

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Senior Bridge Engineer (Specialist)	OFFICE/BRANCH/SECTION DES/SP&/SQM	
WORKING TITLE Accelerated Bridge Construction Subject Matter Expert	POSITION NUMBER 559-220-3185-xxx	EFFECTIVE DATE

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

GENERAL STATEMENT:

This position exists in the Division of Engineering Services (DES), Structure Policy and Innovation subdivision (SP&I), Structure Quality Management Office (SQM), under the direction of the SQM Office Chief (Supervising Bridge Engineer). As the Accelerated Bridge Construction (ABC) Expert, the incumbent performs a variety of tasks to promote and establish ABC as a viable alternative to conventional construction methods. Specific duties, but are not limited to:

TYPICAL DUTIES:

Percentage		Job Description
Essential (E)/Marginal (M) ¹		
25%	E	Engage nationally by serving on FHWA task forces and NCHRP panels; host workshops at state and national level to advance ABC practices; prepare and deliver technical papers and presentations on California ABC practices; conduct webinars; participate in peer exchanges and regularly interact with State Bridge engineers from other DOT's as well as ABC/EDC representatives from FHWA, AASHTO, TRB, and SHRP2; bring valuable information, funding, and best practices to California.
20%	E	Serve as the subject matter expert for ABC; establish policies and guidance materials to facilitate, promote and champion the use of ABC structural elements, processes and practices within the Department; successfully integrate ABC into planning, design and construction practices resulting in a sustained innovative project delivery tool.
20%	E	Serve as a member of the ABC Council and as the Chair the ABC Team; responsible for coordinating DES ABC efforts within Caltrans and with external parties such as academia, the construction industry, local agencies, vendors, and fabricators. Establish DES ABC policies and guidance materials consistent with and supporting Headquarters policies and directives.
20%	E	Performs research on new technologies, methods, materials, equipment, and procedures for ABC implementation.
10%	E	Executes process reviews of ABC practices and prepares reports to management explaining successes and improvement recommendations. Attends technical committee meetings as the SQM ABC representative.
05%	M	Coordinates with Headquarters and District staff to ensure DES ABC policies and guidance are consistent with and support headquarters policies and efforts.

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

No direct supervision is exercised. However, this position is responsible for providing guidance and policy to DES Headquarters and District personnel.

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

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KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Must have a valid certificate of registration as a Civil Engineer in the State of California.

Knowledge: Requires a broad knowledge of Caltrans major activity areas and organization; transportation economics and financing; various phases of transportation systems planning and engineering work; the methods and criteria used in design, maintenance, and construction of various types of bridges, buildings, and other transportation facilities; factors that influence the impact of transportation facilities on the environment, community and economy; departmental goals, policies, procedures, funding and financial constraints; project development process; technical environmental analysis, planning concepts, project risk and quality management principles; knowledge of the principles, practices, and trends of public and business administration, budgets, personnel, project management, planning, partnering, and the Department's Equal Opportunity Program. The incumbent must have broad and extensive knowledge of the policies and procedures of the Division of Engineering Services, and engineering project development processes, including district project management practices and project issues. Must have an in-depth knowledge in ABC principles, FHWA's Every Day Counts; Project Risk; and the California Bridges and Structures Strategic Direction.

Abilities: Must be able to administer the DES Accelerated Bridge Construction program, analyze situations accurately and adopt an effective course of action in the resolution of complex engineering problems. Must be able 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, locally and nationally. The incumbent must have the ability to use quality tools and principles in seeking to continuously improve work processes, employment opportunity and labor relations objectives.

Analytic Abilities: The work and responsibilities assigned to this position require the ability to assimilate technical and procedural input from various sources, to evaluate that input, develop alternative courses of action and to make objective recommendations on all critical issues affecting the planning, project delivery, maintenance and applied studies related to transportation systems. The incumbent must reason logically and creatively using a variety of analytical and problem-solving techniques.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent is responsible for independent action and initiative in carrying out the assigned duties. The incumbent will initiate, develop and make recommendations on changes to policies and procedures. Failure to carry out these responsibilities could result in:

- Miss the opportunity to provide the Districts or the public improved project delivery, minimized traffic disruption, increased safety, and reduced environmental impacts
- Inconsistent and inefficient ABC application leading to a rejection of the practice by DES staff, industry and the public
- Fail to support the Director's commitment to mainstream ABC in California and the Department's commitment to FHWA to promote EDC
- Caltrans will not be recognized as a national leader in ABC or having meet new challenges through innovation
- Loss of public confidence in Caltrans as a responsible public agency and first-rate engineering and environmentally sensitive organization

PUBLIC AND INTERNAL CONTACTS

The incumbent must establish and maintain working relationships on a regular basis with public and private agencies, industry representatives, university and research authorities, special transportation interests, district management and other Headquarters' divisions/programs, and with state, federal, and local agencies with the common goal of providing a sound transportation system for California.

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. Must be able to use fine manipulation and/or simple grasping during the course of their workday. Some walking may be required.

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Must be able to effectively communicate in English, both orally and in writing, and have the demonstrated ability to make presentations, lead workshops, and serve on quality teams. The incumbent must be able to sustain the mental activity needed to conduct necessary research, analysis, and synthesis of issues and make well-reasoned recommendations to management.

Must be able to organize and prioritize large volumes of varied documents. The workload is subject to frequent, substantial and unexpected changes that could affect the scheduling or completion of assignments.

Must be able to handle multi-tasks, adapt to changes in priorities, and complete tasks or projects with short notice and work with others in a cooperative manner. The incumbent must have the ability to develop and maintain cooperative, collaborative working relationships and recognize difficult, emotionally charged and/or sensitive situations and handle them effectively and appropriately. Must deal effectively with pressure, maintain focus and intensity yet remain optimistic and persistent, even under adversity.

The incumbent behaves in a fair and ethical manner toward others and demonstrates a sense of responsibility and commitment to public service. The incumbent values cultural diversity and other individual differences in the workforce.

WORK ENVIRONMENT

The work environment is fast-paced, busy and requires considerable flexibility in managing time, priorities, and assignments. It can be demanding and/or stressful. The incumbent may be required to travel to district offices or other meeting facilities, and/or to the sites of proposed projects. In the field the incumbent may experience all climatic conditions, including rain. While at their base of operation, employees will work in climate-controlled office under artificial light. However, due to periodic problems with the heating and air conditioning, the building temperature may fluctuate.

I have read, and understand the duties listed above and can perform them either with or without reasonable accommodation. (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 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