Environmental Engineering



Designing for value and longterm sustainability.

In our experience, no two projects are ever alike. Our clients have different needs, goals, available funding, sites, and facilities. While we are skilled at applying our experience from an array of prior projects, we know that customized solutions and designs are what is ultimately required. Our approach to every project focuses on working collaboratively with you, listening closely to your specific needs, taking the time to understand your facilities, and providing options that are the right fit for you.

Our Environmental Engineering Discipline is focused on finding solutions for your wate treatment, storage and distribution, wastewater conveyance and treatment, and solid waste management needs. We can tackle studies, investigations, Class Environmental Assessments (EA), master plans, conceptual, preliminary, and detailed design, construction tender documents, and construction contract administration services.



Increasing Plant Capacity to Meet Population Growth Projections

J.L. Richards was retained to provide EA, design, and construction contract administration/inspection for the Cataraqui Bay Wastewater Treatment Plant (WWTP) in Kingston. The project increased plant capacity, improved the quality of treated wastewater, and renewed much of the existing facility.

The plant's average day treatment capacity was increased from 38.8 MLD to 55 MLD to meet projected population growth. Secondary treatment was upgraded using biological aerated filtration (BAF) technology and biosolids dewatering and solids storage facilities were significantly expanded.



Meeting Future Sanitary Needs of Quinte West

J.L. Richards led the EA, design, and construction contract administration for the expansion of the Dundas Street Sewage Pump Station (SPS). Our team established design parameters and identified and evaluated options to ensure adequate pumping capacity. The project included various lifecycle upgrades and expanding the wet well and dry well to house two new pumps, and construction of a new 800 mm forcemain that connects the SPS to the Trenton WWTP.



Largest Single Infrastructure Project in the City of Owen Sound

J.L. Richards was retained to provide the engineering services for the design, tendering, and construction contract administration of a major upgrade to the City of Owen Sound 24.5 MLD WWTP. Major components of the upgrade included a new BAF complex incorporating a primary effluent pumping station; a UV disinfection system; new chemical feed systems; new biosolids storage; administration facilities including a laboratory, control room, meeting rooms and offices; and other process systems and building systems.



Environmental Engineering

Architecture Civil Engineering **Electrical Engineering Energy Systems Engineering Environmental Engineering** Mechanical Engineering **Planning** Project Management Structural Engineering

Talk to us today

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