CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION		
Transportation Engineer (Civil)	D6 & Central Region Services / Various Divisions/ COS		
WORKING TITLE	POSITION NUMBER	REVISION DATE	
Transportation Engineer (Civil)	906-XXX-3135-XXX		

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:

Transportation Engineers (Civil) (TE) perform engineering duties throughout District 6 (District) in Design, Engineering Services, Construction, and/or Asset, Program and Project Management. The TE performs activities requiring engineering knowledge and management skills for the preparation of plans, specifications, estimates, design drawings, written documents, presentations, and other related work for transportation projects. Based on annual workload, delivery commitments, and the TE Rotation Program the incumbent may be assigned by the District to a variety of positions in an office or field environment. When working in the Design, Engineering Services, and/or Asset, Program and Project Management, incumbent will be under the direct supervision of a Branch Chief, a Senior Transportation Engineer. When working in Construction, incumbent will be under the direct supervision of an Area Construction Engineer, a Senior Transportation Engineer, in a field environment. In either environment, the incumbent performs various transportation engineering tasks of average difficulty accomplished through understanding and applying Caltrans standards, manuals, guidelines, policies, directives, and computer software applications. Incumbent may be assigned by Supervisor to be a Lead-worker to train, direct, and manage the work of other staff within the assigned branch. Travel is required. The incumbent is required to have a current driver's license when operating a State-owned or leased vehicle. A valid Professional Engineering (Civil) license is required for Range D appointment and to serve as the licensed professional resident engineer on projects.

The incumbent is subject to the mandatory TE Rotation Program, which is required for all permanent, full-time TE employees hired by Caltrans districts after June 22, 2018. The program provides opportunities for employees and Caltrans to benefit through a standardized process that systematically engages newly hired engineers. Participants will develop well-rounded project delivery knowledge, skills, and abilities by rotating through diverse project delivery functional units. Each rotation assignment will be based on workload needs and individual employee goals. The full rotation consists of a minimum of 24 months. Assignments may involve long term travel and can be located throughout the District.

## **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.

- Creativity and Innovation: Thinks beyond the confines of traditional models to recognize opportunities, seek creative solutions and take intelligent risks. (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)
- Decision Making: Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (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)
- 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. (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)
- **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, 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)

- Fostering Diversity: Capable of working with a diverse work group, including but not limited to differences in race, nationality, culture, age, gender, and differently able. Makes everyone feel valuable regardless of diversity in personality, culture, or background. Fosters a diverse culture to create best solutions. (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)
- 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 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)
- 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)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (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 Job Description

Essential (E)/Marginal (M)<sup>1</sup>

35% Е Prepare plans, specifications and cost estimates (PS&E) for various assigned projects for the Minor, HM and/or Capital Outlay Support programs. Will produce (by utilizing, but not limited to, Microsoft Excel and Word, Computer Aided Drafting and Design (CADD) and Civil 3D) technical engineering documentation such as PS&E, memorandums, transmittal letters, and Design Standard Decision Documents (DSDD). Perform CADD and manual delineation on different media types for project plans, design drawings, displays, plots and other mapping. Develop alternatives, purpose and need, estimates, and make recommendations for transportation projects by using engineering knowledge and skills, and applying the appropriate design standard, guidelines and manuals. Ensure that all work is done in accordance with contract specifications, review, perform oversight and inspect work and operations in regard to safety traffic control, quality and quantity of work. Acting as an engineering consultant and liaison to local agencies, provide instruction, guidance, and analysis. Maintain expertise and knowledge of pertinent laws, statutes and regulations, engineering solutions, design standards, and computerized information systems. Е Prepares special studies, exhibits, reports and maps for project scoping, regional plans, freeway 30% agreements, environmental documents, environmental permits, public hearings, traffic safety and operational studies, etc. Prepares and processes documentation including fund requests, federal authorizations (E-76), federal agreements, and state agreements (master agreements and program supplements). Routes draft project documents for multidisciplinary reviews, collects review comments and implements appropriate changes resulting from the review comments. May recommend engineering changes in the design of the plans and specifications and draft contract change orders and transmittal memorandums approved by a Professional Engineer. Assists Project Engineer/Assistant Project Engineer and/or Resident Engineer/Assist Resident Engineer in coordination of project activities with other branches within Caltrans, consultants, other agencies, and the general public. In a construction unit, maintains complete and accurate daily contract records. Responsible for quantity measurements and calculations for work performed, determining if the project has a satisfactory progress rate, takes appropriate remedial action for delays, and approves final payment. Е 15% Tracks projects, monitors related schedules and budgets, compiles and maintains project data on computer systems for use by the Branch, Office, and/or the Division. Evaluates alternative design solutions for transportation projects to balance environmental considerations, transportation benefit, and project cost.

15%	E	Reviews and prepares comments for encroachment permit applications, environmental documents, planning documents, traffic studies, tentative maps, and other documents from public agencies as they relate to existing and future Caltrans facilities. Provides technical support as needed to other divisions and branches. Retains, organizes, and submits final design records to project record archives. Requests engineering and technical support from other units as needed, such as Environmental documents, Right of Way Certifications, Traffic Management Plans, Lane Closure Charts, drainage recommendations, etc. Researches as-builts, project history files, reviews encroachment permits, and conducts field reviews to obtain information as needed to complete assignments. Prepare and/or reviews other engineering assignments toward completing contract plans, including studies for traffic handling and stage construction. Conducts field investigations and control tests to approve material incorporated in bridges, non-standard major structures, and transportation-related buildings and facilities.
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5% M Attends training courses deemed mandatory or necessary, which may require travel and overnight stay. Participates in internal and external teams and committees. Assists Branch Manager in identifying training needs. Provides formal and informal training to others. Captures meeting minutes, documents engineering decisions, and maintains project files. Prepares correspondence as necessary.

<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

The incumbent has no direct supervision of others. However, the incumbent may assign and review specific tasks within the project assignment and/or function as a leadworker.

#### KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of: The basic principles of physics, chemistry, and mathematics as applied to civil engineering; engineering surveying; hydrology and hydraulics; stress analysis; mechanics; strength of materials, properties and uses of engineering construction materials; methods and equipment of engineering construction; engineering economics; personal computer applications and CADD systems; methods and processes used in the preparation of engineering design and contract plans, and highway design practices and interpretation of technical data; effective verbal and written communication.

Ability to: Analyze compiled and complex data for various reports and other documentation; prepare complex plans, specifications and estimates, write correspondence and prepare reports, analyze situations, and take effective action to accomplish the assigned tasks and resolve issues; perform simple mapping and drafting and make neat and accurate computations and engineering notes; prepare reports; establish and maintain friendly and cooperative relations with those contacted in the course of work; and communicate effectively.

## RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent is responsible for making average technical and/or engineering decisions which may affect the development and construction of transportation related projects. Improper judgments and errors made by the incumbent could result in unsafe highway conditions, a reduction in the operations of highways, and/or the unnecessary expenditure of limited state resources. Failure could result in a detrimental effect on the Department and the State. The incumbent is responsible for their actions, decisions, quality of completed work, and use of state time, equipment, and materials. Improper performance of duties and/or failure to adhere to established policies, procedures, and guidelines could lead to adverse action and possible termination.

### PUBLIC AND INTERNAL CONTACTS

The incumbent will have contacts with other Caltrans employees and supervisory staff within their district and/or headquarters programs, other local staff, federal agencies, and the public

#### PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent must be able to move heavy objects (40 lb for construction) within an office or over various types of terrain; stand or sit for prolonged periods; and perform work that includes bending, stooping, and/or kneeling. In construction, incumbent must be able to work on uneven ground, must wear hardhat, safety vest, and safety glasses. The incumbent should have problem solving, analysis, and reasoning skills. Emotional requirements include the ability to develop and maintain cooperative working relationships, recognize emotionally charged issues or problems, and respond appropriately to difficult situations.

#### WORK ENVIRONMENT

While at the base of operation, the incumbent works in a climate-controlled environment in an office building, field office, laboratory, and/or trailer. Travel to work sites for field work and other travel is required. The incumbent may periodically be required to travel and work outdoors and may be exposed to dirt, noise, dust, chemicals, uneven surfaces, and extreme weather

conditions. Working at night and overtime may be required. Possession of a valid driver's license is required to operate a State owned or leased vehicle.

Rotation Program is required. Based on annual workload, delivery commitments, and seasonal needs, incumbent may be assigned by the Department to a variety of positions in an office or field environment.

This position may be eligible for telework. The amount of telework is at the discretion of the Department and based on Caltrans's evolving telework policy. Caltrans supports telework, recognizing that in-person attendance may be required based on operational needs. Employees are expected to be able to report to their worksites with minimum notification if an urgent need arises. The selected candidate will be required to commute to the headquartered location as needed to meet operational needs. Business travel may be required, and reimbursement considers an employee's designated headquartered location, primary residence, and may be subject to CalHR regulations or applicable bargaining unit contract provisions. All commute expenses to the headquartered location will be the responsibility of the selected candidate.

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