Black Creek Renewal Initiative



Background

- Historical flooding in the study area triggered the need for significant infrastructure improvements
- The City initiated the Black Creek Renewal Municipal Class Environmental Assessment in 2012
- The construction phase of the Black Creek Renewal Project is expected to commence in 2026

Project Objective

- The primary objective is to advance the design for the six projects within the Black Creek Renewal Initiative
- Completion of the six projects will collectively:
 - ✓ Reduce future flooding in the Black Creek Corridor study area
 - ✓ Improve water quality and stream bank erosion
 - ✓ Enhance natural heritage system and public realm
 - ✓ Emphasize active transportation within the area



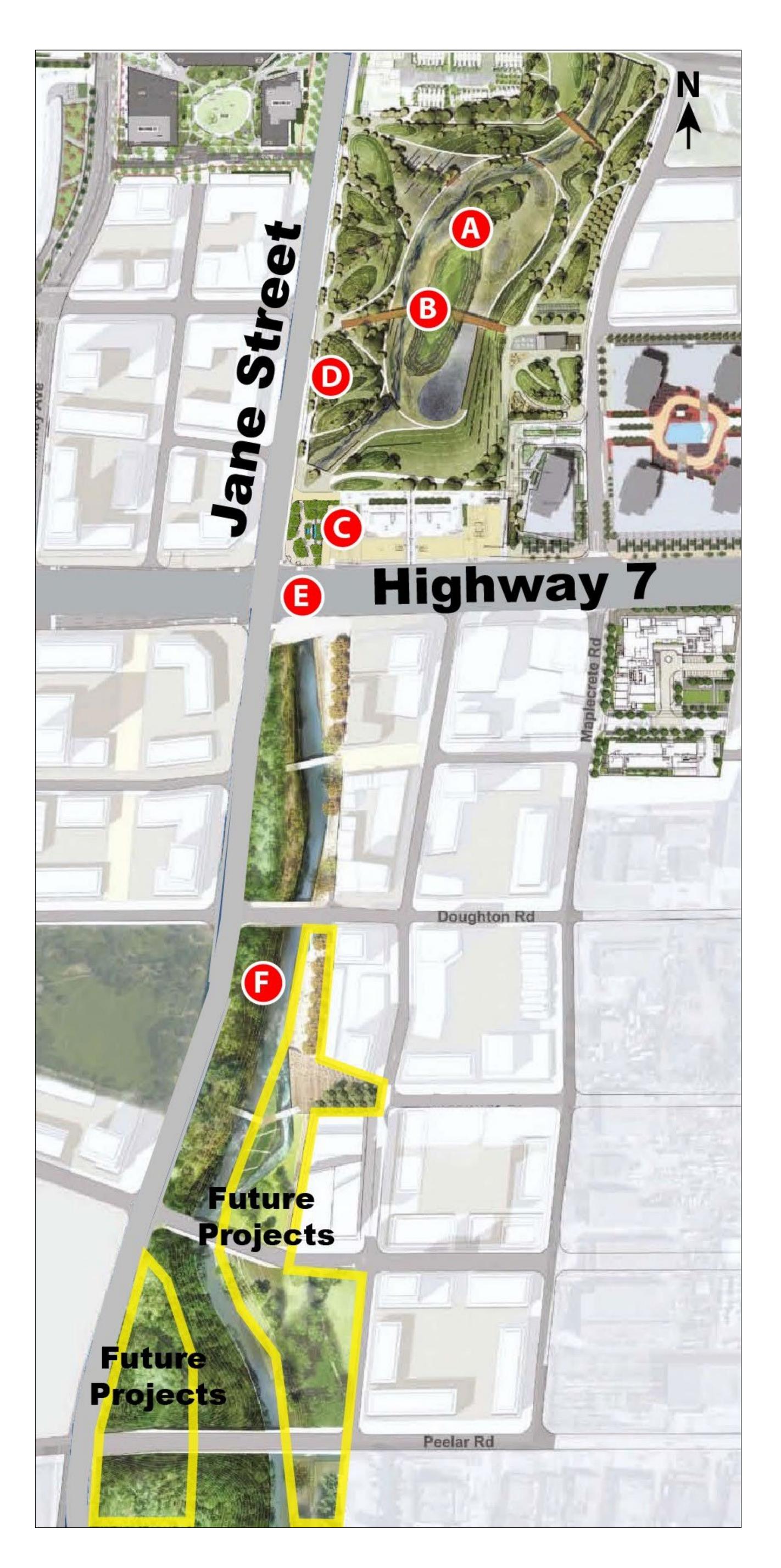






Overview of the Project Components

This project consists of 6 integrated components (A - F).



Project Components:

A: Edgeley Pond and Park

B: Edgeley Pond and Park -

Pedestrian Bridge

C: Plateau and Plaza

D: Jane Street Streetscape North

E: Highway 7 Culvert

Improvements

F: Black Creek Renewal





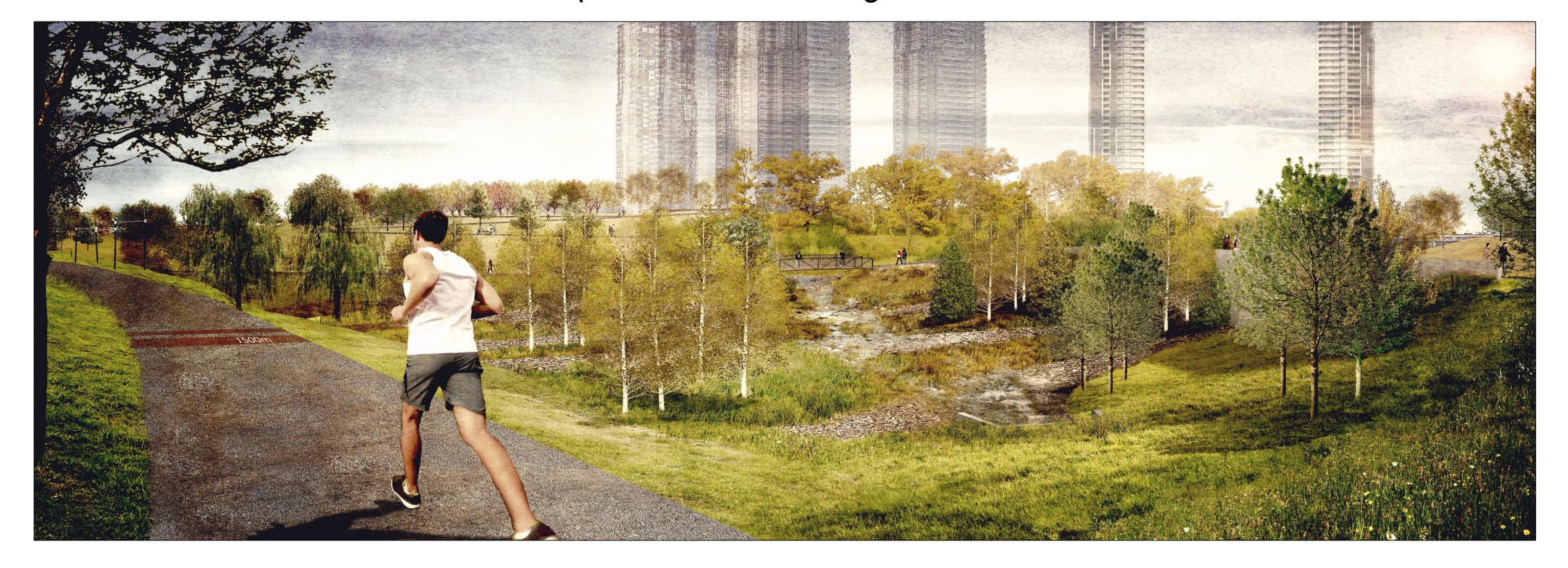




Component A: Edgeley Pond & Park

The Vision of the Park

- To become the heart of the Vaughan Metropolitan Centre
 - Creation of an open and innovative public space
- Improvement to stormwater management infrastructure
 - Optimization of ecological habitat



Objectives

- Improve stormwater management and stream corridor functional design
 - Improve ecological function and provide functional natural habitats
 - Generate spaces for active and passive recreation
 - Showcase design innovation
 - Enable further development of Vaughan's Downtown











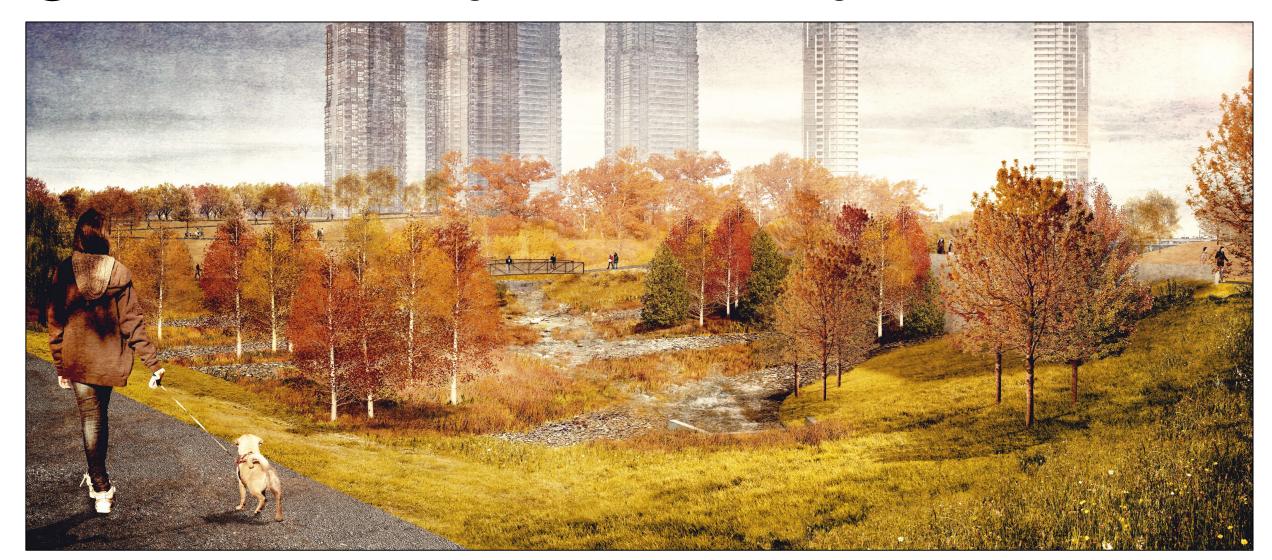
Edgeley Pond & Park Exemplary Features







B View of Green Design Features Looking South



C View of Edgeley Pond & Park Looking North











Component B: Edgeley Pond and Park Pedestrian Bridge

The Iconic Highlight of the Vaughan Metropolitan Centre

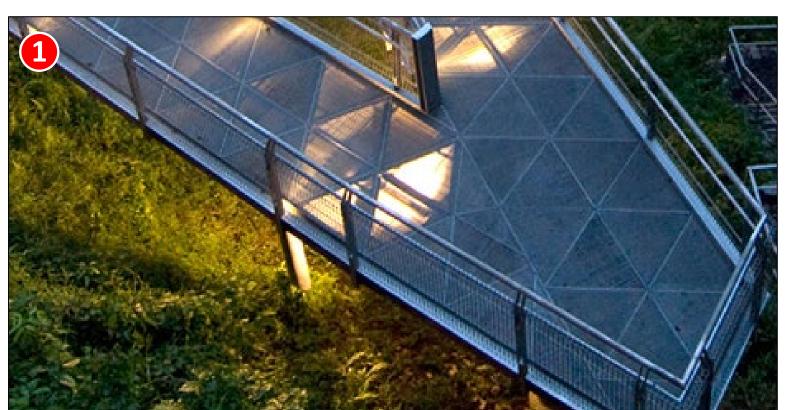


Objectives

- Provide pedestrian access from Maplecrete Road to Jane Street through the Edgeley Pond and Park
- Reflect an iconic character within the Vaughan Metropolitan Centre

Design Features

- Three spans to balance function and form; elegant design appearing lightweight in nature
- High-quality finishes in the handrail, guardrail and decking designed for accessibility, longevity and durability
- Overlook area within the existing forest canopy with a rest area and a space from which to view the park





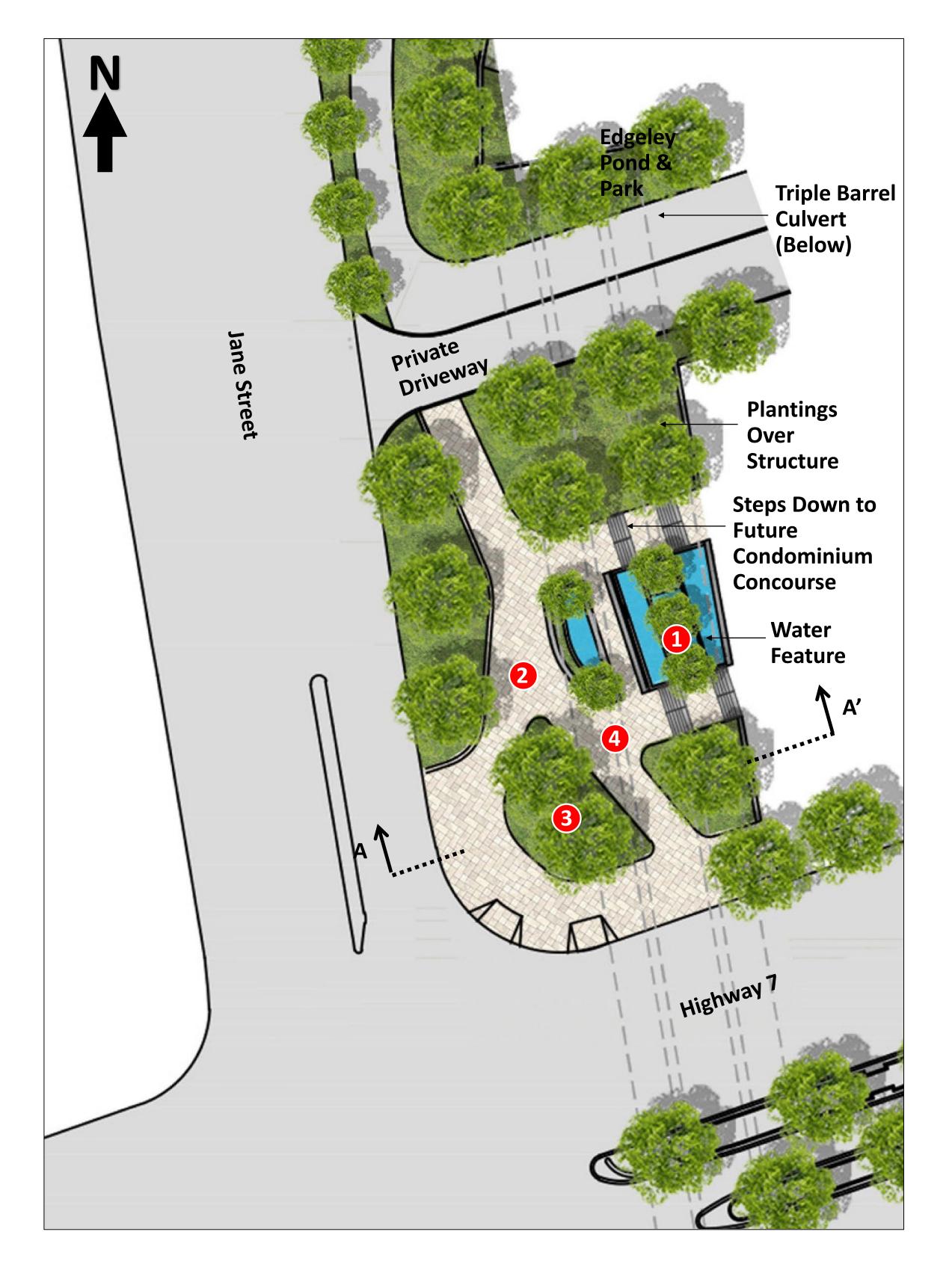








Component C: Plateau & Plaza



Objectives

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

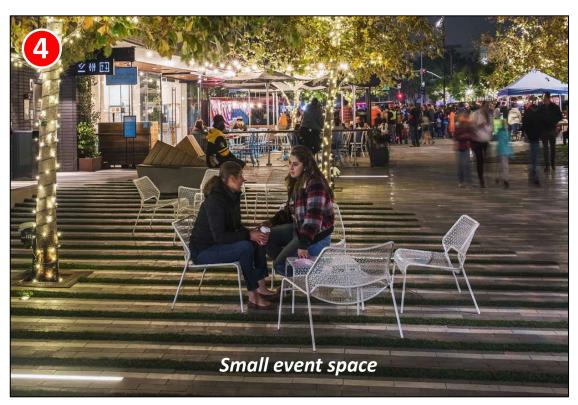
Design Features

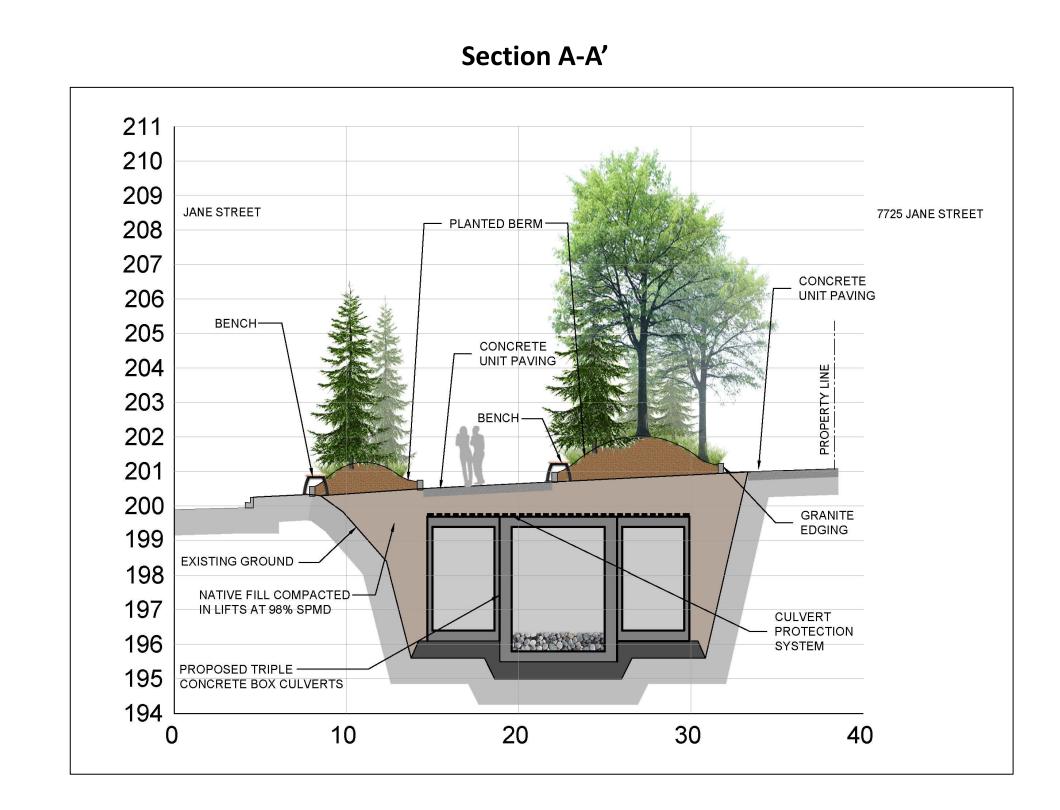
- Active transportation facilities are integrated into the design between planting nodes
- Seating and a terraced water feature provide for interest and accent
- The landscape features are designed with the triple barrel culvert below in mind
- Sufficient space to accommodate large volume of users at the intersection
- The plaza enables an opportunity to view the park at the south end



















Component D: Jane Street Streetscape North











Objectives

- The streetscape seamlessly integrates with the Edgeley Pond & Park
- Multi-Use Pathways connecting to key walking and cycling routes along Jane Street

Design Features

- Creates opportunities for east-west connections through the Edgeley Pond & Park, as well as
 other destinations on the west side of Jane St in the VMC
- Consistent streetscape aesthetic along Jane Street provides continuity between Black Creek
 Renewal and Edgeley Pond & Park
- Pedestrian lighting along the pathway provides safe use of the street at night





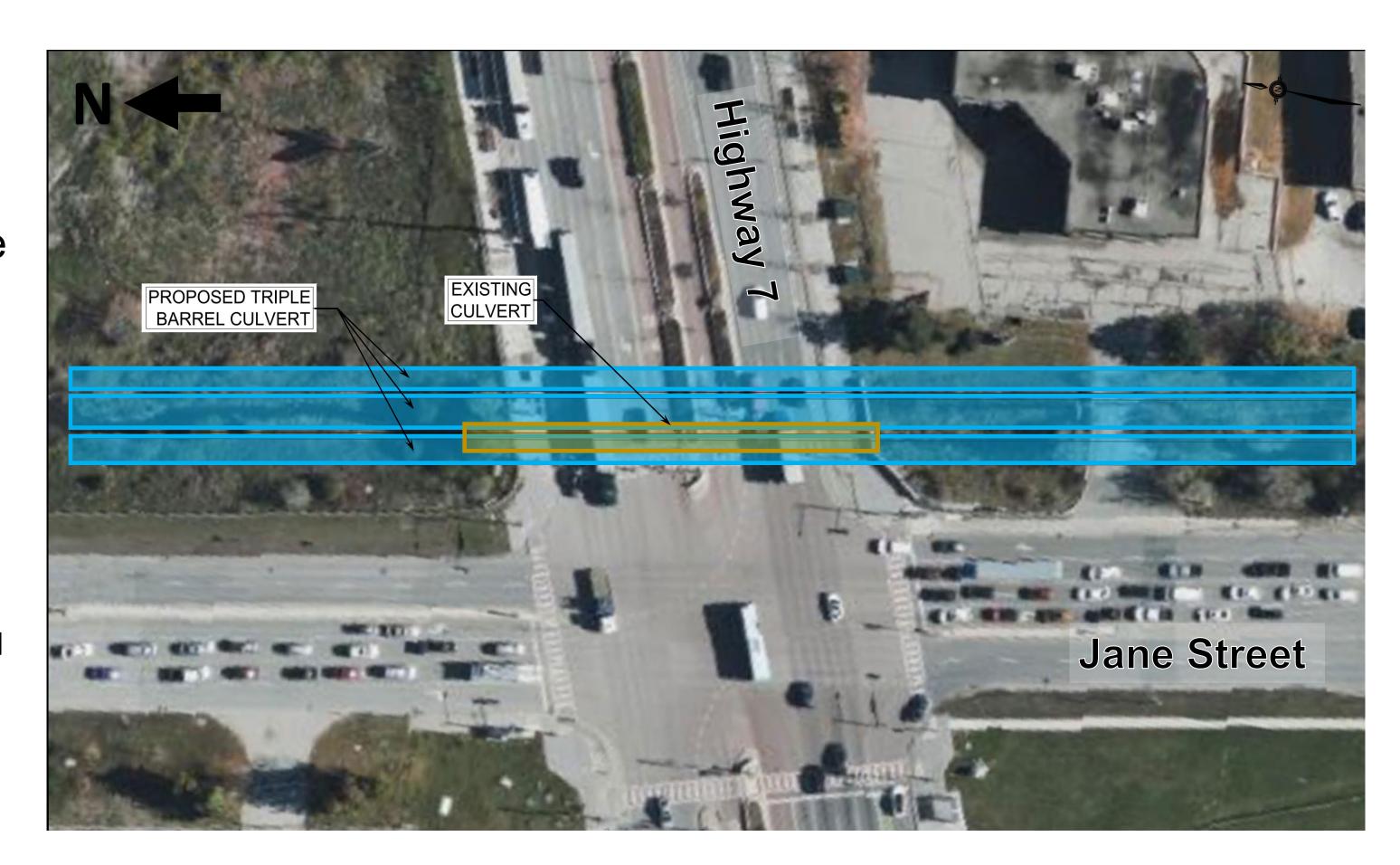




Component E: Highway 7 Culvert

Background

- The existing culvert under
 Highway 7 does not provide
 adequate flow conveyance
- The existing culvert will be replaced and extended to accommodate future initiatives within the Plateau and Plaza as well as lands south of Highway 7



Location of Crossing

• The new culvert extends across Highway 7 as well as spanning the Plateau and Plaza to the north and the private property to the south

Objective

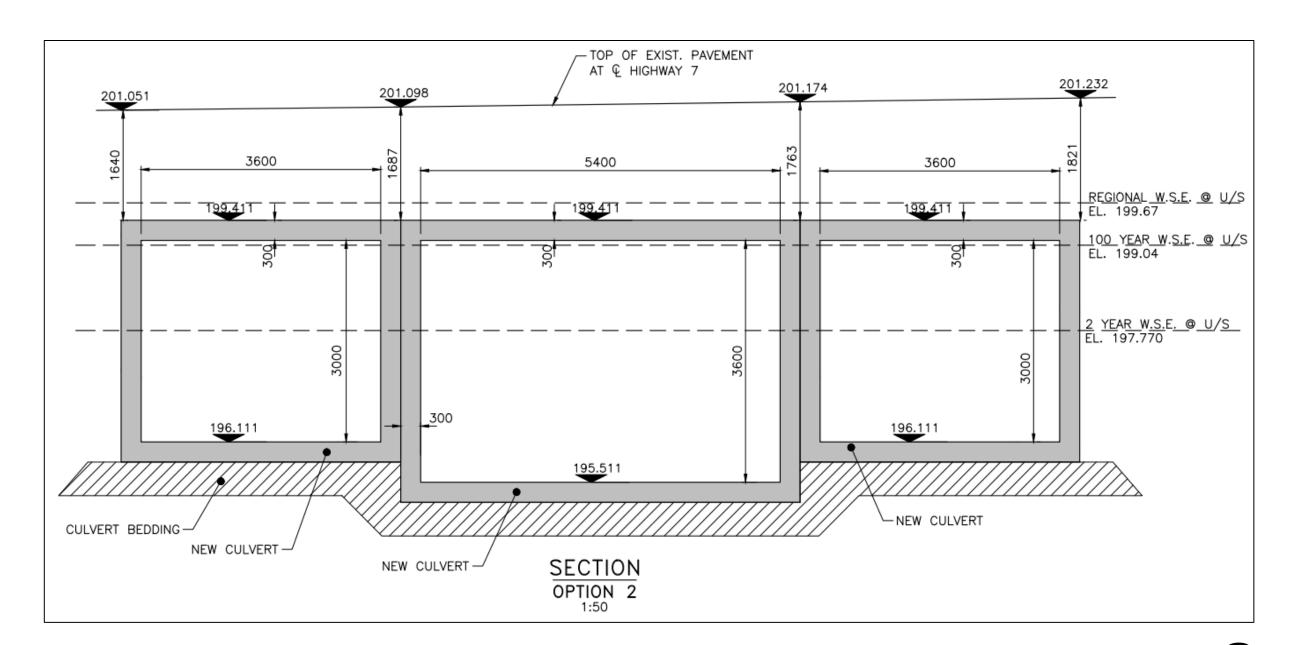
- The new culvert will provide flow conveyance for infrequent flows thereby reduce flooding along the Highway 7 and Jane Street area
- The culvert configuration will
 accommodate natural features such
 as a low flow channel with naturalized
 substrate to enhance fish passage
 opportunities



Facing north looking at existing Highway 7 culvert flowing south

Proposed Cross Section & Plan

 The accompanying graphic illustrates a cross section of the proposed three culverts under Highway 7





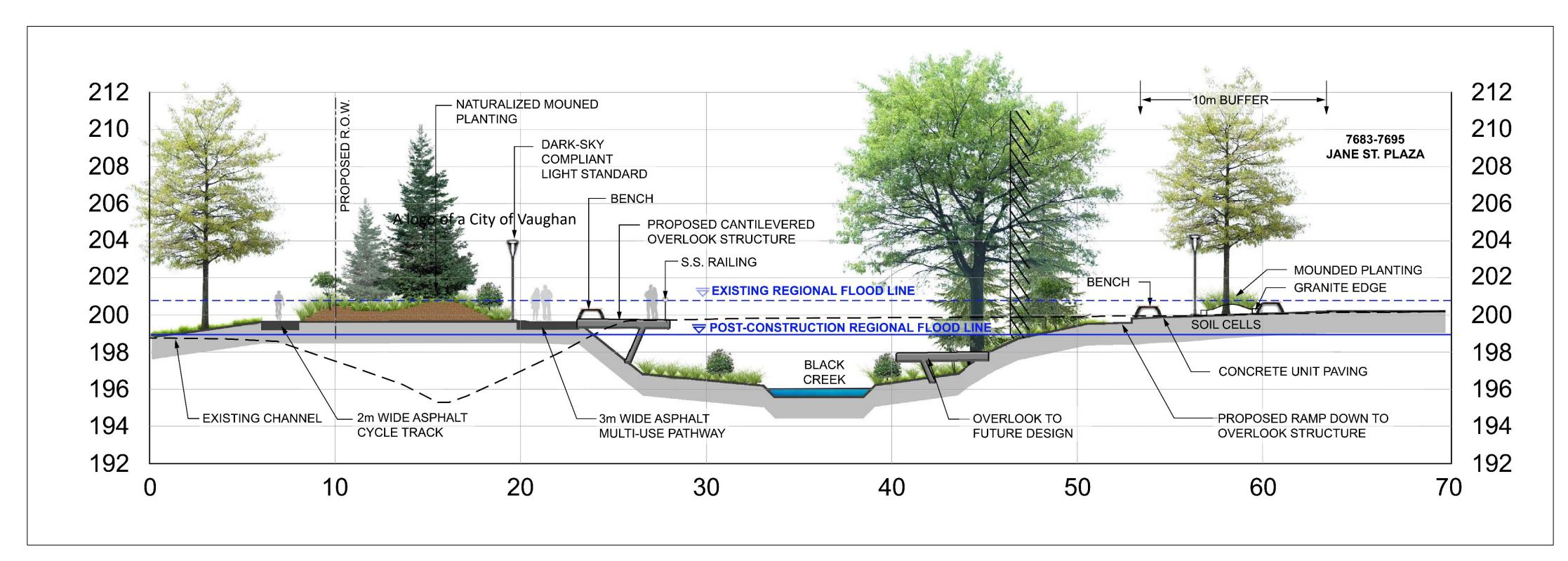






Component F: Black Creek Renewal





The Objectives of the Black Creek Renewal Component Include:

Improving Public Realm

 Experience the integration with nature through lookouts, park seating, concrete terraced seating & gazebos

Reducing Flooding

Improved capacity to carry large volumes of water through a naturalized channel

Promoting Active Transportation

Cyclist & pedestrian use through urban and naturalized trail systems

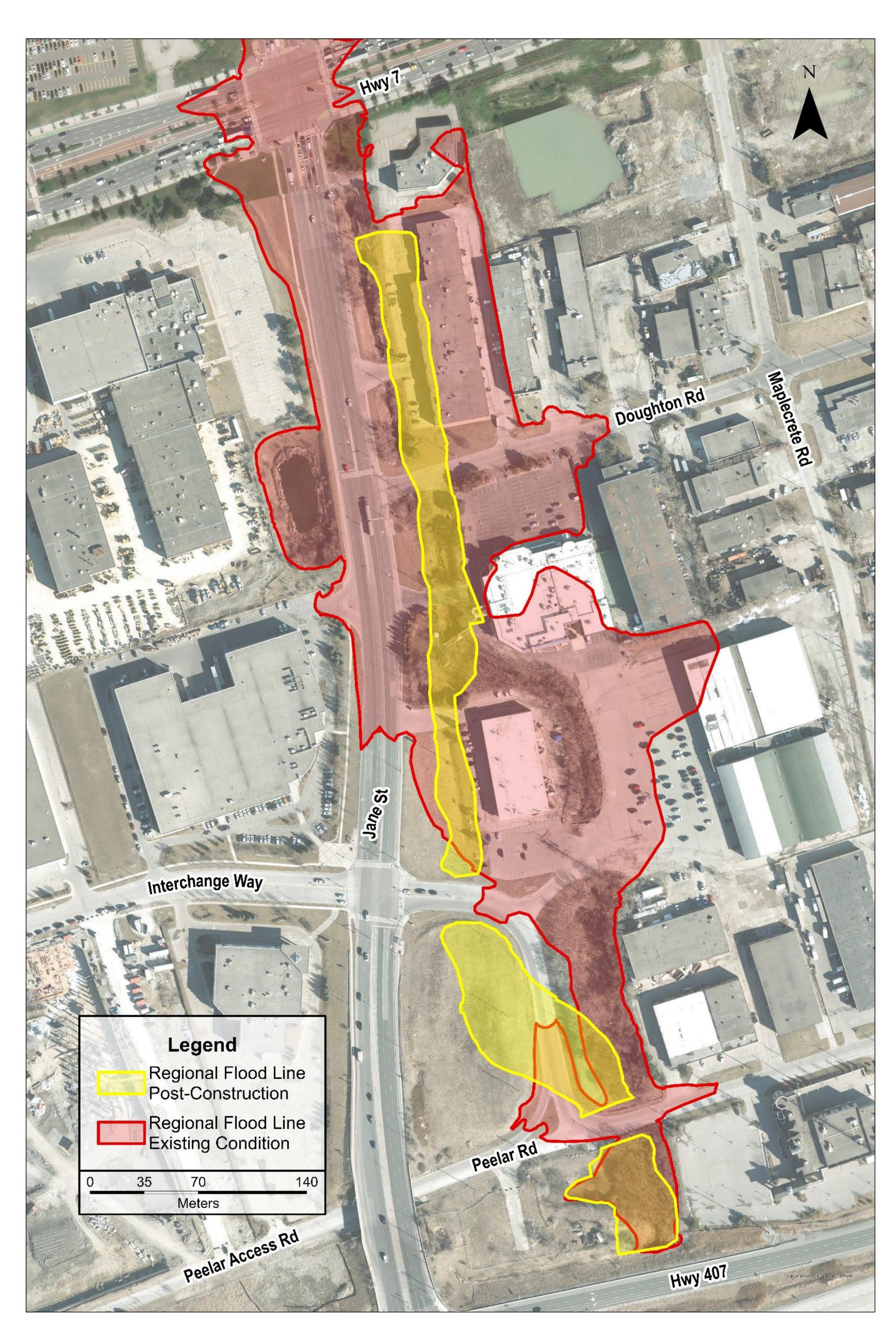








Black Creek Renewal Flood Lines



Objective

 Construction of the Black Creek Renewal channel will reduce the limits of flooding as shown in the proposed conditions (yellow)

Existing Conditions

Considerable extents of the project area are flooded, including overtopping of Jane Street

Proposed Conditions

• The post-construction flood line will be contained within the Black Creek Renewal Channel







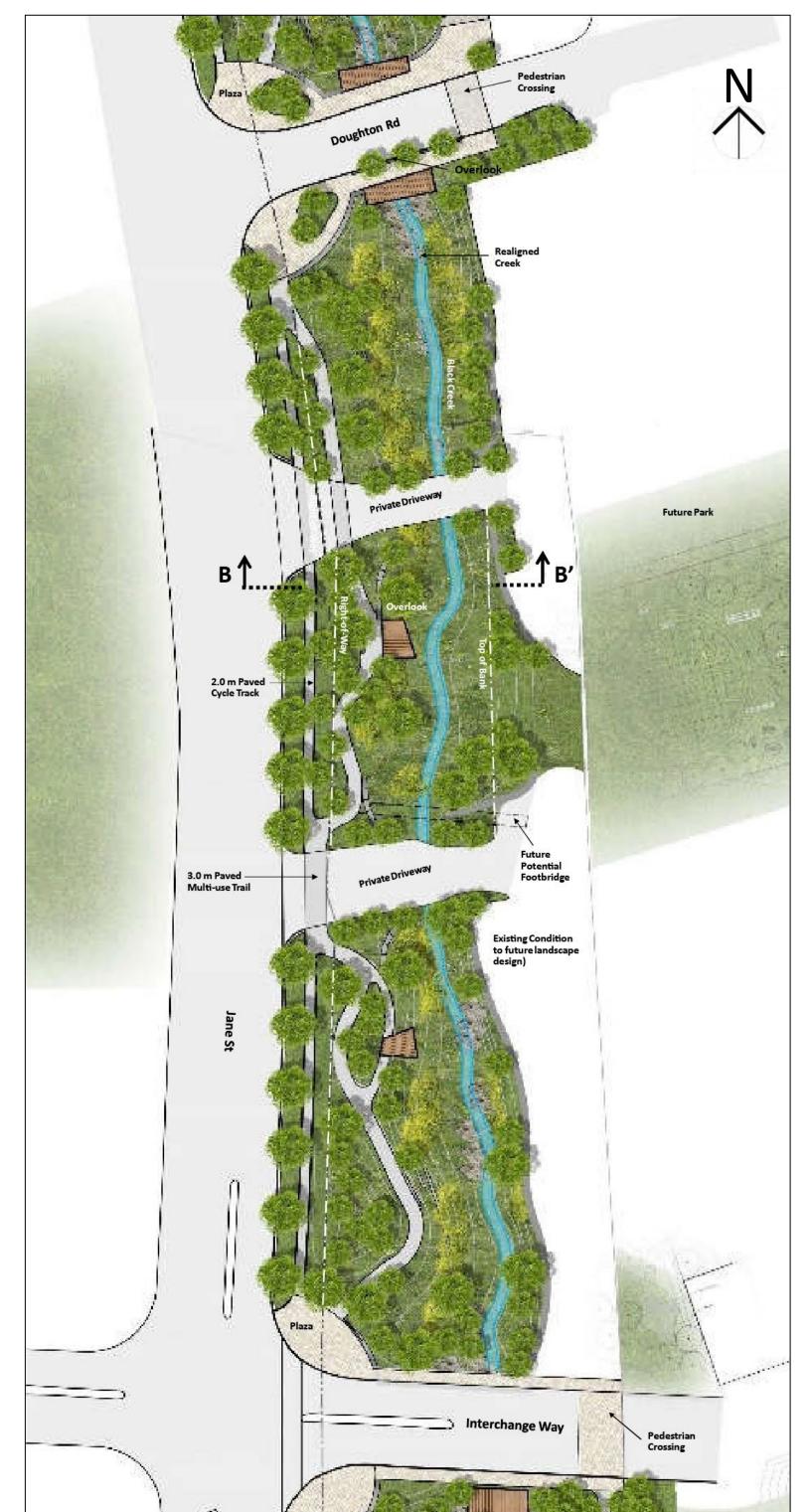


Black Creek Renewal – Project Reach

Upper Reach



Middle Reach



Lower Reach



- The Black Creek Renewal project is comprised of three reaches as upper reach, middle reach and lower reach
- The upper and lower reaches will be built to ultimate EA recommendation
- The middle reach will be constructed to accommodate existing constraints









Black Creek Renewal Doughton to Highway 7 Plan and Cross Section (Upper Reach)



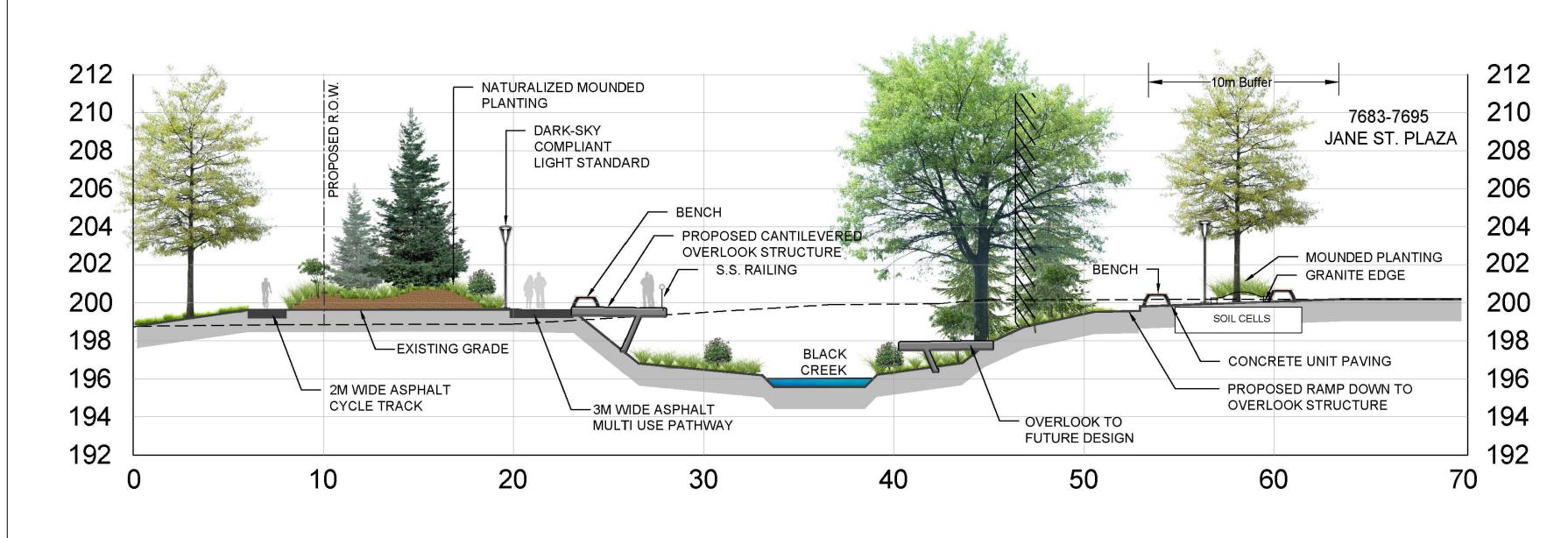








Section A-A'



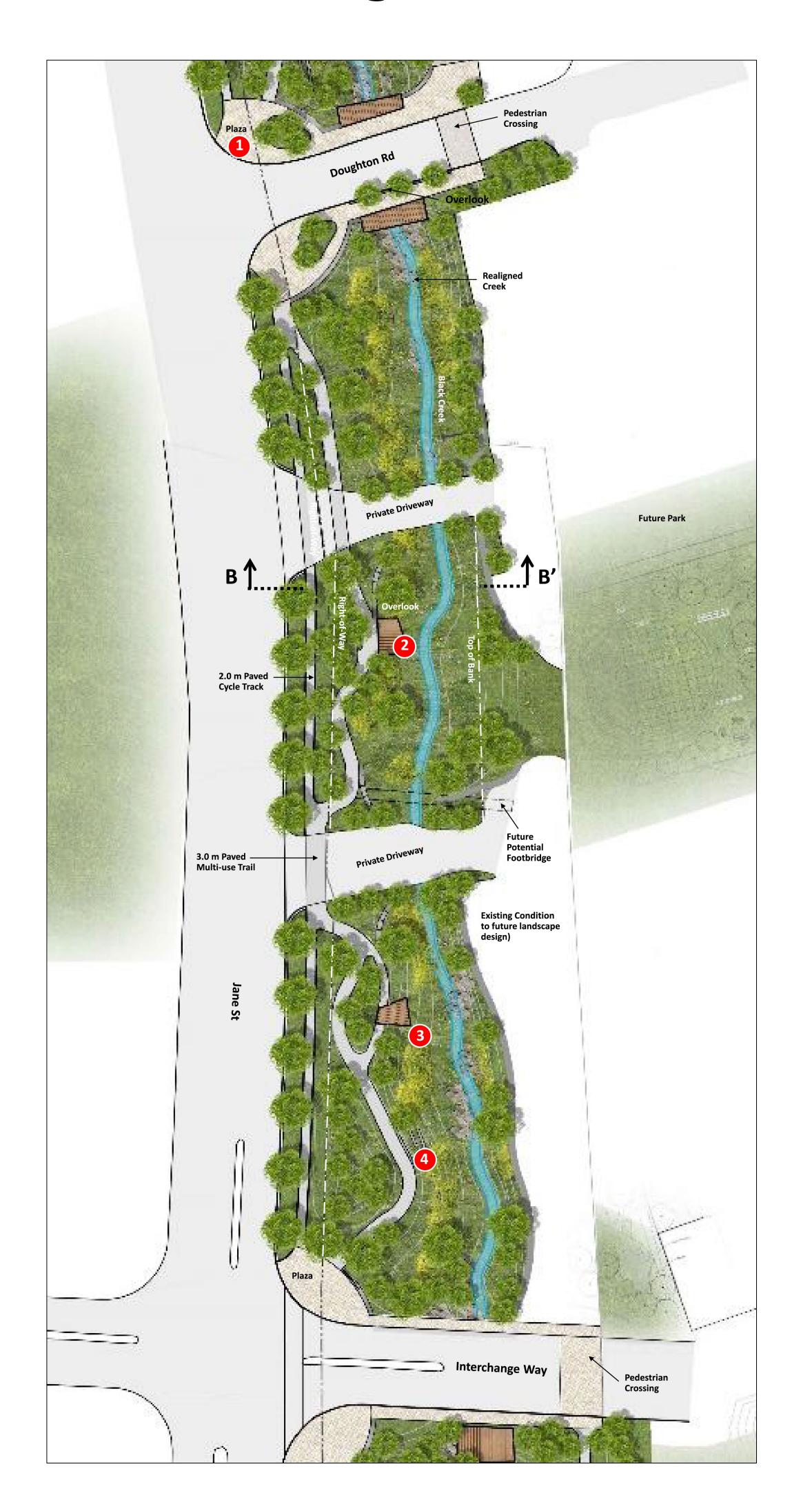






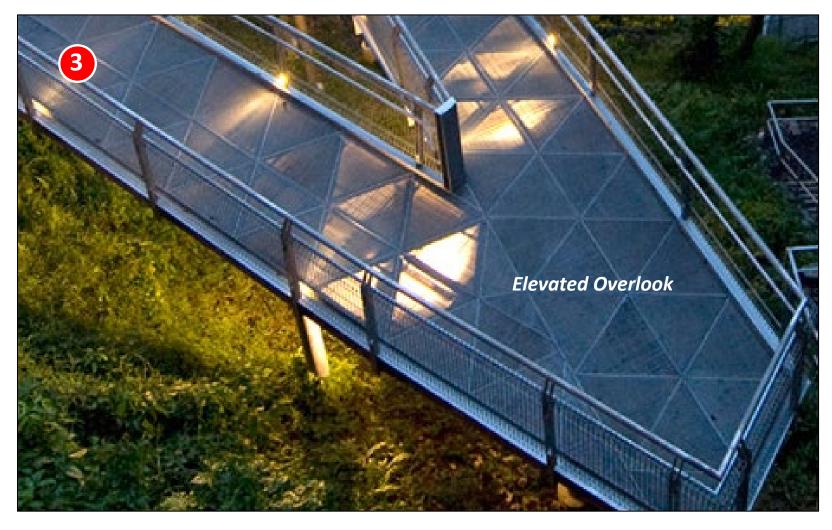


Black Creek Renewal Doughton to Interchange (Middle Reach)



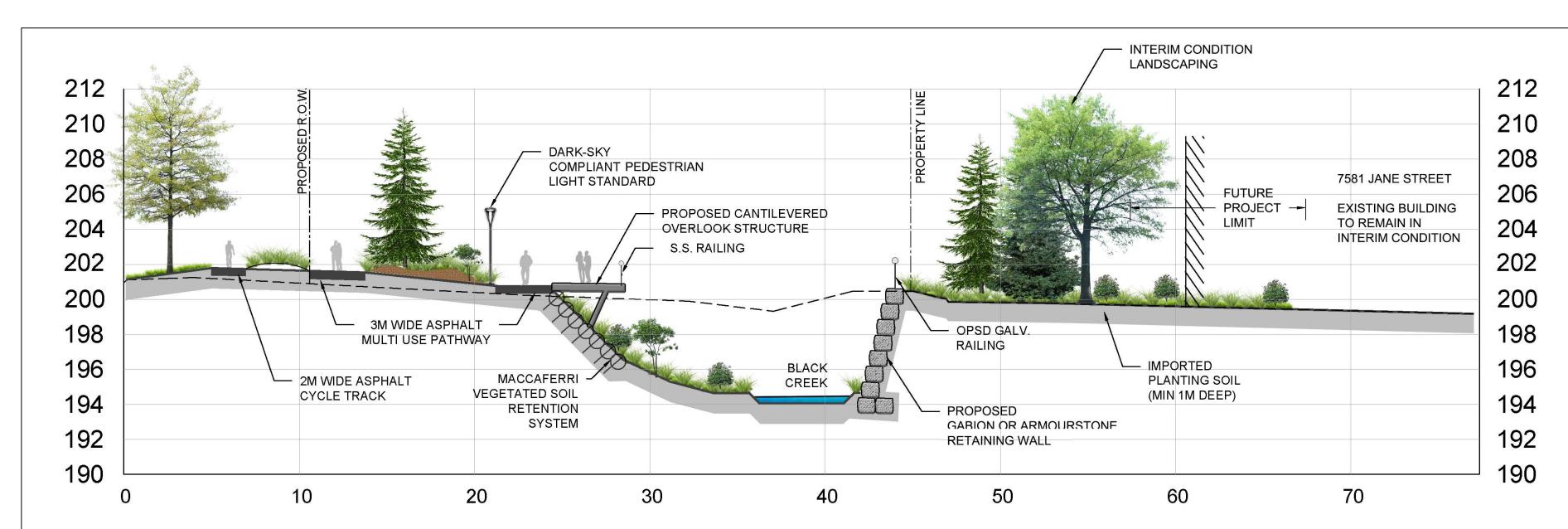








Section B-B'











Black Creek Renewal Interchange way to Hwy 7 (Lower Reach)









PROPOSED GABION OR ARMOURSTONE

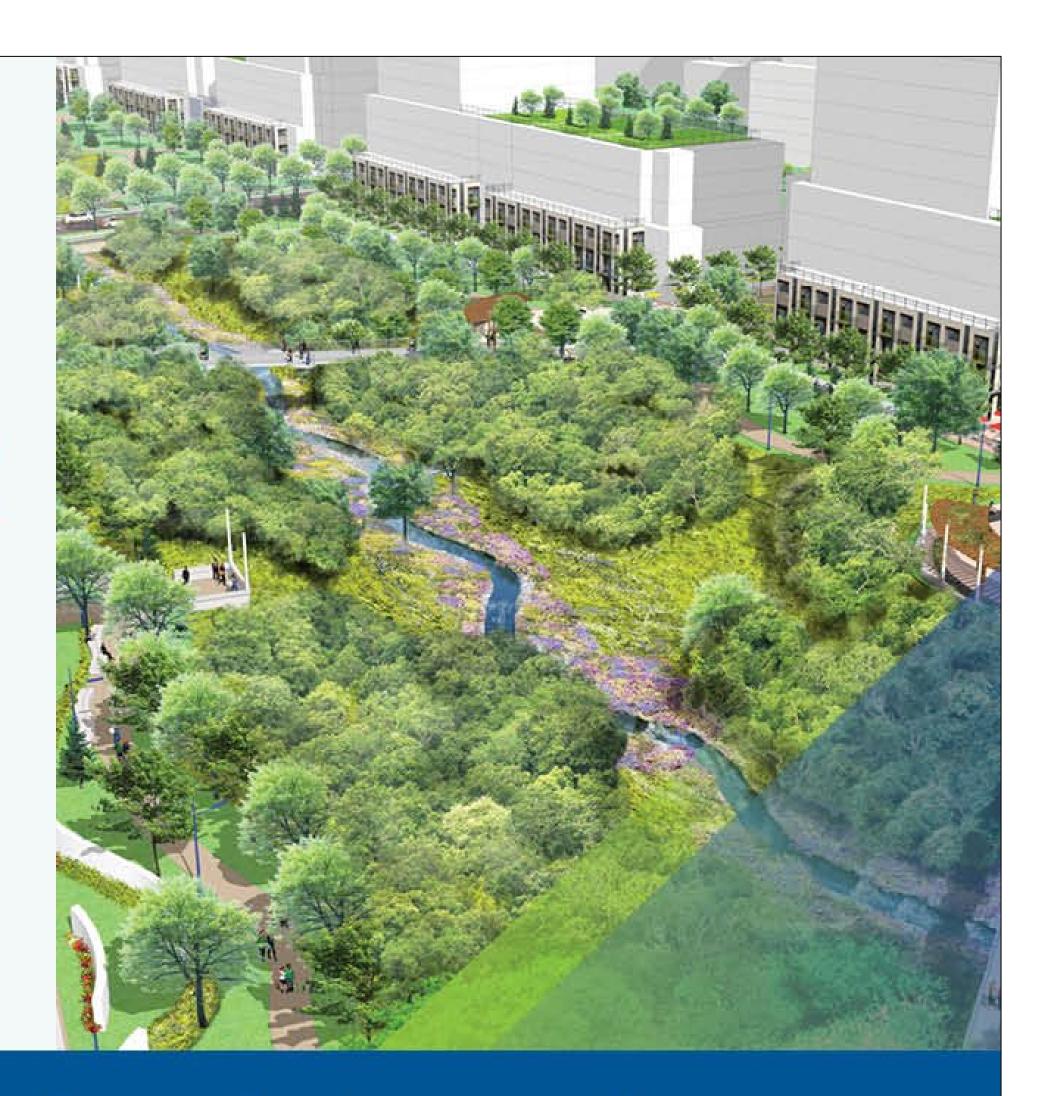


Next Steps

- The six components will be constructed using a Design-Build approach
- The general timing with respect to the major components is provided in the table below
- The Design-Build contract is anticipated to award in Q4 2024

Major Project Component	Construction Start Date	Construction End Date
Black Creek Renewal	2025	2027
Edgeley Pond and Park	2025	2031
Highway 7 Culvert	2027	2029

Flood prevention in the VMC Learn more



vaughan.ca/BlackCreek







