

**Vaughan Metropolitan Centre**

# **Stormwater Management and Drainage Enhancement Study**

**Open House/  
Public Information  
Centre #3**

DAVID BRALEY VAUGHAN METROPOLITAN CENTRE OF C  
200 APPLE MILL ROAD, VAUGHAN, ON.

MAIN LOBBY

THURSDAY, MAY 14, 2026 | 5:30 P.M. TO 7:30 P.M.

**TYLin**

**3** Third Party  
Public

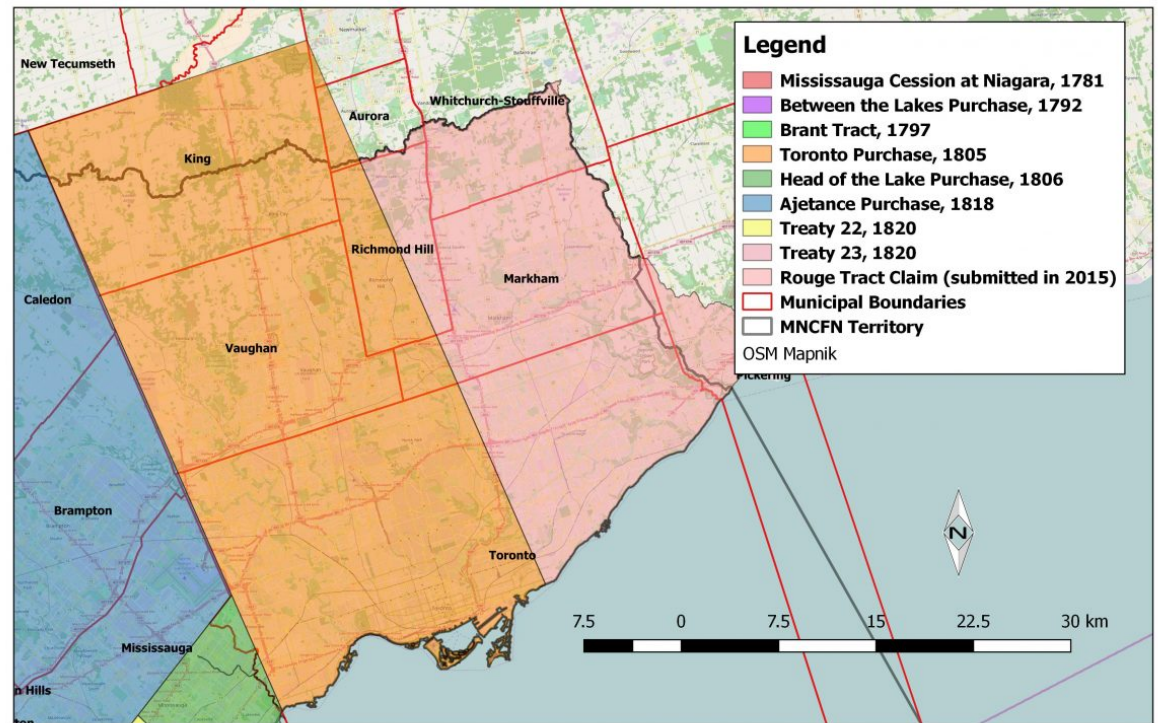
**vaughan**  
DOWNTOWN  
METROPOLITAN CENTRE

**VA**

# Land Acknowledgement

We respectfully acknowledge that the City of Vaughan is situated in the Territory and Treaty 13 lands of the Mississaugas of the Credit First Nation. We also recognize the traditional territory of the Huron-Wendat and the Haudenosaunee. The City of Vaughan is currently home to many First Nations, Métis and Inuit people today.

As representatives of the people of the City of Vaughan, we are grateful to have the opportunity to work and live in this territory.



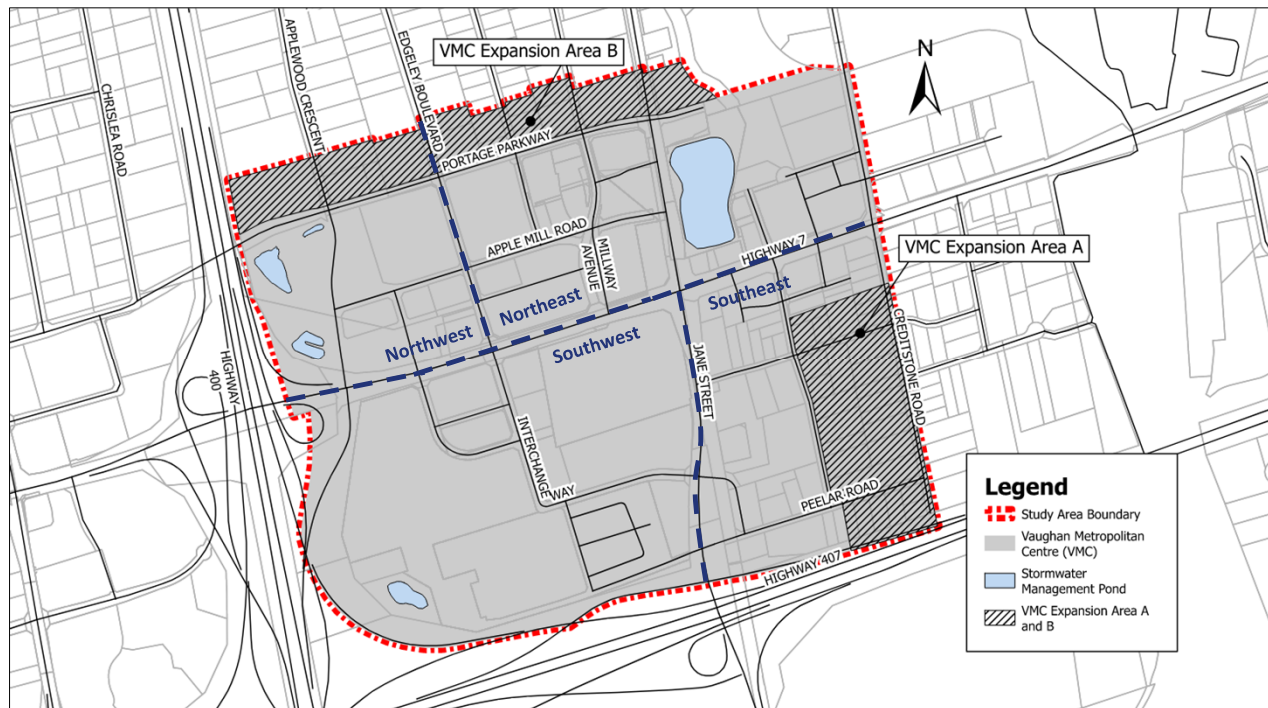
**Municipal Boundaries Related to the Toronto Purchase (1805) and the Rouge Tract Claim (2015)**

# Project Objective

The purpose of the study is to refine and enhance the stormwater management (SWM) strategy for the Vaughan Metropolitan Centre (VMC) to support the area's growth and future developments.

The VMC has grown faster than expected and its boundaries are expanding to include Expansion Area A and B and the SWM strategy from the 2012 VMC Municipal Servicing Master Plan no longer meets the needs of current and future development.

Once completed, the study will propose a stormwater management plan that follows best practices and City policies to treat storm runoff and reduce flood risks while considering the interests of the public, impacted property owners and planned developments.



# Stormwater Management

Stormwater is the rainwater or melted snow that flows across hard surfaces like roads, sidewalks, parking lots, and rooftops instead of seeping naturally into the ground. Without proper management, stormwater contributes to poor water quality, flooding and erosion in receiving watercourses.

Stormwater quality and quantity can be managed using three types of practices: measures at the source on the site, systems that carry water along its path, and controls applied before the water is discharged into a watercourse.

## Source Controls

- Rain gardens
- Permeable pavement
- Green roofs
- Rainwater Harvesting (cisterns, rain barrels)

## Conveyance Controls

- Vegetated swales
- Bioretention facilities
- Infiltration systems
- Soil cells

## End of Pipe Controls

- Wet ponds
- Dry ponds
- Manufactured Treatment Devices such as Oil-grit separators



Rain Garden



Bioretention Swale

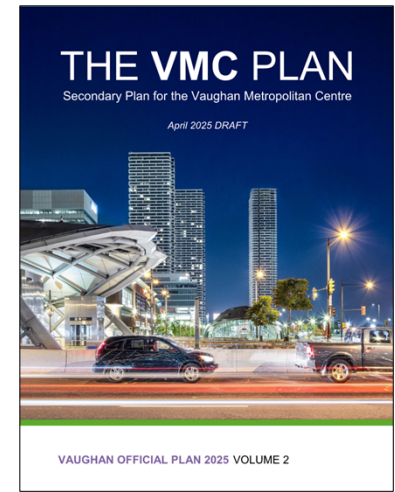
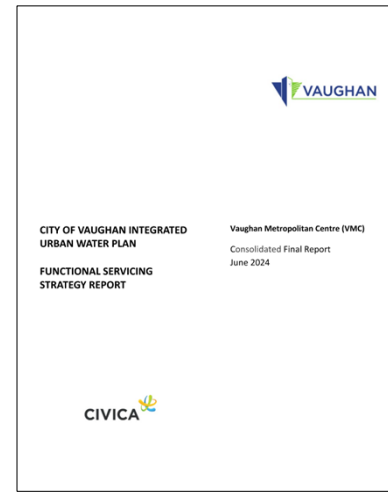
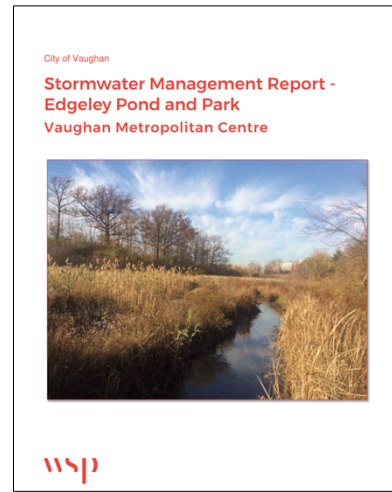
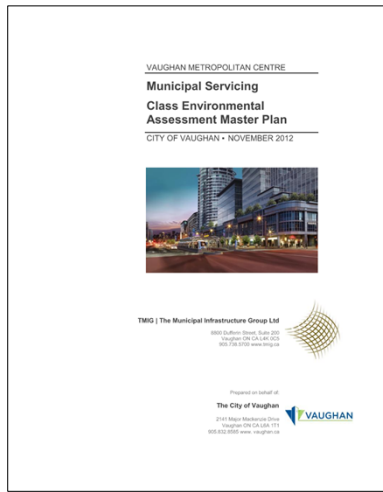


Exfiltration Trench



Wet Pond

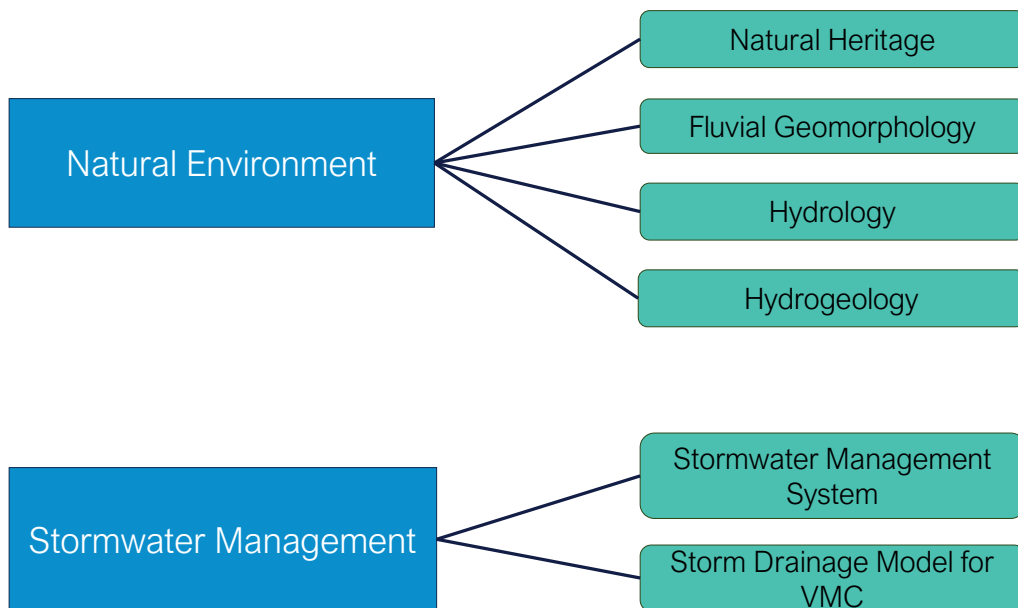
# Background



2012	2017 - 2021	2024	2025
<p>Stormwater management (SWM) strategy developed with on-site SWM criteria, end-of-pipe ponds and retrofits for all four quadrants through the VMC Master Servicing Plan</p>	<p>Edgeley Pond retrofit study for Northeast Quadrant</p>	<p>Larger stormwater management (SWM) ponds to meet SWM criteria and account for expansion areas, through the Integrated Urban Water Plan – VMC Functional Servicing Strategy Report</p>	<p>VMC Secondary Plan replaces previous VMC Secondary Plan and outlines the new framework for Vaughan’s downtown</p>

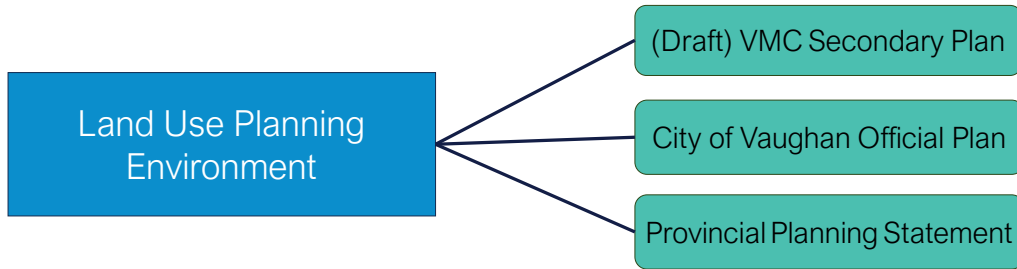
# Existing Conditions

Recent studies, including the City's June 2024 Integrated Urban Water Plan, provide information on existing conditions for stormwater management, fluvial geomorphology, natural heritage, hydrology, hydrogeology, archaeology, and cultural heritage in the study area. The VMC Secondary Plan 2025 provides information on current and future land use conditions. This current Municipal Class Environmental Assessment (MCEA) considers and builds upon the information from these plans and studies.



- Natural heritage features within the VMC are limited to small areas abutting Black Creek and the Edgeley Pond.
- Fluvial geomorphology (i.e., the study of the physical form of rivers) was previously assessed within VMC. Erosion and instability concerns were addressed through the Black Creek Renewal project.
- Previous hydrogeology studies indicated relatively high groundwater elevation in the VMC.
- Existing stormwater management system includes a minor and major drainage system, and stormwater management ponds that discharge to a tributary or the main branch of Black Creek.
- Stormwater management criteria for development and redevelopment established through previous studies.
- Floodplain delineated by Toronto and Region Conservation Authority (TRCA).
- Storm sewer and roadway drainage model for VMC completed through 2024 Integrated Urban Water Plan study.

# Existing Conditions (continued)



VMC Secondary Plan 2025 designates land use for development and redevelopment, parks and environmental open space, and infrastructure including stormwater management.

- Current City of Vaughan Official Plan and Provincial Planning Statement.

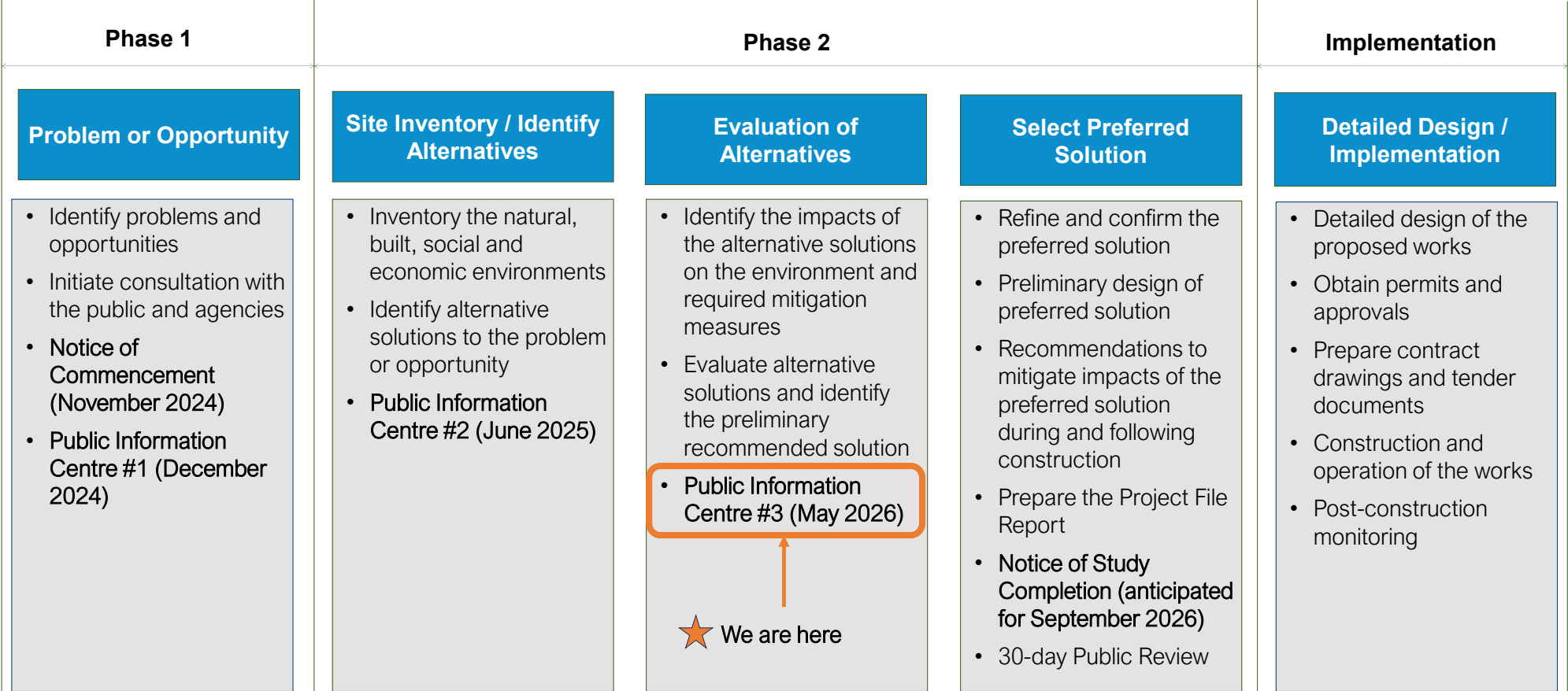
## Cultural Heritage Environment

- Cultural heritage resources refers to archaeology, built heritage, and cultural heritage landscapes.
- Built heritage and cultural heritage landscapes are inventoried by the City and there are no heritage properties within the study area.
- Archaeological potential has been removed for most of the study area because of previous disturbance (land alterations) from the existing development in the VMC.
- The VMC is the City's emerging downtown and central business district – the financial, innovation and cultural centre of the City.

## Social and Economic Environment

# Municipal Class Environmental Assessment Process

This study is being carried out in accordance with the requirements of Schedule 'B' projects outlined in the Municipal Engineers Association "Municipal Class Environmental Assessment" (MCEA) document (February 2024). This study is being undertaken to satisfy Phases 1 and 2 of the MCEA process.



# Evaluation Criteria

The City has established evaluation criteria based on previous studies, stakeholder input, municipal and provincial guidelines and existing conditions. Preliminary evaluation criteria fall under the following categories:

## Technical / Engineering

- Adherence to current stormwater management criteria
- Effectiveness for stormwater control and treatment
- Adherence to City and Provincial design standards
- Physical constraints and conflicts
- Ease of implementation
- Operations and maintenance
- Climate change resiliency

## Land Use Planning, Social and Cultural

- Consistency with New VMC Secondary Plan and Parks & Wayfinding Master Plan
- Construction impacts on community

## Financial and Property Impacts

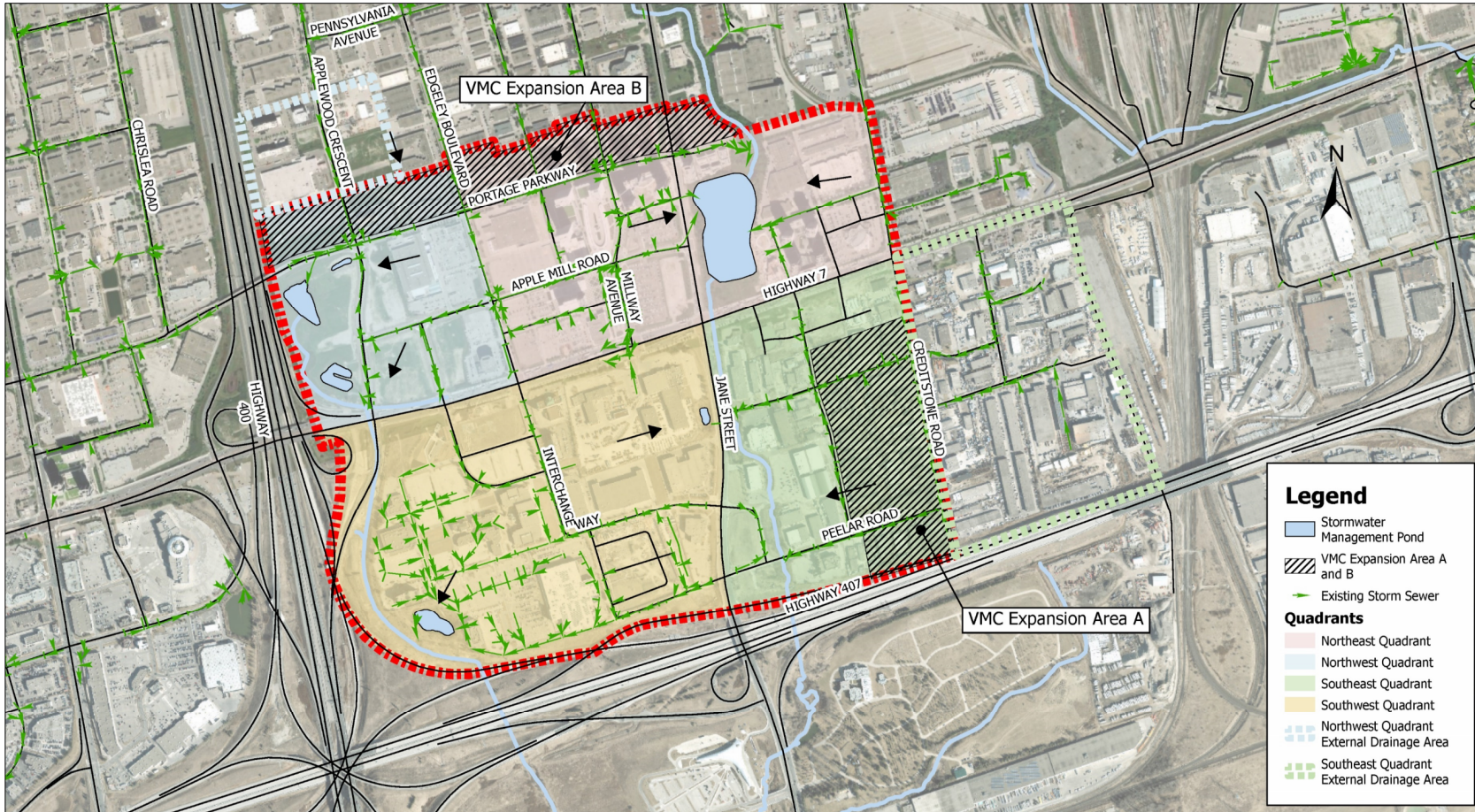
- Capital cost of implementation
- Cost of operations, maintenance and replacement
- Availability of City owned land or need to expropriate private lands

## Natural Environment

- Alignment with other studies
- Opportunities for enhancements

# VMC Stormwater Management Quadrants

Stormwater runoff within the VMC is managed based on drainage boundaries. Drainage is split into four 'quadrants', which consist of the northeast, northwest, southeast and southwest.



# VMC Secondary Plan - Land Use

The map shows how different areas within the VMC are planned to be used. It identifies where residential, commercial, mixed-use, parks, and institutional spaces are located. The map helps guide future development by showing how land is organized to support a complete, connected urban centre with places to live, work, and gather.



# Northeast Quadrant Edgeley Pond and Park



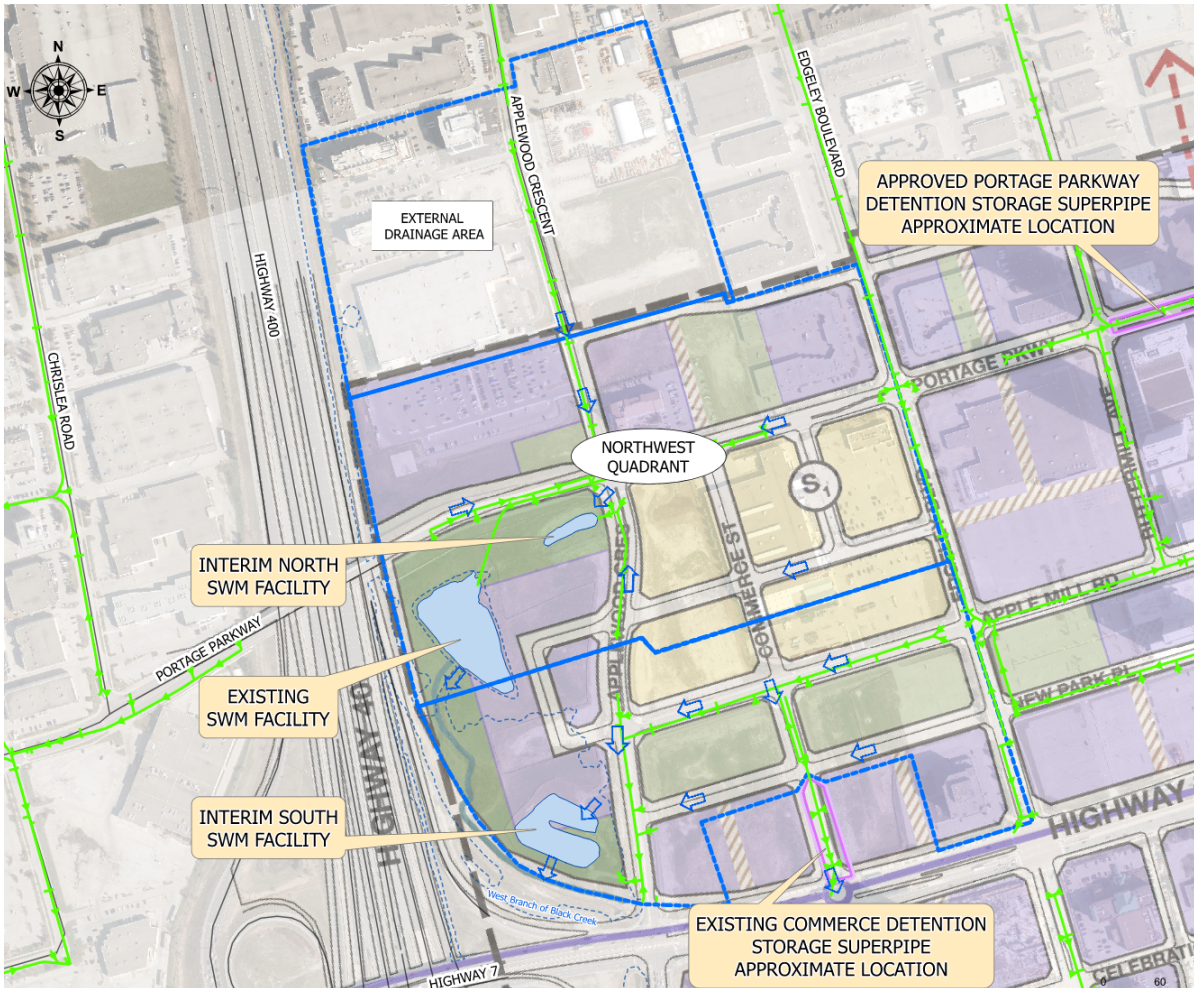
Stormwater management (SWM) for the northeast quadrant will be provided by the Edgeley Pond retrofit to meet current SWM criteria. The Edgeley Pond retrofit will also integrate park amenities.

The Edgeley Pond and Park is currently under construction, which began in 2025. The retrofit of the existing pond is using a Design-Build approach as part of the City's Black Creek Renewal project.



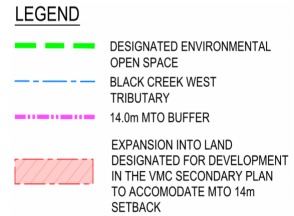
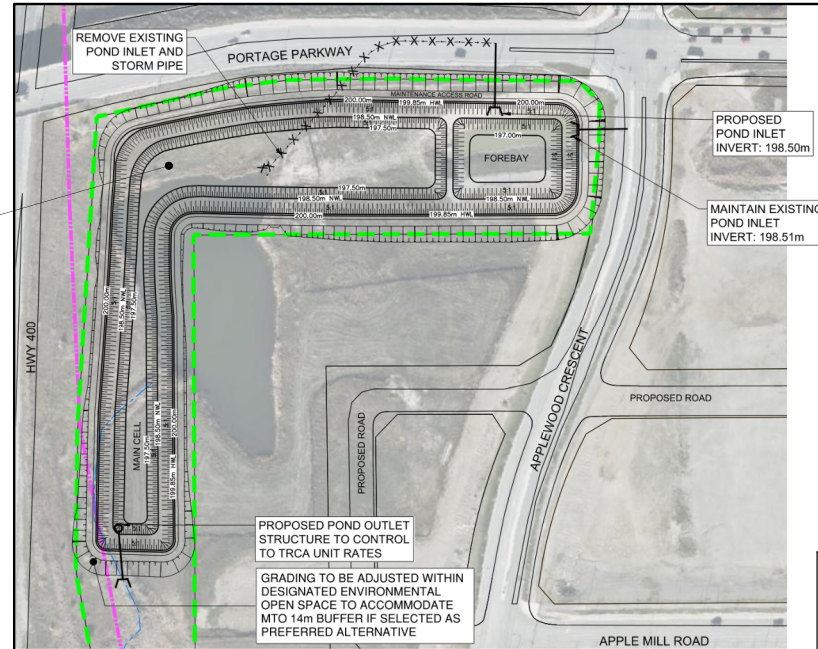
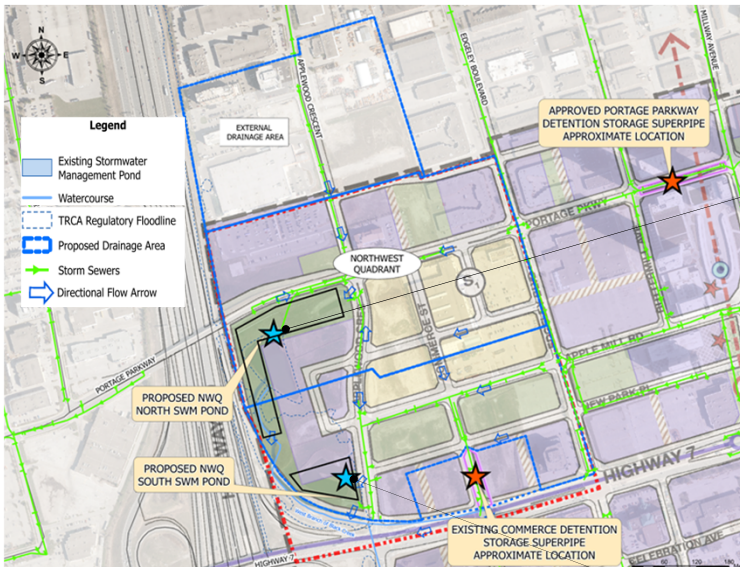
From Black Creek Renewal Design Build Public Information Centre Presentation (May 2, 2024)

# Northwest Quadrant Alternative: Do Nothing / Maintain Existing Stormwater Management Ponds

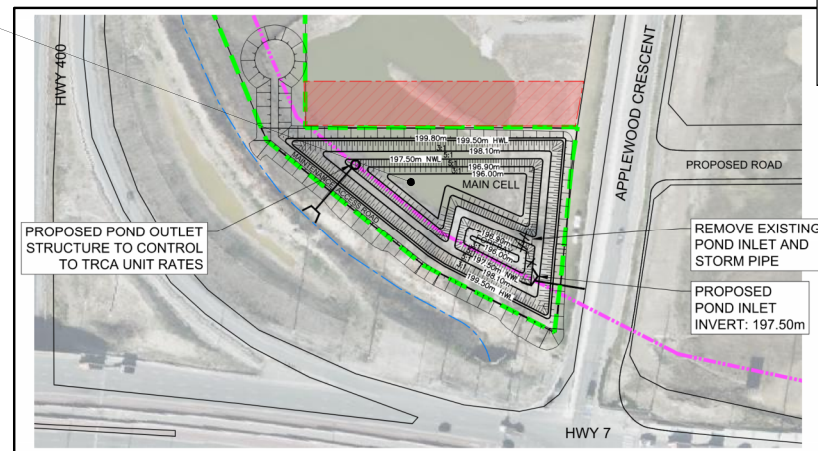


- Retain the existing (interim) stormwater management (SWM) ponds.
- Privately-owned SWM controls to be implemented during development and redevelopment of private properties, according to current City requirements and SWM criteria for the VMC.

# Northwest Quadrant Alternative: Retrofit Stormwater Management Ponds

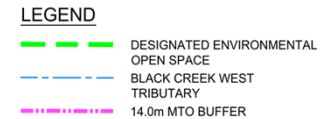
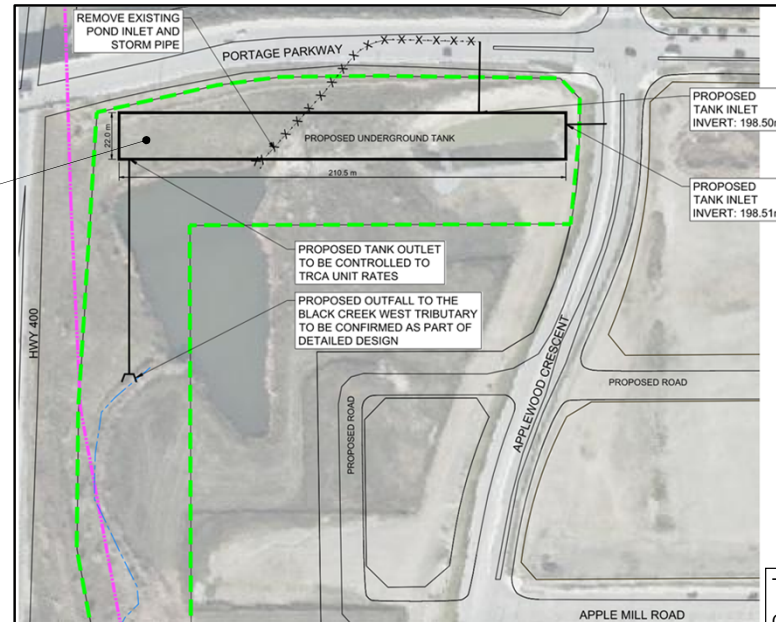
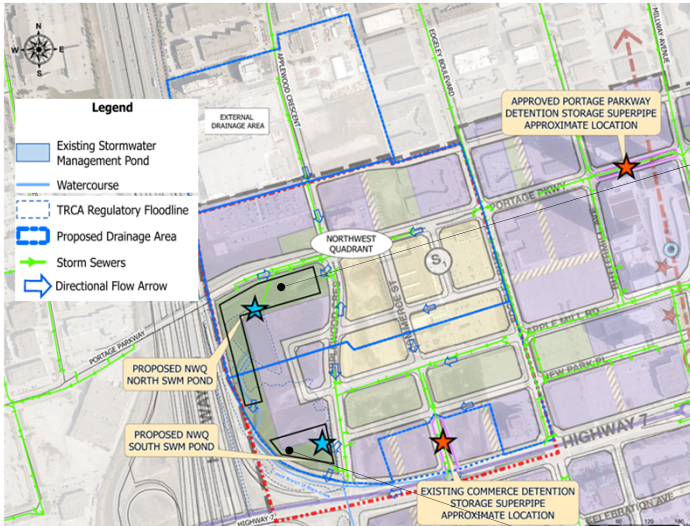


*Stormwater management pond footprint is conceptual and will be refined in later design stages.*

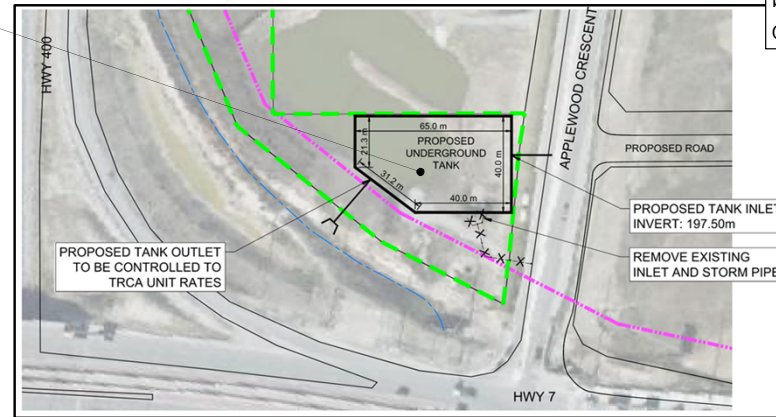


- Expand stormwater management (SWM) ponds according to 2012 Municipal Master Plan and 2024 VMC Functional Servicing Strategy.
- Privately-owned SWM controls to be implemented during development and redevelopment of private properties, according to current City requirements and SWM criteria for the VMC.

# Northwest Quadrant Alternative: New Non-Conventional/Underground Stormwater Management Facility



Tank footprint is conceptual and will be refined in later design stages.



- New underground storage for quantity and erosion control with upstream water quality control within roadway right-of-way and private blocks
- Privately-owned stormwater management (SWM) controls to be implemented during development and redevelopment of private properties, according to current City requirements and SWM criteria for the VMC.

# Evaluation Matrix - Northwest Quadrant

Factors and Sub Factors	Alternatives		
	Alt. 1 - Do Nothing/Maintain Stormwater Management Facilities	Alt. 2 – Retrofit Stormwater Management Ponds	Alt. 3 – Underground Stormwater Management Tanks
<b>Technical / Engineering</b>			
Adherence to current stormwater management targets	✗	●	●
Effectiveness to mitigate adverse effects of stormwater runoff	✗	●	●
Adherence to current and emerging SWMF design standards	✗	●	●
Physical constraints and conflicts	—	✗	●
Ease of implementation	—	■	✗
Operations and maintenance	—	●	■
Climate change resiliency	—	●	●
<b>Natural Environment</b>			
Alignment with natural environment studies and policies	—	●	●
Enhancement of the natural environment	—	●	●
<b>Land Use Planning, Social and Cultural</b>			
Consistency with Secondary Plan land uses and policies	—	✗	●
Alignment with the Parks and Wayfinding Strategy	—	✗	●
Construction impacts on the community	—	■	✗
<b>Financial and Property Impacts</b>			
Cost of implementation	—	■	✗
Cost of operations and maintenance, and replacement	—	●	✗
Availability of City owned land or need to expropriate private lands	—	■	●

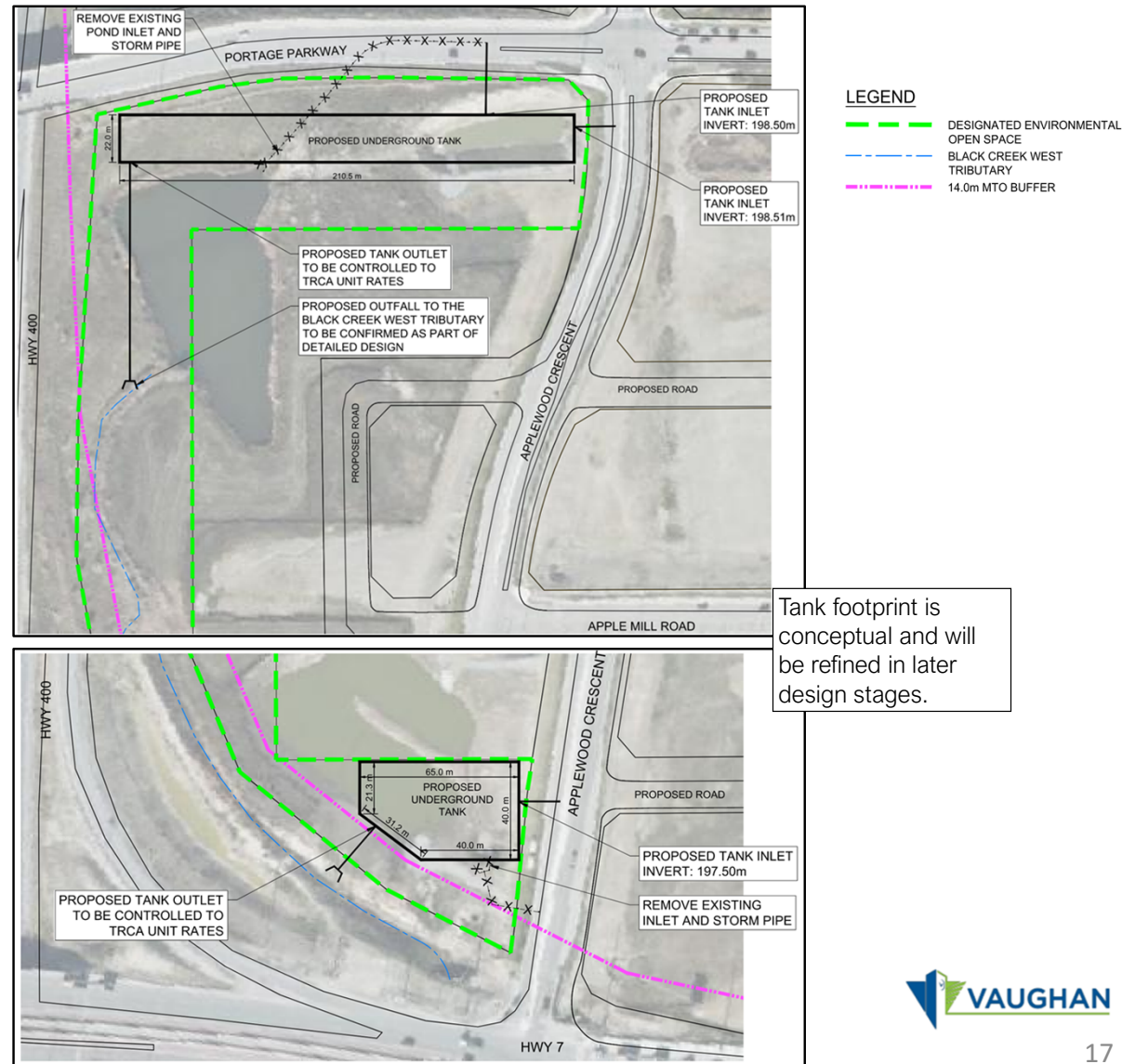
- More Preferred
- Moderately Preferred
- ✗ Less Preferred
- Alternative not carried forward for evaluation

Preferred Alternative

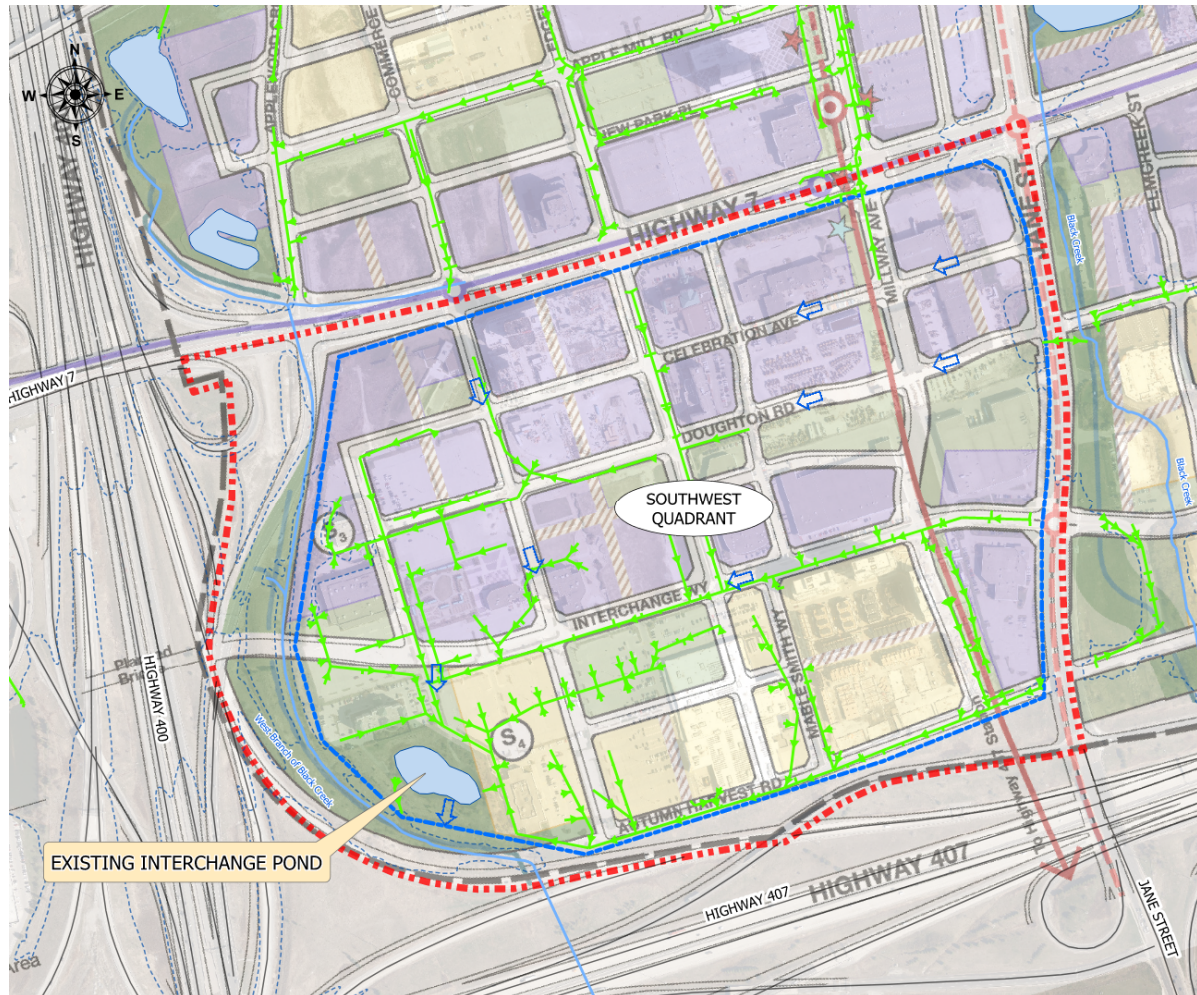
# Northwest Quadrant Preferred Alternative: Underground Stormwater Management Tanks

Based on the results of the evaluation, underground storage tanks have been recommended as the proposed alternative. The reasons for recommending this alternative are as follows:







- The underground facility will control peak flows, up to and including the 100-year (significant storm) event, to Toronto and Region Conservation Authority unit release rates
- The underground facilities provide the opportunity for additional park space within the VMC area in alignment with the Parks and Wayfinding Strategy
- The underground facility will fit more easily within the open space area designated as part of the VMC Secondary Plan, compared to a pond option, without conflicting with area designated for development in the VMC Secondary Plan



# Southwest Quadrant Alternative: No Stormwater Management Pond Retrofit

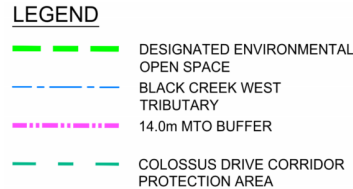
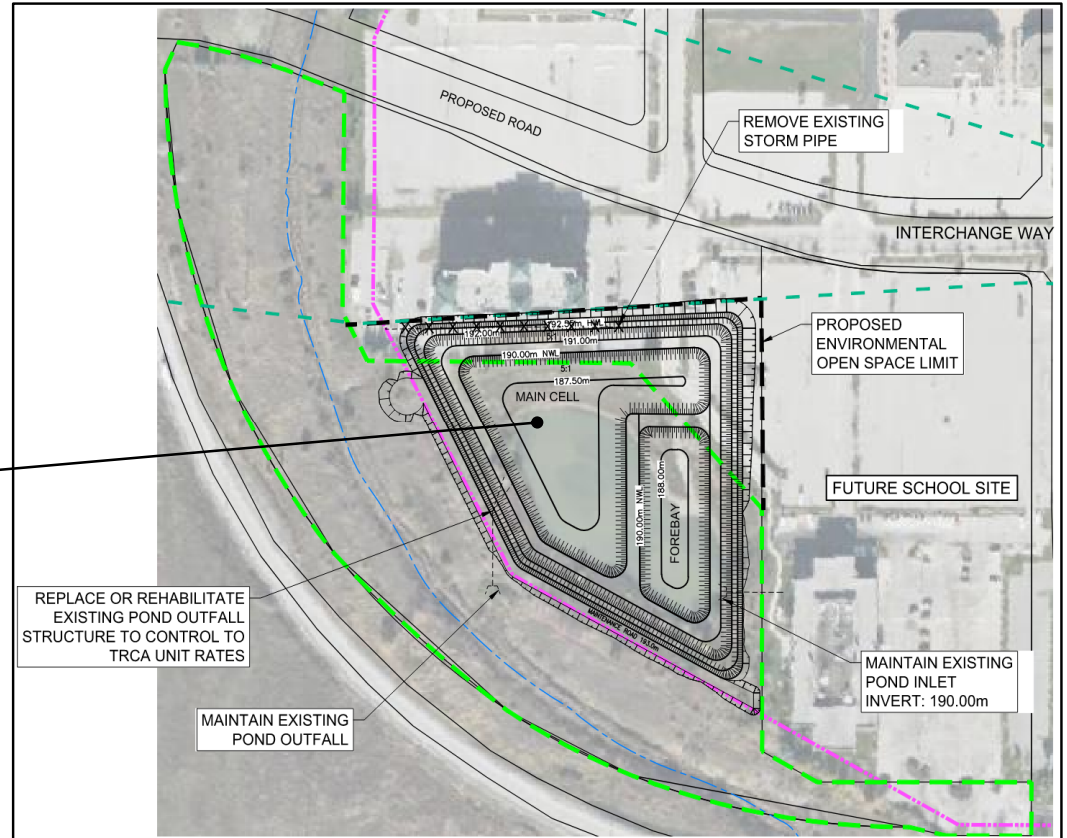
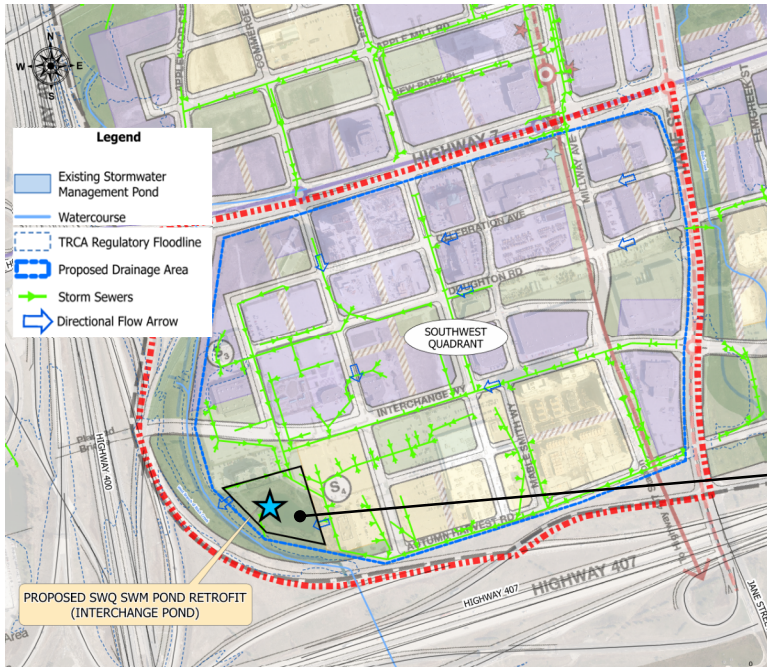


## Legend

-  Existing Stormwater Management Pond
-  Watercourse
-  Toronto & Region Conservation Authority Regulatory Floodline
-  Proposed Drainage Area
-  Storm Sewers
-  Directional Flow Arrow

- Retain the existing (interim) stormwater management (SWM) ponds.
- Privately-owned SWM controls to be implemented during development and redevelopment of private properties, according to current City requirements and SWM criteria for the VMC.

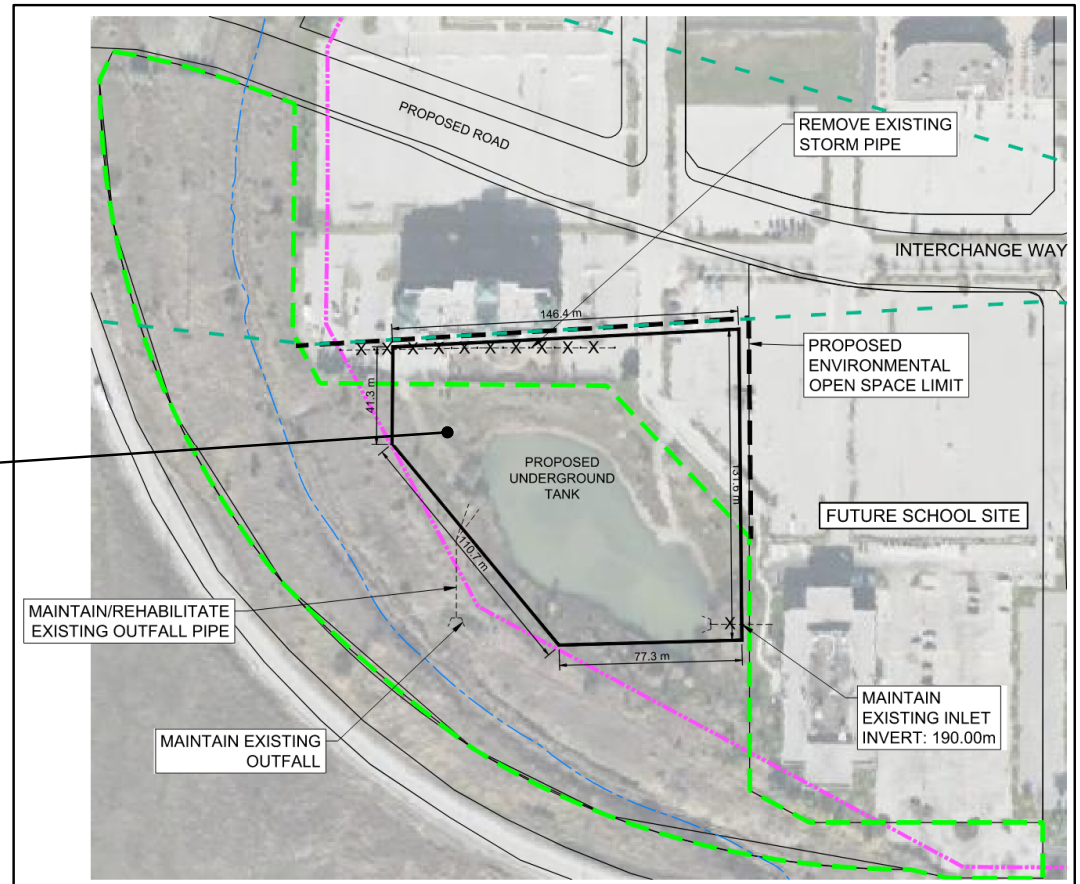
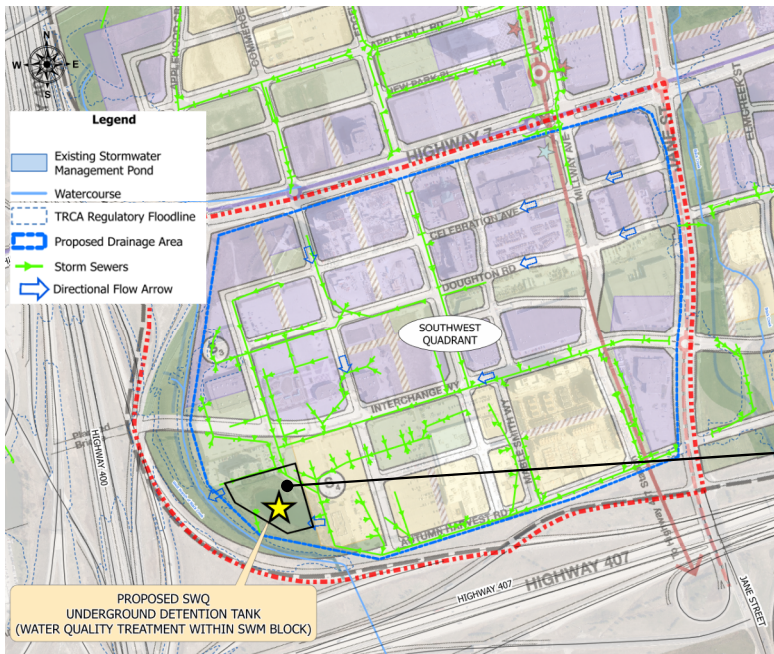
# Southwest Quadrant Alternative: Retrofit Stormwater Management Pond



Stormwater management pond footprint is conceptual and will be refined in later design stages.

- Expand stormwater management (SWM) pond according to 2012 Municipal Master Plan and 2024 VMC Functional Servicing Strategy.
- Privately-owned SWM controls to be implemented during development and redevelopment of private properties, according to current City requirements and SWM criteria for the VMC.

# Southwest Quadrant Alternative: New Non-Conventional/Underground Stormwater Management Facility



## LEGEND





- DESIGNATED ENVIRONMENTAL OPEN SPACE
- BLACK CREEK WEST TRIBUTARY
- 14.0m MTO BUFFER
- COLOSSUS DRIVE CORRIDOR PROTECTION AREA

Tank footprint is conceptual and will be refined in later design stages.

- New underground storage for quantity and erosion control with upstream water quality control within stormwater management (SWM) block.
- Privately-owned SWM controls to be implemented during development and redevelopment of private properties, according to current City requirements and SWM criteria for the VMC.

# Evaluation Matrix – Southwest Quadrant

Factors and Sub Factors	Alternatives		
	Alt. 1 – Do Nothing/Maintain Stormwater Management Pond	Alt. 2 – Stormwater Management Pond Retrofit	Alt. 3 - Underground Stormwater Management Tank
<b>Technical / Engineering</b>			
Adherence to current stormwater management targets	✗	●	●
Effectiveness to mitigate adverse effects of stormwater runoff	✗	●	●
Adherence to current and emerging SWMF design standards	✗	●	●
Physical constraints and conflicts	■	●	●
Ease of implementation	■	■	✗
Operations and maintenance	■	●	■
Climate change resiliency	■	●	●
<b>Natural Environment</b>			
Alignment with natural environment studies and policies	■	●	●
Enhancement of the natural environment	■	●	●
<b>Land Use Planning, Social and Cultural</b>			
Consistency with Secondary Plan land uses and policies	■	●	●
Alignment with the Parks and Wayfinding Strategy	■	✗	●
Construction impacts on the community	■	■	✗
<b>Financial and Property Impacts</b>			
Cost of implementation	■	■	✗
Cost of operations and maintenance, and replacement	■	●	✗
Availability of City owned land or need to expropriate private lands	■	■	■

-  More Preferred
-  Moderately Preferred
-  Less Preferred
-  Alternative not carried forward for evaluation

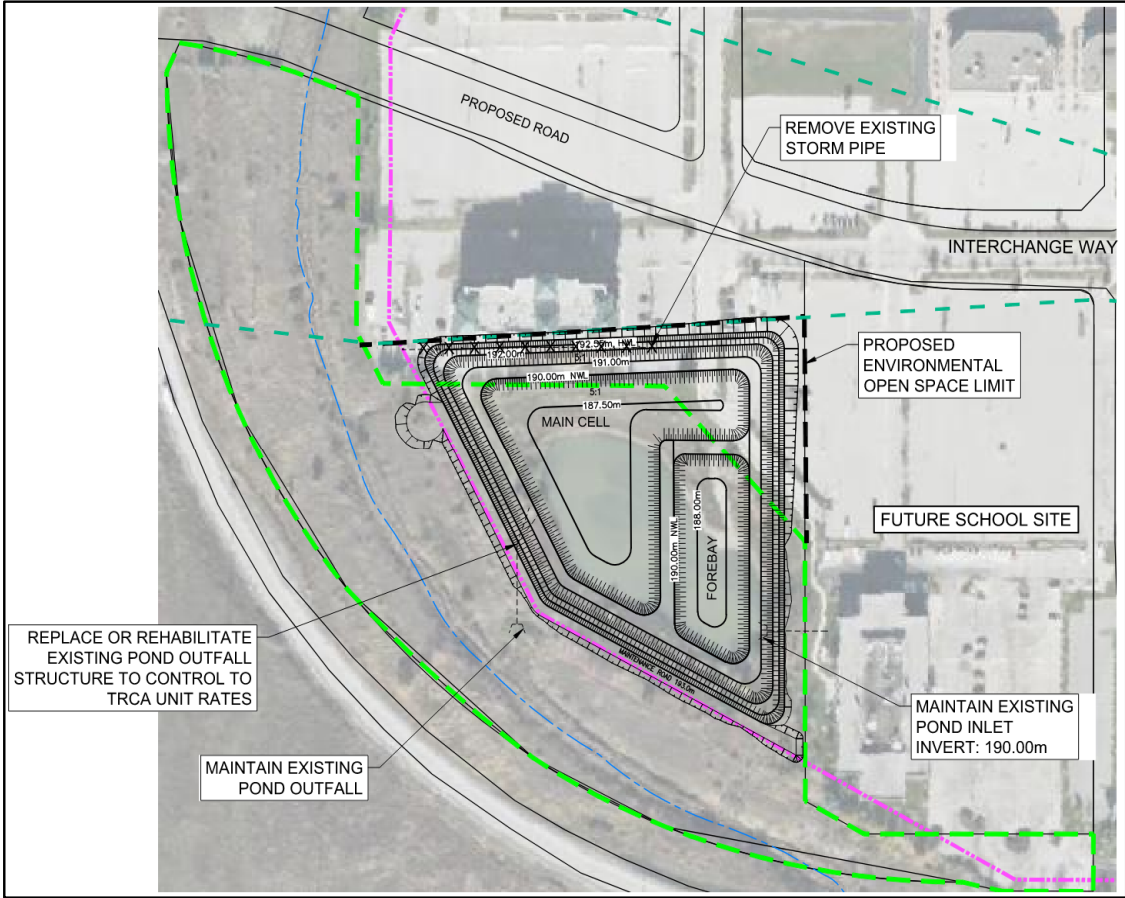
Preferred Alternative

# Southwest Quadrant





## Preferred Alternative: Retrofit Stormwater Management Pond

Based on the results of the evaluation, a stormwater management (SWM) pond retrofit has been recommended as the proposed alternative. The reasons for recommending this alternative are as follows:

- The pond will control peak flows, up to and including the 100-year (significant storm) event, to Toronto and Region Conservation Authority unit release rates as well as provide enhanced quality and erosion control
- The ponds will fit within the open space / park space area designated as part of the VMC Secondary Plan
- With other components being equal, a pond has significantly lower upfront and operation and maintenance cost compared to an underground tank

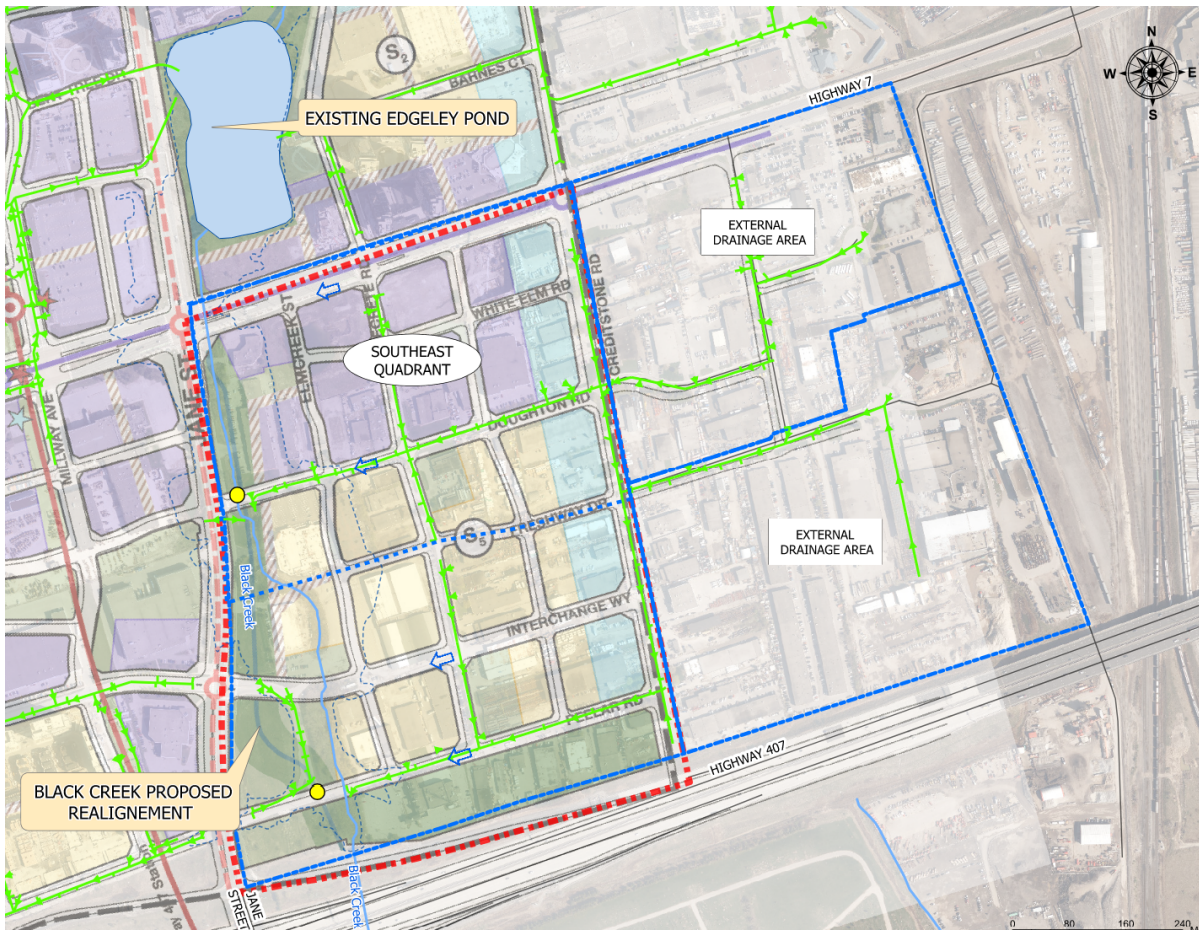


**LEGEND**

	DESIGNATED ENVIRONMENTAL OPEN SPACE
	BLACK CREEK WEST TRIBUTARY
	14.0m MTO BUFFER
	COLOSSUS DRIVE CORRIDOR PROTECTION AREA

Stormwater management pond footprint is conceptual and will be refined in later design stages.

# Southeast Quadrant Alternative: Do Nothing / No New Stormwater Management Facility

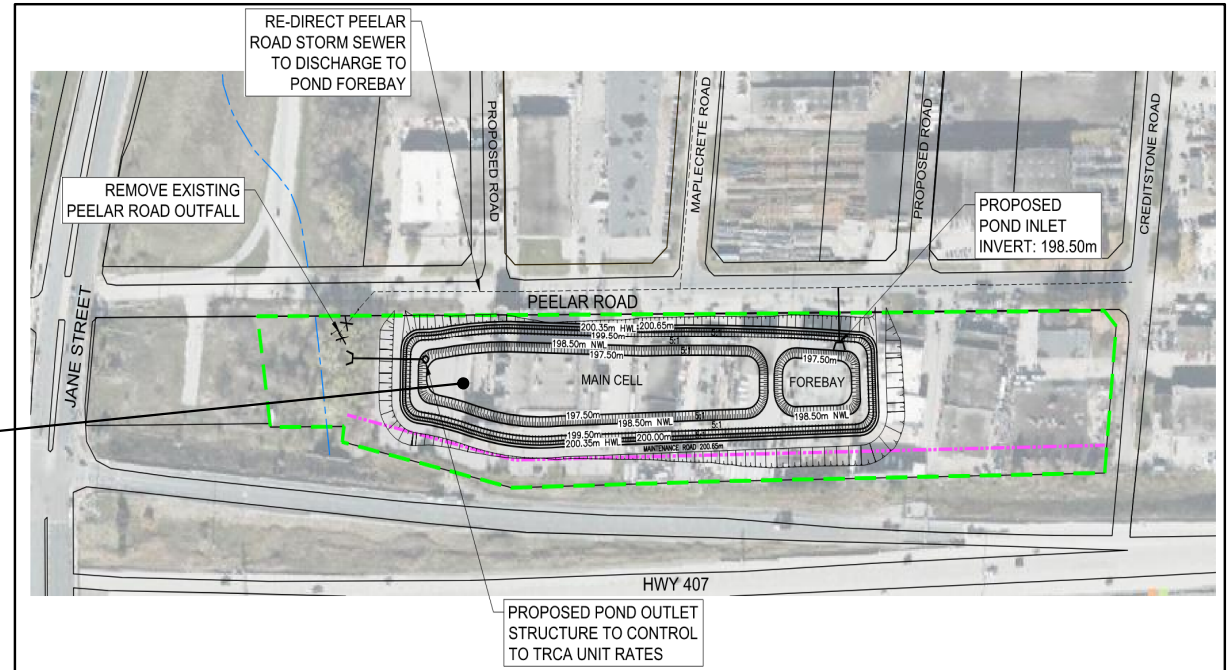
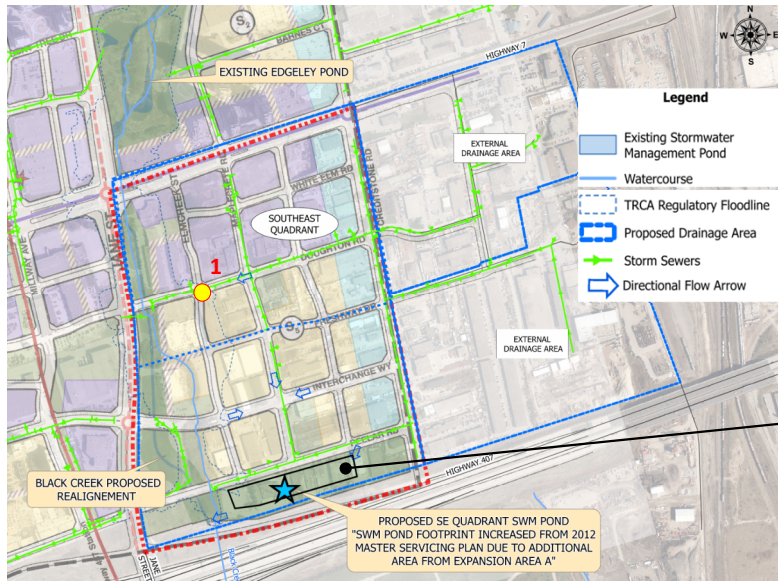


## Legend

- Existing Stormwater Management Pond
- Watercourse
- Toronto & Region Conservation Authority Regulatory Floodline
- Proposed Drainage Area
- Storm Sewers
- Directional Flow Arrow

- Privately-owned stormwater management (SWM) controls to be implemented during development and redevelopment of private properties, according to current City requirements and SWM criteria for the VMC.
- While this alternative does not propose water quality treatment in public roadways, the City currently requires water quality control for new / redeveloped public roadways through low impact development facilities.

# Southeast Quadrant Alternative: New Stormwater Management Pond



## LEGEND

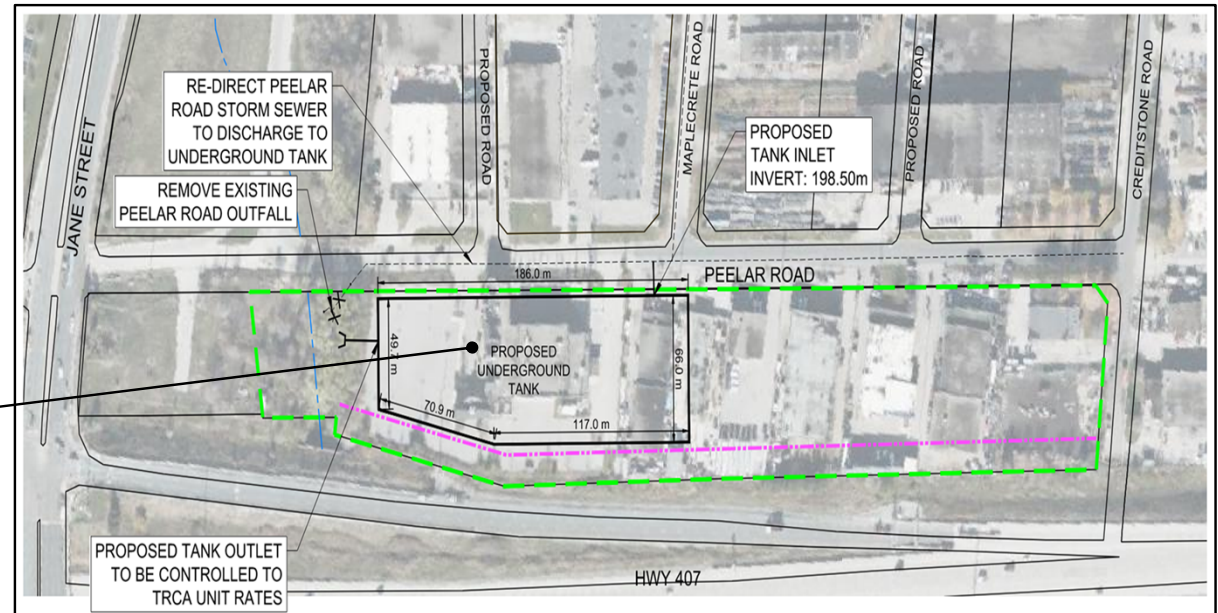
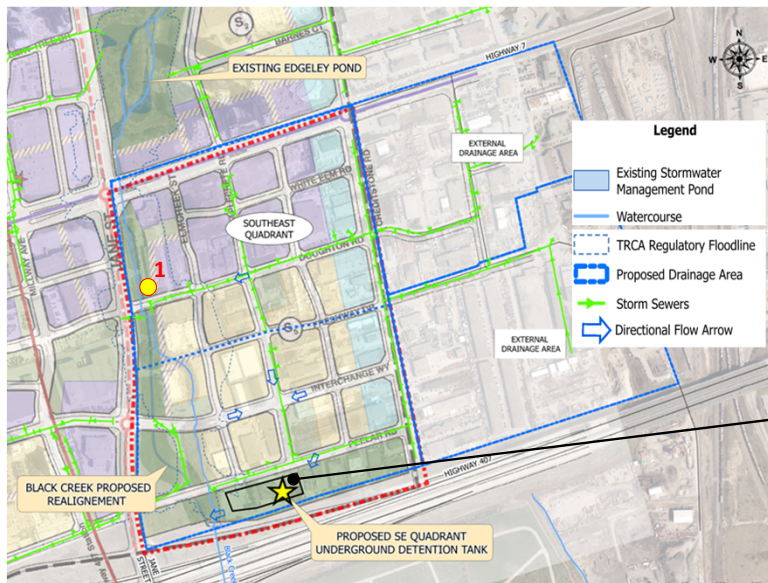
- DESIGNATED ENVIRONMENTAL OPEN SPACE
- BLACK CREEK MAIN BRANCH
- 14.0m MTO BUFFER

Stormwater management pond footprint is conceptual and will be refined in later design stages.

- New stormwater management (SWM) pond south of Peelar Road according to 2012 Municipal Master Plan and 2024 VMC Functional Servicing Strategy.
- Privately-owned SWM controls to be implemented during development and redevelopment of private properties, according to current City requirements and SWM criteria for the VMC.

*Note: For the north portion, drainage to the existing Doughton Road outfall to Black Creek, right-of-way runoff will require water quality control, which can be achieved with the implementation of SWM Tree Trenches in the right-of-way. SWM Tree Trenches are low-impact-development methods that filter stormwater runoff before it enters the storm sewer system .*

# Southeast Quadrant Alternative: New Underground Stormwater Management Tank



## LEGEND

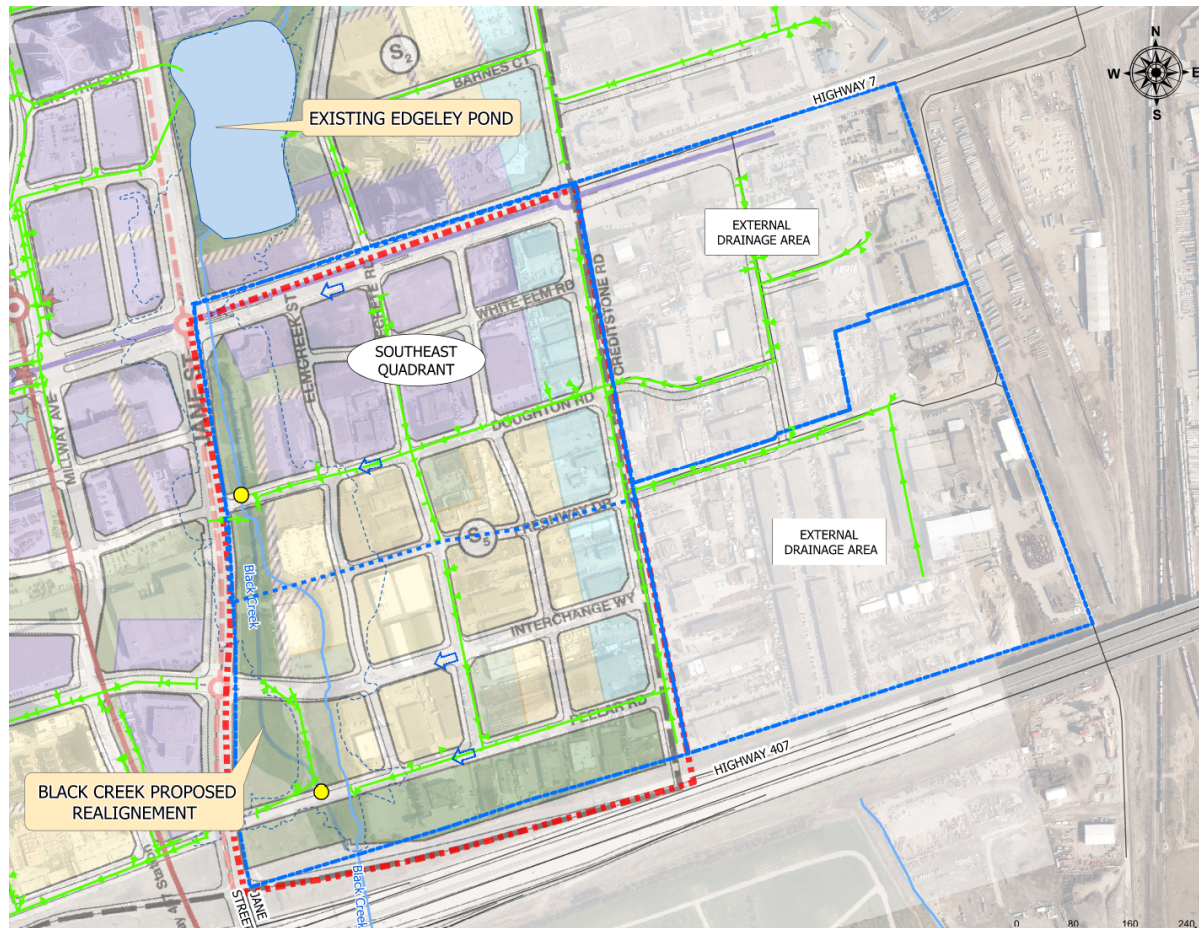
	DESIGNATED ENVIRONMENTAL OPEN SPACE
	BLACK CREEK MAIN BRANCH
	14.0m MTO BUFFER







Tank footprint is conceptual and will be refined in later design stages.

- New underground storage for quantity and erosion control with upstream water quality control within stormwater management (SWM) block.
- Privately-owned SWM controls to be implemented during development and redevelopment of private properties, according to current City requirements and SWM criteria for the VMC.

*Note: For the north portion, drainage to the existing Doughton Road outfall to Black Creek, right-of-way runoff will require water quality control, which can be achieved with the implementation of SWM Tree Trenches in the right-of-way. SWM Tree Trenches are low-impact-development methods that filter stormwater runoff before it enters the storm sewer system .*

# Southeast Quadrant Alternative: Water Quality Control for Roadways







- Legend**
-  Existing Stormwater Management Pond
  -  Watercourse
  -  TRCA Regulatory Floodline
  -  Proposed Drainage Area
  -  Storm Sewers
  -  Directional Flow Arrow
- Water quality control for roadways only (excluding quantity and erosion control) will be provided through privately owned stormwater management (SWM) controls.
  - These controls will be implemented during the development and redevelopment of private properties, in accordance with current City requirements and VMC SWM criteria, with the inclusion of on-site water quality control.

# Evaluation Matrix - Southeast Quadrant

Factors and Sub Factors	Alternatives			
	Alt. 1 - Do Nothing	Alt 2. – New Stormwater Management Pond	Alt 3. – New Underground Stormwater Management Tank	Alt. 4 –Water quality control within road Right-of-way only
<b>Technical / Engineering</b>				
Adherence to current stormwater management targets	✗	●	●	■
Effectiveness to mitigate adverse effects of stormwater runoff	✗	●	●	✗
Adherence to current and emerging SWMF design standards	✗	●	●	✗
Physical constraints and conflicts	—	■	●	—
Ease of implementation	—	■	✗	—
Operations and maintenance	—	■	✗	—
Climate change resiliency	—	●	●	—
<b>Natural Environment</b>				
Alignment with natural environment studies and policies	—	●	●	—
Enhancement of the natural environment	—	●	●	—
<b>Land Use Planning, Social and Cultural</b>				
Consistency with Secondary Plan land uses and policies	—	●	●	—
Alignment with the Parks and Wayfinding Strategy	—	✗	●	—
Construction impacts on the community	—	■	■	—
<b>Financial and Property Impacts</b>				
Cost of implementation	—	■	✗	—
Cost of operations and maintenance, and replacement	—	■	✗	—
Availability of City owned land or need to expropriate private lands	—	■	●	—

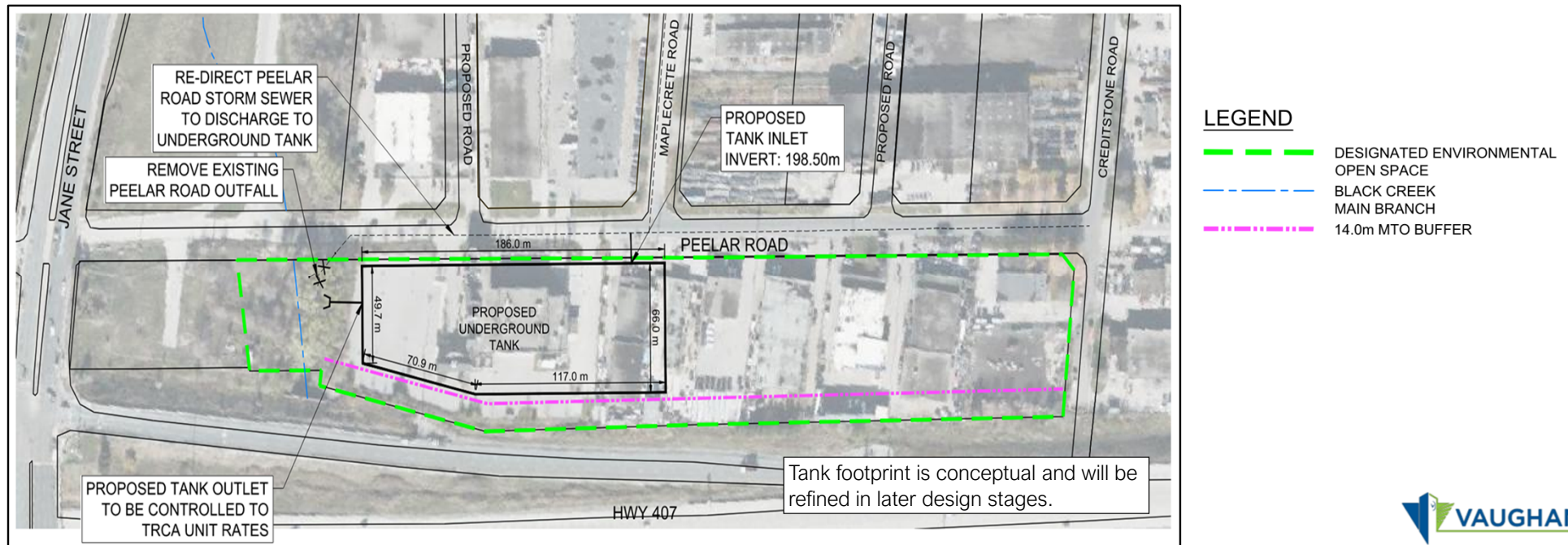
Preferred Alternative

-  More Preferred
-  Moderately Preferred
-  Less Preferred
-  Alternative not carried forward for evaluation

# Southeast Quadrant Preferred Alternative: Underground Stormwater Management Tank

Based on the results of the evaluation, an underground storage tank has been recommended as the proposed alternative. The reasons for recommending this alternative are as follows:

- The underground facility will control peak flows for its respective drainage area, up to and including the 100-year (significant storm) event, to TRCA unit release rates
- The underground facilities provide the opportunity for additional park space within the VMC area in alignment with the Parks and Wayfinding Strategy
- The underground facility has a smaller footprint compared to a pond, which is a significant benefit in the southeast quadrant due to the absence of existing end-of-pipe facilities and higher land / development pressures



# Thank You For Attending

Following this Open House, the City will:

- Review and respond to comments received
- Finalize the study throughout 2026, including:
  - Further development of the preferred alternatives (to 30% detailed design)
  - Completion of the Environmental Study Report (ESR)
  - Posting of the ESR to the project website for a 30-day public review

We encourage you to provide comments in writing tonight or through the project website at [vaughan.ca/VMCSWM](https://vaughan.ca/VMCSWM) by Friday, May 29, 2026.

## Contact Information

Visit [vaughan.ca/VMCSWM](https://vaughan.ca/VMCSWM) for project information, future notices, and to access the online comment form.

Email [VMC.SWMStudy@vaughan.ca](mailto:VMC.SWMStudy@vaughan.ca) to be added to the study's mailing list.



SCAN ME



**Thank You For  
Your Participation!**

**TYLin**

**3** Third Party  
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