



# **Eglinton Crosstown West Extension Advanced Tunnel Community Liaison Committee (CLC) Meeting #4**

# Agenda

1. Land Acknowledgement
2. Safety Moment
3. Introducing the WECC and Metrolinx project team
4. CLC Expectations
5. Project Schedule
6. Tunnel Update
7. Surface Construction Update
8. Public Engagement
9. Monitoring
10. Questions

## 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.

## Safety moment

Construction for the Eglinton Crosstown West Extension (ECWE) project has expanded over the spring and summer of 2023, which means trucks, machinery, and equipment are now operating in many areas along the Eglinton Avenue West corridor.

Staff are trained to ensure the safe movement of vehicles and equipment in the area.

Everyone has a role in safety to play.

Please obey construction signage in the area and cross at designated crosswalks.

Exercise caution while traveling and commuting in the area.



**CAUTION!**

**Construction equipment and vehicles passing through.**



**Stay alert while in our construction zone.**

**There's a lot going on while we build your new transit extension.**

# Introducing the WestEnd Connectors project team



**John Provenzano**  
Communications &  
Public Engagement  
Lead



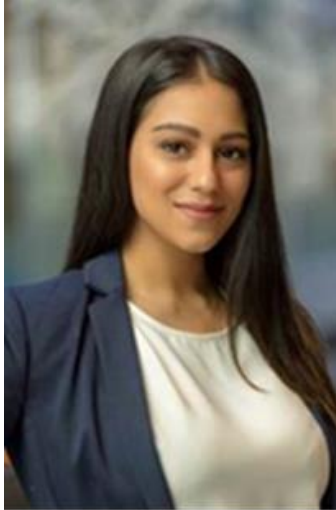
**Yuri Andrade**  
Construction Manager



**Emidio Tamburri**  
Tunnel Manager



# Introducing the Metrolinx project team



**Aman Gill**  
Community Relations  
Manager, ECWE



**Chathurika  
Mahagamulla Gamage**  
Project Manager- ATC1,  
ECWE



**Shahid Neaz**  
Project Manager- ATC1,  
ECWE



**Fayyaz Siddiqui**  
Senior Project Manager-  
ATC1, ECWE



# Community Liaison Committee Code of Conduct

Community Liaison Committees (CLCs) are being held quarterly to provide open, two-way communication and sharing of information before and during construction of the ECWE project. A code of conduct will help ensure that discussions are respectful and productive:

- Participate fully and openly in discussions, while also creating an environment where all members are encouraged to contribute and share their views.
- Participate in a respectful manner, including refraining from use of foul language and derogatory comments.
- Keep requested agenda and discussion items within the mandate of the committee.
- Maintain confidentiality of sensitive issues, when requested by participants.
- Represent your community's diverse perspectives and interests.
- Refrain from speaking to the media or engaging on social media regarding their role or any information they obtained as a result of being a member.
- Commit to equity, diversity, overcoming systemic racism and supporting the participation of the whole community regardless of race, gender, class, sexuality, age or ability.



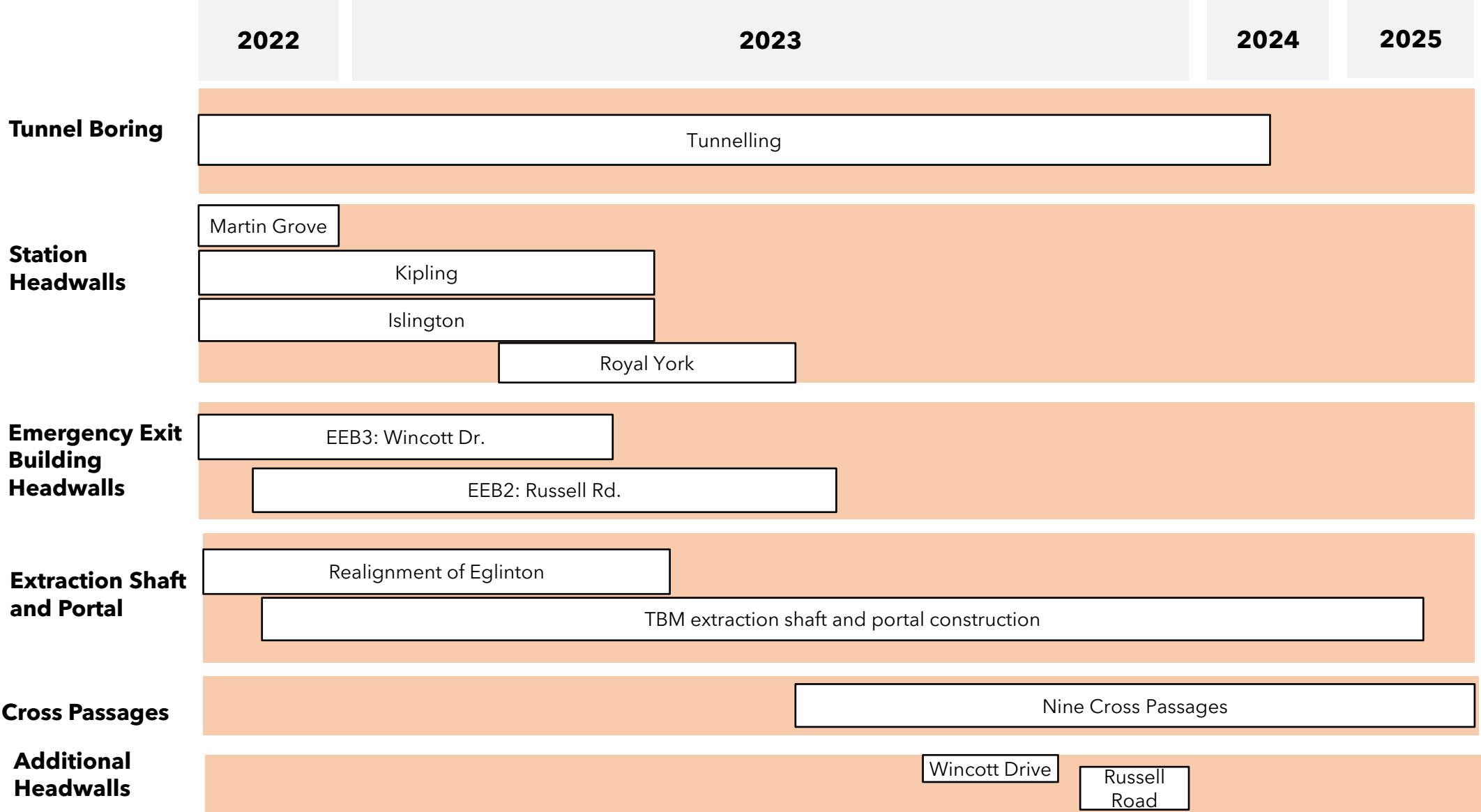
## **CLC Members**

- Residents
- Property management groups
- Representatives from condo boards
- Representatives from the community
- Businesses
- City of Toronto – Transit Expansion Office
- City of Toronto – Transportation Services
- Elected Officials



# Renforth to Scarlett tunnel timeline

Timelines are subject to change.





# Tunnelling Update

# What to expect during tunnelling

- TBMs operate beneath Eglinton Avenue West 24 hours per day, Monday through Friday, with occasional weekend work.
- The launch shaft area will be an active construction site until the completion of tunnelling work in 2025.
- Residents and businesses in the area can expect to hear some noise during construction, but disruption will be minimal.
- Some residents have reported to feel vibrations from the TBMs. However, vibrations are expected to stop once the TBM is a few metres away from their homes.
- Additionally, construction trucks will be present in the area during this work. The trucks entering and exiting the site sound similar to TTC busses or sanitary trucks that frequent the area.



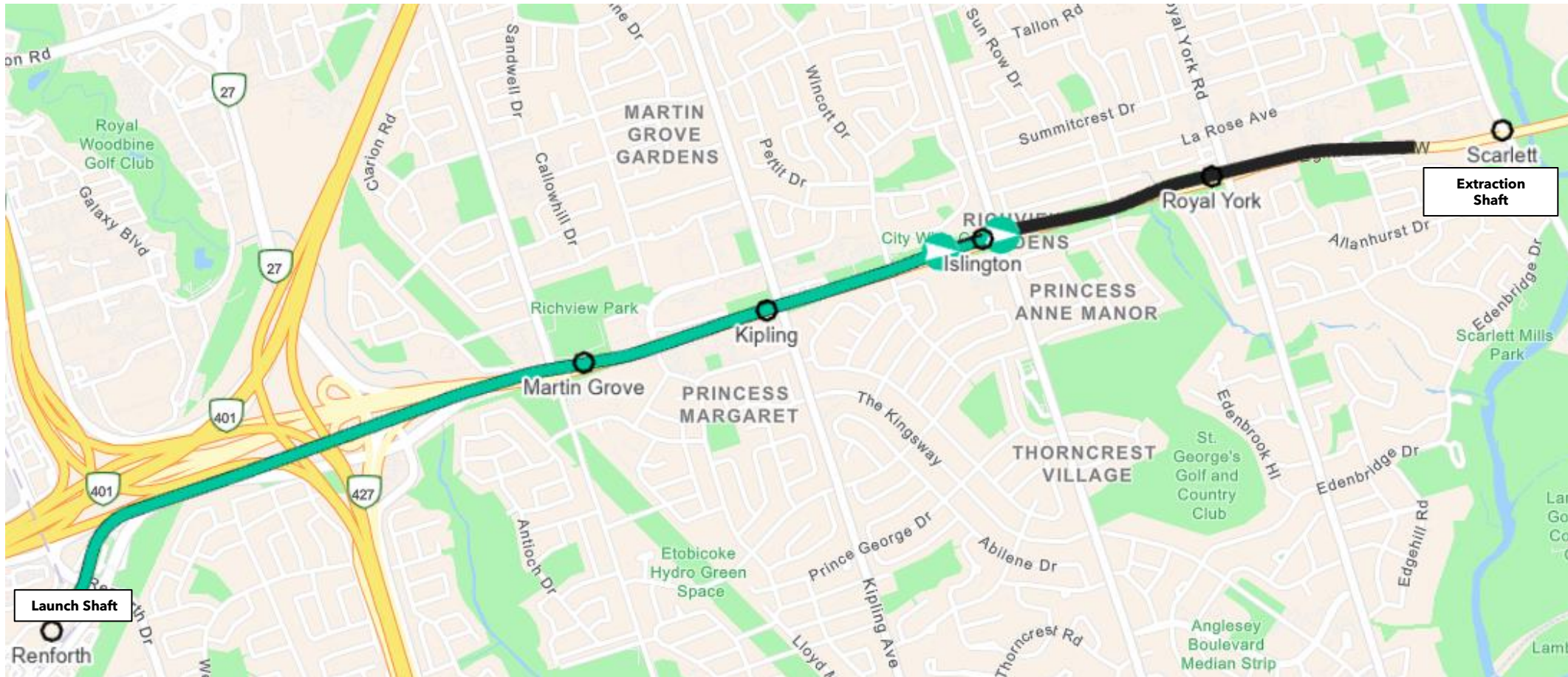
The launch shaft in September 2023



# Tunnelling update

Where are Renny and Rexy, the two tunnel boring machines (TBMs) now?

The TBM Tracker can be found on the project website and is updated regularly.



# TBM update

- Both TBMs will tunnel approximately 6 kilometres along the Eglinton Avenue West Corridor before completing their journey at Scarlett Road in early 2024.
- Renny passed through the first headwall at Martin Grove Road in November 2022 and Remy passed through Martin Grove Road in March 2023.
- Currently, Renny is at 4.52km and Remy is at 4.25km.





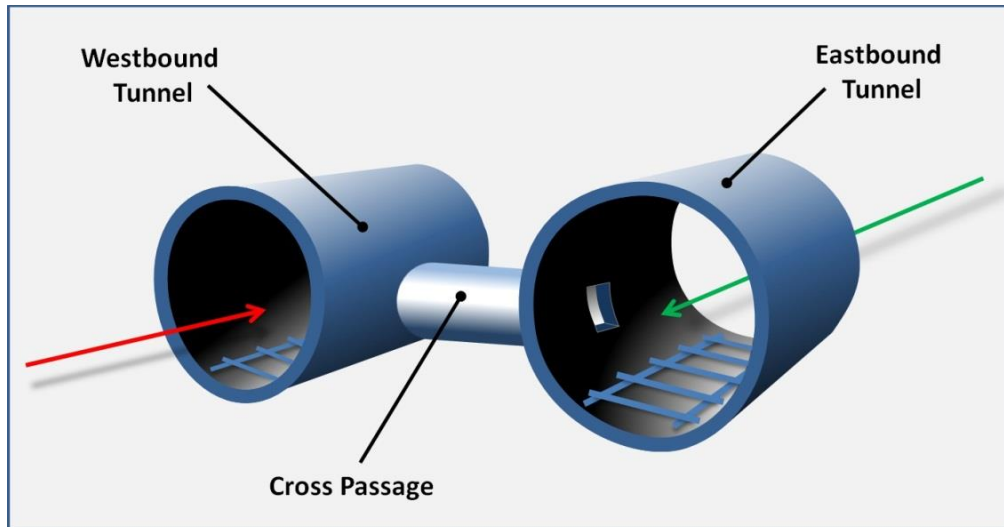
# Cross Passage construction has begun

A cross passage (CP) is a small passageway built to connect the eastbound and westbound tunnels for maintenance and/or emergency purposes.

This project will have 9 cross passages along the Eglinton Avenue West corridor.

Work for the first cross passage at Renforth, "CP-10" started on May 15 - slightly ahead of schedule.

While many other projects build cross passages after the TBMs complete their digging, our team's methods, equipment, and expertise allow us to build them during TBM operation.



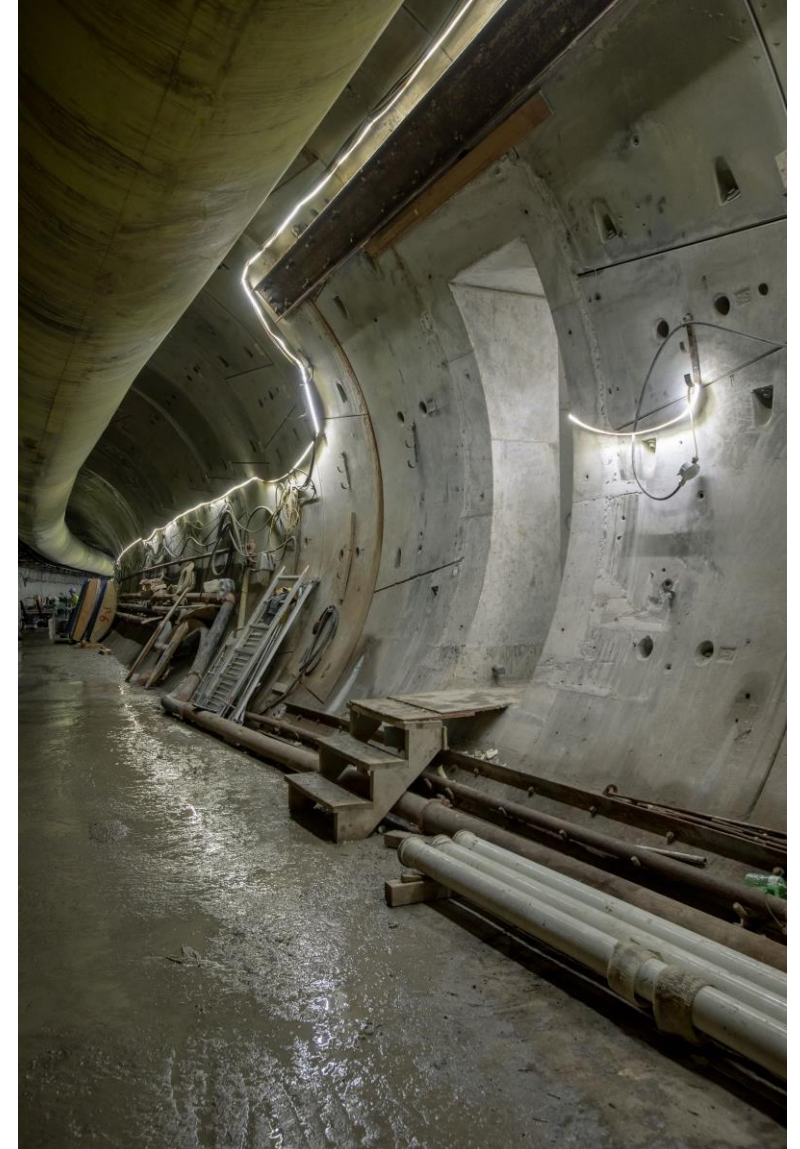
# Cross Passage construction progress

**CP-10**



**100 % completed**

Work started in May 2023  
and was completed in  
September 2023





# Cross Passage construction progress

## CP-9

✓ **100 % completed**

Work started in June 2023

## CP-8

✓ **60 % completed**

Work started in July 2023

## CP-7

✓ **50 % completed**

Work started in August 2023

### Brokk Machine

A Brokk machine is used to excavate the cross passages.

- **Safety** - The Brokk is remote controlled. The operator can control the machine from 5 to 8 metres away
- **Environmental** - The Brokk is electric-powered, so there is no pollution or smoke in the tunnel
- **Productivity** - The Brokk is more powerful and compact compared to a standard excavator of the same power
- **Multi-tools** - The Brokk has multiple tools that can be used as a: breaker, bucket, roadheader, etc.





# Construction Update

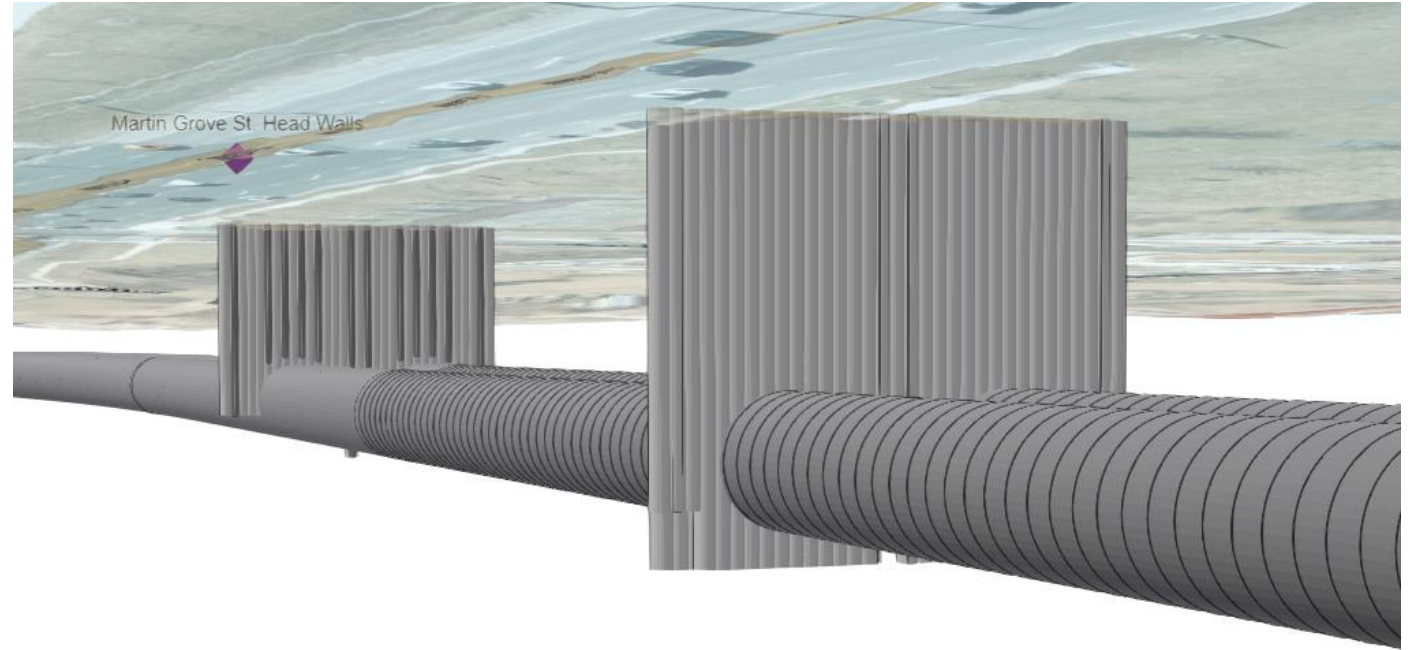
## What to expect during construction work?

- The working hours for surface construction are between 7:00 a.m. and 11:00 p.m.
- WECC typically works Monday to Friday, however, occasional weekend work is required.
- Residents can expect to hear noise from construction equipment, drills, excavators and trucks.
- Lane reductions and pedestrian detours will be required to ensure everyone's safety. Further notification will be provided for every lane closure.
- Mitigations are being put in place to reduce dust, including the use of water sprays and biodegradable dust suppressants.
- We are working as quickly as possible to minimize the impact to the neighborhoods and residences in the Eglinton Ave. area.
- If you have any concerns, we are here to listen. Contact our 24/7 hotline: **416-202-8001**

# Headwall overview

## What are headwalls?

- Headwalls are underground support walls located at the east and west ends of the station location.
- The TBMs bore through the headwalls, therefore crews must build them prior to the TBMs arriving at each site.
- There will be four underground stations in this tunneled section (Martin Grove, Kipling, Islington and Royal York) and each will require two headwalls be built.
- There will also be headwalls constructed for two emergency exit buildings – one between Kipling Avenue and Islington Avenue, the other between Islington Avenue and Royal York Road.



3D model of two headwalls



# Martin Grove headwall

✓ Major works completed in October 2022

✓ Lanes reopened

- The first TBM, Renny, reached the Martin Grove headwalls in mid-November 2022.
- Remy passed through in March 2023.





# Kipling headwall

- ✓ Major works completed in April 2023
- ✓ Lanes reopened





## Emergency Exit Building #3 (Wincott Drive)

Emergency Exit Buildings are used to evacuate passengers from tunnels in the event of an emergency at track level during operation.

✓ Major works completed  
in March 2023

✓ Lanes reopened





## Additional headwall work at Wincott Drive

- ✓ Major works completed in September 2023
- ✓ Lanes reopened
- Construction crews finished building an additional headwall at Wincott Drive and Eglinton Avenue West. This additional headwall is for intervention on the TBMs due to very challenging and unexpected soil conditions.
- Our second TBM, "Rexy" passed through this headwall.





## Emergency Exit Building #2 (Russell Road)



Major works completed in  
July 2023





# Islington headwall



Major works completed in April 2023

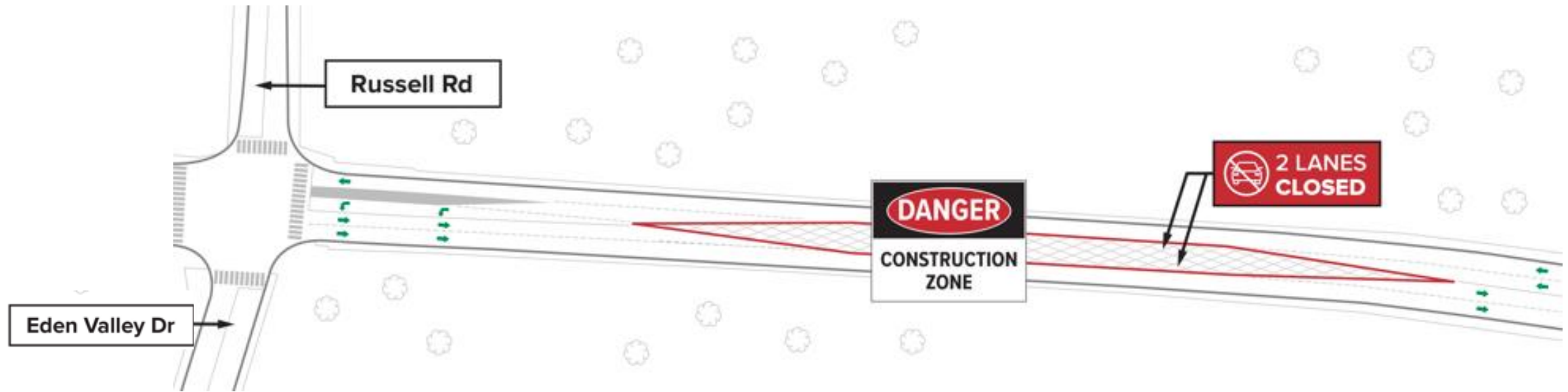
- Renny is currently just past Islington



## Emergency Exit Building #2 (Russell Road)

Current traffic staging:

Traffic map not to scale.



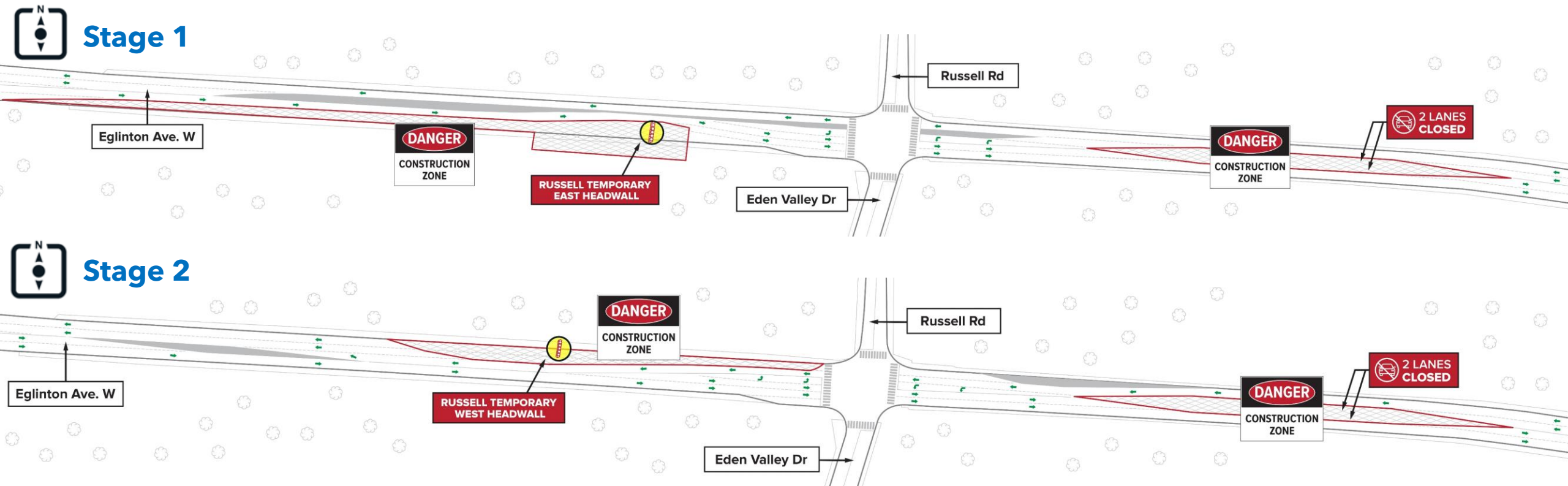
Major works completed  
in July 2023

- One north and one south lane are temporarily closed. One eastbound and one westbound lane remain open to traffic at all times during construction.
- No bus stops are impacted during this work.



# Additional headwall work at Russell Road

October 2023 - December 2023



- Construction crews are building an additional headwall at Russell Road and Eglinton Avenue West. This additional headwall is for intervention on the TBMs due to very challenging and unexpected soil conditions.
- Our TBMs, "Renny" and "Rexy" will pass through this headwall.
- In both stages one and two (as shown on the map), one lane will be reduced in both directions. One eastbound and westbound lane will remain open at all times.



## Royal York headwall



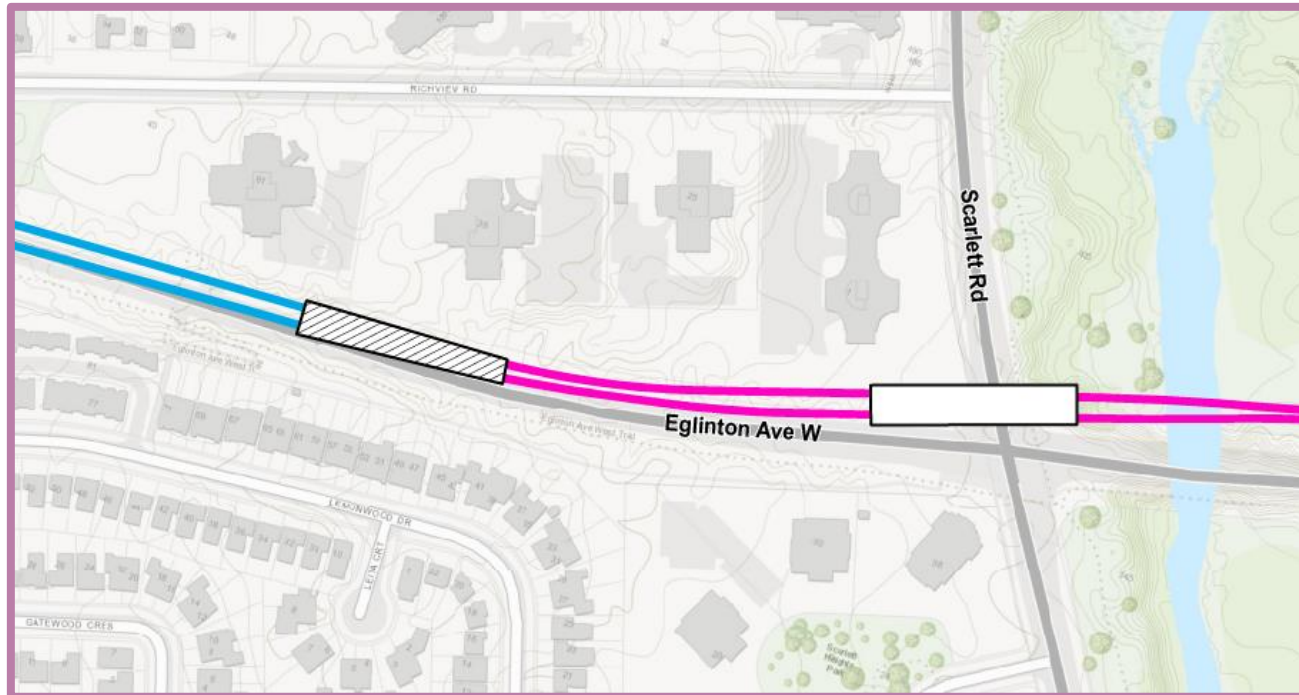
Major works completed in  
May 2023





# Extraction shaft and portal

- The TBMs will finish digging west of Scarlett Road where they will be dismantled and removed from the ground through an extraction shaft.
- The shaft is also the portal for where the light rail vehicles transition between the tunnel and the elevated guideway.
- Construction for the extraction shaft/portal began in winter 2022. The TBMs will finish tunnelling and will be removed in Spring 2024.



Crosstown LRT east portal (2021)



## Extraction Shaft (Scarlett Road)



To make room for the extraction shaft and portal (which will be used to remove the tunnel boring machines), Eglinton Avenue West shifted to the south by approximately 10 metres (33 feet) between Scarlett Road and the pedestrian bridge.

The road realignment construction was completed in April 2023, and crews reopened the south side of Eglinton Avenue West and flipped the work zone to the north side to continue working full-time on the extraction shaft.

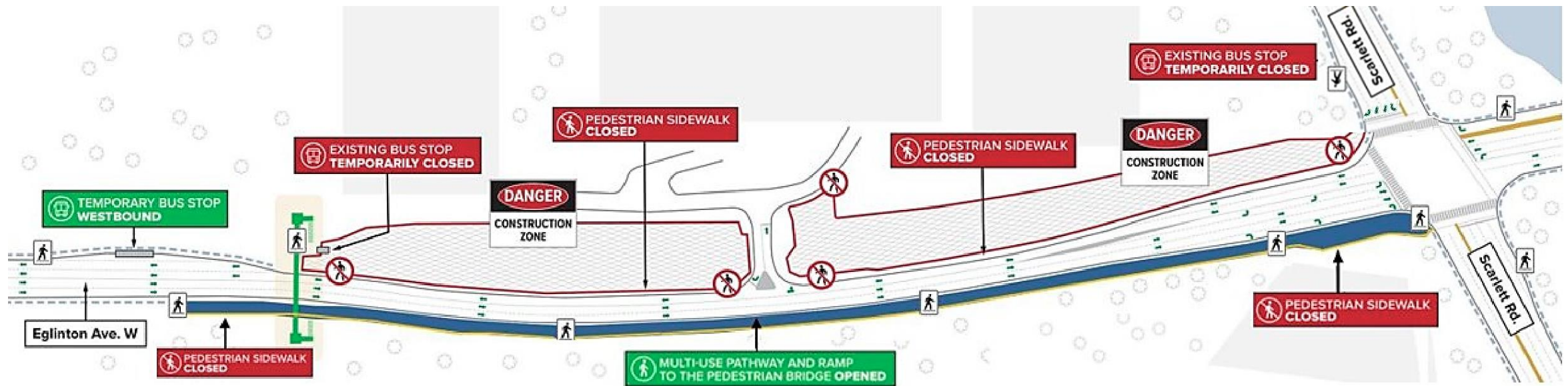
This work will require different traffic staging throughout 2023. More details will be provided closer to those dates.



# Road diversions to support the extraction shaft construction

New work zone and traffic staging as of July 2023:

Traffic map not to scale.



- The work zone on the south side of Eglinton Avenue West, including the multi-use path is open to the public.
- Work north of Eglinton Avenue West will continue, the work zone will include east of the Richview driveway.
- Three traffic lanes will be open to traffic: one westbound and two eastbound.
- The north sidewalk west of the Scarlett Road and Eglinton Avenue West intersection will be temporarily closed.
- Pedestrians are encouraged to use multi-use path and pedestrian bridge during this stage of construction.

# Driveway relocation at Richview Road

New work zone and traffic staging for last week of October 2023 - 2025:

Traffic map not to scale.



- The Richview Road driveway will be relocated further east of the Scarlett Road and Eglinton Avenue West intersection.
- The private Richview Road sidewalk will remain open, however, a small portion will be closed off to provide access for the driveway.
- Left turns into the driveway will remain prohibited.

## TBM Breakthrough in Spring 2024

- Renny and Remy are expected to breakthrough at Scarlett Road and Eglinton Avenue West between April to May 2024.

Check out what a TBM breakthrough looks like ➡





## Public Engagement

- Resident and commuter engagement, pop-up events, and canvassing have been conducted across the Eglinton Avenue West Corridor since 2021. Community members and residents can provide feedback directly to the team and have project questions or concerns answered in person.
- The CLC is another form of public engagement to help bring more voices to discussions about the project.

**In 2023, the ECWE Communications and Public Engagement team has:**

- Conducted **13** community pop-up events
- Canvassed **1000+** houses
- Spoken with **700+** community members
- Hosted or participated in **4** open houses and community meetings
- **2** minister tunnel tours
- Construction Notices distributed to **12,000+** residents



**CLC Meeting -  
April 27 2023**



**Open House  
Tunnelling Update -  
May 15 2023**

# Metrolinx Ad Campaign

Eglinton Crosstown West Extension

**37,500 more people  
will be within a  
10-minute walk  
of rapid transit.**



 **METROLINX**

Eglinton Crosstown West Extension

**Future connections  
for you, with links to  
GO, UP, TTC & MiWay.**



 **METROLINX**

Eglinton Crosstown West Extension

**Will put 23,600 jobs  
within easy reach of  
rapid transit.**



 **METROLINX**

Eglinton Crosstown West Extension

**Fewer greenhouse  
gas emissions.  
Less traffic congestion.  
It's a win-win.**



 **METROLINX**

# Monitoring

- Noise, air and vibration monitors have been installed on the properties of residences, offices and commercial buildings in the vicinity of the construction.
- This equipment helps us measure and minimize noise and vibration throughout the project term to prioritize your safety and well-being.
- The project team will continually monitor the noise, air and vibration throughout the project term.

## This is not a camera!

This is a **total station**, an automatic monitoring system that reads slope measurements and surface movements at specific points. As the TBMs tunnel across Eglinton Avenue West, the project team can read the data collected by these instruments to see if they have caused any surface or ground impacts as they pass.





## Air Quality Monitor



- Air quality monitors measure dust levels 24/7 while construction is occurring in the area.
- The air quality monitor is a small, battery operated, noiseless unit which is typically installed on a lamppost or similar structure.
- Installation does not require any drilling or intrusive impacts to buildings or structures.
- WECC may require periodic access to maintain the monitor (e.g., cleaning off the solar panel).

## Noise Monitor



- Noise monitors measure noise levels during construction in the area.
- The noise monitor is a small, battery operated, noiseless unit which is typically installed on a lamp-post or similar structure.
- Installation does not require any drilling or intrusive impacts to buildings or structures.



## Vibration Monitor

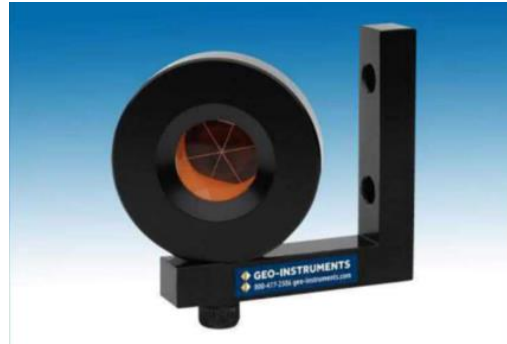


- These monitor sensitive structures during surface construction in the area.
- The vibration monitor is a small, battery operated, noiseless unit which is typically installed on the ground.
- Installation does not require any drilling or intrusive impacts to buildings or structures.

# Geotechnical Instrumentation Monitoring Points Instruments



Installed in the ground, these short white cylindrical posts are Surface Monitoring Points that monitor any ground movement along the tunnel alignment as the TBMs pass through.



The L-Bar Mini Prism is a compact and versatile optical target used with automated total stations to monitor potential ground movement and the structures on it. Suitable for a wide range of applications, the L-Bar Mini Prism is installed on the exterior building facades.

**Together, these instruments operate as a whole.**



**Questions?**

# Appendix



# Glossary

**Cross Passages:** a short tunnel that connects 2 parallel tunnels.

**Design-Build-Finance:** a single contract is awarded for the design, construction, and full or partial financing of a facility or project.

**Emergency Exit Buildings:** used to evacuate passengers from tunnels in the event of an emergency at track level during operation.

**Extraction Shaft:** where the boring machines are dismantled and removed from the ground after completing the tunnel.

**Headwalls:** underground support walls located at the east and west ends of the station location.

**Launch Shaft:** deep excavation areas that provide access points for TBMs.

**Tunnel boring machine (TBM):** a machine used to excavate tunnels with a circular cross section through a variety of soil and rock strata.