TRANSPORTATION IMPACT STUDY

Proposed Mixed-Use Development

1376-1382 Plains Road East
City of Burlington

April 2026

24224

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April 15, 2026 **Reference Number:** 24224.01

Sam Mandelbaum
Rester Management

Dear Mr. Mandelbaum,

RE: Transportation Impact Study
Proposed Mixed-Use Development
1376- 1382 Plains Road East, Burlington

LEA Consulting Ltd. (LEA) is pleased to present the findings of our Transportation Impact Study for the proposed mixed-use development located at 1376-1382 Plains Road East, in the City of Burlington. This study has been prepared in support of the Official Plan Amendment (OPA) and Zoning By-law Amendment (ZBA) applications for the site. This report concludes that the traffic associated with the proposed development will have an acceptable impact on the surrounding road network.

Please do not hesitate to contact the undersigned should you have any additional questions or concerns.

Yours truly,

LEA CONSULTING LTD.



Robert Keel, MSc. Pl., MCIP, RPP
Manager, Transportation Planning

Encl. Transportation Impact Study – 1376 & 1382 Plains Road East, Proposed Mixed-Use Development, City of Burlington. (April 2026)

Disclaimer

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1 INTRODUCTION

LEA Consulting Ltd. (LEA) has been retained by Rester Management to undertake a Transportation Impact Study (TIS) for the proposed mixed-use development located at 1376-1382 Plains Road East in the City of Burlington (herein referred to as the "subject site"). The following TIS has been prepared in support of the Official Plan Amendment (OPA) and Zoning By-law Amendment (ZBA) applications for the proposed development.

The subject site is currently occupied by a two (2)-storey commercial building and associated surface parking. The site location is illustrated in **Figure 1-1**.

Figure 1-1: Site Location



Source: Google Maps, Accessed January 2026

The purpose of this assessment is to review the existing transportation infrastructure in the surrounding area, including the road network, transit network and active transportation network, and assess the traffic impact of the proposed development on the surrounding network. In addition, the proposed parking and loading provisions have been reviewed, and Transportation Demand Management (TDM) measures have been recommended to encourage the use of other modes of transportation. The TIS for the proposed development has been conducted in accordance with the requirements set out by the Halton Region's *Transportation Impact Study Guidelines (January 2015).*

1.1 PROPOSED DEVELOPMENT

The proposed development is a 25-storey mixed-use building containing 283 residential units, with retail at-grade. The proposed development will provide 45 residential spaces and 11 visitor spaces, for a total of 56 parking spaces (0.20 spaces per unit). The proposed site statistics are summarized in **Table 1-1**.

Table 1-1: Proposed Site Statistics

Land Use	Unit Count / GFA
Residential	**283 Units**
Studio	6 units
1-Bedroom	220 Units
2-Bedroom	44 Units
3-Bedroom	13 Units
Retail	400m^2

Vehicular access to the development is proposed via a full movement driveway off Plains Road East, shared with the adjacent commercial property. The proposed site plan is illustrated in **Figure 1-2.**

Figure 1-2: Proposed Site Plan



Source: WZMH Architects, April 2026

2 EXISTING TRANSPORTATION CONDITIONS

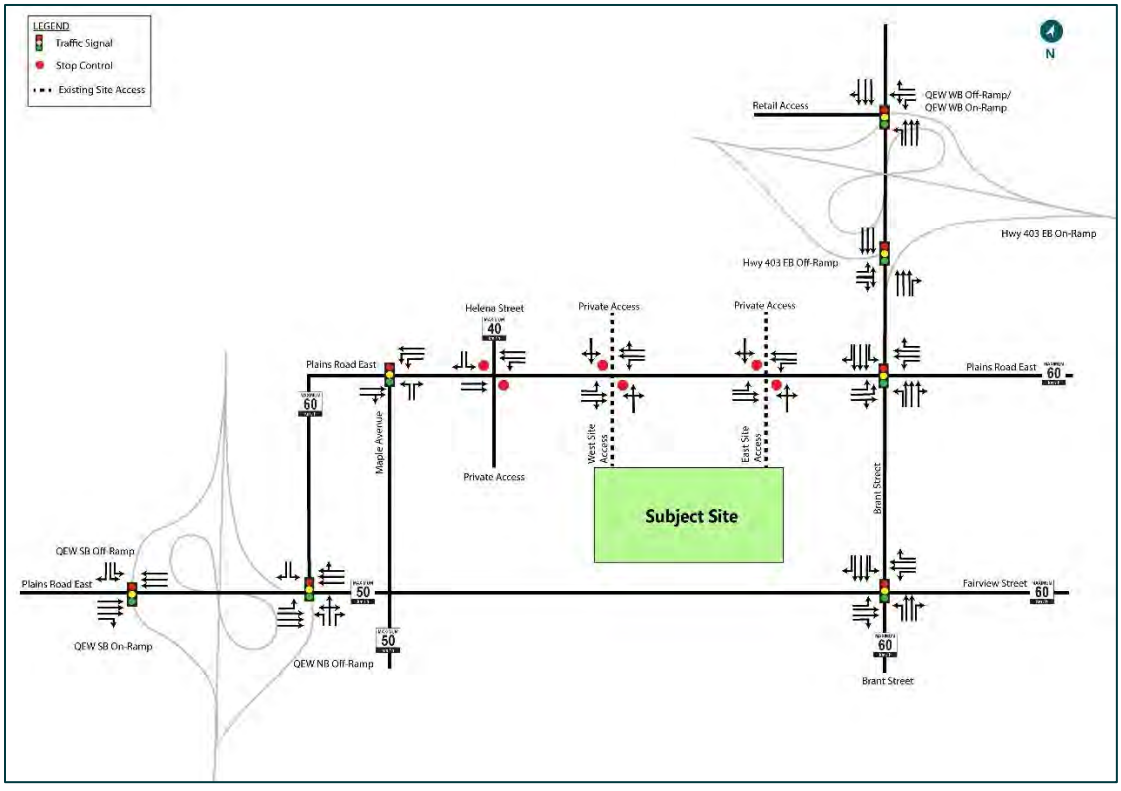
This section identifies the existing traffic conditions present in the study area, including the road, transit, cyclist, and pedestrian networks. The study area was determined by assessing the size of the proposed development and its anticipated traffic impact. The study terms of reference is provided in **Appendix A.** The study area includes the following existing intersections:

- Plains Road East and Maple Avenue (Signalized);
- Plains Road East and Existing Site Access (West) (Unsignalized);
- Plains Road East and Existing Site Access (East) (Unsignalized);
- Plains Road East and Brant Street (Signalized);
- Brant Street and QEW Off Ramps (Signalized);
- Brant Street and Fairview Street (Signalized);
- Plains Road East and Helena Street (Unsignalized);
- Plains Road East and QEW Off Ramp (Signalized); and
- Plains Road East and Fairview Street (Signalized).

2.1 EXISTING ROAD NETWORK

This section describes the road network within the above-mentioned study area. The existing intersection controls and lane configuration are illustrated in **Figure 2-1**.

Figure 2-1: Existing Lane Configuration



Queen Elizabeth Way (QEW) is a 400-series highway under the jurisdiction of the Ontario Ministry of Transportation (MTO). The highway is located north and west of the subject site and is generally oriented in an east-west direction. The QEW extends across southern Ontario, providing a key regional connection across the Greater Toronto and Hamilton Area (GTHA) and extending south toward the Niagara Region. Indirect access to the QEW is afforded via the signalized intersections of Brant Street and Fairview Street. The posted speed limit is 100 km/h.

Highway 403 is a 400-series highway under the jurisdiction of the Ontario Ministry of Transportation (MTO). The highway is located north and west of the subject site and is generally oriented in an east-west direction. Highway 403 extends from Woodstock in the west to Mississauga in the east, serving as a key commuter and goods movement corridor within the Greater Golden Horseshoe. Indirect access to Highway 403 is afforded via the signalized intersections of Brant Street and Fairview Street. The posted speed limit is 100 km/h.

Plains Road East is an east-west multi-purpose arterial under the jurisdiction of the City of Burlington. Plains Road East extends from Fairview Street in the west to Brenda Crescent in the east, where it continues as Queensway Drive. The roadway operates with a four (4) lane cross-section, consisting of two (2) lanes in each direction. The posted speed limit is 60 km/h within the study area.

Brant Street is a north-south regional urban road under the jurisdiction of Halton Region within the study area. Brant Street extends from Dundas Street in the north to Lakeshore Road in the south. The roadway operates with a seven (7) lane cross section, consisting of three lanes in each direction and a centre left turn lane. The posted speed limit is 60 km/h within the study area.

Maple Avenue is a north-south industrial collector within the study area and continues as an urban avenue south of Fairview Street, under the jurisdiction of the City of Burlington. Maple Avenue extends from Plains Road East in the north to North Shore Boulevard East / Lakeshore Road in the south. The roadway operates with a four (4) lane cross-section, consisting of two (2) lanes in each direction, with auxiliary left and right turn lanes at major intersections. The posted speed limit of 50 km/h within the study area.

Fairview Street is an east-west multi-purpose arterial under the jurisdiction of the City of Burlington. Fairview Street extends from Plains Road East / King Road in the west to 1k east of Appleby Line in the east. Within the vicinity of the site, the roadway operates with a six (6) lane cross-section, consisting of three (3) lanes in each direction. East of Brant Street the roadway operates with a five (5) lane cross-section, with auxillary turn lanes at key intersections. The posted speed limit within the study area is 60 km/h, and 50km/h west of its intersection with Plains Road East.

Helena Street is a north-south local roadway under the jurisdiction of the City of Burlington. Helena Street extends between Leighland Road and Plains Road East. The roadway operates with a two (2) lane cross-section, consisting of one (1) lane in each direction. The posted speed limit is 40 km/h.

2.2 EXISTING TRANSIT NETWORK

The subject site is located in an area well-serviced by the existing Burlington transit network. There are a number of surface transit options available in the study area which connect the subject site to a variety of destinations, including the Burlington GO station (approximately 1.5km southeast). The subject site is within convenient walking distance of several bus stops along Brant Street, providing easy access to public transportation.

Transit routes currently servicing the area are illustrated in **Figure 2-2** and are described below. The subject site has a TransitScore™ of 56/100, which classifies the area as having "Good Transit" and indicates that there are several nearby public transportation options.

Figure 2-2: Existing Transit Network



Source: Burlington Transit System Map, November 2025

Route 2 – Brant is a bus route that generally operates in a north-south direction, connecting the Downtown Terminal (John Street) to the Highway 407 Carpool Lot. Along the route, it serves key locations such as Burlington GO Station, which connects various local transit routes and GO Transit services.

Access Location: Route 2 is accessible in the study area at the intersection of Plains Road East and Brant Street (approximately 300m east, a 4-minute walk).

Route 12 – Upper Middle is a bus route that generally operates in an east-west direction on weekdays, connecting key location in the city. Route 12 runs from Burlington GO Station to Burlington North SmartCentre, passing through key intersections such as Guelph Line and Walkers Line.

Access Location: Route 12 is accessible in the study area at the intersection of Plains Road East and Brant Street (approximately 300m east, a 4-minute walk).

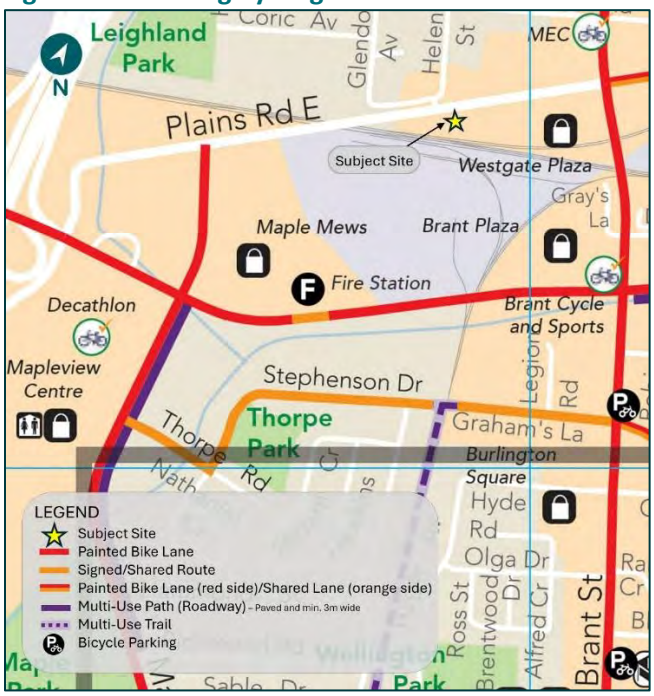
Route 87 – North Service (Aldershot) is a bus route that that generally operates in an east-west direction, connecting Aldershot GO Station to Burlington GO Station. Service is available Monday through Friday; there is no service on weekends.

Access Location: Route 87 is accessible in the study area at the intersection of Plains Road East and Brant Street (approximately 300m east, a 4-minute walk).

2.3 EXISTING CYCLING NETWORK

The existing cycling network surrounding the site is illustrated in **Figure 2-3**. The subject site is located in a neighborhood with access to nearby cycling infrastructure, including bike lanes along Brant Street, Maple Avenue, and Fairview Street. Additionally, the site benefits from the presence of a mixed-use path (bike lane and sharrows) along Plain Road East, east of the Brant Street intersection. The site receives a BikeScore™ of 72/100, or "Very Bikeable", when entered into the WalkScore™ application. This indicates that cycling is feasible for some trips.

Figure 2-3: Existing Cycling Network



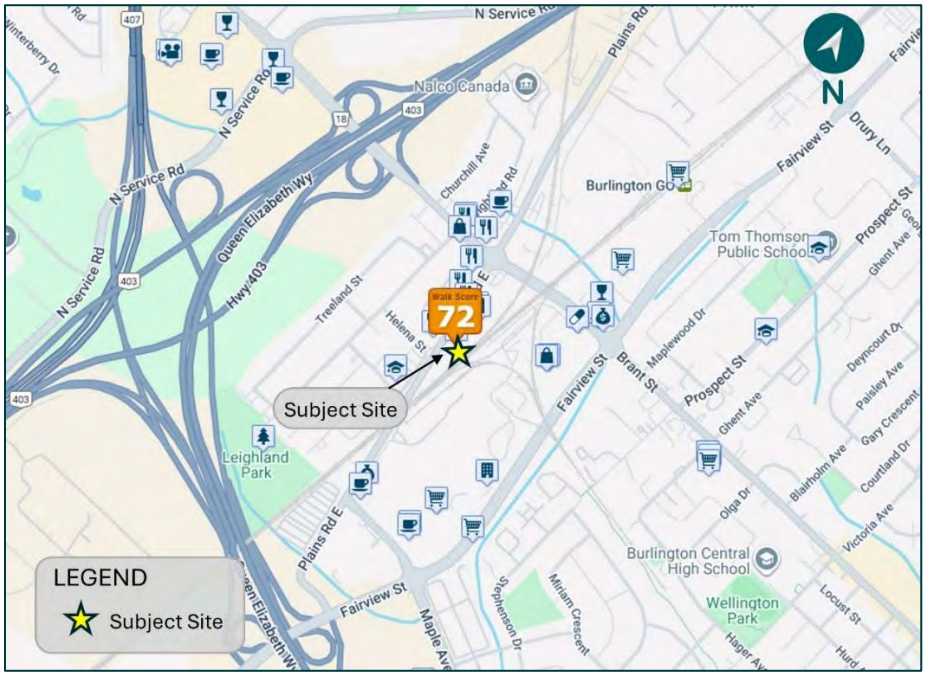
Source: Urban Burlington Bike Map, 2021

2.4 EXISTING PEDESTRIAN NETWORK

The existing pedestrian network consists of sidewalks along both sides of all major roadways within the study area. Pedestrian crosswalks are available at the signalized intersections of Plains Road East and Brant Street and Plains Road East and Maple Street (except the west leg). The existing pedestrian network provides good connections between the residential and commercial uses in the area.

The site has a WalkScore™ of 75/100, or "Very Walkable", which indicates that some daily errands can be readily accomplished without requiring a private vehicle. As shown in **Figure 2-4**, a 15-minute walk from the site provides access to amenities and services such as restaurants, retail, grocery stores, schools, and parks, ensuring that many daily needs can be accommodated as a pedestrian or a short bus ride.

Figure 2-4: Neighbourhood Walkability



Source: Walkscore.com, accessed January 2026

2.5 TRAFFIC DATA COLLECTION

Turning movement counts (TMCs) were used as the source of traffic data for the intersection capacity analysis. Traffic counts were collected by LEA to capture the weekday AM and PM peak periods. A summary of the TMC data collected is outlined in **Table 2-1**, with detailed traffic counts and signal timing plans available in **Appendix B**.

Table 2-1: Traffic Data Summary

Intersection	TMC Date	Source
Brant St & Hwy 403 Off-Ramp	Thursday, February 27, 2025	LEA Consulting Ltd.
Plains Rd E & Brant St	Thursday, October 2, 2025	
Plains Rd E & Maple Ave	Wednesday, January 7, 2026	
Plains Rd E & East Site Access		
Plains Rd E & West Site Access		
Plains Rd E & Fairview St / QEW SB On-Ramp	Thursday, February 19, 2026	
Plains Rd E & QEW SB Off-Ramp		
Plains Rd E & Helena Street		
Brant St & Fairview St		
Brant St & QEW WB Off-Ramp		

2.6 EXISTING TRAFFIC VOLUMES

The existing peak hour traffic volumes in the study area during the weekday AM and PM peak hours are illustrated in **Figure 2-5**. Note: traffic volumes were balanced to match adjacent intersections with few to no midblock accesses, as summarized in **Table 2-2**.

Figure 2-5: Existing (Balanced) Weekday Peak Hour Traffic Volumes

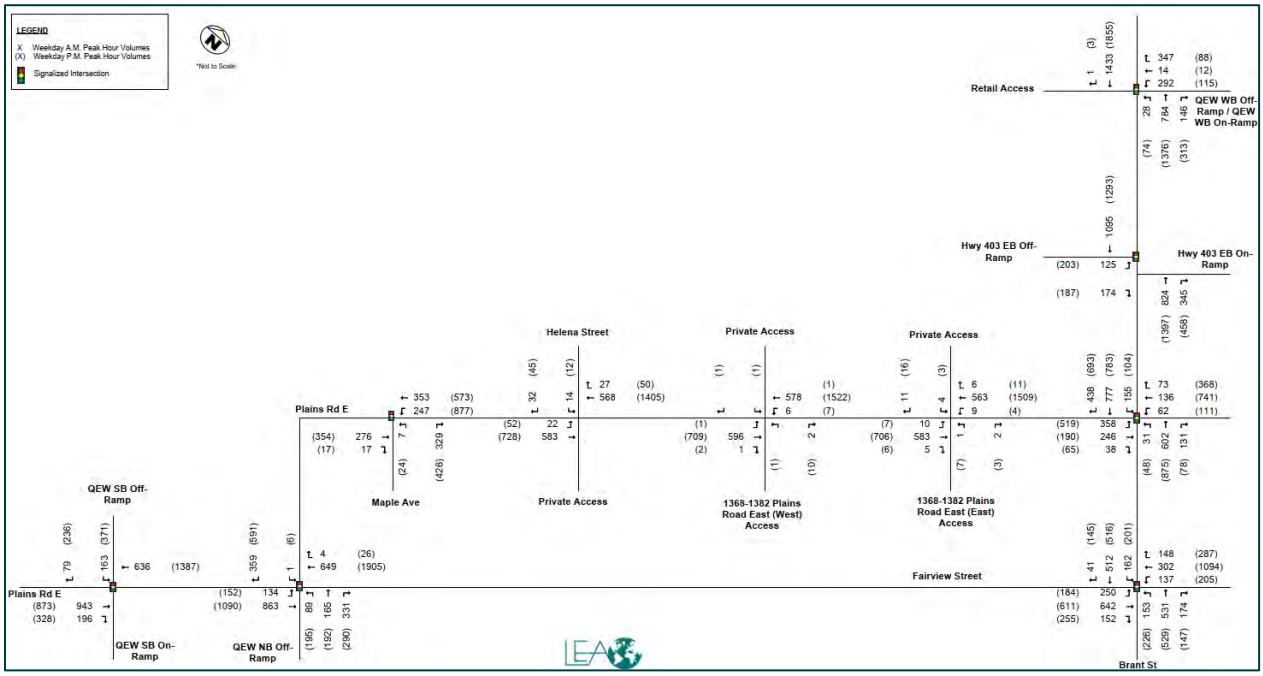


Table 2-2: Balanced Intersection Volumes for the Weekday AM and PM Peak Hours

Intersection	Peak Period	Balanced Volumes
Maple Ave & Plains Rd E	AM	NBR, EBT, EBR, WBL, WBT
Plains Rd E & 1368-1382 Plains Road East (East) Access	AM	EBT
Plains Rd E & 1368-1382 Plains Road East (West) Access	AM	EBT
Plains Rd E & Helena Street	PM	SBR, WBT
Plains Rd E & Fairview St	AM	SBL, SBR
	PM	NBT, EBL, WBR, SBR

3 FUTURE BACKGROUND TRANSPORTATION CONDITIONS

For the analysis of future background traffic conditions, this study considers two horizons: a five (5)-year horizon from the existing year 2026 to 2031 and a 10-year to the future year 2036. Future background conditions include traffic added to the network from general corridor growth. The future background conditions were used as the baseline for evaluating the impact of the proposed development.

3.1 FUTURE ROAD IMPROVEMENTS

No external roadway improvements are noted within the immediate study area.

3.2 FUTURE TRANSIT IMPROVEMENTS

The following section provides a summary of the policy context and planned transit network improvements within the study area.

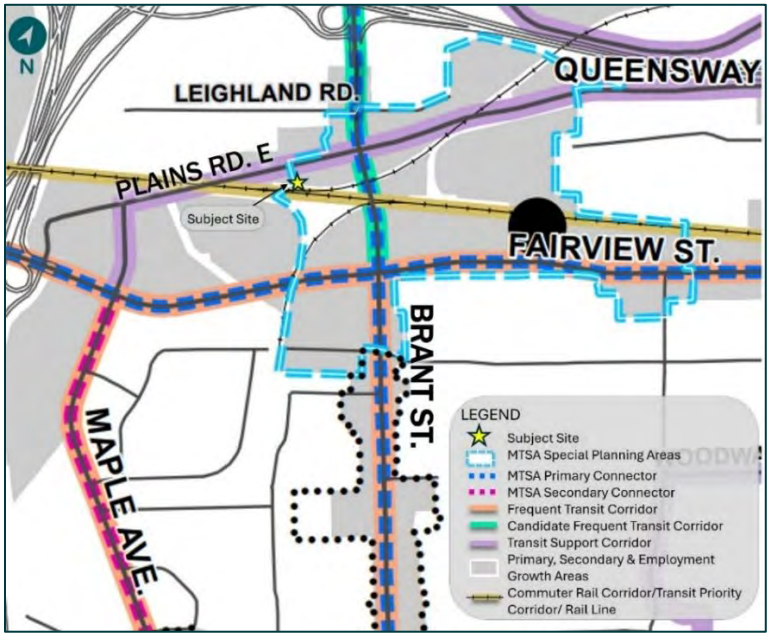
3.2.1 City of Burlington Official Plan

Within the study area, the City of Burlington Official Plan identifies Plains Road East (east of Maple Avenue) and Maple Avenue (north of Fairview Street) as Transit Support Corridors. In addition, Brant Street (north of Fairview Street) is identified as a Candidate Frequent Transit Corridor where transit improvements will be prioritized, as well as a Major Transit Station Area (MTSA) Primary Connector to provide direct transit connections between MTSAs and a strong pedestrian environment. Fairview Street is similarly identified as both a Frequent Transit Corridor and an MTSA Primary Connector.

The subject site is located within an MTSA special planning area in the City of Burlington Official Plan, and is within the provincially designated Downtown Burlington UGC/Burlington GO MTSA.

Figure 3-2 illustrates the City of Burlington Growth Framework and Long Term Frequent Transit Corridors.

Figure 3-1: Growth Framework and Long Term Frequent Transit Corridors



Source: City of Burlington Official Plan-Schedule B-2, November 2020

3.2.2 Burlington GO Station Upgrades

As outlined in the GO Rail Station Access Plan (February 2023) prepared by Metrolinx, a range of long-term, improvements have been identified for Burlington GO station for the year 2041. These improvements include the following:

- Working with the City of Burlington and Burlington Transit to identify opportunities to add additional bus bays by optimizing design of the existing bus loop facility or through provision of on-street bays;
- Encouraging the City of Burlington, the City of Hamilton, and SoBi to explore the feasibility of bike share expansion to the south of the GO station. Protect space for a future bikeshare docking station where feasible;
- As part of a future station improvement to decommission the northern bus loop provide a northern PUDO in a high ridership configuration with 17 waiting and 9 loading spaces and dedicated access;
- Dependent on a future need to resize or reconfigure the southern PUDO, reduce size to 24 waiting and 8 loading spaces with dedicated access, and reallocate space to other modes or uses;
- Implement modified reserved and carpool parking on up to 51% of total parking spaces; and
- As part of a reconfiguration of the north station site, adding 50 parking spaces.

Planned station access improvements will enhance active transportation connections and improve access to higher-order transit services within the surrounding area, including to/from the proposed development.

3.3 FUTURE ACTIVE TRANSPORTATION NETWORK

3.3.1 Integrated Mobility Plan (IMP)

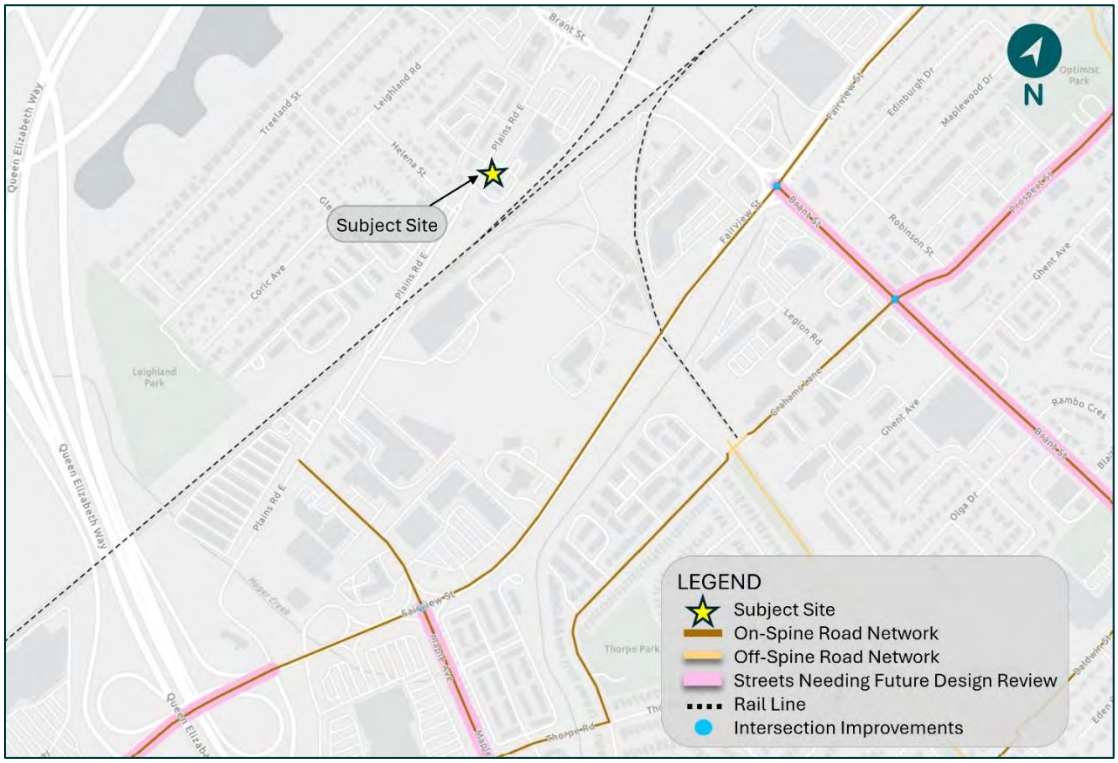
The City of Burlington has developed its first Integrated Mobility Plan (IMP), a 30-year strategy aimed at enhancing the citywide transportation network. The IMP focuses on creating a sustainable and accessible transportation system, emphasizing improvements for pedestrians and cyclists.

While no IMP-identified capital projects are proposed directly adjacent to the subject site, several pre-approved projects are planned within the broader surrounding network. These projects are intended to enhance active transportation connectivity and improve multimodal travel along key corridors in proximity to the study area. IMP pre-approved capital projects include the following:

- **Plains Road (King Road to the QEW Northbound Off-Ramp / Plains Road East)** is identified as an on-spine road network with planned improvements including protected cycling facilities, enhancements to the pedestrian realm, and optimization for Bus Rapid Transit (BRT) operations; and
- **Maple Avenue (Plains Road East to Fairview Street)** is identified as an on-spine road network with planned improvements include protected bicycle lanes and pedestrian realm enhancements.

Figure 3-2 illustrates the on-spine and off-spine cycling routes, as well as streets identified for future design review.

Figure 3-2: Integrated Mobility Plan (IMP) – Future Cycling Network



Source: City of Burlington, accessed January 2026

3.4 CORRIDOR GROWTH

A 2.00% annual growth rate was applied to all through movements (EBT, WBT, NBT, and SBT) along Plains Road East and Brant Street, as outlined in **Table 3-1**.

Table 3-1: Corridor Growth Rates

Corridor	AM	PM
Brant Street	2.00%	2.00%
Plains Road East	2.00%	2.00%

3.5 BACKGROUND DEVELOPMENTS

Two (2) background developments were included in the traffic analysis, as shown in **Table 3-2.** Excerpts from the studies providing details of the background development trips are provided in **Appendix C**.

Table 3-2: Background Developments

#	Address	Descriptions	Source of Traffic Volumes
1	1335 & 1355 Plains Road East	38 residential units	Paradigm Transportation Solutions Ltd. (November 2017)
2	1134 & 1167 Plains Road East	Phase 1: 654 residential units, 810m^2 GFA ground floor commercial Phase 2: 408 residential units, 208m^2 GFA ground floor commercial, 465m^2 GFA office	Paradigm Transportation Solutions Ltd. (May 2021)
3	1060 Brant Street	93 residential units	LEA Consulting Ltd. (December 2025)

3.6 FUTURE BACKGROUND TRAFFIC VOLUMES

Future background traffic volumes during the weekday AM and PM peak hours under the 2031 and 2036 horizon years are illustrated in **Figure 3-3** to **Figure 3-4.**

Figure 3-3: Future Background (2031) Traffic Volumes

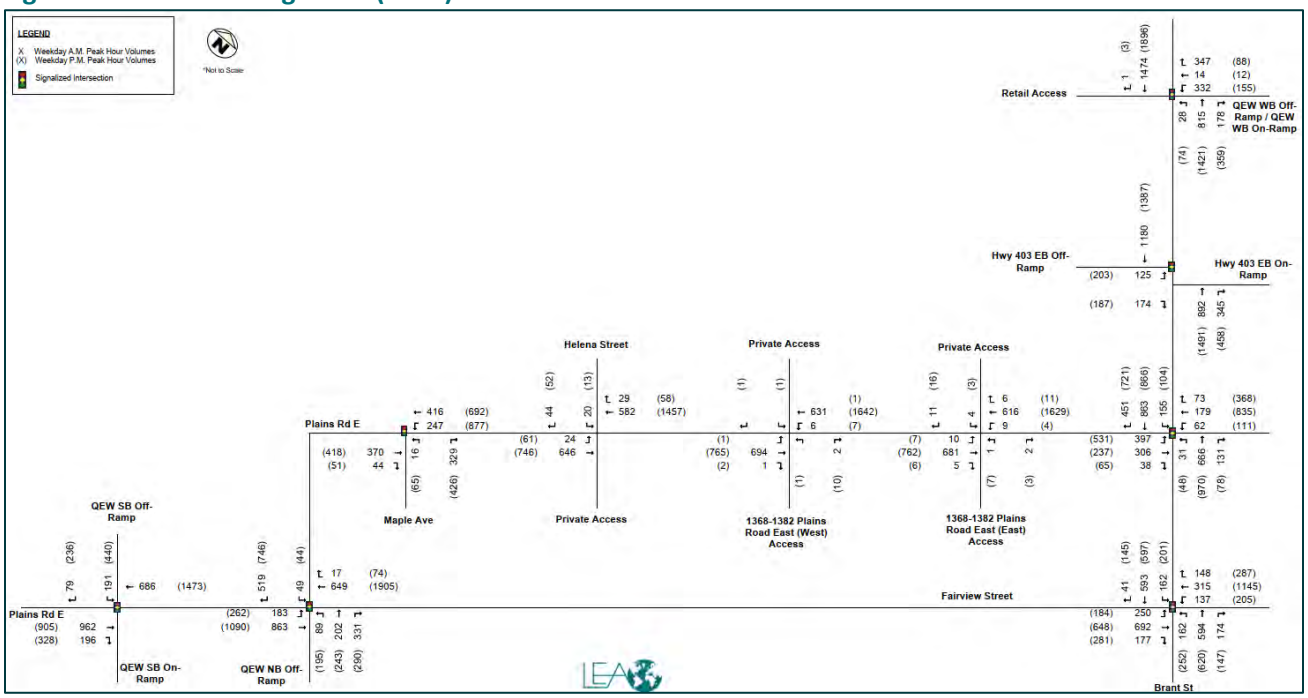
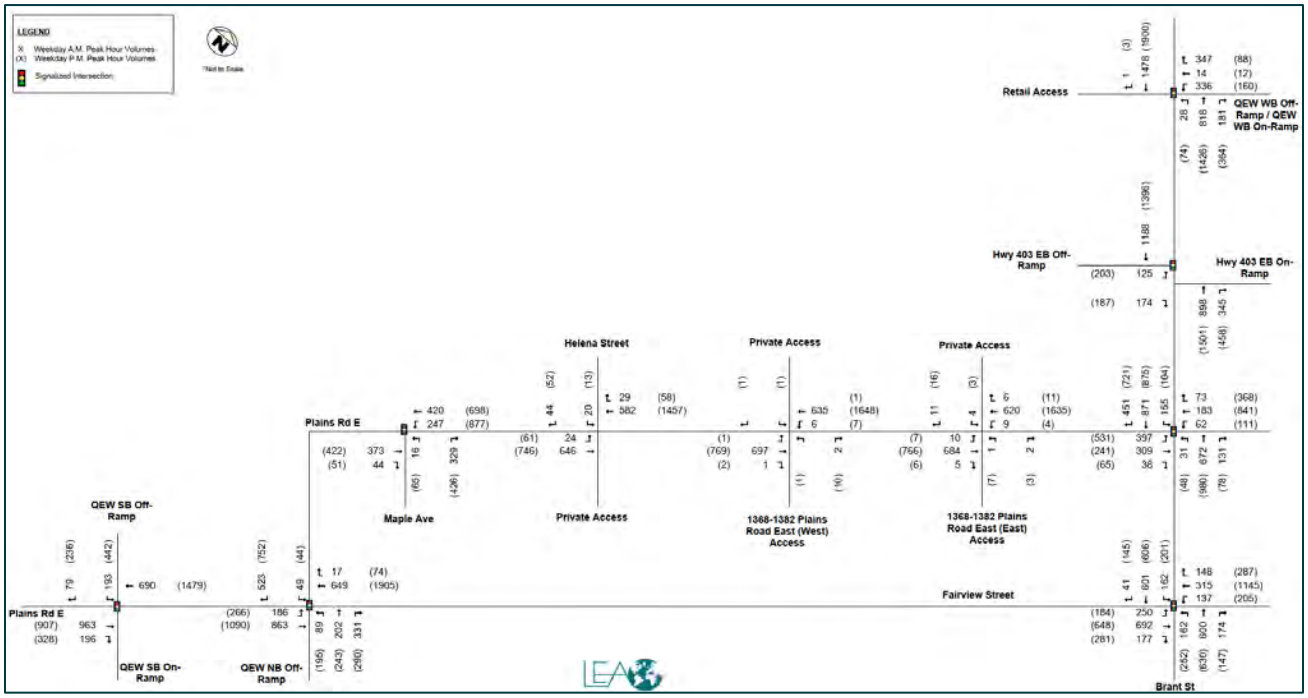


Figure 3-4: Future Background (2036) Traffic Volumes



4 SITE GENERATED TRAFFIC

The proposed development is a 25-storey mixed-use building containing 283 residential units, with retail at-grade. Access to the development is proposed via an unsignalized full-movement site access off Plains Road East, shared with the nearby commercial property. The existing westerly site access will be removed as part of the proposed development.

The sections below discuss the calculation, distribution, and assignment of site-generated vehicle trips.

4.1 MODAL SPLIT

As per the TOR response received from City staff, it was assumed that the local mode share should be consistent with the information provided in the City of Burlington IMP, as shown in **Table 4-1.**

It is noted that the assumed shared of auto driver trips is significantly higher than what is reported in the 2022 TTS for surrounding Traffic Analysis Zones (4057, 4059), where an auto driver mode share of 64% is reported (see **Appendix D**). This difference may be attributable to the IMP combining auto driver and auto passenger trips as a single mode share category.

Table 4-1: Existing Study Area Mode Split

Mode	Existing Mode Share (Burlington)
Auto Driver	92%
Transit	5%
Pedestrian	0%
Cyclist	3%
Total	**100%**

4.2 SITE TRIP GENERATION

Existing site trips were removed from the surrounding road network.

Trip generation associated with the proposed development was estimated using trip rates from the ITE Trip Generation Manual 11th Edition. The trip rates from ITE LUC 222 (Multifamily Housing – High Rise) in General Urban/Suburban, not close to rail transit was used to estimate the number of residential trips. As per the TOR response received from City staff, a 92% auto driver mode share was assumed (consistent with the IMP reported mode share).

A summary of the site vehicle trip generation is provided in **Table 4-2**.

Table 4-2: Site Trip Generation Summary

Land Use	Description	Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
ITE LUC 222 – Multifamily Housing (High-Rise) 283 Residential Units	ITE Person Trip Rate (/unit)	0.10	0.24	0.34	0.25	0.21	0.46
	ITE Person Trips	27	69	96	70	60	130
	Auto Driver Trips (92%)	25	63	88	64	55	119
	Total Site Auto Trips	**25**	**63**	**88**	**64**	**55**	**119**

The proposed development is anticipated to generate 88 two-way vehicle trips (25 inbound and 63 outbound) during the weekday AM peak hour and 119 two-way vehicle trips (64 inbound and 55 outbound) during the weekday PM peak hour.

This represents a very conservative estimate of the site's future vehicle trip generation, given that the proposed development will provide only 56 vehicle parking spaces (0.20 spaces per unit).

4.2.1 Multi-Modal Trip Generation

Multi-modal site trip generation was estimated using the local mode split identified in the City of Burlington IMP, as shown in **Table 4-3.**

Table 4-3: Multi-Modal Site Trip Generation

Land Use	Description	Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
Residential (283 Units)	External Person Trips	27	69	96	70	60	130
	Auto Driver	25	63	88	64	55	119
	Transit	1	3	4	4	3	7
	Pedestrian	0	0	0	0	0	0
	Cyclists	1	2	3	2	2	4

4.3 TRIP DISTRIBUTION AND ASSIGNMENT

The directional trip distribution of site traffic was derived using the 2022 TTS data filtered for trips originating in/destined to apartments or townhouses during the AM and PM peak periods within TAZ 4057, 4059. Site traffic was assigned to the road network based on logical routing, turn restrictions, and the location and configuration of the site access.

The assumed trip distribution for the proposed development is outlined in **Table 4-4.** Detailed TTS calculations are provided in **Appendix D**.

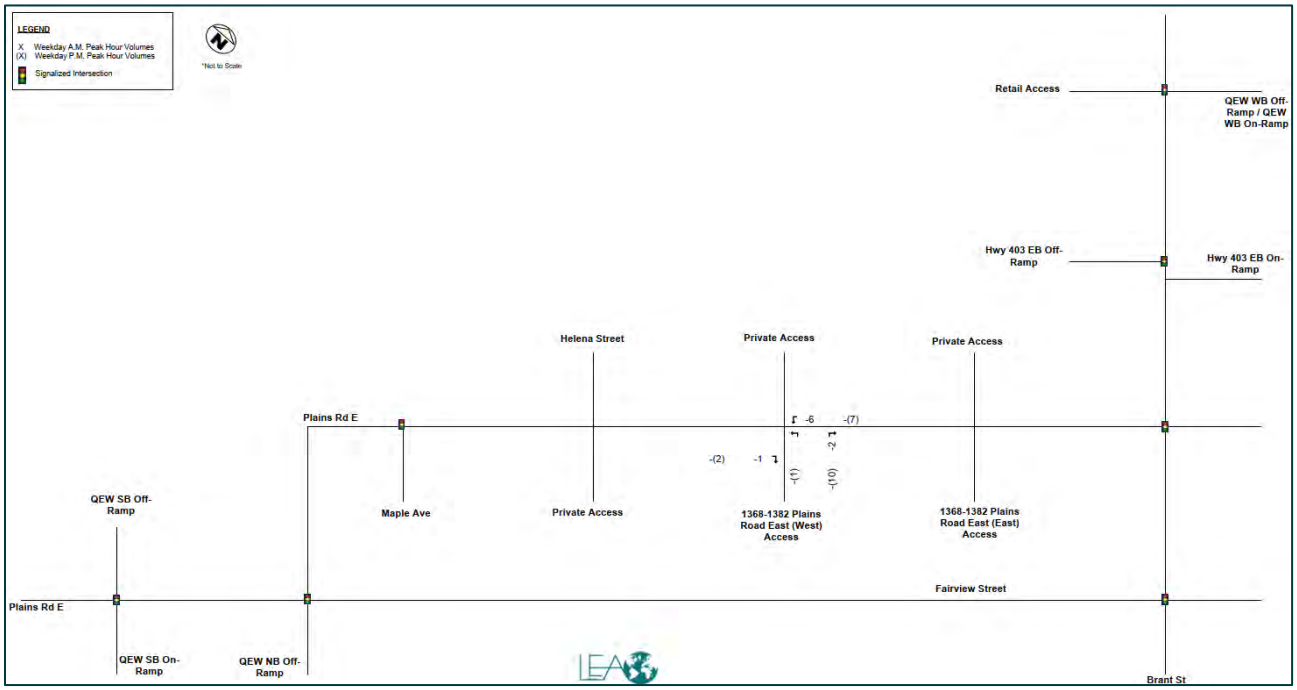
Table 4-4: Site Trip Distribution

Origin/ Destination	Assigned Route	Weekday AM/PM	
		In	Out
North	Brant Street	40%	49%
South	Brant Street	17%	13%
East	Plains Road	17%	19%
West	Plains Road	21%	12%
	Maple Avenue	6%	7%
	Total	**100%**	**100%**

4.4 SITE GENERATED TRAFFIC VOLUMES

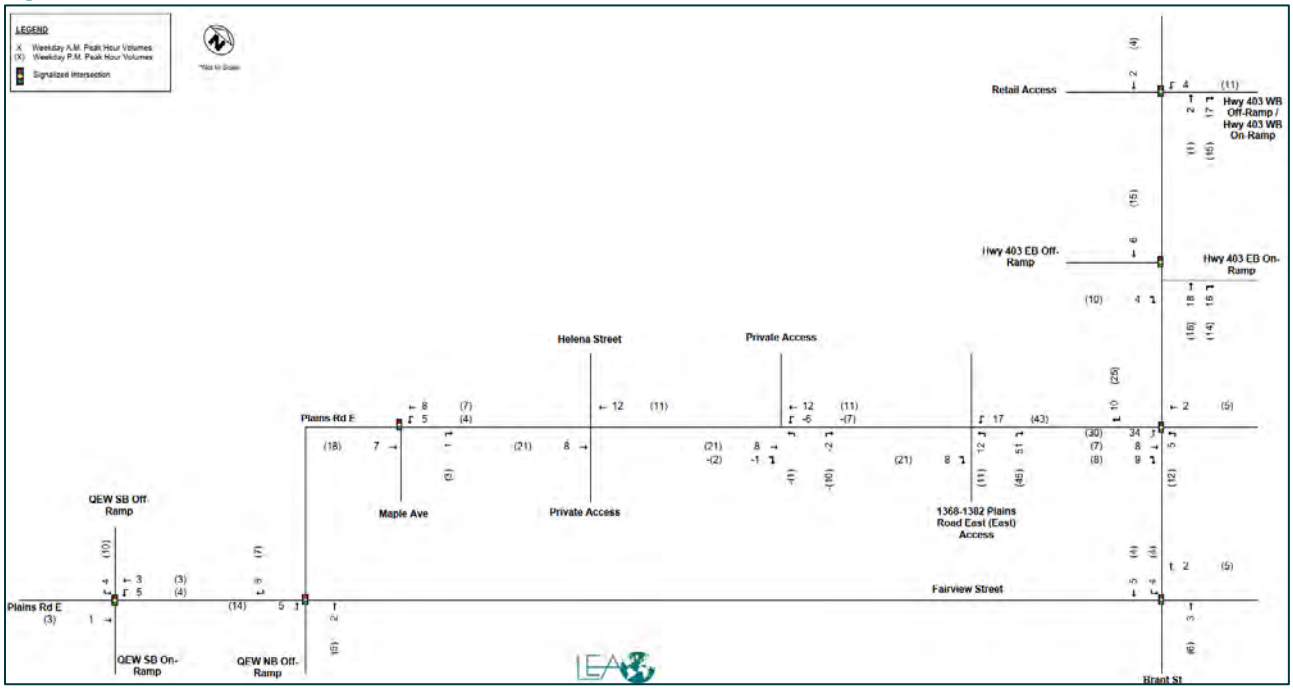
Figure 4-1 illustrates the existing trips to be removed from the road network.

Figure 4-1: Existing Site Trip Volumes (To Be Removed)



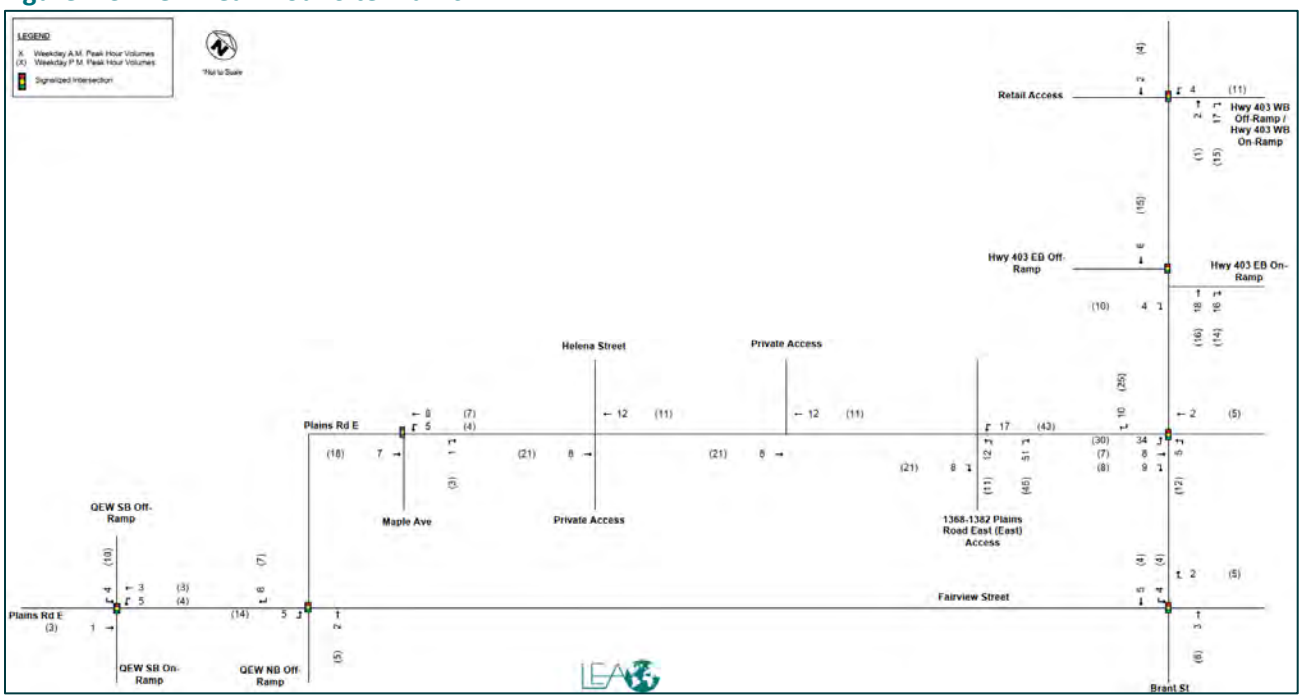
The resulting net site generated traffic volumes for the weekday AM and PM is illustrated in **Figure 4-1**.

Figure 4-2: Net Site Peak Hour Traffic Volumes



The new site traffic volumes added to the surrounding road network, forming the basis of the operational analysis, are illustrated in **Figure 4-3**.

Figure 4-3: New Peak Hour Site Traffic



5 FUTURE TOTAL TRANSPORTATION CONDITIONS

Future total traffic conditions include the addition of site trips to the 2031 and 2036 future background volumes.

5.1 FUTURE TOTAL TRAFFIC VOLUMES

Future total traffic volumes under the weekday AM and PM peak hours during the 2031 and 2036 horizon years are illustrated in **Figure 5-1** and **Figure 5-2**, respectively.

Figure 5-1: Future Total (2031) Traffic Volumes

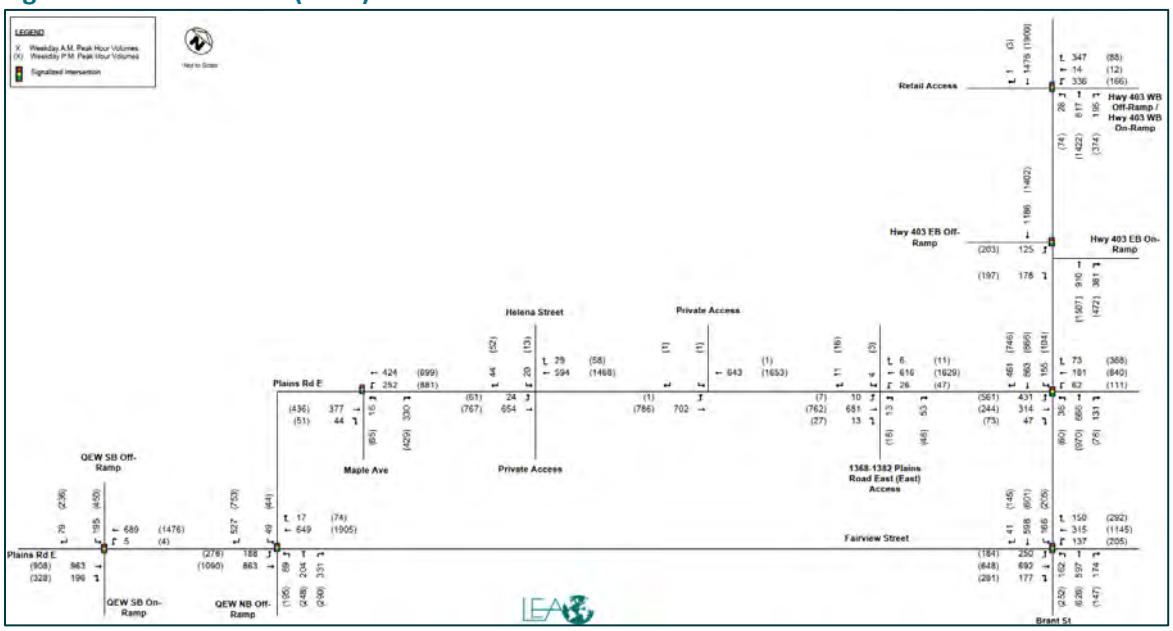
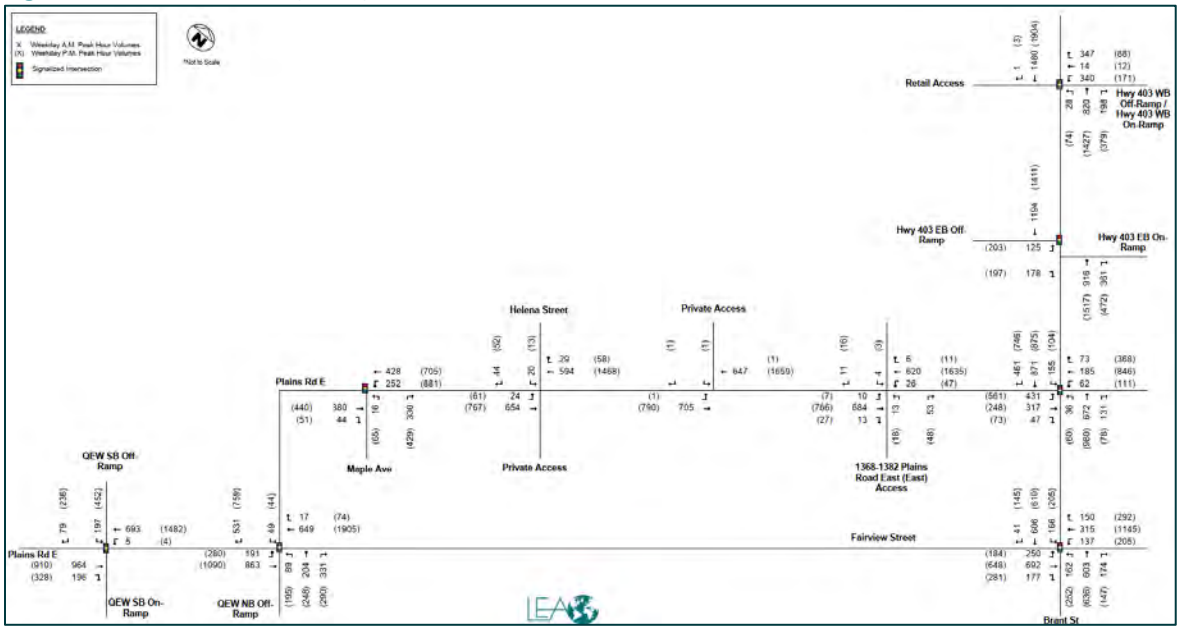


Figure 5-2: Future Total (2036) Traffic Volumes



6 INTERSECTION CAPACITY ANALYSIS

The following sections provide an analysis of the intersection operations under the existing, future background, and future total scenarios. The intersection capacity analysis for the study area was undertaken using Synchro version 11.0, which is based on Halton Region's Transportation Impact Study Guidelines (2015). As per the guidelines, key movements of interest are those with a Level Volume-to-Capacity (V/C) ratio greater than 0.85 for through or shared through/turning movements, V/C ratio greater than 0.95 or greater for exclusive movements.

6.1 SYNCHRO MODEL INPUTS AND ASSUMPTIONS

6.1.1 Synchro Calibrations/Parameters

6.1.1.1 Existing Conditions Synchro Model Inputs

Existing traffic operations were assessed to provide a baseline for future traffic operations. The applied Peak Hour Factor (PHF) value was calculated based on surveyed counts.

6.1.1.2 Future Background and Future Total Synchro Model Inputs

Input parameters from the existing conditions were maintained with the corresponding future background and future total volumes.

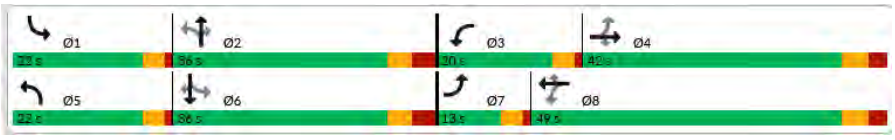
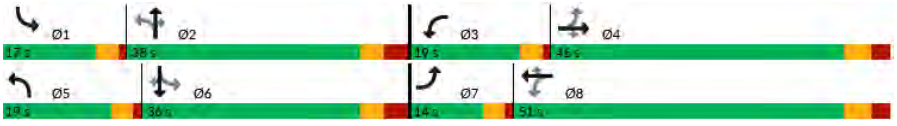
The following sections outline a comparison of the capacity analysis results for existing, 2031 and 2026 future background, and 2031 and 2026 future total conditions. Detailed capacity analysis results are provided in the following appendices:

- **Appendix E**: Existing Intersection Capacity Analysis Results
- **Appendix F**: 2031 and 2036 Future Background Intersection Capacity Analysis Results
- **Appendix G:** 2031 and 2036 Future Total Intersection Capacity Analysis Results

6.1.2 Signal Timing Modifications

Due to critical movements identified during the PM peak hour in the future scenarios, signal timing plan optimization is recommended for the intersection of Fairview Street and Brant Street. A summary of the recommended changes under the future total scenario is provided in **Table 6-1**.

Table 6-1: Proposed Signal Timing Plan

Intersection	Signal Timing Plans
Fairview St & Brant St	Existing PM:  Optimized PM: 

Fairview St & QEW NB Off-Ramp	Existing PM:  Optimized PM: 

6.2 SIGNALIZED INTERSECTIONS (2031)

The results for the studied signalized intersections under each traffic scenario during the weekday AM and PM peak hours for the 2031 horizon year are summarized in the sections below.

6.2.1 Plains Road East & Brant Street

The intersection capacity analysis results at Plains Road East & Brant Street during the weekday AM and PM and peak hours are summarized in **Table 6-2**.

Table 6-2: Intersection Capacity Analysis - Plains Road East & Brant Street

Mvmt	Existing (2026)				Future Background (2031)				Future Total (2031)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	C (26)	-/-	Overall	-	C (28)	-/-	Overall	-	C (29)	
EBL	358	0.71	D (40)	31/54	397	0.77	D (44)	36/68	431	0.81	D (46)	41/77
EBTR	284	0.66	C (34)	46/80	344	0.73	D (36)	59/98	361	0.74	D (37)	63/104
WBL	62	0.46	D (42)	11/26	62	0.48	D (44)	11/27	62	0.48	D (44)	11/27
WBT	136	0.26	C (33)	12/21	179	0.30	C (33)	16/26	181	0.30	C (34)	16/26
WBR	73	0.06	C (32)	0/6	73	0.06	C (32)	0/5	73	0.06	C (32)	0/5
NBL	31	0.12	B (18)	3/9	31	0.13	B (19)	3/10	36	0.15	B (20)	4/11
NBTR	733	0.46	C (24)	36/61	797	0.53	C (27)	44/71	797	0.54	C (28)	45/71
SBL	155	0.45	B (14)	14/33	155	0.49	B (16)	16/35	155	0.50	B (17)	16/35
SBT	777	0.40	B (20)	38/62	863	0.46	C (22)	47/74	863	0.46	C (23)	48/74
SBR	438	0.37	C (21)	5/36	451	0.42	C (23)	11/51	461	0.44	C (24)	12/53
PM Peak Hour												
Overall	-	-	D (42)	-/-	-	-	D (46)	-/-	-	-	D (48)	-/-
EBL	519	0.83	D (54)	65/85	**531**	**0.85**	**E (55)**	**66/87**	**561**	**0.87**	**E (58)**	**71/97**
EBTR	255	0.43	C (30)	45/75	302	0.50	C (31)	56/90	317	0.51	C (31)	60/95
WBL	111	0.60	D (54)	27/45	111	0.61	E (55)	27/45	111	0.61	E (56)	27/45
WBT	**741**	**0.86**	**D (49)**	**92/118**	**835**	**0.93**	**E (57)**	**109/148**	**840**	**0.94**	**E (59)**	**110/150**
WBR	368	0.75	D (48)	57/105	368	0.73	D (46)	58/106	368	0.74	D (47)	59/107
NBL	48	0.22	C (25)	7/16	48	0.25	C (27)	7/16	60	0.33	C (28)	10/19
NBTR	953	0.63	D (36)	77/94	1048	0.71	D (39)	87/105	1048	0.72	D (40)	88/105
SBL	104	0.56	C (28)	17/30	104	0.65	C (35)	17/33	104	0.66	D (36)	17/34
SBT	783	0.49	C (32)	61/76	866	0.56	C (35)	69/85	866	0.56	D (35)	70/85
SBR	693	0.77	D (46)	51/141	**721**	**0.85**	**E (55)**	**67/160**	**746**	**0.92**	**E (66)**	**84/177**

Existing Conditions: Under existing conditions, the intersection of Plains Rd E and Brant St generally operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. During the PM peak hour, the WBT is deemed critical with a V/C above 0.85.

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. The SBR experiences reduced capacity and increased delays during the PM peak hour due to background traffic growth, and similarly, reduced capacity and higher delays are expected for the WBT movement. However, overall intersection operations remain acceptable and no modifications are recommended.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.2.2 Plains Road East & Maple Avenue

The intersection capacity analysis results at Plains Road East & Maple Avenue during the weekday AM and PM and peak hours are summarized in **Table 6-3**.

Table 6-3: Intersection Capacity Analysis - Plains Road East & Maple Avenue

Mvmt	Existing (2026)				Future Background (2031)				Future Total (2031)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	B (16)	-/-	-	-	B (17)	-/-	-	-	B (17)	-/-
EBTR	293	0.27	B (13)	8/28	414	0.40	B (16)	13/43	421	0.41	B (16)	14/44
WBL	247	0.28	B (14)	7/19	247	0.25	B (14)	7/19	252	0.26	B (14)	8/20
WBT	353	0.67	B (19)	24/61	416	0.71	C (20)	29/74	424	0.72	C (20)	30/76
NBL	7	0.23	C (29)	1/4	16	0.52	D (40)	1/8	16	0.52	D (40)	1/8
NBR	329	0.45	B (15)	15/31	329	0.48	B (15)	20/35	330	0.48	B (15)	20/36
PM Peak Hour												
Overall	-	-	B (18)	-/-	-	-	C (22)	-/-	-	-	C (23)	-/-
EBTR	371	0.47	C (25)	20/52	469	0.75	D (40)	47/76	487	0.78	D (42)	50/81
WBL	877	0.63	B (15)	36/78	877	0.58	B (16)	60/85	881	0.58	B (16)	60/86
WBT	573	0.73	B (19)	49/119	692	0.82	C (24)	110/193	699	0.82	C (24)	112/196
NBL	24	0.46	D (40)	3/13	65	0.49	D (41)	13/26	65	0.49	D (41)	13/26
NBR	426	0.51	B (13)	31/50	426	0.46	B (10)	33/52	429	0.47	B (10)	34/52

Existing Conditions: Under existing conditions, the intersection of Plains Rd E and Maple Ave operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. No critical movements identified.

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. No critical movements identified.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.2.3 Brant Street & QEW WB Off-Ramp/WB On-Ramp & Retail Access

The intersection capacity analysis results at Brant Street & QEW WB Off-Ramp/WB On-Ramp & Retail Access during the weekday AM and PM and peak hours are summarized in **Table 6-4**.

Table 6-4: Intersection Capacity Analysis - Brant St & QEW WB Off-Ramp/WB On-Ramp & Retail Access

Mvmt	Existing (2026)				Future Background (2031)				Future Total (2031)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	C (23)	-/-	-	-	C (24)	-/-	-	-	C (24)	-/-
WBL	292	0.47	D (37)	35/50	332	0.53	D (37)	40/57	336	0.53	D (37)	41/58
WBT	14	0.45	D (36)	35/50	14	0.50	D (37)	40/56	14	0.50	D (37)	40/57
WBR	347	0.83	D (54)	59/85	347	0.83	D (54)	61/88	347	0.83	D (54)	61/88
NBL	28	0.20	B (16)	3/10	28	0.21	B (17)	4/10	28	0.21	B (17)	4/10
NBT	784	0.28	B (13)	41/57	815	0.29	B (14)	44/60	817	0.29	B (14)	44/60
NBR	146	0.12	C (31)	0/19	178	0.14	D (35)	0/22	195	0.16	D (37)	0/24
SBTR	1434	0.58	B (16)	90/122	1475	0.60	B (17)	95/127	1477	0.60	B (17)	96/127
PM Peak Hour												
Overall	-	-	B (11)	-/-	-	-	B (12)	-/-	-	-	B (13)	-/-
WBL	115	0.45	D (54)	16/31	155	0.53	D (55)	21/38	166	0.55	D (55)	23/40
WBT	12	0.46	D (54)	16/31	12	0.53	D (54)	21/38	12	0.55	D (55)	23/40
WBR	88	0.24	D (52)	6/22	88	0.22	D (50)	6/22	88	0.21	D (50)	6/22
NBL	74	0.40	A (8)	6/9	74	0.42	A (8)	6/10	74	0.42	A (8)	6/10
NBT	1376	0.34	A (6)	51/67	1421	0.36	A (6)	56/74	1422	0.36	A (6)	57/76
NBR	313	0.22	B (20)	14/33	359	0.25	C (24)	18/40	374	0.26	C (25)	20/43
SBTR	1858	0.52	A (8)	70/99	1899	0.54	A (9)	76/109	1903	0.54	A (9)	77/111

Existing Conditions: Under existing conditions, the intersection operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. No major constraints are noted.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.2.4 Brant Street & Fairview Street

The intersection capacity analysis results at Brant Street & Fairview Street during the weekday AM and PM and peak hours are summarized in **Table 6-5**.

Table 6-5: Intersection Capacity Analysis - Brant Street & Fairview Street

Mvmt	Existing (2026)				Future Background (2031)				Future Total (2031)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	C (26)	-/-	-	-	C (27)	-/-	-	-	C (27)	-/-
EBL	250	0.55	B (17)	25/53	250	0.55	B (18)	27/54	250	0.55	B (18)	27/54
EBT	642	0.70	C (28)	49/80	692	0.71	C (30)	56/87	692	0.71	C (30)	56/87
EBR	152	0.11	C (22)	0/14	177	0.12	C (23)	0/15	177	0.12	C (23)	0/15
WBL	137	0.50	C (22)	13/30	137	0.53	C (23)	13/30	137	0.53	C (23)	14/30
WBT	302	0.43	C (27)	22/40	315	0.42	C (28)	24/42	315	0.42	C (28)	25/42
WBR	148	0.11	C (25)	0/15	148	0.11	C (26)	0/14	150	0.11	C (26)	0/15
NBL	153	0.43	B (19)	14/31	162	0.50	B (20)	16/34	162	0.50	B (20)	16/34
NBT	531	0.65	C (29)	41/69	594	0.70	C (32)	48/79	597	0.71	C (32)	49/80
NBR	174	0.12	C (24)	0/16	174	0.12	C (25)	0/17	174	0.12	C (25)	0/17
SBL	162	0.47	B (19)	15/33	162	0.51	C (20)	16/34	166	0.52	C (21)	17/35
SBT	512	0.63	C (29)	39/66	593	0.71	C (32)	49/79	598	0.71	C (32)	49/80
SBR	41	0.03	C (24)	0/0	41	0.03	C (25)	0/0	41	0.03	C (25)	0/0
PM Peak Hour												
Overall	-	-	D (37)	-/-	-	-	D (41)	-/-	-	-	D (41)	-/-
EBL	**184**	**0.95**	**E (74)**	**28/85**	**184**	**0.93**	**E (72)**	**30/81**	**184**	**0.93**	**E (72)**	**30/81**
EBT	611	0.55	C (30)	64/92	648	0.55	C (30)	69/94	648	0.55	C (30)	70/94
EBR	255	0.18	C (26)	0/20	281	0.20	C (26)	0/20	281	0.20	C (26)	0/20
WBL	205	0.58	B (20)	27/48	205	0.61	C (22)	28/45	205	0.61	C (22)	28/45
WBT	**1094**	**0.89**	**D (40)**	**129/186**	**1145**	**0.92**	**D (44)**	**142/192**	**1145**	**0.92**	**D (44)**	**142/192**
WBR	287	0.22	C (24)	0/20	287	0.22	C (25)	0/19	292	0.23	C (25)	0/19
NBL	226	0.74	C (35)	37/58	**252**	**0.94**	**E (65)**	**45/97**	**252**	**0.94**	**E (67)**	**45/98**
NBT	529	0.72	D (42)	63/85	620	0.75	D (44)	77/99	626	0.76	D (44)	78/100
NBR	147	0.11	C (34)	0/17	147	0.11	C (34)	0/17	147	0.11	C (34)	0/17
SBL	201	0.68	C (33)	33/51	201	0.82	D (48)	34/63	205	0.83	D (50)	35/66
SBT	516	0.74	D (44)	63/83	597	0.80	D (48)	75/97	601	0.81	D (48)	76/98
SBR	145	0.11	C (35)	0/17	145	0.11	D (35)	0/17	145	0.11	D (35)	0/17

Existing Conditions: Under existing conditions, the intersection operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. During the PM peak hour, the EBL and WBT are deemed critical with V/Cs exceeding 0.85.

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. The NBL is added to the list of critical movements during the PM peak hour; this finding is attributable to background traffic growth. Signal optimization is recommended to improve intersection operations. After optimization, several capacity constraints remain, but no intersection modifications are recommended as these operating conditions are typical for a major arterial intersection during the weekday peak periods.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.2.5 Plains Road East & QEW SB On-Ramp / QEW SB Off-Ramp

The intersection capacity analysis results at Plains Road East & QEW SB On-Ramp / QEW SB Off-Ramp during the weekday AM and PM and peak hours are summarized in **Table 6-6**.

Table 6-6: Intersection Capacity Analysis - Plains Road East & QEW SB On-Ramp / QEW SB Off-Ramp

Mvmt	Existing (2026)				Future Background (2031)				Future Total (2031)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	A (9)	-/-	-	-	A (9)	-/-	-	-	A (9)	-/-
EBT	943	0.28	A (4)	21/30	962	0.29	A (5)	22/32	963	0.29	A (5)	22/32
EBR	196	0.15	A (4)	0/6	196	0.15	A (4)	0/6	196	0.15	A (4)	0/6
WBT	636	0.19	A (4)	13/19	686	0.21	A (4)	15/22	694	0.23	A (4)	15/23
SBL	163	0.52	D (43)	18/28	191	0.56	D (43)	21/32	195	0.57	D (43)	22/33
SBR	79	0.06	D (40)	0/14	79	0.06	D (39)	0/14	79	0.06	D (39)	0/14
PM Peak Hour												
Overall	-	-	B (18)	-/-	-	-	B (20)	-/-	-	-	C (20)	-/-
EBT	873	0.24	A (6)	27/33	905	0.25	A (6)	29/35	908	0.25	A (6)	29/35
EBR	328	0.23	A (6)	0/8	328	0.23	A (6)	0/8	328	0.23	A (7)	0/8
WBT	1387	0.38	A (9)	87/93	1473	0.41	A (10)	86/101	1480	0.44	B (10)	93/108
SBL	371	0.76	E (59)	51/68	440	0.85	E (64)	62/83	450	0.86	E (66)	64/88
SBR	236	0.80	E (71)	46/85	236	0.79	E (68)	49/91	236	0.78	E (67)	49/91

Existing Conditions: Under existing conditions, the intersection operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. The SBL is expected to experience reduced capacity and higher delays due to background traffic growth; no intersection modifications are recommended as overall operations remain acceptable.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.2.6 Fairview Street & Plains Road East & QEW NB Off-Ramp

The intersection capacity analysis results at Fairview Street & Plains Road East & QEW NB Off-Ramp during the weekday AM and PM and peak hours are summarized in **Table 6-7**.

Table 6-7: Intersection Capacity Analysis - Fairview Street & Plains Road East & QEW NB Off-Ramp

Mvmt	Existing (2026)				Future Background (2031)				Future Total (2031)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	C (20)	-/-	-	-	C (24)	-/-	-	-	C (25)	-/-
EBL	134	0.27	A (7)	9/20	183	0.37	A (8)	14/29	188	0.38	A (8)	15/30
EBT	863	0.26	A (7)	27/42	863	0.27	A (8)	29/44	863	0.27	A (8)	30/45
WBTR	653	0.24	B (12)	27/43	666	0.26	B (14)	30/49	666	0.27	B (15)	30/49
NBL	89	0.24	D (36)	17/29	89	0.21	C (34)	16/28	89	0.21	C (34)	16/28
NBT	165	0.77	D (51)	62/88	202	0.77	D (49)	68/95	204	0.77	D (49)	69/96
NBR	331	0.36	D (38)	15/39	331	0.37	D (36)	18/42	331	0.37	D (36)	18/42
SBL	1	0.01	C (34)	0/2	49	0.42	D (38)	10/22	49	0.42	D (38)	10/22
SBR	359	0.56	C (35)	35/56	519	0.84	D (47)	75/98	527	0.85	D (48)	77/100
PM Peak Hour												
Overall	-	-	C (32)	-/-	-	-	D (42)	-/-	-	-	D (43)	-/-
EBL	152	0.72	D (49)	27/46	**262**	**0.90**	**E (72)**	**55/93**	**276**	**0.91**	**E (75)**	**59/100**
EBT	1090	0.35	B (16)	55/38	1090	0.37	B (18)	56/68	1090	0.37	B (18)	55/67
WBTR	1931	0.77	C (30)	157/157	**1979**	**0.95**	**D (47)**	**192/230**	**1979**	**0.96**	**D (49)**	**192/230**
NBL	195	0.33	D (35)	39/67	195	0.30	C (32)	37/58	195	0.30	C (32)	37/58
NBT	192	0.51	D (38)	64/104	243	0.52	D (35)	69/102	248	0.53	D (36)	71/104
NBR	290	0.33	D (35)	25/56	290	0.40	C (34)	40/68	290	0.40	C (34)	40/68
SBL	6	0.02	C (32)	1/5	44	0.17	C (31)	8/19	44	0.18	C (31)	8/19
SBR	**591**	**0.92**	**E (57)**	**131/222**	**746**	**0.99**	**E (63)**	**168/256**	**753**	**0.99**	**E (63)**	**171/260**

Existing Conditions: Under existing conditions, the intersection operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. During the PM peak hour, the SBR is deemed critical with a V/C above 0.85.

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. The EBL and WBTR are deemed critical during the PM peak hour due to background traffic growth, and the SBR is expected to operate near capacity.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended, as this intersection is expected to operate at constrained but acceptable levels.

6.2.7 Brant Street & Hwy 403 EB Off-Ramp / QEW EB On-Ramp

The intersection capacity analysis results at Brant Street & Hwy 403 EB Off-Ramp / QEW EB On-Ramp during the weekday AM and PM and peak hours are summarized in **Table 6-8**.

Table 6-8: Intersection Capacity Analysis - Brant Street & Hwy 403 EB Off-Ramp / QEW EB On-Ramp

Mvmt	Existing (2026)				Future Background (2031)				Future Total (2031)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	B (11)	-/-	-	-	B (11)	-/-	-	-	B (11)	-/-
EBL	125	0.58	D (50)	25/42	125	0.58	D (50)	25/42	125	0.58	D (50)	25/42
EBR	174	0.22	D (45)	6/22	174	0.29	D (45)	9/25	178	0.31	D (46)	10/27
NBT	824	0.23	A (4)	17/26	892	0.24	A (4)	18/28	910	0.25	A (4)	19/29
NBR	345	0.25	A (4)	0/8	345	0.25	A (4)	0/8	361	0.27	A (5)	0/8
SBT	1095	0.30	A (9)	64/89	1180	0.32	A (9)	70/95	1186	0.32	A (9)	71/95
PM Peak Hour												
Overall	-	-	B (11)	-/-	-	-	B (11)	-/-	-	-	B (11)	-/-
EBL	203	0.67	E (58)	35/56	203	0.67	E (58)	35/56	203	0.68	E (58)	37/57
EBR	187	0.45	D (49)	19/39	187	0.50	D (50)	22/42	197	0.50	D (50)	23/43
NBT	1397	0.38	A (5)	39/58	1491	0.41	A (6)	43/64	1507	0.42	A (6)	44/66
NBR	458	0.33	A (6)	0/10	458	0.33	A (6)	0/10	472	0.34	A (6)	0/10
SBT	1293	0.36	A (6)	32/69	1387	0.38	A (7)	35/84	1402	0.39	A (7)	36/88

Existing Conditions: Under existing conditions, the intersection operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. No critical movements identified.

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. No critical movements identified.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.3 UNSIGNALIZED SITE ACCESS (2031)

The results for the unsignalized intersection under each traffic scenario during the weekday AM and PM peak hours for the 2031 horizon year are summarized in the section below.

6.3.1 Plains Road East & East Site Access

The intersection capacity analysis results at Plains Road East & East Site Access during the weekday AM and PM and peak hours are summarized in **Table 6-9**.

Table 6-9: Intersection Capacity Analysis - Plains Road East & East Site Access

AM	Existing (2026)				Future Background (2031)				Future Total (2031)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
NBLTR	3	0.01	B (14)	-/0	3	0.01	C (16)	-/0	66	0.18	C (16)	-/4
EBL	10	0.01	A (9)	-/0	10	0.01	A (9)	-/0	10	0.01	A (9)	-/0
EBT	583	0.00	(0)	-/0	684	0.00	(0)	-/0	684	0.00	(0)	-/0
EBR	5	0.00	(0)	-/0	5	0.00	(0)	-/0	13	0.00	(0)	-/0
WBL	9	0.01	A (9)	-/0	9	0.01	A (9)	-/0	26	0.03	A (9)	-/1
WBT	563	0.00	(0)	-/0	620	0.00	(0)	-/0	620	0.00	(0)	-/0
WBR	6	0.00	(0)	-/0	6	0.00	(0)	-/0	6	0.00	(0)	-/0
SBLTR	15	0.04	B (14)	-/1	15	0.04	C (15)	-/1	15	0.05	C (16)	-/1
PM Peak Hour												
NBLTR	**10**	**0.11**	**E (46)**	**-/2**	**10**	**0.13**	**F (57)**	**-/3**	**66**	**0.48**	**F (52)**	**-/16**
EBL	7	0.02	B (14)	-/1	7	0.02	C (15)	-/1	7	0.02	C (15)	-/1
EBT	706	0.00	(0)	-/0	766	0.00	(0)	-/0	766	0.00	(0)	-/0
EBR	6	0.00	(0)	-/0	6	0.00	(0)	-/0	27	0.00	(0)	-/0
WBL	4	0.01	A (9)	-/0	4	0.01	A (9)	-/0	47	0.06	A (10)	-/1
WBT	1509	0.00	(0)	-/0	1635	0.00	(0)	-/0	1635	0.00	(0)	-/0
WBR	11	0.00	(0)	-/0	11	0.00	(0)	-/0	11	0.00	(0)	-/0
SBLTR	19	0.14	D (34)	-/4	**19**	**0.17**	**E (43)**	**-/4**	**19**	**0.21**	**F (54)**	**-/6**

Future Total Conditions: Under future total conditions, outbound site traffic is expected to operate with some delays due to the limited number of gaps in east-west through traffic along Plains Road East, but the northbound movement is expected to maintain capacity. Due to the use of highly conservative study analysis parameters related to site trip generation, it is reasonable to conclude that actual intersection operations will be better than forecasted under this analysis. As a result, no intersection modifications are recommended.

6.3.2 Plains Road & Helena Street

The intersection capacity analysis results at Plains Road & Helena Street during the weekday AM and PM and peak hours are summarized in **Table 6-10**.

Table 6-10: Intersection Capacity Analysis - Plains Road & Helena Street

Mvmt	Existing 2026				Future Background 2036 Optimized				Future Total 2036 Optimized			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
EBL	22	0.03	A (9)	-/1	24	0.03	A (9)	-/1	24	0.03	A (9)	-/1
EBT	583	0.00	(0)	-/0	646	0.00	(0)	-/0	654	0.00	(0)	-/0
WBT	568	0.00	(0)	-/0	582	0.00	(0)	-/0	594	0.00	(0)	-/0
WBR	27	0.00	(0)	-/0	29	0.00	(0)	-/0	29	0.00	(0)	-/0
SBL	14	0.05	C (16)	-/1	20	0.07	C (17)	-/1	20	0.08	C (17)	-/1
SBR	32	0.06	B (11)	-/1	44	0.08	B (11)	-/2	44	0.08	B (11)	-/2
PM Peak Hour												
EBL	52	0.12	B (14)	-/3	61	0.14	B (15)	-/4	61	0.15	B (15)	-/4
EBT	728	0.00	(0)	-/0	746	0.00	(0)	-/0	767	0.00	(0)	-/0
WBT	1405	0.00	(0)	-/0	1457	0.00	(0)	-/0	1468	0.00	(0)	-/0
WBR	50	0.00	(0)	-/0	58	0.00	(0)	-/0	58	0.00	(0)	-/0
SBL	**12**	**0.09**	**E (35)**	**-/2**	**13**	**0.11**	**E (39)**	**-/3**	**13**	**0.11**	**E (40)**	**-/3**
SBR	45	0.13	C (16)	-/3	52	0.15	C (17)	-/4	52	0.16	C (18)	-/4

Existing Conditions: Under existing conditions, the intersection operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th percentile queues can be accommodated by their available storage lanes. No critical movements are identified except for the SBL during the PM peak hour, which experiences LOS E.

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.4 SIGNALIZED INTERSECTIONS (2036)

The results for the studied signalized intersections under each traffic scenario during the weekday AM and PM peak hours for the 2036 horizon year are summarized in the sections below.

6.4.1 Plains Road East & Brant Street

The intersection capacity analysis results at Plains Road East & Brant Street during the weekday AM and PM and peak hours are summarized in **Table 6-11**.

Table 6-11: Intersection Capacity Analysis - Plains Road East & Brant Street

Mvmt	Existing (2026)				Future Background (2036)				Future Total (2036)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	C (26)	-/-	-	-	C (28)	-/-	-	-	C (29)	-/-
EBL	358	0.71	D (40)	31/54	397	0.77	D (44)	37/68	431	0.81	D (46)	41/77
EBTR	284	0.66	C (34)	46/80	347	0.73	D (37)	60/99	364	0.75	D (37)	64/105
WBL	62	0.46	D (42)	11/26	62	0.48	D (44)	11/27	62	0.48	D (44)	11/27
WBT	136	0.26	C (33)	12/21	183	0.31	C (33)	16/27	185	0.31	C (34)	17/27
WBR	73	0.06	C (32)	0/6	73	0.06	C (32)	0/5	73	0.06	C (32)	0/5
NBL	31	0.12	B (18)	3/9	31	0.13	B (19)	3/10	36	0.15	B (20)	4/11
NBTR	733	0.46	C (24)	36/61	803	0.53	C (27)	44/71	803	0.54	C (28)	45/71
SBL	155	0.45	B (14)	14/33	155	0.50	B (16)	16/35	155	0.50	B (17)	16/35
SBT	777	0.40	B (20)	38/62	871	0.46	C (22)	47/74	871	0.47	C (23)	48/75
SBR	438	0.37	C (21)	5/36	451	0.43	C (23)	12/52	461	0.44	C (24)	12/54
PM Peak Hour												
Overall	-	-	D (42)	-/-	-	-	D (46)	-/-	-	-1	D (49)	-/-
EBL	519	0.83	D (54)	65/85	531	0.85	E (55)	66/87	561	0.87	E (58)	71/97
EBTR	255	0.43	C (30)	45/75	306	0.50	C (31)	57/92	321	0.52	C (31)	61/97
WBL	111	0.60	D (54)	27/45	111	0.61	E (55)	27/45	111	0.61	E (56)	27/45
WBT	**741**	**0.86**	**D (49)**	**92/118**	**841**	**0.93**	**E (58)**	**109/150**	**846**	**0.94**	**E (60)**	**111/151**
WBR	368	0.75	D (48)	57/105	368	0.73	D (46)	58/106	368	0.74	D (47)	59/107
NBL	48	0.22	C (25)	7/16	48	0.26	C (27)	7/16	60	0.33	C (28)	10/19
NBTR	953	0.63	D (36)	77/94	1058	0.72	D (39)	88/107	1058	0.73	D (40)	89/107
SBL	104	0.56	C (28)	17/30	104	0.66	D (36)	17/34	104	0.66	D (37)	17/35
SBT	783	0.49	C (32)	61/76	875	0.56	C (35)	70/86	875	0.57	D (35)	71/86
SBR	693	0.77	D (46)	51/141	721	0.85	E (55)	68/160	746	0.93	E (66)	85/178

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to the 2031 conditions. The WBT remains critical during the PM peak hour, but is expected to continue operating similarto 2031 conditions.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.4.2 Plains Road East & Maple Avenue

The intersection capacity analysis results at Plains Road East & Maple Avenue during the weekday AM and PM and peak hours are summarized in **Table 6-12.**

Table 6-12: Intersection Capacity Analysis - Plains Road East & Maple Avenue

Mvmt	Existing (2026)				Future Background (2036)				Future Total (2036)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	B (16)	-/-	-	-	B (17)	-/-	-	-	B (17)	-/-
EBTR	293	0.27	B (13)	8/28	417	0.40	B (16)	13/44	424	0.41	B (16)	14/45
WBL	247	0.28	B (14)	7/19	247	0.25	B (14)	7/19	252	0.26	B (14)	8/19
WBT	353	0.67	B (19)	24/61	420	0.72	C (20)	30/75	428	0.73	C (20)	30/76
NBL	7	0.23	C (29)	1/4	16	0.52	D (40)	1/8	16	0.52	D (40)	1/8
NBR	329	0.45	B (15)	15/31	329	0.48	B (15)	20/36	330	0.48	B (14)	20/36
PM Peak Hour												
Overall	-	-	B (18)	-/-	-	-	C (22)	-/-	-	-	C (23)	-/-
EBTR	371	0.47	C (25)	20/52	473	0.76	D (41)	48/77	491	0.80	D (43)	50/82
WBL	877	0.63	B (15)	36/78	877	0.58	B (16)	60/85	881	0.58	B (15)	60/86
WBT	573	0.73	B (19)	49/119	698	0.82	C (24)	112/196	705	0.82	C (24)	114/199
NBL	24	0.46	D (40)	3/13	65	0.49	D (41)	13/26	65	0.49	D (41)	13/26
NBR	426	0.51	B (13)	31/50	426	0.46	B (10)	33/52	429	0.46	B (10)	34/52

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to the 2031 conditions.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.4.3 Brant Street & QEW WB Off-Ramp/WB On-Ramp & Retail Access

The intersection capacity analysis results at Brant Street & QEW WB Off-Ramp/WB On-Ramp & Retail Access during the weekday AM and PM and peak hours are summarized in **Table 6-13**.

Table 6-13: Intersection Capacity Analysis - Brant St & QEW WB Off-Ramp/WB On-Ramp & Retail Access

Mvmt	Existing (2026)				Future Background (2036)				Future Total (2036)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	C (23)	-/-	-	-	C (24)	-/-	-	-	C (24)	-/-
WBL	292	0.47	D (37)	35/50	336	0.53	D (37)	41/58	340	0.54	D (37)	41/58
WBT	14	0.45	D (36)	35/50	14	0.50	D (37)	40/57	14	0.51	D (37)	41/57
WBR	347	0.83	D (54)	59/85	347	0.83	D (54)	61/88	347	0.83	D (54)	61/88
NBL	28	0.20	B (16)	3/10	28	0.21	B (17)	4/10	28	0.21	B (17)	4/10
NBT	784	0.28	B (13)	41/57	818	0.29	B (14)	45/60	820	0.29	B (14)	45/61
NBR	146	0.12	C (31)	0/19	181	0.14	D (36)	0/23	198	0.16	D (37)	0/24
SBTR	1434	0.58	B (16)	90/122	1479	0.60	B (17)	96/128	1481	0.61	B (17)	96/128
PM Peak Hour												
Overall	-	-	B (11)	-/-	-	-	B (12)	-/-	-	-	B (13)	-/-
WBL	115	0.45	D (54)	16/31	160	0.54	D (55)	22/39	171	0.55	E (55)	23/40
WBT	12	0.46	D (54)	16/31	12	0.53	D (55)	22/39	12	0.56	E (55)	24/41
WBR	88	0.24	D (52)	6/22	88	0.22	D (50)	6/22	88	0.21	D (50)	6/22
NBL	74	0.40	A (8)	6/9	74	0.42	A (9)	6/10	74	0.42	A (8)	6/10
NBT	1376	0.34	A (6)	51/67	1426	0.36	A (6)	57/75	1427	0.36	A (6)	57/76
NBR	313	0.22	B (20)	14/33	364	0.25	C (25)	18/42	379	0.26	C (26)	20/44
SBTR	1858	0.52	A (8)	70/99	1903	0.54	A (9)	77/110	1907	0.55	A (9)	78/112

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to the 2031 conditions.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.4.4 Brant Street & Fairview Street

The intersection capacity analysis results at Brant Street & Fairview Street during the weekday AM and PM and peak hours are summarized in **Table 6-14**.

Table 6-14: Intersection Capacity Analysis - Brant Street & Fairview Street

Mvmt	Existing (2026)				Future Background (2036)				Future Total (2036)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	C (26)	-/-	-	-	C (27)	-/-	-	-	C (28)	-/-
EBL	250	0.55	B (17)	25/53	250	0.55	B (18)	27/54	250	0.55	B (18)	27/54
EBT	642	0.70	C (28)	49/80	692	0.72	C (30)	56/87	692	0.72	C (30)	56/87
EBR	152	0.11	C (22)	0/14	177	0.12	C (23)	0/15	177	0.12	C (23)	0/15
WBL	137	0.50	C (22)	13/30	137	0.53	C (23)	14/30	137	0.53	C (23)	14/30
WBT	302	0.43	C (27)	22/40	315	0.42	C (28)	24/42	315	0.42	C (28)	25/42
WBR	148	0.11	C (25)	0/15	148	0.11	C (26)	0/14	150	0.11	C (26)	0/15
NBL	153	0.43	B (19)	14/31	162	0.50	B (20)	16/34	162	0.50	B (20)	16/34
NBT	531	0.65	C (29)	41/69	600	0.71	C (32)	49/80	603	0.71	C (32)	50/81
NBR	174	0.12	C (24)	0/16	174	0.12	C (25)	0/17	174	0.12	C (25)	0/17
SBL	162	0.47	B (19)	15/33	162	0.51	C (20)	16/34	166	0.53	C (21)	17/35
SBT	512	0.63	C (29)	39/66	601	0.71	C (32)	49/80	606	0.71	C (32)	50/81
SBR	41	0.03	C (24)	0/0	41	0.03	C (25)	0/0	41	0.03	C (25)	0/0
PM Peak Hour												
Overall	-	-	D (37)	-/-	-	-	D (42)	-/-	-	-	D (42)	-/-
EBL	**184**	**0.95**	**E (74)**	**28/85**	**184**	**0.94**	**E (73)**	**30/81**	**184**	**0.94**	**E (73)**	**31/81**
EBT	611	0.55	C (30)	64/92	648	0.55	C (30)	70/94	648	0.55	C (31)	70/94
EBR	255	0.18	C (26)	0/20	281	0.20	C (26)	0/20	281	0.20	C (26)	0/20
WBL	205	0.58	B (20)	27/48	205	0.61	C (22)	28/45	205	0.61	C (22)	28/45
WBT	**1094**	**0.89**	**D (40)**	**129/186**	**1145**	**0.92**	**D (44)**	**143/192**	**1145**	**0.92**	**D (45)**	**143/192**
WBR	287	0.22	C (24)	0/20	287	0.22	C (25)	0/19	292	0.23	C (25)	0/19
NBL	226	0.74	C (35)	37/58	**252**	**0.95**	**E (68)**	**45/99**	**252**	**0.95**	**E (68)**	**45/99**
NBT	529	0.72	D (42)	63/85	630	0.76	D (44)	79/101	636	0.77	D (44)	79/101
NBR	147	0.11	C (34)	0/17	147	0.11	C (34)	0/17	147	0.11	C (34)	0/17
SBL	201	0.68	C (33)	33/51	201	0.82	D (49)	34/64	205	0.84	D (51)	35/68
SBT	516	0.74	D (44)	63/83	606	0.81	D (48)	77/99	610	0.81	D (48)	78/99
SBR	145	0.11	C (35)	0/17	145	0.11	D (35)	0/17	145	0.11	D (35)	0/17

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to the 2031 conditions. No new constraints are predicted, as all critical movements are expected to operate similar to 2031 conditions.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions.

6.4.5 Plains Road East & QEW SB On-Ramp / QEW SB Off-Ramp

The intersection capacity analysis results at Plains Road East & QEW SB On-Ramp / QEW SB Off-Ramp during the weekday AM and PM and peak hours are summarized in **Table 6-15.**

Table 6-15: Intersection Capacity Analysis - Plains Road East & QEW SB On-Ramp / QEW SB Off-Ramp

Mvmt	Existing (2026)				Future Background (2036)				Future Total (2036)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	A (9)	-/-	-	-	A (9)	-/-	-	-	A (9)	-/-
EBT	943	0.28	A (4)	21/30	963	0.29	A (5)	22/32	964	0.29	A (5)	22/32
EBR	196	0.15	A (4)	0/6	196	0.15	A (4)	0/6	196	0.15	A (4)	0/6
WBT	636	0.19	A (4)	13/19	690	0.21	A (4)	15/22	698	0.23	A (4)	15/23
SBL	163	0.52	D (43)	18/28	193	0.56	D (43)	22/32	197	0.57	D (44)	22/33
SBR	79	0.06	D (40)	0/14	79	0.06	D (39)	0/14	79	0.06	D (39)	0/14
PM Peak Hour												
Overall	-	-	B (18)	-/-	-	-	B (20)	-/-	-	-	C (20)	-/-
EBT	873	0.24	A (6)	27/33	907	0.25	A (6)	29/35	910	0.26	A (6)	29/35
EBR	328	0.23	A (6)	0/8	328	0.23	A (7)	0/8	328	0.23	A (7)	0/8
WBT	1387	0.38	A (9)	87/93	1479	0.41	A (10)	86/101	1486	0.45	B (10)	93/109
SBL	371	0.76	E (59)	51/68	442	0.85	E (64)	62/83	452	0.86	E (66)	64/89
SBR	236	0.80	E (71)	46/85	236	0.79	E (67)	49/91	236	0.78	E (67)	49/92

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to the 2031 conditions.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.4.6 Fairview Street & Plains Road East & QEW NB Off-Ramp

The intersection capacity analysis results at Fairview Street & Plains Road East & QEW NB Off-Ramp during the weekday AM and PM and peak hours are summarized in **Table 6-16**.

Table 6-16: Intersection Capacity Analysis - Fairview Street & Plains Road East & QEW NB Off-Ramp

Mvmt	Existing (2026)				Future Background (2036)				Future Total (2036)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	C (20)	-/-	-	-	C (24)	-/-	-	-	C (25)	-/-
EBL	134	0.27	A (7)	9/20	186	0.38	A (8)	15/29	191	0.39	A (8)	15/30
EBT	863	0.26	A (7)	27/42	863	0.27	A (8)	29/44	863	0.27	A (8)	30/45
WBTR	653	0.24	B (12)	27/43	666	0.26	B (14)	30/49	666	0.27	B (15)	30/49
NBL	89	0.24	D (36)	17/29	89	0.21	C (34)	16/28	89	0.21	C (34)	16/28
NBT	165	0.77	D (51)	62/88	202	0.77	D (49)	68/95	204	0.77	D (49)	69/96
NBR	331	0.36	D (38)	15/39	331	0.37	D (36)	18/42	331	0.37	D (36)	18/42
SBL	1	0.01	C (34)	0/2	49	0.42	D (38)	10/22	49	0.42	D (38)	10/22
SBR	359	0.56	C (35)	35/56	523	0.85	D (47)	76/99	531	0.86	D (49)	78/101
PM Peak Hour												
Overall	-	-	C (32)	-/-	-	-	D (43)	-/-	-	-	D (44)	-/-
EBL	152	0.72	D (49)	27/46	266	0.90	E (72)	56/96	280	0.92	E (76)	60/102
EBT	1090	0.35	B (16)	55/38	1090	0.37	B (18)	55/68	1090	0.37	B (18)	55/67
WBTR	1931	0.77	C (30)	157/157	1979	0.95	D (48)	192/230	1979	0.96	D (50)	192/230
NBL	195	0.33	D (35)	39/67	195	0.30	C (32)	37/58	195	0.30	C (32)	37/58
NBT	192	0.51	D (38)	64/104	243	0.52	D (36)	69/102	248	0.53	D (36)	71/104
NBR	290	0.33	D (35)	25/56	290	0.40	C (34)	40/68	290	0.40	C (34)	40/68
SBL	6	0.02	C (32)	1/5	44	0.17	C (31)	8/19	44	0.18	C (31)	8/19
SBR	591	0.92	E (57)	131/222	752	0.99	E (65)	170/259	759	0.99	E (65)	173/263

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to the 2031 conditions. No new constraints are predicted, as all critical movements are expected to operate similar to 2031 conditions.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions.

6.4.7 Brant Street & Hwy 403 EB Off-Ramp / QEW EB On-Ramp

The intersection capacity analysis results at Brant Street & Hwy 403 EB Off-Ramp / QEW EB On-Ramp during the weekday AM and PM and peak hours are summarized in **Table 6-17**.

Table 6-17: Intersection Capacity Analysis - Brant Street & Hwy 403 EB Off-Ramp / QEW EB On-Ramp

Mvmt	Existing (2026)				Future Background (2036)				Future Total (2036)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	B (11)	-/-	-	-	B (11)	-/-	-	-	B (11)	-/-
EBL	125	0.58	D (50)	25/42	125	0.58	D (50)	25/42	125	0.58	D (50)	25/42
EBR	174	0.22	D (45)	6/22	174	0.30	D (46)	9/25	178	0.32	D (46)	10/27
NBT	824	0.23	A (4)	17/26	898	0.25	A (4)	18/29	916	0.25	A (4)	19/29
NBR	345	0.25	A (4)	0/8	345	0.25	A (4)	0/8	361	0.27	A (5)	0/8
SBT	1095	0.30	A (9)	64/89	1188	0.32	A (9)	71/95	1194	0.33	A (9)	72/96
PM Peak Hour												
Overall	-	-	B (11)	-/-	-	-	B (11)	-/-	-	-	B (11)	-/-
EBL	203	0.67	E (58)	35/56	203	0.67	E (58)	35/56	203	0.68	E (58)	37/57
EBR	187	0.45	D (49)	19/39	187	0.50	D (50)	22/42	197	0.51	D (50)	23/43
NBT	1397	0.38	A (5)	39/58	1501	0.41	A (6)	43/64	1517	0.42	A (6)	45/67
NBR	458	0.33	A (6)	0/10	458	0.33	A (6)	0/10	472	0.34	A (6)	0/10
SBT	1293	0.36	A (6)	32/69	1396	0.38	A (7)	35/86	1411	0.39	A (7)	36/89

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to the 2031 conditions.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

6.5 UNSIGNALIZED SITE ACCESS (2036)

The results for the unsignalized intersection under each traffic scenario during the weekday AM and PM peak hours for the 2036 horizon year are summarized in the section below.

6.5.1 Plains Road East & East Site Access

The intersection capacity analysis results at Plains Road East & East Site Access during the weekday AM and PM and peak hours are summarized in **Table 6-18**.

Table 6-18: Intersection Capacity Analysis - Plains Road East & East Site Access

Mvmt	Existing (2026)				Future Background (2036)				Future Total (2036)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
NBLTR	3	0.01	B (14)	-/0	3	0.01	C (16)	-/0	66	0.18	C (16)	-/0
EBL	10	0.01	A (9)	-/0	10	0.01	A (9)	-/0	10	0.01	A (9)	-/0
EBT	583	0.00	(0)	-/0	684	0.00	(0)	-/0	684	0.00	(0)	-/0
EBR	5	0.00	(0)	-/0	5	0.00	(0)	-/0	13	0.00	(0)	-/0
WBL	9	0.01	A (9)	-/0	9	0.03	A (9)	-/1	26	0.03	A (9)	-/0
WBT	563	0.00	(0)	-/0	620	0.00	(0)	-/0	620	0.00	(0)	-/0
WBR	6	0.00	(0)	-/0	6	0.00	(0)	-/0	6	0.00	(0)	-/0
SBLTR	15	0.04	B (14)	-/1	15	0.04	C (16)	-/1	15	0.05	C (16)	-/1
PM Peak Hour												
NBLTR	**10**	**0.11**	**E (46)**	**-/2**	**10**	**0.13**	**F (57)**	**-/1**	**66**	**0.48**	**F (52)**	**-/2**
EBL	7	0.02	B (14)	-/1	7	0.02	C (15)	-/1	7	0.02	C (15)	-/0
EBT	706	0.00	(0)	-/0	766	0.00	(0)	-/0	766	0.00	(0)	-/0
EBR	6	0.00	(0)	-/0	6	0.00	(0)	-/0	27	0.00	(0)	-/0
WBL	4	0.01	A (9)	-/0	4	0.01	A (9)	-/1	47	0.06	A (10)	-/0
WBT	1509	0.00	(0)	-/0	1635	0.00	(0)	-/0	1635	0.00	(0)	-/0
WBR	11	0.00	(0)	-/0	11	0.00	(0)	-/0	11	0.00	(0)	-/0
SBLTR	19	0.14	D (34)	-/4	**19**	**0.17**	**E (43)**	**-/1**	**19**	**0.21**	**F (54)**	**-/1**

Future Total Conditions: Under future total conditions, site traffic is expected to maintain capacity and no intersection modifications are recommended. Although higher delays are noted for the outbound movement, intersection operations should be considered given the applied site trip generation assumptions.

6.5.2 Plains Road & Helena Street

The intersection capacity analysis results at Plains Road & Helena Street during the weekday AM and PM and peak hours are summarized in **Table 6-19**.

Table 6-19: Intersection Capacity Analysis - Plains Road & Helena Street

Mvmt	Existing (2026)				Future Background (2036)				Future Total (2036)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
EBL	22	0.03	A (9)	-/1	24	0.03	A (9)	-/1	24	0.03	A (9)	-/1
EBT	583	0.00	(0)	-/0	654	0.00	(0)	-/0	646	0.00	(0)	-/0
WBT	568	0.00	(0)	-/0	594	0.00	(0)	-/0	582	0.00	(0)	-/0
WBR	27	0.00	(0)	-/0	29	0.00	(0)	-/0	29	0.00	(0)	-/0
SBL	14	0.05	C (16)	-/1	20	0.08	C (17)	-/1	20	0.07	C (17)	-/1
SBR	32	0.06	B (11)	-/1	44	0.08	B (11)	-/2	44	0.08	B (11)	-/2
PM Peak Hour												
EBL	52	0.12	B (14)	-/3	61	0.15	B (15)	-/4	61	0.14	B (15)	-/4
EBT	728	0.00	(0)	-/0	767	0.00	(0)	-/0	746	0.00	(0)	-/0
WBT	1405	0.00	(0)	-/0	1468	0.00	(0)	-/0	1457	0.00	(0)	-/0
WBR	50	0.00	(0)	-/0	58	0.00	(0)	-/0	58	0.00	(0)	-/0
SBL	**12**	**0.09**	**E (35)**	**-/2**	**13**	**0.11**	**E (40)**	**-/3**	**13**	**0.11**	**E (39)**	**-/3**
SBR	45	0.13	C (16)	-/3	52	0.16	C (18)	-/4	52	0.15	C (17)	-/4

Future Background Conditions: Under future background conditions, the intersection is expected to generally operate similar to the 2031 conditions.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No intersection modifications are recommended.

7 MULTI-MODAL ANALYSIS

As per the City of Burlington's TOR response, a multimodal level of service analysis (MMLOS) was conducted. This analysis is a qualitative review of the infrastructure available to transit, pedestrian and bicycle modes. It reflects the convenience and comfort experienced by each travel mode and factors in various elements including exposure to street traffic, operating speed, facilities widths and general road network elements. The MMLOS guidelines follow the Ontario Traffic Council Multi-Modal Level of Service Guidelines (August 2022).

The MMLOS analysis was conducted for the following intersections and roadway segments included in the study area. The City of Burlington provided street classifications and target LOS values for each mode in their TOR response. The following table shows the results of the MMLOS evaluation.

Table 7-1: MMLOS Results and Targets

Street Name	Street Type	LOS Per Mode Type				
		Pedestrian	Bikes	Transit	Trucks	Cars
Plains Road E	Neighbourhood Main Street	C	C	D	D	D
	Adjusted Targets	B	C	D	D	D
	Actual	**F**	**None**	**E**	**C**	**C**
Brant Street / Fairview Street	Urban Main Street	C	C	D	D	D
	Adjusted Targets	B	B	C	C	D
	Actual	**D**	**F**	**E**	**A**	**B**
Brant Street / Plains Rd E Street	Urban Main Street	C	C	D	D	D
	Adjusted Targets	B	B	C	C	D
	Actual	**D**	**F**	**E**	**A**	**B**
Site Access & Plains Road E	Neighbourhood Main Street	C	C	D	D	D
	Adjusted Targets	B	B	C	C	D
	Actual	**F**	**None**	**C**	**A**	**A**

7.1 TRANSIT ASSESSMENT

The Ontario Traffic Council results for each section are provided below:

- **Plains Road East segment:** The segment along Plains Road East from Brant Street to the rail corridor operates below the target TLOS. Enhancing pedestrian amenities, including shelters, seating, and shade trees, would help improve overall conditions.
- **Brant Street & Plains Road East intersection:** The TLOS at the intersection operates below the target TLOS. The lower TLOS may be attributed to moderate transit movement delays. Transit priority measures such as dedicated transit lanes or transit signal priority should be considered to improve the TLOS.
- **Brant Street & Fairview Street:** The TLOS at the intersection operates below the target TLOS. The lower TLOS may be attributed to moderate transit movement delays. Transit priority measures such as dedicated transit lanes or transit signal priority could be provided to improve the TLOS.

7.2 PEDESTRIAN ASSESSMENT

The Ontario Traffic Council results for each section are provided below:

- **Plains Road East segment:** The segment along Plains Rd E operates below the target PLOS. Although basic pedestrian infrastructure such as sidewalks are available, the long spacing between controlled crossings and the lack of buffer between the sidewalk and road contribute to the lower PLOS. Enhancing pedestrian amenities and infrastructure would help improve overall conditions.
- **Brant Street & Plains Road East intersection:** The available pedestrian amenities are minimal and does not meet the target PLOS. This assessment is provided given the presence of some enhanced pedestrian measures, elongated vehicle turning radius and rather lengthy intersection cycle length.
- **Plains Rd East & Fairview Street intersection:** The available pedestrian amenities are minimal and do not meet the target PLOS. In particular, the channelized right turns and associated large turning radii, as well as rather lengthy intersection cycle length create additional delay for pedestrians.
- **Site Access & Plains Road East intersection**: The existing driveway has a wide cross section and large turning radii, causing the PLOS to be below the target.

7.3 CYCLING ASSESSMENT

The Ontario Traffic Council results for each section are provided below:

- **Plains Road East segment**: No cycling infrastructure is available along the segment of Plains Rd East.
- **Brant Street & Plains Road East intersection:** The BLOS at the intersection operates below the target BLOS, primarily due to extended signal cycle lengths and numerous uncontrolled conflicts. Providing enhanced bicycle facilities, including crossrides and bicycle storage, would help improve conditions.
- **Brant Street & Fairview Street intersection:** The BLOS at the intersection operates below the target BLOS, primarily due to extended signal cycle lengths and numerous uncontrolled conflicts. Providing enhanced bicycle facilities, including crossrides and bicycle storage, would help improve conditions.
- **Site Access & Plains Road East intersection:** No cycling infrastructure is available.

7.4 TRUCK ASSESSMENT

The Ontario Traffic Council results for each section are provided below:

- **Plains Road East segment:** Good levels of service are available and meet the target LOS.
- **Brant Street & Plains Road East intersection:** Good levels of service are available for truck operations as judged by somewhat generous right turning radii and moderate conflicts presented by car traffic. LOS is acceptable.
- **Brant Street & Fairview Street intersection:** Good levels of service are available for truck operations as judged by somewhat generous right turning radii and moderate conflicts presented by car traffic. LOS is acceptable.
- **Site Access & Plains Road East intersection:** Good levels of service are available for truck operations as judged by somewhat generous right turning radii and moderate conflicts presented by car traffic. LOS is acceptable.

7.5 CAR ASSESSMENT

The Ontario Traffic Council results for each section are provided below:

- **Plains Road East segment**: Good levels of service are available and meet the target LOS.
- **Brant Street & Plains Road East intersection**: Good levels of service occur due to all movements having dedicated turn lanes and a signal cycle length that service all movements well. LOS is acceptable.
- **Brant Street & Fairview Street intersection**: Good levels of service occur due to all movements having dedicated turn lanes and a signal cycle length that service all movements well. LOS is acceptable.
- **Site Access & Plains Road East intersections**: Good levels of service are available and meet the goal LOS.

8 PARKING ASSESSMENT

The following section reviews the parking standards for the proposed redevelopment based on the current zoning by-law requirements applicable to the subject site.

8.1 ZONING BY-LAW REQUIREMENTS – BICYCLE PARKING

There are no bicycle parking requirements for residential developments under the City of Burlington Zoning By-law 2020. However, to support the vehicle parking strategy, bicycle parking will be provided at the rates specified in the Burlington City-wide Parking Standards Review:

- 0.50 long-term bike parking spaces per residential unit
- 0.05 short-term bike parking spaces per residential unit.

This corresponds to a proposed bicycle parking supply of 142 long-term and 17 short-term bike parking spaces (incl. 3 retail spaces), for a total of 159 bicycling parking spaces.

8.2 ZONING BY-LAW REQUIREMENTS – VEHICLE PARKING

Given the subject site's location within the Downtown Burlington UGC/Burlington GO MTSA, no minimum parking requirements apply in accordance with the Province of Ontario's Bill 185. Notwithstanding this, the proposed development includes a total of 56 vehicular parking spaces, which includes a provision for visitor parking.

Table 8-1 details the applicable parking requirements and proposed supply for the subject site.

Table 8-1: Zoning By-law 2020 Vehicular Parking Requirements

Land Use	Units/GFA	ZBL 2020		Proposed Development	
		Minimum Parking Rate	Required Spaces	Proposed Supply	Proposed Rate
Residential	283 units	N/A (1)	N/A	45 spaces	0.15 sp./unit
Visitor				11 spaces	0.045 sp./unit
Retail	400m^2			0 spaces	-
		Total	**0 spaces**	**56 spaces**	**0.20 sp./unit**

Note: (1) – Due to the site's location within the Burlington GO MTSA

The proposed development will provide 45 residential spaces and 11 visitor spaces for a total of 56 parking spaces (0.20 sp./unit). Additional supporting justification for the proposed vehicle parking supply is provided in **Section 9.**

8.2.1 Accessible Parking Review

Two (2) accessible parking spaces are proposed on-site. The number of aaccessible parking spaces has been provided in accordance with the Zoning By-law 2020 standards, based on the total number of spaces supplied.

The number of accessible parking spaces required is summarized in **Table 8-2**.

Table 8-2: Zoning By-law 2020 Accessible Parking Requirements

Total Parking Provided	Minimum Parking Rate	Required Accessible Parking	Proposed Supply
56	3% of required parking	2 spaces	2 Type A

Given the surrounding transportation environment discussed in **Section 2**, including the availability of fully accessible surface transit services, future residents or visitors will have many transportation options that do not require the use of a personal vehicle. As a result, the proposed accessible parking supply should be considered appropriate.

9 PARKING JUSTIFICATION

The proposed development will provide 56 parking spaces (0.20 spaces per unit), a supply that reflects the subject site's location within an MTSA and its access to higher-order transit and active transportation infrastructure. With no minimum parking requirements applicable, the proposed supply is considered appropriate and supports Provincial and Municipal objectives to reduce auto dependency in transit-supportive areas.

A comprehensive Transportation Demand Management (TDM) strategy will further support travel by transit, walking, and cycling. Based on the above, the proposed parking supply is appropriate.

The following subsections will provide justification for the proposed residential parking rate.

9.1 EXISTING & FUTURE TRANSPORTATION CONTEXT

9.1.1 Opportunities for Transit Users

The subject site has convenient access to the transit network provided by Burlington Transit. The site is serviced by local bus routes along Brant Street including Route 2 – Brant, Route 12 – Upper Middle, and Route 87 – Harvester/North Service (Aldershot). Notably, Route 2 provides frequent transit service (15 minutes during weekday daytime) connecting the subject site to Burlington GO station (approximately 1.5km southeast) and Burlington's Downtown. The southbound bus stop for these routes is located approximately 300m (a 4-minute walk) east of the subject site at the intersection of Plains Road East and Brant Street. As per the City of Burlington Integrated Mobility Plan (September 2023), Plains Road East (east of Maple Avenue) and Maple Avenue (north of Fairview Street) are identified as Transit Support Corridors. In addition, Brant Street (north of Fairview Street) is identified as a Candidate Frequent Transit Corridor and a Major Transit Station Area (MTSA) Primary Connector to provide direct transit connections between MTSAs and have a strong pedestrian environment.

Furthermore, the subject site is located within a 14-minute bus ride or 19-minute walk of the Burlington GO station providing connections to the Lakeshore West GO rail line and several GO bus routes including GO Route 12 – Niagara Falls/Toronto. The proximity of the subject site to the Burlington GO station provides good access to destinations throughout the City of Burlington and Halton Region. Corridor improvements are planned along the Lakeshore West GO line between Union Station and Burlington Station for electrification and 15-minute or better service. New hourly service to and from Hamilton seven days a week is also planned as part of Metrolinx's GO expansion project. These future transit initiatives will further improve transit access to/from the proposed development.

9.1.2 Opportunities for Active Transportation Users

The area in which the subject site is situated is walkable, with continuous sidewalks on both sides of Plains Road East, Brant Street, and Maple Avenue. Pedestrian crosswalks are also available at all signalized intersections surrounding the subject site. These sidewalks provide supporting pedestrian infrastructure to reach nearby transit stops.

Within the study area, bike lanes are provided along Brant Street and Maple Avenue. Additionally, the site benefits from a mixed-use path (bike lane and sharrows) along Plain Road East, east of the Brant street intersection. These cycling facilities also provide connections to nearby multi-use trails for recreational travel.

9.2 POLICY REVIEW

There are a number of key Provincial and City policy documents and initiatives providing overarching direction as it relates to the provision of vehicular parking, particularly within transit accessible areas. The subject site has convenient access to local and regional transit services and is situated on a candidate frequent transit corridor. The following section describes the relevant policies as it relates to reducing vehicular parking and increasing other modes of transportation.

9.2.1 Provincial Planning Statement (2024)

The Provincial Planning Statement (PPS) 2024 is a streamlined province-wide land use planning policy framework which came into effect on October 20, 2024 and replaces both the Provincial Policy Statement, 2020 and A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019.

Under Section 3 of the Planning Act, all decisions affecting land use planning matters "shall be consistent with" the PPS. Key transportation-related policies promote land use patterns that:

- Efficiently use land and resources;
- Support active transportation;
- Are transit-supportive, as appropriate

Section 3.2.2 further encourages the efficient use of existing and planned infrastructure through transportation demand management strategies, where feasible. **Section 2.4.1.2** directs planning authorities to support complete communities and plan strategic growth areas to accommodate and support transit networks.

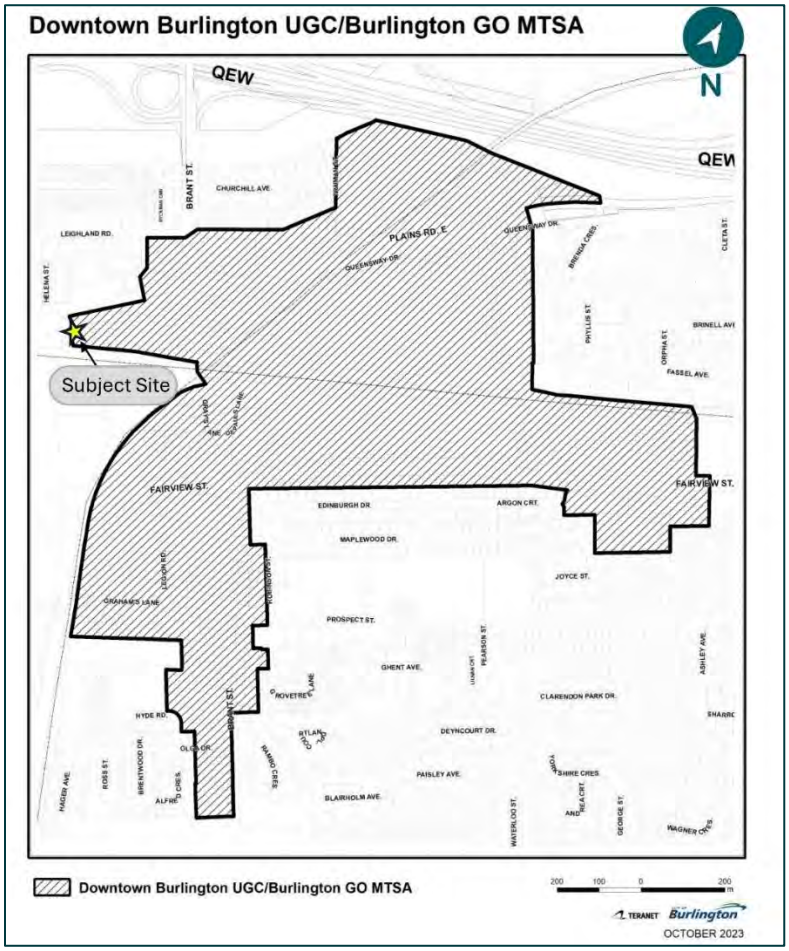
The proposed parking supply will promote the efficient use of the existing transit and active transportation network that surrounds the subject site, situating future residents in an area where they can travel without requiring the use of a personal vehicle. The provision of a limited supply of parking will ensure that future households are largely compatible with a lifestyle that does not require the daily use of a personal vehicle, helping to foster a transit-supportive neighbourhood that will enable future investments such as frequent transit on nearby streets.

9.2.2 Bill 185: Changes to the Ontario Planning Act (1990)

On June 6, 2024, Bill 185 received royal assent to amend the Planning Act to add Section 16 and to further amend Section 34 of the PEA to remove a municipality's ability to require minimum vehicular parking (except for bicycle parking) in Major Transit Station Areas.

As per the City of Burlington's Official Plan, MTSAs are the area including and around any existing or planned higher order transit station and are generally defined as the area within an approximate 500m to 800m radius of a transit station. As illustrated in **Figure 9-1**, the subject site is located within the Downtown Burlington UGC/Burlington GO MTSA. The parking policy direction from Bill 185 is therefore applicable to the subject site, as it directs municipalities to eliminate the overprovision of vehicle parking in areas near higher order transit.

Figure 9-1: Downtown Burlington UGC/Burlington GO MTSA



Source: City of Burlington By-law 45-2024 (Council Adopted) (June 2024)

9.2.3 City of Burlington Official Plan (2020)

The City of Burlington Official Plan is a policy document that guides decision-making on land use, development, and resource management. *Chapter 6.2* outlines the policy direction related to multimodal transportation and integrating mobility with land use to improve the quality of life in the City. The Official Plan notes that in order for the City of Burlington to grow successfully, it must be a walking-friendly city, a bike-friendly city, and a city designed and built with supporting public transit. These modes should be attractive choices in place of the automobile.

Notably, objective *6.2.1(1) I)* is to recognize parking management as a critical tool to influence travel mode choice which in turn will affect housing costs and shape the public realm. The City's Official Plan also recognizes the importance of a Transportation Demand Management (TDM) Plan and will consider reducing parking requirements for developments where a comprehensive TDM Plan is submitted and implemented.

The proposed parking supply, along with the comprehensive TDM Plan discussed in **Section 0**, supports the objectives in the Official Plan and will help prioritize transit and active modes in a planned growth area.

9.3 OVERALL SUMMARY

The proposed development will provide 45 residential spaces and 11 visitor spaces, for a total of 56 parking spaces (0.20 spaces per unit). As the site is located within the Downtown Burlington UGC/Burlington GO MTSA, no minimum vehicular parking requirements apply. The parking strategy reflects Provincial direction under Bill 185 to support transit-oriented development and reduce auto dependency in areas served by higher-order transit.

The proposed parking supply aligns with the transportation and parking objectives of both the Province and the City of Burlington. This strategy will be supported by a robust Transportation Demand Management (TDM) Plan that enhances the convenience and attractiveness of travel by transit, cycling, and walking. Based on the above, it is our professional opinion that the proposed vehicle parking supply is appropriate and should be supported.

10 LOADING ASSESSMENT

According to Zoning By-law 2020 Section 2.25.3, at least one (1) off-street loading space shall be provided in conjunction with every principal building, including mixed-use buildings. The proposed development will provide one (1) loading space, satisfying the zoning by-law requirements.

A review of the functionality and accessibility of the proposed loading space was completed to determine that the proposed loading space can be accessed and egressed by the appropriate vehicles. In addition, the functionality and alignment of the site access on Plains Road East has been reviewed.

Swept path diagrams demonstrating vehicular and loading functionality are provided in **Appendix H**.

11 TRANSPORTATION DEMAND MANAGEMENT PLAN

Transportation Demand Management (TDM) is a set of strategies that strive towards a more efficient transportation network by influencing travel behaviour. Effective TDM measures can reduce vehicle usage and encourage people to engage in more sustainable methods of travel. There are several opportunities to incorporate TDM measures that support alternative modes of transportation. The recommendations should enhance non-single occupant vehicle trips for the future residents of the proposed development. In an effort to reduce single occupancy auto vehicle trips generated, a variety of multimodal infrastructure strategies and TDM measures have been detailed below.

11.1 PEDESTRIAN-BASED STRATEGIES

On-Site Pedestrian Infrastructure and Connection to Public Sidewalk Network

The proposed development will implement a pedestrian-friendly design through adequate lighting and landscaping near the building entrance. The lobby and main entrance to the building are positioned facing Plains Road East for easy access to the public sidewalk network. This approach will provide a convenient connection to nearby transit stops (at the intersection of Plains Road East and Brant Street) and surrounding neighbourhood amenities. In addition, pedestrian and public realm improvements will be implemented along the site's Plains Road East frontage.

11.2 CYCLING-BASED STRATEGIES

Provision of Bicycle Parking

The proposed development will provide bicycle parking spaces to support and encourage active transportation. Bicycle parking will be provided at the rates specified in the *Burlington City-wide Parking Standards Review*, which recommended a rate of 0.50 long-term and 0.05 short-term bike parking spaces per residential unit. This corresponds to a proposed bicycle parking supply of 142 long-term and 14 short-term bike parking spaces. In addition, 3 short-term spaces will be provided for the retail component.

Promote and Increase Cycling Awareness

Information packages will be made available to residents of the proposed development, to help encourage active transportation and increase awareness of different travel alternatives. The package will information regarding the environmental and health benefits of cycling, rules of the road, and maps which display active transportation infrastructure available in the surrounding area.

11.3 TRANSIT-BASED STRATEGIES

Pre-Loaded PRESTO Cards

The applicant will provide a PRESTO card to each rental unit of the proposed development at building occupancy, pre-loaded with a monthly pass (value of $156). This will help reduce the financial barriers restricting usage of the available transit infrastructure. Residents will be able to learn how to make use of transit in their daily lives and will have a reduced reliance on automobiles as a mode of transportation.

Transit Information Packages and Real-time Digital Display

For residents to take complete advantage of the local transit services, transit information packages will be distributed to residents to increase transit awareness. The information packages will contain public transit

information such as route maps and timetables. In addition, a digital display will be located in the building lobby with up-to-date information regarding transit schedules, adjacent transit stops, and service disruptions. The addition of a digital display showing transit information will help residents gain a better understanding of what transit routes are available and when departure times are so that they can easily plan their trip.

11.4 PARKING-BASED STRATEGIES

Limited Provision of Residential Vehicle Parking

The proposed development will include a limited supply of residential parking (0.20 space/unit), ensuring that the majority of future residents who choose to reside at the site are compatible with a lifestyle centred on the primary use of transit and active transportation. This measure will ensure a very low generation of SOV trips by the future development, as the majority of future residents will not have access to a personal vehicle.

Unbundled parking

It is recommended that the proposed development lease parking spaces separately from the cost of purchasing a unit. This will encourage other sustainable modes of transport and reduce auto-dependency by discouraging vehicle ownership as occupants recognize the costs of maintaining a parking space.

11.5 TDM SUMMARY

The recommended TDM measures are summarized in **Table 11-1**.

Table 11-1: Proposed TDM Measures

Recommended TDM Measure	Quantity	Unit Cost	Total Cost
Pedestrian-based Strategies			
On-Site Pedestrian Infrastructure and Connection to Public Sidewalk Network	N/A	Included in Site Plan	Included in Site Plan
Cycling-based Strategies			
Provision of Bicycle Parking	156 spaces	$500	$78,000
Cycling Information Packages	283 units	~$2.00 per unit	$566
Transit-based Strategies			
Pre-loaded PRESTO Cards	283 units	$156	$44,148
Transit Information Packages	283 units	~$2.00 per unit	$566
Parking-based Strategies			
Limited Provision of Residential Vehicle Parking	N/A		
Unbundled Parking	N/A		
Total	-	-	**$123,280**

12 CONCLUSIONS AND RECOMMENDATIONS

- **Proposed Development:** LEA has been retained by Rester Management undertake a TIS for the proposed mixed-use development located at 1376-1382 Plains Road East in the City of Burlington. The proposed development is a 25-storey mixed-use building containing 283 residential units, with retail at-grade.
- **Existing Transit Network**: The subject site is located in an area well-serviced by the existing Burlington transit network. There are a number of surface transit options available in the study area which connect the subject site to a variety of destinations, including the Burlington GO station (located approximately 1.5 km southeast). The subject site is within convenient walking distance of several bus routes with stops located at the Plains Road East and Brant Street intersection, providing easy access to public transportation.
- **Surrounding Active Network:** The subject site is located in a neighborhood with access to nearby cycling infrastructure, including bike lanes along Brant Street and Maple Avenue. Additionally, the site benefits from a mixed-use path (bike lane and sharrows) along Plain Road East, east of the Brant street intersection. The existing pedestrian network provides good connections between the residential and commercial uses in the area.

  The City of Burlington has developed its first Integrated Mobility Plan (IMP), a 30-year strategy aimed at enhancing the citywide transportation network. The IMP focuses on creating a sustainable and accessible transportation system, emphasizing improvements for pedestrians and cyclists. Although no capital projects are planned immediately adjacent to the site, pre-approved IMP projects along Plains Road and Maple Avenue will introduce protected cycling facilities and pedestrian realm improvements.

  Within the study area, the City of Burlington Official Plan identifies Plains Road East (east of Maple Avenue) and Maple Avenue (north of Fairview Street) as Transit Support Corridors. In addition, Brant Street (north of Fairview Street) is identified as a Candidate Frequent Transit Corridor where transit improvements will be prioritized, as well as an and a Major Transit Station Area (MTSA) Primary Connector to provide direct transit connections between MTSAs. Fairview Street is similarly identified as both a Frequent Transit Corridor and an MTSA Primary Connector.
- **Site Trip Generation:** The proposed development is anticipated to generate 88 two-way vehicle trips (25 inbound and 63 outbound) during the weekday AM peak hour and 119 two-way vehicle trips (64 inbound and 55 outbound) during the weekday PM peak hour. This represents a conservative estimate given that the site will provide a limited supply of vehicle parking (56 spaces, or 0.20 spaces per unit).
- **Intersection Capacity Analysis:** The traffic analysis was undertaken based on a future horizon of 2031 and 2036. The analysis results confirm that the proposed development will have an acceptable impact on the surrounding road network, with all intersections operating similar to background conditions.
- **Bicycle Parking:** There are no bicycle parking requirements for residential developments under the City of Burlington Zoning By-law 2020. However, to support the vehicle parking strategy, bicycle parking will be provided at the rates specified in the Burlington City-wide Parking Standards Review. This corresponds to a proposed bicycle parking supply of 159 bicycle parking spaces, including 142 long-term and 17 short-term bicycle parking spaces.

- **Vehicle Parking:** The proposed development will provide 45 residential spaces and 11 visitor spaces, for a total of 56 parking spaces (0.20 spaces per unit). As the site is located within the Downtown Burlington UGC/Burlington GO MTSA, no minimum vehicular parking requirements apply. The parking strategy reflects Provincial direction under Bill 185 to support transit-oriented development and reduce auto dependency in areas served by higher-order transit.
- **Loading Review:** According to Zoning By-law 2020 Section 2.25.3, at least one (1) off-street loading space shall be provided in conjunction with every principal building, including mixed-use buildings. The proposed development will provide one (1) loading space, satisfying the zoning by-law requirements.
- **Transportation Demand Management:** Several Transportation Demand Management (TDM) measures have been proposed to reduce automobile usage and encourage people to engage in more sustainable transportation mode.

Transportation Impact Study
Proposed Mixed-Use Development
1376-1382 Plains Road East, Burlington
24224