# 301 Somme Street

## TIA Step 3 – Strategy Report (Design Review)

Draft

August 2025

## TIA Plan Reports

On 14 June 2017, the Council of the City of Ottawa adopted new Transportation Impact Assessment (TIA) Guidelines. In adopting the guidelines, Council established a requirement for those preparing and delivering transportation impact assessments and reports to sign a letter of certification.

Individuals submitting TIA reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Ottawa's Official Plan, the Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines.

By submitting the attached TIA report (and any associated documents) and signing this document, the individual acknowledges that s/he meets the four criteria listed below.

**CERTIFICATION**

1. I have reviewed and have a sound understanding of the objectives, needs and requirements of the City of Ottawa's Official Plan, Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines;
2. I have a sound knowledge of industry standard practice with respect to the preparation of transportation impact assessment reports, including multi modal level of service review;
3. I have substantial experience (more than 5 years) in undertaking and delivering transportation impact studies (analysis, reporting and geometric design) with strong background knowledge in transportation planning, engineering or traffic operations; and
4. I am either a licensed[1] or registered[2] professional in good standing, whose field of expertise [check √ appropriate field(s)] is either transportation engineering ☑ or transportation planning ☐.

[1,2] **License of registration body that oversees the profession is required to have a code of conduct and ethics guidelines that will ensure appropriate conduct and representation for transportation planning and/or transportation engineering works.**

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301 Somme Street

# TIA Step 3 – Strategy Report (Design Revew)

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# TIA STEP 3 – STRATEGY REPORT

Parsons has been retained by W.O. Stinson & Son Limited to prepare a TIA in support of a Site Plan Control Application for a vehicle service lot located at the municipal address of 301 Somme St. This document follows the TIA process as outlined in the City of Ottawa Transportation Impact Assessment (TIA) Guidelines (2017). The following report represents Step 3 – Strategy Report.

## 1.0 SCREENING FORM

The Screening Form did not trigger a TIA based on any of the triggers; however, for ease of review, the TIA Guidelines structure has been followed and only relevant elements based on the feedback form have been included, with other sections exempted. The Site Plan has been provided in **Appendix A**.

## 2.0 SCOPING REPORT

### 2.1. Existing and Planned Conditions

#### 2.1.1. Proposed Development

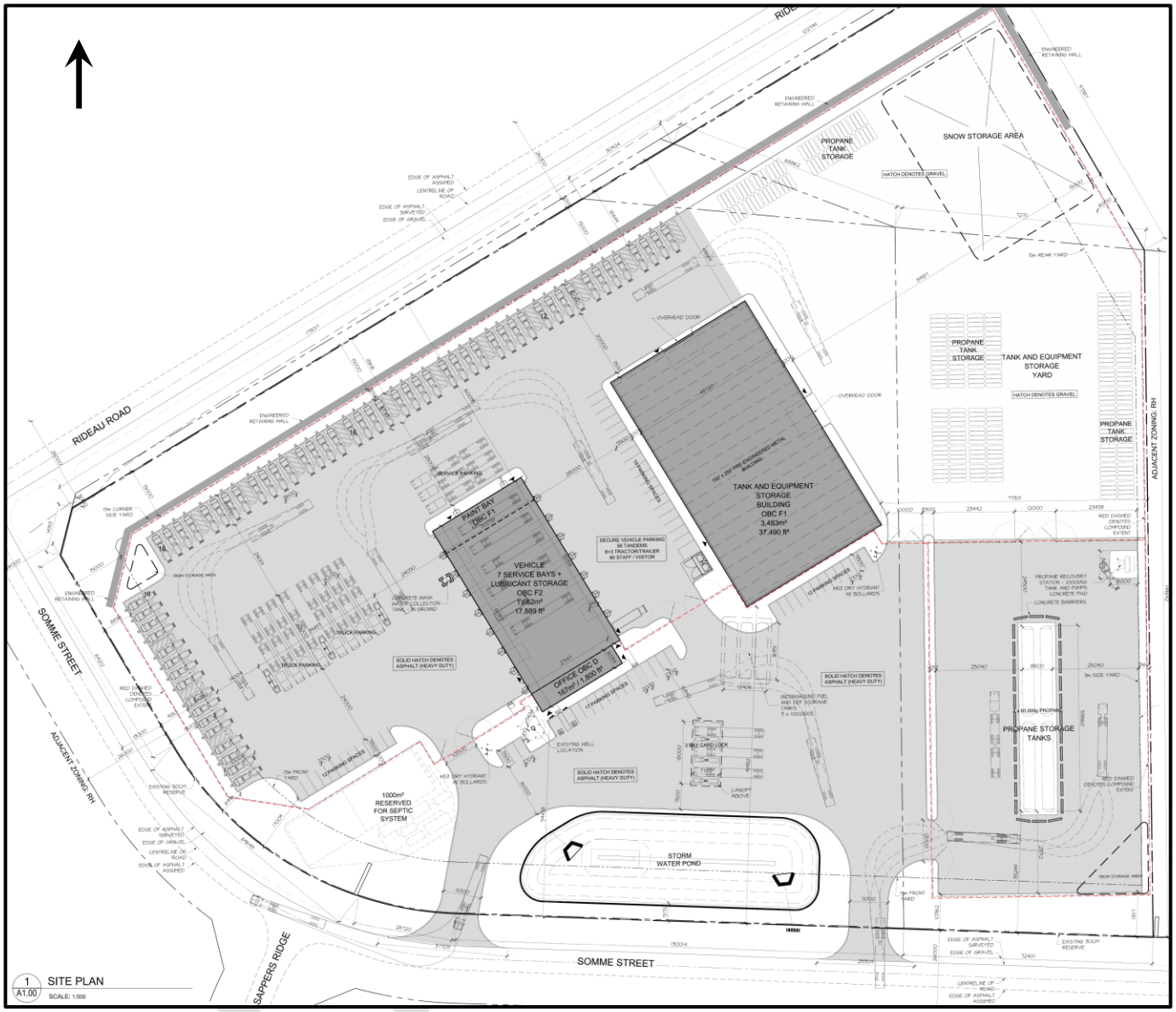
The proposed development is located at 301 Somme Street in the City of Ottawa. The site, bound by Somme Street on the southwest and south, and Rideau Road on the northwest, is 6.09 hectares in area. The site is currently undeveloped and located in the Tomlinson Hawthorne Industrial Park in Ward 20 (Osgoode), located on Rideau Road between Hawthorne Road and Ramsayville Road. The site context is illustrated in **Figure 1.**

The proposed development consists of a tank and equipment storage building (3,483m$^2$), a building containing an office area (167m$^2$), lubricant storage, and seven service bays (1,662m$^2$), and open areas for the storage, maintenance, and servicing of Stinson vehicles. The site proposes two accesses which are to perform as a one-way inbound and one-way outbound. Stinson currently operates several facilities in Eastern Ontario.

The proposed surface parking consists of 50 standard vehicle spaces (excluding spaces used for Stinson vehicles). A landscaped buffer will provide separation between the parking lot and adjacent streets. Two indoor bicycle parking spaces will be provided. The site plan is provided in **Figure 2**.

Figure 1: 301 Somme Street - Site Context

Figure 2: 301 Somme Street - Proposed Site Plan – August 2025



### 2.1.2. Existing Conditions

Area Road Network

A description for each road within the study area included in the TIA has been provided below.

***Hawthorne Road*** has two classifications within the study area. North of Rideau Road, Hawthorne Road is classified by Schedule C16 of the Official Plan as a rural collector road, with a 27m right-of-way and a posted speed limit of 80km/h. Schedule C16 calls for a 34m protected right-of-way on this segment. South of Rideau Road, Hawthorne Road is classified as a rural local road, with an assumed unposted speed limit of 50km/h and a 27m right-of-way. Both segments have a two-lane, two-way cross section, with the segment south of Rideau Road having no painted median line. Hawthorne Road is unpaved 70m north of Somme Street. Hawthorne Road is also a full-load truck route.

***Somme Street*** is classified as a rural local road. It resembles a large crescent, where it intersects Hawthorne Road south of the site, extending eastward and then curving back to the west, and then to the north, where it intersects Rideau Road next to the site. It has a two-lane, two-way cross-section with no posted speed limit and a 27m right-of-way. The unposted speed limit is assumed as 50km/h.

***Rideau Road*** is classified as a rural collector, with a 26m right-of-way, a two-lane, two-way cross section and gravel shoulders. The posted speed limit is 80km/hr. Rideau Road is a truck route, with full loads allowed west of Hawthorne Road and with restrictions west of Hawthorne Road.

Existing Study Area Intersections

The following provides a description of study area intersections:

Hawthorne/Rideau

This intersection is a four-legged, unsignalized intersection with all-way stop signs. Each approach consists of a two-lane, two-way cross section. All turning movements are permitted.


Somme/Rideau

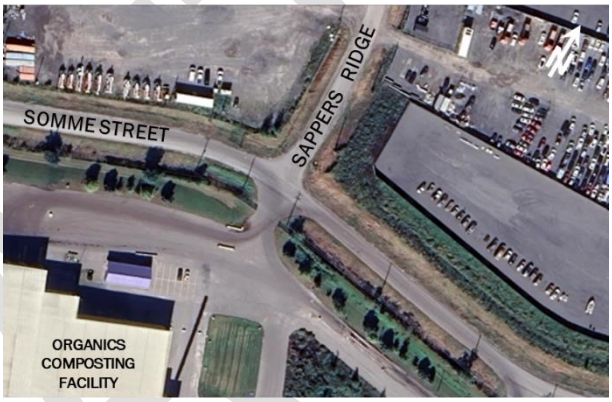
This intersection is a three-legged, unsignalized intersection with stop control on all northbound movements from the south leg. Each approach consists of a two-lane, two-way cross section. This intersection was open for operation in Spring/Summer 2025. All turning movements are permitted.

### Somme/Sappers Ridge (North)

This intersection is a three-legged, unsignalized intersection, with no marked stop signs. Each approach consists of a two-lane, two-way cross section. All turning movements are permitted.


### Somme/Sappers Ridge (South)

This intersection is a four-legged, unsignalized intersection, with no marked stop signs. One of the approaches functions as an entrance/exit into the Renewi Organics Composting Facility. Each approach consists of a two-lane, two-way cross section. All turning movements are permitted.




### Hawthorne/Somme

This intersection has three legs, with two high-traffic driveways (Rideau Quarry Access; Renewi Organics Composting Facility) located just south. It is unsignalized. The east approach is stop-controlled, while the southern driveways function as stop-controlled accesses. Each approach consists of a two-lane, two-way cross section. All turning movements are permitted.

## Existing Driveways to Adjacent Developments

Driveway accesses near to the development as shown in red boxes for major accesses and yellow boxes for minor accesses in **Figure 3** include:

- On Somme Street, in clockwise fashion from the Subject Site:
  - Two single accesses to Subject Site
  - Two single access to Copart – Ottawa (commercial: car parts sales)
  - Single access to undeveloped lot
  - Single access to undeveloped lot
  - Two single accesses to Techo-Bloc (commercial: landscaping supply)
  - Single access to Hawthorne Self Storage (commercial: self-storage)
  - Two single accesses to Renewi Organics Composting Facility
- On Sappers Ridge, south of the Subject Site:
  - Two single accesses (280m, 380m south of Sappers Ridge/Somme [N]) to storage lots
- Single access (80m north of Sappers Ridge/Somme [S]) to Sadex Towing Inc (towing lot)
  - On Hawthorne Road:
- South approach, single access to/from the Rideau Quarry
  - West side, 40m south of Hawthorne/Somme. dual access to/from the Rideau Quarry
  - East side, 40m south of Hawthorne/Somme single access to/from Renewi Organics Composting Facility
- On Rideau Road:
  - 170m west of Hawthorne, single access to/from the Rideau Quarry

Figure 3: Adjacent Driveways Adjacent to the Development

## Existing Area Traffic Management Measures

There are no existing area traffic management measures within the study area

## Existing Pedestrian/Cycling Network

There are no pedestrian facilities in the study area. Gravel shoulders are provided on Rideau Rd and Hawthorne Rd, but they are considered sub-par in quality and understood not to be part of a regional biking network.

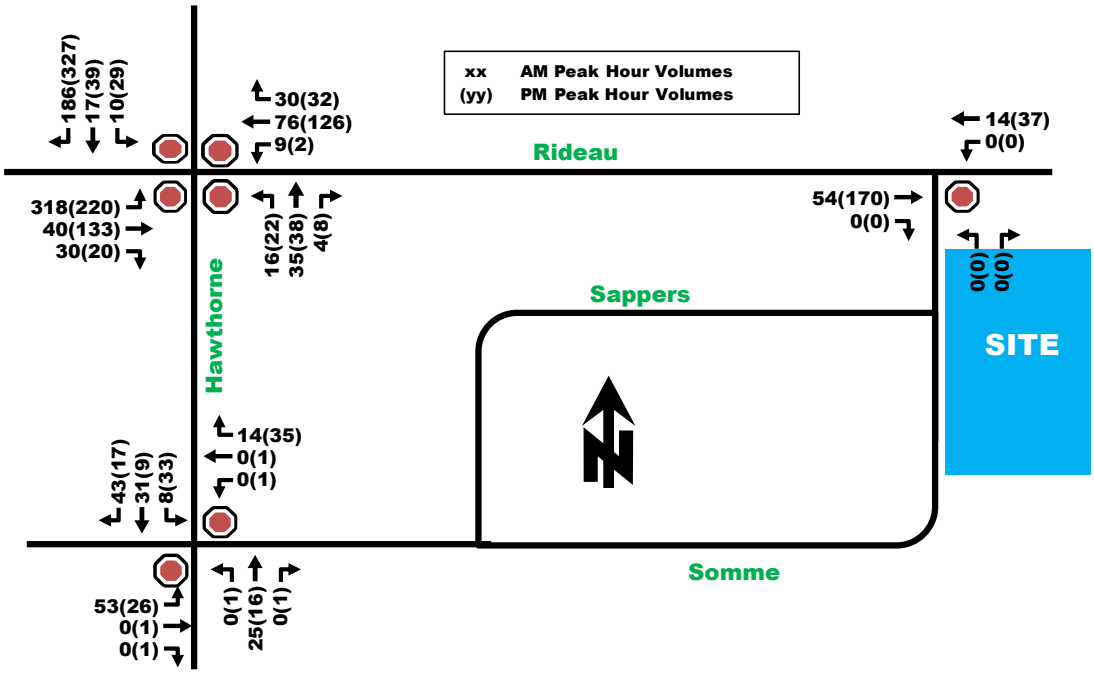
## Transit Network

There are no bus stops or transit routes within the study area. The nearest transit route is Route #304, with service designated 'Occasional Trips', which runs along Bank Street (over 2km away) on Thursdays only.

## Peak Hour Travel Demands

Traffic count data was obtained from the City of Ottawa or conducted by Parsons. The traffic volumes at study area intersections are illustrated in **Figure 4**, with raw traffic count data provided in **Appendix B**. There were no observed pedestrian or cyclist movements at any of the study area intersections. Note that Somme/Rideau intersection has been barricaded and only allows through traffic on Rideau Rd.

Figure 4: Existing Peak Hour Vehicle Traffic Volumes – AM (PM) Peak Hour




## Existing Road Safety Conditions

A five-year collision history data (2018-2022, inclusive) was obtained from the City of Ottawa Open Data for the study area intersections, as well as road segments within the study area. Detailed collision analysis has been provided in **Appendix C**.

Upon analyzing the collision data, the total number of collisions observed within the study area was determined to be 9 collisions within the past five-years.

Table 1: Summary of Type, Quantity and Injury Producing Collisions

| Classification of Accident | Rear End | Turning Move-ment | Side-swipe | Angle | Approa-ching | SMV Other | SMV Unatten ded | Other | Total |
|---|---|---|---|---|---|---|---|---|---|
| P.D. only | 3 | 1 | 1 | 2 | 0 | 1 | 0 | 1 | **9 (100%)** |
| Non-fatal injury | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0 (0%)** |
| Non-reportable | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | **0 (0%)** |
| Total | **3 (33%)** | **1 (11%)** | **1 (11%)** | **2 (22%)** | **0 (0%)** | **1 (11%)** | **0 (0%)** | **1 (11%)** | **9 (100%)** |

Within the study area, the quantity of collisions plus collisions with pedestrians (peds) and bikes, and distance of mid-block at each location has occurred at a rate as shown in **Table 2**. Note there were no collisions with active users (pedestrians or cyclists).

Table 2: Summary of Collision Location and Injury Causing Collisions

| Location | # Collision 2018-2022 | % Causing Injury | Midblock Distance | Collisions with AT | Most Frequent Type |
|---|---|---|---|---|---|
| Hawthorne/Rideau | 8 | 0% | - | 0 | Rear End (38%) |
| Somme/Rideau | 0 | - | - | 0 | - |
| Hawthorne/Somme | 0 | - | - | 0 | - |
| Midblock on Rideau | 1 | 0% | 235m | 0 | SMV Other (100%) |
| Midblock on Hawthorne | 0 | - | 510m | 0 | - |
| Midblock on Somme | 0 | - | 1,700m | 0 | - |
| Midblock on Sappers | 0 | - | 450m | 0 | - |

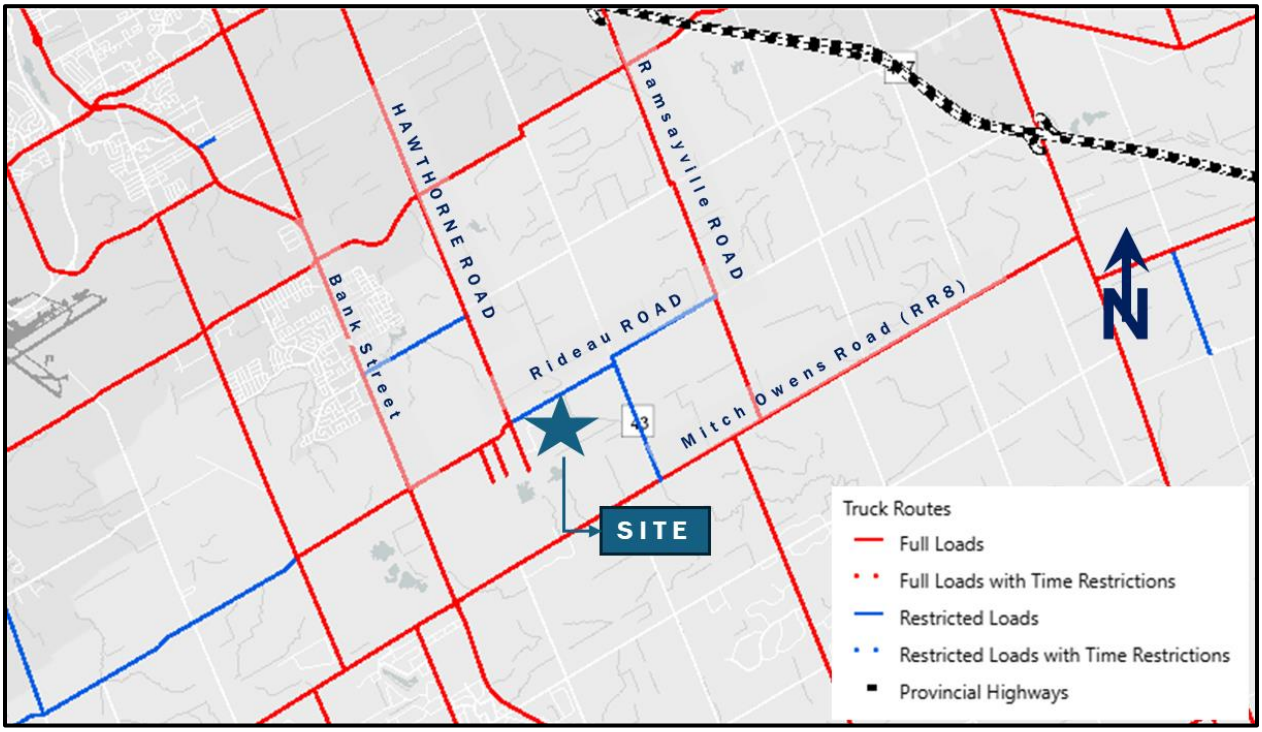
As shown in the table above, there were very few collisions recorded within the study area, with no particular type of collision resulting in more than 3 identical types of collisions (3 rear end collisions recorded at Hawthorne/Rideau). No collision patterns have been identified. Furthermore, none of the collisions recorded involved vulnerable users such as pedestrians or cyclists, and none of the collisions resulted in injury. No recommendations are proposed at this time.

## Existing Truck Routes

**Figure 5** illustrates an extract from the City of Ottawa Rural Truck Routes map. Heavy vehicles are obliged to travel on truck routes until such time that the operator needs to make a delivery, service, stop or similar on premises not abutting a truck route. The following truck routes are in the vicinity of the proposed development"

- Hawthorne Road, from south of Somme Street to Walkley Road: Full time truck route that can carry full loads all year.
- Rideau Road, from Ramsayville Road to Hawthorne Road: Restricted Truck Route, restricted to five (5) tonnes per axle during the spring thaw period (Typically mid-March to mid-May).
- Rideau Road, from Hawthorne Road to Albion Road: Full time truck route that can carry full loads all year.

Figure 5: City of Ottawa Rural Truck Routes, March 2025




### 2.1.3. Planned Conditions

Future Transportation Network Changes

Official Plan (2021)

According to the Official Plan, the site is located in the rural transect and the lands are designated as "rural industrial and logistics". The site is partially within the "mineral aggregate separation overlay" area. There are no planned future conditions near the site.

Transportation Master Plan Update – Phase 1 (2023) & Phase 2 (July 2025)

There are no planned new facilities within any of the transportation subsections, including the road network, transit network, cycling network or pedestrian network.

Other Area Developments

The following section outlines adjacent developments in the general area that were considered in the TIA. **Figure 6** illustrates the site context for other area developments near the subject site with a description of each development below:

*35 Sappers Ridge*
A heavy industrial subdivided lot with 16 units within three main building strips. The file was initiated in 2014 and no TIA was found.

Figure 6: Other Area Developments


## 2.2. Study Area and Time Periods

For the purposes of this report, the proposed development is assumed to be fully constructed by 2026. The full buildout scenario and five-years after development buildout will be analyzed, 2026 and 2031. The future horizon years analyzed will use the weekday morning and afternoon peak hour traffic volumes. Proposed study area intersections are listed below and illustrated in **Figure 7**.

- Hawthorne/Rideau
- Somme/Rideau
- Hawthorne/Somme
- Site Access

Figure 7: Study Area and Intersections to be Analyzed


## 2.3. Exemption Review

The following modules/elements of the TIA process provided in **Table 3** are recommended to be exempt in the subsequent steps of the TIA process, based on the City's TIA guidelines, the feedback form/city correspondence and the subject site:

Table 3: Exemptions Review Summary

| Module | Element | Exemption Consideration |
|---|---|---|
| 4.1 Development Design | 4.1.3 New Street | Only required for plans of subdivision |
| 4.3 Boundary Street Design | All | Given site context and scope as per email with City Staff (June 16, 2025) |
| 4.5 TDM | All | Exempt as per email with City Staff (June 16, 2025) |
| 4.6 Neighborhood Traffic Calming | All | Does not meet criteria for significant sensitive lands |
| 4.7 Transit | All | The development is forecasted to generate less than 75 vehicle and transit trips. |
| 4.8 Network Concept | All | Only required for ZBLA applications. |
| 4.9 Intersection Design | All | The development is forecasted to generate less than 75 vehicle trips. |

# 3.0 FORECASTING

## 3.1. Development Generated Travel Demand

### 3.1.1. Trip Generation and Mode Shares

The proposed development consists of a tank and equipment storage building (3,483m$^2$), a building containing an office area (167m$^2$), lubricant storage, and seven service bays (1,662m$^2$), and open areas for the storage, maintenance, and servicing of Stinson vehicles.

Trip Generation Rates

A hybrid approach in generating trip rates has been considered since data from another Stinson & Son Limited (Bank Street) proxy trucking facility is available. The available data covers all land uses except for office uses which will be separately calculated using the ITE Trip Generation Manual (11$^{th}$ edition). Note that from the data provided, it is understood that most trucking activities occur between 04:00 to 06:00 in the morning and spread between 14:00 to 18:00 in the afternoon. For the purpose of this evaluation, the trip generation will focus on the peak hours of the adjacent road, when traffic volumes are highest (i.e. one hour between 7am-9:30am and 3:30pm-6pm). The trip rates are summarized in **Table 4** below.

Table 4: Proposed Development Trip Rates

| Land Use | ITE/TRANS Designation or Description | Data Source | Trip Rates | |
|---|---|---|---|---|
| | | | AM Peak | PM Peak |
| Truck Yard | Lubrication and Service Bays | Proxy Site | T = 0.292(x) | T = 0.292(x) |
| Fueling | Cardlock Fueling Bays | Proxy Site | T = 3(p) | T = 3(p) |
| ITE712 | "Small Office Building" | ITE | T = 1.67(x) | T = 2.16(x) |
| *Note: T = Average Vehicle Trip Ends; x = area in 1,000 ft$^2$; p = number of pumps* | | | | |

Based on the rates derived by the proxy site, then the future trip generation by the truck yard and fueling bays can be calculated by multiplying the rate by the proposed new land uses as summarized in **Table 5**. Note that all trips are in vehicle trips.

Table 5: New Truck Trips Based on Proxy Site

| Land Use | Size | AM Peak (Vehicle Trips/hr) | | PM Peak (Vehicle Trips/hr) | | | |
|---|---|---|---|---|---|---|---|
| | | In | Out | In | Out | In | Out |
| Truck Yard | 17,890 ft$^2$ | 0 | 5 | 5 | 5 | 0 | 5 |
| Fueling | 3 Pumps | 5 | 5 | 10 | 5 | 5 | 10 |
| **Total Vehicle Trips** | | **5** | **10** | **15** | **10** | **5** | **15** |

In addition, the total number of person trips per hour generated by the proposed office uses are calculated by multiplying the vehicle trip rates for office uses from **Table 4** by 1.28 factor, as per the ITE Trip Generation Manual to account for typical North American auto occupancy, transit use and non-motorized mode. The resulting person trips per peak hour shown in **Table 6** below.

Table 6: Peak Hour Person Trip Generation

| Land Use | GFA | AM Peak Person Trips | PM Peak Person Trips |
|---|---|---|---|
| Small Office Building | 1,798 ft$^2$ | 4 | 5 |

The proposed development is anticipated to generate a total of approximately 305 and 225 person trips during the morning and afternoon peak hours, respectively. **Table 7** provides the mode share percentages obtained from the 2020 TRANS Manual for the "Other Rural" district and anticipated proposed mode share breakdown for this development. The table summarizes the mode share rationale for each mode.

Table 7: Existing and Proposed Weekday Peak Hour Mode Share Breakdown

| Travel Mode | TRANS 2020 Mode Share | | Proposed Mode Share | Rationale |
|---|---|---|---|---|
| | AM | PM | | |
| Auto Driver | 87% | 80% | 85% | Expected due to nature of development and site context |
| Auto Passenger | 9% | 14% | 15% | Approximately 1.2 ratio passenger to driver |
| Transit | 0% | 1% | 0% | Nature of development expected to generate negligible transit trips |
| Cycling | 0% | 2% | 0% | Limited cycling facilities adjacent to the site and site context |
| Walking | 3% | 4% | 0% | Low density near site and little pedestrian trips forecasted |
| **Total Person Trips** | **100%** | **100%** | **100%** | – |

The total peak hour person trips in **Table 6** are then divided into different travel modes using the proposed mode shares shown above in **Table 7**. The resultant trips per mode share for the office building and the combined site trip generation have been summarized in **Table 8**, and **Table 9** respectively.

Table 8: Office Peak Hour Trips Generated – AM / PM Peak Hours

| Travel Mode | Mode Share | AM Peak (Person Trips/hr) | | | PM Peak (Person Trips/hr) | | |
|---|---|---|---|---|---|---|---|
| | | In | Out | Total | In | Out | Total |
| Auto Driver | 85% | 3 | 1 | 4 | 1 | 4 | 5 |
| Auto Passenger | 15% | 0 | 0 | 0 | 0 | 0 | 0 |
| Transit and non-motorized | 0% | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Person Trips | 100% | 3 | 1 | 4 | 1 | 4 | 5 |

Table 9: Combined Site Generated Vehicle Trips – AM / PM Peak Hours

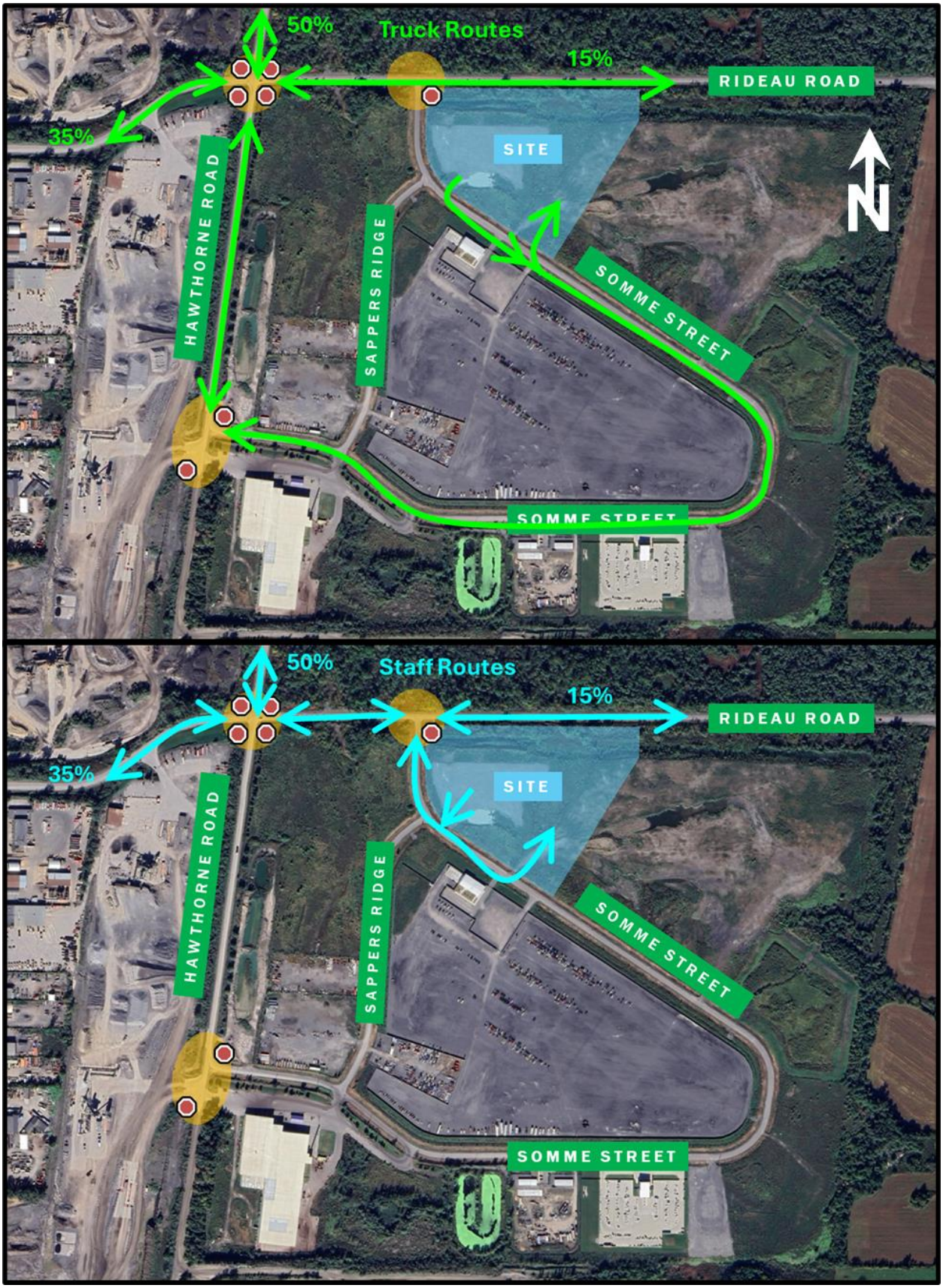
| Land Use | AM Peak (Vehicle Trips/hr) | | | PM Peak (Vehicle Trips/hr) | | |
|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total |
| Truck Yard | 0 | 5 | 5 | 5 | 0 | 5 |
| Fueling | 5 | 5 | 10 | 5 | 5 | 10 |
| Small Office Building | 3 | 1 | 4 | 1 | 4 | 5 |
| **Total Vehicle Trips** | **8** | **11** | **19** | **11** | **9** | **20** |

As shown above, the proposed development is anticipated to generate approximately 20 new two-way vehicle trips during the AM and PM peak hours respectively.

### 3.1.2. Trip Distribution and Assignment

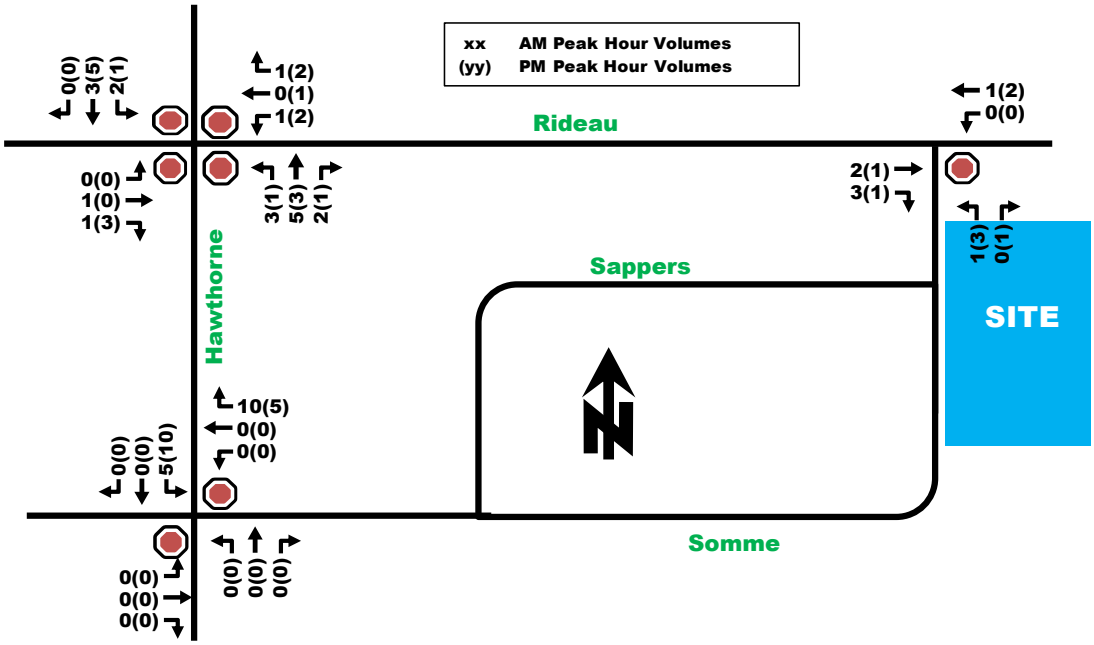
Based on the location of adjacent arterial roadways and potential destinations, the distribution of site-generated traffic volumes was estimated as shown in **Figure 8**. Note that large truck traffic has been assigned to Hawthorne Rd due to tight curb radius at Somme/Rideau; further discussions and rationale provided in **Section 4.1.2.**

Figure 8: Site Generated Vehicle Traffic Percent Distribution



The anticipated 'new' auto trips for the proposed development from **Table 9** were then assigned to the road network with the distribution shown above, as shown in **Figure 9**, for the total site-generated traffic.

Figure 9: Site-Generated Traffic




## 3.2. Background Network Traffic

### 3.2.1. Transportation Network Plans

Refer to **Section 2.1.3: Planned Conditions**.

### 3.2.2. Background Growth and Other Area Developments

As described in **Section 2.1.3**, there was only one new development proposed within a 1km radius which did not have any supporting TIA or transportation analysis. To account for future background growth potential, a 1% annual growth rate will be applied on all vehicle movements, including Rideau Rd, Hawthorne Rd and Somme St.

### 3.2.3. Future Background Volumes

No known other area development volumes were found, therefore only a 1% annual growth rate on all study area movements were applied. Since further analysis will not be conducted due to low site trip generation rates, then only the highest horizon background traffic volumes have been shown, including 2031 background volumes and total 2031 volumes including the development as seen in **Figure 10** and **Figure 11** respectively.

Figure 10: 2031 Background Traffic Volumes – AM (PM) Peak Hour

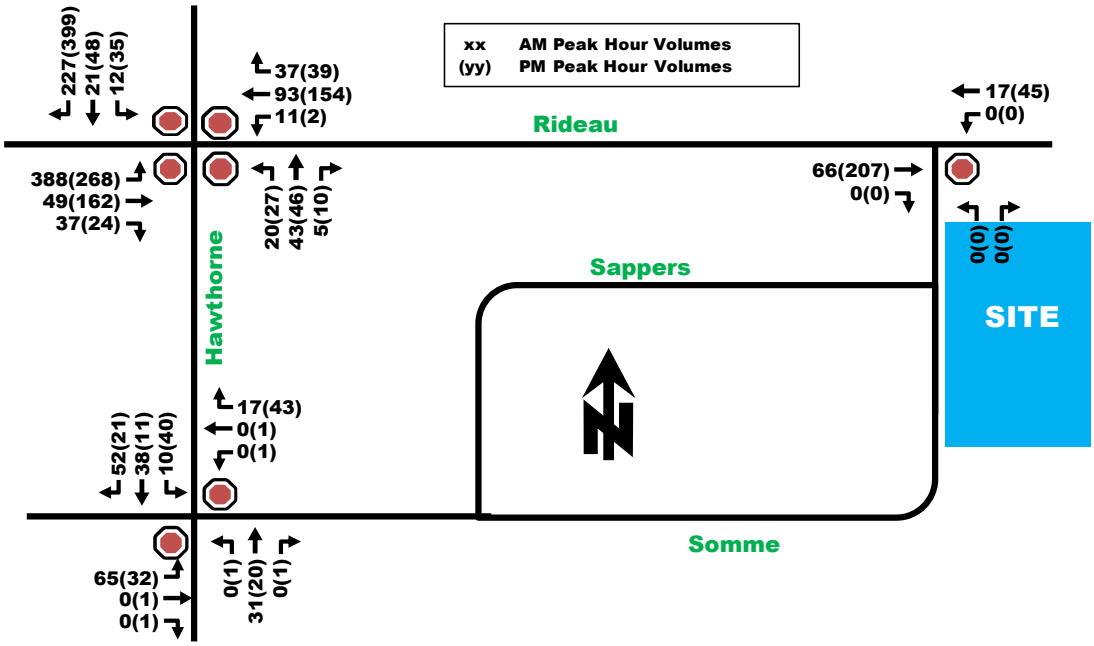
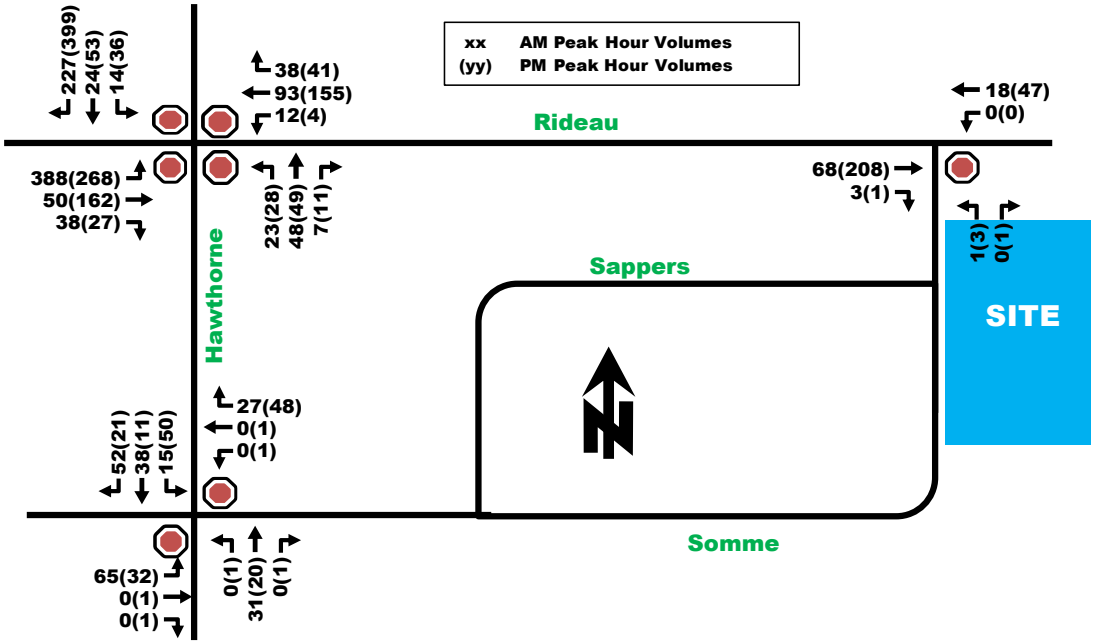



Figure 11: 2031 Full Buildout Traffic Volumes – AM (PM) Peak Hour




## 3.3. Demand Rationalization

The following section is exempt as less than 75 vehicle trips are anticipated (refer to **Section 3.1**).

# 4.0 ANALYSIS

## 4.1. Development Design

### 4.1.1. Design for Sustainable Modes

Pedestrian/Cycling Routes and Facilities

The site is located in a rural heavy industrial area where walking and cycling trips are not anticipated to occur in notable amounts. There are no walking destinations within close proximity, and no infrastructure for pedestrians. Internal to the site, there are pedestrian landing zones and 2.0m or more wide pedestrian facilities to separate them from heavy vehicle movements. Given the site context and rural industrial land uses nearby, the proposed facilities internal to the site and lack of external facilities are considered adequate.

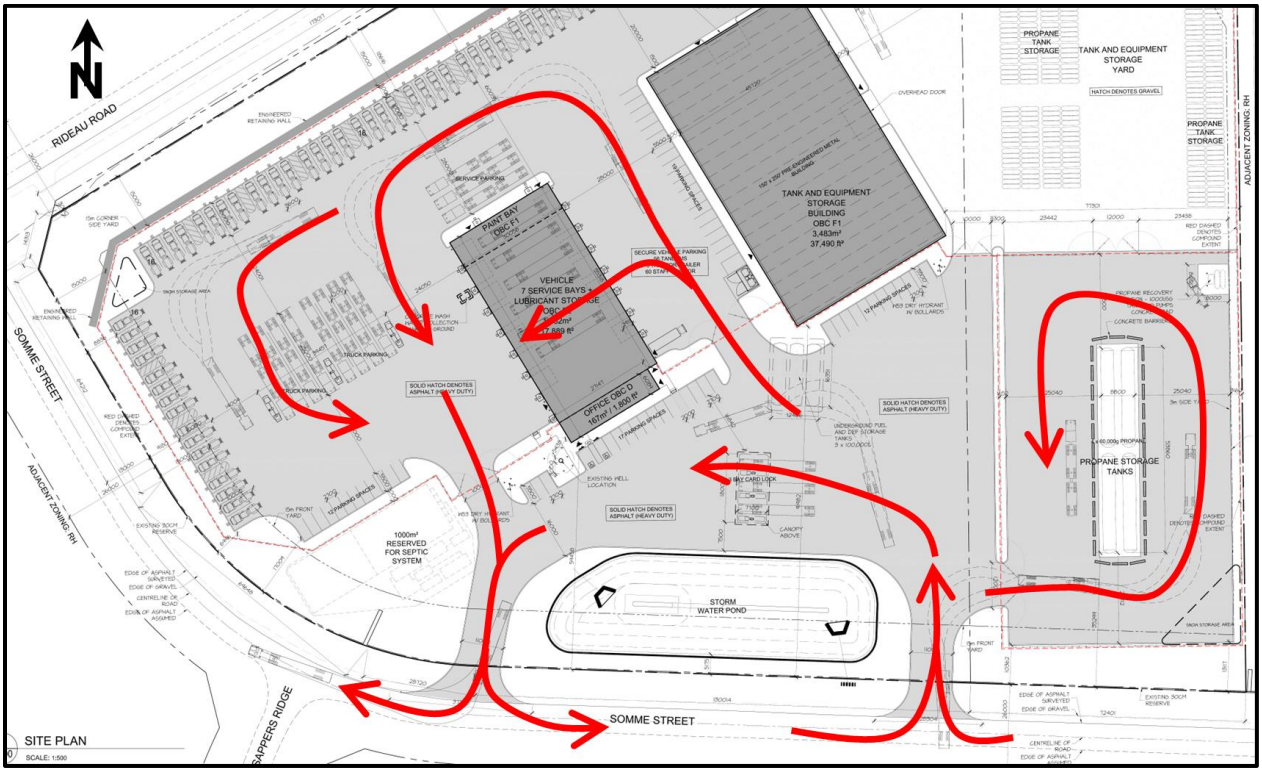
Location of Transit Facilities

The nearest transit stop is located more than 2kms away from the site and only operates on Thursdays on limited schedules. It is not forecasted that anyone using this site will take transit.

### 4.1.2. Circulation and Access

Internal Site Circulation: The site has been designed to operate as a counterclockwise loop, with the eastern access proposed as an inbound only access and the western access proposed as an outbound only access. Once internal to the site, trucks may refuel using the 3 cardlock bays by turning left or may continue towards the two gates into the service and storage yard, which is also proposed to operate in a counterclockwise direction. The propane refill area near the propane storage tanks could operate in either direction of flow, but for consistency is recommended to operate as a counterclockwise direction also. The internal aisles have been designed wide to accommodate smooth operations of large trucks such as WB20s. **Figure 12** below illustrates the proposed internal circulation.

Figure 12: Internal Vehicle Circulation – 301 Somme Street

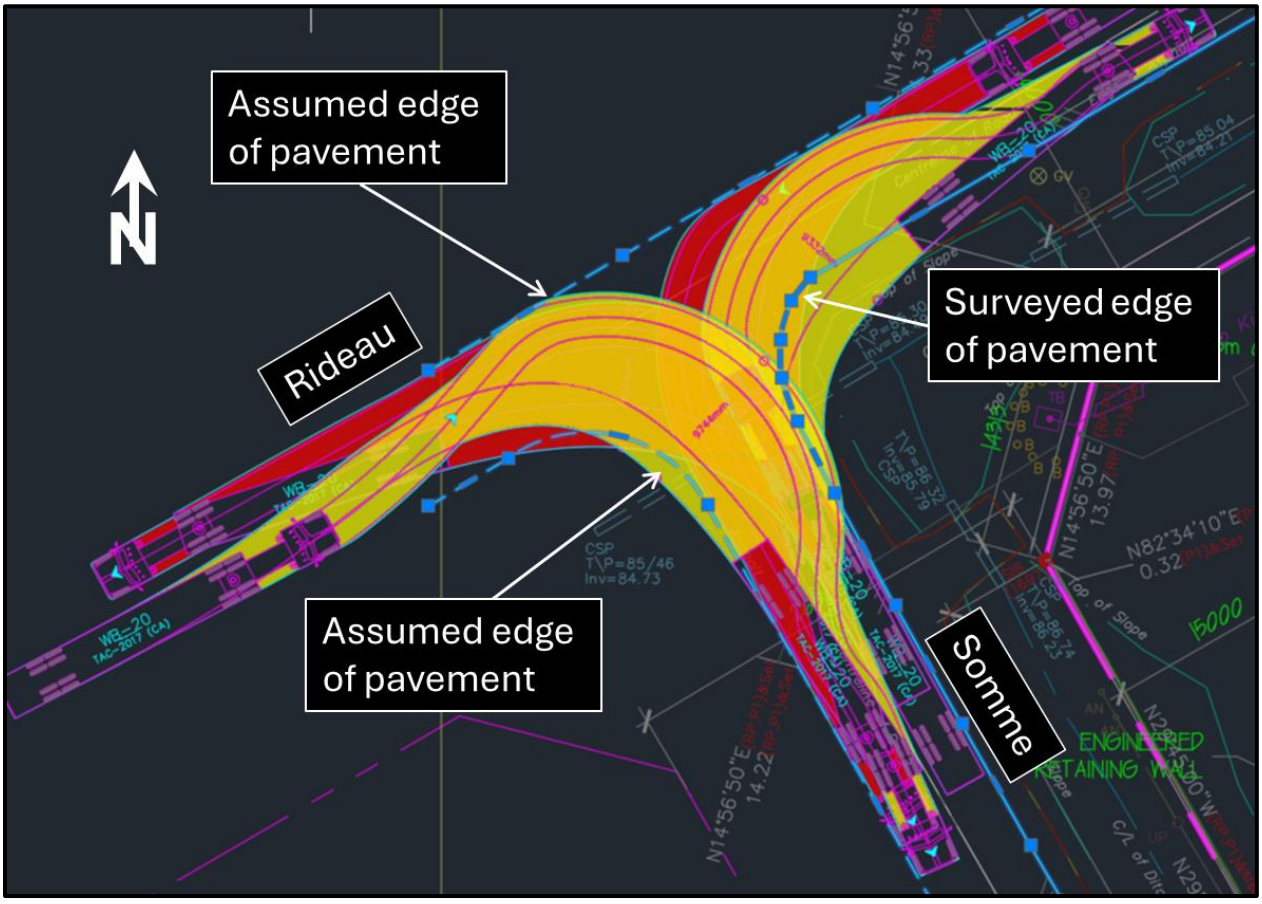


External Site Circulation: The municipal road network within the study areas was also reviewed externally to the site. It is expected that the site would generate a range of heavy truck vehicle sizes, up to and include WB-20 tractor trailers (53 foot trailers). The site provides parking for 56 tandem trucks and 11 tractor trailer type trucks

- **Somme/Rideau Intersection**: A swept path analysis (**Figure 13**) found that the ~10m southwest and southeast curb radius at Somme/Rideau would be insufficient to accommodate the turning radius for tractor trailer trucks (WB-20s). WB-20s would be required to take the full oncoming lane, which would still require them to depart the existing asphalt surface. HSUs can navigate the intersection. The approximately 10m corner radii is not considered typical of intersections expected to serve large volumes of heavy vehicle movements.
- **Somme/Rideau Intersection**: This intersection provides acceptable curb radii which can accommodate WB-20 and HSU movements.

Based on the foregoing analysis, it is recommended that 301 Somme St tractor trailer units access the industrial park via Hawthorne/Somme. To facilitate WB-20 movements at Somme/Rideau, additional localized intersection widening would be required.

Figure 13: WB20 Truck Swept Paths at Somme/Rideau




Truck turning templates have been provided in **Appendix D**.

### 4.1.3. New Streets Network

Exempt, only required for Plans of Subdivision.

## 4.2. Parking

The site is a vehicle storage yard which has ancillary uses such as small office components (for trucking logistics), service bays and 3 fueling positions for the trucks to be stored at this yard. The client intends to provide 60 staff parking spaces which will serve those picking up a commercial truck to drive to/from the site, mechanics and service staff and office staff, which is anticipated to be very minimal. In addition, despite the very poor cycling infrastructure to the site, 2 bike parking spaces have been proposed indoors for anyone who wishes to commute to the site this way.

The site has been designed to accommodate 56 tandem trucks, 11 tractor trailer trucks and any trucks which may be temporarily parked within the vehicle service and lubrication bays or operating within the yard. Given that the site is meant to operate as a trucking service and storage yard, the proposed number of parking spaces are reasonable and fit within the rural heavy industrial zoned land.

## 4.3. Boundary Street Design

This section is exempt given the site's context and land uses, as confirmed based on scope of work requirements via an email with City Staff dated June 16, 2025.

## 4.4. Access Intersection Design

Note, former sections 4.4.2 (Access Control) and 4.4.3 (Access Design) have been moved to Section 4.9.1 and 4.9.2 as per the revised TIA Guidelines, June 2023.

### 4.4.1. Location and Design of Access

**Vehicle Access and Circulation**

The site plan proposes two vehicle accesses located 45m and 175m east of the Sappers/Somme intersection. The access spacing is sufficient to minimize conflict with the Sappers/Somme intersection.

The eastern access is proposed as an inbound only access while the western access is proposed as an outbound only access. Both accesses will consist of an 11m wide aisle, with wider flaring at the Somme St road edge to accommodate the truck turning templates of larger trucks such as WB20. Signage is to be installed to enforce the one-way operation of the accesses

As discussed in **Section 4.1.2**, it is recommended that larger WB20 trucks use Hawthorne Rd to access Somme St and then the site.

**Left Turn Lane Requirements – Somme/Rideau Intersection**

The need for a westbound left turn lane was considered at the Somme/Rideau intersection. Westbound volumes are less than 50 vehicles/hour during the weekday peak hour. The site is not anticipated to have a notable impact to the westbound left turn movement. Given the proximity to the Hawthorne/Rideau all-way stop-controlled intersection, there are not anticipated to be difficulties with turning left into the site.

A westbound left turn lane is not recommended based on the foregoing analysis.

**Throat Length**

The Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads, Chapter 8 (Access) provides guidelines for clear throat length. Clear throat lengths are only recommended for arterial and collector roads. Since Somme St is a local road, then no clear throat lengths are required, however the accesses have been designed long enough to allow a full WB20 truck to queue internally before entering or exiting the site.

**Private Approach By-law**

Additionally, the Private Approach By-Law requirements for the City of Ottawa were reviewed, with the following observations:

- Given the proposed land use as truck facility, the width of the proposed development drive aisles are considered a requirement to accommodate large trucks.
- The site has two frontages (approximately 210m and 300m long) which permits having at least two two-way private approaches per frontage.
- Section 25(m)(ii) suggests that for 100 to 199 parking spaces provided, that the distance between the private approach and nearest intersecting street line be at least 30m and the distance between private approaches be at least 30m. The nearest intersecting street is 45m and the private approaches are separated by 130m, thus meeting this bylaw.
- The access are greater than 3m from the adjacent property line.
- The grade of the private approach is to not exceed 2% within the private property for a distance of 9.0m to the curb line.

The access designs are in conformance with the City of Ottawa Private Approach By-law 2003-447 or have been justified based on their intended purpose. The accesses do not cross any active transportation facilities.

## 4.5. TIA Sections 4.5-to-4.9

These sections have been exempted from the TIA report. Refer to **Table 3**.

# 5.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Based on the results summarized herein the following findings and recommendations are provided:

Existing Conditions

- W.O. Stinson & Son Limited is proposing a vehicle service lot at the municipal address of 301 Somme St. The 6.09-hectare site is currently vacant land within an industrial park.
- The site is located within the rural transect and is designated as heavy industrial land.
- The study area does not have any pedestrian or cycling infrastructure near the site.

Proposed Development

- The development will consist of approximately a tank and equipment storage building (3,483m$^2$), a building containing an office area (167m$^2$), lubricant storage, and seven service bays (1,662m$^2$), and open areas for the storage, maintenance, and servicing of Stinson vehicles. The development is assumed to be fully constructed by the year 2026.
- The site will provide parking for 56 tandem trucks, 11 tractor trailer trucks, 60 staff parking spaces and 2 bike parking spaces to be located indoors.
- Neither the Official Plan or Transportation Master Plan propose any modifications to the road, transit, pedestrian or cycling network.
- The site proposes two accesses:
  - 45m east of Sappers/Somme intersection intended to operate as an outbound only.
  - 175m east of Sappers/Somme intersection intended to operate as an inbound only.
  - Both accesses has been designed with an 11m wide drive aisle and wider tapering at the road edge to accommodate large truck turning movements (WB20).
- The existing **Somme/Rideau** intersection does not offer sufficient curb radii and approach/egress width to safely accommodate WB20 truck turning movements. It is recommended that WB-20 type vehicles

(tractor trailer units) access the industrial park via the **Hawthorne/Somme** intersection. The existing **Somme/Rideau** intersection would require pavement widening to satisfy WB-20 truck turning movements.

Future Conditions

- Given the low number of vehicle trips forecasted (less than 75), no major impacts to the study area network are anticipated. Future conditions are forecasted to operate similarly to today.

Based on the preceding report, the proposed development located at 301 Somme St is recommended from a transportation perspective.

Prepared By:

Juan Lavin, P. Eng.

Transportation Engineer

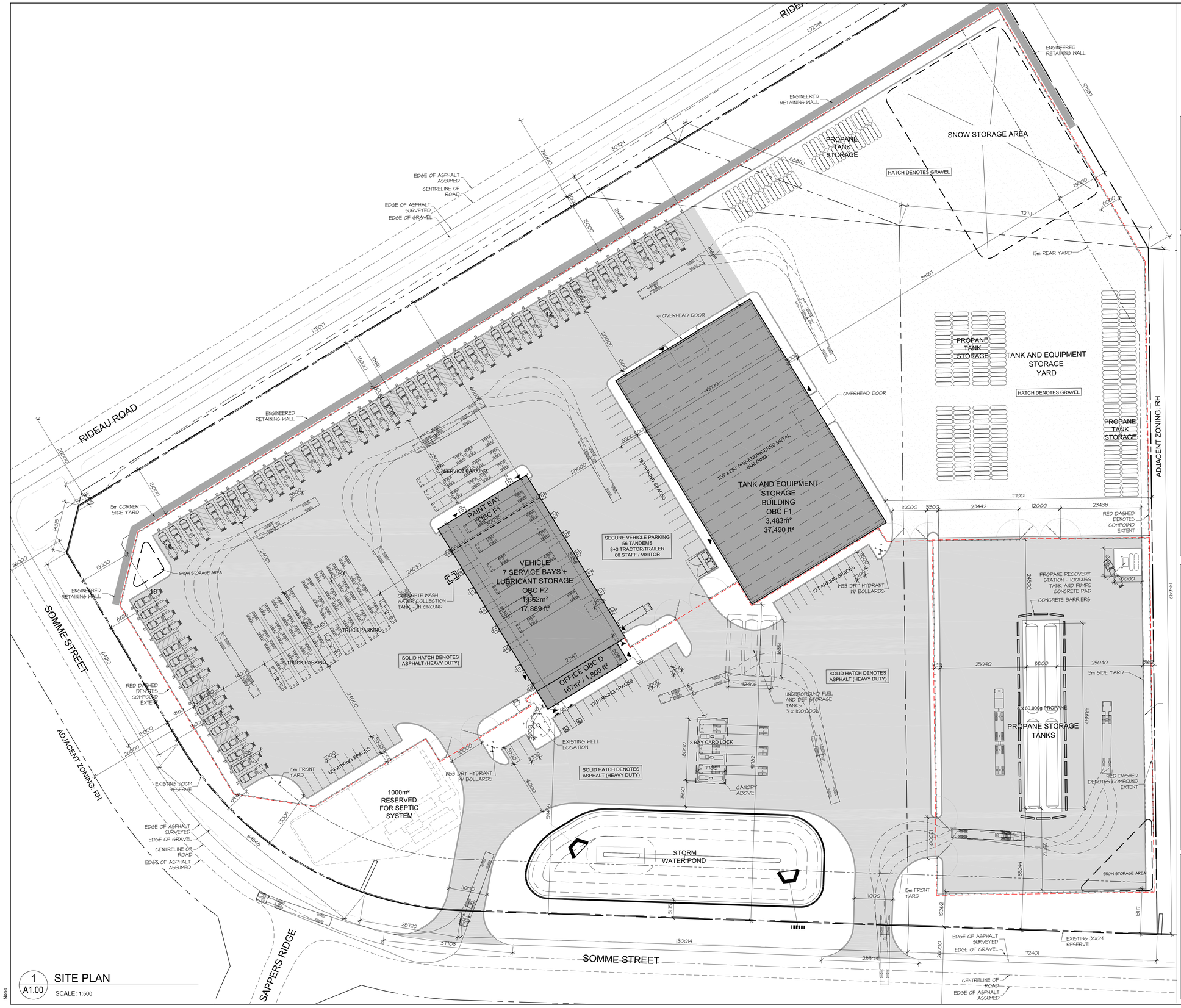
Reviewed By:

Jake Berube, P.Eng., RSP1

Senior Transportation Engineer

# Appendix A:

High Definition Site Plan




1 A1.00 SITE PLAN

SCALE: 1:500

None
None

W.O. STINSON & SON LTD.

## LEGAL DESCRIPTION:

PART OF LOT 26; CONCESSION 6 (RIDEAU FRONT)
GEOGRAPHIC TOWNSHIP OF GLOUCESTER
and PARK OF BLOCKS 5 AND 14, REGISTERED PLAN 4M-1388
CITY OF OTTAWA

## CIVIL ADDRESS:

301 SOMME STREET, OTTAWA

## ZONING NOTES:

OFFICIAL PLAN DESIGNATION: RURAL
ZONING - RH - RURAL HEAVY INDUSTRIAL
ABUTTING - RH - RURAL HEAVY INDUSTRIAL

**Owner**
W. O. STINSON & SON LTD.
4728 Bank Street, Ottawa, ON K1T 3W7
Attn: Scott Stinson - 613 822-7400

**Architect/Agent**
HOBIN ARCHITECTURE INC.
63 Pamilla Street, Ottawa, ON, K1S 3K7
Attn: Doug van den Ham - 613-238-7200 x 115

**Survey**
ANNIS O'SULLIVAN VOLLEBEKK LTD
113 Prescott Street, Box 1340, Kemptville, Ontario K0G1J0
Attn: Emmett Ketchum - 613-258-1717

**Civil**
STANTEC OTTAWA
300 - 1331 Clyde Avenue Ottawa ON K2C 3G4
ATTn: Peter Moroz P.Eng - 613-244-2851

**Structural**
NOT YET CONTRACTED

**Electrical**
NOT YET CONTRACTED

**Landscape**
NOT YET CONTRACTED

**Traffic**
PARSONS ENGINEERING
1223 Michael St., Suite 100, Ottawa, ON K1J 7T2
Attn: Jake Berube - 613-641-1862

| ZONE: RH | REQUIRED | PROVIDED |
|---|---|---|
| PERMITTED USE (AMONG OTHERS) | AUTOMOBILE SERVICE STATION, DRIVE-THROUGH FACILITY, GAS BAR,PARKING LOT, SERVICE & REPAIR SHOP, STORAGE YARD, WAREHOUSE | ALL PERMITTED USES |
| MIN. LOT AREA | 8,000 sq.m. | 60,893sq.m. |
| MIN. LOT WIDTH | 50m | 00m |
| MIN. FRONT YARD SETBACK | 15 m | 15 m |
| MIN. REAR YARD SETBACK | 15 m | 15 m |
| MIN. INTERIOR SIDE YARD SETBACK (i) ABUTTING INDUSTRIAL ZONE (ii) OTHER | 3m 10m | 3m 10m |
| MIN. CORNER SIDE YARD SETBACK | 15m | 15m |
| MAX. PRINCIPAL BUILDING HEIGHT | 15m | 15m |
| MAX. LOT COVERAGE (%) | 50% | 8.7% |
| PARKING SPACES (STAFF) | 00 / 100 = 00 | 60 |
| BICYCLE PARKING | 1 / 1500 = 2 | 2 PROVIDED INDOORS |
| OUTDOOR STORAGE | NOT PERMITTED IN ANY REQUIRED FRONT OR CORNER SIDE YARD, MUST BE SCREENED FROM ADJACENT RESIDENTIAL OR PUBLIC ROADS BY A 1.8M HIGH OPAQUE SCREEN | |

## LEGEND:

| | |
|---|---|
| B.F. PARKING STALL c/w BF. SIGNAGE | 3400, 5650 |
| DEPRESSED CURB c/w TWSI | |
| 150mm DIA., 6mm THK, GALV. STEEL BOLLARD (MIN. 1.5m HIGH & 1.5m BELOW GRADE) | *BOL |
| 300mm DIA., 6mm THK, GALV. STEEL BOLLARD (MIN. 1.5m HIGH & 1.5m BELOW GRADE) | *BOL-2 |
| PRECAST CONCRETE PAVING | |
| CAST IN PLACE CONCRETE SIDEWALK/ REFER TO GEOTECH. REPORT | |
| HEAVY DUTY ASPHALT | |
| ASPHALT SIDEWALK | |
| PAINTED LINE STOP BAR | |
| ROLLED CONCRETE CURB | RC |
| SITE SIGNAGE | |
| PAINTED LINES | |
| BIKE RACK | |
| EXTERIOR LIGHTING/ REFER TO ELEC. DWGS. FOR TYPES | A0 |
| CHAIN LINK FENCE | |
| FIRE ROUTE SIGNAGE | FRS |

| no. | date | revision |
|---|---|---|
| 8 | AUG 13, 2025 | ISSUED FOR COORDINATION |
| 7 | JULY 17, 2025 | ISSUED FOR COORDINATION |
| 6 | JULY 16, 2025 | ISSUED FOR CONCEPT REVIEW |
| 5 | MAY 28, 2025 | SITEPLAN – EXISTING WELL |
| 4 | APR 15, 2025 | SITEPLAN PRE-CONSULTATION |
| 3 | MAR 20, 2025 | ISSUED FOR CONCEPT REVIEW |
| 2 | MAR 06, 2025 | ISSUED FOR CONCEPT REVIEW |
| 1 | FEB 27, 2025 | ISSUED FOR CONCEPT REVIEW |



**Hobin Architecture Incorporated**
63 Pamilla Street
Ottawa, Ontario
Canada K1S 3K7

T: 613-238-7200
F: 613-235-2005
E: mail@hobinarc.com

**hobinarc.com**

HOBIN ARCHITECTURE

PROJECT/LOCATION:
W.O. Stinson & Son Ltd.
Somme Street Truck Yard
301 Somme Street

DRAWING TITLE:
VEHICLE SERVICE & STORAGE YARD SITE PLAN

| DRAWN BY: | DATE: | SCALE: |
|---|---|---|
| DV | FEB 2025 | AS NOTED |

PROJECT: 2502

DRAWING NO.: A1.00

REVISION NO.:

# Appendix B:

Existing Peak Hour Volumes

# Transportation Services - Traffic Services

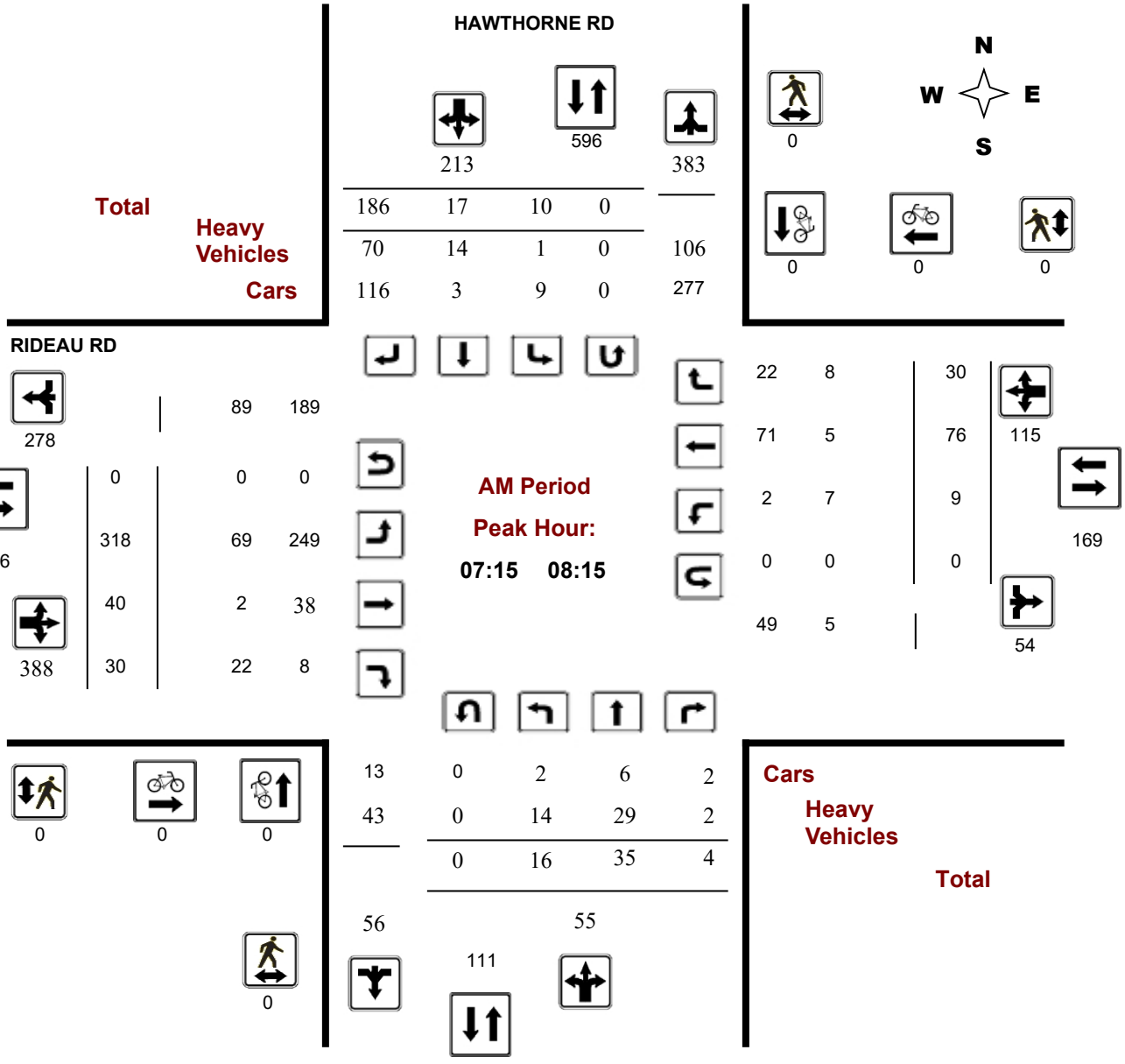
## Turning Movement Count - Study Results

## HAWTHORNE RD @ RIDEAU RD

**Survey Date:** Wednesday, July 31, 2024 **WO No:** 41777

**Start Time:** 07:00 **Device:** Miovision

## AM Period Peak Hour Diagram



# Transportation Services - Traffic Services

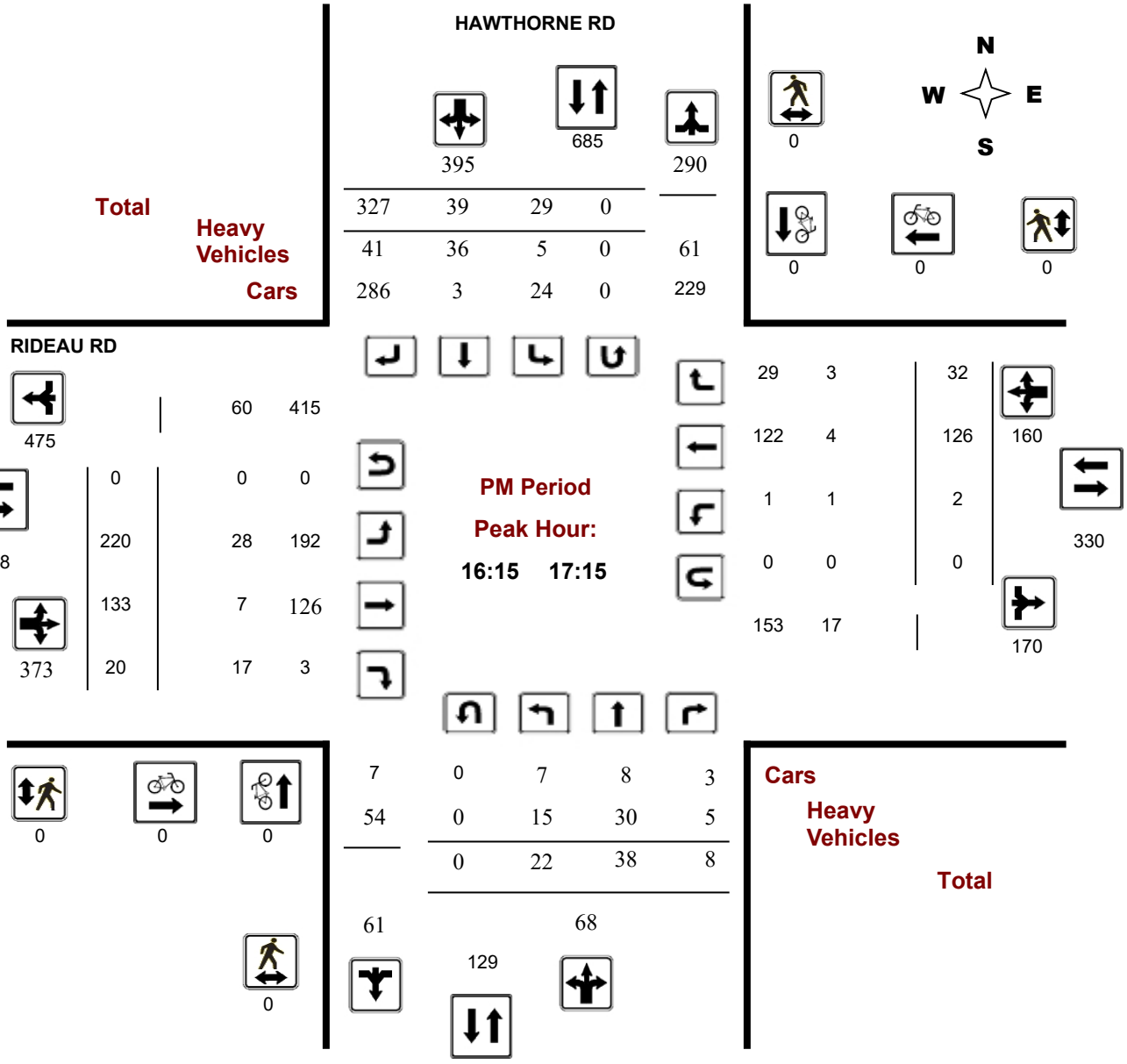
## Turning Movement Count - Study Results

## HAWTHORNE RD @ RIDEAU RD

**Survey Date:** Wednesday, July 31, 2024 **WO No:** 41777

**Start Time:** 07:00 **Device:** Miovision

## PM Period Peak Hour Diagram



**Directional Traffic Flow**

**Intersection:** Somme Street/Hawthorne Road

**Date:** Tuesday, Jul 08, 2025

**Time:** 7:00AM to 8:30AM

| Time | NBL | NBT | NBR | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR | 15-Minute Total | 1-Hour Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7:00AM - 7:15AM | 0 | 0 | 0 | 1 | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 2 | 10 | 10 |
| 7:15AM - 7:30AM | 0 | 0 | 0 | 1 | 0 | 7 | 10 | 0 | 0 | 0 | 0 | 4 | 22 | 32 |
| 7:30AM - 7:45AM | 0 | 0 | 0 | 0 | 1 | 10 | 10 | 0 | 0 | 0 | 0 | 2 | 23 | 55 |
| 7:45AM - 8:00AM | 0 | 1 | 0 | 3 | 10 | 9 | 11 | 0 | 0 | 0 | 0 | 0 | 34 | 89 |
| 8:00AM - 8:15AM | 0 | 11 | 0 | 2 | 14 | 9 | 5 | 0 | 0 | 0 | 0 | 3 | 44 | 123 |
| 8:15AM - 8:30AM | 0 | 13 | 0 | 3 | 6 | 6 | 12 | 0 | 0 | 0 | 0 | 3 | 43 | **144** |
| 1.5 Hour Total | 0 | 25 | 0 | 10 | 31 | 43 | 53 | 0 | 0 | 0 | 0 | 14 | 176 | |
| **Peak Hour Total (7:30AM - 8:30AM)** | **0** | **25** | **0** | **8** | **31** | **34** | **38** | **0** | **0** | **0** | **0** | **8** | **144** | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % of traffic = trucks, 7:00 - 7:15 | | | | 100% | | 100% | 80% | | | | | 100% | 90% |
| % of traffic = trucks, 7:15 - 7:30 | | | | 0% | | 86% | 90% | | | | | 25% | 73% |
| % of traffic = trucks, 7:30 -7:45 | | | | | 100% | 80% | 100% | | | | | 0% | 83% |
| % of traffic = trucks, 7:45 - 8:00 | | 100% | | 33% | 90% | 78% | 73% | | | | | | 76% |
| % of traffic = trucks, 8:00 - 8:15 | | 91% | | 0% | 93% | 100% | 80% | | | | | 0% | 82% |
| % of traffic = trucks, 8:15 - 8:30 | | 100% | | 67% | 100% | 100% | 92% | | | | | 67% | 93% |
| % of traffic = trucks, 7:00 - 8:30 | | 96% | | 40% | 94% | 88% | 87% | | | | | 36% | 83% |

**Directional Traffic Flow**

**Intersection:** Somme Street/Hawthorne Road

**Date:** Tuesday, Jul 08, 2025

**Time:** 4:00PM to 5:30PM

| Time | NBL | NBT | NBR | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR | 15-Minute Total | 1-Hour Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4:00PM - 4:15PM | 1 | 5 | 1 | 4 | 5 | 7 | 8 | 1 | 1 | 0 | 1 | 4 | 38 | 38 |
| 4:15PM - 4:30PM | 1 | 4 | 1 | 4 | 5 | 4 | 4 | 1 | 1 | 1 | 1 | 4 | 31 | 69 |
| 4:30PM - 4:45PM | 0 | 4 | 0 | 5 | 4 | 3 | 10 | 0 | 0 | 0 | 0 | 5 | 31 | 100 |
| 4:45PM - 5:00PM | 0 | 4 | 0 | 15 | 0 | 8 | 5 | 0 | 0 | 0 | 0 | 6 | 38 | 138 |
| 5:00PM - 5:15PM | 0 | 4 | 0 | 9 | 0 | 2 | 7 | 0 | 0 | 0 | 0 | 20 | 42 | **142** |
| 5:15PM - 5:30PM | 0 | 0 | 0 | 5 | 1 | 1 | 5 | 1 | 0 | 0 | 1 | 7 | 21 | 132 |
| 1.5 Hour Total | 2 | 21 | 2 | 42 | 15 | 25 | 39 | 3 | 2 | 1 | 3 | 46 | 201 | |
| **Peak Hour Total (4:15PM - 5:15PM)** | **1** | **16** | **1** | **33** | **9** | **17** | **26** | **1** | **1** | **1** | **1** | **35** | **142** | |
| % of traffic = trucks, 1 | 100% | 100% | 100% | 100% | 100% | 100% | 75% | 100% | 100% | | 100% | 100% | 95% | |
| % of traffic = trucks, 1 | 100% | 100% | 100% | 100% | 100% | 75% | 100% | 100% | 100% | 100% | 100% | 50% | 90% | |
| % of traffic = trucks, 1 | | 100% | | 100% | 75% | 100% | 80% | | | | | 20% | 77% | |
| % of traffic = trucks, 1 | | 50% | | 80% | | 88% | 100% | | | | | 83% | 82% | |
| % of traffic = trucks, 8 | | 50% | | 78% | | 50% | 86% | | | | | 60% | 67% | |
| % of traffic = trucks, 8 | | | | 80% | 0% | 100% | 40% | 100% | | | 100% | 71% | 67% | |
| % of traffic = trucks, 1 | 100% | 81% | 100% | 86% | 87% | 88% | 79% | 100% | 100% | 100% | 100% | 63% | 80% | |

# Appendix C:

Historic Collision Data

**Total Area**

| Classification of Accident | Rear End | Turning Movement | Sideswipe | Angle | Approaching | SMV other | SMV unattended vehicle | Other | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| P.D. only | 3 | 1 | 1 | 2 | 0 | 1 | 0 | 1 | 9 | 100% |
| Non-fatal injury | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Non-reportable | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Total | **3** | **1** | **1** | **2** | **0** | **1** | **0** | **1** | **9** | 100% |
| | #1 or 33% | #3 or 11% | #3 or 11% | #2 or 22% | #7 or 0% | #3 or 11% | #7 or 0% | #3 or 11% | | |

**HAWTHORNE RD/RIDEAU RD**

| Years | Total # Collisions | 24 Hr AADT Veh Volume | Days | Collisions/MEV |
|---|---|---|---|---|
| 2018-2022 | 8 | n/a | 1825 | **n/a** |

| Peds | Cyclists |
|---|---|
| **0** | **0** |

| Classification of Accident | Rear End | Turning Movement | Sideswipe | Angle | Approaching | SMV other | SMV unattended vehicle | Other | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| P.D. only | 3 | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 8 | 100% |
| Non-fatal injury | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Non-reportable | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Total | **3** | **1** | **1** | **2** | **0** | **0** | **0** | **1** | **8** | 100% |
| | 38% | 13% | 13% | 25% | 0% | 0% | 0% | 13% | | |

**RIDEAU RD, HAWTHORNE RD to SOMME ST**

| Years | Total # Collisions | 24 Hr AADT Veh Volume | Days | Collisions/MEV |
|---|---|---|---|---|
| 2018-2022 | 1 | n/a | 1825 | **n/a** |

| Peds | Cyclists |
|---|---|
| **0** | **0** |

| Classification of Accident | Rear End | Turning Movement | Sideswipe | Angle | Approaching | SMV other | SMV unattended vehicle | Other | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| P.D. only | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 100% |
| Non-fatal injury | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Non-reportable | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Total | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **1** | 100% |
| | 0% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | | |

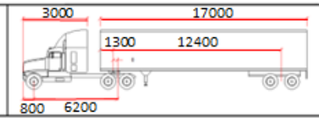
# Appendix D:

Truck Turning Templates

PARSONS

Note: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall provide the location of utilities and shall be responsible for adequate protection from damage.

N




WB-20 Not to Scale

mm

| | |
|---|---|
| Width | : 2600 |
| Track | : 2600 |
| Lock to Lock Time | : 6.0 |
| Steering Angle | : 28.2 |

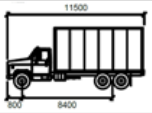
| | | | |
|---|---|---|---|
| **Drawing Description** | 301 Somme St | | |
| **Client** | W.O. Stinson & Son Lmt | **Date** | 2025 08 15 |
| **Figure Number** | 1 of 2 | | |
| **Project Number** | 479529 | **Project Description** | WB20 Turning |

PARSONS

Note: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall provide the location of utilities and shall be responsible for adequate protection from damage.

N

Legend




HSU

| | mm |
|---|---|
| Width | : 2600 |
| Track | : 2600 |
| Lock to Lock Time | : 6.0 |
| Steering Angle | : 40.0 |

Not to Scale

| | | | |
|---|---|---|---|
| **Drawing Description** | HSU Checks at Somme/Rideau | | |
| **Client** | W.O. Stinson & Son Lmt | **Date** | 2025-08-15 |
| **Project Number** | 479529 | **Figure Number** | 2 of 2 |
| | | **Project Description** | HSU at Somme/Rideau |