


Metrolinx On Corridor Program – Public Consultation Briefing


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OVERVIEW OF ONCORRIDOR (ONCORR) PROGRAM

Metrolinx is on route to transform its rail system with the implementation of the GO Rail Expansion Program - an investment program intended to provide:






MORE ALL-DAY SERVICE




SERVICE IN BOTH DIRECTIONS




TRAINS EVERY 15 MINUTES

Over 205 km of new track laid to enable 6,000 weekly services with two-way all-day service on Lakeshore West, Kitchener, Barrie, Stouffville, and Lakeshore East.




FASTER AND MORE EFFICIENT TRAINS

Over 680 km of electrified track to provide trains that are up to 30% faster and 50% cheaper to operate per train KM



MORE ACCESSIBLE STATIONS

42 Stations are upgraded to improve accessibility



AN EXPANDED UNION STATION

Union Station's platforms and tracks are upgraded to accommodate demand beyond 2055

Expanding GO is a cost-effective way to add transport capacity in the GTHA by leveraging existing, under-used rail corridors that span over 400 km of the region.



Under GO Expansion, the transformation to a more modernized network will bring fundamental changes to the current make-up of GO Transit’s seven (7) operating rail corridors. It will result in the implementation of over 205 km of new track and 680 km of electrified track that will be laid to allow for the more frequent and efficient movement of trains.

ONCORR INFRASTRUCTURE REQUIRING EA APPROVAL

Scarborough Rail/Rail Grade Separation TPAP

- New rail-rail grade separation
- New bridge over Midland Avenue
- Corvette Avenue crossing improvements
- Danforth road-rail grade separation
- Potential relocation of Scarborough GO Station

Electrification TPAP Addendum

Vegetation Compensation Program

Significant EA Addendum to Barrie Corridor Expansion TPAP (2017)

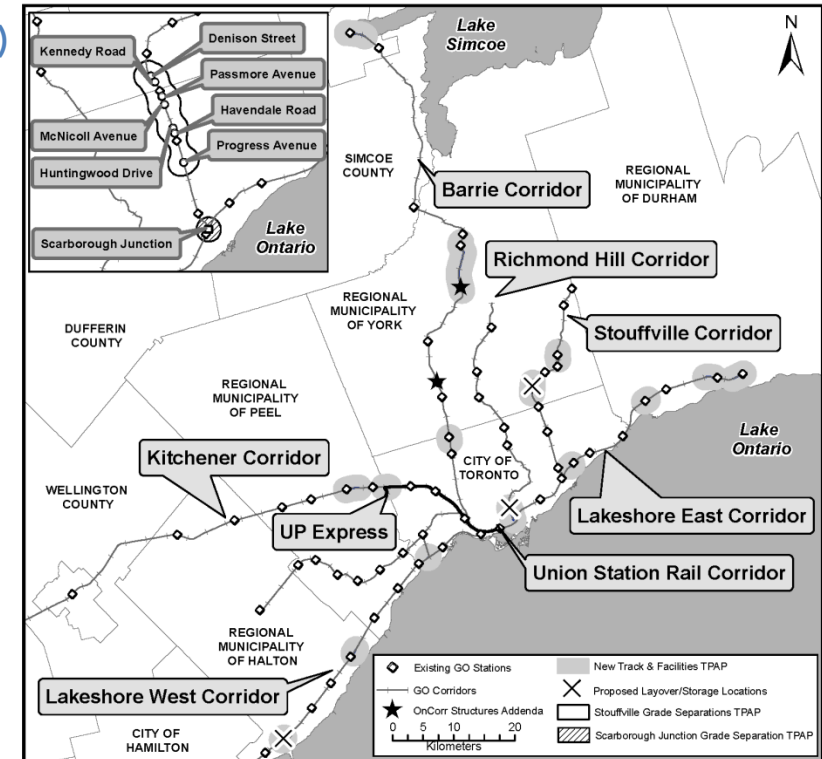
- Wellington Street / Rail Grade Separation, Aurora
- McNaughton Road / Rail Grade Separation, Vaughan

New Track and Facilities TPAP

- **Don Valley Layover (RH)**
- Beach Rail Layover (LSW)
- Unionville Storage Facility (STVL)
- **Electrification of Richmond Hill Corridor (Partial)**
- Thickson Rail Bridge widening, Oshawa
- **New track infrastructure (Network-wide)**

Stouffville Grade Separations TPAP

- Havendale Road
- Huntingwood Drive
- McNicoll Avenue
- Passmore Avenue
- Progress Avenue
- Kennedy Road
- Denison Street



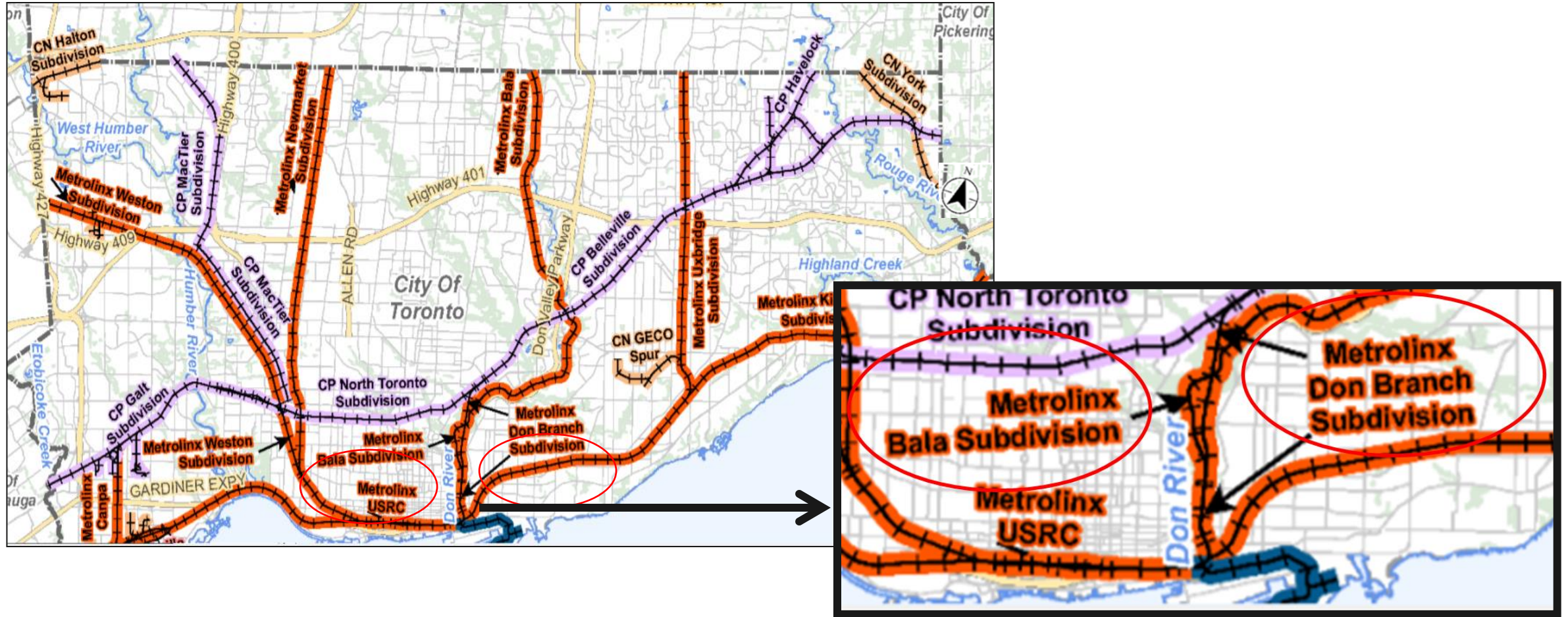
Key Map of GO Expansion Project Areas

ONCORR NEW TRACK & FACILITIES PROJECT

- New tracks within existing Metrolinx rail right-of-way (ROW)
- Modifications or upgrades to existing tracks within existing Metrolinx rail ROW
- Three (3) new layover/storage facilities, including the Don Valley layover
- Electrification of a portion of the Richmond Hill rail corridor up to approximately Pottery Road to allow for the turn back of trains and ease congestion at Union Station.

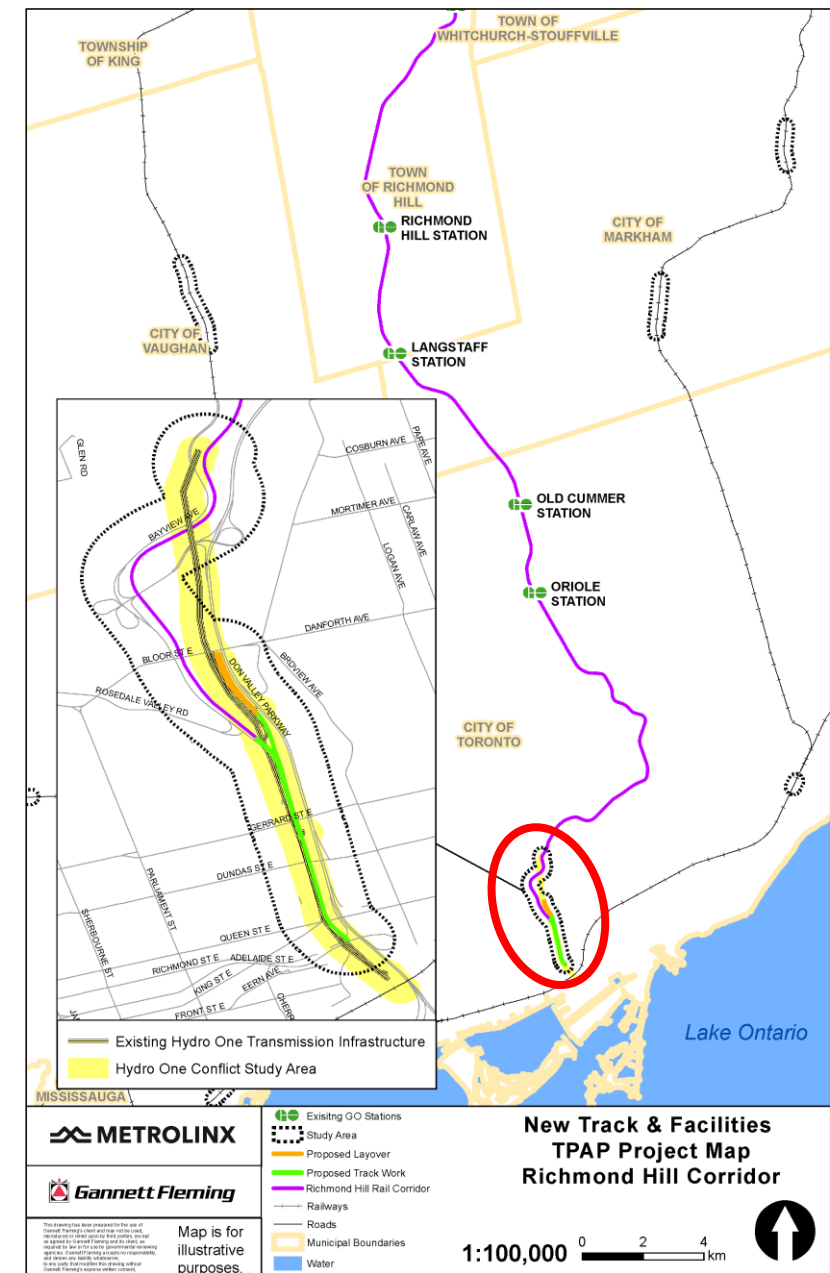


MAP OF RAIL CORRIDOR SUBDIVISIONS - CITY OF TORONTO



ONCORR NEW TRACK & FACILITIES TPAP: RICHMOND HILL CORRIDOR

- A new Don Valley Layover Facility in Toronto at Mile 208.28 to Mile 208.60 (beneath and south of Bloor Street E and west of Don Valley Parkway on the Metrolinx-owned Don Branch subdivision)
- New tracks and track upgrades, including:
 - Track upgrades to the Metrolinx-owned Don Branch subdivision to facilitate construction of the Don Valley Layover Facility from Mile 208.60 to Mile 209.50
 - Track upgrades from Mile 1.90 to 2.8
- Electrification of the corridor up to Pottery Road (approximately Mile 4.4)
- Utility Conflicts are under review and solutions are being considered

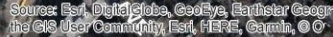


ONCORR NEW TRACK & FACILITIES TPAP: DON VALLEY LAYOVER

- Layover required to accommodate daytime (offpeak) train storage near Union Station. Existing layovers do not have capacity.
- Storage capacity of three (3) L12L locomotives
- Engaging City of Toronto through Technical Advisory Committee meetings to minimize project impacts and develop Environmental Project Report (EPR) commitments and P3 contract Output Specifications
- Metrolinx will maintain and restore the Lower Don River Trail to its preconstruction state due to proximity of the Lower Don River Trail to the proposed access road.



A paved path leads towards a bridge with a steel arch structure, surrounded by greenery and autumn foliage. Power lines are visible overhead, and a modern building is in the background.



LAYOVER - ASSOCIATED INFRASTRUCTURE, FACILITIES & ACCESS

Layovers are being developed on Metrolinx Property (where possible), however the following may be required:

- Road Access
- New transformers (to be tied into power grid)
- Waste management areas, sanitary fields and/or exterior lighting
- Connection to existing water, sewage, gas, fire, and telephone lines
- Re-grading of land, as well as new ditches or swales
- Truck turn-around space
- Crewing centre
- Wayside power
- Locomotive drip trays
- Electrification infrastructure



Figure: Example of a Layover on Kitchener corridor . For Illustrative purposes only.

Metrolinx will further develop the design concept.

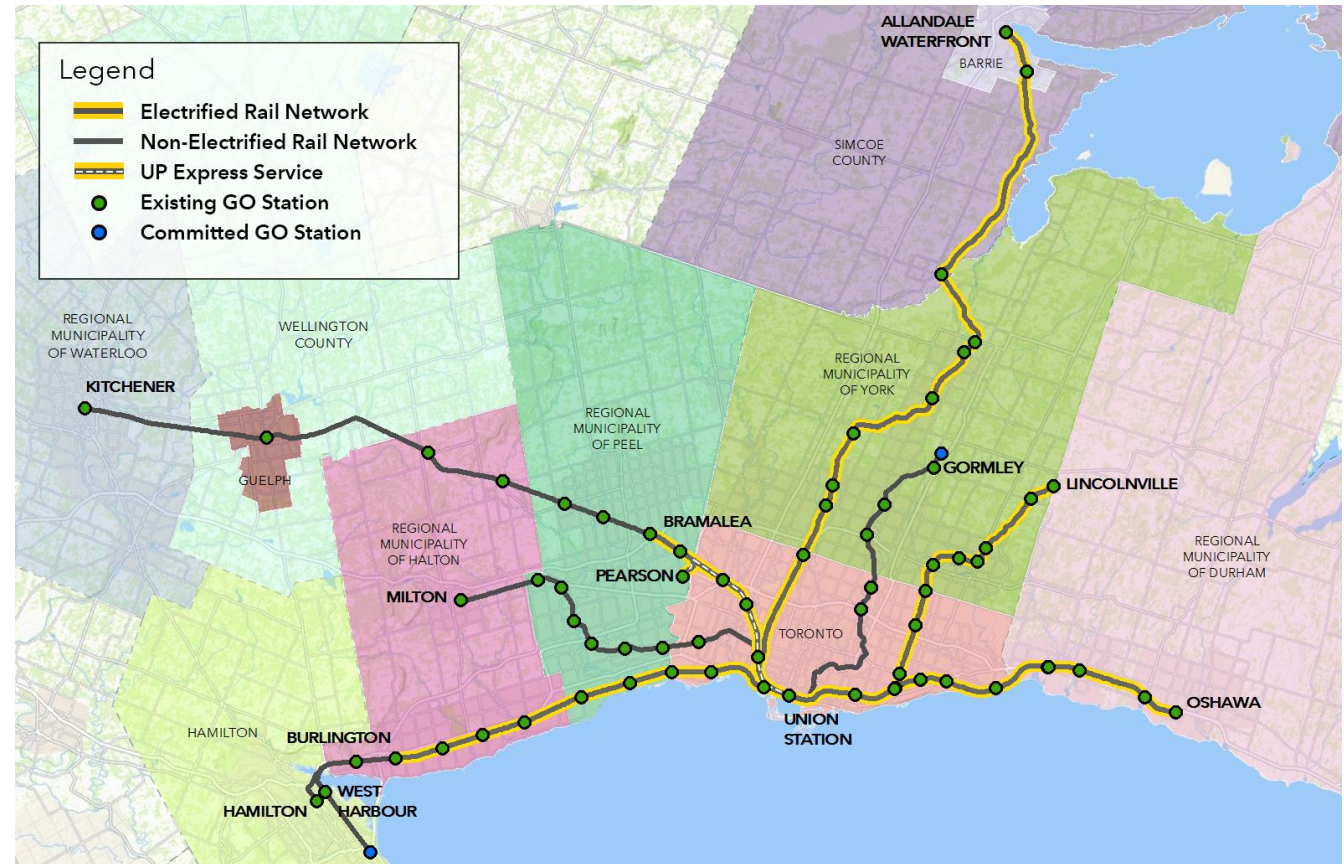
ANTICIPATED PROPERTY IMPACTS (NEW TRACK & FACILITIES)

Location	PIN	Property Address	Owner	Why it's required	Acquisition	Area (Sq, m)
Don Valley Layover	103950536	Not available	City of Toronto	Required for access	Partial Taking	Not available (currently being assessed)
Don Valley Layover	210680065	Not available	The Metropolitan Toronto and Region Conservation Authority	Required for facilities	Partial Taking	77,987

Property impacts are based on preliminary designs and are subject to change.

GO RAIL NETWORK ELECTRIFICATION

- Metrolinx is proposing to electrify 6 of 8 rail corridors* and a small section of the Richmond Hill Corridor
- Reference Concept Designs are in progress for 8 structures on Richmond Hill Corridor.
- Metrolinx is working with the City of Toronto on Bridge modifications



*GO Rail Network Electrification TPAP Statement of Completion was issued in December 2017.

ELECTRIFICATION ATTACHMENTS

Flash Plate

- Flash plates are required for concrete bridges to provide protection against arching
- Flash plates are required underside of bridges across the entire pantograph envelope

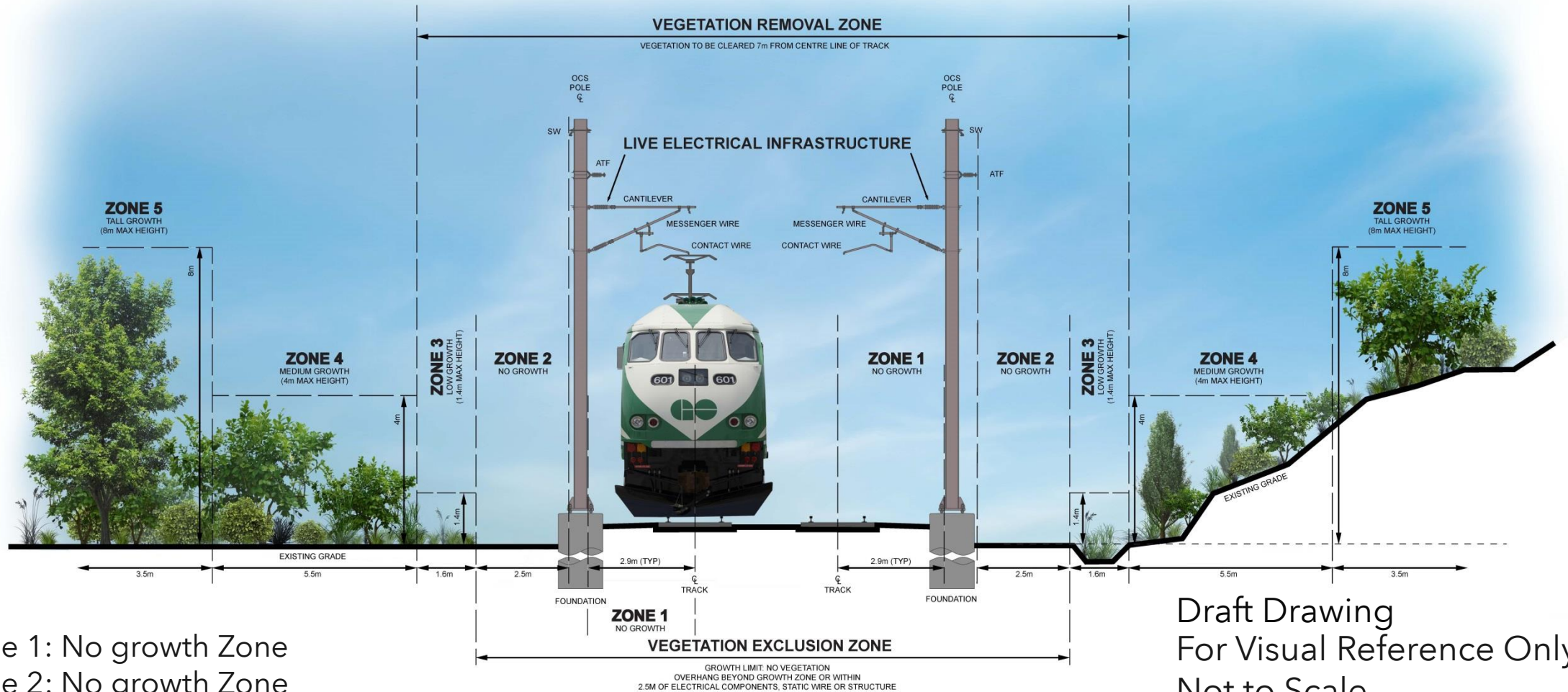


OCS, Grounding and Bonding

- Attachments are used for support of OCS wires in situations with restricted vertical clearance and/or wide overhead structures as may be required.



IVM STRATEGY - PLANTING NEAR THE RAIL CORRIDOR



Zone 1: No growth

Zone 2: No growth

Zone 3: Low growth zone comprised of non-woody vegetation.

Zone 4: Medium growth zone comprised of shrubs and non-woody species that grow up to 4 m high when mature.

Zone 5: Tall growth zone comprised of trees, shrubs, and non-woody species that grow up to 8 m high when mature.

Draft Drawing
For Visual Reference Only -
Not to Scale

ONCORR PROGRAM - REVISED NOISE & VIBRATION, AIR STUDIES

A lot has changed since the 2017 system-wide Noise & Vibration study. Therefore a study update is needed to compare the 2015 baseline levels against GO Expansion.

The study update will model and assess the following:

- Future service concepts (train size and frequency);
- New tracks, switches and layover infrastructure;
- Proposed source control measures;
- Additional feasibility studies for mitigation.

Modelling is underway to study noise and vibration impacts of GO and subway service in the joint GO-Ontario Line corridor, and the impacts of GO Expansion in the Lakeshore East corridor east of the Ontario Line. Results, including proposed mitigation measures, will be shared once available (targeting spring 2020).



NOISE & VIBRATION ALONG JOINT CORRIDOR: ONCORR & ONTARIO LINE

- A combined impact assessment will be completed for GO Rail and subway where they run in parallel.
- Metrolinx will follow
 - GO N&V Guideline [Ontario Ministry of Environment and Energy/GO Transit Draft Protocol for Noise and Vibration Assessment Guide (MOEE/GO Transit, 1994)]; and
 - TTC N&V Guideline [Ontario Ministry of Environment and Energy/Toronto Transit Commission Protocol for Noise and Vibration Assessment (MOEE/TTC, 1993)]
- Results and proposed mitigation approach to be shared at upcoming Ontario Line public meetings – anticipated Spring 2020



VEGETATION INVENTORY: TORONTO-DANFORTH

The following tree removal numbers are based on the 7m-wide Electrification zone for the Vegetation Removal and Compensation Program. Metrolinx will also identify trees needed for other On Corridor and Ontario Line work such as new tracks, station facilities, noise walls, etc.



76 Municipally-owned trees to be removed



4 Provincially-owned trees to be removed (non-Metrolinx lands)



44 Privately-owned trees to be removed

Trees will be removed using permits under the City of Toronto's:

City Street Tree Bylaw (Article II of Chapter 813)

Private Tree Bylaw (Article III of Chapter 813)

Ravine and Natural Feature Protection Bylaw (Municipal Code, Chapter 658)

Parks By-Law. Article VII, Chapter 608

Compensation will be provided as per the By-law, as well as per Metrolinx's ecological compensation policy where applicable.

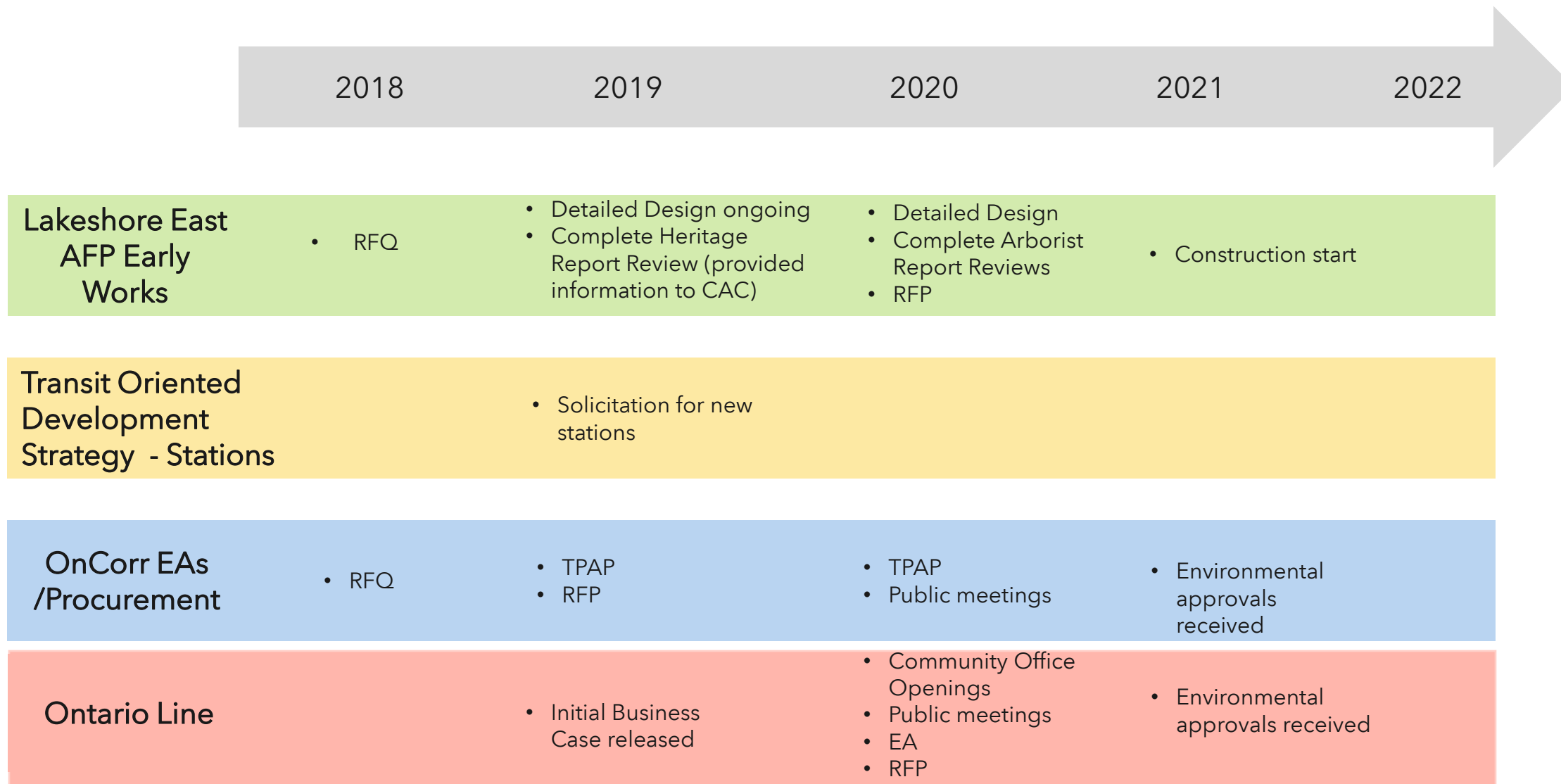
Tree removal numbers are subject to refinement.

TREE REMOVAL STRATEGY

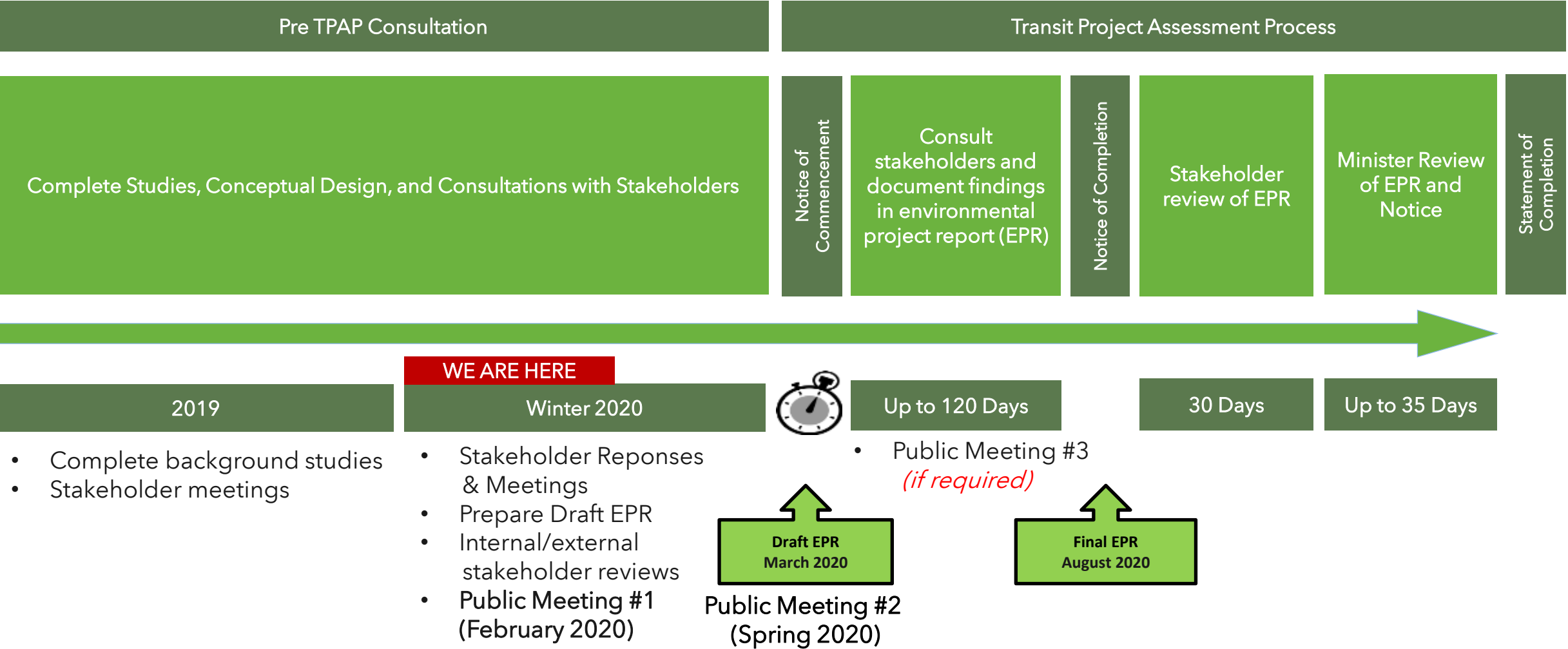
- **Vegetation Removals** will be completed using various mechanical equipment from the rail way. There is potential that access to trees will be needed on non-Metrolinx owned lands.
- **Tree Removal Work** may be completed outside of daylight hours, on weekends, and will be scheduled around the train schedules.
- **Compensation:** Metrolinx will be implementing ecosystem restoration projects to off set the trees being removed



ANTICIPATED EARLY WORKS / ONCORR / ONTARIO LINE TIMELINE



ANTICIPATED TPAP TIMELINE



APPROACH – PUBLIC CONSULTATION

Public Information Centres (PICs)- February 2020

- Venues are selected by proximity to the proposed infrastructure (grade separations, layovers)
- Open-house, drop-in format
- Information to include:
 - Update on GO Expansion
 - Proposed plans, impacts and mitigation
 - Updates on network-wide technical studies (noise, air, vegetation management)
- Materials for consultation:
 - Information Panels
 - Discussion Guide and Information handout sheets
 - Comment Forms
 - Roll Plans & Project-Specific Maps

PIC	Venue	Date
Markham	Markham Village	Tue Feb 18
Barrie	South Shore Community Centre	Wed Feb 19
Aurora	Aurora Community Centre	Mon Feb 24
Scar. South	Scarborough Civic Centre	Mon Feb 24
Don Valley	Evergreen Brickworks	Tue Feb 25
Burlington	Central Recreation Centre	Wed Feb 26
Agincourt	Metropolitan Centre	Wed Feb 26
Downtown	George Brown College	Thu Feb 27
Vaughan	Vaughan City Hall	Sat Feb 29
Whitby, Pickering & Oshawa	Abilities Centre	Sat Feb 29

