



CIVIL ENGINEER 1

Department: Planning and Public Works
Job Class #: 904300
Pay Range: Engineering/Technical 08

FLSA: Non-exempt
Represented: Yes

Classification descriptions are intended to present a descriptive list of the range of duties performed by employees in this class and are not intended to reflect all duties performed within the job.

GENERAL FUNCTION

This is entry-level professional work in civil engineering. Work includes performing a broad range of engineering duties involved with design, report preparation, review and/or inspection of civil work projects or other closely related work. Considerable latitude is given for independent action within the scope of oral and written instructions and incumbents may serve as a lead worker on specific assignments. Work is performed under the limited supervision of another civil engineer or administrative superior who makes general assignments and reviews work to ensure that it is completed according to instructions and in accordance with accepted principles and practices of civil engineering. Although incumbents are generally assigned to one area of engineering, they may be rotated to different sections or positions. Duties of a more technical nature may be assigned on a temporary basis as needed to meet the workload of a variety of sections.

This position is distinguished from the Engineering Technician 3 classification by the more frequent application of analytical skills. The scope and range of duties performed are broader and less specialized than those performed by the Engineering Technician 3. The Civil Engineer 2 class performs a higher level of professional duties and has greater responsibility for the completion of projects.

ESSENTIAL FUNCTIONS

Performs layout, drafting and design work on a variety of routine public works and utilities projects utilizing computer programs. Depending on area to which assigned, may design roads, bridges, structures, traffic control devices; storm water collection and disposal systems; wastewater collection, treatment and disposal systems; water treatment and distribution systems; and/or other appurtenances.

Designs and/or prepares contract plans for capital improvement projects.

Prepares and reviews comprehensive engineering plans, reports, studies and related documents.

Prepares scopes, cost estimates, specifications, special provisions and related documents for capital improvement projects.

Prepares portions of engineering plans, reports or studies for existing or proposed capital improvement projects or operational concerns (such as roadway and traffic studies); reviews calculations or routine work of others.

CIVIL ENGINEER 1
Classification Description – Pierce County
Page 2

Reviews development projects for compliance with county ordinances, state and federal statutes and regulations, adopted standards or county policy and meets with project applicants to resolve questions or problems.

Provides information at public meetings or to a hearing examiner, board, commission, or elected official on projects or cases being reviewed by the department.

Reviews and investigates citizen concerns and recommends remedial measures.

Inspects and evaluates structures in compliance with established inspection programs and prepares appropriate reports; calculates and verifies pay quantities for contracted services.

Requests, performs, or directs the testing of materials and interprets results to ensure compliance with project specifications; prepares written reports and recommends alternatives when necessary.

OTHER JOB FUNCTIONS

Provides technical assistance to co-workers and the general public concerning established policies and procedures.

Participates in technical review meetings with engineering and planning staff; coordinates work or work in progress with other county employees, departments, and outside agencies.

Performs other related duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of higher level mathematics, including trigonometry, algebra, geometry, and calculus, and its application to surveying and engineering computations.

Knowledge of applicable state and federal laws, ordinances, and regulations.

Knowledge of physics, statistics, dynamics, and other civil engineering standards and practices.

Knowledge of the current literature, trends, and developments in the field of engineering, and the ability to keep current with new developments.

Ability to direct and review the work of subordinates.

Ability to adapt engineering information, codes, statutes, and standards to the planning, review, design, and construction of capital improvement projects.

Ability to collect and analyze technical information and to develop logical solutions or alternatives to problems.

CIVIL ENGINEER 1
Classification Description – Pierce County
Page 3

Ability to use a personal computer and computer-aided design systems, and to develop new applications of existing programs to complete a job function.

Ability to prepare, interpret and utilize plans, maps, specifications, special provisions and reports.

Ability to perform engineering calculations and to prepare engineering reports.

Ability to use and maintain various engineering tools and equipment.

Ability to work outdoors in all types of weather conditions.

Ability to bend, stoop, work at heights, and walk on uneven terrain. However, this may vary according to assignment or section.

Ability to communicate effectively with others orally and in writing.

Ability to physically perform the essential job functions.

Ability to meet the travel requirements of the position.

RECRUITING REQUIREMENTS

A Bachelor degree in Civil Engineering or closely related field OR registration as an Engineer-In-Training OR four years of progressively responsible, broad-based civil engineering experience is required. Education and work experience may be substituted on a year for year basis. Satisfactory physical condition, as evidenced by a County-approved physical examination may be required prior to appointment to the position. Ability to successfully complete all required background investigations.

SPECIAL NOTE: Engineering students in their final quarter/semester of education prior to receiving their Bachelor's Degree will be considered. The recruiting requirements of the position would have to be met prior to employment beginning.