

Gold Leaf Properties Inc.
9644 Townsend Line
Kerwood, Ontario N0M 2B0

February 9, 2024
SBM-23-2076

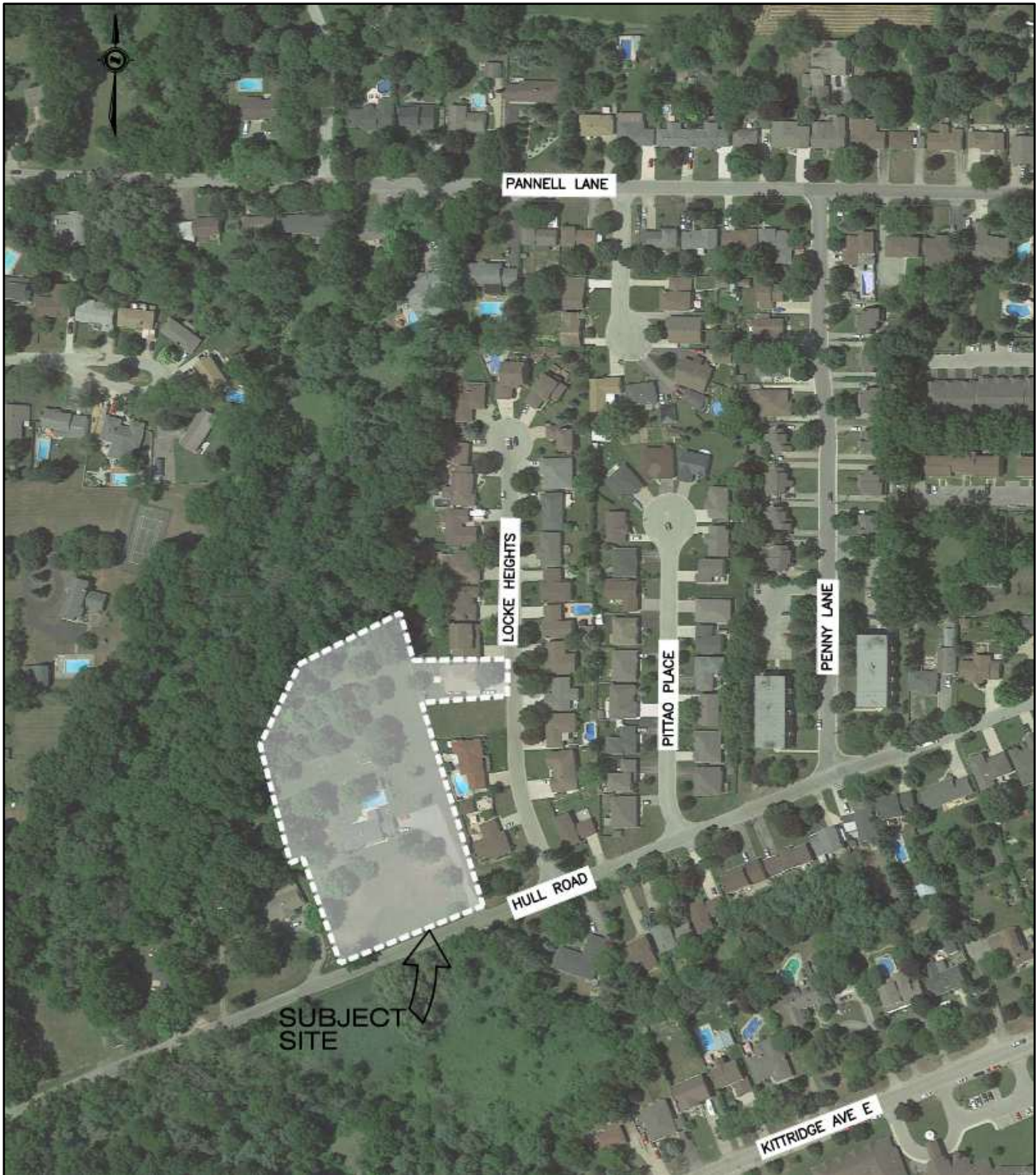
Attn: Cindy Read

**Re: Traffic Impact Brief
6 Locke Heights
Strathroy, Ontario**

1 INTRODUCTION

This Traffic Impact Brief (TIB) has been prepared by Strik, Baldinelli, Moniz Ltd (SBM) to identify traffic impacts, or a lack thereof, associated with the proposed residential development located at 6 Locke Heights and 101 Hull Road in Strathroy, Ontario. The development is proposed to include 26 townhouse units with a single vehicular access on Locke Heights. The location of the proposed development is illustrated in Figure 1.

Figure 1: Site Location



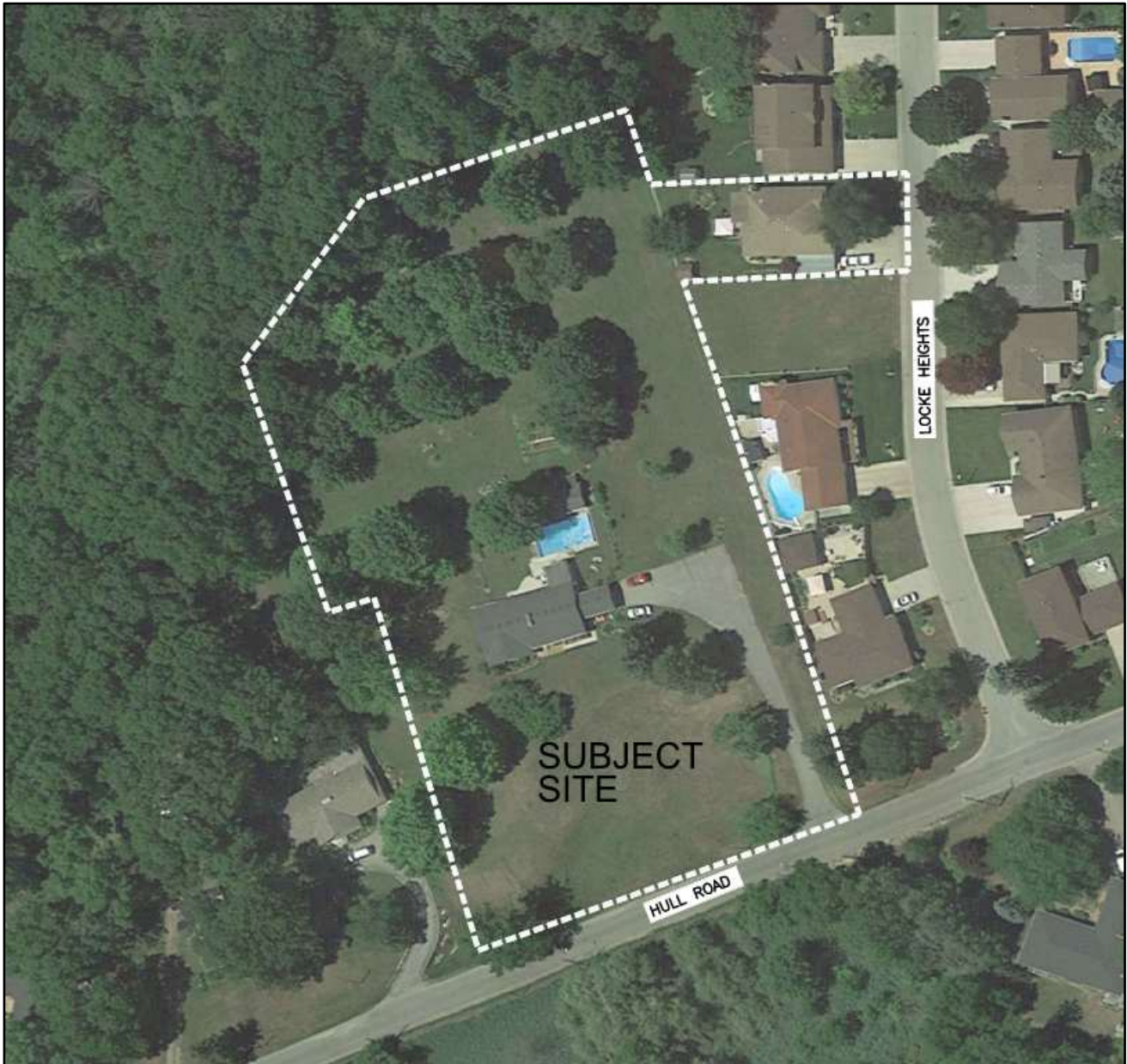
Aerial Image Source: Google Earth (April 2016 imagery)

2 EXISTING CONDITIONS

A site visit was conducted on October 17, 2023, to confirm existing roadway conditions surrounding the site.

The subject site is bounded by the Hull Road right of way (ROW) to the south, residential properties and the Locke Heights ROW to the east, and residential properties (primarily woodlands) to the north and west. There are existing residential buildings, a driveway, and a shed located on the property. The existing site area can be seen in Figure 2.

Figure 2: Site Area



Aerial Image Source: Google Earth (April 2016 imagery)

Locke Heights is a two-lane local road running north-south, perpendicular to Hull Road. Locke Heights is a cul-de-sac with an urban cross-section (curb and gutter) and has no signed parking restrictions. Locke Heights has an assumed (unposted) speed limit of 50 km/h and it has stop control at the Hull Road intersection (south end). Currently, there is no existing sidewalk on Locke Heights.

Hull Road is a two-lane local road running east-west with an assumed (unposted) speed limit of 50 km/h. Hull Road has a semi-rural cross-section (no curb and gutter) and the only existing sidewalk is on the north side of Hull Road between Locke Heights and Penny Lane. There are no signed parking restrictions on Hull Road.

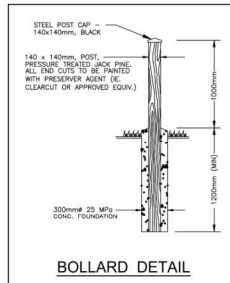
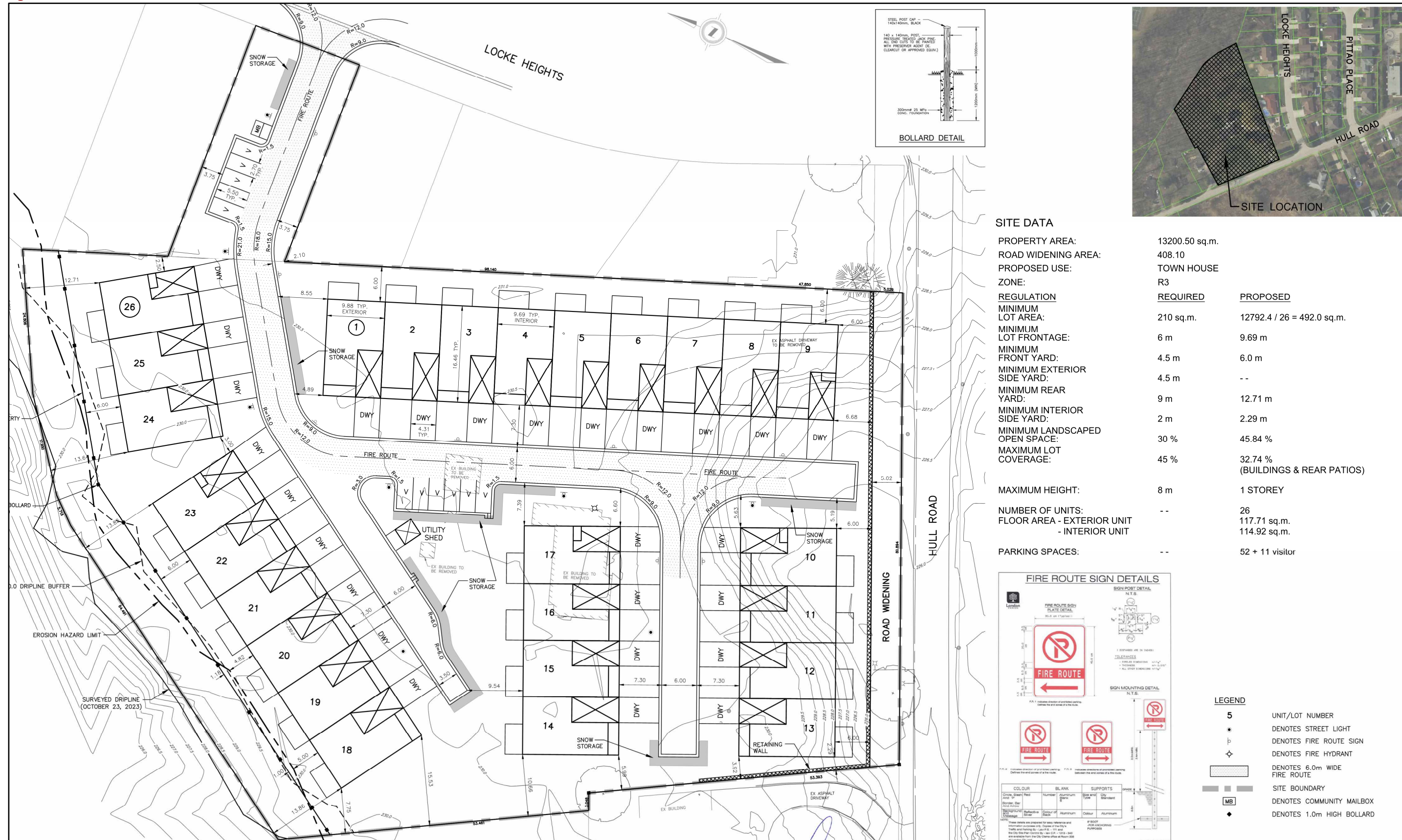
Based on observations during our site visit, we would estimate that the existing two-way traffic volumes on Hull Road at Locke Heights are well below 200 vehicles during the peak hour, with approximately 10% turning to/from Locke Heights. As such, there are no concerns about existing traffic capacity or operations on these local roads.

Locke Heights had several vehicles parked on the street, but the majority were parked on the west side of Locke Heights.

3 PROPOSED DEVELOPMENT

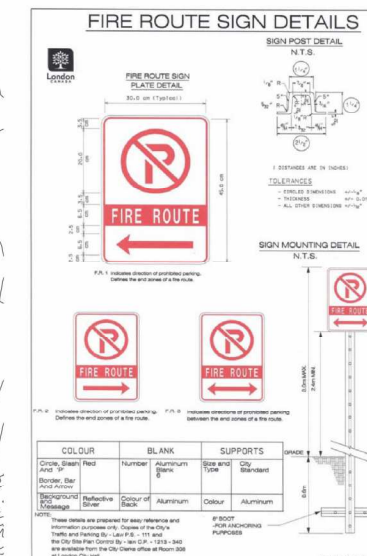
The development is proposed to include 26 townhouse units geared towards seniors living (rental). A single vehicular access is proposed on the west side of Locke Heights, through the 6 Locke Heights property (existing home to be demolished). A cropped version of the Site Plan by LDS dated September 14, 2023, is shown in Figure 3 and the full version of the drawing is included in Appendix A.

Figure 3: Site Plan



SITE DATA

PROPERTY AREA:	13200.50 sq.m.
ROAD WIDENING AREA:	408.10
PROPOSED USE:	TOWN HOUSE
ZONE:	R3
REGULATION	REQUIRED PROPOSED
MINIMUM LOT AREA:	210 sq.m. 12792.4 / 26 = 492.0 sq.m.
MINIMUM LOT FRONTAGE:	6 m 9.69 m
MINIMUM FRONT YARD:	4.5 m 6.0 m
MINIMUM EXTERIOR SIDE YARD:	4.5 m - -
MINIMUM REAR YARD:	9 m 12.71 m
MINIMUM INTERIOR SIDE YARD:	2 m 2.29 m
MINIMUM LANDSCAPED OPEN SPACE:	30 % 45.84 %
MAXIMUM LOT COVERAGE:	45 % 32.74 % (BUILDINGS & REAR PATIOS)
MAXIMUM HEIGHT:	8 m 1 STOREY
NUMBER OF UNITS:	- - 26
FLOOR AREA - EXTERIOR UNIT	- - 117.71 sq.m.
- INTERIOR UNIT	- - 114.92 sq.m.
PARKING SPACES:	- - 52 + 11 visitor



LEGEND

5	UNIT/LOT NUMBER
•	DENOTES STREET LIGHT
⊥	DENOTES FIRE ROUTE SIGN
⊕	DENOTES FIRE HYDRANT
▬	DENOTES 6.0m WIDE FIRE ROUTE
▬	SITE BOUNDARY
MB	DENOTES COMMUNITY MAILBOX
◆	DENOTES 1.0m HIGH BOLLARD

3.1 SITE TRAFFIC GENERATION, DISTRIBUTION, AND IMPACT

Site generated traffic volumes from the proposed development have been estimated based on trip rate information contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual 11th Edition* (ITE September 2021). The land use “Senior Adult Housing – Single Family” (ITE Land Use Code 251) was selected to best represent the proposed residential use and the resulting trip generation estimates for the peak hours are summarized in Table 1.

Table 1: Trip Generation Summary

ITE LAND USE DESCRIPTION	Units	AM PEAK HOUR TRIPS			PM PEAK HOUR TRIPS		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Senior Adult Housing – Single Family LUC 251	26	5	9	14	10	6	16

As shown in Table 1, the new trip generation (two-way) for the proposed development is forecast to be only 14 and 16 trips in the AM and PM peak hours, respectively.

The site traffic will use Locke Heights to travel to/from Hull Road, where it will be dispersed east and west to/from the broader road network. The traffic volumes are quite minor with a maximum of new 16 trips per hour, which is equivalent to approximately 1 new vehicle every 4 minutes. These new trips will have no discernible effect on the operations of the external road network and the site access will function well.

4 SITE ACCESS CONSIDERATIONS

The site access is proposed to be located through the 6 Locke Heights property which is approximately 100 m north of the Hull Road and Locke Heights tee intersection. Locke Heights is relatively straight and flat, and the proposed site access location provides good sightlines to the north and south of the site. The Locke Heights intersection is situated at the crest of a vertical curve on Hull Road and sight distances are clear in both directions along Hull Road. Overall, we have no concerns about visibility at the proposed site access or existing intersection that will accommodate site traffic.

With on-street parking currently permitted on both sides of Locke Heights there is existing potential for the road to be reduced to a single lane width, requiring opposing vehicles to yield to one another to pass the parked vehicles. While the volume of site traffic is expected to be quite minor and would not significantly increase the potential for this type of conflict around parked vehicles, we suggest that consideration be given to prohibiting parking on the east side of Locke Heights between the proposed site access and Hull Road. The east side is suggested over the west side so as to provide a more clear passage for northbound vehicles and avoid any chance of northbound vehicles having to yield in close proximity to Hull Road.

Overall, we have no concerns about the location, function, or operation of the proposed site access.

5 CONCLUSIONS

Based on the analysis/review completed for this Traffic Impact Brief, the following has been concluded:

- The proposed 26-unit residential development is expected to generate only 14 new trips in the AM peak hour (5 in and 9 out) and 16 trips during the PM peak hour (10 in and 6 out), which will have no discernible effect on the operations of the surrounding road network.

- The proposed site access is expected to operate well. It provides good sightlines along Locke Heights and there are no visibility or operational concerns along Hull Road.
- No improvements to the external road network are required to accommodate the proposed development, however, we suggest that consideration be given to prohibiting on-street parking along the east side of Locke Heights between Hull Road and the proposed site access.

6 LIMITATIONS

This Brief was prepared by Strik, Baldinelli, Moniz Ltd. for Gold Leaf Properties Inc. and the Municipality of Strathroy-Caradoc. Use of this Brief by any third party, or any reliance upon its findings, is solely the responsibility of that party. Strik, Baldinelli, Moniz Ltd. accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions undertaken as a result of this report. Third party use of this Brief, without the express written consent of the Consultant, denies any claims, whether in contract, tort, and/or any other cause of action in law, against the Consultant.

All findings and conclusions presented in this Brief are based on the conditions as they appeared during the period of the review. This Brief is not intended to be exhaustive in scope or to imply a risk-free property. It should be recognized that the passage of time may alter the opinions, conclusions, and recommendations provided herein.

SBM's review was limited to the documents referenced above and/or on the SBM drawings provided separately. SBM Ltd. accepts no responsibility for the accuracy of the information provided by others. All designs and recommendations presented in this Brief are based on the information available at the time of the review.

This document is deemed to be the intellectual property of SBM Ltd. In accordance with Canadian copyright law.

7 CLOSURE

We trust this Brief meets your satisfaction. Should you have any questions or require further information, please do not hesitate to contact the undersigned.

Strik, Baldinelli, Moniz Ltd.

Planning • Civil • Structural • Mechanical • Electrical



Jonah Lester, P. Eng.
Transportation Engineer



Michelle Alegria
Civil Engineering Trainee I

APPENDIX A

Site Plan

