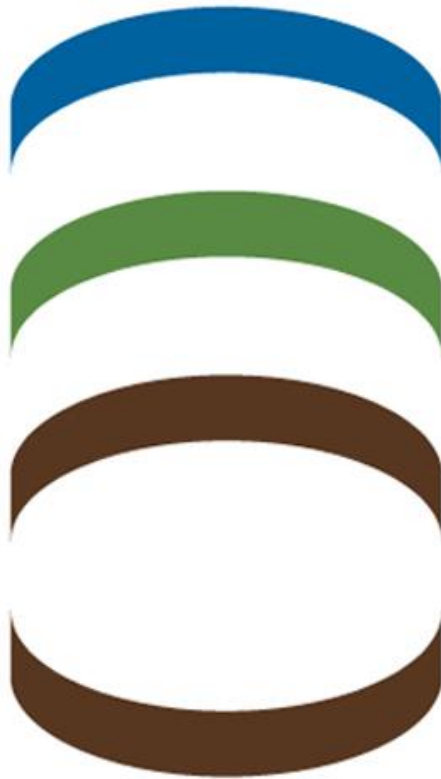


TRANSPORTATION IMPACT ASSESSMENT

1199 NEWMARKET HOLDINGS LTD

Property located at 1195 Newmarket Street in Ottawa, ON
N/Ref.: **14166**



Pascal Fhima, Eng., P. Eng.

President and CEO

AUGUST 2021
Revised: **MAY 2022**

TABLE OF CONTENT

| | |
|---|----------|
| EXECUTIVE SUMMARY | 3 |
| 1. SCREENING | 3 |
| 1.2 INTRODUCTION | 3 |
| 1.3 PROPOSED DEVELOPMENT | 4 |
| 1.4 SCREENING FORM | 5 |
| 2. SCOPING..... | 6 |
| 2.1 EXISTING CONDITIONS | 6 |
| 2.2.1 ROADWAY | 6 |
| 2.2.2 INTERSECTIONS | 7 |
| 2.2.3 DRIVEWAYS | 7 |
| 2.2.4 SIGNAGE AND PAVEMENT MARKINGS | 2 |
| 2.2.5 PEDESTRIANS, CYCLISTS AND TRANSIT | 2 |
| 2.2.6 EXISTING TRAFFIC VOLUMES | 2 |
| 2.2.7 COLLISION RECORDS | 3 |
| 2.2 PLANNED CONDITIONS | 4 |
| 2.3 STUDY AREA AND TIME PERIODS | 5 |
| 2.4 EXEMPTIONS REVIEW | 5 |
| 3. TRAVEL DEMAND FORECASTING..... | 6 |
| 3.2 DEVELOPMENT-GENERATED TRAFFIC..... | 6 |
| 3.3 TRIP DISTRIBUTION | 7 |
| 3.4 BACKGROUND TRAFFIC..... | 7 |
| 4. CONCLUSIONS AND RECOMMENDATIONS | 9 |



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 10,439 square metre warehouse building and 82 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 Triolet 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 Signalized crossing



Figure 4 Unsignalized, with all-way stop-control

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 1st, 2015 to December 31st, 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 |
|---------------------------------|---------------------------------|---|-------------------|
| Design Review Component | | | |
| 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"> Not required for site plans expected to have fewer than 60 employees and/or students on location at any given time | Not Exempt |
| 4.6 Neighborhood Traffic Management | 4.6.1 Adjacent Neighborhood s | <ul style="list-style-type: none"> Only required when the development relies on local or collector streets for access and total volumes exceed ATM capacity thresholds | Not Exempt |
| 4.7 Transit | | <ul style="list-style-type: none"> Only required when proposed development referred to Transit | Exempt |
| 4.8 Network Concept | All elements | <ul style="list-style-type: none"> Only required when proposed development generates more than 200 person-trips during the peak hour in excess of the equivalent volume permitted by the established zoning | Exempt |
| 4.9 Intersection Design | | <ul style="list-style-type: none"> intersections are within the range of school and transit stop | 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 | 28 |

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 less than 60 person trips. As such, since the site generated traffic was calculated to be 37 vph during the PM 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. ANALYSIS

4.1 PARKING

The subject site is located in Area C on Schedule 1A of the City of Ottawa's Zoning By-Law (ZBL). Minimum vehicular for the proposed development are identified in the ZBL and are summarized in the following table.



Table 6 Parking Requirements

| Land Use | Minimum Parking Rate | Required | Provided |
|------------|---|----------|----------|
| Ware House | 0.8 Per 100 sq. m for first 5000 sq. m of GFA | 40 | 82 |
| | 0.4 Per 100 sq. m above 5000 sq. m of GFA | 25 | |
| | Reserved Parking spaces | 4 | 4 |

4.2 ACCESS INTERSECTIONS DESIGN

Based on the City of Ottawa Accessibility Design Standards, the curb ramps and depressed curbs are provided for the people with sight weakness to serve a step-free access for people who use mobility aids (e.g., walkers and wheelchairs) at pedestrian crossings and vehicular loading areas.

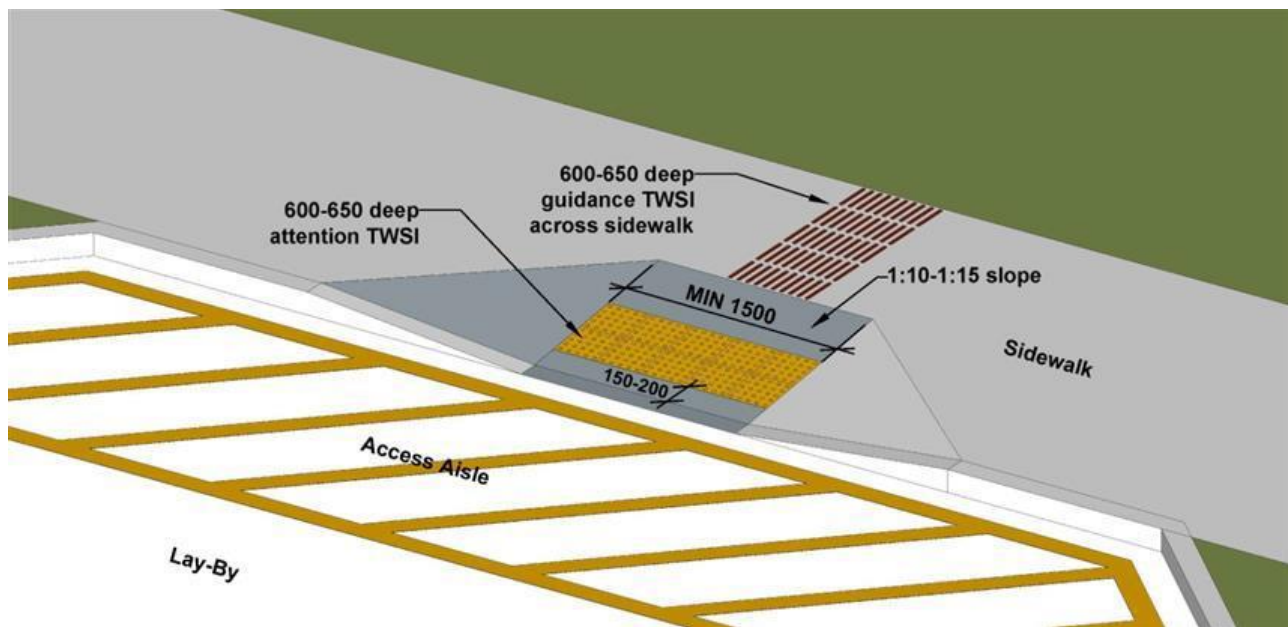


Figure 8 A curb ramp at a vehicular loading zone (From Web Site)

Depressed curbs will provide a wider sloped access from a pedestrian walkway down to a vehicular roadway.



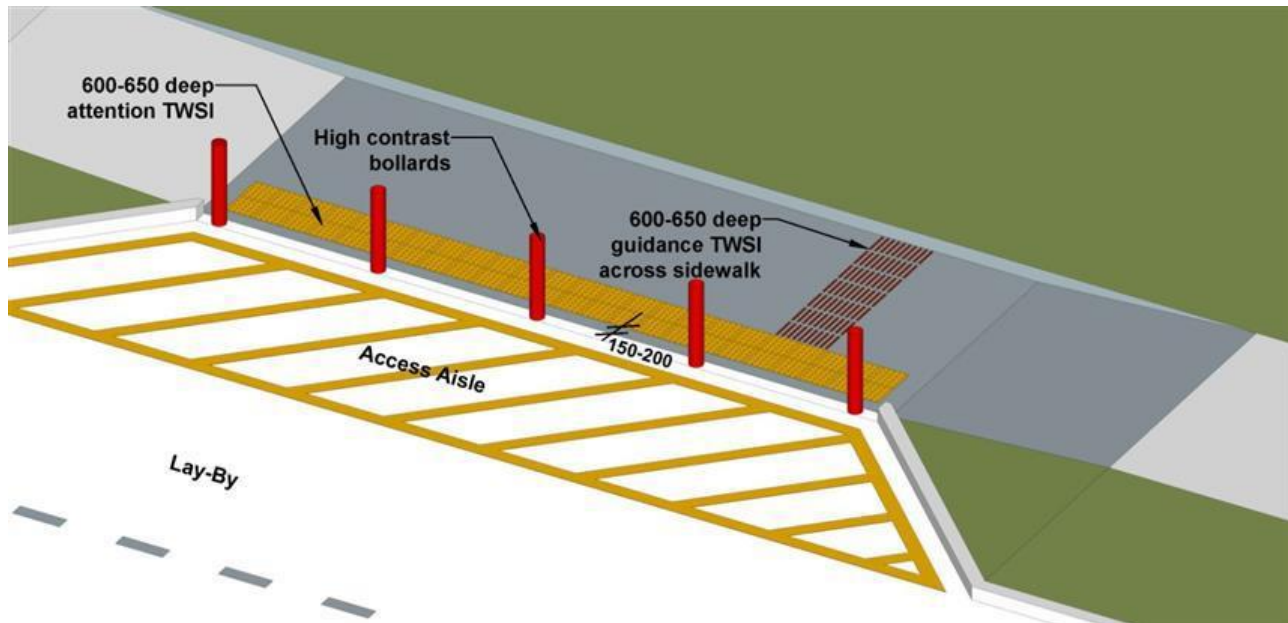


Figure 9 A depressed curb at a vehicular loading zone (From Web Site)

As per Section 3 of the City of Ottawa Accessibility Design Standards, TWSI should be also used to alert disabilities to the presence of a curb ramp or depressed at intersections or crossings.

5. 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



APPENDIX I

- ❖ Proposed site plan



| ZONING MATRIX | | |
|---|---|-------------------------|
| PROPERTY DESCRIPTION | | |
| CITY OF OTTAWA PIN NUMBER | 04263-0267 (LT) | |
| MUNICIPAL ADDRESS | 1195 Newmarket St | |
| LOT AREA | 25,922m ² | |
| BUILDING INFORMATION | | |
| BUILDING AREA: | 10,439m ² | |
| PROPOSED USE: | WAREHOUSE | |
| No. STOREYS: | 1 | |
| ZONING TABLE | | |
| CITY OF OTTAWA ZONING BY-LAW No. 2008-250 | | |
| IL - LIGHT INDUSTRIAL ZONE | REQUIRED | PROPOSED |
| MIN. LOT AREA | 2,000 m ² | 25,922m ² |
| MIN. LOT WIDTH | No minimum | n/a |
| MAX. LOT COVERAGE | 65% | 10439/25922x100 = 40% |
| MIN. FRONT YARD SETBACK | 7.5m | Building setback = 7.5m |
| MIN. SIDE YARD SETBACK | 7.5m | Building setback = 20m |
| MIN. REAR SETBACK | 3.5m | Building setback = 8.4m |
| MIN. SETBACK WATERCOURSE | 30m | Building setback = 30m |
| MAX. BUILDING HEIGHT | 18m | 14.6m |
| MIN. WIDTH LANDSCAPE | STREET: 3m | Varies, more than 3m |
| OTHER CASES: N/A | | |
| VEHICLE PARKING SPACES (AREA C, SCHEDULE 1A) Table 101 - N95 warehouse | | |
| | 0.8 per 100m ² for the first 5000m ² of gross floor area (0.8x5000/100= 40) | 82 |
| | 0.4 per 100m ² above 5000m ² of gross floor area (0.4x(10439-5000)/100=22) | |
| | total: 40+22= 62 | |
| RESERVED PARKING SPACES (ACCESSIBLE DESIGN GUIDELINES) | | |
| | 4 | 6 (3 type A, 3 type B) |
| BIKE PARKING SPACES (AREA C, SCHEDULE 1A) Table 111A | | |
| | 1 per 1000m ² of gross floor area (10439/1000 = 10.4) | 11 |

LEGEND:

- PROPERTY LINE
- MINIMUM BUILDING SETBACK
- SOFT LANDSCAPING
- CONCRETE SIDEWALK, WIDTH AS NOTED OR CONCRETE PAD
- PAVING STONES
- EXTERIOR LAMP POST ON CONCRETE BASE
- EXTERIOR WALL MOUNTED LIGHT FIXTURE
- EXTERIOR RECESSED LIGHT FIXTURE
- EXISTING TREE TO REMAIN, REFER TO LANDSCAPE PLAN AND TCR
- EXISTING TREE TO BE REMOVED, REFER TO LANDSCAPE PLAN AND TCR
- PROPOSED ENTRANCE
- ACCESSIBLE PARKING
TYPE A: 3.4m x 5.2m
TYPE B: 2.4m x 5.2m
AISLE: 1.5m WIDE
- TWO WAY VEHICLE CIRCULATION, 6.7m MINIMUM

SITE NOTES:

- S1 STANDARD PARKING SPACE 2.6m X 5.2m
- S2 ASPHALT SURFACE
- S3 EXISTING FIRE HYDRANT
- S4 DEPRESSED CURB WITH TWSIS FOR BARRIER FREE ACCESS
- S5 SIAMESE CONNECTION
- S6 RELOCATED FIRE HYDRANT, MINIMUM 3m FROM THE DRIVEWAY, AND 0.6m FROM THE SIDEWALK, MAX 45m TO THE SIAMESE CONNECTION
- S7 DASHED LINE: FIRE ROUTE AS PER CODE REQUIREMENTS
- S8 SNOW STORAGE AREA, DOES NOT OCCUPY DRIVEWAY, AISLES, PARKING OR ROAD ALLOWANCE, MINIMUM 1.5m SETBACK
- S9 CONCRETE PAD NEXT TO EXISTING BUS STOP 2.2m x 3.5m AND 0.5m BACK FROM THE SIDEWALK
- S10 REFUSE AREA
- S11 42" HIGH GUARDRAIL AND RETAINING WALL
- S12 EXISTING FIRE HYDRANT TO BE RELOCATED, SEE S6
- S13 TRANSFORMER
- S14 BICYCLE PARKING SPACE, 0.6m x 1.8m WITH SECURE RACK, SEE LANDSCAPE PLAN
- S15 EXISTING HYDRO POLE
- S16 GROUND LEVEL LOADING DOOR
- S17 TYPICAL LOADING BAY
- S18 BACKLIT PYLON SIGN
- S19 1.83m HIGH CHAIN LINK FENCE ALONG ENTIRE PROPERTY LINE PARALLEL TO RAILWAY, VINE TO GROW ALONG THE FENCE
- S20 MASONRY SCREEN WALL ±10'-0" HIGH, TO ALIGN WITH TOP OF ADJACENT MASONRY WALL
- S21 EXISTING LID TO BE RELOCATED
- S22 PICNIC AREA
- S23 INCREASE CURB RADIUS FOR ENTRY AND EXIT OF TRUCKS, REFER TO PAGES A15-A18 FOR TRUCK TURNING TEMPLATES
- S24 CORNER OF BUILDING AT FRONT YARD SETBACK, CANOPY OVERHANGS SETBACK BY LESS THAN 3.75m.
- S25 BUILDING SETBACK 30m FROM WATERCOURSE
- S26 REMOVE EXISTING CAR ENTRY AND REPAIR SIDEWALK
- S27 EXISTING STOP SIGN
- S28 HIGH WATER MARK COINCIDES WITH TOP OF DITCH
- S29 HATCHED AREA: DEPRESSED CURB AT SIDEWALK AS PER CITY CURB RETURN ENTRANCES DOCUMENT SCT.1
- S30 EXTERIOR METAL STAIR AND DOOR TO ACCESS BUILDING

SCALE:

1:400

0 5m 10m 25m

PROPOSED SITE PLAN

GUPTA ARCHITECTURE INC.

345 VICTORIA, SUITE 300, WESTMOUNT (QC) H3Z 2N2
TEL. (514) 481-1055 www.g-architecture.com

LRL ENGINEERING
5430 CANOTEX ROAD
GLOUCESTER (ONTARIO) K1J 9G3
613-842-3434
WWW.LRL.CA

ORIAM INC.
1200 RUE DE LOUVAIN OUEST
MONTREAL (QUEBEC) H4N 1G5
514-982-0990
WWW.ORIAMGROUPE.COM

GINO J. AIELLO LANDSCAPE ARCHITECT
110 DIDSBURY ROAD UNIT 9
OTTAWA (ONTARIO) K2E 0C2
613-852-1343
WWW.GJALA.COM

J.D. BARNES LIMITED
62 STENOIS DRIVE, SUITE 103
KANATA (ONTARIO) K2K 2A9
613-731-7244
WWW.JDBARNES.COM

HP URBAN
2405 ST. LAURENT BLVD. UNIT P
OTTAWA (ONTARIO) K1G 5B4
613-899-3484
PETER.HUME@HPURBAN.CA

L'ENTREPRENEUR DEVRA VÉRIFIER TOUTES DIMENSIONS ET CONDITIONS AU CHANTIER AVANT DE COMMENCER TOUT TRAVAIL. LES DIMENSIONS NE DOIVENT PAS ÊTRE MESURÉES DIRECTEMENT SUR CE DESSIN. CE PLAN DOIT ÊTRE IMPRIMÉ SUR UNE FEUILLE 24x36.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE PRIOR TO STARTING ANY WORK. DIMENSIONS ON THIS DRAWING ARE NOT TO BE SCALED. THIS PLAN MUST BE PRINTED ON A 24x36 SHEET.

**PAS POUR CONSTRUCTION
NOT FOR CONSTRUCTION**

ONTARIO ASSOCIATION OF ARCHITECTS

VINOD GUPTA
LICENCE 7552

| REVISION | DATE |
|-------------------------------|---------------|
| SITE PLAN APPLICATION - REV 1 | 00 2021-10-27 |
| SITE PLAN APPLICATION - REV 2 | 01 2021-12-17 |
| SITE PLAN APPLICATION - REV 3 | 02 2022-05-05 |

1199 NEWMARKET HOLDINGS LTD
A-3488 CHEMIN COTE-DES-NEIGES
MONTREAL, QC
H3H 2M6

NEW LIGHT INDUSTRIAL BUILDING
1195 NEWMARKET STREET
OTTAWA, ONTARIO
K1B 1A6

SITE PLAN

DATE: 2021-10-05

SCALE: 1:400

DESIGNED BY: ADC

DRAWN BY: VG

PROJECT NO. 18630

DATE: 2021-10-05

SCALE: 1:400

DESIGNED BY: ADC

DRAWN BY: VG

PROJECT NO. 18630

A000

APPENDIX II

- ❖ 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 ²) | 11,148 |
| Number of Accesses and Locations | 1 |
| Phase of Development | 2 |
| Buildout Year | 2025 |

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 ² |
| Industrial | 5,000 m ² |
| Fast-food restaurant or coffee shop | 100 m ² |
| Destination retail | 1,000 m ² |
| Gas station or convenience market | 75 m ² |

** 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).