

SUBJECT	PONDEROSA COMMONS PHASE 1 BOARD 4 REPORT
MEETING DATE	SEPTEMBER 21, 2017

Forwarded to the Board of Governors on the Recommendation of the President

**APPROVED FOR
SUBMISSION**



Santa J. Ono, President and Vice-Chancellor

For Information

Report Date	August 21, 2017
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Presented By

- Louise Cowin, Vice-President Students
- Andrew Szeri, Provost and Vice-President Academic
- Andrew Simpson, Vice-President Finance & Operations
- Gage Averill, Dean, Faculty of Arts
- Andrew Parr, Managing Director, Student Housing & Hospitality Services
- John Metras, Managing Director, Infrastructure Development
- Michael White, Associate Vice-President Campus & Community Planning
- Peter Smailes, Treasurer
- Aubrey Kelly, President and CEO, UBC Properties Trust

EXECUTIVE SUMMARY

Ponderosa Commons, consisting of Phase 1 East & West and Phase 2, is the first of five planned mixed-use commons identified in the Vancouver Campus Plan. It has been programmed and designed to provide on-campus student housing to meet growing demand and create vibrant social and academic centres, bringing life to the core of campus 24 hours a day, 12 months of the year and connecting students who live on campus, commuter students, faculty and staff. This review focuses on Phase 1 East & West to be followed by a review of Phase 2 in Winter term 2017.

Finishing at \$87.214 million, \$441,000 below the approved budget of \$87.655 million, Ponderosa Phase 1 East and West includes 603 student residence beds, academic space for the Faculty of Arts, a collegium for commuter students, a restaurant, fitness facility, bicycle storage and end of trip facility, and informal learning spaces.

The facility has achieved LEED Gold certification, created a high quality student experience and brought vitality and social energy to the University Boulevard precinct in the campus core.

<i>If this item was previously presented to the Board, please provide a brief description of any major changes since that time.</i>	As part of the Board-approved project management process, Board 4 is the project close out report which is submitted following construction, occupancy and warranty period.
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INSTITUTIONAL STRATEGIC PRIORITIES SUPPORTED

- Learning
 Research
 Innovation
 Engagement
 (Internal / External)
 International
 or Operational

DESCRIPTION & RATIONALE

The Ponderosa Commons project received Board 1 approval February 2011 for both Phases 1 East & West and Phase 2. Board 3 approval for Phase 1 East & West was received in December 2011. All academic and community amenity space plus 434 residence beds in the Phase 1 West Tower were completed on schedule in September 2013 and the remaining 169 residence beds in Phase 1 East Tower were occupied in December 2013 and January 2014 – behind the proposed schedule of September 2013. This project finished \$441,000 below the approved budget of \$87.655 million.

Ponderosa Commons in total includes 1,158 student residence beds, academic space for Faculty of Arts and Faculty of Education, two collegia for commuter students, a café, fitness facility, bicycle storage and end of trip facility, and informal learning spaces. The originally proposed child care facility in Phase 2 was not built due to site-specific feasibility and cost constraints. A child care facility was instead added to the Orchard Commons project.

Program:

Phase 1 West	Phase 1 East	Phase 2
434 beds	169 beds	555 beds
Mercante Café	BFA/MFA studios	Harvest Deli
Fitness facility	Printmaking studio	Residence front desk & Amenities
Bike storage	Psychology offices	Education office + teaching space
End of trip facility	Art gallery	Collegium
Collegium		Informal learning space
Informal learning space		
Geofluvial lab		
Biogeography lab		

UBC Properties Trust managed the project. The architect was Kuwabara Payne McKenna & Blumberg in partnership with Hughes Condon Marler. The construction manager for Phase 1 was Ledcor.

BENEFITS
 Learning,
 Research,
 Financial,
 Sustainability &
 Reputational

Ponderosa Commons is the first of five proposed commons designed to increase on-campus student housing to meet growing demand and create vibrant social and academic centres, bringing life to the core of campus 24 hours a day, 12 months of the year and connecting students who live on campus, commuter students, faculty and staff.

RISKS Project is complete.
Financial,
Operational &
Reputational

COSTS Ponderosa Commons Phase 1 finished \$87.214 million, \$441,000 below the approved budget of \$87.655 million.
Capital &
Lifecycle
Operating

FINANCIAL Funding Sources, Impact on Liquidity	Summary by Funding Department	Phase 1	Phase 2	Total
	SHHS (Student Housing Financing Endowment Loan)	\$65,407	\$55,467	\$120,873
	SHHS (Working Capital Loan)	\$14,880	\$4,745	\$19,625
	Central	\$1,268	\$6,037	\$7,305
	Faculty of Arts	\$5,600	\$0	\$5,600
	Faculty of Education	\$0	\$11,082	\$11,082
	IIC	\$500	\$500	\$1,000
	Total	\$87,655	\$77,829	\$165,484

SCHEDULE All academic and community amenity space plus 434 residence beds in the Ponderosa Phase 1 West Tower were completed on schedule in September 2013 and the remaining 169 residence beds in Phase 1 East Tower were occupied in December 2013 and January 2014 – behind the proposed schedule of September 2013.
Implementation
Timeline

CONSULTATION A stakeholder meeting of occupants, operators and the project delivery team was held January 16, 2017 to review project constraints and lessons learned. Although there are two Ponderosa Commons phases, the meeting’s focus was Ponderosa Commons Phase 1 East & West and the lessons learned will inform future Commons and Public Realm projects. Phase 2 will have its own Board 4 meeting in December 2017. The following is a summary of the January 2017 discussion:
Relevant Units,
Internal &
External
Constituencies

Design

SHHS confirmed positive feedback on residence room configuration and food service outlet, Mercante. The residence unit spaces were reduced in size (to 237 SF) to produce density on a compact site. The units have proved to be very popular and the residence design guidelines have been revised. Academic occupants are pleased with their space. No Custodial Room with floor drains and sink was provided in Ponderosa Phase 1 West requiring ‘work-around’ in operating procedures.

Lesson: In this first multi-stakeholder project, SHHS took on greater costs than its partners. More accurate calculation of the value of shared space will be applied in subsequent projects.

Process

This project proved the value of a functional program. A thorough understanding of replacement space function and use is essential.

Lesson: A mixed use development requires a deep understanding of function and use and this will create opportunities for cost effective shared spaces.

Social Sustainability

This project successfully met the goals of Social Sustainability, Campus Vitality and Safety identified in the 2010 Vancouver Campus Plan and achieved LEED Gold certification. G McGeough, University Architect noted that converting the University Boulevard roadway to public space and adding green space and outdoor social amenities has made a significant contribution to a high quality student experience and social well-being.

The full 12-month use of the building meets the Plan's sustainability goals of a year-round use of the campus. A Parr, SHHS Managing Director confirms 100% summer occupancy in Phase 1 and wait lists for summer occupancy of residence units. Collateral benefits include more food outlets open longer hours and during summer and having higher sales. The area around Ponderosa is active and lively after hours and on weekends.

Lesson: Allow the students to live, learn and be social in hubs located as part of the campus core.

Operations

SHHS noted the success of the building envelope, a precast insulated concrete panel system prefabricated off site. This was a technical innovation and UBC's Ponderosa Commons was its first use in Western Canada. Building Operations agreed that it works well, is weather tight, was quick to assemble and will be low maintenance. The panels have a good R-value and a durable interior finish. SHHS confirmed that the costs were reasonable, the aesthetics pleasing and the 'just in time' delivery using available materials facilitated the construction process.

SHHS' housing program development is an iterative process with each project implementing lessons learned from the last. The next mixed-use residence at Orchard House used a similar precast panel system with more refinements.

Lesson: Refining a successful model will contribute to improved construction schedules, energy use, and long term maintenance targets.

Mixed uses with no legal division between different independent operational units creates complications for signage and wayfinding, and maintenance of building-wide systems such as fire alarms.

Lesson: Ownership, jurisdictional boundaries and responsibility must be worked out carefully between users in advance of operational start up.

Landscape Design

Building Operations was pleased with overall process, and the opportunities to offer feedback throughout the development process were better than typical. However, Building Operations notes that the design has various maintenance and Campus Plan

Design Guideline concerns which have resulted in negative outcomes in the physical design with long-term impacts on operational resources. Despite this, usership of the new outdoor spaces is high, meeting the desired outcome of enhanced vibrancy and campus animation.

Lesson: As Building Operations are the advocates for maintainability and stewardship, they must be involved in the pre-Development Permit working group design/planning process, recognizing the importance of finding balance between aesthetics, usability and maintainability. Identification of design and construction deficiencies during the development and construction processes must be addressed before formal handover.

Public Realm

As a jurisdictional boundary has not been established between Campus Core and SHHS, it is still unclear who is fiscally responsible for landscape maintenance.

Lesson: Jurisdictional boundaries for responsibility of public realm maintenance should be established early.

Schedule

To achieve timely delivery of much needed new student residence beds, functional planning for the project was undertaken on a compressed schedule. This worked for SHHS who had a clear understanding of residence needs but it created challenges for the academic partners who had less certainty regarding funding and could have used more time to fully consider program requirements. The site was also complicated and more planning and study could have been applied to program integration and operational issues such as hours and means of access for academic versus residential users and “back of house” material flow.

Lesson: Compression of schedule inhibits careful problem solving. Multi-stakeholder projects such as these are more complicated and require more front-end planning time to ensure completion and occupancy occurs as scheduled. Mixed-use commons projects are now given an extended timeline of 52 months from inception to completion. This allows time to thoroughly plan all operational and academic details, recognizing that academic planning typically takes longer. Mixed-use commons usually involve more than just a simple replacement of existing academic space but rather the creation of new expansion space. It is therefore important to ensure that:

- 1) New space will strategically meet academic needs in future (rather than simply replicating inadequate existing facilities), and
- 2) Academic facilities are conceived as an integral part of the mixed-use hub. In Ponderosa Phase 1, academic needs were met, but there was not enough time for a robust exploration of synergies among the three academic units and with SHHS. The longer timeline available for this synergistic planning in Ponderosa Commons Phase 2 and Orchard Commons resulted in better integration between the various uses and functions.

Integration

Fitting an efficient structural system through various vertical program spaces which include residential, classrooms, common areas and social amenities proved to be challenging. Floor plates did not match up and structure had to compensate to meet the design needs of all groups. This structural compensation added time and cost to the process.

Lesson: If it is possible to integrate program spaces horizontally, rather than vertically, it will result in a more efficient and cost effective facility.

Sustainability

Ponderosa was very successful on the social sustainability front, increasing vibrancy on campus and improving security. The project fulfilled its provincial mandate by becoming LEED Gold certified in 2017, achieving credits that support UBC’s environmental sustainability goals. The innovative building envelope has set an example for future buildings by combining precast sandwich panels and window wall technology for high-rise residential construction that is durable, promotes airtight construction and avoids thermal bridging. As the energy use is higher than modelled, it was recommended that EWS and SHHS partner on re-commissioning which will improve heat recovery and operations.

Child care

The child care facility planned for Phase 2 could not be effectively delivered due to cost, design and site restrictions. The decision was to eliminate the child care centre from Ponderosa Commons and incorporate it at Orchard Commons.

Elevators

Recurring problems have been experienced with elevator operations in Ponderosa Phase 1. There appear to be systemic issues in the elevator industry in general as UBC has experienced issues with all suppliers in the market.

Lesson: UBC Procurement is working to add an incentive to elevator contracts by including the maintenance contract in the tender.

Previous Report Date	December 1, 2011 Board of Governors Meeting
Decision	Approved Ponderosa Commons Board 3 Approval (Phase 1)
Action / Follow Up	Approval granted subject to tenders for construction components being received at or below budget.

Previous Report Date	September 27, 2011 Board of Governors Meeting
Decision	Approved: Phase 1 Board 2, \$2,000,000 funding Release
Action / Follow Up	Summer occupancy risk raised. Administration will continue to work on summer use of campus initiative.

Previous Report Date	September 20, 2011 Board of Governors Meeting
Decision	Approved: Phase 1 Board 2, \$2,000,000 funding Release
Action / Follow Up	While some concerns were expressed regarding cost, members were supportive of overall program & design.
Previous Report Date	June 9, 2011 Property & Planning Committee
Decision	Approved: Phase 1 Update and \$1,250,000 Interim Funding Release
Action / Follow Up	A special Board of Governors meeting may be required in early 2012 for Board 3 approval.
Previous Report Date	June 2, 2011 Property & Planning Committee
Decision	Approval recommended: Phase 1 Update and \$1,250,000 Interim Funding Release
Action / Follow Up	
Previous Report Date	June 9, 2011 Property & Planning Committee
Decision	Approved: Phase 1 Update and \$1,250,000 Interim Funding Release
Action / Follow Up	Members were concerned about tight schedule and potential impact of that pressure on decision-making during construction. Future presentations to indicate more clearly the flow of funds from various funding sources (including faculties and IIC contributions to the public realm) to specific aspects of the project.
Previous Report Date	February 7, 2011 Board of Governors Meeting
Decision	Approved: Phase 1 and Phase – Board 1. \$750,000 Funding Release
Action / Follow Up	N/A
Previous Report Date	February 2, 2011 JOINT Finance Committee and Property & Planning Committee
Decision	Approval Recommended: Phase 1 and Phase – Board 1. \$750,000 Funding Release
Action / Follow Up	Concerned about tracking costs for the non-housing aspects of the project, potential funding gaps, the name/use of the word ‘hub’, the mixed uses suggested, and the overall design of the building. All expenses will be appropriately allocated to the responsible unit through formal loan agreements, to be negotiated within existing guiding principles.

Attachment 1 – Photographs of Ponderosa Phase 1

Ponderosa Commons Phase 1 West – Collegium and Residence Tower



Ponderosa Commons Phase 1 East – Audain Arts Centre



Ponderosa Commons Phase 1 East – Audain Arts Centre – Fine Arts Studios



Ponderosa Commons Phase 1 Residences - Studio



Kitchen at Ponderosa Commons



Studio at Ponderosa Commons



Bathroom at Ponderosa Commons

