

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Caltrans Electrical Supervisor S-12	08-681 Electrical Crew East (EFIS Unit# 2370)	
WORKING TITLE	POSITION NUMBER	EFFECTIVE DATE
Caltrans Electrical Supervisor	908-680-6925-XXX	

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

GENERAL STATEMENT:

Under the supervision of a Caltrans Electrical Area Superintendent, the Caltrans Electrical Supervisor is responsible for the supervision of an electrical crew in the installation, maintenance, and repair of the most complex electrical and electronically controlled devices on facilities and State right of way. Assigns work, evaluates performance, promotes and enforces safety rules; repairs, maintains, and reviews different reports; operates highway maintenance tools, equipment and vehicles. The incumbent will be required to work temporary and/or intermittent varied work shifts and required to respond to emergency situations and calls. May work with other cost centers. A class 'C' driver's license is required. A class 'A' or 'B' license with endorsements and current medical certificate is desirable. Computer and communications skills are also desirable. Emergency response is required outside of employee's normal work hours. Duties include, but are not limited to:

TYPICAL DUTIES:

Percentage		Job Description
40%	E	Assigns, directs and supervises the installation, maintenance and repair of a wide variety of electrical and electronic equipment, including traffic signals (TS), ramp meters (RM), flashers, changeable message signs (CMS), closed circuit television (CCTV), vehicle detection systems (VDS), pumping plants, highway lighting systems, highway advisory radio (HAR), toll bridges, telemetry, Fiberoptics, Internet Protoca (IP) networks, and other electrical equipment associated with State facilities such as alarm systems, generators, heating and air conditioning systems, electrical panels and wiring. Selects and procures electrical materials and specialized equipment. Supervises the upkeep of crew, storage and shop spaces. Insures proper use and care of equipment such as vehicles, tools, and test equipment.
20%	E	Performs the most complex technical electrical and electronic work. Insures mandated checks are performed such as Traffic Signal yearly conflict monitor checks, and 90/120 day preventive maintenance scheduled visits on electrical installations are conducted.
20%	E	Inspects the installation, maintenance, and repair of the highway electrical inventory, as per Maintenance Manual requirements. Inspects ongoing and completed work for compliance of safety and maintenance practices. Trains and instructs subordinates and evaluates performance.
10%	E	Makes estimates of labor, times, materials, and equipment for repair costs. Maintains records, and prepares reports, monthly expenditures, time keeping, personnel records, and performs daily administrative tasks.
5%	E	Operates light trucks, vans, and automotive vehicles. May drive heavy trucks if properly licensed. Incumbent shall follow prescribed methods of equipment as instructed by Management Equipment Training Academy (META) and their supervisor. Shall use pre-op, and post-op checklists for reporting vehicle problems, and make minor repairs on equipment as instructed by META. May operate automatic, or manual transmissions.
5%	E	Performs preventive maintenance tasks such as painting, cleaning graffiti, routine testing, pour/finish concrete equipment bases. Pull wires thru conduit/poles, repair conduits, poles and wiring, re-lamp traffic signals, illuminated signs, or luminaires. Install, maintain, and remove traffic control devices such as cones, signs, barriers, etc. as necessary for safety.

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.

MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others.

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

Supervises day to day operations of approximately 5 electricians in the preventive or corrective installation, maintenance and repair of State Electrical installations such as TS, RM, CMS, CCTV, etc.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of: Theory of electricity and electronics, basic terminology, principles, methods, materials, tools, and equipment used in the installation, maintenance, and repair of electrical and electronic equipment, including solid-state circuits, electronic test equipment, including Digital Multi-meter (DMM), signal generator, megger, oscilloscope, Time Domain Reflectometer (TDR), tracer, Optical time-domain reflectometer (OTDR), optical source/power meter, etc. The incumbent must understand safety precautions while working with electricity as described in the National Electrical Code, Electrical Orders of the Division of Industrial Safety and Cal/OSHA safety and health regulations. Must understand and practice effective supervision technics, labor relations, safety and health objectives, regulations and practices, and a supervisor's role in safety, health, equal opportunity policies and the processes available to meet program objectives. Must possess knowledge of Statewide Maintenance functions and mission goals, values, organization, and procedures of the Department of Transportation.

Abilities & Analytical: Ability to install, construct, test, maintain, and repair a wide variety of electrical and electronic devices, including TS, RM, CMS, CCTV, etc. and the ability to train others to perform these tasks. Computer, and Communications (Telco, Fiber, IP) skills are highly desirable. Must possess strong verbal and written communication skills as required for successful job performance. Well organized and able to gather statistical data for analysis that may be used for personnel and equipment budgeting and planning. Must prepare and maintain accurate and complete reports and records. Need to interpret plans, schematics, lists; estimate repair costs, make rough sketches, list and procure materials and equipment, establish and maintain effective cooperative relations with those contacted in the workplace under a banner of mutual dignity and respect. Establish a safe work environment, make daily reports. Recognize work needs, available resources and plan/inspect the work of crew members. Analyze management information and requests, system information, and effectively contribute to the Department's Safety, health, and equal opportunity objectives. Must be able to effectively analyze various work situations and make sound decisions.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Poor judgment could result in danger and possible injury or loss of life for the travelling public or Caltrans employees, ineffective production methods, and substandard quality and quantity of work. Negligent administrative skills could result in tort liability to the State. Errors in judgment could also result in civil and/or criminal liability to the employee.

PUBLIC AND INTERNAL CONTACTS

The incumbent may be asked to work with other Maintenance, Traffic Operations, Design, Construction/Permits branches, and all levels of Caltrans management. May also be required to work with California Highway Patrol representatives, or local agencies such as city and/or county representatives. Internal contacts are made by telephone, radio, and/or in person. Contact with utility companies, distributors, manufacturers, and rail road representatives will be made by telephone, e-mail, or in person. Contact with the public is on a regular basis.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Physical: The incumbent will be required to do heavy manual labor including moving/placing heavy objects by lifting, pulling, pushing and carrying, as well as power grasping, squatting, stooping, kneeling, bending, twisting, reaching, climbing, walking on uneven/unstable ground; working in confined spaces, and standing or sitting for prolonged periods. May be required to work 55' or above the pavement, water, or in the midst of traffic. May be required to sit in/on and drive or operate Maintenance vehicles. The incumbent will be required to wear ear plugs for loud noises, wear respirators, and appropriate safety gear at all times. The incumbent must be able to hear and see, with or without corrective assistance, at a satisfactory level to ensure his own safety and that of others. Must have visual and color acuity adequate to perform the essential functions of the job. The position is a drug sensitive class. The incumbent will be required to pass a pre-employment drug test and subject to reasonable suspicion testing during appointment. If incumbent possesses a commercial driver's license, he or she will be required to take random drug tests throughout appointment.

Mental & Emotional: Must be able to keep up with current technological changes in the fields of electricity and electronics.

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

Must have the ability to develop and maintain cooperative working relationships; respond appropriately to difficult situations; recognize emotionally charged issues or problems, and cope with and respond to emergency situations such as traffic/weather conditions and other natural disasters. Must be able to focus on precise work beyond the distractions of traffic, be emotionally stable, alert, and aware at all times. Reason logically, draw valid conclusions, makes appropriate recommendations, and adopt an effective course of action. Need to determine amount of materials and length of time to accomplish a job. This position is responsible for working cooperatively with team members and other supervisors to identify innovations that may increase productivity, reduce costs, and improve quality of work, as well as Safety. This position must adhere to high customer service standards, and provide quality service to both internal and external customers.

WORK ENVIRONMENT

The incumbent will be based at a Maintenance Station in a climate controlled environment under artificial lights, but much of the duties and time will be spent outdoors, installing, maintaining, and repairing electrical systems and/or performing manual labor. Weather conditions vary from a very cold, windy, and wet winter climate to a very hot and dry summer climate. May be exposed to dirt, dust, fumes, hot materials, chemicals, loud noises, inclement weather, steep uneven and/or unstable terrain, fast moving traffic, and/or extreme temperatures. May be required to stand or sit for long periods of time. May be exposed/put in stressful situations. Will be required to wear long pants and appropriate footwear in good condition, and must wear provided personal protective safety equipment including, but not limited to: shirts, vests, hard hats, safety glasses, gloves, face shields, respirators, ear plugs, rain gear, flame retardant clothing and other safety devices deemed necessary. The incumbent will be required to travel extensively, throughout an assigned area in the District, or may be required to travel and work outside in other areas in the District. The incumbent may be required to work nights, weekends, holidays, alternate work schedules, irregular shifts, and required to respond to emergency situations and calls.

I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

EMPLOYEE (Print)

EMPLOYEE (Signature)

DATE

I have discussed the duties with, and provided a copy of this duty statement to the employee named above.

SUPERVISOR (Print)

SUPERVISOR (Signature)

DATE