

Engineering Technician I - Tompkins County Tompkins County

Department: Highway

Classification: Competitive

Labor Grade: 9

Approved: 3/2022 by RP

Revised: 2/2023

By: RP, Commissioner of Human Resources

MINIMUM QUALIFICATIONS:

1. Graduation from a regionally accredited or New York State registered two year college with an Associate's degree in Engineering Technology, Civil Technology, Construction Technology, **OR**
2. Graduation from a regionally accredited or New York State registered two year college with an Associate's degree in Science, Technology, Engineering, Earth Sciences, or related field, **AND** one year of full time paid (or the equivalent part-time and/or volunteer) broadly based experience applicable to construction and maintenance of highways or in the construction industry; **OR**
3. Graduation from a high school technical education program (recognized by the New York State Education Department as meeting acceptable program practices and standards) with knowledge of one or more of the following: CAD, GIS, construction technology, drafting, engineering, or engineering graphics **AND** two years of full-time paid (or the equivalent part-time and/or volunteer) broadly based experience applicable to construction and maintenance of highways or in the construction industry ; **OR**
4. Any combination of training and experience equal to or greater than that specified above.

Tompkins County is Committed to Equity and Inclusion. We encourage those with similar values to apply.

SPECIAL REQUIREMENTS:

Must possess at the time of appointment a valid New York State drivers' license with a clear driving record and maintain it for the duration of employment.

DISTINGUISHING FEATURES OF THE CLASS:

An Engineering Technician performs technical tasks including survey field work, GIS and CADD basic clerical tasks, data entry, and record maintenance. The incumbent works with basic office equipment and software, technical equipment used in surveying activities; reduces and plots notes; prepares maps and plans, performs mathematical computations, and assists with observations, inspections, laboratory tests and report preparation. Incumbent performs quality control on various projects and may assist in monitoring environmental quality in relation to projects. Incumbent is expected to use various computer applications in order to perform the duties of the position. The work is performed under the direct supervision of the Highway Director or designee. Moderate autonomy and independent judgment is exercised when performing the duties of this position.

Supervision of others is not generally a function of this class. Incumbent will perform all related duties as assigned.

TYPICAL WORK ACTIVITIES: (Illustrative, but not all-inclusive)

- Performs clerical tasks and assists administrative programs
- Provides information and assistance to public regarding department policies and procedures;
- Development of Highway and Engineering technical requirements;
- Development of budgets and schedules for Engineering projects;
- Performs all types of surveys including photogrammetric, construction, property, topographic, traffic, route, and hydrographic;

- Performs construction inspection to ensure proper implementation of plans, specifications, regulations and codes;
- Performs and coordinates material and construction testing in the field and/or lab.
- Performs basic engineering computations and research, with assistance from Engineering Staff
- Performs sign inventories and maintains database
- Aids in instruction of use of transits, levels and other survey equipment
- Attends training as assigned or requested
- Manages the County Engineering Resource Room;

KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Ability to tactfully answer telephones, and respond to community service requests;
- Proficient knowledge and ability to use Microsoft Office Suite;
- Assists administrative functions including clerical tasks, formulation of budgets and schedules;
- Ability to understand and interpret complex oral and written information;
- Working knowledge of the practices and principles of engineering and construction;
- Working knowledge of the operation of the instruments and materials used in engineering and construction projects;
- Working knowledge of survey and engineering terminology;
- Ability to assist in surveys including but may not be limited to photogrammetric, construction, property, topographic, traffic, route, and hydrographic;
- Working knowledge of rules, regulations and codes pertaining to engineering projects;
- Ability to interpret engineering drawings and specifications;
- Ability to perform material and construction tests in the field and lab;
- Ability to understand basic laboratory instrumentation and electronics;
- Ability to use a personal computer to manipulate engineering software programs;
- Working knowledge of CADD and GIS computer software;
- Physical condition commensurate with the demands of the position;
- Ability to lift and carry fifty (50) pounds;

Originally created 3/2022

E70