CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT
(HAMILTON WATER DIVISION – WATER DISTRIBUTION & WASTEWATER COLLECTION - LOCATION – 330
WENTWORTH STREET NORTH)

STORMWATER MANAGEMENT TECHNOLOGIST - CUPE 5167

SUMMARY OF DUTIES

Reporting to the Project Manager, the Stormwater Technologist is responsible to provide technical support services in the implementation of the Stormwater and Drainage Program in accordance with legislation, policies, procedures and guidelines.

GENERAL DUTIES

Provides stormwater management planning/services for the Water Distribution & Wastewater Collection Section considering the needs of the City, residents and businesses and in accordance with government legislation, guidelines and related policies and procedures.

Responsible for the development, maintenance and continuous improvement of the various GIS based data collection applications (e.g. Collector App, Survey 1-2-3, etc.) utilized within the stormwater and drainage program. This also includes the management of the computerized databases, including the entering, manipulation and retrieval of data.

Collects field data, monitors and assesses the operation of existing stormwater management infrastructure (ponds, creeks, drainage systems within easements, etc.) in relation to approved design capacities/configuration. The collection of data includes the installation, maintenance, and removal of field equipment at various stormwater systems. Equipment may include the deployment of automatic samplers, water level data loggers, pipe velocimeters, grab samples, and rain gauges. This also includes the collection of sediment depths within stormwater facilities.

Establishes and maintains regular drainage maintenance inspection programs and schedules maintenance as required ensuring all regulations, procedures and requirements within related drainage legislation and policies/procedures are met.

Maintains record of digital log books (via GIS based data collection applications) to ensure that they are up to date based on the various inspection activities performed at stormwater management infrastructure, as required to satisfy Environmental Compliance Approvals.

Reviews maintenance and inspection records, along with monitoring data to evaluate the performance of existing stormwater management infrastructure and recommends maintenance/retrofits and any enhancements as may be required to maintain approved functionality of infrastructure and optimize on-going maintenance activities. Prepares documentation to support permit applications required to perform maintenance and repair work.

Assists in the forecasting and planning of maintenance works required for Stormwater Management Facility maintenance, repair and/or rehabilitation.

Assists with contract administration for projects related to the operation and maintenance of City stormwater and drainage assets, including maintaining daily records of work being performed, certification of performed work, attends field meetings with contractors/consultants, and measuring and confirming quantities of contract items to support the processing of payment certificates and invoicing by contractors and/or consultants. Assists in the preparation of request for quotations and/or tenders, including obtains quotes and prepares purchase orders.

Investigates and assists in the development of new/revised policies/procedures for improving the Section's technical operations/services as it relates to stormwater management. Researches, evaluates and recommends work related procedures for stormwater management program activities.

Liaises with external agencies such as Ministry of Natural Resources, Ministry of Environment, neighbouring municipalities, Conservation Authorities and stakeholders' groups.

Responds to inquiries of a technical nature from public, staff from other departments, members of Council municipal and government agencies.

Assists in the preparation of reports and correspondence related to stormwater and drainage issues including operational/technical performance relative to stormwater management against established benchmarks, including the creation and updating of digital dashboard.

Provides input on budget forecasting as it relates to the program needs.

Educates and informs general public and others regarding program details and responsibilities.

Advises and provides technical direction to field staff on infrastructure inspection protocols, approved maintenance practices, database data retrieval, health and safety (dangerous vegetation), invasive species management, inspection and maintenance log sheet completion procedures.

Regularly updates spatial data used by internal staff to locate and identify 'assumption' status of stormwater infrastructure and all of the internal components with respect to approved engineering plans.

Updates GIS mapping to include newly developed and/or retrofitted stormwater and drainage infrastructure.

Attends infrastructure pre-assumption meetings and evaluates infrastructure as per Approved Design drawings by other Department / Agencies. Provides comments with regard to outstanding deficiencies and monitors its completion.

Researches new technology and methodologies to improve field maintenance operations, training, etc.

Coordinates communication between management and field staff. Discuss operational concerns with PM and Superintendent and provides input on potential solution to problems.

Undertake drainage investigations as required by internal staff. Provides assessment and recommendations to mitigate flooding or water conveyance problems as it may be required from an operational point of view.

Works in accordance with the provisions of applicable Health and Safety legislation and all City of Hamilton corporate and departmental policies and procedures related to Occupational Health and Safety.

Contributes to a positive work environment, by working collaboratively with teammates, co-workers, and other City staff. Performs their duties with professionalism and is respectful of others.

Performance of other duties as assigned related to the core responsibilities of the position.

QUALIFICATIONS

- 1. Knowledge of the theories and practices of stormwater management normally acquired by attaining a three-year Diploma in a related Engineering Technology Program or a Bachelor's Degree in the field of Civil Engineering or Water Resources Engineering or an equivalent combination of education and relevant experience.
- 2. Specific knowledge and experience in the management of natural watercourses, stormwater management, stormwater infrastructure and sediment/erosion control practices.
- 3. Familiar with the operation of field equipment, such as automatic water samplers, and water level loggers would be considered an asset.

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- 4. Thorough knowledge and understanding of statutes, regulations and by-laws affecting the Section such as the Water Resources Act, Environmental Protection Act, Fisheries Act, Species at Risk Act, the Conservation Act.
- 5. Highly effective research and analytical, written and oral communication, presentation, interpersonal and organizational skills.
- 6. Comprehensive knowledge of computer software applications such as Microsoft Office, Hansen, ArcGIS, or equivalent Geospatial software and other related software such as data management and work order systems software applications in the area of stormwater management.
- 7. Previous demonstrated experience in conducting: field inspections, survey equipment, operation and maintenance of stormwater facilities, water sampling programs, groundwater and/or surface water monitoring.
- 8. Must have a valid Class "G" Driver's Licence.

THIS POSITION REQUIRES A VALID CLASS 'G' DRIVER'S LICENCE AND PROOF THEREOF IS REQUIRED AFTER HIRE.