

JUNIOR ENGINEER

DISTINGUISHING FEATURES OF THE CLASS:

The work of this professional engineering position entails working in an office and field settings, and performs Middle level engineering functions. This position involves working with both civil engineering and heavy highway construction projects. This position receives direct supervision from the Superintendent of Engineering Services. Does related work as required.

TYPICAL WORK ACTIVITIES:

Supervises field parties and operates robotic instruments using survey and GPS equipment in conducting surveys for providing line and grade for street paving, sewer and water extensions and other standard municipal improvement projects;

Individually performs and Directs field parties that are engaged in engineering projects;

Individually performs and supervises engineering office record keeping and correspondence;

Performs investigations, layouts, studies and reports on engineering problems presented;

Assists in the preparation of plans, specifications, and design of proposed engineering projects;

Assists in studies to determine future needs of streets, sewers, and water distribution systems;

Assists in the preparation of cost estimates and time schedules for construction projects and or special projects;

Assists in selecting equipment, and checks manufacturer's equipment specifications and contractor's drawings;

Makes searches for property line surveys;

Creates and maintains drawings using computer aided drafting software;

Creates and maintains documents using Word and Excel computer software.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES, AND PERSONAL CHARACTERISTICS:

Good knowledge of principles, practices, and techniques of civil engineering;

Good knowledge of principles, practices, and techniques of highway construction used in municipal infrastructure projects;

Working knowledge of the design and construction of municipal facilities;

Ability to operate a personal computer to monitor and analyze data;

Ability to use, read, and interpret, engineering field and office instruments;

Ability to read and interpret engineering drawings and specifications;

Ability to communicate both orally and in writing;

Physical condition commensurate with the duties of the position.

MINIMUM QUALIFICATIONS:

- (a) Graduation from an accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a Bachelor's degree in civil engineering, engineering technology, architecture, or related field; or
- (b) Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with an Associate's Degree in Civil Engineering, Engineering, Science, Mathematics, or related field; and two years experience in Civil Engineering or Highway Construction; or
- (c) Graduation from high school or possession of a high school equivalency diploma and four years of experience in Civil Engineering or Highway Construction; or
- (d) An equivalent combination of training and experience as defined by the limits of (a) and (b) and (c) above.