CITY OF LONG BEACH

CLASSIFICATION SPECIFICATION

TITLE: **ELECTRICAL ENGINEER**

DEFINITION: Under direction, performs responsible supervisory and specialized professional work in electrical engineering.

EXAMPLES OF DUTIES:

- Designs, develops and evaluates interior and exterior electrical power distribution systems including lighting, fire detection and suppression, communication, security, computer, mechanical control, railroad signalization, fiber optic infrastructure systems, local and wide area networks, container crane power and control systems, refrigerated container unit power outlets and remote monitoring systems, and container terminal switchgear.
- Develops and evaluates task requirements and technical standards for work to be performed by outside consultants.
- Coordinates electrical service requirements with utility companies.
- Estimates electrical construction costs and recommends energy saving improvements.
- Inspects both in-progress and completed work.
- Applies electrical codes and standards to the design of city electrical facilities.
- May assist in the selection, training, work assignment, and evaluation of subordinates.
- Prepares standards for world application of shore to ship power and controls ("cold ironing"), designs photovoltaic systems, develops procedures and requirements to restore electrical power system to port terminals within a short time after a disaster.
- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

- Current registration as a professional Electrical Engineer in the State of California.

- Four years of paid (full-time equivalent) experience with primary responsibility for preparation or review and approval of standards, designs, and cost estimates of electrical engineering projects, which must have been gained after graduation from an accredited four year college or university with a degree in Electrical Engineering or after passing the Engineering-in-Training (EIT) examination in the field of Engineering.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Thorough knowledge of electrical engineering theories, principles, methods, techniques, tools and equipment used in the design, construction, testing, calibration, maintenance and repair of industrial electrical and electronic equipment and devices.
- Working knowledge of general construction practices.
- Knowledge of National Electrical Codes (NEC), City ordinances, standards, and regulations pertaining to the work.
- Knowledge of project management methods and practices for planning, budgeting, scheduling, monitoring performance and evaluating results.
- Ability to provide field solutions to electrical construction problems and ensure contractor compliance with plans and specifications.
- Ability to work with division staff, consultants, and local agencies.

Willingness to work weekends, evenings, overtime, and holidays as needed.

A valid motor vehicle operator's license.

HISTORY:

Approval/Adoption Dates: 06/19/78
Revised/Approved: 02/17/2021