

**CLASS TITLE: MANAGING ENGINEER (DOT)**

**Class Code: 02961800**

**Pay Grade: 41A**

**EO: A**

**CLASS DEFINITION:**

**GENERAL STATEMENT OF DUTIES:** To be responsible for the administration, direction and supervision of a complex divisional civil engineering program within the Department of Transportation such as: Bridge Engineering, Bridge Inspection, Traffic Safety, Construction Management, Materials Quality Assurance, Highway Maintenance Operations, Project Management, or Stormwater Management; to perform highly difficult and responsible work of a professional civil engineering nature in directing the engineering activities of the program; as directed, to serve as a division or section administrator; and to do related work as required.

**SUPERVISION RECEIVED:** Works under the administrative direction of a superior with considerable latitude for the exercise of initiative and independent judgment; work is reviewed through conferences and submitted reports for compliance with departmental policies and objectives, laws, rules and regulations.

**SUPERVISION EXERCISED:** Plans, organizes, directs, coordinates and evaluates the work of a subordinate professional, technical and administrative staff engaged in carrying out a complex civil engineering program.

**ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:**

To be responsible for the administration, direction and supervision of a complex divisional civil engineering program within the Department of Transportation such as: Bridge Engineering, Bridge Inspection, Traffic Safety, Construction Management, Materials Quality Assurance, Highway Maintenance Operations, Project Management, or Stormwater Management.

To perform highly difficult and responsible work of a professional civil engineering nature in directing the engineering activities of the program.

As directed, to serve as a division or section administrator.

To review and discuss the work of a unit with assistants and subordinates.

To review, discuss, approve or reject designs and specifications or changes in designs and specifications.

To review and approve or reject materials and equipment requisitions and the work orders.

To inspect the work of the unit's projects in the field.

To consult with a superior on matters of policy, special projects and of matters affecting the state highway engineering program and to provide professional advice on such matters.

To evaluate present programs as to their effectiveness and efficiency in attaining their objectives, and to prepare future plans and budget allocations based on this evaluation.

To coordinate program planning and development with other units and with private contractors.

To make recommendations on program planning and implementation, budget requirements and staffing needs.

As required, to assist in human resource matters and the negotiation of labor contracts with the several bargaining units.

To maintain an effective public relations program to provide an understanding of the unit's policy and of the functions and objectives of various programs.

To review existing laws, proposed legislation, rules and regulations and to make recommendations.

**Within the Bridge Engineering Program:** to oversee bridge load rating and bridge preservation activities; to develop detailed repair plans for critical projects; to assist with and coordinate any technical bridge engineering issues with all other sections.

**Within the Bridge Inspection Program:** to oversee daily bridge inspection activities; to plan, schedule and track statewide inspections; to oversee the preparation of detailed inspection reports.

**Within the Traffic Safety Program:** to program, schedule and coordinate the Highway Safety Improvement Program (HSIP), State Traffic Commission improvements, Statewide signing and highway lighting contracts, and to review and approve all Traffic Management Plans (TMP) for construction projects.

**Within the Construction Management Program:** to manage supervisory personnel in carrying out policies and procedures to ensure projects are constructed in accordance with project plans and specifications, and to oversee quality assurance systems and procedures are effectively enforced; to evaluate programs as to their effectiveness and efficiency in attaining their objectives and to prepare recommendations based on this evaluation; to inspect, coordinate, review and evaluate the work of subordinates on projects in the field with other units and with private contractors.

**Within the Materials Quality Assurance Program:** to manage supervisory personnel in carrying out policies and procedures to ensure all materials quality assurance processes are effectively enforced in accordance with project specifications and federal regulations; to perform highly difficult administrative work related to technical activities within a materials and quality assurance divisional engineering program; to evaluate materials quality assurance programs as to their effectiveness and efficiency and make recommendations; to make recommendations to the Manager on program planning and implementation, on budget requirements, and staffing needs; and to inspect, coordinate, review and evaluate the work of subordinates.

**Within the Highway Maintenance Operations Program:** to be responsible for the administration and operation the administrative support and engineering program engaged in the maintenance and preservation of state roads, bridges and assets; to perform highly difficult and responsible work of a professional civil engineering nature in directing all engineering activities relating to the units' functions; to inspect the work of the unit; to make recommendations on the Division's program planning and implementation, on budget requirements and on staffing needs; and to review existing laws, proposed legislation, rules and regulations and to make recommendations.

**Within the Project Management Division:** to oversee the development of detailed scopes of work for all types of capital projects; to coordinate these scopes with other Sections of the Department; to oversee plan reviews for compliance with federal and state regulations, requirements, and policies; to oversee standards and specification development and coordination of Bluebook and Design Policy Memo's for conformance to Department specifications; and to ensure timely and consistent coordination with the various Utility companies and Railroads; and to oversee the Survey Unit's activities.

**Within the Stormwater Management Program:** to assist as directed in overseeing the RIDOT/USEPA Consent Decree. and its associated construction and reconstruction program.; To perform highly difficult and responsible work of a professional civil engineering nature in directing all program engineering activities.

To do related work as required.

## **REQUIRED QUALIFICATIONS FOR APPOINTMENT:**

**KNOWLEDGE, SKILLS AND CAPACITIES:** Within a specific program assignment, a thorough knowledge of the engineering principles, practices, materials and methods used for highways, bridge design, bridge inspection, traffic safety, construction, highway maintenance, stormwater, or project management; a thorough knowledge of highway engineering problems and techniques peculiar to the State; a high degree of skill and administrative ability in organizing, directing and coordinating a highway engineering design program; the ability to evaluate the effectiveness of programs and to recommend changes to make them effective; the ability to establish and maintain cooperative relations with officials, subordinates and the public; knowledge of workplace occupational health and work zone safety programs; the ability to inspect complex engineering working plans and a fundamental knowledge of engineering computations, analyses and presentations; a thorough knowledge of federal and state laws relating to transportation administration, engineering and enforcement programs; a thorough knowledge of transportation principles, methods, practices, standards and organization; a thorough knowledge of the organizational structure and functions of public transportation; the ability to evaluate the effectiveness of programs, identify problems and work creatively to improve them; the ability to develop and maintain effective working relationships with public, press and private officials; the ability to plan, organize, review and evaluate the work of a staff of professional, technical, clerical and other employees; and related capacities and abilities.

## **EDUCATION AND EXPERIENCE:**

Education: Possession of a bachelor's degree in Civil Engineering from a college of recognized standing, supplemented by graduate-level courses in civil engineering; and

Experience: At least seven (7) years of progressively responsible employment in a supervisory civil engineering position in highway, traffic, bridge design and ratings, construction management, highway maintenance, environmental regulatory engineering, or materials quality engineering.

Or, possession of a master's degree in Civil Engineering from a college of recognized standing and at least five (5) years of progressively responsible employment in a supervisory civil engineering position in highway, traffic, bridge design and ratings, construction management, highway maintenance, environmental regulatory engineering, or materials quality engineering.

SPECIAL REQUIREMENTS: At the time of appointment and continually thereafter, must possess a Certificate of Registration as a Professional Engineer (PE) issued by the Rhode Island State Board of Registration for Professional Engineers as a condition of employment.

Class Revised: July 25, 1993

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Class Revised: August 18, 2019