

SANITARY ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This is a staff position within the Technical Services group. The incumbent is responsible for making technical computations, drawings, and gathering data. An employee in this case may locate water mains or sewer lines pursuant to New York State Code 53 or locate mains, valves, etc., from existing prints, notes, etc., for repairs to existing facilities or may be assigned to the upkeep of valve books, system drawings, plant drawings, or other difficult office work. General supervision is received from higher level management, with leeway for exercise of independent judgment in carrying out the details of assignments in accordance with department policy and sound engineering practices. Supervision may be exercised over engineering aides and other subordinate employees as assigned.

TYPICAL WORK ACTIVITIES:

Performs fire flow and water pressure tests;

Reviews drawings to insure compliance with Water and Sewer Ordinance and New York State Code for Domestic and Industrial Services, meters and backflow prevention devices;

Supervises and participates in the taking and plotting of field notes;

Draws cross sections and profiles and calculates cut and fill;

Checks maps for location of structures, conduits, cables, sewer and water lines in accordance with New York State Code 53;

Makes routine engineering computations;

Plots location of storm and sanitary sewers and water lines from field notes and related data;

Supervises in-house projects for adherence to specifications;

Interacts with contractors and others as needed on construction projects;

Answers inquiries from general public and others regarding work in progress;

Assists engineering staff and other members of the Niagara Falls Water Board to assure smooth continuous operations.

Performs piping system evaluation, prepares working drawings for the repair of water mains, storm and sanitary installations;

May operate computer aided design equipment and software;

Operates blueprint machine and general office machines;

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(continued)

KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Most poses a knowledge of :

1. process instrumentation diagrams and general process engineering discipline;
2. engineering plant and field survey work and drafting;
3. mathematics as applied civil engineering work;
4. modern drafting methods techniques and practices;
5. acceptable engineering practices used in water and sewer line repairs;

The Skillset required consists of:

1. use of drafting instruments;
2. use of computer packages such as MS Office
3. written and verbal communications

Abilities and personal characteristics the incumbent will need to succeed:

1. to interpret the Water and Sewer Ordinance and insure compliance
2. interpret engineering maps, sketches, blueprints and specifications;
3. accurately record field survey notes and make rough sketches;
4. plan and supervise the work of others;
5. understand and carry out technical oral and written engineering instructions;
along with initiative and resourcefulness, accuracy, and good independent judgement.

MINIMUM QUALIFICATIONS:

A graduation from a regionally accredited college or university with a Bachelor's degree in chemical, civil, or sanitary engineering.

SPECIAL REQUIREMENTS:

New York State Driver's License