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
By: AF, 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 years of full time paid (or the equivalent part-time and/or volunteer) broadly based experience in the design and/or construction of utility projects and/or heavy highway projects, at least one year 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 years of full time paid (or the equivalent part-time and/or volunteer) experience in the design and/or construction of utility and/or heavy highway projects, at least two years of which must have been in a supervisory capacity; OR

(c) Any combination of training and experience equal to or greater than that described in (a) and (b) above.

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

SPECIAL REQUIREMENTS:

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

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 engineering other highway related projects. An employee in this position utilizes numerous surveying skills related to engineering, highway construction and maintenance, project design, project management, construction inspection, record-keeping, and relevant technical and computer applications that support them. This includes Assists in development, implementation, maintenance, and the monitoring of compliance for 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 are needed to successfully communicate and interact with staff, contractors, vendors, other municipal officials, and residents. The employee will perform the work of the Highway sign shop while supervising crew(s) composed of Sign Mechanics, Heavy Equipment Operators, Motor Equipment Operators, Laborers, and Seasonal Workers engaged in the manufacturing and installation of highway roadside signs. The incumbent will be responsible to be fully knowledgeable of the requirements that govern highway roadside signs such as the Manual of Uniform Traffic Control Devices and local highway standards and practices. 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 all types of surveys including photorammetric, construction, property, topographic, traffic, route, and hydrographic;
- 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 lab;
- Prepares and plans for Engineering highway projects including work orders, designs, drawings, and other related information;
Performs coordinating Engineering computations and design 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:

• 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 formulate schedules;
• Ability to perform surveys including but not limited to photorammetric, construction, property, topographic, traffic, route, and hydrographic;
• Supervises and schedules daily work projects and makes work assignments to the sign shop crew;
• Prepares sign work orders and provides explanation of work orders or related documentation;
• Operates and oversees the operation of the sign making process including layout, preparation, cutting, adhering, and installation;
• Observes work in progress and that which is completed to insure adherence to instructions, guidelines, and schedules;
• Insures that signs are produced and installed according to the Manual of Uniform Traffic Control Devices and other highway standards and practices;
• Sets up signage for construction projects including detours, road closings, and other signage in accordance with the Manual of Uniform Traffic Devices (MUTCD) latest edition -Maintains written records of work performed including labor, materials, and equipment;
• Oversees inventory of sign shop materials and orders materials as needed.
• Ability to perform material and construction tests in the field and lab;
• Ability to understand and interpret complex oral and written information;
• Ability to use computers and highway engineering software programs;
• Ability to use and apply GIS technology and stay current with other computer programs relevant to work tasks;
• The employee’s physical and mental condition shall be commensurate with the demands of the position, either with or without reasonable accommodation.

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