ENGINEERING ASSISTANT I & II

DISTINGUISHING FEATURES OF THE CLASS: The incumbent in this position performs technical work under the direction of an Engineering consulting firm in connection with any branch of engineering performed in the field, office or drafting room. Supervision is frequently exercised over engineering aides of lower grades. Assignments are given orally and in writing and are general in nature, affording some opportunities for the use of independent judgment. Work may be checked in progress and is generally checked upon completion by an engineering superior. The difference between the Engineering Assistant I and Engineering Assistant II is the level of responsibility and professional engineering experience required of the position.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

- Assists field survey crew; supervises work, takes notes, makes sketches of work performed, makes contact with the general public, and is responsible for the work results and progress of the party;
- Responsible for the management and monitoring of post construction storm water control practices (especially those in City's ownership);
- Assists in the preparation of annual reports such as the Municipal Separate Storm Sewer System (MS4) report;
- Manages construction site inspections for compliance with Storm Water Pollution Prevention Plans (SWPPP);
- Organizes and conducts training of City employees in pollution prevention practices;
- Manages the performance of stream analysis under the guidance of professional superiors and prepares plans to manage streams within the City boundaries;
- Investigates illegal discharges into the City's storm sewer system;
- Performs supervisory or medium level technical drafting work such as that involved in detailing engineering drawings;
- Supervise and participate in the preparation of public works plans, such as those for water and sewerage system construction;
- Prepares general and special purposes maps;
- Checks contract drawings;
- Inspects contract work in a specialized engineering field such as water and sewer construction and maintenance;
- Makes preliminary estimates on engineering projects;
- Receives records, charts, and statistical information of a technical engineering nature;
- Analyzes data as it comes from the field;
- Checks the work of engineering aides of lower grades;
- Enters and retrieves information in an automated information system.
- Does related work as required.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Good knowledge of the principles, practices, and instruments used in engineering drafting (including computer aided design and geographic information system programs);
- Good knowledge of engineering principles and practices;
- Good knowledge of mathematics through trigonometry and its application to engineering computations;
- Good knowledge of construction specifications, plans, estimates, codes, rules and regulations relating to public works construction by contract;
- Skill in the use of engineering instructions and equipment;
- Ability to perform moderately difficult technical computations, to make estimates and tests, and to compile simple engineering data and statistics;
- Ability to engage in continuous field work requiring physical stamina;
- Ability to make difficult and technical engineering drawings;
- Ability to establish and maintain effective working relationships with other Water Department personnel, contractors and the general public;
- Good knowledge of personal computers and office equipment;
- Physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS:

A) Graduation from a regionally accredited or NYS registered college or university or one accredited by the NYS Board of Regents to grant degrees with a Bachelor's Degree (or higher) in Engineering and four (4) years of full-time paid experience in sub-professional engineering work.

B) Graduation from a college or university whose engineering curriculum is accredited by the Accreditation Board for Engineering and Technology (ABET) with an Associate Degree in Engineering Technology and six (6) years of paid full-time experience in sub-professional engineering work; **OR**

C) Any equivalent combination of education, training and experience as defined by the New York State Education Department, Office of the Professions, to apply for licensure as a Professional Engineer in New York State.