

EAST BAY REGIONAL PARK DISTRICT

JUNIOR CIVIL ENGINEER

GENERAL FUNCTION:

Under supervision in a learner capacity, to do the less complex professional office and field work in civil engineering; and to do other work as required.

PRINCIPAL DUTIES & RESPONSIBILITIES:

Assists in engineering work in connection with projects relating to land, hydraulics, roads, bridges, wharves, piers, dams, levees and similar works; acts as instrument person in a surveying party and in the absence of superior takes temporary charge of party; keeps survey and construction notes; makes engineering calculations in connection with field or office work; does simple design work and drafts working plans and detail drawings and tracing; makes or revises maps, charts and diagrams; acts as inspector on a variety of construction projects such as highway construction; inspects, makes field or laboratory analysis on materials being used for construction projects; makes field inspections of existing structures to determine extent of damage, deterioration or defects; assists in the preparation of progress and construction reports and estimates.

MINIMUM QUALIFICATIONS:

Education: Graduation from a curriculum in civil engineering accredited by the Engineer's Council for Professional Development, or equivalent qualifications. (Registration as a Senior in such a curriculum will admit an applicant to the competition, but he must produce evidence of graduation before he will be considered eligible for appointment.)

Possession of equivalent qualifications may be demonstrated by graduation from an engineering curriculum which includes the basic engineering courses normally covered in a standard four-year course, and by qualifying in a written examination covering basic civil engineering. (Registration as a Senior in such a curriculum will admit an applicant to the qualifying examination, but he must produce evidence of graduation before he will be considered to meet the minimum qualification.)

KNOWLEDGE, SKILLS AND ABILITIES:

Thorough knowledge of: basic principles of physics, chemistry and mathematics as applied to civil engineering. General knowledge of: surveying; hydraulics; stress analysis; mechanics; strength properties and uses of engineering construction materials. Familiarity with: methods and equipment of engineering economics; common descriptions of real property. Ability to: do simple mapping and drafting and make neat and accurate computations and engineering notes; prepare reports; establish and maintain friendly and cooperative relations with those contacted in the course of the work.