



SIXTH OAK

SIXTH LINE AND BURNHAMTHORPE ROAD WEST

URBAN DESIGN BRIEF

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1.0 DESIGN VISION, GUIDING PRINCIPLES, AND OBJECTIVES

The Sixth Oak development study area described in this Urban Design Brief (UDB) consists of a combined 23.12 hectares (57.13ac) of land that is designated as part of the North Oakville Secondary Plan Area. The development's design vision and guiding principles are rooted in the Town's North Oakville East Secondary Plan, reflecting North Oakville's "*distinct historical roots and small-town heritage and Trafalgar Township's village rural heritage, with nodal development, prestige industry, and green linkages continuing to define Oakville's unique landscape.*"

1.1 Design Vision

Reflective of the planned North Oakville East Secondary Plan land uses, Sixth Oak will comprise a proposed secondary school (6.07 ha), employment lands (5.77 ha), natural heritage system (NHS) (combined 9.33 ha), and a stormwater management (SWM) pond (1.23 ha).

1.2 Community Guiding Principles & Objectives

The Sixth Oak development is designed to be an integral part of the surrounding communities in North Oakville. In order to achieve this, the following community goals and objectives have been established:

1.2.1 Community Guiding Principles

Sixth Oak shall be designed and developed to fit seamlessly within the framework provided by the North Oakville Master Plan and will complement the surrounding land uses. The established goals for the community include the following:

- **Create a sustainable natural heritage and open space system**
Meet the environmental objectives required to create a long-term sustainable NHS in an urbanized setting. A responsibly conceived land use fabric that is derived from a robust NHS will enhance the livability of the community.
- **Provide access and visibility to open space**
Recognize the importance of developing physical and visual access to open spaces that will contribute to enhanced livability while maintaining the integrity of all environmental systems.
- **Locate secondary school to create a community focal point**
Recognize that schools help define a neighbourhood's character and promote a strong sense of community for residents. Establishing schools at prominent locations along arterial streets anchor them as a community landmark, and also ensure they can be serviced by transit.
- **Provide for a range of employment uses**
Create employment districts which provide a range of high quality employment opportunities with access to major freeways, arterial road, and transit systems, and promote a live/work relationship through adjacencies to planned residential developments.
- **Provide logical connections with adjacent existing and future communities**
Recognize the importance of ensuring Sixth Oak is part of a well-connected and cohesive community framework with strong links to adjacent future residential neighbourhoods.

1.2.2 Neighbourhood Objectives for Sixth Oak

A set of core neighbourhood objectives have been established as part of the Sixth Oak planning and design. The following apply to the Sixth Oak subject lands described in this UDB:

- **Natural Heritage System** - The development recognizes and enhances the significant NHS and links it through adjacent emerging communities by providing visually and physically interconnected spaces throughout the surrounding low and medium density residential neighbourhoods.
- **Open Space System** - The Open Space component of the North Oakville Natural Heritage and Open Space System includes open space areas such as SWM facilities and schools. The proposed Sixth Oak SWM pond and secondary school will be designed to connect with and enhance the adjacent NHS, ensuring public safety, views, and accessibility.
- **Transit Supportive Development** - The proposed Sixth Oak secondary school will be sited in a prominent location so that it will be well served by transit. Sidewalks, cycling allowances, lane configurations, and trails are all designed with accessibility, walkability, and safe cycling in mind.

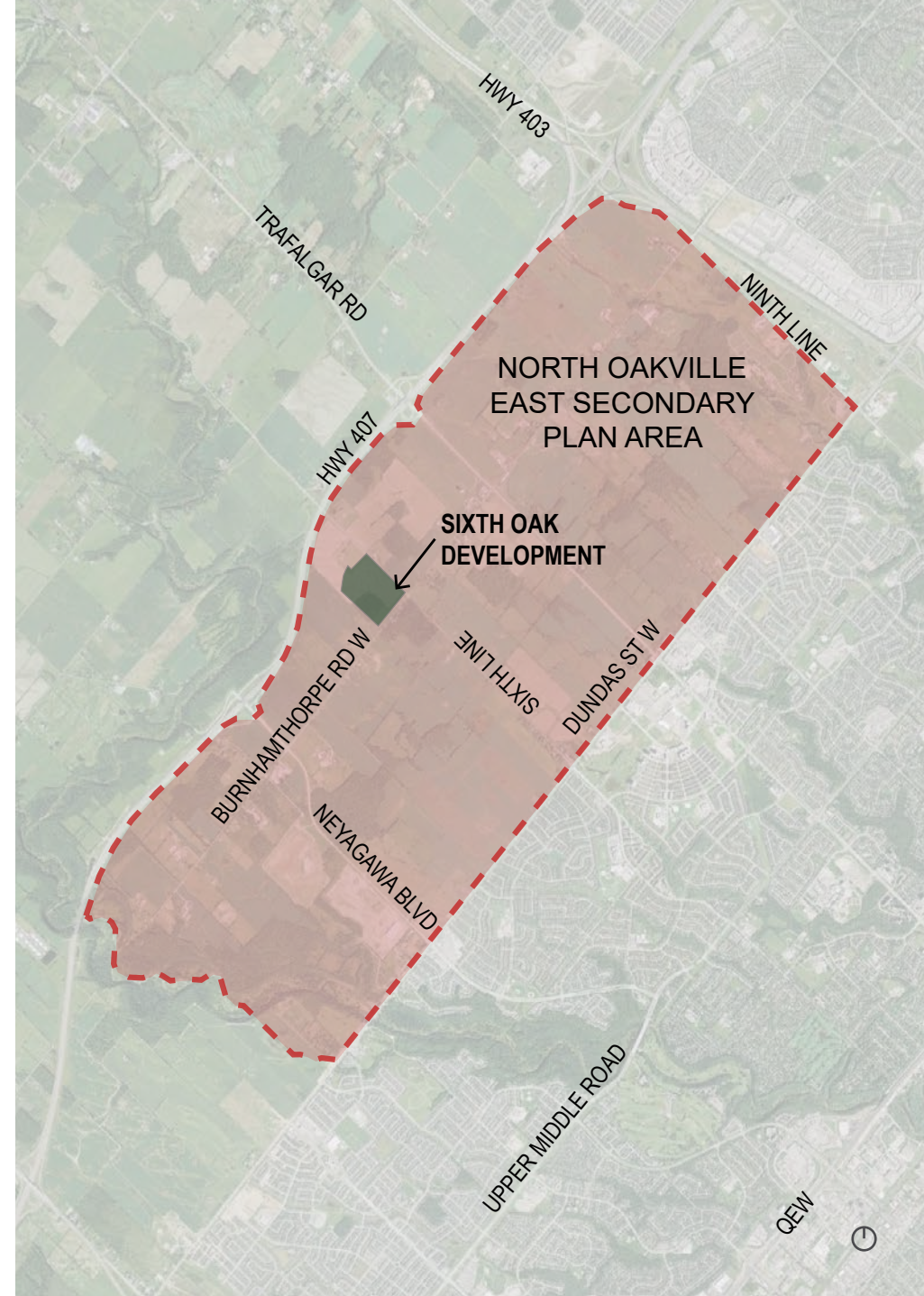


Fig. 1.0 - The Sixth Oak development lands within the North Oakville East Secondary Plan Area

2.0 CONTEXTUAL ANALYSIS

The development site for Sixth Oak is situated north of Burnhamthorpe Road West and along the west side of Sixth Line.

2.1 Existing Natural Features, Topography & Vegetation

The existing topography and vegetation of the subject lands is that of gently rolling farmland, hedgerows, and wooded areas. A significant woodland feature is located toward the south-west corner of Sixth Oak. This designated NHS feature extends north through the subject lands to connect with an existing feature east of Sixth Line, as well as south into the adjacent Star Oak Development.

2.2 Surrounding Land Uses & Built Form Character

The Sixth Oak lands are surrounded by existing residential development to the east and future residential developments to the west and south, and bounded by the future William Halton Parkway (North Oakville Transportation Corridor) to the north, Burnhamthorpe Road West to the south, and Sixth Line to the east. North of William Halton Parkway are future employment lands and Highway 407. The Highway 407 interchange is just over 2km from the subject lands.

Along the south side of Burnhamthorpe Road West are existing residential lots. Built form in the surrounding future residential developments will include a variety of single detached homes and townhouses. To the east and south of the subject lands along Sixth Line, rear lane townhouses and 6-8-storey mixed use built form contribute to the urban character of the Neighbourhood Centre Area and Neighbourhood Activity Node, providing amenities and services for the wider community.



South-east bird's eye view from the Sixth Oak development site, facing the Sixth Line and Burnhamthorpe Road West intersection and the existing residential lots



Newly constructed rear lane townhomes along Sixth Line, directly across from the Sixth Oak subject lands



Newly constructed roundabout at William Halton Parkway and Sixth Line, looking south-west toward the Sixth Oak subject lands



Existing single detached houses on Preserve Drive, south-west of Sixth Oak



Existing single detached houses under construction backing onto NHS channel along east side of Sixth Line, south-east of Sixth Oak



Bird's eye view of newly constructed rear lane townhomes on Ernest Appelbe Boulevard, south-east of Sixth Oak



Fig. 2.2f - Sixth Oak Development Subject Lands

2.3 Views & Vistas from the Site

Given the extensive NHS lands bisecting the site and connecting it to the wider natural open space network of North Oakville, in addition to the proposed SWM pond, there are opportunities to preserve the views and vistas to significant features. The south-west to north-east NHS will directly inform the proposed development sites and views will be maintained from internal site networks (i.e. parking lots, trails, etc.) and public open spaces (i.e. SWM pond, school fields, etc.), where feasible. Refer to *Fig. 6.1.5 Views and Vistas* for potential viewsheds and view corridor opportunities within the Sixth Oak development master plan.

2.4 Gateways & Landmarks

Since Sixth Oak is intended to complement the surrounding residential communities through the development of a secondary school and employment lands, traditional landscape gateway elements will not be a component of this proposed development. Open space features comprising the SWM pond and NHS along Burnhamthorpe Road West will signify entry from the south-west.

Placement of the school building at the intersection of Burnhamthorpe Road and Sixth Line may serve a landmark function from the south-east. The building may be designed with enhanced architectural treatment to define it as a community focal point.



Fig. 2.3 - Image example of a trail situated within the buffer lands of an NHS feature, next to an emerging residential community

2.5 Transportation Networks

Although there are no public transit services running to the subject lands, in the fullness of time bus services will be implemented along Sixth Line and the existing and planned William Halton Parkway, which will swing north of the site and the current Burnhamthorpe Road West. Currently, east-west bus routes run south of the subject lands, on Sixteen Mile Drive and Dundas Street East, with a bus stop approximately 1km south at the intersection of Dundas Street East and Sixth Line.

The development of this site will provide opportunities for pedestrian and cycling networks that link with the greater community. In addition to bike lanes proposed for Sixth Line and a yet to be determined bike facility on Burnhamthorpe Road West, south of the subject lands a Major Trail running east-west has been recently constructed, consistent with the North Oakville Trails Plan - East.



Fig. 2.5 - Oakville Transit bus services will be implemented along Sixth Line and the existing and planned William Halton Parkway

3.0 POLICY CONTEXT

The proposed development for Sixth Oak is subject to several planning studies and processes. This UDB outlines a set of guidelines consistent with the objectives of the following documents:

3.1 North Oakville Master Plan

The design and structure of the Sixth Oak development complies with the North Oakville Master Plan (Appendix 7.3 - February 2008), which illustrates the structuring elements, land uses, and overall design of the North Oakville Planning Area and sets out the policies and figures of the Secondary Plan to be implemented. The proposed development is consistent with this master plan with respect to the general allocation of land uses. These land uses are designated as follows:

- Employment District - a full range of employment uses. In addition, limited retail and service commercial uses serving the employment area shall be clustered at the intersections with Arterial, Avenue, and Connector roads;
- Transitional Area - an interface and buffer between the more intensive concentration of industrial, office, and service employment uses located in the Employment District designation, and adjacent residential uses. Institutional uses are permitted in Transitional Areas;
- Stormwater Management Facility; and
- Natural Heritage System Area.

3.2 North Oakville East Secondary Plan

The character and pattern of the Sixth Oak lands recognizes and preserves natural heritage features, integrating open spaces, views, vistas, and pedestrian systems. An employment area and secondary school are proposed, accessible to future transit and Highway 407, and within walking distance to activities, amenities, and adjacent residential communities. The following key elements in the Sixth Oak development plan are consistent with guidelines outlined in the North Oakville East Secondary Plan (February, 2008):

7.2.3 GENERAL DEVELOPMENT OBJECTIVES

7.2.3.1 Environment and Open Space

- To preserve and protect significant woodlands, the proposed development creates a sustainable natural heritage and open space system, which provides a balance between active and passive recreational needs and links to the existing open space system within the Town.

7.2.3.3 Employment

- The Sixth Oak development will create employment districts which provide for a range of employment opportunities with access to major freeways, arterial roads, and transit systems, while integrating the area's natural heritage component of the natural heritage and open space system.

7.4.6 NATURAL HERITAGE AND OPEN SPACE SYSTEM

- The plan for the Sixth Oak development recognizes that the primary purpose of the NHS is to protect and preserve key ecological features and, where appropriate, enhance and expand upon this natural environment. Protecting this system will also contribute to the enhancement of air and water resources, and provide for limited passive recreational needs.

North Oakville

Urban Design and Open Space Guidelines

November 23, 2009



7.5.4 GENERAL DESIGN DIRECTIONS

- Public safety, views and accessibility, both physically and visually, to the Natural Heritage component of the Natural Heritage and Open Space System, as well as to the SWM pond and school, will be an important consideration in the design of the Sixth Oak development.
- Buildings, structures and landscaping shall be designed to provide visual interest to pedestrians, as well as a “sense of enclosure” to the street. Generally, heights of buildings shall also be related to road widths to create a more comfortable pedestrian environment, so that the wider the road width, the higher the building height. The proposed secondary school building at the intersection of the Burnhamthorpe Road and Sixth Line arterial streets shall be sited and massed toward the intersection.

7.5.17 EMPLOYMENT DISTRICT

- The Employment District will permit a full range of employment uses. In addition, limited retail and service commercial uses serving the employment area shall be clustered at the intersections with Arterial, Avenue, and Connector roads.

3.3 North Oakville Urban Design and Open Space Guidelines

The Sixth Oak development will reflect the North Oakville East Urban Design and Open Space Guidelines that outline the physical design components necessary for the development of a high quality, sustainable and integrated community. The planning and design of this new development is based on the Town's detailed set of objectives, illustrated recommendations and guidelines that will impact urban living, employment and recreation, implementing the broad policies of the North Oakville East Secondary Plan.

Fig. 3.3 - North Oakville Urban Design and Open Space Guidelines will serve as the basis for the site planning and detailed design of the Sixth Oak development

3.4 North Oakville Trails Plan

The North Oakville Trails Plan is a key component of the transportation strategy for the Town's Vision 2057 and Secondary Plan area, recognizing that trails are an essential part of linking new communities, reducing reliance on roads, encouraging walking and cycling, and controlling access into the NHS system. The hierarchy of trails includes multi-use trails, major trails, and minor trails, as well as a network of on-road cycle lanes and bike routes.

The trails plan for the Sixth Oak development adheres to the general trail network including:

- A north-south bicycle lane along Sixth Line;
- An east-west bicycle lane along Burnhamthorpe Road West;
- An east-west bicycle lane and multi-use trail along the future William Halton Parkway;
- A major trail situated primarily along the southern flankage of the NHS woodland and through the proposed school block.

Refer to Fig. 6.1.2 Trail Network Plan for more details on the proposed location of these trails in the development master plan.

3.5 North Oakville Sustainability Checklist

The North Oakville Sustainability Checklist is an important tool for assessing the sustainability of planned developments. Based on North Oakville Secondary Plan policies, the checklist is meant to be a tool to encourage sustainable development practices. The planning and design of the Sixth Oak development incorporates these broader best-practice guidelines as outlined in the following categories:

- Development Form;
- Air Quality / Energy Efficiency;
- Water Management; and
- Natural Heritage.



Fig. 3.4 - The location of Sixth Oak within the North Oakville trails Plan - East



Urban Design Direction for Oakville

Staff update - December 2, 2019
Version - 2.0

Endorsed by Council on May 12, 2014
Version - 1.0



Urban Design Direction for Oakville

Urban Design Direction for Oakville

Staff update - December 2, 2019
Version - 2.0

3.6 Livable by Design Manual

The Livable by Design Manual (LBDM) provides comprehensive and detailed design direction for development to ensure designed and built elements are integrated with their surroundings and result in projects that not only function, but are aesthetically pleasing, support community vitality, and improve the overall livability of Oakville.

The guiding design principles are the foundation for the urban design direction presented in the LBDM and include:

- Sense of identity;
- Compatibility;
- Connectivity;
- Sustainability;
- Legacy; and
- Creativity.

Part C of the LBDM includes a comprehensive set of detailed standards and technical direction to achieve the best possible site development and functionality. It informs the general site and building design guidelines for the school and employment area provided in Section 6.0 of this UDB. For more detailed built form and site development standards, the following sections of the LBDM should be referenced:

- 3.2 Low rise non-residential buildings
- 4.1 Landscaping
- 4.2 Pedestrian connections
- 4.3 Parking
- 4.4 Lighting
- 4.5 Signage
- 4.6 Service, loading, and storage areas

Fig. 3.6 - The Livable by Design Manual provides comprehensive and detailed design direction for the Sixth Oak development

4.0 DEVELOPMENT FRAMEWORK

The development framework for the surrounding residential communities will serve as the main building components for delineating the various land uses in the Sixth Oak development. The following section describes these key structuring elements.

4.1 Boundary Interface / Future Adjacent Residential Communities

The future adjacent residential development planned beyond the south, east, and west interfaces of Sixth Oak has directly influenced the structure and layout of the community through the continuation of the NHS. The extension of William Halton Parkway, north of the subject lands, and the proximity of Highway 407 complement the site's proposed employment land uses, consistent with the North Oakville East Secondary Plan.



Fig. 4.1 - Plan showing land uses on the Sixth Oak subject lands, within the surrounding residential development



Fig. 4.2 - Sixth Oak Development Land Use Plan

4.2 Pattern of Land Uses

The Sixth Oak development will be characterized by a mix of non-residential land use blocks that will define its character and function, corresponding with the Town's land use designations planned for this site. The uses within the subject lands include:

- **Transitional Area** - Secondary school with proposed childcare and office building at the intersection of Sixth Line and Burnhamthorpe Road West;
- **Employment Area** - Future employment uses consistent with those permitted in the North Oakville East Secondary Plan, north of the proposed NHS and south of the future William Halton Parkway extension;
- **NHS Lands** - Preserved woodland comprising a significant area toward the south-west corner of Sixth Oak, and extending north through the subject lands to connect with an existing feature east of Sixth Line, as well as south into the adjacent Star Oak Development;
- **SWM Pond** - Connecting with the NHS to the west and contributing to a prominent visually linked open space system.

LEGEND

- TRANSITIONAL AREA
- EMPLOYMENT AREA
- NATURAL HERITAGE SYSTEM
- SWM POND

4.3 Street Network

The road hierarchy surrounding and within the Sixth Oak development consists of the following street types (refer to Fig. 4.3):

- Highway 407 - located 500m north of the subject lands;
- William Halton Parkway - along the northern boundary / the development of which is separate from the Sixth Oak site;
- Arterial Road - Sixth Line along the eastern boundary and Burnhamthorpe Road West along the southern boundary / the development of which is separate from the Sixth Oak site;
- Collector Road - Preserve Drive along the western boundary / the development of which is separate from the Sixth Oak site;
- Internal Vehicular Network - 6m drive aisles are clearly defined on the secondary school site plan and allow for accessibility and navigation. The site is accessed via a driveway on Burnhamthorpe Road West, as well as a driveway on Sixth Line. Parking areas have been designed to meet the Livable By Design Manual criteria for landscaping and pedestrian navigation.

LEGEND

-  HIGHWAY 407
-  PARKWAY
-  ARTERIAL ROAD
-  COLLECTOR ROAD
-  INTERNAL VEHICULAR NETWORK

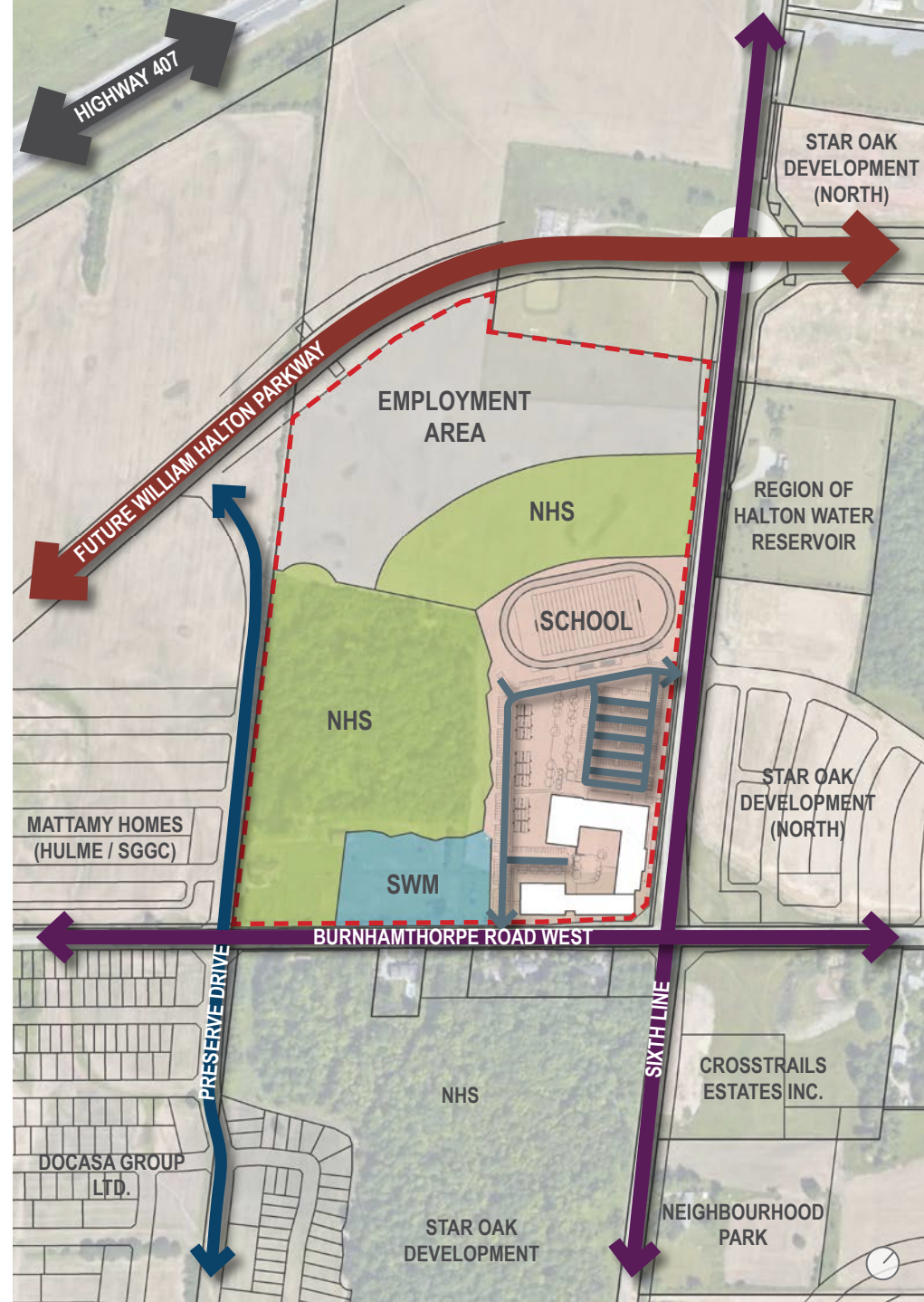


Fig. 4.3 - Road Hierarchy Plan for Sixth Oak within the surrounding community

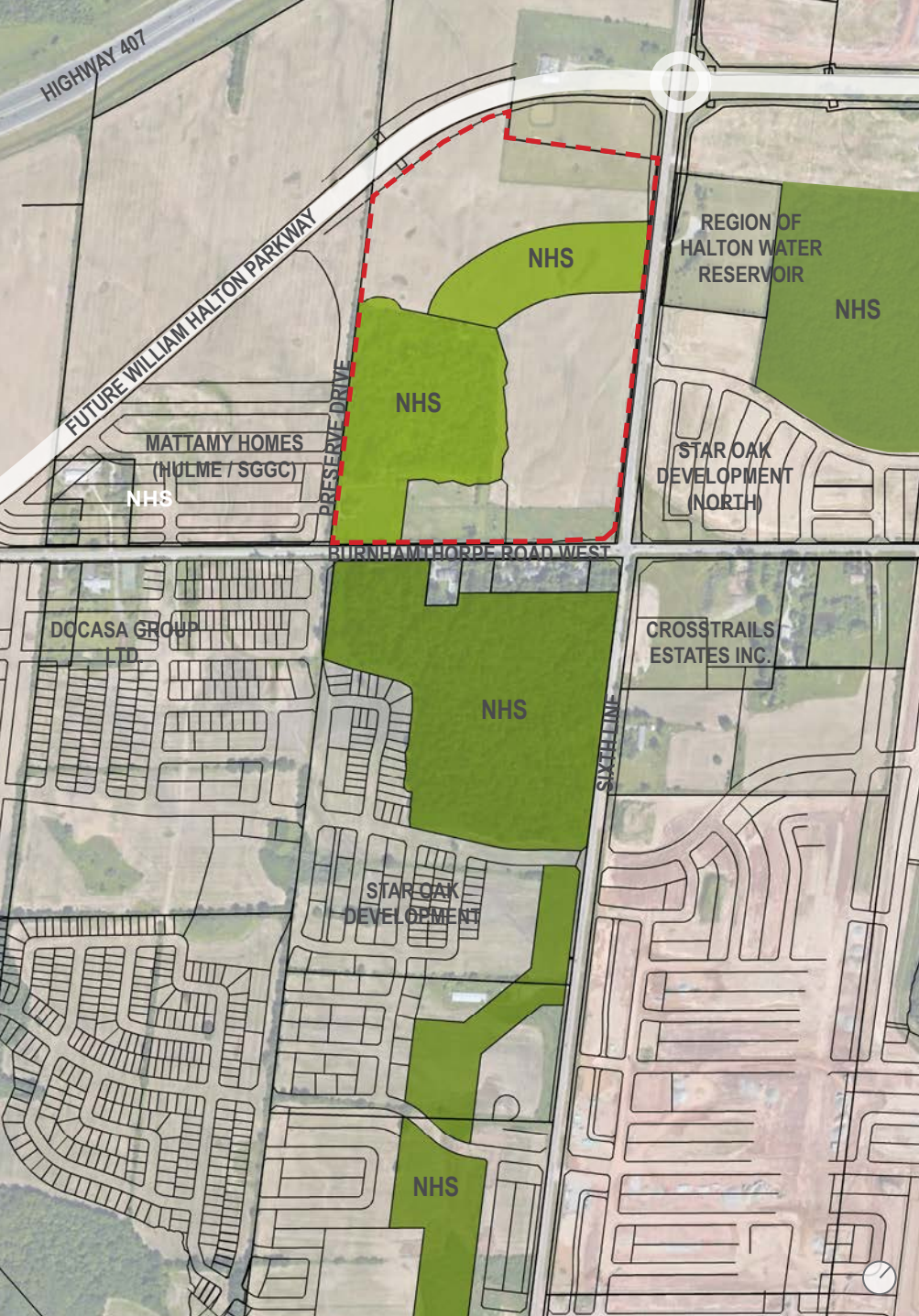


Fig. 4.4 - Natural Heritage System defines the structure of the Sixth Oak development

4.4 Natural Heritage System

Protecting the NHS within the study area will help to ensure an ecologically diverse, healthy, and sustainable open space system in an urbanized setting. The broader area objective is to preserve the existing natural environment and provide corridor connections to achieve multiple environmental objectives and targets related to wildlife habitat and links, community diversity, and water management, etc., that will be balanced and implementable.

The proposed land use fabric for the Sixth Oak development has evolved from the prominent NHS lands that bisect the site. As part of the comprehensive open space system, a trail network reflecting the North Oakville Trails Plan - East has been integrated through the NHS, extending to the north-east (refer to 6.1.2 Trail Network). View opportunities of NHS have also been identified in 6.1.3 Views and Vistas.

LEGEND

- SIXTH OAK NATURAL HERITAGE SYSTEM
- NATURAL HERITAGE SYSTEM OUTSIDE OF SUBJECT LANDS

5.0 DEVELOPMENT MASTER PLAN

The Sixth Oak development will comprise a proposed secondary school (6.07 ha), employment lands (5.77 ha), natural heritage system (NHS) (combined 9.33 ha), and a SWM pond (1.23 ha). Access to the secondary school will be from Burnhamthorpe Road West and Sixth Line. Although a site plan for the employment lands north of the NHS is not yet developed, access will likely occur from Sixth Line and William Halton Parkway.

A linked network of public open spaces (NHS, SWM pond, and school) with integrated trail connections is proposed through the subject lands, strategically located within reasonable walking distances from surrounding residential communities. The proposed development recognizes and preserves existing NHS features, while integrating views, vistas, and pedestrian/cycling links through the trail network.

There are five key elements that characterize the Sixth Oak development and form the overall development master plan: NHS lands, trail connections, the SWM, the secondary school, and the employment lands.

LEGEND

- TRANSITIONAL AREA (SCHOOL)
- EMPLOYMENT AREA
- NATURAL HERITAGE SYSTEM
- SWM POND



Fig 5.0 - Development Master Plan for Sixth Oak

6.0 DETAILED DESIGN DIRECTION

6.1 Open Spaces and Connections

As part of the overall planning and coordination of amenities, an interconnected network of open spaces are proposed within the Sixth Oak development.

As a significant component of the subject lands, the NHS and SWM blocks offer opportunities for trail connectivity to natural areas and strategic views toward open space features from the public and private realms, particularly from the secondary school grounds, Burnhamthorpe Road West, and the employment area to the north.

6.1.1 Secondary School Site

The proposed 6.07 ha (15.00 ac) secondary school, combined with the adjacent SWM pond and NHS, will be one of the primary open spaces and focal points for the surrounding communities. The school site's conceptual program design includes an artificial turf field, running track, and potential winter sports dome, student plaza, tech court, learning courtyard, and a play area associated with a proposed childcare / office building. As the proposed design is conceptual, it is subject to change following submission of this UDB.



LEGEND

- SCHOOL
- PARK
- NATURAL HERITAGE SYSTEM
- SWM POND

Fig. 6.1 - Sixth Oak Open Space Plan

6.1.2 SWM Pond

The proposed 1.23 ha (3.04 ac) SWM pond will function as water quality and quantity control for the development, and as a publicly accessible open space amenity. This facility has been located in relation to existing natural drainage patterns of the site, will augment the extent of natural areas, and will provide passive recreation opportunities with trail connections and viewshed opportunities. To better integrate the stormwater functions with its surrounding land uses, the design of this feature shall have regard for the following:

- The design of the pond shall appropriately address its street frontage along the south side to enhance its visibility within the community as a valuable open space amenity.
- A regular spaced row of coarse-leaved, native canopy trees shall be provided along the street frontage in combination with areas of naturalized planting.
- Planting shall be naturalized throughout to consist of whips, multi-stem shrubs, ornamental grasses, and riparian, aquatic, and upland species appropriate for the pond condition, with an emphasis on native species, in accordance with Conservation Halton standards.
- Pedestrian trails shall be integrated to provide connections from the pond street entry. This trail will be contained within the pond boundary and it may be combined with the maintenance access road to minimize non-vegetative surfaces, while providing opportunities for pedestrian interaction.
- Should utility structures be placed within the pond facility, they should be well integrated with the landscape to minimize visual impacts on the public realm. Considering its less sensitive function and landscape screening opportunities, SWM ponds may be considered in locating utility infrastructure in accordance with Town guidelines, as an alternative to more sensitive public realm locations (parks, street rights-of-way, etc.).
- Information signage shall be provided at the pond entry / lookout area to inform the public of the importance and treatment of the SWM pond as a functioning natural open space feature.
- The design of the SWM pond shall require approval from the Town of Oakville, Conservation Halton, and the Ministry of Environment, Conservation and Parks.



Fig 6.1.2a - Example of a stormwater management pond adjacent to a natural heritage system that functions as an important ecological and community amenity through a naturalized planting strategy and controlled pedestrian interaction



Fig 6.1.2b - Example of a stormwater management pond lookout and trail connection

6.1.3 Trail Network

The North Oakville Secondary Plan calls for the development of an extensive recreation trail system. Consistent with Figure NOE4 of the Secondary Plan, the trails system proposed for Sixth Oak will provide access to the NHS from the adjacent streets, primarily within the established buffer zone. The trail will connect to planned or existing pathways and cycling facilities throughout the broader community as a comprehensive pedestrian and cycling linkage network. Where feasible, trails should be accessible and visible from adjacent streets, the secondary school, and the employment area.

In compliance with the North Oakville East Trails Plan, the following trail types are proposed within Sixth Oak:

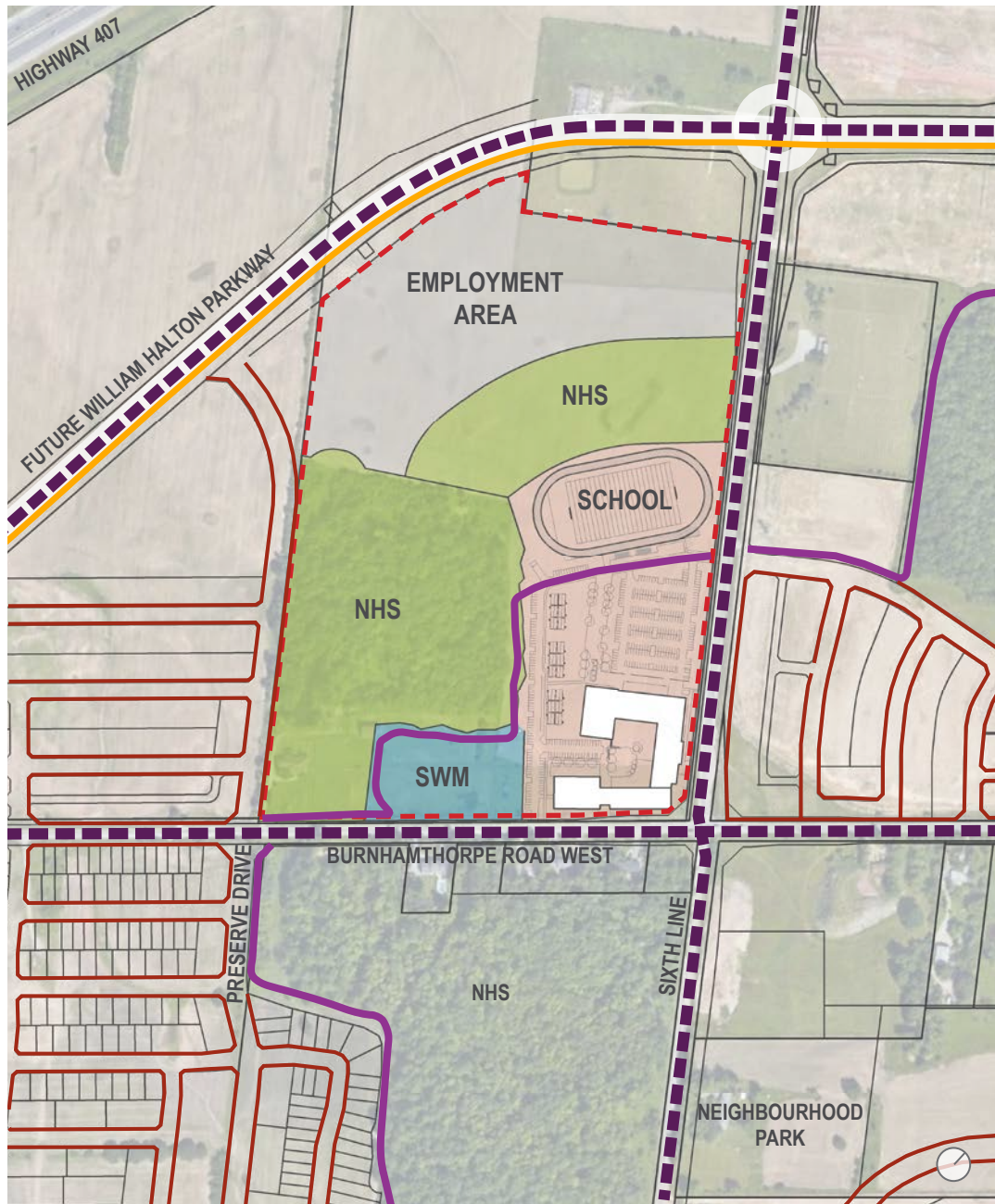
- **Major Trail** - A south-west to north-east trail through the woodland and NHS, connecting with the secondary school and proposed major trail to the north and south.
- **Bicycle Lane** - Providing a north-south connection along Sixth Line and an east-west connection along Burnhamthorpe Road West, connecting with other bike routes and major trails; providing an east-west connection along the future William Halton Parkway.
- **Multi-use Trail** - Located along the future William Halton Parkway, providing an east-west connection to adjacent communities.

The trail design shall comply with the North Oakville East Urban Design and Open Space Guidelines and satisfy the objectives of the North Oakville East Trails Plan. The following guidelines shall apply to the Sixth Oak development:

- The material composition of the trail should be appropriate to the surrounding natural features and anticipate type and frequency of use. It is expected that both asphalt and screenings will be considered.
- Trails may vary in size to allow two-way cycling, based on Town of Oakville standards.
- Trail lighting requirements shall be determined on a site-by-site basis and take into consideration night-time use, disturbance of natural areas, impacts on adjacent land uses, maintenance requirements, etc.
- Pedestrian trails shall be integrated into the NHS corridor buffer design, connecting with adjacent street sidewalks to encompass the pedestrian and cycling network for the community.
- All trails shall be appropriately set back from adjacent lot lines. Where necessary, buffer planting shall be situated between the employment area and the trail to help screen views. Planting placement and species type shall ensure sightlines are maintained to reinforce safe trail use, consistent with CPTED principles.
- The integration of a lookout may be considered at the pond entry off the Burnhamthorpe Road West street frontage in the south-west corner of the pond, which may provide seating and decorative features (decorative paving, information signage, shade structure) at this desirable view opportunity.



Fig. 6.1.3a - A Major Trail integrated with the NHS lands will be connected to the proposed broader trail network



LEGEND

- ON-STREET BIKE LANE
- MAJOR TRAIL / 2.4m SIDEWALK
- MULTI-USE TRAIL
- 1.5m SIDEWALK



Fig. 6.1.3b - Trail network plan depicting proposed trail locations within Six Oak and surrounding neighbourhoods. Plan based on 2008 North Oakville East Trails Plan (subject to change pending approval of a new trails plan)

Fig. 6.1.3c - Strategically situated information signage can inform users of the important functions, regulations, and wayfinding related to the NHS



6.1.4 Views and Vistas

Opportunities to provide strategic views and viewsheds toward the existing NHS woodlot in the south-west and the introduced NHS connections, SWM pond, and school block within Sixth Oak shall be integrated into the proposed block framework. These views and viewshed opportunities are primarily provided through the location of the existing arterial street frontages immediately adjacent to these open space features and facilities, as well as the Major Trail proposed through the NHS features.

If the plans for a sports dome to cover the proposed artificial turf field in the winter months are realized, its location north of the Major Trail and south of the NHS linkage should not negatively impact views from the trail into the significant NHS woodlot feature to the west.

Figure 6.1.4 illustrates these opportunities.

LEGEND

-  VIEWS
-  TRAIL / MAINTENANCE ACCESS

Fig. 6.1.4 - Views and Vistas Plan in Star Oak Development

6.2 School Design Guidelines

The proposed secondary school site is 6.07 ha, located at the intersection of Burnhamthorpe Road West and Sixth Line. The school building frontage is oriented along Sixth Line, with portables interior to the site, along the western edge. A potential childcare centre and future office building is proposed along Burnhamthorpe Road West, connected to the school. As part of the conceptual design, the proposed outdoor amenity features may include an artificial turf field, running track, and winter sports dome, student plaza, tech court, learning courtyard, and a play area associated with the attached childcare / office building, all of which may be subject to change.

6.2.1 School Site Design

The secondary school has been strategically located to provide safe and logical accessibility by pedestrians, cyclists, and motorists, and to achieve maximum visibility from surrounding areas through linkages with the open space system and trail network. The following site design guidelines should be considered:

- The layout and design of the school block should allow for connections to the Major Trail within the NHS, any multi-use pathways within the SWM pond, and adjacent sidewalks.
- The impact of parking and drop-off / pick-up facilities should be minimized from the street edge through siting (at the rear or side of buildings away from the street) and landscape buffer treatment.
- Conflicts between pedestrian and vehicular routes shall be avoided. Adequate setback between building entrances and on-site traffic routes should be provided. Pedestrian routes should be well defined and provide easy, direct, and barrier-free access to school entrances.
- Parking areas, driveways, and walkways shall be adequately illuminated with low level, pedestrian-scaled lighting.
- Paved surfaces on school sites shall be provided in accordance with the applicable School Board requirements for parking and barrier-free play areas.
- Where ground level signage is used it shall be designed as a landscape feature, integrating other components such as planting, lighting, etc.
- Loading, service, and garbage areas shall be integrated into the building design or located away from public view and screened to minimize negative impacts.
- Utility meters, transformers, and HVAC equipment shall be located away from prominent public views.



Fig. 6.2.1 - Sixth Oak Secondary School Site plan



Fig 6.2.2a - The school building should form a strong street edge through minimum building set-backs and direct access to the main entry from adjacent sidewalks



Fig 6.2.2b - The school should incorporate prominent building features into its design, which will help to reinforce its landmark function

6.2.2 School Built Form Design

Schools serve as landmark buildings within the community. The secondary school has been strategically sited at a prominent intersection to anchor it as a community focal point.

- The building should form an edge along Sixth Line, and in the future along Burnhamthorpe Road West, creating a strong built form relationship at the corner through minimum building set-backs and direct access to the main entry from adjacent sidewalks.
- The school shall incorporate a prominent corner feature into its design, which will help to reinforce its landmark function.
- Main entrances shall be directly visible from the street and be given design emphasis.
- Architectural styles, materials, and colours should relate to the character envisioned for the surrounding community. High quality building materials shall be used, including brick or stone as the main wall materials.
- 4-5 storey building massing shall be provided.
- Buildings shall be located to ensure good sight lines for all vehicular access points and to create coherent on-site traffic circulation. Vehicle circulation at the front of the school shall, typically, be limited to drop off zones.
- Lighting for school buildings shall be integrated into the architecture. Lighting shall be directed downward and inward to avoid light spill-over onto adjacent properties.
- Signage shall be incorporated into the building architecture.
- Loading, service and garbage areas shall be integrated into the building design or located away from public view and screened to minimize negative impacts.
- Rooftop mechanical equipment shall be screened from ground level view by incorporating sight screens or integrating into the roof or a parapet.

6.3 Employment Area Design Guidelines

The employment area proposed in the north portion of the Sixth Oak subject site, along the future William Halton Parkway, will allow for a full range of employment uses. In addition, limited retail and service commercial uses may be clustered at the intersection of Sixth Line and William Halton Parkway. Capitalizing on its prime location, the employment district will have easy access to Highway 407 and future public transit along Sixth Line.

The primary goal for the development of the employment lands is to create a consistently high quality built environment through the combination of site planning, building massing, architectural detail, materials, and landscape / streetscape treatments.

6.3.1 Employment Area Site Design

The following site design guidelines should be considered when preparing a site plan for the future employment lands:

- No outdoor storage will be permitted.
- Buildings shall be located to ensure good sight lines for all vehicular access points and to create coherent on-site traffic circulation.
- On-site pedestrian routes shall be well defined and provide easy, direct and barrier-free pedestrian access to main entrances of the building.
- The number of driveway entries from roadways shall be managed to reduce interruptions to pedestrian walkways and increase opportunities for street tree planting and landscaping treatments, while providing sufficient access for efficient site circulation.
- Where large parking areas are proposed, they shall be located to the rear or side of the building's primary frontage or façade. Large parking areas should be broken into smaller human-scale blocks defined by landscaping and walkways.
- A double row of parking and a central drive aisle may be permitted between the front of the building and the street for site circulation and parking purposes.
- Where parking areas are visible from the street, they should be screened through the use of enhanced edge landscaping and/or architectural elements.



Fig 6.3.1a - Employment sites shall be designed to achieve a comfortable and attractive pedestrian-scale environment



Fig 6.3.1b - Large parking areas should be broken into smaller human-scale blocks defined by landscaping



Fig 6.3.1c - Buildings shall be designed and sited to have a positive relationship to the street, with the length of the building façade exposed to the street view



Fig 6.3.1d - Pedestrian walkways, entrances, and parking areas shall be adequately illuminated

- Buildings shall be designed and sited to have a positive relationship to the street, with the primary façade parallel to the roadway and located close to the minimum setback to appropriately address, define, and relate to the adjacent street edge.
- The office component of light industrial buildings shall be located closer to the street than the warehouse functions to maximize opportunities for windows facing the street.
- For sites adjacent to the NHS, the use of a multi-building campus design may be considered with buildings sited and designed to overlook and integrate with these features.
- Loading, service, and garbage areas shall be located away from prominent street views and shall be integrated into the building design or screened with landscaping, walls or fencing to minimize negative impacts of noise, visibility, odors and vibrations on adjacent properties.
- The length of the building façade exposed to the street view shall be optimized. Building frontage shall be proportional to the lot frontage.
- Utility meters, transformers, and HVAC equipment shall be located away from prominent public views.
- Noise attenuation measures shall be provided, as required, where service areas are in proximity to residences. These features should be complementary in material and design to surrounding buildings / structures to reinforce the image of the community.
- Pedestrian walkways, entrances, and parking areas shall be adequately illuminated.
- All lighting shall be directed downward and inward to avoid light spill-over onto adjacent properties.
- All proposed signage shall be of a high design quality and shall at all times be in compliance with the Town's sign by-laws.
- Where freestanding signage is proposed, it should be ground-related with a horizontal form and consist of materials complementary to the building design. Ground-related signage may be designed to incorporate landscaping / planting beds.

6.3.2 Employment Area Built Form Design

The following built form guidelines should be considered when designing future employment area buildings:

- A unique built form identity may be developed for each employment parcel.
- Plain, unarticulated, box-like building designs with large blank walls will not be permitted.
- Glazed areas shall be maximized along street frontages. Windows shall be large, well proportioned and compatible in scale with the building mass and architectural style.
- Primary entrances are encouraged to be the focal point of the building.
- Articulated roof form is encouraged through the use of parapets, cornices, and roof elements.
- High quality, durable building materials shall be used. This may include, but should not be limited to architectural glass, steel panels, polished stone, brick, and textured concrete panels.
- Building façades which are highly visible from the public realm shall provide visual interest through the use of appropriate architectural detailing, wall and roof articulation, fenestration, lighting, and materials to express a distinct visual identity, while harmoniously blending into the neighbourhood fabric.
- Corner buildings shall be sited close to the intersection and address both street frontages in a consistent manner. Access points for corner lot buildings shall be located away from the intersection.
- Buildings shall be designed and sited to minimize the impact of overshadowing, blocked views, and overlook onto adjacent residential properties.
- Rooftop mechanical equipment shall be integrated into the roof design and screened from prominent public view.
- Building signage shall be designed to be characteristic of the architectural identity of each development while respecting the business community's desire for corporate logos.
- Building signage may be internally or externally illuminated. Cut-out letter signage is preferred.



Fig 6.3.2a - Main entrances shall be designed with emphasis, using high-quality exterior cladding materials



Fig 6.3.2b - Signage shall be designed to be characteristic of the architectural identity of the building while respecting the desire for corporate logos

6.4 Sustainability Features

Sustainable development practices balance the health and well-being of the environment and related resources with the pressure of urbanization, bringing forward strategies to better manage increased population densities, resource and energy consumption, and vehicular traffic volumes.

Walkability is one of the cornerstones of sustainable design. Open spaces and amenities within Sixth Oak are located within a comfortable walking distance of surrounding residential communities. In addition, proposed trails linked with the sidewalk network shall offer convenient and enjoyable pedestrian connections.

Sustainability is supported by:

- A publicly accessible NHS, SWM pond, and secondary school, located within comfortable walking distance of surrounding residential communities.
- Proposed trails associated within natural features, as well as street related cycling facilities in Sixth Oak and the surrounding neighbourhoods, linked with the sidewalk network, offering convenient and enjoyable pedestrian and cycling connections.
- The efficient arrangement of employment uses and tenures in proximity to residential areas to minimize travel time, traffic, greenhouse gases, servicing costs, and energy costs.

6.4.1 Low Impact Development Methods

The following sustainable development practices should be considered:

- Provide landscaping that increases the urban canopy, creates comfortable micro-climate conditions, mitigates negative seasonal effects (wind breaks or shade canopy) and contributes to overall biodiversity.
- Where feasible, integrate bio-retention swales as an effective technique for managing stormwater within expansive areas of runoff. These may include swales, vegetated islands, rain gardens, etc.
- Emphasize the sourcing of local materials and manufactured components where possible.
- Consider shading screens, eaves, and overhangs to reduce heat absorption through windows.
- Utilize low-e glass and other energy efficient materials and construction methods.
- Consider introducing advanced technologies and practices into the building process where possible.
- Utilize recycled materials where possible, reducing the demand for new materials and increasing the market for recycling.
- Connect and integrate pedestrian trails with the sidewalks in the surrounding community.



Fig 6.4 - Where feasible, integrate bio-retention swales as an effective technique for managing stormwater within parking lots

7.0 IMPLEMENTATION

The UDB has addressed pertinent urban design issues as applied to Sixth Oak's overall goals and objectives, land uses, structuring elements, open spaces, built form, sustainability, and low-impact development strategies. The intended result is the development of a community that is reflective of the fundamental key design tenets of the broader North Oakville planning area.

The Sixth Oak UDB complements the approved North Oakville Urban Design and Open Space Guidelines (November 2009). The UDB strives to consider aspects of built form and open space design that are specific to the subject lands within the overall framework of the North Oakville communities. However, to garner a complete and comprehensive understanding of all urban design aspects, the reader should reference all North Oakville studies.

All lands in the North Oakville East Secondary Plan Area shall be designated as a site plan control area. However, the site plan control by-law shall establish circumstances where development is to be exempt, including low density development and freehold townhouses, which are subject to the subdivision approval process or site alteration permit process. Since the Sixth Oak development site proposes only non-residential uses, including NHS, SWM pond, secondary school, and employment area uses, detailed site plans will be required by the Town of Oakville. Site plans will be reviewed in relation to the North Oakville Urban Design and Open Space Guidelines and the Livable by Design Manual.



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