

New York State Department of Civil Service
DIVISION OF CLASSIFICATION & COMPENSATION

Classification Standard

Occ. Code 4052100

Construction Specialist 1 (Transportation), Grade 19

Brief Description of Class Series

Construction Specialists 1 (Transportation) perform technical engineering work that requires knowledge of engineering principles and the ability to apply this knowledge in the design, construction, inspection, and evaluation of roads, structures, and related equipment and materials. Incumbents work independently in planning and scheduling work, selecting work methodology, evaluating information and preparing reports and recommendations, completing plans, resolving problems in the field, and performing field work.

These positions are classified in the Department of Transportation and the Thruway Authority.

Distinguishing Characteristics

Construction Specialist 1 (Transportation): utilizes strong empirical knowledge and extensive experience in performing complex civil engineering technical activities; functions as a construction project lead; reviews the technical accuracy of plans and documentation in contracts and proposals; prepares cost estimates of materials and supplies for projects; gathers and evaluates technical data; and performs complex graphical modeling and analysis.

Related Classes

Engineering Technicians perform a variety of technical duties supportive of the preparation of work and building plans.

Assistant Engineers (all parentheses) are characterized by performing a variety of duties requiring the intensive application of engineering principles in the practical solution of engineering problems to develop and mature the engineering knowledge and judgement expected of a Professional Engineer and provide the experience required for licensure.

Illustrative Duties

Specific duties may vary depending on program and assignment.

Monitors construction activities to ensure that the quality of construction projects conform with contract and permit requirements.

Performs and verifies physical inspections, tests, and measurements of construction in progress for accuracy and completion.

Directs field survey crews in collecting electronic survey data describing ground features and assembles the data into appropriate three-dimensional models for engineering use.

Inspects, tests, and evaluates existing infrastructure elements and natural features, and provides recommendations to advance Department activities and projects.

Oversees the evaluation of construction alternatives for cost, effectiveness, maintenance needs and costs, and impact on surrounding areas.

Assists in establishing and implementing quality control requirements and quality assurance programs to ensure that designs and materials used in a project meet the specified quality requirements and to ensure the safety of agency staff, contractors, and the traveling public.

Supervises subordinate technical staff in gathering field samples and conducting laboratory tests according to established procedures.

Assists in evaluating and developing recommendations to address soil, rock, and groundwater conditions affecting the transportation infrastructure.

Trains and supervises subordinate engineering technicians, traffic system technicians, and seasonal Transportation Construction Inspectors.

Supervises and coordinates work of subordinate employees and ensures that all agency responsibilities are carried out.

Assists in preparing designs, proposals, specifications, and cost and quantity estimates for highway, bridge, traffic systems, and other transportation infrastructure work.

Prepares and reviews complex 3D, or higher-level CADD models of highways and bridges.

Reviews and approves technical staff work for accuracy, completeness, and compliance with procedures, guidelines, and commonly accepted engineering principles.

Participates in evaluating contract claims against the State or State claims against contractors by analyzing claims, preparing engineering documentation for the Attorney General's Office, preparing exhibits, providing safety data and historical information, inspecting and evaluating construction, consulting with firms, agency staff, and attorneys, and attending pretrial and settlement conferences. Also assists claims officer in Freedom of Information Law (FOIL) requests.

Oversees permit applications to ensure that proposed construction is accomplished according to sound engineering principles and Department policy.

Provides materials technical expertise and guidance for region's Planning, Design, Construction, Maintenance, and Traffic activities.

Directs region's Traffic Systems Technicians in the maintenance, repair and construction of traffic control signals and other intelligent transportation system devices (i.e., traffic systems) and ensures compliance with procedures, guidelines, and commonly accepted engineering principles.

Minimum Qualifications

Promotion: One year of permanent competitive service in a drafting, engineering technician or engineering position allocated at or above Grade 15.

Open Competitive: High school graduation or equivalent and seven years of full-time satisfactory experience in civil engineering or engineering technology related to transportation infrastructure work

Substitution: Thirty semester hours of training from a technical institute, community college or college in civil engineering, civil engineering technology, construction technology, engineering, physical or applied sciences on a year-for-year basis, up to four years.

Note: Classification Standards illustrate the nature, extent, and scope of duties and responsibilities of the classes they describe. Standards cannot and do not include all the work that might be appropriately performed by a class. The minimum qualifications above are those required for appointment at the time the Classification Standard was written. Please contact the Division of Staffing Services for current information on minimum requirements for appointment or examination.

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