

JUNIOR ENGINEER (TRAFFIC)

DISTINGUISHING FEATURES OF THE CLASS: Under supervision, incumbents perform entry-level traffic engineering and complex technical work, involving traffic flows, signal maintenance, roadway design, road markings and signage. Incumbents conduct inspections, prepare simple designs, calculate data, prepare cost estimates and prepare proper updates and daily work records. The incumbent may work independently on less complex and routine projects and under direct supervision on more difficult tasks. As the incumbents skill and knowledge increases, less direction is received. Each level engineer, in this title series, takes part in the production of details, plans, specifications, etc. The difference between the Junior Engineer and Assistant Engineer is in the length of experience, judgment and independent action required. Advancement depends on the attainment of higher level skills and on the regular assignment to jobs requiring those skills. Supervision is not a responsibility; however guidance and direction may be given to a small number of non-professional employees. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Prepares plans, specifications and estimates for installations, purchase or maintenance of traffic control equipment;

Inspects and designs road markings and signage to comply with County, State and Federal standards;

Compiles traffic computer logs and tapes for system analysis and documentation;

Makes routine inspections of County maintained traffic signals and associated equipment;

Reviews plans and specifications for traffic controlled signals or systems to be implemented under Federal Highway programs;

Prepares progress reports;

Computes and checks estimates;

Supervises maintenance personnel and insures appropriate action taken by Contractor;

Tests and installs experimental traffic devices and instruments;

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments;

May perform other incidental tasks, as needed.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Good knowledge of the principles and practices of traffic engineering; good knowledge of the principles of highway engineering and soil mechanics; good knowledge of computer assisted design, CAD; skill in surveying, topographical mapping and drafting; ability to prepare plans, specifications and estimates for traffic control devices; ability to prepare and interpret specifications and contract estimates; ability to perform mathematical computations applied to engineering problems; ability to follow complex oral and written instructions; ability to get along well with others; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential tasks of the position; ability to use computer applications such as spreadsheets, word processing, e-mail and database software; good judgment; accuracy; reliability; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Either (a) Bachelor's Degree* in Civil Engineering, or Traffic/Transportation engineering; or (b) a Bachelors Degree* in Civil Technology and one year of experience where the primary function of the position was in either civil or traffic engineering.

*SPECIAL NOTE: Education beyond the secondary must be from an institution recognized or accredited by the Board of Regents of the New York State Education Department as a post-secondary, degree-granting institution.

NOTE: Unless otherwise noted, only experience gained after attaining the minimum education level indicated in the minimum qualifications will be considered in evaluating experience.