



Job Description – Traffic System Technician

Reports To: Assistant Public Works Director **FLSA Classification:** Full Time, Non-Exempt
Date Revised: October 2025 **Department:** Public Works

Position Summary

Traffic System Technicians perform semi-skilled technical work in the installation, maintenance and repair of electrical and electronically controlled traffic signal devices and systems; to assist in installing, maintaining and repairing traffic signs and markings, and to perform related duties as required. The Traffic System Tech 1 works according to some procedures but decides how or when to do things; work is reviewed regularly by supervisor.

Position Responsibilities - Essential Job Functions

To ensure the greatest possible protection for employees in the workplace, the City of Anderson requires cooperative efforts of all employees with help in establishing and maintaining a safe and healthful work environment.

The City of Anderson requires that PPE (Personal Protective Equipment) be used by employees whenever workplace hazards are discovered that could damage any part of the body. In addition, the City of Anderson requires all employees to wear PPE, such as but not limited to, safety glasses, face shields, safety shoes, hearing protection (ear plugs/ear muffs), gloves, etc. as required by their job duties. PPE is to be used as a tool to eliminate and/or reduce the hazards employees face in their daily job duties.

The job may risk exposure to bright/dim light, dust and pollen, adverse weather conditions, wetness and humidity, traffic, extreme noise levels, vibration, moving machinery, electrical shock, heights.

The job requires normal visual acuity, depth perception and field of vision, hearing and speaking abilities, color perception.

PPE is not to be used and will not be used as a substitute for safe work practices, machine guards, or other controls designed by equipment manufacturers or other engineering sources. PPE is to be used in conjunction with these controls to increase employee protection.

Traffic System Technician job descriptions are distinguished from Traffic System Tech 1 and Traffic System Tech 2 by training and experience.

Traffic System Tech 1 – works according to some procedures but decides how or when to do things; work is reviewed regularly by supervisor.

Traffic System Tech 2 – performs skilled work and assists in supervising, works within a general outline of work to be performed and develops work methods and sequences under general supervision.

Department Specific Job Functions

The tasks listed below are those that represent most of the time spent working in this job description. Management may assign additional tasks related to the type of work of Traffic System Technicians as necessary.

- Install and maintain electrical and electronic equipment associated with the City traffic signal system.
- Troubleshoot, repair and/or replace traffic signal equipment as needed; diagnose and replace faulty electronic components.

Traffic System Technician

October 2025

This is not a contract. No information in this document will alter the at-will employment relationship.

Job Description – Traffic System Technician

- Connect power to traffic signals.
- Design, fabricate, install, repair and maintain traffic signs and markings.
- Repair and replace high-pressure lighting and ballast for overhead lighting.
- Hang street banners to promote City events; install holiday lighting along streets.
- Perform all duties in compliance with federal, state and local laws and regulations, City policies and procedures, and standards of quality and safety.
- Operate bucket trucks, derrick and other vehicles; use hand and power tools; maintain assigned vehicles and equipment.
- Prepare and maintain detailed work records and reports.
- Receive and respond to inquiries and requests for assistance regarding areas of responsibility.
- Perform general clerical work as required, including but not limited to completing records and forms, copying and filing documents, entering and retrieving computer data, etc.
- Attend meetings, workshops, training, etc., as appropriate to enhance job knowledge and skills.

It is understood that every incidental duty connected with operations detailed in this job description are not always specifically described, and employees, at the discretion of the City, may be required to perform duties not within their job descriptions and as requested as the discretion of management of the City.

Additional Job Functions

Traffic System Tech 2:

- Test and assist in the installation of electrical and electronic equipment associated with the City traffic signal system.
- Program signal controllers.
- Connect power to signal equipment.
- Supervise and assist in the maintenance of all signal-related apparatus; troubleshoot, repair and/or replace traffic signal equipment as needed; diagnose and replace faulty electronic components.
- Determine supplies, parts, tools and equipment needed to accomplish assigned tasks; obtain quotes for parts and supplies as necessary; maintain inventory records.
- Provide training and leadership of co-workers as assigned.
- Repair and replace high-pressure lighting and ballast for overhead lighting.

Essential Skills and Experience

- Requires high school diploma, GED or specialized vocational training.
- Must possess a valid state CDL driver's license and provide a safe driving record.
- IMSA Level I certification required; work zone certification required; may be required to obtain technical certifications as deemed necessary by supervisor.
- Requires one to two years of related work experience.
- Requires computing or performing arithmetic operations using data or information.
- Requires speaking or signaling to people to convey or exchange information of a general nature.
- Requires leading, operating or repairing complex machinery or equipment that requires extended training and experience, such as traffic control devices, electrical / electronic equipment or the application of custom or commercial software or systems; may involve installation and testing. Involves operations of limited scope.
- Requires performing semi-skilled work involving set procedures and rules but with frequent problems.
- Requires using basic algebra involving variables and formulas and/or basic geometry involving plane and solid figures, circumferences, areas and volumes, and/or computing discounts and interest rates.

Traffic System Technician

October 2025

This is not a contract. No information in this document will alter the at-will employment relationship.

Job Description – Traffic System Technician

- Requires reading technical instructions, procedures, manuals and charts to solve practical problems; composing routine reports and specialized reports, forms and business letters with proper format; speaking compound sentences using normal grammar and word form.
- Requires doing clerical, manual or technical tasks requiring a wide range of procedures and requiring intensive understanding of a restricted field or complete familiarity with the functions of a unit or small division of an operating agency; requires normal attention with short periods of concentration for accurate results or occasional exposure to unusual pressure.

Traffic System Tech 2:

- Must possess IMSA Level II certification, work zone, electronics and fiber optic certifications; may be required to obtain additional technical certifications as deemed necessary by supervisor.
- Requires over two years and up to and including four years.
- Requires coordinating or determining time, place or sequence of operations or activities based on analysis of data or information and may implement and report on operations and activities.
- Requires giving information, guidance or assistance to people to directly facilitate task accomplishment; may give directions or assignments to helpers or assistants.
- Requires leading, operating or repairing complex machinery or equipment that requires extended training and experience, such as traffic control devices, electrical / electronic equipment or the application of custom or commercial software or systems; may involve installation and testing. Involves operations of limited scope.
- Requires performing skilled work involving rules/systems with almost constant problem-solving.
- Requires using mathematics involving the practical application of fractions, percentages, ratios and proportions; or measurements, logarithmic or geometric construction. May use algebraic solutions of equations and inequalities; descriptive statistics; deductive geometry, plane and solid, and rectangular coordinates; mathematical classifications or schemes.
- Requires doing specialized technical or entry-level professional work requiring general understanding of operating policies and procedures and their application to problems not previously encountered; application of specialized technical or professional principles and practices or the use of a wide range of administrative methods in the solution of problems.
- Demonstrate:
 - Excellent communication (verbal and written) and interpersonal skills with ability to develop strong professional working relationships across all levels of the organization.
 - Ability to speak compound sentences using normal grammar and word form.
 - Ability to plan effectively, set priorities, make sound decisions, and to manage/complete multi-faceted projects in conjunction with normal activity.
 - Superior organizational skills, strong quality orientation, and high attention to detail.
 - Computer proficiency and technical aptitude with the ability to use Microsoft Word, Excel, and Outlook and custom applications.
 - Strong ethical standards, reliability, professionalism, positive attitude, and ability to remain calm in stressful situations.



Job Description – Traffic System Technician

Beneficial Skills and Experience

- Basic understanding of traffic signal equipment, roadway lighting, and control systems.
- Familiarity with electrical and electronic principles related to traffic signals or similar systems.
- Ability to read and interpret simple wiring diagrams, schematics, and work orders.
- Experience or coursework in electrical, electronics, or transportation technology (vocational or technical training preferred).
- Basic knowledge of traffic safety rules, MUTCD standards, SCDOT signal specifications, and general roadway signage.
- Skill in using hand tools, power tools, and electrical testing instruments safely.
- Ability to assist with installation, maintenance, and repair of traffic signal equipment and field wiring.
- Willingness to learn traffic management software and basic computer/networking skills.
- Good problem-solving ability and attention to detail when troubleshooting equipment.
- Ability to work outdoors in all weather conditions and perform physical tasks such as lifting, climbing, and standing for extended periods.
- Strong teamwork, communication, and customer service skills to work effectively with other technicians and departments.
- Ability to obtain IMSA Traffic Signal Technician Level I certification within a specified time after hire (preferred or required depending on policy).

ADA Compliance

The City of Anderson 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.

ADA Guidelines

Physical Demands

Stand	<input checked="" type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
Walk	<input checked="" type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
Sit	<input checked="" type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
Handling	<input checked="" type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
Reach Outward	<input checked="" type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
Reach Above Shoulder	<input checked="" type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
Climb	<input checked="" type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
Crawl	<input type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input checked="" type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
Squat or Kneel	<input type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input checked="" type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
Bend	<input type="checkbox"/> Constantly	<input checked="" type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A

Lifting Requirements

10 pounds or less	<input checked="" type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A
11 to 20 pounds	<input checked="" type="checkbox"/> Constantly	<input type="checkbox"/> Frequently	<input type="checkbox"/> Occasionally	<input type="checkbox"/> N/A

