

Jurisdictional Class: Competitive
EEO Category: Professionals
Adopted: 07/28/2021

MECHANICAL ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: The incumbent of this position assists in research, planning, design, control and coordination of mechanical public works projects. The work involves coordination and active interaction with various County departmental personnel, as well as, State and Federal agencies. Major technical and engineering policy decisions and problems are discussed with a Deputy Commissioner or the Commissioner before taking action. The work is performed under general supervision of a Deputy Commissioner, with leeway allowed for the exercise of independent judgment in carrying out details of the work. While an incumbent usually works independently, occasionally, supervision may be exercised over the work of various professional and non-professional employees in project activities. The incumbent performs related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

Researches, prepares, reviews and revises plans, bid criteria, specifications, designs and reports for public works projects involving renovation, repair and new construction of heating, ventilating, air conditioning, plumbing and electrical systems (mechanical systems) at County installations, including airport facilities, office buildings, correctional facilities, and emergency services facilities;

Coordinates technical services and assists in final inspection of mechanical system improvement projects conducted by outside contractors involving municipal facilities;

Manage service contracts;

Manage building automation software and supervise users;

Inspect or review mechanical system alterations and construction projects for conformance with specifications;

Confers with superiors and peers on a variety of engineering projects dealing with cost projection, workload, and feasibility studies, etc;

Researches and prepares preliminary specifications for mechanical equipment and supplies;

Conducts studies and surveys to prepare reports for future and long-range mechanical system improvement projects;

Develops time schedules, materials and personnel requirements for various maintenance, repair, renovation and new construction projects;

Conducts studies and provides technical assistance to various County departments in areas of research, evaluation, cost estimates, recommendations, development of plans and specifications for projects covering a wide range of technical areas, leading to repair, modifications and/or improvements to mechanical systems;

Inspect mechanical systems to determine areas requiring repair and recommends type of work necessary;

Provides technical assistance and coordination for projects that are regulated by various Federal and State agencies;

Serves as project manager and coordinates projects that require multiple Public Works Division participation, such as Highways and Bridges, Engineering, and Buildings and Grounds;

Prepares economic and cost analysis, feasibility studies, compliance reports, reliability analysis and other technical reports for various special projects, as assigned by the Deputy Commissioner and Commissioner;

Responds to emergencies by providing technical guidance and trouble shooting;

continued...

TYPICAL WORK ACTIVITIES (cont'd):

Represents the Deputy Commissioner and Commissioner at meetings and during various situations requiring coordination with Village, Town, County and State officials.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Comprehensive knowledge of the principles and practices of engineering and sources of engineering data; comprehensive knowledge of modern engineering methods and techniques as applied to mechanical systems and related public works projects; skill in coordinating and applying technical research in preparing reports of studies; ability to organize, plan, and lay-out working details of engineering projects for professional and technical subordinates; ability to prepare technical reports; initiative and resourcefulness in solution of complex technical problems.

MINIMUM QUALIFICATIONS: Candidates must meet minimum qualifications at time of application. Either:

- (A) Graduation from a regionally accredited or New York State registered college or university with a Master's Degree in mechanical engineering, electrical engineering, or a closely related field **AND** three (3) years of experience in mechanical or electrical engineering; **OR**
- (B) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in mechanical engineering, electrical engineering, or a closely related field **AND** four (4) years of experience in mechanical or electrical engineering; **OR**
- (C) Graduation from a regionally accredited or New York State registered college or university with an Associate's Degree in mechanical engineering, electrical engineering, or a closely related field **AND** six (6) years of experience in mechanical or electrical engineering.

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