

CLASSIFICATION TITLE Sr Bridge Engineer	OFFICE/BRANCH/SECTION DES/SES/ODTS	
WORKING TITLE Senior Project Engineer - Signs & Overhead Structures	POSITION NUMBER 559-220-3185-052	REVISION DATE 02/28/2025

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

GENERAL STATEMENT:

Under the direction of a Supervising Bridge Engineer, the incumbent shall stay abreast of the latest codes and practices in their technical area of expertise. The incumbent shall serve as a Project Engineer for PS&E delivery of non-standard signs & overhead structures, perform design or design check on more complex projects, provide technical support for project delivery activities, and provide input and recommendations for the development and maintenance of departmental standards and guidance.

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

CORE COMPETENCIES:

As a Sr Bridge Eng, 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, Prosperity, Employee Excellence - Collaboration, Innovation)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety, Prosperity - Collaboration, Integrity, People First, 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)
- **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, Equity - Equity, Integrity, Stewardship)
- **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. (Prosperity, Employee Excellence - Collaboration, Equity, Stewardship)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Climate Action, Prosperity - Collaboration, Integrity, Stewardship)
- **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. (Equity, Climate Action, Employee Excellence - Collaboration, 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. (Safety, Climate Action, Prosperity - Collaboration, Equity, Innovation)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Safety, Prosperity - Collaboration, Innovation, Integrity, Pride, Stewardship)

TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M) ¹	Job Description
40% E	Serve as Project Engineer in the development of contract plans, specifications and estimates (PS&E) for non-standard signs, traffic signals, luminaires, changeable message signs and overhead structures statewide. Coordinate structural concepts, design criteria and details for the project or corridor. Work closely with DES functional units, Districts and Headquarters to assure timely and consistent decisions and products.

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20%	E	Perform the design or design check on the more difficult portions of the non-standard work in their area of expertise. Provide technical support for project delivery activities during design and construction as well as review and approve encroachment permits. Provide technical assistance for special situations not covered by standards.
15%	E	Provide general technical support to DES, Districts, Headquarters and others. Review PS&E package submittals, working drawings or contract change orders upon request. Act as a technical consultant in the interpretation of departmental standards and guidance. Duties include taking on a Task Order Manager role in A&E consultant oversight for project delivery workload involving structures.
10%	E	Provide input and recommendations regarding structural standards and guidance for signs and overhead structures in accordance with departmental policies and state of the practice. This includes, but is not limited to: Construction Standards (Standard Plans, Standard Specifications, RSP, NSSP and others), AASHTO Specifications as adopted/amended by Caltrans, Bridge Design Manuals (including Structure Technical Policies, Bridge Design Memos, Memos-to-Designers, Bridge Design Aids, Bridge Design Details, Bridge Standard Detail Sheets) and others.
10%	E	Develop and maintain own expertise by keeping abreast of latest codes and practices in their own and other related areas of expertise.
5%	M	Responsible for remediating memorandum and technical documents in accordance with current Caltrans and ADA WCAG standards to meet compliance with AB434 legislation.

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

This position does not supervise, however may act as a lead worker over one to ten engineers and technicians.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Employee must hold a valid certificate of registration as a Civil Engineer as well as the following:

- High level of competency or the ability to achieve that competency in engineering as it relates to design, specification development, construction and research in the technical area of expertise.
- Ability to communicate, both verbally and written, with Caltrans employees at all levels, AASHTO officials, and the general public concerning California policy and design procedures.
- Ability to conduct research and implement findings.
- General knowledge of structure design, construction and maintenance practices.

The work done is that of a professional civil engineer engaged in the design of complex transportation structures in the technical area of expertise. He/she is required to be consistently searching for new methods and approaches to simplify the necessary calculations and evaluations. Considerable analysis and study is required to solve the problems presented.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Employee in this position has the professional responsibility to perform their duties in a manner that assures the safety of the traveling public at a cost that is an effective use of public funds.

- Errors in judgment and decisions could affect public safety or result in liability for the Department.
- Structural failure can be catastrophic due to loss of life, disruption in goods movement, and/or delays to the traveling public.

PUBLIC AND INTERNAL CONTACTS

Employee in this position must maintain communication with Departmental personnel, contractors, consultants, industry representatives, and other outside agencies as deemed necessary. Employee attends and conducts meetings and responds to numerous requests for information.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Employee may be required to sit for long periods of time using keyboard and video display terminal. Employee may be required to move large or cumbersome plans and diagrams from one location to another. May be required to lift/move/carry various types of portable equipment around the work site or out in the field.

WORK ENVIRONMENT

While at their base of operation, employees will work in a climate-controlled office under artificial lighting. Employees may also be required to travel and work outdoors and may be exposed to dirt, noise, uneven surfaces and/or extreme heat or cold.

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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