



## TRAFFIC SIGNAL TECHNICIAN 3

**Department: Planning and Public Works**

**Job Class: 945800**

**Pay Range: Maintenance/Trade 40**

**FLSA: Non-Exempt**

**Represented: Yes**

Classification descriptions are intended to present a descriptive list of the range of duties performed by employees in this class. Classification descriptions are not intended to reflect all duties performed.

**GENERAL FUNCTION:** An employee in this class is responsible for supervising and working with a crew of skilled and semi-skilled workers in the construction, installation, maintenance, repair, and operation of County traffic signal and street lighting systems.

**SERIES CONCEPT:** The Traffic Signal Technician 3 is the highest level in the job series. This classification is distinguished from the other Traffic Signal Technicians by the supervisory duties.

### **ESSENTIAL FUNCTIONS:**

- Oversee signal section programs, as requested, consistent with applicable state, County and federal standards. Implement and utilize systems to improve efficiency and track programs.
- Assist in monitoring and providing input into the section budget; assist in tracking project costs and estimating needs for annual budget.
- Order maintenance items such as equipment and parts; monitor state and county bids related to the signal section.
- Schedule, coordinate and inspect activities of crews in maintaining and installing traffic signals, caution lights, luminaries, testing equipment and related electric or electronic apparatus.
- Observe work in progress and after completion; ensures compliance with maintenance and quality standards and County codes.
- Assist in determining complexity of jobs and assigning personnel accordingly; assign trouble and emergency calls to crews.
- Train, or arrange training, for personnel.
- Assist in completing reviews and evaluations of employee job performance.
- Provide monthly and annual status reports, orally or in writing, and other reports as requested. Provide input on projected section goals and activities.
- Program, monitor, modify and repair the master signal control computer system as requested.
- Interpret layouts, wiring diagrams, electrical job assignments, and procedures; operate equipment; test and measure electrical circuits; work to electrical codes and road standards.
- Install, operate, maintain, and repair traffic signal and road illumination systems comprised of detector units, control equipment, overhead and underground wiring systems, concrete bases, wood, aluminum, and steel structures, back guys, signal heads and lamps, and light sources and fiber optics networks.
- Install, operate, maintain, and repair electrical control systems such as electrically-powered motor controls for ferry ramps, electrically-powered barricades, electrically-powered delineation systems, and interconnected changeable message signs, when requested.
- Splice, pull, solder, hang, and terminate cables.

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**ESSENTIAL FUNCTIONS (continued)**

- Operate lift equipment and Class III equipment to perform installation, maintenance, and repair of road lighting, traffic signals, power systems, or other electrical inventory.
- Complete reports and keeps records related to duties performed; may enter information into computerized maintenance management system and/or paper files.
- Locate and mark conduit prior to the installation of other utilities.
- Build foundations for signal cabinets; dig foundations, make forms, and pour concrete. Bend, cut and bury conduit as needed.

**OTHER JOB FUNCTIONS:**

- Perform other related duties as assigned.

**SUPERVISION EXERCISED AND RECEIVED:** This classification supervises lower level Traffic Signal Technicians. This position works under the supervision of the Traffic Operations Supervisor, who monitors work through discussion, reports, and results obtained to ensure compliance with the overall section goals and responsibilities. Assignments are received in the form of oral instructions or work orders and are carried out with considerable independence.

**WORK ENVIRONMENT:** The work environment characteristics described herein are representative of those an employee encounters while performing the essential functions. Work is performed in the office and in the field in situations which may present hazards from weather and traffic. Work may be performed on 24-hour standby.

**PHYSICAL REQUIREMENTS:** The physical demands described herein are representative of those that must be met by an employee to successfully perform the essential functions of the position. Finger dexterity in order to use and operate hand and power tools, electronic tools and equipment; use of eye sight in order to read and interpret drawings, sketches, plans, and operational manuals; lift traffic signal equipment weighing 50 pounds; work above ground for extended periods of time; work near high and low voltage electricity; work in all types of weather conditions including in heavy traffic areas; and drive to various assigned work sites.

**KNOWLEDGE, SKILLS AND ABILITIES**

**Knowledge of:**

- Principles of electrical theory as applied to circuits and wiring systems.
- The principle and application of electronics theory as related to traffic signal installation and repair.
- Occupational hazards and safety precautions of the electrical trade and working in and around traffic.
- Methods, materials, and techniques commonly used in construction, maintenance, operation, and repair of traffic signal and street lighting systems.
- The principles of effective supervision.

**Skill in:**

- Use and operation of a personal computer and related programs.
- Use and operation of a variety of hand and power tools and equipment.

**KNOWLEDGE, SKILLS AND ABILITIES (continued)**

**Ability to:**

- Operate and repair highly technical electromechanical and solid state control devices.
- Program and operate signal related computer systems.
- Effectively assign, lead, monitor and evaluate technical electrical and electronic work.
- Read and interpret complex engineering plans, schematics, and wiring diagrams.
- Interpret work orders, and to develop changes to accommodate field conditions.
- Complete neat and accurate records.
- Monitor a budget and track project and operational costs.
- Plan and implement long-range maintenance, repair, modification and inspection programs.
- Communicate effectively orally and in writing.
- Develop and maintain effective working relationships with other employees and the general public.
- Work outdoors for extended periods of time under unfavorable weather conditions.
- Bend, stoop, and work at heights.
- Work effectively as a member of a team.
- Work on 24-hour call standby as determined by the County.
- Work independently with minimal supervision in the field.
- Physically perform the essential job functions, including the ability to lift up to 50 pounds.
- Meet the traveling requirements of the position.
- Willingness to obtain the appropriate certificate, license, or registration as required by the position.

**MINIMUM RECRUITING REQUIREMENTS TO APPLY:** Four years of increasingly responsible experience related to the duties of the position, including two years as a lead worker or supervisor.

**SPECIAL REQUIREMENTS AND/OR QUALIFICATIONS:** Washington State certification as an electrician is highly desirable. Possession of, or ability to obtain at time of appointment, a Washington State Driver's License. In accordance with the IBEW Local 483 Collective Bargaining Agreement, Article 5, Section 5.5. **Pierce County residency is required within six months of the date of employment and must be maintained throughout the employment as a Traffic Signal Technician unless an exception is approved in advance of any change. Each request for exception shall be evaluated on individual merit and response time and no reasonable request shall be denied. Residency requirement is due to required participation in the 24 hour on-call duty program.** Satisfactory physical condition as evidenced by a County-approved physical examination may be required. Ability to successfully complete all required background investigations.