### **Ontario Line**

# Moss Park Virtual Open House on Station Excavation

June 13, 2024





#### 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.



## Introductions

**Speakers** 

#### **Contracting Authority**









**Ross Andersen**Senior Advisor, Community Engagement
Metrolinx



**Eric Devera**Deputy Station Manager, Moss Park
Ontario Transit Group



James Francis
Senior Manager, Subways Sponsor
Metrolinx



Aga Szczotka Environmental Management Ontario Transit Group

### **Agenda**

Welcome Introduction

#### Presentation

- Ontario Line overview
- Progress to date
- Construction look-ahead
- About piling construction
- Reducing impacts

Q/A and Discussion

### **Meeting Guidelines**

- Please help us create a **respectful space** for both panelists and fellow participants.
- We want to answer as many questions as possible, so please keep your question brief.
- Please ask **one question at a time;** if you have a second question, we will loop back to you.
- We'll have **dedicated time for questions**, so please note them and we'll have an opportunity for you to raise your questions after the presentation.
- Today's meeting will be focused primarily on construction impacts in the Moss Park area, including piling. As such, for other topics, we may connect with you by phone or email after the meeting or speak to those topics at the Moss Park CLC.

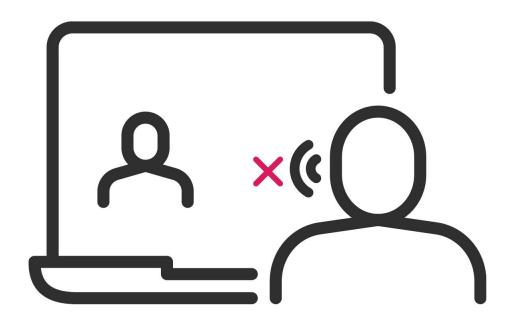


## Having audio issues?

Please dial in by phone;

**Tel:** 437-703-4197

Code: 365299408#



#### How to join **Slido** to Ask Questions through text



Ask your questions through Slido. We'll be answering some of the questions that were submitted previously through Slido.

#### Two ways to submit your questions:

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OR

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<sup>\*</sup>Please note that it will take a moment for your question to become live on the system.

## **Ontario Line**

## **About the Ontario Line**



#### **Ontario Line Subway**



South Alignment of Ontario Line (Exhibition to Corktown/Don Yard)

North Alignment of Ontario Line (East Harbour to Science Centre)



15.6 kilometres long



15 stations



As frequent as every 90 seconds during rush hour



227,500 more people within walking distance to transit



388,000 daily boardings



40+ connections to other transit options



Up to 47,000 more jobs accessible in 45 minutes or less, on average



28,000 fewer cars off the road each day

#### **About Ontario Transit Group (OTG)**

Ontario Transit Group (OTG) is a joint venture between Ferrovial Construction and Vinci Construction Grands Projets to design, build and deliver the southern portion of Ontario Line Subway - Southern Civil, Stations and Tunnel work. The contract was awarded in November 2022.

#### **Stations:**

- One above-ground station to be integrated with the existing GO Transit Exhibition Station.
- Two underground stations to be integrated with the existing TTC Osgoode and Queen subway stations.
- Four new underground stations (King/Bathurst, Queen/Spadina, Moss Park, Corktown).

#### **Tunnel:**

 6-kilometre tunnel and associated tunnelling works from Exhibition to Don Yard portal.



Ontario Line South Civil spans Exhibition to Don Yard portal (west of the Don River), shown in yellow.

## **Ontario Line**

## Moss Park Station Construction Lookahead



#### Moss Park Station 2024/2025 construction lookahead

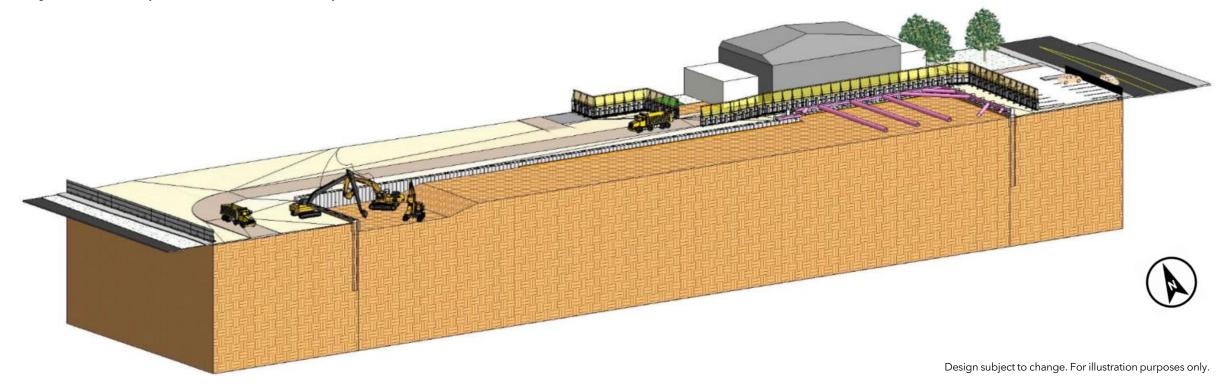
#### Major construction milestones to propel the Ontario Line subway forward.

Time	Activity	Details & Purpose
Spring/ Summer 2024	Piling	Piling work around the perimeter of the future station ensures structural support before station excavation begins.
Summer 2024- 2025	Excavation	Soil and rock will be excavated to create shafts from the street level to the station level 30m underground.
Fall/ Winter 2025	Station reinforced concrete works preparation	Excavation shaft completion and concrete reinforcement to begin.

<sup>\*</sup>Dates subject to change

#### Staging of shaft excavation - progression of excavation

- Removing the surface layers using excavators, dozers or other suitable equipment.
- Excavating sequentially in lifts, while continuously installing support systems to prevent soil collapses.



#### Staging of shaft excavation - progression of excavation

• As excavation progresses and the secant pile walls revealed, walers and struts are installed to support **Diagonal Struts** and reinforce the shaft secant pile walls. Walers • Additional equipment is erected (crane) to support the excavation process by September 2024. **Horizontal Struts** Design subject to change. For illustration purposes only.

### **Ontario Line**

## Moss Park Station Excavation





#### What is station excavation?

- Station excavation involves creating a vertical passageway from surface to depth where the subway tunnel and station will be constructed.
- With the use of specialized equipment, crews will remove soil and bedrock to a depth of 30m deep into the shaft.
- The newly drilled and poured secant pile walls help secure the perimeter of the excavation zone with the struts and walers installation.

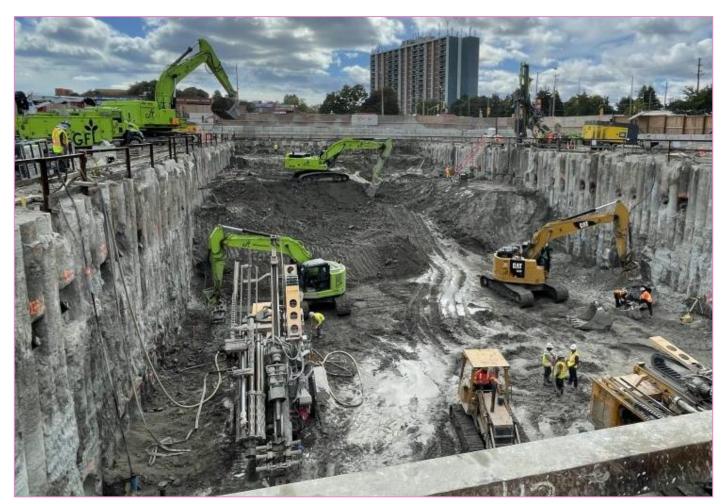


Image used is for illustrative purposes only

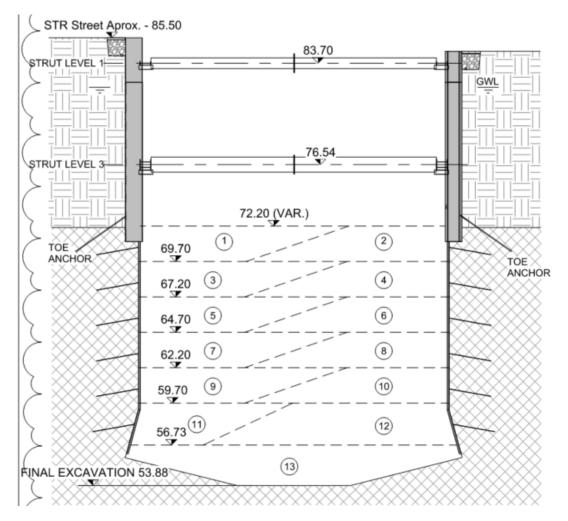
#### What is station excavation - soil & bedrock

#### Soil (0m - 13m)

First ~13m of excavation is through the soil.
 Sequential excavation alongside strut, waler and toe anchor installation.

#### **Bedrock (13m - 30m)**

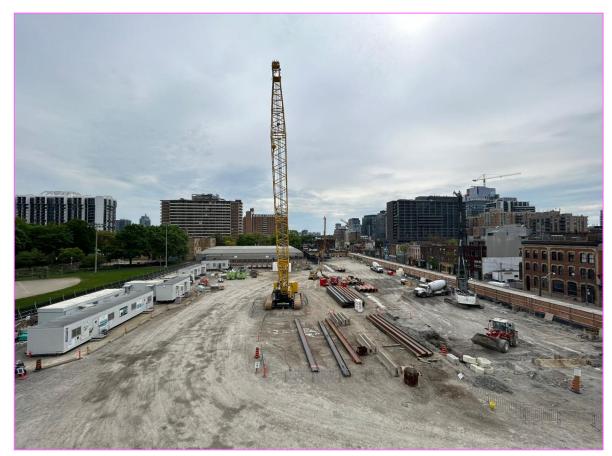
- Final 17m of excavation is through bedrock.
   Bedrock will be chipped and excavated out of the shaft.
- Support system includes shotcrete wall with rock dowel anchors.



Moss Park Excavation Sequence

#### **Excavation schedule at Moss Park**

- Work is estimated to take place from mid-July 2024 through July 2025.\*
- Expected hours of work are weekdays from 7:00 a.m. to 7:00 p.m.
- Work is not expected to extend beyond 11:00 p.m.
- Work hours and timeframes are subject to change as the needs of construction change.



Looking easterly at the H beams

<sup>\*</sup>Dates are subject to change

#### What to expect in the community

- Mobilization of materials and equipment will be arriving to site.
- Trucks entering and leaving worksites daily, following a specified route.
- Certified traffic control persons in place to ensure safety for the community and workers on-site.
- Excavation equipment will remain within the work site for the duration of the excavation process.



Excavation of the working platform in the initial stages

#### What to expect in the community - equipment

 Noise from equipment and machinery, loading of excavated material, is expected.

• Equipment used during this operation includes **cranes**, **excavators**, **dozers** and **dump trucks** on-site.







#### **Ontario Line**

## Reducing Impacts to the Community



#### Site traffic, cyclists and pedestrian impacts

At the east entrance, trucks will enter from Sherbourne Street, and turn right into the site.

At the southwest exit, trucks will enter from Queen Street East turning right into the site. Trucks will exit the site turning right onto Queen Street East and left on Jarvis Street OR exit the site turning right onto Queen Street East and left onto George Street.

Trucks will enter and exit the site assisted by a traffic control person(s).

#### **HAUL ROUTES**

#### **Inbound from the West**

Trucks will exit Lakeshore Boulevard onto Lower Jarvis Street, right on Dundas Street, right on Sherbourne Street and right into the site. **OR** trucks will exit Lakeshore Boulevard onto Lower Sherbourne Street, left onto Queen Street East, and right into the site.

#### **Inbound from the East**

Trucks will exit the Don Valley Parkway to Richmond Street, right onto Jarvis Street, right on Dundas Street, right on Sherbourne Street and right into the site.

**OR** trucks will exit the Don Valley Parkway to Richmond Street, right onto Sherbourne Street, left onto Queen Street East, and right into the site.

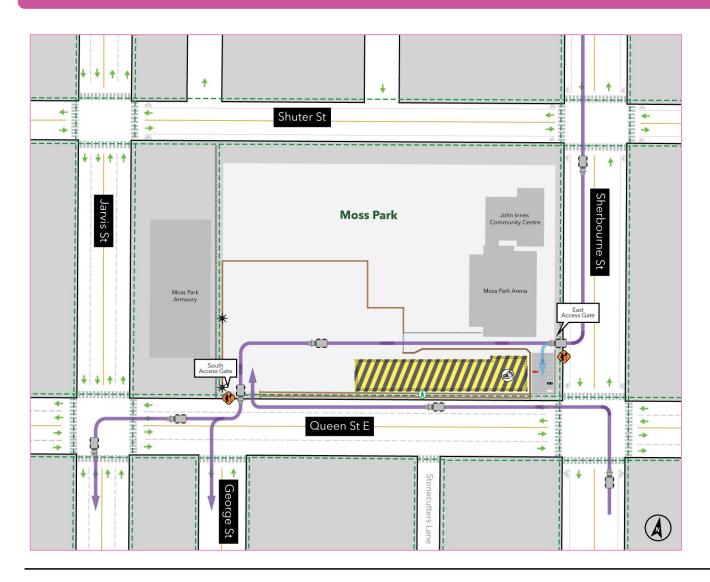
#### Outbound to the West

Trucks will exit right onto Queen Street East, left on Jarvis Street (outside of restricted hours) or left on George Street, left on Adelaide Street, right on Sherbourne Street and enter Lakeshore Boulevard.

#### **Outbound to the East**

Trucks will exit right onto Queen Street East, left on Jarvis Street (outside of restricted hours), or left on George Street, left on Adelaide Street and enter the Don Valley Parkway.

#### Site traffic, cyclists and pedestrian impacts





Work zone



Truck route



Excavating machine



Traffic control person



·--- Pedestrian route



—— Hoarding

#### Construction site plans for traffic, cyclists and pedestrians

- All sidewalks and bike lanes will remain open. Pedestrians will continue to use Sherbourne Street west sidewalk and Queen Street East pedestrian tunnel. Cyclists can continue to use the bike lanes on Sherbourne Street and Shuter Street without interruption.
- All roads will remain open. No planned road closures on Queen Street East, Sherbourne Street, Shuter Street or Jarvis Street.
   Do expect more traffic on the roads as a result of the increase in trucks coming to and leaving the site.
- **No impacts to public transit.** The 501 Queen streetcar and the 75 Sherbourne bus stops or schedule at the intersection of Queen Street East and Sherbourne Street will remain uninterrupted by the construction activities.
- A reminder for members of the public to **be mindful** and to follow the direction by flag-persons onsite when crossing the access points safely.



#### Minimizing impacts to the community

## To reduce impacts to residents and businesses in the area, mitigations will be in place including:

- Air quality monitoring to track dust debris and vehicle emissions to ensure that construction activities don't impact the quality of the environment.
- Site hoarding where possible to help reduce noise.
- Continuous loop truck routes, reducing need for trucks to reverse using back-up alarms.
- Street sweepers and wheel cleaning as needed to ensure soil and sediment is kept off city streets and sidewalks.
- Expanded paving of frequently used areas minimizes the amount of loose soil that can be disturbed by vehicle traffic further reducing dust emissions.



Noise monitor

#### Reducing noise impacts

- Monitoring noise levels: Utilizing sound metres and real-time monitoring systems, OTG can track and control noise emissions to help minimize disturbances to the community and ensure project regulations compliance.
- Noise and vibration monitoring devices
   placed on-site and in neighbourhood for active
   tracking of impact to ambient noise levels.
- Hoarding & noise barriers serve as effective solutions to absorb and contain some construction noise.



Queen Street East access gate

#### Keeping your community clean

Dust suppression can be **effectively managed** through the use of the following **mitigations** at site:

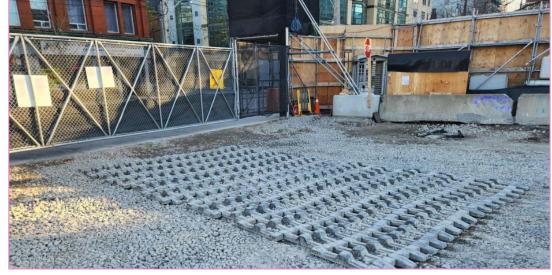
#### **Mud Mats**

Provide a stable and supportive surface for over soft or unstable ground preventing vehicles and heavy equipment from sinking and reducing the amount of mud created with more frequent passage.

#### **Water Suppression**

Assist by regularly moistening exposed soils and debris preventing dust particles from becoming airborne.

\*Different solutions are utilized across the seven stations.







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## **Asking Questions Tonight**

To ask a question, you can type into Slido (see link provided on slide #11) or raise your hand:

#### **Desktop / Laptop / Chromebook:**

- Raise your hand from the bar at the top of the screen.
- Your question will placed in the queue.
- When it comes your turn, the meeting organizer will enable your mic.

\*You still need to unmute yourself: click the "mic" icon at the top of the screen.  $\longrightarrow$ 

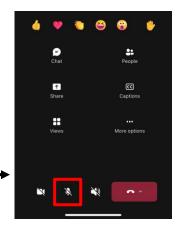
\*Note: your browser may ask your permission to use your mic. You must "allow" it.

## ♣ Use microphone? https://mictests.com/#:~:te mictests.com wants to X ♣ Use your microphone Block Allow

#### **Phone**

- Click the hand icon from the bottom of the screen. –
- Your question will be placed in the queue.
- When it comes your turn, the meeting organizer will enable your mic.

\*You still need to unmute yourself: swipe up & click the "mic" icon at the bottom of the screen.  $\longrightarrow$ 





#### **Contact Metrolinx and stay connected**

Metrolinx will keep the community informed by providing Ontario Line updates and addressing questions and concerns effectively, and quickly.

#### **Connect With Us:**

Email: OntarioLine@metrolinx.com

Telephone 24/7: 416-202-5100

Ontario Line e-newsletter: Metrolinx.com/OntarioLine

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