

# Highway 400 Bridge Rehabilitation Environmental Assessment

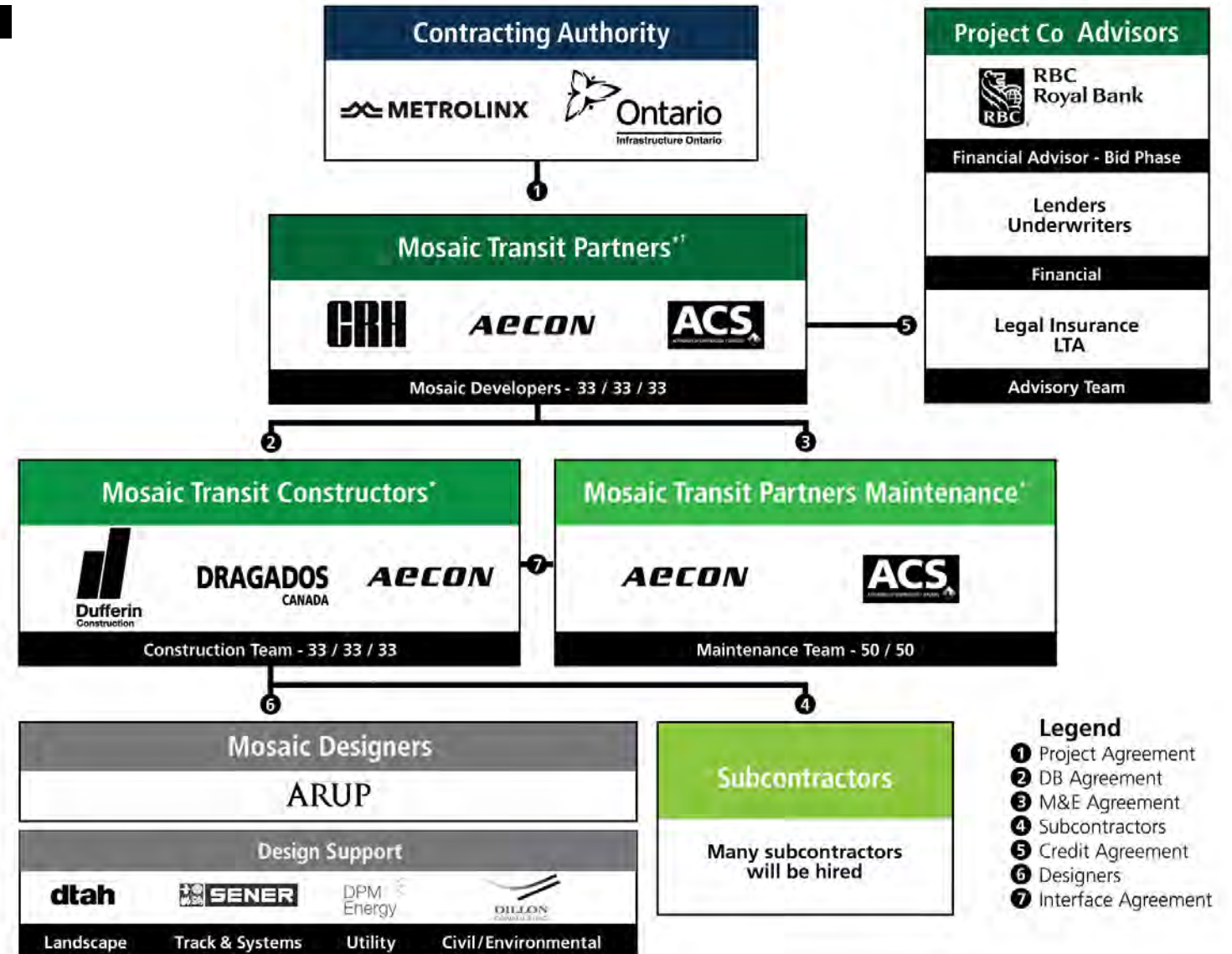
## Public Information Centres Information Boards

Rendering: Martin Grove LRT Stop, view from the west.



# Mosaic Transit Group

- **Mosaic Transit Group** is the consortium selected by **Metrolinx** and **Infrastructure Ontario** to design, build, finance during construction and maintain the **Finch West Light Rail Transit (LRT)** project.



\*Each Mosaic Transit Group Company is overseen by an Executive Committee

\*\* Also known as:



- Mosaic Developers
- Project Co





# Today's Objectives

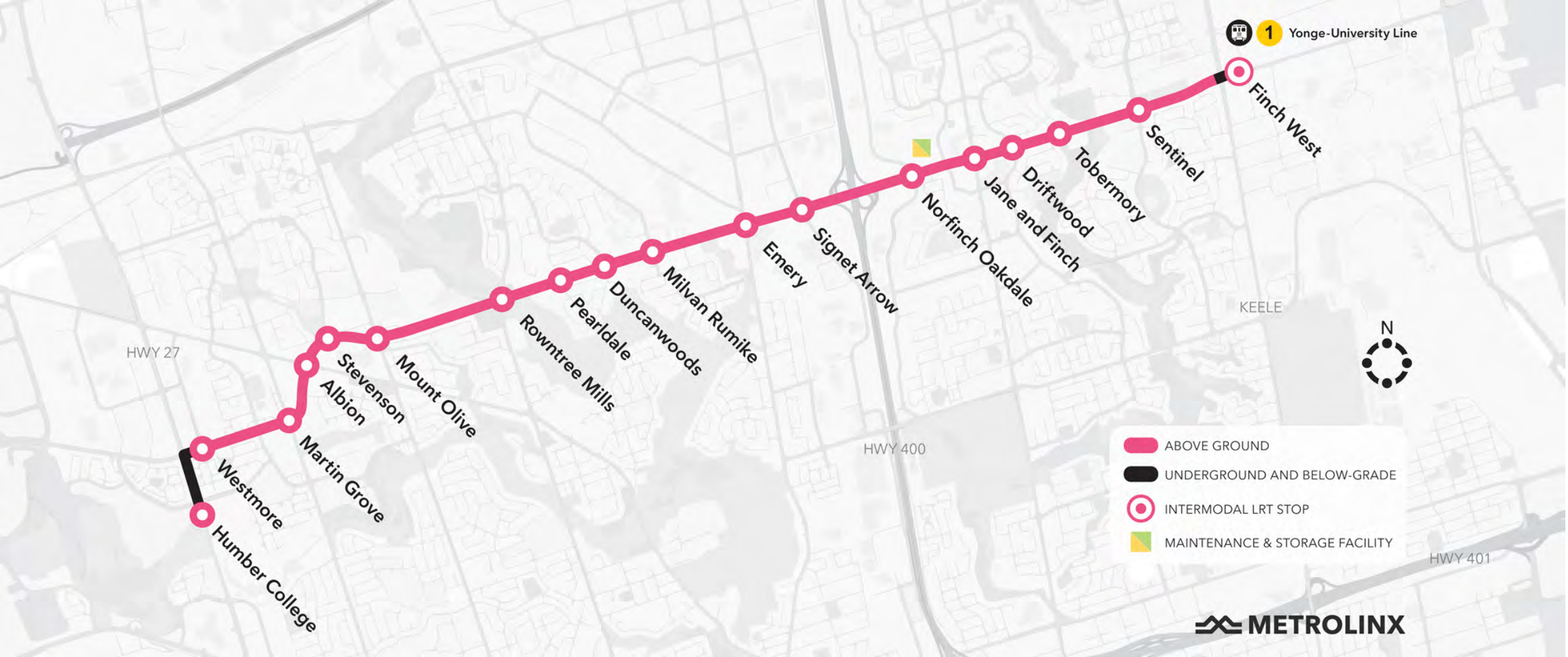
- Share information about the Project
- Consult specifically about the works that are planned for the Highway 400 overpass at Finch Avenue West
- Discuss Next Steps in the Process
- Receive your comments and answer your questions

Photo: Highway 400 Bridge at Finch Avenue West.





# Finch West LRT Route





# Finch West LRT Project Overview

- **11 km** of fast, reliable transit from Keele Street to Humber College
- **18 stops** – 16 surface, 1 underground and 1 below grade
- Renewal of **Highway 400** at Finch Avenue West
- Connections to **TTC, GO Transit, MiWay, Viva** and **Züm**
- Transit to **46,000** passengers per weekday
- **\$1.2 billion** commitment from the Province of Ontario including **\$333 million** from the Government of Canada
- Design, Build, Finance and Maintain (DBFM) model
- Owner – **Metrolinx**
- Operator - **TTC**
- Vehicle provider – **Alstom**

Rendering: Humber College Stop, portal, view from the west.





# Background

- **May 7, 2018:** DBFM Contract awarded to Mosaic Transit Group
- **December 2017:** RFP closed and Finch West LRT Community Office opened
- **December 2016:** Preparatory Works started by other subcontractors hired by Metrolinx
- **September 2015:** RFQ issued following signing of Master Agreement among Metrolinx, City of Toronto and TTC for the Finch West LRT – an 11km LRT line from Keele Street in the east to Humber College in the west
- **2010:** The Finch West LRT project announced as part of Transit City and the City of Toronto completed an EA process to replace bus service on Finch Avenue, between Yonge Street and Highway 27

Rendering: Finch West LRT Station, concourse level.





# Current Status

## Design

Mosaic Transit Group's constructors and designers are refining the Project's design, integrating key stakeholders' input, where possible, with:

- **Metrolinx**
- **Infrastructure Ontario**
- Ontario Ministry of Transportation
- TTC
- City of Toronto
- Vehicle Manufacturer
- Utility Companies
- Railway Companies (CP Rail)
- The public (including various community groups)

Rendering: Finch West LRT Station, upper level.





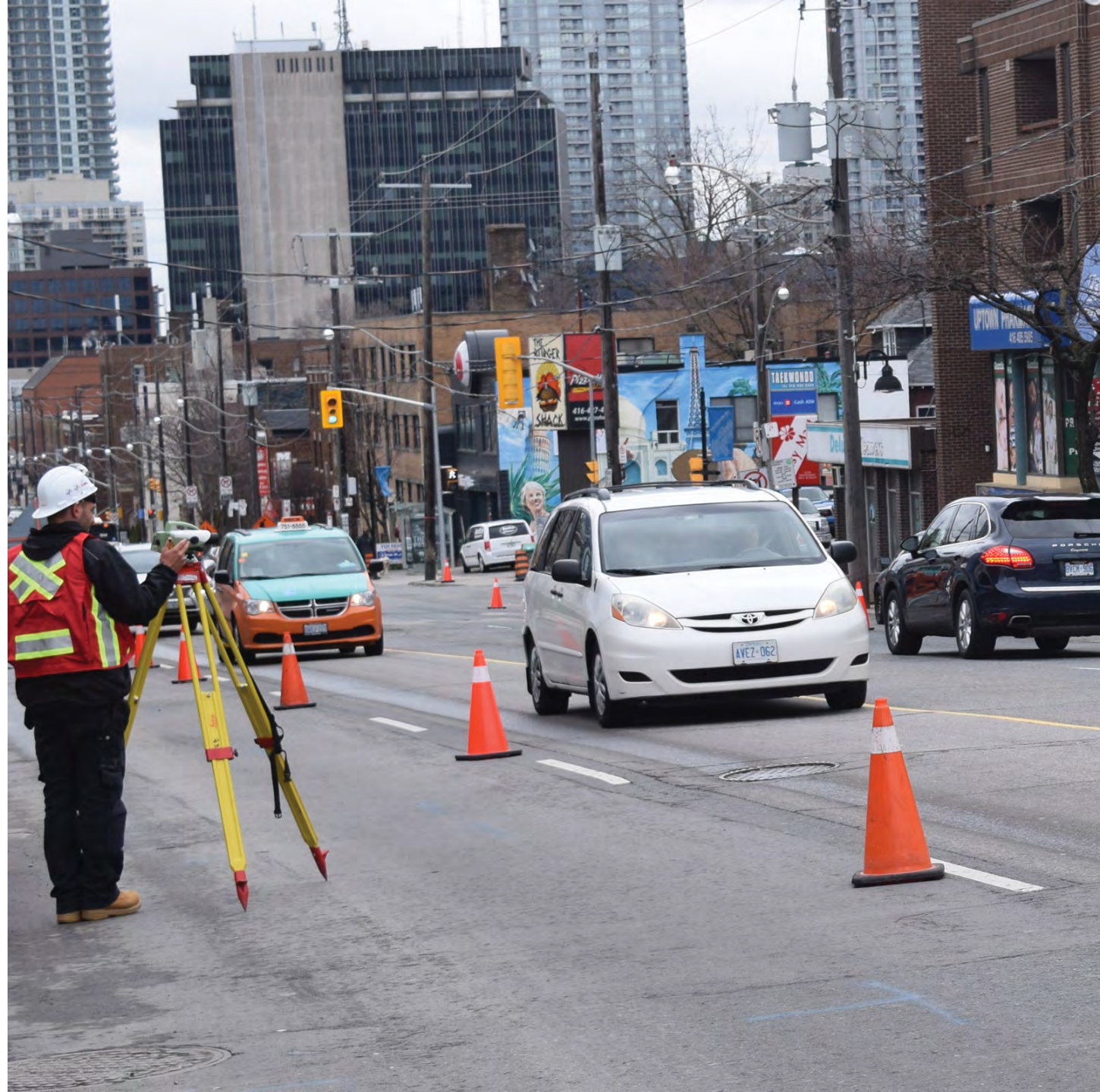
# Current Status

## Early Works – Fall 2018 to Spring 2019

Mosaic Transit Group's constructors are preparing the Project corridor for excavation and construction by:

- Surveying/Monitoring
- Manhole investigations
- Pre-condition surveys (noise/vibrations monitoring)
- Utility locates/marketing services/relocation
- Sub-surface utility engineering
- Site preparation
- Bridge abutment repairs

Photo: Road survey.





# Construction Starts

## Spring/Summer 2019 – What to expect

Mosaic Transit Group's constructors will begin construction at these sites:

- Along Finch Avenue, including utilities relocation and abutment rehabilitation below Highway 400 Bridge
- The Maintenance and Storage Facility
- Finch West LRT Station

Photo: Drill rig on site.





# What to expect during construction

- **Changes to Travel Patterns** – One lane will remain open in each direction on Finch Avenue to reduce congestion at all times. Additional lane closures may be in place during non-peak travel times.
- **Detours** – Will be required. Please watch for notices and signs.
- **Dust** – Construction projects cause dust. Watering trucks will be used to help reduce dust.
- **Noise** - Heavy equipment will be used periodically, creating noise, which we will monitor and take action to minimize noise levels.
- **Notices** - If you live or work nearby, you will receive notices about construction work. **Register with us today** to receive updates.
- **Advertisements** in local media outlets (e.g. newspapers).
- **Road signs.**

Photo: Sample signs.





# Approach to managing disruptions

Together with Metrolinx, Mosaic Transit Group's constructors will develop and execute plans to:

- **Ensure public health and safety.**
- **Manage traffic** control and coordinate with Emergency Services and transit.
- **Communicate early** and often to local residents, the general public, local businesses and institutions.
- **Have monthly meetings** with key stakeholders in the community.
- **Maintain access** to property and local businesses.
- **Provide directional signage** to identify access to local businesses.
- **Use message boards** to alert motorists of estimated travel time through the corridor.
- Conduct **Public Events/Meetings**

Photo: Public tour of a LRT Maintenance and Storage Facility.





# Approach to managing disruptions

Engaging the community is important to us!

- **Meaningful and accurate** background/context so that the public and stakeholders can make informed comments and provide input on the Project.
- **Timely and transparent** information to engage the public and other stakeholders early and often.
- **Two-way communication** for a fair and respectful dialogue between Metrolinx/IO/MTG and the public and other stakeholders.
- **Allow for broad solutions** to provide a corridor-wide focus as well as local outreach to continually inform the public and other stakeholders.

Photo: Pixelbay.com



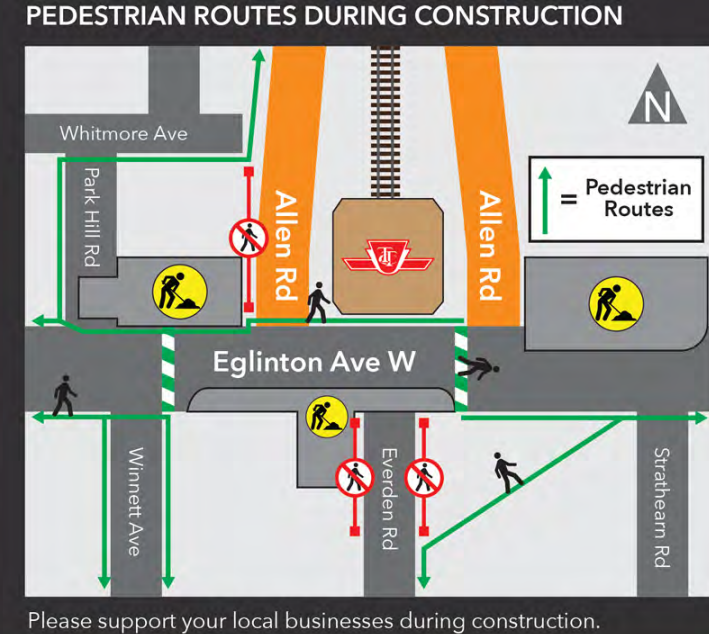


# Business Support

Together with Metrolinx, Mosaic Transit Group will:

- Give businesses up-to-date information on construction activities and timing; where they are directly impacted, they will be supported through significant engagement.
- Offer training to businesses.
- Develop and implement Shop Local Campaign in collaboration with BIAs.
- Produce Advertising, Signage and Wayfinding.
- Participate in Community improvement activities (e.g. window washing, participation in community events).
- Beautify neighbourhoods.

Collage: Wayfinding map and sample of Open for Business signage.



*Open* for Business!  
90 Eglinton Ave. East Toronto



# Community Benefits

- Metrolinx recognizes that its major infrastructure investments should provide benefits for the communities in which it works including employment, training, apprenticeship, local suppliers and social procurement opportunities.
- Toronto Transit Projects include a Community Benefits Program (Eglinton Crosstown LRT and the Finch West LRT).
- Mosaic Transit Group is committed to hiring locals and apprentices, as well supporting small and medium-sized businesses and social enterprises.
- The Community Benefits Program offers opportunities to businesses in the community and across the region. It supports social enterprises and also creates employment and training opportunities for historically disadvantaged and equity seeking individuals with multiple and systemic barriers to employment.

Photo: Partnership with Habitat for Humanity to provide apprenticeship training.





# Public Realm Improvements



Rendering: Martin Grove Stop



# Public Realm Improvements





# Public Realm Improvements



Rendering: Traction Power Sub-station at Keele.



# Highway 400 Bridge at Finch Avenue

The Finch West LRT alignment will pass below the existing Highway 400 Bridge at Finch Avenue, requiring bridge rehabilitation.

Planned rehabilitation activities will be performed using a Rapid Bridge Replacement (RBR) approach.

Photo: Highway 400 Bridge at Finch Avenue West.





# Construction Approach

## Traditional Bridge Replacement Method

- Requires long duration of lane reductions and diversions during construction.

## RBR Approach

- Reduced traffic disruptions - from many years to weekend and night lane closures.

## Benefits of the RBR Approach:

- Public health and safety will be maintained throughout.
- Most of the new bridge construction takes place beside the highway and not in the road, resulting in less traffic impacts.
- The crew works faster to build the new bridge as the work is not taking place alongside traffic.
- A new bridge is available in less time than a traditional bridge rehabilitation method.
- Necessary Highway 400 closures will occur only overnight or on specific weekends.

Photo: Sample of a staging area for RBR works.





# EA Process

- Complete an MTO Class Environmental Assessment (EA) for the Rapid Bridge Replacement.
- Consult with members of the public and stakeholders.
- Identify anticipated impacts associated with the bridge replacement.
- Identify mitigation measures to incorporate into the design and construction planning.

Photo: Highway 400 Bridge at Finch Avenue West.



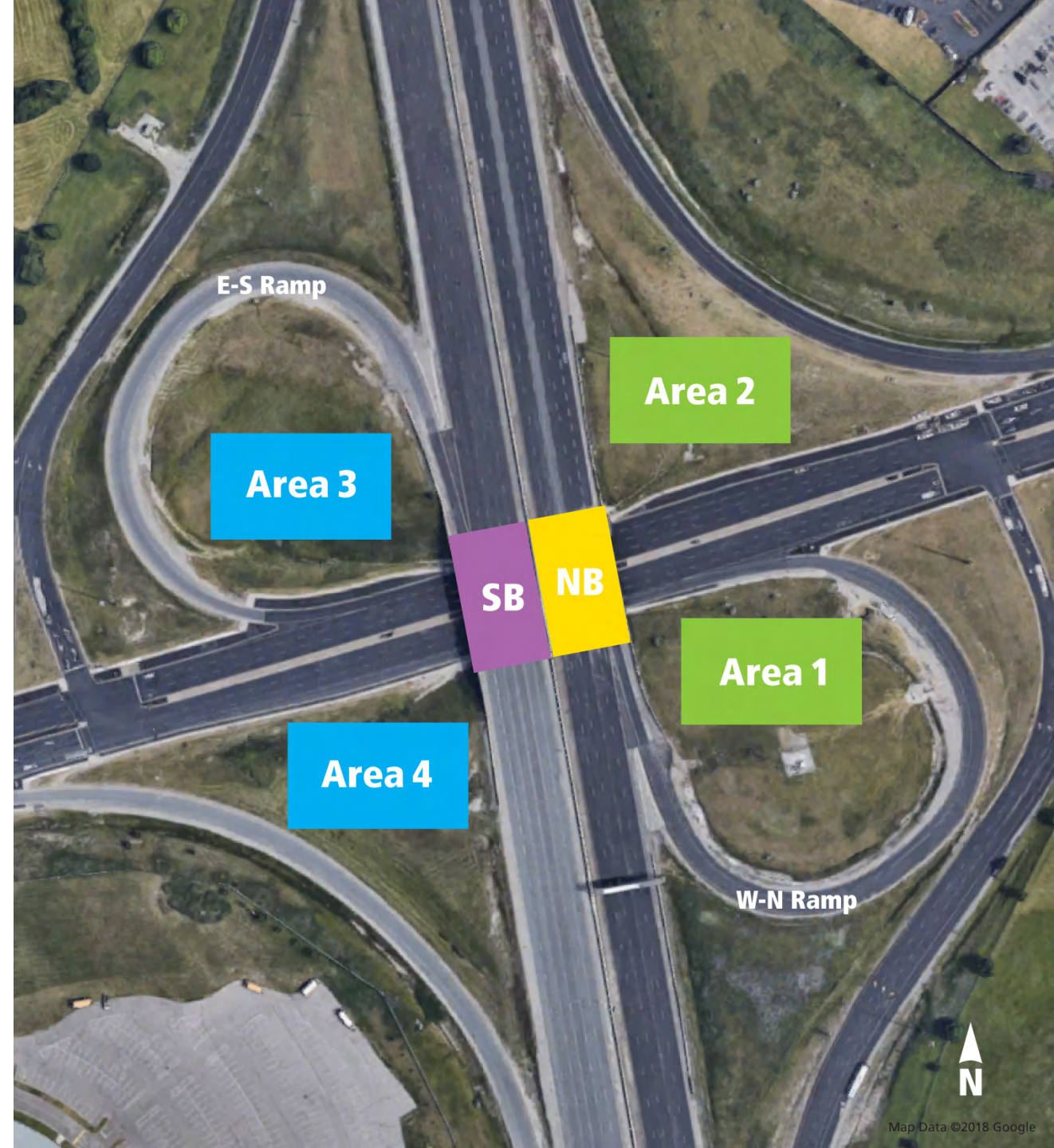


# Rapid Bridge Replacement Overview

## Objective: Minimize Disruptions

- Superstructures (decks and girders) will be constructed next to Highway 400 and not impact traffic.
- Existing bridge substructure (abutments and piers) will be rehabilitated from Finch Avenue in 2019 to 2020.
- Northbound and southbound girders and decks will be replaced in separate weekend operations in Spring/Summer 2020.
- Old girders and decks will be demolished once new structures are in place.

Photo: Satellite image to illustrate lay down areas.





# Rapid Bridge Replacement Sample



Construction of new deck in staging areas.



Temporary support structures in staging areas.



# Rapid Bridge Replacement Sample



**Self Propelled Modular Transporter (SPMT)** - exchanging old deck and girders for new.



**SPMT** - delivering new deck and girders for placement on substructure.



# Northbound Closure for RBR – Spring/Summer 2020

Highway 400 at Finch Avenue interchange



**NB** – Northbound, **SB** – Southbound, **EB** – Eastbound, **WB** – Westbound



# Northbound Closure for RBR – Spring/ Summer 2020

Highway 400 at Highway 401  
interchange

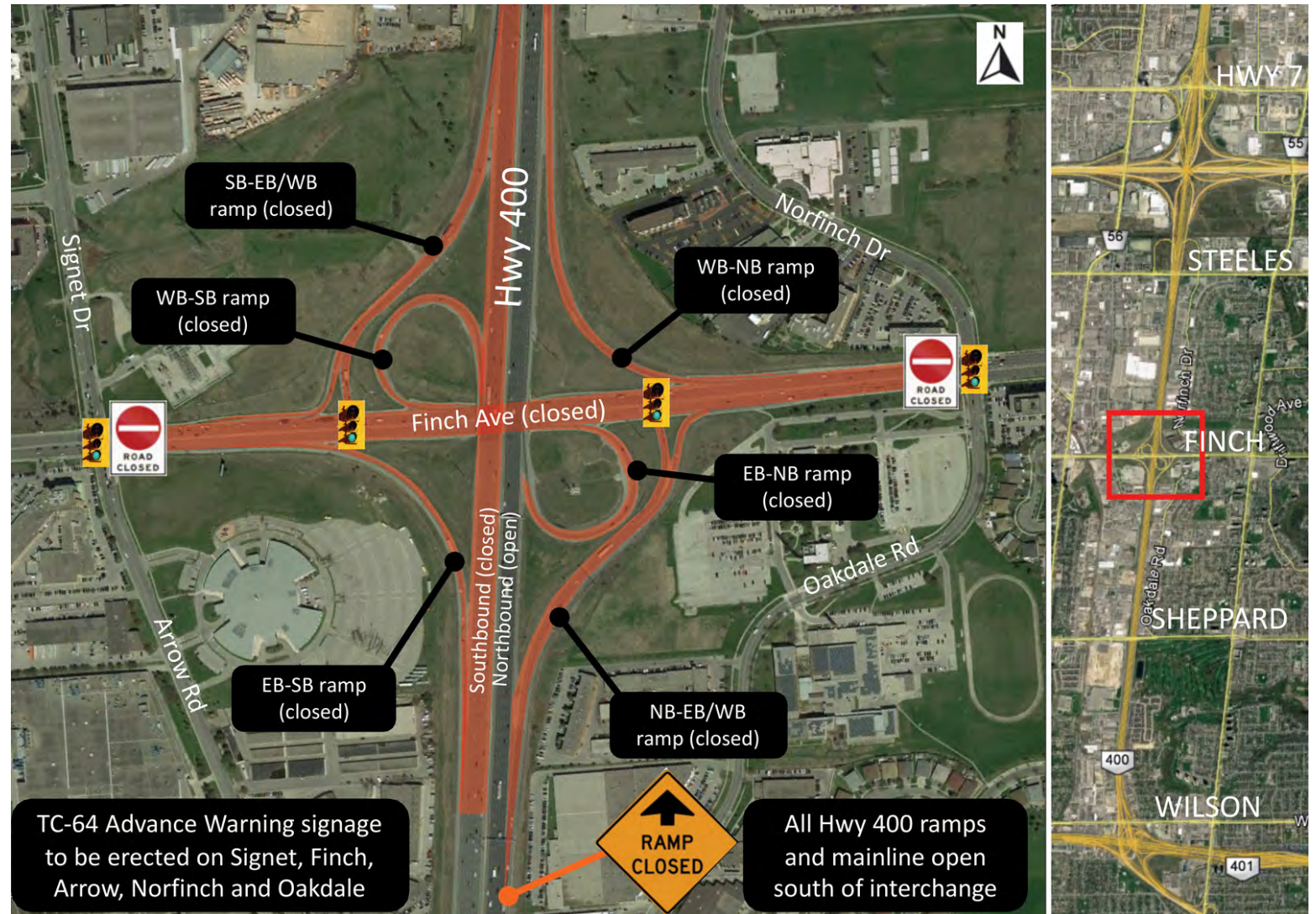


**NB** – Northbound, **SB** – Southbound, **EB** – Eastbound, **WB** – Westbound



# Southbound Closure for RBR – Spring/ Summer 2020

Highway 400 at Finch Avenue  
interchange



**NB** – Northbound, **SB** – Southbound, **EB** – Eastbound, **WB** – Westbound



# Southbound Closure for RBR – Spring/Summer 2020

- Highway 400 at Highway 7
- Highway 407ETR
- Steeles Avenue interchange



**NB** – Northbound, **SB** – Southbound, **EB** – Eastbound, **WB** – Westbound



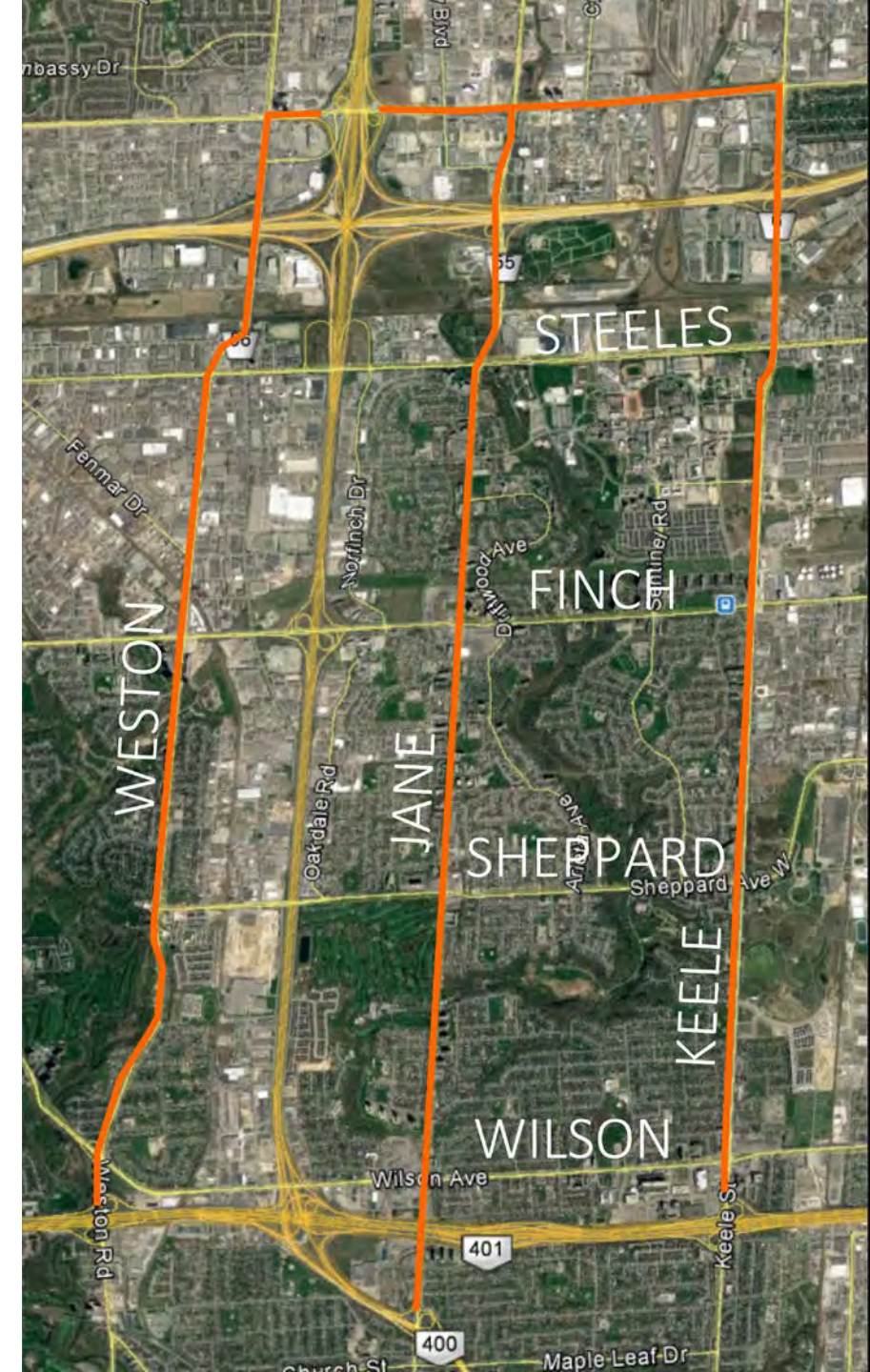
# Alternate Routes During Highway 400 Closures for RBR

## Keele Street

- Major arterial road, four to six lanes
- ~12 km between Highway 401 and Highway 7

## Other alternate north-south routes:

- Highway 427
- Highway 27
- Allen Road
- Highway 404





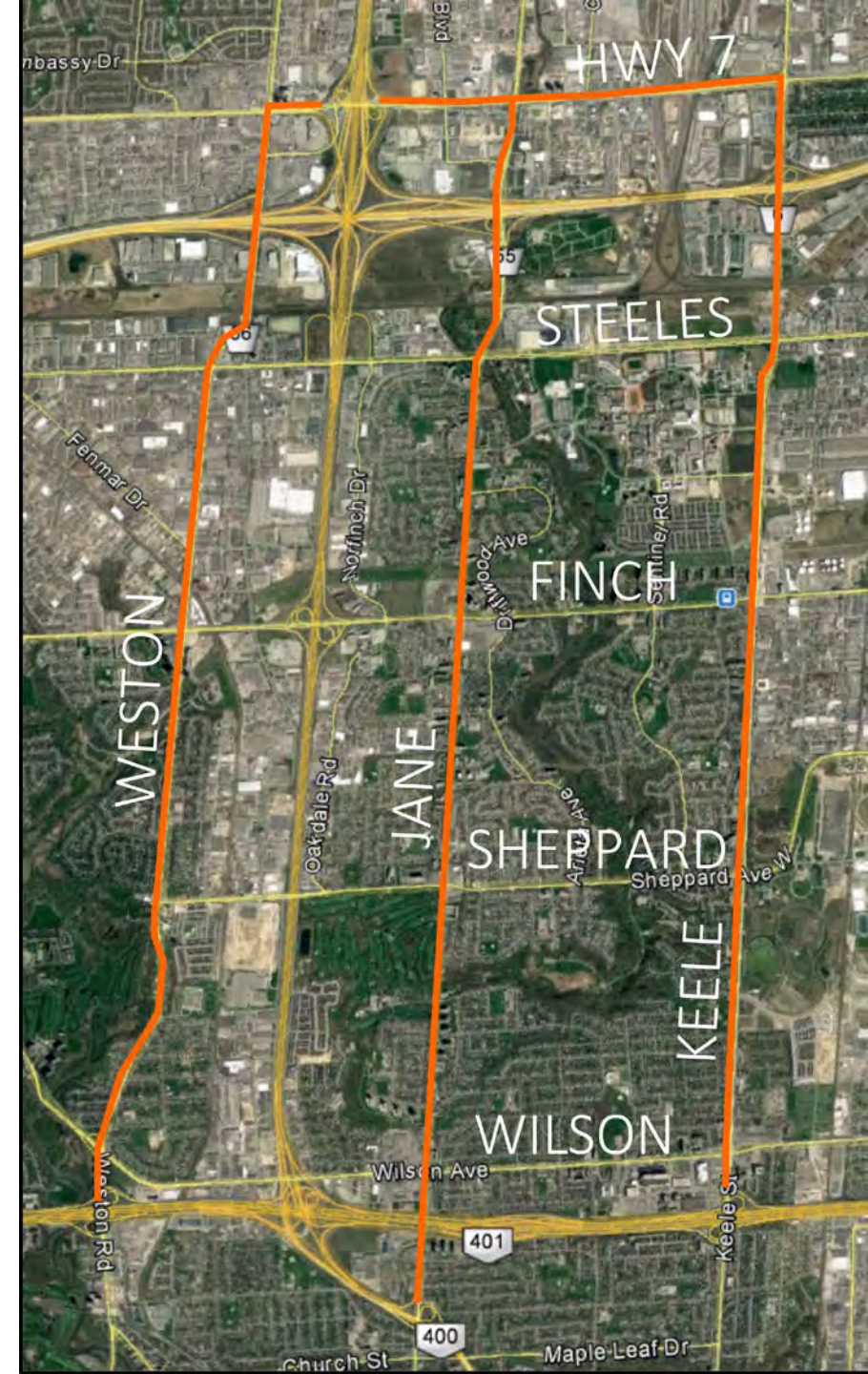
# Alternate Routes During Highway 400 Closures for RBR

## Weston Road

- Major arterial road, four lanes + one centre turning lane
- ~ 9 km between Highway 401 and Highway 7

## Other alternate north-south routes:

- Highway 427
- Highway 27
- Allen Road
- Highway 404





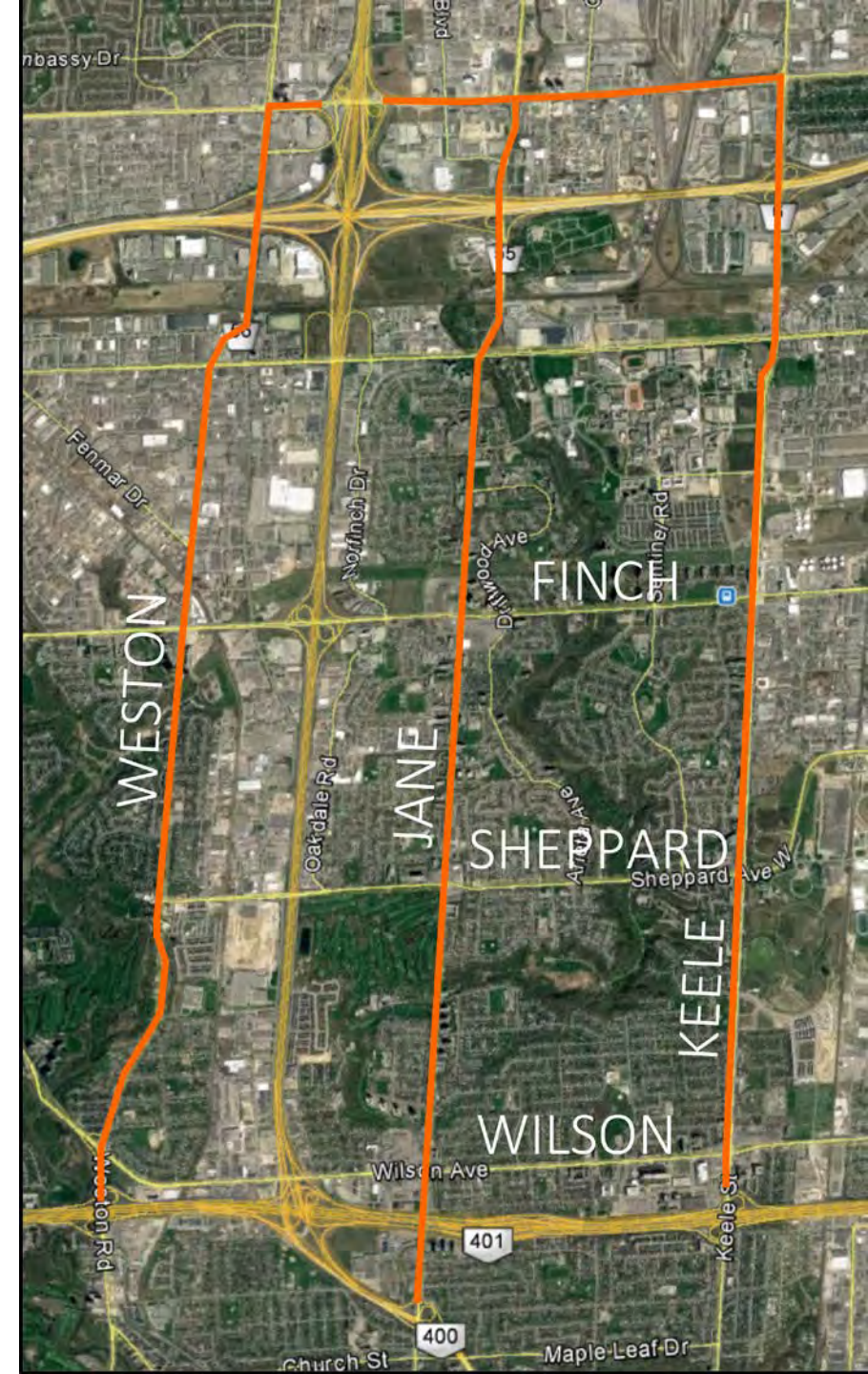
# Alternate Routes During Highway 400 Closures for RBR

## Jane Street

- Major arterial road, four lanes + one centre turning lane
- ~ 10 km between Highway 400, Jane Street and Highway 7

## Other alternate north-south routes:

- Highway 427
- Highway 27
- Allen Rd
- Highway 404



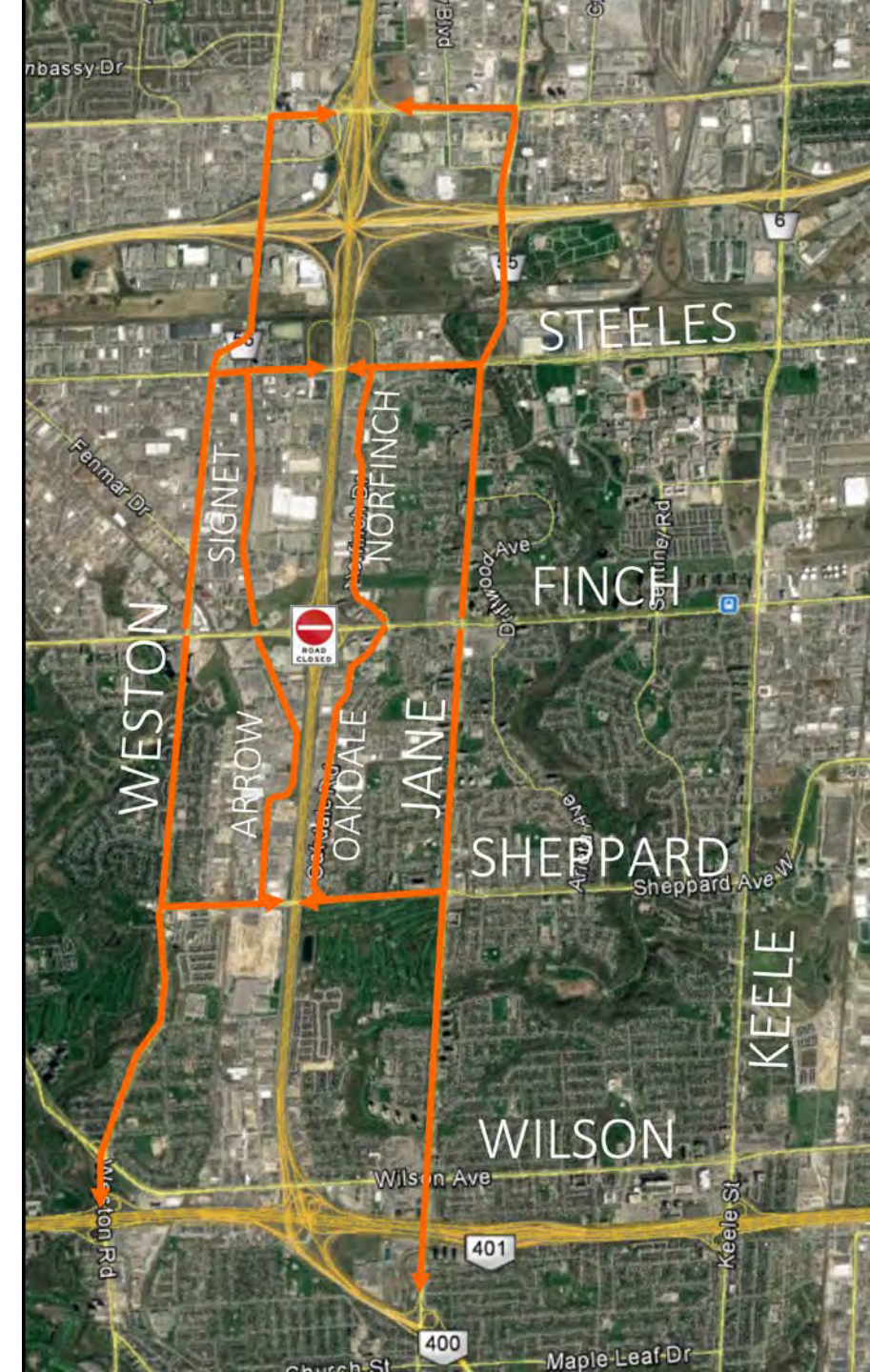


# Alternate Routes During Finch Avenue West Closure for RBR

- Finch Avenue West full closure between Arrow Road/Signet Drive and Oakdale Road/Norfinch Drive
- Restricted access to Highway 400 and Finch Avenue West
- Traffic will be diverted to alternative routes within the immediate area
- Advance warning signage will identify alternative routing options
- Advance public notification

## Alternate Routes During Finch Avenue Closure:

- **For northbound travel:** Weston Road, Signet Drive, Norfinch Drive, Jane Street
- **For southbound travel:** Weston Road, Arrow Road, Oakdale Road, Jane Street
- **Across Highway 400:** Steeles Avenue and Sheppard Avenue
- **To Highway 401:** Weston Road and Jane Street





# Highway 400 Bridge Timeline



## Fall 2018

- EA Study for Highway 400 RBR begins
- Group 'B' Notice of Study Commencement issued
- Open house advertised in print, on Mosaic's website and Metrolinx's Twitter @FinchWestLRT and with door-to-door notices

## Early Winter 2019

- Review and assess stakeholders' feedback
- Potential for MTO to step study down from Group 'B' to Group 'C'

## Spring - Fall 2019 (Pending outcome of EA Process)

- Bridge construction begins in temporary areas adjacent to the highway

## Spring - Summer Early 2020 (Pending outcome of EA Process)

- Intermittent night or weekend lane closures for removal of old girders/decks and installation of new bridge/completion
- Partial closure of bridge over two separate weekends
- New bridge fully open to traffic



# Next Steps in the EA Process

- Allow 30 days for public to provide comments/feedback.
- Assess and respond to all feedback.
- With MTO, determine if the EA study will proceed as Group 'B' or Group 'C'.
- If the Project is stepped down to a Group 'C', a Notice of Project Step Down will be issued for a 30-day comment period and an Environmental Screening Document prepared for internal use.
- If the Project remains a Group 'B', a Transportation Environmental Study Report will be prepared and made available for a 30-day public review period.
- **The Finch West LRT project has cleared Transit Project Assessment Process and this EA study is solely for the plans associated to the Highway 400 Bridge Rehabilitation at Finch Avenue West.**

Rendering: Sentinel Stop, platform west view.





# Extensive Consultation

We are engaging with various stakeholders, including but not limited to:

- Members of the public
- City of Toronto
- York Region
- Metrolinx
- Vaughan
- Ministry of Environment, Conservation and Parks
- Ontario Ministry of Transportation
- 407ETR
- Emergency Services Providers in the City of Toronto and Vaughan Region (i.e. local and regional police, fire, and ambulance services)
- Institutions (i.e. local hospitals, school boards)
- Canadian Fuels Association
- Business Owners
- Retail Malls
- Business Improvement Areas
- Trucking Associations
- Transit Operators and Bussing Companies
- Taxis and Limousine Companies
- Utility Providers
- Places of Worship

Photo: Business Opportunities Information Session.





# We want to hear from you

Is there anything else that should be considered?

How could we change the traffic management staging?

Do you have any other comments?

## Provide your feedback:

- Face-to-face to our team in the room
- Written feedback to team
- Online feedback at [www.mosaictransit.com](http://www.mosaictransit.com)

Rendering: Entrance to Humber College Stop, view from the south-east.







**Finch**  
WEST LRT

Thank you

Questions?

Rendering: Martin Grove LRT Stop, view from the west

