

Metrolinx Scarborough Subway Extension - Closure of Sidewalk on McCowan Road

Date: February 8, 2022

To: Scarborough Community Council

From: Director, Planning and Capital Program

Wards: Ward 23 - Scarborough North

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on McCowan Road, City Council approval of this report is required.

Metrolinx's contractor Strabag ("the Project Co.") is responsible for designing and building the underground tunnel of the Scarborough Subway Extension (SSE) project. The Project Co. is preparing the tunnel boring machine (TBM) launch site for tunnel excavation, which is planned to commence in April 2022. The TBM launch site is located in the northeast quadrant of Sheppard Avenue East and McCowan Road, with four site accesses on McCowan Road and two site accesses on Sheppard Avenue East.

The excavation operations are expected to generate multiple truck trips (31 truck trips per hour) over 12 hours per day. In coordination with City staff, Metrolinx and the Project Co. have reviewed pedestrian safety on sidewalks adjacent to the site accesses to prevent construction vehicle-pedestrian conflicts. As a result, the east sidewalk on McCowan Road, between Sheppard Avenue East and Nugget Avenue, is recommended to be closed to pedestrian traffic from April 1, 2022, to March 31, 2024. In addition, the Project Co. will install appropriate signage at the signalized intersections of McCowan Road at Sheppard Avenue East and McCowan Road and Nugget Avenue to direct pedestrians to the west sidewalk on McCowan Road.

The Project Co. will manage and ensure pedestrian safety on the sidewalk adjacent to the two site accesses on Sheppard Avenue East by using traffic control persons (TCPs) to regulate the inbound and outbound truck movements.

RECOMMENDATIONS

The Director, Planning and Capital Program recommends that:

1. City Council approve the closure of the east sidewalk on McCowan Road, between Sheppard Avenue East and Nugget Avenue, from April 1, 2022 to March 31, 2024.
2. City Council direct that the east sidewalk on McCowan Road, between Sheppard Avenue East and Nugget Avenue, be returned to its pre-construction or better condition when the project is completed.

FINANCIAL IMPACT

There is no financial impact to the City of Toronto associated with the recommendations in this report. Metrolinx's contractor, Strabag (the Project Co.) will be responsible for all costs related to the implementation of the sidewalk closure, signage, south crosswalk and traffic signal timing modifications at the intersection of McCowan Road and Nugget Avenue.

DECISION HISTORY

City Council, at its meeting on January 29, 2020, delegated to the General Manager, Transportation Services, the authority to temporarily close to pedestrian and vehicular traffic highways or portion of highways for a period up to and including 365 consecutive days, until December 31, 2030, with the exception of those highways listed in section 937-4 of Chapter 937, as required for the purpose of the construction of the Line 2 Scarborough Subway Extension and exempt the General Manager, Transportation Services, in carrying out this delegated authority from Section 937-5 of Chapter 937, that being the requirement to notify the local Ward Councillor of the pending closure and the requirement to report on the proposed closure if so requested by the local Ward Councillor.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.IE11.13>

COMMENTS

The SSE is a 7.8 kilometre long underground rapid transit line providing extension of the TTC Line 2 subway service from Kennedy Station to Sheppard Station in the City of Toronto. The SSE project will consist of three stations along McCowan Road located at Lawrence Avenue, Bushby Drive and Sheppard Avenue East. Figure 1 below shows the subway route alignment and location of the stations.

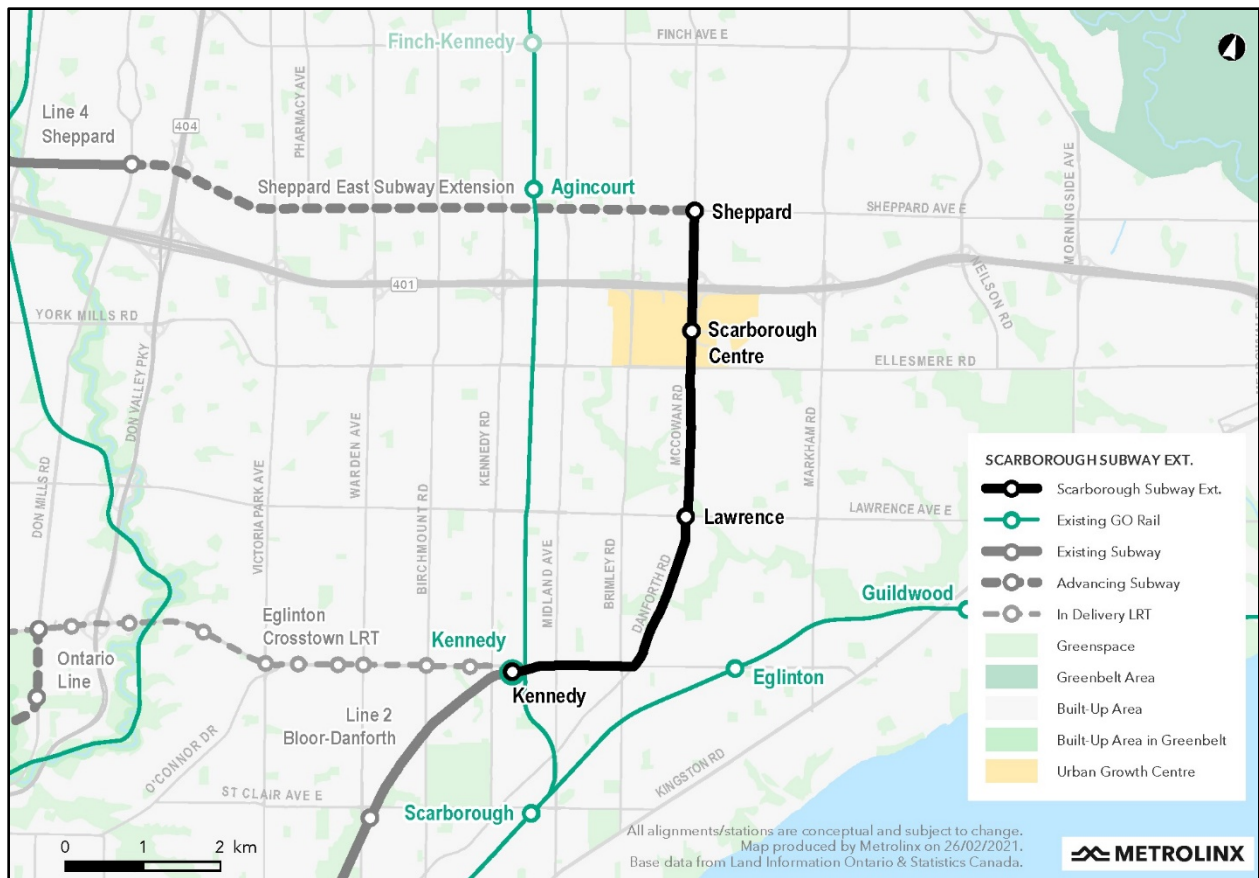


Figure 1 - Scarborough Subway Extension Alignment

Source: Metrolinx

The project is currently in the tunnelling phase with the Project Co. preparing the TBM launch site for the tunnel excavation scheduled to commence in April 2022. The TBM launch site is located in the north-east corner of the intersection of Sheppard Avenue East and McCowan Road. Two accesses provide vehicular access to the site on Sheppard Avenue East and four accesses on McCowan Road. Figure 2 below shows the TBM launch site location and accesses.



Gate	Designated Use
Gate A	Haul Truck and Employee Entrance
Gate B	PCTL Delivery and Employee Exit
Gate C	Concrete Delivery Exit
Gate D	Concrete Delivery and PCTL Delivery Entrance
Gate E	Employee Entrance and Exit
Gate F	Haul Truck Exit

Figure 2 - TBM Launch Site Location and Accesses

Source: Metrolinx

During the tunnel excavation, the site will operate on a 12-hour shift schedule running from 7:00 a.m. to 7:00 p.m., Monday to Friday. The site is expected to generate 31 truck trips per hour to remove the excavated spoils, deliver precast tunnel liners, concrete and other building material. Figure 3 below provides the estimated daily and hourly truck trips at the site.

	Hours of Operation	Estimated Daily Maximum	Estimated Peak Hour Traffic	Entrance	Exit
Muck Removal	9 hours/day	270 trucks/day	30 trucks/hour	Gate A	Gate F
Concrete and Other Deliveries	12 hours/day	15 trucks/day	1 truck/hour	Gate D	Gate C
PCTL Deliveries	12 hours/day	26 trucks/day	N/A	Gate D	Gate B
Employee Traffic	Off-peak only	Day shift - 35 ppl Night shift - 31 ppl	N/A	Gates A and E	Gates B and E
Total			31 trucks/hour		

Figure 3 – TBM Launch Site Truck Trips

Source: Metrolinx

Pedestrian safety on sidewalks adjacent to the site accesses was reviewed to minimize potential conflicts between pedestrians and construction vehicles. The four site accesses along McCowan Road are expected to experience frequent inbound and outbound truck movements and higher likelihood of vehicle-pedestrian conflicts. Therefore, the east sidewalk on McCowan Road adjacent to the four site accesses will be temporarily closed to pedestrians to prevent any conflicts with construction vehicles during the tunnel excavation stage (April 1, 2022, to March 31, 2024). Pedestrians will be directed to the west sidewalk by safely crossing at the signalized intersections of McCowan Road at Sheppard Avenue East and Nugget Avenue. Appropriate advanced signage will be positioned at strategic locations to inform pedestrians in the area and direct them to the west sidewalk. Additionally, the Project Co. will install the south crosswalk at the intersection of McCowan Road and Nugget Avenue to minimize detour for pedestrians and facilitate easy access to the TTC bus stop. The detour will cause minimal disruption for pedestrians as most origins and destinations are located on the west side of McCowan Road. Figure 4 below shows the pedestrian detour with the south crosswalk.



Figure 4 – Pedestrian Detour

Source: Metrolinx

The north sidewalk on Sheppard Avenue East will remain open to pedestrians. The Project Co. will manage pedestrian safety at the two site accesses on Sheppard Avenue East by deploying TCPs to regulate the inbound and outbound truck movements. The TCPs will determine sufficient and safe gaps for truck movements between the pedestrian traffic and may, occasionally, stop pedestrians. At the site accesses adequate sightlines for pedestrians and construction vehicle operators, along with sufficient lighting, will be provided. In addition, the Project Co. will monitor the site access operations for pedestrian safety and implement any additional measures required to prevent vehicle-pedestrian conflicts.

Local Ward 23 Councillor Cynthia Lai has been advised of the recommendations of this staff report.

CONTACT

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SIGNATURE

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ATTACHMENTS
