



## Cayuga County Department of Human Resources and Civil Service Commission

### JOB SPECIFICATION

Civil Service Title:	<b>SENIOR ENGINEERING TECHNICIAN</b>
Jurisdictional Class:	Competitive
Civil Division:	County Highway Department
Adoption: CSM	1/11/86
Revised: CSM	02/18/04, 08/15/07

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#### **DISTINGUISHING FEATURES OF THE CLASS:**

This position exists in the County Highway Department and involves responsibility for the performance of complex technical tasks associated with a number of engineering and public works projects. These tasks include supervising a field survey party, performing computation and inspection tasks associated with a variety of engineering and public works projects. The incumbent is also responsible for the efficient performance of construction work allied with the accurate collection and recording of data for use in the development of plans and specifications. The incumbent exercises supervision over the work of Engineering Technicians and a variety of laborers assigned to a specific project. Work is performed under the direct supervision of the General Highway Foreman with leeway allowed for the exercise of independent judgment in selecting the methods for accomplishing tasks also assigned. The incumbent does related work as required.

#### **TYPICAL WORK ACTIVITIES: (Illustrative Only)**

Participates under supervision in the preparation and revision of plans, specifications, and design of engineering and public works projects involving installations including buildings, roads, drainage systems, parks, and bridges;

Participates in field surveys, inspections, and data taking for the purpose of collecting information to serve as the basis for preparation of estimates, plans, and specifications for county sponsored engineering and public works projects;

Inspects the work of private contractors whose services have been acquired for the performance of the construction portion of county sponsored engineering projects;

Assists in inspection of construction and maintenance projects conducted by the Public Works employees for roads, parks, and building projects;

Makes basic engineering computations and checks the computations of others;

Assists the Director of Public Works in the initiation, planning, and development of major highway projects;

Makes maps, plans, and charts from notes and other information sources;

Coordinates with outside agencies for engineering support for county projects;

Consults with Town Highway Superintendents to give technical advice and engineering assistance as related to road and drainage projects;

Assists in preparation and distribution of estimates, specifications and bidding documents for materials, equipment, and construction projects for a variety of agencies and departments;

Takes traffic counts on County and Town Highways and compiles this information;

Maintains inventory of county infrastructure using computer programs and inspections;

Performs various technical and clerical duties in the field and in the office as directed by the Director of Public Works;

Works with State Department of Transportation to implement road safety projects, and other Department of Transportation programs that involve Counties, Towns, and Villages;

Monitors the safety program of the County Highway Department;

Researches deeds and surveys to determine on site road right of ways and county property lines;

Conducts office operations of the department for processing of permit applications, purchasing supplies and equipment; maintenance of equipment, maintenance of filing system for correspondence, technical reference materials, maps and plans, operation and maintenance of blueprint machine and engineering instruments.

**FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES, PERSONAL CHARACTERISTICS:**

Thorough knowledge of high school geometry trigonometry;  
Thorough knowledge of the principles, techniques, and practices of land surveying;  
Thorough knowledge of engineering, surveying, and drafting instruments and equipment;  
Good knowledge of construction specifications and their application to public works activities;  
Working knowledge of computer terminology;  
Ability to learn computer aided drafting and other employer software programs;  
Ability to interpret engineering maps, sketches, and blueprints;  
Ability to understand and carry out complex technical oral or written instructions;  
Ability to plan and supervise the work of others;  
Willingness to work outdoors, occasionally under adverse conditions;  
Physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:**

Graduation from a regionally accredited or New York State registered two-year college or technical institute with an Associate's Degree in engineering technology, construction technology, mechanical technology, land surveying, or a related field and 2 years of experience as a technician on engineering projects which shall have included the use or techniques involved in mechanical construction, or engineering technology, or land surveying.