

To:	Steve Rosell Summit Earthworks Inc.	Date:	January 25, 2021
c:		Memo No.:	001
From:	Yutaka Tabata, E.I.T Stephen Gardner, M.Sc.	File:	ENG.VGEO03082-01
Subject:	Derwent Way Soil Transfer and Barge Facility Derwent Way/Salter Street Northbound Right-turn		

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1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by Summit Earthworks Inc. to undertake a traffic impact assessment (TIA) for the proposed Derwent Way Transfer Station to be located on a vacant lot adjacent to Derwent Way in New Westminster, British Columbia (BC). This traffic impact assessment analyzed both the weekday a.m. and p.m. peak hour conditions for the opening year and opening + 20-year horizon. The analysis covered the impact of site traffic at the intersections of Derwent Way/Ewen Avenue, Derwent Way/Salter Street, Derwent Way/South Dyke Road and Derwent Way/Annacis Parkway.

Further to the assessment of the southbound left-turn, the potential queues for the northbound right-turn movement at the Derwent Way/Salter Street intersection were assessed in this memo.

2.0 EXISTING TRAFFIC VOLUMES

Turning movement counts were undertaken in the a.m. and p.m. peak periods at the intersection of Derwent Way and Salter Street in January 2017. No vehicles were observed making the southbound left-turn during the a.m. peak hour and only one vehicle was observed making the left-turn during the p.m. peak hour. A summary of the background traffic volumes is provided in Table 1.

Table 1: Existing Traffic Volumes at Derwent Way/Salter Street

	Southbound		Northbound		Westbound	
	Left-turn	Through	Through	Right-turn	Left-turn	Right-turn
a.m. Peak Hour	0	192	124	9	7	2
p.m. Peak Hour	1	202	367	3	3	1

3.0 TRAIN TRAFFIC DELAYS

The Southern Rail of British Columbia (SRY) and the Port of Vancouver has indicated that trains cross Salter Street approximately 8-10 times a day and may block access to the site for around 5 minutes every time. This would temporarily delay inbound vehicles from making a turn onto Salter Street. SRY Rail has also indicated that typical training crossing peak hours occurs between 8 p.m. and 2 a.m. which falls outside of operation hours of the site and that on a typical day approximately 3 to 4 trains would pass outside of that window.

4.0 SITE TRAFFIC IMPACT

The site is anticipated to generate 11 inbound trips and 8 outbound trips in the a.m. peak hour and 8 inbound trips and 11 outbound trips in the p.m. peak hour. All site traffic will be routed to/from the south via Cliveden Avenue and Belgrave Way (i.e., no southbound left-turns from Derwent Way and westbound right-turns from Salter Street). We anticipated an average traffic load of 1-3 vehicles in the a.m. peak hour and 1-2 vehicles in the p.m. peak hour to attempt to access the site during a train crossing event based on a 5 minute stoppage and the volumes presented in Table 1.

Several measures will be implemented to mitigate the impact of trucks arriving during rail events:

1) Trucks will be dissuaded from queuing on Derwent Way

In the event of a train crossing, trucks will be directed north along existing trucking routes to route back to the site via Highway 91A and through Annacis Island and back to the site. This route is anticipated to take approximately 14 min (Figure 1) which provides enough time for the trains to clear.

A traffic management plan containing routing information, train crossing schedules, and other traffic rules/restrictions has been developed by Summit. This will be distributed to all drivers as part of the screening process.

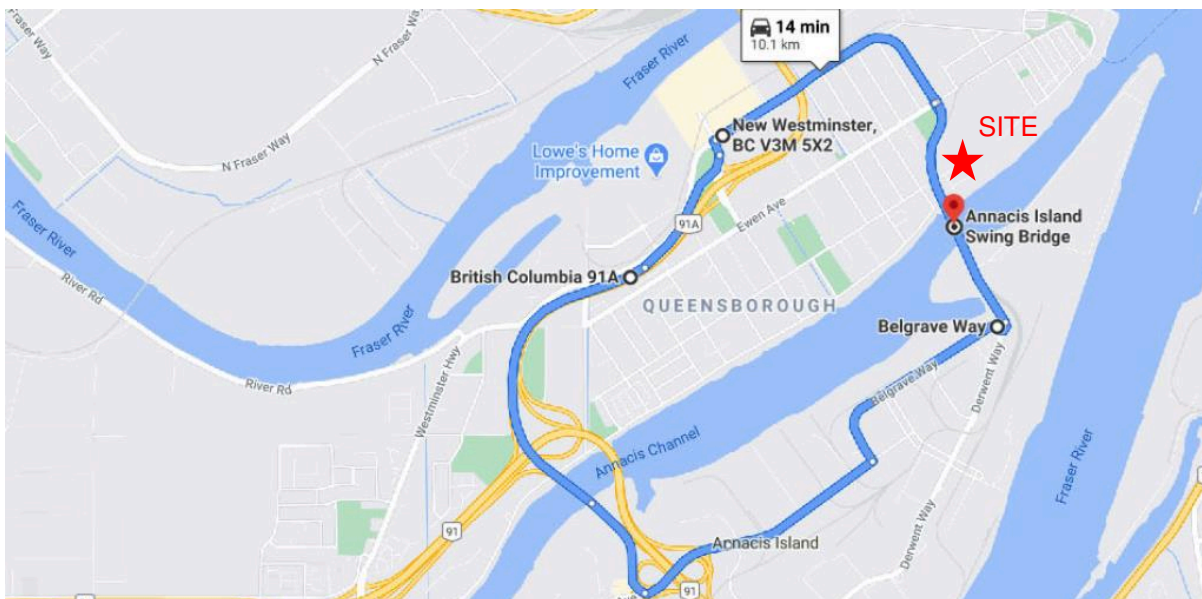


Figure 1: Detour Route (Source: Google Maps)

2) Regular correspondence with SRY Rail

Summit will be in frequent communication with SRY Rail for train crossing schedules and information. This information will be shared with drivers to schedule deliveries between train crossing times. SRY has indicated a willingness to share this information and to maintain ongoing communication with Summit.

5.0 COMMENTS FROM THE CITY OF NEW WESTMINSTER

In a letter dated December 15, 2020, the City of New Westminster's Transportation Division provided two traffic comments that should be addressed by Summit. The specific strategies that will be implemented to address these comments are as follows:

1) Provide further information regarding how they will enforce or compel the development's heavy vehicles to travel to and from the south. A traffic management plan and/or agreement with the City to put in place a modified Derwent Way and Salter Street intersection layout that would physically restrict trucks from travelling to and from the north, should be provided.

As noted earlier, a Traffic Management Plan has been developed for the site. It will include:

- Proposed signage (no southbound left-turn movements to the site, no queueing along Derwent way);
- Travel routes (all vehicles to arrive from the south);
- Detour routes in an event of a train crossing
- Train crossing scheduled (when available)

2) Provide analysis findings on the delays and queuing impacts at the Derwent Way and Salter Street intersection during a train crossing event, with respect to the need for an exclusive southbound left-turn lane (and/or a northbound right-turn lane with adequate measures for heavy vehicle enforcement coming from and going to the south).

SRY Rail has indicated that the train crossing peak hours are from 8 p.m. – 2 a.m, which falls outside the operation of the site. With 8-10 crossings scheduled a day, there will be limited occurrences where trucks are unable to access the site due to train crossings. In the rare event of a train crossing, vehicles will be instructed to drive north to loop back to the site via the route provided in 4.0. This will be enforced with signs and highlighted in the Traffic Management Plan. Given these facts, there will not be any queuing impacts to the intersection of Derwent Way.

6.0 CLOSURE

We trust this memo meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

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