



University of Toronto

Office of the Assistant Vice-President, Space and Facilities Planning

TO: Planning and Budget Committee

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

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DATE: February 15, 2006 for March 7, 2006

AGENDA ITEM: Science Building at the University of Toronto at Scarborough

JURISDICTIONAL INFORMATION:

Under the Policy on Capital Planning and Capital Projects, the Planning & Budget Committee considers reports of Project Planning Committees and recommends to the Academic Board approval in principle of projects and changes of scope as required to complete the project.

PREVIOUS ACTION TAKEN

In May 2005 the Planning and Budget Committee approved in principle the Project Planning Report for Phase I of the Science Building at the University of Toronto at Scarborough (UTSC). The approval allowed UTSC to proceed through the detailed planning stage. The concept design and subsequent detailed costing are now complete defining co-ordination and intervention with the existing science wing at UTSC.

A cash allocation of \$3,000,000 in 2004/05 was made available. The various sources of funding, required for the completion of the project, were to be confirmed by April 2006, prior to the commencement of the construction. The availability of all funds were to be reassessed by the Planning and Budget Committee.

Phase 1 included a new building of 2543 net assignable square metres [nasm] or a maximum of 5075 gross square metres, rectification of several deferred maintenance issues, and renovations to existing research facilities. It will accommodate 16 laboratories designed as generic wet labs with a planned core of support areas, 16 faculty offices and 24 offices for graduates and post doctoral fellows and a large lecture theatre. The design and construction schedule for the new Science Building is very aggressive and requires completion and occupancy in January 2008. The total project cost was originally estimated to be \$31,500,000.

HIGHLIGHTS:

The Science Building at UTSC is urgently required to support and provide the facilities necessary for the development of the research endeavours of the physical and environmental sciences and the life sciences, as a direct consequence of the double cohort and the resultant enrolment expansion. More students implies the need not only for more facilities to support the educational process, but also to attract high ranking academics through the provision of

research facilities that will ensure academics, once recruited, will contribute to the overall well-being of the educational and research aspirations of UTSC. The project has been identified as the highest priority for the University of Toronto at Scarborough, and one of the highest priority projects at the University. The project is planned to be developed in phases. UTSC will be aggressively seeking additional support from the Canadian Foundation for Innovation and other sources for strategic research projects that could be included within the planned Phase 2.

As Phase 1 of the project proceeded through design it became apparent that a full basement would be beneficial not only to support additional research endeavours of the science faculty but to create an operational basement level link to the existing John Andrews Science Wing. An increase in size of the building (approximately 440 net assignable square meters and 970 gross square meters) above the previously approved space programme is required.

The expansion of the basement will include low-cost space for plant growth chambers, storage space for field equipment and other science equipment, and increased space for the NMR facility to accommodate additional required infrastructure. The additional space will also create storage space and link the new building and the existing science wing adjacent to the theatre. This increase in the basement-located support space is partially offset by minor decreases in classroom and study space, and academic office space categories. The changes are compensated by more efficient placement of seating, and accommodating the open area graduate/PDF office space within the lab zones. No losses in the approved seating capacity will occur. There is a net increase in the research lab/support space category. The increase in projects costs for these changes have been identified.

FINANCIAL AND/OR PLANNING IMPLICATIONS:

The total project costs for the revised scope, based on the February 2006 TPC (as attached) will be \$33,089,000, an increase of \$1,589,000, from the initial estimate.

The annual operating costs of the facility, Phase 1, are estimated at \$300,000. These costs will be re-evaluated once the building is operational and carried from the operating budget of the University of Toronto at Scarborough.

Identified sources of funds to date include:

- 1) Cash allocation of \$3,000,000 in 2004/2005. These funds are being used for Phase 1 (design costs and proceeding to tender. Approved by Planning and Budget Committee May 2005.)
- 2) An allocation of \$10,089,000 from UTSC operating budget.
- 3) Debt of \$20 million to be repaid by UTSC from its operating budget.

RECOMMENDATIONS:

The Planning and Budget Committee recommends to the Academic Board:

1. THAT the February 2006 revisions change in scope for the Science Building at UTSC, approximately 2982 nasm and 6041 gross increasing the total project cost to \$33,089,000 be approved in principle.
2. THAT the additional sources of funding identified below be approved.
 - a) An allocation of \$10,089,000 from UTSC operating budget.
 - b) Debt of \$20 million to be repaid by UTSC from its operating budget.

Project Title:

UTSC Science building

Revised estimate, February 2006

TABLE 1: Total Project Cost Estimate

	Items	
A	Construction amount	19,151,500
	Construction Contingency	1,349,210
	Applicable GST	473,566
	Total, including GST	\$20,974,276
B	Infrastructure Upgrades in Sector	3,050,000
C	Secondary projects	2,525,000
	Demolition of Soils building	100,000
D	Landscaping	inc
	Permits & Insurance	217,700
	Professional Fees	2,899,000
E	Computing Infrastructure	82,000
F	Telephone Terminations	26,000
	Audio/Visual	100,000
	Moving	195,474
	Staging	0
G	Furnishings: Department	601,100
G	Furnishings: Classrooms	60,000
G	Equipment	520,500
H	Security & access systems	100,000
	Signage: Interior & Exterior	56,000
	Signage: Donor Recognition	10,000
	Groundbreaking & Building opening	30,000
J	Miscellaneous	15,000
	Project Contingency	779,550
K	Finance Costs	747,400
	Total Project Cost Estimate GST included	\$33,089,000

prepared

jcb Dec 20 2005

Notes:

A per AW Hooker	
Base estimate 5,000 GSM	\$16,800,000
Bridge to S Wing incl. alter.	\$485,000
fire route work	\$410,000
relocate existing services	\$300,000
extra landscape over estimate	\$100,000
extra science basement space	\$415,500
theatre expansion	\$ 641,000
total construction contract estimate	\$19,151,500

B Main boiler replacement. Amount is inclusive TPC.

C Secondary projects:	TPC amounts
(i) Demo. portables	\$80,000
(i) Rental	\$48,000
Relocate grounds vehicle area	\$77,000
(i) Sprung removal costs	\$35,000
(i) Replace Soils bld.	\$150,000
New emergency generator for S Wing	\$735,000
Teaching lab upgrades	\$600,000
Biology Teaching Lab upgrades	\$200,000
Upgrades to Research labs.	\$250,000
Rationalize space in S Wing	\$250,000
Fire doors in S Wing	\$100,000
total	\$2,525,000

(i) Any carry forwards from these projects will be used towards the relocation of the Grounds Vehicle area.

D Approximately \$250,000 included in construction amount for hard and soft landscaping in vicinity of building.

E Backbone connection to building, wireless hardware.

F allow for new sets & relocates.

G see schedule

H allows for up to 18 doors to have card control.

J trades, advertising etc

K see schedule.

New Science Building at UTSC

# Rooms	Room Use	Approved Space Program			Revised	
		Nasm Per Room	Total Nasm Per Room Use	Total Approved Sq.M.	Revised Program Nasm	Change
CLASSROOMS and STUDY SPACE						
1	150 seat (original revised to 240 seat)	250	250	250	229	-21
RESEARCH LABS						
16	generic wet labs	70	1120		1082	
	various lab support areas, dedicated, dept., central		448		781.2	
				1,568	1863.2	295
ACADEMIC OFFICES						
16	faculty	12	192		193.6	
8	pdfs/ras (2 stations per 12 sq.m. office)	12	96		78.6	
16	graduate (3 stations per 12 sq.m. office)	12	192		153	
				480	425.2	-55
ADMINISTRATION/OTHER						
4	technicians	6	24		21.6	
2	non-academic staff	13	26		30.8	
1	office supplies/storage/machine room	25	25		22.6	
1	common room space	50	50		57.5	
1	meeting room	75	75		72.9	
1	ground floor lobby/showcase area	45	45		45	
				245	250.4	5
BASEMENT LINK TO S-WING						
5	storage rooms				163	
1	box office/coats				10	
1	lobby				42	
					214	214
TOTAL NASM				2,543	2,982	439
TOTAL NON-ASSIGNABLE AND STRUCTURAL AREAS				2,532	3,059	527
TOTAL GROSS				5,075	6,041	966
RATIO GROSS TO NASM				2.00	2.03	

Revised February 14th. 06