

County of Bruce

Class EA for the Durham Street Bridge

Community of Walkerton



Presentation to Brockton Council

June 6, 2023

SCHEDULE 'C' CLASS EA STUDY PHASES

PROBLEM DEFINITION



EVALUATION OF ALTERNATIVES



We are Here

EVALUATION OF DESIGN CONCEPTS



PREPARE ENVIRONMENTAL STUDY REPORT



PROJECT IMPLEMENTATION

Class EA Consultation Program

- February 2021 – Project Initiation
 - Notice Published in Walkerton Herald, Hanover Post
 - Letters sent to Review Agencies and Indigenous Groups
 - Notice sent to 400+ Adjacent Property Owners
- May 2021 – Website launched with Signs at Bridge
 - Approximately 20 submission through the website
- October 4, 2022 Public Meeting – 45 in Attendance
- May 11, 2023 Meeting for Businesses – 135 in Attendance



Durham Street Bridge

Bridge Details

- Five span rigid frame T-Beam Girder Bridge with a drop-in centre span with half joints and cantilevered end spans.
- Constructed Circa 1937

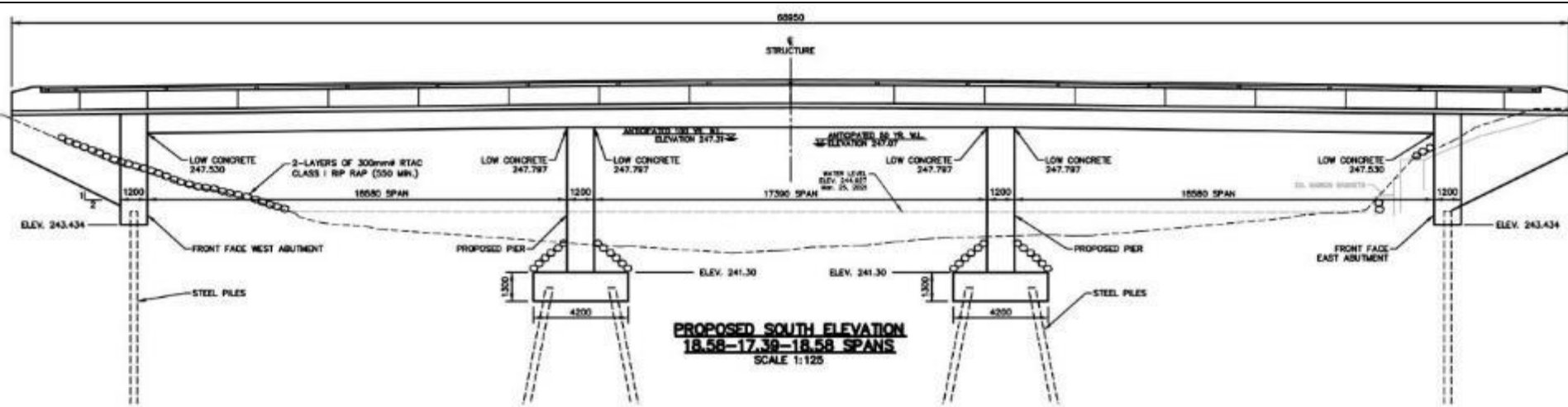


Deficiencies

- Concrete Deterioration
- Safety concerns associated with the drop in centre span



Conceptual Replacement Bridge Design



- Existing bridge has 4 piers – new bridge will have two
- Proposed design will match or slightly improve hydraulic conditions at the bridge
- Proposed middle piers in same general location as existing central piers, minimizing impacts to aquatic habitat

Hydraulic Investigation

- Assessment of the Proposed Durham Street Bridge included:
 - Floodplain model updates with new survey data and the partial removal of the Truax Dam
 - Ensuring no flooding impacts to properties or dyke system
 - Cut and fill assessment for impacts on flood storage
 - Ice jam and ice flow considerations
 - Evaluation of different bridge design alternatives
 - Report submitted to SVCA for review and approval
 - Proposed bridge design reviewed through the model

Detour Alternatives

- Detours Using County Roads – North and South Routes
 - Trucks traffic encouraged to use detour
- Local Detour – Via C.R. 19/Concession 2/Yonge Street
 - Estimated Cost of \$1.9 M + Engineering
- Temporary Vehicle Bridge – Adjacent to Orange Street
 - Estimated Cost of \$6.3 Million + Engineering
- Temporary Pedestrian Bridge – Adjacent to Orange Street
 - Estimated Cost of \$2.6 M + Engineering

County Road North Detour

4

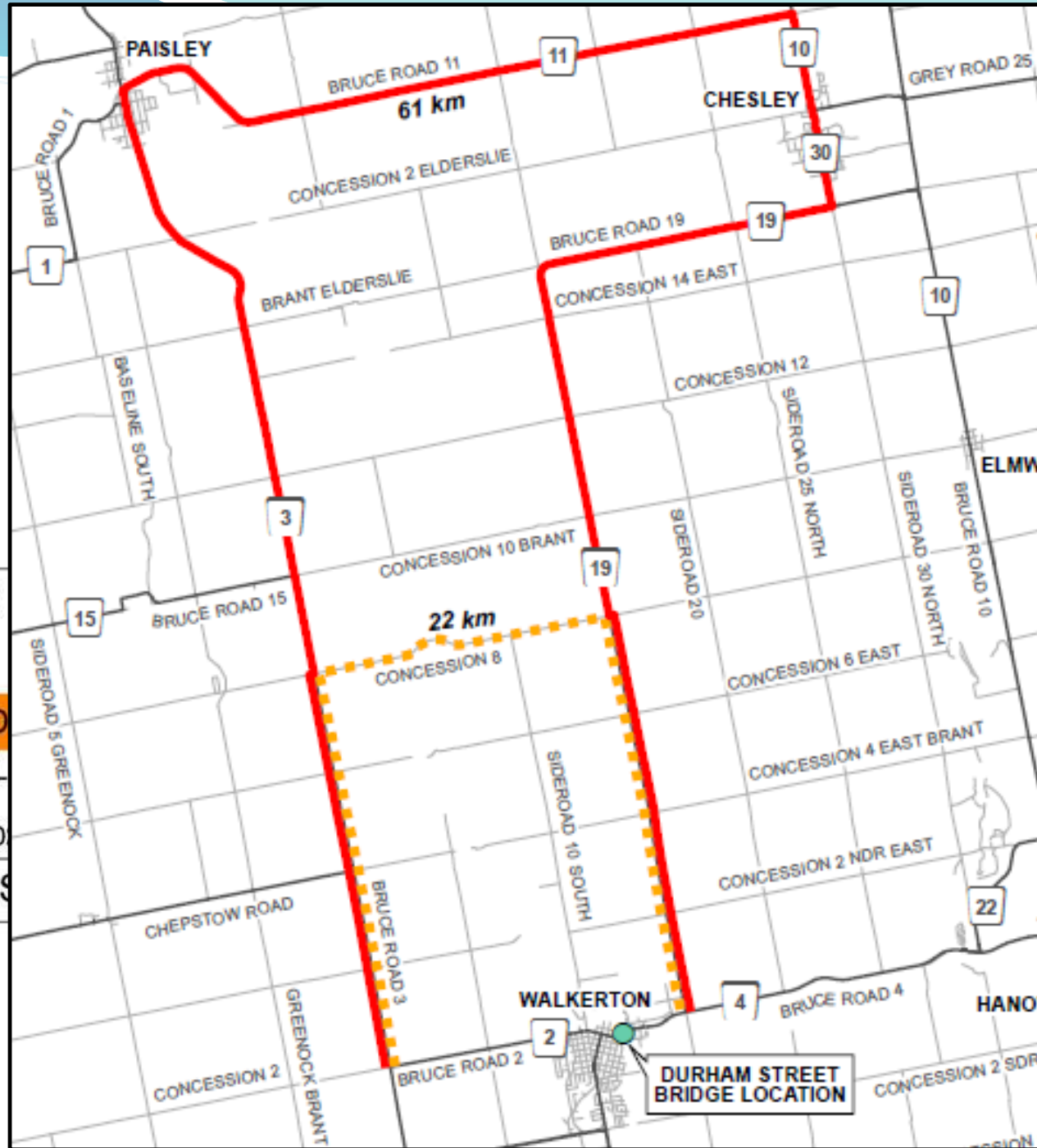
DURHAM STREET (BRUCE RD 4)
CLOSED BETWEEN McNAB ST.
AND WILLIAM ST.

BRIDGE OUT - ROAD CLOSED

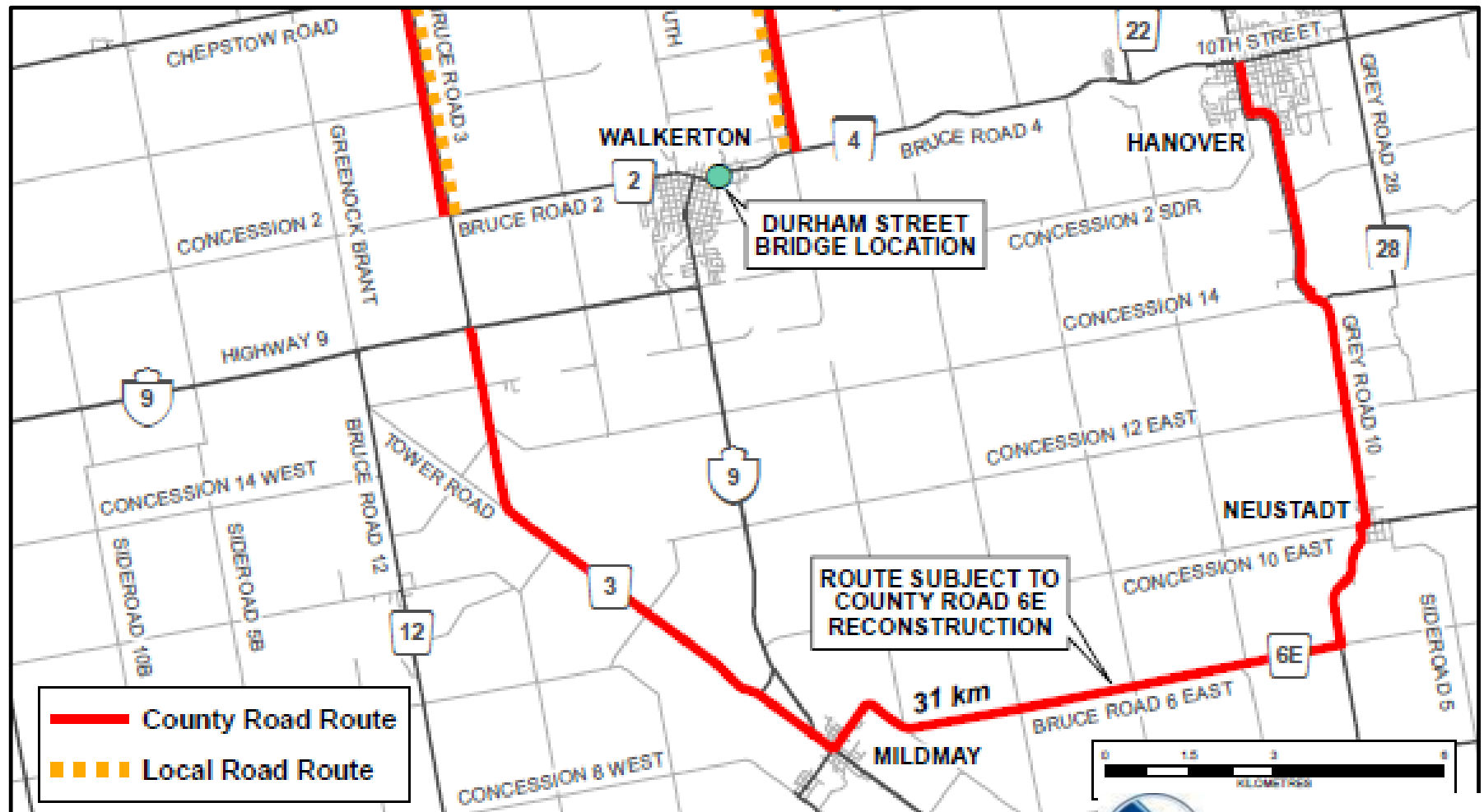
NO THROUGH ACCESS. FOLLOW LOCAL
DETOUR TO ACCESS DOWNTOWN
WALKERTON. SUMMER 2025 TO FALL 2025

ACCESS TO ALL BUSINESSES

EXAMPLE PROJECT SIGN - TC64 & TC64T
NOT TO SCALE



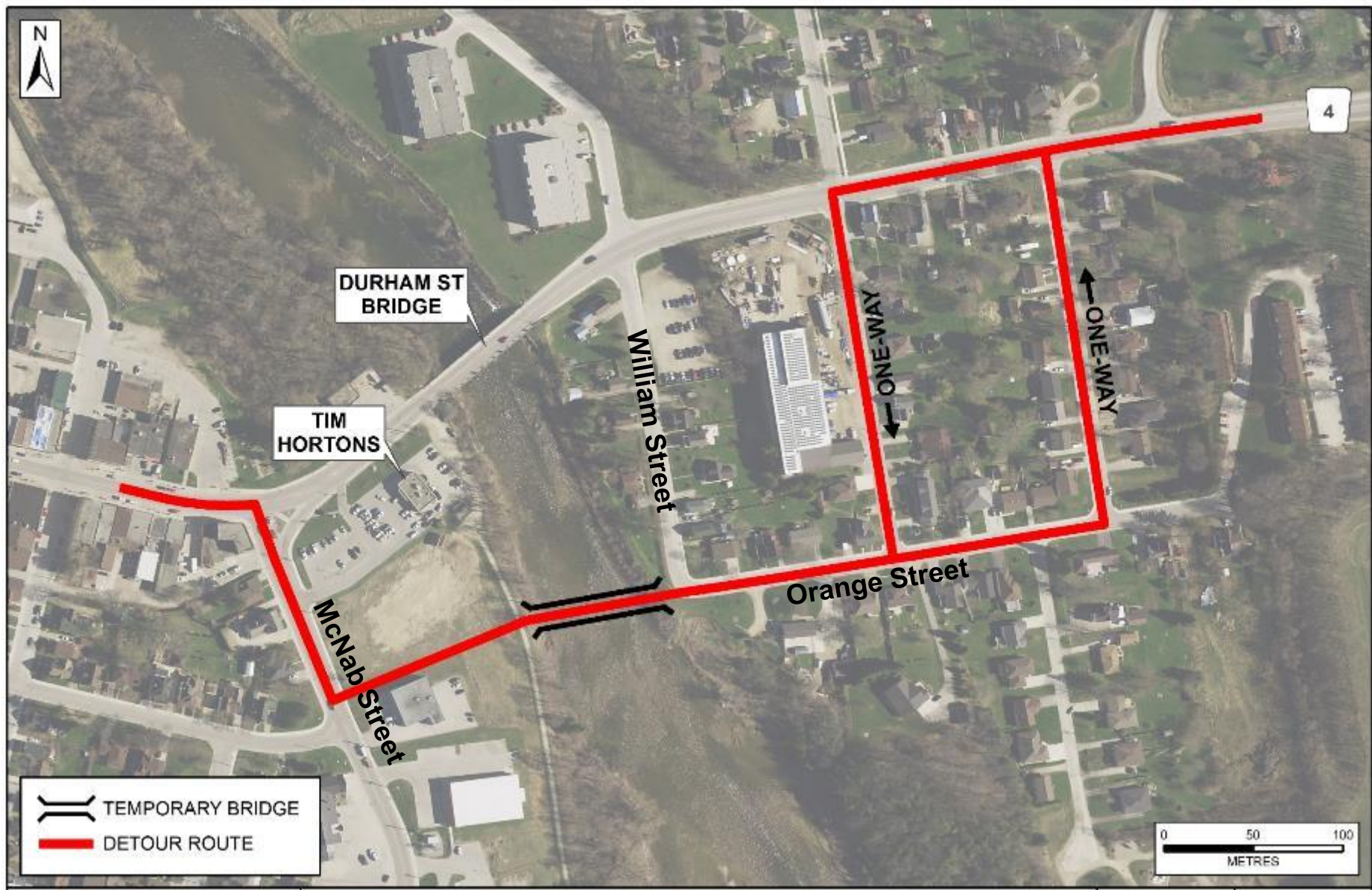
County Road South Detour



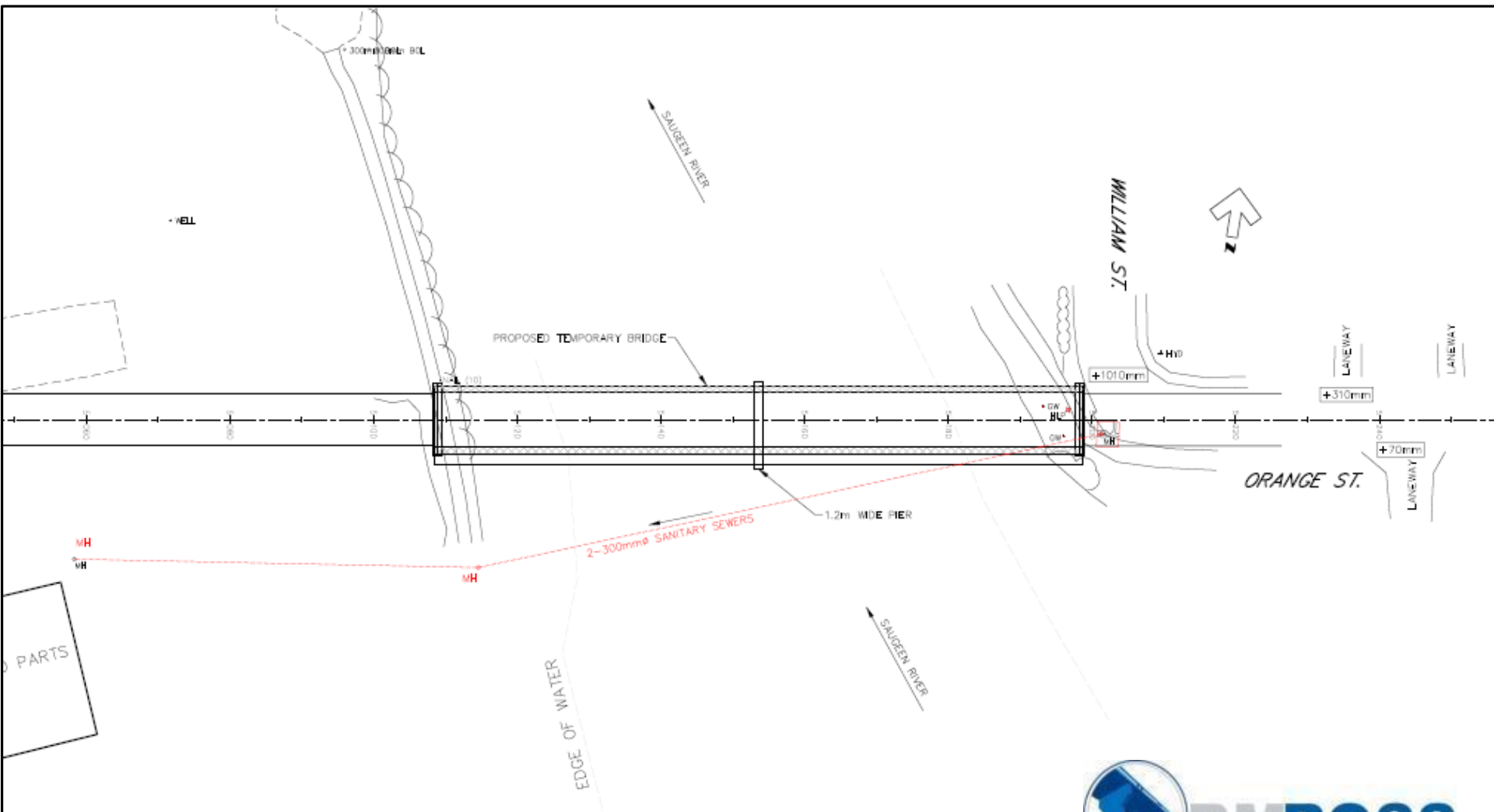
Detour Using Local Roads



Temporary Vehicle Bridge

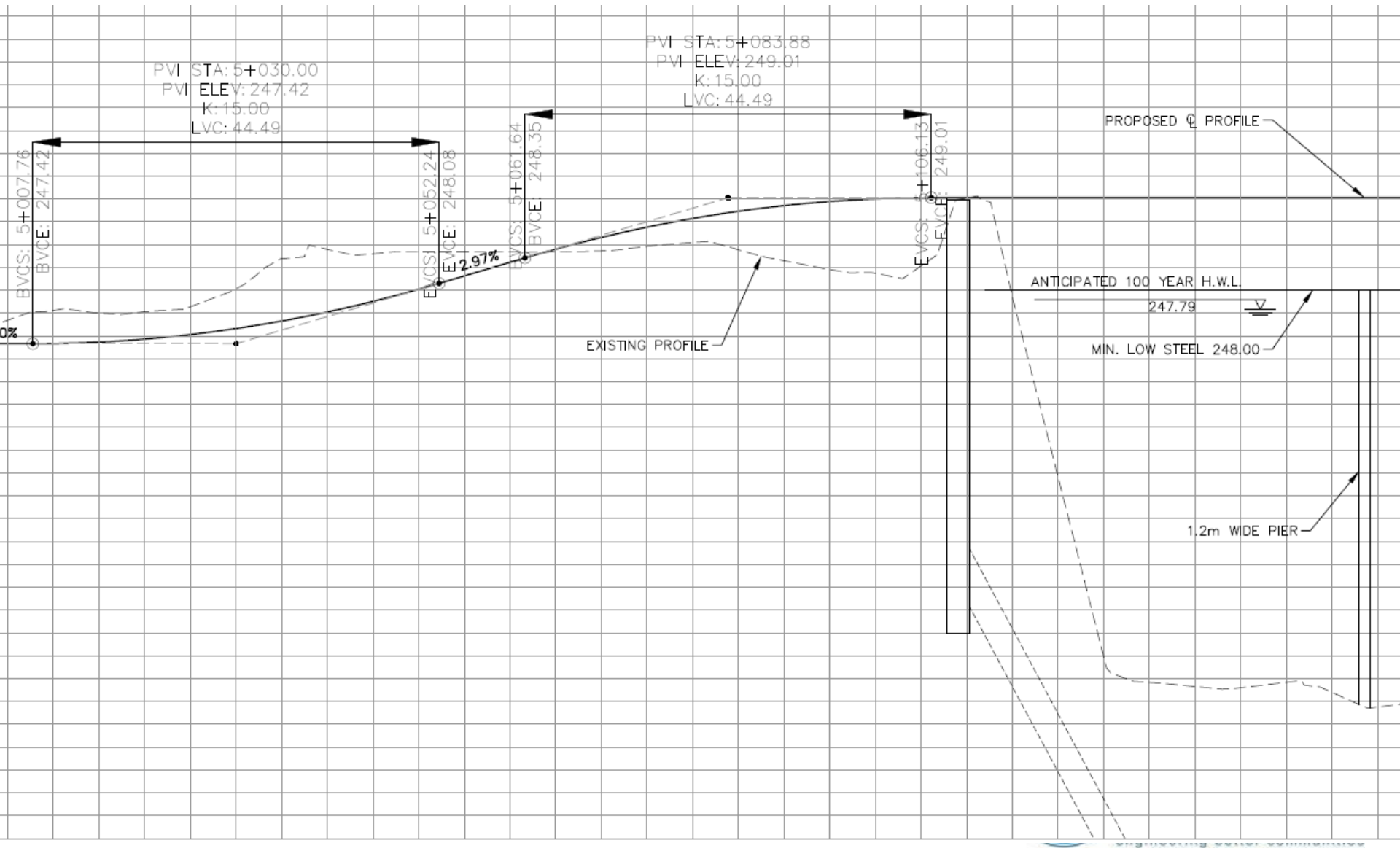


Plan View

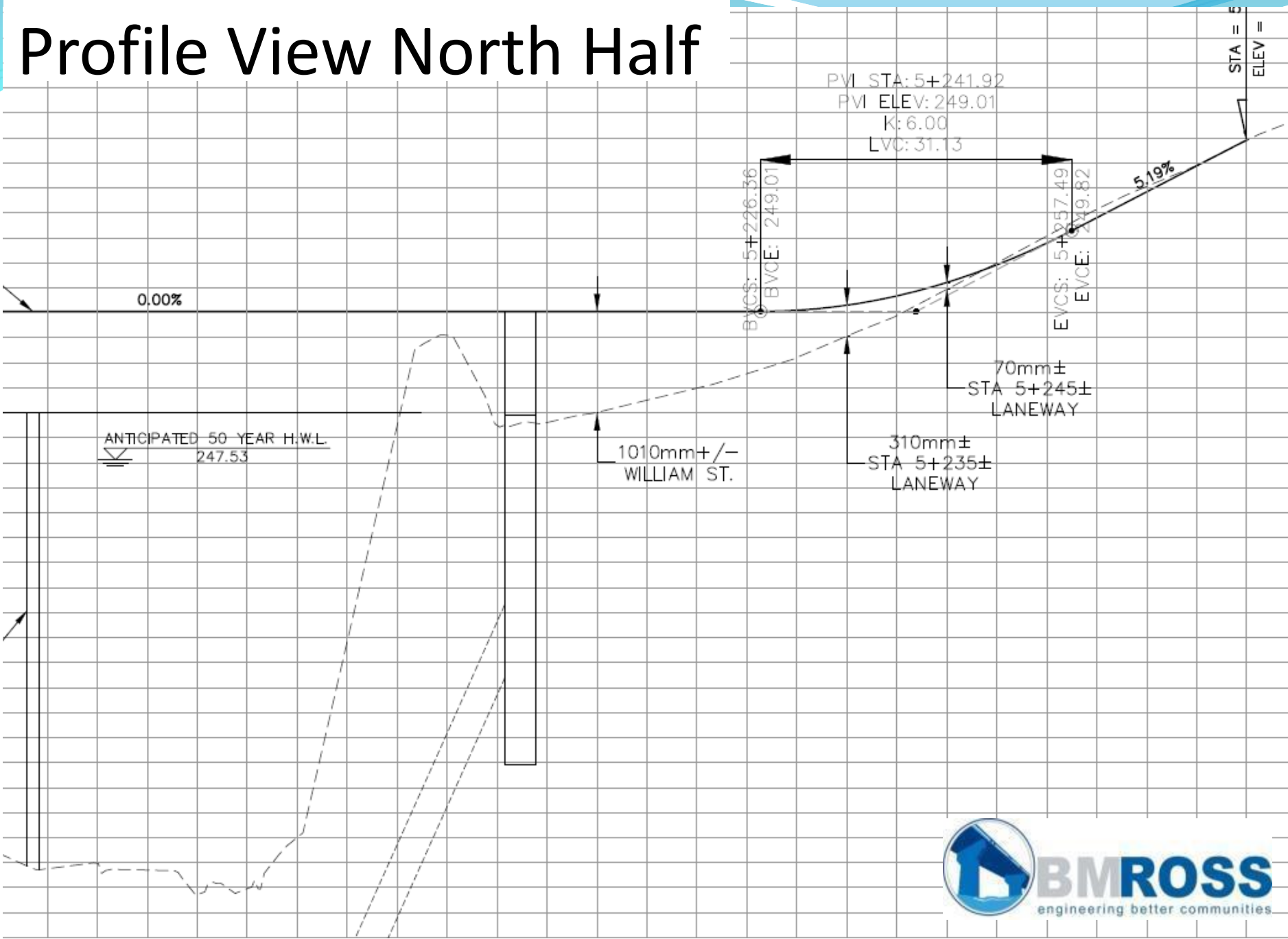


BMROSS
engineering better communities

Profile View South Half



Profile View North Half



View of crossing location looking east toward Orange St.



View of trail at crossing location



View of access toward McNab from crossing location



View of berm at corner of Orange and William



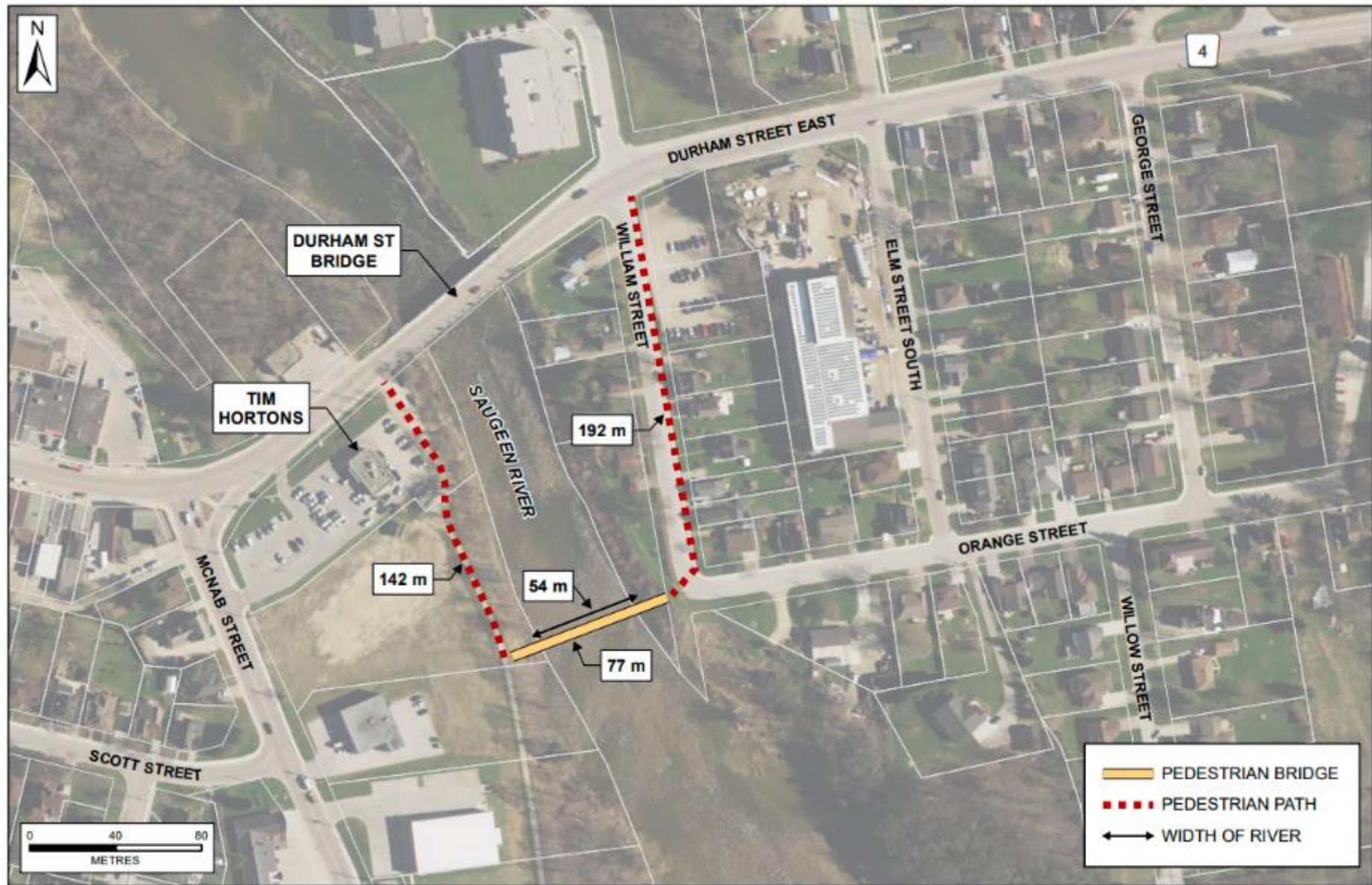
View looking east on Orange from edge of berm



Pier Construction for Multi-Span Bridge



Pedestrian Bridge





Existing Trail in Winter – behind Tim Hortons

Recommended Detour Option

● Local Detour

- Local traffic to use local detour to the north via Bruce Road 19, Concession 2 and Yonge Street
- Transit stops to be created on both sides of the river to convey pedestrians into Walkerton – 12 hour daily service
- Truck traffic encouraged to use truck detour routes
- Concession 2 and Yonge Street to be upgraded with additional lift of asphalt to improve road base
- Improvements planned for intersections of 19/Conc. 2, Yonge/Conc. 2 to improve turning radius
- Improvements at Yonge/Durham Street to provide temporary signals

- Local Detour Route

- Local Detour Route



Proposed Schedule

- **June 2023** – Presentation to Brockton Council
- **Summer 2023** – Presentation to County Council
- **Summer/Fall 2023** - Second Public Information Meeting
- **Summer/Fall 2023** – Update letter to Agencies/ Indigenous Communities
- **Fall/Winter 2023** – Finalize EA Process & Publish Report
- **Winter 2023/24** – Complete Engineering Design & Apply for Approvals (DFO/SVCA/MECP)
- **2024** – Complete detour road upgrades
- **Spring 2025** – Construction Initiated
- **Fall 2026** – Construction Completed

Feedback and Comments Received to Date

- Concerned with length of local detour
- 1700 Residents cut off from the downtown
- Concerns that pedestrian traffic is cut off and that transit approach may not meet required demand
- Concerns with response times for emergency services
- Request for a pedestrian bridge during construction
- Has a wooden timber bridge been investigated vs concrete girder style
- Loss of traffic through the downtown will impact businesses
- Request for a public health survey of residents due to the potential loss of the bridge during construction
- Burden of costs to residents due to extra fuel needed to use local detour vs a temporary vehicle bridge



Feedback and Comments Received to Date, cont'd

- Request to see a breakdown of the temporary bridge in Paisley vs the potential temporary bridge in Walkerton
- Request for an Economic Impact Study
- Concerns about increased accidents at intersections for potential detour
- Concerns about the detour closing during winter storms
- Long list of marketing and campaign ideas generated through consultation with business owners
- The County to work with Brockton Staff to continue furthering the dialogue and voice of the business owners.
- Frequent meetings or possibly ad-hoc committee with businesses

