

POSITION DUTY STATEMENT

PM-0924 (REV 9/2013)

CLASSIFICATION TITLE Senior Bridge Engineer (Supervisory)	OFFICE/BRANCH/SECTION DES/Structure Construction	
WORKING TITLE Bridge Construction Engineer	POSITION NUMBER 559-Variou-3185-xxx	EFFECTIVE DATE July 2014

As a valued member of the Caltrans team, you make it possible for the Department to improve the mobility across California by being innovative and flexible; reporting to work as scheduled; working cooperatively with team members and others; and treating others fairly, honestly and with respect. Your efforts are important to each member of the team as well as those we serve.

GENERAL STATEMENT:

This position reports directly to a Supervising Bridge Engineer in Division of Engineering Services/ Structure Construction. The incumbent is responsible for and manages a staff of engineering employees on multiple structure projects. The Senior Bridge Engineer (Supervisory) may be required to act as the Structure Representative on major projects while managing field staff on smaller structure projects.

TYPICAL DUTIES:

Percentage		Job Description
Essential (E)/Marginal (M) ¹		
30%	E	Provide expertise as needed on structure issues within your area. Resolve contract disputes and issues by determining the intent of the Special Provisions, Project Plans, Revised Standard Specifications, Standard Specifications, Revised Standard Plans, Standard Plans and other supplemental project information, to reduce or eliminate project delays and claims.
25%	E	Assign and supervise the work of all Transportation Engineer Civil Range A-D, Associate Bridge Engineers, Associate Materials and Research Engineer, and Transportation Engineering Technicians, on projects within the assigned area. Conducts required staff safety meetings at least every 10 days.
25%	E	Ensure field construction records are adequate and accurate; that projects are properly staffed, resourced and scheduled; review contract change orders (CCOs), and see that public contacts addressed by the Structure Representatives are being properly handled. Review contractor's operations for compliance with the California Office of Safety and Health Administration (CAL-OSHA) regulations.
10%	E	Provides liaison between the construction projects and Structure Construction Headquarters, Districts, Structure Design, Transportation Laboratory and various other State and outside agencies.
5%	M	Review plans and specifications for upcoming projects. Participate on project delivery teams, technical teams, and technical committees. Develop and deliver training.
5%	M	Periodic review of projects as work progresses to assure compliance with plans and specifications, structural adequacy of temporary structures used for construction, and public and employee safety.

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

Receives general direction from a Supervising Bridge Engineer. Responsible for independent actions as projects are geographically located at construction sites away from the Headquarters Office.

Typically supervises 8 to 12 engineering employees in varying classes who are located throughout the geographical area.

KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS

Possession and maintenance of a valid driver's license in the State of California is required. Possession and maintenance of a valid certificate of registration as a civil engineer in the State of California. A thorough knowledge of methods of design and construction of various types of bridge and transportation related structures; materials, methods and equipment used in construction of structural work. Knowledge of the economics of structure design and construction,

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contract administration and laws and codes governing construction by contract. Ability to plan and direct the work of others; analyze situations accurately and adopt an effective course of action; prepare clear and concise written correspondence, and reports, articles for publication, and address an audience effectively. Ability to analyze and develop solutions for difficult technical and administrative problems relating to construction work. Develop new construction techniques and materials. This position requires knowledge of stress analysis, strength, properties and uses of construction materials; mathematics as applied to civil engineering; methods, materials and equipment used in construction and maintenance of transportation structures; surveying and the methods of proportioning and handling Portland cement concrete. Must be able to use and reference the Bridge Construction Records & Procedures, other Structure Construction O(SC) manuals, and the Construction Manual, and Caltrans Safety Manuals. Must have a working knowledge of and the ability to follow and apply the information contained within Director's Policy and Deputy Directives applicable to OSC. Must be proficient in the use of Excel, MS Word and other engineer related computer programs and software. Must have a basic knowledge in the use of Access. Must have the ability to develop and deliver training to a group.

You may obtain a copy of the class specifications and salary information at: www.spb.ca.gov

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Incumbent will be responsible for ensuring the administrative integrity and technical control of structure work. Must be able to recognize construction problems and take appropriate action. Incorrect decisions could result in delayed project delivery, structural failure, substantially increase costs to the State or loss of life. Incumbent is responsible for the safety of the traveling public and assigned employees. Incorrect decision could result in loss of life.

PUBLIC AND INTERNAL CONTACTS

Exercises wide latitude for project related contacts with Structure Design and Maintenance, Headquarters Units, Districts, public and private agencies, and contracts. Incumbent must be able to establish and maintain open communication with those contacted during the course of work. Will confer routinely with contractor's management staff, in order to resolve problems relating to the terms of the contract, representatives from other State and public agencies and the general public.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Ability to develop and maintain cooperative working relationships; respond to difficult situations, recognize emotionally charged issues and problems and validate the various responses. Incumbent must be able to climb steep inclines and perform work from heights which may be over 100 feet above ground or water. Must be able to sit while driving for long periods of time. Must be able to carry and/or use field engineering equipment such as, but not limited to surveying equipment, concrete testing equipment (including air-meter and Kelly ball) and equipment for testing smoothness (including a profilograph). Hearing and sight are both essential to job performance because the engineer must be able to hear directions, traffic and equipment and must see to perform his/her duties safely. Corrected hearing is acceptable. Sight must be corrected to the State of California, Department of Motor Vehicles standards for safely driving a vehicle. Night vision must be good for safety when working after dark. Incumbent must be able to walk, stand or sit for long periods of time. Other physical requirements of the job include the ability to lift and or carry 50 pounds or more, reaching overhead, pushing or pulling, twisting, climbing, balancing, bending, crouching, squatting, crawling, and fine manipulation. Possession and maintenance of a valid California driver's license in the State of California is desirable.

WORK ENVIRONMENT

Incumbent will be exposed to various work environments. Regular punctual attendance is required. Work week will generally consist of five, eight hour days, but may vary or require extended hours or night work depending on projects in the incumbent's area. In the office setting, incumbent must be able to stand and/or sit for prolonged periods of time. Will be exposed to artificial lighting in a climate-controlled area. Must be able to lift 50 pounds and climb steep inclines. Extensive travel may be required, therefore, incumbent must be able to travel using a car or commercial transportation. In the field setting, incumbent may be exposed to loud noises, dust, chemicals, extreme weather conditions and sunlight while out in the field. May be required to work in a wide range of sometimes extreme weather conditions, including heat up to 120 degrees, cold as low as 15 degrees, strong winds, rain, sleet or snow. Personal safety requirements include:

- Work boots, in good sturdy condition, must be worn to provide foot and ankle support and protection.
- Either long or short-sleeved shirts and a safety vest must be worn on or around the jobsite.
- Long pants, no shorts or cut-offs, must be worn on or around the jobsite.
- Provided safety gear; hard hats, safety glasses, safety vests, hearing protection devices, gloves, respirator and other

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safety gear must be worn when required by the Department.

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
