STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Senior Transportation Electrical Engineer, Supervisor	District 11/Traffic Safety & Ops-Transportation Mgmt Center	
WORKING TITLE	POSITION NUMBER	REVISION DATE
Branch Chief, Electrical Design	911-350-3164-004	10/30/2026

As a valued member of the Caltrans team, you make it possible to improve lives and communities through transportation.

GENERAL STATEMENT:

Under the general direction of the Supervising Transportation Electrical Engineer (District Division Chief of the Traffic Safety & Operations (TSO)-Transportation Management Center (TMC)), the Senior Transportation Electrical Engineer, Supervisor serves as Branch Chief of the Electrical Design Branch in District 11's Transportation Management Center (TMC). The incumbent plans, organizes, directs, and supervises engineering staff responsible for developing and reviewing electrical plans, specifications, and estimates (PS&E) and related engineering deliverables for traffic signals, ramp meters, changeable message signs, cameras, communications networks, broadband, roadway weather information systems, detection and data collection systems, Transportation Management Systems (TMS), Intelligent Transportation Systems (ITS), and Smart Corridor elements. The incumbent provides professional engineering oversight, establishes branch work priorities and schedules, supervises employee performance and development, and coordinates with District, Headquarters, and external partners to support safe, effective, timely, and cost-conscious project delivery. The incumbent also directs branch participation in Transportation Systems Management and Operations (TSMO)/TMS planning, asset-performance initiatives, and evaluation of emerging technologies consistent with the District's TMC Vision Plan.

Possession of a valid certificate of registration as an electrical engineer issued by the California Board of Registration for Professional Engineers is required.

Appointment to this position is contingent on passing the Department of Justice (DOJ) background check.

CORE COMPETENCIES:

As a Senior Transportation Electrical Engineer, Supervisor, 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.

- **Creativity and Innovation:** Thinks beyond the confines of traditional models to recognize opportunities, seek creative solutions and take intelligent risks. (Safety, Climate Action, Employee Excellence - Innovation, Stewardship)
- **Dealing with Ambiguity (Risk):** Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Prosperity, Employee Excellence - Integrity, Pride, Stewardship)
- **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. (Equity, Climate Action, Prosperity - Equity, Integrity, Stewardship)
- **Conflict Management:** Recognizes differences in opinions and encourages open discussion. Uses appropriate interpersonal styles. Finds agreement on issues as appropriate. Deals effectively with others in conflict situation. (Equity, Prosperity, Employee Excellence - Collaboration, Equity, Integrity)
- **Teamwork and Collaboration:** Sets team structure. Organizes, leads, and facilitates team activities. Promotes team cooperation and encourages participation. Capable of cross functionality and working well with others on a team to achieve personal goals, team goals, and organizational goals. Takes responsibility for individual actions in order to achieve consistent results. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation)
- **Organizational Awareness:** Contributes to the organization by understanding and aligning actions with the organization's strategic plan, including the mission, vision, goals, core functions, and values. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Equity, Innovation, 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. (Safety, Equity, Climate Action, Prosperity - Equity, Innovation)
- **Planning and Results Oriented:** Organizes and executes work to meet organizational goals and objectives while meeting quality standards, following organizational processes, and demonstrating continuous commitment. (Equity, Prosperity, Employee Excellence - Equity, Innovation, Pride)

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- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Safety, Prosperity - Equity, Innovation, Pride)

TYPICAL DUTIES:

Percentage	Essential (E)/Marginal (M)[1]	Job Description
35%	E	ELECTRICAL DESIGN AND ENGINEERING OVERSIGHT Plans, organizes, assigns, directs, and reviews the work of staff preparing electrical PS&E and related technical documents for ITS/TMS and other District transportation electrical systems. Provides technical direction on design criteria, project scope, engineering alternatives, constructibility, operability, and maintenance considerations. Reviews complex electrical engineering work, including consultant-prepared designs, electrical components of encroachment permits, and interdisciplinary project documents for conformance with applicable engineering standards, Department policies, safety requirements, project objectives, and available resources. Resolves technical issues and coordinates with Planning, Design, Construction, Maintenance, Traffic Operations, project teams, and partner agencies to deliver assigned electrical design work within established schedules and budgets. Establishes and monitors branch workloads, available resources, project schedules, work agreements, and deliverable commitments for electrical design services. Tracks the progress of assigned engineering tasks, provides status updates to project development teams and management, and participates in project coordination meetings. Coordinates assigned consultant work and reviews consultant deliverables when those activities fall within the branch's delegated responsibilities. Identifies resource constraints, schedule conflicts, and emerging project-delivery issues, develops recommendations, and coordinates corrective actions with project teams. Maintains accountability for the effective use of assigned staff and resources.
30%	E	BROADBAND Directs and coordinates staff supporting MMBN implementation, District broadband planning, Traffic Operations Systems Network (TOSNET) modernization, and related ITS/TSMO initiatives. Establishes technical objectives and reviews proposed systems architecture, connectivity, redundancy, interoperability, physical and information-security coordination, asset visibility, scalability, and Vehicle-to-Everything (V2X) applications in consultation with appropriate information technology and cybersecurity authorities. Evaluates and recommends emerging technologies, pilot deployments, and integration approaches, coordinates interagency agreements, utility interfaces, local connections, and project delivery strategies to meet scope, schedule, budget, and operational needs.
20%	E	SUPERVISORY Exercises direct supervisory responsibility for assigned engineers and other staff. Plans, organizes, assigns, directs, and reviews staff work, establishes performance expectations, schedules, and quality standards, and monitors workloads, progress, and accountability. Provides active and timely feedback to staff regarding job performance and performance appraisals, addresses performance and conduct concerns, and takes timely action on disciplinary matters in coordination with the Office of Discipline Services and consistent with applicable policies and procedures. Ensures that all staff are aware of and comply with the District’s and Division’s Letters of Expectations, Department policies, and directives. Prepares Annual Performance Reviews and Individual Development Plans and works directly with staff to identify and implement training plans, career-development opportunities, and equipment needs. Conducts regular staff meetings, fosters a team-oriented, collaborative, innovative, and respectful work environment, and holds staff accountable for the quality and timeliness of their assignments. Serves as a communication link between staff and executive management, conveys Department priorities, and maintains a safe working environment. Supports recruitment, selection, onboarding, succession planning, Equal Employment Opportunity, labor-relations compliance, and reasonable accommodation processes.

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10%	E	TSMO AND TMS Provides technical leadership and coordination in support of the District's TSMO and TMS programs. Collaborates with the TMS Asset Manager and other TMC senior engineers to establish performance targets, evaluate Smart Corridor needs, and identify system improvements consistent with the TMC Vision Plan. Coordinates with planners, project managers, corridor managers, project engineers, and regional and local agencies to integrate TSMO/TMS elements into transportation projects and funding programs. Reviews and provides technical recommendations on Regional Transportation Improvement Programs (RTIP), Transportation Concept Reports (TCR), Project Study Reports (PSR), Project Reports (PR), encroachment permits, constructibility reviews, and District circulation reviews. Participates in Project Development Team (PDT) meetings to provide engineering guidance on TSMO/TMS project scoping, system integration, and implementation.
5%	M	OTHER RELATED RESPONSIBILITIES Acts as backup to the Division Chief or other Branch Chiefs during their absences ensuring seamless operations. Performs other related responsibilities as required by adapting to evolving needs and contributing to the overall success of the team and the District.

[1]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

The incumbent plans, directs, and supervises a team of up to twelve (12) engineering professionals in the Electrical Design Branch. This position provides support, guidance, and mentorship to staff ensuring that projects align with the District's goals and objectives. Through effective leadership, the incumbent ensures that all team members are equipped with the necessary skills and resources to successfully fulfill their responsibilities and contribute to the overall success of the District.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of: Transportation engineering standards, policies, and procedures used by the Department is required, as well as the Department's Mission, Vision, Goals, Objectives, and Performances Measures; computer systems and software, project management databases, and TMS engineering processes; the use of e-mail, electronic forms, spreadsheets, word processing, and PowerPoint presentations; various phases of transportation engineering (including planning processes and methods, systems planning, evaluation of alternatives, and facility locations and design), transportation economics and financing, project evaluation and management; principles and techniques of personnel management and supervision; a supervisor's role in Equal Employment Opportunity (EEO), health, safety, and labor relations programs and the processes available to meet their objectives.

Ability to: Plan, direct, and lay out work for others; make effective presentations, take action independently, prepare reports and correspondences; collaborate ideas with others working in the TMS field; take independent action in evaluating ideas, proposals, reports, and studies to implement new TMS elements on the State Highway System, and develop responses to outside inquires; communicate orally and in writing and deal with other internal and external partners and customers calmly and professionally (this includes private citizen inquires and discussions at public meetings). The incumbent must be capable of applying specific knowledge of these systems to the duties of this position.

Analytical requirements: Must have strong technical and analytical abilities in design, construction, operations, and maintenance of ITS/TMS hardware and software systems, communication systems, and all elements of the freeway infrastructure. Must use engineering skills and judgment to support a state-of-the-art TMC facility and TSMO.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent exercises independent professional and supervisory judgment over engineering recommendations, review of electrical designs, allocation of branch resources, work quality, and program delivery. Errors in technical decisions, design approvals, specifications, contract coordination, system integration, or supervision could result in unsafe electrical or traffic-control conditions, system failures, traffic disruptions, contract change orders, rework, schedule delays, loss or misuse of funds, increased maintenance costs, regulatory noncompliance, damage to public or private property, and potential liability to the State.

PUBLIC AND INTERNAL CONTACTS

The incumbent maintains regular contact with District 11 and Headquarters managers and staff, including the TMC, Planning, Design, Construction, Maintenance, Traffic Operations, project and corridor managers, and the TMS Asset Manager. External contacts may include the San Diego Association of Governments, regional and local agencies, consultants, contractors, utilities, academic institutions, and other public or private partners involved in ITS, TSMO/TMS, electrical design, and broadband initiatives. Contacts involve coordinating scope and technical requirements, reviewing project documents, resolving engineering issues, providing status updates, and representing the branch at project development, technical, and interagency meetings. The incumbent communicates with executive management and staff on branch priorities and operational issues.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent must be able to analyze complex technical and personnel issues; exercise judgment under competing priorities and time constraints; prepare and review detailed engineering documents; use standard office and computer equipment; communicate effectively; and respond calmly to disagreements and urgent operational issues. Office work generally involves

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prolonged sitting, keyboard use, and screen work. Field visits may require walking on uneven surfaces, observing active construction or transportation facilities, and using prescribed personal protective equipment. Reasonable accommodation will be considered consistent with applicable requirements.

WORK ENVIRONMENT

This position is at the Transportation Management Center (TMC). The incumbent works in a climate-controlled office under artificial lighting. The position requires travel to District offices, regional-agency meetings, project sites, and occasional locations outside the District. Safety is a paramount consideration in the field locations, where extensive exposure to traffic, heavy construction equipment, and the outdoor environment such as dirt, dust, chemicals, loud noise, uneven surfaces, and severe weather conditions. The incumbent must remain vigilant and adhere to established field safety procedures to mitigate risks when working in the field. Furthermore, it is the incumbent's responsibility to communicate and enforce proper safety precautions among staff to ensure a safe working environment for all team members. It is required for the incumbent to possess a valid driver's license to operate a State-owned or leased vehicle.

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.)

I agree that by providing my electronic signature for this form, I agree to conduct business transactions by electronic means and that my electronic signature is the legal binding equivalent to my handwritten signature. I hereby agree that my electronic signature represents my execution or authentication of this form, and my intent to be bound by it.

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

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