

# **VMC BLACK CREEK RENEWAL UPDATE**

**VMC SUBCOMMITTEE**  
JUNE 11 2014

CONSULTING TEAM

**TMIG | The Municipal Infrastructure Group Ltd**  
**Schollen & Company**  
**Public Work**  
**Swerhun Inc**  
**Research Corp**

# PRESENTATION OVERVIEW

1. Background Refresher
2. Results of Expanded Facilitation
3. Black Creek Renewal Concept
4. Black Creek Renewal Vision
5. Key Considerations
6. Next Steps

# BACKGROUND

MAJOR MACKENZIE DRIVE

HIGHWAY 400

JANE STREET

RUTHERFORD ROAD

LANGSTAFF ROAD

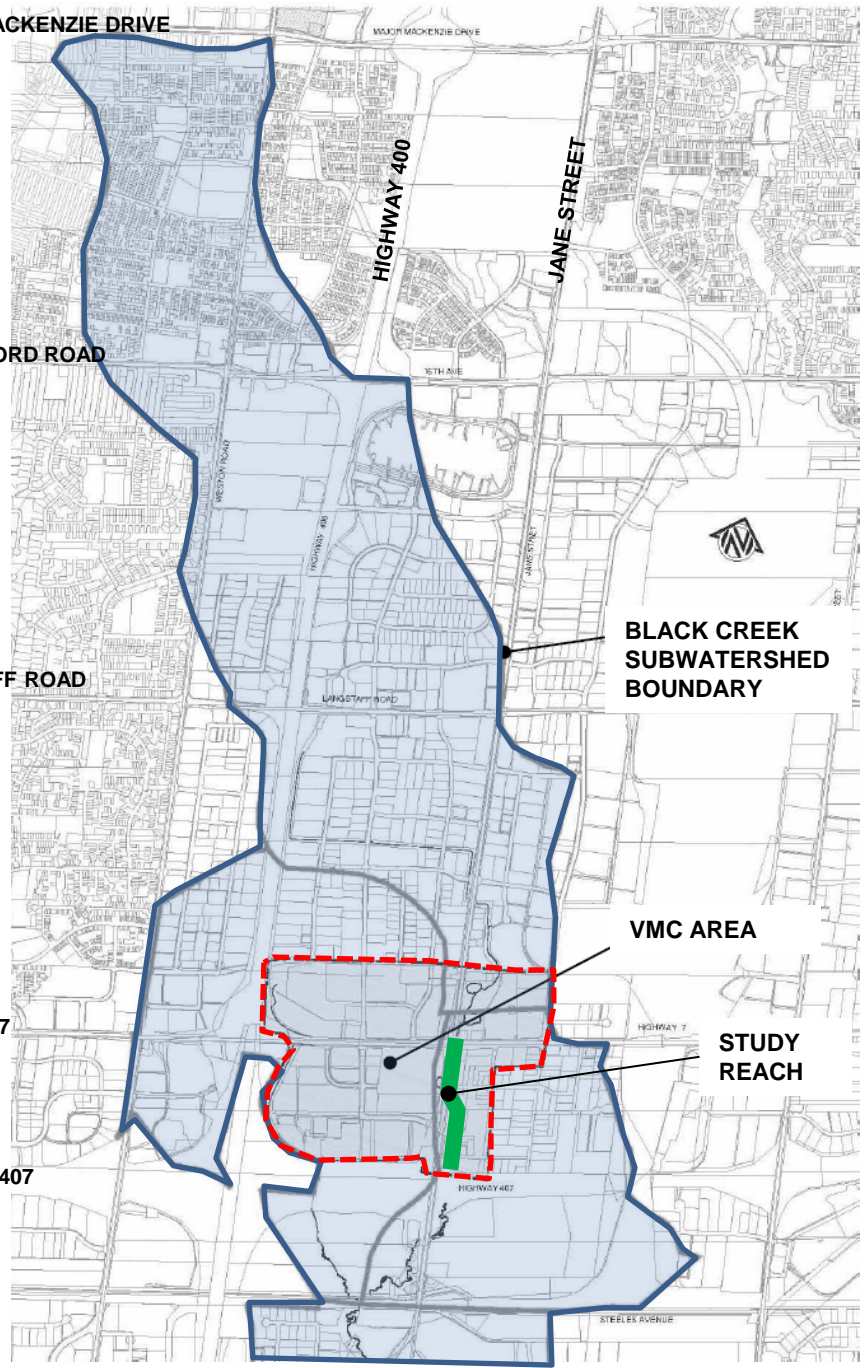
BLACK CREEK SUBWATERSHED BOUNDARY

VMC AREA

HIGHWAY 7

STUDY REACH

HIGHWAY 407

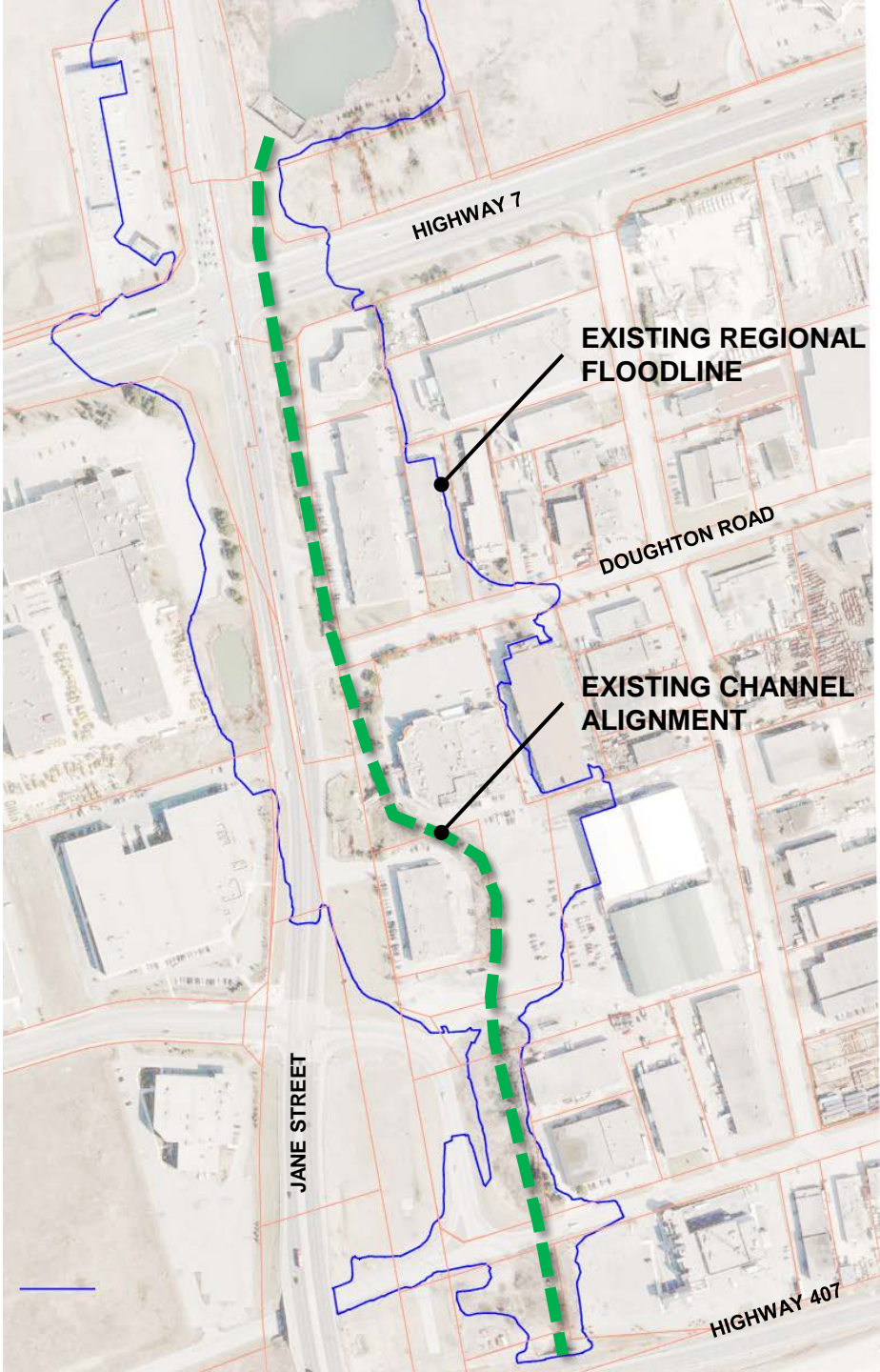


# Black Creek Watershed Context



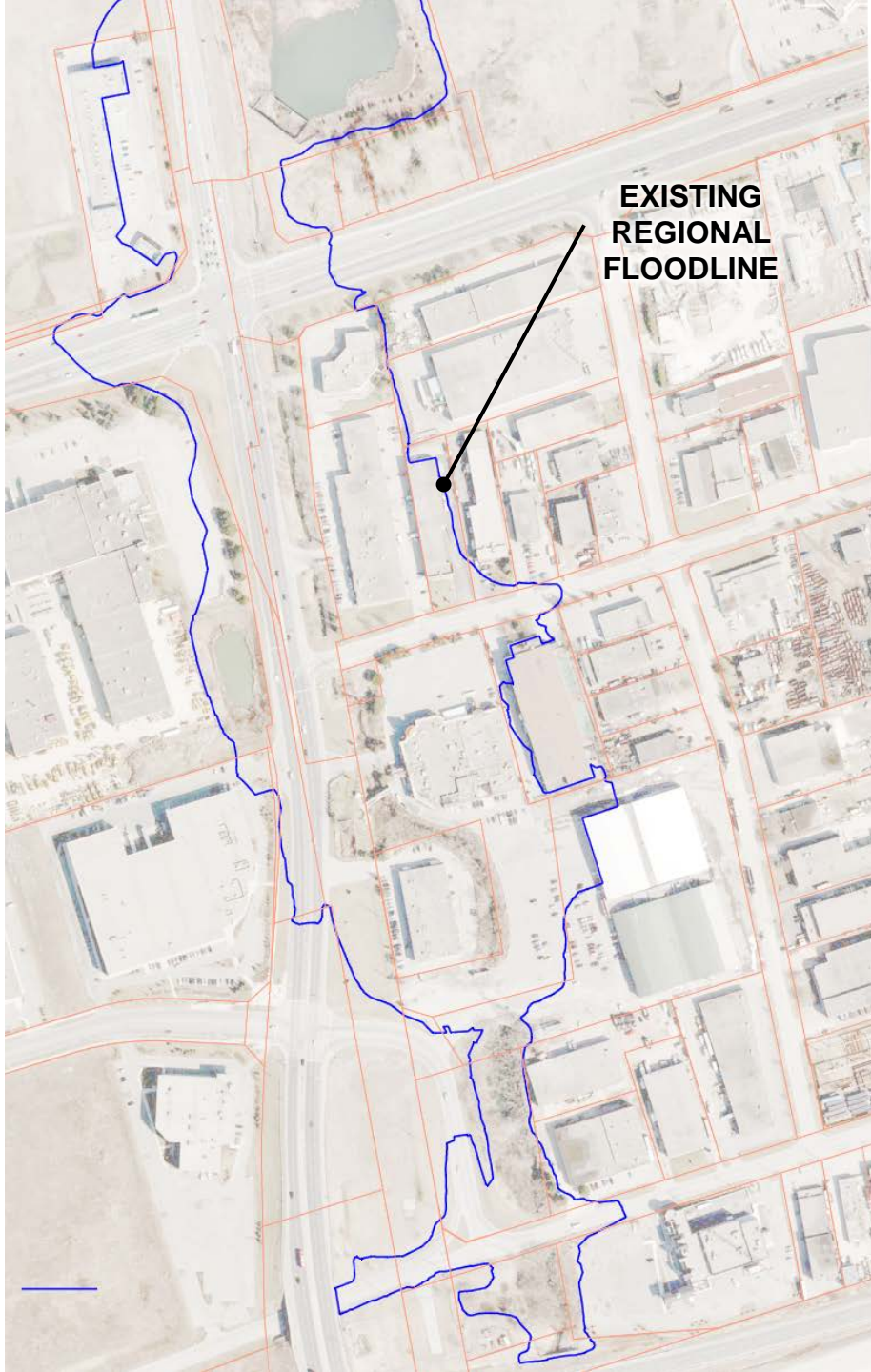
**August 2005 Storm - Flooding near Jane Street and Highway 7**

# Regulatory Floodplain



# Black Creek Optimization Study Recommended Solution (AECOM, May 2011)





## VMC Black Creek Renewal (commenced July 2012)

Project Objective:

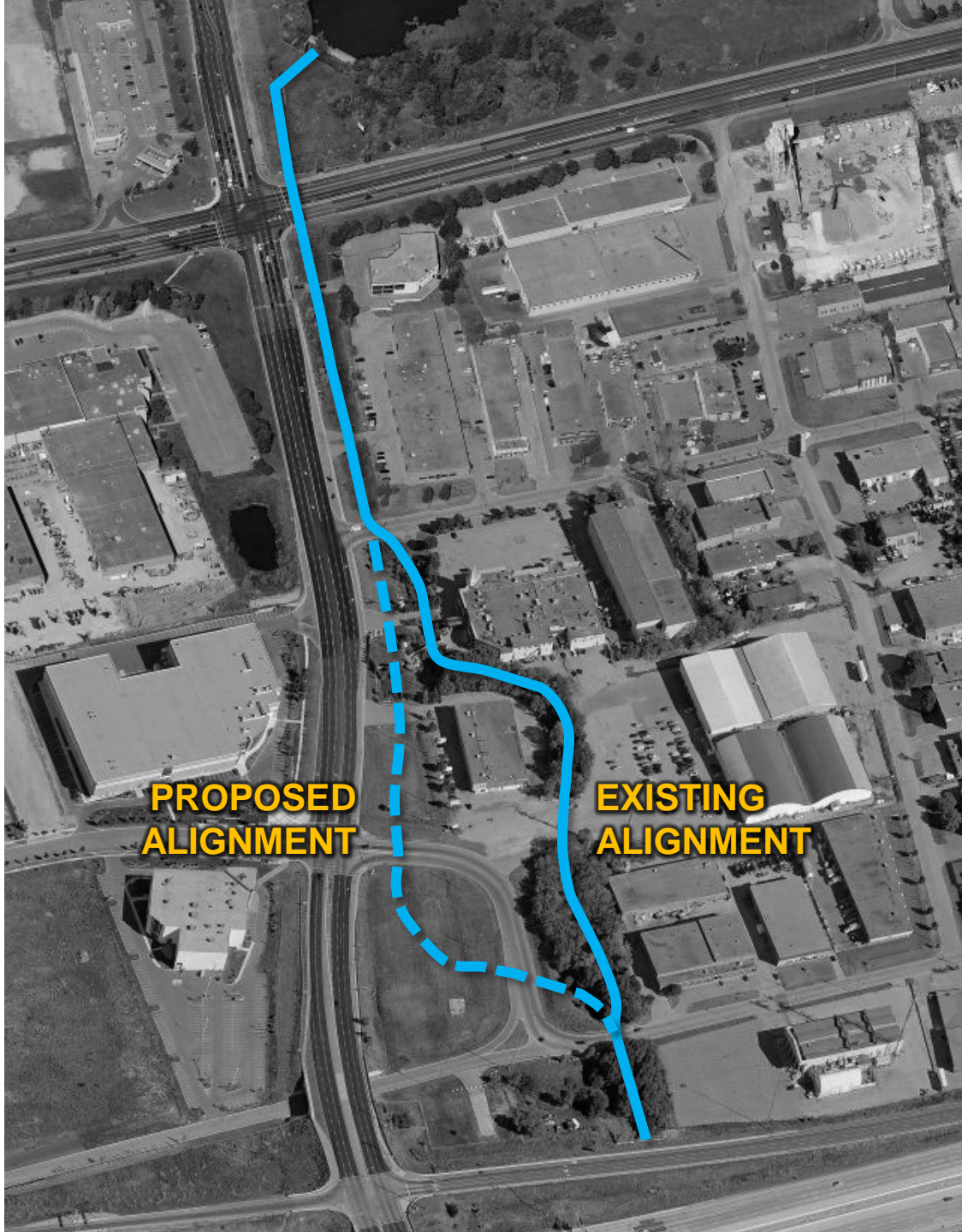
**address flood risk and  
unlock development  
potential**



# EXPANDED FACILITATION

## **Expanded Facilitation Objectives:**

- Effectively engage stakeholders to collaboratively generate and evaluate alternatives
- Create a forum for frank discussion regarding objectives and constraints
- Collectively prioritize key requirements to generate a consensus-based concept
- Numerous workshops and one-one meetings



← Alignment

Form → combination of:  
Natural channel  
Pipe  
Urban channel

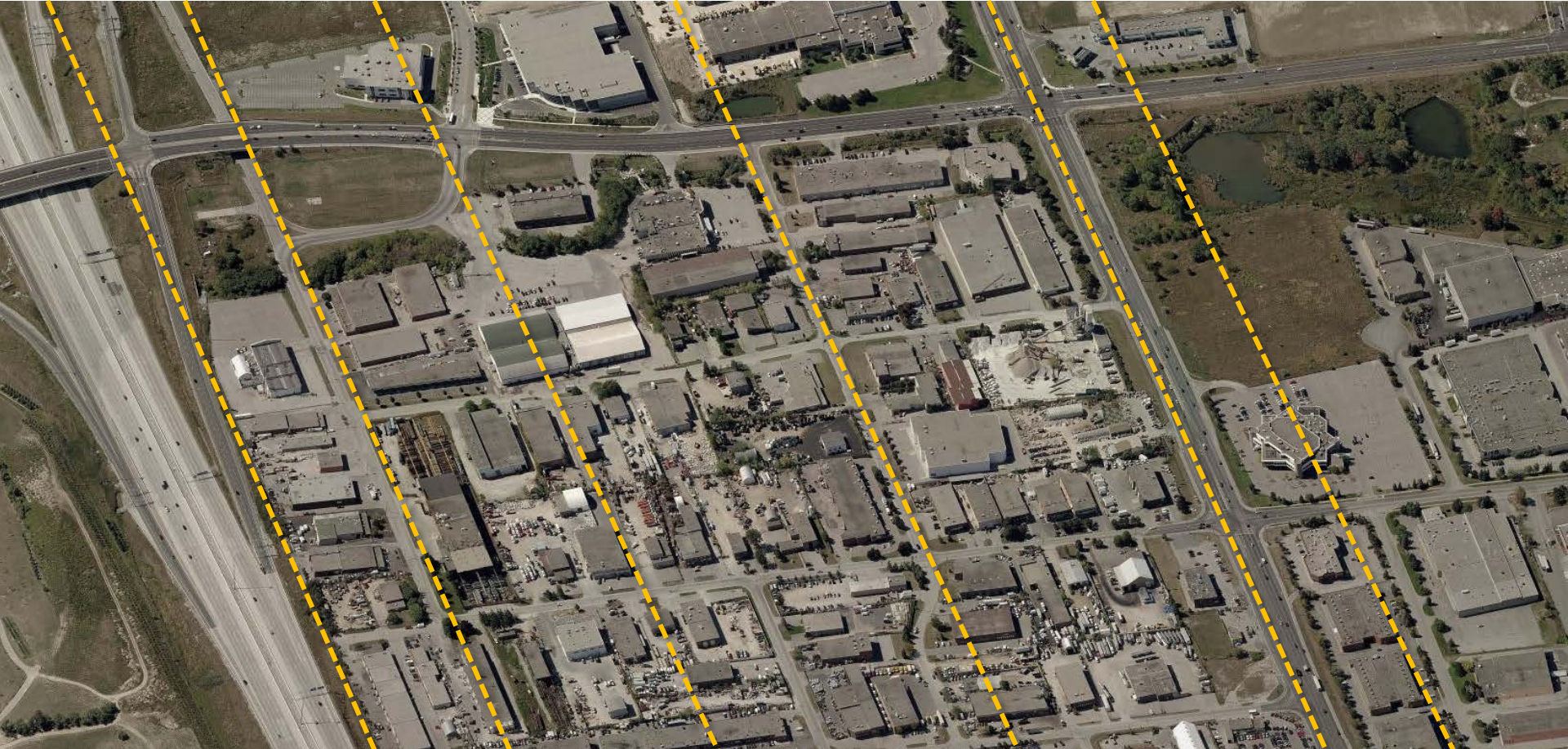
**PROPOSED  
ALIGNMENT**

**EXISTING  
ALIGNMENT**

# Key EA Considerations



# Study Area Reaches



**REACH 5**  
(Peelar to  
407)

**REACH 4**  
(Interchange to  
Peelar)

**REACH 3**  
(Doughton to  
Interchange)

**REACH 2**  
(Hwy 7 to  
Doughton)

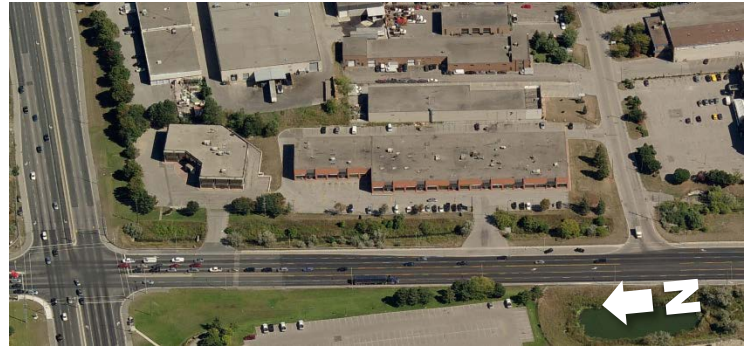
**REACH 1**  
(north of Hwy 7)

# One on one meetings

REACH 1



REACH 2



REACH 3



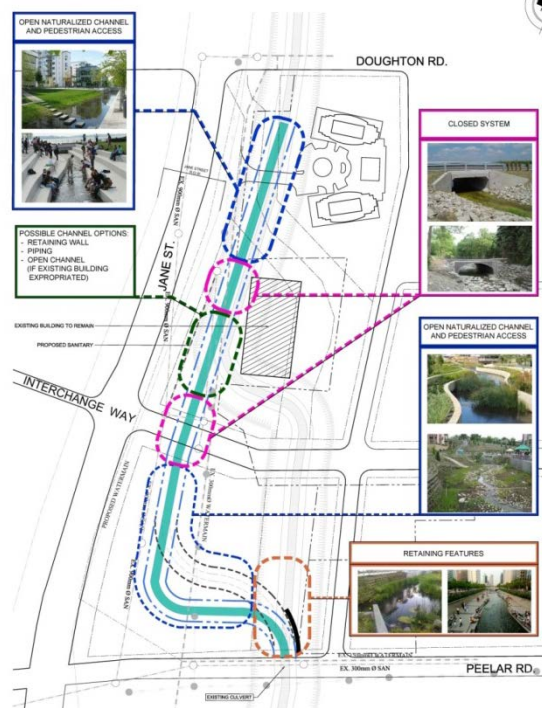
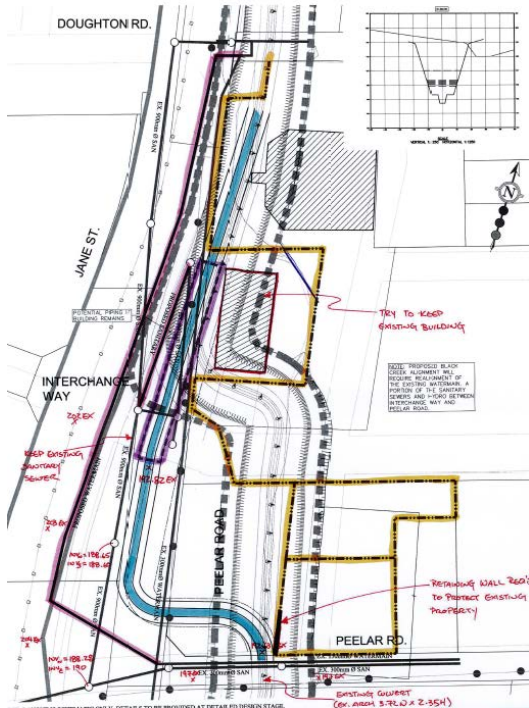
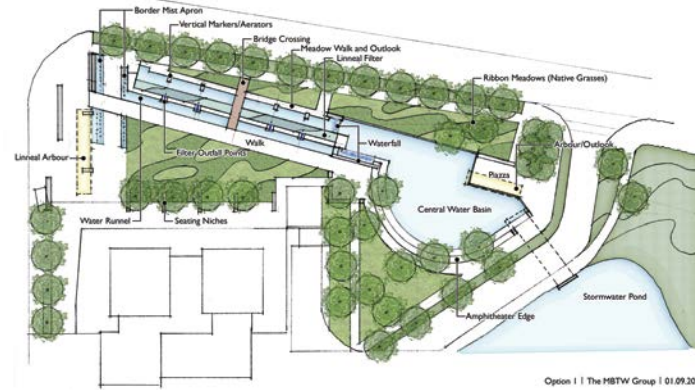
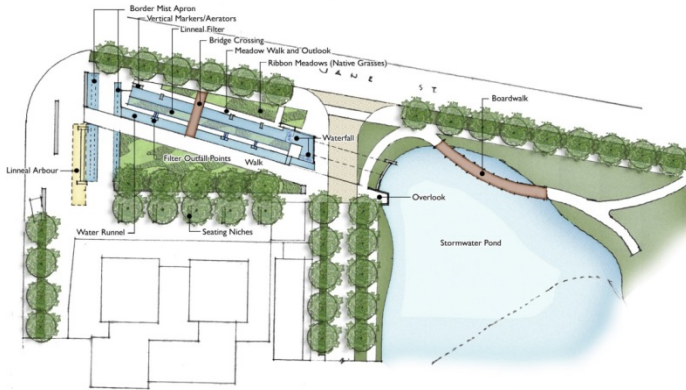
REACH 4



REACH 5

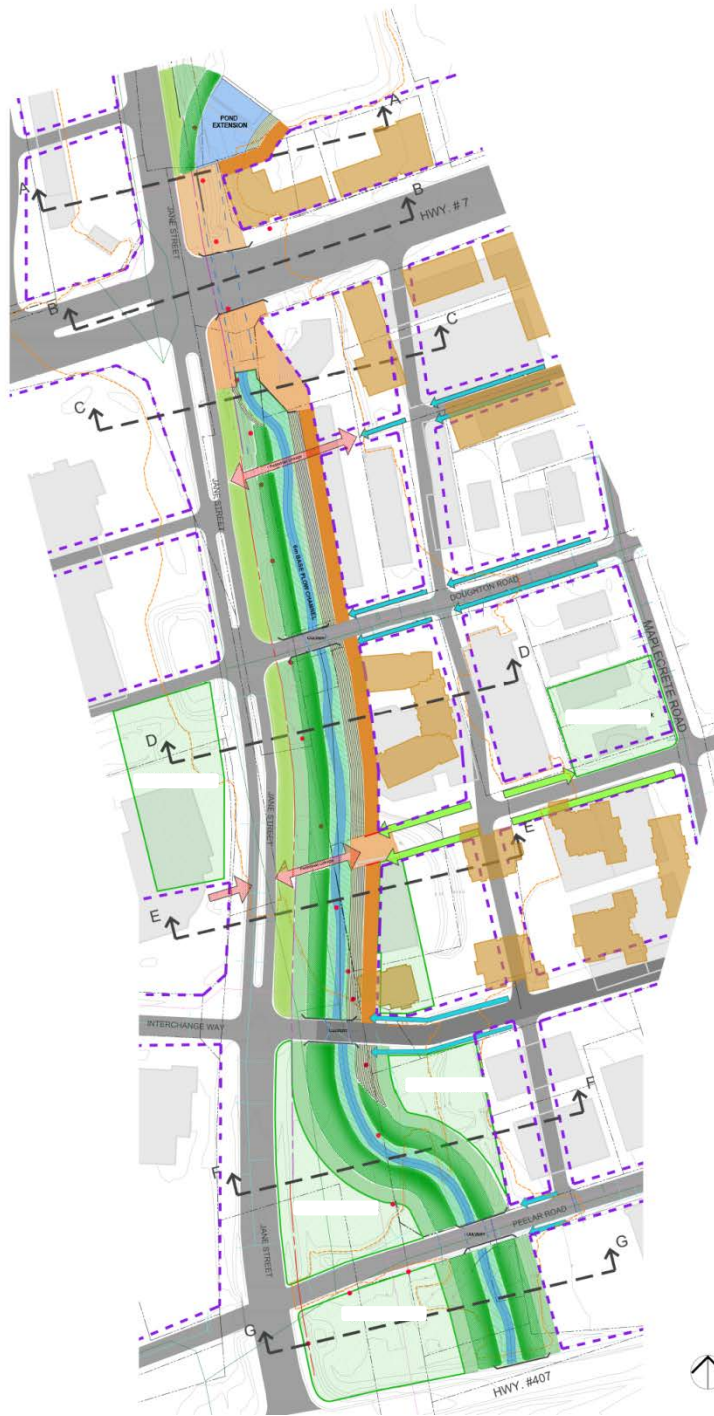


# One on one meetings



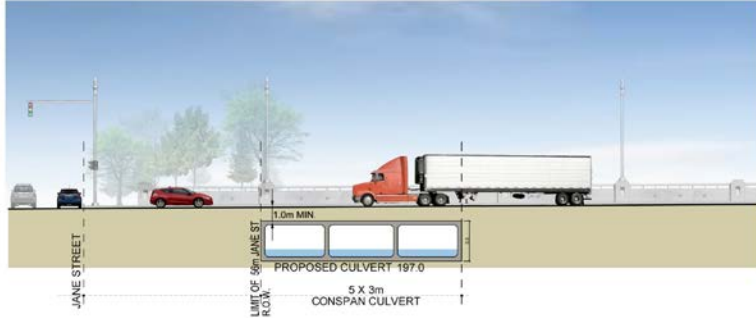
# CONCEPT



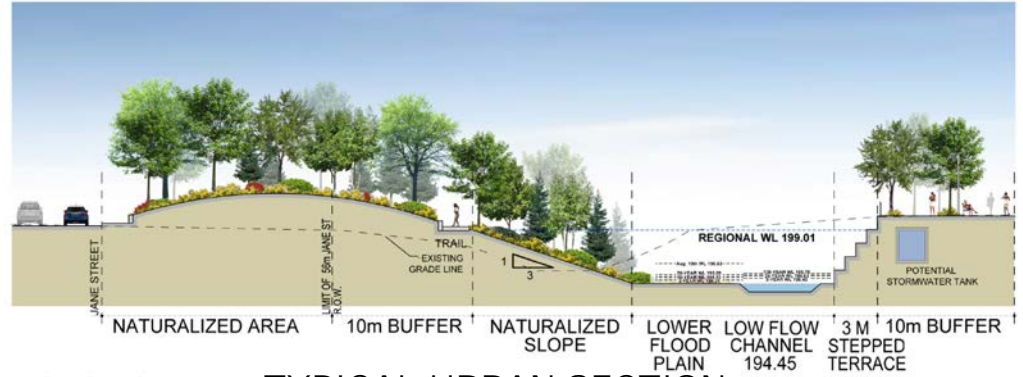


# ULTIMATE CONCEPT

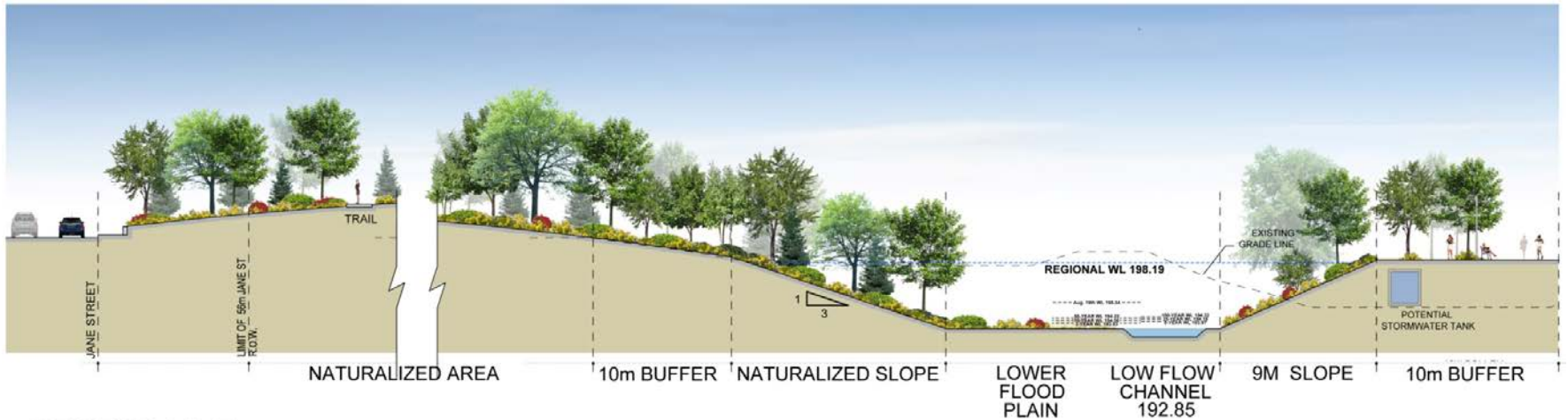
# Sample Cross Sections (preliminary)



**SECTION B-B TYPICAL ENCLOSED SECTION**



**SECTION D-D TYPICAL URBAN SECTION**



**SECTION F-F TYPICAL NATURAL SECTION**

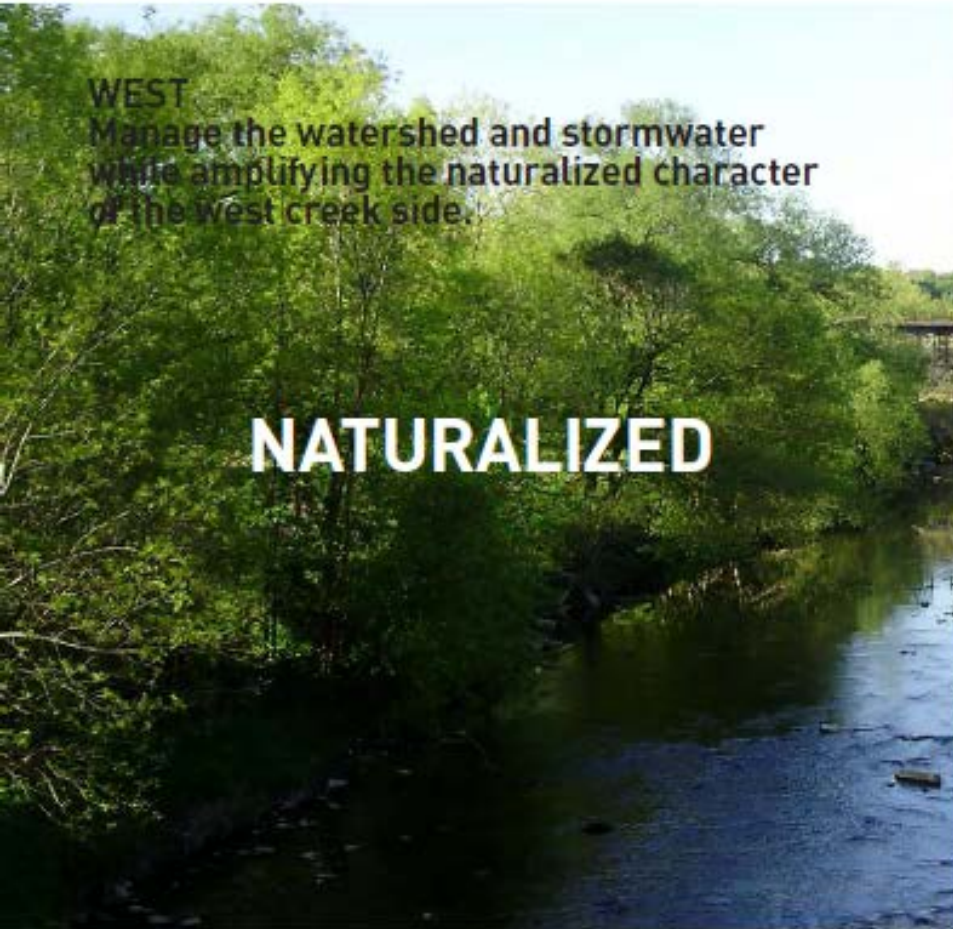
# VISION

# A Coordinated Vision for Two Distinct Banks of Black Creek.

## WEST

Manage the watershed and stormwater while amplifying the naturalized character of the west creek side.

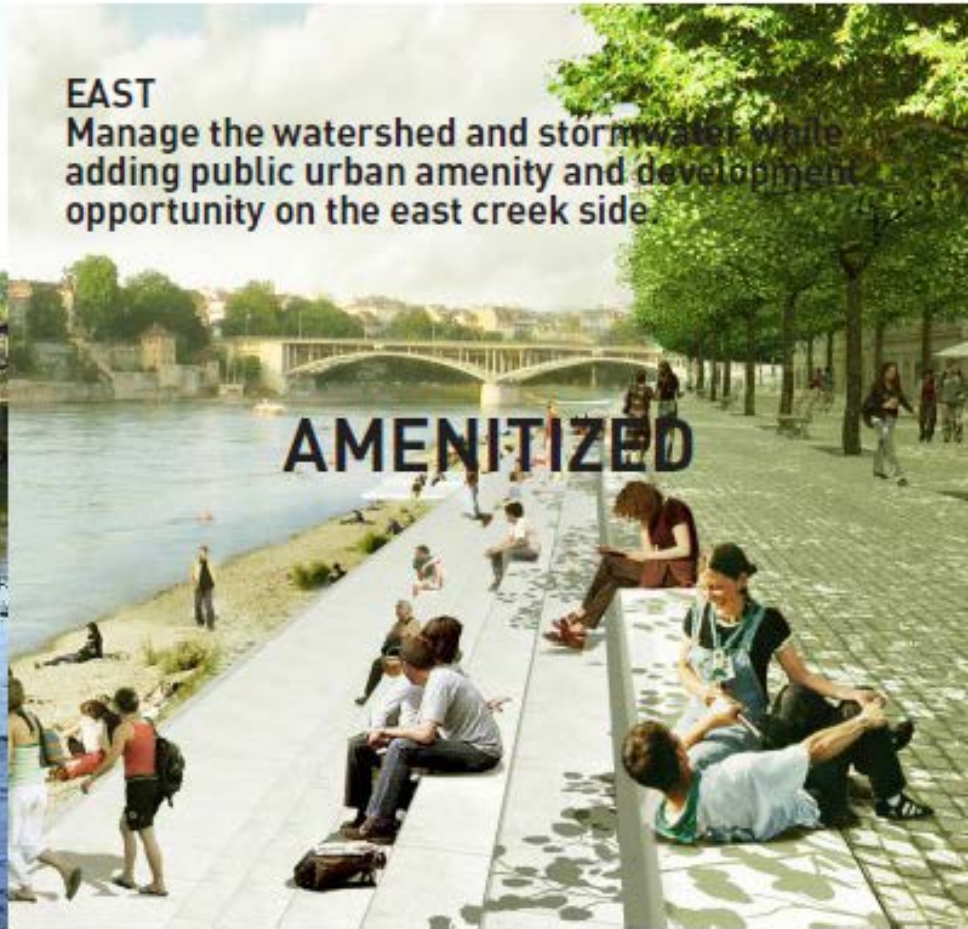
**NATURALIZED**



## EAST

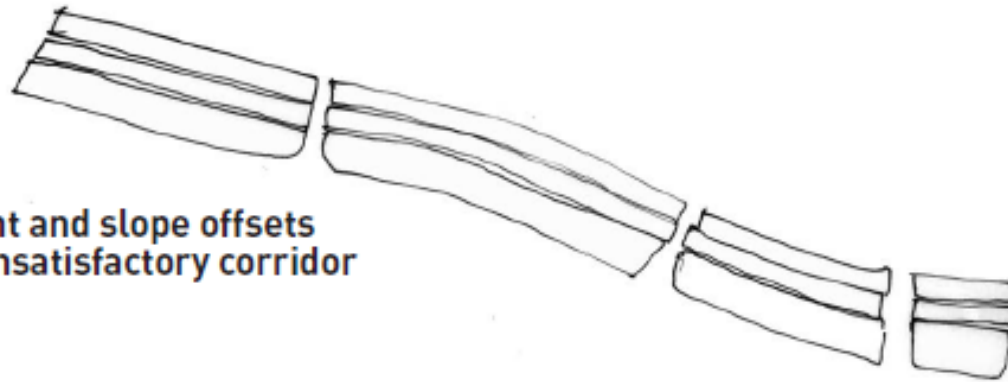
Manage the watershed and stormwater while adding public urban amenity and development opportunity on the east creek side.

**AMENITIZED**

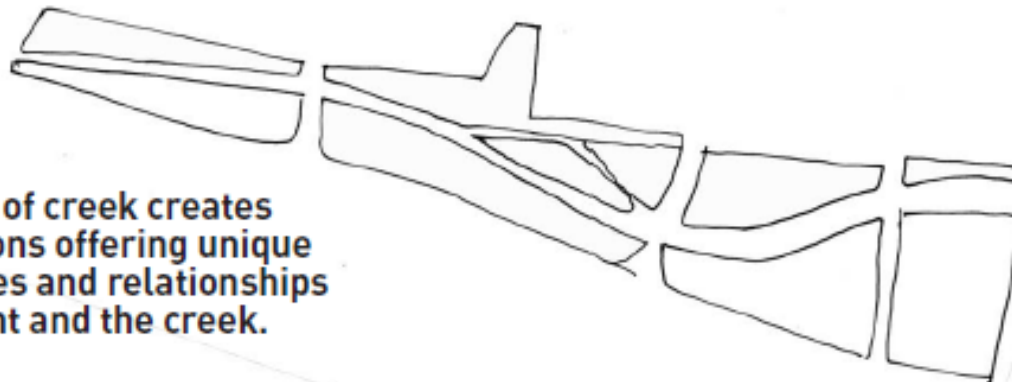


# Create diverse edge conditions and unique 'Addresses' on the Creek.

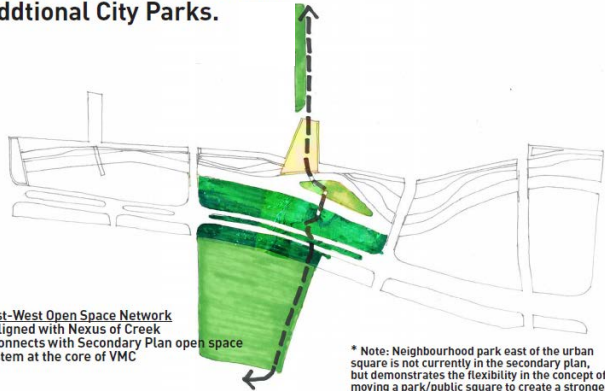
'Functional' alignment and slope offsets result in a generic, unsatisfactory corridor



'Dynamic' alignment of creek creates diverse edge conditions offering unique frontage opportunities and relationships between development and the creek.



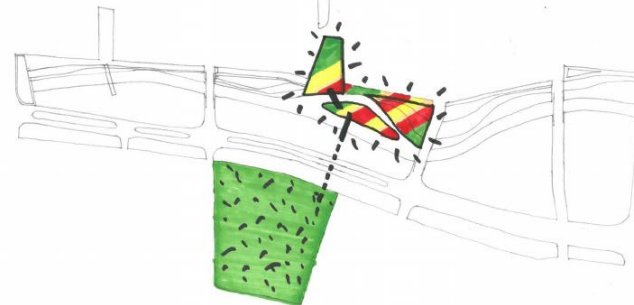
### East-West Link to VMC and Additional City Parks.



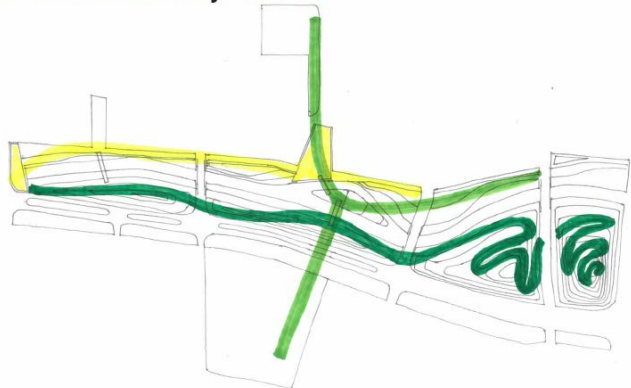
**East-West Open Space Network**  
 - Aligned with Nexus of Creek  
 - Connects with Secondary Plan open space system at the core of VMC

\* Note: Neighbourhood park east of the urban square is not currently in the secondary plan, but demonstrates the flexibility in the concept of moving a park/public square to create a stronger pedestrian and open space system (subject to discussion through mediation)

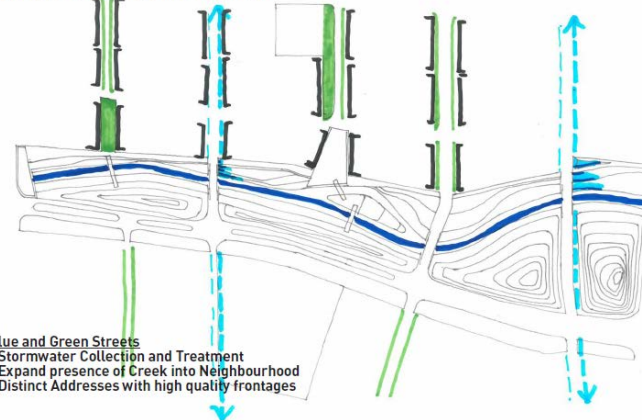
### Support the Nexus with Programming and Community Cultural Events.



### Three New VMC Trajectories.



### Blue and Green Streets



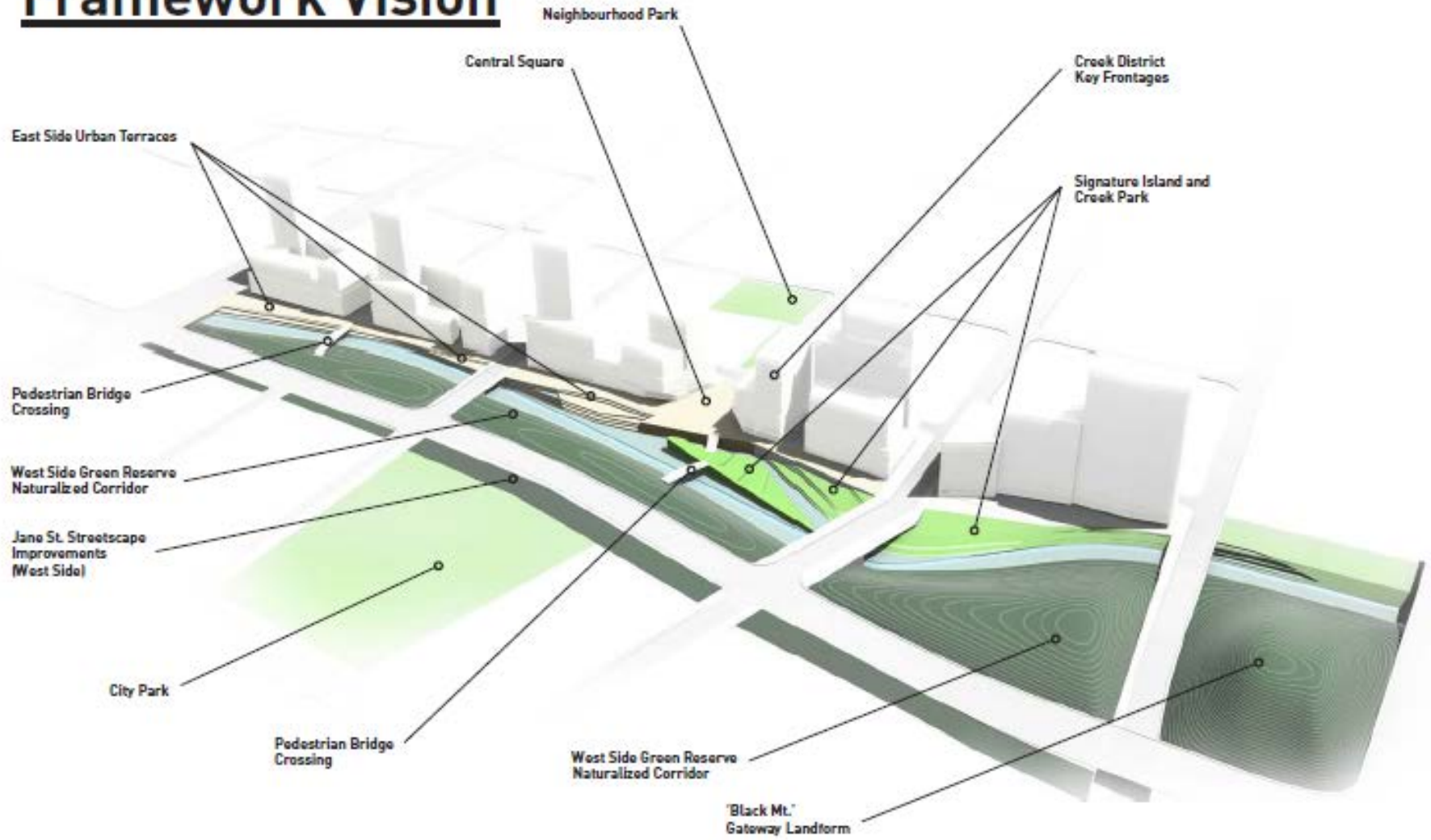
**Blue and Green Streets**  
 - Stormwater Collection and Treatment  
 - Expand presence of Creek into Neighbourhood  
 - Distinct Addresses with high quality frontages

### Creek District - Key Frontages



**Emerging Creek District**  
 - Development gains value from relation to creek-related open spaces  
 - Potential for a coherent district to emerge within the VMC offering a particular atmosphere and quality of living  
 - Both sides of Jane St. contribute to the emerging district

# Framework Vision



# Impression

View North at Interchange Way





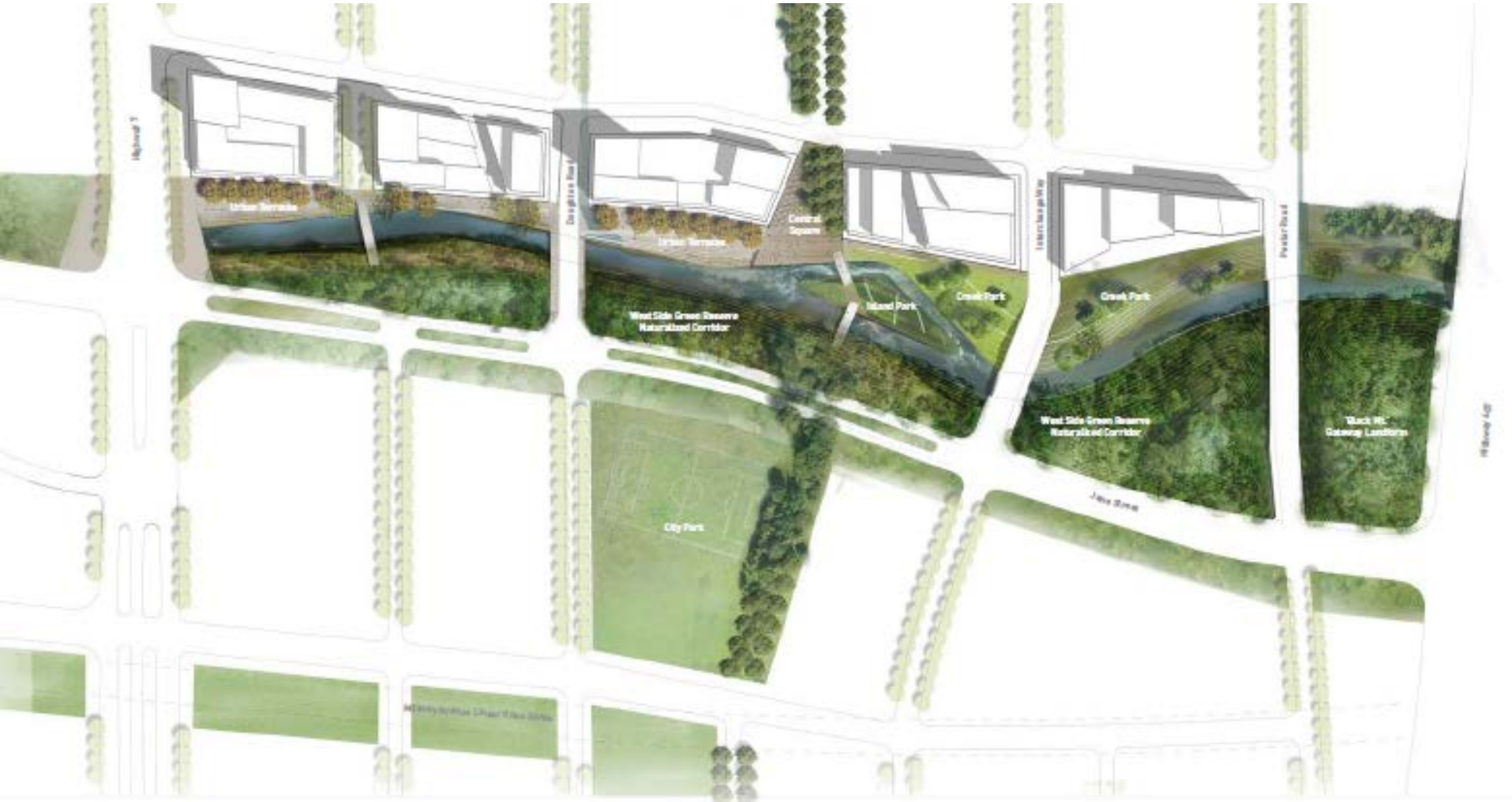
# West Side Conceptual Vision: The Presence of the Creek Ecology meets Jane Streetscape



# East Side: transitioning north to south



# Preliminary Demonstration Plan



# KEY CONSIDERATIONS



**COHESIVE  
VISION**

**FLOODING**

**SAFETY**

**LAND**

**ECOLOGY**

**PHASING**

**MONEY**



**VMC BLACK CREEK RENEWAL**  
VMC SUBCOMMITTEE JUNE 11 2014

COHESIVE VISION

FLOODING

SAFETY

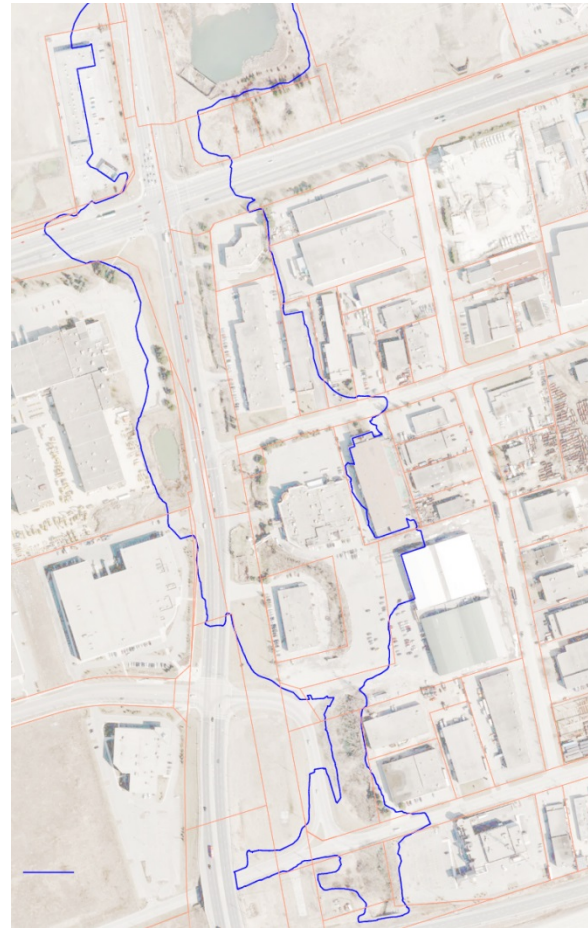
LAND

ECOLOGY

PHASING

MONEY

Floodplain and associated flood risk will be further reduced and largely contained within the new channel. In addition concept avoids 'trench' sections and considers pedestrian movement and access.



COHESIVE VISION

FLOODING

SAFETY

LAND

ECOLOGY

PHASING

MONEY



Urban channel form reduces channel width requirements. For selected properties directly impacted by floodplain and the renewal of Black Creek:

Available tableland today = 3.49 ha

Available tableland in future = 6.81 ha

**Reducing the floodplain by reconstructing the channel can increase available development potential by at least 100%**

COHESIVE VISION

FLOODING

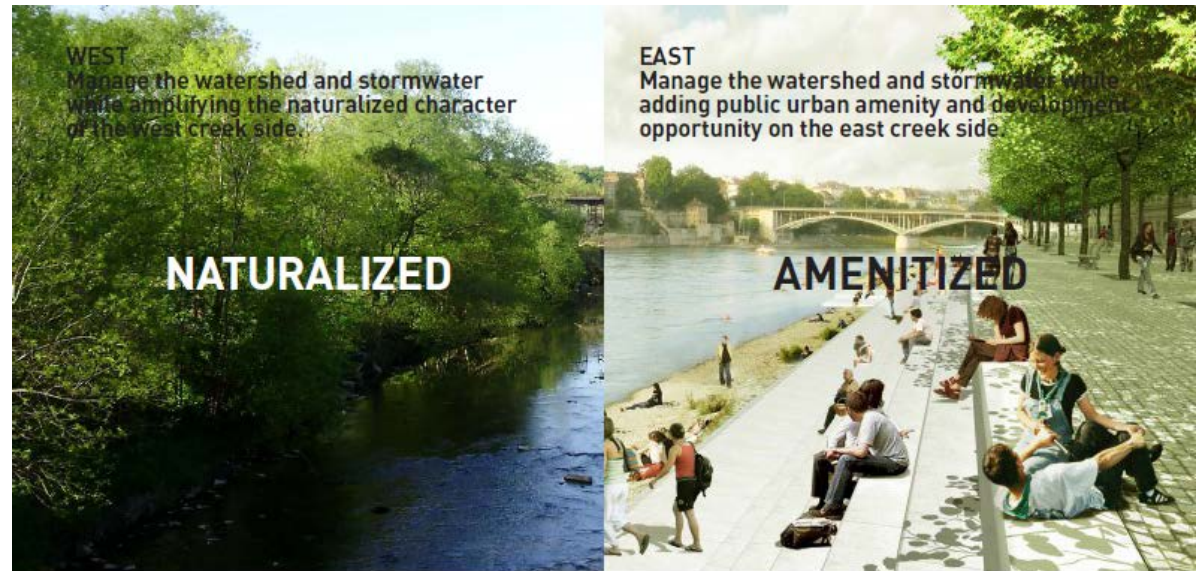
SAFETY

LAND

ECOLOGY

PHASING

MONEY



**Design of natural sections on west side of channel to collectively achieve net ecological gain over its entire length.**



COHESIVE VISION

FLOODING

SAFETY

LAND

ECOLOGY

PHASING

MONEY



**Interim solution seeks to address:**

- Maintained functionality of operating businesses
- Early implementation of selected reaches to incrementally reduce flood risk and facilitate redevelopment
- Generate momentum for ultimate vision

COHESIVE VISION

FLOODING

SAFETY

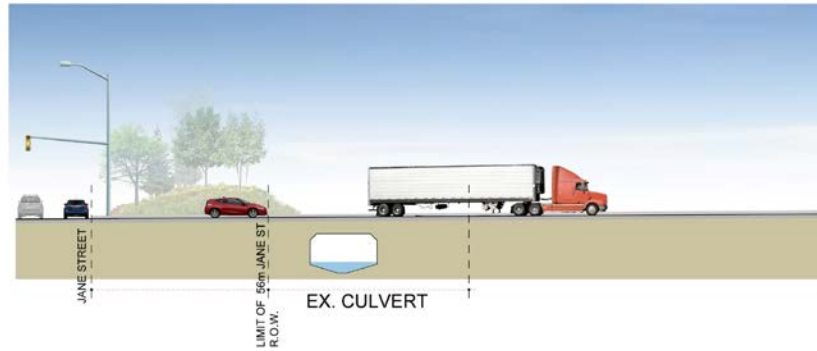
LAND

ECOLOGY

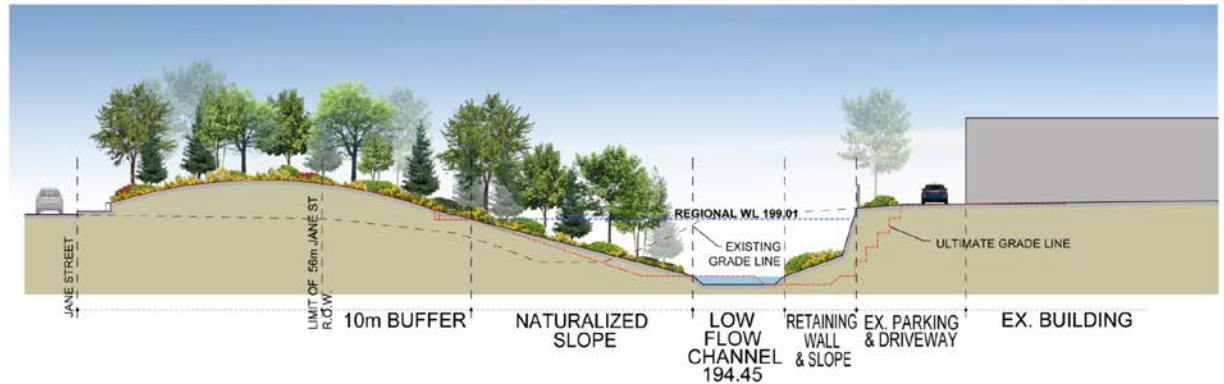
PHASING

MONEY

Interim Concept respects existing operating businesses



SECTION B-B



SECTION D-D



COHESIVE VISION

FLOODING

SAFETY

LAND

ECOLOGY

PHASING

MONEY

High level cost estimates for varying channel forms:

Natural Channel:	typ. \$5k per metre
Fully Enclosed (Pipe):	typ. \$40k per metre
Combination:	somewhere in between

More detailed estimates currently being prepared based on ultimate concept

Will inform the financial strategy



# NEXT STEPS

## **Facilitation process is concluded**

**Concept defined and refined to address requirements and stakeholder concerns, yielding general consensus on vision and structure**

### **Next steps:**

- Secondary Plan appeal process (Black Creek concept considered in the context of the OMB appeals resolution process)
- Costing of channel based on current concept plan
- Integrating channel concept with Edgeley Stormwater Management Pond north of Highway 7
- Begin to develop financial strategy (Summer 2014)
- Continue with Class EA study: technical analysis, conceptual design, hydraulic modeling and conduct two public information centres (estimated Fall 2014)
- Complete Class EA study (estimated Fall 2015)
- Updates to VMC Sub-Committee at key milestones

**QUESTIONS?**