

Civil Engineer - Town of Ithaca Tompkins County

Department: Town of Ithaca

Classification: Competitive

Labor Grade: 13

Revised: 9/82;3/86;2/90;5/91;12/98;12/03;6/11

By: AF, Commissioner or Personnel

MINIMUM QUALIFICATIONS: EITHER:

(a) Graduation from a regionally accredited or New York State approved four-year college or university with a bachelors degree in Civil Engineering; **OR**

(b) Graduation from a regionally accredited or New York State approved two-year college with an associates degree in Engineering Technology, Engineering Science, or a related field **AND** two years of experience as an engineering technician or other similar position involved with civil engineering work; **OR**

(c) Graduation from high school or possession of high school equivalency diploma **AND** six years of experience as an engineering technician or other similar position involved with civil engineering work; **OR**

(d) Any equivalent combination of training and experience as described in (a), (b), or (c) above.

SPECIAL REQUIREMENT:

The applicant must be eligible for a New York State motor vehicle operator's license at the time of application, possess such license at the time of appointment and maintain a valid driver's license for the duration of employment.

DISTINGUISHING FEATURES OF THE CLASS:

This is a basic professional engineering position requiring the ability to apply principles of physics, mathematics, mechanics and materials to engineering problems. The work requires independent judgment in devising new methods and adapting standard procedures to meet unusual conditions. The work is performed under the general direction of a Senior Civil Engineer, with overall direction from the Director of Public Works. Supervision may be exercised over the work of subordinates. Attendance at evening meetings of various boards and committees of the Town may be required. The incumbent will perform all related duties as required.

TYPICAL WORK ACTIVITIES:

- Conducts surveys for road, conduits, etc., map developed areas, and to run location lines for roads, conduits, etc.;
- Conducts surveys to obtain data on drainage structures guide rail systems, traffic signing, etc.;
- Reviews and inspects storm water pollution protection plans submitted to Town;
- Supervises construction work on assignment;
- Keeps records of amount of work done and of changes in plans and specifications;
- Checks design computations and plans of other staff for routine errors;
- Works with engineering technicians and students engaged in design surveys and construction inspection;
- Supervises and instructs in the use of transits, levels and other surveying instruments;
- Drafts plans, topographical and cross-section maps and charts;
- Computes and estimates quantities of materials used for determining payments to contractors;
- Prepares bid documents for water, sewer, storm water, road projects and other projects as assigned;
- Completes State Environmental Quality Reviews for water, sewer, storm water and road projects;
- Reviews building permit applications, including representing the Town at meetings with applicants and boards.

KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Good knowledge of the principles of civil engineering, physics and mathematics;
- Good knowledge of construction and engineering practices;

- Working knowledge of the codes, laws rules, regulations and procedures governing highway and bridge design and construction, and storm water compliance;
- Skill in the use of surveying and drafting instruments;
- Ability to use a computer and many types of software programs such as Microsoft Word, Excel, Access and a variety of mapping and engineering surveying software;
- Ability to design moderately difficult engineering projects;
- Ability to make difficult technical computations and compile engineering data;
- Ability to read and interpret engineering drawings and specifications;
- Ability to plan and supervise the work of others;
- Ability to operate a variety of surveying instruments (e.g., surveyor's level, theodolite);
- Ability to use drafting equipment;
- Ability to establish cooperative working relationships with contracts, the public, consultants, vendors, co-workers, and other department staff;
- Ability to perform activity requiring physical effort (walking, climbing or reaching);
- Ability to perform work requiring prolonged visual concentration;
- Resourcefulness, accuracy, alertness, good judgment;
- Physical condition commensurate with the demands of the position.