

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT

(HAMILTON WATER DIVISION – WATER AND WASTEWATER SYSTEMS PLANNING - LOCATION - 77 JAMES ST. N., SUITE 400)

INFRASTRUCTURE DATA TECHNOLOGIST - CUPE 5167

SUMMARY OF DUTIES

The Infrastructure Data Technologist, under the direction of Senior Project Managers, supports the System Planning team's work processes for the tracking and analysis of available capacity of water, wastewater and stormwater infrastructure, and to review and comment on proposed development and changes to City infrastructure. The Technologist will develop and employ database, spreadsheet and Geographical Information System (GIS) tools to track, analyze and file incoming and outgoing data and documents, and occasionally carry out field work such as sampling and inspection to support on-going water resources related projects.

GENERAL DUTIES

Assists in the development and use of electronic data and document management tools, including spreadsheets and databases, as well as physical (paper) filing systems.

Tracks document transmission and team workflow.

Compiles and circulates summaries of team performance using established Key Performance Indicators (KPIs).

Retrieves and summarizes documents and data from various City electronic and physical (paper) data systems and archives, as required by other team members.

Performs initial screening of development application circulations for completeness, and to identify which require engineering review, by applying established criteria/checklists.

Collects, manages, reviews, quality checks, statistically analyses, enters, and updates data in databases such as hydrometric and meteorological databases, water billing, and SCADA. Updates GIS shapefiles, and prepares maps and presentation figures.

Participates in and contributes to work efficiency/process optimization reviews for Continuous Improvement.

Conducts visual observation and takes photographs of drainage features such as roadways, ditches, and creeks during rainfall events.

Monitors groundwater wells using instruments.

Calibrates monitoring equipment and verifies data.

Collects water quality samples from groundwater wells and surface water features.

Receives and answers inquiries by telephone, email, or traditional mail.

Monitors and documents work performed by contractors and facilitates problem resolution.

Maintains records such as correspondence and report files within the appropriate tracking system.

Performs other duties as assigned which are directly related to the major responsibilities of the position.

QUALIFICATIONS

1. Must have a demonstrated knowledge and experience in the duties described above, normally acquired through a combination of relevant work-related experience and a community college diploma (Civil Engineering Technology, Geographic Information Systems, Data/Information Management, or related field of study).
2. Must have previous design or planning experience related to municipal infrastructure systems for water supply, and/or wastewater collection, and/or stormwater conveyance.
3. Must have demonstrated knowledge and experience in creating and maintaining ArcGIS geodatabases, feature classes, and shapefiles with good knowledge of relational database design. Python scripting for ArcGIS is an asset.
4. Must have functional competency in spreadsheet apps (e.g., MS-Excel), and database apps (e.g. MS-Access). Competency with Microsoft Word, SQL, and Power BI is an asset.
5. Must have demonstrated knowledge and experience in programming using Visual Basic for Applications (VBA) to edit and create simple and advanced MS-Excel VBA macros.
6. Effective written and verbal communication skills.
7. Ability to perform well both independently and as part of a team.
8. Ability to perform physical field work including carrying/installing instrumentation and water samples.
9. Knowledge and working experience related to Ontario Planning Act approvals and related municipal procedures and guidelines, particularly City of Hamilton planning approvals procedures, are an asset.
10. Knowledge of Ontario regulations and guidelines relevant to municipal infrastructure and water resources is an asset.
11. Knowledge of water hydraulic engineering, and/or hydrology, and/or hydrogeology is an asset.

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

NOTE 1:

As a condition of employment, the successful applicant(s) will be required to obtain a satisfactory Criminal Record & Judicial Matters Check (*formerly Police Information Check*), at their own expense, prior to beginning work in this position.

THE INCUMBENT SHALL COMPLY WITH ALL HEALTH AND SAFETY POLICIES AND PRACTICES FOR THIS POSITION AND THE WORKPLACE
