

POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

CLASSIFICATION TITLE Transportation Engineer (Elect)	OFFICE/BRANCH/SECTION D4/Construction/Construction Services	
WORKING TITLE Construction Electrical Specialist	POSITION NUMBER 904-501-3609-XXX	REVISION DATE

As a valued member of the Caltrans leadership team, you make it possible for the Department to provide a safe and reliable transportation network that serves all people and respects the environment.

GENERAL STATEMENT:

In the Office of Construction Services and under the technical direction of a Senior Transportation Electrical engineer, serves as an Construction Electrical Specialist and may, as circumstances require, be assigned as a Resident Engineer for small Electrical Systems Construction projects. The Construction Electrical Specialist provides electrical technical assistance to Construction Resident Engineers who are the State's Representative on one or more construction contracts.

CORE COMPETENCIES:

As a Transportation Engineer (Elect), the incumbent is expected to become proficient in the following competencies as described below in order to successfully perform the essential functions of the job, while adhering to and promoting the Department's Mission, Vision, Values, Strategic Imperatives and Goals. Effective development of the identified Core Competencies fosters the advancement of the following Leadership Competencies: Change Commitment, Risk Appetite, Self-Development/Growth, Conflict Management, Relationship Building, Organizational Awareness, Communication, Strategic Perspective, and Results Driven.

- **Learning on the Fly:** Learns quickly, is open to change, experiments, and is flexible. (Safety First - Integrity)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Cultivate Excellence - Integrity)
- **Ethics and Integrity:** Demonstrated concern to be perceived as responsible, reliable, and trustworthy. Respects the confidentiality of information or concern shared by others. Honest and forthright. Conforms to accepted standards of conduct. (Cultivate Excellence - Integrity)
- **Problem-solving and Decision-making :** Identifies problems and uses logical analysis to find information, understand causes, and evaluate and select or recommend best possible courses of action. (Strengthen Stewardship and Drive Efficiency - Engagement)
- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Cultivate Excellence - Equity)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Advance Equity and Livability in all Communities - Integrity)
- **Communication:** Expresses oneself clearly in all forms of communication. Gives feedback and is receptive to feedback received. Knows that listening is essential. Keeps others in the Division and other functional units informed as appropriate. (Advance Equity and Livability in all Communities - Engagement)
- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Strengthen Stewardship and Drive Efficiency - Equity)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Advance Equity and Livability in all Communities - Engagement)

TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M) ¹	Job Description
50% E	Monitors and inspects the progress of electrical work during installation, modification and/or removal of traffic signals, Traffic Management Systems (TMS), highway lighting, and other electrical control systems. Is responsible on a daily basis for resolving conflicts between plans and specifications and actual site conditions. Recommends electrical engineering changes in the design of the plans and specifications, which are then referred to the Design Project Engineer for approval. Maintains daily records of contract activities.

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25%	E	Ensures that all work is done in accordance with contract plans and specifications; provides technical support to the Resident Engineers on the acceptance of electrical materials and installation.
10%	E	Ensures that all materials incorporated into the work are acceptable and of good quality and comply with contract requirements.
5%	E	Keeps the Senior Transportation Engineer and the Resident Engineer informed of the project electric system work.
5%	E	Ensures that the work is carried out in a manner that best avoids safety hazards to workers and public.
5%	M	Develops quantity calculations for work performed progress and final payment for work done. Attend training as deemed mandatory or necessary, which may require travel and overnight stay. Incumbent may perform other duties with the scope of this office as required.

¹ESSENTIAL 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

The position does not have supervisory responsibilities. May act as a lead worker over other engineering staff.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

The Construction Electrical Specialist must be experienced in highway electrical construction methods and procedures; must possess the ability to communicate information and instructions; must be able to gain the respect of contractors; must be willing to accept a high degree of responsibility; be able to respond quickly to emergencies; and must be decisive. The position also requires strong writing and oral language skills.

This position requires analytical ability. The Construction Electrical Specialist analyzes the contractor's methods and procedures to ensure that the work will meet contract requirements. Analyzes plans, specifications, and site conditions to determine if changes are necessary to improve the finished product. In the highly important area of safety, the Construction Electrical Specialist must study work methods and traffic conditions closely both before and during the work to assure safety. He or she analyzes all test results and analyzes production rates and cost data to ensure that available funds are not exceeded.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Performance errors in the duties listed above could have serious consequences. For example, failing to ensure that work is carried out in accordance with proper safety practices could result in injury or death to members of the traveling public, to State employees, and to the contract workers. Failing to ensure the quality of material used and/or compliance with document specifications could result in deterioration of and subsequent damage to the structure, with consequent great costs to the State. Anything less than strict control of payment determination could mean excessive and undue cost to the State for work performed. Failing to consider the interests of the public and other agencies adequately could result in damage to these entities. Failing to ensure that the finished product meets the needs of the traveling public could result in damage, delay, and excessive costs to them for years to come. And as a highly visible representative of the State government, the Construction Electrical Specialist's failure to behave in a correct manner at all times could have a detrimental effect on the State's image.

PUBLIC AND INTERNAL CONTACTS

The Construction Electrical Specialist's contacts are: with the contractor, various Resident Engineers and Senior Engineers; the traveling public; residents in the vicinity of the construction; other agencies-city, county, utility districts, subcontractors, Federal, etc.; and with the District Office and Headquarters office staff. Contact with the contractor and a subcontractor occurs daily and requires diplomacy, forcefulness, intelligence, decisiveness, good communication skills, and strength of character.

The Construction Electrical Specialist is visible to both the traveling public and resident public both personally and through the results of his or her actions. The Construction Electrical Specialist answers questions and complaints while maintaining appropriate behavior and an attitude of interest and cooperation.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Employee may be required to move large or cumbersome reports/plans from one location to another; occasional bending, stooping and kneeling; required to walk about on slopes or uneven terrain; required to move about on foot. The workload is subject to frequent, substantial, and unexpected changes within a few months. Needed are the following requirements:

Mental requirements include sustained mental activity needed for report writing, problem solving, analysis and reasoning. Must

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have the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice. Must have the ability to develop new insights into situations and apply innovative solutions to make organizational improvements; enable others to acquire the tools and support they need to perform well; understand linkages between administrative competencies and mission needs.

Emotional requirements include the ability to develop and maintain cooperative working relationships; respond appropriately to difficult situations; recognize emotionally charged issues or problems; and acknowledge the various responses. Must be able to deal effectively with pressure, maintain focus, and intensity yet remain optimistic and persistent, even under adversity. Will consider and respond appropriately to the needs, feelings, and capabilities of different people in different situations; is tactful and treats others with respect.

WORK ENVIRONMENT

While at their base of operation, employee will work in a climate-controlled field office under artificial light. The Senior Transportation Engineer will set working hours. Overtime and night work may be required, and vacations may be restricted, during peak times of the construction project.

The Construction Electrical Specialist will be exposed to loud noise, dust; extreme weather conditions at the project sites.

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