

**CALIFORNIA DEPARTMENT OF TRANSPORTATION
 DUTY STATEMENT**

CLASSIFICATION TITLE	DISTRICT/DIVISION/OFFICE	
Transportation Engineer, Civil	DES-METS-GS/ Office of Structural Materials	
WORKING TITLE	POSITION NUMBER	EFFECTIVE DATE
Transportation Engineer, Civil	559-318-3135-XXX	NOV 2014

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

Under direction of a senior transportation engineer, the employee serves as an expert in the field of testing and quality assurance/quality control of structural steel, fasteners, bridge bearings, joint seals, anchorage devices, and other related structural products.

TYPICAL DUTIES

Percentage	Job Description
Essential (E)/Marginal (M)	

- | | |
|---------|--|
| 20% (E) | Assists the Structural Materials Testing Branch (SMTB) supervisor on ensuring compliance with the relevant clauses of ISO/IEC 17025 "General requirements for the competence of testing and calibration laboratories" and the A2LA "General requirements for laboratories accreditation." |
| 20% (E) | Assists the SMTB supervisor with technical matters related with analysis, quality assurance testing and special investigations pertaining to structural steel, fasteners, bridge bearings and joint seals, anchorage devices, and other related structural products. Evaluates new products of a structural nature. Prepares correspondence and written reports as needed. |
| 10% (E) | Reviews submittals from Independent Testing Laboratories to be included in the Caltrans list of approved Independent Testing (IT) laboratories. Ensures compliance with Caltrans requirements, and maintains and updates the pre-approved list. |
| 10% (E) | Reviews submittals from mechanical coupler fabricators, coordinates testing of specimens for prequalification approval, and maintains and updates the fabricators pre-qualified list. |

- 10% (E) Reviews submittals from high strength threaded bar fabricators, concrete anchorage fabricators, and resin capsule anchors fabricators; coordinates testing of specimens for pre-qualification approval, and maintains and updates the pre-qualified product lists.

- 10% (E) Consults and/or confers with and assists other Headquarters offices, District personnel, other public agencies, manufacturers, contractors, and private individuals in the area of structural materials and related products. Provides technical expertise and consultation concerning specialized structural materials and products, including fasteners, concrete anchorage devices and bonding materials.

- 10% (E) Prepares and participates in training programs, lab tours, and attends and participates in meetings and conferences

- 10% (M) Participates in various Technical Committees including, but not limited to: the Steel Committee, the Welding Committee, the Concrete Committee and the Consistency Committee. In this capacity prepares, reviews, edits, or recommends changes to plans, specifications and test methods.

SUPERVISION EXERCISED OVER OTHERS

Position does not supervise others.

KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS

A well-rounded education and experience in the field of civil engineering is required. Materials testing and structural engineering experience is desirable. The incumbent should be familiar with Caltrans Standard Plans and Specifications, ASTM, ANSI, AWS, AASHTO and other related specifications. The position requires the ability to analyze situations, materials and test data to perform structural engineering. Proficiency with computers and computer software is required.

CONSEQUENCE OF ERROR/RESPONSIBILITY FOR DECISIONS

Errors can lead to the acceptance and incorporation of improper or inferior materials in Caltrans construction and maintenance projects, resulting in decreased service life and effectiveness, or possible structural failure of a highway bridge, traffic barrier, light pole, etc. This can result in the loss of substantial amounts of government funds and can have direct effect on the lives and safety of the traveling public.

PUBLIC AND INTERNAL CONTACTS

In the course of carrying out his or her duties, employee will maintain close communication with other personnel. He or she will routinely confer with other State representatives both within and outside Caltrans to transmit or obtain relevant information.

PHYSICAL, MENTAL AND EMOTIONAL REQUIREMENTS

Employee may be required to sustain the mental activity needed for conducting tests and calculating results. The employee will be required to use a computer at various times during the day. Problem solving, analysis and reasoning may be required to respond appropriately to situations and to develop and maintain cooperative working relationships. The employee may occasionally be required to move equipment and test materials that require lifting up to 50 lbs.

WORK ENVIRONMENT

The majority of the time, the employee will work in a climate-controlled office. Occasionally, the employee will work in the lab and may be exposed to dirty surfaces and equipment, odors, hot liquids, flames and hot equipment. The employee may occasionally be required to travel and work outdoors, and may be exposed to dirt, noise, uneven surfaces, and/or extreme heat or cold.

I have read, understand and can perform the duties listed above. If you believe you may require reasonable accommodation, please discuss this with the hiring supervisor

Employee's Name (please print)

Employee's Signature

Date

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

Supervisor's Name (please print)

Supervisor's Signature

Date