



# TRAFFIC SIGNAL TECHNICIAN I

## JOB DESCRIPTION

<b>Department:</b> Public Works	<b>Division:</b> Operations
<b>Work Location:</b> Urbana Public Works	<b>Percent Time:</b> 100%
<b>Job Type:</b> Civil Service; <del>Union</del>	<b>FLSA Status:</b> Non-Exempt
<b>Reports To:</b> Electrical Supervisor	<b>Union:</b> <del>Union (AFSCME)</del>

## JOB SUMMARY

The Traffic Signal Technician I is responsible for maintaining and repairing traffic signals at designated City of Urbana intersections; maintaining and repairing pedestrian crossing signals including speed radar display devices; locating and repairing faults on electrical cables; assisting in the design and inspection of traffic signal and street lighting installation; maintaining Departmental electronic devices; and performing locates of City maintained utilities per J.U.L.I.E. requests. Performs snow removal duties as assigned.

Distinguishing Characteristics: This job class performs the essential functions of the position while receiving day-to day direction and receiving job specific training under supervision. Positions at this level are not expected to function with the same amount of knowledge or skills as positions allocated to the Traffic Signal Technician II level and exercise less independent discretion and judgment in matters related to work procedures and methods. Under supervision and through training and experience, employees in this classification are assigned increasingly responsible duties.

## ESSENTIAL FUNCTIONS

1. Replaces complete traffic signals and street lights, overload devices, worn-out parts, visors, lenses, LED signals, and signal heads as needed or scheduled; adjusts signal heads as needed.
2. Inspects, replaces, and programs traffic signals and pedestrian signal controllers; inspects emergency vehicle preemption systems on a semi-monthly basis to ascertain proper operation.
3. Notifies Arbor Division of tree limbs that obscure the view of traffic signals.
4. Turns on and repairs cabinet heaters in fall and turns off in spring. Maintains ventilation in summer.
5. Act as "standby" electrician to rResponds to emergency calls pertaining to malfunctioning or damaged traffic signals~~ng to malfunctioning traffic signals or damage to signals, including such as from storms or accidents; enters damage reports. Evaluates damage and conduct emergency repair of traffic control devices due to accidents, malfunctions, and weather. , streetlights, or related components, including such as from storm or accidents: enters damage~~

reports. Evaluates damage and conduct emergency repair of traffic control, street lighting, and other electrical devices.

6. Replaces signal equipment as scheduled.

7. Maintains parts inventory list; recommends and participates in the purchase of all traffic related parts and equipment.

8. Assists in traffic studies as assigned.

~~8.9.~~Assists the City Electricians in the maintenance of electrical infrastructure as assigned.

~~9.10.~~ Recommends modifications for improving signal equipment to reduce maintenance costs and improve safety and efficiency of traffic flow.

~~10.11.~~ Assists in inspection and design of traffic and street lighting installation for conformance with standard specifications and special provisions.

~~11.12.~~ Purchases miscellaneous supplies and parts as authorized.

~~12. Maintains telemetry equipment for City at Vine Street lift station.~~

13. Maintains records of signal equipment and submits State reimbursement forms.

14. ~~Prepares written documentation~~Documents or notifies for the Electrical Supervisor and the Deputy Director for Operations of recent problems, changes, and condition of signal equipment annually.

15. Completes work orders and updates asset information utilizing work order/asset management software.

16. Locates all City-owned utilities for contractors, utilities, and City crews using cable locator and maps.

~~16. Locates traffic signal underground utilities in the field as needed.~~

17. Performs preventative maintenance and repairs of ESDA sirens.

18. Removes snow from streets and parking lots using snow plow, snow blower and shovel; spreads road salt on streets;

19. Responds to citizen and customer inquiries or concerns;

20. Performs general housekeeping in work area.

21. Maintains regular and reliable attendance.

22. Demonstrate superior seamless customer service, integrity, and a commitment to innovation, efficiency, and fiscally responsible activity.

23. Contributes to a work environment that encourages knowledge of, respect for, and development of skills to engage with those of other cultures or backgrounds.

24. Contributes to the overall success of the Public Works Department by performing other essential duties and responsibilities as assigned.

~~18. Assists with snow and ice removal utilizing various size dump trucks, construction equipment and hand tools.~~

~~19. Performs other related duties as assigned.~~

JOB SPECIFICATIONS

**JOB REQUIREMENTS:**

**Education & Experience**

*Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

- Knowledge typically acquired through an Associate's degree in Electronics or Electrical Engineering plus two (2) years of experience in electronics OR five (5) years as a journey-level electrician.

**Knowledge of:**

- Standard practices, materials, tools and equipment used in electronic electrical trade work.
- Occupational hazards and safety precautions necessary in electrical circuits and wiring systems and ability to apply knowledge to work problems.
- Standard specifications for traffic signals and street lighting.

**Skills**

- Computer skills sufficient to perform the essential functions of the job. This entails knowledge of, or ability to learn, various computer software applications including word processing, spreadsheets and traffic signal software.
- Communication skills using tact, courtesy and cooperation in dealings with others where the primary purpose is the exchange of information

**Ability to**

- Detect defects in traffic signals, school crossing signals, and street lighting.
- Safely operate an aerial truck and other City vehicles.
- Safely lift and maneuver up to seventy-five (75) pounds.
- Interact with others in a tactful and effective manner.
- Adapt to performing under stress when confronted with emergencies and frequent deadlines.
- Read a variety of records, reports, policy and procedure manuals, codes, etc., ranging from moderately complex to highly technical terminology. Requires the ability to prepare forms and reports using prescribed formats and adhere to rules of grammar, spelling, diction and punctuation.

**LICENSES, CERTIFICATIONS AND MEMBERSHIPS REQUIRED**

- Must possess or obtain within six (6) months of employment a valid State of Illinois Class B Commercial Driver's License (CDL) with Air Brake endorsement and have a safe driving record.
- ~~Must possess, or obtain within sixty (60) days of employment, a Class B Commercial Driver's License with an air brake endorsement and maintain a safe driving record.~~ Requires

International Municipal Signal Association (IMSA) Work Zone Traffic Control Safety Certification, or approved equivalent, -within 1 years of employment.

- , IMSA Traffic Signal Level I -Certification. or approved equivalent, within two (2) years -of employment
- and-IMSA Traffic Signal Level II Certification, or approved equivalent, within four (4)-four (4) years of employment.
- Licenses, Certifications and Memberships Preferred
- City of Urbana Attainment of a journey-level electrical license is preferred.

### **Job Dimensions**

#### **Special Requirements**

- Employees in this classification are designated as Emergency/Essential and may be required to work overtime with little or no advance notice. Employees in this classification are subject to standby duty for after-hours emergencies on a rotating basis.
- The incumbent has considerable ongoing responsibility for public safety, as characterized by regularly scheduled duties including: 1) responding to emergencies that directly affect the safety of the public, and 2) operating equipment or machines for which the consequences of operator error include significant property damage and/or threaten serious injury to self or others.
- Responsible for ensuring the safety of motorists, bicyclists and pedestrians, and other City employees while performing repairs on traffic signal equipment.
- Responsible for assessing emergency situations; correcting or controlling situations.

#### **Contacts**

- The purpose of interactions occurring during the normal scope of work involve planning or coordinating work efforts with other City employees, various state and local governmental agencies, local contractors, members of the public, or others who are working toward common goals and where relationships are generally cooperative. Contacts are moderately structured and routine and require courtesy, discretion, and sound judgement.

#### **Supervision received**

- This position works under supervision of the Electrical Supervisor, however, generally works independently under the oversight and guidance of the Traffic Signal Technician II and/or Electrician II.

±

#### **Level and complexity of supervision exercised**

- This position is not responsible for supervising any staff positions, but may assist in providing guidance and oversight to seasonal and part-time personnel.

### **Security Level**

- Level CDL: Must demonstrate the ability to perform safety-sensitive functions in accordance with federal requirements.
- Level PHYS: Must demonstrate the ability to perform essential functions that require physical agility as noted in the job description, with or without reasonable accommodations.

### **Physical Demands and Working Conditions**

The work environment involves potential high risk and/or stress due to exposure to dangerous situations, hazardous materials, and/or unusual environmental stress from working in high-risk situations and/or high noise levels, poor ventilation, and/or extremes of heat or cold. Protective gear and/or special equipment is normally required.

Work requires considerable and strenuous physical exertion such as climbing ladders, frequent lifting of objects over 50 pounds, crawling or crouching in restricted areas. Occasional lifting of heavy objects weighing 75 pounds or more is required. The work environment and physical demands may include: making precise arm-hand positioning movements (i.e., operates an electric hand drill); lifting arms above shoulder level to work in ceiling areas, on light fixtures, or on traffic signals; working in small, cramped areas such as ceiling crawl spaces, equipment enclosures, closets, etc. Climbing ladders or steps to reach work areas; working at heights greater than ten feet; remaining in a standing position for extended periods of time; working outside year-round in a variety of weather conditions with exposure to the outdoor elements; moving heavy objects (50 pounds or more) long distances (more than 20 feet); traveling across rough, uneven, or rocky surfaces; lifting heavy objects (motors, conduit, and ladders) up to 75 lbs.; using power tools and hand tools; climbing stairways, ladders, and work on elevated structures (some electrical equipment is located on top of elevated structures); working in a stationary position for considerable periods of time (i.e. wiring motors, kneeling, standing, and sitting); extensive reading and close vision work (reading blueprint and diagrams); exposure to heat, cold, dampness, dust, pollen, odors, fumes, etc.; exposure to hazards of electrical shock, falls, noise, equipment operation, etc.; and may require working extended hours (electricians are assigned stand-by shifts outside their normal work shift and may be called for emergencies).

### **Vision/Hearing**

Able to see in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; visually inspect work in progress. Able to distinguish between the full range of colors in the color spectrum to work with electrical wires and/or traffic signal lights. Able to hear in the normal audio range with or without correction.

*The physical demands and work environment characteristics described herein 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.*

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

**Class Specification History**

General revision: November 29, 2023

General revision: August 2018

For HR/Finance Use

<u>Job Class Code</u>	<u>Pay Grade</u>
<u>EEO Category</u>	<u>LVL</u>

SPECIAL REQUIREMENTS

- ~~As a safety sensitive position, the incumbent is subject to drug and alcohol testing per department and City policy.~~
- ~~Position requires incumbent to be subject to call-out for emergency situations; must be accessible for contact via a designated cell phone for response 24/7.~~

**Supplemental Information**

Supervision received

- ~~Work typically occurs under general supervision, where the incumbent is responsible for developing procedures for performance of a variety of duties or performs complex duties within established policy guidelines.~~

Level and complexity of supervision exercised

- ~~This position is not responsible for supervising any staff positions.~~

Physical Demands and Working Conditions

- ~~Involves routine and frequent exposure to electrical shocks, heights, and outdoor fieldwork year-round, including in adverse weather conditions. Working conditions involve work~~

~~with live electrical wiring, near automobile fumes and traffic, and working from aerial platforms and ladders. Some work will occur in an office environment.~~

- ~~• Vision: Ability to see in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; visually inspect work in progress.~~
- ~~• Hearing: Ability to hear in the normal audio range with or without correction. Must be able to hear and understand communications through telephone and radio.~~
- ~~• Motor Coordination: Requires the ability to coordinate hands and eyes in manipulating small items and components of electronic devices and equipment.~~
- ~~• Manual Dexterity: Requires the ability to handle a variety of items, equipment, control knobs, buttons, switches, catches, etc. Must have high levels of eye/hand/foot coordination.~~
- ~~• Color Discrimination: Requires the ability to differentiate colors and shades of color.~~

### **BREAK**

### **Job Dimensions**

- ~~• Responsible for ensuring the safety of motorists, bicyclists and pedestrians, and other City employees while performing repairs on traffic signal equipment.~~
- ~~• Regular contact with the public, various state and local agencies, other City of Urbana departments, local contractors, and vendors.~~

*The work environment characteristics described herein 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.*

*The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.*

*The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.*

### **Class Specification History**

- ~~• General revision: August 2018~~

*For HR/Finance Use*

<b>Title Code</b>	<b>Pay Grade</b>
<b>EEO Category</b>	