

Senior Engineering Technician - Tompkins County Tompkins County

Department: Highway
Classification: Competitive
Labor Grade: Blue Collar Grade 11
Approved: Reclass effective 09/02/2012
Revised: 1/17; 5/18; 4/21
By: RP, Commissioner of Personnel

MINIMUM QUALIFICATIONS:

- (a) Graduation from a regionally accredited or New York State registered two year college with an Associates degree in Engineering Technology **AND** four (4) years of full time paid (or the equivalent part-time and/or volunteer) broadly based experience in the design and construction of transportation or utility projects, to include surveying, mapping and use of computer aided design graphics (CADD) and/or database applications, with at least two years of which must have been in a supervisory capacity; **OR**
- (b) Graduation from high school or possession of a high school equivalency diploma **AND** six (6) years of full time paid (or the equivalent part-time and/or volunteer) broadly based experience in the design and construction of transportation or utility projects, to include surveying, mapping and use of computer aided design graphics (CADD) and/or database applications, with at least two years of which must have been in a supervisory capacity; **OR**
- (c) Any combination of training and experience in a related field equal to or greater than that described in (a) and (b) above.

SPECIAL REQUIREMENTS:

Within twelve months will obtain certification from the National Institute for the Certification of Engineering Technicians or equivalent certification. 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.

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

DISTINGUISHING FEATURES OF THE CLASS:

This position provides technical support, field support, designs, project management, and research assistance as required for all types of highway, bridge and other highway infrastructure related projects. It requires the ability to utilize various skills related to surveying, engineering, highway construction and maintenance, project design, project management, construction inspection, record-keeping, relevant computer software applications (CADD / GIS) to support various department projects and programs. The Senior Engineering Technician assists in planning, development, implementation, maintenance and inspection of highway related projects. Work is performed under the direct supervision of the County Highway Director or designee. The incumbent may lead small groups of employees and contractors at a job site. Strong inter-personal skills, resourcefulness, initiative, good judgment and tact are required to successfully communicate and interact with staff, contractors, vendors, other municipal officials, and residents. Although supervision of others is not a primary function of this position, the incumbent may be called upon to supervise work projects, work groups, and to provide technical supervision and training to departmental staff. The incumbent will perform all related duties as assigned.

TYPICAL WORK ACTIVITIES:

- Inspects and evaluates conditions of infrastructure;
- Manages and develops work plans from highway pavement management system;
- Serves as a highway representative on various teams or work groups;
- Monitors compliance with respect to rules, regulations, codes and contracts;
- Assists with development of budgets and schedules for Engineering highway and related projects; Plans and performs field data collection, including GIS, topographic and land surveys, construction layout, property and right-of-way surveys;
- Performs and coordinates construction inspection to ensure proper implementation of plans, specification, regulations and codes;
- Performs and coordinates material and construction testing in the field and/or laboratory;
- Prepares and plans for highway infrastructure projects including work orders, designs, drawings, and other related information;

- Performs coordinating engineering computations and designs all duties under general supervision of the Director of Engineering, County Highway Director or designee;
- Provides technical and assistance for projects;
- Manages and applies relevant computer programs to project, develop, and monitor highway and related projects.

KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Thorough knowledge and ability to use computers and highway engineering software (CADD);
- Thorough knowledge and ability to use mapping, database and related software (GIS) necessary to design, develop and maintain the department GIS program, web sites and applications;
- Ability to understand and interpret complex oral and written information;
- Good knowledge of the practices and principles of engineering, highway maintenance, and construction;
- Good understanding of the instruments and materials used in engineering and construction projects;
- Good knowledge of survey and engineering terminology;
- Good knowledge of rules, regulations and codes pertaining to engineering projects;
- Ability to read and understand engineering drawings and specifications;
- Ability to plan and develop schedules;
- Ability to perform field data collection and surveys to include but not limited to topographic, traffic, route, property and construction layout;
- Ability to perform material and construction tests in the field and laboratory;
- The employee's physical condition shall be commensurate with the demands of the position.

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