

ASSOCIATE CIVIL ENGINEER

DEFINITION

Supervises and participates in the surveying activities and preparation of civil engineering drawings, specifications, and cost estimates for design of new school sites and alterations of existing sites.

TYPICAL DUTIES

Supervises and participates in the preparation of civil engineering drawings, specifications, and cost estimates for building and ground improvements, streets, storm drains, and sanitary sewer systems; land, topographical, and construction surveying; preparation of tract maps and legal descriptions for property purchases, sales, leases, and easements.

Confers with and advises District personnel and officials of public agencies and utility companies concerning details of civil engineering projects.

Prepares civil engineering design standards for the guidance of District personnel and commissioned civil engineers.

Interprets and clarifies construction drawings for inspectors and contractors and attends construction job "starts" and "final" meetings.

Supervises the preparation and maintenance of plot plans and records of boundary and property lines for District properties.

Coordinates projects with personnel in other design units and checks work for conflicts with other engineering and architectural features.

Reviews relevant information on file and visits project sites to analyze conditions and to study civil engineering problems.

Confers with and reviews the work of architects and engineers who are commissioned by the District for phases of site development and building projects.

Advises District and contract engineers regarding District, City, and County design requirements.

Works with public agencies and others to obtain or dispose of earth materials in connection with school site development.

Represents the District on assigned projects in negotiations with contractors relative to change orders, contract time extensions, and payment requests, and in verifying final compliance with construction plans.

Schedules Civil Engineering projects to meet prescribed deadlines.

Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

An Associate Civil Engineer performs and supervise activities of civil engineering design and field work performed by District employees and reviews the work of commissioned civil engineers on assigned projects.

A Civil Engineer performs civil engineering planning and design work; provides technical direction to District engineering personnel, commissioned architects, and consulting engineers; and may sign plans and specifications as a registered engineer.

An Assistant Civil Engineer participates in the preparation of designs, plans, cost estimates, and specifications for ground improvements, streets, storm drains, and sanitary sewer systems, and assists in the review of the work of commissioned architects and engineers.

SUPERVISION

General supervision is received from the Supervising Civil Engineer and/or Civil Engineer. Supervision is exercised over lower-level employees as assigned.

CLASS QUALIFICATIONS

Knowledge of:

- Terminology, symbols, and sources of civil engineering design and drafting information
- State and local building and grading codes and applicable ordinances pertaining to civil engineering features of building construction
- Stress analysis, strength, and other physical properties of materials used in civil engineering construction
- Civil engineering principles and practices in expressing ideas, designs and data in drawings
- Design principles, mathematics, and construction industry practices for solution of civil engineering problems
- Civil engineering design standards of the District
- Methods and principles of land, topographical, and construction surveys
- Current civil engineering costs and schedules of fees
- AutoCAD or other recognized major computer-aided design software system
- Microsoft Word, Excel, and Outlook
- Principles of supervision

Ability to:

- Analyze civil engineering problems and formulate solutions
- Detect errors, omissions, and discrepancies in civil engineering plans and designs prepared by others
- Effectively utilize AutoCAD software to create and update civil engineering plans and designs
- Interpret architectural and engineering plans and specifications
- Make accurate calculations
- Prepare clear, concise reports and technical descriptions
- Work effectively with public officials, commissioned architects and engineers, and District personnel
- Supervise effectively
- Communicate effectively, both orally and in writing

Special Physical Requirement:

- Ability to climb ladders and scaffolds, walk on roofs, and move safely in partially completed buildings and crawl spaces

ENTRANCE QUALIFICATIONS

Education

Graduation from a recognized college or university with a bachelor's degree in civil engineering that included completion of at least one course in a recognized major computer-aided design software system or possession of an Engineer-in-Training Certificate issued by the California State Board for Professional Engineers, Land Surveyors, and Geologists.

Experience:

Three years of experience in planning, designing, cost estimating, and preparing specifications for civil engineering for large commercial, governmental, or school projects that included the use of at least one recognized major computer-aided design software system.

Special:

A valid license as a Professional Engineer in Civil Engineering issued by the California State Board for Professional Engineers, Land Surveyors, and Geologists is preferable.

A valid driver's license to legally operate a motor vehicle in the State of California and the use of a motor vehicle, or the ability to utilize an alternative method of transportation.

This class description is not a complete statement of essential functions, responsibilities, or requirements. Entrance requirements are representative of the minimum level of knowledge, skill, and /or abilities. To the extent permitted by law, management retains the discretion to add or change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.

Revised
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JPK2/MHO