

INTELLIGENT TRANSPORTATION SYSTEMS (ITS) OPERATIONS FOREMAN

JOB DESCRIPTION

Classification Responsibilities: Under general direction, an Intelligent Transportation Systems (ITS) Operations Foreman supervises technicians who install, maintain, and repair traffic signals and related components; performs related work as required.

Distinguishing Features: The ITS Operations Foreman is distinguished from the ITS Technician II class by the performance of full supervisory responsibility and greater technical knowledge. The incumbent determines equipment needs and orders materials and supplies, and has project management and contract administration responsibility. The incumbent researches and composes specifications for ITS equipment and hardware and participates in preparing budget preparation. The ITS Operations Foreman reports to the ITS Operations Supervisor. Work is subject to stand-by and call-out during off-duty hours. This class is FLSA nonexempt.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Graduation from high school or GED. Any combination of training, education, or experience equivalent to extensive (5+ years) traffic signal maintenance experience, including a minimum of 6 months of lead or supervisory experience; **OR** an Associate in Applied Science Degree in Electronics Engineering Technology (or educational equivalent) with considerable (3 - 5 years) experience in traffic signal maintenance, including a minimum of 6 months of lead or supervisory experience.

Special Requirements. Must possess a valid Class D Arizona Driver's License by hire date. Must possess an International Municipal Signal Association (IMSA) Level II Traffic Signal Technician Certification (Electronic or Electrical), IMSA Traffic Signal Inspection Certification, a current IMSA Work Zone Temporary Traffic Control Technician Certification, or a current American Traffic Safety Services Association (ATSSA) Traffic Control Technician Certification. Must live within a twenty-mile radius of the intersection of Main Street and Greenfield Road within one year after date of employment.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

Preferred/Desirable Qualifications. Experience in maintaining microprocessor-based instruments, broad knowledge of traffic signal operations, pre-empt devices, and communications equipment. National Electrical Manufacturers Association (NEMA) and Advanced Traffic Control (ATC) controllers. Graduation from an accredited college or university with an Associate's Degree in Electronics/Electrical Technology. IMSA Traffic Signal Senior Field Technician Level III and Traffic Signal Design/Engineering Technician Level II Certification is highly desirable.

ESSENTIAL FUNCTIONS

Communications: Communicates with the general public, other City employees, vendors, and contractors in order to supervise subordinates, coordinate and schedule activities for construction, and operation and maintenance of traffic signals and components. Instructs and trains subordinates in a classroom setting regarding operation and maintenance of tools, equipment, and instruments.

Manual/Physical: Reviews the work products of others to ensure compliance with standard operating procedures, federal, state, and City regulations. Inspects, monitors, and evaluates work-related information and equipment to determine compliance with prescribed operating and safety standards, regulations, or guidelines. Operates a City vehicle requiring a standard Class D Arizona Driver's License to attend meetings and to oversee projects and work in progress out in the field. Operates a variety of standard office equipment to prepare report forms. Enters data or information into a personal computer in order to maintain inventory and operations. Prepares and or updates maps, schedules, graphs, or similar charts to maintain logs and reports on objectives. Sorts, files, and distributes incoming mail, products, and other materials used in traffic signal section. Perceives the full-range of the color spectrum in order to maintain proper continuity of wiring. Detects traffic sounds when working near moving traffic, backup warning devices when working around moving equipment, sirens, and calls for help. Performs physical inventories of traffic signal equipment and hardware. Meets scheduling and attendance requirements.

Mental: Plans, organizes, and/or directs the activities of the traffic signal section in the construction, preventive maintenance, and operations of traffic signals. Supervises and evaluates the work of subordinate personnel in the installation, maintenance, and repair of complex electronics. Prioritizes own work and assigns work to other personnel. Coordinates work activities and other tasks with other City departments, other cities, and agencies. Assists with signal section policies and short- and long-term objectives. Conducts research and analyzes electrical and mechanical data to revise specifications and descriptions for tools, equipment, components, and instruments used to update the Mesa Standard Details Manual. Performs mathematical calculations, statistical computations, financial and cost analysis, and related activities necessary to efficiently and economically operate traffic signals. Comprehends and makes inferences from written material such as operation and maintenance manuals and product catalogs to make operating and purchasing decisions. Understands and interprets blueprints, schematic drawings, layouts, and other visual aids to carry out construction, operation, and maintenance of traffic signals and associated electronic and mechanical equipment and instruments. Estimates labor and material costs from blueprints and other work plans. Learns job-related material through on-the-job training regarding traffic signal equipment.

Knowledge and Abilities:

Knowledge of:

the Manual on Uniform Traffic Control Devices (MUTCD), National Electrical Codes (NEC) and the Institute of Transportation Engineers (ITE) Standards for signal equipment;

the possible defects and faults in electrical wiring and signal control equipment and of effective corrective measures;

the tools, equipment, and general practices of construction;

the hazards and precautionary methods associated with the electric trade;
the principles and practices involved in the installation, maintenance, and repair of traffic signals; and
conduct site review work in progress and review the work with the ITS Technicians or with the
employees of private contractors.

Ability to:

supervise the ITS Technician I, II, engaged in the testing, diagnosis, and repair of electronic controllers,
monitors, remote control units, and other equipment;
coordinate work activities with other divisions and sections;
work with the ITS Operations Supervisor in the preparation and monitoring of the budget;
review inventory systems data to keep track of major equipment components and their operating life
history;
recommend equipment and personnel needed;
revise design standards for the phasing, color coding, and wiring of City traffic signals;
revise specifications and descriptions for tools, equipment, components, and instruments used by
subordinate staff to update the Mesa Standards Details Manual;
determine when a crew can be assigned to a project by considering project priority, blue stake status,
projected start and completion dates, and crew availability;
provide training and instruction to crews on work methods, safety, policies and procedures, and related
requirements;
plan and schedule work projects and the personnel, equipment, and material needed;
monitor inventory levels and recommend the ordering of materials and equipment to meet anticipated
needs;
interpret electrical plans, code requirements, electronic schematics, and diagrams for the installation and
maintenance of traffic signal systems;
develop working procedures for trained technical personnel;
maintain complete and accurate records and prepare reports; and
establish and maintain effective work relationships with management, subordinates, private contractors,
City officials, and the general public.

The duties listed above are intended only as general illustrations of the various types of work that may be
performed. Specific statements of duties not included does not exclude them from the position if the
work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by
the City as the needs of the City and requirements of the job change.

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EEO-Tech

JOB FCTN-TEC

INCREMENTS 63-200

PAY GRADE: 50

IND-5506

SWORN-No