



SUBJECT UBC Farm Centre, UBC Vancouver – Board 1

SUBMITTED TO Property Committee

MEETING DATE March 12, 2024

SESSION CLASSIFICATION Recommended session criteria from Board Meetings Policy:
OPEN

REQUEST APPROVAL REQUESTED

IT IS HEREBY RESOLVED that the Property Committee, in accordance with authority delegated by the Board of Governors, grants BOARD 1 approval for the UBC Farm Centre project at UBC Vancouver as follows:

- i.* approval of project in principle;
- ii.* approval of preliminary program and schedule;
- iii.* approval of location;
- iv.* approval of preliminary capital budget of \$6,929,000 and operating costs as set out in the Appendices to the briefing;
- v.* approval of funding sources;
- vi.* authorization to proceed to schematic design; and,
- vii.* approval of funding release of \$400,000 for the next stage of project development.

LEAD EXECUTIVE Frank Laezza, Vice-President Finance & Operations

SUPPORTED BY Gage Averill, Provost and Vice-President Academic, UBC Vancouver
Rickey Yada, Dean, Faculty of Land and Food Systems (LFS)
Sean Smukler, Academic Director, Centre for Sustainable Food Systems, LFS
Bhushan Gopaluni, Vice-Provost & Associate Vice-President, Faculty Planning
John Metras, Associate Vice-President Facilities
Denise Brown, Director, Capital Planning & Development
Michael White, Associate Vice-President Campus & Community Planning
Yale Loh, Treasurer
Aubrey Kelly, President & CEO, UBC Properties Trust

PRIOR SUBMISSIONS

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

EXECUTIVE SUMMARY

In accordance with the [Capital Projects Policy](#), this Board 1 approval request for the UBC Farm Centre 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 Farm Centre project is \$6,929,000.

Background and Rationale

Global land and food systems are in a moment of great opportunity given the current global challenges of food insecurity, climate breakdown, biodiversity loss and inequity, and the need for truth and reconciliation with Indigenous communities. In searching for answers about how to emerge from these complex challenges, the importance of the research, learning and work conducted at the UBC Farm through the Centre for Sustainable Food Systems (CSFS) has become increasingly critical.

The CSFS is uniquely positioned to bring together students, faculty, and staff from across a globally renowned University and connect them to networks of farmers, policymakers, and local and Indigenous communities to develop solutions grounded by our connection to the land at the UBC Farm. Unfortunately, the current infrastructure on-site is very limited and is constraining the CSFS’s ability to deliver current and future programming. A new facility is critical to achieving the goals outlined in the new 2024-2029 CSFS strategic plan and is identified as a priority in UBC’s Major Capital Plan.

Project Description

The Faculty of Land and Food Systems (LFS) proposes to replace and consolidate the existing overcrowded and inadequate facilities with new, expanded infrastructure and support facilities that will meet the learning and research needs of projected students, faculty, staff, Indigenous community members and other visitors to the site. This will be delivered over several phases with the first phase being a new Farm Centre.

The proposed new Farm Centre will enable CSFS and UBC to expand programming to present a globally unique research and teaching environment aimed at improving the sustainability and resiliency of regional, national, and global food systems. The facility will help establish the site as a new model for an agricultural academic facility by providing spaces that will expand the opportunities for researchers to discover, test and monitor social, economic, and environmental interventions within a living agroecosystem. Research opportunities will span the entire “seed-to-shelf-to-plate-to-fork” continuum while integrating a multitude of disciplines and sectors to provide global leadership for transformation leading to resilient and secure future food systems. The new Farm Centre will help to connect leading-edge research and innovative practices to programs that engage learners, be they students, farmers, or the neighbourhood community and will contribute significantly to UBC’s reputation as a world-leading university in the field of Sustainability and Environment.

The Faculty of Land and Food Systems Farm Centre project is strongly aligned with all four core areas of *Shaping the Next Century 2018-2028*, [UBC Strategic Plan, 2018-2028](#), and in particular:

- People and Places – Strategy 1: Great People, Strategy 2: Inspiring Spaces and Strategy 3: Thriving Communities
- Research Excellence – Strategy 7: Research Support, Strategy 8: Student Research and Strategy 10: Research Culture
- Transformative Learning – Strategy 13: Practical Learning
- Local and Global Engagement – Strategy 16: Public Relevance and Strategy 17: Indigenous Engagement

Preliminary Program

A preliminary functional program was developed by UBC Facilities in close consultation with the CSFS, UBC Farm and their various stakeholders. The project proposes a 586 gross square metre (6,310 gross square foot) new Farm Centre building to support the CSFS’s and the Farm’s core programs and operations.

Component	Net Area (square metres)	Net Area (square feet)
Multi-Use Space, Lobby	178	
Teaching & Community Kitchen	40	
Shared Kitchen Resources	33	
Elders’ Space; Quiet Room	30	
Main Office & Support	85	
Total Building Net Area	366	3,940
Gross-up incl WC’s, M&E, circulation, walls	220	2,370
TOTAL Building Gross Area	586	6,310

Site

The proposed Farm Centre project will be located at the South Campus UBC Farm site (see *Appendix 1: Context Location Map*). The New Building Site Selection Committee approved the proposed site in June 2012. The proposed site for the new facility is on a brownfield fill site adjacent to the current Harvest Hut location (Plant Science Field House Building #670), and near the main gate to UBC Farm. This site does not directly affect any neighbouring uses and will allow for future interactions and connections (e.g., district energy system).

Campus and Community Planning (C+CP) has confirmed that the proposed development is not inconsistent with the UBC Land Use Plan or the Vancouver Campus Plan.

Preliminary Capital and Operating Budgets

UBC Properties Trust (UBCPT) has estimated the capital budget for the project at \$6,929,000. The facility’s equipment will be procured and approved separately in accordance with the Capital Purchase provisions of UBC Policy FM11 (Capital Projects, Capital Purchases & Internal Loans) and the Signing Resolutions.

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 Faculty of Land and Food Systems. Note that the current O&M rate is under review and may increase prior to final Board 3 approval (current market costs are approximately \$13/gsf). Lifecycle capital costs will be funded by the UBC operating budget and Provincial government through the Routine Capital Program. O&M Rates are subject to further increases throughout the life of the building based on escalation and market fluctuations.

The detailed breakdowns of the preliminary capital budget and O&M costs are shown in *Appendix 2: Preliminary Capital Budget and Operating Costs*.

Funding Sources

The capital budget for the project is estimated at \$6.929 million, to be funded as follows:

Funding Source	Amount (\$)
Donor Fundraising ¹	4,033,355
Faculty of Land and Food Systems Reserves	503,645
Academic Capital Fund	2,392,000
Total	\$6,929,000

¹ Donor Fundraising is backstopped by the Faculty of Land and Food Systems Reserves.

Donor fundraising has successfully secured \$2.3 million in donations. LFS will bridge any funding gaps through Faculty reserves pending the surety of remaining donations.

The Academic Capital Fund will be the final funding source leveraged to minimize construction period financing costs. The Academic Capital Fund will allocate debt service payments related to an internal loan of \$2,392,000 payable over 30 years at an interest rate of 5.75%. The annual debt service payment will be approximately \$165,000.

Sustainability Targets

UBC does not require new buildings that are less than 1,000 square metres in size to pursue LEED certification; however, the overall design will align with LEED best practices. The project team will develop, and work towards, defined energy and carbon performance targets as well as meaningful sustainability goals that are relevant for the project type.

Risks

- Current market conditions remain volatile due to labour shortages and construction material / supply chain cost escalations. A 10% escalation contingency is included in the preliminary project budget to address this risk; however, if the project is delayed or market escalation remains high, actual costs could exceed the contingency. Mitigating strategies for this risk include building shell space for infrastructure-heavy spaces and further reducing project scope.
- The project proposes to use existing service connections, however sanitary sewer upgrades may be required to service this and other future projects at the UBC Farm. Electrical and natural gas services will use existing services from the UNA side. A placeholder is included in the budget for site servicing and will be confirmed as design progresses.
- As with all donor pledged gifts, there is a slight risk that part of a gift will be given on a delayed timeline or not realized.

Risks of not Proceeding

- The Farm Centre construction will be primarily funded by donors. If construction is not undertaken in a timely manner, there may be a reputational risk.
- Continued inability to accommodate additional requests for research and teaching engagement at the Farm due to lack of facilities.

Preliminary Schedule

Since the project’s conception, receiving initial New Building Site Selection Committee approval in June 2012, the Farm Centre project has been refined and received endorsement in November 2023 by PPAC. The following preliminary schedule has been provided by UBC Properties Trust:

Milestone	Target Date
Executive 1	July 2011
New Building Site Selection Committee	June 2012
Executive 2	July 2012
PPAC ¹	July 2012
Executive 2 (revised)	October 2016
Executive 3	April 2018
PPAC (revised)	November 2023
Executive 3 (revised)	January 2024
Board 1	March 2024
Board 2	December 2024
Board 3	December 2025
Construction Start	January 2026
Occupancy	May 2027
Board 4	June 2029

¹ Property & Planning Advisory Committee

APPENDICES

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

PRESENTATIONS

1. UBC Farm Centre Board 1

Appendix 1 – Context Location Map



Appendix 2 – Preliminary Capital Budget and Operation Costs

Preliminary Capital Budget

UBC Properties Trust (UBCPT) has provided the following capital cost estimate update for the Faculty of Land and Food Systems (LFS) Farm Centre project. This is a class D estimate with an accuracy of +/-30%.

Project Capital Cost Breakdown	\$ Costs
Construction Costs	
Construction ¹	3,477,000
Site Servicing ²	500,000
Public Realm ²	200,000
Construction Contingency	350,000
Construction Costs Subtotal	4,527,000
Cash Allowances	
FF+E ³	130,000
UBC IT/AV ⁴	150,000
Building Operations Support	-
Secure Access/Signage/Moving ⁴	50,000
Cash Allowances Subtotal	330,000
Soft Costs	
Consultants	589,000
Project Management	340,000
Inspection & Testing	-
Permits	140,000
Insurance/Legal	-
Soft Costs Subtotal	1,069,000
Building Total	
GST & PST	90,000
Construction Period Financing ⁵	81,000
Retained Risk Fee	67,000
Escalation Contingency	765,000
Project Total	\$6,929,000

<i>Gross Building Area (Square Feet)</i>	<i>6,310</i>
<i>Cost per Square foot (\$/SF)</i>	<i>\$1,098</i>

¹ Green roof and other bespoke or unconventional sustainable features are not included in the preliminary estimate.

² Site Servicing and Public Realm placeholder to be confirmed by EWS and C+CP.

³ UBC IT, AV and Secure Access to be confirmed by UBC.

⁴ Any specialty kitchen and lab equipment are not included.

⁵ Fluctuations in interest rates may affect financing costs.

Preliminary Operations and Maintenance Cost

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 Faculty of Land and Food Systems (LFS). Note that the current O&M rate is under review and may increase prior to final Board 3 approval (current market costs are approximately \$13/gsf). O&M Rates are subject to further increases throughout the life of the building based on escalation and market fluctuations. Lifecycle capital costs will be funded by the UBC operating budget and Provincial government through the Routine Capital Program.

UBC Farm Centre	\$/gsf	LFS
Total Gross Area (sf)		6,310
OPERATION COSTS¹		
Annual Operations + Maintenance	\$6.37	\$ 40,195
Utilities	\$2.23	\$ 14,071
Total O+M Cost	\$8.60	\$ 54,266
LIFECYCLE CAPITAL COSTS²		
Cyclical Maintenance	\$3.51	\$ 22,148
Modernization / Upgrade	\$0.93	\$ 5,868
Total Capital Renewal Cost	\$4.44	\$ 28,016

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

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



UBC Farm Centre Board 1

March 12, 2024

John Metras
Associate Vice-President Facilities



Introduction and summary



Background:

- The Centre for Sustainable Food Systems (CSFS) connects UBC with farmers, policymakers and communities to find solutions for food insecurity, climate change, biodiversity loss and inequity.
- Faculty of Land and Food Systems (LFS) needs new, bigger facilities to support learning and research, starting with a new Farm Centre.
- The new space will benefit students, faculty, staff, Indigenous people and visitors and support CSFS and UBC's vision of creating a world-class research and teaching hub for sustainable and resilient food systems.

Introduction and summary



The new Farm Centre will:

- Showcase the latest innovations and best practices in agroecology, from seed production to food consumption and waste management.
- Enhance UBC's reputation as a global leader in sustainability and environment research and education.
- Engage diverse learners, from students to farmers to community members, in experiential and participatory education programs that link theory and practice.

Additional Details



- The 586 gross square metre (6,310 gross square foot) building will incorporate traditional sustainable elements such as rainwater capture.
- The building will be located close to the Farm entrance gate and away from quiet farm activities (e.g. Musqueam Garden).
- The structure will be built into a sloped section of the site to help mitigate temperature fluctuations, using passive cooling as much as possible, as well as using sustainable local building materials.

Additional Details



Total project cost is estimated at \$6.9 million:

- Funded by donor fundraising (58%), Academic Capital Fund (35%) and Land & Food Systems (LFS) Faculty reserves (7%).
- Donor fundraising has successfully secured \$2.3 million in donations.
- LFS will bridge any funding gaps through Faculty reserves pending the surety of remaining donations.

Additional details – Context & Site Plans



Proposed UBC Farm Centre – Context Plan



Proposed UBC Farm Centre – Site Plan



Discussion and decision points



Board 1 approval of UBC Farm Centre 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 \$6,929,000 & operating costs;
5. Approval of funding sources;
6. Authorization to proceed to schematic design; and
7. Approval of funding release of \$400,000 for the next stage of project development.