



# Urban Design Study

**60 Dundas Street East**  
City Of Mississauga

**Prepared For**  
Almega Asset Management

March 2022



Job Number  
2195

[www.bousfields.ca](http://www.bousfields.ca)

Urban Planning  
Urban Design  
Community Engagement

**Toronto Office**

3 Church Street, Suite 200  
Toronto, ON  
M5E 1M2

T. 416.947.9744  
F. 416.947.0781

**Hamilton Office**

1 Main Street East, Suite 200  
Hamilton, ON  
L8N 1E7

T. 905.549.3005  
F. 416.947.0781

# Table of Contents

<b>1 Introduction</b>	<b>I</b>
1.1 Goals and Objectives	3
1.2 Analysis of the Existing Site and Neighbourhood	5
<b>2 Analysis of the Proposed Development</b>	<b>15</b>
2.1 Site Design	16
2.2 Built Form and Uses	30
2.3 Access, Circulation, Parking and Services	39
2.4 Supporting Studies	45
<b>3 Summary and Conclusions</b>	<b>47</b>



This Urban Design Study (UDS) has been prepared by Bousfields Inc., on behalf of Almega Asset Management, to describe and illustrate the urban design goals, objectives and analysis for the development being proposed at the corner of Dundas Street East and Shepard Avenue – municipally known as 60 Dundas Street East.

The proposal consists of a mixed-use development that includes a 36-storey tower with a 3-storey podium in Phase 1 and a 33- and 29-storey tower with a 3- to 5-storey podium in Phase 2. The development will incorporate retail uses at grade along both Dundas Street East and Shepard Avenue and provide 1,224 residential units. Moreover, the proposal introduces a 510-square metre public park adjacent to Cooksville Creek.







# Introduction

This Urban Design Study (UDS) has been prepared by Bousfields Inc., on behalf of Almega Asset Management, to describe and illustrate the urban design goals, objectives and analysis for the development being proposed at the corner of Dundas Street East and Shepard Avenue – municipally known as 60 Dundas Street East (hereafter referred to as the “Subject Site”). The proposal consists of a mixed-use development that includes a 36-storey tower with a 3-storey podium in Phase 1 and a 33- and 29-storey tower with a 3- to 5-storey podium in Phase 2. The development will incorporate retail uses at grade along both Dundas Street East and Shepard Avenue and provide 1,224 residential units. Overall, the development will produce a gross floor area of 67,847 square metres (above grade) with a resulting Floor Space Index (FSI) of approximately 6.32 times the lot area. The development will also introduce a 510-square metre public park adjacent to Cooksville Creek.

The following UDS is a companion document that should be read in conjunction with the Planning Justification Report (also prepared by Bousfields Inc.), architectural plans (prepared by Chamberlain Architect Services Limited) and other accompanying reports. It is our opinion that the built form of this proposed development represents good urban design, supports incoming transit infrastructure along Hurontario Street and Dundas Street East and positively contributes to the enhancement of the existing and planned character of Downtown Cooksville.

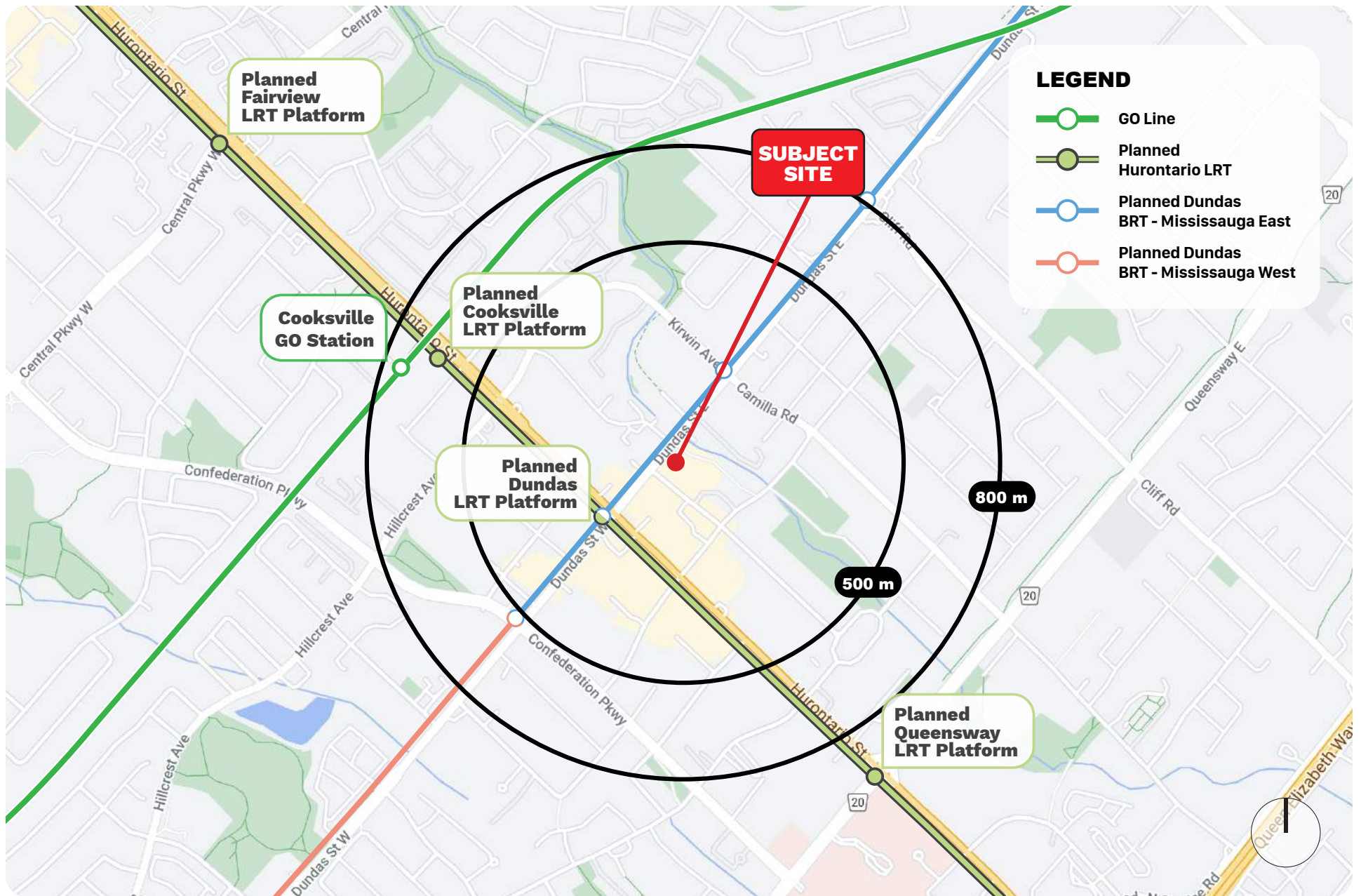


Figure 1 - Area Context



## 1.1 Goals and Objectives

The Subject Site is envisioned as an attractive mixed-use and transit-supportive development that will contribute to Downtown Cooksville's existing vibrant and diverse urban neighbourhood. The intensification of the Subject Site will improve the public realm along both Dundas Street East and Shepard Avenue by siting buildings near the street edge to contribute to the main street character and incorporating grade-related retail to encourage activity. Taller building forms will be established to provide more housing



### (1) Enhance the Existing Character of the Site

- Develop a pedestrian-friendly building form with excellent architectural design, contextually appropriate massing and treated with high-quality building materials.
- Orient and place the proposed building at, or near, the street edge to animate and enhance the adjacent public realm.
- Expand the existing green network by introducing a new public park adjacent to the creek edge.

within the neighbourhood and to support existing and planned transit initiatives such as the Hurontario Light Rail Transit (LRT), proposed Bus Rapid Transit (BRT) along the Dundas Street corridor and GO Transit.

In support of the City of Mississauga's policies and guidelines for Downtown Cooksville, the proposal appropriately considers the following objectives:



### (2) Support Existing and Planned Transit Infrastructure

- Introduce densities that will support existing and planned transit initiatives within the immediate neighbourhood.
- Orient building entrances towards transit corridors and stops for immediate access and convenience.



### (3) Create a Positive Pedestrian Experience at Ground Level

- Provide an appropriate street wall height to promote a positive pedestrian-scaled experience at the ground level.
- Incorporate active uses and transparent material at the ground level to animate and enhance the character of the adjacent public realm.
- Minimize the appearance of, and internalize, vehicular and servicing areas to reduce their presence along the street.



### (4) Maintain Compatibility and Respect and Connect the Surrounding Context

Reduce impacts of overlook, shadowing and wind tunnel effects on the surrounding neighbourhood context by incorporating appropriate transitions in height and articulation to the proposed massing.

Improve pedestrian circulation within the existing open space network by introducing new pedestrian connections to fill the "gaps".



## **1.2 Analysis of the Existing Site and Neighbourhood**

### **1.2.1 Subject Site**

The Subject Site – municipally addressed 60 Dundas Street East – is located at the southeast corner of Dundas Street East and Shepard Avenue. The Subject Site has a gross site area of 10,719 square metres, with approximately 79 metres of frontage along Dundas Street East (the north boundary) and 115 metres of frontage on Shepard Avenue (the west boundary). The Subject Site is bounded on the east side by Cooksville Creek, with a public walkway extending from Dundas Street East to King Street East along the east boundary of the site.

The Subject Site currently contains a one-storey 2,673-square metre retail shopping centre on the southerly half of the site. The building is setback approximately 65.73 metres from the north lot line abutting Dundas Street East, between 5.8 metres to 33.3 metres from the east lot line abutting Cooksville Creek, 6.2 metres from the south lot line abutting the property at 85 King Street East, and between 15.5 metres to 16.4 metres from the west lot line abutting Shepard Avenue.

The remainder of the site has a significant amount of surface parking – with approximately 160 surface parking spaces occupying the northern and western portions of the Subject Site. The parking areas are accessed by three full-move unsignalized accesses, including one along Dundas Street East (at the northeast corner of the Subject Site) and two along Shepard Avenue (one at the southwest corner of the site, and one at the midpoint of the Subject Site along Shepard Avenue).



Figure 2 - Immediate Context



### 1.2.2 Immediate Area

South of the Subject Site are two slab-form apartment buildings at 18- and 10-storeys (75 and 85 King Street East operated by Revera). These apartment buildings are designated Residential High Density in the City of Mississauga Official Plan. Further south, along the south side of King Street East, are two one-storey detached residential houses (84 and 98 King Street East). Along Shepard Avenue, south of King Street East, is a low-rise residential neighbourhood with one and two-storey detached houses oriented east-west with large driveways and front-yard setbacks.

West of the Subject Site, between Shepard Avenue and Hurontario Street, is a large commercial plaza. The plaza extends along the western side of both the Subject Site and the Revera retirement apartments south of the Subject Site, with the northern half of the plaza abutting the Subject Site. The plaza includes a number of low-rise retail uses with surface parking - all within the Mixed-Use designation of the Official Plan.

North of the Subject Site is Dundas Street East – an east-west 42-metre arterial road that traverses the entire City of Mississauga and is planned to incorporate a Bus Rapid Transit ("BRT") route under the Dundas Connects Master Plan. North of Dundas Street East are low-rise commercial plazas and offices with surface parking. Continuing north of these commercial uses are a series of mid- and high-rise apartment buildings up to 28 storeys in height.

East of the Subject Site is Cooksville Creek, which is a channelized open creek that runs in a north-south direction through box culverts under Dundas Street East. The creek runs for approximately 16 kilometres from Matheson Boulevard, near Hurontario Street, and flows south towards Lake Ontario at R.K. McMilian Park. A public walkway extends along the west side of Cooksville Creek, abutting the Subject Site, and extends from Dundas Street East to King Street East. Beyond Cooksville Creek, to the east of the Subject Site, is a 16-storey condo building (Artform Condos, 86 Dundas Street East) that is currently under construction.



Subject Site, looking south from the Dundas-Shepard intersection



Dundas Street East, looking northwest from the Subject Site



Dundas Street East, looking northeast from the Subject Site



Shepard Avenue looking south from the Subject Site

### 1.2.3 Area Context

The Subject Site is within the Downtown Cooksville Character Area, which is an area identified for intensification and growth by both Provincial and City planning documents. As per the City of Mississauga Official Plan, the Downtown Cooksville area is bounded by the Hudson Railway to the north, Kirwin Avenue to the east, King Street to the south and Confederation Parkway to the west.

The area is currently characterized by underutilized low-rise commercial properties (and related surface parking) along Dundas Street and Hurontario Street, with some older higher slab form apartment buildings. Cooksville Creek bisects the area in a north-south direction, with low-rise residential neighbourhoods generally located east and south of Camilla Road and King Street East respectively. The Downtown Cooksville Character Area consists of a range of uses, including a library, medical clinics and daycare uses. The area is undergoing a transition from a more suburban form of development, towards a more compact complete community. In this regard, there are recent approvals for a 28-storey residential building at 45 Agnes Street and a 16-storey residential building at 90 Dundas Street East (immediately across the creek, east of the Subject Site). The Downtown Cooksville area is generally located between the Queen Elizabeth Way (QEW) to the south, and the 60- to 80-storey towers in the Downtown Core Character Area to the north (southwest of Square One shopping centre).

Within the Downtown Cooksville area, lands are generally designated for Mixed Use or Residential High-Density Development in the Official Plan. The Subject Site, as well as much of the lands fronting onto Hurontario Street and Dundas Street East, is designated Mixed Use where the main street retail character is planned to be maintained. The remaining lands within the Downtown area are generally designated Residential High Density and Residential Medium Density; with some Office, Public Open Space and Greenlands designations interspersed throughout the area. Lands beyond the downtown boundary are generally designated Low-Density Residential I and Low-Density Residential II and are generally comprised of single detached houses and townhouses.

The Downtown Cooksville area is poised to receive significant new transit infrastructure. The Subject Site is located approximately 150 metres from a Hurontario Light Rail Transit (LRT) stop at the intersection of Hurontario Street and Dundas Street East. The line is anticipated to be complete by fall of 2024. The Dundas Bus Rapid Transit (BRT) line, which is currently in the initial planning stages, is expected to run along the Dundas Street corridor and will interchange with the LRT at Hurontario Street and Dundas Street East there is an additional planned stop at the corner of Dundas Street East and Kirwin Avenue. The site is also approximately within 700-metres of the Cooksville GO Station to the north. The Cooksville GO Station area is identified as a Mobility Hub in the Metrolinx 2041 Regional Transportation Plan and within a Major Transit Station Area ("MTSA") in the Council-endorsed Draft Regional Official Plan Amendment ("ROPA").

The draft ROPA proposes a new map - Schedule Y7 – Major Transit Station Area - that identifies the Subject Site as being within a Primary Major Transit Station Area due to its association with the Hurontario LRT and Dundas BRT stops. Primary Major Transit Station Areas are areas that have existing or planned transit-supportive built forms and can meet or exceed the minimum density target, as defined by the Draft Peel 2051 Municipal Comprehensive Review Policies.





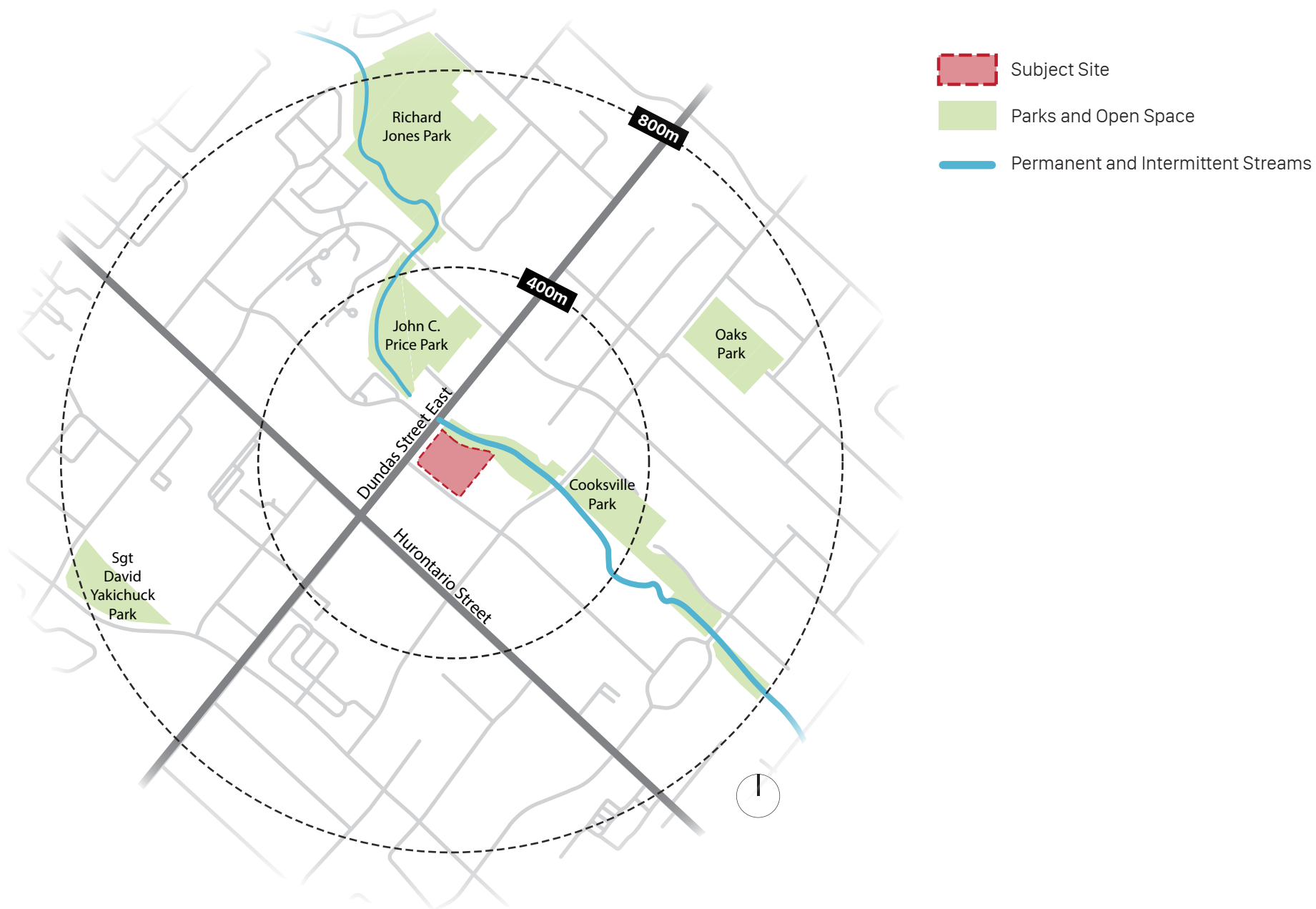
Figure 3 - Surrounding Context



#### **1.2.4 Site Topography, Natural Features and Vegetation**

The Subject Site is relatively flat with no significant changes in grade. It is generally paved and has a limited vegetation cover. Specifically, the Subject Site contains narrow boulevards of landscaping, along the western and northern lot lines. There is also a small, landscaped area – with a diagonal interlocking stone walkway – at the northwest corner of the site that leads to the parking lot from the Dundas Street East and Shepard Avenue intersection.

As described in the accompanying Tree Inventory and Preservation Plan Report, a total of 34 trees are located within six metres of the Subject Site. Many of these trees are located along the eastern and southern edge of the Subject Site – adjacent to Cooksville Creek and within the landscape buffer associated with the apartment buildings on the neighbouring property. Moreover, six street trees are located within the landscape boulevards along the Shepard Avenue frontage.



**Figure 4 - Natural Features And Vegetation**

## 1.2.5 Transportation Network

The Subject Site is located along Dundas Street East, a major east-west arterial residential and commercial thoroughfare that runs from Kingston Road in Toronto, through Mississauga, and towards Highway 6 in Waterdown. Dundas Street East is identified as an Intensification Corridor (Schedule 2 of Mississauga Official Plan) and is an Arterial Road with a designated right-of-way width of 42 metres (Schedules 5 and 8 of the Mississauga Official Plan). The segment of Dundas Street East adjacent to the Subject Site has a five-lane cross-section for eastbound and westbound traffic - including a central turning lane and sidewalks on both sides of the street.

The Dundas Connects Master Plan – which was endorsed by City Council on June 20, 2018 - is intended to guide future urban growth and intensification along the Dundas Street Corridor. The Master Plan will support major improvements to transportation, land use and the public realm along the Dundas Street Corridor. A major highlight of the Master Plan includes implementing Bus Rapid Transit (BRT) along the Dundas Street corridor from Highway 6 in Hamilton to the Kipling Transit Hub in Toronto - equaling approximately 17 kilometres of BRT within the City of Mississauga. Planning for the BRT is currently underway - with analysis ongoing to determine the right-of-way widening width along Dundas Street East.

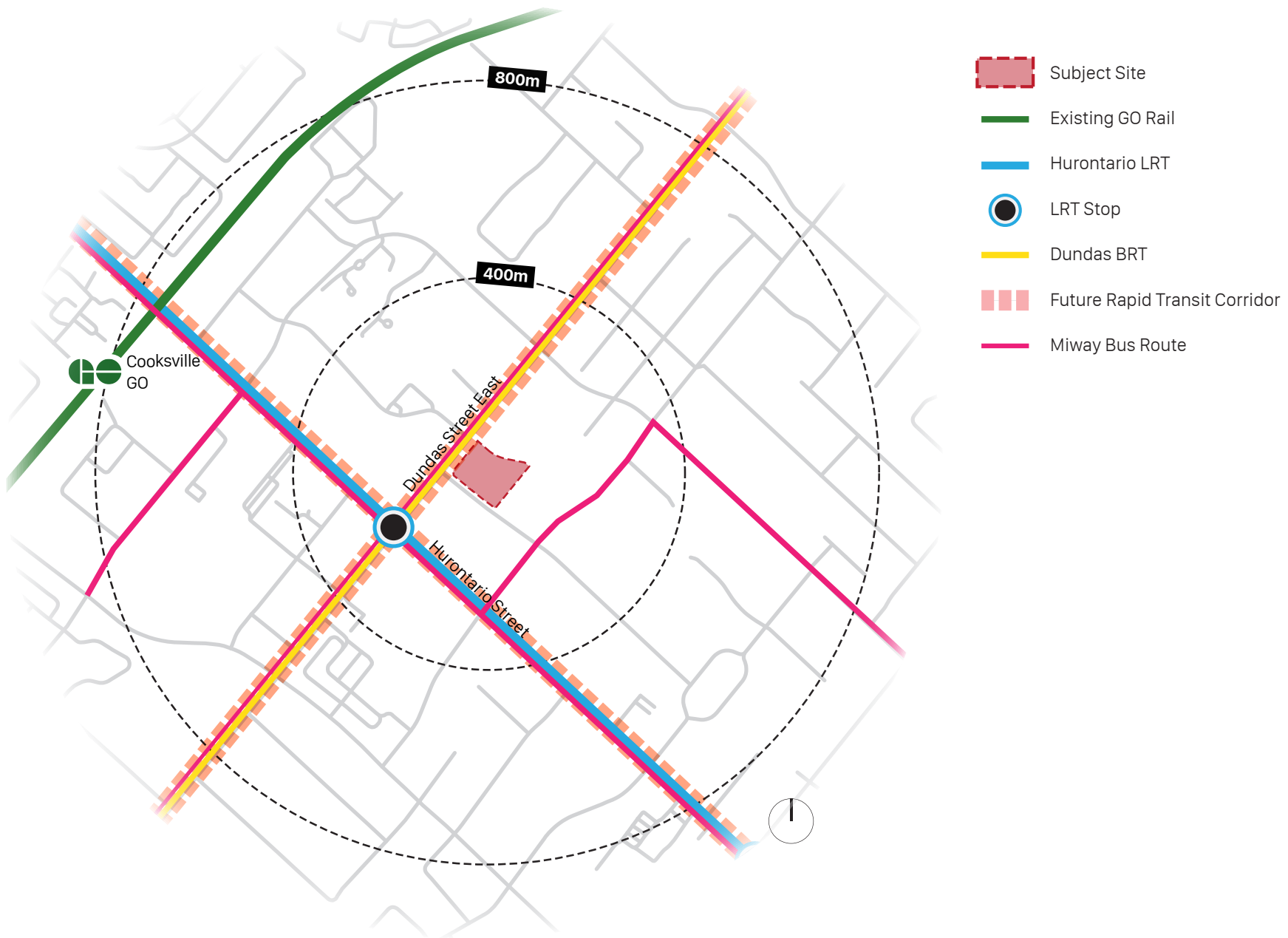
As mentioned, the Subject Site is located approximately 150 metres from the intersection of Dundas Street East and Hurontario Street. This intersection will be an interchange for the planned Dundas BRT and under-construction Hurontario Light Rail Transit (LRT). Once complete, the Hurontario LRT will run north-south in a dedicated lane from the Port Credit GO Station (along the Lakeshore West line) to the Brampton Gateway Terminal. The Hurontario LRT will provide connections to Züm (Brampton Transit's Bus Rapid Transit service), Cooksville GO Station along the Milton Line and the City Centre Station which connects to Miway - Mississauga's Transit System. The Hurontario LRT project is expected to be completed in 2024.

Currently, the Subject Site is serviced by a number of MiWay public transit bus routes. Along Dundas Street, MiWay Route 1 (Dundas) and Route 101 (Dundas Express) provide connections to Kipling Station in Etobicoke and U of T Mississauga Campus. These routes serve the Subject Site with stops at the Dundas-Jaguar Valley or Dundas-Hurontario intersections.

Along Hurontario Street, MiWay Route 2 (Hurontario) and Route 103 (Hurontario Express) provide connections to Port Credit GO Station, City Centre Transit Terminal at Square One Shopping Centre, Trillium Health Partners Hospital and the Brampton Gateway Terminal. These routes have key stops at the intersection of Dundas Street East and Hurontario Street that are easily accessible from the Subject Site.

The Subject Site is located approximately 700 metres from Cooksville GO Station (representing a 13-minute walk). The Cooksville GO Station is on GO Transit's Milton Line regional commuter rail service, which operates between Milton and Union Station. It also serves additional MiWay routes that provide connections to Port Credit GO Station, Square One GO Bus Terminal and TTC services at Sherway Gardens Terminal in Etobicoke.

Schedule 7: Long term Cycling Routes of the Mississauga Official Plan (MOP) identifies Hurontario Street and a portion of Dundas Street West - west of Confederation Parkway - as *Primary On-Road / Boulevard* cycling routes. Section 8.2.4 of the MOP states that these routes are meant to connect key city destinations with cycling infrastructure. Moreover, Section 8.2.4 states that the City will protect, and may acquire, lands required for the cycling facilities shown on *Schedule 7: Long Term Cycling Routes* through the development approval process and capital works program.



**Figure 5 - Transportation Network**





# Analysis of the Proposed Development

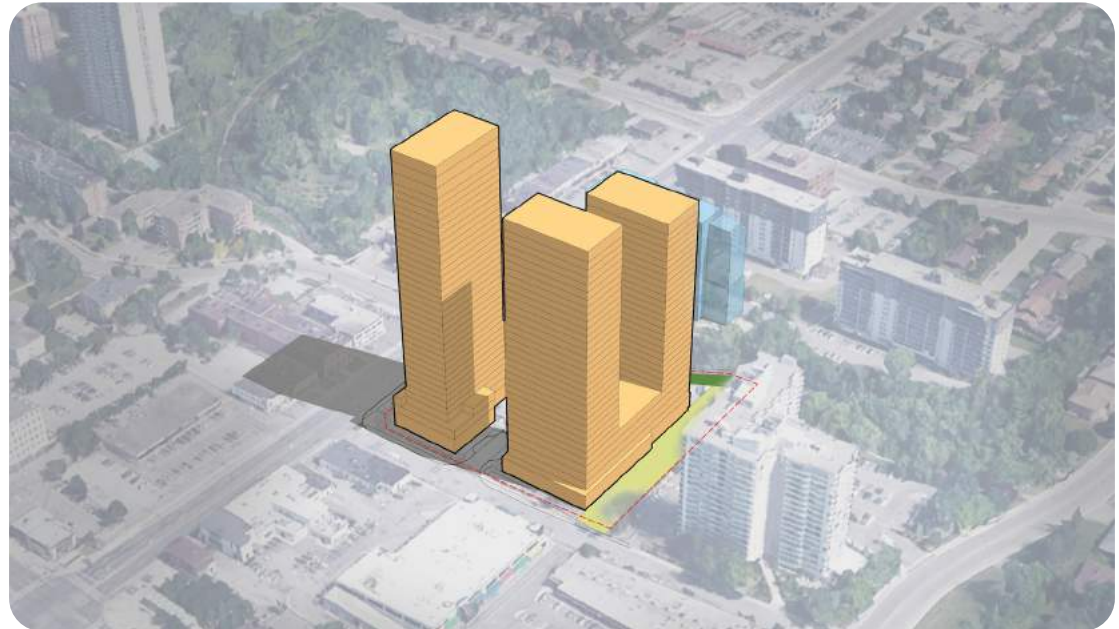
## 2.1 Site Design

The development proposal is comprised of a 36-storey mixed-use building and a 33- and 29-storey residential building planned in two phases. The buildings are oriented around an internal courtyard, which includes a private road system with vehicular access from Dundas Street East and Shepard Avenue.

Collectively, the buildings contain a total of 1,224 dwelling units and generate a total gross floor area of 67,847 square metres. Broken down, it is comprised of 65,884 square metres of residential gross floor area and 1,963 square metres of retail gross floor area. The resulting density is 6.32 times the area of the lot.



View Looking North - Existing Site Conditions



View Looking North - Proposed Development



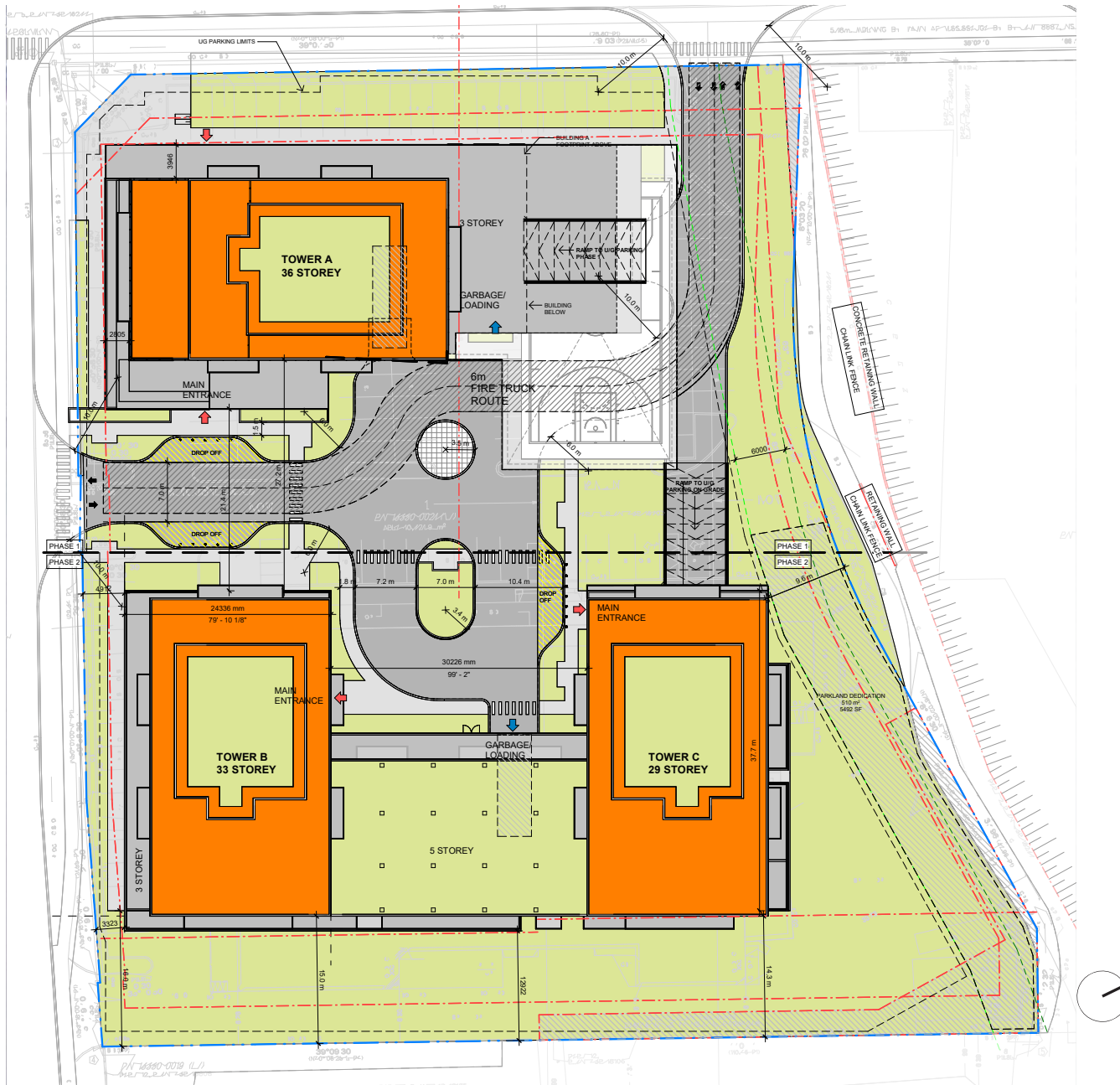
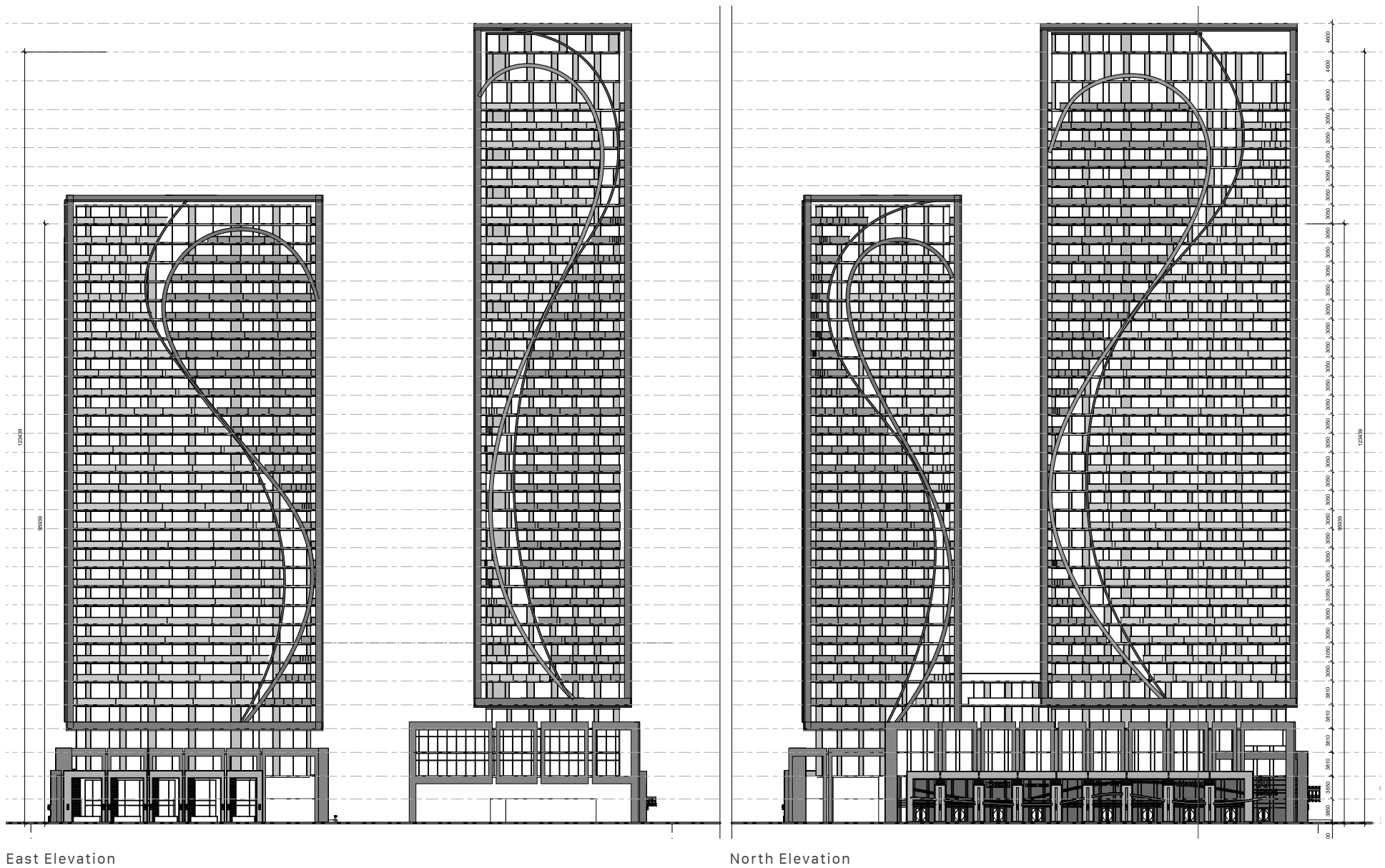


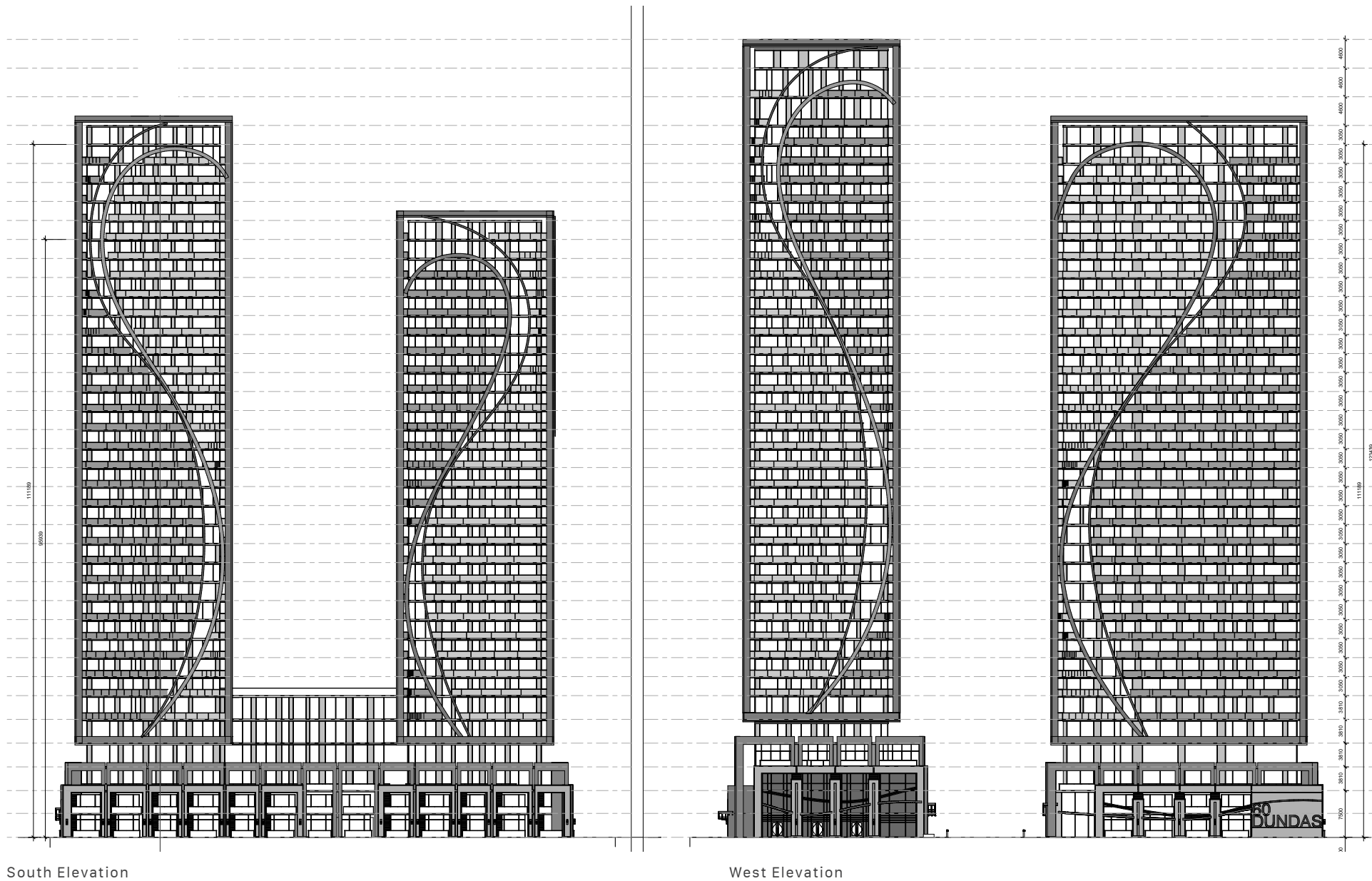
Figure 6 - Site Plan (Prepared by Chamberlaine Architect Services Limited)





**Figure 8 - East and North Architectural Elevations** (Prepared by Chamberlaine Architect Services Limited)





**Figure 9 - South and West Architectural Elevations** (Prepared by Chamberlaine Architect Services Limited)

## 2.1.1 Organization of Site Elements

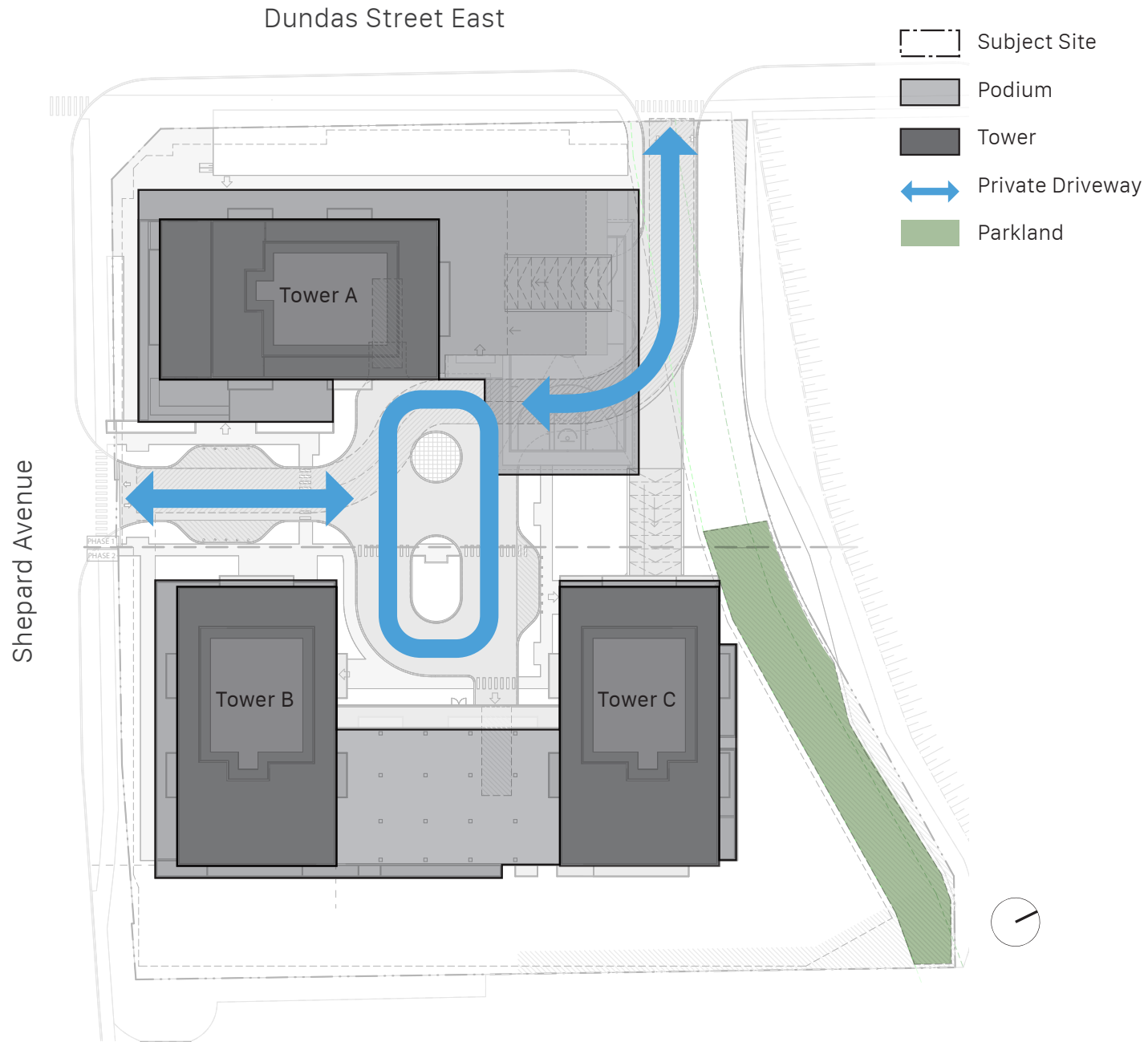
The proposal envisions the redevelopment of the Subject Site with a mixed-use development consisting of three tall building components atop two podiums. The overall site arrangement has been informed by the natural and emerging built form context of the surrounding area. In this regard, the proposed site design will provide an appropriately intensified built form that will benefit from existing and planned transit, while respecting the adjacent Cooksville Creek and main street character of the adjacent streetscapes.

The corner of Dundas Street East and Shepard Avenue is anchored by a 36-storey tower element ("Tower A") with a 3-storey podium (together referred to as "Building A"). South of Tower A are a 33- ("Tower B") and a 29-storey tower element ("Tower C") which share a 3- to 5-storey podium (together referred to as "Building B"). Building B primarily fronts onto Shepard Avenue.

The podiums have been sited to frame the adjacent public streets and maintain adequate separation distances from one another to ensure the public and private realms are enhanced and suitable to each function. Active grade-related uses are provided along both street frontages to animate the public realm. Retail uses will front onto Dundas Street East and anchor the corner of the Dundas-Shepard intersection. Residential lobbies and grade-related townhouse units will front onto Shepard Avenue to activate the public realm and respect the neighbourhood character of the street south of the Subject Site.

Tower elements have been organized to maintain appropriate separation distances from each other to limit impacts of privacy and overlook, and to preserve access to sunlight and sky view. Together, the proposed buildings frame an internal courtyard, which is comprised of a private road configuration with vehicular access from Dundas Street East and Shepard Avenue.

A public park has been strategically located along the eastern edge of the proposed buildings – specifically Cooksville Creek – to provide a visual landscape extension to the existing natural feature.



**Figure 10 - Site Organization**



## 2.1.2 Public and Private Open Spaces

### 2.1.2.1 Public Park

The proposed development will introduce 510 square metres of public parkland alongside the Cooksville Creek edge to provide publicly accessible open space that expands and compliments the existing green network. In addition to providing a visual landscape extension to the existing naturalized area and encouraging a sense of place, the proposed park will also function as a flood mitigation feature.

As envisioned in Vision Cooksville (2016), the proposed park will link to an existing trail that runs parallel with the west side of Cooksville Creek - providing a pedestrian connection to Dundas Street East to the north and King Street East to the south. New pedestrian pathways enhanced by landscape features will also extend from the park to Shepard Avenue to provide connections to the public realm. Moreover, the park is framed by the podium of Building B which is lined with active residential uses that will animate and provide passive overlook onto the open space.

The park has been designed with a size and shape that will allow for flexible passive and active programming to provide opportunities for gathering and socializing for members of the community. The park is envisioned to be treated with a mixture of high-quality hard and soft landscaping elements. The detailed design will be developed in collaboration with the City of Mississauga.

### 2.1.2.2 Private Amenity Areas

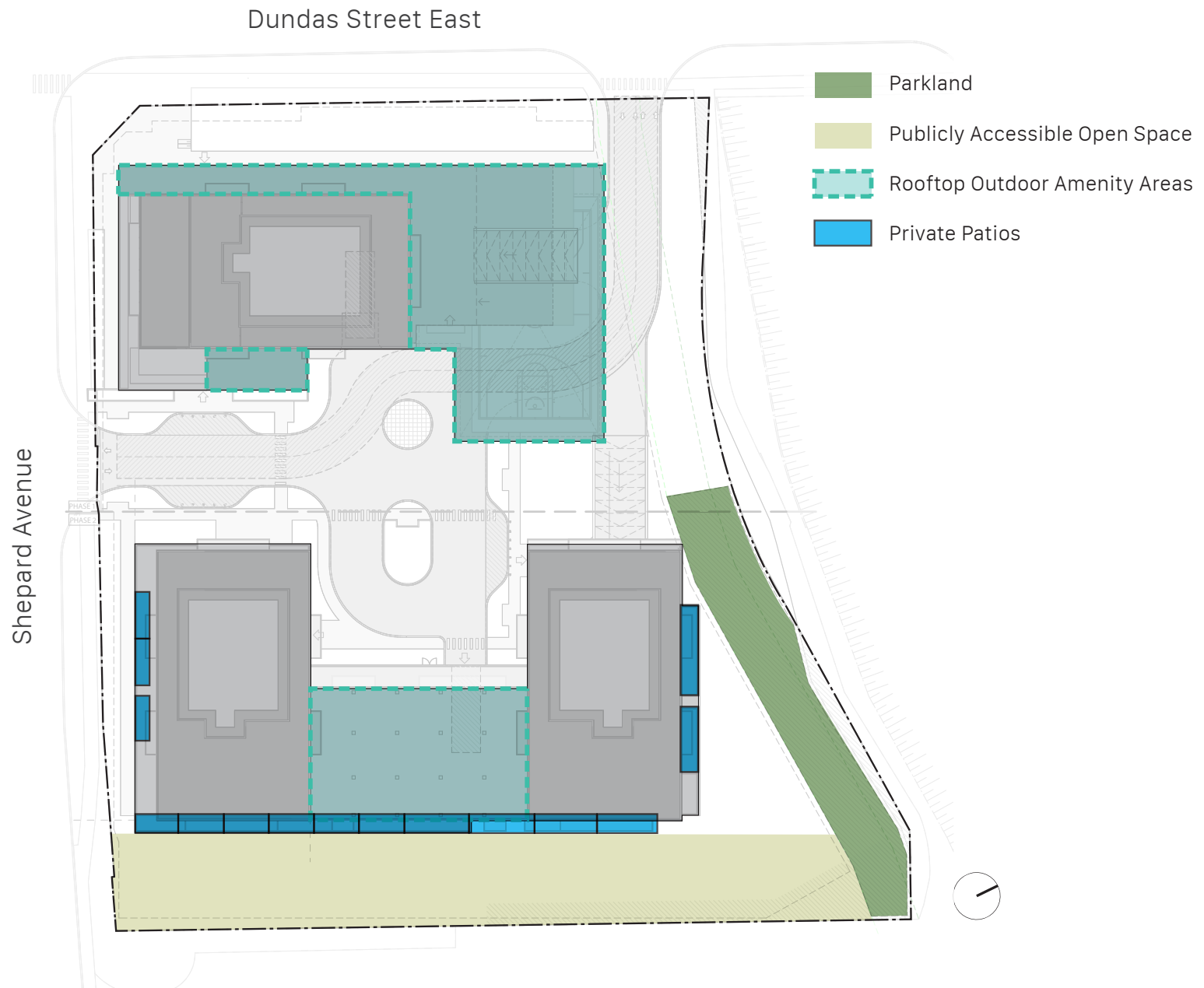
In addition to the proposed public open space, the development provides a total of 9,351 square metres of indoor and outdoor amenity space. Amenity space has been provided within each of the proposed buildings to ensure all residents have access to a variety of passive and active activities associated with these spaces in accordance with Mississauga Official Plan (MOP) Policy 9.3.5.7.

A total of 3,772 square metres of outdoor amenity space is proposed throughout the development. At grade, a 41-square metre amenity space is proposed at the southeast corner of Building A. The outdoor amenity space will include hard and soft landscaping materials and will provide opportunities for gathering and socializing for community residents. Rooftop outdoor amenity space has been provided atop each podium. This includes the Second Mezzanine Level and Level 3 of Building A, and Level 5 of Building B. The rooftop amenity spaces associated with each building are large and will provide opportunities for flexible uses. While detailed programming for the spaces will be determined during the Site Plan application, an outdoor pool is proposed along the western portion of the podium room of Building A.

A total of 5,579 square metres of indoor amenity space is proposed throughout the development.

Within Building A, indoor amenity space is provided on the Mezzanine Level, Second Mezzanine Level, Level 2 and Level 3. Within Building B, indoor amenity space is provided on Level 4 and Level 5.

Indoor amenity spaces have been situated to front onto adjacent streets to provide additional animation within the upper podium levels of each building in accordance with MOP Policies 9.2.1.23 and 9.2.1.25. Each indoor amenity space is of a size that can accommodate a variety of programs and has been located adjacent to outdoor amenity spaces where possible. While the detailed programming of these spaces will be determined in the Site Plan process, a sports court has been proposed within Building A and an indoor swimming pool has been proposed in Building B.



### **2.1.3 Landscape Opportunities**

Landscape elements are incorporated throughout the site to enhance the overall character and visual appearance at the pedestrian level. These elements will provide transitions between areas of different functions, highlight building and vehicular entrances, frame private grade-related patios, soften the edges along the property boundaries and improve the open space condition along Cooksville Creek.

The proposed landscape elements and outdoor amenity areas are intended to provide legible, and convenient visual and physical connections throughout the Subject Site. This will draw pedestrians in, promoting active and passive recreation and social interaction.

A key opportunity for landscape features on the site is the internal courtyard area which is framed by the proposed buildings. This space will serve as the primary circulation corridor for the site and will be designed to accommodate both pedestrians and vehicles. Landscaping elements will be used to form the shape and character of this space and create a comfortable environment at grade - providing a buffer between areas for vehicles and pedestrians. In this regard, the central driveway and pedestrian walkways are lined with sod and other soft landscaping elements such as trees and ornamental plantings. This will create a welcoming, pedestrian-oriented environment for residents and visitors to enjoy.

In addition, the proposed development will incorporate several landscaping elements within the street. The proposed boulevard treatments are discussed in Section 2.1.4.



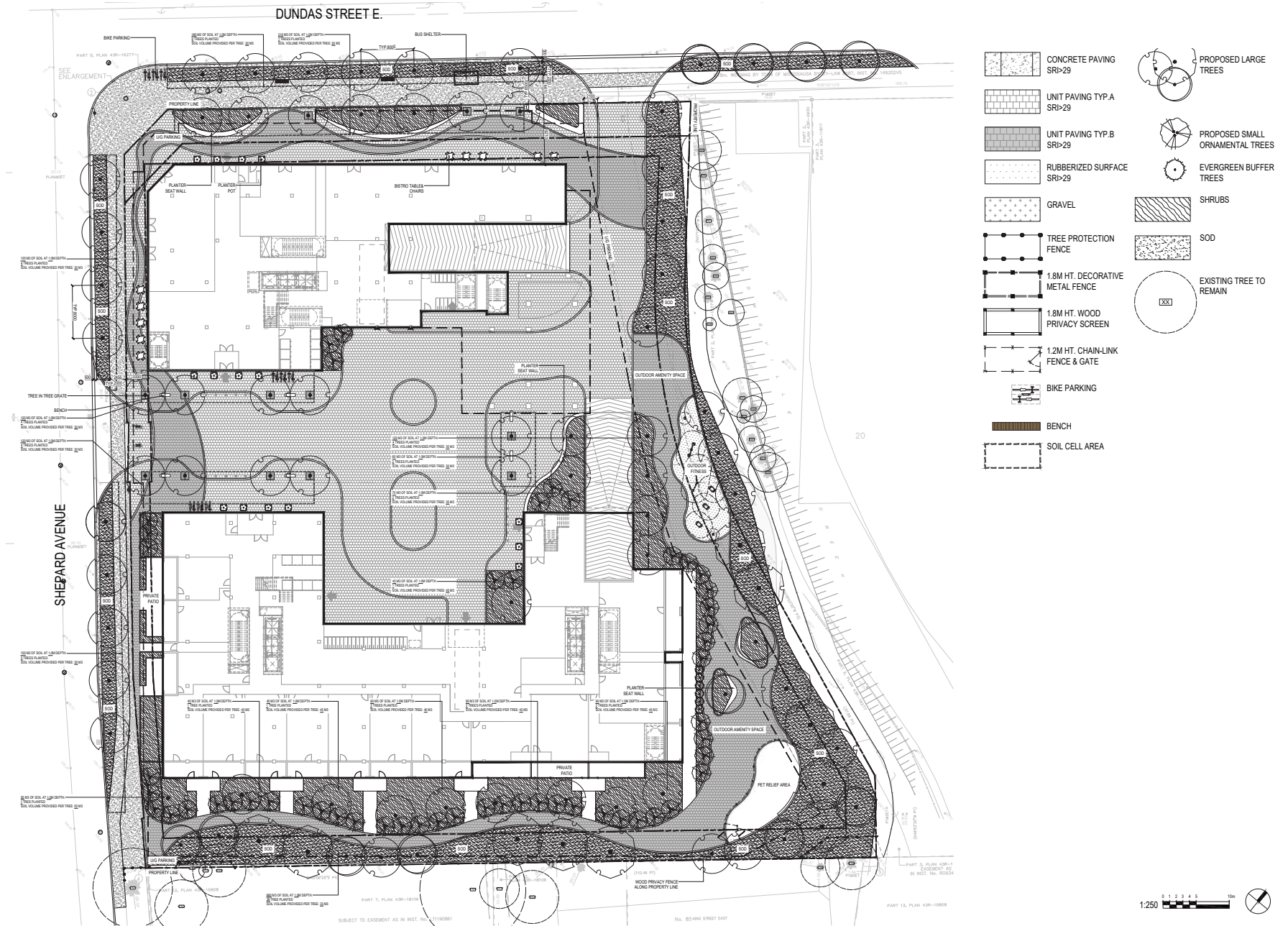


Figure 12 - Landscape Plan - Conceptual Purpose, Subject to Change (Prepared by Studio tla)

## 2.1.4 Streetscape

The streetscape strategy is focused on creating a strong sense of place that respects the main street character along Dundas Street East and the neighbourhood character along Shepard Avenue. The proposed development will animate both streetscapes with active building frontages to encourage a high level of activity within the public realm. This will compliment the pedestrianized nature envisioned for Downtown Cooksville.

Dundas Street East is a multi-modal arterial street that serves as a major transportation corridor and key structuring element for the Downtown Cooksville area. As such, the streetscape design for Dundas Street East will align with its role as a major thoroughfare within the City of Mississauga. Based on the Dundas Connects Master Plan, it is anticipated that ongoing development comprising of mid-rise buildings and, or, tall buildings with mid-rise podiums along Dundas Street East will transform the street and give it a more enclosed and urban character. The inclusion of retail uses at grade and improved boulevards will encourage active transportation and draw pedestrians towards the Subject Site.

An expanded public realm is envisioned along the Dundas Street East frontage. From an urban structure perspective, the proposal introduces ample opportunities for enhanced landscaping elements which reflect and reinforce the prominence of the street. Such opportunities include:

- A 4.41-metre-wide sidewalk zone;
- Two rows of street trees;
- Shrubs and planting beds;
- Seating benches; and
- Bike racks.

Streetscape elements will be designed to create a sense of identity for the Subject Site and will be coordinated with the existing and planned streetscape improvements undertaken by the City of Mississauga as part of the Dundas Connects Master Plan.

Shepard Avenue will be revitalized as a landscaped street, lined with active residential and non-residential uses. In this regard, the streetscape character will be softened with street trees and landscaping to respect the character of the mature and heavily landscaped street edge south of the Subject Site. Shepard Avenue will feature coordinated and/or integrated street furnishings, street trees and landscaping. Pedestrian zones will allow for an appropriate transition between the public and private realm where grade-related residential uses front the street.



**Figure 13 - Dundas Street East Illustrative Renderings** (Prepared By Chamberlaine Architect Services Limited)



## 2.1.5 Detailed Site Statistics

The following table provides detailed statistics for the development proposal.

Standard	Proposed
<b>Site Area</b>	10,734.05 square metres
<b>Gross Floor Area</b>	
Residential GFA	65,884 square metres
Retail GFA	1,963 square metres
<b>Total GFA</b>	<b>67,847 square metres</b>
<b>Floor Space Index</b>	6.32
<b>Building Height</b>	
Tower A	36 storeys / 123.4 metres (excl. MPH)
Tower B	33 storeys / 111.2 metres (excl. MPH)
Tower C	29 storeys / 99.25 metres (excl. MPH)
<b>Unit Mix</b>	
Studio	176 units (14%)
One-Bedroom/+ Den Units	741 units (61%)
Two-Bedroom/+ Den Units	292 units (24%)
Three-Bedroom/Townhouse Units	15 units (1%)
<b>Total Dwelling Units</b>	<b>1,224 units (100%)</b>
<b>Amenity Space</b>	
Indoor	5,579 square metres
Outdoor	3,772 square metres
<b>Total Amenity Space</b>	<b>9,351 square metres</b>
<b>Car Parking Spaces</b>	
Resident	856 spaces
Visitor	102 spaces
Commercial	21 spaces
<b>Total Parking Spaces</b>	<b>979 spaces</b>
<b>Bicycle Parking Spaces</b>	
Resident Long Term	735 spaces
Resident Short Term	62 spaces
Retail Long Term	1 space
Retail Short Term	2 spaces
<b>Total Bicycle Parking Spaces</b>	<b>800 spaces</b>
<b>Loading Spaces</b>	
Type G Spaces	2 spaces

## 2.2 Built Form and Uses

### 2.2.1 Building Setbacks and Orientation

Through building setbacks and stepbacks, the proposed buildings within the Subject Site have been designed with regard for the surrounding context, to frame streets at an appropriate scale and facilitate comfortable pedestrian circulation within the public realm. The siting of buildings is intended to activate proposed pedestrian routes within the site and reinforce existing ones along Dundas Street East and Shepard Avenue.

To that end, buildings are proposed to be sufficiently set back from streets and open spaces to provide room for pedestrian amenities and landscape features within the public realm. The 3-storey podium of Building A is set back from Dundas Street East by 8.0 metres - measured from the lot line to the north building façade - and 15.0 metres measured from the public street curb to the north building façade. Building A is also set back 3.0 metres from Shepard Avenue - measured from the west lot line to the west building façade - and 8.5 metres measured from the public street curb to the west building façade.

The 3- to 5-storey podium of Building B is set back by between 12.9 and 15.0 metres from the south lot line. It is set back by 3.3 metres from Shepard Avenue - measured from the west lot line to the west building façade - and 8.6 metres measured from the public street curb to the west building façade. Moreover, Building B is set back by 9.6 metres from the east lot line along Cooksville Creek.

The proposed towers have been massed with floor plates of 800 square metres to minimize shadow and wind impacts on adjacent streets, sidewalks and parks. Furthermore, the proposed tall buildings are separated from one another by more than 30 metres - with the exception of Tower A and B which maintains a minimum separation distance of 28.1 metres. In our opinion, the proposed towers have been located to limit impacts on and provide adequate access to sunlight and sky view from the public realm and adjacent properties. To that end, Towers B and A are offset and oriented perpendicular to one another to create a diverse skyline and minimize the overlap between buildings to maintain access to sunlight and sky view, and limit wind impacts.

Having regard for the existing low-rise and main street character along Dundas Street East, considerations have been made to locate the tall building elements away from the street and to allow the 3-storey podium to remain as the primary street framing element. All towers are set back above their respective podiums to ensure the podium base and tower elements are clearly defined from one another. Along the Dundas Street East frontage, all towers are setback a minimum of 10 metres from the street line in accordance with MOP Policy 12.4.1.4 to maintain an appropriate street scale and sense of enclosure.

Specifically, Tower A is located at the northwest quadrant of the Subject Site, with frontages along both Dundas Street East and Shepard Avenue. Tower A is located towards the northwest corner of the podium and maintains a 3.9 metre stepback from the north podium façade, a 2.9 metre stepback from the west podium façade, a 5.8 metre stepback from the south podium façade and a 26 metre stepback from the east podium façade.

Atop the shared 3- to 5-storey podium, Towers B and C are located at the west and east ends of the shared podium base and have mirrored tower floorplates and layouts above level 2. Tower B maintains a 3.0 metre stepback from the west podium façade, while Tower C maintains a 2.5 metre stepback from the east podium façade.

With respect to tower separation from existing buildings, Tower B is setback 15.0 metres and Tower C is setback 14.3 metres from the south lot line. The proposed setbacks of Tower B and C maintain a minimum separation of approximately 40 metres and 20 metres, respectively, from the existing residential buildings on the property to the south. As mentioned above, Tower C has been oriented perpendicular to the existing 10-storey building to the south to limit facing conditions between the two buildings. As well, Tower C is setback a minimum of 9.6 metres from the east lot line which abuts Cooksville Creek. The creek area creates a natural buffer between the proposed towers and the approved tall building to the east - therefore adequately limiting additional built form impacts. In our opinion, the proposed setbacks are appropriate, and concerns related to built form impacts have been adequately addressed.

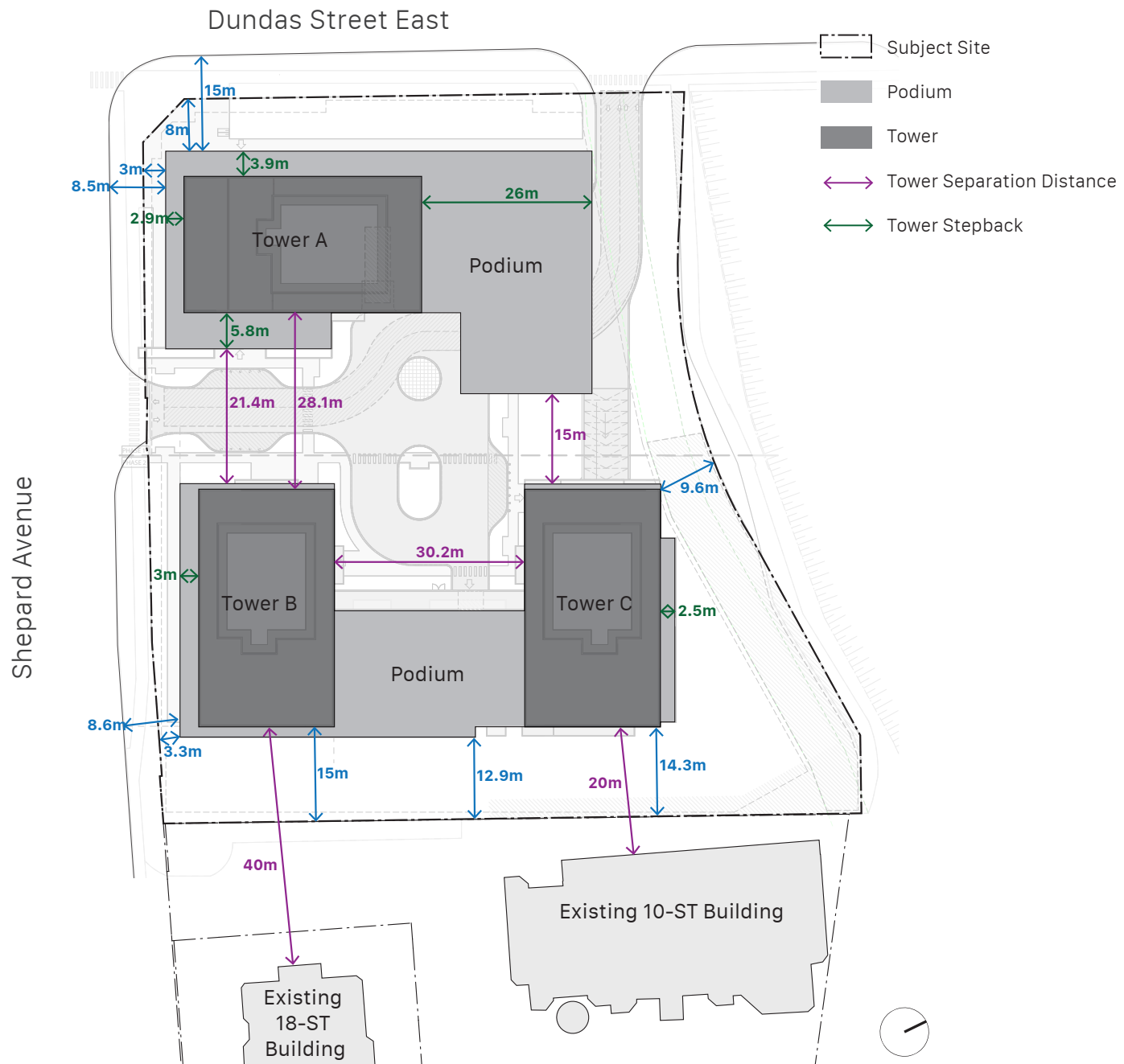


Figure 14 - Building Setbacks And Orientation



## 2.2.2 Building Height and Form

The proposed height and massing have been based on several contextual and urban design considerations including: the size, depth, and configuration of the Subject Site; its prominent location near the centre of Downtown Cooksville; and the existing and planned context of tall buildings within the surrounding neighbourhood. This built form and urban structure setting – together with the immediate adjacency of the Subject Site to transit along Dundas Street East and the nearby Hurontario LRT and Cooksville Go Station – combine to support development of this scale. The proposed building heights reflect the emerging built form context within Downtown Cooksville and achieve an appropriate level of intensification for this prominent site with excellent access to transit.

The City of Mississauga Official Plan (MOP) promotes development in the form of tall buildings within Intensification Areas and Downtowns. While a maximum height is not prescribed for properties designed Mixed Use within a Downtown, heights of up to 25-storeys are permitted within the Residential High-Density designation as per MOP Policy 12.1.2.2.

Recognizing that Downtown Cooksville is targeted for significant change and revitalization with intensification, transit infrastructure investment and redevelopment, the proposed heights are generally consistent with the height range of proposed and approved buildings within the vicinity of the Subject Site. Moreover, they are demonstrative of the future built form context and evolution of Downtown Cooksville. In this respect, buildings with heights greater than 25 storeys have been approved within the surrounding area, including a 28-storey building at 45 Agnes Street. There are also several existing mid- and high-rise slab style apartments with heights that range up to 22-storeys within the surrounding area. In our opinion, the greater level of height and density would contribute to the achievement of transit-supportive intensification in accordance with recent and emerging policy changes – including the Provincial Policy Statement, Growth Plan and Municipal Comprehensive Review which is outlined in detail in the accompanying Planning Justification Report.

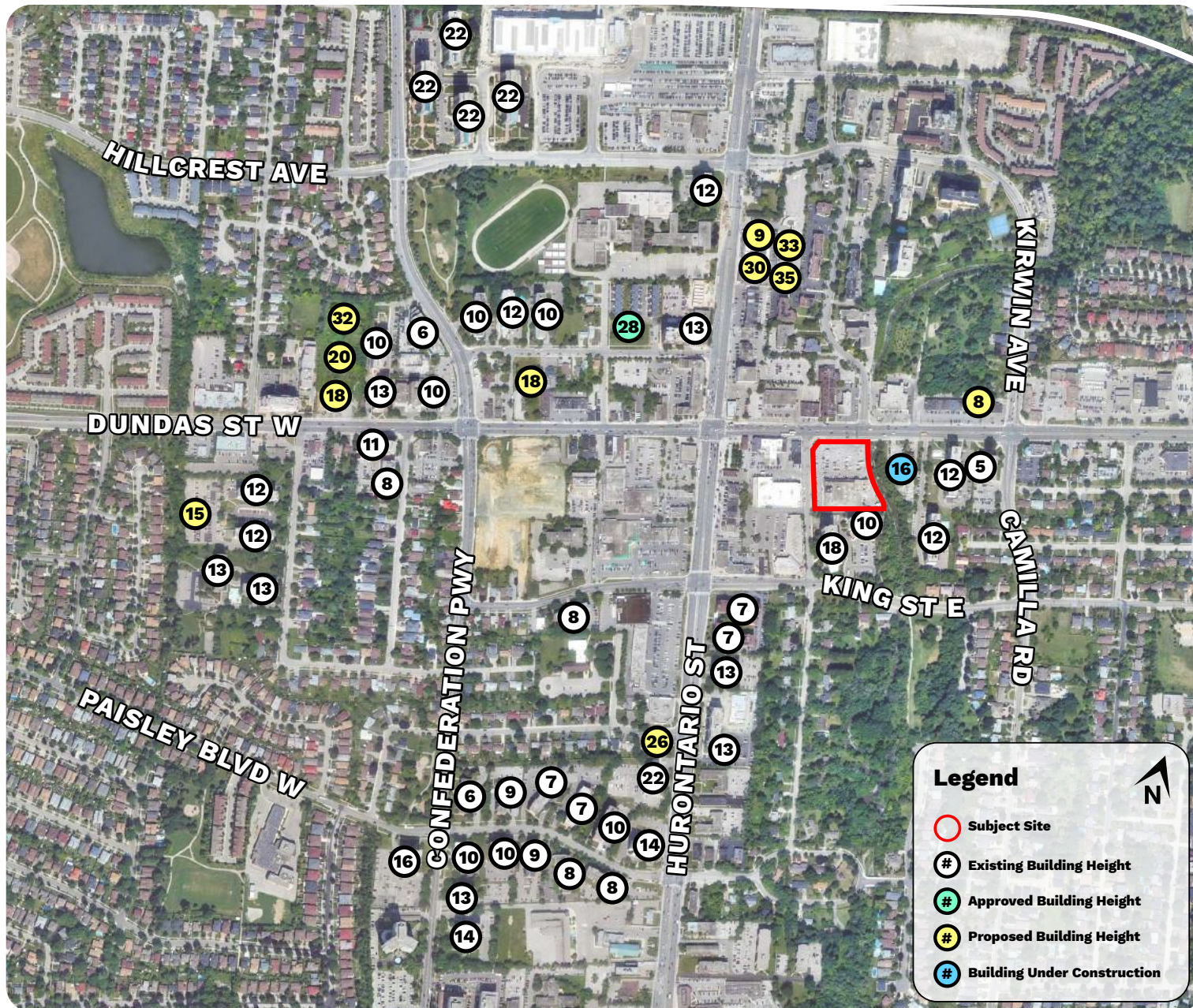


Figure 15 - Height Context



### 2.2.2.1 Building Form

To limit built form impacts on the public realm and adjacent properties, the proposed buildings have been designed in the form of point towers atop appropriately scaled podium buildings. This built form typology will respect and enhance the existing and planned development context, which includes mid-rise and tall buildings. To that end, the proposed towers have been designed to characterize three built form elements: the podium base, the tower shaft, and the tower top:

#### Podium Buildings

The proposed podiums have been designed to frame the adjacent streets with good proportion and establish a strong street edge. The 3-storey podium base building of Tower A has been appropriately scaled to respond to the existing context along Dundas Street East - which is primarily characterized by 2- and 3-storey commercial buildings.

In accordance with MOP Policy 12.4.6.1.1, the proposed podium base building has been massed to fit within a 45-degree angular plane measured from a height equal to 80% of the right-of-way width of Dundas Street East. In this regard, the proposed 15.1-metre height of the podium base building will enhance and reinforce the main street character of Dundas Street East and provide a pedestrian-scaled street wall that creates a comfortable sense of enclosure along the street.

Similarly, the proposed 3- to 5-storey podium base building shared by Towers B and C has been massed with a 11.3-metre street wall along Shepard Avenue - which relates appropriately to the 20-metre right of way width of the street. The base building along this street frontage will establish a street edge condition that respects Shepard Avenue as a neighbourhood street, while providing grade-related residential units and landscaping to enhance the existing streetscape character.

#### Tower Shaft

The upper portion of the tower element is defined by its slender shape, minimal stepping, and typical uniform floor plate. Each tower element is stepped back above the podium to ensure the podium remains the primary street defining element.

The proposed tower heights balance the objectives of providing a built form that is compatible with the surrounding context while achieving intensification in proximity to transit. To ensure both objectives are met, the proposed towers have been designed to appropriately limit and mitigate built form impacts, as demonstrated in the supporting studies summarized in Section 2.4. In addition to the proposed built form stepbacks and orientation described above, the proposed tower elements incorporate defined architectural articulation to break up the building elevations and reduce the perception of height from the pedestrian level. To that end, the use of glazing and other "light" cladding materials will help further reduce the perception of the overall building mass.

#### Tower Top

Lastly, the proposed tower elements will be topped with mechanical penthouses that are stepped back from the tower shaft and treated with cohesive design language and materials to ensure they are screened from view and limit obstructions to sky view.

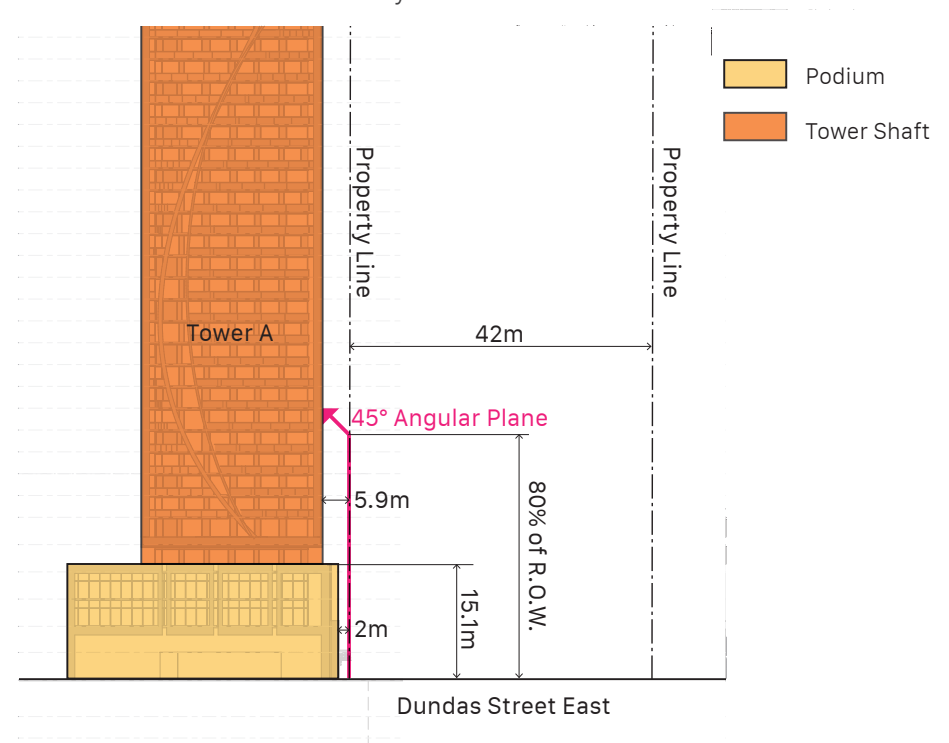


Figure 16 - East Elevation of Subject Site



**Figure 17 - Built Form Heights**



### 2.2.3 Transition to Adjacent Uses and Built Form

The proposed development includes a variety of building heights that respond to several contextual considerations, while providing appropriately scaled podiums that anchor each building within the Subject Site. The uses surrounding the site vary; with low-rise commercial uses to the north and west, naturalized areas to the east and high-rise residential uses to the south – with established neighbourhoods beyond. Recognizing that some of these uses are more sensitive to built form impacts than others, the proposed development has been designed to prioritize transition towards the east and south to limit light, view, privacy, and shadow impacts on the adjacent Cooksville Creek, associated trail and low-rise residential areas beyond.

Transition within the proposed development is to be achieved through spatial separation to areas of lower scale and intensity. This includes the stepping down of building height towards these sensitive areas. The overall built form strategy is to provide a gradual stepping of height and scale from the Dundas-Shepard intersection – increasingly stepping down in a southeasterly direction. This stepping of height will contribute to the downward height progression from the Hurontario-Dundas Street intersection towards the surrounding Character Areas envisioned in the MOP (Policy 12.4.1.5).

In this regard, the tallest building proposed is located at the corner of Dundas Street East and Shepard Avenue - northwest corner of the Subject Site. Tower A has a height of 36-storeys (123.4 metres), and steps down to a lower podium element which frames the street. Moving southeast, tower heights transition down to 33-storeys (111.2 metres) and 29-storeys (99.25 metres) to Tower B and C.

As detailed in Section 2.2.2, the proposed towers are appropriately sited from the southern and eastern lot lines of the Subject Site. This provides an appropriate spatial separation to the existing high-rise residential buildings to the south and naturalized areas to the east. As such, in addition to the strategy of stepping down in height from north to south across the Subject Site, landscaping is provided along the eastern edge of the Subject Site to screen the buildings from view and offer additional privacy to the adjacent properties to the south and east.



**Figure 18 - Built Form Transition Diagram**

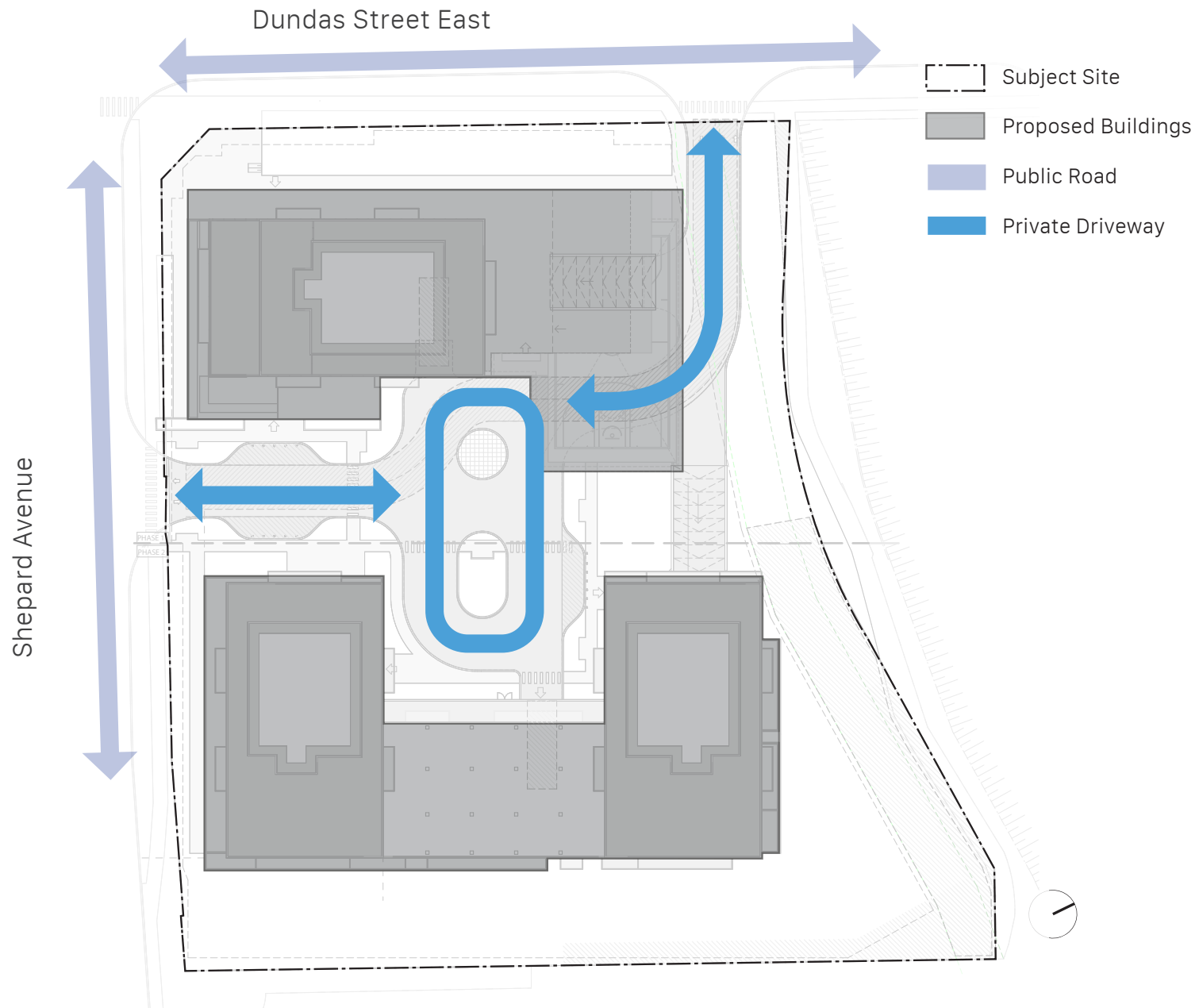
## **2.3 Access, Circulation, Parking and Services**

### **2.3.1 Vehicular Access and Circulation**

In terms of vehicular access, the proposal contains two entry points which lead to the shared parking garage entrances. This includes one entry point from Dundas Street East, aligned to Jaguar Valley Drive to the north and on the east end of Building A, and another entry point from Shepard Avenue between Building A and B.

The proposed development will reduce the overall number of existing curb cuts on the site from three to two by removing the access point from Shepard Avenue at the southern end of the Subject Site. The consolidation of access points will provide a more continuous streetscape and limit areas of conflict between vehicles and pedestrians.

The proposed buildings have been organized around a common driveway - which has a roundabout configuration with drop-off areas at the central portion of the Subject Site. Building A contains a garage ramp located along the easterly portion of the podium. This provides access to the underground parking levels. Building B contains a shared garage ramp located along the eastern portion of the podium building.



**Figure 19 - Vehicular Circulation Diagram**

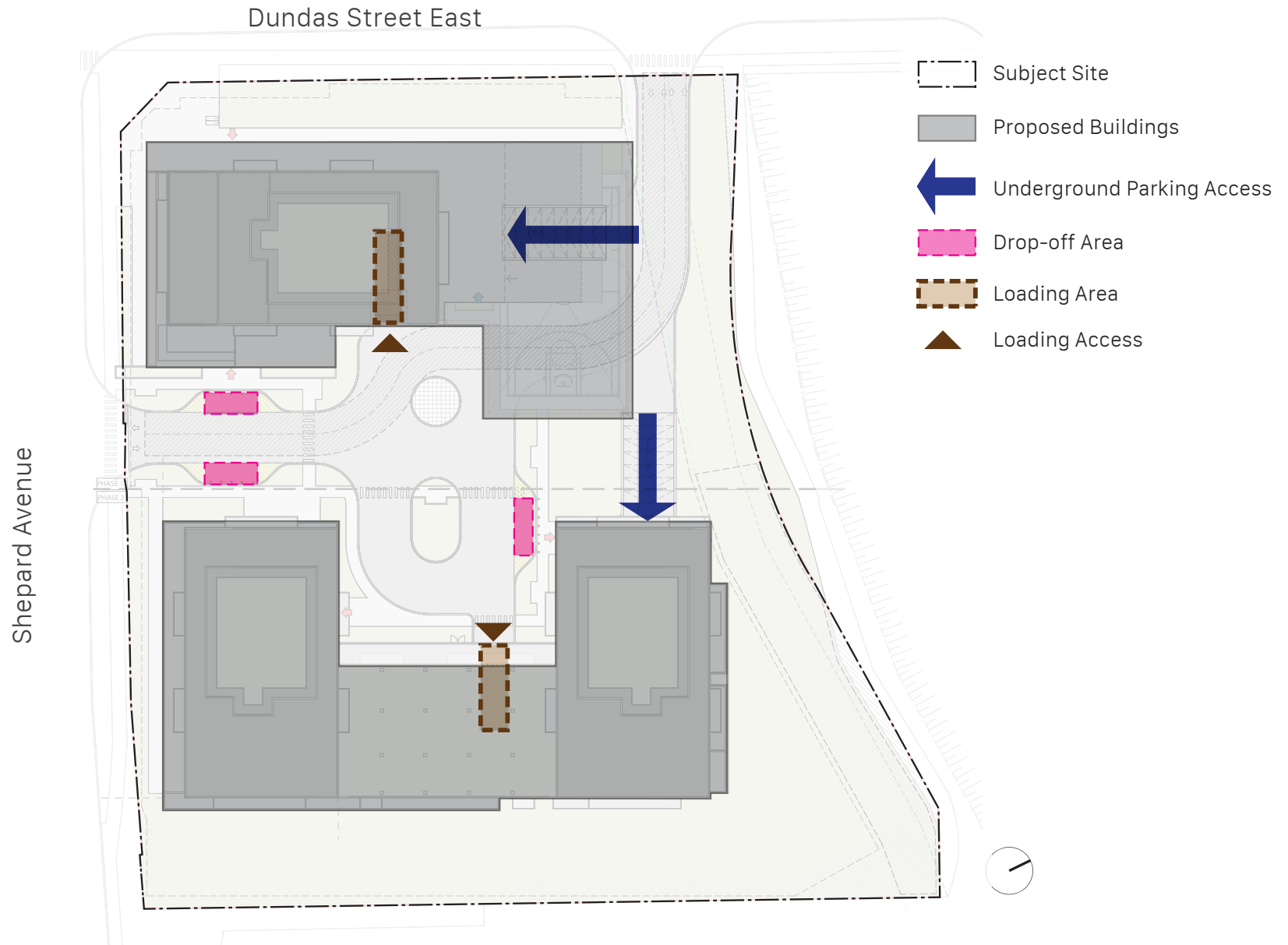


### **2.3.2 Parking, Loading and Servicing Areas**

The proposed development has been designed to be pedestrian oriented and to limit the visual impact of parking and loading areas from the public realm. The proposal provides 979 parking spaces within five levels of underground parking. Of the total number of parking spaces, 856 are residential parking spaces, 102 are visitor parking spaces (including 4 carshare spaces) and 21 are retail parking spaces. Access to below-grade parking is provided within each podium. Parking ramps are recessed within the building mass and screened from the public realm.

Lay-by areas are also provided along the central driveway, adjacent to primary building entrances, to accommodate drop-off areas. These areas are also located away from the adjacent streets and sidewalks to limit their impacts on pedestrians.

In terms of loading, two loading spaces are included within the proposal, including one type 'G' loading space within Building A and one type 'G' loading space within Building B. Each loading space is accessed via the internal driveway and is located internally with each building.



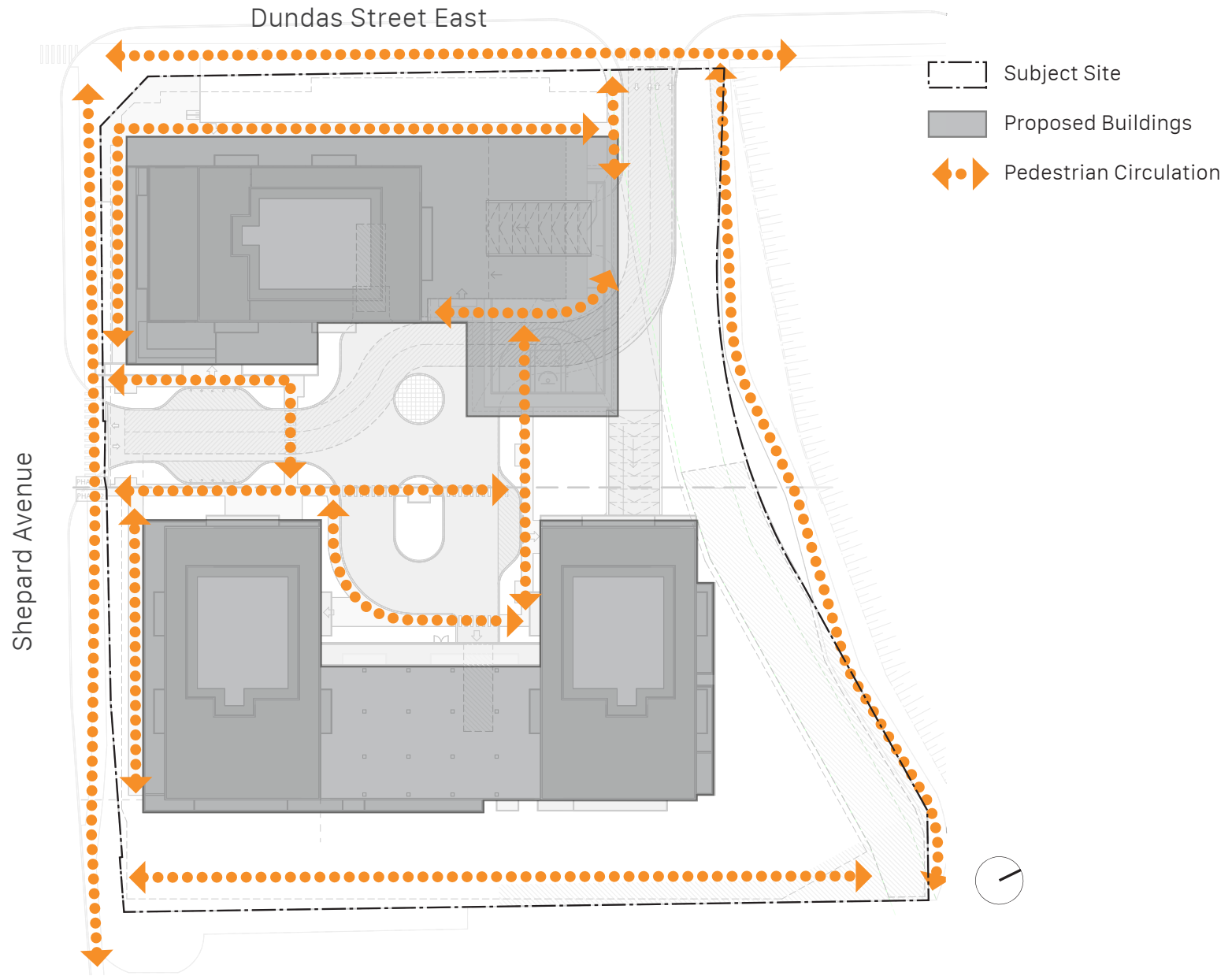
**Figure 20 - Parking, Loading And Servicing Diagram**

### **2.3.3 Pedestrian Circulation**

A network of sidewalks, mid-block connections and pedestrian pathways have been designed to promote active transportation and increase permeability and connectivity throughout the Subject Site. Multiple pedestrian connections from Dundas Street East are proposed to draw in pedestrians into the Subject Site, including pedestrian routes along each side of the private driveway within the internal courtyard area. Pedestrian routes within the site will also lead to the existing bus stop along Dundas Street East and provide a convenient connection that encourages the use of public transit. Furthermore, a path system is proposed along the southern and eastern edges of the Subject Site which connects the pedestrian pathways within the Subject Site to an existing trail along Cooksville Creek. This pathway network will foster a new east-west connection from Shepard Avenue to the creek edge and promote the use of the new public park.

Along both Dundas Street East and Shepard Avenue frontages, wide landscaped boulevards along the streetscape have been provided to connect the proposed buildings throughout the Subject Site, and to link the surrounding streetscape network. Internal pedestrian pathways will also provide connections to the existing sidewalks from building entrances and grade-related units.

The proposed development promotes the use of active transportation modes, generally through the provision of the connections described above, but more specifically through the proposed cycling infrastructure incorporated into the design of the Subject Site. In this regard, internal bicycle storage facilities have been included in the design of each building and located at grade where possible. Additional short term bicycle storage is proposed within the boulevard of Dundas Street East to support the highly pedestrianized and active nature envisioned for the street.



**Figure 21** - Pedestrian Circulation Diagram



## 2.4 Supporting Studies

### 2.4.1 Shadow Study

A Shadow Study was prepared by Bousfields Inc. in support of the proposed development. The shadow study includes an assessment of the net incremental shadow impact of the proposed development on residential private outdoor amenity space (i.e. private rear yards, patios and pools), communal outdoor amenity areas that are part of the proposed development or adjacent apartment sites, public realm elements (i.e. sidewalks, open spaces, plazas, as well as turf and flower gardens) and building faces to allow for the possibility of using solar energy.

With respect to residential private outdoor amenity spaces, incremental shadows are cast on the rear yards of some single-detached lots at certain test times. However, the Study concludes that the proposed shadows do not exceed one hour in duration on any of the private amenity areas, and as a result the impacts satisfy the assessment criteria.

As it relates to communal outdoor amenity spaces, the Study concludes that the shadow impacts on adjacent outdoor amenity areas associated with existing and approved developments are generally acceptable as the assessment criteria are generally met for June, September, and December. With respect to shadowing of on-site amenity areas, portions of the proposed rooftop outdoor amenity areas will be in shade at various times. While the shadow impacts do not satisfy the assessment criteria for certain test times, the Study notes that the incremental shadow impacts on the rooftop amenity areas are acceptable within an urban context. Between March and September, when outdoor amenities typically receive their heaviest use, the proposed development is in substantial compliance with the assessment criteria.

With respect to public streets, the proposed development satisfies the assessment criteria as it relates to Shepard Avenue since it allows for 5 hours of sunlight on the sidewalk on the opposite side of Shepard Avenue on September 21<sup>st</sup>. The assessment criteria have not been met for the sidewalks associated with Dundas Street East. It is our opinion that although the assessment criteria are not met, the proposal casts slender and fast-moving shadows that result in acceptable and localized impacts on the adjacent sidewalk.

With respect to shadows cast on public open spaces, parks and plazas, the Study demonstrates that the proposed development only results in incremental shadow impacts on the open spaces associated with Cooksville Creek on September 21<sup>st</sup> from 11:12am to 5:48pm. The proposed development ensures access to sunlight is maintained on more than 50% of the open space area, and therefore satisfies the assessment criteria.

As it relates to on-site public open spaces, the development will cast shadows on the proposed public park on September 21<sup>st</sup> between 8:35am and 4:12pm. While the shadow impacts do not satisfy the assessment criteria, we note that a portion of the shadow cast on the proposed park is from the existing tall buildings south of the Subject Site at 75 and 85 King Street East. Additionally, the park is situated east of the proposed buildings and is therefore in a location that will naturally receive more shadowing. The park is in a desirable location adjacent to Cooksville Creek and in our opinion, the incremental shadow impacts are acceptable given the site's location within an intensification area where high-density development is anticipated.

Based on the shadow analysis, it is our opinion that the proposed development will have acceptable shadow impacts on adjacent low-rise neighbourhoods, private amenity areas, and public open spaces in accordance with Policy 9.5.3.9 of the Mississauga Official Plan.

### 2.4.2 Pedestrian Wind Comfort and Safety Study

A Pedestrian Wind Comfort and Safety Study was prepared by RWDI in accordance with the City of Mississauga Terms of Reference, dated March 2022. The purpose of the report was to predict and assess wind conditions associated with the proposed development. Policy 9.2.1.16 and 9.5.3.9 of the Official Plan state that tall buildings will minimize adverse microclimatic impacts on the public realm and private amenity areas, including wind.

The Study notes that the existing wind conditions on and around the Subject Site are predicted to be generally comfortable for the intended use throughout the year. However, uncomfortable wind conditions are predicted to around the existing towers to the south of the site during the winter season.

With the addition of the proposed Building A, the overall predicted windspeeds are considered appropriate for the intended use in the summer, including the building main entrances, grade level outdoor amenity and sidewalks. The addition of the proposed Building B is not expected to change the general grade level wind conditions, but higher wind speeds are anticipated at the outdoor amenity, and uncomfortable wind conditions predicted between the proposed buildings.

In the winter, uncomfortable wind conditions are predicted at multiple locations on and around Building A, including the north main entrance. The addition of Building B is expected to improve some of the uncomfortable wind conditions around Building A, but higher wind speeds are measured at most of the building's entrances, and uncomfortable wind conditions are predicted on the north and south sides of Building B.

In the proposed Phase I configuration, the criterion used to assess the pedestrian wind safety is expected to be exceeded at multiple locations around the building and on the 3rd floor amenity terrace. The addition of the Building B in Phase II is expected to improve some of the predicted safety exceedances. Wind speeds that exceed the wind safety criterion are anticipated in the area between the proposed buildings, to the south of Building B, and on the 3rd floor terrace even with the future buildings in place. The addition of the future buildings is expected to slightly improve the wind conditions.

The Study concludes that satisfactory wind speeds around the proposed buildings, and in the 3rd floor amenity terrace of Building A can be achieved with various wind control measures. Additional wind tunnel testing is recommended to develop wind control solutions.

For further details, refer to the Pedestrian Wind Comfort and Safety Study submitted as part of the application package.

### 2.4.3 Noise and Vibration Impact Study

A Noise and Vibration Impact Study was prepared by RWDI for the proposed development. Policies 9.5.1.11 and 9.5.1.12 of the Official Plan state that new residential development abutting major roads should be designed with a built form that mitigates traffic noise and that noise impacts are to be mitigated.

The Study recommends the following noise control measures:

- Installation of central air-conditioning so that all suites' windows can remain closed. a. STC-26, STC-45, and STC-25 are recommended for the minimum sound insulation ratings for the window, exterior wall, and exterior door respectively on the north façade of Building A. These STC ratings would be achieved with the Ontario Building Code Minimum requirements.
- Construction of perimeter noise barriers along the outdoor amenity areas if feasible.
- The inclusion of noise warning clauses related to transportation sound levels at the building façade, and in the outdoor amenity areas if barriers or parapet walls are not provided Vibration from the LRT to the south-west along Hurontario Street at the proposed development is not expected due to the setback being greater than the worst-case setback noted in the project's Environmental Project Report.

The Study concludes that based on the results of the analysis for the given site plan and the implementation of the recommendations included with the assessment, the proposed development is predicted to meet the applicable sound and vibration criteria.

For further details, refer to the Noise and Vibration Impact Study submitted as part of the application package.



## Summary and Conclusions

It is the opinion of this Urban Design Study that the proposed development represents good urban design, is appropriate within the emerging and planned built form context and contributes to the enhancement of the existing and planned character of both Dundas Street East and Mississauga. The proposal is successful in providing an enhanced interface with the public realm and introducing a built form that enhances the existing character of the site and provides an adequate transition to the nearby neighbourhood and naturalized.

The development proposal will provide a transit-supportive and pedestrian-friendly built form that improves the pedestrian condition at grade and incorporates architectural and landscape design elements that respond appropriately to the surrounding area. The positioning of building height near the corner of Dundas Street East and Shepard Avenue will support the existing and planned transit infrastructure and nearby Cooksville Go Station. Moreover, it will serve as a transition towards the planned intensification along Dundas Street East and within Downtown Cooksville as a whole.

The proposed development is generally in keeping with, and maintains, the intent of the urban design policies in the Official Plan as outlined in this Urban Design Study. Overall, it is our opinion that the proposed development is appropriate, desirable and should be approved.



**Figure 22 - Aerial View Looking East** (Rendering prepared by Chamberlaine Architect Services Limited)



