ARCADIS IBI GROUP
500–333 Preston Street
Ottawa ON K1S 5N4 Canada
tel 613 225 1311 fax 613 225 9868
ibigroup.com

Technical Memorandum

To/Attention	Cameron Salisbury	**Date**	November 1, 2022
From	Ben Pascolo-Neveu, P.Eng.	**Project No**	138780
Subject	1050 Tawadina Road - Transportation Memorandum		

Arcadis IBI Group was retained by WestUrban Developments Ltd. to prepare a Transportation Memorandum in support of a Site Plan Control application for a proposed mid-rise residential development at 1050 Tawadina Road in Wateridge Village, Ottawa.

The proposed development will consist of two, 9-storey mid-rise residential buildings with a total of 254 dwelling units joined by a one level, below-grade parkade (see **Appendix A**). The subject property occupies the northern portion of 1050 Tawadina Road and is generally bound by Tawadina Road to the north, Michael Stoqua Street to the east, Bareille-Snow Street to the west, as well as Hemlock Road further to the south. The proposed access configuration consists of two (2) all-movement driveways: a vehicular connection on Tawadina Road serving the parking garage, as well as an additional driveway for the surface parking lot at the southwest corner of the site.

The results of the Transportation Impact Assessment (TIA) Screening Form (see **Appendix B**) indicate that a TIA would not be required for the proposed development, given that the Trip Generation, Location and Safety Triggers were not met. The vast majority of vehicular impacts were accounted for previously as part of the Wateridge Phase 2A/2B TIA (Dillon, 2019), with just 11 and 13 two-way additional vehicular trips expected during the weekday peak morning and afternoon peak hours, respectively, constituting a negligible increase in traffic.

Subsequently, it was agreed through email correspondence with the City Transportation Project Manager, Neeti Paudel, on August 22, 2022 that a memorandum would sufficiently address the transportation concerns for the subject site, with consideration of the following items: Transportation Demand Management, Parking, Site Access & Circulation.

The site location and its surrounding context are shown in **Figure 1** below.

Figure 1 – Site Location

Transportation Demand Management

The City of Ottawa is committed to implementing Transportation Demand Management (TDM) measures on a City-wide basis in an effort to reduce automobile dependence, particularly during the weekday peak travel periods and encourage use of non-auto modes of travel during the peak periods.

The proposed development conforms to the City's TDM principles by providing convenient and direct connections to adjacent pedestrian and cycling facilities.

Context for TDM

The proposed development will consist of mid-rise residential units which provides an appropriate level of compact growth and is supported by the CFB Rockcliffe Community Design Plan (CDP) within this block. Further, the site is located within the 'Core Area' of the CFB Rockcliffe CDP and within 100 metres of the 'Hemlock Core Street' which is planned to accommodate grade-separated cycle tracks and concrete sidewalks in both directions to help promote the use of active transportation modes.

Need and Opportunity

There is an opportunity to increase the overall proportion of sustainable transportation trips within Wateridge Village through the implementation of strategic TDM measures and site-specific infrastructure in order to complement the facilities which are currently in place or planned along the adjacent road network.

Mode share targets applied as part of the trip generation exercise conducted for the TIA Screening Form were consistent with the Phase 2A/2B TIA and are expected to be achievable, given the suite of TDM measures outlined in the 'TDM Program' section below.

In terms of transit, the proposed development is currently served by Route 27 and will be within a 400-metre walking distance of existing bus stops southwest of the development, as well as future bus stops on Hemlock Road and Codd's Road. The subject development will therefore be well positioned to provide residents with increased transit options, as service is gradually strengthened in response to the build-out of the surrounding community.

The primary entrances for each building will be street-oriented to provide direct pedestrian access to the nearest boundary street. A network of pathways is proposed to facilitate connections between building entrances and pedestrian facilities proposed on each boundary street. The design and infrastructure improvements contribute to a development that will reduce private auto usage by integrating well with the existing and proposed sustainable transportation infrastructure.

TDM Program

The City of Ottawa's TDM Measures and TDM-Supportive Development-Design & Infrastructure Checklists were completed for the proposed development and are provided in **Appendix C**. These checklists indicate measures that are being contemplated as part of this development, including the following:

- Install a bike repair station with commonly used tools such as an air pump.
- Provide bicycle parking in highly visible and lighted areas, sheltered from the weather wherever possible.
- Ensure that walking routes to transit stopes are secure, visible, lighted, shaded and wind-protected when possible.
- Provide walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate.
- Unbundle parking from monthly rent.

Parking

Vehicular parking spaces are proposed on-site, consisting of 192 resident and 25 visitor spaces for a total of 217 spaces. The City of Ottawa Zoning By-law 2008-250 indicates a minimum of 140 vehicle parking spaces are required to serve the proposed development and therefore the on-site parking supply is compliant with the by-law. Five visitor parking spaces are proposed in the surface parking lot at the southwest corner of the building and are accessible via the proposed site access driveway on Bareille-Snow Street, while the remainder of visitor and resident spaces will be housed within the below-grade parking garage.

A total of 156 bicycle parking spaces are proposed on-site, exceeding the required 127 spaces specified in the by-law. These spaces will either be provided in a secure and sheltered location within the one-level below-grade parking garage or in a high-visibility areas at-grade with convenient access to the adjacent road network.

Site Access & Circulation

All site-generated traffic will access the proposed developments via two, two-way private approaches: one on Tawadina Road and one on Bareille-Snow Street. The proposed site access driveways are both in conformance with the City of Ottawa Private Approach By-law 2003-447, with particular confirmation of the following items:

- Width: As stated in the Private Approach By-law, a private approach shall have a minimum width of 2.4m and a maximum width of 9.0m. The City of Ottawa Zoning By-law further specifies that for driveways providing access to a parking lot or parking garage, a two-way private approach shall have a minimum width of 6.0m. The two-way internal drive aisles for the subject development provide approximately 7.5 metres of clear width within the surface parking lot and approximately 6.7 metres of clear width within the underground parking garage, therefore both are in conformance with the by-law requirements.
- Quantity & Spacing of Private Approaches: For sites with frontages between 46 and 150 metres, a maximum of two (2) two-way private approaches are permitted on each frontage. The proposed development consists of approximately 78- and 92-metre frontages on Bareille-Snow Street and Tawadina Road, respectively. As such, a single two-way private approach on each these frontages is compliant with the by-law.
- Distance from Property Line: Private approaches must be at least 3.0m from the abutting property line, however this requirement can be reduced to 0.3m provided that the access is a safe distance from the nearest driveway serving the adjacent property, sight lines are adequate and that it does not create a traffic hazard. The two-way access on Bareille-Snow Street has an offset of approximately 0.5m from the nearest property line, with a separation distance of approximately 13.7m to the nearest proposed site access driveway on the neighbouring property to the south. Given that Bareille-Snow Street is classified as a local road with low speeds, low vehicular volumes and no significant sightline constraints, this separation distance is deemed acceptable.

The proposed site access driveways have been designed as per City Standard SC7.1 (March 2021) to ensure that sidewalks are continuous across each vehicular connection, thereby helping to prioritize active users over vehicular movements. Curb lines will also not be present across the sidewalk to improve the overall pedestrian experience.

In terms of waste collection, it is expected that refuse bins will be rolled from the designated storage area across the surface parking lot to Bareille-Snow Street for curbside pick-up by a Front-Loading Waste collection vehicle.

Conclusion

Based on the results of the Transportation Impact Assessment (TIA) Screening Form prepared for the subject site, just 13 two-way additional vehicular trips are anticipated during the critical weekday morning peak hour beyond the site-generated traffic impacts developed as part of the Wateridge Phase 2A/2B TIA. The proposed development will provide a host of Transportation Demand Management (TDM) measures to prioritize and support sustainable modes of transportation and further reduce reliance on private automobile usage for site-generated trips.

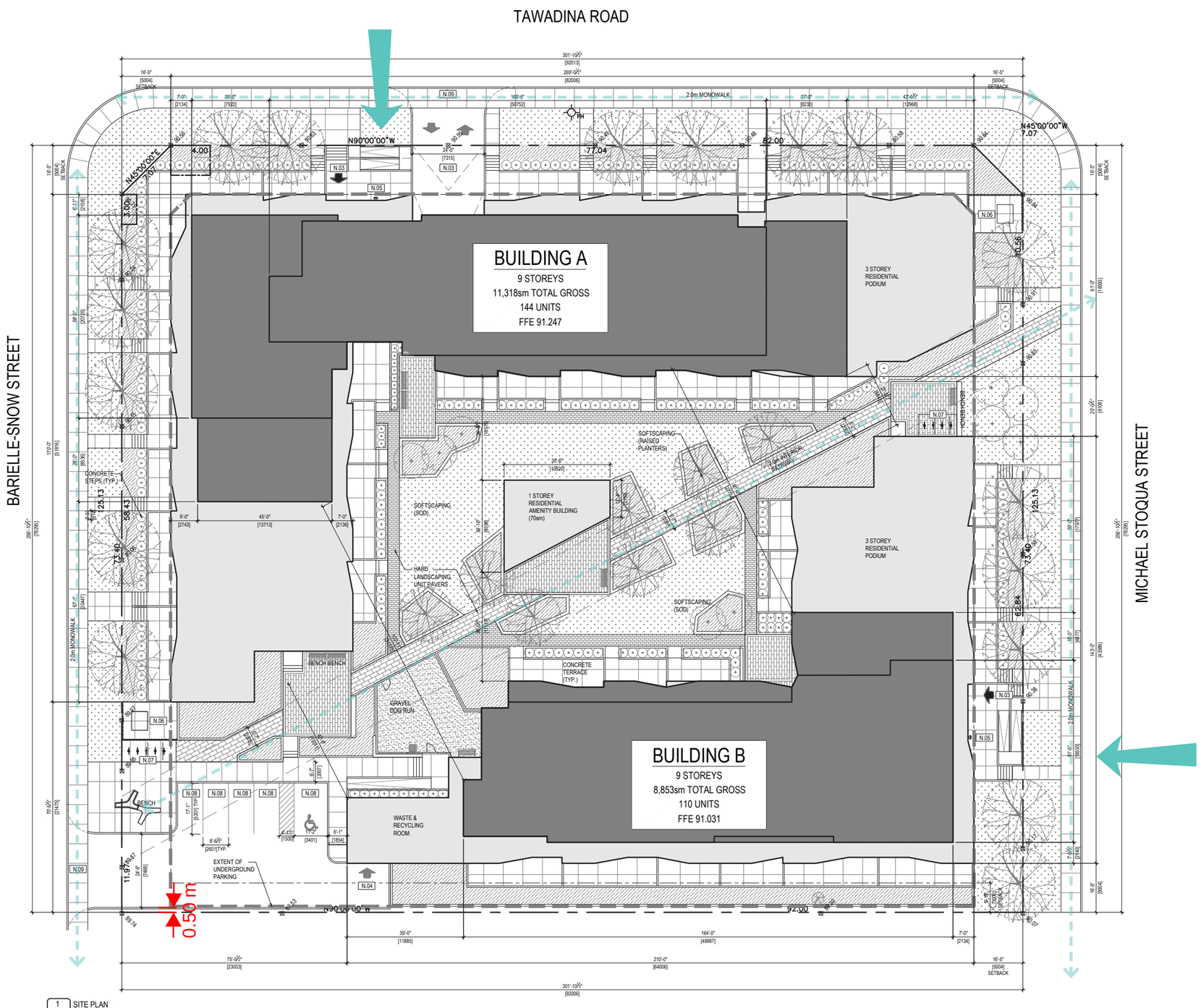
The parking and site access/circulation aspects of the proposed development were reviewed and determined to be in compliance with the City of Ottawa Zoning By-law and Private Approach By-law.

It is therefore the overall opinion of Arcadis IBI Group that the proposed development will integrate well with and can be safely accommodated by the adjacent transportation network.

Prepared by:

Ben Pascolo-Neveu, P.Eng.

Appendix A - Proposed Development



PROJECT STATISTICS

WESTURBAN - WATERIDGE

SITE AREAS	sf	sm
SITE AREA	77,274	7,179
TOTAL	**77,274**	**7,179**
FAR	**0.0**	

BICYCLE STALLS	BIKE STALLS
HORIZONTAL (PARKADE)	138
HORIZONTAL (AT GRADE)	18
TOTAL	**156**

UNIT COUNT	BUILDING A	BUILDING B	
FLOOR 1	24	16	
FLOOR 2	26	17	
FLOOR 3	26	17	
FLOOR 4	16	12	
FLOOR 5	14	12	
FLOOR 6	14	9	
FLOOR 7	8	9	
FLOOR 8	8	9	
FLOOR 9	8	9	
TOTAL	**144**	**110**	**254**

BUILDING AREAS	BUILDING A GROSS (SM)	BUILDING B GROSS (SM)
FLOOR 1	1,922	1,423
FLOOR 2	1,977	1,331
FLOOR 3	1,977	1,331
FLOOR 4	1,201	900
FLOOR 5	1,105	900
FLOOR 6	1,105	742
FLOOR 7	677	742
FLOOR 8	677	742
FLOOR 9	677	742
TOTAL	**11,318**	**8,853**

MAIN ENTRY

SITE CIRCULATION

SITE PLAN

2022.09.16

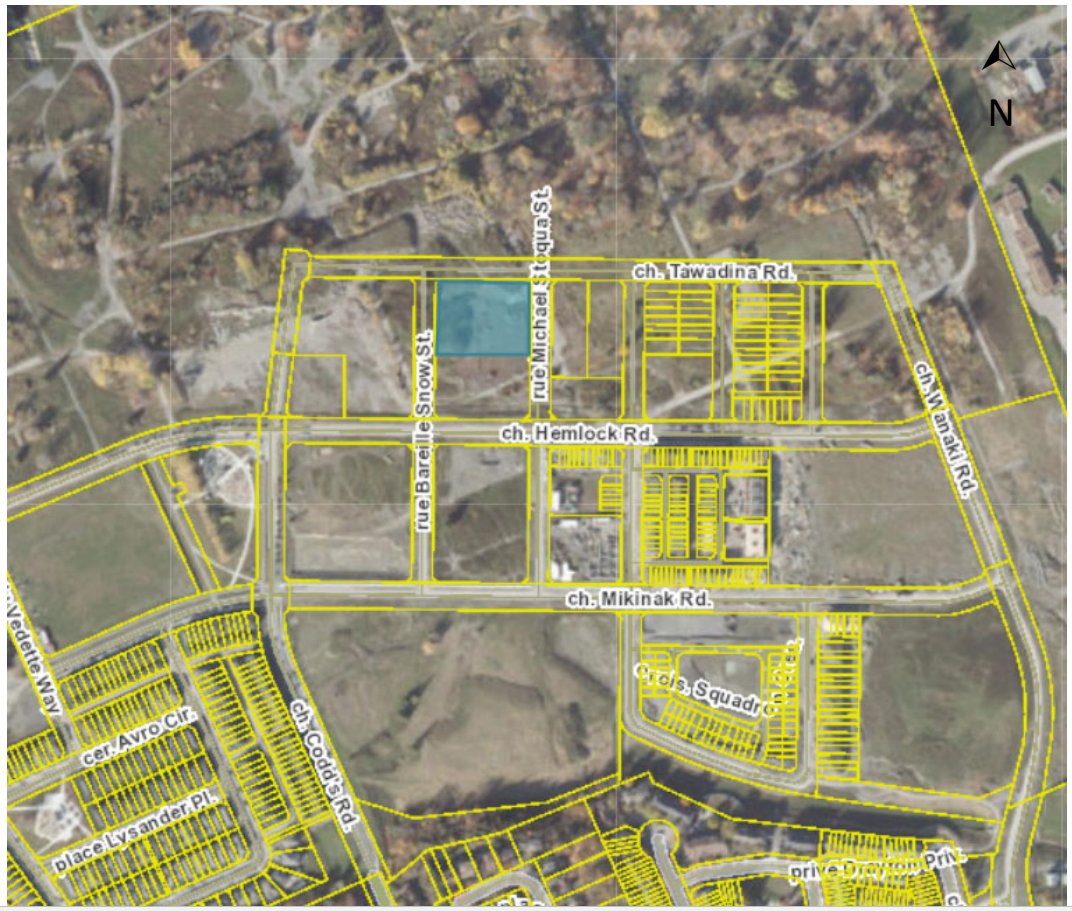
WATERIDGE

FAAS

Appendix B – TIA Screening Form

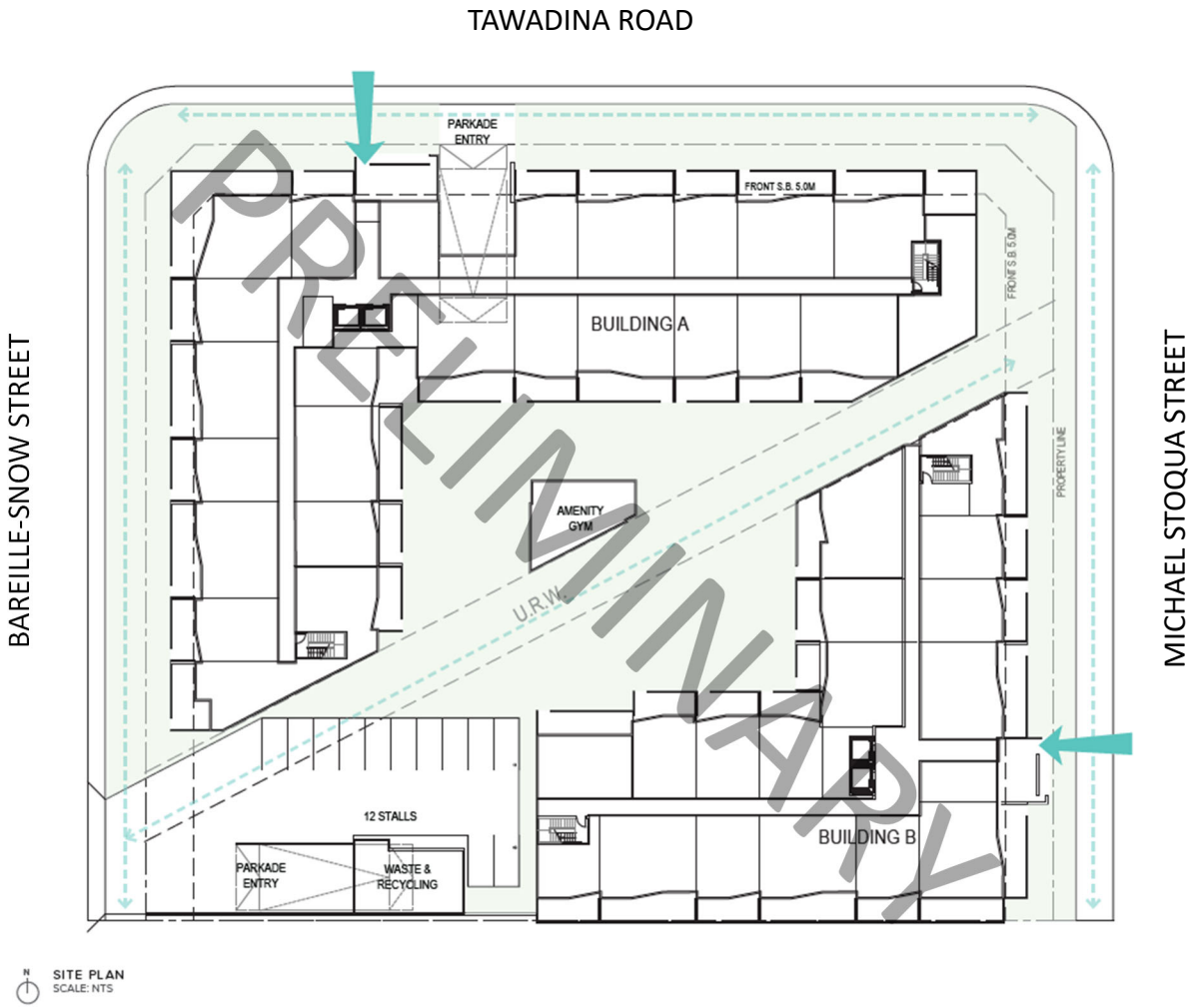
City of Ottawa 2017 TIA Guidelines Screening Form

1. Description of Proposed Development

Municipal Address	1050 Tawadina Road, Ottawa, ON
Description of Location	Wateridge Village – The subject property occupies the northern portion of 1050 Tawadina Road and is bound by Tawadina Road to the north, Michael Stoqua Street to the east and Bareille-Snow Street to the west. Hemlock Road is located approximately 55 metres to the south. 
Land Use Classification	Residential
Development Size (units)	254 dwelling units
Development Size (m^2)	N/A

Number of Accesses and Locations	One (1) proposed all-movements site access driveway on Bareille-Snow Street One (1) proposed all-movements site access driveway on Tawadina Road
Phase of Development	Single Phase
Buildout Year	2023-2024

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.*

The proposed development consists of 254 dwelling units, a net increase of 155 units over the minimum 99-unit target density for this 0.69-hectare site, as planned for in the *Former CFB Rockcliffe Community Design Plan (August 2015)*. The minimum density target was based on the 'mid-rise mixed' land use characteristics provided in Table 5.2 and highlighted below:

Table 5.2: Land Use Distribution and Density

Land Use	Land Area (ha)	Minimum Density (units/ha)	Minimum Units	Target Employment (jobs)	Estimated Population
Low-Rise Residential	8.94		427		1,167
Blocks 11, 15-17, 19-21, 55	*6.53*	*32*	*209*	*n/a*	*619*
Blocks 53, 57	*2.41*	*91*	*219*	*n/a*	*548*
Low- To Mid-Rise Residential	19.88	105	2,087	n/a	3,964
Forest Special Design Area	3.13	91	285	n/a	461
Low- To Mid-Rise Mixed-Use	2.27	91	206	n/a	393
Mid-Rise Mixed-Use	7.68	143	1,100	n/a	1,430

Source: Former CFB Rockcliffe Community Design Plan (Aug. 2015), Table 5.2

A TIA was conducted for Wateridge Phase 2A/2B (Dillon, February 2019) which included the subject property. It was assumed that the trip generation for the subject property in that TIA was developed

using the minimum CDP density target (i.e. 99 units) and the 2009 TRANS Trip Generation methodology, providing the results outlined in **Table 1** below.

Table 1 - Approximated Site-Generated Traffic from Wateridge Phase 2A/2B TIA using 2009 TRANS – 99 dwelling units

	Weekday AM Peak Hour				Weekday PM Peak Hour		
Mode (Mode Share)	In	Out	Total		In	Out	Total
Auto Driver (35%)	5	17	22		15	9	24
Auto Passenger (13%)	2	7	9		6	3	9
Transit (35%)	5	17	22		15	9	24
Bike (3%)	0	2	2		1	1	2
Walk (14%)	2	7	9		6	4	10
Subtotal:	**15**	**50**	**65**		**43**	**26**	**69**

Applying the recently-adopted 2020 TRANS Trip Generation methodology and assuming a mode share consistent with the Phase 2A/2B TIA for 254 dwelling units, resulted in the trip generation outlined in **Table 2** below.

Table 2 - Approximated Site-Generated Traffic from Wateridge Phase 2A/2B TIA using 2020 TRANS – 254 dwelling units

	Weekday AM Peak Hour				Weekday PM Peak Hour		
Mode (Mode Share)	In	Out	Total		In	Out	Total
Auto Driver (35%)	11	24	35		20	15	35
Auto Passenger (13%)	4	9	13		8	5	13
Transit (35%)	12	27	39		22	16	38
Bike (3%)	1	2	3		2	1	3
Walk (14%)	5	11	16		10	7	17
Subtotal:	**33**	**73**	106		**62**	**44**	106

The net increase in site-generated trips resulting from a comparison of **Table 2** and **Table 1** is summarized in **Table 3** below.

Table 3 - Additional Site-Generated Traffic Since Wateridge Phase 2A/2B TIA using 2020 TRANS – 254 dwelling units

	Weekday AM Peak Hour				Weekday PM Peak Hour		
Mode (Mode Share)	In	Out	Total		In	Out	Total
Auto Driver (35%)	6	7	13		5	6	11
Auto Passenger (13%)	2	2	4		2	2	4
Transit (35%)	7	10	17		7	7	14
Bike (3%)	1	0	1		1	0	1
Walk (14%)	3	4	7		4	3	7
Subtotal:	**18**	**23**	41		**19**	**18**	37

As indicated in **Table 3** above, the overall increase from 99 to 254 dwelling units with the application of the 2020 TRANS methodology would result up to 13 additional two-way vehicular trips during the weekday morning and afternoon peak hours. Overall, the additional vehicular trips resulting from the proposed site plan in comparison to the minimum target density in the CDP would generate a negligible increase in traffic, especially when divided amongst the two proposed site access driveways and the three regionally-connected site access intersections (i.e. connections to Montreal Road & the Aviation Parkway).

Based on the results above, the Trip Generation Trigger was NOT 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?		✓
Is the development in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone?*		✓

**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).*

Based on the results above, the Location Trigger was NOT satisfied.

4. Safety Triggers

	Yes	No
Are posted speed limits on a boundary street are 80 km/hr or greater?		✓
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?		✓
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)?		✓
Is the proposed driveway within auxiliary lanes of an intersection?		✓
Does the proposed driveway make use of an existing median break that serves an existing site?		✓
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?		✓
Does the development include a drive-thru facility?		✓

Based on the results above, the Safety Trigger was NOT satisfied.

5. Summary

	Yes	No
Does the development satisfy the Trip Generation Trigger?		✓
Does the development satisfy the Location Trigger?		✓
Does the development satisfy the Safety Trigger?		✓

As indicated above, none of the triggers were satisfied. As such, a TIA Study is not required for the 1050 Tawadina Road development.

Appendix C – TDM Checklists

TDM-Supportive Development Design and Infrastructure Checklist:
Residential Developments (multi-family or condominium)

Legend

REQUIRED	The Official Plan or Zoning By-law provides related guidance that must be followed
BASIC	The measure is generally feasible and effective, and in most cases would benefit the development and its users
BETTER	The measure could maximize support for users of sustainable modes, and optimize development performance

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	1.	**WALKING & CYCLING: ROUTES**	
	1.1	**Building location & access points**	
BASIC	1.1.1	Locate building close to the street, and do not locate parking areas between the street and building entrances	☑
BASIC	1.1.2	Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations	☑
BASIC	1.1.3	Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort	☑
	1.2	**Facilities for walking & cycling**	
REQUIRED	1.2.1	Provide convenient, direct access to stations or major stops along rapid transit routes within 600 metres; minimize walking distances from buildings to rapid transit; provide pedestrian-friendly, weather-protected (where possible) environment between rapid transit accesses and building entrances; ensure quality linkages from sidewalks through building entrances to integrated stops/stations *(see Official Plan policy 4.3.3)*	☐
REQUIRED	1.2.2	Provide safe, direct and attractive pedestrian access from public sidewalks to building entrances through such measures as: reducing distances between public sidewalks and major building entrances; providing walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate, such as courtyards and transit stops; and providing weather protection through canopies, colonnades, and other design elements wherever possible *(see Official Plan policy 4.3.12)*	☑

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
REQUIRED	1.2.3	Provide sidewalks of smooth, well-drained walking surfaces of contrasting materials or treatments to differentiate pedestrian areas from vehicle areas, and provide marked pedestrian crosswalks at intersection sidewalks *(see Official Plan policy 4.3.10)*	☑
REQUIRED	1.2.4	Make sidewalks and open space areas easily accessible through features such as gradual grade transition, depressed curbs at street corners and convenient access to extra-wide parking spaces and ramps *(see Official Plan policy 4.3.10)*	☑
REQUIRED	1.2.5	Include adequately spaced inter-block/street cycling and pedestrian connections to facilitate travel by active transportation. Provide links to the existing or planned network of public sidewalks, multi-use pathways and on-road cycle routes. Where public sidewalks and multi-use pathways intersect with roads, consider providing traffic control devices to give priority to cyclists and pedestrians *(see Official Plan policy 4.3.11)*	☑
BASIC	1.2.6	Provide safe, direct and attractive walking routes from building entrances to nearby transit stops	☑
BASIC	1.2.7	Ensure that walking routes to transit stops are secure, visible, lighted, shaded and wind-protected wherever possible	☑
BASIC	1.2.8	Design roads used for access or circulation by cyclists using a target operating speed of no more than 30 km/h, or provide a separated cycling facility	☑
	1.3	**Amenities for walking & cycling**	
BASIC	1.3.1	Provide lighting, landscaping and benches along walking and cycling routes between building entrances and streets, sidewalks and trails	☑
BASIC	1.3.2	Provide wayfinding signage for site access (where required, e.g. when multiple buildings or entrances exist) and egress (where warranted, such as when directions to reach transit stops/stations, trails or other common destinations are not obvious)	☑

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	2.	**WALKING & CYCLING: END-OF-TRIP FACILITIES**	
	2.1	**Bicycle parking**	
REQUIRED	2.1.1	Provide bicycle parking in highly visible and lighted areas, sheltered from the weather wherever possible *(see Official Plan policy 4.3.6)*	☑
REQUIRED	2.1.2	Provide the number of bicycle parking spaces specified for various land uses in different parts of Ottawa; provide convenient access to main entrances or well-used areas *(see Zoning By-law Section 111)*	☑
REQUIRED	2.1.3	Ensure that bicycle parking spaces and access aisles meet minimum dimensions; that no more than 50% of spaces are vertical spaces; and that parking racks are securely anchored *(see Zoning By-law Section 111)*	☑
BASIC	2.1.4	Provide bicycle parking spaces equivalent to the expected number of resident-owned bicycles, plus the expected peak number of visitor cyclists	☑
	2.2	**Secure bicycle parking**	
REQUIRED	2.2.1	Where more than 50 bicycle parking spaces are provided for a single residential building, locate at least 25% of spaces within a building/structure, a secure area (e.g. supervised parking lot or enclosure) or bicycle lockers *(see Zoning By-law Section 111)*	☑
BETTER	2.2.2	Provide secure bicycle parking spaces equivalent to at least the number of units at condominiums or multi-family residential developments	☐
	2.3	**Bicycle repair station**	
BETTER	2.3.1	Provide a permanent bike repair station, with commonly used tools and an air pump, adjacent to the main bicycle parking area (or secure bicycle parking area, if provided)	☑
	3.	**TRANSIT**	
	3.1	**Customer amenities**	
BASIC	3.1.1	Provide shelters, lighting and benches at any on-site transit stops	☐
BASIC	3.1.2	Where the site abuts an off-site transit stop and insufficient space exists for a transit shelter in the public right-of-way, protect land for a shelter and/or install a shelter	☐
BETTER	3.1.3	Provide a secure and comfortable interior waiting area by integrating any on-site transit stops into the building	☐

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	4.	**RIDESHARING**	
	4.1	**Pick-up & drop-off facilities**	
BASIC	4.1.1	Provide a designated area for carpool drivers (plus taxis and ride-hailing services) to drop off or pick up passengers without using fire lanes or other no-stopping zones	☑
	5.	**CARSHARING & BIKESHARING**	
	5.1	**Carshare parking spaces**	
BETTER	5.1.1	Provide up to three carshare parking spaces in an R3, R4 or R5 Zone for specified residential uses *(see Zoning By-law Section 94)*	☐
	5.2	**Bikeshare station location**	
BETTER	5.2.1	Provide a designated bikeshare station area near a major building entrance, preferably lighted and sheltered with a direct walkway connection	☐
	6.	**PARKING**	
	6.1	**Number of parking spaces**	
REQUIRED	6.1.1	Do not provide more parking than permitted by zoning, nor less than required by zoning, unless a variance is being applied for	☐
BASIC	6.1.2	Provide parking for long-term and short-term users that is consistent with mode share targets, considering the potential for visitors to use off-site public parking	☐
BASIC	6.1.3	Where a site features more than one use, provide shared parking and reduce the cumulative number of parking spaces accordingly *(see Zoning By-law Section 104)*	☐
BETTER	6.1.4	Reduce the minimum number of parking spaces required by zoning by one space for each 13 square metres of gross floor area provided as shower rooms, change rooms, locker rooms and other facilities for cyclists in conjunction with bicycle parking *(see Zoning By-law Section 111)*	☐
	6.2	**Separate long-term & short-term parking areas**	
BETTER	6.2.1	Provide separate areas for short-term and long-term parking (using signage or physical barriers) to permit access controls and simplify enforcement (i.e. to discourage residents from parking in visitor spaces, and vice versa)	☐

TDM Measures Checklist:
Residential Developments (multi-family, condominium or subdivision)

Legend

BASIC — The measure is generally feasible and effective, and in most cases would benefit the development and its users

BETTER — The measure could maximize support for users of sustainable modes, and optimize development performance

★ — The measure is one of the most dependably effective tools to encourage the use of sustainable modes

		TDM measures: *Residential developments*	Check if proposed & add descriptions
	1.	**TDM PROGRAM MANAGEMENT**	
	1.1	**Program coordinator**	
BASIC ★	1.1.1	Designate an internal coordinator, or contract with an external coordinator	☐
	1.2	**Travel surveys**	
BETTER	1.2.1	Conduct periodic surveys to identify travel-related behaviours, attitudes, challenges and solutions, and to track progress	☐
	2.	**WALKING AND CYCLING**	
	2.1	**Information on walking/cycling routes & destinations**	
BASIC	2.1.1	Display local area maps with walking/cycling access routes and key destinations at major entrances *(multi-family, condominium)*	☐
	2.2	**Bicycle skills training**	
BETTER	2.2.1	Offer on-site cycling courses for residents, or subsidize off-site courses	☐

			TDM measures: *Residential developments*	Check if proposed & add descriptions
		3.	**TRANSIT**	
		3.1	**Transit information**	
BASIC		3.1.1	Display relevant transit schedules and route maps at entrances *(multi-family, condominium)*	☐
BETTER		3.1.2	Provide real-time arrival information display at entrances *(multi-family, condominium)*	☐
		3.2	**Transit fare incentives**	
BASIC	★	3.2.1	Offer PRESTO cards preloaded with one monthly transit pass on residence purchase/move-in, to encourage residents to use transit	☐
BETTER		3.2.2	Offer at least one year of free monthly transit passes on residence purchase/move-in	☐
		3.3	**Enhanced public transit service**	
BETTER	★	3.3.1	Contract with OC Transpo to provide early transit services until regular services are warranted by occupancy levels *(subdivision)*	☐
		3.4	**Private transit service**	
BETTER		3.4.1	Provide shuttle service for seniors homes or lifestyle communities (e.g. scheduled mall or supermarket runs)	☐
		4.	**CARSHARING & BIKESHARING**	
		4.1	**Bikeshare stations & memberships**	
BETTER		4.1.1	Contract with provider to install on-site bikeshare station (*multi-family)*	☐
BETTER		4.1.2	Provide residents with bikeshare memberships, either free or subsidized *(multi-family)*	☐
		4.2	**Carshare vehicles & memberships**	
BETTER		4.2.1	Contract with provider to install on-site carshare vehicles and promote their use by residents	☐
BETTER		4.2.2	Provide residents with carshare memberships, either free or subsidized	☐
		5.	**PARKING**	
		5.1	**Priced parking**	
BASIC	★	5.1.1	Unbundle parking cost from purchase price *(condominium)*	☐
BASIC	★	5.1.2	Unbundle parking cost from monthly rent *(multi-family)*	☑

			TDM measures: *Residential developments*	Check if proposed & add descriptions
		6.	**TDM MARKETING & COMMUNICATIONS**	
		6.1	**Multimodal travel information**	
BASIC	★	6.1.1	Provide a multimodal travel option information package to new residents	☐
		6.2	**Personalized trip planning**	
BETTER	★	6.2.1	Offer personalized trip planning to new residents	☐