

JUNIOR ENGINEER (WATER AGENCY)

GENERAL STATEMENT OF DUTIES: Performs general engineering work related to the technical and operational aspects of a water agency; does related work as required.

DISTINGUISHING FEATURES OF THE CLASS: Under the direct supervision of the Assistant Civil Engineer (Westchester Joint Water Works) or the General Superintendent, an incumbent of this class performs engineering work related to water agency planning, design, construction and operations. Supervision may be exercised over one or more technical employees, and on special projects, over non-technical employees as demanded by the project. May substitute for operating department supervisors in their absence.

EXAMPLES OF WORK: (Illustrative Only)

Assists in the planning of future needed improvements for the Water Works;

Prepares specifications for materials, construction and maintenance projects;

Assists in the preparation of the annual list of capital budget items;

Designs or assists with the design of system improvements, including main extensions for developers, and supervises the preparation of plans;

Issues, receives and analyses all bids for purchase of material and equipment;

Supervises the maintenance of all distribution system records, including maps and plans;

Supervises and assists with the inspection of routine construction projects;

Inspects major construction projects;

Reviews contractors' claims for payment;

Conducts or supervises special field studies including leak surveys, cross-connection programs, fire flow tests, co-efficient tests, pump efficiency tests, large meter tests, hydraulic studies, and topographic surveys;

Makes economic comparisons and studies;

Prepares written reports on work assignments, including progress;

Supervises personnel consisting of drafters, engineering aides, and those water maintenance men who are assigned to inspection work as required;

May substitute for supervising personnel during periods of absence, as required;

Responds to emergencies such as fires, main breaks, power failures (on call).

REQUIRED KNOWLEDGE, SKILLS ,ABILITIES AND ATTRIBUTES: Thorough knowledge of the principles and practices of surveying; good knowledge of the principles and practices of civil or sanitary engineering, including hydraulics; good knowledge of the methods and equipment used in construction; good knowledge of the practices of specification writing; good knowledge of cost estimating; good knowledge of construction techniques and procedures; good knowledge of drafting procedures; ability to write engineering reports and letters in clear, grammatically correct language; ability to do mathematical computations as applied to engineering problems; ability to lay out and plan the work of others; accuracy; reliability; initiative; sound professional judgment; physical condition commensurate with the duties of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Graduation from a high school or possession of a high school equivalency diploma and either: a) graduation from a recognized college with a Bachelor's Degree in Civil Engineering, Sanitary Engineering, or Mechanical Engineering and one (1) year of field and office experience in engineering work; or (b) graduation from a Master's Program in Civil Engineering, Sanitary Engineering, or Mechanical Engineering; or (c) a satisfactory equivalent combination of the foregoing training and experience.