

FOR INFORMATION:

TO: Planning and Budget Committee

SPONSOR: Elizabeth Sisam, Assistant Vice-President Campus and Facilities Planning

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DATE: January 9 for January 21, 2009

AGENDA ITEM: 8

ITEM IDENTIFICATION:

Project Planning Committee for the Centre for Enabling Technologies, Faculty of Applied Science and Engineering.

JURISDICTIONAL INFORMATION:

Under the Policy on Capital Planning and Capital Projects, section 5.A. the membership and terms of reference of Project Committees shall be reported to the Planning and Budget Committee.

BACKGROUND:

In June 2008 The Faculty of Applied Science and Engineering began a divisional space review which included an extensive review of the quantity and quality of its existing facilities. The study has identified significant deficiencies in the quality of existing laboratories and support infrastructure many of which are very out dated. The lab and cleanroom spaces in of the existing facilities are currently located in three different buildings – Bahen, Wallberg and Pratt – and the administrative offices are in yet another building – Sandford Fleming. Relocating some laboratories and offices to one main campus hub for micro and nanotechnology will allow improved student access to the facilities, more efficient use of the facilities, and lower maintenance and operational costs, as well as synergies with other groups to be located in the Centre for Enabling Technologies. With a focus on advanced materials and optical sciences, the Centre will allow the University of Toronto to locate key enabling technologies in a single building to benefit researchers, students and Ontario's high tech industry partners.

The proposed Centre for Enabling Technologies will consist of a new building within the Faculty of Applied Science and Engineering that will provide the research facilities and collaborative opportunities to develop multi-disciplinary projects and which will address the existing space deficiencies. The Faculty's current facilities house micro and nanofabrication facilities which will be incorporated into the new building. In order to support multidisciplinary synergies, the plan calls for the Institute for Optical Sciences also to be located in the new facility.

Over the next five years the University plans to expand its graduate enrolment further to bring the total proportion of graduate students, particularly at the St. George campus, to a level more in line with other research-intensive peers. In addition to the 1,297 graduate students currently enrolled in Engineering programs on the St. George campus, it is planned that 232 more will be added in the next five years. These additional graduate students will support the University's research strength across many disciplines including engineering, nanotechnology and optical sciences and will be an important part of Ontario's next generation of highly skilled human capital. The additional space is needed to support the growing number of graduate students in these areas.

PROPOSED COMMITTEE MEMBERSHIP:

Stewart Aitchison, Vice Dean-Research, Faculty of Applied Science and Engineering (Co-Chair) Steve Miszuk, Director, Planning and Infrastructure, Faculty of Applied Science and Engineering (Co-chair)

Leo Monaco, Undergraduate Student, Faculty of Applied Science and Engineering Josie Barbato, Graduate Student, Faculty of Applied Science and Engineering Michell Xu, Graduate Student, Faculty of Applied Science and Engineering Doug Perovic, Department of Materials Science and Engineering Ron Venter, Professor Emeritus, Faculty of Applied Science and Engineering and Chair, FASE Divisional Space Review

Dr. Henry Lee, Senior Technologist, Edward S. Rogers Sr. Dept. of Electrical & Computer Engineering

Sal Boccia, Senior Technologist, Department of Materials Science and Engineering Jennifer Adams, Senior Planner, Office of the AVP Campus and Facilities Planning Julian Binks, Manager, Capital Projects Planning, Real Estate Operations Gail Milgrom, Managing Director, Office of the AVP Campus and Facilities Planning

TERMS OF REFERENCE:

- 1. Make recommendations for a detailed space program and functional layout for the Centre for Enabling Technologies.
- 2. Identify the space program as it is related to the existing and approved academic plan for the Faculty of Applied Science and Engineering taking into account the impact of approved and proposed program that are reflected in increasing faculty, student and staff complement. Plan to realize maximum flexibility of space to permit future allocation as program needs change.
- 3. Demonstrate that the proposed space program will be consistent with the Council of Ontario Universities and the University of Toronto space standards.
- 4. Identify all secondary effects, including space reallocations from the existing site, impact on the delivery of academic programs during construction and the possible required relocation as required to implement the plan of existing units.
- 5. Address campus-wide planning directives as set out in the campus master plan, open space plan, urban design criteria and site conditions that respond to the broader University community.
- 6. Identify equipment and moveable furnishings necessary to the project and their estimated cost.

- 7. Identify all data, networking and communication requirements and their related costs.
- 8. Identify all security, occupational health and safety and accessibility requirements and their related costs.
- 9. Identify all costs associated with transition during construction and secondary effects resulting from the realization of this project.
- 10. Determine a total project cost estimate (TPC) for the capital project including costs of implementation in phases if required, and also identifying all resource costs to the University.
- 11. Identify all sources of funding for capital and operating costs.
- 12. Complete report by May, 2009.