

WWTP Instrumentation & Controls Specialist**GENERAL FUNCTION**

Install, repair and maintain the instrumentation and controls for the following sites: Westside and Eastside Treatment Facilities, 39 sewage pump stations, 15 CSO (combined sewage overflow) sites, 3 remote odor control stations, and 3 flow metering stations. This includes all communications to and from the Westside WWTP for SCADA monitoring and control systems. Must be a self starter with limited supervisory oversight.

REPRESENTATIVE ESSENTIAL DUTIES and RESPONSIBILITIES (Note – this list is intended only to illustrate the various types of work that may be performed. The omission of specific statements does not exclude them from the position.)

Program, maintain and trouble shoot PLC's (programmable logic controllers), PanelView HMI's (human machine interface) for both treatment plants, pump stations, odor control and overflow sites.

Familiar with process control systems for level control, flow control, D.O. systems, chlorine monitoring systems and temperature control systems, with the ability to troubleshoot, repair and calibrate.

Proficient knowledge of motor control systems for single phase 120/240v and 3 phase 240v and 480v systems.

Ability to design and program with Wonderware HMI programs including Intouch 10.1, SCADA alarm callout program, Active Factory trending program and the INSQL historian program, with the ability to update the system as needed for present and future changes.

Ability to design and program VFD (variable frequency drives), VSD (variable speed drives), and Soft Starters including Allen Bradley, Siemens, and others, with the ability to program, troubleshoot, and repair.

Designs, installs, programs and troubleshoots Allen Bradley SCL 505 and Micro and Pico PLC's (programmable logic controllers) and Siemens S7 series and 545 series PLC's.

Designs, installs, programs and troubleshoots Allen Bradley PanelView HMI's (human machine interface), Siemens PanelView HMI's, and communication to various PLC's (programmable logic controllers),

Designs, installs, programs and troubleshoots telemetry systems, including PLC to PLC communication over phone, fiber, and radio, with the ability to install, troubleshoot and calibrate.

Design and install electrical control cabinets for sewage pump stations, treatment plant processes, and CSO sites in accordance with state and national codes and standards. Designs, installs and maintains control circuits for motors, control valves and with PLC control and communications to SCADA systems.

Reviews and corrects consultants' plans and specifications for process control, instrumentation, and electrical systems. Inspects work done by others and instructs others on use of equipment.

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Calibrates and checks instrument loops. Performs instrumentation startups.

Performs administrative tasks, such as preparing specifications, purchasing, specifying and inventory control. Prepares cost estimates for jobs. Creates and maintains documentation, manuals, and records in printed and electronic format.

Other Duties

- **Regular attendance is an essential requirement**
- **Performs related work as assigned and/or required**

KNOWLEDGE, SKILLS and ABILITIES (Entry Requirements)**Knowledge of:**

- Wastewater process control systems.
- Motors, motor starters and motor control systems.
- National Electrical Code (NEC) and Instrumentation
- Electrical theory as applied to the installation and repair of electrical circuits and systems.
- Wonderware HMI Systems.
- Programmable Logic Controllers and human machine interfaces.
- SCADA and telemetry systems.

Ability to:

- Read and interpret blueprints, diagrams and charts.
- Install, maintain, troubleshoot and repair, process control/instrumentation equipment, VFD's and VSD's, telemetry and SCADA systems and other electrical circuitry.
- Communicate clearly complex terms and projects to persons with limited technical knowledge.
- Work with a wide variety of tools and equipment in assembling materials with little or no supervision.

Skill in:

- Personal computer -- Microsoft Excel, Word, Wonderware and specialized programs.
- Electronic test equipment, process calibrators, etc.

QUALIFYING EDUCATION and EXPERIENCE (Minimum Requirements)

Bachelor degree in electronics or related field and five years experience in design, programming, maintenance and repair of instrumentation and control systems such as PLC's, VFD's, HMI software and process calibrators, etc. or any combination of experience and education which provides the applicant with the desired skills, knowledge and abilities to perform the work.

Valid Washington State Drivers License and Commercial Drivers License

Special Requirements

- Requires working standby with a callback on a 24-hour basis.

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- Commercial Drivers license with air brake endorsement.
- Must be certified in CPR and first aid, confined space, and Washington State Flagger's card.
- Certified Crane Operator for small telescoping movable cranes.
- WA State Wastewater Treatment Plant Operator I certification

PHYSICAL REQUIREMENTS

Be able to discern fine detail for equipment repair and to accurately determine colors. Use both power and hand tools. The work often transitions from indoor to outdoors. Due to size, location and various levels within the WWTP and sewage pump stations, the ability to sit, walk, climb stairs and ladders, agility is required. Must be able to lift 50 pounds.

WORKING CONDITIONS

Considerable time in the field with exposure to raw sewage, hazardous chemicals, biological hazards, electrical and mechanical hazards, varied weather conditions and working in confined spaces that surround an industrial facility, with the balance in an office environment. Required to work standby with a call back on a 24-hour basis, and the ability to respond within 30 minutes of the call-out. Physical labor is required for lifting up to 50 pounds.

LEGAL and REGULATORY EMPLOYMENT CONDITIONS

Fair Labor Standards Act: The classification is non-exempt under the laws of Fair Labor Standards Act minimum wage and overtime provisions.

Representation: The classification is included in the bargaining unit pursuant to the Recognition Article of the current labor agreement between the City of Bremerton and the Teamsters Local 589.

Civil Service: The classification is excluded from the City's Civil Service System.

Appointment and Removal Authority: The position is filled by appointment by the Department Head. Removal is by action of the Department Head in conformance with Human Resources Policies.

This classification specification does not constitute an employment agreement between the City and employee. It is subject to change by the City, with the approval of Human Resources, as the needs of the City and requirements change.