

DIRECTOR OF ENGINEERING

DISTINGUISHING FEATURES OF THE CLASS:

This is an administrative and professional engineering position responsible for the daily functioning of the Engineering Unit of the Highway Systems Management Division of the Department of Public Works. The work is carried out under the guidance of the Deputy Commissioner of Public Works and involves engineering management associated with highway-related design, planning, cost estimating, construction inspection, traffic and safety, and advisory engineering service to other municipalities and units of government. Work is performed under the general direction of the Deputy Commissioner of Public Works with considerable leeway allowed in conducting daily unit activities. Supervision is exercised over subordinate employees.

TYPICAL WORK ACTIVITIES:

Typical work activities for incumbents in this title include those listed below in addition to those typical work activities performed by lower level titles in the series. They are indicative of the level and types of activities performed by incumbents in this title. It is not meant to be all inclusive and does not preclude a supervisor from assigning activities not listed which could reasonably be expected to be performed by an employee in this title.

1. Directs and supervises engineering design phase of public works, such as road construction, bridge and structure construction, storm and sanitary sewer construction, traffic studies and sign erections. Evaluates completed plans and determines choice of alternate proposals. Reviews cost estimates of all projects. Signs plans and forwards to the Deputy Commissioner and/or Commissioner for approval;
2. Formulates design criteria, standards and detailed specifications for use in preparation of project plans/reports for force account and contracted work on public works projects;
3. Schedules and assigns design and inspection projects to all Engineering Unit personnel for public works projects. Schedules all related field surveys;
4. Establishes procedures and standards for issuing work permits and oversize vehicle permits under specified conditions. Approves and signs all work permits;
5. Oversees preparation of maps, descriptions and cost estimates of land acquisition. Directly involved in negotiations with property owners for acquisition of land for public works projects;
6. Consults with Deputy Commissioner and Commissioner of Public Works and implements resulting departmental policy relative to design projects, administration of engineering personnel and preparation of budget;
7. Reviews reports prepared by Engineering personnel related to traffic studies, bridge and traffic sign inspections and any others mandated by law for State, County and Town agencies;
8. Makes field inspections prior to design phase to ascertain conditions. Inspects construction projects to insure conformity with plans and specifications.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Thorough knowledge of the principles of engineering, physics and mathematics as related to civil engineering; thorough knowledge of the practices, theories and procedures of civil engineering, including surveying and related computations; thorough knowledge of construction materials, methods, standards and tests; thorough knowledge of applicable codes, laws, rules, regulations and procedures governing civil engineering design and construction; thorough knowledge of the planning, design, construction and maintenance of highways and related structures; good knowledge of the principles of supervision and administration; ability to train and supervise subordinate staff; ability to prepare finished plans, designs, specifications and narrative reports; ability to plan, schedule, coordinate and evaluate repair, maintenance

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FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: (Cont'd)

and construction programs; ability to establish cooperative relationships with subordinates, co-workers, contractors and their staff and other officials; ability to select, from a variety of engineering alternatives, the most effective and cost efficient methods; ability to design construction proposals; ability to gather, analyze and evaluate information from a variety of sources and prepare recommendations and proposals; ability to perform complex mathematical and engineering calculations; ability to analyze the condition of roads, structures, equipment, embankments and construction projects and determine maintenance, repair and construction needs; mechanical aptitude; accuracy; 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 and six (6) years of civil engineering experience, three (3) years of which involved supervisory responsibilities;
- OR: (B) An Associate's degree in Engineering and eight (8) years of experience in road or bridge maintenance and construction projects, four (4) years of which involved supervisory responsibilities;
- OR: (C) An equivalent combination of training and experience between the limits of (A) and (B) above.

SPECIAL REQUIREMENT:

Eligibility for licensure as a Professional Engineer at time of application. Possession of license at time of appointment.

EG0101

ADOPTED: 01/01/78

REVISED: 04/10/84 04/21/85 01/01/13 01/19/22