

Howitt Creek Emergency Sewer Encasement and Erosion Protection



November 2024

City of Guelph

**MUNICIPAL
ENGINEERS
ASSOCIATION**



Aquafor Beech
Limited



J.G. GOETZ CONSTRUCTION LIMITED



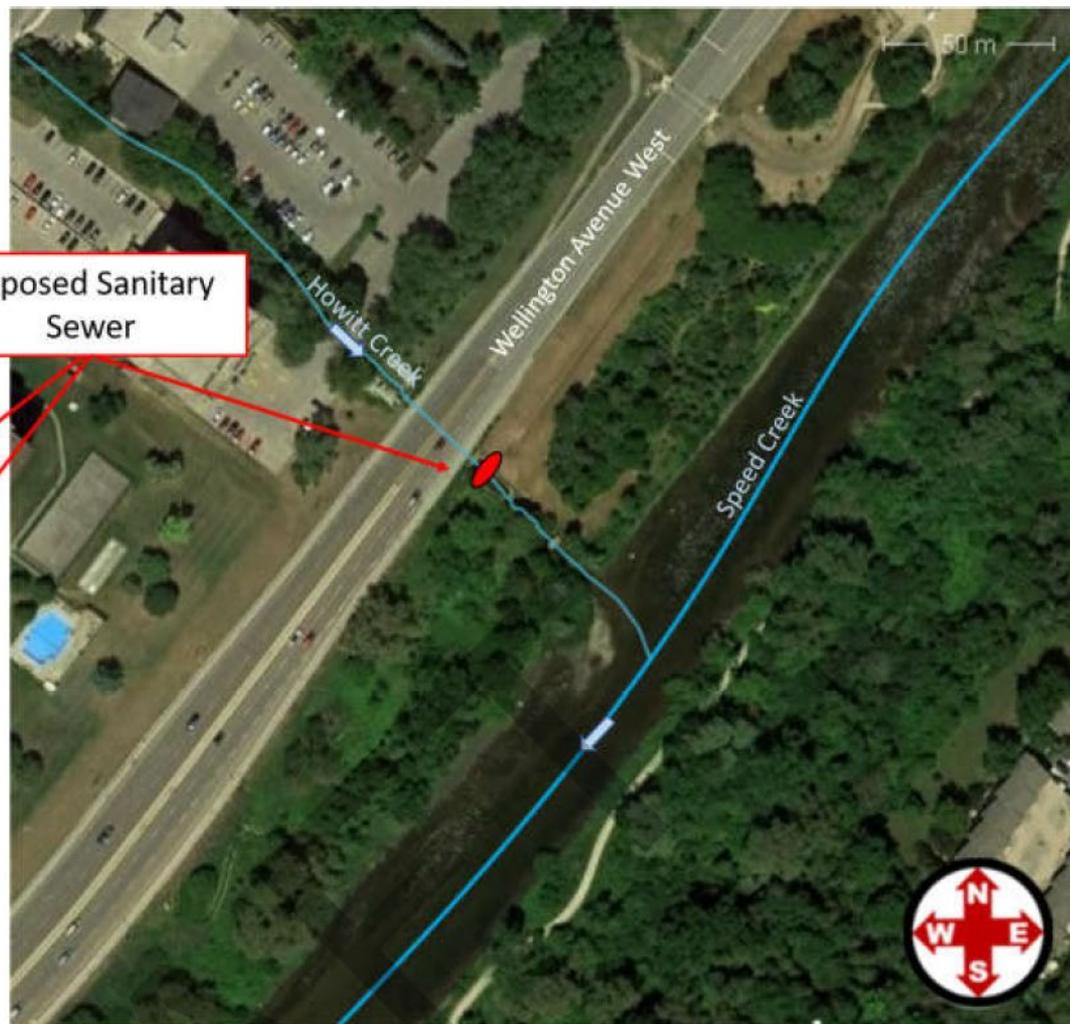
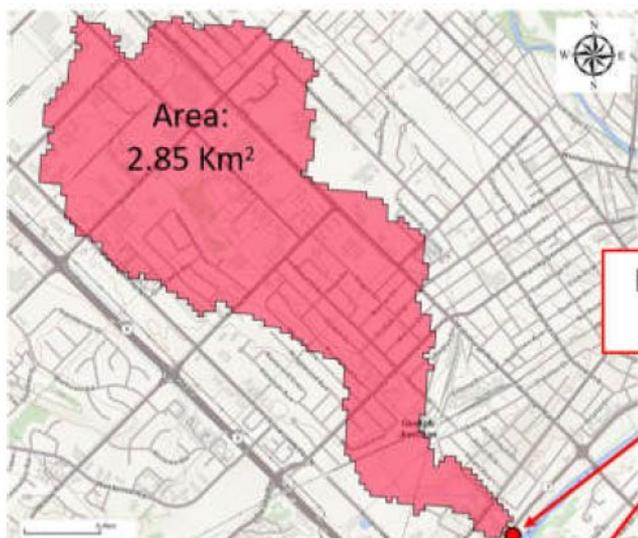
Agenda

- Project Identification and Location
- Existing Conditions
- Design Solution
- Construction and Staging
- Outcome

Project Identification

- Issue noticed during erosion inspections completed as part of the SWM Master Plan
- Trunk sewer was exposed and experiencing severe erosion and undermining
- Failure would be catastrophic

Project Location



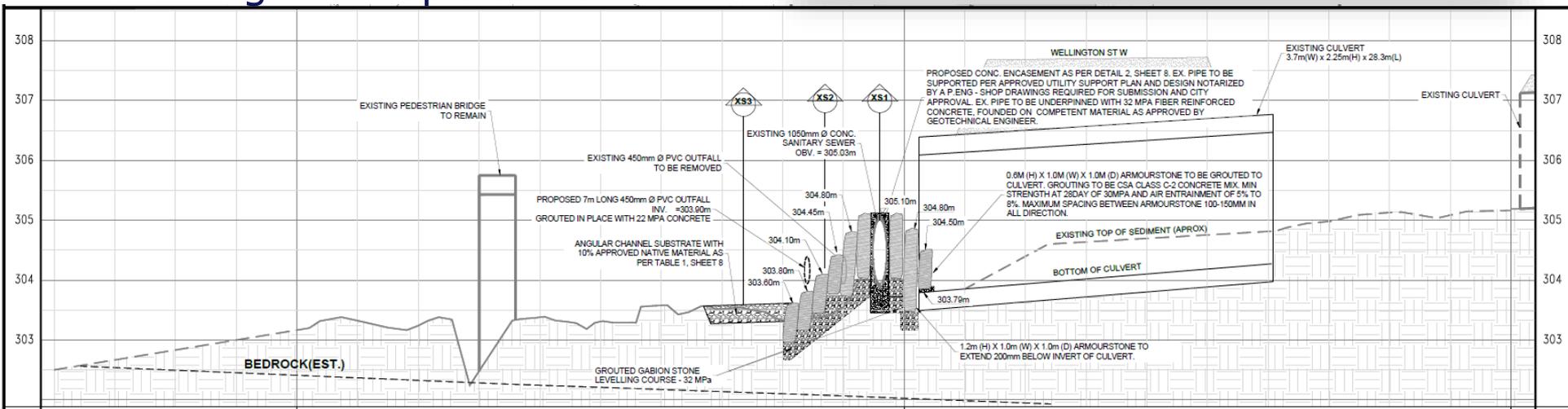
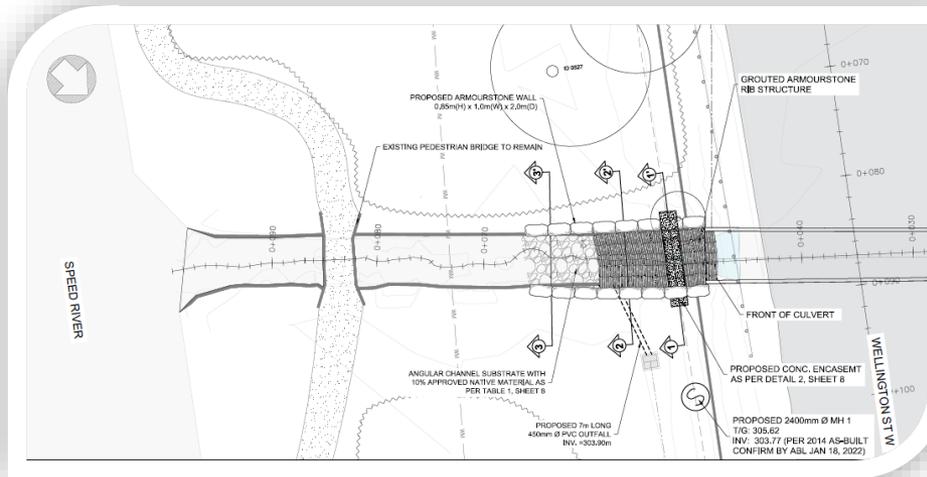
Existing Conditions



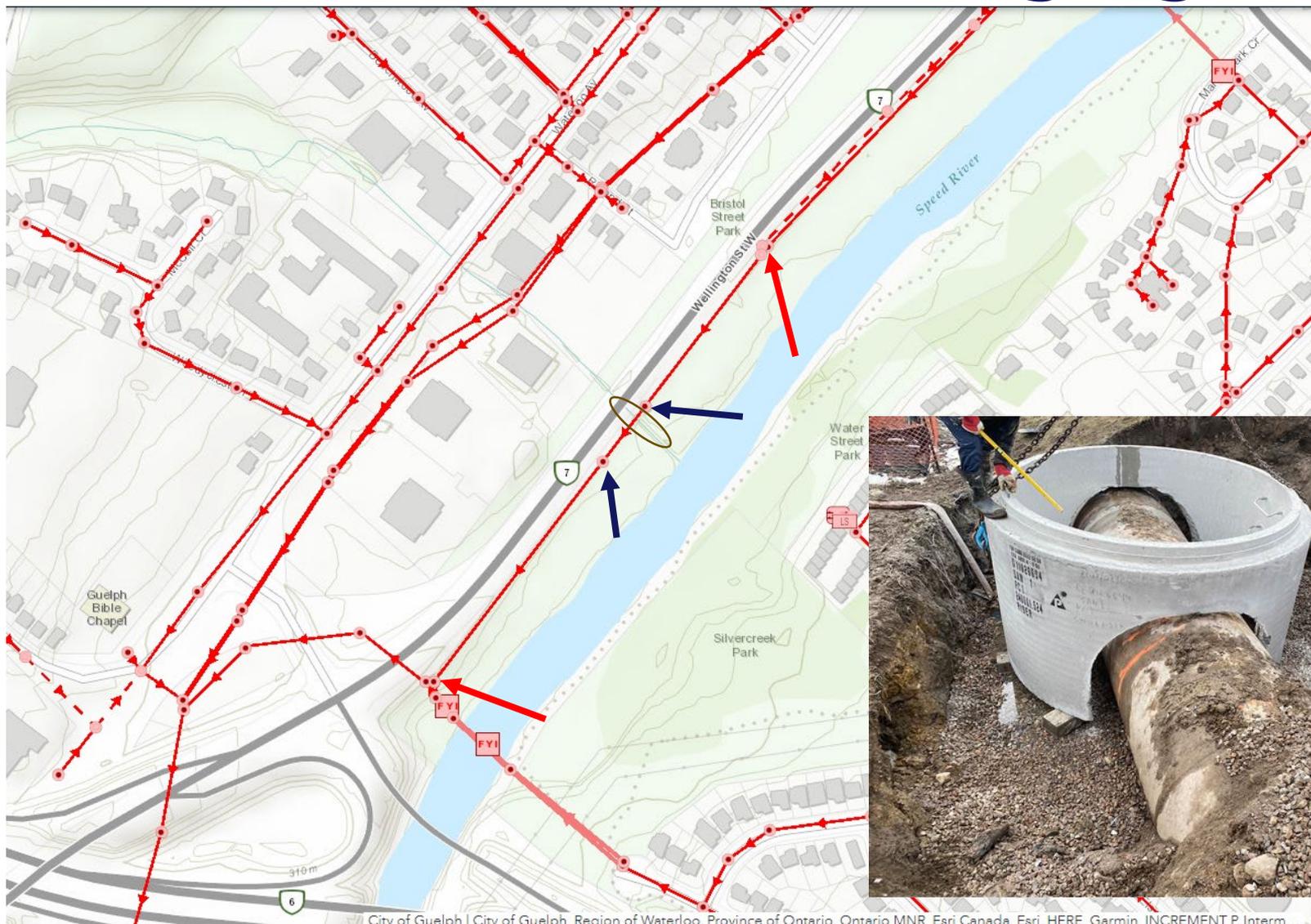
Design Solution

A summary of the detailed works include:

- Two 2400mm dia. MHs
- Sanitary sewer and creek bypass
- Concrete encasement of existing sewer
- Angular channel substrate and armourstone rib structure over exposed pipe
- Retaining wall replacement



Construction and Staging



Sewer bypass



Creek bypass

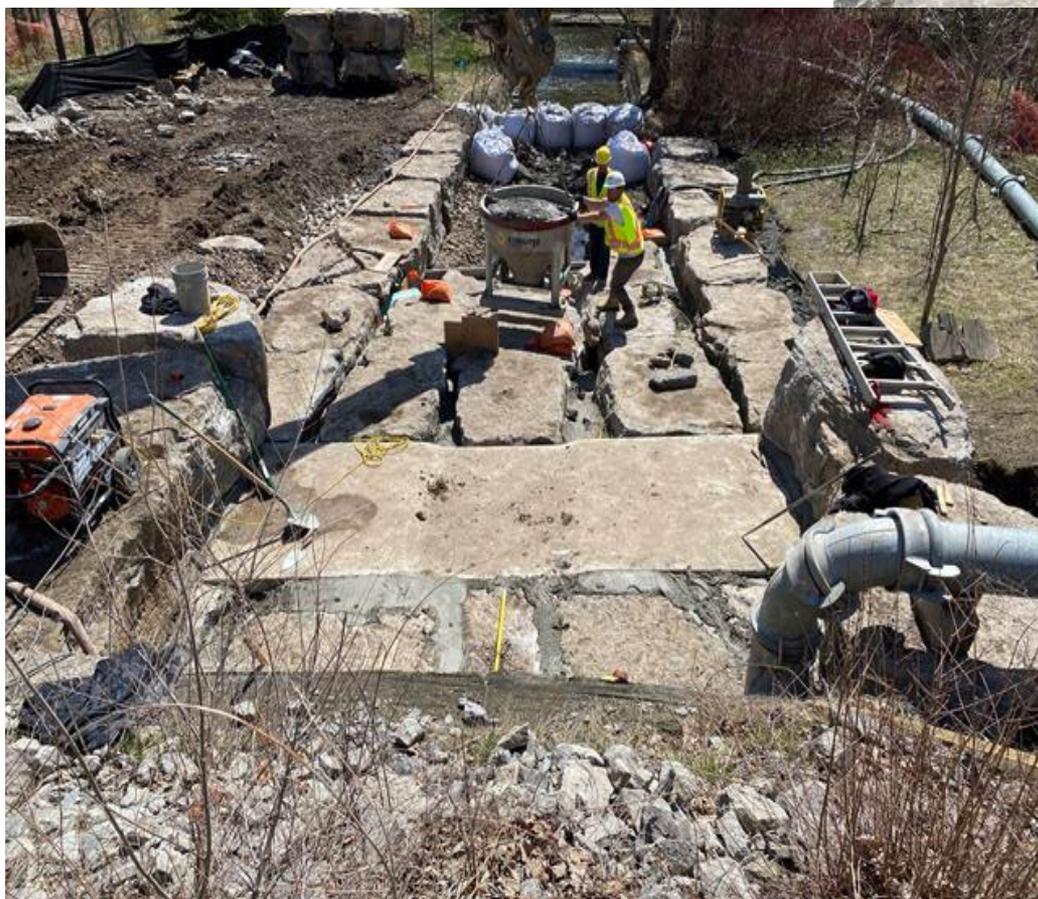




Concrete Encasement



Armourstone Retaining Walls and Creek Bed Ribbing





Questions?

Contact info:

Jackie Kay, MBA, P.Eng., PMP

Project Engineer, Design and Construction
Engineering and Transportation Services

City of Guelph

519-822-1260, extension 2251

TTY 519-826-9771

jackie.kay@guelph.ca