Summary of Duties: Makes detailed cost estimates of materials and labor for the construction, alteration and improvement of structural and architectural features; or electrical and electronic systems; or plumbing, heating and air-conditioning systems for City facilities; and does related work.

Distinguishing Features: Employees of these classes are primarily concerned with making detailed cost and quantity estimates of material and labor for proposed City buildings and other structures and for alterations, improvements or repairs to existing facilities.

The primary responsibility of employees of these classes is the completeness and accuracy of such estimates, based on plans, specifications, inspections, and instruction. These classes are distinguished from each other by specialization in structural and architectural, electrical or mechanical features. An estimator may work on estimates involving other than their specialty when such work is a minor part of the estimate and it is not feasible to assign a specialized estimator. Estimate requests are normally received in the form of sketches, completed plans and specifications or written instructions. The estimates are reviewed for reasonableness with occasional spot checks of individual estimates.

Examples of Duties: All Classes: Makes preliminary and final detailed estimates of material and labor costs for proposed construction, improvement or alteration to City facilities or for the remodeling, replacement and moving of private buildings as a result of public improvements; works from memoranda, sketches, plans and specifications; prepares quantity surveys and detailed lists of materials to be used; prepares construction staffing schedules for required work; studies and reports on the cost aspects of construction methods during the progress of both force account and contract construction work; makes spot cost analyses of work in progress; makes cost analyses of completed work; compares and checks estimates with detailed cost analyses of work in progress and upon completion; makes cost estimates of existing improvements for real property acquisitions; makes studies to determine cost indices to be used in adjusting property records; inspects buildings and reviews plans and sketches to determine feasibility of repair or alteration from the standpoint of costs; writes reports on inspections and investigations; maintains cost records, gathers data and prepares statistics on construction costs; assists in the preparation of budget requests, including estimates for fiscal building projects; investigates contract change orders and payment requests; and may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications:
Electrical  Mechanical
Construc-  Construc-   Construc-
struction       tion        tion

Knowledges:

Methods of estimating material and labor costs and of the current costs of materials used in the construction, improvement, alteration and repair of:

Reinforced concrete, steel, masonry and wood frame buildings; Good Working Working

Electronic and electrical installations in buildings; Good Good Working

Mechanical installations buildings; Good Good Good

Prevailing wages and construction practices and terminology in the:

Building trades; Good General General

Electrical trades; General Good General

Mechanical trades; General General Good

Abilities:

Estimate the amount of labor necessary to perform the work involved; X X X X

Evaluate contract change orders; X X X

Evaluate contract entitlement and claims; X X X
**Abilities:**

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<tr>
<th></th>
<th>Estimator</th>
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<tr>
<td>Make cost analyses of:</td>
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<tr>
<td>Completed structures</td>
<td>X</td>
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<tr>
<td>Electrical installations;</td>
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<tr>
<td>Mechanical installations;</td>
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<td>X</td>
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<td>Read and interpret building plans and specifications;</td>
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<td>Write clear and comprehensive reports.</td>
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Four years of experience in construction estimating, building inspection, general contracting professional architecture or professional engineering, two years of which involved making cost and quantity estimates for type I, II, III and IV buildings under the Uniform Building Code or Los Angeles City Building Code is required for Construction Estimator. One year of college education with specialization in structural or civil engineering may be substituted for each year of the above general experience lacking up to a maximum of two years.

Four years of experience in making cost and quantity estimates of construction electrical work or as a journey-level electrician installing and maintaining wiring and equipment in buildings, two years of which was in making cost and quantity estimates for large type I, II, III and IV buildings under the Uniform Building Code or Los Angeles City Building Code is required for Electrical Construction Estimator. One year of college engineering training may be substituted for each year of the above general experience up to a maximum of two years.

Four years of experience in making cost and quantity estimates of plumbing, heating, ventilating or air-conditioning work or as a journey-level plumber or air-conditioning mechanic, two years of which was in making cost and quantity estimates for large type I, II, III and IV buildings under Uniform Building Code or Los Angeles City Building Code is required for Mechanical Construction Estimator. One year of college engineering training may be substituted for each year of general experience lacking up to a maximum of two years.

**License:** All Classes: A valid California driver's license and a good driving record are required for all positions.

**Physical Requirements:** Strength to perform average lifting less than 5 pounds and occasionally over 15 pounds; frequent walking and standing; good speaking and hearing ability; and good eyesight.
Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positrons in these classes. Such determination must be made on an individual basis in light of the person's limitations, the requirements of the position, and the appointing authority's ability to effect reasonable accommodations to the person's 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.