STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

# POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

| CLASSIFICATION TITLE | OFFICE/BRANCH/SECTION | |
|---|---|---|
| Senior Transportation Engineer | Central Region Construction 501 | |
| WORKING TITLE | POSITION NUMBER | EFFECTIVE DATE |
| Senior Transportation Engineer, Supervising | 931-501-3161 | |

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 the general direction of a Supervising Transportation Engineer, incumbent will be a responsible for planning, directing, and coordinating highway construction.

## TYPICAL DUTIES:

| Percentage | Essential (E)/Marginal (M)[1] | Job Description |
|---|---|---|
| 40% | E | Assign work, give instructions and make decisions on various engineering and administrative problems in connection with directing the work involved in heavy grading, rock surfacing, asphalt concrete and portland cement concrete paving, constructing of culverts, and constructing of major bridges. Major bridge tasks are in conference with Bridge Engineer. |
| 15% | E | Initiate and process contract change orders, prepare comprehensive field reports and other miscellaneous correspondence, and review progress and final pay estimates. |
| 15% | E | Ensure that project construction conforms to traffic control, environmental, hazardous waste, and storm water pollution prevention criteria. |
| 15% | E | Provide leadership and supervision for field office and inspection staff. Responsible for monitoring and managing staffing resources including overtime, operating expenses, travel and timely submittal of TOPPS. |
| 5% | E | Provide appropriate training and evaluation of subordinates to assure their development and the quality of their performance. |
| 5% | M | Meet with private and public sector and the news media to ensure that they and the public are properly appraised of contract progress, and any special contract problems. |
| 5% | M | Coordinate construction consultant contracts. |

[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.

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

Supervise a staff of engineers and others engaged in transportation engineering work and development activities.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Must possess a valid certificate of registration as a Civil Engineer. Knowledge of: Various phases of transportation engineering, including planning processes and methods, systems planning, evaluation of alternatives, and facility

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locations and design, construction, operation and maintenance, transportation economics and financing; project management concepts; factors which influence the impact of transportation facilities on the environment, the community and the economy; principles and techniques of personnel management and supervision; Department's Equal Opportunity Policy and Objectives. Health and safety and labor relations programs and the processes available to meet their objectives.

Ability to: Plan and direct the work of others; analyze situations accurately and adopt an effective course of action; make effective presentations.

Incumbent needs to have knowledge of a manager's/supervisor's responsibility for promoting equal opportunity in hiring and employee development and promotion, and for maintaining a work environment that is free of discrimination and harassment.

Knowledge of safety and health policies and procedures as contained in the Department's Injury and Illness Prevision Program, and the supervisor role in maintaining an effective injury and illness prevention program.

Incumbent is required to have a moderate degree of analytical skill to determine if construction work meets specification requirements and to interpret plans and specifications correctly.

Incumbent analyzes special provisions, plan estimates, regulations, construction progress, and critical path method (CPM) scheduling and makes decisions based on these factors. Incumbent must have a thorough knowledge of scheduling, materials, safety practices, contract financing and record keeping. Ability to communicate and work under pressure is required.

Must have a complete knowledge of contract administration paperwork and documentation. Prefer incumbent who is able to use and understand computers. Must be able to prepare reports and correspondence. Incumbent is expected to have a good knowledge of all phases of engineering and departmental policies and operations; be familiar with all rules and regulations pertaining to the State and Highway Code, Construction Manual, Standard Specifications, Special Provisions, and other pertinent manuals, laws and codes.

Incumbent should have knowledge of methods, materials, tools and equipment used in highway and bridge construction; scheduling; and safety practices. Incumbent is required to know methods and equipment used in construction of transportation facilities; methods of proportioning and handling Portland cement and asphalt concrete; testing of materials; principles and practices involved in utility relocation, environmentally sensitive areas, Storm Water Pollution Prevention Plans (SWPPP) and Cal/OSHA safety regulations. Incumbent must be able to calculate pay quantities on Contractor's contracts and communicate effectively orally and in writing. Must have the ability to make neat and accurate mathematical calculations and engineering notes; make sound decisions in the implementation of contract plans, specifications and various engineering activities; organize/arrange data to produce effective work products without repetitious direction; and possess interpersonal skills necessary to be an effective team member.

Knowledge of: Basic principles of physics, chemistry, and mathematics as applied to civil engineering; stress analysis; mechanics; strength of materials; properties and uses of engineering materials; methods and equipment of engineering construction; engineering economics; hydrology and hydraulics.

Possess interpersonal skills necessary to be an effective team member.

Ability to: read and write English at a level required for successful job performance; inspect construction work and enforce compliance with plans and specifications.

Incumbent is expected to apply sound engineering judgment in evaluating a variety of problems, assess workloads, and set priorities and allocate staff.

Must have the ability to evaluate work methods and traffic conditions closely, both before and during the work, to assure safety.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The Construction Engineer is responsible for all construction work in the assigned area and must answer for his/her

decisions and those of subordinates. Errors in judgment could result in:

- Time and cost overruns on contracts which could result in contractor claims and excessive expenditure of public funds.
- Use of inferior materials which require replacement and/or result in a finished product of poor quality.
- May result in expensive waste of time and materials
- Cause additional work and/or project delays
- Reduction in productivity

Incumbent is responsible for his/her actions, decisions, quality of work, and proper use of State time, equipment and materials. 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

Incumbent must be able to communicate effectively with others including Department staff, technical/professional level staff of outside agencies, contractor's personnel and members of the public regarding construction projects. Has frequent contact with City and County representative, private contractors, traveling public, Senior Engineers and their staff, and other branches, both District and Headquarters, to provide a coordination of effort in processing estimates, payments and other documents that are handled by the Construction Field Office. Incumbent must be able to communicate effectively with Contractor's personnel, property owners and internal personnel. Good communicative skills are essential in carrying out the duties.

Internally, must coordinate construction activities with other functional managers on a continuing basis, as well as maintaining communications with Headquarters Construction.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Must possess the ability to lead, plan, and direct the work of others. Must be able to analyze situations accurately and adopt an effective course of action. Must be able to concentrate, formulate effective strategies, be multi-tasked, adapt to changes in priorities, and complete complex task or projects with short notice. Ability to resolve emotionally charged issues reasonably and diplomatically. Must be able to develop and maintain cooperative working relationships. Must be able to organize and prioritize. Must be able to prepare correspondence and reports. Must be able to communicate effectively and make effective presentations. Must be able to represent the Department of Transportation at meetings. Must be able to assign work, check work, give instructions and assistance, and maintain discipline. Must be able to provide technical oversight of consultants performing engineering work under contract with the Department. Must be able to ensure that assigned projects are completed within scope, cost, schedule, budgeted resources and departmental standards and practices. Ability to develop personnel requirements and monitors use of personnel in meeting engineering projects and operations schedules.

Must possess the ability to work on uneven ground, climb, lift, carry, bend, squat, kneel, crouch, reach, pull, push, grasp, sit, stoop, crawl, and repetitive use of extremities. Must be able to transport variety of objects that are less or equal to 40 pounds. Hard hat, safety vest or approved safety shirt, and safety glasses must be worn at all times in the field, no exceptions. May be required to sit for long periods of time. May be required to stand for long periods of time.

The workload is subject to frequent, substantial, and unexpected changes. Workload may subject employee to night work, frequent changes of shift, frequent changes of work hours and workdays, and geographic transfer. Travel is required. A valid California Drivers License is required. Overtime and/or flexible hours may be required. Vacations may be restricted during peak times. Use of computers and other various office equipment is required.

Must possess a valid certificate of registration as a Civil Engineer.

WORK ENVIRONMENT

Job will have exposure to chemicals, equipment, machinery, heat, cold, dust, gas, fumes, outdoor conditions, indoor

conditions, lab conditions, humidity, and high decibels of noise. While at the Construction office employees will normally work in a 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, 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 |