

**ENGINEERING TECHNOLOGIST V****DEFINITION**

This is civil engineering work performed at a semi-professional level under the direction of the division manager. Incumbents are responsible for coordinating the implementation of routine and complex engineering programs, requiring considerable and specialized professional skills and knowledge relating to specific areas of the design and construction of Municipal public works services. Work assignments include the solution of difficult design problems, and the supervision of the related work of other employees. The incumbent will have considerable independence, seeking only general guidance from the division manager.

**ILLUSTRATIVE DUTIES AND RESPONSIBILITIES:**

- Plans, coordinates and participates in the work of a design team engaged in various phases of project development and construction, in the engineering fields of water supply and distribution, waste water and storm water collection and disposal; road design; and traffic engineering.
- Designs and using AutoCAD, drafts, and provides inspection of construction of multi discipline projects including a mix of two or more of transportation projects, waterworks, sewer or drainage systems, street light systems and transit operation facilities. Assembles and analyses data on waste water and storm water flows and works with computer programs related to same.
- Manages engineering projects or assigns project management duties to coordinate all phases of routine works projects, including planning; preliminary and final design reviews; preparation of cost estimates and specifications; preparation of tender documents; analysis and tabulation of bids; review of insurance and bond documents; review of job cost allocations.
- Establishes future priorities and undertakes long term planning of municipal infrastructure, determines the needs for engineering studies, and oversees municipal projects and budget forecasts.
- Directs, provides guidance and oversees the work on a continuous basis of several engineer consultants working on municipal projects.
- Prepares Request for Proposals, and then evaluates and provides recommendation for award of consulting engineering services.
- Supervises the work of other technicians, draftspersons and surveyors assigned to assist on certain projects.
- Responds to public enquiries and complaints; chairs advisory and steering committees to meet project needs.
- Coordinates field inspection on construction projects and negotiates required adjustments with contractors.
- Controls and coordinates work on one or more projects, maintains records of pipe installed, materials used, manholes constructed, quantities of rock drilled or blasted; issues site instructions, and prepares monthly progress reports.
- Maintains regular liaison and coordinates with municipal crews, contractors, engineering consultants, utility companies, suppliers, government agencies, public and other involved parties.
- Participates in the testing of new equipment and installation to ensure operating efficiency and quality of workmanship.
- Evaluates and reviews proposed plans for rezoning, development permit, subdivision applications, public utility and engineering designs to ensure that the project requirements meet departmental objectives.
- Provides direction and assistance to engineering staff and design engineers in expediting

- and coordinating projects; both in administration and communication.
- Responsible for maintaining complete files and notes of his/her designs.
- Represent the municipality in open houses, workshops, and public meetings.
- Other duties as required.

#### KNOWLEDGE, SKILLS AND ABILITIES ON THE JOB:

- Knowledge of relevant provisions of all appropriate federal, provincial and municipal acts, bylaws, and regulations.
- Sound working knowledge of the principles and practices of civil engineering relevant to the position.
- Working knowledge of and ability to use computer based engineering applications such as AutoCAD, GIS, computer modelling and spreadsheets.
- Ability to effectively and efficiently plan, organize and manage workloads and projects, set priorities, meet deadlines, and work under pressure.
- Ability to research new methodologies, technologies and principles relating to the discipline and apply best management practices to Saanich environment, if applicable.
- Ability to communicate effectively in writing.
- Ability to prepare and deliver effective presentations.
- Ability to direct and train staff.
- Maintains annual training per the professional requirement for each discipline to do so.
- Ability to prepare finished design drawings in a computerized working environment.
- Demonstrates Saanich Core Competencies as they relate to this position (see all behaviour statements):
  - Adaptability - willingness to be flexible in a changing work environment
  - Relationship Building - establishes and maintains respectful and cooperative working relationships.
  - Effective Communications - communicates effectively with others.
  - Problem Solving - recognizes and acts to resolve problems.
  - Customer Focus - provides excellent service to both internal and external customers.

#### For Transportation Section:

- Considerable knowledge of and ability to use Pavement Management Systems.
- Considerable knowledge of asphalt pavement design.
- Considerable knowledge of Traffic Engineering practices and principles.
- Considerable knowledge of geospatial software and database principles.
- Considerable knowledge of municipal, provincial and federal guidelines, practices, acts and bylaws.

#### For Underground Section:

- Considerable knowledge of and ability to use hydraulic modelling software.
- Considerable knowledge of underground utility and pumping station design.
- Considerable knowledge of trenchless technology construction methods and techniques.
- Considerable knowledge of environmental best management practices.

#### REQUIREMENTS:

- A Diploma in Civil Engineering from a recognized institution.
- Eight years directly related experience.
- Eligible for membership in the Applied Science Technologists and Technicians of BC
- Conversant with computer based engineering applications.
- Possession of a valid Class 5 Driver's License and a personal vehicle, that meets the requirements described in the Transportation policy, available for use as and when

required.

STANDARDS:

- Support and uphold the established policies and objectives of the Municipality and the Division in all areas of activity.
- Will not release or discuss non-routine municipal or departmental business without prior authorization.
- Adhere to all established municipal and departmental rules and regulations.
- Maintain the performance levels set by the Division in the execution of all duties and responsibilities.
- Maintain a cooperative working relationship with employees, management, Council and the public.
- Maintain regular communication with the supervisors, keeping them fully informed of all non-routine, urgent and/or controversial matters.
- Shall not receive or solicit a subscription, gratuity, or fee for or in conjunction with any service or presumed service performed by him/her as an employee.