

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Senior Transportation Electrical Engineer (Supervisor)	OFFICE/BRANCH/SECTION Operations / 10-390 (2586) / Traffic Electrical Systems	
WORKING TITLE Traffic Electrical Systems Branch Chief	POSITION NUMBER 910-390-3164-001	EFFECTIVE DATE

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:

This position is under the general direction of the Deputy District Director of the District 10 Maintenance and Operations Division, a CEA A, who will provide general guidance, policy determinations and resolution of problems. The Traffic Electrical Systems Branch Chief has charge of difficult electrical engineering work involving the supervision of journey level engineers and technicians engaged in traffic control systems, traffic management systems, and related activities. The branch chief manages a team of Intelligent Transportation Systems (ITS) personnel in the development, deployment, and continuous engineering of a sustainable Transportation Management Systems (TMS) infrastructure. The incumbent provides leadership and guidance in continuously transforming the Department's TMS into a high-performing and integrated multi-modal transportation system in District 10.

TYPICAL DUTIES:

Percentage	Essential (E)/Marginal (M) ¹	Job Description
25%	E	Supervises, hires, develops, and trains staff. Clearly communicates the organization's mission, vision, and strategic management plan and strategies. Ensures that staff is familiar with the Division's business plan and principles, and that they understand the branch expectations and duties as described in their duty statement. Provides staff the resources needed to perform their assigned duties successfully (e.g., tools, equipment, materials). Schedules work assignments, establishes priorities, and directs the work of staff making adjustments as necessary due to changing priorities. Encourages innovative solutions from staff and serves as a role model by striving for continuous improvement. Provides feedback on job performance to the employee that entails critical, constructive, and ideally oral and written feedback, through the regular monitoring of their productivity and work load. Prepares timely probation reports and individual development plans; provides training opportunities within the unit. As necessary, employs the necessary actions to address performance issues (corrective, adverse, etc).
25%	E	Provides supervision, review and approval for the operation of traffic signals in the District. Directs technical staff in making timing studies and observations of traffic signals to maximize their performance. Maintains the records of traffic signal locations and inventory. Provides technical expertise for the deployment and use of Traffic Signal Management and Surveillance System (TSMSS).
25%	E	Provides supervision and manages District 10's TMS infrastructure which includes central transportation management and information delivery systems, communications systems, and field monitoring and control systems. Monitors and reports on TMS performance and makes recommendations to resolve performance issues. Develops and maintains, in conjunction with Headquarters, production units and workload standards to support allocation and resource requirements for their project codes. Develops unconstrained workloads, operating expenses and contract requests.
10%	E	Provides supervision, review and support for the Traffic Census Program in the District. Directs technical staff in the collection of volume and classification information for the District. Oversees the equipment needs required for the collection of this information.
10%	E	Provides supervision, review and support for Capital Outlay Support (COS) projects and Encroachment permits. This includes development of resource requests for COS projects to ensure proper resourcing, reviewing PS&E packages to ensure the District's ITS needs are met, and attending Project Development Team (PDT) and constructability meetings. Provide technical support and final inspection for ITS elements to Construction personnel.

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5% M Provides and coordinates state furnished IT elements for projects in Construction.

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 incumbent will directly supervise a staff composed of Electrical Engineers and Electrical Engineering Technicians. The incumbent may be called upon to act as the Deputy District Director of the District 10 Maintenance and Operations Division periodically.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

The incumbent must have knowledge of the general principles and techniques in managing technology programs and projects for electronics and software development in large organizations; the requirements for successful completion of each of the phases of the hardware and software development life cycle; the principles and techniques of personnel management and supervision; systems engineering methodology; concepts for developing and operating state-of-the art transportation management systems; relevant national ITS standards activities such as ITS America, National Transportation Communications for ITS Protocol, and the ITS National Architecture; project management, contract management and contract administration processes and techniques.

The incumbent must possess a valid certificate of registration as an Electrical Engineer issued by the California State Board of Registration for Professional Engineers.

The incumbent should have experience in design and preparation of plans, specifications, and estimates for traffic control systems; electrical and electronic theory as applied to traffic control systems; principles and practices of traffic engineering as they apply to traffic control; various codes and field practices governing the design and installation of traffic control equipment; basic occupational safety and health regulations contained in the Title 8 Industrial Relations, Electrical Safety Orders, safety and health policies and procedures as contained in the Department's Injury and Illness Prevention Program, and the supervisor's role in maintaining an effective injury and illness prevention program; materials and construction costs for traffic control systems; digital electronics, microprocessors, and development of strategies for traffic control; computer-based traffic management equipment; principles and techniques of personnel management; a manager's/supervisor's responsibility for promoting equal opportunity in hiring and employee development and promotion, and for maintaining a work environment that is free of discrimination and harassment; planning and supervising the work of others.

The incumbent must be able to plan, lead, organize, direct, and supervise the work of others; establish and maintain cooperative relations with those contacted in the course of the work; promote equal opportunity in employment and promotion, and maintain a work environment that is free of discrimination and harassment; prepare correspondence and reports; communicate effectively; administer an engineering program; work effectively and partner with others as an interdisciplinary team member; express ideas and communicate effectively both orally and in writing; prepare technical correspondence and comprehensive reports; address an audience effectively and participate in public presentations; analyze situations accurately and adopt an effective course of action; effectively lead and contribute to the department's strategic management, safety, health, equal opportunity and labor relations objectives.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Responsible for the reliability and accuracy of all actions, decisions, and recommendations in his/her capacity. Proper use of equipment, correct methods analysis, and timely meeting of all deadlines. Inappropriate decisions or errors of judgment may lead to the loss of time and the ability to solve critical problems which will adversely affect the payback of expended effort and the loss of opportunities to increase the transportation efficiency and safety.

PUBLIC AND INTERNAL CONTACTS

Frequent contact with district and headquarters personnel is required to keep abreast of the needs and program requirements of the Department. Contact with: federal, state, county and legislative agencies and departments; public utilities; and telecommunications companies are required.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The workload is occasionally subject to substantial, and unexpected changes within a short time period which requires

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that the incumbent quickly adapt behavior and work methods in response to new information/priorities, and unexpected obstacles; multi-task; effectively interact with many levels of people in a cooperative manner; be decisive; take appropriate actions; and complete tasks or projects with a short notice. The incumbent should be able to work effectively under pressure, maintain focus and intensity yet remain optimistic and persistent, even under adversity.

The incumbent shall act in a fair and ethical manner toward others and demonstrate a sense of responsibility and commitment to public services; develop new insights into situations and apply innovative solutions to make organizational improvements; grasp the essence of new information and master new technical and business knowledge, particularly in the area of outreach; and value cultural diversity and other individual differences in the workforce.

The incumbent may be required to sit for long periods of time using a keyboard and video display terminal. The incumbent will occasional lift up to 25 pounds without assistance. Bending, stooping, and pulling may be required within the normal course of performing some of responsibilities associated with the positions.

WORK ENVIRONMENT

The incumbent will work in a climate-controlled office under artificial lighting. However, due to periodic problems with the heating and air conditioning, the building temperature may fluctuate. The incumbent must be willing to work outside normal working hours as needed. The environment is fast-paced, demanding and busy; and requires considerable flexibility in managing time, priorities and assignments. Vacations may be restricted during peak times.

The incumbent will be required to travel to meetings and provide training in classroom settings in other office buildings or sites and may be exposed to uneven surfaces, noise, and varying temperatures. The incumbent may occasionally travel out of state.

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