

Durham College & University of Ontario Institute of Technology

# CAMPUS MASTER PLAN



DRAFT  
March 24, 2015

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# INTRODUCTION







## 1.0 INTRODUCTION

The Campus Master Plan (CMP) for Durham College (DC, the college) and the University of Ontario Institute of Technology (UOIT, the university) is a visionary, forward thinking document that provides the framework, strategy and collection of tools needed to guide campus development in keeping with space requirements. More specifically, the CMP is a coordinated development solution that will guide the character, scale, facilities and layout of the shared Oshawa campus and will address future academic, research, student life, athletic and community partnership needs. Most importantly, the CMP is realistic and

implementation focused. It describes the steps that need to be undertaken to translate the joint vision into a vibrant institutional precinct that is appropriately integrated within the Region of Durham and the City of Oshawa.

The CMP development process involved two phases:

- **Phase 1:** Vision and Directions Report | The Vision and Directions Report is a summary of contextual analysis, site observations, focused consultation and a creative preliminary campus design process. This Report describes a

Framework, through a series of Master Plan principles, recommendations and graphic depiction of a layout for the shared Oshawa campus. Phase 1 was initiated in August 2013 and was completed in late June 2014.

- **Phase 2:** Joint CMP | The CMP includes a detailed concept plan, a phasing strategy and an implementation strategy. Phase 2 commenced in July 2014 and concluded in June 2015 with adoption of the Plan by both Institutions.

### WHAT IS A MASTER PLAN?

A Master Plan is a guiding document that provides an illustration and associated objectives and guidelines in text format to direct how future growth will occur within a specific area. A Master Plan is a visionary document that provides the framework to direct future decision-making with respect to built form, open space, and infrastructure of all kinds. A Master Plan must be detailed enough to ensure that the Plan's vision and objectives can be achieved over time; while also allowing for flexibility and adaptability as circumstances, technologies, and demands change and evolve.



## 1.1 Campus Master Plan Scope and Format

The CMP will guide the future land use and infrastructure development for the shared Oshawa campus, with particular focus on enrolment growth and associated space needs to 2030. The shared Oshawa campus includes undeveloped institutional lands, the institutional lands north of Conlin Road, and west of Simcoe Street North. For the purposes of this report, those lands will be referred to as the “Windfields Farm lands north of Conlin Road.”

UOIT and DC have campuses and locations in other parts of Durham Region, including the DC Whitby campus and the UOIT downtown Oshawa location. The focus of this CMP document is the shared Oshawa campus, and associated Windfields Farm lands north of Conlin Road.

The CMP vision, principles and guidelines have been established and confirmed in consultation with DC and UOIT. As such, any future development and expansion at other campuses or locations should reference the relevant guidelines in the approach to their campus design and development. Physical and visual connections to the university’s downtown location, and DC’s other campuses will be addressed through the guidelines on wayfinding and signage that are outlined in Section 5.6.

The geographical scope of the CMP is illustrated in Figure 1.1.



FIGURE 1.1 – Shared Oshawa Campus and Scope of the CMP

The vision for the CMP and associated principles provide the framework and key directions for the future campus. Policies and guidelines that implement the Vision, support the principles and result in holistic place-making are established. Most importantly, the CMP provides DC and UOIT with the tools, processes, and guidelines to direct campus development to 2030.

The following sub-sections will address the CMP principles, including:

- **Section 2:** Vision, Principles and Context
- **Section 3:** Sustainability and Universal Accessibility
- **Section 4:** Campus Character
- **Section 5:** Movement and Circulation
- **Section 6:** Public Realm and Open Space
- **Section 7:** Infrastructure and Utilities; and
- **Section 8:** Implementation

The CMP takes a holistic approach to placemaking by providing design guidelines in the areas of Campus Character, Movement and Circulation and Public Realm and Open Space (Figure 1.2).



**FIGURE 1.2 – Approach to Holistic Placemaking in the Campus Master Plan**







# VISION, PRINCIPLES & CONTEXT

# 2

## 2.0 VISION, PRINCIPLES & CONTEXT

### 2.1 Vision and Principles

The CMP Vision was established during Phase 1 and outlines the future aspirations for the campus:










#### CMP Vision

The joint CMP for Durham College and the University of Ontario Institute of Technology addresses land use and infrastructure development with a realistic, solutions-oriented implementation plan. The CMP acknowledges space needs across all institutional categories and the desire for a vibrant, integrated and sustainable campus community. The CMP concept promotes a compact, walkable, mixed-use and green campus that offers opportunities for appropriate collaboration with the community, business partners, and all levels of government.

The CMP includes guidelines and recommendations that are aligned with and will implement the Vision and ensure that the campus is a vibrant space for faculty, students and the community, into the future. The Vision is further supported by seventeen (17) Master Plan principles. The principles were established in consultation with the CMP Core Team, Senior Management Team, Board of Governors, students, faculty, staff, the community and external agencies and partners.

### The CMP Principles

1	 <b>Student Focused Institutions</b>	The CMP will address the needs of students, and enhance the student's experience of the campus environment as an integral part of their life while enrolled in the College and/or the University.
2	 <b>Research, Experiential Learning &amp; Scholarship</b>	The CMP will take full account of the distinctive infrastructure needs to support research, experiential learning and scholarship and the application thereof.
3	 <b>Contemporary Planning</b>	Campus design, built form, student services, pedestrian connectivity and parking cannot continue to be planned and developed as they are currently. A contemporary approach to campus planning and design that shifts the current paradigm is required. The paradigm shift will enhance the existing campus and develop the future campus spaces in a way that encourages walkability, the creation of vibrant streetscapes, establishes strong connections, and responds to the needs of students and faculty.
4	 <b>Vision Based in Practicality</b>	The CMP will create an implementable and practical vision for the campuses. Phasing will address the immediate facility needs while being flexible to respond to the evolving nature of the academic environment and funding opportunities.
5	 <b>Walkability</b>	The CMP will prioritize pedestrians and create strong links both through and surrounding the campus. Especially important are the links across Simcoe Street North and Conlin Road for future campus expansion into the Windfields Farm north of Conlin Road and to enhance integration between the campus and the broader community.
6	 <b>Transportation and Transit</b>	Pedestrians and cyclists as well as public transit will be given priority in terms of long term planning and facilities. The provision of public transit to and from campus will improve over time, and will, in turn, reduce reliance on personal vehicles. The CMP will be positioned to leverage future transit investment.
7	 <b>Green Connections</b>	The surrounding natural landscape should be considered as a key feature of the CMP. Buildings and pedestrian walkways will address and interact with natural spaces and provide walking and cycling connections to the broader community.
8	 <b>Interactions and Long Term Connections</b>	The CMP will promote interaction and integration with the surrounding community and land uses. New campus facilities should include spaces that can be used by a broad range of people within and outside of the academic community.

9	 <b>Identity</b>	The CMP will strengthen the physical relationship between DC and UOIT whilst providing a means for both institutions to reinforce their own identities. The shared Oshawa campus will be defined as a place that is unique and distinguishable from the surrounding areas, but that is integrated with and inviting to the broader community.
10	 <b>Use Land Efficiently</b>	The CMP development concept will be structured to meet the future academic, faculty, athletic and student space needs of the institutions while providing the tools and framework to be adaptable to leverage funding opportunities as well as development opportunities with the private sector.
11	 <b>Partnerships</b>	The CMP will provide guidance to the institutions on how they should position themselves, in terms of organization and design, to take advantage of partnership opportunities (government and non-government).
12	 <b>Enrolment Growth &amp; Diverse Student Needs</b>	The CMP will accommodate the future academic space needs for both the University of Ontario Institute of Technology and Durham College. The CMP will acknowledge the demographic profile and needs of the student population as being unique from other colleges and universities and will address residence, housing, activity, social and cultural needs.
13	 <b>Sustainability</b>	The CMP will incorporate sustainability principles that are measurable, holistic and applicable at different scales (building to neighbourhood). Where possible, sustainability features will form key areas of interest within the campus, such as the existing stormwater ponds and green roofs.
14	 <b>Innovation &amp; Technology</b>	The CMP will accommodate spaces for innovative start-ups, technology and manufacturing. The innovation and technology park space will provide spaces that can be used by both institutions and that can be integrated with academic spaces.
15	 <b>Decision Making Processes</b>	The CMP will articulate and directly inform a decision-making process with respect to physical form, space utilization and partnership with moving forward for both institutions, ensuring the continued success and growth of both.
16	 <b>Cultural Heritage &amp; Diversity</b>	The campus has a rich history and a bright future as well as a diverse student population which should be reflected in the CMP. The legacy of E.P Taylor, Windfields Farm and the horse racing history associated with the lands north of Conlin Road, as well as the Aboriginal heritage, should be expressed in the CMP in an innovative and relevant way.
17	 <b>A Plan that Works for the Short, Medium &amp; Long term</b>	The CMP will be adaptable over the short, medium and long term, as opportunities arise.

The Master Plan Principles were used to frame the key directions outlined in the Vision and Directions Report, including the development of a Campus Framework Plan and recommendations. The Framework Plan conceptually illustrates the key principles and ideas that have been carried over into the Concept Plan (see Figure 2.1). The recommendations contained within the Vision and Directions Report are addressed in the CMP either as elements of the Concept Plan, guidelines for how the campus should develop in the future, and/or as key actions in the implementation section.

In October 2014, a public open house and workshop was held where the principles of “Student Focused Institutions”, “Plan that works for Short, Medium and Long Term”, “Walkability”, “Transportation and Transit” were identified as being priorities in the CMP. As such, these principles have been incorporated into the CMP guidelines.

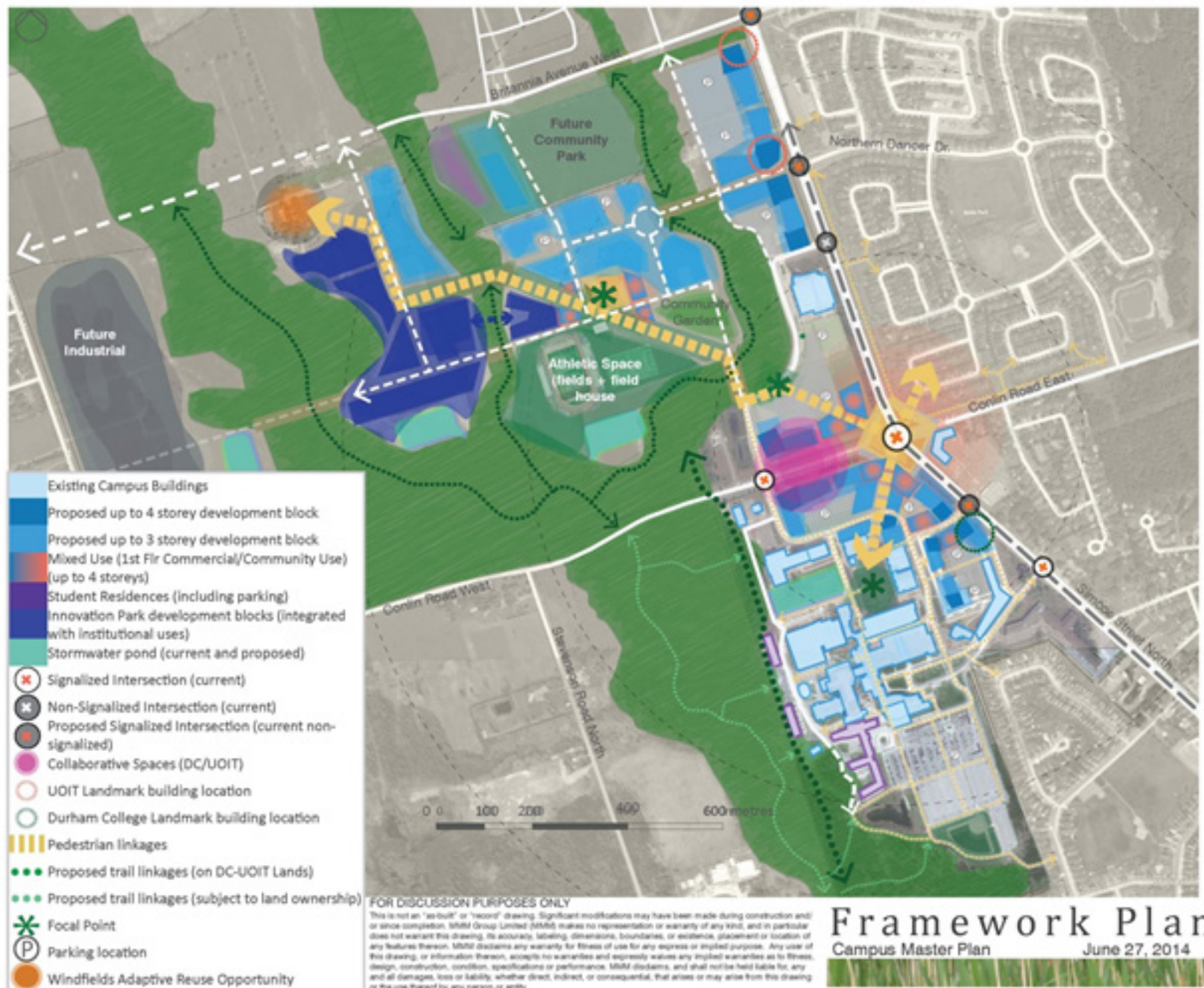


Figure 2.1 - Campus Framework Plan (Phase 1)

The Framework Plan (Figure 2.1) illustrates the following key designs concepts:

- A pedestrian focused diagonal link from Simcoe Street North and Conlin Road towards the existing campus, south of Conlin Road and to new campus expansion area, north of Conlin Road. This creates a strong visual and physical connection to Windfields Farm lands north of Conlin Road and to Polonsky Commons and the existing campus buildings south of Conlin.
- Simcoe Street North and Conlin Road intersection will be the shared focal point and gateway to the shared Oshawa campus.
- Additional academic, residence and student service spaces will be provided along the Simcoe Street North frontage, as well as within a new campus focal point on the Windfields Farm lands.
- Introduction of new roads that will provide access to the central portion of the Windfields Farm lands.
- Additional commercial uses to be integrated throughout the existing Campus.

- The Windfields Farm lands north of Conlin Road quad focuses around a central open space. Uses in this area will primarily be institutional, however student residences (for undergraduate and graduate students), and commercial uses will be provided at key locations.
- Innovation space to complement and link together with the innovation park may also be located in this central area.
- Shared institutional and commercial uses will serve the institutions and broader community. These should be located on the north and south sides of Conlin Road at Simcoe Street North and within the campus expansion area north of Conlin Road.
- Views and pedestrian connections will be maintained into Windfields Farm lands north of Conlin Road and the south of Conlin Road.
- Open space will accommodate city park land as well as active recreation space.
- Student residences will face onto the open space and natural environment.
- Parking areas will be provided for new buildings.

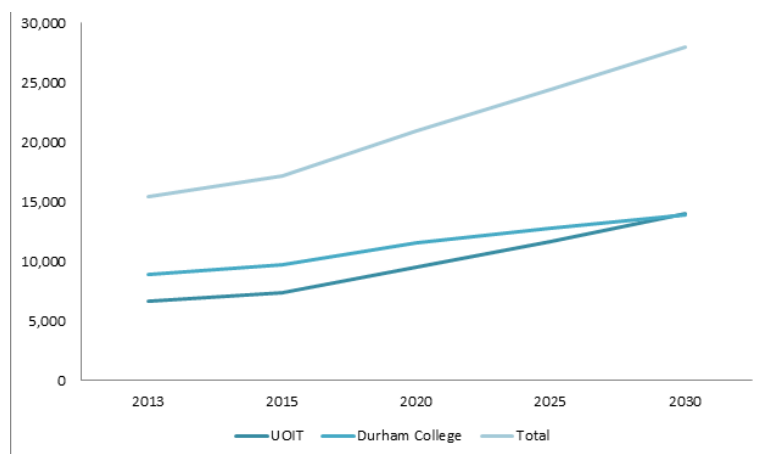
- Bus stops will be located along Simcoe Street North for the proposed Bus Rapid Transit (BRT) and other public transit improvements. The stops should be located in close proximity to campus buildings. A second transit hub will be determined in the CMP.
- Additional athletic facilities (e.g., athletic fields and field house) will be provided within the Windfields Lands north of Conlin Road. As the campus develops, the soccer field currently located at the north-west corner of Simcoe Street and Conlin Road will be relocated.

The key features of the Framework Plan directly relate to the Master Plan principles, and have been carried forward in the creation of a Master Plan Concept for the DC and UOIT shared Oshawa campus.

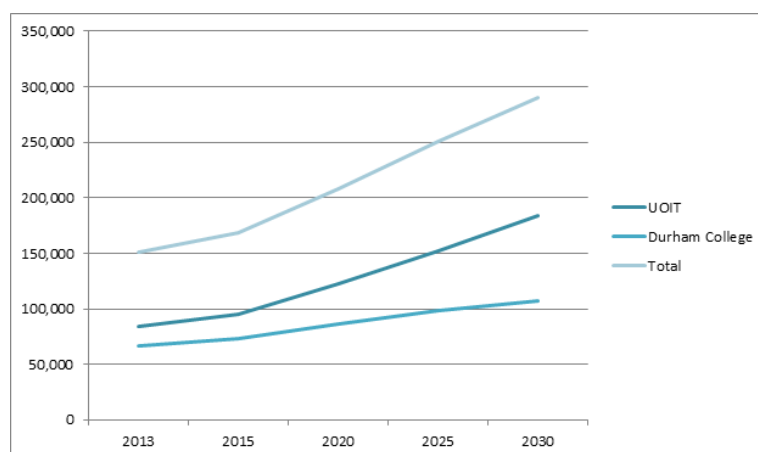


## 2.2 Enrolment and Space Projections

Over the next 15 to 20 years, the student enrolment at all DC and UOIT campuses is expected to grow by over 16,700 full time equivalents (FTE). This enrolment growth will increase by approximately 12,500 FTE students from what currently exists. The majority of the growth will occur on the shared Oshawa campus. Figure 2.2 illustrates the projected enrolment growth at the shared Oshawa campus over the next 15-20 years.



**Figure 2.2 - Full Time Equivalent Student Enrolment Growth at the Shared Oshawa Campus**



**Figure 2.3 - Projected Space Needs at the Shared Oshawa Campus**

One of the key objectives of the CMP is to determine where and how to accommodate the expected growth. As part of the first phase of the CMP project, high-level space projections were undertaken by Educational Consulting Services (ECS). The full report is included as an Appendix to the Visions and Directions Report. The analysis identified an existing space shortfall at the shared Oshawa campus of over 36,000 gross square metres (GSM) in 2013.

The 2013 space shortfall on the shared Oshawa campus was over 36,000 GSM. Over the next 15 to 20 years, almost 140,000 GSM will be required to meet projected enrollment; bringing the total required space to approximately 176,000 GSM. Academic space projections include the future needs in terms of classrooms, lecture halls, laboratories, learner support, academic operations, administration, and campus services.

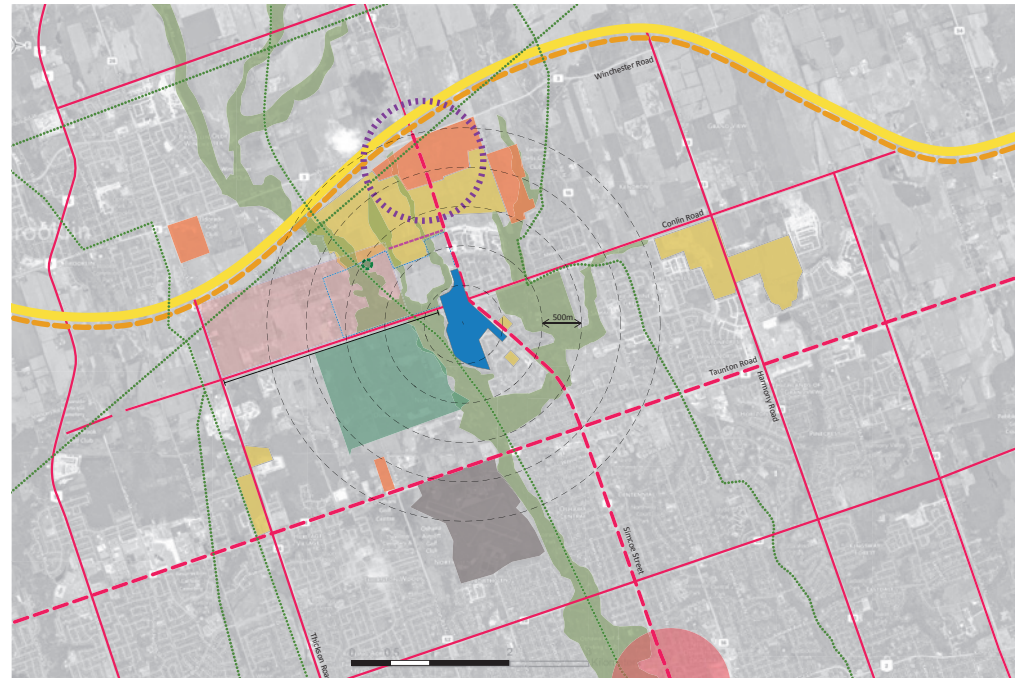
### 2.3 World In Motion

The Visions and Directions Report included an analysis of the planning and development context surrounding the shared Oshawa campus (Figure 2.4). This “World in Motion” analysis reviewed existing and new policy as well as on-going development applications to illustrate the evolution that is currently taking place on the lands surrounding the shared Oshawa campus.

What was once agricultural land and open space is now being transformed into residential communities and commercial amenities. Further, the Province of Ontario’s Big Move plan (2008) identifies the Simcoe Street North corridor as a future rapid transit corridor. Implementation of a rapid transit corridor along Simcoe Street would significantly change the character and transportation movement along Simcoe Street, and would provide additional transit access for the shared Oshawa campus.

The Highway 407 eastern extension is currently under construction north of the shared Oshawa campus. A full interchange is being constructed at Simcoe Street, approximately 2.5 km north of the campus and will be completed in late 2015. This significant infrastructure investment will also have implications on the campus and the future character along Simcoe Street. The shared Oshawa campus is well positioned well to take advantage of the evolving context and leverage the infrastructure investments associated with it.

Given the projected student enrolment at the shared Oshawa campus, there is a significant opportunity to define a campus precinct in north Oshawa that acts as a gateway to the City of Oshawa, as articulated through this CMP.



**Figure 2.4 - World In Motion – Shared Oshawa Campus**



## 2.4 Concept Plan

Through discussions with the Core Team, the Board of Governors, Presidents, Senior Management Teams, key stakeholders, the City, the Region, students, faculty, and staff, the Framework Plan was further refined to establish the Concept Plan for the CMP. The Concept Plan illustrates the key features from the Framework Plan while also providing additional detail.

The Concept Plan for the shared Oshawa campus illustrates a complete campus community beyond 2030. The Concept Plan introduces new academic spaces and increases opportunity for the development of community, service and retail spaces that will serve both the campus population, as well as the surrounding neighbourhood. The Concept Plan identifies and characterizes the new campus road network that connects the new development areas with the existing campus, and with the residential development occurring north of Britannia Avenue West. The Concept Plan sets the framework for a compact and walkable campus that will accommodate future growth and expansion and provide opportunities for greater integration with the surrounding community, local industries and strategic partners.



## LEGEND














- |   |                            |   |                             |
|---|----------------------------|---|-----------------------------|
|  | MIXED-USE BUILDINGS        |  | GREEN LINK                  |
|  | INSTITUTIONAL BUILDINGS    |  | COMMUNITY FARM              |
|  | RESIDENTIAL BUILDINGS      |  | GREEN SPACES                |
|  | INNOVATION PARK BUILDINGS  |  | ATHLETIC FIELDS             |
|  | EXISTING BUILDINGS         |  | STORMWATER MANAGEMENT PONDS |
|  | INDUSTRIAL LAND            |  | PROPOSED PARKING LOT        |
|  | AGRICULTURAL RESEARCH AREA |  | EXISTING PARKING LOT        |
|  | TRANSIT HUB                |   |                             |
|  | CITY PARK                  |   |                             |

Figure 2.5 - Campus Master Plan Concept (as approved November 18, 2014)





# **SUSTAINABILITY & UNIVERSAL ACCESSIBILITY**

# 3



### 3.1 Sustainability and Campus Planning

DC and the UOIT have made commitments to sustainability by promoting and implementing practices and approaches to development that are environmentally, socially and economically sustainable.

In July 2014, DC created a Conservation and Demand Management Plan which is intended to build upon DC's sustainability platform by detailing the current energy performance and greenhouse gas (GHG) impact of DC, while also setting goals to improve site energy efficiency and reduce GHG emissions over the next five years (to 2019). DC has already made significant progress in energy consumption reduction. As well, the Conservation and Management Plan identifies additional tools and programs aimed to further reduce the Colleges' ecological footprint.

UOIT has made a commitment to "demonstrate stewardship of the natural and built environment in a manner that is socially, environmentally and economically responsible while strengthening sustainability practices on campus and in the community through active student and staff participation." In October 2014, the UOIT Board of Governors approved a Sustainability Policy for the university. UOIT's sustainability policy will:

- "Foster a culture of sustainability throughout our campus and broader community by playing a positive and proactive role in sustainability leadership; and
- Ensure that our commitment to

sustainability is reflected in our organizational behaviours and policies through the application of effective, long-lasting solutions which integrate the ecological, social and economic facets of sustainability."

Both UOIT and DC have included in their respective sustainability commitments that they will continue to leverage and support the unique partnership and synergies associated with the broad-reaching and successful sustainability initiatives undertaken by each institution. The CMP supports the sustainability commitments made by each institution and provides additional guidance focused around campus and building expansion and leveraging their green spaces and environment.

The Vision and Directions Report included six recommendations relating to sustainability, as well as key considerations for the CMP. These have been incorporated in the guidance below. In addition, sustainable campus planning and guidance is integrated into many of the campus planning guidelines in the related CMP sections. The following sustainability guidelines must be considered:

- 3.1.1** Continue to leverage the natural synergies that are created through the shared campus, including the use of shared resources, such as parking, food services, learning spaces, and the implementation of sustainability policies and commitments as approved by both institutions.

- 3.1.2** Establish a shared commitment that all new buildings will be developed in an ecological, economical, and socially sustainable manner. Establish a shared and consistent set a green building criteria which will be used by both institutions to determine the appropriate sustainable technologies and practices for each new building. The green building criteria may be developed based on the evaluation criteria found in Leadership in Energy and Environmental Design (LEED®) or BREEAM, for example.

- 3.1.3** Commit to creating sustainable landscapes on campus through sustainable land development and management practices. Foster resiliency in the campus landscape by encouraging thoughtful planning and design that informs long-term monitoring and adaptive management of the landscape. Establish a shared and consistent set of low impact development (LID) criteria that will be implemented by both institutions to determine appropriate approaches for each new landscape. The "Sustainable Sites Initiative™" may serve as the basis for the establishment of such criteria. LID approaches were incorporated into the Master Environmental Servicing Plan for the Windfields Planning Area and are also relevant to this site, including:

- Grade the areas adjacent to natural features to direct runoff toward these features. This could include incorporating shallow infiltration swales (with clear stone) along the edges of the natural areas.
- Construction of the creek crossings should be scheduled if possible during late summer to take advantage of the typically lower groundwater elevations.
- Place additional topsoil across development lands to provide for water storage, including in boulevards. Potentially deeper topsoil could be placed within open spaces areas and playing fields. The upper portions of underlying soil should be tilled or scarified prior to placing the topsoil.
- Grade as much of the stormwater management ponds as possible directly to the creeks rather than back to the pond.

**3.1.4** Stormwater management on site should first consider low impact development alternatives such as soakaways, trenches and chambers, bioretention, vegetated filter strips, permeable pavements, enhanced grass swales and perforated pipe systems to encourage infiltration or storage and reuse of rainwater wherever possible. In addition, the

following should be studied:

- In individual building design, stormwater may be captured in a cistern and reused for building sanitary conveyance and/or landscape irrigation.
- Reduce the amount of impervious surfaces by using alternative paving materials such as open pavers and open rubber mats.
- Where impervious or hardscape areas are implemented, such as parking lots, integrate bioswales and vegetation throughout and border the area with soft/permeable surfaces to allow stormwater to be slowed and infiltrated.
- Green roofing systems may be implemented to reduce the amount of roof runoff during a storm by absorbing the rainwater, and reducing both the rate and quantity of its discharge.
- Stormwater management ponds, where needed, should be designed as an open space feature, and integrated with the surrounding green spaces.

**3.1.5** When designing open spaces, passive recreation and outdoor pedestrian connections, provide a mix of both soft and hardscaped materials. Soft landscaping should be comprised of drought tolerant plants that are either

native and/or adaptive to promote biodiversity. Where hardscaping is required, minimize the potential heat island effect by either using materials that reflect the sun's heat or through shading. Consider incorporating the following:

- Vegetation that promotes the regional identity of the landscape of the campus and enhances a sense of place. Native and appropriate non-native plants adapted to site conditions, local climate, and the design intent support biodiversity, and improve opportunities for the successful establishment of plant communities. Use only non-invasive plants that are nursery grown, locally and legally harvested, or salvaged for reuse on campus.
- Siting vegetation or vegetated structures in strategic locations around buildings will reduce energy consumption and associated costs. The urban heat island effect may be reduced by planting trees, installing green roofs, or vegetated structures such as pergolas or trellises to shade hardscape areas such as patios, walkways, rooftops, or parking lots.

**3.1.6** Continue to promote and encourage the use of alternative modes of transportation to the personal vehicle through transit pass programs, provision of covered and adequate bicycle parking, and discussions with Durham Regional Transit and GO Transit on the increased provision of transit service along key routes.

**3.1.7** New buildings should be designed and constructed to ensure that they are flexible and adaptable to changing learning formats and styles over time. Further, non-academic uses, particularly on the ground floors of buildings should be designed to be adaptable to changing uses or needs as the campus grows. This will result in fewer materials going to the landfill from building construction and renovation.

**3.1.8** Materials used in the construction of new buildings on campus can have significant impact on the environment, resulting from the initial natural resource depletion and the ecological impacts of their eventual disposal. The source and lifespan of building materials should be considered at the outset of the new building design process to ensure that they have minimal environmental effects and are longer lasting. This will result in an overall reduction in the demand for raw materials over time and the amount of waste generated

when compared with buildings / materials that have a shorter life-span.

## **3.2 Universal Accessibility**

UOIT and DC are committed to providing for students, staff and faculty with disabilities. The Accessibility for Ontarians with Disabilities Act (AODA) was enacted in 2005 and contains specific standards that are broken down into five categories. Accessibility standards relating to the built environment were developed and focus on removing barriers to buildings and to the public realm. On December 27, 2013, Ontario Regulation 368/13 was filed to amend the new 2012 Building Code, O.Reg. 332/12. The effective date of the amendment is January 1, 2015. Accessibility Standards for the Design of Public Spaces only apply to new construction and major changes to existing features. As such, the following guidelines apply:

**3.2.1** New buildings will be required to achieve the standards set out in the OBC as they relate to the AODA requirements.

**3.2.2** New campus open spaces, trails and pedestrian connections should be designed to be consistent with the Policy Guidelines for the Design of Public Spaces, April 2014.









# CAMPUS CHARACTER

# 4

The CMP sets the framework for the transition towards a compact, well-connected and walkable campus that has a cohesive appearance and approach to the built form and the treatment of the public realm. This will be achieved through the shift over time from an auto-oriented built form, to one that is oriented towards transit, active transportation, pedestrian connectively and walkability.

The CMP sets the overall vision and associated guidelines for the future campus, and provides more detailed, areas specific guidelines associated with seven campus Character Areas (refer to Figure 4.5):

- 1 Campus Corners
- 2 Durham
- 3 Gateway
- 4 Quad
- 5 Innovation
- 6 Windfields
- 7 Thornton

The campus Character Areas are visually and physically connected to one another, while also each having distinct and distinguishable features and characteristics. This will ensure legibility within and between the spaces.

Each Character Area is well connected to neighbouring Character Areas and the broader campus through a series of pedestrian and vehicular connections, as well as through a consistent approach to streetscape and wayfinding.

The CMP illustrates a multi-modal, pedestrian oriented, and integrated urban focal point at the Simcoe Street North and Conlin Road intersection.

The Concept Plan and supporting guidelines emphasize the importance of this intersection as a gateway to the campus and to the City of Oshawa from the developing northern area. The Concept Plan illustrates buildings which front both Simcoe Street North and Conlin Road and that frame the intersection. Identified as the Campus Corners Character Area, this area will promote a mix of uses at grade and increased interaction between the institutions and the broader community. Strong pedestrian transects radiate from the Simcoe Street and Conlin Road intersections into the shared Oshawa campus, north and south of Conlin Road.

The shared Oshawa campus character is outlined in the next section, followed by more specific built form guidelines which relate to each of the seven campus Character Areas.

#### 4.1 Campus Character

Campus character is established through a combination of built form, architecture, land uses, landscaping, open spaces, pedestrian connections, and movement. New development on the shared Oshawa campus presents an opportunity to reinforce and enhance the campus character, in terms of the interior spaces that it will create, its relationship to existing buildings and the interaction with the surrounding outdoor spaces.

The continuity and movement between buildings and spaces on campus and a consistent approach to how buildings address streets and open spaces will ensure that the campus is a recognizable place that differs from the surrounding communities and is identifiable as a Campus Character Area. Buildings play an important role in the creation of walkable streets by providing a street edge that reinforces and supports pedestrian circulation and frames the public realm.

The interaction of a building's indoor spaces and the surrounding public outdoor spaces, through the provision of pedestrian entrances, transparent glazing at grade, active ground floor uses and breaking down of blank wall facades, will help to establish a more interactive and inviting atmosphere for pedestrians. The guidelines associated with Campus Character are designed to be read in conjunction with the Public Realm and Open Space guidelines to ensure that the objectives of both are balanced and implemented.

The following guidelines apply to new development:

##### Land Use and Building Siting:

- 4.1.1 Buildings should provide academic, student services, administrative and campus services to meet future student and programmatic requirements, as well as provide spaces for student and campus life

Buildings should incorporate active







**Figure 4.2 - Ground Floor Mixed Use**

**4.1.3** Buildings should be oriented to address the adjacent street frontages and provide main building entrances which front onto these streets, such as Conlin Road, Simcoe Street North, Founders Drive and primary and local campus streets. Building orientation will be further addressed in the street hierarchy in Section 5.0.

**4.1.4** Buildings should be built to the property lines, particularly abutting Simcoe Street North and Conlin Road and should only be set back to allow for additional pedestrian areas, for active ground floor uses (such as an outdoor café or restaurant), or for widened pedestrian boulevards, in key locations.

**4.1.5** Key views should be considered during building siting and development. Buildings that terminate key views should have a higher architectural quality. Key views are identified in Figure 4.3.

**4.1.6** Buildings should be designed to orient principal entrances to public spaces or streets and ensure that the principal entrance is clearly identifiable through architectural detailing (e.g. canopies, wall articulation, material changes, etc.). Secondary entrances should be provided on all other sides of the building or as functionally required.

**4.1.7** Buildings should not turn their backs on the open spaces and natural features on the shared Oshawa campus. Building designs should integrate with the landscape and natural setting through the placement of windows, doorways, and passive outdoor amenity spaces. Further, architectural detailing should be introduced to minimize the presence and dominance of blank wall faces.

**4.1.8** Student accommodation will be essential to establish a vibrant campus community and to support the mix of uses proposed at key locations on campus. Student

accommodation should be provided on the shared Oshawa campus and be placed within close walking distance to academic buildings and student service and social spaces. Student accommodation should include a mix of both traditional dormitory residences, as well as apartment-style residences that could accommodate mature students, visiting faculty or staff and international students. Student accommodation and living spaces may be integrated within some of the academic buildings, if deemed appropriate.

- 4.1.9** Athletic and recreation facilities should be provided on the shared Oshawa campus and incorporate requirements for built form, noted above.
- 4.1.10** Infill or adaptive reuse should establish a consistent street wall and seek to create enclosure along the streetscape.

## Building Height and Massing:

- 4.1.11** A range of building heights should be provided throughout the campus. Generally buildings should not exceed four (4) storeys, or approximately 16.0m, in height, excluding rooftop mechanical rooms. Taller buildings are encouraged to be located at Primary or Secondary Gateways and /or landmark locations as shown on Figure 4.3.
- 4.1.12** At Primary or Secondary Gateways and/or landmark locations on campus, building heights in addition to four (4) storeys (16.0 m) in height should be explored, as identified in Figure 4.3. Discussions with the Oshawa Municipal Airport will need to occur to determine whether additional permitted heights are feasible.
- 4.1.13** Primary and Secondary campus gateways and landmarks are identified on Figure 4.3. Buildings located at Primary and Secondary Gateways and landmarks should incorporate enhanced architectural features or building articulation to mark the gateway. Public art and/or landscape features may also be provided, where appropriate at these locations.



Figure 4.3 - Views and Gateways

- 4.1.14** Buildings over three (3) storeys, or approximately 12.0m in height, should include a step-back at the third storey. This will ensure that the pedestrian scale is maintained throughout campus and that adequate sunlight can penetrate the public realm. The minimum step-back should be between 3.0m and 5.0m.
- 4.1.15** Avoid buildings that are greater than 60.0m in length without a significant vertical break, including a change in building material, wall plane, pedestrian connection/pathway or other significant architectural feature.
- 4.1.16** Avoid significant stretches of blank wall façade on a building. Use entrances, windows, architectural detailing and articulation to break up blank wall facades.



## High Quality and Pedestrian Oriented Design:

- 4.1.17** Enhanced architectural design should be incorporated in new buildings, particularly those located at gateways or landmarks. Encourage variation in architectural styles, materials, colours, and articulation to create distinguishable and identifiable buildings and spaces.
- 4.1.18** Design sites to promote and facilitate human activity and social interaction. Encourage courtyards, forecourts, plazas, patios and other amenity spaces to enliven the public or semi-public realm and to allow convenient access between public and private spaces.
- 4.1.19** Promote walkability through a compact development form (Figure 4.4) with interconnected pedestrian routes, and through the creation of active, pedestrian-oriented, safe and attractive street frontages.
- 4.1.20** Buildings located along envisioned active pedestrian or transit streets within the campus should provide weather protection architectural features or design (continuous canopy, collonades, etc.), wherever possible.

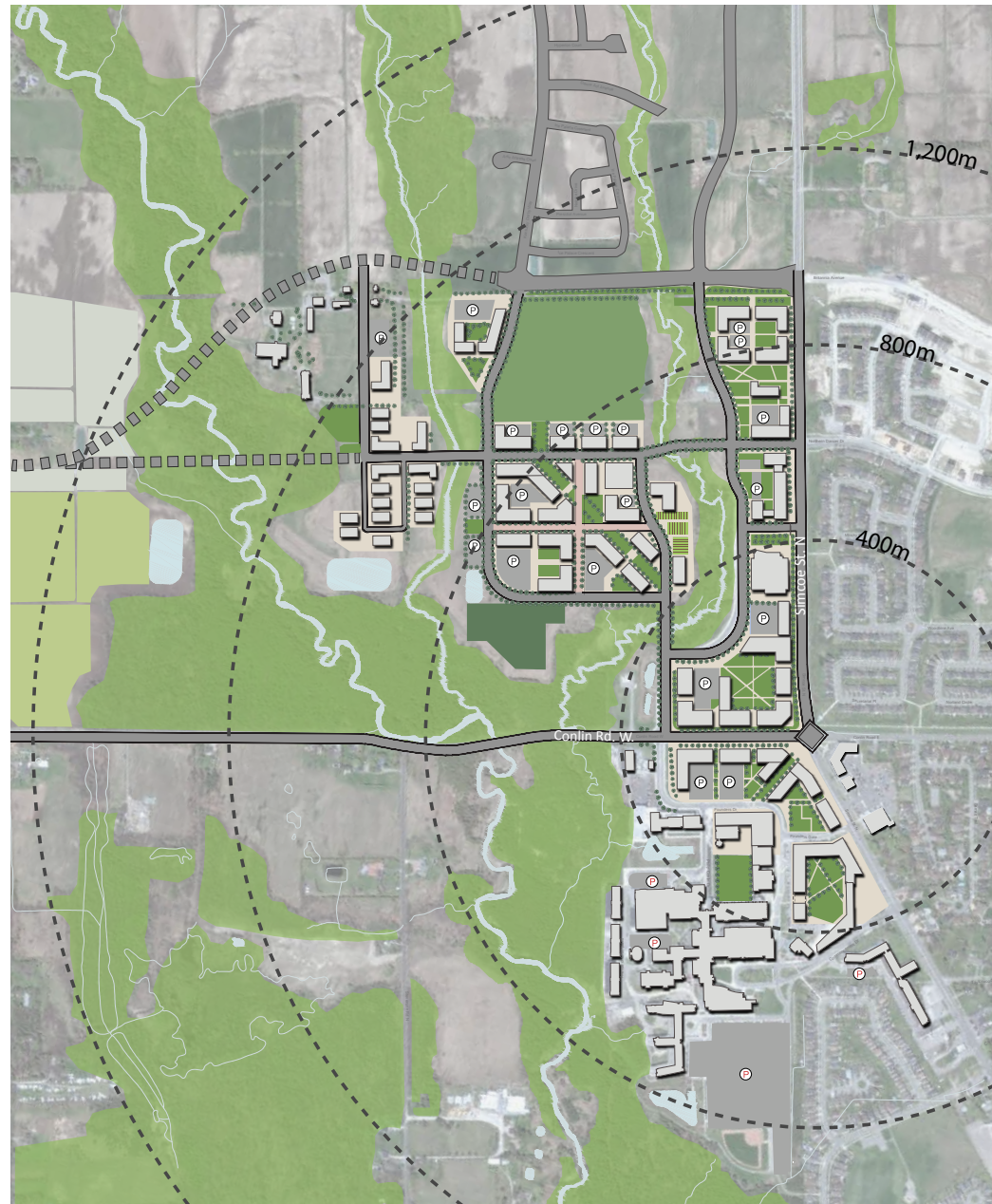


Figure 4.4 - Compact Development - 400m Increments (5 minute walk)



- 4.1.20 Ensure resiliency and adaptability in architectural design through the creation of adaptive spaces that can evolve and change over time as teaching methods and needs evolve.
- 4.1.21 Development on campus should respect the traditional aboriginal lands, and areas used for ceremonial purposes.
- 4.1.22 All rooftop mechanical units and penthouses should be screened from view by being integrated into building design and/or enclosed with materials consistent or complementary to building cladding and cladding colours.
- 4.1.23 Building loading, servicing, servicing elements and utilities should be incorporated into the design of the building to mitigate visual and physical impact on the streetscape. Where not possible, they should be screened through landscaping (soft and/or hard).

## 4.2 Campus Character Areas

The shared Oshawa campus will be made up of seven separate campus character areas. Campus planning and future expansion should occur in a holistic manner, instead of on a site-by-site basis. Although each area will have a distinct character, the built form, public realm and open space guidelines and the movement framework will visually, physically and functionally knit the campus character areas together.

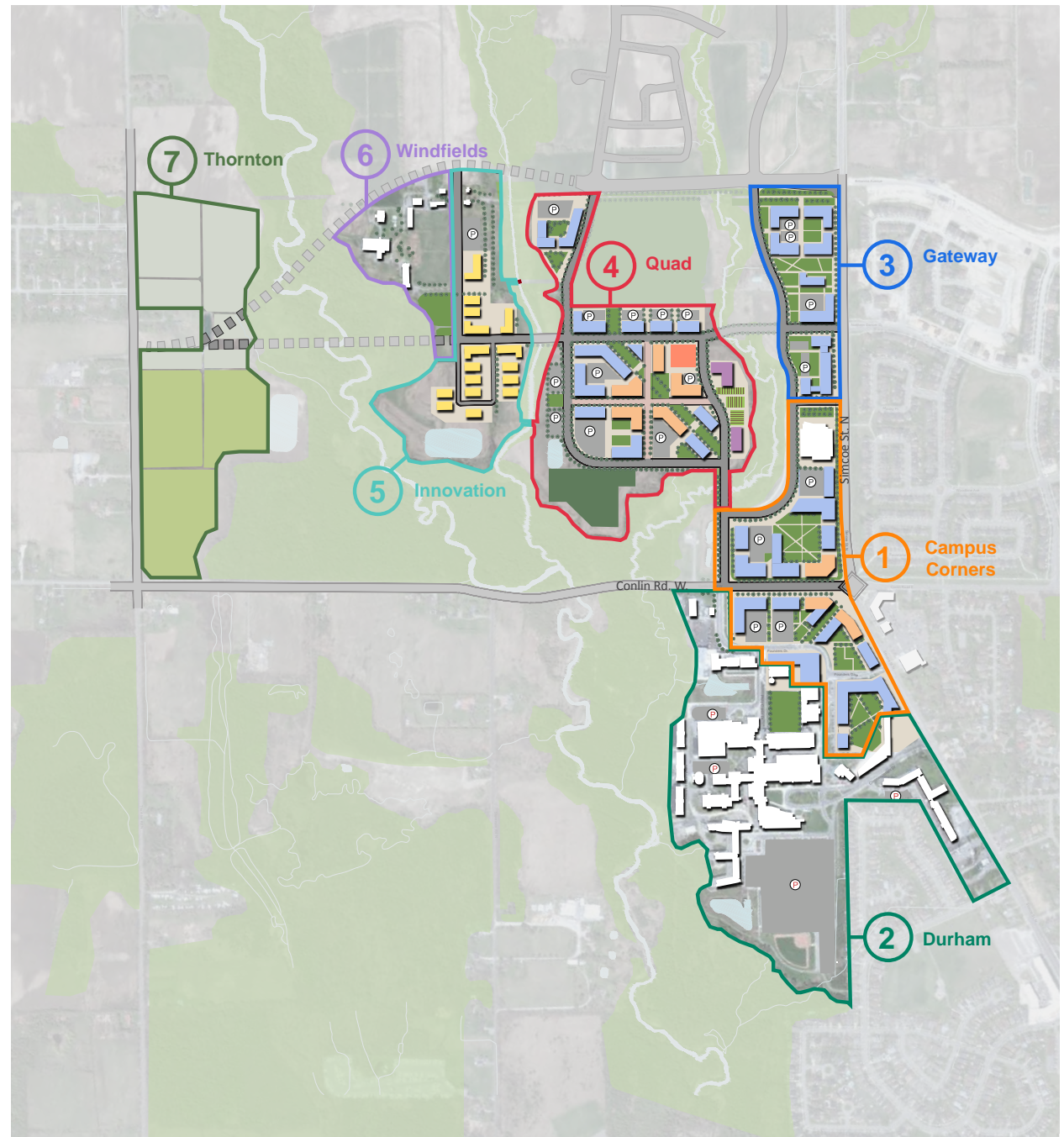


Figure 4.5 - Concept Plan with Campus Character Areas

The seven campus character areas include, and are illustrated in Figure 4-5:

- 1 Campus Corners
- 2 Durham
- 3 Gateway
- 4 Quad
- 5 Innovation
- 6 Windfields
- 7 Thornton

In addition to the Campus Character guidelines outlined in section 3.1, the following guidelines will apply to each Character Area.

#### 4.2.1 Campus Corners Character Area

The Campus Corners Character Area is envisioned to be the main focal point for the shared Oshawa campus and will extend north from the existing shared buildings south of Conlin Road.

Campus Corners will be a destination, not only for members of the academic community, but also for the broader community. Campus Corners will be the connection between the lands south of Conlin Road and the future development areas north of Conlin Road. The Conlin Road corridor between Simcoe Road North and Founder Drive will be a connecting seam with a strong focus on the intersection of Simcoe Street and Conlin Road. The surrounding buildings will frame the street edges, reinforce this area as a Primary Gateway through architectural features and details and provide pedestrian friendly ground level active frontages. Ground floor uses will have a stronger focus on retail, restaurant and service uses which can provide retail opportunities for both the academic community, as well as residents living within close walking distance. Ground floor uses will also provide innovation spaces allowing students and/or faculty to collaborate and partner with local and regional businesses. The public realm will be pedestrian oriented and provide safe north-south access across Conlin Road, and east-west access across Simcoe Street.

- 4.2.1.1 The focus on Campus Corners will be the Simcoe Street North and Conlin Road intersection. Buildings should be designed to architecturally address both the Simcoe Street and Conlin Road frontages and to animate the street level. Buildings should be designed to accommodate strong physical pedestrian and visual connections from the intersection to the institutional lands north and south of Conlin Road.

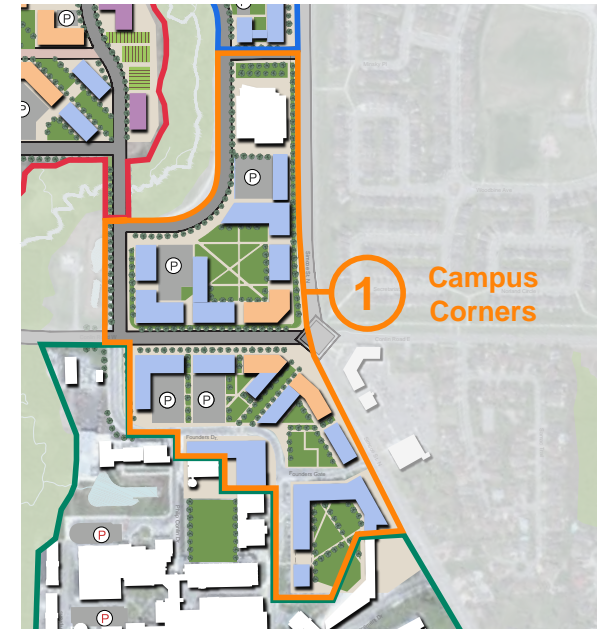
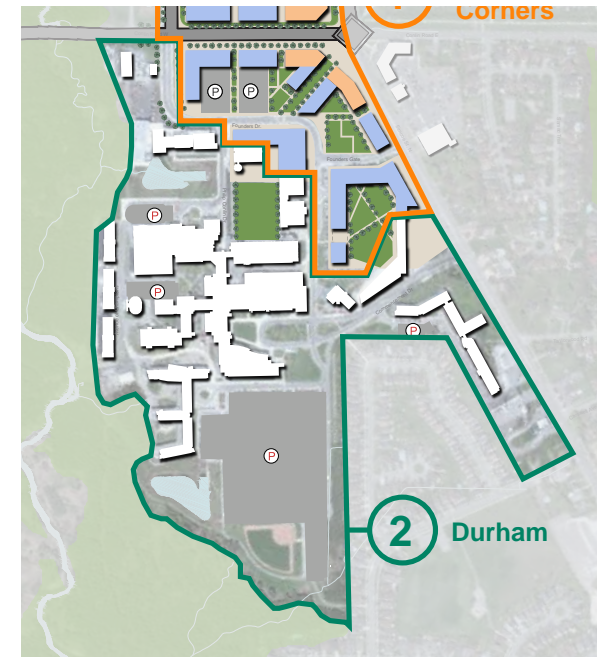


Figure 4.6 - Campus Corners





- 4.2.1.2 Campus Corners should be developed to include a mix of uses that provide academic uses, as well as retail and service uses for both the academic and broader community. Ground floor uses should activate the street frontage and create interest along the street edge. Wider boulevards should be provided to allow for patios and/or upgraded streetscaping.
- 4.2.1.3 Buildings should be designed and oriented to support pedestrian connections to existing and future campus buildings/facilities and reinforce views to other Character Areas within the campus (e.g. northwest view to natural heritage and future Quad Character Area).
- 4.2.1.4 Built form and land uses in Campus Corners will support its importance as a significant public transit node and access point to the campus.
- 4.2.1.5 Increased building height at the intersection of Simcoe Street and Conlin Road should be considered to act as both a landmark and to emphasize it as the Primary Gateway to the Campus.
- 4.2.1.6 Wherever possible building design should create quadrangles that are connected with other quadrangles within the campus and to public realm streets to create additional pedestrian connectivity in the campus.
- 4.2.1.7 Parking areas will not be permitted between buildings at the Conlin Road and Simcoe Street intersection.
- 4.2.1.8 A significant amount of the existing parking is provided within Campus Corners Character, including Founders Lots 2, 3, 6 and 7. As Campus Corners is developed, additional parking will need to be provided at other locations on campus, as well as being integrated into the future building design. Additional guidance on the approach to future parking provision and phasing is provided in Sections 5 and 8.
- 4.2.1.9 A hydro corridor currently traverses Campus Corners in the east-west direction across the lands directly south of Conlin Road. When the lands on the south side of Conlin Road are redeveloped from surface parking lots, UOIT and DC should, through consultation with the hydro provider, seek to have the hydro corridor buried in this section, so to minimize the visual impacts of the corridor, and allow for development to occur in that area.



**Figure 4.4 - Durham Character Area**



### 4.2.2 Durham Character Area

The existing shared Oshawa campus is identified, for the purposes of the CMP as the Durham Character Area. It encompasses the area where many of the existing shared Oshawa campus buildings are located, as well as student residences, the Commencement Lot and the transit hub at Commencement Drive. Commencement Lot provides a significant number of parking spaces for the existing campus. The following guidelines apply to the Durham Character Area:

- 4.2.2.1 New development opportunities may arise within Durham, as buildings age and require replacement or reconstruction. In the event that new buildings are constructed, guidelines relating to the overall campus should be applied to ensure that a consistent approach is taken to future built form and how it addresses the public realm.
- 4.2.2.2 Polonsky Commons is an important central open space feature of Durham, as well as of the broader shared Oshawa campus. The built form relationship and connections to Polonsky Commons should be maintained.
- 4.2.2.3 Opportunities for improved streetscaping, active transportation and transit provision should be explored, as outlined in Sections 5 and 6 of this plan.

### 4.2.3 Gateway Character Area

The Gateway Character Area will be the northern arrival and entry to the Campus, as well as to the City of Oshawa. The built form in this Gateway will define the western edge of Simcoe Street North. This edge will also need to relate to the residential uses opposite to the east. Gateway will be comprised of mainly institutional, academic office research and parking facilities. It will provide a secondary gateway to the campus from both Simcoe Street and Britannia Avenue West. The following guidelines apply to Gateway:

- 4.2.3.1 Buildings fronting onto Simcoe Street North will provide active facades through the provision of clear glazing and building functions that address views from Simcoe Street.
- 4.2.3.2 Buildings will frame green public spaces and quadrangles along the internal campus street network and provide a buffer from the Simcoe Street edge.
- 4.2.3.3 Other than street entries into the Campus, buildings along Simcoe Street should provide additional pedestrian access points or through-ways to increase permeability



Figure 4.5 - Gateway Character Area



along the street edge while providing additional pedestrian entry and exit from the Campus and views into the campus from Simcoe Street.

- 4.2.3.4 Green spaces and quadrangles should be interconnected both within the Character Area and adjacent Character Areas as well to any potential adjacent open space trail system.
- 4.2.3.5 Buildings located at the intersection of Britannia Avenue West and Simcoe Street North should address the corner through added wall articulation or architectural features.
- 4.2.3.6 Additional building height, where possible, should be considered for the Secondary Gateway, at the corner of Simcoe Street and Britannia Avenue West.
- 4.2.3.7 Surface parking may be provided on the south end of the Gateway Character Area, on the north side of Northern Dancer Drive, if determined necessary.

#### 4.2.4 Quad Character Area

The Quad Character Area presents a unique development opportunity for the university and college. The Quad Character Area concept illustrates a strong diagonal pedestrian boulevard that will transect the lands and create strong linkages to the future City of Oshawa Community Park, and to the Windfields Character Area. The diagonal pedestrian boulevard will be lined on either side with academic and mixed-use buildings. The Quad will be demarcated by a significant central public open space which will reflect a character similar to that of Polonsky Commons in the Durham Character Area. East-west and north-south Campus Streets will bisect the large block and connect to the Northern Dancer Drive western expansion, and the proposed circular Primary Campus Street. The following guidelines apply to development within the Quad Character Area:

- 4.2.4.1 Buildings shall address the diagonal pedestrian boulevard and central open space, and animate those edges through the provision of active ground floor uses, visually permeable glazing, pedestrian weather protection (canopies) and minimize shading of the public realm.
- 4.2.4.2 A mix of uses shall be provided on the ground floors of buildings that surround the open space. Uses should include retail, general and student specific services, and restaurants / cafes. Innovation spaces shall also be provided which will encourage and

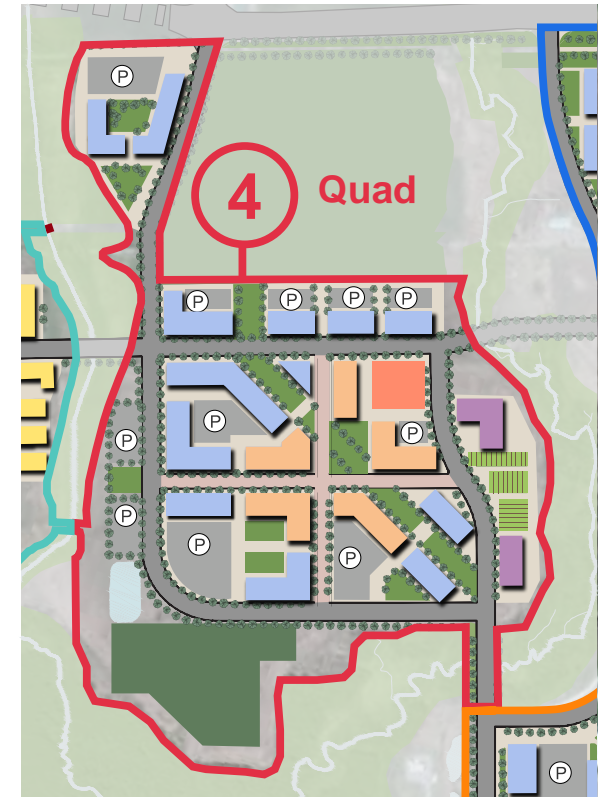


Figure 4.6 - Quad Character Area





foster partnerships between the institutions and growing businesses. Uses on upper floors should be academic focused.

- 4.2.4.3 Provide student accommodation that integrates with the academic and mixed uses and that will help to create activity on campus outside of regular school hours. Student and faculty accommodation may be integrated into the upper floors of the mixed use buildings, should these spaces not be needed for academic spaces.
- 4.2.4.4 Provide parking at the rear of buildings or edges of property, away from central green space. Structured parking may be required to meet future parking demands. If determined necessary, structured parking should be provided in the south-west portion of the Quad area. The structured parking lot should be designed to integrate with surrounding built form and where possible, incorporate active ground floor uses (i.e., small scale retail uses) fronting Campus Streets. On-street parking may be provided along the north-south and east-west Campus Streets.
- 4.2.4.5 Provide links to and integrate with the City of Oshawa's community park to the north.
- 4.2.4.6 Reinforce diagonal pedestrian boulevard through repetition of special hard landscaping or decorative paving materials used in other parts of the shared Oshawa campus. Further design guidelines for the pedestrian boulevard are provided in Section 6.1.
- 4.2.4.7 Introduce built form that addresses either view termination or provides a landmark visible from adjacent Character Areas through a combination of increased building height and/or architectural features.
- 4.2.4.8 Ensure building orientation and placement enhances pedestrian permeability and directs pedestrian circulation/activity towards the mixed use core. This will support its commercial and retail activities while connecting to amenities and services at Character Areas edges.
- 4.2.4.9 Provision of athletic spaces within close walking distance (approximately 200 metres or 3 minutes) to the mixed use core, diagonal pedestrian boulevard, central open space and student accommodation.
- 4.2.4.10 Seek to provide community garden space within close proximity to student residences.

4.2.4.11 Should additional academic space not be needed in this area, DC and UOIT should seek and leverage development opportunities and partnerships that are complementary to the academic uses and that meet the overall campus planning objectives.

4.2.4.12 As these lands may not be required for campus development in the next 15 years, UOIT and DC may seek to use a portion of the lands for an interim use, such as surface parking lots. If an interim use is proposed, the road structure as identified in the Concept Plan should be established in the first stages of development. This will ensure that once the lands transition from surface parking lots, to new buildings, the general road structure is already in place. Surface parking lots must be designed in a manner that is consistent with the sustainability objectives of this Plan, and of the City.

#### 4.2.5 Windfields Character Area

The Windfields Character Area includes many of the original Windfields buildings, as well as the culturally significant grave site of Northern Dancer. A unique approach to the future development of this area is required due to its cultural significance. Originally settled as farmland by individual landholders, the land was gradually consolidated in the twentieth century. Landscape elements such as parts of an orchard, several drives and buildings are still extant on the property, tangible evidence of the settlement activities undertaken by farming families present here during the nineteenth century. The property's grid lines of fences, trees and hedgerows established in the mid-twentieth century have changed little over time. The significance of the site as a cultural heritage landscape stems from its association with several well-known landowners who played an influential role in shaping both the community of Oshawa and the equestrian industry in Canada, the race horse cemetery, and the designed landscape elements associated with several houses on the site.

The significance of the Windfields Farm in terms of cultural heritage value has been established.

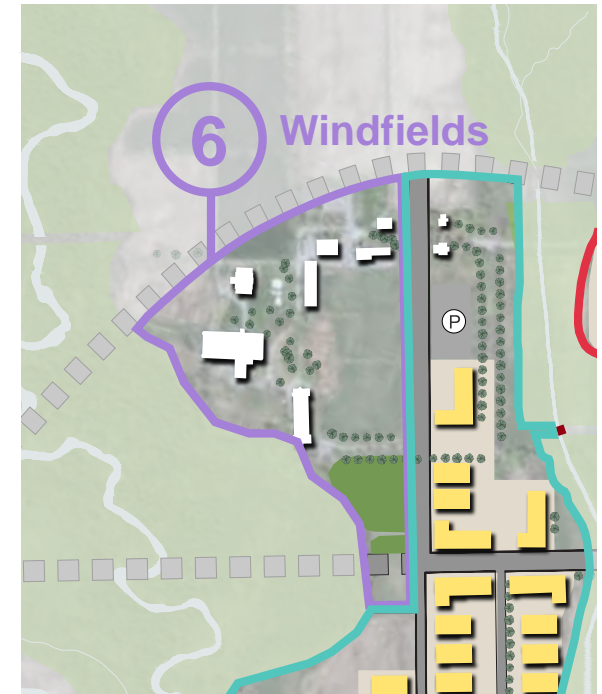


FIGURE 4.7: Existing Windfields Buildings

Buildings that still exist as part of this Character Area include:

- A-1: Barn No.2;
- A-3: Barn No.6, Foaling Barn;
- A-4: Barn No.5 and A-12: Silo;
- A-7: House 22/23;
- A-19: Arena and Barn No.1;
- C-8: House No. 28;
- C-9: Cattle Barn;

There is an obligation to maintain the Northern Dancer gravesite. The maintenance and management of Windfields represents a significant investment for the institutions, and as such, a clear path forward must be established in order to ensure the resource is managed both physically and fiscally. Heritage buildings that remain unoccupied for long periods of time are at risk through general deterioration as well as threats of vandalism and arson.

The adaptive reuse of built form in Windfields represents a unique opportunity. Often adaptive reuse of a building is a viable alternative to demolition and replacement as it requires less energy and results in fewer waste products generated, and can offer social benefits by revitalizing familiar landmarks. At the time of publication of this CMP, the City of Oshawa and UOIT are embarking on a heritage study to consider feasible adaptive reuse of the buildings within this Character Area.

The following guidelines apply to Windfields:

- 4.2.5.1 Undertake an Options Assessment to consider and identify feasible options for adaptive reuse of the historic properties.
- 4.2.5.2 Reoccupation of some of the buildings on the farm may help to stabilize the site, avoid possible vandalism and further deterioration, and address shortages in space that both intuitions face. Where development timing and funding align, larger buildings such as the barns could, with some removal on, be converted into lecture or convocation halls. Other programming elements, such as agricultural education could be planned for this part of the expanded North Oshawa Campus.
- 4.2.5.3 In order to continue to express the legacy of the E.P. Taylor and Windfields Farm through the CMP, it is important to conserve the cultural heritage landscape value of the place. Preserving the evidence of past agricultural land use can be accomplished through the incorporation on of tree lines and hedgerows into future access roads



and walkways, as well as the stone entry features. One of these walkways could enhance the connection on to the existing horse cemetery and woodlot burial ground. These green linkages create a strong visible identity for the campus while increasing walkability throughout campus and beyond to the community.

- 4.2.5.4 Explore the potential for heritage designation of the Windfields Character Area under the Part V of the Ontario Heritage Act or conservation as a cultural heritage landscape. Review the potential for the adaptive reuse of buildings that are part of this complex, in order to incorporate them into the campus and ensure their continued viability.
- 4.2.5.5 Refer to Parks Canada's Standards and Guidelines for the Conservation of Historic Places in Canada for appropriate criteria to apply to the protection and conservation of heritage elements within the campus.
- 4.2.5.6 Incorporate Aboriginal heritage into the fabric of the campus, and incorporate traditional Aboriginal ways of viewing and interpreting the world into consultation and interpretation. Continue to acknowledge Aboriginal sites on campus, and incorporate them into curriculum.
- 4.2.5.7 Seek opportunities to create walking tours of the campus that highlight the built and cultural heritage of the area, potentially established through customised applications for smart phones.
- 4.2.5.8 Explore interpretive features at Windfields Farm to serve as a meeting place for walking tours, as well as a source of information for self-guided tours.
- 4.2.5.9 Explore opportunities to engage campus visitors through signage that includes Quick Response codes with links to websites containing further information about the history of the buildings and landscapes on campus.
- 4.2.5.10 Integrate the history of Windfields in to the landscape features, plant typologies, and signage in other campus Character Areas.





#### 4.2.6 Innovation Character Area

UOIT and DC are committed to the fostering of innovative and entrepreneurial industries through the provision of space specifically for this purpose on the shared Oshawa campus. The strategic plans for both UOIT and DC contain statements relating to the fostering of innovation and entrepreneurship. The Innovation Character Area provides space that will be used to foster collaboration between private sector, government, university researchers and educators and will be a hub of activity with a focus on advanced manufacturing. The Innovation Character Area will integrate with the Windfields Character Area and will enhance the opportunity for collaboration between the academic facilities provided there.

4.2.6.1 It is estimated that approximately 32,200m<sup>2</sup> of space will be required at full build out of the Innovation Area. Development will be phased over time to address both advancement of private partnerships as well as growth and development of the Campus.

4.2.6.2 Over time, business ventures that are born out of the Innovation Character Area may require additional space or dedicated manufacturing space. The lands east of Thornton Road, west of Oshawa Creek and north of Conlin Road may be used in the future to accommodate the ventures that may have outgrown the campus setting.

4.2.6.3 The specific building orientation and layout within the Innovation Character Area has been designed to allow for flexibility in the future development. The building placement and footprints may be refined once the specific internal use is determined. Generally, the following guidelines should apply:

- Buildings should be designed to address the adjacent main street in order to minimize walking distance from the surrounding streets into the building.
- Front entrances to buildings should be oriented to the main street, of either Northern Dancer, or the new north-south street. Ground floor uses should animate the street, and blank walls should be minimized.
- Open spaces should be provided in proximity to the buildings, and should integrate with the tributary lands located to the east.
- Building loading and servicing areas should be located away from the main pedestrian entrance and screened from public view through building design or landscaping.
- Parking should be provided at the rear or side of the building, away from the main street frontage, and, where feasible should be structured.

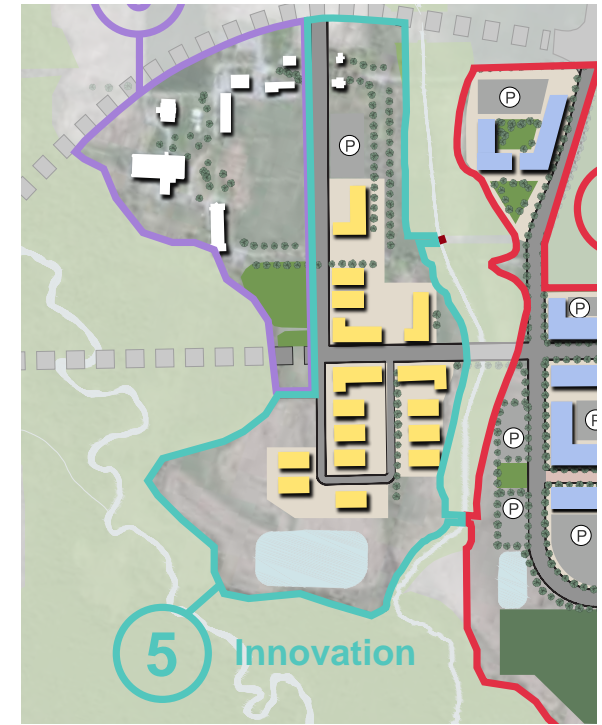


Figure 4.8 - Innovation Character Area





#### 4.2.7 Thornton Character Area

The Thornton Character Area is located between Thornton Road and the Oshawa Creek. The southern portion of these lands are identified on the Concept Plan as being a future Agricultural Research Area. The Britannia Avenue West extension will traverse this Character Area. No area specific guidelines have been developed for this Character Area.

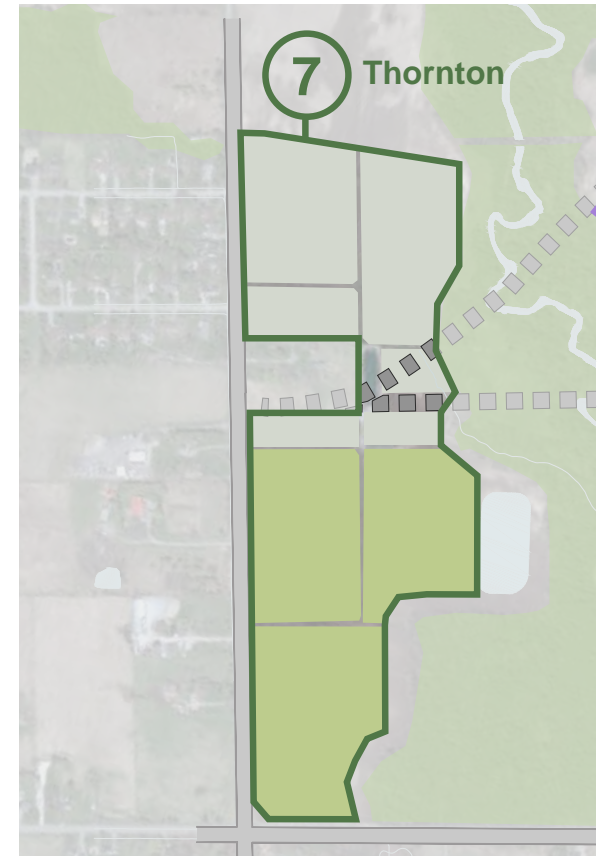


Figure 4.9 - Thornton Character Area





# MOVEMENT & CIRCULATION

# 5

## 5.1 Street Network

The CMP introduces a new street network and additional signals at key existing intersections, as illustrated in Figure 5.1. A street hierarchy has been introduced for new and existing campus streets. The purpose of the road hierarchy is to ensure that the transportation and movement needs of the campus can be met; while also ensuring that the spaces are interconnected by a series of pedestrian oriented linkages. The road hierarchy also establishes a consistent approach to streetscaping and roadway design. Three street types have been identified on the Concept Plan (Figure 5.2), and include:

- **Regional/City Street:** Operated by the City of Oshawa or the Region of Durham, including: Conlin Road, Simcoe Street North, and Britannia Avenue West. Although UOIT and DC do not have control over the treatment of the public right-of-way, there is opportunity to work together with the Region and City to implement unique signage, street furniture, lighting or boulevard treatments along these streets to truly define and identify this area.
- **Primary Campus Street:** Operated by DC and UOIT with the primary function being to allow movement through the campus, for transit, personal, service and delivery vehicles, for cyclists and for pedestrians. The right-of-way cross section illustrates the provision of one lane in each direction, turning lanes at intersections, on-street parking, bicycling lanes, sidewalks and street-

trees. The road right-of-way will be 23.0m, which is narrower than the Regional and City Streets; however wider than the Local Campus Streets. Primary Campus Streets include, the existing Founders Drive, Northern Dancer Boulevard extension, the new ring-road in the Quad Character Area, and the extension of Founders Drive on the east and west sides of the tributary.

- **Local Campus Street:** Operated by UOIT and DC with the primary function of providing pedestrian connections and vehicular access only to the nearby buildings. The road right-of-way will be 16.0m. Local Campus Streets, include: Founders Gate, Avenue of Champions will permit one lane of traffic in each direction and wide pedestrian sidewalks. Street trees should be incorporated into these right-of-ways when the buildings directly adjacent are constructed. New Local Campus Streets within the Quad Character Area are recommended to be designed as woonerfs (shared streets).

The following guidelines should be applied in relation to the local street network:

- 5.1.1 New campus streets will be provided as the campus expands north. Streets will follow a hierarchy of Regional/City Street, Primary Campus Street and Local Campus Street. Each street type will have a unique cross section that will define the streetscape and paved surface.

- 5.1.2 The intersection of Simcoe Street North and Conlin Road is a Primary Gateway and should be designed in a manner that balances the priorities of pedestrians and vehicles, ensuring that:

- special paving for pedestrian cross-walks be provided at this intersection to delineate the space from other intersections along Simcoe Street North;
- signal timing is sequenced to provide pedestrians with adequate time to cross safely;
- right-turning vehicles yield to pedestrians, not vice-versa;
- “pork-chop” islands and wide-right turn lanes are minimized; and
- transit stops and future BRT stations can be accommodated.

- 5.1.3 DC and UOIT will work together with the Region of Durham to provide new signalized intersections at Simcoe Street North and Northern Dancer Drive.

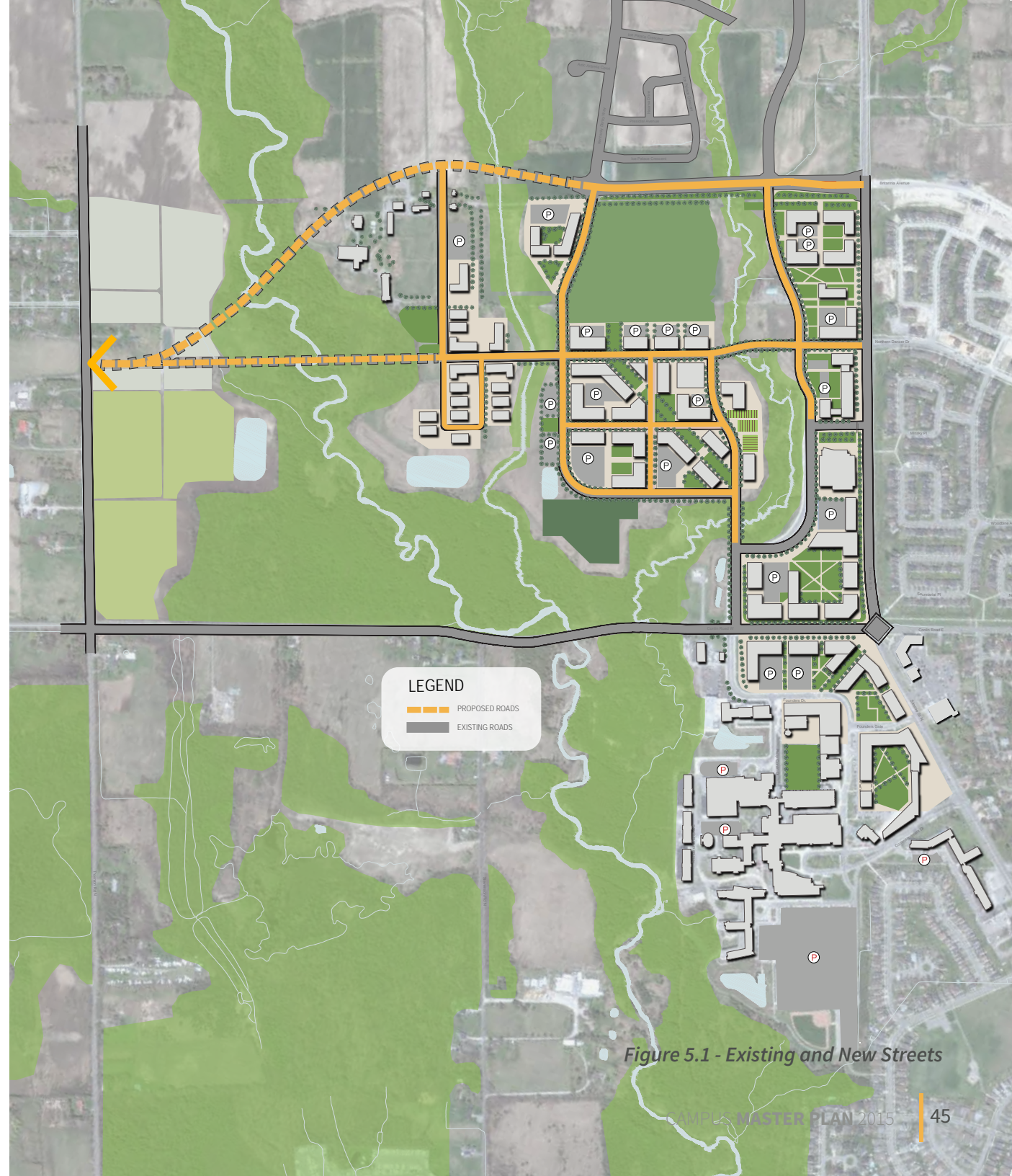
- 5.1.4 The street network is designed to improve connectivity while also ensuring that pedestrians are prioritized through the provision of wider pedestrian sidewalks and, where applicable, boulevards.

- 5.1.5 The proposed street network aligns with existing and new local streets, including Northern Dancer Drive, and

Britannia Avenue West, as well as the new local roads north of Britannia Avenue West.

**5.1.6** Pedestrian oriented Local Campus Streets, such as the east-west, and north-south woonerf style (shared) streets in the Quad Character Area, shall have a distinct paving to distinguish them from other Local Campus Streets.

**5.1.7** Predominantly pedestrian streets within the Quad Character Area may include features such as removable bollards or other motor vehicle control features in order to allow for the creation of 'pedestrian-only' streets during special events.



**Figure 5.1 - Existing and New Streets**



## 5.2 Pedestrian Network

Pedestrian movement to and from campus, as well as throughout campus will be of utmost importance. Pedestrians create the vibrancy and activity that defines college and university campuses and make them safe spaces where people want to spend time.

Once on campus, students, faculty and staff should be able to easily and safely move between buildings and across campus. The principle of “Walkability” was identified, through community consultation, as a priority for the CMP. As a result, the CMP Concept Plan establishes the foundation for a strong pedestrian network. The following guidelines relate to the pedestrian network:

- 5.2.1** The campus will continue to provide safe and well connected pedestrian routes throughout campus, as illustrated on Figure 5.2. New buildings are to be designed to link to the broader pedestrian network, and where logical, provide internal pedestrian connections to neighbouring buildings.
- 5.2.2** The future building placement, orientation, and entrances as well as the interaction with the surrounding street network and open spaces must consider pedestrian movement as a priority.
- 5.2.3** Compact development form that is interconnected with pedestrian pathways encourages walkability. New development will promote walkability on campus.

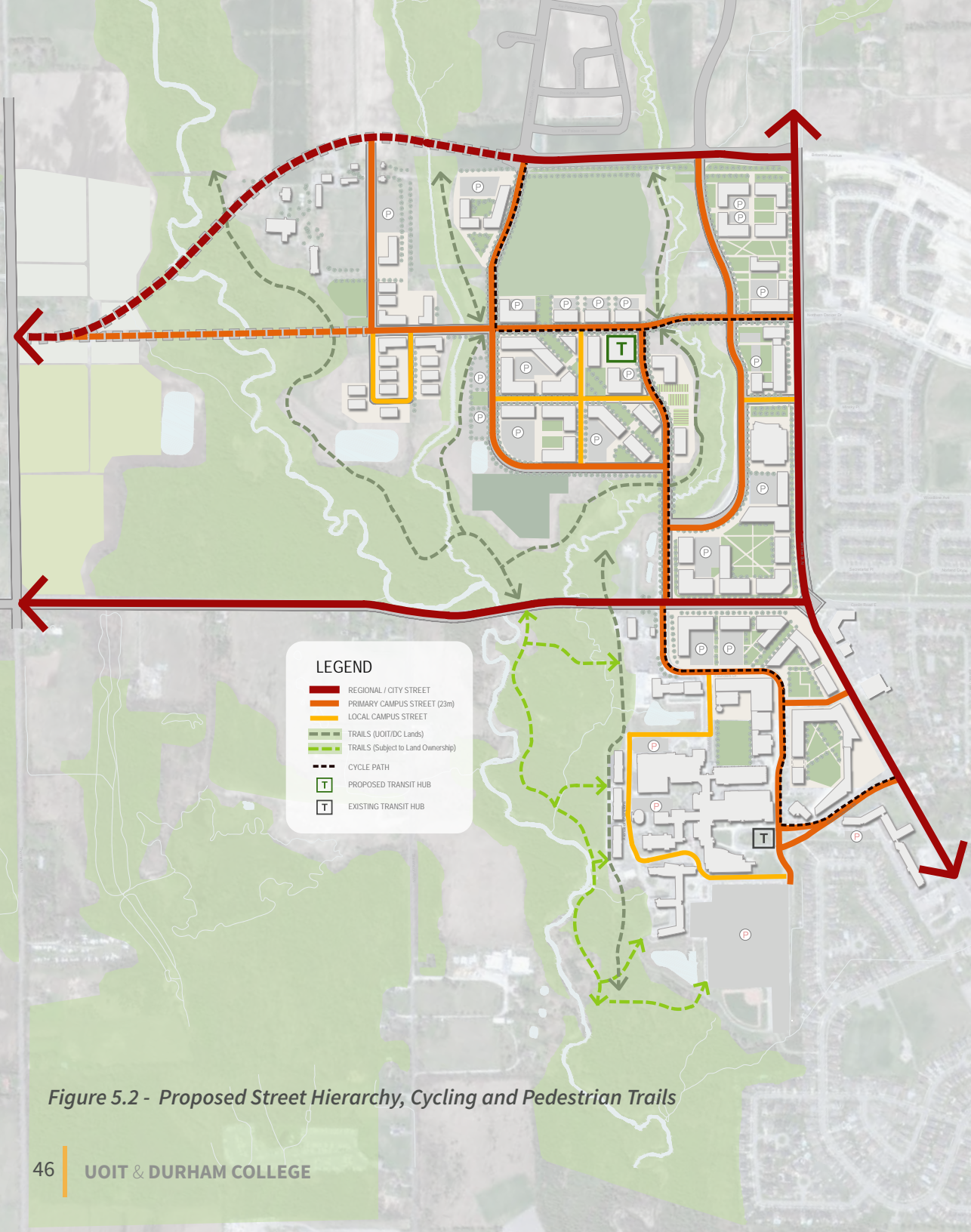


Figure 5.2 - Proposed Street Hierarchy, Cycling and Pedestrian Trails

**5.2.4** Diagonal transects provided from the Simcoe Street North and Conlin Road intersection that lead in to the campus, provide direct pedestrian connections to key academic and open spaces. These transects will ensure that a visual connection is maintained from this key intersection in to the campus.

**5.2.5** The Oshawa Creek and its tributaries present an opportunity to establish a trail system throughout the shared Oshawa campus, north and south of Conlin Road, with connections further south to the existing trail system.

**5.2.6** Crime Prevention Through Environmental Design (CPTED) principles must be applied on campus to ensure a safe and comfortable pedestrian environment, including the provision of adequate lighting along pedestrian routes, sight lines in to, and out of pedestrian spaces, and landscape design that allows for visibility.

### **5.3 Parking**

The current campus provides a total of 3,248 parking spaces which are located in surface parking lots located south and north of Conlin Road. Based on the 2013 enrolment, the campus was providing 0.21 parking spaces per student.

The Vision and Directions Report analyzed two scenarios for future campus parking requirements, which included.

- **Scenario 1:** maintain the existing parking supply in the order of 3,248 spaces; and,
- **Scenario 2:** maintain the existing parking supply ratio of 0.21 space/FTE students.

The CMP maintains the existing supply ratio of 21 spaces/FTE.

It is acknowledged that parking will continue to be needed on the shared Oshawa campus; however, as student enrolment, faculty and staff increase over time, UOIT and DC will monitor parking demand, and respond to future parking needs in a sustainable manner which takes into consideration the provision of future transit, active transportation options, and transportation demand management strategies.

As the CMP is realized, existing parking lots will be relocated, converted to structured lots, or removed to accommodate new academic spaces. An approach to the provision of parking on campus is outlined in Section 8: Implementation, as it relates to proposed phasing.

The following guidelines relate to parking:

**5.3.1** Parking will continue to be provided on campus; however should not occupy prime development sites or be located in key viewsheds. UOIT and DC should seek to maintain or only moderately increase the total parking supply of from what is currently provided (3,248 spaces).

**5.3.2** Parking demand at all campus parking lots should be monitored to be able to respond to future parking needs as enrolment grows and new buildings are constructed.

**5.3.3** As Campus Corners develops, replacement parking will need to be provided, as required based on the parking demands at the time of building construction.

**5.3.4** Surface parking lots should be located on future development sites with the understanding that these will eventually be redeveloped for other uses. Surface parking lots should be designed to integrate sustainable design features and, where applicable, vegetation to minimize the visual impact.

**5.3.5** Structured parking lots are encouraged and should be strategically located on campus and designed to minimize the visual impact from the structure. Parking structures that front Regional/City Streets or on to the Local Campus Streets in the Quad should be designed to incorporate active street frontages (retail, service, etc.). If feasible, underground parking should be incorporated into the design of new buildings.

**5.3.6** Additional parking will be available through the provision of on-street parking spaces as illustrated on the conceptual Primary Campus Road cross section.

**5.3.7** Transportation Demand Management (TDM) Programs should be established to minimize the reliance of students, faculty and staff on the private automobile, including:

- Establishment of a car pool program, working together with Smart Commute Durham, and

identify priority carpool parking spaces;

- On-going coordination and discussions with Durham Transit on the provision of new transit routes to and from campus;
- Gradually increase the price of parking to encourage other modes of transportation;
- Promote the development of a compact and walkable campus, so that, if students need to drive, they can park for the day and walk between classes and campus activities.

**5.3.8** The City of Oshawa's Zoning By-law outlines requirements with respect to the total number of parking spaces to be provided based on the total number of students; however, as leaders in sustainability, and compact walkable community design, the UOIT and DC should work to maintain the current parking supply.

**5.3.9** Encourage a transition of parking from surface to structured parking lots. This will minimize the total land area used for parking and can free it up for other uses.





Figure 5.3 - Existing Parking Lots

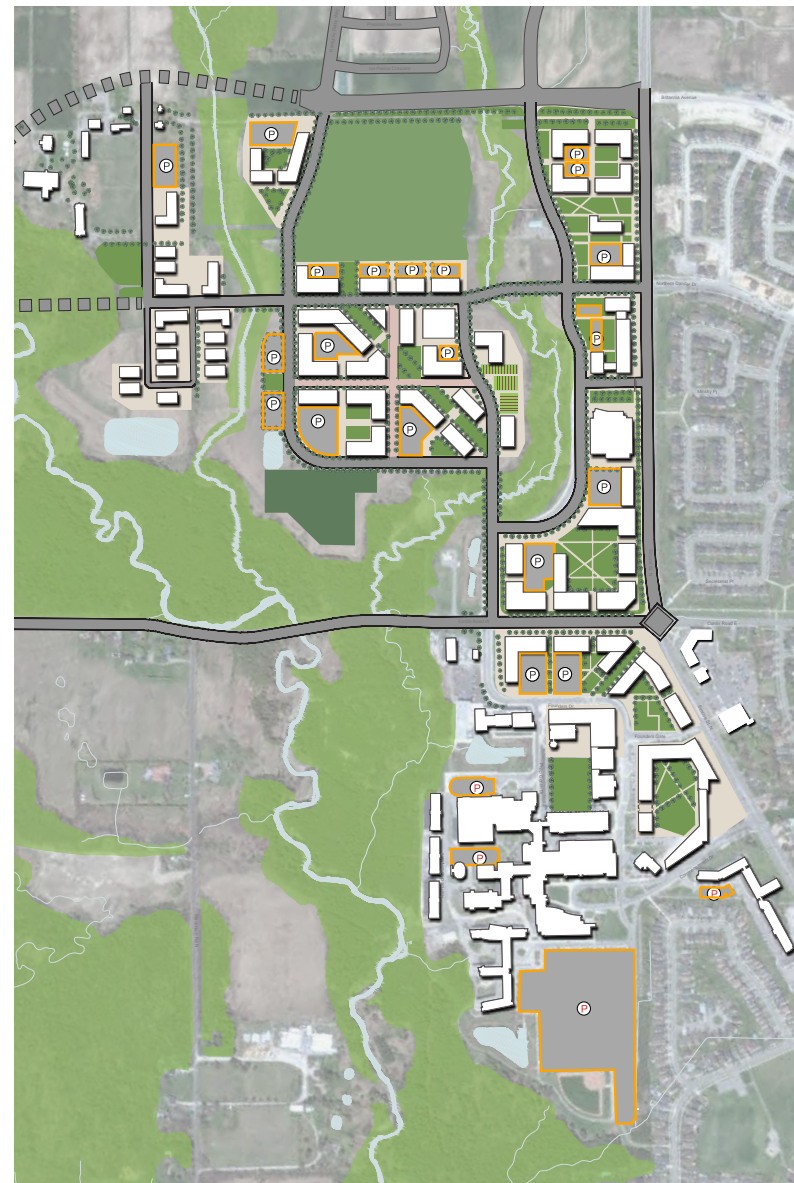


Figure 5.4 - Existing & Proposed Parking

## 5.4 Public Transit

The DC and UOIT CMP establishes a built form, movement and open space framework that supports the increased provision of transit services over time.

Simcoe Street is identified as a future rapid transit corridor in the Metrolinx 'Big Move' plan and the Durham Regional Transit long term planning. The future enrolment growth projected at DC and UOIT, combined with the new residential development north of the shared Oshawa campus, it is expected that the demand for transit will increase over time. Future rapid transit along Simcoe Street presents a unique opportunity to establish a node at the intersection of Simcoe Street North and Conlin Road with future rapid transit stations, the shared Oshawa campus, and a mix of academic, retail, service, restaurant and office spaces within close walking distance. One central focal point for the CMP concept plan is the Simcoe Street and Conlin Road intersection and the emphasis that future development be oriented towards the future transit facilities along Simcoe Street North.

The approach to building orientation, placement and phasing in the CMP will ensure that future development is consistent with and supportive of rapid transit provision along Simcoe Street. This will ensure that campus staff and the student population directly benefit from the planned rapid transit investments within the City, Region and province

A reliable and comprehensive transit service will

also increase connectivity between the shared Oshawa campus and the UOIT Downtown Location and the DC Whitby Campus. The following guidelines outline the CMP's public transit strategy:

- 5.4.1** Monitor Durham Region Transit and GO Transit ridership volumes on a yearly basis along the routes serving the campus. This data will allow transit service to be more responsive to the varying needs of the campus population.
- 5.4.2** The existing transit hub on Commencement Drive and the provision of direct transit routes to the shared Oshawa campus should be maintained.
- 5.4.3** A second transit hub should be established in the Quad Character Area, as illustrated on the Concept Plan. The second transit hub is centrally located and will have access onto Northern Dancer Drive.
- 5.4.4** The Simcoe Street North corridor is identified in The Big Move and Durham Region and Durham Region Transit's Long Term Transit Strategy as a future Rapid Transit corridor. With the projected increase in enrolment, DC and UOIT should continue to have discussions with representatives from Metrolinx and Durham Region Transit with regards to the future Rapid Transit corridor.
- 5.4.5** The Simcoe Street North and Conlin Road intersection is identified in

the CMP as a future Transit Node. Understanding that direct transit service to the shared Oshawa campus will continue to be required, transit service along Simcoe Street North (rapid transit or otherwise) should be encouraged.

- 5.4.6** A separate Transportation Study, undertaken in 2014, reviewed the feasibility of transit priority signalization at the Simcoe Street and Founders Gate intersection to allow for bus access/egress and safe pedestrian crossing.



## 5.5 Active Transportation

Encouraging active transportation through bicycling and walking contributes significantly to reducing automobile dependence. Figure 5.2 illustrates the proposed on-street cycling route through the campus, and new trails. The following strategies relate to active transportation:

- 5.5.1 Integrate cycling lanes along key internal campus streets that connect with the broader Regional and City trail network and on-road cycling infrastructure. The primary cycle route is illustrated on Figure 5.2 and has been incorporated into the conceptual cross section for the Primary Campus Street.
- 5.5.2 Bicycle racks and lockers should be situated close to buildings to afford users the opportunity to ride to and from their intended destinations.
- 5.5.3 Where feasible, bicycle parking should be incorporated into the design of new buildings or be weather protected.
- 5.5.4 DC and UOIT should develop strategies to promote active transportation, as well as carpooling, transit and other transportation demand management options.
- 5.5.5 Connect on-site active transportation routes with City-led initiatives / multi use trails.

- 5.5.6 Provide trail connections along the Tributaries to connect the campus south towards Lake Ontario.

## 5.6 Wayfinding and Signage

Wayfinding and signage should be oriented towards pedestrians to ensure that the campus is legible and can be easily navigated. Signage design can also be carried to other campuses and locations in order to visually connect and more specifically relate the identity of the shared Oshawa campus with the other UOIT locations and DC campuses. The following guidelines relate to wayfinding and signage on the campus:

- 5.6.1 A consistent approach to signage for each institution should be developed that will help to distinguish between UOIT, DC and shared academic buildings. This consistent building and entry signage should also be implemented at UOIT's downtown location and DC's Whitby Campus to visually tie the campuses together.
- 5.6.2 Outdoor lighting can extend access and use of many areas into the nighttime hours and allow for a more active and safe campus. Thoughtful design can address site illumination requirements while minimizing potential effects of the lighting on the surrounding buildings or uses.





# **PUBLIC REALM & OPEN SPACE**

# 6

## 6.1 Open Space

Open space in the form of plazas, squares and outdoor amenity areas have long served as collective gathering spaces and campus activators. Historically the public square has often been at the heart of a city, town or village, just as Polonsky Commons has become the heart of the current campus. It is the image of these common areas and plazas that are often imprinted on both students, staff and campus visitors alike, and as such, these important public spaces often serve as touchstones in terms of the identity of the institutions. Perhaps most vital to the success of a plaza is in its programming. Plazas can provide gathering and congregating spaces that enhance campus life. Ensuring that outdoor design elements accommodate and encourage programmable event spaces is important.

The following guidelines relate to campus open spaces:

**6.1.1** Establish a series of open and student gathering spaces throughout all campus Character Areas that are linked together by strong pedestrian connections via the campus road network, through campus buildings as well as on pedestrian-only pathways and sidewalks. Figure 6.1 illustrates the campus open spaces.

**6.1.2** Establish a green pedestrian boulevard that radiates north-west from the Simcoe Street North and Conlin Road intersection, crosses the tributary, and extends across



Figure 6.1 - Open Space Plan

the Quad. This will be the main pedestrian and open space spine for the lands north of Conlin Road. Specifically, the design of this open space should:

- Provide for a strong pedestrian connection that is framed by built form and vegetation, and applies CPTED principles to create a safe and accessible link to the heart of the Quad.
- Establish consistent design elements unifying the different character areas through the use of an allée along the length of the walk as well as consistent paving to provide legibility.
- Consider human comfort through the consideration of microclimate, and all season use of the space.
- Be both visually and physically connected to the natural heritage system through trail linkages and landscape design that draws together the designed and the natural spaces together.
- Consider the interface with the squares that intercept the pedestrian connection, which should offer a place of refuge without disrupting the continuity of the diagonal main spine.

**6.1.3** A large open space should be established at the centre of the Quad. This space will reflect the existing Polonsky Commons and will serve as a central gathering space. Specifically, this open space should:

- Provide a focal point in the Quad, and serve as a destination for the green pedestrian boulevard.
- Be framed by built form and vegetation, and apply CPTED principles to create a safe and accessible space in the heart of the Quad.
- Consider the landscape character of Windfield's Farm and incorporate or reference its picturesque landscape qualities as appropriate.
- Provide for a diversity of spaces to allow for various

programmatic elements throughout the year

- Be designed with consideration for microclimate, and all season use of the space.

**6.1.4** Incorporate innovative interpretive elements into plazas, open spaces and outdoor amenity areas that speak to the history of the campus, as well as specific built or cultural heritage landscape elements that are proximate, such as the historic Windfields Farm.

**6.1.5** Establish animated destination points within the campus' open spaces and public realm elements. These destination points will be varied in their design and will provide a sequence of experiences and serve as visual markers and cues for users.





- 6.1.6** Consider all four seasons in the design to maximize usability of a site as well as strengthen its presence within the community by providing space for varied uses such as student markets, skating rinks, or water features.
- 6.1.7** Provide both prospect and refuge for open space users; create spaces that evoke a feeling of enclosure and safety with protection from the elements as well as open spaces that are more freely programmable.
- 6.1.8** Ensure circulation within the space is both efficient and interesting; incorporate elements into the design that will draw users into the space while allowing for others to simply pass through the space.
- 6.1.9** Ensure that adequate visibility is maintained throughout the campus' open spaces and public realm features through the careful consideration of sight lines and adequate lighting levels, in accordance with Crime Prevention Through Environmental Design (CPTED) principles.
- 6.1.10** Provide amenities at key meeting and congregating points, such as moveable street furniture to encourage social interaction, as well as adequate trash receptacles, recycling facilities and lighting, trees or shade structures to ensure that the space is comfortable and safe.

- 6.1.11** Encourage public art or design elements that relate to, or reinforce, a defined theme within the surrounding area with emphasis on the site history, cultural landscape or distinctive theme. Investigate opportunities to link public art with coordinated design elements.

Often a defining characteristic on a campus, plant massing and mature vegetation can distinguish a place from surrounding areas. Mature street trees form a large portion of the urban landscape fabric, one of the most important elements in providing unity and defining a campus. Much of the mature vegetation that provides aesthetic, social and environmental benefit to the campus is associated with the natural heritage corridors. In an effort to retain and protect mature vegetation within the campus, it is recommended that:

- 6.1.12** Built form footprints should consider the mature vegetation on site early in the design process, and seek out all reasonable site solutions for retention and incorporation into the proposed site plan.
- 6.1.13** During the planning process, suitable high quality trees and vegetation blocks should be identified and the feasibility of retention determined. Mature vegetation is to be retained and protected in accordance with the City of Oshawa's Site Alteration By-law.

## 6.2 Streetscaping

Renewed focus is now being placed on streets; once again they are being seen as public spaces with a range of functions, not simply as conduits for vehicular traffic. Streets play a defining role in terms of the establishment of community identity and aesthetic character, and particularly within a campus context, should be viewed as public space first and foremost. When designing and detailing streets and streetscape elements on campus, the following should be considered:

- 6.2.1** The street should be viewed as place not space, and spatial consideration given to multiple modes of transit, an adequate pedestrian boulevard, and street trees. Conceptual streetscape designs for each street typology identified in Section 5.0 are provided in Section 6.3.
- 6.2.2** Activities bordering the space play an important role in defining the character and life of a street. Urban design and programming consideration should be given to adjacent spaces so that the street itself is enlivened.
- 6.2.3** Programming consideration should be given to activities within the street right-of-way, in an effort to animate the space throughout all four seasons, and throughout both the day and night.

**6.2.4** The microclimate created by adjacent built form and landscape elements, as well as those within the right-of-way should be considered in an effort to create a comfortable microclimate within the street. Design elements that shelter pedestrians from wind, rain, and sun are encouraged.

**6.2.5** The scale and proportion of elements both within and adjacent to the right-of-way should be considered in an effort to create human-scale public open space within the streetscape.

**6.2.6** The maintenance and operational requirements of design elements should be considered early in the design process, and allowance for proper maintenance made in budgets.

**6.2.7** Mixed use areas on campus, such as within the Quad, should be defined by consistent building street edges and allow for flexible on-street parking. Consideration should be given to flexible parking that incorporates a moveable bollard system, and parking stalls delineated with paving materials of a pedestrian character.

**6.2.8** Student residences should have consistent setbacks to allow for privacy and semi-private areas at grade, such as front porches, balconies, steps and verandas that are

engaged with the streetscape.

**6.2.9** Encourage the use of pedestrian scale lighting in addition to roadway lighting to foster a sense of human scale within the streetscape.

**6.2.10** Coordinate driveway entrances to buildings, loading areas, and parking facilities to minimize the crossing of sidewalks for vehicular access.

### 6.3 Street Hierarchy

Section 5.1 introduces a street network and hierarchy for the campus from a transportation and functionality perspective. The following guidelines relate to the character and streetscape associated with the three street typologies:

**Regional/City Street:** Operated by the City of Oshawa or the Region of Durham, including: Conlin Road, Simcoe, and Britannia Avenue West. Figure 6.2 conceptually illustrates a cross

section that incorporates street trees, a multi-use trail, dedicated by lanes and stations integrated into the centre medians and two travel lanes in each direction. The cross section will be modified to relate to specific road rights-of-way and requirements. The following guidelines describe the Regional /City Street character and streetscape:

**6.3.1** Consider the incorporation of dedicated or shared lanes for alternative modes of transportation such as buses and bicycles in accordance with the City of Oshawa Integrated Transportation Master Plan (TMP).

**6.3.2** Explore opportunities to link the streetscape along surrounding Regional and City streets with the campus urban fabric through the interconnection of adjacent campus corridors, connections, landscape and built form.

**6.3.3** Buildings adjacent to Regional/City Streets should be designed with a higher architectural quality to accentuate corners and entries into the campus and act as landmarks and visual termini for views (as identified on Figure 4.3).



Figure 6.2 - Regional/City Street Conceptual Streetscape

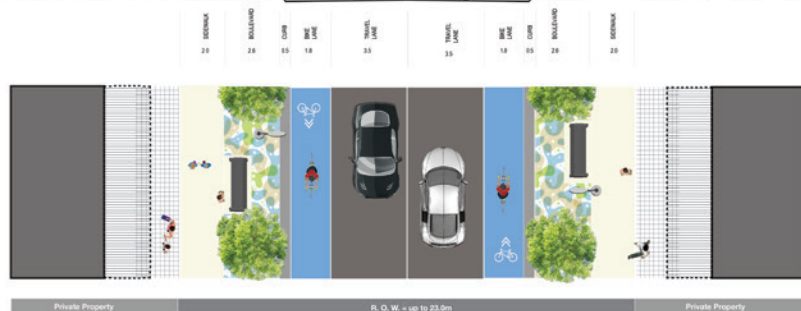
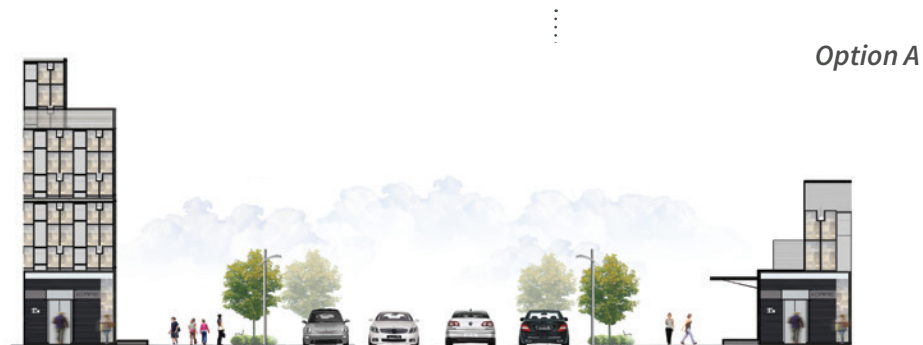
- 6.3.4** Emphasize pedestrian crosswalks, particularly on Simcoe Street and Conlin Road, through the use of distinctive paving materials such as unit pavers or thermoplastic imprinting, providing visual cues to motorists regarding the pedestrian scale within the public realm.
- 6.3.5** Draw from a consistent palette of streetscape materials.
- 6.3.6** Clearly identify the pedestrian realm within the right-of-way through the use of differentiating materials and the establishment of planted buffers. Establish ribbon sidewalks that are generous in their width.
- 6.3.7** In concert with the City of Oshawa and the Region of Durham, reinforce gateways to the campus along Simcoe Street North and Conlin Road through the use of distinctive and high quality materials and the incorporation of public art.
- 6.3.8** Future development should promote boulevard tree planting and coordinated services so to avoid hydro transformers in the boulevard where feasible.
- 6.3.9** Along wider rights-of-way, seek to establish pedestrian refuge islands that are integrated into centre median planting features where feasible to enhance safety for pedestrians and establish consistency along the streetscape.

**Primary Campus Street:** Operated by DC and UOIT with the primary function being to allow movement through the campus, for transit, personal, service and delivery vehicles, for cyclists and for pedestrians. Two conceptual cross sections have been developed that illustrates the provision of one lane in each direction, turning lanes at intersections, on-street parking, bicycling lanes, sidewalks and street-trees (Figure 6.3).

The road right-of-way will be 23.0 m. Primary Campus Streets are identified in Figure 5.2, and include, Founders Drive north to Britannia Avenue West, Northern Dancer extension west, and the new ring-road in the Quad.

- 6.3.10** Encourage opportunities for special paving, landscaping, seating and pedestrian-scale lighting to create pedestrian interest along the street and to promote human-scale dimensions.
- 6.3.11** Locate and design buildings to establish a well-proportioned street enclosure (building height-to-street width ratio) where the height of the building does not overpower the street. Use a variety of massing techniques to achieve a well proportioned street enclosure generally at a 1:1 height-to-street width ratio.
- 6.3.12** Create focal points and destinations along the length of the streetscape where pedestrians are encouraged to linger rather than pass through.

- 6.3.13** Where on-street parking is proposed, encourage the establishment of landscaped curb bulbs for buffers. Explore parking stall designs that allow for conversion to usable public space when needed.
- 6.3.14** Draw from a palette of streetscape materials that is consistent and visually strong to establish a consistent visual character along the length of Primary Campus Street corridors. The palette of streetscape materials for the Primary Campus Street will be complementary to the Local Campus Street materials palette.
- 6.3.15** Encourage awnings and building overhangs to shelter pedestrians from inclement weather and enhance the experiential quality of the streetscape.
- 6.3.16** Enhance the aesthetic of Primary Campus corridors through the incorporation of consistent street tree planting along the length of corridors within wide boulevards and centre medians. Establish allées to define the pedestrian realm and buffer from the vehicular zone. Reduce or mitigate visual clutter where possible along main streets by eliminating unnecessary signage, co-ordinating street furnishings.



**Local Campus Street:** Operated by UOIT and DC with the primary function of providing pedestrian and small vehicular connections. The road right-of-way will be 16.0m which will permit one lane of traffic in each direction, as well as wide pedestrian sidewalks. Local Campus Streets include: Founders Gate, Avenue of Champions, and minor east/west, and north/south streets in the Quad.

Local Campus Streets, particularly the new east-west and north-south streets within the Quad Character Area, should be designed as Woonerfs or shared streets. Figure 6.4 illustrates conceptual cross sections for the Local Campus Street.

These streets will integrate uses within the right-of-way, removing the boundaries established in more traditional geometry between vehicles, cyclists, and pedestrians. Woonerfs are intended to serve those uses located along its length, not to function as through streets.

A guiding principle in design is the equal distribution of space between uses. The design intention is to integrate uses, and thereby increase safety. While the notion of shared space within North American streetscapes is a relatively new one, it offers potential in terms of activating public space within the streetscape, particularly within the campus context. Existing Local Streets may be upgraded to a Woonerf

Figure 6.3 - Primary Campus Street Conceptual Streetscape - Option A and B (23.0 m ROW)



(shared) street if or when the roadway requires significant reconstruction.

implementation of local campus streets should consider the following:

- 6.3.17** Surface treatments will include varied materials to provide visual and haptic (i.e., tactile) cues to users across the width of the right-of-way. Grade separated sidewalks will be eliminated and focus will be placed on differentiated material use.
- 6.3.18** Gateway or entry points should be well defined to indicate a change in road behaviour models to users.
- 6.3.19** Where on-street parking is proposed, incorporate bollards or other property demarcation elements to define private space.
- 6.3.20** Draw from a palette of streetscape materials that is consistent and visually strong to establish a consistent visual character along the length of the street.
- 6.3.21** Integrate street furniture in such a way so as to encourage community engagement within the streetscape, and promote driver engagement.
- 6.3.22** Where appropriate, introduce traffic calming measures such as raised



Figure 6.4 - Local Campus Street Conceptual Streetscape - Option A and B (16.0 m ROW)

speed reducers and increase side friction through consistent street furniture and street tree plantings.

- 6.3.23** Consider the use of pedestrian or low level lighting only where design parameters permit to encourage pedestrian character. The use of metal halide or LED lighting is encouraged to provide clean white light with true colour rendering that delineates paving features.
- 6.3.24** Enhance the aesthetic of local campus streets through the incorporation of consistent street tree planting along the length of corridors. Employ planting design details such as continuous street tree trenches and structural soils to improve the long term prospects for successful establishment when street tree planting occurs within hardscape.

## **6.4 Public Art**

The shared Oshawa campus currently contains quite a few public art installations. As such, the following guidelines should be considered in the placement of new public art.

- 6.4.1** Locate public art in visible locations or amenity spaces visible to the public or intended users. Consider locating public art at locations within the public realm that can be used as visual markers or cues for pedestrians. For sensitive features, consider internal locations in public view, such as foyers or display areas.









# INFRASTRUCTURE & UTILITIES



## 7.1 Stormwater Management

In the management of stormwater on the site, DC and UOIT should, wherever possible apply low impact development (LID) principles. This will help to mitigate reductions to groundwater recharge due to the increase in imperviousness caused by the proposed development. Additional guidelines relating to LID principles and criteria are identified in Section 3.1.

### North of Conlin Road

At full build-out, new stormwater management (SWM) treatments will be needed to accommodate development north of Conlin Road. The location of ponds were identified in the previously approved Master Environmental Servicing Plan (MESP) for the Windfields Planning Area West (February 2012) at the south limit of the development lands adjacent to the three creeks (Oshawa Creek, Tributary W1 and Tributary W2) or an appropriate approach to SWM should be reviewed prior to development to assess the SWM needs at that time.

DC and UOIT should:

- 7.1.1** Consider future SWM facility design as an opportunity to create an aesthetically appealing landscape feature that integrates well in to the surrounding environment and can be used as a showcase for innovative approaches to SWM, as was demonstrated in the SWM pond adjacent to Polonsky Commons, south of Conlin Road.

- 7.1.2** Minimize the size of future SWM ponds by considering LID alternatives, as noted in Section 2.1.
- 7.1.3** Ensure that new SWM facilities are designed as amenity spaces for the campus and should be designed to be naturalized with plantings.
- 7.1.4** Where feasible, SWM facilities should be integrated into the campus walkway network.

### South of Conlin Road

South of Conlin Road it is expected that new storm sewers will only be required to connect to any new structures being proposed. Since the campus lands south of Conlin Road are essentially fully developed with hard surfaces (i.e. buildings and parking lots) it is expected that the existing ponds can accommodate any redevelopment proposals on these lands without the need for any significant upgrades or new ponds. If the imperviousness level of the site changes it is expected that the upgrades would be modest and could be accommodated by making minor adjustments to the existing ponds such as revisions to outlet pipes or structures and possible excavation to achieve additional storage.

## 7.2 Sanitary Sewer

### North of Conlin Road

An existing 525mm sewer on Founders Drive, north of Conlin Road has been extended north to Britannia Avenue West. The sewer will be constructed along the west edge of the campus development block (east edge of tributary W1) and is designed at sufficient depth to accommodate future development within the UOIT/ DC lands north of the arena, and west of Simcoe Street North.

To service the UOIT/DC lands within the Quad, located between Tributary W1 and the West Oshawa Creek, it will be necessary to construct a trunk sewer across Tributary W1 north of the Conlin Road Pumping Station. There is an existing 1350mm diameter sewer entering the north side of the pumping station. This sewer was constructed with an allowance for the future construction of a 1200mm diameter sewer across Tributary W1. The sewer connections will include a manhole with an invert of 142.43m and will provide sufficient depth to drain by gravity beneath the creek elevation (approximately 146.0m). The sewers within Quad will drain by gravity along future internal roads on either side of Tributary W2 following the slope of the land. The sewer located in Innovation, on the west side of Tributary W2 will cross Tributary W2 and combine with the flows within the Quad on the east side of Tributary W2. This trunk sewer is oversized to accommodate future flows from the Windfields Part II Plan as well as flows from Columbus, other industrial lands and flows that are to be diverted from Brooklin. The Region of Durham will be responsible for oversizing costs

beyond the minimum size required by UOIT/DC.

The Thornton Character Area, on the west side of west Oshawa Creek between the Oshawa Creek and Thornton Road will also flow to the Conlin Road Pumping Station. Servicing these lands will require a sewer syphon to be constructed beneath West Oshawa Creek. The syphon will be constructed within UOIT/DC lands approximately 300m north of Conlin Road. This sewer will also be a trunk sewer as it will accommodate flows from the industrial lands west of Thornton Road.

### South of Conlin Road

The campus south of Conlin Road drains to the Simcoe Street North Pumping Station located on Simcoe Street North just north of East Oshawa Creek. The Region of Durham has advised that this pumping station has experienced capacity issues over the last few years. Upgrades to the pumping station were undertaken by the Region in August/September 2013 in order to provide additional capacity.

In 2014 the Region had expected to further upgrade this system by increasing the size of a portion of the existing forcemain which was considered to be a bottleneck. With that upgrade in place, the Simcoe Street North Pumping Station capacity would increase from 140 l/s to 170 l/s.

The Region confirmed in a meeting in November 2013 that the recent and proposed upgrades to the Simcoe Street North Pumping Station and forcemain are being completed to allow for expected intensification along Simcoe Street and will not provide any additional capacity for UOIT/DC. As noted in the Vision and Directions

Report, UOIT/DC were previously allocated 40 l/s for the lands south of Conlin Road. This allocation is not expected to increase. The sanitary sewer capacity issues were noted in the Vision and Directions Report, and as a result, UOIT and DC have initiated sanitary flow monitoring for the lands south of Conlin Road. This monitoring is anticipated to be completed in March 2015, and a report will be submitted to the Region at that time.

Depending on the outcome of the sanitary flow monitoring, alternatives approaches for addressing future sanitary sewer needs on the lands south of Conlin Road may need to be reviewed. The Region has indicated that they are supportive of redirecting a portion of the sanitary flows from the lands south of Conlin Road to the north to outlet at the Conlin Road Pumping Station. This would require installing a mid-block pumping station to divert flows from the new development directly south of Conlin Road, where parking lots currently exist, to the Conlin Road Pumping Station north of Conlin Road. The Conlin Road Pumping Station has sufficient capacity to accommodate these additional flows, as well as the anticipated future flows from development to the north. Further, the Region of Durham's Development Charge Background Study (March 2013) indicated that the Conlin Road Pumping Station will receive improvements to further increase capacity. These improvements are to start in 2016, with anticipated completion by 2022. Redirecting flows from a portion of the new development on the lands south of Conlin Road towards the Conlin Road Pumping Station will also reduce

the current flows for the lands south of Conlin Road, and potentially allow for additional growth or new buildings within the Durham Character Area, if desired in the future.

### 7.3 Water System

As noted in the Vision and Directions Report, water for the UOIT/DC lands originates at the Oshawa Water Supply Plant located on Ritson Road South at Lake Ontario. A series of trunk watermain constructed north along the City's major roads and some easements delivers water to the campus. Any new watermain required for future campus development can simply connect to the existing adjacent watermain without the need for any pressure reducing valves or booster pumping stations. The Vision and Directions Report details the existing water system for the lands north and south of Conlin Road.

In summary, watermain will be constructed on all of the major roads surrounding this site. The UOIT/DC lands will require private connections as these lands are privately owned. Due to the large size of this property it is expected that the land will be developed through multiple blocks or parcels of land and be phased over many years.

Hydrant and valve locations will be confirmed at the detailed design stage to the satisfaction of the Region of Durham and the City of Oshawa Building Department. Final watermain sizes for the Site will be confirmed through discussion with Region of Durham staff at the time of detailed design. The water system will be designed in accordance with Region of Durham criteria.



**Figure 7.1 - Existing and Potential Water Servicing and Stormwater Management**



**Figure 7.2 - Existing and Potential Sanitary Servicing**





**IMPLEMENTATION**

**8**

## 8. Implementation

The CMP identifies a set of objectives, a vision, and guidelines that have been endorsed and approved by the Senior Administration, Presidents and Boards of Governors of both University of Ontario Institute of Technology and DC. Although it is understood that the CMP needs to be dynamic and adaptable to respond to the needs of both institutions, there must be a consistent approach taken to CMP implementation, future development proposals and amendments or revisions to the CMP, as necessary. The horizon year for the CMP is 2030; however, regular review of the CMP objective, guidelines and assumptions should occur to ensure that they remain consistent with those of both institutions. A clear process to monitor CMP implementation is required to ensure that the agreed vision and principles are realized, and, if necessary, adapted over time to respond to changing conditions and contexts.

The CMP for DC and UOIT will be implemented through:

- 8.1** Effective project review and approval processes for all development projects initiated by UOIT, DC, or third party leaseholders (such as residence operators). In all cases, project proposals need to be assessed against the CMP objectives and guidelines and discussed with relevant stakeholders.
- 8.2** The principles and guidelines in the CMP apply to: all academic projects;

ancillary unit projects, including student housing; commercial or retail partners; and/or third party institutional projects.

- 8.3** DC and UOIT should seek partnerships with third party developers in order to leverage their existing land assets and realize the CMP development objectives that fall outside of the university and college's typical operating mandate. These partnerships will increase the opportunity for supportive institutional, innovation and community development both with Campus Corners and Quad areas.
- 8.4** The establishment of a Joint Design Advisory Panel that will consist of members from UOIT and DC, as well as a registered professional planner (land use). A registered landscape architect, urban designer, civil engineer and transportation engineer, will be included and involved in the design review as needed.
- 8.5** A Joint Campus Planner should provide technical support throughout CMP implementation and work together with UOIT and DC, and the Joint Design Advisory Panel to provide ongoing technical expertise throughout Master Plan implementation, particularly in the first three to five years following approval.

**8.6** The CMP identifies spatial relationships between future buildings and open spaces and a framework for the future street and pedestrian network. Specific building and landscape programs, dimensions, and scale and detailed infrastructure have been intentionally left out to allow for flexibility and design processes in the future.

**8.7** A phasing plan has been developed as part of the CMP based on current priorities and assumptions. As new developments and/or opportunities arise phasing may be adjusted, in accordance with the CMP principles and guidelines.

**8.8** The concept plan and 3D model illustrating the vision for the CMP will be maintained and updated during implementation. This will be used as a tool to:

- Identify development opportunities and articulate site specific guidelines and relationships
- Allow future design consultants to insert their proposals for testing and evaluation. Finished designs will be added to the model.
- Be used by the Design Advisory Panel to conduct their review and evaluation against the criteria in the CMP and Design Guidelines (general and site specific).

## 8.1 Phasing, Project Review and Municipal Approvals

### 8.1.1 Campus Master Plan Phasing

A logical approach to phasing will be critical to the success of the CMP and will ensure that infrastructure requirements, costs and parking requirements are anticipated and that future buildings are located on development-ready sites. The phasing plan has been integrated with the order of magnitude cost estimate. The Concept Plan shown throughout the CMP illustrates an ultimate build-out scenario for the future campus. This ultimate build-out is expected to occur beyond 2030 and the life span of this CMP.

The Vision and Directions Report included a high level analysis of the future space requirements for UOIT and DC. These space requirements were based on the projected enrolment at each institution over the next 15-20 years almost 140,000 gross square metres (GSM) will be required to meet projected enrolment. If no additional buildings are constructed by that timeframe the space shortfall would be 176,000 GSM. To address the projected space shortfall, new programmatic spaces will need to be incrementally added. Phasing for the purposes of the CMP has been undertaken

based on the projected future space requirements and priority buildings, as identified by UOIT and DC. Phasing was not determined based on incremental timeframes as new building construction is dependent on many factors including funding, partnerships and realized enrolment.

Based on the future space requirements and the Concept Plan illustrated, the space required to fulfil projected need for the timeframe of this CMP can be provided using only a portion of the total UOIT and DC lands, as will be illustrated in the Phasing Plan (Figures 9-1 through 9-4);

In addition to the future space requirements for DC and UOIT, the phasing plans identify where both temporary and permanent parking lots will be located. As noted in Section 5.3, parking requirements are expected to increase as the student enrolment and academic space increases; The current ratio of 0.21 parking spaces per FTE has been maintained for the purposes of the phasing plan. This illustrates a conservative approach to the provision of parking spaces, and should be monitored to ensure that this does not result in an oversupply of parking spaces. The approximate number of parking spaces to be provided within each

phase is summarized in the table below. As noted in the next steps, parking demand should be monitored in order to provide adequate and appropriate parking as the campus grows, and to minimize the chance of oversupply.

## Phase 1: UOIT /DC Priority Buildings

Phase 1 will see the development of key buildings that have been identified as the top priorities for UOIT and DC. These include, SILC (UOIT), Simcoe Building Replacement (DC), Joint Health Sciences Building (DC and UOIT), and CARIE (UOIT). Phase 1 includes development north of Conlin Road, on the north-west corner of Simcoe Street and Conlin Road, where the current soccer field and tennis centre are located. As a result, Phase 1 also includes the relocation of the athletic field and associated facilities to the south end of the Quad area. Supporting infrastructure will be developed to support relocation of these athletic facilities, including a new vehicular connection and culvert crossing the tributary, a diagonal pedestrian connection, temporary roadways, and temporary parking lots. The Windfields Character Area is also included in Phase 1 as the CMP recommends that an Options Assessment be undertaken for the remaining buildings in this Windfields Character Area to identify feasible options for adaptive reuse.

New parking lots will be constructed in three locations north of Conlin Road, as illustrated on the Phase 1 plan. New parking lots will accommodate the loss of 475 parking spaces associated with the removal of Founders 6 and 1 Lots, as well as the increase in the need for parking spaces on an interim and short term basis. Surface parking lots will be converted to either structured parking lots in the future, or replaced with buildings, as the campus continues to develop.

In Phase 1, Founders 7 Lot remains as is and continues to provide 241 parking spaces. In addition to the temporary surface parking lots provided within the Quad area, a temporary surface parking lot will be provided directly north of Northern Dancer Drive. This parking lot will be replaced with a future building, as illustrated in the Concept Plan. Section XX identifies specific design guidelines associated with this surface parking lot to ensure that it fits subtly in to the campus development. A more significant number of new parking spaces are provided in Phase 1 to account for the permanent loss of parking spaces as a result of new buildings, as well as the anticipated temporary loss of parking spaces in Founders Lots 2 and 3 during the construction of the new Simcoe Building and SILC building south of Conlin Road.

Due to the large size and location, structured parking may be most logically located at Commencement Lot at the south end of the campus. The transportation and transit analysis undertaken as part of this CMP process demonstrated that the intersection of Simcoe Street and Commencement Crescent currently operates at capacity and additional parking spaces at Commencement Lot will result in additional vehicles using that intersection creating further congestion at that location. As a result, structured parking has not been recommended at Commencement Lot, at this time, but may be provided if access for both private vehicles and transit is improved. The table below summarizes the number of parking spaces to be provided in Phase 1.



## Phase 2 and 3: Gateway and Campus Corners

Phase 2 will consist of development north of Northern Dancer Drive and south of Britannia Avenue West. A new roadway will be constructed as part of Phase 2 which will connect Founders Drive between Northern Dancer Drive and Britannia Avenue. No parking spaces are lost as a result of Phase 2 construction. Should parking demand demonstrate that additional parking spaces are needed during Phase 2, a temporary surface parking lot may be constructed on the eastern side of the Quad. This parking lot will be designed to be easily converted to the future green boulevard space.

Phase 3 will consist of the buildings located on the south Conlin Road, and east of Simcoe Street. Phase 3 is a critical component of campus development, and as such, has been grouped together with Phase 2 in order to allow for development in this location to proceed either concurrently or before Phase 2, if the opportunity to do such arises (through partnership opportunities, or funding). Phase 3 will be the final development phase at Campus Corners and will frame the Simcoe Street and Conlin Road intersection. It will re-inforce and further enhance walkability, and pedestrian-oriented design through the implementation of the diagonal transect connecting the intersection with the campus, north and south of Conlin Road. No new roads are required to implement Phase 3; however, it presents an opportunity to upgrade streetscapes along Founders Drive, Simcoe Street North and Conlin Road, if these have not already been upgraded. This development will result in the loss of a

more significant amount of existing surface parking. Should parking demand demonstrate that additional parking spaces are needed in Phase 3, the surface lot located north of the new athletic facilities in the Quad area may be converted to a structure parking lot. Section XX identifies specific design guidelines associated with structured parking lots to ensure that it fits in with the character of the campus.

By this point in the campus development, it is expected that additional transit will be provided along Simcoe Street, including, potentially bus rapid transit, as envisioned and emphasized in the CMP. Although a significant amount of existing parking will be lost during this phase, additional parking will have been provided through the development of a temporary parking lot during Phase 2, and through a shift in the modal split between transit and private vehicle.

Phase 4: Quad

Phase 4 will consist of development within the Quad area. Phase 4 requires more significant investment in infrastructure, including the construction of new streets, a culvert crossing, and civil and stormwater servicing. Phase 4 also includes significant investment in open space and landscaping as a result of the green boulevard and the new central greenspace. The Quad area presents a more significant opportunity for DC and UOIT to seek development partnerships and to establish a walkable and integrated institutional, residential and mixed-use community that provides academic spaces in conjunction with retail, restaurant and services uses, student and/or faculty residences, innovation and office spaces and open space. The Quad will be well

connected to the other areas on campus, as well as to the City park and community to the north. A second transit hub will also be provided in this phase of development. Additional parking will be provided both on-street, as well as integrated in to new building sites. Parking lots are located at the rear of new buildings, away from the central green boulevard and open space. It was assumed that the anticipated future parking for Phase 4 is the same as in Phase 3 as a result of additional transit service associated with the transit hub. Construction of the pedestrian boulevard will require the removal of the temporary parking lot in this Phase.

Beyond Phase 4: Innovation

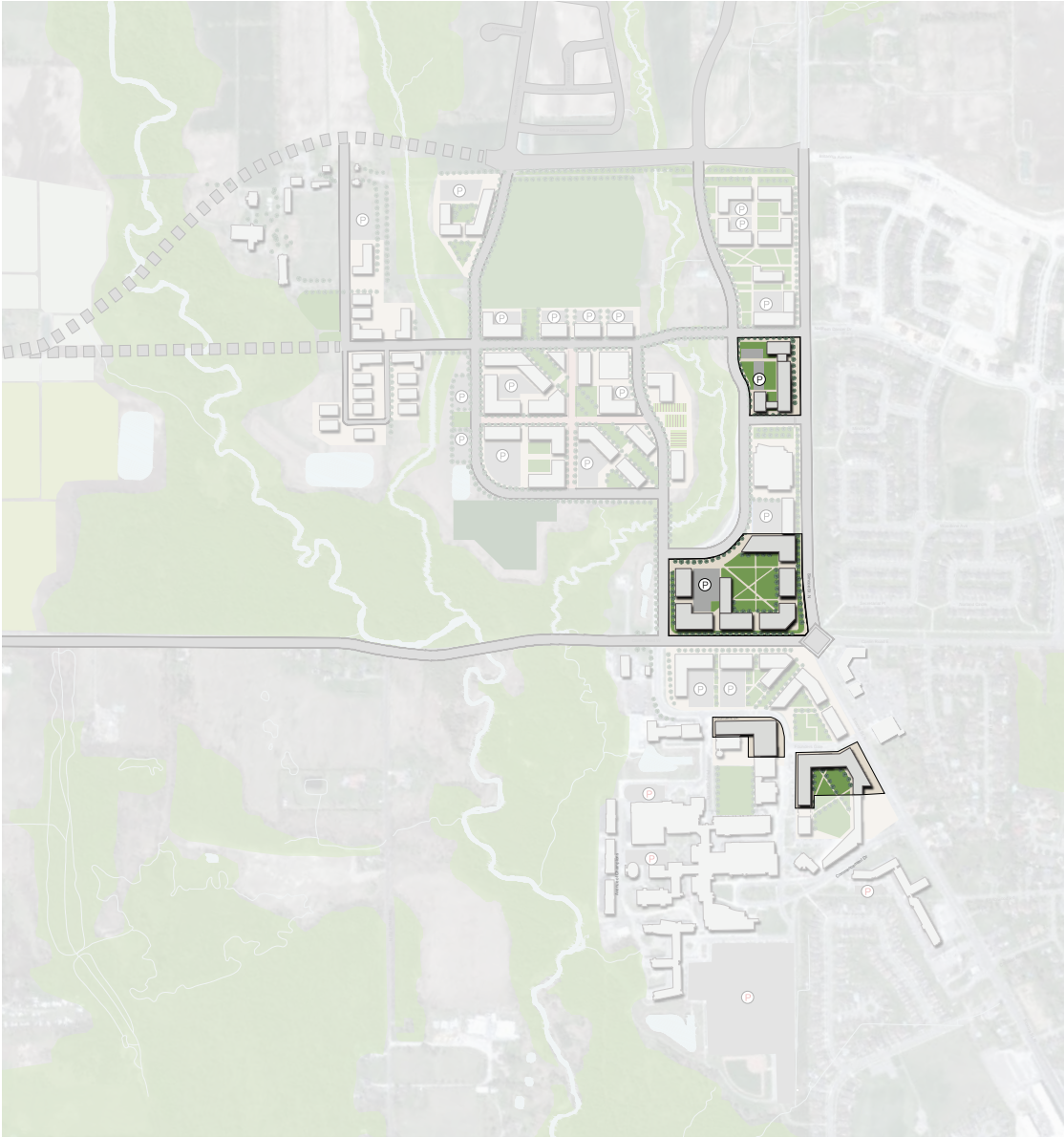
The Innovation Character Area is identified as a future phase, beyond Phase 4; however, development in this area may occur sooner if opportunities for partnerships arise. Development requires the construction of new roads, a culvert crossing, and servicing. Parking needs in this area have not been analysed because the scale and format of development is not known at this time.

Table 8.1 Parking Phasing Plan

	Estimated Number of Future Parking Spaces	Estimated Number of Parking Spaces Lost to New Development	Estimated New Parking Spaces Provided	Estimated Number of Parking Spaces by Phase
Phase 1	3,605	475	1,357	4,130
Phase 2	4,407	-	721	4,851
Phase 3	5,136	1,116	1,583	5,318
Phase 4	5,136	660	639	5,297

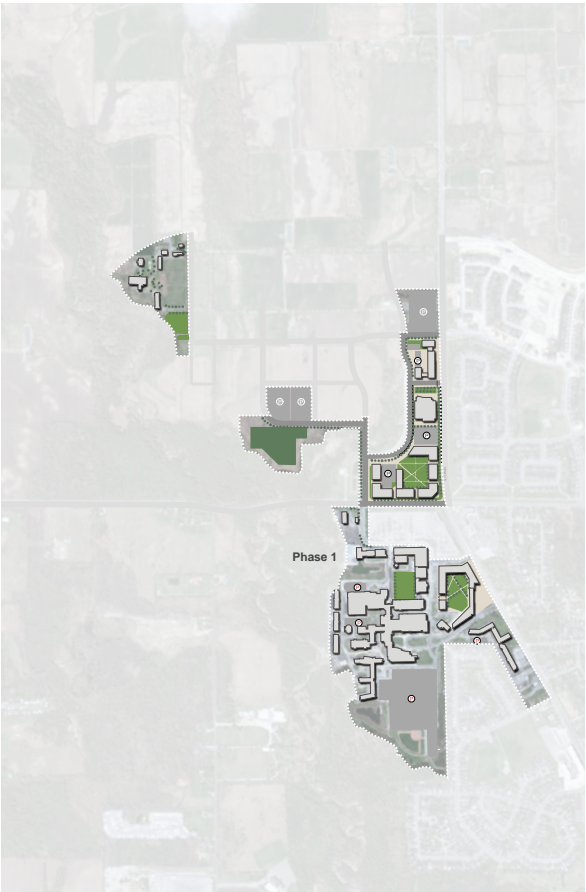
Notes: New parking does not account for the additional spaces to be provided through implementation of on-street parking on new streets.

The following identifies the priority new building locations:

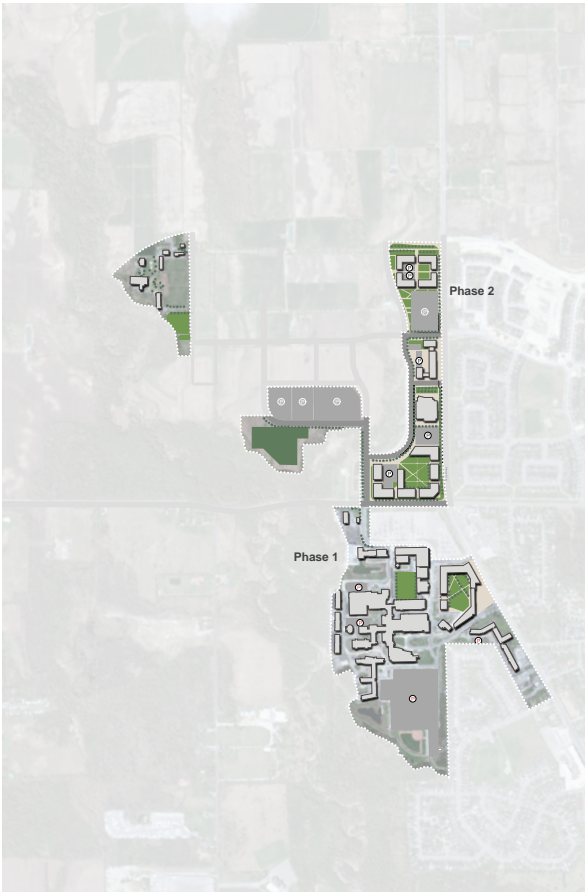


**FIGURE 8-5: Priority building locations**

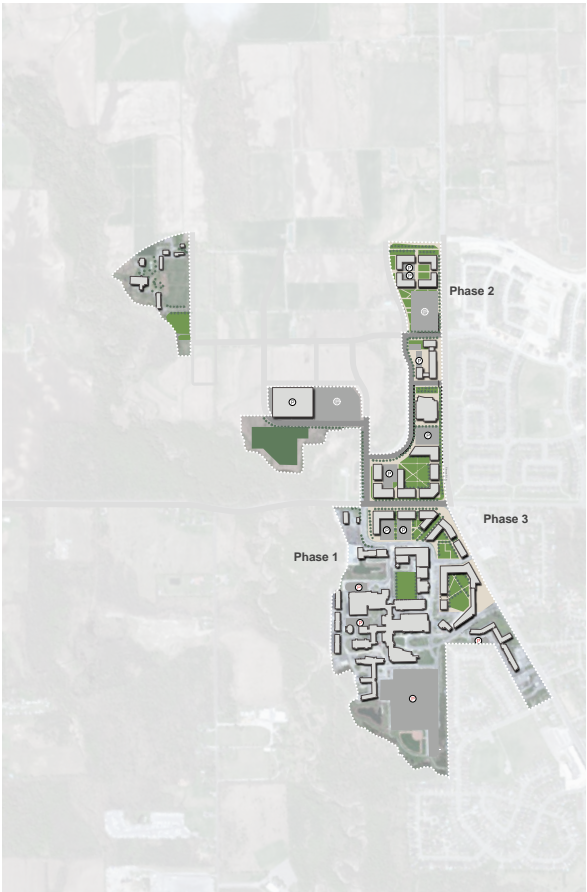
Figure 8.1 through 8.4: Phasing Plans



Phase 1



Phase 2

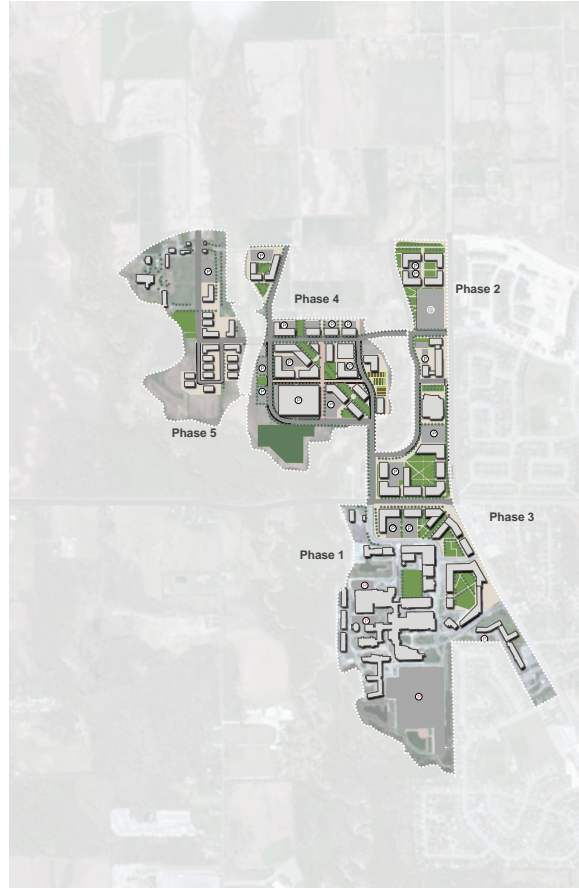


Phase 3





*Phase 4*



*Beyond Phase 4*



### 8.1.2 Roles and Responsibilities

DC and UOIT have a shared responsibility to uphold the vision, principles and guidelines contained within the CMP. To assist in CMP implementation, the following roles and responsibilities are recommended:

- The Institutions: DC and UOIT will play the most significant role in the implementation of the CMP. The CMP is a joint document that illustrates the shared vision for the future of the campus. In order to uphold the CMP commitments, UOIT and DC must coordinate their capital investment and future building plans.
- Joint Design Advisory Panel: The Joint Design Advisory Panel will be responsible for reviewing all new design proposals on the shared Oshawa campus to ensure consistency with the CMP objectives and guidelines and provide consistent oversight and technical input to future development projects. The Joint Design Advisory Panel will include members from both institutions, as well as a registered professional land use planner. An urban designer, civil engineer and transportation engineer will be included on the panel and

involved in the design review as needed. The Panel will report directly to the DC and UOIT presidents. The Advisory Panel will need to ensure that the CMP Concept Plan and 3D computer model is maintained as new development and infrastructure is constructed allowing DC and UOIT to continually monitor and assess the implications and opportunities associated with each new building.

- Joint Campus Planner: The Joint Campus Planner will provide technical support and strategic advice during CMP implementation, working closely with DC and UOIT. The Planner will assist DC and UOIT with developing requests for proposals, obtaining municipal planning approvals, retaining design consultants and assist with implementation of key infrastructure and building investments. Strategic Partners: Large-scale infrastructure projects are rarely implemented completely through funds from the institutions themselves. Many require investment from strategic partners in the public or private sectors in order to achieve mutually beneficial growth.

Potential partners could include: provincial or federal agencies, Lakeridge Health, local private developers, complementary universities or colleges (e.g., Trent University).

- Region of Durham and City of Oshawa: DC and UOIT will continue to work collaboratively with the Region of Durham, and the City of Oshawa throughout the implementation of the CMP. More specifically, UOIT and DC should continue to monitor and discuss:
  - o the design and construction of Simcoe Street North improvements (streetscaping, branding, pedestrian amenities);
  - o enhancing pedestrian connections across Simcoe Street North and Conlin Road;
  - o future road and streetscape improvements along Conlin Road;
  - o transit provision (as discussed below); and
  - o municipal servicing.
- Durham Region Transit and Metrolinx: Increased transit access and connectivity to the shared Oshawa campus will be critically important as the campus

expands. UOIT and DC will work collaboratively with Durham Region Transit to ensure that transit service continues to grow and meet the needs of students and faculty. Bus rapid transit along Simcoe Street North is identified in Metrolinx' Big Move Plan. As enrolment increases at the shared Oshawa campus and residential development continues north of Britannia Avenue, demand for higher order transit along Simcoe Street is expected to increase. The CMP envisions Simcoe Street as a higher order transit route, as identified in the Big Move Plan. As such, DC and UOIT should continue to work with Metrolinx, the City and Region to ensure that this priority transit route moves to implementation.

- Other Agencies: Agencies, such as Central Lake Ontario Conservation Authority (CLOCA), Oshawa Power and Utilities Corporation (OPUC), and/or the Oshawa Municipal Airport, may need to be involved at key points during CMP implementation.

The following illustrates the overall framework for DC and UOIT to undertake future development review and approval:

1	<ul style="list-style-type: none"> <li>• Capital project identified. Project overview and justification provided, including programmatic space to be provided, building scale and options for building location.</li> </ul>
2	<ul style="list-style-type: none"> <li>• Preliminary concept plans developed, including order of magnitude cost. May include concept plans in multiple locations.</li> </ul>
3	<ul style="list-style-type: none"> <li>• Preliminary concept plans provided to Joint Design Advisory Panel for initial review and input.</li> <li>• Implications on CMP and required infrastructure determined. Planning approvals identified.</li> <li>• Joint Design Advisory Panel to provide summary of review and recommendations to DC and UOIT.</li> </ul>
4	<ul style="list-style-type: none"> <li>• Acknowledge capital investment, including identification of partnerships and funding approval.</li> </ul>
5	<ul style="list-style-type: none"> <li>• Preliminary architectural design developed and reviewed by institutions and Joint Design Advisory Panel. Revisions made as needed. Joint Design Advisory Panel provides final input on building design prior to proceeding with municipal planning approvals, and detailed design.</li> </ul>
6	<ul style="list-style-type: none"> <li>• City and Regional development approvals identified and obtained, as required.</li> <li>• Detailed design</li> <li>• Construction.</li> </ul>

### 8.1.3 Design and Development Review

As the CMP is realized, new development opportunities will arise that will implement the Campus Character and Public Realm and Open Space Guidelines contained within this document. It is recommended that:

- 8.1.3.1 Prior to the commencement of any new project, a set of development and design criteria be established. The development and design criteria will reference relevant guidelines from the CMP and will also be used to determine the appropriate site for the development opportunity.
- 8.1.3.2 The Joint Design Advisory Panel review all new design proposals to ensure consistency with the CMP objectives and guidelines and provide technical feedback on the approach to urban design, transportation, landscape architecture, and servicing.
- 8.1.3.3 Design proposals for new buildings on campus be reviewed in the context of the CMP guidelines and the relationship to the surrounding open spaces and pedestrian connections.
- 8.1.3.4 New infrastructure projects, including new roadways to be constructed be reviewed in the context of the CMP guidelines relating to Movement and Circulation, Open Space and Public Realm to ensure.

### 8.1.4 Regulatory Approvals

The following outlines the regulatory approvals that would need to be undertaken in order to proceed with campus development. As agencies of the Province of Ontario, UOIT and DC are not required to obtain planning approvals from Durham Region and the City of Oshawa; however, these processes are often followed in order to ensure that Region and City staff are supportive of the development, and to provide the Region and the City an opportunity to comment and give input to the development. It should be noted that there are application fees associated with amendments to the Region of Durham Official Plan, City of Oshawa Official Plan, and City of Oshawa Zoning By-law, and with Site Plan Applications. Application fees are subject to change and as such, have not been included in this section.

#### **Durham Regional Official Plan (January 2013, Office Consolidation)**

The Durham Regional Official Plan (ROP) is a long-range policy document that provides Regional Council with a policy framework for decision making. The ROP provides policies that guide the use of land and the provision of transportation services across the Region in an effective and efficient manner. The ROP designates the entire shared Oshawa campus as “Living Area”. The uses associated with this designation are predominantly residential; however, certain public, recreational and employment uses that are compatible with the surrounding uses are permitted in accordance with the municipal Official Plan. The proposed

future uses are consistent with the policies outlined in the Regional Official Plan; therefore, no amendments to the Regional Official Plan would be required in order to proceed with future development.

#### **City of Oshawa Official Plan (2013, Office Consolidation)**

The City of Oshawa Official Plan (OP) provides a comprehensive framework for the development and redevelopment of lands within its municipal boundaries. The OP serves to guide the City’s growth and development in an orderly and efficient manner. The OP designates the majority of the lands north of Conlin Road as Institutional, with the exception of the lands located in the Thornton area, which are designated Industrial. The lands north of Conlin Road, and east of the Oshawa Creek, are also within the Windfields Planning Area Part II Plan (Official Plan Amendment 89) and are subject to additional land use policies.

The Official Plan’s institutional designation permits colleges, hospitals, large religious institutions and accessory uses. The uses proposed in the campus master plan are generally consistent with the land use permissions outlined in the Official Plan; therefore, an Official Plan Amendment is not required.

The Official Plan’s institutional designation permits colleges, hospitals, large religious institutions and accessory uses. The uses proposed in the campus master plan are generally consistent with the land use

permissions outlined in the Official Plan; therefore, an Official Plan Amendment is not required.

The lands north of Conlin Road are within the “Windfields Planning Area Part II Plan”. The Windfields Planning Area is to be developed as a mixed use community that integrates major residential, commercial and institutional components as well as the necessary community support facilities such as schools, parks, open space and other commercial and community facilities. The Campus Corners, north of Conlin Road, the Simcoe Gateway and Campus Quad areas are designated “Institutional” in the Part II Plan. These lands are to be used for campus uses and related activities, including City and University recreational facilities and commercial uses that serve students. Additional policies are provided within the Part II Plan which further direct the provision of open space, community parkland, mixed use development and recreational space within these lands. The uses proposed within the CMP are generally consistent with the land uses envisaged in the Institutional land use designation. Should additional non-institutional residential, commercial and/or retail development be proposed, an amendment to the Part II Plan may be required.

### **Restrictive Covenant**

A Restrictive Covenant exists on the institutional lands north of Conlin Road and therefore future development proposals in that area must consider the conditions outlined in the

covenant (dated September 4, 2003). This Restrictive Covenant limits the permitted uses on the lands north of Conlin Road to include: accessory educational uses; retail uses (not exceeding 20,000 ft<sup>2</sup> or 1,858.06 m<sup>2</sup>); research uses; and recreational and open space uses. The restrictive covenant also prohibits industrial and commercial uses, and office building in which more than 25% of the net rentable area of all office uses is used for non-educational uses. As such, the Restrictive Covenant limits the extent of non-institutional development on the lands north of Conlin Road. The proposed academic uses north of Conlin Road are consistent with the permissions contained in the Restrictive Covenant; however, should additional non-institutional residential, commercial and/or retail space and Public Private Partnerships be proposed, then modifications may be required to the uses in the Restrictive Covenant.

### **City of Oshawa Zoning By-law No. 60-94**

The City of Oshawa Zoning By-law provides detailed regulations that implement the objectives and policies of the Official Plan. The Zoning By-law serves as a land use implementation tool to guide the Town’s growth and development in an orderly and efficient manner. All of the UOIT and DC lands north of Conlin Road, and east of the Oshawa Creek are “Major Institutional Zone”. This zone permits the following uses: art gallery; home for the aged; hospital; museum; nursing home; parking garage or parking lot; post-secondary school; and supervised student residence. The zone does not permit retail or commercial uses. The maximum height permitted is 40 storeys, however, due

to the site’s proximity to the Oshawa Airport, the height is further restricted to a maximum of 4 storeys. Therefore, in order to permit retail and/or commercial uses at grade, a Zoning By-law Amendment is required. The lands west of Oshawa Creek are “Urban Reserve”. Uses permitted in this zone are limited to agricultural.

A zoning by-law amendment application involves a high level of consultation with the City, various public departments and the local community. The rezoning process includes: a pre-consultation meeting; rezoning application submission; review by City staff and other agencies; a public meeting; and a Council decision. This process can take up to nine months or more for Council to approve, depending on the complexity and public opinion. Furthermore, both the applicant and members of the public also have a right of appeal to the Ontario Municipal Board for the rezoning application.

### **Site Plan Approval**

A Site Plan application will also be required to implement future development. Site Plan approval is a “technical” approval that is issued by City staff. There is no requirement for public notification or input and unlike a rezoning application, there is no opportunity for appeal by the general public to the Ontario Municipal Board. A reasonable timeframe to achieve Site Plan approval would be six months, in the absence of any unforeseen complications. The City can process the rezoning application concurrently with Site Plan application in order to maximize efficiency and timing.

## 8.2 Master Plan Monitoring and Amendments

The CMP provides a framework and guidelines for future campus development that will provide the projected academic, administrative and ancillary space needs to meet the anticipated student enrolment growth. The CMP cannot anticipate every future eventuality. As such, the CMP will need to be monitored as new building, open space and infrastructure projects are brought forward, and subsequently updated.

The following actions should be undertaken to monitor the progress and status of the plan's implementation:

- All new projects be reviewed and assessed against the vision, objectives and guidelines in the CMP. As projects are realized, the CMP Concept Plan will be updated to illustrate the new Campus and associated infrastructure.
- Semi-annual reports to the DC and UOIT Presidents that document the status of existing and future projects, infrastructure requirements and application of the guidelines contained within the CMP.
- Reporting to the Board of Governors of UOIT and DC at pre-determined intervals, that documents the on-going projects and proposals as they relate or have implications on the CMP.
- Amendments and/or minor additions to the CMP must be outlined in a report which documents the proposed amendment, rationale for the

amendment and potential impacts on the CMP's principles, guidelines or concept plan. All amendments must be reviewed by the Joint Design Advisory Panel. Following review and approval by the Joint Design Advisory Panel, the Amendment will be reviewed and approved by the Senior Management Teams at DC and UOIT. It is at the discretion of the Senior Management Teams to determine whether approval from either institution's President or Board of Governor's is required.

- Both DC and UOIT's Strategic Plans extend to 2016. The CMP should be reviewed in the context of new strategic objectives or goals established following review of the current Strategic Plans.
- A comprehensive CMP review should occur every ten (10) years to ensure that the principles and guidelines remain accurate and consistent with the individual and shared interests of DC and UOIT. Minor CMP reviews may be required after five (5) years, depending on the scale of growth that has occurred on campus.

## 8.3 Order of Magnitude Cost

An order of magnitude cost estimate for the future infrastructure has been calculated based on the CMP Concept Plan. The cost estimate takes into account the following:

- Earthworks
- Services (water, sanitary) within the right-of-way
- Services (storm / FDC) within the right-of-way
- Roadworks
- Services (water, sanitary) within area
- Services (storm / FDC) within area
- Street trees
- Enhanced streetscaping
- Hydro
- SWM Pond
- Culvert
- Pedestrian bridge
- Parking

In addition to the list of exclusions noted in Appendix A, the order of magnitude costs do not include enhanced landscaping, boulevard treatments (widened or enhanced paving), open spaces, pedestrian connections not associated with walkways, or enhanced lighting. Costs for enhanced features have been identified separately.

Based on the current concept plan it is anticipated that future academic space requirements to 2030 for both DC and UOIT can be accommodated within Campus Corners and Gateway Character Areas. The CMP phasing



plan recommends that the lands on the north side of Conlin Road be redeveloped within the first phases of development. As a result, the athletic field and associated athletic and parking facilities will be relocated in Phase 1 to the location illustrated on the Concept Plan within the south end of the Quad. This will require the construction of a bridge or culvert between Campus Corners and Quad.

It should also be noted that the Windfields and Thornton areas were excluded from the cost estimate at this time. The future use and layout of those areas has not yet been established. Further, costs associated with the development of the bridge across Oshawa Creek between the Innovation and the Thornton areas have not been included. The need for this crossing will be determined once the Britannia Avenue West alignment to Thornton Road is confirmed and the north-south roadways within the Innovation and Windfields areas have been finalized.

Table 8-1 is a summary of the Order of Magnitude cost estimate for infrastructure. For the purposes of the cost estimate, Campus Corners has been divided into two areas, south of Conlin Road and north of Conlin Road.

Table 8-1 Infrastructure Cost Summary

Phase	Cost Estimate (\$000 ` s) <i>Rounded</i>
Phase 1	1,700
Phase 2	3,500
Phase 3	1,300
Phase 4	10,700
<b>Totals</b>	26,700

Table 8-2 Enhanced Landscape Features and Pedestrian Realm Costs

Area	Cost Estimate (\$000 ` s) <b>Rounded</b>
<b>Totals</b>	26,700

## 8.4 Recommendations for Further Study and Initial Improvements

Campus development will occur over the course of many years. Technical studies, plans and monitoring will be needed to support and further refine the recommendations in the CMP.

The following future studies and plans are recommended in the short-term (0 to 2 years):

- **Parking Usage Study:** A parking usage study should be undertaken to assess the current parking supply and demand, and to provide recommendations on the future parking requirements as enrolment grows. This study should include a monitoring process to ensure that there is accurate and up to date information on parking usage.
- **Travel and Transit Demand Monitoring:** A survey should be undertaken at regular and measurable intervals during the year to monitor and document the current travel and transit demand on campus. It is recommended that this survey be undertaken on an annual basis to ensure consistency in the information and data obtained. This information will support discussions surrounding increased transit investment and provision to the shared Oshawa campus with Metrolinx and Durham Regional Transit. It will also assist in identifying trends in the student travel patterns.

- **Future Infrastructure Design:** Detailed road and bridge design will need to be undertaken in order to implement the CMP. Specifically, when new campus buildings are constructed on the north side of Conlin Road, the athletic fields will need to be relocated. New infrastructure will be required to access the future athletic spaces.
- **Options Assessment for Windfields Heritage Buildings:** The CMP recommends that an Options Assessment be undertaken to consider and identify feasible options for adaptive reuse of the remaining Windfields Farm buildings. This study may be undertaken in coordination with the City of Oshawa.
- **Wayfinding and Signage Plan:** The CMP recommends that a consistent approach to building, entry, street and wayfinding signage be taken including the locations for gateway signage. Wayfinding and signage will be used as a tool to visually integrate the shared Oshawa campus with the other DC and UOIT campuses/locations. The Wayfinding and Signage Plan will design and detail the specific signs.

The following future studies and plans are recommended in the medium-term (2 years and beyond)

- **Detailed Landscape and Open Space Plan:** The public realm and open space concept and guidelines contained within the CMP provide a

framework for these campus features. The Landscape and Open Space Plan will further refine the framework and provide additional detail with respect to the design and programming of open spaces, landscape and streetscape treatments, including street furniture.

- **Building Height Strategy:** The CMP promotes compact development with a focus on the Simcoe Street North and Conlin Road intersection. The Campus Master Plan also recommends that UOIT and DC work together with the Oshawa Airport Authority to determine the maximum permitted building and structure height. DC and UOIT should seek to permit additional height at key gateway locations, such as at the Simcoe Street North and Conlin Road location. Technical analysis will be required to determine whether additional height may be accommodated at this location.
- **Development Corporation or Properties Trust:** DC and UOIT may explore the opportunity to establish either a development corporation or properties trust to act as an arms-length organization that manages the institution's shared land assets. The corporation would include real estate and land development professionals and would be responsible for the current and future management and development of surplus lands. The corporation would also seek

partnership opportunities to support the development of innovative industries, student and/or faculty accommodation, retail, restaurant, office and academic spaces, as needed. The corporation would report to senior leadership teams at both institutions.



# REFERENCES





## REFERENCES:

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# **APPENDIX A:**

## **CONSULTATION**

As introduced in the Vision and Directions Report, consultation is an integral part of the CMP process. The consultant project team has worked collaboratively with a project team made up of representatives from Durham College and the University of Ontario Institute of Technology over the course of the study. The project team has also worked with DC and UOIT's Senior Administrators and the Boards of Governors, the City of Oshawa, Region of Durham, Durham Region Transit, students, faculty, staff and the surrounding community throughout the study process. More specifically, the consultant team has worked together with:

- DC and UOIT Core Team: A focused group of senior representatives from DC and UOIT who are responsible for providing on-going input to the CMP process. The consultant team has worked closely with this team to confirm assumptions, address key issues, obtain strategic direction, and ensure that deadlines are achieved.
- Senior Administrators: The Senior Leadership teams from both DC and University of Ontario Institute of Technology have provided strategic input into the process.
- Board of Governors: Durham College and the University of Ontario Institute of Technology each have a Board of Governors whose role is to govern the affairs of the institutions. Although each institution has an independent Board of Governors, two individuals are cross-appointed to sit on both Boards.

The project team has presented to the Boards of Governors throughout the study process.

- Public Open House and Website: One open house was held during Phase 1. Two workshops and one open house will be held in Phase 2. The first workshop was held in October 2014 and the second will be held in March 2015. The final open house will be held in September 2015. A project website was established at the outset of the project. Project updates have been added to the website throughout the study.

### 3.1 Phase 2: Workshop #1

In October 2014, the project team held a Workshop to obtain input from students, faculty, staff, and interested members of the community on the three key themes of the CMP, and the draft final Concept Plan. Attendees were provided with a questionnaire that focused on the three themes of: Built Form and Character, Transportation and Movement and Public Realm and Open Space. Display boards were set up that provided general information on the CMP process, as well as interactive boards which sought input from attendees relating to the three key themes, the CMP Principles and the Concept Plan. More specifically, the CMP Principles were illustrated on two display boards and, using coloured and numbered dots, participants were asked to identify which principles were considered to be most important them. Approximately 65 people signed in at the

Workshop and 27 workbooks were submitted. The questionnaire was also uploaded digitally to the project website. This allowed those who were unable to attend the workshop to provide interactive input through the project website. An interactive concept plan was also uploaded to the project website allowing users to drop digital notes relating to specific areas of the concept plan.

The following summarizes the comments provided on the Concept Plan, both during the workshop, and through the online map:

- Improve pedestrian connections across Conlin Road and Simcoe Street North (i.e., tunnel, bridge or crossing);
- Additional study / passive spaces (indoors);
- Greenspace / passive outdoor space;
- Lack of parking – more parking is needed, particularly if existing lots are being removed;
- Student focused services on campus (restaurants / cafes / groceries);
- High quality architecture;
- Additional athletic space; and
- Request for prayer space.

These comments are addressed in the CMP guidelines, as well as through revisions to the Concept Plan.

Participants also provided input on the CMP principles by ranking the principles that they felt were most important. The following four Principles were identified as the priorities first by the Core Team, and then further ranked



by participants at the public open house and through questionnaires on the website:

- Student Focused Institutions;
- Plan that works for the Short, Medium and Long Term;
- Transportation and Transit; and
- Walkability.

Open House participants were also requested to identify up to two additional principles, from the full list of seventeen principles, as priorities. The following additional principles were identified as being important to those who participated:

- Research, Experiential Learning and Scholarships; and
- Sustainability.

Input obtained during and after this Workshop has been considered and incorporated into the CMP document.

### **3.2 Phase 2: Workshop #2**

TO BE COMPLETED FOLLOWING WORKSHOP