



<b>SUBJECT</b>	UBC Sauder School of Business Power House Expansion Project, UBC Vancouver - Board 2
<b>SUBMITTED TO</b>	Property Committee
<b>MEETING DATE</b>	September 13, 2023
<b>SESSION CLASSIFICATION</b>	Recommended session criteria from Board Meetings Policy: OPEN
<b>REQUEST</b>	<p><b>APPROVAL REQUESTED</b></p> <p>IT IS HEREBY RESOLVED that the Property Committee recommends that the Board of Governors grant BOARD 2 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 the revised capital budget and operating budgets;</li> <li>ii. authorization to issue the development permit;</li> <li>iii. authorization to proceed to working drawings and tender; and,</li> <li>iv. approval of funding release of \$5,500,000 for the next stage of development.</li> </ul>
<b>LEAD EXECUTIVE</b>	Frank Laezza, Vice-President Finance & Operations
<b>SUPPORTED BY</b>	<p>Gage Averill, Provost and Vice-President Academic, UBC Vancouver</p> <p>Darren Dahl, Dean, UBC Sauder School of Business</p> <p>Bhushan Gopaluni, Vice-Provost and Associate Vice-President Faculty Planning, UBC Vancouver</p> <p>John Metras, Associate Vice-President Facilities</p> <p>Jennifer Sanguinetti, Managing Director, Infrastructure Development</p> <p>Michael White, Associate Vice-President Campus &amp; Community Planning</p> <p>Yale Loh, Treasurer</p> <p>Aubrey Kelly, President &amp; CEO, UBC Properties Trust</p>

## PRIOR SUBMISSIONS

The subject matter of this submission was considered by the Property Committee on [March 16, 2022](#) (OPEN SESSION) – Board 1 Approval, Funding Release \$2,000,000. Action/Follow up: Proceed with schematic design.

The following Executive Summary provides an update from the date of the most recent submission.

## EXECUTIVE SUMMARY

In accordance with the [Capital Projects Policy](#), this Board 2 approval request for the UBC Sauder School of Business Power House Expansion project 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 the UBC Sauder School of Business Power House Expansion project is \$147,191,000.

The Sauder School of Business Power House Expansion project (Sauder Expansion project) will provide much-needed teaching and support space, including a Responsible Business Centre, Indigenous Business Centre, Experiential Learning in Finance space, Climate Lab, Creative Destruction Lab and Innovation and Entrepreneurship Centre, for the Robert H. Lee Graduate School. The new space will support both the school's local and global goals of creating a world class business school that defies prevailing corporate expectations and has a more intimate relationship to its place and people.

The project concept has been significantly refined since Board 1 through the schematic design process and in consultation with stakeholders. Design for the revised 13,138 square metre Sauder Expansion project is in progress and incorporates the refined project concept. The project concept has been refined, as follows:

#### *Power House*

The original intent of the project was to integrate and re-use elements of the 1960's era modernist style Power House Addition into the new building design. As per the Vancouver Campus Plan Policy 43, heritage resources shall be retained where viable, as determined by comparing the costs, functionality, campus fit, ecological and heritage impacts of retention versus replacement. Following a detailed analysis, including engineering and constructability reviews, the team identified several major challenges to retention, including:

- Asbestos and lead contamination. This impacts the ability to safely upgrade the existing structure as well as the removal of the existing boilers which would necessitate large segments of the structure to be disassembled.
- Structural and seismic upgrades. Much of the existing structure (including the existing openings, roof structure, and columns) would need to be rebuilt to bring the building up to current seismic standards to allow other uses to be considered. Many of the key, character-defining elements rely on thin building assemblies which are challenging to retain in such an upgrade.
- Site prep. The grades would not provide a dignified accessible route from West Mall to the main entrance of the new building.
- Site integration. Its scale and location on the site make integration with a new program incredibly challenging.
- Cost prohibitive elements. There are considerable costs associated with maintaining the structure as an interior space, drawing resources from other program needs.

After a review process that weighed all the criteria, the conclusion was that retaining the Power House was not feasible. Discussions with Campus & Community Planning (C&CP) and Senior Administration led to the decision that the building would be demolished as per the original intent of the Steam-to Hot-Water Conversion project (*Refer to BOG report [June 4, 2013](#)*). Demolition will be completed as a separate project prior to the start of the Sauder Expansion project construction. A photo installation of the Power House is planned for the new building that will tell the story of the facility and its role in UBC's early development. A professional photographer captured key images for this purpose prior to the Power House's demolition.

#### *Fire Hall*

A request was made, through the schematic design process, to consider the relocation of the adjacent Old Fire Hall, which currently houses Faculty of Arts, which would allow an open and uninterrupted presence on West Mall. Discussions with C&CP, Faculty of Arts, Infrastructure Development, the Provost Office, and Student Housing & Community Services have resulted in the decision to relocate the Fire Hall and its tenants for the Sauder Expansion project to increase its presence along West Mall and to facilitate better access for service vehicles going to adjacent buildings. A funding contribution from Sauder will be provided for the relocation of the Fire Hall and the Faculty of Arts building tenants. The Fire Hall relocation and siting is a separate project that is in early planning stages and should not impact the Sauder Expansion timeline.

#### *Child Care*

The Board 1 approval for the Sauder Expansion project included child care within the new facility. Since this approval, it was determined that the childcare program space will be delivered as a stand-alone facility and separately located elsewhere on campus from the new Sauder Expansion building. Reasons for this relocation

include challenges in situating the facility within the footprint in such a way that allowed for quality outdoor space and appropriate drop off and pickup access that would permit safe and accessible operation. The childcare project will be completed as a separate project, with partial funding provided by Sauder, fulfilling its Board 1 commitment in providing on-campus child care.

Overall, the removal of the Power House, relocation of the Fire Hall and delivery of child care elsewhere on campus, has allowed the project team to explore improved project siting (including site access and serviceability) and massing options, within a constrained site.

Public Consultation

The design team presented to the Advisory Urban Design Panel (AUDP) and received support on July 6, 2023. On July 25, 2023, a public open house was held. Approximately 47 people viewed the presentation boards and many spoke with staff regarding the project. While the project was generally well-received by attendees, there were concerns regarding the preservation of the Old Fire Hall and some Art History, Visual Art & Theory faculty and staff felt that there was a lack of substantive consultation. Staff continue to work to identify a location and use for the Old Fire Hall to support its long-term viability and are confident that the project is ready to proceed to issuance of the Development Permit following Board 2 approval.

Sustainability Objectives

The project is targeting LEED Gold certification, with defined greenhouse gas emissions (GHG) and energy use intensity (EUI) targets in support of UBC’s Climate Action Plan. A preliminary energy model has been developed. The project is on track to meet high level targets and performance benchmarks. Specific GHG emission reduction and EUI information for the project will be provided at Board 3 once the detailed design is complete.

The building is targeting a 10% reduction in embodied carbon. The project team is exploring opportunities to promote universal accessibility, reduce indoor and outdoor water use, and divert construction and demolition waste from the landfill.

Capital Budget and Funding

The capital budget of the Sauder Expansion project (excluding the Old Fire Hall relocation and childcare) has increased from \$120,000,000 at Board 1 to \$147,191,000 due to continuing construction market escalation and an expansion of project scope to expand the building presence on West Mall. The total cost of the project includes internal construction interest costs which are subject to change based on assumptions regarding project costs, cash flows, timelines and construction interest rates. The team will continue to seek opportunities to reduced costs, however, the updated funding sources are as follows:

Funding Source	Amount \$
Donor Fundraising <sup>1</sup>	35,000,000
Sauder Operating Reserves	50,000,000
Sauder Internal Loan @ 5.75% for 30 years	22,191,000
Academic Capital Fund	40,000,000
<b>Total Funding</b>	<b>\$147,191,000</b>

<sup>1</sup> Donor Fundraising is backstopped by a Sauder Internal Loan

The Sauder School of Business will pay \$1.2 million annual debt service for the proposed internal loan of \$22,191,000, based on a 30-year term at an annual interest rate of 5.75%. This equates to a forecasted debt burden ratio of approximately 1.0% 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.

In addition to the total Sauder Expansion project budget, Sauder is committed to funding an additional \$5,700,000 to fulfill its obligations to providing childcare (\$500,000) through the project and relocating the Fire Hall (\$5,200,000). The cumulative funding for the Sauder Expansion project and the additional funding commitments for Firehall and Orchard Child Care centre is \$152,891,000.

If Sauder is required to provide further funding to backstop a shortfall in donor fundraising for the Sauder expansion and the Fire Hall relocation, this would be done through an internal loan. If needed, the annual debt service would increase to \$3.5 million and debt burden would increase approximately 3.0%, right at the target threshold as set out in the Board of Governor approved guidelines.

Risks

- Market escalation continues to be a challenge exceeding what was previously forecasted. A construction contingency has been included in the project budget to account for high market escalation.
- The project will be built adjacent to the existing Sauder building, Jack Bell, Dorothy Somerset Studio, BC Binning Studios and Leonard S. Klink. Construction in a precinct with several occupied buildings can cause disturbance to existing programming, classrooms, and office spaces. The risk to adjacent spaces will be mitigated through comprehensive scheduling and communication to the greatest extent possible. Some relief space may be provided during critical times, to be determined during design development.
- There is a risk of unknown conditions inherent in the underground conditions in the courtyard. Extensive investigations of the existing building and the courtyard help to mitigate this risk. A construction contingency has been included in the project budget to deal with unforeseen items.
- The project’s targeted construction schedule overlaps with that of the proposed Jack Bell Renew project. The two projects are in close proximity, are both subject to constrained sites and may be competing for the same site access and lay down areas. There has been close communication between the project management and design teams to coordinate planning for construction and public realm scopes. The same Construction Manager was awarded both projects, which is beneficial to the Project for site coordination and project delivery.

Preliminary Schedule

The following preliminary schedule has been updated to reflect Board 2 in September 2023:

Milestone	Target Date Board 1	Target Date Board 2
Executive 1	May 2017	May 2017
New Building Site Selection Committee	Feb 2018	Feb 2018
Executive 2	Mar 2019	Mar 2019
Executive 2 Update	July 2019	July 2019
PPAC <sup>1</sup>	Jan 2022	Jan 2022
Executive 3	Feb 2022	Feb 2022
Board 1	Mar 2022	Mar 2022
Board 2	Dec 2022	Sept 2023
Board 3	Dec 2023	Sept 2024
Construction Start	Jan 2024	Oct 2024
Construction Completion	Mar 2026	Feb 2027
Occupancy	Apr 2026	Mar 2027
Board 4	Mar 2028	June 2029

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

## **APPENDICES**

1. Context Location Map
2. Functional Program
3. Preliminary Capital and Operating Budgets

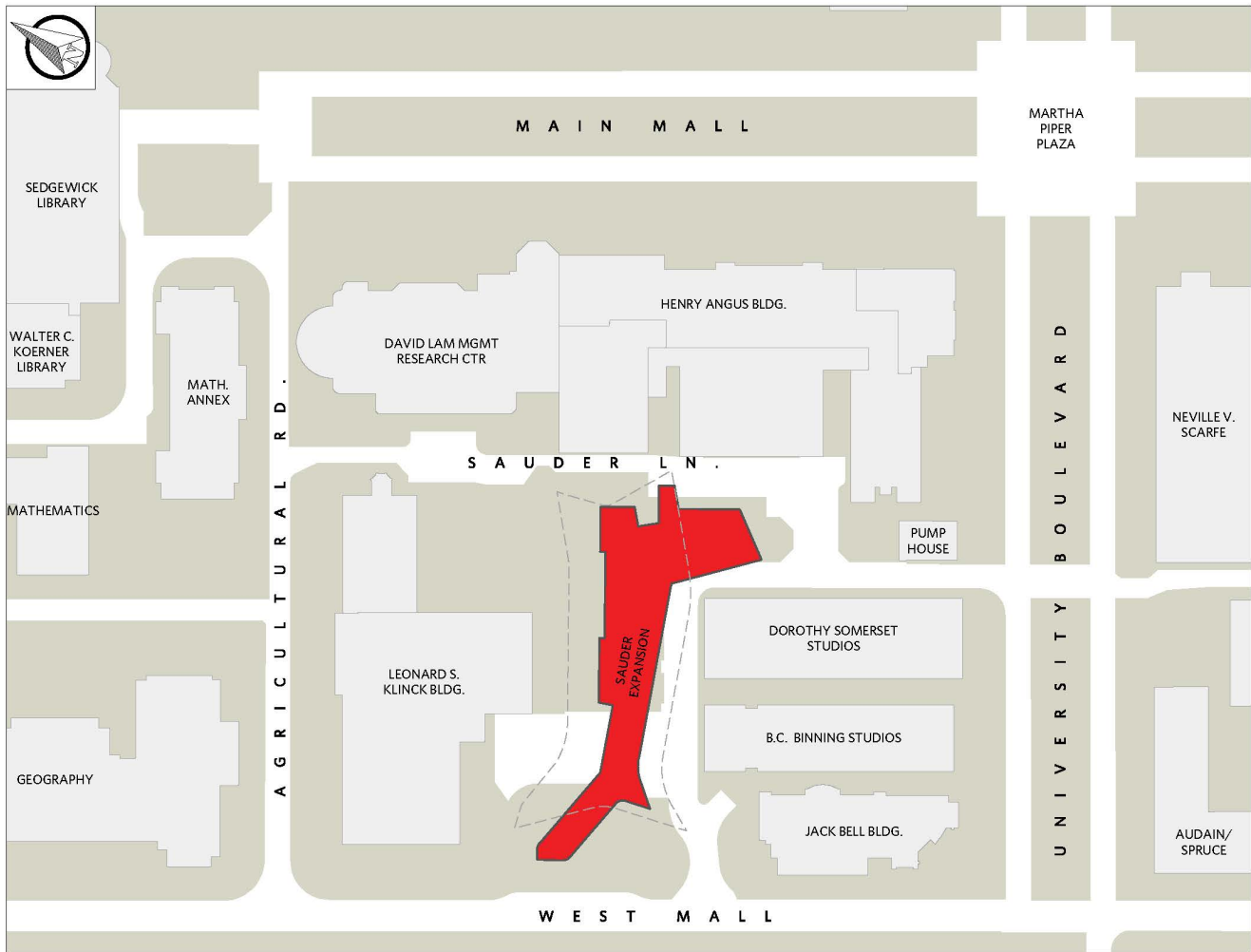
## **PRESENTATIONS**

1. UBC Sauder School of Business Power House Expansion – Board 2

## **SUPPLEMENTAL MATERIALS (optional reading for Governors)**

1. Schematic Design Renderings

Appendix 1 – Context Location Map



## Appendix 2 – Functional Program

Component	Net Area (square metres)	Net Area (square feet)
<b>RHL Graduate School Administration (offices &amp; support space)</b>	574	
<b>RHL Graduate Programs Learning spaces</b>		
Classrooms	2,067	
Graduate Student Zone (lounge, study space, project rooms)	1,092	
Teaching Labs	255	
<b>Innovation spaces<sup>1</sup></b>	1,743	
<b>Common space (informal learning space)</b>	293	
<b>Building services and support</b>	1,447	
Subtotal Sauder Net Area	7,471	80,416
Gross-up @ 1.71 x nsm	5,288	
<b>TOTAL Building Gross Area</b>	<b>12,758</b>	<b>137,332</b>

<sup>1</sup>Innovation spaces include a Responsible Business Centre, Indigenous Business Centre, Experiential Learning in Finance space, Climate Lab, Creative Destruction Lab and an Innovation and Entrepreneurship Centre. All innovation spaces are subject to change.

### Appendix 3 – Preliminary Capital and Operating 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 C estimate with an accuracy of +/-15%.

Project Capital Cost Breakdown	Costs \$
<b>Construction Costs</b>	
Construction	96,000,000
Public Realm – Plaza	1,000,000
Public realm – Pedestrian Spines	1,000,000
Site Servicing <sup>1</sup>	2,000,000
Pump House Demolition <sup>2</sup>	1,000,000
Contingency	5,000,000
<b>Total Construction</b>	<b>106,000,000</b>
<b>Cash Allowances</b>	
FF+E	3,150,000
UBC IT <sup>3</sup>	1,500,000
UBC AV <sup>3</sup>	7,000,000
UBC Building Operations	250,000
Secure Access/Signage/Moving	650,000
<b>Total Cash Allowances</b>	<b>12,550,000</b>
<b>Soft Costs</b>	
Consultants	9,385,000
Preconstruction/Permits	2,120,000
<b>Total Soft Costs</b>	<b>11,505,000</b>
<b>Building Subtotal</b>	<b>130,055,000</b>
Project Management	3,250,000
GST	2,226,000
<b>Building Total</b>	<b>135,531,000</b>
Construction Period Financing	3,900,000
Escalation Contingency	6,360,000
Retained Risk	1,400,000
<b>PROJECT TOTAL</b>	<b>\$147,191,000</b>

<i>Project Area (Gross Square Feet)</i>	<i>137,332</i>
<i>Cost Per Square foot</i>	<i>\$1,072</i>

Contributions to Related Project <sup>4</sup>	5,700,000
<b>TOTAL PROJECT INCLUDING RELATED PROJECT CONTRIBUTIONS</b>	<b>\$152,891,000</b>

<sup>1</sup> Excludes service upgrades

<sup>2</sup> Costs for overlap of pump house demolition and excavation work

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

<sup>4</sup> Final costs to be confirmed when specific requirements finalized (Fire Hall, Faculty of Arts displacement, Child Care)



### Preliminary Operating Budget

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 operating and maintenance (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.

Sauder School of Business Expansion	\$/gsf	Sauder
Total Gross Area (sf)		137,332
<b>OPERATING COSTS<sup>1</sup></b>		
Annual Operations + Maintenance	\$6.37	\$874,802
Utilities	\$2.23	\$306,249
<b>Total O+M Cost</b>	<b>\$8.60</b>	<b>\$1,181,051</b>
<b>LIFECYCLE CAPITAL COSTS<sup>2</sup></b>		
Cyclical Maintenance	\$3.51	\$482,034
Modernization / Upgrade	\$0.93	\$127,718
<b>Total Capital Renewal Cost</b>	<b>\$4.44</b>	<b>\$609,752</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).



# **UBC Sauder School of Business Power House Expansion Board 2**

September 13, 2023

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



# Introduction and summary



UBC Sauder Expansion project will:

- Accommodate the projected enrolment increase (30% expected) of current professional graduate programs;
- Provide additional space to accommodate for the planned growth;
- Target LEED Gold certification & 10% reduction in embodied carbon;

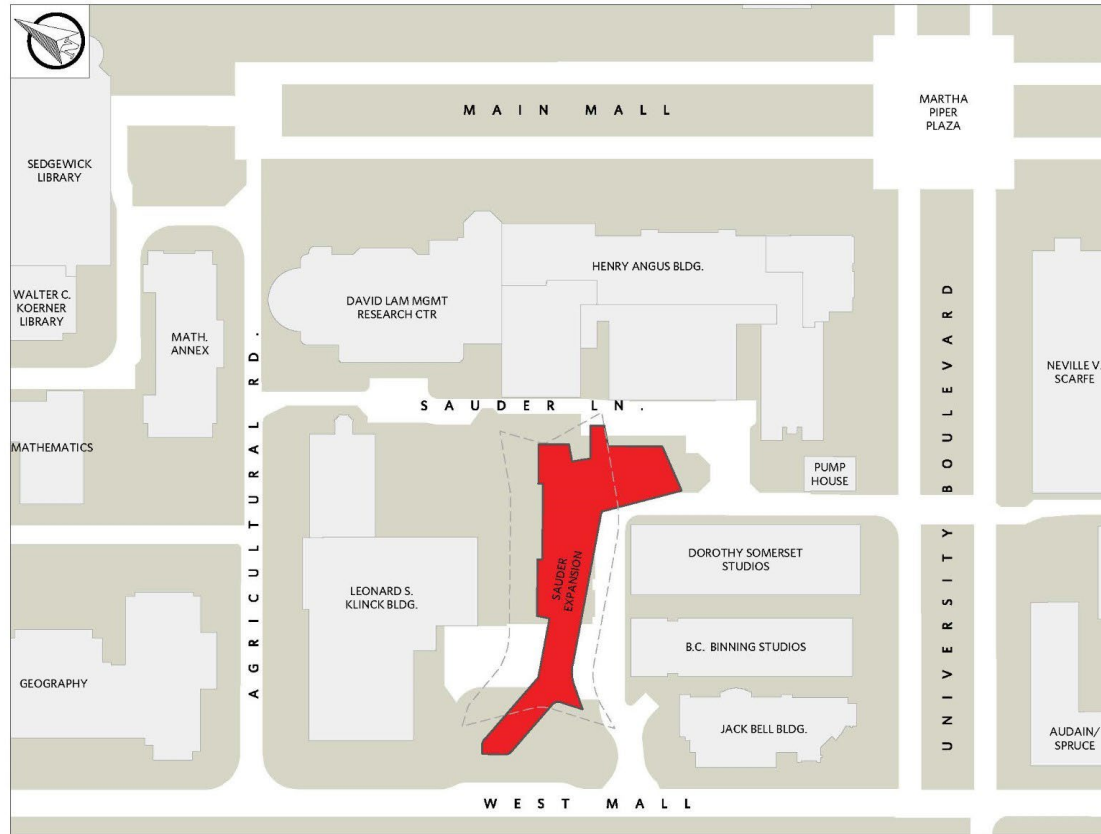
# Additional details



Total project cost estimated at \$152.9 million:

- The expansion capital budget increased from \$120,000,000 at Board 1 to \$147,191,000 due to continuing construction market escalation and an expansion of project scope to expand the building presence on West Mall;
- Includes the Project's funding commitment of an additional \$5.7 million to fulfill its obligations to providing childcare (\$500,000) through the project and relocating the Fire Hall (\$5,200,000);
- Funding sources are from donor fundraising, Sauder operating reserves, an internal loan and Academic Capital Fund.

# Additional details – Site Plan



# Additional details – Schematic Rendering



Aerial view from the southwest

# Discussion and decision points



Board 2 approval of Sauder Expansion project:

1. Approval of the revised capital budget and operating budgets;
1. Authorization to issue the development permit;
2. Authorization to proceed to working drawings and tender; and
3. Approval of funding release of \$5,500,000 for the next stage of development

Supplemental Materials 1 – Schematic Design Renderings



Aerial view from the south-west



Street view across West Mall facing east





Street view across University Boulevard facing north-west



Street view across Main Mall and University Boulevard facing west