



JOB TITLE:	ENGINEERING DESIGN TECHNICIAN	DIVISION:	DISTRICT - ENGINEERING
REPORTS TO:	SUPERVISING 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 general direction from supervisor and engineers, perform complex drafting assignments that require the application of engineering design and drafting techniques. Create detailed drawings for engineering projects, layouts, sketches, maps and graphic representations of engineering designs. Using Excel or other database software, catalogue and organize as-built record drawings. Work with engineers and other District personnel to furnish and receive information for engineering and special projects. Confers with the supervisor to resolve problems; monitors the condition of drafting equipment, printers and plotters; performs additional related duties as required.

Essential Responsibilities

- Prepares civil, structural, architectural, mechanical and electrical plans and detail drawings for District-wide projects
- Receives initial instructions, requirements and advice from supervisor; completed work is checked for technical adequacy and consistency
- Prepares clear, complete and accurate detailed engineering plans and drawings from rough sketches, notes or verbal instruction
- Utilize computer in AutoCAD, database, word-processing applications for completion of tasks
- Employs District established CADD Users guidelines and drafting standards in performing drafting duties
- Prepares graphic presentations and architectural renderings
- Prepares design drafting of architectural, civil and structural assignments
- Uses accepted formulas and manuals in making necessary computations
- Create and update as-built record drawings
- Scan and organize electronic records of project contract documents
- Assists engineering with field surveys
- Monitor and schedule maintenance of large format plotter and scanner
- Perform multiple tasks in a high paced environment, with minimal instructions 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
- Spreadsheet, database, and word processing software
- Engineering mathematics and practices and engineering terminology
- 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:

- Drafting using AutoCAD
- Prepare plans and graphics for presentations
- Assist in the preparation of designs, plans, estimates, reports and specifications
- 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
- Three years' extensive drafting experience in an engineering office including one year intermediate level experience
- Two years AutoCAD experience required; manual drafting experience desirable

Required License:

- Must possess and maintain a current and satisfactory driving record. No reckless driving and DUI within the last 7 years. No more than 2 moving violations within the last 3 years. Operates District vehicles on a regular basis (Drives District vehicles on a regular basis).



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. Ability to lift up to 20 pounds (to box and lift files for storage). 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.