

Russell Carhouse Track Upgrades Project Overview

Community Update June, 2022



Background - Streetcar Program

- 60 new streetcars procured (low floor light rail vehicles or LFLRVs) as part of TTC's Green Fleet Plan.
- New streetcars will begin arriving to TTC facilities in Fall 2023 (on a phased delivery schedule).
- Expansion of TTC streetcar fleet requires capacity for additional maintenance/storage space.
- In order to prepare for their arrival, TTC must upgrade storage capacity across the City:
 - Modifications required to the carhouses and storage areas at Russell Carhouse and Hillcrest Complex



Carhouse Upgrades

- Bring TTC streetcar equipment and facilities to a state of good repair (some facilities are over 100 years old).
- Project benefits include:
 - \circ Address state of good repair needs and support future ridership growth.
 - \circ 107 million boardings in 2019 → 120 million boardings in 2030.
 - $\circ\,$ Reduce travel time to and from existing maintenance facilities.
 - \circ Cost effective with infrastructure already in place.
 - New streetcars contribute to TTC's Green Fleet Plan.



Russell Carhouse - Schedule

Work Required:	Approx. Start Date:
Russell Yard Track Replacement	Fall, 2022 – for 2.5 years (TBD*)
Russell Carhouse Extension and Interior Modifications	2025 – 2028 (date TBD*)

(*Start dates are dependent on the City King-Queen-Queensway-Roncesvalles project and other City work, pending third party union strikes and unforeseen events.)



Russell Carhouse – Satellite View





Russell Carhouse and Track - Work Details

- Russell Carhouse is used for streetcar operations and maintenance.
- Tracks to be upgraded within yard in phases to accommodate ongoing streetcar operations/service.

The upgrade project will include:

Yard storage tracks (start date is Fall, 2022 – for 2.5 years, TBD*):

- Replace all yard track with concrete embedded track rail and switches in stages (as the yard will still be in service).
- Provide track lubrication to all storage tracks to reduce streetcar noise (wheel squeal).
- Replace all underground utility services and provide stormwater retention management system to meet City of Toronto and Toronto Water requirements.
- Replace overhead electrical conductor system for Streetcar pantograph operations.

Carhouse extension and modifications (start date is 2025 – 2028, TBD*):

- Construct west extension of carhouse to allow for additional maintenance bay for LFLRVs.
- Upgrade existing carhouse building to accommodate new LFLRV streetcars.
- Reconfigure maintenance tracks and pits in the Carhouse for LFLRV operational maintenance.
- Introduce maintenance access for LFLRV rooftop mounted equipment.



Russell Carhouse and Track - Community Impacts During Construction

- Trucking material off site, truck traffic, routing along Queen St. E. /Eastern Ave., queuing up before 7 a.m. (traffic lanes and street parking may be reduced).
- Traffic control on Queen St. E. and Eastern Ave. (at Russell Carhouse).
- Temporary (during construction) off site parking plan for employees.
- Renovations to carhouse to take place in 2025 to 2028*.



Streetcar track and carhouse construction

- The majority of work will take place between 7 a.m. and 7 p.m., as required.
- As permitted, some overnight and weekend work will be required during the course of this project in order to complete the work as quickly as possible.
- Noise, dust and vibration associated with construction is unavoidable with this work. Mitigation will be undertaken.
- Mitigation measures include: vibration monitoring, wet cutting of concrete and mesh fencing to reduce dust.
- Construction trucks, equipment and workers will be present in the general area.



