

July 19, 2024

Mr. Reno Piccini
Piccini Architect
148 Walton Street, Unit 1
Port Hope, ON L1A 1N6

Reference: Residential Addition to Hotel and Restaurant
Traffic Brief & Parking Assessment
Port Hope, Northumberland County, ON
Project N° 2222-21

Dear Mr. Piccini,

Asurza Engineers Ltd. was retained to undertake a traffic review and parking assessment for the proposed residential addition to a hotel and restaurant, located at 86 John Street in the Municipality of Port Hope.

This letter provides an overview of traffic generation and will determine if the proposed development will generate impacts to the current traffic operations on the adjacent road and intersection. In addition, the feasibility of a shared parking supply between the three land uses will be investigated via the municipal zoning by-law as well as a parking survey.

Background

The subject site is located in downtown Port Hope. See **Exhibit 1** for an aerial view of the site location. The site currently features a hotel (Hotel Carlyle & Restaurant), and it is proposed to sever the lot to permit the addition of a mid-rise residential building, abutting the existing structure.

Across a total of five floors, this building would add 11 dwelling units to the site, and the new site plan geometry will provide a total of 32 parking spaces on the two lots. It is intended to maintain the existing site accesses on John Street and Augusta Street. For further information, see *Appendix A – Draft Site Plan*.



Exhibit 1: Site Location.

Development Trip Generation and Trip Distribution

The estimation of trips generated by the proposed development were derived from the Trip Generation Manual, 11th Edition, published by the Institute of Transportation Engineers (ITE). The land use which most closely describes the proposed development is 'Multifamily Housing (Mid-Rise) – Land Use 221'.

The trip generation manual includes the following definition for the above noted land use code:

'Mid-rise multifamily housing' includes apartments and condominiums located in a building that has between four and ten floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

The trip rates and the estimated numbers of trips to be generated by the proposed development are shown in **Table 1**:

TRIP GENERATION RATES BY LAND USE								
ITE Code	ITE Land Use	Unit of Measure	AM Peak Hr. of Adj. Street			PM Peak Hr. of Adj. Street		
			Rate	In	Out	Rate	In	Out
221	Multifamily Housing (Mid-Rise)	Dwellings	0.37	23%	77%	0.39	61%	39%

ESTIMATED NUMBER OF TRIPS BY LAND USE								
ITE Code	ITE Land Use	Total Units	AM Peak Hr. of Adj. Street			PM Peak Hr. of Adj. Street		
			Trips	In	Out	Trips	In	Out
221	Multifamily Housing (Mid-Rise)	11	4	1	3	4	3	1

Table 1: Estimation of Trips Generated.

It is estimated that the additional 11 dwelling units will generate 4 new trips during a typical weekday morning peak hour and 4 new trips during a typical weekday afternoon peak hour. It is clear that these trips will be very minimal in their effects on the adjacent roadway.

Discussion

According to "Transportation Impact Analyses for Site Development – an ITE Recommended Practice," a publication from ITE, one guideline suggests that the generation of an additional 100 vehicles per hour by any proposed development could potentially lead to traffic issues such as reduced capacity, extended queues, and lower levels of service.

The publication also notes that the 100 vehicles per hour threshold is not a strict requirement for initiating a transportation impact analysis. In densely populated areas with diverse urban characteristics, jurisdictions often use lower thresholds, and these thresholds may vary among agencies to address specific local conditions and priorities.

Considering the minor nature of the proposed development and its location outside of densely populated areas, it is evident that the number of generated trips does not reach a threshold necessitating an additional in-depth traffic analysis.

Parking Survey and Assessment

As shown in the draft site plan, the retained lot will include the hotel, the restaurant, and 13 parking spaces, while the severed lot will include the proposed mid-rise building and 19 parking spaces. The proposal to sever the existing lot includes an agreement with an easement across both lots to allow for shared site access and parking.

According to the Municipality of Port Hope Zoning By-law 20/2010 (last updated August 31, 2023), the parking rates for each land use are shown in **Table 2**:

By-Law Parking Rates by Land Use			
Type of Use	Total per Land Use	Parking By-Law Rates	Parking Required
Hotel	10 units	1 per unit	10
Restaurant	236 m2	1 per 9.3 m2	26
Residential	11 units	0.75 per unit	9
Total Required			45

Table 2: By-law Parking Rates by Land Use.

Due to the location of the subject site within the Downtown Commercial (COM3) zone, the by-law states that the parking rate for apartment dwellings is reduced from 1.25 per unit down to 0.75 per unit.

It is noted that the subject site requires 45 parking spaces according to the by-law. The draft site plan indicates 32 parking spaces, resulting in a deficit of 13 parking spaces.

To gain a more informed understanding of the actual parking demand of the subject site, a video-based parking survey was conducted by Asurza Engineers on July 5 to 6 (Friday to Saturday), as well as July 11 to 12 (Thursday to Friday). See *Appendix B – Parking Survey Sheets*.

It is indicated by the survey that the peak parking demand shared by the existing hotel and restaurant is 10 parked cars, occurring in the evening for some time intervals from 5:30 pm to 8:30 pm.

To remain conservative with the estimate, an increase of 20% will be applied to the peak parking demand identified by the survey, bringing the demand to 12 parking spaces for the existing site.

Based on the information combined from the survey (existing hotel and restaurant) and the zoning by-law (proposed residential), the sum of the parking demand for each land use is shown in **Table 3**:

Survey and By-law Parking Rates by Land Use			
Type of Use	Total per Land Use	Parking Rates	Parking Required
Hotel & Restaurant	10 units	Peak 10 parked cars observed, + 20%	12
	236 m2		
Residential	11 units	0.75 per unit	9
Total Required			21

Table 3: Survey and By-law Parking Rates by Land Use.

Therefore, the peak parking demand shared by the retained lot (existing uses) and the severed lot (proposed residential) is estimated to be 21 parking spaces. When compared to the 32 parking spaces provided on the draft site plan, this represents a surplus of 11 parking spaces.

Conclusion

Due to the very limited scale of the proposed development, the additional trips will impose virtually no impact on the adjacent roads. Any minor traffic impact as a result of the new trips will be negligible to the current traffic operations.

According to the noted parking survey, a peak demand of 10 parked cars was observed at the existing site, representing the demand of the hotel and restaurant. After providing a 20% increase to the survey, and including the minimum required for the proposed residential as per the by-law, a minimum of 21 parking spaces is recommended to be shared by the site. Based on the present draft site plan, the proposed site will feature a surplus of 11 parking spaces.

Should you require any further information in consideration of the above, please contact the undersigned.

Sincerely,



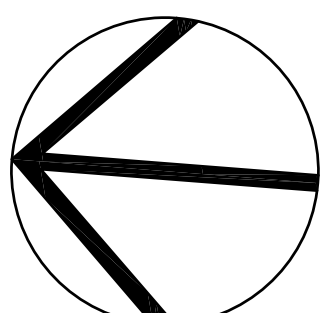
Martin Asurza, M. Eng., P. Eng.
Senior Transportation/Traffic Engineer
martin@asurza.ca

Appendix A

Draft Site Plan



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NO:	DATE:	ISSUE/REVISION FOR:	BY:
	D.M.Y.	DESCRIPTION	INIT.
1	23.11.23	CLIENT REVIEW	RP
2	11.03.24	MUNICIPAL PLANNING REVIEW	RP

CONDOMINIUM APARTMENT BUILDING

AUGUSTA STREET
PORT HOPE, ONTARIO

ASUNDER TRADE
& CAPITAL INC.
86 JOHN ST., PORT HOPE
ON L1V 2Z2

SITE PLAN

DRAWN BY: RP	CHK'D BY: RP
PROJECT NO: 21.333	DATE: MAY 2021

A101

ZONING & SITE DATA

BUILDING TYPES:	EXISTING	PROPOSED	CONDOMINIUM SETBACKS: FRONT YARD, SOUTH: FRONT YARD, NORTH: REAR YARD, NORTH: INTERIOR SIDE YARD, EAST: INTERIOR SIDE YARD, WEST:	EXISTING	PROPOSED	PARKING SPACE REQUIREMENTS FOR COMBINED LOTS BY AGREEMENT: HOTEL & RESTAURANT: CONDOMINIUM APARTMENTS: 0.75 PER DWELLING UNIT: 11 DWELLING UNITS: TOTAL SPACES REQUIRED: TOTAL SPACES PROVIDED: BARRIER-FREE PARKING SPACES PROVIDED: 2 TYPE A & 1 TYPE B	EXISTING	PROPOSED
CURRENT ZONING DESIGNATION:	CON3 DOWNTOWN COMMERCIAL	AMENDMENT REQUIRED	HOTEL & RESTAURANT SETBACKS: FRONT YARD, SOUTH: FRONT YARD, NORTH: REAR YARD, NORTH: INTERIOR SIDE YARD, EAST: INTERIOR SIDE YARD, WEST: INTERIOR SIDE YARD, NORTH:	— — — — 4,287 m 28,164 m 11,890 m	1,034 m 1,034 m 6,789 m 0,000 m NO CHANGE NO CHANGE 0,000 m NO CHANGE	18 SPACES CONDOMINIUM APARTMENTS 9 SPACES 27 SPACES	— — — — — — — —	18 SPACES CONDOMINIUM APARTMENTS 9 SPACES 27 SPACES
LOT TOTAL AREA: EAST LOT AREA:	2,913.00 m ² —	— 1,461.45 m ² 1,461.55 m ²	CONDOMINIUM SETBACKS: FRONT YARD, SOUTH: FRONT YARD, NORTH: REAR YARD, NORTH: INTERIOR SIDE YARD, EAST: INTERIOR SIDE YARD, WEST: INTERIOR SIDE YARD, NORTH:	— — — — 4,287 m 28,164 m 11,890 m	1,034 m 1,034 m 6,789 m 0,000 m NO CHANGE NO CHANGE 0,000 m NO CHANGE	18 SPACES CONDOMINIUM APARTMENTS 9 SPACES 27 SPACES	— — — — — — — —	18 SPACES CONDOMINIUM APARTMENTS 9 SPACES 27 SPACES
LOT FRONTS: WEST LOT AUGUSTA FRONTAGE: EAST LOT JOHN FRONTAGE:	— 36,332 m	28,422 m NO CHANGE	CONDOMINIUM SETBACKS: FRONT YARD, SOUTH: FRONT YARD, NORTH: REAR YARD, NORTH: INTERIOR SIDE YARD, EAST: INTERIOR SIDE YARD, WEST: INTERIOR SIDE YARD, NORTH:	— — — — 4,287 m 28,164 m 11,890 m	1,034 m 1,034 m 6,789 m 0,000 m NO CHANGE NO CHANGE 0,000 m NO CHANGE	18 SPACES CONDOMINIUM APARTMENTS 9 SPACES 27 SPACES	— — — — — — — —	18 SPACES CONDOMINIUM APARTMENTS 9 SPACES 27 SPACES
BUILDING AREA, FOOTPRINT: HOTEL & RESTAURANT: CONDOMINIUM APARTMENTS:	655.42 m ²	NO CHANGE 598.48 m ²	CONDOMINIUM SETBACKS: FRONT YARD, SOUTH: FRONT YARD, NORTH: REAR YARD, NORTH: INTERIOR SIDE YARD, EAST: INTERIOR SIDE YARD, WEST: INTERIOR SIDE YARD, NORTH:	— — — — 4,287 m 28,164 m 11,890 m	1,034 m 1,034 m 6,789 m 0,000 m NO CHANGE NO CHANGE 0,000 m NO CHANGE	18 SPACES CONDOMINIUM APARTMENTS 9 SPACES 27 SPACES	— — — — — — — —	18 SPACES CONDOMINIUM APARTMENTS 9 SPACES 27 SPACES
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SITE INFORMATION SOURCE

SITE INFORMATION ON THIS DRAWING WAS TAKEN FROM:
 PLAN OF TOPOGRAPHIC DETAIL OF
 86 JOHN STREET
 PORT HOPE, ONTARIO
 COUNTY OF NORTUMBERLAND
 SCALE = 1 : 250
 FIELDWORK COMPLETION: APRIL 27, 2021
 ISSUED TO CLIENT: MAY 11, 2021





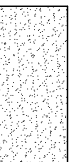
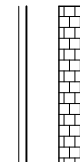
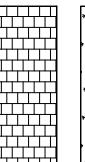

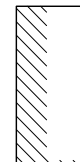
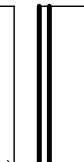






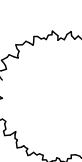

AND:

PLAN OF SURVEY OF
LOT 316, SMITH ESTATE, PLAN AND
58 STEWART PLAN
TOWN OF PORT HOPE
NOW COUNTY OF NORTHUMBERLAND
FORMERLY COUNTY OF DURHAM
SCALE: 1" = 20 FT.
SURVEY COMPLETED ON 1 & 7, 1984
RECEIVED & DEPOSITED UNDER REGISTRY ACT
27 FEB. 1984, PLAN 9R-1522

BOTH PREPARED BY:

SYLVESTER & BROWN LAND SURVEYING
191 TORONTO ROAD
PORT HOPE, ONTARIO L1A 3V5
905-885-2260 OR 1-888-743-2222
JOB NO. P2021-033

SITE PLAN LEGEND

	PROPERTY LINE	
	EXISTING SPOT ELEVATION	
	NEW SPOT ELEVATION	
	BORE HOLE. SEE GEOTECHNICAL REPORT	
	NEW CONCRETE PAVING	
	NEW POURED CONCRETE CURB	
	NEW PRECAST CONCRETE PAVERS	
	NEW GRASS	
	EXISTING CONSTRUCTION	
	NEW CONSTRUCTION	
	UTILITY POLE	
	UTILITY STRUCTURE & RELATED STRUCTURES	SAN (EXAMPLE) GAS-GAS METER GAS-GAS VALVE GAS-ELECTRIC WH=MANHOLE OHW=OVERHEAD WIRE SW=SWITCHARY STN=STATIONARY WAT=WATER WH=WATER VALVE
	FIRE HYDRANT	
	SAME-SE CONNECTION	
	CATCH BASIN MANHOLE. SEE SITE SERVICING PLAN	
	CATCH BASIN. SEE SITE SERVICING PLAN	
	EXISTING TREE TO REMAIN	
	EXISTING SHRUBS TO REMAIN	
	MISCELLANEOUS ABBREVIATIONS:	CRW=CONCRETE RETAINING WALL STW=STONE RETAINING WALL SRW=STONE RETAINING WALL

