

Job Class Code: 3280	FLSA Status: Non-Exempt
Pay Code: Annual	EEO Category: 3

GENERAL DESCRIPTION

The purpose of the job classification (class) is to manage the instrumentation program and perform complex, technical work in the repair, maintenance, inspection, installation, and calibration of instrumentation and control systems and equipment related to water production, water distribution, and sanitary sewer pump stations. The job class works within a general guideline of work to be performed; develops work methods and sequences under general supervision.

TYPICAL TASKS

<ul style="list-style-type: none"> • Manage the department's instrumentation and control program including associated database of devices for process controls and water production laboratory equipment. • Troubleshoots, diagnoses, repairs, and conducts preventive maintenance (e.g. cleaning, calibration) on electrical, electronic, and instrumentation systems and equipment to include programmable logic controls (PLC); variable frequency drives (VFD); various level, flow, pressure, and temperature devices; solid state reduced voltage controllers; pneumatic and digital instrumentations; alarm telemetry systems; data loggers; motor control circuits; generator control; and transfer switches. • Designs, fabricates, and installs new instrumentation systems; reads and interprets blueprints, diagrams and schematics to include Programmable Logic Controllers (PLC), ladder logic and proportional-integral (PI) controls. • Provides cost estimates, evaluates resource needs, manages the effective deployment of resources, and prepares and reviews specifications. • Maintains inventory of spare parts for instrumentation and initiates procurement of replacement supplies and equipment as necessary. • Collects data for preventive maintenance system. Prepares files and reports including records of repair and maintenance work completed. • Operates assigned service vehicle, meggers, power analyzers, hand and power tools, permanent and portable generators, and load bank testers; recommends changes to operational functions of equipment, as needed. • May supervise or guide subordinate staff to ensure all equipment meets applicable codes and guidelines. • Performs other duties as assigned.
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GENERAL STANDARDS

Data Involvement	Manages and determines sequence of operations for systems processes or activities based on analysis of data or information; implements and reports on operations and activities.
Interpersonal/People Involvement	Gives information, guidance, or assistance to people to directly facilitate task accomplishments; may give instructions or assignments to helpers or assistants.
Reasoning Requirements	Performs work involving the application of logical principles and thinking to solve practical problems within, or applying to, a unit or division of the organization.
Mathematical Requirements	Uses basic algebra involving variables and formulas, basic geometry involving plane and solid figures, such as circumferences, areas, and volumes, and computes ratios, rates, percents, or other parameters.
Language Requirements	Reads scientific and technical journals, procedure manuals, and/or legal documents; speaks formally to groups of coworkers, contractors, and staff in other organizational agencies and the general public; composes reports, training, and other written materials using proper language, punctuation, and grammar.
Mental Requirements	Performs professional work requiring the application of principles and practices of a wide range of technical methods in resolution of problems; requires continuous, close attention for accurate results or frequent exposure to unusual pressure.

Decisions/Supervisory Control	Guides others, making frequent decisions, affecting the individual, coworkers, and others who depend on the service or product.
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KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge	Must be proficient in using a computer with standard Microsoft Office Suite, PLC Programming Software, Oscilloscope, and Instrumentation Control Systems for pressure and temperature. Must fully understand electronic and electrical systems involving variables and formulas pertaining to direct and alternating current calculations.
Skills	Must exhibit critical thinking by using logic and reasoning to understand, analyze, evaluate and resolve complex data and instrumentation issues and to research information in order to identify the strengths and weaknesses of alternative solutions. Must be able to build interpersonal relationships by developing and maintaining cooperative and professional interactions with representatives from other departments and organizations. Must apply judgment in decision making by evaluating the best method of research and must establish priorities to resolve complex matters giving consideration to relative costs and benefits of potential actions to choose the most appropriate alternative.
Abilities	Must have the ability to read and understand as-built drawings, manuals, documents, and publications. Requires light to medium work that involves walking or standing; exerting force and lifting up to 50 pounds; adeptness and speed in the use of the fingers, hands, or limbs in tasks involving close tolerances; normal visual acuity and field of vision, hearing, speaking, color perception, sense of smell, depth perception, and texture perception.

EDUCATION, EXPERIENCE AND SPECIAL REQUIREMENTS

Vocational/Educational Requirement	Requires any combination of education and experience equivalent to an associate's degree in Electronics, Instrumentation Engineering, or a closely related field.
Experience	In addition to satisfying the vocational/education standards, this class requires a minimum of four years of electronics, electro-mechanical, or instrumentation required. Experience in programming and calibration of water and sewer instrumentation and controls is preferred.
Special Certifications and Licenses	Requires a valid driver's license with a driving record that complies with the City's Driving Standards. A valid Electrical Journeyman's Card is required; a Master Electrician license is preferred.
Special Requirement(s)	Employees may be expected to work hours in excess of their normally scheduled hours in response to short-term department needs and/or City-wide emergencies. Emergency operations support work and work locations may be outside of normal job duties.

AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS

The City of Chesapeake is an Equal Opportunity Employer. ADA requires the City to provide reasonable accommodations to qualified individuals with disabilities. Prospective and current employees are invited to discuss accommodations.

This is a class specification and not an individualized position description. A class specification defines the general character and scope of duties and responsibilities of all positions in a job classification, but it is not intended to describe and does not necessarily list the essential functions for a given position in a classification.