

# PORTLANDS FLOOD PROTECTION

Port Lands Flood Protection Construction Liaison Committee Meeting #3

September 24, 2018



WATERFRONToronto

# Agenda

1. Introductions
2. Project Background
3. Construction Update: Cherry Street Stormwater and Lakefilling
4. Construction Update: Port Lands Flood Protection
5. Overview: Managing Construction Impacts
6. Traffic Management Plan Update
7. Next Steps
8. Discussion and Feedback

# Project Overview









# Full Vision Plan



# Funded Project Areas



# What are we building?

- A** Cherry Street Stormwater and Lakefilling
- B** Polson Slip Naturalization
- C** Flood Protection - River Valley
- D** Don Greenway (Spillway & Wetland)
- E** Don Roadway Valley Wall Feature
- F** East Harbour Flood Protection Land Form
- G** Sediment and Debris Management Area
- H** Flow Control Weirs
- I** Eastern Avenue Flood Protection
- J** Villiers Island Grading
- K** Keating Channel Modifications
- L** Promontory Park South
- M** River Park
- N** Lake Shore Road and Rail Bridge Modifications
- O** Cherry Street Bridge North
- P** Cherry Street Bridge South
- Q** Commissioners Street Bridge
- R** Old Cherry Street Bridge Demolition
- S** Site Wide Municipal Infrastructure
- T** Don Roadway
- U** Hydro One Integration
- V** Commissioners Street
- W** Cherry Street Re-alignment

-  Port Lands Flood Protection and Enabling Infrastructure Boundary
-  Earthworks/Flood Protection
-  Parks
-  Bridges & Structures
-  Roads and Municipal Infrastructure



# Earthworks/Flood Protection

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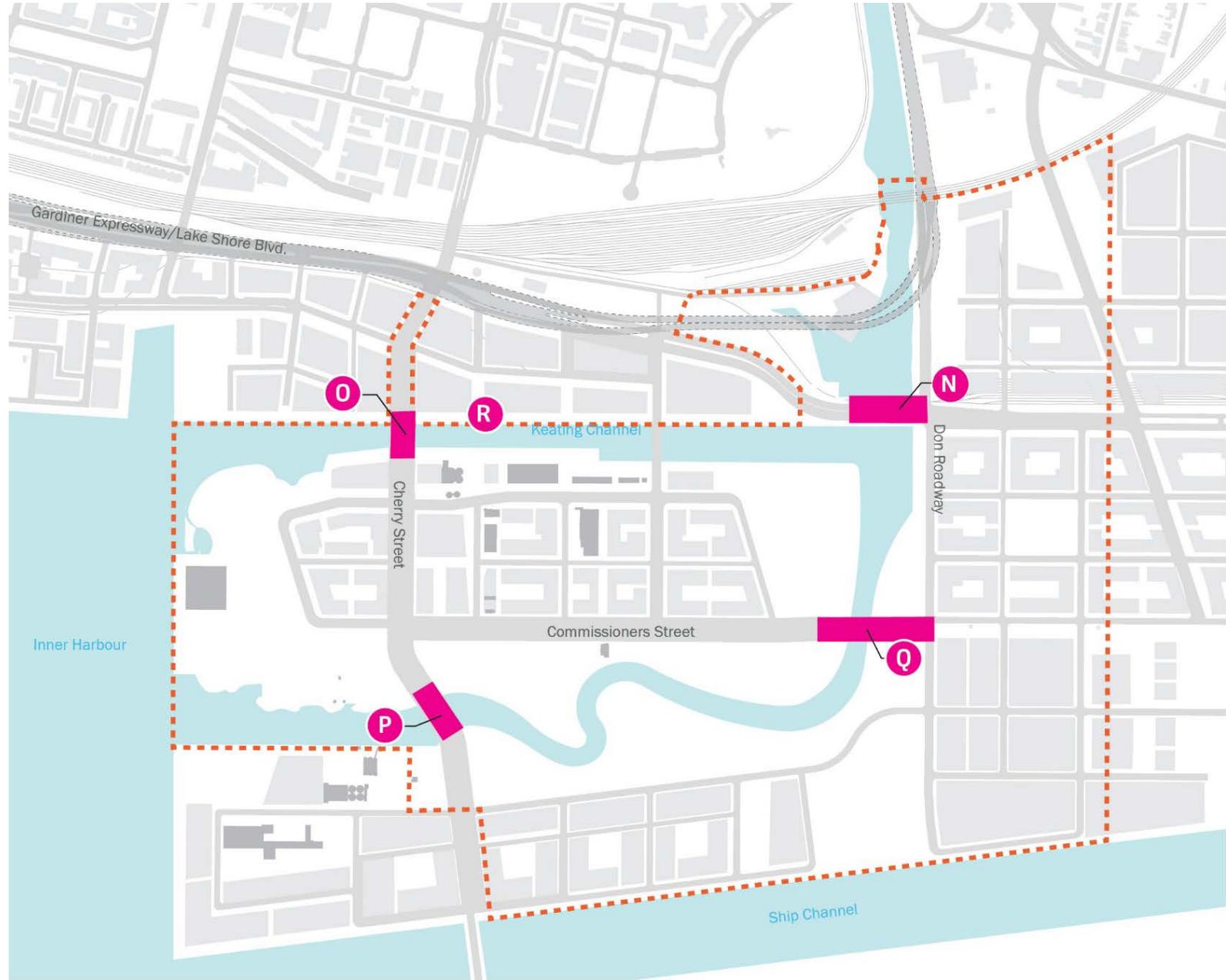
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# Bridges and Structures

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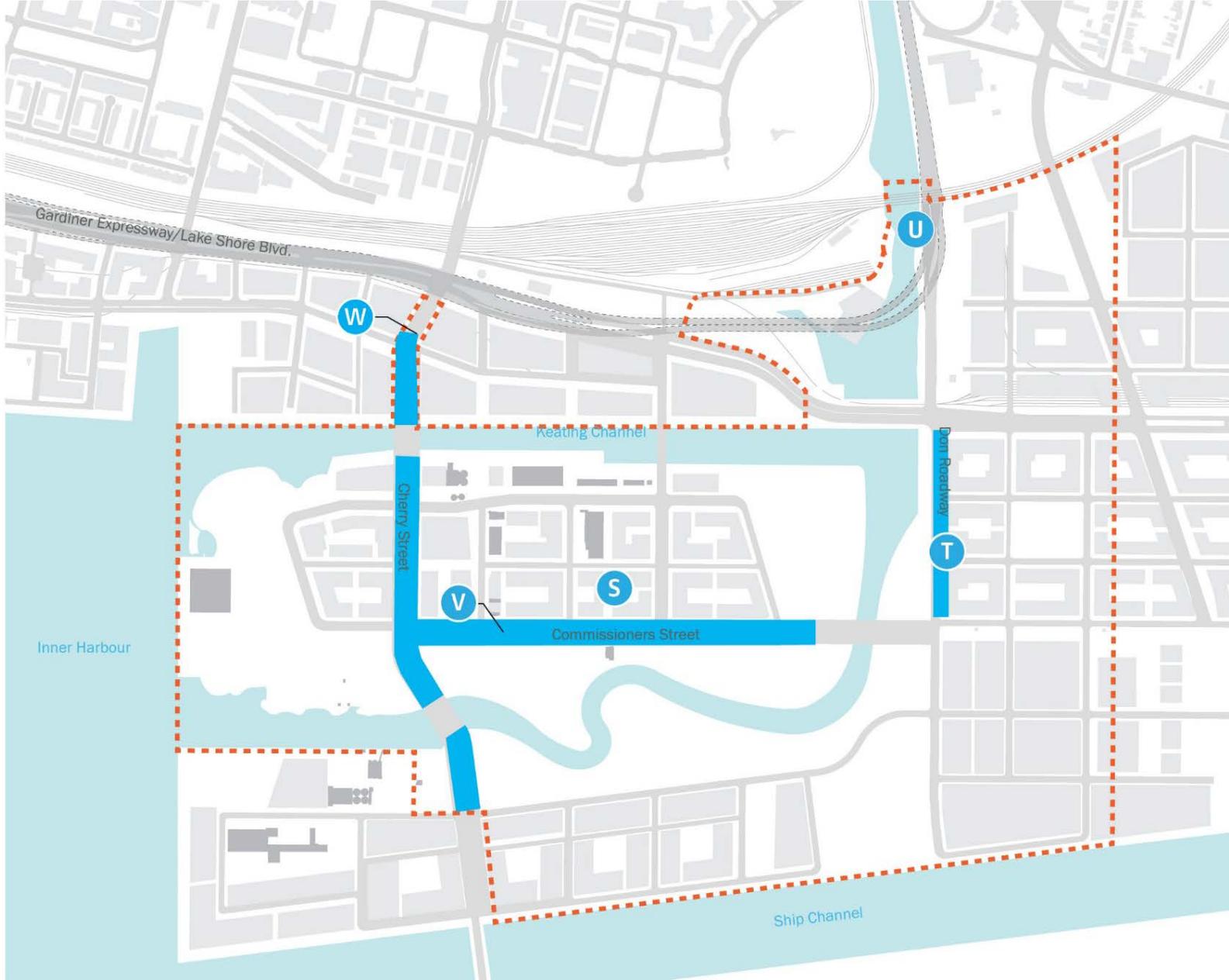
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# Roads and Municipal Services

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# Parks

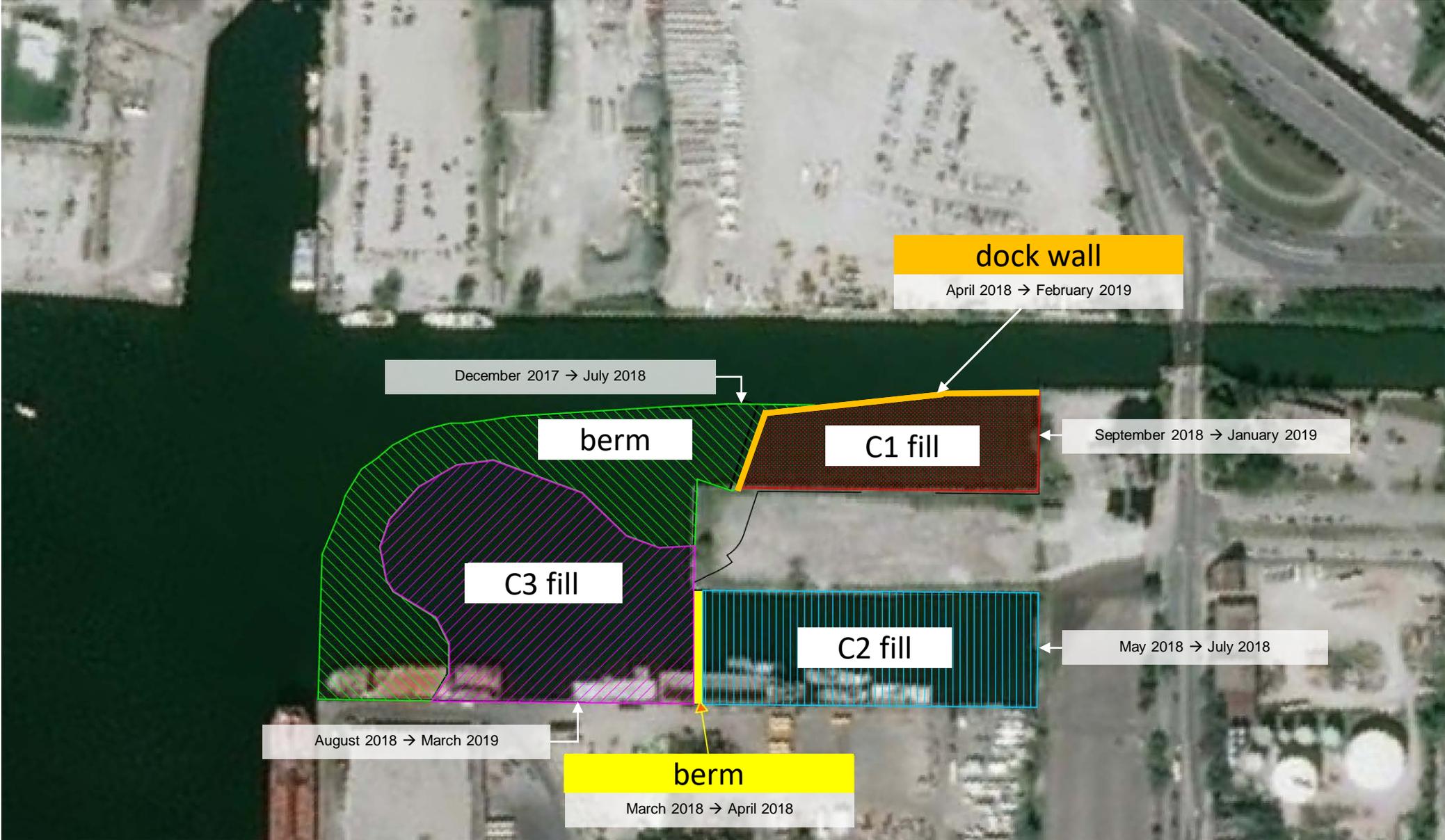
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# Construction Update: Cherry Street Stormwater and Lakefilling

# Construction Schedule



# Ongoing Construction: Revetment Berm



# Ongoing Construction: Dock Wall



# Ongoing Construction: Lakefilling



# Ongoing Construction: Marine Landscaping





# Construction Update: Port Lands Flood Protection

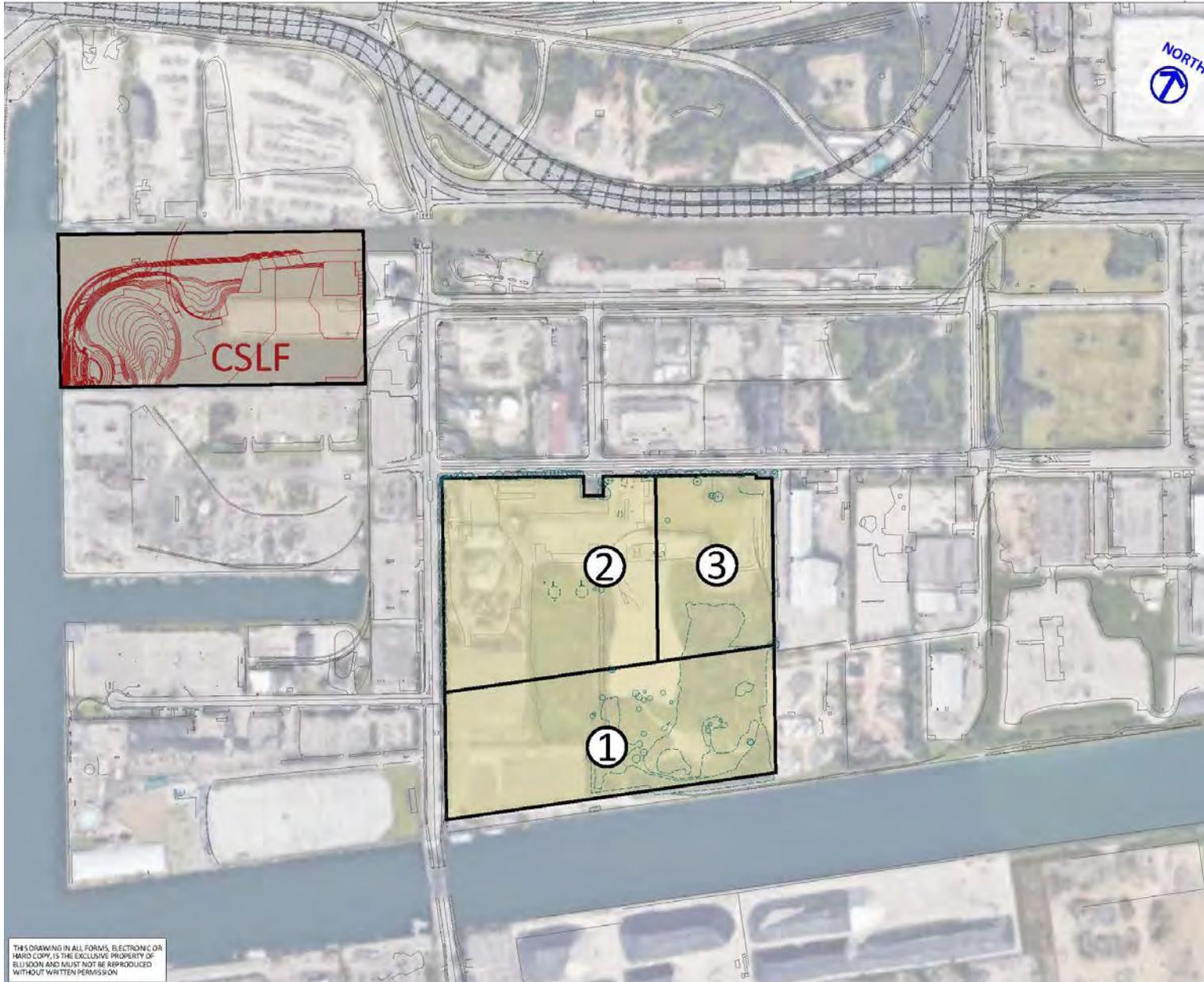
# Parks, Public Realm, and River Projects

PRESENTED BY  **EllisDon**



**WATERFRONT**Toronto

# Ongoing Construction: August – December 2018



## AREA 1

- Tree cutting
- Demolition: parking lot
- Site preparation: removal and stockpiling of topsoil

## AREA 2

- Tree cutting
- Demolition: buildings, parking lot
- Site preparation: removal of topsoil

## AREA 3

- Tree cutting
- Demolition: building, parking lot
- Site preparation: removal of topsoil

## MONITORING (SITE-WIDE)

- Air, dust, noise, odour, weather

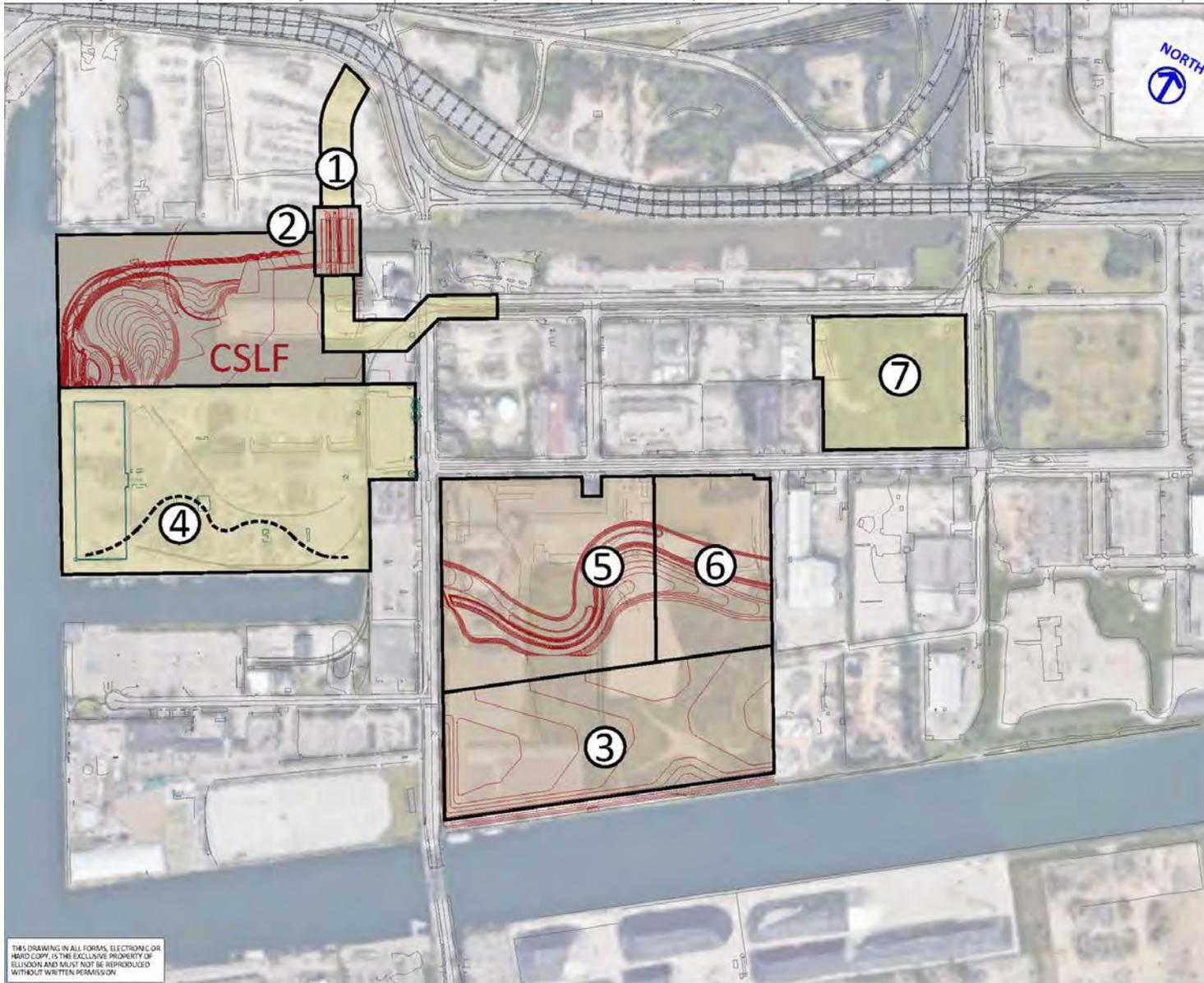
# Ongoing Work: Soil and Groundwater Sampling



# Ongoing Work: Air, Dust, Noise, Odour and Weather Monitoring



# Upcoming Construction: January-March 2019



## AREA 1

- Cherry Street realignment: demolition, site preparation

## AREA 2

- New Cherry Street Bridge

## AREA 3

- Installation of soil treatment facility

## AREA 4

- Demolition: parking lots, buildings
- Site preparation

## AREA 5

- Deep soil mixing

## AREA 6

- Site preparation

## AREA 7

- Tree cutting
- Demolition: buildings, parking lots
- Site preparation

## MONITORING (SITE-WIDE):

- Air, dust, noise, odour, weather
- Turbidity
- Surface-water quality
- Vibration

# Overview: Managing Construction Impacts

Effects*	Mitigation Measures
Traffic / service disruptions	<p>Use a traffic management plan and standard traffic control measures and safely co-ordinate traffic flow</p> <p>Provide alternate access and re-routing signage to businesses as required and maintain emergency access to adjacent structures and buildings</p>
Dust and emissions	<p>Use monitoring systems to measure dust levels</p> <p>Adhere to Waterfront Toronto's management plan for dust suppression and emissions</p>
Noise	<p>Act in accordance with City of Toronto's Noise Bylaw</p> <p>Operate truck traffic for off-site disposal of soil during off-peak hours where possible</p>
Odour	<p>Use monitoring systems to measure odour levels</p> <p>Implement odour-control measures on-site</p>

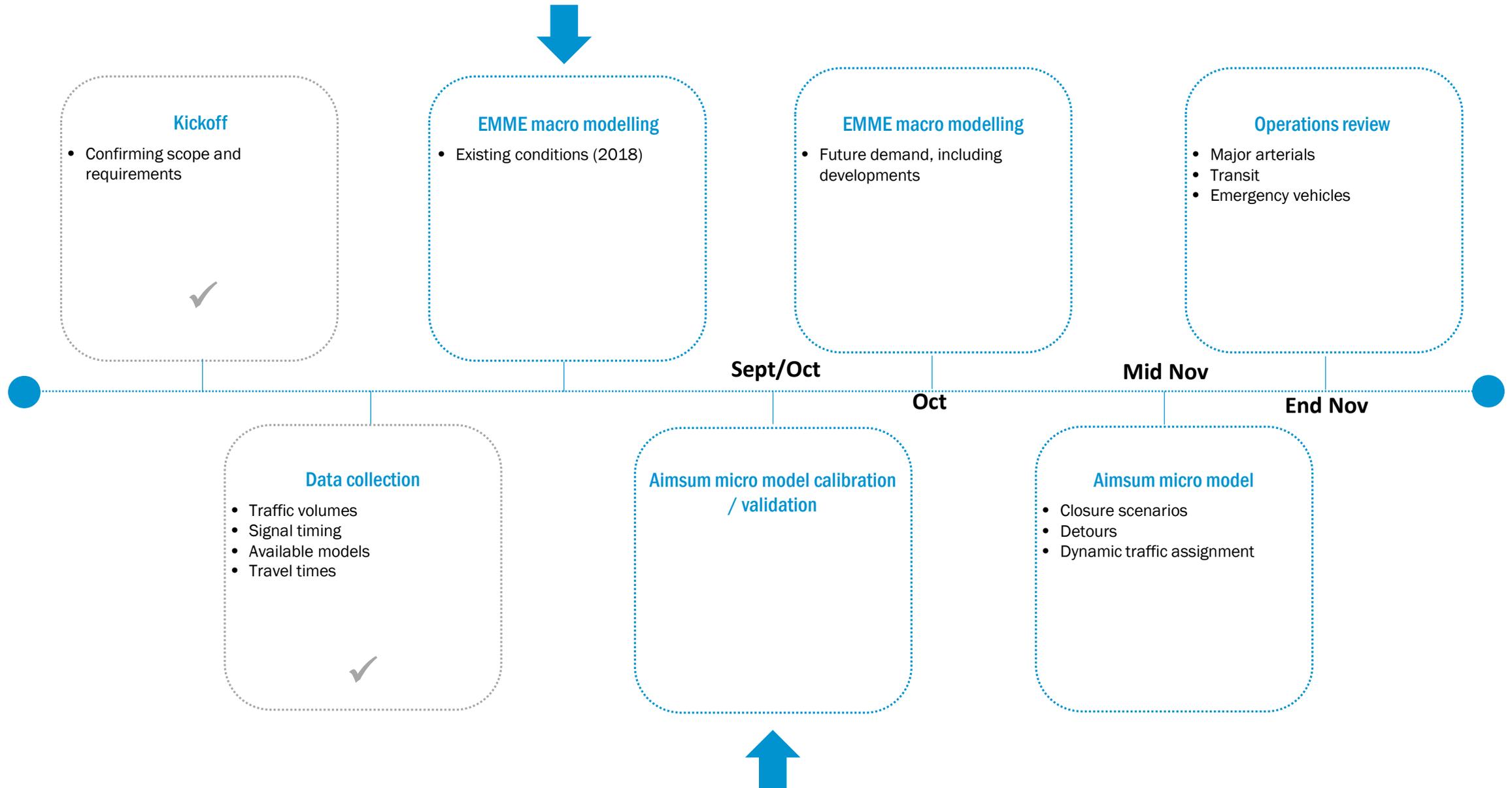
\*As identified in Section 7 of the Don Mouth Naturalization and Port Lands Flood Protection Environmental Assessment

# Overview: Managing Construction Impacts

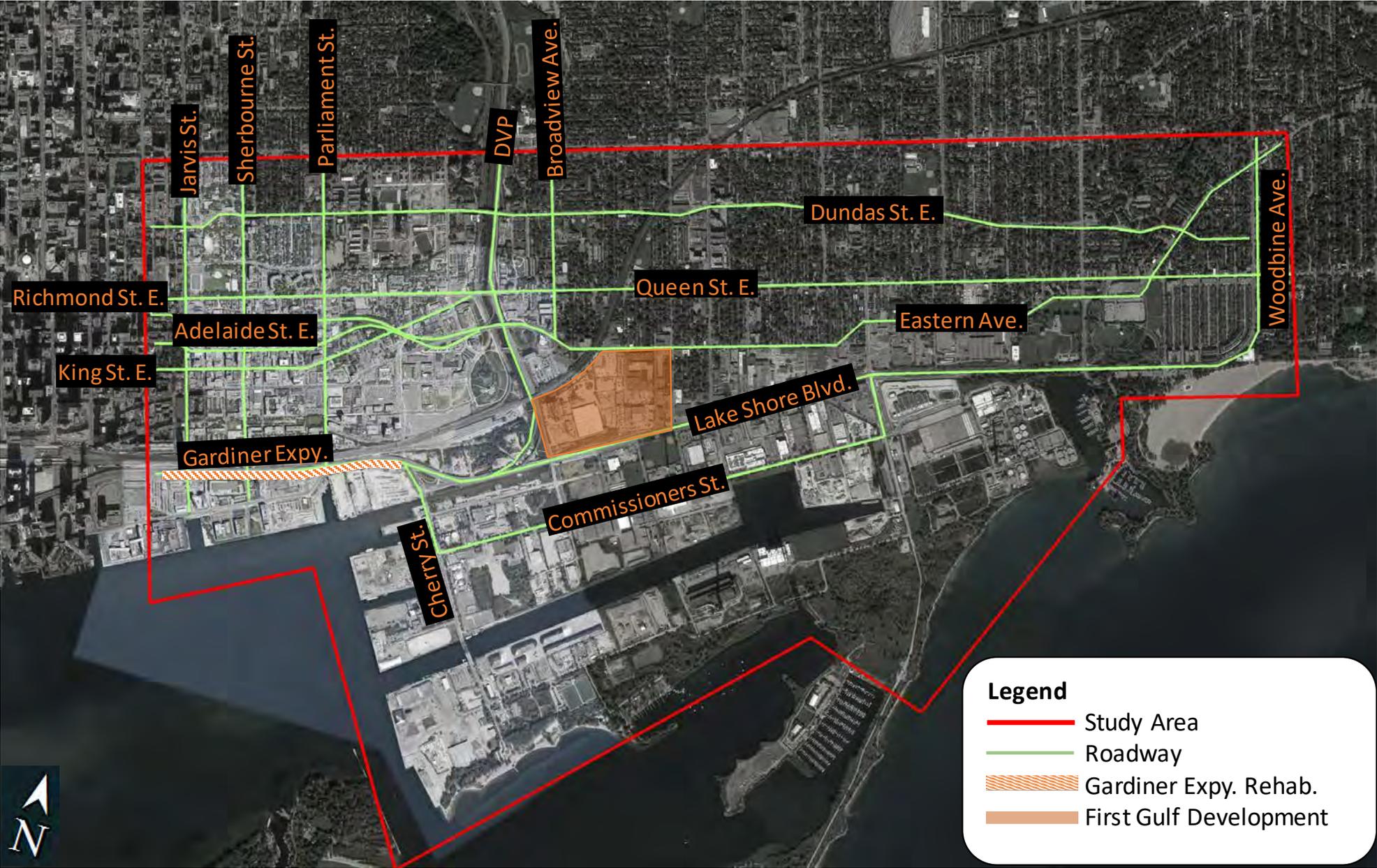
- Environmental Management Plans
  - Soil Management Plan
  - Air Quality, Weather and Noise Monitoring Plan
  - Surface Water Quality Monitoring Plan
  - Groundwater Management Plan
  - Odour Management Plan
  - Water Management Plan
- Traffic Management Plan
- Health and Safety Plan

# Traffic Management Plan Update: Port Lands Flood Protection

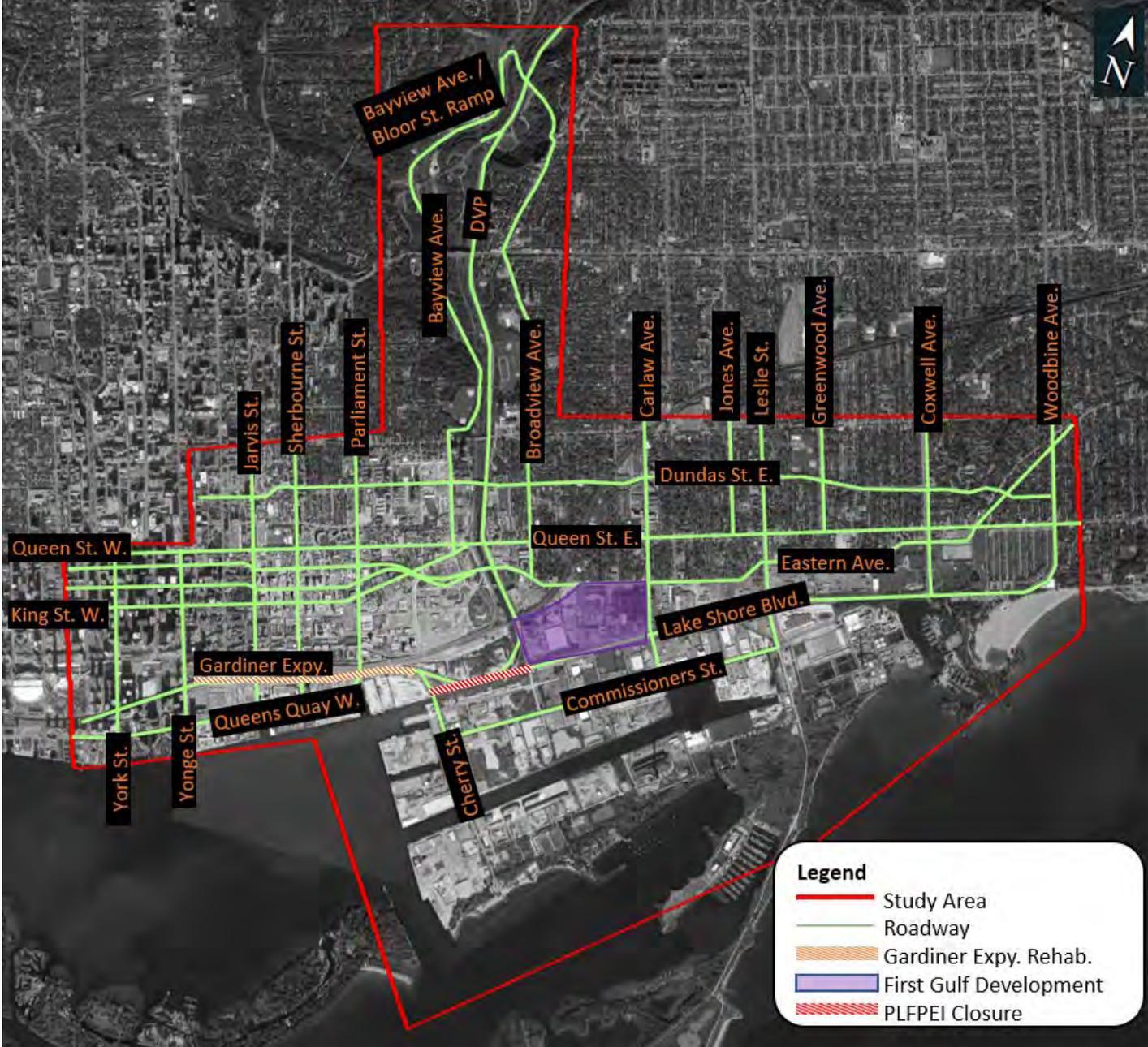
# Where are we now?



# Original Study Area



# Revised Study Area



# New Study Area: Traffic Signals and Transit Routes

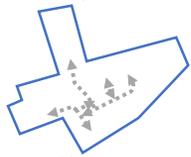
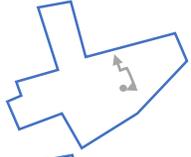
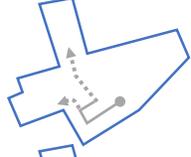
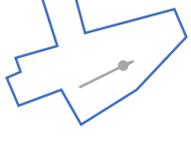


# Data Collected: Stakeholder Input

We got data from 11 stakeholders on:

- Trips to/from the business:
  - Roadways
  - Time of day
- Special times for spike in traffic (seasonal or during special events)
- Level of operations that can accommodate as a “worst case scenario”
- Alternative routes and/or time of day during construction

# Data Collected: Stakeholder Input

BUSINESS	MAX. DAILY VEHICLE VOLUMES	FREQUENCY/DURATION	PRIMARY ROUTES
	 <b>810</b>	 <b>MON-FRI*</b> 06:00 – 09:00 14:00 – 17:00 <small>Secondary shift – 24/7 shift work</small>	 <p>East/West along Commissioners, Lake Shore North/South along Don Roadway, Carlaw, Leslie</p>
	 <b>520</b>	 <b>MON-FRI</b> 05:30 - 18:00	 <p>Cherry – Lake Shore Commissioners – Leslie / Don Roadway Smaller streets (e.g. Villiers, Logan, Carlaw)</p>
	 <b>384</b>	 <b>EVERY DAY</b> 24 hours/day <small>3-4 busses every 15 mins</small>	 <p>TTC Bus Route 83</p>
	 <b>200</b>	 <b>SUN-FRI</b> 05:30 - 14:30 <small>open until 4 or 5 pm on busy winter shipping days</small>	 <p>Unwin – Cherry Gardiner West via Lake Shore DVP North via Don Roadway</p>
	 <b>190</b>	 <b>MON-FRI</b> 08:00 - 20:30	 <p>East of DVP: Commissioners – Leslie (80%) and/or Carlaw (20%) West of DVP: Commissioners – Carlaw or Don Roadway</p>
	 <b>110</b>	 <b>MON-FRI*</b> 06:00 – 18:00	 <p>Commissioners Backup routes: Leslie, Carlaw, Don Roadway, Cherry</p>

# Data Collected: Stakeholder Input

BUSINESS	MAX. DAILY TRUCK VOLUMES	FREQUENCY/ DURATION	PRIMARY ROUTES
	 99	 SUN-FRI 08:00 - 19:00 <small>various departure times</small>	 Unwin – Cherry East/West on Commissioners Carlaw, Leslie or Cherry to Don Roadway
	 85	 MON-FRI 04:00 - 16:00	 Polson via Cherry Lake Shore or DVP/Don Roadway/Commissioners Leslie – Unwin
	 75	 MON-FRI* 05:00 – 20:00	 Out: Commissioners – Carlaw – Lake Shore – Gardiner In: DVP – Don Roadway - Commissioners
	 70	 SUN-FRI 18:00 to 06:00	 Unwin – Cherry
	 48	 MON-FRI* 07:00 – 19:00	 Cherry – Villiers Don Roadway – Villiers Commissioners – Don Roadway – Villiers Commissioners – Munitions

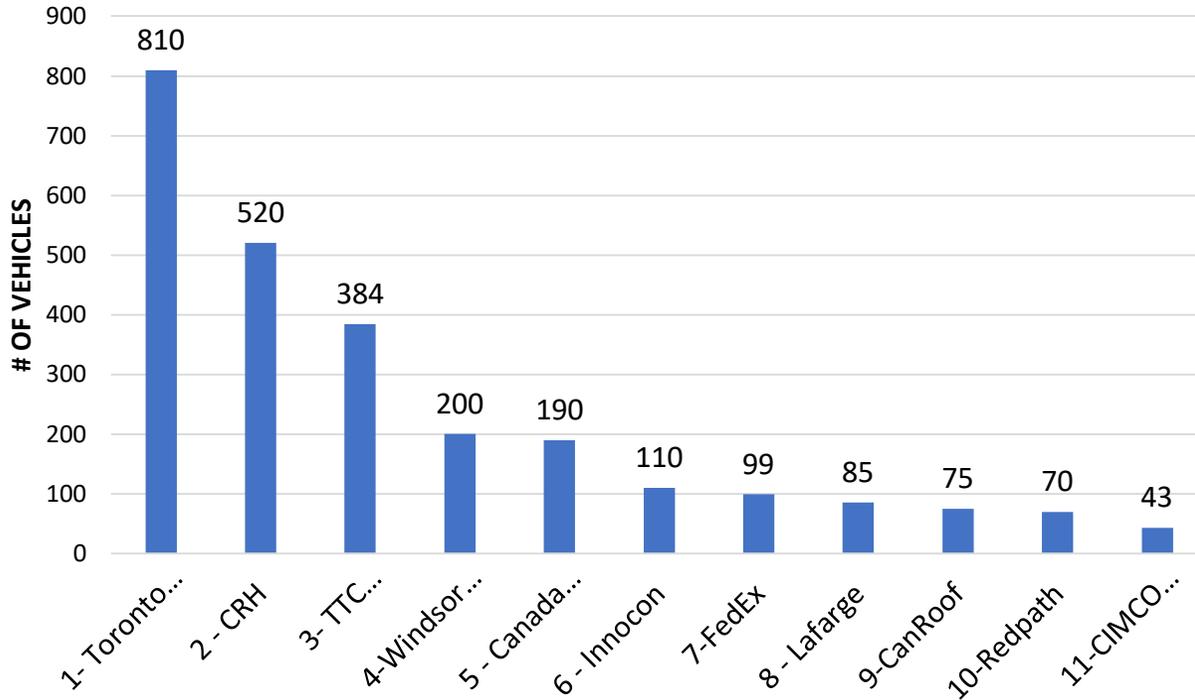
\* Respondent did not specify days when the business typically operates, assumed Monday - Friday

# Data Collected: Stakeholder Input

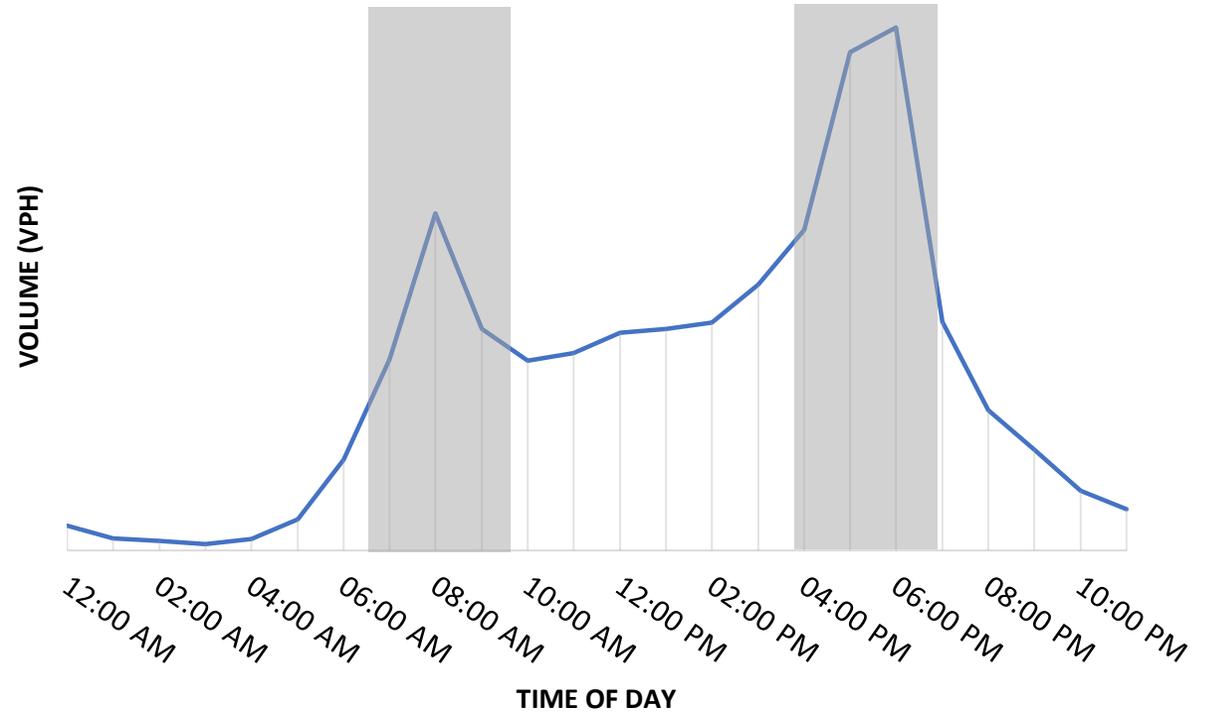


# Stakeholder Input Integrated with Additional Data

## Daily Trips Generated by Stakeholders



## Typical Weekday Volume Profile – City of Toronto



- Traffic model will consider how total trips generated by stakeholder businesses are distributed throughout a typical day
- Model will drive the traffic management plan and will inform detour routes (vehicles, active transportation, TTC) , signage and pavement markings

Model will cover the peak hours noted above:  
AM Peak – 7:30 to 8:30 AM  
PM Peak – 5:00 to 6:00 PM

# Next Steps

- **September-November 2018:** Continuous Coordination with City Staff and stakeholders
- **December 2018:** Complete model of existing conditions; Update to CLC
- Additional consultation with City staff and stakeholders as Traffic Management Plan is finalized
- Finalize Traffic Management Plan in advance of any major closures

# Discussion and Feedback