



CLASS SPECIFICATION

5/12/11

AIRPORT ENGINEER, CODE 7256

Summary of Duties: An Airport Engineer performs professional engineering work in the planning, design, construction, maintenance and operation of airport landside facilities, structures and support systems that may include but not be limited to airside runways, taxiways, navigations aides, associated airfield infrastructures, airport communication systems, and airport security networks; plans airport projects, systems and construction to address airfield design, passenger processing, airport ground access, environmental compliance, airport safety and airport security; prepares specifications, designs, plans, estimates, studies assessments and reports on emerging airport needs, variability of air traffic, problems of congestions and delays, airport terminals, automatic baggage systems, people mover systems, and reconfiguration of services and facilities during construction.

Assists in supervising and directing the work of a section in the Los Angeles World Airports (LAWA) Planning, Facilities Engineering, Information Technology, or Airport Development Groups; may act as technical and administrative assistant to the head of a major section or element working on airport engineering design and construction projects; assists with coordinating the application, implementation, and compliance with Federal Aviation Administration (FAA) and Transportation Security Administration (TSA) standards, policies, and requirements related to airport design, construction, operation, and security.

Distinguishing Features: Employees in this class may assist with a variety of airport engineering infrastructure capital improvement programs and related projects by preparing, reviewing and evaluating airport planning studies, life-cycle cost analyses, preliminary design concepts, landside traffic modeling, airside gate analyses, and cost estimates. An Airport Engineer may perform a wide array of technical duties in support of planning, designing, constructing and defining specifications for the development of airport infrastructures, airport improvement programs, large and primary hub airport projects, airport security systems, hangars, terminals, and tenant improvements all with the purpose of handling both aircraft and passenger demands.

An Airport Engineer I is generally appointed to a position which personally performs duties that require technical expertise in the fields of airport planning, airport engineering, program management, airport design and construction management, airport facilities and asset management, airport environmental management, facilities engineering, information technology management, transportation engineering, airport

safety, and airport security as outlined by FAA and TSA standards. As a technical assistant to the engineering project managers or element managers, an Airport Engineer I may investigate, evaluate, and analyze engineering problems and solutions, perform coordination activities for airport engineering programs and projects, and research emerging airport design and construction issues.

An Airport Engineer II is a lead manager for an integrated project management team, airport planning group, information technology group, or technical engineering support group that works on airport plans, designs, systems and construction. Persons at the second pay grade would possess all the skills, knowledge and abilities of an Airport Engineer I and may provide supervisory management, oversight of professional services contracts, and direction to professional engineers, consultants, and other support staff; may provide technical staff assistance on airport engineering, design, and construction projects directed by a Chief of Airports Engineer, Chief Airport Planner, or Senior Systems Analyst; and, may represent engineering division managers in meetings with consultants, contractors, engineering firms, airlines, airport tenants, airport operators, airport agencies, and government agencies.

Airport Engineers may be a first line supervisor, providing technical and administrative oversight of professional services for airport planning, information technology, engineering, and technical support for the LAWA Capital Improvement Program (CIP) or Airport Facilities Management Program. Incumbents in the class of Airport Engineer as bona fide supervisors are responsible for the supervision, management, training, and development of direct and indirect subordinate staff.

Examples of Duties:

- Utilizes airport site characteristics and aviation subject matters to develop airport layout plans, airfield designs, and construction plans;
- Directs, manages, and coordinates LAWA staff engaged in the preparation, review and administration of consultant service contracts, construction management contracts, facilities engineering, management contracts, and other professional service contracts for airport facilities or programs;
- Works with consultants and LAWA staff on the completion of airport design, construction, operation and security projects;
- Facilitates preparation of aviation forecasts, capacity analysis and aircraft gate utilizations;
- Develops project control procedures for all airport planning and engineering projects to ensure timely completion within the budgeted funds;
- Prepares and issues tenant construction permits; reviews and oversees the management of maps for leased airport property as well as computer-aided design and geographic information system documents;
- Manages the preparation and review of work orders and cost estimates for improvements related to enhancing airport operations, safety, capacity, and environmental concerns;

- Provides technical support for the operation and troubleshooting of IT systems, network servers, wireless networks, serial communications network cabling, and field computer equipment utilized in the support of airport planning, engineering, or facilities management applications;
- Represents the Department of Airports at meetings with City officials, air carriers, FAA, TSA, other governmental agencies, citizen groups, and other organizations on various activities related to less complex LAWA facility projects;
- Performs the full range of supervisory activities including the application of discipline, processing and resolving grievances, and evaluating performance; and
- Accepts occasionally assignments for other airport engineering related duties for training purposes or to meet technological changes or emergencies.

Qualifications:**Knowledge of:**

- The application of civil, structural, electrical, mechanical, and communications engineering for planning, design, construction, commissioning, activation, maintenance and operation of airport facilities and infrastructure;
- The technical requirements unique to airport engineering, including but not limited to FAA and TSA standards, airport design and construction standards, airfield pavement design standards, airfield navigation systems, airfield operations, terminal operations, airport landside operations, air cargo facility operations, airport security operations, airline tenant and concessionaire operations, airport ground transportation operations, airport noise mitigation, and airport environmental mitigation measures;
- Air traffic movement simulations, as well as and modeling programs and practices, for airside, terminal and landside facilities;
- The preparation of designs, plans, specifications, schedules and estimates for airport passenger terminals facilities;
- Engineering economics, particularly as related to airports facilities and programs;
- The organization, policies, and scope of activities of safety and security principles and practices of the various LAWA divisions;
- The coordination, supervision, organization, and budgeting problems encountered in large-scale engineering design, construction, and maintenance work;
- Federal, State, and City laws and regulations concerning the design, construction, planning, troubleshooting, maintenance, and operating functions of LAWA;
- The legal requirements of contracts, leases, and permits as related to the Department of Airports activities;
- Standard, government-approved airport construction materials and practices;
- City personnel rules, policies and procedures;
- Memoranda of understanding as they apply to subordinate personnel;

- Laws and regulations related to equal employment opportunity and affirmative action; and
- Supervisory principles and practices, including planning, delegating and controlling the work of subordinates.

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;
- Make comprehensive studies and investigations and prepare reports and recommendations about airport infrastructure, facilities and passenger systems;
- Represent the Department at conferences, meetings, and hearings;
- Deal tactfully and effectively with government officials, employees, and the public; and
- Apply sound supervision principles and techniques.

Minimum Requirements: Two years of professional experience at the level of Engineering Associate III in the areas of civil, structural, mechanical, electrical, or communication engineering in the design, construction, management or engineering of airport/aviation projects or programs is required for appointment to the Airport Engineer position.

Registration: Registration as a Professional Engineer with the California State Board of Registration for Professional Engineers is required for appointment to an Airport Engineer.

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; good speaking and hearing ability.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depend, in part, on the specific requirements for the job, the limitations related to the disability, and the ability of the hiring department to reasonably accommodate 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 all of the duties and responsibilities of any position shall be.