

# Land Acknowledgement

Let us take a moment to acknowledge we are on lands that have been, and continue to be, home to many Indigenous Peoples including the Anishnabeg, the Haudenosaunee and the Huron-Wendat peoples.

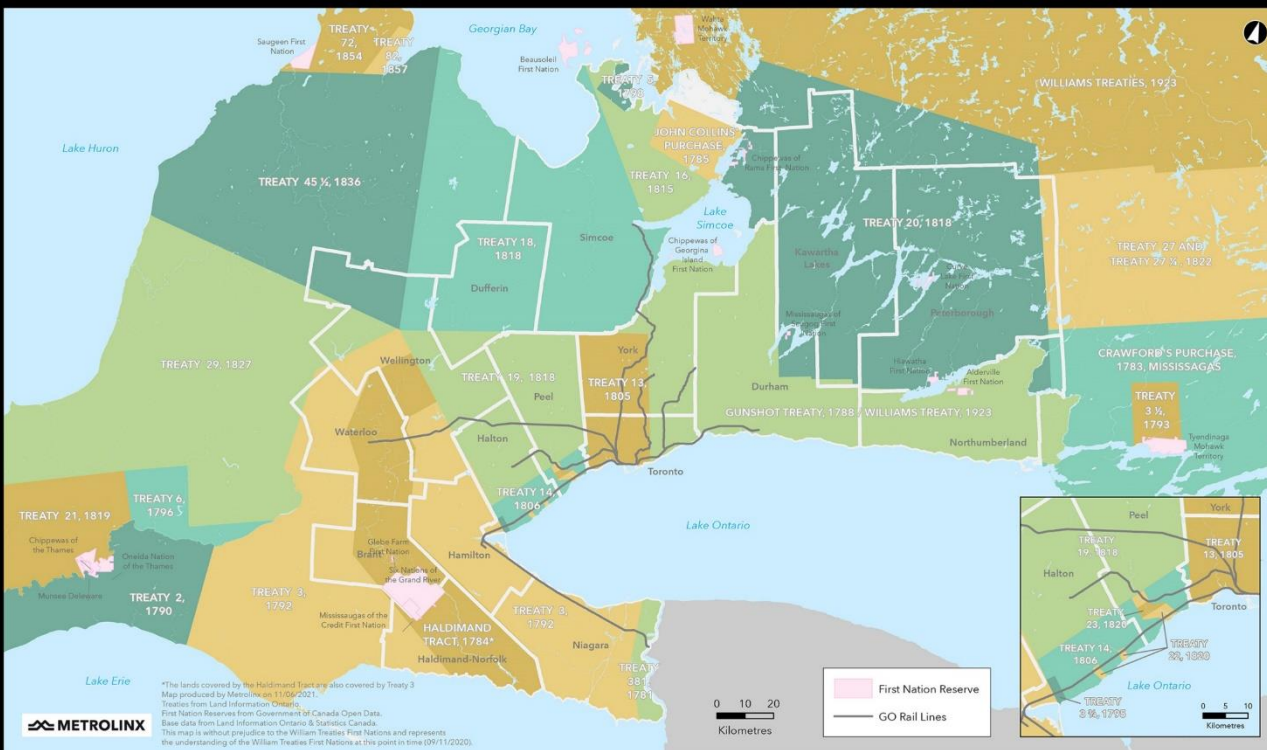
We are all Treaty people. Many of us have come here as settlers, as immigrants or involuntarily as part of the trans-Atlantic slave trade, in this generation, or generations past.

We acknowledge the historic and continued impacts of colonization and the need to work towards meaningful reconciliation with the original caretakers of this land.

We acknowledge that Metrolinx operates on territories and lands covered by many treaties that affirm and value the rights of Indigenous communities, Nations and Peoples.

We understand the importance of working towards reconciliation with the original caretakers of this land. At Metrolinx, we will conduct business in a manner that is built on a foundation of trust, respect and collaboration.

Treaties and Reserves in the Greater Golden Horseshoe



**Ontario Line**

**Construction Liaison Committee**

**Pape-Danforth & Sammon**

**October 2, 2024**

# AGENDA

## 1. CLC Overview & Introductions

- What is a CLC?
- Participants and Introductions

## 2. Work Overview

- Pape Segment & CLC Area
- Pape Station
- Sammon Emergency Exit Building (EEB) and Crossover
- Contracts Packages

## 3. Current Work

- Pape Station Advance Works
- Pape Station Support of Excavation
- Sammon EEB and Crossover Support of Excavation
- Slurry Wall Methodology

## 4. Issues and Mitigations

- 24-hour Work
- Haul Routes & Idling
- Dust

## 5. Discussion

## 6. Next Steps



# CLC Overview & Introductions

# Construction Liaison Committee (CLC) Terms of Reference

## What is a CLC?

Construction Liaison Committees (CLCs) provide open, two-way communication and sharing of information before and during the construction of the Ontario Line project. The CLC will focus on the impacts from the Ontario Line within proximity of Pape & Danforth and Pape & Sammon.

The CLC is a forum for Metrolinx and representatives of the committee to proactively communicate and discuss Ontario Line construction activities and community impacts in a collaborative and respectful manner.

## Membership

James Whittaker

CLC members include representatives from Metrolinx, our construction partners (Green Infrastructure Partners and Pape North Connect), and from organizations and representatives of the community.

## Meeting Schedule

- The CLC will meet monthly for an hour, subject to change based on construction progress and membership availability.
- We will establish a regular meeting time for the CLC, subject to change where appropriate.
- The CLC agenda will be organized with input from the CLC members.

# CLC Participants

## Community Members

- Pat Biros (Toronto Public Library)
- Naureen Choudhry (Woodgreen Community Services)
- Ryan Cohen (Nisbet Lodge)
- Mary Fragedakis (GreekTown on the Danforth BIA)
- Paul Hamel (Community member)
- Gavin Leeb (Community member)
- Phoenix Menday (Community member)
- Tom Shenstone (Community member)
- Stephanie Spiel (Community member)
- Sven Wolpert (Community member)

## Elected Officials

- MPP Peter Tabuns
- Councilor Paula Fletcher
- Trustee Sara Ehrhardt

## City of Toronto

- Transit Expansion
- Transportation Services
- Economic Development and Culture

## Metrolinx

### *Community Engagement*

- Sean Major
- Phil Rodrigues

### *Program Sponsor*

- John Potter

### *Construction Management*

- Will Close
- Zaidun Alganabi

## Contractor Representatives

### *Green Infrastructure Partners*

- Geoff Mosher
- Joe Di Carlo
- Isabel De Miguel
- Shaelyn Hickey

## **Getting to know you:**

- What is one thing you hope to learn at the CLC?

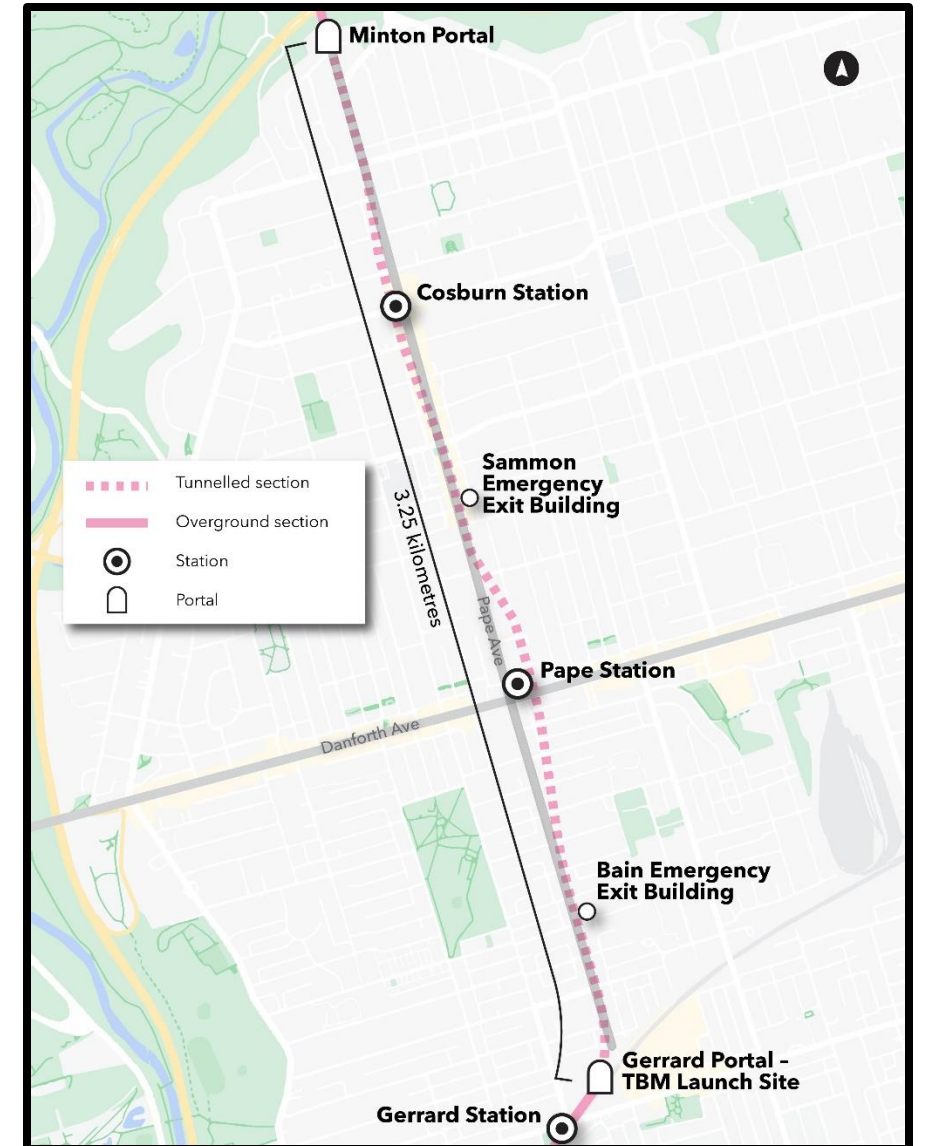
# Work Overview



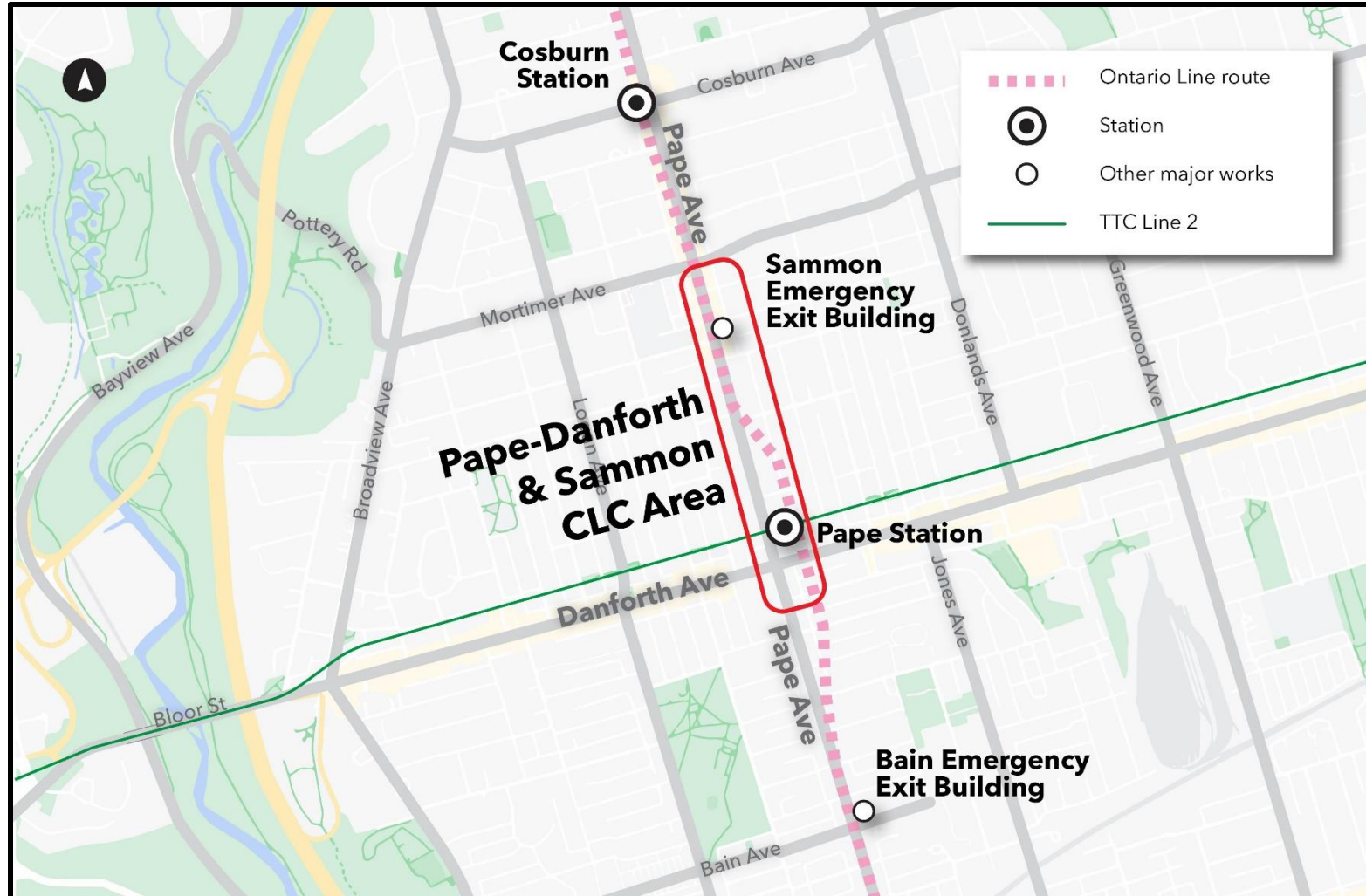
# Pape Segment

The Pape Segment Includes:

- Three kilometres of twin bored tunnels under Pape Avenue, between Gerrard Street East and Minton Place near the Don Valley Parkway;
- Two underground stations (Pape and Cosburn), two portals (Gerrard and Minton);
- Three emergency exit/service buildings (Bain Avenue, Sammon Avenue and Minton Place);



# Pape-Danforth & Sammon CLC – Area of Focus



## Pape Station Overview

The existing Pape Station will be expanded to accommodate a new concourse and platform for the Ontario Line. Features will include:

- A new platform underneath the existing Line 2 platform.
- A new fully accessible entrance and concourse directly accessible from Danforth Avenue.
- Connection between Line 2 and the Ontario Line.
- A rebuild of the existing TTC bus loop.
- Presto fare gates using the TTC fare system.
- Platform-screen doors on the Ontario Line platform for increased safety and operational reliability.
- Glass exterior walls for increased natural light flow and customer safety.





# Pape Station



## Sammon Emergency Exit Building & Crossover Overview

On the southeast corner of Sammon Avenue and Pape Avenue, crews will construct an emergency exit building and a crossover.

- The emergency exit building will be located at the site of the former KFC restaurant. It will provide an alternative exit from the subway tunnels in the event of an emergency.
- The crossover will be situated in an expanded cavern at track level. Crossovers allow trains to change from one track to the other, giving greater operational flexibility to the line.
- In addition to the emergency exit building, a mechanical building will be located on-site.





## Pape Station Advance Works

Beginning in early 2024, Duron mobilized to begin a package of work readying the TTC's Pape Station for future construction of a new Ontario Line connection. Works have included bus canopy demolition, ventilation shaft modification, and utility relocations in the vicinity of the station.

**Constructor:** Duron Ontario Ltd.

**Timeline:** 2024

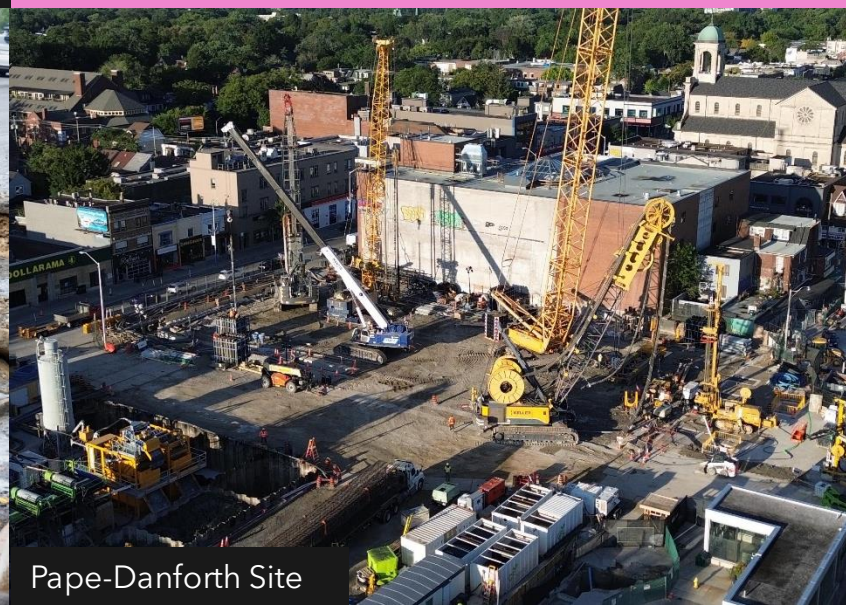


## Pape Support of Excavation

The Pape Support of Excavation (PSOE) contractor will install the excavation supports and exterior concrete walls for the underground Pape station, and complete excavation of the station's two shafts north and south of the existing TTC station. In addition, they will perform the same work for an emergency exit building and track crossover at Sammon Avenue.

**Constructor:** Green Infrastructure Partners

**Timeline:** 2024-2026



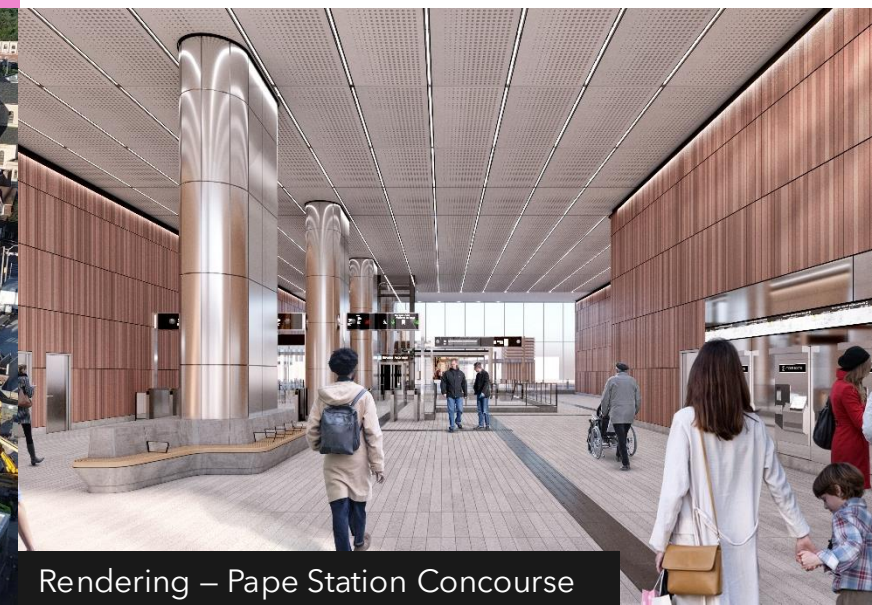
Pape-Danforth Site

## Pape Tunnels and Underground Stations

The Pape Tunnel and Underground Station (PTUS) constructor will take over Pape Station and Sammon crossover construction following PSOE and see the station through to completion. Elsewhere on Pape, they will construct the Gerrard Portal, the Bain emergency exit, Cosburn Station, and the Minton Portal. They will also operate the tunnel boring machines under Pape Avenue.

**PTUS Constructor:** Pape North Connect

**Timeline:** 2024-2031



Rendering – Pape Station Concourse

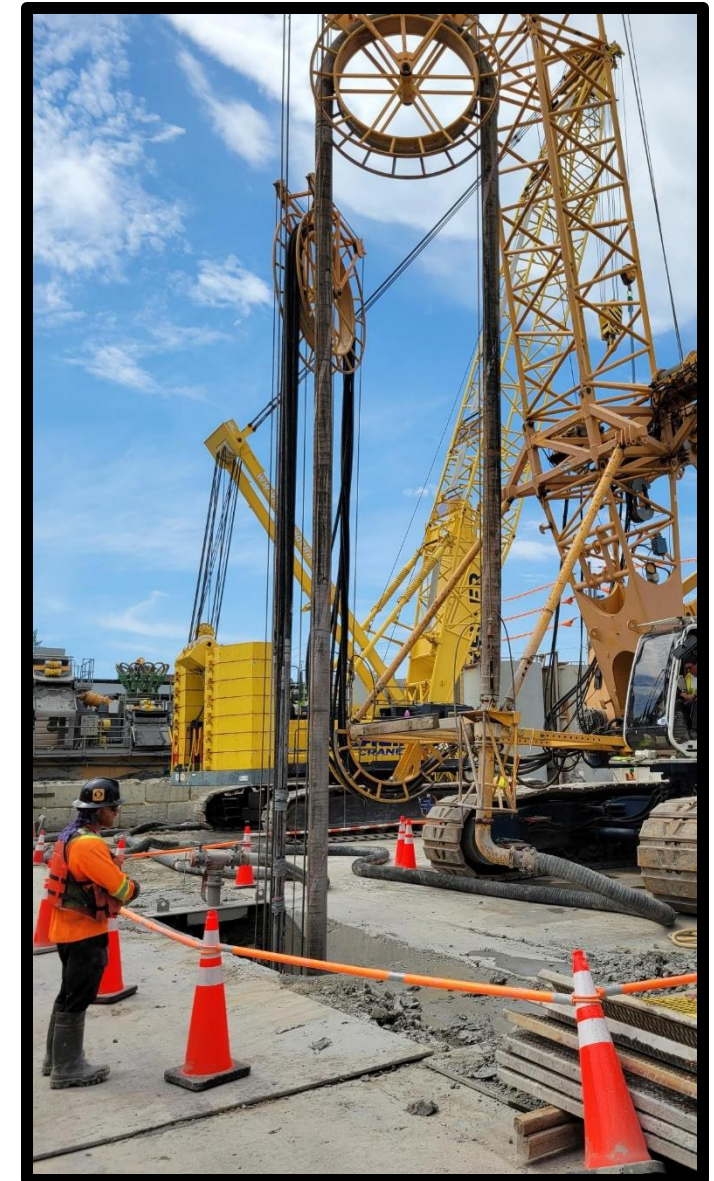


## Pape Support of Excavation

At Pape Station, crews are constructing the shafts of the Ontario Line interchange with Pape Station. This requires building a concrete slurry wall foundation and relocating existing utilities within the path of future infrastructure. The same method is being used to construct the foundation of the future emergency exit building at Sammon Avenue.

### Pape-Danforth Expected Timeline of Works:

- June 2024 to October 2024:
  - Preparation for excavation and relocating utilities (sewers, Bell cables).
- July 2024 to April 2025
  - Installing the slurry wall foundation.
- April 2025 to July 2026
  - Excavating within the boxes formed by the slurry walls.



## Pape Station Advance Works

A separate package of work is being conducted within and in the vicinity of Pape Station called *Pape Station Advance Works*. This work is being done to prepare the station and TTC lands for the upcoming construction of the Ontario Line connection, and includes:

- Modifications to the existing TTC Pape Station including the partial demolition of the headhouse;
- Sewer and watermain relocations; and
- Modifications of the existing tunnel ventilation shaft for the existing Line 2 subway.

This work is being conducted by Duron Ontario Ltd. It began in early 2024 and will conclude in late 2024, at which point GIP will assume control of Pape Station lands as they continue installing underground supports and shift into excavation.



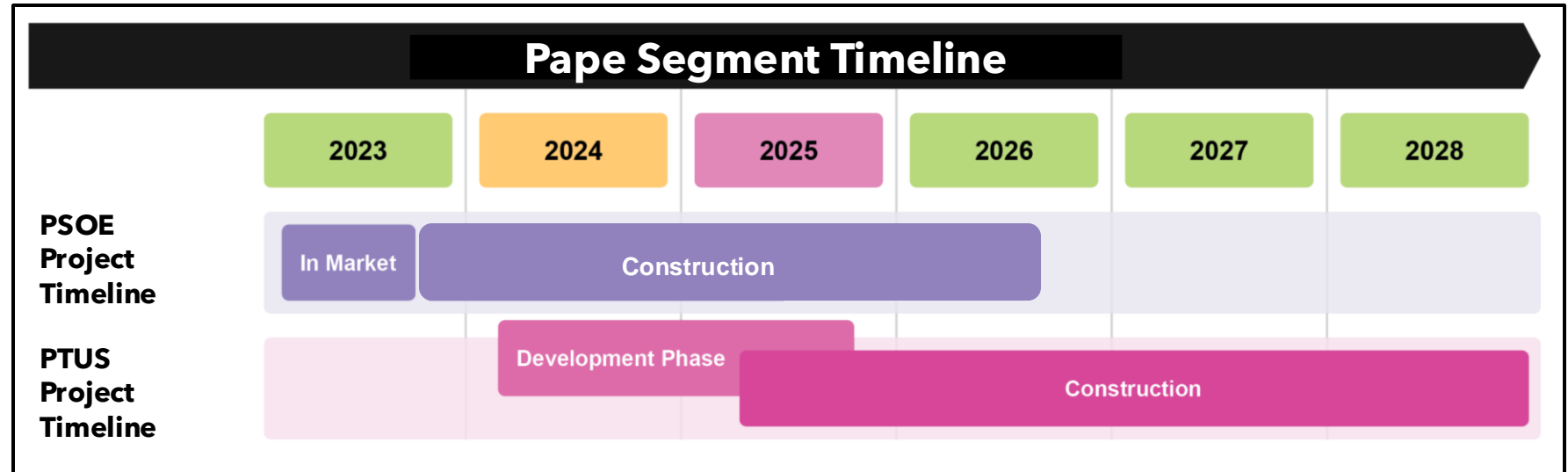


# Pape Tunnels and Underground Stations (PTUS)

The PTUS project is currently in the *development phase*, which involves advancing design and determining methodology for future construction. The following preparatory activities are currently being undertaken:

- Noise and vibration baseline monitoring
- Progressing engineering design
- Environmental surveys and sampling

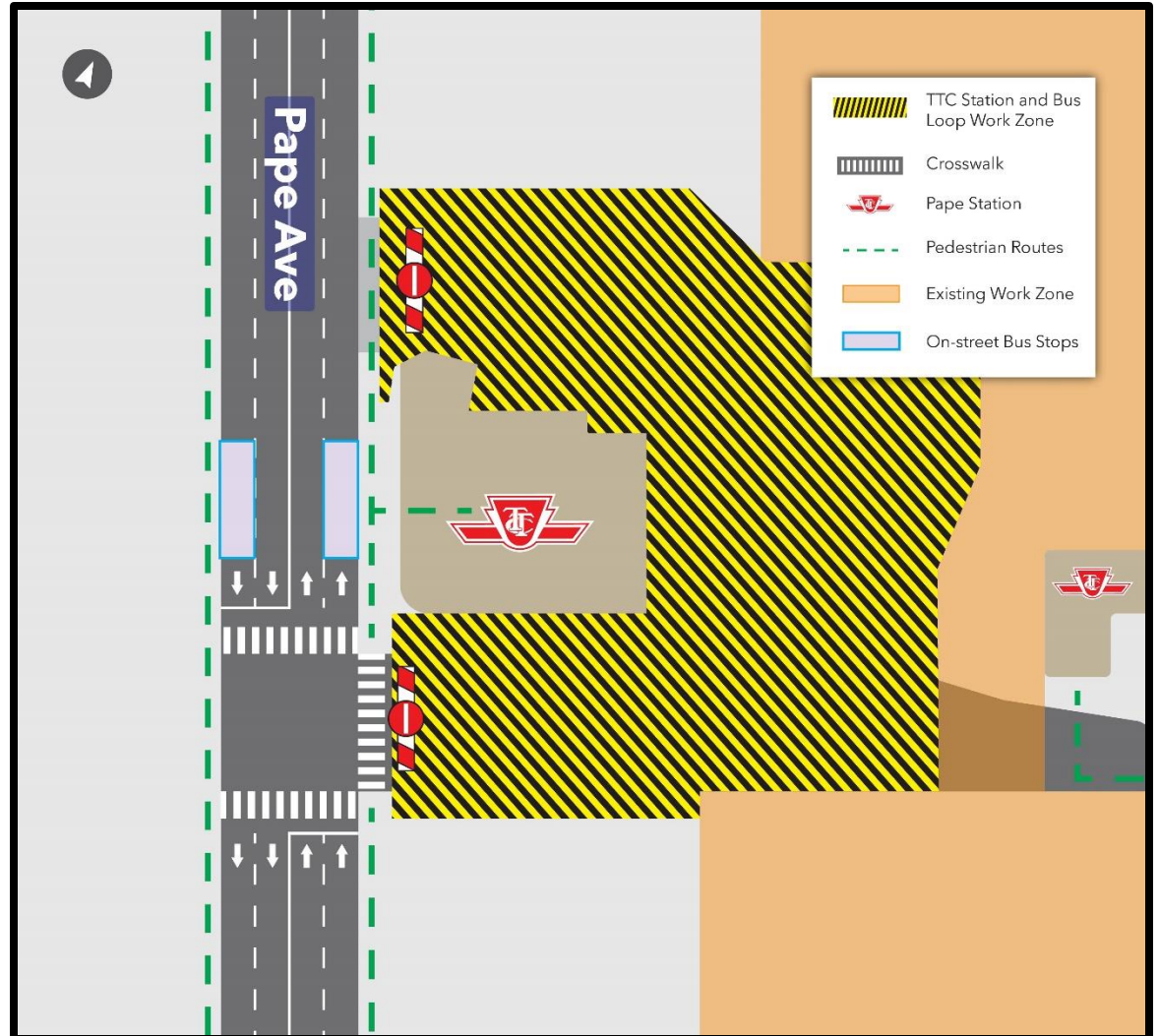
**Construction of the PTUS project is anticipated to begin with early works and demolitions in late 2024 / early 2025.**



# Current Work

## Pape Station Advance Works

- Since May 12, the bus loop at Pape Station has been closed as crews perform bus loop canopy demolition, wet utility relocations within the bus loop, and modifications of the existing tunnel ventilation shaft.
- Due to work plan revisions, the bus loop closure is being extended into 2025. Updates will be communicated jointly by the TTC and Metrolinx once a precise schedule has been determined.





# Pape Station Advance Works



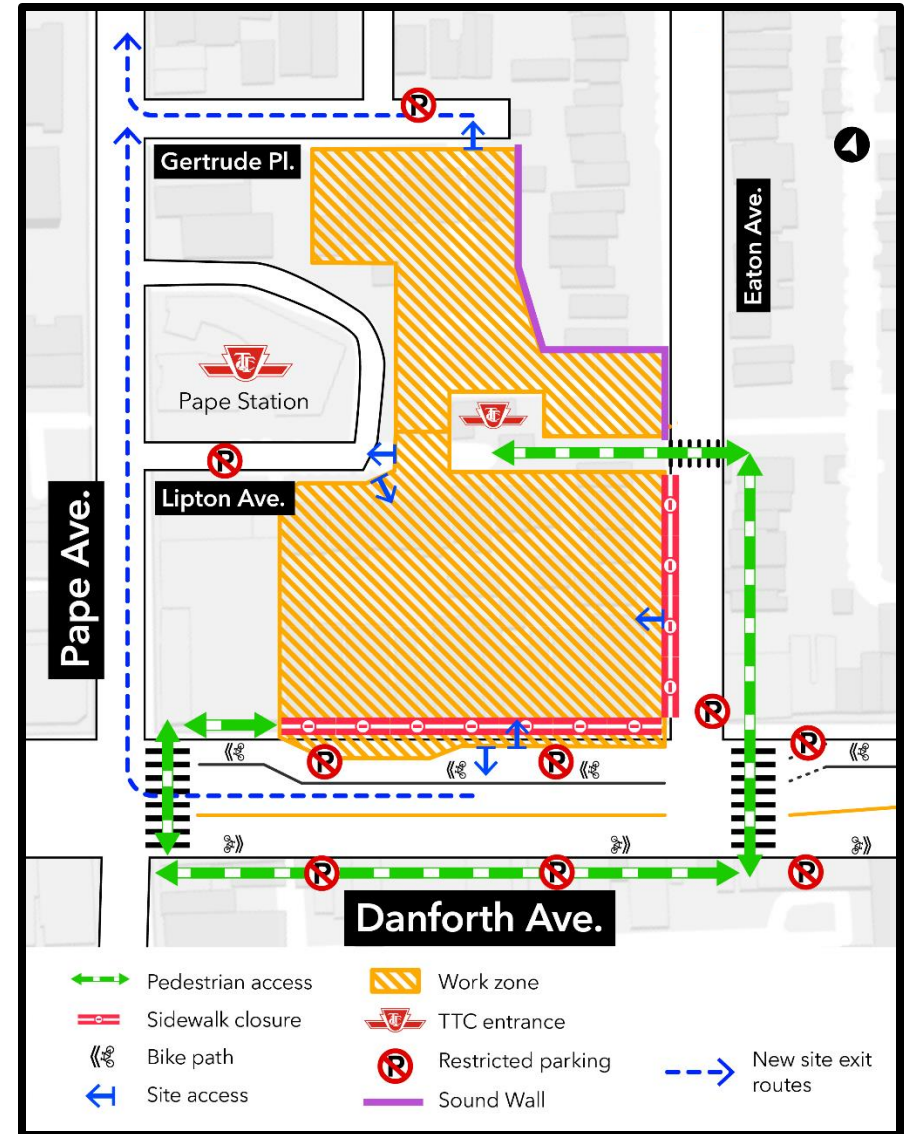


# Pape Support of Excavation – Danforth Avenue

- Construction on the underground concrete support walls for the future Ontario Line interchange at Pape Station.
- Sidewalk and traffic detours, parking restrictions, and temporary crosswalks are in place to accommodate construction and allow for safe navigation around the site.
- Extended work hours are required to accommodate the time concrete needs to dry. This keeps the work safe by establishing trench stability.

## Hours of work:

- Ongoing until Spring 2025
- Monday - Friday over 24hrs
- Saturdays from 6 a.m. - 7 p.m.



# Pape Support of Excavation – Danforth Avenue



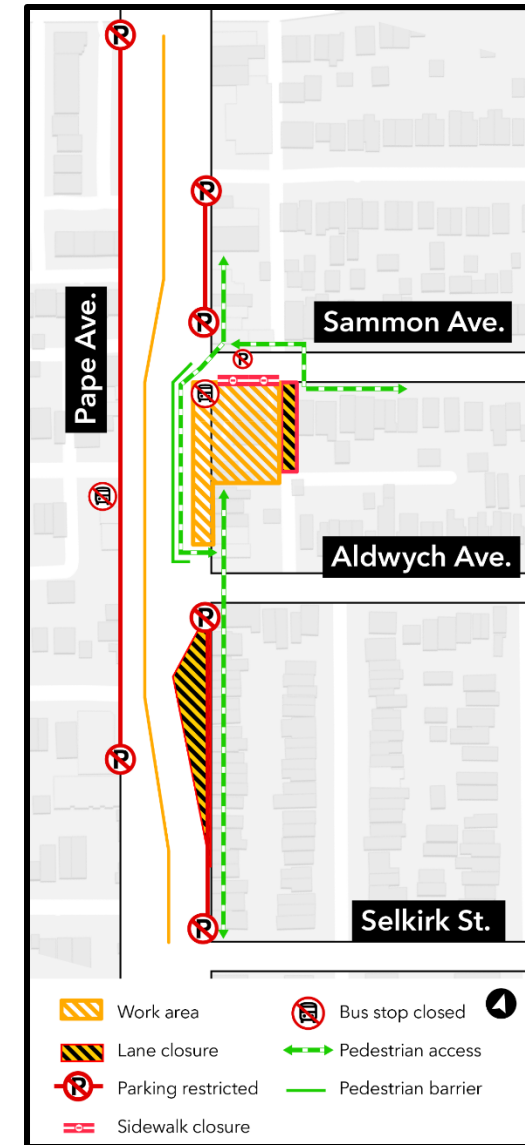


## Pape Support of Excavation – Sammon Avenue

- Construction on the underground concrete support walls for the future Ontario Line emergency exit at Sammon Avenue.
- Sidewalk and traffic detours, as well as parking restrictions are in place to accommodate construction and allow for safe navigation around the site.
- Extended work hours are required to accommodate the time concrete needs to dry. This keeps the work safe by establishing trench stability.

### Hours of work:

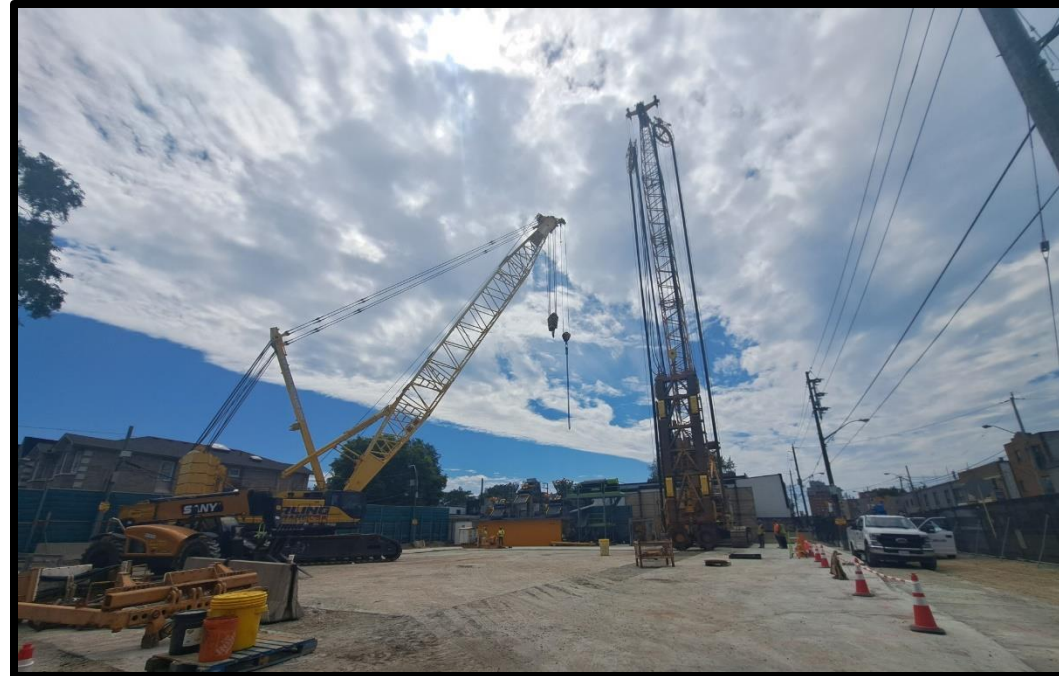
- Ongoing until Summer 2025
- Monday - Friday over 24hrs
- Saturdays from 6 a.m. - 7 p.m.



# Pape Support of Excavation – Sammon Avenue



Excavating a panel with the hydromill



A crane and hydromill at the Sammon site



Carefully placing a rebar cage into the excavated panel



# Slurry Wall Construction Methodology

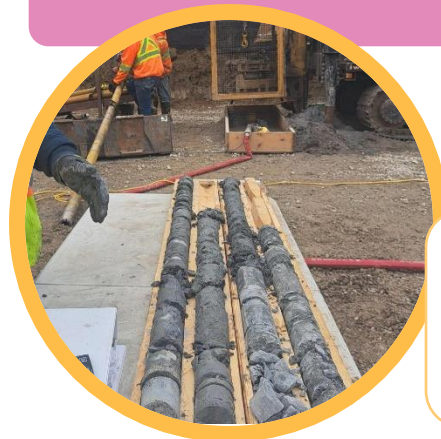
Building a new subway involves a lot of digging. Before crews can start excavating, a strong foundation needs to be built to ensure structural stability is maintained for surrounding structures. This is the Support of Excavation (SOE), the work that will allow for safe and stable excavation.

## What method is being used to build the foundation?

A slurry wall is the technique being used to build reinforced concrete walls as the foundation. The panels are made up of rebar cages and concrete. This method is being used for both the Ontario Line connection at Pape Station and the emergency exit building at Sammon Avenue.

## How was this technique chosen?

Engineers consider many factors when choosing the best method for the job. This includes the properties of the soil, the size of the site, the surrounding structures, and many others.



## Why is it called a slurry wall?

Slurry, a mixture of water and clay, is pumped into the holes that crews dig to build the station's foundation. The thick and dense properties of the slurry keep the holes stable and safe.



To evaluate ground conditions prior to slurry wall construction, a geotechnical drill is used to retrieve soil samples.

## What are the advantages of using a slurry wall?

Building a slurry wall causes less vibration and keeps the surrounding soil more stable. This is especially important due to the proximity of the existing Line 2 subway tunnel.

# Issues and Mitigations

# 24-Hour Work & Site-based Mitigations

Slurry wall construction at both Pape-Danforth and Pape-Sammon is taking place on a 24-hour schedule from Monday to Friday. This is done for the following reasons:



**Operations:** Slurry wall construction requires an extended schedule to avoid interruptions to the work sequence (shown on previous slides). Interruptions may lead to quality and schedule issues.



**Schedule:** Operating continuously allows us to construct slurry walls faster and reduce the overall project timeline and impact to the community.



**Safety:** Continuous operation reduces risks associated with starting and stopping work, which makes the site safer for both workers and the public.

We understand that 24-hour work is disruptive to the community. We are employing site-based mitigations to reduce impacts the surrounding area:



**Noise Barriers & Hoarding:** Hoarding will be constructed to provide a solid barrier between the site and adjacent areas. Where feasible, sound walls will be installed to help to further reduce noise coming from the site.



**Broadband Backup Alarms:** Construction equipment reversing on site will be equipped with broadband backup alarms, which emit a less abrasive noise as opposed to traditional beeping alarms.



**Noise and Vibration Limits:** Work will comply with noise and vibration limits mandated by Metrolinx. A noise and vibration monitoring program is in place to provide data to alert the contractor of any exceedances. Exceedances will be analyzed and addressed.

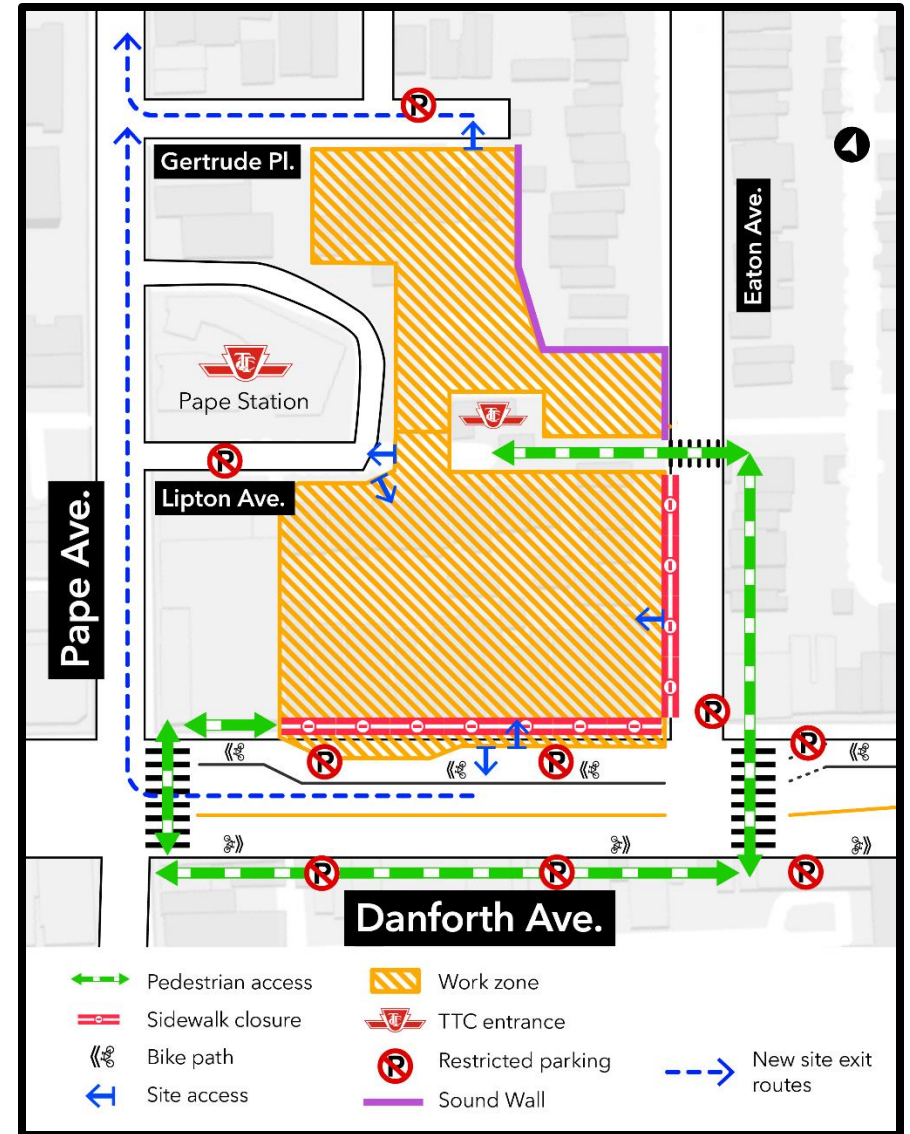
# Truck Haul Routes & Idling

## Haul Routes

- This summer, we received complaints about construction vehicles travelling north on Eaton Avenue and using residential streets to exit the neighbourhood.
- We have implemented a gate on Danforth Avenue for trucks to leave site, eliminating the need for trucks to use Eaton Avenue. This gate operates in conjunction with the gates on Lipton Avenue and Gertrude Place.

## Idling

- Outside of instances where it is deemed operationally necessary (such as for concrete mixers), vehicle idling is not permitted.
- Idling guidelines have been and will continue to be communicated to all contractors.



# Mid-September Dust Incident

There was a notable increase in dust at site and surrounding community occurred mid-September; leading to increased community complaints.

## Contributing factors:

- Two weeks of dry weather
- Toronto Hydro work re-routing trucks from Pape Avenue to Eaton Avenue, which tracked more dust and dirt into community
- City request to minimize use of water on site and stop wet sweeping to keep catch basins clear.

## Actions taken in response to dust incident:

- Contractor investigation of cement and bentonite use found no evidence of spill; any spill and clean-up would have been visible and required reporting to Ministry of Environment, Conservation and Parks (MECP);
- Review of contractor practices and actions:
  - Increased paving of site
  - Increased water spraying at site and reinstated wet sweeping/vacuuming on surrounding streets
  - Metrolinx car wash vouchers will be distributed to impacted community members.

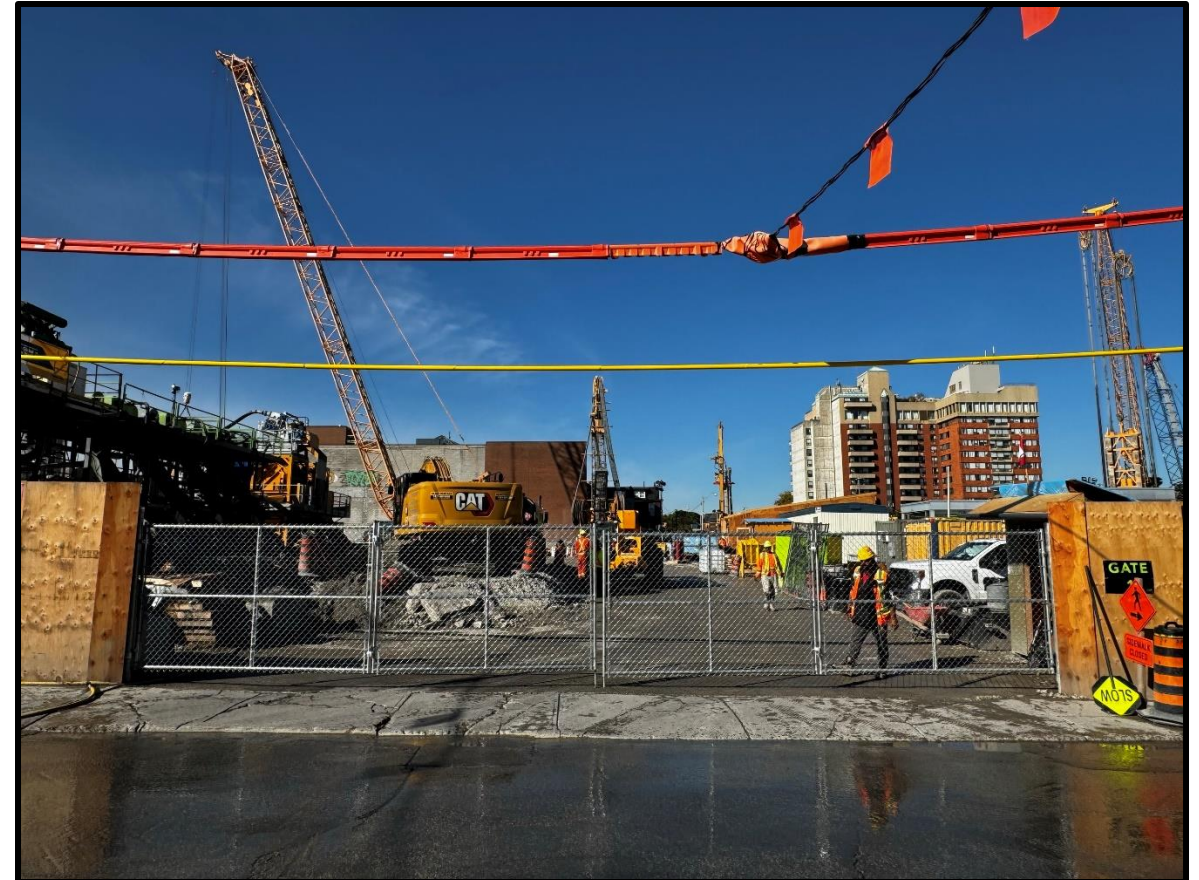
## Monitoring:

- Exceedances were observed above contractual thresholds at times in September
  - There is no evidence of hazardous material release resulting from these exceedances
  - With mitigations and rainfall, air quality has improved
  - Metrolinx and contractor are following all MECP reporting requirements; no reporting required to date



## Contractor Mitigations

- Use of water tankers for street flushing and cleaning on Eaton, Pape, Danforth, and Muriel.
- Upgraded site entrances to concrete slabs.
- Use of street sweepers with wetting and vacuum capabilities.
- Increased wetting of site entrances of the and other paved areas.
- Investigating options to pave more of the site.
- Manual removal of dust from Danforth bike lanes which are too narrow for sweepers.
- Installed mud mats at Danforth and Eaton gates.
- Coarse granular stone laid down on unpaved areas.



# Dust mitigation measures



Street cleaner



Concrete pad at the Eaton Gate



# Discussion





# Next Steps

## Future CLCs

- The CLC is an **iterative process** – we will adjust the presentation structure where needed based on your concerns and feedback.
- We will keep track of questions raised in discussions so that they can be answered, where needed, in future CLCs.
- Each CLC will incorporate an Action Item tracker to ensure that community concerns are being tracked and relevant changes communicated to the CLC members.