

## Traffic Signal Technician I & II

This recruitment is for the vacancies of Traffic Signal Technician I and II-Streets. Depending on your level of experience and needs of the departments, if successful, the Hiring Manager will place you in one of the available positions.

This posting shows the description for Traffic Signal Technician I- Streets. For detailed information about Technician II, view the job descriptions with the links below.

[Class Specifications | Traffic Signal Technician II | Class Spec Details \(governmentjobs.com\)](#)

Actively supports and upholds the City's stated mission and values. Incumbents are responsible for performing a wide variety of tasks, ranging from unskilled manual labor to journeyman level in the maintenance, repair and installation of electrical and electronic traffic control systems and equipment. This position works independently and exercises skilled judgment in the performance of assigned duties. Work includes heavy physical exertion, is performed primarily outside, includes exposure to hazardous conditions and must be completed during inclement weather.

### **ADMINISTRATIVE DUTIES:**

- Supervisory: This job does not have formal supervisory responsibilities.
- Budgetary: This job does not have budgetary responsibilities but carries out day-to-day activities within approved budget.
- Strategic Planning: This job does not have strategic planning responsibilities, but carries out day-to-day activities in order to reach the stated goals and objectives.
- Policies/Procedures: This job carries out day-to-day activities in accordance with established policies and procedures.
- Compliance: This job carries out day-to-day activities in accordance with Federal, State, and Local laws, rules, and regulations as well as City policies and procedures.
- Council Communications: This job carries out day-to-day activities in accordance with Council's adopted priorities and direction.
- Reporting: This job does not have duties related to reporting to Federal/State/Local agencies.

### **Examples of the Work Performed**

- Provides excellent customer service to both internal and external customers by demonstrating continuous effort to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly with others.
- Performs periodic maintenance inspections, repairs and makes modifications to electrical/electronic traffic control equipment and systems.
- Performs construction tasks of the electrical, carpentry, plumbing and concrete trades during repair, construction and modification of traffic signal and other systems.

- Diagnoses equipment malfunctions and restores traffic control systems and equipment to normal operation.
- Performs work using manuals, electronic schematics, wiring diagrams, construction plans, and computer software and applications.
- Operates heavy equipment, hand and power tools.
- Operates electrical, electronic and specialized testing equipment.
- Prepares written and computerized documentation of work performed.
- Provides location services for underground electrical facilities.
- Reviews plans and specifications for compliance with standards.
- May inspect the work of contractors and others to verify compliance with standards.
- Assists in estimating and requisitioning materials, supplies, and equipment needed for maintenance, repair and project activities.
- Assists in the preparation, layout, and planning of projects, as assigned.
- Provides emergency on-call response to signal malfunctions, failures and knockdowns.
- Participates in snow operations, street lighting, signs and markings and other Streets Section activities as assigned.
- Other duties as assigned.

## **Qualifications**

### **MINIMUM REQUIREMENTS**

- High school diploma or G.E.D.
- A minimum of one year of experience in electrical or electronic maintenance and repair.
- Must possess, or obtain within six months of employment, a valid Arizona Class B Commercial Driver's License.
- Or any combination of education, experience, and training equivalent to the above Minimum Requirements.

### **DESIRED EXPERIENCE AND TRAINING**

- Two years of progressively responsible experience in the installation, maintenance, programming, and operation of microprocessor-based electrical and electronic control equipment, especially, NEMA TSII and TSI traffic signal controllers, emergency vehicle and railroad preemption devices, and telemetry and communications equipment.
- Current IMSA Level II Traffic Signal Certification. (Tech I)
- Current IMSA Level III Traffic Signal Certification. (Tech II)
- Current IMSA Roadway Lighting Certifications.
- Advanced and demonstrated knowledge of personal computer software operations related to traffic systems.
- Associate degree in electronics.
- Arizona Class A Commercial Driver's License.

## **OTHER REQUIREMENTS**

- Must possess, or obtain upon employment, a valid Arizona driver's license.
- Regular attendance is an essential function of this job to ensure continuity.
- Incumbents of this position are subject to pre-employment drug screening, and post-employment random, post-accident, and reasonable suspicion drug/alcohol screening related to CDL licensing regulations.
- Must have the ability to be contacted and to respond in a timely manner and be willing and able to perform emergency work on an evening, weekend, and 12-hour shift basis.
- All Emergency Service Employees shall maintain their principal residence within the state boundaries of Arizona. All Emergency Service Employees, except those holding a position in Fire, will arrive at the assigned or emergency work location within one (1) hour from notification to report to duty.
- Employees may be designated a take home City vehicle.
- Employees who are designated to take home a City vehicle per the Vehicle Take Home Administrative Policy must live within the prescribed area. The defined as a 12-mile radius from City Hall or 35 miles eastbound, westbound, and southbound from the I-17 and I-40 exchanges, or 10 miles from City Hall along Highway 180 North with a five-mile-wide corridor (2 ½ miles on each side).

### **Supplemental Information**

#### **REQUIRED KNOWLEDGE, SKILLS AND ABILITIES (ILLUSTRATIVE ONLY)**

- Knowledge of the hazards and applicable safety rules and precautions involved in equipment operation and general maintenance and construction.
- Knowledge of the hazards and safety rules and precautions of the electrical and electronic trades.
- Knowledge of electrical and electronic devices used in modern traffic control systems.
- Knowledge of tools, materials, methods, and practices of electrical and electronic repair.
- Knowledge of electrical codes, traffic signal standards and traffic control methods.
- Skilled in electrical and electronic construction and diagnostic repair work.
- Language Skills: Ability to understand and follow verbal or written instructions. Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from staff, customers, and the general public.
- Mathematical Skills: Ability to work with algebraic formulas and trigonometric formulas. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

- Reasoning Ability: Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.
- Ability to diagnose problems with electrical/electronic circuits and equipment.
- Ability to proactively notice, recognize and make repairs as necessary within assigned areas.
- Ability to perform physical labor tasks of the electrical, carpentry, plumbing and concrete trades.
- Ability to make skillful, controlled manipulations of small objects, such as wiring a control cabinet.
- Ability to work at heights up to 45 feet in an aerial platform.
- Ability to lift arms above shoulder level, such as working with overhead wiring.
- Ability to climb a ladder to reach objects.
- Ability to bend or stoop repeatedly or continually over time.
- Ability to perform very heavy work; Exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.
- Ability to work outdoors at high altitude in a variety of adverse conditions, including heavy nearby traffic and inclement weather with exposure to the elements, including heat, rain, wind, cold, and snow.
- Ability to perceive the full range of the color spectrum, such as working with color-coded electronic components or multi-conductor cables.
- Ability to enter and manipulate data or information in a computer, signal controller or other programmable electronic equipment.
- Ability to read, interpret and work from graphic instructions, such a manuals, schematics, diagrams and blueprints.
- Ability to work independently, as well as, cooperatively with others, as required.
- Ability to establish and maintain effective working relationships with other staff, supervisor, and the general public.
- Ability to plan, organize, and direct the work to an assigned crew, as needed.
- Ability to work safely without presenting a direct threat to self, other workers, or the public, including exercising safety precautions and conforming to safety rules and regulations.

## **PHYSICAL REQUIREMENTS AND WORKING CONDITIONS**

- While performing the duties of this job, the employee is regularly required to Stand, Walk, Sit, use hands to finger/handle/feel, Reach with hands and arms, Climb or balance, Stoop, kneel, crouch, or crawl, Talk or hear and Taste or smell.
- The employee must occasionally lift and/or move up to 100 pound and frequently lift 50 pounds.

- Vision requirements for this position include Close vision, Distance vision (clear vision at 20 feet or more), Color vision (ability to identify and distinguish colors), Peripheral vision (ability to see up, down, left, and right while eyes fixed on a given point), Depth perception (three-dimensional vision, ability to judge distances and spatial relationships), Ability to adjust focus (ability to adjust the eye to bring an object into sharp focus),
- Working conditions include regularly Working near moving mechanical parts, Work in high, precarious places, Outdoor weather conditions and Risk of electrical shock, and occasionally working in Wet or humid conditions (non-weather), Fumes or airborne particles, Extreme cold (non-weather), Extreme heat (non-weather) and Vibration.
- The noise level in the work environment is usually loud noise (examples: metal can manufacturing department, large earth-moving equipment).