

a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

### **REPORT TO THE BOARD OF GOVERNORS**

SUBJECT UNDERGRADUATE LIFE SCIENCES TEACHING LABS RENEWAL

MEETING DATE April 14, 2014

Forwarded to the Board of Governors on the Recommendation of the President

APPROVED FOR SUBMISSION

David H. Farrar Acting President and Vice-Chancellor

Presented ByDavid Farrar, Provost & Vice-President Academic<br/>Pierre Ouillet, Vice-President Finance, Resources & Operations<br/>Simon Peacock, Dean, Faculty of Science<br/>Gavin Stuart, Vice-Provost Health and Dean, Faculty of Medicine<br/>John Metras, Managing Director, Infrastructure Development<br/>Michael White, Associate Vice-President, Campus & Community Planning<br/>Peter Smailes, Treasurer<br/>Al Poettcker, President & CEO, UBC Properties Trust

Report Date March 20, 2014

DECISION REQUESTED IT IS HEREBY REQUESTED that the UBC Board of Governors approve BOARD 1 for Undergraduate Life Sciences Teaching Labs Renewal, with a funding release of \$1,500,000 to commence design.

Preliminary Capital Budget	\$80,000,000
Preliminary Operating Budget	\$ 1,503,000
Schedule	
Project in Principle	
Location	
Consultant Selection	
Program	
Proceed to Schematic Design	
Funding Release	\$1,500,000
Information	
Expenses to Date \$0	

### **EXECUTIVE SUMMARY**

The Undergraduate Life Sciences Teaching Labs Renewal project involves an \$80 million renewal and expansion of the Biological Sciences complex to provide modern, well equipped teaching laboratories for over 2,000 students enrolled in undergraduate life sciences programs. This will replace and consolidate deteriorated teaching labs in the Biological Sciences Centre and North, Wesbrook and D.H. Copp buildings. **The project will also address seismic risk associated with these buildings, which have all been rated high or very high risk, and ultimately result in the elimination of up to \$85M in deferred maintenance.** 

A functional program has been completed and aligned with the proposed project budget.

Funding is proposed to be contributed from three sources:

- 1) Pending Treasury Board Approval, the Ministry of Advanced Education has approved in principle a contribution (\$21.25 million) toward the renewal portion of the project.
- 2) An internal loan (\$21.25 million) repaid from the Central Operating Budget supported by expected Vantage College revenue. The project is required in part to support the additional services for expanded enrolment to which Vantage College will materially contribute. The Vantage College operating budget includes an annual allocation to specifically support debt financing for the Undergraduate Life Sciences Teaching Labs project.
- 3) An internal loan (\$37.5 million) repaid from the Trek Endowment using the 3.5% annual spending allocation attributable to \$57.3 million in incremental endowed land development revenue made possible in part by this project. This land development revenue would be generated by shifting two rental University Housing projects (for those who work at or attend UBC) from Wesbrook Place to Academic lands on University Boulevard the current General Services & Administration Building (GSAB) and D.H. Copp building sites. GSAB tenants are currently being relocated as part of a previously planned project to the Gerald McGavin, Donald Rix and Technology Enterprise Facility 3 buildings making the site available for development any time after July 2014. D.H. Copp uses would be shifted to the renewed and expanded Biological Sciences complex after its targeted completion in July 2017 thus making the D.H. Copp site available for development. Shifting the rental projects from Wesbrook Place to these sites on University Boulevard would free up Market Leasehold gross buildable area in Wesbrook Place that would consequently generate \$57.3 million in prepaid lease revenue for endowment. The annual 3.5% endowment spending allocation on this amount will support debt service for a \$37.5 million loan for the Undergraduate Life Sciences Teaching Labs (Biological Sciences Renew) project. A schematic showing the flow of funds is provided in Attachment 3.

This represents a creative opportunity to develop a vibrant mixed-use community at the gateway to campus, with ground level Academic/Campus as a Living Lab program uses and needed rental University Housing on University Boulevard, while at the same time supporting a much needed infrastructure renewal project impacting thousands of students. The development of the mix-use community allows the University to deliver the University Boulevard housing and retail vibrancy envisaged in the original campus plan, before a later reallocation of land to the new SUB, Alumni Centre and expanded transit terminal. In that context, the transfer of sites to University housing, although compliant with the Land Use Plan, is truly exceptional in nature.

Campus & Community Planning (C&CP), in consultation with UBC counsel, has reviewed the proposed projects on the GSAB and D.H. Copp sites and determined that the mixed-use/Campus as a Living Lab approach is consistent with the *Land Use Plan* and *Vancouver Campus Plan*.

This Board 1 approval request is specifically for the Undergraduate Life Science Teaching project, including the proposed funding model. The project is currently ranked as priority 1B in the UBC Capital Plan and received Executive 3 approval on December 16, 2013. Separate Board approvals will be sought at the appropriate time for the proposed rental University Housing projects on University Boulevard.

Place and Promise COMMITMENT(s)	The University provides the opportunity for transformative student learning through outstanding teaching and research, enriched educational experiences, and rewarding campus life.
Place and Promise ACTION(s)	Foster UBC's globally influential areas of research excellence. Develop new global centres of excellence at UBC with international partners.
Place and Promise COMMITMENT(s) Place and Promise ACTION(s) Description & Rationale	Enhance infrastructure to support leading edge research.
Description & Rationale	<b>Background and Academic Need</b> UBC delivers life sciences teaching programs to more than 2,000 FTE students, preparing students for further study or a career in the life sciences sector. Laboratory experiences are essential to learning, providing hands-on opportunities to explore practical problems and conduct research.
	Life sciences teaching programs are currently delivered in deteriorating buildings that are 1960-70's era or older and represent significant seismic risk. Original lab configuration and infrastructure hampers the ability of instructors to develop progressive teaching methods centered on student collaboration. Teaching lab sizes limit the ability of programs to respond to increased student demand for placement. Building finishes and systems are beyond or nearing the end of their serviceable life and renovation of individual labs is limited by the inability to improve overall deteriorating building infrastructure.
	The proposed project will provide modern, well equipped laboratories and a consolidated home for undergraduate students and teaching faculty in the following programs:
	• Faculty of Science: Biology, delivered by Botany and Zoology, currently located in Biological Sciences North Wing and Centre Block
	<ul> <li>Faculty of Science: Microbiology &amp; Immunology (M&amp;I), currently located in the Wesbrook Building</li> </ul>
	• Faculty of Medicine: Biochemistry & Molecular Biology (B&MB), and Cellular and Physiological Sciences (CAPS), currently located in the D.H. Copp Building
	<b>Project Description</b> The project will renew and add a 4th floor to Biological Sciences North Wing (built 1976), create a 4-storey link between Biological Sciences West and North, and replace the deteriorated Biological Sciences Centre Block (built 1948) and 2-storey Workshop Building with a new 5-storey addition on the east side of the courtyard. A project site plan is provided in Attachment 2. Total project area, including rooftop research and teaching greenhouse space, is 174,795 gross square feet. The project builds on the successful renewal of the Biological Sciences West and South Wings completed in 2011 as part of the Knowledge Infrastructure Program funded by the Federal and Provincial governments.

Demolishing Biological Sciences Centre and renewing Biological Sciences North will reduce deferred maintenance by \$45M and significantly reduce structural seismic risks. Teaching programs in Copp and Wesbrook are the primary functions remaining in those buildings, and relocating the programs paves the way for future demolition and an additional deferred maintenance reduction of \$40M. Demolition of Copp following completion of the project will create a major building site to be used for rental University Housing (for those who work at or attend UBC), the proceeds of which will help fund the Biological Sciences renewal project.

In the short-term, relatively low cost seismic, functional and life safety upgrades to Wesbrook and minor safety upgrades to Copp will allow these facilities to be used for swing space to facilitate the Undergraduate Life Sciences Teaching Lab renewal and then potentially the planned Undergraduate Chemistry Teaching Lab renewal project.

### **Functional Program**

Resource Planning Group (RPG) was retained to develop a functional program for the project. Total new and renewed building area is approximately 15,408 gross square metres (165,840sf) plus 832 gross square metres (8,956sf) of rooftop research and teaching greenhouse space, for a total of 16,240 gross square metres (174,795sf). The project will include:

- Teaching laboratories for Biology, M&I, B&MB, and CAPS
- Teaching lab support, including preparation rooms, environment chambers, and plant and specimen collections
- Instructors' offices and administrative support
- Student help centre, informal learning space, and student association offices
- Faculty of Science Co-op for life sciences programs (currently in Copp)
- Replacement lecture theatres and classrooms
- Replacement and upgrade of Biological Science complex functions currently in North Wing and Centre Block, including Botany administration hub, post-doctoral and graduate student offices, the Biolmaging Facility, research greenhouse and growth chambers, loading/receiving, central stores, workshops, aquatics research and hummingbird lab.



# **Functional Program Summary**

Space Requirements Net Square Metres (NSM) by Category (Yr 2015/16)									
	_		1	4.0	1		1		
				Academic	14.0	I	l I		
		2.0	1	& Admin	Common	16.0	18.0		
		Teaching	3.0	Offices &	Use &	Non-	Aquatics		
	1.0 Class-	Labs	Research	Related	Student	Assign-	and	Total	
Component	rooms	UGrad	Labs	Support	Activity	able	Plants	NSM	BGSM <sup>1</sup>
A1. Classrooms, BioSciences	1,566.8	-	-	-	440.7	-	-	2,007.5	
Resource Centre, Informal									
Learning			·		L	$\bot$ $\_$			
B1 Biology Program Teaching Labs, Teaching Offices	-	3,126.2	-	413.5	10.1	-	-	3,549.8	
B2 Microbiology & Immunology	-	729.0		110.0	24.4		-	863.4	
Teaching Labs, Teaching Offices			•	•			•		
B3 Biochemistry & Molecular Biology	-	449.0	-	66.9			-	515.9	
Teaching Labs, Teaching Offices					L	$\bot$ $\_$			
B4 Cellular & Physiological Sciences	-	305.7	-	66.0	-	-	-	371.7	
<u>Teaching Labs, Teaching Offices</u>						L _			
B5 Shared Teaching Labs Support	-	70.5	-	-	-	-	-	70.5	
C1 Aquatics Research Additional			. —. —		T - 1	┌ - ─	210.0	210.0	
Functions					<b>.</b>		l		
C2 Hummingbird Behaviour Lab	-	-	45.0	-	-	-	,	45.0	
C3 Botany Centralized Growth				⊢ .─	I	<u> </u>	280.4	280.4	
C5 Biolmaging Facility EM Suite			196.9	11.0	. — . —	. — ·	<u> </u>	207.9	
<u>C6 Shops</u> <u> </u>			302.8	430	+	+	. —. —	345.8	
				43.0		, <u> </u>			
C7 Receiving & Building Services, Central Stores		/5.4	61.4	11.0	- .— —	- 		147.8	
D1 Other Offices and Shared Office	-	-	-	538.5	-	-	-	538.5	
Support (Botany, Zoology)					.— —	. — .	L _		
D2 Shared Office Support				187.5	I	I <u>-</u> .		187.5	
D3 Life Sciences Co-op	-	-	-	63.7	-	-	-	63.7	
E1 Building Support			ı — —	·	г — -	135.0	, <u> </u>	135.0	
Subtotal Net Square Metres	1,566.8	4,755.8	606.1	1,511.1	475.2	135.0	490.4	9,540.4	
Building Gross-up				l	i	i			
Subtotal BGSM @1.615 Factor x NSM				1	ł	ł	1		15,408
Factor based on combined				I	I .	i i	I		-,
Renew/New project					1	l T	l		
C4 Rooftop Botany Greenhouses	-	- 1			Ι_	Ι_	693.3	693.3	
Subtotal	-	-	-	-	ı -	ı -	693.3	693.3	
Subtotal BGSM @1.20 Factor x NSM				1	ł	ļ	1		832
			1	1			1		
TOTAL BGSM				l	1	1			16,240
<sup>1</sup> BGSM = Building Gross Square Me	tres				•	•			•



# **COSTS** Capital & Lifecycle Operating

The following hudget was prepared by LIBC Project Services		Total		
The following budget was prepared by ober foject services.		Total	, Cos	t/sf
Construction Costs				72%
Construction	\$	51 823 824	Ś	296
Design/Construction Contingency	Ś	1 785 186	<b>,</b>	250
Construction Management	\$	2 072 953		
Cash Allowances		2,072,333		14%
Public Realm	Ś	1.000.000		2.70
Site Servicing	Ś	950.000		
Demolition	Ś	683.345		
Escalation	\$	-		
Kitchen Equipment	\$	-		
FF+E	\$	3,750,000		
UBC IT and Secure Access	\$	1,000,000		
Audio Visual	\$	1,000,000		
Swing Space Cash	\$	2,500,000		
Soft Costs				10%
Consultant Budget	\$	5,182,382		
Moving / Commission / Inspection	\$	829,181		
IIC, Permits, PO Charges, Insurance & Legal	\$	525,000		
Project Management	\$	1,462,037		
Building Subtotal	\$	74,563,909	\$	427
GST	\$	1,230,305		
Project Subtotal	\$	75,794,214	\$	434
Retained Risk	\$	445,792		
UBC Finance Charges	\$	1,179,994		
SUBTOTAL	\$	77,420,000	\$	443
ADDITIONAL WESBROOK UPGRADES				
- Seismic Upgrade	\$	1,000,000		
- Lab safety upgrades	\$	1,050,000		
- Lecture theatre upgrade	\$	530,000		
PROJECT BUDGET	\$	80,000,000	\$	458

OPERATING BUDGET			
Operating Costs	Annual \$	\$,	/GSF
Annual Operations + Maintenance	\$1,113,444		\$6.37
Utilities	\$389,793		\$2.23
Total O + M Cost	\$ 1,503,237	\$	8.60
		_	
Less: Savings from Demolished Space*	\$ 474,931	\$	5.67
Net O&M Cost	\$ 1,028,306		
Lifecycle Capital Costs	Annual \$	\$,	/GSF
Cyclical Maintenance	\$613,530		\$3.51
Modernization / Upgrade	\$162,559		\$0.93
Total Capital Renewal Cost	\$776,090		\$4.44

\*\*DEMOLITIONS: Bio Ctr 59,695 GSF; Bio North Rooftop Greenhouses 4240 GSF; Bio North Rooftop Mech PH 2960 GSF;3rd flr bridge between BioSci N&W 2196GSF; BioSouth Spoke 6738GSF; Workshop 7642GSF, Paper Recyc/Flamm Stor 291GSF TOTAL DEMOLISHED SPACE 83,762 GSF (7782 GSM)

Faculties of Science and Medicine will pay annual net O&M cost for their respective space. Central Operating budget will fund Capital Renewal requirements to the extent possible.

#### **FINANCIAL Preliminary Funding Plan**

Funding Sources, Impact on Debt Ratios

The Undergraduate Life Sciences Teaching Labs project was included as the top priority in the last UBC Five-Year Capital Plan submission to the Provincial Government. This Plan proposed that funding for the project be split 50/50 between the Provincial Government and UBC. The Province has indicated that it has approved in principle the renewal portion of the project only, estimating its cost to be in the range of \$42.5 million. Pending Treasury Board approval, the Province would contribute \$21.25 million toward this renewal component. The following funding plan is therefore proposed, including UBC internal sources for the balance of the project funding.

Funding Source	
<b>Provincial Government</b> – Pending Treasury Board approval, the Ministry of Advanced Education has approved in principle a contribution toward the renewal portion of the project.	\$21,250,000
<b>Central Operating Budget</b> - Internal Ioan (30 years, 5.75%) repaid from Central Operating Budget supported by expected Vantage College revenue. The project is required in part to support the additional services for expanded enrolment to which Vantage College will materially contribute. Vantage operating budget includes a sufficient annual allocation to specifically support this debt financing for the Undergraduate Life Sciences Teaching Labs project.	\$21,250,000
<b>Trek Endowment</b> – Internal Ioan (35 years, 5.75%) repaid from Trek Endowment using 3.5% annual spending allocation attributable to the \$57.3 million endowed land development revenue made possible by this project. Details noted below.	\$37,500,000
Total Funding	\$80,000,000

The \$57.3 million endowed land development revenue would be generated by shifting two rental University Housing projects (for those who work at or attend UBC) from Wesbrook Place to Academic lands on University Boulevard – the current General Services & Administration Building (GSAB) and D.H. Copp building sites. Shifting these rental projects would free up 301,500 f<sup>t2</sup> (132,700 f<sup>t2</sup> plus 168,800 f<sup>t2</sup>) of Market Leasehold gross buildable area in Wesbrook Place that would consequently generate \$57.3 million in prepaid lease revenue (\$190/f<sup>t2</sup> net of servicing and IICs) for endowment. The annual 3.5% endowment spending allocation on this amount will support debt service for a \$37.5 million loan amortized over 35 years at 5.75%. A schematic showing the funds flow is provided in Attachment 3.

GSAB tenants are currently being relocated to available office space in the Gerald McGavin, Donald Rix and Technology Enterprise Facility 3 buildings. This is part of a proactive strategy to address seismic risk, deferred maintenance and inadequacy of the building for current requirements. Demolition of GSAB could take place at any time after July 2014. D.H. Copp uses would be shifted to the renewed and expanded Biological Sciences complex after its targeted completion in July 2017 thus making the D.H. Copp site available for development. Both GSAB and D.H. Copp have been assessed as very

high risk for structural failure in the event of a seismic event and therefore their demolition represents a net benefit to the University from a risk management perspective.

The current UBC liquidity plan includes the required internal financing for this project, which is a Priority 1B on the internal capital priorities list. An assessment will be made prior to Board 3 to determine whether sufficient liquidity is available for the project to proceed on the proposed schedule.

# UBCPT Financial Analysis of Proposed Land Use Change to GSAB and D.H. Copp Building Sites

The following value to UBC would be generated by shifting rental University Housing projects from Wesbrook Place to Academic lands on University Boulevard:

GSAB Site:

Site Area	47,400 ft <sup>2</sup> (4,400 m <sup>2</sup> )
Assumed built form	6-storey wood frame
Assumed FSR	2.8
Rental GBA	132,700 ft <sup>2</sup>

Copp Site:

Site Area	60,300 ft <sup>2</sup> (5,600 m <sup>2</sup> )
Assumed built form	6-storey wood frame
Assumed FSR	2.8
Rental GBA	168,800 ft <sup>2</sup>

Benefit to Wesbrook Place:

Shifting these rental projects would free up 301,500 ft<sup>2</sup> (132,700 ft<sup>2</sup> plus 168,800 ft<sup>2</sup>) of Market Leasehold gross buildable area (GBA)

Consequently, 301,500 ft<sup>2</sup> of wood-frame GBA in Wesbrook Place would return to UBC:

- \$57.3 million in prepaid lease revenue (\$190/ft<sup>2</sup> net of servicing and IICs)
- \$7.5 million in IIC (infrastructure impact charges) revenue (net increase market rate over rate for rental University Housing)
- \$8.0 million in the cost of servicing that could be applied to University Boulevard
- \$1.0 million in CAC (community amenity charges) revenue

Total return to UBC \$73.8 million

Once built, the new wood frame rental projects would generate Appraisal Surplus values of approximately **\$33 million to \$38 million** (\$110 to \$125/ft<sup>2</sup>).

The \$57.3 million pre-paid lease revenue would be endowed and the associated increase in annual endowment spending be used to support financing for Undergraduate Life Sciences Teaching Labs project.

#### SCHEDULE **Preliminary Implementation Schedule**

The project is targeting completion in June 2017. This will allow time for set-up of Implementation teaching labs prior to the start of the 2017/18 academic year. Timeline

UBC Board 1	April 2014
Treasury Board Approval of Provincial Funding Contribution	Fall 2014
UBC Board 2	December 2014
UBC Board 3	June 2015
Construction Start	July 2015
Substantial Completion	June 2017
Final Occupancy	July 2017
Board 4	June 2019

#### RISKS **Project Risks**

Financial, Operational & Reputational

The primary risk for the project is that the Land Development and Vantage College revenues required for project funding are not realized in the expected timeframe. This would create a funding shortfall requiring other projects supported by the Central Operating Budget to be potentially deferred. UBC Properties Trust has confirmed the potential land development revenue for the market housing development based on extensive experience and track record with similar developments on campus. Vantage College confirms that application numbers are in line with expectations and that they are on track to meet initial year enrolment targets.

Benefits of the proposed project include: BENEFITS

Learning, Research,	Drovidocu	s modern teaching labs for 2,000 students in life sciences program
Financial,	Provides i	s modern teaching labs for 2,000+ students in me sciences program.
Sustainability &	<ul> <li>Addresses</li> </ul>	es seismic risk in four high or very high risk buildings
Reputational	Eliminate	es up to \$85 million in deferred maintenance
	<b>D</b> · · ·	

Provides rental University Housing for those who work at or attend UBC •

CONSULTATION The project is currently ranked as priority 1B in the UBC Capital Plan and is a priority for Relevant Units, the Faculties of Science and Medicine. Infrastructure Development - Facilities Planning Internal & External has worked with the user group to develop the functional program and a swing space Constituencies plan, and UBC Project Services has provided preliminary budget costing based on the program. Campus & Community Planning (C&CP) has provided input on off-site utilities, sustainability objectives, siting, and integration with the Public Realm. UBC Utilities has provided a preliminary assessment of utilities requiring relocation. C&CP has determined that this project does not require submission to the New Building Site Selection Committee as it involves rebuilding on an existing built site. The project received the support of the Property & Planning Advisory Committee (PPAC) on September 17, 2013.

> A Request for Expressions of Interest from architects has been completed and the following short-list of qualified design consultants is recommended:

- Acton Ostry Architects
- **B+H** Architects
- **Diamond Schmitt/CEI Architecture**

The project manager, in consultation with the University Architect, Faculties of Science and Medicine and Infrastructure Development, will select the prime design consultant from this shortlist based on detailed proposals.

The project will be managed by UBC Project Services (Infrastructure Development). Project Services managed the successful renewal of Biological Sciences West + South which was completed on time and under budget in 2011.

Following Board 1 approval and the selection of the project architects, the development review process will include reviews by the Advisory Urban Design Panel and the Development Review Committee. A public open house will be held prior to the Board 2 report to the Board of Governors scheduled for November 2014.

### **Campus & Community Planning Review**

Campus and Community Planning, in consultation with UBC counsel, have analyzed the land use implications of the proposed rental University Housing on the GSAB and D.H. Copp sites. Both sites are designated 'Academic' in the *Land Use Plan*. This allows a range of development uses to support UBC's academic mission. The proposed projects fit the academic designation as demonstration campus-as-a-living-lab projects. Staff have structured the project proforma to contribute Infrastructure Impact Charges from the associated Wesbrook Place land development towards this goal and have begun to explore research partnerships with a number of academic sponsors.

A possible vision for the two sites is as follows:

### **GSAB Site – UBC Athletics Focus**

- Highlighting UBC's high performance sports and health and wellness initiatives, and serving as a portal to the surrounding athletics facilities.
- Providing ground-floor academic uses such as high performance sport research labs, recovery facilities and retail, while integrating with surrounding uses such as transit.
- Offering much needed upper-floor rental University Housing (for those who work at or attend UBC) with priority access for varsity athletes, coaches and Kinesiology faculty.

# D.H. Copp Site – Social Sustainability Focus

- Serving as a Campus as a Living Lab project for research investigating community living in a dense urban setting. Early identification of potential partnerships includes the School of Population and Public Health.
- Providing ground-floor academic and retail uses to integrate with existing and planned University Boulevard developments.
- Offering upper-floor rental University Housing exploring innovation in higher density living, such as:

- o Integrated indoor/outdoor common areas;
- Enhanced design for accessibility / persons with disabilities;
- Increased functional landscaping / urban agriculture;
- Innovation in unit design (flexible and multi-functional spaces);
- Building systems monitoring and feedback loops to inhabitants;
- o Healthy and low environmental impact materials;
- o Passive building design to reduce energy needs;
- o Shared amenities for inhabitants;
- Integrated design process with end users.

The opportunity to build mixed-use academic and University Housing on these sites also contributes to UBC's long-term vision for University Boulevard as a vibrant complete community. As the campus gateway, the GSAB site in particular offers the opportunity to enhance UBC's 'front door' with a welcoming university arrival experience.

C+CP has also confirmed that conversion of the GSAB and D.H. Copp sites to include University Housing would not undermine UBC's supply of land for teaching and research. The *Vancouver Campus Plan* identifies the GSAB site for administrative use; this use has already been shifted to existing administrative buildings. D.H. Copp and neighbouring buildings are identified as redevelopment sites. With completion of the undergraduate teaching laboratories, academic uses in D.H. Copp will be shifted to the newly-expanded Biological Sciences complex. In the long-term, the sites' redevelopment could result in more efficient academic uses in neighbouring buildings.

Building University Housing on the GSAB and D.H. Copp sites would contribute to UBC's Housing Action Plan targets and count as part of the *Land Use Plan* requirement that 20% of new residential units be rental housing. This would reduce the demand for rental housing in the Wesbrook Place neighbourhood and allow additional market leasehold development.

The detailed vision for these sites will be developed through consultation with the campus community, recognizing that proposed redevelopment of these sites to include University Housing will likely generate debate. In the past, concerns have been raised by some students with proposals for faculty and staff housing south of Gage Towers. C+CP will seek to understand and manage such concerns through a meaningful community engagement process that:

- involves early communication with key stakeholders, technical analysis of project impacts, and comprehensive public consultation prior to and following the development permit process;
- communicates the intent for using the sites for Campus as a Living Lab projects that integrate University Housing, an athletics portal, social sustainability, and various academic services; engages the community on how best to activate the sites and ensure compatibility and integration with the surrounding area and uses.

Signed Off by:

UBCPT COMMENTS Date of Review: Complete for all reports that include a property component

### Attachments

- 1) Context Map with Relevant Buildings
- 2) Biological Sciences North & Centre Project Site
- 3) Land Development Funding Model Flow of Funds
- 4) Capital Project Accountability Scope & Planning
- 5) Capital Project Accountability Budget & Financing



### Attachment 1: Context Map with Relevant Buildings



**Potential University Housing Sites** 

Undergraduate Life Sciences Teaching Labs Project Site



Attachment 2: Biological Sciences North & Centre Project Site







# Attachment 4: Capital Project Accountability Scope & Planning

						TATUS		
UBC	PROJECT NAME				CURRENT APPROVAL S	STATUS		
SHOT.	Project Name:	Undergraduate L	ife Sciences Te	aching Labs			Level	Approval Date
	Department/Unit:	Faculty of Science	e, Faculty of Med	dicine	Executive:		3	Dec. 16, 2003
	Sponsor:	David Farrar, Pro	vost & VP Acade	emic	Board:			
PROJECT	DESCRIPTION				FUNCTIONAL PROGRAM	M		
Developme	nt Type:	Renovation & Exp	ansion		Space Type	Net SM	Net SF	Gross SF
Facility Typ	pe	Teaching Labora	tories, Classroo	oms, Office &	Total	10,234	110,158	174,795
		Support; Core Bu	ilding & Resea	rch Functions	See Functional Program			
Gross Buil	ding Area:	174,795 gross so	quare feet (16,2	40 gsm)				
Capital Cos	st:	\$80,000,000						
Location/S	ite:	UBC Vancouver						
Primary Us	Primary Users / Tenants: Science - Botany op: Medicine - Bi		Zoology, Micro	biology, Co-				
op; Medicine - Bio		ochemistry, CPS	6					
Nood/Dr =								
Need/Ben	e∎t Area Decemb Environ	mont	Medern well	oquinned tee	obing laboratorian for stud	onto in life acier		
Ceaning &	Research Enviol	men	Wodern, wen-	equipped tea	ching laboratories for stude	ents in me scier	ices programs	
Student An	nenity / Amonity							
Other Ben	y Amenity		This project wi	ill replace and	consolidate deteriorated te	aching labs in th	e Biological Sci	ences Centre and
Other Bene			North Weshro	ok and D H C	consolidate deteriorated te	will also addres	s seismic risk a	ences Centre and
			these building	s. which have	all been rated high or very h	igh risk. and ulti	matelvresultin	the elimination of
up to \$85M in deferred maintenance. Completion of the project will up the Copp site for re-deve			re-development for					
			housing. Rep	lacement of th	e deteriorating Biosci comp	lex research su	oport and core b	uilding functions
			completes the	renewal of re	search facilities for Zoology	and Botany.		
SCHEDUL	E				SUSTAINABILITY GOAL	S		
			Target	Actual	Indicator	Tar	get	Actual
Board 1			April-2014		Certification:	LEED Gold		
Treasury	Board Approval		Fall-2014		Energy Efficiency Level:	TBD % better t	han MNECB	
Board 2			Dec-2014		Energy Use Intensity:	221 kWh/ft <sup>2</sup>		
Board 3			Jun-2015		GHG Reduction:	TBD % better th	an standard	
Construct	tion Start		Jun-2015		Const Waste Recycling	TBC % recyclin	ig rate	
Substant	ial Completion		Jun-2017		Water Use Efficiency	TBD % better th	an standard	
Occupan	су		July 2017		Innovative Features:			
Board 4			Jun-2019		-			
DEVELOP	MENT PROCESS							
					,			
Project Ma	anager	UBC Project Serv	ices		Construction Manager		TBD	
Architect		TBD			Infrastructure Developmen	t Rep	Barbara Gordo	n
		Data			Comma	nte		
AUDPRe	view	Sept/Oct 2014						
Dev. Revie	ewCommittee	Sept/Oct 2014						
Public Op	en House	Oct-2014						
Developm	ent Permit	Jan-2015						
Building F	Permit	Jun-2015						
CAMPUS &	COMMUNITY PLAN							
0 0			L - L C -	+				



# Attachment 5: Capital Project Accountability Budget & Financing

Tasket Name:     Index Internet     Index Inte											
Descrimentation:         Inclusion Security of Secures Paculty of Applied Secures           Development Cost         South Fame, Proceed & VP Academic         Control is a Cost of Security Academic Cost of Secure Cost of Secure	UBC Project Name:	Undergraduate Life S	Sciences Teaching I	abs							
Spence         David Frang, Procest & VP Academic           CATATAL BUDGET (\$2000)         UFECYCLE OPERATING BUDGET           Catal David Sequence         Solos         9/GSF         Operating Costs         Annual \$         \$ / GSF         Funding Sequence           Descriptions         Solos         9/GSF         Operating Costs         Annual \$         \$ / GSF         Funding Sequence           Descriptions         Solos         9/GSF         Operating Costs         Annual \$         \$ / GSF         Funding Sequence           Descriptions         Solos         9/GSF         Operating Costs         Annual \$         \$ / GSF         Funding Sequence         S / GSF         Procest Sequence         S / GSF         Funding Sequence         S / GSF         S / GSF         Procest Sequence         S / GSF         Funding S	Department/Unit:	Faculty of Science Fa	aculty of Applied Sci	ences	-						
APPTAL BUDGET         SUDDET         SUDDET         SUDDET         SUDDET           Capital Development Cost Construction Construction Contingency         \$1028         \$008         \$008         \$1028	Spansar	David Farrar Provost	& VP Academic	circes	-						
Card Laboration Management Cost \$500b \$500b \$600b \$1785 \$00b \$1785 \$100b \$1785 \$100b		Bavia Fairai, Frovost	a vi neadenne				DUDOFT				
Capital Development Cost         StODE         StODE         Operating Costs         Annual 7         St OSE P         Punding 3           Construction         S. 12,87         S         Str OSE A         Ministranuce         S. 308,702	CAPITAL BUDGET (\$000\$)				LIFE-CYCLE	OPERA IING	BUDGET				
Cardination         S         S1224         S         250         Cpc & Maintenner         \$         1.785         Utilities         \$         1.83         3.77           Construction Management         5         2.071         Gross Total OM Cet         \$         3.88,793         \$         8.001           Candination Management         5         2.071         Gross Total OM Cet         \$         4.803         \$         5         3.87,893         \$         8.001           Canaditation Management         5.790         Hel OAM Cook         \$         4.74,893         \$         8.001           Commissioning, Inspection, Morage         2.375         Hel OAM Cook         \$         1.802,800         Hel OAM Cook         \$         1.802,800         Hel OAM Cook         \$         1.902,803,800	Capital Development Cost		\$000s	\$/GSF	Operating C	osts	Annual \$	\$/G	iSF	Funding \$	Sourc
Design/construction Contingency         5         1,785         Utilizes         6         89,793         8         2,223           Cark Attinue means         2,203         Cross Savings tom         5         1,003,237         8         6,00           Cark Attinue means         2,203         Loss Savings tom         5         1,003,237         8         6,00           Cark Attinue means         2,725         He to MM Coole         5         1,003,237         8         6,00           Commets/saving, sepacition, Moking         1,725         He to MM Coole (Core Deschord)         7         1,000,000         5         1,000,000         5         1,000,0000,000,000,000,000,000,000,000,	Construction		\$ 51,824	\$ 296	Ops & Maint	enance*	<b>\$</b> 1,113,444	\$	6.37		
Cance control Management S 2003 Green Total ORM Cent S 100273 S 8000 Cent Allowing Control Allowing Source	Design/Construction Continger	ncy	\$ 1,785		Utilities		\$ 389,793	\$	2.23		
Cach Allowance     2,233     Instantors & English Kom     8     8     0,2433     8     0,07       Common Scherighter     2,735     Her CSB Code     5     1,223,30     Her CSB Code     1       Common Scherighter     2,755     -     -     Part device from Watersian Research & and thorise devices from Scherighter Scherighter Allowance     2,000     1	Construction Management		\$ 2,073		Gross Total	O&M Cost	\$ 1,503,237	Ş	8.60		
Falling and transmission         Space         Interface and space         Participation         Space           Commission in properties         Space         For device from Whiteston Forecome A space         Space         Forecome and the space         Space <td< td=""><td>Cash Allowances</td><td></td><td>2,633</td><td></td><td>Less: Sa</td><td>Mings from</td><td>\$ 474,931</td><td>\$</td><td>5.67</td><td></td><td></td></td<>	Cash Allowances		2,633		Less: Sa	Mings from	\$ 474,931	\$	5.67		
Control         Contro <thcontrol< th=""> <thcontrol< th=""> <thco< td=""><td>Planning &amp; Design Euroituro &amp; Equipment</td><td></td><td>5,182</td><td></td><td>Net O&amp;M Cr</td><td>ed space</td><td>\$ 1.028.306</td><td></td><td></td><td></td><td></td></thco<></thcontrol<></thcontrol<>	Planning & Design Euroituro & Equipment		5,182		Net O&M Cr	ed space	\$ 1.028.306				
NG. CAC, Parmits. Instances & Logal     525     —"CERCOT INVOMS: fin Cerc 90.095 col: Bo Item It borth Comparison on Cerc Proceed Naming Eaberen Endos NAW 27       URG. IFA/VISionally Advance     2,000     Education of Cerc 90.095 col: Bo Item It borth Comparison NAW 27       URG. IFA/VISionally Advance     2,000     Education of Cerc 90.095 col: Bo Item It borth Comparison NAW 27       URG. IFA/VISIonally Advance     2,000     Education of Cerc 90.095 col: Bo Item It borth Comparison NAW 27       VISI: IFA/VISIonal VICES     2,200     Education of Cerc 90.095 col: Bo Item It borth Comparison NAW 27       Additional VICES Col: Integrates     2,200     Education NAW 27       Nothering I     1,120     Life Cycle Capital Costs     6       Rahand RAK Costingoncy     4.66     Total Cap Renewal Cost 5     7.425       Construction Financing     1,120     Education Nation Nati	Commissioning Inspection	Mavina	3,730		* Arnt deriver	i from Whitest	The Research 8	excludes	landse	ane momt	overhe
Project Management Project Manag	IC. CAC. Permits. Insurance	& legal	525			NS- Bio Ctr 50	605 CSE: Bio No	rth Dooffor	Cmont	oue oe 4240	
UILC ITALVSSecutity Advance.	Project Management		1.462		Bio North Roc	ofion: Mech PH 3	2960 GSF:3rd flr I	nii Roono, oridae betv	veen Bio	Sci N&W 21	1966S
Swing Saves and add Westbrock upgrades         2,500         IOTAL 83/67 CSI (7/82 CM30)         Vestbrock Upgrades         Funding S           Additional Vestbrock upgrades         2,500         Life Cycle Calible Tools         Annot S         \$ 12.50         Southood Upgrade         \$ 12.50         Southood Upgrade         \$ 12.50         \$ 0.03         Southood Upgrade         Southood Upgrade         \$ 0.03         Southood Upgrade         \$ 0.03         Southood Upgrade         Southood Upgrade<	UBC IT/AV/Security Allowan	ce	2,000		BioSouth Spo	ke 6738GSF; V	Workshop 7642G	SF, Paper	Recyc/F	amm Stor 2	91GS
Additional Weshcok upgrades       2,580       Life-Cycle Capital Costs       Annual \$       \$ 16 CSF       Funding S         Tax       1,230       Modemization/Upgrade       \$       61 CSS       \$       0.93         Tax       1,230       Modemization/Upgrade       \$       61 CSS       \$       0.93         Related R4K Contingoncy       4/66       Total Cap Renewal Cost       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       776,090       \$       \$       776,090       \$	Swing Space and addi West	rook upgrades	2,500		TOTAL 83,762	2 GSE (7782 G	SM)				
Stabilizities         Image: Stabilizi	Additional Wesbrook upgrade	es	2,580		Life-Cycle C	apital Costs	Annual \$	\$/G	SF	Funding \$	Sourc
Tax       1,230       Modemizializan/Upgado       §       162,859       §       0.93         Construction Financing       1,180       Total Cap Renewal Code       §       742,25       742,55         Carpital Rudget       S0000       5       430       Construction Financing       742,25       742,25         Carpital Rudget       S0000       5       430       Construction Financing       742,25       742,25         Carpital Rudget       S0000       5       430       Construction Financing       742,25       Construction Financing       Construction Financing <td>Subtotal</td> <td></td> <td>\$ 77,144</td> <td>\$ 443</td> <td>Cyclical Mai</td> <td>ntenance</td> <td>\$ 613,530</td> <td>\$</td> <td>3.51</td> <td></td> <td></td>	Subtotal		\$ 77,144	\$ 443	Cyclical Mai	ntenance	\$ 613,530	\$	3.51		
Relation Back Contingency       446       Total Page network Cost, §       774,090 (§       74,28         Construction in himsoning       1,130       Image: Construction in himsoning       Image: Co	Tax		1,230		Modernizatio	n/Upgrade	\$ 162,559	\$	0.93		
Construction Financing       1180       Construction Financing       Intelligit         Capital Rudget       \$ 80,000   \$ 43       Operating Rudget Notes:       SCREEWING Target MED has been requested to provide routine capital funding for Wesbrook upgrades       Operating Rudget Notes:       Decktore with experimental with an experimental financing of the store requested to provide routine capital funding for Wesbrook upgrades       Construction Financing       Loan Amt       Amort.       Int.       Amort.       Am	Retained Risk Contingency		446		Total Cap R	enewal Cost	\$ 776,090	\$	74.25		
Total Project Budget       S       80,000       5       458         Capital Budget Notes:       Soft Puritates will wary with areas that are in enew stead of project AVED has been requested to provide routine capital funding for Westrook upgrades.       Operating Budget Notes:       The Faculties of Science and Medicine will be responsible for the OAM costs: Central will funding for Westrook upgrades.         FUNDING AGREEMENTS       Etability with:       Committed       Secured*       Dekt Serviced By:       Loan Amt       Amort.       Int.       Amn. Pay         GPOF - Central Admin       \$       21,250       \$       -       Total       \$       37,500       35,75%       \$       - </td <td>Construction Financing</td> <td></td> <td>1,180</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Construction Financing		1,180								
Capital Budget Notes: SIGSF unitrates will vary with areas that are in renewed to provide routine capital funding for Westbrook upgrades. FUNDING AGREEMENTS (\$00e) FUNAICING	Total Project Budget		\$ 80,000	\$ 458							
responsible for the CAM Costs. Central will will we cycle capital costs to the extent possible.       FUNDING ACREEMENTS (\$000)       FINANCING ACREEMENTS (\$000)       Funding Source     Liability with: internally financed \$ 21,250 \$ - 1 5 21,250 \$ - 1 Text Endowment     Loan Amt internally financed \$ 21,250 \$ - 1 5 21,250 \$ - 1 5 21,250 \$ - 1 Text Endowment     Loan Amt \$ 21,250 \$ - 1 5 - 2 5 - 1 5 - 1	Capital Budget Notes:	\$/GSF unit rates will	vary with areas that	are in renewed	Operating B	ludget Notes:	The Faculties of	Science a	nd Medi	cine will be	
cycle capital costs to the edent possible.         FUNDING AGREEMENTS (\$000)       FINANCING AGREEMENTS         FUNDING AGREEMENTS (\$000)         Funding Source GPOF - Central Admin       Liability with: s 21,250       Committed \$ 21,250       Secured \$ 21,250       Debt Serviced By: s - 1       Loan Ant: S 21,250       Amort       Int.       Annort       Int.       Annort       Annort       Int.       Int.       Annort       Int.       Annort       Int.       Annort       Int.       Int. <td colspan="2">and new portions of</td> <td>project. AVED has b</td> <td>een requested</td> <td></td> <td></td> <td>responsible for</td> <td>the O&amp;M co</td> <td>osts.Ce</td> <td>entral will fun</td> <td>nd life-</td>	and new portions of		project. AVED has b	een requested			responsible for	the O&M co	osts.Ce	entral will fun	nd life-
FUNDING AGREEMENTS         (\$000)         FINANCING AGREEMENTS           Funding Source GPOF - Central Admin         Liability with: internally financed \$         Committed \$         Secured' \$         Debt Serviced By: GPOF - Central Admin         Amort. Int         Int. Amort.         Amort. Int.         Amort. Amort.         Int. Amort.         Amort.         Amort. <td></td> <td>oital funding for Wes</td> <td>brook upgrades.</td> <td></td> <td></td> <td>cycle capital cos</td> <td>ts to the e</td> <td>xtent pos</td> <td>ssible.</td> <td></td>		oital funding for Wes	brook upgrades.			cycle capital cos	ts to the e	xtent pos	ssible.		
FUNDING AGREEMENTS       FUNDING AGREEMENTS         Funding Source       Liability with: Internally financed       Committed \$ 21,250       Secured' \$ - Chiral Admin       Loan Amt \$ 21,250       Amnot. Int.       Int.       Annot. Int.       Int.       Annot. Int.       Int.       Annot. Int.       Int.       Annot. Int.       Int.       Annot.       Int.		· • • • • •									
Funding Source         Libility with: GPOF - Central Admin         Loan Amt internally financed \$ 21,250 Trek Enclowment         Internally financed \$ 21,250 Trek Enclowment         Internally financed \$ 21,250 \$ -         Secured* (S)         Debt Serviced By: (S)         Loan Amt S         Amo, 2 (S)         Internally (S)         Internally (S)         Amo, 2 (S)         Internally (S)         Internally	FUNDING AGREEMENTS	\$000s)			FINANCING	AGREEMENT	8				
GPOF - Central Admin       Internally financed       \$       21,250       30       5,75%       \$         Provincial God/       \$       21,250       \$       -       Trek Endowment       \$       21,250       30       5,75%       \$         Trek Endowment       Internally financed       \$       37,500       \$       -       Trek Endowment       \$       37,500       35       5,75%       \$       \$       -       \$       \$       37,500       35       5,75%       \$	Funding Source	Liability with:	Committed	Secured*	Debt Ser	viced Bv:	Loan Amt*	Amort	Int	Ann. Pay	vmen
Productal GoVI       Internally financed       \$       21,250       \$       -       Inter Endowment       \$       37,500       35       5,756       \$         Total       \$       37,500       \$       -       Total       \$       37,500       35       5,756       \$         Total       \$       \$       8,0000       \$       -       Total       \$       5,750       \$       \$         * Funding paid or firmly committed to be paid before end of construction       * Lean amts in this case represent liabilities to support to the Capacity impact:       Undergrad Life Sciences Teaching Labs Project       Debl Capacity impact:       Undergrad Life Sciences Teaching Labs Project         FROJECT REQUIREMENT       NAME       Signan Peacock       Signan Peacock       20-Mar.14         Programmatic need and benefit       Dean of Science       Signan Peacock       20-Mar.14         Project scope and budget       Project scope and budget       Infasticulture Dovelopment       John Metras       20-Mar.14         Project scope and budget       Campas & Commanity Planning Director       John Metras       20-Mar.14       20-Mar.14         Project sale       Campas & Commanity Planning A Hospitality Services       John Metras       20-Mar.14       20-Mar.14         Respecting and child care	GPOF - Central Admin	Internally financed	\$ 21,250	\$ -	GPOF - Ce	entral Admin	\$ 21,250	30	5.75%	\$	1,50
Total       Internally financed       \$ 37,500	Provincial Govt		\$ 21,250	\$ -							
Total       \$       -       \$       -       \$ <td>Trek Endowment</td> <td>Internally financed</td> <td>\$ 37,500</td> <td>\$ -</td> <td>Trek Endow</td> <td>vment</td> <td>\$ 37,500</td> <td>35</td> <td>5.75%</td> <td>\$</td> <td>2,49</td>	Trek Endowment	Internally financed	\$ 37,500	\$ -	Trek Endow	vment	\$ 37,500	35	5.75%	\$	2,49
Total       S       Total       S       S       S         * funding paid or timly committed to be paid before end of construction       * Lean amits in this case represent liabilities for unsecured funding source         Funding Notes:       Image: Committed to be paid before end of construction       * Lean amits in this case represent liabilities for unsecured funding source         Funding Notes:       Image: Committed to be paid before end of construction       * Lean amits in this case represent liabilities for unsecured funding source         Protect recourse construction       Pathon and LiquidityPlan and therefore sufficient in the Capacity in project in the Capacity Plan and therefore sufficient is available to support the immediate developm the project.         Protect recourse and budget       NAME       Signature       Signature       Quitart				\$ -			\$ -			\$	-
Total       Start       Total       Start       Start         * Funding paid or firmly committed to be paid below end of construction       * Lean antis in this case represent liabilities to unsecured funding source         Funding Notes:       Debt Capacity Impact:       Undergrad Life Sciences Teaching Labs Project         CHECK       REQUIREMENTS CHECKLIST & SIGN-OFF       Debt Capacity Impact:       Undergrad Life Sciences Teaching Labs Project         CHECK       REQUIREMENTS       CHECKLIST & SIGN-OFF       SiGNA TURE       Date         CHECK       REQUIREMENT       NAME       SiGNA TURE       DATE         CHECK       Programmatic need and benefit       Dean of Mcdicine       Simon Peacock       20-Mar-14         Project scope and budget       phastructure Development       John Metras       20-Mar-14         Project scope and budget       Associate Vice President       John Metras       20-Mar-14         Project scope and budget       Associate Vice President       John Metras       20-Mar-14         Sustainability measures       Infastructure Development       John Metras       20-Mar-14         Development review proces       Statent Housing & Hospitally Services       N/A       20-Mar-14         Classroon/leaching lab review       Infastructure Development       John Metras       20-Mar-14 <tr< td=""><td></td><td></td><td></td><td>\$ -</td><td></td><td></td><td>\$ -</td><td></td><td></td><td>\$</td><td>-</td></tr<>				\$ -			\$ -			\$	-
* Funding paid or firmly committed to be paid before and of construction       * Loan and/s in this case represent liabilities for unsecured funding source funding source is a proof to be paid before and of construction         Funding Notes:       Debt Capacity Impact:       Undergrad Life Sciences Teaching Labs Project be en included as a Proof ty 18 project in the Capacity Impact:       Undergrad Life Sciences Teaching Labs Project be en included as a Proof ty 18 project in the Capacity Impact:         PROJECT RECURRENTS CHECKLIST & SIGN-OFF       Signam defector sufficient is available to support the immediate developm the project.         PROJECT RECURRENTS CHECKLIST & SIGN-OFF       Signam Peacock Gavin Stuart       Qo-Mar-14         Programmatic need and benefit       Dean of Science Development Managing Director       Simon Peacock Gavin Stuart       20-Mar-14         Project scie       narging Director       Simon Peacock Gavin Stuart       20-Mar-14         Project scie       Campus & Community Planning Associate Vice President       Michael White       20-Mar-14         Quektopment review process Associate Vice President       Sohn Metras       20-Mar-14       20-Mar-14         Quektopment review process Associate Vice President       Michael White       20-Mar-14       20-Mar-14         Quektopment review process Associate Vice President       Sohn Metras       20-Mar-14       20-Mar-14         Quektopment review process Associate Vice President       Michael White       20-M	Total	Total			Total		\$ 58,750			\$	3,99
Funding Notes:     Debt Capacity Impact:     Undergrad Life Sciences Teaching Labs Project been included as a Phony 18 project in the Cap Plan and Liquidity Plan and therefore sufficient is available to support the immediate developm the project.       PROJECT REQUIREMENTS CHECKLIST & SIGN-OFF     SIGNATURE     DATE       CHECK     REQUIREMENT     NAME     SIGNATURE     DATE       Programmatic need and banefit     Dean of Science     Simon Peacock     20-Mar-14       Dean of Science Development     Analysing Director     John Metras     20-Mar-14       Project scope and budget     Infrastructure Development     Moneging Director     John Metras     20-Mar-14       Project scope and budget     Infrastructure Development     Michael White     20-Mar-14       Project scope and budget     Infrastructure Development     Michael White     20-Mar-14       Project scope and budget     Infrastructure Development     Michael White     20-Mar-14       Project scope and budget     Infrastructure Development     Michael White     20-Mar-14       Classroom/teaching lab review     Infrastructure Development     John Metras     20-Mar-14       Cassroom/teaching agreements     Treasury     Peter Smalles     V/A       Functing & linancing agreements     Treasury     Peter Smalles     20-Mar-14       Development Office     Development Services     John Metras <t< th=""><th>* Funding paid or firmly comm</th><th>nitted to be paid bef</th><th>ore end of construc</th><th>tion</th><th>* Loan arrits</th><th>in this case re</th><th>present liabilitie</th><th>s for unse</th><th>cured fu</th><th>nding sourc</th><th>ces</th></t<>	* Funding paid or firmly comm	nitted to be paid bef	ore end of construc	tion	* Loan arrits	in this case re	present liabilitie	s for unse	cured fu	nding sourc	ces
Function g Notes:       Debt Capacity impact:       Deban Capacity impact:       Debt Capacity impact											
PROJECT RECURREMENTS CHECKLIST & SIGN-OFF       Signature       Deam of the column and therefore sufficient is available to support the immediate developm the project.         CHECK       REQURREMENT       NAME       Signature       DATE         CHECK       REQURREMENT       NAME       Signature       DATE         Project manager assignment       Dean of Science       Simon Peacock       20-Mar-14         Poject scope and budget       nifastructure Development       John Metras       20-Mar-14         Poject scile       Campus & Computing Director       John Metras       20-Mar-14         Poject scile       Campus & Compunity Planning       Associate Vice President       Michael White       20-Mar-14         Development review process       Associate Vice President       John Metras       20-Mar-14         Massing Director       Infastructure Development       John Metras       20-Mar-14         Respectation and thild care       Student Housing & Hespitality Services       N/A       20-Mar-14         Respectation and thild care       Student Housing & Hespitality Services       N/A       20-Mar-14         Managing Director       Infastructure Development Managing Director       N/A       20-Mar-14         Managing Director       Managing Director       N/A       20-Mar-14         Managin	Funding Notes:				Debt Capaci	ly impact:	Undergrad Life	Sciences I	eaching	Labs Proje	cthas
In any distance between the source of the immediate development the immediate development the immediate development the project.         PROJECT REQUIREMENT       NAME       Date: Dat							Plan and Liquid	ity Plan an	therefo	ve sufficient	ipitai Liquidi
the project.       the project.         PROJECT REQUIREMENTS CHECKLIST & SIGN OF         CHECK       REQUIREMENT       NAME       SigN TURE       DATE         CHECK       REQUIREMENT       NAME       SigN TURE       DATE         CHECK       Programmatic need and benefit       Dean of Science       SigN TURE       DATE         Dean of Medicine       SigN TURE       SigN TURE       20-Mar-14         Project scope and budget       Infrastructure Development       John Metras       20-Mar-14         Project site       Campus & Community Planning       Michael White       20-Mar-14         Development review process       Campus & Community Planning       John Metras       20-Mar-14         Cassroom/feaching lab review       Infrastructure Development       John Metras       20-Mar-14         Gassroom/feaching lab review       Infrastructure Development       Monaging Director       N/A       20-Mar-14         Check preview       Infrastructure Development       Monaging Director       N/A       20-Mar-14         Check preview       Infrastructure Development       Monaging Director       N/A       20-Mar-14         Check preview       Infrastructure Development Office       N/A							is available to si	upport the	immedia	ate developm	nento
PROJECT REQUIREMENTS CHECKLIST & SIGN-OFF         SIGNATURE         DATE           CHECK         REQUIREMENT         NAME         Signan Deacock         20-Mar-14           Programmatic need and benefit         Dean of Science         Simon Peacock         20-Mar-14           Project scope and budget         Infrastructure Development         John Metras         20-Mar-14           Project scope and budget         Infrastructure Development         John Metras         20-Mar-14           Swing space requirements         Campus & Community Planning         Michael White         20-Mar-14           Project site         Cassociate Vice President         Michael White         20-Mar-14           Qassocial vice President         Managing Director         John Metras         20-Mar-14           Qassociale vice President         Michael White         20-Mar-14           Qassocial vice President         Michael White         20-Mar-14           Qassocial vice President         John Metras         20-Mar-14           Qassocial vice President         Ireasury         Peter Smalles							the project.				
CHECKREQUIREMENTNAMESIGNATUREDA TEProgrammatic need and benefitDean of Science Dean of MedicineSimon Peacock Gavin Stuart20-Mar-14 Gavin StuartProject scope and budget Project manager assignment Swing space requirementsInfrastructure Development Managing DirectorJohn Metras20-Mar-14 Gavin StuartProject site Development review process Sustainability measuresCampus & Community Planning Associate Vice PresidentMichael White20-Mar-14Classroom/leaching lab review Development review process Sustainability measuresInfrastructure Development Managing DirectorJohn Metras20-Mar-14Food, housing and child careStudent Housing & Hospitality Services Managing DirectorN/A20-Mar-14Food, housing and child careStudent Housing & Hospitality Services Managing DirectorN/A20-Mar-14Life cycle operating costsDevelopment Office AVP, Development CoreN/A20-Mar-14Life cycle operating costsInfrastructure Development Managing DirectorJohn Metras20-Mar-14Security & access controlUniversity Community ServicesJohn Metras20-Mar-14	PROJECT REQUIREMENTS	CHECKLIST & SIG	N-OFF								
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