# University of Waterloo Board of Governors BUILDING & PROPERTIES COMMITTEE Notice of Meeting

Date:Wednesday 29 September 2021Time:1:00-3:00 p.m.Place:via MS Teams

\*material attached \*\*material to be distributed

# Action

1.	Declaration of Conflicts of Interest	Declaration
2.	Minutes of the 12 May 2021 Meeting* [George]	Decision
3.	Business Arising from the Minutes	Information
4.	<ul> <li>Resolution by Electronic Vote [George]</li> <li>a. Science Laboratories Renovation*</li> <li>b. Math 4 – Appointment of Architects*</li> </ul>	Information
5.	<ul> <li>Capital Financing Commitments and Construction Status [Huber]</li> <li>(a) Building &amp; Properties Finance Summary – September 2021*</li> <li>(b) Construction Status Report – September 2021*</li> <li>(c) Capital Financing Commitments – April 30, 2021*</li> </ul>	Information
6.	ESC 3 <sup>rd</sup> Floor Renovation (Revised Budget Recommendation)* [Huber, Lemieux, Rush]	Decision
7.	Health Innovation Arena (Revised Budget Recommendation)* [Huber, Rush]	Decision
8.	Committee's Term of Reference*	Information
9.	Execution Against the Work Plan* [George]	
10	Other Business	Information
11.	Proceed into Confidential Session	Information
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**OPEN SESSION** 

Next Meeting: Wednesday 29 September 2021, 1:00-3:00 p.m., via MS Teams

22 September 2021

Alice Raynard Associate University Secretary

# University of Waterloo Board of Governors BUILDING & PROPERTIES COMMITTEE Minutes of the 12 May 2021 Meeting [in agenda order]

Attendees: Peter Barr, Martha George (chair), Tony Giovinazzo, Alice Raynard (secretary), James Schlegel

Administration: Stepanka Elias, Feridun Hamdullahpur, Dennis Huber, Rob Hunsperger, James W. E. Rush

Guests: Anne Bordeleau, Murray Gamble, Andre Gignac, Naima Samuel, Matthew Schwarze

Regrets: none

**Organization of Meeting:** Martha George took the chair and Alice Raynard acted as secretary. The chair welcomed members to the meeting. The agenda was approved by consensus as circulated. The secretary advised that quorum was present.

# **OPEN SESSION**

# 1. DECLARATION OF CONFLICTS OF INTEREST

No conflicts of interest were declared.

# 2. MINUTES OF THE 10 MARCH 2021 MEETING

A motion was heard to approve the minutes of the meeting as distributed. Barr and Schlegel. Carried.

# 3. BUSINESS ARISING FROM THE MINUTES

There was no business arising.

# 4. CAPITAL FINANCING COMMITMENTS AND CONSTRUCTION STATUS

Huber commented on the reports, which encompass the full 12 months, ended April 30, 2021.

- a. Building & Properties Finance Summary May 2021. A disciplined approach has led to forgoing the ancillary units' capital debt requirement requirements and to postponing the debt requirement by an additional year.
- b. Construction Status Report May 2021. Comments were provided on the Marine Lab, Hydro Feed, ESC renovation, Math 4 and Health Innovation projects. Members discussed: roof warranties; management of deficiencies; Optometry WEI project (12% complete); price escalation mitigation re: supply chain included in tender documents.
- c. Capital Financing Commitments 30 April 2020. 90% of the SLC/PAC addition is achieved.

# 5. MATH4 – APPOINTMENT OF ARCHITECTS

Huber indicated that a formal recommendation concerning the appointment of architects for the Math4 project could not be submitted in time for the Committee meeting. A proposal will be submitted further to this meeting and an electronic vote will be requested. Hunsperger spoke to the level of interest in this project by potential firms. Members discussed the membership of the President's Advisory Committee on Design (PACOD). A recommendation will be made to the President presently.

# 6. ENVIRONMENTAL SUSTAINABILITY PRACTICES IN THE CONTEXT OF CAMPUS PLANNING AND DEVELOPMENT

Huber spoke to the document, indicating the Guidelines are aspirational targets in order to start including targets and passive attributes on projects. Members discussed: anything that is being built has to be better than the bare minimum to achieve the University's 2050 environmental goals; balance between costs and carbon neutrality; elaboration process on those guidelines; fundamental research on new materials and glass structure taking place at the University.

# 7. MAINTENANCE PROGRAM AND ENERGY CONSERVATION EFFORTS

Huber spoke to the document, specifying that the spending of \$20M on utilities represents 2% of the University's budget and compared to the U6 research intensive universities in Ontario, the University usually benchmarks as 2<sup>nd</sup> or 3<sup>rd</sup>, with the University of Toronto having significantly older and bigger infrastructures. A review has been conducted by Walter Fedy, leading mainly to LED lighting payback; Huber can bring back a more in-depth report to the Committee. Stepanka provided an update on the HVAC improvements; all HVAC units (396), including satellite campuses, have been inspected and retrofitted. Members discussed: regular maintenance; air exchanges and HVAC; disinfectant protocols (the University follows public guidelines and provides training).

# 8. EXECUTION AGAINST THE WORK PLAN

Raynard indicated the committee was on track. A campus tour for members is to be organized for the next meeting or around that time, depending on health restrictions.

# 9. OTHER BUSINESS

There was no other business.

# **10. PROCEED INTO CONFIDENTIAL SESSION**

The committee convened in confidential session.

The committee is scheduled to meet on Wednesday 29 September 2021, 1:00-3:00 p.m. via Teams.

3 September 2021

Alice Raynard Associate University Secretary

# University of Waterloo Board of Governors BUILDING & PROPERTIES COMMITTEE 25 June 2021

#### FOR APPROVAL

#### **Recommendations:**

That the Building & Properties Committee approve:

- a \$6.8 million total project budget for renovations to create new science labs on the 3<sup>rd</sup> floor of the Biology 1 building and the 1<sup>st</sup> floor of the Biology 2 building; and
- 2) approve the award of a stipulated price contract to Harbridge + Cross Ltd. for \$5,196,000.00 plus HST.

#### **Background:**

Developed in coordination with the Biology 1 (B1), Biology 2 (B2), and Earth Science Chemistry (ESC) buildings master renewal plan, this project provides new biology laboratories which are critical to the teaching and research activities of the Faculty of Science.

McCallum Sather Architects were previously selected through a competitive selection process to undertake the B1, B2, and ESC master renewal plan as part of this laboratory design project to ensure that future multiphase lab renewal projects were aligned with the long-term renewal plan while recognizing these lab intensive buildings have not been substantially renovated since the mid-1960's when B1 and B2 were originally constructed.

The project was initially estimated in an October 2020 Class B estimate to cost less than \$5 million and therefore did not require the Building & Properties Committee's approval. Since the October estimate was prepared, the project scope has increased to include the replacement of some core mechanical infrastructure, there have been increases in the architectural and structural scope, and the construction industry has experienced pandemic related cost increases (as much as 20% increase on some project components). As a result, the total project cost has increased beyond the \$5M approval threshold.

This project was competitively bid on MERX. Six (6) General Contractors submitted bids. The tenders were competitively priced, with the lowest submitted bid within  $\sim 3.7\%$  of the next lowest bid; the third lowest bid was  $\sim 4.7\%$  higher than low bid.

The proposed project budget (\$000s) including net HST (3.41%) is:

Construction Cost	\$5,373
Consulting Fees	538
<b>Building Permit Fees</b>	4
Environmental Consulting	16
Contingency	869
Total	\$6,800

The project will be funded through the Faculty of Science's operating reserves.

James Rush, vice-president, academic & provost Robert Lemieux, dean of science Dennis Huber, vice-president, administration & finance Rob Hunsperger, director, design & construction services

#### confidential

#### **University of Waterloo Board of Governors BUILDING & PROPERTIES COMMITTEE** 20 May 2021

#### FOR APPROVAL

# **Report to the Building & Properties Committee** Math 4 – Appointment of Architects

## Recommendation:

That the Building & Properties Committee recommend to the Board of Governors the appointment of Moriyama & Teshima Architects as the prime consultants for the recently approved Math 4 building.

Background:

- At its January 2021 meeting, the Building & Properties Committee approved the submission of the \$90m \_ project budget to the Board of Governors (approval occurred in February 2021). The B&P and Board approval also included the siting of the building in the interstitial space between the Math & Computer and Davis Centre buildings
- On February 8, 2021, the University issued a Request for Service Qualifications on MERX (public tendering site) inviting firms with appropriate experience and qualifications to make a submission. In total 21 submissions were received which were shortlisted based on the evaluation criteria summarized in the RFSO.
- The four shortlisted firms were issued a Request for Proposal for Consultant Services on March 23, 2021. The RFP summarized the evaluation criteria for the final selection.
- The President's Advisory Committee on Design (which was supplemented with a graduate student representative) interviewed the four teams on May 6 and May 10.
- The seven person PACOD committee ranked Moriyama & Teshima Architects as the clear preference (6 of 7 members ranked them first and one member ranked them a close second).
- The proposed fees are competitive with a percentage fee proposal of 7.75% (based on a percentage of the final cost of construction excl. HST)
- The President received PACOD's recommendation on May 19 and confirmed his support for the recommendation.
- Moriyama & Teshima Architects previously designed the Minota Hagey Residence as well as the Laurel Creek pedestrian bridges on the south campus
- Their team will be led by two UW graduates of the School of Architecture and includes:
  - Blackwell Structural Engineers • Integral Group Mechanical Engineers • • Integral Group **Electrical Engineers**
  - RDH Building Science
  - LMDG Building Code
  - Turner & Townsend
- - Sustainability & Building Envelope
- Building Code & Safety
  - Cost Consultant

- WalterFedy
- PLANT
- Two Row Architecture

Civil Engineer Landscape Architect Indigenous Design Consultant

> Dennis Huber Vice-President, Administration & Finance

Rob Hunsperger Director, Design and Construction Services

# Report to the Building & Properties Committee Capital Financing Commitments September 2021

The Building & Properties Committee (B&P) reviews the summary of Capital Financing Commitments at each meeting.

Activity to date in 2021/22:

• The University has allocated \$7.7 million to capital projects as follows:

East Campus 5	\$2.5 million
Engineering 7	\$1.2 million
AHS Addition to BMH	\$2.3 million
PAC/SLC ("Student Space")	\$1.7 million

• Repayments by ancillary enterprises (Housing, Food Services and Parking) on internal loans have been deferred for 2 years (2020/2021 and 2021/2022) due to the impact of the pandemic on ancillary unit operations and their revenue-generating activity

Summary:

- The University remains well within its approved policy limits and below the 4.0% of annual gross revenue maximum for principal and interest payments
- The financing position for each project as of April 30, 2021 is attached

**Dennis Huber** 

#### Construction Status Report Sep-21

				\$000s				
	Original	Current	Procurement		percent	Original	Estimated	
Projects	Budget	Approved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
Complete but with minor deficiencies		1			1			
SLC/PAC Addition	34,000	41,000	lump sum	Bondfield	99%+	2018/19		building received full occupancy permit on September 7, 2021
								outstanding deficiencies to be completed by November
								Holdbacks have been paid; one claim received relating to work still to be completed by roofing
	34,000	41,000						contractor which totals \$40.5k; formal settlement agreement in place to release the claim
		-						once work is completed and paid direct by UW based on general contractor progress draw

	Original	Current	Procurement		percent	Original	Estimated	
Projects	Budget	Approved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
In-Progress								
								Project substantially complete.
Aquatic Animal Lab Upgrade (B1)	3,836	4,900	stipulated sum	RossClair	~99.9%	2020	Nov. 2021	Chief Veterinary Inspector has reviewed and approved project
			(CCDC2-2008)					
								Air balancing incomplete. Source of problem unknown. Continues to delay occupancy.
								Consultants/Contractor not permitted to bid new work until deficiencies resolved.
	3,836	4,900						Anticipated Total Project Costs incl. 3.41% HST: increased to \$5.16M

	Current	Procurement		percent	Original	Actual	
dget A	pproved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
4,170				98%	Sept. 2021		All underground work completed, backfilled and site disturbances restored
		(CCDC2-2008)	(\$3.326M)				Campus underwent several power shutdowns throughout the summer - complete
							Project is substantially complete and remains on budget
							Equipment and cabling commissioned
							Contractor completing labelling and close-out documentation
4,170	4,220				1		
	4,170	4,170 4,220	4,170 4,220 stipulated sum (CCDC2-2008)	4,170 4,220 stipulated sum Sutherland Schultz (CCDC2-2008) (S3.326M)	4,170 4,220 stipulated sum Sutherland Schultz 98% (CCDC2-2008) (\$3.326M)	4,170 4,220 stipulated sum Sotherland Schultz 98% Sept 2021 (CCDC2-2008) (S3.326M)	4,170 4,220 stipulated sum Sutherland Schultz 98% Sept. 2021 Nov. 2021

	Original	Current	Procurement		percent	Original	Estimated	
Projects	Budget	Approved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
In-Progress Earth Science Chemistry (ESC) Third Floor Renovations	17,500	17,500 (in review)		тва	109	; 2022	2023	Schematic Design completed with Class D estimate. Starting Design Development Revised Budget pending approval (Sept 2021 B&P Meeting) Estimated Construction: October 2022 - December 2023 Project timing dependent upon completion of pre-requisite project to relocate existing labs on 3rd floor
	17,500	17,500						

	Original	Current	Procurement		percent	Original	Actual	
Projects	Budget	Approved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
In-Progress								
								Programming and visioning complete with Velocity stakeholders
Health Innovation Arena	30,000	30,000	TBA	TBA	99	2023		Exterior concept and schematic design floor plan revised per value engineering effort
280 Joseph Street Kitchener		(in review)						Renderings for Fundraising/Advancement complete
								Meeting with City of Kitchener RE: Site Plan Application and Small Business Centre
								review scheduled for November 2021
								Revised Budget pending approval (Sept 2021 B&P Meeting)
								Environmental Remediation Report ongoing to reduce petrohydrocarbon concentrations to land use
	30,000	30,000			1	1	1	threshold
								Substantial Completion anticipated for October 2023

	Original Budget		Procurement Method		percent complete		Actual Completion	Risks/Status
<u>In-Progress</u> Math 4	90,000	90,000		TBA	3%	2023		Programming complete, and validated by Faculty of Math Consultants commencing Schematic Design Phase Order of Magnitude costing indicates additional funding may be required based on current market conditions. Class D Estimate will be produced following Schematic Design ready for January 2022 88.P meeting Math in consultation with Provost and Registrar to determine if Registrar controlled classrooms should be added to the program Surveys currently underway or scheduled to document existing conditions, including boundary survey, topographical survey, fire flow analysis, arborist and geotechnical report

			Procurement Method				Actual Completion	Risks/Status
In-Progress Optometry - Waterloo Eye Institute	45,250	45,250	тва	ТВА	12%	2023		75% Design Development milestone achieved
								Designs advancing for surgical suites, biomedical labs, eye care clinics & retail space No new cost data has been generated Plant Operations developing Facility Renewal Program (FRP) list to include primary electrical service upgrades to support proposed adotmetry addition.
	45,250	45,250						(existing underground ductbank crossing Columbia is at end-of-life)

			Procurement				Actual	
Projects	Budget	Approved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
In-Progress								
Biology 1/Biology 2 Lab Renovation	6,800			Harbridge & Cross (\$5.196M)	100% Design 1% Construction	Jun-22		Construction Contract awarded Contractor currently mobilizing, preparing construction schedule, shop drawing schedule Asbestos Abatement underway on first floor
	6,800	6,800						Still awaiting first application for payment on project

#### University of Waterloo Capital Financing Commitments April 30, 2021 (\$000s)

	Currently Internally	Estimated Amortization	
Capital Project	Financed	Period	Comments
Construction Completed			
Residence - UWP and MKV	12,687	8 years*	Recovery through student residence fees
Engineering 7	21,641		Pledges of approximately \$33 million against these Engineering buildings, Engineering has
Other Engineering (including 5, 6, and DWE)	10,337		committed to funding any unrealized pledges
Health Services Addition/Renovations	2,403	4 years	Compulsory undergrad and grad student fees; donations
Blackberry Buildings (5)	2,899	4 years	Operating funds, (\$400k from Parking (\$100K/year)*)
Applied Health Sciences Addition	9,199		Faculty, operating funds; donations
Student Residence - Claudette Millar Hall	26,243	< 15 years*	Residence fees and Food Services revenues
North Campus Field House	16,880	10 years	\$16.9M from operating funds
Completed Total	102,289		

	Expenses	Total Budget	Funding	Committed Future	Currently	Currently Internally Financed	Project Completion	Commente
In-Progress	to Date	Total Budget	On-hand	Funding	Unfunded	Financeo	Date	Comments
Student Life Centre and PAC Addition	46,530	46,530	3,098	43,432	-	43,432	2021	\$24 million compulsory undergrad and grad student fees; \$19.4 million operating funds
Recently Approved								
								\$8.5m commitment from City of Kitchener, \$7.5m commitment from University operating
Health Innovation Arena	180	30,000	300	17,200	12,500	-		funds, \$1.2m pledge
Math	113	90,000	30,000	15,000	45,000	-		\$30m contributed from Math and \$15m commitment from University operating funds
Earth Sciences & Chemistry	121	22,700	-	22,700	-	121		50% to be funded from Science and 50% from University operating funds
								\$8.8m in donations, a \$2.2m UW contribution plus a further \$4 million University
Optometry Eye Institute	395	45,250	1,364	15,000	28,886	- 969		commitment to match a potential major donation
						40 50 4		
In-Progress and Recently Approved Total						42,584		
Total Internal Financing Commitments						144,873		

Debt Policy: Annual Principle & Interest Payments must be < 4% of annual gross revenue (currently approximately \$48 million)

Conclusion: Required annual P&I payments to service this debt are < 4% of annual gross revenue

#### Notes:

There is a \$22 million lease-back financing commitment until 2053 for Columbia Lake Village Townhouses, with minimum \$7 million lease commitments being recovered through student residence fees.

\* Repayments have been suspended for 2 years due to the impact of covid on operations in the ancillary units

# Report to the Building & Properties Committee Renovations to the third floor, Earth Sciences & Chemistry (ESC) Building September 29, 2021

# Recommendation:

That the Building & Properties Committee recommend to the Board a revised \$22.14 million budget (\$4.64 million increase) for renovations to the 3<sup>rd</sup> floor of the Earth Sciences & Chemistry Building (ESC).

# Background:

In January 2021, the Building & Properties Committee approved a \$17.5 million budget for renovations to the 3<sup>rd</sup> floor of the Earth Sciences & Chemistry Building (ESC) based on recent studies conducted by a multi-disciplinary engineering team with expertise in rehabilitating wet science buildings. The high-level review included the Earth Science & Chemistry Building, the Biology 1 (B1) building, the Biology 2 (B2) building, and the Chemistry 2 (C2) building which were constructed during the 1960s and 1970s. These studies identified the high-level renewal requirements to modernize the buildings while improving space utilization. Although the multi-building renewal is planned to occur over many years in multiple phases, the initial phase would include the renovation of 25,000 square feet of labs located on the third floor of ESC.

The initial budget was based on a high-level masterplan and "order of magnitude" cost estimate. During Schematic Design, the scope of work was better defined, and this revised budget is based on a "Class D" construction cost estimate. The overall increase of 26.5% is attributable to this increase in scope (including \$1.37m for additional lab spaces, mechanical systems, and abatement) as well as construction cost escalation (\$3.27m) due to COVID and other market forces.

		Estimate \$000s	Revised E	E <b>stimate</b> \$000s		
Construction	(\$560/sf)	14,000	(\$722/sf)	18,045		
Contingency		1000		1355		
Professional Fe	es	1800		1960		
Disbursements		150		165		
<b>Building Autom</b>	nation	150		165		
Network Conne	ectivity	300		350		
Permits		100		100		
Total		17,500		22,140		

The recommended \$22.14 million budget is based on a Class D estimate (including net HST):

The 50:50 cost matching commitment has increased from \$8.75 million to \$11.07 million and will be shared by the Faculty of Science together with the Provost (central funding). External funding opportunities will continue to be pursued. This funding strategy only applies to this specific phase.

James Rush Robert Lemieux Dennis Huber

# Report to the Building & Properties Committee Warehouse Building on UW's Health Sciences Campus September 29, 2021

# Recommendation:

That the Building & Properties Committee recommend a revised budget of \$34.4 million to the Board of Governors for the renovation of UW's warehouse building on the Health Sciences Campus in downtown Kitchener.

# Background:

In October 2020, the Board of Governors approved a preliminary budget of \$30M. This estimate was based on a notional program and list of requirements.

At that time the following was understood:

- The University acquired the warehouse land and buildings for \$5 million in November 2005 at the time of the creation of the Health Sciences Campus. Prior to the purchase, Conestoga-Rovers & Associates conducted a site inspection and reviewed a Phase I Environmental Site Assessment (ESA) undertaken by the owner during the summer of 2005
- The building is approximately 90,000 sq. ft. across two floors and was used as a warehouse
- The University arranged for Conestoga-Rovers & Associates to complete a Phase II Environmental Site Assessment in 2006. The Phase II ESA involved the collection and analysis of soil and groundwater samples from the property which determined:
  - The site contains surficial fill materials estimated at 34,000 cubic metres which is a mix of materials; some areas do not meet MOE Table 2 residential or community land use standards. A risk assessment and the development of a risk management plan is required to confirm if these materials are protective of human health and the environment and can remain on site. However, any excavated fill materials removed during construction would likely need to be disposed of off-site at a permitted landfill. The investigation of groundwater quality identified some limited groundwater impact which is likely manageable using the same risk management approach
- The building requires an entirely new envelope (roof/exterior walls/windows/doors), additional exits, new mechanical/electrical services, and interior fit out
- Velocity would occupy one floor which would include 17,700 sq. ft. of lab space in this new health tech hub
- The project will be completed in phases, with the building envelope, core mechanical/electrical services completed in Phase 1 along with partial interior fit-out

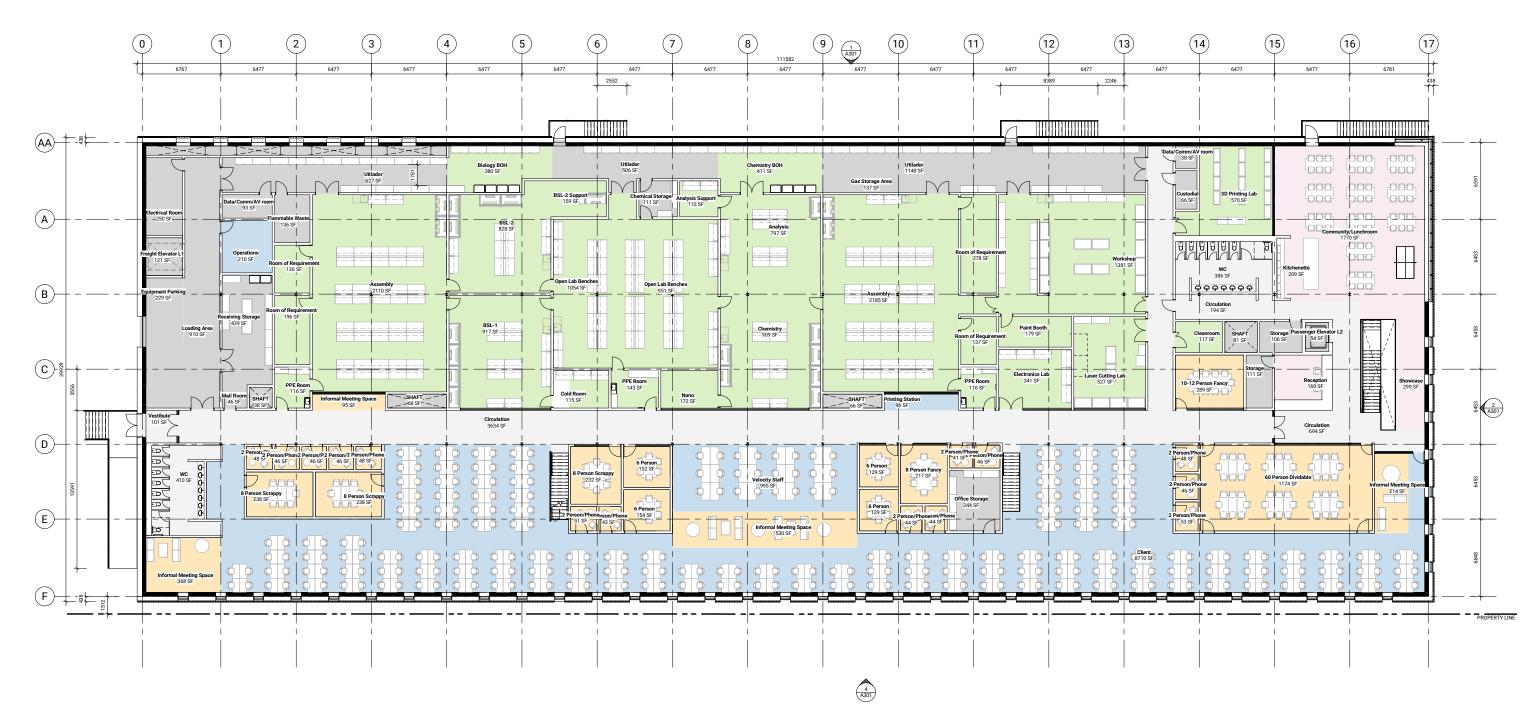
Diamond Schmitt Architects (appointment approved April 2021 by Board) and their team of subconsultants, engaged with the Velocity stakeholders to validate the program and determine laboratory requirements. This along with an existing conditions investigation, informed a schematic design and Class 'D' estimate.

eu Budget (5000s including contingency & net HST) for 90,000 sq. ft										
			Preliminary	Revis	sed Budget					
			Budget	(14.79	% increase)					
			<u>\$'000s</u>		<u>\$'000s</u>					
	Construction	(\$264/sf)	23,780	(\$303/sf)	27,270					
	Contingency		1,780		2045					
	Professional Fees		2,600		2950					
	Building Automat	ion	435		500					
	Network/AV/Secu	urity	305		350					
	Permits		250		285					
	Cost Escalation		850		1000					
	Total	(\$333/sf)	30,000	(\$382/sf)	34,400					

Revised Budget (\$000s including contingency & net HST) for 90,000 sq. ft.:

The tentative funding for the project includes University operating funds redirected from rent payments currently incurred for Velocity over 10 years amounting to \$7.5m (net of operating costs which would be redirected to operating costs of the new space), the City of Kitchener for a maximum contribution of \$8.5M, a \$1.5m donation, with the balance being pursued through other levels of government as well as further donations and potentially operating funds. The funding arrangement with the City of Kitchener includes a commitment by the University to provide the City with 5,000 sq. ft. of space and a prorata repayment of the City's capital funding in the event the University terminates its planned use of the space within 15 years of the completion date.

James Rush Dennis Huber





# University of Waterloo Board of Governors BUILDING & PROPERTIES COMMITTEE

# 1. MEMBERSHIP

This committee shall consist of a maximum of nine members. Of those, at least five members shall be members of the board appointed to the board by the Lieutenant Governor in Council or elected by the board from the community-at-large, and one shall be a faculty member of the board.

One undergraduate student member of the board and one graduate student member of the board shall be members of the committee. If the presidents of the Waterloo Undergraduate Student Association and the Graduate Student Association – UW are members of the board, then they shall serve respectively as the undergraduate and graduate student members of the committee. Should the president of the Waterloo Undergraduate Student Association or the Graduate Student Association – UW be unwilling to serve on the committee or not be a member of the board, then the respective seat on the committee shall be filled by appointment from among student governors made by the president of the respective student association.

It is expected that at least two members of the committee will have experience with capital construction and/or property development.

## 2. MEETINGS

The committee will meet at the call of the chair of the committee, but not less than four times annually.

The quorum for the transaction of business at any meeting of the committee shall be a majority of the members of the committee, present either in person, by teleconference or by videoconference, provided that not less than a majority of those constituting the quorum shall be members appointed to the board by the Lieutenant Governor in Council or elected by the board from the community-at-large.

## 3. TERMS OF REFERENCE

The committee is established for the following purposes:

To oversee campus planning and development activity in the context of the Campus Master Plan and prudent environmental sustainability practices, and not less than annually to perform a review of the Campus Master Plan in the context of the university strategic plan.

To make recommendations to the Board of Governors on campus planning and development initiatives, with due consideration to the impact on multi-campus sites, including (without limitation) the acquisition or disposal of land or buildings, the use of land, buildings and facilities, the siting of buildings and roads, and the review of all agreements to which the university is a party (including donor agreements and academic agreements) having impact on the acquisition, use and/or development of real property.

To approve on behalf of the board, construction projects between \$5,000,000 and \$10,000,000 and to make recommendations to the Board of Governors regarding construction projects exceeding \$10,000,000, including (without limitation) the appointment of architects and design consultants, the business plan and budget, the design, and the award of construction contracts.

To ensure that the university has in place appropriate procedures for cost estimating, competitive tendering of bids, awarding of contracts, contract administration, cost control and payment to contractors for all site work, new construction, alternations and major repair.

To ensure that the university complies with all building codes, fire codes, safety regulations and statutory and regulatory provisions, as appropriate, in its building and properties program, and to review compliance annually.

To ensure that the university has appropriate maintenance programs in place for buildings and properties.

To review annually the status of capital construction projects, including status of accumulated debt and compliance with approved debt policy.

To report on its activities to the Board of Governors at least annually.

To assess annually the adequacy of the committee's terms of reference and to propose any needed amendments to the Governance Committee.

Approved by the Board of Governors, 6 June 2006 Amended by the Board of Governors, 1 April 2008 Amended by the Board of Governors, 27 October 2009 Amended by the Board of Governors, 2 April 2013 Amended by the Board of Governors, 1 April 2014 Amended by the Board of Governors, 4 February 2020

#### University of Waterloo Board of Governors BUILDING & PROPERTIES COMMITTEE Work Plan Execution

		WORK P	lan Execution								canceled	canceled					
Task	Frequency	19/01/2018	09/03/2018	18/05/2018	12/10/2018	18/01/2019	08/03/2019	15/05/2019	02/10/2019	15/01/2020	3.4.2020	13/05/2020	30/09/2020	13/01/2021	10/03/2021	05/12/2021	29/09/2021
Campus Master Plan (as needed)	annual			•						•				•			
Capital financing commitments and construction status	each meeting	•	•	٠	٠	٠	•	٠	•	•			•	•	•	•	•
Committee self- assessment survey results	annual		•		٠		•		•				٠		•		•
Environmental sustainability practices	annual			•					•							•	•
Maintenance program and energy conservation efforts	annual								•							•	
Orientation/tour of campus	as required			•				•								•	
Development projects five-year plan			•														
Committee terms of reference	annual	•				•			•				•				•
Statutory compliance	annual	•				•				•				•			
University of Waterloo real estate holdings	annual	•				٠				•				•			
Committee work plan/special topics; orientation/briefing requirements	annual	٠				•				•			•				