Summary of Duties: Determines departmental equipment needs, prepares specifications; inspects equipment received from vendors, and makes recommendations in connection with the purchase, operation, and maintenance of a wide variety of transportation, construction, fire, recreation, and park maintenance equipment; or participates in and supervises such work; and does related work.

Distinguishing Features: Equipment Specialists are required to perform their duties in a wide variety of physical settings and must exercise considerable independent judgment in evaluating and inspecting equipment. An employee of this class assists in equipment planning activities by having frequent contact with field personnel and equipment firms as well as investigates new types of equipment, determines equipment suitability, prepares or revises equipment purchase specifications, and inspects equipment to determine if it meets specification requirements. Employees assigned to these positions review the operation and maintenance of transportation, construction, fire, or recreation equipment to recommend changes and modifications leading to more effective and economical equipment use.

Some positions in this class act as working supervisors. As such, the incumbents provide technical assistance to subordinates and participate in the more complex work involving major special-purpose equipment or broad knowledges of equipment usage and requirements.

The class of Equipment Specialist is distinguished from classes in the equipment repair series in that the latter are responsible for the repair and maintenance of equipment. The work of Equipment Specialists differs from the work of Purchasing Specifications Analysts in that the latter prepare specifications for a wide variety of materials and products costing over $5,000 and do not inspect equipment to determine if it conforms with specifications.

Examples of Duties: Interviews field and equipment repair supervisors to determine equipment needs; reviews manufacturers' catalogs and meets with manufacturers' representatives to determine suitability and availability of equipment; contacts other departments and agencies to survey their experiences with various equipment; reviews equipment repair records to determine maintenance costs; arranges for material and equipment tests; prepares and revises equipment specifications; draws schematic illustrations of desired equipment; completes purchase requisitions and requests for sale; analyzes bids and recommends award of contract; prepares correspondence and reports; answers questions from vendors regarding interpretation of specifications; operates, inspects, and tests equipment to determine if it meets specification requirements; contacts vendors to resolve equipment problems that are under warranty; coordinates the assignment of equipment numbers;
maintains inventory records of equipment, special attachments, and location of equipment; determines when equipment should be replaced; recommends changes in equipment operation, repair methods, and maintenance schedules to reduce downtime; analyzes changes in equipment operation, maintenance, and design to determine if the planned replacement program should be adjusted; coordinates the loan of salvaged, leased or borrowed equipment; updates equipment knowledges by attending shows, demonstrations, conventions and by reading brochures, digests, and professional publications; evaluates suggestions on improving the equipment operation, maintenance, or purchasing; assists in preparing equipment budget requests by listing equipment requiring replacement, recommending replacement priorities, and indicating the types of equipment to be purchased; and may evaluate department repair shops to determine comparable

Supervises employees engaged in the above work; provides technical advice to subordinates; reviews subordinates' work in progress and on completion for clarity, accuracy, legal and safety requirements, needs of the department, cost considerations, and thoroughness; prepares reports on faulty equipment operation recommending appropriate solutions; conducts studies; develops and conducts training; maintains a technical library; and reviews new legislation to determine its affect on specification requirements.

Employees of this class may be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications: A good knowledge of engineering principles involving stress, materials, hydraulics, and design; a good knowledge of the necessary content of purchase specifications; a working knowledge of the function, use, and availability of equipment; a working knowledge of safety rules, regulations, and practices; a working knowledge of the operating principles of equipment component parts; a working knowledge of the methods of data collection and cost benefit analysis; a general knowledge of the cost of operating, maintaining, and repairing equipment; a general knowledge of the operation and maintenance of various equipment; and a general knowledge of engineering principles involving stress, materials, hydraulics and design.

The ability to prepare recommendations based on cost analysis; the ability to write accurate, clear, concise, and technical reports, letters, and specifications; the ability to interpret detailed equipment descriptions; the ability to prepare schematic drawings of desired equipment; the ability to operate various equipment, gauges, and meters; the ability to devise effective and relevant equipment test procedures; the ability to cope with a wide variety of equipment problems at one time; and deal tactfully and effectively with supervisors, vendors, and the public.

Four years of experience as a Heavy Duty Equipment Mechanic or Senior Equipment Mechanic or in a class which is at least at that level and
in the maintenance and repair of transportation, construction, fire, or park maintenance equipment; or, four years experience as a Methods and Standards Technician in the analysis of equipment repair activities or in a class at least at that level and in the analysis of either the operation or maintenance and repair of transportation, construction, fire, or park maintenance equipment is required.

Sixty semester units or ninety quarter units of college level courses related to administration, engineering, mathematics, or physics may be substituted for two years of the required experience.

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

Physical Requirements: Strength to perform average lifting of less than 5 pounds and occasionally over 15 pounds; body agility and equilibrium involved in such activities as working in confined areas with moving equipment; back and leg coordination involved in activities such as stooping, kneeling, crouching, crawling, and sliding; arm, hand, and finger dexterity involved in such activities as making schematic drawings or operating equipment; good speaking and hearing ability; and good eyesight.

Persons with medical limitations may, with reasonable accommodation, 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 requirement of the position, and the appointing authority's ability to effect reasonable accommodations to the person's limitations.

As provided in Civil Service Commission 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.