

Welcome to the Open House Eglinton Crosstown West Extension

Tunnelling update

May 15, 2023

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 ECWE project has expanded, 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 to play in safety.
- 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.

Community engagement

- **17 open houses** topics covered include project introduction/EPR addendum, background and benefits, construction updates, elevated guideway, station locations and design, and restoration
- 300,000+ flyers and community notices distributed across the communities the line will serve
- **Three surveys** posted on key aspects of the project for community feedback, including a recent poll on the Kipling- Eglinton Station location, which received **over 200 responses** and a recent survey on the elevated section, which received **over 700 responses** from the local community
- Over 30 blog stories issued, a monthly e-newsletter, and weekly e-blasts
- Over 50 meetings held with our stakeholders and community organizations to keep them informed of our plans
- Over 100 pop-ups and canvasses to raise awareness of the project and address concerns from the community
- Community office opening this weekend at 326 Scarlett Road

Introducing the WestEnd Connectors project team

WestEnd Connectors Construction is an integrated general partnership consisting of three Canadian and international leaders in construction: Dragados Canada, Inc., Aecon Infrastructure Management Inc., and Ghella Canada Ltd. Together, the team is building and financing the tunnels for the Eglinton Crosstown West Extension (ECWE).

Our team members have extensive experience in Canadian heavy civil and urban infrastructure projects and bring a unique expertise in underground tunneling works.









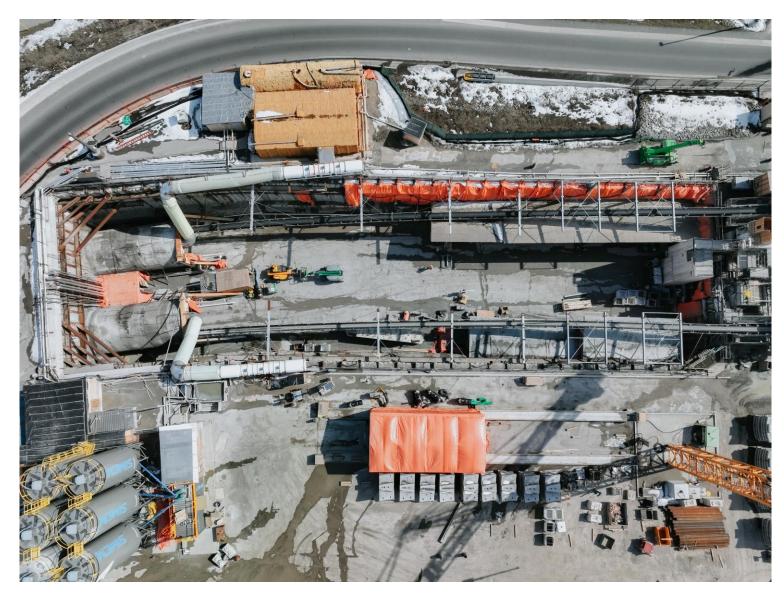
Renforth to Scarlett tunnel timeline

| | 2022 | | | 2023 | | 2024 | 2025 |
|---|---|----------------------|--|------------|--|-----------|-------------------|
| Tunnel Boring | Tunnelling | | | | | | |
| Station Headwalls | Martin Grove | Kipling Islington | | Royal York | | | |
| Emergency Exit Building Headwalls | EEB3: Wincott Drive EEB2: Russell Road | | | | | | |
| Extraction Shaft and Portal | Realignment of Eglinton | | | | TBM extraction shaft and portal construc | ction | |
| Cross Passages | | | | | Cross Pass | ages | |
| | | | | | | Timelines | are subiect to cl |

Timelines are subject to change.

What to expect during tunnelling

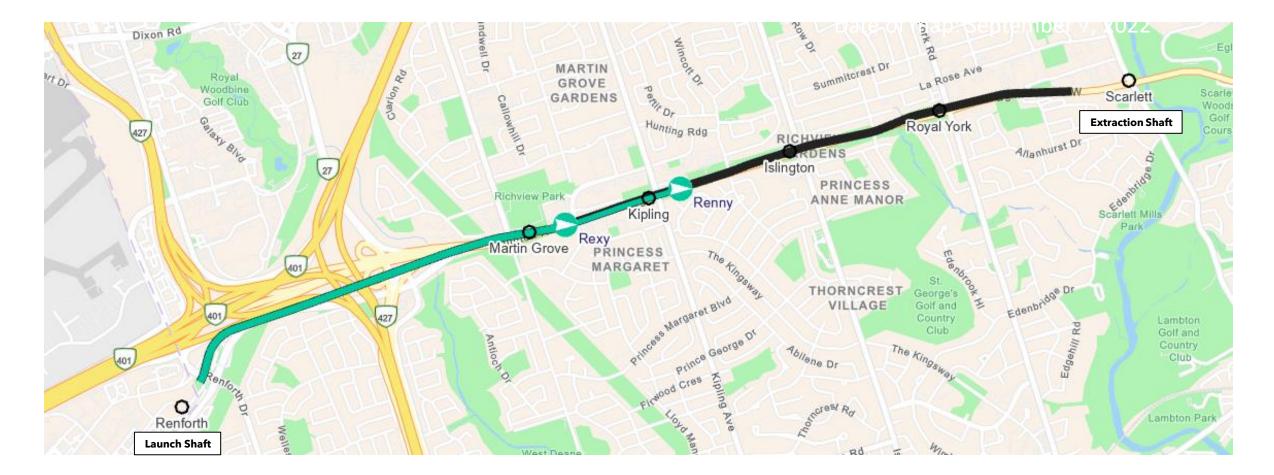
- Tunnel boring machines (TBMs) work beneath Eglinton Avenue West and operate Monday - Friday with occasional weekend work.
- The launch shaft area will be an active construction site until tunnelling and related work is complete in 2025.
- Residents and businesses in the area can expect to hear some noise during construction, but disruption will be minimal.
- Additional construction trucks will be present in the area during this work. The trucks/vehicles entering and exiting the site sound similar to the TTC busses and sanitary trucks that frequent the area.



The launch shaft in March 2023

Tunnelling update

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



Tunnel boring machine (TBM) update

- Renny began excavation on April 11, 2022. Rexy started tunnelling on a parallel course on July 25, 2022.
- Renny passed through the Kipling headwalls in April 2023 is currently between the Kipling and Islington headwalls.
- Rexy reached the Kipling headwalls in May 2023.
- Both TBMs will tunnel approximately six kilometers along the Eglinton Avenue West Corridor before completing their journey at Scarlett Rd. in early 2024.





The inside of a tunnel boring machine



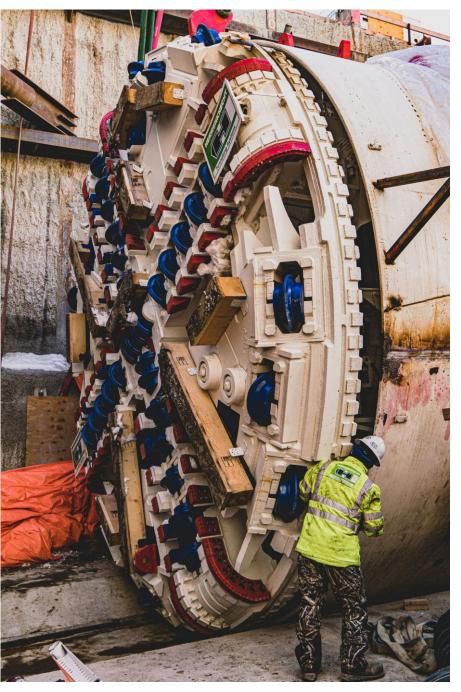




Tunnel boring machine (TBM) fun facts

Did you know?

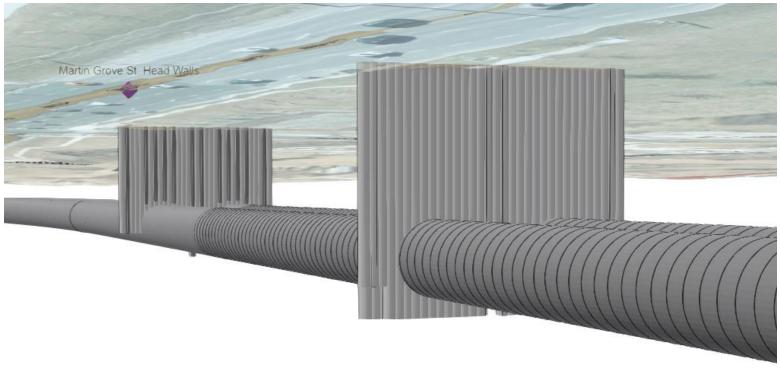
- The TBMs weigh about 750 tonnes each which is about five times as heavy as a blue whale.
- TBMs travel on average 10 to 15 metres a day.
- TBMs typically collects around 2,000 tonnes of earth and rock per day as they tunnel.
- It can take between 50 to 120 minutes for a TBM to excavate and install one liner ring.



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 (Martin Grove, Kipling, Islington and Royal York) and each require two headwalls to be built.
- There will also be two emergency exit buildings constructed - one between Kipling Ave and Islington Ave, the other between Islington Ave and Royal York Rd.



3D model of two headwalls

Martin Grove headwall

Construction began in April 2022 and major works were completed by October 2022.

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



The Martin Grove site in April 2023

Kipling Avenue headwall

Construction began in May 2022 and was completed in April 2023.

- Renny passed through the Kipling headwalls in April 2023.
- Rexy reached the Kipling headwalls in May 2023.



The Kipling Avenue site in April 2023

Emergency Exit Building #3 (Wincott Drive)

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

Construction began in August 2022 and was completed in March 2023.



The EEB #3 site in April 2023

Islington Avenue headwall

Construction began in November 2022 and major works were completed in April 2023.



The Islington Avenue site in April 2023

Emergency Exit Building #2 (Russell Rd.)

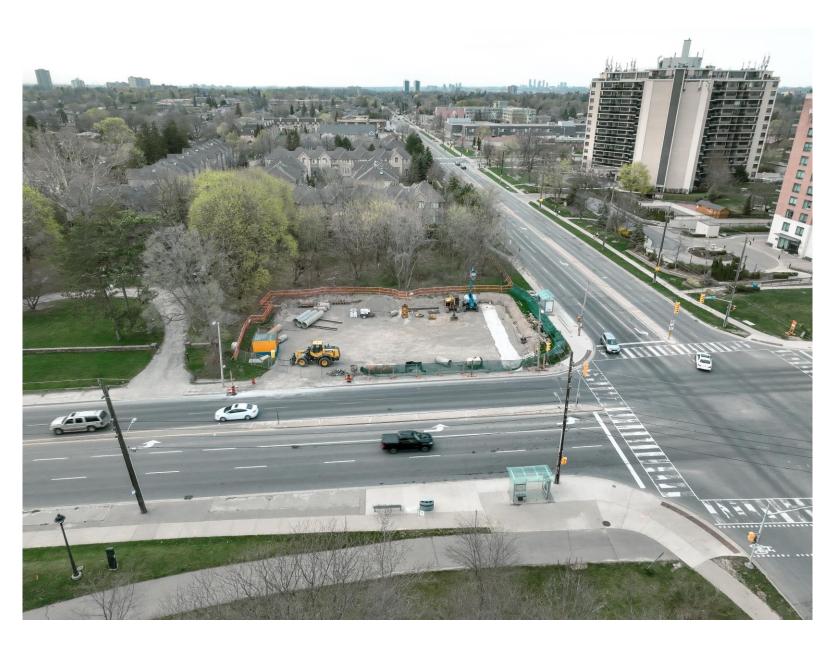
Emergency Exit Buildings (EEB) are used to evacuate passengers from tunnels in the event of an emergency at track level during operation.

Construction began in November 2022 and is scheduled to be completed by summer 2023.



Royal York headwall

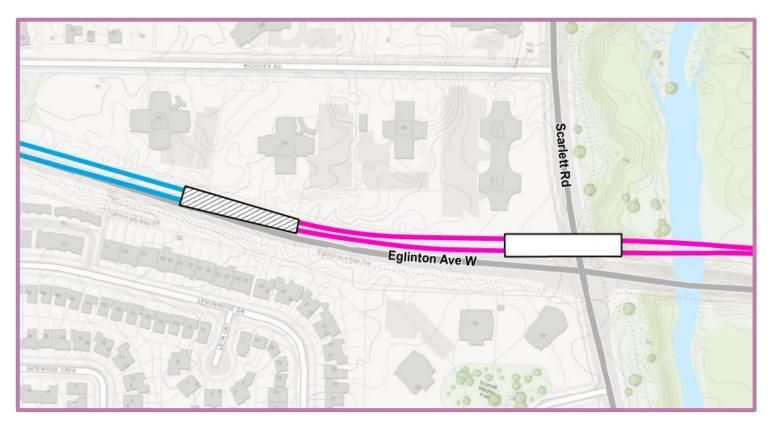
Construction began in April 2023 and is scheduled to be completed by June 2023.



The Royal York site in April 2023

Extraction shaft and portal

- The TBMs will finish digging west of Scarlett Rd. 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 2024.





Crosstown LRT east portal (2021)

Realignment of Eglinton Ave. West at Scarlett Rd.

To make room for the extraction shaft and portal, Eglinton Ave. West shifted to the south by approximately 10 metres (33 feet) between Scarlett Rd. and the pedestrian bridge.

Construction for the realignment began in April 2022 and was completed in April 2023.



The extraction shaft site in April 2023 - Road realignment work



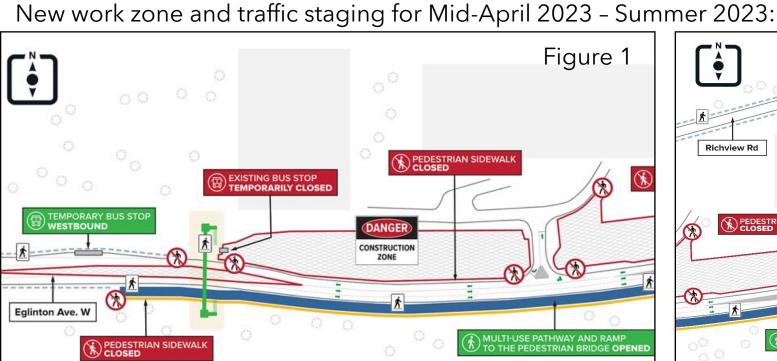
Extraction shaft: April 2023



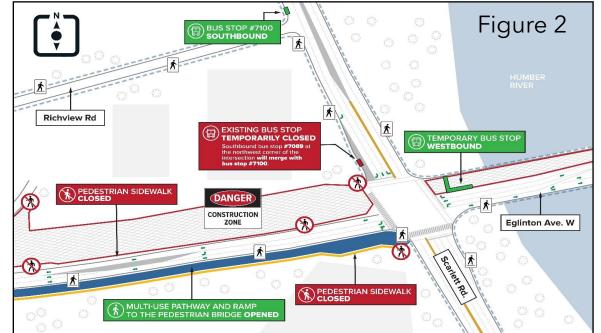
The road realignment has been completed, and crews reopened the south side of Eglinton Ave. West and flipped the work zone to the north side to continue working full-time on the extraction shaft (the portal used to remove the tunnel boring machines).

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

Road diversions to support the extraction shaft construction



- The south side of Eglinton Ave. West, including the multi-use path, is open to the public.
- Three lanes are open to traffic: one westbound and two eastbound.
- The two eastbound lanes merge into one through and right-turn lane at the southeast corner of the Scarlett Road and Eglinton Avenue West intersection. There continues to be a dedicated lane at the Scarlett Road and Eglinton Avenue West intersection for left turns.
- The sidewalk on the north side of Eglinton Ave. West is temporarily closed between the pedestrian bridge and Scarlett Road.
- The sidewalk on the south side will remain closed during this period. Pedestrians are encouraged to use the multi-use pathway and pedestrian bridge during this stage of construction.

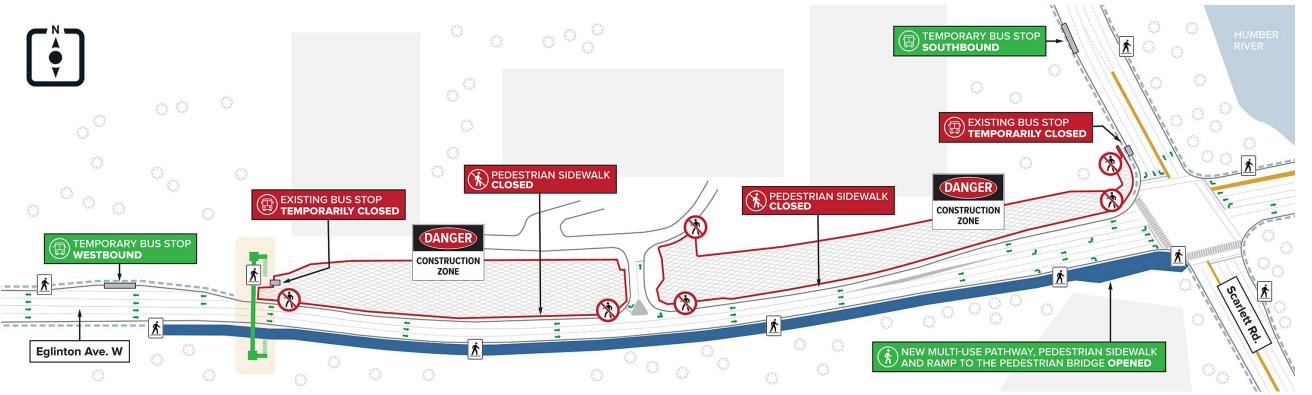


Traffic map not to scale.

- Three southbound lanes are open at the northwest corner of Scarlett Road and Eglinton Avenue west: one through lane, one right turn lane, and one left turn lane.
- Southbound bus stop #7089 at the northwest corner of the intersection is merged with bus stop #7100 at Richview Road and Scarlett Road.
- The westbound bus stop at the northeast corner of the intersection is moved onto a temporary platform.

Road diversions to support the extraction shaft construction

New work zone and traffic staging for Summer 2023:



Traffic map not to scale.

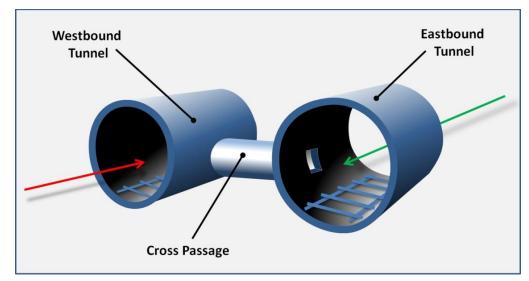
- The work zone on the south side of Eglinton Ave. West, including the multi-use path, will be open to the public.
- Work north of Eglinton Ave. West will continue, the work zone will extend east of the Richview driveway.
- Three traffic lanes will be open to traffic: one westbound and two eastbound.
- The north sidewalk west of the Scarlett Rd. and Eglinton Ave. West intersection will be temporarily closed.
- Southbound bus stop #7089 at the northwest corner of the intersection is merged with bus stop #7100 at Richview Road and Scarlett Road.
- Pedestrians are encouraged to use the multi-use path and pedestrian bridge during this stage of construction.

Cross passages: construction begins in summer 2023

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

Crews will build these cross passages within the newly built tunnels after the tunnel boring machines have completed their work.

This project will have 9 cross passages along the Eglinton Ave. West corridor. This work is scheduled to begin by summer 2023.





Monitoring noise and vibration

- Noise, air and vibration monitors have been installed on the properties of residences, offices and commercial buildings in the vicinity of the construction as per the Noise, Vibration and Air Quality Management Plans. This equipment helps us measure and minimize noise and vibration throughout the project term to prioritize your safety and well-being.
- The project team receives noise, air, and vibration monitor alerts in real time located along the project extent.

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.



Noise monitor



Air quality monitor



Vibration monitor



We're here for you

Your feedback is vital in helping us move the Eglinton Crosstown West Extension forward in a way that strengthens the community. We are grateful for your input.

Visit us at the Community Office

326 Scarlett Road

Tuesdays and Thursdays, 10 a.m. - 5 p.m. or by appointment



Want to know more?

Visit:

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Email us at:

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