

James Bay Inflow and Infiltration Pilot Project

The majority of the City of Victoria's sanitary sewers and storm drains were built prior to the 1920s. With a sanitary sewer system consisting of 240 kilometres of mostly vitrified clay pipes, the City is studying ways to reduce rain and groundwater from entering the sewer system. This is also known as inflow and infiltration or I&I.



What is inflow and infiltration (I&I)?

Inflow: Rainwater that enters the sanitary sewer through holes in manhole covers, catch basins or improper service connections.

Infiltration: Groundwater that seeps into the sanitary sewer through cracks or joints in the sanitary sewer pipe and manholes.

What is the James Bay I&I Pilot Project?

The purpose of the pilot project is to study which trenchless rehabilitation approach has the greatest ability to prevent rain and groundwater from entering the sanitary sewer system. Trenchless technology enables crews to reline aging pipes from small access points, without having to dig up large sections of the road.

The project has been divided into five study areas. In four areas, a different rehabilitative approach will be studied, while one will remain as a controlled area. Results from the project will form the "blueprint" for future I&I reduction initiatives in the City and throughout the region.

Why is reducing I&I important?

By reducing I&I and upgrading our sanitary sewers, we will:

- Reduce the risks of sewer backups and flooding
- Minimize potential impacts on the environment

- Make our sewer system reliable for the future, and
- Do our part for regional liquid waste management.

What can residents and property owners expect?

Because four technologies are being tested in different areas of James Bay, people will see or experience different levels of work. Please refer to the map on the reverse side for information on the type of work that will be done in each area. Anyone whose property will be affected will receive a letter with specific information describing the work to be done on their property along with a request for their consent.

What approaches are going to be tested?

1. Rehabilitation of sanitary sewer mains and manholes within public right-of-ways.
2. Rehabilitation of sanitary sewer service connections to the property.
3. Redirection of improper, or cross connected, storm drain service connections.

What trenchless technologies are going to be used?

The following trenchless rehabilitation methods will be used:

- Pipe Relining – inserting a flexible liner into a defective sewer pipe or sewer service

- Pipe Bursting – pulling a new pipe into an undersized or defective sewer pipe by breaking and displacing the existing pipe into the surrounding soil using a bursting machine
- Manhole Grouting – sealing any leaks by injecting a grout into cracks or voids surrounding the manhole
- Manhole Lining – inserting a flexible liner into a defective manhole

When will the work be done?

The work will start in mid-June and continue through to the fall.

How much does this project cost?

In 2008, the City was successful in securing a \$3 million grant from the Canada-British Columbia Federal Gas Tax Innovations Fund to implement this inflow and infiltration reduction pilot project.

OPEN HOUSE:

James Bay Inflow and Infiltration Pilot Project

**Wednesday, June 3, 2009
5 p.m. to 8 p.m.**

**James Bay Community School Centre
140 Oswego Street**

Registration is not required. Take this opportunity to meet with City Engineering staff and ask questions.

For more information, visit: www.victoria.ca and click on *What's New*.

FOR MORE INFORMATION:

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