Jurisdiction: Oneida County
Jurisdictional Class: Competitive
Revised: 8/15/01

ASSOCIATE ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This position exists in the County Department of Public Works, Engineering Division, and involves performance of advanced engineering work in the planning, design, investigation, maintenance, and control of engineering and related public works projects. The work involves supervision of varying numbers of professional and non-professional employees by laying out tasks, giving instructions regarding required procedures, and making checks on completion of work. Major technical and engineering policy decisions and problems are discussed with a supervisor before taking action. The work is performed under general supervision of the Deputy Commissioner, with leeway allowed for exercise of independent judgement in carrying out details of the work. Supervision is exercised over the work of various professional and non-professional employees. Does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

Supervises and participates in the preparation, review and revision of plans, specifications and design of engineering and public works projects involving County installations including, but not limited to airport facilities, office buildings, libraries, jail, highways, bridges, sewage and drainage systems, hospital and nursing home facilities, court facilities and the parks and preserves system;

Supervises and participates in field survey inspection and data taking for the purpose of collecting information to serve as the basis for preparation of estimates, plans and specifications for engineering and public works projects;

Prepares specifications, coordinates technical services and final inspection of construction projects conducted by outside contractors involving municipal facilities;

Participates in the continuing evaluation of technical standards for public works engineering practices through study of current literature, attending technical meetings and seminars, discussion with peers, etc.;

Provides coordinating technical services and final inspection of construction and maintenance projects conducted by the Department of Public Works field and garage personnel for highways, airport, parks and building projects;

Supervises and participates in the administration and presentation of applications for State and Federally funded programs for highway, airport, parks and building construction;

Reviews planned building alterations and construction for structural safety and design;

Supervises and participates in preparation of purchase specifications and analysis of bidding documents to make recommendations for contract awards for the purchase of materials and equipment for the Division of Highways and Bridges for other agencies and departments;

Supervises and participates in the preparation of engineering cost estimates for proposed programs and alternatives involving other agencies and departments;

Develops project scope and preliminary cost estimates sufficient for preparation of capital project budgets or submittals to grant fund programs;

continued...

TYPICAL WORK ACTIVITIES: Continued

Prepares contract plans and specifications for solicitation of bids;
Directs execution of public works projects having an emphasis on environmental engineering, including supervision of staff engineers and technicians;
Supervises technical personnel involved with surveying, drafting, specifications writing, and field inspection;
Utilizes computer programs to assist in arriving at solutions to engineering problems and in the preparation of reports and correspondence;
Reviews public works project proposals, whether public or private, for compliance with applicable environmental statutes;
Reviews field data and analyzes programs for maintenance and repair of highways, bridges, and structures;
Prepares requests for proposals, assists in the selection of, and manages the work of consultants;
Represents the Division of Engineering in a professional manner in meetings and through the preparation of routine correspondence and reports;
Confers with superiors on a variety of engineering projects dealing with cost projection, workload, feasibility studies, etc.;
Makes recommendations regarding quality control and efficiency of departmental services related to engineering functions;
Reviews personnel and operational expenditures of the various Divisions and makes recommendations for efficiency improvements and cost effectiveness;
Originates plans for the design and construction of highway, bridge, airport and other transportation projects;
Prepares specifications for construction materials, equipment and supplies;
Conducts studies and prepares reports for future and long-range public improvement projects;
Develops and instructs subordinates in engineering computer program application and use;
Supervises design of public works projects and coordinates with state and Federal agencies concerning funding beneficial to the County;
Manages capital projects accomplished by private contractors.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Thorough knowledge of the principles and practices of engineering and sources of engineering data; thorough knowledge of modern engineering methods and techniques as applied to highways, buildings, airport and related public works project design and construction; skill in coordinating and applying engineering research in preparing reports of studies; ability to organize, plan and lay out working details of engineering projects to professional and technical subordinates; ability to prepare technical reports of engineering research and studies; initiative and resourcefulness in solution of complex engineering problems.

continued...

MINIMUM QUALIFICATIONS: Either:

(A) Possession of a Master's Degree in civil or environmental engineering from a regionally accredited or New York State registered school of engineering **AND** two (2) years of experience involving civil or environmental engineering; **OR**

(B) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in civil or environmental engineering **AND** three (3) years of experience as described in (A) above; **OR**

(C) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in engineering **AND** five (5) years of experience as described in (A) above; **OR**

(D) Graduation from a regionally accredited or New York State registered college or university with a Associates Degree in civil engineering technology or engineering science **AND** seven (7) years of experience as described in (A) above.