CLASSIFICATION TITLE
 OFFICE/BRANCH/SECTION

 Transportation Engineer (Civil)
 Bridge Design/SOE/Specification Development

 WORKING TITLE
 POSITION NUMBER
 REVISION DATE

 Specification Development Engineer
 559-240-3135-299
 08/03/2022

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:

This position is in the Division of Engineering Services (DES), Bridge Design (BD), Structure Office Engineer (SOE). Under the general direction of the Structure Specifications Research and Development Branch Chief, a Senior Bridge Engineer, the incumbent is responsible for research and development of contract specifications for the construction of bridges, retaining walls, and other transportation-related structures.

As part of your employment with DES there is a mandatory TE-Civil Professional Development Rotation Program that applies to all permanent full-time TE-Civils hired after January 1, 2017. Temporary relocation more than 50 miles from your permanent unit may be necessary for rotation assignments.

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.

- Flexibility and Managing Uncertainty : Adjusts thinking and behavior in order to adapt to changes in the job and work environment. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency Engagement, Equity, Innovation)
- Decision Making: Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety First, Strengthen Stewardship and Drive Efficiency Engagement, Innovation, Integrity)
- Initiative: Ability to identify what needs to be done and doing it before being asked or required by the situation. Seeks out others involved in a situation to learn their perspectives. (Strengthen Stewardship and Drive Efficiency 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. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency Engagement, Innovation)
- 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. (Cultivate Excellence -Engagement, Integrity)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency Engagement, 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. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency - Engagement, Integrity)
- **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. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency Integrity, Pride)
- Technical Expertise: Depth of knowledge and skill in a technical area. (Cultivate Excellence Innovation, Integrity)

TYPICAL DUTIES:

Percentage

Essential (E)/Marginal (M)¹

45%

E Develops new and modifies existing standard specifications for the construction of bridges, retaining walls, and other transportation-related structures; records revisions and updates to the Standard Special Provisions (SSP) or Standard Specifications in branch documents.

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30%	Е	Performs research on new technologies, methods, materials, equipment, and procedures for the construction and maintenance of transportation-related structures.
15%	Е	Responds to questions regarding specifications for transportation-related structures.
5%	E	Coordinates with internal and external customers, stakeholders, and office staff in the obtaining of concurrences for new or modified standard specifications.
5%	М	Attends Technical committee meetings as the SOE representative. Completes other duties as assigned by the Branch Chief. Assist with training and performs the duties of mentor of new employees.

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 None

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS Strong technical writing and editing skills; and excellent command of English grammar, spelling, and usage; and an eye for detail.

Ability to effectively coordinate and communicate, both orally and in writing, with all levels of management and employees in Headquarters and districts, and with persons outside the Department.

Strong research skills, including the ability to seek out, gather, and evaluate information from multiple sources; to elicit cooperation and facilitate resolution of differences of opinion among various parties; and to synthesize the information into a final specification document.

Knowledge of the computer programs used in preparing, managing, and tracking specifications; general knowledge of the methods, procedures, tools, and equipment used in the design, maintenance, and construction of transportation-related structures; general knowledge about the properties and uses of construction materials.

General ability to read and interpret contract plans and specifications; to understand, visualize, and interpret construction stages and sequences; and to analyze technical content for construction feasibility.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent is responsible for developing standard specifications which are used in construction contracts. Errors or poor judgment may necessarily lead to contract change orders, disputes that cause claims, increased engineering and construction costs, reduced work quality, or loss of federal funds.

PUBLIC AND INTERNAL CONTACTS

The incumbent has contact with staff from SOE and from other departments within Caltrans, including Headquarters Construction, Legal, Structure Design, Structure Construction, METS & Geotechnical Services, Maintenance, Environmental, Transportation Architecture, and Electrical, Mechanical, Water and Wastewater. The incumbent also has contact with District Office Engineer personnel, various industry representatives such as material suppliers, fabricators, and contractors, and with other governmental agencies, such as the Federal Highway Administration (FHWA).

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent may be required to sit for long periods of time using a keyboard, mouse, and video display monitor, or while attending meetings.

The incumbent must be able to work on several projects at one time and to work in both a team environment and independently.

The incumbent must develop and maintain cooperative, collaborative working relationships and must be responsive to the needs of others.

The incumbent must accept criticism on their writing in a professional manner.

WORK ENVIRONMENT

While at their base of operation, incumbent will work in a climate-controlled office under artificial lighting. As a statewide organization, DES adjusts to periods of fluctuating workload to successfully deliver projects. Incumbent may be required to travel

and perform fieldwork and may be exposed to dirt, uneven surfaces, extreme temperatures, noise, vibration, and odor associated with fieldwork. Incumbent may work around bulky/heavy materials and equipment used in the vicinity of inspection areas and may also be exposed to the motoring public. DES employees may be given temporary assignments on DES projects throughout the State as workload demands.

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.

DATE

EMPLOYEE (Print)

EMPLOYEE (Signature)

I have discussed the duties with, and provided a copy of this duty statement to the employee named above.

SUPERVISOR (Print)

SUPERVISOR (Signature)	DATE