

JOB TITLE:	SENIOR MECHANICAL ENGINEER	DIVISION:	DISTRICT - ENGINEERING
REPORTS TO:	DIRECTING CIVIL ENGINEER	EEO CATEGORY:	02 - PROFESSIONAL
FLSA:	NON-EXEMPT	SAFETY-SENSITIVE:	YES (Public Safety)
CLASSIFICATION:	REPRESENTED	LOCATION:	SAN FRANCISCO

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

Position Summary

Under direction, perform varied professional and mechanical engineering work of above average difficulty in the field and office. May supervise subordinate engineering personnel engaged in design and construction work. May act as resident engineer on construction projects. Interpret, explain and carry out existing engineering construction, design and inspection methods and procedures. Responsibilities include regular contact with mechanical suppliers, contractors and their representatives, the general public and other professional engineering personnel obtaining and providing technical engineering data and information, preparing, checking and reviewing detailed and complex engineering plans, specifications and related reports. Perform related duties as required.

Essential Responsibilities

- Prepares and supervises the preparation of mechanical engineering designs, drawings, specifications, schedules, quantity and cost estimates for a wide range of new construction and maintenance improvement projects.
- Plans, schedules and coordinates detailed phases of mechanical engineering work either as part of a major project or for an entire project of smaller scope.
- Reviews contractors' mechanical submittals and works to ensure compliance with plans and specifications.
- Reviews consultant's mechanical designs and submittal packages.
- Makes field investigations of existing facilities.
- Makes investigations of contractual and construction problems that may arise on construction projects.
- Makes difficult engineering calculations and analysis in connection with mechanical design of utility systems and transportation facilities; supervise the preparation of detailed drawings for these facilities.
- Inspects and supervises a wide variety of ordinary and complex construction projects to ensure compliance with contract plans and specifications.
- Assists in the preparation of complex contract documents.
- Prepares correspondence and prepare technical engineering reports in connection with a wide variety of projects.
- Works on a team with other engineers, drafting technicians and contracts personnel on planning, developing and finalizing technical and construction contract documents.
- Knows and follows the safety and health rules and safe working practices applicable to their job.



- Ensures that employees under their supervision follow established safe work practices and obey all safety rules.
- Regular and reliable attendance and performance is required.

Required Knowledge, Skills and Abilities

Working knowledge of:

- Theories and practices of mechanical engineering, designing, construction and inspection procedures.
- Current mechanical codes and products.
- Modern construction methods, the strengths and uses of construction materials and stress analysis required in planning construction projects.

Ability to:

- Originate and check design details, estimates, engineering plans and specifications.
- Demonstrate considerable skill in the application of engineering theories and practices to practical engineering field and office problems.

Minimum Qualifications

Education and/or Experience:

- Bachelor's degree in Mechanical Engineering
- Five years position-related mechanical engineering experience, including design, estimate and specification preparation and the inspection of construction work
- Experience in the design of new and evaluation of existing HVAC and piping systems
- One-year supervisory experience is desirable

Required Licenses:

- Registration (P.E. license) as a Mechanical Engineer in the State of California for at least 5 years.

Physical Requirement:

Ability to perform periodic field investigations and inspections of existing and new works on the Golden Gate Bridge, and other District structures and buildings. Ability to climb scaffolds, catwalks and ladders. Ability to carry test, inspection and other equipment that may weigh up to 50 pounds. Routine use of computer, telephone and other office equipment. Mobility to work in office setting.

This position may have a potential for or actual exposure to lead. Pursuant to OSHA regulations, District employees are not exposed to lead at concentrations greater than 10 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) of air averaged over an 8-hour period.