JOURNEYMAN ELECTRICIAN

Department: **Central Maintenance**
Division: **n/a**
Appointing Authority: **Mayor**

Grade: **CM4**
Revision Date: **11/19**
Bargaining Unit: **EAW**

Definition:

Performs skilled and professional work in the installation, repair, maintenance, and inspection of electrical, lighting, signal, data, and alarm equipment and systems in City and School facilities to ensure integrity of systems and safety of all facilities; all other work that is logical to the position as required.

Supervision:

Performs electrical system installation, repair, and maintenance duties with no supervision.

Works under the general direction and supervision of head of Central Maintenance or designee. Plans and schedules own work, referring only unusual administrative or other matters to supervisor. Works within established policies and under the general policy direction of head of Central Maintenance.

May be responsible for some supervision or oversight of maintenance staff on projects requiring adherence to permitting or code requirements, or of outside vendors or crafts personnel on similar projects. May direct one or two personnel as required.

Environment:

Duties are performed under typical field, building and construction conditions with exposure to weather extremes and other hazards; operates standard office equipment; field work involving inspections or on-site visits. Noise level is usually moderate to at times loud. Exposure to sewage, grey water, oil/grease, chemicals, gases, electrical shock and other environmental hazards.

Performs varied and responsible functions requiring independent judgment to ensure compliance with applicable laws, regulations, and departmental policies.

Has contact with employees, departments, elected and appointed officials, citizen or governmental committees, State and Federal agencies, vendors, consultants, contractors, outside organizations and the general public.

Has access to confidential information such as departmental bid/proposal information, contracts, and other information regarding departmental business.

Errors in judgment and administration decisions may cause an adverse impact on employee morale, building and employee safety; cause confusion and delay; legal or financial repercussions; waste of public funds, lower standards of service that could seriously affect the public image of the department or the city; and significantly impact long-term capital planning and infrastructure.

Must drive self to job sites and locations as necessary.

Essential Functions: (The essential functions or duties listed below are intended only as illustration of the various types of work that may be performed and are representative of those that must be met by an employee to successfully perform the essential functions of the job. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.)

City performs electrical service, maintenance and installation work on building and site electrical systems, alarm systems, communication equipment, traffic signals, street lights, fire systems, and other routine maintenance on electrical equipment.
Installs, tests, repairs and maintains electrical wiring systems, fixtures, appliances and equipment, power supply wiring and conduit for newly installed machines and equipment. Troubleshoots, diagnoses and repairs faulty wiring, defective electrical equipment and machinery. This may include, but not limited to, switchgear, transformers, relays, pumps, motors, switches, position sensing devices, light fixtures, fire and security systems, etc. for proper operation. Experience with CAT6 wiring and termination for computer and security systems is part of this work.

Inspects and tests circuits and fixtures to locate broken wires, loose connections, blown fuses, faulty switches, grounds, shorts and other defects. Troubleshoots problems related to the operation of mechanical and electrical equipment, alarm repairs and maintenance needs, and makes recommendations as warranted for the replacement or overhaul of such equipment to the head of Central Maintenance or his designee.

Develops plans, cost estimates, bills of material; plans and schedules work projects. Orders and arranges for timely delivery of material, testing equipment and tools required for all electrical systems repair and maintenance projects; monitors inventory levels of parts, equipment, tools or supplies.

Must learn to navigate the Central Maintenance computerized maintenance work order program in order to complete assigned work orders. This position will be expected to set up work procedures associated with PM schedules in the maintenance work order system. Obtains necessary permits and monitors work being performed to ensure cost effective use of labor and materials. Inspects systems and work in progress and upon completion for satisfactory performance and conformance with plans and specifications and local codes.

Performs other semi-skilled interior and exterior building maintenance and repairs such as painting, floor covering, plumbing, carpentry, mechanical, and other unskilled and semi-skilled trades work and other duties as assigned when electrical work is insufficient to meet the daily or weekly workweek.

Minimum Qualifications: (*Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying.)*

Education and Experience:
High school diploma and valid Massachusetts Journeyman Electricians license required along with a minimum of five years field experience as a reliable full time electrician.

Knowledge, Ability and Skill:

Requires thorough understanding of electrical systems and principals upon which such systems are designed and operate; the ability to use schematics and to understand verbal instructions of a technical nature. Knowledge of the hazards and safety precautions common to electrical maintenance and repair activities; of

the various types of materials, equipment, tools, methods and techniques used in the installation and maintenance of electrical systems.

Demonstrates a full understanding of applicable codes, policies, procedures, and work methods associated with assigned duties. Ability to read, interpret and understand detailed plans, schematics, ladder logic, drawings, specifications and blueprints, operation manuals, and other technical documents. Ability to meet project timetables. Ability to design and prepare cost estimates and bills of material for routine repair and special projects. Ability to coordinate and work with all other building trades.

Thorough working knowledge of departmental functions and operations; of standard office practices and procedures; of use and operation of standard office equipment; ability to operate a personal computer in a windows environment with proficiency in MS Office and G-Suite required; familiarity with database programs and computer hardware and software systems.

Professional level of skill in the operation, maintenance and use of equipment, testers and tools of the trade. Works under the appropriate provision of the electrical code, approved plans and specifications, and standard industry practice.

Must demonstrate neatness and organization in the field when installing new conduit, wiring, and equipment. Accurate panel and device labeling for safety and future troubleshooting is a routine part of this job.

Ability to establish and maintain satisfactory relationships with supervisors, subordinates, coworkers, community representatives, and the general public. Ability to direct subordinates in an efficient and positive manner. Ability to establish short range plans and objectives within scope of policies and goals. Must be punctual and perform all aspects of job responsibilities with honesty and integrity.

This person must be able to work on their own and demonstrate self-motivation and direction with minimal input from supervisor.

May perform other semi-skilled interior and exterior building maintenance and repairs such as painting, floor covering, carpentry, mechanical, and other unskilled and semi-skilled trades work and other duties as assigned if there is insufficient electrical work to complete a workweek or workday.

Physical Requirements:

Physical ability to perform manual work for 8 hour day. Work may involve lifting objects weighing 50-75 lbs and pushing and pulling objects weighing up to 100 lbs; work in cramped areas or awkward positions for prolonged periods of time; exposure to ambient conditions including hot, humid, cold or wet conditions.

Work may require use of staging, ladders or mechanical/hydraulic lifts at various heights. Moderate to strenuous physical effort required to perform manual tasks on-site and possibly under adverse weather conditions. Normal working day may involve walking, standing, sitting, with moderate to frequent body movements such as reaching, bending, twisting, grasping, pulling and pushing materials. Good vision required for detailed work, instrument reading and ability to perform close vision, distance vision, peripheral vision, color vision and the ability to adjust focus. Ability to use computer keyboard and write instructions under standard office conditions; to use specialized power and hand tools and equipment utilized in the trade.

Designing, drafting, calculating and related duties involve concentration of mental and visual attention with manual coordination for sustained periods.

Special Requirements: Must successfully pass CORI/ SORI checks. Must have a valid Class D Driver's license. must have an acceptable driving record and be insurable under city's policy. Must possess a valid Massachusetts Journeyman Electricians license. May be required to respond to or be on-call for emergency situations outside of normal work hours.

(This job description does not constitute an employment agreement between the employer and employee. It is used as a guide for personnel actions and is subject to change by the employer as the needs of the employer and requirements of the job change.)

Approved:

Human Resources Director

11/26/19
Date

Revision History: Initial 6.10, 11/19

Facilities Manager

Mayor