

SENIOR ENGINEERING TECHNICIAN

DISTINGUISHING FEATURES OF THE CLASS: This is technical work of a moderately complex nature involving responsibility for a variety of activities providing assistance in engineering projects such as inspection assignments, traffic and safety work. The work is performed under the general supervision of higher level engineering staff and work guidance (e.g. lead work) may be provided to others. Does related work as required.

TYPICAL WORK ACTIVITIES:

Operates survey instruments (e.g. level, transit, theodolite, etc.) and may lead small project survey parties;
Inspects portions of construction and maintenance projects, including materials supplied for such projects;
Performs computations from field notes to reconcile errors in survey work;
Performs a variety of drafting assignments;
Plots maps as aides to survey work;
Makes and checks engineering computations of a routine nature;
Researches deeds and maps to form a basis for field survey;
Interprets plans and performs calculations from plan information for survey and quality control of construction projects;
Maintains the official records (e.g. daily progress reports, field notebook, specific files, etc.) during the life of a construction project;
Interprets plans and specifications as inspector on construction projects;
Supplies supplementary survey layout on construction projects;
Performs laboratory tests on soils and other materials to establish their suitability as construction materials;
Investigates and approves minor changes on contracts;
May prepare monthly estimates for partial payment on contracts, take field measurements for final payment and calculate final payment based on plans and measurements;
May collect and tabulate traffic accident, traffic volume and similar data;
May supervise and direct the making, placing and maintenance of traffic signs in accordance with presented procedures;
May take and investigate routine related complaints by the public.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Good knowledge of engineering mathematics; good knowledge of the use and care of a transit and level; good knowledge of drafting techniques; working knowledge of construction and maintenance methods and materials for highways and drainage structures; ability to read and interpret highway plans and specifications; ability to understand complex oral and written instructions concerning engineering work.

In addition, if employed by the County of Rockland: working knowledge of methods and materials of bridge construction and maintenance; ability to read and interpret bridge plans and specifications.

(over)

MINIMUM QUALIFICATIONS:

1. Graduation from high school or possession of an equivalency diploma and three (3) years of experience assisting in civil engineering work (not as a Laborer) or;
2. An Associate's degree, or equivalent college credits (minimum of sixty (60) credits), or higher, in Science, Mathematics, or comparable curriculum, and one (1) year of experience that substantially involved civil engineering work (not as a Laborer) or in quality control work related to construction projects (not as a Laborer), or;
3. An Associate's degree, or equivalent college credits (minimum of sixty (60) credits), or higher, in either Engineering, Surveying, Forestry, Landscaping, Architecture, or comparable curriculum, shall be fully qualifying.

NOTE: College credits in Engineering, Surveying, Forestry, Landscaping, Architecture, or comparable curriculum, may be substituted on the basis of nine (9) credits for one (1) year of experience as described in (1) above, for up to two (2) years of experience.

SPECIAL REQUIREMENT: If driving is required, a valid driver's license appropriate to the vehicle to be operated.

PROMOTION: Two (2) years of permanent status as an Engineering Technician.