



<b>SUBJECT</b>	UBC Sauder School of Business Power House Expansion Project (UBC Vancouver) – Board 1
<b>SUBMITTED TO</b>	Property Committee
<b>MEETING DATE</b>	March 16, 2022
<b>SESSION CLASSIFICATION</b>	Recommended session criteria from Board Meetings Policy: OPEN
<b>REQUEST</b>	<p>APPROVAL REQUESTED</p> <p>IT IS HEREBY RESOLVED that the Property Committee recommends that the Board of Governors grant BOARD 1 approval for the UBC Sauder School of Business Power House Expansion project as follows:</p> <ul style="list-style-type: none"><li>i. approval of project in principle;</li><li>ii. approval of preliminary program and schedule;</li><li>iii. approval of location;</li><li>iv. approval of preliminary capital budget of \$120,000,000 and operating costs as set out in the Appendices of this submission;</li><li>v. approval of the preliminary funding strategy as outlined in the section Funding &amp; Financing;</li><li>vi. authorization to proceed to schematic design; and,</li><li>vii. approval of funding release of \$2,000,000 for the next stage of project development.</li></ul>
<b>LEAD EXECUTIVE</b>	Peter Smailes, Vice-President Finance & Operations
<b>SUPPORTED BY</b>	Andrew Szeri, Provost and Vice-President Academic, UBC Vancouver Robert Helsley, Dean, UBC Sauder School of Business Moura Quayle, Vice-Provost and Associate Vice-President Academic Affairs John Metras, Associate Vice-President Facilities Jennifer Sanguinetti, Managing Director, Infrastructure Development Michael White, Associate Vice-President Campus & Community Planning Yale Loh, Treasurer Aubrey Kelly, President & CEO, UBC Properties

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**PRIOR SUBMISSIONS**

The subject matter of this submission has not previously been considered by the Property Committee.

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**EXECUTIVE SUMMARY**

In accordance with the [Capital Projects Policy](#), this Board 1 approval request for UBC Sauder School of Business Power House Expansion is provided as part of the project management process for construction projects over \$5,000,000. The Board of Governors has delegated to the Property Committee the authority to make decisions on its behalf for construction projects between \$5 million and \$20 million. The aggregate estimated value of UBC Sauder School of Business Power House Expansion is \$120,000,000.

## Background and Rationale

UBC Sauder School of Business (UBC Sauder) is recognized globally as one of the top business schools in the world. The School is in the midst of a significant period of innovation and growth in its student population, program portfolio and faculty complement in response to rising demand for business education and the ever-growing need for talent by employers across BC, Canada and the world. Projected enrolments in current professional graduate programs are expected to increase by more than 30% over the next five years, and the school is planning to add one or two new graduate programs (or new streams to existing programs) to meet the demand for business education serving the growing tech sector in Vancouver.

The Robert H. Lee Graduate School currently occupies approximately 24,000 net square feet in the Henry Angus Building and the David Lam Management Research Centre. The Graduate School requires significant additional space to accommodate the planned growth in students and associated faculty, staff and services, as well as the innovative program initiatives envisioned by the School. Moreover, as business education evolves, the physical environment in which students learn must likewise evolve. Modern teaching spaces are highly interactive and require greater flexibility in design and construction.

## Project Description

The proposed project is approximately 13,138 gross square metres (141,420 gross square feet) in total, which will include 12,674 gross square metres (136,422 gross square feet) of UBC Sauder program space and 464 gross square metres (4,998 gross square feet) of space for two 25-space child care facilities to be operated by UBC Child Care Services. The current vision for the project is an 11-storey tower and entrance podium west of the Henry Angus Building that will house all Robert H. Lee Graduate School learning spaces and administrative functions and the child care facilities.

The new expansion will facilitate a purposeful shift from learning spaces that emphasize teaching through lectures to spaces that foster creativity and innovation through experiential learning and teamwork. The project will include a new Centre for Collaborative Learning to support and grow entrepreneurial learning, collaboration with industry and engagement with the broader community. This Centre will be a home for the Creative Destruction Lab (CDL) -West, as well as a “collision forum” where entrepreneurs with new ventures will locate in-situ and work with students and researchers in the school. The forum will also provide a home for activities with other Faculties and units in the university that have a need to co-locate with CDL-West or with other ventures in the school.

Relocation of existing graduate program functions from Henry Angus and David Lam to the new facility will free up classroom space to serve the growing undergraduate population, as well as offices and meeting rooms which will facilitate an internal reorganization and consolidation of UBC Sauder activities.

The UBC Sauder School of Business Power House Expansion project strongly supports the Innovation theme throughout UBC’s strategic plan *Shaping the Next Century 2018-2028*, [UBC Strategic Plan, 2018-2028](#) and is aligned with all four core areas:

- People and Places – Strategy 2: Inspiring Spaces and Strategy 3: Thriving Communities
- Research Excellence – Strategy 8: Student Research, and Strategy 9: Knowledge Exchange
- Transformative Learning – Strategy 13: Practical Learning and Strategy 14: Interdisciplinary Education
- Local and Global Engagement – Strategy 16: Public Relevance

## Preliminary Program

In 2017, Sauder engaged a planning consultant to develop a functional program for the Graduate School facility, which identified the need for 12,674 gross square metres (136,422 gross square feet) of program space. A 2021 program review identified the benefits of increasing the program to include additional components, however increasing the project's built area is beyond anticipated funding capacity. Sauder is proceeding with the original proposed building area, but during the design process may investigate incorporating some of the elements proposed in the program update.

Component	Net Area (square metres)	Net Area (square feet)
RHL Graduate School Administration (offices & support space)	691	
RHL Graduate Programs Learning spaces		
Classrooms	2,642	
Graduate Student Zone (lounge, study space, project rooms)	1,573	
Teaching Labs	1,320	
Development & Alumni Engagement (office & support space)	550	
Common space (informal learning space, conf. rm)	105	
Building services and support	905	
Subtotal Sauder Net Area	7,681	82,678
Gross-up @ 1.65 x nsm	4,994	
<b>Subtotal Sauder Gross Area</b>	<b>12,674</b>	<b>136,422</b>
Child Care Facilities	281	3,030
Gross-up @ 1.65 x nsm	183	1,968
<b>Subtotal Child Care Facilities Gross Area</b>	<b>464</b>	<b>4,998</b>
<b>TOTAL Building Gross Area</b>	<b>13,138</b>	<b>141,420</b>

## Site

The proposed site is located directly west of the Henry Angus Building, in the block defined by University Boulevard, Main Mall, Agricultural Road and West Mall. The block is within the Campus Core, a site occupied by the old, original UBC Power House, and its 1960's era, modernist-style Power House Addition. The project includes integration and adaptive re-use of the Power House Addition as an entry/multi-purpose podium with spaces to facilitate social connectivity and to encourage the exchange of ideas, opinions and knowledge. The child care facilities will ideally be located on the third floor of the tower in order to utilize the roof of the Power House Addition as an outdoor play area. The original Power House, now decommissioned, will be demolished.

The site was recommended by the New Building Site Selection Committee on February 19, 2018, and endorsed by the Property & Planning Advisory Committee + Senate Academic Building Needs Committee on January 17, 2022.

## Preliminary Capital and Operating Budgets

UBC Properties Trust has estimated the capital budget for the project at \$120 million, including allowances for demolition of the original Power House, adaptive re-use of the Power House Addition, and a bridge to the existing Henry Angus Building.

Annual operation and maintenance (O&M) costs will be calculated at the standard rate (\$8.60/gsf/year for new buildings) and paid by the UBC Sauder School of Business. Note that the current O&M rate is under review and may increase prior to final Board 3 approval.

Detailed breakdowns of the preliminary Capital Budget and Operation Costs are shown in *Appendix 2 Preliminary Capital Budget and Operations and Maintenance Costs*.

### Funding Sources and Financing

The project will be funded through a targeted \$35 million in private philanthropy, matched by \$35 million from the Academic Capital Fund (ACF), and \$50 million from the School's reserves and debt financing for a total project cost of \$120 million.

The effects of COVID have led Sauder and Development & Alumni Engagement (DAE) to reduce near-term fundraising expectations; however overall donor fundraising is still expected to reach a total of \$35 million. The building project is designated as the cornerstone of the school's Responsible Leadership Campaign and an updated assessment of donor prospects is currently underway including the need for a significant lead gift. Should fundraising fall short, UBC Sauder will fund the shortfall through its reserves and an increase to the internal loan commitments. The Academic Capital Fund (ACF) will contribute the \$2.4 million annual debt service payments for an internal loan of up to \$35 million, payable over 30 years at an interest rate of 5.75%.

Funding Source	Amount \$
Donor Fundraising	35,000,000
Sauder Reserves	27,000,000
Sauder Internal Loan @ 5.75% for 30 years	23,000,000
Academic Capital Fund	35,000,000
<b>Total Funding</b>	<b>\$120,000,000</b>

The Sauder School of Business will pay the \$2.4 million annual debt service of the proposed internal loan of \$23 million, based on a 30-year term at an annual interest rate of 5.75%. This equates to a forecasted debt burden ratio of approximately 1.5% which is well within the Sauder School of Business capacity for debt service (maximum 3%). Treasury confirms that there is sufficient liquidity to provide the proposed financing for the project.

Discussions are in progress with respect to a funding contribution from Student Hospitality and Community Services (SHCS) for the child care centre and food services outlet tenant improvements.

### Sustainability Targets

The building will target LEED Gold certification as a minimum, with defined greenhouse gas emissions (GHG) and energy use intensity (EUI) targets in support of UBC's Climate Action Plan, and additional strategies explored with UBC Sustainability and the design team. Specific GHG emission reduction and EUI information for the project will be provided at Board 3 once detailed design is complete. Adaptive re-use of the Power House Addition continues UBC's commitment to building renewal, a sustainable building practice that will preserve a heritage building, avoid sending building materials to landfill, and save the energy and resources that would be required to produce new materials. The project team will explore opportunities to promote enhanced universal accessibility.

## Risks

- Infrastructure Development and UBC Properties Trust advise that the current construction market continues to be extremely volatile, with many trade prices continuing to trend upward due to supply chain disruptions. The budget estimate has increased by \$15 million since 2019 which is evidence of this trend. An escalation contingency of \$4.6 million has been included in the cost estimate to reflect this risk. The team will also pursue various strategies as required to ensure delivery of the program within the updated budget envelope.
- Planning and budgeting to date for adaptive re-use of the Power House Addition and demolition of the original Power House incorporates known conditions, however there are inherent unknowns with demolition and with working within an existing building. A construction contingency of \$3.95 million has been included in the cost estimate to mitigate this risk.
- The project's targeted construction schedule is similar to that of the proposed Jack Bell Renew project. The two projects are in close proximity and may be competing for the same site access and lay down areas. Close coordination between the two projects will be critical for their mutual success.

## Preliminary Schedule

The following Preliminary Schedule has been provided by UBC Properties Trust:

MILESTONE	TARGET DATE
Executive 1	May 2017
New Building Site Selection Committee	Feb 2018
Executive 2	Mar 2019
Executive 2 Update	July 2019
PPAC <sup>1</sup>	Jan 2022
Executive 3	Feb 2022
Board 1	Mar 2022
Board 2	Dec 2022
Board 3	Dec 2023
Construction Start	Jan 2024
Construction Completion	Mar 2026
Occupancy	Apr 2026
Board 4	Mar 2028

<sup>1</sup>Property & Planning Advisory Committee + Senate Academic Building Needs Committee

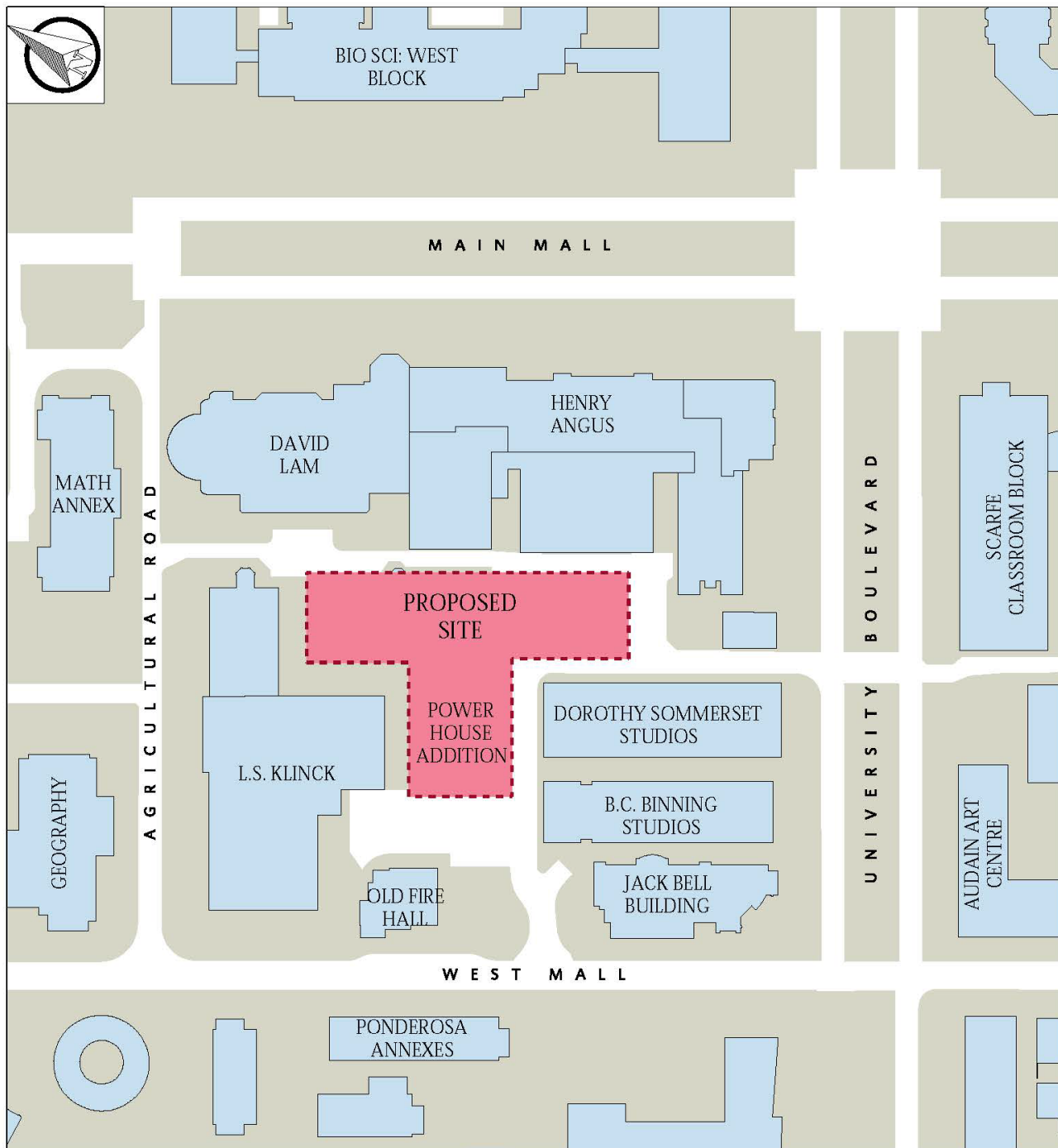
## APPENDICES

1. Context Map of Location
2. Costs – Preliminary Capital Budget and Operating Costs

## PRESENTATIONS

1. UBC Sauder School of Business Power House Expansion – Board 1

Appendix 1 – Context Location Map



## Appendix 2 – Preliminary Capital and Operation Budgets

### Preliminary Capital Budget

UBC Properties Trust has provided the following capital cost estimate update for the Sauder School of Business Power House Expansion Project. This is a class D estimate with an accuracy of +/-20-30%.

Project Capital Cost Breakdown	Costs \$
<b>Construction Costs</b>	
Construction	69,000,000
Renovate Power House Addition <sup>1</sup>	3,750,000
Bridge to Henry Angus	750,000
Public Realm - Plaza	1,000,000
Public realm – Pedestrian Spines	1,000,000
Child Care Tenant Improvements & Landscape	1,500,000
Site Servicing <sup>2</sup>	2,000,000
Pump House Demolition <sup>1</sup>	1,000,000
Contingency	3,950,000
<b>Total Construction</b>	<b>83,950,000</b>
<b>Cash Allowances</b>	
FF+E	2,550,000
UBC IT <sup>3</sup>	1,500,000
UBC AV <sup>3</sup>	7,000,000
Service Requests to Facilities	250,000
Secure Access/Signage/Moving	250,000
<b>Total Cash Allowances</b>	<b>11,550,000</b>
<b>Soft Costs</b>	
Consultants	9,235,000
Preconstruction/Permits	1,679,000
<b>Total Soft Costs</b>	<b>10,914,000</b>
<b>Building Subtotal</b>	<b>106,414,000</b>
Project Management	2,660,000
GST	1,777,000
<b>Building Total</b>	<b>110,851,000</b>
Construction Period Financing	3,400,000
Escalation Contingency	4,609,000
Retained Risk	1,140,000
<b>PROJECT TOTAL</b>	<b>\$120,000,000</b>

Project Area (Gross Square Feet)	141,420
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Cost Per Square foot	\$849
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<sup>1</sup> Extent of hazmat abatement unknown

<sup>2</sup> More investigation required

<sup>3</sup> UBC/IT costs to be confirmed when specific requirements finalized

### Preliminary Operations and Maintenance Cost

Annual operation costs will be calculated at the standard rate (\$8.60/gsf/year for new buildings) and paid by the Sauder School of Business. The current O&M rate is under review and may increase prior to final Board 3 approval. Lifecycle capital costs will be funded by the UBC operating budget and Provincial government through the Routine Capital Program.

<b>Sauder School of Business Expansion</b>	<b>\$/gsf</b>	<b>Sauder</b>	<b>SHCS</b>	<b>Total</b>
Total Gross Area (sf)	141,420	136,422	4,998	
<b>OPERATION COSTS<sup>1</sup></b>				
Annual Operations + Maintenance	\$6.37	\$869,008	\$31,837	
Utilities	\$2.23	\$304,221	11,146	
<b>Total O+M Cost</b>	<b>\$8.60</b>	<b>\$1,173,229</b>	<b>\$42,983</b>	<b>1,216,212</b>
<b>LIFECYCLE CAPITAL COSTS<sup>2</sup></b>				
Cyclical Maintenance	\$3.51	\$478,841	17,543	
Modernization / Upgrade	\$0.93	\$126,873	4,648	
<b>Total Capital Renewal Cost</b>	<b>\$4.44</b>	<b>\$605,714</b>	<b>\$22,191</b>	<b>627,905</b>

<sup>1</sup> Final costs will be based on actual built areas and are subject to change pending final design and construction.

<sup>2</sup> Lifecycle Capital Costs are covered by the UBC Operating Budget (Routine Capital program).





# Sauder School of Business Power House Expansion Project – Board 1

March 16, 2022

**John Metras, Associate Vice-President Facilities**



# Introduction and summary



Proposed Sauder Power House Expansion will:

- House Sauder's expanded graduate programs, including tech-focused areas
- Provide spaces that foster creativity & innovation through experiential learning
- Retain the 1960s modernist Power House Addition

## Additional details



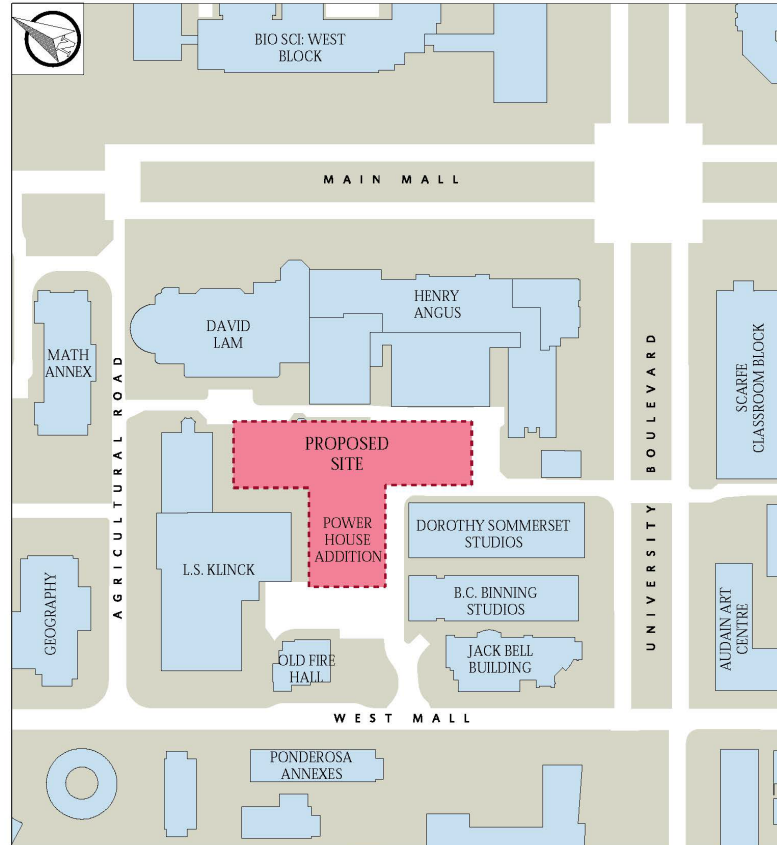
- Building gross area 13,140 m<sup>2</sup> (141,420 ft<sup>2</sup>)
- Includes innovative learning spaces, Creative Destruction Lab (CDL) - West, a “collision forum” for entrepreneurs with new ventures, and office space
- Also will have 2 new child care facilities

## Additional details



- Use of the Power House building site removes a seismic risk
- Current capital cost estimate is \$120.0 million
- Funding anticipated from Sauder reserves & internal loan, donors, and Academic Capital Fund

# Additional details – Site Map





# Discussion and decision points



## Board 1 approval of the Sauder Expansion project:

1. approval of project in principle;
2. approval of preliminary program and schedule;
3. approval of location;
4. approval of preliminary capital budget of \$120,000,000 & op costs;
5. approval of the preliminary funding strategy;
6. authorization to proceed to architect selection and schematic design;  
and
7. funding release of \$2,000,000 to commence schematic design.