

# SHERIDAN COLLEGE DOWNTOWN MISSISSAUGA CAMPUS

## A New Downtown Campus

The introduction of a Post-Secondary Education Campus by Sheridan Institute of Technology & Advanced Learning, hereinafter referred to as Sheridan, in Downtown Mississauga fulfills many of the objectives contained in the City's recently adopted Strategic Plan. In the context of the five (5) Strategic Pillars for Change: Move, Belong, Connect, Prosper and Green, the Sheridan Master Plan will direct and influence how the Campus will evolve in a downtown setting with particular importance on the movement of people to and from the Campus; connect with and inspire the youth and new Canadians in and beyond Mississauga; serve as a catalyst to help the economy and businesses of Mississauga to grow and evolve; and play a strong role in promoting a green culture in Mississauga.

The success of Sheridan in Mississauga will be dependent on many actions including but not limited to pursuing future Partnerships with the youth, the business community and the cultural community of Mississauga.

## Purpose and Effect

This Master Plan Document is a visual executive summary of a series of initial meetings, workshops, and design efforts on behalf of the City of Mississauga, Sheridan College and the design team from Glattig Jackson. This document is intended to assist with (a) formulating a more detailed conceptual & site development drawings; (b) evaluation of formal drawings submitted to the City of Mississauga for review and approval; (c) and serve as a plan to direct and influence securing further partnerships with the public and private sector to advancing future post-secondary education opportunities and investment in Downtown Mississauga.

The Master Plan is a conceptual representation of a campus development on 8.5 acres bounded by Rathburn Road West to the north, Living Arts Drive to the west, Prince of Wales Drive to the south, and Duke of York Boulevard to the east. This downtown campus is intended to be developed by Sheridan College along with public parking and a public park system. The park system is intended to run through the campus and will be refined through a "place-making" process engaging the public and other stakeholders within the parameters of the Future Directions Master Plan for Recreation and Parks and Natural Areas, to ensure that the appropriate facilities and spaces are created.

## Master Plan Principles

The Master Plan process was guided by a number of primary principles:

**Connectivity** - The Master Plan continues the Downtown 21 Vision Plan of creating a connected Mississauga. Increased connectivity is critical to the future development of Downtown Mississauga because additional street network will share the future travel demands; provide a finer system of sidewalks to increase the walkability of Downtown; increase the opportunities for transit; and develop more "complete streets" incorporating walking, cycling, and driving. The campus is split into a north and south block, the seam being Square One Drive, a flush street allows vehicular access and gives a higher priority to pedestrians. Square One Drive will help disperse traffic from Rathburn Road West and Prince of Wales Drive and create "A" Street frontage on Square One Drive, both east and west of the College.

**Flexible Urban Spaces & Parkland** - In addition to a series of pedestrian-oriented spaces within the Centre Precinct, the Master Plan proposes a series of continuous open spaces that not only serve as civic space for the general public of Mississauga, but also ties together the various phased buildings of the Sheridan College Campus. These green spaces are civic parkland and are open to the public and connect celebrative spaces in front of the Living Arts Centre to Rathburn Road West as well as connect to a larger system of existing and proposed parks. Additionally, it is intended that these urban spaces are constructed and designed in a highly effective manner with buildings that front the primary streets and parkland, animated public edges to encourage walkability and public permeability, and with consideration given to sustainable, green building techniques.

**Viewsheets & Deflected Views** - The Master Plan takes advantage of viewsheets and forced perspectives with the alignment of the campus buildings and arrangement of open spaces. These views are focused on elements of the architecture, viewsheets into Downtown Mississauga, high quality plantings and furnishings, the roundabout, and future development anticipated on Square One Drive and near Rathburn Road West and potential BRT/LRT stations. These views reinforce the continuous open space as public and welcoming.

**Landscape Character** - The landscape character of the Sheridan College Campus will support the daily demands of students and visitors to the campus, as well as the needs of the broader public who will frequent this public park. The campus will exemplify the "Green" pillar of the City's Strategic Plan by incorporating Low Impact Development (LID) techniques in parking areas to reduce stormwater quantities leaving the site, improve stormwater quality, and reduce the urban heat island effect with planting and paving materials. Plant material will be native, drought tolerant, and will support a sustainable and ecological approach to the environment.

**Opportunities & Partnerships** - The Master Plan intentionally links together Sheridan College with a series of civic facilities like the Living Arts Centre (training and public art opportunities), Central Library (reference material and study space), the Fitness Facility at the Civic Centre (exercise and active living), the Retail and Business Community in downtown Mississauga (shopping, employment, incubator business opportunities), and the YMCA. These linkages will function as a catalyst for continued investment and improvements to existing and future transit in the Downtown and other connected corridors across Mississauga and the Greater Golden Horseshoe.

**Implementation** - The Master Plan is intended to be phased over time with the understanding that key decisions need to be made on the location, the overall architectural design, the function of public streets, the treatment of surface and structured parking, park planning, and construction and perimeter landscaping on an interim basis and upon full build-out with supporting documentation prepared by the applicant(s) (i.e. wind study, micro-climate studies, etc.)



October 2009

## Square One Drive - "A Flush Street"

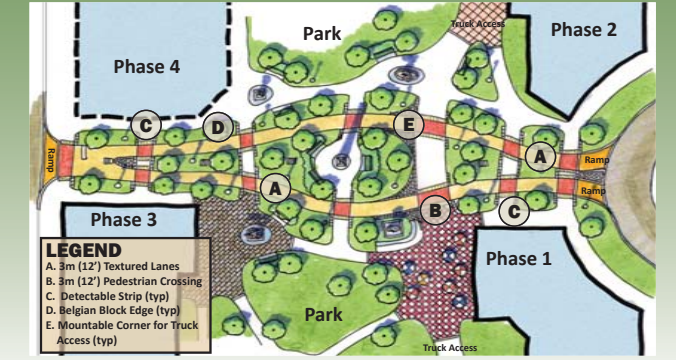
The Master Plan proposes that Square One Drive will be a two-way "flush street". In order to provide the safest walkable and drivable environment for the students, faculty, the public, and automotive users, the street is conceived with curbless edges giving a continuous flush surface from building face to building face and continuity of the parkland space. It is envisioned that the parkland is a single open space with a street through it, as opposed to two parkland spaces separated by a street. The flush street must take into account various design elements including:

- Pavement texture differences
- Flush street design
- Views towards architecture and public art
- Open space located between the travel lanes
- Multiple pedestrian crossing points
- A barrier free environment for the pedestrian
- Strategically placed street furniture and bicycle parking
- Incorporation of art and nature
- Sustainable stormwater management
- A sense of enclosure to focus the driver on the near and middle distance



5 Perspective View looking across Prince of Wales Drive at the Entry Plaza of the proposed Sheridan Campus.

This flush "plaza" will benefit many different kinds of users, as well as provide flexible space for college needs such as loading for the buildings. Loading facilities must be designed in a way that minimizes design and operational conflicts associated with the public parkland. Additionally, the flush street will encourage slow and safe speeds, while maintaining the same volumes as a conventional street, therefore performing equally, but with a safer pedestrian environment. This street design is an intended departure from conventional practices. This unique space and the roundabout at Square One Drive & Duke of York Boulevard may be the subject of an Environmental Assessment in accordance with related regulations.



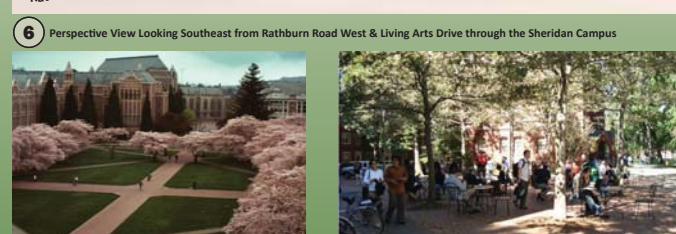
Square One Drive - Conceptual Plan for "A Flush Street"

## Parkland & Campus Open Space

The open space system proposed in the Master Plan is intended to be a public park used by Sheridan students and faculty, as well as the general public. The space is envisioned as a series of green spaces, hardscape plazas, seating areas, and a unifying landscape connecting together the Sheridan Campus architecture with the existing Downtown Mississauga buildings.



6 Perspective View Looking Southeast from Rathburn Road West & Living Arts Drive through the Sheridan Campus

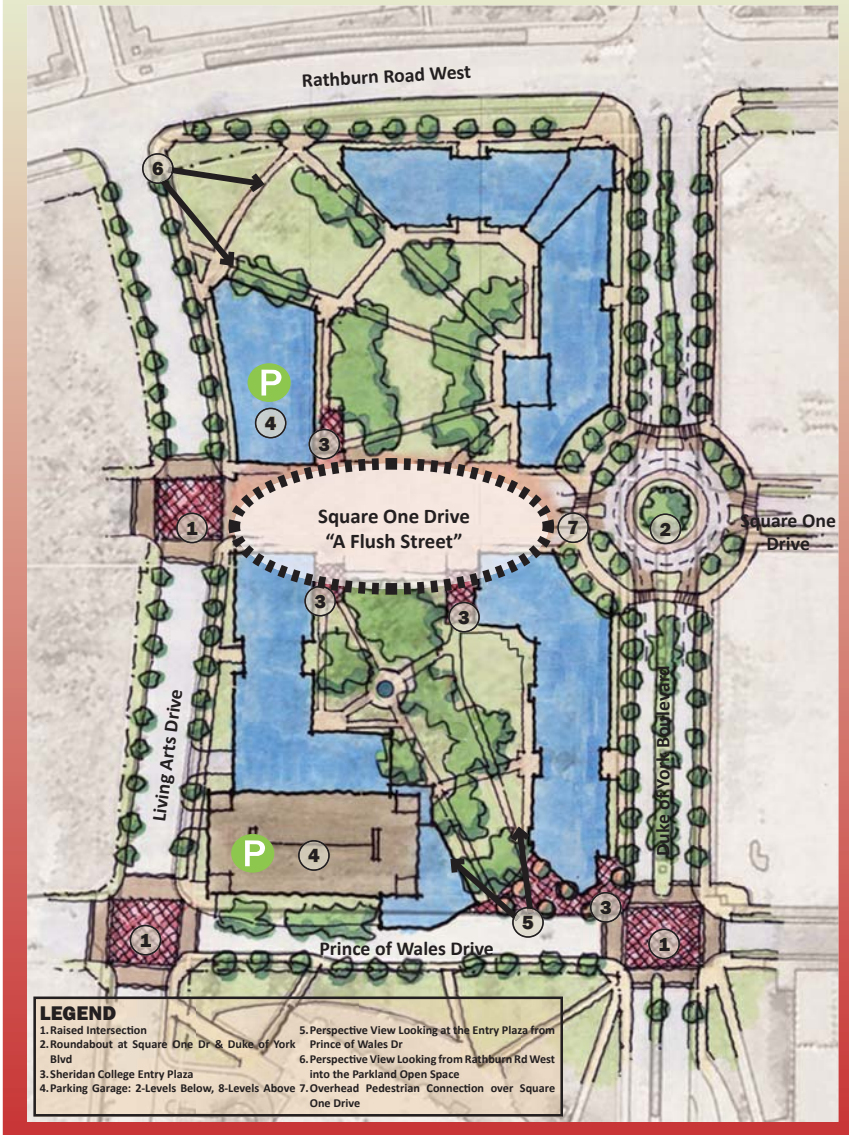


University of Washington - This open space unites the open space of the campus with angled walks creating dramatic vistas to the campus architecture  
Harvard University - This plaza space offers moveable tables and chairs, adequate tree canopy, bicycle parking, and (not seen in the image) free wi-fi internet access for users sitting in the plaza space.



Virginia Commonwealth University - VCU sits in Downtown Richmond, VA and features shared spaces and this student dining hall with outdoor tables and chairs that both address the city street and entrance to the shared space and quad to the left of the image.  
Harvard University - Harvard Yard acts not only as the primary gathering space for students and faculty, but a flexible space for both passive and active recreation. The open space is open to the public and provides connections from Harvard Square (a Transit Station) to adjacent residential neighborhoods.

## Overall Master Plan



Overall Master Plan

## Overhead Pedestrian Bridges

While pedestrian bridges connecting buildings are discouraged in a walkable urban environment, campus safety and inter-building connections are important to the operations of Sheridan College. The Master Plan would allow a sensitively designed overhead pedestrian bridge connecting the first and second phase buildings over Square One Drive. This connection would need to occur on the third or fourth level to give as much permeability and feeling of openness to Square One Drive. The architecture of the bridge needs to contribute to the campus buildings and be treated as an iconic feature with special attention to the architectural details.



Overhead Pedestrian Bridge in New York City - This pedestrian bridge is located on the third levels of these two buildings. It is high enough over the street to allow the streetscape to feel open and fluid. The architecture is also contextually sensitive using glass and detailed materials to create a better looking structure. The connection over Square One Drive needs to connote an entrance feature onto a special street, campus space, and open space.

## Master Plan Shadow Study - September 22nd Equinox, 10:30 EDT

The shadow study shows the importance of considering positive microclimate conditions for public park areas as it relates to building heights and the amount of sunlight in the public parkland.



## Downtown Municipal Parking Garage

In Phase 2, the Master Plan proposes a 10-level (2-stories below ground, 8-stories above ground) parking garage that will satisfy most of the parking needs of Sheridan College for Phase 2 and future phases. The garage is intended to be designed as a context-sensitive structure. Ground floor land uses are needed to give the garage an active front, especially on the east end. Transportation Demand Management measures will be implemented to mitigate the volume of automobile traffic and parking demand generated by the campus. The facade should be treated with a similar level of detail as the other campus architecture and special consideration should be given to sustainable design and incorporation of public art.

## Interim Surface Parking

In Phase 1 interim surface lots will be used to satisfy the parking demands of the College. Because the parking requirements in Phase 1 are less than in the overall master plan, surface lot spaces are more cost effective, however, as the campus expands, parking garage(s) will ultimately be the most cost effective and most efficient use of the downtown land. As shown in the conceptual phasing plan below, the surface lots in Phase 1 and 2 will serve as the foundation for future buildings on the campus. This is intended to be a more efficient use of land. There will be considerably less impact to the parkland space because the areas slated for future development will already be disturbed. Despite the fact that these lots are temporary, they should still be well-landscaped, offer sustainable solutions to stormwater run-off, create connections across the parkland to the Campus buildings, and use lighting that considers safety and security.



## Sustainable Design

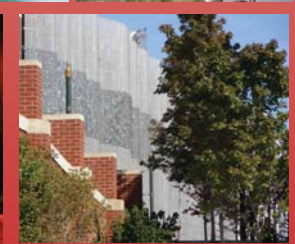
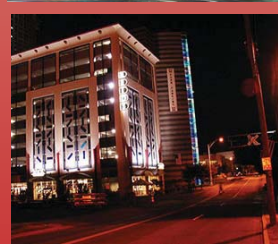
The Civic Center Parking Structure, located in Santa Monica, California, features solar panels that provide all of the building's energy needs.



Not only is the building structure energy efficient, it also contains many sustainable features such as a storm drain water treatment system, usage of recycled construction materials for building, low-VOC paints and coatings, low-e glazing for heating and cooling efficiency, and energy efficient mechanical systems.



**Architecture and Urban Context** - This parking structure uses local architecture to make the garage a contributing building in the Downtown. The ground floors have a mix of uses including retail, office, and general commercial that help to activate the street and encourage walkability.



Public Art - This public parking garage in Charlotte, NC utilizes public art within the facade to show wind patterns both in the daytime through reflective panels and in the evening through different colored art pieces that also move with the wind.

## Roundabouts

The Master Plan includes a roundabout at Square One Drive & Duke of York Boulevard. This will help facilitate current and expected traffic volume on Square One Drive as it is connected to Rathburn Road West as proposed in the Downtown 21 Master Plan. In general, roundabouts help Downtown Mississauga for six reasons:

- Function:** Traffic signals are designed to stop traffic, allowing various turn movements to proceed, one phase at a time, causing motorists delays throughout the day and during peak times. Roundabouts, there are no signals to unduly delay motorists. Roundabouts are usually accommodate trucks, fire trucks, buses, etc. The bonus is that, unlike traffic signals, the roundabouts do not need the storage lanes and turn lanes to operate efficiently. Plus, the roundabouts free up this significant space for other important purposes such as on-street parking and pedestrian accommodation. Roundabouts generate lower maintenance costs than signalized intersections and do not need to be timed. Plus, roundabouts are aesthetically pleasing while traffic signals are ugly.
- Safety:** Roundabouts are safer than traffic signals for motorists, cyclists, and pedestrians. The number of collisions drops. Plus, the severity of the collisions drops even more. The reasons include: i) drivers slow down for roundabouts, unlike signals, where many drivers speed up to make a stale green light or yellow lights; ii) safer pedestrian crossings; and iii) simplicity of use.
- Pedestrian Friendly:** It is easier and safer to cross the street at a roundabout than at a signalized intersection. A pedestrian looks to the left, crosses one lane (12') to the splitter island (refuge), looks right, and then crosses the other lane (12'). The signalized intersection requires the pedestrian to cross 50'-70' at once, exposing them for longer periods of time to traffic.
- Design:** Roundabouts employ less asphalt than signalized intersections and, therefore, offer more opportunities for landscaping. The center islands are ideal for planting beds of flowers, trees, and/or art. The sides of the street can have additional parking, street trees, landscaping, and seating areas. Furthermore, the aerial clutter, poles, and control boxes associated with traffic signals are removed.
- Environmental:** Roundabouts use less pavement compared to large signalized intersections and, thus, result in less storm water runoff. Noise and air pollution are reduced due to less idling, accelerating, and braking. Roundabouts do not require electricity to operate, which is great in general, but also makes them indifferent to power outages.
- Economic Development:** The space, in front of the Downtown businesses, that was previously used for storage lanes and left turn lanes can be used to increase supply of on-street parking supply which benefits customers and businesses. Coupled with superior aesthetics and pedestrian accommodation, the roundabouts are hugely beneficial for economic development.



## Conceptual Phasing Plan



Phase One Building on the South Block with Interim Surface Parking  
Phase Two Buildings on the North & South Blocks, including a Parking Garage  
Full Build-Out and Quad/Open Space Completion  
Potential Re-Alignment of Rathburn Rd & Living Arts Dr for BRT/LRT. A Downtown 21 Project.