KIND OF WORK

Lead, skilled and licensed electrical work.

NATURE AND PURPOSE

Under general supervision, an employee in this class performs and directs others in planning, lay out, installation, alteration and repair of wiring, apparatus, or equipment for electrical light, heat and power according to specifications in the National and State Electrical Codes and National Electrical Safety Code. An employee in this class provides leadwork direction to state employees, which may include, but is not limited to, those holding licensure to perform electrical work, such as licensed Electricians; Registered Unlicensed Electricians and Power Limited Technicians; and/or other staff which may include laborers, maintenance employees, correctional facility inmates, regional center residents and other helpers. Leads must provide work direction to at least one or more state employees performing licensed electrical work, must maintain leadwork direction in accordance with the statutes that govern electrician licensure, and must comply with the definition of leadwork which requires leading at least three FTE state employees.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Plans, lays out or supervises the planning, lay out, installation, alteration and repair of wiring, apparatus, or equipment for electrical light, heat and power by generating the plans, blueprints, and specifications and discussing them with the supervisor; reviewing previous electrical project plans and specifications; and obtaining permits.

Schedules, distributes/balances and guides the work activities of employees performing electrical work to assist supervisory staff in the timely and safe completion of assigned workload, by planning and laying out the work, training employees, and designating work activities.

Monitors and reports on the work activities of employees performing electrical work to ensure the completion of timely and safe electrical projects in compliance with electrical codes and safety standards by overseeing and inspecting all work activities.
Estimates costs for time, labor and materials so that the supervisor can prioritize, budget and schedule electrical projects by determining the type and amount of supplies necessary to complete the project according to codes; developing material lists; selecting the best work procedures; determining equipment and labor requirements; and requisitioning and checking necessary parts, supplies and equipment.

Assists in reviewing electrical project language prior to insertion into contracts and when bids are received to ensure electrical wiring, apparatus and equipment described and/or utilized by the contractor is compatible sufficient to perform long-term preventative maintenance.

Leads the planning and/or lay out, installation, alteration and repair of wiring, apparatus, or equipment for electrical light, heat and power so that all systems are operational according to electrical codes and standards by identifying the most direct and appropriate route to run the new wiring; laying out the work; troubleshooting disruptions; testing, repairing or replacing circuits or power plant control devices; implementing preventive maintenance programs; and inspecting all work activities.

Leads and/or installs, repairs, maintains, tests, and inspects electrical equipment and appliances such as washers, dryers, disposals, dishwashers, water heaters and other electric, motor-driven equipment according to the manufacturer's specifications and the Underwriter's rules for electrical installation by following safety standards and procedures to prevent injuries.

Overhauls hand and power tools to ensure their safe, efficient use for current and future electrical projects by inspecting their physical condition; repairing, or replacing worn or broken parts; performing preventative maintenance; and documenting the nature of the repair or replacement.

Serves as the designated Master Electrician of Record for an agency or major subdivision of (e.g., DOC or DHS facility, State University campus, DOT District).

**KNOWLEDGE, SKILLS AND ABILITIES REQUIRED**

Knowledge of:

Construction plans, blueprints and electrical specifications sufficient to interpret, modify and follow them to complete the installation, alteration, maintenance and repair of electrical systems and equipment, sufficient to advise other state employees on more effective techniques and work procedures to complete electrical projects.
Knowledge of (continued):

Electrical tools and equipment, safety standards and procedures sufficient to perform work efficiently and safely.

Shop math sufficient to estimate labor and material costs for planned projects.

Skill in:

Using hand and power tools sufficient to install, alter, maintain, and repair electrical systems and equipment in state buildings.

Ability to:

Lead and motivate electrical project employees sufficient to direct them toward the timely completion of assigned projects.

Maintain and repair hand and power tools sufficient to ensure their availability and safe operation for electrical projects.

Direct, instruct, monitor and inspect the electrical work of licensed Electricians, less skilled employees, inmates, and residents sufficient to ensure work is correctly and safely completed.

Maintain electrical project records of time and materials sufficient to report daily, weekly, and monthly progress of electrical projects.

LEGAL AND LICENSURE REQUIREMENTS

Registration with the Minnesota Department of Labor and Industry, Board of Electricity as a Class A Master Electrician.

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Rev.: 08/91
Rev.: 10/20

TC: Former Title(s): 11/94