

2150 LAKE SHORE BOULEVARD WEST

PROPOSED MIXED-USE DEVELOPMENT TORONTO, ONTARIO

Urban Transportation Considerations Official Plan Amendment Update and Zoning By-law Amendment

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EXECUTIVE SUMMARY

OVERVIEW

Transportation is a key factor when considering the redevelopment of the 2150 Lake Shore Boulevard West property (also referred to herein as "the Site") and in resolving a number of long-standing weakness and challenges in the mobility network that currently supports the Humber Bay Shores area and South Etobicoke more generally, today.

While there are many aspects to the development of a Master Plan for the Site from a transportation and mobility perspective, four major themes are central to the successful development of a Master Plan for the 2150 Lake Shore Boulevard West property.

These will, combined with other planning initiatives, serve to provide a truly workable and effective transportation and mobility context for future residents, employees, patrons and visitors and – importantly – address the needs of existing and other new residents in the surrounding rapidly developing areas in Humber Bay Shores and beyond.



SITE LOCATION

These are centred on four "major"" themes:

- 1. advancing and providing "real" transit travel opportunities to the area and the creation of a new integrated GO / TTC transit hub for the area;
- 2. addressing and improving current traffic congestion challenges in the area in a way that responds to, and addresses, the current level of tidal commuter motorist use of the area street system today as an alternate to the Gardiner Expressway corridor;
- 3. implementation of an excellence across the street and public realm network that creates a truly walkable, pedestrian first community that seamlessly extends along and across the area main-streets and adjacent developed / developing areas within Humber Bay Shores and beyond to maximize activetransportation and the potential for walking and cycling as primary modes of travel for short local trip-making.
- 4. the creation of a Master Plan and development programme that is focussed – as an integral part of every step of its planning – upon a commitment to provide high quality sustainable mobility options serving both the Master Plan development and the growing broader Humber Bay Shores community that will minimize the reliance upon automobile usage and reduce related traffic impacts of the area as a whole.



Current Area Mobility Challenges

Traffic congestion – particularly during peak periods - is a long-standing issue in the area given the proximity of the Lake Shore Boulevard West corridor to the Gardiner Expressway and the large volumes of long distance commuter traffic that "overflows" routinely from the highway onto the parallel Lake Shore Boulevard West corridor. This has led to congestion levels at key points along Park Lawn Road and Lake Shore Boulevard West that are detrimental to the character and functionality of both of these streets as main streets serving the Humber Bay Shores community.

There is also a lack of quality transit options serving the area residents notwithstanding the presence of the Lakeshore West GO line. Existing (and new) are – currently - relying upon the 501 Queen streetcar service and surface bus routes for any level of transit connectivity which involves – for most trips – extended travel times. Travel undertaken in the Humber Bay Shores and surrounding area is predominantly car focused given this factor, which serves to compound the levels of traffic congestion in the area.



AREA TRAFFIC CHALLENGES

THE TRANSIT GAP

Opportunity

Redevelopment of the Site has the potential – as planned - to greatly benefit the broader mobility needs of the surrounding, and growing, Humber Bay Shores and South Etobicoke area and address long-standing challenges facing existing residents of the area. This is particularly of consequence in the context that the emerging Humber Bay Shores area is planned to become the home – based upon current infrastructure - for over 25,000 people as it builds out over the next few years in addition to a broader area population of 50,000+ people.

The existing area mobility challenges can be addressed through the provision of new and improved transit service options, new street connections, urbanization opportunities of the existing street network, and the expansion of the active transportation connections across the community.

Each of these elements can only realistically be delivered as part of, or in conjunction with, a redevelopment of the 2150 Lake Shore Boulevard West property. They are achievable through the coordination of effort by the City, provincial and municipal transportation agencies, First Capital as the developer of the Site and area stakeholders to create the best outcome for the Humber Bay Shores, Mimico and South Etobicoke areas and, of course, for the development potential of the site itself.



A MASTER PLAN FOR TRANSPORTATION & MOBILITY

A comprehensive Master Plan has been developed for the 2150 Lake Shore Boulevard West property. This development plan provides an overall vision guiding the redevelopment of the property to create a centre for the Humber Bay Shores community that provides for the full range of land uses, facilities, amenities, place, spaces, parks and destinations that sustain successful communities.

From a transportation and mobility perspective, it is recognized that the redevelopment of the 2150 Lake Shore Boulevard West property presents an enormous opportunity to not only address current mobility weaknesses and challenges in the area but to transform mobility in this area of South Etobicoke and the Humber Bay Shores.

The Master Plan has been conceived on this basis, and responds specifically to the existing area transportation challenges, to create a mobility context for the area focused upon establishing transit, cycling and pedestrian travel as the primary travel modes for the Site and surrounding area that will enable the long term area transportation demands of the Master Plan and broader area to be met into the future.

The Master Plan is also focused upon creating an environment that emphasizes the quality of place and the public realm as part of a complete community. This maximizes shorter trip- making opportunities through the provision of a wide range of amenities, destinations, facilities serving the Site itself and the broader Humber Bay Shores area and in establishing sustainable travel options as the primary modes for "last mile" trips. The following are the key underpinning elements of the Master Plan from a mobility and transportation perspective.

- Provision of transformational transit
- Addressing congestion
- Creation of a quality, fined grained area street network and public realm
- A focus on facilitating pedestrian and cycling mobility in the Humber Bay Shores
- A commitment to facilitating sustainable transportation
- Development of area transportation systems that will meet the future mobility needs of the Humber Bay Shores and surrounding area.



MASTER BLOCK AND MOBILITY PLAN



TRANSFORMATIONAL TRANSIT

Central to any redevelopment of the 2150 Lake Shore Boulevard West property is the advancement of transit service in the area and – significantly – the introduction of a new Park Lawn GO Station on the Lakeshore West rail corridor and a new integrated TTC station at the new GO station.

An Integrated GO / TTC Transit Hub

From a transit perspective, a redevelopment of the Site can realize "a once in a generation" and unique opportunity to provide a new integrated Transit Hub and District focussed on a new Park Lawn GO Station.

The owners has been working with Metrolinx to advance and realize the introduction of a new Park Lawn GO Station as a central element of the Master Plan. This work has been extensive and has involved an update to the Initial Business Case (IBC) for the station and advancement of the next stages of design / approval necessary to bring the station to realization including the initiation of a Transit Project Assessment Process (TPAP) for the station. This work will enable the next stages of approval and implementation of the station by approximately 2025.

An integrated GO, TTC LRT and TTC bus terminal facility is seen as an instrumental element of the Transit Hub and in the delivery of excellent transit to the area in the future. The integrated facility will provide for convenient and efficient passenger transfers and inter-change between existing and new LRT / streetcar and bus services that will link this new transit hub facility to the surrounding communities.

This Hub will provide for long awaited and transformational transit service options to / from central Toronto and across the Greater Toronto Area for this part of South Etobicoke that will be - with the Transit Hub - accessible from the heart of the Humber Bay Shores community and beyond.

Enhanced Transit Network

GO Rail Transit

A two-way, 5 trains per hour, all-day GO rail service frequency is being contemplated at the Park Lawn GO Station which will greatly improve commuter rail travel options provided east and westbound along the Lakeshore GO corridor. This will significantly provide travel times to downtown Toronto (and any of the existing and planned downtown RER stations including Union Station) of less than 15 minutes which is a highly competitive and attractive travel time in the Toronto context.

This area, in the past, has not been afforded this level of accessibility. The improved level of transit service will attract the majority of travel needs of the future 2150 Lake Shore Boulevard West development and the Humber Bay Shores area.

TTC Surface Transit Integration

The creation of the integrated transit hub provides a logical focus for new and existing area surface transit routes to converge as integrated feeder and distribution services to the GO rail service.

The linkage of area surface transit services to the Park Lawn GO Station will offer significant benefit to a substantial number of residents across Humber Bay Shores and South Etobicoke that fall within a convenient transit trip of the GO station. This has substantial potential to reduce auto-mode reliance across a wide area and reduce the existing level of car usage in these areas.

- LRT Services

The 501, 504 and 508 streetcar / LRT services are planned route to / from the transit hub facility to provide the desired connectivity between this service and the tributary areas these routes serve. LRT routings would be enhanced – as per current City plans – as a dedicated LRT right-of-way through the Humber Bay Shores area to maximize efficiency and service potential.

- TTC Bus Services

There is a substantial opportunity to modify existing and add new surface bus routes in the area to respond and capitalize upon the transit accessibility afforded by the new Park Lawn GO station. The existing Prince Edward (route 66) and Queensway (route 80) bus services are all candidates for extension and modification to service the GO station while other new local Humber Bay Shores and Mimico services may also be introduced in response to the transit opportunities in the area. These improved services would provide for a considerable level of transit connectivity within the GO station tributary area that would fully leverage and capitalize upon the capacity and convenience of the new GO train services that would be available within this area.

The Transit Hub is Transformational

The planning initiatives recently undertaken by the City of Toronto as part of the City's Waterfront Transit Reset study and by Metrolinx as part of its review of potential new GO stations across the GTA, supports the concept of the Transit Hub.

The potential to anchor and integrate such a Hub (which would be of great benefit to the Humber Bay Shores area today) with a new mixeduse and complete community, built upon a sustainable transportation philosophy, capitalizes and supports the significant capital investments being made by the Federal, Provincial and Municipal Governments in new transit infrastructure across the Region and that planned by the City of Toronto.

The integration of new development and new and improved transit centres aligns directly with Provincial and Municipal policies and will – in this instance – be of considerable benefit to a large number of existing or prospective area residents within the rapidly emerging Humber Bay Shores area.

The ability to enable the realization of an integrated TTC / GO Transit Hub as part of the 2150 Lake Shore Boulevard West property cannot be under-estimated in the context of addressing the transportation and mobility challenges facing this part of the City and creating new, sustainable mobility options for a substantial number of people.



ADDRESSING AREA TRAFFIC CONGESTION

A Responsive New Street Network

The Master Plan provides for a responsive street network that provides new major street linkages and improvements that will address current challenges and optimally provide for new vehicular activity needs.

This network is centred around provision of a new relief road facility (Street A) running along the northern Site boundary that – significantly – provides a new crossing of the rail corridor and substantially benefits the area network as a whole. It also extends to improvements on the area arterial street network and creation of a network of smaller, pedestrian focussed streets within the 2150 Lake Shore Boulevard West Site itself.

Relief Road (Street A)

The potential to provide the Relief Road (Street A) between Park Lawn Road and the Gardiner Expressway / Lake Shore Boulevard corridors is a significant element of any traffic related solution in the area.

Street A would "offload" – acting as a bypass facility - through traffic from Park Lawn Road and Lake Shore Boulevard West enabling it to be reestablished and re-imagined as a true "Main Street" within Humber Bay Shores and would address long-standing capacity constraints on Lake Shore Boulevard West at Park Lawn Road and Palace Pier Court. It would also, and significantly from a development perspective, provide for excellent direct highway / arterial vehicular access for new development on the Site and a significant opportunity to direct the major traffic and servicing activity to the northern periphery of the Site.

Although Street A is a complicated and costly item of new infrastructure, its potential benefits in optimizing traffic patterns in Humber Bay Shores is substantial.

Other Arterial Street Improvements

Other improvements to the area arterial street system are identified on Lake Shore Boulevard West, Park Lawn Road and the Queensway in the Master Plan to accommodate future traffic demands across the Humber Bay Shores area (including new Site and other development activity) and to – importantly – integrate the planned LRT dedicated right- of-way on Lake Shore Boulevard West.

These streets will also be re-imagined – while considering traffic related needs - to integrate new cycling and pedestrian facilities and features as well as substantial enhancements to the streetscape and public realm provided along these streets.

The ongoing City's Park Lawn-Lake Shore Transportation Master Plan process will – significantly – determine the ultimate set of improvements and changes to the broad area road network supporting Humber Bay Shores and the South Etobicoke area. It will also provide an implementation mechanism that will enable important and necessary City-scale infrastructure moves to be made in step with any redevelopment of the 2150 Lake Shore Boulevard West property.



MAJOR ROAD NETWORK MOVES

CREATING MAIN-STREETS – LAKE SHORE & PARK LAWN

Lake Shore & Park Lawn Today

The redevelopment of the 2150 Lake Shore Boulevard West property and the new street network opportunities that area presented as a result, will enable a renewal of Lake Shore Boulevard West and Park Lawn Road in the Humber Bay Shores area.

Both of these streets have long operated primarily as vehicular thoroughfares as a natural consequence of the connectivity afforded to the Gardiner Expressway and the presence of the former Christies Cookie factory on the 2150 Lake Shore Boulevard West property.

Complete Main-Streets

It is one of the Master Plan objectives to enable the renewal of both of Park Lawn Road and Lake Shore Boulevard West in the Humber Bay Shores area as true complete "main streets" serving the local communities on both sides of them providing for all travel modes with a particular emphasis on the pedestrian realm created. The introduction of Street A is central to off-loading current (and future) traffic activity from these streets and allowing them to operate as more locally focused corridors from a traffic function perspective.

The Master Plan proposes significant reconstruction along both of these streets to incorporate the long planned dedicated LRT right-of-way on Lake Shore Boulevard West, bicycle facilities on both streets and significant enhancements and improvements to the pedestrian and public realm.

An emphasis is also placed on creating a fine grain of formal signalized crossing opportunities as part of the overall focus to link the Humber Bay Shores community together at a pedestrian scale.



REPRESENTATIVE CROSS SECTION - LAKE SHORE BOULEVARD WEST



NEIGHBOURHOOD STREET CONNECTIONS



A NEW NEIGHBOURHOOD STREET NETWORK

New Local Street Network

The 2150 Lake Shore Boulevard West development proposal establishes a new fine-grained series of new public and private streets. This network will provide for public access to / from and through the new community, will create excellence in the public realm and pedestrian and non-automobile travel environment and will necessarily, support the vehicular access and service needs of the emerging neighbourhood.

This street network will provide for building address, retailing opportunities, public realm spaces and places, landscape features and will form the connective tissue of the development plan for the Site.

Complete Streets & the Public Realm

The proposed new street network will integrate facilities supporting all travel modes including formal transit service (LRT and streetcar), cycling facilities (on / off-street bike lanes, trails) and pedestrian boulevards that link and connect to the surrounding neighbourhood fabric.

They will be true complete streets focusing upon an excellence in the design and composition of this street network to create a vibrant and successful community.

Public & Private Streets

A network of public and private local streets are proposed "looping" through the Master Plan and providing connections to both Lake Shore Boulevard West and Park Lawn Road. These form the "spine" connectors within the Master Plan and will accommodate the LRT routing to / from the Transit Hub.

The street network is intended to be primarily public and dedicated to the City. One street linkage is proposed as a private street to enable the integration of below grade servicing & parking facilities beneath it. Not withstanding ownership, the private linkage will be designed to look, feel and operate like a public street.

It is noteworthy that lateral tunnel connections are proposed at key locations beneath portions of the public street network to provide for the integrated servicing / parking basement facility.

Connectivity

The creation of a significant level of multi-modal connectivity and interconnection with the bordering main streets and neighbouring communities within Humber Bay Shores is the focus of the new proposed street network. Importantly, signalized intersections are proposed at all new public street connections to maximize neighbourhood pedestrian routing opportunities and provide formal and safe pedestrian crossing facilities as part of the emphasis on creating a complete community.

PEDESTRIAN MOBILITY

A Mixed-Use Community

The Master Plan creates a true mixed-use community on the 2150 Lake Shore Boulevard West property that provides for a wide range of complementary land-uses that extend across retail, employment, service, recreational, entertainment, residential and institutional uses.

The introduction of such a broad and strong offering of uses distributed across the Site provides a highly active and vibrant core to the Master Plan community that will provide for, not only the Site itself, but the broader needs of the Humber Bay Shores community as well.

Significantly, the core elements of the plan, and wide range of amenities and services provided, can ALL be reached from across Humber Bay Shores on foot and without – for the vast number of trips – the use of a car.

This ability for area residents to travel – primarily on-foot – to a wide variety of local destinations (i.e. employment, recreational, institutional, retail and service) that meet the needs of a community is a significant factor in: i) shortening trips made, ii) internalizing trip-making to a significantly greater degree than occurs today in Humber Bay Shores; and iii) eliminating the need for a substantial component of car-borne trip-making that would otherwise occur.

The Pedestrian Realm

The quality of the public realm created and the successful integration of broad array of great, practical, convenient, interesting, safe and attractive pedestrian-scale connections (including formal signalized street crossing facilities) that link across the Master Plan and beyond into Humber Bay Shores community, are significant factors in creating an environment that is highly supportive of pedestrian mobility.

Transit & "Last Mile"

The proposed Transit Hub is located within the heart of, not only the Master Plan, but also the Humber Bay Shores community as a whole.

Notably, all of the Master Plan area falls within a 5-minute walk of the Transit Hub while the vast majority of the broader Humber Bay Shores area is located within a walk of less than 10 minutes. The so-called "last mile" of any transit-based journey can be readily made on-foot within an attractive environment.

Walking as a Primary Local Travel Mode

The combined strengths, from a transportation perspective, of establishing a strong mixed-use plan supported by a well integrated and highly walkable pedestrian network on the 2150 Lake Shore Boulevard West property enable walking to be established as the primary travel mode for a significant proportion of trips made within the Master Plan and surrounding Humber Bay Shores area.



PEDESTRIAN MOBILITY CONTEXT

ENABLING CYCLING

Cycling as a Strong Travel Mode

The redevelopment of the 2150 Lake Shore Boulevard West property provides a substantial opportunity to augment, extend and complete the existing area bicycle trail / path network.

The Master Plan has been developed to create a local environment that will establish cycling as a strong and viable travel option for a wide range of travel needs across Humber Bay Shores and surrounding area. This - notably - includes trips made to / from the planned Transit Hub (i.e. "Last Mile") and the commercial centre of the Master Plan.

At the same time, the Master Plan and the connectivity afforded to the broader area cycling network, offers substantial support for longer distance recreational and commuter travel particularly across the Lake Ontario waterfront towards downtown Toronto.

An Expanded Cycling Network

The Master Plan provides for a network of protected bicycle facilities with the Site itself and on the adjacent arterial street system including:

- Protected cycle tracks on Lake Shore Boulevard West and Park Lawn Road
- Bicycle lanes on the proposed Master Plan "Loop Road"
- Direct cycle connections to the major bicycle parking facilities to be provided at the Transit Hub

This network will connect with, extend and complete the broader trail / path network in the area and offer connectivity to the Martin Goodman Trail on the Lake Ontario waterfront, new / planned linkages along Mimico Creek and the trail network that extends up Humber River.

End User Facilities

A range of long and short term bicycle parking facilities and supporting facilities (i.e. showers repair stations) will be provided across the Master Plan and provide for the needs of all user groups including residents, employees, visitors and commercial patrons. Access convenience and quality will be a significant focus of the detailing of the Master Plan.

A major contemporary bicycle parking facility will be integrated into the Transit Hub as part of the overall strategy to establish cycling as a strong commuting "Last Mile" travel option.

Bike Share & Sharing Services

Bicycle Sharing and other related mobility services (i.e. scooters) will all form part of the overall Master Plan cycling strategy to maximize cycleuse opportunities.



CYCLING CONNECTIONS

SERVICING AND ACCESS

A Comprehensive Strategy & Public Realm Considerations

The Master Plan has been developed to take advantage of the potential – with a single ownership - to consolidate vehicular systems and access across multiple blocks and buildings to minimize the intrusion of servicing, loading and higher traffic activity at grade within the heart of the Master Plan. More specifically, the ability to consolidate vehicular access, servicing and parking facilities removes the need to provide multiple separate facilities for each building or development block which affords substantial benefit to the overall Master Plan.

This comprehensive approach to planning and integrating such vehicular systems into the fabric of the Master Plan is, in fact, central to the creation of an excellence in the public realm provided across the Site.

A Responsive Vehicular Access System

Seven (7) vehicular parking and loading access driveways consolidate driveway locations within the Master Plan.

The Master Plan strategically places these primary accesses on perimeter of the Master Plan to most directly "capture" arriving and departing traffic, to maximize use of the Relief Road as a direct entrance to the below grade levels and – importantly - avoid large concentrations of traffic within the heart of the plan area.

Access to the servicing network, via Street A, takes advantage of the beneficial grade differences provided along that routing. Vehicular access to parking is provided from each of the other access locations.

An Integrated Consolidated Below Grade Servicing Plan

The Master Plan integrates all loading and parking facilities below grade within a consolidated basement.

Servicing and loading for each development parcel and building is provided for via a system of distributed below grade loading / service areas and connecting linkages. The distribution of loading facilities provides an effective and efficient series of facilities that will meet the loading and delivery needs of each area of the Master Plan and the land uses above.

Parking is also provided on a consolidated basis beneath each of the development parcels. Commercial parking supporting the employment, retail and visitor parking needs will be located on the upper portions of the garages while residential parking will be provided on the lower levels.

Reduced parking supply standards are being sought compared to the prevailing Zoning By-law needs recognizing the planned transit accessibility of the Site and to support the creation of a new community centred on minimizing automobile use.

Vehicular pick-up / drop-off facilities for the main Transit Hub and commercial uses are provided on street and below grade to provide a flexible range of facilities to accommodate residential, office, retail and other "front door" needs.

A COMMITMENT TO SUSTAINABLE TRAVEL

The Changing Mobility Context

Travel and mobility across the City is changing with an increasing reliance now being placed upon transit and other sustainable forms of transportation.

This shift in behaviour across the City is being supported by considerable investments being made by all three levels of government in transit and other mobility infrastructure initiatives.

Importantly for the Humber Bay Shores and South Etobicoke area, these investments include for substantial increases in service along the Lake Shore West GO rail corridor that will provide fast and frequent service to downtown Toronto and elsewhere.

Influence of the GO Station & Mode Share

The ability to locate a new GO station at Park Lawn as part of an integrated transit hub within the 2150 Lake Shore Boulevard West Master Plan is "game changing" for – not only the 2150 Lake Shore Boulevard West Site itself, but also for the surrounding area.

The new GO station, and network of enhanced LRT and bus services that would converge upon the new transit hub, will offer significantly enhanced and viable travel options for many thousands of people who would be within a short walk or a short bus / LRT ride of the new Park Lawn station.

Residents within the tributary "transit-shed" of the new Park Lawn GO Transit Hub would be able to capitalize upon the vastly reduced travel times afforded across the Greater Toronto Area, which has the added potential to enable a shift of current car-users onto these newly accessible enhanced transit services. This will serve to reduce current car reliance. Usage levels and suppress area traffic activity level growth.

DEMAND MANAGEMENT

A Commitment to Sustainable Travel

Sustainable transportation strategies are integrated into all aspects of the Master Plan development and supporting infrastructure planning and will continue to develop as the Master Plan evolves to include the future operation and management of its buildings, land uses and supporting facilities.

A complementary Demand Management Plan has been developed that will evolve further as the Master Plan is advanced. This Plan aims to provide a framework for three broad frames of reference guiding:

- 1. broad infrastructure decision making,
- 2. Site systems and facility design / operation; and,
- 3. user behaviour.

The Demand Management Plan has influenced all aspects of the Master Plan preparation and provides parameters that guide the way the Site programme responds to mobility. These include a range of factors as follows:

- 1. the physical plan including its design, organization, mobility systems, infrastructure provisions and building facilities;
- operational measures that will be deployed on-site such as ecomobility focussed services (i.e. car-share, bike-share, vehicle rentals, scooter rental, app development, centralized delivery logistics) and the way they are deployed through the creation of clusters where all such uses / facilities would be provided;
- ongoing and active promotional and management strategies designed to effectively maintain, evolve and optimize the Site Demand Management systems.

TRAVEL DEMAND FORECASTS

Master Plan Travel Demand Forecasts

Future travel demands for the Master Plan development plan have been assessed on a first principles person trip-making basis.

Peak hour travel demand forecasts are derived using person trip making parameters for each of the component land uses within the Master Plan taking into account occupancy patterns, trip intensity, trip purpose, landuse interaction and multi-purpose trip making as well as internalization and local trip capture potential.

The distribution of person trip making across the Greater Toronto Area was derived for each land-use (residential, commercial and employment) from a review of Transportation for Tomorrow (TTS) survey information and retail trade area factors distribution. This distribution was used to inform likely travel mode choice for residents, employees, visitors and retail / entertainment patrons based upon the relative availability, travel time and convenience of transit and other travel options for each specific origin – destination set.

Existing Travel Changes & Other Area Development Forecasts

The influence of the new Park Lawn GO Station on existing travel patterns and characteristics in the Humber Bay Shores area and other areas has been considered in the forecast of future travel conditions in the area. The potential for existing area car-users to (desirably) shift onto the newly accessible transit services available in the area has been incorporated into the future forecasts.

The travel demands of future and emerging area development in the South Etobicoke area has also been assessed on a comprehensive basis adopting the same person trip-making based approach as that taken for the 2150 Lake Shore Boulevard West property. Future trip-making to / from emerging area development within the area influenced by the planned Park Lawn GO Station "transit- shed" area have been assessed reflecting the changing (and vastly improved transit) travel options that will be available to prospective area residents and their visitors.



SITE TRAVEL DEMAND SUMMARY



SITE TRAVEL DISTRIBUTION SUMMARY



MEETING FUTURE MOBILITY NEEDS

A Complete Plan to Accommodate Future Mobility Needs

The 2150 Lake Shore Boulevard West Master Plan has been developed on a comprehensive basis to address the future travel needs of – not only the Site itself – but of the surrounding area also as it evolves into the future.

Consideration has – significantly - been given to addressing capacity and opportunity needs across all travel modes and significant transportation improvements are proposed across the area to address the future mobility demands of this area of South Etobicoke. These include the introduction of the new GO Station, Transit Hub and street network improvements.



TRAFFIC OPERATIONS ANALYSIS RESULTS

Traffic Assessment and Analysis

Detailed traffic operations and other transportation assessments have been undertaken as part of the evaluation of area mobility improvement needs and determination of the proposed transportation networks.

Street intersection level of service (LOS) assessments have been undertaken on the planned area street system for future weekday and weekend peak hour periods. These assessments provide an indication of intersection performance under future conditions based upon average delays experienced by motorists and available capacities when travelling through an intersection.

Detailed micro-simulation assessments of network operations have also been developed based upon the City's future "do-nothing" conditions model integrating the proposed area network improvements and new Site traffic activity generated by the 2150 Lake Shore Boulevard West Master Plan and area development. These detailed assessments provide a wide range of network performance measures including vehicles speeds, delays and travel times that offer indications of network performance.

Mobility Needs Can be Met in the Future

The range of assessments undertaken in support of the Master Plan confirm – based upon the results provided by these analyses – the adequacy of the proposed transportation networks to appropriately accommodate future travel demands including transit and traffic needs.

These assessments will continue to be refined through the approvals process and as the City's Transportation Master Plan is advanced.

1.0 INTRODUCTION

BA Group is retained by FCR (Park Lawn) LP and CPPIB Park Lawn Canada Inc. (herein referred to as "FCR", "CPPIB", or "the Client") to provide urban transportation consulting services in relation to the redevelopment of the former Christies cookie factory Site, comprising municipal addresses 2150-2194 Lake Shore Boulevard West and 23 Park Lawn Road (herein referred to as "the Site", "the Christies Site", or "the 2150 Lake Shore Site").

1.1 THE CHRISTIES SITE

The Christies Site is located in the western area of Toronto at the confluence of a number of regional transportation facilities as they cross the Humber River. These include – significantly – the Gardiner Expressway highway corridor (and its interchanges with Park Lawn Road), two arterial streets in Lake Shore Boulevard West and the Queensway, the Lakeshore West GO rail corridor and the Martin Goodman multi-use trail system.

This confluence provides significant opportunity to support the redevelopment of the 2150 Lake Shore Boulevard West property as a complete community that can – with accompanying investment in new and modified transportation initiatives – be excellently served by a full range of mobility travel options.

Figure 1 illustrates the Site location and context.

1.2 BACKGROUND

The Site is a key part of an ongoing City of Toronto led Secondary Plan process that is to establish a comprehensive vision for both the Site and surrounding area.

The Mr. Christies Secondary Plan process was initiated by the City following a settlement of appeals by FCR of the City of Toronto Official Plan Amendment No. 231 (herein referred to as "OPA 231") for the Site. This settlement led to the adoption of a Site and Area Specific Policy (SASP) for the Site and the re-designation of the lands from Employment Industrial to Regeneration Area.

An Official Plan Amendment (OPA) application was made by the "Owners" for the Site in October 2019. This application presented a comprehensive mixed-use Master Plan development vision for the property and this process is currently advancing in parallel to the City-led Secondary Plan process. BA Group prepared an Urban Transportation Considerations report as part of the initial October 2019 OPA submission made to the City.

The proposed Master Plan provides a multi-faceted framework guiding the creation of a new community within the Humber Bay Shores area including a detailed consideration of the range of supporting services, amenities, public and private open spaces, land-uses, transit and other mobility infrastructure provisions, new streets and other structuring elements that are proposed to support the Master Plan.

Further details are provided within the materials submitted as part of the October 2019 OPA submission and within this report.



1.3 TRANSPORTATION AS A KEY FACTOR

Transportation is a key factor considered as part the redevelopment of the Site and in resolving a number of long-standing weaknesses and challenges in the mobility network in the Humber Bay Shores and southern Etobicoke area.

1.3.1 Current Area Mobility Challenges

The Site's adjacency to the Gardiner Expressway and supporting arterial corridors (Lake Shore Boulevard West and Park Lawn Road), and higher-order rail transit infrastructure presents unique challenges for the Site, and equally significant opportunity to tap into and improve existing major transportation infrastructure.

Traffic congestion – particularly during the peak periods – is a longstanding issue in the area given the proximity of the Lake Shore Boulevard West corridor to the Gardiner Expressway and the large volume of commuter traffic that "overflows" routinely from the highway onto the parallel Lake Shore Boulevard West corridor. This has led to congestion levels at key points along Park Lawn Road and Lake Shore Boulevard West that are detrimental to the character and functionality of both of these streets as main streets serving the Humber Bay Shores community.

Notwithstanding the presence of the Lakeshore West GO line, there is also a lack of quality transit options serving the area. Existing (and new) area residents are currently relying upon the TTC 501 Queen streetcar service and surface bus routes for any level of transit connectivity which involves – for most trips – extended travel times. Travel undertaken in the Humber Bay Shores and surrounding area is predominately car focused given this factor, which serves to compound the levels of traffic congestion in the area.

Future Site Mobility Opportunities

Given its size and location, the Christies Site has a significant role to play in the future vision of this area, with a unique ability to significantly influence, not only the urban fabric of the Humber Bay Shores neighbourhood as a whole, but the mobility patterns of the surrounding area.

Redevelopment of the Site has the potential to benefit the broader mobility needs of the surrounding, and growing, Humber Bay Shores and South Etobicoke communities, and address long-standing challenges facing existing and prospective residents of the area.

The existing area mobility challenges can be addressed through the provision of new and improved transit service options, new street connections, urbanization opportunities of the existing street network, and the expansion of the active transportation connections across the community.

Each of these elements can only realistically be delivered as part of, or in conjunction with, a redevelopment of the 2150 Lake Shore Boulevard West property. They are achievable through the coordination of effort by the City, Provincial and municipal transportation agencies, FCR as the developer of the Site and area stakeholders to create the best outcome for the Humber Bay Shores, Mimico and Southern Etobicoke areas and, of course, for the development potential of the Site itself.

This role has been central to the planning efforts that informed and structured the Master Plan Vision for the Site and the October 2019 OPA application. The October 2019 submission built upon over three years of review and analysis of transportation, transit and other infrastructure considerations in the area focussed upon addressing key issues in the area today.

1.4 MASTER PLAN UPDATE

FCR has been working with City of Toronto staff, City and Provincial agencies and the area community representatives since the initial OPA submission in October 2019.

Development plans have been advanced and modified in as part of the ongoing design development process for the Master Plan and related transportation infrastructure and in response to staff and agency comments and input.

1.4.1 Staff Comments

A range of City staff and other agency comments have been received following submission of the original OPA application and supporting materials. These have included commentary on public parkland provision, school and community uses and the overall form of the development plans.

From a transportation perspective, comments have been received from City of Toronto Engineering and Construction Services staff, Transportation Planning staff and the Toronto Transit Commission (TTC) on a range of topics. These have ranged from commentary on the location of bus stops providing connections to the Park Lawn GO Station transit hub, the design of TTC light rail LRT infrastructure, street design considerations to commentary on the broad mobility assessments presented within BA Group's October 2019 Transportation Study report.

A number of these comments are addressed within the updated Master Plan while others will be the subject of subsequent detailed assessment submissions following advancement of City led Park Lawn – Lake Shore Transportation Master Plan study and supporting transportation modelling analyses.

1.4.2 Key Master Plan Changes

While the Master Plan remains organized around the same key principles as outlined in the October 2019 OPA submission, a number of changes have been made since the initial submission as part of its evolution and refinement.

Key amongst these have been modifications to:

- i) the size of the public park,
- ii) the alignment and routing of the Relief Road (Street A),
- adjustments to the alignment of the eastern side of the loop road (Street B) and private street linking eastwards to the Relief Road;
- iv) the inclusion of two potential elementary schools within the Master Plan;
- v) consideration of community centre uses;
- vi) the land-use mix to reflect an increase in employment uses within the Master Plan;
- vii) bus bay locations at the GO Station to now be on Park Lawn Road; and
- viii) the public realm to include a significant pedestrian connection linking between Park Lawn Road and Station Plaza in place of a previously shown private street

The design development and approvals processes for the proposed Park Lawn GO Station have also been advanced significantly by the Owners working with Metrolinx since the initial OPA submission. Details will be presented as part of the Updated Initial Business Plan (IBC) report to be issued by Metrolinx and as part of the related Transit Project Assessment Process (TPAP) being undertaken for the station.

The overall Master Plan vision and changes made to it from a transportation perspective are summarized within this report in Sections 3 and 4.

1.5 CURRENT SUBMISSIONS

An updated Official Plan Amendment application is now being made to the City of Toronto reflecting the changes made to the Master Plan since the initial OPA submission in October 2019.

Zoning By-law Amendment (ZBA) and Draft Plan of Sub-Division (DPOS) applications are also now being made to further advance and define the approvals and implementation processes for the Site and the infrastructure proposed to support its development in the context of continuing development in the Humber Bay Shores Area.

This Urban Transportation Considerations study forms part of the updated OPA and the initial ZBA / DPOS applications for the Site and builds upon the comprehensive submission materials presented as part of the October 2019 OPA submission.

1.6 THIS REPORT

1.6.1 Building on the October 2019 OPA Submission

This Urban Transportation Considerations report has been prepared to provide an overview of the mobility aspects of the updated Master Plan and builds upon, as noted previously, the comprehensive series of assessments and technical studies submitted as part of the initial OPA submission.

This report builds upon the Urban Transportation Considerations report prepared by BA Group as part of the October 2019 OPA submission. This report provided a comprehensive review of all transportation and mobility related aspects surrounding the redevelopment of the 2150 Lake Shore Boulevard West property in the context of the growing Humber Bay Shores community. This report provides supplementary and updated materials that outline the changes made to the Master Plan from a transportation perspective and, in support of the ZBA and DPOS applications. Additional details with respect to the design and supply arrangements of the supporting Site infrastructure elements such as parking, loading / servicing, street design and the active transportation network are also included.

The October 2019 submission provides a comparison of the travel demand characteristics related to the Master Plan. That report is to be read in conjunction with this update, which provides a local review of the implications of changes made to the proposed street network within the Site. A detailed full re-evaluation of the extensive range multi-modal transportation activity forecasts and assessments presented within the October 2019 OPA submission is not, however, provided as part of this report given that the Master Plan programme and basic framework has remained largely unchanged since the initial submission.

The earlier broad travel demand and operational assessments remain, as such, valid for the purposes of this OPA submission update and ZBA / DPOS application submissions.

1.6.2 Park Lawn Lake Shore Transportation Master Plan

It is noted that the transportation analyses presented within the October 2019 BA Group report will be reviewed in further detail as future macro and micro-simulation modelling outputs become available from the Cityled Park Lawn Lake Shore Transportation Master Plan process.

The outputs from this broad area study will provide a frame of reference upon which the future (2041) transportation travel conditions in the area can be further evaluated including the range of new mobility and transportation infrastructure proposed as part of the 2150 Lake Shore Boulevard West Master Plan and supporting transportation plan.

1.6.3 Study Scope

The following provides an overview of the scope of the transportation items addressed as part of this report that, as noted previously, builds on the comprehensive series of assessments presented in our October 2029 report.

Background

• An update on the Secondary Plan and development planning process

Master Plan Update

- An overview of the Master Plan Vision, supporting mobility framework and key changes made to the Site plan
- A detailed review of the key transportation elements of the Master Plan including design / functional / operational changes to the following:
 - o the Transit Hub
 - o the proposed street network
 - o the active network
 - Site planning elements including parking layouts, loading and servicing plan arrangement, bicycle parking provisions and allocations, building and GO Station vehicular pick-up / drop-off activity accommodation and vehicular Site access.

Travel Demand Forecasts & Analysis

• An update to the Travel Demand Management framework plan supporting the Master Plan

- A review of travel demand forecasts for the current Master Plan programme and a comparison to that considered within the October 2019 OPA submission
- An update on the multi-modal travel capacity analysis
- A supplementary analysis of TTC streetcar operations

Parking

- A review of appropriate vehicle parking supply standards proposed to support the Master Plan that recognize the future mobility context of the Site, mobility aspirations for the Master Plan that promote non-automobile travel means and the role of parking supply as a key element of the Travel Demand Management framework.
- A review of bicycle parking standards and provisions to be adopted

Loading and Servicing

• A review of loading supply requirements and provisions for the Master Plan considering a consolidation of servicing facilities between development blocks

It is intended that this material, as such, be read in conjunction with the BA Group October 2019 report.

2.0 PLANNING PROCESS UPDATE

West Toronto, and specifically south Etobicoke, has been the subject of a number of City planning initiatives over a number of years that have led to the emergence of the Humber Bay Shores community that surrounds the 2150 Lake Shore Boulevard West property.

The approval of a settlement of the appeal of OPA 231 for the Site by the LPAT in August 2019 sets a significant milestone for the 2150 Lake Boulevard West Site. This settlement has enabled the advancement of the number of planning processes that focus on establishing a future vision and development framework for the Site and the Humber Bay Shores area as a whole.

Seven inter-related processes have been initiated by the City, FCR and Metrolinx as part of the advancement of land-use and infrastructure planning in the area. These are as follows:

- Christies Planning Study
- Park Lawn Lake Shore Transportation Master Plan (TMP)
- Park Lawn GO Station Initial Business Case (IBC)
- Transit Project Assessment Process (TPAP) for the proposed Park Lawn GO Station
- Official Plan Amendment application for the 2150 Lake Shore Boulevard West Site
- Zoning By-law Amendment application for the 2150 Lake Shore Boulevard West Site
- Draft Plan of Sub-Division application for the 2150 Lake Shore
 Boulevard West Site

The following outlines and describes the above, their status and upcoming next steps as they relate to the planning process for the Christie's Site.

2.1 CHRISTIES PLANNING STUDY

In October 2019, City staff initiated the Christie's Planning Study to establish a comprehensive planning framework for a study area that is focussed primarily on the 2150 Lake Shore Boulevard West Site and adjacent lands around the proposed location of the Park Lawn GO Station.

The City is conducing a planning study to identify and establish:

- an appropriate built form and land-use framework for the study area;
- hard infrastructure, sustainability and energy needs;
- mobility and transit facility and infrastructure needs including, notably, the form of new transit infrastructure to support / interconnect with the proposed Park Lawn GO Station;
- community services and facility needs including potential school and community centre provisions; and
- open space and parks needs.

The Christies Planning Study will ultimately lead to the preparation of a Secondary Plan policy framework, a Zoning By-Law and Urban Design Guidelines that will guide the future development of the 2150 Lake Shore Boulevard West property. In October 2019, the Christie's Planning Study (together with the Park Lawn Lake Shore Transportation Master Plan) conducted its first public open house to raise awareness and familiarize the attendees with the Study Area, the Study team, aligned initiatives and anticipated timelines for the project process. The October meeting also provided an opportunity for City staff to learn from attendees about their perspective on area needs, concerns and considerations including those related to transportation and mobility.

A stakeholder meeting was held in February 2020 to update members of local community groups, residents and ratepayer associations and other organizations in the area with study progress and to assist in prioritizing needs in the area. This meeting was held jointly as part of the Park Lawn Lake Shore Transportation Master Plan process.

A public meeting was to be held at the end of March 2020 to provide a full study update to the local community. This meeting was, due to the COVID 19 situation, cancelled. Presentation materials that would have been shown are posted on the City's Christies Planning Study portal.

Further consultations are planned in Summer 2020 pending the COVID 19 situation at that time.

2.2 PARK LAWN LAKE SHORE TRANSPORTATION MASTER PLAN

The City of Toronto originally initiated the Park Lawn Lake Shore Transportation Master Plan (TMP) in 2016 to evaluate and plan for transportation options that address existing deficiencies and accommodate increases in population and employment in the Park Lawn Road and Lake Shore Boulevard West area.

The TMP was subsequently paused prior to the resolution of the OPA 231 appeals to await information and input regarding the development potential for the 2150 Lake Shore Boulevard West Site and the related prospect of a new Park Lawn GO Station.

With the settlement of the OPA 231 appeals, and with the commencement of the Christies Planning Study in October 2019, the City has resumed work on the TMP to move the study objectives forward and to evaluate options to improve the area's transportation network including: a) improved access to the street, b) transit and active transportation network, c) provision of additional connections across major physical barriers such as rail lines, d) planning for investment in public transit, pedestrian and cycling networks; and e) enhancing the quality of the streetscape and urban design elements of the public realm.

The TMP includes Phases 1 and 2 of the Municipal Class Environmental Assessment (MCEA) process that is a required process in the planning and implementation of large infrastructure projects. These two phases (Phases 1 and 2) of the MCEA process are intended to identify the transportation "problems and opportunities" that are to be addressed, to develop and evaluate options that respond to these and to recommend a preferred set of improvements / initiatives to be advanced. Further study (Phases 3 and 4 of the MCEA process) will be required for larger infrastructure projects that may be advanced.

2.2.1 February 2020 Stakeholder Meeting and Study Update

In February 2020, the City Planning and Transportation Services department hosted a Stakeholder Meeting to provide updates on the TMP and the Christies Planning Study. Various stakeholders, including but not limited to local community groups, resident associations, and Business Improvement Areas (BIAs) attended.

A potential network improvement list was identified that would be assessed as part of a high level screening exercise and further, for shortlisted options, as part of the TMP. These potential initiatives ranged across:

- transit improvements (transit priority features and integration with the proposed Park Lawn GO Station);
- street network improvements (including modifications on Lake Shore Boulevard West, the Queensway, Park Lawn Road, Gardiner Expressway connections)
- new east-west and north-south street linkages (including connections across the Lakeshore West rail corridor and Gardiner Expressway).

It is noteworthy that the TMP study area has been expanded as part of the re-initiation of the TMP to include the Legion Road area and, as part of the broader modelling inputs, a significant area extending from Highway 427 to Exhibition Place along the Gardiner / Lake Shore Boulevard corridor.

2.2.2 Next Steps

The COVID 19 situation has resulted in the postponement of the Christie Planning Study public meetings originally scheduled for March 2020. We understand that the City is in the process of organizing alternate arrangements to meet the MCEA process requirements for public consultation and to garner input from the public and stakeholders.

Detailed analysis and modelling work is continuing and will assess the performance of various options being considered to address existing issues on the area networks, to accommodate future growth and support the future mobility needs of the Humber Bay Shores area with a prospective development of the 2150 Lake Shore Boulevard West property.

Once complete, the TMP will recommend a series of transportation projects, initiatives and policies to support the Park Lawn / Lake Shore Area. Some recommended projects will require completion of additional phases in the EA process, including further opportunities for public consultation.

2.3 PARK LAWN GO STATION IBC

Metrolinx has studied considering the introduction of a new GO Station at Park Lawn GO Station to support emerging area development.

Metrolinx completed an Initial Business Case (IBC) in 2016 and recognized Park Lawn as a strategic location of dense development and growth, as well as opportunity to integrate with local transit in the area. The commitment of GO Regional Express Rail (RER) and more frequent and faster service created significant opportunity to realize a model hub bringing together and integrating higher order transit, local transit and other modes. This IBC did not commit to a Park Lawn GO Station for a number of technical matters largely relating to the relative location of the existing Mimico GO Station.

Metrolinx updated their IBC in 2018, which presented an updated assessment of a Park Lawn GO Station in the context of additional ridership that will be created by potential redevelopment of the 2150 Lake Shore Boulevard West Site and a reassessment of station spacing and related operational considerations. It is noteworthy that the 2150 Lake Shore Boulevard West property was, at the time of this updated IBC, advancing towards a settlement with the City of the OPA 231 appeals and was to be designated as a regeneration area, which opened up the prospect of additional development potential in the Station catchment. The Updated IBC (2018) identifies the Park Lawn GO Station for advancement subject to the typical Metrolinx approvals processes.

Metrolinx is undertaking an update to the IBC, which will confirm Station design parameters, operational viability, updated ridership forecasts and financial modelling. The Updated IBC (2020) is anticipated to be released in early Summer 2020 and will enable the continued advancement of the GO Station approvals process.

2.4 PARK LAWN GO STATION TPAP

FCR retained Hatch to undertake an Environmental Assessment (EA) for the new Park Lawn GO Station on the Lakeshore West rail corridor for Metrolinx.

The evaluation of the potential environmental effects of the proposed Park Lawn GO Station will be carried out in accordance with the Transit Project Assessment Process (TPAP). The Environmental Assessment Act (EAA) under Ontario Regulation 231 /08 – Transit Projects and Metrolinx Undertakings (O. Reg. 231/08), regulates the TPAP. The purpose of the TPAP is to ensure potential effects associated with the Project are clearly identified and mitigated to the greatest extent feasible.

Hatch is also leading the initial preliminary concept design development of the Station as part of the first stages of the TPAP working with Metrolinx, FCR and its consultant team. Other stakeholders, including the City of Toronto, will be consulted on a collaborative basis through the concept development process. Supporting technical studies are also being advanced evaluating the various technical and environmental aspects of the Station project as part of the TPAP. These will ultimately feed into the TPAP documentation provided to the Minister of the Environment for approval.

The formal TPAP is scheduled to be initiated in the mid to latter part of 2020 and will extend into the Spring of 2021 when study completion is expected.

Please note that approvals for new TTC related transit infrastructure (i.e TTC LRT loop and new track work) do not form part of the TPAP for the GO Station which deals with the Metrolinx infrastructure. Any approvals required for new TTC related infrastructure are to be advanced through the City's Planning Act related approvals processes.

2.5 OFFICIAL PLAN AMENDMENT APPLICATION

As noted earlier, the owners of the Site made an Official Plan Amendment (OPA) application in October 2019.

This application presented a comprehensive mixed-use Master Plan development vision for the property and this process is currently advancing in parallel to the City-led Secondary Plan process and other infrastructure related processes.

BA Group prepared an Urban Transportation Considerations report as part of the initial October 2019 OPA submission made to the City.

City of Toronto and other agency staff (including TTC) have provided comments on the initial OPA application. From a transportation perspective these include: a range of detailed comments on design of the TTC facilities; commentary on the technical analyses presented within the BA Group report; a request to incorporate inputs from the City's Transportation Master Plan modeling process into the analyses as they become available; and general comments on the form and function of the public street network. A revised OPA application is now being made to the City of Toronto reflecting changes made to the Master Plan in response to various comments received from the City and stakeholders as well as the design development process of the buildings has evolved. This revised submission is combined with an initial Zoning By-law Amendment application and an initial Draft Plan of Sub-Division. This report forms part of this updated OPA submission.

A noted earlier, a number of the staff / agency comments are addressed as part of the revised submission. Other, more detailed comments (and particularly those that require integration with the Transportation Master Plan modelling inputs), will be addressed through subsequent transportation related and consolidated submissions.

There are also a series of ongoing processes through which details related to the TTC, the Park Lawn Lake Shore TMP, Park Lawn GO Station and other details of the Master Plan and related infrastructure are being advanced. These processes – and emerging changes / refinements – will also be incorporated into subsequent submissions to the City.

2.6 ZONING BY-LAW AMENDMENT & DRAFT PLAN OF SUB-DIVISION APPLICATIONS

Zoning By-law Amendment (ZBA) and Draft Plan of Sub-Division (DPOS) applications are currently being made to the City to initiate the more refined review of the development details of the Master Plan.

This report also forms part of the initial ZBA and POSD submissions noting that, from a transportation perspective, the overall Master Plan has remained largely consistent with that submitted as part of the initial OPA. This report, as such, relies upon the earlier comprehensive submissions by BA Group made to the City in October 2019 for much of the detailed assessment and overview review which remains valid and current with respect to the current Master Plan.

This report provides an overview of the changes made to the current Master Plan and further details relating to its current design arrangements and transportation elements that are pertinent to the Zoning By-law Amendment and Plan of Sub-Division processes.

3.0 MASTER PLAN OVERVIEW

3.1 THE MASTER PLAN

The proposed Master Plan (herein referred to as "the Christies Master Plan" or "the Master Plan") has been developed with the understanding that transportation advancement is the key to unlocking the potential to develop an integrated, active and attractive community in southwest Toronto. Recognizing that the existing transportation infrastructure defining the Site boundaries, which currently contribute to challenges and barriers to area mobility, presents significant opportunity to bring an unprecedented level of access to transportation networks previously unavailable to the Humber Bay Shores area and southern Etobicoke, more generally.

While there are many aspects to the development of a Master Plan for the Site from a transportation and mobility perspective, four major themes are central to the successful development the 2150 Lake Shore property. These will, combined with other planning initiatives, serve to provide a truly workable and effective transportation and mobility context for future residents, employees, patrons and visitors and – importantly – address the needs of existing and new residents in the surrounding, rapidly developing areas in Humber Bay Shores and beyond. These are centred on four "major"" themes:

- 1. Advancing and providing "real" transit travel opportunities to the area and the creation of a new integrated GO / TTC transit hub;
- 2. Addressing and improving current traffic congestion challenges in the area in a way that responds to the current level of tidal commuter motorist use of the area street system as an alternate to the Gardiner Expressway corridor;
- Implementation of an excellence across a street and public realm network that creates a truly walkable, pedestrian first community that seamlessly integrates adjacent developed / developing areas within Humber Bay Shores and beyond to maximize active-transportation and the potential for walking and cycling as primary modes of travel for short local trip-making; and
- 4. Creation of a Master Plan and development programme that is focused – as an integral part of every step of its planning – upon a commitment to provide high quality, sustainable mobility options serving both the Master Plan development itself and the growing broader Humber Bay Shores community, that will minimize the reliance upon automobile usage and reduce related traffic impacts of the area.

To achieve the Master Plan vision and major themes, a series of mobility planning principles have been established to guide the redevelopment of the Christies Site.



The principles build upon the broader context of Municipal and Provincial planning policy direction that is guiding the way the City of Toronto evolves and responds to changing transportation needs, with initiatives and investments prioritizing the mobility and experience of people over the efficiency of car movement.

The principles understand the existing context and constraints of the Site and recognize the opportunity and role the development plan can, and will play in reshaping the urban fabric and mobility network of the greater community.

The key mobility principles are outlined below and discussed in the following sections.

- Transform Area Transit
- Address Area Traffic Congestion
- Create Complete Main Streets
- Integrate New Neighbourhood Streets
- Prioritize Pedestrian Mobility
- Enable and Support Cycling
- Arrange Site Access and Servicing
- Commit to Sustainable Transportation
- Meet Future Mobility Demands

Physical infrastructure improvements, Site plan elements, Site organization and measurable TDM measures, and work together to influence travel demand and characteristics for the Site and surrounding area integrate the above principles within the Master Plan.



3The key elements that together implement the first two themes of the Master Plan "Transforming Area Transit" and "Addressing Area Traffic Congestion" include:

- The delivery of the Park Lawn GO train station on the Lakeshore • West GO line;
- The realignment of the TTC 501 Queen and 508 Lake Shore . Streetcar and surface transit services to deliver an integrated and central mobility hub; and;
- The delivery of the Relief Road (Public Street A) corridor and • the relocation of the Gardiner Expressway access ramps.

The above major infrastructure changes unlock the ability to implement the third Master Plan theme of "Create Complete Main Streets", "Integrate New Neighbourhood Streets", "Prioritize Pedestrian Mobility" and "Enable and Support Cycling" that will reshape the local urban fabric and integrate the surrounding community. This includes:

- The re-characterization of Lake Shore Boulevard West and Park • Lawn Road to create an attractive main street across the Humber Bay Shores community;
- The delivery of a unique, fine-grained local street system that . integrates the community and creates a block plan supportive of a high quality public and private realm; and
- . The connection of excellent recreational and active transportation networks available to the Site and surrounding area.







The adoption of site related planning principles "Arrange Site Access and Servicing", "Commit to Sustainable Transportation" and "Meet Future Mobility Demands" will support the quality of place and the public realm that is key to the creation of a complete community. The Master Plan includes:

- The external location of vehicle site access driveway to minimise the intrusion of higher traffic activity at grade within the heart of the Master Plan;
- A mixed-use community where the opportunities for day-to-day activity, to a significant extent, can be accommodated within the local community, and without the use of a car;
- Enabling and supporting cycling as a travel mode through the integration of high-quality bicycle parking facilities and supporting services and end user facilities;
- The delivery of numerous key infrastructure pieces- not only within the site itself but of the surrounding area, will enable the future travel demands of the 2150 Lake Shore Boulevard West Site and broader surrounding area to be appropriately met over time. In summary, these include:
 - o the new transit hub
 - o new public street connections
 - o area street modifications; and,
 - o new and expanded bicycle and pedestrian networks





3.2 MASTER PLAN UPDATES

A comprehensive Master Plan, developed initially as part of the September 2019 Official Plan Amendment (OPA) application has continued to evolve in response to initial City of Toronto comments and as part of the design development of the project.

The Master Plan continues to reflect the guiding mobility vision and responds specifically to the area transportation challenges, and fosters a growth of a precinct centred on transit, cycling, and pedestrian travel as the primary modes of travel for the Site and surrounding neighbourhood, helping meet the long-term area transportation demands and goals.

In general, the development programme remains generally consistent with that originally proposed in the September 2019 OPA submission. Notable changes to the plan include the reallocation of retail space into employment are, the removal of hotel space, and the allowance for the provision of two (2) elementary schools. **Table 1** provides a summary of the changes to the development statistics.

TABLE 1MASTER PLAN CHANGES

Use	October 2019 Submission	May 2020 Submission	Changes
Residential	7,455 units	7,139 units	- 316 units
Employment	41,925 sq.m. GFA	64,392 sq.m. GFA	+22,467 sq.m. GFA
Retail	42,700 sq.m. GFA	36,659 sq.m. GFA	-6,041 sq.m. GFA
Hotel	20,235 sq.m. GFA	-	-20,235 sq.m. GFA
School	-	8,459 sq.m. GFA	+8,459 sq.m. GFA

Appendix A includes the reduced scale architectural plans.

Changes to the Master Plan have also prioritised the quality of place and public realm as part of a complete community. The incorporation of key community amenities and facilities in the Master Plan will help serve the Site and the wider Humber Bay Shores area and provide these services locally.

The following are a summary of the key changes related to the Master Plan from a transportation and mobility perspective:

- A large 1.0 hectare public park to be dedicated to the city, community centre and potential elementary school site which will improve the public realm, introduce municipal community facilities within the Humber Bay Shores neighbourhood and provide for school amenities within walking distance of residents in the neighbourhood;
- Delivery of a refined multi-modal Transit Hub that will provide an opportunity for an interchange of services between the Metrolinx Lakeshore West GO line, local streetcar services along Lake Shore Boulevard (501 and 508) and the local bus services along Park Lawn Road (66 and 80), as identified through the ongoing coordination process with the Toronto Transit Commission (TTC);
- A ten metre shift south of the proposed **Relief Road** to provide additional space between the existing Gardiner Expressway for earth-retention measures and a buffer for construction;
- The introduction of a new **pedestrian plaza** adjacent to the northbound bus platforms (between Block C and D1) to enhance the public realm adjacent to passenger waiting areas, and foster the creation of a pedestrian only route between Park Lawn Road and the Transit Hub via Station Square; and,
- A realignment of Private Street 'D' to provide for a larger public park area.




FIGURE 2 MASTER PLAN

3.3 MOBILITY CONTEXT

To achieve the Master Plan vision and goals noted above, physical infrastructure improvements (transit and road network changes), the Site plan organization and elements, and meaningful cycling and pedestrian connections will work in partnership to influence travel demand and characteristics for the Site and surrounding area. By adopting and building upon the broader context of Municipal and Provincial planning policies, the design of the Site and surrounding infrastructure will drive changes to modal shifts and prioritise the safety and mobility of people over the efficiency of vehicle movements.

3.3.1 Transit Plan

The Transit Hub, centred on the proposed Park Lawn GO Station at the north-west boundary of the site, will serve as a major terminus / transfer point for residents, commuters, visitors of the site and the wider neighbourhood.

The introduction of the multi-modal hub is key in improving the level of public transit services offered in the Humber Bay Shores neighbourhood and facilitating a shift away from auto-centric means of transportation.

First Capital Realty has been working with Metrolinx to advance and realize the introduction of a new Park Lawn GO Station as a central element of the Master Plan and transit plan. This work has been extensive and has involved an update to the Initial Business Case (IBC) for the station and advancement of the next stages of design / approval necessary to bring the station to realization including the initiation of a Transit Project Assessment Process (TPAP) for the station. This work will enable the next stages of approval and implementation of the station by approximately 2025.

A two-way, 5 trains per hour, all-day GO rail service frequency is being contemplated at the Park Lawn GO Station which will greatly improve commuter rail travel options provided east and westbound along the Lakeshore GO corridor. Travel times to downtown Toronto will be less than 15 minutes, making it a highly attractive travel time in the Toronto context and will make public transit highly attractive to those travelling to / from the neighbourhood.

Transit Changes

The Toronto Transit Commission (TTC) is also committed to changes in the service network to help facilitate the creation of a multi-modal hub and help respond to the emerging transit opportunities in the area. These improved services would provide for a considerable level of transit connectivity and expand the GO station tributary area.

They have identified the 501 Queen and 508 Lake Shore streetcar routes, which already provide service along Lake Shore Boulevard, as possible candidates for termination at the station. This would involve the relocation of the existing Humber Loop, currently north of the Gardiner Expressway, and in a poor location relative to the community, it serves.

In addition, the TTC agree that the existing 66 Prince Arthur and 80 Queensway bus services are candidates for rerouting to better serve the new GO station. Curbside / layby stops located at the rail corridor will enable the buses to provide passengers with immediate access to the multi-modal hub, and support the easy transfer of modes. The bus services will utilise the existing loop at the TTC loop at Marine Parade Dr. / Lake Shore Boulevard to end their service and turnaround.

The changes in transit services, in response to the new GO station will provide additional transit connectivity and expand the GO station tributary area.





FIGURE 3 FUTURE TRANSIT CONTEXT

3.3.2 Street Network

The development plan for the Site delivers a series of new transportation connections that public road infrastructure that expands the existing street network in Humber Bay Shores and provides additional connectivity for all road users and access to the Site.

Key objectives for the masterplan road network include the following:

Build Network Redundancy

A new crossing of the rail corridor will provide opportunities for both vehicles and pedestrians to travel between the Park Lawn Gardiner Expressway ramp terminals and Lake Shore Boulevard. From a vehicular and traffic operations perspective, this additional link in the community will provide network redundancy and relieve pressure on the Park Lawn Road / Lake Shore Boulevard West signalized intersection.

Re-characterise Adjacent Streets

The new street network will provide additional relief to the area transportation issues and allow both Lake Shore Boulevard and Park Lawn Road to be reimagined as "Main Streets". With the redistribution of vehicle traffic, it allows these streets to multi-modal transportation corridors and public and pedestrian realm to be improved.

Consider all Road Users

The incorporation of cycling and pedestrian facilities on the new and existing street network will help support the movement of people and goods using non-auto modes of travel. Thoughtful, safe, and welldesigned facilities will minimise road conflicts and encourage walking and cycling as a mode of travel.

Support Access Needs to / from 2150 Lake Shore Boulevard W.

The new network of streets will offer direct connections to / from the Site from the wider road network.

Network Changes

The road network has generally remained consistent with that proposed as part of the initial 2019 Official Plan application. There have, however; been changes to the road plan in response to City of Toronto comments and as part of the ongoing design development process to improve and prioritise the quality of place and public realm as part of a complete community.

The following are a summary of the key changes related to the road plan:

- Realignment of the Relief Road to increase the distance to 10 metres between the existing Gardiner Expressway Lake Shore Boulevard off-ramp to provide for additional space for earth retention infrastructure and buffer to the highway;
- Realignment of the Loop Road to allow for a larger 1.0 hectare public park to be dedicated. A 23.0 metre right-of-way width will allow for the ability to provide a one-way anti-clockwise dedicated streetcar right-of-way loop;
- Reimagined private pedestrian plaza between Block C and D1 provides for a pedestrian and cycling link between Park Lawn Road and the Loop Road, and passenger route between the bus stops on Park Lawn Road and the Transit Hub

Figure 4 illustrates the following new street names:

- Public Street A Relief Road
- Public Street B Loop Road
- Public Street C the public road connection between Park Lawn Road / Public Street B. It will form the 4th leg of the existing signalized intersection at the Westlake development driveway
- Private Street D the private road connection between Public Street A and Public Street B





FIGURE 4 STREET NETWORK CONTEXT AND CHANGES

3.3.3 Active Transportation

The development plan for the Site introduces new active infrastructure facilities that help provide connections from key destinations within the Site (e.g. Park Lawn Station and the new public park), to the surrounding neighbourhoods and existing facilities as illustrated in **Figure 5**.

Key objectives for the pedestrian and cycling network include the following:

A Mixed-use Community

The Master Plan creates a true mixed-use community on the 2150 Lake Shore Boulevard West property that provides for a wide range of complementary land-uses that extend across retail, employment, service, recreational, entertainment, residential and institutional uses.

The introduction of such a broad and strong offering of uses distributed across the Site provides a highly active and vibrant core to the Master Plan community, which will serve not only the Site itself, but the broader needs of the Humber Bay Shores community.

Significantly, the core elements of the plan, and wide range of amenities and services provided, can all be reached on foot from across Humber Bay Shores without the use of a car for the vast number of trips.

An Improved Public Realm

A renewed streetscape along the fronting roads to the 2150 Lake Shore Boulevard development will celebrate the public realm through the well design spaces that are conscious of the pedestrian and cyclist experience. The Master Plan will create new urban spaces and places, where residents, workers, and visitors can interact and explore helping to foster an animated streetscape and areas supportive of pedestrian and cycling mobility.

Non-Auto Focus

With the advent of a multi-modal hub in the Humber Bay Shores community, there is an opportunity to shift travel from auto related modes of transportation, to active forms of transportation, which include walking and cycling. Key in this regard, is the development of "complete streets" as part of the master plan.

Transit Integration "Last Mile"

Active modes of travel (e.g. cycling and walking) will form a large share of the "first and last mile" mode of travel for people in the neighbourhood travelling to / from the new Transit Hub. The integration of cycling and pedestrian connections with the station will help encourage a shift towards more non-auto modes of travel, and encourage transit usage.

Network Building

The Site will develop new pathways, roads, and facilities that will help form well-connected, active transportation networks capitalise on the opportunity to fill in the missing gaps in the area pedestrian and cycling networks and help connect key destinations.

End User Facilities

A range of long-term and short-term bicycle parking facilities and supporting facilities (e.g. shower and change rooms, repair stations, etc...) will be provided across the Master Plan to provide for the needs of all user groups. Bicycle parking facilities will be included as part of the Transit Hub as part of the strategy to establish cycling as a strong commuting "Last Mile" option.

Bike Sharing and other mobility services (e.g. scooters) will help form part of the masterplan to maximum active modes of transportation



3.3.4 Servicing & Parking Strategy

The Master Plan consolidates vehicular systems and access across multiple blocks and buildings to minimise the intrusion of servicing, loading, and higher traffic activity at grade within the heart of the Site. By consolidating vehicular access to servicing and parking facilities, it removes the need to provide separate facilities for each building or development block, which affords substantial benefit to the overall Master Plan.

This comprehensive approach to planning and integrating such vehicular systems into the fabric of the Master Plan is, in fact, central o the creation of a high-quality at-grade public realm.

A Responsive Vehicular Access System

The Master Plan incorporates seven (7) vehicular parking and loading access facilities.

These accesses are strategically placed along the perimeter of the Master Plan to most directly "capture" arriving traffic and "disperse" departing traffic. Two (2) primary signalized entrances: one along the Relief Road (Public Street A) and one along Park Lawn Road; will provide efficient entrances to the below-grade and help avoid large concentrations of traffic within the heart of the Master Plan.

Servicing access to the main development parcels (A to E) will be provided via the Relief Road (Public Street A) and take advantage of the beneficial grade differences provided along that routing to access the P2 loading level. The seven (7) Site driveways all provide access into the underground parking areas.

An Integrated Consolidated Below Grade Servicing Plan

The Master Plan integrates all loading and parking facilities below grade within a consolidated basement.

A system of distributed below grade loading / service areas and connecting linkages provide access to the block and associated loading facilities. The distribution of loading facilities provides an effective and efficient series of facilities that will meet the loading and delivery needs of each land use of the Master Plan.

Parking is provided on a consolidated basis beneath each development parcel and will support the buildings above. Commercial parking supporting the employment, retail and visitor parking needs will be located on the upper portions of the garages, while residential parking will be provided on the lower levels. The parking supply has been minimised and is further discussed in **Section 8.0**.

Vehicular pick-up / drop-off facilities for the main Transit Hub and commercial uses are also provided below grade to accommodate the "front door" needs of the Site and transit hub.

Connections Below Public Streets

The below grade parking and servicing facilities are located beneath the Master Plan development parcels and outside of the proposed public road network and park to be dedicated to the City. However, to achieve the level of consolidation sought, it is necessary to provide a number of below tunnel connections at strategic locations beneath the proposed public streets.

Changes to the Servicing and Parking Strategy

The below-grade strategy remains consistent with the initial masterplan developed as part of the OPA submission, however; the following key changes have been made as part of the ongoing design development process:

- the main signalized Relief Road Site driveway now provides servicing access to the main development parcels (A to E). A network of vehicle tunnels between development blocks (and under public roads) will connect the below grade servicing areas;
- a P1 below-grade parking level will provide for the majority of the non-residential parking supply across the Site. All the nonresidential Site uses will share this pool of commercial parking and it will meet the parking needs of the Site appropriately. Smaller pools of non-residential parking are located within the upper levels of Block B, E, and F.





4.0 TRANSPORTATION DESIGN UPDATE

The proposed Master Plan has been developed with the understanding that the transportation advancement is key in unlocking to the potential to develop and integrated, active and attractive community in the Humber Bay Shores neighbourhood. A number of key transportation pieces will be important in helping to achieve this vision. The following section provides a detailed review and description of these transportation Master Plan elements as follows:

- The Transit Hub
 - o Metrolinx Park Lawn GO Station
 - o TTC Streetcar / LRT considerations
 - o TTC Surface Routes (Bus) considerations
- The Road Network
 - o Lake Shore Boulevard West
 - o Park Lawn Road
 - o The Relief Road (Public Street 'A')
 - o The Loop Road (Public Street 'B')
 - o Other street network connections
- The Active Network
 - o Pedestrian Realm
 - o Cycling Network
- Site Planning Strategies
 - o Site Access Strategy
 - o Site Servicing Strategy
 - o Site Parking Strategy
 - o Pick-up / Drop-off Strategy
 - o Bicycle Parking Strategy







2150 LAKE SHORE BOULEVARD WEST

4.1 THE TRANSIT HUB

From a transit perspective, the redevelopment of the Site, which is at the nexus of the Lakeshore West GO line and the TTC Lake Shore streetcar services, presents an opportunity to change the transit opportunities in the Humber Bay Shores neighbourhood.

A creation of an integrated transit hub provides a logical terminus and point of convergence for modified surface routes (bus and streetcar) to serve as feeder services to the GO rail service. The linkage of these transit routes will significantly benefit a large number of residents within the transit watershed and reduce auto-reliance in South Etobicoke.

4.1.1 GO Station Considerations

The Owners been working with Metrolinx to advance to planning of the new Park Lawn GO Station. This work has been extensive and has involved an update to the Initial Business Case (IBC) for the station and advancement of the next stages of design / approval necessary to bring the station to realization including the initiation of a Transit Project Assessment Process (TPAP). This work will enable the next stages of approval and implementation of the station by approximately 2025. The following highlights key station considerations:

- Pedestrian access to the station building will be generally granted from three (3) locations: Station Square (Platform Level), Park Lawn Road, East Side (Mezzanine Level), and the Relief Road (Mezzanine Level). Secondary accesses to the platforms are provided on the west side of Park Lawn Road;
- A pedestrian tunnel between the rail corridor will link the station buildings on both the north and south side of the tracks;
- **Dedicated GO Station Bicycle Parking:** The proposal will provide a minimum of 192 covered bicycle parking spaces and 96 secured bicycle parking spaces will be in vicinity of the GO station building, in accordance with Metrolinx requirements.

- **Passenger waiting platforms** will be located on either side of the existing four-track Lake Shore West rail corridor. Eastbound trains will stop at the south platform, westbound trains will stop at the north platform. Bypassing rail traffic will have the option of using the centre tracks.
- A **Station Canopy** on a portion of the rail platform will be developed as part of the ongoing design development process, and in consultation with Metrolinx and other stakeholders; and,
- **Pick up / drop-off facilities** located within the P2 level of the D2 block basement, informally along the eastbound curb lane of the Relief Road (Public Street 'A'), and within curbside laybys on the Loop Road (Public Street 'B).

Figure 7 provides a high-level overview of the key station access / entrance and pedestrian routing strategy. Two main station entrance elevations allow for better integration amongst the different station elements while taking advantage of the Site elevation differences.

Platform Level (±89.00)

The upper level has a direct relationship (station building access) to Station Square and the heart of the 2150 Lake Shore Boulevard Site. Both the GO Train platforms and the TTC streetcar platforms will be located at this level.

Mezzanine Level (±84.00)

A lower, mezzanine level will provide pedestrian access to / from Park Lawn Road and the bus platforms and will provide for the pedestrian tunnel beneath the rail corridor. An entrance at the mezzanine level on the north side of the rail corridor will provide for passenger access to / from the relief road



FIGURE 7 - CONCEPTUAL GO STATION LAYOUT

4.1.2 Streetcar / LRT Considerations

The Transit Hub station design incorporates a LRT / streetcar loop facility and layover space to provide a turnaround facility for the existing 501 Queen and 508 Lake Shore streetcar services as illustrated in **Figure 8**. This station will replace the existing Humber Loop and relocate it in a more accessible location for the residents / employees / visitors of the wider Humber Bay Shores neighbourhood.

As part of the ongoing planning and design process with the Toronto Transit Commission (TTC), the design of the Loop Road facility and station design have evolved to include the following:

- Streetcar services will run within in an anti-clockwise loop along a 3.5 metre wide physically separated **dedicated facility** on the Loop Road to improve reliability and safety for the passengers and other street users. A 1.0 metre edge zone would be provided adjacent to the streetcar tracks for OCS poles;
- Two separate **loading platforms** will provide separate waiting areas for two or more services and provide flexibility for services running with different headways. They would be in a parallel configuration, similar to those seen at Broadview Station and Dundas West Station and would allow for boarding to two (2) services, an eastbound and westbound service.
- **Two unloading platforms**, and a **layover space** for the streetcars, separate from the loading platforms, will allow for simultaneous boarding and alighting during peak times and help reduce passenger delay; and,
- Neighbourhood streetcar platforms within the centre streetcar right-of-way have been located at the intersection of Park Lawn Road / Lake Shore Boulevard and at the Relief Road / Brookers Lane / Lake Shore Boulevard to continue to provide service to the wider Humber Bay Shores neighbourhood.

Design Considerations

A number of key design considerations and assumptions were adopted for the planning stages of the design:

- An assumed **centreline radii** of 16.0m and 18.0m was adopted for the station and public road intersections. Further design of the intersection layouts will comply with the standard track arrangements per TTC drawings S-3-202 and S-3-203;
- a minimum platform length of 30.0 metres was adopted, which is intended to accommodate the Bombardier Flexity Outlook Streetcars;
- a minimum platform width of 3.0m was adopted to provide comfortable passenger waiting space within the centre right-ofway and station facility;
- a minimum dedicated **streetcar right-of-way** of 3.5 metres (one-way and 7.0 metres (two-way);
- per TTC comments, the design of the Loop Road (Public Street B) streetcar right-of-way does not need to accommodate for bus operations in the same right-of way

Unidirectional Example



CONCEPTUAL UNIDIRECTIONAL ROUTING (TTC, 2019)



FIGURE 8 - CONCEPTUAL LRT STATION LAYOUT

LRT Track Connections: Lake Shore to Park Lawn GO

Streetcar services will run within in an anti-clockwise loop along a 3.5 metre wide physically separated dedicated facility on the Loop Road. The separated facility will help improve reliability and safety for the passengers and other street users by eliminating the need for the service to operate in mixed traffic. A 1.0 metre edge zone would be provided adjacent to the streetcar tracks for OCS poles.

A new signalized intersection at Public Street C / Loop Road (Public Street B) will provide for a controlled intersection to manage southbound vehicles who will be required to turn right across the tracks.

The intersection at Public Street B and Private Street D will operate under stop control for the minor intersection (Street D) and under yield condition for the southbound left turn across the TTC tracks. This arrangement allow for a clear view of oncoming TTC vehicles and is appropriate for the safe operation of all road users. It is not anticipated that turning vehicle volumes be high.

LRT Tracks and Station Plaza

The streetcar / LRT will travel through Station Plaza upon exiting the station facility. Pedestrian crossing locations are limited to two locations by using landscaping and other materials to guide pedestrians to predefined crossing locations to minimise potential conflicts with TTC vehicles. The tracks will be embedded within the surface to provide a flush surface.

At this stage, the design of the overhead infrastructure within Station Square has not detailed, however; OCS poles will be provided along the track to provide electrification.

Anticipated Passenger Volumes

Forecasted ridership volumes were initially developed in BA Group's initial September 2019 OPA report. Since then we have made modifications to the project peak hour ridership volumes at the Transit Hub stop. This is summarised in **Table 2** and further discussed in **Section 7.3**.

TABLE 2 SUMMARY OF PROJECTED LRT PEAK HOUR RIDERSHIP

Peak Hour		Direction	Transit Hub Stop
АМ	Boarding	EB	280
		WB	85
	Alighting	EB	250
		WB	320
РМ	Boarding	EB	285
		WB	205
	Alighting	EB	130
		WB	235
SAT	Boarding	EB	250
		WB	180
	Alighting	EB	215
		WB	250



4.1.3 Bus Interchange Considerations

The bus stop locations have been relocated from the Relief Road to layby / curbside platforms along Park Lawn Road, in response to TTC comments. Locations along Park Lawn Road, in close proximity to the rail corridor / D1 Block, would provide a better opportunity for passengers to connect with the Transit Hub, while allowing buses to remain "on line". Changes to existing TTC bus routes and the addition of potential new routes capitalises on the higher order transit being afforded by the new Park lawn GO station and will help connect the residents of southern Etobicoke to the new transit hub.

Stop Location Review

BA Group undertook a review of possible locations where a platform that can accommodate two standard buses can be located in close proximity to the station. **Figure 9** depicts these locations.

Feasible locations for stops were limited due to the platform length and taper requirements. Stops "S2 and "N2", which are between the rail corridor and the new signalized intersection, are unable to accommodate the double-length (28.0m) stop platform and appropriate tapers between the new signalized intersection and the rail corridor.

In summary, southbound locations were limited to "S1" Relief Road / Gardiner Off-Ramp far side (north of the rail corridor), and "S3" far side of the new proposed Park Lawn Site access signal. For northbound, these stops would be located nearside at the above noted intersections ("N1" and "N3"). The TTC has indicated a preference for "S1" and "N3".

A key factor in determining suitable stop locations was the sidewalk width / pedestrian realm beneath the existing Park Lawn Road rail corridor underpass. As a result of the existing width and adjacency to the live traffic lanes, it is recommended that this segment of sidewalk should not be relied upon for large passenger flows.





Master Plan Bus Stop Locations

The current Master Plan proposes to adopt stop locations "S3" and "N3" (south of the new proposed Park Lawn Site driveway signalized intersection) as shown in **Figure 10**. Although the TTC has indicated a preference for "S1" as the southbound stop location, it is of BA Group's opinion that a "S3" stop location would provide passengers with a more a direct route to the GO station (via the signalized intersection and pedestrian plaza spaces incorporated into the Master Plan).

Adopting the "S3" location would is beneficial, as it would avoid the use of the narrow sidewalk in the Park Lawn underpass in the AM peak period (where passenger are expected to alight the bus and walk to the eastbound rail platform on the south side of the rail corridor to travel downtown). A stop location north of the rail corridor would also require passengers to cross a larger and busier intersection at the Relief Road / Gardiner Off-ramp, which is a less pleasing pedestrian and passenger experience.

Both the TTC and BA Group prefer the "N3" location for the northbound bus platform. It has a direct relationship to the development and the transit hub via the new pedestrian plaza, providing ample waiting space and high quality public realm experience for passengers.

Pedestrian Connections

The provision of a pedestrian plaza between Blocks C and D1 not only encourages and promotes walking within the Site, but it provides ample outdoor pedestrian space near the northbound bus stop location in a location that relates well to waiting passengers. The plaza also helps form a continuous pedestrian path for passengers in the afternoon rush walking from station entrance at Station Square to the northbound bus platforms.

Design Considerations

As part of the ongoing planning and design process with the Toronto Transit Commission (TTC), the planning of the bus facilities assume the following:

- Bus services will stop along Park Lawn Road to allow the Park Lawn GO station stop to remain "on line", minimising the rerouting, and delay in service times.
- The 66 Prince Arthur and 80 Queensway buses are identified as candidates for rerouting and increased service to / from the Park Lawn GO station. It is our understanding that drivers for these routes will utilise the existing loop / turnaround facility at Lake Shore Boulevard / Marine Parade Dr. to layover.
- **28.0 metre long platforms**, designed to accommodate two standard buses, on both the east and west sides of Park Lawn Road at the new signalized intersection just south of the rail corridor; two additional stops (one northbound and one southbound) are located, nearside, at the intersection of Park Lawn Road / Public Street 'C';
- 3.0 metre wide **bus layby lanes**, with a minimum 25.0 metre entry and exit taper minimise disruption to the traffic on Park Lawn at the stops adjacent to the GO station.

Although the bus stops are not located immediately within the station, they provide a level of immediacy to station entrances located at the Park Lawn elevation (station mezzanine level). These bus stops are also located at the proposed signalized intersection to provide passengers a safe means of crossing Park Lawn Road and an opportunity for southbound passengers to access the GO station.



FIGURE 10 - CONCEPTUAL BUS PLATFORM LAYOUT

TTC Bus Service Assumptions

The TTC does support extending some local bus connections in the area to the proposed GO station. Currently, the TTC has provided feedback indicating that they do not support the extension of the 77 Swansea to the Site (as proposed in the initial September 2019 OPA report) as it duplicates the service provided along the Queensway in the same area.

The 66 Prince Arthur and 80 Queensway buses continue to be excellent candidates for increased service to / from the Park Lawn GO station. It is our understanding that drivers for these routes will utilise the existing loop / turnaround facility at Lake Shore Boulevard / Marine Parade Dr. to layover.

Currently, these routes operate with a frequency of approximately six to seven buses per hour for the 66 Prince Arthur route, and three buses per hour for the 80 Queensway route.

Based on updated passenger forecasting, as summarised in **Table 3**, the passenger demand for these services is expected to increase and operational frequency will increase to help meet the demand. The forecasting study is undertaken at the stop adjacent to the Transit Hub. and does not assume any the passenger boarding / alighting that may occur at other Site adjacent stop locations

To arrive at a reasonable service level assumption, and allow for boarding along the route, a ridership capacity of 35 passengers per bus was assumed (70% capacity of a standard 51-person bus).

TABLE 3

FUTURE TOTAL BUS RIDERSHIP FORECAST SUMMARY (TRANSIT HUB STOP)

Peak Hour	l.	Direction	Route 66	Route 80	TOTAL
AM	Poording	NB	225	90	315
	воаготну	SB	0	0	0
	Alighting	NB	0	0	0
		SB	330	165	495
РМ	Boarding	NB	275	135	410
		SB	0	0	0
	Alighting	NB	0	0	0
		SB	235	90	325
SAT	Dearding	NB	265	105	370
	воаготну	SB	0	0	0
	Alighting	NB	0	0	0
	Alighting	SB	295	115	410

The demand of approximately 10 to 15 buses per hour suggests a provision for the accommodation of two (2) bus bays / laybys. This will also allow for the staging / potential layover of buses.

This is consistent with the request from TTC to provide platform lengths of 28.0 metres, designed to accommodate two standard length buses.



4.2 THE ROAD NETWORK

Traffic congestion – particularly during the peak periods – is a longstanding issue in the neighbourhood given the proximity of Lake Shore Boulevard West relative to the Gardiner Expressway. A large volume of commuter traffic that "overflows" routinely from the highway leads to congestion levels at key intersections that are detrimental to the character and functionality of Park Lawn Road and Lake Shore Boulevard as main streets serving the Humber Bay Shores community.

The 2150 Lake Shore Boulevard Master Plan proposes a number of larger road network improvements (as illustrated in **Figure 11**) and changes to help foster an environment that emphasis the quality of place and public realm. These larger changes will be reviewed in the context of the ongoing Park Lawn Lake Shore Transportation Master Plan (TMP) and will be developed further as part of that process.

Appendix I provides for the Functional Road Plan.

These key changes include:

- The delivery of a **Relief Road (Public Street A)**, a new bypass facility running along the northern Site boundary that will provide anew crossing of the rail corridor. As part of the work, the Gardiner Expressway access ramps would be realigned to provide for direct highway / arterial vehicular access to the new Site development;
- A **uni-directional, separated streetcar** loop on the Loop Road (Public Street B) which will provided TTC streetcar vehicle access to the new multi-modal hub;
- The **re-characterisation of Lake Shore Boulevard West and Park Lawn Road** to create an attractive main streets across the Humber Bay Shores community;
- The delivery of a unique, **fine-grained local street system** that integrates the community and creates a block plan supportive of a high quality public and private realm; and,
- The connection of excellent recreation and active transportation networks available to the Site and surrounding area.



2150 LAKE SHORE BOULEVARD WEST

4.2.1 Public Street 'A' (Relief Road)

The Relief Road (New Public Street 'A') provides a secondary crossing of the Metrolinx rail corridor, and offers an alternative to the Park Lawn Road / Lake Shore Boulevard intersection. It will form a new fourth leg to the existing Park Lawn Road / Gardiner off-ramp signalized intersection and is proposed to terminate at Lake Shore Boulevard / Marginal Boulevard as illustrated in **Figure 13**.

Street 'A' would act as a bypass facility, rerouting through traffic away from Park Lawn Road and Lake Shore Boulevard West. This allows them to be re-established and re-imagined as a true "Main Streets" and address long-standing capacity constraints on Lake Shore Boulevard West at Park Lawn Road and Palace Pier Court. Finally, it would provide for excellent direct highway / arterial vehicular access for new development on the Site and a significant opportunity to direct the major traffic and servicing activity to the northern periphery of the Site.

From a transportation perspective, the design of the Relief Road has changed as part of the ongoing design development process, and in response to TTC comments. The road continuous to have a basic fourlane cross-section (e.g. two lanes in each direction) within a proposed 26.0 metre right-of-way. Key changes to the Relief Road are summarised below:

- A 10 metre shift south (away from the Gardiner Expressway Lake Shore Boulevard off-ramp) provides additional space for earth retention structures, and additional construction buffer space;
- **Removal of the 3.0 metre bus layby** at the rail corridor reflects the TTC's preference to maintain bus service on Park Lawn Road; and,
- Updated southbound lane configuration at the Relief Road / Lake Shore Boulevard intersection.

4.2.1.1 Gardiner Ramp Relocation (East)

The Eastbound Lake Shore Boulevard and Gardiner Expressway onramp and Gardiner Expressway off-ramp are proposed to be realigned to intersect with the Relief Road at a new three-legged intersection, consistent with the initial OPA application. This will improve connectivity to the proposed Relief Road and Site accesses.

The location of this intersection is driven by road geometric constraints for the on / off ramps onto the Gardiner Expressway. A suitable geometric design was developed based on a 60 km/h design speed for highway ramps. The design of these ramps requires the embankment in front of the west abutment of the eastbound Gardiner Expressway offramp to eastbound Lake Shore Boulevard to be reconfigured in order to meet design speed requirements. This alignment minimises alterations to the tunnel section, abutments, piers, and decks of the Gardiner Expressway to avoid high costs and construction impacts to the highway. The location of this proposed intersection also provides for adequate sightlines (stopping sight distance) to the future signal heads.

4.2.1.2 Key Cross-Sectional Elements

The Relief Road will have the following key cross sectional elements as illustrated in **Figure 12**:

- 2.4 metre wide pedestrian clearway on the south boulevard with 2.0 metre furnishing / planting strip;
- 3.0 metre centre left-turn lane and shadow within a 16.0 metre roadway; and,
- A 4.4 metre allowance on the north side for possible earth retention structure or embankment.





FIGURE 12 PUBLIC STREET A (RELIEF ROAD) CROSS-SECTION

2150 LAKESHORE BOULEVARD WEST

4.2.1.3 Underpass

An underpass beneath the rail corridor will provide for two vehicular lanes in each direction, with sufficient clearance to the box structure. An allowance in the underpass structure will be made along the south side for a pedestrian sidewalk. No pedestrian facilities will be provided along the northern edge of the Relief Road.

4.2.1.4 GO Station Pick-Up / Drop-Off

Informal curbside drop-off is expected to occur along the eastbound curb lane adjacent to the GO station entrance. The provision of only one through eastbound through lane from the Gardiner off-ramp, as well as a single southbound left-turn lane allows for the flexible use of the curb lane for non through traffic.

The provision of this space, in addition to the formal PUDO facility within the P1 basement and surface laybys on the Loop Road will help fulfill Metrolinx passenger pick-up / drop-off requirements to provide for space for 30 vehicles.

The provision of this space is part of a wider strategy that includes a basement level pick-up / drop-off area and layby along Street 'B' (Loop Road) to handle the station related pick-up / drop-off. Further information is provided in **Section 4.4.5**.

4.2.1.5 Signalized Site Driveway

The Relief Road is bounded by two signalized intersections (at Park Lawn Road in the west, and Lake Shore Boulevard in the east). A signalized Site driveway is proposed approximately midway to provide one of two primary driveway entrances into the below grade loading and parking facilities. This signalized intersection is located approximately 250 metres from Park Lawn Road and 300 metres from Lake Shore Boulevard.

4.2.1.6 Un-signalized Site Driveways / Intersections

Right-in / right-out access is provided at an un-signalized Site driveway within the Block D3 development to provide access to the potential school and residential uses within that block.

A right-in / right-out access at Private Street D approximately 40 metres east of the Gardiner Expressway ramp intersection will provide access to the internal Loop Road within the Site (Public Street B) as well as the building driveway located in Block E.



FIGURE 13 PUBLIC STREET A (RELIEF ROAD) FUNCTIONAL DESIGN

2150 LAKESHORE BOULEVARD WEST

4.2.2 Lakeshore Boulevard West

Lake Shore Boulevard is a major arterial street with a planned right-ofway (ROW) width of 36.0 metres, as outlined in the City of Toronto's Official Plan. The right-of-way width provides sufficient width for a dedicated centre running transit right-of way.

From a transportation perspective, the design of Lake Shore Boulevard remains generally consistent with the cross-section proposed as part of the initial OPA application. Two (2) vehicular through lanes will be provided in each direction, with a minimum 7.0 metre wide dedicated centre-running streetcar right-of-way. Left turning lanes are provided at signalized intersections, consistent with the initial OPA application. Wide boulevards on both the north and south side of the street will provide for a high quality pedestrian realm and for off-street cycling facilities.

The ongoing Park Lawn-Lake Shore Transportation Master Plan process will ultimately determine the ultimate set of improvements and changes to the broad area road network supporting Humber Bay Shores and the South Etobicoke area.

4.2.2.1 Key Changes

Key changes are summarised below:

- The lane configurations for the existing / planned public streets south of Lake Shore Boulevard (which form part of the Humber Bay Shores neighbourhood) will remain as a two-lane cross section at each of the proposed new signalized intersections. Updated traffic analysis is undertaken in **Section 7.0**.
- Protected cycling crossing opportunities are detailed at the Lake Shore Boulevard signalized intersections to improve safety of pedestrian and cycling crossings.

4.2.2.2 Key Cross-Sectional Elements

Lake Shore Boulevard will be reconstructed with "complete streets" in mind and provide for dedicated facilities for all users. These are noted as follows and illustrated in **Figure 14**:

- 1.8 metre wide one-way cycle tracks within the boulevard;
- 7.0 metre wide two-way dedicated TTC streetcar / LRT centre running right-of way, per the initial Lake Shore Boulevard EA;
- A basic two-lane vehicular cross-section, with 3.3 metre lanes;
- Minimum 2.1 metre pedestrian clearway (3.0 metre along most of the frontage) to provide for sufficient pedestrian space; and,
- Planting zones, where applicable.

It is noteworthy that no land dedication along Lake Shore Boulevard West is required from the 2150 Lake Shore Boulevard West property to fulfill the 36.0 metre right-of-way as outlined in the City's Official Plan.

The design and layout of Lake Shore Boulevard West will continue to evolve as part of ongoing city-led Park Lawn Lake Shore Transportation Master Plan (TMP).

4.2.2.3 Intersection Control

Signalized intersections are proposed at all the intersections between Park Lawn Road and Brooker's Lane. These intersections are spaced at approximately 130 metres – 140 metres, with the exception of the section between the Relief Road and the existing Brooker's Lane – 90 metres.

As part of the ongoing design development, traffic signal priority may be implemented along Lake Shore Boulevard to help minimise transit vehicle delay and improve operations and reliability. Further study will be undertaken.



6.Qr

Two-way Streetcar Lane

SECTION D-D LAKE SHORE BLVD W - 36.0m R.O.W.

2.1m || 1.8m | 1.5m|

One-way Furnish Cycle Plant Track Zor

Planting Zone

Pedestrian Clearway

North

0.6

ó.ón

Roadwa

1.8m 2.3m

One-way Furnishing/ Cycle Planting Track Zone

3.Qm Pedestrian Clearway

South

4.2.3 Park Lawn Road

Park Lawn currently provides the only major north-south road connection between the neighbourhoods north and south of the Gardiner Expressway and rail corridor. A right-of-way (ROW) widening will be taken from the subject Site to fulfill the 36.0 metre ROW as designated in Toronto's Official Plan.

From a transportation perspective, the design of Park Lawn Road remains generally consistent with the exception of additional bus laybys on both the northbound and southbound sides of the road to provide alighting / boarding space for the bus routes that will connect with the new GO station.

4.2.3.1 Key Changes

Key changes are summarised below:

- 3.0 metre wide bus layby lanes with 25.0 metre entry and exit tapers have been introduced south of the proposed signalized intersection at the South Beach Condos Driveway / New Site Driveway to accommodate bus pick-up / drop-off activity at the new GO station
- The 3.4 metre wide two-way cycling facility has been extended north to the rail corridor to provide a continuous connection between the Martin Goodman Trail at Lake Shore Boulevard, and the GO station bicycle parking, which can be accessed from the mezzanine (Park Lawn) entrance.

4.2.3.2 Key Cross-Sectional Elements

The widened east boulevard on Park Lawn Road will provide an opportunity for an enhanced public realm. Typical key cross section elements are noted as follows and illustrated in **Figure 15**:

- A 3.1 metre two-way cycle track facility within the boulevard;
- A minimum 2.1 metre pedestrian clearway;
- 1.5 metre planting opportunities on both sides of the cycle track facility; and,
- A 2.4 metre wide TTC bus platform at stop locations.

4.2.3.3 Intersection Control

As part of the development proposal, a new signalized intersection is proposed approximately 185 metres north of the existing signal at the existing Westlake Site driveway (future location of Street C). This new signalized intersection aligns with the existing condominium driveway. A new below grade ramp will provide vehicular access into the belowgrade basement levels.

The signalized intersection will also provide a safe pedestrian crossing opportunity for southbound bus passengers alighting on the west side of Park Lawn Road. The crosswalk will allow them to cross Park Lawn Road safely to enter the Site, and access the GO station entrance.





FIGURE 15 PARK LAWN WEST FUNCTIONAL PLAN & CROSS-SECTION

2150 LAKESHORE BOULEVARD WEST

4.2.4 Public Street 'B' (Loop Road)

A network of public streets are proposed within the Master Plan provide public access to the community facilities (GO Station, public park to be dedicated, community centre, etc...), and provide high quality pedestrian and cycling connections for those travelling within the vicinity of the community.

Consistent with the initial OPA application, "Complete Streets" guided the design of the Loop Road (Public Street 'B'). The cross sectional design will accommodate the one-way streetcar route, two-way cycling facility, and pedestrian clearway within a 23.0 metre right-of-way. Vehicular traffic will largely operate in a clockwise direction, with the transit operations (streetcar) operating in an anti-clockwise direction.

Although the Loop Road will handle a large amount of transit riders, cyclists, and pedestrians, this street will be quiet from a vehicular perspective. Use of the road by vehicles is centred on providing front door (i.e. pick-up / drop-off) and emergency access to the buildings and spaces that front onto it.

A two-way vehicular portion, with access also from either Private Street 'D' or Public Street 'C', will be 6.6 metres in width, and allows for flexible curbside usage on a controlled limited basis. Formal laybys are provided along portions of the street to provide for a variety of possible uses, including, WheelTrans, taxi stands, or short-term parking uses. These parking laybys are located a minimum of 30.5 metres from signalized intersections and 15.0 metres from un-signalized intersections.

The Loop Road is illustrated in **Figure 17**.

4.2.4.1 Key Changes

Key changes to Public Street 'B' include the following:

- A revised two-way vehicular section between Private Street 'D' and Public Street 'C', to provide curbside access to various development blocks and improve vehicular connectivity within the Site;
- A revised 20.0 metre right-of-way (ROW) width along the park frontage;
- The provision of a fully dedicated 3.5 metre wide one-way streetcar lane, with a 1.0m adjacent buffer zone for streetcar pole (OCS) infrastructure; and,
- A 2.9 metre two-way cycle track facility along the outer edge of the Public Street will provide cycling connections to community destinations such as the GO station, new public park to be dedicated, and community centre.

4.2.4.2 Key Cross-Sectional Elements

The Loop Road provides an internal connection within the Site to all the development blocks. Key cross-sectional elements are as follows and illustrated in **Figure 16**:

- A 2.9 metre two-way cycle track within the outside edge of the loop road provides a separated, and dedicated facility with easy access to key destinations within the Site;
- A minimum 2.1 metre pedestrian clearway is provided on both sides of the street;
- A 3.5 metre wide uni-directional streetcar lane with 1.0 metre adjacent zone for OCS infrastructure; and,
- A two-way 6.6 metre wide vehicular portion between Street C and Street D.



FIGURE 16 PUBLIC STREET B (LOOP ROAD) CROSS-SECTION

2150 LAKESHORE BOULEVARD WEST

4.2.4.3 Intersection Control

A signalized intersection is proposed at Street B / Street C to manage and control the southbound right-turning vehicles crossing the streetcar tracks. This intersection is located approximately 90 metres east of the Street C / Park Lawn Road intersection.

The intersection at Public Street B and Private Street D will operate under stop control for the minor intersection (Street D) and under yield condition for the southbound left turn across the TTC tracks. This arrangement allow for a clear view of oncoming TTC vehicles and is appropriate for the safe operation of all road users. Turning vehicle volumes are not anticipated to be high.

Transit signal priority within the Loop Road is being explored as part of the ongoing design development process.

4.2.4.4 The Curb and Use

The Loop Road is intended to provide local street access and a frontdoor address to the development blocks centred within the heart of the development, and most notably, the GO Station and Station Square.

Although the road will be handling large amounts of transit passengers, pedestrians and cyclists, this road will not be busy from a vehicular standpoint, as there are no vehicular Site accesses planned from the Loop Road.

This allows it to assume a role intended to handle development-related front-door related vehicle activity and is part of the overall strategy to accommodate the station related passenger pick-up / drop off (PPUDO). Other station PPUDO will occur informally along the Relief Road (Public Street A) and within the D2 basement pick-up / drop-off area.

Formal laybys strategically placed along the Loop Road will allow for short-term temporary parking adjacent to key uses (e.g. office and retail uses in the A and D blocks). Short-trip vehicle use (i.e. ride-share, taxi), and more importantly, accessible vehicle access (e.g. Wheeltrans) will be able to utilise the Loop Road to provide immediate access to building entrances. Curbside station drop-off along the loop road minimises passenger travel distance and level changes, which are key considerations for accessible drop-off / pick-up.

Overall, these laybys help form part of the overall Site approach to pickup / drop-off and related activity. The close proximity to Station Square, and ultimately the transit hub, make it a convenient place for GO station pick-up / drop-off activity to occur. The provision of formal curbside laybys are to help supplement the pick-up / drop-off facilities planned within the below-grade.

The 6.6 metre two-way vehicular portion between Private Street 'D' and Public Street 'C', will allow for informal, flexible curbside usage on a controlled limited basis.

Combined, the formal laybys and quiet nature of the Loop Road (Public Street B) will help meet the front-door needs of the development and the passenger pick-up / drop-off station related activity.

Section 4.4.5 provides a wholesome discussion on the overall Site-wide pick-up / drop-off strategy.



FIGURE 17 INTERNAL STREETS FUNCTIONAL PLAN

4.2.5 New Public Street 'C'

New Public Street 'C' will provide a public vehicular connection between the Loop Road (Public Street 'A') and Park Lawn Road and is aligned with the existing signalized intersection at the Westlake development Site driveway. Inbound access only to the underground garage at Block C will be provided along this road.

A 20.0-metre right-of-way will be provided, and will accommodate pedestrian boulevards on either side. A westbound left-turn lane will be provided at the signalized intersection with Park Lawn Road. Please refer to **Figure 18** for more information.





4.2.6 Private Street 'D'

A private street connection between the Relief Road (Public Street 'A') and the Loop Road (Public Street 'B'), provides local street access to the development, including the underground parking access located in Block E. This street is intended to operate, look, and feel like public street, but will be kept private to enable the integration of below grade parking connections between the D3 and E block within the Site. Please refer to **Figure 19** for more information.






4.2.7 Queensway

The Queensway is an arterial road that runs in an east-west direction north of the 2150 Lake Shore Boulevard subject Site. It has a 30.0 metre right-of-way (ROW) as identified in Toronto's Official Plan.

Consistent with the initial OPA application, changes to the lane configuration at the Park Lawn Road / Queensway intersection is proposed to increase the storage capacity, and help improve traffic operations. **Figure 20** provides an overview of the proposed changes.

A widening extending 175 metres west and east of the subject intersection would provide for an additional eastbound right-turn lane with approximately 50.0 metres of storage capacity and 100 metres of taper. The proposed widening would not impact the Mimico Creek crossing.

At the Mimico Creek crossing, the existing roadway width is in the order of 17.5 metres and consist of a basic four lane cross section (two lanes in each direction). It is proposed to widen the pavement width at the Park Lawn Road / Queensway intersection to 20.5 metres to accommodate two through lanes in both the eastbound and westbound direction, with right and left turn lanes in both directions.



FIGURE 20: QUEENSWAY FUNCTIONAL PLAN



4.2.8 Gardiner On / Off Ramps – Park Lawn Road

Modifications, consistent with the initial OPA application are recommended at the westbound Gardiner Expressway on-ramp off Park Lawn Road to widen the on-ramp to achieve an additional receiving lane. This is proposed in conjunction with the dual northbound left-turn lane on Park Lawn Road and dual southbound right-turn lane on Park Lawn Road. **Figure 21** provides an overview of the proposed changes.

The lane configuration at the eastbound Gardiner Expressway off-ramps at Park Lawn Road will be modified to accommodate a through lane to the Relief Road. The existing eastbound dual-left turn lanes and rightturn lane will be maintained. Removal of the eastbound right-turn slip lane is proposed to improve pedestrian crossing safety at the intersection. Replacing the slip-lane with reduced curb radii will reduce the crossing distance for pedestrians, minimising conflicts between vehicles, pedestrians, and cyclists, and will slow vehicles making rightturns.

The widening and taper of the off-ramps begins approximately 120 metres west of the signalized intersection and does not suggest modifications to the Mimico Creek crossing. Further understanding and a more wholesome design review will be undertaken as part of the ongoing design development process.



FIGURE 21: GARDINER ON/OFF RAMPS – PARK LAWN ROAD



4.2.9 Gardiner Ramps – Relief Road (East)

The Eastbound Lake Shore Boulevard and Gardiner Expressway onramp and Gardiner Expressway off-ramp are proposed to be realigned to intersect with the Relief Road (Public Street A) at a new three-legged intersection, consistent with the initial OPA application. This will improve connectivity to the proposed Relief Road and Site accesses. **Figure 22** provides an overview of the proposed changes.

The location of this intersection is driven by road geometric constraints for the on / off ramps onto the Gardiner Expressway. A suitable geometric design was developed based on a 60 km/h design speed for highway ramps. The design of these ramps requires the embankment in front of the west abutment of the eastbound Gardiner Expressway offramp to eastbound Lake Shore Boulevard to be reconfigured in order to meet design speed requirements. This alignment minimises alterations to the tunnel section, abutments, piers, and decks of the Gardiner Expressway to avoid high costs and construction impacts to the highway. The location of this proposed intersection also provides for adequate sightlines (stopping sight distance) to the future signal heads.





4.3 THE ACTIVE NETWORK

4.3.1 The Heart of the Community

At the heart of the master plan is a distinct, covered galleria space. This covered market will take on a form as a pedestrian connector, forming mid-block connections within the Site, as well as creating a destination. Retail stores and employment spaces will anchor the Site, while residential spaces will be located within a diverse mix of building typologies. The Master Plan will incorporate neighbourhood amenities like, public parks, and schools, providing much needed services within walking / cycling distance to the growing Humber Bay Shores community. The creation of a network of pedestrian and cycling spaces is key in the success of this community.

4.3.2 Pedestrian Considerations

The 2150 Lake Shore Boulevard Master Plan emphasizes pedestrian mobility and aims to provide for a safe and attractive public realm within the Site in its entirety. In addition to the enlarged 1.0 hectare public park to be dedicated, a number of notable pedestrian enhancements are contemplated as part of the development proposal and illustrated in **Figure 23**:

- Multiple signalized crossing opportunities at intersections along Lake Shore Boulevard West;
- Enlarged east boulevard along Park Lawn Road, with widened pedestrian clearway;
- Wide pedestrian clearways along the Loop Road (Public Street 'B'); and,
- Pedestrian only spaces that facilitate pedestrian connections to / from transit infrastructure and the wider community.

Signalized Pedestrian Crossings along Lake Shore Boulevard

New signalized intersections along Lake Shore Boulevard present opportunities to improve pedestrian permeability to / from Lake Ontario and the Martin Goodman Trail. These new signalized intersections align with the existing street network south of Lake Shore Boulevard and respond to the pedestrian desire paths to / from the activity notes within the Site (e.g. the galleria, public park, and Park Lawn GO Station) within the 2150 Lake Shore Boulevard Site. The intersections will also provide new, safe crossing opportunities for those with visual or hearing impairments.

Geometric design considerations, such as reduced curb radii to manage vehicular turning speeds, and reduced lane widths to reduce vehicular speeds along Lake Shore Boulevard will help improve the pedestrian realm for pedestrians.

Supporting Transit

Anchored by the new GO station and transit hub, key pedestrian spaces such as station square and the pedestrian plaza will provide for a high quality pedestrian realm for commuters travelling / from the transportation hub. The transportation hub will be at the nucleus of the bus and streetcar services and of pedestrian pathways and cycle routes. The connection of these active infrastructure pieces will improve the attractiveness of non-auto modes, fulfill the "last mile" need, and maximise the reach of the walkable and bike-able transit watershed.

Enlarged East Boulevard on Park Lawn Road

The widening of the Park Lawn Road right-of-way (ROW), presents an opportunity to provide a high quality pedestrian realm within the widened east boulevard. In a typical section, a minimum 2.4 metre wide pedestrian clearway is buffered to the roadway by a two-way cycle track with planting buffers on either side. The wide boulevard protects the sidewalk and offers additional relief from vehicular traffic noise and vehicle exhaust emissions.

Loop Road (Public Street 'B') Pedestrian Realm

The Loop Road connects all the key locations with the development to / from Lake Shore Boulevard and the new Park Lawn GO station. The cross-section design incorporates a minimum 2.1 metres pedestrian clearway on both sides of the street, with opportunities to increase the effective width on the outside, as the space blends with both the "Largos" and Public Park to be dedicated.

Pedestrian Spaces

A number of pedestrian spaces within the Site help connect various spaces within the Site and provide meeting places for those in the community. These include:

- Boulevard Square, adjacent to Lake Shore Boulevard,
- Station Square, which provides a pedestrian pathway from the Loop Road (Public Street 'B' to the GO station)
- a pedestrian plaza that provides a pedestrian connection between the Loop Road (Public Street 'B') and Park Lawn Road; and,
- the pedestrian space within the Galleria, that provides mid-block connections within the heart of the development.





FIGURE 23 INTERNAL AND EXTERNAL PEDESTRIAN CONNECTIONS

2150 LAKE SHORE BOULEVARD WEST

4.3.3 Cycling Considerations

The 2150 Lake Shore Boulevard West development will introduce a number of new active infrastructure connections in the Humber Bay Shores area to make cycling a safe, more convenient form of transportation within the neighbourhood, and to provide residents cycling connections to the high quality existing recreational trails.

The Master Plan cycling network proposes the following:

- In-boulevard 1.8 metre one-way cycle track facilities along Lake Shore Boulevard West;
- Two-way 3.1 metre wide cycle track facilities along the east boulevard on Park Lawn Road;
- Two-way 2.9 metre wide cycle track facilities along the outer edge of the Loop Road; and,
- Protected intersections to improve cyclist safety and comfort.

The dedicated cycling facilities will connect prospective residents, visitors and employees of the Site to the major cycling routes in the area, including the Martin Goodman Trail, Humber River Trail, and future Mimico Creek Trail as illustrated in **Figure 24**.

Lake Shore Boulevard West Cycling Facility

1.8 metre wide in-boulevard cycle tracks are proposed on Lake Shore Boulevard between Park Lawn Road and the Relief Road (Street 'A'). These facilities will offer cyclists an added level of separation and protection from vehicular traffic, and improve the existing on-street bicycle lanes / sharrow condition on Lake Shore Boulevard today. It will serve as the main east-west cycling link within the neighbourhood, and connect to the other proposed north-south cycling facilities. The provision of these facilities are consistent with creating a complete "main street" on Lake Shore Boulevard, with provisions for all modes of travel. It is proposed to provide a 3.1 metre in-boulevard two-way cycle track on the widened east boulevard on Park Lawn Road. Landscape buffers on either side of the facility between the street and the pedestrian clearway will help provide additional comfort for cyclists from the road and offer a more defined travelled way.

This cycling facility will run north south from the Martin Goodman Trail and the Lake Shore Boulevard cycle tracks and provide a direct connection to the new Park Lawn GO station and its bicycle parking facilities. It offers an opportunity to provide a connection along the east side of Park Lawn road north of the Gardiner Expressway in the future, avoiding the need to intersect with the on and off ramps located on the west side.

The two-way cycle track will continue between the proposed bus platforms and pedestrian clearway in a reduced 2.8 metre two-way cycling facility with 0.3 metre buffers on both sides. Passengers will be able to wait for a northbound bus on the formal platform, or within the pedestrian plaza. Pavement marking and signage, along with the narrowed cycle facility will encourage slower speeds from cyclists and heighten awareness.

Loop Road (Public Street 'B) Cycling Facility

A 2.9 metre wide in-boulevard two-way cycle facility is proposed on the outside of the Loop Road, and is intended to provide cycling connections between the Lake Shore Boulevard cycle track and notable destinations within the Site, including the new public park to be dedicated and the new Park Lawn GO Station. The facility also provides a higher quality separated cycling route that is more approachable to a range of cyclists.

Protected Intersections

The design and incorporation of protected intersections at signalized intersections within the vicinity of the Site will help lower turning vehicular speeds, improve driver sightlines, and reduce the distance and time that cyclists are exposed to conflicts. These intersections will incorporate corner islands, to extend the protected separation as far into the intersection as possible and reduce the turn radius. The proposed signal phasing will consider the use of protected bicycle phases.



MAHLERPLEIN BICYCLE PARKING ENTRANCE, AMSTERDAM ZUID STATION (ANKA VAN VOORTHUIJSEN, 2019)

End Point User Facilities

The Master Plan will provide a range of long and short-term bicycle parking facilities and support facilities (e.g. shower and change rooms, bicycle repair stations, etc...) to meet the needs of all user groups including residents, visitors, employees, and commercial patrons. Access convenience and quality are underlying goals for the Master Plan.

Bicycle parking for the residential uses will be primarily located underground, a close to the surface as possible. Travel distance and reliance on mechanical means will be minimised when providing access to these rooms. Thought has been also given to place access to these rooms within close proximity to the cycling facilities and paths.

A separate bicycle parking facility, integrated into the D1 block, will provide for the long-term secured bicycle storage requested by Metrolinx as part of the station design. Access to this facility will be provided from both the Park Lawn Road cycle facility and from Station Square. This dedicated facility will further encourage cycling as a "last mile" mode of choice.

Visitor bicycle parking spaces will be dispersed through the master plan and provide for convenient, visible short-term spaces at-grade. They will be located close to building entrances and cycling facilities for ease of use.

These facilities will further improve the attractiveness of cycling as a mode of transport for short neighbourhood trips.





4.4 SITE PLANNING ELEMENTS

4.4.1 Vehicular Site Access Arrangement

Central to the 2150 Lake Shore Boulevard West Master Plan is the creation of an excellent public realm at-grade. A comprehensive approach to the planning of the vehicular elements is made possible by the single ownership of the Site, enabling vehicular elements (which include Site access driveways) to be removed from the heart of the Master Plan. The intrusion of servicing / loading and vehicle activity atgrade within the Master Plan was minimised by placing vehicular accesses along the periphery of the Site. This removed the need to provide multiple separate driveways for each building or development block.

To achieve the level of consolidation sought, below-grade tunnel connections between development blocks are required to provide connections to parking, pick-up / drop-off and loading facilities. They help enable a defined parking and loading circulation strategy, and facilitate the master plan parking strategy discussed in **Section 8.0**.

Site access locations generally remain consistent with the initial OPA application. They are summarized as follows:

Primary Site Accesses:

- Main signalized Driveway at Relief Road (Public Street 'A') ٠
- Signalized driveway at Park Lawn Road (D1 Block) ٠

Secondary Site Accesses:

- Right-in / right-out un-signalized driveway at Relief Road (Public Street 'A') (D3 Block)
- Right-in / right-out un-signalized driveway at Park Lawn Road (B Block)
- All-moves un-signalized driveway at Private Street 'D' (E Block)
- Signalized Site Driveway at Lake Shore Boulevard / Brooker's Lane (Block F)
- Compatibility of street network with landscape plan

Figure 25 illustrates the proposed Site access locations.

Sight Distance Considerations: 4.4.2

The design of the underpass and location of the signalized Site driveway access onto the Relief Road considered minimum sight distance requirements. A minimum travel length of approximately 135 metres is achieved, exceeding the minimum 110 metres outlined by the City of Toronto, for a vehicle making an un-signalized right-turn onto a road with a 60 km/h design speed. It is anticipated that the posted speed of the Relief Road will be 50 km/h.





FIGURE 25 VEHICULAR SITE ACCESS

4.4.3 Site-Wide Parking Deployment Strategy

The Master Plan includes provision of parking in a manner that supports the proposed development but responds to the sustainable transportation policies and the City of Toronto's strategic direction towards a multi-modal city. All parking facilities will be located belowgrade, and access will be relegated to Site driveways located on the periphery of the development to minimise the intrusion of driveways within the heart of the Master Plan.

The following is a summary of the key strategies that the Master Plan has adopted as part of the Site-wide parking strategy:

- Parking supply is generally minimised across the Site in response to the evolving transportation context, and higherorder transit that will be afforded to the Site;
- The non-residential (commercial) parking supply will be minimised and shared between various component uses on the Site (e.g. office and retail) to more efficiently use parking resources;
- Below-grade inter-block garage connections will enable the sharing of the non-residential (commercial parking) parking resources between development blocks, and better allow for the distribution of parking traffic to all Site driveways; and,
- No GO station commuter parking will be provided on the Site.

4.4.3.1 Key Changes

Since the initial OPA application, the non-residential (commercial) supply and arrangements have evolved. The main supply of commercial parking is now located on the 1st level below grade (P1) Site access locations from the Relief Road and Park Lawn Road generally remain consistent with the OPA application and will enable circulation to all levels of the below grade parking garage.

4.4.3.2 Non-Residential Parking Strategy

Park Lawn Road and Relief Road signalized Site driveways will provide for the primary accesses to the commercial parking areas. Secondary un-signalized accesses will also be provided.

The primary supply of non-residential parking will be located on the P1 (first level below grade) within Blocks A, C and D. "Tunnel" connections beneath the public roads, provide for an interconnected circulation loop, facilitating a well-defined search and circulation path. **Figure 26** illustrates the vehicle routing paths.

These non-residential "tunnel" connections are listed below:

- Block A (82.50) to Block C (83.00); and
- Block A (82.50) to Block D (83.00).

It is intended that all non-residential parking areas within the Site will be operated as a commercial parking garage. The main supply, located within the heart of the masterplan, will act as a Site-wide parking resource and help meet the overall demands of the Site.

The non-residential parking supply requirement is intended to be met upon the full build out of the Site. As part of the ongoing design development process, a review of the non-residential parking supply by phase will be undertaken.

In general, it is proposed to adopt a 1.0 space / 100 sq. metres of nonresidential GFA (i.e. office, retail) parking requirement to the Site. Temporary sharing will be considered when determining the overall Sitewide parking requirement. **Section 8.0** provides further information regarding the proposed parking supply.

4.4.3.3 Resident Parking Strategy

All Site accesses will provide access to the residential parking areas. Resident parking will be located within the lower levels of the underground parking area. As part of the residential parking strategy, the residential parking supply will be located relative to the demands generated by the residential towers, allowing residents to park below their respective residential towers.

Various below-grade "tunnel" connections and inter-floor ramps will allow residents flexibility and redundancy when entering / exiting the garage. This helps alleviate congestion at Site accesses and enables a more efficient distribution of traffic onto the local street network.

The minimum parking standards being proposed are reduced compared to the Zoning By-law provisions that would ordinarily apply to this area today. The proposed parking supply was guided by the following:

- The Site's proximity to existing and future transit and cycling facilities that provide non-automobile dependant travel connections across the city;
- The range of employment, retail and residential uses on the Site which reduce the need for area residents to use / own a car for general trip making;
- An evolving and expanding menu of transportation modes, which do not require reliance on privately, owned vehicles.

The Site is located directly adjacent to a new multi-modal transit hub with direct rail connections to downtown Toronto and the terminus for local streetcar and bus services. Recognizing the connections to higher order and local transit services, we are proposing an effective residential parking supply ratio of 0.4 spaces per unit, which is lower than the Zoning By-law requirements for the proposed development (a equivalent blended rate of 0.96 spaces per unit).

Section 8.0 provides a review of the appropriateness of the proposed residential parking supply.



FIGURE 26A SITE-WIDE PARKING FACILITY CONFIGURATION - GROUND FLOOR



FIGURE 26B SITE-WIDE PARKING FACILITY CONFIGURATION - P1 LEVEL



FIGURE 26C SITE-WIDE PARKING FACILITY CONFIGURATION - P2 LEVEL

100m



FIGURE 26D SITE-WIDE PARKING FACILITY CONFIGURATION - P3 LEVEL

100m



FIGURE 26E SITE-WIDE PARKING FACILITY CONFIGURATION - P4 LEVEL



FIGURE 26F SITE-WIDE PARKING FACILITY CONFIGURATION - P5 LEVEL

Date Plotted: May 13, 2020 Filename: J:7036-10\BA\Circulation\2020\0. April 14, 2020\BA-CHRISTIE-PARKING-R0-7036-10.dwg



FIGURE 26G SITE-WIDE PARKING FACILITY CONFIGURATION - P6 LEVEL

4.4.4 Site-Wide Loading Strategy

The Master Plan takes a comprehensive approach to planning by integrating a below-grade interconnected servicing system to provide access across multiple blocks and buildings. A centralised below-grade servicing network is being pursued for the development to consolidate access at a series of key driveway / ramps to avoid the proliferation of ramps, typical in conventional developments where each development block is considered individually. This helps to minimise the intrusion of servicing and loading vehicles within the heart of the Site and is central to creating an excellent at-grade public realm

4.4.4.1 Servicing Access

The placement of key loading accesses on the perimeter of the proposed development helps avoid larger vehicles from travelling through the heart of the development (e.g. along the Loop Road), opening opportunities to better enhance the public realm at-grade.

Three loading accesses are provided along the perimeter of the Site:

- Relief Road 'Street A' (signalized driveway)
- Relief Road 'Street A' (un-signalized driveway)
- Brooker's Lane / Lake Shore Boulevard West (signalized driveway)

It should be noted that majority of the servicing vehicles for blocks A to E will be entering and exiting from the Relief Road 'Street A' signalized driveway. This provides a defined and consolidated entrance and exit route for service vehicles for the entire development. Access to an atgrade loading area for two (2) type 'C' loading spaces in Block D3-3 is provided via an un-signalized driveway from the Relief Road 'Street A' to help facilitate move-in / move-out of residents. Access to an at-grade loading area for Block F is provided via a signalized driveway at Brooker's Lane / Lake Shore Boulevard. These three accesses are summarized in **Figure 27**.





4.4.4.2 Below-Grade Inter-Block Connections

The loading areas will be located beneath the development parcels and outside of the public road network and proposed public park with the exception of Block F and two (2) type 'C' loading spaces in Block D3-3. To achieve the level of consolidation sought, a number of below-grade tunnel connection at strategic locations are placed beneath the public streets to access development blocks separated from the loading accesses by public roads.

Key tunnels below public roads allow connections between Block D (where the servicing entrance from the Relief Road are) to Block A. An additional tunnel connection under the Loop Road creates a connection between Block A to Blocks C and E. The elevation of these connections occur where sufficient depth beneath the public road can be provided for utilities and landscaping requirements. **Figure 28** illustrates a summary of the below-grade inter-block connections.





FIGURE 28: BELOW-GRADE INTER-BLOCK CONNECTIONS

4.4.4.3 Loading Space Supply Strategy

Each block, or group of master plan buildings will have a centralised loading areas.. These loading facilities are well located relative to building cores and vertical circulation areas. Loading spaces are strategically placed based on the building's main usage. Multiple Type 'B' and 'C' loading spaces are placed near buildings with employment and retail cores to accommodate for frequent deliveries and pick-up. Type 'G' and 'C' loading spaces are placed near residential cores to accommodate for garbage collection and facilitate move-in / move-out of residents.



FIGURE 29A SITE-WIDE LOADING FACILITY CONFIGURATION - GROUND LEVEL





100m





100m

4.4.5 Site-Wide Pick-up / Drop-off Strategy

An emerging number of mobility options, such as car share, taxi, and ride-hail services, can help reduce the need for private vehicle ownership, and overall, reliance on the automobile for every day needs. Although these mobility options reduce the need for private automobiles and their storage in parking facilities, they require space to allow for the pick-up / drop off activities to occur in a safe and organised manner.

Pick-up / drop-off (PUDO) facilities have been incorporated into the master plan at-grade and within the underground facilities to accommodate the two main groups of users:

- 1. Passengers travelling to / from the GO / transit station; and,
- 2. Persons travelling to / from the various buildings and areas within the development.

The following locations are the proposed off-street Site PUDO facilities:

- Block B2 Below-grade PUDO loop basement facility (accessed from the Relief Road);
- Potential short-term parking spaces adjacent to building cores within the publicly accessible portions of the underground garage, and;
- **PUDO loop facility within the D3 Block**, adjacent to the potential school (accessed from the Relief Road).

In addition, the following are form part of the on-street pick-up / drop-off strategy for the Site:

- **At-grade Loop Road curbside laybys** (Public Street 'B'), adjacent to building entrances and key destinations; and,
- Short-term curbside drop-off along the Relief Road (Public Street A).

The locations of these facilities are illustrated in **Figure 30**.

Transit Hub Pick-Up / Drop-Off Strategy

Although Park Lawn GO Station will be an urban commuter rail station, and the majority of passengers will arrive either by transit, walking or cycling, Metrolinx has identified the need to provide thirty (30) passenger pick-up / drop-off (PPUDO) spaces to be provided in some form. A combination of proposed facilities will help meet this demand.

- A below-grade PPUDO facility within the P2 basement of the D2 block will provide in the order of 12 – 15 short-term spaces. Vertical circulation is provided within the development block allowing passengers to travel to / from ground level to access the station facilities.
- 2. Formal layby facilities on the Loop Road will allow for short-term temporary parking adjacent to Station Square. Activity associated with the short-trip vehicle use (i.e. ride-share, taxi) and accessible vehicle access (e.g. Wheeltrans) can be accommodated along the curb and help form part of the overall approach to station PPUDO. The close proximity to Station Square, and ultimately the transit hub, make it a convenient place for a portion of the GO station pick-up / drop-off activity to occur. In the order of four (4) vehicles can be accommodated within the layby spaces adjacent to Station Square.
- 3. Informal curbside drop-off is expected to occur along the eastbound curb lane of the **Relief Road** (Public Street A) adjacent to the north GO station entrance. The provision of only one through eastbound through lane from the Gardiner off-ramp, as well as a single southbound left-turn lane allows for the flexible use of the curb lane for non through traffic. The length of curb can accommodate approximately 12 -15 vehicles.

The provision of these spaces will help fulfill Metrolinx PPUDO requirements to provide thirty (30) pick-up / drop-off spaces, respond to the practical need for the station related PPUDO demands.



Development-Related Pick-up / Drop Strategy

A number of different facilities around the Site are proposed to accommodate the front-door PUDO demands associated with the development. A combination of proposed facilities will help accommodate these activities.

- A below-grade PPUDO facility within the P2 basement level of the D2 block will provide for the office and residential uses in the D1 and D2 block
- Designated short-term parking spaces near retail building entrances and vertical circulation elements within the P1 level of the commercial garage beneath retail uses (i.e. Block A, C, and D) will provide for the short-term parking associated with the retail uses of the development.
- Designated short-term parking spaces near residential tower core locations within the underground parking garage will help meet the demands related to the residential pick-up / drop-off activity.
- 4. Formal layby facilities on the Loop Road will allow for shortterm temporary parking adjacent to the development blocks. Activity related to short-trip vehicle use and accessible vehicle can be accommodate with the formal laybys. The 6.6 metre two-way vehicular portion between Private Street 'D' and Public Street 'C', will allow for informal, flexible curbside usage on a controlled limited basis, while still accommodating for the low levels of vehicular traffic expected on this street.
- 5. D3 Block short-term parking spaces within the P1 level of the garage, accessed from the Relief Road un-signalized Site access will, in addition to the school, accommodate any residential related PUDO demands within the below-grade.

The formal below-grade PUDO facilities, combined with the spaces provided along the street system will allow for a practical, responsive pick-up / drop-off strategy for the Site.

School Pick-Up / Drop-off Facility

Although the school (located within the D3) block is within walking distance to the immediate neighbourhood and catchment area, a number of parking spaces is proposed within the P1 level of the D3 block be designated and allocated for short-term parking during peak hours. Although pick-up / drop-off activity is not encouraged at an urban school location, the provision of these parking spaces will help accommodate those who live outside the immediate neighbourhood and families with special needs / small children. The facility and the parking spaces will be accessed from the un-signalized driveway off the Relief Road (Public Street 'A') and will be directly adjacent / below the school uses.

A Dynamic Street Space

Adaptable curb infrastructure and the use of technology can allow lanes, or curbside space to become dynamic, serving different purposes across the day. A programmable management system that is applied Site wide can change and communicate to vehicles / drivers the usage of the space depending on priorities over the time of day. These technologies, which include availability sensors, dynamic signs and pricing, can all help manage the use of the space. The feasibility and use of these technologies on the public street infrastructure will continue to be explored through the planning process.





FIGURE 30A PICK-UP / DROP-OFF FACILITIES - GROUND LEVEL

BA GROUP 7036-10





4.4.6 Site-wide Bicycle Parking Strategy

The redevelopment of the 2150 Lake Shore Boulevard west proper provides a substation opportunity to create a local environment that will establish cycling as a strong and viable travel options for a wide range of travel needs across Humber Bay Shores and the surrounding area. This includes trip made to / from the planned Transit Hub and the commercial centre of the Master Plan.

A range of long-term and short-term bicycle parking facilities and supporting facilities (e.g. shower and change rooms, repair stations, etc...), consistent with Toronto Green Standard requirements will be provided across the Master Plan to provide for the needs of all user groups. These general location of facilities are illustrated in **Figure 31**.

Bicycle Parking Access Strategy

It is intended that bicycle parking facilities in the masterplan be located within the levels closest to grade. Although access to these facilities are still being developed and designed as part of the master plan, passive modes of vertical circulation (i.e. ramps, stairs with bicycle grooves) will be incorporated into the design to further improve the attractiveness of cycling as a viable mobility option.

Transit Hub Station Bicycle Parking

Station bicycle parking facilities will be included and integrated into the D1 block and at convenience surface locations adjacent to the transit hub as part of the strategy to establish cycling as a strong commuting "Last Mile" option. A minimum of 192 covered bicycle parking spaces and 96 secured bicycle parking spaces will be located within the vicinity of the GO station building, in accordance with Metrolinx requirements.

Bicycle Sharing

Bike Sharing and other mobility services (e.g. scooters) will help form part of the masterplan to maximum active modes of transportation. The incorporation of bike-share stations at key locations with the master plan will continue to be explored through the design of the project.

Surface Bicycle Parking Strategy

Surface bicycle parking has not been incorporated into the landscape master plan design yet, however; the provision of a portion of the required short-term bicycle parking spaces outside of the main entrances of key destinations (e.g. retail, community centre, offices) will improve the level of convenience for cyclists. The quantity and exact location of these spaces will be determined at later stages of the planning and design of the master plan.



STRAWINSKYLAAN STATION, JAN DE VRIES, 2018





FIGURE 31A SITE-WIDE BICYCLE PARKING FACILITIES - GROUND FLOOR



100m





100m

5.0 TRANSPORTATION DEMAND MANAGEMENT PLAN

5.1 OBJECTIVE & GOALS

The Integrated Mobility (TDM) Plan is proposed to guide the provision of viable alterative personal transportation options beyond the singleoccupant, private automobile. The objective is to encourage travel behaviour and patterns that are sustainable.

The primary goals of the Mobility Plan 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 objective and goals, 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 more 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.

5.2 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 Mobility Plan objective can be achieved by influencing mobility choice and patterns through the following strategies:

- Minimize External Travel Demands
- Improve and Increase Pedestrian Mobility
- Facilitate and Increase Transit Use
- Support and Increase Bicycle Use
- Reduce and Manage Parking Supply
- Reduce Auto Ownership and Use
- Increase TDM Communication and Awareness

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.



5.3 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:

A. External Infrastructure and Facilities Planning

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.

B. Site Planning and Design

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

C. Operations and Management

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

D. Post Occupancy 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.

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

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

5.4 **PROPOSED MOBILITY (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, ensuring the success for the Mobility Plan strategies is important.

To this end, Mobility Plan strategies are presented with targeted "intents" (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.

A brief overview of the proposed Mobility Plan strategies is provided below, along with a detailed summary of each measures provided in Table 4.

It is important to note that these TDM strategies will be continuously refined throughout the application process.

Minimize External Travel Demands

The site plan promotes shorter travel trips and walkability through providing a range of land uses that are convenient to prospective residents, visitors, customers, and employees, including the employment, entertainment, and hybrid live-work spaces.

The development plan will not only internalize future site-related travel demands, but as well, the trips associated with the site-surrounding community. The vision and planning of the Master Plan will establish a heart to the Humber Bay Shores community, providing a vibrant centre where people can locally shop, eat, play, work, live. The capture of the site and neighbourhood trips by the local amenities is a key factor in managing site and area travel demands.

Improve and Increase Pedestrian Mobility

The site will increase pedestrian mobility by creating an urban realm and pedestrian-focused environment that is safe, easily accessible, and interactive between multiple users. The provisions of a park, mid-block connections, and landscaped boulevards will improve the overall experience of pedestrians.

Facilitate and Increase Transit Use

The delivery and integration of transit is a high priority for the site development. The planned improvements and additional service allows the site to promote transit use by providing direct linkages to key destinations, creating a multi-modal transit node along a major corridor, and collaborating with transit agencies to incentivize transit use.

More specifically, major transit moves include the provision of the new Park Lawn GO Station on the Lakeshore West GO rail corridor. Relocation and alignment of LRT services along Lake Shore Boulevard West and internal to the site will establish a completely integrated Regional (GO) and Local (TTC) transit services. Working with TTC to maximize and surface transit (bus) integration and expansion is being pursued. The priority in supporting pedestrian mobility is also essential in facilitating transit access for all users. The porosity of the site and emphasis on public realm is interrelated within this goal.

Support and Increase Bicycle Use

The site provides safe, convenient, and reliable cycling connections and facilities by providing abundance bicycle parking and shower facilities for resident and non-resident use. The site also provides convenient bicycle access at key locations and build facilities directly within the transportation network.

Bicycle parking supplies and supporting shower and bike repair facilities are being provided to meet Toronto Green Standards (TGS) Tier 1, with

additional bike-share facilities across the site including, notably, around the new GO Station / transit hub to help with end-user and last mile mobility solutions.

Reduce and Manage Parking Supply

This strategy can be achieved through the site's provision of a substantially lower parking supply than what is required by current Zoning By-law standards, simultaneously with the major increase in proximity, convenience, and availability of other non-auto modes. Further, the site proposes adopting shared parking spaces between non-residential uses to maximize efficiency based on typical parking utilization patterns.

Reduce Auto Ownership and Usage

Similar to the previous strategy, the plan aims to achieve reducing auto ownership and use by limiting the availability of parking and drivable space. The space conventionally used for auto movement can be retransformed into urban spaces prioritized for pedestrians and cyclists. In addition, the site plans to establish car share programs to reduce single occupancy vehicle use and encourage carpooling.

Increase TDM Communication and Awareness

The overall Master Plan and its strategies can be supported on an ongoing basis by establishing a TDM coordinator office, frequently tracking travel data operated by transportation agencies and other collaborators, and utilizing the advancement of technology to develop user-friendly applications (i.e. bike share availability and real-time transit schedules).

A detailed summary of the Mobility Plan is outlined in **Table 4.** It is noted that the proposed measures will continue to be refined in later planning and development stages of the Christie's site.
TABLE 4 MOBILITY TRAVEL PLAN

Strategy		Intent	Possible Measures	Proposed Measures
Minimize External Travel Demands		Reduce the need for residents, employees and visitors to travel off-site by offering a variety of residential and non-residential uses on-site, shorten travel distances to services and amenities, and support residents that work from home. Providing a variety of land uses within the site reduces the need to make further travel trips as a result of proximity and level of convenience.	 B. Site Planning & Design 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 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. 	 The proposed development offers a variety of uses – employment, retail and residential– that allow people to meet multiple needs on-site. The introduction on new community facilities on the site will serve the wider Humber Bay Shores neighbourhood will bring these amenities within a short walking / cycling distance from their residences. This will reduce the auto-based travel demands for residents of the 2150 Lake Shore Boulevard site, but also for neighbourhood residents. This will create internal site trips that are easily made or more convenient on foot.
an Mobility		Enhance the walkability of the site and adjacent neighbourhood, assist in creating safe and accessible pedestrian linkages to the site	 A. External Infrastructure Planning Work with the City towards realizing improvements to area pedestrian infrastructure quality of the public realm and the convenience of pedestrian linkages / road crossings along the site boundaries and in the site area. 	3. New mid-block connections and crossing opportunities along Park Lawn Road and Lake Shore Boulevard West are proposed, as part of the Master Plan.
and Increase Pedestr	Ŕ	The quality of the public realm and general accessibility surrounding the site influences the travel choices of residents,	 B. Site Planning & Design Provide high-quality, safe pedestrian-scale connections from the site property to the surrounding public street network. Facilitate convenient building access and connectivity. Provide accessible and universal connectivity throughout the site, meeting appropriate accessibility codes and guidelines. 	 Increased pedestrian permeability through the site. Vehicular accesses are minimized and exterior to the site, creating pedestrian oriented internal streets. Widened sidewalks, improved boulevards, and new signalized pedestrian crossings to improve the pedestrian realm and support the anticipated pedestrian activity.
Improve		employees, and visitors of the proposed development.	 C. Operations & Management Maintain on-site pedestrian facilities to enable year-round pedestrian access and usage. 	7. Private pedestrian sidewalks and pathways will be maintained year-round to ensure reliable pedestrian access.



TABLE 3 MOBILITY TRAVEL PLAN CONTINUED

Strategy		Intent	Possible Measures	Proposed Measures
sit Use	ť	Increase awareness and viability of transit travel options for commuter and recreational travel purposes, capitalize on the improving transit context, and support the use of transit for short and long-distance travel by site users. The site's access to local and regional transit services provides convenient connections across the City, into the downtown core, and across the GTA at large.	 A. External Infrastructure Planning Work with City / regional transit operators and other stakeholders to review and improve accessibility to existing / new surface transit routes. Establish transit stops at key neighbourhood locations. 	 8. Construction of a new Park Lawn GO Station. 9. Creation of a new multi-modal transit node along the Lake Shore West GO corridor. 10. Provision of new dedicated LRT track facilities along
Facilitate and Increase Tran			 B. Site Planning & Design Provide accessible and high-quality pedestrian connections towards transit from the site. Provide facilities that support transit passenger travel including weather protection and amenities along key travel paths within the site. Facilitation of accessible transit services (e.g. WheelTrans). 	 Lake Shore Boulevard West and to the transit hub. 11. Realignment of the existing TTC surface transit services to deliver an integrated and central mobility hub. 12. Minimize transit transfer times by creating an integrated transit station between TTC streetcars, buses, and GO trains.
			 C. Operations & Management Encourage on-site PRESTO card sales. Provide transit service information for site users. Offer transit promotion programs. Consider providing shuttle service to key destinations. 	 Collaboration with public transit agencies (TTC and Metrolinx) to coordinate and plan for service expansion. Provision of transit screens and real-time information in publicly accessible areas to further facilitate transit use.
Support and Increase Bicycle Use	Å	Provide physical and operational infrastructure on- site and cooperate with the City to enhance bicycle connectivity within the area and the broader network. B The site's proximity to these prospective cycling connections will provide safe, convenient, and reliable pathways that connect to the downtown and adjacent communities surrounding the B	 A. External Infrastructure Planning Work with the City to improve existing facilities and provide new connections in the site area 	15. Cycling facilities and connections will be provided and enhanced at the site (i.e. Park Lawn Road, Relief Road, and Lake Shore Boulevard) and within the immediate area.
			 B. Site Planning & Design Provide secure long-term bicycle parking in convenient and accessible locations Provide short-term bicycle parking distributed across the site in accessible locations 	16. The proposed bicycle parking supply will meet TGS Tier 1 standards.17. Convenient access to the bicycle parking in the new GO Station will be provided via the Relief Road.
			 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 within a future station and a station of the provide dedicated station of the provide station of the provid	 Provision of dedicated cycling facilities on the Relief Road, Lake Shore Boulevard, Park Lawn Road, and Loop Road. Consideration will be given to providing bike-share locations pear and around the new GO station
		site.	 C. Operations & Management Consider bike-share stations within the site at convenient locations Encourage an on-site bicycle repair / maintenance centre, or bicycle parking valet 	 20. Monitor bike share locations and real-time availability of supply through a smartphone app that is convenient to site users and visitors. 21. Provision of cycling services and repair stations / maintenance centre within development blocks.

TABLE 2 MOBILITY TRAVEL PLAN CONTINUED

Strategy		Intent	Possible Measures	Proposed Measures
ade Parking Supply		Reduce car ownership needs and the attractiveness of car use for residents, employees and visitors by encouraging higher vehicle occupancy and the use of other travel modes. The reduced of residential and non-residential parking	 B. Site Planning & Design Establish appropriate minimum parking supply standards for the proposed land uses and buildings that may be reduced compared to the existing Zoning By- law; Adopt a sharing of all non-residential parking to maximize the efficient use of the available supply; and Provide preferred high-occupancy vehicle / carpool parking. 	 22. Residential and non-residential parking will be provided at reduced parking standards. 23. Non-residential parking will be provided within a paid commercial parking facility. 24. Sharing of parking amongst non-residential uses will maximize the efficiency of the supply.
Reduce and Mana		standards applied to the proposed development encourages site users to re- consider the use of a car.	 C. Operations & Management 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; and Offer parking to residents 'unbundled' from unit purchase. 	25. Non-residential parking will be provided within a paid commercial parking facility. The parking fee structure will respond to the parking demand to encourage non-automobile usage.26. Residential parking will be offered unbundled when units are purchased.
e Auto Ownership & Usage		Reduce the need for residents and employees to own a car for occasional travel and reduce the likelihood of privately-owned car use as a primary travel mode, particularly during peak periods. Reducing the use and ownership of private vehicles reducse traffic demand within the site itself and the local street network. This allows greater opportunities for a more efficient	 C. Operations & Management 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 	27. Provision of information to site residents and employees regarding the availability of car-share provided within the area.28. Car-share will be provided on the site within publically accessible areas of the parking garage.
Reduc		use of vehicle parking provided on-site (i.e. non-auto infrastructure).	 D. Post-Occupancy Monitoring 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 	29. Establish a monitoring program for the car-share usage provided on the site.

TABLE 2 MOBILITY TRAVEL PLAN CONTINUED

Strategy		Intent	Possible Measures	Proposed Measures
ommunication and Awareness	.	Inform and raise awareness of non-automobile travel options for the site, actively promote non-automobile travel options, services, and develop and coordinate TDM programs / indicatives with employment tenants within the context of the broader strategies in place. The provision of ongoing promotional and educational	 C. Operations & Management 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) 	 30. New residential, office and retail tenants will be made aware of the existing transit services and active transportation facilities on-site and in proximity to the site. 31. Wayfinding signage will be provided to raise awareness about the transit services offered on-site and within the area.
Increase TDM C		ability to fully adapt the strategy based on changing demand and special circumstances as they may arise.	 D. Post-Occupancy Monitoring 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 	32. Provision of transportation information screens located in accessible (pedestrian focused) locations to inform travelers, on an on-going basis, the time, location, and travel schedules of the multiple travel options available on-site (i.e. broader taxi / ride- share provider service networks, transit / bike share provisions and other transportation services).



FIGURE 32 MOBILITY PLAN ELEMENTS

6.0 TRAVEL DEMAND UPDATE

Overview

As part of the October 2019 OPA submission transportation report, a travel demand analysis was undertaken to determine the projected multimodal Site trip generation and assign and assess its impacts on the surrounding transportation services and infrastructure.

Following the preparation of the October 2019 OPA submission transportation report, some changes have been made to the development plan and as such, this section provides an update to the travel demand analysis taking these changes into consideration.

This section is organized as follows:

- 1. Provide an upfront summary of the changes to the development plan in **Section 6.1**;
- 2. Provide the subsequent changes to the projected multimodal trip generation of the proposal and **Section 6.2**; and
- 3. Subsequently provide details on the multimodal trip forecasting methodology in **Section 6.3**.

It is noted that some capacity analysis updates were also undertaken and are discussed in **Section 7.0**.

As outlined in the following sections, overall the revised development plan results in a reduction to projected auto driver trips during all peak periods considered, compared with the previous proposal.

It is noted that since the submission of the October 2019 OPA transportation report, formal comments have been received from the City of Toronto, some of which are in relation to the travel demand and capacity analyses.

In order to keep the scope of this report focused on the current updates, the comments received by the City of Toronto will be addressed under a separate cover at a later date.

6.1 UPDATED DEVELOPMENT PLAN

As previously discussed, some changes have been made to the development plan following the preparation of the October 2019 OPA submission transportation report.

Key changes to the development plan include:

- Minor changes to the proposed residential unit numbers and the office and retail floor areas;
- Removal of the hotel from the development plan;
- Addition of 2 potential schools to the development plan combining for a total enrolment of 1,100 students; and
- Removal of Street A (the northern east-west road which connected the Loop Road to Park Lawn Road) from the development plan.

Table 5 provides a summary of the change to the development statistics.

Overall, the changes are minor, with the most notable change the replacement of the previously proposed hotel use with the potential schools.

TABLE 5 CHANGE TO DEVELOPMENT STATISTICS

Land Use	Previous Proposal (October 2019)	Current Proposal (May 2020)	Change
Residential	7,455 units	7,139 units	-316 units
Office	41,924 m ²	64,392 m ²	+22,468 m ²
Retail	42,701 m ²	36,659 m²	-6,042 m ²
Hotel	350 rooms	-	-350 rooms
Schools	-	2 schools 1,100 students	+1,100 students

6.2 UPDATED MULTIMODAL TRIP GENERATION

The updated multimodal Site trip generation associated with the current proposal and the resultant change from the previous proposal is summarized in **Table 6** and **Figure 33**.

As shown, the proposal is expected to result in a reduction to overall person trips, auto driver trips, GO Transit trips and local transit trips during the PM and Saturday peak periods.

During the AM peak period, a minor increase to person trips is projected. The increase to person trips during the AM peak period is largely associated with internal walking trips. Notably, a reduction to auto driver trips is projected during the AM peak hour.

It is also noted that whilst there is an increase to pick up / drop off trips during the AM and PM peak periods, this change is associated with school pick up / drop off trips that are expected to be in the form of passby trips made by parents or guardians on the way to / from other activities, such as work. As such, these trips are not expected to result in any additional auto driver trips on the road. Overall, the revised development plan results in a reduction to projected auto driver trips during all peak periods considered, compared with the previous proposal.

The methodology for determining the projected multimodal Site trip generation is outlined in the following section.

TABLE 6PROJECTEDCHANGETOMULTIMODALSITETRIPGENERATION (TWO-WAY)

Mode	Previous Proposal (October 2019)	Current Proposal (May 2020)	Change
Auto Driver	1,350 (1,780)	1,290 (1,645)	-60 (-135)
	[2,615]	[2,265]	[-350]
Auto	355 (480)	325 (430)	-30 (-50)
Passenger	[710]	[625]	[-85]
Auto PuDo	20 (15)	105 (25)	+85 (+10)
	[15]	[15]	[-]
Transit GO	1,270 (1,175)	1,265 (1,145)	-5 (-30)
	[1,105]	[995]	[-110]
Transit Local	1,140 (1,150)	1,185 (1,055)	+45 (-95)
	[1,320]	[1,135]	[-185]
Internal	1,345 (1,795)	1,770 (1,745)	+425 (-50)
(Walk)	[1,775]	[1,655]	[-120]
Linked	1,040 (2,650)	835 (2,175)	-205 (-475)
(Walk)	[1,770]	[1,410]	[-360]
Walk	50 (95)	55 (105)	+5 (+10)
	[165]	[150]	[-15]
Cycle	245 (270)	230 (270)	-15 (-)
	[330]	[290]	[-40]
Total	6,815 (9,410)	7,060 (8,595)	+245 (-815)
	[9,805]	[8,540]	[-1,265]

1. xx (xx) [xx] = AM peak hour (PM peak hour) [Saturday peak hour]





FIGURE 33 UPDATED TOTAL SITE TRIPS BY MODE

2150 LAKE SHORE BOULEVARD WEST

6.3 MULTIMODAL TRIP FORECASTING METHODOLOGY

Overview

This section provides a summary of the projected multimodal trip generation by land use and the associated methodology, with the sections organized as follows:

- 1. The multimodal trip generation by land use is summarized in **Section 6.3.1** and **Table 7**.
- 2. The trip forecasting methodology for the previously proposed uses (residential, office and retail) is briefly discussed in **Section 6.3.2**.
- 3. The trip forecasting methodology for the potential schools (a new land use not included in the previous proposal) is outlined in **Section 6.3.3**

6.3.1 Multimodal Trip Generation by Land Use

The projected multimodal site trip generation by land use is summarized in **Table 7**.

6.3.2 Residential, Office, Retail Trip Forecasting Methodology

The methodology to project the multimodal site trip generation associated with the previously proposed uses (residential, office and retail) remains consistent with the methodology as outlined in the October 2019 OPA submission transportation report.

Mode	Residential	Office	Retail	School	Total
Auto Driver	930 (800) [795]	240 (230) [60]	100 (605) [1,410]	20 (10) [0]	1,290 (1,645) [2,265]
Auto Passenger	270 (230) [240]	30 (30) [0]	25 (170) [385]	0 (0) [0]	325 (430) [625]
Auto PuDo	20 (15) [15]	0 (0) [0]	0 (0) [0]	85 (10) [0]	105 (25) [15]
Transit GO	955 (815) [820]	285 (270) [50]	5 (60) [125]	20 (0) [0]	1,265 (1,145) [995]
Transit Local	845 (710) [695]	205 (190) [45]	45 (145) [395]	90 (10) [0]	1,185 (1,055) [1,135]
Internal (Walk)	355 (480) [480]	95 (90) [20]	815 (1,125) [1,155]	505 (50) [0]	1,770 (1,745) [1,655]
Linked (Walk)	0 (0) [0]	0 (0) [0]	835 (2,175) [1,410]	0 (0) [0]	835 (2,175) [1,410]
Walk	20 (15) [15]	30 (30) [10]	5 (60) [125]	0 (0) [0]	55 (105) [150]
Cycle	175 (150) [155]	50 (60) [10]	5 (60) [125]	0 (0) [0]	230 (270) [290]
Total	3,570 (3,215) [3,215]	935 (900) [195]	1,835 (4,400) [5,130]	720 (80) [0]	7,060 (8,595) [8,540]

TABLE 7 PROJECTED MULTIMODAL SITE TRIP GENERATION BY LAND USE (TWO-WAY)

Notes:

1. xx (xx) [xx] = AM peak hour (PM peak hour) [Saturday peak hour]

6.3.3 School Trip Forecasting Methodology

6.3.3.1 Overview

For the purpose of this analysis, a first principles assessment has been undertaken to estimate the multimodal trip generation associated with the schools.

6.3.3.2 Type of Schools

It is understood that at this stage, one school is intended to be Toronto District School Board (TDSB) and one school is intended to be Toronto Catholic District School Board (TCDSB). It is understood that both schools are intended to be elementary schools.

6.3.3.3 Enrolment Numbers

For the purpose of this assessment, it is assumed that the total enrolment of 1,100 students is spread equally across the two schools (i.e. enrolment of 550 students per school).

6.3.3.4 Staff Numbers

A review of student to staff ratios at existing public elementary schools was undertaken based on information in the document titled "York *Region Safety and Traffic Circulation at School Sites Guideline Study*" (prepared by MMM Group, dated July 1999), and is outlined in **Table 8**.

Based on this, a conservative student to staff ratio of 12 has been adopted for the purpose of this analysis. Application of this rate to the assumed 550 students at each school, equates to 46 staff at each school (92 total).

TABLE 8 STUDENT TO STAFF RATIOS AT PUBLIC ELEMENTARY SCHOOLS

	No. Staff	No. Students	Student to Staff Ratio
William Armstrong Public School	30	416	13.9
Whitchurch Highlands Public School	30	340	11.3
St Nicholas Elementary School	54	793	14.7
Charles Howitt Public School	287	330	11.8
W.J. Watson Public School	36	470	13.1
Walter Scott Public School	42	568	13.5
Holland Landing Public School	38.5	501	13.0
Rosedale Heights	39	584	15.0
Highview Public School	56	659	11.8
Light of Christ Elementary School	398	586	15.0
Holy Name Elementary School	22.5	312	13.9
Average	13.4		
Adopted			12.0

Notes:

 Source: York Region Safety and Traffic Circulation at School Sites Guideline Study (prepared by MMM Group, dated July 1999).

6.3.3.5 Arrival and Departure Patterns

In order to determine the percentage of students arriving in the AM peak hour and departing in the PM peak hour, arrival and departure proxy data was sourced from existing schools. A first principles assessment was also undertaken on the basis of trip generation rates outlined in the ITE Trip Generation Manual 10th Edition + Supplement, Land Use Code 520 (Elementary School).

The ITE first principles assessment is summarized in **Table 9**. To determine arrival and departure patterns in the AM and PM peaks respectively, the assessment looks at the peak direction only (i.e. inbound in the AM peak and outbound in the PM peak) on the basis that the opposite direction is assumed to be attributed to the opposite component of a pick up/drop off vehicle trip.

TABLE 9 ESTIMATED PEAK HOUR STUDENT ARRIVAL AND DEPARTURE RATES – ITE 10TH EDITION + PLUS SUPPLEMENT FIRST PRINCIPLES ASSESSMENT (LUC 520 ELEMENTARY SCHOOL) ELEMENTARY SCHOOL

	AM Peak Hour (Inbound)	PM Peak Hour (Outbound)
Vehicle	0.36 ¹	0.09 ²
Walk+Bike+Transit	0.25 ³	-
Total Person Trips	0.61	0.094
Student Component ⁵	0.56	0.08
Staff Component	0.05	0.01
% students arriving in AM peak hour/departing in PM peak hour	56%	8%

Notes:

1. Based on 2-way ITE rate of 0.67, of which 54% are inbound.

2. Based on 2-way ITE rate of 0.17, of which 52% are outbound.

 Based on 2-way ITE rate of 0.25 and assumes 100% are inbound (ITE does not provide an inbound/outbound split).

 ITE does not provide a Walk+Bike+Transit rate for PM peak. Assumes all PM peak school based trips as determined by ITE at survey locations are vehicle trips.

5. Based on student to staff ratio of 12, assuming same arrival and departure patterns for staff and students.

The proxy data and the results of the ITE first principles assessment are summarized in **Table 10**. For the purpose of this assessment, it is assumed that the AM road network peak hour aligns with the AM school peak hour. The PM peak hour is based on the road network peak specifically.

TABLE 10 PEAK HOUR STUDENT ARRIVAL AND DEPARTURE RATES

	% students arriving in AM peak hour	% students departing in PM peak hour
ITE First Principles ¹	56%	8%
Toronto Prep School ²	64%	15%
Bishop Strachan School ³	70%	11% ⁴
Average	63%	11%
Adopted⁵	60%	10%

Notes:

1. As outlined in **Table 9**

2. Based on arrival and departure surveys undertaken by BA Group in October 2014 at Toronto Prep School, a private secondary school located at 250 Davisville Ave

 Based on arrival and departure surveys undertaken by BA Group in October and November 2018 at Bishop Strachan School, a private school servicing kindergarten to grade 12 located at 298 Lonsdale Rd

4. The PM peak surveys undertaken at Bishop Strachan ended at 4:30, with 89% of students having already departed. Conservatively assumes remaining 11% all depart during PM peak hour.

5. Adopted for both students and staff

Based on the above data, an arrival rate of 60% has been adopted for the AM peak hour and a departure rate of 10% has been adopted for the PM peak for both students and staff (assuming the same arrival and departure patterns). A summary of the projected arrivals and departures is provided in **Table 11**. During the Saturday peak, trip generation associated with the schools is projected to be zero.

TABLE 11 PROJECTED ARRIVALS AND DEPARTURES

	%	TDSB	TCDSB	Total
Total		550 students 46 staff	550 students 46 staff	1,100 students 92 staff
AM Peak Hour Arr.	60%	330 students 30 staff	330 students 30 staff	660 students 60 staff
PM Peak	10%	35 students	35 students	70 students

6.3.3.6 Projected Student Catchment

Given the substantial density proposed within the Site and the immediate vicinity of the Site, it is expected that the large majority of students would be drawn from Site and the balance of the local area. As such, it is assumed that 100% of the TDSB enrolment comes from the local area. The TCDSB has the potential to draw students from further afield. For the purpose of this analysis, it is assumed 75% of the TCDSB enrolment comes from the local area, with the remaining 25% coming from external areas. The projected student catchments are summarized in Table 12.

TABLE 12 **PROJECTED STUDENT CATCHMENT PERCENTAGES**

	TDSB	TCDSB
Local	100%	75%
External	0%	25%
Total	100%	100%

Based on the above, the projected catchments of the students arriving and departing in the AM and PM peak hours respectively is summarized in Table 12.

TABLE 13 PROJECTED CATCHMENTS OF STUDENTS ARRIVING AND DEPARTING IN PEAK HOUR

	TDSB	TCDSB	Total		
Local	330 (35) [0]	250 (25) [0]	580 (60) [0]		
External	0 (0) [0]	80 (10) [0]	80 (10) [0]		
Total	330 (35) [0]	660 (70) [0]			
1. xx (xx) [xx] =	AM peak hour (PM p	eak hour) [Saturday pe	eak hour]		

xx (xx) [xx] = AM peak hour (PM peak hour) [Saturday peak hour]

6.3.3.7 Projected Student Mode Choice

Given the substantial density in the immediate area of the school, it is expected that the majority of local trips will be walking trips, with the potential for some pick up/drop off trips in the form of pass-by trips made by parents or guardians on the way to/from other activities, such as work.

For the external trips, it is expected that these would be school bus trips (categorized as "local transit" trips for consistency with previous analyses).

The adopted mode choice percentages are summarized in Table 14 and the projected mode choice of students arriving and departing in the AM and PM peak hours respectively is summarized in Table 15.

TABLE 14 PROJECTED MODE CHOICES BY CATCHMENT – STUDENTS

	Local	External			
Auto Driver	0%	0%			
Auto Passenger	0%	0%			
Auto PuDo ¹	15%	0%			
Transit GO	0%	0%			
Transit Local ²	0%	100%			
Internal (Walk)	85%	0%			
Linked (Walk)	0%	0%			
Walk	0%	0%			
Cycle	0%	0%			
Total	100%	100%			

Notes:

1. It is expected that all auto PUDO trips associated with the local area will be pass-by trips.

2. School bus trips are categorized as local transit trips.

TABLE 15 PROJECTED MODE CHOICE OF STUDENTS ARRIVING AND DEPARTING IN PEAK HOUR

	TDSB	TCDSB	Total		
Auto Driver	0 (0) [0]	0 (0) [0]	0 (0) [0]		
Auto Passenger	0 (0) [0]	0 (0) [0]			
Auto PuDo ²	50 (5) [0]	35 (5) [0]	85 (10) [0]		
Transit GO	0 (0) [0]	0 (0) [0]	0 (0) [0]		
Transit Local ³	0 (0) [0]	80 (10) [0]	80 (10) [0]		
Internal (Walk)	280 (30) [0]	215 (20) [0]	495 (50) [0]		
Linked (Walk)	0 (0) [0]	0 (0) [0]	0 (0) [0]		
Walk	0 (0) [0]	0 (0) [0]	0 (0) [0]		
Cycle	0 (0) [0]	0 (0) [0]	0 (0) [0]		
Total	330 (35) [0]	330 (35) [0]	660 (70) [0]		

Notes:

xx (xx) [xx] = AM peak hour (PM peak hour) [Saturday peak hour]
 It is expected that all auto PUDO trips associated with the local are

It is expected that all auto PUDO trips associated with the local area will be pass-by trips.

3. School bus trips are categorized as local transit trips.

6.3.3.8 Projected Staff Mode Choice

For the purpose of this analysis, the adopted mode splits for staff are in line with the assumptions for the office land use on the Site, outlined in **Table 16**.

The resulting projected mode choice of staff arriving and departing in the AM and PM peak hours respectively is summarized in **Table 17**.

TABLE 16 PROJECTED MODE CHOICES BY CATCHMENT – STAFF

	Mode Split
Auto Driver	25%
Auto Passenger	5%
Auto PuDo	0%
Transit GO	30%
Transit Local	20%
Internal (Walk)	10%
Linked (Walk)	0%
Walk	5%
Cycle	5%
Total	100%

TABLE 17 PROJECTED MODE CHOICE OF STAFF ARRIVING AND DEPARTING IN PEAK HOUR HOU

10 (5) [0]	4.0. (5) 501	
	10 (5) [0]	20 (10) [0]
0 (0) [0]	0 (0) [0]	0 (0) [0]
0 (0) [0]	0 (0) [0]	0 (0) [0]
10 (0) [0]	10 (0) [0]	20 (0) [0]
5 (0) [0]	5 (0) [0]	10 (0) [0]
5 (0) [0]	5 (0) [0]	10 (0) [0]
0 (0) [0]	0 (0) [0]	0 (0) [0]
0 (0) [0]	0 (0) [0]	0 (0) [0]
0 (0) [0]	0 (0) [0]	0 (0) [0]
30 (5) [0]	30 (5) [0]	60 (10) [0]
	0 (0) [0] 0 (0) [0] 10 (0) [0] 5 (0) [0] 5 (0) [0] 0 (0) [0] 0 (0) [0] 0 (0) [0] 30 (5) [0]	0 (0) [0] 0 (0) [0] 0 (0) [0] 0 (0) [0] 10 (0) [0] 10 (0) [0] 5 (0) [0] 5 (0) [0] 5 (0) [0] 5 (0) [0] 0 (0) [0] 0 (0) [0] 0 (0) [0] 0 (0) [0] 0 (0) [0] 0 (0) [0] 0 (0) [0] 0 (0) [0] 30 (5) [0] 30 (5) [0]

xx (xx) [xx] = AM peak hour (PM peak hour) [Saturday peak hour]

1.



6.3.3.9 Total School Multimodal Trip Generation

Based on the foregoing, the total multimodal trip generation associated with the schools is summarized in **Table 18**.

TABLE 18 TOTAL SCHOOL MULTIMODAL TRIP GENERATION

	TDSB	TCDSB	Total		
Auto Driver	10 (5) [0]	10 (5) [0]	20 (10) [0]		
Auto Passenger	0 (0) [0]	0 (0) [0]	0 (0) [0]		
Auto PuDo ²	50 (5) [0]	35 (5) [0]	85 (10) [0]		
Transit GO	10 (0) [0]	10 (0) [0]	20 (0) [0]		
Transit Local ³	5 (0) [0]	85 (10) [0]	90 (10) [0]		
Internal (Walk)	285 (30) [0]	220 (20) [0]	505 (50) [0]		
Linked (Walk)	0 (0) [0]	0 (0) [0]	0 (0) [0]		
Walk	0 (0) [0]	0 (0) [0]	0 (0) [0]		
Cycle	0 (0) [0]	0 (0) [0]	0 (0) [0]		
Total	360 (40) [0]	360 (40) [0]	720 (80) [0]		

Notes:

1. xx (xx) [xx] = AM peak hour (PM peak hour) [Saturday peak hour]

7.0 CAPACITY ANALYSIS UPDATE

7.1 OVERVIEW

As outlined in **Section 6.2**, the current development proposal is projected to generate less auto driver trips and GO Transit trips than the previous October 2019 proposal. A minor increase to local transit trips is projected during the AM peak hour, however once distributed across the transit routes, the change is projected to be minimal.

As such, it is considered that the conclusions outlined in the October 2019 OPA submission transportation report in relation to the travel demand analysis generally remain valid and a full update to the multimodal trip assignment and analysis has not been undertaken.

Key conclusions in relation to the road network and transit capacity from the October 2019 OPA submission transportation report are reproduced below:

- Overall, the road network is projected to operate within capacity under future total conditions, noting the benefit of the projected mode shift associated with the transit station and the new infrastructure and lane configuration changes proposed as part of the proposed development.
- As a result of projected Site development, background development and station related transit activity, a number of area transit services are projected to exceed current day capacity.
- However, it is expected that with the development of the Site and the proposed station along with RER and future GO expansion, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area.

In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service.

Notwithstanding the above, it is noted that in addition to the change to development statistics, there are some other changes to the development plan and surrounding transportation infrastructure and services which are relevant to the capacity analysis.

As such, a series of specific analyses have been undertaken to review these changes. A high level overview of the specific analyses and outcomes is provided **Section 7.1.1** and **Section 7.1.2**. Further detail on the specific analyses are provided in **Section 7.2** and **Section 7.3**.

It is noted that given a full updated trip assignment has not been undertaken, the volumes associated with the previous proposal have been utilized to undertake the specific analyses.



7.1.1 Traffic Capacity Analysis Updates

New Pedestrian Plaza (Removal of Private Street)

The current development plan includes the removal of the previously proposed Private Street A (the northern east-west road which connected the Loop Road to Park Lawn Road).

As such, volumes previously assigned to this street have been reassigned and updated capacity analyses have been undertaken of the relevant intersections. The updated capacity analyses are detailed further in **Section 7.2.1**.

The updated capacity analysis indicates that the removal of Street A has minimal impact on traffic operations, with all relevant intersections expected to continue to operate within capacity. The removal of Street A is therefore considered appropriate.

Changes to Lane Configurations and Traffic Control

The current development plan includes updated lane configurations at the following intersections:

- Lake Shore Boulevard West / Shore Breeze Drive / Public Street B (Loop Road);
- Lake Shore Boulevard West / Silver Moon Drive / Public Street B (Loop Road);
- Lake Shore Boulevard West / The Marginal Boulevard / Public Street A (Relief Road).

In addition, the current development plan has updated the Loop Road / Street C intersection to operate under signal control. As such, updated capacity analyses have been undertaken to incorporate the above changes, with updates to the assumed signal phasings also incorporated. The updated capacity analyses are detailed further in **Section 7.2.2**. The updated capacity analysis indicates that the above changes have minimal impact on traffic operations, with the intersections expected to continue to operate within capacity. The outlined changes are therefore considered to be appropriate.

7.1.2 Transit Capacity Analysis Updates

Following advice from TTC, it is understood that bus route 77 is not intended to divert to the Site.

As such, transit trips previously assigned to bus route 77 have been reassigned.

Furthermore, streetcar route 508 has been incorporated into the analysis. It is noted that given streetcar route 508 follows a similar track to streetcar route 501, it has been assumed for the purpose of this analysis that it would service the same passengers as streetcar 501. As such, streetcar 501 and streetcar 508 ridership have been combined into a single analysis. Transit route capacities for the study area bus routes have also been updated in accordance with the updated TTC service summary.

Subsequently, updated capacity analyses have been undertaken of the relevant transit routes and are detailed further in **Section 7.3**.

The updated capacity analysis indicates similar results to the October 2019 OPA submission transportation report, with some transit routes projected to exceed current day capacity. However as previously noted, it is expected that with the development of the Site and the proposed station, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area. In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service. As such, the removal of bus route 77 from diverting to the Site is considered to be acceptable.



7.2 TRAFFIC CAPACITY ANALYSIS UPDATES

7.2.1 New Pedestrian Plaza (Removal of Private Street)

As discussed in **Section 7.1.1**, the current development plan includes the removal of the previously proposed private street to incorporate a new pedestrian plaza to connect Park Lawn Road and Public Street B (Loop Road).

The private street was previously proposed to operate as a right in / right out connection to Park Lawn Road and did not provide direct access to any driveways to basement car parking.

As such, volumes previously assigned to the private street have been reassigned, and updated capacity analyses have been undertaken of the relevant intersections. It was assumed for the purpose of this assessment, that all traffic previously utilizing the private street is relocated to Street C.

The derivation of the reassigned traffic volumes is summarized in a series of figures as follows:

- The future total traffic volumes as reported in the October 2019 OPA submission transportation report are shown in **Figure 34**;
- The adjustments to these volumes to incorporate the removal of the private street are shown in **Figure 35**; and
- The resultant updated future total traffic volumes are shown in **Figure 36**.

Notably, the intersections with updated traffic volumes are summarized as follows:

- Park Lawn Road / Metro Grocery Driveway / Street C; and
- Public Street B (Loop Road) / Street C.

The updated capacity analyses for the abovementioned intersections are summarized in **Table 19** and the updated future total traffic conditions for the network are illustrated in **Figure 38**.

The Synchro output sheets for the updated future total are provided in **Appendix B**. For reference, the Synchro output sheets for the existing, future background and October 2019 OPA submission future total were attached in Appendix H of the October 2019 OPA submission transportation report.

It is noted that the results of the Street B (Loop Road) / Street C intersection also include the changes to signal control which are outlined in further detail in **Section 7.2.2**.

Overall, the updated capacity analysis indicates that the removal of the private street to introduce a new pedestrian plaza has minimal impact on traffic operations, with all relevant intersections expected to continue to operate within capacity. The removal of this private street is therefore considered appropriate.

Intersection	Movement	Existing			Future Background			Future Total (October 2019 OPA submission)			Future Total (Current update)		
		V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
	Overall	0.58 (0.59) [0.57]	B (A) [B]	13.1 (9.6) [12.1]	0.70 (0.68) [0.63]	B (B) [B]	13.8 (10.4) [12.4]	0.42 (0.41) [0.40]	A (A) [B]	10.0 (8.7) [11.8]	0.43 (0.41) [0.40]	B (B) [B]	10.9 (13.9) [13.3]
ry South	EBL	0.73 (0.58) [0.65]	C (C) [C]	29.2 (28.8) [27.9]	0.75 (0.58) [0.65]	C (C) [C]	30.5 (28.8) [27.9]	0.40 (0.23) [0.32]	C (B) [C]	20.4 (19.9) [20.7]	0.42 (0.23) [0.32]	C (B) [B]	20.7 (20.0) [19.7]
g Site Dw d) ' Street B	EBTR ²		-		-			0.05 (0.03) [0.10]	B (B) [B]	17.6 (18.5) [19.0]	0.05 (0.03) [0.10]	B (B) [B]	17.6 (18.5) [17.9]
cery Dwy / Existing d Future Backgroun stro Grocery Dwy / uture Total) ²	EBR ²	0.15 (0.18) [0.29]	B (C) [C]	18.3 (23.9) [21.5]	0.30 (0.18) [0.33]	B (C) [C]	18.9 (23.9) [21.9]		-		-		
	WBLTR ²	- (0.00) [0.01]	- (C) [B]	- (22.8) [19.6]	- (0.00) [0.01]	- (C) [B]	- (22.8) [19.6]		-		-		
letro Gro xisting an n Rd / Me	WBTR ²	-			-			0.03 (0.01) [0.02]	D (B) [D]	36.6 (18.4) [47.8]	0.27 (0.05) [0.21]	C (F) [C]	32.4 (144.7) [29.4]
wn Rd / N (后 Park Law	NBL	0.04 (0.27) [0.14]	A (A) [A]	6.9 (9.2) [8.3]	0.05 (0.41) [0.18]	A (B) [A]	7.0 (15.0) [8.7]	0.01 (0.09) [0.06]	A (A) [A]	5.9 (5.1) [7.3]	0.01 (0.09) [0.06]	A (A) [A]	5.2 (5.2) [8.5]
Park La	NBTR	0.38 (0.28) [0.39]	A (A) [A]	9.0 (6.0) [9.3]	0.65 (0.38) [0.55]	B (A) [B]	11.7 (6.6) [10.2]	0.43 (0.23) [0.44]	A (A) [A]	8.1 (5.2) [9.9]	0.43 (0.23) [0.45]	A (A) [B]	7.6 (5.1) [11.4]
	SBTR	0.48 (0.59) [0.52]	B (A) [A]	10.7 (8.1) [9.5]	0.54 (0.70) [0.61]	B (A) [B]	11.1 (9.8) [10.6]	0.29 (0.50) [0.43]	A (A) [B]	7.6 (9.0) [11.0]	0.29 (0.50) [0.44]	A (A) [B]	7.5 (9.0) [11.9]

UPDATED TRAFFIC OPERATIONS RESULTS - NEW PEDESTRIAN PLAZA (REMOVAL OF PRIVATE STREET) TABLE 19:

Notes:

1.

xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak] Lane configurations change between analysis scenarios 2.

TABLE 19: UPDATED TRAFFIC OPERATIONS RESULTS - NEW PEDESTRIAN PLAZA (REMOVAL OF PRIVATE STREET) (CONT'D)

Intersection	Movement	Existing			Future Background			Future Total (October 2019 OPA submission)			Future Total (Current update)		
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Delay	V/C	LOS	Delay
В	Overall										0.14 (0.09) [0.17]	B (B) [B]	10.7 (13.3) [12.4]
Loop Road / Street E	NBLT		NI/A2			N1/A 2			N/A3		0.19 (0.11) [0.23]	A (A) [B]	6.0 (8.7) [10.4]
	SBR		N/A		N/A ⁻			N/A			0.06 (0.04) [0.07]	B (B) [B]	10.4 (10.1) [10.5]
	Streetcar										0.33 (0.33) [0.33]	D (D) [D]	36.0 (36.0) [36.0]

Notes:

xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak] 1.

2. 3.

Intersection does not exist under existing and future background Intersection was unsignalized under future total in the October 2019 OPA submission







FIGURE 34B FUTURE TOTAL TRAFFIC VOLUMES - OCTOBER 2019 OPA SUBMISSION TRANSPORTATION REPORT - INTERNAL



FIGURE 35A FUTURE TOTAL TRAFFIC VOLUME ADJUSTMENTS FOR NEW PEDESTRIAN PLAZA (REMOVAL OF PRIVATE STREET) -EXTERNAL BA GROUP 7036-10 2150 LAKE SHORE BOULEVARD WEST MA





FIGURE 35B FUTURE TOTAL TRAFFIC VOLUME ADJUSTMENTS FOR NEW PEDESTRIAN PLAZA (REMOVAL OF PRIVATE STREET) - INTERNAL

2150 LAKE SHORE BOULEVARD WEST



FIGURE 36A UPDATED FUTURE TOTAL TRAFFIC VOLUMES - EXTERNAL



FIGURE 36B UPDATED FUTURE TOTAL TRAFFIC VOLUMES - INTERNAL

2150 LAKE SHORE BOULEVARD WEST

7.2.2 Changes to Lane Configurations and Traffic Control

As discussed in **Section 7.2.2**, the current development plan includes updated lane configurations at the following intersections:

- Lake Shore Boulevard West / Shore Breeze Drive / Public Street B (Loop Road);
- Lake Shore Boulevard West / Silver Moon Drive / Public Street B (Loop Road);
- Lake Shore Boulevard West / The Marginal Boulevard / Public Street A (Relief Road.)

In addition, the current development plan has updated the Public Street B (Loop Road) / Street C intersection to operate under signal control.

As such, updated capacity analyses have been undertaken to incorporate the above changes, with updates to the assumed signal phasings also incorporated.

The updated future road network is shown in **Figure 37** and reflects the changes to assumed lane configurations and traffic control at the abovementioned intersections.

The updated capacity analyses for the abovementioned intersections are summarized in **Table 20** and the updated future total traffic conditions for the network are illustrated in **Figure 38**.

The Synchro output sheets for the updated future total are provided in **Appendix B**. For reference, the Synchro output sheets for the existing, future background and October 2019 OPA submission future total were attached in Appendix H of the October 2019 OPA submission transportation report.

It is noted that the results of the Public Street B (Loop Road) / Street C intersection also include the changes resulting from the removal of Street A, which are outlined in further detail in **Section 7.2.1**.

The updated capacity analysis indicates that the above changes have minimal impact on traffic operations, with the intersections expected to continue to operate within capacity. The outlined changes are therefore considered to be appropriate.



7.2.3 Summary of Traffic Capacity Analysis Updates

The updated traffic capacity analysis is summarized as follows:

- As the current development proposal is projected to generate less auto driver trips than the previous October 2019 proposal, it is considered that the conclusions in the October 2019 OPA submission transportation report in relation to the travel demand analysis generally remain valid.
- However, a series of specific analyses have been undertaken to review some changes to the development plan and surrounding transportation infrastructure. Specifically:
 - The current development plan includes the removal of the previously proposed private street (the northern east-west road which connected the Loop Road to Park Lawn Road) to introduce a new pedestrian plaza. The updated capacity analysis indicates that the removal of the street has minimal impact on traffic operations, with all relevant intersections expected to continue to operate within capacity. The removal of this private street is therefore considered appropriate.
 - The current development plan includes updated lane configurations and traffic control at some intersections within the study area. The updated capacity analysis indicates that these changes have minimal impact on traffic operations, with the intersections expected to continue to operate within capacity. The outlined changes are therefore considered to be appropriate.

 The balance of the study area road network remains unchanged from the October 2019 OPA submission transportation report and is projected to continue to operate within capacity under future total conditions.

Intersection Movement		Existing			Futi	Future Background			Future Total (October 2019 OPA submission)			Future Total (Current update)		
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Delay	V/C	LOS	Delay	
	Overall							0.50 (0.36) [0.32]	B (B) [B]	13.6 (10.7) [12.9]	0.55 (0.43) [0.43]	B (B) [C]	17.5 (17.9) [21.7]	
op Rd	EBL							0.03 (0.16) [0.30]	A (B) [B]	7.0 (12.6) [14.1]	0.32 (0.40) [0.57]	F (E) [E]	90.1 (71.7) [62.2]	
/ Shore Breeze D ure Background) ore Breeze Dr / Lo Total)	EBTR				N/A ²			0.58 (0.42) [0.34]	B (B) [B]	12.0 (14.2) [12.6]	0.60 (0.44) [0.35]	B (B) [B]	14.3 (16.9) [13.4]	
	WBTR		NI/A2					0.27 (0.45) [0.37]	A (A) [A]	7.5 (4.7) [8.2]	0.30 (0.54) [0.47]	B (B) [C]	12.8 (14.1) [20.1]	
re Blvd W g and Fut d W / Shi (Future	NBL		N/A					0.14 (0.06) [0.12]	D (D) [D]	44.9 (43.9) [44.5]	-			
.ake Shor (Existin	NBLTR								-			D (D) [D]	48.0 (44.9) [46.3]	
La Lake Sh	NBTR						0.28 (0.10) [0.17]	D (D) [D]	46.3 (44.3) [45.0]		-			
	Streetcar							0.50 (0.48) [0.48]	E (E) [E]	78.4 (78.0) [78.0]	0.45 (0.45) [0.56]	E (E) [F]	71.7 (71.7) [86.5]	

TABLE 20: UPDATED TRAFFIC OPERATIONS RESULTS - CHANGES TO LANE CONFIGURATIONS AND TRAFFIC CONTROL

Notes:

1.

xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak] Intersection is unsignalized under existing and future background 2.



Intersection	Movement	Existing			Fut	Future Background			Future Total 2019 OPA su	bmission)	Future Total (Current update)		
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Delay	V/C	LOS	Delay
	Overall				0.90 (0.86) [0.67]	B (A) [B]	19.9 (9.2) [12.5]	0.58 (0.40) [0.41]	B (B) [B]	11.0 (11.8) [14.2]	0.64 (0.47) [0.47]	B (B) [B]	19.0 (17.0) [18.3]
	EBTR				0.87 (0.58) [0.56]	B (A) [A]	18.6 (6.5) [8.6]	0.62 (0.44) [0.37]	A (A) [A]	4.0 (3.2) [3.8]	0.70 (0.53) [0.42]	B (A) [A]	14.1 (8.9) [8.0]
n Dr d) ' Loop Rc	WBL				0.95 (0.91) [0.67]	F (C) [C]	106.6 (21.1) [22.6]	0.12 (0.20) [0.12]	B (B) [A]	14.8 (10.7) [9.4]	0.35 (0.46) [0.36]	E (E) [E]	74.9 (69.0) [65.6]
ilver Moo 3ackgroun Moon Dr /	WBT				0.31 (0.50) [0.37]	A (A) [A]	5.7 (6.2) [8.2]	0.20 (0.36) [0.26]	B (A) [A]	14.5 (10.0) [9.6]	0.20 (0.37) [0.26]	B (B) [B]	15.8 (12.5) [10.9]
lvd W / S d Future E / / Silver I uture Tota	NBL ²		N/A ³		0.75 (0.55) [0.67]	D (D) [D]	43.8 (42.7) [42.9]	0.46 (0.28) [0.50]	D (D) [D]	49.8 (47.0) [51.3]		-	
Shore B xisting an re Blvd W	NBLR ²				-				-			D (D) [D]	52.5 (47.7) [54.3]
Lake (丘	NBR ²				0.22 (0.05) [0.06]	C (D) [C]	31.4 (37.3) [33.1]	0.14 (0.13) [0.10]	D (D) [D]	44.7 (44.8) [44.3]		-	
	SBTR					-			D (D) [D]	44.1 (45.9) [45.8]	0.08 (0.23) [0.22]	D (D) [D]	44.1 (45.9) [45.5]
	Streetcar					-		0.50 (0.48) [0.48]	E (E) [E]	78.4 (78.0) [78.0]	0.49 (0.45) [0.56]	E (E) [F]	73.9 (71.7) [86.5]

TABLE 20: UPDATED TRAFFIC OPERATIONS RESULTS - CHANGES TO LANE CONFIGURATIONS AND TRAFFIC CONTROL (CONT'D)

Notes:

1.

xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak] Lane configurations change between analysis scenarios 2.

Intersection is unsignalized under existing 3.

Intersection	Movement		Existing		Fut	ure Backgro	und	(October 2	Future Total 2019 OPA su	bmission)	Future Total (Current update)			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Delay	V/C	LOS	Delay	
	Overall								0.85 (0.91) [0.68]	C (C) [E]	30.7 (28.0) [66.0]	0.96 (0.96) [0.68]	D (D) [E]	55.0 (41.8) [74.3]
	EBL							0.59 (0.18) [0.39]	B (A) [B]	13.3 (5.1) [11.4]	0.96 (0.30) [0.69]	F (E) [F]	102.9 (62.7) [86.2]	
ps	EBTR							0.87 (0.75) [0.68]	C (B) [B]	21.9 (19.0) [19.3]	0.86 (0.82) [0.68]	C (C) [C]	27.2 (32.5) [22.7]	
e Marginal Blvd Background) ginal Blvd / Relief al)	WBTR							0.35 (0.29) [0.30]	C (D) [D]	28.2 (44.7) [40.5]	0.41 (0.28) [0.34]	D (D) [D]	35.1 (44.1) [45.1]	
	NBL							0.13 (0.03) [0.03]	D (D) [B]	44.8 (43.5) [17.9]		-		
d W / The d Future E The Marg uture Tota	NBLTR		N/A ²			N/A ²	N/A ²		-			0.26 (0.04) [0.08]	D (C) [B]	36.0 (23.5) [18.5]
shore Blv xisting an Blvd W /	NBTR							0.27 (0.06) [0.05]	D (D) [B]	46.2 (43.9) [18.0]	-			
Lake S (丘	SBL							0.70 (0.75) [0.65]	D (D) [B]	36.6 (47.3) [18.7]	-			
Ľ	SBLT								-			F (E) [B]	83.9 (62.9) [17.6]	
	SBT							0.07 (0.15) [0.08]	C (D) [B]	22.5 (35.1) [12.5]	-			
	SBR							0.21 (0.92) [0.50]	F (C) [F]	88.2 (28.7) [172.2]	0.21 (0.95) [0.50]	F (D) [F]	100.5 (37.6) [169.8]	

UPDATED TRAFFIC OPERATIONS RESULTS - CHANGES TO LANE CONFIGURATIONS AND TRAFFIC CONTROL (CONT'D) **TABLE 20:**

Notes:

1.

7036-10

xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak] Intersection is unsignalized under existing and future background 2.
TABLE 20: UPDATED TRAFFIC OPERATIONS RESULTS - CHANGES TO LANE CONFIGURATIONS AND TRAFFIC CONTROL (CONT'D)

Intersection	Movement	Existing			Future Background			(October 2	Future Total 2019 OPA su	bmission)	Future Total (Current update)		
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Delay	V/C	LOS	Delay
В	Overall									.0 0) 0]		B (B) [B]	10.7 (13.3) [12.4]
oop Road / Street E	NBLT		N/A2			N/A2			NI/A3		0.19 (0.11) [0.23]	A (A) [B]	6.0 (8.7) [10.4]
	SBR		N/A-		IN//	IN/A			N/A		0.06 (0.04) [0.07]	B (B) [B]	10.4 (10.1) [10.5]
Ľ	Streetcar										0.33 (0.33) [0.33]	D (D) [D]	36.0 (36.0) [36.0]

Notes:

xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak] 1.

2. 3. Intersection does not exist under existing and future background Intersection was unsignalized under future total in the October 2019 submission



FIGURE 37A UPDATED FUTURE ROAD NETWORK - EXTERNAL





FIGURE 37B UPDATED FUTURE ROAD NETWORK - INTERNAL



FIGURE 38A UPDATED FUTURE TOTAL TRAFFIC CONDITIONS - EXTERNAL

2150 LAKE SHORE BOULEVARD WEST



FIGURE 38B UPDATED FUTURE TOTAL TRAFFIC CONDITIONS - INTERNAL

2150 LAKE SHORE BOULEVARD WEST

7.3 TRANSIT CAPACITY ANALYSIS UPDATES

Overview

As discussed in **Section 7.1.2**, following advice from TTC, it is understood that bus route 77 is not intended to divert to the Site. The future transit context is shown in **Figure 39**.

As such, transit trips previously assigned to bus route 77 have been reassigned.

Furthermore, Streetcar route 508 has been incorporated into the analysis. It is noted that given streetcar route 508 follows a similar track to streetcar route 501, it has been assumed for the purpose of this analysis that it would service the same passengers as streetcar 501. As such, streetcar 501 and streetcar 508 ridership have been combined into a single analysis. Transit route capacities for the study area bus routes have also been updated in accordance with the updated TTC service summary.

Subsequently, updated capacity analyses have been undertaken of the relevant transit routes,

The steps and derivation of the reassigned transit trips, updated transit route capacities, and updated capacity analyses are organized as follows:

- 1. The reassignment of trips previously assigned to bus route 77 is outlined in **Section 7.3.1**;
- 2. The updated capacities based on the current TTC service summary is outlined in **Section 7.3.2**; and
- 3. The resultant updated capacity analysis is outlined in **Section 7.3.3**.

Notably, the transit routes with updated ridership are summarized as follows:

- Combined streetcar routes 501 and 508;
- Bus route 66;
- Bus route 77; and
- Bus route 80.

The updated capacity analysis indicates similar results to the October 2019 OPA submission transportation report, with some transit routes projected to exceed current day capacity.

However as previously noted, it is expected that with the development of the Site and the proposed station, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area.

In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service. As such, the removal of bus route 77 from diverting to the Site is considered to be acceptable.



FIGURE 39 FUTURE TRANSIT CONTEXT

2150 LAKE SHORE BOULEVARD WEST

7.3.1 Reassignment of Bus Route 77 Trips

Previous Projected Transit Ridership

For reference, the projected transit ridership as reported in the October 2019 OPA submission transportation report for streetcar routes 501 and 508, bus route 66, bus route 77 and bus route 80 are provided in **Table 21** through to **Table 23** for background development, Site development and station related trips respectively.

 TABLE 21
 PROJECTED BACKGROUND TRANSIT RIDERSHIP BY TRANSIT

 ROUTE (ACCUMULATION AT LOCAL AREA STOP) –
 OCTOBER 2019 OPA SUBMISSION TRANSPORTATION

 REPORT
 Report

Direction	AM	Peak	PM I	Peak	SAT Peak				
Direction	Arrive	Depart	Arrive	Depart	Arrive	Depart			
	St	reetcar Ro	outes 501	and 508					
EB	180	330	150	185	130	215			
WB	160	140	255	150	175	105			
		Bus	Route 66						
NB	0	200	0	125	0	125			
SB	115	0	160	0	110	0			
		Bus	Route 77		-				
NB	0	70	0	20	0	40			
SB	20	0	50	0	35	0			
Bus Route 80									
EB	0	35	0	10	0	25			
WB	5	0	25	0	20	0			

TABLE 22 PROJECTED SITE TRANSIT RIDERSHIP BY TRANSIT ROUTE – OCTOBER 2019 OPA SUBMISSION TRANSPORTATION REPORT

Direction	AM Peak			PM Peak			SAT Peak				
Direction	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way		
Streetcar Routes 501 and 508											
EB	20	360	380	55	185	240	75	220	295		
WB	155	45	200	260	40	300	180	85	265		
			В	us Rout	te 66						
NB	0	160	160	0	80	80	0	140	140		
SB	60	0	60	130	0	130	120	0	120		
			Вι	us Rou	te 77						
NB	0	160	160	0	95	95	0	145	145		
SB	75	0	75	135	0	135	130	0	130		
Bus Route 80											
EB	0	80	80	5	40	45	15	50	65		
WB	25	0	25	50	5	55	35	15	50		

TABLE 23 PROJECTED STATION RELATED TRANSIT RIDERSHIP BY TRANSIT ROUTE – OCTOBER 2019 OPA SUBMISSION TRANSPORTATION REPORT

Direction		AM Pe	ak	PM Peak			SAT Peak		
Direction	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
		:	Streetcar	Route	es 501 ar	nd 508			
EB	240	20	260	90	70	160	155	45	200
WB	100	55	155	30	175	205	55	120	175
			В	us Ro	ute 66				
NB	0	65	65	0	185	185	0	125	125
SB	255	0	255	95	0	95	170	0	170
			В	us Ro	ute 77				
NB	0	30	30	0	100	100	0	60	60
SB	140	0	140	45	0	45	80	0	80
Bus Route 80									
EB	110	0	110	45	0	45	70	0	70
WB	0	30	30	0	80	80	0	55	55

Trips Previously Assigned to Bus Route 77

The trips previously assigned to bus route 77 in the October 2019 OPA submission transportation report are summarized in **Table 24**.

TABLE 24 TRIPS PREVIOUSLY ASSIGNED TO BUS ROUTE 77 – OCTOBER 2019 OPA SUBMISSION TRANSPORTATION REPORT

Direction	AM Peak			PM Peak			SAT Peak			
Direction	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way	
Background Development Trips										
NB	0	70	70	0	20	20	0	40	40	
SB	20	0	20	50	0	50	35	0	35	
			Site De	velopm	nent Tri	ps				
NB	0	160	160	0	95	95	0	145	145	
SB	75	0	75	135	0	135	130	0	130	
			Statio	n Relat	ed Trip	S				
NB	0	30	30	0	100	100	0	60	60	
SB	140	0	140	45	0	45	80	0	80	

Reassignment of Background and Site Development Trips Assumptions

In relation to the background and Site development transit trips previously assigned to bus route 77 in the October 2019 OPA submission transportation report, the majority were assigned (approximately 80%) as a connection to the Bloor-Danforth subway line. With the removal of bus route 77 from the Site, it is assumed that these trips would instead take bus route 66 to connect to the Bloor-Danforth subway line. The remaining background and Site development transit trips would be expected to connect to bus route 77 via bus route 80 or streetcar routes 501 and 508.

Accordingly, the background and site development transit trips previously assigned to bus route 77 have been reassigned as follows:

- 80% to bus route 66;
- 10% to bus route 80; and
- 10% to streetcar routes 501 and 508.

Reassignment of Station Related Trips Assumptions

In relation to the station related transit trips previously assigned to bus route 77 in the October 2019 OPA submission transportation report, these were connecting GO Transit riders from the local and peripheral areas (as defined in the October 2019 OPA submission transportation report). With the removal of bus route 77 from the Site, it is assumed that trips associated with the local area would instead take streetcar routes 501 and 508, whilst trips associated with the peripheral area would be expected to connect to bus route 77 via bus route 80 or streetcar routes 501 and 508.

Accordingly, the background and site development transit trips previously assigned to bus route 77 have been reassigned as follows:

- 80% to streetcar routes 501 and 508; and
- 20% to bus route 80.

Reassignment of Trips

Subsequently, the reassignment of the trips previously assigned to bus route 77 is summarized in **Table 25** through to **Table 27** for background development, site development and station related trips respectively. It should be noted that not all trips are removed from bus route 77, only reassigned to connect via other transit routes.

TABLE 25 REASSIGNMENT OF TRIPS PREVIOUSLY ASSIGNED TO BUS ROUTE 77 – BACKGROUND DEVELOPMENT (ACCUMULATION AT LOCAL AREA STOP)

Direction	AMI	Peak	PM I	Peak	SAT Peak				
Direction	Arrive	Depart	Arrive	Depart	Arrive	Depart			
	Sti	reetcar Ro	outes 501	and 508					
EB	0	10	0	5	0	5			
WB	5	0	5	0	0	0			
		Bus	Route 66						
NB	0	55	0	15	0	30			
SB	15	0	40	0	30	0			
		Bus	Route 77						
NB	0	-55	0	-15	0	-30			
SB	-15	0	-40	0	-30	0			
	Bus Route 80								
EB	0	5	0	0	0	5			
WB	0	0	5	0	5	0			

TABLE 26 REASSIGNMENT OF TRIPS PREVIOUSLY ASSIGNED TO BUS ROUTE 77 – SITE DEVELOPMENT

	AM Peak			PM Peak			SAT Peak		
Direction	In	Out	2- Way	In	Out	2- Way	In	Out	2- Way
		S	treetcar	Routes	501 and	1 508			
EB	0	15	15	0	10	10	0	15	15
WB	5	0	5	10	0	10	10	0	10
	-	-	В	us Rou	te 66		-		
NB	0	130	130	0	75	75	0	115	115
SB	60	0	60	110	0	110	105	0	105
	-	-	В	us Rou	te 77		-		
NB	0	-130	-130	0	-75	-75	0	-115	-115
SB	-60	0	-60	-110	0	-110	-105	0	-105
Bus Route 80									
EB	0	15	15	0	10	10	0	15	15
WB	10	0	10	15	0	15	15	0	15

TABLE 27 REASSIGNMENT OF TRIPS PREVIOUSLY ASSIGNED TO BUS ROUTE 77 – STATION RELATED

	AM Peak			PM Peak			SAT Peak		
Direction	In	Out	2- Way	In	Out	2- Way	In	Out	2- Way
		S	treetcar	Routes	501 and	I 508			
EB	0	25	25	0	80	80	0	50	50
WB	110	0	110	35	0	35	65	0	65
			В	us Rou	te 66		-		
NB	0	0	0	0	0	0	0	0	0
SB	0	0	0	0	0	0	0	0	0
			В	us Rou	te 77		-		
NB	0	-20	-20	0	-60	-60	0	-40	-40
SB	-85	0	-85	-25	0	-25	-50	0	-50
Bus Route 80									
EB	0	5	5	0	20	20	0	10	10
WB	30	0	30	10	0	10	15	0	15

Projected Updated Transit Ridership

The resultant projected adjusted transit ridership for streetcar routes 501 and 508, bus route 66, bus route 77 and bus route 80 is summarized in **Table 28** through to **Table 30** for background development, site development and station related trips respectively.

TABLE 28 PROJECTED BACKGROUND TRANSIT RIDERSHIP BY TRANSIT ROUTE (ACCUMULATION AT LOCAL AREA STOP) – ADJUSTED

Direction	AM	Peak	PM I	Peak	SAT Peak				
Direction	Arrive	Depart	Arrive	Depart	Arrive	Depart			
	Sti	reetcar Ro	outes 501	and 508					
EB	180	340	150	190	130	220			
WB	165	140	260	150	175	105			
		Bus	Route 66						
NB	0	255	0	140	0	155			
SB	130	0	200	0	140	0			
		Bus	Route 77						
NB	0	15	0	5	0	10			
SB	5	0	10	0	5	0			
	Bus Route 80								
EB	0	40	0	10	0	30			
WB	5	0	30	0	25	0			

Direction	AM Peak				PM Peak			SAT Peak				
Direction	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way			
	Streetcar Routes 501 and 508											
EB	20	375	395	55	195	250	75	235	310			
WB	160	45	205	270	40	310	190	85	275			
			Bu	us Rou	te 66							
NB	0	290	290	0	155	155	0	255	255			
SB	120	0	120	240	0	240	225	0	225			
			В	us Rout	te 77							
NB	0	30	30	0	20	20	0	30	30			
SB	15	0	15	25	0	25	25	0	25			
Bus Route 80												
EB	0	95	95	5	50	55	15	65	80			
WB	35	0	35	65	5	70	50	15	65			

TABLE 29 PROJECTED SITE TRANSIT RIDERSHIP BY TRANSIT ROUTE – ADJUSTED

TABLE 30 PROJECTED STATION RELATED TRANSIT RIDERSHIP BY TRANSIT ROUTE – ADJUSTED

Direction	AM Peak			PM Peak			SAT Peak						
Direction	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way				
	Streetcar Routes 501 and 508												
EB	240	45	285	90	150	240	155	95	250				
WB	210	55	265	65	175	240	120	120	240				
			В	us Ro	ute 66								
NB	0	65	65	0	185	185	0	125	125				
SB	255	0	255	95	0	95	170	0	170				
			В	us Ro	ute 77								
NB	0	10	10	0	40	40	0	20	20				
SB	55	0	55	20	0	20	30	0	30				
Bus Route 80													
EB	110	5	115	45	20	65	70	10	80				
WB	30	30	60	10	80	90	15	55	70				

7.3.2 Updated Transit Route Capacities

Transit route capacities have been updated based on the current TTC service summary. The updated combined hourly capacities of streetcar routes 501 and 508 is provided in **Table 31**, whilst the updated hourly capacities of the bus routes are provided in **Table 32**.

TABLE 31 COMBINED STREETCAR 501 AND 508 HOURLY CAPACITY

Streetcar Route	Direction	AM Peak	PM Peak	SAT Peak
	EB In (501L)	444 (6 vehicles)	444 (6 vehicles)	444 (6 vehicles)
501	EB Out (501A)	666 (9 vehicles)	666 (9 vehicles)	666 (9 vehicles)
501	WB In (501A)	666 (9 vehicles)	666 (9 vehicles)	666 (9 vehicles)
	WB Out (501L)	444 (6 vehicles)	444 (6 vehicles)	444 (6 vehicles)
	EB In	222 (3 vehicles)	-	-
509	EB Out	222 (3 vehicles)	-	-
506	WB In	-	222 (3 vehicles)	-
	WB Out	-	222 (3 vehicles)	-
	EB In	666 (9 vehicles)	444 (6 vehicles)	444 (6 vehicles)
501/508	EB Out	888 (12 vehicles)	666 (9 vehicles)	666 (9 vehicles)
combined	WB In	666 (9 vehicles)	888 (12 vehicles)	666 (9 vehicles)
	WB Out	444 (6 vehicles)	666 (9 vehicles)	444 (6 vehicles)

Notes: 1.

Assumes streetcar vehicle capacity of 74 passengers per vehicle

TABLE 32 BUS ROUTE HOURLY CAPACITIES

Streetcar Route	Direction	AM Peak	PM Peak	SAT Peak
66	NB	306 (6 vehicles)	357 (7 vehicles)	153 (3 vehicles)
00	SB	306 (6 vehicles)	357 (7 vehicles)	153 (3 vehicles)
77	NB (7		357 (7 vehicles)	306 (6 vehicles)
11	SB	357 (7 vehicles)	357 (7 vehicles)	306 (6 vehicles)
20	EB	102 (2 vehicles)	102 (2 vehicles)	153 (3 vehicles)
00	WB	102 (2 vehicles)	102 (2 vehicles)	153 (3 vehicles)

Notes: 1.

. Assumes bus vehicle capacity of 51 passengers per vehicle

7.3.3 Updated Capacity Analyses

Based on the foregoing analysis, a summary of the Site ridership for streetcar routes 501 and 508, bus route 66, bus route 77 and bus route 80 is provided in **Table 33** through to **Table 36** respectively, whilst updated capacity analyses are provided in **Table 37** through to **Table 40** respectively.

It is noted that for the purpose of this analysis, the existing and projected future transit ridership associated with streetcar routes 501 and 508 was assumed to be spread across both routes.

The updated capacity analysis indicates similar results to the October 2019 OPA submission transportation report, with some transit routes projected to exceed current day capacity, summarized as follows:

- Streetcar routes 501 and 508 are projected to slighty exceed capacity in the eastbound direction during the AM peak hour and in both directions during the PM peak hour;
- Bus route 66 is projected to exceed capacity in both directions during the AM and PM peak hours;
- With its removal from diverting to the Site, bus route 77 is projected to operate within capacity during all periods analyzed; and
- Bus route 80 is expected to exceed capacity in both directions during the AM and PM peak hours.

However, as previously noted, this analysis is against current day capacity. It is expected that with the development of the Site and the proposed station, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area.

In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service. As such, the removal of bus route 77 from diverting to the Site is considered to be acceptable.

SITE TRANSIT TRIPS (STREETCAR ROUTES 501 AND 508) TABLE 33

Route Direction	Inbound	Approx. Persons / Streetcar ²	Outbound	Approx. Persons / Streetcar²
Eastbound	20 (55)	2 (9)	375 (195)	31 (22)
	[75]	[13]	[235]	[26]
Westbound	160 (270)	18 (23)	45 (40)	8 (4)
	[190]	[21]	[85]	[14]

Notes:

1. AM Peak (PM Peak) [SAT Peak]

2. Based on number of services as outlined in Table 31

SITE TRANSIT TRIPS (BUS ROUTE 66) TABLE 34

Route Direction	Inbound	Approx. Persons / Bus²	Outbound	Approx. Persons / Bus²
Northbound		-	290 (155) [255]	48 (22) [85]
Southbound	120 (240) [225]	20 (34) [75]	-	-

Notes:

1. AM Peak (PM Peak) [SAT Peak]

2. Based on number of services as outlined in Table 32

TABLE 35 SITE TRANSIT TRIPS (BUS ROUTE 77)

Route Direction	Inbound	Approx. Persons / Bus²	Outbound	Approx. Persons / Bus²
Northbound		-	30 (20) [30]	4 (3) [5]
Southbound	15 (25) [25]	2 (4) [4]	-	-

Notes:

1.

AM Peak (PM Peak) [SAT Peak] Based on number of services as outlined in **Table 32** 2.

TABLE 36 SITE TRANSIT TRIPS (BUS ROUTE 80)

Route Direction	Inbound	Approx. Persons / Bus²	Outbound	Approx. Persons / Bus²
Eastbound	0 (5)	0 (3)	95 (50)	48 (25)
	[15]	[5]	[65]	[22]
Westbound	35 (65)	18 (33)	0 (5)	0 (3)
	[50]	[17]	[15]	[5]

Notes: 1.

AM Peak (PM Peak) [SAT Peak]

Based on number of services as outlined in Table 32 2.

		AM Peak					PM Peak					
	On Arrival			Or	On Departure		On Arrival			On Departure		
Direction	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
				Existing Cor	nditions (at Lake	Shore Bl	vd W / Park Lawn	Rd)				
Eastbound	666	267	0.40	888	285	0.32	444	172	0.39	666	151	0.23
Westbound	666	105	0.16	444	131	0.30	888	298	0.34	666	294	0.44
				Pro	jected New Rider	ship (see	e Figure 40)					
Eastbound		440			760			295			535	
Westbound		535			240			595			365	
				Future	e Total Conditions	(at Futu	re Transit Hub)					
Eastbound	666	707	1.06	888	1,045	1.18	444	467	1.05	666	686	1.03
Westbound	666	640	0.96	444	371	0.84	888	893	1.01	666	659	0.99

TABLE 37 STREETCAR ROUTE 501 AND 508 ACCUMULATION CAPACITY ANALYSIS

Notes:

1. Recent Saturday data not available.



FIGURE 40: FORECAST TRIPS – STREETCAR ROUTES 501 & 508



		AM Peak					PM Peak					
Dimention	On Arrival			C)n Departure		On Arrival			On Departure		
Direction	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
				Existing Cor	nditions (at Lake	Shore Blv	d W / Park Law	/n Rd)				
Northbound	306	82	0.27	306	218	0.71	357	21	0.06	357	67	0.19
Southbound	306	42	0.14	306	21	0.07	357	159	0.45	357	70	0.20
					Projected N	ew Riders	hip					
Northbound		-			610			-			480	
Southbound		505			-			535			-	
				Future	Total Condition	s (at Futur	e Transit Hub)					
Northbound	306	82	0.27	306	828	2.71	357	21	0.06	357	547	1.53
Southbound	306	547	1.79	306	21	0.07	357	694	1.94	357	70	0.20

TABLE 38 **BUS ROUTE 66 ACCUMULATION CAPACITY ANALYSIS**

Notes: 1. Recent Saturday data not available.

			AM	Peak					PM	Peak		
Dimention		On Arrival		C	On Departure		On Arrival			C	On Departure	
Direction	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Existing Conditions (at Windermere								e PI)				
Northbound	357	129	0.36	357	207	0.58	357	19	0.05	357	43	0.12
Southbound	357	130	0.36	357	129	0.36	357	27	0.08	357	26	0.07
					Projected Ne	ew Ridersh	ip					
Northbound		-			55			-			65	
Southbound		75			-			55			-	
				Future	Total Conditions	at Future	e Transit Hub)					
Northbound	357	129	0.36	357	262	0.73	357	19	0.05	357	108	0.30
Southbound	357	205	0.57	357	129	0.36	357	82	0.23	357	26	0.07
			Saturda	ay Peak								
	Existing Cor	nditions (at Wind	ermere Av	ve / Windermer	e PI)							
Northbound	306	40	0.13	306	57	0.19						
Southbound	306	46	0.15	306	46	0.15						
		Projected Ne	w Ridersl	nip								
Northbound		-			60							
Southbound	Southbound 60 -											
Future Total Conditions (at Future Transit Hub)												
Northbound	306	40	0.13	306	117	0.38						
Southbound	306	106	0.35	306	46	0.15						

TABLE 39 BUS ROUTE 77 ACCUMULATION CAPACITY ANALYSIS

			AM	Peak					PM	Peak		
B: ()		On Arrival		C)n Departure			On Arrival		C	On Departure	
Direction	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Existing Conditions (at The Queensw								Rd)				
Eastbound	102	43	0.42	102	42	0.41	102	56	0.55	102	50	0.49
Westbound	102	79	0.77	102	84	0.82	102	41	0.40	102	48	0.47
					Projected N	lew Riders	hip					
Eastbound		110			140			50			80	
Westbound		70			30			105			85	
				Future	e Total Condition	ns (at Futu	re Transit Hub))				
Eastbound	102	153	1.50	102	182	1.78	102	106	1.04	102	130	1.27
Westbound	102	149	1.46	102	114	1.12	102	146	1.43	102	133	1.30
]		Saturda	ay Peak								
	Existing C	onditions (at The	e Queensw	/ay / Park Lawr	n Rd)							
Eastbound	153	54	0.35	153	41	0.27						
Westbound	153	58	0.38	153	68	0.44						
		Projected N	lew Riders	ship								
Eastbound		85			105							
Westbound		90			70							
	Future	Total Condition	is (at Futu	re Transit Hub)								
Eastbound	153	139	0.91	153	146	0.95						
Westbound	153	148	0.97	153	138	0.90						

TABLE 40 BUS ROUTE 80 ACCUMULATION CAPACITY ANALYSIS

8.0 VEHICULAR PARKING

Overview

The Master Plan is centred upon creating a new complete community that is built, from the ground up, to provide a wide range of nonautomobile dependent mobility options that minimize car usage as a form of transportation.

The Master Plan is proposing a significant array of non-automobile facilities and elements that will not only provide for future mobility needs of residents, employees and visitors to the Christies development but will also greatly benefit the mobility options for all of the Humber Bay Shores and Southern Etobicoke area.

Significant elements of the Master Plan that are central to this vision and support sustainable transportation options include:

- Construction of a new Park Lawn GO Station;
- Creation of a Transit Hub at the new GO Station with new TTC LRT and bus facilities;
- New dedicated LRT track facilities connecting Lake Shore Boulevard West to the Transit Hub;
- Dedicated LRT tracks on Lake Shore Boulevard West;
- Enhancing cycling facilities on Lake Shore Boulevard West, Park Lawn Road and within the development plan;
- A series of complete streets and new main street signalized crossings that promote walking as a viable local travel mode;
- Bike share and end-user cycling facilities within the development plan; and
- Car share facilities and other complementary programmes.

All of these combine to fully support non-automobile dependent mobility in the area.

Parking Supply as a Key Factor

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

The range of "game changing" mobility options being proposed as part of the Christies Master Plan present a rare and significant opportunity to advance a highly progressive parking strategy that minimizes car usage, maximizes usage of the proposed sustainable travel options being constructed and enables the realization of a "complete" new community built upon contemporary travel thinking.

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:

- i. Recognizes the mobility environment being created in the sitesurrounding neighbourhood;
- ii. Reflects contemporary (and significantly reduced) parking needs in areas with high transit accessibility;
- iii. Maximizes the sharing of parking supplies across land uses in the Master Plan; and
- iv. Discourages the provision of excess parking so as to not further encourage and enable vehicular travel.

A review of such a parking regime and rationale for reduced minimum parking standards within any Zoning By-law established for the 2150 Lake Shore West site is outlined herein.



Approach to Establishing Appropriate Parking Standards

The following is reviewed as part of strategy and rationale with respect to establishing an appropriate series of minimum parking standards for the proposed 2150 Lake Shore West development:

1. Prevailing Zoning By-law Standards Review

This section provides an overview of the currently applicable Zoning By-law parking standards and the corresponding required parking supply.

2. Proposed Standards Overview

This section summarizes the range of minimum parking standards being proposed for the development, together with an overview commentary regarding the various factors influencing the proposed standards.

3. Policy and Planning Context

This section focusses upon outlining the broad Provincial, Regional and Municipal mobility planning policies and how they are pertinent to parking policy decision making in transit accessible areas.

4. Master Plan Mobility Context

This section explores the mobility context being planned for the 2150 Lake Shore West development and for Humber Bay Shores as a whole. In particular, this section outlines the emerging transportation context and the significant investments and supporting mobility planning that will establish non-automobile and sustainable transportation options as the primary travel mode for the area.

5. Resident Parking Considerations

This section presents a discussion regarding appropriate minimum parking standards that are proposed for resident use. The disconnect of the prevailing Zoning By-law regime from contemporary parking needs in transit accessible areas is explored together with parking demand trends being seen across the City and the guidance these provide towards adoption of a reduced parking standard in an emerging highly transit accessible context such as this.

6. Non-Residential Parking Considerations

This section presents a discussion regarding the range of parking standards being proposed for non-resident uses within the Master Plan. The appropriateness of the proposed standards is outlined in the context of the level of transit and other non-automobile dependent forms of mobility proposed to support the development and recognizing the extensive shared parking opportunities presented by the Master Plan that will lead to significant efficiencies in parking supply use and supply needs.

7. Summary

An overview of the parking strategy and related discussion is presented summarizing the desirability, appropriateness and rationale supporting adoption of the reduced series of minimum parking standards for the 2150 Lake Shore West development.

8.2 PROPOSED PARKING SUPPLY STANDARDS

8.2.1 Proposed Parking Standards

The minimum parking standards being proposed are reduced compared to the Zoning By-law provisions that would ordinarily apply to this area today.

It is proposed to adopt minimum parking standards that are reflective of the contemporary public policy and planning framework that is guiding the Christies Master 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.

From its earliest inception, the Christies Master Plan has been planned and designed to establish and connect a community focussed upon minimizing automobile use. The major infrastructure moves enabling this shift are being delivered as part of the plan as discussed.

To fully capitalize on the infrastructure investments and to achieve / enable the sustainable mobility ambitions of the development, the parking standards need to reflect the same goals and objectives in minimizing auto-use. As such, it is proposed to establish a low, and appropriate, minimum series of parking standards for residential and non-residential land uses.

The recommended standards and resulting parking requirements are provided in **Table 42**, and listed below for reference.

•	Residential	0.40 spaces per unit
•	Visitor	0.10 spaces per unit
٠	Retail	1.00 spaces per 100m ² GFA
٠	Office	1.00 spaces per 100m ² GFA
•	School	0.50 spaces per 100m ² GFA

It is also proposed to adopt sharing provisions outlined in Zoning Bylaw 569-2013 for all non-resident parking to maximize the usage of provided parking, 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 site requirement is 3,939 parking spaces, including 2,852 residential parking spaces and 1,087 non-residential (i.e. retail, office and visitor) parking spaces.

A summary of the phase-by-phase resulting parking requirements are provided in **Appendix C**.

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

TABLE 42 PROPOSED PARKING STANDARDS

			Minimum Douking Data	Minimum Parking	Min	imum Parking Re	quired		
	se	Units / IFA	Minimum Parking Rate	Required	AM	РМ	Evening		
	Phase I	1,352 units		540 spaces	540 (100%)	540 (100%)	540 (100%)		
	Phase II	1,654 units		661 spaces	661 (100%)	661 (100%)	661 (100%)		
	Phase III	1,912 units	0.40 anagaa par unit	764 spaces	764 (100%)	764 (100%)	764 (100%)		
Residential	Phase IV	1,020 units	0.40 spaces per unit	408 spaces	408 (100%)	408 (100%)	408 (100%)		
	Phase V	517 units		206 spaces	206 (100%)	206 (100%)	206 (100%)		
	Phase VI	684 units		273 spaces	273 (100%)	273 (100%)	273 (100%)		
		Sub-Total		2,852 spaces	2,852	2,852	2,852		
	Residential Visitor	7,139 units	0.10 spaces per unit	713 spaces	71 (10%)	249 (35%)	713 (100%)		
	Retail	36,659 m ²	1.00 space per 100 m ²	366 spaces	73 (20%)	366 (100%)	366 (100%)		
Non- Residential	Office	64,392 m ²	1.00 space per 100 m ²	643 spaces	643 (100%)	385 (60%)	0 (0%)		
	School	8,459 m²	0.5 spaces per 100 m ²	42 spaces	42 (100%)	42 (100%)	8 (20%)		
		Sub-Total	829	1,042	1,087				
		Я	2,852	2,852	2,852				
Minimum		Nor	829	1,042	1,087				
Totals			Total		3,681	3,894	3,939		
		Minimum-Pa	rking Requirement			3,939			

Notes: 1.

Site stats are based on architectural stats prepared by Allies and Morrison Architects dated May 15, 2020.



8.2 PROPOSED PARKING SUPPLY STANDARDS

8.2.1 Proposed Parking Standards

The minimum parking standards being proposed are reduced compared to the Zoning By-law provisions that would ordinarily apply to this area today.

It is proposed to adopt minimum parking standards that are reflective of the contemporary public policy and planning framework that is guiding the Christies Master 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.

From its earliest inception, the Christies Master Plan has been planned and designed to establish and connect a community focussed upon minimizing automobile use. The major infrastructure moves enabling this shift are being delivered as part of the plan as discussed.

To fully capitalize on the infrastructure investments and to achieve / enable the sustainable mobility ambitions of the development, the parking standards need to reflect the same goals and objectives in minimizing auto-use. As such, it is proposed to establish a low, and appropriate, minimum series of parking standards for residential and non-residential land uses.

The recommended standards and resulting parking requirements are provided in **Table 42**, and listed below for reference.

٠	Residential	0.40 spaces per unit
٠	Visitor	0.10 spaces per unit
٠	Retail	1.00 spaces per 100m ² GFA
٠	Office	1.00 spaces per 100m ² GFA
•	School	1.00 spaces per 100m ² GFA

It is also proposed to adopt sharing provisions outlined in Zoning Bylaw 569-2013 for all non-resident parking to maximize the usage of provided parking, 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 site requirement is 3,939 parking spaces, including 2,852 residential parking spaces and 1,087 non-residential (i.e. retail, office and visitor) parking spaces.

A summary of the phase-by-phase resulting parking requirements are provided in **Appendix C**.

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

TABLE 42 PROPOSED PARKING STANDARDS

Use		Units / IFA	Minimum Parking Rate	Minimum Parking Required	Minimum Parking Required		
					АМ	РМ	Evening
Residential	Phase I	1,352 units	0.40 spaces per unit	540 spaces	540 (100%)	540 (100%)	540 (100%)
	Phase II	1,654 units		661 spaces	661 (100%)	661 (100%)	661 (100%)
	Phase III	1,912 units		764 spaces	764 (100%)	764 (100%)	764 (100%)
	Phase IV	1,020 units		408 spaces	408 (100%)	408 (100%)	408 (100%)
	Phase V	517 units		206 spaces	206 (100%)	206 (100%)	206 (100%)
	Phase VI	684 units		273 spaces	273 (100%)	273 (100%)	273 (100%)
	Sub-Total			2,852 spaces	2,852	2,852	2,852
Non- Residential	Residential Visitor	7,139 units	0.10 spaces per unit	713 spaces	71 (10%)	249 (35%)	713 (100%)
	Retail	36,659 m ²	1.00 space per 100 m ²	366 spaces	73 (20%)	366 (100%)	366 (100%)
	Office	64,392 m ²	1.00 space per 100 m ²	643 spaces	643 (100%)	385 (60%)	0 (0%)
	School	8,459 m²	0.5 space per 100 m ²	42 spaces	42 (100%)	42 (100%)	8 (20%)
	Sub-Total			1,882	829	1,042	1,087
Minimum Requirement Totals	Resident			2,852	2,852	2,852	
	Non-Resident				829	1,042	1,087
	Total				3,681	3,894	3,939
	Minimum-Parking Requirement				3,939		

Notes: 1.

Site stats are based on architectural stats prepared by Allies and Morrison Architects dated May 15, 2020.



8.2.2 The Opportunity

It is in our opinion that the parking standards outlined in Zoning By-law 569-2013 overstate the parking needs of a contemporary transitoriented development such as the Christies Master Plan by some margin. As such, it is proposed to adopt parking standards that are reduced from the currently applicable Rest of City rates.

The public policy regime with respect to mobility and development planning has changed over recent years as sustainable growth is at the forefront of initiatives. Provincial, Regional and Municipal-wide directives set a planning framework that increasingly 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.

Partnerships and funding mechanisms to invest in and construct sustainable transportation infrastructure and integrated land development is at the forefront of City planning, with unprecedented collaboration across all levels of government and the private sector.

Themes such as 'planning transit from a network perspective', 'designing streets and public realm for people', 'connecting and expanding cycling infrastructure', and 'increasing multi-modal mobility options' re-occur through contemporary public policy and have been fundamental to the development of the Christies Master Plan mobility principles established to guide the planning and design of the Site.

Through the Christies development and concurrent Secondary Plan, local planning has the opportunity to support and further advance contemporary policy framework, mobility planning initiatives, and transit infrastructure investments.

8.2.3 A Forward-Directed Planning Regime

The transportation infrastructure and urban development to be delivered through the Christies Master Plan has the ability to significantly influence the mobility context and patterns of the Humber Bay Shores community and site-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 change travel behaviours in areas such as southeastern Etobicoke, local planning has the need and opportunity to align and reflect such objectives. The Site re-development presents the opportunity to practice proactive planning in regard to parking policy and the supportive By-law regime.

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

Significant transit and mobility investments are being made across both private and public sectors to: improve existing transit services (i.e. GO RER, Waterfront Transit Reset), introduce new access to such services (Park Lawn GO and integrated transit hub), and facilitate access to transit through public realm, pedestrian connectivity and cycling infrastructure improvements throughout the area.

To fully support the area mobility planning and help deliver a fundamentally transit-oriented development, the local By-law regime will need to be forward thinking and provide tools to enable the success of the site and area investments.

Setting appropriate, pro-active Zoning By-law standards is key in this regard and has an essential role in supporting the Master Plan and mobility goals of the area.



As previously outlined at the outset of this **Section 8.0**, the approach taken for the parking strategy and establishing appropriate minimum parking supply standards is as follows:

Policy and Planning Context

A review of contemporary Provincial, Regional and Municipal mobility planning policies and how they are pertinent to parking policy decision making in transit accessible areas.

- o Provincial and Regional Framework
- o City-Wide Initiatives and Trends
- o Master Plan Principles and Objectives

Master Plan Mobility Context

A review of the mobility context being planned for the Site and surrounding area, including the significant investments and supporting mobility planning that will establish nonautomobile and sustainable transportation options as the primary travel mode for the area.

- Local Planning Disconnects and Emerging Opportunities
- o Emerging Transportation Context
- o Site and Area Travel Characteristics

• Resident Parking Considerations

A discussion regarding appropriate minimum parking standards proposed for resident use. The disconnect of the prevailing Zoning By-law regime is explored together with parking demand trends being seen across the City and the guidance these provide towards adoption of a reduced parking standard.

- o Parking Trends and Data Insights
- o Proxy Area and Site Travel Characteristics
- o Proposed Resident Parking Standards

Non-Residential Parking Considerations

A discussion regarding the parking standards proposed for non-resident uses within the Master Plan. The appropriateness of the proposed standards is outlined in the context of the level of transit and other non-automobile dependent forms of mobility proposed to support the development and recognizing the extensive shared parking opportunities that will lead to significant efficiencies in parking supply use and supply needs.

- o Prevailing Zoning By-law Disconnect
- o Approach to the Provision of Parking
- o Proposed Non-Residential Parking Standards

8.3 POLICY AND PLANNING CONTEXT

Overview: Contemporary Public Policy and Alignment of Master Plan Objectives

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

Mobility planning increasingly 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. Fundamental to such, contemporary planning initiative is the need to reduce and manage parking.

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

- Planning transit from a network perspective.
 Public transit is being transformed with the goal of achieving 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.
 City of Toronto has been undertaking significant expansion of cycling infrastructure as put forward in the Cycling Network Ten Year 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 government. The above themes have been fundamental to the development of the Christies Master Plan mobility principles, which have been and will continue to guide the planning and design of the site. The Master Plan principles (further discussed in **Section 8.3.3**) include:

- Transform Area Transit
- Create Complete Main Streets
- Prioritize Pedestrian Mobility
- Enable and Support Cycling
- Commit to Sustainable Transportation

Notably, the collaboration, partnership and funding mechanisms across all levels of government and the private sector to invest in and construct sustainable transportation infrastructure and development are at an all time high.

The Christies Master Plan is a leading example of such collaboration; it will set a precedent of the collaborative efforts across agencies and sectors to deliver major transit infrastructure that will alter the mobility patterns and urban development in southeast Etobicoke. The following are explored as part of the review of the policy framework guiding the general approach to mobility within provincial, municipal and local planning policy documents and the alignment with the core elements of the Master Plan and its guiding principles:

- 1. Provincial and Regional Framework
- 2. City-Wide Initiatives and Trends
- 3. Master Plan Principles and Objectives

8.3.1 Provincial and Regional Framework Considerations

By way of example - Provincial and Regional policy and planning that promotes sustainable transportation and development include:

- 2014 Provincial Policy Statement
 Encourages the provision of transportation demand management strategies within new developments to increase the efficiency of existing and planned transportation infrastructure. It also encourages density being added to lands that adopt a mix of uses to promote non-auto based travel. This suggests limiting the number of vehicular trips, partially through reduced parking, being generated by the Site
- Growth Plan for the Greater Golden Horseshoe (2017)
 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 consider minimizing the provision of parking as an important strategy.
- Ministry of Transport Transit-Supportive Guidelines (2012) Support the use of TDM strategies, especially in close proximity to transit stations. This includes the reduction of parking requirements upon the adoption of TDM measures, the sharing of parking between uses and use of on-street parking during off-peak hours. This is fundamental to the Site with consideration to planning for the new GO Station.

- Metrolinx 2041 Regional Transportation Master Plan Supports intensification in accordance with sustainable transportation objectives. Additional rapid transit options (i.e. light rail), greater pedestrian connections, and mixed-use density should be considered for the City of Toronto and the surrounding region. Emerging and established mobility hubs, such as the Site, should adopt such elements and minimize parking in areas that may be more efficiently utilized by more sustainable infrastructure.
- Ontario's Five-Year Climate Action Plan

The vision and direction from the Province has been provided as strategies, which municipalities are encouraged to consider and deploy to combat climate change. In addition to planning actions to support cycling and walking and to reduce singlepassenger vehicle trips, it includes policy stating that minimum parking requirements will be eliminated over the next five years for municipal zoning by-laws, particularly in transit corridors and other high-density, highly walkable communities.

Minimum parking requirements are a barrier to creating complete, compact and mixed-use communities. By-laws will encourage active modes of transportation through bicycle requirements, bike lanes, larger sidewalks and enhanced tree canopies.

Support for A Reduction in Minimum Parking Requirements

Reducing parking supply is one of most effective ways to reduce automobile use and – in the case of a new community such as the Christies Master Plan – to establish "habit forming" travel characteristics from the very first resident by emphasizing sustainable travel options and constraining the opportunity for people to choose to drive where other choices exist.

In fact, as noted above, the **Ontario's Five-Year Climate Change Action Plan** provides policy direction on eliminating minimum parking requirements.

The concept to eliminate minimum parking requirements in transit accessible areas, particularly for higher-density buildings, is not a new phenomenon in North America. Developments proposing "zero" resident parking are being promoted, approved and developed in major cities across North America, including Toronto, Calgary, Vancouver, Portland, and Boston. Some cities have also reconsidered the parking requirements within their by-laws and have eliminate minimum residential parking requirements in downtown / core areas.

Table 43 summarizes a list of examples of cities in Ontario with no

 minimum parking requirements near transit station areas.

TABLE 43 MUNICIPALITIES WITH NO MINIMUM PARKING REQUIREMENT

Municipality	Location	Policy
Kitchener, Ontario	Within 400 metres of transit station	City of Kitchener Zoning By-law 2019-51
Hamilton, Ontario	Within all transit areas	Transit Oriented Development Guidelines (2012)
Ottawa, Ontario	Areas within Downtown Special Area	City of Ottawa Zoning By-law 2018-250 Consolidation (Part 4, Sections 100-114)
St. Catharine's, Ontario	Downtown areas	City of St Catharine's Zoning By- law 2013-283
Oakville, Ontario	Downtown areas	Town of Oakville Zoning By-law 2014-014

The increasing number of apartment or condominium building with reduced parking standards, compared to the Zoning By-law requirements and provision of "zero" residential parking spaces is becoming the new norm as the City's population continues to grow, transit expansions are undertaken across the city and auto-ownership declines.

As previously discussed, the "no minimum parking" policy stated by **Ontario's Five-Year Climate Change Action Plan** is becoming an increasingly common phenomenon.

Although the applicant is not requesting "zero" parking for the proposed development, the shift away from providing resident parking for each unit highlights a changing attitude toward auto-ownership, travel and the cost of living in Toronto. Changing City-wide travel trends are further explored in the following section.

8.3.2 City-Wide Initiatives and Trends

City Policy and Planning

Similarly, contemporary City-Wide policy and planning are leading urban growth and development through an integrated approach between mobility, urban development, and public realm.

The **Toronto Official Plan** implements Provincial directions and outlines City Council's goals and visions with respect to how the City grows and evolves over time. The plan is intended to ensure that the City evolves, improves and realizes its full potential in areas such as transit, land use development and the environment.

The vision of creating an attractive and safe city that instills a sense of belonging, and establishes a quality of life for all to enjoy – includes city-defining elements such as:

- Vibrant neighbourhoods that are part of a complete community;
- Attractive, tree-lined streets with shops and housing that are made for walking; and
- A comprehensive and high quality affordable transit system that lets people move around the City quickly and conveniently.

One of four key principle of the **Toronto Official Plan** is *Connectivity: A City of Connections*, where the future of Toronto is one where:

- There is a fast, convenient and high-quality transit system linking areas of housing and employment and also providing access to goods, services, health, care, education, and recreation;
- Mixed use is seen as the best way to "move less"; and
- City services are delivered efficiently through a growthsupportive infrastructure system.

Future growth of the City will be steered to areas that are well served by transit and multi-modal mobility options, directed by the **Toronto Official Plan** integrated land use and transportation policies. The importance of integrated transportation and land use planning and increasing accessibility is at the forefront of the plan:

"Accessibility has two components: mobility (transportation) and proximity (land use). Increasing mobility by providing modal choice, and/ or increasing the speed of travel allows more trips to be made within a given time, whereas increasing proximity through greater mixing of uses and/or higher densities achieves the same effect by shortening trip lengths."

The City of Toronto recently released an update to the **Toronto Official Plan**, which adopted new policy that prioritizes walking, cycling and transit, as well as policy that outlines how the City will work with their partners to expand the higher-order transit network and guide the integration of development with such higher-order transit.

By-way of example:

"The City's transportation system will be maintained and developed to support the growth management objectives of this Plan by – developing the key elements of the transportation system in a mutually supportive manner which prioritizes walking, cycling and transit over other passenger transportation modes"

The principles and objectives of the Christies Master Plan resonate with the vision, principles, and themes of the **Toronto Official Plan**. As previously noted, the Master Plan principles are further discussed in **Section 8.3.3**.

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Guidance Provided by the Downtown Plan

The **Downtown Plan** for Toronto that was created from the TOcore planning initiative is another example of contemporary, leading Municipal planning. From a transportation perspective, it focuses upon:

- Creating an inter-connected higher-order transit network that will expand the reach and convenience of transit as a travel alternative;
- Creating complete communities and streets focused upon creating places and spaces for all users that will enhance transportation mode choice options;
- The enhancement of the public realm to create a vibrant, prosperous City that encourages pedestrian travel;
- Expanding and connecting cycling infrastructure to enhance cycling as a mobility options; and
- Expanding the range of mobility options through the use of technology and sharing opportunities to better address mobility needs of the City.

While the **Downtown Plan** does not include the site, the priorities and planning objectives established are equally relevant and applicable to the Christies Master Plan and Humber Bay Shores community given:

- The emerging and planned urban context of the area;
- The existing and planned transit accessibility;
- That a full range of land uses, including a strong commercial and employment presence, is being provided in this area; and
- The connection of active network and priority on pedestrian mobility and experience.

The transportation-related themes outlined with the **Downtown Plan** and, more generally within the City of Toronto's planning directives, have been considerations that have informed and guided the planning of the proposed development's design, approach to the public realm, and mobility strategies.

The Master Plan vision and principles area further discussed in **Section 8.3.3**.

City Travel Characteristics Over Time

In step with the above, there are a number of transportation-related trends occurring on a wide scale due to evolving infrastructure and planning, as driven by supporting policies. This includes transit improvements, cycling infrastructure and services, as well as additional pedestrian infrastructure. The increasing convenience and ease of these services are resulting in a decrease in the reliance on the personal vehicle, and thereby influencing parking needs overtime.

The Transportation Tomorrow Survey (TTS) measures the behaviour of travel characteristics in the GTA in five-year intervals. A review of mode choice data for peak period travel to and from the Toronto citycentre (Planning District (PD) 1) shows that sustainable travel choices, such as walking, cycling and transit, are consistently increasing over time while automobile use is on the decline.

Over a 20-year period (from 1996 to 2016), TTS survey results show that central (PD 1) Toronto-oriented trips made by active or transit modes of travel have increased from 60% to 75%, whereas trips made by personal vehicle (including passenger trips) have decreased from 40% to 25%.

Similarly, the same review of mode choice data was undertaken for Planning Districts 1, 2, and 4 – an area generally representative of the city centre and increasingly urban, transit-accessible areas north and west of the city centre. The TTS data shows similar trends for peak period travel to / from these areas – auto vs. non-auto mode shares have also shifted by 15% over the 20-year period.

The PD 1, 2, and 4 mode choice data shows a decreasing trend in auto mode share from 50% in 1996 to 35% in 2016. The combined transit and active mode shares have therefore increased from 50% to 65% of mode choice.

These trends in TTS travel data highlight the global shifting of mode choice away from the personal vehicle as alternative mobility options and urban context change over time. Generally, with emerging technologies and shifting transportation planning priorities, travel trends are shifting away from the personal vehicle.



Downtown Core, West Toronto & Mid-Town (PD1,2,4)



The Growing Evolution of Parking Needs

As demonstrated by the travel mode share changes presented above, the downtown core is unexpectedly leading the way in terms of nonauto travel share. However, as the peripheries of central Toronto, particularly along transit accessible corridors, become increasingly urban and supported in terms of mobility options, travel trends are reflecting similar changes in auto vs. non-auto mode choice.

The same can be said for parking demands. Parking demands in downtown Toronto have been steadily decreasing over time, leading the City to continuously lower parking supply needs in its most transit accessible and urban areas. Current residential parking demands in the city centre are in the order of 0.20 to 0.25 spaces per unit (as further discussed in **Section 8.5.1**).

However, as urban and mobility contexts transition and extend (from downtown) along transit accessible corridors, similar changes in parking needs are being observed. Also key in this regard is the way that car ownership is being viewed by newer generations in the context of new development in transit accessible areas.

For instance in areas west of downtown (ex. Bloor-Dundas, High Park, Liberty Village, City Place) parking demands are in the order of 0.40 to 0.45 spaces per unit. In midtown Toronto (namely Yonge-Eglinton), along the Yonge corridor, parking demands are increasingly in the 0.30 to 0.35 space per unit range. Again, more detail with respect to parking demand data is provided in **Section 8.5.1**

For additional insight into generally changing parking demands over time, BA Group has conducted a number of studies for residential buildings within transit accessible areas of the City over a substantial period of time. BA Group has been able to obtain parking demand information at three buildings over a 20-year period (1996 to 2015). The overall history of demands recorded in each case provides a significant level of insight into the way parking demands have evolved at each residential building over time and may evolve in the future. The location and description of the three buildings are outlined below:

- 45 Dunfield Avenue, Yonge-Eglinton (rental);
- 55 Charles Street West, Bay-Bloor (rental / condominium);
- 77 Davisville Avenue, Yonge-Davisville (rental)

It is notable that all three buildings have experienced, while not always linear, a significant decrease in parking demands during the time period. The observed residential parking demand for these buildings decreased from approximately 0.50 to 0.35 spaces per unit to approximately 0.44 to 0.23 spaces per unit. This provides strong evidence of the downward evolution of parking in transit accessible locations. The overall trends relate to a shift in modal split towards non-auto modes as vehicle ownership decreases and other modes of transportation become more readily available and as the costs of not only building underground parking rise significantly, so to do the costs of maintaining and managing the same underground parking.



8.3.3 Alignment with Master Plan Principles and Objectives

The transportation and mobility aspects of the Master Plan have been developed in the context of the broader City, Regional, and Provincial planning direction outlined above.

A series of principles have been developed to guide the development of the Master Plan. The principles build upon the broader context of the planning policy direction that is guiding the way the City of Toronto evolves and responds to changing transportation needs, with initiatives and investments prioritizing the mobility and experience of people over the efficiency of car movement.

These transportation principles resonate and reflect broader City transportation policy and preferences that talk to the creation of mixeduse developments, complete streets for people, urban design excellence, and the mobility experience of all street users.

The principles understand the existing context and constraints of the Site and recognize the opportunity and role the development plan can, and will play in reshaping the urban fabric and mobility network of the greater community. They provide a framework guiding the way in which the redevelopment of the Site should be considered from a transportation perspective, how the mobility needs of the proposal and area as a whole can be best met.

The key principles are as follows:

- Transform Area Transit
- Address Area Traffic Congestion
- Create Complete Main Streets
- Integrate New Neighbourhood Streets
- Prioritize Pedestrian Mobility
- Enable and Support Cycling
- Arrange Site Access and Servicing
- Commit to Sustainable Transportation
- Meet Future Mobility Demands

The above principles are integrated through physical infrastructure improvements, site plan elements, site organization and measurable TDM measures, and work together to influence travel demand and characteristics for the Site and surrounding area.

The Christies Master Plan provides an overall vision guiding the redevelopment of the property to create a centre for the Humber Bay Shores community that provides for the full range of land uses, facilities, amenities, open spaces, and destinations that sustain successful communities.

From a mobility perspective, new elements including higher order transit and sustainable infrastructure are being introduced in the Master Plan to create a new transportation context.

The support provided through transit and non-auto facilities are fundamental aspects that will serve the Humber Bay Shores area in the most optimal way.

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The following are the four key underpinning elements of the Master Plan from a mobility and transportation perspective:

- Delivery of a new **transit hub** that provides access to the Metrolinx Lakeshore West GO that integrates multiple modes (particularly local transit);
- Delivery of a responsive **street network** with new street linkages and improvements that prioritize the needs of non-auto modes;
- Delivery of **active infrastructure** that provides connections between key destinations within and around the site by establishing sustainable travel options;
- An **urban plan** that creates a strong public realm network through the provision of a mixed-use community and truly livable neighbourhood by way of urban and functional design

The Opportunity

The Master Plan is centred upon creating a new complete community that is built, from the ground up, to provide a wide range of nonautomobile dependent mobility options that minimize car usage as a form of transportation.

The Master Plan is proposing a significant array of non-automobile facilities and elements that will not only provide for future mobility needs of residents, employees and visitors to the Christies development but will also greatly benefit the mobility options for all of the Humber Bay Shores and Southern Etobicoke area. Significant elements of the Master Plan that are central to this vision and support sustainable transportation options include:

- Construction of a new Park Lawn GO Station;
- Creation of a Transit Hub at the new GO Station with new TTC LRT and bus facilities;
- New dedicated LRT track facilities connecting Lake Shore Boulevard West to the Transit Hub;
- Dedicated LRT tracks on Lake Shore Boulevard West;
- Enhancing cycling facilities on Lake Shore Boulevard West, Park Lawn Road and within the development plan;
- A series of complete streets and new main street signalized crossings that promote walking as a viable local travel mode;
- Bike share and end-user cycling facilities within the development plan; and
- Car share facilities and other complementary programmes.

All of these combine to fully support non-automobile dependent mobility in the area. The details of the transportation and mobility infrastructure, strategy, and demand management tools that are part of the plan are further provided in the following sections relating specifically to the emerging transportation context of the sitesurrounding area.

8.4 MASTER PLAN MOBILTIY CONTEXT

8.4.1 Local Planning Disconnects and Emerging Opportunities

The current state of parking has shifted vastly over the years as a direct effect from major trends seen in transit accessible areas.

Traditionally, support for non-auto mobility has been oriented towards downtown Toronto given the established transit infrastructure and alternative, sustainable modes of travel (i.e. walking, cycling, and / or transit). However with increasing efforts and investments to change travel behaviours across the City, opportunities such as the Christies Master Plan and its substantial mobility investments need to be similarly supported.

The Site presents this opportunity to commit to changing the mobility context and urban form of south Etobicoke – setting a precedent for the area. The development plan will be one of the first non-downtown nodes to establish such a transit-oriented environment that is fully leveraged by the master plan, secondary studies, and policies on a local and regional scale. The Site has the unique opportunity to set a new precedent that builds upon the progression that has occurred in central areas of the City – notably downtown – and do so on a proactive basis.

The local area, which is currently subject to active mobility and development planning has the opportunity to be at the forefront of City planning and sustainable community building.

With the Waterfront Transit Reset Study and now the concurrent Christies Planning Study (Secondary Plan) and supporting Transportation Master Plan, local planning has the opportunity to establish a proactive approach to further advance initiatives and investments to increase sustainable mobility options and reduce vehicle travel demands.

The Non-Applicability of the Current Zoning By-law Regime

The current City of Toronto Zoning By-law regime is not in step with the contemporary planning initiatives that are guiding development today and into the future. This holds true not just for the Etobicoke area but for the City as a whole. Parking standards currently in force are conservatively high and continually overstate development parking needs particularly as they pertain to residential land uses.

Since 2013, an increasing number of parking amendments to Zoning By-law 569-2013 have taken place in various areas within the City. The approval standards in the Zoning By-law were derived from past studies dated pre-2007, representing an approximate 15-year time gap; this indicates a major disconnect from the more recent planning and policy directives, as previously discussed.

The following outlines each Policy Area of Zoning By-law 569-2013 and their defined transportation context, along side the approximate blended minimum residential parking standard.

TABLE 44 ZONING BY-LAW 569-2013 RESIDENTIAL PARKING RATES

Policy Area	Context	Rate
Policy Area 1	Downtown Area	0.65 spaces / unit
Policy Area 2	Centres	0.80 spaces / unit
Policy Area 3	Avenues along Subway Lines	0.80 spaces / unit
Policy Area 4 Avenues along Surface Transit		0.86 spaces / unit
Rest of City	-	0.96 spaces / unit

The disconnect between Zoning By-law parking standards and current parking demand trends is discussed in detail in **Section 8.5.1**.



8.4.2 Emerging Transportation Context

The mobility planning and deliverables of the Master Plan outlined above will significantly alter the mobility patterns in south Etobicoke.

The unprecedented delivery of transit infrastructure and completely integrated transit-oriented master plan will characterize and re-shape the transportation context of the area.

Transit Access

The proposed Park Lawn GO Station and LRT route will provide convenient access to the GO services and future RER improvements. This will significantly increase transit opportunities to the Site and the wider Humber Bay Shores area.

The existing and significantly improving level of transit provides highly convenient transit travel options for residents, visitors, employees, and patrons of the site. It is supportive of non-automobile dependent travel and offers the site and surrounding neighbourhood an excellent and convenient travel alternative that avoids the use of a private automobile on a day-to-day basis. This reduces the need for vehicle use and ownership, as has been experienced in many recent developments across Toronto.

As a result of these current and future transit commitments and investments, the site is expected to evolve into a multi-modal mobility hub with a major focus on transit integration. The following briefly summarizes the transit service offered by the site:

- All-day GO service with 12-minute headways;
- 12-minute GO train ride to / from the downtown area; and
- Multiple higher order surface transit routes extending eastwest (i.e. 508 and 501 streetcars) and three bus routes.

This high level of transit service also positively influences the level of pedestrian accessibility to and from the site. An increasingly large portion of area residents, visitors, and employees will have enhanced access within a 5-minute walk or 10-minute transit ride to downtown Toronto and key destinations.

Active Transportation

In future conditions, the active transportation context of the local area will provide extended and renewed multi-use trails. The master plan proposes a number of new pedestrian and cycling facilities and improvements (i.e. mid-block connections) that will increase the overall permeability of the Site.

In addition, the Site itself will have greater access by cycling and / or within walking distance of a range of employment, retail and entertainment services located along the Park Lawn Road and Lake Shore Boulevard West corridors.

As a result, these new connections and facilities will integrate the Site into the surrounding area, and form direct linkages to existing and future active transportation routes.

In general, the availability and convenience of multi-modal services will reduce the need to use a car. The Site was designed to reduce vehicle dependency through active mixed-use frontages, strong pedestrian and cycling passageways, and reliable non-auto service.

Travel Demand Management

As discussed in **Section 5.0**, a comprehensive TDM Plan is proposed as part of the development proposal. This TDM Plan is intended to outline a wide range of strategies, measures and initiatives that will ultimately reduce the reliance of auto travel, as well as deliver and integrate significant transit service at the site.

The TDM Plan generally focuses on enhancing mobility options for building residents, employees, and visitors by providing practical travel options other than private vehicles. The TDM Plan further incorporates recommendations to provide convenient pedestrian facilities and bike parking, collaboration with transit agencies, and other incentive-based or promotional initiatives. Such strategies will leverage the site's location and provide residents, employees, patrons, and visitors with opportunities to travel by non-automobile dependent means to an extent that is much greater than anticipated.

One of the most effective TDM strategies includes limiting parking availability within the Site. The limited availability of residential parking, combined with the convenience and availability of other travel options, tends to limit car ownership.

Other related factors that have played a role in establishing the framework for this change in parking needs includes the changes in travel alternatives that reduce car ownership, single occupancy vehicles, and / or daily auto use.

The advent of car-sharing services, in particular, and the investment in all forms of non-automobile travel alternatives (i.e. dedicated bicycle infrastructure) have made, and are continuing to make, a significant difference in resident and tenant perspective on travel mode and mobility choice.

The policies, programs, and services (i.e. car-share) put in place by the City of Toronto over recent years have and continue to experience success and have played a key part in the changing parking landscape across the downtown areas and transit accessible centres.

In summary, the proposed TDM plan and corresponding measures will further influence site travel behaviour, and support the vision and investments being made to establish a non-automobile dependent mobility context. A key and effective TDM tool to help achieve the above is reduced and managed parking supplied.

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8.4.3 Site and Area Travel Characteristics

The supporting planning directives and future transportation context for the local area plays an essential role and provides a strong foundation for the increase in sustainable mobility, and particularly, the decrease in auto use. In addition to this, the vision, planning, and infrastructure provision of the Site provide substantial opportunities to establish a community with fundamentally different travel characteristics.

Today's travel characteristics for the local area demonstrate a heavy reliance on auto use, with approximately 60% auto driver trips and approximately 5% auto passenger trips. Transit comprises approximately 30% of trips.

As previously discussed, the additions of the planned LRT and new GO station at the Site signify convenience and opportunity; these are expected to foster growth, efficient travel, and greater mobility for all prospective users. Furthermore, the mixed-use nature of the proposed development plan will encourage the use of internalized trips within the development itself.

This works parallel to the TDM strategies set out for the Site – car share services, limited parking, and carpooling programs which are proposed to incentivize sustainable travel and promote non-auto use.

Lastly, it is expected that the current and evolving area demographics will respond to the upgraded positioning and level of service accordingly. The overall transportation-related environment being set for the Site creates the ability to develop a transit-oriented development with a shift in travel characteristics that conform to contemporary policy and planning principles. On the basis of the above, reliance on auto use is expected to be significantly reduced in the local area. Conversely, a notable increase to the GO Transit mode split is projected (particularly with the construction of the new GO Station) and a notable increase to active mode split is also projected (particularly with the mixed-use nature of the site promoting substantial internalization between uses).

Overall, across all proposed land uses, a future driver mode split in the order of 30% is projected (and 10% auto passenger trips), whilst an increased transit mode split of 50% is projected.

Overall, the transportation context and travel characteristics of the local area are expected to be drastically changed from existing, following development of the site and other related transportation infrastructure. It is expected that there will be an increased focus on transit, as well as active transportation modes servicing interaction between the broad mix of land uses proposed on the Site and in the local area. Accordingly, a reduced reliance on the private vehicle is projected.

In this respect, from a transportation perspective, the future local area is expected to operate in a similar manner to areas of Toronto with a similar transportation context, particularly in relation to an area's proximity to high-order transit services and in relation to an area's mixed-use nature. Notable areas which are considered relevant in this regard include Liberty Village, Bloor-Dundas, Yonge-St. Clair, and Yonge-Eglinton (these proxies are further discussed in **Section 8.5.2**).

As such, when determining parking provisions for the site, it is considered most appropriate to reflect parking approvals and existing parking demands of areas of a similar transportation context of the future local area, such as those listed above. Again, discussed further in **Section 8.5.2**).

8.5 RESIDENT PARKING CONSIDERATIONS

It is in our opinion that the residential parking standards that are currently applicable to the site overstate the parking needs of the proposed development by some margin.

The Rest of City parking rates are reflective of an outdated by-law regime, inappropriate for application to a contemporary, transitoriented development such as the Christies Master Plan.

As previously noted, the approval standards in the Zoning By-law were derived from past studies dated pre-2007, representing an approximate 15-year time gap; this indicates a major disconnect from the more recent planning and policy directives. This disconnect is further explored through quantitative means by reviewing parking approval and parking demand data across the City.

The parking demand data provides further insight by focusing on key proxy areas that have been considered to reflect elements of the future mobility context of the Master Plan, and portray current travel characteristics similar to those projected for the site.

Particular areas particularly in the west side of central Toronto and midtown Toronto are explored as a means of establishing the appropriate residential parking standards for the site.

The above factors are explored as part of formulating the proposed residential standards, along with the overall need to bring the residential parking standards in step with public policy and planning initiatives that are guiding development in an integrative manner with transit and mobility options, alternative to the private vehicle. As such, this section includes the following:

- Parking data and trends across the City providing insight into current trends and further highlighting the disconnect of the current regime;
- A more focused review of the parking trends of proxy areas that are reflective of the travel context and characteristics of the site.
- The proposed parking standards and the appropriateness of their applicability to the site.

8.5.1 Parking Trends and Data Insights

The City of Toronto comprises residential buildings of all typologies with a range of parking supply ratios that vary based upon a number of factors including: a building's age; approval and parking demand regimes in place at the time of construction; and the marketing needs of a particular product.

There is a broad spectrum of parking supplies and demands associated with residential buildings across the City and these have been changing (reducing) over recent years in response to changing demographics, economic factors, City policy and planning directives, evolving mobility choices (i.e. transit, car-share, bike share), and proximity to a variety of land uses (employment centres, retail facilities, and entertainment services). These factors contribute to the choices in which residents and visitors make with respect to vehicular and nonvehicular travel mode use.

As previously noted, parking standards (namely residential) outlined in the City of Toronto's comprehensive Zoning By-law 569-2013 are considered to be conservatively high relative to parking demand and approval trends across Toronto. Current residential parking approvals and demand data are discussed in the following to demonstrate the disconnect between Zoning By-law standards and emerging parking trends. As such, this section includes the following:

- A review of parking minimum standard approval records across the City;
- A review of parking demand data across the City based on counts undertaken by BA Group between 2010 and 2019; and.
- A review of the above approvals records and parking demand data in the context of the prevailing Zoning By-law regime.

Parking Approvals

Parking provisions at a substantial and increasing number of new residential / mixed-use buildings across Toronto have been approved at levels that are less than the applicable Zoning By-laws (often by some margin).

Such approvals have been secured through City Council, the Ontario Municipal Board (now Local Planning Appeal Tribunal), and the Committee of Adjustment for both condominium and rental buildings within transit accessible areas of the City.

BA Group has collected and compiled numerous approvals of reduced residential parking supply ratios across the City. The approval records are represented graphically in **Figure 41** to illustrate parking supply ratio trends by geographic location. A full, extensive list of the approval records is provided in **Appendix D**.

Illustrating the data graphically demonstrates the parking approval trends that are occurring across City districts. For instance, in downtown Toronto the approvals data ranges from 0.03 to 0.35, with an average between 0.15 and 0.20 spaces per unit.

In the western edges of central Toronto (generally west of Bathurst Street, east of Etobicoke), residential parking supplies are being approved at an average between 0.40 to 0.45 spaces per unit. Data point locations include developments within the Liberty Village, Bloor West Village / High Park and Bloor-Dundas / Junction areas.

Parking approvals across midtown Toronto, generally within the Yonge-Eglinton area, are reflecting an average supply ratio in the order of 0.25 to 0.30 spaces per unit.

TABLE 45 PARKING APPROVALS SUMMARY

Study Area	Parking Approval Trends
Downtown Central	0.15-0.20 spaces / unit
Midtown	0.25-0.30 spaces / unit
West Toronto	0.40-0.45 spaces / unit
East Toronto ²	0.50-0.55 spaces / unit
Scarborough & North York	0.60-0.65 spaces / unit
Notoo:	1

Notes 1.

Limited parking demand and approvals data in East Toronto (< 5 points)



FIGURE 41 PARKING APPROVALS SUMMARY

Parking Demands

BA Group has conducted numerous residential parking demand surveys across Toronto over many years. All studies have been conducted in-person, during peak residential parking demand periods (over-night / early morning).

Parking studies completed between 2010 and 2019 have been compiled and provided graphically to illustrate emerging parking demand trends across Toronto, and how the trends vary by City district and transportation context. The parking demand data is illustrated in **Figure 42** and an extensive list of the data is provided in **Appendix E**.

Downtown Toronto reflects the lowest parking demands, as expected. In recent years (between 2010 and 2019) parking demands are on average in the order of 0.25 spaces per unit. Notably this is averaged across 63 data points of varying residential building typologies, age and tenure. It is worth highlighting that in downtown Toronto, parking demands at multiple locations are being recorded at rates of less than 0.10 spaces per unit. At four sites, over 10 parking studies (2 to 3 studies completed per site) reveal demands consistently ranging between 0.04 to 0.11 spaces per unit, averaging at approximately 0.08 spaces per unit.

In midtown Toronto, parking demand observations are averaging in the order of 0.30 spaces per unit, and across the west side of central Toronto (west of Bathurst, east of Etobicoke) parking demands are on average between 0.40 to 0.45 spaces per unit. Again, the west Toronto parking studies are predominately in the Liberty Village, High Park, Bloor-Dundas and City Place neighbourhoods.

Notably, parking demands in locations long-since considered suburban in nature, with limited access to high-order transit and active transportation networks, are also seeing parking utilizations significantly less than 1 space per unit (i.e. all residents have a car).

Across North York and Scarborough residential parking demands are averaging between 0.50 and 0.55 space per unit. Again, note that this averages across all building typologies and tenures, however with 49 study observations the range and average of the parking data is revealing of the decreased parking trends in districts traditionally considered to be auto-oriented.

It is important to note that of the North York and Scarborough parking studies, only two sites are adjacent (within 300m) higher-order transit services. They are as follows:

- 55 Town Centre Court (Line 3 Scarborough RT); and
- 1650 Sheppard Avenue East (Line 4 Sheppard Subway).

Excluding this data, the average parking demand continues to reflect an average of approximately 0.55 spaces per unit.

The transit context of the study locations is illustrated within the parking demand graphic (**Figure 42**).

TABLE 46 PARKING DEMAND SUMMARY

Study Area	Parking Demand Trends
Downtown Central	0.20-0.25 spaces / unit
Midtown	0.30-0.35 spaces / unit
West Toronto	0.40-0.45 spaces / unit
East Toronto ²	0.25-0.30 spaces / unit
Scarborough & North York	0.50-0.55 spaces / unit
Notes:	•

1. Limited parking demand and approvals data in East Toronto (< 5 points)

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FIGURE 42 PARKING DEMAND SUMMARY

Zoning By-law Disconnect

Parking standards outlined in the City of Toronto's comprehensive Zoning By-law 569-2013 are considered to be conservatively high relative to parking demand trends across Toronto. The parking approval records and parking demand data summarized above clearly demonstrates the disconnect between current parking trends and the in-place Zoning By-law regime.

To emphasize this point, **Table 47** summarizes the average parking demand and average parking approval data by general district (Downtown Toronto, Midtown Toronto, West Toronto, East Toronto, and Scarborough / North York). Note that due to limited availability of both parking approval and demand information, Etobicoke is not included in the summary.

The Downtown Central area, generally defined by Bathurst Street to Parliament Street and Front Street to Dupont Street, is currently subject to Policy Area 1 parking standards, which is a blended average rate of approximately of 0.65 spaces per unit. As shown in **Table 47**, the parking demands average 0.20 to 0.25 parking spaces per unit.

The extent and number of new developments that are proceeding with reduced parking standards in the downtown area is, increasingly, reflective of the recognition by City of Toronto staff that Zoning By-law requirements are disconnected (i.e. overstated) from current parking needs of residential buildings in the downtown area.

This same disconnect between parking needs and by-law regime is apparent City-wide (as shown in **Table 47** and further discussed below), however it is traditionally less often recognized or addressed in areas outside of the City centre.

Increasingly, in midtown Toronto and to some extent the western and eastern edges of the City centre, City approvals are adopting lower residential parking standards (from the current regime) that are more reflective of parking demand utilizations. The Midtown Toronto area is primarily subject to Policy Area 2 and Policy Area 3 parking standards. Both policy areas reflect a blended average residential rate of approximately 0.80 spaces per unit. Parking demands, however, are significantly lower with average observed rates in the order of 0.30 spaces per unit.

Similarly, there is a significant disconnect across other areas of the City. Notably, under current policy, West and East Toronto require in the order of 0.80 to 0.96 spaces per unit, whereas parking demand utilization averages are in the order of 0.35 to 0.45 spaces per unit. In North York and Scarborough, parking standards in the order of 0.86 to 0.96 spaces per unit are currently applicable, whereas parking studies are revealing demands in the order of 0.55 spaces per unit.

It is important that development across the City proceeds with parking standards that are, at a minimum, reflective of existing parking utilization trends – and that are ultimately further reaching (i.e. lower) than current demands. Constraining parking supplies is a known, effective Transportation Demand Management (TDM) measure to further reduce vehicle use and support initiatives to increase sustainable modes of travel (ex. transit, walking, cycling).

As previously discussed, travel and parking trends over time consistently show a decrease in vehicle use and ownership – having a Zoning By-law regime that reflects and supports this trend is key in planning development in accordance with sustainable public policy. Again, this is approach has been more widely adopted and embraced in downtown Toronto, however the parking demand reviewed as part of this study clearly and consistently shows a City-wide disconnect between parking demand observations and by-law standards.



Overall, the parking approvals and demand data reflect consistently lower parking rates than those of the governing By-law. Most notable are the discrepancies in the Midtown and Downtown area, where you see an entire disconnect of approvals from By-law reflecting the transit accessibility of these areas and the strength in the support for the adoption of a progressive, reduced, parking regime.

Equally, if not more important to highlight is the disconnect between demands, By-law, and to some extent approvals in more peripheral areas such as West Toronto and beyond to North York and Scarborough. Parking demands in various locations across West Toronto (ex. Liberty Village, Bloor-Dundas, High-Park) are reflecting parking demands on average less than half of the current By-law requirements. Notably in Scarborough and North York parking approvals are not in step with current parking demands, indicating a lack of initiative and support for the adoption of lower parking standards. For the Christies Master Plan, this presents an opportunity for local planning to be pro-active and establish a parking regime that will be appropriate for the future emerging context of the site.

Study Area	Policy Area / Transit Context	Zoning By-law 569-2013	Parking Demand Trends	Parking Approval Trends
Downtown Central	Policy Area 1 (Downtown)	0.65 spaces / unit	0.20-0.25 spaces / unit	0.15-0.20 spaces / unit
Midtown	Policy Area 2 (Centres) Policy Area 3 (Avenues along Subway Lines)	0.80 spaces / unit	0.30-0.35 spaces / unit	0.25-0.30 spaces / unit
West Toronto	Policy Area 4 (Avenues along Surface Transit) Rest of City	0.86 spaces / unit 0.96 spaces / unit	0.40-0.45 spaces / unit	0.40-0.45 spaces / unit
East Toronto ²	Policy Area 3 (Avenues along Subway Lines) Policy Area 4 (Avenues along Surface Transit) Rest of City	0.80 spaces / unit 0.86 spaces / unit 0.96 spaces / unit	0.25-0.30 spaces / unit	0.50-0.55 spaces / unit
Scarborough & North York	Policy Area 4 (Avenues along Surface Transit) Rest of City	0.86 spaces / unit 0.96 spaces / unit	0.50-0.55 spaces / unit	0.60-0.65 spaces / unit

TABLE 47 PARKING DEMAND AND APPROVALS SUMMARY

Notes:

1. Limited parking demand and approvals for East Toronto (1 point and 2 points)



8.5.2 Proxy Areas and Site Travel Characteristics

As previously noted in **Section 8.4.3**, the existing travel characteristics for the local area demonstrate a heavy reliance on auto use (60% auto driver mode share). With delivery of the Master Plan, however, and, in particular, the planned site and area major transit investments, the transportation context will drastically change in the future. Such transit investments include:

- A new GO Station on the Lakeshore West rail line;
- A new transit hub at the new GO Station, integrating LRT and surface transit routes;
- GO RER improvements delivering all-day GO service with 12minute headways and 12-minute train travel to / from the downtown area; and
- Waterfront Transit Reset improvements to the 501 Queen Streetcar.

The emerging transit and urban context based on the above improvements and the delivery of the mixed-use development plan at the heart of the existing Humber Bay Shores community, establishes a context that is precedent setting for southeastern Etobicoke. With high transit accessibility and mixed-use nature of the urban plan, a future residential auto mode share of 30% is projected for the site.

In establishing the travel characteristics of the Master Plan an extensive and detailed review of mode choice and distribution data was undertaken for various areas across the City in order to assess a series of areas that are, in some way, representative of the emerging and desired context in the site-surrounding area.

Based on transit access, proximity to downtown, and urban form, the following areas were considered to demonstrate elements and travel characteristics with similarities to that envisioned for the site:

- Bloor-Dundas
- Yonge Eglinton; and
- Yonge St. Clair

Although each area has varying elements (subway access, GO access, streetcar access) and at varying distances from downtown Toronto, it is considered that overall the proxies capture the essence of the future site context with respect to: proximity to downtown, strong transit connection to downtown, strong and supportive local area transit, an emerging urban setting with changing demographics.

In short, each of the areas demonstrate residential travel characteristics that, in our opinion, are reflective of the anticipated site travel behaviour. The residential mode choice across the four proxies were generally 30% auto driver.

In reviewing the parking demand data presented in the above **Section 8.5.1** (and **Appendix E)**, parking trends within the vicinity of the above noted proxy areas reflect demands ranging from approximately 0.30 spaces per unit to 0.50 space per unit.

More specifically in the West Toronto areas (i.e. Bloor-Dundas and Liberty Village) average residential parking demands are in the order of 0.40 to 0.45 spaces per unit. In Midtown Toronto (i.e. Yonge-St. Clair, Yonge-Eglinton) residential parking demands are in the 0.30 to 0.35 space per unit range.

Given the emerging transit and urban context of the proposal as outlined above, and its similarities to the abovementioned proxy areas, it is considered appropriate for proposed parking provisions to align with observed trends in these areas. A residential parking supply standard of 0.40 spaces per unit is, therefore, considered appropriate for the site and the emerging future mobility context.



8.5.3 Proposed Resident Parking Standards

Reduced minimum parking standards are proposed for the Master Plan as part of a contemporary and pro-active parking framework for the site. The following reduced minimum blended resident parking standard is proposed as part of this framework:

Residential
 0.40 spaces per unit

The above standard is representative of an average overall parking standard proposed that would be applied for all residential unit types within the 2150 Lake Shore Boulevard West Master Plan. It is noteworthy in this regard that, while not determined at this stage, a proportion of units will be provided as rental apartments and there will also be a component of affordable housing provided consistent with current City policy.

Specific minimum standards can be established from the above blended ratio for each unit type for inclusion in a site specific Zoning By-law as appropriate recognizing the overall "blended" parking minimum target proposed.

Resident Parking Requirements

Based on the recommended (reduced) resident parking standard, a total of 2,852 resident parking spaces are required to support the Master Plan. Parking is provided within underground parking facilities located beneath each of the development parcels on a consolidated basis.

Influencing Factors

The adopted standard has been established considering a range of influencing factors and serves to "set the stage" for the emergence of a new community centred on the use of sustainable transportation, that promotes the localization of trip-making and the use of new transit services provided at the Park Lawn Transit Hub. These all combine to minimize dependency on the private automobile as a mobility mode.

Influencing factors include:

- Provincial and Municipal policies that all talk to the promotion of non-automobile dependent travel and sustainable forms of mobility;
- The substantial investments being proposed as part of the Master Plan to establish / construct the Park Lawn GO Station and TTC Transit Hub as a central component of its mobility plan as well as construction of dedicated TTC LRT facilities on Lake Shore Boulevard West and connections to the GO Station;
- Travel and mobility trends experienced across the City as a whole and the emergence of a decisive move away from the former reliance on automobile dependent transportation particularly in transit accessible, urban locations;

- Parking trends seen in transit accessible locations that illustrate a disconnect between the prevailing Zoning By-law regime and actual parking needs and, in fact, approvals provided by the City Council, Committee of Adjustment and LPAT;
- Consideration of the forward-thinking positive demand management aspects of parking supply policy and the significant travel benefits that can be accrued through establishing a parking framework for the site that aims to strategically integrate and build upon experience seen elsewhere across the City.

A Pro-Active and Contemporary Parking Framework

The proposed minimum resident parking standard has been adopted recognizing the importance of establishing a pro-active, and permissive, vehicular parking policy regime at the outset of the development of this Master Plan that will encourage the use of non-automobile travel modes to the greatest extent.

The proposed minimum resident standard has been targeted towards establishing a "low floor" base requirement for the residential units on the site that reflects the most pro-active elements of transportation planning and experience seen in similar contexts across the City. The proposed blended standard is reflective of the range of standards seen in such contexts and responds to the future excellent transit accessibility context that will be afforded to this area with development of the 2150 Lake Shore Boulevard West property.

The reduced standard is intended to purposely establish a context within which residential development proceeds with an emphasis on non-automobile dependent travel recognizing the role that parking supply / availability can play as a demand management tool.

More specifically, the reduced standard has been set, reflecting the range of supply standards seen in comparable contexts, to help mould travel behaviour in the new development. The pro-active parking standard requirement regime will operate as part of the overall package of infrastructure, demand management programmes and controls to focus new resident travel upon non-automobile dependent travel mobility solutions provided as part of the 2150 Lake Shore Boulevard West Master Plan.

Appropriateness of the Proposed Resident Standard

The adoption of the proposed average resident parking standard of 0.40 spaces per unit is considered to be highly appropriate for the 2150 Lake Shore Boulevard West Master Plan.

This standard is reflective of a supply target that will form part of a contemporary parking regime guiding development of the site over time that balances the strong desire to minimize automobile use, maximize sustainable travel mode use and – at the same time – provide sufficient parking for the necessary needs of prospective residents in the future context of the site.

The proposed standard recognizes the fundamental change in the travel context proposed for the site (and surrounding area) as part of this highly transit orientated Master Plan and the travel behavioral change that this context can promote.

The opportunity afforded by the significant investments being made in transit and other sustainable transportation network infrastructure as part of the Master Plan is significant and needs to be complemented by a pro-active parking regime that guides resident mobility choice from the outset of the development.

Adoption of the reduced resident standard will also, from a broader sustainability perspective, serve to minimize parking needs and the unnecessary provision of an expensive and inefficient resource. The minimization of parking supply needs also clearly assists – if minimized – in reducing site related traffic activity and traffic congestion levels into the future.

8.6 NON-RESIDENT PARKING CONSIDERATIONS

It is in our opinion that the non-residential parking standards that are currently applicable to the site overstate the parking needs of the proposed development by some margin.

The Rest of City parking rates are reflective of an outdated by-law regime, inappropriate for application to a contemporary, transitoriented development such as the Christies Master Plan.

Similar to the reasons presented for the residential parking considerations, there is a need to bring the non-residential parking standards in step with public policy and planning initiatives that are guiding development in an integrative manner with transit and mobility options, alternative to the private vehicle.

The truly mixed-use nature of the development proposal presents tremendous 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.

As such, this section outlines the primary elements that are considered key in the justification for reduced non-residential parking standards and the ability to share parking resources seamlessly across the entirety of the site. The discussion points herein include:

- A discussion regarding the disconnect of the prevailing Zoning By-law regime particularly given the emerging mobility and urban context of the site and surrounding area;
- A discussion regarding the approach to providing nonresidential parking to maximize supplies and most efficiently use parking supplies across the site; and
- A discussion regarding the proposed parking standards and the appropriateness of their application to the Master Plan.

8.6.1 A Disconnected Prevailing By-law for the Master Plan Mobility Context

The Rest of City rates that are currently applicable to the site drastically overstate the parking needs of the site and do not support the overall mobility direction and goals of the Master Plan.

As previously noted the prevailing Zoning By-law parking regime derived from past studies dated pre-2007, representing an approximate 15-year time gap; this indicates a major disconnect from more recent planning and policy directives, and generally changing parking needs over time.

The prevailing parking standards were established based on what was considered appropriate, at that time, for parking needs in areas across the City with varying transit and urban context. For instance, the Policy Area 1 standards were established for downtown areas of the City (with greatest access to high-order transit and urban environment), Policy Areas 2 and 3 standards were established for defined centres and avenues along subway corridors, and Policy Area 4 standards were defined for avenue along frequent surface transit routes.

The Rest of City parking standards were established for the balance of the lands, intended for large areas of the City with limited to no transit services, and generally reflective of a suburban built form. The nonresidential parking standards defined in the Rest of City rates are intended for land uses that are not typically adjacent or within close proximity to density, and are considered on a stand-alone basis.

As previously discussed, albeit from a residential parking perspective, there is an overall disconnect between the Zoning By-law parking standards and the current parking demands that are being observed across the City. As highlighted in **Section 8.5.1**, the parking standards of each defined policy area overstates (by some margin) the parking needs of the area.

Most notable however is the disconnect of the Rest of City parking standards and the emerging urban, transit-oriented, context of the Christies Master Plan. The Rest of City rates, intended for areas of the City with little to no transit access and non-residential land uses as individual, stand-alone uses, and therefore not benefiting from shorter, non-auto, trip making characteristics that arise from adjacent density and mixed uses, are not appropriate for application to the Master Plan.

With the transit-oriented and urban nature of the Christies Master Plan there is a need and opportunity to recreate an appropriate approach to non-residential parking that reflects the truly mixed-use plan and the synergies that exist within it.

The non-residential uses proposed as part of the Master Plan, particularly commercial / retail, have been developed to support the local community. The commercial format is local in nature, intended to enable community residents and employees to shop, eat, and play at the heart of the Humber Bay Shores neighbourhood. The local area and site population (local market), in turn supports the viability of such local format retail / commercial uses. This local synergy is a key component to reducing travel demand and parking needs of the site. The Master Plan's support for local travel options (pedestrian connectivity, site porosity, cycling infrastructure, and local transit integration) further enable the localized trip making,

Through major infrastructure moves that significantly alter the transit access of the site, the Master Plan supports other modes of travel, particularly as it pertains to non-residential uses with commuter draws (example office).

Overall, there is a need to align the local By-law regime with the emerging urban context of the site. Appropriate and progressive parking standards are an essential tool to support the Master Plan and, in fact, pro-actively seek to reduce auto use and reliance.

8.6.2 Approach to Provision of Non-Resident Parking

A site-wide parking deployment strategy has been developed as part of the site planning and design to ensure both the most efficient use of parking infrastructure and resources, and to minimize the intrusion of driveways within the heart of the Master Plan.

Key to the parking strategy is the proposal to provide non-residential parking within shared commercial parking facilities located beneath the development plan. The non-residential parking supply, can therefore be minimized and shared between the various component land uses.

Below-grade connections across the site plan will enable the sharing of the non-residential parking supply between development blocks, and also allow for the distribution of parking traffic to all site driveways.

The ability to share parking in a pooled commercial format is essential in order to maximize efficiency and ensure parking is not under-utilized or oversupplied.

Land uses have varying parking occupancy demands, and it is important to understand such temporal variations so as to provide parking in the most efficient way where spaces get used most often

The usage patterns of residential visitor, commercial / retail, and office parking vary across the course of a typical day. For instance, retail uses tend to peak during the mid to late afternoon whereas residential visitor demands typically peak later in the early and late evening periods. Office demands peak during the morning and reduce over the course of a typical weekday and are very limited during the weekday evenings and on weekends. Zoning By-law 569-2013 includes temporal sharing formulae that can be applied to the base parking standards when calculating overall nonresident parking needs of a proposed development.

The temporal sharing formulae will continue to apply to the proposed parking standards.

TABLE 48 NON-RESIDENTIAL PARKING STANDARDS

Use	АМ	РМ	EVE
Visitor	10%	35%	100%
Office	100%	60%	0%
Retail	20%	100%	100%
School	100%	100%	20%

Pooled and shared parking across all site land uses is the most efficient way to provide parking where spaces get used more often, for more purposes recognizing the above temporal relationships of different user groups. Again, this helps to minimize parking needs and avoids unnecessary over supply of parking.

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8.6.3 Proposed Parking Standards

The non-residential parking standards proposed for the Master Plan are as follows:

- Visitor 0.10 spaces per unit
- Retail
 1.00 space per 100 sq.m. GFA
- Office
 1.00 space per 100 sq.m. GFA
- School 0.50 spaces per 100 sq.m. GFA

The above rates are consistent with the Policy Area 2 and Policy Area 3 standards outlined in Zoning By-law 569-2013.

As previously discuss, these standards were originally developed to be used in centres and transit accessible area across the City. By-way of comparison, the Rest of City standards were developed for greater areas with limited or no transit service – again, typically suburban in built form with single-use developments.

The Zoning By-law is generally considered to be outdated with respect to parking standards, however – the PA2 / PA3 standards are considered to be more appropriate for the urban and transit accessible context being established in and around the site. A comparison of the currently applicable Rest of City non-residential rates and proposed Policy Area 2 / 3 non-residential rates is provided in **Table 49**.

Notably the proposed non-residential parking rate reduction is in the same order of magnitude as the reduction being sought from the prevailing residential parking standards -40% to 50%, which is considered to be consistent and appropriate considering the travel mode share changes anticipated for the site.

TABLE 49 NON-RESIDENTIAL PARKING STANDARDS

Use	Rest of City	Policy Area 2 / 3
Visitor	0.20 spaces / unit	0.10 spaces / unit
Office	1.50 spaces / 100 sq.m.	1.00 spaces / 100 sq.m.
Retail	1.50 spaces / 100 sq.m. ¹ 3.00 spaces / 100 sq.m. ² 6.00 spaces / 100 sq.m. ³	1.00 spaces / 100 sq.m.
School	1.50 spaces / 100 sq.m.	0.50 spaces / 100 sq.m.

Notes:

1. If GFA is more than 200 sq.m. and less than 10,000 sq.m.

2. If GFA is 10,000 sq.m. or more but less than 20,000 sq.m.

3. If GFA is 20,000 sq.m. or more.

It is proposed to provide all non-residential parking as pooled, shared, commercial parking below the site plan, with below-grade connections to maximize parking efficiency and distribute vehicles between the garage access points.

The proposed parking standards and deployment strategy are considered appropriate given the changing context of the sitesurrounding area with major transit and multi-modal investments being made as part of the Master Plan and area-wide planning. The reduced supply also takes into consideration the local nature of the site retail / commercial uses; the internalization of commercial trips will result in significantly less parking demands in comparison to traditional, stand alone retail formats.

8.7 PARKING STANDARDS AND SUPPLY OVERVIEW

8.7.1 Disconnect of Prevailing Parking Standards

The applicable Zoning By-law 569-2013 parking standards, in our opinion, greatly overstate the vehicular parking needs of the proposed development.

The Rest of City rates and, generally, the City of Toronto 569-2013 are not sufficiently reflective of current parking trends and proactive policy and planning initiatives. This is particularly relevant with respect to the urban, transit-oriented development, that is the Christies Master Plan, that will be setting a new precedent in Etobicoke.

Parking standards outlined in the City of Toronto's comprehensive Zoning By-law 569-2013 are considered to be conservatively high relative to parking demand trends across Toronto.

A review of City-wide parking demand data alongside prevailing parking standard requirements, clearly shows that parking demands are consistently lower than the governing by-law, and often by some margin. The extent and number of new developments that are proceeding with reduced parking standards in the downtown area is, increasingly, reflective of the recognition by City of Toronto staff that Zoning By-law requirements are disconnected (i.e. overstated) from current parking needs This same disconnect between parking needs and by-law regime is apparent City-wide, however it is traditionally less often recognized or addressed in areas outside of the City centre.

The Master Plan presents the opportunity to change the above and align the local planning and by-law regime to be supportive and proactive with respect to establishing appropriate parking standards for the site. A progressive, reduced, parking regime is essential in supporting and committing to changing the mobility context and urban form of south Etobicoke – notably reducing vehicle demands.

8.7.2 Contemporary Policy and Mobility Planning Context

The public policy regime with respect to mobility and development planning has changed over recent years as sustainable growth is at the forefront of initiatives. Provincial, Regional and Municipal-wide directives set a planning framework that increasingly 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.

Such policy framework has been fundamental to the development of the Christies Master Plan mobility principles. The development plan is centred upon creating a new complete community that is built, from the ground up, to provide a wide range of non-automobile dependent mobility options that minimize car usage as a form of transportation.

The Christies Master Plan provides an overall vision guiding the redevelopment of the property to create a centre for the Humber Bay Shores community that provides for the full range of land uses, facilities, amenities, open spaces, and destinations that sustain successful communities.

From a mobility perspective, elements of the plan such as a new GO Station integrated with LRT / surface transit services, re-alignment and right-of-way dedication of LRT infrastructure, dedicated and connected cycling facilities, and complete streets that enable and enhance pedestrian mobility, all come together to establish a new transportation context. The support provided through the transit and non-auto facilities will serve Humber Bay Shores in the most optimal way.

Again, the Christies development presents local planning the opportunity to support and further advance contemporary policy framework, mobility planning initiatives, and transit infrastructure investments for the site-surrounding area.

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8.7.3 Opportunity for Pro-Active Planning and Support for Travel Demand Management

The range and scale of mobility options being proposed as part of the development plan present a rare and significant opportunity to advance a parking strategy that minimizes car usage, maximizes usage of the proposed sustainable travel options being constructed and enables the realization of a "complete" new community built upon contemporary travel thinking.

Minimizing and managing parking supplies is key in this regard, as it is one of the most effective demand management tools that can be utilized to reduce auto reliance and support travel by other mobility means. In the case of a new community such as the Christies Master Plan – to establish "habit forming" travel characteristics from the very first resident by emphasizing sustainable travel options and constraining the opportunity for people to choose to drive where other choices exist.

As such, setting appropriate, pro-active Zoning By-law standards is imperative in supporting the Master Plan and helping to realize the non-automobile dependent mobility context of the future.

A reduced by-law regime is intended to purposely establish a context within which development proceeds with an emphasis on nonautomobile dependent travel recognizing the role that parking supply / availability can play as a demand management tool.

The pro-active parking standard requirement regime will operate as part of the overall package of infrastructure, demand management programmes and controls to focus new resident travel upon nonautomobile dependent travel mobility solutions provided as part of the 2150 Lake Shore Boulevard West Master Plan.

8.7.4 Proposed Appropriate Parking Standards

The parking standards proposed for Master Plan are future-looking, taking into consideration the mobility and urban context that is emerging as a result of both master planning and area planning initiatives, while recognizing the existing site location and context.

The proposed standards were developed based on: i) understanding the current Zoning By-law regime disconnects with respect to current parking demands, particularly in transit accessible neighbourhoods; ii) understanding existing travel characteristics and parking trends in areas reflective of the future context and travel characteristics of the site; iii) understanding the need for the City to grow sustainably in a truly integrative way, as reiterated through contemporary public policy.

As such, it is in our opinion that the proposed standards are appropriate to support and leverage the site into the future. The parking standards that are therefore recommended are as follows:

٠	Residential	0.40 spaces per unit
٠	Visitor	0.10 space per unit
•	Retail	1.00 space per 100 sq.m. GFA
•	Office	1.00 space per 100 sq.m. GFA
٠	School	0.15 spaces per

It is also proposed to adopt sharing provisions outlined in Zoning Bylaw 569-2013 for all non-resident parking to maximize the usage of provided parking, 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 site requirement is 3,939 parking spaces, including 2,852 residential parking spaces and 1,087 non-residential (i.e. retail, office and visitor) parking spaces.

8.8 PROPOSED PARKING FACILITIES

A proposed parking supply of 4,425 parking spaces is provided within a six (6) level underground parking garage (i.e. P1 to P6 underground levels). The proposed parking supply per parking level is summarized in **Table 50**.

TABLE 50 PROPOSED PARKING SUPPLY

	Residential	Non-Residential	
P1 Level		973	
P2 Level		151	
P3 Level	1,345	45	
P4 Level	1,320		
P5 Level	515		
P6 Level	76		
Sub-Total	3,256 1,169		
Total	4,425		

Notes:

1. Site stats are based on architectural stats prepared by Allies and Morrison Architects dated April 15, 2020.

8.8.1 Residential Parking Supply

The resident parking standards outlined in the City of Toronto Zoning By-law 569-2013 are considered to be conservatively high given the location of the Site relative to the proposed higher-order transit, the Site's proximity to an array of mixed-use amenities and recent parking approval trends.

The proposed resident parking supply of 3,256 parking spaces (0.46 spaces / unit) is appropriate recognizing these factors. The resident parking supply will be located within the P2 – P5 parking levels of the underground garage.

As part of the residential parking strategy, the residential parking supply will be located relative to the demands generated by the residential towers, allowing residents to park below their respective residential towers.

Various below-grade "tunnel" connections and inter-floor ramps will allow residents flexibility and redundancy when entering / exiting the garage. This help alleviate congestion at site accesses and enables a more efficient distribution of traffic onto the local street network.

8.8.2 Non-Resident Parking Supply

It is proposed to provide 1,169 non-residential parking spaces, shared between the residential visitor, office, and retail uses on a non-exclusive basis within the P1 Level of Blocks A, C, and D, the P2 level of Block B, the P1, P2 and P3 level of Block E and the P1 level of Block F.

All non-residential parking areas within the Site will be operated as a commercial parking garage. The main supply, located within the heart of the masterplan, will act as a site-wide parking resource and help meet the overall demands of the Site.

The non-residential parking supply requirement is intended to be met upon the full build out of the Site. As part of the ongoing design development process, a review of the non-residential parking supply by phase will be undertaken.

8.8.3 Accessible Parking Supply

It is proposed to meet the accessible standards outlined in City of Toronto By-law 579-2017 which requires a minimum of 108 accessible spaces. Notwithstanding, the accessible spaces will meet the dimensions outlined in the Zoning By-law 579-2017.

A total of 106 accessible spaces with dimensions 3.4m x 5.6m x 2.1m are proposed in the underground garage. Shared 1.5m access aisles are provided adjacent to the spaces, meeting the requirements outlined in Zoning By-law 579-2017.

The proposed accessible parking supply is summarized in **Table 51**.

TABLE 51 PROPOSED ACCESSIBLE PARKING SUPPLY

	Proposed	Accessible	Accessib Alloc	essible Space Allocation	
Phase	Supply	Required	Residential	Non- Residential	
Phase 1	711	18	15	3	
Phase 2	1,259	30	18	12	
Phase 3	1,105	25	21	2	
Phase 4	526	14	12	2	
Phase 5	422	11	7	4	
Phase 6	402	10	9	1	
Total	4,425	108	82	24	

Notes:

1. Site stats are based on architectural stats prepared by Adamson Associates Architects dated May 15, 2020.

8.8.4 Proposed Toronto Green Standards (TGS) Parking Provisions

8.8.4.1 AQ 1.2 - LEV and Sustainable Mobility Spaces -Residential

The Toronto Green Standard (TGS) Version 3.0, standard AQ1.2 states that if providing more than the minimum parking required under the Zoning-By-law, the excess spaces must be dedicated low-emitting vehicles (LEV), car-pool or car-share spaces.

Given that the provision of residential parking is 404 spaces over the recommended Zoning By-law requirement (2,852 spaces required vs 3,256 spaces provided), 405 spaces within the underground garage are to be dedicated as LEV, car-pool or car-share, meeting and exceeding the TGS V3.0 AQ1.2 requirements.

The proposed Residential LEV parking supply is summarized in **Table 52**.

	Residential				
Phase	Required Parking	Proposed Parking	Proposed LEV Parking		
Phase 1		576			
Phase 2		783			
Phase 3	2,852	937	405		
Phase 4		434	405		
Phase 5		229			
Phase 6		297			
Total		3,256	405		

TABLE 52 PROPOSED RESIDENTIAL LEV PARKING SUPPLY

Notes:

1. Site stats are based on architectural stats prepared by Adamson Associates Architects dated May 15, 2020.

8.8.4.2 AQ 1.2 - LEV and Sustainable Mobility Spaces - Non-Residential

The Toronto Green Standard (TGS) Version 3.0, standard AQ1.2 states that for institutional, commercial and retail developments, the number of dedicated low-emitting vehicles (LEV), car-pool or car-share spaces should be no less than 1 dedicated space for every 10 parking spaces provided above the minimum Zoning By-law requirement.

Given that the provision of non-residential parking is 82 spaces over the Zoning By-law requirement (1,087 spaces required vs 1,169 spaces provided), a minimum of 8 spaces within the underground garage are to be dedicated as LEV, car-pool or car-share, meeting the TGS V3.0 AQ1.2 requirements.

The proposed LEV parking supply is summarized in Table 53.

Non-Residential Phase Proposed LEV Required Proposed Parking Parking Parking Phase 1 135 1 Phase 2 476 3 Phase 3 168 1 1,131 92 1 Phase 4 Phase 5 193 1 Phase 6 1 105 8 Total 1.169 ---

PROPOSED NON-RESIDENTIAL LEV PARKING SUPPLY

Notes:

TABLE 53

1. Site stats are based on architectural stats prepared by Adamson Associates Architects dated May 15, 2020.

8.8.4.3 AQ 1.3 - Electric Vehicle Infrastructure

The Toronto Green Standard (TGS) Version 3.0, standard AQ1.3 states that 20% of the total parking supply must be fitted with electric vehicle supply equipment (EVSE). The remaining 80% of the parking spaces are to be designed to permit future EVSE installation (i.e. empty conduit).

885 parking spaces are to have electric vehicle supply equipment (EVSE) installed (651 resident spaces and 234 non-residential spaces). The remaining 3,540 spaces are to be EVSE ready (2,605 residential and 935 non-residential spaces), meeting the TGS V3.0 AQ 1.3 requirements.

The proposed EVSE parking supply is summarized in **Table 54**.

	Residential		Non-Res		
Phase	EV Supply (20%)	EVSE Supply (80%)	EV Supply (20%)	EVSE Supply (80%)	TOTAL
Required	651	2,605	234	935	4,425
Proposed	651	2,605	234	935	4,425

TABLE 54PROPOSED EVSE SUPPLY

Notes: 1.

Site stats are based on architectural stats prepared by Adamson Associates Architects dated May 15, 2020.

9.0 BICYCLE PARKING

9.1 ZONING BY-LAW REQUIREMENTS

9.1.1 Zoning By-law 569-2013 (TGS) Version 3.0 – Tier 1, Zone 2

The Site is currently subject to City of Toronto Zoning By-law 569-2013 and Toronto Green Standards (TGS) Version 3.0 - Tier 1, Zone 2.

Application of the City of Toronto Zoning By-law 569-2013 and Toronto Green Standards (TGS) Version 3.0 (Tier 1, Zone 2) at a phase-byphase level, requires a minimum of 5,730 bicycle parking spaces, including 5,000 long-term spaces and 730 short-term spaces. A summary of the minimum bicycle requirements for the proposed development for each block or group of master plan buildings is provided in **Table 55**.

A breakdown of the phase-by-phase bicycle parking requirement calculation can be found in **Appendix F**.

	Minimum Bicycle Parking Required							
Phase	Residential		Retail		Office		School	
	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term
Phase 1	95	920	15	7	39	31		
Phase 2	116	1,125	34	16	34	27		
Phase 3	134	1,301	15	7	34	27	9	6
Phase 4	72	694	18	8				
Phase 5	37	352	23	14				
Phase 6	48	466	10	4				
Sub-Total	502	4,858	112	51	107	85	9	6
Total	5,730							

TABLE 55 ZONING BY-LAW 569-2013 / TORONTO GREEN STANDARD VERSION 3 (TIER 1, ZONE 2) BICYCLE PARKING REQUIREMENTS

Notes:

1. Site stats are based on architectural stats prepared by Allies and Morrison Architects dated May 15, 2020



9.1.2 Zoning By-law 569-2013 (TGS) Version 3.0 – Tier 2, Zone 2

It is proposed to adopt the Toronto Green Standards (TGS) Version 3 -Tier 2, Zone 2 standards. The adoption of these higher rates are conducive to the urban content of the neighbourhood and further encourages cycling as an attracted mode of transportation. Application of the City of Toronto Zoning By-law 569-2013 and Toronto Green Standards (TGS) Version 3.0 (Tier 2, Zone 2) on a phase-byphase basis, requires a minimum of 7,514 bicycle parking spaces, including 6,569 long-term spaces and 945 short-term spaces. A summary of the minimum bicycle requirements for the proposed development for each block or group of master plan buildings is provided in **Table 56**.

A breakdown of the phase-by-phase bicycle parking requirement calculation can be found in **Appendix F**.

TABLE 56 ZONING BY-LAW 569-2013 / TORONTO GREEN STANDARD VERSION 3 (TIER 2, ZONE 2) BICYCLE PARKING REQUIREMENTS

	Minimum Bicycle Parking Required								
Phase	Residential		Retail		Office		School		
	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	
Phase 1	136	1,217	15	7	39	31			
Phase 2	166	1,489	34	16	34	27			
Phase 3	192	1,721	15	7	34	27	9	6	
Phase 4	102	918	18	8					
Phase 5	52	466	20	9					
Phase 6	69	616	10	4					
Sub-Total	717	6,427	112	51	107	85	9	6	
Total	7,514								

Notes:

1. Site stats are based on architectural stats prepared by Allies and Morrison Architects dated May 15, 2020

9.1.3 Proposed Bicycle Parking Supply and Facilities

A total of 7,696 bicycle parking spaces (6,644 long-term spaces and 1,051 short-term spaces) are currently incorporated into the development proposal. These spaces are provided on the ground floor, mezzanine level and P1 underground parking levels. A description of the bicycle parking allocation and bicycle supply is provided in **Table 57** and is illustrated in the reduced scale architectural plans provided in **Appendix A**.

Bicycle parking is generally located within the first level of below grade basement. Access to these facilities will be designed as part of the ongoing Master Plan, however; it is intended that access to these facilities be granted though passive (non-mechanical) means, such as bicycle stairs or ramps.

The long-term bicycle parking rooms will be secure and weather protected and the short-term bicycle parking will be located in highly visible and publicly accessible locations. A portion of the short-term bicycle parking supply will be located within close proximity to building entrances at street level.

It is of BA Group's opinion that the planned bicycle storage rooms areas effectively meet the overall intent of providing bicycle parking on the ground level or the first level below or above grade to make it convenient and effortless and is thus acceptable.

TABLE 57	PROPOSED	BICYCLE	PARKING SUPPLY
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	Block	Residential		Retail		Office		School	
		Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term
Site Wide		714	6,425	113	73	196	129	28	17
Sub-Total		7,139		186		325		45	
Total		7,696							

Notes:

1. Site stats are based on architectural stats prepared by Adamson Associates Architects dated May 15, 2020



9.3 PROPOSED SHOWER AND CHANGE FACILITIES

Application of the shower and change room facilities standards of the Toronto Green Standards for the non-residential bicycle parking supply requires five (5) shower and change rooms to be provided for each gender. A total of eight (8) change rooms and shower facilities are provided for the proposed development as summarized in **Table 58**.

The above supply meets and exceeds the requirements of the shower and change facilities outlined in the City of Toronto Zoning By-law 569-2013 and Toronto Green Standards (TGS) Version 3.0 (Tier 2, Zone 2).

TABLE 58 Shower and Change Room Facilities

Phase	Use	No. of Long Term Bicycle Parking Spaces Required (Tier 2)	No. of Shower & Change Room Facilities	Block	Location	
Dhana 1	Office Uses	10 spaces	1 per gender	Block D1	Mezzanine Level	
Fliase I	Retail Uses	48 spaces	i per gender			
Dhana 2	Office Uses	41 spaces	2 per conder	Plack A2 / A2	P1 Lovel	
Phase 2	Retail Uses	25 spaces	z per gender	DIUCK AZ / AS		
Phase 3	Office Uses	42 spaces		Block A2 / A3	P1 Level	
	Retail Uses	10 spaces	2 per gender			
	School	9 spaces				
Phase 4	Retail Uses	12 spaces	1 per gender	Block D	P1 Level	
Phase 5	Retail Uses	14 spaces	1 per gender	Block E	Mezzanine Level	
Phase 6	Retail Uses	6 spaces	1 per gender	Block F	Ground Floor Level	
Total		217 spaces	8 per gender			

10.0 LOADING & SERVICING

10.1 ZONING BY-LAW REQUIREMENTS

10.1.1 Zoning By-law 569-2013 Loading Supply

Application of the loading requirements outlined in the City of Toronto Zoning By-law 569-2013 to the proposed development proposal was applied for each block in order to meet the needs their respective uses.

This requires twenty-seven (27) loading spaces, including twelve (12) Type 'B', eight (8) Type 'G', and seven (7) Type 'C' loading spaces.

A summary of the minimum loading requirements for the proposed development for each block or group of master plan buildings is provided in **Table 55**.

A more detailed loading requirement calculation, including loading sharing rules, can be found in **Appendix G**.

Block	Minimum Number of Loading Spaces								
	Туре А	Туре В	Type G	Туре С	Total				
A	0	3	1	2	6				
В	0	2	1	0	3				
С	0	1	1	0	2				
D-1	0	1	1	2	4				
D-2	0	1	1	3	5				
D-3	0	1	1	0	2				
E	0	2	1	0	3				
F	0	1	1	0	2				
Total	0	12	8	7	27				

TABLE 59 ZONING BY-LAW 569-2013 LOADING SUPPLY

Notes:

1. Site stats are based on architectural stats prepared by Allies and Morrison Architects dated May 15, 2020.


10.1.2 Proposed Loading Supply

The current proposed development incorporates a total of fifty-eight (58) loading spaces, including two (2) Type 'A', twenty-four (24) Type 'B', eight (8) Type 'G' and twenty-four (24) Type 'C' loading spaces to service all 6 blocks.

Each loading area is accessed from the Relief Road ('Street A') with the exception of Block F where the at-grade loading area is accessed from the signalized driveway from Brooker's Lane / Lake Shore Boulevard West. Refer to Section 4.4.4.1 for an overview of how each loading area in Blocks A to E are accessed from Relief Road (Street 'A').

The proposed loading supply meets and exceeds the minimum requirement in order to meet the individual blocks' needs. Multiple loading Type 'B' and Type 'C' loading spaces are proposed to help facilitate move-in / move-out of residents while also ensuring commercial deliveries and pick-up needs are met.

A summary of the proposed loading supply for each block is provided in **Table 60.**

TABLE 60 PROPOSED LOADING SUPPLY

Block	Minimum Number of Loading Spaces					
	Туре А	Туре В	Type G	Туре С	Total	
А	1	10	1	8	20	
В	0	2	1	3	6	
С	1	1	1	1	4	
D-1	0	4	1	3	8	
D-2	0	3	1	2	6	
D-3	0	1	1	5	7	
E	0	2	1	1	4	
F	0	1	1	1	3	
Total	2	24	8	24	58	

Notes:

1.

Loading supply is based on architectural stats prepared by Adamson Associates Architects dated May 15, 2020.

10.2 PROPOSED LOADING FACILITIES

10.2.1 Residential Refuse / Recycling Collection

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 block's loading area. Each block 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 m^2 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. A summary of the bin staging requirements and proposed areas per block is provided in **Table 61**.

TABLE 61 REQUIRED AND PROPOSED GARBAGE BIN STAGING AREA

Plack	Residential	Bin Staging (m²)		
DIOCK	Units	Required	Proposed	
А	1,654	165	320	
В	1,020	100	280	
С	705	70	140	
D-1	647	60	140	
D-2	625	60	175	
D-3	1,287	125	125	
E	517	50	150	
F	684	65	65	

Notes:

 Site stats are based on architectural stats prepared by Allies and Morrison Architects dated May 15, 2020

2150 LAKE SHORE BOULEVARD WEST, OPA UPDATE & ZBA MAY 2020 7036-10 The full 6.1 metre clearance will be provided above the entire Type 'G' space and with a portion of the bin staging area located in front of the Type 'G' loading space. This portion of staging area that has a 6.1 metre height clearance, is located approximately 2.0 metres in front of the Type 'G' loading space.

A trained waste management staff can facilitate garbage bins being manoeuvred to / from the Type 'G' loading space during garbage collection. The remaining bin staging area will have a minimum of 4.5 metres clearance.

10.2.2 Non-Residential Refuse / Recycling Collection

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



10.2.3 Operations & 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 Truck
- Single Axle Cab with 53' Trailer
- TAC Heavy Single Unit Design Vehicle (TAC-HSU)
- TAC Single Unit Design Vehicle (TAC-SU)
- TAC P-Car

Vehicle Manoeuvring Diagrams are provided in **Appendix H** 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 existing the Site.

10.2.4 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.

10.3 LOADING SUMMARY

The proposed loading supply of fifty-eight (58) loading spaces, including two (2) Type 'A', twenty-four (24) Type 'B', eight (8) Type 'G' and twenty-four (24) 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.

11.0 SUMMARY OF KEY FINDINGS

The following summarizes the key findings of this transportation study:

Background

- The original Official Plan Amendment (OPA) application for the 2150 Lake Shore Site was made to the City of Toronto in October 2019.
- Since the original application, FCR has been working with City of Toronto staff, City and Provincial agencies and the area community representatives to refine and advance the development plans.
- City staff and other agency comments on the original OPA application have been received including comments from City Engineering and Construction Services staff, Transportation Planning staff and the Toronto Transit Commission (TTC).
- A number of these comments are addressed within the updated Master Plan while others will be the subject of subsequent detailed assessment submissions following advancement of City led Park Lawn – Lake Shore Transportation Master Plan study and supporting transportation modelling analyses.
- The design development and approvals processes for the proposed Park Lawn GO Station have also been advanced by FCR working with Metrolinx; details will be presented as part of the Updated Initial Business Plan report to be issued by Metrolinx and the station Transit Project Approval Process.

This Report

- An updated Official Plan Amendment application is being made to the City of Toronto reflecting the changes made to the Master Plan since the initial OPA submission.
- Zoning By-law Amendment (ZBA) and Draft Plan of Sub-Division (DPOS) applications are also being made to further advance and define the approvals and implementation processes for the Site and proposed infrastructure.
- This transportation study forms part of the updated OPA and the initial ZBA / DPOS applications and builds upon the comprehensive series of assessments and technical studies submitted as part of the initial OPA submission.
- This report has been prepared to provide an overview of the mobility aspects of the updated Master Plan.
- The transportation analyses submitted as part of the initial OPA application will be reviewed in further detail as macro and microsimulation modelling outputs become available from the Park Lawn Lake Shore Transportation Master Plan (TMP) process.
- The outputs from the (TMP) will provide a frame of reference upon which the area future transportation travel conditions can be further evaluated including new transportation infrastructure proposed as part of the Master Plan.

Planning Process Update

- The approval of a settlement of the appeal of OPA 231 for the Site by the LPAT in August 2019 sets a significant milestone for the 2150 Lake Boulevard West Site. This settlement has enabled the advancement of the number of planning processes that focus on establishing a future vision and development framework for the Site and the Humber Bay Shores area as a whole.
- Seven inter-related processes have been initiated by the City, FCR and Metrolinx as part of the advancement of land-use and infrastructure planning in the area. These are as follows:
 - o Christies Planning Study
 - Park Lawn Lake Shore Transportation Master Plan (TMP)
 - o Park Lawn GO Station Initial Business Case (IBC)
 - o Transit Project Assessment Process (TPAP) for the proposed Park Lawn GO Station
 - Official Plan Amendment application for the 2150 Lake Shore Boulevard West Site
 - Zoning By-law Amendment application for the 2150 Lake Shore Boulevard West Site
 - Draft Plan of Sub-Division application for the 2150
 Lake Shore Boulevard West Site
- The Christies Planning Study will ultimately lead to the preparation of a Secondary Plan policy framework, a Zoning By-Law and Urban Design Guidelines that will guide the future development of the 2150 Lake Shore Boulevard West property.

- The City of Toronto originally initiated the Park Lawn Lake Shore Transportation Master Plan (TMP) in 2016 to evaluate and plan for transportation options that address existing deficiencies and accommodate increases in population and employment in the Park Lawn Road and Lake Shore Boulevard West area.
- Metrolinx is undertaking an update to the IBC, which will confirm Station design parameters, operational viability, updated ridership forecasts and financial modelling. The Updated IBC (2020) is anticipated to be released in early Summer 2020 and will enable the continued advancement of the GO Station approvals process.
- FCR retained Hatch to undertake an Environmental Assessment (EA) for the new Park Lawn GO Station on the Lakeshore West rail corridor for Metrolinx. The evaluation of the potential environmental effects of the proposed Park Lawn GO Station will be carried out in accordance with the Transit Project Assessment Process (TPAP).
- The Owners of the Site made an Official Plan Amendment (OPA) application in October 2019. A revised OPA application is now being made to the City of Toronto reflecting changes made to the Master Plan in response to various comments received from the City and stakeholders as well as the design development process of the buildings has evolved. This revised submission is combined with an initial Zoning By-law Amendment application and an initial Draft Plan of Sub-Division.

Master Plan Vision

- The Master Plan has been developed with the understanding that transportation advancement is the key to unlocking the potential to develop an integrated, active and attractive community in southwest Toronto.
- From a transportation and mobility perspective, there are four major themes that are central to the successful development:
 - Advancing and providing "real" transit travel opportunities to the area and the creation of a new integrated GO / TTC transit hub;
 - Addressing and improving current traffic congestion challenges in the area in a way that responds to the current level of tidal commuter motorist use of the area street system as an alternate to the Gardiner Expressway corridor;
 - Implementation of an excellence across a street and public realm network that creates a truly walkable, pedestrian first community that seamlessly integrates adjacent developed / developing areas within Humber Bay Shores and beyond to maximize activetransportation and the potential for walking and cycling as primary modes of travel for short local trip-making; and
 - Creation of a Master Plan and development programme that is focused – as an integral part of every step of its planning – upon a commitment to provide high quality, sustainable mobility options serving both the Master Plan development itself and the growing broader Humber Bay Shores community, that will minimize the reliance upon automobile usage and reduce related traffic impacts of the area.

- To achieve the Master Plan vision and mobility themes, a series of mobility planning principles have been established to guide the redevelopment of the 2150 Lake Shore Site.
- The principles build upon the broader context of Municipal and Provincial planning policy direction that is guiding the way the City of Toronto evolves and responds to changing transportation needs, with initiatives and investments prioritizing the mobility and experience of people over the efficiency of car movement.
- The principles understand the existing context and constraints of the Site and recognize the opportunity and role the development plan will play in reshaping the urban fabric and mobility network of the greater community.
- The mobility principles are as follows:
 - o Transform Area Transit
 - o Address Area Traffic Congestion
 - o Create Complete Main Streets
 - o Integrate New Neighbourhood Streets
 - o Prioritize Pedestrian Mobility
 - o Enable and Support Cycling
 - o Arrange Site Access and Servicing
 - o Commit to Sustainable Transportation
 - o Meet Future Mobility Demands
- The principles are integrated through physical infrastructure improvements, Site plan elements, Site organization and TDM measures, and work together to influence travel demand and characteristics for the Site and surrounding area.

Master Plan Overview

- The Master Plan recognizes the opportunity and need to not only address current mobility weaknesses and challenges in the area but to transform mobility patterns in southeast Etobicoke.
- Primary infrastructure deliverables that will transform mobility patterns that will enable the Master Plan and community are:
 - o Delivery of Park Lawn GO train station;
 - Realignment and integration of TTC streetcar and surface transit services at the mobility hub; and
 - Delivery of Relief Road corridor and relocation of Gardiner Expressway access ramps.
- Further infrastructure deliverables that will reshape the local urban fabric and integrate the Humber Bay Shores community are:
 - Re-characterization of the Lake Shore West corridor providing a Main Street to the community;
 - Delivery of a unique fine-grained local street system that structures a quality public / private realm; and
 - o Connection of area recreational and active transportation networks available to the community and with the future centralized mobility hub.
- The adopt of Site planning principles
 - The external location of vehicle Site access driveway to minimise the intrusion of higher traffic activity at grade within the heart of the Master Plan;
 - A mixed-use community where the opportunities for day-to-day activity, to a significant extent, can be accommodated within the local community, and without the use of a car;

- Enabling and supporting cycling as a travel mode through the integration of high-quality bicycle parking facilities and supporting services and end user facilities;
- The delivery of numerous key infrastructure pieces- not only within the Site itself - but of the surrounding area, will enable the future travel demands of the 2150 Lake Shore Boulevard West Site and broader surrounding area to be appropriately met over time.
- The major infrastructure moves permit the delivery of a Master Plan that creates a centre for Humber Bay Shores, providing a full range of land uses, facilities, amenities, places, spaces, parks and destinations that sustain a successful community.
- The delivery of approximately 36,650 square metres of retail GFA across a range of types, shapes, and sizes including a "market" of street related retail, entertainment and eating establishments, and community-serving shops.
- The delivery of approximately 7,140 new residential units creating an attractive community at the heart of southeast Etobicoke;
- The delivery of approximately 64,400 square metres of employment GFA creating a true mixed-use community where Site and area residents can live, work, and play; and
- The delivery of approximately 8,500 square metres GFA of school uses, for a potential of two (2) new elementary schools.

Master Plan Updates

Key Changes Overview

- While the Master Plan remains organized around the same key principles as outlined in the October 2019 OPA submission, a number of changes have been made including:
 - o The size of the public park,
 - o The alignment and routing of the Relief Road (Street A),
 - Adjustments to the alignment of the eastern side of the loop road (Street B) and private street linking eastwards to the Relief Road;
 - The inclusion of two potential elementary schools within the Master Plan;
 - The land-use mix to reflect an increase in employment uses within the Master Plan;
 - Bus bay locations at the GO Station to now be on Park Lawn Road; and
 - The public realm to include a significant pedestrian connection linking between Park Lawn Road and Station Plaza in place of a previously shown private street

Transit Network Context

- The Toronto Transit Commission (TTC) is also committed to changes in the service network to help facilitate the creation of a multi-modal hub and help respond to the emerging transit opportunities in the area. These improved services would provide for a considerable level of transit connectivity and expand the GO station tributary area.
- The TTC have identified the 501 Queen and 508 King streetcar routes, which already provide service along Lake Shore Boulevard, as possible candidates for termination at the station. This would involve the relocation of the existing Humber Loop,

currently north of the Gardiner Expressway, and in a poor location relative to the community it serves.

 In addition, the TTC have identified the existing 66 Prince Arthur and 80 Queensway bus services as services that will service the new GO station. Curbside / layby stops located at the rail corridor will enable the buses to provide passengers with immediate access to the multi-modal hub, and support the easy transfer of modes.

Street Network Context

- The road network has generally remained consistent with that proposed as part of the initial 2019 Official Plan application.
- Realignment of the Relief Road to increase the distance to 10 metres between the existing Gardiner Expressway Lake Shore Boulevard off-ramp to provide for additional space for earth retention infrastructure
- Realignment of the Loop Road to allow for a larger 1.0 hectare public park to be dedicated. A 23.0 metre right-of-way width will allow for the ability to provide a one-way anti-clockwise dedicated streetcar right-of-way loop.
- Reimagined private pedestrian plaza between Block C and D1 provides for a pedestrian and cycling link between Park Lawn Road and the Loop Road, and passenger route between the bus stops on Park Lawn Road and the Transit Hub



Active Network Context

- The development plan for the Site introduces new active infrastructure facilities that help provide connections from key destinations within the Site (e.g. Park Lawn Station and the new public park), to the surrounding neighbourhoods and existing facilities
- Key objectives for the pedestrian and cycling network include the following:
 - The creation of a mixed-use community where a wide range of amenities and services that will support the Humber Bay Shores neighbourhood can be easily reached on foot, or with a short bicycle ride.
 - Improvements to the public realm to improve the pedestrian and cyclist experience and their respective networks
 - High-quality cycling routes to help shift travel away from auto-related modes of transportation, including "lastmile" trips
 - A range of bicycle parking facilities and supporting amenities will be provided across the Master Plan to provide for the needs of these user groups.

Servicing & Parking Strategy

The Master Plan has been developed to consolidate vehicular systems and access across multiple blocks and buildings to minimise the intrusion of servicing, loading, and higher traffic activity at grade within the heart of the Site. By consolidating vehicular access to servicing and parking facilities, it removes the need to provide separate facilities for each building or development block, which affords substantial benefit to the overall Master Plan.

- The current design reflects the following values:
 - A responsive vehicular access system that locate accesses along the perimeter of the Master Plan to most directly "capture" arriving traffic and "disperse" departing traffic.
 - Loading and parking facilities are all located belowgrade within a consolidated and connected basement. Servicing and loading for each development parcel and building is provided for via a system of distributed below grade loading / service areas and connecting linkages. The distribution of loading facilities provides an effective and efficient series of facilities that will meet the loading and delivery needs of each land use of the Master Plan.
 - A pool of commercial parking will be shared among all the non-residential Site uses and meet the parking needs of the Site appropriately. Residential parking will be provided / met on a block-by-block basis
 - Connections between public streets will help facilitate the level of consolidation sought

Transit Hub Design Changes

GO Station Considerations

- The Owners been working with Metrolinx to advance to planning of the new Park Lawn GO Station. This work has been extensive and has involved an update to the Initial Business Case (IBC) for the station and advancement of the next stages of design / approval necessary to bring the station to realization including the initiation of a Transit Project Assessment Process (TPAP). This work will enable the next stages of approval and implementation of the station by approximately 2025
- As part of the coordination process, the design of the station has advanced since the initial OPA application, in response to Metrolinx input.
- Pedestrian access to the station building will be generally granted from:
 - o Station Square (Platform Level);
 - o Park Lawn Road;
 - o Relief Road (Mezzanine Level); and,
 - secondary accesses to the platforms will be provided on the west side of Park Lawn Road;
- A pedestrian tunnel between the rail corridor will link the station buildings on both the north and south side of the tracks;
- The proposal will provide a minimum of 192 covered bicycle parking spaces and 96 secured bicycle parking spaces will be in vicinity of the GO station building, in accordance with Metrolinx requirements
- Passenger waiting platforms will be located on either side of the existing four-track Lake Shore West rail corridor. Eastbound trains will stop at the south platform; westbound trains will stop

at the north platform. Bypassing rail traffic will have the option of using the centre tracks.

- A Station Canopy on a portion of the rail platform will be developed as part of the ongoing design development process, and in consultation with Metrolinx and other stakeholders; and,
- Pick up / drop-off facilities located within the P1 level of the D2 block basement, informally along the eastbound curb lane of the Relief Road (Public Street 'A'), and within curbside laybys on the Loop Road (Public Street 'B).

Streetcar Considerations

- A LRT / streetcar loop facility and layover space is incorporated into the Transit Hub station design to provide a turnaround facility for the existing 501 Queen and 508 Lake Shore streetcar services.
- Streetcar services will run within in an anti-clockwise loop along a 3.5 metre wide physically separated dedicated facility on the Loop Road to improve reliability and safety for the passengers and other street users.
- Two separate loading platforms will provide separate waiting areas for two or more services and provide flexibility for services running with different headways;
- Two unloading platforms, and a layover space for the streetcars, separate from the loading platforms, will allow for simultaneous boarding and alighting during peak times and help reduce passenger delay; and,
- Neighbourhood streetcar platforms within the centre streetcar right-of-way have been located at the intersection of Park Lawn

Road / Lake Shore Boulevard and at the Relief Road / Brookers Lane / Lake Shore Boulevard to continue to provide service to the wider Humber Bay Shores neighbourhood.

- Streetcar services will run within in an anti-clockwise loop along a 3.5 metre wide physically separated dedicated facility on the Loop Road.
- A new signalized intersection at Public Street C / Loop Road (Public Street B) will provide for a controlled intersection to manage southbound vehicles who will be required to turn right across the tracks.
- The intersection at Public Street B and Private Street D will operate under stop control for the minor intersection (Street D) and under yield condition for the southbound left turn across the TTC tracks.
- The streetcar / LRT will travel through Station Plaza upon exiting the station facility. Pedestrian crossing locations are limited to two locations by using landscaping and other materials to guide pedestrians to predefined crossing locations to minimise potential conflicts with TTC vehicles.

Bus Interchange Considerations

- The bus stop locations have been relocated from the Relief Road to layby / curbside platforms along Park Lawn Road, in response to TTC comments.
- Locations along Park Lawn Road, in close proximity to the rail corridor / D1 Block, would provide a better opportunity for passengers to connect with the Transit Hub, while allowing buses to remain "on line".

• Changes to existing TTC bus routes and the addition of potential new routes capitalises on the higher order transit being afforded by the new Park lawn GO station and will help connect the residents of southern Etobicoke to the new transit hub.

Road Network Design Changes

Public Street A (Relief Road)

- The design of the Relief Road has changed as part of the ongoing design development process, and in response to TTC comments.
- The road continuous to have a basic four-lane cross-section within a proposed 26.0 metre right-of-way.
- The following highlight the key changes made since the 2019 OPA submission:
 - A 10 metre shift south (away from the Gardiner Expressway Lake Shore Boulevard off-ramp) provides additional space for earth retention structures, and additional construction buffer space.
 - Removal of the 3.0 metre bus layby at the rail corridor reflects the TTC's preference to maintain bus service on Park Lawn Road.
 - Updated southbound lane configuration at the Relief Road / Lake Shore Boulevard intersection.
- The Eastbound Lake Shore Boulevard and Gardiner Expressway on-ramp and Gardiner Expressway off-ramp are proposed to be realigned to intersect with the Relief Road at a new three-legged intersection, consistent with the initial OPA application.

- An underpass beneath the rail corridor will provide for two vehicular lanes in each direction, with sufficient clearance to the box structure. An allowance in the underpass structure will be made along the south side for a pedestrian sidewalk
- Informal curbside drop-off is expected to occur along the eastbound curb lane adjacent to the GO station entrance. The provision of only one through eastbound through lane from the Gardiner off-ramp, as well as a single southbound left-turn lane allows for the flexible use of the curb lane for non through-traffic.
- A signalized Site driveway is proposed approximately midway to provide a driveway entrance into the below grade loading and parking facilities. This signalized intersection is located approximately 250 metres from Park Lawn Road and 300 metres from Lake Shore Boulevard.
- Right-in / right-out access is provided at an un-signalized Site driveway within the Block D3 development to provide access to the potential school and residential uses within that block.

Lakeshore Boulevard West

- The design of Lake Shore Boulevard remains generally consistent with the cross-section proposed as part of the initial OPA application.
- The following highlights key considerations:
 - The lane configurations for the existing / planned public streets south of Lake Shore Boulevard (which form part of the Humber Bay Shores neighbourhood) will remain as a two-lane cross section at each of the proposed new signalized intersections.

- Protected cycling crossing opportunities are detailed at the Lake Shore Boulevard signalized intersections to improve safety of pedestrian and cycling crossings.
- Lake Shore Boulevard will be reconstructed with "complete streets" in mind and provide for dedicated facilities for all users.
- No land dedication along Lake Shore Boulevard West is required from the 2150 Lake Shore Boulevard West property to fulfill the 36.0 metre right-of-way as outlined in the City's Official Plan.
- Signalized intersections are proposed at all the intersections between Park Lawn Road and Brooker's Lane.

Park Lawn Road

- Park Lawn currently provides the only major north-south road connection between the neighbourhoods north and south of the Gardiner Expressway and rail corridor.
- A right-of-way (ROW) widening will be taken from the subject Site to fulfill the 36.0 metre ROW as designated in Toronto's Official Plan.
- From a transportation perspective, the design of Park Lawn Road remains generally consistent with the exception of additional bus laybys on both the northbound and southbound sides of the road to provide alighting / boarding space for the bus routes that will connect with the new GO station.



- The following highlights key considerations:
 - o 3.0 metre wide bus layby lanes with 25.0 metre entry and exit tapers have been introduced south of the proposed signalized intersection at the South Beach Condos Driveway / New Site Driveway to accommodate bus pick-up / drop-off activity at the new GO station.
 - The 3.1 metre wide two-way cycling facility has been extended north to the rail corridor to provide a continuous connection between the Martin Goodman Trail at Lake Shore Boulevard, and the GO station bicycle parking, accessed from the mezzanine (Park Lawn) entrance.
 - A new signalized intersection is proposed approximately 185 metres north of the existing signal at the existing Westlake Site driveway (future location of Street C).

Public Street B (Loop Road)

- Consistent with the initial OPA application, a main Loop Road (Public Street 'B') will accommodate the one-way streetcar route, two-way cycling facility, and pedestrian clearway within a 23.0 metre right-of-way.
- The following highlights key considerations:
 - A revised two-way vehicular section between Private Street 'D' and Public Street 'C', to provide curbside access to various development blocks and improve vehicular connectivity within the Site.
 - A revised 20.0 metre right-of-way (ROW) width along the park frontage.
 - The provision of a fully dedicated 3.5 metre wide oneway streetcar lane, with a 1.0m adjacent buffer zone for streetcar pole (OCS) infrastructure.

- A 2.9 metre two-way cycle track facility along the outer edge of the Public Street will provide cycling connections to community destinations such as the GO station, new public park to be dedicated, and community centre.
- A signalized intersection is proposed at Street B / Street
 C to manage and control the southbound right-turning vehicles crossing the streetcar tracks.
- The Loop Road is intended to provide local street access to the front door of all the development blocks.
- With no Site driveways, this road will not be handling large amounts of parking related vehicular traffic, allowing it to assume a role intended to handle frontdoor related vehicle activity.
- Laybys strategically placed along the Loop Road will allow for short-term temporary parking adjacent to key uses.
- This activity associated with the short-trip vehicle use (i.e. ride-share, taxi) and accessible vehicle access (e.g. Wheeltrans) will be accommodated along the curb and help form part of the overall Site approach to pickup / drop-off and related activity.

Public Street C

- New Public Street 'C' will provide a public vehicular connection between the Loop Road (Public Street 'A') and Park Lawn Road and will intersect at the existing signalized intersection with the Westlake development Site driveway. Inbound access only to the underground garage at Block C will be provided along this road.
- A 20.0-metre right-of-way will be provided, and will accommodate pedestrian boulevards on either side. A westbound left-turn lane will be provided at the signalized intersection with Park Lawn Road.

Private Street D

- A private street connection between the Relief Road (Public Street 'A') and the Loop Road (Public Street 'B'), provides local street access to the development, including the underground parking access located in Block E.
- This street is intended to operate, look, and feel like public street, but will be kept private to enable the integration of below grade parking connections between the D3 and E block within the Site.

The Queensway

- The Queensway is an arterial road that runs in an east-west direction north of the 2150 Lake Shore Boulevard subject Site.
- It has a 30.0 metre right-of-way (ROW) as identified in Toronto's Official Plan.
- No changes have been made to the proposed cross-sectional modifications originally identified in the initial OPA application. It is recommended that the EB lane configuration at the Park Lawn Road / Queensway intersection allow for the increase of EB right-turn storage capacity to improve traffic operations.

Gardiner On / Off Ramps - Park Lawn Road

- Modifications, consistent with the initial OPA application are recommended at the westbound Gardiner Expressway on-ramp off Park Lawn Road to widen the on-ramp to achieve an additional receiving lane.
- This is proposed in conjunction with the dual northbound leftturn lane on Park Lawn Road and dual southbound right-turn lane on Park Lawn Road.
- The lane configuration at the eastbound Gardiner Expressway off-ramps at Park Lawn Road will be modified to accommodate a through lane to the Relief Road.
- The existing eastbound dual-left turn lanes and right-turn lane will be maintained.
- Removal of the eastbound right-turn slip lane is proposed to improve pedestrian crossing safety at the intersection.

Active Network Design Changes

Pedestrian Network Considerations

- The Master Plan emphasizes pedestrian mobility and aims to provide for a safe and attractive public realm within the Site in its entirety.
- A number of notable pedestrian enhancements are made in the proposed master plan, including:
 - o an enlarged 1.0 hectare public park to be dedicated
 - Multiple signalized crossing opportunities at intersections along Lake Shore Boulevard West present opportunities to improve pedestrian permeability to / from Lake Ontario and the Martin Goodman Trail.
 - Enlarged east boulevard along Park Lawn Road, with widened pedestrian clearway.
 - Wide pedestrian clearways along the Loop Road (Public Street 'B') to connect all the key locations with the Site; and,
 - Pedestrian only spaces such as station square and the pedestrian plaza will provide for a high quality pedestrian realm for commuters travelling / from the transportation hub and facilitate pedestrian connections to / from transit infrastructure and the wider community

Cycling Network Considerations

- The development will introduce a number of new active infrastructure connections in the Humber Bay Shores area to make cycling a safe, more convenient form of transportation within the neighbourhood, and to provide residents cycling connections to the high quality existing recreational trails.
- The following are proposed as part of the Master Plan cycling network:
 - In-boulevard 1.8 metre one-way cycle track facilities along Lake Shore Boulevard West. This facility will offer cyclists an added level of separation and protection from vehicular traffic, and improve the existing on-street bicycle lanes / sharrow condition on Lake Shore Boulevard today. It will serve as the main east-west cycling link within the neighbourhood, and connect to the other proposed north-south cycling facilities.;
 - Two-way 3.1 metre wide cycle track facilities along the east boulevard on Park Lawn Road will run north south from the Martin Goodman Trail and the Lake Shore Boulevard cycle tracks and provide a direct connection to the new Park Lawn GO station and its bicycle parking facilities;
 - **Two-way 2.9 metre wide cycle track facilities along the outer edge of the Loop Road** will provide easy access to notable destinations within the Site, including the new public park to be dedicated and the new Park Lawn GO Station; and,
 - Protected intersections to improve cyclist safety and comfort
- A range of long and short term bicycle parking facilities and support facilities will be provided across the Master plan.

Site Planning Design Changes

Vehicular Site Access

- Central to the 2150 Lake Shore Boulevard West Master Plan is the creation of an excellent public realm at-grade. A comprehensive approach to the planning of the vehicular elements is made possible by the single ownership of the Site, enabling vehicular elements (which include Site access driveways) to be removed from the heart of the Master Plan. The intrusion of servicing / loading and vehicle activity at-grade within the Master Plan was minimised by placing vehicular accesses along the periphery of the Site.
- The following summarise the Site accesses proposed:
 - Main Signalized Driveway at Relief Road (Public Street 'A')
 - o Signalized driveway at Park Lawn Road (D1 Block)
 - Right-in / right-out un-signalized driveway at Relief Road (Public Street 'A') (D3 Block)
 - Right-in / right-out un-signalized driveway at Park Lawn Road (B Block)
 - All-moves un-signalized driveway at Private Street 'D' (E Block)
 - Signalized Site Driveway at Lake Shore Boulevard / Brooker's Lane (Block F)

Parking Deployment Strategy

• The Master Plan includes provision of parking in a manner that supports the proposed development but responds to the sustainable transportation policies and the City of Toronto's strategic direction towards a multi-modal city. All parking facilities will be located below-grade, and access will be relegated to Site driveways located on the periphery of the development to minimise the intrusion of driveways within the heart of the Master Plan.

- All non-residential parking areas within the Site will be operated as a commercial parking garage. The main supply, located within the heart of the masterplan, will act as a Site-wide parking resource and help meet the overall demands of the Site.
- The non-residential parking supply requirement is intended to be met upon the full build out of the Site. As part of the ongoing design development process, a review of the non-residential parking supply by phase will be undertaken.
- In general, it is proposed to adopt a 1.0 space / 100 sq. metres of non-residential GFA (i.e. office, retail) parking requirement to the Site. Temporary sharing will be considered when determining the overall Site-wide parking requirement.
- As part of the residential parking strategy, the residential parking supply will be located relative to the demands generated by the residential towers, allowing residents to park below their respective residential towers.
- Recognizing the connections to higher order and local transit services, we are proposing an effective residential parking supply ratio of 0.4 spaces per unit, which is lower than the Zoning By-law requirements for the proposed development

Site-Wide Loading Strategy

- The Master Plan takes a comprehensive approach to planning by integrating a below-grade interconnected servicing system to provide access across multiple blocks and buildings. A centralised below-grade servicing network is being pursued for the development to consolidate access at a series of key driveway / ramps to avoid the proliferation of ramps, typical in conventional developments where each development block is considered individually.
- Key tunnels below public roads allow connections between Block D (where the servicing entrance from the Relief Road are) to Block A. An additional tunnel connection under the Loop Road creates a connection between Block A to Blocks C and E. The elevation of these connections occur where sufficient depth beneath the public road can be provided for utilities and landscaping requirements
- Centralised loading areas are provided for each block, or group of master plan buildings. These loading facilities are well located relative to building cores and vertical circulation areas. The proposed loading supply will meet and exceed the by-law loading requirements.

Site-Wide Pick-Up / Drop-Off Strategy

• An emerging number of mobility options, such as car share, taxi, and ride-hail services, can help reduce the need for private vehicle ownership, and overall, reliance on the automobile for every day needs. Although these mobility options reduce the need for private automobiles and their storage in parking facilities, they require space to allow for the pick-up / drop off activities to occur in a safe and organised manner.

- Adaptable curb infrastructure and the use of technology can allow lanes, or curbside space to become dynamic, serving different purposes across the day. A programmable management system that is applied Site wide can change and communicate to vehicles / drivers the usage of the space depending on priorities over the time of day. These technologies, which include availability sensors, dynamic signs and pricing, can all help manage the use of the space. The feasibility and use of these technologies on the public street infrastructure will continue to be explored through the planning process.
- The following locations are the proposed off-street Site PUDO facilities:
 - Block B2 Below-grade PUDO loop basement facility (accessed from the Relief Road);
 - Potential short-term parking spaces adjacent to building cores within the publicly accessible portions of the underground garage, and;
 - PUDO loop facility within the D3 Block, adjacent to the potential school (accessed from the Relief Road).
- In addition, the following are form part of the on-street pick-up / drop-off strategy for the Site:
 - At-grade Loop Road curbside laybys (Public Street 'B'), adjacent to building entrances and key destinations; and,
 - Short-term curbside drop-off along the Relief Road (Public Street A).

Site-Wide Bicycle Parking Strategy

- The redevelopment of the 2150 Lake Shore Boulevard west proper provides a substation opportunity to create a local environment that will establish cycling as a strong and viable travel options for a wide range of travel needs across Humber Bay Shores and the surrounding area. This includes trips made to / from the planned Transit Hub and the commercial centre of the Master Plan.
- A range of long-term and short-term bicycle parking facilities and supporting facilities (e.g. shower and change rooms, repair stations, etc...) will be provided across the Master Plan to provide for the needs of all user groups.
- The bicycle parking facilities will be incorporated into the levels closest to grade and although access to these facilities are still being developed as part of the master plan, it is intended that passive modes of vertical circulation (i.e. ramps) will be incorporated into the design to further improve the attractiveness of cycling as a viable mobility option.
- Station bicycle parking facilities will be included and integrated into the D1 block and at convenience surface locations adjacent to the transit hub as part of the strategy to establish cycling as a strong commuting "Last Mile" option.
- Bike Sharing and other mobility services (e.g. scooters) will help form part of the masterplan to maximum active modes of transportation

Mobility (TDM) Plan

- Transportation demand management (TDM) measures can be categorized based on the following four (4) implementation stages:
 - **External Infrastructure 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.
 - Site Plan Design and Features: Physical aspects of the internal design of the development, including its buildings, open spaces and circulation routings to promote alternative transportation modes.
 - Building Operations and Property Management: User-focused programs and policies enacted once the Site is operational to encourage alternative transportation modes.
 - Post Occupancy Monitoring: Post-occupancy data collection programs used to assess travel patterns and gauge the effectiveness of TDM
- The TDM measure are also anticipated to meet the following targets and intents:
 - o Minimise external travel demands
 - o Improve and increase pedestrian mobility
 - o Facilitate and increase transit use
 - o Support and increase bicycle use
 - o Reduce and manage parking supply
 - o Reduce auto ownership and usage; and,
 - o Increase TDM communication and awareness

- The proposed TDM plan incorporates a number of proposed measures to help meet the above noted design intents. Key measures include:
 - The provision of a variety of uses (retail, residential, office, retail, community) within the Site, servicing both the Site and wider Humber Bay Shores Community;
 - An expanded pedestrian and cycling network that will improve safety, desirability, and connectivity within the area;
 - The delivery of a new multi-modal transit hub, and GO station, providing both local and regional transit services to the community;
 - Reduced residential and non-residential parking supply that is supportive of the transit orientated nature of the development;
 - The employment of a commercial (paid) non-residential parking facility to manage the parking demand and encourage non-automobile usage;
 - The provision of dedication station commuter bicycle parking facilities;
 - o The provision of car share and bike share facilities; and,
 - Raised awareness of non-automobile transportation options through wayfinding signage, information packages, and information screens.
- Although these measures will continue to be refined later in the planning and development stages of the subject Site, the proposed measures will help leverage the benefit of the provision of new transit, pedestrian, and cycling infrastructure provided as part of the development proposal.

Travel Demand

- The travel demand analysis has been updated based on the current development statistics, including the addition of the schools to the forecasting.
- Overall, compared with the previous development statistics, the current proposal is expected to result in a reduction to overall person trips, auto driver trips, GO Transit trips and local transit trips during the PM and Saturday peak periods.
- During the AM peak period, a minor increase to person trips is projected. However, this is largely associated with internal walking trips. Notably, a reduction to auto driver trips is projected.

Capacity Analysis

- Given the above, it is considered that the conclusions outlined in the October 2019 OPA submission transportation report in relation to the travel demand analysis remain valid and a full update to the multimodal trip assignment and analysis was not undertaken.
- Key conclusions in relation to the road network and transit capacity from the October 2019 OPA submission transportation report are reproduced below:
 - Overall, the road network is projected to operate within capacity under future total conditions, noting the benefit of the projected mode shift associated with the transit station and the new infrastructure and lane configuration changes proposed as part of the proposed development.
 - As a result of projected Site development, background development and station related transit activity, a number of area transit services are projected to exceed current day capacity. However, it is expected that with the development of the Site and the proposed station along with RER and future GO expansion, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area.
 - In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service.

- Notwithstanding the above, specific analyses were undertaken to review relevant changes to the development plan and surrounding transportation infrastructure, including:
 - The introduction of a new pedestrian plaza (which removed the private street which connected the Loop Road to Park Lawn Road);
 - Changes to lane configurations and/or traffic control at some intersections; and
 - o Updates to transit servicing assumptions.
- Updated Synchro analyses were undertaken for relevant intersections affected by the removal of Street A or lane configuration and/or traffic control changes.
- The results indicated that all intersections are expected to continue to operate within capacity.
- Updated transit capacity analyses were also undertaken based on updated transit servicing assumptions. The results remain generally consistent with those of the October 2019 OPA submission transportation report, with some routes projected to exceed capacity.
- However, as noted above, this analysis is against current day capacity and it is expected that with the development of the Site and the proposed station, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area. In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service.

Vehicular Parking

- The Master Plan is centred upon creating a new complete community that is built, from the ground up, to provide a wide range of non-automobile dependent mobility options that minimize car usage as a form of transportation.
- Significant transportation infrastructure elements such as the creation of a Transit Hub at the new GO Station with new TTC LRT and bus facilities; cycling facilities, car share facilities, and design elements that promote walking as a viable local travel mode decrease reliance on the automobile.
- 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:
 - Recognizes the mobility environment being created in the site-surrounding neighbourhood;
 - Reflects contemporary (and significantly reduced) parking needs in areas with high transit accessibility;
 - Maximizes the sharing of parking supplies across land uses in the Master Plan; and
 - o Discourages the provision of excess parking discourage vehicular travel.

Prevailing Zoning By-law Parking Standards

- The Site is currently subject to the Rest of City (ROC) parking standards under the City of Toronto Zoning By-law 569-2013.
- Zoning By-law 569-2013 Rest of City (ROC) standards require the provision of 10,538 parking spaces, including 6,887 parking spaces for residential uses and 3,651 spaces for nonresidential uses.

- The residential parking requirement equates to an effective overall parking supply of 0.96 resident spaces per unit on average.
- In our opinion, the Rest of City rates and, generally, the City of Toronto 569-2013 are not sufficiently reflective of recent parking trends and proactive policy and planning initiatives.

Proposed Parking Supply Standards

• It is proposed to adopt minimum parking standards that are reflective of the contemporary public policy and planning framework that is guiding the Christies Master Plan as follows:

0	Residential	0.40 spaces per unit
0	Visitor	0.10 spaces per unit
0	Retail	1.00 spaces per 100m ² GFA
0	Office	1.00 spaces per 100m ² GFA
0	School	$0.50 \text{ spaces per } 100 \text{m}^2 \text{ GFA}$

- It is proposed to adopt sharing provisions outlined in Zoning Bylaw 569-2013 for all non-resident parking to maximize the usage of provided parking, to enable multiple user groups to utilize an available parking space, and to minimize overall all nonresidential parking requirements across the project.
- Based on the recommended standards the site requirement is 3,939 parking spaces, including 2,852 residential parking spaces and 1,087 non-residential (i.e. retail, office and visitor) parking spaces.

Policy and Planning Context

- The current transportation policy and planning regimes across Provincial, Regional, and Municipal levels all prioritize the mobility and experience of people over the efficiency of car movement.
- Mobility planning increasingly aims to mitigate and reduce vehicular traffic through the promotion and facilitation of nonauto trips and the improvement of public transit access.
- Similarly, contemporary City-Wide policy and planning are leading urban growth and development through an integrated approach between mobility, urban development, and public realm.
- The principles and objectives of the Christie's Master Plan resonate with the vision and principles of the policy framework.

Master Plan Mobility Context

• The Site presents this opportunity to commit to changing the mobility context and urban form of south Etobicoke – setting a precedent for the area. The development plan will be one of the first non-downtown nodes to establish such a transit-oriented environment that is fully leveraged by the master plan, secondary studies, and policies on a local and regional scale.

- The current City of Toronto Zoning By-law regime is not in step with the contemporary planning initiatives that are guiding development today and into the future. This holds true not just for the Etobicoke area but for the City as a whole. Parking standards currently in force are conservatively high and continually overstate development parking needs particularly as they pertain to residential land uses.
- The mobility planning and deliverables of the Master Plan will significantly alter the mobility patterns in south Etobicoke. A number of transit, cycling, and pedestrian realm improvements, along with Travel Demand Management measures that are being implemented as part of the Master Plan support nonautomobile dependent travel and offers the site and surrounding neighbourhood an excellent and convenient travel alternative that avoids the use of a private automobile on a day-to-day basis.
- Overall, the transportation context and travel characteristics of the local area are anticipated to operate in a similar manner to areas of Toronto where higher order transit is afforded, following the development of the site and other related transportation infrastructure.

Resident Parking Considerations

- BA Group undertook a review of parking data and trends; parking approvals, and parking demand data in proxy areas within the City of Toronto.
- Overall, there is a disconnect between Zoning By-law 569-2013 and the parking approvals and demand data. Most notable are the discrepancies in the Midtown and Downtown area, where you see an entire disconnect of approvals from By-law reflecting the transit accessibility of these areas and the strength in the support for the adoption of a progressive, reduced, parking regime.
- The adopted standard has been established considering a range of influencing fators :
 - Provincial and Municipal policies that all talk to the promotion of non-automobile dependent travel and sustainable forms of mobility;
 - The substantial investments being proposed as part of the Master Plan to establish / construct the Park Lawn GO Station and TTC Transit Hub as a central component of its mobility plan as well as construction of dedicated TTC LRT facilities on Lake Shore Boulevard West and connections to the GO Station;
 - Travel and mobility trends experienced across the City as a whole and the emergence of a decisive move away from the former reliance on automobile dependent transportation particularly in transit accessible, urban locations;

- Parking trends seen in transit accessible locations that illustrate a disconnect between the prevailing Zoning By-law regime and actual parking needs and, in fact, approvals provided by the City Council, Committee of Adjustment and LPAT;
- Consideration of the forward-thinking positive demand management aspects of parking supply policy and the significant travel benefits that can be accrued through establishing a parking framework for the site that aims to strategically integrate and build upon experience seen elsewhere across the City.

Non-Residential Parking Considerations

- The Rest of City parking rates are reflective of an outdated bylaw regime, inappropriate for application to a contemporary, transit-oriented development such as the Christies Master Plan.
- The non-residential uses proposed as part of the Master Plan, particularly employment / retail, have been developed to support the local community. The Master Plan support nonauto local travel through the introduction of transit, cycling, and pedestrian realm improvements. This helps lower the demand for parking for local, necessity-based trips.
- Key to the parking strategy is the proposal to provide nonresidential parking within shared commercial parking facilities located beneath the development plan.
- The usage patterns of residential visitor, commercial / retail and office parking vary across the course of a typical day, allowing for the shared pool of parking to maximise efficiency, and avoid the unnecessary over supply of parking.

• It is proposed to provide all non-residential parking as pooled, shared, commercial parking below the site plan, with belowgrade connections to maximize parking efficiency and distribute vehicles between the garage access points.

Parking Supply Overview

- A total of 4,425 parking spaces are proposed as part of the current Master Plan
- A total of 1,169 non-residential parking spaces are proposed on-site and will be primarily located on the P1 levels within Blocks A, C and D.
- The proposed residential supply of 3,256 spaces is equivalent to, on average, an effective per unit parking supply standard of 0.46 spaces / unit.
- It is proposed to meet the accessible standards outlined in City of Toronto By-law 579-2017, which requires a minimum of 108 accessible spaces.

- Given that the provision of residential parking is 404 spaces over the recommended Zoning By-law requirement (2,852 spaces required vs 3,256 spaces provided), 405 spaces within the underground garage are to be dedicated as LEV, car-pool or car-share, meeting and exceeding the TGS V3.0 AQ1.2 requirements.
- Given that the provision of non-residential parking is 82 spaces over the Zoning By-law requirement (1,087 spaces required vs 1,169 spaces provided), a minimum of 8 spaces within the underground garage are to be dedicated as LEV, car-pool or car-share, meeting the TGS V3.0 AQ1.2 requirements.
- 885 parking spaces are to have electric vehicle supply equipment (EVSE) installed (651 resident spaces and 234 non-residential spaces). The remaining 3,540 spaces are to be EVSE ready (2,605 residential and 935 non-residential spaces), meeting the TGS V3.0 AQ 1.3 requirements.
- The proposed parking supply will, based upon the above, appropriately meet the residential parking demands of the proposed development.

Bicycle Parking

- Application of bicycle parking requirements from Zoning Bylaw 569-2013 and Toronto Green Standards (Version 3.0 – Zone 2, Tier 1 Standards) to the proposed development programme requires a total of 5,730 spaces (5,000 long term and 730 short term).
- Application of bicycle parking requirements from Zoning Bylaw 569-2013 and Toronto Green Standards (Version 3.0 – Zone 2, Tier 2 Standards) to the proposed development programme requires a total of 7,514 spaces (6,569 long term and 945 short term).
- The proposed Site plans incorporate a total of 7,696 bicycle parking spaces (6,644 long term and 1,051 short term). These spaces are generally located in the P1 level (or first floor below grade). This supply meets and exceeds the City of Toronto Zoning By-law 569-2013 and the Toronto Green Standards (Version 3.0 – Zone 1, Tier 2 Standards).
- The proposed bicycle parking supply and design arrangements incorporated in the current proposal is considered to be appropriate and will support the bicycle parking demands of the proposed development.

Loading

- The requirements of City of Toronto's Zoning By-law 569-2013 requires a minimum of twenty-seven (27) loading spaces, including twelve (12) Type 'B', eight (8) Type 'G', and seven (7) Type 'C' loading spaces to support the development plan.
- The current proposed development incorporates a total of fiftyeight (58) loading spaces, including two (2) Type 'A', twenty-four (24) Type 'B', eight (8) Type 'G' and twenty-four (24) Type 'C' loading spaces to service all 6 blocks.
- Loading area arrangements incorporated into the proposed Site plans appropriately accommodate the manoeuvring needs of a semi- trailer (Single Axle Cab with 53' Trailer), City of Toronto garbage collection vehicle, heavy single unit trucks (HSU), single unit trucks (SU) and TAC P Car that will look to service the development.
- All vehicles will be able to enter /exit the proposed development at three different accesses:
 - Signalized driveway at the Relief Road ('Street A') for vehicles servicing Blocks A to E (below grade loading)
 - Un-signalized driveway at the Relief Road ('Street A') for vehicles servicing Block D3-3 for move-in / move-out of residents (at-grade loading)
 - Signalized driveway at Brooker's Lane / Lake Shore Boulevard West for Block F (at-grade loading)

- A number of below-grade tunnel connection at strategic locations are placed beneath the public streets to access development blocks separated from the loading accesses by public roads for Blocks A to E
- The design arrangements of the proposed loading facilities meets the requirements of the City of Toronto Zoning By-law and City of Toronto garbage / recycling policies and will acceptably accommodate the manoeuvring needs of the vehicles using them.