# Civil Engineer - Town of Ithaca Tompkins County

**Department:** Town of Ithaca **Classification:** Competitive

Labor Grade: E

**Approved:** BD Res #79

**Revised:** 9/82;3/86;2/90;5/91;12/98;12/03;6/11; 11/19 **By:** LG, Deputy Commissioner or Human Resources

# **MINIMUM QUALIFICATIONS: EITHER:**

- 1. Graduation from a regionally accredited or New York State approved four-year college or university with a bachelor's degree in Engineering **OR**
- 2. Graduation from a regionally accredited or New York State approved two-year college with an associate degree in Engineering related field **AND** two years of experience in a position involving engineering related work; **OR**
- 3. Graduation from high school or possession of high school equivalency diploma **AND** six years of experience in a position involving engineering related work; **OR**
- 4. Any equivalent combination of training and experience as described in (a), (b), or (c) above.

### ANTICIPATED ELIGIBILITY (FOR MINIMUM QUALIFICATION 'A' ONLY):

If you are enrolled in a Bachelor's Degree Engineering program and would obtain your degree within 9 months of appointment, you may apply.

YOU WILL BE EXPECTED TO SUBMIT COLLEGE TRANSCRIPTS AT TIME OF APPLICATION. TRANSCRIPTS NEED NOT BE OFFICIAL COPIES; HOWEVER, THEY MUST CONTAIN <u>ALL</u> INFORMATION NECESSARY TO QUALIFY YOU FOR THIS POSITION.

NOTE: If your degree and/or college credit was awarded by an educational institution outside of the United States and its territories, you must provide independent verification of equivalency. You can write to this Department for a list of acceptable companies providing this service; you must pay the required evaluation fee.

## **SPECIAL REQUIREMENT:**

Required to possess a valid New York State Driver's License to operate a motor vehicle or otherwise demonstrate the ability to meet the transportation needs of the job.

# **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 and infrastructure related problems. The work requires independent judgment in devising new methods and adapting standard procedures to meet unusual conditions. Work may involve cross department functions with Engineering and Public Works Departments on various infrastructure and project assignments. Work is performed under the direct supervision of the Director of Engineering with some day-to-day leadership from the Senior Civil Engineer, and Director of Public Works or their designee. 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;

Evaluates and acquires products, materials, and services for Engineering and/or Public Works Department;

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.

## FULL PERFORMANCE 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;

Working knowledge of municipal procurement processes;

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, either with or without reasonable accommodations.

C62