

MAJOR FUNCTION

This is skilled journey level work requiring a significant degree of technical ability to install, calibrate, repair, adjust, inspect and perform preventative maintenance and alteration on water and wastewater equipment and electronic and pneumatic, water well, pump station, spray field and treatment plant instrumentation and control systems. Tasks are performed in accordance with established policies and procedures under the general supervision of the technical supervisor.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES**Essential Duties**

Troubleshoots, repairs, calibrates and performs preventative maintenance on the Distributed Computer Control (DCC) system and all associated equipment. Installs, repairs, and modifies a variety of equipment at the Underground Utilities plants and related facilities. This includes, but is not limited to emergency generators, motor control centers/switchgear, motors, grinders, conveyors, fans, blowers, compressors, pumps, logic controllers, solid state motor starters, variable frequency drives, reduced voltage motor starters, rotary screw presses, rotary drum thickeners, large capacity gas fired rotary drum sludge dryers, gas fired thermal oil heaters, ejectors/scrubbers, electrically actuated valves, transformers, gas fired heat exchangers and various lighting and general electrical circuits. Performs maintenance on DCC system software, graphics and database, to include loop and ladder tuning and testing of treatment plant, water well, pump station and irrigation facility control systems. Maintains accurate and up-to-date instrumentation preventative maintenance schedules and calibration data on instrumentation, control systems and equipment. Maintains and repairs dryer and boiler, fuel, burner and safety management system devices and equipment. Plans, engineers and implements various improvement projects for treatment plant, water well, pump station and irrigation facility control loops and related systems. Assist engineers with systems testing. Troubleshoots, repairs, calibrates and performs preventative maintenance on the Underground Utilities Systems Control and Data Acquisition System (SCADA). Performs preliminary assessment on pumps, fans, blowers, compressors, motors and electrically actuated valves. Perform related duties as required.

Other Important Duties

Obtains quotes as needed for materials and supplies, and interfaces through the Computerized Maintenance Management System (CMMS) to maintain accurate records of purchases and work orders. Assesses problems with fire and security systems, including cameras and assist in their repair. Directs the work of contractors. Performs related duties as required.

DESIRABLE QUALIFICATIONS**Knowledge, Abilities and Skills**

Considerable knowledge of the standard practices, tools and terminology of the electrical trade and national electric codes. Considerable knowledge of electronic, and pneumatic theory, application, methods, standards, tools and materials, as they relate to the repair and maintenance of electronic and pneumatic water well, pump station, irrigation facility and treatment plant instrumentation and control systems. Considerable knowledge of safety precautions and procedures. Considerable knowledge of general parts supply and procurement procedures. Considerable knowledge of specialized tools and test equipment and their use as applied to electric, instrumentation and controls. Ability to interpret technical manuals, schematics and blueprints, and effectively use this information to identify malfunctions, and repair and replace defective parts and subassemblies. Ability to communicate effectively and maintain working relationships conducive to successful job performance. Skill in the maintenance, repair and calibration of electrical, electronic, and pneumatic instruments and controls and other related equipment. Skill in the use of microcomputers and the programs and applications necessary for successful job performance.

Minimum Training and Experience

Possession of a high school diploma or an equivalent recognized certificate and completion of an electrical apprenticeship program or an industrial electrical course and four years of journey level experience as an industrial electrician or electrical & instrumentation technician doing work that includes the installation, calibration, testing and maintenance in any of the following areas: water wells, pump stations, treatment plants, electrical generating plants, industrial manufacturing facilities, electrical or instrumentation and control systems; or an equivalent combination of training and experience.

Necessary Special Requirements

Must possess an electrical journeyman's license issued by the City of Tallahassee at the time of appointment or attain a journeyman's license within one year of appointment, as a condition of continued employment.

Must possess a valid Class B State Commercial Driver's License (CDL).

Established: 06-21-06
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