

Jurisdictional Class: Competitive
Adopted: May 14, 1987
Revised: January 10, 2023

COUNTY ENGINEERING ASSISTANT

DISTINGUISHING FEATURES OF THE CLASS: This work involves responsibility for providing engineering support for various public works projects. The position requires the ability to develop, schedule, and coordinate the multiple activities of field parties, County construction crews, contractors, vendors, and suppliers for effective and productive use of County assets. The work involves responsibility for design, making and checking engineering computations, inspecting construction work and materials, construction administration, preparation and maintenance of appropriate records and files, and monitoring regulatory compliance requirements. The work involves the coordination and active interaction with various County departmental personnel and various state and federal agencies. The work is performed under the general supervision of the Highway Superintendent and/or Deputy Highway Superintendent. Supervision is exercised over the work of various professional and non-professional employees in project activities. The incumbent does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative only)

Reviews and makes comments on specific engineering studies, planned alterations, and construction for bridges and highway projects;

Conducts land surveys and obtains property line data for right-of-way acquisition maps;

Makes field surveys to collect data and make evaluations;

Makes blueprints and draws up construction and other project plans;

Assists in the inspection of major construction projects conducted by outside contractors that involve municipal facilities;

Develops schedules, estimates costs, and determines materials and personnel requirements for various maintenance, repair, renovation, and new construction projects;

Patrols and inspects roads, highways and bridges to determine condition and maintenance needs;

Investigates complaints from the public regarding highways and provides explanations to property owners;

Prepares activity, cost, and progress reports;

Confers with various county, town, and village officials regarding construction and maintenance projects;

Prepares and maintains a variety of County, State, and Federal records and reports;

Evaluates bi-annual bridge inspection reports;

Conducts annual tree inspections to mark dead or disabled trees;

Coordinates the one call New York State Dig Safe Program, submits required notices for Highway Department work activities or other county departments as required, monitors clearance notices, and notifies highway construction supervisors or other county agency contacts when clearances are received;

Maintains accurate computerized inventory regarding traffic sign placements, repairs, and installations, and ensures timely input of changes as submitted by the Sign Maintenance Supervisor;

Researches for and provides findings to the Deputy, on department training programs required by the NYS Department of Labor, OSHA, and other regulatory agencies for work zone safety, work place safety, proper handling of hazards materials, and related requirements; conducts employee training as directed; and maintains records of training;

Performs quarterly safety inspections of maintenance facilities and reports findings to the Deputy;

Oversees the petroleum bulk storage program, prepares NYSDEC registrations for fuel and oil storage tanks ensuring information is accurate and up to date, performs monitoring of tanks and dispensing stations on a regular basis, compiles and maintains inspection reports, reports deficiencies to the Deputy, and accompanies NYSDEC personnel on inspections of the bulk storage facilities.

County Engineering Assistant

Represents the Highway Department at meetings and during various situations requiring coordination with city, village, town, county, and state officials.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES & PERSONAL CHARACTERISTICS:

Thorough knowledge of engineering field techniques;
Good knowledge of principles, techniques, and terminology of civil and structural engineering;
Good knowledge of drafting techniques, terminology, and equipment;
Good knowledge of techniques and sources of information concerning engineering research and economics;
Working knowledge of the principles, techniques, and practices of land survey;
Working knowledge of construction specifications and their application to public works projects;
Working knowledge of computer applications used in the design and analysis of civil and structural engineering projects;
Knowledge of the NYS Department of Labor and OSHA regulations;
Knowledge of the NYSDEC regulations as they relate to Highway and Bridge projects and the storage of bulk petroleum products;
Ability to read and understand sketches, blueprints, road construction, and maintenance plans;
Ability to perform technical engineering computations rapidly and accurately;
Ability to perform engineering studies and to prepare detailed, analytical reports;
Ability to prepare detailed cost estimates, drawings, and specifications;
Ability to establish and maintain effective working relationships with others;
Ability to plan, coordinate, and supervise the work of others;
Ability to carry out oral and written directions;
Ability to operate a computer and learn how to use various computer programs to maintain accurate records and prepare reports;
Sound professional judgment;
Initiative and resourcefulness;
Industry and dependability;
Tact and mental alertness;
Physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS: Either:

- (a) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in civil engineering, civil engineering technology, or construction management and one (1) year of experience in civil engineering or general construction or maintenance of highways and bridges; or
- (b) Graduation from a regionally accredited or New York State registered college or university with an Associate's Degree in civil engineering, civil engineering technology, or construction management and two (2) years of experience in civil engineering or general construction or maintenance of highways and bridges that included survey or drafting work; one (1) year of which shall have been in a supervisory capacity; or
- (c) Graduation from high school or possession of a high school equivalency diploma and seven (7) years of experience as defined in (b) above; one (1) year of which shall have been in a supervisory capacity; or
- (d) An equivalent combination of training and experience as outlined by the limits of (a), (b), and (c) above.

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Note: Your degree must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S Secretary of Education. If your degree was awarded by an educational institution outside of the United States and its territories, you must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found on the Internet at <http://www.cs.ny.gov/jobseeker/degrees.cfm>. You must pay the required evaluation fee.

SPECIAL REQUIREMENTS: Eligibility for an appropriate level New York State Driver's License at time of application. Possession of license at time of appointment.