

Summary of Duties: Serves as assistant to the Chief Harbor Engineer in the Engineering or Construction Management Division or directs the activities of a section of the Engineering or Construction Management Division, may represent a Chief Harbor Engineer in dealings with other agencies; and does related work.

Distinguishing Features: A Harbor Engineer is responsible for difficult administrative and professional engineering duties. An employee of this class is in charge of the preparation of designs, plans, specifications and cost estimates for a variety of engineering projects. A Harbor Engineer may act as a technical and administrative adviser and staff assistant to a Chief Harbor Engineer. An employee of this class must be able to carry out difficult assignments in engineering, economic, and planning areas relating to harbor development without specific guidance and make recommendations.

Much of the work of a Harbor Engineer is in connection with future planning and development of the Port of Los Angeles. The results of this employee's work may serve as a basis for long range management decisions and Harbor Department policies. A Harbor Engineer may be called upon to act for, or in place of the Chief Harbor Engineers in their absence. Therefore, an employee of this class must keep abreast of Harbor Department engineering, operations, and administrative activities.

Examples of Duties: Serves as technical and administrative adviser and staff assistant to a Chief Harbor Engineer; represents a Chief Harbor Engineer in meetings with contractors and representatives of engineering firms, steamship and terminal operations, other port and harbor agencies, and other governmental agencies; investigates, analyzes, and advises a Chief Harbor Engineer on the feasibility and urgency of requested projects of large size or considerable scope; makes independent checks of cost estimates, designs and reports submitted to a Chief Harbor Engineer;

Organizes, coordinates, conducts, evaluates, and reviews engineering and economic studies, surveys, investigations, and other data-gathering projects; determines methods to be followed and the format of reports; analyzes data and makes recommendations to serve as a basis for management decisions in such major areas as general harbor development and planning, new or improved construction materials and methods, studies of subsidence and the effect of wave and surge action on port facilities, and current and future physical port facility requirements;

Reviews and analyzes preliminary budget requests from unit heads for conformance to the overall needs and program of the Harbor Department; assists a Chief Harbor Engineer in the preparation of the Division annual budget request; supervises the preparation of the Division annual report;

Directs and coordinates the work of a section engaged in architecture, civil, structural, mechanical, electrical, railroad and marine engineering; reviews designs, plans, drawings, specifications, estimates, and reports necessary for the construction, maintenance, and operation of a variety of concrete, steel and timber structures and other facilities including transit sheds, wharves, buildings, retaining walls, pilings, underground piping and utilities, streets, and pole lines; reviews the specifications for channel dredging or drainage work; reviews the architectural design of buildings and landscaped area; directs the issuance of permits and the maintenance of maps showing changes made by leases; reviews the cost estimates for all work orders; directs and coordinates the work of professional engineers engaged in preparing, reviewing and administering engineering design contracts for Port facilities and developing project control procedures for all Port engineering projects to ensure timely completion within budgeted funds;

Assists in supervising through a staff of engineers and supervisors, field surveying work throughout the Harbor; inspection for verification of quality and quantity of construction and associated purchases acquired under contract by the Department; administration of construction contracts including, negotiation of changes, verification of supporting documents, determination and processing of progress payments, advertisement, bid analysis, recommendation for award, final inspection, and recommendation for acceptance; when directed, acts for or in place of the Chief Harbor Engineers; and may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications: A good knowledge of civil, electrical, mechanical, and structural engineering and architecture as applied to the design, construction, maintenance, and operation of a large harbor and marine terminal facility; a good knowledge of the sources of engineering information; a good knowledge of the preparation of designs, plans, specifications, and estimates for harbor and marine terminal facilities; a good knowledge of engineering economics, particularly as related to harbor and marine terminal facilities; a good knowledge of the organization, policies, and scope of activities of the Harbor Department; a good knowledge of safety principles and practices; a good knowledge of the principles of supervision; a working knowledge of the coordination, supervision, organization, and budgeting problems encountered in large-scale engineering, design, construction, and maintenance work; a working knowledge of the Federal, State, and City laws and regulations concerning the design, construction, maintenance, and operating functions of the Harbor Department; a working knowledge of electrical and mechanical engineering as related to the construction and operating activities of a large harbor and marine terminal facilities and to the design of such facilities; 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 working knowledge of memoranda of understanding as they apply to subordinate personnel; a

good knowledge of construction materials and practices; a good knowledge of the legal requirements of contracts, leases, and permits as related to Harbor Department activities; the ability to independently handle engineering and administrative matters and to evaluate alternate technical proposals in relation to soundness of engineering features, economic feasibility, and conformance to Department policies and accepted practices; the ability to make comprehensive studies and investigations and prepare reports and recommendations; the ability to represent the Department of conferences, meetings, and hearings; and the ability to deal tactfully and effectively with government officials, employees, and the public.

One year of professional experience at the level of Civil Engineer or Architect in the design, construction, or engineering of harbor marine terminal facilities is required.

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

Registration: Registration as a Professional Engineer with the California State Board of Registration for Professional Engineers or a valid Certificate of Registration as an Architect issued by the California State Board of Architectural Examiners is required.

License: A valid California driver's license is required.

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

Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positions in this class. Such determination must be made on an individual basis in light of the person's limitations, the position, and the appointing authority's ability to effect reasonable accommodations to the limitations.

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.