The Ontario Line
Lakeshore East Joint Corridor
Early Works
Construction Liaison Committee

September 11, 2025

LAND ACKNOWLEDGEMENT

Metrolinx acknowledges that we connect communities by building and operating transit within the traditional lands of the Anishinaabe, the Haudenosaunee and the Wendat peoples, for whom these lands continue to have great importance.

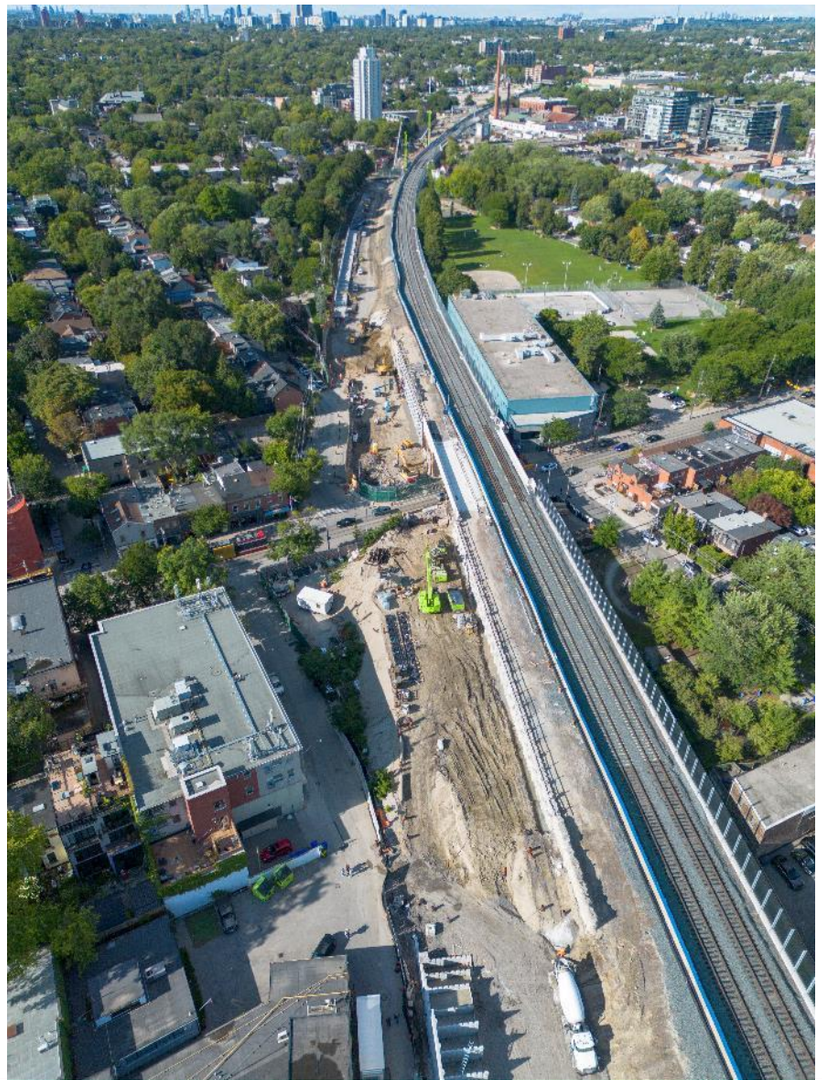
Treaties between First Nations and governments cover these lands, and the promises contained in these Treaties remain relevant to this day.

Metrolinx and its employees are committed to understanding the history of these lands and the continued impacts of colonization and take responsibility for actions to advance reconciliation.

Metrolinx will continue to seek the knowledge, expertise and experience of Indigenous partners and commits to doing business in a manner that is built on a foundation of trust, respect, and collaboration.

Agenda

1. **Welcome** (5 minutes)
    - Land acknowledgement
    - Safety moment
2. **Construction Updates** (25 minutes)
    - Bridges update
    - In-corridor work
    - Lookahead – 2025
    - Elevated guideways and stations update
3. **Actions and Complaints** (20 minutes)
    - Action items
    - Complaints and issues tracker
4. **Noise and Vibration Update** (25 minutes)
5. **Q&A and Discussion** (15 minutes)



Retaining wall and station progress
August 29, 2025

Safety Moment – Back to school safety

With more vehicles (including school buses) on the road and pedestrians such as school children on sidewalks on the move, it's important to keep safety top of mind.

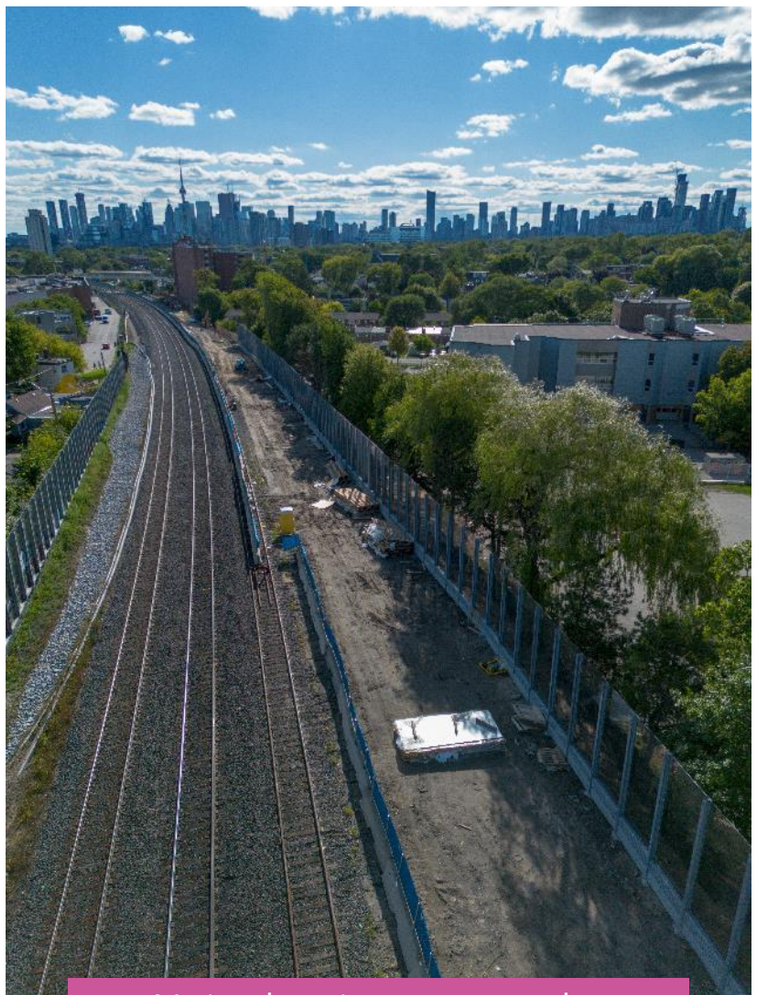
General back to school safety tips

- In school zones, obey reduced speed limits, avoid passing, and give cyclists at least one metre of space.
- Drivers must stop in both directions when a school bus has its stop-arm extended and red lights flashing.
- Drivers should slow down, obey all signals, and never attempt to beat a train or drive around lowered gates.

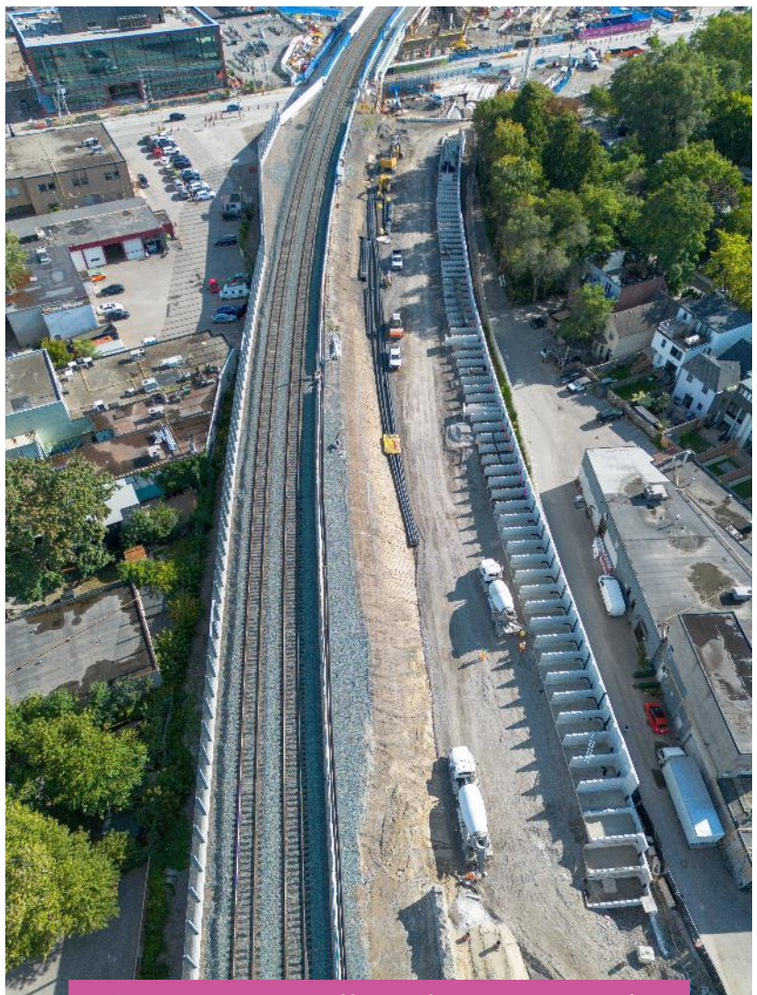
Printed poster attached to site fencing

Ontario Line Construction Update
Lakeshore East Joint Corridor
Early Works Construction

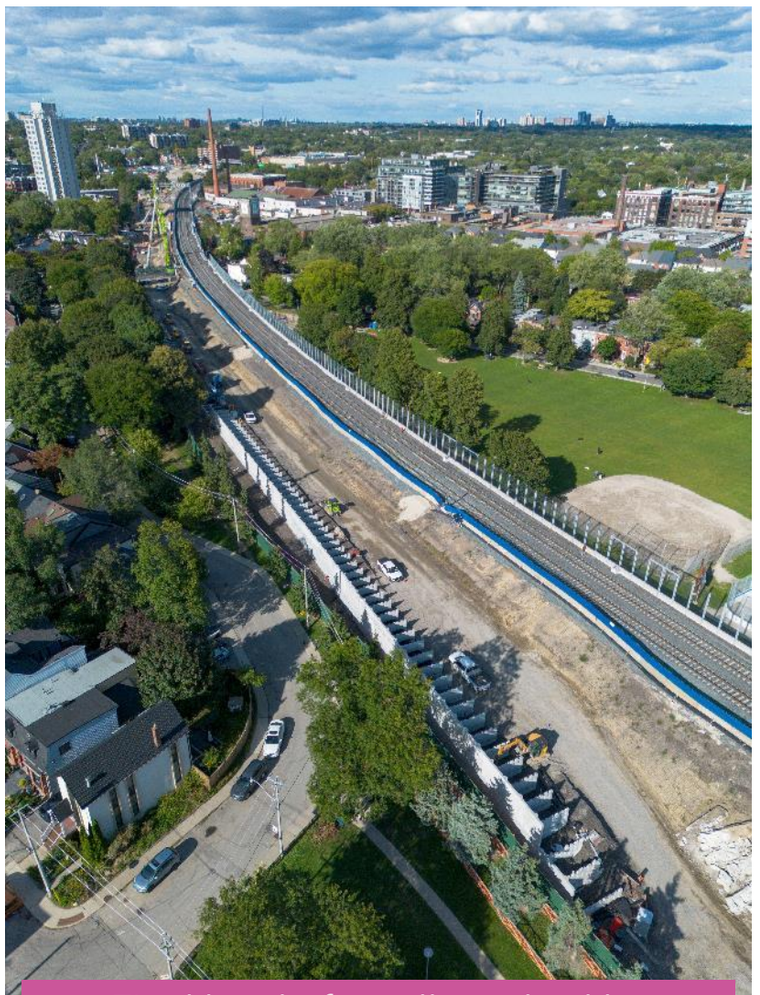
Construction Progress Update: Retaining wall and Noise Barrier Progress



Noise barrier progress by Boultbee and Jones – Aug 29

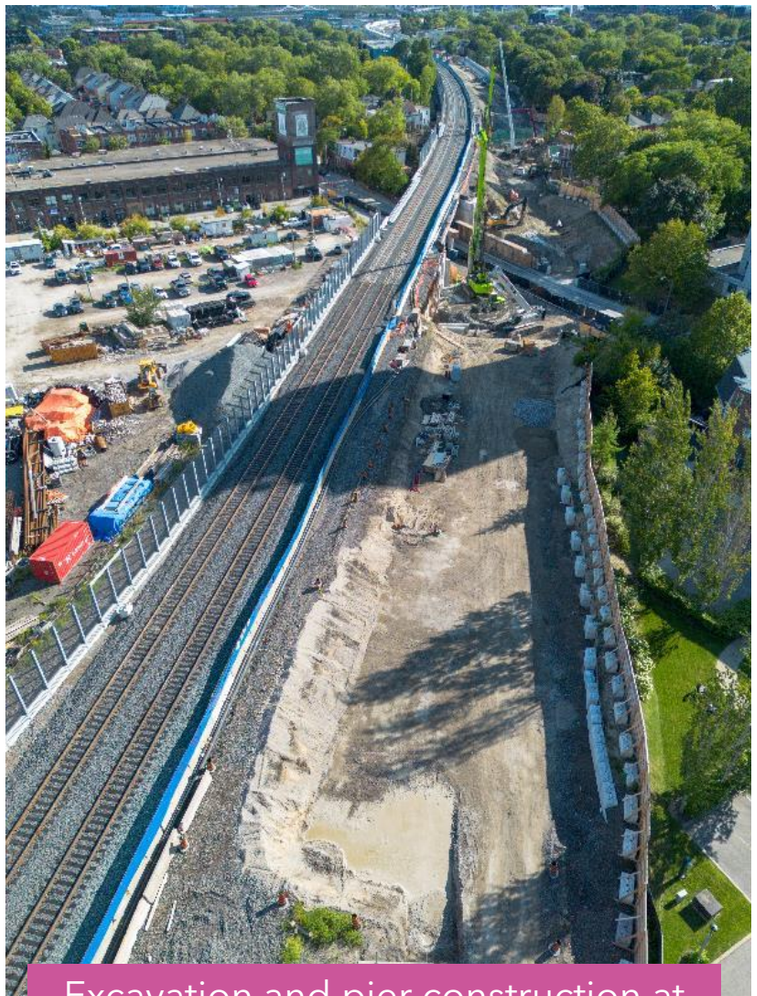


Retaining wall and sewer work by Strange/Saulter – Aug 29

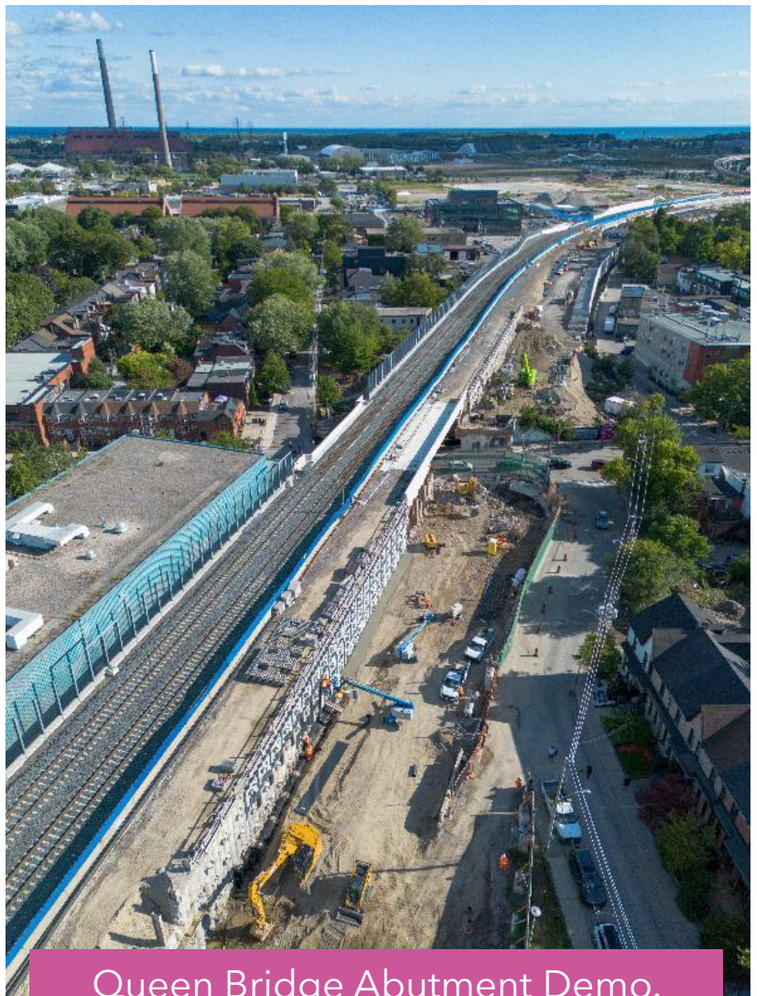


Final level of t-wall reached by De Grassi and Wardell – Aug 29

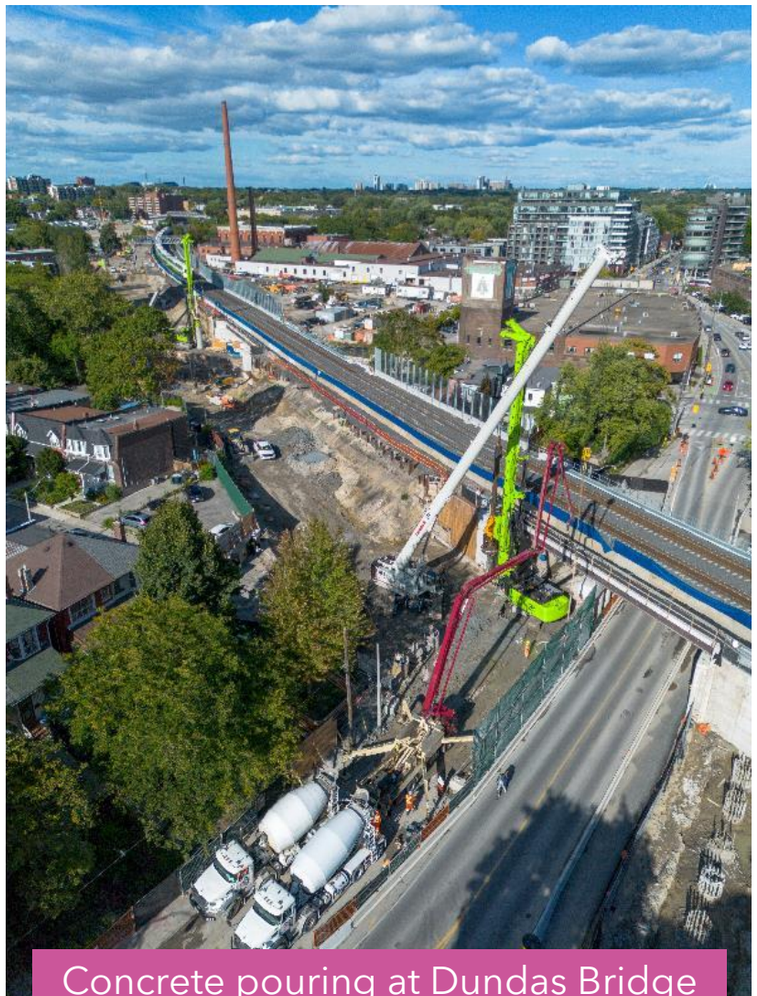
Construction Progress Update: Bridge and station work



Excavation and pier construction at Logan Bridge – Aug 29



Queen Bridge Abutment Demo. Secant wall exposed on north side – Aug 29



Concrete pouring at Dundas Bridge – Aug 29

Bridge reconstruction: Queen St. E., Dundas St. E., and Logan Ave.

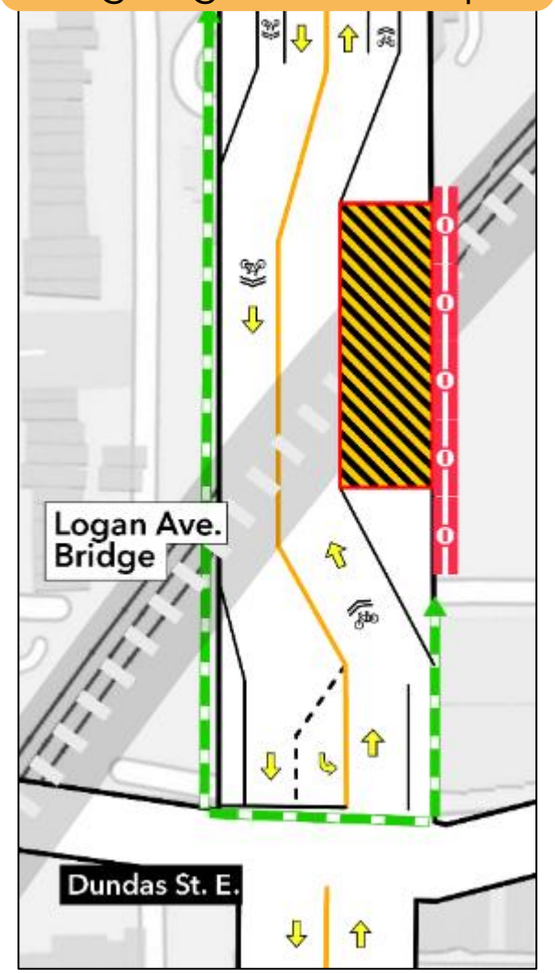
EIGHT WEEK LOOK-AHEAD: September 11– November 6, 2025 – Bridge Work

#	Activity	Location	Start date	Duration	Impact	Hours of Work	Mitigations
1.	**Bridge reconstruction:** Building new bridge piers, abutments and walls.	Dundas and Logan bridges	Ongoing	Until December 2025	Noise, vibration, dust, traffic and pedestrian detours	Monday to Saturday between 7 a.m. and 7 p.m. (Weekend work is periodic)	Temporary and permanent noise barriers, no overnight drilling work, advance wayfinding signage, traffic control personnel, water misting, filter cloth, road cleaning
2.	**Bridge abutment and pier removal**	Queen bridge	Resuming on the south side of Queen St. in late October	Two weeks	Noise, vibration, dust, traffic lane and sidewalk closures.	Monday to Friday between 7 a.m. and 7p.m.	Temporary noise barriers, water misting, sweeping
3.	**Sewer connections:** Connecting bridge drainage systems to City sewers to prevent water damage and flooding.	Queen bridge Logan bridge	**Queen:** Ongoing **Logan:** Late Sept.	Two weeks at each bridge	Noise, dust, traffic and pedestrian detours	Monday to Friday between 7 a.m. and 7p.m.	Advance wayfinding signage, traffic control personnel, water misting, filter cloth, road cleaning

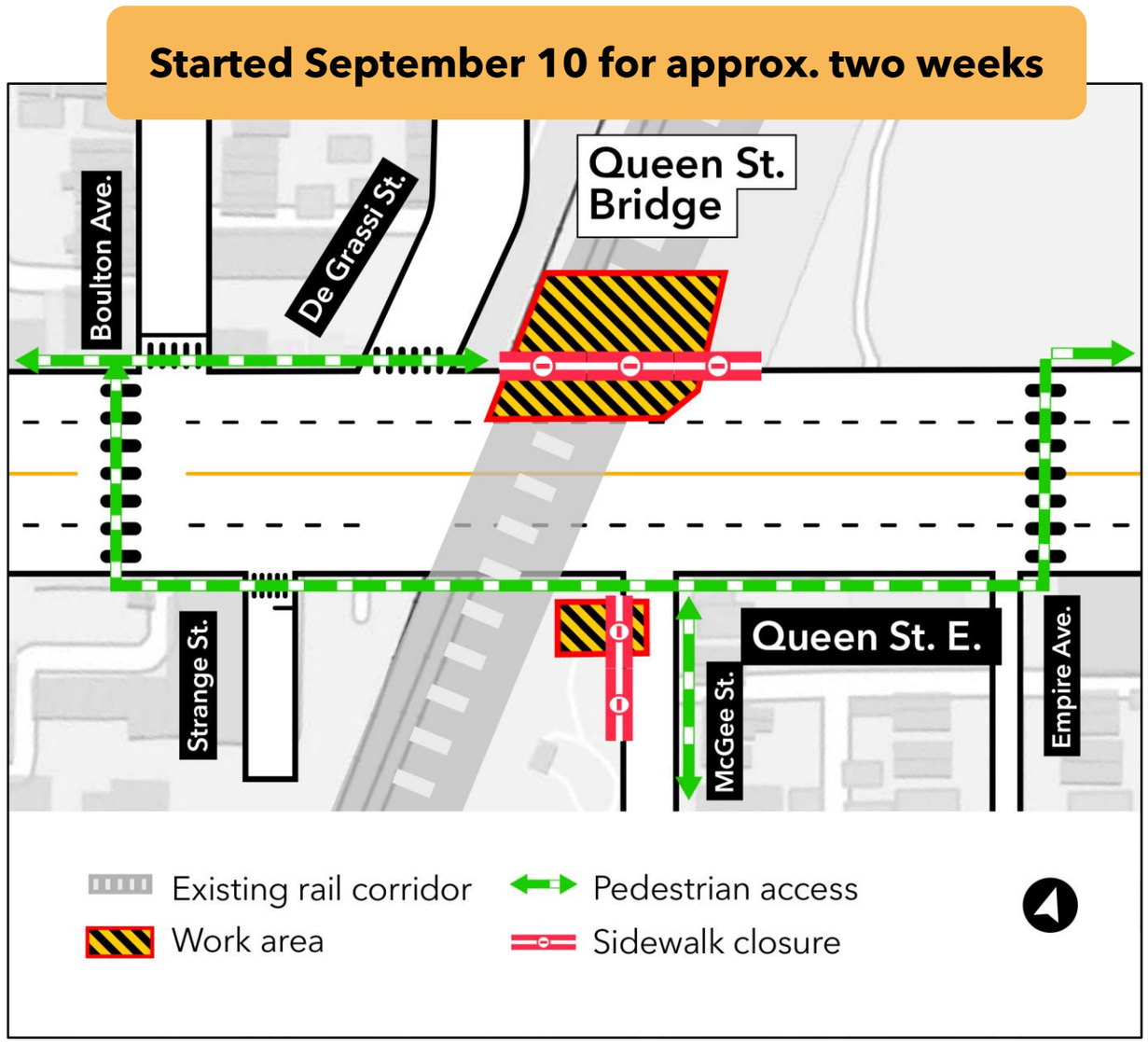
Traffic Configuration: Abutment and Pier Construction at Dundas and Logan Bridges

Dundas Bridge
Ongoing until late Sept.

Logan Bridge
Ongoing until late Sept.

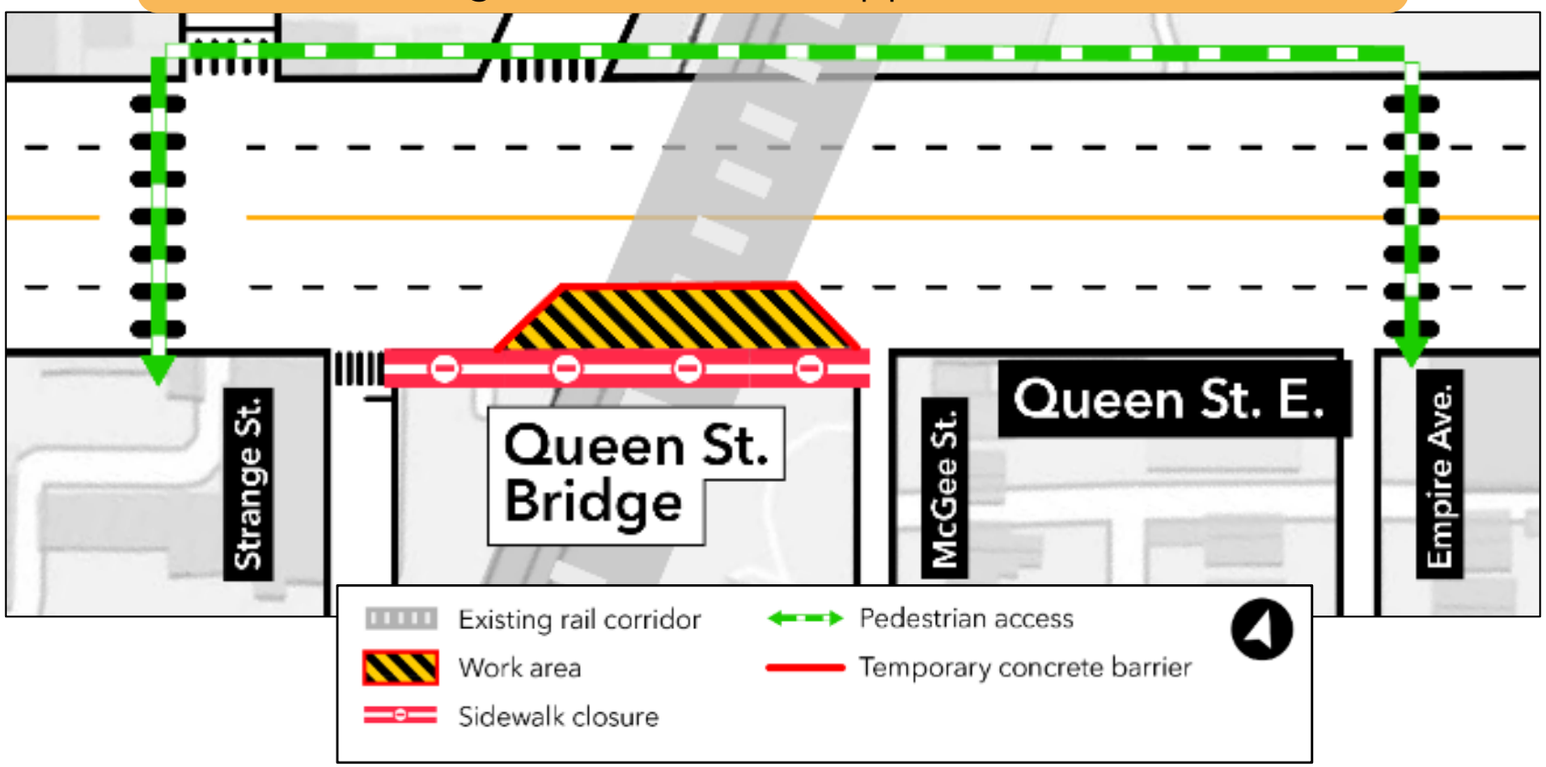


Traffic Configuration: Drainage tie-in at Queen Bridge



Traffic Configuration: Abutment Demolition at Queen Bridge – South Side

Stage two:
Starting late October for approx. two weeks



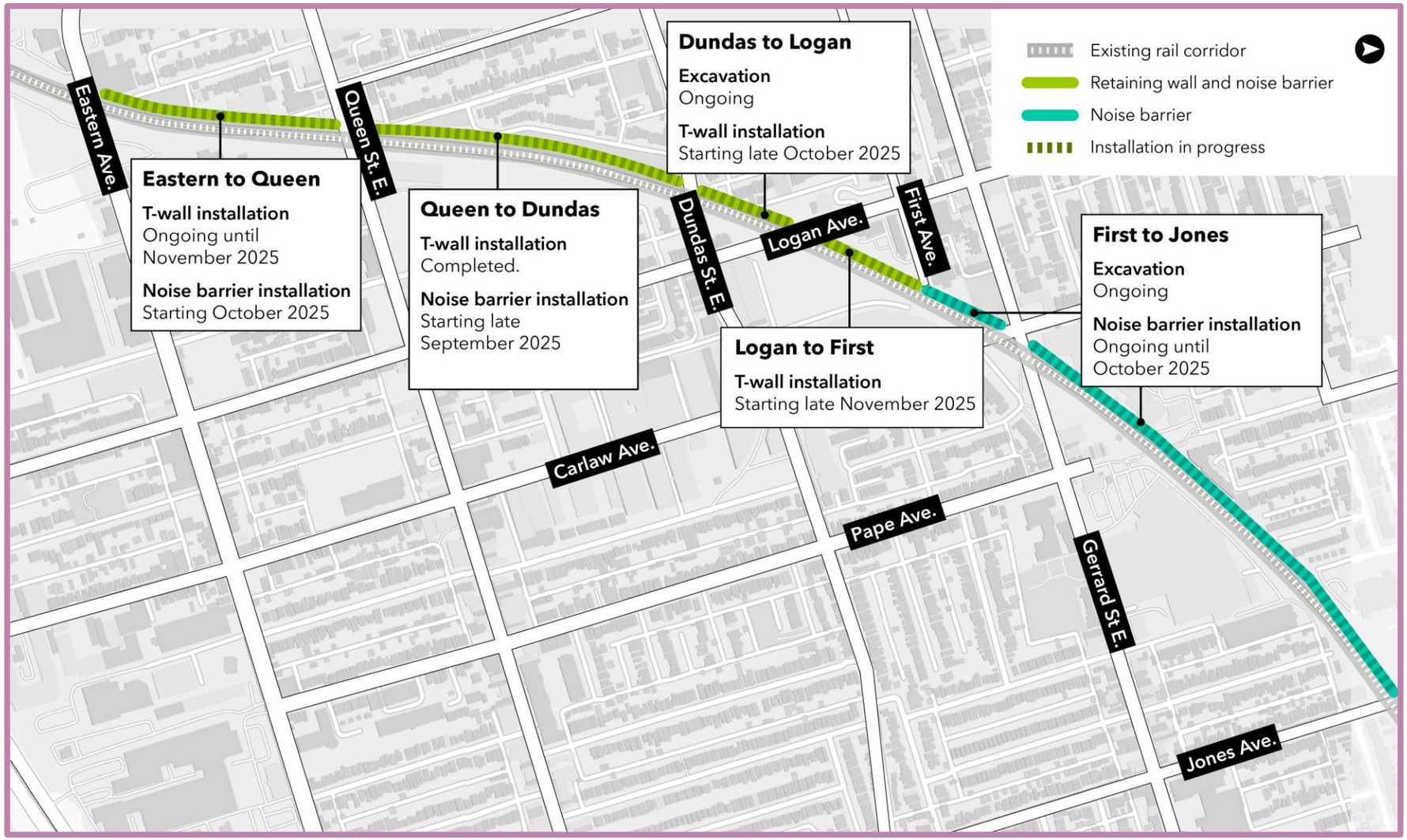
Construction Update: In-Corridor Work

EIGHT WEEK LOOK-AHEAD: September 11– November 6, 2025 – In-Corridor Work

#	Activity	Location	Start date	Duration	Impact	Hours of Work	Mitigations
1.	**Station work:** Tieback installation, concrete works	Gerrard: tieback installation Queen: tieback and concrete	Ongoing	Tiebacks until mid-Oct. 2025 Concrete until Nov. 2025	Noise and dust	Monday to Saturday from 7 a.m. to 5 p.m.	Solid noise barriers, water misting, street sweeping
2.	**Retaining wall construction:** Excavation, tieback installation, backfilling and compaction	On the west side of the rail corridor between Eastern Ave. and Logan Ave.	Ongoing between Queen St. and First Ave.	Approx. one to two months in each area. Retaining wall work will be completed in Dec. 2025	Noise, dust, and vibration	Monday to Saturday from 7 a.m. to 5 p.m. Periodic nighttime concrete pours between Eastern Ave. and Queen St.	Solid noise barriers, water misting, street sweeping, limiting use of the roller during compaction work
3.	**Noise barrier construction:** Excavation, drilling and compaction	On the west side of the rail corridor between Pape Ave. and Jones Ave.	Ongoing between Pape Ave. and Jones Ave.	Until October 2025	Noise, dust, and vibration	Monday to Saturday from 7 a.m. to 5 p.m. Evenings from 3 p.m. to midnight	Solid noise barriers, water misting, limiting roller usage during compaction work
4.	**Restoration work:** Installing high-security fence and laying topsoil	At Jimmie Simpson Park and McCleary Parkette	Ongoing	Jimmie Simpson Park: Complete week of Sept. 22 McCleary Park: Complete in Oct.	No major impacts are expected.	Monday to Friday from 7 a.m. to 5 p.m.	No mitigations required
5.	**Sewer installation:** Excavating and installing a new storm sewer	Within the rail corridor beside First Avenue	Starting late Oct.	Until late Nov. 2025	Noise, dust, and vibration	Monday to Friday from 7 a.m. to 5 p.m.	Water misting, street sweeping

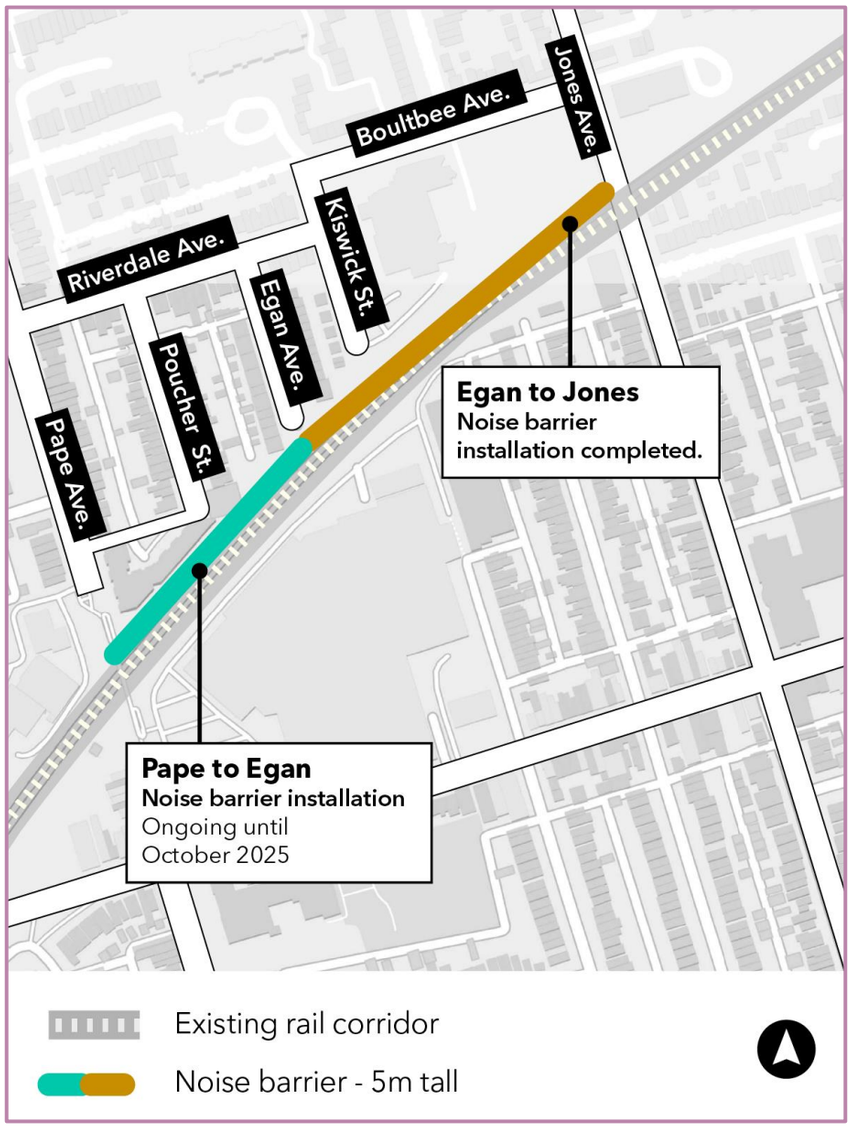
Retaining Wall Construction Update - Upcoming Work

West side of the rail corridor



Noise Barrier Construction Update - Upcoming Work

West side of the rail corridor



Construction Lookahead
Summer to Winter 2025

2025 Construction Look-Ahead

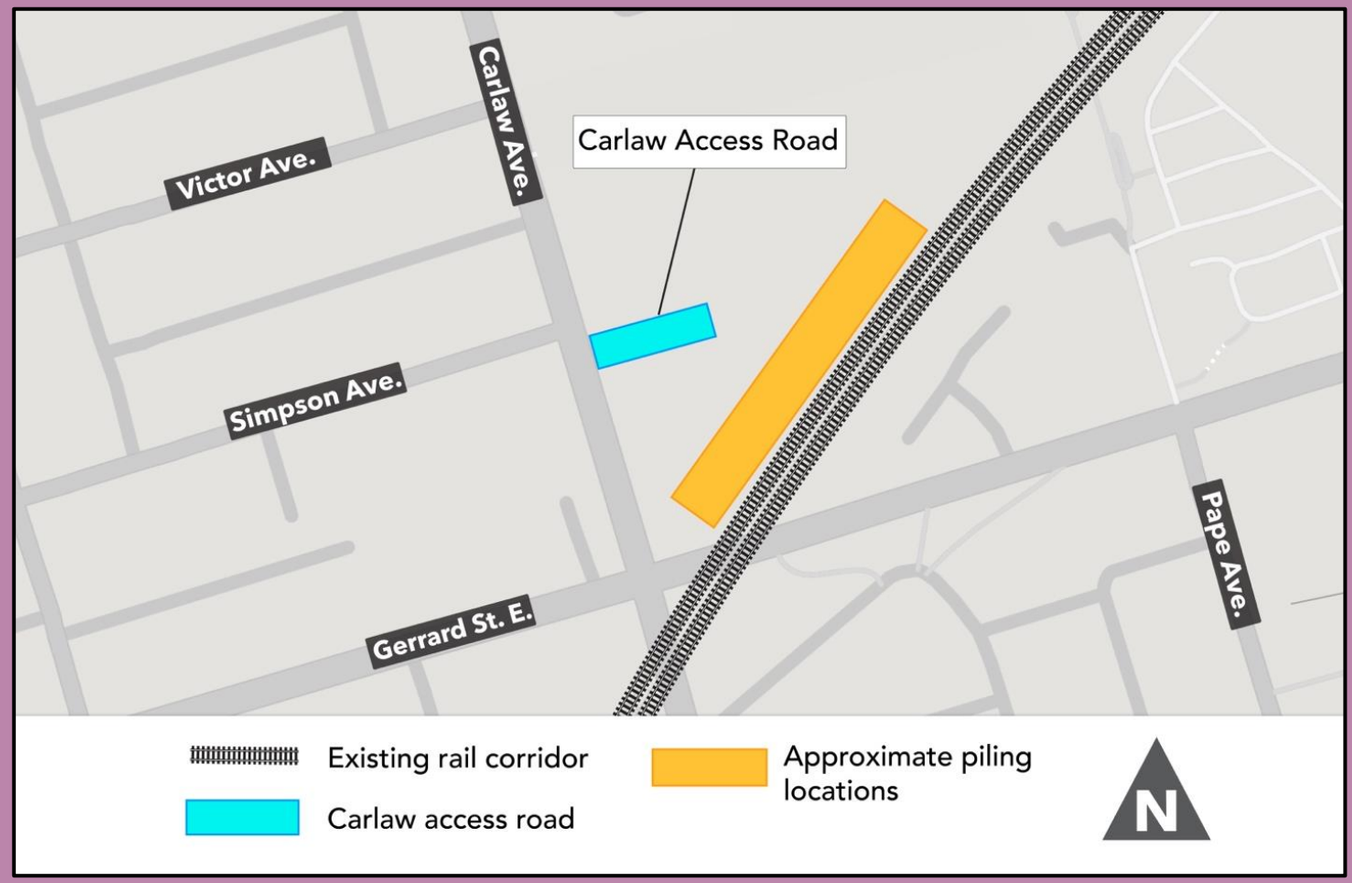
Timing	Activity	Location	Details and Purpose
Summer	Bridge reconstruction	At Logan and Dundas bridges	Building new bridge piers, abutments and walls. Tiebacks and caissons are being installed to support the new bridges. Drill rigs, concrete trucks, saws and tieback drills will be used to complete this work. Once the caissons are completed, the new piers and abutments will be built above ground. Construction activities will include rebar installation and concrete pours.
	Retaining wall installation	Along the west side of the rail corridor	Removing material from the rail corridor to enable construction of new retaining walls. Excavators will load material into dump trucks to be hauled off site. Granular material will be backfilled and compacted – vibrations can be expected during compaction. Once, excavation work is completed, pre-cast concrete blocks will be installed to form the new retaining walls.
Fall	Abutment demolition	Queen bridge	Removing the old abutments and piers on the south side of the Queen bridge.
	Bridge deck construction	Dundas and Logan bridges	Building the new bridge decks over the road. Weekend road closures will be required on Logan Ave. and Dundas St. to install the girders for the new bridges.
	Sewer work	At Queen, Dundas, Logan bridges, and First Ave./Gerrard St..	Reinforcing and installing new sewers to enable retaining wall and bridge construction.
	Noise barrier installation	Along the west side of the rail corridor	Installing acrylic noise barriers on top of the concrete retaining walls. Steels posts will be installed to support the noise barrier panels.
Winter (into 2026)	Major track closure	Inside the rail corridor between Eastern Ave. and Jones Ave.	Major track closure to facilitate in-corridor work such as constructing drainage systems, grading and utility installations.
	Retaining wall and noise barrier completion	West side of the rail corridor between Eastern Ave. and Jones Ave.	Completion of installation of all retaining wall and noise barriers.
	Bridge deck completion	Dundas and Logan bridges	After the bridge girders are installed, crews will work on pouring concrete, waterproofing and finishing the bridge decks.

Construction Update: Elevated Guideways and Stations

The Ontario Line

Gerrard Station Piling

- In Fall 2025, piling will begin for Gerrard Station.
- Piling will take place within the existing work zone at 449 Carlaw Avenue.
- Piling work will take approximately four months to complete.
- Once the piling is completed, the area will be partially excavated to street level.
- Drill rigs, trucks and other construction equipment will be used to complete this work.
- The temporary dog off-leash area will remain open during this work.



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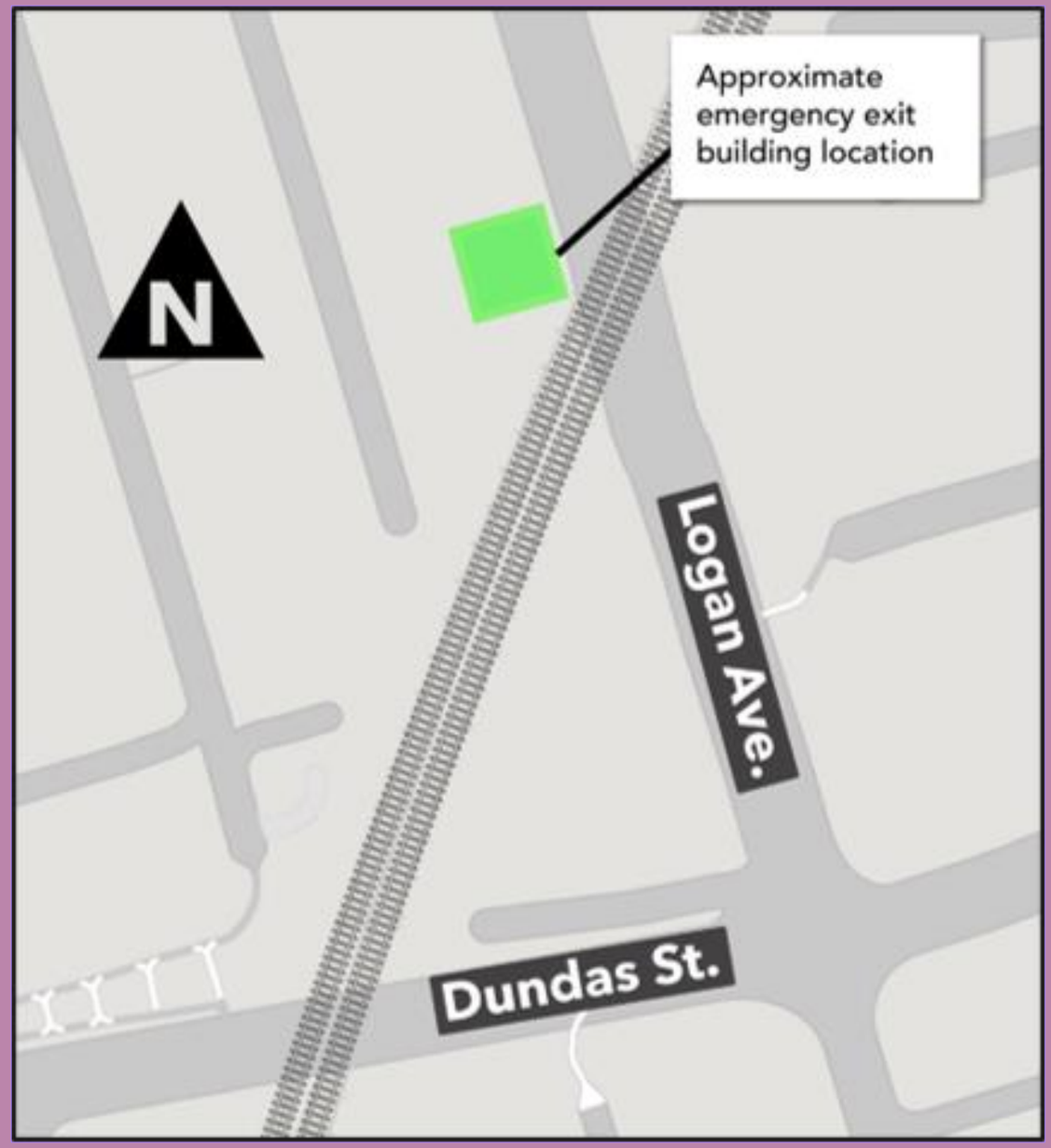
The Ontario Line

Emergency Exit Building

- The Emergency Exit Building (EEB) is required to evacuate passengers between station stops.
- The EEB also allows emergency responders to access a train if there is an issue between stops.
- The EEB will be located directly adjacent to the Ontario Line rail corridor on Logan Avenue.
- It is a smaller-scale structure that encloses the exit stair.
- Once we have completed our review with various emergency services including EMS and the Toronto Fire, we will be able to share the designs and renderings in early-2026.
- There will be a landscaping treatment at the base of the EEB along Logan Avenue.



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Action Items and Complaints and Issues Tracker

Completed Action Items

#	Action	Response	Status
1.	**Metrolinx** will explore having subject experts present at a future CLC meeting to discuss heritage building designations and the impact of vibration on different structures.	Metrolinx is coordinating the attendance of a heritage subject matter expert to provide information on difference in vibration impact for different properties at an upcoming CLC meeting.	**Completed**
2.	**Metrolinx** will forward the detailed timeline regarding the noise barrier cleaning and fence installation schedule at Booth and Paisley.	Schedule for noise barrier cleaning and fence installation is as follows: • **Week of Sept 15:** Install railing and gate at bottom of the 2 Paisley staircase, and complete paving work around the staircase is required • **Week of Sept 22:** Fence completion at Jimmie Simpson playground and high-security gate installed at 2 Paisley to close off the area Graffiti cleaning to occur after the gate is installed.	**Completed**
3.	**Metrolinx** and **Dufferin Construction Company** will commit to checking in on Paid Duty Officers more regularly during road closures.	Metrolinx and DCC have conducted regular Safety Walks to confirm PDO or flagger presence during Dundas sidewalk closures and will continue to monitor for future sidewalk and road closures.	**Completed**
4.	**Metrolinx** will conduct a comparative analysis between higher and ground-level noise monitor readings and provide the information gathered at a future CLC.	Analysis provided in GEMS presentation (Slides 33-47).	**Completed**

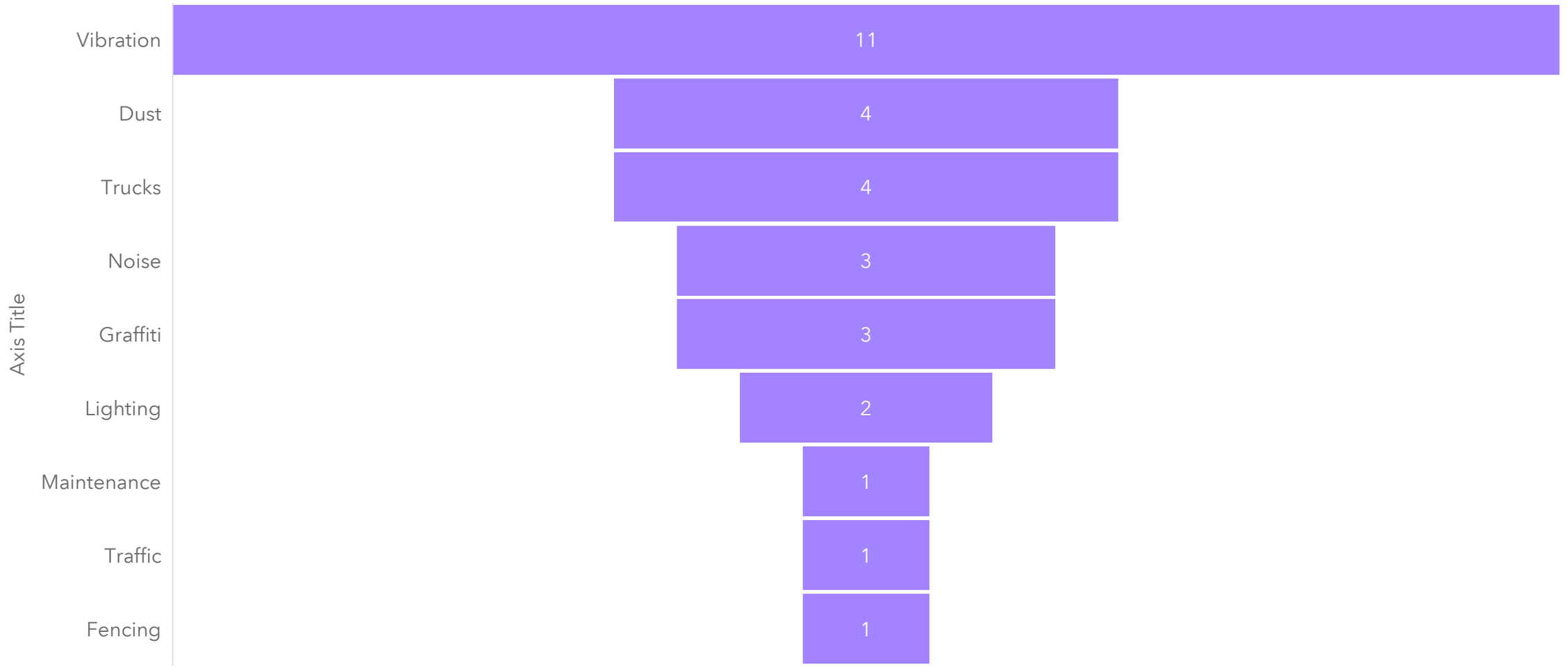
Completed Action Items

#	Action	Response	Status
5.	**Metrolinx** will extend an invitation to GEMS to attend the next CLC meeting.	GEMS invited and in attendance at September 11, 2025 CLC meeting.	**Completed**
6.	**Metrolinx** will reach out to the WoodGreen headquarters, per the Riverside BIA's contact.	Meeting held between Metrolinx and WoodGreen.	**Completed**
7.	**Dufferin Construction Company** will monitor and manage signage more consistently.	DCC and MX have undertaken site walks to regularly monitor signage.	**Completed**
8.	**Metrolinx** will review and adjust the complaints and issues summaries to ensure clarity.	Complaints and Issues slides updated to include more detailed locations of complaints.	**Completed**
9.	**Metrolinx** will consider adding additional noise/vibration monitoring on days when compaction work takes place.	Additional monitor has been approved for Saulter St.	**Completed**
10.	**Metrolinx** will explore additional monitor installation between Tiverton and First Ave.	MX requested an analysis of the current monitor locations in the area of Tiverton and First Ave. The environmental specialists concluded that the current locations are adequate to capture noise, vibration, and air quality readings in the area.	**Completed**

Pending Action Items

#	Action	Response	Status
1.	**Metrolinx** to explore organizing a walk in the spring with the City of Toronto and LSE CAC to discuss tree restoration plans.	Metrolinx will organize a walk with City of Toronto and LSE CAC to discuss tree restoration plans. Timing to be confirmed.	**Pending**
2.	**Metrolinx** will confirm the management and ownership of bridges at Logan, Dundas and Queen.	Metrolinx and the City are still finalizing details around bridge asset ownership and management. Once an update is available, the CLC membership will be informed.	**Pending**
3.	**Metrolinx** will share an update on the Gerrard portal haul routes once confirmed and share truck route updates in future CLC presentations.	Major construction at the Gerrard portal is anticipated to begin in September 2026. More details will be provided closer to this date.	**Pending**
4.	**Dufferin Construction** will clean the graffiti on the noise barrier at Booth and Paisley.	Cleaning of the noise barrier will be scheduled once the gate is installed at the end of the staircase. Gate installation is planned for September 2025.	**Pending**
5.	**Metrolinx** will add a section discussing haul route details to next month's CLC presentation deck.	All haul routes that have been confirmed are available on the Metrolinx website. Haul routes for the Gerrard Portal have not been finalized. Until these routes are finalized, truck routes related to the 449 Carlaw site utilize existing arterial corridors (Gerrard, Carlaw, Lakeshore).	**Completed**
6.	**Metrolinx** will update the community about its pest control plan development.	This plan is in development and updates will be shared when available.	**Pending**

Complaint Summary: August 1 – September 4, 2025



Total complaint count: 30

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Complaint Summary: August 8 - September 4, 2025

No.	Location	Complaint count by category	Total complaint count
1,	Queen bridge	• Vibration - 3 • Graffiti - 2 • Dust – 2 • Lighting – 1 • Maintenance - 1	9
2.	Degrassi St.	• Trucks – 4 • Dust – 1 • Vibration – 1 • Noise - 1	7
3.	Saulter St.	• Vibration - 2	2
4.	Dundas bridge	• Lighting – 1 • Traffic - 1	2
5.	Booth-Paisley	• Vibration - 4 • Noise – 2 • Graffiti - 1	7
6.	Logan bridge	• Fencing – 1	1
7.	Pape Avenue	• Dust – 1	1
8.	Carlaw-Gerrard	• Vibration - 1	1

Complaint Summary: August 8 - September 4, 2025

No.	Location	Complaint count by category	Corrective actions
1,	Queen bridge	• Vibration - 3 • Graffiti - 2 • Dust – 2 • Maintenance - 1	• Vibration monitoring reviewed and information was provided to resident. • Graffiti was removed. • Audit performed on street sweeper to ensure water is being used. • Catch basin was cleared
2.	Degrassi St.	• Trucks – 4 • Dust – 1 • Vibration – 1 • Noise - 1	• Additional signage posted for truck drivers and enforcement by traffic controllers on site. • Added water misting on site. • Vibration and noise monitoring reviewed and information on work activities was provided to the resident.
3.	Saulter St.	• Vibration - 2	• Vibration monitoring reviewed and information was provided to resident. • Additional monitor to be installed on Saulter St.
4.	Dundas bridge	• Lighting – 1 • Traffic - 1	• Lighting reinstated. • Traffic obstruction was removed.
5.	Booth-Paisley	• Vibration - 4 • Noise – 2 • Graffiti - 1	• Vibration monitoring reviewed and information was provided to resident. • Noise complaint investigated and work was related to gate installation at 2 Paisley. Activity needed to take place at night due to proximity of the work to the tracks. Mx followed up with residents. • Graffiti was removed.

Complaint Summary: August 8 - September 4, 2025

No.	Location	Complaint count by category	Corrective actions
6.	Logan bridge	• Fencing – 1	• Fencing was removed
7.	Pape Avenue	• Dust – 1	• Additional filter cloth added on fencing
8.	Carlaw-Gerrard	• Vibration - 1	• Contractor investigated and confirmed no work happening at the time of the complaint. Mx followed up with resident.

Noise and Vibration Update
August 2025

Noise and Vibration Monitoring Update – September 2025

- There are currently 13 noise monitors, and 15 vibration monitors located across the Lakeshore East rail corridor.
- Most noise exceedances were observed during the Queen Street bridge demolition.
- No nighttime noise or vibration exceedances were recorded.
- No exceedances coincided with community noise complaints.

- The summary above provides information on noise levels measured over 15-minute intervals (15-minute average).

Registered Noise Exceedances: August 2025

No.	Date/Time of Exceedances	Detail	Location	Source	Corrective action	Complaint received (Y/N)
1.	August 9, 2025 – Daytime	Noise	812 Queen Street	Excavation with hammer	• Exceedance attributed to the breaking of Queen St bridge • Slowed movement of excavator breaker to reduce exceedances • All mitigation strategies were used: portable barriers, good condition equipment, 3m tall wall noise barrier and rubber dampers/tipping on trucks	N
2.	August 9, 2025 – Daytime	Noise	812 Queen Street	Repositioning of equipment	• Exceedance attributed to the breaking of Queen St bridge • All mitigation strategies were used: portable barriers, good condition equipment, 3m tall wall noise barrier and rubber dampers/tipping on trucks	N

- The above table provides information on noise levels measured over 15-minute intervals (15-minute average).
- Exceedances unrelated to Lakeshore East Joint Corridor construction are not reflected in this table.

Lakeshore East Joint Corridor Early Works
Noise & Vibration Monitoring

Matthew Pickett, B.A., CAN-CISEC, CPESC
Environmental Manager, GEMS

Agenda

1. Noise & Vibration (NV) Monitoring

- What is the zone of influence?
- How are locations chosen?
- How are the limits set?

2. Vibration – Heritage vs. Non-Heritage Buildings

- What are heritage buildings?

3. Feelable Vibration vs. Structural Damage

- Differences in feelable vs. structural damage

4. Noise Impacts to Properties at Height

- Understanding noise impacts at adjacent receptors, including those at height

5. Monitoring & Mitigation

Noise & Vibration Monitoring

- NV limits were developed in consultation with noise and vibration engineers, subject matter experts and industry standards (e.g., U.S. Federal Transit Administration Noise and Vibration Impact Assessment Manual, MECP Noise Pollution Control, City of Toronto Vibration Bylaw).
- The criteria vary based on receptor sensitivity, land use, duration of exposure, ambient baseline conditions, time of day, etc.

How are limits set?

Vibration

- Limits are set as per City of Toronto By-law 514-2008.
- More sensitive limits are applied to Heritage Buildings on the frequency (Hz) and peak particle value (PPV) in mm/s.

Noise

- Limits are set for Day, Night and Lmax, Leq (15-minute) averaging periods.

Frequency (Hz)	Vibration Limit (mm/s)	Vibration Limit (Sensitive limits)
Less than 4	8	3
4 to 10	15	10
Greater than 10	25	16

Noise and Vibration Zone of Influence

Zone of Influence

- The Zone of influence (ZOI) is defined as the land in or adjacent to a site, including any buildings or structures, that is potentially impacted by vibration from construction activities.
- The ZOI was defined during the design stage and provided to the Contractor to assess the number of receptors that required monitoring during construction.
- For vibration, the ZOI generally extends to 8 m from the work zone.
- For noise, the ZOI extends from 120 m to 250 m from the work zone (day vs. night limits).

Scaled Area Map Showing Zone of Influence for Vibration

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Zoomed in Section of ZOI Assessment

- Outside green line is perceptible vibration
- Blue line is heritage limits
- Orange line is the City of Toronto prohibited limit

Scaled Area Map Showing Zone of Influence for Noise

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Noise & Vibration Monitoring

How were receptors chosen for monitoring?

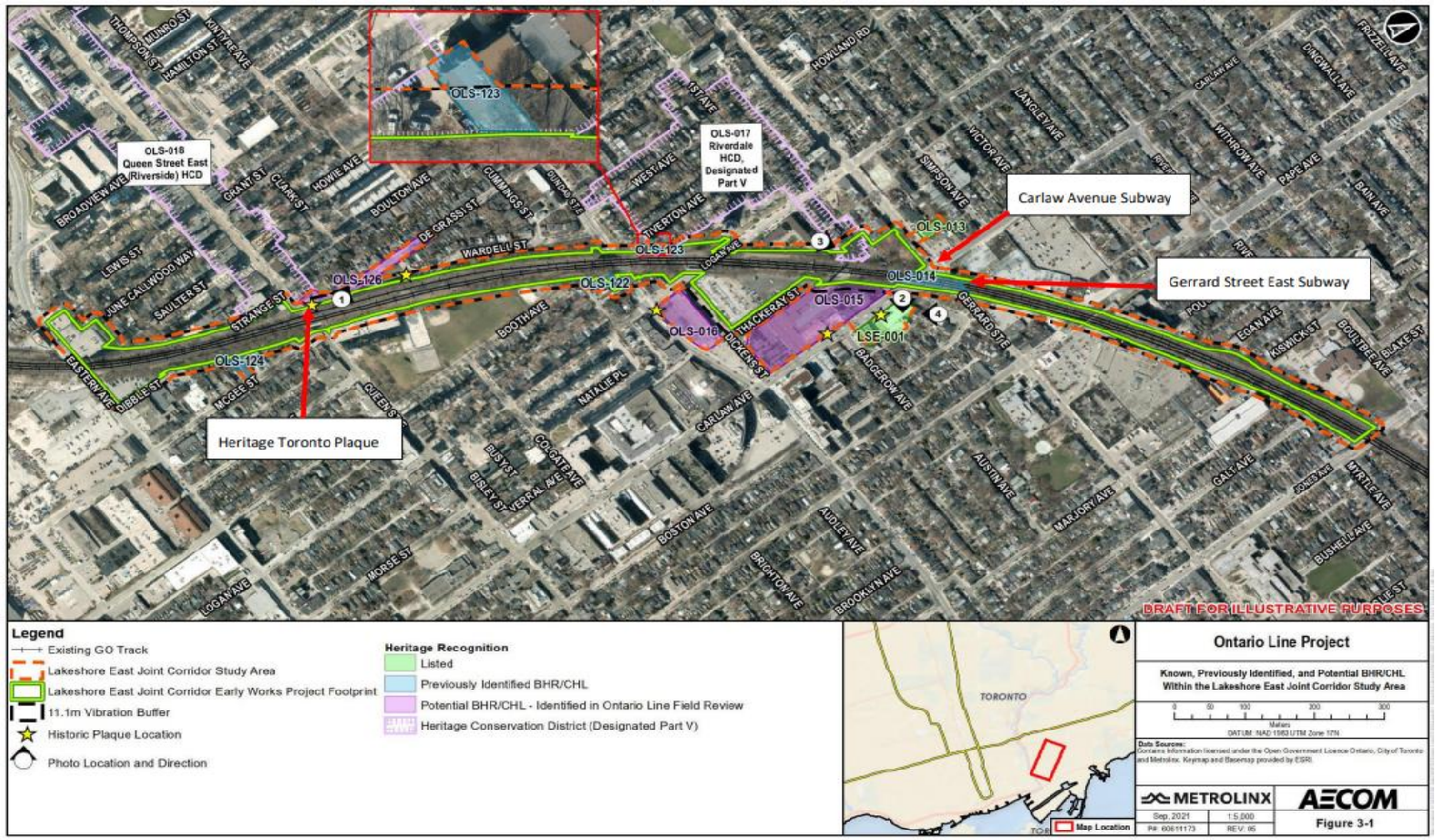
There are several key factors:

1. Are they within the predicted ZOI? If no, no monitoring is required.
2. If within the ZOI, are they the closest receptor to the work zone of proposed construction activities
3. Can a permission to enter agreement (PTE) be secured?

Prior to requesting PTEs, a site walk was conducted with Metrolinx, the Contractor and the specialists to identify target receptors for monitoring. Monitoring at receptors is preferred as it provides actual impact and data to make informed decisions in real-time.

Vibration Monitoring at Heritage Buildings

- Limits are more stringent for heritage buildings and sensors are adjusted to ensure limits are set accordingly.
- Heritage buildings were identified during design, before construction.
- Monitoring is occurring at all Heritage locations (on North Side of the corridor).
- Location of Built Heritage Resources and Cultural Heritage Landscapes in the Study Area (AECOM, 2021)



- Listed Heritage Buildings/Districts include:
  - 400 Carlaw Ave, Riverdale Heritage Conservation District
  - Queen St E (Riverside Heritage Conservation District)
  - 6, 8 and 10 Paisley Ave
  - 15 and 17 Tiverton Ave

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Feelable Vibration and Structural Damage Vibration

Feelable vibrations are vibrations people can sense or feel, but don't cause damage to structures.

- Low amplitude: Not strong enough to harm the structure.
- Frequency range: Often in the range of human sensitivity, but no physical harm to structures
- Effects: May cause discomfort, annoyance, or concern, especially in sensitive environments like hospitals or offices.
- Feelable vibrations can be as low as 0.1 to 0.3 mm/s

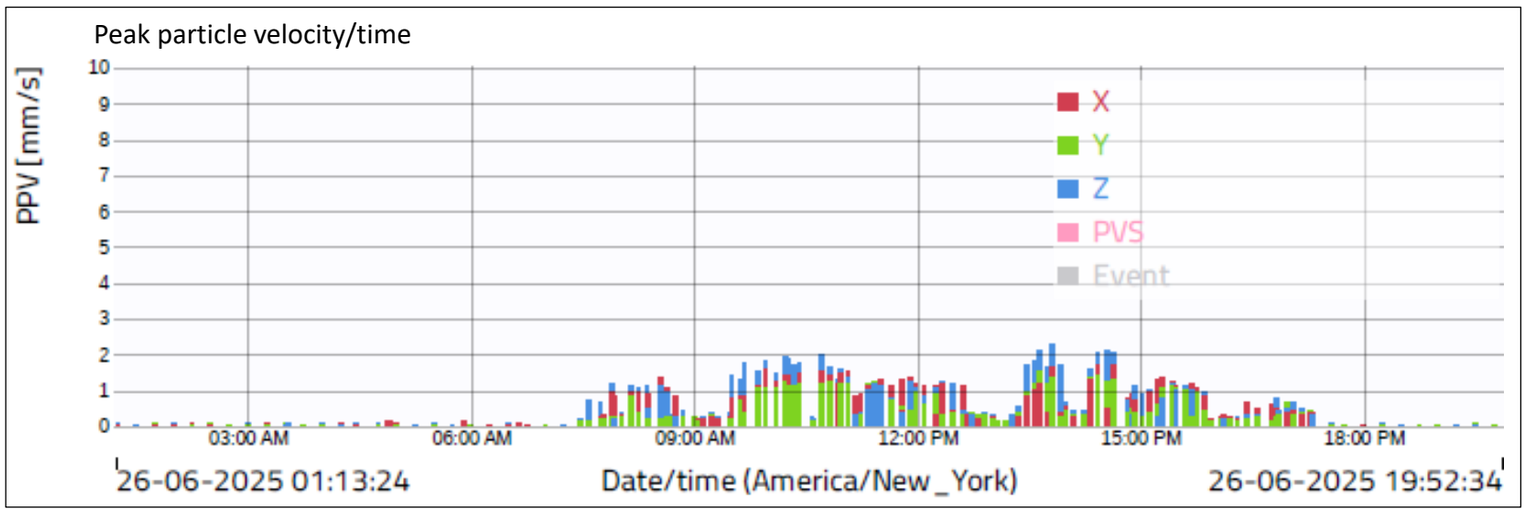
Structural damage vibrations are vibrations strong enough to cause physical damage to a building or its components.

- High amplitude: Strong enough to harm the structure.
- Frequency range: Can vary widely, but often includes low-frequency, high-energy waves.
- There have been no observed structural damage vibrations recorded in the LSE/JC works area.
- No vibration recordings have exceeded outlined limits nor were strong enough to cause physical damage to buildings or its components.

Feelable Vibration

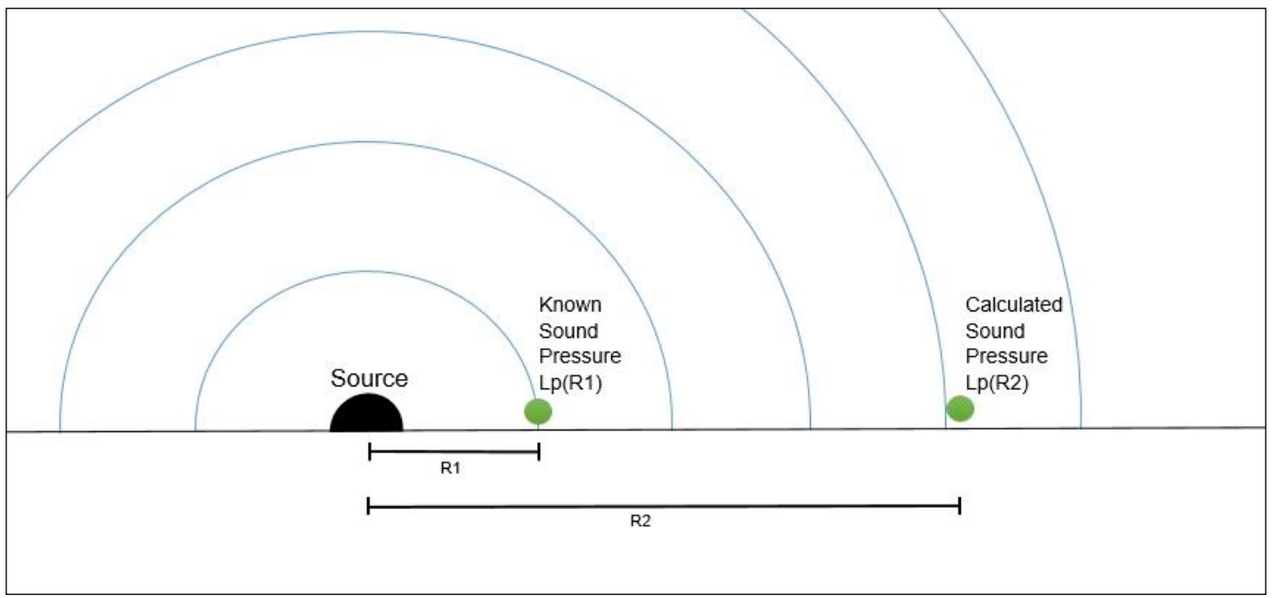
- A vibration complaint received on June 26, 2025.
- Compaction works occurred around the complaint, meaning we expected to see a higher frequency during compaction activities.
- The peak particle velocity (PPV) was 2.2 mm/s at 15 Hz.
- With the limit being 25 mm/s (or 16mm/s for Heritage), vibration was approximately 10-15% of the limit.

Example



Noise Impacts at Height

- GEMS can use data from noise monitors along the fence line to determine noise impacts at receptors (Ex. 444 Logan Avenue).
- Prediction models and equations are used to calculate sound attenuation over distance.
- The model considers the following factors when calculating the noise impacts:
  - Known sound pressure at monitor
  - Terrian
  - Directional noise sources
  - Height
  - Reflective surfaces or barriers (hoarding)



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Noise Impacts at Height

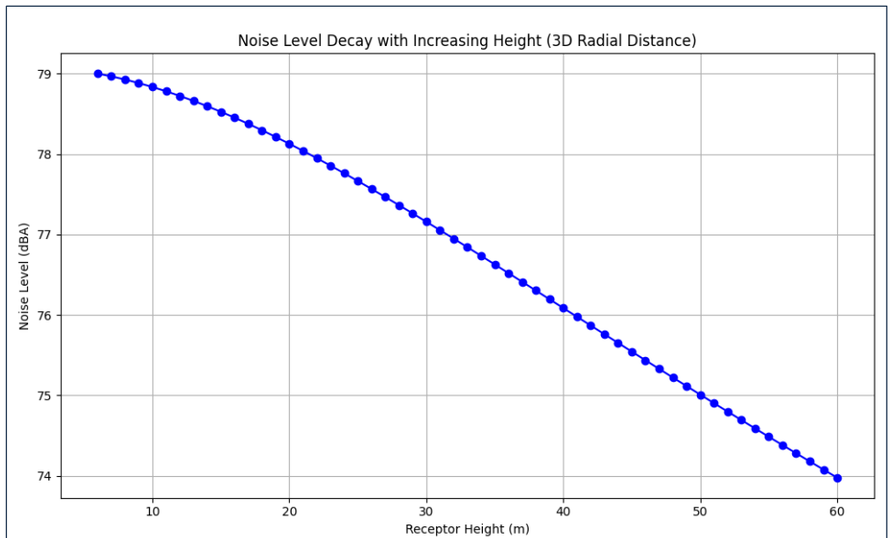
Example

Assuming a right triangle, length of 40 m, height of 50 m, the length of the third side would be 64 m.

Noise Impacts at Height

Example

- Fence line (sensor) is 20 m from the bridge. Noise level is measured as 85 dba.
- Receptor is 20 m from the fence line (40 m from the bridge).
- Noise level at receptor is 79 dba at 6 m height.
- Noise level at 50 m in height would be 75 dba.



*Generally, a loss of 6 dba per doubling of distance

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Monitoring & Mitigation

- Regular planning and reviewing of upcoming work activities with all parties.
- Circulation of community notices.
- Timing work during the day, after 7 a.m. on weekdays and after 9 a.m. on weekends, where possible.
- No vibration generating activities (i.e., compaction) past 11 p.m.
- Currently 13 noise and 15 vibration sensors spread throughout the corridor – all providing real-time alerts.
- Majority of sensors are receptor based, where Permissions to Enter (PTE) are available. Other sensors are placed at the fence line.
- Real-time warnings (set at 75% limit for vibration) provide advanced notice to the Contractor. Alerts are sent via text and email.
- Noise barrier walls and hoarding are main noise mitigation – breaking the line of sight, where site constraints allow.
- For vibration, compaction is the main impact activity causing vibration.
- Use of smaller rollers, static rolling or plate tampers, reduce vibration levels. These are all high frequency activities, so limits are higher for structural damage but will be feelable.

What’s Next and Wrap Up

Contact Us

Metrolinx will keep the community, residents and businesses informed by providing project updates, seeking input and feedback, and addressing questions and concerns effectively and quickly.

Stay connected:
Ontario Line e-newsletter @ Metrolinx.com/OntarioLine

Next CLC:
Thursday, October 9

Questions or comments:
OntarioLine@metrolinx.com
24/7 call # 416-202-5100

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Station plaza artist rendering


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