

# **SIGNAL ELECTRICIAN**

**IV-6330**

**Date:** October 2009

**Department/Division:** Public Works/Field Services

**FLSA:** Non-Exempt

**Reports to:** Labor Supervisor

## **PURPOSE OF POSITION**

Under general direction of the Labor Supervisor, performs skilled technical work in the installation, maintenance and repair of a variety of traffic signal control equipment and signal systems.

## **ESSENTIAL DUTIES OF POSITION (with or without accommodation)**

*The following duties are normal for this position. These are not to be construed as exclusive or all inclusive. Other duties may be assigned.*

- Installs, repairs and maintains simple and complex mechanical and electronic traffic signal equipment and systems including fixed time, solid state, microprocessor, and relate devices.
- Responds to emergency calls regarding accidents or weather damaged signals, diagnoses problems and repairs.
- Works on city street lights at the direction of the supervisor.
- Replaces burned out lights, lamps and bulbs.
- Installs repairs and replaces traffic signs.
- Diagnoses vehicle pavement loop failures and corrects problem.
- Uses diagnostic modules to identify failures and malfunctions.
- Maintains accurate records of work completed including timing sheets, service reports, preventative maintenance sheets, and maps.
- Locates and marks underground cables and conduit runs prior to excavation work.
- Assists in maintaining proper inventories of supplies and parts for signal system repairs.
- Maintains and updates database system of the computerized signal system and ensure proper back up of files.
- Performs scheduled routine preventative maintenance on equipment and systems.
- Maintains regular and punctual attendance and working hours and emergency calls.
- Establishes and maintains effective working relationships with officials, other agencies, fellow employees, and the general public.
- Regularly lifts and/or up to 25 pounds and occasionally lifts up to 50 pounds.
- Expected to temporarily perform duties outside of normal classification in the event of a declared emergency. In the event that an employee is excused from work other than being sick, they will be required to report to work in a state of declared emergency.

## **MINIMUM TRAINING AND EXPERIENCE REQUIRED TO PERFORM ESSENTIAL FUNCTIONS**

Graduation from standard high school, GED, trade or technical school preferably including course work in electronics or electrical repair and considerable experience, at least two years, working in electrical or electronic maintenance, construction or repair work. Any combination of experience and training which provides the required knowledge, skill and abilities.

## **MINIMUM ABILITIES REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS**

### **Abilities**

The employee frequently is required to use hands and fingers to handle and feel; reach with hands and arms; and smell. Ability to quickly move hands, hands together with arms, or two hands to grasp, manipulate, or assemble objects, ability to exert muscle force repeatedly or continuously over time; this involves

muscular endurance and resistance to muscle fatigue, ability to use abdominal and lower back muscles to support part of the body repeatedly or continuously over time without 'giving out' or fatiguing, ability to quickly and repeatedly bend, stretch, twist, or reach out with your body, arms, and/or legs.

Ability to speak clearly so others can understand you, ability to see details at close range (within a few feet of the observer), ability to see details at a distance, ability to identify and understand the speech of another person, ability to listen to and understand information and ideas presented through spoken words and sentences.

**Job Knowledge**

Complete working knowledge of the methods, practices, tools and equipment used in traffic signal and system maintenance and repair; and of electrical construction and maintenance; and of the applicable local and national electrical codes; and of the occupational hazards and safety precautions of the trade. Ability to troubleshoot, analyze, locate and efficiently correct malfunctioning equipment; ability to operate bucket trucks, vehicles and other equipment; ability to understand and follow written instructions, drawings, schematics, and blue prints; ability to efficiently use diagnostic devices to identify problems.

**Language Skills and Interpersonal Communication**

Requires effective communication skills and the ability to provide assistance to employees and citizens. Requires the ability to speak clearly, distinctly and effectively with fellow employees and the general public; read in English and compare similarities and differences between words and series of numbers; apply common sense understanding to the work process, procedures, programs and services; and to provide and follow verbal and written instructions. Requires the ability to work as a member of a team in order to accomplish tasks; the ability to establish and maintain effective working relationships with other employees and the general public; Establish and maintain effective working relationships with fellow employees, city officials and regulatory personnel.

**Work Environment**

While performing the duties of this job, the employee is regularly exposed to outside weather conditions and risk of electrical shock. The employee is frequently exposed to high, precarious places and fumes or airborne particles. The employee is occasionally exposed to moving mechanical parts, toxic or caustic chemicals and vibration. The noise level in the work environment is usually moderate.

**Special Requirements**

Requires Traffic Signal Technician Level I, I.M.S.A. certification and a valid Commercial Driver's License with special endorsements as required, issued by the State of Iowa.

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The City of Sioux City is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourages employees and prospective employees to discuss needed accommodations with the appropriate City representatives.