

## MAINTENANCE ELECTRICIAN 2

### CLASS DESCRIPTION

#### General Responsibilities:

This is highly skilled lead and journey-level electrical work in the maintenance, installation and repair of electrical equipment and systems (including heating, ventilation, pumping and control equipment, and air conditioning equipment); and other skilled work in the overall maintenance of designated facilities throughout the City of Madison. The work involves researching, coordinating, designing, and directing the fabrication of electrical components and the evaluation of complex electrical systems and associated work. This may involve leading and overseeing various projects involving skilled trades team members such as carpenters, plumbers, and associated maintenance mechanics under the general supervision of a Facilities Maintenance Supervisor. Work is characterized by the exercise of independent judgment and discretion in laying out work and in directing other building maintenance workers. Work is performed in accordance with general instructions and procedures and reviewed for overall results.

Movement from a Maintenance Electrician 1 to a Maintenance Electrician 2 is not automatic. Rather, a Maintenance Electrician 2 is filled via competition and is based on the needs of the department as well as the qualifications of the candidates.

#### Examples of Duties and Responsibilities:

Perform journey-level installation, inspection, and maintenance work and systems analysis on electrical and other systems within the Parks Division. Develop comprehensive ongoing maintenance schedules and plan for their implementation. Maintain related plans, drawings, and schematics. Lead in the more judgmental and/or discretionary elements of electrical trades work, including needs assessment, research, problem resolution, system design, and associated coordination with contractors, engineers, and architects. Oversee diverse and complex facility maintenance programs which include various integrated systems involving electrical, plumbing, and mechanical sections. Consult with other departments and/or external agencies in the resolution of special equipment and system problems.

Oversee the inspection of electrical work on contracted City projects. Perform quality and conformance inspections of work completed by contractors on new construction and remodeling projects. Consult with design engineers and participate in designing and developing specifications for new electrical facilities and construction projects. Perform general building alterations, modifications, and repairs. Design and construct specialized mechanical equipment and fabricated parts involving welding and metalworking techniques.

Plan for, train, assign, and oversee skilled, semi-skilled and seasonal employees in the maintenance and repair of Parks Division facilities, equipment, and systems. Lead and supervise various project work involving skilled trades team members. Refer performance and/or other employee relations problems to supervisor for resolution.

Develop and maintain an equipment and supply inventory. Maintain and update records. Requisition materials, parts, and supplies for electrical, HVAC, and other related maintenance and repair activities. Write related reports.

Operate a variety of service vehicles and equipment, including backhoe, trencher, fork lifts, front end loaders, bobcat-style skid loaders, dump truck, and related vehicles.

Develop procedures and practices for the installation, operation, and maintenance of various electrical facilities and systems. Install new lighting circuit and fixtures, outlets, switches, relays, circuit breakers, power disconnects, circuit panels, etc. Install new or replace various electrical and electronic control components on various boiler forced air furnaces, ventilating and air conditioning systems. Design, install and maintain electrical control systems and wire systems.

Coordinate and perform of preventative maintenance work on various heating, ventilating, and air conditioning systems, fan motors, valves, compressors, pump appliances, starter motors, communication systems, security systems, air handlers, pneumatic control systems and ventilating equipment. Maintain and service specialized equipment such as heaters, furnaces, ice machines, freezers, varied food service equipment, air compressors, public address and scoreboard systems, etc. Maintain and service specialized lighting systems at athletic fields, buildings, parking facilities, etc.

Perform diverse facility maintenance and repairs such as: minor carpentry, plumbing, painting and welding repairs; the repair of telephone systems, electric generators, power mowers, tractors, other power grounds equipment; and the maintenance and repair of water softeners and heaters, and auxiliary pumps. Perform exterior building maintenance and repair work (e.g., tuck pointing, caulking, black top and cement repair, etc.); and operate snow plowing equipment.

Perform related work as assigned.

## QUALIFICATIONS

### Knowledge, Skills and Abilities:

Thorough knowledge of the principles, techniques, and tools of the electrical trade, including principles, practices and techniques applicable to the maintenance, installation and repair of electrical and electronic systems and equipment, including HVAC and similar equipment. Thorough knowledge of related building construction principles, codes, practices, and nomenclature. Thorough knowledge of related safety precautions and requirements. Thorough knowledge of diverse facility maintenance principles and practices applicable to carpentry, plumbing, painting and welding projects, etc. Thorough knowledge of National Fire Protection Association standards and the National Electrical Code. Ability to inspect for electrical code compliance. Ability to prepare routine reports and keep accurate records. Ability to develop, read, and interpret electrical plans and schematics. Ability to utilize applicable testing equipment in the diagnosis of facility maintenance and repair issues and to take necessary corrective action. Ability to effectively plan, assign and lead the work of employees and crews. Ability to provide diverse facility maintenance consultation. Ability to communicate effectively both orally and in writing. Ability to develop and maintain effective public and internal working relationships. Ability to perform physically demanding work; to work in confined spaces; and to exercise sensory acuity in related diagnostic and repair work. Ability to work in inclement weather. Ability to respond to emergency situations outside of regular work hours. Ability to maintain adequate attendance.

### Training and Experience:

Four years of directly related journey-level electrical experience in building construction, which includes experience in planning and implementing diverse electrical installations; including or supplemented by diverse facility maintenance responsibilities. Such experience would normally be gained after completion of a related apprenticeship or trade school program. Possession of a Master Electrician License may be substituted for two years of experience. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledge, skills and abilities necessary to perform the duties of this position will also be considered.

Necessary Special Qualifications:

Possession of a valid Class B Commercial Driver's License. The successful candidate must have passed the written portion of the relevant Department of Transportation testing process before starting employment. A condition of continued employment is passage of the skills portion of the test and obtaining the required operator's license within a specified timeframe.

Possession and maintenance of a Wisconsin Journeyman Electrician license.

Certification in CPR and first aid or the ability to obtain certification within the probation/trial period. Failure to obtain this certification within the probation/trial period will result in the employee not passing probation/trial period, absent extenuating circumstances.

Physical Requirements:

Employees in this position must be able to lift/carry objects weighing up to 75 pounds and must be capable of lifting heavier objects with another employee. This position requires a high percentage of work outdoors in all types of weather, including tornadoes, ice, wind, thunderstorms, etc. while walking and standing. Employees will be expected to visit and walk through a variety of fieldwork sites (e.g., wooded areas, hilly uneven terrain, wetlands, shorelines, etc.)

<b>Department/Division</b>	<b>Comp. Group</b>	<b>Range</b>
Parks	16	19

Approved:

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 Brad Wirtz  
 Human Resources Director

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 Date