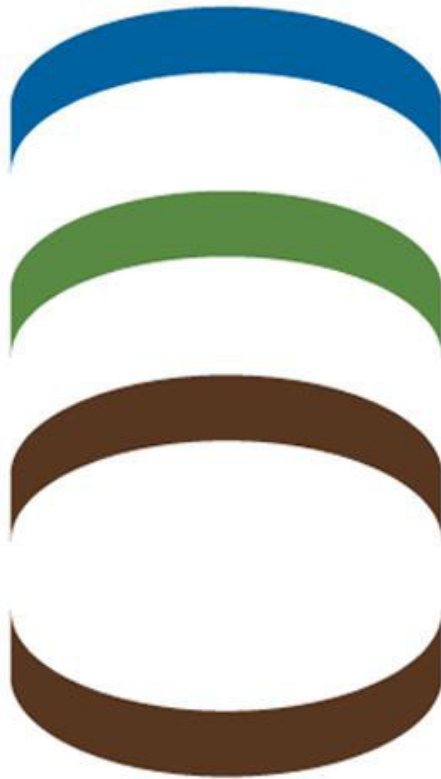


**TRANSPORTATION IMPACT ASSESSMENT**

Property located at 1195 Newmarket Street, Ottawa

N/Réf.: **14166**



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**Hui Chen Peng, P. Eng.**

Consultant - 1001130984



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**Pascal Fhima, Eng., P. Eng.**

President and CEO

**AUGUST 2021**

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## EXECUTIVE SUMMARY

This Transportation Impact Assessment (TIA) report has been prepared for the project at 1195 Newmarket Street. The subject site is surrounded by the following facilities:

- ❖ A Truck-Use Pathway East-West bound to the south of the site;
- ❖ Non-residential developments in the vicinity

As per Ottawa Transportation Impact Assessment Guideline, the traffic components and volume as well as the trend in horizontal year are evaluated. The conclusions and recommendations of this assessment can be summarized as follows:

The weekday peak hour total traffic volumes along Bantree Street and Newmarket Street are anticipated to be within the City's ATM (Active Traffic Management) thresholds, and overall capacity thresholds for a local roadway.

The additional traffic generated by the proposed development during the weekday peak hours is not anticipated to have a significant impact on both Newmarket Street and Bantree Street, nor on intersection operations within the study area. All study area intersections are anticipated to continue to operate with a supposed LOS F or D during weekday peak hours.

## 1. SCREENING

### 1.2 INTRODUCTION

This Transportation Impact Assessment (TIA) report has been prepared for the project at 1195 Newmarket Street. The subject site is surrounded by the following facilities:

- ❖ A Truck-Use Pathway East-West bound to the south of the site;
- ❖ Non residential developments in the vicinity

A view of the subject site is provided in Figure 1.

The site currently is vacant and has gated accesses at Newmarket Street restricting local intersection with Bantree Street.





**Figure 1: Study Site**

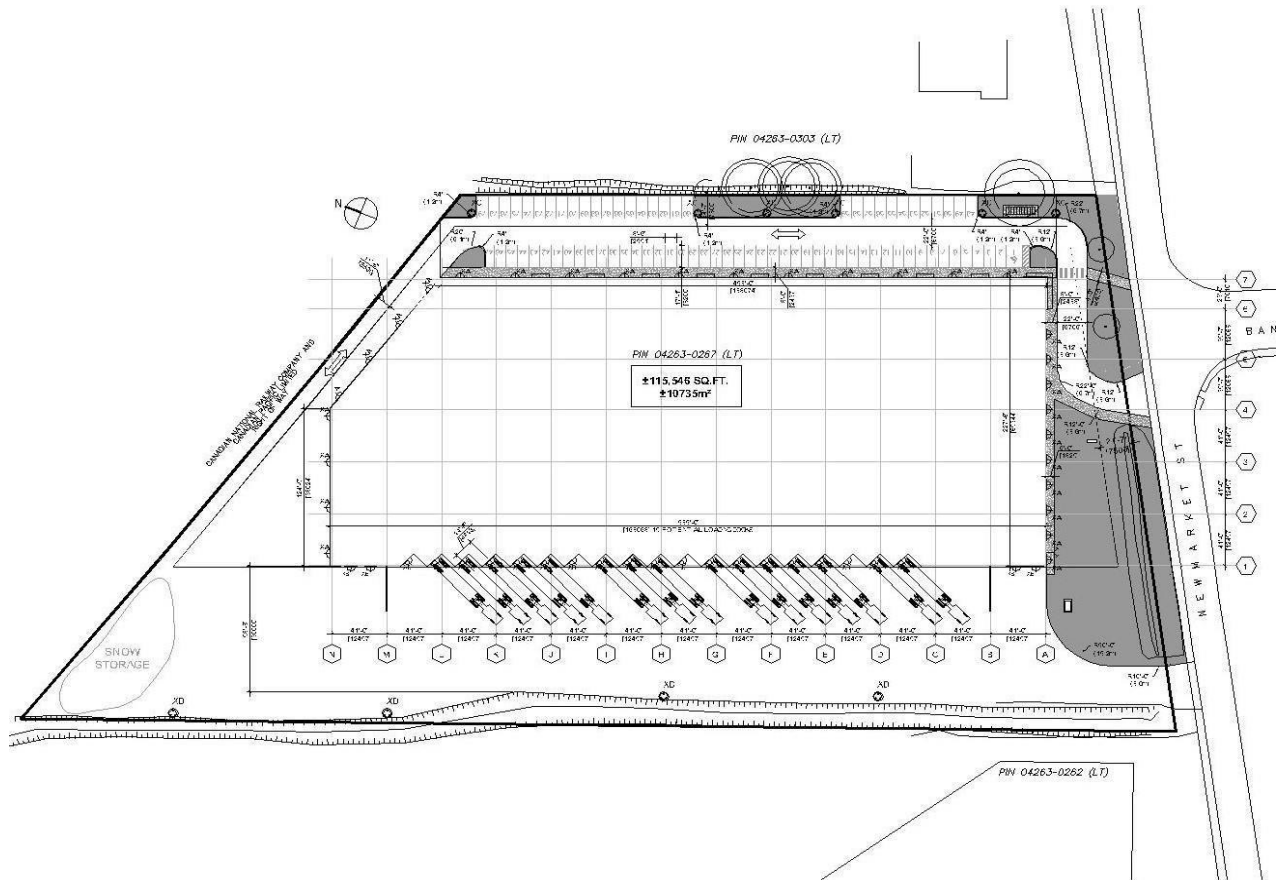
### 1.3 PROPOSED DEVELOPMENT

The development at 1195 Newmarket Street was proposed by 1199 Newmarket Holdings Ltd, with the purpose of a plan to develop a 10,735 square metre warehouse building and 79 vehicle parking spaces. The site is currently developed, and a copy of the proposed site plan can be referred in Appendix A.

The items in the proposed plan refer to a parcel of Water, Sanitary Sewer, and Storm Sewer in this area. A site plan for the warehouse is shown in Figure 2.

This TIA was prepared to assess the potential transportation implications of the development and to determine whether transportation improvements are required as a result. A map indicating the transportation study area is shown in Figure 1.





**Figure 2 Site Plan**

## 1.4 SCREENING FORM

The City's 2017 TIA Guidelines identify three triggers for completing a TIA report, including trip generation, location. The criteria for each trigger are outlined in the City's TIA Screening Form. The trigger results are as follows:

- ❖ Trip Generation Trigger – The development is anticipated to generate over 5,000 square feet industrial area; further assessment is required based on this trigger.
- ❖ Location Trigger – Nothing is triggered on this criterion.
- ❖ Safety Trigger – No safety triggers outlined in the TIA Screening Form are met; no further assessment is required based on this trigger.

A copy of the TIA screening form is included in Appendix B.



## 2. SCOPING

### 2.1 EXISTING CONDITIONS

#### 2.2.1 ROADWAY

The key roadways in the vicinity are shown in Figure 1. These roads included Newmarket Street, Bantree Street, and the Innes Road. Particularly, the Innes Road and Bantree Street have been identified as the roads most directly affected by transportation along access roads. All other roadways within the study area fall under the jurisdiction of the City of Ottawa.

Newmarket Street is a local roadway that runs on a west-east alignment from south end of Michael Street. It has a two lane with one sidewalk/curb on north side. Newmarket Street has a supposed speed limit of 40km/hr and is designated as a truck route.

The primary entrance to the site is found on the east side of Newmarket Street, approximately 20m east of the intersection with Bantree Street.

Bantree Street is a local roadway that runs on a north-south alignment from north intersection with Newmarket Street, then turns to east, terminating at an entrance to Sheffield Road. It has a two-lane cross section without sidewalks/curbs on both sides. Bantree Street has a regulatory speed limit of 50km/hour and is designated as a local road.

Innes Road is classified as an arterial roadway. It runs on an east-west alignment from Industrial Avenue, terminating at the crossing with Dunning Road in the east part of the city. The road has a four-lane undivided road with a cross section of no curb/sidewalk on either side, and a posted speed limit of 60 km/hr.

Michael Street is a local roadway that runs on a north-south alignment from the south end with Newmarket Street, terminating at Triole Street & Parisien Street to the north. It has a two lane with no sidewalk/curb. Michael Street has a posted speed limit of 40km/hr and is designated as a truck route.





## 2.2.2 INTERSECTIONS

The intersections along Michael Street have stop controls for the road.



Innes Road/Bantree Street

- ❖ Signalized intersection
- ❖ One left-turn lane in all directions

**Figure 3**



Unsignalized, with all-way stop-control

**Figure 4**

## 2.2.3 DRIVEWAYS

A review of adjacent driveways along the Newmarket Street (within 200 m of the subject site) shows one driveway (Liverpool Ct) serving some dwellings in the vicinity.

## 2.2.4 SIGNAGE AND PAVEMENT MARKINGS

Regulatory signage and pavement markings are in accordance with City of Ottawa and MTO requirements. MTO will be updating the signage and pavement markings in the vicinity of the interchange.



### 2.2.5 PEDESTRIANS, CYCLISTS AND TRANSIT

Sidewalk is currently only provided on north side of Newmarket Street. There are no other sidewalks along Innes Road, and Bantree Street in this area.

Within the study area, bike lanes and cycling tracks are not provided.

There are also no Transit stops in the vicinity of the subject site that is discussed in the subject site.

### 2.2.6 EXISTING TRAFFIC VOLUMES

Weekday traffic counts were obtained from the City of Ottawa at the study area intersections to determine the existing pedestrian and vehicular traffic volumes.

**Table1: Intersection Total Traffic Volume (2019)**

Intersection	All Motorized vehicle AADT Volume	Truck/day	Pedestrians/day	Bicycles/day
Bantree/Innes	43,058	4,185	86	6
Michael/Belfast	9,434	1,029	39	18



**Figure 5: Bantree & Newmarket traffic volume**





### 2.2.7 COLLISION RECORDS

Historical collision data from January 1<sup>st</sup>, 2015 to December 31<sup>st</sup>, 2018 was obtained from the City's Public Works and Service Department for the study area intersection.

**Table 2: Reported Collisions from 2015~2018**

Intersection	Impact Types					Total number of collisions
	Angle	Sideswipe	Rear End	Turning Movement	SMV/Others	
Newmarket/Bantree	1	0	0	0	0	1
Bantree/Innes	6	5	20	33	4	68

#### ❖ Bantree Street/Innes Road

Almost all the collisions were reported at this intersection over the period from 2015 to 2018. Of the total sixty-eight collisions, 11 caused injuries, but none caused fatalities.

#### ❖ Newmarket Street/Bantree Street

Only one collision due to angle was reported in 2018, but no injuries caused.

### 2.2 PLANNED CONDITIONS

The City of Ottawa's Transportation Master Plan (TMP) 2031, Rapid Transit and Transit Priority & Affordable Rapid Transit and Transit Priority (RTTP) Network will have little impacts on the implementation of the project along Newmarket Street.



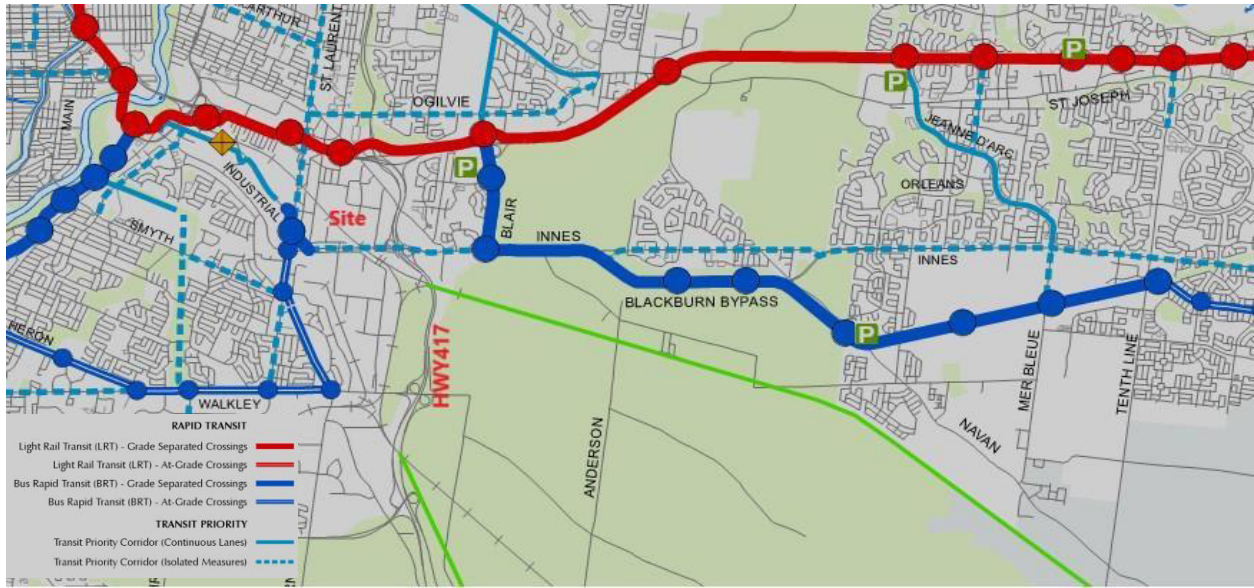


Figure 6 Rapid Transit and Transit Priority Network – 2031

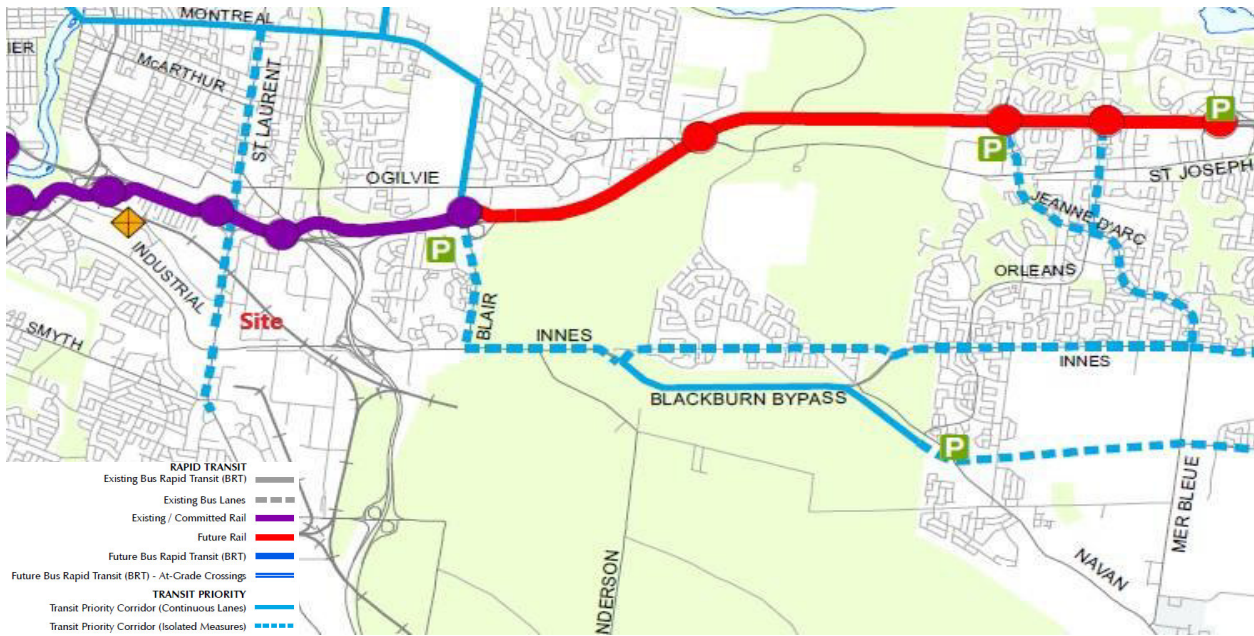


Figure 7 Affordable Rapid Transit and Transit Priority Network – 2031



## 2.3 STUDY AREA AND TIME PERIODS

The study area intersections include the proposed accesses and following intersections:

❖ Newmarket Street/Bantree Street,

The selected time periods for the analysis are the weekday AM and PM peak hours, as they represent the “worst case” combination of site generated traffic and adjacent street traffic. Analysis will be completed for the 2025 build-out year (supposed) and 2031 horizon year.

Weekday AM peak: 73 vehicles per hour

Weekday PM peak: 53 vehicles per hour

## 2.4 EXEMPTIONS REVIEW

As outlined in the TIA Guidelines, the applicable exemptions for this site including Design Review and Network impact module are exempted.

**Table 3: TIA Exemptions**

Module	Element	Exemption Criteria	Exemption Applies
<b>Design Review Component</b>			
4.1 Development Design	4.1.2 Circulation and Access	• Only required for site plans	Not Exempt
	4.1.3 New Street Networks	• Only required for plans of subdivision	Exempt
4.2 Parking	4.2.1 Parking Supply	• Only required for site plans	Not Exempt
	4.2.2 Spillover Parking	• Only required for site plans where parking supply is 15% below unconstrained demand	Exempt
4.3 Boundary Street		• Only required for site plans	Not Exempt
4.4 Access Design		• Only required for site plans	Not Exempt



Network Impact Component			
4.5 Transportation Demand Management	All elements	<ul style="list-style-type: none"> <li>Not required for site plans expected to have fewer than 60 employees and/or students on location at any given time</li> </ul>	Not Exempt
4.6 Neighborhood Traffic Management	4.6.1 Adjacent Neighborhoods	<ul style="list-style-type: none"> <li>Only required when the development relies on local or collector streets for access and total volumes exceed ATM capacity thresholds</li> </ul>	Not Exempt
4.7 Transit		<ul style="list-style-type: none"> <li>Only required when proposed development referred to Transit</li> </ul>	Exempt
4.8 Network Concept	All elements	<ul style="list-style-type: none"> <li>Only required when proposed development generates more than 200 person-trips during the peak hour in excess of the equivalent</li> <li>volume permitted by the established zoning</li> </ul>	Exempt
4.9 Intersection Design		<ul style="list-style-type: none"> <li>intersections are within the range of school and transit stop</li> </ul>	Exempt

### 3. TRAVEL DEMAND FORECASTING

#### 3.1 DEVELOPMENT-GENERATED TRAFFIC

The trip generation for this development was computed based on the 10th edition of the ITE Trip Generation Manual. The expected trips generated by the site were computed based on assuming the entire gross floor area can be classified as warehouse space (the ITE trip generation manual states that warehouse space often includes office and maintenance areas). The trip generation calculations are provided in Table 3, below.

**Table 4: Trip Generation Calculations**

Land Use	Code	1,000sq-ft GFA	Period	Trips
Warehouse	150	115	AM	35
			PM	37



The total expected trips generated as a result of the site at 1195 Newmarket Street are summarized in Table 5.

**Table 5: Total Trips Generated by Site including Inbound / Outbound Trip Distribution**

Period	Total	Inbound	Outbound
AM	35	28	7
PM	37	9	328

### 3.2 TRIP DISTRIBUTION

The City of Ottawa’s “Transportation Impact Assessment Guidelines” state that no traffic assessment is required when the estimated trip generation is at or below the 75 vph site generated traffic threshold. As such, since the site generated traffic was calculated to be 37 vph during the morning peak hour, which means no traffic assessment is required by the City of Ottawa.

### 3.3 BACKGROUND TRAFFIC

A review of historic traffic counts, as well as Master Plan of the City Ottawa was reviewed to determine an appropriate background growth rate along the study area roadways.

Based on the historic traffic counts (2016, 2017, 2019, and 2020 at Bantree Street/Innes Street), traffic volumes generally maintain stable along the study area roadways. This is consistent with the 2031 Transportation Master Plan, which suggests no growth along the study area roadways.

## 4. CONCLUSIONS AND RECOMMENDATIONS

The weekday peak hour total traffic volumes along Bantree Street and Newmarket Street are anticipated to be within the City’s ATM (Active Traffic Management) thresholds, and overall capacity thresholds for a local roadway.



The additional traffic generated by the proposed development during the weekday peak hours is not anticipated to have a significant impact on both Newmarket Street and Bantree Street, nor on intersection operations within the study area. All study area intersections are anticipated to continue to operate with a supposed LOS F or D during weekday peak hours.





## APPENDICES

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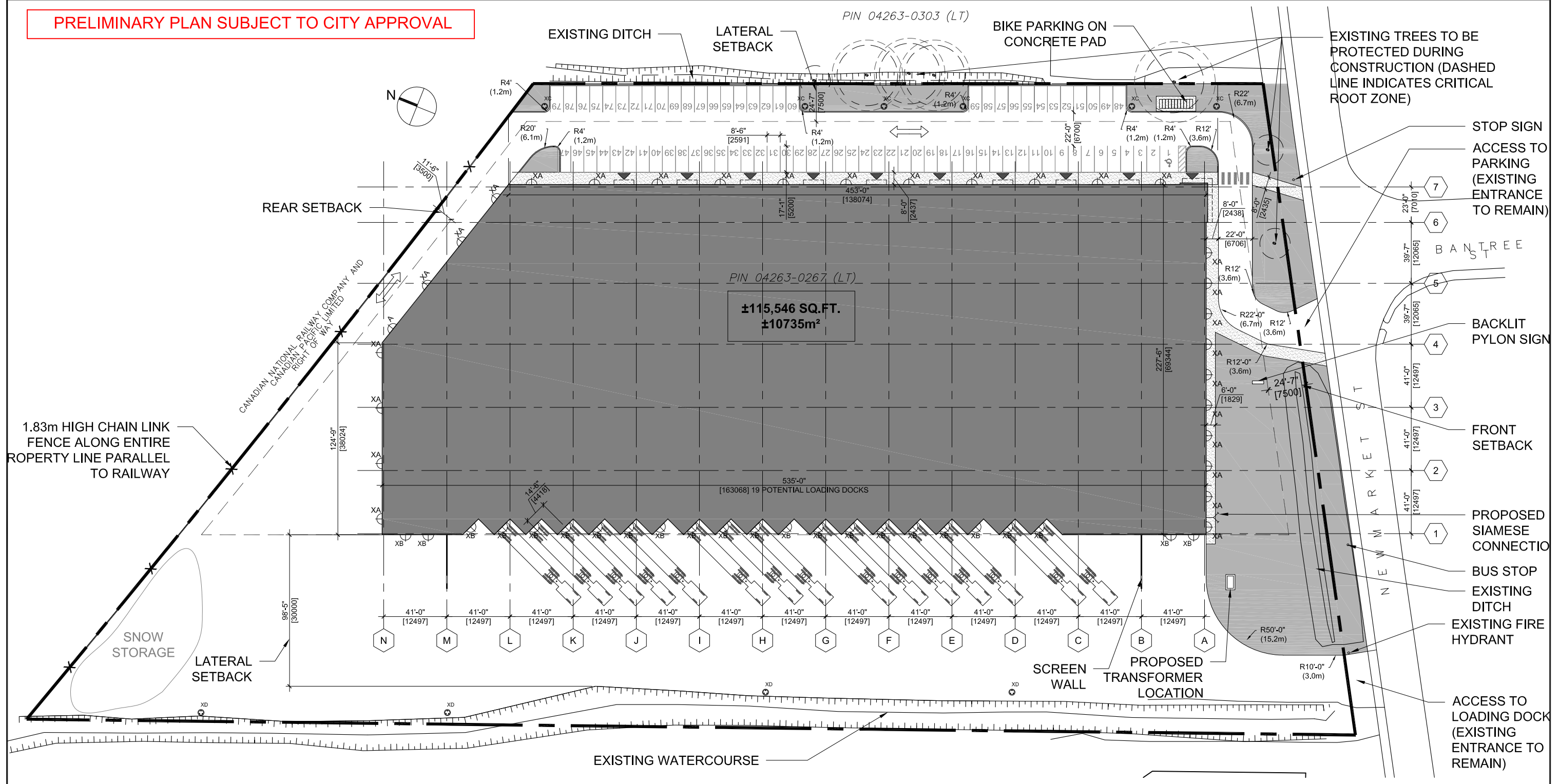
## APPENDIX I

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- ❖ Proposed site plan



**PRELIMINARY PLAN SUBJECT TO CITY APPROVAL**



**A CALCULATIONS:**

TOTAL LOT AREA:	279,018 FT <sup>2</sup> = 25,922 m <sup>2</sup>
LOT COVERAGE 65%:	181,362 FT <sup>2</sup> = 16,850 m <sup>2</sup>
PROPOSED BUILDING AREA (42%):	115,546 FT <sup>2</sup> = 10,735 m <sup>2</sup>

**PARKING CALCULATIONS:**

REQUIRED PARKING = 63 (79 SHOWN)
(WAREHOUSE RATE 0.8/100m <sup>2</sup> FOR FIRST 5000m <sup>2</sup> , 0.4/100m <sup>2</sup> FOR REST)
REQUIRED RESERVED PARKING = 1 MINIMUM
(PART C SECTION 111, SIZE 3.66m x 5.2m)
REQUIRED BIKE PARKING = 10,735m <sup>2</sup> / 1000m <sup>2</sup> = 11

**LANDSCAPING CALCULATIONS:**

% ON SITE = ±7%
% IN PARKING AREA = ±13%

**LEGEND:**

	PROPERTY LINE		LAMP POST
	MINIMUM BUILDING SETBACK		WALL SCENCE
	NEW LANDSCAPED AREA		POTENTIAL ENTRANCE
	NEW CURB AND SIDEWALK		

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**PAS POUR CONSTRUCTION  
 NOT FOR CONSTRUCTION**

ÉMIS POUR/ISSUED FOR:	RÉV/REV:	DATE:
INFORMATION	00	2021-04-22
INFORMATION	01	2021-05-26
INFORMATION	02	2021-05-31
INFORMATION	03	2021-06-02
INFORMATION	04	2021-07-09

**PROPOSED SITE PLAN**  
 TITRE/TITLE:  
 1195 NEWMARKET STREET  
 OTTAWA, ONTARIO.  
 PROJET/PROJECT:

DESSIN REF: REF DWG:	-	REF:	-	DATE:	2021-03-08
VG-A NO.	18630	DESSINÉ PAR/ DRAWN BY:	ADC	ECHELLE/ SCALE:	1/64"=1'-0"
		VERIFIÉ PAR/ VERIFIED BY:	VG		<b>A10</b>
				NO. PAGE/ SHEET NO.	

## APPENDIX II

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- ❖ City of Ottawa 2017 TIA Guidelines Screening Form



**City of Ottawa 2017 TIA Guidelines Screening Form**

**1. Description of Proposed Development**

Municipal Address	1195 Newmarket St. Ottawa
Description of Location	North of Innes Rd.
Land Use Classification	Industrial
Development Size (units)	
Development Size (m <sup>2</sup> )	10,735
Number of Accesses and Locations	1
Phase of Development	2
Buildout Year	<b>2025</b>

**If available, please attach a sketch of the development or site plan to this form.**

**2. Trip Generation Trigger**

Considering the Development’s Land Use type and Size (as filled out in the previous section), please refer to the Trip Generation Trigger checks below.

Land Use Type	Minimum Development Size
Single-family homes	40 units
Townhomes or apartments	90 units
Office	3,500 m <sup>2</sup>
Industrial	5,000 m <sup>2</sup>
Fast-food restaurant or coffee shop	100 m <sup>2</sup>
Destination retail	1,000 m <sup>2</sup>
Gas station or convenience market	75 m <sup>2</sup>

*\* If the development has a land use type other than what is presented in the table above, estimates of person-trip generation may be made based on average trip generation characteristics represented in the current edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual.*

**If the proposed development size is greater than the sizes identified above, the Trip Generation Trigger is satisfied.**

### 3. Location Triggers

	Yes	No
Does the development propose a new driveway to a boundary street that is designated as part of the City’s Transit Priority, Rapid Transit or Spine Bicycle Networks?		<input type="radio"/>
Is the development in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone?*		<input type="radio"/>

\*DPA and TOD are identified in the City of Ottawa Official Plan (DPA in Section 2.5.1 and Schedules A and B; TOD in Annex 6). See Chapter 4 for a list of City of Ottawa Planning and Engineering documents that support the completion of TIA).

**If any of the above questions were answered with ‘Yes,’ the Location Trigger is satisfied.**

### 4. Safety Triggers

	Yes	No
Are posted speed limits on a boundary street are 80 km/hr or greater?		<input type="radio"/>
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?		<input type="radio"/>
Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)?		<input type="radio"/>
Is the proposed driveway within auxiliary lanes of an intersection?		<input type="radio"/>
Does the proposed driveway make use of an existing median break that serves an existing site?		<input type="radio"/>
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?		<input type="radio"/>
Does the development include a drive-thru facility?		<input type="radio"/>

**If any of the above questions were answered with ‘Yes,’ the Safety Trigger is satisfied.**

### 5. Summary

	Yes	No
Does the development satisfy the Trip Generation Trigger?	<input type="radio"/>	
Does the development satisfy the Location Trigger?		<input type="radio"/>
Does the development satisfy the Safety Trigger?		<input type="radio"/>

**If none of the triggers are satisfied, the TIA Study is complete. If one or more of the triggers is satisfied, the TIA Study must continue into the next stage (Screening and Scoping).**