

PROFESSIONAL ENGINEER 1

DISTINGUISHING FEATURES OF THE CLASS: This work involves performing civil engineering studies necessary for the development, upkeep, and improvement of the County's infrastructure. Responsibilities may include the design, development and implementation of projects involving bridge, road and culvert construction, waste management and traffic engineering. Supervision is exercised over subordinate engineering department personnel. This position differs from that of Civil Engineer by virtue of its expanded scope and level of responsibility. The work is performed under general direction of a higher-level Professional Engineer or Deputy Commissioner of Public Works with wide latitude allowed for the use of independent judgement in carrying out the technical aspects of the work. Applied knowledge of mathematical, physical, and engineering sciences in several specialty areas is utilized as well as provision of the full range of professional engineering services including consultation, evaluation, planning, systems design, engineering surveys, and project oversight in order to ensure work conforms to accepted engineering standards. A Professional Engineer 1 does related work as required.

TYPICAL WORK ACTIVITIES:

- Produces preliminary and final designs of bridge, highway and culvert projects;
- Performs structural analysis;
- Produces bid-ready documents;
- Prepares construction cost estimates;
- Performs drainage designs and hydraulic calculations;
- Reviews construction projects to ensure conformance with plans and specifications;
- Reviews plans for conformance with applicable federal, state and local codes and regulations;
- Researches engineering procedures/materials to determine best methods and materials to use for a project;
- Inspects construction and maintenance work to ensure conformance with plans and specifications;
- Evaluates contractor proposals, negotiates revisions, and participates in securing final approval
- Develops and oversees implementation of research projects and field surveys;
- Prepares alterations and modifications for new and existing roadways to improve road conditions/traffic flow;
- Provides project management and oversight for complex public works projects involving both County and consultant resources.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES, AND PERSONAL

CHARACTERISTICS: Comprehensive knowledge of the principles and practices of engineering; comprehensive knowledge of construction procedures including design, specification writing, inspections and surveys; thorough knowledge of the codes, laws, rules, regulations and procedures governing engineering design and construction; working knowledge of the tools, terminology and materials used in the construction of roads, bridges, waterways, buildings and sanitary landfills; thorough knowledge of the codes, laws, rules, regulations and procedures governing engineering design and construction; ability to plan, organize and supervise the work of others; ability to prepare plans and specifications; ability to communicate well both orally and in writing; physical condition sufficient to perform the essential functions of the position.

MINIMUM QUALIFICATIONS: Possession of a Bachelor's Degree in civil or structural engineering AND license and current registration issued by the New York State Education Department to practice as a Professional Engineer.

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 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 New York State Civil Service website. You must pay the required evaluation fee.

SPECIAL REQUIREMENT: Possession and maintenance of an appropriate driver's license.

CATTARAUGUS COUNTY CIVIL SERVICE

Adopted: 5/11/2026