

**CITY OF CONCORD
CLASS SPECIFICATION**

CLASS TITLE: ENGINEERING TECHNICIAN I - UTILITIES
DEPARTMENT: COMMUNITY DEVELOPMENT
REPORTS TO: CITY SURVEYOR

DATE: 6/23

JOB SUMMARY:

Performs underground utility locating and various routine drafting, surveying, and paraprofessional engineering duties involved with the investigation, location, and design of public or private engineering and construction projects.

ESSENTIAL JOB FUNCTIONS: (All responsibilities may not be performed by all incumbents.)

Field locates and marks out underground utilities in the public right-of-way and on City owned land using a variety of means and methods.

Communicates directly with residents, contractors, and other excavators to ensure that utility markings are correct and relevant to the work being performed.

Conducts research of existing records and conditions and other related information for buried fiber optic, water, sanitary sewer, and storm sewer infrastructure including services, connections, and foundation drains to provide interpretations and guidance to the general public, contractors, and engineers; updates information and documents related to water, sanitary sewer, and drainage systems.

Conducts research and compiles information based on permanent & private records, maps, plots, etc., to provide interpretations and guidance to the general public, contractors, engineers, as well as local & state governmental departments.

Updates information and documents related to water, sanitary sewer, and drainage systems for input into the City's GIS system.

Maintains records and research files by scanning, labeling, and archiving using computer software.

Interprets construction plans and right-of-way plans for staff; answers questions in the office and on site.

Familiar with the New Hampshire Public Utilities Commission (PUC) Rules, State Statutes, and the Excavator's manual, all related to the underground utility damage prevention program.

Provides information to the PUC, Dig Safe, State employees, City employees, other utility companies, contractors, and homeowners, and the general public of the location of or lack of underground utilities.

Reviews site plans to prepare for utility markouts.

Performs QA / QC of utility record cards as prepared by others.

Organizes field inspection notebooks submitted by Engineering inspectors and General Services department field crews.

Identifies and develops potential sources of supplies, materials, equipment, and services that are capable of providing appropriate quality at appropriate prices.

Assists with survey work under the direction of the city surveyor.

Performs other related duties as assigned.

MATERIAL AND EQUIPMENT USED:

Geographic Information System Software
Computer
AutoCAD
Level
Motor Vehicle
Vivax-Metrotech Pipe and Cable Locator
Schonstedt Magnetic Locator
Various hand tools

MINIMUM QUALIFICATIONS REQUIRED:

Education and Experience:

High School diploma or GED; and additional vocational course work or training in applied algebra, trigonometry, statistics, drafting, AutoCAD, and/or GIS; and; six months to one year of experience in field of utility locating and survey, drafting, or other related sub-professional engineering work; or, any combination of education, training and experience which provides the required knowledge, skills and abilities required for the job.

Licenses and Certifications:

Valid New Hampshire Driver's License.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

Survey techniques related to underground utility damage prevention programs, mathematics, report writing, instrument usage, and the application of related tools.

Fundamental engineering and design work, and utility construction methods.

Applications of computer-assisted drafting such as AutoCAD and GIS.

Familiar with safety practices for working in urban and rural settings and right-of-ways.

Skill in:

Use of surveying, drafting, and computing instruments.

Creative and effective use of computer programs in the completion of duties.

Typing and operation of computer keyboard in order to enter and retrieve data.

Mental and Physical Abilities to:

Create drawings, tracings, and technical computations.

Understand and carry out oral and written instructions, giving close attention to detail.

Establish and maintain effective working relationships with other employees and the general public.

Communicate effectively, both orally and in writing.

Read and interpret documents such as safety rules, operation and maintenance instructions, and procedure manuals.

Deal with problems involving several alternative variables in various situations.

Solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists.

Perform duties while sitting at a desk or table or while intermittently sitting, standing, stooping, bending, crouching, or walking.

Frequently lift light or heavy objects.

Use tools or equipment requiring a high degree of dexterity.

Working Conditions:

Work is performed in an office and outdoors year round.

The employee will be exposed to noise, dust, dirt, grease, machinery with moving parts, roadway traffic, and inclement weather to include extreme heat and cold.

The work requires the use of protective devices such as masks, goggles, or gloves.

This class specification should not be interpreted as all inclusive. It is intended to identify the essential functions and requirements of this job. Incumbents may be requested to perform job-related responsibilities and tasks other than those stated in this specification. Any essential function or requirement of this class will be evaluated as necessary should an incumbent/applicant be unable to perform the function or requirement due to a disability as defined by the Americans with Disabilities Act (ADA). Reasonable accommodation for the specific disability will be made for the incumbent/applicant when possible.