

# Black Creek Renewal Project

2024 MEA Conference, Ottawa  
November 20, 2024



ENTUITIVE



# Agenda / Discussion for Today



**PROJECT BACKGROUND**

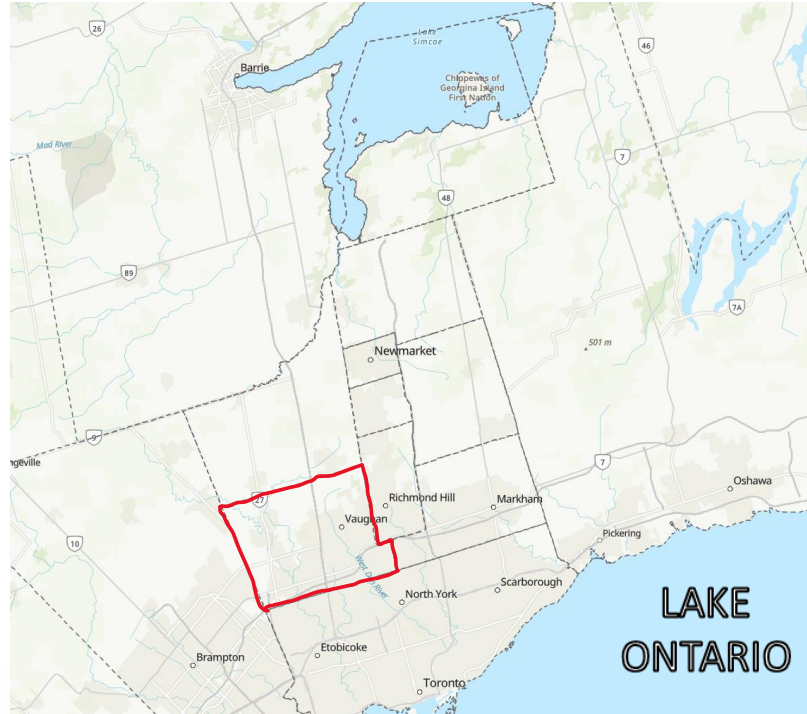


**PROJECT COMPONENTS**



**QUESTION**

# City of Vaughan



# PROJECT LOCATION



# PROJECT LOCATION: THE BLACK CREEK CORRIDOR

- Adjacent to the Vaughan Metropolitan Centre Subway
- Nearby a Major Intersection (Jane Street and Highway 7)
- Within the heart of Downtown Vaughan

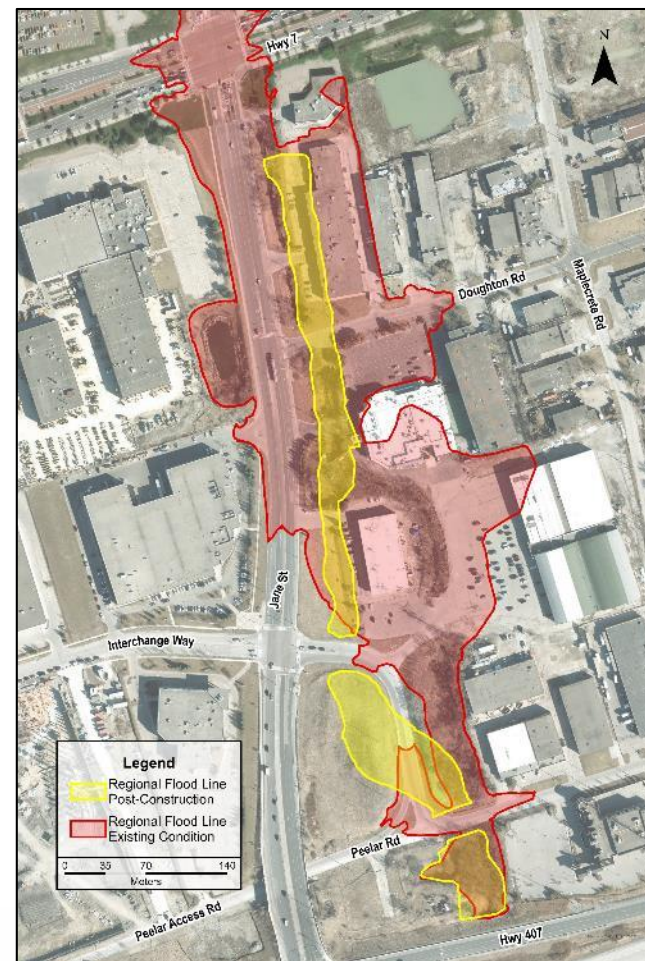


# Vaughan Metropolitan Centre (VMC)



# Problem Definition

- **Existing Conditions**
  - Considerable extents of the project area are flooded, including overtopping of major arterial roads including Jane Street and Highway 7 (red)
  - Edgeley Pond is not accessible to the public and act as an online SWM facility
  - Much of the creek corridor is inaccessible and poses a flood hazard
- **Objective**
  - Construction of the Black Creek Renewal channel will reduce the limits of flooding as shown in the proposed conditions (yellow)
  - Edgeley Pond, north of Hwy 7, to be developed not only as a SWM facility but also as a public park for the residents to enjoy.
- **Results**
  - The post-construction flood line will be contained within the new Black Creek channel thus eliminating flood risk and free up developable lands.
  - Edgeley Pond will be the largest park area owned by the City in the VMC.



# 2005 FLOOD





# 2005 FLOOD



# 2005 FLOOD



# DESIGN VISION



“...the design of the Black Creek channel, open space and related infrastructure shall recognize the prominence and significance of the VMC as well as the ecological significance of Black Creek. The new naturalized creek channel will be integrated in design to a high urban design and sustainability standard and with complementary landscapes.”

# DESIGN PRINCIPLES



The Black Creek Design is based on the following guiding principles:

1. **Re-align and Reconstruct the Black Creek Corridor (Hwy 7 – Hwy 407)**
2. **Address Flooding Impacts (Edgeley Pond, Hwy 7 culvert crossing and Black Creek)**
3. **Implement a Public Realm (Edgeley Pond/Park and Jane Street/Black Creek corridor streetscape and ATF)**
4. **Establish Habitat and Enhance Ecology**
5. **Celebrate Stormwater**
6. **Educate and Inform**

# PROJECT OUTCOME



Modify the floodplain to mitigate flood damages to properties/transit hub in VMC



Enable developable land to meet provincial housing mandate



Connecting the missing pieces of active transportation network



Creating public realm, park space, and public amenities for residents



Upgrade existing underground infrastructure




# PROJECT COMPONENTS

- A. Edgeley Pond & Park(EPP)
- B. EPP Pedestrian Bridge
- C. Plaza & Plateau
- D. Jane Street Streetscape North
- E. Hwy 7 Culvert Replacement
- F. Black Creek Renewal  
(including streetscape and public realm)



# Component A - Edgeley Pond and Park



 <p>CONTRACT FOR: <b>EDGELEY POND + PARK</b> 7955 JANE STREET, VAUGHAN, ONTARIO</p> <p><b>PHASE 1</b> TENDER UPDATE FOR THCA COMMENT AUGUST 13, 2021</p> 	
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# Component B - Edgeley Pond and Park Pedestrian Bridge

*The Iconic Highlight of the Vaughan Metropolitan Centre*



- **Conceptual Design by Schollen**
- **Complete design and construction by Design-Builder**
- **Connects Barnes Crt to Jane St**

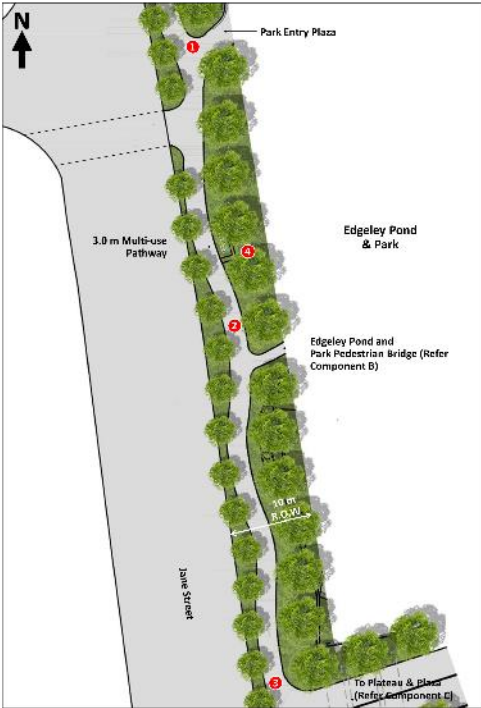


# Component C - Plaza and Plateau



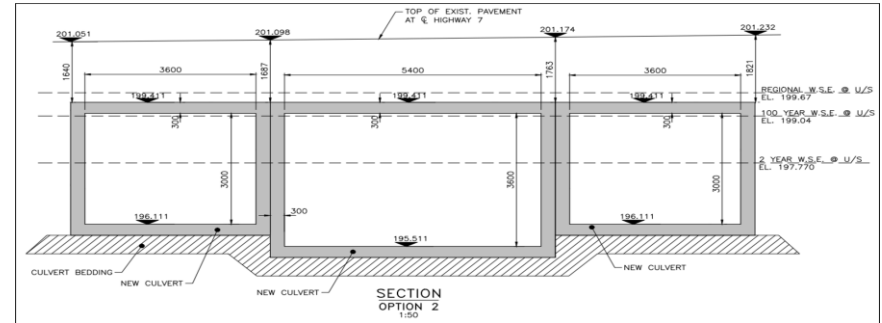
Provides integration of the Edgeley Pond & Park trails with pedestrian traffic at the intersection of Highway 7 and Jane Street

# Component D - Jane Street Streetscape (east side north of Hwy 7)



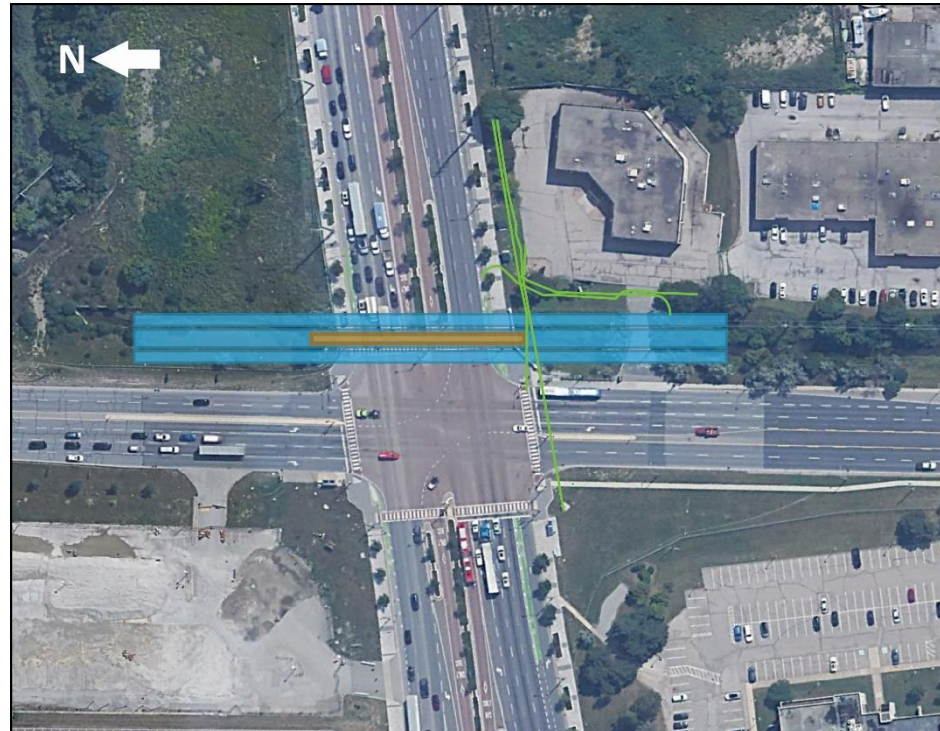
- 3.0m MUP shown to be revised to a sidewalk and cycle track
- Provide connectivity to existing cycling network

# Component E – Hwy 7 Culvert

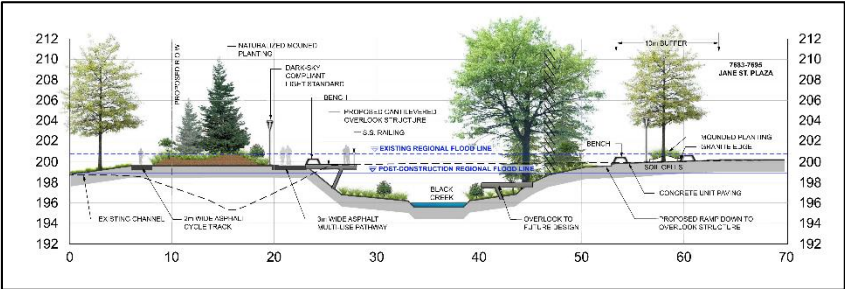


# Special Consideration – Hwy 7 Culvert

- Gas Main
- Subsurface Hydro
- Watermain
- Communications



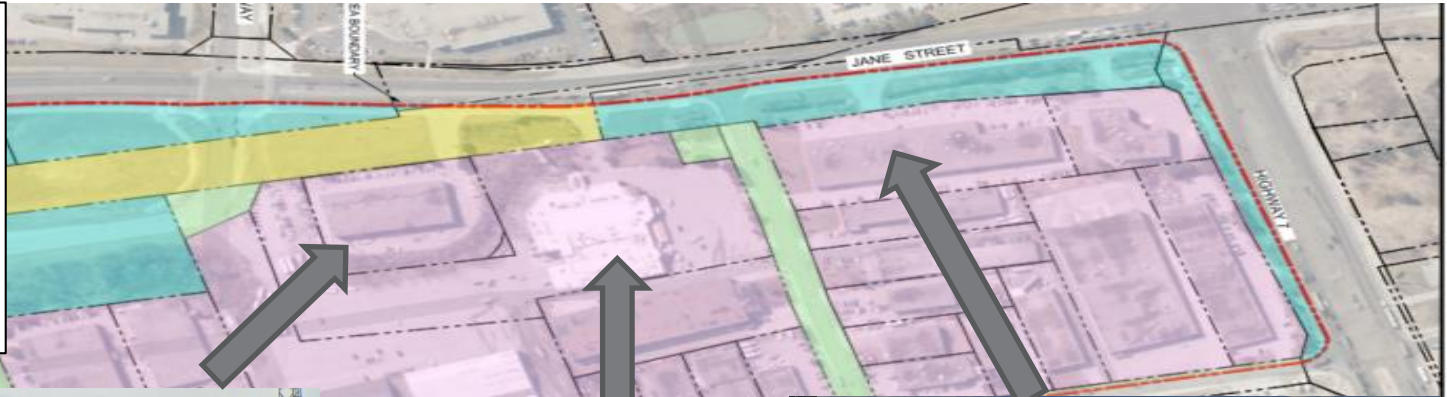
# Component F – Black Creek Renewal



# BLACK CREEK RENEWAL - ACTIVE BUSINESSES

## LEGEND:

- PRIVATE PROPERTY
- CITY PROPERTY
- REGION PROPERTY
- MTO PROPERTY



# Black Creek Vision



*Elevated Overlook*



*Naturalized Landscape*



*Tiered Plantings*



*Wetland Creation*



*Pedestrian Promenade*



*Landscape Terraces*



# Black Creek Renewal - Reaches

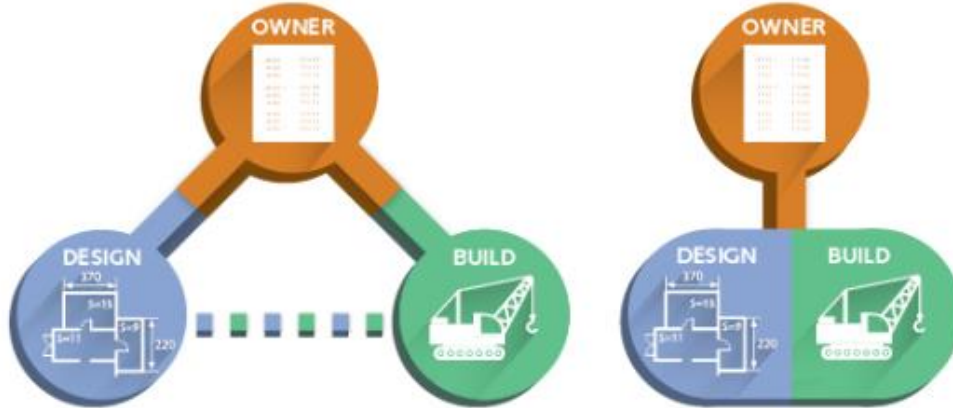




# Project Challenges

- **Technical**
  - Coordinating the construction of the Hwy 7 culvert crossing
  - Agency/Ministry acceptance (TRCA, MECP, DFO, MNR)
  - Implementing interim solutions to accommodate businesses
  - Utility relocation (i.e. hydro, gas, watermain, sewers, communication)
  - Property acquisitions
  - Design Build delivery model (providing sufficient guidance for the outcome while promoting innovation)
- **Stakeholders**
  - Competing interest and priorities
  - Development community

# PROCUREMENT: DESIGN-BUILD



<https://www.adamosecurity.com/why-to-choose-design-build-for-your-secure-facility/>

- City/Technical Advisor produces conceptual design
- Design Builder advances design and completes construction
- Advantages:
  - Minimizes owner risk
  - Schedule efficiency
  - Encourages creativity
- Disadvantages
  - Bias towards cost savings
  - Risk for deviation from the ultimate vision



# Project timelines

Construction Start Date	Construction End Date
2025	2031

**Flood prevention in the VMC**  
Learn more  
[vaughan.ca/BlackCreek](https://vaughan.ca/BlackCreek)



# Thank you!

Questions?