

## Cramahe – Industrial Park Expansion Continues

Clearford's Small Bore Sewer™ (SBS™) enabled the servicing of an industrial park to accommodate existing buildings on septic tanks and new development.

Cramahe Township is located in Northumberland County between Toronto and Kingston and may be known by many as the home of The Big Apple Theme Park, which has become an area landmark. It was the Big Apple owner's desire to expand and the related sewage disposal needs that provided the impetus for Cramahe Council to investigate and initiate the servicing of the adjacent Industrial Park with sanitary sewers. The Township's dilemma, faced by many small Ontario municipalities, was having limited surplus sewer capacity in their wastewater treatment plant, as well as limited financial resources to apply to expansion in an environment of slow economic growth. In 2003, after considerable research, Cramahe's Municipal Council selected Clearford's SBS™ wastewater collection system over a traditional "big pipe" gravity sewer to meet its servicing needs. New SBS™ clarifiers replaced the existing septic tanks and the existing businesses were connected to the new main located on the street.

### Highlights of the Cramahe SBS™ Installation:

- Using horizontal boring technology, the project was installed in **4 months with no road closures and no detours**;
- The **capital cost of installation was \$440,000 compared to an estimated \$700,000** for a traditional gravity sewer;
- **Operating costs are approximately 50% less than** the estimates for a traditional gravity sewer;
- A new road and servicing extension to serve new lots on North Industrial Drive were installed in 2008 by open cut methods. Since the original construction, there have been a total of 8 commercial connections to the system, 3 of which are new in 2008-2009, **and more are contemplated**.
- Since construction in 2003, **the system has operated without issue and requires minimal routine maintenance**.

The Cramahe SBS™ installation, expansion and its successful performance to date are a testament to the integrity of this cost-effective solution for industrial park development applications.



*"A traditional full-size gravity sewer was considered by Council to be beyond the financial means of the municipality. Clearford's Small Bore System™ was chosen as an alternative because installation costs were lower and weeping beds would still be eliminated. The SBS™ system has been in operation for over six years now and is performing without any problems. I would recommend that this system be considered as an option any time sewers are required."*

*Barry Thrasher, P.Eng.,  
Public Works Director,  
Township of Cramahe,  
Ontario, Canada*

*"For collection systems, alternative, small diameter sewers should be used wherever possible. These systems are one of the many important developments in wastewater technology in many years. Properly used, they can represent an impressive savings over conventional sewers."*

*U.S. Environmental  
Protection Agency*

### About Clearford Industries Inc

Clearford Industries Inc. (TSX-V: CLI) is the developer of the patented Small Bore Sewer™ (SBS™), a watertight small diameter wastewater collection system that provides servicing with superior operational and environmental performance at a significantly lower cost when compared to historic gravity sewers. With the SBS™ as the enabling technology, Clearford delivers, on a global basis, turnkey, fixed-price wastewater collection, treatment, and energy generation solutions that are ideally suited for water-scarce regions, those with unreliable water distribution networks, and new developments seeking a greener approach to water and wastewater management.

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