



FOR APPROVAL

CONFIDENTIAL

IN CAMERA SESSION

TO: Business Board

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PRESENTER: Scott Mabury, Vice President, University Operations
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DATE: January 20, 2014 for January 27, 2014

AGENDA ITEM: 17

ITEM IDENTIFICATION:

University of Toronto Mississauga Biology Greenhouse (Phase 1) - Financial Implications and Funding Sources - **Execution of the Project.**

JURISDICTIONAL INFORMATION:

Section 5.2 (b) of the Terms of Reference for the Business Board states that the Board is responsible for “approval of capital expenditures for, and the execution of, approved projects, as required by approved policies.”

Under the *Policy on Capital Planning and Capital Projects*, the Business Board approves the execution of projects.

GOVERNANCE PATH:

Execution of the Project

1. Business Board [For Approval] (January 27, 2014)

Project Planning Report (not a Business Board item as this is an Approval Level 2 project and borrowing is not required)

1. Campus Affairs Committee [For Recommendation] (November 11, 2013)
2. Campus Council [For Recommendation] (December 9, 2013)
3. Academic Board [For Approval] (January 30, 2014)
4. Executive Committee [For Confirmation] (February 27, 2014)

PREVIOUS ACTION TAKEN:

The Campus Affairs Committee, at its November 11, 2013 meeting considered and recommended this proposal for Campus Council consideration. At its December 9, 2013 meeting the Campus Council recommended the proposal to the Academic Board for its approval at the January 30, 2014 meeting of the Board, at which time it will go forward to the Executive Committee for confirmation on February 12, 2014.

HIGHLIGHTS:

The proposed Biology Greenhouse at UTM will provide a much-needed new modern facility for a significant amount of increasingly sophisticated research needs. UTM currently has 169 net assignable square meters (nasm) dedicated to a greenhouse at the rooftop level of the Davis Building. The facility is an important support to both research and teaching. Areas of research that rely upon this facility include: climate change; plant ecology; plant molecular systematics; plant taxonomy; molecular genetics; genomics and bioinformatics; and, insect neuroendocrinology. Undergraduate laboratories using plant material supplied and maintained by the existing greenhouse are associated with many courses within the major and specialist programs in Biology. The greenhouse is managed by a full-time horticulturalist and operated with part-time staff and undergraduate volunteers.

Space Program and Functional Plan

The proposed project includes the construction of a header house (containing support areas, incoming and distribution of services to the rest of the structure) and the first of potentially four glass houses, each of which is further divided into six separately controlled areas.

The proposed greenhouse will address the current and anticipated research needs and provide for future expansion to support teaching and research in four phases:

Phase 1 (this project) will consist of the site development, a header house and construction of a single glass structure, subdivided into six-modular units.

Phases 2, 3 and 4 (to be brought forward as separate projects as funding becomes available), will each include one six-modular greenhouse unit with a common corridor. In the meantime, the existing greenhouse will be maintained and will focus on the supply of teaching materials.

Schedule:

- Governance approval – November 2013 to February 2014
- Consultant selection – March 2014
- Design development and contract drawings March – May 2014

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- Tender and Award June 2014
- Mobilization and Construction July 2014 – June 2015
- Commissioning and moving July 2015
- Full operational occupancy by division August 2015

FINANCIAL IMPLICATIONS:

a) Total Project Cost Estimate

The proposed Total Project Cost (TPC) for Phase 1 of the Biology Greenhouse project is \$4,170,391.

b) Operating Costs

Annual energy and maintenance costs are expected to range from \$72,400 to \$86,000. Additional annual operating costs related to staffing and transportation (operating cost of van) are estimated at \$67,600 per year. UTM's annual Operating Budget has provided for these increased costs that total between \$140,000 to \$153,600.

The annual estimated cost of energy and maintenance; between \$262 and \$311 / nasm.

c) Funding Sources

The funding sources are as follows:

- Capital Reserves derived from the UTM Operating Budget \$4,170,391

RECOMMENDATION:

Be It Resolved

Subject to Governing Council approval in principle of the project,

THAT the Vice-President University Operations be authorized to implement the UTM Biology Research Greenhouse project (Phase 1) at a total project cost of \$4,170,391, to be fully funded by Capital Reserves derived from the UTM Operating Budget.

DOCUMENTATION PROVIDED:

For background information - *Project Planning Report for the University of Toronto Mississauga UTM Biology Research Greenhouse* (October 31, 2013)