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

Date: Wednesday 18 January 2023

Time: 1:00-3:00 p.m. Place: via MS Teams

11 January 2023

*material attached

**material to be distributed

Action

OPEN SESSION

1.	Declaration of Conflicts of Interest	Declaration
2.	Minutes of the 5 October 2022 Meeting* [Gamble]	Decision
3.	Business Arising from the Minutes	Information
4.	Capital Financing Commitments and Construction Status [Reitsma] (a) Capital Financing Commitments Report – January 2023* (b) Construction Status Report – January 2023* (c) Capital Financing Commitments Schedule – April 30, 2022*	Information
5.	University of Waterloo Real Estate Holdings* [Reitsma]	Information
6.	Optometry – Budget Increase* [Rush]	Decision/ Recommendation
7.	Math 4 Building – Updated Recommendation* [Hunsperger]	Decision/ Recommendation
8.	New Residence – Consultation Fees* [Hunsperger, Read, Reitsma]	Decision/ Recommendation
9.	Work Plan for Next Fiscal Year; Orientation/Briefing Requirements* [Gamble]	Information
10.	Execution Against the Work Plan* [Gamble]	Information
11.	Other Business	Information
12.	Proceed into Confidential Session	Information
Ne	xt Meeting: Wednesday 8 March 2023, 1:00-3:00 p.m., via MS	Гeams

Alice Raynard

Associate University Secretary

University of Waterloo Board of Governors BUILDING & PROPERTIES COMMITTEE Minutes of the 5 October 2022 Meeting

vinutes of the 5 October 2022 [in agenda order]

Attendees: Peter Barr, Carol Cressman, Michael Eubanks, Murray Gamble (chair), Tony Giovinazzo, Alice Raynard (secretary), Stephanie Ye-Mowe

Administration: Christiana Alkiviades, Stepanka Elias, Vivek Goel, Dennis Huber, Rob Hunsperger

Guests: Mark Giesbrecht

Regrets: Naima Samuel

Organization of Meeting: Murray Gamble 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 18 MAY 2022 MEETING

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

3. BUSINESS ARISING FROM THE MINUTES

There was no business arising.

4. SPACE INVENTORY AND FACILITY STATUS

Elias spoke to this item, which stems from a discussion the committee had at its last meeting concerning maintenance program and energy conservation efforts, and presented on: comparison with Ontario universities; space inventory submitted to the Council of Ontario Universities every three years; specific criteria for the calculation of space; significant operational, energy, sustainability and deferred infrastructure costs; available spaces; facility condition index (FCI) to assess condition of infrastructure and five to ten-year projections; budget needs. Members discussed: ratio of space compared to other institutions to bring space ratio down; recommendations from administration; review of workspaces and guidelines; faculty culture and research space; prioritization of maintenance. Administrative team to come back at a future meeting to provide an update on maintenance plan.

5. DISTRICT ENERGY STUDY

Thijssen spoke to his presentation, providing background and context to the university (community-scale project); larger campus footprint; renewal of infrastructure, pressure to reduce GHG, and resiliency (energy, cost, climate); carbon neutral imperative by 2050; District Energy Study to connect most building to Ring Road, representing over 75% of carbon load; consulting partners; project deliverables; interim reports and consultation sessions leading to final report synthesizing all project findings; project timeline for 2023; initial findings and impact of future construction; campus-wide project; risks and costs in not undertaking renewable. Members discussed: flexibility to acknowledge different technologies; decarbonization and energy efficiency to be addressed through this study. Thijssen to present an update in the new year.

6. CAPITAL FINANCING COMMITMENTS AND CONSTRUCTION STATUS

- a. Building & Properties Finance Summary September 2022. The report was received for information.
- **b.** Construction Status Report September 2022. Hunsperger spoke to the revitalization of B1, B2 and ESC, delays and costs; [action item] to return with an update to B&P Committee in March; Health Innovation Arena,

redesign and costs, project to be presented at PACOD; Optometry addition (WEI Institute), modifications to plan; B1 and B2, complex project, contingency to budget.

c. Capital Financing Commitments – 30 April 2022. The report was received for information.

7. WATERLOO NORTH HYDRO EASEMENT

Elias spoke to report and precautions taken relative to proposed easement. Any transfer of property has to be approved by the Board of Governors. Giovinazzo and Barr. Carried.

8. INNOVATION ARENA – TENDER AWARD

The Innovation Arena – Health Science Campus project has been presented to the committee in October 2020 and October 2021 (revised budget). The approval of the budget falls within the purview of the Board of Governors, given the committee's terms of reference. Huber mentioned support from the President and Provost, bidding process and cost escalation moved to tender price.

The committee heard motions to recommend to the Board of Governors:

- (i) a \$1.79m (5% increase) to the project budget. Giovinazzo and Cressman. Carried.
- (ii) the award of a stipulated-price contract (CCDC2) to Melloul Blamey Construction for \$29,270,000 (excluding HST). Cressman and Barr. Carried.

9. MATH 4 – REVISED BUDGET

Giesbrecht provided context for the building of Math 4, which has been previously discussed by this committee and is presented to discuss a revised budget in order to accommodate growth in the Faculty of Mathematics over the next five years, in terms of projected students and faculty members. The project includes doubling of eastwest wing of Davis Center, and the preservation of green spaces on campus. Budget revision results from inflation/supply chain issues. Server room to be funded separately.

Members discussed: plan allows for escalation for increased costs (about \$9M); drawings should reflect engineering designs that need to go to PACOD; increase in professional fees; accommodation for server room; itemized list of services; architects selection process and adjudication of consulting contract.

The committee heard a motion to recommend to the Board of Governors a revised budget of \$110 million for the design and construction of the proposed Math 4 building project. Barr and Eubanks. Carried.

10. UPDATE TO WORK PLAN AND ANNUAL REVIEW TERMS OF REFERENCE

Gamble provided an overview of this item to the committee; similarly to items 4 and 5 of the agenda, this item stems from discussions at the last meeting in May re: maintenance program and energy conservation efforts, where the committee had requested adding to the work plan an item on comprehensive sustainability program once per year with a view to report to the Board. Members agreed with the proposition to substitute the item on "Environmental sustainability practices in the context of campus planning and development activity" (May meeting) by that of "Comprehensive sustainability program" (October meeting), and with the current terms of reference remaining the same ("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 [...].) Gamble referred to the work in progress relative to governance review; proposed modification of 2022-2023 workplan; no concerns with shifting of comprehensive sustainability meeting to March.

Deferred maintenance review will be put on work plan, the committee's expectation this being brought back to the committee's attention in the next meetings.

11. EXECUTION AGAINST THE WORK PLAN

The document was received for information.

12. OTHER BUSINESS

There was no other business.

13. PROCEED INTO CONFIDENTIAL SESSION

The Committee convened in confidential session.

The Committee is scheduled to meet on Wednesday 18 January 2023, 1:00-3:00 p.m. via Teams.

13 October 2022

Alice Raynard Associate University Secretary

Report to the Building & Properties Committee Capital Financing Commitments

January 2023

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

Activity to date in 2022/23:

- The University has collected \$1.43M in student fees:
 - Health Services Addition \$0.49M
 - o PAC/SLC Addition \$0.94M
- Donations totaling \$0.06M towards various projects
- City of Kitchener contributions for the Health Innovation Arena project totaling \$0.24M
- Quarterly and annual repayments by ancillary enterprises (Housing, Food Services and Parking)
 with total payments of \$2.54M
- The Faculty of Health has repaid the agreed upon annual payment of \$0.66M to the addition to BMH
- The University contributed \$1M for the Innovation Arena furniture

Summary:

- Contributions to capital projects made fiscal year-to-date total \$5.93M
- 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, 2022 is attached

Jacinda Reitsma Vice-President, Administration & Finance

Construction Status Report January 2023 \$000s

	Original	Current	Procurement		percent	Original	Estimated	
Projects	Budget	Approved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
<u>In-Progress</u>								Prequalification for Bidding Contractors complete
Earth Science Chemistry (ESC)	17,500	22,140	ТВА	ТВА	99% Design	2022	2024	Building Permit Applicaiton submitted December 2022
Third Floor Renovations								Pre-requisite project currently under construciton to relocate researchers off the 3rd floor. Third floor renovations dependent upon completion of pre-requisite project
					0% Construction			Third noor renovations dependent upon completion of pre-requisite project
	17,500	22,140						Mechanical system design ongoing to meet intent of Shift-Neutral mandate
								Construction Document Phase approximately 99% Complete
								Schedule anticipates bidding project in order to have bids ready for recommendation at March 2023 B&P meeting. Proposed Tender date January 12, 2023
								Estimated Construction: April 2023 - September 2024

	Original	Current	Procurement		percent	Original	Actual	
Projects	Budget	Approved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
In-Progress Health Innovation Arena 280 Joseph Street Kitchener	30,000	-	CCDC2- Stip Sum	Melloul Blamey	100% Design 7% Construction	2023	Jan 10, 202	Site Plan Approval application approved by the City of Kitchener 4 Net Neutral Carbon strategy relies on future City of Kitchener District Energy Loop. Substantial Completion revised to January 10, 2024 Melloul Blamey awarded contract on November 7, 2022 Building Permit issued Nov. 25, 2022. Construction start delayed by ~3 weeks ESA2 activities impacted site prep/underground works. Soil Management Plan issued, monitoring wells decommissioned Ongoing: Contaminated soil removals, underground civil works, concrete slab removals, selective demolition, 2nd floor structural reinforcement, designated substance abatement ongoing

	Original	Current	Procurement		percent	Original	Actual	
Projects	Budget	Approved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
<u>In-Progress</u>								
								35% design development (DD) report complete
Math 4	90,000	110,000	TBA	TBA	25% Design	2024		Interim cost estimate complete based on 35% DD milestone progress set
								Project scope adjusted based on projected costs. Server room to be shelled space, reserved for future project
								Shift Neutral (net-zero carbon) strategy depends on future server room for heat
			-					Presidents Advisory Committee on Design (PACOD) recommended project to proceed
	90,000	110,000)					See current agenda for recommendation to deliver project through Construction Management form of contract

	Original		Procurement		percent		Actual	
Projects	Budget	Approved Budget	Method	Contractor	complete	Schedule	Completion	Risks/Status
In-Progress Ontonestas Materiae 5 de la tituta	45.250	45.250	TD 4	TD 4	200/ 0	2022		
Optometry - Waterloo Eye Institute	45,250	45,250	IRA	ТВА	30% Design	2023		100% Design Development milestone achieved Design Development estimate completed, and being evaluated Class C Construction Estimate = \$42.5M up \$7.23M from Class D Estimate of \$35.2M \$2.5M attributable to market conditions with remainder due to design development Recommendation for budget increase from \$45.25M to \$50.34M described in this B&P package
	45,250	45,250						

University of Waterloo Capital Financing Commitments April 30, 2022 (\$000s)

Capital Project						Currently Internally Financed	Estimated Repayment Period	Comments
Construction Completed								
Residence - UWP and MKV						12,687	8 years*	Residence fees. Payments resuming Fiscal 2023.
Engineering 7						18,556	9 years	Plades of \$20 CM for Environment wildings Fourth provinces
Other Engineering (including E5, E6, and DWE	≣)					8,315	1-3 years	Pledges of ~\$32.6M for Engineering buildings. Faculty payments.
Health Services Addition/Renovations						1,679	3 years	Compulsory undergrad & grad student fees; donations. (Student fees for interest will continue beyond 3 years)
Blackberry Buildings (EC1-5)						399	4 years*	\$0.4M from Parking (\$0.1M/year)
Faculty of Health Addition						6,241	6 years	Faculty, University commitment, donations
Student Residence - Claudette Millar Hall						26,243	15 years*	Residence fees and Food Services revenues
North Campus Field House						15,894	9 years	University commitment and potential donations
Student Life Centre and PAC Addition						40,624	< 30 years	\$24M (+interest) undergrad & grad student fees, payments commenced Fall 2021; balance is University commitment
Completed Total						130,638	•	
	Expenses to Date	Total Budget	Funding On-hand	Committe d Future Funding	Currently Unfunded	Currently Internally Financed	Project Completion Date	Comments
In-Progress and Recently Approved								
Health Innovation Arena	1,092	34,400	858	16,807	16,735	234		\$8.5M City of Kitchener grant, \$7.5M University commitment, >\$1.5M donations
Math4	1,305	90,000	57,500	17,500	15,000	-		\$57.5M contributed from Math and \$17.5M University commitment
Earth Sciences & Chemistry	360	22,140	1	22,139	=	359		50% to be funded from Science and 50% University commitment
Optometry Eye Institute	692	45,250	1,691	15,000	28,559			>\$10M in donations, \$2.2M to \$6.2M University commitment depending on receipt of matching donation
In-Progress and Recently Approved Total						593		
Total Internal Financing						131,231		

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

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

Notes:

There is a \$22M lease-back financing commitment until 2053 for Columbia Lake Village Townhouses, with minimum \$7M 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. Payments commencing Fiscal 2023.

University of Waterloo Real Estate Holdings Sites Owned By UW - December 2022

Bldg #	Location	Land Area	Building Area	Acquisition	Description
		Acres	Square Feet	Date	
Various	North and South Campus - Waterloo	976.3	8,434,357	1950s to Present	t Original campus of the University of Waterloo. Site of approximately 58 major buildings used for teaching, research, administration and student housing and recreation. The north campus is the site of UW's 200 acre environmental reserve and 120 acre Research
			(excludes Research and Technology Park buildings)		and Technology park, designed to accommodate 1.2 million square feet of office space.
	Rockwood Gorge - Rockwood	18	0	1977	Ecological reserve. Scenic gorge bisected by the Eramosa river, located in the town of Rockwood. Features dolomitic limestone
					cliffs, caves, and potholes. This area is used for research by the Faculty of Environment.
	Spongey Lake - Baden	79	0	1989	Ecological reserve. Small lake, sphagnum bog and forest located near the town of Baden. This area is used for research by the Faculty of Environment.
	School of Architecture Parking Lot - Cambridge	0.503	0	2012	Small parking lot on River Street, across the street from the School of Architecture
47	School of Architecture - Cambridge	1	83,336	2004	Former Riverside Silk Mills (and later Tiger Brand) building (circa 1920) on Melville Street, on the banks of the Grand River. Occupied by the University of Waterloo School of Architecture.
49 and 52	Health Sciences Campus - Kitchener	4	192,812	2009	Former Epton Industries site at Victoria and King. The two buildings on the site are occupied by the School of Pharmacy and the McMaster University Michael G. DeGroote School of Medicine.
55	Digital Media Stratford	1.38	51,334	2012	Offers programs focused on digital media technologies and global business issues. Former CNR railway yard site located at 125 St. Patrick Street, Stratford.
128	Tri-University Library Facility - Guelph	1	18,190	1996	Library materials storage and distribution facility, located on Malcolm Road in the City of Guelph. Facility is a joint venture with Wilfrid Laurier University and the University of Guelph. Land and building areas shown represent Waterloo's 48% share of the total 2.1 acres of land and 38,500 square feet of building space.
129 and 131	Aberfoyle (Puslinch) Property - Aberfoyle	41	18,362	1997	Small research facility, leased to a biofilter manufacturer. The property also features storage barn, located on Wellington Rd. 34.
139	68 Victoria St. South - Kitchener	3	92,923	2005	Former Ontario Seed Company warehouse, located adjacent to the Health Sciences Campus site.
	Owned Sub-Total	1,125.2	8,891,314		

University of Waterloo Real Estate Holdings Sites Leased By UW - December 2022

Bldg #	Location	Land Area Acres	Building Area Square Feet	Acquisition Date	Description
	Parking Lot "E" - Waterloo	1	0	1975	Leased land effective July 1, 1975 for 90 years (2065). Small parking lot on Seagram Drive, across the street from UW Place.
	School of Architecture Parking Lot - Cambridge	0.5	0	2004	Leased land effective June 1, 1980 for 50 years (2030). Small parking lot on River Street, across the street from the School of Architecture
95	Waterloo Tennis Courts - Waterloo	1	0	1975	Leased land. 6 all-weather tennis court surfaces located at the Waterloo Tennis Club beside Seagram Stadium in Waterloo. The courts are covered by an air supported structure owned by the Tennis Club. Use of the courts is shared with the Tennis Club. Lease extended in November 2022 for approx. 20 years to allow for the tennis club to procure a replacement bubble.
135	Fire Research Facility - Waterloo	0	10,494	2003	Building is owned by UW, situated on leased land at the Waterloo Landfill site. Used by the Engineering Faculty for fire research and by Applied Health Sciences for fitness research. Current lease expried April 2022, and UW is investigating the site and current facility use for research to determine if lease will be extended with the Region of Waterloo.
136 and 137	Pavement and Transport Technology Facility - Waterloo	0	2,048	2004	Buildings are owned by UW, situated on leased land at the Waterloo Landfill site. The site is used for paving materials research. There is also a UW windmill research site located nearby.
140	School of Architecture - Rome, Italy	0	6,000	1979	Leased space. Design studios, library and office space, used for the School of Architecture's Rome program for 4th year students. Located in Piazza Santa Maria in Trastavere. The program has been running since 1979.
156	Balsillie School of International Affairs / CIGI	0	50,000	2011	Leased space (through Oct. 31, 2027) in the Centre for International Governance Innovation used for the Balsillie School of International Affairs.
158	Velocity Garage Incubator	0	36,798	2012 & 2014	Name Change Mar 2016. Leased space located in the former Lang Tannery building on Victoria Street South in Kitchener. Velocity promotes entrepreneurship and commercialization of new products and technologies developed by students. Lease extends through Nov. 20, 2023.
162	220 Yonge Street, Eaton's Ctr Toronto	0	4,469	2015	Leased space occupied by the Master of Taxation program. 5 year extension until Jun 30, 2025. Renewed for a further 5 year term thru June 30, 2025.
167	Research Institute for Aging	0	8,853	2015	RIA/Schlegels building on the north campus. Lease started in September 2015, and was revised in 2020 to reflect changes to the space being used. Used by AHS for aging research. Lease will end Sept. 30, 2111 if not terminated sooner.
169	EVolv1	0	7,879	2018	Sub lease at 420 Wes Graham Way, Waterloo through December 31st, 2023.
170	Bradshaw Lofts	0	4,895	2019	Lease of space at 245 Downie St., Stratford, ON - more or less on the lower floor of building - for use as classroom, meetings, events. Initial lease 3 years September 2019 - August 2022. Lease extended through December 2025.
171	The Cora Building	0	6,119	2018	Sub lease of space at 375 Hagey Boulevard (Suite 302) for 67 months (Dec, 2018 through June 2024)
172	Critical Media Lab	0	500	2019	Lease of space at 151 Charles St. for 2 years beginning January 2019 for Critical Media Lab; 1 year extension through Dec. 2021; Further 1 year extension through Dec. 2022.
	Catalyst 137	0	14,737	2021	Lease of space at Catalyst 137 Glasgow St., Kitchener for Faculty of Engineering's Additive Manufacturing Group. Dec. 1, 2021 through March 31, 2032
	Leased Sub-Total	2.5	152,792		
	Total	4 407 7	0.044.406		
	<u>Total</u>	<u>1,127.7</u>	<u>9,044,106</u>		

Changes since December 2021

95 - Waterloo Tennis Courts extended through May 31, 2042

135 - Fire Research Facility lease has expired (April 2022) and is being assessed by UW as to whether a renewal term is appropriate 162 - Eaton Centre leases extended June 2020 - June 2025

Report to the Building & Properties Committee School of Optometry & Vision Science (Faculty of Science), Waterloo Eye Institute (WEI) January 18, 2023

Recommendation:

That the Building & Properties Committee recommend to the Board of Governors a revised project budget of \$50.34 million (previous approval was \$45.25 million) for the Waterloo Eye Institute and that the project proceed to final design and tender.

Background:

Beginning in July 2019, the School of Optometry & Vision Science worked with a design team from *FYi doctors* to reimagine the patient care pathway. Leveraging their expertise in practice design, the team worked with faculty and staff to develop improvements which reflected contemporary practice, clinical education, and training. The clinic modernization plan includes expanded optical services, and state-of-the-art biomedical sciences infrastructure with a goal to provide seamless integration for the continuum of eye and vision care.

A Request for Services Qualifications was publicly advertised on Merx which led to the March 2021 approval by the Building & Properties Committee to appoint HOK architects as prime consultant. At the same committee meeting, Building & Properties approved an estimated budget of \$45.25 million based on preliminary designs and a Class D construction estimate where proceeding to tender was conditional on securing funding for 50% of the project costs and developing a plan to raise the balance.

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

	March 2021	January 2023					
	Class D	Class C					
Construction Costs	\$38,637	\$41,800 (includes escalation to July 2023) (1)					
Professional Fees	2,486	2,750					
Fees to develop schematic design		675 (including multiple revisions)					
Disbursements		100					
Other Fees (Geotech, survey, locates,	, etc.)	155					
Commissioning		360					
High Voltage Electrical Loop	1,344	1,050					
Permits & Development Charges	611	600					
AV/Network/Security/Furnishings	1,138	1,250					
Project Contingency		1,600					
Medical Equipment	1,034	0					
Total	\$45,250	\$50,340					

Note 1: construction prices remain volatile; we continue to monitor market trends

To date, the School of Optometry & Vision Science has raised ~\$18 million, has committed \$2.5m of its existing internal resources, and the University has committed \$6.5m from operating funds for a total of \$27 million which exceeds the requirement for a minimum of 50% of funds committed to proceed to final design and tender. The balance will be funded by a combination of fund-raising and incremental revenue generation over the next 8 years which is backstopped with a funding short-fall commitment from the Dean of Science.

James Rush

DRAFT

Report to the Building & Properties Committee Proposed Math 4 Project

January 18, 2023

Recommendation:

That the Building & Properties Committee recommend to the Board of Governors that the Math 4 building be constructed using a Construction Management form of contract rather than the previously contemplated Stipulated Price Contract form of agreement.

Background:

At its September 2022 meeting, the B&P Committee approved the recommendation to the Board of Governors to construct the proposed Math 4 building with a total revised project budget of \$110 million.

At the meeting in May, the B&P Committee approved the recommendation to the Board to appoint Moriyama & Teshima Architects as prime consultants for the project.

During the initial phases of the design, both the design team and the independent cost consultant identified the rapid and volatile price increases being experienced within the construction industry. In order to address this situation, multiple cost estimates have been undertaken following an extensive value engineering exercise. The total building floor area remains unchanged at approximately 140,000 gross square feet. The recommended \$110 million budget is based on 35% design development completion and assumes a Q3 2023 tender award which includes a 10% escalation contingency between August 2022 and Q3 2023.

The project currently has financial commitments totaling \$75 million: (a) the Faculty of Mathematics has transferred \$57.5 million to the project's capital account, and (b) the Provost has committed \$17.5 million of institutional funding toward the project. The Faculty of Mathematics has made this project a priority in its ongoing fundraising activities. Any funding shortfalls related to the remaining \$35 million will be funded by the Faculty over a 7-8 year period following building completion.

Building Specifics:

At approximately 140,000 gross square feet, the proposed building is planned to be 5 storeys including a mechanical penthouse at level 5 and is designed to seamlessly connect the Math & Computer Building with the Davis Centre while maintaining the integrity of the existing outdoor quad.

This new, state-of-the-art building will host research institutes in vital fields such as fintech, data science, and cryptography. Specifically, the building will accommodate Combinatorics and Optimization. Mathematics Business and Financial Technology, as well as the Centre for Education in Mathematics and Computing which plays a key role in the Faculty's extensive outreach program. The building is designed to support enriched student experience by creating new social and collaboration spaces. It features classrooms and collision spaces to encourage interaction and collaboration among faculty, students, staff and external partners. It will accelerate leading-edge math and computer science research as well

as foster a culture of innovation and collaboration. By creating a vibrant and singular environment, the building will support the Faculty attract more of the world's top math and computer science talent.

Budget Specifics:

The revised budget estimate has increased \$20 million or 22% (including net HST):

		\$000s
	Jan 2021	August 2022
	<u>Estimate</u>	<u>Estimate</u>
Construction	\$70,000	\$87,500 (includes escalation)
	, ,	
Post-contract Contingency	7,000	7,000
Professional Fees	6,000	7,850
Disbursements	250	300
Other Fees & Commissioning		650 (Geotech, fire flow, survey, asbestos, etc.)
Furniture & Furnishings	2,500	2,150
AV/Network/Security	1,250	1,550
Permits & Development Charg	ges <u>3,000</u>	3,000
Total	\$90,000	\$110,000
	(\$643/sf)	(\$786/sf) approx. increase of 22%

Director, Design & Construction Dean, Mathematics VP, Administration & Finance

Report to the Building & Properties Committee Student Residence Building

January 18th, 2023

Recommendation:

That the Building & Properties Committee recommend to the Board of Governors:

- i) The appointment of Diamond Schmitt Architects Inc. (DSAI) as the prime consultants to prepare design and construction documents for a proposed 500-bed undergraduate student residence.
- ii) The site location for the proposed building on Parking Lot A.

Initial estimates for this project are in the order of \$90M+. Considering current economic and construction market volatility, hiring DSAI and confirming the site location will enable the consultant team to advance the design to better inform cost estimates on the total project scope prior to seeking financial approval.

Background – Connection to Campus Housing's Facilities Strategy:

- The University of Waterloo currently has 5,774 residence beds and approximately 7,104 beds in total when the university colleges are included. Most of the residence buildings require substantial re-investments to remain operable and desirable for students long term.
- The University's Campus Housing department recently completed a comprehensive Campus Housing Facilities Strategy to guide the residence renewal plans that will provide an enhanced student experience through a mixed-year living model. Research has shown benefits come from students living in residence, and the combination of more upper-year undergraduates and greater interest in learning in the living environment presents a compelling opportunity for the University to stress the value that comes from in-person experiences.
- To meet the demand for University operated residence accommodations that support a positive student experience, additional residence space is needed. This will allow for renewal of existing facilities and ensure the University can continue to honour the first-year residence guarantee, which is a key recruitment tool.
 - Although there has been a substantial increase in purpose-built off-campus student housing in Waterloo in recent years, the University is well positioned to compete based on the focus to enhance learning and development.

Background – Building and Site Selection:

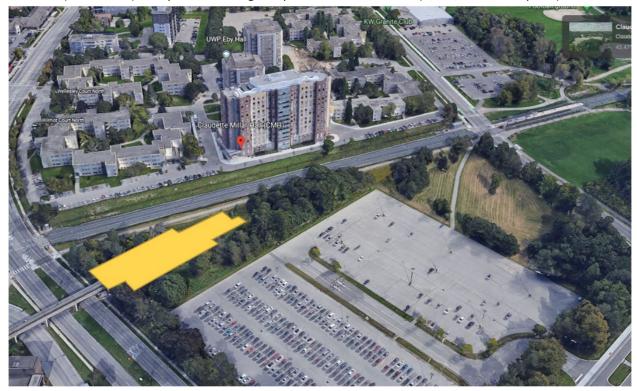
- The UW Campus Masterplan identifies Parking Lot A as a "potential development" site and further describes this area as contemplated expansion sites for "Mixed-Use" development.
- In alignment with the Campus Housing Facilities Strategy, 4 potential site locations were considered, and Lot A was identified as the preferred option for this project to utilize unoccupied sites, optimize proximity to complementary buildings and amenities, and to

- enhance the student experience for both residents and non-residents by leveraging a high-traffic location (gateway).
- The proposed residence building is being designed to meet net neutral design guidelines and the recommended location for the building on the north/east side of Parking lot A also creates opportunities to explore alternative energy sources, further supporting the University's Net Zero carbon targets.
- The proposed residence building will be designed to connect to a future academic building within the south campus gateway. The new building will accommodate a connection to the existing pedestrian bridge over University Avenue, and will propose a pedestrian bridge over the LRT tracks to the Claudette Millar Hall residence.

Background – Consultant Selection:

- On June 28, 2022, the University issued a Request for Proposal for Consultant Services on MERX (public tendering site) inviting firms with appropriate experience and qualifications to make a submission. In total 7 submissions were received, and 3 firms were shortlisted for an interview.
- The President's Advisory Committee on Design (PACOD) interviewed the 3 teams on August 29, 2022, and ranked Diamond Schmitt Architects Inc (DSAI) as the top candidate.
- DSAI were awarded an initial design contract to complete a Site Study, Programming, Conceptual Design, and a Class D Estimate for the project
- The UW project team is seeking approval to appoint DSAI as the prime consultants beyond this initial concept phase.
- DSAI's proposed consulting fees are competitive with a percentage fee proposal of 3.950-4.499% (based on a percentage of the final cost of construction excl. HST).

Site Plan (aerial view) - Proposed building footprint and orientation. (+/-15,000sf floor plate)



Rob Hunsperger, Director, Design & Construction Chris Read, Associate Provost, Students Jacinda Reitsma, VP, Administration & Finance

University of Waterloo Board of Governors BUILDING & PROPERTIES COMMITTEE 2022-2023 Work Plan

May Meeting*

- Campus Master Plan (as needed)
- Capital financing commitments and construction status
- Maintenance program and energy conservation efforts
- Orientation/tour of campus as required/for new members

September/October Meeting*

- Capital financing commitments and construction status
- Five-year plan for development projects anticipated to be considered during that five-year Period
- Assessment of adequacy of committee's term of reference with recommendations for amendments, as appropriate, to the Governance Committee
- Review results of Self-Assessment

January Meeting*

- Capital financing commitments and construction status
- Statutory compliance
- University of Waterloo real estate holdings
- Work plan for next fiscal year/special topics; orientation/briefing requirements

March Meeting*

- Capital financing commitments and construction status
- Comprehensive sustainability program (formally: Environmental sustainability practices in the context of campus planning and development activity)
- Committee Self-Assessment Survey Committee Self-Assessment (ahead of Board of Governors meeting)

October 2022

^{*}each meeting will also include, as required, award of tenders (approval of recommendation to the board) and appointment of architects/consultants

University of Waterloo Board of Governors [LDING & PROPERTIES COMMIT] Work Plan Execution

canceled canceled

					cancelea							cancelea			
					03/04/2020										
					and										
	Frequency	15/05/2019	02/10/2019	15/01/2020	5/13/2020	30/09/2020	13/01/2021	10/03/2021	12/05/2021	29/09/2021	12/01/2022	09/03/2022	18/05/2022	5/10/2022	18/01/2023
Campus Master Plan (as	annual			•			•								
needed)				· ·			•								
	each meeting														
commitments and		•	•	•		•	•	•	•	•	•		•	•	•
construction status															
Committee self-	annual														
assessment survey			•			•		•		•				•	
results															
	annual								•					•	
sustainability practices														_	
Maintenance program	annual														
and energy conservation			•						•				•	•	
efforts															
Orientation/tour of	as required	•							•				•		
campus		•							•				•		
Development projects															
five-year plan															
Committee terms of	annual		•			•				•				•	
reference			•			•				•				•	
	annual			•			•						•		
	annual			•			•				•				•
real estate holdings				•			•				•				•
	annual														
plan/special topics;															
orientation/briefing				•		•					•				
requirements															