

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 designs, on-site inspections, 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 regionally accredited or New York State registered 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 regionally accredited or New York State registered 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.

SPECIAL REQUIREMENTS:

Possession of an appropriate level New York State driver' 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