



URBAN DESIGN BRIEF

EMPLOYMENT LANDS

LAZY PAT FARM, NORTH OAKVILLE WEST

M A Y 2 0 1 1

Prepared for:



Prepared by:





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This Urban Design Brief has been prepared in accordance with the requirements of the Town of Oakville's North Oakville West Secondary Plan (NOWSP) as part of a comprehensive Draft Plan of Subdivision and Zoning By-law amendment submission for lands commonly known as the "Lazy Pat Farm" property (3269 Dundas Street West). This parcel of land is owned by bcIMC Realty Corp. and managed by Bentall Kennedy (Canada) LP and is herein referred to as the "Subject Property".



The purpose of this Urban Design Brief is to:

- » Illustrate the proposed community design for the subdivision.
- » Ensure the design has regard for the policies and design strategies that promote the community design vision outlined in the following overarching planning and urban design documents:
 - » the North Oakville West Secondary Plan;
 - » the North Oakville West Urban Design and Open Space Guidelines; and
 - » the North Oakville Sustainability Checklist.
- » Coordinate the design of key elements of the public and private realms in order to create an attractive and viable employment district.

The principles within this Urban Design Brief are intended to provide a framework to effectively guide the development of the Subject Property. The graphics and illustrations are conceptual and have been provided to show the proposed design principles and elements for this development. They should not be interpreted literally as the end product. This Urban Design Brief has been prepared in support of a Draft Plan of Subdivision and Zoning By-law amendment submission, therefore, this document does not deal with site specific design issues related to architectural and/or landscaping matters (i.e., building and streetscaping details), but rather addresses larger-scale community design issues. The more detailed architectural and landscaping matters will be dealt with through subsequent site plan applications.





2.1 Contextual Analysis

The Subject Property is generally located in the northwest corner of the Town of Oakville, in the Region of Halton, within the western portion of the North Oakville West Secondary Plan (NOWSP) area, as illustrated on Figure 2.0. This area has been more specifically defined as the 407 West Employment Area, which is bound by Dundas Street East, Tremaine Road, Highway 407 and Bronte Road.

Figure 2.1 | Subject Property Location within the Town of Oakville





Dundas Street looking east towards Subject Property



New residential development south of Dundas Street in the Palermo West Planning District

2.1.1 Composition of Surrounding Character and Land Uses

The Subject Property is adjacent to Highway 407 which provides convenient access to the surrounding Provincial Highways, including Highways 401, 403 and the QEW.

For the purposes of this Urban Design Brief, compass north-west has been described as north which is common throughout the Region of Halton. The lands generally north of Dundas Street comprise the last remaining greenfield development areas in the Town of Oakville.

The lands on the north side of Highway 407 consist of agricultural and open space areas in the Town of Oakville and the Town of Milton. A significant portion of these lands are located within the Province's Greenbelt Plan and have been designated as Protected Countryside, which prohibit future urban land uses.

The lands to the west are currently used for agricultural uses and designated for future employment uses. Lands west of Tremaine Road are located in the City of Burlington and include agricultural and open space uses associated with Bronte Creek. A significant portion of these lands are also located within the Province's Greenbelt Plan and have been designated as Protected Countryside, which prohibit future urban land uses. The lands immediately west of Tremaine Road are located with the City of Burlington's Tremaine/ Dundas Secondary Planning area, which comprise some of the last remaining greenfield lands within the City of Burlington. A Secondary Planning Study is currently underway to determine the future land uses for this area.



View of Lazy Pat farmstead



Existing human-made pond

To the south, the Subject Property is bordered by Dundas Street West, a major arterial road with future transit potential. On the opposite side of Dundas Street, the land is used for agriculture, and comprises the Bronte Creek Provincial Park which is located within the Provincial Greenbelt Plan area. New residential development within the Palermo West Planning District is located to the southwest of the Subject Property. The street pattern for this community is generally a modified grid pattern with access to Dundas Street West at the Colonel William Parkway intersection. The lands within the Palermo West Planning District are zoned MD1 and HD which generally permits medium and high density residential development. The dwellings closest to Dundas Street West include recently constructed block townhouses that are buffered from the street by a large landscaped berm.

The lands to the east comprise agricultural and open space uses, and include the existing General Electric facility (formerly Zenon Environmental), the Forestview Bible Church and New Electric Enterprises Inc., an industrial operation. These lands are also designated for future employment uses, and comprise a significant portion of the natural heritage system with the 407 West Employment Area. Lands to the east of Bronte Road currently consist of agricultural and open space uses with the Sixteen Hollow Employment Area. This area is also designated for future employment uses and is the future location of the new Oakville Hospital.



Stream corridors traversing the property



Slightly undulating landscape

2.1.2 Subject Property

The Subject Property is located on the north side of Dundas Street West, generally mid-block between Tremaine Road and Bronte Road. The municipal address is 3269 Dundas Street West, Oakville. The property encompasses a gross area of approximately 751,849m² (75.2 hectares) with approximately 550 metres of frontage on Dundas Street West.

An aerial photograph of the Subject Property and surrounding land uses are illustrated in [Figure 2.2](#). The Subject Property consists predominately of agricultural lands, featuring open fields, woodlots and natural vegetation, and associated farm dwellings and buildings. The existing buildings and structures on the site, range from 50 to 100 years old, and include a barn complex, 19th century farmhouse, mid-twentieth century dwelling, frame shed/garage, pool and pool house.

The landscape is relatively flat to slightly undulating, and generally slopes towards the southwest corner of the Subject Property. There are no substantial high points, but there are a number of small stream corridors (many intermittent) on the Subject Property. There is a relatively large human-made pond located near the southeast portion and several creeks traverse the Subject Property, which include tributaries of 14 Mile Creek West. The main branch of 14 Mile Creek West is located just to the east of the Subject Property. A remnant woodlot is located adjacent to Highway 407 along the northern property boundary, and a smaller woodlot is associated with the creek and ravine area along the eastern property boundary.

Figure 2.2 | Subject Property – Aerial View



Legend

-  Subject Property
-  407 West Employment Area

Figure 2.3 | Views



2.1.3 Views

The Subject Property is currently farmed and there are few trees or other substantial areas of natural vegetation outside of the small creek valleys. That, in addition to the relatively flat terrain, accommodates views onto and across the Subject Property from all sides (see Figure 2.3).

Figure 2.4 | Subject Property Context



2.1.4 General Analysis of the Urban Pattern in the Immediate Area

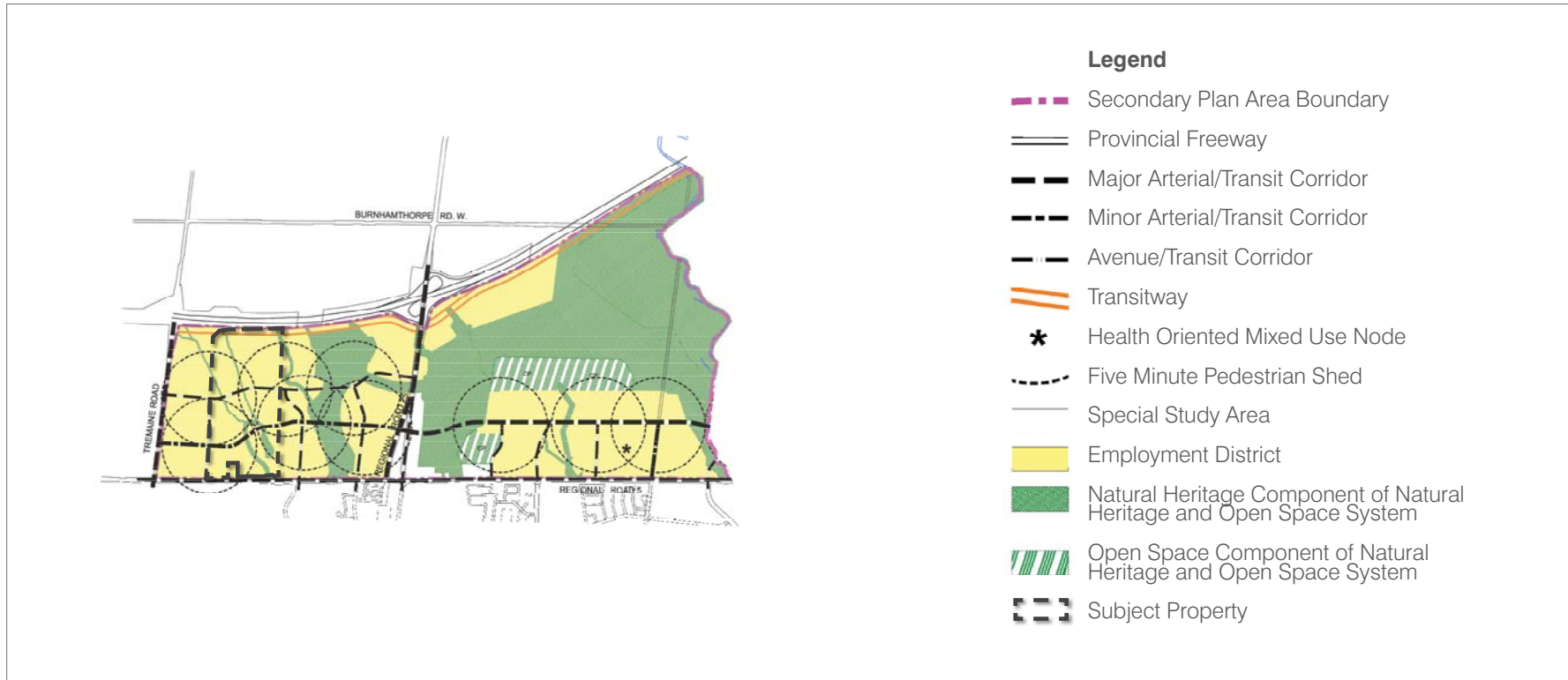
The existing urban pattern in the immediate area is largely rural, with the exception of recent urban development on the south side of Dundas Street (Figure 2.4). However this area, generally south of Highway 407, is designated for future urban growth and the more relevant analysis is of the proposed land use plans for the area.

Dundas Street West is a major Regional arterial road with the potential for a higher-order transit system, which will link the City of Burlington to Oakville and continue east to the City of Mississauga. While Dundas Street is envisioned as a major urban arterial thoroughfare for most of its length through Oakville, the section of Dundas Street West abutting the Subject Property is bounded on the south by Bronte Creek Provincial Park and medium density residential

uses buffered from the road by a landscaped berm. Further west in the City of Burlington, Dundas Street crosses the Bronte Creek valley, a major green space, before re-emerging into the more urban Alton node at Appleby Line. Therefore, this section of Dundas Street West will be the least likely to have an urban character within the Town of Oakville and most likely to retain its current green and/or rural characteristics.

The Palermo Village Node at the intersection of Dundas Street and Bronte Road, is intended to be the major focus for commercial activity in the immediate area. It will also be a major transfer point on any future transit lines that run along Dundas Street. The area is designated Urban Core which

Figure 2.5 | Community Structure Plan from the NOWSP



reflects the most urban part of the NOWSP area, and accommodates the most varied and dense range of uses to support the establishment of a mixed use node. Old Bronte Road is intended to have a main street character which reflects the heritage character of the area.

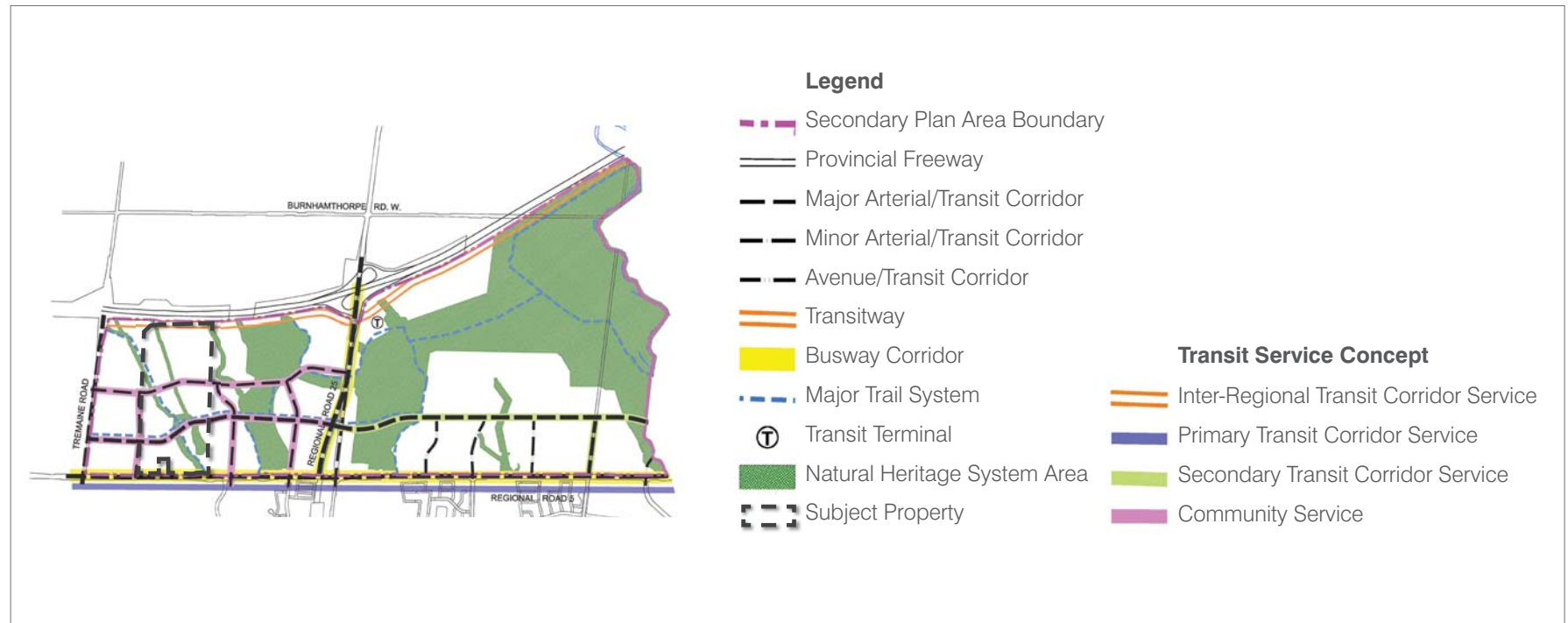
The proposed urban pattern for the NOWSP area is a modified grid of Minor Arterial Roads and Avenues scaled and spaced to service large employment parcels. Within the 407 West Employment Area there are three access points to Dundas Street West and two each to Tremaine Road and Bronte Road. These roads form a modified grid pattern that is aligned to minimize creek crossings while maximizing development parcel size (Figure 2.5) and provide a contiguous and transit supportive road network.

2.1.5 Connection to Surrounding Transportation Networks

2.1.5.1 Automobile

Currently, access to the Subject Property is only provided by an existing driveway from Dundas Street West, which runs along the eastern edge of the Subject Property. However the NOWSP proposes two east-west roads and three north-south roads within the 407 West Employment Area (Figure 2.6). This will provide the Subject Property with additional access to Bronte Road, Tremaine Road and other intersections along Dundas Street West in the future. One of the three north-south roads are proposed completely or partially on the Subject Property. The western-most road (referred to as Avenue Two on our Concept Plan) is proposed to run generally along the western portion of the Subject Property and the middle road (Avenue Three) is proposed to run just east of the Subject Property to align with the existing Zenon Drive intersection, and curve onto the Subject Property at its northern end.

Figure 2.6 | Transportation Plan from the NOWSP



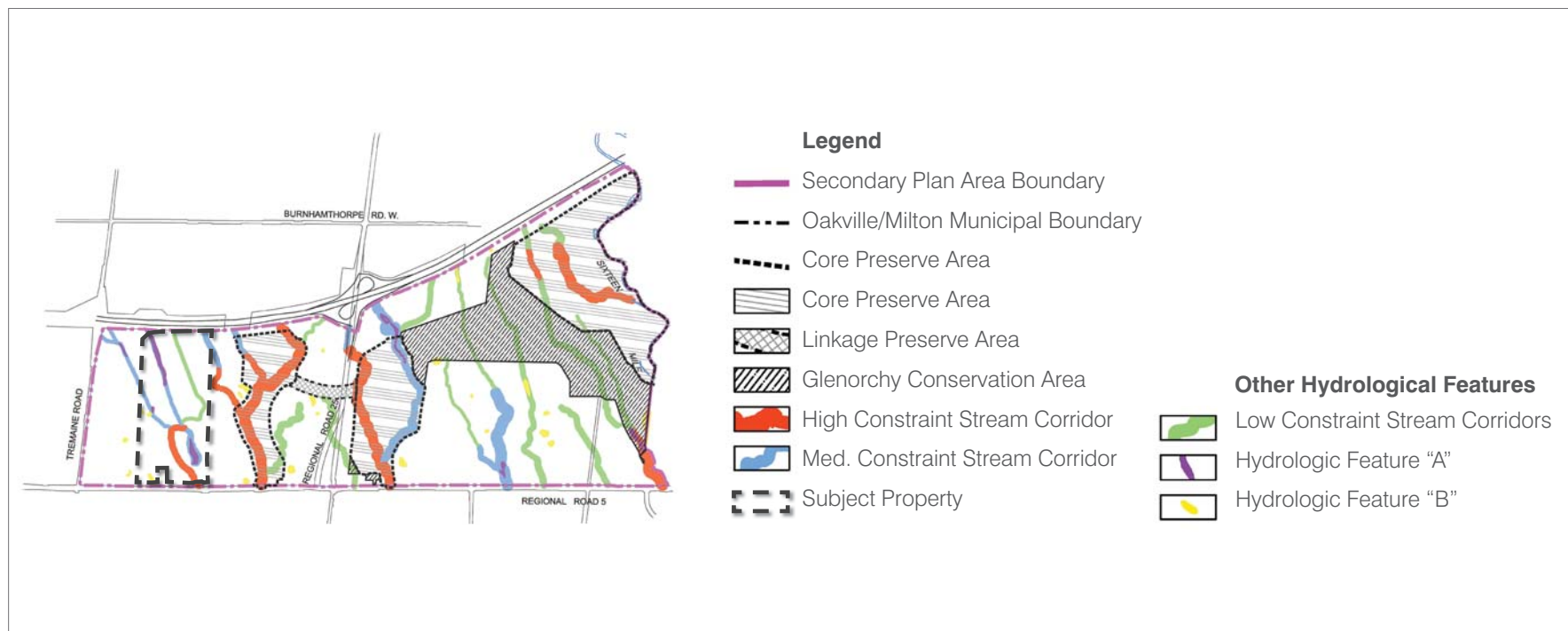
2.1.5.2 Transit

A major higher-order transit service is proposed for Dundas Street West. Depending on the final design and technology used, it is anticipated that there will be major transit stops located at the intersections of Colonel William Parkway and/or the intersection of Dundas Street West and the western north-south road (Avenue Two). In addition, a dedicated bus Transitway with a station at the intersection of Bronte Road and Highway 407 is proposed along the southern side of Highway 407. Local bus routes will connect these higher-order transit services to interior parcels within the Subject Property. All proposed roads on the Subject Property can accommodate local buses. The proposed modified grid pattern provides for a contiguous and efficient transit system.

2.1.5.3 Pedestrian Connections

All roads proposed on the Subject Property will accommodate sidewalks on both sides of the road, allowing pedestrian connections throughout the Subject Property, to Dundas Street West, and to future roads to the east and west of the Subject Property. In addition, as identified in the NOWSP a major trail system is proposed along the Burnhamthorpe Road extension and a stream corridor trail will be located running from the general vicinity of Dundas Street West and Colonel William Parkway along the natural heritage system to the general vicinity of Tremain Road and Highway 407, traversing the Subject Property.

Figure 2.7 | Natural Heritage Features as Identified by the NOWSP



2.1.5.4 Cycling Network

The proposed Burnhamthorpe Road extension is identified as a Minor Arterial cross-section with a maximum right-of-way of 26.0m. This road is wide enough to accommodate on-street bicycle lanes and will connect to bike paths and on-street trails located in the Palermo Village and the Sixteen Mile Creek area. It will allow for future connections west into the City of Burlington as well. Cycling facilities are to be incorporated into the design of all roads and may consist of on-road facilities or on bicycle paths separated from the roadway, which may or may not include a designated bike lane.

2.1.6 Relationship to the Natural Heritage System

There are two major stream systems that traverse the Subject Property (see Figure 2.7). In the northeast corner there is a medium to high constraint stream corridor that flows southeast and joins a Core Preserve Area a few hundred meters east of the Subject Property. Currently this stream creates an isolated block of land in the northeast corner of the Subject Property which can only be accessed by crossing the stream. The second major stream system flows in three branches across the middle of the Subject Property in a southeast direction. The eastern most of these streams is an intermittent swale that has a low constraint stream corridor designation. The middle and western branches have medium constraint stream corridor designations. The three branches



Confluence of high and medium constraint stream corridors



culminate in the centre of the Subject Property and form one larger stream with a high constraint stream corridor designation. There is also a human-made pond that connects to this stream system. This stream system exits the Subject Property via a culvert under Dundas Street West, where it flows into 14 Mile Creek West, south of Dundas Street.

The only woodlot of notable size on the Subject Property is a small remnant woodlot at the very northern edge of the property immediately adjacent to Highway 407. A smaller woodlot is associated with the creek and ravine area along the northeastern property boundary. There are few other significant trees on the Subject Property outside of the stream corridors and in the southeast corner of the property located around the existing farmhouse dwellings and barns.

2.1.7 Edges, Gateways, Landmarks and Nodes in the Vicinity

The major node and focal point for new development and activity in the 407 West Employment Area is at the intersection of Dundas Street West and Bronte Road (Palermo Village) which is located approximately 1.2km east of the Subject Property. Dundas Street West forms an edge between the residential and open space areas to the south and the employment lands to the north. The overpasses over Highway 407 at Tremaine Road and Bronte Road both form gateways into the Town of Oakville. In addition Tremaine Road forms the boundary with the City of Burlington, making the intersection of Tremaine Road and Dundas Street another potential gateway opportunity into the Town of Oakville. None of these gateway features are located on the Subject Property; however, the Subject Property abuts Highway 407 which provides opportunity for enhanced visual exposure along this important Provincial Highway.

2.2 Goals and Objectives

The goal in developing the Subject Property is to create an environmentally and economically sustainable employment district that will contribute to the dynamic character of the Town of Oakville. In order to reach this goal the Concept Plan must balance environmental opportunities with economic realities to create an employment district that is visually attractive, environmentally responsible and functionally efficient. By carefully choosing and scaling community and urban design elements to suit the future character of the employment district, the Subject Property will successfully attract a range of employers and diverse employment uses that will support the economic vitality of the Town of Oakville in years to come.

2.3 Response to Town Documents

2.3.1 North West Oakville Secondary Plan

The North Oakville West Secondary Plan (NOWSP) outlines how development is to occur in the area. The primary consideration is ensuring that the environmental sustainability and health of the area is protected through a natural heritage systems approach. This is accomplished by identifying and delineating concentrations of significant environmental features which contribute to the creation of a natural heritage system. The natural heritage system provides the framework for the establishment of neighbourhoods and employment areas which are centered on bus stop or transit nodes. At these nodes, parks and other civic areas will also serve as central “meeting places” for employees and residents of the Town. As an Employment Area, the Subject Property should provide for a range of employment opportunities and service-related employment uses in an efficient land use arrangement and with a mix of employment uses and tenures that complement the residential neighbourhoods within the Town.

An efficient and effective road network should provide mobility opportunities for all modes of travel, including trucks, buses, cars, bicycles and pedestrians. Development will be based on a modified grid road pattern designed to disperse and reduce the length of vehicular trips and support a viable transit system. An appropriate balance must be achieved between the streets linear transportation function, including accommodation for transit, its ability to provide access to flanking land uses and accommodate employment related vehicular traffic, and to act as a socially vibrant public space. To achieve this balance, these streets and the buildings relationship to the street will have to be well thought-out and designed. In addition to the street network, a safe and linked network of walkways and cycleways should connect destinations in order to promote active mobility. Views and vistas should be integrated into the design of the community. Buildings should be scaled and located so as to promote walkability and to create an attractive and pedestrian-oriented urban environment.

2.3.2 North Oakville Urban Design Guidelines

The North Oakville Urban Design Guidelines (NOUDG) establishes the overall community design vision and principles for the entire North Oakville area. The key principles as identified in the NOUDG include:

1. Create a Sustainable Natural Heritage and Open Space System
2. Provide Access and Visibility to Open Space
3. Create a Sustainable Street Transportation Network
4. Create Compact, Walkable Mixed-Use Development
5. Provide a Variety of Housing
6. Preserve and Extend Residential Enclaves and Cultural Heritage
7. Sustainable Development
8. Provide a Vital Setting for Employment Uses

With the exception of principles 5 and 6, which are not applicable to the Employment District, all these principles will be respected. Matters related to archaeological and cultural heritage resources on the Subject Property have been addressed through the supporting documentation submitted with the development application.

Specific to Employment Districts, the NOUDG provides for three primary land use categories which include: Light Employment, General Employment and Service Areas. Light Employment Areas include a range of light industrial and office uses as well as ancillary retail uses. These uses will be located at the most visible locations along Highway 407 and higher order transit corridors. Service Areas will be located at major intersections and cluster employment-related services and local retail uses together with light employment uses. Higher architectural and site design standards will be required for Service Areas and Light Employment Areas, as such, no outdoor storage will be permitted within these land use categories. General Employment Areas allow all the uses permitted in the Light Employment Area plus a range of other more industrial uses that may include outside storage and outside operations. These uses will be located on internal parcels which are not visible from Highway 407 or major arterial roads.

The NOUDG provides a list of design guidelines for both street-related and campus style employment area designs.

For street-related employment development the guidelines suggest that:

- » building setbacks should be minimized to create an urban street edge particularly along major arterial roads and avenues;
- » buildings should face the street and apply the highest design standards to visible primary building elevations;
- » in retail and service commercial areas, active uses including accessory uses and service uses such as cafes and financial institutions, should be located at-grade along public sidewalks to reinforce a sense of street animation and safety, wherever possible; and,
- » loading, service and parking areas should be located in side and rear yards.

For campus style employment designs the guidelines suggest that:

- » buildings should respond to open space opportunities, providing a scale and pattern of development that supports pedestrian activity between buildings and adjacent open spaces, courtyards, walkways and other elements;
- » building orientation or massing should optimize connections and views to the natural heritage and open space system or other adjacent natural features;
- » stormwater management ponds should be integrated with the design of employment uses; and
- » opportunities to create 'green' parking courts that apply a high degree of landscape treatment and/or biofiltration for stormwater run-off should be considered.

The NOUDG provides a number of further recommendations that, where applicable, are addressed in more detail in the following sections of this Urban Design Brief. Other recommendations address a level of architectural or landscaping design detail that is not applicable at the Draft Plan of Subdivision stage of development. Therefore, this Urban Design Brief does not deal with all site-specific design items addressed in the NOUDG. All future site plan applications for the Subject Property will include their own detailed Urban Design Brief that encompasses items that are relevant to the design of the site at a more detailed level and will further elaborate on the principles of this Urban Design Brief and the NOUDG.





The vision and community design process described in Section 4 has resulted in the development of a Concept Plan for the Subject Property and surrounding lands (Figure 3.1) which accommodates a diverse range of employment uses within a variety of built forms that are integrated within their natural setting. The Concept Plan reflects the community design principles outlined in the NOWSP and the community design elements of the NOUDG.

Figure 3.1 | Concept Plan



Based on this Concept Plan, the Draft Plan of Subdivision has been prepared to legally establish this framework.

The Concept Plan accommodates an employment area on the Subject Property, which is intended to include light and general employment uses and limited retail and service commercial uses which serve the employment area in accordance with the Town's land use and planning directions for the 407 West Employment Area. The vision for the Subject Property is to develop an environmentally and economically sustainable employment district that will contribute to the dynamic character of the Town of Oakville.

The range of employment land uses for the Subject Property have been further characterized as light employment (prestige office uses), general employment, and service area (service/retail/office) uses, in accordance with the NOWSP, NOUDG's and implementing Comprehensive Zoning By-law for North Oakville. The development concept envisions more prestige office uses adjacent to Highway 407 and Bronte Road, due to increased visibility along these major roads. Limited commercial (service/retail/office) uses are envisioned to be clustered at the intersections with Arterial Roads and Avenues along the Dundas Street corridor to serve the employment area. It is recognized that more general industrial uses, such as mixed warehousing and office uses may be accommodated internal to the employment area, and appropriately buffered from surrounding land uses.

The Concept Plan is consistent with the Town's NOWSP and incorporates an appropriate implementation of the proposed road network based on more detailed study. The road pattern follows a modified grid pattern which responds to the existing environmental and site conditions, while encouraging accessibility and a viable transit network throughout the 407 West Employment Area.

The Concept Plan accommodates three intersection locations with Dundas Street West, including the existing intersections with Valleyridge Drive and Zenon Drive/Colonel William Parkway. A new intersection at Dundas Street is proposed approximately equal distance between Tremaine Road and the

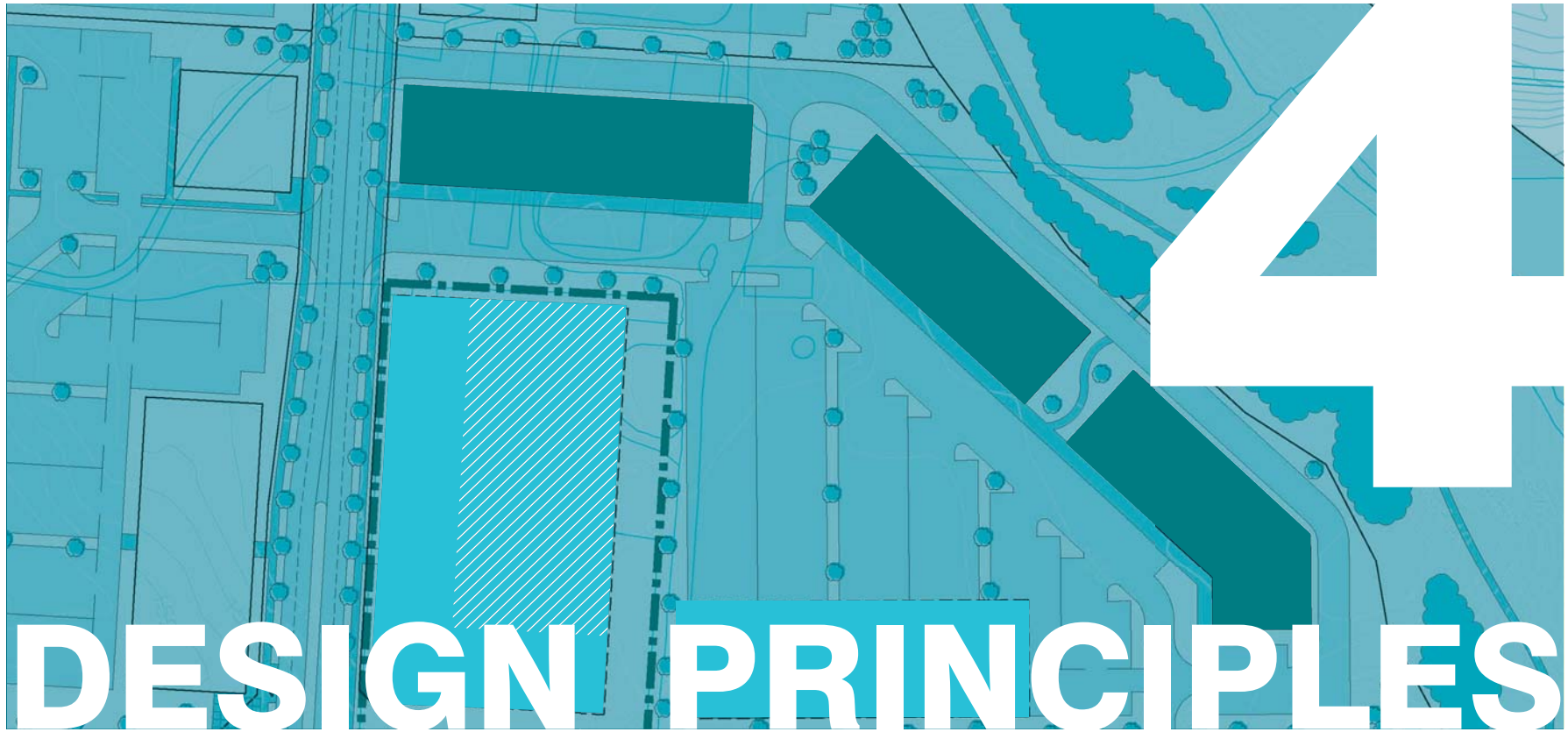
Colonel William Parkway intersection. Two major east/west road corridors are proposed as identified in the NOWSP to provide access from Tremaine Road to Bronte Road, across the employment area. The southern east/west road aligns with the proposed New North Oakville Transportation Corridor (i.e., Burnhamthorpe Road extension) proposed on the east side of Bronte Road. The spacing and locations of these intersections is consistent with the NOWSP and is intended to align with the secondary planning study being undertaken for the Dundas/Tremaine Secondary Plan area in the City of Burlington.

The development proposal identifies the natural heritage and open space system and stormwater management facilities based on the Town's NOWSP, which has been further refined for the Subject Property through the Environmental Implementation Report and Functional Servicing Study (EIR/FSS), prepared in support of these applications.

A community park is proposed at the northeast corner of the intersection of Avenue Two and the Burnhamthorpe Road extension, adjacent to the natural heritage system. The park is intended to provide a focal point for the employment area and accommodate passive outdoor recreational uses consisting of seating and gathering areas serving the surrounding employment area, and provide a central access to the proposed trail network within the natural heritage system along the stream corridor.

Section 4.3 outlines more detailed site design considerations applicable to individual parcels within the Draft Plan of Subdivision. These site design elements will provide urban design guidance for the preparation of subsequent site plan applications. As detailed site plans are prepared for the development blocks, a more detailed Urban Design Brief will be required which outlines how the development will address the site design requirements of the NOUDG and this Urban Design Brief.





4.1 Vision

Principle: Contribute to the overall supply of employment opportunities for residents of Oakville by providing a wide range of employment uses at appropriate densities and in an appropriate built form.



Campus-style design example (NOUDG)



The Town of Oakville implemented the concept of Transects, as developed by the firm of Duany Plater-Zyberk, to determine the appropriateness of development in any particular area of the Town. This method for determining the scale and form of development creates a series of designations that vary from the most urban at the Town Centre (Urban Core areas) to the least urban - at the fringes of the community. Often employment districts are separated out from the transect regime due to the fact that these areas have very specific design requirements that if controlled too tightly might have a negative economic impact on the community.

Within the Employment districts of North Oakville there is a range of character areas from the most urban, along the Trafalgar Road corridor, to the least urban at Tremaine Road. The following describes the transect approach as it relates to employment area development in North Oakville:

- » The Trafalgar Road corridor should provide the highest density of jobs, most likely multi-storey major office buildings with underground or structured parking and a robust retail element at the street level to provide active sidewalks and an animated streetscape.
- » Surrounding the Trafalgar Road Corridor and at various nodes outside of the Trafalgar Road area, such as at Palermo Village, somewhat less dense office uses will be appropriate. Here the office development will be not as intensive, some or all of the parking may be on the surface, and commercial or retail uses will be appropriately scaled for the surrounding density and character of the area (i.e., 'mainstreet' approach).
- » The next step down in transects is along the major arterial roads such as Dundas Street and Bronte Road which are located outside of the Urban Core areas. These areas, while ultimately walkable and transit-friendly, will be more likely to be primarily served by automobiles for a longer period. Therefore the built-form on these properties needs to balance the current economic realities with the future vision for these areas.



Street-related design examples (NOUDG)

- » Finally there are the areas that are farthest from the major nodes and are not immediately adjacent to the major arterial roads (i.e, internal to the employment districts). These areas will be suitable for more general industrial related uses, such as manufacturing and warehousing uses along with lower density office uses that rely mainly of surface parking.

Following this Transect concept, a distinct employment district will be created on the Subject Property that accommodates a combination of both street and campus related employment development. This will provide for a mixture of lot sizes, building types and architectural styles; and create blocks and streets that respond to the existing topography and maximize views and access to the natural heritage and open space system and other community focus areas.

This section outlines the community design principles that have informed the community design and layout of the proposed Concept Plan for the Subject Property.

4.2 Community Design

This Urban Design Brief accompanies a Draft Plan of Subdivision and Zoning By-law Amendment application and as such, it strongly reflects the Community Design criteria set out in the NOUDG and the NOWSP. This section illustrates how the vision and goals for the area are being met at the community design scale.

4.2.1 Environmental Sustainability

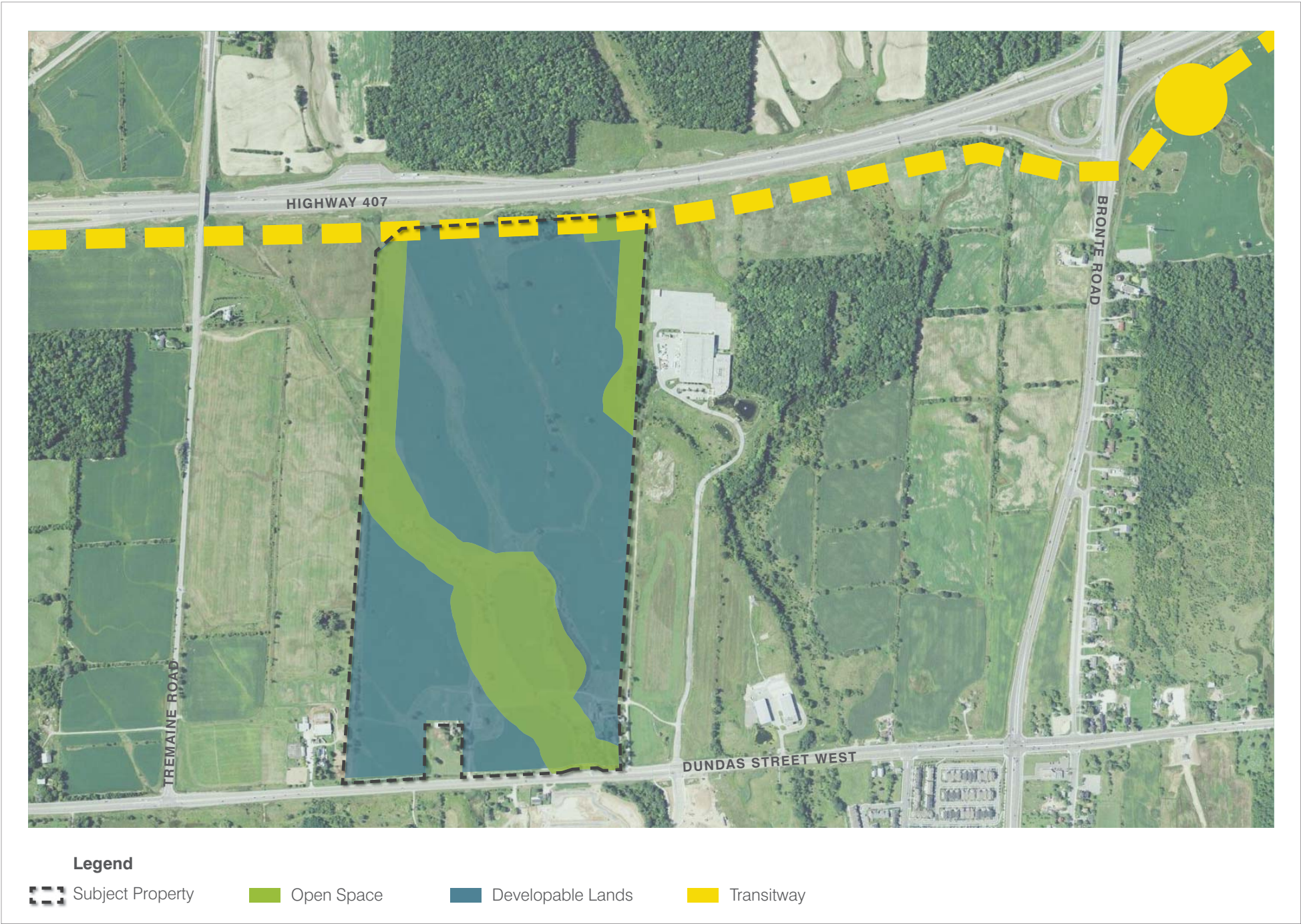
Principle: Environmental protection and enhancement of natural heritage areas will be the primary design consideration.

The first step in designing any site is to define the development limits and the extent of the natural heritage system. There are two main elements that affect the developable area on the Subject Property, the 407 Transitway and the various natural heritage features that comprise the natural heritage system ([Figure 4.1](#)). The Environmental Implementation Report and Functional Servicing Study (EIR/FSS) submitted with these applications defines the extent of the natural heritage system. The right-of-way for the future 407 Transitway

will be determined through a subsequent Environmental Assessment. It is anticipated that a right-of-way width of as much as 30m may be required; however it is the Town's intent to minimize the extent of the right-of-way to maximize the development potential. For the time being we have shown the 407 Transitway as a 30m right-of-way along the northern portion of the Subject Property. This area will be reserved until future transit use studies define the exact right-of-way requirements.

The proposed natural heritage system is conceptually shown on [Figure 4.1](#), and generally includes all the protected high constraint stream corridors. Where creeks are classified as medium or low constraint, the Concept Plan proposes realigning some of these features to create a more efficient developable area while providing an enhanced natural heritage system with fewer crossing points as supported through the EIR/FSS. The Concept Plan proposes the realignment of the two individual streams of the central stream system into one wider more significant and naturalized stream corridor along the western property boundary. The stream in the northeast corner of the Subject Property is also proposed to be realigned along the property boundary to provide a more contiguous development block. A more detailed rationale for the realignment of these stream corridors is described in the EIR/FSS.

Figure 4.1 | Proposed Natural Heritage System and 407 Transitway





Dundas Street looking east towards Subject Property



Dundas Street and Zenon Drive intersection

4.2.2 Road Network

Principle: A well connected grid network of streets will provide multiple access opportunities for employees and visitors and support the efficient movement of goods, by car, truck, bus, and bike.

The proposed road network generally follows the modified grid pattern identified in the NOWSP; however, the location of the roads have been modestly adjusted based on more detailed study to take into account the configuration of the existing natural heritage features, minimize the number of stream crossings, and provide appropriate intersection locations and development block sizes (Figure 4.2).

The minor arterial road that runs east-west across the Subject Property (Burnhamthorpe Road extension) has been aligned to minimize the length of creek crossings at the two major stream corridors in the 407 West Employment Area, and it will pass north of the existing human-made pond on the Subject Property. Avenue One that runs roughly parallel to it mimics its curves, although

this street does shift further south to minimize impacts to the existing G.E. facility and the major woodlot located just east of the Subject Property. On the Subject Property, this road curves further north than what is conceptually identified in the NOWSP in order to provide better access to the lands in the northern-most part of the Subject Property and accommodate more suitably sized employment blocks.

There are two north-south avenues on the Subject Property. The western-most avenue (Avenue Two) has been aligned to connect to Dundas Street West at a suitable location and curves to meet the Burnhamthorpe Road extension at an angle of 10 degrees before continuing north to connect to Avenue One. The other north-south avenue on the Subject Property (Avenue Three) starts east of the Subject Property and aligns with the intersection of Colonel William Parkway, an existing signalized intersection. The Concept Plan proposes that this street swing west as soon as possible to run approximately along the existing eastern property boundary of the Subject Property, to provide more suitably sized employment blocks between Avenue Three and the Core Preserve Area to the east.

Figure 4.2 | Proposed Road Network



4.2.3 Transit, Cycling and Pedestrian Network

Principle: The opportunity for transit use and active mobility (pedestrians, cycling) will be a priority.

There are two major public transit initiatives proposed for this area; the Highway 407 Transitway and the Dundas Street higher-order transit service (Figure 4.3).

The proposed 407 Transitway will have a station at Bronte Road. This service will bring people from Hamilton, Burlington, and Mississauga to Oakville. Local bus routes will connect the 407 Transitway station to the 407 West Employment Area.

The Dundas Street higher-order transit service proposed by Metrolinx will likely accommodate either a bus rapid transit service or a light rail service. The location of stops or level of service has not been finalized, but when the system gets built we would anticipate a major transit station at Palermo Village (Bronte Road) with possible additional stations at Colonel William Parkway/Avenue Three and at Avenue Two. This service will bring people to the area from Burlington and the eastern parts of Oakville.

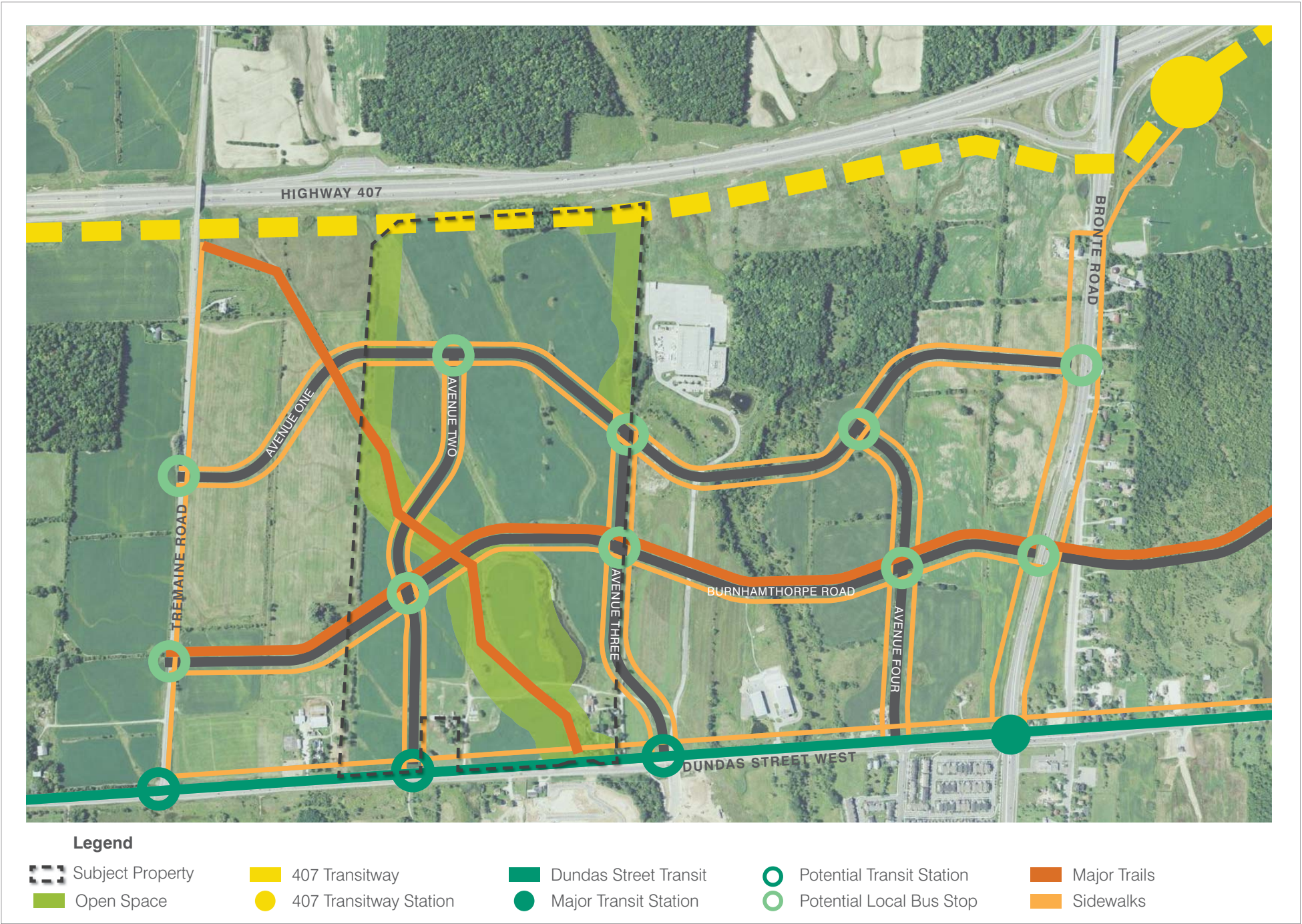


Trails provide opportunities to experience the natural settings (NOUDG)

Local bus stops will be located at all major intersections within the 407 West Employment Area. These local bus stops will create a grid of stops that will service all future development parcels with almost all lands within the 407 West Employment Area, being not more than 250m from a bus or higher-order transit stop.

The southern-most east-west road on the Subject Property (Burnhamthorpe Road extension) is a 26.0m wide Minor Arterial. This road is wide enough to accommodate on street bicycle lanes. A multi-use trail will run through the natural heritage system on the Subject Property and will connect to the street network at a number of locations.

Figure 4.3 | Proposed Transit and Pedestrian Network





6775 Financial Drive, Mississauga (Bentall Kennedy (Canada) LP)



Microsoft Canada Head Office, Mississauga (Bentall Kennedy (Canada) LP)



Maple Leaf Foods, Meadowvale, Mississauga (Bentall Kennedy (Canada) LP)



Steeles Technology Campus (SteelesTECH), Toronto (Bentall Kennedy (Canada) LP)

Precedent images of Light Employment Offices Uses

4.2.4 Land Uses

Principle: Uses will be located in a logical manner with higher densities, and higher circulation generators located near the future major transit nodes and along high traffic roads.

The developable area will be used for a range of employment uses and related infrastructure (i.e. stormwater management facilities). Light Employment uses, in particular prestige office buildings in a business park environment, will be located on lots adjacent to the Highway 407. These buildings will generally have a higher architectural quality and higher density, while outdoor storage will be prohibited. Service Commercial uses, including offices and retail uses,

will be located on the parcels closest to Dundas Street West and will also have a higher architectural quality and higher density, while prohibiting outdoor storage. General Employment uses, including manufacturing and warehousing, will be directed to the internal lots, where they are appropriately screened and buffered from adjacent uses (Figure 4.4).

Two stormwater management facilities are proposed to accommodate storm flows from the Subject Property and related catchment areas. Both stormwater management facilities are located south of the Burnhamthorpe Road extension, on either side of the natural heritage system.

Figure 4.4 | Proposed Land Uses



Figure 4.5 | Building Orientation should define intersections



4.2.5 Transit Oriented Design

Principle: The location of higher density uses and the location of buildings on each development parcel will be driven primarily by proximity to rapid transit and local bus service.

The road network within the 407 West Employment Area is intended to strike a balance between the needs of employment users, many of which will require regular truck access, and transit accessibility for employees. Major transit stations may be located at the intersections along Dundas Street West (subject to a Metrolinx/City initiated study). The most intense employment related commercial and service uses will be located in the development block adjacent to this intersection. Service commercial uses will be located within the buildings to encourage and support pedestrian movements, particularly along the Avenue Two street edge. Front doors will face the street in order to make access for pedestrians a priority. The balance of the Dundas Street edge along the Subject Property will have a green landscaped character that will create a pleasant pedestrian environment through the use of trees and landscaping.

In areas not adjacent to Dundas Street the built-form and building siting will provide greater flexibility, allowing for a wider range of employment uses, including those requiring a large degree of truck access. However, buildings will be oriented so that their main public entrances are as close as possible to the street, bus stops and sidewalks to encourage active mobility and transit (Figure 4.5). Pedestrian routes through these lower-intensity areas will be safe and attractive, but will have a more natural character than the southern section of Avenue Two.



Safe and convenient opportunities for pedestrians



Pedestrian-scaled building

4.2.6 Pedestrian-scaled Street and Block Patterns

Principles: A grid pattern of streets along with additional stream corridor trails will provide connected and safe opportunities for pedestrians.

Due to the requirements of employment users, the block pattern in this area will be relatively large when viewed from a pedestrian scale, in comparison to residential neighbourhoods which accommodate smaller lot sizes and are typically more permeable. However the grid pattern is connected and additional pathways through the intervening green spaces will be provided

to accommodate pedestrian movement throughout the Subject Property as efficiently as possible. It is anticipated that local bus stops will be provided at all intersections and mid-block throughout the Subject Property. Along Dundas Street West and the intersection of Avenue Two, pedestrian access directly from the future Dundas Street transit system will have a more urban character, with buildings relating closely to the street edge and building podiums appropriately scaled for the width of the street. Further north the character of the streets will have a greener feel. Buildings will likely be setback from the edge of the street further, but the intervening area will be landscaped and street trees will create a sense of scale and amenity for pedestrians.

Figure 4.6 | Significant Views and Vistas



Entrance to Bronte Creek Provincial Park

4.2.7 Views

Principles: Views and vistas will be maintained and enhanced, to highlight both natural areas and architectural character.

The southern section of Avenue Two is the main local gateway into the Subject Property. While it will have a relatively urban pedestrian-friendly character, it will also have green terminus views both to the north and south. To the south, views will terminate at the natural heritage areas associated with Bronte Creek Provincial Park just beyond the Dundas Street West intersection. To the north you will see the internal green node (proposed community park) and natural heritage system at the intersection with the Burnhamthorpe Road extension. Burnhamthorpe Road extension will also have terminus views of the natural heritage system and associated stormwater management facilities along its length through the Subject Property (Figure 4.6).

As there are a number of streets that cross or run parallel to open space features within the Subject Property there will be a number of streets with side views into these natural heritage areas from the street. In addition, the northern edge of Dundas Street will have a green landscaped character that will reflect the green character on the south side of the street through this area. This will create a strong visual experience for drivers and transit users as they travel along Dundas Street.



Royal Bank Facility, Mississauga (Bentall Kennedy (Canada) LP)



Higher design standards are required for buildings located at highly visible sites (NOUDG)

4.2.8 Built-form and Site Configuration

Principle: Creating a unique sense of place and character that demonstrates how both economic vitality and environmental sustainability can co-exist.

Based on the Transect principles, the development parcels fronting onto Dundas Street West should have the highest density and the highest quality of design. Dundas Street is described in the NOWSP as being a point of transition between the north and south side of the street rather than it being a barrier, and that urban design elements should encourage visual and physical links between the north and south sides of the street. The south side of the street opposite the Subject Property is partially a two-storey residential townhouse development, buffered from the street by a large landscaped berm, and open space areas associated with Bronte Creek Provincial Park. The transition in this area needs to be from a very green and low intensity use on the south side of Dundas Street, to an employment district on the north side of the street. In this instance, the most appropriate character for the northern edge of Dundas Street between Tremaine Road and Colonel William Parkway is a green landscaped edge which transitions to employment land uses.

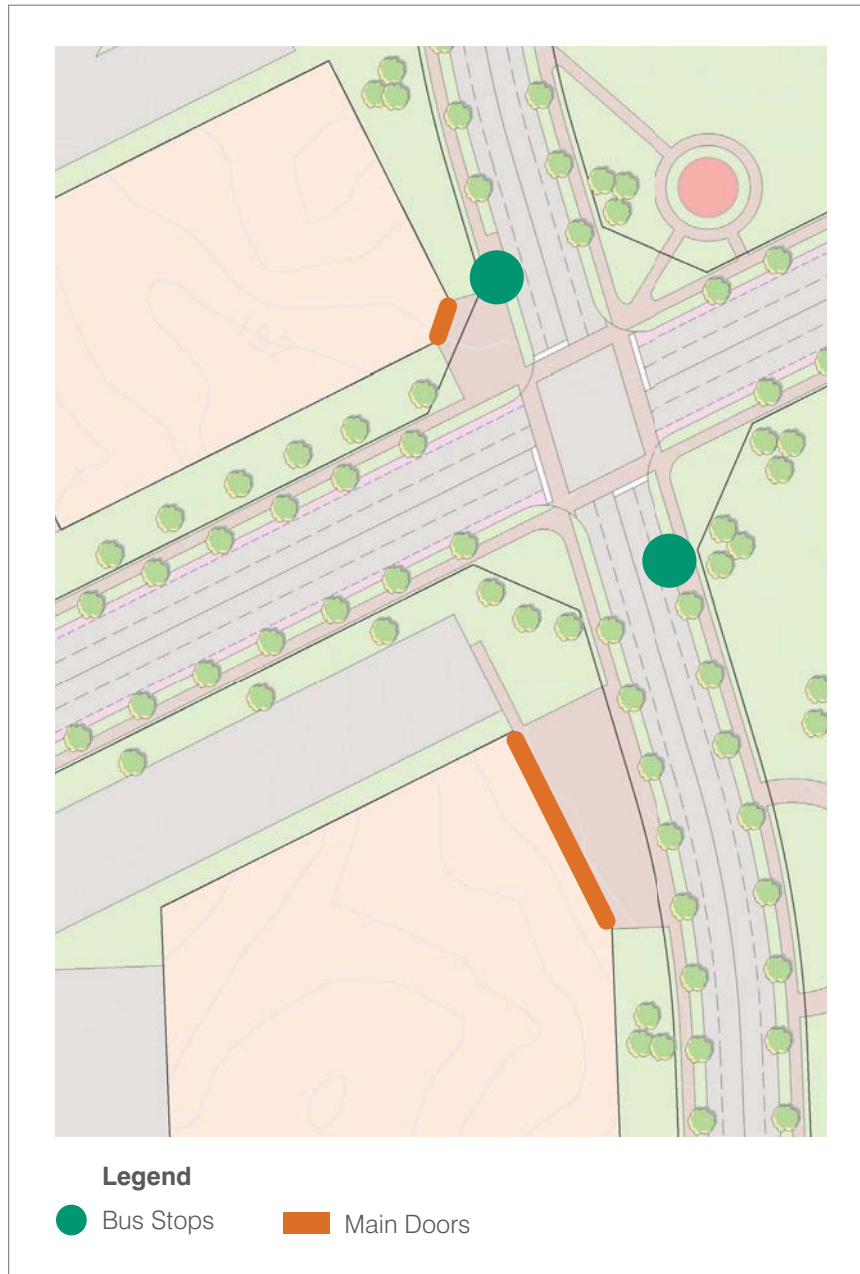
The main intersection into the Subject Property, at Dundas Street and Avenue Two, will create an important local gateway location. When higher order transit

is available on Dundas Street it is likely that there will be a major transit stop at this intersection and that passengers will either transfer to local buses or walk to their destination from this location. Therefore, the southern-most section of Avenue Two should have a very street-related and pedestrian-friendly character with active employment-related service and commercial uses along its edge, along with signature buildings marking the corners.

Moving north into the Subject Property the density and character of the built form will evolve, as warehouses and manufacturing uses will be accommodated internal to the Subject Property. These uses typically require larger setbacks and more horizontally oriented buildings. At the intersection of Avenue Two and Burnhamthorpe Road extension there will be a green node with two of the four corners being open space uses (a stormwater management facility, and a neighbourhood park adjacent to the natural heritage system). These green spaces will provide views and access into the adjoining natural heritage system. This intersection will provide an internal focal point for the employment district on the Subject Property.

The northern-most tier of development parcels, north of Avenue One will be zoned Light Employment, due to their proximity and visibility to Highway 407. These parcels are anticipated to accommodate major office uses for companies that require greater visual exposure along Highway 407.

Figure 4.7 | Main Door Relationship to Bus Stops



Entrance to building located close to bus stop

4.3 Site Design

This section provides an overview of how development will occur on individual blocks within the Subject Property and how the public realm areas will contribute to the overall character of the employment district. As each block within the Subject Property is developed, the site plan application will need to include a detailed Urban Design Brief that outlines how the development addresses the site design requirements of the NOUDG, and the guidelines outlined in this Urban Design Brief. All detailed design elements shown in the illustrations in this section are conceptual and are intended to illustrate the site design elements.

4.3.1 Building Accessibility and Orientation to the Street

Principle: Buildings will be located in such a way that pedestrians and transit users are given building access priority.

One of the key principles for reducing automobile dependency and encouraging transit ridership is to create environments that are attractive and efficient for pedestrian movement. This means eliminating environments that are hostile to pedestrians and reducing walking distances as much as possible. One of the best ways to create a pedestrian-friendly environment is to locate buildings as close to the street-edge as possible, and provide main building entrances which are conveniently accessible to transit stops (Figure 4.7).

It is proposed that all streets within the Subject Property have sidewalks on both sides. Most critically the southern-most section of Avenue Two will provide a robust pedestrian environment in order to take advantage of the potential for a major transit stop at its intersection with Dundas Street. In addition, all intersections will have bus stops allowing transit users to access all the development blocks within easy walking distance. Locating buildings as close as possible to these transit stops will make transit usage a more attractive and viable option.

4.3.2 Master Planning for Large Sites

Principle: Planned higher-density sites that are not developing to their full potential in their first phase of development will be required to show that they are capable of meeting the longer-term development goals for the community in later phases of development.

Using the Transect principle, the Town can guide what the community will look like at some point in the future - however going from a farmer's field on the outskirts of the urban area to the final built-form on certain parcels may not be feasible for a number of reasons. Therefore a phased approach to development can be used to allow for financially viable development today, while still allowing for the end vision to be achieved in the future. A phased development approach would require each development block to prepare an overall site plan that illustrates both the interim and ultimate development potential for the parcel. The site plan would illustrate how the first phase of development could be accommodated while still allowing for more intensive future development to occur, in order to achieve the Town's ultimate development objectives..

All new development will be encouraged to occur in a phased manner so that the first phase of development does not preclude additional density from being added in the future. There are two ways to accomplish this. One is to build the pedestrian-oriented street-related building at the front of the property first and accommodate surface parking areas behind the buildings. At some point in the future the surface parking can be redeveloped with structured parking and an additional building can be added behind the original building. The other way to phase the development is to build the first building at the rear of the property with surface parking in front and then accommodate the construction of the street-related buildings in the future (Figure 4.8 and 4.9). While this doesn't create the pedestrian-friendly street character in the short term, it is more likely to accommodate a better pedestrian-oriented streetscape in the long term as the second phase of development is more likely to be built when transit is more prevalent and utilized, and therefore, it is more likely the building will help create a vibrant pedestrian environment.

On development parcels devoted to manufacturing and warehousing uses there will need to be more flexibility in locating buildings and parking/loading areas. Generally landscaping will be promoted around the edges of the property to create a green edge that can be used for bio-swales and tree planting. Buildings should be located on the portion of the property closest to the nearest bus stops if possible.

Figure 4.8 | Potential Phasing of Development

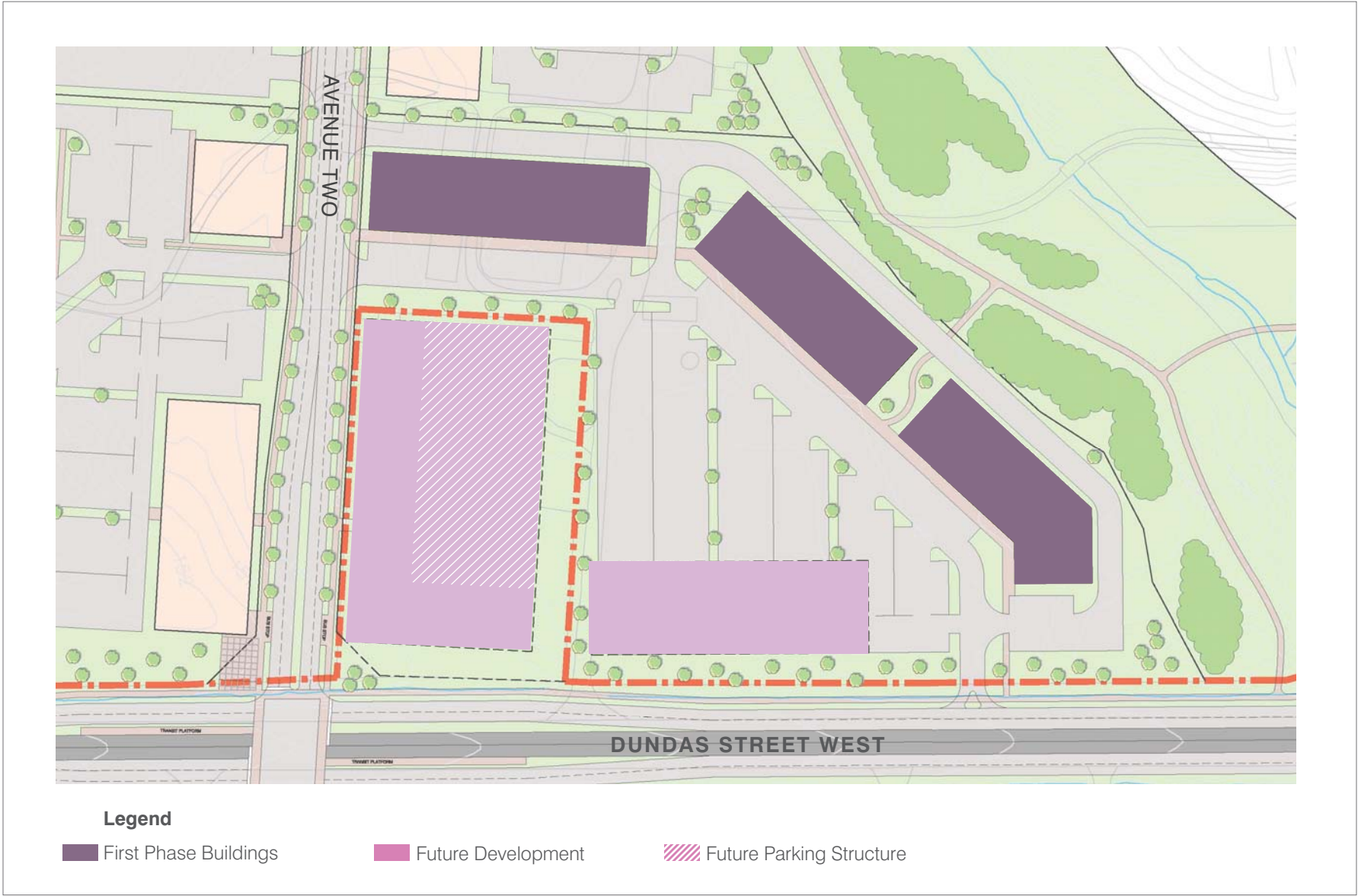
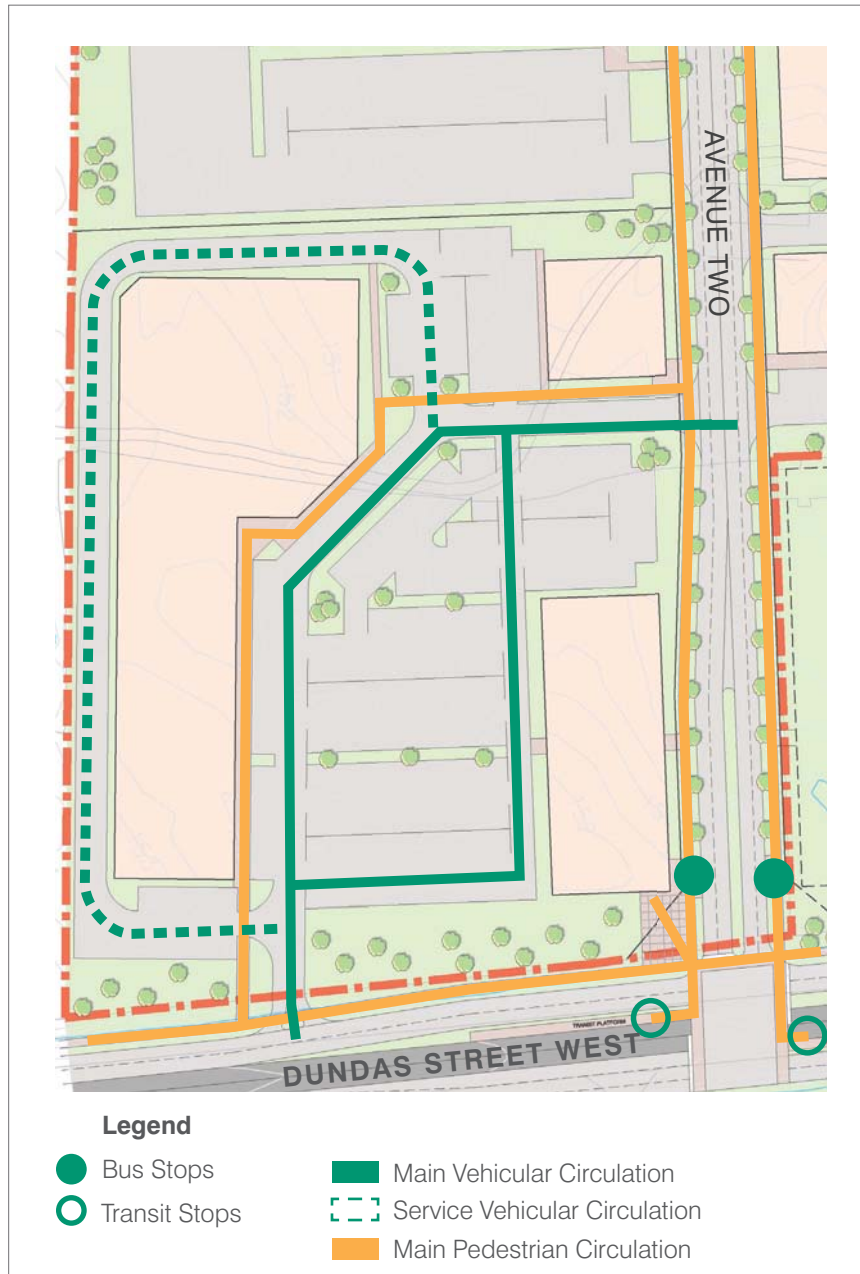


Figure 4.9 | Illustration of Potential Interim and Ultimate Development Scenarios



Figure 4.10 | On-Site Circulation



4.3.3 Vehicular and Pedestrian Circulation

Principle: Pedestrian circulation must be efficient, comfortable and safe in order to provide the greatest opportunity for pedestrians and transit users. Potential conflict points between vehicular and pedestrian circulation routes should be minimized.

On-site property circulation will be designed with both pedestrians and vehicles in mind. The primary building entrances will be located as close to the street as possible in order to encourage transit use and active mobility. Where a secondary tier of buildings is not located close to the street edge a continuous pedestrian connection must be provided from the building entrances to the adjacent public sidewalks (see Figure 4.10). These connections should be attractive, safe and clearly demarcated. They should not cross long distances of unprotected open spaces (e.g. through the middle of parking lots), but should be adjacent to buildings where possible or protected by landscaping and trees where they must be exposed. Conflict points between pedestrians and vehicles will be minimized through appropriate landscaping and site design techniques.

Vehicular circulation will be efficient and safe. For commercial and prestige employment parcels, service and delivery vehicle loading areas will be located in the side and rear yards, appropriately screened from view from public streets wherever possible and will not conflict with the main pedestrian accesses. For general employment uses, where truck access may be the main activity on the parcel, loading bays should be located at the rear of the building wherever possible, with employee parking located at the side and the building located close to the street. Driveways shared between properties are encouraged and should be provided wherever feasible to minimize disruption of the public sidewalk and pedestrian realm and to reduce the amount of impervious surface areas. Landscaped islands should be included in all large surface parking areas to subdivide the parking area into smaller areas.



Provide opportunities to create 'green' parking areas (NOUDG)



A central public open space as a focal point

4.3.4 Character and Image

Principle: The compatibility of environmental and economic sustainability should be reflected in architecture, landscaping and site design.

Within a business park, economic activity is normally paramount, but in order for it to be economically viable must be environmentally sustainable. Through the use of architectural elements and landscaping treatments, the site design and layout will respect the natural environment. The use of LEED and other green building standards will be encouraged. Low Impact Development standards should be incorporated on all sites in order to minimize surface water run-off and encourage natural groundwater infiltration where possible. The use of native trees and vegetation within a natural setting will be encouraged for all landscaped areas.

Central to this theme, the natural heritage system will be prominent. At various locations, views into the natural heritage system and connected parks and stormwater management facilities will be maintained. An integrated system of trails and public sidewalks will allow access into and through the natural heritage system and will interface with the built environment most significantly at a central community park located at the northeast corner of the intersection of the Burnhamthorpe Road extension and Avenue Two.

4.3.5 Public Space

Principle: A central public space will be provided as a focal point for the employment district.

The southern-most section of Avenue Two will be the first phase of development on the Subject Property, and will also provide an important gateway into the employment district. At the intersection of Dundas Street West the buildings adjacent to Avenue Two will have a relatively urban character in order to take advantage of the proposed future rapid transit system on Dundas Street. The view south from this section of street will be across Dundas Street to the expansive open space area associated with Bronte Creek Provincial Park. The view north from this street, into the employment district, will terminate with another green feature – the parkette and natural heritage system. The parkette located at the northwest corner of Avenue Two and Burnhamthorpe Road extension will become the main focal point of the district and will contain a design feature or a public art installation that will signify the locations importance. This parkette is immediately adjacent to the central natural heritage system which traverses the Subject Property and will provide the main connection point for people accessing the open space trail system.



Natural looking landscaping

4.3.6 Landscaping

Principle: A natural looking streetscape character will prevail which will help blend the built-form into the natural areas.

Landscaping will be an important site design element. All landscaping will be encouraged to have a natural layout using indigenous plants set in a natural setting. Every effort should be made to retain existing trees and vegetation where possible.

Large surface parking areas should be subdivided by treed landscaped islands and strips that will create a visual break within large surface parking areas. The use of alternative paving materials such as porous blocks or roller compacted concrete should be considered in appropriate locations. Infiltration swales and other on-site methods for reducing the volume of runoff or improving the quality of runoff should be implemented wherever possible.

4.3.7 Street Furniture

Principle: Attractive yet cost effective street furniture will be used.

All Town standards for both public realm and private realm lighting will be observed. In general all lighting will be designed to provide a safe and secure environment at night without providing excessive amounts of light that may create light pollution or illumination onto neighbouring properties.

All Town standards for both public realm and private realm signage will also be observed. Signage will be appropriately scaled and illuminated. Signage will be limited to company names and logos, and other pertinent information such as addresses. Temporary or advertising signage will be discouraged.

Street furniture, including transit shelters, seating areas, garbage and recycling receptacles will be incorporated to the Town standards.

4.3.8 Mid-rise and Tall Buildings

Principle: Careful consideration will be given to the architectural design and massing of mid-rise and tall buildings to provide a comfortable pedestrian environment and add visual amenity.

Employment buildings take a wide variety of shapes and sizes, particularly in employment districts located outside the main Urban Core areas. These buildings are often designed for specific needs or to reflect specific corporate or industry standards. However, where these buildings exceed five storeys in height, the impact on long distance view and adjacent micro-environmental impacts should be a design consideration.

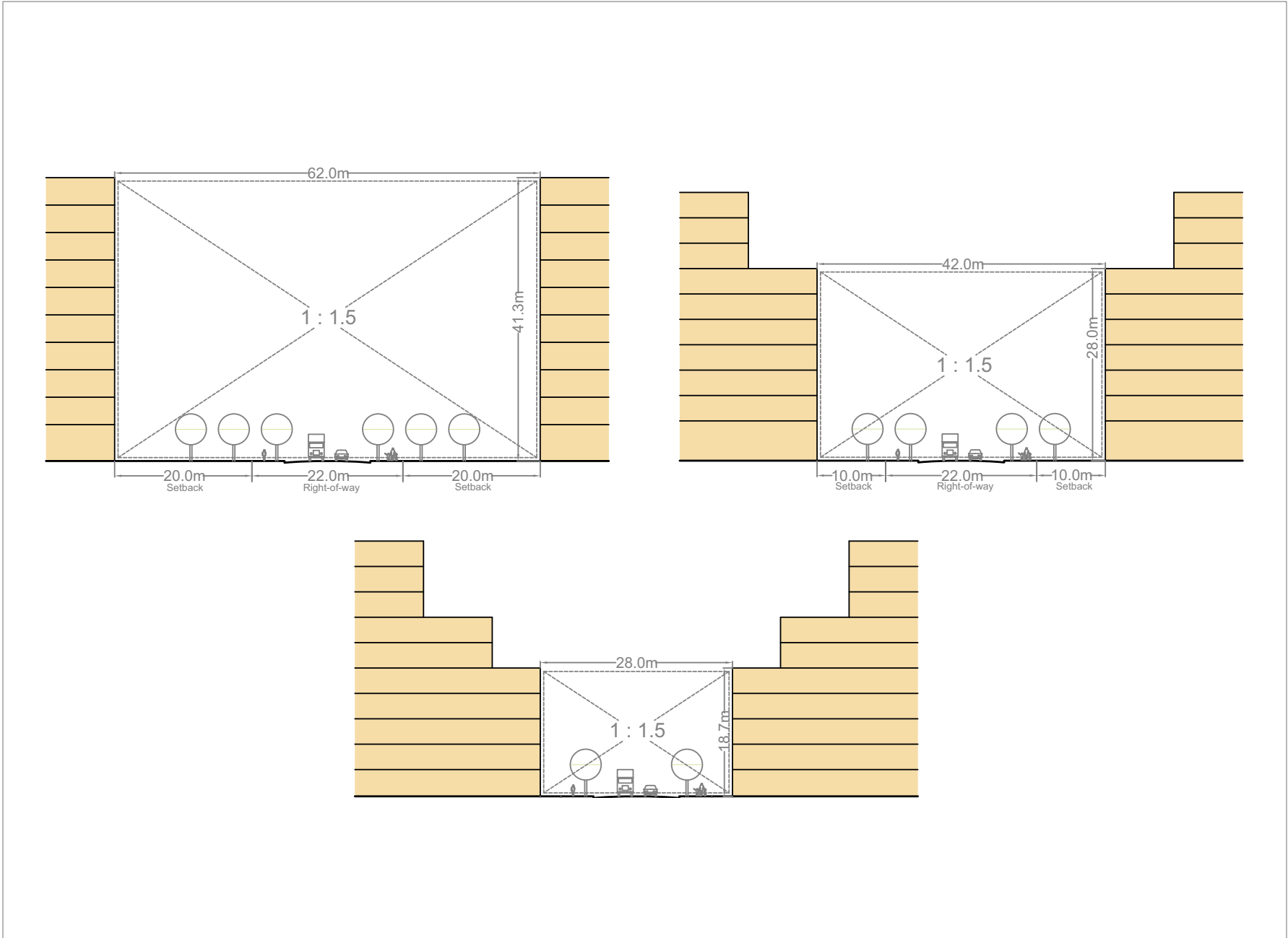
How tall buildings relate to the street is an important design consideration on pedestrian-scaled streets. In the business park context a building-height-to-street-width ratio of 1:1.5 will provide the appropriate street-edge building height (notwithstanding special architectural features which may be higher). All of the proposed street right-of-ways within the Subject Property are 22m or wider, however, the ratio needs be measured from building face to building face which means the buildings setback from the right-of-way limit must also be factored in. If a new building is being constructed opposite an existing building the number can be easily calculated, however if no building exists on

the opposite side of the street within a reasonable distance then one should assume a future building in that location would have a similar setback as the building being proposed.

Assuming the building setback is 3.0m on either side of the street, the resulting building-face-to-building-face distance would be 28.0m meaning the appropriate street-edge building height would be 18.7m (5 storeys). If the building setbacks on either side of the street were 20.0m, the appropriate street-edge building height would be 41.3m (10 storeys). If the proposed buildings are taller than the height suggested by the 1:1.5 ratio, building stepbacks or architectural elements that visually define that height limit will be used.

Consideration will be given to the architectural design of buildings as they relate to short, medium and long range views of the building. Short range views, such as those from the street immediately in front of the building require a fine level of architectural detail such as brick work or glazing characteristics. Medium range views, such as those from adjacent buildings or from a certain distance along the street require a consideration of building massing and articulation to provide visual interest. Long distance views, such as those from a far-away viewpoint or other tall buildings require architectural consideration of the overall buildings shape, particularly the roof line.

Figure 4.11 | Illustration of Building to Street Relationship





A green focal point

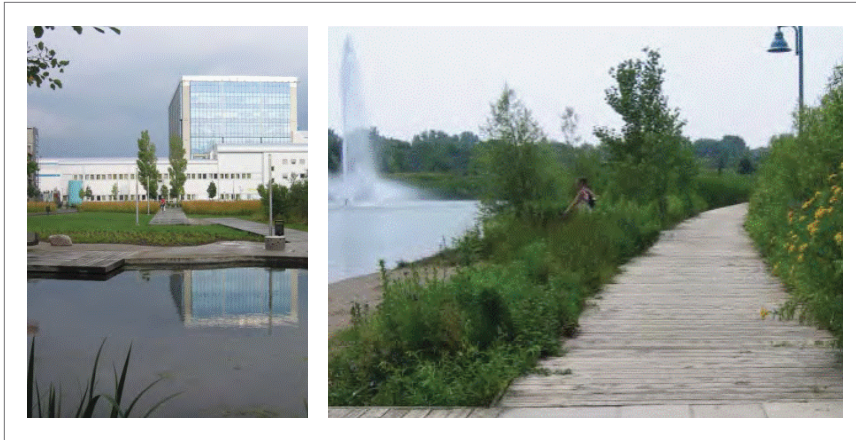
4.4 Public Realm

4.4.1 Public Spaces / Plazas

There are two primary public realm nodes within the Subject Property – the gateway at Avenue Two and Dundas Street West, and the open space parkette feature at the northeast corner of the intersection of Avenue Two and the Burnhamthorpe Road extension.

The gateway at Avenue Two and Dundas Street West will largely be defined by the pedestrian-oriented street-related buildings and uses that will line the southern-most section of Avenue Two. Within the public realm, a consistent and attractive environment should be created by locating trees, street furniture and unique ground surfaces in such a way as to denote this area as a special place. Sidewalks should be broader than elsewhere in the development and opportunities for the blending of public and private areas, such as restaurant and café patios, should be considered. This section of street will be the most active pedestrian location in the development when the Dundas Street rapid transit service is completed, and it should reflect a commitment to transit-oriented development.

The parkette feature at the northeast corner of the intersection of Avenue Two and the Burnhamthorpe Road extension will be the main connection point between the employment district and the adjacent natural open space areas. It is also the view terminus for the southern section of Avenue Two. In order to mark this special location, a gazebo, fountain or public art installation should be considered along with passive recreational uses such as seating and landscaping areas. This area could be used for outdoor lunch-time concerts and other community/business events.



Stormwater management facilities may function as public amenity spaces (NOUDG)

4.4.2 Linkages to the Surrounding Open Space

The parkette at Avenue Two and the Burnhamthorpe Road extension will be the main connection point between the urban employment district and the trail system through the adjacent natural heritage system. This trail system will connect to Dundas Street in the south and eventually to Tremaine Road in the west. Side trails and public sidewalks may also connect to other streets and properties adjacent to the natural heritage system, creating an alternative pedestrian/cycling route through the employment district. At the central parkette the trail will meet the sidewalk allowing pedestrians and cyclists to cross Avenue Two and the Burnhamthorpe Road extension at the intersection, providing for a safe and accessible journey.

The proposed stormwater management facilities are intended to augment the open space area and may accommodate trails and provide integration with the natural heritage system where appropriate. The design of buildings adjacent to the stormwater management facilities and natural heritage system should provide opportunities for access and an enhanced relationship to these areas.

4.5 Sustainability

In addition to the Sustainable Development Strategy found in the NOWSP, the Town has prepared a Sustainable Development Checklist which will be used as a tool for assessing the sustainable features of specific development applications. The Sustainable Development Checklist reflects the sustainability strategies applicable to the scale and extent of the Draft Plan of Subdivision level. The following summarizes some sustainability measures applicable to the Subject Property.

4.5.1 LEED (or similar) Certification

Every building constructed on the Subject Property will be encouraged to be energy efficient and environmentally responsible. This may allow these buildings to be awarded LEED certification or other green certifications, however achieving these certifications shouldn't be the only driving force for being environmentally responsible. All buildings should be specifically designed for their particular site to take advantage of energy reduction opportunities and to reduce their impact on the natural open spaces surrounding them.

4.5.2 Natural Heritage and Open Space System

The proposed natural heritage system is consistent with the North Oakville Creeks Subwatershed Study, as outlined in the supporting EIR/FSS. The realignment of certain stream corridors provides opportunities for enhancement and restoration of the existing natural heritage features. Lands within the natural heritage system and stormwater management facilities will be in public ownership and accommodate trails where feasible and appropriate.

4.5.3 Reducing Carbon Emissions

At a community design level the street network has been laid out in a transit-friendly grid with connections to the east, west and south. Consideration has been given to the connection to both the proposed future Dundas Street Rapid Transit line and the Highway 407 Transitway stop at Bronte Road and Highway 407, along with local bus connections. The opportunity for pedestrians to walk throughout the community has been provided. As North Oakville develops an alternative to automobile use will become more popular and accepted and this development will be able to adapt to evolving mobility needs.

4.5.4 Community Design and Land Use

The subdivision design generally reflects the North Oakville Master Plan for the Subject Property. Modifications to the road network have been proposed to minimize impacts to the natural heritage system, while maintaining a modified grid road pattern. The modifications to the road network provide for more appropriately sized employment development blocks along the Highway 407 frontage while avoiding the need for additional local roads which would result in a less efficient road/transit service network.

The development concept proposes a mix of employment uses in keeping with the NOWSP and comprehensive zoning by-law which anticipates a range of employment uses including general and light employment uses, and retail and service commercial uses which serve the employment area. It is anticipated that a mix of service and commercial uses serving the employment area will result in less vehicle trips and create a more pedestrian environment within the context of an employment area.

While the Sustainability Checklist envisages a maximum block length in the order of 300m within employment areas, this is generally not feasible given the configuration of land uses and the natural heritage system. It is recognized, that given the requirement for larger development blocks for employment uses, a finer grain of streets and blocks is not practical. However, the intent of this objective is maintained by providing a modified and connected grid pattern which minimizes the impact on the natural heritage system, while accommodating an efficient transit system and providing continuous sidewalks on both sides of the street.



On-site stormwater retention areas and infiltration areas reduce the requirement for end-of pipe stormwater infrastructure (NOUDG)

4.5.5 Stormwater Management

From a stormwater management perspective, sustainable handling and treatment of storm flows has been considered from a “treatment train” approach utilizing a number of treatment processes prior to discharge of collected runoff to a receiving water body. This process is further broken down into three separate, but interconnected approaches based on the various points collected runoff is encountered on the Subject Property:

1. The first approach is at the lot level where rainfall is converted to runoff. Each development lot will be required to address impacts resulting from their individual development plans. Post-development hydrographs for each lot should match pre-development hydrographs with respect to peak flow rate and total runoff volume as closely as possible. In addition, quality treatment of development related pollutant loadings, such as hot-spot runoff must be addressed prior to discharging flow to publicly controlled areas. Techniques to implement this recommendation include green roof installation, rainwater harvesting, soakaway pits for rooftop runoff (where soil conditions permit) and bioretention and/or bioswale treatment in landscaped areas where applicable. The level of implementation of these techniques is dependent on the detailed development plans, and must form a criterion for their plan submissions as they are advanced, but since the overall benefits to be provided are reserved for future analysis, redundant treatment capacity has been provided in the overall stormwater management strategy.



2. The second process involves attenuation and treatment in public conveyance systems used to transport collected runoff from the Subject Property. These systems typically rely on infiltration to absorb portions of the post-development hydrograph prior to discharge to end of pipe facilities. In addition, the systems may be augmented by various practices to reduce flow rates and retain smaller volumes for evapotranspiration, which will provide benefits toward an overall water balance for the Subject Property.
3. The final process involves “end of pipe” facilities that collect and treat runoff in a publicly controlled area explicitly designed and constructed to address development impacts in a manner meeting regulatory requirements while allowing for maintenance and sustained operation. As issues surrounding the practical implementation of lot level and conveyance controls prevent reliance on their associated benefits until further on in the planning process, the final stormwater management facilities have been sized in a manner that provides full redundancy for the required levels of treatment and flow control. These terminal stormwater management measures have been preliminarily designed as full wet pond type facilities intended to provide water quality treatment, flow control and erosion control for the lands tributary to them. All preferred criteria for wet pond facilities as outlined by the Ministry of the Environment have been incorporated, as well as site specific criteria related to endangered species and Halton Conservation Authority guidelines. Longer detention times for smaller precipitation events will allow for enhanced evapotranspiration rates and an overall improved water balance.





This Urban Design Brief has been prepared in accordance with the requirements of the Town of Oakville's North Oakville West Secondary Plan (NOWSP) as part of a comprehensive Draft Plan of Subdivision and Zoning By-law amendment submission for the Subject Property. As such, the principles within this Urban Design Brief are intended to provide a framework to effectively guide the development of the Subject Property at a subdivision/community level.



The design process described within this Urban Design Brief has resulted in the development of a Concept Plan for the Subject Property and surrounding lands which accommodates a diverse range of employment uses within a variety of built forms that are integrated within their natural setting, while encouraging street-related and pedestrian oriented built forms where appropriate. The Concept Plan reflects the principles outlined herein and respects the intent of the NOWSP and the community design elements of the NOUDG.

More detailed site level architectural and landscaping matters will be dealt with through subsequent site plan applications, and supported by a detailed Urban Design Brief that addresses the site design requirements of the NOUDG's.

