mcgill university physical master plan

PLANNING AND DESIGN PRINCIPLES
EXECUTIVE SUMMARY

Revised February 6, 2008

INTRODUCTION

McGill University operates in an environment that is increasingly international and competitive for the best people, the best ideas and adequate funding. To continue to excel and compete on the world stage, the University must marshal its resources to ensure that future development is sustainable, enhances its ability to serve society and allows it to fulfill its teaching and research mission. The University must plan for its future. Therefore, through the course of 2005 and early 2006, McGill University undertook an extensive review of its current facilities, space needs and projections for growth and change on its campuses, with the intent to create a new Master Plan for the University. This physical Master Plan is part of a comprehensive planning process that will build on McGill's academic and research strengths, and which has involved all the primary elements of the University, including academic, research, fiscal, service, and philanthropic operations. The results of these reviews are intended to inform and guide discussions relating to the University's physical development to 2010 and beyond.

Context for Growth and Change

Founded in 1821, McGill University has developed along the southern flank of Mount Royal Park, Montreal's most prominent landmark, and has played a prominent role in the City's development. McGill has grown along with Montreal and now occupies an 80 acre downtown campus with an enrollment of over 30,000 students in a metropolis of nearly 2 million inhabitants. McGill is fortunate to be located in a City with four universities, three professional schools and several colleges. Montreal is a vibrant, multilingual and cosmopolitan metropolis, home to one of the highest student populations per capita of all North American major cities. Cities that build on their creative potential are the most successful in attracting talent and resources and Montreal's rich cultural environment is a great magnet for attracting students from all over the world. McGill is determined to play a key role in the fulfillment of the City's ambitious goal of making of Montreal one of the most prosperous knowledge cities in the world.

Downtown (top) and Macdonald Campuses (bottom)

Mount Royal is Montreal's most distinctive and cherished feature and McGill's emblematic and perennial signature. McGill's downtown campus lies almost entirely within the Historic and Natural District of Mount Royal, a heritage zone created by the Government of Quebec in 2005 to recognize the importance of this prominent Montreal landmark and its prestigious religious, educational and hospital institutions, as well as its rich social history. McGill's relationship with Mount-Royal, its home for nearly 200 years, is a long and treasured one. McGill supports the preservation and enhancement of Mount Royal as a major feature of the City and understands its significant responsibility of balancing its needs as a living institution with the mountain's sensitive natural environment. McGill's downtown campus has also a rich archeological past where traces of First Nations Peoples' prehistoric and historic period can be found. The preservation of this uniquely rich, archeological, natural and built environment, adjacent to the bustling city core is a major focus of the "Planning and Design Principles" of the University's master plan.

While Montreal's oldest university is renowned as one of the world's best research institutions, it is also known for the magnificence of its downtown campus. McGill today has more than 100 buildings on its downtown campus, most constructed in the late nineteenth and early twentieth century. The historic buildings, lawns, gardens and majestic trees combine to make it the most significant and beautiful green space in Montreal's downtown core. Furthermore, the Macdonald campus located at the western tip of the Island of Montreal in Sainte Anne-de-Bellevue is the largest green space on the Island, consisting of over 1,600 acres of prime land, comprising agricultural land, almost two kilometres of undeveloped lakeshore, wetlands, majestic forests and habitat for wildlife and plant species. A leader in environmental issues, the campus includes the Morgan Arboretum, the St. Lawrence Valley Ecomuseum, field research facilities, a working farm and greenhouses. Established in 1906, the Macdonald Campus is home to the Faculty of Agricultural and Environmental Sciences, a world-class teaching and research facility. The Sainte Anne-de- Bellevue campus — which McGill shares with John Abbott CEGEP — is a bustling environment with over 9,000 students and staff.

Over-Arching Principles

It is fundamental that the physical development of McGill's campuses be consistent with and responsive to the academic requirements of the University community. In order to continue to meet its academic mission, to respond to new areas of academic and societal priority, and to enhance McGill's position among the best publicly-funded universities in the world, the University must continue to grow.

However, the growth in enrollment and adaptation and expansion of our facilities must be done with caution and care. Montreal, with its multicultural and multi-university milieu, provides McGill students with extensive opportunities for academic, cultural, and social growth. McGill, along with the city's other universities, is a major contributor to the economy, vibrancy and vitality of Montreal, rivaling the largest industrial, financial and commercial enterprises in its economic multiplier effect. McGill wishes to work in collaboration with the cities of Montreal and Sainte-Anne-de-Bellevue and other partners in the community to maintain an appropriate balance between its mission as a research-intensive university and its commitment to the preservation and enhancement of its natural and built environment.

McGill University strives to be an environmentally safe and responsible learning institution, which can stand as a model for environmentally responsible living. To this end, the University has committed itself to the principles of sustainable building practices for the design and development of new building and landscape projects, for the redevelopment of existing facilities and for the operation of all of its facilities. McGill's commitment to the sustainable development of its campuses underlies all Planning and Design Principles, guiding long-term development and operational plans for the University as well as more immediate strategies for planning, design, construction and care of McGill's campuses.

PLANNING AND DESIGN PRINCIPLES

Through the initial framework established by the Master Plan Task Force, the early phases of the Master Plan process and planning work by McGill, a series of principles have emerged around which the master plan will be centered. These Planning and Design Principles will support the University's mission, guide its growth, and ensure that individual projects develop as part of a cohesive whole. The Planning and Design Principles summarized within this document describe the underlying ideas and policies which will guide campus development. Most principles will apply to both campuses, but others reflect the specific needs and character of each site and its users. As principles, they are not intended to set performance standards and be prescriptive in terms of final built form, but rather they are intended to address strategies and organizational patterns.

These Planning and Design Principles address the following topics as they contribute to the public realm of the University: the development and use of a campus structure and the organization of landscape and built form; ways in which individual projects can contribute to the University's overall goals; the sitting of buildings; the best use of existing space; infrastructure needs; circulation routes; and other considerations such as lighting, safety and environmental concerns. The Planning and Design Principles are organized into sections addressing issues of: 1.0 Dynamic Intellectual Community; 2.0 Strategic Growth; 3.0 Campus Identities; 4.0 Research, Teaching and Learning; 5.0 Non-Faculty Space Priorities; 6.0 Historic Buildings and Landscapes; 7.0 Facilities and Infrastructure; 8.0 Campus Accessibility, and 9.0 Landscape Design. The full document, entitled Planning and Design Principles, contains justifications for the 47 Principles summarized below. Furthermore, these Principles are supplemented by 90 Planning Objectives (not included in this summary) that were developed to further clarify the intent of the Principles, and to identify specific design criteria through which the Planning and Design Principles could be implemented.

1.0 Dynamic Intellectual Community

Facilitate a dynamic intellectual community through interdisciplinary collaboration across all fields of study and research.

1.1 Constituent and Communal Needs

Design all projects to contribute to the needs of the campuses as a whole, in addition to meeting the needs of a particular user group.

1.2 Contiguity of Academic Programmes.

Where possible, maintain and reinforce the contiguity of academic programme space by locating teaching and research facilities in physically linked or proximate facilities.

1.3 Grouping Related Activity and Intensity

To further support a vibrant interconnected university community, locate academic and non-academic programmes in areas of related activity and intensity.

1.4 Shared Amenities

Provide new or improved common amenities at key nodes of interaction to facilitate informal contact.

1.5 Interdisciplinary Scholarship and Research

Create appropriate dedicated facilities to support interdisciplinary scholarship and research.

2.0 Strategic Growth

In concert with the Academic Plan, growth will be accommodated in strategic areas.

2.1 Compact Campuses: Growth Capacity and Growth Projections

In order to maintain and intensify the rich academic experience provided by its current campuses, increased space needs will be met primarily through infill and redevelopment, reinforcing the existing campus precincts.

2.2 Strategic Property Acquisition

While existing campus precincts will be maintained and reinforced, the University may further strengthen the structure of its campuses through the judicious acquisition of additional properties outside the current precincts.

2.3 Alliances

Support additional opportunities for the growth and enhancement of academic pursuits through links with outside agencies, including peer organizations, allied industry and government, whose interests are aligned with the academic priorities of McGill.

3.0 Campus Identities

Reinforce the special and identifying qualities of each campus.

3.1 Spirit of the Place and Campus Settings

Design new projects to reinforce the fundamental character-defining qualities of the campuses, respecting and celebrating their settings.

3.2 The Symbolic Focal Spaces: Lower Campus Green and McEwen/Watson Fields

Maintain and enhance the Lower Campus Green and McEwen/Watson Fields as the primary outdoor focal spaces of the downtown campus and Macdonald campus.

3.3 Integrated Exterior Network

Develop an armature of green open spaces and pathways which connects the focal space with the other parts of each campus.

3.4 Intensification of Buildings and Interior Circulation

Through infill development, building additions and connecting structures, develop contiguous groupings of buildings which frame and support the streets, pathways and open spaces; and which also provide a network of interior circulation that complements the outdoor routes.

The lower campus green framed by buildings from different periods

4.0 Research, Teaching and Learning

Invest in facilities which support excellence in research, teaching and learning, and which foster the close relationship between these activities.

4.1 Academic Research Space: Research and Laboratory Facilities

Support research and learning through the improvement of interdisciplinary research and laboratory facilities.

4.2 Academic Teaching Space: Classrooms, Teaching Labs and Study Areas

Support teaching and learning through the improvement of classrooms, teaching laboratories and study facilities.

4.3 Informal Learning: Student Space

Support learning through the construction of spaces that support informal learning for a diverse student body, as well as formal academic facilities.

4.4 Libraries

Enhance the existing libraries and support the diverse traditional and emerging functions served by these facilities.

5.0 Service Areas Priorities

Support a rich academic experience through investment in student, administrative and support services.

5.1 Student Services and Activities

Provide adequate spaces for student services and student activities at convenient, central locations.

5.2 Administrative Units

Administrative units will be positioned on or off campus in response to the needs of each unit and the constituents they serve. Administrative units that do not require contact with students may be relocated to the periphery of the downtown campus or other off-campus locations, and those units which provide common high-use services will be located for convenient access.

5.3 Assembly and Governance

Encourage the creation of meeting spaces that support the University's collegial and collaborative decision-making processes.

5.4 Food Services and Social Spaces

Provide new and improved food services and social spaces.

5.5 Athletic & Recreational Facilities

Provide improved and expanded athletic facilities and playing fields that are easily accessible from the core of each of the campuses.

Molson Stadium

5.6 Residential Availability

Provide a greater variety of housing types to accommodate needs of a wider spectrum of students, including senior undergraduates, graduates, and international students, as well as visiting faculty and families.

5.7 Communal Support Services

Mitigate the potential negative visual impact of service areas and move workshops, storage facilities and equipment to less prominent locations.

6.0 Historic Buildings and Landscapes

Conserve and build upon the strengths of the University's existing built heritage.

6.1 Preservation Designations

Develop a comprehensive assessment of and database for the University's holdings.

6.2 Rehabilitation, Adaptation and Replacement

Identify and maintain the best of the University's historic features, and repair or remove those features of lesser historic significance. Assign appropriate uses to historic buildings in order to ensure their heritage values are conserved.

6.3 Funding

Actively work to increase funding from a range of sources for historic buildings and landscapes.

7.0 Facilities and Infrastructure

Support the achievement of excellence through the provision of appropriate facilities and infrastructure.

7.1 Renewal of Existing Facilities

Renew or replace out-dated existing buildings and infrastructure.

7.2 Reallocation of Space

In conjunction with the renewal or replacement of existing facilities, give consideration to the reallocation of space in order to make best use of University facilities and infrastructure.

7.3 Construction of New Facilities

When it has been determined that existing facilities cannot meet the standards and capacity required of current or anticipated programmes, construct new facilities.

7.4 Space Utilization

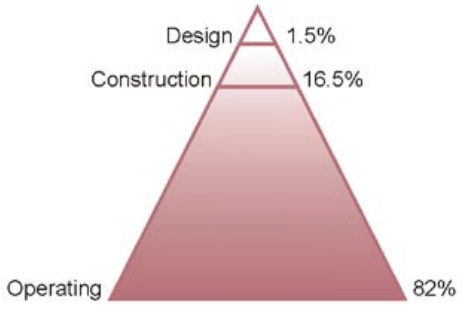
Improve space utilization at all campus locations.

7.5 Building Standards: Quality, Permanence, and Economy

Commit to high quality, permanence and life-cycle economy in building and site development design, construction, maintenance and renewal.

7.6 Energy Conservation and Waste Efficiency

Implement environmentally responsible practices and build and renew buildings, infrastructure and landscape in a manner that is land, energy, resource and waste efficient.



Smaller earlier costs greatly influence larger, later costs.
Source: Consulting Engineers of British Columbia

8.0 Campus Accessibility

Improve the access both to and within the campuses.

8.1 Transportation Emphasis

Use transportation demand management strategies to reduce demand for parking and the need for single occupancy vehicles by promoting a range of viable commuting alternatives, including public transit, bicycling, walking, and carpooling.

8.2 Pedestrian Network

Give priority to pedestrians by improving and expanding pedestrian networks and limiting vehicular access to the campuses.

8.3 Vehicular Circulation

Reconfigure campus vehicular circulation systems to give priority to pedestrians and reduce pedestrian/vehicular conflicts.

8.4 Service and Emergency Vehicles

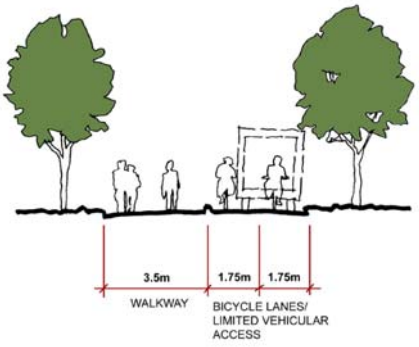
Service and emergency vehicles should use streets and drives where possible. Develop shared pedestrian/service routes where street access is unavailable and mitigate the negative visual impact of service areas.

8.5 Cycling

Encourage commuting to the campuses by bicycle without compromising pedestrian safety.

8.6 Transit

Encourage commuting to the campuses by public transit.



Strategy for shared use of roads

8.7 Parking

Provide the minimum amount of parking required and reduce the visual and the negative environmental impacts of parking areas.

8.8 Orientation and Wayfinding

Enhance orientation and wayfinding and provide a clear destination for visitors.

8.9 Barrier-Free Campuses

Give high priority to developing barrier-free access to all parts of the University. Provide special services to people with disabilities in locations where universal access has not yet been achieved.

8.10 Campus Safety

Design and manage buildings, landscapes, and lighting to promote personal safety.

9.0 Landscape Design

Develop and maintain the landscape open spaces of the campuses: to reveal and strengthen the special and identifying qualities of the University's places; to tie together the various parts of the campuses, both physically and thematically; to provide safer, more useable and more beautiful campus spaces; and to follow exemplary standards of environmental sustainability at the stage of implementation and in the continued operations and management.

9.1 Planting

Major planting will be deployed to reinforce a legible spatial structure of the campuses, to moderate the micro-climate, to increase the bio-mass, and to support other environmental objectives.

9.2 A Landscape Design Palette

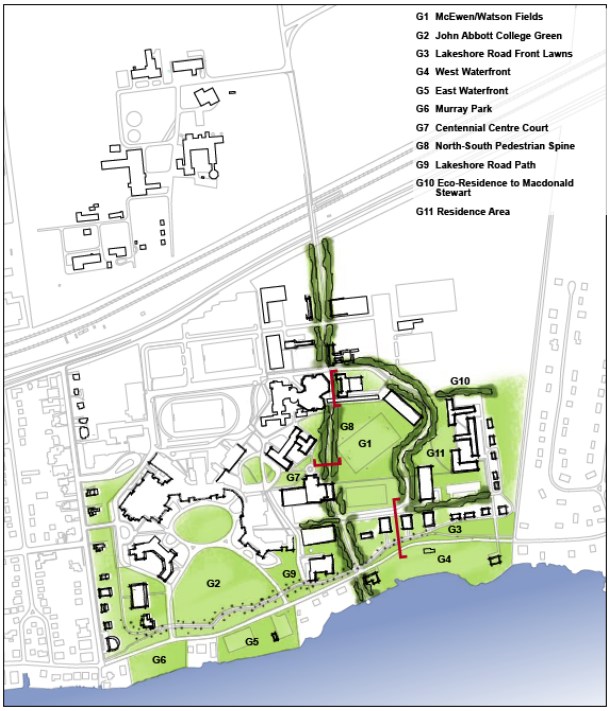
Design and select a palette of high quality, landscape construction materials, design details and furnishings for both campuses that references the local traditions and settings of each campus and has a common association with McGill University.

9.3 Outdoor Lighting

Design exterior lighting to promote night-time safety and comfort; to demarcate principal pathway routes; and to subtly illuminate spaces of social or architectural significance.

9.4 Storm Water Management

Design in-ground and rooftop landscapes to optimize the management of storm water.



Proposed Macdonald Green Network

9.5 Commemoration and Public Art

Reveal the activities, values and history of McGill through the naming of places and artifacts, and through commemorations and works of art that are integrated with their associated settings.