

CIVIL ENGINEER

DEFINITION

Performs civil engineering planning and design, provides technical direction to District personnel, commissioned architects, and consulting engineers on matters related to civil engineering design, and certifies design plans.

TYPICAL DUTIES

- Advises, consults with, and gives technical direction to commissioned architects and structural engineers and their consulting civil engineers on District policies and guides for the design of site development, including grading, paving, fencing, parking layouts, streets, storm drains, and sewer systems, in the construction of new buildings and the major alteration of existing building sites.
- Provides technical direction to personnel of the Civil Engineering Unit in the preparation of school site designs, specifications, and cost estimates.
- Reviews plans and specifications submitted by commissioned or consulting civil engineers for conformance to District policies and guides, and for possible conflict with other architectural and engineering features, and requests necessary revisions.
- Submits recommendations for commissioning of civil engineers by the District, evaluates engineers' proposals on scope of work and fees, reviews engineers' completed work, and recommends payment or nonpayment of partial and final fees.
- Prepares and maintains civil engineering standards and specifications to assure conformance to building codes and safety requirements and to improve the quality and economy of construction, maintenance, and operation.
- Directs site development studies to determine the cost and feasibility of site grading and street and utility improvements included in conditions for land acquisitions.
- Advises contractors, commissioned architects and engineers, and District construction inspectors on civil engineering problems encountered during construction.
- Conducts research and makes reports on structural systems relative to civil engineering components, installation methods, and their costs.
- Confers with and advises District personnel, manufacturers' representatives, and officials of other public agencies, on matters pertaining to District civil engineering guides.
- Provides professional certification of civil engineering designs for assigned District and commissioned projects.
- Performs the more difficult civil engineering work of the Unit.
- Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

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

The Supervising Civil Engineer supervises the activities and personnel of the Civil Engineering Unit, selects and directs the activities of commissioned civil engineers, and represents District interests relative to civil engineering concerns.

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

SUPERVISION

General supervision is received from the Supervising Civil Engineer. Supervision is exercised over District civil engineering personnel. Technical direction is given to commissioned architects and their consulting civil engineers on matters related to civil engineering design.

CLASS QUALIFICATIONS

Knowledge of:

- Principles and standard practices of civil engineering
- State and local codes pertaining to civil engineering features of building construction and their application
- Relationship of civil engineering to the other engineering and architectural features of buildings, including cost and operation comparisons
- AutoCAD or other recognized major computer-aided design software system
- Principles of supervision

Ability to:

- Provide technical review and advice tactfully and effectively
- Effectively utilize AutoCAD software to create and update civil engineering plans and designs
- Comprehend complex plans and specifications and edit the work of others
- Write clear, concise reports and technical descriptions
- Work effectively with commissioned architects and engineers, District personnel, and representatives of public agencies and utility companies
- Supervise effectively

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 high school or evidence of equivalent educational proficiency.

Special:

- A valid license as a Professional Engineer in Civil Engineering issued by the California State Board for Professional Engineers, Land Surveyors, and Geologists.
- A valid California Driver License.
- Use of an automobile.

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 to change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.

Revised
12-7-15
LKD

Reviewed
03-04-21
CL