



Memorandum

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TO: Senate

FROM: Professor Jim Nicell, Associate Vice-Principal (University Services)

SUBJECT: Annual Report from the Senate Committee on Physical Development

DATE: October 6, 2011

DOCUMENT #: D11-16

ACTION REQUIRED: INFORMATION APPROVAL/DECISION

ISSUE: The 2010-2011 annual report of the Senate Committee on Physical Development, a Senate standing committee, is presented for information.

BACKGROUND & RATIONALE: The Senate Committee on Physical Development (SCPD) has been active since 1971. It operates with a membership and terms of reference that were approved by Senate in May 2009.

A report on the activities of the committee over the course of 2010-11 is attached (Appendix A). Also attached are the 2010-11 list of members (Appendix B) and the terms of reference of the Committee (Appendix C).

Five meetings are scheduled during 2011-2012. Priorities for the coming year include focused presentations and discussions to seek the input of SCPD members on specific themes related to the physical development of the campus in service of academic priorities. Confirmed themes include the Macdonald Campus Master Plan, recent changes in the planning framework within the City of Montreal as affecting McGill, the new space management system (FAMIS), and an examination of commuting/transportation usage patterns of the McGill community.

MOTION OR RESOLUTION FOR APPROVAL: N/A

PRIOR CONSULTATION: Members of the Senate Committee on Physical Development

NEXT STEPS: N/A

- APPENDICES:**
- Appendix A: SCPD Annual Report 2010-2011
 - Appendix B: SCPD Membership 2010-2011
 - Appendix C: SCPD Terms of Reference

Senate Committee on Physical Development Annual Report 2010-2011

ACTIVITIES DURING THE 2010-2011 ACADEMIC YEAR

The Committee held six (5) meetings during the 2010-2011 session. This document summarizes the physical development and environment related activities of McGill University for the 2010-2011 session as discussed at meetings of the Senate Committee on Physical Development (SCPD). The membership and terms of reference of SCPD are attached.

PROJECTS (Construction/Renovation)

Various projects discussed over the course of 2010-11 include:

- **475 Sherbrooke West** – This former hotel property was renovated in a series of projects to replace the roof, windows, mechanical systems and other elements and was opened in fall 2010 as the “Carrefour Sherbrooke Residence” adding 320 beds to the McGill Residences inventory. (completed)
- **Molson Stadium Expansion Phase 2** – This project was undertaken to expand the capacity of the Molson Stadium to meet the needs of the Montreal Alouettes (\$29.4 M). Funding was provided by the Quebec Government, City of Montreal and the Montreal Alouettes. (completed)
- **Centennial Centre** – A new food (dietetics) teaching laboratory (\$4.09 M) and a new elevator/ramp to make the building accessible for the mobility impaired (\$1.16 M) have been constructed in the Centennial Centre on the Macdonald Campus. (completed)
- **Strathcona Anatomy and Dentistry Building** – A project (\$4.74 M) was undertaken to install a new CFI-funded electron microscope and also replace and upgrade the supporting infrastructure of the building (completed)
- **MNI Expansion Project Phase 1** – The Neuro was expanded by approximately 70,000 sq. ft. through the construction of a North Wing at a cost of \$37.4 M. This first phase of the project achieved the construction of a building shell, the establishment of a Brain Imaging Centre and other facilities in support of research, and some partial finishing of interior space. Significant deferred maintenance work in support of the infrastructure in the North East sector was also incorporated into the project. (completed)
- **Federal Stimulus Projects** – The 3 projects funded via the Knowledge Infrastructure Program (KIP) in the McIntyre Medical Building (\$36.9 M), the Macdonald Engineering Building (\$25.4 M) and the Otto Maass Chemistry/Pulp & Paper Buildings (\$33.93 M) were planned for completion in March 31, 2011 (\$81 M in KIP funding plus a number of integrated CFI-funded projects). The Federal Government has since extended the deadline for completion to October 2011.
- **410 Sherbrooke** – This recently acquired former Courtyard Marriott hotel is in the process of being renovated for use as a student residence (\$21.8 M). The project is self-financed as is the case for all residence buildings. Full occupancy is anticipated for fall 2012.
- **Ludmer Building and Stewart Biology Building Animal Facilities** – Upgrades to the animal facilities in the Ludmer (\$4.0 M) and Stewart Biology Buildings (\$4.04 M) are currently underway.
- **Bronfman Building** – Work has begun on the 2nd floor renovation involving the creation of a new business intelligence centre and the relocation of the Howard Ross Library out of the building (\$4.1 M).
- **Redpath-McLennan Terrace** – A major renovation involving the replacement of the degraded terrace and the approach from McTavish was approved (\$6.8 M). The work will be conducted in 3 phases with the first phase occurring in the summer of 2011.

- **Arts Building** (\$5.53 M) – The windows replacement project was completed, but the masonry repair work has been delayed due to site conditions that required additional masonry and structure work to be done.
- **Maass Chemistry Building Teaching Laboratories** – A new integrated teaching lab installation will be undertaken, building on the infrastructure upgrades now being completed through the KIP initiative (\$6.48 M).
- **CLUMEO Project (École de Technologie Supérieure)** – This project for the creation of a high-speed computing facility at ETS and funded by CFI is substantially complete (\$5.75 M).
- **Teaching Labs** – A budget for the renovations of teaching laboratories has been established at \$1 M per year for capital renovations and \$1 M for equipment. The first major project is now underway for Chemistry, building on the infrastructure work completed through the Otto Maas Building KIP project.
- **Stewart Biology Terrace** - The Stewart Biology Terrace deferred maintenance project was substantially complete late in fall 2010 with planting and landscaping finalized in the late spring of 2011 (\$2.27 M).
- **Green McGill Project**
 - On May 28, 2010, the University officially closed its gates to vehicles, except for limited deliveries, etc. At the same time, the City of Montreal designated lower McTavish Street as a pedestrian zone, managed by McGill, under the terms outlined within a new municipal by-law. The University made a major investment this year in a variety of elements including plantings, street furniture, signage, pavement markings and is continues to experiment with how to best use the newly acquired spaces.
 - A winter campus initiative was also undertaken in 2011, which included relocation of planters, benches etc., change in snow removal plans to encourage changes in circulation, and new LED outdoor lighting of trees on McTavish Street and at the Milton entrance. The highlight of the winter project was a new lit skating rink on the lower campus. It was suggested that next year a larger rink may be considered so that it could be used for recreational hockey.
 - For summer 2011, planned initiatives include: additional campus furniture, new experimental designs for benches and bike racks, new plantings to include a mix of perennials and winter plants and a demonstration project to embed/cover asphalt with plantings. In future, additional improvements are planned to campus entrances and control points including reinstallation of the Milton gates. Follow-up on safety issues at the campus periphery with the City of Montreal is also being undertaken.

PROJECTS IN THE PLANNING STAGE

- **MNI Expansion Project Phase 2** – The second phase of the expansion project in the North Wing of the Neuro is being planned in support of research and clinical activities. This \$18.8 M project involves the fit out of the building shell that was constructed in Phase 1. The execution of construction work will begin once funding for all elements of the project is approved.
- **Macdonald Campus - Bridge over Highway 20** – The University was advised by the Quebec Ministry of Transport that the bridge spanning Autoroute 20 within the Macdonald Campus requires replacement. Negotiations and planning occurred over the course of the year to determine whether the bridge should be moved to a different location. The decision was made that it should remain in essentially the same location. No schedule has been confirmed for the work.
- **Deferred Maintenance** – Following on the significant work conducted between 2008 and 2011 to address priority deferred maintenance issues, a second phase of additional priority deferred maintenance projects for the period of 2011-2014 is being planned.

OTHER INITIATIVES

- **City of Montreal issues:**
 - A servitude between McGill and the City of Montreal for a pedestrian path along the axis of University Street at the top to connect to Mt. Royal Park was completed. This was negotiated as part of the Molson Stadium expansion funding agreement.
 - An agreement with the City of Montreal was completed to formalize access to the North East Sector (Athletics) for a limited number of buses and service vehicles via Mt. Royal Park. Temporary arrangements were made during the construction of the Molson Stadium and MNI Expansion projects.
- **Gault Nature Reserve - Annual Report 2009-2010.** Highlights include:
 - The new water system and dam repair projects are both completed. Even after having completed these priority projects, deferred maintenance will continue to pose significant challenges in coming years, especially with respect to Maison Gault, the Research Building and a number of septic systems.
 - The University has taken over the operation of the Maison Gault. Staff offices were moved to Maison Gault to create more space for the Mont St-Hilaire Nature Centre in the Johannsen Pavilion. Maison Gault will be developed as a more effective venue for teaching, workshops and conferences.
 - In addition to teaching, there are 32 research projects underway using the Reserve, 19 of which have begun in the last 18 months. New grants are related to biodiversity and ecosystems which is currently a priority of the Quebec Government. This represents approximately \$1 M in research funding.

The typical format of meetings is on specific themes of interest to the Committee where the input of members was sought. Themes and presentations covered over the past year are summarized below:

- **“Three phases of Teaching and Learning Services Work Group: Classroom Improvements / Renewal 2005-2010” led by Prof. C. Weston, Chair, Teaching and Learning Spaces Work Group**
 - Phase 1 - Refocusing classroom design – Establishing a pedagogical framework for classroom design based on NSSE survey results. Focus on active and collaborative learning, student/faculty interaction, enriching the educational experience and a supportive campus environment
 - Phase 2 - Low risk incremental change - Create design teams and develop a process and criteria for prioritizing. First focus will be on lecture halls.
 - Phase 3 - Informed risk – Learning from practice. Including “scaled up” classrooms and Technology enabled active learning classrooms (e.g. Burnside 511, Education 627 and Macdonald Stewart MS2-028)
 - Investment: Approximately \$8 M has been expended over the past 5 years in more than 300 classrooms using an annual capital budget of \$1 M for renovations and \$1 M for IT upgrades.
 - Demand for teaching in new active learning classrooms exceeds current availability.
 - Winter 2011 – The first university-wide survey on classrooms as learning environments will be undertaken.
 - A recommendation was made to have this material presented to Senate. Invitations from Faculties to make this presentation are welcome.

- **“Making the McGill Sustainability Policy Come Alive” led by Mr. D. Fortune and “The McGill Sustainability Projects Fund Partnership” led by Ms. L. Wyatt, Office of Sustainability, University Services.**
 - The Sustainability Projects Fund was established to fund sustainability projects with the goal of bringing about culture change through a ‘best practices’ and “living laboratory” model. Each student contributes \$0.50 per credit toward the fund (to a maximum of \$7.50 per semester), and this is matched by the University to provide approximately \$800,000/year over 3 years
 - Criteria for judging projects: Commitment; well thought out; community stakeholder engagement; communication; learning and behavior change; bang for buck; potential for institutionalization; Other elements including applied student research, local sourcing, etc.
 - Other requirements: Projects should be designed for application in the McGill environment; submissions require a work plan, a process of evaluation, and reporting requirements. Projects should be future oriented and have some form of educational component to accomplish culture change.
 - Example target action areas: Inform and educate; encourage economic efficiencies; promote sustainable procurement; minimize use and consumption of resources and shift toward the use of renewable resources; diversion of waste; reduce energy consumption/intensity and greenhouse gas emissions;; identify and conserve cultural heritage including green spaces; make sustainability a priority and incorporate principles of sustainability into daily activities; organize sustainable events to promote responsible management.
 - The greatest challenge (and opportunity) is to engage the broader community and to encourage people to take individual and group actions. Students and staff are participating in numerous projects, but participation of academics is not well established at present. It was suggested that Faculty Councils would be a good venue to try to get the message out about the Fund to major academic units.

- **“Energy Management at McGill” led by J. Conraud, Energy Manager, Utilities and Energy Management, Facilities Operations & Development, University Services**
 - Current situation:
 - McGill consumes 25% of the energy of all Quebec universities (Laval 17%, Montreal 16%, Sherbrooke 7%, and Concordia 7%) due to a combination of intense research activities and older buildings. More than 50% of the energy is used for heating, with high air change requirements in research buildings being a major contributor.
 - Intensity of energy use at McGill has decreased since 2003, but MELS has set an objective of achieving a 14% reduction from the 2003 level.
 - McGill performs much better than many jurisdictions in greenhouse gas emissions due to a reliance on electricity and the burning of natural gas in our power plants, rather than oil or coal.
 - Objectives and actions:
 - To not only meet the MELS objective but to ultimately exceed it, through a combination of innovations and strategic planning. In order to achieve this goal, it is imperative that we empower and engage our community in energy savings measures.
 - Energy Management Plan – To achieve the MELS objective, the plan calls for more than \$35 M in investment, which would achieve an anticipated \$6 M in annual energy savings. Initiatives include: the creation of an Energy Management Information System (EMIS) to meter consumption and provide real-time data on energy usage in individual buildings; building audits to identify opportunities for energy savings; building re-commissioning projects to fine tune or improve existing systems; lighting retrofits to enhance lighting and reduce energy consumption; and energy savings projects.

- **“Estimating, Designing and Delivering Laboratory Renovation Projects at McGill University” led by: Robert Stanley, Director of Project Management, Facilities Operations & Development, University Services.**
 - A presentation was made to review processes for the estimation and conduct of construction/renovation projects at McGill and to discuss factors that contribute to the costs and timeline of projects. Highlights include:
 - The age and historic nature of many buildings and supporting infrastructure represent important challenges to many renovation projects.
 - It is very important to have the project scope defined as early and as completely as possible in order to develop a reliable estimate and project plan. The location of the proposed renovation needs to be defined before an estimate can be produced given that local site conditions have a major impact on scope and cost.
 - Details on activities and specifications of equipment that are to be used in renovated spaces are crucial in order to properly establish the project scope and timeline.
 - In order to minimize the time for delivery of research laboratories in support of new personnel, units must try to identify needs before new people arrive to begin the planning process for projects and minimize delays that will impact on research productivity.

- **“McGill’s Visual Arts Collection” led by Prof. D. Covo, Member of the School of Architecture and Chair of the Visual Arts Sub-Committee of SCPD**
 - Mission for the collection: To celebrate the power of art for education and meaning; to add interest and meaning to the environment; to make art part of every student and staff member’s experience
 - Highlights of the collection:
 - 1800 pieces including a number of outdoor sculptures; 200-300 of the items in the collection constitute important pieces
 - Donations are the major source for the collection. Other sources include acquisitions (including student work), commissions (including commissioned portraits) and government-funded art installations as mandatory part of publically-funded construction projects.
 - A small operating fund exists for transport, restoration, etc. including a part time curator position.
 - The University maintains an ‘art bank’ allowing pieces to be displayed in various areas within the university. Most of the collection is on display and not a lot is in storage. Valuable pieces are located in secure areas.
 - A formalized acquisitions policy has been established with DAR and a new committee has been set up through the Provost’s Office to manage the collection.

**Senate Committee on Physical Development
MEMBERSHIP FOR 2010-2011**

- The Associate Vice-Principal (University Services) – Professor Jim Nicell (Chair)
- The Provost or delegate – Professor Jan Jorgensen (Delegate)
- The Associate Vice-Principal (Macdonald Campus) – Professor Chandra Madramootoo
- The Director of the Gault Nature Reserve – Professor Martin Lechowicz
- The Trenholme Director of Libraries or delegate – Ms. Diane Koen (Delegate)

Eight representatives of Senate approved by Senate on the recommendation of Senate Nominating Committee (3-year renewable terms):

- Professor David Covo – School of Architecture – 2011 (Chair, Visual Arts Subcommittee; Chair, Architectural Advisory Subcommittee; Chair, Gardens and Grounds Subcommittee)
- Professor Marianna Newkirk (Faculty of Medicine) – 2012
- Professor Jane Everett – Dean of Students – 2012
- Mr. Jonathan Rousham – Faculty of Engineering – 2013
- Professor George Haller – Chair, Department of Mechanical Engineering – 2012
- Ms. Jana Luker – Executive Director, Student Services – 2013
- Professor Bruce Lennox – Chair, Department of Chemistry – 2012
- Professor Christopher Manfredi – Dean, Faculty of Arts – 2012

Four student representatives:

- Undergraduate: Zach Newburgh (SSMU)
- Undergraduate: Randall Blom (SSMU)
- Graduate: Faisal Naqib (PGSS)
- Macdonald Campus: Peter Pertschy (Agricultural and Environmental Sciences)

Secretary: Mr. Brian Karasick (Office of Campus and Space Planning)

Resource persons:

- Professor Alan Watson – Department of Plant Science (Chair, Macdonald Subcommittee on Physical Facilities)
- Charles Adler - Director, Office of Campus and Space Planning

**Senate Committee on Physical Development
TERMS OF REFERENCE OF THE COMMITTEE**

As approved by Senate in May 2009

The Committee on Physical Development is a Standing Committee of Senate charged with advising on the nature of physical development as it reflects the academic priorities and needs of the University.

Specific Areas of Responsibility

The Committee shall:

1. Advise Senate on the extent to which major physical development projects on campus reflect the academic plans and priorities of the University as expressed in the principles defining the University's Master Plan. These nine principles are:
 - a. facilitate a dynamic intellectual community
 - b. achieve strategic growth
 - c. reinforce campus identities
 - d. support excellence in research, teaching and learning
 - e. invest in priority service areas
 - f. conserve and build upon strengths of historic buildings and landscapes
 - g. provide appropriate facilities and infrastructure
 - h. improve campus accessibility
 - i. Develop and maintain the campus open spaces for maximum benefit.
2. Consider possible modifications to the Master Planning principles over time.
3. Appoint subcommittees and workgroups that may assist the Committee in carrying out its mandate, and to dissolve them as necessary.
4. Monitor trends in the use, for academic purposes, of facilities, including those not located on the main campuses, to receive reports on these facilities and to advise Senate and the Associate Vice-Principal (University Services) on such matters.
5. Report on the Committee's deliberations and to submit the appropriate recommendations, on behalf of Senate, to the Board of Governors Building and Property Committee.
6. The Committee shall meet at least four times per year and report annually to Senate.

Composition

- The Associate Vice-Principal (University Services) – Chair
- The Provost or delegate
- The Associate Vice-Principal (Macdonald Campus)
- The Director of the Gault Nature Reserve
- The Trenholme Director of Libraries or delegate
- Eight representatives of Senate, approved by Senate on the recommendation of Senate Nominating Committee
- Two undergraduate students
- One graduate student
- One student representative of Macdonald Campus