



JOB TITLE:	SENIOR ENGINEERING DESIGN TECHNICIAN	DIVISION:	DISTRICT - ENGINEERING
REPORTS TO:	DIRECTING CIVIL ENGINEER	EEO CATEGORY:	03-TECHNICIAN
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 the supervision of a Directing Civil Engineer, responsible for the technical quality of the drafting work performed by other Engineering Design Technician(s) and Engineers staff as well as their own drafting work. Performs complex drafting assignments that require the application of engineering design and drawing techniques. Produces a large volume of working plans and detailed drawings for engineering projects. Interacts with other engineering staff members and all levels of District personnel to furnish and receive information for engineering and special projects. Reviews the work products prepared by Engineering Design Technician(s) regarding the technical quality of the Engineering Design Technicians work products. Serves as a lead worker and assists Directing Civil Engineer with training of and to provide guidance to Engineering Design Technicians. Confers with their supervisor to resolve problems; performs additional related duties as required or assigned.

Essential Responsibilities

- Prepares civil, structural, architectural, mechanical and electrical plans and detailed drawings
- Receives initial instructions, requirements and advice from their supervisor;
- Is responsible for technical adequacy and consistency drafting produced work
- Checks the completed work prepared by Engineering Design Technician(s) for technical adequacy and consistency
- Prepares a large volume of clear, complete and accurate detailed engineering plans and drawings from CADD files, rough sketches, notes, or verbal instruction
- Utilizes computers in CADD, database, spreadsheet and word-processing applications for completion of tasks
- Employs established CADD Users guidelines and drafting standards in performing drafting duties
- Updates CADD Users guidelines and drafting standards, as necessary
- Prepares graphic presentations and architectural renderings
- Prepares design drafting of architectural, civil and structural assignments
- Uses accepted formulas and manuals in making necessary computations
- Assists engineering with field surveys
- Performs multiple tasks in a high paced environment, with minimal instruction and supervision



- Knows and follows the safety and health rules and safe working practices applicable to his or her job.
- Establishes and maintains effective working relationships with District employees, customers, vendors and all others contacted during the course of work using principles of excellent customer service
- Performs additional related duties as assigned
- Regular and reliable performance and attendance is required

Required Knowledge, Skills and Abilities

Working knowledge of:

- Methods, layouts and details used in the preparation of engineering drawing and graphic presentations
- Computer Assisted Design Drafting (CADD)
- Computer operating system and plotting configurations
- Spreadsheet, database, and word processing software
- Engineering mathematics and practices
- Modern construction methods and building materials, codes and specifications in design and construction
- Occupational health and safety rules and working practices applicable to this position

Ability to:

- Prepares plans and produces graphics neatly and accurately
- Assists in the preparation of designs, plans, estimates, reports and specifications
- Communicates and interacts with a professional, courteous demeanor
- Follow the safety and health rules and safe working practices applicable to the job

Minimum Qualifications

Education and/or Experience:

A combination of college level training and position related experience equivalent to:

- Associate degree, or equivalent, with major course work in drafting. Additional Qualifying Experience may be substituted for education on a year-for-year basis
- Five years extensive drafting experience in a production-oriented engineering office including three years intermediate level experience
- Four years Computer Assisted Design Drafting (CADD) experience required, AutoCADD preferred, and one year manual drafting experience desirable
- Proficiency to maintain computerized databases using Access
- Intermediate to advanced skills in MS Word, Excel, Outlook and PowerPoint



Required License:

- Must possess and maintain a current, valid California driver's license and satisfactory driving record. No reckless driving and DUI infractions within the last 7 years. No more than 2 moving violations within the last 3 years. May operate District vehicles.

Physical Requirement:

Ability to perform extensive computer input. Ability to remain seated at an office desk working at a computer terminal for long periods of time. Ability to use copiers and scanning machines. Ability to work in an office environment. Vision to read printed materials and a computer screen. Hearing and speech to communicate in person and over the telephone. Routine use of computer, telephone and other office equipment. Ability to travel to District facilities.

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.