

**CITY OF CONCORD
CLASS SPECIFICATION**

CLASS TITLE: ENGINEERING TECHNICIAN I
DEPARTMENT: COMMUNITY DEVELOPMENT
REPORTS TO: VARIOUS

JOB CODE: 2119
DATE: 2/08

JOB SUMMARY:

Performs work associated with the design of engineering projects, oversees the projects progress and construction inspection of various public and private infrastructure improvement projects.

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

Assists in identifying and recommending infrastructure improvements needed to complete approved capital plans based upon observations of field conditions, knowledge of existing plans, and review of records.

Designs and drafts detailed engineering plans and construction details using engineering design GIS and AutoCAD software.

Coordinates with various City personnel throughout the design and construction of projects to ensure compliance with technical specifications and standards.

Manages and directs contractors to maintain compliance with project plans and specifications.

Issues permits and inspects all work within the public right of way.

Performs municipal engineering inspections on public/private projects completed by contractors; interprets and clarifies plans and specifications to contractors and work crews; checks grade material depth and other engineering phases of project; maintains cost estimates and expenditure records; may make minor adjustments to construction design plans during field installation.

Advises and inspects contractors in the installation of underground utilities; reviews site plans for accuracy; takes field locations of underground utilities; ensures compliance with permit requirements.

Conducts research and compiles reports based on preliminary examination of existing records and conditions.

Researches records, maps, plots, etc. to provide interpretations and guidance to the general public, contractors, and engineers; updates information and documents related to water, sanitary sewer, and drainage systems.

Calculates, coordinates, and reviews payment of requisitions for capital improvement projects; designs and reviews plans for proposed projects; ensures correct specifications.

Maintains records and research files using computer software.

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

Prepares plans and specifications, using available sources of information, for a project or program to meet the needs of the city and/or department.

Interprets construction plans and right-of-way plans for the public; answers questions in the office, on site and during scheduled public meetings.

Requests information from the city survey crew in order to facilitate construction project planning and installation.

Represents the department at development, interdepartmental, neighborhood, or other meetings as requested.

Performs other related duties as assigned.

MATERIAL AND EQUIPMENT USED:

Copy Machine	Calculator	Camera	Surveying Equipment
Fax Machine	Scale	Computer	Laser Equipment
AutoCAD	GIS	Vehicle	

MINIMUM QUALIFICATIONS REQUIRED:

Education and Experience:

High School diploma or GED; and, two to four years of progressively responsible related experience, in the construction field or any combination of education, training and experience which provides the knowledge, skills and abilities required for the job.

Licenses and Certifications:

Valid Driver's License.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

Principles and practices of civil engineering, surveying and construction.

Design, spreadsheet, word processing, and database software.

AutoCAD, drafting and engineering software.

Record keeping, report preparation, filing methods, and records management techniques.

Basic budgetary principles and practices.

Applicable state, federal, and local laws, rules, and regulations.

Methods and techniques of research and report presentation.

Computer applications related to the work.

Skill in:

Using tact, discretion, initiative, and independent judgment within established guidelines.

Researching, compiling, and summarizing a variety of informational and statistical data and materials.

Organizing work, setting priorities, meeting deadlines, and following up on assignments with a minimum of direction.

Good mathematical skills.

Communicating clearly and effectively, orally and in writing.

Preparing reports, correspondence, and other written materials.

Mental and Physical Abilities to:

Read and understand construction plans and specifications.

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

Apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

Read and interpret documents, construction specifications, as-built plans, safety rules, and so forth.

Deal with problems involving several alternative variables in various situations.

Perform duties while intermittently sitting, standing, bending, crouching, stooping, or walking.

Frequently lift light and heavy objects.

Distinguish between shades of color.

Climb ladders.

Working Conditions:

Work is performed in an office and outdoors.

The employee may be exposed to noise, dust, dirt, grease, machinery with moving parts, contagious or infectious diseases, irritating chemicals, and cold or inclement weather.

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