III. Concept Plan

3.1 Key Design Strategies

The following section provides an overview of the Key Design Strategies that shape the Fredericton Campus Plan concept.



3.1.1 Background: Existing Open Space and Landscape

A significant portion of the existing campus was designed with the notion that buildings shape and create open spaces, rather than merely occupying a specific, isolated site. In the first phase of University development (1900-1949), buildings were naturally sited in relation to the dramatic view of the growing City of Fredericton, and to pleasant rural streets (now Dineen and Bailey Drives). The palette for this building program was farmers' fields, orchards, gardens, a bull pasture, and the grove in front of the Old Arts building. In the absence of a comprehensive approach to open spaces, a few (albeit strategic) trees were planted; however, much of the campus landscape remained unchanged.

Over the next significant growth period (1949-1969), the siting of buildings began to respond to and create a campus context. By incorporating the idea of quadrangles and an understanding of the landscape as essential to the university experience, the campus began to emerge as a defined pattern. This development was influenced in part by a traditional campus approach that recognized gracious landscaped environments as an appealing approach to campus planning. Private, generous lawns and gardens were incorporated into campus designs as amenities conducive to academic flourishing. In essence, campuses were conceived as tranquil retreats, fundamentally distinct from surrounding urban environments.

The siting of Tibbits Hall, Lady Dunn Hall, and Joy Kidd House demonstrate this shift towards understanding buildings not only in relation to streets, but also as having the capacity to shape landscaped, appealing, and useful outdoor rooms. The relationship between Toole Hall, Tilley Hall, and the Harriet Irving Library represents an additional example of this attempt to create a formal open space defined by the surrounding buildings. Priority, however, with respect to campus development, continued to be *building* form and character; consequently, opportunities to complete and formalize these quads in the past have been routinely missed.

More recently, as a result of budgetary constraints, the campus landscape has not received all the attention it deserves. Landscaping initiatives have been prompted by the need to resolve specific operational problems, resulting in a patchwork of landscape details with varying degrees of quality and longevity. For example, rose bushes have been planted in strategic locations to keep students from short cutting across lawns. Pathways have been established in an ad hoc manner and trees have been planted sparingly. In general, a distinct, and distinctive, landscape aesthetic is missing from the campus.

Landscapes continually evolve, are regenerated and refined. The landscape of UNB Fredericton of the future is entirely dependent on the consideration, investment, and foresight of present campus planning.



3.1.2 First Design Strategy: Enhanced, Defined and Extended Open Spaces

The Campus Open Space System is a key structural element of the Campus environment.

This system:

- provides links between and among buildings;
- reinforces linkages with the broader community;
- establishes the physical and visual context for building development:
- facilitates a green and sustainable campus;
- creates outdoor gathering places, recreational spaces, and the pedestrian connections vital to the livability of the campus:
- is a key component to enhancing the overall campus image as a breathtaking natural setting where students and faculty thrive.

The open space pattern is to be extended, enhanced and completed. More buildings do not compromise open spaces. To the contrary, by completing and enhancing existing quads (such as Jacob's Yard, north of the library), open spaces become defined and integrated into the overall structure of the campus. They are no longer undefined, "leftover" spaces.

Newly defined open spaces will protect existing green spaces that are currently underutilized or ignored. Whereas in the past the quality of the campus has been understood in relation to buildings, open spaces will now shape the character of the campus and one's experience of it. The treatment of these spaces is critical to the maintenance and beauty of the overall campus structure.

The wooded area south of the Student Union Building will be incorporated as a preserved green space that provides a moment of relief from the intensity of activity on campus. Spaces within it are both informal and formal, and its key new characteristic is a naturalized setting, potentially incorporating a pond or water feature.



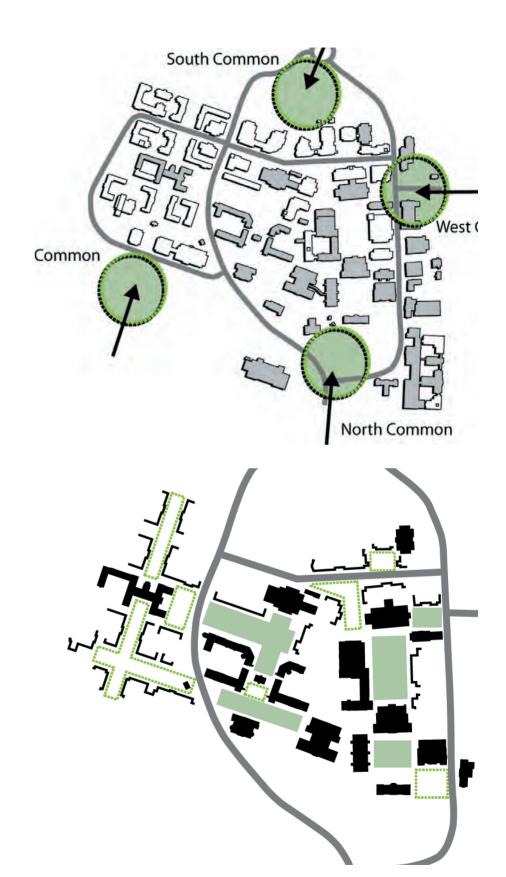
The clear delineation of open spaces through the careful locating of new buildings will result in new alignments connecting the east/west and south/north of campus. The campus will remain as permeable as it is today, but will be defined by explicit open space connections that enhance view corridors and connectivity between functions, including academic, residences, student services, and retail.

A landscape character for the campus will be defined. Not all landscaped areas need to be treated in the same manner, and yet certain areas, such as formal entrances to landmark buildings, ought to have an established landscape character that both distinguishes the area and signals its status in relation to the overall campus. Materials used throughout the campus will communicate a unified landscape and an overall language that explicitly define UNB Fredericton.

The Big Design Moves

The Commons: the protection and definition of passive green areas at the gateways into the campus.

A Defined Open Space Pattern: the enhancement, extension and completion of the existing pattern of quadrangle spaces as the key structuring element of the campus.





3.1.3 Campus Streets

Since the late 1800s, when Joseph Bailey first rendered the UNB Fredericton campus in a hand drawing (see p. 7), the importance of campus streets has been embedded in campus planning. The template for the existing road pattern was articulated at this time: the existing approach from University Avenue led to a generous avenue — then known as The College Avenue — that veered to the west, creating a symbolic and ceremonial entrance. This early road pattern conforms to the existing westerly road, Dineen Drive. College Road — which loosely conforms to Mackay Drive as we see it today — provided easterly access. The destination in all instances was the Old Arts Building, which was enveloped by a ring road, a terrace and a vard. This early mapping points to a modern problem: Mackay was also a through-route, providing access to the gardens, orchards and fields beyond Old Arts.

By 1953, several buildings had been added to the campus along the early template for road development: Lady Beaverbrook Gym, Lady Beaverbrook Residence, Sir Edmund Head Hall, and the Forestry and Geology Building. These all conformed to, or filled in, the existing road network. Over the hundred years following the inception of the college, the layout of campus roads remained unchanged.

It was in the 60s and 70s that the campus road network campus began to fill out, corresponding to a sharp increase in private automobile ownership. As new buildings were built, parking spaces were created in close proximity. The emphasis during this period of campus development was on consistent architectural design. The notion of a formalized approach to movement or circulation remained beyond the scope of campus planning.

Today, as in most urbanized areas, there is a significant perceived problem related to movement and circulation. In part, this is fuelled by the absence of a strategic approach to streets, walking, access and parking. Much like the City of Fredericton and many other mid-sized towns, the University of New Brunswick Fredericton is beholden to the automobile and experiences traffic congestion as a result.

Campus streets have remained nondescript: although they excel at catering to University-related and through traffic, they sometimes create an unpleasant pedestrian environment. Significant stretches exist where conflicts abound, such as in the area around MacLaggan Hall along Dineen Drive. Edges are loosely defined, and sidewalks are narrow and discontinuous. In the winter months, they are often covered by mounds of snow cleared from the roads.

Streets have the capacity to define the campus, elevate its character, and provide a beautiful encounter with a unique environment. The Fredericton Campus Plan, through a variety of key moves related to streets and streetscaping, seeks to achieve this kind of beauty.



3.1.4 Second Design Strategy: Beautiful, Safe, Streets for People

The streetscape character for all streets should contain the **same design language**, and taken as a whole will define a distinct campus *street* character. It will be clear, upon entering the campus grounds, that the campus itself is a unique and distinct environment that has a progressive approach to movement.

All streets should be framed by strong public spaces that include widened sidewalks, street furniture such as benches and cycling paths. Streets, in the Fredericton Campus Plan, are for pedestrians and cyclists, as well as vehicles. This street design character, taken with measures that support walking, public transit and cycling, is part of an integrated approach to **campus traffic calming**. For example, the redesign of streets to include frequent pedestrian crossings will interrupt traffic flow and signal to drivers that the campus is an environment better experienced on foot. Although vehicles will continue to have access to many parts of campus, the planning and design of the streets gives preference to other modes of transportation.

In keeping with the commitment to create an animated pedestrian campus, the Concept Plan includes a **Pedestrian Mall** that connects the most important campus community functions such as the Library and Student Union Building, as well as linking the two primary quadrangles on campus. New building frontages are also provided and a variety of student services as well as a variety of small-scale uses are recommended to animate this key pedestrian corridor and to enhance student life on campus.

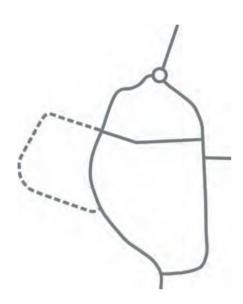
Recognizing that beautiful streets are essential to a vibrant campus where users experience ease whether driving or walking, Pacey Drive has been designed as **a new Promenade** with a variety of building types that define the south edge of campus and support interesting street life. It is here, along Pacey Promenade, that new, synergistic uses may be introduced to support an urban quality and dynamic campus infrastructure.

Specific treatments of the edges of campus result in an enhanced interface with the community. Campus edges are better defined and seek to integrate with adjacent uses. Windsor Street is prioritized as an area in need of significant and immediate landscaping details to improve the current relationship of buildings and parking lots with the street.

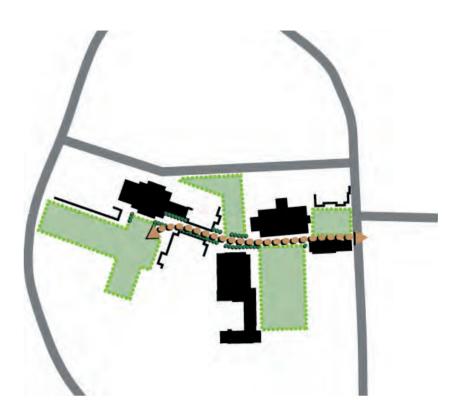


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The Big Design Moves



A New Access Loop: the expansion area to the east will be serviced by a new loop road extending from Pacey Drive and connecting back to Mackay Drive.



Pedestrian Mall: the creation of a pedestrian corridor linking key campus functions and open spaces.

Pacey Promenade: A campus "main street" framed by existing and new buildings, linking open spaces and supporting an animated street life.



3.1.5 Buildings

An unambiguous building aesthetic, extensively based on the use of red Chipman brick, has been the essence of the campus identity at UNB Fredericton. By committing to materials that are intended for longevity such as brick and limestone, a central characteristic of the campus has remained intact despite a significant growth spurt through the 1950s and 1960s, national trends towards modern design, and, over the past thirty years, incremental growth.

The interpretation of this style of architecture into the future presents a challenging question. While a commitment to specific materials, and even a slight extending of this palette, will serve to maintain and enhance continuity throughout the campus, it will not *de facto* produce good architecture or good buildings. The fundamental question in need of resolution relates to building design, quality, life-span, siting, massing, functionality, and relevance. Architecture can be assisted, or regulated in part, by a predetermined palette, but it cannot be predominantly shaped or dictated by it. In the ideal, UNB Fredericton will be best served by well-designed buildings that not only conform to, but also elevate, the existing architectural language on campus.





















3.1.6 Third Design Strategy: Well-Defined Campus Form and Architecture



Buildings, public art, and tall structures act as landmarks on campus. As orienting elements, landmarks provide visual interest and orient students, faculty, and staff as they move through campus. These buildings should be located at strategic sites that are embedded with historical, cultural or visual significance. An excellent precedent is the Old Arts Building, perched on the hill and serving as a key focal point to users as they enter the campus. It is undeniably the primary landmark on campus.

Landmark buildings contribute to an appealing and cohesive skyline condition, particularly when viewed from the City of Fredericton. This serves to reinforce and affirm the identity of UNB Fredericton. All landmarks should be given special planning consideration, since they aspire to a quality that is reflective of the pursuit of academic excellence.

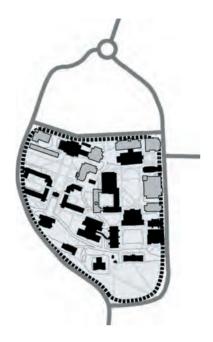
As UNB Fredericton develops, buildings will be designed to support pedestrian vibrancy by encouraging a multitude of active ground floor and small-scale uses. As the campus as a whole strives to be permeable, new buildings themselves need to be permeable, having a variety of public entrances. In particular, some buildings will need to 'face' all four sides of the campus in order to integrate into the campus landscape. The Old Arts building is a compelling example that highlights this approach. Despite its substantial size, it

is not experienced as a blank wall. All sides of the building offer formal, inviting entrances. In the Fredericton Campus Plan, buildings have been oriented to ensure that they enhance the pedestrian experience, for example through the implementation of Breezeways.

The areas that are reserved as parcels for future buildings, landscape, servicing, and public realm components are defined as **new development sites**. Although these sites may be used for interim uses such as parking, important and primary edges have been identified. These edges will be developed first, as they contribute to a larger development pattern, strengthening the open space system. Although it may take many years for the building program to consume the available capacity for new development, the open space system will be developed in the initial stages, thereby articulating the campus structure.

The Fredericton Campus Plan maintains the existing campus building aesthetic by supporting an architectural character that is consistent with the red Chipman brick, vertical windows and clearly articulated entrances. The identity of UNB Fredericton will continue to be tied to beautiful and timeless buildings.

The Big Design Moves

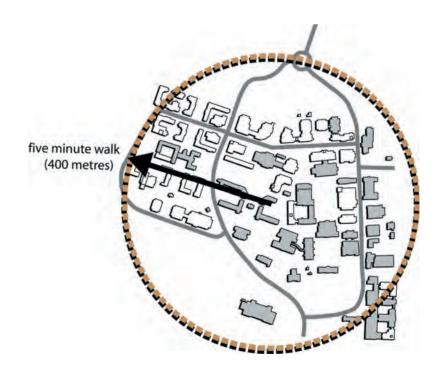


An intensified pedestrian priority area.



Expansion to the east and along the slope.

Potentially over 1.5 million square feet of new buildings within walking distance, added to an approximated 2 million square feet of existing space.



3.2 Core Campus Concept: A Vision for the Long-Term

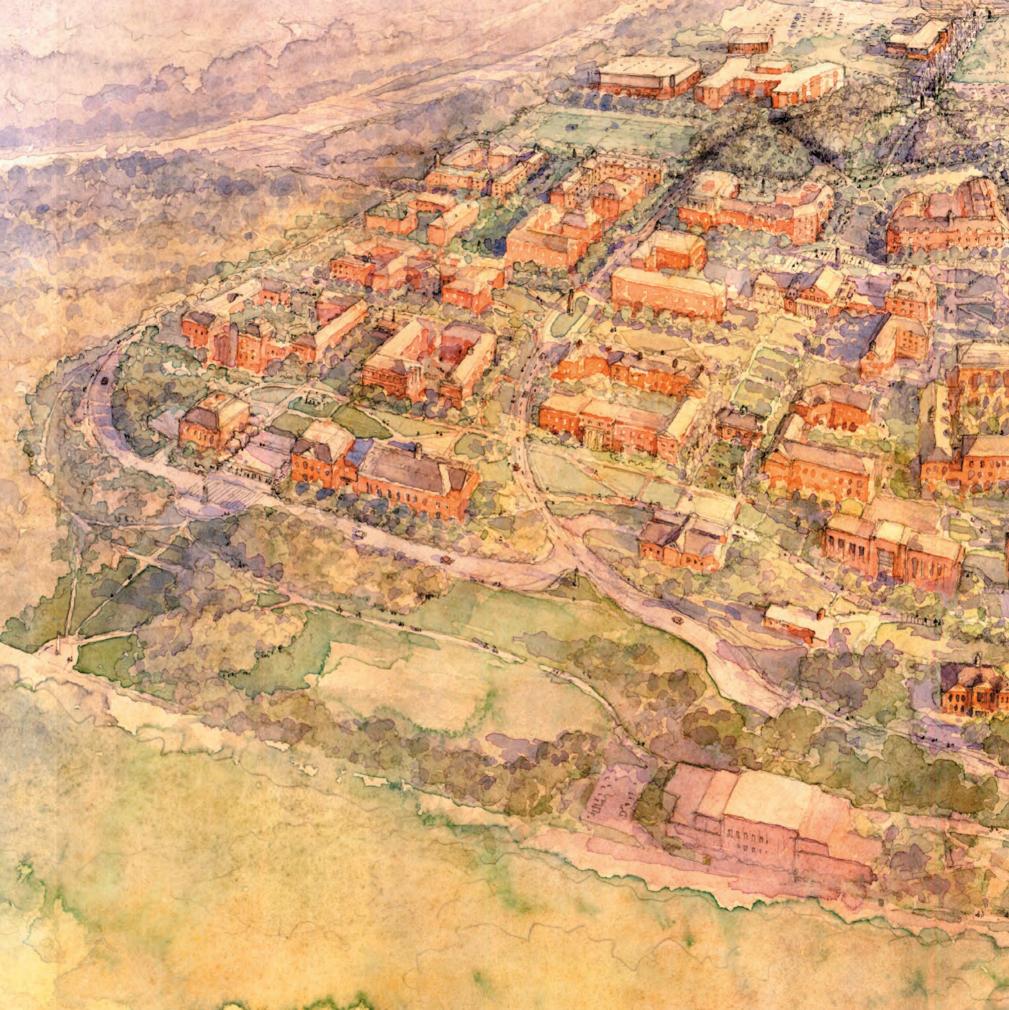
The concept plan represents the full build-out of the campus and therefore the long-term vision for campus development. Several key assumptions are embedded in this vision:

Some significant future building sites on the campus are parking areas today. To create a cohesive, dynamic campus environment with strong and interesting connections, the campus-building program should prioritize parking areas within the Central Campus for redevelopment (within Dineen Drive to the west, Mackay Drive to the east, and Pacey Drive to the south). New buildings will serve to strengthen existing open spaces, redefine and renew existing ones, and complement the architectural form on campus. Before new areas are developed, the campus core should be infilled.

While new buildings will integrate with existing buildings, thereby providing a consistent urban form, the Campus Plan's approach to open space design points to opportunities to visually stimulate and refresh the overall campus environment by adding creative vertical and horizontal design features, such as landmarks and "earthworks," described in more detail in Sections 4.2 and 4.3, respectively.

- In the full-build out vision, most parking is provided in structures that have either been integrated below buildings or incorporated into the grade. Some of the parking along Windsor Street will remain, although it will be redesigned to create a much stronger street edge that responds to the residential nature of the College Hill neighbourhood. Parking will be accessible to the core and yet discreet; it will be nearby, but will not undermine the campus aesthetic.
- The Fredericton Campus Concept is designed to prioritize pedestrian movement. To support this objective, a variety of pedestrian-supportive elements have been included in the design, such as a system for pedestrian movement and a pedestrian corridor. Detailed design, including signage and wayfinding, will require further study. The objective should remain to provide "clues" that encourage pedestrianism and provide for convenience and comfort. For example, planters that define pedestrian crosswalks can be equipped with utilitarian components, such as seating.
- Intensification of the campus through an on-going building program allows for the infill necessary to provide some "key" infrastructure: landscaping, pathways, breezeways, open spaces. By centering development on a *core* area, it becomes possible to foster a high quality environment in this centre.









3.3 Precincts and Places

A key objective of the Fredericton Campus Plan is to create a cohesive campus environment that is linked through open space connections, landscape character, architectural continuity, and an approach to movement and wayfinding that is characterized by convenience, beauty, inspiration, and pleasure. And yet, the campus can be conceived as being comprised of a series of precincts that embody a distinct quality. Specific design approaches that respond to locational needs are captured on a precinct by precinct basis.





3.3.1 **Central Campus**

The Central Campus is the historical core of the campus, with its approximately twenty-five buildings. It is defined by Dineen Drive to the west, Mackay Drive to the east, and Pacey Drive to the south. The buildings in the Central Campus include a key cluster of residences, McConnell Hall and the Student Union Building. It is characterized by a consistent architectural form, although the Old Arts Building, as a key landmark site, is distinct in its building materials (limestone brick and grey slate) and style. Seven development sites, new landmark building sites and several gateway sites have been identified within the Central Campus.

- 1) In keeping with the notion that amenities ought to be centralized, such that the walking distance to them is minimized, student services and all other commonly used resources should be located in the Central Campus.
- The Pedestrian Mall, located to the north of the existing Student Union Building and the Harriet Irving Library, should be an area characterized by high quality landscape features, in keeping with the overall landscape character of the campus.
- Bailey Drive and the existing north-south route should be reconstituted as a limited access road, providing access to parking for people with special needs, permitted visitors, and visitor parking.
- Jacob's Yard should be enhanced with improvements to the pathways, new sculpture landmarks and earthworks.
- The current parking area north of the Residence Administration Building should be transformed into a square with special paving and landscaping. This square may constitute an attractive location for a café.
- The court in front of the Forestry and Geology Building, west of the Old Arts Buildings, should be transformed into a new quad space with a gateway feature signalling entry into the pedestrianized and historic Central Campus.
- 7) The area between the Science Library and Old Arts Building should be transformed into a multi-purpose square, with some parking, an outdoor eating area and enhanced with special paving and landscaping features.



- A new quad east of the Harriet Irving Library should become the primary pedestrian access between the Central Campus and the South Common area, including Pacey Drive.
- 9) Parking areas that remain in the Central Campus should be reserved for special permit holders and should be enhanced with special paving and landscaping treatments.
- 10) New buildings in the Central Campus should complete the existing open space framework and frame the Pedestrian Mall and campus streets.
- 11) The access road to the Student Union Building loading area should be reconfigured to create a building site at Pacey Drive and to conceal the loading area.



By removing the parking area from the front of the **Residence Administration Building**, a paved square for formal and informal gathering and play can be created for the enjoyment of all University users.



A landmark tower on a future building enclosing the **Tilley Hall Courtyard** will help to orient pedestrians and should be aligned with the existing view axis through the Neville and Neill Residences.









3.3.2 **North Corridor**

The North Corridor contains one building — the Lady Beaverbrook Gymnasium — and no new building sites. Located parallel to Beaverbrook Street east of University Avenue, this corridor should become a prominent pedestrian gateway into the campus and a key interface to the citywide recreational trail network. It forms the north segment of the "greenbelt" around the campus and is comprised of the North and East Commons, and Buchanan Field.

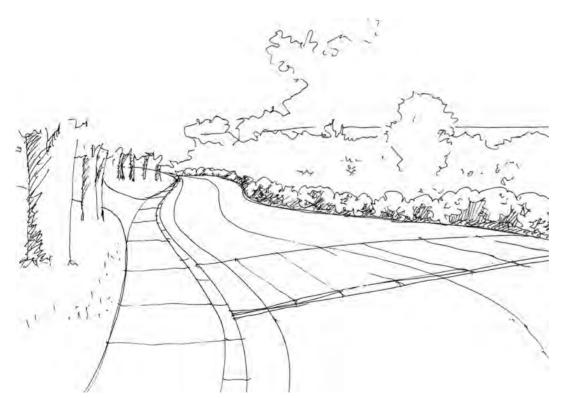
- The North Common gateway should be enhanced with the addition of a right-turn lane from Mackay Drive onto Beaverbrook Street.
- 2) The East Common will provide a direct pedestrian connection from the intersection of Waterloo Row and Beaverbrook Street/Forest Hill Roads to the East Campus expansion area.
- The Beaverbrook Street streetscape should be improved to enhance the Campus edge and interface with the City as well as improving the pedestrian amenity.
- 4) A number of key open space landmark sites have been identified for the North Corridor.



A new pedestrian gateway will be provided at the intersection of Waterloo Row and Beaverbrook Street/Forest Hill Roads. The **East Common** will be the northern terminus to the new linear space serving the East Campus expansion area.









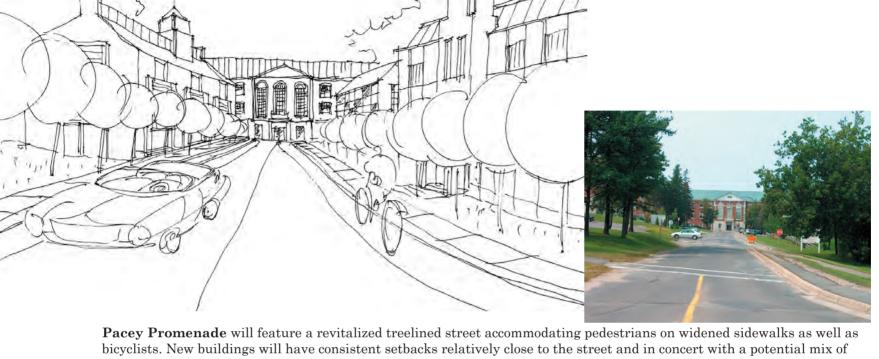
Guard rails should be replaced or concealed with landscaping; and, raised crosswalks should be provided frequently as traffic calming devices.

3.3.3 **South Common**

Much of the South Common expansion area is currently a wooded area, with the exception of the NRC building and parking areas south of Pacey Drive. Four development sites have been identified in this area, primarily in relation to the proposed Pacey Promenade. This South Common Expansion Area will continue to provide a natural amenity, which should be enhanced with a pond and passive areas close to building sites. An open field will be created that is consistent with the view axis of the existing traffic circle, which will be enhanced with a new landmark.

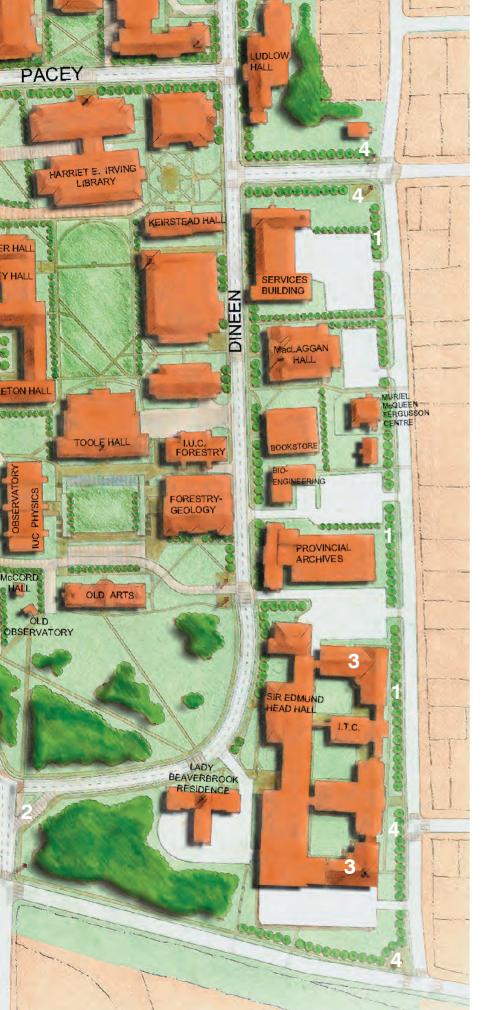
- Pacey Drive should become an urban street characterized by a variety of prominent buildings, retail services and restaurants;
- The South Common will protect much of the existing wooded area while providing a passive open space focus for the south campus and an appealing gateway;
- A new quad will provide a focal area for the NRC and Harriet Irving Library expansions;
- A water feature or pond will provide the South Common with a valuable amenity;
- The traffic circles should be maintained for traffic calming and enhanced with landmark features;
- New buildings in the South Common expansion area will complete the existing open space framework and frame Pacey Drive;
- A new building will conceal the north edge of the NRC building and provide Pacey Drive with a proper frontage.





uses, Pacey Promenade will become the campus "main street".

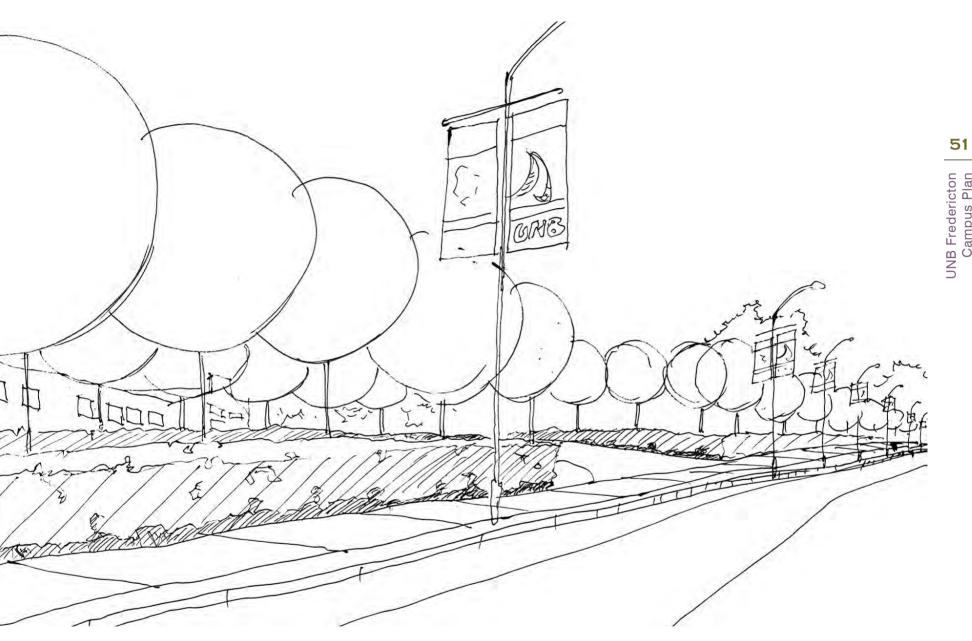




3.3.4 West Corridor

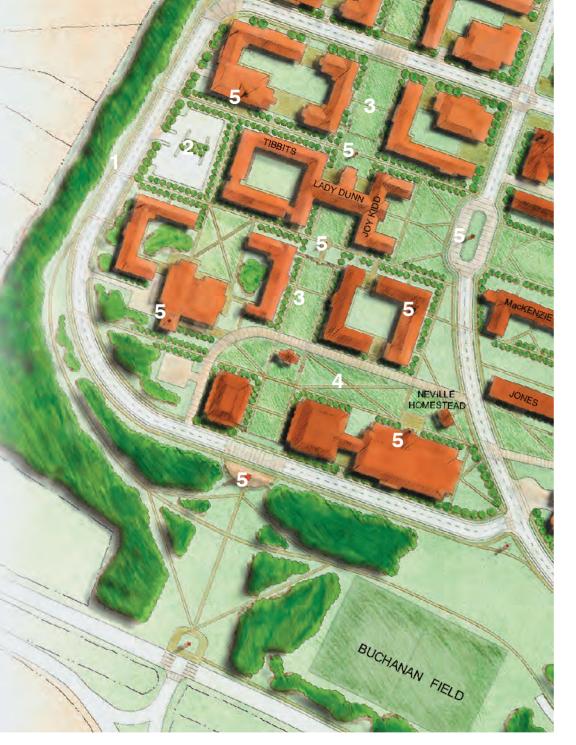
The West Corridor is characterized by a cluster of historic buildings that face Dineen Drive, including Ludlow Hall, MacLaggan Hall, the Provincial Archives, R. N. Scott Hall, Sir Edmund Head Hall, and Lady Beaverbrook Residence.

- 1) The area of this corridor that runs adjacent to Windsor Street should be respected as a primary interface between the University and the community. As a result, it has been designated for enhanced streetscaping to conceal parking areas, strategic placement of trees on surface parking areas, enhanced pedestrian connections to the neighbourhood, an enhanced gateway feature at Kings College Road and Windsor Street, and structured parking at the northwest corner of the campus (see map on p.128).
- 2) The existing gateway treatment at the corner of Mackay Drive and University Avenue is an important and an appropriate landmark. A "stop and see" area can be created by normalizing the Dineen and Mackay Drive intersection, on the current Dineen Drive alignment. In this location, visitors will be able to pull to the side to receive a campus map.
- 3) This Corridor presents two opportunities to complete existing courtyards, both of which are associated with Sir Edmund Head Hall.
- 4) A number of sites have been identified for landmark treatments, either to signify a gateway or a visual terminus.
- 5) A potential linkage from the Forestry and Geology Building to Sir Edmund Head Hall may be accommodated through a two-level breezeway system that would allow for the bridging of Dineen Drive.



The Windsor Street streetscape treatment will aim to conceal unsightly parking and loading areas, while creating an appealing interface for pedestrians and the University's neighbours.

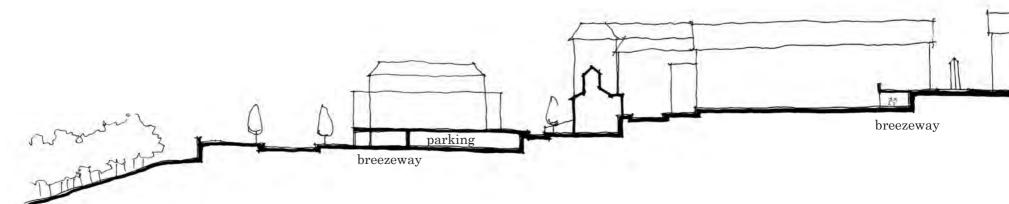




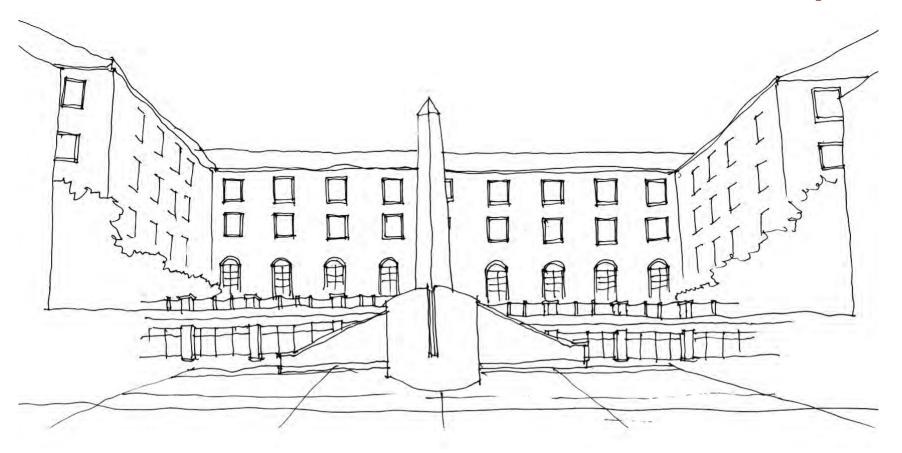
3.3.5 East Campus

The East Campus is currently underutilized, other than Joy Kidd House, Tibbits Hall and Lady Dunn Hall. Fourteen new development sites have been identified, many of them corresponding to enhanced open spaces and new landmark sites.

- 1) A new loop road is proposed to improve access to the East Campus. As a continuation of Pacey Promenade, it will blend seamlessly into the campus fabric and will serve to integrate the existing campus with the expansion area.
- 2) Parking for new buildings in the East Campus should primarily be provided within the grading of the slope, although a surface parking area for visitors is proposed on the eastern edge of the East Campus.
- 3) A new north-south linear open space will be the focus for the East Campus. This space will terrace down the slope and incorporate Breezeways. In the long-term, access through Lady Dunn Hall should be considered to allow for continuous north-south pedestrian movement.
- 4) A new east-west linear space will serve the north end of the East Campus area. The east termination of this space should be at a prominent landmark building.
- 5) Several open space and building landmark sites have been identified as strategic visual points in the pedestrian network.

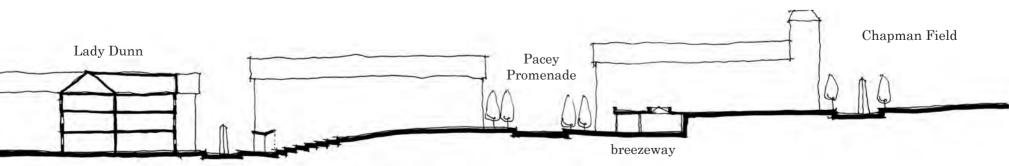


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The East Campus will be organized around a north-south linear sequence of spaces that terrace down from Chapman Field to Buchanan Field. This terracing offers opportunities to provide parking under the buildings. The minimal sloping easily accommodates breezeways.



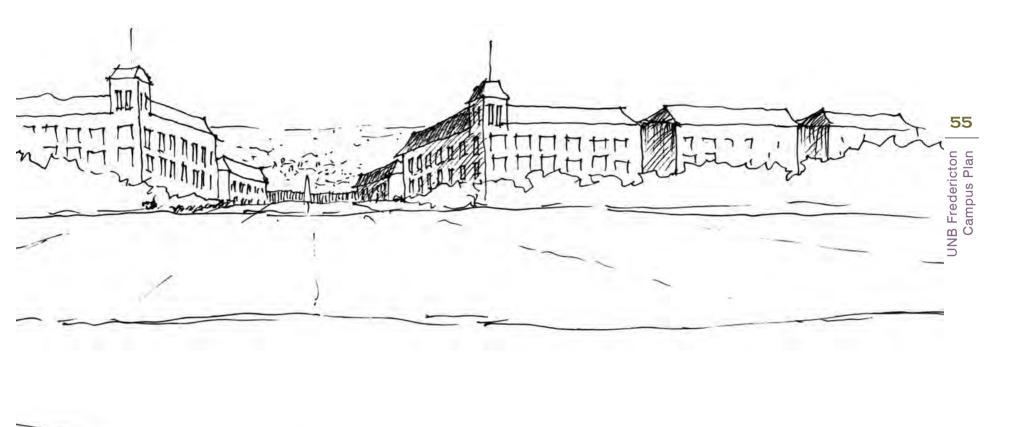




3.3.6 Chapman Field

Chapman Field is also an expansion area to the east of the Central Campus, currently characterized by surface parking and Chapman Field itself. Two substantial new development sites have been identified in this precinct, and are positioned in between the Pacey Promenade extension and the field.

- 1) The new north-south linear open space that serves the east expansion areas has its south terminus at Chapman Field, where a gateway treatment in the landscape and built form should be applied.
- 2) The foot path connecting the campus to the neighbourhoods to the east should be formalized as a key pedestrian entry.
- Several open space and building landmark sites have been identified as strategic visual points in the pedestrian and street network.



Chapman Field bookends the primary linear green space that serves the East Campus. The intersection of the field and this open space is punctuated by two taller structures on either side of the gateway into the East Campus.

