



March 23, 2016

File: 1617

**STORMWATER MANAGEMENT ASSESSMENT**  
**89 Main Street East**  
**Town of Grimsby**

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We are pleased to provide a stormwater management assessment of the redesign of the asphalt access and parking area at 89 Main Street East, in the Town of Grimsby. The property currently has a single dwelling with existing asphalt coverage and conveys stormwater flows from north to south to the rear of the property to a rearyard catch basin on the lands of 91A Main Street East.

We have reviewed the Stormwater Management Plan for Main Place as prepared by Upper Canada Consultants (October 2000) and have confirmed the subject lands had been included within the Stormwater Management plan for Main Place. The Main Place storm sewer was designed to ensure capacity for the subject lands under the existing conditions. The original Figure #2 from the Main Place Stormwater Management Plan has been provided showing the subject property have been accessed under the existing conditions and sufficient capacity within the existing storm sewer is provided.

The existing conditions for the subject lands is comprised of approximately 710m<sup>2</sup> of impervious area with 377m<sup>2</sup> of landscape area, these conditions provide a imperviousness percentage of 71.0%. The proposed conditions for the subject lands will incorporate approximately 455.0m<sup>2</sup> of impervious area and 440m<sup>2</sup> of landscape areas, which will decrease the imperviousness percentage to 66.0%. Therefore, the overall proposed parking lot grading and landscape buffers will provide additional stormwater infiltration over existing conditions. The weighted imperviousness percentage calculation worksheet has been included with this report.

In areas adjacent to exterior property lines, it is suggested to provide grassed swales to ensure stormwater flows continue to convey to the existing rearyard catch basin, the location of the proposed swales has been identified in the provided concept plan.




In conclusion, we feel the proposed redesign of the asphalt access and parking area shall not have any stormwater impacts on the adjacent lands and Town storm sewer systems. The following is a summary of the stormwater assessment.

1. The impervious area of the subject lands has decreased with the reduction of asphalt area at the front of the property which is proposed to be landscape area.
2. The existing stormwater overland and sewer systems that provided drainage shall not be impacted by the proposed redesign, as the subject lands have more previous area for stormwater infiltration.
3. Grassed swales to be provided to ensure stormwater flows continue to convey to the existing rear-yard catchbasin.

Should you have any questions or concerns regarding the information provided, please do not hesitate to contact our office.

Yours very truly,



Jason Schooley, P.Eng.

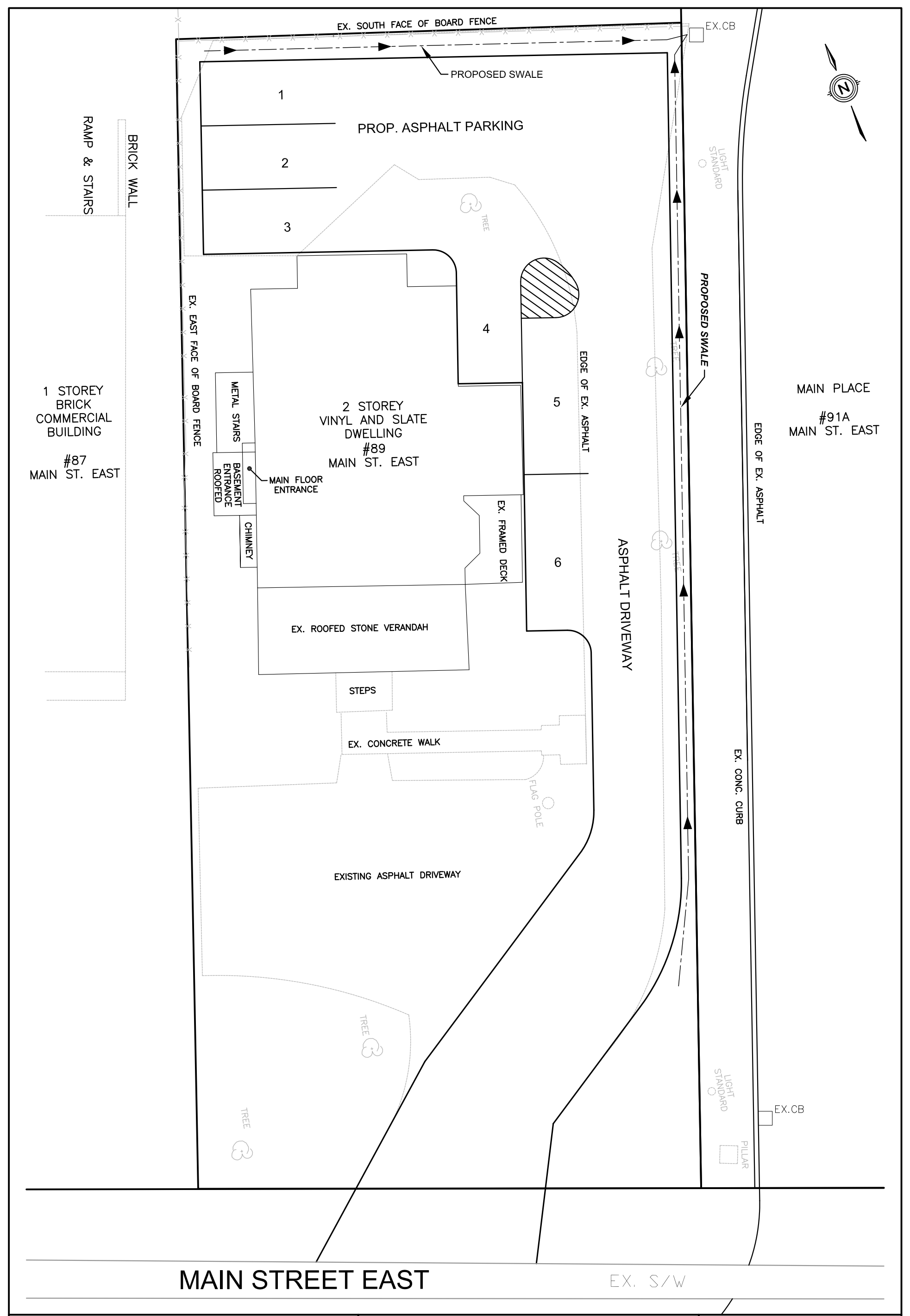


## Weighted Imperviousness Percentage Calculation Worksheet

Project Name: 89 Main Street East, Town of Grimsby  
 Project Number: 1617  
 Date: March 23, 2016  
 Person: David Lampman, E.I.T.

	<i>Footprint</i>	<i>Number</i>		<i>Effective Impervious Area</i>
<b><u>EXISTING CONDITIONS</u></b>				
Existing Asphalt Parking	524.0 m <sup>2</sup>	0.95	m <sup>2</sup>	498 m <sup>2</sup>
Existing Building	186.0 m <sup>2</sup>	1.00	ea	186 m <sup>2</sup>
Landscape/Greenspace	377.0 m <sup>2</sup>	0.20	ea	75.4 m <sup>2</sup>
<b>TOTAL CATCHMENT IMPERVIOUS AREAS</b>				759 m <sup>2</sup>
<b>TOTAL CATCHMENT AREA</b>				1,071 m <sup>2</sup>
<b>EFFECTIVE WEIGHTED CATCHMENT IMPERVIOUSNESS</b>				<b>71.0%</b>

	<i>Footprint</i>	<i>Number</i>		<i>Effective Impervious Area</i>
<b><u>PROPOSED CONDITIONS</u></b>				
New Asphalt Parking	455.0 m	0.95	m	432 m <sup>2</sup>
Existing Building	186.0 m <sup>2</sup>	1.00	ea	186 m <sup>2</sup>
Landscape/Greenspace	440.0 m <sup>2</sup>	0.20	ea	88.0 m <sup>2</sup>
<b>TOTAL CATCHMENT IMPERVIOUS AREAS</b>				706 m <sup>2</sup>
<b>TOTAL CATCHMENT AREA</b>				1,071 m <sup>2</sup>
<b>EFFECTIVE WEIGHTED CATCHMENT IMPERVIOUSNESS</b>				<b>66.0%</b>



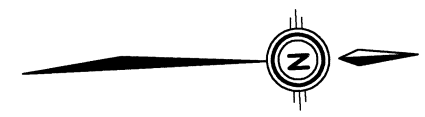
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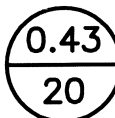
**89 MAIN STREET EAST**

**TOWN OF GRIMSBY  
CONCEPT PLAN**

DATE	2016-03-23
SCALE	1:150 m
REF No.	.
DWG No.	<b>1617</b>



**LEGEND**

-  EXISTING DRAINAGE BOUNDARY
-  FUTURE DRAINAGE BOUNDARY
-  PROPOSED STORM SEWER
-  EXISTING STORM SEWER
-  DRAINAGE AREA (HECTARES)  
SUBCATCHMENT NO.

SCALE 1:500

**MAIN PLACE, GRIMSBY  
STORMWATER DRAINAGE AREAS**

  
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DWG. No: **FIGURE 2**

