SENIOR ENGINEERING TECHNICIAN

<u>DISTINGUISHING FEATURES OF THE CLASS:</u> This is technical work involving responsibility for a variety of activities supporting engineering projects, including inspection tasks, traffic and safety operations. The work is performed under the general supervision of a higher-level engineering supervisor and work guidance (e.g., lead work) may be provided to others. Does related work as required.

TYPICAL WORK ACTIVITIES:

Handles survey instruments, such as levels, transits, theodolites, etc. and may lead small survey crews on specific projects;

Inspects portions of construction and maintenance projects, including materials provided for these projects;

Analyze field notes to resolve discrepancies and enhance survey accuracy;

Performs basic engineering calculations;

Performs a variety of drafting assignments;

Plots maps as aides to survey work;

Reviews and verifies routine engineering calculations;

Researches deeds and maps to form a basis for field survey;

Analyzes plans and performs calculations based on plan details for surveying and quality control of construction projects;

Oversees official records, including daily progress reports, field notebooks and specific files throughout the duration of a construction project;

Oversees the maintenance of tools and equipment;

Interprets plans and specifications on construction projects;

Provides additional survey layout support for construction projects;

Conducts laboratory tests on soils and other materials to determine their suitability for construction use;

Reviews and approves minor changes to contracts;

May prepare monthly estimates for partial payment on contracts, take field measurements for final payment and calculate final payment based on plans and measurements;

May collect and tabulate traffic accidents, traffic volume and similar data;

May oversee the installation and upkeep of traffic signs in accordance with established procedures;

May handle and investigate routine complaints from the public;

May assist with and interpret bridge plans and specifications.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Good knowledge of basic mathematics; good knowledge of drafting techniques; good knowledge of the principles, practices and terminology of land surveying; good knowledge of construction and maintenance methods and materials for highways and drainage structures; good knowledge of tools, techniques and terminology of drafting; working knowledge of engineering concepts; ability to perform basic inspections; ability to read and interpret highway plans and specifications; ability to understand and interpret written materials such as graphs, tables and dimensional drawings; ability to understand technical written and oral instructions regarding engineering work.

<u>In addition, if employed by the County of Rockland:</u> working knowledge of methods and materials of bridge construction and maintenance; ability to read and interpret bridge plans and specifications.

MINIMUM QUALIFICATIONS:

- 1. Graduation from high school or possession of an equivalency diploma <u>and</u> three (3) years of work experience in civil engineering assisting in drafting or survey work or in quality control work related to construction projects. (Time spent as a Laborer shall not be deemed qualifying); <u>or</u>
- An Associate's degree or higher in Science, Mathematics, or comparable curriculum, <u>and</u> one (1) year of work experience in civil engineering assisting in drafting or survey work or in quality control work related to construction projects. (Time spent as a Laborer shall not be deemed qualifying); <u>or</u>
- 3. An Associate's degree or higher in either Engineering, Surveying, Forestry, Landscaping, Architecture, or comparable curriculum.

NOTE: Twelve (12) additional college credits in Engineering, Surveying, Forestry, Landscaping, Architecture, or comparable curriculum, may be substituted for one (1) year of experience as described in (1) or (2) above, for up to two (2) years.

SPECIAL REQUIREMENT: Possession of a valid driver's license at the time of appointment and throughout the duration of employment in this title. The appointing authority shall have the responsibility for the verification of the driver's license which may be checked throughout the course of employment in this title.

PROMOTION: Two (2) years of permanent status as an Engineering Technician.