



**← STAGE
ETAPPE →**

2

A decorative graphic consisting of four thick, diagonal lines meeting at a central point. The lines are colored blue, red, yellow, and green, and each has a circular gradient effect.

EAST EXTENSION
PROLONGEMENT **EST**

Montréal Station



Montréal Station (Cont'd)



Jeanne d'Arc Station



Jeanne d'Arc Overpass



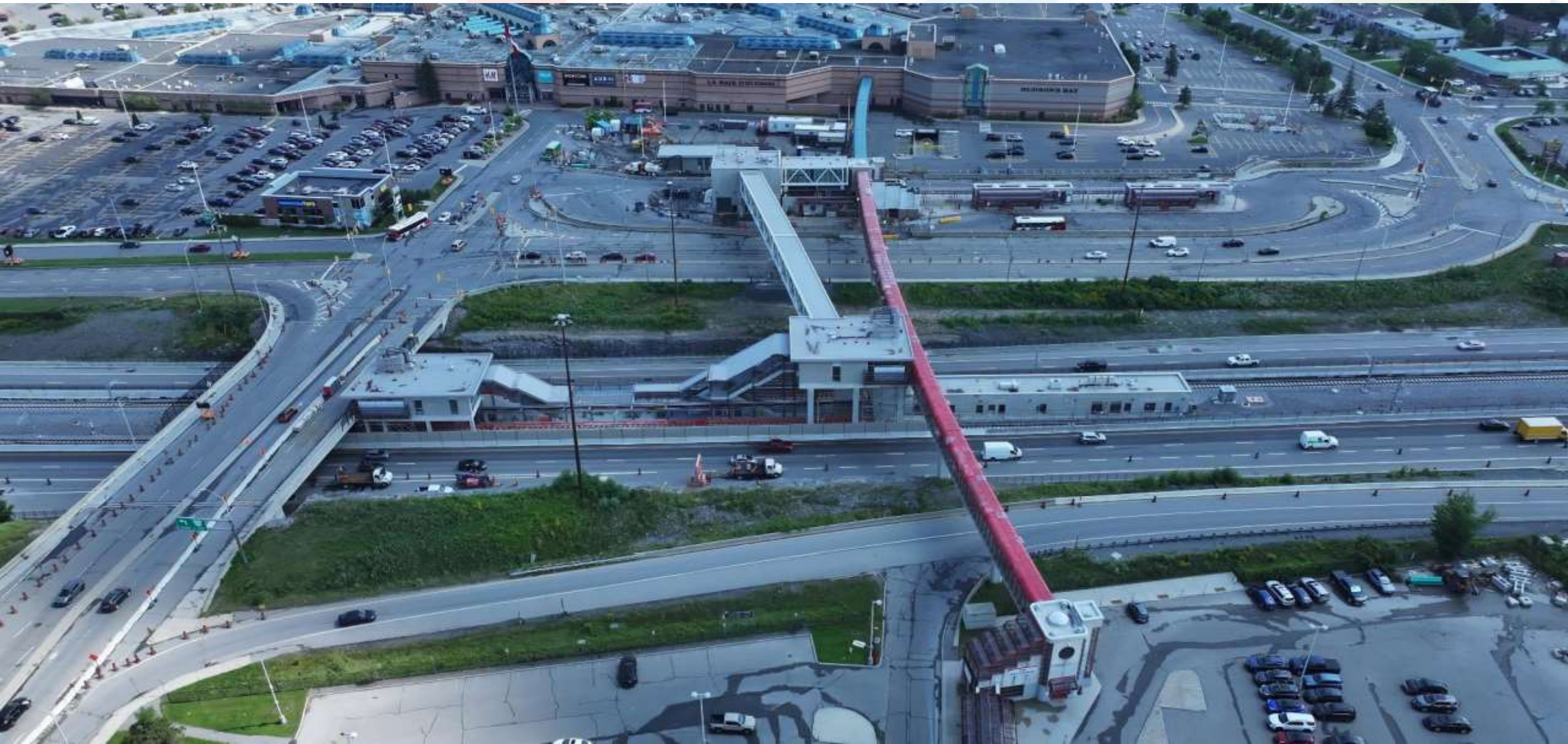
Convent Glen Station



Convent Glen Station Platform



Place d'Orléans Station



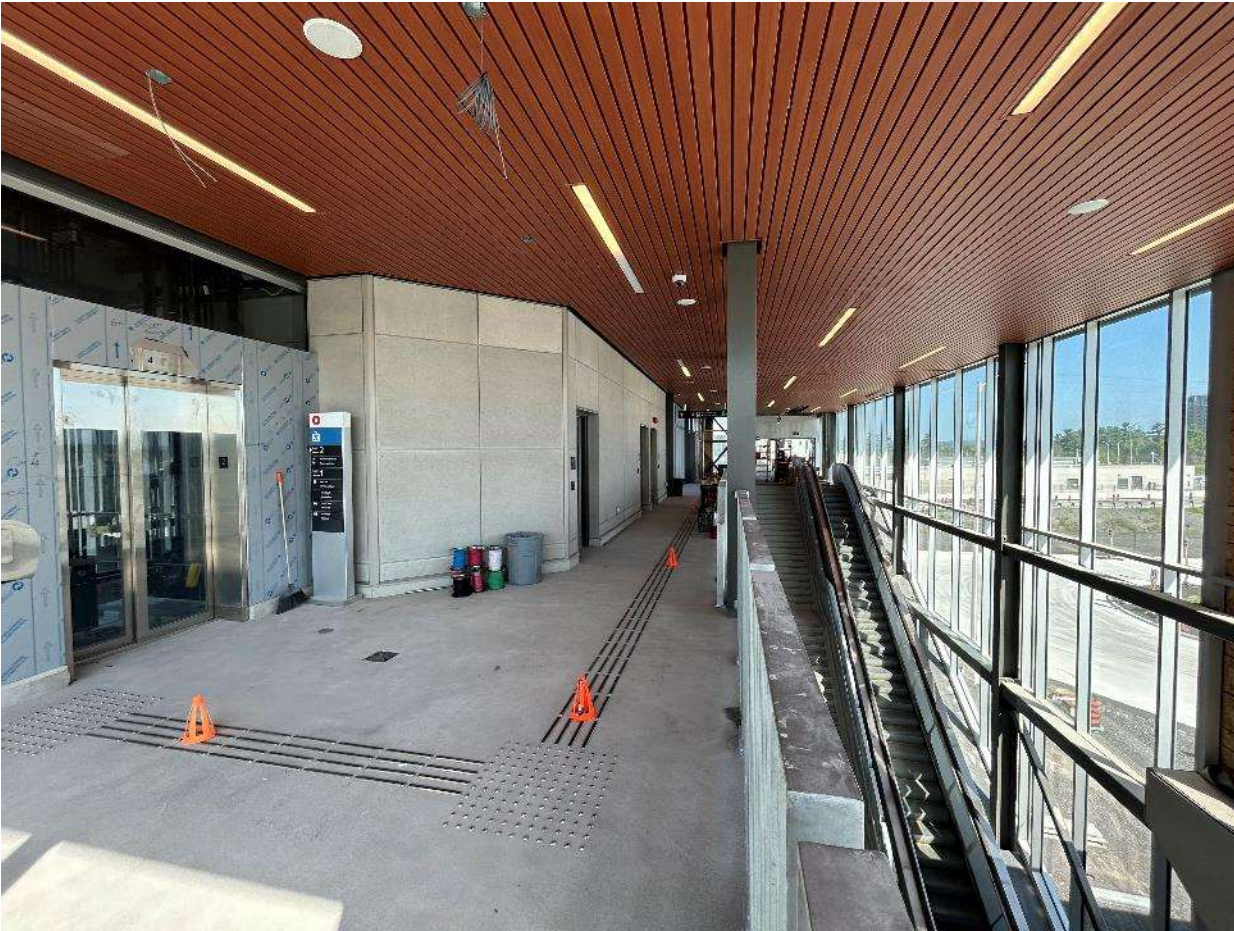
Place d'Orléans Station Pedestrian Bridge



Trim Station



Trim Pedestrian Bridge



Trim Bus Loop



Upcoming East Activities

- 🎯 **Fall 2024:** Connectivity enhancements on Jeanne d'Arc Boulevard will be complete
- 🎯 **Winter 2024:** Increase of train testing from Blair Station through to Trim Station
- 🎯 **Winter 2024:** Station Completion
- 🎯 **End of 2024:** Final Highway 174 paving from Champlain to east of Trim

East Traffic and Mobility Impacts

Location	Timeline	Traffic & Mobility Impacts
Highway 174	Ongoing	Lane and ramp closures as required; additional paving and highway work in 2025.
Montréal Road	Ongoing	Lane closures under OR 174 overpass and ramp closures to complete utility work.
Jeanne d'Arc Blvd	Ongoing	Various traffic configurations including long term lane reductions on the bridge as part of rehabilitation and active transportation project.
Orléans Blvd	Through to End of 2024 (TBC)	Long term lane closures to facilitate station works.
Champlain street	Through to End of 2024 (TBC)	Southbound direction is reduced to a single lane to provide access for station works.

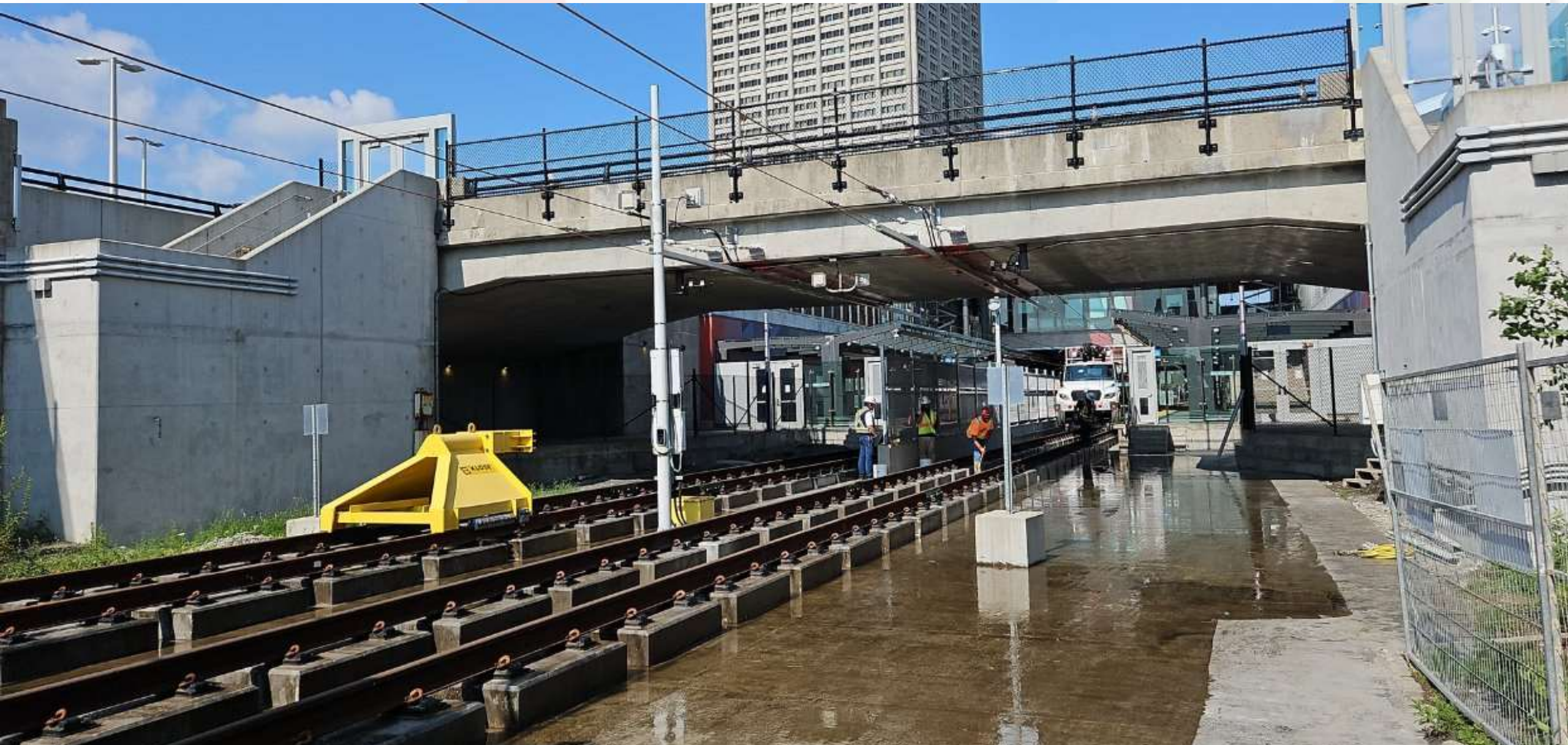


WEST EXTENSION
PROLONGEMENT **OUEST**

Tunney's Pasture Station



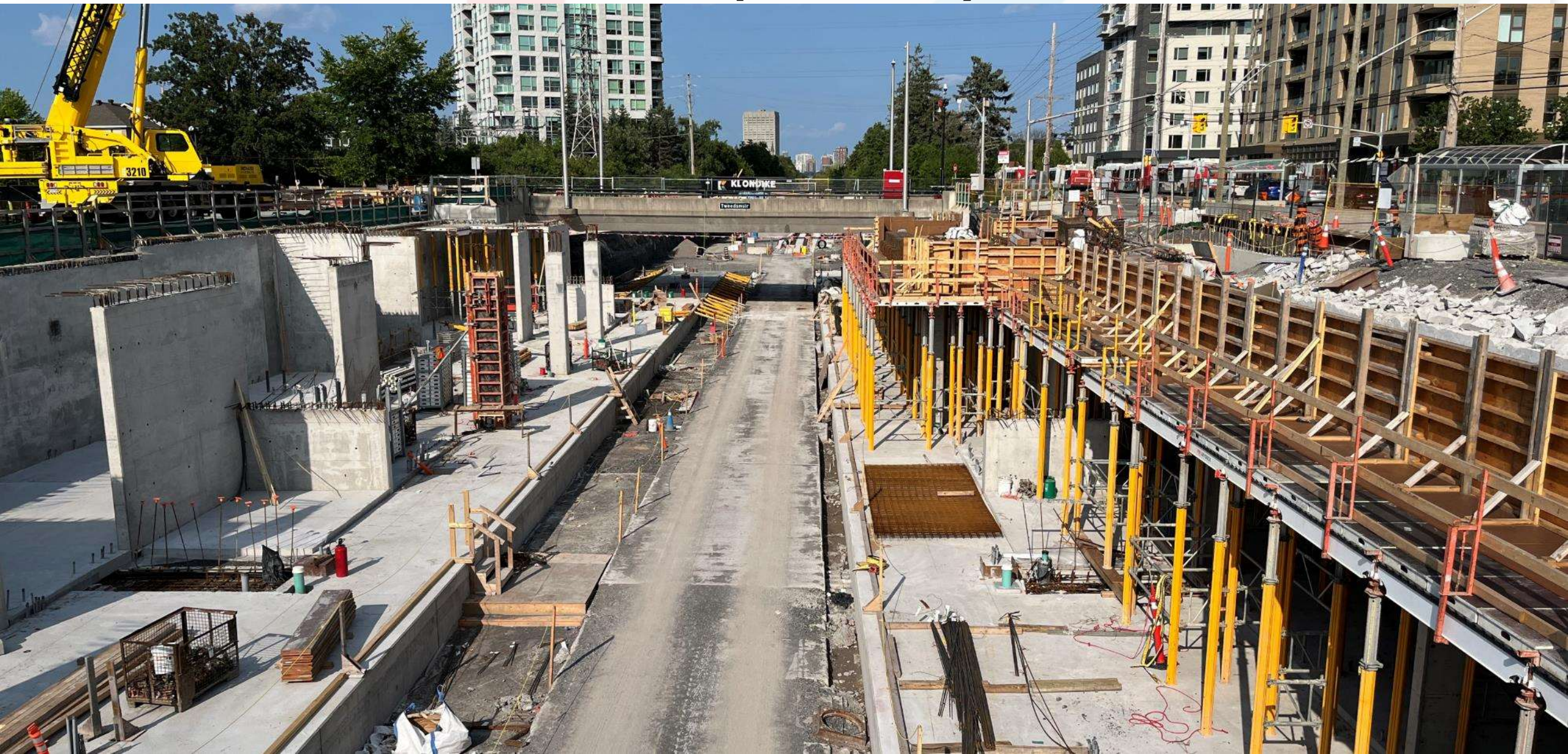
Tunney's Pasture connection to Line 1



Westboro Station



Westboro Station (Cont'd)



Kichi Zìbì Station



Kichi Zìbì Station (Cont'd)



Aug 6, 2024 1:42:12 p.m.
45.39217034820467N 75.75972779653966W
351 Dominion Avenue
Ottawa
Ontario



Sherbourne Station



Sherbourne Station (Cont'd)



New Orchard Station



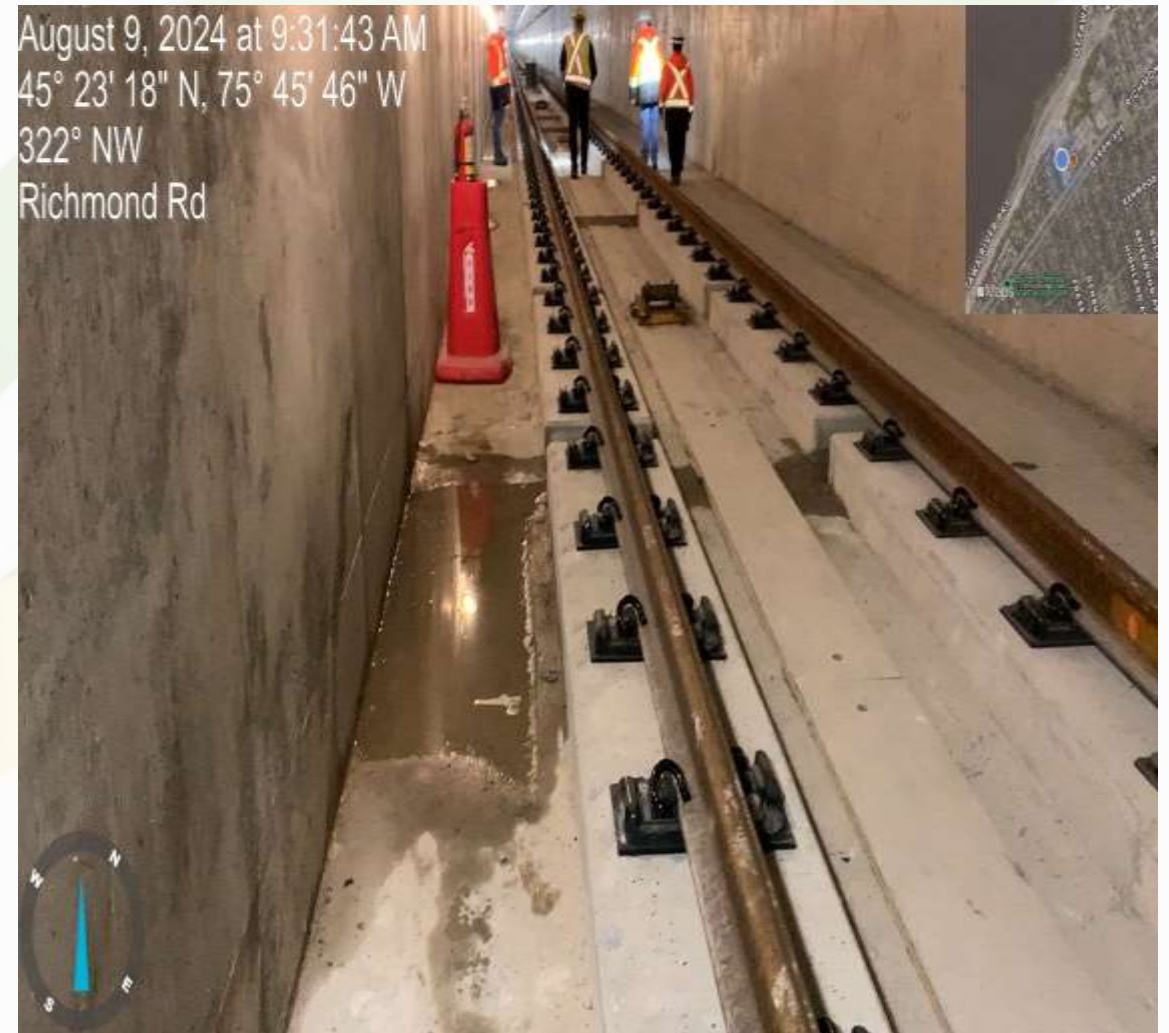
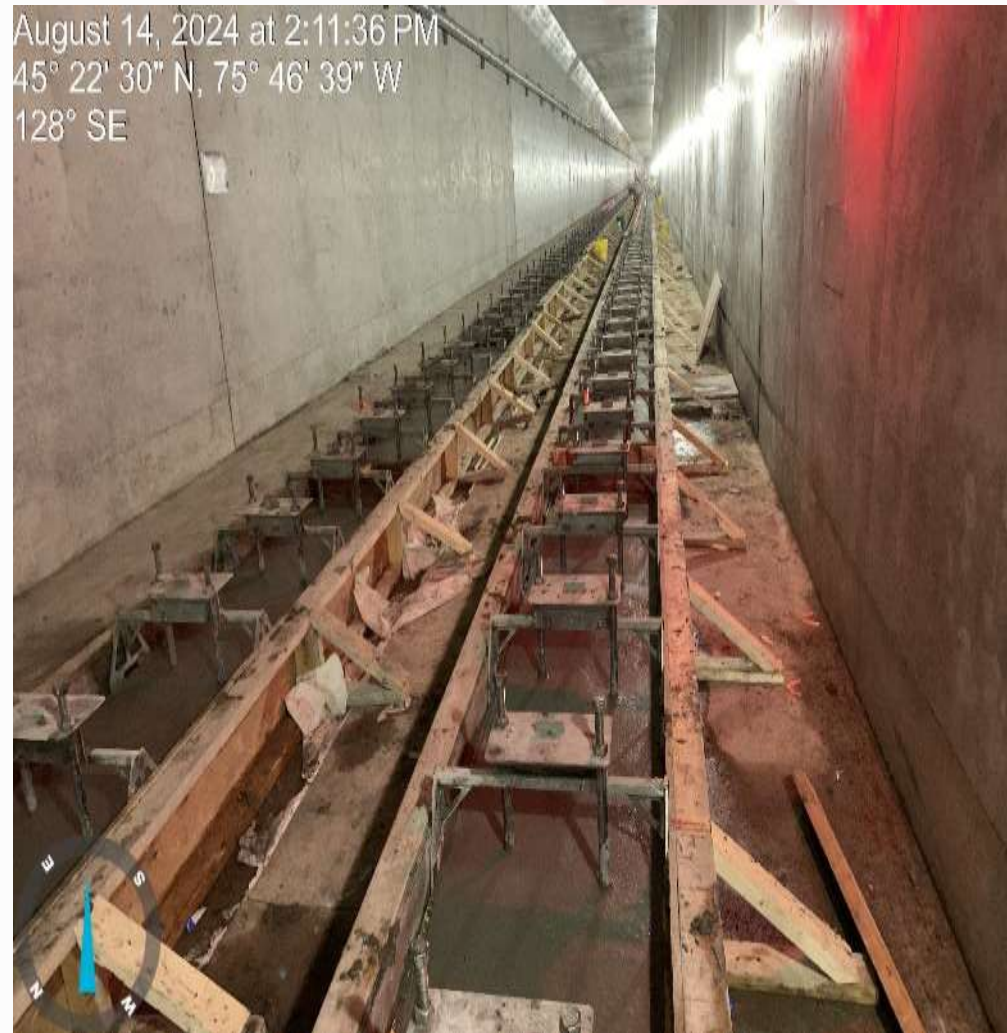
New Orchard Station (Cont'd)



Cut and Cover Progress



Cut and Cover Progress (Cont'd)



Cut and Cover Progress (Cont'd)



Cut and Cover Progress (Cont'd)



Lincoln Fields Station



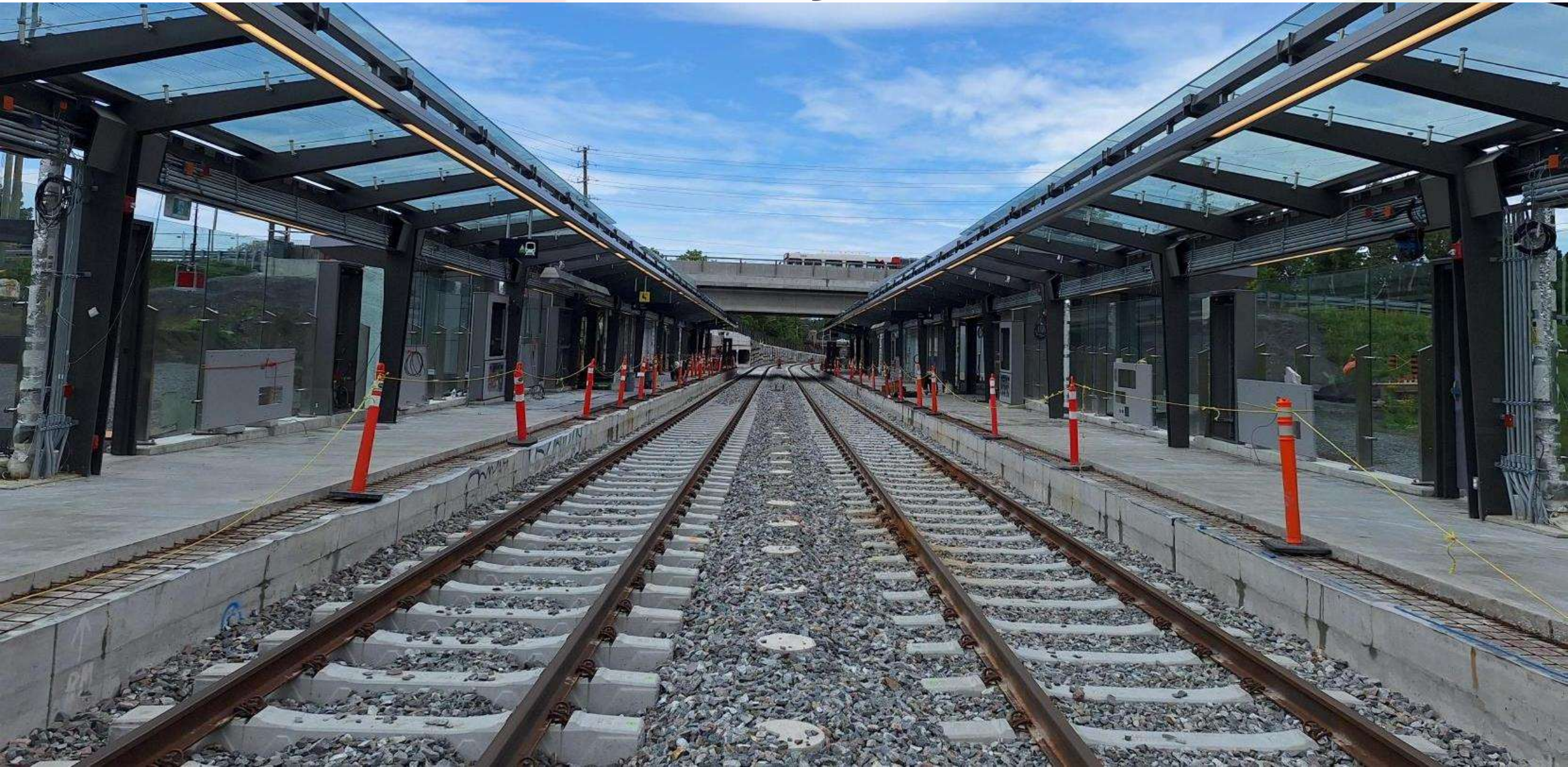
Connaught Flyover



Iris Station



Iris Station Guideway



Algonquin Station



Algonquin Station (Cont'd)



Algonquin Pedestrian Bridge



Queensview Station



Queensview Station (Cont'd)



Pinecrest Station



Pinecrest Station Guideway



Bayshore Station



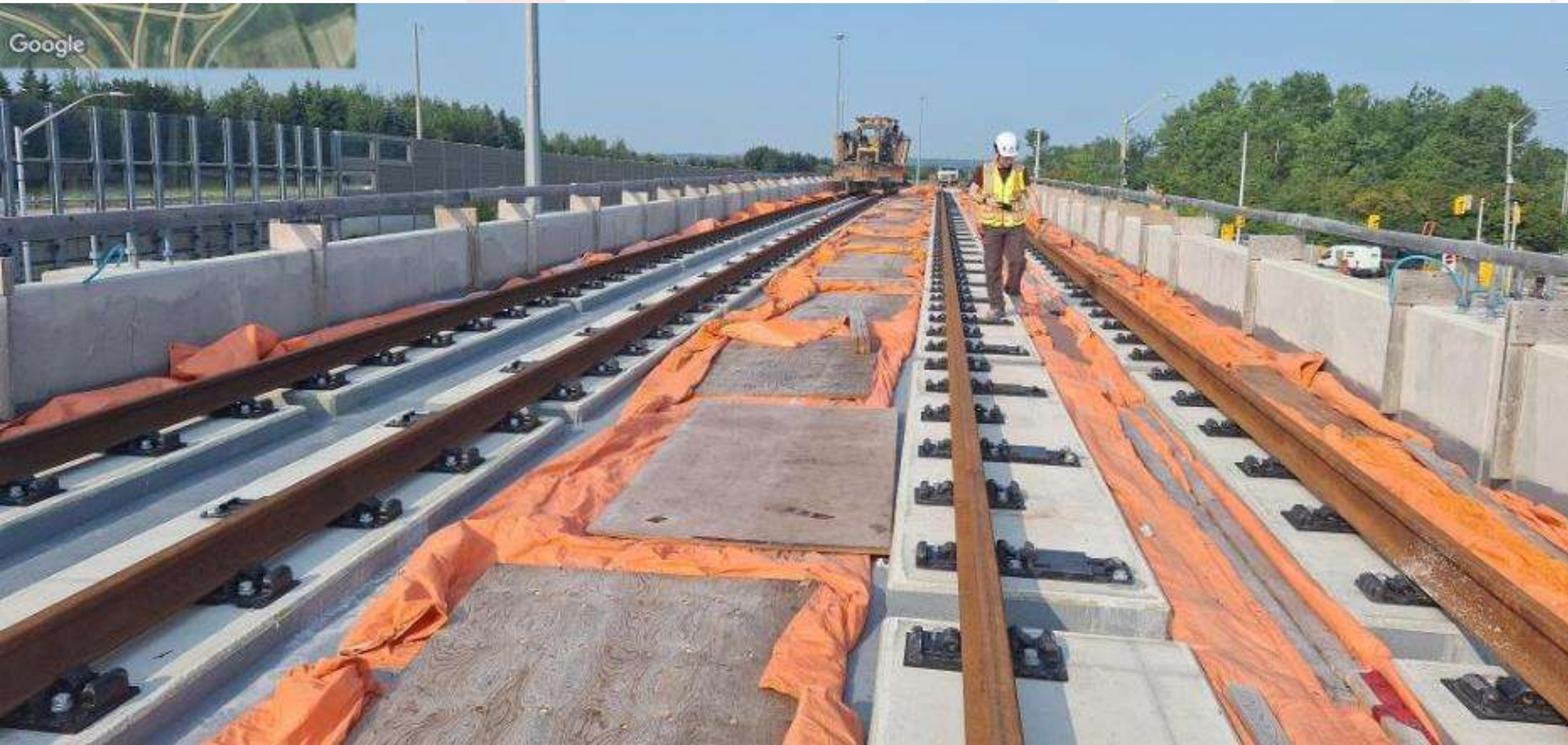
Bayshore Station (Cont'd)



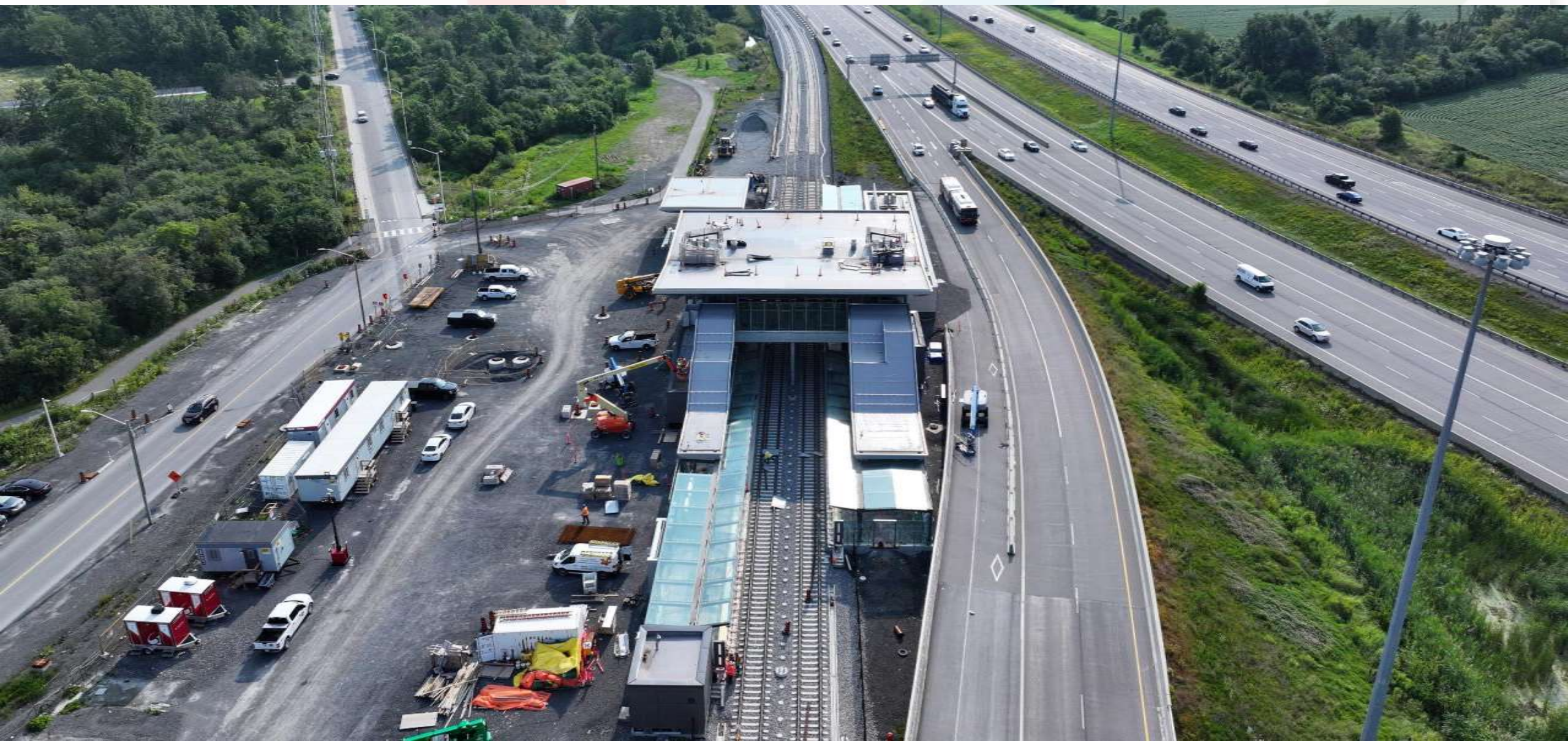
Holly Acres Rail Bridge



Holly Acres Rail Bridge (Cont'd)



Moodie Station



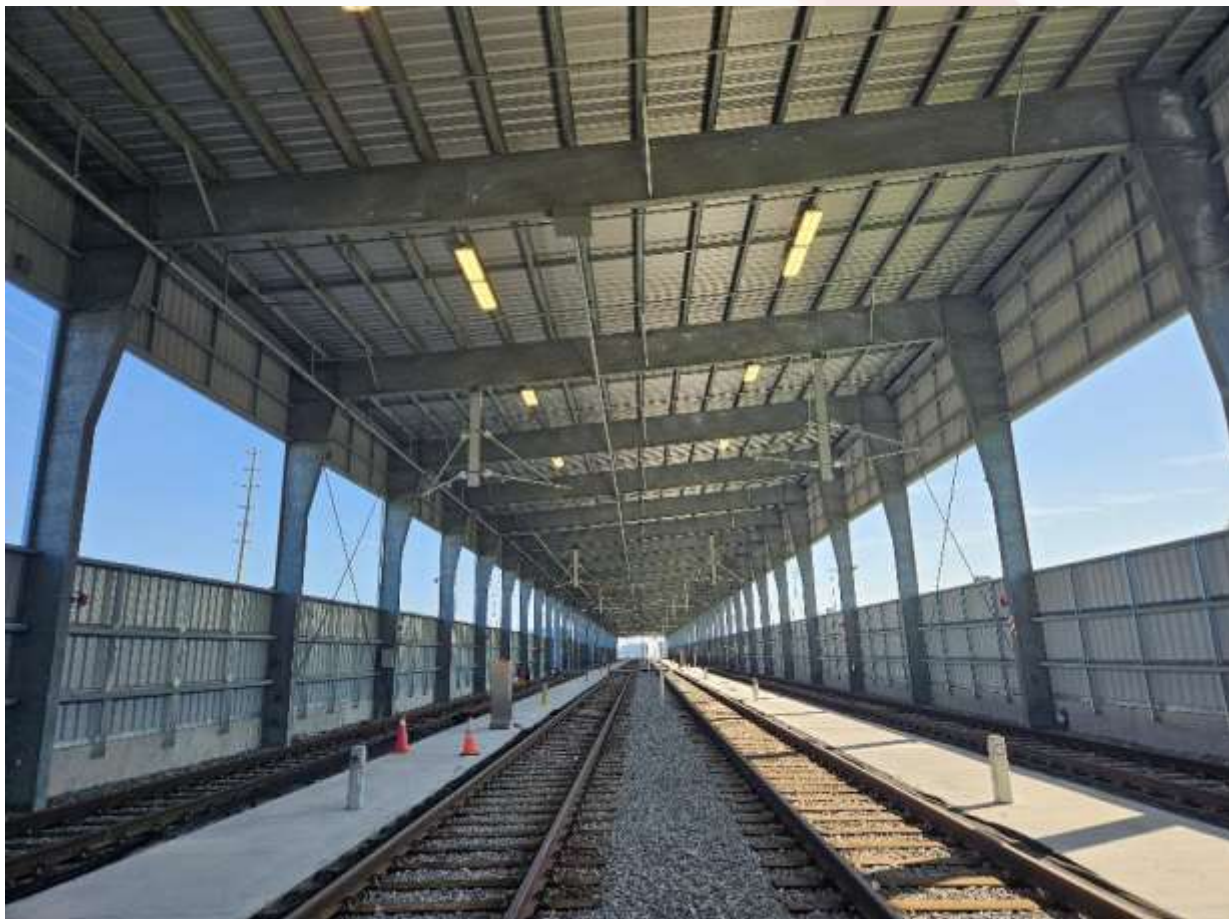
Moodie Station (Cont'd)



Corkstown Light Maintenance and Storage Facility (LMSF)



Corkstown LMSF (Cont'd)



Upcoming West Activities

- 🎯 **Fall 2024:** Completion of Pinecrest stormwater pond
- 🎯 **Fall 2024:** First trains at the LMSF
- 🎯 **Fall 2024:** Commissioning of the LMSF and start of train testing
- 🎯 **Ongoing:** Revitalizing Richmond Road Project
- 🎯 **Extending into 2025:** Installation of overhead catenary system on mainline

West Traffic and Mobility Impacts

Location	Timeline	Traffic & Mobility Impacts
Highway 417 and Pinecrest Interchange	Spring to Fall 2024	<ul style="list-style-type: none">• Impacts to 417 WB off-ramp to Pinecrest/Greenbank• Impacts to 417 WB on-ramp from Greenbank Northbound• Impacts to 417 WB on-ramp from Pinecrest southbound
Highway 417 and Richmond Interchange	Spring to Fall 2024	<ul style="list-style-type: none">• Impacts to 417 WB off-ramp to Richmond• Lane shifts and closures on Richmond bridge over Hwy 417

West Traffic and Mobility Impacts (*Cont'd*)

Location	Timeline	Traffic & Mobility Impacts
Corkstown Road	Ongoing	Multiple flagging lane closure to assist with construction and landscaping. Closures at Moodie & Corkstown for intersection construction.
Kichi Zibī Mīkan	Ongoing	Multiple long term lane closures to finish road modifications and realignment of the road.
Iris Street (Transitway and Adirondack Avenue)	Until end of 2024	Minor lane closures for utility relocation to service Iris Station.
Richmond Road (between New Orchard Avenue and McEwen Avenue)	Ongoing	Multiple closures for Richmond Complete Streets and construction of new Byron Linear Park.

Alstom Citadis Production (Stage 2)



Train

SOUTH EXTENSION PROLONGEMENT **SUD**

Bayview Station



Corso Italia Station



Gladstone new signaled cross-ride construction



Dow's Lake Station



Carleton Station



Rideau River Pedestrian Bridge



Mooney's Bay Station



Ellwood Diamond Grade Separation



Walkley Station



Albion Maintenance and Storage Facility (MSF)



Albion MSF (Cont'd)



Greenboro Station



South Keys Station



Hunt Club MUP and Rail Bridge



Leitrim Station



Bowesville Station



Bowesville Station (Cont'd)



Limebank Station



Uplands Station



Airport Station



Airport Station (Cont'd)



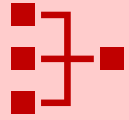
Traffic and Mobility Impacts

Location	Timeline	Traffic & Mobility Impacts
Pedestrian crossing at Gladstone	Ongoing	New signalized cross-ride
Hunt Club Road	Ongoing	New intersection and MUP work
Pedestrian crossings at Lester Road, Leitrim Road, and Earl Armstrong	Ongoing	New intersection and MUP work



Centralized communications hub: The Head-end

What is the Head-end?



City responsible for ensuring seamless coordination of all systems for safe and reliable operation. It must be fully functional during trial running to simulate real-life conditions.



New upgraded functionality for O-Train South Line, independent of Line 1



Where data from various field devices and systems is collected, processed, integrated, and stored, making it readily accessible for the line controllers.

Head-end components



Systems feeding into Head-end include CCTV, Intrusion Access Controls, SCADA, Passenger Information, Telephony, Networking Equipment, P25 radio (City scope)



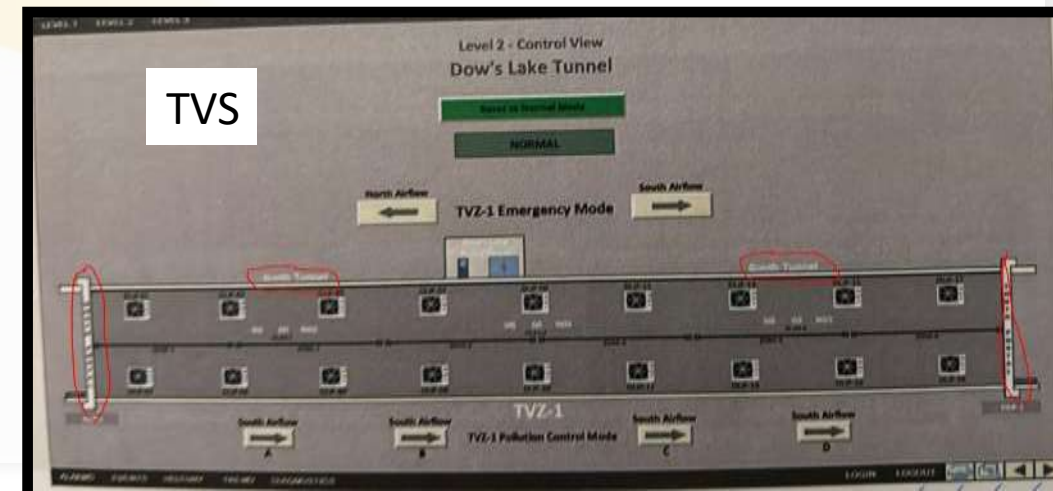
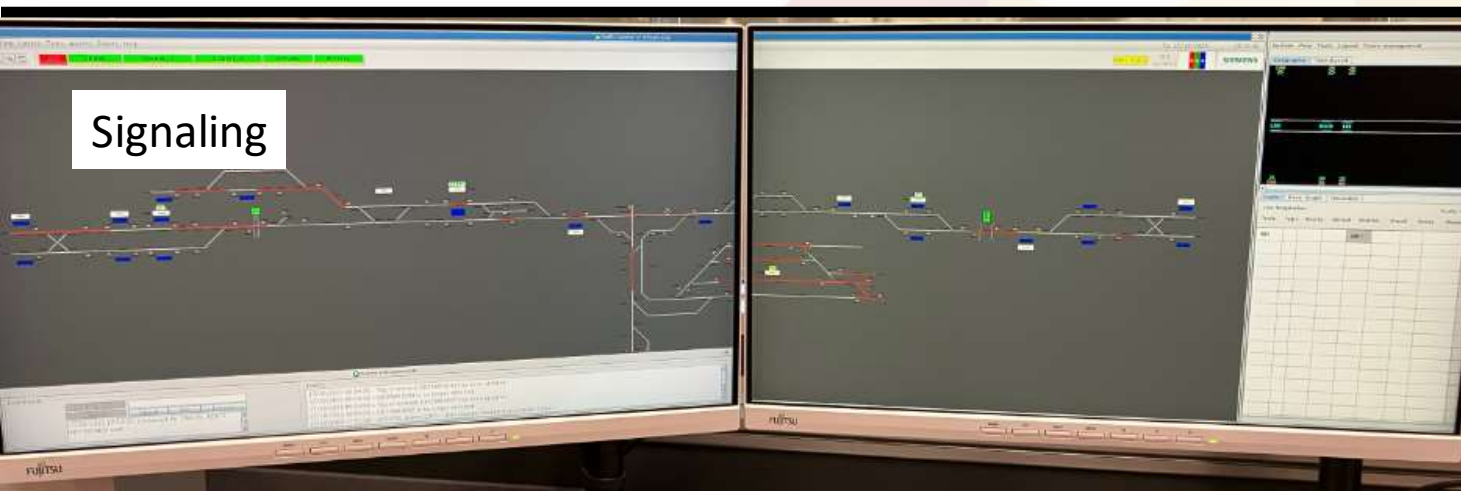
Tunnel Ventilation System, Signaling system (TNEXT scope)



Includes workstations, servers, fiber and copper cables, monitors

O-Train South Facts & Figures

- City-built system, independent of Line 1
- Over 1,470 devices on network
- Over 1,312 SCADA discrete points being monitored
- 525 System Tests Reports (SITs and SATs)

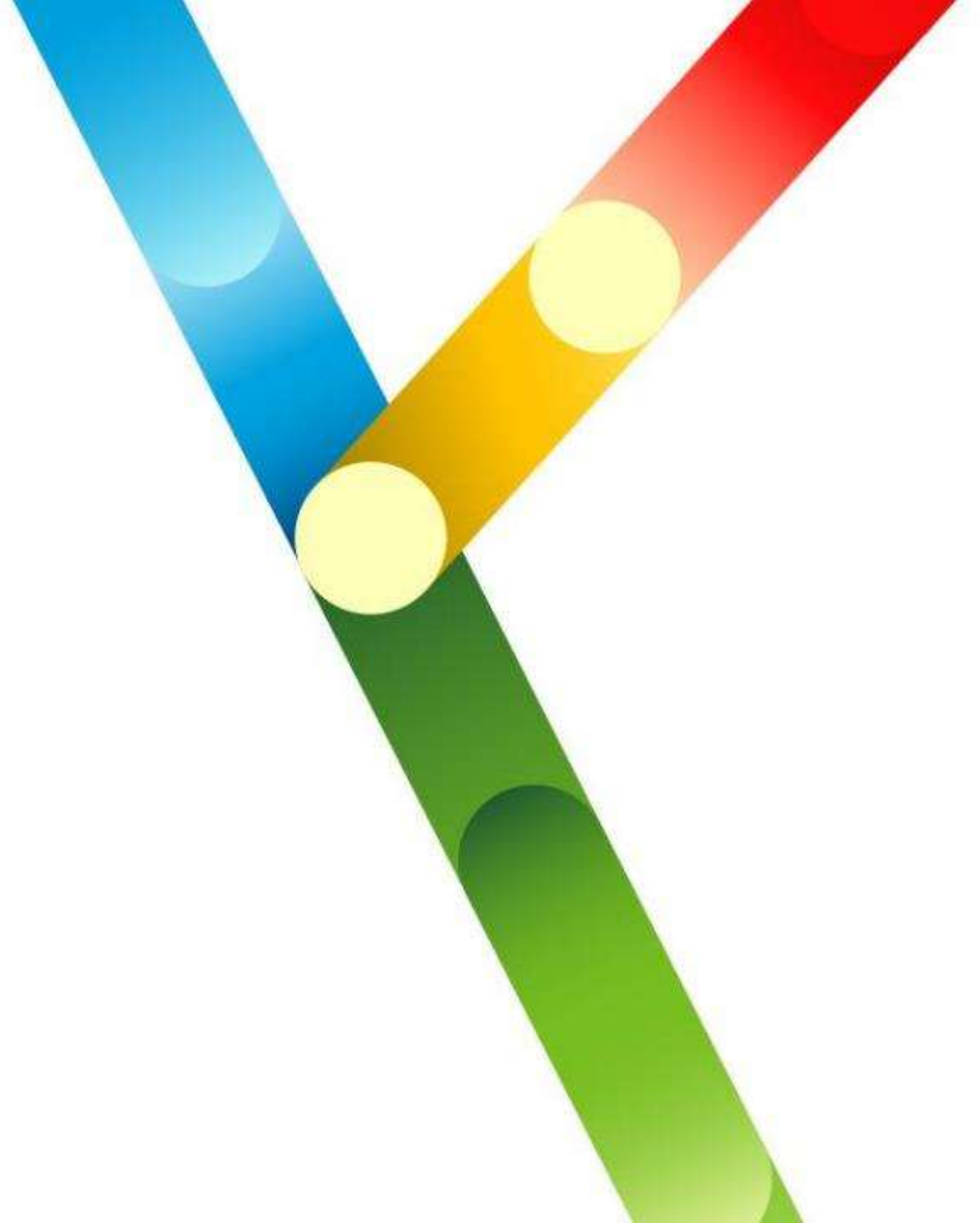


O-Train South Head-end Status

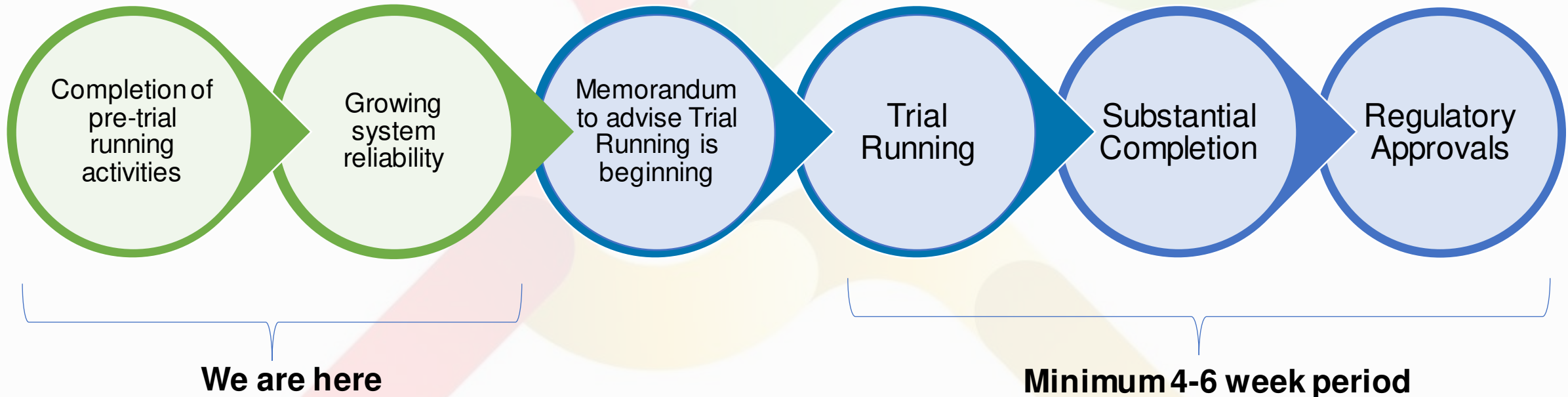
- System Integration Tests completed
- SCADA Alarm management being addressed
- Closing out deficiencies
- Head-end is operational and being used every day



Trial Running



Trial Running Status Update



Trial Running Prerequisites

- i. The integrated System Infrastructure has been tested.
- ii. The complete fleet is fully tested and ready for passenger service.
- iii. The complete signaling and train control system is fully tested and ready for service.
- iv. There are no outstanding defects affecting rail systems (track, signals, and comms).
- v. There are no major defects, safety defects, or incomplete vehicle modification programs.
- vi. All stations are substantially complete with only minor deficiencies remaining.
- vii. TNEXT is fully mobilized, fully trained and ready to commence maintenance.
- viii. TNEXT has submitted the Maintenance Verification & Validation Matrix.
- ix. The City is fully mobilized, trained and ready to operate the System.

Completion of Pre-Trial Running Activities and Growing System Reliability

1. System Infrastructure Finalization

- Addressing and resolving system infrastructure issues, particularly those related to scheduling, Signaling and Train Control System (S&TCS), and Automatic Train Supervision (ATS).
- Optimization of SCADA management to reduce alarms
- Finalization of APC function on 5 Stadler FLIRTs

2. Maintenance Management and Performance Reporting System (MMPRS) Functionality

- Consistent functioning of MMPRS by improving the accuracy of data reported from the ATS system.
- Working on generation of failure management scenario reports in degraded mode operations.

3. Diesel Rail Operator Proficiency

- Operators becoming fully proficient with fully functioning rail system. Continued practice is essential to improve operational performance and achieve the required service standards.

4. Vehicle Reliability

- Through daily use we are identifying issues and increasing reliability to achieve consistent performance.

Operations & Maintenance Training

- Training and development is a continuous activity over the life of the system. The initial round of critical safety training is required to be complete for Trial Running.
 - A. Diesel Rail Operators: Minimum of 54 required
 - 56 have successfully completed training with 7 more in progress and we anticipate some of the 9 instructors returning to active service to support Trial Running
 - Of the trained operators, some have moved to other positions, and/or are not available for active service
 - To sustainably support revenue service, we are in the process of increasing our numbers of trained Diesel Rail Operators
 - B. Diesel Rail Controllers: Minimum of 12 required; 12 complete (pending additional training); 1 in progress
 - C. Maintenance Team: Refresher on rules training completed.
 - D. Emergency Responder: Completed

Final Readiness

For a period of 3 weeks following trial running, OC Transpo and TNEXT maintenance personnel will continue with final preparations and readiness activities for the launch of the system.

- Activities that will be undertaken include;
 - Continued operation of the line exercising all aspects of daily service including launch and reduction of trains, maintenance of vehicles and related infrastructure, incident response etc.
 - Reviewing standard operating procedures, roles and responsibilities, communications with internal and external partners.
 - Conducting drills and exercises based on real situations that staff will encounter while in service.
 - Includes: troubleshooting of common train issues such as train doors, service recovery from a short delay, responding to passenger emergency intercoms, medical emergencies etc.

Final Readiness

- Two multi-stakeholder exercises including emergency response personnel:
 - Airport exercise: testing the emergency gate used by first responders to cross the track and respond to emergencies
 - Dow's Lake tunnel full scale exercise: simulation of an incident involving a train in the tunnel and test the emergency response
- A full-scale dress rehearsal involving hundreds of staff and volunteers will be undertaken
 - Allows for the testing of our SOPs and to observe how customers navigate and interact with the system, the trains, signage etc.
 - A number of scenarios will be undertaken to assess and validate staff's knowledge and understanding of operating procedures.
- Station familiarization tours
 - Allows our staff to become familiar with the system so front-facing staff are ready to support customers



Questions?