

# Major Capital Projects Development Process

(Projects \$5 - \$10 Million)



PROCESS STEP	DESCRIPTION	ACTION/CONSULTATION
<b>PRELIMINARY PLANNING / NEEDS IDENTIFICATION</b>	<ul style="list-style-type: none"> <li>Needs identification</li> <li>Options assessment</li> <li>Estimate of magnitude of building or renovation</li> <li>Set approximate timelines</li> <li>Identify preliminary academic, provincial and campus contextual issues</li> <li>Early potential funding discussions to establish viability of vision</li> </ul>	<ul style="list-style-type: none"> <li>Project Client</li> <li>Provost's/Sponsoring VP's Office</li> <li>Infrastructure Development</li> <li>UBCO: Okanagan Leadership Council</li> </ul>
<b>SPACE ALLOCATION + PROJECT COMPLIANCE</b>	<ul style="list-style-type: none"> <li>Review current and proposed space inventory allocation versus BC University Space Standards.</li> <li>Confirm project alignment with UBC Strategic Plan, Academic Plan, Campus Plan, Capital Priorities and Provincial Priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure Development</li> <li>Provost's Office</li> <li>C&amp;CP/CP*</li> </ul>
<b>EXECUTIVE 1 APPROVAL</b>	<b>Concept and rationale, and funding release for next stage.</b>	<b>Presented by Project Initiator and Infrastructure Development</b>
<b>CAMPUS INPUT</b>	<ul style="list-style-type: none"> <li>Consultation to develop project parameters and impacts, funding, etc. with Campus &amp; Community Planning/Campus Planning*, Treasury, UBC Properties Trust or Project Services (Infrastructure Development), BO &amp; EWS/CORM** for major renovations, and other campus constituent groups as required.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure Development</li> <li>Project Client</li> </ul>
<b>SITE ASSESSMENT (for new building or addition)</b>	<ul style="list-style-type: none"> <li>Site review and recommendation by New Building Site Selection Committee, as per Campus Plan requirements.</li> <li>Review to include land use, utilities, transportation, sustainability, environmental assessment and neighbour impact.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure Development</li> <li>C&amp;CP/CP</li> <li>New Building Site Selection Committee</li> <li>UBCV: PPAC/SABNC</li> </ul>
<b>SUSTAINABILITY OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>Identify project sustainability objectives and opportunities, including Living Lab opportunities. Undertaken with representatives from C&amp;CP/CP (Sustainability), Building Operations, Infrastructure Development, VP Research &amp; Innovation, UBCPT.</li> </ul>	<ul style="list-style-type: none"> <li>C&amp;CP/CP</li> <li>Infrastructure Development</li> </ul>
<b>SPACE LIST / FUNCTIONAL PROGRAM / TEST FIT</b>	<ul style="list-style-type: none"> <li>Assign UBC Facilities Planning planner and, when applicable, retain external planning/programming consultant with UBC Facilities Planning oversight.</li> <li>Prepare space list and/or functional program and test-fits as required in consultation with Project Client.</li> <li>It may be necessary to engage architecture and engineering consultants to undertake a feasibility study at this stage to confirm project scope/cost.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure Development</li> <li>Project Client</li> </ul>
<b>INITIAL COST ESTIMATE</b>	<ul style="list-style-type: none"> <li>ID will assign Project Services (ID) or UBCPT to prepare initial capital cost estimate based on program.</li> <li>Adjust program as required to address budget constraints in consultation with project client.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure Development</li> <li>UBCPT / Project Services (ID)</li> </ul>
<b>FUNDING &amp; FINANCING PLAN</b>	<ul style="list-style-type: none"> <li>Develop a viable funding and financing plan. Consultation on the plan may include representatives from the Provost's Office, Infrastructure Development, External Relations, Development and Treasury.</li> </ul>	<ul style="list-style-type: none"> <li>Project Client</li> <li>Provost's Office</li> <li>Infrastructure Development</li> </ul>
<b>EXECUTIVE 2 APPROVAL</b>	<b>Site, preliminary program, cost estimate, funding sources, financing requirements, planned schedule, space allocation, funding release for next stage.</b>	<b>Presented by Project Initiator and Infrastructure Development</b>
<b>ASSIGN PROJECT MANAGER</b>	<ul style="list-style-type: none"> <li>Assign project manager: Typically UBC Project Services for renewal/reno projects and UBCPT for new building projects, but there are exceptions.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure Development</li> <li>Project Client</li> </ul>

<b>PROJECT STEERING COMMITTEE</b>	<ul style="list-style-type: none"> <li>Formation of Project Steering Committee composed of senior reps from key project stakeholders e.g. Project Client, Provost's Office or applicable VP's Office, C&amp;CP/CP, Treasury. Cttee makes decisions as required on issues affecting scope, budget, schedule, funding &amp; financing that are brought forward by the Project Manager.</li> <li>Infrastructure Development chairs this Committee.</li> <li>Project Manager prepares monthly project status report.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure Development</li> <li>UBCPT / Project Services (ID)</li> </ul>
<b>PROJECT WORKING COMMITTEE</b>	<ul style="list-style-type: none"> <li>Formation of a Project Working Committee composed of reps of the key groups involved in the design, construction and operation of the development, e.g. multiple Project Client reps, Facilities Planning, Learning Space Planner, Building Operations &amp; EWS/CORM, UBCIT/AV, C&amp;CP/CP, and others as required. This Committee guides design of the project.</li> <li>The Project Manager chairs this Committee which is also attended by the architect and other consultants as required.</li> </ul>	<ul style="list-style-type: none"> <li>UBCPT / Project Services (ID)</li> <li>Project Client Representatives</li> <li>Infrastructure Development</li> </ul>
<b>URBAN DESIGN CONTEXT + SITE SERVICING PLAN (for new building)</b>	<ul style="list-style-type: none"> <li>Consult with C&amp;CP/CP to review public realm integration.</li> <li>Consult with C&amp;CP/CP, Building Operations (Utilities), Energy &amp; Water Services (EWS)/CORM and UBCPT to prepare concept utilities servicing plan.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure Development</li> <li>C&amp;CP/CP</li> <li>New Building Site Selection Committee</li> </ul>
<b>BUDGET &amp; SCHEDULE</b>	<ul style="list-style-type: none"> <li>Preliminary capital budget and project schedule prepared by Project Services (ID) or UBCPT based on program.</li> <li>Consult with Building Operations on life-cycle operating and capital renewal costs.</li> </ul>	<ul style="list-style-type: none"> <li>UBCPT / Project Services (ID)</li> <li>Infrastructure Development</li> </ul>
<b>FUNDING &amp; FINANCING PLAN</b>	<ul style="list-style-type: none"> <li>Confirm funding plan.</li> <li>Confirm financing terms and availability if required.</li> </ul>	<ul style="list-style-type: none"> <li>Project Client</li> <li>Development Office</li> <li>Treasury</li> <li>Infrastructure Development</li> </ul>
<b>RISK REGISTER</b>	<ul style="list-style-type: none"> <li>Identify project risks and prepare project risk register with input from Project Steering Committee.</li> <li>Update at the appropriate times to include input from design and construction teams.</li> </ul>	<ul style="list-style-type: none"> <li>UBCPT / Project Services (ID)</li> <li>Infrastructure Development</li> </ul>
<b>ARCHITECT SELECTION</b>	<ul style="list-style-type: none"> <li>Implement architect selection process in accordance with UBC Policy FM11 Capital Projects, Capital Purchases and Internal Loans.</li> </ul>	<ul style="list-style-type: none"> <li>UBCPT / Project Services (ID)</li> <li>Infrastructure Development</li> <li>Project Client</li> </ul>
<b>SCHEMATIC DESIGN</b>	<ul style="list-style-type: none"> <li>Select project architect and engage other design consultants and construction manager as required.</li> <li>Schematic design with input from Project Working Committee and in accordance with the functional program, UBC Campus Design Guidelines, UBC Technical Guidelines, UBC and project-specific sustainability objectives, budget and schedule.</li> <li>Schematic design reviews by Campus operational groups; costing review.</li> </ul>	<ul style="list-style-type: none"> <li>UBCPT / Project Services (ID)</li> </ul>
<b>DESIGN DEVELOPMENT</b>	<ul style="list-style-type: none"> <li>Continuation of design and program refinement in accordance with the project goals.</li> <li>Design development reviews by Campus operational groups.</li> <li>Design development costing review.</li> <li>Develop potential value engineering strategies with Project Working Committee.</li> </ul>	<ul style="list-style-type: none"> <li>UBCPT / Project Services (ID)</li> </ul>
<b>DEVELOPMENT PERMIT PROCESS (for new building or project that changes building's exterior appearance, public realm, or land use)</b>	<ul style="list-style-type: none"> <li>Present to Development Review Committee and Advisory Urban Design Panel.</li> <li>Hold Public Open House.</li> <li>C&amp;CP/CP review for compliance with Land Use Plan, Campus Plan and Design Guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>UBCPT / Project Services (ID)</li> <li>C&amp;CP/CP</li> </ul>
<b>WORKING DRAWINGS &amp; CONSTRUCTION DOCUMENTS</b>	<ul style="list-style-type: none"> <li>Prepared in accordance with UBC Technical Guidelines and with continued input and review by Project Working Committee and campus stakeholders (Building Operations, Sustainability Office, UBC IT/AV, EWS/CORM, Parking &amp; Access, Safety &amp; Risk Services, etc.) and the Construction Manager if applicable.</li> </ul>	<ul style="list-style-type: none"> <li>UBCPT / Project Services (ID)</li> </ul>

<b>TENDER PROCESS</b>	<ul style="list-style-type: none"> <li>• Pre-qualify bidders if applicable; Issue tenders; Receive and evaluate tenders.</li> <li>• If required, implement value engineering strategies with Working Committee and operational stakeholders agreement.</li> <li>• Prepare award recommendation.</li> </ul>	<ul style="list-style-type: none"> <li>• UBCPT / Project Services (ID)</li> </ul>
<b>BUILDING PERMIT</b>	<ul style="list-style-type: none"> <li>• Coordinate submission of drawings and Letters of Assurance for Building Permit.</li> </ul>	<ul style="list-style-type: none"> <li>• UBCPT / Project Services (ID)</li> </ul>
<b>EXECUTIVE 3 APPROVAL</b>	<b>Final program, capital and operating budgets, funding sources, financing (if required), schedule, urban design context (if applicable), funding release.</b>	<b>Presented by Project Initiator and Infrastructure Development</b>
<b>CONSTRUCTION</b>	<ul style="list-style-type: none"> <li>• Award contracts, obtain building permit and undertake construction.</li> <li>• Prepare on-going status updates and cashflow reports for the Project Steering Committee.</li> <li>• Manage change order requests.</li> <li>• Communicate and evaluate any proposed changes to Project Working Committee and operational stakeholders.</li> <li>• Coordinate with Building Operations and facility manager as required.</li> <li>• Coordinate regulatory and quality assurance inspections.</li> </ul>	<ul style="list-style-type: none"> <li>• UBCPT / Project Services (ID)</li> </ul>
<b>SUBSTANTIAL COMPLETION</b>	<ul style="list-style-type: none"> <li>• Coordinate final regulatory and deficiency inspections.</li> <li>• Obtain Letters of Assurance.</li> <li>• Coordinate with Building Operations transition team and initiate handover.</li> </ul>	<ul style="list-style-type: none"> <li>• UBCPT / Project Services (ID)</li> </ul>
<b>POST CONSTRUCTION</b>	<ul style="list-style-type: none"> <li>• Demonstrate systems operation.</li> <li>• Obtain necessary operating permits and occupancy permit.</li> <li>• Deliver records drawings and maintenance manuals.</li> <li>• Address queries or complaints from building users.</li> <li>• Complete operational handover to Building Operations.</li> </ul>	<ul style="list-style-type: none"> <li>• UBCPT / Project Services (ID)</li> </ul>
<b>OCCUPANCY</b>	<ul style="list-style-type: none"> <li>• Coordinate user move-in.</li> <li>• Install specialty equipment.</li> <li>• Clear outstanding deficiencies and warranty items.</li> <li>• Begin closure of capital account.</li> <li>• Prepare project completion report.</li> </ul>	<ul style="list-style-type: none"> <li>• UBCPT / Project Services (ID)</li> </ul>
<b>POST OCCUPANCY EVALUATION</b>	<ul style="list-style-type: none"> <li>• Consolidate lessons learned regarding project design, development process, cost, operating costs, material durability, compliance with sustainability / energy targets .</li> <li>• Liens, litigation if necessary.</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure Development</li> </ul>

C&CP/CP: Campus & Community Planning at UBC Vancouver / Campus Planning at UBC Okanagan

BO&EWS/CORM: Building Operations & Energy & Water Services at UBC Vancouver / Campus Operations & Risk Management at UBC Okanagan

ID: Infrastructure Development

UBCPT: UBC Properties Trust

PPAC/SABNC: Property & Planning Advisory Committee/ Senate Academic Building Needs Committee