

PRINCIPAL CIVIL ENGINEER, 9489

Summary of Duties : Serves as administrative and technical head of a major civil, structural or other engineering unit or may act as project engineer for a major construction project.

Distinguishing Features : The class of Principal Civil Engineer is distinguished from lower level professional engineering classes in that the former has greater administrative responsibilities which may include directing the activities of a major division or district civil engineering office, directing a group of units responsible for the civil engineering activities of a major department or acting as resident engineer on major construction projects. The employee serves in a technical as well as an administrative capacity and may be responsible for directing the preparation and coordination of studies, economic evaluations, designs, plans, official cost estimates, specifications, construction and field activities for a wide variety of civil engineering projects and compliance with the City's laws regarding work by private contractors within the public ways. Assignments are usually in general terms, supplemented by conferences. Procedures and policies developed by a Principal Civil Engineer are normally subject only to executive review and evaluation. An employee of this class must resolve difficult administrative and technical problems which arise in connection with the coordination of civil engineering projects with the requirements of private industry, utilities and other government agencies.

Examples of Duties : Develops and administers policies, technical standards and procedures; prepares or directs the preparation of work programs, cost control procedures and budget estimates; participates in the planning for development and expansion of major engineering projects and makes recommendations as to technical and economic feasibility of alternate plans; confers with division heads, consulting engineers, private contractors and other government agencies on planning, design, construction and procedural problems; prepares technical recommendations for contracts, agreements, ordinances, bills and memorials; represents various City officials and agencies in conferences and appears in court and before legislative bodies as an expert witness;

Acts as the administrative and technical head of a major division of a large municipal engineering organization concerned with the preparation and application of standards and procedures in wastewater systems, structural engineering, street opening and widening, construction management, estimating and capital improvement planning on a City-wide basis, or as the administrative and technical head of a major district concerned with all of these aspects of municipal public works in a large geographical area of the City;

Directs and supervises a number of units providing administrative and technical services concerned with the civil engineering features of hydraulic design, right-of-way and survey, structural and architectural design, economic studies, engineering drafting, plan and specification preparation, inspection, utility and permit projects, and materials and equipment procurement for major engineering design and construction programs;

Develops proposed projects for public improvements, ensures compliance with laws and ordinances related to the public way and may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications: A good knowledge of coordination, supervision, management control and planning problems encountered in large-scale engineering and design work; a good knowledge of engineering economics and the methods of financing municipal projects; a good knowledge of civil engineering as applied in administering and directing the preparation of designs, plans, specifications, estimates, studies, technical reports and recommendations for a wide-variety of engineering works such as sewers, sewage treatment and disposal facilities, street and highway improvements, storm drains, erosion control, flood control structures and appurtenant works; a good knowledge of safety principles and practices; a working knowledge of public works programs, policies, standards and organization, and of the procedures involved in the development of major projects from initiation to final completion; a good knowledge of construction management and practices, including surveys and inspection, general administration and coordination as required in the conduct of an extensive public works program; a working knowledge of the laws and regulations related to equal employment opportunity and affirmative action; a general knowledge of City personnel rules, policies and procedures; a general knowledge of memoranda of understanding as they apply to subordinate personnel; the ability to plan and direct work programs, develop design standards, organize procedures and exercise administrative direction over large groups of engineers and technicians; the ability to prepare or supervise the preparation of reports, agreements, legislative recommendations, cost control procedures and accurate records; and the ability to deal tactfully and effectively with other supervisors, utility and governmental officials, employees and the public.

Two years of professional engineering experience at the level of Senior Civil Engineer is required for Principal Civil Engineer.

Registration: Registration as a Civil Engineer with the California State Board of Registration for Professional Engineers is required.

Appointment to one position requires the authority to use the title "Structural Engineer" issued by the California State Board of Registration for Professional Engineers.

Appointment to a position in this class is subject to a one-year probationary period as provided by Section 109 of the City Charter.

Physical Requirements : Strength to perform average lifting of less than 5 pounds and occasionally over 15 pounds; good speaking and hearing ability; and good eyesight.

Persons with handicaps may be capable of performing the duties of some of the positions in these classes. Such determination must be made by the medical examiner on an individual basis.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what the duties and responsibilities of any position shall be.