

DEPARTMENT: NORTH TONAWANDA ENGINEERING DEPT.
CLASSIFICATION: COMPETITIVE
APPROVED: 2/21/96

CIVIL ENGINEER
(North Tonawanda)

DISTINGUISHING FEATURES OF THE CLASS: The work involves responsibility for the design, development, inspection, maintenance, and construction of a variety of city engineering projects. The Civil Engineer may be in charge of projects in the field or of the design of projects in the office, or conduct field inspections to determine work to be done. The work is performed under the general supervision of the City Engineer with independent judgment exercised in researching different design alternatives and the details of each project. Supervision may be exercised over the work of Engineering Technicians in the field. Does related work as required.

TYPICAL WORK ACTIVITIES:

Designs and drafts plans and specifications for highways, storm drainage and sanitary sewer construction projects, determining appropriate pipe size, road profiles, design of retaining and head walls, etc.;

Computes cost feasible estimates and estimates of quantity of construction materials needed and determines time schedules for construction projects;

Inspects general construction projects (including materials and installation of materials) and determines if work is in compliance with plans and specifications and monitors work in progress to authorize contractor's payments;

Prepares verbal and written status reports on construction projects in progress;

Acts as liaison between private contractors and City Engineer, interprets and enforces city codes, makes changes on plans and drawings, and records all field data;

Supervises field parties engaged in making surveys for providing line and grade for street paving and construction, sewer and water extensions and other standard municipal improvement projects;

Investigates property owners' complaints and recommends corrective action.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Good knowledge of the principles and practices of civil engineering;

Good knowledge of modern methods and techniques as applied to the construction and maintenance of public works projects;

Ability to make engineering computations, design engineering projects, plans and specifications;

Ability to conduct engineering research work and to write technical reports;

Ability to use engineering field and office instruments;

Ability to analyze the condition of roads, structures, embankments and construction projects and determine construction needs;

Ability to establish cooperative working relationships with others;

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 or a closely related field; or
- (b) Graduation from a regionally accredited or New York State registered college or university with an Associate's degree in civil engineering or a closely

related science/engineering field and two years technical experience assisting in engineering work; or

(c) Graduation from high school or possession of a high school equivalency diploma and four years technical experience assisting in engineering work; or

(d) An equivalent combination of training and experience as defined by the limits of (a), (b) and (c).