

POSITION DUTY STATEMENT

PM-0924 (REV 3/2006)

CLASSIFICATION TITLE Transportation Engineering Technician	DISTRICT/DIVISION/OFFICE 03/Division of Maintenance and Traffic Operations Signal Ops / Electrical Design (Unit 390)	
WORKING TITLE Transportation Engineering Technician	POSITION NUMBER 903-350-3175-xxx	EFFECTIVE DATE

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: (BRIEF SUMMARY OF THE MAIN PURPOSE AND FUNCTIONS OF THE POSITION. DESCRIBE THE SUPERVISORY RELATIONSHIPS (INCLUDING THE CLASSIFICATION OF THE SUPERVISOR OR MANAGER TO WHOM THE INCUMBENT REPORTS.) WHEN APPROPRIATE, IDENTIFY THE NEED FOR ANY CREDENTIAL OR LICENSE (SUCH AS A DRIVERS' LICENSE.)

Under the direction of the Chief, Electrical Design/Signal Operations Branch, (a Senior Transportation Electrical Engineer) the incumbent will participate in design activities. Using information initiated by an engineer, uses analytical and computer-oriented processes and equipment in the preparation of contract plans, estimates, and specifications for approval by the engineer.

TYPICAL DUTIES:

PERCENTAGE

JOB DESCRIPTION

Essential (E)/Marginal (M)¹

- 25% (E) Calculate quantities for estimates and assist in the preparation of contract plans. Calculate and/or check highway structural section calculations and miscellaneous quantities shown on plans.
- 25% (E) Use Computer Aided Drafting Design (CADD) and other computer-oriented software to prepare contract plans. Assist in the preparation of Base Maps using CADD software on the CT Engineering Workstation under direction of the engineer.
- 15% (E) Assist in the preparation of contract plans, profiles, cross sections and other details, including making fundamental mathematical calculations. Receive initial engineer decisions and prepare contract plans, profiles, cross sections and other details.

¹ ESSENTIAL 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

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- 15% (E) Assists in the final preparation of hard copy and/or electronic maps and plans under the direction of the engineer.
- 10% (E) Under direction of the engineer, assist in the preparation of roadway alignments, profile grades, and drainage facilities. This includes preparation of mathematical calculations (run a traverse) and drafting of plans for transportation projects using CADD software on the CT Engineering Workstation.
- 10% (M) Upon direction from the engineer, identify elements that are not within normally acceptable technical guidelines as written in manuals, design bulletins, and other reference guides for consideration by the Engineer to be incorporated into final design.

SUPERVISION EXERCISED OVER OTHERS:

This position does not supervise.

KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS:

Must possess a wide knowledge of details including software, methods and layouts used in the preparation of contract plans and construction drawings; mathematics, highway design practices; conventional and state-of-the-art computer applications to transportation engineering work; and technical level civil engineering skills in order to understand and apply Caltrans manuals and standards.

Must have the ability to make accurate mathematical calculations; demonstrate the potential to assume progressive technician journey level responsibility; organize/arrange data to produce effective work products without repetitious direction; and possess interpersonal skills necessary to be an effective team member.

- Knowledge of the functional and organizational characteristics of the Division.
- Knowledge of District functions, policies, procedures, and operations.
- Knowledge of computers and the Department's standard software.
- The ability to work independently, learn quickly, analyze situations, and communicate tactfully and effectively with a variety of people with different backgrounds, experiences and attitudes.

CONSEQUENCE OF ERROR/RESPONSIBILITY FOR DECISIONS:

Failure to understand and incorporate appropriate standards, requirements and policies into work product may result in expensive waste of time and materials, cause additional work and project delays, and could result in excessive construction contract claims.

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Incumbent is responsible for his/her actions, decisions, quality of work, and proper use of state time, equipment and materials. Errors in judgment could jeopardize meeting project deadlines. Improper performance of duties and/or failure to adhere to established policies, procedures and guidelines could lead to adverse action and possible termination.

PUBLIC AND INTERNAL CONTACTS:

Must be able to respond to inquiries and provide accurate and factual information. Should be able to deal effectively with others.

PHYSICAL, MENTAL AND EMOTIONAL REQUIREMENTS:

Physical requirements for this position include sitting for long periods of time using a keyboard and video display terminal and may occasionally require bending, stooping and kneeling.

Mental requirements for this position include the ability to multi-task, adapt the changes in priorities, and complete tasks or projects with short notice; ability to organize and prioritize large volumes of varied documents; and the ability to concentrate in order to review and create documents and meet strict deadlines.

Emotional requirements for this position include: interaction with many people and the ability for employees to work together in a cooperative manner; ability to resolve emotionally charged issues reasonably and diplomatically; deal effectively with pressure, maintain focus, and intensity yet remain optimistic and persistent, even under adversity; consider and respond appropriately to the needs, feelings, and capabilities of different people in different situations; is tactful and treats others with respect; open to change and new information; and adapts behavior and work methods in response to new information, changing conditions, or unexpected obstacles.

WORK ENVIRONMENT:

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

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

EMPLOYEE (Print)	DATE
EMPLOYEE (Signature)	DATE

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

SUPERVISOR (Print)	DATE
SUPERVISOR (Signature)	DATE