

Technical Memorandum

To: Philip Thibert (Brigil)
 Copy: Austin Shih, P.Eng.
 From: Juan Lavin, EIT

Date: 23 June 2021
 Project: 476705-01000

**Re: Petrie's Landing I TIA Addendum
 Updated Tower 4 Proposal**

1. Purpose

A Transportation Impact Assessment (TIA) was prepared by Parsons on behalf of Brigil for Petrie's Landing I, located at 8900 Jeanne D'Arc Boulevard. The study was in support of a zoning application for Towers 3 to 5, which was submitted on July 22, 2019 and was subsequently approved by Council. Brigil has recently amended the plans for Tower 4, which triggered an increase in the proposed number of residential units.

The purpose of the ensuing Technical Memo is to confirm whether the revised Tower 4 proposal alters the conclusions and recommendations from the approved 2019 report that would trigger a TIA resubmission.

2. Previous TIA Study

The City of Ottawa approved the zoning application in 2019, which proposed a total of 842 units and 1,500 m² of retail. Of the 842 units, 198 units were located in Tower 4. The recent amendments by Brigil propose an increase in units for Tower 4 only, from 198 to 242 residential units. The footprint and number of storeys for all the buildings remain the same. There are no proposals to change the retail size. A comparison of the approved versus proposed unit counts have been summarized in **Table 1**.

Table 1: Previously Approved and New Proposed Unit Counts

Building	# of Storeys (same)	Approved # of Units	Proposed New # of Units	Size of Retail (m ²)
Tower 3	18	162	162	-
Tower 4	22	198	242	-
Tower 5a	32	286	286	400
Tower 5b	22	196	196	1,100
Total		842	886	1,500

As seen in **Table 1** above, Brigil is proposing an increase of 44 units which equates to an overall increase in units of approximately 5% for the entire Petrie Landing I development.

Using the TRANS Trip Generation – Residential Trip Rates, the difference in people and vehicle trips were calculated. The addition of 44 extra units (increase in units from 198 to 242) represents a net change of approximately 20 new vehicle trips per hour two ways for the AM and PM peaks. Using the TRANS guidelines and table 3.13, the person trips were calculated and shown in **Table 2**. The person trips were then used to calculate the vehicle trips generated based on mode shares for Orléans extracted from the OD-Survey conducted in 2011 as seen in **Table 3**.

The methodology and approach described above was the same approach used in the 2019 TIA.

Table 2: Site Net Increase 'Person Trips' Generated

Travel Mode	AM Mode Share	AM Peak (persons/h)			PM Mode Share	PM Peak (persons/h)		
		In	Out	Total		In	Out	Total
Auto Driver	44%	5	15	20	44%	11	9	20
Auto Passenger	9%	1	3	4	14%	5	2	7
Transit	34%	4	11	15	33%	8	6	14
Non-motorized	13%	1	5	6	9%	3	1	4
Total People Trips	100%	11	34	45	100%	27	18	45

Table 3: Site Net Increase 'Vehicle Trips' Generated using Orléans Mode Share

Travel Mode	AM Mode Share	AM Peak (veh/h)			PM Mode Share	PM Peak (veh/h)		
		In	Out	Total		In	Out	Total
Auto Driver	40%	5	13	18	55%	13	11	24
Auto Passenger	20%	3	6	9	20%	5	4	9
Transit	25%	3	9	12	15%	4	3	7
Non-motorized	15%	1	5	6	10%	2	3	5
Total People Trips	100%	12	33	45	100%	24	21	45
Total 'New' Vehicle Trips		5	13	18	-	13	11	24

As shown in **Table 3**, the additional 44 units proposed in the Petrie's Landing I – Tower 4 is expected to trigger a net increase of approximately 18 and 24 vehicular trips in the morning and afternoon peak hours respectively. At full buildout of the Petrie Landing I site, the 2019 TIA report estimated approximately 303 and 360 vehicular trips would be generated in the morning and afternoon peak hours respectively. The net increase in vehicular trips with the new Tower 4 proposal is less than 6%, or 1 vehicle every 2.5 to 3-minutes.

Additionally, the 2019 TIA demonstrated that all the study area intersections operated at a LOS D (v/c ratio 0.84 overall) or better at full buildout of Petrie Landing I, suggesting that there is adequate capacity in the network to accommodate the net increase in trips.

3. Closing

Brigil is proposing a revised Tower 4 proposal within the approved Petrie Landing I development with an additional 44 residential units. The preceding analysis demonstrates that the conclusions and recommendations from the July 22, 2019 TIA Report by Parsons are not expected to change with this latest proposal and no further analysis is necessary.

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