

## **Port Lands Flood Protection - Don Roadway - Construction Staging Area**

**Date:** August 23, 2021  
**To:** Toronto and East York Community Council  
**From:** Acting Director, Traffic Management, Transportation Services  
**Wards:** Ward 14, Toronto - Danforth

### **SUMMARY**

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As the Toronto Transit Commission (TTC) operates a transit service on Don Roadway, which is being rerouted along Commissioners Street, City Council approval is required.

As part of the Port Lands Flood Protection Project and Enabling Infrastructure Project, Waterfront Toronto is planning to create two new additional outlets for the Don River and widen the mouth of the river at Keating Channel. In order to facilitate the flood protection and the new configuration of the river path, a new dockwall along the west side of Don Roadway will be constructed. Additionally, the elevation of Don Roadway will be increased by 3.5 metres to match the height of the new dockwall.

Transportation Services is requesting authorization to temporarily close Don Roadway, between Lake Shore Boulevard East and Villiers Street, for a period of up to 27 months (i.e. October 1, 2021 to December 31, 2023), to accommodate construction staging operations.

### **RECOMMENDATIONS**

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The Acting Director, Traffic Management, Transportation Services, recommends that:

1. City Council authorize the temporary full closure of Don Roadway to all road users, between Lake Shore Boulevard East and Villiers Street, from October 1, 2021 to December 31, 2023.
2. City Council authorize the continuation of the standing prohibition in effect all times on both sides of Commissioners Street, between a point 120 metres east of Don Roadway and Saulter Street South as enacted at [TE10.29](#) in Recommendation 15, set to expire on May 16, 2022, to be in effect till December 31, 2023 to accommodate the requirements of this new closure.

3. City Council direct that Don Roadway and Commissioners Street be returned to pre-construction traffic and parking regulations when the project is completed.

## **FINANCIAL IMPACT**

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There is no financial impact to the City of Toronto. Waterfront Toronto is responsible for all costs associated with this project.

## **DECISION HISTORY**

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City Council, at its meeting on July 14, 2021, adopted Item IE23.13 "Port Lands Flood Protection - Lake Shore Boulevard East Trail and Lower Don Trail Construction Closures and Detour Routes" authorizing the installation of temporary cycling infrastructure on Cherry Street, Villiers Street, Saulter Street and Commissioners Street.  
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE23.13>

City Council, at its meeting on December 16, 17 and 18, 2020, authorized the General Manager, Transportation Services to execute a Project Delivery Agreement with Waterfront Toronto, on terms and conditions satisfactory to the General Manager, Transportation Services, and in a form satisfactory to the City Solicitor, for the reconstruction of Lake Shore Boulevard East between the Don River and Carlaw Avenue, including the Lake Shore Boulevard bridge and all required active transportation and public realm components. City Council directed City staff to continue working in consultation with Waterfront Toronto and the staff of the local Councillors' offices to coordinate and implement a public outreach and information program related to traffic mitigation for the duration of the project.  
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.IE18.3>

City Council, at its meeting on November 26 and 27, 2019 adopted Item TE10.29 "Construction Staging - Port Land Flood Protection and Enabling Infrastructure Project" authorizing a temporary full closure of Commissioners Street, between Cherry Street and a point 120 metres of Don Roadway; and Don Roadway, between Villiers Street and Commissioners Street to accommodate construction staging.  
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.TE10.29>

City Council, at its meeting on December 5, 6, 7 and 8, 2017 adopted as amended Item PG24.6 "Port Lands Planning Initiatives – Final Report" to guide the revitalization of the Port Lands.  
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.PG24.6>

City Council, at its meeting on November 8 and 9, 2016 adopted Item 2016 EX18.3 "Port Lands Flood Protection Due Diligence Review and Next Steps" authorizing the start of Essroc Quay Lake Filling and Naturalization capital project to be created with the Waterfront Revitalization Initiative Capital Program.  
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.EX18.3>

## **COMMENTS**

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## **Project Background**

As part of the Port Lands Flood Protection Project (PLFP), Waterfront Toronto is implementing the recommendations of the approved Don Mouth Naturalization and Port Lands Flood Protection Environmental Assessment. The primary objective of this program is the provision of flood protection to the southeastern downtown area. A key component of this program is to create two new additional outlets for the Don River and widening of the mouth of the river at the Keating Channel.

The Gardiner East Environmental Assessment (Gardiner EEA) completed by the City of Toronto and approved by the Ministry of Environment and Climate Change includes a reconfiguration of the Gardiner Expressway and Lake Shore Boulevard East in the area of the Don River.

In consideration of the significant synergies to be gained, City Council, at its meeting on December 16, 17 and 18, 2020 approved Waterfront Toronto to implement portions of the Gardiner EEA related to the Lake Shore Boulevard East/Don River Bridge in conjunction with their ongoing work in the PLFP. The combined scope includes closure and removal of the Gardiner East to Logan Avenue ramps, full reconstruction of the Lake Shore Don River Bridge and the reconstruction of Lake Shore Boulevard East, including full Public Realm, from the Don River to Carlaw Avenue.

## **Existing Conditions**

The Port Lands primarily consists of port and industrial uses, with associated heavy truck traffic.

Don Roadway is a collector roadway and consists of a four-lane (two northbound and two southbound) cross-section. There are no sidewalks on either side of the roadway and the Lake Shore Boulevard East Trail is located on the east boulevard. Stopping is prohibited at all times on both sides of the street. The TTC "72B and 72C Pape" bus route operates on Don Roadway. There are no bus stops on the subject section of Don Roadway.

Commissioners Street is a collector roadway and consists of a four-lane (two eastbound and two westbound) cross-section with parking allowed on both sides of the street for a maximum period of three hours. Currently, sidewalks are located on the north side of Commissioners Street, between Logan Avenue and Carlaw Avenue. On the south side, sidewalks are present between Saulter Street South and Logan Avenue.

## **Construction Staging**

Don Roadway, from Lake Shore Boulevard East to Villiers Street, including the lands from the dockwall to the west and the Lake Shore Boulevard Trail to the east, will be elevated by 3.5 metres above its current elevation. In addition, the existing utilities on Don Roadway will be removed to facilitate the road reconstruction including watermain, sanitary and storm sewer, abandoned oil and gas lines, hydro and telecommunication lines. New utilities including watermain and storm sewer will be installed after the completion of ground improvement works. The existing dockwall along the west side of Don Roadway is in advanced state of disrepair and will be replaced during the

reconstruction of Don Roadway. The new dockwall elevation will match the grade raise on Don Roadway.

In order to facilitate the construction activities, Don Roadway, between Lake Shore Boulevard East and Villiers Street, including the Lake Shore Boulevard Trail on the east boulevard, will be temporarily closed to all road users, including pedestrian, cyclists and motorists beginning October 1, 2021.

Major construction activities and associated timelines for the project are described below:

- Site preparation and removals: September 2021 to November 2021;
- Grade elevation: November 2021 to October 2022;
- Installation of new dockwall: May 2022 to June 2022;
- Ground improvement: September 2022 to February 2023; and
- Utility installation and road reconstruction: March 2023 to December 2023.

### **Traffic Impacts**

With the full closure of Don Roadway in place, southbound traffic will be redirected at Lake Shore Boulevard East. Northbound access at Don Roadway and Villiers Street will be closed, thus eastbound and westbound traffic travelling on Villiers Street must continue through the intersection. Moreover, access to the Northbound Don Valley Parkway will be restricted from Don Roadway and accessible from the westbound through-right lane on Lake Shore Boulevard East.

Heavy trucks egressing the Port Lands to access Lake Shore Boulevard East and Northbound Don Valley Parkway primarily utilize Leslie Street, Carlaw Avenue and Don Roadway. The closure of Don Roadway will increase the traffic volumes at the intersection of Carlaw Avenue and Lake Shore Boulevard East, specifically the northbound left-turn movement.

Based on the traffic impact analysis, approximately 26% of the critical northbound left-turn heavy truck volumes on Carlaw Avenue are destined to Northbound Don Valley Parkway during the morning peak hours. The remaining 74% of heavy trucks are destined to the Gardiner West (53%) and Lake Shore Boulevard West (21%). During the afternoon peak hours, approximately 17% of heavy truck volumes are destined to Northbound Don Valley Parkway, with the remaining 83% destined to Gardiner Expressway (39%) and Lake Shore Boulevard West (44%).

The removal of the Gardiner East access ramps at Logan Avenue will commence in September 2021. Thus, the next available access to the Gardiner Expressway is the westbound on-ramp from Lake Shore Boulevard East at Lower Jarvis Street. As a result, it is anticipated that over 50% of heavy trucks at Carlaw Avenue will divert to Cherry Street at Lake Shore Boulevard East in the morning peak period. However, in the afternoon peak period, the queues for the northbound through movement will operate over capacity due to the increase in heavy truck volumes. Therefore, the recommended outbound route is from the intersection of Carlaw Avenue and Lake Shore Boulevard East when northbound left-turn queues are shorter in the afternoon peak period. Area wide messaging will be provided to all business owners in the Port

Lands to egress from Cherry Street in the morning peak period and from Carlaw Avenue in the afternoon peak period.

The Gardiner East access ramps will result in detoured traffic; consequently, lower traffic volumes are expected at the intersection of Leslie Street and Lake Shore Boulevard East. Based on the traffic impact analysis at the subject intersection, the critical northbound movement will operate acceptably in both morning and afternoon peak periods. Overall, the intersection is expected to operate acceptably, similar to the existing conditions. Of note, the queue and delays for the eastbound through movement on Lake Shore Boulevard East, at Leslie Street will decrease to the lane reductions west of Carlaw Avenue.

Currently, eastbound left-turn movements are prohibited during all times at the intersection of Don Roadway and Lake Shore Boulevard East. In an effort to provide outbound heavy trucks in the Port Lands with an alternate route to access Northbound Don Valley Parkway, Transportation Services reviewed the feasibility of installing an eastbound left turn arrow (EBLTA) at the intersection of Don Roadway and Lake Shore Boulevard East. The future conditions were analyzed using the lane configurations during construction, with and without the EBLTA. It should be noted that the analysis incorporates the additional eastbound traffic from the Gardiner Expressway off-ramp at Lower Jarvis Street; the aforementioned closure on Don Roadway; and the reconstruction of Lake Shore Boulevard East, between Don Roadway and Carlaw Avenue, which will reduce the roadway to one eastbound traffic lane and two westbound traffic lanes.

Based on the traffic impact analysis, the implementation of the EBLTA would increase the critical eastbound movement delay from 139 seconds to 403 seconds during the afternoon peak period. The average vehicle queuing on the eastbound through movement is expected to increase from 176 metres to 812 metres. The implementation of the EBLTA will result in excessive queues and delays to the critical eastbound movement, therefore the advanced feature is not recommended.

In summary, the closure of Don Roadway will divert the majority of heavy trucks from Don Roadway to the intersection of Cherry Street and Lake Shore Boulevard East, thereby reducing the northbound left turn queue and delay at Carlaw Avenue during the morning peak period. Conversely, heavy truck traffic will be encouraged to egress from Carlaw Avenue at Lake Shore Boulevard East during the afternoon peak period. The intersection of Leslie Street and Lake Shore Boulevard East will continue to operate acceptably. In order to mitigate the traffic impacts on the transportation network, signal timing changes will be implemented to improve traffic flow on the above critical directions and along the Lake Shore Boulevard corridor.

In order to safely detour people cycling around the construction staging areas, new cycling infrastructure detours will be installed on Cherry Street, Villiers Street, Saulter Street South and Commissioners Street. Pedestrian movements will be detoured onto existing sidewalks on the aforementioned roadway and in some cases, new sidewalks or multi-use trails will be constructed to improve pedestrian connectivity.

TTC bus routes 72B and 72C currently operating along Don Roadway will be rerouted along Commissioners Street. As part of the diversion, TTC buses will perform a U-turn manoeuvre on Commissioners Street, west of Saulter Street, then travel eastbound

The Ward Councillor has been notified of the recommendations of this report.

## **CONTACT**

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## **SIGNATURE**

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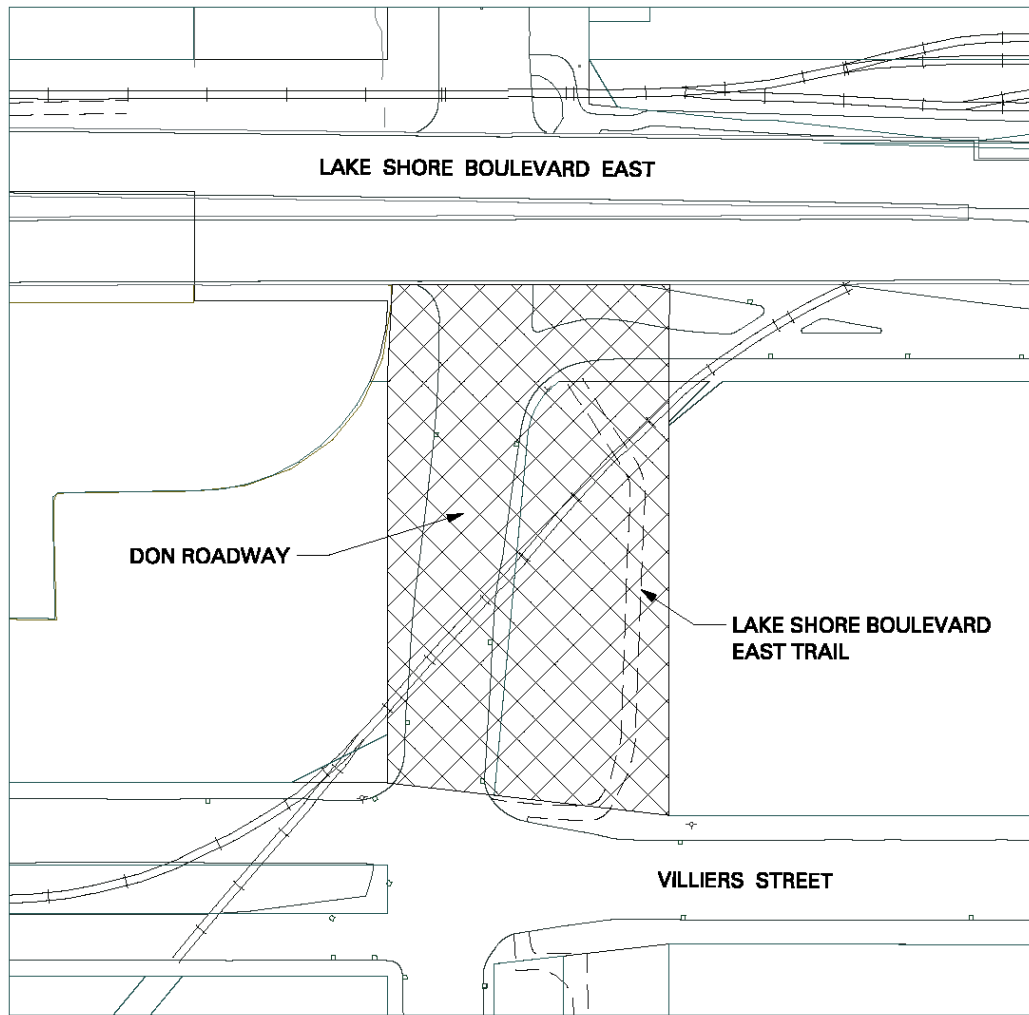
Roger Browne, M.A.Sa., P.Eng.  
Acting Director, Traffic Management  
Transportation Services

## **ATTACHMENTS**

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Attachment 1: Proposed Construction Staging Area on Don Roadway

## Attachment 1: Proposed Construction Staging Area on Don Roadway



### LEGEND:

 PROPOSED CONSTRUCTION AREA

### NOTE:

1. ALL DIMENSIONS ARE APPROXIMATE.
2. INFORMATION ON THIS PLAN IS BASED ON OFFICE RECORDS AND IS SUBJECT TO FIELD VERIFICATION.

# PROPOSED CONSTRUCTION STAGING AREA DON ROADWAY



FILE NO. 421T - 0196

SCALE : N.T.S.

DRAWN BY : O. K.

DATE : JULY 2021