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Subject	Construction Traffic Impacts Assessment	Project Name	Etobicoke Creek Sewer Improvement EA
Attention	Italia Ponce Vanelli	Project No.	CE731700
From	Jeff Qiao		
Date	February 7, 2022		
Copies to	Tom Mahood		

1. Introduction

The Region of Peel is completing a Schedule 'C' Municipal Class EA for the Etobicoke Creek Trunk Sanitary Sewer (ECTS). The ECTS is a critical part of the East Trunk system which services multiple cities and municipalities within the region. The existing ECTS trunk sewer in the study area runs from Kennedy Road to south of Derry Road, improvements to address future capacity needs stemming from growth plans and existing sanitary sewer issues are required.

The purpose of this memorandum is to review and understand the traffic management constraints and requirements for design and construction of the preferred alternative. The preferred alternative and design concept includes three (3) tunneled segments from east of Kennedy Road to East of Dixie Road with 6 tunnel construction shafts, and an open cut segment from East of Dixie ending at Derry Road as shown in Figure 1.

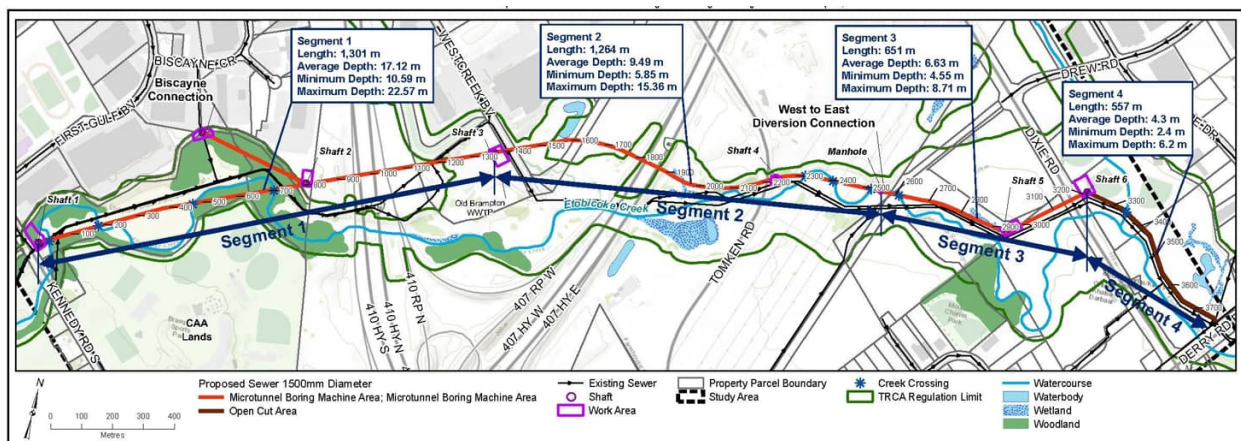


Figure 1: Preferred Design Alignment and Shaft Locations

2. Tunneled Segments

Tunnel operations have minimal impacts to traffic outside of proposed construction compounds. In this case, the proposed construction tunnel shafts are all expected to be off-road. As a result, traffic operations impacts will be limited to construction related traffic entering and exiting the construction compound from the nearest public roadway. Construction related traffic is expected to be minimal, up to 1 truck per hour during tunneling for the purposes of shaft construction, pipe delivery and/or material removal, along with minor peaks when worker shift changes occur.

- Tunnel Shaft 1

Tunnel Shaft 1 is just east of Kennedy Road south of First Gulf Boulevard. The multiuse trail north of Etobicoke Creek and accessible off of Kennedy Road will act as an access road to Shaft 1. Kennedy Road is a major arterial and in the vicinity of the anticipated construction access, is 4 lanes with a two-way left turn lane (TWLTL). Given the low number of expected traffic related to construction, it is not anticipated that this tunnel shaft will have any traffic operations impacts on Kennedy Road or the surrounding road network. During the detailed design stage, considerations for the access road should include sightlines and turning radii to ensure that heavy vehicles can be safely accommodated.

To construct the site compound and tunnel shaft, some short duration temporary closures of Kennedy Road may be required. As Kennedy Road is a major arterial, such works should be completed during night-time or weekend to avoid impacts to peak hour traffic flows.



- Tunnel Shaft 2

Tunnel Shaft 2 is located southeast of Biscayne Crescent and west of highway 410. It is accessed through the Pepsico lands which is access off of a private entrance on Clippers Court which is a minor cul-de-sac connecting to Biscayne Crescent. Biscayne Crescent Connections to First Gulf Boulevard which provides

access via signalized intersections to both Kennedy Road and Steeles Avenue Road, both of which will be able to accommodate large construction vehicles. There is no need for modifications to any of the intersections. As this access is shared with the private property owner, coordination between the contractor and the property owner will be required to limit conflicts between truck movements and periods of higher activity for the impacted businesses.



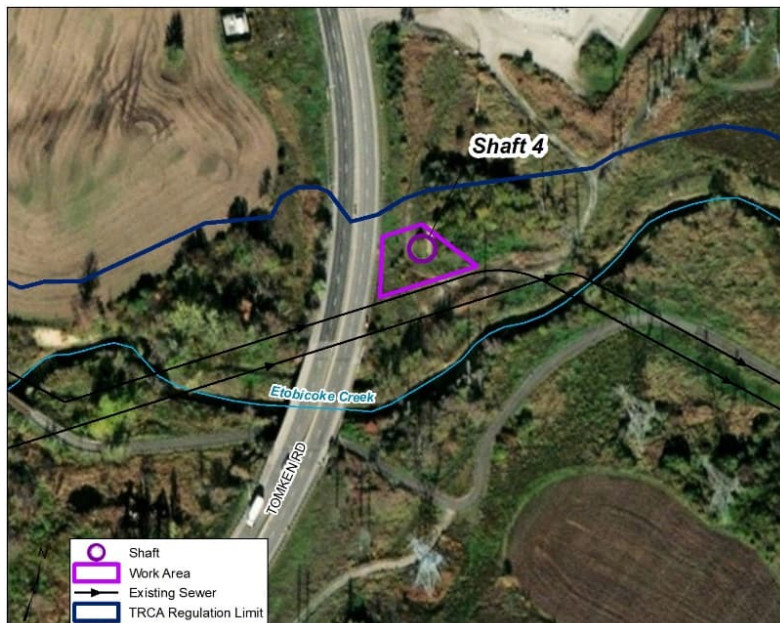
- Tunnel Shaft 3

Tunnel Shaft 3 is located at the south end of Westcreek Boulevard at the site of the old Brampton Treatment Plant. Westcreek Boulevard is two lane road that serves a small industrial area just west of Tomken Road. Based on nearby existing industries, roadway already serves heavy vehicles and should have no issues accommodating construction vehicles. Given that construction related traffic activity is limited, no impacts to traffic operations are expected. The southern end of Westcreek Boulevard does include access to the Etobicoke Creek Trail. The design of the construction compound should limit any impacts to access and use of the trail.



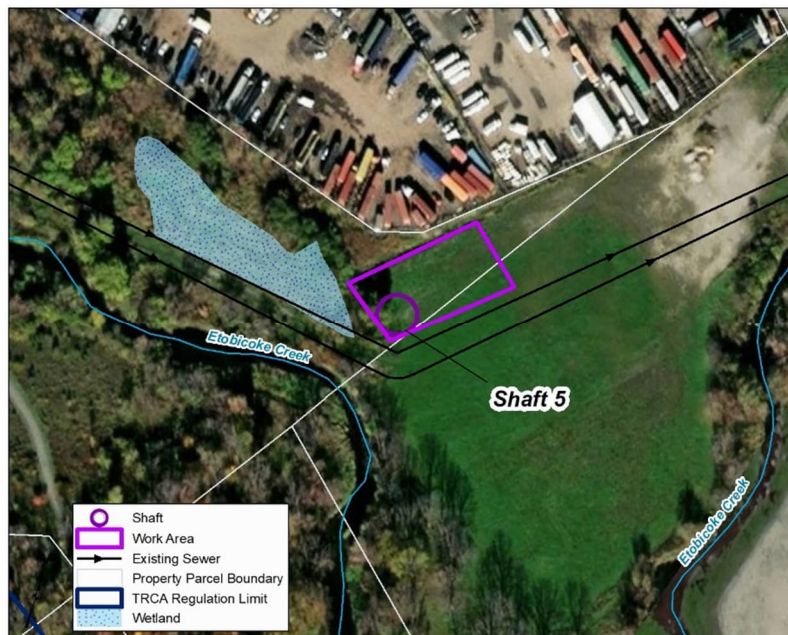
- Tunnel Shaft 4

Tunnel Shaft 4 is located just east of Tomken Road and north of Etobicoke Creek within the hydro corridor. Access to the shaft location would be off Tomken Road where either the access to the hydro corridor could be used and/or a new access could be created. Both options would be expected to have minimal traffic impacts. During the detailed design stage, considerations for the access road should include sightlines and turning radii to ensure that heavy vehicles can be safely accommodated.



- Tunnel Shaft 5

Tunnel Shaft 5 is located approximately 300 m west of Dixie Road and north of Etobicoke Creek. A temporary construction access would be required on the west side of Dixie Road to provide access to the shaft location. Dixie Road is a major 6 lane arterial and would have no issues providing allowing for minor increase in traffic volumes due to construction. Turning restrictions (right-in right-out only) will be required for the access due to the centre median along Dixie Road.



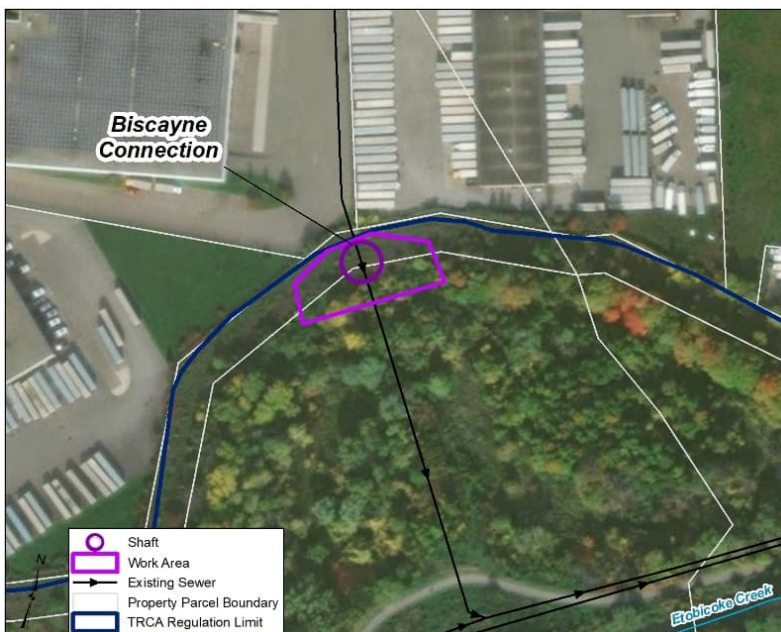
- Tunnel Shaft 6

Shaft 6 is located immediately east of Dixie Road and north of Etobicoke Creek. A temporary construction access would be required on the east side of Dixie Road to provide access to the shaft location. Dixie Road is a major 6 lane arterial and would have no issues providing allowing for minor increase in traffic volumes due to construction. Turning restrictions (right-in right-out only) will be required for the access due to the centre median along Dixie Road.



- Biscayne Connection

The Biscayne Connection is located north of Etobicoke Creek and south of Biscayne Crescent. Access would be through First Gulf Boulevard and Biscayne Crescent both of which serve existing commercial/industrial areas which have existing high truck traffic. Access is expected via private property off Biscayne Crescent and no traffic impacts are expected. As this access is shared with the private property owner, coordination between the contractor and the property owner will be required to limit conflicts between truck movements and periods of higher activity for the impacted businesses.



- Manhole

This manhole is located south of Etobicoke Creek between Shaft 4 and Shaft 5 and will serve as the West to East Diversion Connection. Access will likely be from Tomken Road via the existing hydro corridor access on the south side of the creek. The access road would then follow along the Etobicoke Creek Trail to the manhole location, the design of the access road should minimize impacts to the trail where possible.



3. Open Cut Segments

East of Tunnel Shaft 6, the proposed sewer is expected to be constructed using open cut from east of Dixie Road to the connection at Derry Road. As most of this open cut segment is off-road, the traffic impacts are expected to be limited with only the low volume of construction related traffic impacting nearby roadways.

A temporary construction access would be required on the east side of Dixie Road and/or north side of Derry Road to provide access to the open cut segment. Dixie Road and Derry Road are both major 6 lane arterials and would have no issues providing allowing for minor increase in traffic volumes due to construction. Turning restrictions (right-in right-out only) will be required for the accesses due to the centre median along both roads.



4. Conclusions

The proposed construction of the Etobicoke Creek Trunk Sewer is anticipated to have minimal impacts. The main construction method along the entire alignment is tunneled, and as a result does not intrude upon any active roadways during most of the construction works. Six tunnel construction shafts are expected along with 2 additional work areas to facilitate construction of a connection and manhole; however, they are all proposed off-road and construction activity traffic is expected to be low and have minimal impacts on the adjacent road network and the Etobicoke Creek Trail.

Major arterials Kennedy Road, Derry Road and Dixie Road will have minimal impacts as construction compounds will be located off the roadway. Where short duration activities that encroach upon major arterials are required for the purposes of shaft compound construction, work will be completed during evening or weekend hours to avoid impacting peak hour traffic flows.