

E/ONE INDOOR LOW-PRESSURE SEWER SYSTEMS SOLVE MUNICIPALITY'S SEWER CAPACITY LIMITATIONS

THE CHALLENGE

A home builder in Trenton, Ontario was struggling with some of their neighbourhood developments because the municipality was unable to increase the wastewater treatment (WWTP) sewer capacity. As a result, the builders needed a low-flow alternative to gravity sewers that would solve the limitation challenges of the municipality's system.

THE SOLUTION

First, our application specialists worked with E/One to create a low-pressure sewer design for the customer's development. Then, after the design was complete, we met with the municipality to present our solution and provide several established E/One installation references that demonstrate the potential for success.

We proposed that the E/One Indoor Grinder Pump (as part of our low-pressure sewer system solution) would remove infiltration and intrusion water from sewers—cutting sewage produced by 50%. The municipality approved a test installation of our system that included a metering chamber at the end of the development's street to monitor and confirm our numbers.

The test installation was a success. The municipality confirmed a 50% reduction in produced sewage and approved a permanent installation.

The E/One system is much more efficient than conventional sewers because it only pumps the household sewage and not the ground and surface water that conventional sewers do.

The system works so well that the customer is using it in 84 other builds.

THE RESULTS

- ▶ Decrease in Produced Sewage
- ▶ Increase in Efficiency
- ▶ Increased Cost Savings

For more information on this solution or if you have a fluid handling challenge of your own - Contact a John Brooks Company Application Expert today!



HOME BUILDER / DEVELOPER | WASTEWATER TREATMENT E/ONE LOW-PRESSURE SEWER SYSTEM REDUCED SEWAGE PRODUCTION BY 50%

TECHNOLOGY UTILIZED

[E/One Low-Pressure Sewer System with E/One's IH901 Indoor Stations](#)

The E/One IH901 Indoor Station grinder pump consists of a pump and tank. The grinder pump, motor controls, and level-sensing are integrated into a compact unit that is easily removable for service.

- ▶ Capacity: 91 gal (344.4 L)
- ▶ Flow: 7-15 gpm (26.5 to 56.78 lpm)
- ▶ Pressure: 0-80 psi (0-5.51 bar)
- ▶ Inlet Velocity: 2 ft/sec (1.09 m/sec)
- ▶ Motor: 1 HP, 1725 rpm
- ▶ Energy Efficiency: 6 kWh - 23 kWh/month
- ▶ Adaptable 1¼" Discharge Connection
- ▶ Corrosion-Resistant HDPE Tank
- ▶ Stainless Steel Unilateral Valves Prevent Backflow

HOW GRINDER PUMP STATIONS WORK

- Waste travels to the grinder pump, which activates automatically.
- The grinder pump grinds solids into fine particles that pass easily through the check valve and pipelines. Even objects like plastic, rubber, fibre, wood, and other items that should not be in sewage are no match for the grinder.
- After it grinds the solids into fine particles, the system pumps the sewage into the sewer, septic tank, or another treatment system down the line.