POSITION DESCRIPTION

Position Title: Traffic Signal Technician

Department: Public Works

Division: Street
Retirement: KPERS
FLSA: Non-Exempt
Effective Date: October 21, 2021

GENERAL PURPOSE

This position will be completely responsible for the operation, diagnostic trouble shooting, preventative maintenance and basic installation of all city traffic signal equipment, city street lighting systems and street/traffic signs.

SUPERVISION RECEIVED

Works under the immediate supervision of the Operations Superintendent or Street Foreman and may receive instructions from Director and Deputy Director of Public Works.

SUPERVISION EXERCISED

Generally none, however may on occasion supervise one to two laborers if necessary.

ESSENTIAL DUTIES AND RESPONSIBILITIES

(Duties listed below do not include all tasks which may be performed.)

- Responsible for diagnostic maintenance of installed electronic traffic signal equipment up to the level of signal equipment exchange.
- Responsible for installations, tuning and diagnosing traffic signal detection systems and initiating immediate corrective repairs as necessary.
- Responsible for the documented setting of signal timing and the removal and replacement of electronic traffic signal controllers to include associated devices.
- Performs documented, scheduled preventive maintenance on all installed traffic signal equipment (e.g., cleaning of lens, replacement of lamps and visors, aligning signal heads, checking and spot painting poles and mast arm brackets, and cleaning contacts to ensure reliable operation of all signalized intersections.)
- Maintains, orders and accounts for an adequate inventory of traffic signal repair parts and devices to ensure normal emergency situations can be corrected in a timely manner with minimum safety threat to the public.
- Maintains and accounts for all issued diagnostic equipment, tools and automotive equipment.
- Reviews plans and specifications for city projects as directed.
- Monitors operations of contractors during traffic signal construction projects as directed.
- Follows industry accepted standards for quality control, implements procedures to produce consistent high quality work and ensures that work quality and productivity are maximized.
- Assists with making, installing, maintaining and inventory of all traffic signs.
- Complies with the safety and loss prevention procedures for the division; reports unsafe or
 dangerous practices or equipment and security issues to the supervisor. Maintains and monitors
 a safety culture in accordance with City policy. This culture will minimize accidents, injuries
 and property damage.
- Controls traffic at work sites in accordance with established work zone control safety standards.

- Documents all work performed on the division work order system and prepares work and supply reports as directed.
- Maintains or improves professional status by membership in local/national traffic related organizations, attendance of seminars, short courses and training classes as directed.
- Maintains and troubleshoots City Street lighting systems and ensures all lights function as
 designed. Takes corrective action required to repair and or replace non-functioning street lights
 and maintains documented preventive maintenance records for the city streets lighting
 inventory.
- May perform other duties as assigned.

PERIPHERAL DUTIES

- May serve as a member on various committees.
- Assists the Street Division with snow removal or other tasks when needed.

MINIMUM QUALIFICATIONS

Education, Experience and License/Certification:

- (A) Be at least 18 years old at time of hire;
- (B) Graduation from high school or GED equivalent;
- (C) Requires additional technical training or experience in electronics;
- (D) Level I IMSA certification for traffic signals within eighteen months of hire;
- (E) Must have working knowledge with Manual of Uniformed Traffic Control Device;
- (F) Must possess a current, valid driver's license at time of application (and maintain for duration of employment) and meet insurability standards under fleet insurance policy; and

Necessary Knowledge, Skills, and Abilities:

- (A) Skill in operation of the listed tools and equipment.
- (B) Skill in operating personal computer and standard office software for email, reporting and record keeping; Skill with software related to traffic signal systems, sign making and related activities.
- (C) Ability to work safely; Ability to communicate effectively both verbally and in writing; Ability to establish and maintain effective working relationships with employees, other departments and the public; Ability to understand and carry out written and oral instructions.
- (D) Ability to prepare and analyze reports; ability to maintain records; ability to carry out assigned projects to their completion; ability to multi-task.
- (E) Ability to read, write, comprehend and speak fluent English.
- (F) Ability and skill in reading and comprehending technical manuals.

SPECIAL REQUIREMENTS

- Subject to immediate call outs during snow, traffic signal or other emergencies.
- Must comply with the City's established on-call response timeframes (40 minutes) within 90 days of hire date.
- Must be able to complete Level I IMSA certification within eighteen months of hire date in order to maintain employment. Affidavit of agreement must be executed upon accepting the position.

DESIRABLE QUALIFICATIONS

- Have or obtain Class B Commercial Driver's License (CDL) and all the proper endorsements to operate equipment or vehicles in division fleet.
- Six months or more experience with microprocessor electronic traffic signal system

- controller equipment.
- Proficient in reading and comprehending technical manuals.
- Familiar with Flexi 8.6 Sign Software, Siemens Traffic Signal Software, Opticoms, Marc NX Traffic Signal Software, Wavetronix Radar Detection, Iteris Camera Detection and Eagle Epac 300 traffic controllers to facilitate general work of sign making and signal maintenance.
- Experience with sign making and installation.
- Familiar with Kansas One-Call.
- Level II (or higher) IMSA certification for traffic signals
- Supervisory experience.

TOOLS AND EQUIPMENT

Motorized vehicle and equipment, including back-hoe, dump truck, pickup truck, utility truck, tamper, plate compactor, saws, pumps, compressors, sanders, generators, ditch witch, chainsaw, common hand and power tools, shovels, wrenches, detection devices, mobile radio, phone, personal computer and associated software programs, calculator, and a variety of electrical equipment.

PHYSICAL DEMANDS

The physical demands described here 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.

This position functions at the Service Center with a significant amount of time spent in the field in all types of weather conditions; travel to other city facilities is expected, as is the ability to travel throughout the city to visit job sites under various stages of construction or to collect traffic data. Field duties involve installing poles, repairing signals and equipment, operating equipment, using the bucket truck and trouble-shooting electronic systems. Ability to use telephone and radio; and to hear warning alarms, and audible signals from testing or diagnostic equipment is required.

Employee can expect extensive periods of time sitting, talking, listening, using the telephone and using the computer. Regular use of hands and fingers to manipulate objects and controls is necessary. Employee can expect to regularly lift and carry 30 lb. loads. Occasional lifting and carrying of loads up to 100 lb. can be expected.

Employee is expected to be able to use close vision and focus to use normal written correspondence from both inside and outside the organization. Good hand eye coordination and manual dexterity must be demonstrated by the ability to operate computers, testing equipment and other specialized traffic engineering equipment.

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.

The work environment ranges from 105F to -20F, and very high to very low humidity in outdoor activity. Employee can expect to get wet from rain, snow and other weather. Work normally occurs during an 8-hour workday and 5-day workweek. Snow removal and other high intensity activities may require 12-hour shifts on an 8-day schedule. Emergency response work may take place outside of normal working hours.

The noise level in the work environment can range up to 100db on the job site. On occasion the noise comes from operating equipment, back-up alarms and other warning devises (horns, etc.).

Employee will be exposed to chemicals (mosquito spray, weed spray, etc.), volatile components of asphalt, typical cleaning and maintenance chemicals in the garage area, as well as normal cleaning agents for electrical systems and general office applications. Employee will be exposed to and working with electrical systems and is often near high-voltage lines.

May be exposed to extremely hot substances used in the Street Department's daily work (asphalt, crack sealing material).

SELECTION GUIDELINES

Formal application and review of qualifications, education and experiences; testing which may include: written and/or practical examination, oral interview; final selection, background investigation, reference check and post-offer medical examination to include a drug screen; and other job related tests may be required.

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 position does not constitute an employment agreement between the City and employee/individual and is subject to change as the needs of the City and requirements of the job change.

APPROVING AUTHORITY:

Department Head

Date

10/25/2021

AR Director

Date

ESSENTIAL JOB FUNCTIONS WORKSHEET

Employees in this position are required to meet the following requirements:

Place an X in the appropriate column

POSITION TITLE: TRAFFIC SIGNAL TECHNICIAN

| | | L | | L | | | H | - | L | | | H | L | | H | |
|---|---|----|----|----------|--|-----|---------------|---|----|---------|--|---|----|---|-------------------|---|
| | × | | | ω | 3. Mathematical ability | | × | | | 6. | 6. Field of Vision | | | | • | 27. Other 27. |
| _ | X | | | 2. | Written language ability | | × | | - | 5 | 5. Color vision | | | × | • | 26. Touching 26. |
| | × | | | : | Reading ability | - ` | × | | | 4 | 4. Accommodation | | × | | • | 25. Hearing 25. |
| | | _ | 3. | | | • • | × | | ů. | ω | 3. Depth perception | | × | | • | 24. Simultaneous Movement 24. |
| | | _ | _ | | MENTAL DEMANDS | | × | - | 2. | 2 | 2. Far vision | _ | | | • | Twisting (upper body) |
| | | | | | | _ | × | | : | _ | 1. Near vision | | | × | • | 22. Squatting 22. |
| | | | | | Temperature variations | _ | | | | | | | X | | • | 21. Walking 21. |
| | | × | | <u>:</u> | 11. Sensitivity to extreme 1 | _ | | | | | VISUAL DEMANDS | | | × | * | Twisting (wrist/arm)20. |
| | | × | | 10. | | | - | _ | | | | | | × | • | 19. Turning 19. |
| _ | | X, | _ | 9. | pment | | - | | | | | | × | | • | 18. Pinching 18. |
| | | × | | | 8. Working in high places | | | | | | £ | | × | | _ | 17. Grasping 17. |
| _ | | X | | 7. | 7. Climbing ladders | | | ^ | | 5. | 5. Very heavy work (100+ lbs) | | | × | - | 16. Object Manipulation 16. |
| _ | | × | _ | 6. | Operation of heavy equipment | | | × | 4 | 4 | 4. Heavy work (50-100 lbs) | | | | $\frac{\cdot}{X}$ | 15. Smelling 15. |
| _ | | × | _ | 5 | 5. Wet work - feet | | <i>></i> \ | Y | • | ω | 3. Medium work (20-50 lbs) | | × | | _ | 14. Driving 14. |
| | | × | | 4. | 4. Wet work - hands | | ^ | × | • | 2. | Light work (10-20 lbs) | | <> | | • | Talking/Speaking 13. |
| | | | | | dust, fumes, gasses | | × | | • | 1. | 1. Semi sedentary (up to 10 lbs) | | <> | | | 12. Fingering 12. |
| | | × | _ | ω. | Allergic irritants | | | | | | | | | | - | 11. Handling 11. |
| | | | | | dust, fumes, gasses | | _ | | | ıa | CARRYING -PUSH/PULL WHILE MOVING | | | × | ÷ | 10. Reaching 10. |
| | | X | | 2. | 2. Skin irritants | | | - | | | | | | × | | 9. Crawling 9. |
| | | | _ | | dust, fumes, gases | | | | | | | | | × | | 8. Crouching 8. |
| _ | | × | İ | : | 1. Respiratory irritants- | | _ | | | | | | | × | • | 7. Kneeling 7. |
| | | | | | HAZARDOUS CONDITIONS | | - | × | 5 | ر. ن | 5. Over heavy work (100+ lbs) | | | × | • | 6. Stooping 6. |
| | | | _ | | | | | × | _ | 4 | 4. Heavy Work (50-100 lbs) | | | × | • | 5. Balancing 5. |
| | | | _ | | | | ^ | × | ٠. | u | 3. Medium work (20-50 lbs) | | | × | • | 4. Climbing 4. |
| | | | × | 4 | 4. Constant/very loud noise | - \ | ¥ | | :" | 2 | 2. Light work (10-20 lbs) | | × | | <u>.</u> | 3. Sitting 3. |
| _ | | × | _ | · | 3. Occasional loud noise | _ | × | _ | 1. | _ | 1. Semi-sedentary (up to 10 lbs) | | × | | • | Standing/ Moving about2. |
| | | × | _ | 2. | Constant low level noise | | | _ | | | | | | × | • | Standing/Stationary |
| | × | | _ | : | Normal noise levels | | | | | sac/ * | LIFTING-PUSH/PULL WHILE STANDING | | | 0 | | |
| | | | | | HEARING DEMANDS | | | | | | PHYSICAL STRENGTH: | | | | | PHYSICAL FACTORS |
| D | C | ш | ≥ | _ | D-Daily (All or most of the time) | D | ВС | A | _ | ~ | D-Daily (All or most of the time) | D | a | ш | A | D-Daily (All or most of the time) |
| | | | _ | | C-Frequently (Sometimes each day) | | - | _ | _ | _ | C-Frequently (Sometimes each day) | | | | | C-Frequently (Sometimes each day) |
| | | | _ | | B-Periodic (Not every day) | _ | | | _ | | B-Periodic (Not every day) | | | | | B-Periodic (Not every day) |
| | | | | | A-Rarely or Never | | | | | | A-Rarely or Never | | | | _ | A-Rarely or Never |
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