

449 CARLAW AVENUE

PROPOSED MIXED-USE DEVELOPMENT

City of Toronto

Urban Transportation Considerations Report

Part 1 of 2 - Technical Study

Prepared For: Choice Properties Limited Partnership

August 2022



**MOVEMENT
IN URBAN
ENVIRONMENTS**
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TABLE OF CONTENTS

1.0 INTRODUCTION	6	7.5 Forecast Site Non-Residential Person Trips	74
1.1 This Study	6	7.6 Forecast Composite Site Travel Demands	76
1.2 Existing Site	6	8.0 SITE TRANSIT ASSESSMENT	79
2.0 DEVELOPMENT PLAN	9	9.0 VEHICULAR TRAFFIC VOLUMES	81
2.1 Project Overview	9	9.1 Traffic Analysis scenarios and Design Periods	81
2.2 New Ontario Line Station	12	9.2 Existing Traffic	81
2.3 Functional Street Network	12	9.3 Future Background Traffic	84
2.4 Cycling Infrastructure	13	9.4 Site Traffic	86
2.5 Pedestrian Improvements	13	9.5 Future Total Traffic	92
2.6 Public Spaces	13	10.0 TRAFFIC OPERATIONS ANALYSIS	98
3.0 SUMMARY OF KEY FINDINGS	20	10.1 Analysis Methodology and Assumptions	98
4.0 PLANNING AND POLICY CONTEXT	25	10.2 Traffic Analysis Summary	102
4.1 Provincial and Regional Policy / Directives	25	11.0 VEHICULAR PARKING CONSIDERATIONS	108
4.2 Local Area Planning Policy	26	11.1 Parking Overview	108
5.0 EVOLVING TRANSPORTATION CONTEXT	28	11.2 Parking Supply as a Key Factor	108
5.1 Area Road Context	28	11.3 Zoning By-law Parking Requirements	109
5.2 Area Transit Context	35	11.4 Proposed Vehicular Parking Standards	113
5.3 Area Pedestrian Network	48	11.5 Proposed Vehicular Parking Supply	115
5.4 Area Cycling Context	50	11.6 Appropriateness of Proposed Vehicular Parking Supply	117
5.5 Area Shared Mobility Services	53	11.7 Parking Summary	131
6.0 MOBILITY CHOICE TRAVEL PLAN	56	12.0 BICYCLE PARKING CONSIDERATIONS	132
6.1 Providing Mobility Choice	56	12.1 Zoning By-law Bicycle Parking Requirements	132
6.2 Mobility Objectives	56	12.2 Proposed Bicycle Parking Supply and Arrangements	133
6.3 Mobility Strategies	57	13.0 LOADING CONSIDERATIONS	135
6.4 Mobility Measures	57	13.1 Zoning By-law Loading Requirements	135
6.5 Recommended TDM Plan	58	13.2 Proposed Loading Supply and Facilities	135
7.0 MULTI-MODAL TRAVEL DEMAND FORECASTING	64	13.3 Loading Summary	136
7.1 Approach to Forecasting Site Travel Demands	64		
7.2 Resident-Related Site Travel Demands	64		
7.3 Retail-Related Site Travel Demands	71		
7.4 Grocery Store Proxy Site Surveys	71		

LIST OF TABLES

Table 1	Proposed Development Summary	10	Table 24	Non-Residential Trip Distribution Pattern	92
Table 2	Area Road Network	29	Table 25	Summary of Calculated Peak Hour Factors.....	99
Table 3	Area Transit Network	36	Table 26	Signalized Intersection Capacity Analysis Results	102
Table 4	Existing and Future Transit Service Area Analysis Comparison	43	Table 27	Unsignalized Intersections Capacity Analysis Results.....	105
Table 5	Area Existing Cycling Network.....	51	Table 28	Zoning By-law 569-2013 Parking Requirements (Policy Area 4)	110
Table 6	Potential Mobility Travel Plan.....	59	Table 29	Zoning By-law 89-2022 Parking Requirements (Parking Zone B).....	111
Table 7	Site Vicinity Residential Trip Mode Split – 2016 TTS Data	65	Table 30	Accessible Parking Requirements as per By-Law 89-2022 (Parking Zone B)	112
Table 8	Residential Trip Mode Split – Proxy Sites	66	Table 31	Proposed Minimum Parking Standards	114
Table 9	Selected Residential Trip Mode Splits (Used for Analysis)	67	Table 32	Proposed Vehicular Parking Supply Allocation.....	115
Table 10	Person Trip Rates: Residential Development Proxy Sites	68	Table 33	Comparison of Progressive Zoning By-law Parking Standards – Residential.....	120
Table 11	Residential Use Person Trip	70	Table 34	Approved Residential Parking Reductions Over Time.....	122
Table 12	Grocery Stores Proxy Site Survey Summary	72	Table 35	Observed Residential Parking Demand.....	124
Table 13	Grocery Trip Mode Split – Proxy Sites	73	Table 36	Comparison of Progressive Zoning By-law Parking Standards – Residential Visitor.....	127
Table 14	Forecast Non-Residential Cycling Trips.....	74	Table 37	Approved Visitor Parking Reductions Over Time.....	128
Table 15	Forecast Site Non-Residential Vehicle Trips.....	75	Table 38	Shared Occupancy Parking Rates.....	130
Table 16	Forecast Site Grocery Pedestrian and Transit Trips	76	Table 39	City of Toronto Zoning By-law 569-2013 (Zone 1) and Toronto Green Standard Version 4 (Tier 1) Bicycle Parking Requirements	132
Table 17	Total Site: Person Trip Generation	77	Table 40	Proposed Site Bicycle Parking Supply Allocation	133
Table 18	Forecast Site Transit Trips.....	80	Table 41	By-Law 569-2013 Loading Requirements	135
Table 19	Existing Turning Movement Count Summary.....	81			
Table 20	Area Background Developments	84			
Table 21	Existing Site Traffic Volumes	86			
Table 22	Total Site Vehicular Trip Generation	89			
Table 23	Residential Trip Distribution	90			

LIST OF FIGURES

Figure 1:	Site Location	7	Figure 14:	Existing and Future Pedestrian Context	49
Figure 2:	Site Context	8	Figure 15:	Existing and Future Cycling Context	52
Figure 3:	Proposed Development Plan	11	Figure 16:	Car Share and Bike Share Locations	55
Figure 4:	Integration of Proposed Ontario Line Station with the Proposed Development	14	Figure 17:	Mobility Plan Elements	63
Figure 5:	Site Plan Elements	15	Figure 18:	Existing Traffic Volumes	83
Figure 6:	Existing Street Network	32	Figure 19:	Future Background Traffic Volumes	85
Figure 7:	Proposed Road Network	33	Figure 20:	Existing Primary Site Traffic (Removed)	88
Figure 8:	Proposed Street Network Context and Changes	34	Figure 21:	New Residential Site Related Trips	92
Figure 9:	Existing Transit Network	38	Figure 22:	New Non-Residential Site Gross Trips	93
Figure 10:	Future Transit Context	40	Figure 23:	New Non-Residential Pass-by Site Related Trips	94
Figure 11:	Future Transit Network	41	Figure 24:	Total New Site Related Trips	95
Figure 12:	Existing Transit Reach	45	Figure 25:	Future Total Traffic Volumes	96
Figure 13:	Future Transit Reach	46	Figure 26:	Existing Lane Configuration and Traffic Control	100

LIST OF APPENDICIES

APPENDIX A:	REDUCED SCALE ARCHITECTURAL PLANS
APPENDIX B:	FUNCTIONAL ROAD PLAN
APPENDIX C:	VEHICLE MANOEUVRING DIAGRAMS
APPENDIX D:	RESIDENTIAL PERSON TRIP GENERATION SURVEY DATA
APPENDIX E:	RETAIL PERSON TRIP GENERATION SURVEY DATA
APPENDIX F:	EXISTING TURNING MOVEMENT COUNTS
APPENDIX G:	EXISTING SIGNAL TIMING PLANS
APPENDIX H:	SYNCHRO ANALYSIS WORKSHEETS

1.0 INTRODUCTION

BA Group is retained by Choice Properties Limited Partnership (herein referred to as the “client”) to provide transportation consulting services related to a mixed-use development located at the property of 449 Carlaw Avenue (herein referred to as the “Site”, “Project”, or “proposed development”) in the City of Toronto.

1.1 THIS STUDY

This study includes a summary of our review of the urban transportation elements of the Project, including:

- A multi-modal travel assessment;
- Traffic impact and operations studies;
- Parking and loading studies; and
- Mobility Choice Travel Plan (Transportation Demand Management).

This study has also be developed in support of a Zoning application through the Province of Ontario’s Transit Oriented Communities (TOC) Program.

1.2 EXISTING SITE

The Site is located north of the Leslieville neighbourhood in the City of Toronto, and is generally bounded by a local laneway (off Langley Avenue) to the north, Canadian National Railway to the south, Pape Avenue to the east, and Carlaw Avenue to the west.

The existing conditions of the property include a surface parking lot servicing a plaza of various commercial uses: tire shop, gas station, grocery store (No Frills), and retail centre.

Currently, there are two vehicular site accesses provided off the southern terminus of Pape Avenue (to the northeast of the Site) and Carlaw Avenue (to the northwest of the Site). These intersections permit all moves and are unsignalized.

The Site’s location and context is illustrated in **Figure 1** and **Figure 2**, respectively.

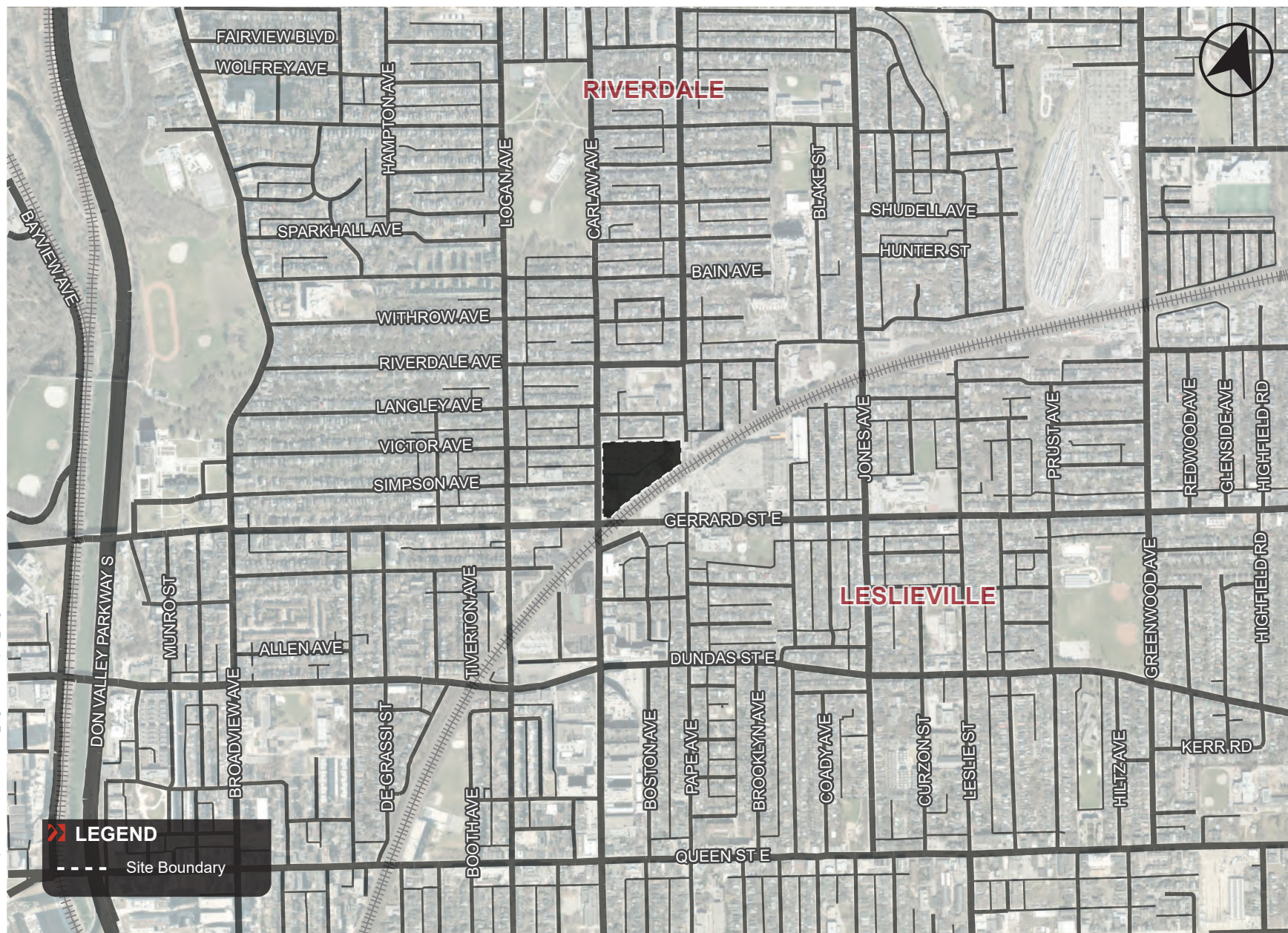


FIGURE 1 SITE LOCATION

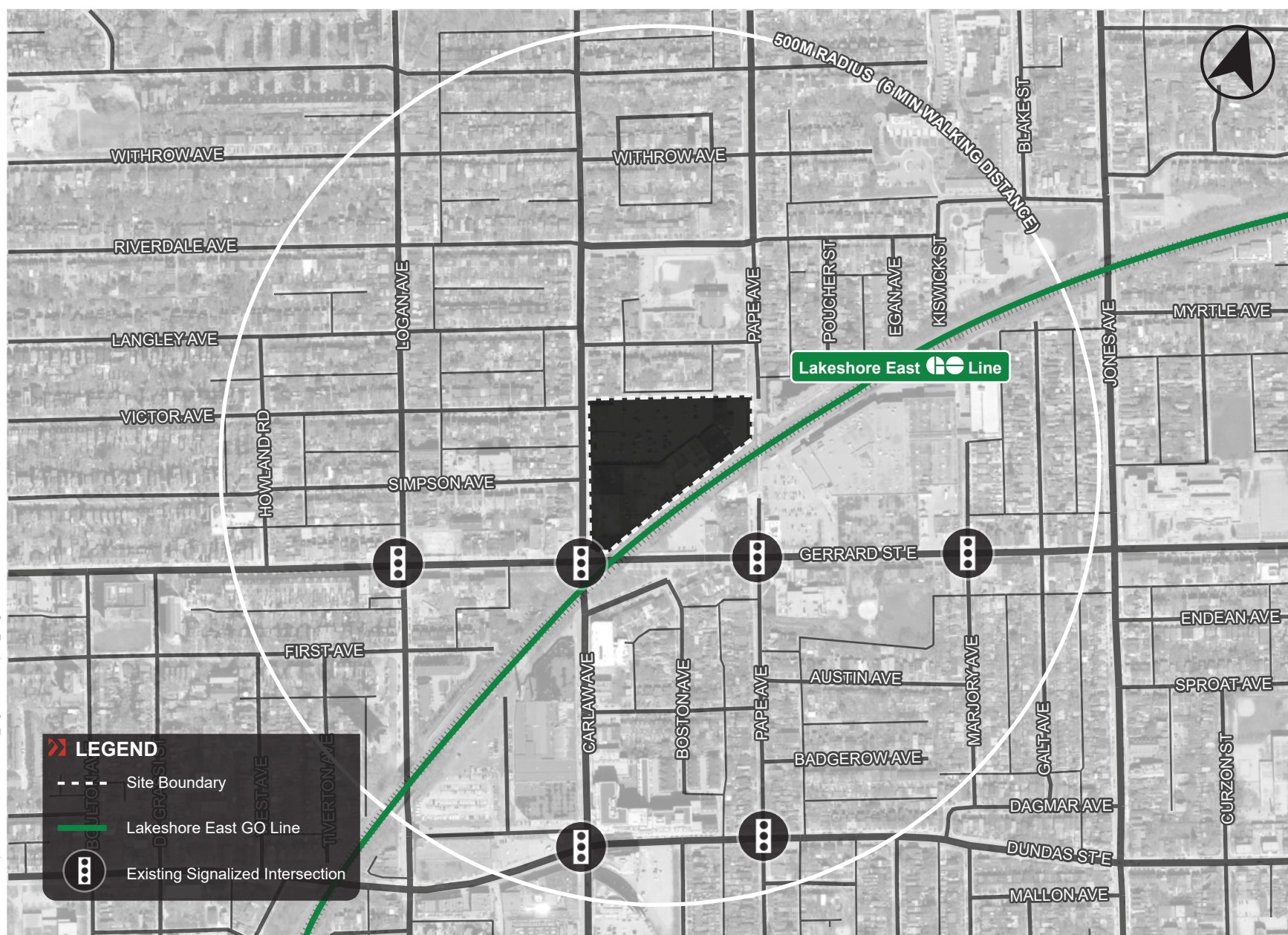


FIGURE 2 SITE CONTEXT

2.0 DEVELOPMENT PLAN

2.1 PROJECT OVERVIEW

The proposed redevelopment aims to introduce complementary uses surrounding the Proposed Ontario Line (OL) Station, including the following:

- Tower A: 374 residential units
- Tower B: 316 residential units
- Tower C: 264 residential units
- Shared Podium (Towers A, B, C):
 - 126 residential units;
 - 2,590 square metres of retail GFA; and
 - 3,460 square metres of grocery GFA.

A detailed breakdown of the redevelopment program is provided in **Table 1**.

The location of the Site is unique, such that it provides an opportunity to build directly adjacent to the upcoming Ontario Line subway. The Site will also provide a number of improvements to the overall area transportation system. Below provides an outline of these future changes as part of the proposed development.

Reduced scale architectural plans of the Master Plan development are included in **Appendix A**.



TABLE 1 PROPOSED DEVELOPMENT SUMMARY

Component		Description
Land Use Elements		
Residential	Podium	6 studio, 63 one-bedroom, 54 two-bedroom, 3 three-bedroom = 126 total units
	Tower A	34 studio, 206 one-bedroom, 100 two-bedroom, 34 three-bedroom = 374 total units
	Tower B	29 studio, 172 one-bedroom, 56 two-bedroom, 59 three-bedroom = 316 total units
	Tower C	24 studio, 146 one-bedroom, 71 two-bedroom, 23 three-bedroom = 264 total units
<i>Total Residential Units</i>		<i>93 studio, 587 one-bedroom, 281 two-bedroom, 119 three-bedroom = 1,080 total units</i>
Non-residential	Retail	2,590 square metres GFA
	Grocery	3,460 square metres GFA
<i>Total Non-residential GFA</i>		<i>6,050 square metres GFA</i>
Open Space	Stratified Parkland	3,370 square metres
	Privately Owned Public Space	5,618 square metres
<i>Total Community GFA</i>		<i>8,988 square metres</i>
OL Station Connection (shared with Retail Concourse)		560 square metres
Transportation Elements		
Pedestrian Access		Multiple at-grade accesses from new and / or improved municipal streets via New Street, Carlaw Avenue, and Pape Avenue.
Vehicular Access		Two site driveways via New Street, located on the east (access to loading facility) and west (access to vehicular parking facility) side.
Bicycle Infrastructure		The bicycle parking spaces are provided near the residential lobbies on Level 1 and near the Tower A residential and retail lobbies on Level P0. The bicycle parking spaces located on the P0 level can be accessed at-grade via the Tower A elevators. There are 978 long term spaces, 120 short-term spaces, and 10 publicly accessible spaces on-site (1,108 total bicycle spaces). There is also 1 shower / change facility (per gender) located on the P0 level.
Parking Supply		All vehicular parking is located on the P0 (retail and grocery), P1 (resident and residential visitor), and P2 (resident) levels accessed by the parking ramp off New Street. There are 256 resident spaces, 56 residential visitor spaces, and 98 shared retail and grocery spaces (410 total vehicular spaces, including 25 accessible spaces).
Loading Supply		The loading area servicing all Towers is located on Level 2 (due to nature of site grading), accessed by the loading access off New Street. The loading supply includes 1 Type 'A', 1 Type 'G', 3 Type 'B', and 2 Type 'C' spaces (7 total loading spaces) and 1 waste compactor.

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FIGURE 3 PROPOSED DEVELOPMENT PLAN

2.2 NEW ONTARIO LINE STATION

The proposed redevelopment plans, adjacent to the Proposed OL Station, will support the travel demands of prospective residents, patrons, employees and visitors as well as provides connectivity to the broader community from the retail component of the development directly to the Station. Simultaneously, the development of the Site further enhances the viability of the Proposed OL Station and supports considerable investments being made by the Metrolinx GO and the City of Toronto.

To support GO Expansion and increased service along the Lakeshore East rail corridor as a joint OL-GO route, a new station connection is being contemplated at the Site. The proposed development plans to leverage the Proposed OL Station through the integration of the existing and planned community.

The Proposed OL Station is located at the southwest area of the Site, in proximity to Tower A. The OL tracks at the Site are elevated in the southwest corner, and will continue below-grade towards the northeast corner at Pape Avenue. The Station connection will be configured as part of the development, which will provide mobility infrastructure (i.e. bicycle parking facilities, retail common area, and pedestrian-friendly waiting areas) as key elements of the existing and planned pedestrian network.

The latest Proposed OL Station location is illustrated in **Figure 4** and **Figure 5**, respectively.

2.3 FUNCTIONAL STREET NETWORK

2.3.1 New Street

A new municipal street (herein referred to as “New Street”) is proposed as part of the Site. The New Street is oriented in a diagonal east-west direction (parallel to railway), extending between existing Pape Avenue

in the east and existing Carlaw Avenue in the west. It is also proposed to provide new signalized intersections where the New Street intersects with Carlaw Avenue and Pape Avenue.

The New Street consists of an 18.50-metre municipal right-of-way, including one travel lane in each direction (servicing left, through, and right movements), landscaped buffers, sidewalks, and setbacks on either side. The street is intended to be a key connection within the proposed redevelopment as it provides access to the 2 site driveways, one to the underground parking facilities and the second to the loading facility.

The detailed functional road plan for New Street is provided in **Appendix B** for reference.

2.3.2 Re-alignment of Pape Avenue

Upon the completion of New Street, it is noted that the east end of the new road connection will extend from the currently existing southern terminus of Pape Avenue. This will provide a continuous and enhanced transportation network from Pape Avenue, with access to Gerrard Street East from the north.

The re-alignment of Pape Avenue and its connection to the new public street is illustrated in **Appendix B** for reference.

2.3.3 Re-alignment of Public Laneway

In order to accommodate the Ontario Line alignment, the properties located on the west side of Pape Avenue between Langley Avenue and the Site are to be removed.

As part of the proposed development, it is proposed to remove the north-south portion on the east side of the U-shaped public laneway off Langley Avenue. Currently this segment of the laneway services the properties on Pape Avenue that are to be removed. The new terminus of this laneway will then be connected to New Street, permitting only left and right movements at this “T” intersection.

The re-alignment of the public laneway and its connection to the new public street is illustrated in **Appendix B** for reference.

2.4 CYCLING INFRASTRUCTURE

A series of cycling-supportive infrastructure is being provided on-site as part of the proposed development, as illustrated in **Figure 5**.

Short-term and long-term bicycle parking is proposed on-site to support cycling as a viable and convenient mobility option. Provisions are made for additional bicycle parking within the public realm surrounding the Site for short-term use as well as opportunities for long-term, secured indoor bicycle storage.

Within proximity to the long-term bicycle parking rooms, shower and change facility, per gender, are provided for further support. There are also two bicycle repair stations proposed within the at-grade long-term bicycle parking facilities. These provide greater opportunities to upkeep the quality of the cyclist experience within the Site area.

2.5 PEDESTRIAN IMPROVEMENTS

The New Street proposed as part of the proposed redevelopment will make provisions for pedestrian sidewalks on both sides of the roadway. New pedestrian crossing facilities are also proposed including new controlled pedestrian crossings at its intersections with Carlaw Avenue and Pape Avenue.

The New Street is also proposed to include public realm elements, through the provision of landscaping. The Site affords the unique opportunity to improve connectivity to and from the Site throughout the immediate road network.

In addition to pedestrian facilities provided within municipal right-of-ways, various pedestrian-focused walkways, building entrances, and accessible elevators within the Site are planned as illustrated in **Figure 5**. Retail concourses and walkways are proposed within the central portions of the all Towers, primarily framed by retail uses between Towers A and B.

2.6 PUBLIC SPACES

To further support the public realm of the site, approximately 9,000 square metres of public space is proposed within the northern and northeast portions of the Site, as illustrated in **Figure 5**.

The first triangular-shaped stratified park located to the north is bounded by the public laneway to the north, Carlaw Avenue to the west, and the New Street to the east and south.

The second privately-owned public space to the northeast is bounded by Pape Avenue to the east, the proposed building and New Street to the north and west, and the Canadian National railway to the south.

The proposed park spaces provide opportunities to enhance connectivity through the Site, and particularly to provide convenient connections to planned uses and improved transit infrastructure.

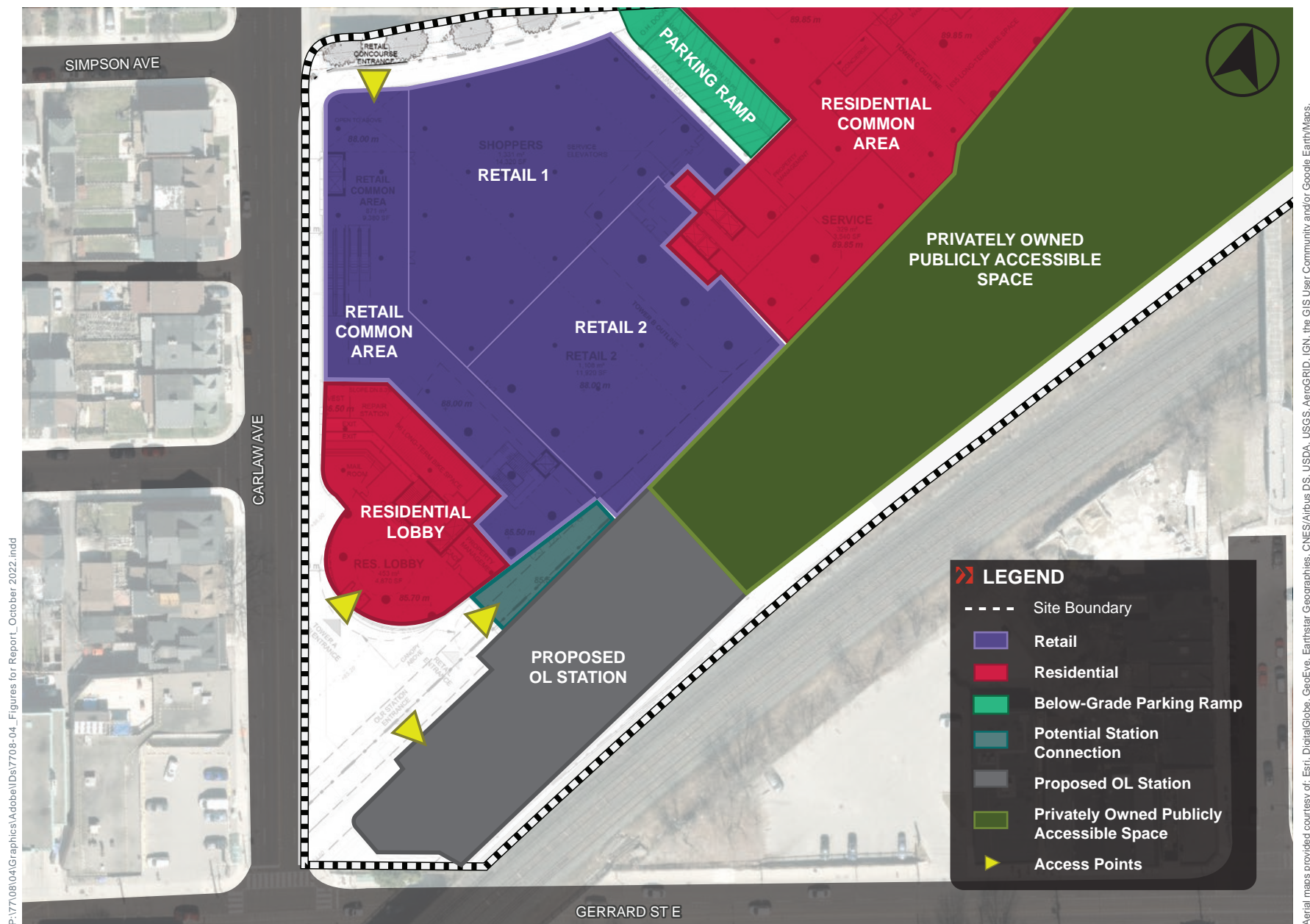


FIGURE 4 PROPOSED ONTARIO LINE STATION WITH THE PROPOSED DEVELOPMENT



FIGURE 5C SITE PLAN ELEMENTS - P0 LEVEL CONFIGURATION



FIGURE 5D SITE PLAN ELEMENTS - P1 LEVEL CONFIGURATION



FIGURE 5E SITE PLAN ELEMENTS - P2 LEVEL CONFIGURATION

3.0 SUMMARY OF KEY FINDINGS

BA Group is retained by Choice Properties Limited Partnership to provide transportation consulting services related to a proposed mixed-use redevelopment located at 449 Carlaw Avenue (also referred to as the “Site”, “Project, or “proposed development”) in the City of Toronto, in support of a Rezoning application through the Province of Ontario’s Transit Oriented Communities (TOC) Program.

Development Plan

1. The proposed redevelopment aims to introduce complementary uses surrounding the Proposed OL Station, including 1,080 residential units, 2,590 square metres of retail GFA, and 3,460 square metres of grocery GFA combined among 3 Towers (A, B, and C) with a shared podium.
2. The key transportation elements consist of a new municipal street (called New Street), access to the Proposed OL Station, a series of bicycle-supportive infrastructure, traffic signals at Carlaw Avenue and Pape Avenue, and re-configuration of the existing Pape Avenue and public laneway off Langley Avenue.
3. The Site also proposes community uses, including 3,370 square metres of parkland to the northwest (north of the New Street) and 5,618 square metres of POPS to the northwest (between the New Street and Canadian National Railway).

Planning and Policy Context

1. The Site is subject to a set of policies and initiatives that are in support of Transportation Demand Management, transit-oriented development, active transportation, minimization of auto use and single occupancy trips, and land use integration /

mixed-use development in order to create complete and livable communities on multiple jurisdictional scales.

Transportation Context

4. The Site is primary served by minor arterial, collector, and local roads that provide strong north-south and east-west connections across the City of Toronto. A notable gap observed includes the disconnection along Pape Avenue near the Site.
5. A new east-west public street (New Street) is proposed along the northern perimeter of the Site between Carlaw Avenue and Pape Avenue. Both ends of the street will be signalized.
6. Modifications to the existing road network are being made as a result of the New Street, including the removal of the north-south portion of the public laneway (east side; terminating at the New Street) and re-alignment of Pape Street (connecting to the New Street).
7. The Site is directly adjacent to the Proposed OL Station and currently has convenient access to other local TTC transit services (bus and streetcar).
8. The area surrounding the Site is well served by pedestrian facilities, including two-sided sidewalks and signalized pedestrian crossings, which lead to key destinations, including parks, retail stores, and schools. Through the development of a finer-grained network, the Project will provide connective pedestrian paths and a stronger public realm.

9. A number of existing cycling facilities and cycling-supportive infrastructure on the Site will foster a comprehensive and safer cycling experience.
10. There are currently shared mobility (bike and car share) services within a 500-metre radius of the Site, including 3 bike share locations and 2 car share locations.
11. The Project is located within an existing Major Transit Station Areas (MTSA), located at the Proposed OL Station on the Lakeshore East GO Line.

Mobility Choice Travel Plan

12. A mobility choice travel (TDM) plan is pursued to advance Transportation Demand Management (TDM), to the extent possible, within the context of the proposed redevelopment.
13. Numerous TDM strategies and measures are contemplated as part of the plan. Their primary objectives are as follows:
 - Reducing demand on road infrastructure, thereby minimizing road and parking capital expenditures;
 - Increasing travel efficiency;
 - Reducing climate change emissions;
 - Improving air quality; and,
 - Improving overall health.

Multi-modal Travel Demand Forecasting

14. Travel demands resulting from the proposed redevelopment have been forecast for residential and non-residential land uses based on information derived from proxy sites with similar transportation context, near higher order transit service.

15. Person-trip travel demands are forecast, and then segmented by travel mode to assess travel demand impacts on area street, transit, cycling and pedestrian infrastructure.
16. The majority of Site trips are anticipated to utilize transit or active transportation modes to access the Site. This assumption is consistent with the travel behaviours observed at proxy sites and data derived from the 2016 TTS data set.
17. The proposed development is anticipated to result in a total of 1,840 two-way person trips during the weekday morning peak hour, 4,340 two-way person trips during the weekday afternoon peak hour and 4,340 two-way person trips during the weekend Saturday peak hour.
18. A total of 900 two-way transit trips are estimated during the weekday morning peak hour, 2,335 two-way transit trips are estimated during the weekday afternoon peak hour and 2,335 two-way transit trips during the weekend Saturday peak hour. Another 475, 1,330 and 1,330 two-way person trips are anticipated to arrive / depart as pedestrians (in addition to transit-related pedestrians) during the weekday morning, afternoon and weekend peak hours, respectively.
19. In the order of 280 two-way gross vehicle trips are anticipated during the weekday morning peak hour, 415 two-way vehicle trips are anticipated during the weekday afternoon peak hour and 415 two-way trips during the weekend Saturday peak hour.
20. Approximately 130, 160 and 160 two-way cycling trips are anticipated during each of the weekday morning, afternoon and Saturday peak hour, respectively.



Vehicular Traffic Volumes

21. Existing baseline traffic volumes were established at intersections within the study area for the weekday morning, afternoon and weekend peak hour periods using traffic count information obtained from surveys undertaken by Spectrum Traffic Data Inc. on April 2, 2022 and April 5, 2022.
22. A corridor traffic growth rate of 2% per year has been assumed for the area arterial roadways (i.e. Carlaw Avenue, Gerrard Street East and Dundas Street East) during the weekday morning and afternoon peak hour periods and weekend Saturday peak hour period over a 5-year development horizon and is consistent with rates applied at other nearby development applications in the area
23. Specific allowances were made for traffic generated by 2 other developments in the area that have either been approved and are not yet built or are being actively reviewed by the City.
24. The existing site generations in the order of 235, 345 and 325 primary two-way trips during the weekday morning, afternoon and Saturday peak hour periods, respectively.
25. The site is anticipated to generate approximately 280, 345 and 345 two-way primary vehicular trips during the weekday morning, afternoon and weekend peak traffic hours, respectively.
26. The proposed development is anticipated to generate in the order of 45, 0 and 20 net-new primary trips during the weekday morning, afternoon and weekend peak hour periods, respectively.

Traffic Operations Analysis

27. Under existing traffic conditions, the area signalized intersections operate at an acceptable level of service with overall v/c ratios of 0.54, 0.55 and 0.49 or better during the weekday morning, afternoon and weekend peak hours, respectively.
28. Under existing traffic conditions, the area unsignalized intersections operate at a acceptably at level of service (LOS C or better) with delays of 22.0 seconds or less during the weekday morning, afternoon and weekend peak hour periods.
29. Under future background traffic conditions with the allowances of specific area development and general corridor traffic growth, the area signalized intersections operate at an acceptable level of service with overall v/c ratios of 0.55, 0.59 and 0.50 or better during the weekday morning, afternoon and weekend peak hours, respectively.
30. Under future background conditions, the area unsignalized intersections operate at a acceptably at level of service (LOS C or better) with delays of 23.8 seconds or less during the weekday morning, afternoon and weekend peak hour periods.
31. With the addition of site-related traffic under future total traffic conditions, the area signalized intersections operate at an acceptable level of service with overall v/c ratios of 0.57, 0.61 and 0.51 during the weekday morning, afternoon and weekend peak hours, respectively.
32. Under future total conditions, with the full build-out of the development, the area unsignalized intersections operate at a acceptably at level of service (LOS C or better) with delays of

17.1 seconds or less during the weekday morning, afternoon and weekend peak hour periods.

Vehicular Parking Considerations

33. Application of Zoning By-laws 569-2013 (Parking Zone 4) and 89-2022 (Parking Zone B) to the proposed redevelopment results in the following minimum requirements:

- Zoning By-law 569-2013: 916 resident spaces, 162 residential visitor spaces, and 59 non-resident parking spaces
- Zoning By-law 89-2022: 56 residential visitor spaces

34. It is proposed to provide parking at the following minimum parking standards:

- Residential: 0.23 parking spaces per unit
- Residential Visitor: 2 spaces plus 0.05 spaces per unit
- Retail: 1.50 parking spaces per 100 m² GFA
- Grocery: 1.50 parking spaces per 100 m² GFA

The resulting recommended minimum supply is 247 resident parking spaces, 56 residential visitor, and 89 non-resident parking spaces.

35. It is proposed to meet and slightly exceed the recommended minimum parking requirements within a 3-level underground parking garage. The proposed development provides for 410 parking spaces, including 256 resident, 56 residential visitor, and 98 non-resident parking spaces. Vehicular parking access is provided via the parking ramp off New Street.

36. The minimum accessible parking requirement will also be met as per Zoning By-laws 569-2013 and 89-2022, including 25 accessible spaces.

37. As per the Toronto Green Standard Version 4, the proposed redevelopment achieves the minimum reduction of 25% single occupant trips.

38. The proposed resident parking supply is appropriate under the basis of overarching and emerging policies and planning directives, the evolving transportation context, review of comparable residential Zoning By-law standards within the GTA, observed residential parking reduction approvals at comparable residential developments within the City, and proposed TDM strategies direct towards residents.

39. The proposed residential visitor parking supply is appropriate based on the proposed Zoning standard as per By-law 89-2022, review of comparable Zoning By-law standards for residential visitors within the GTA, observed residential visitor parking reduction approvals at comparable developments within the City, and proposed TDM strategies directed towards visitors.

40. The proposed non-resident parking supply is appropriate based on the standards proposed as per Zoning By-law 89-2022, adoption of shared parking as an approach to maximizing efficiency, and proposed TDM strategies directed towards site visitors and patrons.

41. The vehicular parking supply is considered to be appropriate and will support the expected parking demands of the proposed development.



Bicycle Parking Considerations

42. Application of City of Toronto Zoning By-law 569-2013 (Zone 1) and Toronto Green Standards (TGS) Version 4 (Tier 1) to the proposed redevelopment results in a minimum requirement of 1,097 bicycle spaces, including 978 long-term spaces and 119 short-term spaces. There is also one (1) shower and change facility (per gender) required.
43. It is proposed to meet and slightly exceed the minimum Zoning By-law 569-2013 requirements. A total of 1,098 bicycle parking spaces, including 978 long term and 120 short term spaces will be provided. These spaces are located primarily at-grade and on the P0 level, which can be accessed via the Tower A elevators. There are bicycle repair stations provided in the two long-term bicycle parking facilities on Level 1. There is also one (1) shower and change facility (per gender) provided for the non-resident long-term cyclists provided on the P0 level. In addition, 10 publicly accessible spaces are being provided on the New Street.
44. As per the Toronto Green Standard Version 4, the proposed redevelopment achieves the minimum and locational requirements for Energized Outlet spaces and bicycle spaces.
45. The bicycle parking supply and design arrangements are considered to be appropriate and will support the expected bicycle parking demands of the proposed development.

Loading Considerations

46. Application of City of Toronto Zoning By-law 569-2013 to the proposed redevelopment results in a minimum requirement of 4 loading spaces, including 1 Type 'A', 1 Type 'G', and 2 Type 'B' spaces.
47. It is proposed to meet and exceed the minimum Zoning By-law 569-2013 requirements. A consolidated loading facility of 7 loading spaces, including 1 Type 'A', 1 Type 'G', and 3 Type 'B', and 2 Type 'C' spaces is provided on Level 2 which can be accessed via the loading ramp off New Street.
48. The loading facility has been appropriately configured to accommodate anticipated loading / servicing vehicles. In addition, functional Vehicle Manoeuvring Diagrams are provided and illustrate the turning movements for the design vehicles entering and exiting the proposed loading spaces.
49. The loading supply and design arrangements are appropriate and will accommodate the expected loading demands of the proposed development.

4.0 PLANNING AND POLICY CONTEXT

The Site is subject to a set of policies and initiatives that are in support of transit oriented development and minimization of auto use and single occupancy trips. An overview of the planning context is provided in the following section.

4.1 PROVINCIAL AND REGIONAL POLICY / DIRECTIVES

4.1.1 Provincial Policy Statement (2020)

Adopted in May 2020, the Provincial Policy Statement (PPS) under Section 3 of the Planning Act sets provisions for transportation demand management (TDM) strategies to be implemented for new developments to increase the efficiency of existing and planned transportation infrastructure is encouraged (**Section 5.0**). As such, the Mobility Choice Travel (TDM) Plan for the proposed site is further discussed in **Section 6.0**.

Furthermore, the PPS encourages density being added to lands that adopt a mix of land uses to encourage non-auto based travel modes and to limit the length and number of vehicular trips generated by the Site.

4.1.2 Places to Grow: Growth Plan for the Greater Golden Horseshoe

The Places to Grow Plan aims to foster economic growth, provide greater housing supply / options, increase employment, and build communities for a healthier and more affordable lifestyle within the Greater Golden Horseshoe. Specifically, the Plan is a long-term strategy that outlines the importance of reducing reliance on the automobile and promoting non-auto modes. Planning for growth along transit corridors, adopting minimum density targets in major station areas and integrating active transportation within the existing and planned street network (i.e. complete streets) are priorities that considers minimizing the provision of parking as an important strategy.

In February 2022, the Transportation Plan for the Greater Golden Horseshoe was adopted to provide a 30-year vision for enhanced mobility within and across the Region. The Plan includes a vision for Mobility in 2051 for a transportation system that provides safe, efficient and convenient options for people and businesses and supports the wellbeing and economic prosperity of the Region into the future. Priorities under the Plan include fighting gridlock and improving road performance, getting people moving on a connected transit system, supporting a sustainable and resilient Region.

4.1.3 Metrolinx Regional Transportation Plan (2018)

The Metrolinx 2041 Regional Transportation Plan – an update to *The Big Move (2008)* – sets out the planned future transportation network for the GTA that best supports intensification in accordance with sustainable transportation objectives. It includes the development of additional rapid transit options for the City of Toronto and surrounding region, including heavy and light rail and bus rapid transit options.

As part of its vision to promote and support the development of sustainable and healthy communities, Metrolinx is creating partnerships to facilitate the implementation of Transit Oriented Communities (TOC). TOC forms higher densities and a mix of uses, located adjacent to or within a short walking distance of higher-order transit stations. The 2018 RTP's Strategy #4 supports TOC as Mobility Hubs (further described in **Section 4.1.4**), to be accomplished through public and private collaboration. The TOC program is intended to connect Metrolinx with third-party partners to promote transit ridership, reduce traffic congestion, and allocate houses and jobs near transit through transit-supportive development practices. The general principles of TOC being supported by Metrolinx are present as part of the Site (i.e. adjacent to the future OL), including the provision of a reduced parking supply and abundant provision of bicycle parking.

The complete implementation of the 2041 Plan will create a more seamless and connected transportation system, including improved access to reliable and frequent transit and affordable travel through reduced car ownership / dependence.

4.1.4 Metrolinx Mobility Hub Guidelines

The Mobility Hub Framework guides the form of development in areas surrounding major transit stations, directing density increases in the region towards land that is within a walking distance of a regional transit hub. While mobility hub designation is not specifically applied to the Project, the Proposed OL Station has the potential to influence the development of the Site in accordance with mobility hub principles.

4.2 LOCAL AREA PLANNING POLICY

4.2.1 Toronto Official Plan

The Toronto Official Plan (OP) adopted a number of policies that directly and indirectly shape the future of the Site and its surrounding area. Specifically, the OP implements provincial directions (identified in the previous section) and outlines City Council's goals and visions. The OP is intended to ensure that the City evolves, improves and realizes its full potential in areas such as transit, land use development, and the built and natural environment. Future growth will be steered by the OP to areas which are well served by transit and the existing road network.

The Site is in proximity to Gerrard Street East and Pape Avenue, both identified as a priority transit corridors in the OP, where transit-supportive measures should be integrated into as-of-right-zoning, such as minimum development densities and minimum parking standards.

Further, the OP encourages Complete Streets to support all users by connecting street grids or by creating smaller development blocks.

4.2.2 TransformTO: Net Zero by 2040 Climate Strategy

In December 2021, Toronto City Council adopted an ambitious strategy to reduce community-wide greenhouse gas (GHG) emissions in Toronto to net zero by 2040. With the adoption of the TransformTO Net Zero Strategy, Toronto's community-wide emissions need to be cut in half in the next 10 years to meet the 2030 target of a 65% emissions reduction. To reach this target, the Strategy identifies actions and targets to be achieved by 2030 in five key areas, one of which is transportation.

One of the primary sources of GHG emissions in Toronto include the transportation sector (36%), largely from the use of personal vehicles. As such, one of the key areas of action in the Net Zero Strategy is to increase access to low carbon transportation options, including walking, biking, public transit and electric vehicles.

The City has identified community-wide targets to 2030 including the following:

- By 2030, 75% of school/work trips under 5km will be walked, biked or taken by transit; and
- By 2030, 30% of registered vehicles in Toronto will be electric.

The Site's proximity to various bus and streetcar routes, as well as the Proposed OL Station, provides residents and visitors with low carbon transportation options. This will reduce the site trips taken by private vehicle and bring the City closer to their Net Zero by 2040 goal.

Additionally, the Site's provision of electric vehicle parking infrastructure aligns with and supports the City's goal to increase the number of electric vehicle ownership in the City.

4.2.3 Toronto Green Standard Version 4

The Toronto Green Standard is Toronto's sustainable design and performance requirements for new private and city-owned developments, since 2010. The Standard consists of tiers of performance measures with supporting guidelines that promote sustainable site and building design. Tier 1 is mandatory and applied through the planning approval process.

Version 4 of the Toronto Green Standard (TGS) came into effect on May 1, 2022 for new planning applications and is one of the key programs under the TransformTO Net Zero Strategy to reduce emissions, community-wide. The Standard addresses various environmental priorities in the City of Toronto, including improvements to air quality.

The Site is subject to Tier 1 (the only tier) performance measures related to low-emissions transportation and cycling infrastructure. **Section 11.5.1** and **Section 12.0** provide a more detailed discussion of these performance measures and how the Site meets these standards.

5.0 EVOLVING TRANSPORTATION CONTEXT

5.1 AREA ROAD CONTEXT

5.1.1 Existing Road Network

The Site is located in the North Riverdale neighbourhood of Toronto with an existing road network, primarily comprising minor arterial, local, and laneway road types. The majority of streets surrounding the site are generally local roads that lead to established residential areas, or provide alternative connections to area arterial roads.

A detailed description of the existing area road network surrounding the Site and the characteristics of the streets serving the study area is provided in **Table 2**.

The existing area street network is illustrated in **Figure 6**.

5.1.2 Proposed Road Network

As mentioned in **Section 2.3.1**, the Project proposes a new east-west public street, called New Street, which is located generally in the center of the site between the proposed public park on the north and the proposed development on the south.

The proposed street is an east-west public road that intersects with Pape Avenue to the east and Carlaw Avenue to the west. This road will provide access to a new park and direct connection into the site. The proposed Right of Way (ROW) is 18.50 metres with a 2-lane cross-section, 1 lane in each direction. Additionally, both proposed intersections at Pape Avenue and Carlaw Avenue will be signalized.

As a result of the new street, additional enhancements and modifications will be made to the immediate existing street network:

- New connection between New Street and existing terminus of Pape Avenue;
- Signalization of New Street / Carlaw Avenue;
- Signalization of New Street / Pape Avenue;
- Removal of north-south segment of public laneway off Langley Avenue on the east side; and
- New connection from public laneway off Langley Avenue to New Street.

A detailed description of the future road connection and additional road improvements at the Site is provided in **Table 2** and illustrated in **Figure 7** and **Figure 8**, respectively.

The functional road plan provides further details for New Street in **Appendix B**.



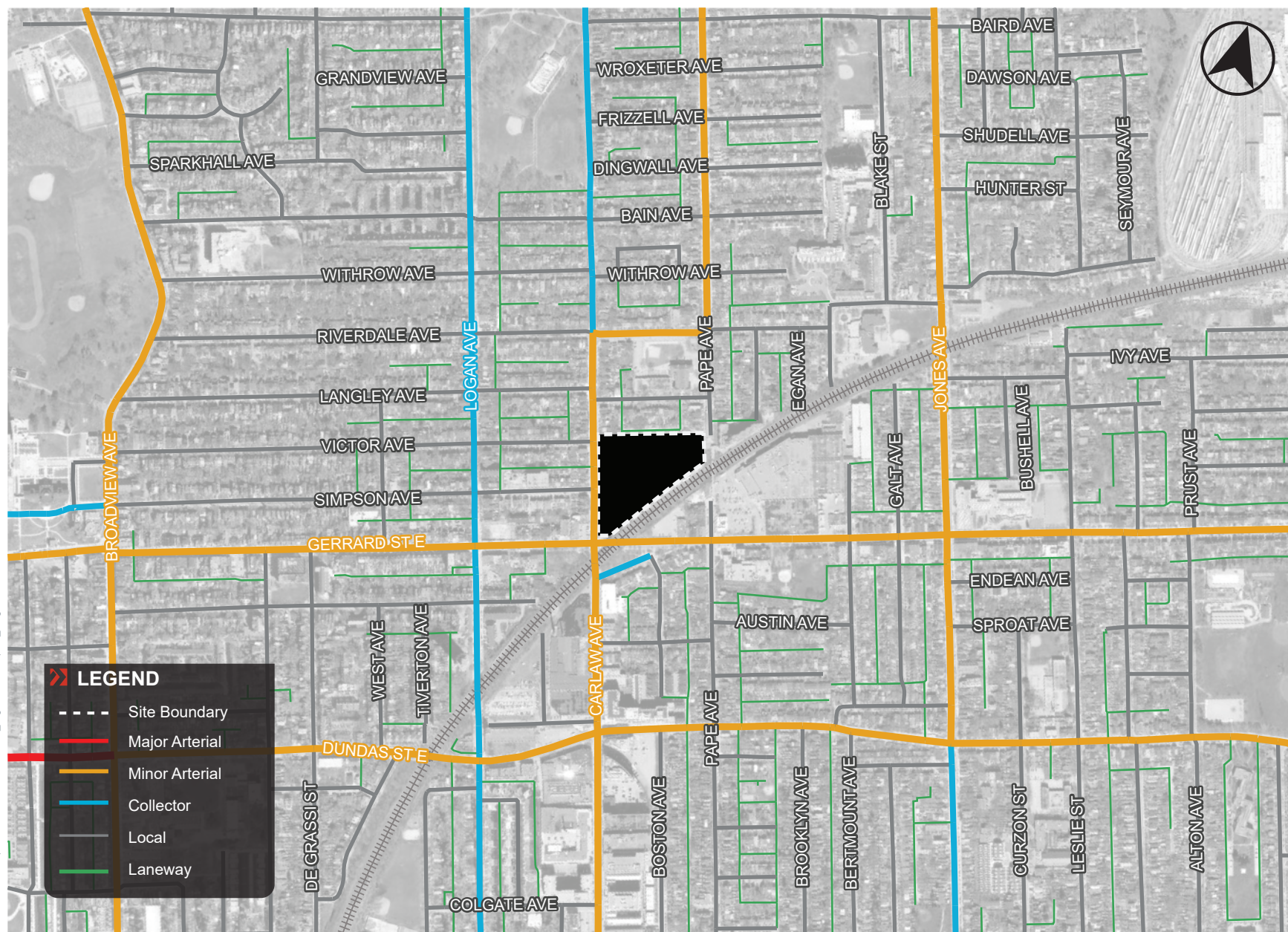
TABLE 2 AREA ROAD NETWORK

Type	Street Name	On-street Parking & Regulations	Roadway Limits	Description
Existing Road Network				
Minor Arterial	North-South	<p>Gerrard Street East to Langley Avenue: Parking is permitted on the east side of the roadway approximately 50 metres north of Gerrard Street East. Parking is not permitted from 7:00am to 9:00am, Monday to Friday. "No Stopping" restriction on the east side from 4:00pm to 6:00pm, Monday to Friday.</p> <p>Parking is permitted on the west side of the roadway approximately 15 metres south of Langley Avenue except for 4:00pm to 6:00pm, Monday to Friday. "No Stopping" restriction on the west side from 7:00am to 9:00am Monday to Friday.</p> <p>Langley Avenue to Riverdale Avenue: It is noted that this entire section of Carlaw Avenue is signed as a 'Snow Route' and all on-street parking is prohibited on snow days.</p> <p>Parking is permitted on the east side of the roadway approximately 15 metres north of Langley Avenue.</p> <p>Parking is permitted on the west side of the roadway approximately 20 metres south of Riverdale Avenue. One (1) on-street parking space along this western section of the roadway is available for accessible parking permit holders.</p>	<p>Roadway extends from Riverdale Avenue in the north to Commissioners Street in the south.</p> <p>Roadway north of Riverdale Avenue is classified as a Collector road.</p>	4-lane cross-section, 2 lanes in each direction. The posted speed limit is 40km/h.
	East-West	<p>Carlaw Avenue to Pape Avenue: On-street parking is permitted on the south side of Gerrard Street East approximately 60 metres east of Carlaw Avenue. Parking is only permitted for 1 hour from 8:00am to 4:00pm Monday to Friday, and from 8:00am to 6:00pm on Saturday. 'No Stopping' restriction on the east side of street between 4:00pm and 6:00pm, Monday to Friday.</p> <p>No stopping on the north side of Gerrard Street East from 7:00am to 9:00am, Monday to Friday, and no parking permitted at any time.</p>	Roadway extends from Coxwell Avenue in the east to Yonge Street (continues west as Gerrard Street West) in the west.	4-lane cross-section, 2 lanes in each direction. The assumed speed limit is 50km/h.

Type	Street Name	On-street Parking & Regulations	Roadway Limits	Description
Local	North-South	<p>Poucher Street to Langley Avenue: No parking is permitted at anytime on the east side of Pape Avenue. No signed parking restrictions are posted along the west side of Pape Avenue.</p> <p>Langley Avenue to Riverdale Avenue: Parking is permitted for 10 minutes from 7:30am to 9:30am, 11:30am to 1:00pm and 3:00pm to 6:00pm on weekdays on the west side of Pape Avenue, approximately 30 metres south of Riverdale Avenue. No parking is permitted on Pape Avenue outside of these times. These provisions are intended to accommodate student pick-up and drop-off activity associated with the adjacent Pape Avenue Junior Public school. This curbside area is signed as a 'Student Pick-up and Drop-off Area'.</p>	<p>Roadway, classified as a local road, extends from Riverdale Avenue in the north to 25 metres south of Poucher Street in the south, where the roadway ends to meet the GO railway tracks.</p> <p>South of the GO railway tracks, the roadway continues southward until Eastern Avenue.</p>	2-lane cross-section, 1 lane in each direction. The posted speed limit is 30km/h.
	East-West	<p>Carlaw Avenue to Pape Avenue: On-street parking is permitted on the south side of Langley Avenue. One (1) on-street parking space along this section of the roadway is available for accessible parking permit holders. No parking is permitted from 12:01am to 7:00am, except by permit.</p> <p>No parking is permitted at any time on the north side of the roadway.</p>	Roadway extends from Carlaw Avenue in the west to Pape Avenue in the east.	2-lane cross-section, 1 lane in each direction. The posted speed limit is 30km/h.
		<p>On-street parking is permitted on the south side of Victor Avenue. No parking is permitted between 12:01am to 10:00am except by permit.</p> <p>On-street parking is not permitted on the north side of Victor Avenue.</p>	Roadway extends from Broadview Avenue in the west to Carlaw Avenue in the east.	1-lane cross section in the eastern direction. The posted speed limit is 30km/h.
		<p>On-street parking is permitted on the north side of Simpson Avenue. No parking is permitted from 12:01am to 7:00am except by permit.</p> <p>On-street parking is permitted within certain segments of the south side of Simpson Avenue, starting 20 metres west of Carlaw Avenue. No parking is permitted from December 1 to March 31. Parking is permitted from April 1 to November 30, only with permit.</p>	Roadway extends from Howland Road in the west to Carlaw Avenue in the east.	2-lane cross-section, 1 lane in each direction. The posted speed limit is 30km/h.

Type		Street Name	On-street Parking & Regulations	Roadway Limits	Description
Laneway	North-South & East-West	Public Laneway (Entrance on Langley Avenue)	No parking is permitted at any time on this roadway.	Roadway is U-shaped. The north-south portions of the roadway extend from Langley Avenue in the north to the parking lot in the south. The east-west portion of the roadway extends ~45 metres east of Carlaw Avenue in the west to ~45 metres west of Pape Avenue in the east.	1-lane cross section. The assumed speed limit is 30km/h.
	East-West	Public Laneway (Entrance on Carlaw Avenue)	No parking is permitted at any time on this roadway.	Roadway extends from ~45 metres east of Logan Avenue in the west to Carlaw Avenue in the east.	1-lane cross section. The assumed speed limit is 30km/h.
Future Road Network					
Local	East-West	New Street	On-street parking can be provided along either the north or south side of the roadway.	Roadway extends from Carlaw Avenue in the west to Pape Avenue in the east.	2-lane cross section, 1 lane in each direction. The assumed speed limit is 30km/h. Refer to Appendix B for further details.





Aerial maps provided courtesy of: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, the GIS User Community and/or Google Earth/Maps.

FIGURE 6 EXISTING STREET NETWORK



FIGURE 7 PROPOSED ROAD NETWORK

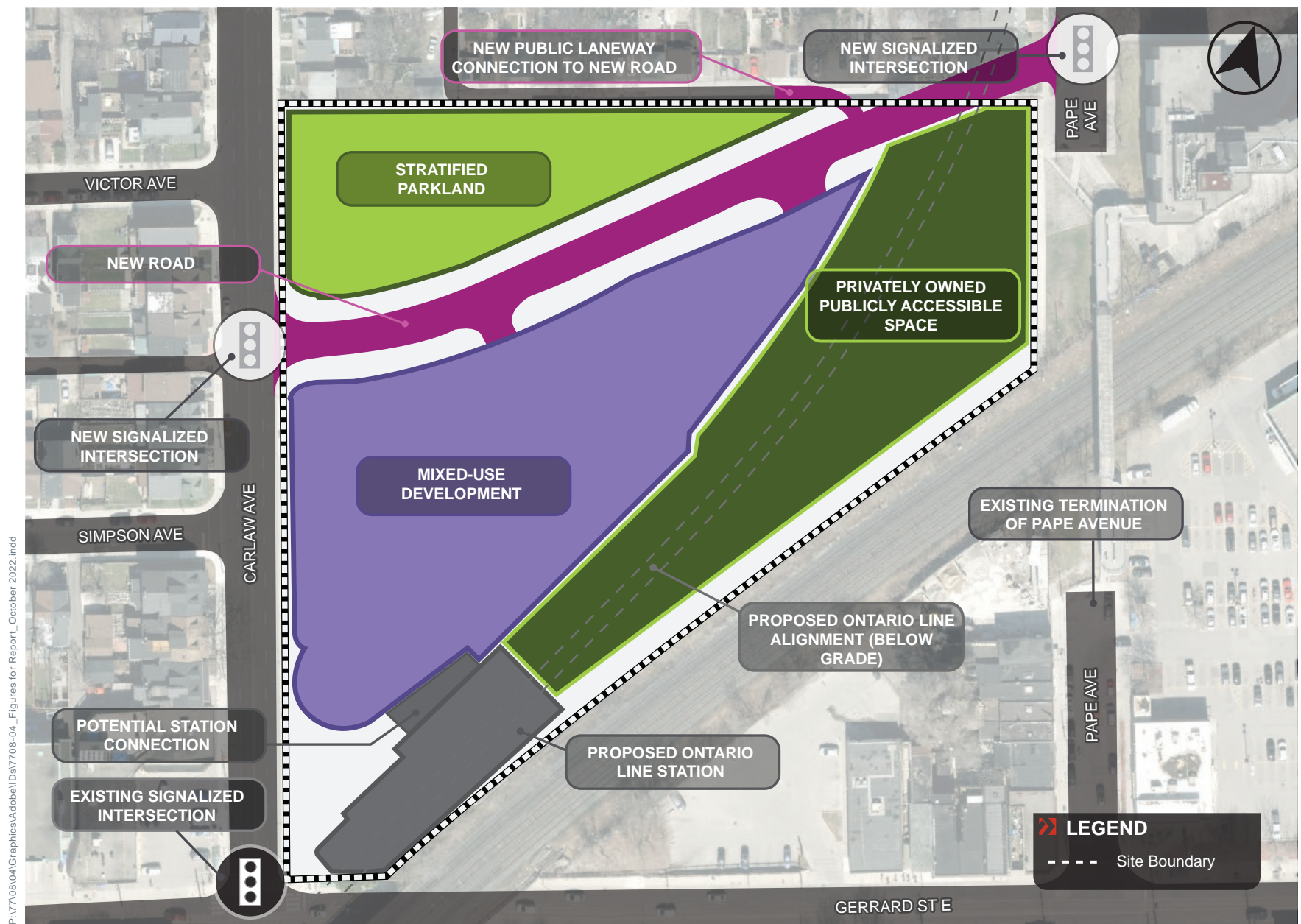


FIGURE 8 STREET NETWORK CONTEXT AND CHANGES

5.2 AREA TRANSIT CONTEXT

5.2.1 Existing Transit Network

The Site is located within the North Riverdale neighbourhood of Toronto, and is well served by transit operated by GO Metrolinx and the Toronto Transit Commission (TTC).

The site is also located within walking distance of a higher order TTC subway station; Pape Station is located approximately 1.40 kilometres northeast of the Site with access to Line 2.

In addition, there are TTC bus routes that are easily accessible from the Site's location, including several routes operating directly adjacent to the Site along the Gerrard Street East and Carlaw Avenue corridors.

A summary of the area transit network surrounding the Site is outlined in **Table 3**.

The existing area transit network is illustrated in **Figure 9**.

TABLE 3 AREA TRANSIT NETWORK

Service Line		Headway	Closest Stop Location	Description
Subway	Line 2 Bloor-Danforth Line	~2 - 3 min. during weekday peak periods ~4 - 5 min. during off-peak periods	Pape Station (1.40 km / 16 min. walk)	This route operates generally in an east-west direction along Bloor Street and Danforth Avenue in the City of Toronto. This route operates between Kipling Avenue in the west and Kennedy Road to the east. Line 2 connects to Line 1 at the Bloor-Yonge and St. George stations, and connects to Line 3 at Kennedy Station.
	506 Carlton	~6 - 10 min. during weekday peak periods ~9 - 10 min. during off-peak periods	Gerrard Street East at Carlaw Avenue (180 m / 2 min. walk)	The 506 Carlton streetcar route operates between Main Street Station on the Bloor-Danforth Subway and High Park Loop, generally in an east-west direction. It also serves the College and Queen's Park Stations on the Yonge-University-Spadina Subway. This branch operates at all times, seven days a week. The route is part of the 10 Minute Network, and operates 10 minutes or better, all day, every day.
Streetcar	306 Carlton (Night)	~17 - 30 min.	Gerrard Street East at Carlaw Avenue (180 m / 2 min. walk)	The 306 Carlton Blue Night streetcar route operates between Main Street Station and Dundas West Station on the Bloor-Danforth Subway, generally in an east-west direction. This branch operates during the overnight period, seven days a week. The route is part of the Blue Night Network and provides 30-minute or better service, from approximately 1:30 a.m. to the start of subway service
Bus	72 Pape	72A: Does not operate during weekday peak periods ~18 - 19 min. during off-peak periods	Carlaw Avenue at Gerrard Street East North Side (100 m / 1 min. walk)	The 72 Pape bus route operates between Pape Station on Line 2 Bloor-Danforth and Commissioners Street, and between Pape Station and Union Station on Line 1, generally in a north-south direction. Three services are operated. The 72A (Pape Station-Eastern) operates at all times except the morning and afternoon peak periods from Monday to Friday. The 72B (Pape Station-Union Station via Queens Quay) operates all day, every day. The 72C (Pape Station-Commissioners) operates during the morning and afternoon peak periods from Monday to Friday. Service between Pape Station and Eastern Avenue is part of the 10 Minute Network, and operates 10 minutes or better, all day, every day.
		72B: ~19 - 21 min. during weekday peak periods and off-peak periods		
		72C: ~8 - 10 min. during weekday peak periods Does not operate during off-peak periods		

Service Line		Headway	Closest Stop Location	Description
	325 Don Mills (Night)	~30 min.	Carlaw Avenue at Gerrard Street East North Side (100 m / 1 min. walk)	<p>The 325 Don Mills Blue Night bus route operates between the area of Steeles Avenue East and Don Mills Road, and the area of Eastern Avenue and Carlaw Avenue, generally in a north-south direction. This branch operates during the overnight period, seven days a week.</p> <p>The route is part of the Blue Night Network and provides 30-minute or better service, from approximately 1:30 a.m. to the start of subway service.</p>



FIGURE 9 EXISTING TRANSIT NETWORK

5.2.2 Future Transit Improvements

There are significant transit improvements planned on regional and local scales, which are fundamental to the delivery of the proposed redevelopment and have positive implications for the Project and its overall accessibility to transit, particularly in relation to the proposed Ontario Line subway.

The future transit context is illustrated in **Figure 10** and **Figure 11**.

The City of Toronto, Metrolinx, and TTC have been collaborating and moving forward in planning and building the Ontario Line, one of four priority transit projects for the Greater Toronto Area (GTA), to alleviate crowding on TTC Line 1 (Yonge-University-Spadina) and better connect communities across the City.

According to the official Metrolinx website for the OL, the proposed subway line will include 15 stops, spanning 15.6 kilometres with a projected ridership of 388,000 daily trips. The route will extend between Ontario Place / Exhibition (to the southwest) and Ontario Science Centre Station (to the northeast); there will be links to existing TTC, GO Transit, and the planned Eglinton Crosstown LRT along the way. The design of the route is central to multiple communities within the City of Toronto – as more housing and businesses grow overtime, residents, workers, and visitors / tourists will often be located within a 10-minute walking distance to the stops along the Ontario Line.

The Site will be directly adjacent to the Proposed OL Station, providing site visitors and residents with immediate connections to higher-order transit and the wider City. The proposed station will also facilitate the transfer of passengers to and from the TTC Streetcar, further improving the transit connectivity of the Site.

According to the *February 2022 Environmental Impact Assessment Report*, an estimated 3,300 people are expected to use Gerrard Station by 2041 during the busiest travel hour, with 2,000 transferring between the Ontario Line and local streetcars and buses. Additionally, once operational, passengers will be able to travel from the Proposed OL Station northwards to the Science Centre OL Station in 10 minutes, as mentioned in the *December 2020 Ontario Line Preliminary Design Business Case Report*.

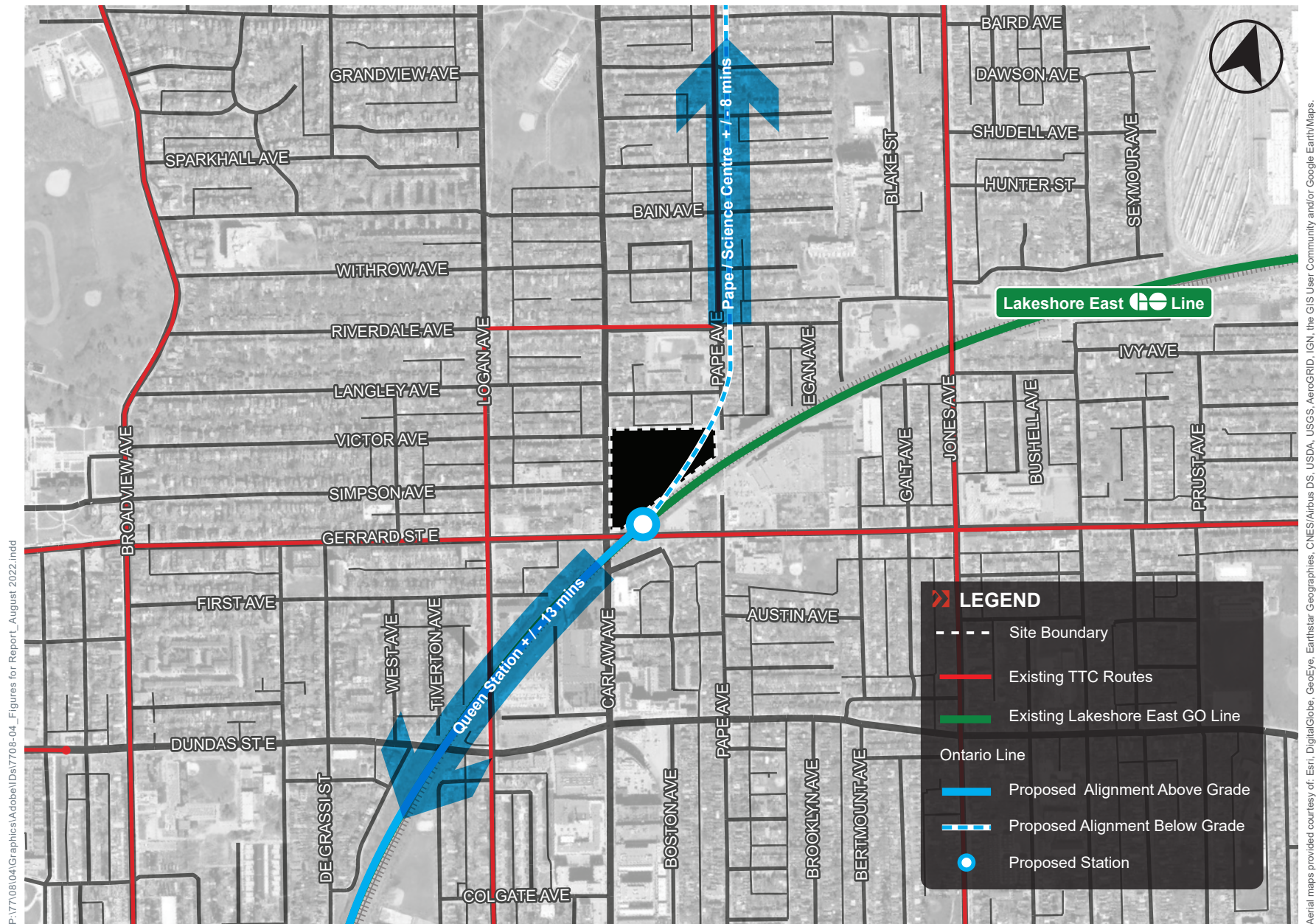


FIGURE 10 FUTURE TRANSIT CONTEXT

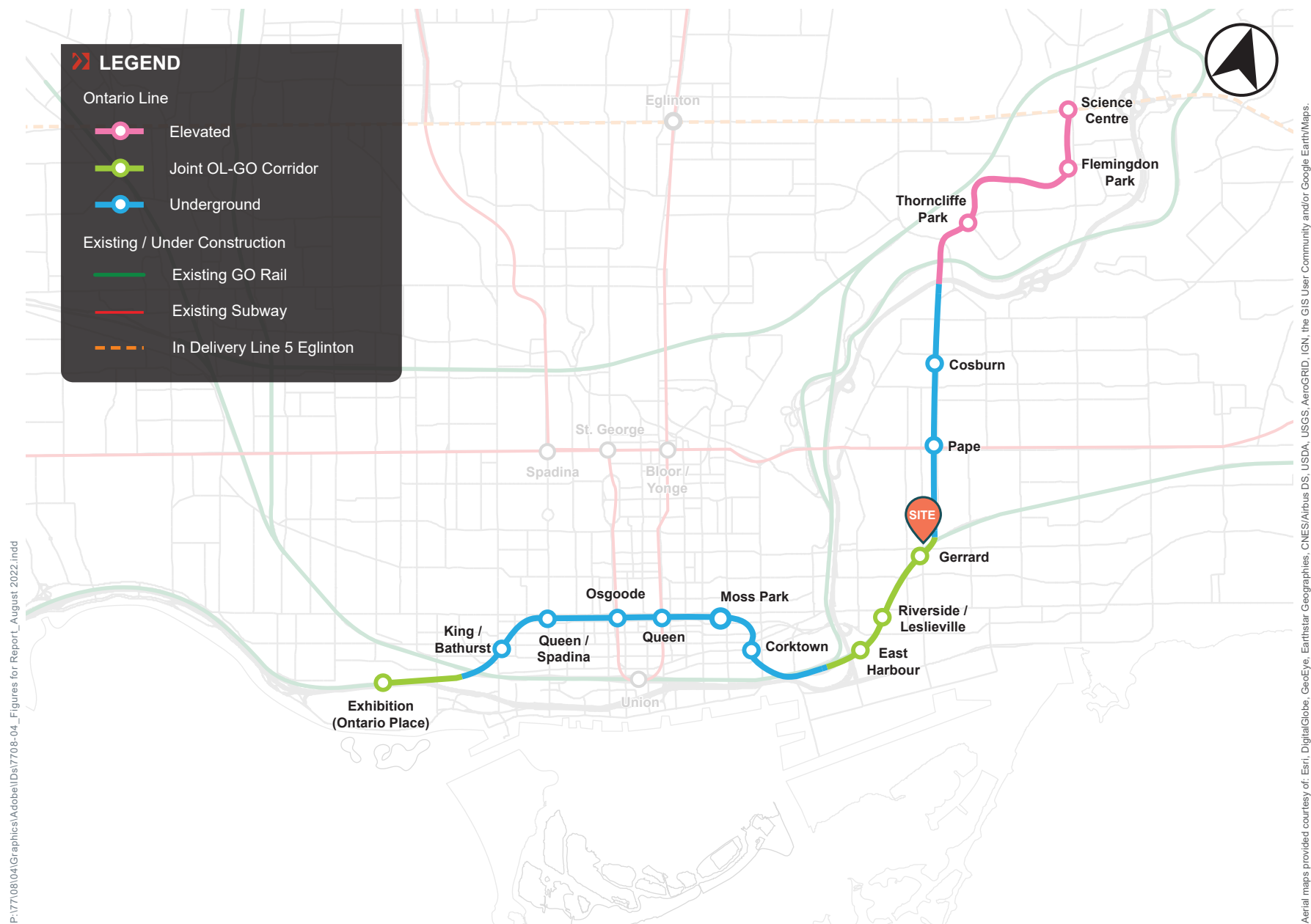


FIGURE 11 FUTURE TRANSIT NETWORK

5.2.3 Transit Reach Assessment

5.2.3.1 Existing Transit Travel Reach

In order to understand the changing transportation context, transit service area analyses for the existing and future transit network was conducted using Geographic Information Systems (GIS). These analyses look at the service area of a transit network that a visitor of the Site has access to in a given time range. This type of analysis is useful in understanding the transit accessibility and can also be used to quantify the impact of transit service changes.

A 15, 30, and 45 minute transit reach from the Site during the weekday morning travel period was analysed for existing conditions as is illustrated in **Figure 12**. Transit travel times include walking time to and from transit stops, as well as the transit schedules during peak hour (i.e. service frequency and wait times), all of which are based upon existing transit service.

5.2.3.2 Future Transit Travel Reach

A review of projected transit travel times assumed the various public transit network improvements included in **Section 5.2.2** is illustrated in **Figure 13**. A comparison of areas that are reachable is provided in **Table 4** below.

TABLE 4 EXISTING AND FUTURE TRANSIT SERVICE AREA ANALYSIS COMPARISON

Transit Scenario	15 minute reach	30 minute reach	45 minute reach
Existing Conditions (Travel Away From Site)	<ul style="list-style-type: none"> • North along Pape Ave to O'Connor Dr; • South along Carlaw Ave to the Waterfront; • East along Danforth Ave to just before Woodbine Ave, east along Gerrard St E to just past Coxwell Ave; and • West along Bloor St W to Ted Rogers Way, along Gerrard St E to just past Sherbourne St. 	<ul style="list-style-type: none"> • North along Kennedy Rd and Don Mills Rd to Eglinton Ave E, north along Yonge St to just before Eglinton Ave E; • South along Warden Ave, Don Valley Pkwy, and University Ave to the Waterfront; • East along St Clair Ave E to just after Midland Ave, east to Eglinton Ave E and Midland Ave; and • West along Bloor St W to Symington Ave (West of Lansdowne Ave). 	<ul style="list-style-type: none"> • North along Midland Ave and McCowan Rd to Sheppard Ave E, north along Don Mills Rd to Highway 401, north along Yonge St to Finch St, north along Allen Rd to just past Wilson Ave; • South along Markham Rd, Victoria Park Ave, Don Valley Pkwy, Yonge St, Bathurst St, and Parkside Dr to the Waterfront; • East along Kingston Rd to just past Galloway Rd (west of Morningside Ave), along Ellesmere Rd to just before Markham Rd; and • West along Bloor St W to just before Kipling Ave.
Future Conditions (Travel Away From Site)	<ul style="list-style-type: none"> • North along Pape Ave / Millwood Rd to just before Dons Mills Rd; • South along Carlaw Ave and Don Valley Parkway to the lakeshore; • East along Gerrard Ave E to just past Coxwell Ave; and • West along Bloor St W to Ted Rogers Way, along Queen St W to just before Portland St (West of Spadina) 	<ul style="list-style-type: none"> • North along Don Mills Rd to just before York Mills Rd, north along the planned Scarborough Subway Extension to Ellesmere Ave E and Brimley Rd; • South along Victoria Park Ave, Coxwell Ave, Don Valley Pkwy, Yonge St, and Lansdowne Ave to the Waterfront; • East along Eglinton Ave E and St Clair Ave E to just before Brimley Rd; and • West along Bloor St W to Dundas St W, west along King St W to Lansdowne Ave, to Weston Rd and St Clair Ave W, to Keele and Eglinton Ave W (Caledonia GO). 	<ul style="list-style-type: none"> • North along McCowan Rd to just before Steeles Ave E, north along Don Mills Rd to just before Finch Ave E, north along Yonge St to just before Centre Ave (North of Finch Ave W), north along Keele St to just past Steeles Ave W, north along Barrie GO Line to Maple GO, north along GO Bus Route 63 to the intersection of Keele St and Kirby Rd; • South along Markham Rd, Victoria Park Ave, Don Valley Pkwy, Yonge St, Bathurst St, Parkside Dr, South Kingsway, and Royal York Rd to the Waterfront; • East along Sheppard Ave E to just before Morningside Ave, east along Kingston Rd to just past Morningside Ave, to Port Union Rd and Lawrence Ave E (Rouge Hill GO); and • West along Eglinton Ave W and Bloor St W to just past Kipling Ave, west along Lakeshore West GO Line to Port Credit GO.

Notable findings include:

- Within 15 minutes, much of the area along Carlaw Ave / Pape Ave and along Danforth Ave and Bloor St E is accessible under existing conditions, with improvements to access north from Pape Ave and along Queen St with the addition of the Ontario Line.
- Within 30 minutes, a large area surrounding Danforth Ave and a majority of Toronto along Bloor St W and Yonge St south of Eglinton Ave are accessible from the site location under existing conditions, with improvements in the future along McCowan Rd, Don Mills Rd, Sheppard Ave, Eglinton Ave, and the Gardiner Expwy due to the addition of the Ontario Line, Eglinton Crosstown Line, Scarborough Subway Extension, and Sheppard West Subway Extension.
- Within 45 minutes, most of Toronto south of Highway 401 is accessible, extending into North York, Scarborough, and the southern half of Etobicoke. Under future conditions, reach extends further out into North York and along Eglinton Ave W and McCowan Rd with the addition of the Sheppard West Subway Extension, Ontario Line, Eglinton Crosstown Line, and Scarborough Subway Extension. Reach extends north to King City GO via Barrie GO Line and Unionville GO via Stouffville GO Line, east to Rouge Hill GO along Lakeshore West GO Line, and west to Clarkson GO via Lakeshore East GO Line are accessible due to the GO Expansion RER projects.

In summary, the site is easily accessible by transit under present conditions, with improvements to access expected as a result of TTC Expansion and extensions to Toronto's rapid transit network. Its central location provides convenient connections to transit and active transportation modes to / from key local and regional destinations. In the

future, the planned transit improvements are expected to enhance the transit experience and overall reach, particularly to other municipalities.

The evolving transportation context visualized above indicates that, at either local or intercity scales, there are suitable alternatives to driving or requiring a parking space for daily travel. The site is in a prime location that enables future site users to shift away from auto use and utilize the major transit investments being afforded within the area.

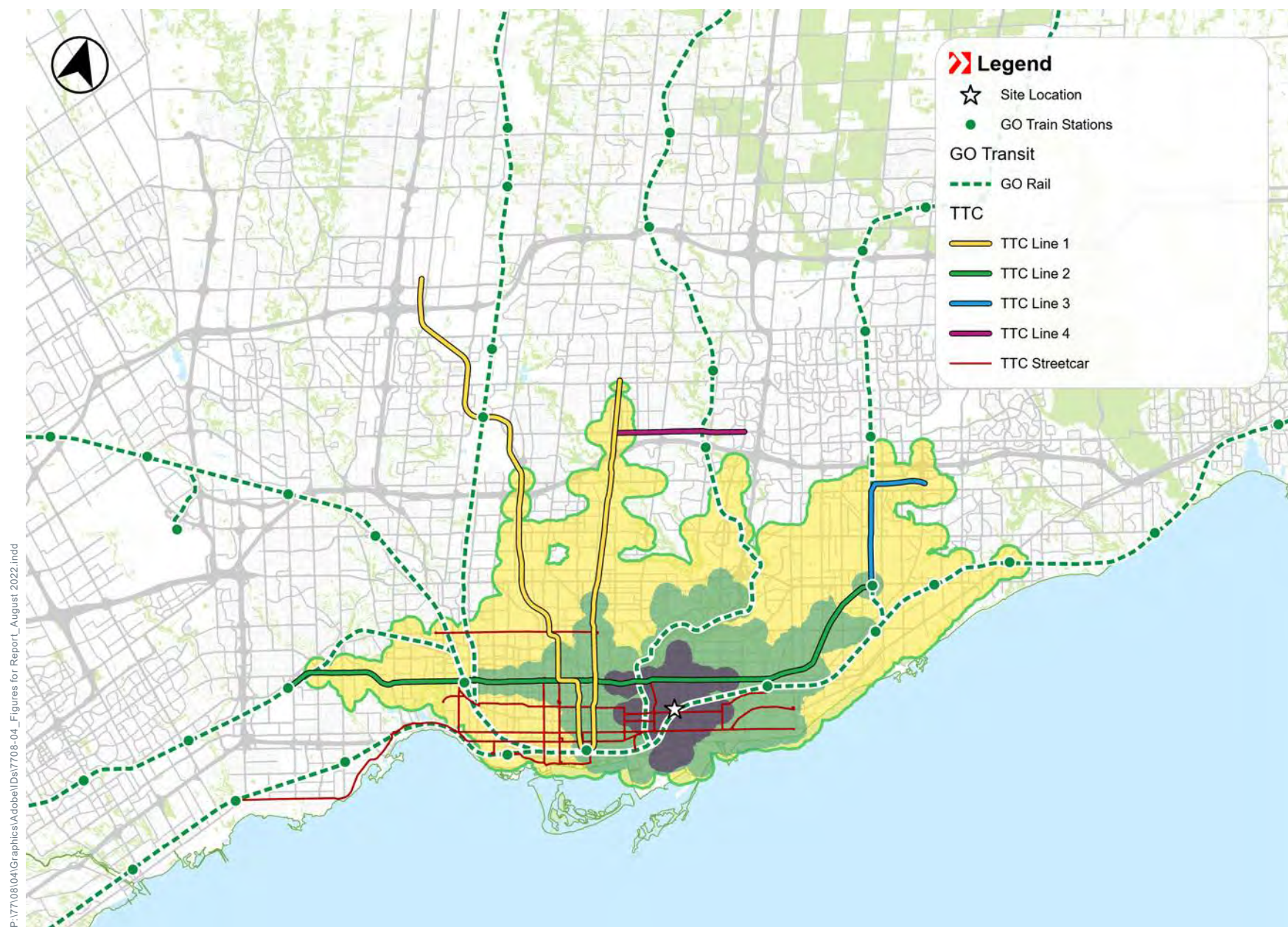


FIGURE 12 EXISTING TRANSIT REACH

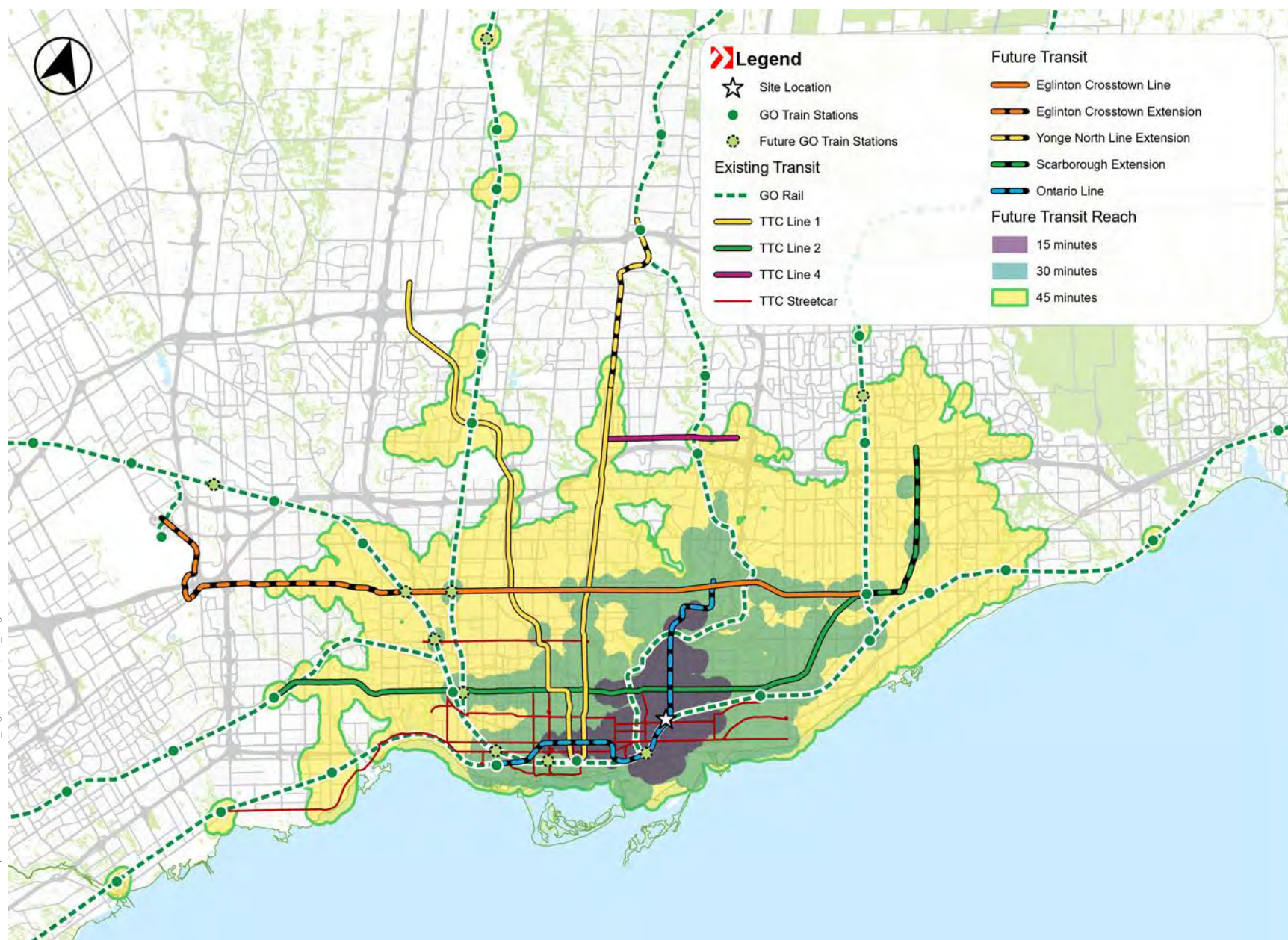


FIGURE 13 FUTURE TRANSIT REACH

5.2.5 Major Transit Station Area

In June 2020, the City of Toronto approved a work plan for the Growth Plan (2019) Conformity and a comprehensive review of the Official Plan. The conformity of the Growth Plan, which came into effect in May 2019, is a provincially legislated requirement that must be satisfied – this presents the opportunity for the City to help address planning and growth-related challenges.

The Growth Plan specifically speaks to Major Transit Station Areas (MTSAs), which are defined as *“the area within an approximate 500 to 800 metre radius of a transit station, representing about a 10-minute walk”*, particularly along an existing or planned transit corridor. There are over 180 MTSAs in the City of Toronto, and the Plan prescribes minimum density targets for these areas (e.g. 200 residents and jobs per hectare for those that are served by subways).

Given that the Site will be directly within an MTSA, it must conform to the minimum density targets prescribed in order to achieve the overarching goals of the Growth Plan (e.g. better mobility). Such density targets will be achieved through the proposed development plan.

Based on the time and resources required to complete a local area study, the City categorized all potential MTSAs into one (1) of three (3) phases, where each phase represents the recommended prioritization identified by City Council. The future Gerrard Ontario Line Station is listed under Phase 2 (out of three phases) of the Proposed MTSA Prioritization Plan.

5.3 AREA PEDESTRIAN NETWORK

The Site is generally located in a mixed-use urban area that provides various amenities and is walkable to various types of destinations (e.g. major transit, parks, retail / commercial uses, and food establishments).

The existing and proposed pedestrian context is illustrated in **Figure 14**.

5.3.1 Existing Pedestrian Context

The Site is located within the southern end of Toronto's North Riverdale neighbourhood and can generally be characterized as a pedestrian-friendly area with excellent access to key amenities and destinations.

The site is generally well-served by essential pedestrian facilities such as two-sided, adequately-sized sidewalks and pedestrian crosswalks at major intersections. In the vicinity of the site, there are continuous sidewalks along both sides of Gerrard Street East and Carlaw Avenue. Local roads near the site vicinity, including Langley Avenue, Pape Avenue, Victor Avenue, and Simpson Avenue also have sidewalks along both sides of the roadways.

As for pedestrian flow at intersections, crosswalks, and pedestrian signal heads are provided at the signalized intersections along Gerrard Street East. Near the Site, along Carlaw Avenue, there is a pedestrian crossover at Langley Avenue to avoid potential conflicts with vehicular traffic. Lastly, all roads at signalized and unsignalized intersections provide curb ramps to facilitate pedestrian movement.

In addition to pedestrian supportive facilities, the site is located in proximity to a wide range of key destinations, including various services and amenities, schools and education centres, community and recreation facilities, restaurants, and other day-to-day amenities that are accessible by foot. Most notably, the site is adjacent to the Gerrard Square shopping mall with various restaurants, a gym, department

stores such as Walmart, Winners, and Home Depot, and services such as Service Canada. Along Gerrard Street East, there are also clusters of restaurants and food stores and other essential services and amenities such as pharmacies and a bank.

Within a 500-metre radius (~5-7 minute walking distance) of the site, pedestrians have access to multiple educational centres and public schools, places of worship of various faiths, and community and recreation centres including the Matty Eckler Community Recreation Centre and its adjacent green space and playground. Within a 750-metre radius (~8-10 minute walking distance), pedestrians can also access Withrow Park, a large green space with an ice rink, basketball court, tennis court, and playground.

5.3.2 Future Pedestrian Context

The development of the Site provides an opportunity to provide a finer-grained pedestrian network that integrates the proposed mixed-use development, park, and Ontario Line station with the surrounding neighbourhood for a strong public realm.

Along the new public street, the site proposes sidewalks on both sides of the roadway with a landscaped buffer. These sidewalks will then tie into the existing pedestrian facilities along Carlaw Avenue and Pape Avenue and new signalized crossings will be installed at these intersections to improve pedestrian safety and flow around the site.

Additionally, the Site proposes POPS (Privately-Owned Public Spaces) along the south-east boundary of the site and a park to the north of the Site, across the New Street. These proposed elements provide additional pedestrian-friendly amenities for Site residents and visitors, offering a convenient and comfortable space for leisure, recreation, or as a waiting area for transit.

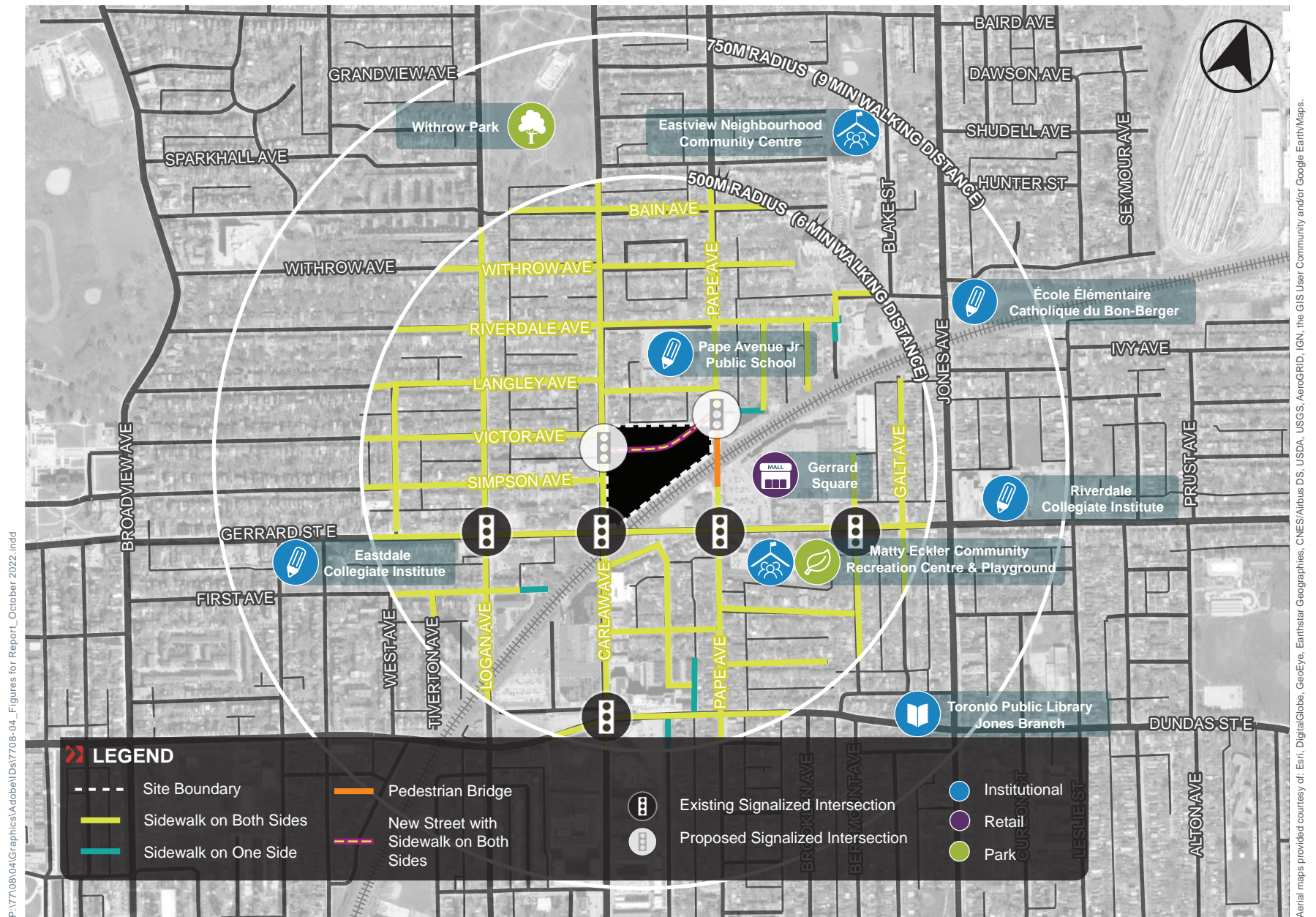


FIGURE 14 EXISTING AND FUTURE PEDESTRIAN CONTEXT

5.4 AREA CYCLING CONTEXT

5.4.1 Existing Cycling Infrastructure

The immediate Site vicinity currently includes limited cycling connections, however, benefits from a number of cycling infrastructure within a 750-metre radius, providing both north-south and east-west connections to the wider cycling network of the City.

The area's cycling network is summarized in **Table 5**.

5.4.2 Future Cycling Infrastructure

In 2016, Toronto City Council adopted a “Ten Year Cycling Network Plan” that outlines the City's planned and proposed investments in cycling infrastructure over the next ten years (2016-2025).

The Ten Year Plan intends to connect gaps within the existing cycling network, expand the network to new areas of the City, and to renew existing routes by improving their quality. An update to the Ten Year Plan was approved in 2019, highlighting key improvements over a three-year period to produce the 2019-2021 Near-Term Implementation Program. In 2021, another update was conducted to highlight key improvements over the subsequent three-year period, producing the 2022-2024 Near-Term Implementation Program.

Planned cycling infrastructure connections and improvements have been identified by the City of Toronto through both the Ten Year Cycling Network Plan (2016) and the Near-Term Implementation Program (2022-2024).

City of Toronto 10-Year Cycling Network Plan

It is planned in the City of Toronto Ten Year Cycling Network Implementation Plan (2016-2025) to add a bicycle lane or cycle track on

Carlaw Avenue from Riverdale Avenue in the north to Lakeshore Boulevard East in the south, extending the current cycling infrastructure southward. Additionally, a “Quiet Street Route” is planned for Riverdale Avenue from Broadview Avenue in the west to Jones Avenue in the east.

City of Toronto Near-Term Implementation Plan (2022-2024)

As part of the City of Toronto Near-term Implementation Plan for 2022-2024, the cycle track along Dundas Street East from Broadview Avenue in the west to Kingston Road in the east will be renewed and upgraded.

The existing and future cycling context is illustrated in **Figure 15**.

TABLE 5 **AREA EXISTING CYCLING NETWORK**




	Route	Type of Cycling Infrastructure	Description	Image (Source: Google Maps)
North-South	Logan Avenue	On-Street Shared Cycling Connections & Bike Lanes	<p>Route travels from Cosburn Avenue in the north to Lakeshore Boulevard East in the south.</p> <p>This route consists of bike lanes and on-street shared cycling connections. Near the site vicinity, this route is a shared cycling connection.</p>	
	Jones Avenue	Bike Lanes	<p>Route travels from Danforth Avenue in the north to Queen Street East in the south.</p>	
East-West	Dundas Street East	Cycle Tracks	<p>Route travels from Sackville Street in the west to Kingston Road in the east.</p>	



FIGURE 15 EXISTING AND FUTURE CYCLING CONTEXT

5.5 AREA SHARED MOBILITY SERVICES

The Site area offers both car share and bike share facilities that allow residents, workers, and visitors alternative options to single occupancy vehicles or the like.

The area car share and Bike Share Toronto locations within are illustrated in **Figure 16**.

5.5.1 Car Share

Car sharing across Toronto provides a low-commitment transportation alternative for automobile use, which has become common practice. The success and influence of car-share programs, which were only in their infancy a decade ago, now provide convenient, non-private automobile travel opportunities for thousands of residents, employees, and visitors of the City of Toronto.

Within the City of Toronto, there are two types of car-share services available for use.

- Type 1: Round-trip, station-based service. The majority of service providers operate using this model, where the user rents and returns the fleet vehicle at the same location. The time of use is reserved in advance.
- Type 2: “Flex”, zone-based service. This car-share model permits the user to rent the vehicle and return at a different location. Typically, the vehicle can be parked within resident-only parking zones. These zones are defined by the car-share provider and are typically located within the residential downtown or East York areas of Toronto.

The success and rising influence of car share programs now provides convenient travel opportunities within the City using non-private automobiles. As vehicles are available “on-demand”, residents in the area can access a vehicle for unique trips that may require a vehicle

without having the need to own a personal vehicle. The availability of this service encourages reduced car ownership.

5.5.1.1 Existing Area Car Share

Within a 500-metre radius (~5-7 minute walking distance) of the site, there are two (2) ZipCar car-share locations, each with one vehicle available to use.

5.5.2 Bike Share Toronto

The Bike Share Toronto program, owned by the Toronto Parking Authority (TPA) provides flexible cycling options within the City of Toronto with bicycles that are used on a short-term basis and can be picked up/dropped off at different stations across the City.

In 2020, Toronto Bike Share completed five (5) years of phased annual expansions, resulting in an expansion of the system from 80 stations and 1,000 bikes to 6,850 bikes, 300 e-bikes, and 625 stations distributed across Downtown, Midtown, North York, Scarborough, York, East York, and Etobicoke.

In February 2022, TPA announced the launch of a Growth Plan Study to lay the foundation for an expansion of Bike Share Toronto into 2025. The expansion to the current network will include the addition of 380 stations, bringing the system size up to 1,000 stations over four years into 2025. The expansion will also stretch the system into all 25 wards in Toronto.

5.5.2.1 Existing Area Bike Share

Within a 500-metre radius (~5-7 minute walking distance) of the site, there are 3 Bike Share stations that can accommodate a total of 48 bicycle docks.

5.5.2.2 Future Area Bike Share

As per the 2022 Growth Plan Study, TPA is seeking opportunities to enhance Bike Share Toronto's connectivity to public transit to support first and last transportation while also providing a low-cost form of mobility in Toronto. The study will focus on installing new stations with connectivity to other transportation nodes such as TTC subway stations and TPA car parks. The Site's proximity to the proposed Gerrard Station of the Ontario Line bring opportunity to expand bike share locations within the site's vicinity.





FIGURE 16 CAR SHARE AND BIKE SHARE LOCATIONS

6.0 MOBILITY CHOICE TRAVEL PLAN

A Mobility Choice Travel Plan is pursued to advance Transportation Demand Management (TDM) strategies and policies within the context of the proposed development.

The Mobility Choice Travel Plan for the proposed development outlines the various TDM measures and strategies being advanced to reduce the number of private automobile-based trips made to / from the site, to promote the use of more active and sustainable modes of transportation, and to play a role in responding to the mobility needs of employees, residents, and patrons of the proposed development.

The Mobility Choice Travel Plan, combined with the physical attributes of the Site Plan – including the site's location in the regional transit network, bicycle infrastructure, and pedestrian facilities – are intended to reduce auto-mode share to the greatest extent possible.

6.1 PROVIDING MOBILITY CHOICE

The proposed development is intended to leverage considerable investment in regional transit infrastructure to provide a high degree of accessibility and mobility to future residents, patrons, and employees of the site.

Furthermore, the development plan itself includes a number of investments in transportation infrastructure, and notably the public realm and wider pedestrian network, to maximize mobility choice and connect with existing and planned active transportation and transit infrastructure. These investments (bicycle, pedestrian and transit connection infrastructure) are detailed as part of the development plan description in **Section 2.0**.

6.2 MOBILITY OBJECTIVES

The Mobility Plan is proposed as a framework to guide the provision of viable alternative personal transportation options beyond the single-occupant, private automobile. The objective is to encourage travel behaviour and patterns that are sustainable. The primary objectives are:

- Reducing demand on road infrastructure, thereby minimizing road and parking capital expenditures;
- Increasing travel efficiency;
- Reducing climate change emissions;
- Improving air quality; and
- Improving overall health.

To achieve the objectives, a series of mobility strategies and corresponding Transportation Demand Management (TDM) measures are outlined and have been considered as part of the site development and future operations to promote the use of active and sustainable transportation modes, respond to the mobility needs of residents, employees and patrons to the site, and reduce dependence on the private automobile.

6.3 MOBILITY STRATEGIES

TDM strategies include the application of various site design elements and property management/operational policies that have the goal of redistributing and reducing the travel demand of a project, specifically that of single occupancy private vehicles. The objective can be achieved by influencing mobility choice and patterns through the following seven (7) strategies:

- Vehicle Parking Supply and Management;
- Facilitation of Reduced Car Ownership and Usage;
- Encourage Transit Use;
- Encourage Bicycle Use;
- Enhance Pedestrian Mobility;
- Land Use and Building Infrastructure; and
- Coordination, Monitoring, Communication and Promotion.

This comprehensive framework has been developed to serve as a guideline for the implementation of effective TDM strategies during the site design stage, as well as in its operations following the full redevelopment of the property.

6.4 MOBILITY MEASURES

Each strategy has possible measures that can and should be implemented as part of the planning, design, and operations of the site and surrounding area. As such, the possible measures are categorized and discussed with respect to their implementation stage / consideration:

- **Infrastructure** (external links and facilities)
Physical infrastructure to improve the alternative (active, transit) mobility transportation realm along the boundaries of the site and to facilitate the integration of pedestrian, cycling and transit infrastructure.

- **Facilities and features of the site plan and design**

Physical aspects of the internal design of the development, including its buildings, open spaces, and circulation routings to promote alternative transportation modes.

- **Building operations / property management**

User-focused programs and policies enacted once the site is operational to encourage alternative transportation modes.

- **Monitoring**

Post-occupancy data collection programs used to assess travel patterns and gauge the effectiveness of TDM strategies and the Mobility Choice Travel Plan as a whole.

6.4.1 Implementation Responsibilities

In regards to implementation, there are three (3) levels of influence and responsibility groupings:

- City – broad infrastructure;
- Developer / Manager – site systems and facilities; and
- Users – what people choose to do and how they use the systems.

6.5 RECOMMENDED TDM PLAN

The future site context provides for frequent, public transit services and improved pedestrian and cycling connectivity. While strong opportunities exist in the area's infrastructure to accommodate sustainable transportation practices, the ability to leverage these opportunities is fundamental to ensuring the success for the Mobility Plan.

To this end, Mobility Plan strategies are presented with targeted “intentions” (e.g. what it is trying to achieve and for whom), accompanied by methods of implementation. Potential strategies are then framed in the context of the development and the strategies most appropriate for application are proposed.

Through the planning and development processes, infrastructure, parking management and supply, and TDM strategies supportive of reducing reliance on single-occupant vehicles will be pursued and formalized.

A summary of the mobility strategy is outlined below. It is important to note that these TDM strategies will be continuously refined throughout the application process. TDM measures proposed as part of the current development application are outlined in **Table 6**.

Figure 17 illustrates the variety of mobility elements associated with the proposed plan.



TABLE 6 POTENTIAL MOBILITY TRAVEL PLAN



Strategy		Intent	Possible Measures	Development Plan Measures
Vehicle Parking Supply & Management		<ul style="list-style-type: none"> • Reduce the attractiveness of car use for residents, employees and visitors • Reduce car ownership needs • Encourage higher vehicle occupancy • Encourage the use of other travel modes 	<p>Building, Planning & Design</p> <ul style="list-style-type: none"> • Establish appropriate minimum parking supply standards for the proposed land uses and buildings that are reduced relative to the existing Zoning By-law • Adopt a sharing of all non-residential parking to maximize the efficient use of the available supply • Provide preferred high-occupancy vehicle / carpool parking • Locate parking underground or above ground to enhance the pedestrian realm and encourage use of non-auto means at grad <p>Operational / Management</p> <ul style="list-style-type: none"> • Operate the majority of the site parking supply as paid parking for non-residents • Adjust parking fee structure, operations and parking allocations to support non-automobile usage goals and to accommodate changing parking needs • Offer parking to residents 'unbundled' from unit purchase 	<ul style="list-style-type: none"> • Adopt reduced (yet appropriate) residential and non-residential parking rates to the as-of-right Zoning By-law 569-2013 requirements (notwithstanding the recently passed Zoning By-law 89-2022 requirements that are currently under appeal). • Sharing of parking amongst non-residential uses will maximize the efficiency of the supply.
Facilitation Of Reduced Car Ownership & Usage		<ul style="list-style-type: none"> • Reduce the need for residents and employees to own a car for occasional travel • Reduce the likelihood of privately-owned car use for general travel, particularly during peak periods 	<p>Building, Planning & Design</p> <ul style="list-style-type: none"> • Provide appropriate pick-up / drop-off facilities to accommodate taxi / ride-share use • Make provisions for car-share, car-pool, low-emission, and short-term vehicle parking to accommodate priority parking for targeted vehicle users <p>Operational / Management</p> <ul style="list-style-type: none"> • Operate a car-share program on-site that members can access "on demand" • Provide and manage a carpool / ride-matching and guaranteed ride home program for residents and employees • Coordination with building employers to offer flexible work hours and compressed work week opportunities for staff • Provide information and communication items that outline the availability of the on-site services as well as broader taxi and ridesharing services • Provide incentive programs design to encourage the use of on-site services including corporate or private membership to car-share / car-pool services <p>Monitoring</p> <ul style="list-style-type: none"> • Monitor car-share program membership and usage, and adjust car deployment to respond to demands • Monitor carpool and ride-matching programs, and adjust to suit needs of residents, employees and visitors 	<ul style="list-style-type: none"> • Provide travel information to Site residents and employees regarding the availability of car-share provided within the area.

TABLE 6 POTENTIAL MOBILITY TRAVEL PLAN CONTINUED



Strategy		Intent	Possible Measures	Development Plan Measures
Encourage Transit Use		<ul style="list-style-type: none"> • Increase awareness and viability of transit travel options for commuter and recreational travel purposes • Capitalize on the improving transit context • Support and encourage the use of transit 	<p>Building, Planning & Design</p> <ul style="list-style-type: none"> • Provide accessible and high-quality pedestrian connections towards transit from the site • Establish transit stops at key neighbourhood locations • Provide facilities that support transit passenger travel including weather protection and amenities along key travel paths within the site • Provide street, pedestrian crossing, and pedestrian improvements to enable convenient / efficient transfers between local and regional transit • Facilitation of accessible transit services (e.g. WheelTrans) <p>Operational / Management</p> <ul style="list-style-type: none"> • Encourage on-site PRESTO card sales • Provide transit service information for site users • Offer transit promotion program • Consider providing shuttle service to key destinations • Work with City / regional transit operators and other stakeholders to review and improve accessibility to existing / new surface transit routes 	<ul style="list-style-type: none"> • Proximity to proposed Ontario Line Station (Gerrard Station). • Provide convenient access from the site to the proposed Gerrard Station. • Collaborate with public transit agencies (TTC and Metrolinx) to coordinate and plan for service expansion.
Encourage Bicycle Use		<ul style="list-style-type: none"> • Provide physical and operational infrastructure on-site • Cooperate with the City to enhance bicycle connectivity within the area to the broader network • Support and encourage cycling for short and medium distance trips, particularly during peak travel periods. 	<p>External Infrastructure</p> <ul style="list-style-type: none"> • Work with the City to improve existing facilities and provide new connections in the site area <p>Building, Planning & Design</p> <ul style="list-style-type: none"> • Provision of new on-street cycling facilities as part of new municipal streets delivered for the development • Provide secure long-term bicycle parking in secure locations • Provide short-term bicycle parking distributed across the site in accessible and convenient locations • Meet or exceed the minimum requirements of the Toronto Green Standards • Provide shower and change facilities within office buildings for staff and visitor use in accordance with the requirements of Toronto Green Standards • Provide dedicated station / commuter parking to encourage uptake of cycling as a last mile mode of transportation <p>Operational / Management</p> <ul style="list-style-type: none"> • Provide bike-share stations within the site at convenient locations • Encourage an on-site bicycle repair / maintenance centre, or bicycle parking valet • Provide on-site bicycle repair / maintenance stations 	<ul style="list-style-type: none"> • Provide bicycle parking supply intended to meet and exceed Zoning By-law 569-2013 (Zone 1) / TGS Version 4 (Tier 1) standards. • Provide shower and change facilities consistent with Zoning By-law 569-2013 / TGS Version 4. • Provide a bicycle repair station on Site.

TABLE 6 POTENTIAL MOBILITY TRAVEL PLAN CONTINUED




Strategy		Intent	Possible Measures	Development Plan Measures
Enhance Pedestrian Mobility		<ul style="list-style-type: none"> Enhance the walkability of the site at-grade and create a pedestrian-first neighbourhood Assist in creating high-quality, safe pedestrian linkages to the site and wider network Improve the quality of the public realm and accessibility of the area Provide high-quality pedestrian facilities that connect to transit stations and stops 	<p>External Infrastructure</p> <ul style="list-style-type: none"> Work with the City towards realizing improvements to area pedestrian infrastructure quality of the public realm and the convenience of pedestrian linkages / road crossings / rail crossings along the site boundaries and in the site area <p>Building, Planning & Design</p> <ul style="list-style-type: none"> Provide high-quality, safe pedestrian-scale connections from the site property to the surrounding public street network and throughout the redevelopment site Provide weather-protected and accessible connectivity in key, high-volume pedestrian areas Facilitate convenient building access and connectivity Provide accessible and universal connectivity throughout the site, meeting appropriate accessibility codes and guidelines Enhance the quality of the public realm through the provision of pedestrian-scale landscaping and appropriate sidewalk widths and general improvements of the public realm along building frontages. Enhance site porosity through the introduction of mid-block pedestrian routes animated through the programming of retail and other uses. <p>Operational / Management</p> <ul style="list-style-type: none"> Maintain on-site pedestrian facilities to enable year-round pedestrian access and usage 	<ul style="list-style-type: none"> Provide new signalized pedestrian crossing opportunities along Carlaw Avenue and Pape Avenue. Provide increased pedestrian permeability through the site through new (or enhanced) street, parkland and POPS areas. Provide consolidated vehicular and loading facilities to reduce points of vehicle / pedestrian conflict. Provide connectivity from the Site to and from the Proposed OL Station.
Land Use & Building Infrastructure		<ul style="list-style-type: none"> Offer a variety of mutually supportive residential and non-residential uses on-site Reduce the need for residents, employees and visitors to travel off-site to address daily needs Shorten travel distances Support residents that work from home 	<p>Building, Planning & Design</p> <ul style="list-style-type: none"> Provide for a range of employment, retail and residential uses within the proposed buildings Provide for support services and amenities within the site, with potential for a day-care, community amenity areas, recreation, and a post office Provide technology and communications support infrastructure and facilities within the residential buildings that support telecommuting and other work from home practices 	<ul style="list-style-type: none"> Offer retail, grocery, and residential uses that allow people to meet multiple needs on-site and create internal site trips that are easily made on foot.

TABLE 6 POTENTIAL MOBILITY TRAVEL PLAN CONTINUED

Strategy	Intent	Possible Measures	Development Plan Measures
<p>Coordination, Monitoring, Communication & Promotion</p> 	<ul style="list-style-type: none"> • Inform and raise awareness of non-automobile travel options for the site • Actively promote non-automobile travel options and services • Introduce, develop and coordinate TDM programs / indicatives with the employment tenants within the context of the broader strategies in place • Ability to adapt the strategy based on changing demand and special circumstances as they may arise • Provide real-time information to allow for commuters to make effective travel decisions 	<p>Operational / Management</p> <ul style="list-style-type: none"> • Establish a TDM Coordinator Office that supports activities and advances TDM strategies, programs and implementation protocols for the site • Establish a consultative framework to liaise and empower building tenants, businesses and residents to engage in dialogue with the City, transit providers, and other service providers to advance the needs of the development and surrounding area • Use of wayfinding and multi-modal navigation tools to augment the TDM services provided on-site • The active marketing, branding and promotion of non-automobile travel options (e.g. fairs, events and other incentive programs) • Provide real-time information regarding travel options, incidents and delays. <p>Monitoring</p> <ul style="list-style-type: none"> • Monitor the success of programming by the TDM Coordinator Office • Measure the site's modal split over time to examine the effectiveness of TDM interventions • Refine programming on an ongoing and coordinated basis • Partner with TDM coordinators or the City to undertake long-term monitoring of transportation facilities and operations. 	<ul style="list-style-type: none"> • New residential and retail tenants will be made aware of the existing transit services and active transportation facilities on-site and in proximity to the Site. • Provide effective wayfinding and signage towards the nearest transit services (e.g. Proposed OL Station entrance) and shared mobility services within the area and bicycle infrastructure on-site.

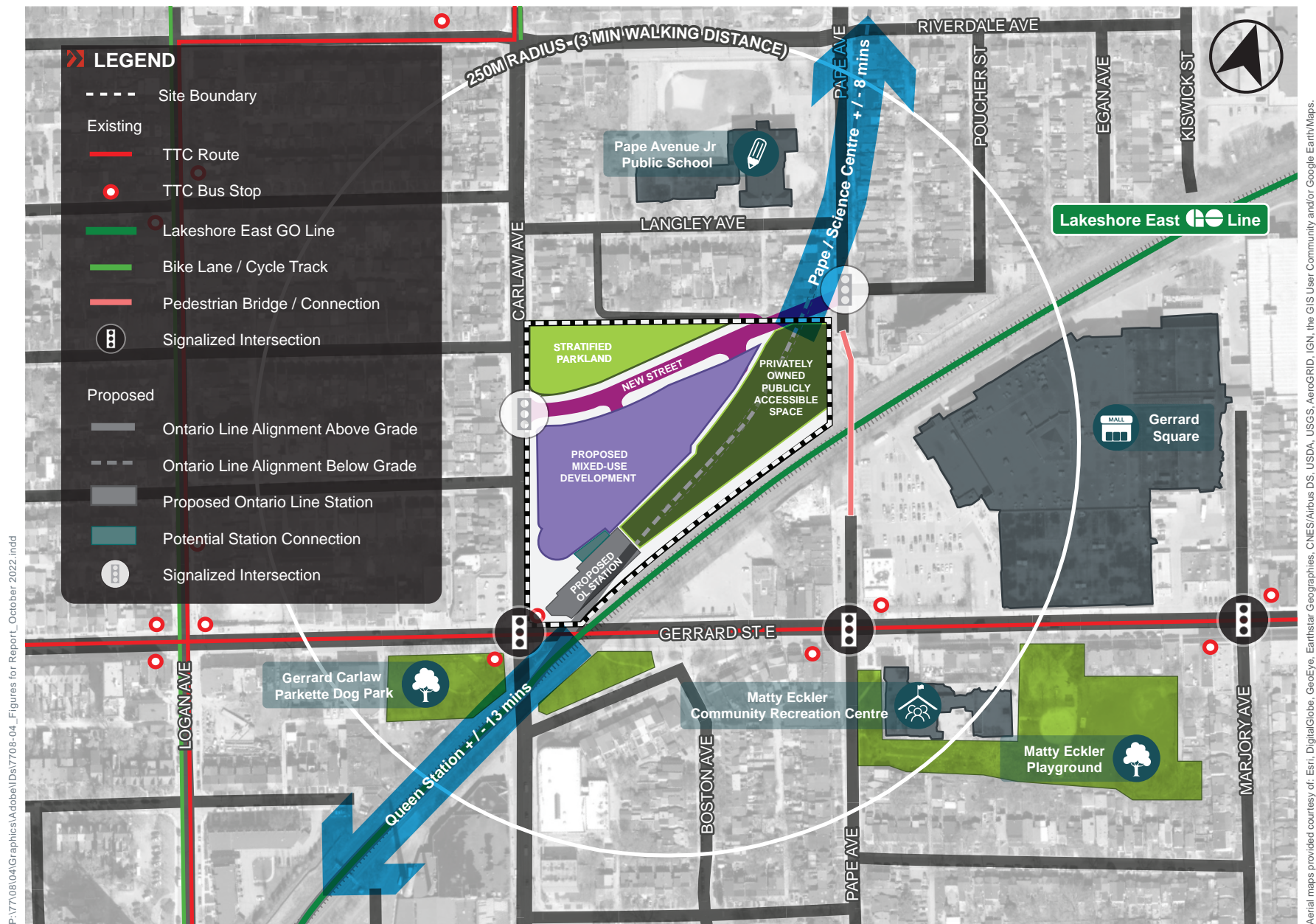


FIGURE 17 MOBILITY PLAN ELEMENTS

7.0 MULTI-MODAL TRAVEL DEMAND FORECASTING

The site is ideally located within a 2-minute walking distance of the Carlton (506) streetcar route along Gerrard Street East and a 2-minute walk from the Pape (72) bus route on along Carlaw Avenue. The Carlton (506) route provides a direct connection to both Main Station and on the Yonge-University subway line (Line 1) and the High Park Loop. The Pape (72) bus route provides direct connections to Pape Station on the Yonge-University subway line (Line 1) in the north and Lake Shore Boulevard East in the south. The Site will also be directly adjacent to the proposed Gerrard Station of the Ontario Line, providing site visitors and residents with immediate connections to higher-order transit and the wider City. The proposed station will also facilitate the transfer of passengers to and from the TTC Streetcar, further improving the transit connectivity of the Site. As such, the site is located in an area that is easily accessible through a transportation network that provide opportunities for non-automobile modes of travel (i.e. cycling, walking and transit).

For the purposes of this analysis, BA Group has established travel demand forecasts for auto-based and non-auto-based trips for the proposed redevelopment. Further details are provided in the following sections.

7.1 APPROACH TO FORECASTING SITE TRAVEL DEMANDS

Travel demands resulting from the proposed redevelopment have been forecast for residential and non-residential land uses based on information derived from proxy sites with similar transportation context, near higher order transit service. Person-trip travel demands are forecast, and then segmented by travel mode to assess travel demand impacts on area street, transit, cycling and pedestrian infrastructure. Additional aspects of the proposed redevelopment are also considered in assessing overall travel demands and resulting travel mode splits, including:

1. site design (parking allowances),
2. anticipated travel mode splits and mode split trends, and
3. area travel behaviour as outlined in TTS travel data and proxy site developments.

7.2 RESIDENT-RELATED SITE TRAVEL DEMANDS

For the purpose of this analysis, travel demand to and from the Site has been developed for the development's residential use, using a person-trip generation methodology by applying modal split to person trip rates as derived from proxy sites. Modal split information have been obtained from proxy site observations and the Transportation Tomorrow Survey (TTS).

7.2.1 Mode Share Assumptions

Travel demand to and from the Site have been developed for residential land uses by applying modal share information, which is based on a review of data retrieved from the 2016 Transportation Tomorrow Survey (TTS). For the purposes of this analysis, future Site resident-related trips are assumed to have mode shares similar to the existing condition (2016 data).

TTS mode share data for resident-related trips during the weekday morning, afternoon and Saturday peak periods are summarized in **Table 7**.

TABLE 7 SITE VICINITY RESIDENTIAL TRIP MODE SPLIT – 2016 TTS DATA

Travel Mode	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Saturday (Weekend) Peak Hour	
	<i>Inbound</i>	<i>Outbound</i>	<i>Inbound</i>	<i>Outbound</i>	<i>Inbound</i>	<i>Outbound</i>
Auto Driver	37%	31%	29%	34%	29%	34%
Auto Passenger	1%	11%	6%	10%	6%	10%
Transit	7%	36%	39%	8%	39%	8%
Walk	49%	13%	19%	41%	19%	41%
Cycle	5%	8%	7%	7%	7%	7%

Notes:

1. Travel mode splits are based on all home-based trips (trips to and from home) within TTS Zones 272 and 269.
2. TTS mode split data not available for weekend residential peak period. For the purpose of this analysis weekday afternoon person trips have been, conservatively assumed for weekend peak hour period.

7.2.2 Proxy Site Surveys: Person Trip Generation

Residential travel demand to / from the Site has been developed using person trip rates derived by BA Group from three (3) other residential properties with similar transportation context, i.e. -proximity to higher order transit facilities, such as the future Gerrard Subway Station adjacent to the Site.

Person trips entering / exiting each of the proxy sites were recorded for the weekday morning and afternoon peak periods (7:30 a.m. to 9:30 a.m.; and 4:00 p.m. to 6:00 p.m.). A single peak hour was chosen from the peak period data collected, and utilized for the basis of the analysis herein. Person trips were recorded by collecting auto trips, auto trip occupancy, pedestrian trips, and cycling trips. Each type of trip was further separated by land-use so as to segregate resident-related trips from trips related to other land uses.

Survey information summarizing residential development person trip rates at three (3) residential developments in the City are summarized in



Table 10. It should be noted that weekend travel information was not obtained at the time of the survey. For the purpose of this analysis weekday afternoon person trips have been, conservatively assumed for weekend peak hour period.

Detailed person trip generation survey data for residential proxy sites are included in **Appendix D**.

The proxy site survey undertaken and summarized below illustrate somewhat different travel mode splits than those observed in the 2016 TTS data set. Notably, proxy site data reveals a somewhat lower proportion of motorists and cyclists, and a considerably higher number of transit users / pedestrians. A summary of travel mode splits observed as part of proxy site surveys is provided in **Table 8**.

TABLE 8 RESIDENTIAL TRIP MODE SPLIT – PROXY SITES

Travel Mode	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Saturday Peak Hour	
	<i>Inbound</i>	<i>Outbound</i>	<i>Inbound</i>	<i>Outbound</i>	<i>Inbound</i>	<i>Outbound</i>
Auto Driver	11%	8%	8%	14%	8%	14%
Auto Rideshare / Taxi	7%	2%	3%	4%	3%	4%
Auto Passenger	4%	4%	4%	5%	4%	5%
Transit / Walk	78%	81%	83%	75%	83%	75%
Cycle	0%	6%	3%	2%	3%	2%

Notes:

1. Travel mode based on proxy site residential trip observations. Proxy site survey data included in **Appendix D**.
2. Weekend travel information was not obtained at the time of the survey. For the purpose of this analysis weekday afternoon person trips have been, conservatively assumed for weekend peak hour period.

Based on the discrepancy viewed in travel mode splits between TTS data and proxy site data, travel mode splits were selected considering the anticipated Site traffic generation (as observed at proxy sites) and consideration of the Site's immediate proximity to planned cycling and transit infrastructure.

TABLE 9 SELECTED RESIDENTIAL TRIP MODE SPLITS (USED FOR ANALYSIS)

Travel Mode	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Saturday Peak Hour	
	<i>Inbound</i>	<i>Outbound</i>	<i>Inbound</i>	<i>Outbound</i>	<i>Inbound</i>	<i>Outbound</i>
Auto Driver	30%	15%	15%	15%	15%	15%
Auto Passenger	5%	5%	5%	5%	5%	5%
Transit	30%	50%	50%	45%	50%	45%
Walk	20%	20%	20%	20%	20%	20%
Cycle	15%	10%	10%	15%	10%	15%



TABLE 10 PERSON TRIP RATES: RESIDENTIAL DEVELOPMENT PROXY SITES

Proxy Site	Survey Date	Proxy Site Tenure	Travel Mode	Parameter	Weekday Morning Peak Hour Trip Rate ²			Weekday Afternoon / Saturday Peak Hour Trip Rate ²		
					<i>In</i>	<i>Out</i>	<i>2-way</i>	<i>In</i>	<i>Out</i>	<i>2-way</i>
783 Bathurst Street and 10-20 Loretto Lane, Toronto	Sept. 20, 2018	Mixed-Use Resident trips segregated (195 units)	Auto Driver	Res. Driver	3	9	12	5	6	11
				PUDO Trips	3	3	6	1	1	2
				<i>Rate (trips / unit)</i>	<i>0.03</i>	<i>0.06</i>	<i>0.09</i>	<i>0.03</i>	<i>0.04</i>	<i>0.07</i>
			Auto Pass.	Res. Pass.	2	2	4	3	3	6
				<i>Rate (trips / unit)</i>	<i>0.01</i>	<i>0.01</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.04</i>
			Walk	Ped / Transit	23	139	162	85	46	131
				<i>Rate (trips / unit)</i>	<i>0.12</i>	<i>0.71</i>	<i>0.83</i>	<i>0.44</i>	<i>0.24</i>	<i>0.67</i>
			Cycle	Cyclists	0	13	13	6	4	10
				<i>Rate (trips / unit)</i>	<i>0.00</i>	<i>0.07</i>	<i>0.07</i>	<i>0.03</i>	<i>0.02</i>	<i>0.05</i>
			Total	Total Person Trips	31	166	197	100	60	160
				<i>Rate (trips / unit)</i>	<i>0.16</i>	<i>0.85</i>	<i>1.01</i>	<i>0.51</i>	<i>0.31</i>	<i>0.82</i>
736 Spadina Avenue, Toronto	Sept. 12, 2018	Mixed-Use Resident trips segregated (216 units)	Auto Driver	Res. Driver	4	10	14	12	4	16
				PUDO Trips	8	8	16	4	4	8
				<i>Rate (trips / unit)</i>	<i>0.06</i>	<i>0.08</i>	<i>0.14</i>	<i>0.07</i>	<i>0.04</i>	<i>0.11</i>
			Auto Pass.	Res. Pass.	0	10	10	4	2	6
				<i>Rate (trips / unit)</i>	<i>0.00</i>	<i>0.05</i>	<i>0.05</i>	<i>0.02</i>	<i>0.01</i>	<i>0.03</i>
			Walk	Ped / Transit	22	94	116	69	36	105
				<i>Rate (trips / unit)</i>	<i>0.10</i>	<i>0.44</i>	<i>0.54</i>	<i>0.32</i>	<i>0.17</i>	<i>0.49</i>
			Cycle	Cyclists	0	9	9	2	0	2
				<i>Rate (trips / unit)</i>	<i>0.00</i>	<i>0.04</i>	<i>0.04</i>	<i>0.01</i>	<i>0.00</i>	<i>0.01</i>
			Total	Total Person Trips	34	131	165	91	46	137
				<i>Rate (trips / unit)</i>	<i>0.16</i>	<i>0.61</i>	<i>0.76</i>	<i>0.42</i>	<i>0.21</i>	<i>0.63</i>

Table continued on following page.

1 Bedford Road, Toronto	Sept. 18, 2018	Mixed-Use Resident trips segregated (254 units)	Auto Driver	Res. Driver	4	13	17	4	15	19
				PUDO Trips	3	3	6	10	10	20
				Rate (trips / unit)	0.03	0.06	0.09	0.06	0.10	0.16
			Auto Pass.	Res. Pass.	2	4	6	5	5	10
				Rate (trips / unit)	0.01	0.02	0.03	0.02	0.02	0.04
			Walk	Ped / Transit	32	85	117	76	54	130
				Rate (trips / unit)	0.13	0.33	0.46	0.30	0.21	0.51
			Cycle	Cyclists	0	0	0	0	0	0
				Rate (trips / unit)	0.00	0.00	0.00	0.00	0.00	0.00
			Total	Total Person Trips	41	105	146	95	84	179
Rate (trips / unit)	0.16	0.41		0.57	0.37	0.33	0.70			
Proxy Site Summary:										
Average Person Trip Rates (person trips / unit):					0.16	0.62	0.78	0.44	0.28	0.72
Average Auto Trip Rates (auto trips / unit) ³ :					0.04	0.07	0.11	0.05	0.06	0.11

Note:

1. Auto passenger includes those observed within site-related auto trips (classified auto-occupancy), and those you are picked-up / dropped-off adjacent to the proxy site (classified taxi or ride-share).
2. Person trips and person trips rates are summarized. Person trip rates are expressed per unit.
3. Auto trips per unit include pick-up / drop-off activity (taxi / ride share), and equate to 2 auto trips (1 inbound; 1 outbound) per person trip.
4. Weekend travel information was not obtained at the time of the survey. For the purpose of this analysis weekday afternoon person trips have been, conservatively assumed for weekend peak hour period

7.2.3 Forecast Site Residential Person Trips

The majority of residential travel to / from the Site will be by non-auto modes, reflecting the existing and future extent of pedestrian, cycling and transit activity in the Site vicinity, the planned cycling network along Carlaw Avenue and the future Gerrard Subway Station. Travel demand forecast for residential trips to / from the Site in the weekday morning, afternoon and Saturday peak hours are summarized in **Table 11**.



TABLE 11 RESIDENTIAL USE PERSON TRIP

Parameter	Base Population Assumptions			
Units:	1,080 units ¹			
Parameter	Person Trip Rates			
	AM Peak		PM / SAT Peak	
Peak Hour Person Trip Rate ²	0.16	0.62	0.44	0.28
Forecast Person Trips	175	670	475	300
	<u>Inbound</u>	<u>Outbound</u>	<u>Inbound</u>	<u>Outbound</u>
Auto Driver Trips	30%	15%	15%	15%
	55	100	70	45
Auto Pass. Trips	5%	5%	5%	5%
	5	35	25	15
Transit Trips	30%	50%	50%	45%
	55	335	240	135
Pedestrian Trips	20%	20%	20%	20%
	35	135	95	60
Cycling Trips	15%	10%	10%	15%
	25	65	45	45
Total Trips:	175	670	475	300
Inbound	55 trips (= 0.05 trips / unit)		70 trips (= 0.07 trips / unit)	
Outbound	100 trips (= 0.09 trips / unit)		45 trips (= 0.04 trips / unit)	
Two-Way	155 trips (= 0.14 trips / unit)		115 trips (= 0.11 trips / unit)	

Notes:

1. Based on 449 Carlaw Avenue proposed development statistics dated August 24, 2022.
2. Based on residential person trip generation surveys undertaken by BA Group. Person trip generation survey data included in **Appendix D**.
3. Travel mode split based on "selected residential trip mode splits" as outlined in **Table 9**.
4. Trips rounded to the nearest 5.
5. Weekday afternoon trip rate and mode splits assumed for the weekend (Saturday) peak period.

The proposed development is forecast to result in approximately 845 two-way person trips during the weekday morning peak hour, and 775 two-way person trips during the afternoon and Saturday peak hour. Of these person trips, 155 two-way vehicle trips are anticipated during the weekday morning peak hour and 115 two-way vehicle trips are anticipated during both the weekday afternoon and Saturday peak hours. It should be noted that the resulting vehicle trip rates, anticipated for the proposed development, are generally consistent with those observed at the proxy sites surveyed herein.

7.3 RETAIL-RELATED SITE TRAVEL DEMANDS

A total of 2,590 sq. m. of retail space is proposed as part of the proposed redevelopment.

Proposed retail uses are anticipated to draw patrons from the existing volume of pedestrians routing along this section of Carlaw Avenue and Pape Avenue. These trips would be generally auxiliary to the proposed building and the immediate neighbourhood, and would largely represent a replacement of trips to existing retail uses on the property today.

For the purpose of this study, retail related uses have been assumed as part of the grocery store uses in establishing travel demands for the non-residential uses proposed on-site.

7.4 GROCERY STORE PROXY SITE SURVEYS

A total of four (4) proxy site surveys at two different grocery store locations were undertaken by BA Group to understand the person and vehicle trip making attributes of grocery retailers in this area of the City.

Person trips entering / exiting each of the proxy sites were recorded for the weekday morning and afternoon peak periods (7:30 a.m. to 9:20 a.m. or 10:30 a.m.; and 4:00 p.m. to 6:00 p.m. or 7:00 p.m.). Person trips were recorded by collecting auto trips, auto trip occupancy, pedestrian trips, and cycling trips. For the purpose of this analysis weekday afternoon person trips have been, conservatively assumed for weekend peak hour period.

All four surveys captured the number of vehicle trips during weekday peak hours to devise a vehicle trip rate based on the applicable floor area or number of parking spaces. Cycling trips were also captured to understand the frequency of cycling trips for a typical grocery store in this area of the City, and to devise a cycling trip rate based on the applicable floor area. A summary of proxy site data is provided in **Table 12**. Detailed person trip generation survey results for grocery proxy sites are included in **Appendix E**.

TABLE 12 GROCERY STORES PROXY SITE SURVEY SUMMARY

Survey Location	Survey Date	Auto and Cycling Trips	AM Peak Hour			PM / SAT Peak Hour		
			In	Out	2-Way	In	Out	2-Way
Metro Supermarket 425 Bloor St. W. Approx. 1,285 sq. m. store with 35 customer parking spaces.	February 27, 2018.	Auto Trips	14	10	24	23	28	51
		Auto Trip Rate (trips / 100 sq. m.)	1.09	0.78	1.87	1.79	2.18	3.97
		Auto Trip Rate (trips / parking space)	0.40	0.29	0.69	0.66	0.80	1.46
		Cycling Trips	3	5	8	4	3	7
		Cycling Trip Rate (trips / 100 sq. m.)	0.23	0.39	0.62	0.31	0.23	0.54
		Transit / Ped. Trips	151	137	288	539	592	1,131
	October 3, 2018.	Auto Trips	9	11	20	31	37	68
		Auto Trip Rate (trips / 100 sq. m.)	0.70	0.86	1.56	2.41	2.88	5.29
		Auto Trip Rate (trips / parking space)	0.26	0.31	0.57	0.89	1.06	1.94
		Cycling Trips	3	3	6	6	6	12
		Cycling Trip Rate (trips / 100 sq. m.)	0.23	0.23	0.47	0.47	0.47	0.93
		Transit / Ped. Trips	51	48	99	307	350	657
Fiesta Farms 200 Christie St. Approx. 2,900 sq. m. store with 61 customer parking spaces.	September 27, 2018.	Auto Trips	36	25	61	78	72	150
		Auto Trip Rate (trips / 100 sq. m.)	1.24	0.86	2.10	2.69	2.48	5.17
		Auto Trip Rate (trips / parking space)	0.59	0.41	1.00	1.28	1.18	2.46
		Cycling Trips	2	1	3	18	14	32
		Cycling Trip Rate (trips / 100 sq. m.)	0.07	0.03	0.10	0.62	0.48	1.10
		Transit / Ped. Trips	95	79	175	244	137	381
		Auto Trips	51	27	78	71	80	151

	September 28, 2018.	Auto Trip Rate (trips / 100 sq. m.)	1.76	0.93	2.69	2.45	2.76	5.21
		Auto Trip Rate (trips / parking space)	0.84	0.44	1.28	1.16	1.31	2.48
		Cycling Trips	2	1	3	24	7	31
		Cycling Trip Rate (trips / 100 sq. m.)	0.07	0.03	0.10	0.83	0.24	1.07
		Transit / Ped. Trips	119	68	187	236	148	384
Average Vehicle Trips Rates		Auto Trip Rate (trips / 100 sq. m.)	1.20	0.86	2.05	2.34	2.57	4.91
		Auto Trip Rate (trips / parking space)	0.52	0.36	0.88	1.00	1.09	2.08
Average Cycling Trips Rates		Cycling Trip Rate (trips / 100 sq. m.)	0.15	0.17	0.32	0.56	0.36	0.91

Notes:

1. Weekend travel information was not obtained at the time of the survey. For the purpose of this analysis weekday afternoon person trips have been, conservatively assumed for weekend peak hour period.

General travel mode splits can also be derived from proxy site surveys summarized above, understanding the limitations in separating transit / pedestrian travel mode shares. A summary of travel mode splits observed as part of proxy site surveys is provided in **Table 13**.

TABLE 13 GROCERY TRIP MODE SPLIT – PROXY SITES

Travel Mode	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Saturday Peak Hour	
	<i>Inbound</i>	<i>Outbound</i>	<i>Inbound</i>	<i>Outbound</i>	<i>Inbound</i>	<i>Outbound</i>
Auto	18%	23%	12%	14%	12%	14%
Transit / Walk	80%	75%	85%	84%	85%	84%
Cycle	2%	2%	3%	2%	3%	2%

Notes:

1. Travel mode based on proxy site residential trip observations. Proxy site survey data included in **Appendix E**.
2. Weekday afternoon mode splits assumed for the weekend (Saturday) peak period.

7.5 FORECAST SITE NON-RESIDENTIAL PERSON TRIPS

Non-residential related cycling trips are estimated based on existing cycling trip rates observed at the grocery store proxy site locations. Selected cycling trips rates are the highest observed rates recorded over the extent of the four proxy surveys, to account for the extent of new cycling infrastructure provided along Carlaw Avenue and the provision of end-of-trip cycling facilities in the site plan. A summary of forecast cycling trips related to the proposed non-residential uses are summarized in **Table 14**.

TABLE 14 FORECAST NON-RESIDENTIAL CYCLING TRIPS

Proposed Non-Residential Retail Uses 2,590 sq. m. GFA Grocery Store 3,460 sq. m. GFA	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Adopted Trip Rate (trips / 100 sq. m.)	0.26	0.39	0.62	0.83	0.48	1.10	0.83	0.48	1.10
Forecast Cycling Trips	15	25	40	50	30	70	50	30	70

Note:

1. Based on a total non-residential GFA of 6,050 sq. m.
2. Trips rounded to the nearest 5.
3. Weekday afternoon trip rate assumed for the weekend (Saturday) peak period.

Non-residential related vehicle trips are estimated based on average existing vehicle trip rates per GFA observed at proxy site locations.

A summary of forecast vehicle trips related to the proposed grocery store are summarized in **Table 14**.

TABLE 15 FORECAST SITE NON-RESIDENTIAL VEHICLE TRIPS

Proposed Non-Residential Retail Uses 2,590 sq. m. GFA Grocery Store 3,460 sq. m. GFA	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Adopted Trip Rate (trips / 100 sq. m.)	1.20	0.86	2.05	2.34	2.57	4.91	2.34	2.57	4.91
Forecast Vehicle Trips	75	55	125	145	155	300	145	155	300

Note:

1. Based on a total non-residential GFA of 6,050 sq. m.
2. Trips rounded to the nearest 5.
3. Weekday afternoon trip rate assumed for the weekend (Saturday) peak period.

Pedestrian / transit trips are also estimated based on the prevailing travel mode shares derived from the proxy grocery store data. Generally, 75% to 85% of total non-residential related trips are anticipated to be either primary transit or primary pedestrian trips. These trips are calculated based on forecast vehicle trips and anticipated vehicle travel mode splits.

For the purposes of the analysis herein, it is assumed that 60% of pedestrian / transit trips oriented to / from the proposed non-residential uses are primarily transit trips and would route between the Site and the future Gerrard Subway Station. A summary of forecast grocery store pedestrian and transit trips is provided in **Table 14**.

TABLE 16 FORECAST SITE GROCERY PEDESTRIAN AND TRANSIT TRIPS

Proposed Grocery Store	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Forecast Vehicle Trips	75	55	125	145	160	300	145	160	300
Auto Travel Mode Split	18%	23%	-	12%	14%	-	12%	14%	-
Estimated Total Trips	415	240	655	1,210	1,105	2,315	1,210	1,105	2,315
Transit / Pedestrian Travel Mode Split	80%	75%	-	85%	84%	-	85%	84%	-
Total Transit / Pedestrian Trips	330	180	510	1,030	930	1,960	1,030	930	1,960
Forecast Transit Trips	200	110	305	620	560	1,175	620	560	1,175
Forecast Pedestrian Trips	130	70	205	410	370	785	410	370	785

Note:

1. Trips rounded to the nearest 5.
2. Weekday afternoon trip rate assumed for the weekend (Saturday) peak period.

7.6 FORECAST COMPOSITE SITE TRAVEL DEMANDS

A summary of forecast Site travel demands by travel mode, including residential and non-residential land use components of the development, is provided in **Table 17**.

TABLE 17 TOTAL SITE: PERSON TRIP GENERATION

Travel Mode	Person Trip Rates								
	AM Peak			PM Peak			SAT Peak		
	<i>Inbound</i>	<i>Outbound</i>	<i>Two-way</i>	<i>Inbound</i>	<i>Outbound</i>	<i>Two-way</i>	<i>Inbound</i>	<i>Outbound</i>	<i>Two-way</i>
Residential Land Uses									
Auto Driver	55	100	155	70	45	115	70	45	115
Auto Passenger	5	35	40	25	15	40	25	15	40
Transit	55	335	390	240	135	375	240	135	375
Walk	35	135	170	95	60	155	95	60	155
Cycle	25	65	90	45	45	90	45	45	90
Non-Residential Land Uses									
Auto Driver	75	55	125	145	155	300	145	155	300
Auto Passenger ¹	10	5	15	30	30	60	30	30	60
Transit	330	180	510	1,030	930	1,960	1,030	930	1,960
Walk	200	110	305	620	560	1,175	620	560	1,175
Cycle	15	25	40	50	30	70	50	30	70
Total Site									
Auto Driver	130	155	280	215	200	415	215	200	415
Auto Passenger	15	40	55	55	45	100	55	45	100
Transit	385	515	900	1,270	1,065	2,335	1,270	1,065	2,335
Walk	235	245	475	715	620	1,330	715	620	1,330
Cycle	40	90	130	95	75	160	95	75	160
Total	805	1,045	1,840	2,350	2,005	4,340	2,350	2,005	4,340

Notes.

1. Non-residential passenger trips derived from Metro Supermarket Proxy Site data. Average vehicle occupancy is observed to be 1.1 person per vehicle during the weekday morning peak period, and 1.2 persons per vehicle in the weekday afternoon peak period.
2. Trips rounded to the nearest 5.

The majority of Site trips are anticipated to utilize transit or active transportation modes to access the Site. This assumption is consistent with the travel behaviours observed at proxy sites and data derived from the 2016 TTS data set.

The proposed development is anticipated to result in a total of 1,840 two-way person trips during the weekday morning peak hour, 4,340 two-way person trips during the weekday afternoon peak hour and 4,340 two-way person trips during the weekend Saturday peak hour.

A total of 900 two-way transit trips are estimated during the weekday morning peak hour, 2,335 two-way transit trips are estimated during the weekday afternoon peak hour and 2,335 two-way transit trips during the weekend Saturday peak hour. Another 475, 1,330 and 1,330 two-way person trips are anticipated to arrive / depart as pedestrians (in addition to transit-related pedestrians) during the weekday morning, afternoon and weekend peak hours, respectively.

In the order of 280 two-way vehicle trips are anticipated during the weekday morning peak hour, 415 two-way vehicle trips are anticipated during the weekday afternoon peak hour and 415 two-way trips during the weekend Saturday peak hour.

Approximately 130, 160 and 160 two-way cycling trips are anticipated during each of the weekday morning, afternoon and Saturday peak hour, respectively.

8.0 SITE TRANSIT ASSESSMENT

The Site is located within a 2-minute walking distance of the Carlton (506) streetcar route along Gerrard Street East and a 2-minute walk from the Pape (72) bus route on along Carlaw Avenue. The Carlton (506) route provides a direct connection to both Main Station and on the Yonge-University subway line (Line 1) and the High Park Loop. The Pape (72) bus route provides direct connections to Pape Station on the Yonge-University subway line (Line 1) in the north and Lake Shore Boulevard East in the south. The Site will also be directly adjacent to the proposed Gerrard Station of the Ontario Line, providing site visitors and residents with immediate connections to higher-order transit and the wider City. The proposed station will also facilitate the transfer of passengers to and from the TTC Streetcar, further improving the transit connectivity of the Site. As such, the site is located in an area that is easily accessible through a transportation network that provide opportunities for non-automobile modes of travel (i.e. cycling, walking and transit). As such, the proposed development is exceptionally well connected to the City transit network and provides people travelling to / from the Site an exceptional resource and opportunity to use transit.

Immediate and direct access to the Toronto Transit Commission (TTC) will be afforded to Site residents, patrons and visitors. Key transit routes in the context of the proposed development, include:

- Future Gerrard Subway Station;
- 506 Carlton Streetcar; and
- 72 Pape Bus.

The proposed redevelopment will benefit from frequent, convenient, reliable, and higher-order transit services and various connections to the wider City transit network.

8.1.1 Forecast Site Transit Demands

Transit trips for the proposed development are forecast for residential, grocery, and retail Site-related travel based on the forecasting methods outlined in **Section 7.0**. The forecasted new transit trips to/from the proposed development during the analyzed weekday and weekend peak hours are summarized in **Table 18**.

TABLE 18 FORECAST SITE TRANSIT TRIPS

Site Transit Trips by Use	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Weekend Saturday Peak Hour		
	Inbound	Outbound	2-Way	Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
Residential Transit Trips	55	335	390	240	135	375	240	135	375
Non-Residential Transit Trips	330	180	510	1,030	930	1,960	1,030	930	1,960
Total Site Transit Trips	385	515	900	1,270	1,065	2,335	1,270	1,065	2,335

Note:

1. Transit Trips are rounded to the nearest 5 trips.

The Site is forecast to generate a total of 900, 2,335 and 2,335 transit trips during the weekday morning, weekday afternoon and weekend (Saturday) peak hours, respectively.

9.0 VEHICULAR TRAFFIC VOLUMES

9.1 TRAFFIC ANALYSIS SCENARIOS AND DESIGN PERIODS

Traffic operations analyses have been undertaken during the weekday morning, afternoon and weekend street peak hours under the following conditions:

- Existing traffic conditions – traffic activity levels under current conditions;
- Future background traffic conditions – traffic activity levels 5 years into the future which include allowance for corridor growth and area specific background developments; and
- Future total traffic conditions – traffic activity levels 5 years into the future with the projected site generated traffic added to the road network.

9.2 EXISTING TRAFFIC

Existing baseline traffic volumes were established at intersections within the study area for the weekday morning, afternoon and weekend peak hour periods using traffic count information obtained from surveys undertaken by Spectrum Traffic Data Inc. on April 2, 2022 and April 5, 2022. A listing of the count data and sources are provided in **Table 19**.

TABLE 19 EXISTING TURNING MOVEMENT COUNT SUMMARY

Intersection	Control Type	Source Agency	Date Counted	Signal Timing Implementation Date ¹
Dundas Street East / Carlaw Avenue	Signalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	August 19, 2021
Gerrard Street East / Logan Avenue	Signalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	February 28, 2022
Gerrard Street East / Carlaw Avenue	Signalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	February 28, 2022
Gerrard Street East / Pape Avenue	Signalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	February 28, 2022
Logan Avenue / Riverdale Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Logan Avenue / Langley Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Logan Avenue / Victor Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-

Logan Avenue / Simpson Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Carlaw Avenue / Riverdale Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Carlaw Avenue / Langley Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Carlaw Avenue / Gas Station Access	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Carlaw Avenue / Victor Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Carlaw Avenue / No Frills Access	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Carlaw Avenue / Laneway	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Carlaw Avenue / Simpson Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Langley Avenue / East Laneway	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Langley Avenue / West Laneway	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Pape Avenue / Riverdale Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Pape Avenue / Langley Avenue	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Pape Avenue / Poucher Street	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-
Pape Avenue / No Frills Access	Unsignalized	Spectrum Traffic Data Inc.	Saturday April 2, & Tuesday April 5, 2022	-

Notes:

1. Signal Timing data issued by the City of Toronto – Transportation Services.

The existing turning movement counts are provided in **Appendix F**.

Figure 18 illustrates the existing traffic volumes.



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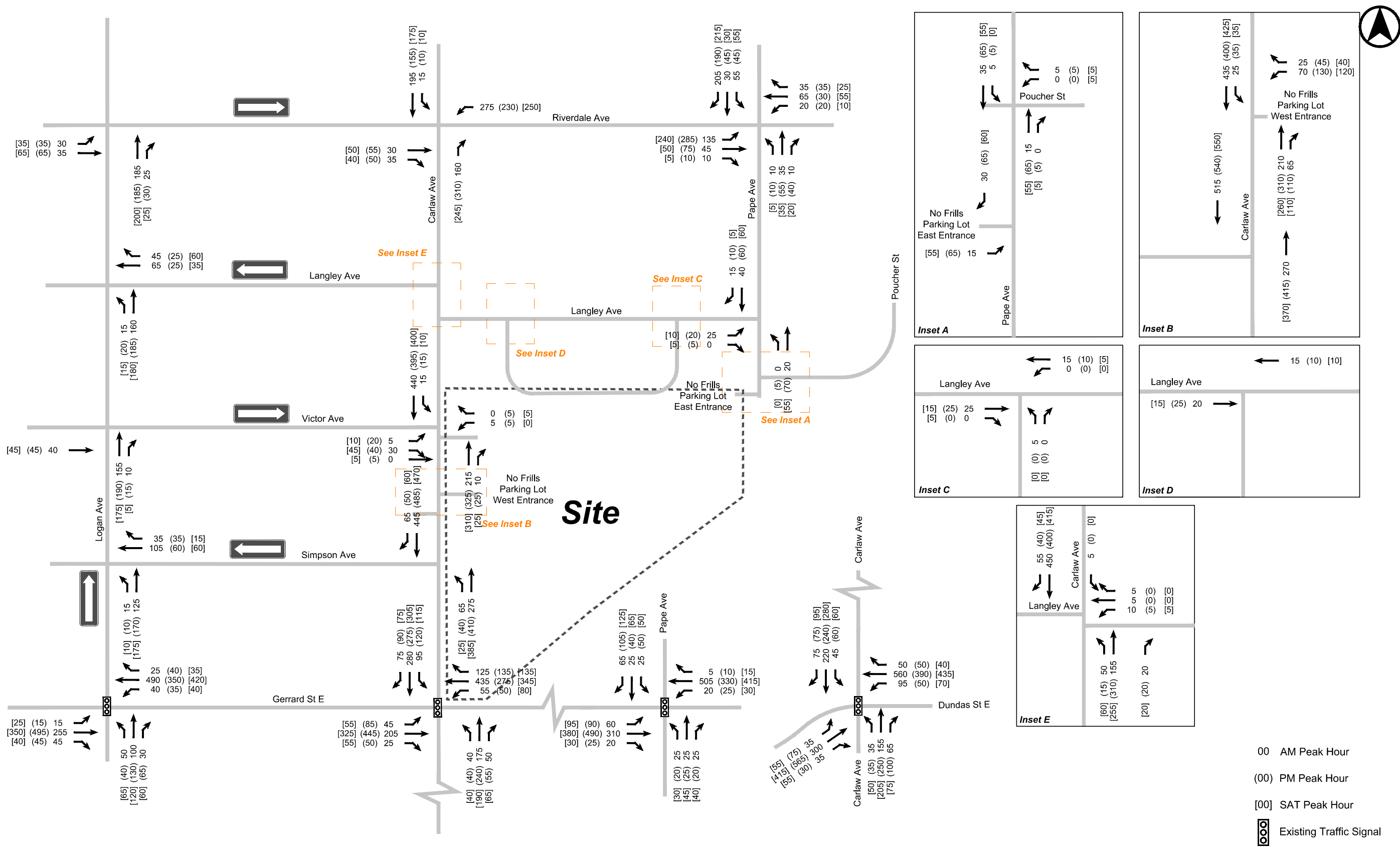


FIGURE 18 EXISTING TRAFFIC VOLUMES

9.3 FUTURE BACKGROUND TRAFFIC

Traffic growth in the site vicinity has been considered based upon an evaluation of traffic volume changes related to:

- General corridor growth on the area arterial roads (i.e. Carlaw Avenue, Gerrard Street East and Dundas Street East); and
- Specific area development traffic (i.e. background development traffic).

9.3.1 Corridor Traffic Growth

A corridor traffic growth rate of 2% per year has been assumed for the area arterial roadways (i.e. Carlaw Avenue, Gerrard Street East and Dundas Street East) during the weekday morning and afternoon peak hour periods and weekend Saturday peak hour period over a 5-year development horizon and is consistent with rates applied at other nearby development applications in the area.

9.3.2 Background Development Growth

Background development traffic allowances have been made to account for new traffic activity related to several other developments in the vicinity of the Site that are either approved but not constructed, or are in the City's approval process.

Traffic allowances associated with these developments were generally established based upon assignment information incorporated into traffic impact studies prepared as part of the approval processes for these developments. These sites were identified through the City of Toronto's development application website.

Area developments that have been considered are summarized in **Table 20** together with the key statistics adopted for the purpose of this study.

Figure 19 illustrates the future background traffic volumes.

TABLE 20 AREA BACKGROUND DEVELOPMENTS

Development	Residential Units	Non-Residential
354 Pape Avenue	41 units	80 m ² commercial GFA and 250 m ² office GFA
433 Pave Avenue	0 units	275 m ² daycare GFA

Notes:

1. Based of a review of the City of Toronto's Development Application website in June 2022.

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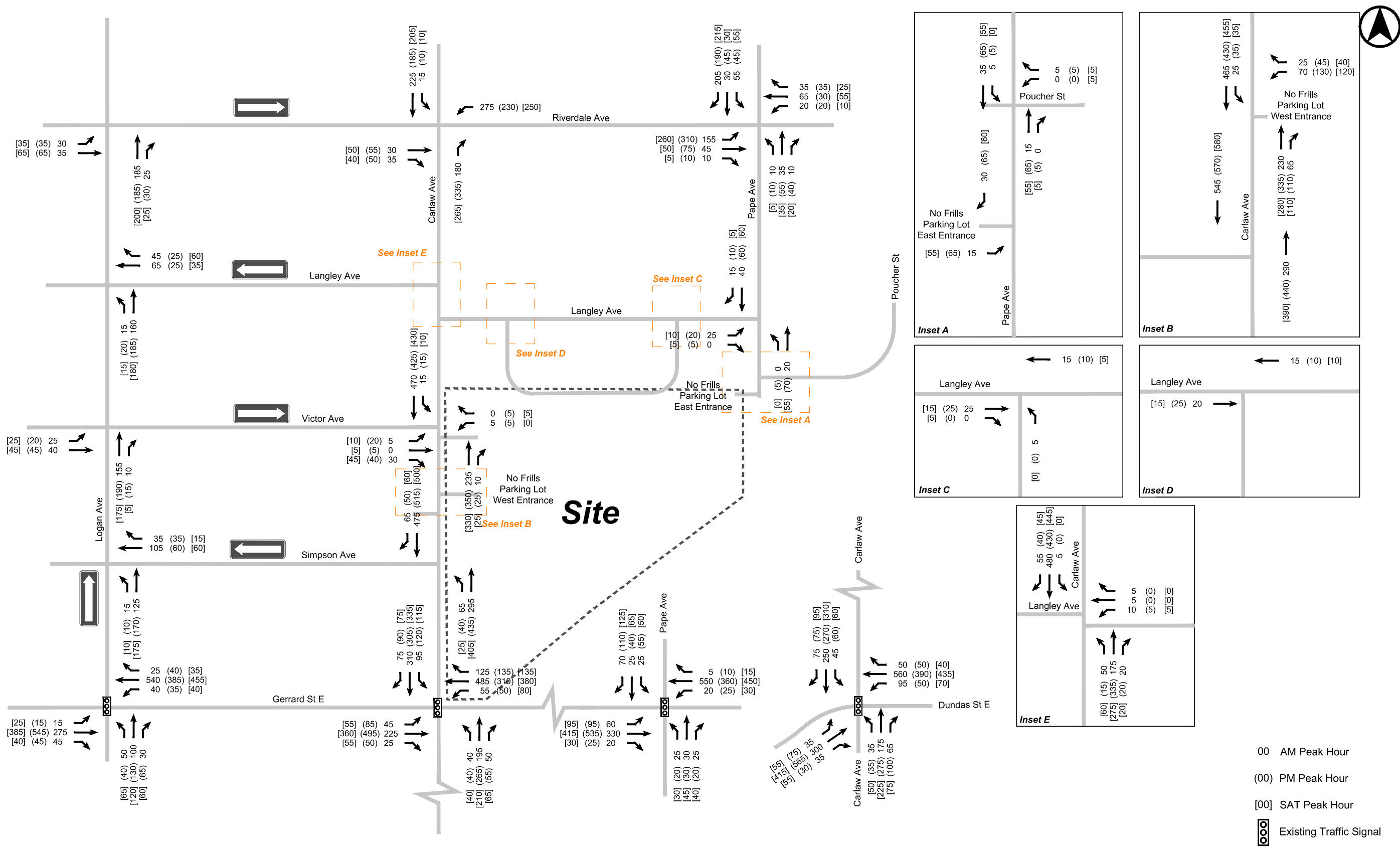


FIGURE 19 FUTURE BACKGROUND TRAFFIC VOLUMES

9.4 SITE TRAFFIC

9.4.1 Existing Site Traffic

Existing site traffic volumes were collected on April 2nd and 5th during the weekday morning, afternoon and weekend Saturday peak hour periods.

Existing site traffic volumes were established based on the following driveway access locations and are summarized in **Table 21**.

- Carlaw Avenue / Gas Station Access;
- Carlaw Avenue / No Frills Access; and
- Pape Avenue / No Frills Access.

TABLE 21 EXISTING SITE TRAFFIC VOLUMES

	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Carlaw Avenue / Gas Station Access	25	5	30	45	10	55	40	5	45
Carlaw Avenue / No Frills Access	90	95	185	145	175	320	145	160	305
Pape Avenue / No Frills Access	30	15	45	65	65	130	60	55	115
Total Existing Gross Site Traffic	145	115	260	255	250	505	245	220	465
Gas Station Pass-By 75% (75%) [75%]	-20	-5	-25	-35	-10	-45	-30	-5	-35
Retail Pass-By 0% (25%) [25%]	0	0	0	-55	-60	-115	-50	-55	-105
Total Pass-by	-20	-5	-25	-90	-70	-160	-80	-60	-140
Total Existing Primary Site Traffic	125	110	235	165	180	345	165	160	325

Notes:

1. Vehicular trip volumes rounded to the nearest 5 vehicles.
2. Gas station trips assumed at 75% pass-by during the weekday morning, afternoon and weekend (Saturday) peak hour at the Carlaw Avenue / Gas Station Driveway.
3. Retail trips assumed at 0%, 25% and 25% during the weekday morning, afternoon and weekend (Saturday) peak hour, respectively at the Carlaw Avenue and Pape Avenue Site Driveways.

The existing site generations in the order of 235, 345 and 325 primary two-way trips during the weekday morning, afternoon and Saturday peak hour periods, respectively.

Figure 20 illustrates the existing site traffic to be removed from the area street network.

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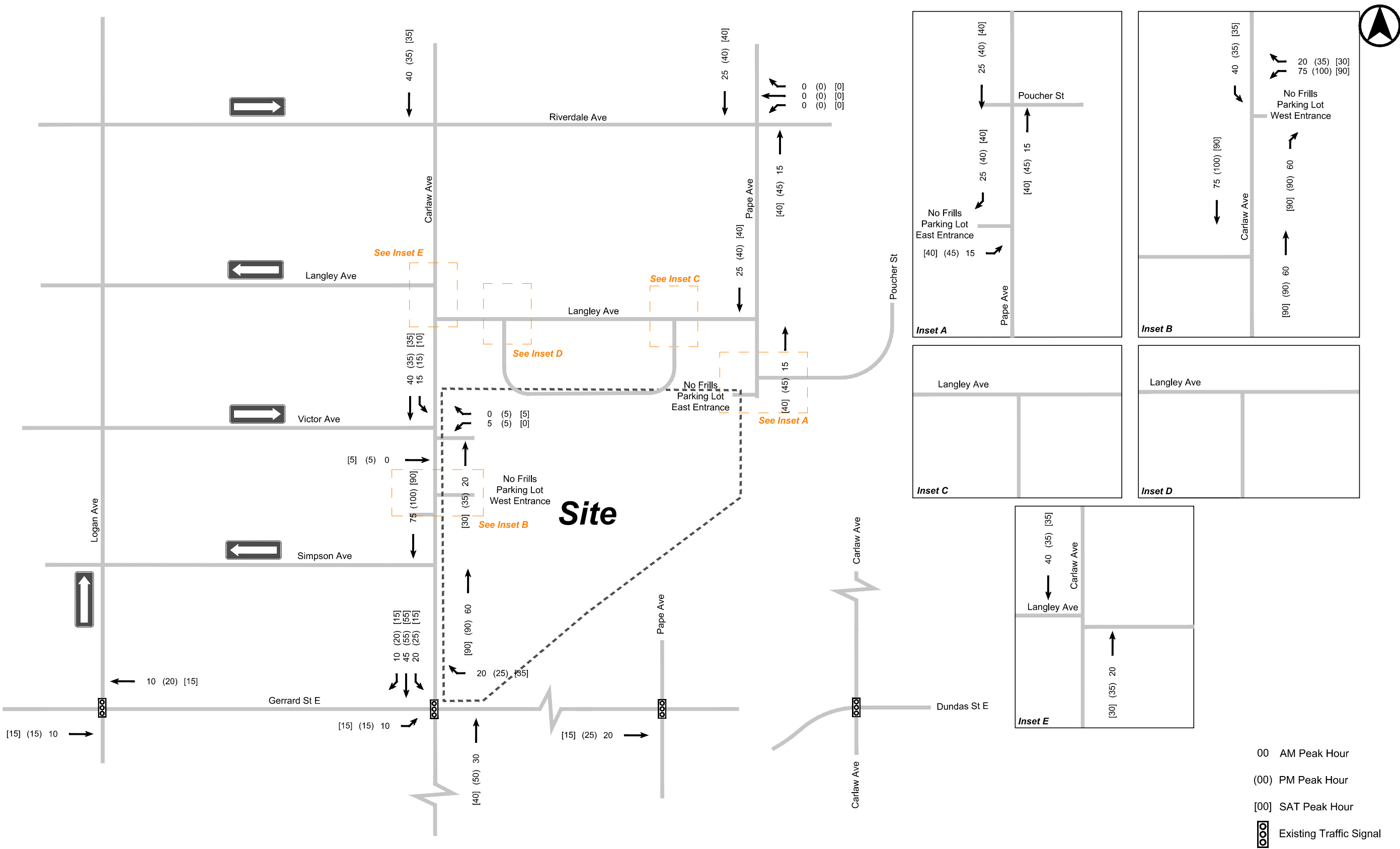


FIGURE 20 EXISTING SITE TRAFFIC VOLUMES (TO BE REMOVED)

9.4.2 Total Site Trip Generation

Table 22 lists the total new site related vehicular trips anticipated as part of the redevelopment of the site.

Recognizing that the existing uses building will be redeveloped, existing site traffic volumes have been removed. The proposed development is forecast to generate in the order of 45, 0 and 20 two-way net-new primary trips during the weekday morning, afternoon and weekend peak hour periods, respectively.

TABLE 22 TOTAL SITE VEHICULAR TRIP GENERATION

	AM Peak Hour			PM Peak Hour			Sat Peak Hour		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Existing Traffic									
Existing Gross Site Trips	145	115	260	255	250	505	245	220	465
Existing Pass-by	-20	-5	-25	-90	-70	-160	-80	-60	-140
Existing Primary Site Trips (To be Removed)	125	110	235	165	180	345	165	160	325
Proposed Uses									
Residential Trips	55	100	155	70	45	115	70	45	115
Non-Residential Gross Trips	75	55	125	145	155	300	145	155	300
Pass-by 0% (25%) [25%] ²	0	0	0	-35	-35	-70	-35	-35	-70
Non-Residential Primary Trips	75	55	125	110	120	230	110	120	230
Total New Gross Site Trip	130	155	280	215	200	415	215	200	415
Total New Primary Site Trips	130	155	280	180	165	345	180	165	345
Total Site Traffic									
Net-New Total Gross Site Trips	-15	40	20	-40	-50	-90	-30	-20	-50
Net-New Total Primary Site Trips	5	45	45	15	-15	0	15	5	20

Notes:

1. Vehicular trip volumes rounded to the nearest 5 vehicles.
2. xx (xx) [xx] - am (pm) [sat]

9.4.3 Trip Distribution and Assignment

The trip distribution pattern for the site traffic was established based on a review of 2016 Transportation Tomorrow Survey (TTS) data for home-based vehicle trips to and from the study area during the weekday morning and afternoon peak hour periods. The distribution of inbound and outbound residential site traffic adopted for the proposed development is outlined in **Table 23**.

TABLE 23 RESIDENTIAL TRIP DISTRIBUTION

To / From	Inbound	Outbound
East on Gerrard Street	40% (40%) [40%]	25% (25%) [25%]
West on Gerrard Street	15% (15%) [15%]	20% (20%) [20%]
North on Carlaw Avenue	10% (10%) [10%]	10% (10%) [10%]
South on Carlaw Avenue	20% (20%) [20%]	45% (45%) [45%]
North on Pape Avenue	15% (15%) [15%]	0% (0%) [0%]
Total	100% (100%) [100%]	100% (100%) [100%]

Notes:

1. Based on a review of 2016 TTS data for home-based trips from 2006 TTS Zones 269 and 272 during weekday morning and afternoon peak hours.
2. xx% (xx%) [xx%] - am (pm) [sat]

The trip distribution pattern for the non-residential site traffic was established based upon a review of the existing site travel characteristics and area travel patterns during the weekday morning, afternoon and Saturday peak hour periods and summarized in **Table 24**.

TABLE 24 **NON-RESIDENTIAL TRIP DISTRIBUTION PATTERN**

To / From	Inbound	Outbound
East on Gerrard Street	15% (15%) [20%]	15% (15%) [10%]
West on Gerrard Street	10% (10%) [10%]	10% (10%) [10%]
North on Carlaw Avenue	30% (20%) [20%]	20% (20%) [20%]
South on Carlaw Avenue	25% (30%) [25%]	40% (30%) [35%]
North on Pape Avenue	20% (25%) [25%]	15% (25%) [25%]
Total	100% (100%) [100%]	100% (100%) [100%]

Notes:

1. Distribution represents the observed direction of travel at the area and site access intersections.
2. xx% (xx%) [xx%] - am (pm) [sat]

Site traffic volumes assigned to the area road network are illustrated in **Figure 21** to **Figure 24**.

9.5 FUTURE TOTAL TRAFFIC

Future total traffic volumes were established by adding site-generated traffic to future background traffic volumes. **Figure 25** illustrates future total traffic volumes for the weekday morning, afternoon peak hours and Saturday peak hours.



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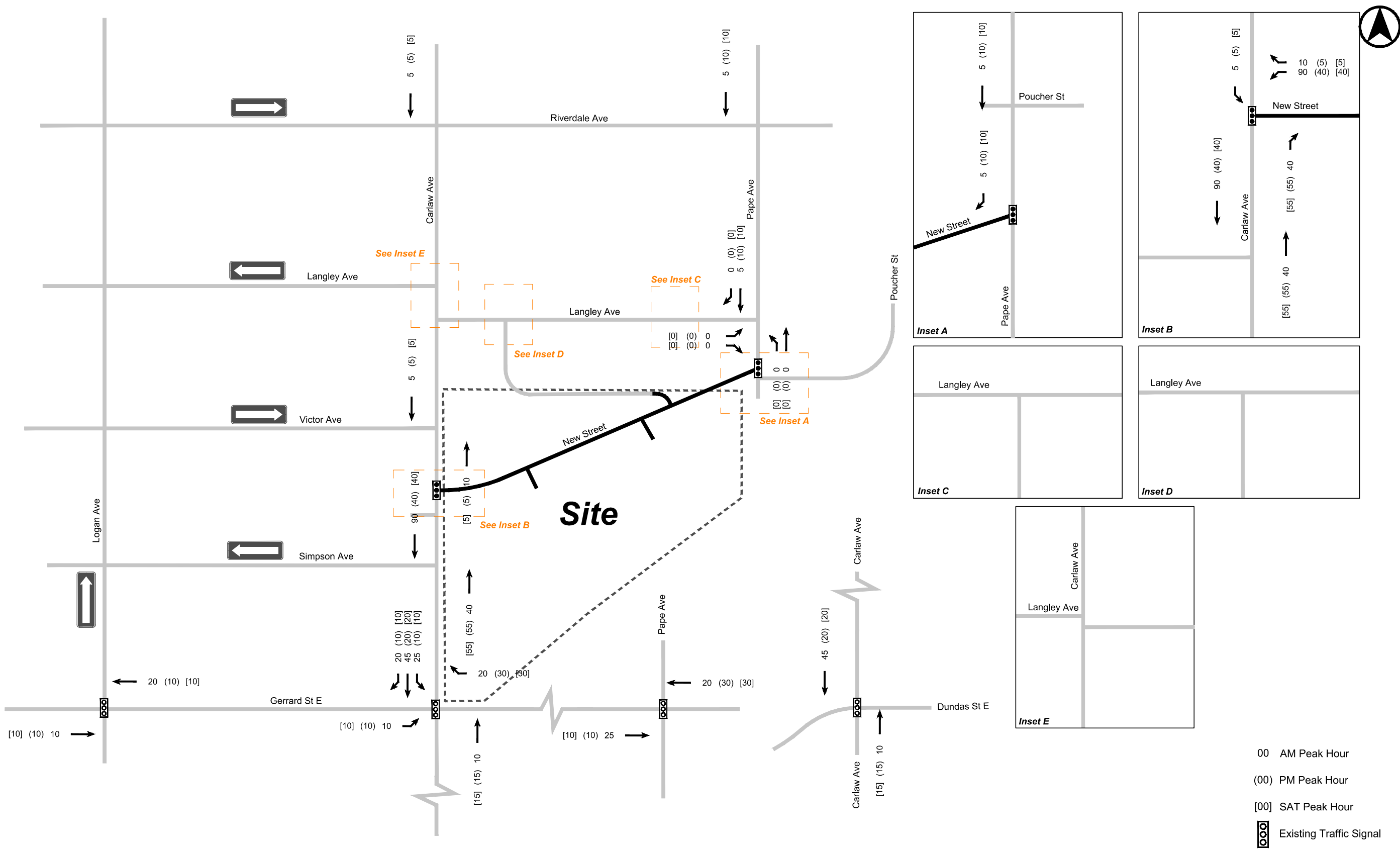


FIGURE 21 NEW RESIDENTIAL SITE TRAFFIC VOLUMES

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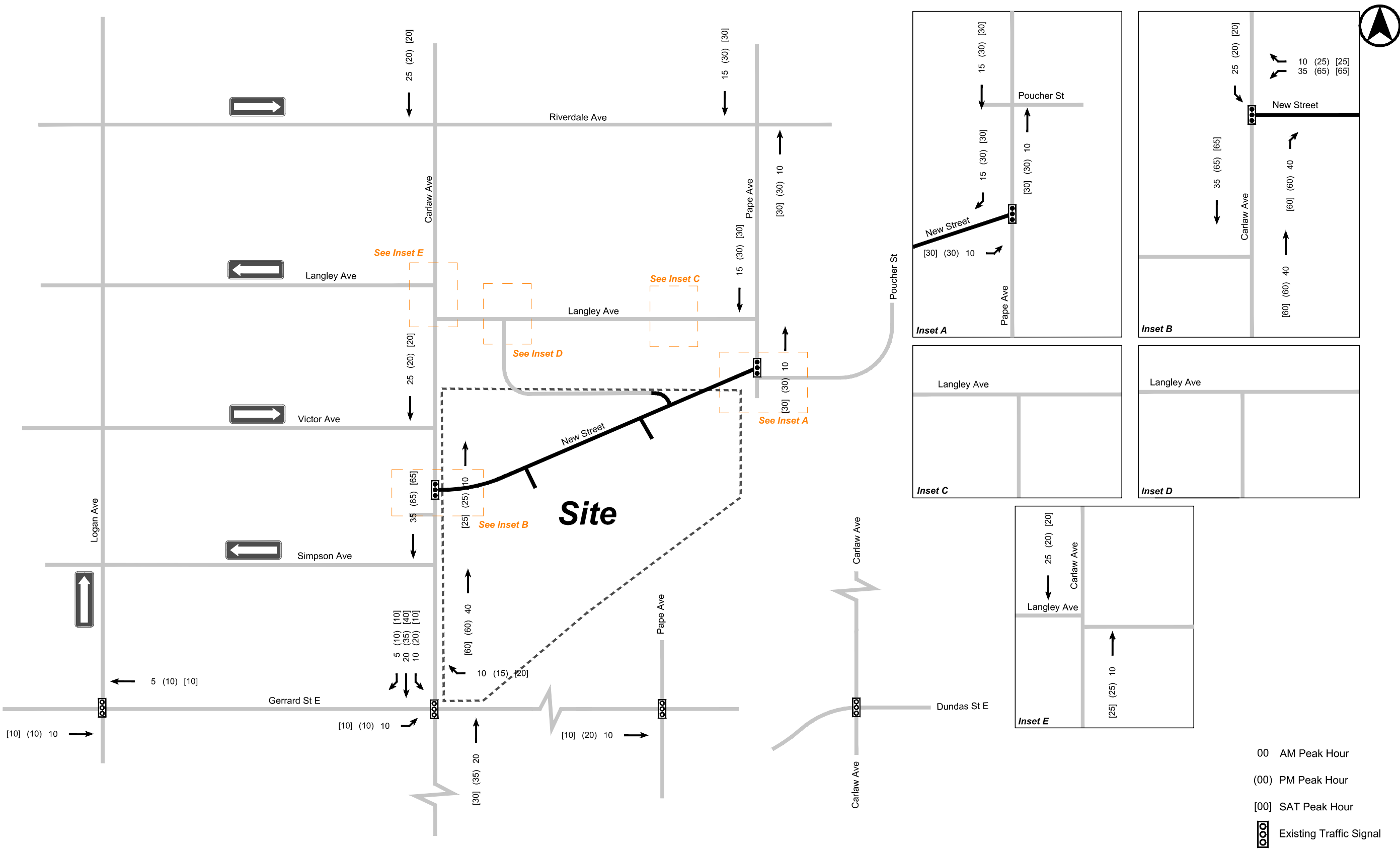


FIGURE 22 NEW NON-RESIDENTIAL GROSS SITE TRAFFIC VOLUMES

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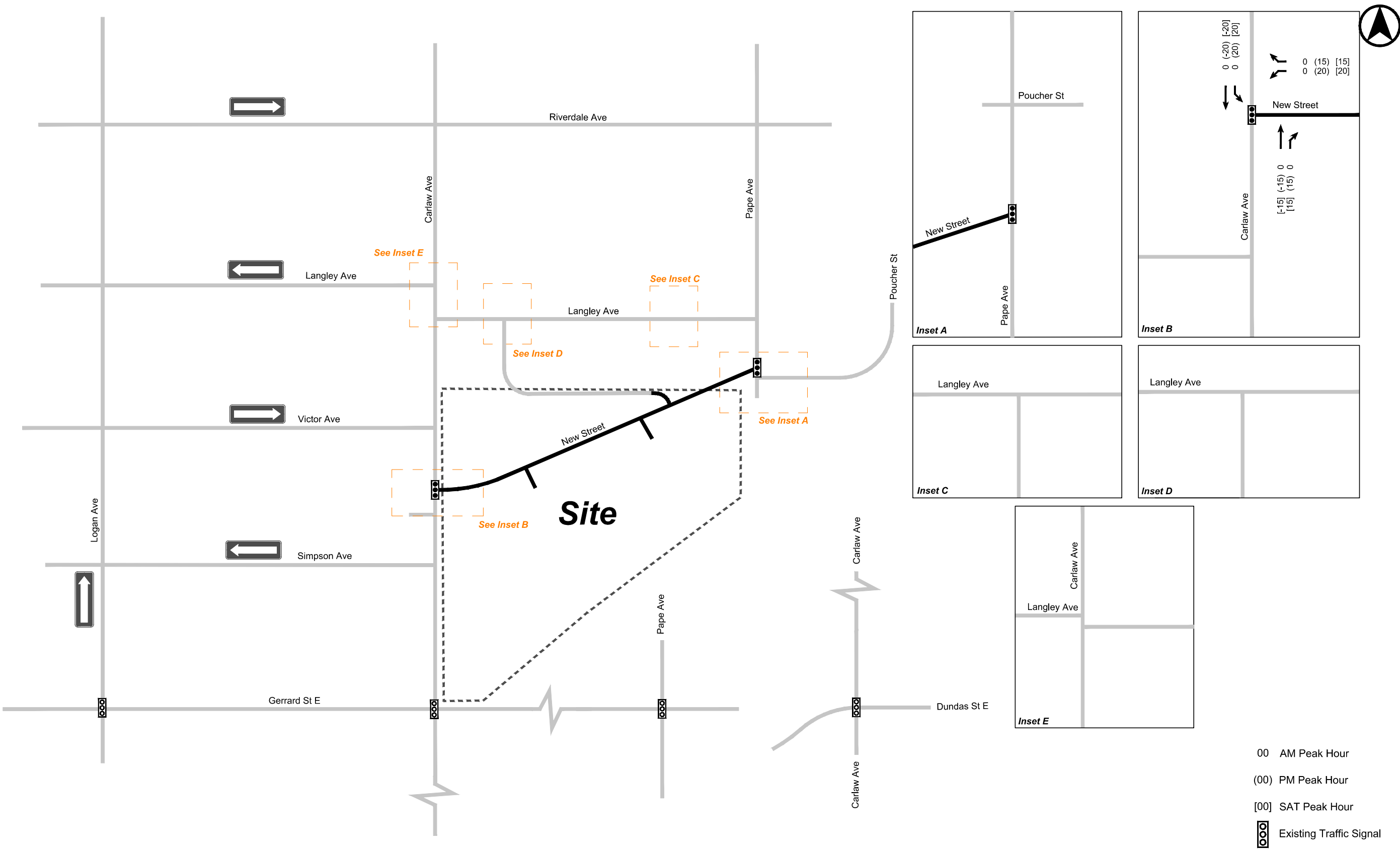


FIGURE 23 NEW NON-RESIDENTIAL PASS-BY SITE TRAFFIC VOLUMES

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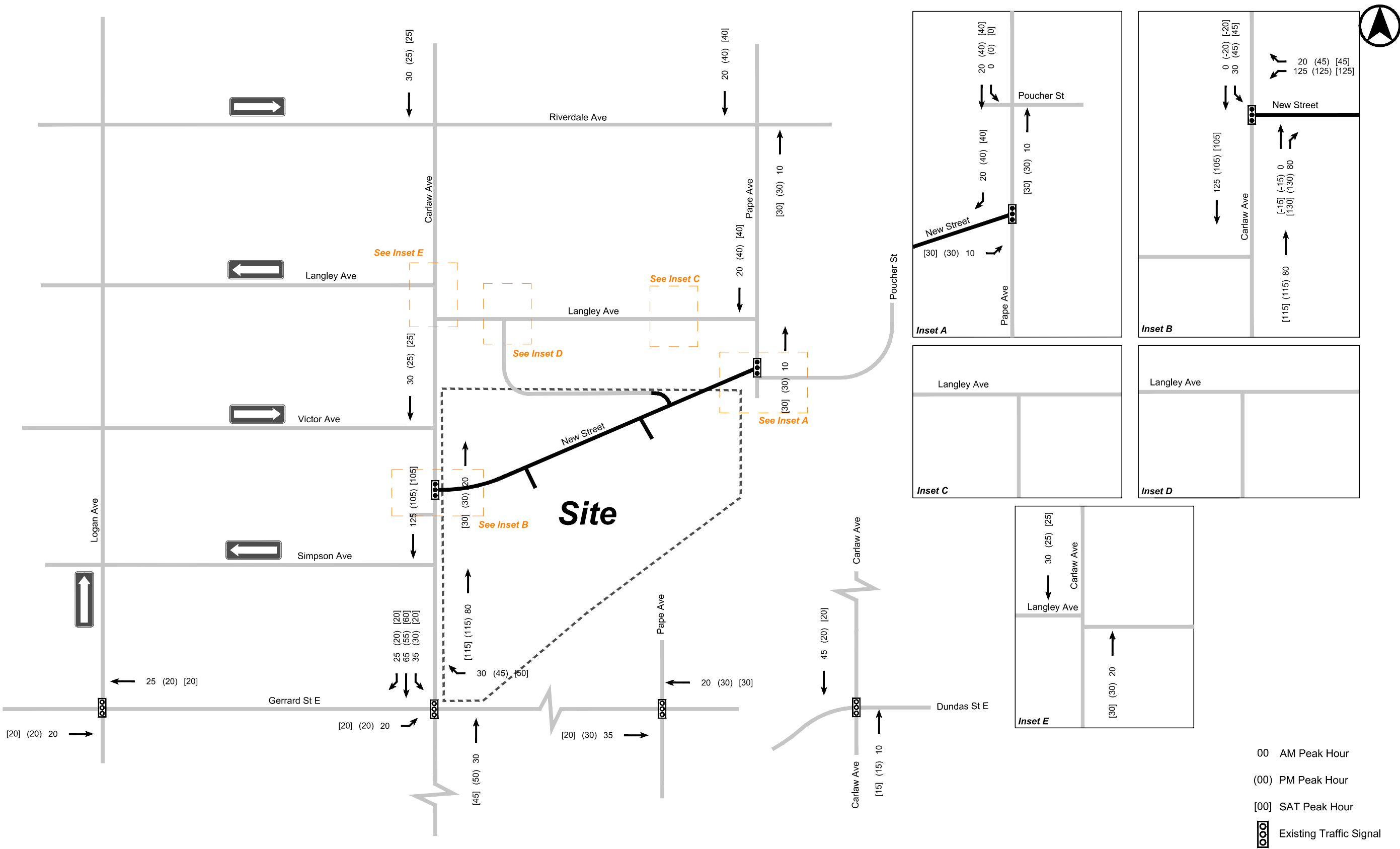


FIGURE 24 TOTAL NEW SITE TRAFFIC VOLUMES

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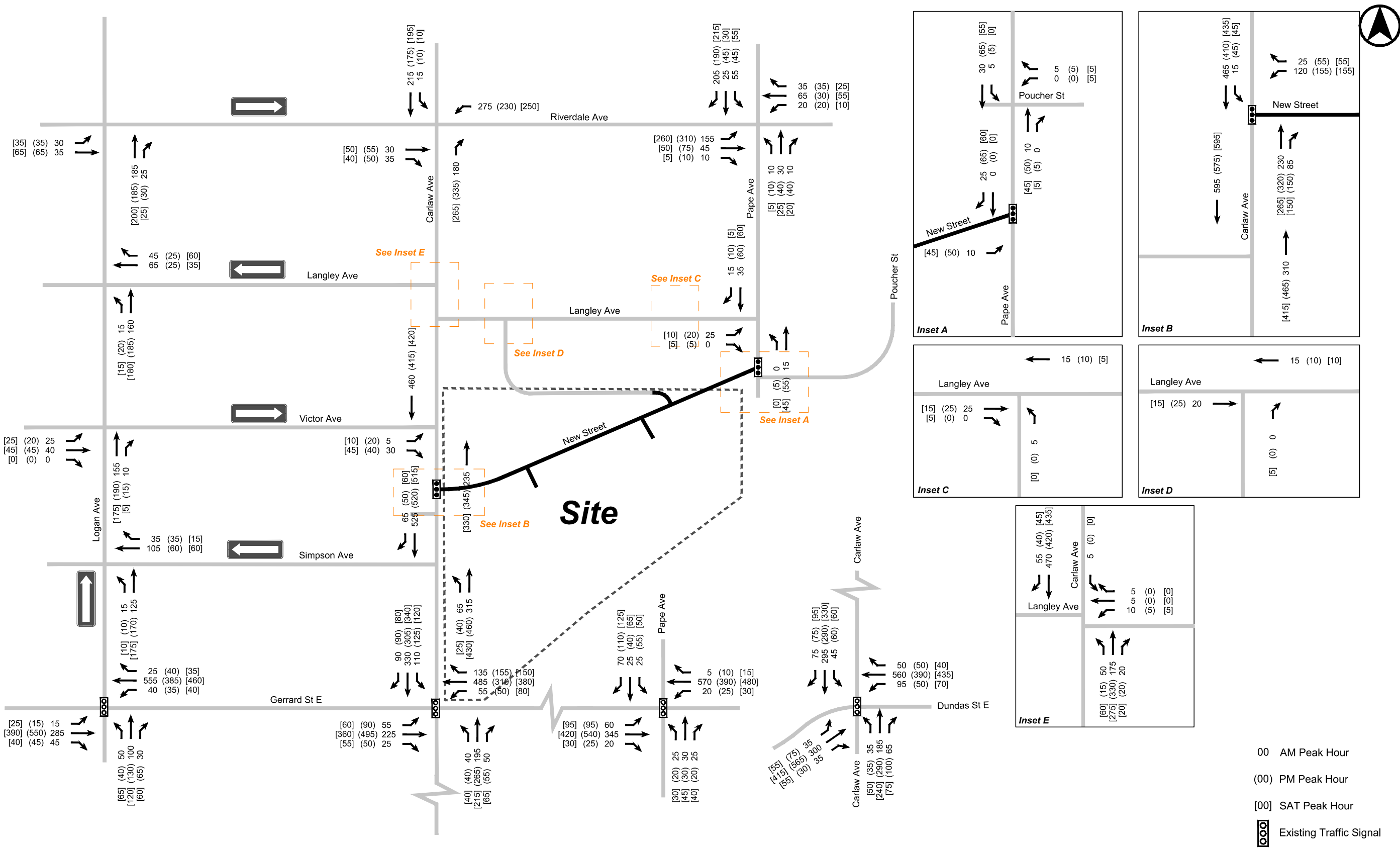


FIGURE 25 FUTURE TOTAL TRAFFIC VOLUMES

10.0 TRAFFIC OPERATIONS ANALYSIS

10.1 ANALYSIS METHODOLOGY AND ASSUMPTIONS

Intersection Capacity Analysis Methodology

Traffic operations analyses have been completed using the Synchro 11 (Version 11.0) capacity analysis software in accordance with the methodologies outlined in the *Highway Capacity Manual* (HCM) and the *City of Toronto's Guidelines for Using Synchro 9*, dated March 2016. The HCM 2000 methodology has been utilized in these analyses.

The key performance indicator of the unsignalized intersection / driveway analyses is an average delay per vehicle (in seconds) and level of service (LOS) designation, where the LOS A (little delay) to LOS F (extended delay) range provides an understanding of the relative time a motorist may have to wait to complete a turn at an intersection or driveway.

Base Saturation Flow Rates

A base saturation flow rate of 1,900 passenger cars per hour of green time per lane has been adopted as the base assumption within all Synchro analyses detailed in this study.

Heavy Vehicle Assumption

Heavy and medium truck percentages incorporated into the analysis were based upon information obtained from the existing intersection turning movement counts.

Road Network

The existing road network configuration was assumed for this analysis under existing and future background scenarios. Under future total conditions a new East / West street is proposed through the site from Pape Avenue to Carlaw Avenue. At Pape Avenue and Carlaw Avenue the new street is proposed to operate under signalized control.

Signal Timings

Existing signal timing, phasing plans and cycle lengths were obtained from the City of Toronto. These parameters were adopted from the analysis of existing conditions and future conditions at all intersections unless otherwise noted in the following analysis summary discussion. The existing traffic signal timing plans are provided in **Appendix G**.

Bus Blockages

Existing bus / streetcar blockages have been adopted based on service frequency summaries at stops located within the study network based on the TTC's Service Summary – Data Compiled by the Service Planning and Scheduling Department dated June 19, 2022 to July 30, 2022.

Lost Time Adjustments

The City of Toronto *Guidelines for using Synchro 9 (including Simtraffic 9)*, dated April 28, 2016, specify a base lost time adjustment factor of -1.0 seconds (i.e. a total loss time per phase equal to the amber plus all-red time minus 1 second). This default value was adopted in the analysis.

Peak Hour Factor

The City of Toronto Synchro 9 guidelines, specifies that default peak hour factors should be used except where site-specific values can be calculated from existing traffic count information. These guidelines specify that a default peak hour factor of 0.90 should be used for through and left-turn movements during the morning peak hour and 0.95 for the through movements and 0.90 for the left turn movements during the afternoon peak hour.

The City of Toronto default values were used in the analysis of the proposed site driveway. At other area intersections, peak hour factors were calculated based on the existing traffic volume data extracted from the traffic counts utilized in this study for the operations analysis. The calculated peak hour factors are summarized in **Table 25**.

TABLE 25 SUMMARY OF CALCULATED PEAK HOUR FACTORS

Intersection	AM PHF	PM PHF	SAT PHF
Dundas Street East / Carlaw Avenue	0.96	0.95	0.96
Gerrard Street East / Logan Avenue	0.98	0.93	0.93
Gerrard Street East / Carlaw Avenue	0.90	0.97	0.96
Gerrard Street East / Pape Avenue	0.89	0.95	0.95
Logan Avenue / Riverdale Avenue	0.87	0.87	0.81
Logan Avenue / Langley Avenue	0.90	0.86	0.97
Logan Avenue / Victor Avenue	0.85	0.83	0.97
Logan Avenue / Simpson Avenue	0.91	0.89	0.90
Carlaw Avenue / Riverdale Avenue	0.89	0.96	0.95
Carlaw Avenue / Langley Avenue	0.88	0.95	0.93
Carlaw Avenue / Gas Station Access	0.88	0.97	0.91
Carlaw Avenue / Victor Avenue	0.88	0.97	0.91

Carlaw Avenue / No Frills Access	0.87	0.97	0.97
Carlaw Avenue / Laneway	0.86	0.96	0.94
Carlaw Avenue / Simpson Avenue	0.89	0.96	0.92
Langley Avenue / East Laneway	0.71	0.73	0.88
Langley Avenue / West Laneway	0.70	0.75	0.91
Pape Avenue / Riverdale Avenue	0.93	0.93	0.96
Pape Avenue / Langley Avenue	0.71	0.94	0.80
Pape Avenue / Poucher Street	0.64	0.83	0.83
Pape Avenue / No Frills Access	0.67	0.83	0.86

Notes:

1. Under future total conditions, the new signalized intersections of New Street / Carlaw Avenue and New Street / Pape Avenue were reviewed based on the City of Toronto's default peak hour factors noted in the City of Toronto's Synchro 9 guidelines. Peak hour factors of 0.90 during the morning peak hour and 0.95 for the through movements and 0.90 for the left turn movements during the afternoon peak hour and Saturday peak hour were applied.

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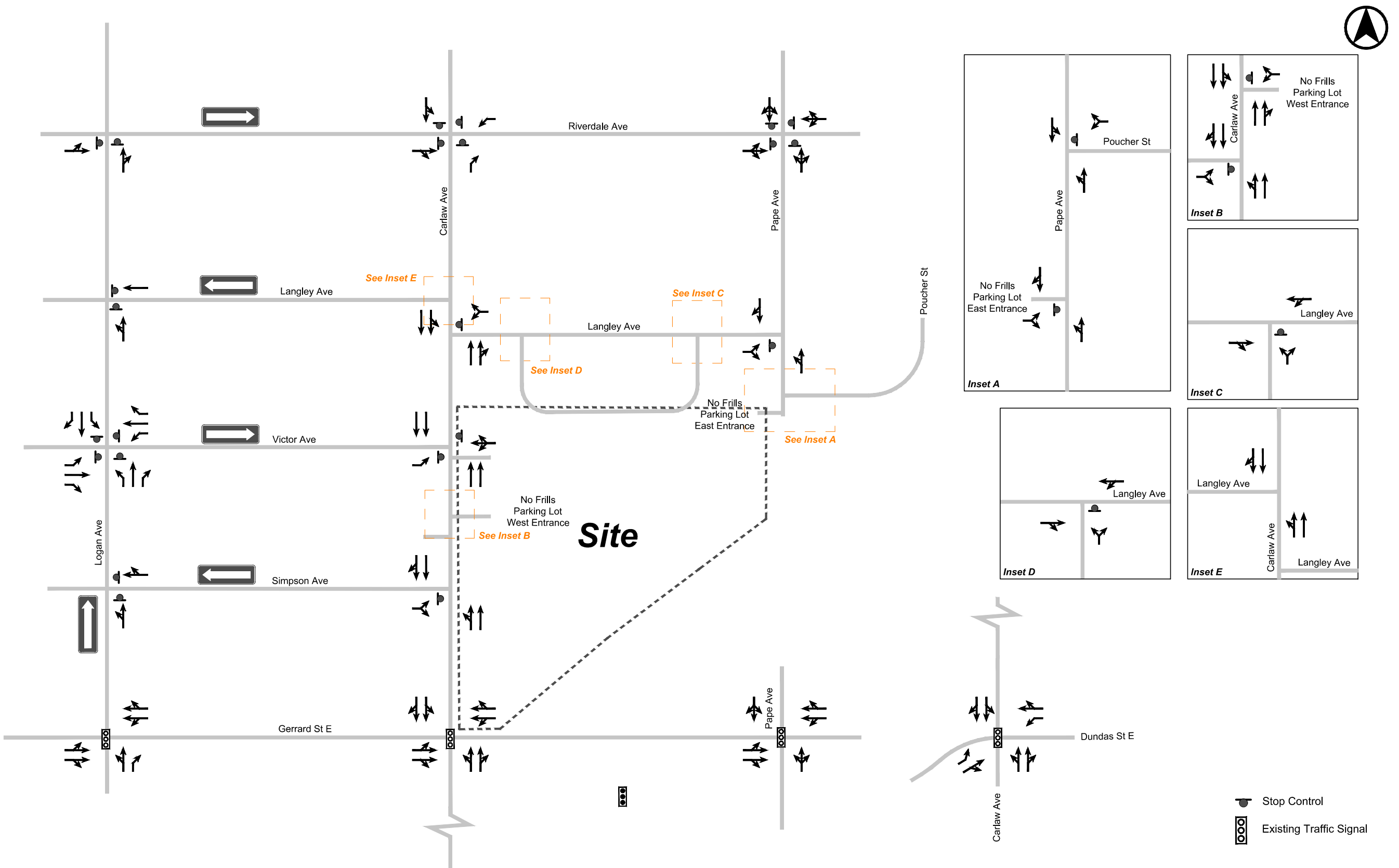


FIGURE 26 EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL

10.2 TRAFFIC ANALYSIS SUMMARY

Detailed Synchro analysis worksheets are provided in **Appendix H**. A discussion of the analysis results are provided herein.

10.2.1 Signalized Intersection Analysis

TABLE 26 SIGNALIZED INTERSECTION CAPACITY ANALYSIS RESULTS

Key Movements	Existing Traffic Conditions		Future Background Traffic Conditions		Future Total Traffic Conditions	
	v/c	LOS	v/c	LOS	v/c	LOS
Dundas Street East / Carlaw Avenue						
EBL	0.16 (0.23) [0.18]	B (B) [B]	0.16 (0.23) [0.18]	B (B) [B]	0.16 (0.23) [0.18]	B (B) [B]
EBTR	0.39 (0.66) [0.51]	B (B) [B]	0.39 (0.66) [0.51]	B (B) [B]	0.39 (0.66) [0.51]	B (B) [B]
WBL	0.24 (0.22) [0.22]	B (B) [B]	0.24 (0.22) [0.22]	B (B) [B]	0.24 (0.22) [0.22]	B (B) [B]
WBTR	0.67 (0.49) [0.51]	B (B) [B]	0.67 (0.49) [0.51]	B (B) [B]	0.67 (0.49) [0.51]	B (B) [B]
NBTLR	0.24 (0.37) [0.34]	B (B) [C]	0.26 (0.41) [0.37]	B (B) [C]	0.28 (0.42) [0.39]	B (B) [C]
SBTLR	0.34 (0.40) [0.46]	B (B) [C]	0.37 (0.44) [0.49]	B (C) [C]	0.42 (0.46) [0.51]	B (C) [C]
Overall	0.54 (0.55) [0.49]	B (B) [B]	0.55 (0.57) [0.50]	B (B) [B]	0.57 (0.58) [0.51]	B (B) [B]
Gerrard Street East / Logan Avenue						
EBTLR	0.37 (0.67) [0.54]	C (C) [C]	0.37 (0.68) [0.56]	C (C) [C]	0.38 (0.69) [0.56]	C (C) [C]
WBTLR	0.68 (0.60) [0.66]	C (B) [C]	0.69 (0.60) [0.67]	C (B) [C]	0.69 (0.60) [0.68]	C (B) [C]
NBTL	0.15 (0.17) [0.19]	A (A) [A]	0.15 (0.17) [0.19]	A (A) [A]	0.15 (0.17) [0.19]	A (A) [A]
NBR	0.02 (0.05) [0.05]	A (A) [A]	0.02 (0.06) [0.05]	A (A) [A]	0.02 (0.06) [0.05]	A (A) [A]

Key Movements	Existing Traffic Conditions		Future Background Traffic Conditions		Future Total Traffic Conditions	
	v/c	LOS	v/c	LOS	v/c	LOS
Overall	0.31 (0.32) [0.33]	C (B) [C]	0.33 (0.34) [0.35]	C (B) [C]	0.34 (0.34) [0.35]	C (B) [C]
Gerrard Street East / Carlaw Avenue						
EBTLR	0.22 (0.54) [0.35]	A (D) [A]	0.24 (0.59) [0.38]	A (D) [A]	0.26 (0.61) [0.39]	A (D) [A]
WBTLR	0.44 (0.40) [0.46]	A (D) [B]	0.47 (0.44) [0.50]	A (D) [B]	0.48 (0.46) [0.51]	A (D) [B]
NBTLR	0.30 (0.24) [0.25]	C (B) [B]	0.33 (0.26) [0.27]	C (B) [B]	0.34 (0.26) [0.27]	C (B) [B]
SBTLR	0.57 (0.64) [0.47]	C (C) [B]	0.61 (0.68) [0.50]	C (C) [B]	0.68 (0.69) [0.52]	C (C) [B]
Overall	0.49 (0.55) [0.47]	B (C) [B]	0.52 (0.60) [0.50]	B (C) [B]	0.56 (0.61) [0.51]	B (C) [B]
Gerrard Street East / Pape Avenue						
EBTLR	0.33 (0.45) [0.44]	A (B) [B]	0.35 (0.49) [0.47]	A (B) [B]	0.36 (0.50) [0.47]	A (B) [B]
WBTLR	0.37 (0.25) [0.33]	B (B) [B]	0.40 (0.27) [0.36]	B (B) [B]	0.41 (0.29) [0.38]	B (B) [B]
NBTLR	0.11 (0.09) [0.16]	B (B) [B]	0.12 (0.10) [0.16]	B (B) [B]	0.12 (0.10) [0.16]	B (B) [B]
SBTLR	0.15 (0.27) [0.38]	B (B) [B]	0.15 (0.29) [0.38]	B (B) [B]	0.16 (0.30) [0.39]	B (B) [B]
Overall	0.27 (0.37) [0.41]	B (B) [B]	0.29 (0.40) [0.43]	B (B) [B]	0.30 (0.41) [0.43]	B (B) [B]
New Street / Carlaw Avenue						
WBTLR	-	-	-	-	0.52 (0.56) [0.58]	C (C) [C]
NBTLR	-	-	-	-	0.16 (0.21) [0.18]	A (A) [A]
SBTLR	-	-	-	-	0.25 (0.23) [0.23]	A (A) [A]
Overall	-	-	-	-	0.31 (0.31) [0.31]	A (A) [A]



Key Movements	Existing Traffic Conditions		Future Background Traffic Conditions		Future Total Traffic Conditions	
	v/c	LOS	v/c	LOS	v/c	LOS
New Street / Pape Avenue						
EBTLR	-	-	-	-	0.27 (0.38) [0.43]	C (C) [C]
SBTLR	-	-	-	-	0.03 (0.06) [0.05]	A (A) [A]
Overall	-	-	-	-	0.04 (0.09) [0.08]	B (B) [B]

Notes:

1. XX (XX) [XX] – Weekday Morning Peak Hour (Weekday Afternoon Peak Hour) [Weekend Saturday Peak Hour]

Under existing traffic conditions, the area signalized intersections operate at an acceptable level of service with overall v/c ratios of 0.54, 0.55 and 0.49 or better during the weekday morning, afternoon and weekend peak hours, respectively.

Under future background traffic conditions with the allowances of specific area development and general corridor traffic growth, the area signalized intersections operate at an acceptable level of service with overall v/c ratios of 0.55, 0.59 and 0.50 or better during the weekday morning, afternoon and weekend peak hours, respectively.

With the addition of site-related traffic under future total traffic conditions, the area signalized intersections operate at an acceptable level of service with overall v/c ratios of 0.57, 0.61 and 0.51 during the weekday morning, afternoon and weekend peak hours, respectively.

10.2.2 Unsignalized Intersection Analysis

Traffic operations analysis results for the area unsignalized intersections are discussed in the following section, and summarized in **Table 27**. Synchro reports are provided in **Appendix H**.

TABLE 27 UNSIGNALIZED INTERSECTIONS CAPACITY ANALYSIS RESULTS

Key Movements	Existing Traffic Conditions		Future Background Traffic Conditions		Future Total Traffic Conditions	
	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
Logan Avenue / Riverdale Avenue						
EBTL	A (A) [A]	8.0 (8.3) [8.4]	A (A) [A]	8.0 (8.3) [8.4]	A (A) [A]	8.0 (8.3) [8.4]
NBTR	A (A) [A]	8.6 (8.7) [9.1]	A (A) [A]	8.6 (8.7) [9.1]	A (A) [A]	8.6 (8.7) [9.1]
Logan Avenue / Langley Avenue						
WBTR	A (A) [A]	7.8 (7.4) [7.5]	A (A) [A]	7.8 (7.4) [7.5]	A (A) [A]	7.8 (7.4) [7.5]
NBTL	A (A) [A]	8.5 (8.6) [8.4]	A (A) [A]	8.5 (8.6) [8.4]	A (A) [A]	8.5 (8.6) [8.4]
Logan Avenue / Victor Avenue						
EBTL	A (A) [A]	7.9 (8.0) [7.8]	A (A) [A]	7.9 (8.0) [7.8]	A (A) [A]	7.9 (8.0) [7.8]
NBTR	A (A) [A]	8.3 (8.6) [8.1]	A (A) [A]	8.3 (8.6) [8.1]	A (A) [A]	8.3 (8.6) [8.1]
Logan Avenue / Simpson Avenue						
WBTR	A (A) [A]	8.0 (7.7) [7.7]	A (A) [A]	8.0 (7.7) [7.7]	A (A) [A]	8.0 (7.7) [7.7]
NBTLR	A (A) [A]	8.3 (8.5) [8.4]	A (A) [A]	8.3 (8.5) [8.4]	A (A) [A]	8.3 (8.5) [8.4]
Carlaw Avenue / Riverdale Avenue						
EBTR	A (A) [A]	8.9 (9.3) [9.1]	A (A) [A]	9.2 (9.6) [9.3]	A (A) [A]	9.1 (9.5) [9.2]
WBL	B (B) [B]	13.2 (11.9) [11.8]	B (B) [B]	13.8 (12.3) [12.3]	B (B) [B]	13.7 (12.2) [12.2]
NBR	A (B) [A]	9.6 (10.9) [9.8]	B (B) [B]	10.1 (11.7) [10.3]	B (B) [B]	10.0 (11.6) [10.3]
SBTL	B (B) [B]	11.1 (10.2) [10.4]	B (B) [B]	12.0 (10.9) [11.0]	B (B) [B]	11.8 (10.7) [10.8]
Carlaw Avenue / Langley Avenue						
WBLR	B (B) [B]	12.9 (14.3) [14.4]	B (B) [B]	13.6 (14.9) [14.9]	B (B) [B]	13.0 (14.5) [14.0]
SBTL	A (A) [A]	0.3 (0.0) [0.0]	A (A) [A]	0.3 (0.0) [0.0]	A (A) [A]	0.3 (0.0) [0.0]
NBTL	A (A) [A]	4.8 (1.2) [4.0]	A (A) [A]	4.5 (1.1) [3.9]	A (A) [A]	4.5 (1.1) [3.9]
Carlaw Avenue / Gas Station Access/Victor Avenue						
EBLR	B (B) [B]	12.5 (13.5) [12.0]	B (B) [B]	12.9 (14.0) [12.4]	B (B) [B]	12.1 (12.5) [11.6]



Key Movements	Existing Traffic Conditions		Future Background Traffic Conditions		Future Total Traffic Conditions	
	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
WBTLR	C (B) [B]	18.3 (14.2) [10.2]	C (B) [B]	19.3 (14.8) [10.3]	-	-
SBTL	A (A) [A]	0.9 (0.9) [0.7]	A (A) [A]	0.9 (0.9) [0.6]	-	-
Carlaw Avenue / No Frills Access						
WBLR	C (C) [C]	17.1 (22.0) [20.8]	C (C) [C]	18.1 (23.8) [22.1]	-	-
SBTL	A (A) [A]	1.5 (2.0) [1.9]	A (A) [A]	1.4 (2.0) [1.9]	-	-
Carlaw Avenue / Laneway						
EBLR	A (A) [A]	0.0 (0.0) [0.0]	A (A) [A]	0.0 (0.0) [0.0]	A (A) [A]	0.0 (0.0) [0.0]
Carlaw Avenue / Simpson Avenue						
EBLR	B (C) [A]	11.4 (15.1) [0.0]	B (C) [A]	11.6 (15.5) [0.0]	B (B) [A]	11.0 (14.3) [0.0]
NBTL	A (A) [A]	4.4 (2.4) [1.7]	A (A) [A]	4.4 (2.4) [1.7]	A (A) [A]	4.3 (2.3) [1.6]
Langley Avenue / West Laneway						
NBLR	A (A) [A]	0.0 (0.0) [8.5]	A (A) [A]	0.0 (0.0) [8.5]	A (A) [A]	0.0 (0.0) [8.5]
Langley Avenue / East Laneway						
NBLR	A (A) [A]	9.0 (0.0) [0.0]	A (A) [A]	9.0 (0.0) [0.0]	A (A) [A]	9.0 (0.0) [0.0]
Pape Avenue / Riverdale Avenue						
EBTLR	B (C) [B]	10.5 (16.0) [12.3]	B (C) [B]	11.0 (17.5) [12.9]	B (C) [B]	10.9 (17.1) [12.7]
WBTLR	A (A) [A]	9.3 (9.4) [9.0]	A (A) [A]	9.4 (9.5) [9.0]	A (A) [A]	9.3 (9.4) [9.0]
NBTLR	A (A) [A]	8.7 (9.8) [8.8]	A (A) [A]	8.8 (10.0) [8.9]	A (A) [A]	8.7 (9.7) [8.7]
SBTLR	B (B) [B]	10.7 (12.0) [10.9]	B (B) [B]	10.8 (12.3) [11.1]	B (B) [B]	10.7 (12.2) [11.0]
Pape Avenue / Langley Avenue						
EBLR	B (B) [A]	10.0 (10.1) [9.9]	B (B) [A]	10.0 (10.1) [9.9]	A (A) [A]	9.9 (10.0) [9.8]
NBTL	A (A) [A]	0.0 (0.5) [0.0]	A (A) [A]	0.0 (0.5) [0.0]	A (A) [A]	0.0 (0.6) [0.0]
Pape Avenue / Poucher Street						
WBLR	A (A) [A]	8.9 (9.2) [9.6]	A (A) [A]	8.9 (9.2) [9.6]	A (A) [A]	8.8 (9.1) [9.5]

Key Movements	Existing Traffic Conditions		Future Background Traffic Conditions		Future Total Traffic Conditions	
	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
SBTL	A (A) [A]	1.0 (0.6) [0.0]	A (A) [A]	1.0 (0.6) [0.0]	A (A) [A]	1.1 (0.6) [0.0]
Pape Avenue / No Frills Access						
EBLR	A (A) [B]	9.7 (9.8) [11.1]	A (A) [B]	9.7 (9.8) [11.1]	-	-

Notes:

1. XX (XX) [XX] – Weekday Morning Peak Hour (Weekday Afternoon Peak Hour) [Weekend Saturday Peak Hour]

Under existing traffic conditions, the area unsignalized intersections operate at a acceptably at level of service (LOS C or better) with delays of 22.0 seconds or less during the weekday morning, afternoon and weekend peak hour periods.

Under future background conditions, the area unsignalized intersections operate at a acceptably at level of service (LOS C or better) with delays of 23.8 seconds or less during the weekday morning, afternoon and weekend peak hour periods.

Under future total conditions, with the full build-out of the development, the area unsignalized intersections operate at a acceptably at level of service (LOS C or better) with delays of 17.1 seconds or less during the weekday morning, afternoon and weekend peak hour periods.

Site related impacts are anticipated to have a negligible impacts at the area unsignalized intersections.

11.0 VEHICULAR PARKING CONSIDERATIONS

11.1 PARKING OVERVIEW

The proposed redevelopment is centered upon creating a new transit-oriented development that minimizes car usage as a form of transportation.

The Site development and area context collectively provides an array of non-automobile facilities and elements that will not only provide for future mobility needs of residents, employees and visitors to the Project but will also greatly benefit the mobility options for the neighbourhood.

Significant elements of the proposed redevelopment and area that support sustainable transportation options include:

- Enhanced connectivity to the Proposed OL Station;
- Creation of a new higher-order transit station with improved transit and pedestrian access;
- Supportive cycling infrastructure within the development plan;
- Introduction of a new street with signalized intersection crossings that promote walking as a viable local travel mode; and
- Comprehensive “mobility plan” (TDM) focused on providing substantial amenities to support active transportation modes and transit use.

These combined will support non-automobile dependent mobility in the area.

11.2 PARKING SUPPLY AS A KEY FACTOR

An effective parking supply and usage strategy is a central element of influencing automobile usage.

The future transit station, among other supportive transportation elements, being proposed near the Site present an opportunity to advance a highly progressive parking strategy that minimizes car usage, maximizes usage of the proposed sustainable travel options, and fosters a “complete” community.

A parking strategy is proposed as part of the Zoning By-law Amendment application that seeks to establish a reduced “minimum baseline” parking requirement environment that:

1. Recognizes the mobility environment being created in the site-surrounding neighbourhood;
2. Reflects contemporary (and significantly reduced) parking needs in areas with high transit accessibility;
3. Maximizes the sharing of parking supplies across land uses in the Master Plan; and
4. Discourages the provision of excess parking in which increases vehicular travel.

A review of the current parking standards, recommended (appropriate) parking standards, and rationale for the reduced minimum parking standards within any Zoning By-law established for the Project is outlined herein.

11.3 ZONING BY-LAW PARKING REQUIREMENTS

11.3.1 City of Toronto Zoning By-law 569-2013

Enacted by City Council in May 2013, the Site is subject to the Policy Area 4 parking standards under City of Toronto’s comprehensive and consolidated Zoning By-law 569-2013.

The minimum residential and non-residential parking supply standards that apply to the site (per block) are summarized in **Table 28**.

• <u>Residential</u>	
Studio	0.70 spaces per unit
1-Bedroom	0.80 spaces per unit
2-Bedroom	0.90 spaces per unit
3-Bedroom	1.10 spaces per unit
• <u>Visitor</u>	0.15 spaces per unit
• <u>Retail</u>	
200m² < GFA < 10,000m²	1.00 spaces per 100m² GFA
<u>Grocery</u>	1.00 spaces per 100m² GFA

The City also recognizes that land uses are often complementary with each other, within the same property that is undergoing development or redevelopment. To that extent, the City of Toronto has established shared parking occupancy rates, recognizing the peak periods of use for various residential and non-residential land uses.

Application of Zoning By-law 569-2013 Policy Area 4 minimum parking standards to the Project results in a requirement of 1,138 parking spaces, including 916 resident parking spaces, 162 residential visitor spaces, and 60 non-residential spaces (i.e. retail and grocery) spaces. The effective resident parking supply is 0.85 parking spaces per unit.

11.3.2 City of Toronto Zoning By-law 89-2022 (Under Appeal)

As noted in **Section 11.3.2**, By-law 89-2022 was enacted and passed in February 2022 to amend Zoning By-law 569-2013 with the proposed changes, which included adjusted minimum accessible parking requirements for most land uses. The appeal expired on March 3, 2022. The new By-law was appealed and is currently before the Tribunal.

It is noted that By-law 89-2022 contains transition clauses which makes the by-law applicable to the site since the development has been submitted after the enactment date (February 2022).

Therefore, for context, the application of the new parking standards included within By-law 89-2022 (which will amend Zoning By-law 569-2013) are applied to the updated development program is summarized in **Table 29**.

• <u>Residential</u>	No minimum
• <u>Visitor</u>	2 + 0.05 spaces per unit
• <u>Retail</u>	No minimum
<u>Grocery</u>	No minimum

The application of the new standards of By-law 89-2022 results in a minimum requirement of 56 residential visitor parking spaces.

Application of the effective parking space requirement of 1,083 spaces would result in a minimum of 25 accessible parking spaces. As per Zoning By-law 89-2022 - Clause 200.15.10.5 (2), the aforementioned effective space requirement represents the base for the minimum number of accessible parking spaces, as it is greater than the permitted parking spaces provided as indicated in **Section 11.5**.



TABLE 28 ZONING BY-LAW 569-2013 PARKING REQUIREMENTS (POLICY AREA 4)

Land Use		Units / GFA ¹	Minimum Parking Rate	Minimum Parking Required ^{2,3}	Occupancy Rate ²		
					AM	PM	EVE
Resident							
Residential	Studio	93 units	0.70 spaces / unit	65	100%	100%	100%
	1-Bedroom	587 units	0.80 spaces / unit	469	100%	100%	100%
	2-Bedroom	281 units	0.90 spaces / unit	252	100%	100%	100%
	3-Bedroom	119 units	1.10 spaces / unit	130	100%	100%	100%
Resident Sub-Total			0.85 spaces / unit (blended)	916	916	916	916
Non-Resident							
Residential Visitor		1,080 units	0.15 spaces / unit	162	10%	35%	100%
					16	56	162
Grocery		3,460 square metres	1.00 space / 100 square metres	34	20%	100%	100%
					6	34	34
Retail		2,590 square metres	1.00 space / 100 square metres	25	20%	100%	100%
					5	25	25
Non-Resident Sub-Total					27	115	221
Total Requirement				-	943	1,031	1,137

Notes:

1. Based upon site statistics provided by Hariri Pontarini Architects dated August 24, 2022.
2. If the number of required parking spaces results in a number with a fraction, the number is rounded down to the nearest whole number but there may not be less than one parking space.
3. The total minimum parking required is equal to the greatest sum out of the 3 occupancy periods (e.g. AM, PM, and EVE).

TABLE 29 ZONING BY-LAW 89-2022 PARKING REQUIREMENTS (PARKING ZONE B)

Land Use		Units / GFA ¹	Maximum / Minimum ²	Parking Rate	Minimum Required ³	Maximum Permission ³
Resident						
Residential	Studio	93 units	Maximum	0.70 spaces / unit	0	65
	1-Bedroom	587 units	Maximum	0.80 spaces / unit	0	469
	2-Bedroom	281 units	Maximum	0.90 spaces / unit	0	252
	3-Bedroom	119 units	Maximum	1.10 spaces / unit	0	130
<i>Resident Sub-Total</i>					<i>0</i>	<i>916</i>
Non-Resident						
Residential Visitor		1,080 units	Minimum	2 + 0.05 spaces / unit	56	112
			Maximum	1.00 space / unit (first 5 units) + 0.10 spaces / unit (remaining units)		
Grocery		3,460 square metres	Maximum	4.00 spaces / 100 square metres	0	138
Retail		2,590 square metres	Maximum	4.00 spaces / 100 square metres	0	103
<i>Non-Resident Sub-Total</i>					<i>56</i>	<i>353</i>
Total Requirement					56	1,269

Notes:

1. Based upon site statistics provided by Hariri Pontarini Architects dated August 24, 2022.
2. There is no minimum parking requirement for all uses unless otherwise specified.
3. If the number of required parking spaces results in a number with a fraction, the number is rounded down to the nearest whole number but there may not be less than one parking space.

TABLE 30 ACCESSIBLE PARKING REQUIREMENTS AS PER BY-LAW 89-2022 (PARKING ZONE B)

Land Use		Units / GFA ¹	Effective Parking Space Rate	Effective Parking Spaces ²	Accessible Parking Spaces Required ³
Resident					5 accessible spaces / first 100 spaces + 1 accessible space / 50 spaces thereafter
Residential	Studio	93 units	0.70 spaces / unit	65	
	1-Bedroom	587 units	0.80 spaces / unit	469	
	2-Bedroom	281 units	0.90 spaces / unit	252	
	3-Bedroom	119 units	1.10 spaces / unit	130	
Resident Sub-Total				916	
Non-Resident					
Residential Visitor		1,080 units	0.10 spaces / unit	108	
Grocery		3,460 square metres	1.00 space / 100 square metres	34	
Retail		2,590 square metres	1.00 space / 100 square metres	25	
Non-Resident Sub-Total				167	
Total Requirement				1,083	25

Notes:

1. Based on site statistics provided by Hariri Pontarini Architects dated August 24, 2022.
2. If the number of required parking spaces results in a number with a fraction, the number is rounded down to the nearest whole number but there may not be less than one parking space.
3. Application of "Effective" Parking Rate and Requirement is a procedural requirement, stipulated by By-law 89-2022, intended to calculate the required quantity of parking spaces (see Section 200.15.10.5)

11.4 PROPOSED VEHICULAR PARKING STANDARDS

The applicable parking standards as per Zoning By-law 569-2013 greatly overstate the vehicular parking needs of the proposed development.

It is proposed to adopt minimum parking standards that are reflective of the contemporary public policy and planning framework that is guiding the development plan. Public initiatives across all levels of government are prioritizing the mobility and experience of people over the efficiency of car movement. Commitments and investments are being made to increase access to public transit and facilitate travel by non-auto means, with aim to mitigate and reduce vehicular traffic.

The Site has been planned to establish and connect a community focused on minimizing automobile use to a great extent while capitalizing on major infrastructure investments to achieve the sustainable mobility ambitions of the City / area. As such, the parking standards have been established for the Site to reflect comparable goals and objectives in minimizing auto-use.

It is proposed to establish a relatively low, yet appropriate, minimum set of parking standards for residential, residential visitors and non-residential (retail and grocery) land uses. A detailed outline of the recommended standards and site parking requirements are provided in **Table 31** and listed below for reference.

- Residential 0.23 spaces per unit
- Visitor 2 + 0.05 spaces per unit
- Retail 1.50 spaces per 100m² GFA
- Grocery 1.50 spaces per 100m² GFA

It is also proposed to provide the non-residential parking in a pooled non-exclusive parking area to maximize the usage of the provided spaces, to enable multiple user groups to utilize an available parking space, and to minimize overall all non-resident parking requirements across the Project.

Based on the recommended standards, the minimum requirement is 392 parking spaces, including 247 resident parking spaces, 56 residential visitor, and 89 non-resident (e.g. retail and grocery) parking spaces.

Support for and the appropriateness of the recommended minimum parking standards is discussed in the following sections.



TABLE 31 PROPOSED MINIMUM PARKING STANDARDS

Land Use		Units / GFA ¹	Parking Rate	Parking Required ²	Occupancy Rate ²		
					AM	PM	EVE
Resident							
Residential	Studio	93 units	0.23 spaces / unit	21	100%	100%	100%
	1-Bedroom	587 units	0.23 spaces / unit	135	100%	100%	100%
	2-Bedroom	281 units	0.23 spaces / unit	64	100%	100%	100%
	3-Bedroom	119 units	0.23 spaces / unit	27	100%	100%	100%
Resident Sub-Total				247	247	247	247
Non-Resident							
Residential Visitor		1,080 units	2 + 0.05 spaces / unit	56	10%	35%	100%
					5	19	56
Grocery		3,460 square metres	1.50 spaces / 100 square metres	51	20%	100%	100%
					10	51	51
Retail		2,590 square metres	1.50 spaces / 100 square metres	38	20%	100%	100%
					7	38	38
Non-Resident Sub-Total				148	22	108	145
Total Requirement					269	355	392

Notes:

1. Based upon site statistics provided by Hariri Pontarini Architects dated August 24, 2022.
2. If the number of required parking spaces results in a number with a fraction, the number is rounded down to the nearest whole number but there may not be less than one parking space.

11.5 PROPOSED VEHICULAR PARKING SUPPLY

The proposed redevelopment incorporates a total of 410 parking spaces located within a 3-level underground parking garage. The parking supply includes 256 resident spaces, 56 residential visitor spaces, and 98 shared non-resident (retail and grocery) spaces to support the proposed uses within the development.

The parking garage will be accessed from New Street. The resident parking spaces are proposed to be located on the partial P1 and P2 levels of the underground parking garage, while the residential visitor parking spaces are proposed to be located on the P1 level. The non-resident parking is proposed to be located on the P0 level.

As part of the overall parking supply, there are 25 accessible parking spaces proposed. The P0 level contains 6 accessible parking spaces, P1 contains 9 accessible parking spaces and P2 contains 10 accessible parking spaces to support the proposed development.

Table 32 provides a breakdown of the proposed parking supply allocation within the facility, per use.

TABLE 32 PROPOSED VEHICULAR PARKING SUPPLY ALLOCATION

Level	Res.	Res. Visitor	Non-res.	Acc.	Total
Level P0	-	-	92	6	98
Level P1	86	54	-	9	149
Level P2	153	-	-	10	163
Total	239	54	92	25	410

It is noted that the proposed parking supply is reduced compared to the requirements as per Zoning By-law 569-2013 and falls within the

minimum and maximum requirements specified under Zoning By-law 89-2022. As both Zoning By-laws are legally in effect, the proposed lower parking requirements will be addressed through the Site Plan application stage upon approval. As a result, the rationale for the proposed parking supply is provided in the subsequent section.

11.5.1 Vehicle Parking Provisions as per Toronto Green Standard Version 4

As mentioned in Section 4.2.3, all new developments are required to meet Toronto Green Standard Version 4 (previously known as Toronto Green Standard Version 3) as of May 1, 2022. It is required to meet Tier 1 performance measures throughout the approvals process of the development. The site is subject to the “Mid to High Rise Residential and Non-Residential Version 4” standards as outlined below.

11.5.1.1 AQ 1.1 - Single-Occupant Vehicle Trips

This standard requires that single-occupancy auto vehicle trips generated by the site be reduced by 25 percent through various multi-modal infrastructure strategies and Transportation Demand Management (TDM) measures. The substantial reduction of the on-site parking supply from Zoning By-law 569-2013 (and therefore site vehicle trips) in comparison to the parking requirement has exceeded 25 percent. In fact, the proposed provision of 410 parking spaces indicates that approximately 64 percent of single-occupancy auto vehicle trips will be reduced to the By-law requirement as part of the proposed plan.

In addition, a number of TDM measures are proposed on-site (as discussed in Section 6.5) to further reduce single occupancy vehicle trips and encourage other alternative, non-motorized travel through a number of strategies. Such strategies include, but not limited to, the provision of bicycle parking and repair stations, pedestrian connections, POPS area, and strategic proximity to an array of existing and future transit services.



As such, the set of TDM strategies proposed, coupled with the provision of limited parking, are to collectively and appropriately meet (and exceed) the minimum standard of 25 percent reduced single-occupancy auto vehicle trips.

11.5.1.2 AQ 1.2 - Electric Vehicle Infrastructure

This standard requires parking spaces to be equipped with an energized outlet with Level 2 charging or higher (e.g. marked and identified for electric vehicle charging), in accordance with Zoning By-law 569-2013 and Zoning By-law 89-2022:

- All residential parking spaces, excluding visitor parking spaces; and
- 25 percent of residential visitor and non-residential parking spaces.

Based on the architectural plans, a total of 82 spaces (i.e., 20 percent of the total parking supply) will provide energized outlets with Level 2 charging or higher.

Reduced architectural plans indicate the number of accessible and EV spaces in **Appendix A**.

11.6 APPROPRIATENESS OF PROPOSED VEHICULAR PARKING SUPPLY

It is recognized that the parking standards outlined in City of Toronto Zoning By-law 569-2013 overstate the parking needs of a contemporary transit-oriented development, such as the Site, by some margin. The recently introduced amendment as per Zoning By-law 89-2022 provides a progressive set of standards that are more comparable to the goals and objectives stated in various policies and plans, as well as the recent parking trends observed within both the Region and City.

As such, it is proposed to adopt reduced minimum parking standards:

- 0.23 spaces per unit for residents;
- 2 + 0.05 spaces per unit for residential visitors; and
- 1.50 spaces per 100 square metres GFA for retail / grocery.

The following sections further discuss the appropriateness of the proposed parking supply, per use.

11.6.1 Resident Parking

As mentioned, the residential parking standards outlined in the Zoning By-law 569-2013 overstate the parking needs of new residential buildings located within the central area of Toronto, including the Site.

As such, it is proposed to reduce the resident parking supply based on the following factors and considerations:

- Evolving policy context directed towards reduced parking;
- Evolving transportation context;
- Progressive resident standards as per Zoning By-law 89-2022;
- Comparison of other residential By-law standards;
- Observed residential parking reduction approvals;
- Proposed resident-based TDM measures.

11.6.1.1 Overview of Planning and Policy Directives

The transportation policy and planning / policy regime that is guiding the way the City evolves and responds to the changing transportation needs reflects policy direction, initiatives, and investments that prioritize the mobility and experience of people over the efficiency of car movement.

Mobility planning aims to mitigate and reduce vehicular traffic through the promotion and facilitation of non-auto trips and the improvement of public transit access. Greater priority is placed on the movement and experience of people, as opposed to vehicular traffic and auto use. As such, contemporary planning is needed to reduce and manage parking.

Common themes across Provincial, Regional, and Municipal policy and guidelines include:

- *Planning transit from a network perspective.*
Public transit is being enhanced to achieve an interconnected network of high-order public transit service. Planning and funding efforts are being undertaken by all levels of government to achieve this vision.
- *Designing streets and public realm for people.*
While the efficient movement of automobiles has previously been the focus in transportation planning, this is no longer true. The enjoyment, safety, and efficiency of the pedestrian has become the primary focus of mobility planning in Toronto.
- *Connecting and expanding cycling infrastructure.*
The City has been undertaking significant expansion of cycling infrastructure as put forward in the Cycling Network Plan. The plan aims to connect the gaps in the existing network of off-street multi-use paths, bicycle lanes, and bicycle routes. The plan seeks to establish major corridors and expand the amount of protected cycling infrastructure in the City.



- *Increasing multi-modal mobility options.*
Innovation and technological advancements have resulted in a proliferation of mobility options in Toronto. In addition to public transit and active transportation, relatively new mobility options include car sharing, bike sharing, and ride sharing – all of which are becoming regulated or provided through public / private initiatives.

The above themes have been fundamental to the development of the Master Plan principles, which have been and will continue to guide the planning and design of the Site.

11.6.1.2 Evolving Transportation Context

Planned improvements to the transportation context around the Site further support a reduction in the use of private vehicles in the area and, therefore, reduced parking.

The new public street north of the Site is proposed to have signalized crossings at Carlaw Avenue and Pape Avenue, improving both pedestrian safety and pedestrian connectivity to and from the property. Additionally, the new public street will feature sidewalks with landscaped buffers on both sides of the roadway, providing a more comfortable pedestrian experience. In addition to the pedestrian network, proposed cycling infrastructure along Carlaw Avenue, Dundas Street West, and Riverdale Avenue will provide more cycling opportunities near and around the Site, further reducing dependence on private vehicles.

Beyond improvements to the public realm, the Site's proximity to the notable Proposed OL Station offers a major opportunity to propose the Site as a transit-oriented development, minimizing car usage to and from the proposed development. The Proposed OL Station is located within steps of the proposed development and, once operational, will connect Site visitors and residents to the Downtown Core and North York in less

than 13 minutes. A more detailed discussion of the OL and its benefits to the Site are discussed in **Section 2.2**.

11.6.1.3 Progressive Resident Standard as per Zoning By-law 89-2022

The transportation infrastructure and urban development, to be delivered through the proposed redevelopment, has the ability to strongly influence the mobility context and patterns of the surrounding area.

Traditionally, support and tools (such as reduced parking standards) for increasing non-auto travel has been oriented towards downtown Toronto. However, with increasing efforts and investments to shift travel behaviours in emerging transit-oriented areas such as the Site, local planning has the need and opportunity to align and reflect such objectives. The Project presents the opportunity to practice proactive planning with regard to parking policy and the supportive By-law regime.

Minimizing and managing parking supplies is one of the most effective transportation demand management tools that can be used to directly reduce auto reliance and support travel by other mobility means.

Transit and mobility investments are being made to strengthen the existing transit network and facilitate greater access to transit through public realm, pedestrian connectivity and cycling infrastructure improvements throughout the Site area.

To fully support the area mobility planning and help deliver a fundamentally transit-oriented development, the recent Zoning By-law 89-2022 is now forward thinking and provides up-to-date zoning tools to enable the success of the site and area investments.

Zoning By-law 89-2022 removes minimum residential parking standards, with the exception of residential visitor parking, throughout the City. In this way, Zoning By-law 89-2022 only prescribes residential parking maximums, which are, for the most part, equivalent to the pre-existing parking minimums prescribed in Zoning By-law 569-2013.

Although Zoning By-law 89-2022 is currently under appeal, this By-law represents the City’s intention to shift travel behaviour away from automobile-use and towards active modes of transportation. The prioritization of active transportation in Toronto will address various issues being faced in the City such as congestion, poor air quality, and unsafe pedestrian and cyclist conditions on the road.

In summary, the Site’s proposed parking supply meets and exceeds the City’s intended “no minimum” parking requirements, falling well within the minimum and maximum parking range specified in Zoning By-law 89-2022.

Setting appropriate, pro-active Zoning By-law standards is key in this regard and plays an essential role in supporting the Site and mobility goals of the general Downtown area.

11.6.1.4 Comparison of Other Residential Zoning By-law Standards

Further evidence of “no minimum” residential parking standards has been observed for other municipalities within the Greater Toronto and Hamilton Area. A comprehensive Zoning By-law review was undertaken to analyze the differences (or similarities) of parking standards adopted across the Region. The selection of municipalities were primarily based on specific characteristics such as density, intensification patterns and diversity of transit services.

Table 33 summarizes the range of parking standards by municipality.

The observed set of minimum standards for residential uses within centre areas (which are often transit-supportive) indicates the commonality of “no minimum” parking, setting apart the relatively high standards provided as per Zoning By-law 569-2013. These various examples indicate the long-term potential to achieve a reduced parking standard as low as “no minimum” for residential uses. In this way, “no minimum” residential parking standards is a suitable approach for the Site given its central location as one of the most urbanized and densely populated cities in Canada where transit and other non-auto facilities are prevalent.

TABLE 33 COMPARISON OF PROGRESSIVE ZONING BY-LAW PARKING STANDARDS – RESIDENTIAL

	City of Toronto		City of Brampton	City of St. Catharines	City of Kitchener	City of Ottawa
Zoning By-law	By-law 569-2013	By-law 89-2022 (passed; under appeal)	By-law 270-2004	By-law 2013-283	By-law 2019-051	By-law 2008-250
Designated 'Centre' Area	Policy Area 4	Parking Zone B	Central Area / Downtown	Downtown	Urban Growth Centre / Downtown	Area X (Inner Urban), Area Y (Inner Urban Mainstreets), and Area Z (Near Major LRT Stations)
Nearby Transit Service	<ul style="list-style-type: none"> • TTC Bus / Subway / Streetcar • GO Bus / Train • MiWay Bus • Future TTC Subway • Future TTC Streetcar 		<ul style="list-style-type: none"> • GO Bus / Train • Brampton Bus • Brampton ZUM BRT • Future Metrolinx Hurontario LRT 	<ul style="list-style-type: none"> • GO Bus / Train • St. Catharines Bus 	<ul style="list-style-type: none"> • GO Bus / Train • Grand River Bus • Grand River ION LRT 	<ul style="list-style-type: none"> • OC Transpo Subway / Bus / LRT • GO Bus / Train • VIA Rail
Minimum Residential Parking Rate ¹	0.70 – Studio 0.80 – 1-Bed 0.90 – 2-Bed 1.10 – 3+ Bed	No minimum	No minimum	No minimum	No minimum	No minimum

Notes:

1. Parking rates as spaces per unit.
2. Parking rates excluding any site-specific / zoning exceptions.

11.6.1.5 Observed Residential Parking Reduction Approvals

There is a broad spectrum of parking supplies and demands associated with residential buildings across the City and area of the Site. Even years prior to the passing of Zoning By-law 89-2022, these parking demands have been changing, and largely reducing, consistently in response to shifting demographics, economic factors, City policies and planning, and the mobility choices of residents within newer buildings, in particular.

Furthermore, parking supply and subsequent demands have become governed by factors and influences not limited to: 1) age and location of a building; 2) building characteristics and market positioning; 3) geography; 4) potential heritage considerations and other site specific factors; 5) area demographics; 6) alternative area mobility options (i.e., transit, car-share, bike share); and 7) proximity to services, employment centres, amenities and retail facilities. These factors contribute towards the choices that residents make with respect to vehicular and non-vehicular use and where they live.

At this point in time, resident parking standards outlined in the City's Zoning By-Law 569-2013 are considered to be conservatively high relative to the parking demands generated by residential buildings within the downtown area, in general, based upon current trends.

Given the above, parking provisions at a substantial proportion of new residential (notably condominiums) buildings in the downtown area, in close proximity to the subway system, have been approved at levels that are less than the applicable Zoning By-law (often by some margin). Such approvals have been accepted by City staff and secured through City Council, the Ontario Municipal Board (OMB) / Local Planning Appeal Tribunal (LPAT), Ontario Land Tribunal (OLT), and the Committee of Adjustment (CoA) for both condominiums and rental buildings within transit accessible areas in the City of Toronto.

There are several recent examples of area condominium buildings where reduced overall resident parking standards were approved and were gradually decreasing over time. While the Site is not located within the central downtown policy areas, the Site will become more comparable to these areas after the Proposed OL Station, adjacent to the Site, is operational. A review of parking reduction approvals within the general area for residential developments are summarized in **Table 34**.

Based on the foregoing, approvals granted over various years range from 0.09 to 0.34 spaces per unit across the downtown area with comparable transit accessibility to the proposed development. Over time, it is observed that increasingly substantial reductions to Zoning By-law 569-2013 in the downtown area have become fairly common and frequent. With the establishment of Zoning By-law 89-2022, providing maximum parking standards has become a more convenient approach to minimizing the frequency of requests made by various applications for new residential developments. In recent years, certain approvals in the area are gradually approaching the resident parking rate being proposed for the Site. Generally, the proposed resident rate for the Site fits well within the range being observed over a number of years.

TABLE 34 **APPROVED RESIDENTIAL PARKING REDUCTIONS OVER TIME**

Address	Approved Residential Parking Rate	Permission Granted Through
5 St. Joseph Street	0.34 spaces / unit	CoA Decision A0850/11TEY
155-163 Dundas Street East / 200 Jarvis Street	0.19 spaces / unit	Site Specific By-law 161-2012
2, 6, 8 Gloucester Street & 601-613 Yonge Street	0.28 spaces / unit	Site Specific By-law 817-2013
50-60, 62 and 64 Charles Street East and 47 and 61 Hayden Street	0.33 spaces / unit	Site Specific By-law 1039-2014 & 1040-2014
592 Sherbourne Street & 15 Shelby Street	0.30 spaces / unit	Site Specific By-law 276-2015
70-72 Carlton Street	0.22 spaces / unit	Site Specific By-law 529-2016
40 Wellesley Street East	0.09 spaces / unit	Site Specific By-law 524-2016 (OMB)
81 Wellesley Street East	0.25 spaces / unit	CoA Decision A0075/17TEY
411 Church Street	0.14 spaces / unit	Site Specific By-laws 852-2017 & 853-2017
46-54 Power Street and 113-135 Parliament Street	0.33 spaces / unit	Site Specific By-laws 276-2019 & 277-2019
59-71 Mutual Street	0.14 spaces per unit	LPAT File # PL160615 Site Specific By-Laws 396-2019 (LPAT) & 397-2019 (LPAT)
79-85 Shuter Street	0.14 spaces per unit	Site Specific By-laws 203-2020 (LPAT) & 204-2020 (LPAT) LPAT Case No. PL170492
319, 321 and 323 Jarvis Street	0.12 spaces / unit	Site Specific By-laws 524-2021 (LPAT) & 525-2021 (LPAT)

11.6.1.7 Observed Residential Parking Demand Trends

BA Group has undertaken several parking demand studies at residential buildings within the Downtown area in order to better understand the residential parking demand that can be anticipated for the new residential uses. The parking demands observed at the proxy residential sites are summarized in **Table 35**.

While the Site is not located within the central Downtown area, the Site will become more comparable to these sites after the Proposed OL Station, adjacent to the Site, is constructed and in operation.

Based on the foregoing, the observed residential parking demand ranges from 0.03 to 0.22 spaces per unit prior to the passing of Zoning By-law 89-2022. In comparison to the recent parking approvals, the proposed parking requirement is comparable and progressive, such that the observed residential parking demand was as low as 0.03 spaces per unit in the year 2016. Since that time, the site area and City has evolved to become well versed and integrated from a transportation and land use perspective. The proposed 'no minimum' residential parking standard is considered appropriate based on continuously decreasing residential parking demand observed, as well as the level of demand anticipated in the future at the Site.



TABLE 35 OBSERVED RESIDENTIAL PARKING DEMAND

Study Location	Study Date	Peak Observed Parking Demand	Effective Parking Demand Ratio
155 Dundas Street East (148 occupied units / 64 residential spaces)	Wednesday, May 18 th 2016 – 4:00 am	13 spaces	0.09 spaces per unit
	Thursday, May 19 th 2016 – 4:00 am	11 spaces	0.07 spaces per unit
	Wednesday, May 25 th 2016 – 4:00 am	15 spaces	0.10 spaces per unit
75 McCaul Street (703 units / 74 parking spaces leased to residents)	Thursday, November 24 th 2016 – 3:00 am	26 spaces ¹	0.04 spaces per unit
	Sunday, November 27 th 2016 – 3:00 am	24 spaces ¹	0.03 spaces per unit
	Tuesday, November 29 th , 2016 – 3:00 am	37 spaces ¹	0.05 spaces per unit
70 Temperance (798 units / 80 residential spaces)	Tuesday, September 26 th 2017 – 4:00 am	49 spaces	0.06 spaces per unit
	Thursday, September 28 th 2017 – 4:00 am	46 spaces	0.06 spaces per unit
	Tues, Sept 26 th – Thurs, Sept 29 th 2017 – 4:00 am	53 spaces ²	0.07 spaces per unit
55 Charles Street East (76 units / 38 residential spaces)	Saturday, May 24 th 2018 – 3:00 am	12 spaces	0.16 spaces per unit
	Tuesday, May 27 th 2018 - 3:00 am	17 spaces	0.22 spaces per unit
	Wednesday, May 28 th 2018 – 3:00 am	17 spaces	0.22 spaces per unit

Notes:

1. Residential demand was determined by reviewing the recorded license plates of parked vehicles against the Village by the Grange resident leasing record license plate information provided by the management property.
2. Composite demand over 2 days.

11.6.1.9 Proposed Residential TDM Measures

As discussed in detail in **Section 6.5**, a TDM Plan for the Site is proposed to guide the provision of viable alternative personal transportation options beyond the single-occupant, private automobile. The objective is to encourage the use of active and sustainable transportation modes, respond to the mobility needs of Site residents and reduce dependence on automobiles.

The future Site context provides frequent public transit services and improved pedestrian and cycling connectivity. The TDM Plan supplements and further leverages the physical infrastructure and attributes of the Site area with the goal of reducing or minimizing auto-mode share.

The proposed residential-based TDM strategies include, but are not limited to:

- Provision of a parking supply reduction to the greatest extent possible;
- Abundant long-term bicycle parking supply;
- Provision of bicycle repair stations;
- Unbundling of units and parking spaces;
- Provision of mixed uses within the development to encourage short, internal site trips; and
- Effective communication and wayfinding tools on-site centred on non-auto transportation services in the area.

11.6.2 Residential Visitor Parking

As mentioned, the residential visitor parking standards outlined in the Zoning By-law 569-2013 overstate the parking needs of new residential buildings located within the central area of Toronto, including the Site.

As such, it is proposed to reduce the residential visitor parking supply based on the following factors and considerations:

- Residential visitor standard as per Zoning By-law 89-2022;
- Comparison with other residential visitor By-law standards;
- Observed residential visitor parking reduction approvals;
- Proposed residential visitor-based TDM measures.

11.6.2.1 Residential Visitor Standard as per Zoning By-law 89-2022

Building upon the discussion initiated in **Section 11.3.2**, the City has reviewed the parking standards for most or all uses and have proposed the following minimum rate for residential visitors (mixed-use buildings) in 'Parking Zone B':

- Residential Visitor: 2 + 0.05 spaces per unit

The substantially reduced minimum requirement represented a progressive, yet practical approach that addressed the excess in visitor parking observed across the City, reflecting more current (and emerging) parking demand trends in Toronto, especially for transit-oriented developments such as the Site.

It is noted that various development applications have achieved a minimum residential visitor rate as low as 'no minimum', which has led to the proposed reduction in requirement as an amendment to Zoning By-law 569-2013. This is further discussed in **Section 11.6.2.3**.

The proposed residential visitor parking supply of the Site meets these minimum standards accordingly, and suggests that the most recently proposed parking rates are appropriate and be adopted as per Zoning By-law 89-2022.

11.6.2.2 Comparison of Other Residential Visitor Zoning By-law Standards

Comparable to the residential use, evidence of substantially reduced residential visitor parking standards have been observed for other municipalities within the Greater Toronto and Hamilton Area. A comprehensive Zoning By-law review was undertaken to analyze the differences (or similarities) of visitor parking standards adopted across the Region. The selection of municipalities were primarily based on certain urban characteristics, including density and intensification patterns and diversity of transit services. **Table 37** summarizes the range of parking standards by municipality.

Based on the above, the observed range of 0.00 - 0.20 spaces per unit for residential visitors also indicates the increasing commonality of minimal to “no minimum” parking within central and highly transit accessible areas. These various examples also indicate the long-term potential to achieve a reduced parking as low as no minimum for residential visitor uses and encouragement for others to capitalize on non-auto facility investments (e.g. transit, cycling, and pedestrian routes) in order to minimize congestion in dense areas. Therefore, applying a comparably low minimum residential visitor rate, as indicated as per Zoning By-law 89-2022 would be appropriate for the Site as a transit-oriented development in a highly accessible central area of the City.

TABLE 36 **COMPARISON OF PROGRESSIVE ZONING BY-LAW PARKING STANDARDS – RESIDENTIAL VISITOR**

	City of Toronto		City of Brampton	City of St. Catharines	City of Kitchener	City of Ottawa
Zoning By-law	By-law 569-2013	By-law 89-2022 (passed; under appeal)	By-law 270-2004	By-law 2013-283	By-law 2019-051	By-law 2008-250
Designated 'Centre' Area	Policy Area 4	Parking Zone B	Central Area / Downtown	Downtown	Urban Growth Centre / Downtown	Area X (Inner Urban), Area Y (Inner Urban Mainstreets), and Area Z (Near Major LRT Stations)
Nearby Transit Service	<ul style="list-style-type: none"> • TTC Bus / Subway / Streetcar • GO Bus / Train • MiWay Bus • Future TTC Subway • Future TTC Streetcar 		<ul style="list-style-type: none"> • GO Bus / Train • Brampton Bus • Brampton ZUM BRT • Future Metrolinx Hurontario LRT 	<ul style="list-style-type: none"> • GO Bus / Train • St. Catharines Bus 	<ul style="list-style-type: none"> • GO Bus / Train • Grand River Bus • Grand River ION LRT 	<ul style="list-style-type: none"> • OC Transpo Subway / Bus / LRT • GO Bus / Train • VIA Rail
Minimum Residential Visitor Rate ^{1,2}	0.15	2 + 0.05	0.20	No minimum	No minimum	No minimum

Notes:

1. Parking rates as spaces per unit.
2. Parking rates excluding any site-specific / zoning exceptions.



11.6.2.3 Observed Residential Visitor Parking Reduction Approvals

As with residential parking, residential visitor parking standards in the central area of Toronto or areas with high levels of transit accessibility have been approved at rates below the Zoning By-law 569-2013 standards, setting a new precedent. Residential visitor approvals have also been secured through City Council, the former OMB, LPAT, OLT, and the CoA.

A selection of examples of such condominium buildings where reduced overall resident parking supplies have been approved by the City or other processes in the downtown area and other transit accessible areas is provided in **Table 37**.

TABLE 37 APPROVED VISITOR PARKING REDUCTIONS OVER TIME

Address	Approved Residential Visitor Parking Rate	Permission Through
5 St Joseph Street	0.02 spaces per unit	CoA Decision - A0850/11TEY (2012) and A0914/10TEY (2011)
42 Charles Street	0.01 spaces per unit	Site Specific By-Law 7-2013 (OMB) OMB Decision – PL120212 (2013)
88 Queen Street & 10 Mutual Street	0.06 spaces per unit	Site Specific By-laws 1293-2018 and 1294-2018 CoA Decision - A0403/16TEY (2016)
177-197 Front Street East, 15-21 Lower Sherbourne Street & 200 The Esplanade	0.06 spaces per unit	Site Specific By-law 1327-2018 (LPAT)
391 Cherry Street	0.00 spaces per unit	Site Specific By-laws 365-2020 (LPAT) and 366-2020 (LPAT)
191-201 Church Street ¹	0.01 spaces per unit	Site Specific By-laws 529-2020 and 530-2020
55 Charles Street East ²	~0.04 spaces per unit	Site Specific By-laws 1183-2020 and 1184-2020
319, 321 & Jarvis Street ³	~0.01 spaces per unit	Site Specific By-laws 524-2021 (LPAT) & 525-2021 (LPAT)

Notes:

1. Site Specific Zoning By-law states, "The required parking spaces for visitors may be provided within a public parking facility".
2. Site-specific Zoning By-law states, "A minimum of 0.035 spaces per dwelling unit shall be provided for visitors and public use [...] must be provided for the exclusive use of visitors of the residential building and the remainder may be used for the purpose of commercial parking garage".
3. Visitor parking is reduced and shared with other non-residential uses.

11.6.2.4 Proposed Residential Visitor TDM Measures

In further support of the proposed residential visitor supply, TDM measures have been offered towards those visiting the proposed development. The following strategies have been proposed for the Site, including but not limited to:

- Provision of a limited number of visitor parking spaces;
- Provision of visitor / short-term bicycle parking;
- Provision and maintenance of safe and convenient pedestrian facilities (e.g. 2.1-metre sidewalks) throughout the site; and
- Provision of wayfinding and signage for convenient access to nearby transportation services.

The proposed development has offered a variety of tools for all types of users to navigate through the mixed-use development and explore non-auto trip options to and from the site. The site's optimal location is a leading factor in which can drive travel behavior towards alternative, sustainable modes of transportation.

11.6.3 Non-Resident Parking

The non-residential parking standards outlined in the Zoning By-law 569-2013 overstate the parking needs of new residential buildings located within transit-accessible areas in Toronto, including the Site.

As such, it is proposed to reduce the non-resident parking supply based on the following factors and considerations:

- Non-resident standards as per Zoning By-law 89-2022;
- Adoption of shared parking arrangement; and
- Proposed residential visitor-based TDM measures.

11.6.3.1 Non-Residential Standards as per Zoning By-law 89-2022

As discussed in **Section 11.3.2**, the City has reviewed the parking standards for all non-residential uses and have proposed the following minimum rates:

- Grocery: No minimum
- Retail: No minimum

These substantially reduced minimum requirements represent a progressive approach that reflect more current (and emerging) parking demand trends observed across the City, as well as conforms to recent local plans (e.g. Official Plan) and overarching regional policies and goals set within.

The Site parking supply meets these minimum standards accordingly and it is recommend that the most recently proposed (and passed) parking rates be adopted as per Zoning By-law 89-2022. Further support for a reduced non-residential parking supply at the site is discussed further in the remainder of this section.

11.6.3.2 Shared Parking for Grocery and Retail Uses

Despite the 'no minimum' parking standards specified as per Zoning By-law 89-2022 for the grocery and retail uses, it is important to consider maximizing the efficiency of parking and its associated development uses through a review of observed parking occupancy patterns for the proposed non-residential components.

The mixed-use nature of the proposed redevelopment presents an opportunity to maximize the efficiency of parking provided on site with pooled and shared resources. By providing a minimized, yet appropriate parking supply in a pooled and shared manner – there is an ability to take advantage of the natural temporal variations in land use parking needs. Thus, the ability to share non-residential parking is essential in order to ensure parking is neither under-utilized nor oversupplied.

Land uses have varying parking occupancy demands, and it is important to understand the temporal variations to provide parking in the most efficient way, where the utilization of each space is maximized.

The usage patterns of grocery and retail parking vary across the course of a typical day. For instance, grocery and retail uses tend to peak during the mid-afternoon whereas residential visitor demands typically peak later in the late evening periods.

Zoning By-law 569-2013 includes temporal sharing formulae that can be applied to the base parking standards when calculating overall non-resident parking needs of a proposed development. The temporal sharing formulae that will be applied to the proposed parking requirements of the Project, is presented below in **Table 38**.

Most of the temporal sharing formulae will continue to apply to the proposed parking standards. It is noted that the retail and grocery uses adopt a comparable sharing utilization throughout the day; despite this,

there may be fluctuations and it is expected that both uses will be served appropriately during these on and off-peak times.

TABLE 38 SHARED OCCUPANCY PARKING RATES

Use	AM	PM	EVE
Grocery	20%	100%	100%
Retail	20%	100%	100%

Notes:

1. Non-residential shared parking occupancy rates per City of Toronto Zoning By-law 569-2013 (Table 200.5.10.1).

Overall, the non-residential parking strategy developed as part of the Site includes the adoption of shared parking between the grocery and retail uses to maximize the efficiency of the parking infrastructure while providing some an opportunity, should users arrive using a vehicle. Again, this helps to minimize parking needs and avoids the unnecessary over supply of parking.

11.6.3.3 Proposed Non-resident TDM Measures

A number of TDM measures have been offered specifically for the non-residential users of the proposed development. The following TDM measures for the new retail uses have been proposed for the Site, including but not limited to:

- Provision of on-site non-residential bicycle parking.

The site-specific TDM measures proposed are expected to supplement the limited parking available on-site and help form a gradual shift in habit towards alternative, non-auto means of travel. It also adds a level of convenience that new retail and office users will appreciate when travelling to and from the site on a daily or weekly basis.

11.7 PARKING SUMMARY

The proposed development, consisting of residential, grocery and retail uses, is subject to the parking standards as per Zoning By-law 569-2013 and the recently passed Zoning By-law 89-2022, which is currently under appeal.

It is proposed to reduce the minimum parking requirements as per Zoning By-law 569-2013 and meet (at a minimum) the requirements as per Zoning By-law 89-2022 as the latter is more reflective of the changing parking trends across the City.

As noted, the current minimum Zoning By-law 569-2013 requirements exceed the needs of the proposed development, and is outdated and no longer applicable. The proposed residential, residential visitor, and non-resident parking reductions are justified by the City's evolving policy context; the future transportation context of the Site; forward-thinking parking standards as per Zoning By-law 89-2022; a comparison of other By-law standards in comparable municipalities; observed parking demand and approvals for developments in central Toronto with a similar transportation context; the adoption of a shared parking arrangement between non-residential uses; and the proposed TDM measures.

Therefore, the proposed parking supply is appropriate for the Site and its associated projected demand.



12.0 BICYCLE PARKING CONSIDERATIONS

12.1 ZONING BY-LAW BICYCLE PARKING REQUIREMENTS

12.1.1 Zoning By-law 569-2013 (Zone 1) / Toronto Green Standard Version 4 (Tier 1)

The site is currently subject to City of Toronto Zoning By-law 569-2013 for Zone 1 and Toronto Green Standards (TGS) Version 4.0 for Tier 1. The minimum bicycle parking requirements applied to the proposed development are summarized in **Table 39**.

Application of Zoning By-law 569-2013 and Tier 1 of Toronto Green Standard Version 4 require the minimum of 1,097 bicycle parking spaces for the site, including 119 short-term and 978 long-term spaces. Based on the six (6) non-residential long-term spaces required, one (1) shower and change facility for each gender will be required as well, as per Zoning By-law 569-2013 Clause 230.5.1.10(7).

Based upon the requirement of 6 long-term non-residential spaces, 1 shower and change facility (per gender) is required.

TABLE 39 CITY OF TORONTO ZONING BY-LAW 569-2013 (ZONE 1) AND TORONTO GREEN STANDARD VERSION 4 (TIER 1) BICYCLE PARKING REQUIREMENTS

Land Use	Units / GFA ^{1,2}	Bicycle Parking Rate		Bicycle Parking Requirement ³	
		Short-Term	Long-Term	Short-Term	Long-Term
Resident					
Residential	1,080 units	0.10 spaces / unit	0.90 spaces / unit	108	972
Resident Sub-Total				108	972
Non-Resident					
Retail	2,590 square metres	3.00 spaces + 0.30 spaces / 100 square metres	0.20 spaces / 100 m²	11	6
Grocery	3,460 square metres	No Requirement		0	0
Non-Resident Sub-Total				11	6
Total Requirement				119 short-term	978 long-term
				1,097 bicycle spaces	

Notes:

1. Interior Floor Area (IFA) is assumed to be equal to Gross Floor Area (GFA).
2. Based upon site statistics provided by Hariri Pontarini Architects dated August 24, 2022.
3. If the calculation of the number of required bicycle parking spaces results in a number with a fraction, the number is rounded up to the nearest whole number.

12.2 PROPOSED BICYCLE PARKING SUPPLY AND ARRANGEMENTS

The Site proposes 1,098 bicycle parking spaces, including 120 short-term spaces and 978 long-term spaces, which meets and slightly exceeds the minimum bicycle parking standards as per Zoning By-law 569-2013 (Zone 1) and Toronto Green Standard Version 4 (Tier 1).

A total of 247 long-term spaces are located on Level P0, including 241 residential long-term spaces and 6 long-term non-residential spaces. The below-grade bicycle parking spaces can be accessed through the Tower A elevators on Level 1. The remaining 731 long-term spaces and 120 short-term spaces will be located within Level 1 of the proposed development and can be accessed through designated bicycle parking entrances from Carlaw Avenue and New Street. Additionally, 10 publicly accessible bicycle spaces will be located along the New Street frontage.

The Level 1 long-term bicycle parking facilities contain bicycle repair stations to upkeep the quality of the cyclist experience within the Site area.

Lastly, 1 shower and change facility (per gender) will be provided on the P0 level of the underground parking garage to serve the needs of the long-term non-residential bicycle users. These facilities are shown adjacent to the non-residential long-term bicycle parking facility. The architectural plans further illustrate 11 additional bicycle rings (which accommodate 22 bicycles) located outside of the new transit entrance.

The bicycle parking supply allocation is provided in **Table 40** and illustrated in the reduced scale architectural plans in **Appendix A**.

TABLE 40 PROPOSED SITE BICYCLE PARKING SUPPLY ALLOCATION

Level	Short-term	Long-term
Level 1	120	731
Level P0	--	247
Sub-Total	120	978
Total	1,098 (plus an additional 10 publicly accessible spaces along the New Street)	

12.2.1 Bicycle Parking Provisions as per Toronto Green Standard Version 4

12.2.1.1 AQ 2.1 - 2.3 Bicycle Parking

These standards require bicycle parking to be provided as per Zoning By-law 569-2013. In addition, long-term bicycle spaces must be provided in a secure controlled-access bicycle facility or purpose-built bicycle locker on a near-surface level. Short-term bicycle spaces must be highly visible at-grade or on the first parking level below-grade.

Based on the above, the proposed bicycle parking supply currently meets the requirements as per Zoning By-law 569-2013 at a minimum. All long-term bicycle parking is located on Level 1 of the Site and Level P0 of the underground parking garage within a secure, weather-protected facility. In addition, all short-term parking will be provided either at-grade or on Level 1 of the Site.



12.2.1.2 AQ 2.4 - Electric Bicycle Infrastructure

This standard requires at least 15 percent of required long-term bicycle parking spaces to include an Energized Outlet (120 V) adjacent to the bicycle rack or parking space. The Energized Outlet is to be located at a maximum distance of 1100mm from the bike rack.

Based on the above, a total of 147 long-term bicycle parking spaces are required to have Energized Outlets. The proposed development will provide energized outlets for 147 long-term bicycle spaces, therefore, meeting the requirements outlined in the TGS Version 4.

12.2.1.3 AQ 2.6 - Publicly Accessible Bicycle Parking

This standard requires that all uses within the proposed development located within 500 metres of a transit station entrance must provide at least 10 additional publicly accessible, short-term bicycle parking spaces, at-grade on the site or within the public boulevard in addition to bicycle parking required under AQ 2.1.

The proposed development will provide 10 publicly accessible parking spaces on the New Street in addition to the requirements outlined as per Zoning By-law 569-2013. Therefore, the provision of these spaces are currently meeting and exceeding the requirements outlined in the TGS Version 4.

13.0 LOADING CONSIDERATIONS

13.1 ZONING BY-LAW LOADING REQUIREMENTS

13.1.1 City of Toronto Zoning By-law 569-2013

Application of Zoning By-law 569-2013 loading standards to the proposed development, taking into account the sharing of loading spaces for mixed use residential developments, is outlined below in **Table 41**.

TABLE 41 BY-LAW 569-2013 LOADING REQUIREMENTS

Use	Units / Floor Area	Loading Requirement	Loading Spaces Required
Residential	1,080 units	400 dwelling units or more	1 Type 'G' 1 Type 'C'
Retail	2,590 square metres	2,000 - 4,999 square metres	2 Type 'B'
Grocery	3,460 square metres	2,000 - 4,999 square metres	1 Type 'A' 1 Type 'B'
Total Requirement:			1 Type 'G' 1 Type 'A' 3 Type 'B' 1 Type 'C'
Total Requirement (after sharing)¹			1 Type 'G' 1 Type 'A' 2 Type 'B'

Notes:

1. Reflects sharing of loading spaces between residential and commercial uses found in Section 40.10.90.1 in City of Toronto Zoning By-law 569-2013.

Application of the loading standards as per City of Toronto Zoning By-law 569-2013 (Sections: 40.10.90.1 and 220.5.10.1 (9)) for the entire redevelopment requires a minimum of 4 loading spaces – including 1 Type 'G' loading spaces, 1 Type 'A' loading space, 2 Type 'B' loading spaces.

13.2 PROPOSED LOADING SUPPLY AND FACILITIES

The current proposed development incorporates a total of 7 loading spaces, including 1 Type 'G' loading spaces, 1 Type 'A' loading space, 3 Type 'B' loading spaces, and 2 Type 'C' loading space.

The proposed loading supply meets and exceeds the minimum requirements of City of Toronto Zoning By-law 569-2013 in order to meet the Site's needs. Thus, the proposed loading supply provisions reflected in the redevelopment plan are appropriate on this basis.

13.2.1 Loading Access and Arrangements

The consolidated loading facility, including all loading docks, can be accessed via the upward loading ramp to Level 2 from New Street.

The proposed consolidated loading area is located on Level 2 in order to take advantage of the natural grading occurring across the Site, where the grading is highest at the northeast corner and slopes down towards the southwest corner of the development. By doing so, the loading dock is at the same elevation as the proposed food store and is almost entirely bound by the food store and Ontario Line.

All loading facilities have been appropriately configured to accommodate anticipated loading / servicing vehicles. The arrangement of the proposed loading facilities, and vehicle manoeuvring diagrams illustrating vehicle sweep paths, are provided in **Appendix C**.



13.2.2 Residential Refuse / Recycling Collection Facilities

Residential refuse / recycling collection for all residential buildings on the Site is proposed to occur within the proposed Type 'G' space located in the respective Towers' loading area. Each Tower is provided with at least one Type 'G' loading space and staging area. Appropriate bin staging provisions are provided adjacent to the Type 'G' loading space in accordance with the design provisions outlined in the *City of Toronto Requirements for Garbage and Recycling Collection for New Developments and Redevelopments* (May 2012).

Provision for a minimum bin staging area to be provided in accordance with the City policy requirements (i.e. size of bin staging area = 5 m² for every 50 residential units provided in excess of the first 50 residential units). The full 6.1-metre clearance will be provided above the bin staging area.

13.2.3 Non-Residential Refuse / Recycling Collection Facilities

Non-residential refuse / recycling facilities for the non-residential (retail, and community space) component of the Site will be picked up by a private garbage contractor.

13.2.4 Operations and Manoeuvring

Turning movement diagrams have been developed demonstrating the ability for service and delivery vehicles to manoeuvre appropriately within the site and entering / leaving the Site in a forward motion. The design vehicles used to access the proposed loading spaces are as follows:

- City of Toronto Garbage Collection Vehicle;
- MTO WB-17.5 Semi-Trailer;
- TAC Heavy Single Unit Design Vehicle (TAC-HSU);
- TAC Single Unit Design Vehicle (TAC-SU); and
- Ford E350 Cube Van.

Vehicle Manoeuvring Diagrams are provided in **Appendix C** and illustrate the turning movements for the design vehicles entering and exiting the proposed loading spaces. These diagrams confirm that the proposed loading arrangements are appropriate and will facilitate the manoeuvring needs of the vehicles entering and exiting the Site.

13.2.5 Height Clearances

The loading areas have been designed such that a minimum height clearances of 4.4 metres is maintained throughout the entire loading area meeting / exceeding the minimum Zoning By-law 569-2013 height clearance requirements (4.0 metres for a Type 'B' loading space, 4.4 metres for a Type 'A' loading space and 4.4 metres for a Type 'G' loading space).

A minimum height clearance of 6.1 metres is provided above the Type 'G' loading space a portion of the bin staging area (located 2.0 metres in front of the Type 'G' loading space) to enable compacted bulk lift bin collection.

13.3 LOADING SUMMARY

The proposed loading supply of 7 loading spaces, including 1 Type 'G', 1 Type 'A', 3 Type 'B', and 2 Type 'C' loading spaces, meets and exceeds the minimum Zoning By-law 569-2013 loading standards.

The proposed loading supply and loading area arrangements are, based on the above, appropriate and will accommodate the loading demands of the Site as planned.