

ENGINEERING TECHNICIAN

Department: DPW
Division: Engineering
Appointing Authority: Mayor

Grade: S4
Date: 11/12
Bargaining Unit: S

Definition:

Responsible for performance of technical duties and functions in support of engineering work activities and operations of the Engineering Division, including surveying, drafting and inspection of construction projects; assists with design contract preparation and contract administration of the town's construction and maintenance projects; maintenance of departmental records and files; administrative functions; all other work that is logical to the position as required.

Supervision:

Works under the general direction and supervision of the Engineering Superintendent. Plans and arranges own work, referring unusual matters to supervisor. Works within established policies and under the general policy direction of the Superintendent.

Performs no direct supervisory duties.

Environment:

Duties are performed under typical office conditions, operates standard office equipment; field work may involve inspection or on-site visits to land use developments, construction sites, or public works facilities. Noise level is usually quiet to moderate.

Performs varied and responsible tasks and functions requiring semi-autonomous and independent judgment to ensure compliance with applicable laws, regulations, and departmental policies.

Has occasional or frequent contact with employees, departments, elected and appointed officials, citizen or governmental committees, state and federal personnel and agencies, vendors, consultants, contractors, outside organizations and the general public.

Has access to confidential information such as departmental bid/proposal information, contracts, and other information regarding departmental business.

Errors in judgment or decisions may cause an adverse impact on employee morale, cause confusion and delay; legal or financial repercussions; waste of public funds, lower standards of service that could seriously affect the public image of the department or the town; and significantly impact long-term capital planning and infrastructure.

Essential Functions: (The essential functions or duties listed below are intended only as illustration of the various types of work that may be performed and are representative of those that must be met by an employee to successfully perform the essential functions of the job. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.)

Review water, sewer, drainage, access and other permit applications for compliance with town requirements.

Assists in the in-house preparation of Autocad plans and drawings and specifications for construction, maintenance or alteration of sewerage systems, water systems, streets, drainage and highways, buildings and other Department of Public Works facilities. Assists in contract bid preparation, advertising and award. Prepare material take-offs for projects and work orders, prepares cost estimates.

Work from sketches, verbal consultation, parameters or data supplied by superior. Make pertinent design calculations to determine loads, stresses, strengths and capacities. Obtain component specifications. Prepare sketches and preliminary calculations for approval or discussion with the Engineering Superintendent. Performs field surveys and other measurements. Performs Dig Safe utility markings.

Performs inspections of construction and/or repair and maintenance of highways, sidewalks, sewer and water systems for compliance with the plans and specifications and conformance to good construction practices; inspects material, grading, drainage, roadside development, curbing, laying of pipe, building of catch basins, manholes and drop inlets, placement of road sub-surfaces and surfaces, pouring of concrete, and related items. Notifies engineer and contractor when work does not conform to specifications or accepted construction practices so that corrective action will be taken. Assists daily construction reports and monthly contract cost summaries. Checks shop drawings to determine compliance with town specifications.

Review subdivision, multi-family housing, commercial and other development plans as submitted by developers. Analyze all components for adequacy and fulfillment of Planning Board and Department of Public Works' requirements. Make recommendations on same to Engineering Superintendent.

Responsible for the preparation of Autocad drawings, sketches and plans, revising existing plans and record drawings upon completion of projects. Maintain engineering plans, files, records and reports. Investigate public requests and complaints and recommends actions.

Assist consultants in data acquisition as requested for contracted design work. Review design drawings and specifications when submitted by consultants and make recommendations to Engineering Superintendent. Prepare engineering correspondence for signature of Engineering Superintendent.

Minimum Qualifications: *Any combination of experience, education and training that would likely provide the required knowledge and abilities is qualifying.*

Education and Experience: At least three years of broad experience with engineering principles and the design of streets, highways, water drainage and sewerage systems, sewage and water treatment plants and related facilities. Computer familiarity and literacy in the types of applications utilized (Autocad, spreadsheets, database and word processing) particular to the work performed. General knowledge of municipal construction methods and materials.

Associate Degree in Civil Engineering or Equivalent; or any equivalent combination of education and experience resulting in the ability to independently perform duties of the position.

Knowledge, Ability and Skill: Knowledge of construction methods and materials, requiring complete design of small projects in highways, sewers, drains, water mains, sidewalks and similar projects. Must possess ability to analyze facts and circumstances of specific projects to determine appropriate action items or plans.

Ability and skill to discuss controversial or emotional issues and matters requiring tact and poise to avoid friction in order to obtain cooperation with contractors, superiors and property owners.

Thorough knowledge of the principles and practices of civil engineering and drafting. Working familiarity with statutes, governmental regulations and codes; departmental policies, procedures and standards pertinent to the design and construction of municipally owned streets, structures and facilities. Shall have thorough knowledge of the particular type of work which permits the employee to solve unusual work problems. Ability to plan, analyze, carry out projects, consult and offer advice; requires effective written and oral communication skills.

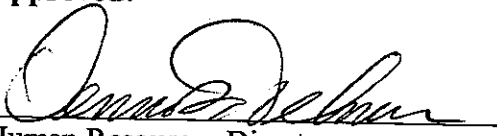
Ability to establish and maintain satisfactory relationships with supervisors, contractors, coworkers, and the general public. Must be punctual and perform all aspects of job responsibilities with honesty and integrity.


Physical Requirements: Designing, drafting, calculating and related duties involve concentration of mental and visual attention with manual coordination for sustained periods.

Moderate to heavy physical effort required to perform manual tasks on-site and possibly under adverse weather conditions. Normal working day may involve walking, lifting, standing, sitting, with moderate to frequent body movements such as reaching, bending, twisting, grasping, pulling and pushing materials. Good vision required for instrument reading and ability to perform close vision, distance vision, peripheral vision, color vision and the ability to adjust focus. Ability to use computer keyboard and write instructions under standard office conditions.

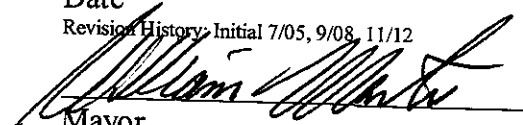
Special Requirements: Must possess a valid operator's license, or have the ability to obtain one prior to employment, as must drive self to job sites and locations as necessary; some evening work may be required to attend meetings and hearings.

Approved:


Human Resources Director


Department Head

11/28/12
Date

Revision History: Initial 7/05, 9/08, 11/12

Mayor

[SSEA Review A]