Town of Needham Civil Engineer 10/2016

#### **Duties:**

Under the direction of the Town Engineer and Assistant Town Engineer, perform a variety of professional engineering responsibilities in support of department operations and activities.

Design a variety of Public Works projects using manual and computerized techniques, including sewer and drain installations, streets, parking lots and other projects at the request of the Town Engineer or Assistant Town Engineer. Calculate and levy assessments for sewer and street projects, and record as required at the Registry of Deeds or Land Court.

Review and comment on subdivision proposals to ensure compliance with applicable Town, state and federal by-laws, rules and regulations. Participate in site plan and new zoning regulations review process. Review Street Permit applications, identify potential conflicts and insure the contractor's adherence to the Town's Street Permit program, procedures, specifications to insure compliance and public safety. Calculate bond and surety amounts for subdivision release of lots, permitted construction activities and street permits. Research owners for street acceptance, land and easement takings. Prepare required information, reports, etc., and file with appropriate Town offices. Prepare other engineering reports, documents and records as required.

Coordinate and implement the street permit issuance and inspection program under the Town's Street Permit procedures pursuant to Town, state and federal by-laws, rules and regulations. Serve as Construction Inspector monitoring public works construction projects, including water, sewer, drain, and highway construction, conducted by Public Works and private contractors to ensure proper installation, appropriate materials, compliance with health and safety regulations, and compliance with appropriate engineering procedures and techniques.

Serve as Traffic/Transportation Engineer, performing traffic engineering studies, writing new traffic regulations for approval by the Town, analyzing horizontal and vertical roadway alignments and making recommendations for improvements, and recommending roadway design and construction standards. Perform a net work road surface evaluation and condition survey to record the extent and severity of the various pavement conditions and distresses. Consult with outside engineering firms on complex design projects.

Attend public hearings to present technical information and to respond to citizen inquiries, requests and complaints. Assist members of the public and other Town departments in resolution of engineering problems. Maintain current knowledge of profession through peer association, attendance at seminars, meetings, etc., and perform related engineering duties as assigned.

The above description outlines the nature and complexity of essential duties performed by employees classified in the Civil Engineer position within the Engineering Division. Under the direction of the Town Engineer/designee, the Civil Engineer will schedule, supervise, coordinate and participate in the daily operation of the Engineering Division and other related work within the Department of Public Works and shall carry out all functions involved within Public Works.

The duties contained herein are not intended to be all-inclusive, but rather are a general statement of responsibilities, some or all of which will be performed by incumbents in the position. Employees classified in the Public Works Civil Engineer job title are expected to assist in other than their primary division and may therefore be requested to perform other tasks and work with other departments as assigned.

### Required Knowledge/Skills

Duties require knowledge equivalent to completion of four years of college with a major in civil engineering.

# Required Licenses

Must possess at all times a valid Massachusetts motor vehicle license. Computer skills are required.

## Required Experience

Position requires three (3) to five (5) years of relevant experience in a public works inspection/enforcement environment.

### Independent Action:

Incumbent functions independently within scope of Engineering Division policies and procedures, and refers to Town Engineer/designee for approval of projects, plans and enforcement action.

# Supervisory Responsibility:

Provides instruction and functional guidance to Survey Party Chiefs, interns or "Cooperative Education" students, and temporary summer help.

## Physical and Environmental Standards:

- Frequent periods supervising or inspecting in non-office environments, including garages, water supply stations, sewer facilities, landfills, parks and recreational areas.
- Regular periods spent outside subject to weather conditions while inspecting or directing work.
- Frequent walking, standing, climbing; occasional requirement for sustained uncomfortable physical positions
- Some exposure to high noise and vibration levels from heavy equipment.
- May spend sustained periods at terminal or on telephone.
- Some travel within the Town to plan, oversee, or provide departmental services.