2017 ECS & TTC project Lakeshore Blvd. West

Project Update



Engineering & Construction Services
TTC

August 31, 2017













Planned Work

- TTC rail replacement on Lake Shore Blvd West
 - (from Humber Loop to Dwight Avenue)
- Installation of new 1.4 km, bi-directional cycle track from Norris Crescent to First Street
- Installation of 2 new platforms just west of the Humber Loop
- Road resurfacing and partial sidewalk reconstruction from Palace Pier Court to 120 metres east of Palace Pier Court
- Work Started on June 26, 2017





Lake Shore Blvd West TTC track replacement

- Humber Loop to Dwight Avenue
 - Rail replacement due to galvanic (metal) corrosion resulting in rail gaps and episodes of arch-flashes
 - Streetcar platform reconstruction minor road and driveway realignment
 - Construction of bi-directional cycling track
- West of Humber Loop
 - Remove and replace 2 platforms
- East of Palace Pier Court
 - Road resurfacing and Partial Sidewalk construction
- Norris Street to First Street
 - Bike lanes installation





Lake Shore Blvd West con't...

- Traffic maintained one lane in each direction
- Partial closures during track work at intersections
- Overnight work by TTC track crews
- Parking restrictions will remain in place within the active construction zone





Work Status on Lake Shore

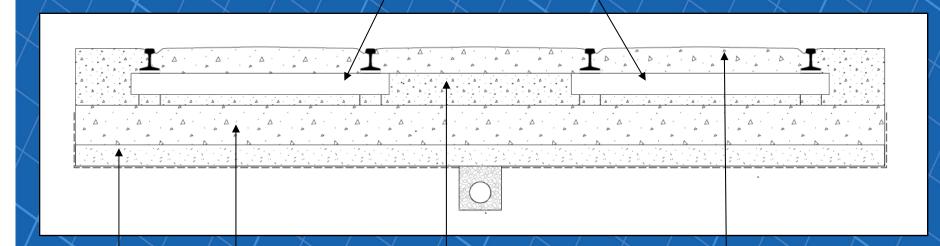
- Why has work been slow moving?
 - There are three vintages of track construction along the length of the current limits of the Lake Shore track project.
 - When rail is constructed it typically involves three layers of concrete
 - Typically for this type of construction, we plan to remove only the top layer of concrete and the streetcar rails
 - Unexpected concrete layer separation conditions have increased the scope of the work and slowed construction for a period of time.





Street Car Concrete Layers

Street Car Track



Concrete Layer 2

Concrete Layer 3

Concrete Layer 1

Granular A





State of good repair – end of life cycle track replacement

- Royal York Rd to the west side of Dwight Avenue last rehabbed in 1996
 - We planned to remove only top layer of concrete to replace rail, but in some sections concrete did not separate easily and (monolithic pour) therefore removal now includes base concrete.
 - Delay due to contractor not pricing the work this way. Plan and approvals for additional work was a slow process but it is finalized.
- Royal York Road to Symons last rehabbed in 1998
 - The top concrete layer in this is section is not separating as cleanly so it is moving slowly
 - The top 150 mm of concrete will be removed to expose the existing rail and fasteners for replacement wherever possible





State of good repair – end of life cycle track replacement

- Symons Street to Humber loop last rehabbed in 2002.
 - Due to accelerated galvanic corrosion to the base of the rail we are now undertaking a rail replacement only project between Humber Loop and Symons Street.
 - The top 150 mm of concrete will be removed to expose the existing rail and fasteners for replacement, and new top concrete will be placed.
 - The occurrence of premature corrosion of the rail will be addressed with the construction of a new sub-station inside the Humber Loop this year. This section to move quicker as concrete layer separation expected to be good.





Construction Images





Cutting Concrete



Pouring Base Concrete



Concrete Track



Work Status

To date the following work has been completed:

Track and concrete has been replaced from First Street to Royal York

Road

 Due to the change of work methods larger work areas are needed than that first communicated in the mailed notice.

- This will impact available parking in a larger section than previously planned
- We are communicating with Green
 P to get answers regarding options
 and the parking lot



Putting Track On Base





Next Steps

 Starting next week the contractor will continue excavation and concrete work east of Royal York to Mimico Avenue







Next Steps Con't

- The contractor will complete the 1.4 km area of road / track along Lake Shore and then return to the west limit and start install the cycle track from First Street moving towards Norris Street
- During bike lane construction the curb lane of Lake Shore will be used by the Contractor and traffic will use the centre lanes
- The TTC track replacement work east of Norris Street will continue simultaneously





Intersection Closures

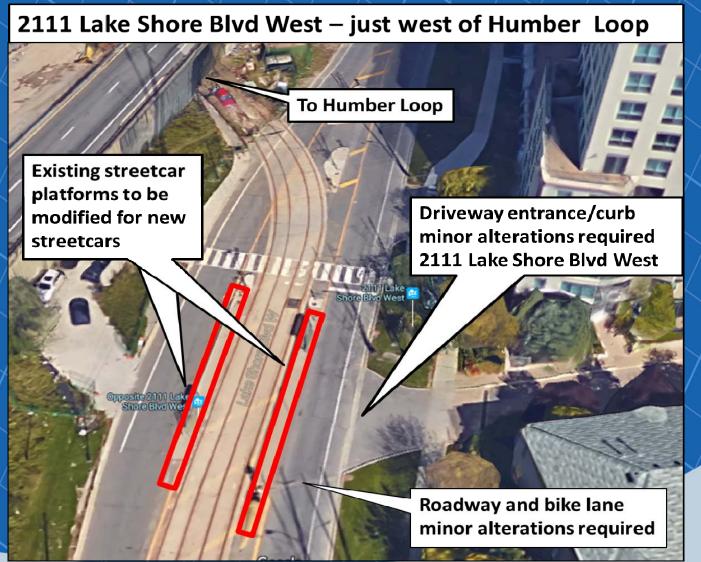
- The following partial signalized intersection closures remain:
 - Symons Street
 - Hill Side Drive
 - Mimico Avenue
 - Superior Avenue
 - Burlington Street
 - Legion Road
 - Park Lawn/Marine Parade
 - Brookers Lane
 - Palace Pier Court
- Dates and localized notices will be provided





Streetcar platforms reconstruction

 Platforms to accommodate for new lowfloor accessible streetcars







Streetcar platforms - related work

Platforms

- Existing: 1.2m wide x 23m long
- New: 2.4m wide x 30m long

Roadway - Lake Shore Blvd West

- Alterations: new platform dimensions require moving south curb lane by 0.63m to the south for a length of approximately 57m
- Eastbound bike lane: minimal change

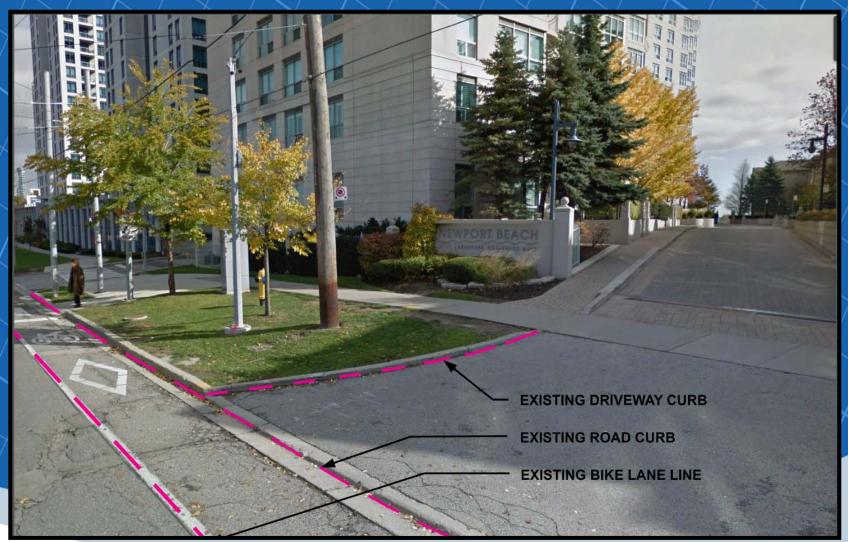
Driveway - 2111 Lake Shore Blvd West

- Vehicle access maintained during work with some restrictions
- Alterations: new platform dimensions and roadway widening require the throat of driveway to be widened, which will improve egress of larger vehicles/emergency vehicles from residential condo complex





Eastbound roadway and driveway at 2111 Lake Shore Blvd West Existing configuration







Eastbound roadway and driveway at 2111 Lake Shore Blvd West Proposed completed configuration (with wider driveway and curb relocation)







Changes to work plan

- We anticipate that we will not complete the streetcar platforms under this contract and are working with TTC to confirm the construction schedule for Platform Work
- We anticipate all the track work shall be completed by December 30, 2017, but can provide a more accurate update in late-September.
- The change of concrete / track work may impact the budget but could be covered by our contingency plan – again more information will be available in late-September.





Humber Loop

- Tunnel walkway: Closed April 24, 2107 to Spring 2018*
 - * end date is subject to change
- Humber Loop will be a major work zone area for various infrastructure improvements this year including
 - new streetcar tracks,
 - accessible platforms,
 - new/wider tunnel walkway,
 - roof replacement of the service building,
 - new sub-station building and,
 - underground conduits for electric cables for the sub-station.
 - Rail installation; summer/fall 2017
- The planned work will enhance TTC's service/rail system
 - The new Electric sub-station will stop galvanic corrosion, underground conduits beneath
 the track for substation; life cycle track replacement (new low floor streetcar operation)
 accessibility platform, new spur track to house low floor streetcar when required.





Humber Loop

- New track and realigned under Gardiner and Metrolinx bridges, new standard size ped walkway.
- When work started, the project teams learned about unforeseen circumstances involving structural complexities requiring additional work/design
- Hydro, Metrolinx rail line Bridge City for Gardiner Expressway all had to approve the deisgns in order to ensure the integrity of structures are protected during and post work.
- Construction Plan is to concentrate on The Queensway portion of the streetcar turn-back inside Humber loop by late January 2018.









Lake Shore streetcar tracks through underpass to/from Humber Loop – Humber Bay Shores condos



Underpass walkway to/from TTC Humber Loop. Humber Loop provides short-cut to access Sobeys





Streetcar Service Plan Target

*subject to change / work conditions

- End of January 2018
 - Return Queen streetcar service west of Roncesvalles to Humber loop for turn-back eastbound.
- June 2018
 - return streetcars Humber Loop to Long Branch Loop.





Ongoing Communication

- Day-to-day issues with construction / traffic can be communicated with Shahid
- TTC issues should be brought to Diego's attention
- Propose that the City work out a bi-weekly update email to BIAs through the remainder of construction / website will be updated biweekly as well
- Visit the next main area with an update reminder that work is approaching and anticipated arrival
- Print Construction Update for mail distribution with current details and anticipated work going forward





PROJECT LEAD / CONTACT DETAILS

Project	Name
TTC Track on Lakeshore	Shahid Virk, 416-338-5542; shahid.virk@toronto.ca Diego Sinagoga, 416-393-2197. diego.sinagoga@ttc.ca
Humber Loop	Diego Sinagoga, 416-393-2197. diego.sinagoga@ttc.ca
website	www.toronto.ca/queensway-lakeshoreconstructionprojects



