

MEMORANDUM

To: Mark Kauhanen (BBS Construction LTD.)

From: William Sherwin (MP), and Thomas Gryz (MP)

Date: March 11, 2022

Re: Updates to Concept Plan for 2 Bill Leathem Drive TIA

This Memo is to be used in conjunction with the Transportation Impact Assessment (TIA) Submitted by McIntosh Perry (MP), in November 2020 for the proposed warehouse development located at 2 Bill Leathem, Drive, Ottawa ON. Figure 1 shows the updated proposed site plan.

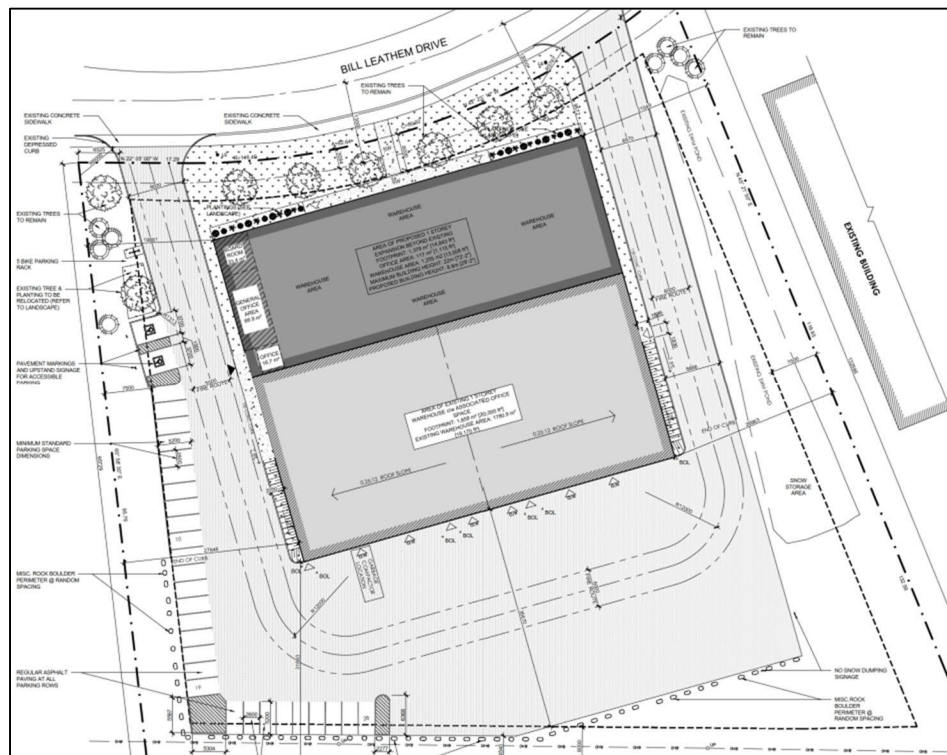


Figure 1 Updated Site Plan

The original proposal for the development was to be located at 2 Bill Leathem Drive in Nepean with a lot area of over 21,000 m² (2.1 ha). The original proposed development was a one-story office with warehouse space which was to have a total Gross Floor Area (GFA) of 1,858 m² (20,000 ft²). The original proposed development had two accesses on Bill Leathem Drive and a total of 42 on-site parking spaces. An expansion of the original development has been proposed and this memorandum will serve as a basis to compare the trip generation and impact onto the road network from the original development to now include the expansion.

Based on the concept plan provided to MP in February 2022, there are plans to include an additional 1,358 m² of warehouse GFA to the original plan. This will be located in the front of the original proposed development and result in the parking stalls previously located at the front of the lot to be removed. With the addition the parking is expected to be reduced to 28 stalls. The addition will not include any new driveways. Both the original and new conceptual plans can be found in Appendix A and Appendix B respectively.

Trip generation for the proposed development was calculated in accordance with Institute of Transportation Engineers (ITE) Trip Generation 10th Edition methodologies and data. Based on the existing site plan the development included 1,858 m² (20,000 Sq Ft) of warehouse space.

Table 1 illustrates the existing trip generation for the site.

Table 1 Existing Trip Generation

ITE Land Use	Unit of Measure	Quantity	Rate		AM Peak Hour			PM Peak Hour		
			AM	PM	In	Out	Total	In	Out	Total
Warehousing (Code 150)	Ksf	20	*	**	27	9	36	10	28	38

* Fitted Curve Equation: $T = 0.12(X) + 25.32$, Trips multiplied by 1.28 As per TIA Guidelines

** Fitted Curve Equation: $T = 0.12(X) + 27.82$, Trips multiplied by 1.28 As per TIA Guidelines

As per city of Ottawa TIA guidelines, trip generation must be done in terms of person trips and not vehicles trips. As such it is required when using ITE trip generation to multiply the corresponding trip generation by a factor of 1.28 to convert vehicle trips to person trips.

Based on the existing trip generation the development is anticipated to generate 36 new person trips during the am peak hour, and 38 during the pm peak hour.

Trip generation for the proposed development was calculated in accordance with Institute of Transportation Engineers (ITE) Trip Generation 10th Edition methodologies and data. Based on the expansion to the proposed development, the new uses are warehouse (ITE LUC 150) of 2,794 m² (30,074 Sq. Ft) and office space (ITE LUC 710) of 422 m² (4,542 Sq. Ft).

Table 2 illustrates the updated trips generated based on the expansion.

Table 2 Updated Trip Generation

Land use	ITE Land Use Code	GFA m (SQ Ft)	Rate		AM Peak Hour			PM Peak Hour		
			AM	PM	In	Out	Total	In	Out	Total
Office	710 General Office Building	117 (1,259)	$T = 1.16 \text{ per } 1000 \text{ Sq Ft.}$	$T = 1.15 \text{ per } 1000 \text{ Sq Ft.}$	1	0	1	0	1	1
Warehouse	150 Warehousing	3036 (32,679)	$T = 0.12(X) + 25.32$	$T = 0.12(X) + 27.82$	22	7	29	9	23	32
Total Vehicle Trips					23	7	30	9	24	33
Total Person Trips					29	9	38	12	31	43

* Total person trips is equivalent to total vehicle trips multiplied by the factor of 1.28 to convert vehicle to person trips as per City of Ottawa TIA Guidelines

Based on the updated trip generation, the new addition, including the previous building, is anticipated to generate 38 trips during the am peak hour with 29 entering the site and 9 exiting the site. During the pm peak hour, the updated development is anticipated to generate 43 trips with 12 entering the site and 31 exiting the site.

The expansion of the development is anticipated to generate a total of 2 more trips during the am peak hour 2 more entering and the same number existing, and 5 more trips during the pm peak hour with 2 more entering and 3 more exiting the site.

As the volume of added trips generated by the addition (2 vph am / 5 vph pm) is expected to be low, it is anticipated that this will result in minimal impact on the existing roadway network and study intersections.

Prepared by,



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Reviewed by,

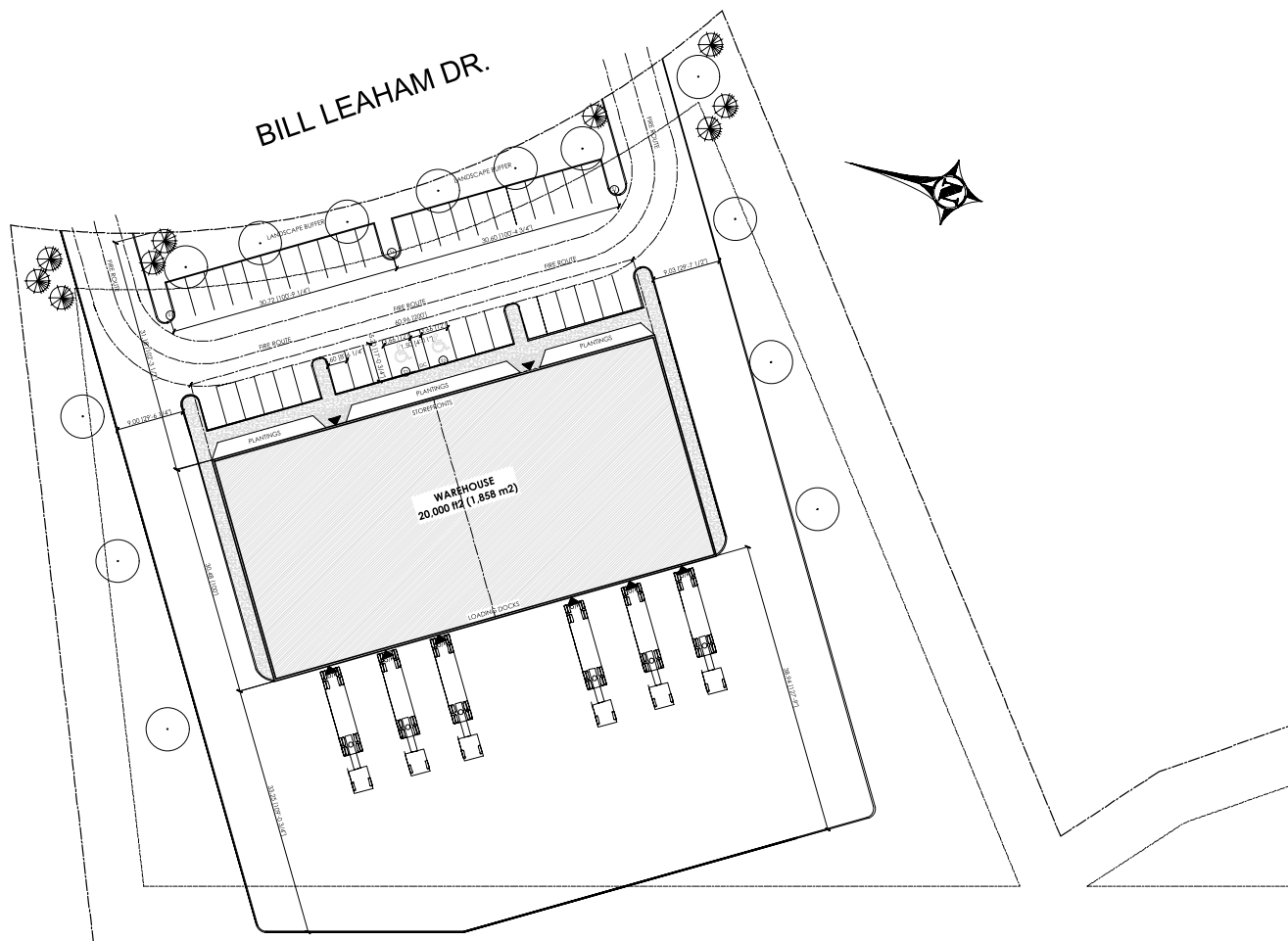
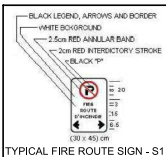


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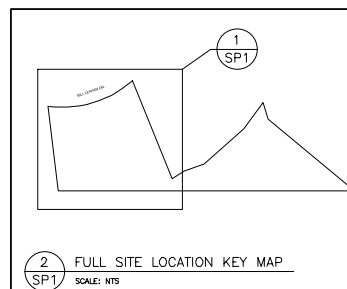
APPENDIX A – ORIGINAL SITE PLAN

MECHANISM	REQUIRED	PROPOSED
MIN LOT AREA	2,000m ²	17,725m ²
MIN LOT FRONTAGE	N/A	m
MAX LOT COVERAGE	65%	XXX
MIN FRONT SETBACK	7.5m	XXXm
INT. YARD SETBACK	7.5m	XXXm
MIN. REAR YARD SETBACK	7.5m	XXXm
MAX. BUILDING HEIGHT	18m	XXXm
MIN. WIDTH OF LANDSCAPE BUFFER ADJUTING STREET	3m	XXXm
PARKING		
MIN REQUIRED SPACES		
WAREHOUSE	[0.8/100m ²] 3	
TOTAL PARKING 2.6mx5.2m	15	XX
TOTAL REAR FREE SPACES		
3.7m x 5.2m	2	2
LOADING SPACES 9mx3.2m	1	1

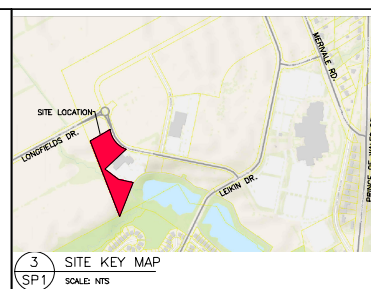
TOP	TOP OF ROAD/SECTION
TOP	TOP OF SLAB
USP	USP (INCREASE OF FOOTING)
DM	MAIN DRAINAGE LOCATION
	OVERROAD DOOR
OC	ONE LOCATIONS
	ROLLBACK
	DEPRESSED CURB
	PROPERTY LINE
	LINE OF SETBACKS
	THE HYDRANT
	CATCH BASIN MAIN HOSE
	CATCH BASIN
	LANDSCAPE CATCH BASIN
	ROUNDER SIGN - SEE SIGN DETAIL BELOW
	BARRIER FREE PARKING SIGN
	ONE WAY TRAFFIC ONLY - NO ENTRY SIGN
	EXTENDED WALL PACE - ROLLUP PHOTO CELL SIGN



1 SITE PLAN
SP1 SCALE: 1:300



2 FULL SITE LOCATION KEY MAP
SP1 SCALE: NTS



3 SITE KEY MAP
SP1 SCALE: NTS

REVISION		
NO.	DATE	REVISION
1		
2		
3		
4		
5		

CIVIL ENGINEER:



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OWNER:
1850591 Ontario Ltd

PROJECT:
WAREHOUSE PROJECT
2 BILL LEAHAM DR.
OTTAWA ON

DRAWING TITLE:

SITE PLAN

PROJECT N°: 492-19

DRAWING NO.

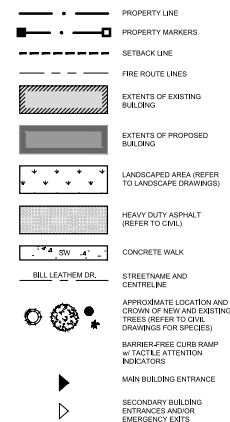
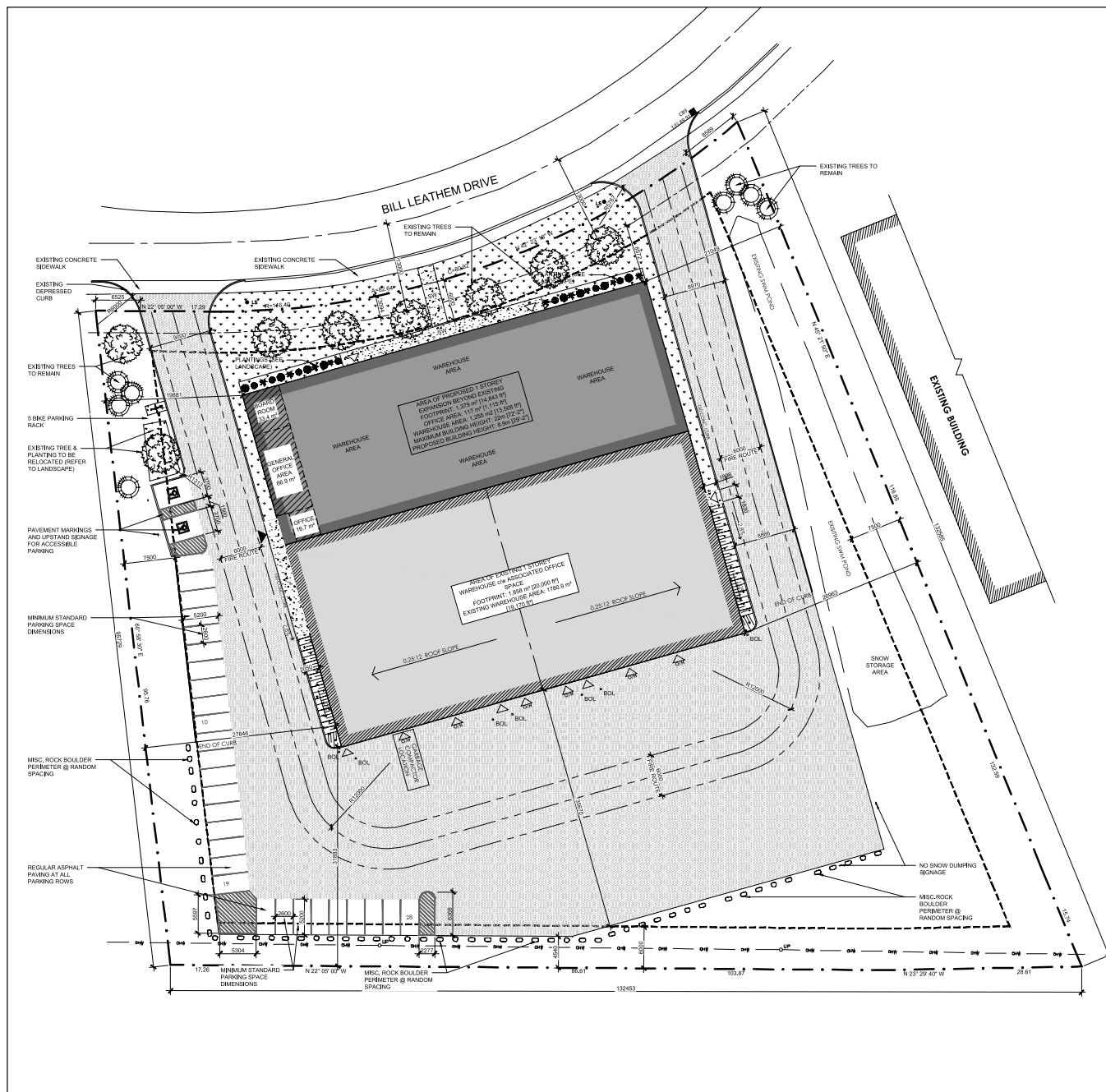
SCALE: AS NOTED

DRAWN BY: MK

DATE: 1/8/2020

SP1

APPENDIX B – UPDATED SITE PLAN



PER THE CITY OF OTTAWA ZONING BY-LAW 2008-200

LEGAL DESCRIPTION:
PLAN OF SURVEY OF PART OF LOT 18 CONCESSION 1 (RIDEAU FRONT)
GEOGRAPHIC TOWNSHIP TOWNSHIP OF NEPEAN
CITY OF OTTAWA

ZONING:
B-1 (LIGHT INDUSTRIAL)

ZONING PROVISIONS (PER TABLE 284E):

- LOT AREA (M²): 3,000 m²
- ACTUAL LOT AREA = 12,114 m²
- LOT WIDTH (M): 15 m
- ACTUAL WIDTH = 116.3 m
- LOT COVERAGE = 60% MAX
- EXISTING LOT COVERAGE = 15%
- ADDITION LOT COVERAGE = 15%
- TOTAL LOT COVERAGE = 30%
- SETBACKS (M):
- FRONT = 6 m
- REAR = 6 m
- SIDES = 7.5 m
- MAX BUILDING HEIGHT = 22 m
- ACTUAL HEIGHT = 13 m
- MIN. WIDTH OF LANDSCAPE BUFFER ADJUTING STREET = 3.0 m

PROPOSAL:
1,380 m² (14,817 m²) TOTAL EXPANSION TO THE EXISTING 1 STOREY BUILDING COMPRISED PRIMARILY OF GENERAL OFFICE SPACE AND WAREHOUSE SPACE. THE EXPANSION WILL INCORPORATE ADDITIONAL GENERAL OFFICE AND WAREHOUSE SPACE.

PARKING:

CITY OF OTTAWA MINIMUM PARKING SPACE RATES

THE REQUIRED NUMBER OF PARKING SPACES BASED ON THE CITY OF OTTAWA'S MINIMUM PARKING SPACE RATES PER BY-LAW 2016-2018 & 2019-2021 - TABLE 101-MINIMUM PARKING SPACE RATES:

ROW M45 - LIGHT INDUSTRIAL USE
INDUSTRIAL USES: LIGHT REQUIRES 0.8 PARKING SPACES PER 100m² OF GROSS FLOOR AREA.

REQUIRED SPACES - WAREHOUSE: 25 SPACES

ROW M59 - OFFICE

OFFICE USE REQUIRES 2.4 PARKING SPACES PER 100m² OF GROSS FLOOR AREA.

REQUIRED SPACES - OFFICE: 3 SPACES

TOTAL REQUIRED: 28 SPACES

TOTAL PROVIDED: 28 SPACES

BARRIER-FREE PARKING:

RESERVED BARRIER-FREE PARKING SPACES

REQUIRED: 2 SPACES

PROVIDED: 2 SPACES

LOADING REQUIREMENTS:

(PER TABLE 133A)
BASED ON THE GROSS FLOOR AREA OF THE BUILDING. A MINIMUM OF 2 LOADING SPACES IS REQUIRED.

BIKE PARKING:

ON-STREET BIKE PARKING WILL BE PROVIDED WHERE SHOWN AND NOTED ON THE PLAN. THE REQUIRED NUMBER OF BIKE PARKING SPACES BASED ON THE CITY OF OTTAWA'S MINIMUM PARKING RATES PER SECTION 111 OF PART 4 OF THE ZONING BY-LAW 2008-200 CONSIDERATION - TABLE 111A-BICYCLE PARKING SPACE RATES:

LAND USE ITEM:

(E) PER 250m² OF GROSS FLOOR AREA - OFFICE = 1 SPACE

(G) PER 1000m² OF GROSS FLOOR AREA - LIGHT INDUSTRIAL = 1 SPACE

AREA OF (E): 117 m² = 1 SPACE

AREA OF (G): 3035.0 m² = 4 SPACES

TOTAL PARKING REQUIRED: 5 SPACES

North



Revisions

No.	By	Description	Date
02	JM	RE-ISSUED FOR COORDINATION	08 MAR 2022
01	JM	ISSUED FOR COORDINATION	07 MAR 2022

Project

WAREHOUSE ADDITION

2 BILL LEATHAM DRIVE, NEPEAN, ON

Drawing
PROPOSED SITE PLAN

Scale AS NOTED **Stamp**

Drawn J.M.

Checked J.M.

Project No. 22-114

Date FEBRUARY 2022

Drawing No.

SP-A01