

DEPARTMENT OF HUMAN RESOURCES  
COUNTY OF HAWAII

**CIVIL ENGINEER IV**  
SR 24; BU 13

Duties Summary:

Performs difficult professional engineering work in the design, construction, maintenance, and operation of civil engineering projects; prepares designs, plans, specifications, estimates, and reports; and performs other duties as required.

Distinguishing Characteristics:

This class differs from that of Civil Engineer III in that it is responsible for the development, analyses, and construction of a complex and major project or several less complex projects; whereas the Civil Engineer III is responsible for well-defined, routine, or uncomplicated projects or acts as an assistant to the Civil Engineer IV on major projects.

This class differs from that of Civil Engineer V in that it has responsibility for a complex and major project or several less complex projects; whereas the Civil Engineer V has responsibility for a number of complex and major engineering projects operating simultaneously where the problems of supervision and coordination are pronounced.

Examples of Duties: *(The following are examples of duties and are not necessarily descriptive of any one position in this class. The omission of specific duty statements does not preclude the assignment of such duties if they are a logical assignment for the position and are consistent with the class concept.)*

- Conducts office field studies of proposed projects and supervises preliminary and final surveys.
- Establishes benchmarks.
- Takes cross-sections, profiles, and contours.
- Makes survey computations and prepares preliminary drawings.
- Designs and assists in the design of reservoirs, retaining walls, bridges, culverts, tunnels, pipelines, sewers, sidewalks, highways, and other concrete, steel, and timber structures; computes grades and alignments, loading, and stresses; determines the size, proportion, and dimensions of structures.
- Supervises the preparation of construction plans and drawings.

- Assists in the preparation of specifications and contract documents.
- Prepares cost and quantity estimates.
- Checks shop drawings.
- Supervises construction and inspection activities.
- Interprets plans and specifications.
- Changes and corrects plans.
- Keeps records of work completed, materials used, and prepares monthly and final payment estimates.
- Conducts hydrologic and land development studies.
- Checks plans and specifications of buildings and structures for compliance with the building code.
- Reviews test reports and soil analysis reports.
- Operates a vehicle to perform work-related duties.
- Performs other related duties.

Minimum Qualification Requirements:

Training and Experience:

- A combination of education and experience substantially equivalent to graduation from an accredited college or university with a baccalaureate degree in engineering, and
- three (3) years of professional civil engineering work experience.

License/Certificate Requirements:

- Possession of a valid State of Hawai'i Driver License (Class 3) or any other valid comparable driver license,
- possession of a valid license as a professional engineer in the United States at time of filing, and
- prior to completion of probation, possession of a valid license as a professional engineer in the State of Hawai'i.

Knowledge of:

- civil and hydraulic engineering principles and practices,
- engineering mathematics, engineering mechanics, and mechanics of materials, and

- structural, mechanical, electrical, and sanitary engineering principles.

Ability to:

- perform civil engineering design work or supervise construction and inspection activities,
- analyze stresses and determine the required foundation and structural features,
- supervise a small group of subordinate professionals or sub-professional employees, and
- prepare engineering and inspection reports.

Physical Requirements:

Persons seeking appointment to positions in this class must meet the health and physical condition standards deemed necessary and proper for performance of the duties.

Physical Effort Grouping: Light

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This is an amendment to the specification for the class CIVIL ENGINEER IV that was approved on August 29, 1957; and amended on March 25, 1963; May 2, 1991; April 2, 2003; and March 23, 2022.

APPROVED: June 26, 2024  
Date

/s/ Sommer J. Tokihiro  
Director of Human Resources