

## **CIVIL ENGINEER**

**DISTINGUISHING FEATURES OF THE CLASS:** This is professional engineering work involving responsibility for the design, maintenance, and repair of County highways, roads, bridges, highway structures, and any work associated with the Delaware County Solid Waste Management Center. The work is performed under the general direction of the Senior Civil Engineer II with wide leeway allowed for the exercise of independent professional judgment in the planning and execution of the work. Direct supervision is exercised over the work of personnel engaged in survey, design, inspection, and construction work. Does related work as required.

**TYPICAL WORK ACTIVITIES:** (Illustrative Only) Supervises a survey crew engaged in determining exact field measurements for road and bridge maintenance, repair and construction projects; Designs highways, bridges, culverts, retaining walls, and related structures; Performs on-site inspections of work in progress and completed projects; Prepares cost estimates for work to be done by the department or contracted out; Supervises the collection of data, the search of public records, and survey work in order to determine land holdings and property lines for right-of-way issues; Reviews and assists in the preparation of applications for Federal and State aid for County and Town highway and bridge projects; Oversees the development of computer terrain models generated from total station survey equipment for use in design of roads, bridges, and solid waste projects; Prepares final plans for construction contracts of roads and bridges; Compiles data for department reports and supervises the filing and indexing of engineering and survey records; Performs on-site inspections; Generates designs, plans, and contracts for the Municipal Solid Waste Co-Composting Facility and Solid Waste Management Facility; Consults with Town Highway Superintendents on highway law issues; Manages special projects as assigned; Manages access, work, and utility permit applications.

**FULL PERFORMANCE, KNOWLEDGE, SKILLS, ABILITIES, AND PERSONAL CHARACTERISTICS:** Thorough knowledge of the modern methods, materials, and techniques of highway and bridge design and construction; Knowledge of the techniques and practices of surveying; Knowledge of the operation of surveying equipment and use of computer terrain modeling software; Knowledge of Federal MUTCD and NYS supplement for highway signs and Federal and NYS guiderail warrants and standards; Ability to perform complex engineering and surveying calculations; Ability to prepare and interpret sketches, maps and construction plans; Ability to read and interpret NYS Highway Law and highway related design manuals; Ability to establish and maintain an effective working relationship with the public; Ability to plan and supervise the work of others; Ability to prepare complex reports and maintain records; Ability to follow technical oral and written instructions; Initiative; Resourcefulness; Good judgment; Accuracy; Physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:** EITHER:

A. (1) Graduation from a four-year college or university with a Bachelor's Degree in engineering and (2) two years of engineering experience, which shall have included one year of bridge, highway or solid waste management design and construction, or three years of experience assisting in civil engineering work, which shall have included the operation of survey equipment, making engineering computations, or computer-aided drafting, and which shall have included one year of assisting in bridge, highway or solid waste management design and construction; OR

B. (1) Graduation from a college or technical institute with an Associate's Degree in engineering technology or related field, and (2) four years of engineering experience, two of which shall have included bridge, highway or solid waste management design and construction, or (3) six years of experience assisting in civil engineering work, which shall have included the operation of survey equipment, making engineering computations, or computer-aided drafting, and which shall have included two years of assisting in bridge, highway, or solid waste management design and construction; OR

C. (1) Graduation from high school and (2) six years of engineering experience, which shall have included two years of bridge, highway, or solid waste management design, or nine years of experience assisting in civil engineering work, which shall have included two years of assisting in bridge, highway, or solid waste management design and construction; OR

D. An equivalent combination of training and experience as defined by the limits of (A) and (B) and (C) above.

**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 Internet at <http://www.cs.ny.gov/jobseeker/degrees.cfm>. You must pay the required evaluation fee.

**SPECIAL REQUIREMENTS:**

Possession of an appropriate level New York State driver's license at the time of appointment and maintained during employment.

Revised 8/25/89; 1/24/97; 8/16/07; 9/13/12; 5/26/15

Reviewed 10/6/04; 3/13/12; 5/21/18; 2/17/23