

## JOB DESCRIPTION

**Job Title:** SCADA Programmer  
**Reports To:** Water Resources Manager  
**FLSA Status:** Non-Exempt  
**Department:** Water Resources  
**Date:** May 8, 2025

**Salary:** TBD based on experience

### Summary:

Perform or assist in the design, development, and troubleshooting of new Supervisory Control and Data Acquisition (SCADA) systems equipment, and in the maintenance, replacement, and repair of existing control systems and associated hardware and equipment.

**Essential Duties and Responsibilities** include the following. Other duties may be assigned.

- Plan, implement, modify, administer and evaluate Supervisory Control and Data Acquisition (SCADA) software.
- System programming using software associated with SCADA System (i.e., ladder logic, structured text, etc.).
- Prepare specifications and maintain all master SCADA hardware and software.
- Assist technicians with the configuration and troubleshooting of wireless networks, instrumentation, and controls used for water and wastewater management systems.
- Collaborate with outside vendors in the designing of database schema to integrate SCADA systems with other systems database structures.
- Develop and modify HMI/SCADA Systems, including graphics creation, tag database generation, report development, computer setup and configuration, and startup services comprising field setup and checkout, and troubleshooting.
- Install Programmable Logic Controllers (PLCs) and input/output devices.
- Startup, configuration, and testing of new and existing SCADA installations.
- Replace defective or inadequate software packages.
- Perform operational systems' tests and fault diagnostics as required to identify and correct electrical, pneumatic, and electronic, and computer system failures.
- Program PLCs and other input/output devices to control and report process information.
- Work with technicians, electricians, and other staff in troubleshooting communication and integration issues between Programmable Logic Controllers and SCADA.
- Prepare reports and correspondence as required by the position.
- Respond to call-out and on-call duties as necessary.
- Perform other tasks as designated by supervisory personnel.

### Qualifications:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Education/Experience:**

Associate's degree or equivalent from a two-year college or technical school; or four (4) years related experience and/or training; or equivalent combination of education and experience.

**Language Ability:**

Ability to read, analyze, and interpret technical procedures, professional journals, written procedures, and instruction manuals. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

**Math Ability:**

Ability to compute rate, ratio, and percent and to draw and interpret bar graphs. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical solutions. Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to calculate geometrical factors such as proportions, area, circumference, and volume.

**Reasoning Ability:**

Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

**Computer Skills:**

SCADA Software (ladder logic, structured text, etc.), Database Software, Work Order Processing, Word Processing, Excel, E-Mail, Internet Software.

**Other Knowledge, Skills, & Abilities:**

Thorough familiarity with electronic control instrumentation systems, real-time computer applications, integrated control systems, and SCADA/PLC programming and troubleshooting.

**Certificates and Licenses:**

Valid State of Texas Driver License.

**Supervisory Responsibilities:**

This position has no supervisory responsibilities.

**Work Environment:**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to work near moving mechanical parts and risk of electrical shock. The noise level in the work environment is usually moderate.

**Physical Demands:**

The described physical demands are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee regularly uses hands to finger, handle, or feel; reach with hands and arms; and talk or hear. The employee is frequently required to walk, stand, sit and stoop, kneel, crouch, or crawl. The employee is occasionally required to climb or balance and taste or smell. The employee may regularly lift and/or move up to 50 pounds.

Specific vision abilities required by this job include close vision, distance vision, depth perception, and ability to adjust focus.