Addendum to the Wastewater Capacity Improvements in Central Mississauga Schedule C Municipal Class Environmental Assessment





Public Information Centre

Applewood United Church – Ann Graham Community Hall

April 24, 2025

5:00 pm – 7:00 pm

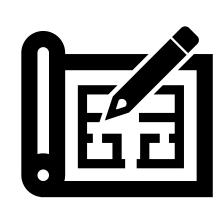
Welcome!



The purpose of this Public Information Centre is to:



Provide an overview of the Addendum to the 2022 Municipal Class Environmental Assessment (MCEA) Study underway for the Wastewater Capacity Improvements in Central Mississauga. This includes a summary of alternatives and recommendations for proposed watermain upgrades from Stillmeadow Road to Dixie Road in the City of Mississauga.



Provide information about the detailed design process underway for sanitary works along Queensway east of Hurontario Street to Etobicoke Creek and preconstruction for Queensway and Stanfield.



Answer questions and provide an opportunity to understand more about the project.

Peel Region is situated on the Treaty Lands and Territory of the Mississaugas of the Credit First Nation as well as the traditional territory of the Anishinabek, Huron-Wendat and Haudenosaunee peoples.



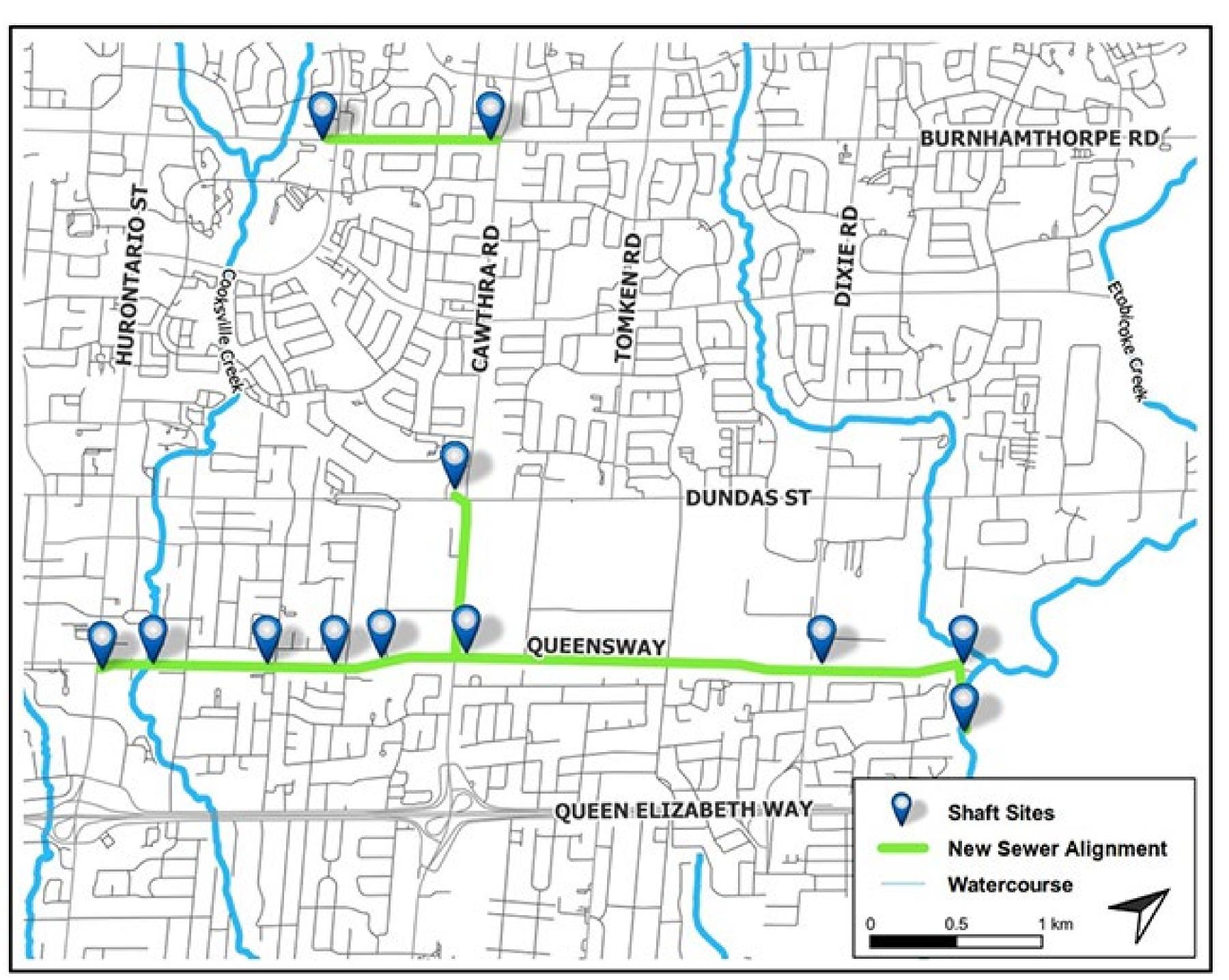
Project Background – Sanitary Work



- In 2022, the Region of Peel (the Region) completed a Schedule C Municipal Class Environmental Assessment (MCEA) for the Wastewater Capacity Improvements in Central Mississauga.
- A new Queensway East Trunk Sewer (QET)
 was recommended to update sanitary
 infrastructure from Hurontario Street to
 Etobicoke Creek (see map).
- The detailed design of wastewater works along Queensway east of Hurontario Street to Etobicoke Creek is underway, in accordance with the 2022 Municipal Class Environmental Assessment.
- Preconstruction details for the works at Queensway and Stanfield is presented on information boards 23 – 29.



For details regarding the 2022 MCEA and integration with the current EA Addendum study, please visit the website link in the QR Code.



2022 Municipal Class Environmental Assessment Sanitary Improvements



EA Addendum – Watermain Improvements



- Following the completion of the 2022 Municipal Class Environmental Assessment process, the Region identified the need to increase the resiliency and capacity of the water distribution system in the Queensway area (Pressure Zone 2).
- Water distribution system improvements were not included in the 2022 Municipal Class Environmental Assessment.
- The Region initiated an Addendum to the 2022
 Municipal Class Environmental Assessment in April
 2024 to review proposed watermain upgrades
 along the Queensway from Stillmeadow Road to
 Dixie Road in the City of Mississauga.
- The addition of a watermain is intended to provide system resiliency and additional capacity to support growth in the Region.



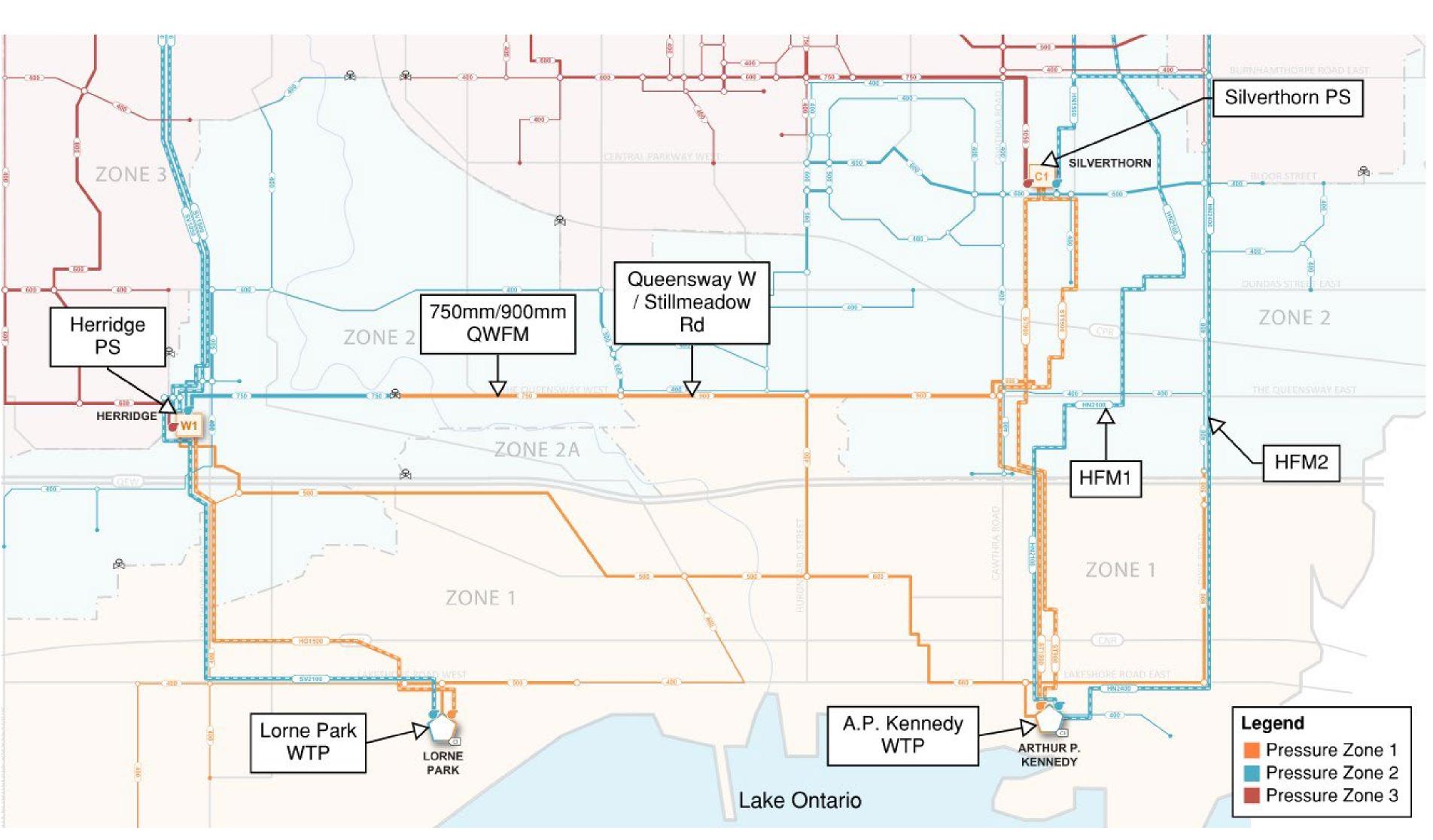
Municipal Class Environmental Assessment Addendum Study Area



Driver for Watermain Improvements



- The Region's water transmission system mainly moves water from the south to the north through two main pipelines: one from APK Water Treatment Plant (East) and the other from Lorne Park Water Treatment Plant (West). The new Queensway watermain will improve the ability to transfer water between the east and west and add a backup system.
- Upgrading the existing Queensway large watermain will provide water needed to support anticipate population intensification in Central Mississauga and improve overall system reliability.
- The condition of the existing Queensway West watermain requires extensive rehabilitation to extend its service life.
- A short section of the existing Queensway
 West watermain under the Hurontario and
 Queensway intersection is too small, and
 its condition is unknown. This section is
 recommended to be replaced.



Peel Region's Water Transmission System



Alternative Solutions – Watermain Upgrades



Five (5) alternative solutions for proposed watermain upgrades along the Queensway from Stillmeadow Road to Dixie Road in the City of Mississauga, were identified and evaluated:

- Alternative 1 Do Nothing (no rehabilitation or construction work on the existing Queensway West Watermain (QWFM) or large watermain). This is not a feasible alternative and is considered for comparison purposes to evaluate the impacts.
- Alternative 2 Full pipe replacement with new 1500mm watermain (same alignment).
- Alternative 3 Full pipe replacement with new 1500mm watermain (new alignment).
- Alternative 4 Full pipe replacement with new 1500mm watermain (new alignment) & rehabilitation of the existing QWFM.
- Alternative 5 Hybrid renewal options.

The alternative solutions were evaluated using the following criteria:

Technical Considerations

Cultural Environment

Natural Environment

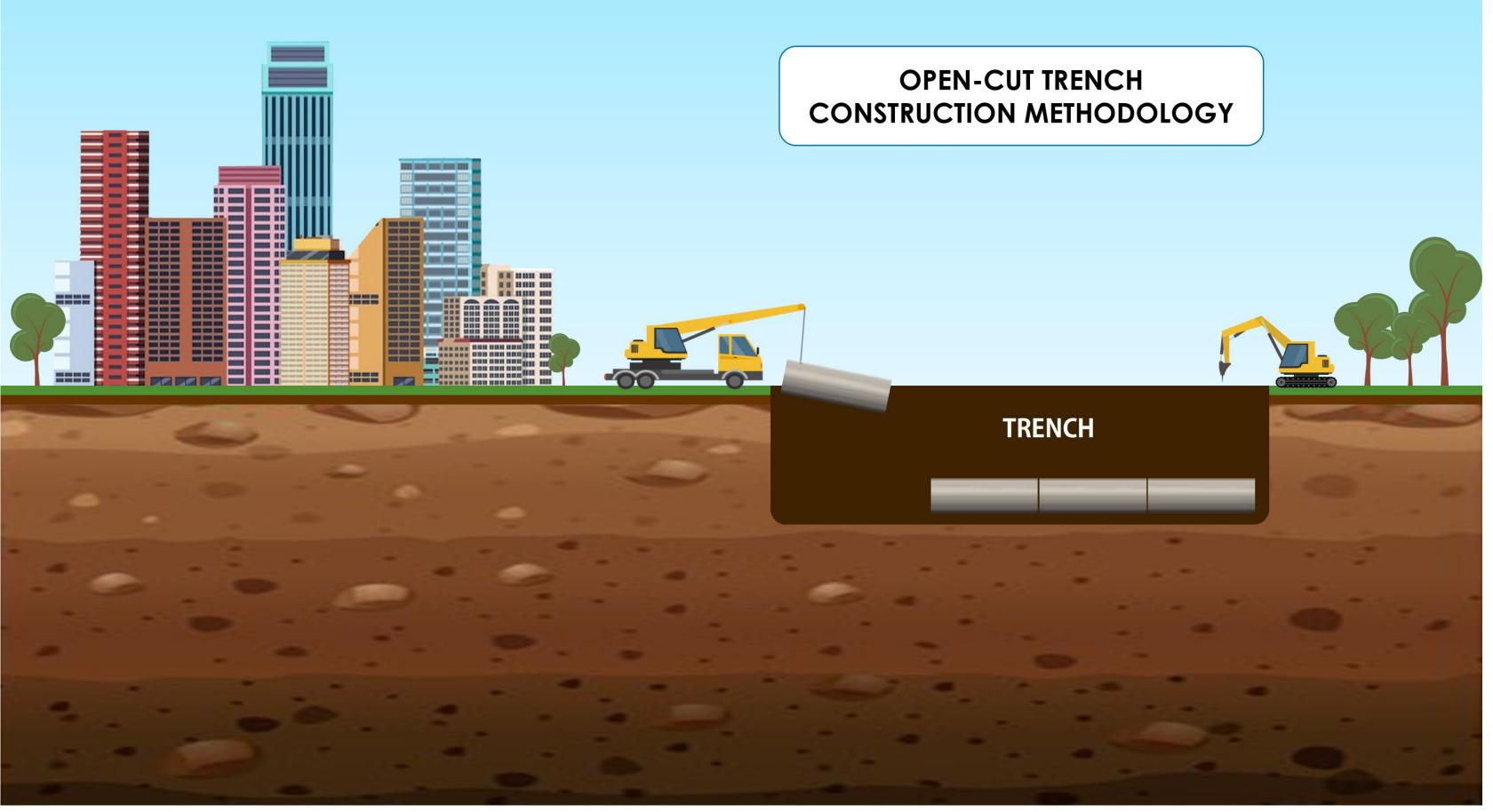
Socio-Economic Environment



Alternative 2 - Full Pipe Replacement with New 1500mm Watermain (Same Alignment)







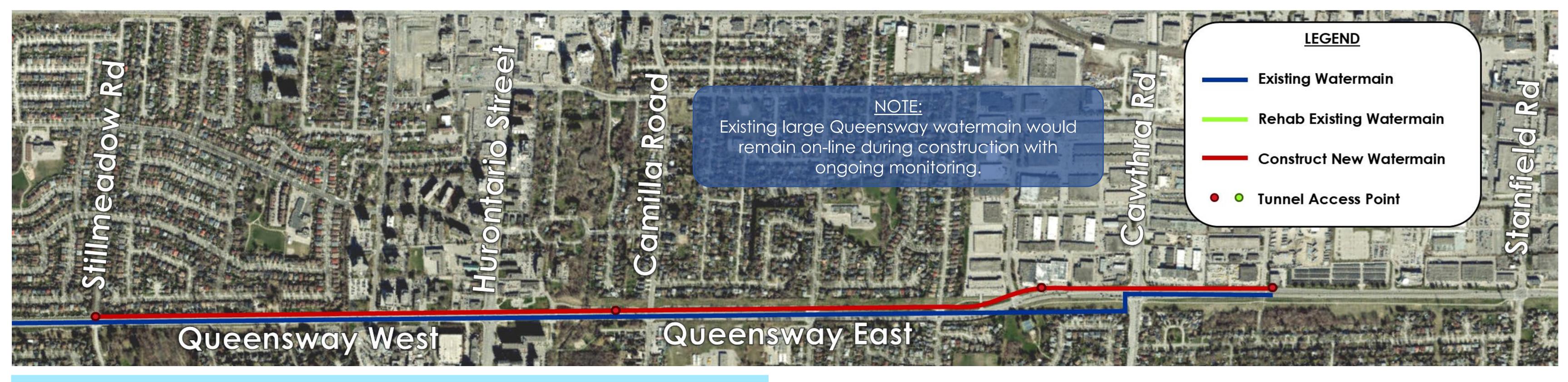
- <u>Technical Considerations</u>: Alternative is less energy efficient at Zone 2 pressures resulting in higher operational costs and greater construction risks at intersections (e.g., traffic & utilities).
- <u>Cultural Environment</u>: Higher impact potential for open cut sections near Stanfield Road and Dixie Road.
- <u>Natural Environment</u>: Digging trenches results in large quantities of excess soil to manage off-site.
- <u>Financial Considerations</u>: Moderate capital cost, but lower cost at the end of service life for rehabilitation.
- <u>Socio-Economic Environment</u>: Greater disruptions associated with open cut construction (single lane closure along entire length).

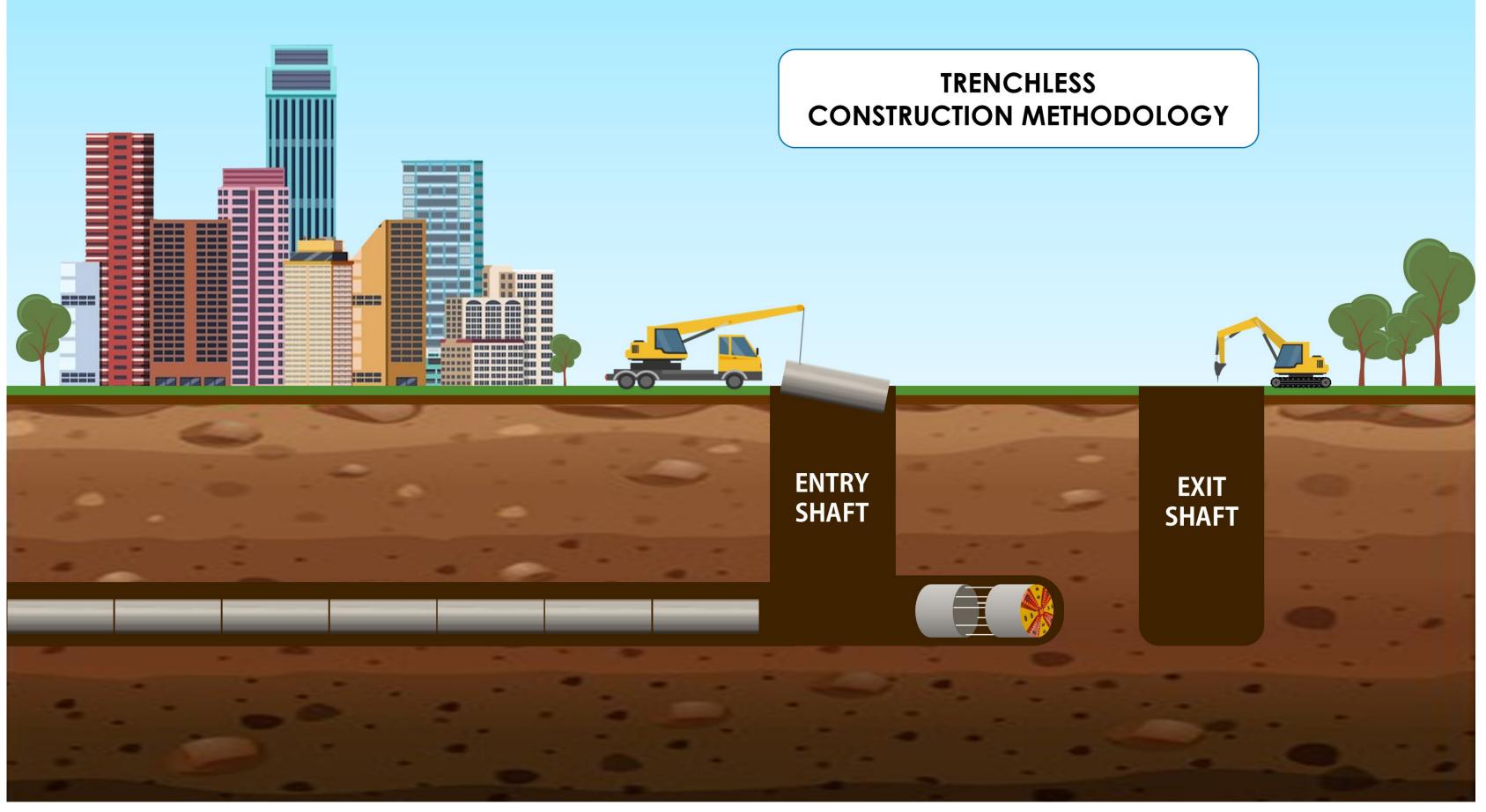
Evaluation Summary: Moderately Preferred



Alternative 3 - Full Pipe Replacement with New 1500mm Watermain (New Alignment)







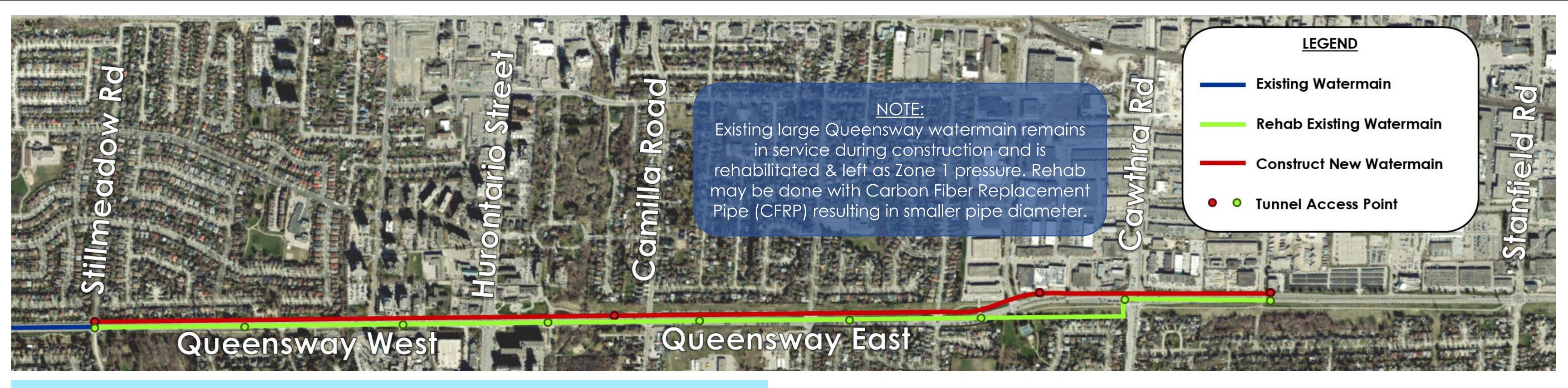
- <u>Technical Considerations</u>: Alternative is energy efficient at Zone 2 pressures resulting in lower operational costs and tunnelling provides ability to avoid utilities and constraints.
- <u>Cultural Environment</u>: No new impacts since work would be in the same area as the sanitary tunnel access points.
- <u>Natural Environment</u>: Impacts limited due to digging small tunnel access points only (no trenches) and tunnelling under sensitive features.
- <u>Financial Considerations</u>: Medium to high capital cost, although it avoids the need for near term infrastructure upgrades.
- Socio-Economic Environment: Tunnelling minimizes disruptions with localized impacts at tunnel access points which can be mitigated.

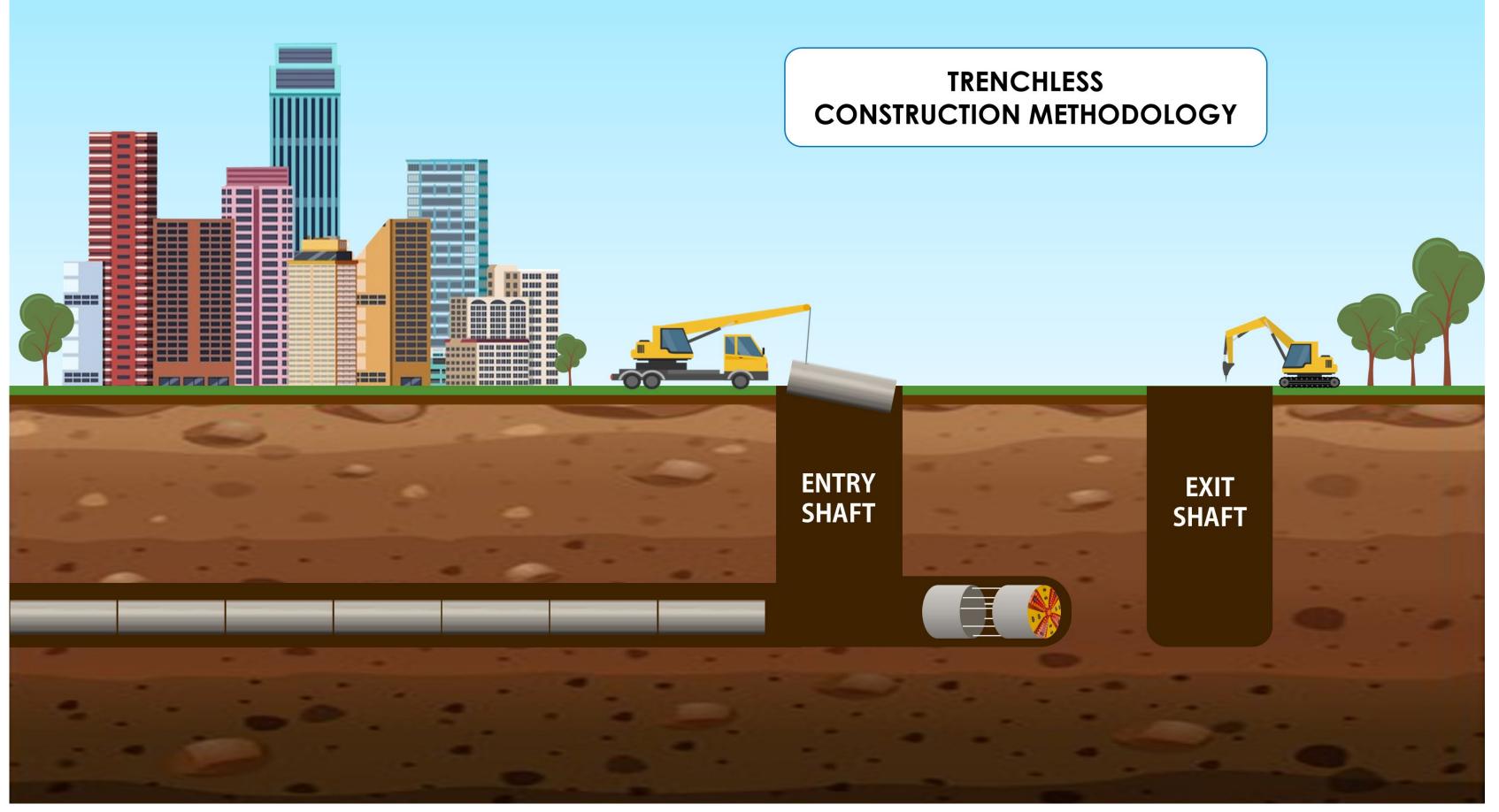
Evaluation Summary: Most Preferred



Alternative 4 - Full Pipe Replacement with New 1500mm Watermain (New Alignment) & Rehabilitation of QWFM







- <u>Technical Considerations</u>: Alternative is energy efficient at Zone 2 pressures resulting in lower operational costs and tunnelling provides ability to avoid utilities and constraints.
- Cultural Environment: No new impacts since work would be in the same areas as sanitary tunnel access points.
- <u>Natural Environment</u>: Impacts limited due to digging small tunnel access points (no trenches) and tunnelling under sensitive features.
- <u>Financial Considerations</u>: High capital cost and operating two systems will result in increased operating costs.
- <u>Socio-Economic Environment</u>: Tunnelling minimizes disruptions with localized impacts at tunnel access points which can be mitigated.

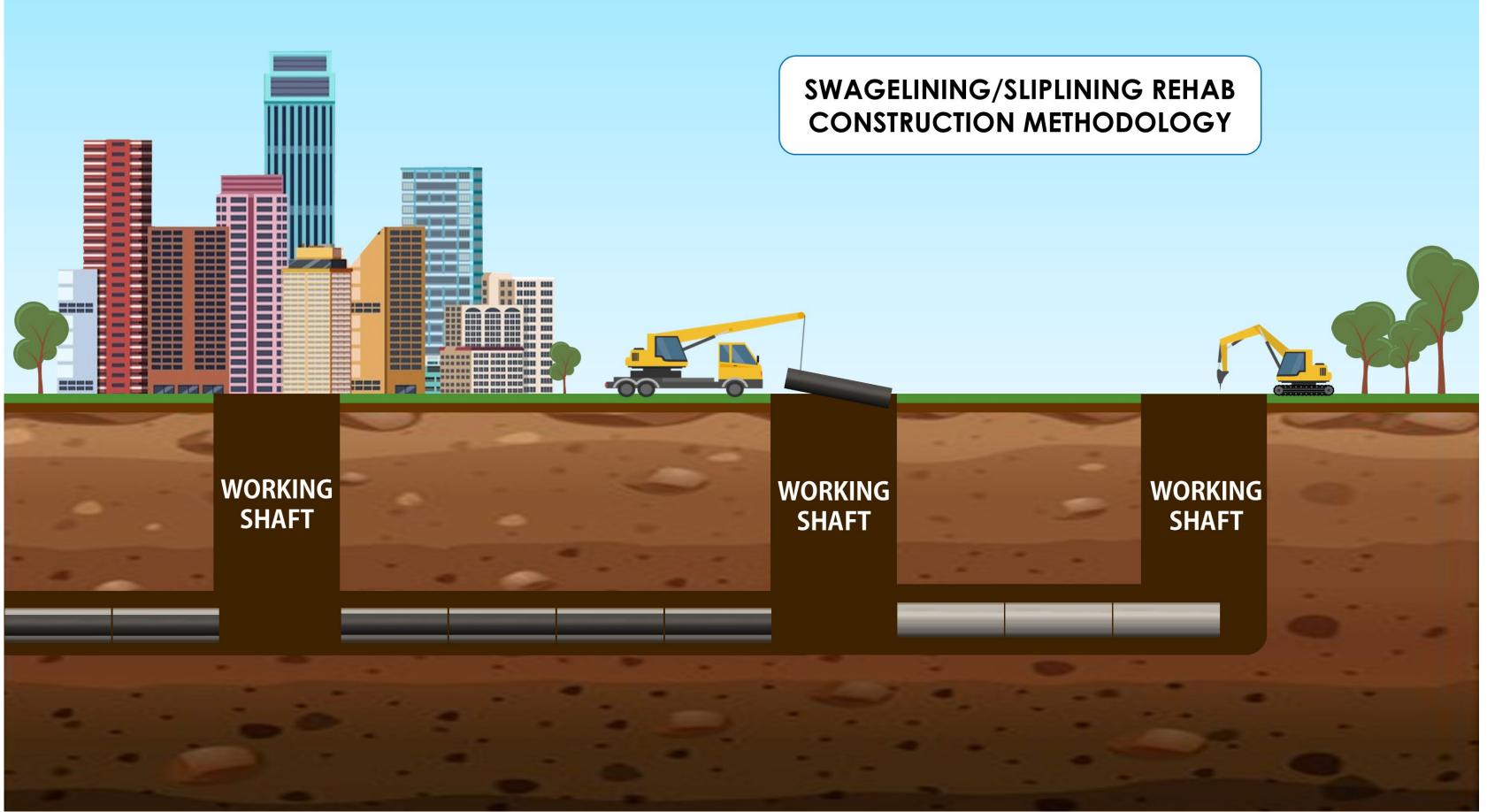
Evaluation Summary: Moderately Preferred



Alternative 5 - Hybrid Renewal Options (Combined Rehabilitate and Replace)







- <u>Technical Considerations</u>: Existing watermain would be offline for extended period for rehabilitation work which impacts water supply.
- <u>Cultural Environment</u>: No new impacts since work would be in the same area as the sanitary tunnel access points.
- Natural Environment: Limited impacts due to small tunnel access points and trenchless rehabilitation under sensitive features.
- <u>Financial Considerations</u>: Low capital cost, but long-term replacement costs are high.
- <u>Socio-Economic Environment</u>: Depending on rehabilitation method and required number of tunnel access points, moderate to high impacts and potential for disruptions are anticipated.

Evaluation Summary: Moderately Preferred



Evaluation Summary: Watermain Upgrade Solutions Peel Region Working with you



Full Replacement Options ————————————————————————————————————				+ Hybrid Options			
Factors	Same Alignment	New Alignment (Do nothing to existing watermain)	New Alignment (Rehab existing watermain)	CFRP Reinforcement (internal)		Upsize 750 mm Section with 900 mm PCCP and Rehab Ex. 900 mm Section with CFRP	With Yill mm P((P and)
Social Environment	Least Preferred	Most Preferred	Moderately Preferred	Least Preferred	Moderately Preferred	Least Preferred	Least Preferred
Cultural Environment	Moderately Preferred	Most Preferred	Moderately Preferred	Moderately Preferred	Most Preferred	Moderately Preferred	Moderately Preferred
Natural Environment	Least Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred	Most Preferred	Moderately Preferred	Moderately Preferred
Technical Environment	Moderately Preferred	Most Preferred	Moderately Preferred	Least Preferred	Least Preferred	Least Preferred	Least Preferred
Financial	Most Preferred	Moderately Preferred	Least Preferred	Least Preferred	Moderately Preferred	Least Preferred	Moderately Preferred
Overall Summary	Moderately Preferred	Most Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred	Least Preferred	Least Preferred

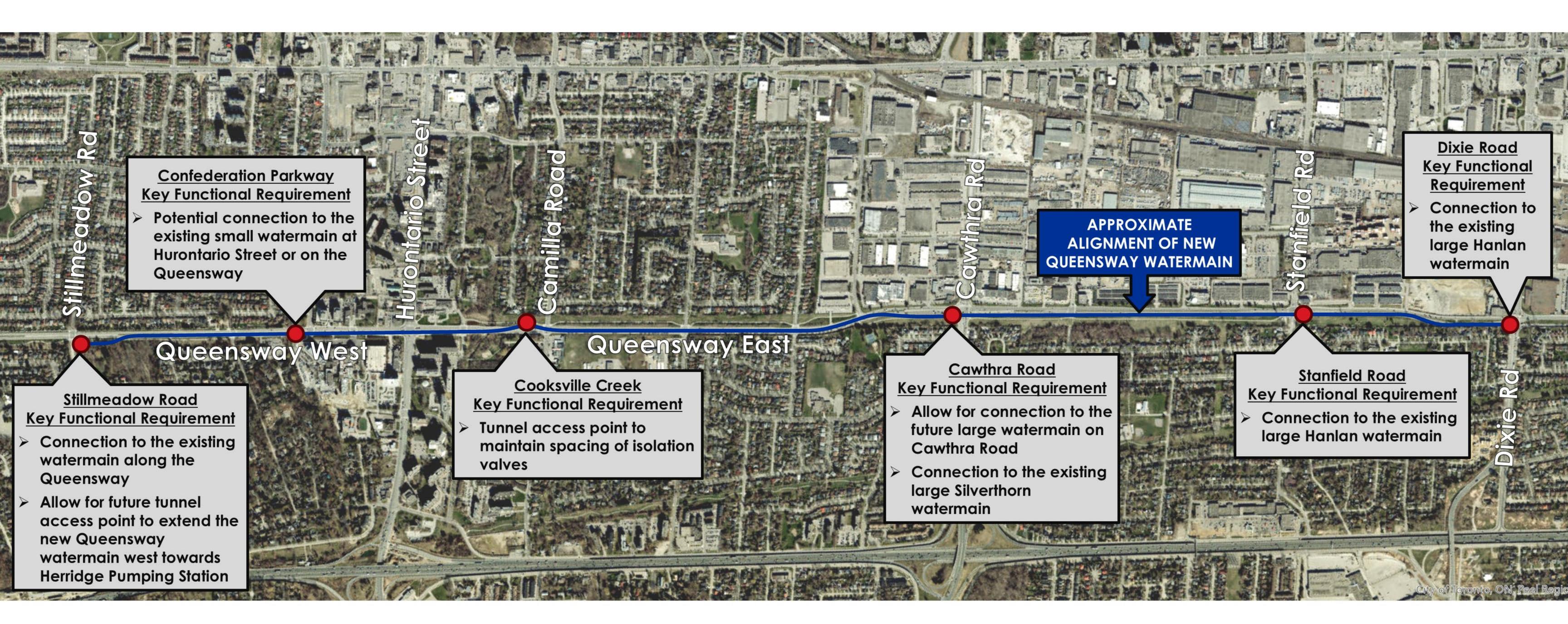
The preferred water system upgrade is full pipe replacement with 1500 mm diameter prestressed concrete cylinder pipe (PCCP) with the existing large Queensway watermain taken out of service for the following reasons:

- Tunneling reduces socio-economic and environmental impacts with localized impacts only at tunnel access point sites
- Limited cultural/ natural environment impacts due to small tunnel access point sites
- Improved technical benefits
- Added major east-west transfer transmission main in Zone 2
- Increased flow capacity, providing flexibility in supplying future flow requirements
- Eliminates the need to rehabilitate the QWFM



Preferred Watermain Upgrade Solution

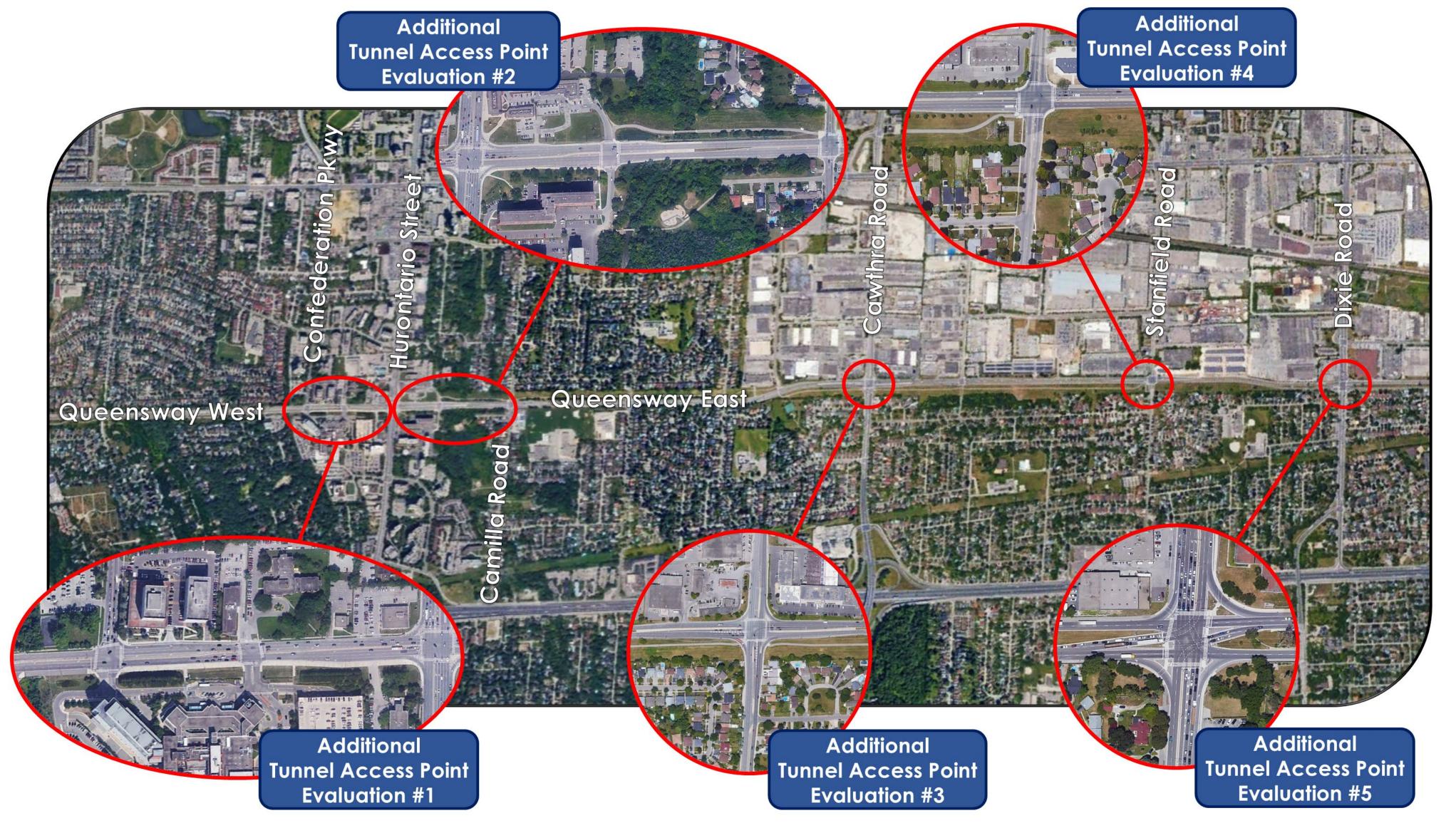




Alternative Design Concepts – Tunnel Access Points



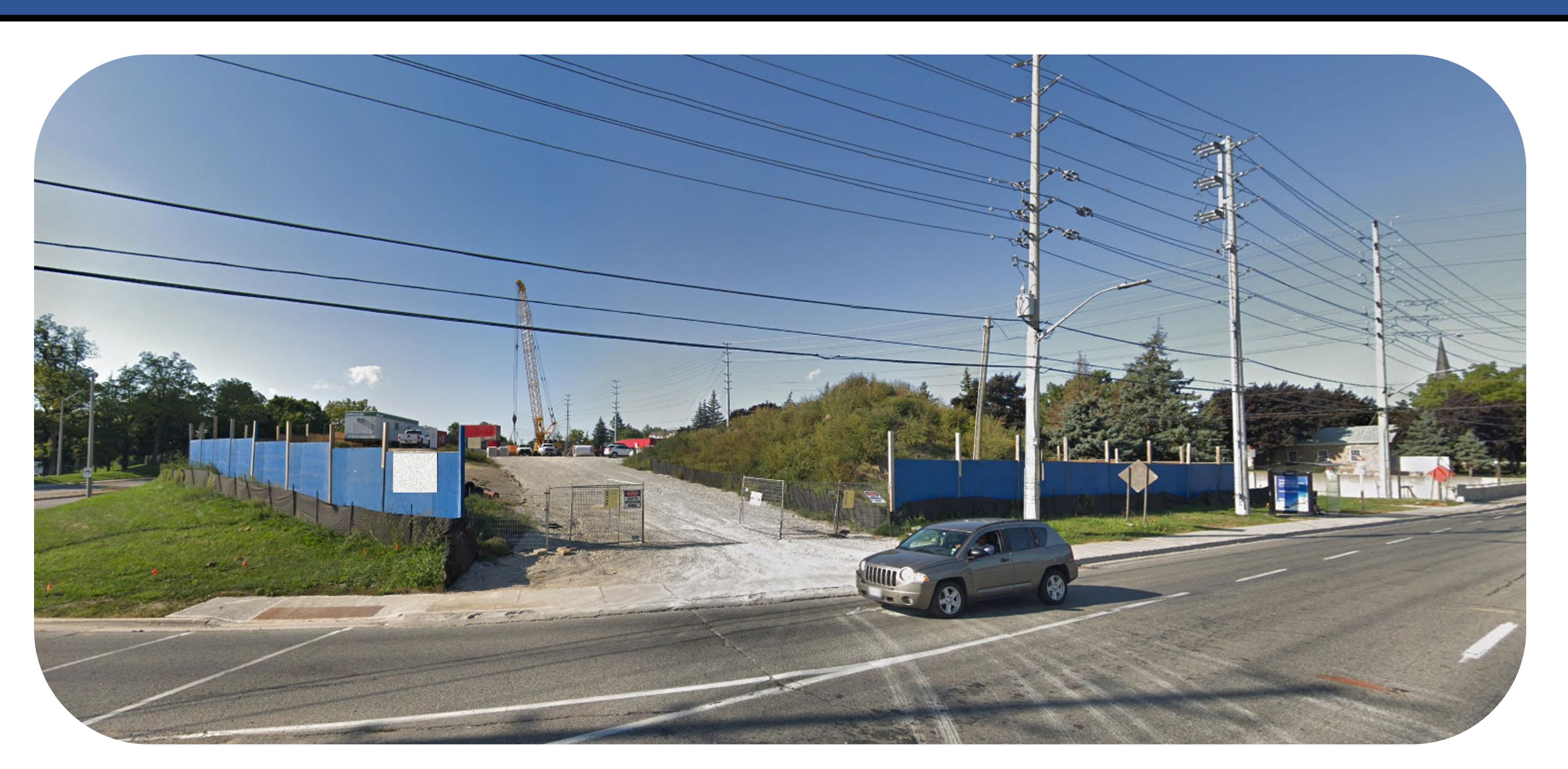
- Alternative design concepts were developed as part of Phase 3 of the EA Addendum process to determine the best method of implementing the preferred alternative solution (full pipe replacement with 1500 mm diameter prestressed concrete cylinder pipe).
- For this project, alternative design concepts included the evaluation and selection of the best site for the initial new Queensway watermain construction phase, tunnel access points, and the alignment for the watermain.
- Two (2) termination points (Stillmeadow Road and Confederation Parkway) were considered feasible and carried forward for the review of tunnel access points and watermain alignments.
- Five (5) additional tunnel access points were evaluated to determine the most suitable location to connect to the existing system or to access valve chambers* or large Hanlan watermains (HFM1, and/or HFM 2).



* An underground concrete box that provides access to valves or other equipment associated with the watermain.

Typical Tunnel Access Point Construction Site





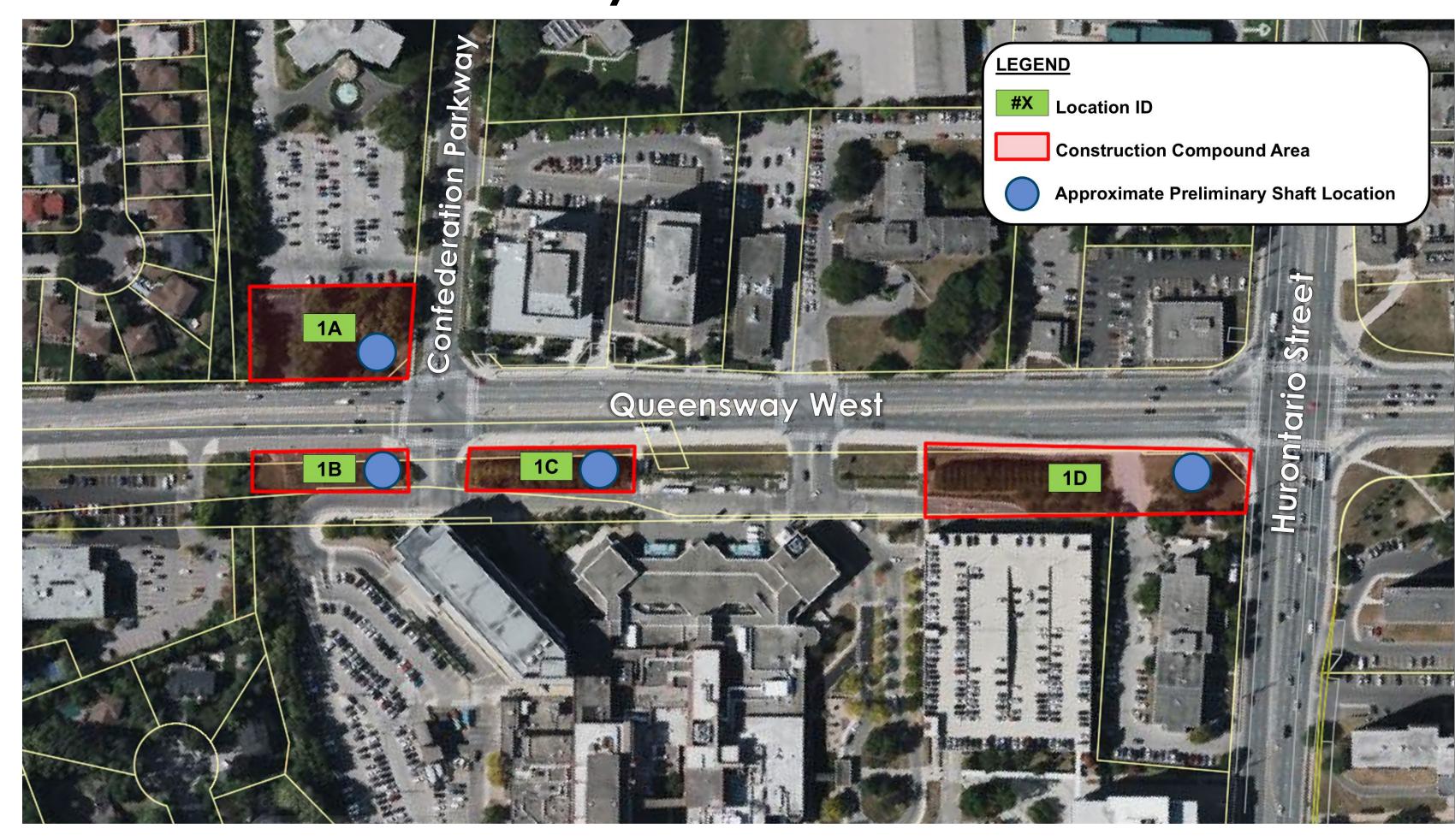
Example of Fencing and Equipment for Construction Site



Tunnel Access Point Locations



Location 1: Confederation Parkway – potential connection to the existing distribution main at Hurontario Street or the Queensway



Location 2: Cooksville Creek – tunnel access point to maintain spacing of isolation valves



Option 1A was chosen for its efficient integration with infrastructure, minimal long-term impacts, and reliable water supply, balancing environmental and community needs.

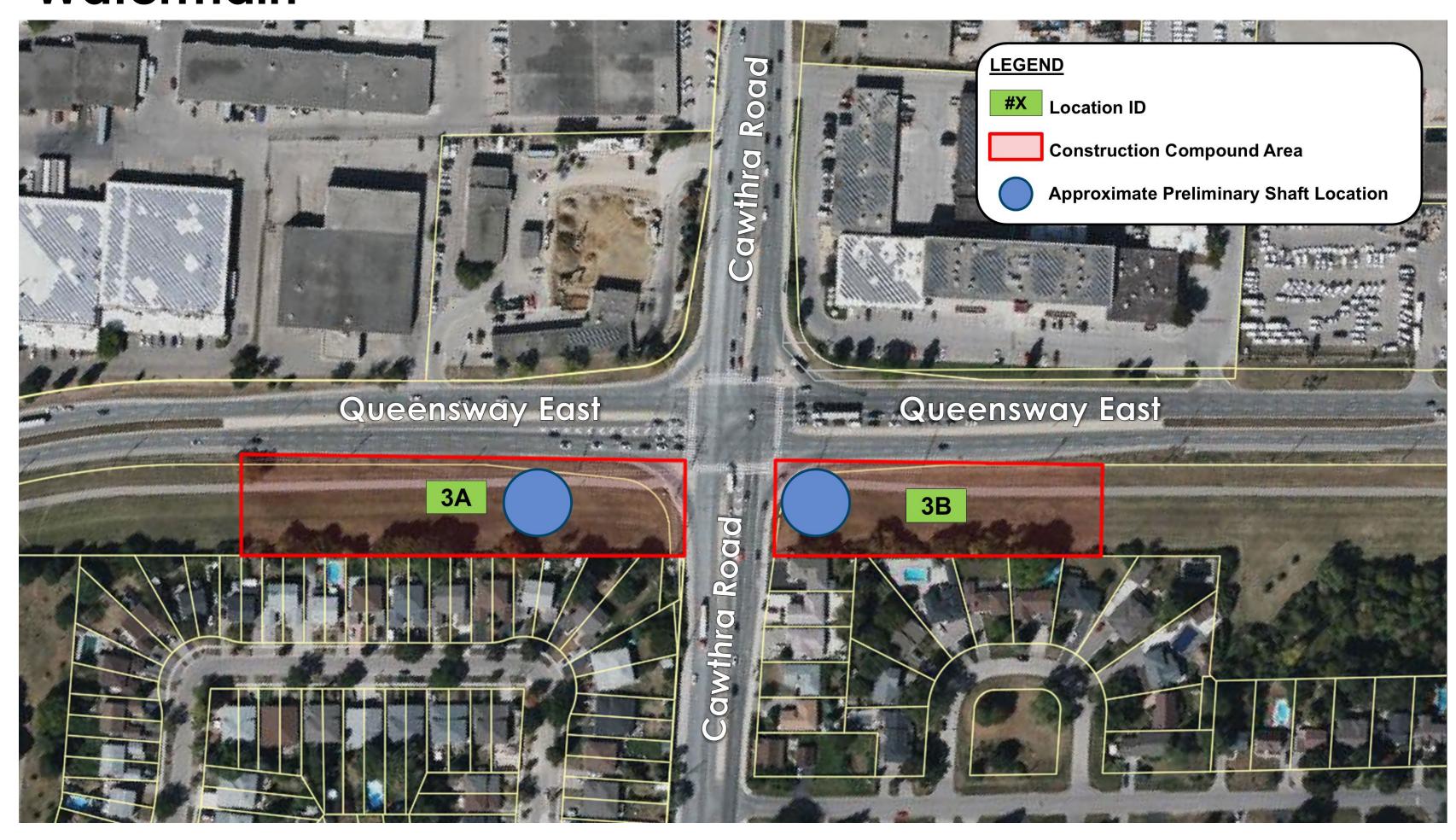
Option 2B was selected for its space efficiency, flexibility for future expansions, minimal environmental impact, and alignment with existing infrastructure, ensuring uninterrupted service during construction.



Tunnel Access Point Locations



Location 3: Cawthra Road – Future connection to the future Watermain and to the existing Silverthorn Watermain



Location 4: Stanfield Road - connection to existing Hanlan Watermain 1



Option 3A was selected for its reduced construction complexity, strong connection to existing infrastructure, improved system resiliency and flow flexibility. It supports future infrastructure needs, aligns with land use plans, and effectively manages environmental and technical considerations while ensuring reliable water supply.

Option 4B was selected for its efficient integration with existing infrastructure, reliable water distribution, enhanced system resiliency, and minimal environmental impact. It avoids long-term effects on sensitive habitats and transit infrastructure, with only short-term construction disruptions and no permanent land use changes.



Tunnel Access Points



Location 5: Dixie Road - connection to the existing Hanlan Watermain



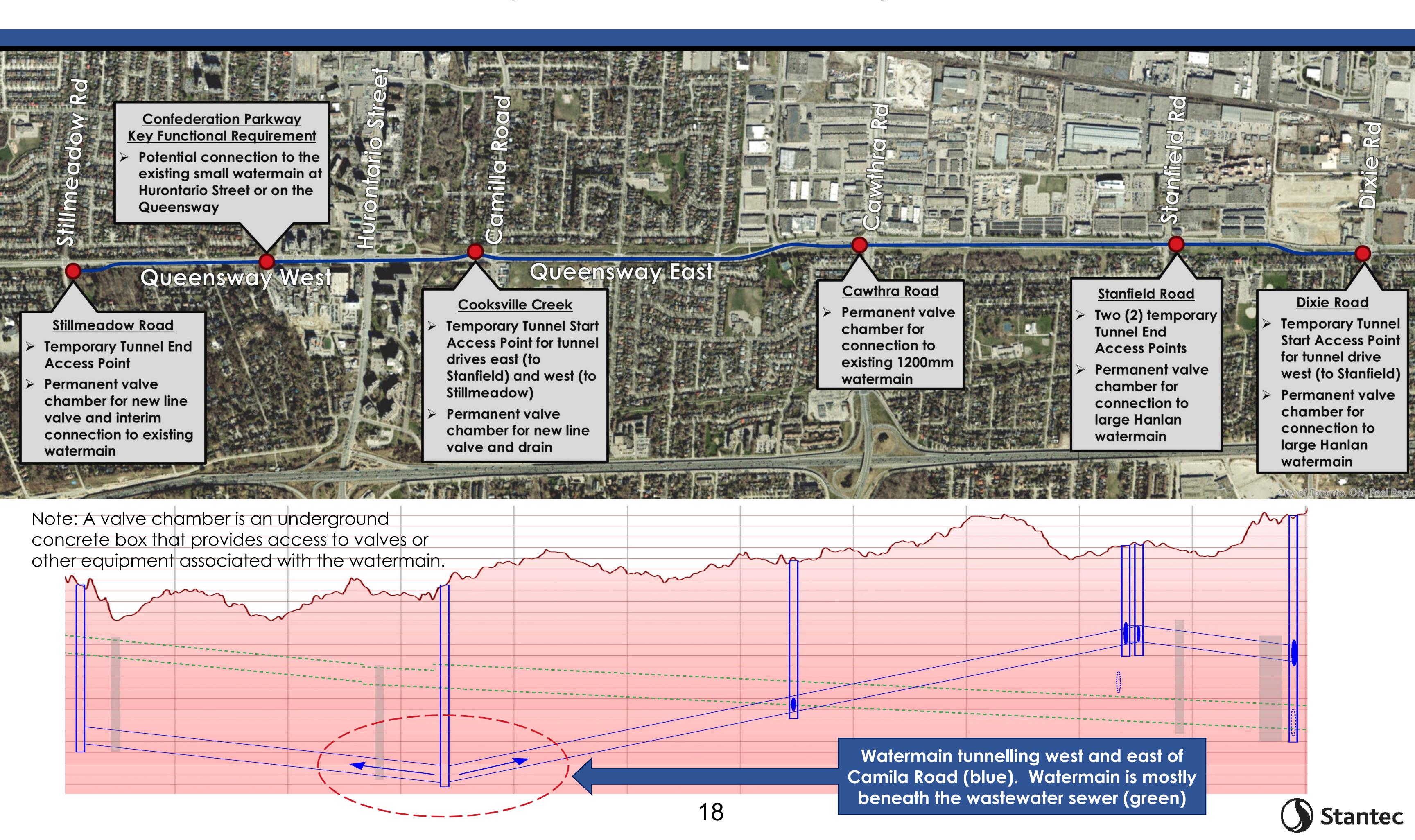
Option 5C was chosen for its efficient use of greenspace, reducing construction risks and minimizing roadway disruptions. It allows new Queensway watermain work without impacting the large Hanlan watermain (HFM2) which runs under Dixie Road, aligns with land use plans, and only requires temporary easements. This option enhances system resiliency and flow flexibility, while minimizing upgrades and avoiding permanent land use changes.

Work at 5B will be required for the sanitary system, not the watermain.

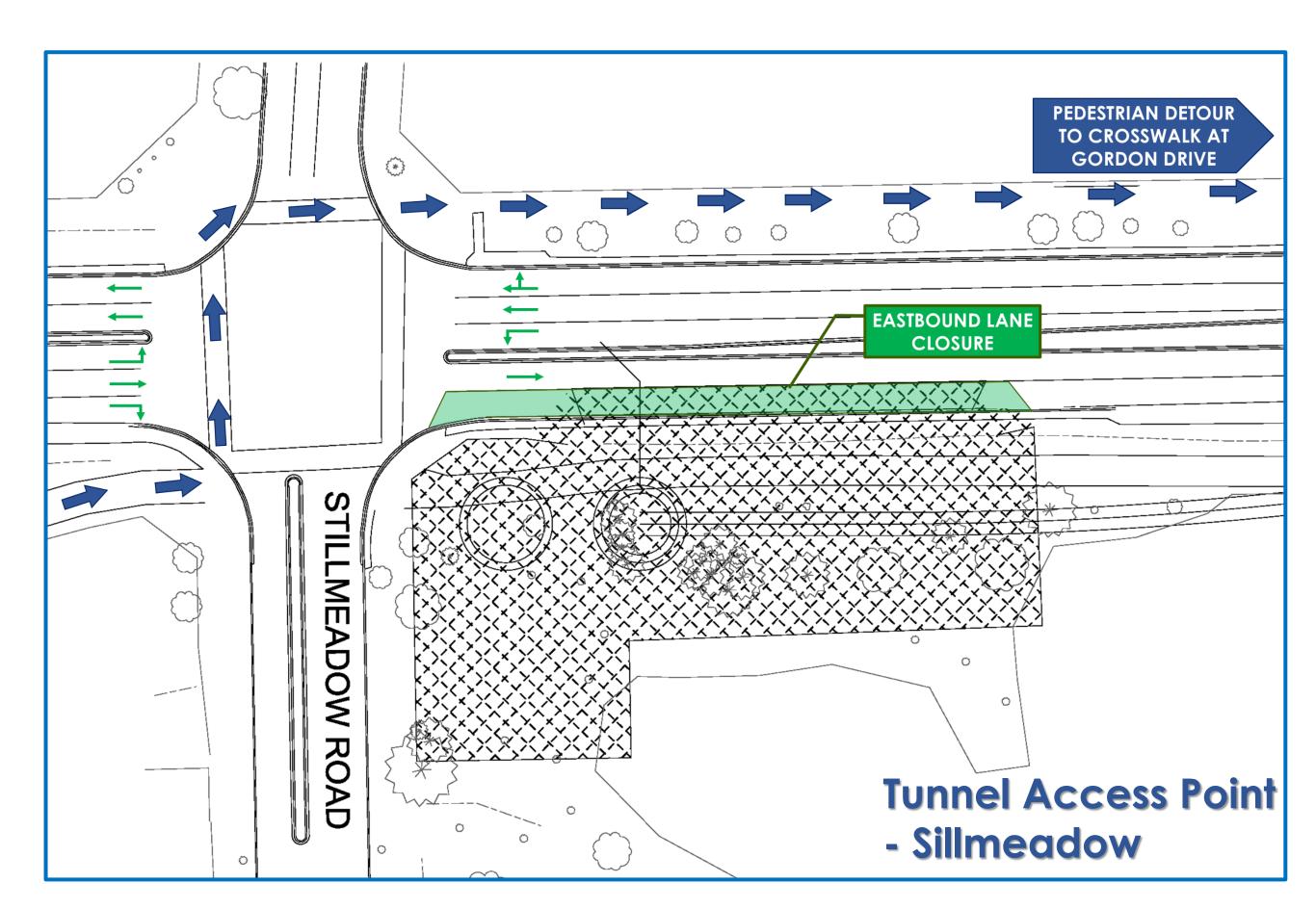


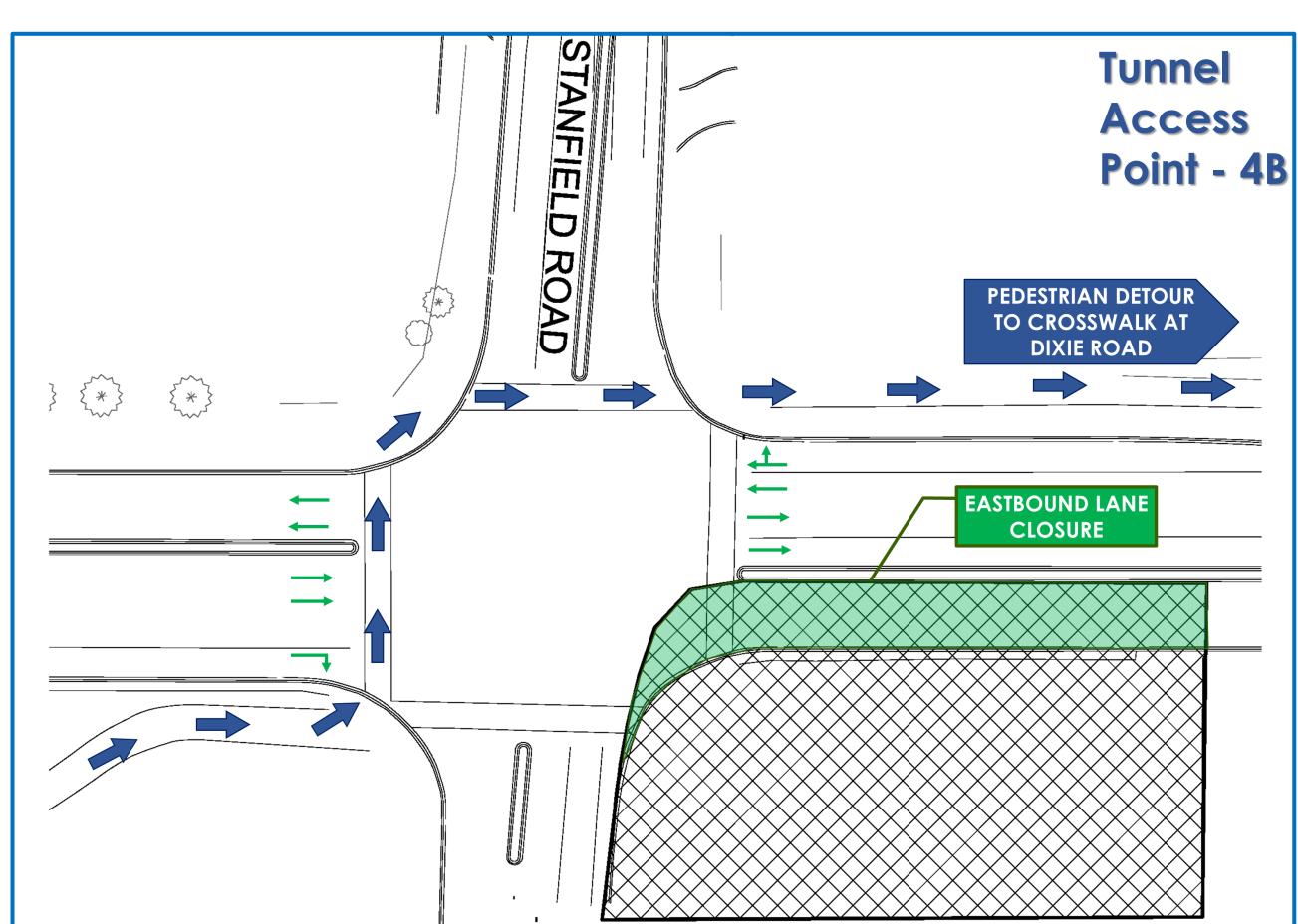
Preferred Queensway Watermain Alignment

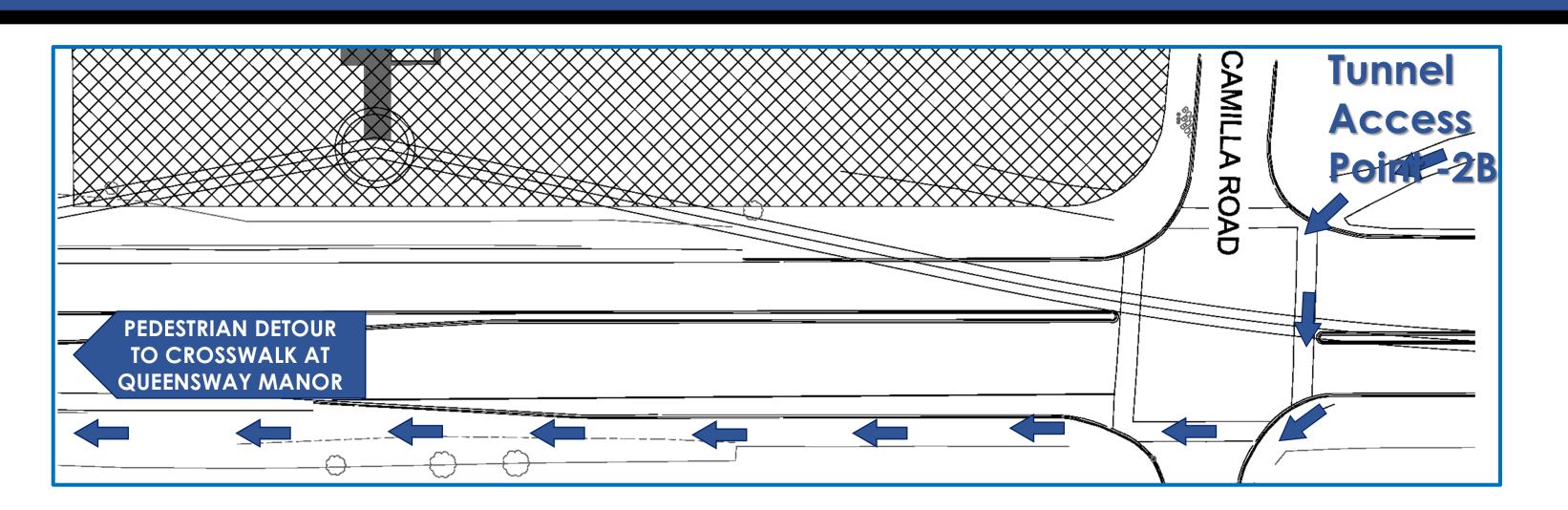


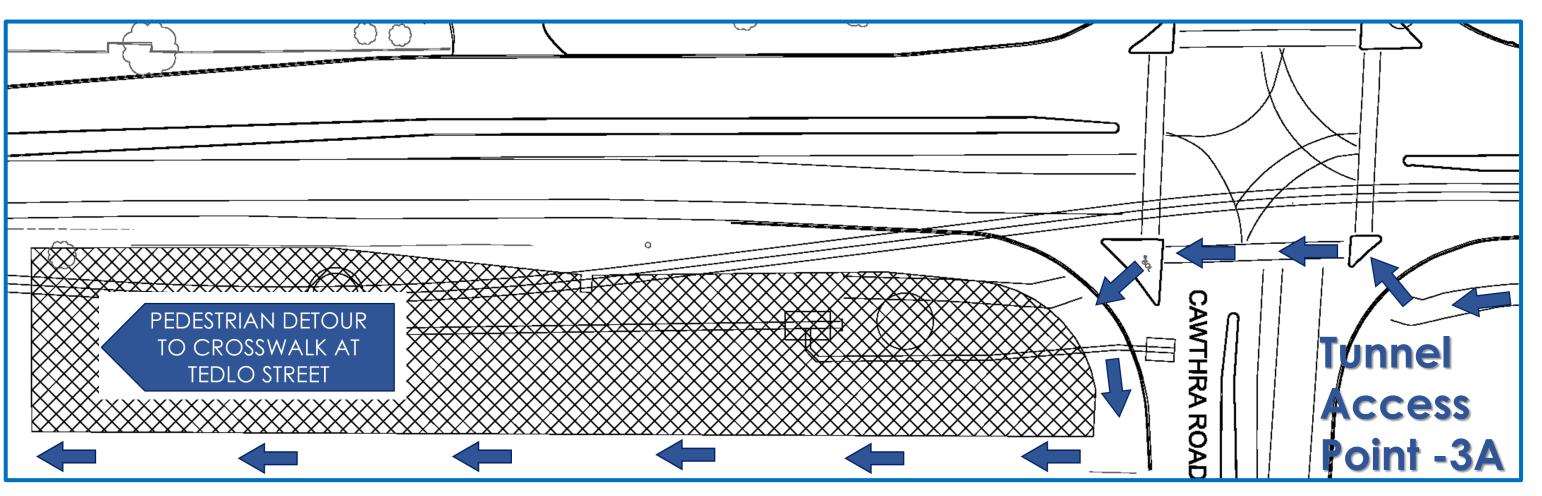


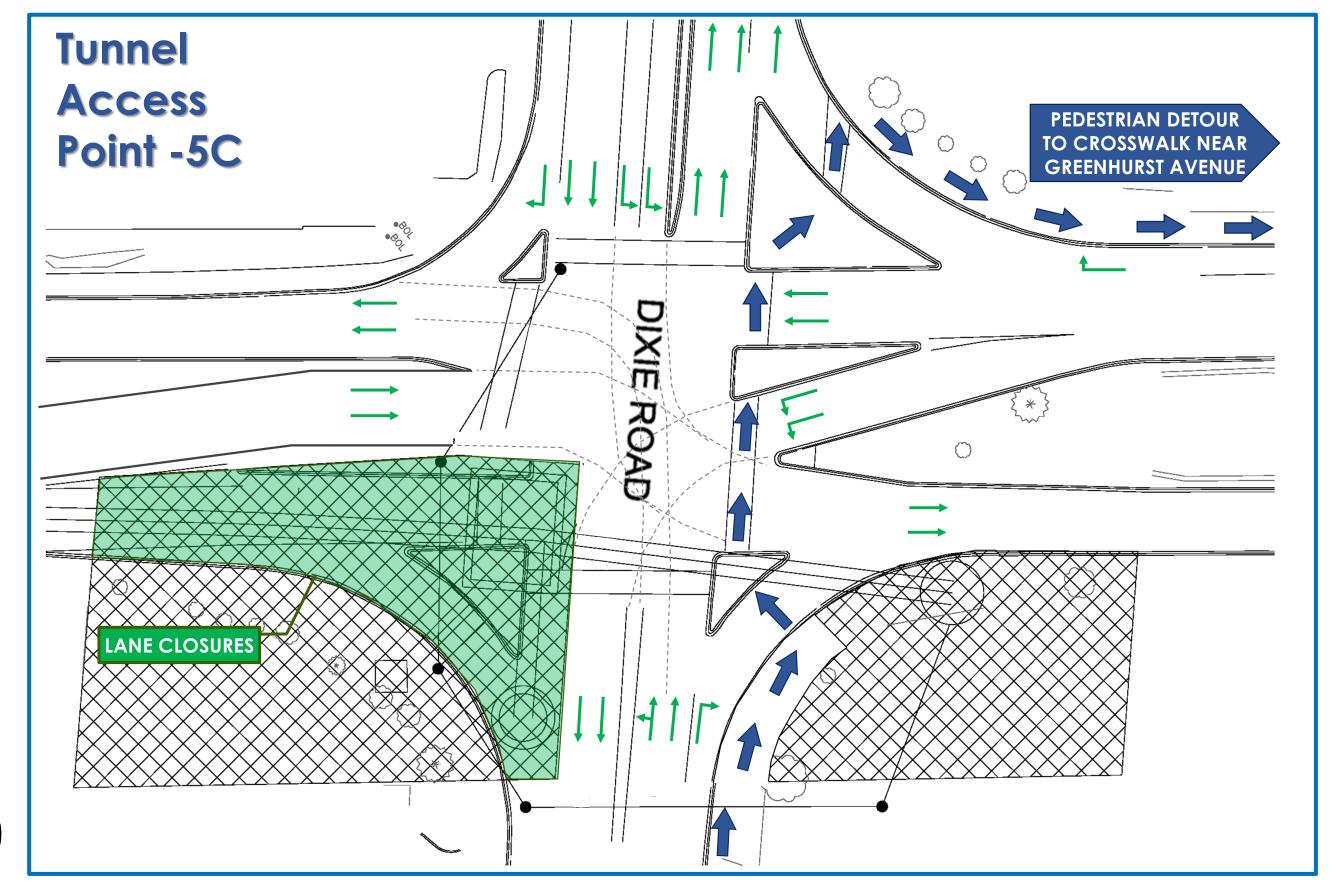
















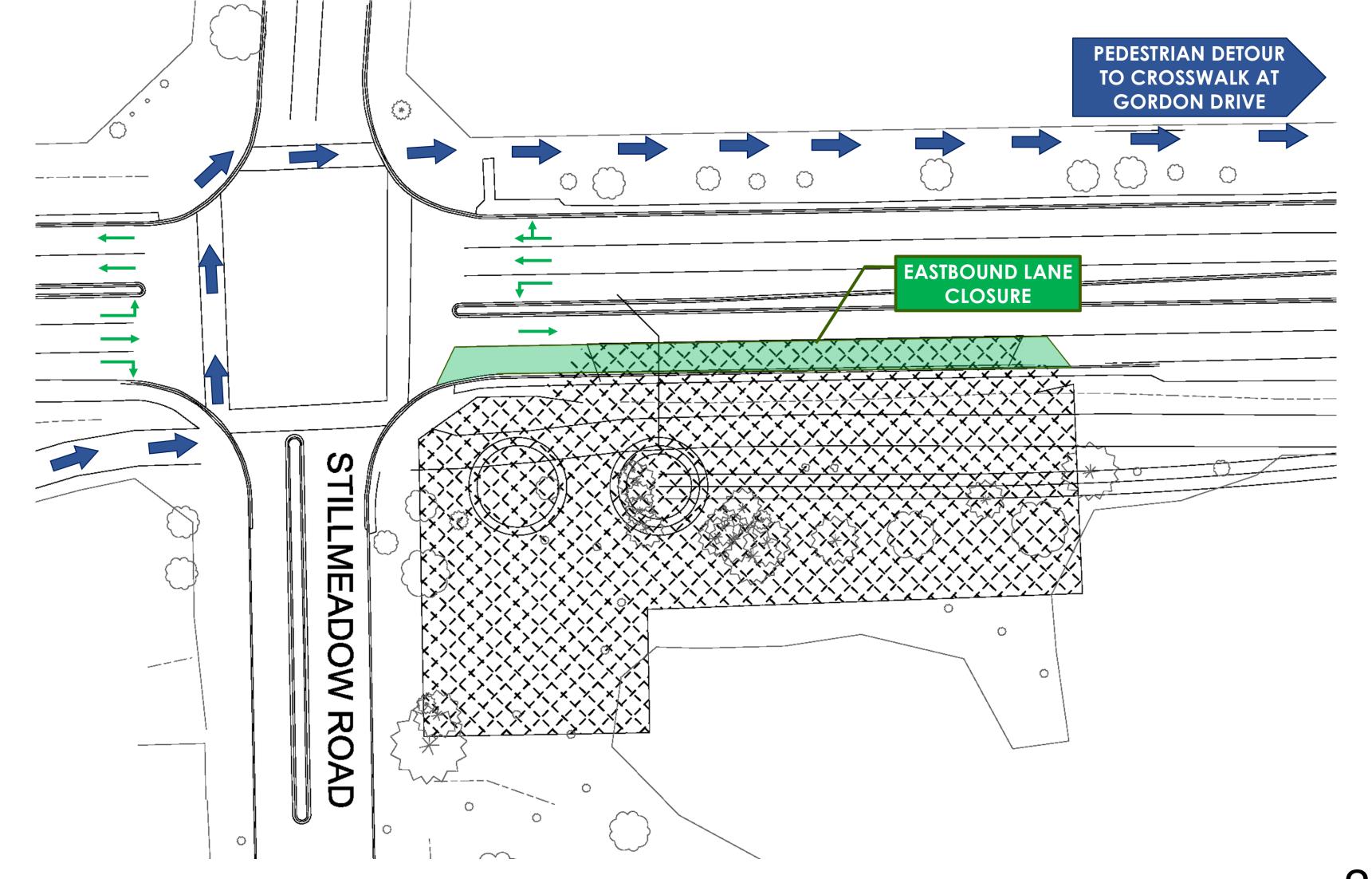
Most of the work will occur off Queensway in boulevards to reduce potential impacts to traffic. Dates of the traffic restrictions are to be confirmed and those directly impacted will be provided advance notice. Signage will be placed within the area to indicate the traffic restrictions.

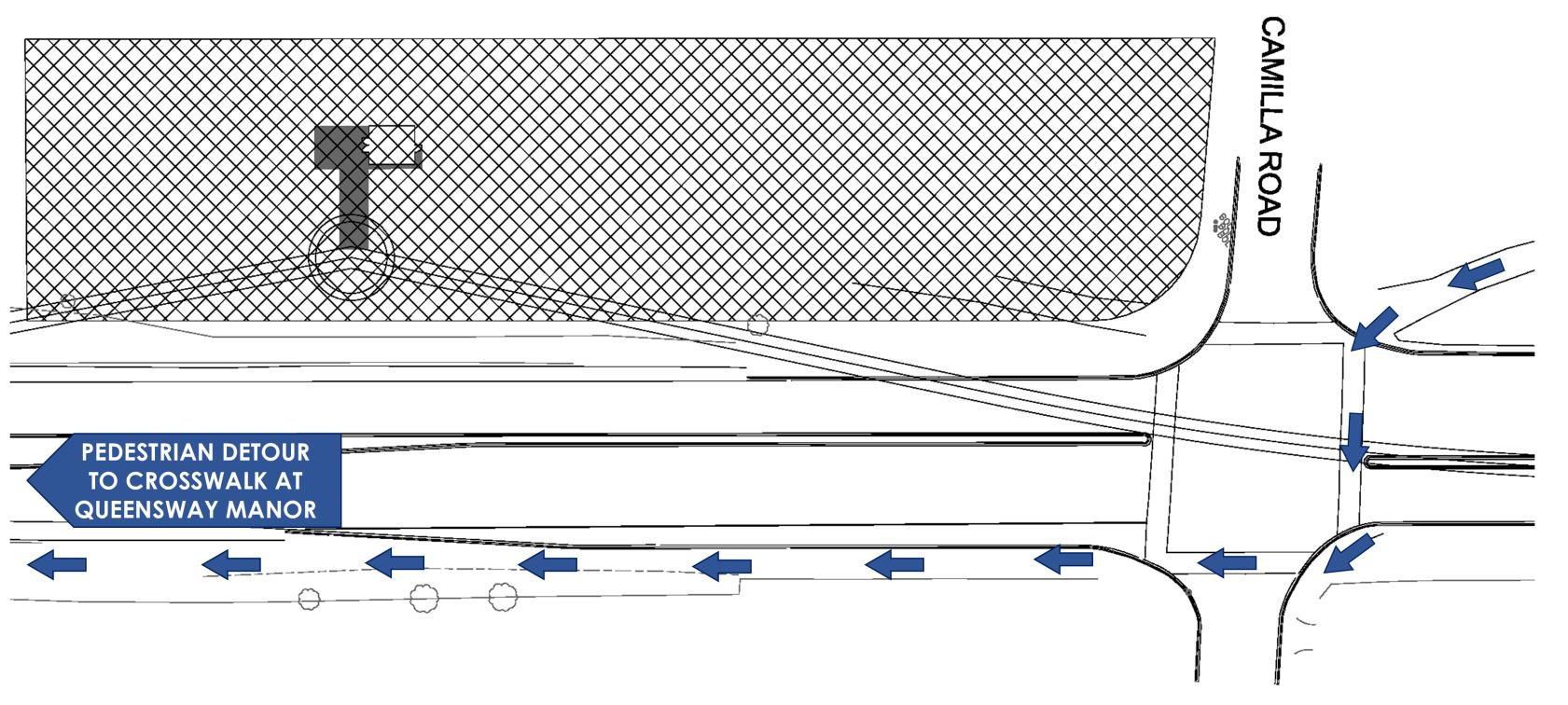
Stillmeadow Road

- This site is located in the east quadrant of the intersection between Stillmeadow Road and Queensway West, adjacent to Stillmeadow Park.
- Queensway eastbound traffic will be reduced to 1 lane.
- The multi-use pathway will be redirected to the north side of the Queensway.

Cooksville Creek

- This site is located in the west quadrant of the intersection between Camilla Road and Queensway East.
- There are no anticipated long-term traffic impacts for this site. Periodic short-term disruptions may be required.
- The multi-use pathway will be redirected to the south side of the Queensway.









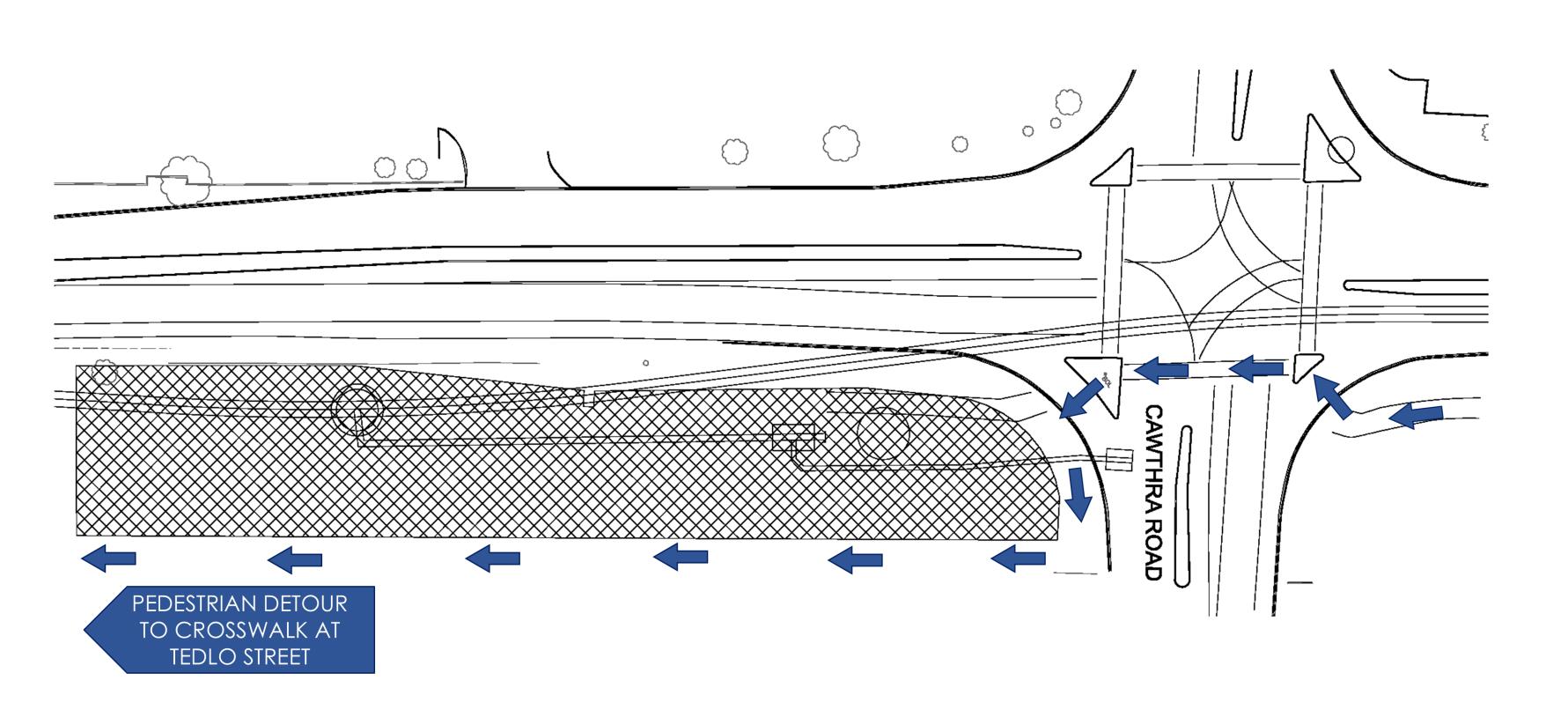
Most of the work will occur off Queensway in boulevards to reduce potential impacts to traffic. Dates of the traffic restrictions are to be confirmed and those directly impacted will be provided advance notice. Signage will be placed within the area to indicate the traffic restrictions.

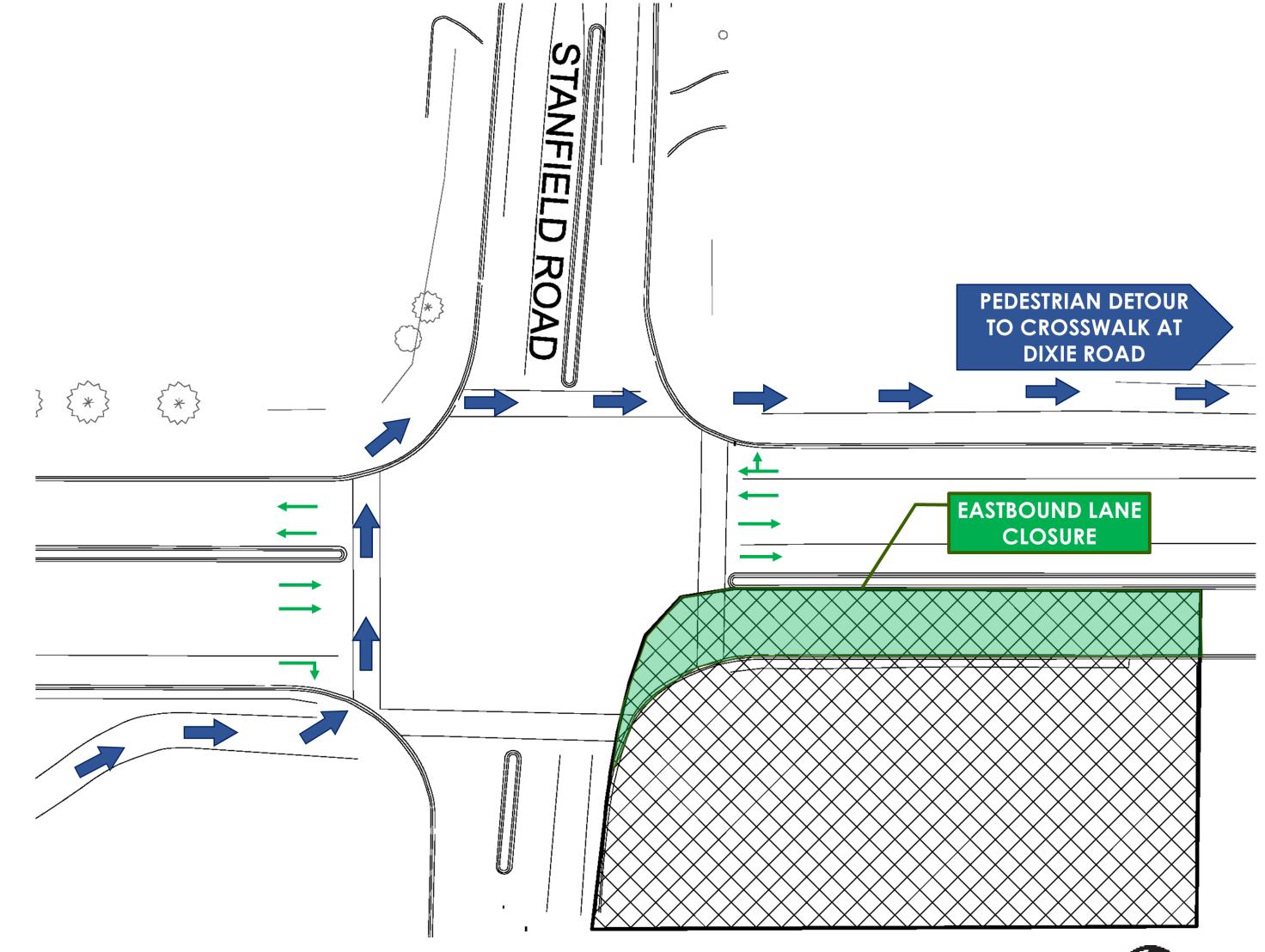
Cawthra Road

- This site is located in the south quadrant in the intersection between Cawthra Road and Queensway East.
- There are no anticipated long-term traffic impacts for this site. Periodic short-term disruptions may be required.
- The multi-use pathway will be redirected to the south side of the compound.

Stanfield Road

- This site is located in the east quadrant of the intersection between Stanfield Road and Queensway East.
- Some turning movements will be restricted, but 2 lanes in each direction will be maintained along the Queensway.
- The multi-use pathway will be redirected to the north side of the Queensway.





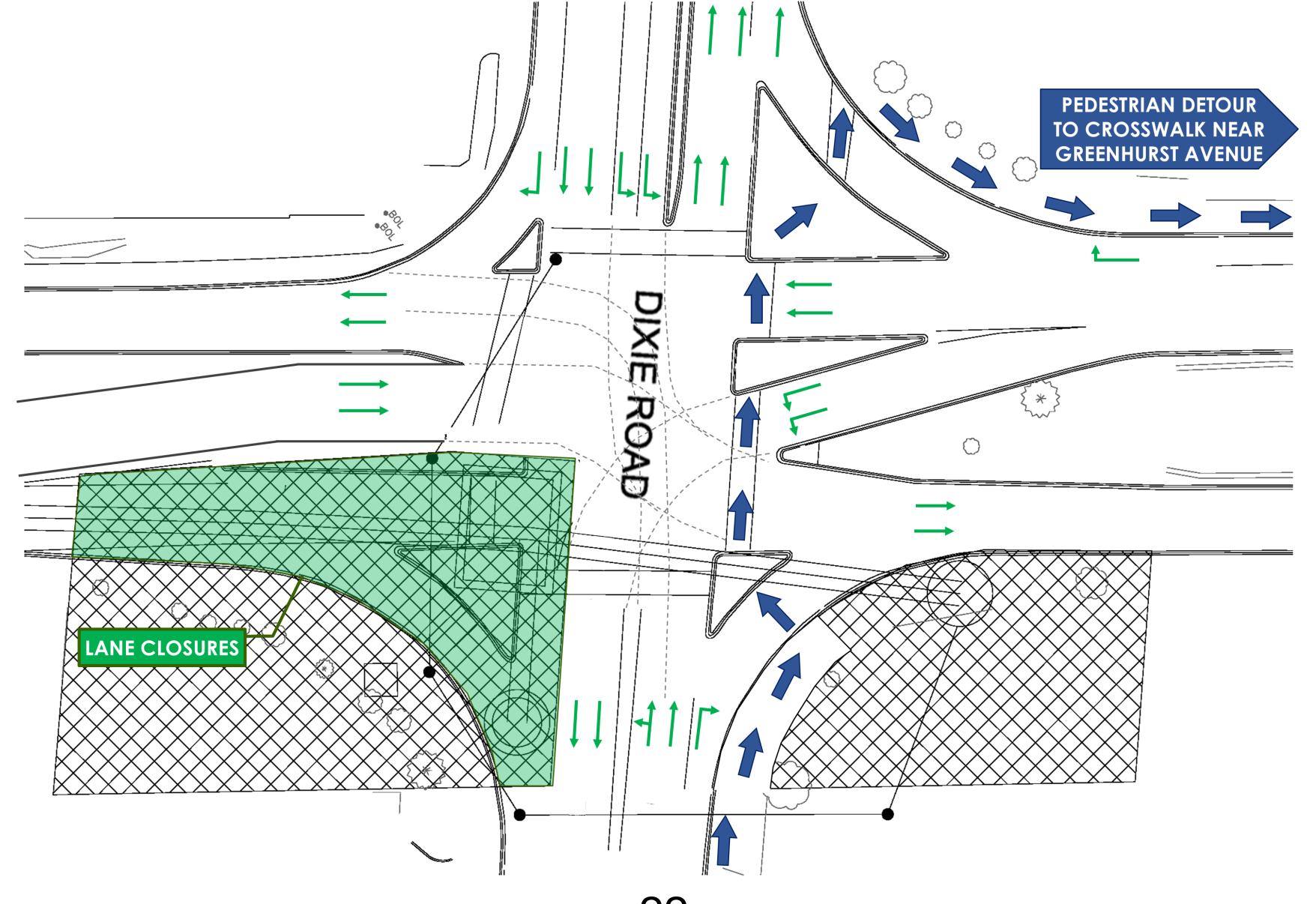




Most of the work will occur off Queensway in boulevards to reduce potential impacts to traffic. Dates of the traffic restrictions are to be confirmed and those directly impacted will be provided advance notice. Signage will be placed within the area to indicate the traffic restrictions.

Dixie Road

- This site is located in the east quadrant of the intersection between Stanfield Road and Queensway East.
- Green arrows indicate traffic movements that will be maintained during construction. There will be no eastbound left-hand or right-hand turns permitted.
 The multi-use pathway will be redirected to the north side of the Queensway.



Next Steps



Mitigation Measures

- Based on the impacts, preliminary mitigation measures will be recommended in the MCEA Addendum Report along with commitments for future work.
- These measures will be based on Peel Region policies, standards and best practices as well as regulatory agency requirements and conditions of approval.
- Preliminary mitigation measures will be refined during the future detailed design phase of the watermain.

Municipal Class Environmental Assessment Addendum Process

- Review and consider feedback from agencies, stakeholders, Indigenous Communities, and the public.
- Publish the Notice of EA Addendum and begin the 30-day review period.
- Proceed to detailed design, complete remaining studies.
- Develop a traffic management plan.
- Obtain permits and approvals.

Construction - Community Engagement

- Additional notification and signage will be provided prior to construction work commencing.
- Construction updates and specific notices for residents will be issued as required (i.e., temporary parking restrictions, flushing after new service, temporary event relocation).
- Project Ambassador will be available during working hours.



Hanlan Watermain Modifications



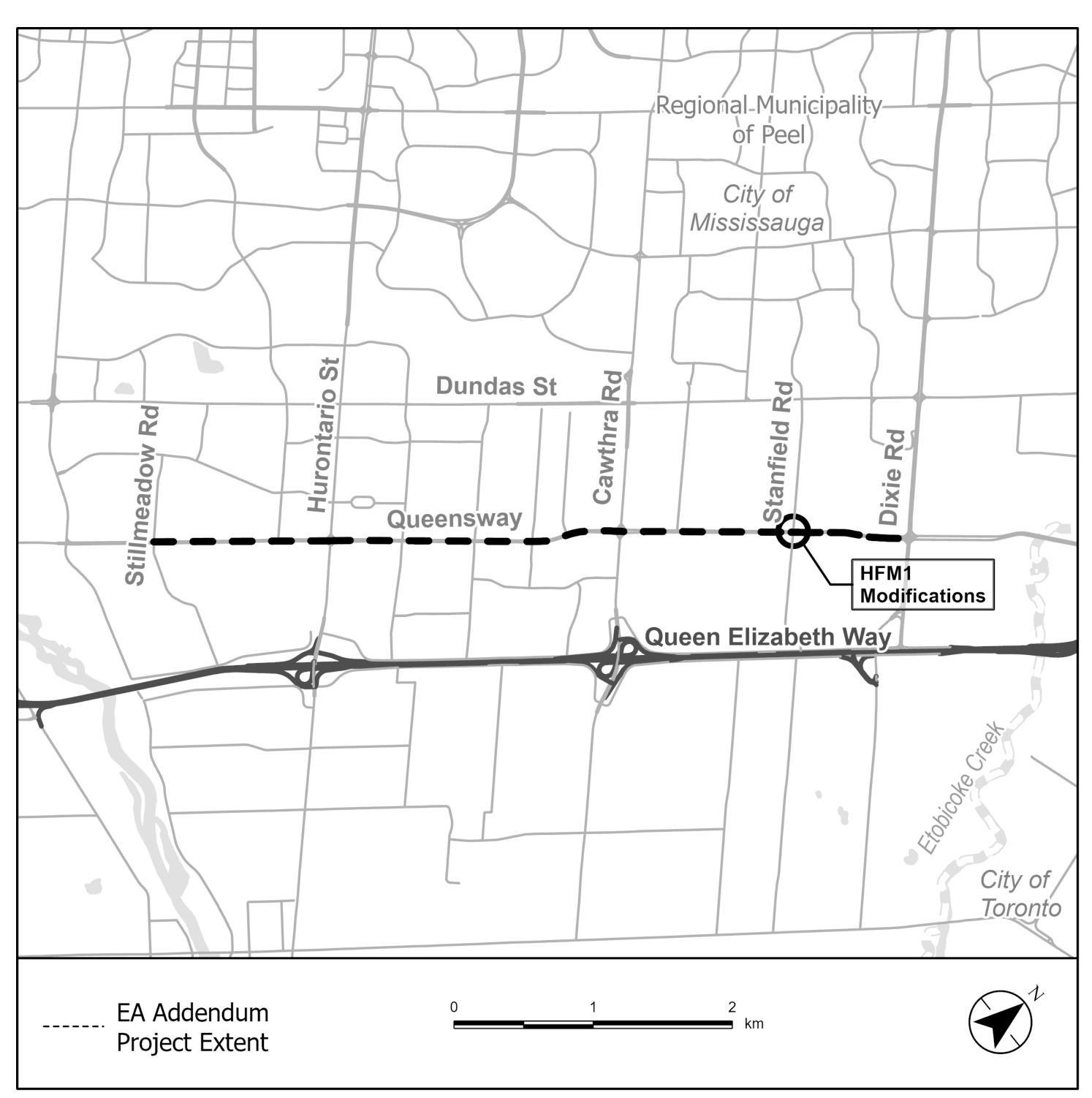


Pre-Construction Information

Large Hanlan Watermain Modifications at Queensway East & Stanfield Road



- Modification to a small portion of the existing large diameter Hanlan watermain is required to make room for the new wastewater sewer on Queensway East identified in the 2022 Environmental Assessment.
- A section of the large watermain will be retired and replaced at the intersection of Queensway East and Stanfield Road.
- Trenchless technology (i.e., tunneling that does not require digging a trench) will be used for construction, and includes digging two tunnel access points (deep holes) located at the northeast and the southeast corner of the intersection.



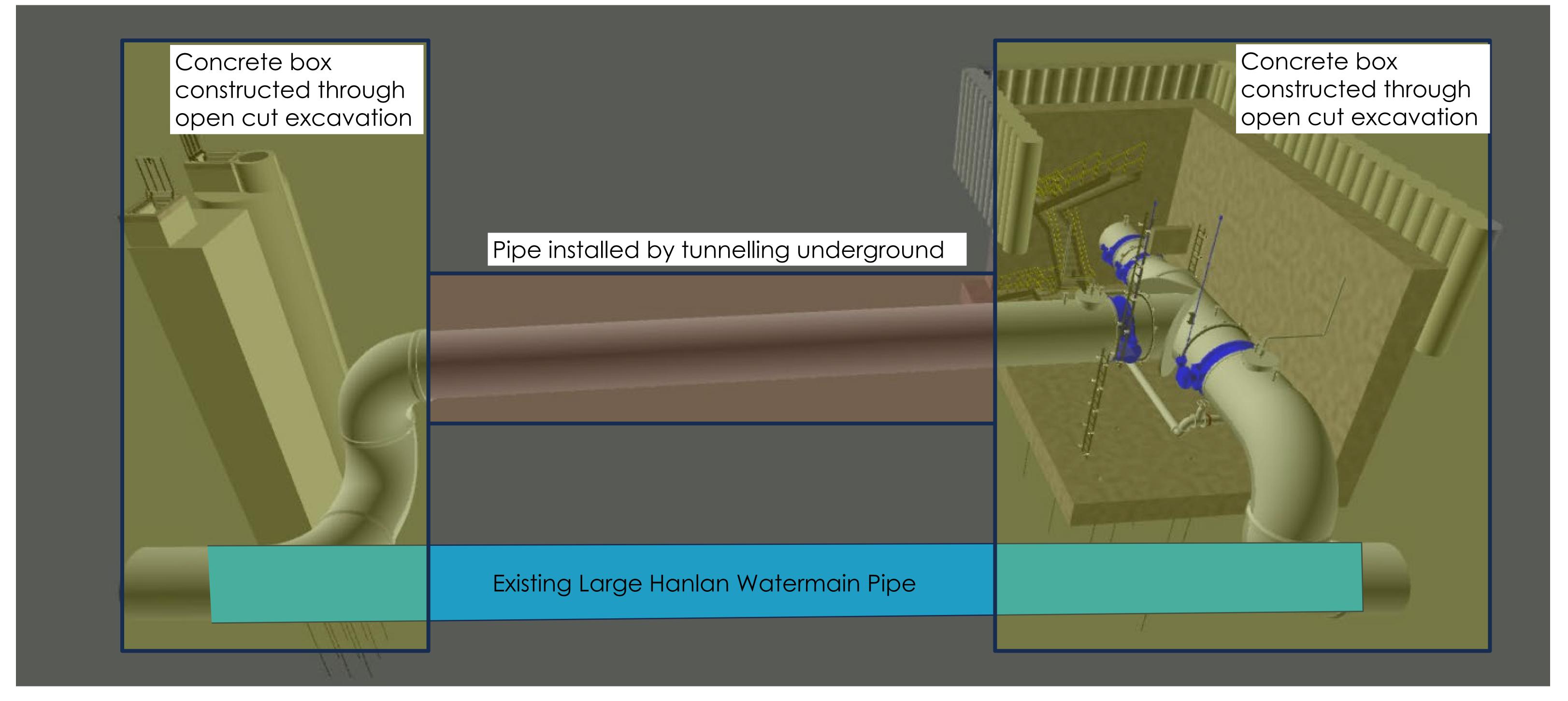
Location of Modification to Large Watermain (HFM1) at Intersection of Queensway East and Stanfield Road



Modifications to Large Hanlan Watermain - 3D Model

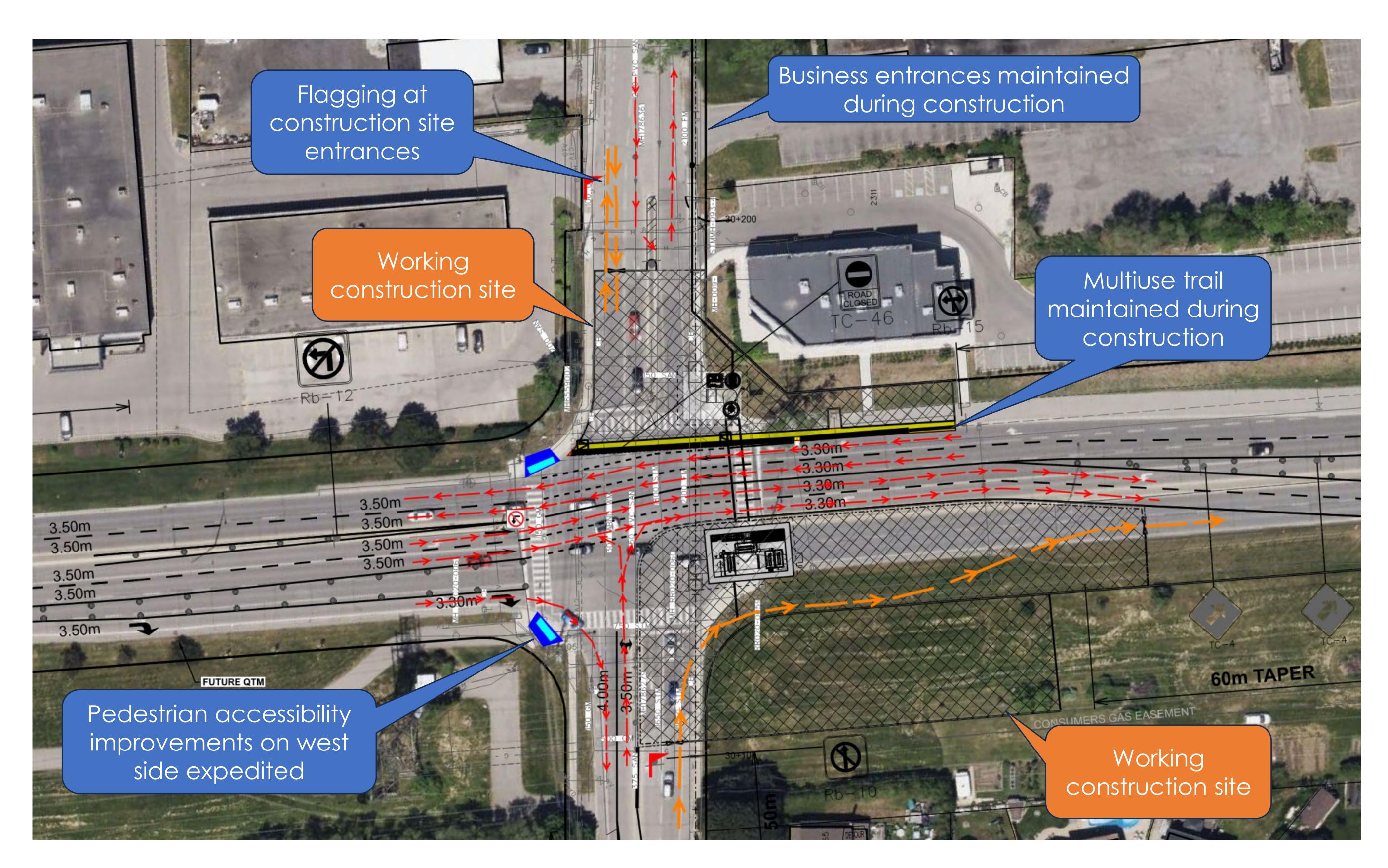


Permanent underground concrete boxes that provide access to devices that shut of the flow of water within the watermain (or other equipment associated with the watermain) will be constructed along with the new pipes.



Modifications to Large Hanlan Watermain - Site Plan



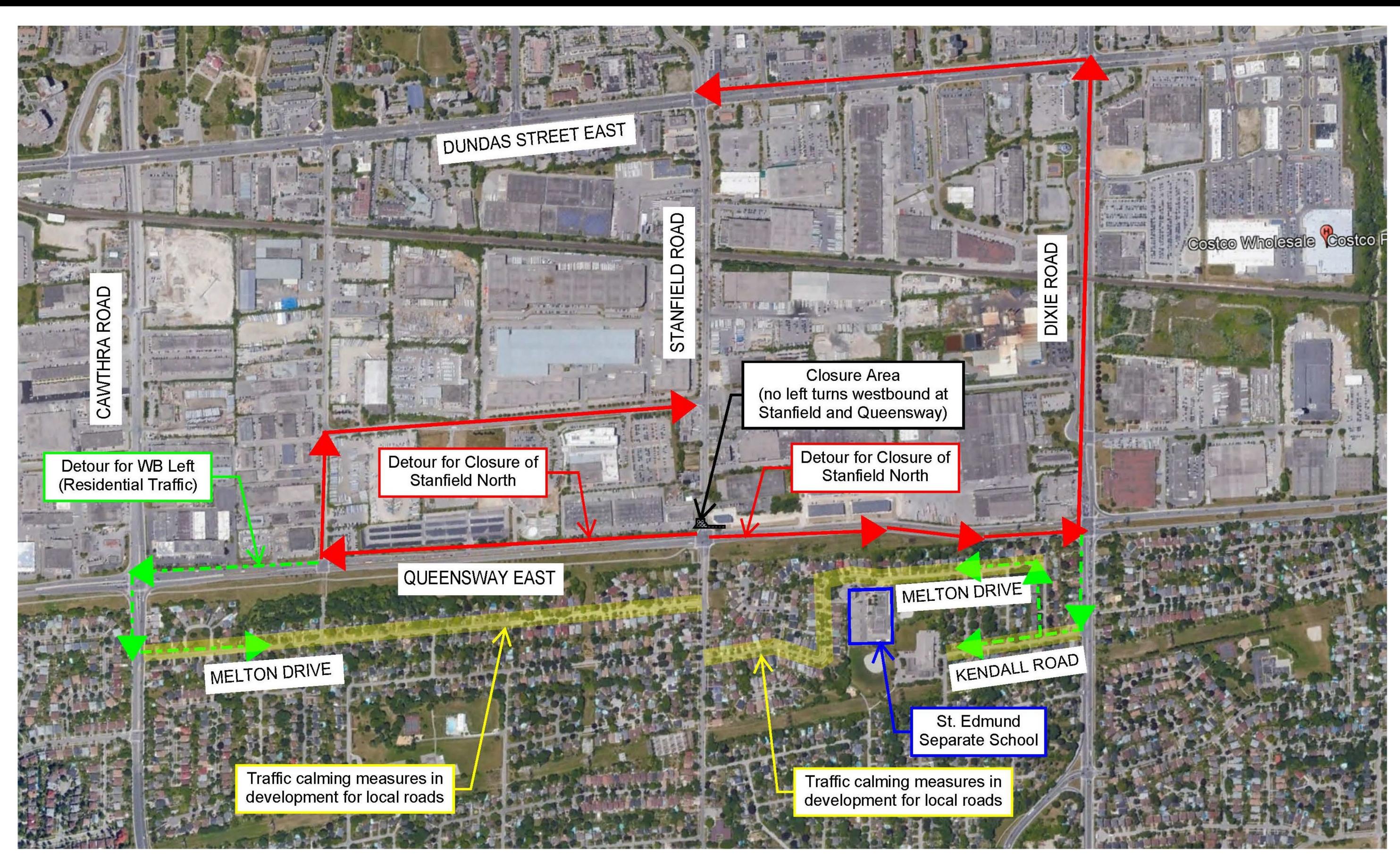


- Watermain will be constructed under Queensway using a tunnel.
- Two lanes of traffic will be maintained in each direction on Queensway.
- Construction site areas will be fenced.
- Construction site layout and orientation engineered to minimize impacts.
- Construction will start in the summer 2025 and be completed at the end of 2026.



Review of Traffic Impacts – Detour Routes





Review of Traffic Impacts – Business Access





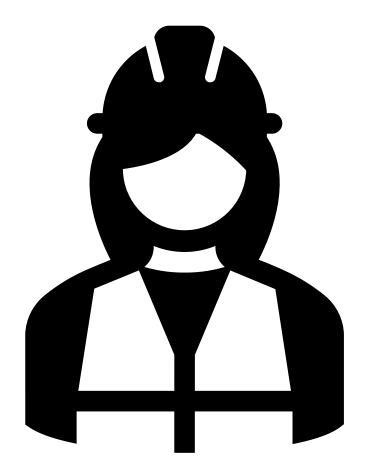
Project Ambassador

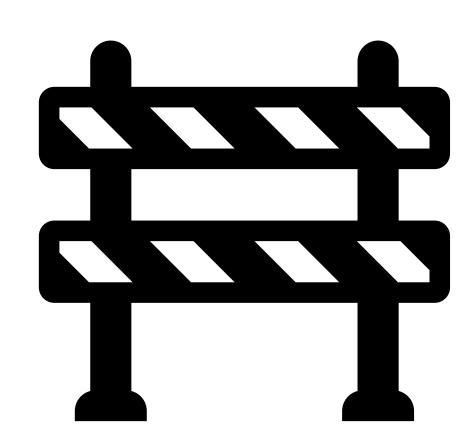


Project Ambassador

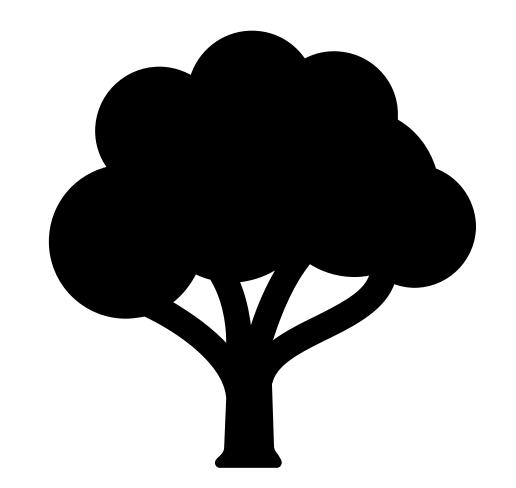
A Project Ambassador will be available during the construction period. Their duties will include monitoring traffic conditions daily throughout the construction period and answering questions/concerns raised by the public. The Project Ambassador will provide a direct connection between the project team, contractor and the public to effectively handle any inquiries and concerns.

The purpose of the Project Ambassador is to improve the overall construction process experience for the public. They will be able to provide the community with additional resources and assist with helping you safely and efficiently navigate around the construction sites.













Thank You for Participating!



Thank you for attending this Public Information Centre. Your feedback is very important to this study. Please complete the comment form provided or contact the Region of Peel by email or phone to share your thoughts by **May 22, 2025**.

Wastewater Collection and Conveyance

Engineering Services Division Public Works, Region of Peel (905) 791-7800 extension 4409 construction@peelregion.ca

All information is collected in accordance with the Freedom of Information Privacy Act.

