

# City of Hamilton Watermain Restoration

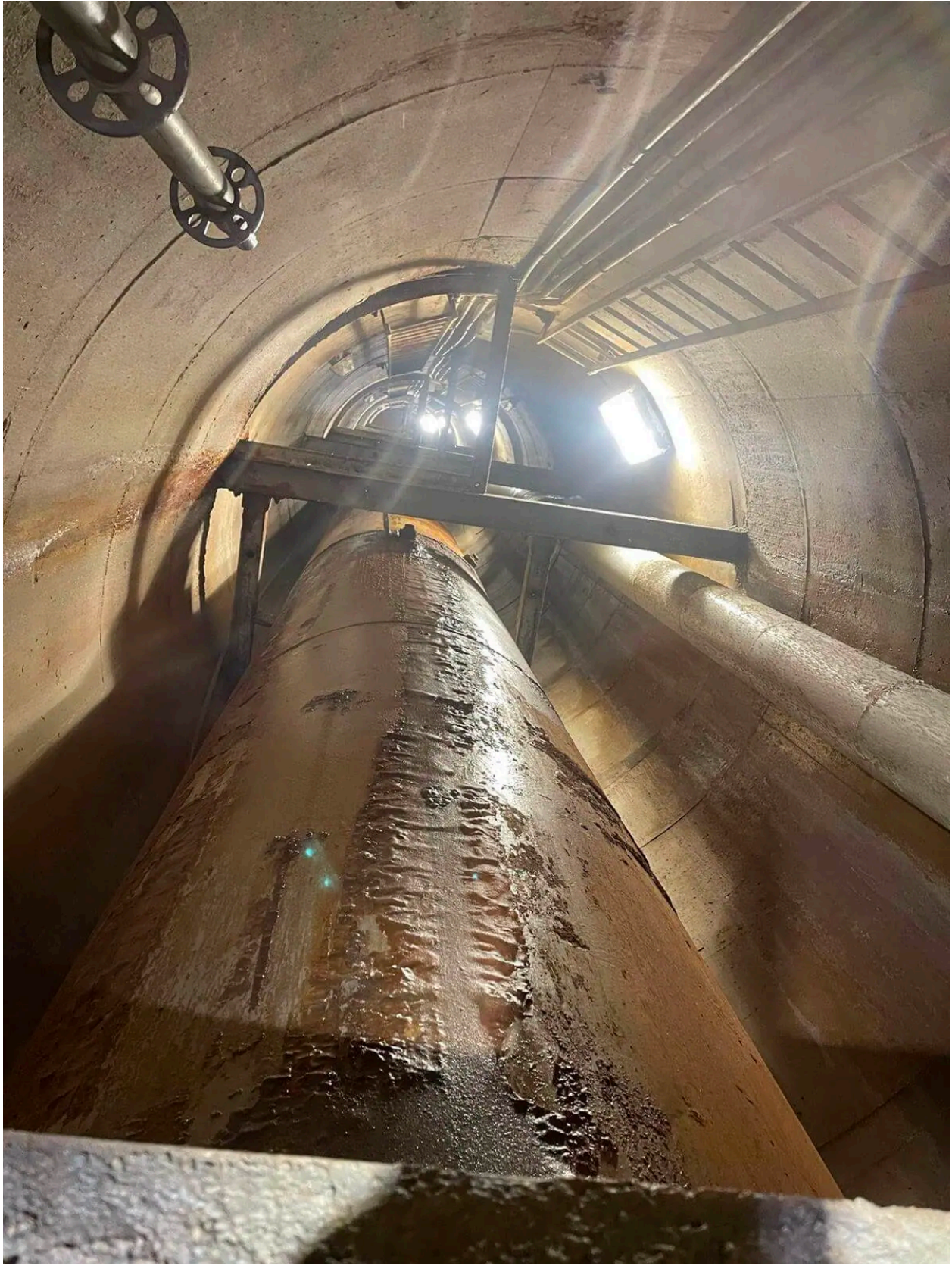
---

---

The Kenilworth Trunk Watermain in the City of Hamilton supplies approximately 50% of the potable water for the City's 350,000 residents.

---

This vital infrastructure is housed within an 8-foot diameter concrete access tunnel beneath Hamilton Mountain.



Watermain showed signs of corrosion



Installation of StrongPIPE® V-Wrap™ System



Completed restoration on horizontal pipe



Completed restoration on vertical pipe

## Project Overview

---

- Watermain provides approximately 50% of the potable water for the City
- 44-inch diameter steel pipe
- Approximately 900-feet long pipe in total

The Kenilworth Trunk Watermain in the City of Hamilton supplies approximately 50% of the potable water for the City's 350,000 residents. This vital infrastructure is housed within an 8-foot diameter concrete access tunnel beneath Hamilton Mountain. The watermain consists of a 44-inch diameter steel pipe that extends about 800 feet before curving into an additional 150-foot section.

Recent inspections revealed varying degrees of corrosion, with wall thickness loss ranging from 10% to 50%. To address these critical issues before the summer demand season, emergency repairs were necessary.

STRUCTURAL TECHNOLOGIES' StrongPIPE® V-Wrap™ Structural Carbon Fiber System was selected for the repair, known for its adaptability and reliability in strengthening critical infrastructure. PULLMAN, an exclusive licensee, installed the V-Wrap™ in two phases. Phase 1 focused on the most urgent repairs, addressing areas with a wall section loss of 30% or more. Phase 2 tackled repairs for wall section losses between 10% and 30%.

The team completed repairs both circumferentially and longitudinally in the affected areas, successfully enhancing the structural integrity of this vital pipeline and extending its service life by over 50 years.

## PROJECT INFO

---

- **Location:** Hamilton, Ontario
- **General Contractor:** Clearway Construction Inc.
- **FRP Design Engineer:** Simpson Gumpertz & Heger (SGH)
- **Owner:** City of Hamilton
- **Specialty Contractor:** [PULLMAN](#)
- **Material Supplier & QC Support:** [STRUCTURAL TECHNOLOGIES](#)
- **Project Structural Consultant:** Stantec Inc.

## SOLUTIONS

---

[StrongPIPE® V-Wrap™ Carbon Fiber](#)

## AWARDS

---

2024 No Dig Project of the Year Award Winner