



ENGINEERING TECHNOLOGIST TECHNICIAN 1

Five (5) permanent and one (1) temporary (12-month), full-time positions – Toronto, ON

Are you a Certified Engineering Technician or Technologist, or a similarly qualified professional, with engineering experience related to hydrology, hydraulics, stormwater management, or infrastructure asset management? Do you have expertise in CADD and/or GIS operations or database maintenance? If so, join the City of Toronto as part of the Toronto Water team.

Reporting to the Manager, Analytics Services Unit, or the Manager, Infrastructure Planning & Programming Unit, or the Manager, Strategic Planning & Policy Unit within Water Infrastructure Management, you will assist Engineers and Senior Engineers in GIS database maintenance for water and sewer networks, analysis of water and sewer systems, planning for, and reviewing, condition assessment programs, and development review, maintenance and application of watermain and hydrology/hydraulic sewer models. As an Engineering Technologist Technician 1, you will also participate in risk assessment and management for the City's water, sewer, and stormwater management infrastructure.

MAJOR RESPONSIBILITIES

Your primary responsibilities as an Engineering Technologist Technician 1 will be varied, but you'll be expected to:

- Maintain, update, and retrieve/analyze/summarize data from various database systems, such as TWAG, InfoAsset Manager, and Hansen/Avantis Works Management systems, using various tools and technologies such as Microsoft Excel/Access, and CADD/GIS.
 - Instruct and direct Engineering Technologist Technicians 3 in various tasks such as data gap investigations, digitization, etc.
 - Prepare, read and interpret technical drawings, including collecting and preparing input data for water/wastewater hydraulic models, such as InfoWater/InfoWorks ICM, from engineering drawings (e.g. plan and profile, details, sections), field measurement data, and survey notes.
 - Program, operate and maintain a variety of mechanical, digital, analogue, wireless, computerized and other equipment programs/systems in performing data analysis, graphical summaries, mapping, calculations, studies about meteorological, flow and pressure monitoring, and water quality/quantity data, condition rating data, etc.
 - Perform and/or review research and calculations, including obtaining, summarizing, and analyzing water billing data and other information, as required.
 - Conduct surveys, investigations, performance monitoring, and studies for a variety of proposals, programs, land development applications and projects pertaining to the City's facilities and underground water, sewer, and stormwater management infrastructure systems, and analyze and summarize results.
 - Check and provide progress/inspection reports (e.g. final plans, condition assessment reports, CCTV data) on the work of contractors, consultants and developers, to ensure completeness, accuracy, use of safety equipment, adherence to approved designs, procedures, regulations, statutes, specifications, and City standards.
 - Liaise with Utility companies, consultants, developers, public, contractors, etc., on meetings related to capital projects, to resolve problems, etc.
 - Investigate, and respond to, inquiries from the public, surveyors, consultants, contractors, and other internal staff related to construction activity or information on infrastructure.
 - Assist with the preparation of budget and tracking of expenditures.
 - Act as a lead in performing calculations, integration of data, measurements, operation of equipment, etc. Format digital data and develop base plan & profile drawings. Configure computer files. Review applications from the public, contractors, etc., and ensure that necessary specifications and requirements are met.
 - Administer, analyze, prepare, and co-ordinate requirements, design reviews, reports, specifications, agreements, and any documentation related to construction projects and land
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development proposals, and prepare drafts for Engineers to review.

- Search, evaluate, analyze, and finalize field notes, survey reports, study reports, and analyses for preparation of plans, design, modelling, and systems assessment.
- Perform design and drafting work, including reading and interpreting technical drawings/documents, and prepare and check map data and products using CADD/GIS to input information.
- Assist the Engineers or carry out technical work for the planning, design, tendering, construction, and inspection of municipal infrastructure, and maintenance of infrastructure data.
- Prepare and oversee ROEI/RFQ/RFP contracts relating to maintenance and upkeep of Toronto Water's geospatial data, hydrology/hydraulic modelling systems, and engineering studies.
- Prepare, tender, and administer contracts for the installation, construction and rehabilitation of infrastructure, and other projects associated with the maintenance of infrastructure data to ensure that contracts are carried out in accordance with City standards, specifications, and procedures.
- Prepare instructions, procedures, templates, SOPs, and training course materials and conduct training and demonstrations for users of GIS, and other applications.

KEY QUALIFICATIONS

Your application for the role of **Engineering Technologist Technician 1** must describe your qualifications as they relate to:

1. Post-secondary degree or diploma in an engineering program, or equivalent combination of education or experience.
2. Considerable experience in CADD and/or GIS operations or database maintenance using various CADD, GIS, and database tools, such as AutoCAD, ArcGIS, QGIS, and Microsoft suite such as Excel/Access or other software, or the equivalent of applications and tools for drafting/mapping, database maintenance, modelling, or analysis, etc.
3. Experience in one of the following fields: design and construction, operation and maintenance, asset planning and management, infrastructure condition assessment related to water, wastewater, or stormwater management system.
4. Experience in utilizing engineering principles and practices related to one of the following subject areas: hydrology, hydraulics, stormwater management, or infrastructure asset management.

You must also have:

- Knowledge in Civil Engineering principles related to the design and construction of water, wastewater, and stormwater management network systems and facilities.
- Knowledge in principles and methods for the collection of meteorological data, flow, and water quality monitoring data from open channels and sewers.
- Demonstrated skills in the preparation of data files, and data summaries, and generating graphical summaries of meteorological, flow, and water quality monitoring data.
- Ability to answer questions from the public and converse verbally and in writing with engineering staff and others on technical issues.
- Ability to provide work direction to other staff.
- Ability to support the Toronto Public Service values to ensure a culture that champions equity, diversity, and respectful workplaces.
- Valid Ontario Class "G" Driver's Licence and access to a motor vehicle to travel to various work locations within the GTA for business purposes.

ASSET:

- Eligibility for membership in the Ontario Association of Certified Engineering Technicians and Technologists (OACETT).

NOTE: All City of Toronto employees are required to be fully vaccinated as a condition of hire in accordance with the City's [Mandatory Vaccination Policy](https://www.toronto.ca/city-government/accountability-operations-customer-service/city-administration/corporate-policies/people-equity-policies/covid-19-mandatory-vaccination-policy/) < <https://www.toronto.ca/city-government/accountability-operations-customer-service/city-administration/corporate-policies/people-equity-policies/covid-19-mandatory-vaccination-policy/> >.

Wage Range: \$39.92 - \$43.71 per hour

Toronto is home to more than 2.9 million people whose diversity and experiences make this great city Canada's leading economic engine and one of the world's most diverse and livable cities. As the fourth largest city in North America, Toronto is a global leader in technology, finance, film, music, culture, and innovation, and consistently places at the top of international rankings due to investments championed by its government, residents and businesses. For more information, visit jobs.toronto.ca or follow us on Twitter at [Twitter.com/CityTOjobs](https://twitter.com/CityTOjobs), on LinkedIn at [Linkedin.com/company/city-of-toronto](https://www.linkedin.com/company/city-of-toronto) or on Facebook at [Facebook.com/CityTOjobs](https://www.facebook.com/CityTOjobs).

How to Apply:

For more information on these and other opportunities with the City of Toronto, visit us online at <https://jobs.toronto.ca/jobsatcity/>. To apply online, submit your resume, quoting **Job ID 25192**, by **Friday, August 19, 2022**.

Equity, Diversity and Inclusion

The City is an equal opportunity employer, dedicated to creating a workplace culture of inclusiveness that reflects the diverse residents that we serve. Learn more about the City's commitment to [employment equity](https://jobs.toronto.ca/jobsatcity/content/Hiring-Policies-and-Statements/?locale=en_US) < https://jobs.toronto.ca/jobsatcity/content/Hiring-Policies-and-Statements/?locale=en_US >.

Accommodation

The City of Toronto is committed to creating an accessible and inclusive organization. We are committed to providing barrier-free and accessible employment practices in compliance with the Accessibility for Ontarians with Disabilities Act (AODA).

Should you require Code-protected accommodation through any stage of the recruitment process, please make them known when contacted and we will work with you to meet your needs. [Disability-related accommodation during the application process is available upon request](https://jobs.toronto.ca/jobsatcity/content/Hiring-Policies-and-Statements/?locale=en_US). Learn more about the City's [Hiring Policies and Accommodation Process](https://jobs.toronto.ca/jobsatcity/content/Hiring-Policies-and-Statements/?locale=en_US) < https://jobs.toronto.ca/jobsatcity/content/Hiring-Policies-and-Statements/?locale=en_US >.
