State Department of Motor Vehicles rules. Must be able to be insured, and continue to be insurable, by the District's liability insurance carrier.

DESIRABLE QUALIFICATIONS

Knowledge of:

- 3-Phase/single phase, high & low voltage electrical systems;
- TIA-568A compliance for horizontal cat 3, 4 & 5 cable installation & fiber optics;
- Transformers and switch gear;
- Backbone wiring installation;
- Install patch panels and complete cat #5 cable and fiber optics terminations;

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Senior Electrical Communications Specialist - contd.

Knowledge of:

- Telecommunications and wiring installations;
- The various types of fire alarm systems;
- Simplex intercom and phone systems;
- Computer software (what types);
- Uniform Fire Code Title #24;
- Uniform Electrical Code.

Ability to:

- Diagnose and troubleshoot power failures and malfunctions in high and low voltage systems;
- Calculate power and total loads of electrical systems;
- Lay out new conduit and install structured cabling for LAN and WAN networks;
- Lay out and design runs and know how to use existing conduits;
- Read blueprints and schematics for new conduit runs;
- Work cooperatively with co-workers, administrators, contractors, outside organizations and other employees utilized to perform duties in this area;
- Familiar with terminology in both Electrical and Local Area Network;
- Operate computer and relevant software;
- Use testing equipment such as ohmmeter, amprobe, voltmeter, data, cable certified, meter, path finder, phone line tester, tone generator and etc;
- Effectively coordinate and assess the work of others;
- Develop and deliver training programs for maintenance personnel;
- Communicate effectively with co-workers, management, external contacts, and school site personnel.

Training and Experience:

Any combination of training and experience which would likely provide the required knowledge and abilities is qualifying. A typical way to obtain this knowledge and abilities would be:

Five years experience as a journey-level electrician and 3 years experience in the installation and maintenance of telephones, telephone lines, alarm systems data and fibre optics wiring and other electronic systems; Some experience performing lead or assisting in the direction of workers is desirable; Training and/or course work related to field is desirable as is the possession of a California Contractors Electrical License.

Established 9/5/00

9/12/00

(REF. B-3)