



2800 High Point Drive | T. 905.875.0026
 Suite 100, Milton, ON | F. 905.875.4915
 L9T 6P4 | cfcrozier.ca

MEMO

DATE	June 23, 2023	PROJECT NO.	0706-6431
RE	1425 Dundas Street East – Floodplain Evaluation		

TO Anthony Di Giandomenico, P.Eng, – Project Manager, City of Mississauga
 Amanda McKay, P.Eng. PMP, – Matrix Solutions Inc.

FROM Matt Britton, P.Eng. – C.F. Crozier & Associates Inc.

CC Jason Wagner, MCIP, RPP, – Senior Manager, TRCA
 Bashar Al-Hussaini, – Planner, City Planning Strategies
 Alexandra Kau – CPD Developments
 Sarah Clark, MCIP, RPP – Glen Schnarr & Associates Inc.

1.0 Introduction

C.F. Crozier & Associates Inc. (Crozier) was retained by CPD Developments to prepare a Floodplain Evaluation in support of advancing formal development applications for the Site located at 1425 Dundas Street East, Mississauga, herein after referred to as the subject site. The Floodplain Evaluation summarizes the existing floodplain extents on the subject site, as well as a conceptual evaluation of the potential floodplain impacts under a proposed development scenario.

This memo has been written as a companion document to the letter “1425 Dundas Street East – Site Redevelopment”, prepared by Glen Schnarr & Associates Inc. (GSAI), dated June 23, 2023.

2.0 Background

2.1 Existing Site

The subject site is approximately 1.93 ha and currently consists of an existing commercial plaza and parking lot areas. The subject site, located in a residential and commercial neighbourhood, is bounded by Dundas Street East to the south, Dixie Road to the west, an industrial lot to the north, and a commercial plaza to the east. Approximately 300 m to the north of the subject site is the Little Etobicoke Creek. The subject site is located within a Provincially defined Special Policy Area (SPA), which restricts development due to a floodplain spill condition of the Little Etobicoke Creek. The SPA is intended to be in place until mitigation solution(s) are implemented which will eliminate the spill conditions of Little Etobicoke Creek. Mitigation solutions are being explored and evaluated as part of the Dixie Dundas Flood Mitigation Project (Schedule C Municipal Class Environmental Assessment), which is currently underway. Refer to Section 3.0 for more information regarding the Environmental Assessment.

The material in this memo reflects best judgment in light of the information available at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. C.F. Crozier & Associates Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

2.2 Proposed Development

A concept plan has been developed for the subject site by WZMH, dated December 2022. The concept plan includes the construction of four (4) buildings with an arrangement of podiums and five (5) residential towers, as well as associated driveway, parking, and amenity areas. The proposed uses of the buildings are for retail and residential units.

A copy of the December 2022 Concept plan is attached to this memo.

3.0 Dixie Dundas Flood Mitigation Environmental Assessment

As mentioned in Section 2.1, the Dixie Dundas Flood Mitigation Project (Schedule C Municipal Class Environmental Assessment) is currently underway, which is exploring solution(s) to mitigate the spill conditions of the Little Etobicoke Creek. We have reviewed the Public Information Centre (PIC) #2 Spring 2023 materials available online, which identify the preferred design solution for the flood mitigation. The preferred design solution consists of floodplain improvements within the Little Etobicoke Creek, bridge replacements at the Dundas Street and Dixie Road crossings of the creek, installation of a berm adjacent to the creek banks, and various infrastructure modifications to suit these improvements. Experts from the PIC materials are attached to this memo.

We would like to note that the preferred flood mitigation measures are all located within, or adjacent to, the Little Etobicoke Creek, and are not reliant on the use of the subject site lands, nor participation of CPD Developments.

The following sections discuss the floodplain conditions on the subject site.

4.0 Existing Floodplain Evaluation

Firstly, we wish to point out that the Special Site 1 – Dixie Employment Area map of the Mississauga Official Plan identifies that the subject site, in its entirety, is located within the Special Policy Area which is captured entirely by the floodplain. However, the TRCA's online Floodplain Map Viewer presents a different floodplain limit, which is significantly reduced to the eastern limit of the subject site. Furthermore, the TRCA's online Floodplain Map Viewer indicates that the floodline presented online is an Engineered Flood Plain, and as such this floodline is considered to be more accurate and correct than the floodline presented in the [Special Site 1 – Dixie Employment Area].

Crozier has obtained the TRCA flood plain map (Sheet 3) of Etobicoke Creek, which depicts the floodline across the subject site. Sheet 3 is attached to this memo for reference. We have also received the floodline in CAD file format from the TRCA, and we have prepared a figure to present the floodline in closer detail on the subject site. Please refer to Figure 1 attached.

Furthermore, a detailed topographic survey was undertaken for the subject property by Aksan Piller Corporation Ltd., dated September 29, 2022, and the TRCA floodline was refined based on this detailed topographic mapping. The refined floodline is also presented on Figure 1. In order to refine the TRCA floodline, the Regional water surface elevations (WSELs) of the TRCA floodline were estimated by comparing the TRCA floodline to the detailed topographic mapping. After estimating the WSELs, the TRCA floodline was adjusted to conform to the

detailed topographic mapping. As can be seen on Figure 1, the existing floodplain extents encroaching into the subject site are limited to the eastern area of the subject site.

The existing floodplain storage volume within the subject site was estimated using Civil 3D. The estimated volume is approximately 53 m³.

5.0 Proposed Floodplain Evaluation

As outlined in Section 2.2, the proposed development conditions consist of four (4) buildings with an arrangement of podiums and five (5) residential towers, as well as associated driveway, parking, and amenity areas. The concept plan prepared by WZMH, dated December 2022 is presented on Figure 2, along with the existing conditions floodline. As shown on Figure 2, the proposed development will encroach into the existing floodplain.

To facilitate development of the subject site in a manner that would adhere to applicable TRCA policies and criteria, modifications will be required to the existing floodplain limits.

For the purposes of this memo, Crozier has prepared a conceptual grading plan to demonstrate that the subject site can be graded to alter the existing floodplain limits in a manner that would adhere to applicable TRCA policies and criteria. The preparation of the conceptual grading plan applied the following parameters:

- Maintain existing grades at the property line,
- Where the floodplain limits abut a proposed building, the proposed surface grade at the edge of the proposed building is set 0.3 m higher than the existing WSEL.
- Maintain floodplain storage volumes to the extent possible.

The conceptual grading plan and corresponding modified floodplain are presented on Figure 2.

The proposed floodplain storage volume within the subject site was estimated using Civil 3D. The estimated volume is approximately 50 m³. In comparison to the existing floodplain storage volume, there would be a reduction of floodplain storage volume of approximately 3 m³ under proposed conditions. The magnitude of the reduction in floodplain storage is considered to be minor and inconsequential to the overall floodplain storage of the Little Etobicoke Creek spill area.

5.1 Future Refinement

As shown on Figure 2, the conceptual grading would shift the floodplain around the proposed buildings, however the floodplain extents would still encroach into the proposed driveway and parking areas. As such, it is acknowledged that further considerations would have to be given to applicable TRCA policies and criteria, such as safe access & egress, and safe conveyance. We anticipate further analyses to be undertaken during the development application process, in collaboration with TRCA.

6.0 Recommendations

Based on the foregoing contents presented in this memo, we conclude that the preferred design solution for the Dixie Dundas Flood Mitigation Project (Schedule C Municipal Class Environmental Assessment), as presented within the Public Information Centre #2 Spring 2023 materials, is not reliant upon the subject site. Moreover, it is our opinion that the subject site could be developed to meet the applicable TRCA policies and criteria at this current time. As such, we respectfully request the Agencies to allow CPD Developments to advance formal development applications on this subject site prior to the Dixie Dundas Flood Mitigation Project (Schedule C Municipal Class Environmental Assessment) being completed and mitigation solutions installed, consistent with the requests of the memo prepared by GSAI.

Sincerely,

C.F. CROZIER & ASSOCIATES INC.

A handwritten signature in black ink, appearing to read 'Matt Britton', written in a cursive style.

Matt Britton, P.Eng.
Manager, Land Development

MB/dd

Encl. Concept Plan, WZMH
 Excerpts from Dixie-Dundas Flood Mitigation EA PIC #2
 TRCA Flood Plain Map, Sheet 3, Etobicoke Creek
 Figure 1
 Figure 2

J:\706 - 1045064 Ontario Limited (CPD Inc)\6431 - 1425 Dundas Street East, Mississauga\Memos\2023.06.23_(0706-6431)_Floodplain Evaluation_Final.docx

Welcome

Welcome to the online Public Information Centre (PIC) #2

Dixie-Dundas Flood Mitigation Project

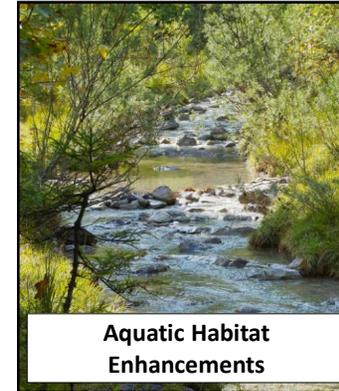
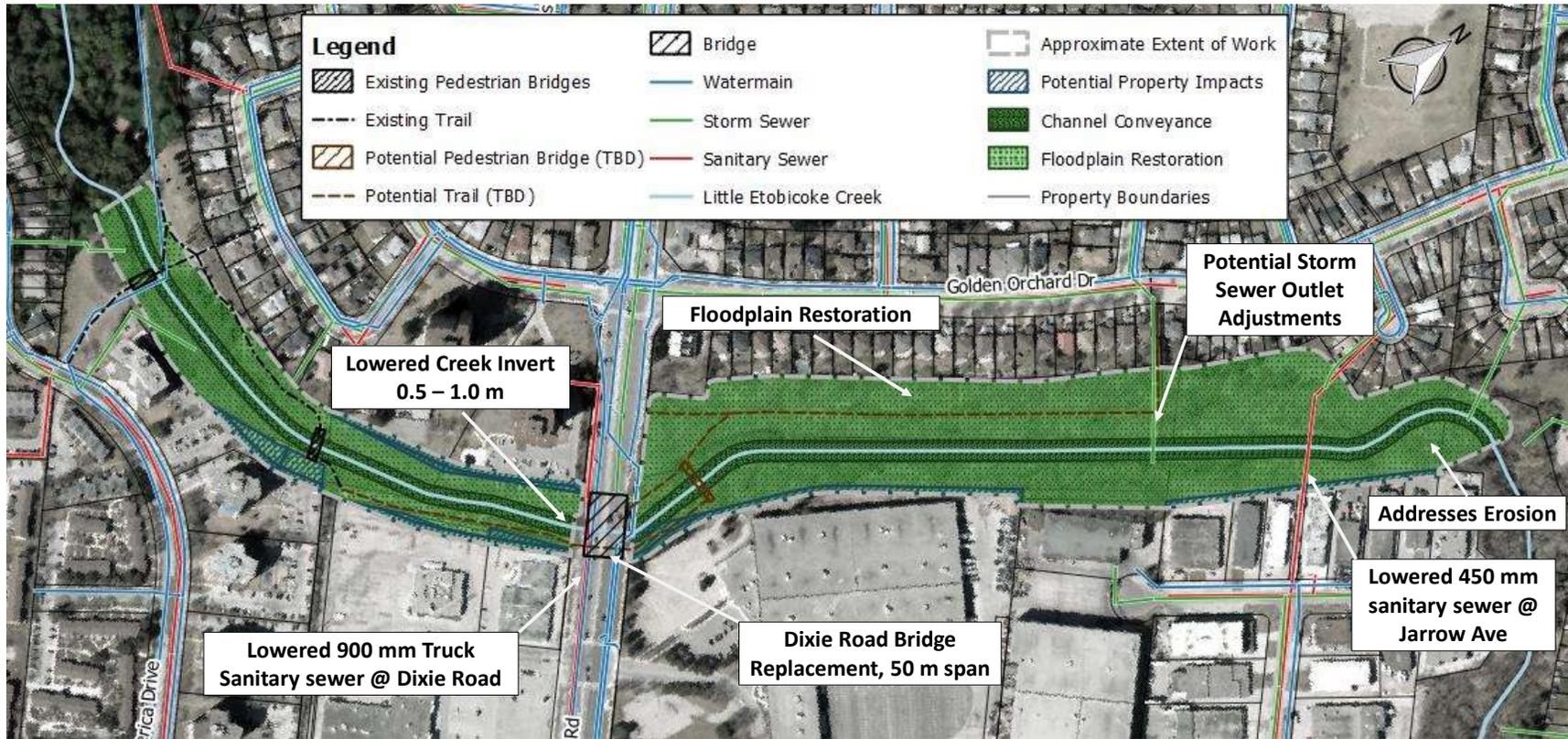
Schedule C Municipal Class Environmental Assessment

<http://www.mississauga.ca/flooding>

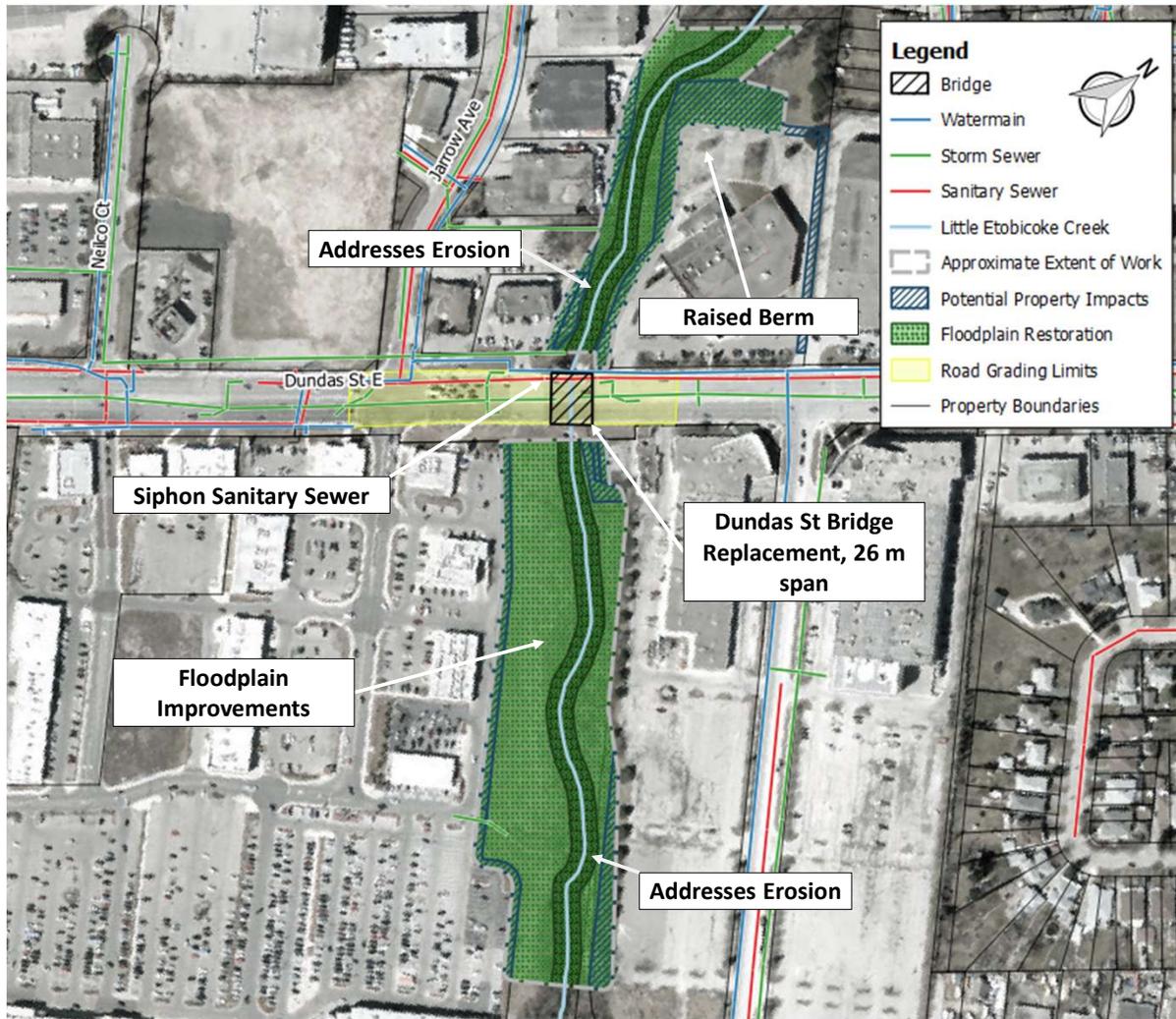


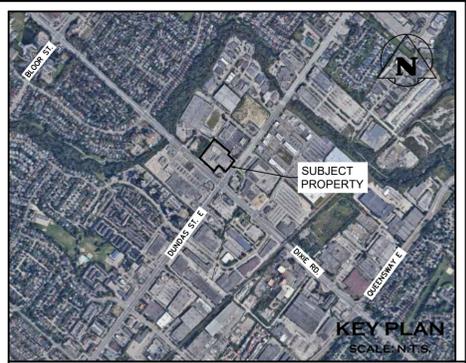
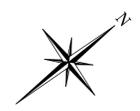
Summary of Preliminary Preferred Design Concepts & Next Steps

Dixie Area - Preliminary Preferred Design Concept



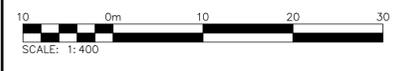
Dundas Area - Preliminary Preferred Design Concept





LEGEND

- PROPERTY LINE
- EXISTING GRADE
- TRCA REGULATORY FLOODLINE
- CFCA FLOODLINE
- CFCA FLOODLINE SETBACK (10.0m)



C	ISSUED FOR FLOODPLAIN EVALUATION MEMO	2023/JUN/23
B	ISSUED FOR FLOODPLAIN & CONCEPT PLAN COORDINATION	2022/NOV/30
A	ISSUED FOR FLOODPLAIN & CONCEPT PLAN COORDINATION	2022/AUG/23
No.	ISSUE / REVISION	YYYY/MM/DD

SITE PLAN NOTES:
 DESIGN ELEMENTS ARE BASED ON SITE PLAN BY W2MH INC.
 DRAWING No. 299-1
 DATE RECEIVED 2022/DEC/16

REGIONAL FLOODPLAIN LIMITS BASED ON TRCA FLOODPLAIN MAP, ETOBICOKE CREEK, SHEET 3, REVISION 1, DATED 2020.10.23

DRAWING NOTES:
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART OF IT WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS STRICTLY PROHIBITED.
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 THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT. DO NOT SCALE THIS DRAWING.
 ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

Project
1425 DUNDAS STREET EAST
 CITY OF MISSISSAUGA

Drawing
 EXISTING CONDITIONS

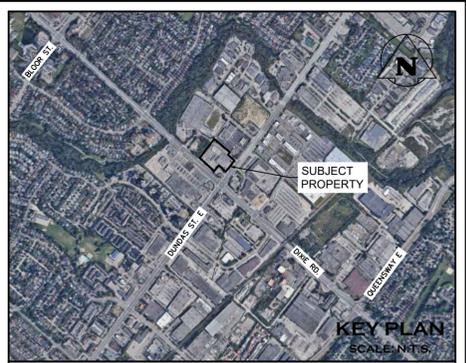
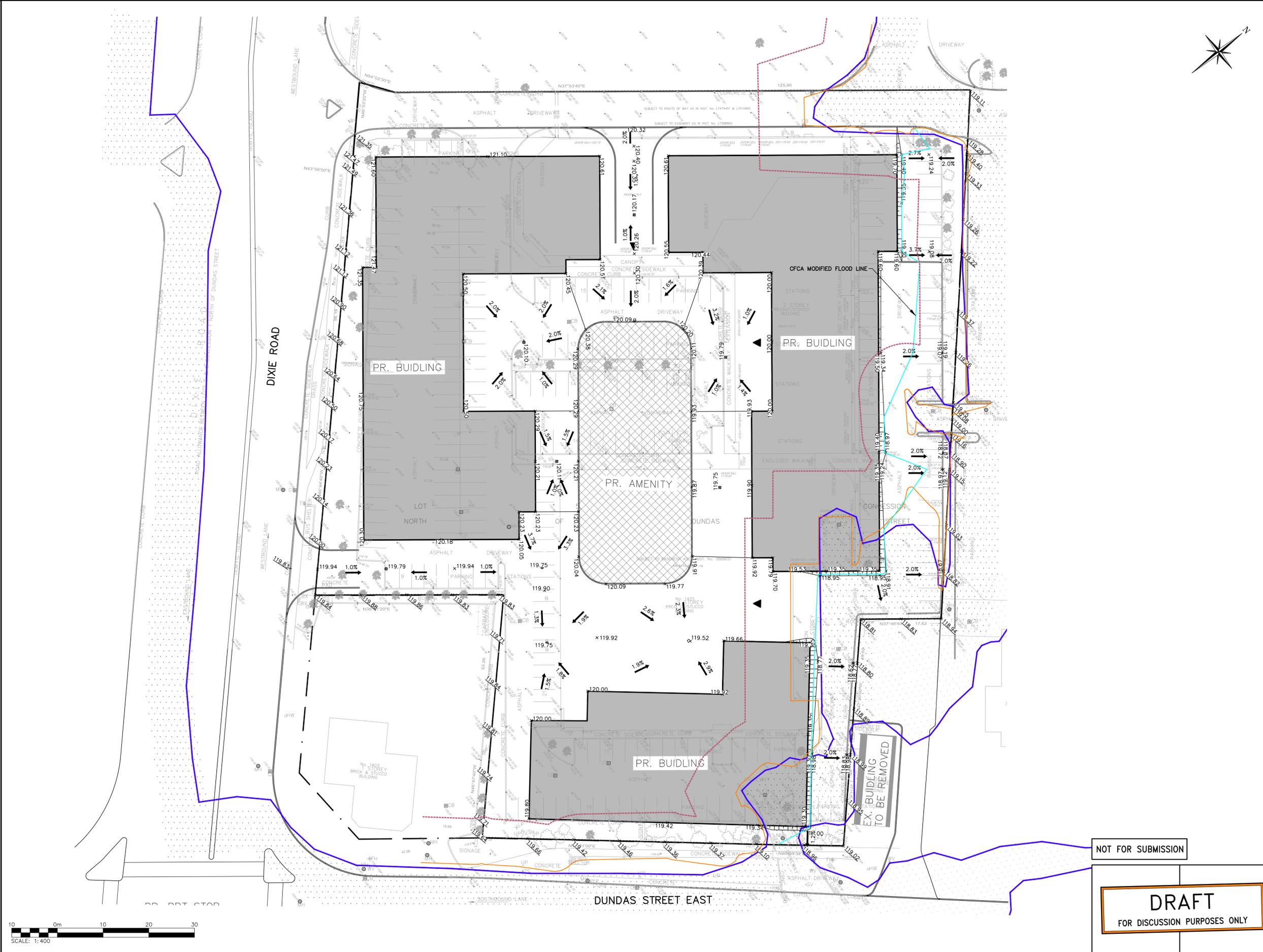
CROZIER
 CONSULTING ENGINEERS

2800 HIGH POINT DRIVE
 SUITE 100
 MILTON, ON, L9T 6P4
 905-875-0026 T
 905-875-4915 F
 WWW.CROZIER.CA
 INFO@CROZIER.CA

NOT FOR SUBMISSION

DRAFT
 FOR DISCUSSION PURPOSES ONLY

Drawn	V:MH	Design	P:R	Project No.	706-6431
Check	S:C	Check	B:W	Scale	1:400
				Dwg.	FIG 01



LEGEND

- PROPERTY LINE
- EXISTING GRADE
- TRCA REGULATORY FLOODLINE
- CFCA FLOODLINE
- CFCA FLOODLINE SETBACK (10.0m)
- MODIFIED FLOODLINE

NOTES:

- CONCEPT PLAN TO BE UPDATED BASED ON LEGAL AND TOPOGRAPHIC SURVEY TO VERIFY ALIGNMENT.
- 10.0m SETBACK FROM CFCA FLOODLINE TO BE VERIFIED WITH TRCA DURING PRE-CONSULTATION.

C	ISSUED FOR FLOODPLAIN EVALUATION MEMO	2023/JUN/23
B	ISSUED FOR FLOODPLAIN & CONCEPT PLAN COORDINATION	2022/NOV/30
A	ISSUED FOR FLOODPLAIN & CONCEPT PLAN COORDINATION	2022/AUG/23
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 DRAWING No. 299-1
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Project
1425 DUNDAS STREET EAST
 CITY OF MISSISSAUGA

Drawing
CONCEPT PLAN 1PD-R2

2800 HIGH POINT DRIVE
 SUITE 100
 MILTON, ON, L9T 6P4
 905-875-0026 T
 905-875-4915 F
 WWW.CROZIER.CA
 INFO@CROZIER.CA

Drawn	V:MH	Design	P:R	Project No.	706-6431
Check	S:C	Check	B:W	Scale	1:400
				Dwg.	FIG 02

NOT FOR SUBMISSION

DRAFT
 FOR DISCUSSION PURPOSES ONLY

OCTOBER 15, 2024

PROJECT NO: 0706-6431

**SENT VIA: EMAIL
AKAU@CPDDEVELOPMENTS.COM**

CPD Developments
2525 Sources Blvd.
Pointe-Claire, QC H9R 5Z9

Attention: Alexandra Kau

**RE: FLOODPLAIN EVALUATION LETTER
1403 & 1425 DUNDAS STREET EAST
MISSISSAUGA, ONTARIO**

Dear Alex,

C.F. Crozier & Associates Inc. (Crozier) was retained by CPD Developments to prepare a Floodplain Evaluation in support of advancing formal development applications for the site located at 1425 Dundas Street East, City of Mississauga. The floodplain evaluation was documented in a memorandum titled 1425 Dundas Street East – Floodplain Evaluation, prepared by Crozier, dated June 23, 2023. The memorandum is appended to this letter.

Subsequent to preparing this memorandum, CPD Developments has purchased the property located at 1403 Dundas Street East, which is adjacent to the 1425 Dundas Street East property. Additionally, subsequent to preparing the memorandum the concept plan has been revised. The revised concept plan is appended to this letter.

The purpose of this letter is to confirm that the analysis and recommendations outlined in the June 23, 2023 memorandum would also apply to the newly purchased 1403 Dundas Street East property as well as the revised concept plan, where by it is our opinion that:

- The preferred design solution for the Dixie Dundas Flood Mitigation Project (Schedule C Municipal Class Environmental Assessment), as presented within the Public Information Centre #2 Spring 2023 materials, is not reliant upon the subject site (1403 & 1425 Dundas Street East).
- The subject site (1403 & 1425 Dundas Street East) could be developed to meet TRCA policies and criteria, as may be applicable.

Should you have any questions or require any further information, please do not hesitate to contact the undersigned.

Sincerely,

C.F. CROZIER & ASSOCIATES INC.

A handwritten signature in black ink, appearing to read 'M. Britton', written in a cursive style.

Matt Britton, P.Eng.
Manager, Milton

MB/cj

c.c. Sarah Clark, Glenn Schnarr & Associates Inc.

Encl: "1425 Dundas Street East – Floodplain Evaluation", prepared by Crozier, dated June 23, 2023
Development Concept SPD, prepared by WZMH, dated September 26, 2024

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