

POSITION DUTY STATEMENT

DOT PM-0924 (REV 08/2024)

CLASSIFICATION TITLE Materials and Research Engineering Associate (Specialist)	OFFICE/BRANCH/SECTION DES/METS/OMMIA/IA South	
WORKING TITLE MREA-IA South	POSITION NUMBER 559-319-3381-xxx	REVISION DATE 10/31/2024

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:

Under the supervision of a Senior Transportation Engineer (Supervisor) Branch Chief, Independent Assurance (IA) South/ Corroboration Sample Program (CSP), or the guidance from a Transportation Engineer - Civil, the Materials and Research Engineering Associate (MREA) will be in District 12 in Huntington Beach, Field Office and cover work in Districts 7, 8, 11 and 12. The MREA may also support the IA Program in Districts 5, 6 and 9 and assist with the Corroboration Sample Program (CSP), Joint Training Certification Program (JTCP) and Reference Sample Program (RSP) statewide as needed. Extensive statewide travel is required.

CORE COMPETENCIES:

As a Materials and Research Engineering Associate (Specialist), 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. (Strengthen Stewardship and Drive Efficiency - Engagement, Innovation)
- **Dealing with Ambiguity (Risk)**: Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Strengthen Stewardship and Drive Efficiency - Engagement, Integrity)
- **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. (Advance Equity and Livability in all Communities - Equity, Integrity)
- **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. (Strengthen Stewardship and Drive Efficiency - Engagement, Innovation)
- **Relationship Building**: The ability to develop and maintain internal and external trust and professional relationships, which includes listening and understanding to build rapport. (Cultivate Excellence - Engagement)
- **Customer Focus**: Considers, prioritizes, and takes action on the needs of both internal and external customers. (Safety First - Engagement, Equity)
- **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 - Engagement, Equity)
- **Analytical Skills**: Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Strengthen Stewardship and Drive Efficiency - Engagement, Innovation)
- **Thoroughness**: Ensures that work and information is complete and accurate. Ensures that assignment goals, objectives, and completion dates are met. Documents and reports on work progress. (Safety First, Strengthen Stewardship and Drive Efficiency - Engagement, Innovation)

TYPICAL DUTIES:

Percentage
Essential (E)/Marginal (M)¹ Job Description

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30%	E	Certify Caltrans, Local Agency, and private industry company personnel in proper sampling and testing procedures in accordance with California Test Methods (CTM), American Association of State Highway Transportation Officials (AASHTO) Test Methods, and American Society for Testing and Materials (ASTM) Test Methods through the Caltrans Independent Assurance (IA) Program and Joint Training Certification Program (JTCP). Personnel certification is accomplished in accordance with the Caltrans IA Manual through verification of training, administration of written examinations on test procedures, and administration of practical examinations on test procedures. Tracks the participation and communication in the Statewide IA Database (SIAD) and files documents in the IA Folder located in the METS Common Drive.
30%	E	Accredit Caltrans, Local Agency, and private industry company laboratories in proper sampling and testing procedures in accordance with CTM, AASHTO, and ASTM Test Methods through the Caltrans Independent Assurance (IA) Program and Joint Training Certification Program (JTCP). Laboratory accreditation is accomplished in accordance with the Caltrans IA Manual through site assessments, review of laboratory accreditation manuals, confirmation of equipment calibrations, and verification of proficiency sample testing. Tracks the participation and communication in the SIAD and files documents in the IA Folder located in the METS Common Drive.
15%	E	Assist with the preparation of reference and corroboration samples for utilization by the RSP and CSP, respectively. Provide assistance to JTCP at California State University, Long Beach and San Jose State University as directed by the Branch Chief.
15%	E	Assist in the development of the IA program improvements including but not limited to; corroboration sample program, reference sample program, internal and external presentations, and reporting statistics to the Branch Chief regarding certified technicians and accredited laboratories.
10%	M	Perform physical and analytical testing of highway construction materials. Perform other duties appropriate for an MREA at the direction of the Branch Chief including support of the IA Central and IA North branches.

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

The MREA has no supervisory responsibilities, but in backup capacity to the Branch Chief, the MREA acts as a lead worker over technicians, student assistants, and others as required and assigns and/or schedules laboratory work for laboratory personnel.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Incumbent must hold and maintain a valid California driver's license when operating a State owned vehicle.

Knowledge of:

- Highway construction materials, sampling, and testing procedures including portland cement concrete, asphalt concrete and other manufactured materials encountered in highway construction and repair.
- Construction testing equipment and the ability to use them.
- Contract specifications.
- Computer applications (e.g., Microsoft Outlook for e-mail, and the Microsoft Office Suite of MS-Word, MS-Excel, MS-PowerPoint, MS-Access, Microsoft Teams, and WebEx for virtual meetings) and database software applications (SIAD).
- California Test Methods, AASHTO test methods, and ASTM test methods.
- Caltrans Independent Assurance program.

Ability to:

- Express opinions and defend those opinions in discussions with experienced laboratory and field personnel.
- Communicate effectively, both orally and in writing.
- Write technical documents including manuals, material reports, policy and guidance documents.
- Be comfortable in a training situation and make presentations to groups.
- Properly analyze specifications and test requirements, accurately interpret test results, and take effective and appropriate action.
- Draw sound conclusions and apply the knowledge and experiences of others.
- Establish and maintain good, professional working relationships with Department units, industry and contractors on Department projects.
- Work independently and develop a specific plan of action after receiving general direction.

Incumbent must be familiar with and able to follow the Department policies and procedures and must be confident and secure in

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his/her knowledge of the above listed factors.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Errors, if not immediately recognized and corrected, in the work could result in problems ranging from annoyance to serious inconvenience and, in some cases, may result in delays, costly remedial action, and/or contractor's claims. Unusual decisions that could have serious repercussions are normally referred to the immediate Supervisor.

PUBLIC AND INTERNAL CONTACTS

The incumbent has frequent contact with Caltrans personnel and Private, Local Agency and Caltrans laboratories and technicians. The incumbent is expected to handle this contact with professionalism at all times and gain and maintain the confidence and cooperation of those contacted during the course of work.

As a representative of the Department and the State of California, the incumbent is expected to maintain fair, impartial and effective relationships with clients, and conduct himself or herself in a professional and courteous manner at all times.

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 use fine manipulation and/or simple grasping during the course of their workday. Some walking may be required. Incumbent may be required to lift and/or move objects weighing up to 50 pounds.

Must be able to effectively communicate in English and may be required 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, reasoning, auditing and editing, problem solving and report creation and writing.

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. The incumbent must have the ability and aptitude to utilize a personal computer to update, retrieve, and analyze information.

Must be able to multitask while regularly responding to e-mails and phone calls. This position requires the incumbent to be flexible and adaptable to changing policies, rules and regulations as it relates to personnel administration. Must be able to 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 with staff as well as other departmental employees and recognize emotionally charged and/or sensitive issues and problems and handle them effectively and appropriately. Employee must recognize and respond appropriately to difficult situations and priority issues arising within a dynamic work environment, and must facilitate effective solutions. 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.

The incumbent must possess the ability to formulate effective strategies consistent with the Division's business plan and develop new insights into situations and apply innovative solutions to make organizational improvements. The incumbent must have the ability to effectively coordinate multiple assignments with concurrent due dates.

Travel is required for this position and may constitute up to 75% of the employee's time.

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

Sometimes the employee will work in a testing laboratory or in field and may be exposed to dirty surfaces, testing equipment, odors, hot liquids, dust, and noise.

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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

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