



WELCOME

**Jones Court Stream Rehabilitation
VIRTUAL PUBLIC INFORMATION CENTRE
September 29th, 2022**

Your comments are encouraged and appreciated, as this will provide us an opportunity to address project issues and concerns.

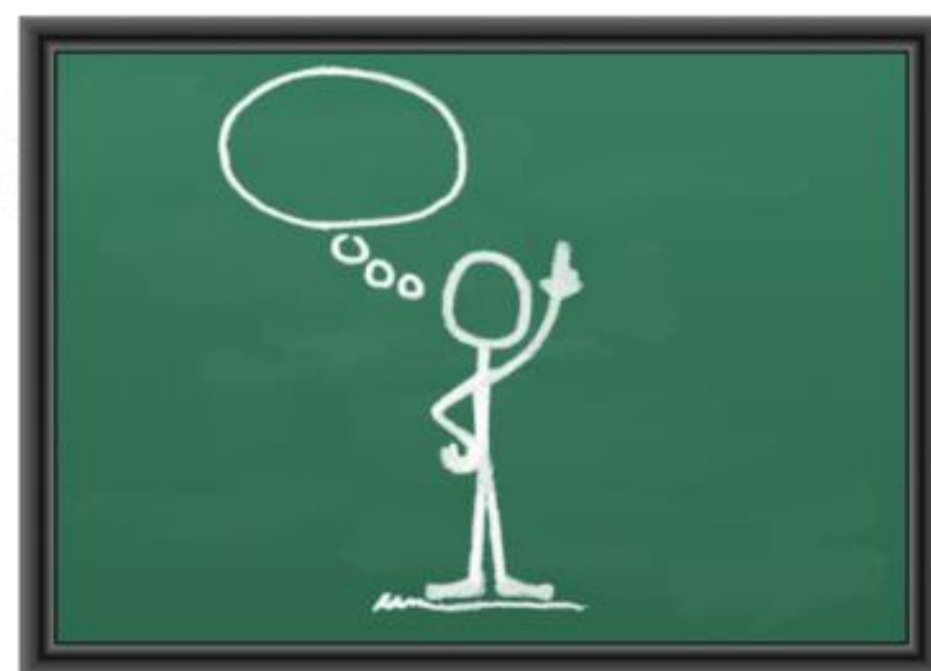


STUDY PURPOSE / PROBLEM DEFINITION

The Town of Aurora has retained Aquafor Beech Limited to complete the design of stream rehabilitation works to address erosion and infrastructure concerns along a tributary of Tannery Creek near the Jones Court culvert crossing.

This will improve the stability and health of the watercourse and mitigate risks to private properties and Town infrastructure, while enhancing the aesthetics of the creek corridor.

VIRTUAL PUBLIC INFORMATION CENTRE PURPOSE



This Virtual Public Information Centre (PIC) is Designed to:

- Present information on existing conditions
- Present the proposed detailed design solution
- Delineate Impacts to vegetation and private property



To Gain Community Input on:

- Existing conditions information
- The detailed design solution
- Planned site restoration
- Concerns related to the proposed works

PROJECT DEVELOPMENT

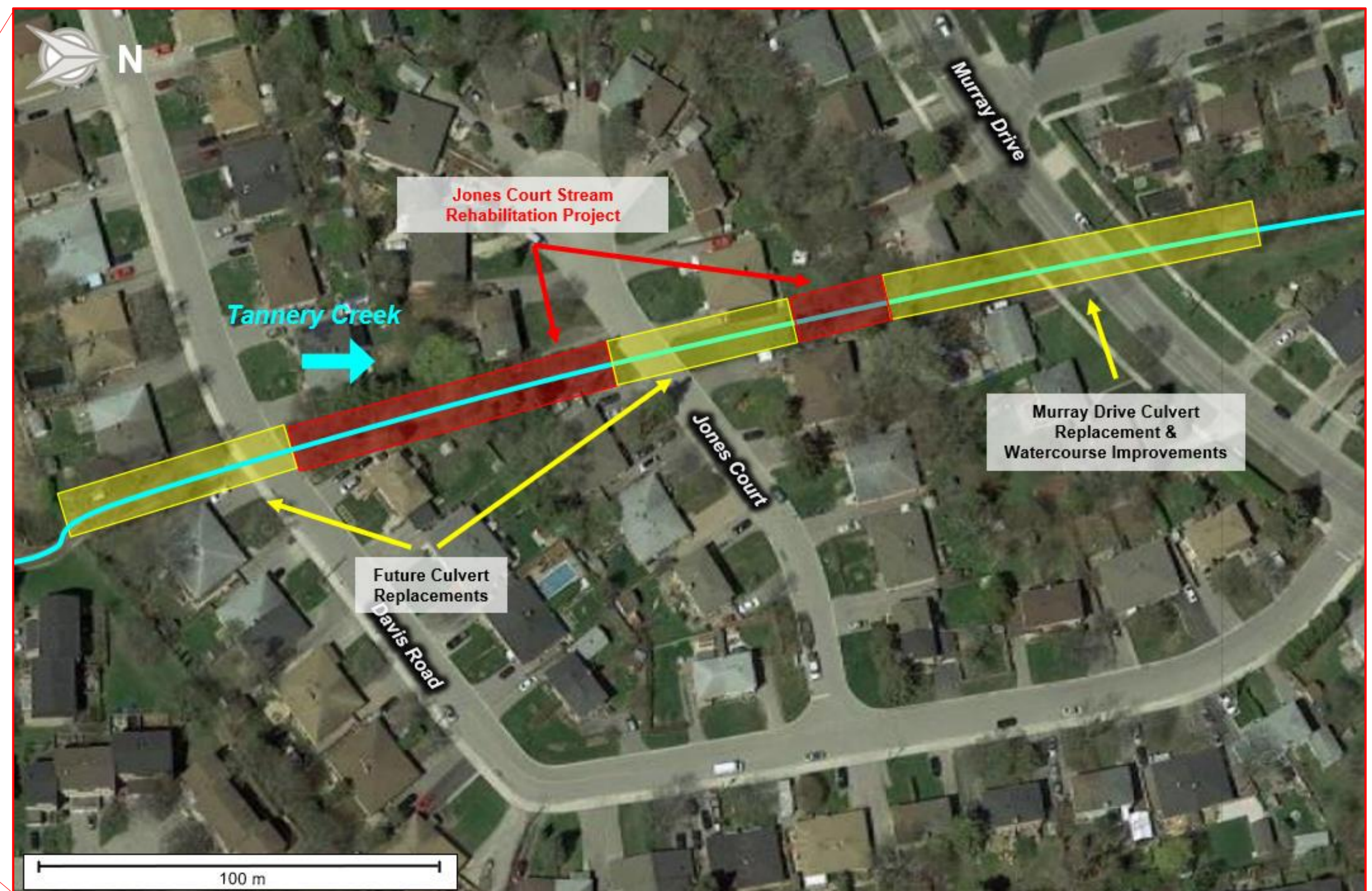
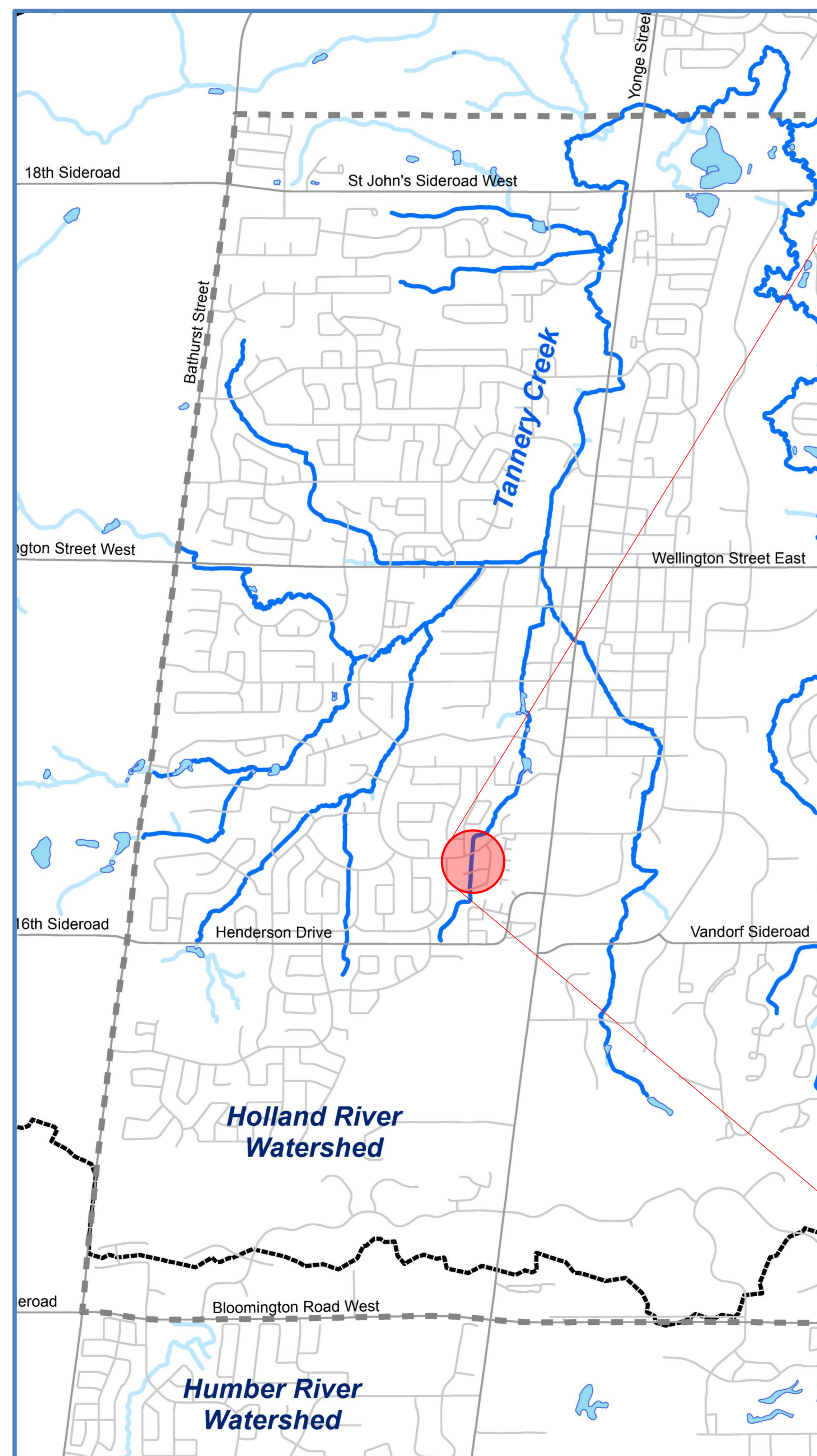


Jones Court Stream Rehabilitation

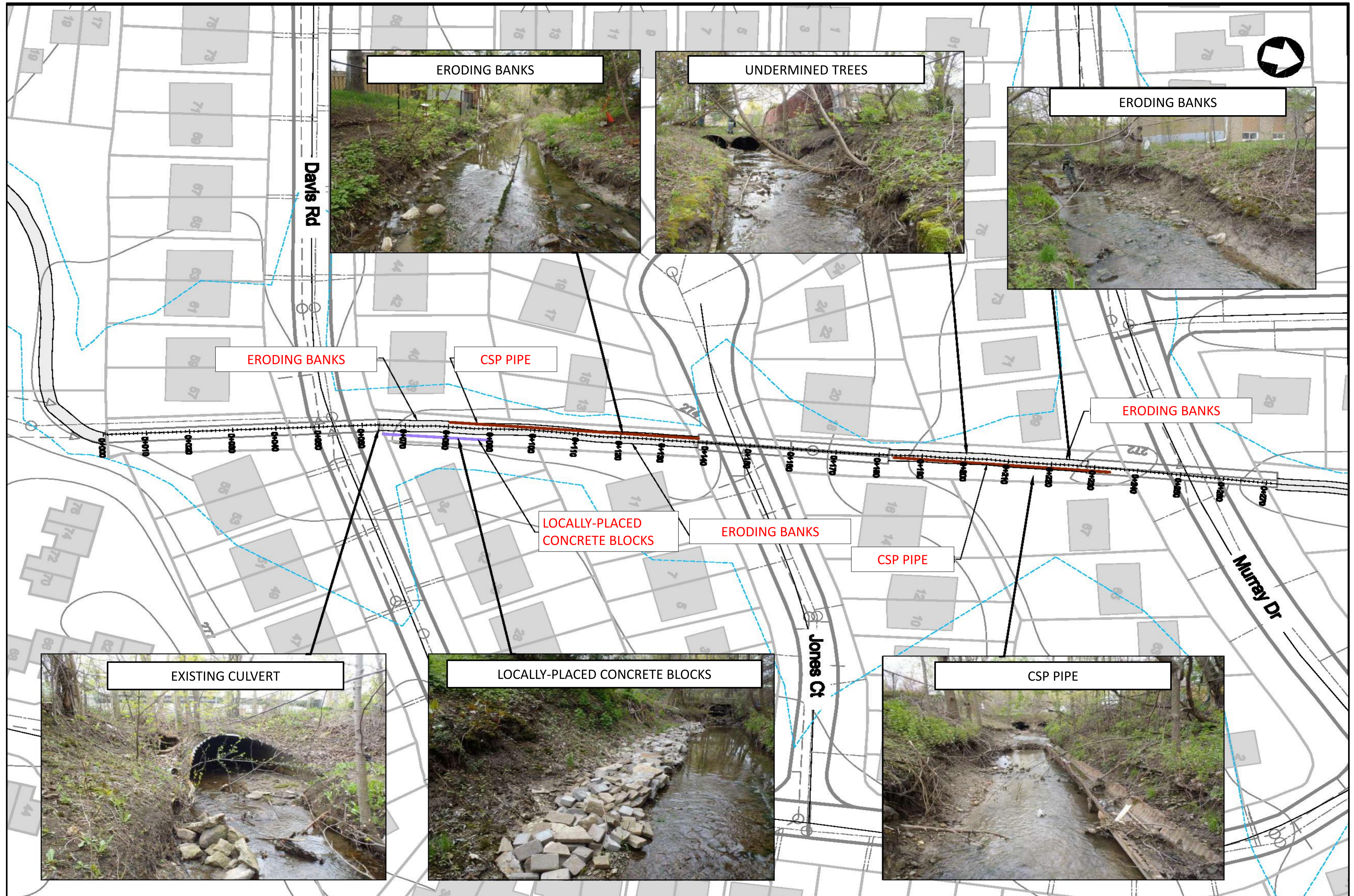
- In 2019 the Town of Aurora completed a Stream Management Master Plan (SMMP) in conjunction with the Tannery Creek Flood Relief Study (TCFRS) to define flooding and erosion risk sites within the Town of Aurora.
- The SMMP identified this site as the 2nd highest priority erosion mitigation project based the existing level of risk and opportunities for risk reduction and remediation.
- The creek banks through the project area are actively eroding towards private properties, with unstable bank slopes undermining fences, private structures, and trees.
- Old half-pipe CSPs and privately placed stone erosion controls are in deteriorating condition and negatively impacting flow.
- This project is being undertaken to address the erosion concerns noted above, as originally identified in the SMMP and TCFRS, to protect private properties from damage.

STUDY AREA

Tannery Creek flows northward through the Study Area towards Lake Simcoe. The study area extends approximately 70m upstream and 20m downstream of Jones Court, tying into future culvert works and the upcoming Murray Drive Culvert Replacement Project.



EXISTING CONDITIONS



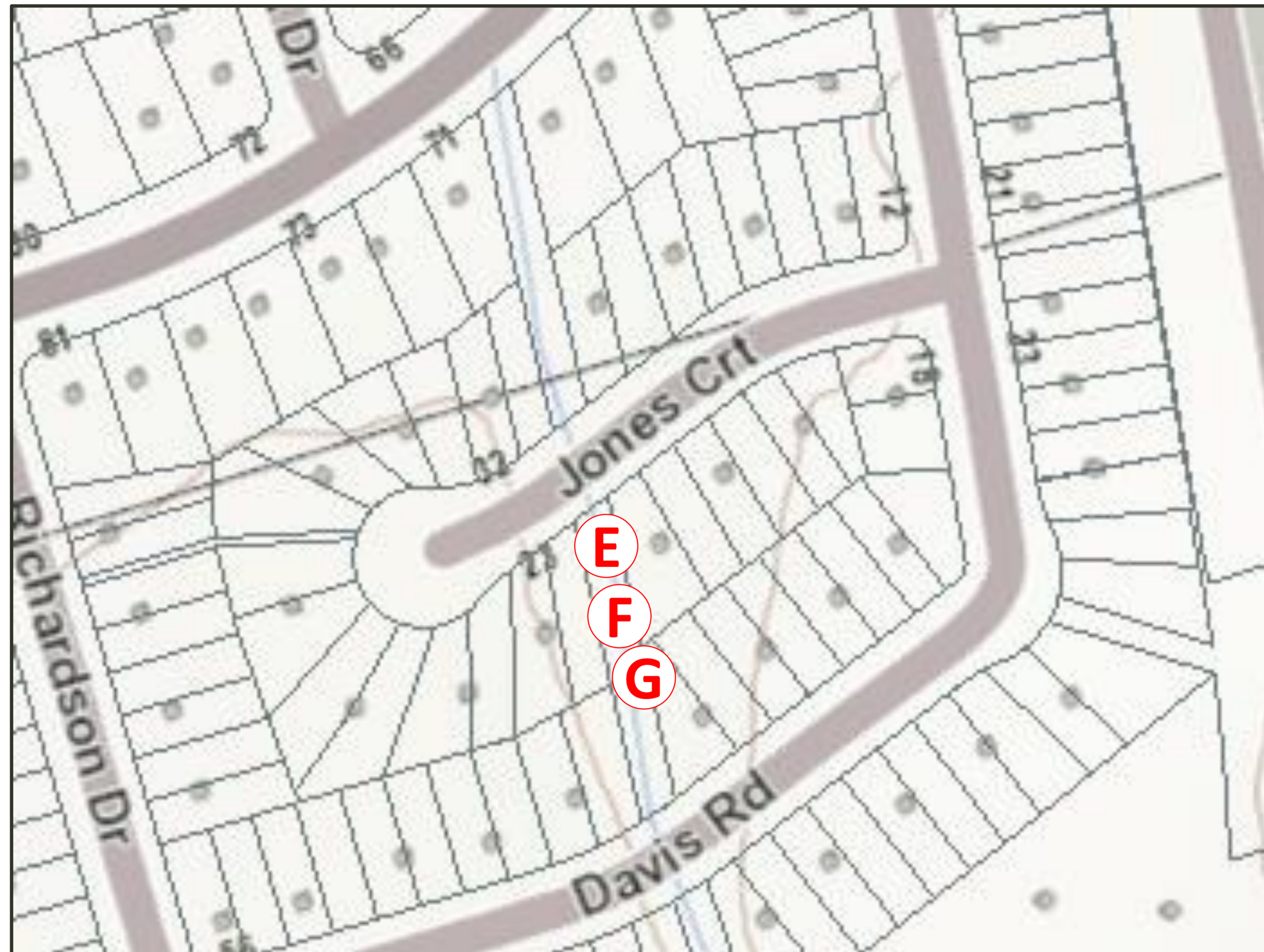
EXISTING CONDITIONS



EXISTING CONDITIONS



EXISTING CONDITIONS



TERRESTRIAL ECOLOGY

- Ecological Land Classification (ELC) is a standard practice used to describe, identify, classify and map vegetation communities on the landscape. The ELC classifications for the project areas are described below:
- The area between Jones Court and Davis Road was found to consist of Fresh - Moist Norway Maple Lowland Deciduous Forest FODM7-8 (FOD7). This community was generally disturbed, and was dominated by Norway Maple and Manitoba Maple (a non-native species).
- The stream corridor north of Jones Court to Murray Drive was described as a Cultural Woodland (CUW1) community. The main canopy was comprised of Manitoba Maple and Black Walnut.
- The undergrowth in both areas was dominated by invasive species such as garlic mustard and species common to disturbed woodlands.

AQUATIC ECOLOGY

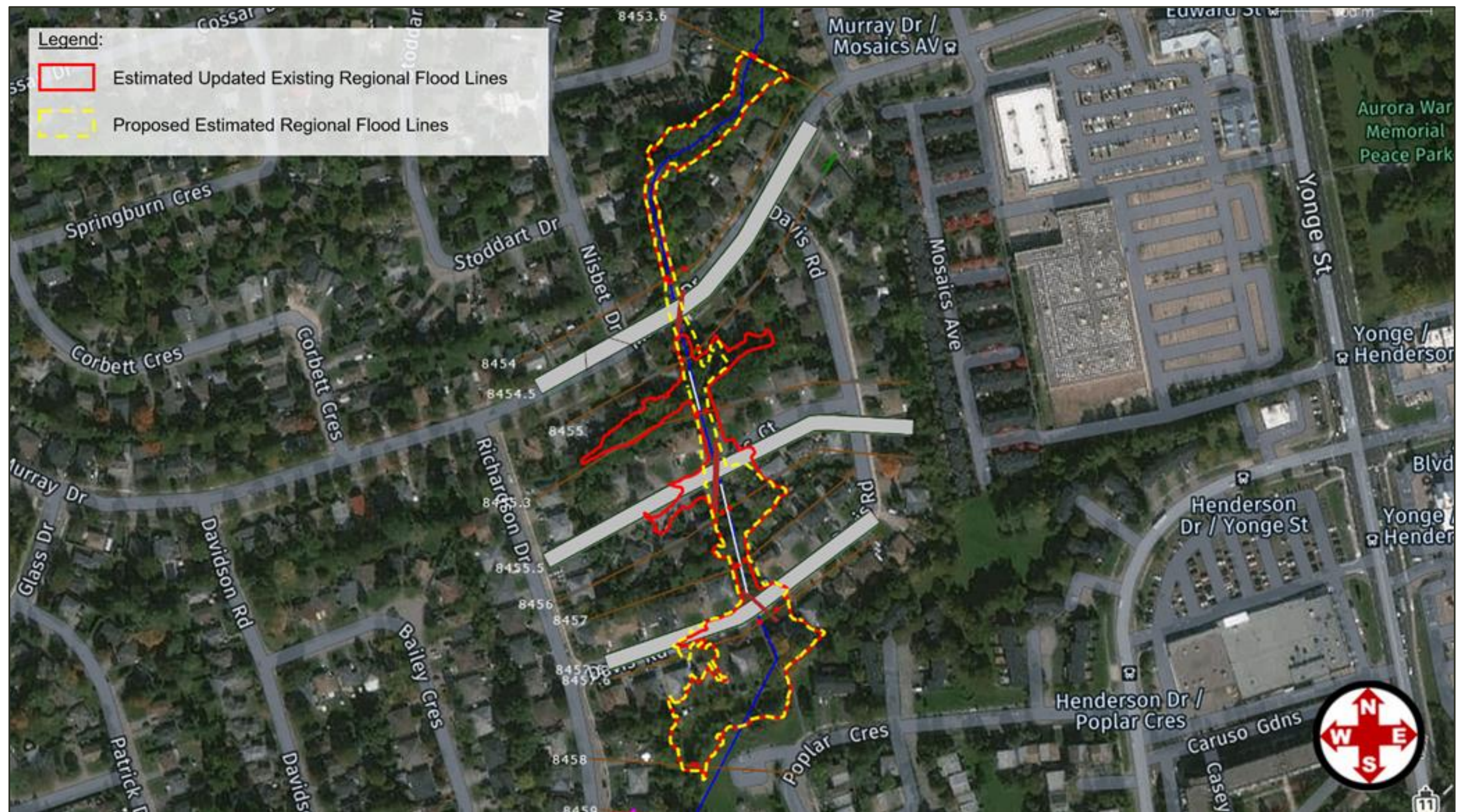


- Tannery Creek and the study site found within it provides habitat to a variety of fish species, despite the degraded habitat conditions.
- Aquatic habitat is generally in poor condition, demonstrating characteristics of an urban-impacted and stormwater-fed watercourse, with little instream or riparian vegetation.
- Restoration will include:
 - Improved channel morphology, providing more diverse habitat and varied flow conditions.
 - Improved variety of channel substrates to provide a better mix of habitat types and potential spawning areas.

HYDROLOGY AND HYDRAULICS

The study looked into the hydrology and hydraulics of the study area in order to understand how water flows through the creek, the forces it exerts under normal and extreme conditions, and the extent of flooding, so as not to worsen or impact flood levels.

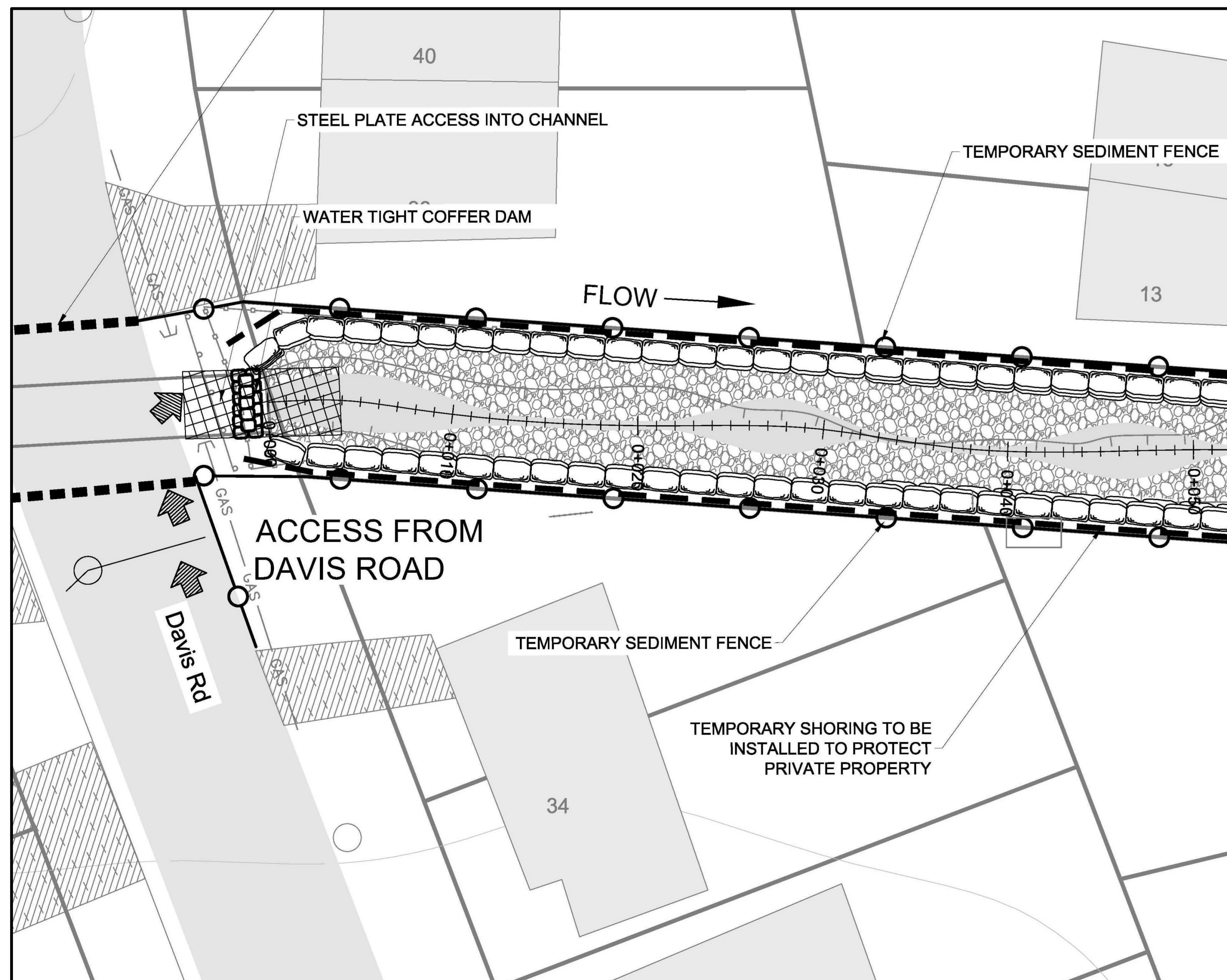
The modelled limits of the Regional floodplain are shown below, highlighting that the proposed design will decrease the extent of flooding during large rainfall events.



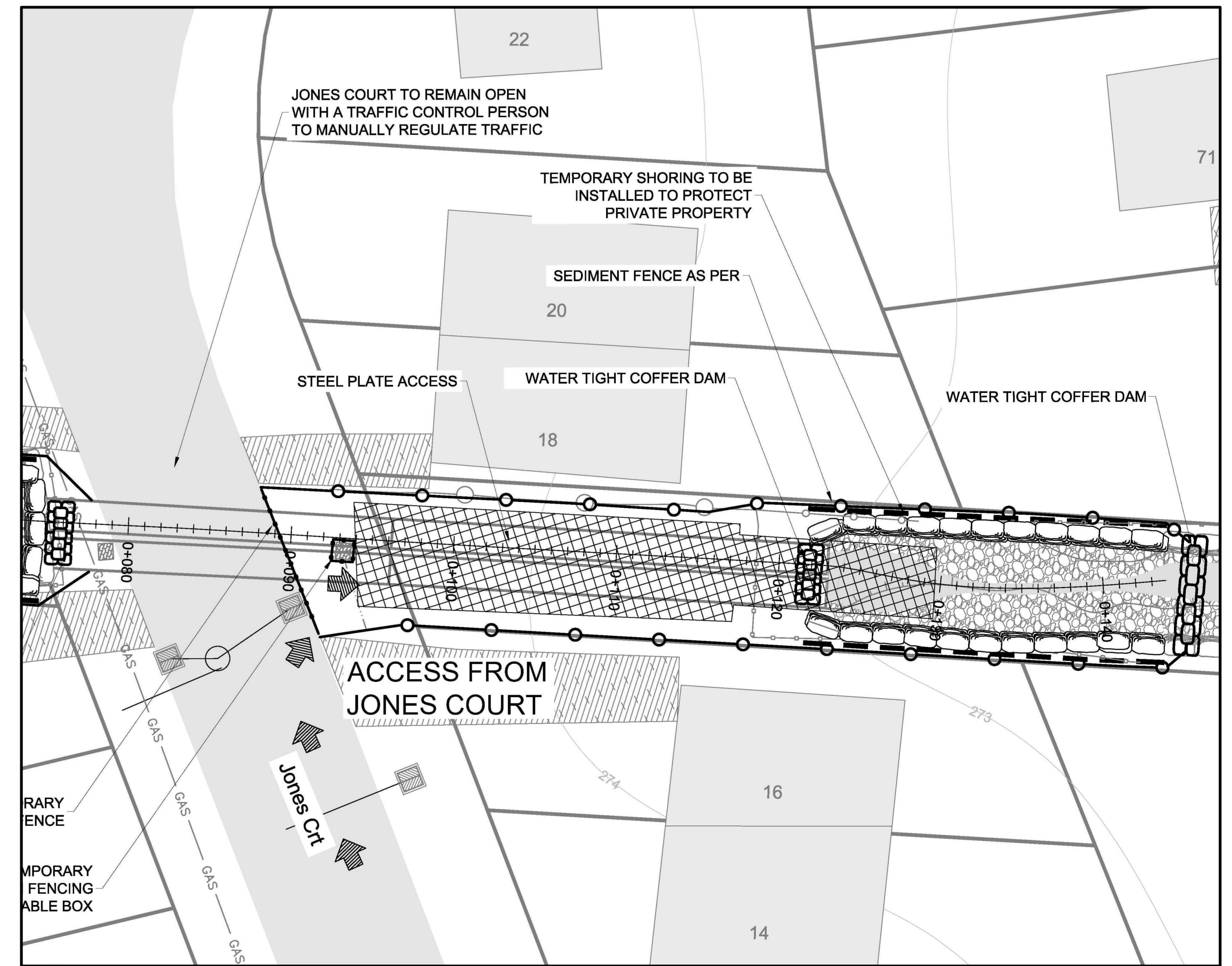
OWNERSHIP AND ACCESS

The Creek within the study area flows through Town owned property, though some access to properties bordering the creek will be required for construction and/or restoration activities.

The section upstream of Jones Court will be accessed via Davis Road, which will be temporarily closed at the access point. The downstream section will be accessed from Jones Court, which will remain open to local traffic. Staging of construction equipment and material will occur along the access routes.

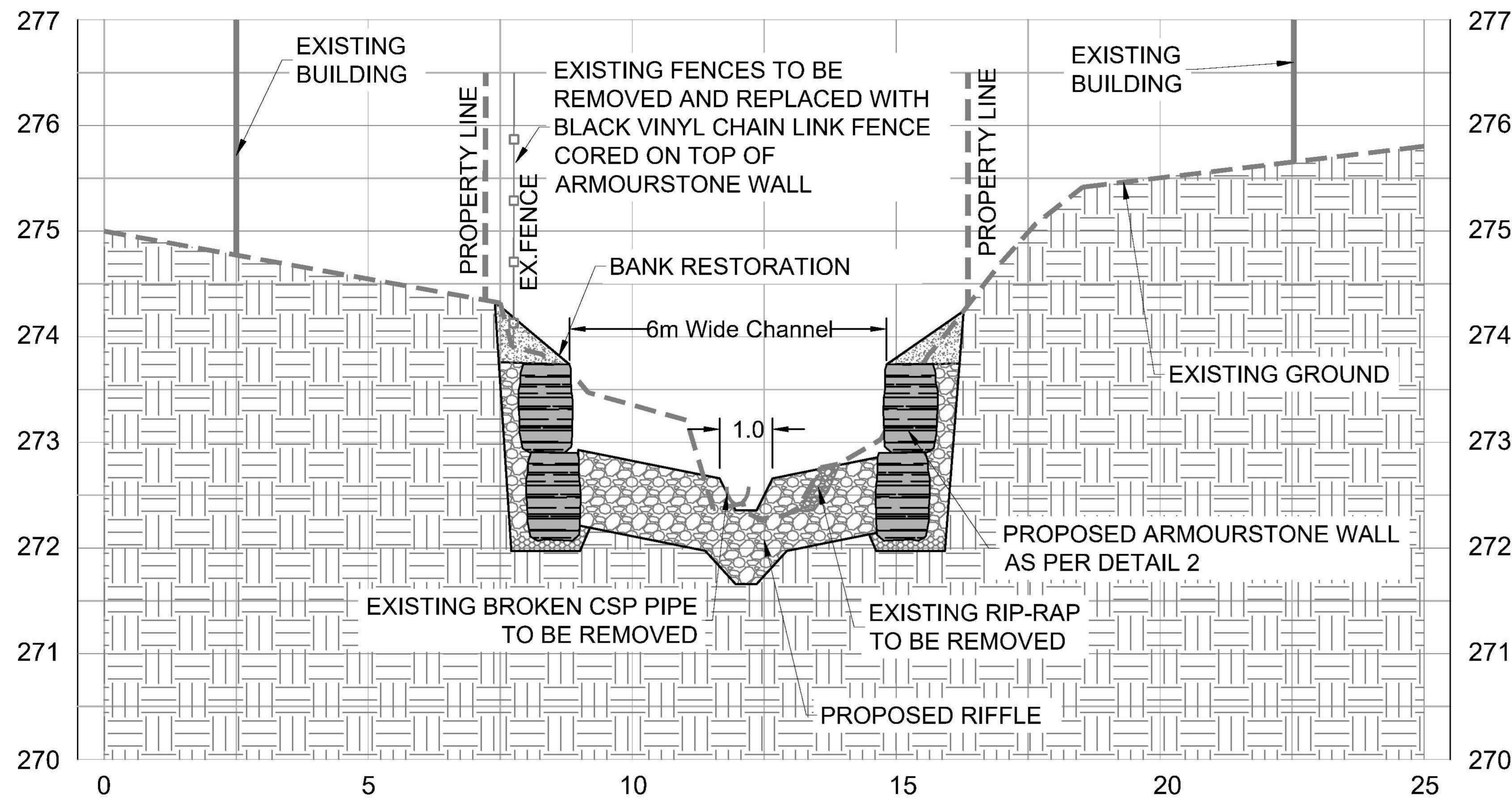


Davis Road Access



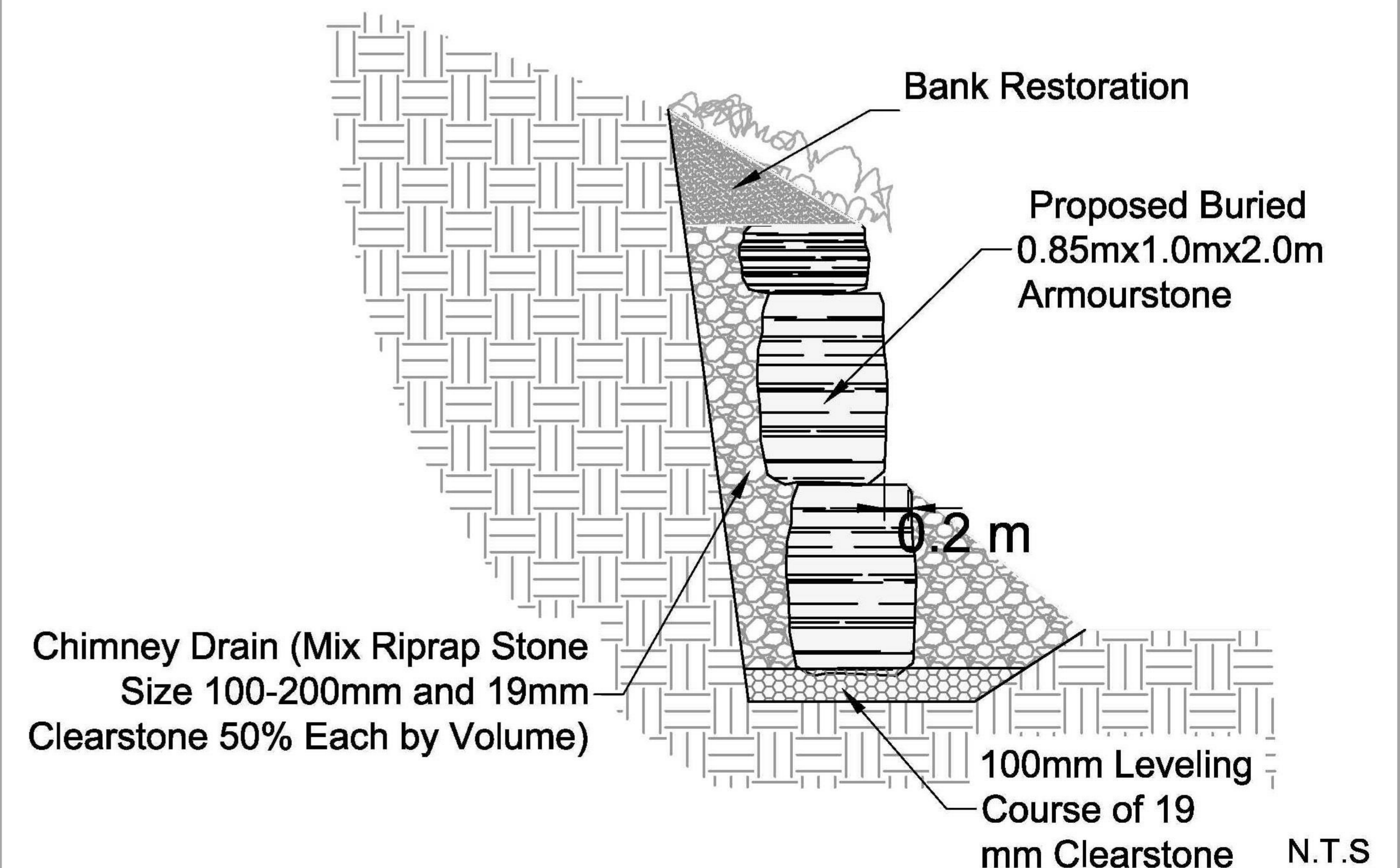
Jones Court Access

DETAILED DESIGN – Stream Rehabilitation

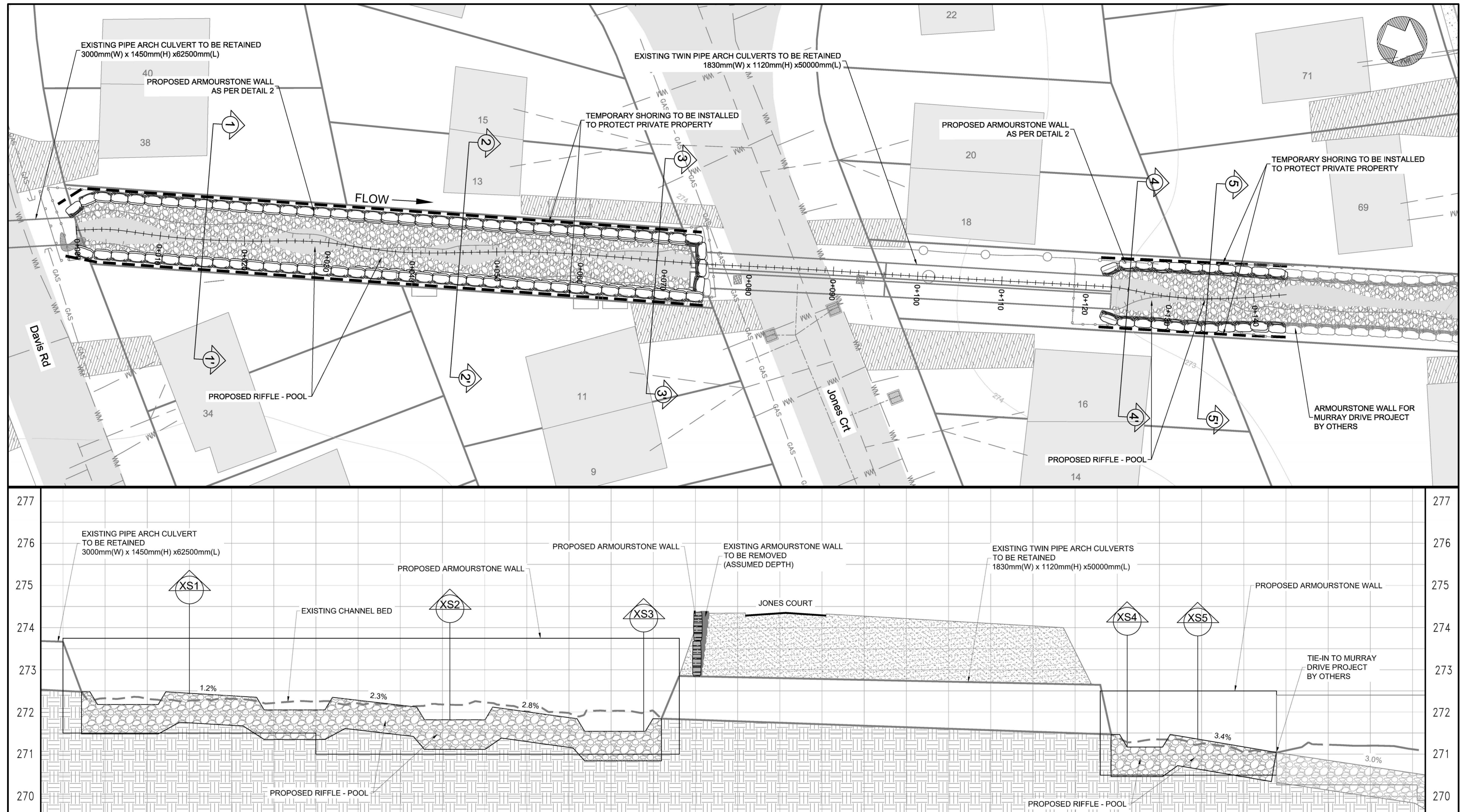


- Armourstone lined channel will reduce erosion risks to private property and improve conveyance of storm flows.
- Natural riffle-pool sequences will restore more natural channel conditions, improving aquatic habitat.
- Banks behind the armourstone walls will be restored with a native upland vegetation seed mix.

DETAIL 2 - TYPICAL BURIED ARMOURSTONE WALL



DETAILED DESIGN – Other Components



- Existing halfpipe CSPs and private bank protection stone to be removed.
- Sediment, woody debris, and litter will be cleared from banks and culverts.
- Existing armourstone wall upstream of Jones Court to be replaced.
- Private fences located on Town property will be replaced and relocated along property boundaries.

DETAILED DESIGN – Site Restoration



Jones Court Stream Rehabilitation

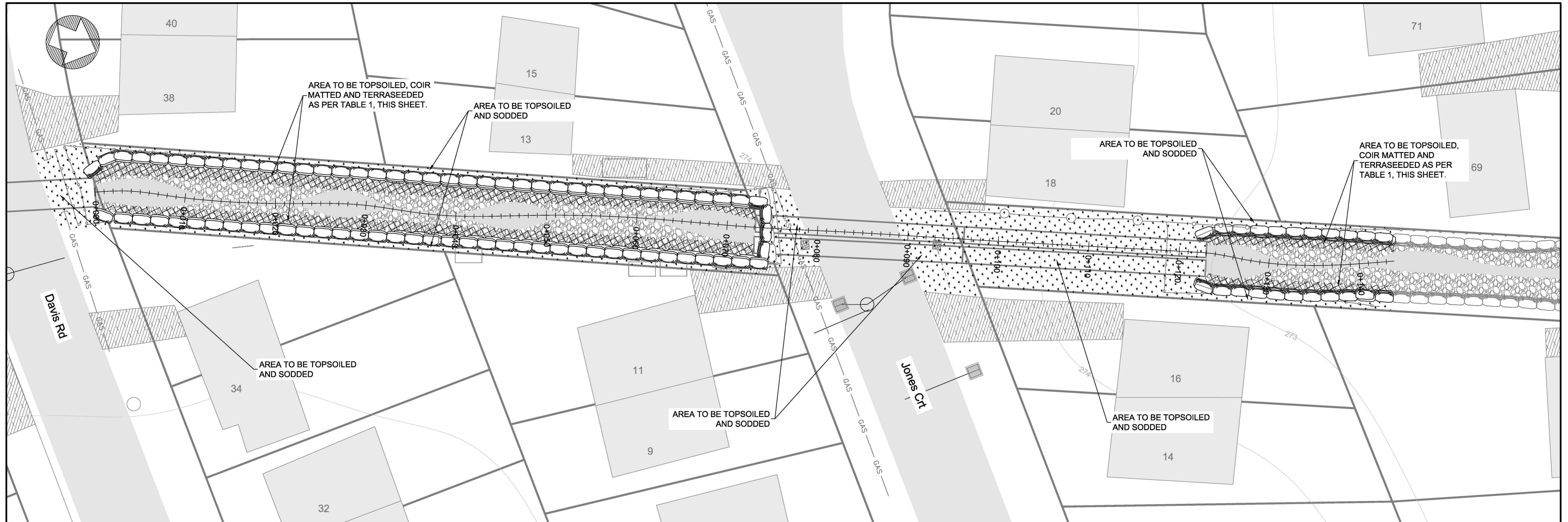


TABLE 1 - SEED MIX FOR UPLAND AREAS

Scientific Name	Common Name	% BY VOLUME
<i>Anemone canadensis</i>	Canada Anemone	1
<i>Asclepias syriaca</i>	Common Milkweed	2
<i>Carex granularis</i>	Limestone Meadow Sedge	15
<i>Elymus virginicus var. virginicus</i>	Virginia Wildrye	40
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	1
<i>Monarda fistulosa var. fistulosa</i>	Wild Bergamot	1
<i>Oenothera biennis</i>	Common Evening Primrose	25
<i>Rudbeckia hirta</i>	Black Eyed Susan	10
<i>Solidago canadensis var. canadensis</i>	Canada Goldenrod	1
<i>Solidago juncea</i>	Early Goldenrod	1
<i>Solidago nemoralis ssp. nemoralis</i>	Gray-stemmed Goldenrod	1
<i>Symphotrichum novae-angliae</i>	New England Aster	1
<i>Verbena urticifolia</i>	White Vervain	1
TOTAL = 100		

- 39 Total Tree Removals
- Topsoil and Sodding Repair on Residential Side of Fence
- Native Herbaceous Seed Mix on Creek Side of Fence

<p>16-322-2802 BRIMWICK AVE. MISSISSAUGA, ONTARIO, L4V 1S2 PHONE: (905) 629-0299, FAX: (905) 629-0289</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>№</th> <th>REVISIONS</th> <th>DATE</th> <th>APPROVED</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>30% Preliminary Design Issued for Town Review</td> <td>Nov. 12th, 2021</td> <td>R.A.</td> </tr> <tr> <td>2.</td> <td>60% Design Drawings</td> <td>April 12th, 2022</td> <td>R.A.</td> </tr> <tr> <td>3.</td> <td>90% Design Drawings</td> <td>June 10th, 2022</td> <td>R.A.</td> </tr> <tr> <td>4.</td> <td>Issued for LSRCA Approval</td> <td>Sept. 18th, 2022</td> <td>R.A.</td> </tr> </tbody> </table>	№	REVISIONS	DATE	APPROVED	1.	30% Preliminary Design Issued for Town Review	Nov. 12th, 2021	R.A.	2.	60% Design Drawings	April 12th, 2022	R.A.	3.	90% Design Drawings	June 10th, 2022	R.A.	4.	Issued for LSRCA Approval	Sept. 18th, 2022	R.A.	<p>LEGEND</p> <ul style="list-style-type: none"> PROPERTY LINE STORM LINES SANITARY LINES EXISTING CONTOUR EXISTING MH EXISTING DRIVEWAY WATERMAIN EXISTING CATCHBASIN 	<p>TOWN OF AURORA REVIEWED DATE _____ 2022 DIRECTOR OF PLANNING & DEVELOPMENT SERVICES</p>	<p>JONES COURT STREAM REHABILITATION</p> <p>RESTORATION PLAN</p>	<p>TOWN OF AURORA PLANNING & DEVELOPMENT SERVICES ENGINEERING & CAPITAL DELIVERY DIVISION</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DESIGN R.A.</td> <td>SCALE 1:200</td> </tr> <tr> <td>DRAWN P.S.</td> <td>REVIEWED</td> </tr> <tr> <td>DATE SEPT.23, 2022</td> <td>SHEET № 10</td> </tr> <tr> <td>DRAWING № RP</td> <td>Page 10 OF 11</td> </tr> </table>	DESIGN R.A.	SCALE 1:200	DRAWN P.S.	REVIEWED	DATE SEPT.23, 2022	SHEET № 10	DRAWING № RP	Page 10 OF 11
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NEXT STEPS

PUBLIC CONSULTATION – September 2022

- Any questions or concerns can be directed to Glen McArthur at the Town of Aurora.
- The project team will compile and review feedback, and will confirm or adapt the detailed design accordingly.

OBTAIN AGENCY APPROVALS – 2022

- Final approvals and permits to be obtained from LSRCA, MECP and DFO.

CONSTRUCTION - 2023

- Construction currently planned for fall 2023.

TO PROVIDE COMMENT, OR TO BE ADDED TO THE STUDY STAKEHOLDER LIST, PLEASE CONTACT:

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THANK YOU
**FOR PARTICIPATING IN THE JONES COURT
STREAM REHABILITATION PUBLIC INFORMATION
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