CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Transportation Engineer (Civil)	12-Division of Maintenance / Office of Maintenance Engineering	
WORKING TITLE	POSITION NUMBER	REVISION DATE
Maintenance Engineering (ME) - Engineer / ME Prog. Assistant	912-601-3135-XXX	09/30/2024

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:**

Under the general direction of a senior transportation engineer or a branch chief of Maintenance Engineering, the Transportation Engineer (Civil) performs transportation engineering-related duties to include, but not limited to: investigation, initiation and development of maintenance projects to expedite repairs of damaged and aging facilities; collaboration with the ME team in several facets of their needs. Prepares plan sheets in CADD - Computer Aid Design & Drafting, including project cost estimates and specifications. The incumbent will assist the program advisor with both the State Highway Operation and Protection Program (SHOPP) and Highway Maintenance (HM-5) projects, and in managing the Facility Condition Index (FCI) information and projects for Transportation Related Facilities (TRF). Works as inspector during construction phase of ME generated projects. Supervision is general in nature, but of sufficient depth to assure satisfactory performance of assigned duties. The incumbent may be required to work overtime, irregular shifts/alternate work schedules including nights, holidays and weekends; may be required to respond to emergency situations and calls.

# CORE COMPETENCIES:

As a Transportation Engineer (Civil), 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, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency - Engagement, Equity, Innovation, Integrity, Pride)
- Dealing with Ambiguity (Risk): Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Safety First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency Engagement, Integrity)
- **Reliability:** Ability to demonstrate dependability in meeting commitments, and providing a consistent work product. Takes responsibility for individual actions in order to meet deadline demands. (Safety First Engagement)
- **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. (Safety First, Cultivate Excellence Equity, Integrity)
- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Safety First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities Engagement, Equity, Innovation, Integrity, Pride)
- 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 First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)
- Interpersonal Effectiveness : Effectively and appropriately interacts and communicates with others to build positive, constructive, professional relationships. Tailors communication style based on the audience. Provides and is receptive to feedback. (Safety First, Cultivate Excellence Engagement, Equity, Innovation, Integrity, Pride)
- Analytical Skills: Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Safety First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)
- Thoroughness: Ensures that work and information is complete and accurate. Ensures that assignment goals, objectives, and completion dates are met. Documents and reports on work progress. (Safety First, Cultivate Excellence, Enhance and Connect the Multimodal Transportation Network, Strengthen Stewardship and Drive Efficiency, Lead Climate Action, Advance Equity and Livability in all Communities - Engagement, Equity, Innovation, Integrity, Pride)

# TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M)<sup>1</sup> Job Description

- 45% Е Conducts field reviews and assists field Maintenance crew staff to assess issues; makes determination whether to incorporate the needs previously identified into upcoming Major Maintenance (HM) with emphasis in HM-5 for maintenance facility upkeep, State Highway Operation and Protection Program (SHOPP) funded projects. Designs HM projects using Microstation and CADD tools to assist in the assembly of plans, specifications and estimates (PS&E) packages. Prepares reports, PS&E, and contract documents for various HM projects, ensuring the purpose & needs are met as defined in the yearly HM work plan. Assists SHOPP assets program coordinators in preparation of district's Ten Year Plan (TYP) SHOPP program; updates and maintains information in the Asset Management Tool (AMT); review and comments on project initiation document (PID), project Report (PR), project specification & estimate (PS&E) packages. Serves as the contract manager within the ME office for various types of contracts. Е Provides engineering expertise to the field superintendents and/or supervisors including researching plans, 30% right of way records, and other documents pertaining to the department's assets. Reviews PS&E packages on proposed construction projects and provides review comments as part of the project development team (PDT) member. Investigates and responds to engineering related public complaints, public records requests, and questions from legal and claims departments. 20% Е Inspects HM projects during construction phase when directed. Has direct contact with Contractor, developing workable and effective solutions to field issues and contract deficiencies. Prepares daily reports of the work including documenting conversations and other items that affect the work. Inspects progress of the work to assure compliance with contract plans and specifications on all phases of highway construction, including working in a lead capacity to work cooperatively with others and building teamwork to perform the duties of this position. Assists Traffic Maintenance Electrical (TME) senior and maintenance engineer with HM Safety and TMS 5% Μ
- Assists Traffic Maintenance Electrical (TME) senior and maintenance engineer with HM Safety and TMS (Traffic Management System) programmed projects by leading on preparation of PS&E packages from its inception through construction phase. Occasionally may assist ME branch with evaluation of major damage incidents. Attends mandatory trainings and meetings to coordinate activities with other function in the district, with other agencies and with Headquarters.

<sup>1</sup>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

This position does not supervise, but may be assigned to act in a Lead Engineer capacity. In the absence of a Senior Engineer, may be called upon to act as a Senior (if Licensed Professional Engineer) for a short duration.

# KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

The incumbent must have demonstrated knowledge of the Department's construction administration process, policies and procedures; technical knowledge of all phases of design and construction, of materials and methods used, the ability to interpret plans, specifications, and estimates, and other Department resource materials; ability to design using the latest Standard Plans and Specifications; ability to inspect construction work and determine whether it meets contract requirements. Incumbent must be able to speak and write effectively, evaluate situations accurately, take effective action, and deal tactfully on sensitive and controversial matters, negotiate and communicate effectively with Contractors, Internal and External stakeholders; ability to prepare comprehensive reports and correspondence; ability to develop and choose from alternative courses of direction; ability to travel to and work at construction sites throughout the district and during all shifts; ability to see and maintain alertness to the environment day and night is critical. Incumbent is responsible for working cooperatively with team members and supervisors to identify innovations that will increase productivity reduce cost and maintain or improve quality.

### RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Must be able to effectively make decisions concerning work in progress and in solving assignment-related concerns and issues. Work must be performed in an accurate, organized, and timely manner, Failure to handle implementation and administrative issues properly as they arise could result in the unnecessary payment of large claims to the contractor and/or delay in contract completion. Improper management of resources and lack of quality assurance would result in loss of funding and poor delivery to the public.

# PUBLIC AND INTERNAL CONTACTS

This position requires continuous written and oral communication with the supervisor, the contractor, design engineers, Resident Engineers, the District's Public Information office, internal functional units, and external partners. Incumbent must provide high

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quality service and establish and maintain courteous and cooperative relations with those contacted in the course of work.

#### PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Incumbent may be required to work extended night and weekend work shifts when directed. Possession of a valid driver's license is required when operating a vehicle. Incumbent may be required to sit for long periods using a keyboard and video display terminal, then sustain mental activity for analysis and reasoning. Incumbent may be exposed to construction dust, dirt, noise, inclement weather, and live traffic and may include walking on uneven ground, bending, stooping, and kneeling. Incumbent must be able to sustain mental activity to write reports, resolve politically sensitive problems, manage diverse field issues, deal with complex problems, perform audit of man-hours worked, identify equipment/supplies used, problem solve, analyze and develop solutions to field issues and take the initiative to effectuate corrective action. Must have the ability to develop and maintain cooperative working relationships; consider the needs and perspectives of others; respond effectively to changing and difficult circumstances; and communicate to foster a team environment.

#### WORK ENVIRONMENT

The incumbent will work partially in the office when developing design plans and follow the project to construction site when project has been advertised and awarded for construction. Workload will subject incumbent to night work, intermittent changes in work shift, work hours and workdays. Project assignments can be anywhere in District 12, Orange County. Incumbent will be exposed to various work environments including outdoor traffic, sun, wind, rain, dirt, noise, uneven surfaces and extreme hot or cold during field inspections. In such instances, appropriate safety equipment will be provided. Office work environment is typically in a climate-controlled office. The incumbent may sit for long periods of time while using a keyboard and video display terminal. The hours of scheduled work will be at the discretion of the Senior Transportation Engineer and/or based on organizational needs, design team needs and construction work schedule. Overtime and/or weekend work may be required. Incumbent will be required to use State-issued cell phone and vehicle responsibly in conformance with the Department's policies, and respond timely during duty hours and provide after hours contact information to their supervisors for purposes of emergency response as it relates to their construction projects. Incumbent may be called back to the worksite after incumbent has completed the regular shift. Vacations may be restricted during the heavy work load and it's approved at the supervisor's discretion.

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