



# Technical Memorandum

To:	Colin Westerhof – Town of Oakville	Date:	2023-08-15
Cc:	Paul Barette – Town of Oakville Michael Di Febo – Town of Oakville Sean Stewart – Town of Oakville Syed Rizvi – Town of Oakville		
From:	Mark Crockford, P.Eng. Robin Marinac, P.Eng.	Project Number:	2023-101

## Re: Bronte River Transportation Impact Study Addendum – DPS/ZBA

### 1 Introduction

To support the Bronte River Limited Partnership properties located at 1300-1350 Bronte Road in Oakville, Ontario, a Transportation Impact Study (TIS) dated March 2023 was prepared and included in the April 2023 DPS/ZBA draft plan of subdivision and zoning by-law amendment (DPS/ZBA) submission. This study was based on Concept Plan SK-92. Since this submission, comments have been received from Town and Region staff.

It is noted that in September 2022, an appeal to the OLT was filed by the proponent, and throughout this process, the parties have continued to work on a without prejudice basis towards resolving outstanding issues and concerns related to the applications. The parties have participated in a series of without prejudice workshops, meetings and site visits which have resulted in a resolution of most issues.

The outcome of these discussions has been positive and, in addition to the received submission comments from Town and Region staff, have resulted in further modifications to the development plan and are reflected in Concept Plan SK-97. From a transportation perspective, these changes are considered minor.

The prepared March 2023 Bronte River Transportation Impact Study (TIS), referred to herein as the TIS, forms the basis for this memo, and this addendum acts as a covering letter for the TIS.

This memo has been prepared to support the DPS/ZBA 'mini submission' application for the Bronte River development and will examine the changes between the original concept plan considered in the TIS (Concept Plan SK-92) and the current plan (Concept Plan SK-97) that is being put forward. This includes examining the unit count and type, preparing an updated trip generation (using the same factors as those presented in the TIS), and identifying the anticipated impact of the proposed changes to the concept plan. Additionally, as a result of these changes to the plan, the received comments from Town staff, as well as a request from Town staff in a without prejudice meeting on August 3, 2023, an update to Section 5.1.2 of the TIS is required. Town staff have requested this update to Section 5.1.2 of the TIS be produced in order to provide further justification for the proposed number of parking spaces in the Bronte River site, as well as for the width and location of on-street visitor parking within the subject development.

Additionally, the comment response matrix, and additional site circulation analysis have been prepared and will also be submitted as part of a 'mini submission' to support the draft plan of subdivision and zoning by-law amendment application. It is noted that as a draft plan condition, the TIS will be required to be updated to include any changes identified in the comment response matrix, the 'mini submission', as well as changes to the concept plan reflected in Concept Plan SK-97.

## 2 Site Plan Comparison

The previous concept plan considered in the TIS (Concept Plan SK-92) is included as Attachment 1. The updated plan, to be analyzed through this memo (Concept Plan SK-97), is included as Attachment 2. Table 1 summarizes the unit count changes between the previous concept and the updated plan.

*Table 1: Land Use Statistic Comparison*

	Single Family Detached LUC 210	Multifamily Housing (Low-Rise) LUC 220
<b>Original</b>	86	89
<b>Updated</b>	86	76
<b>Change</b>	0	-13
<b>% Change</b>	0.0%	-15.8%

As shown above, the revised plan proposes thirteen fewer multifamily housing units (15.8% of the total number of multifamily housing units). Of these thirteen units, twelve are back-to-back townhouses, and one is a standard townhouse unit. Due to the change in unit counts the trip generation has been examined to determine if the proposed changes would significantly differ relative to the trip generation originally considered. The trip generation equations for the single-family detached units, and townhouse units were used in the TIS as the rates produced using these equations were within the range of rates listed in the data statistics for each land use code. The trip generation factors used for each of the land uses are summarized in Table 2.

*Table 2: ITE Trip Generation Factor*

	Single Family Detached LUC 210	Multifamily Housing (Low-Rise) LUC 220
<b>AM Peak</b>	$T = 0.71T + 4.8$	$\ln(T) = 0.95 \ln(T) - 0.51$
<b>PM Peak</b>	$\ln(T) = 0.96 \ln(T) + 0.20$	$\ln(T) = 0.89 \ln(T) - 0.02$

Using the above trip generation equations and a 76% auto driver mode share as applied in the TIS, the total vehicle trip generation for the site has been recalculated. Table 3 summarizes and compares the trip generation of the Bronte River site as considered in the TIS compared to the updated trip generation calculated in this memo.

*Table 3: Vehicle Trip Generation Comparison*

Scenario	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
<b>Previous</b>	20	63	83	67	40	107
<b>Updated</b>	18	59	77	64	38	102
<b>Difference</b>	-2	-4	-6	-3	-2	-5
<b>% Difference</b>	-10.5%	-6.6%	-7.5%	-4.6%	-5.1%	-4.8%

As shown above, the changes to the trip generation as a result of the updated concept plan will result in a net decrease of approximately 7.5% in AM peak hour vehicle traffic, and a net decrease of approximately 4.8% in PM peak hour vehicle traffic.

The reduction in proposed townhouse units will result in a small decrease of traffic. As this reduction in generated traffic is expected to minimally improve the operational analysis of the Study Area intersections analyzed in the TIS, it therefore does not need to be re-examined in Synchro to support the small reduction to the unit count as part of the updated concept plan. Therefore, the results and conclusion of the original TIS remain valid.

## 3 Parking

This section serves as an update to Section 5.1.2 in the TIS dated March 2023. The parking provisions for the proposed development have been reviewed using the Town of Oakville By-law 2014-014. Table 4 documents the required parking along with the parking provisions.

Table 4: Vehicle Parking Requirements – Zoning By-Law Approach

Parking Classification	GFA (sq.m.)/ Units	Residential Parking Rate	Parking Spaces Required	Parking Spaces Provided
Single-Detached	86	2 spaces / unit	172	172
Back-to-back townhouses	54	2 spaces/unit	108	108
Townhouses	22	2 spaces/unit plus 0.25 visitor spaces / required resident spaces	44 + 11	44 + 11
Additional Community Visitor Parking			0	47
<b>Total</b>			<b>335</b>	<b>382</b>

As noted above, the resident parking space requirement for the proposed land uses within the Bronte River development is 335 resident parking spaces, whereas 382 resident parking spaces are provided. Two parking spaces are provided for each detached dwelling unit either inside or in front of the garages, satisfying the zoning by-law requirement. Dual frontage townhouse units as well as the back-to-back townhouse units are provided with one parking space in garage and another in their driveways. In addition, 58 parking spaces will be provided on the roadside of the condo roads, at the ends of the townhouse blocks, and along a portion of the low impact development facilities (LIDs). Of these 58 visitor parking spaces, 11 of them will only serve the dual frontage townhouse units, and the remaining 47 visitor parking spaces will support all proposed unit types within the subject development. Bronte River is providing the additional 47 visitor parking spaces above and beyond the by-law requirements to ensure that this condominium development functions well and has no impact on surrounding land uses. Further details regarding visitor parking will be provided in the parking plan submitted as part of the 'mini submission'.

Within the subject development, a 17-metre local road, 9.4 metre, 10.9 metre, and 11.9 metre condo roadways are noted. The Town of Oakville standard cross-section for the 17-metre local road will be used, and custom condo road cross-sections for the 9.4 metre, 10.9 metre, and 11.9 metre condo roadways have been prepared. Within the cross-section for the 11.9 metre condo roadway, a 2.5 metre on-street parking lane is shown on one side of the road. While it is noted that the Town of Oakville By-law 2014-014 requires parking space with the length parallel to the aisle or driveway to be 2.7 metres in width, multiple Town of Oakville standard cross-section drawings show an on-street parking lane less than 2.7 metres. For example, the local roadway 17 metre right-of-way standard drawing shows an on-street parking lane with a width of 2.25 metres, the local roadway 20 metre right-of-way standard drawing shows an on-street parking lane with a width of 2.5 metres, the connector roadway 19 metre right-of-way standard drawing shows an on-street parking lane with a width of 2.25 metres, and the avenue 22 metre right-of-way standard drawing shows an on-street parking lane with a width of 2.25 metres. As multiple Town of Oakville standard roadway cross-section drawings propose an on-street parking lane with of 2.5 metres or less, the proposed on-street parking lane width of 2.5 metres shown in the 11.9 metre condo roadway custom cross-section is acceptable. Cross-sections for roadways internal to the site will be provided as part of the 'mini submission'.

## 4 Site Specific Transportation Review

Site-specific considerations for the Bronte River development including a Transit Facilities Plan, Pedestrian Circulation Plan, Cycling Facilities Plan, and HSU and firetruck turning templates will be prepared as part of the future TIS update, which will be a draft plan condition.

## 5 Conclusions

The proposed development concept has been refined since the original TIS was prepared. This addendum has verified that the changes to the development concept and associate unit counts will have no negative impact on the operational analysis. Additionally, the proposed number of parking spaces is deemed appropriate to serve the subject development, and the proposed on-street parking lane width is deemed acceptable.

As noted above, as a draft plan condition, the TIS will be required to be updated to include any changes identified in the comment response matrix, the prepared 'mini submission' material, as well as changes to the concept plan reflected in Concept Plan SK-97.

If you have any questions or comments, please do not hesitate to contact the undersigned.

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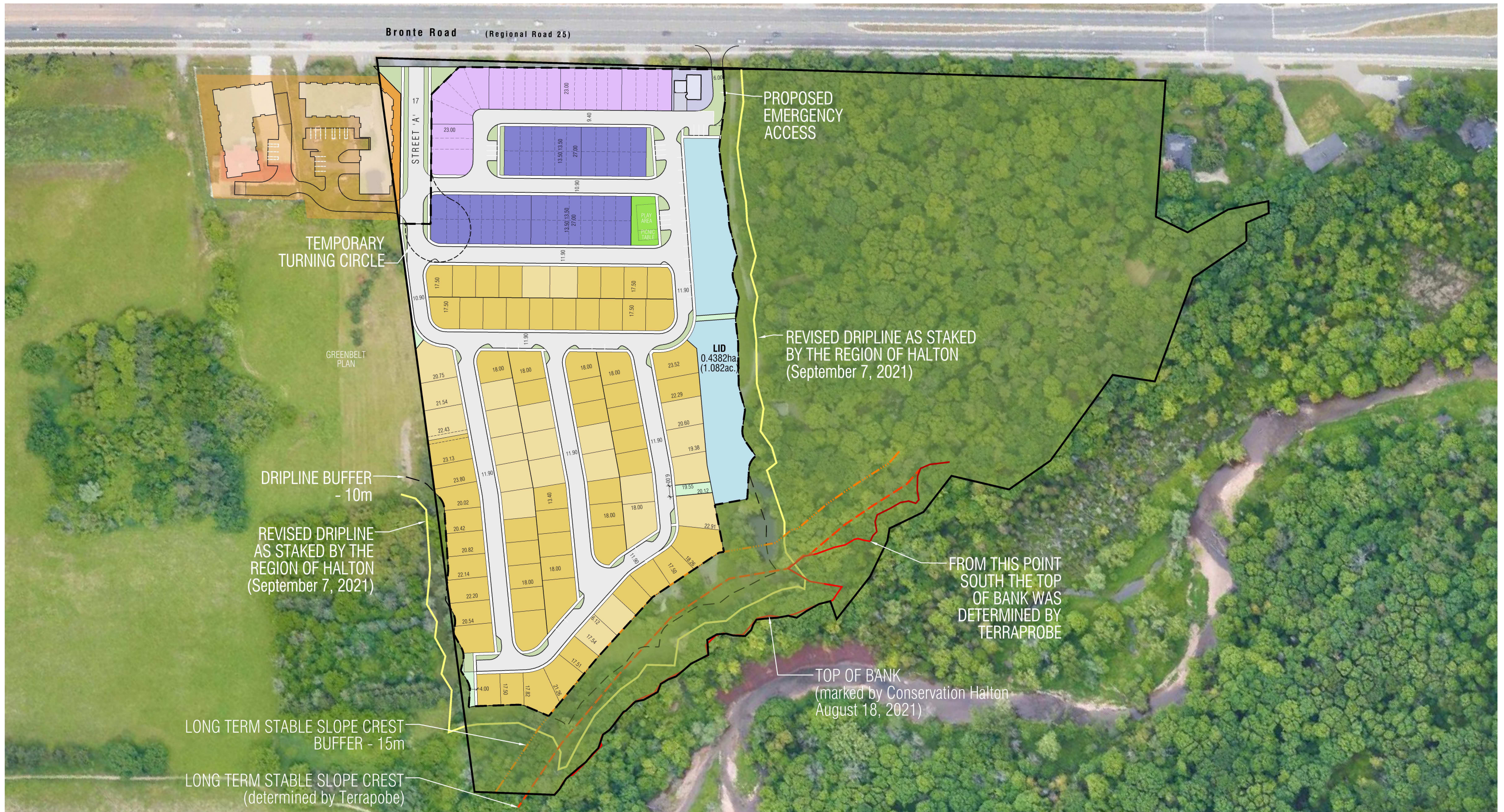
# Attachment 1

Concept Plan SK-92



# Attachment 2

Concept Plan SK-97



- All Units In Metric Unless Otherwise Noted.
- Base Information Obtained From Various Sources And Is Approximate.
- Schedule / Plan Information Is Conceptual And Requires Verification by Appropriate Agency.
- Aerial Photo: Google Earth

**GERRARD  
DESIGN**

# BRONTE RIVER | Oakville, ON CONCEPTUAL DEVELOPMENT PLAN



AUG 10, 2023  
PROJECT 1637  
SCALE 1:2000

**SK-97**