

**TO:** Planning and Budget Committee

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

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**AGENDA ITEM:** 6

**ITEM IDENTIFICATION:**

Interdisciplinary Design Studios within the Department of Civil Engineering and the Lassonde Institute Project Change of Scope

**JURISDICTIONAL INFORMATION:**

Under the Policy on Capital Planning and Capital Projects, the Planning & Budget Committee reviews Project Planning Reports prepared for a capital project and recommends to the Academic Board approval in principle of the project.

**BACKGROUND**

A Project Planning Committee was established in December 2004 and in May 2007 the Faculty submitted an Interim Report to the Accommodation and Facilities Directorate and sought approval for the allocation, in principle, of the attic space in the Mining Building to the Department of Civil Engineering as the location for the department's Interdisciplinary Design Studio. Approval was also given at that time to engage a consultant to further investigate the structural, building code, and other feasibility aspects of the proposed attic renovation, the creation of an accessible entrance off King's College Road coupled with an elevator servicing every floor, to improve the accessibility to the Mining Building and to produce a conceptual design. The team included a heritage consultant to report on the condition of this designated building and construction cost estimates were also prepared for the basic project plus required restoration/repair work.

In January 2008 the consultants submitted a feasibility study and concept plan to locate the Interdisciplinary Design Studios within the unfinished attic space of the Mining Building. Their work has informed the conclusions and recommendations of the Project Planning Report which was approved in principle by Governing Council in June 2008. The estimated total project cost of the attic renovations was \$12,150,000 and included high priority roof renovations. Although other restoration and items requiring attention were identified, funding was not assigned for implementation at that time.

## HIGHLIGHTS

Located at the main gates of the University of Toronto St. George campus, the Mining Building is one of the original buildings of the University of Toronto's Faculty of Applied Science and Engineering and in 2005 celebrated its 100<sup>th</sup> anniversary. Today, the Mining Building hosts the Undergraduate Lassonde Mineral Engineering Program and the Lassonde Institute for graduate research in Engineering Geoscience as well as the Department of Mechanical and Industrial Engineering and the Institute for Biomaterial and Biomedical Engineering (IBBME).

The attic of the Mining Building, currently unusable space, has been identified as a potential location for the Faculty's proposed Interdisciplinary Design Studios within the Department of Civil Engineering, the Lassonde Mineral Engineering Program and the Lassonde Institute. These design studios will address the pressing needs for additional facilities in support of undergraduate and graduate expansion programs, be used to promote interdisciplinary activities in engineering geoscience and urban engineering design and to enhance the student learning experience.

The renovation of the attic space will not only accommodate the design studios but also provide much needed graduate student offices, a seminar room and administrative space. The proposed renovation of the Mining Building will give Canada's mining business capital a new education and research hub and foster growth toward providing solutions to the industry's pressing needs. It will be the Innovation Centre for the Canadian Mining Industry.

The facility will create an environment which supports full implementation of the studio method of design education. The foundations of this method, which is practiced in schools of architecture and the great European schools of engineering, are learning through doing, constant informal interaction with peers, and frequent critique of work in progress by teaching staff. The space will provide graduate student offices to accommodate graduate student expansion and a convergence area for researchers and industry to collaborate on joint projects.

The renovation of the attic space in the Mining Building also presents an opportunity to put the Department's commitment to the development and maintenance of environmental strategies aimed at enhancing university property, as well as the global environment, into practice. The principles of environmental sustainability are to form an integral part of the design and implementation of this renovation. The total project cost estimate allows for environmentally sustainable choices in construction methods, materials, furniture and furnishings.

The proposed project will improve accessibility in the building by making the building fully accessible with an interior elevator shaft created immediately to the North of the West stair with no impact to the exterior appearance of the building.

The Mining Building is currently a designated building in the Inventory of Heritage Properties on architectural grounds for its importance as a major work of Edwardian Classicism. As a designated building any changes to the exterior of the structure will be reviewed by the Heritage Preservation Services of the City of Toronto. A heritage consultant was engaged as part of the feasibility study to ensure that any changes would be handled with sensitivity.

## FINANCIAL AND PLANNING IMPLICATIONS

The estimated total cost of the attic renovation, elevator installation and all associated work if tendered as a lump sum in the spring of 2009 was \$10,065,000 and included allowances for asbestos abatement and an allowance for relocation costs for building occupants who will be either permanently or temporarily displaced by the work, for which a plan is being developed.

As part of the feasibility study a review and assessment of the condition of the building envelope was undertaken to identify items of restoration and maintenance and their related costs. The west half of the roof was identified by the consultants, reviewed by Facilities and Services and classified as “high priority” requiring immediate attention. The estimated total cost for this work was \$2,085,000 if done at the same time as the other construction. The estimated total project cost of the attic renovations was \$12,150,000 and included high priority roof renovations. Although other restoration and maintenance items requiring attention were identified, including the introduction of photovoltaic panels were proposed, immediate funding sources were not identified for implementation. These additional items, together with escalation to time of tender will increase the total project cost to \$20,000,000

## **FUNDING SOURCES**

This renovation project is being submitted under the federal infrastructure program, identified as the Innovation Centre for the Canadian Mining Industry. A commitment of \$4 million has been secured, and discussions are advanced for further contributions with the balance being sought under the infrastructure program.

## **SCHEDULE**

The project will proceed with implementation once funding commitments are in place.

## **RECOMMENDATIONS**

It is recommended that the Planning and Budget Committee recommend to the Academic Board:

1. THAT the Project Planning Report for the Civil Engineering Interdisciplinary Design Studios be approved in principle
2. THAT the project scope, comprising renovations to approximately 630 net assignable square meters and 1,130 gross square meters be increased to a total project cost of \$20,000,000, subject to funding, to include high priority repairs, maintenance and restoration and items addressing sustainability.