university of british columbia okanagan

master plan

2005.09.29

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MASTER PLAN

EXECUTIVE SUMMARY

The Master Plan for the University of British Columbia Okanagan takes the site that previously served as the north Kelowna campus of Okanagan University College and plans for its expansion to triple the student population by 2010. The Master Plan is grounded in the principles and strategies of the University of British Columbia, especially TREK 2010 and TREK 2000, and in the aspirations and directions of the Academic Plan for UBC O, prepared with intensive consultation with the campus community.

The Master Plan was undertaken in four stages. In March 2005, Stage One started the process with a thorough inventory and assessment of the campus, research into its context, and initial discussions with many stakeholders. Stage One resulted in a set of Planning and Design Principles (pages 4 to 7) that summarized the understanding of the campus and the hopes for its future. Stage Two began when the draft Master Program was made available for use by RPG Resource Planning Group and produced, through workshops and review presentations, a conceptual framework of the Campus Plan that was then refined and elaborated through Stage 3, with changes triggered by the finalization of the Master Program and other input and initial cost estimates and phasing assumptions, and Stage 4, with three dimensional design explorations and design guidelines for each building and major landscapes, and further refinements of costs and development phases.

The Campus Plan defines eight precincts with distinct roles and characters (pages 12-13 for detailed descriptions):

The Core: The compact heart of the campus centred on University Way, the main entry route onto campus. A concentration of academic buildings rings the existing campus buildings on the south side of University Way with a variety of indoor and outdoor social spaces. North of University Way is the University Centre, the co-location of many facilities in the Master Program that generate campus-wide activity, both day and night, and invite use by the surrounding Okanagan communities.

The Commons: A large open lawn for the informal enjoyment of everyone on campus with its edges defined by academic and residence buildings except on the east side where panoramic views of the valley are featured.

Health, Wellness and Recreation: Indoor and outdoor recreation facilities are integrated with synergistic academic programs including Social Work, Nursing, Psychology, and Human Kinetics.

Okanagan Landscape: The precinct between the Core and Highway 97 slopes to the east and encompasses grassland, pine forest, and wetland landscapes that speak of the Okanagan's character. These landscapes provide a sense of place to the experience of arriving on the campus and a setting for gateway buildings and parking lots.

Hilltown: The hill is the site of existing and future residences and enjoys proximity to the core and spectacular views.

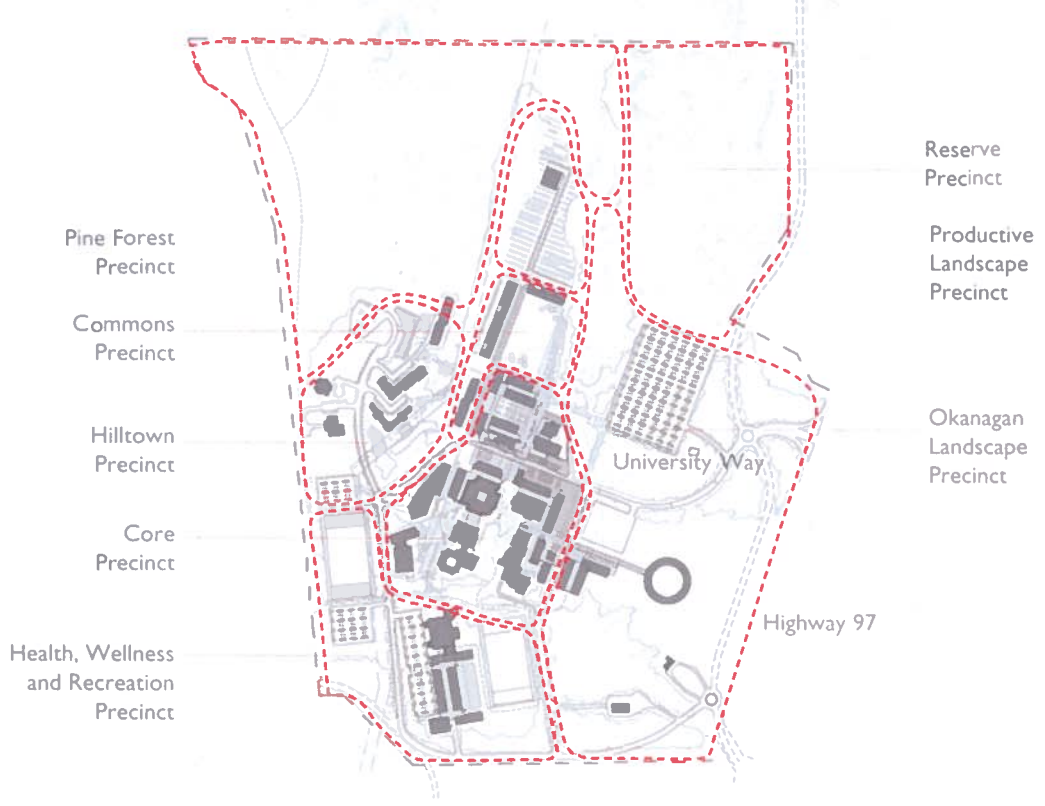
Productive Landscape: This precinct is on a disturbed site at the periphery of campus and provides land for research plots and greenhouses during the 2010 plan timeframe, structured to resemble the productive orchard and vineyard landscapes that are characteristic of the Okanagan.

Pine Forest: The existing pine forest is not needed for implementation of the Master Plan to 2010 but may be used for longer-term development.

Reserve: The lower bench along the highway is anticipated to develop post 2010 and to respond to the airport-related private Gateway development to its north with research, high tech, and commercial uses.

The Plan is realized in four phases, each with related landscape and infrastructure projects. Phase 1 is underway and includes two new dormitories and the Multipurpose Building. Phase 2 (2006-2008) delivers the Engineering and Management buildings, the School of Education, and the first stage of the University Centre. Phase 3 (2008-2009) sees the expansion of the Library, completion of the University Centre, and two 400 seat lecture theatres with associated academic space. Phase 4 (2009-2010) includes the Health, Wellness and Recreation complex and the Research Greenhouses. With donor support, the Drama Theatre, Scholar's Retreat, Gathering Place and other facilities will be implemented.

Please refer to page 14 for detailed descriptions of building locations and uses.



PRECINCTS OF THE MASTER PLAN

BACKGROUND + INTRODUCTION

The Master Plan addresses the transformation of the north campus of Okanagan College into the University of British Columbia Okanagan. This Plan reflects the final Master Space Program prepared by RPG Resource Planning Group Inc. and contains preliminary phasing scenarios.

Stage One of the Campus Master Plan commenced in March 2005 with a series of workshops and stakeholder meetings with the Steering Committee and Project Team. Stage One was concurrent with the preparation of the Space Master Program process and, therefore, focused on a review of background information, site inventory and assessment, and consultation with the campus community and other stakeholders. Several workshops were held with stakeholders and the City of Kelowna to consider opportunities for the Master Plan with respect to: integration with the surrounding community, transportation and transit access, potential sustainable best practices, and directions and expectations from the Academic Plan. A set of preliminary Planning and Design Principles were drafted to reflect the results of Stage One and for use in consultation during Stage Two.

Stage Two was initiated when the draft Space Master Program became available. An intensive series of workshops with the Steering Committee and Project Team developed a conceptual plan for UBC Okanagan that was consistent with the space requirements for campus expansion to 2010 for 7,500 students (FTE). An extensive round of consultation was then undertaken to review the preliminary Master Plan and the Draft Planning and Design Principles that had been used in its development. Both the Principles and the conceptual framework were widely endorsed through this process. Based on the physical planning framework developed in Stage Two, a location and conceptual plan for the first academic building, the Multipurpose Building (E), was determined for presentation to the Board of Governors.

Stage Three evolved and refined the Master Plan. The final Space Master Program reflected an increased proportion of students in the sciences than had been projected at first. As a result, several new buildings were added to the Master Plan. Through several iterations of the Plan, preliminary phasing and cost estimates were prepared and an understanding of funding sources and year-by-year demand for program space was clarified. The phasing and cost estimates for the Campus Master Plan to 2010 are included in this report. The Project Team has also prepared projections and diagrams that test the resilience of the Master Plan to accommodate post 2010 expansion while retaining its commitment to the Planning and Design Principles.

After the Planning Principles and physical framework of the Campus Master Plan had been confirmed by the Steering Committee, further refinement was undertaken as Stage Four to reflect comments received through consultation with the Steering Committee and campus stakeholders and the evolving understanding of campus requirements. Stage Four included preparation of the three dimensional Demonstration Plan and Design Guidelines.

VIEW SOUTH TO EXISTING ACADEMIC COURTYARD

3D MODEL OF EXISTING CAMPUS

EXECUTIVE SPONSORS
Barry McBride, Deputy Vice-Chancellor, UBC Okanagan
Dennis Pavlich, VP External and Legal Affairs, UBC Vancouver

STEERING COMMITTEE
Aidan Kiernan, AVP Operations, UBC Okanagan
Moura Quayle, Dean, Faculty of Agricultural Sciences, UBC Vancouver
Catherine Alkenbrack, Manager, Space Administration & Planning, UBC Vancouver
Joe Stott, Director, Campus and Community Planning, UBC Vancouver
Ruby Theilmann, UBC Okanagan Project Director
Karly Henney, Planner, Campus and Community Planning, UBC Vancouver

PROJECT TEAM
Greg Smallenberg, Phillips Farevaag Smallenberg
Marta Farevaag, Phillips Farevaag Smallenberg
Jennifer Nagai, Phillips Farevaag Smallenberg
Alison Maddaugh, Phillips Farevaag Smallenberg
Bruce Kuwabara, Kuwabara Payne McKenna Blumberg
Tom Payne, Kuwabara Payne McKenna Blumberg
Brian Christianson, Stantec Architecture
Jim Kentel, Stantec Consulting
Dave Cullen, Stantec Consulting
Steve Woodmass, Stantec Consulting

PLANNING CONTEXT

The Master Plan process involved a review of City of Kelowna plans and policies and discussions with senior departmental staff to place the development of the University of British Columbia Okanagan into the context of its surroundings and plans for their future use and development. Campus expansion is consistent with the Kelowna Official Community Plan but will require a rezoning to a comprehensive zone that responds to the Master Plan and encompasses the entire campus lands.

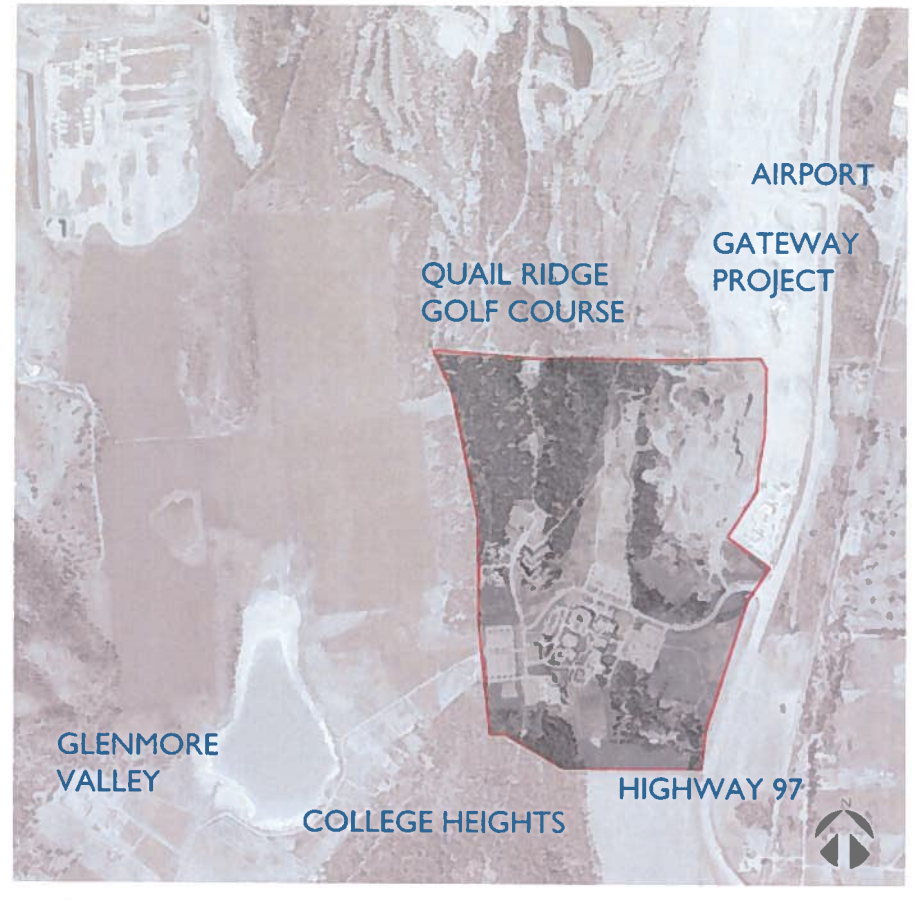
Many of the land uses around the campus are on the threshold of major changes. The lands to the north of the main entry to the campus along the Highway 97 corridor are being planned to have light industrial, high tech, and service commercial uses, often related to the airport, and a hotel. These uses will replace the current sand and gravel extraction operations, although a concrete batch plant has recently been approved in this area. This area has been studied as a joint project, termed the Gateway, with participation of the City of Kelowna, the airport authority, and affected landowners. Planned access improvements into these development sites include a grade-separated interchange at the airport and the extension of Hollywood Road northward to this interchange. Hollywood Road will also serve to provide collector road access to the land owned by UBC O at the northeast corner of campus that is currently leased for gravel and sand operations but with significant potential for future development.

Detailed planning for a new access to the campus at the southeast corner of the campus is currently underway among the Ministry of Transportation, the City of Kelowna, and the University of British Columbia Okanagan for implementation in the near future. This initiative will distribute traffic between two entry points from Highway 97 and mitigate current congestion problems at the main gateway to campus. New roads on campus will provide a choice of routes to approach the campus core from the new south gateway: on Hollywood Road, immediately parallel to the highway, and on an internal north-south road located between the new buildings for Engineering and Management.

The forested ridge adjacent to the southwest corner of the campus is the subject of an application for amendment of a previously adopted Area Structure Plan that will distribute a range of land uses that are already endorsed in the Official Community Plan in a configuration that locates commercial and multiple family residential uses in closer proximity to campus than was originally envisioned. A private school is proposed near the existing UBC O playfield.

The campus is bordered by land in the Agricultural Land Reserve both on the south, between College Heights and the highway, and along most of its western boundary. The ALR lands to the west of campus are a mix of both small and large holdings.

The north side of campus is edged by the Quail Ridge development and golf course. Its phased development is underway and new construction is underway near the campus boundary. A regional trail links the campus to the north but there are no vehicular connections.



AERIAL PHOTOGRAPH OF CAMPUS AND ITS CONTEXT

PLANNING + DESIGN PRINCIPLES

During the initial stages of the Master Plan process, a review of policies and previous plans was undertaken, including the TREK 2010 and TREK 2000 documents of the University of British Columbia Vancouver and the Academic Plan for the University of British Columbia Okanagan. Workshops were held with a wide range of stakeholders to discuss their hopes and aspirations for the Master Plan. From these sources, a set of Planning and Design Principles were drafted and then reviewed and revised during the consultation process. The consolidated Planning and Design Principles were well supported by stakeholders and provided clear direction for the preparation of the Master Plan.

PRINCIPLE: **Provide a Hierarchy of Outdoor and Indoor Social Spaces that Encourage Social Interaction**

Implications:

- Provide a mix of open, shaded, and covered open space suited to the seasons and the Okanagan climate
- Make each space contribute to a sense of place and of belonging to the UBC Okanagan community
- Promote numerous impromptu and casual contacts among students, faculty, and staff from all courses of study and parts of campus
- Create a range of spaces, with appropriate landscape characters and programming, that act as an interconnected system to produce " a whole that is greater than the sum of its parts" : a central 'commons'/ gathering place, major courtyards defined by academic buildings, minor courtyards within academic buildings as sources of light and air as well as places for rest and study, social spaces defined by residential buildings, movement corridors, and passive landscapes as edges and buffers

PRINCIPLE: **Ensure Comprehensive Universal Access**

Implications:

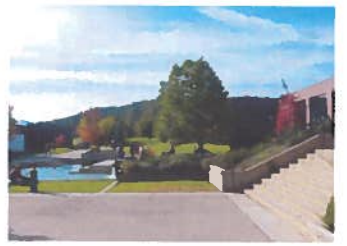
- Integrate universal access wherever possible with a goal of full accessibility within buildings and throughout the landscape
- Review site and buildings on the current campus to determine where modifications would be required to achieve this objective

PRINCIPLE: **Work within Financial Realities**

Implications:

- Balance the desire for economical initial construction costs with the value of high quality buildings with low life-cycle costs
- Support sustainable objectives and permanent buildings that are flexible and adaptable to changing use
- Foster mixed use buildings that include services like coffee shops and copy centers
- Consider partnerships and sponsorships with the City of Kelowna and the private sector
- Ensure that the needs of conference and meeting users are part of the design of residences, food services, and social spaces

PRINCIPLE: **Plan for Landscape Development in the Budgeting Process**



Implications:

- Ensure that the budget for campus development has landscape as a category

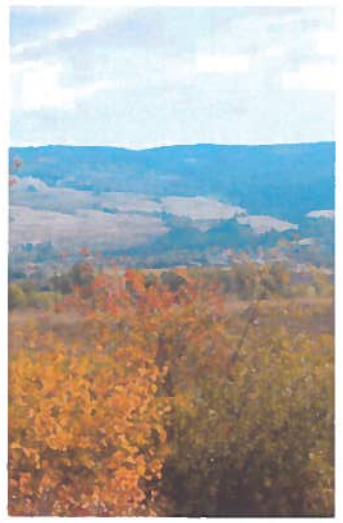
PRINCIPLE: **Give Physical Expression of the Planning Principles of UBC TREK 2010, UBC Okanagan Academic Plan, and UBC TREK 2000**

Implications:

- Ensure that the visions in the Academic Plan are matched by the physical expression of campus development
- Consult with the people who shaped the Academic Plan during the Master Plan process
- Review the evolving Master Plan regularly in reference to UBC policies

PLANNING + DESIGN PRINCIPLES

PLANNING PRINCIPLES



PRINCIPLE: **Integrate the Campus into the Iconic Okanagan Landscape**

Implications:

- Establish preservation areas to conserve the majority of the existing pine forest stands, a significant portion of the grass benchlands, and the wetland and make them available as a teaching resource
- Provide a network of trails through the campus landscapes, and connecting to the regional trail system, as an amenity to campus life
- Recognize and utilize at the appropriate elevations the three generic Okanagan landscapes: pine forest at the hilltops, grassland on the hillsides, and intensive land use on the valley floor
- Advocate strategies to naturalize damaged grassland and to sustain existing stands of Ponderosa pine
- Select plants that are characteristic of the Okanagan and suited to low maintenance and low use of water for irrigation
- Support the continued viability of adjacent agricultural lands for their value as a landscape setting for the campus and their potential as a learning environment

PRINCIPLE: **Protect and Expand the Campus Land Base for Long-term Growth**

Implications:

- Envision the long range future of the campus, while focusing on the 2006 timeframe, to avoid the preemption of opportunities
- Consider opportunities for partnerships and academic activities on the Agricultural Land Reserve to the west and possibly to the south of the campus
- Plan road access to minimize the introduction of barriers to movement, especially for pedestrians
- Strategize to reduce the site area occupied by surface parking over time
- Consult with the City of Kelowna and other potential partners on shared off-campus recreational, cultural, and continuing educational facilities

PRINCIPLE: **Represent the Aboriginal People's Historical Connection to the Land**

Implications:

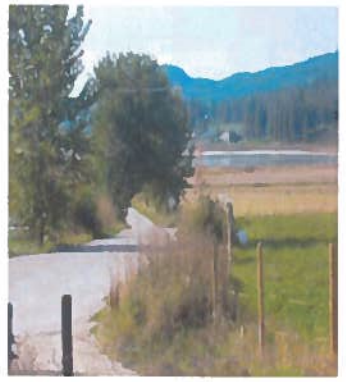
- Create a Gathering Place on campus that is structured around traditional Okanagan Nation symbols such as the circle
- Reflect the traditions of seasonal land use and plants with ethnobotanical values in the campus landscape

PRINCIPLE: **Demonstrate Sustainable Best Practices**

Implications:

- Plan for the use of geothermal heating and cooling, including the retrofitting of existing buildings and the eventual removal of the current heating plant structure
- Explore the feasibility of a Living Machine for sewage treatment
- Manage on-site stormwater through surface features integrated into the design of streetscapes and landscapes
- Make sustainable features visible and available as learning and teaching opportunities
- Optimize passive solar opportunities
- Consider landscaped green spaces on structure and roofs as integral parts of the campus landscape
- Endeavour to build structures for permanence and quality as well as flexibility to adapt to changing program requirements over time in order to demonstrate resource efficiency

DESIGN PRINCIPLES



PRINCIPLE: **Integrate Campus Development with its Neighbours to Ensure that All Okanagan Communities are Welcomed on Campus**

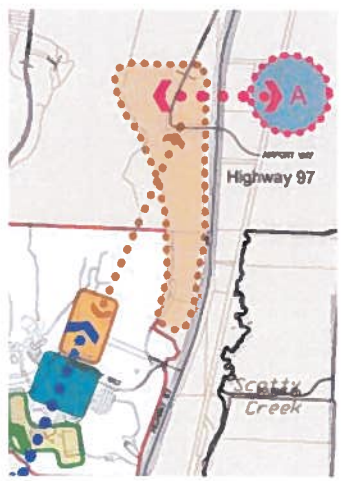
Implications:

- Buffer adjacent ALR in keeping with City of Kelowna policies
- Plan cooperatively with the City of Kelowna to share recreational and cultural facilities
- Provide effective, direct road and trail access to the Glenmore Valley and the Glenmore Highlands communities

PRINCIPLE: **Co-locate New Recreational and Cultural Facilities on Campus in an Area that is Recognizable as a Campus Precinct and Convenient to the Surrounding Community**

Implications:

- Provide access for shared use by the Okanagan community, Kelowna citizens, and more specifically Glenmore Valley residents
- Ensure that any roadway access and event parking has been considered in proximity to any community oriented facilities in a manner that does not negatively impact the campus



PRINCIPLE: **Locate New Research Facilities toward the Northeast Quadrant of Campus to Anticipate Links to Private Research, High Tech, and Related Commercial Development in the Vicinity of the Airport Gateway**

Implications:

- Coordinate development plans with City, Airport, and private landowners to create strong links between the campus and adjacent development
- Strive for a shared intention to achieve shuttle, pedestrian and cyclist routes that will connect the airport to the campus core through new development
- Seek opportunities to share parking on adjacent private lands as an alternative to building more parking on campus
- Encourage the development of commercial services immediately off-campus that will supplement the ancillary services available on campus to provide greater choice for the campus community and to reduce the use of vehicles for shopping and entertainment trips

PRINCIPLE: **Co-locate the New Student Services Building and Other Campus Social Facilities to Maximize Synergies among Activities**

Implications:

- Locate the student services building as an edge to an important social space and program the space to support student lead activities, events, and celebrations
- Consider the suggestions generated by the campus life mini-project

PRINCIPLE: **Define, Protect, and Manage Key Views**

Implications:

- Identify, map, and protect the most significant view corridors
- Orient buildings to frame views with deliberation within the landscape
- Consider views and vistas to key campus buildings as part of the entry sequence
- Incorporate a vertical element as a landmark with long-distance views towards the campus

DESIGN PRINCIPLES

PRINCIPLE: **Utilize a Palette of Local and Appropriate Materials and Site Furnishings to Unify the Campus**

Implications:

- Develop a palette of materials that is coherent with the existing OUC buildings on campus while expressing a new, contemporary aesthetic for UBC Okanagan
- Review the original decision to select dark red brick as an authentic material from and for the Kelowna region by recommending use, in varying degrees, on future buildings
- Develop a language of design for site furniture that spans the entire campus linking the interconnected network of open spaces

PRINCIPLE: **Strive for Light and Transparency**

Implications:

- Create more ground floor transparency along building edges
- Integrate indoor and outdoor spaces, especially communal amenity spaces
- Consider light within and around buildings as part of the strategies for wayfinding and safety and security
- Maximize natural daylight for liveability and to limit use of energy
- Consider the quality of light within all important campus open spaces throughout various times of the day

PRINCIPLE: **Provide for Public Art, Community Events, and Commemorations**

Implications:

- Use places and place names to commemorate and interpret local history and people important to the campus as it develops
- Encourage displays of art and other work by the campus community throughout indoor and outdoor communal spaces
- Create spaces that accommodate community events at the small and large scale

PRINCIPLE: **Place Buildings to Create the Edges of Open Spaces**

Implications:

- Establish an open space framework defined by existing and future building footprints
- Use the placement of buildings to reinforce strong visual and pedestrian axes

PRINCIPLE: **Orchestrate an Aesthetic and Welcoming Entry Experience onto the Campus from All Entry Points**

Implications:

- Design landscape "thresholds" in order to make the experience of moving into the campus expressive of the Okanagan landscape and to initiate the sense of place of UBC Okanagan
- Structure the streetscape design to provide wayfinding information and reduce the need for extensive signage
- Work with the MoT to ensure that the new access from the highway achieves a powerful entry experience into the campus

PRINCIPLE: **Integrate and Upgrade Campus Assets**

Implications:

- Review existing campus buildings, grounds, and infrastructure to identify opportunities for reinvestment and redesign required to meet the policies, principles, and vision for UBC Okanagan

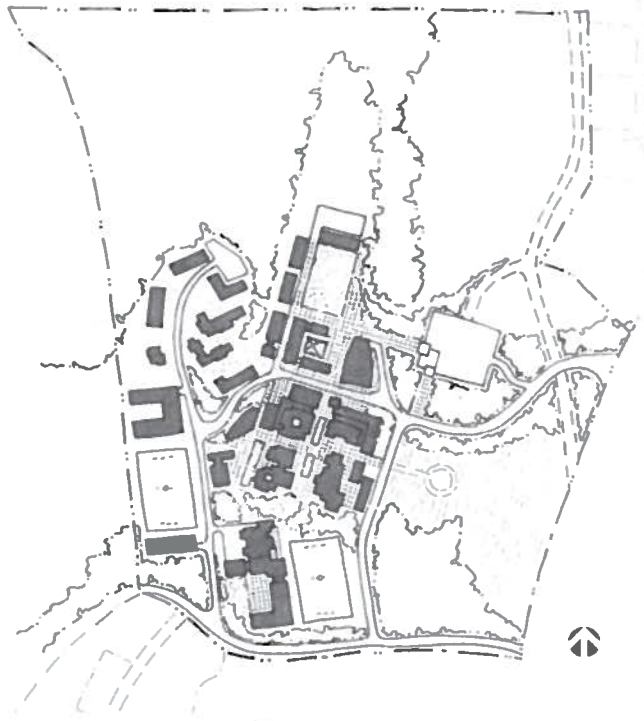
PRINCIPLE: **Design for a Sense of Security, Safety, and Belonging**

Implications:

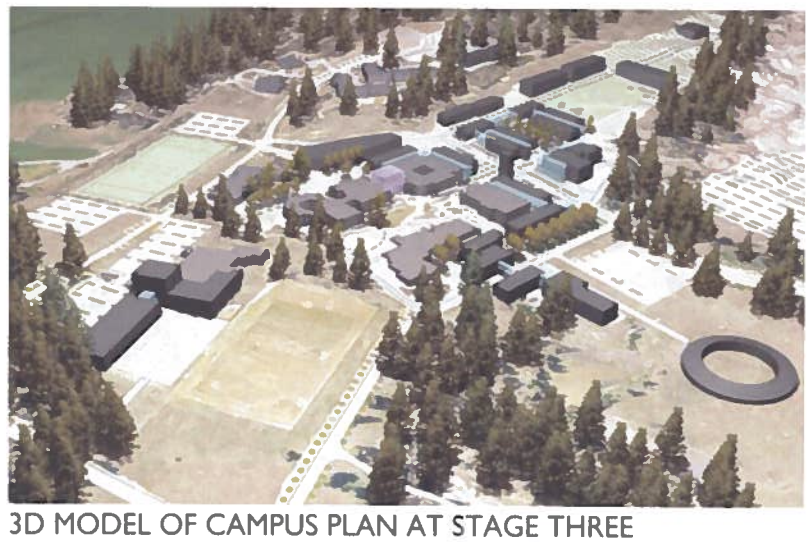
- Consider site security and safety throughout the design process in a balanced approach with the intentions to create a meaningful and aesthetic campus character

MASTER PLAN TO 2010

The framework of the Master Plan emerged from intensive workshops during Stage Two of the planning process through the participation of the Steering Committee and Project Team. It then evolved in response to comments from many reviewers and to changes to the Master Space Program.



PRELIMINARY CAMPUS PLAN FROM STAGE TWO WORKSHOP PROCESS



3D MODEL OF CAMPUS PLAN AT STAGE THREE

MASTER CAMPUS PLAN TO 2010

MASTER PLAN FRAMEWORK

The framework of the Master Plan responds to a number of planning and urban design considerations as well as to the Planning and Design Principles. A series of diagrams that illustrate these considerations were prepared in Stage One for use in the design workshops and available for reference in the Stage One Report under a separate cover. An understanding of these aspects of the Master Plan is essential to its use and, especially, to its adaptation to changing requirements as UBC O responds to the interests of students, faculty, staff, and patrons.

Road Network Integration

The existing road access to the campus relies on the access from Highway 97 at University Way. Negotiations with the Ministry of Transportation and the City of Kelowna, concurrent with the Master Plan, have developed a plan for new road access that will create a new entry at the southeast corner of campus and a connecting link that parallels the highway between this entry and the current one. This initiative will spread the traffic between two entries from the highway when it is built in the next few years and will mitigate the current problems with queueing of vehicles turning left onto campus.

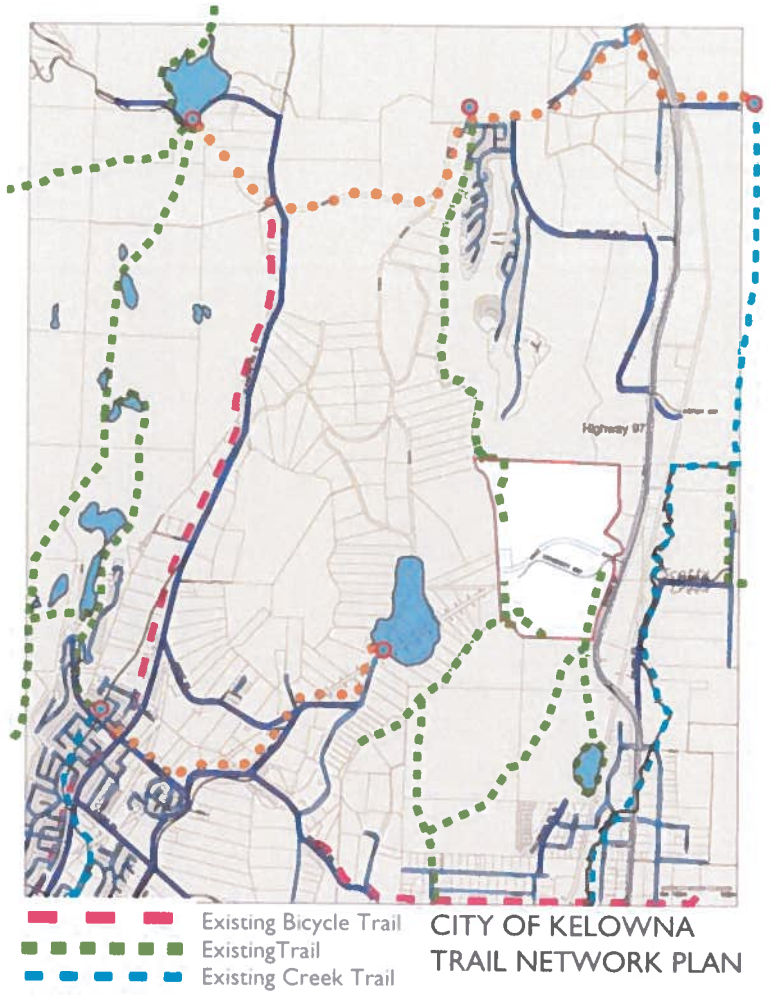
In the longer term, the Master Plan anticipates the potential for a road link to the west into the Glenmore Valley by planning an internal roadway along the south edge of the campus. This link is desirable for more direct access from north Kelowna and to provide access to the large recreational development planned by the City for the upper Glenmore Valley that will provide recreational opportunities for students, staff, and faculty of UBC O within a five minute drive or easy cycle from campus.

Pedestrian and Cycling Trail Integration

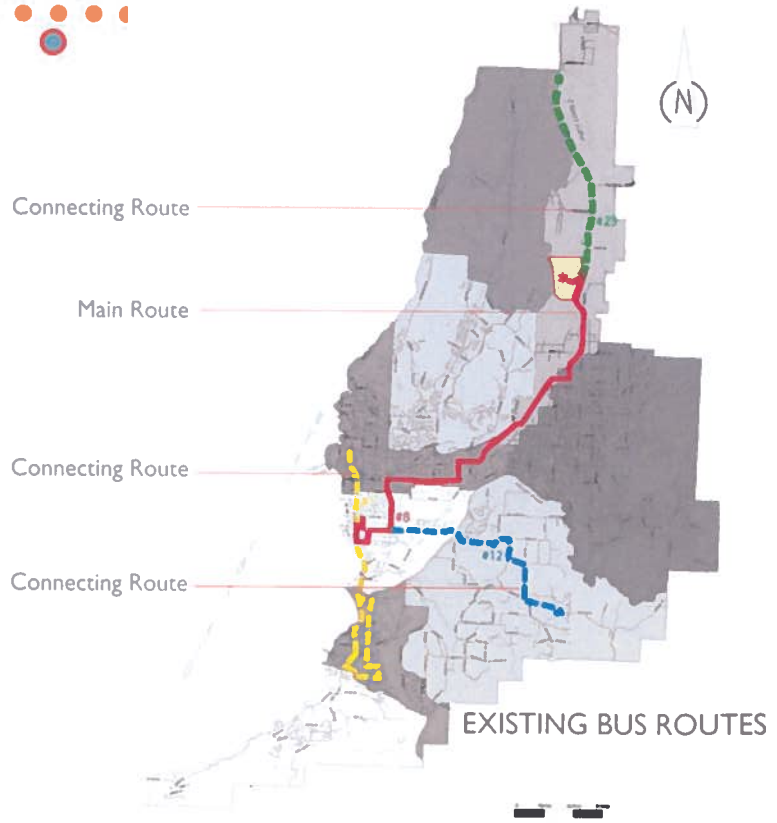
Improved accessibility by bicycle and on foot is part of the strategy to reduce car use and related demand for parking on campus. Trail links to campus from the west and south are currently being planned by the City of Kelowna. The Master Plan links to the Flume Trail along the northwest edge of campus and accommodates pedestrian movement with a variety of paved routes and informal trail loops. Cyclists are provided with space in the design of campus roads and with facilities for secure bicycle storage near academic and recreation destinations and within residences.

Transit Integration

Over the next few years, transit access to UBC O will expand significantly both within Kelowna and regionally. The Campus Plan proposes to accommodate buses on campus on the internal loop created by University Way, West Gate, South Gate, and East Gate. Buses arriving from Kelowna would enter at South Gate and loop clockwise. Regional buses arriving from communities to the north would enter at Main Gate and loop counterclockwise. Bus stops should be near key campus destinations. Bus lay-bys are located on both sides of University Way adjacent to Building F to facilitate exchanges, freeing the current bus area for redevelopment as part of the active pedestrian-oriented streetscape at the University Centre.



CITY OF KELOWNA
TRAIL NETWORK PLAN



EXISTING BUS ROUTES

MASTER PLAN FRAMEWORK

Provision of Parking

The current campus has a substantial amount of surface parking ringing the campus core and is largely a commuter rather than residential university. As the Master Plan is implemented, new buildings occupy the sites of existing surface parking lots and trigger the construction of new parking in planned permanent locations.

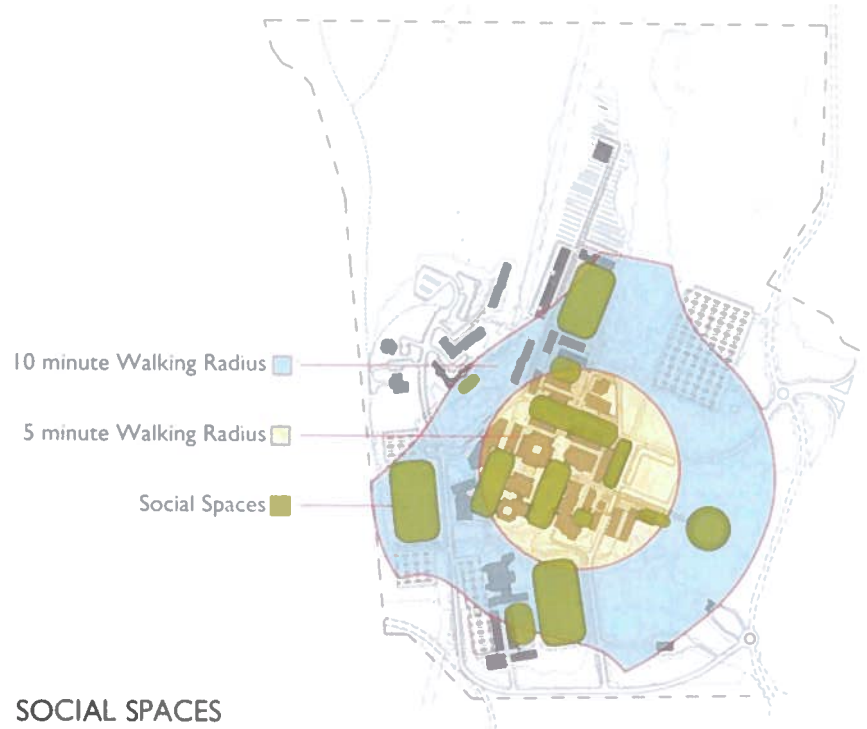
By 2010, approximately three quarters of parking will be in surface lots and one quarter will be underground or on the ground floor of structures. The structured parking is located in the two areas of campus that attract frequent use by the public, nearby residents, and conferences: the University Centre and the Health, Wellness, and Recreation buildings. It is anticipated that the public and visitors will be more willing and able than students and staff to pay a premium for the convenience of structured parking at their destination. (Refer to the diagram on page 45 for more information on planned parking facilities.)

Topography and Aspect

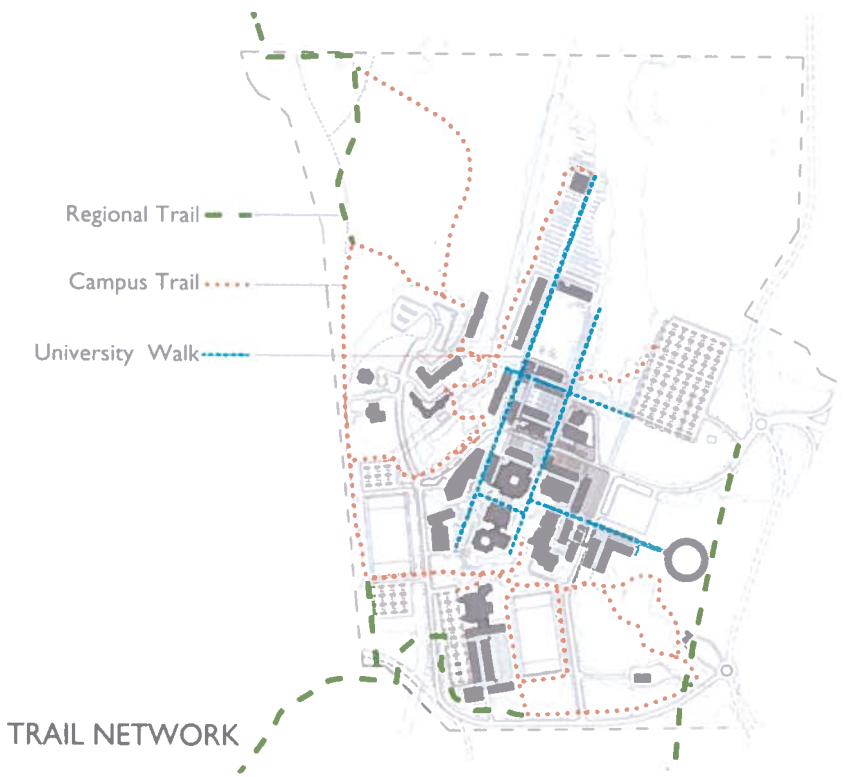
The campus has a complex and varied topography. The intensive core occupies the relatively level central terrace. The sites for Health, Wellness, and Recreation and the University Centre, and the Commons to its north are higher than the elevations in the Academic Core. The Demonstration Plan has identified strategies to take up these changes in elevation within buildings; for example, the floor of the first phase of the University Centre (K1) that addresses University Way should be a level below the floor that opens onto the University Plaza on its north side. The Demonstration Plan also ensures that universal access can be comfortably achieved throughout the central campus.

East of the core, the land slopes dramatically toward the highway; this change in elevation is intensified to the north of University Way where gravel and sand extraction has created an escarpment and an area that requires significant remediation before it will be suited to development. South of University Way, the slope is more regular. The Gathering Place nestles into this hillside within an open grassland landscape that is iconic to the Okanagan. The new section of Hollywood Road occupies the toe of the slope near the highway where it will have low visual impact on views from the upper terrace towards the valley.

The topography in the northwest quadrant of campus is a south-facing hillside rising to a summit at the north boundary of campus where the water reservoir is being built. This precinct, named the Hillside, is planned as the focus of longer-term residential development that will readily take advantage of the south aspect for related landscaped social spaces.



SOCIAL SPACES



TRAIL NETWORK

MASTER PLAN FRAMEWORK

Landscape Typologies

The campus represents a microcosm of the landscapes that are iconic for the Okanagan: development and a related manicure landscape on flat land, grassland on the lower slopes of the valley sides, and pine forest at higher elevations. The Master Plan seeks to reinforce this pattern with intensification of development on the flatter land, use of a sustainable native grassland landscape on sloping areas of the campus, particularly to create the entry experience from the Main Gateway on University Way and an appropriate setting for the Gathering Place, and retention, at least within the 2010 time horizon, of the remnants of pine forest as a backdrop.

Integration with the Existing Campus

The structure of the campus inherited from the Okanagan University College is informed by a geometry and orientation for the Master Plan. The central courtyard is extended to the north as University Walk, the primary organizing spine of the Plan. The initial expansion of space for the first years of UBC O is achieved first through the addition of new floors to existing buildings in the core and then by wrapping new wings, with mediating atriums, around the Science and Library buildings. In later phases, the existing Arts and Student Services Buildings are adapted for new programs and become edges to new campus social spaces in concert with new buildings: the Arts and Sciences Courtyard on the west and the Engineering and Management Courtyard on the east.

The red brick that dominates the existing buildings continues to define the character of the Academic Courtyard and becomes an accent material for new structures. University Way remains the main entry route into campus but its character and use is transformed into a streetscape defined by building walls and a focus of retail and social activity between the Academic Core and the University Centre.

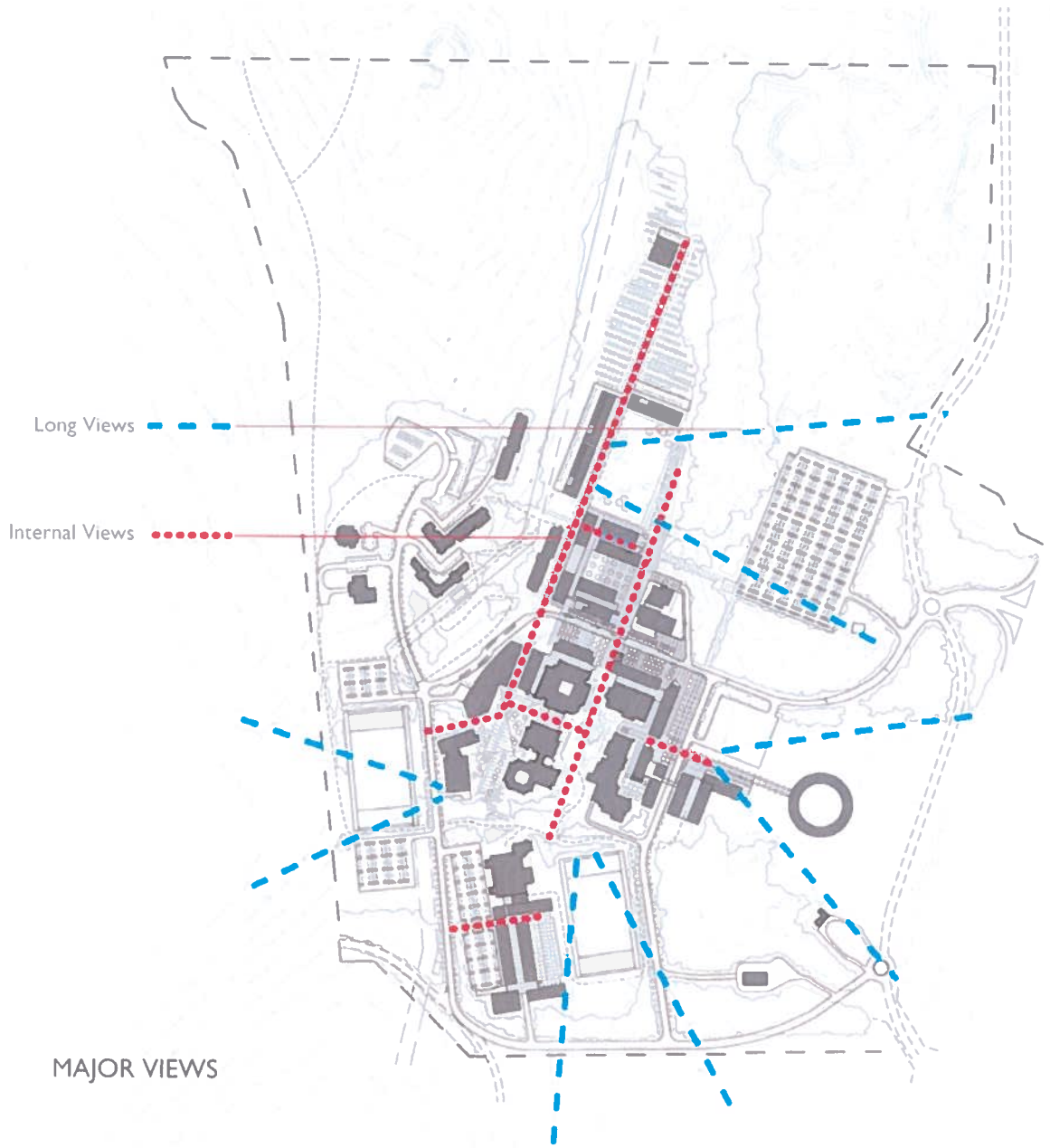
Building Height Limitations

Transport Canada has an approvals role for buildings near airports that affects building heights on the UBC O campus. Although the potential for taller buildings is anticipated due to improvements in the technology of airplanes, the Master Plan has kept building heights within the limits that are currently understood to be acceptable to Transport Canada.

View Opportunities

Spectacular views are available from a number of vantage points on campus. Capturing and framing these views and the phased relocation of surface parking outside of key view corridors has been a major determinant of campus form in the Master Plan process. Views into the agricultural land to the west are maintained from several academic and residential buildings by the placement of the new playfield within this view corridor. Buildings on the south side of campus will have panoramic views to the south over the existing playfield.

The University Centre and Learning Commons as well as the buildings around the Commons all have views over the valley to the east that will be enhanced in time by the relocation of parking to new sites outside of key view corridors. Design Guidelines for the protection of key views are found on page 25.



MAJOR VIEWS

PRECINCTS

The Master Plan defines eight precincts, each with a characteristic mix of uses, building typology, and landscape.

The Core Campus

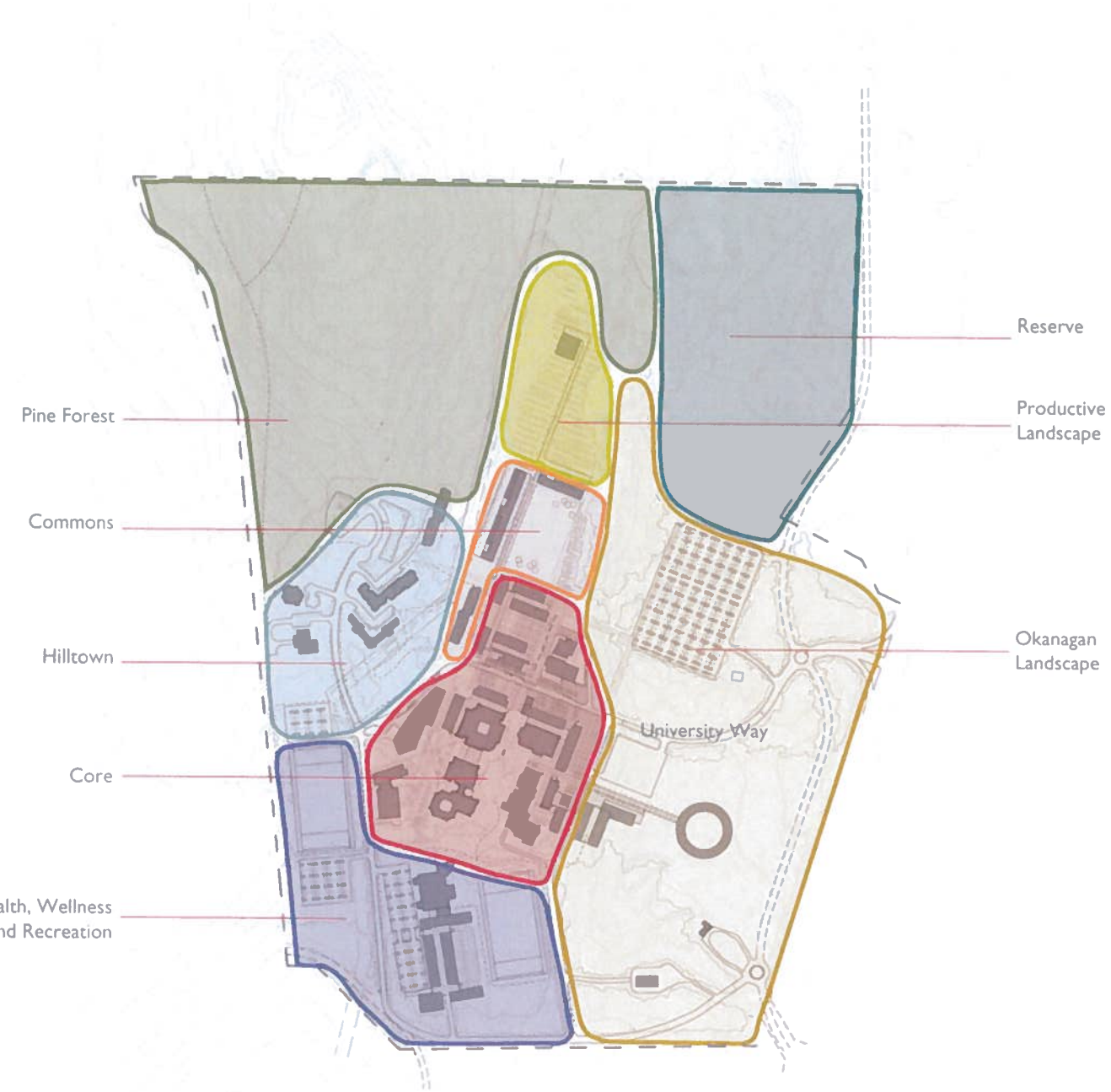
The intensive heart of the campus is focused at the intersection of University Way and University Walk. South of University Way is a compact co-location of academic buildings organized around three courtyards: the existing central courtyard and the planned Arts and Sciences Courtyard and Engineering and Management Courtyard. These buildings are largely three and four storey structures, often with intervening atrium spaces offering social opportunities, weather protected circulation, and natural light penetration into building interiors. Building programs and social spaces encourage interaction and dialogue among students and faculty of all departments and move away from buildings dedicated specifically to arts or sciences.

The University Centre is located to the north of University Way and provides for the co-location of facilities and services used by everyone on campus and, in many cases, the surrounding community. The University Centre embraces a theatre for dramatic and musical productions, a 400 seat lecture theatre, a variety of food and retail shopping opportunities, space to accommodate the needs of the Student Association, including a pub, as well as offices for student services and conferences, computer labs, meeting rooms, and other facilities. Planned to be built in two phases, the University Centre takes advantage of its sloping site by providing structured parking accessible at grade from its lower east side.

The Commons

This precinct is organized around the Commons, a large open lawn for the informal enjoyment of everyone on campus inspired by similar, well-loved greens at the heart of universities across North America. Almost the size of a playfield, it is nevertheless not meant to be used for athletic programming but rather for unprogrammed sport, passive use, and play. It is the fair weather social space that provides a soft landscape counterpoint to the hard surface courtyards of the Core.

The buildings in the precinct are sited to form strong, defining edges to the Commons itself and to the important north-south pedestrian spine, the Mews, that edges the Commons on its west side and links southward to the Health, Wellness, and Recreation buildings. Each of the buildings fronting on the Commons has academic or campus-wide social spaces at ground level to ensure that the Commons feels welcoming to all, not like a space belonging to adjacent residents.



CAMPUS PRECINCTS

PRECINCTS

Health, Wellness, and Recreation

The Health, Wellness, and Recreation precinct occupies the southwest corner of the campus where it will be readily accessible to the planned College Heights neighbourhood and, with the completion of road access, to the Glenmore Valley community. It builds on the existing gymnasium and playfield with additional recreation facilities: an expansion of the gymnasium, new indoor recreation spaces, and a second playfield. The recreation facilities are co-located with space for academic programs that have a health and wellness focus and, in some cases, offer community services, including Human Kinetics, Psychology, Social Work, Nursing, and Dentistry.

Okanagan Landscape

The east-facing slope, between the Core and the Highway, has open grassland with stands of pine forest and a small wetland that comprise a landscape that is iconic to the Okanagan. Throughout the campus and community consultation for the Master Plan, people spoke of the importance of anchoring this campus in the landscape of the Okanagan as the preferred strategy for ensuring a sense of place.

The landscape is used to orchestrate the entry experience from Highway 97 from the Main Gate so that visitors move up the hill, through trees, and then see the Gathering Place as the view into the grassland opens at the curve of the road. A substantial amount of surface parking is developed within this precinct with existing and new trees providing visual buffers and shade.

Buildings developed within this precinct include the Gathering Place and the Engineering with Management Building (V) and have design guidelines that address their access and loading requirements while achieving a landscape integration with the larger character of the precinct. If the campus expands beyond the program of the 2010 Plan, additional buildings may be sited in this precincts under similar landscape guidelines.

Hilltown

The existing residences, Weather Office building, and daycare already occupy the south-facing hillside on the western side of the campus core. One of two new residences is already being developed in the precinct, north of the existing dorms, and the Weather Office is being adapted as offices for campus operations. Through 2010, no additional development is envisioned in the Master Plan. Should demand for residential accommodation on campus exceed the capacity provided in the Plan, the Hilltown area has the potential to provide sites for new dormitories or for townhouses and apartments suited to families and couples (refer to page 53). The current daycare occupies a prime location that could be more intensively developed with daycare facility within it.

Productive Landscape

The area north of the Commons is an open, disturbed site that is not required for buildings to achieve the 2010 Master Program. The Master Plan identifies it as a suitable location for research fields for the Agroecology program and related academic research opportunities, some of which have already been sought by faculty members. A greenhouse to support research that is too space-consumptive to be housed in the small greenhouse on the roof of the Multipurpose Building is located in this precinct as the terminus of the Mews.

Pine Forest

The pine forest is not required for campus development based on the 2010 Master Program and is therefore left in its current condition. It is used for a network of informal trails and visited by some classes for field work. At present, this forest is not suffering from pine beetle infestation although this is a significant problem throughout the Okanagan.

Reserve

The northeast corner of the campus lands is physically cut off from the central core by the escarpment and lack of road or trail links. This area has a number of potential uses for campus-related development or for sale or lease to generate funds for the university including research facilities that benefit from a co-location with UBC O, sports facilities with large footprints that serve both the campus and the larger Okanagan community, or a new hospital or medical facility that would be affiliated with an expanded Medical School at UBC O.

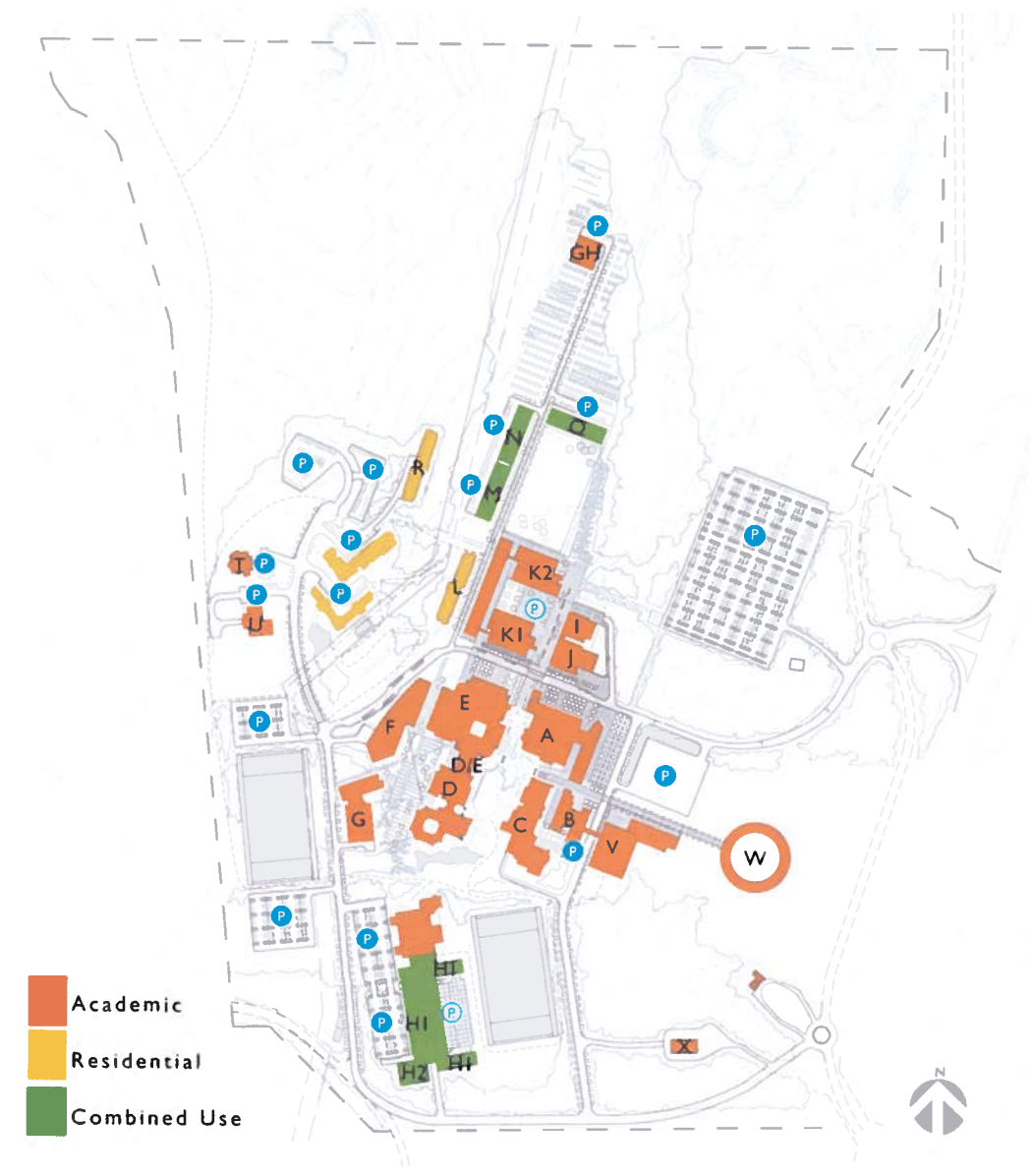
KEY PLAN TO BUILDING USE

Buildings in the 2010 Campus Plan are categorized as Academic, Residential, and Combined Use (Academic at lower levels with residential above). The intended uses of campus buildings are described in the chart as are the anticipated phases and total gross area in square meters.

BUILDING LEGEND

	BUILDING + USE	DESCRIPTION	PHASE	ESTIMATED AREA (M2)
A	Learning Commons	Expansion of existing library with an internal atrium	Phase 3	12,793
B	Management (with Engineering)	New building for Management School co-located with Engineering	Phase 2	3,969.60
C	Cafeteria / University Club / Academic	Adaptive reuse of current Student Services Building for academic uses	Existing	-
D	Creative Studies	Existing Arts Building with its third floor addition used for classrooms and offices	Phase 1 Addition	-
E	Multipurpose	Existing Science Building with its third floor addition and its upcoming expansion	Phase 1 Addition	+/- 8,013.80
D/E	Irving K. Barber Atrium	Atrium linking the expanded Arts and Multipurpose Buildings	Donor	-
F	Cinematheque / Academic	New building for science faculties and a 400 seat all-faculties lecture theatre	Phase 3	6,972.80
G	Fine Arts	Existing building adaptively reused for Fine Arts and Creative Studies	Existing	-
H1	Health, Wellness and Recreation / Residences	Existing Gymnasium expanded for recreation, health, and wellness-related faculties	Phase 4	17,438
H1-P	H1 Partial	Existing Gymnasium expanded for recreation, health, and wellness-related faculties	Donor	4,988
H2	Health, Wellness and Recreation / Residences	Residential component on upper floors of Health, Wellness and Recreation	Phase 4	6,830
I	Lecture Theatre	A 400 seat all-faculties lecture theatre	Phase 3	897.60
J	Drama Theatre	'Black box' theatre designed for drama and related productions	Donor	2,838
K1	University Centre	First phase of co-location of many campus-wide and community facilities	Phase 2	7,129.60
K2	University Centre	Second phase of co-location of campus-wide and community facilities	Phase 3	9,619.20
L	Dormitory	Residences currently in design	Phase 1	1,282
M	School of Education / Residences	Combined academic on lower floors with residences above	Phase 2	6,843.16
N	Academic / Residences	Combined academic on lower floors with residences above	Phase 3	4,297.16
O	Scholars' Retreat	Scholars' Retreat with accommodations and social space	Donor	4,742
R	Dormitory	Residences currently in design	Phase 1	1,282
GH	Research Greenhouses	Greenhouses for academic research purposes	Phase 4	1,170
T	Daycare	Existing daycare remains through 2010 on long-term residential development site	Existing	-
U	Operations	Existing Weather Office building adaptively reused for operations offices	Existing	-
V	Engineering (with Management)	New building for Engineering co-located with Management School	Phase 2	10,244.80
W	Gathering Place	Open air structure for social gatherings	Donor	2,550
X	Maintenance	Existing maintenance facility	Existing	-

* Refer to the section on phasing for the assumptions and details of the above phases.

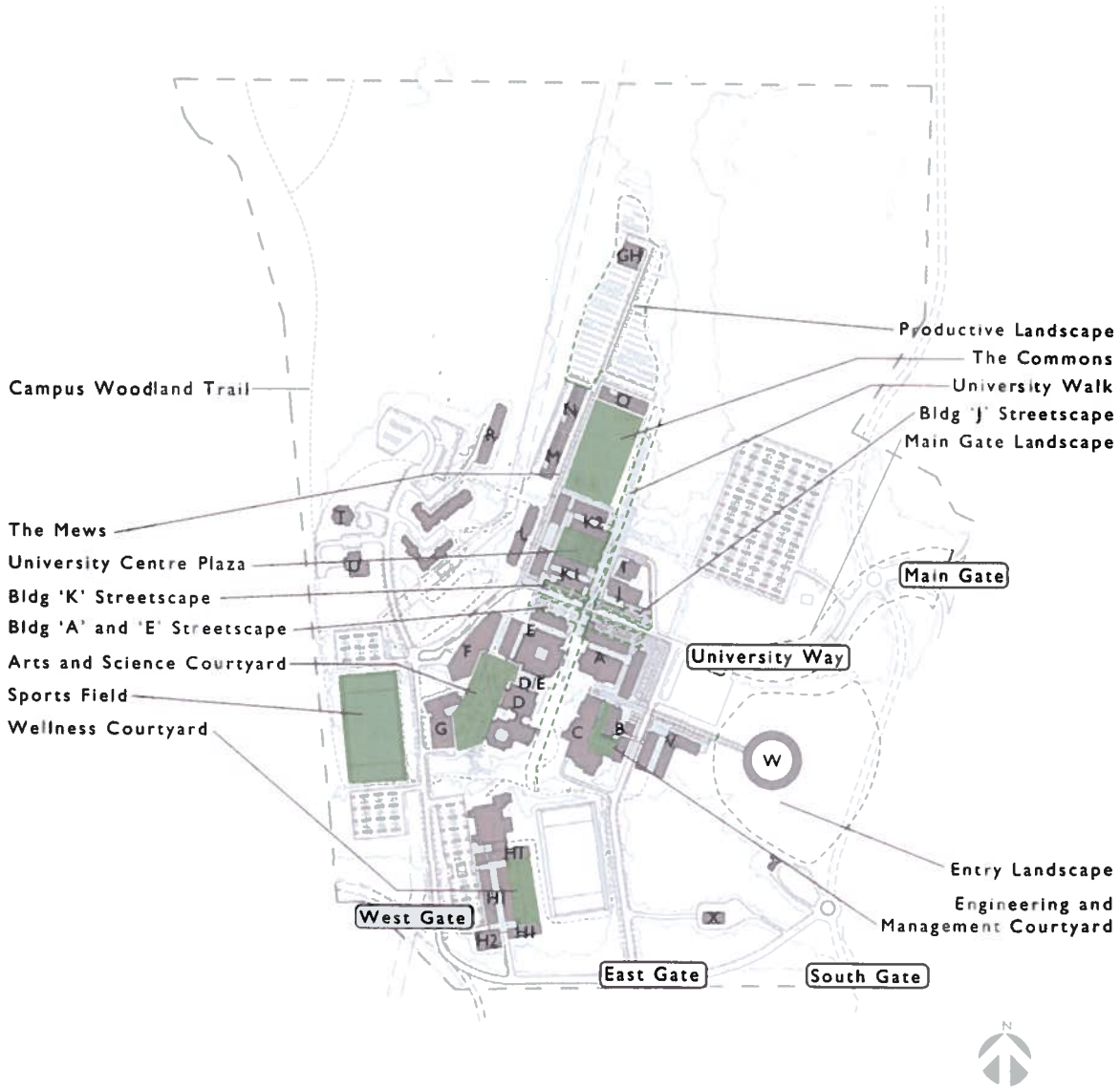


KEY PLAN TO LANDSCAPE + SITE PROJECTS

Campus outdoor spaces are planned to provide a variety of opportunities for socialization, recreation, and respite from active sports fields to walking and cycling trails, from intensely active streetscapes with an urban character to open lawn with a timeless campus appeal. Landscape and site projects are costed separately from buildings, assuming that only 5 meters around each building is part of the building budget. Recognizing that phasing is linked to fundraising, it is hoped that major landscape elements will be implemented as the buildings that complete their edges are built.

LANDSCAPE + SITE PROJECTS LEGEND

ROADWAYS	DESCRIPTION	PHASE
University Way and Main Gate	Improvements to transform existing College Way into University Way with a more active 'high street' character with adjustments to its alignment and elevation around the University Centre	Phase 2
East Gate	A new roadway linking the existing University Way entrance with the planned new South Gate entrance to the campus from the Highway	Phase 2
South Gate	A new roadway along the southern boundary of the campus anticipated to be built as a two lane roadway within a road dedication with expansion capability to four lanes in the future, if warranted; the South Gate will access the campus from the Highway with the construction of the new connection by MoT and from the Glenmore Valley when a route can be obtained for a public road link to the west	Phase 2
West Gate	Minor improvements to an existing roadway and extension to intersect with South Gate	Phase 2
The Mews	A narrow road with a mews-like character providing local access to the buildings and open spaces north of University Way	Phase 3
STREETSCAPES		
Building 'A' and 'E' Streetscape	A landscaped social space on the south side of University Way within the University Centre	Phase 3
Building 'J' Streetscape	Streetscape designed to provide outdoor social space to support events at the Drama Theatre and its lobby	Donor
Building 'K' Streetscape	Streetscape designed for outdoor cafes and food services and to be animated by retail and related uses	Phase 2
COURTYARDS / PLAZAS		
Arts and Science Courtyard	A major outdoor social space activated by movement among its surrounding buildings, by a cafe with outdoor seating, by film showings at the Cinematheque, and by temporary and permanent art installations	Phase 3
Engineering and Management Courtyard	An academic courtyard related to the existing food services in Building C and movement of students in engineering, management, and other studies among Buildings C, B, and V	Phase 2
University Centre Plaza (Including University Walk)	The place on campus that brings students, faculty, staff, and the surrounding community together at the co-location of the most public and day-through-evening destinations	Phase 3
Wellness Courtyard	The outdoor social focus of the Health, Wellness and Recreation complex with its diverse range of students from health related and social science disciplines coming together with all users of the campus sports and community health facilities	Phase 4
LANDSCAPES		
Entry Landscape	A remnant of the Okanagan grassland landscape as both a key feature of the entry from the Main Gate and an appropriate setting for the Gathering Place	Phase 2
Productive Landscape	A landscape reflecting the productive agricultural heritage of the Okanagan adapted to agroecological and other plant related research	Phase 4
OTHER		
The Commons	A large open green for everyone on campus to enjoy for sunning, outdoor classes, solitary reading, and informal play throughout the seasons	Phase 4
Campus Woodland Trail	An informal loop trail around the campus for walking, cycling and cross country skiing	Phase 4
Sports Field	A second sports field to serve the needs of the expanding campus	Phase 4



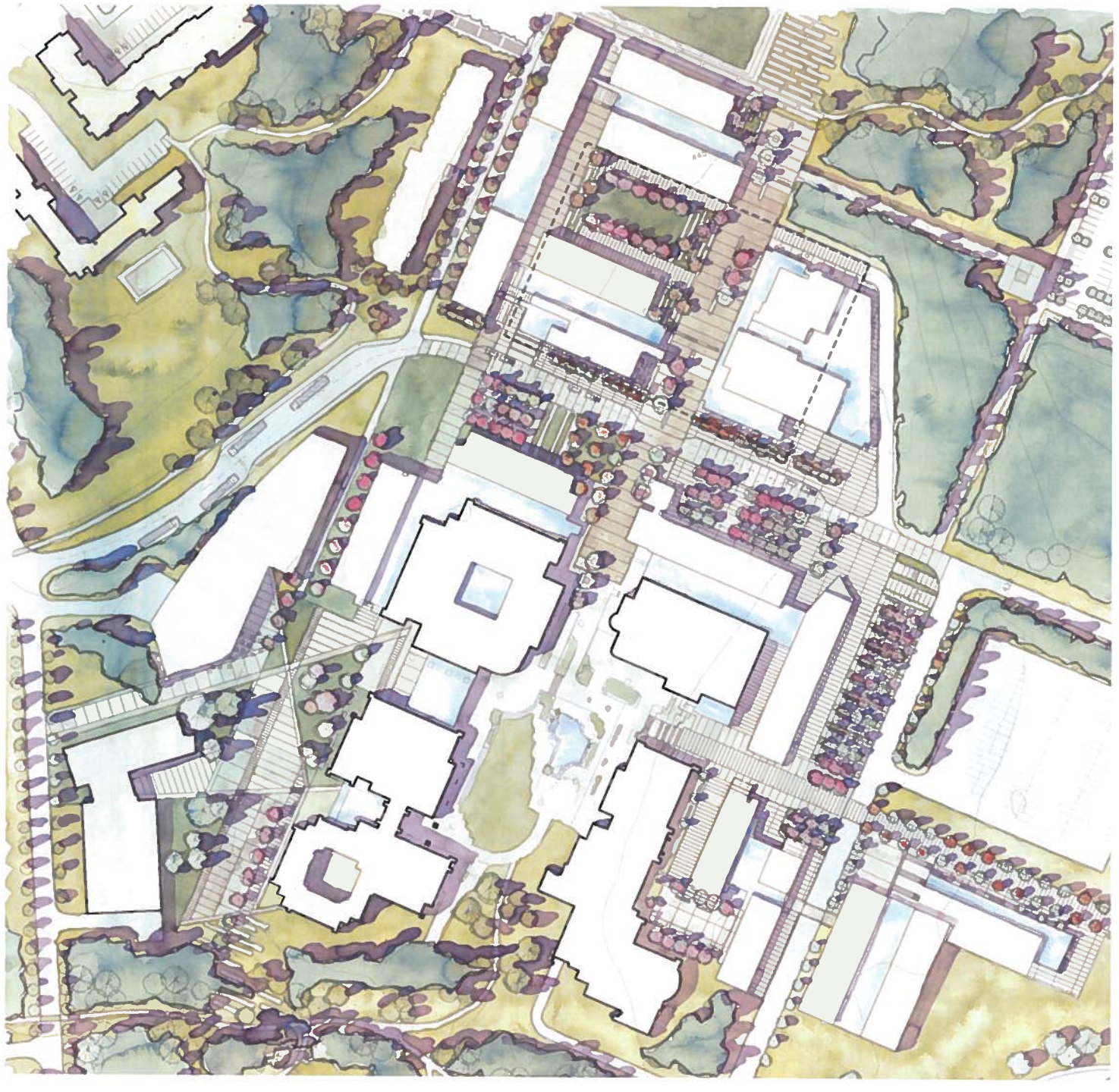
DEMONSTRATION PLAN

The Demonstration Plan is a key component of Stage Four of the Master Plan. The intent is to explore, confirm, and illustrate the three-dimensional implications of the conceptual master plan prepared in Stage Three. The Demonstration Plan represents one specific way that the Master Plan could be built to be fully consistent with the Master Program, the Planning Principles, and the Design Guidelines. The oblique model and perspective sketches from the Demonstration Plan assist in visualizing what the campus could be like for its users in 2010.

The process of preparing the Demonstration Plan has informed the Design Guidelines for the campus as a whole, for each building, and for specific landscape and infrastructure projects. The Design Guidelines address considerations that will integrate each progressive component of the Master Plan implementation into both the built fabric of the campus and planned future phases. The Guidelines are not intended to produce the Demonstration Plan but rather to ensure that the campus will meet the goals and objectives of the Campus Plan while retaining flexibility for appropriate responses to unanticipated changes to program and timing.

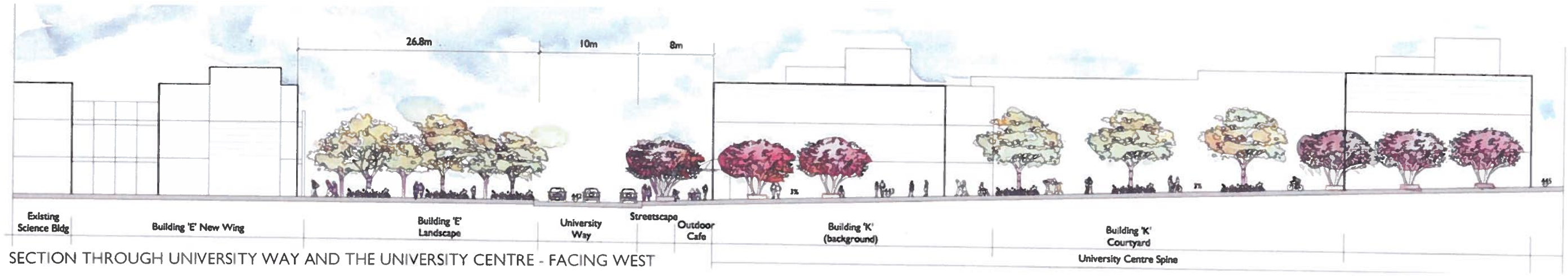
(Please refer to pages 24 through 47 for the Design Guidelines)

The preparation of information for the three dimensional model also required the testing of each building to demonstrate that the footprint and massing meet the requirements of the Master Program.

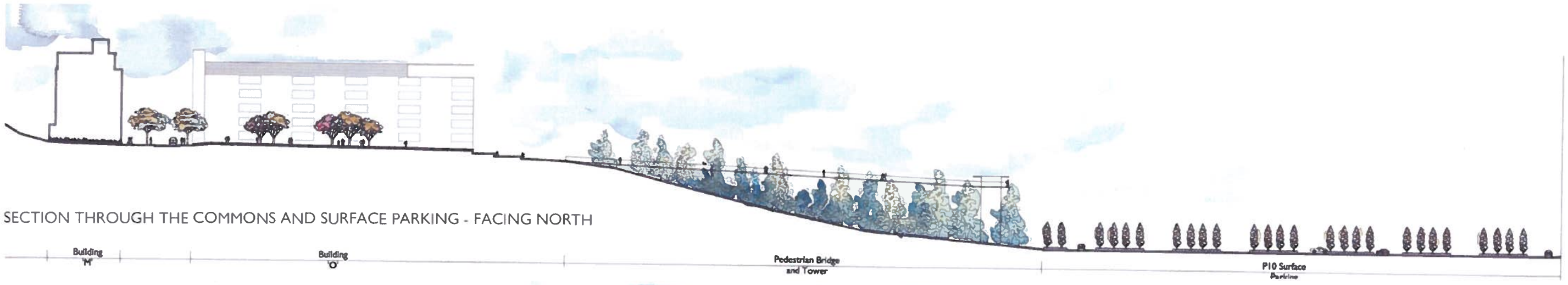


PLAN ENLARGMENT OF CORE

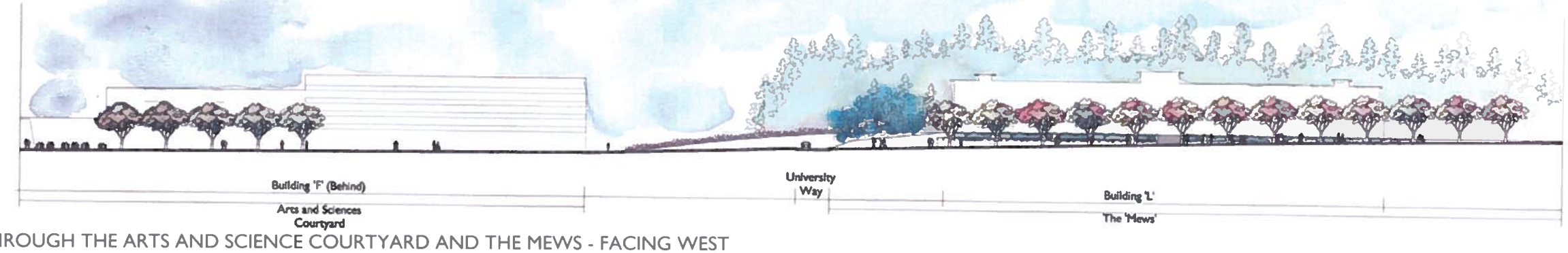
DEMONSTRATION PLAN + SITE SECTIONS



SECTION THROUGH UNIVERSITY WAY AND THE UNIVERSITY CENTRE - FACING WEST



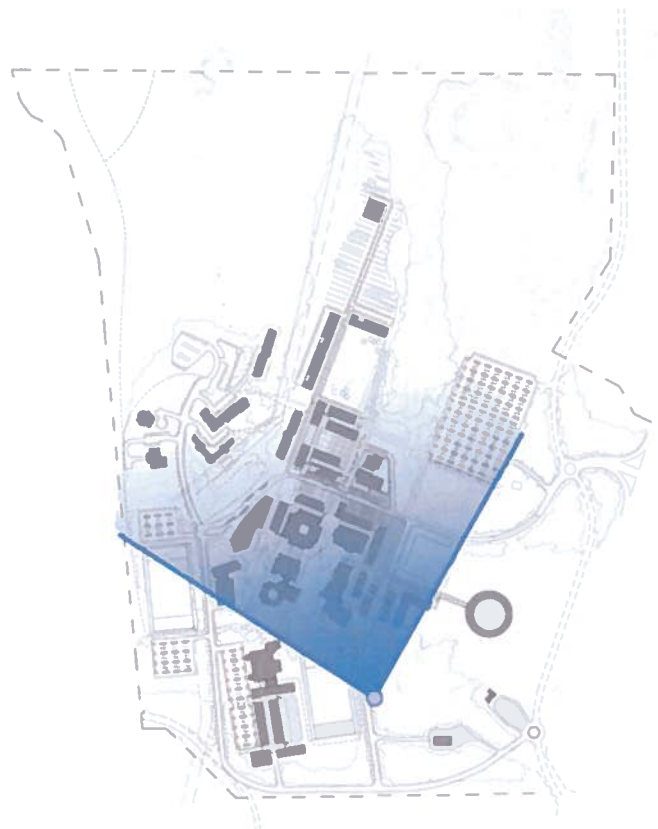
SECTION THROUGH THE COMMONS AND SURFACE PARKING - FACING NORTH

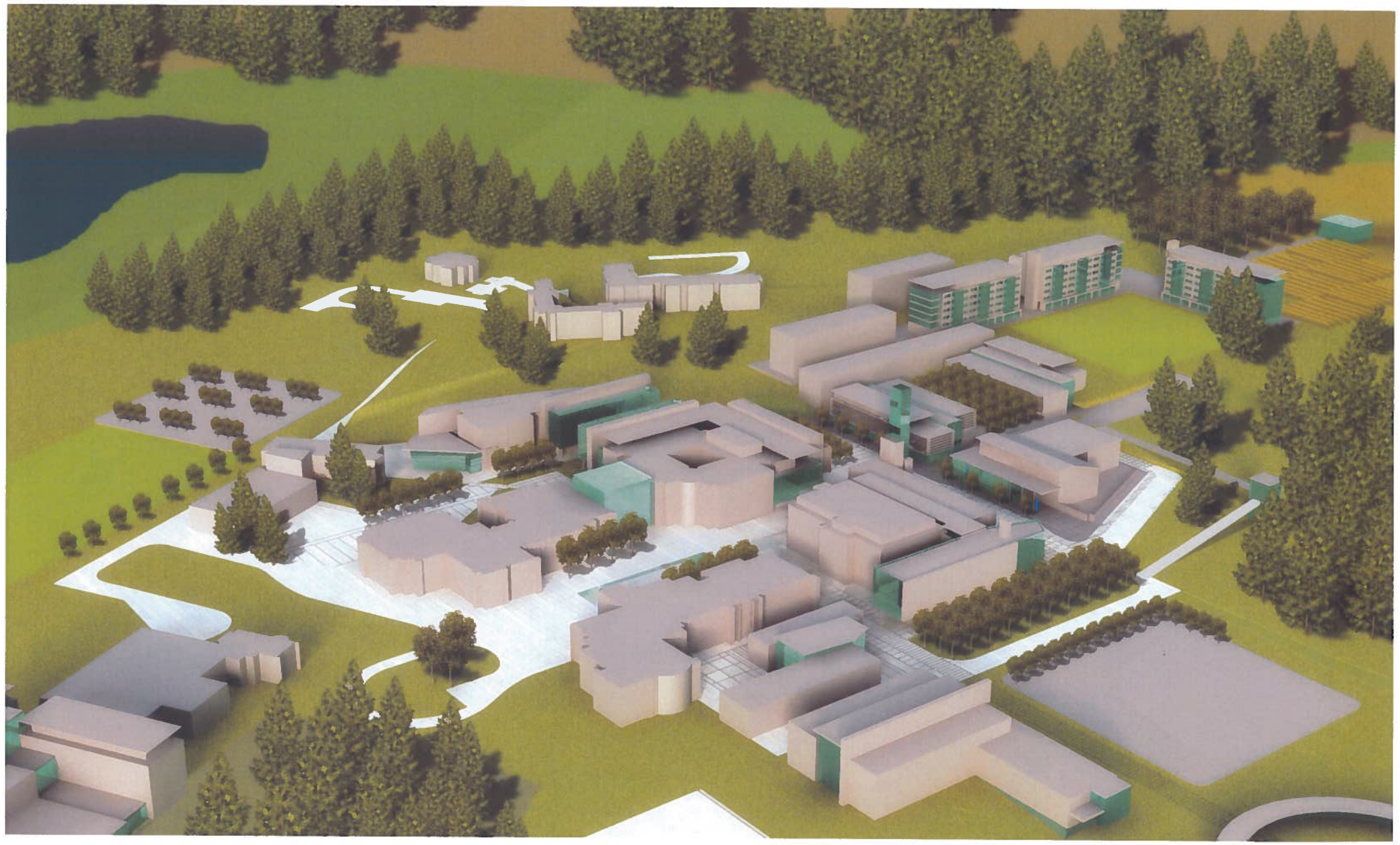


SECTION THROUGH THE ARTS AND SCIENCE COURTYARD AND THE MEWS - FACING WEST

DEMONSTRATION PLAN - OBLIQUE VIEW

The Demonstration Plan is illustrated in this oblique perspective focused on the Academic Core with the existing campus buildings and central courtyard at the centre of the image and new buildings framing new outdoor and atrium social spaces.

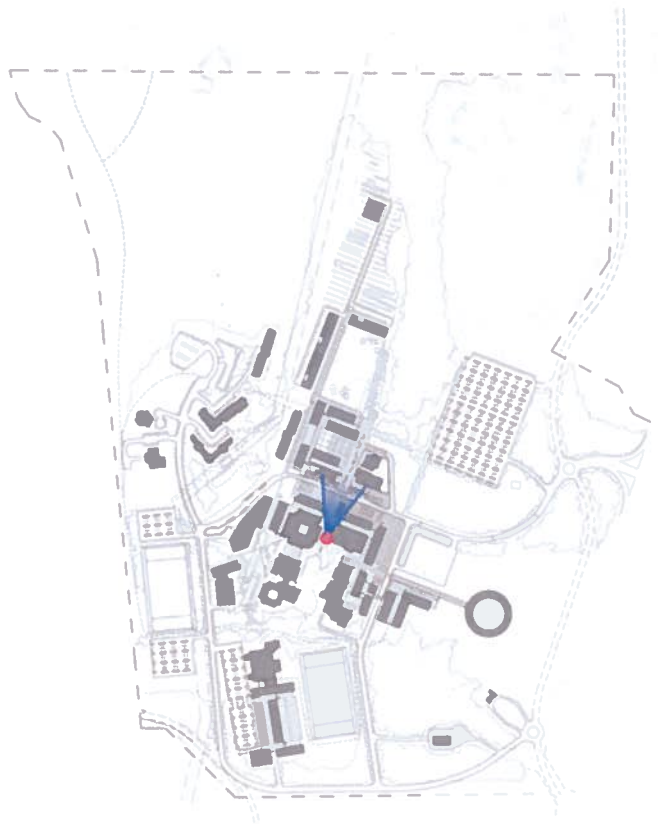




AERIAL OBLIQUE VIEW OF STUDY MODEL FROM SOUTHEAST

DEMONSTRATION PLAN - PERSPECTIVE VIEW

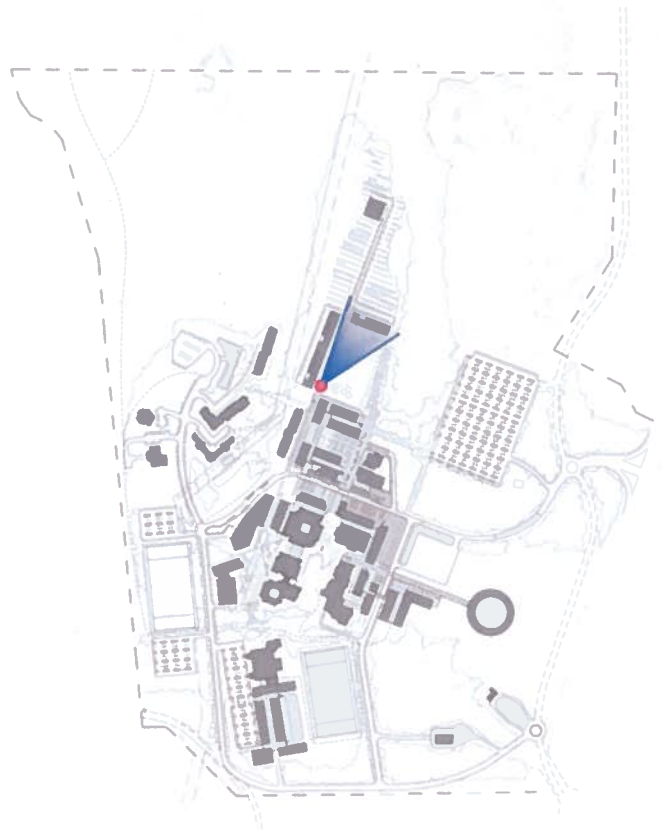
This view looks north towards the University Centre along University Walk from the Multipurpose Building.



DEMONSTRATION PLAN - PERSPECTIVE VIEW NORTH TO UNIVERSITY CENTRE

DEMONSTRATION PLAN - PERSPECTIVE VIEW

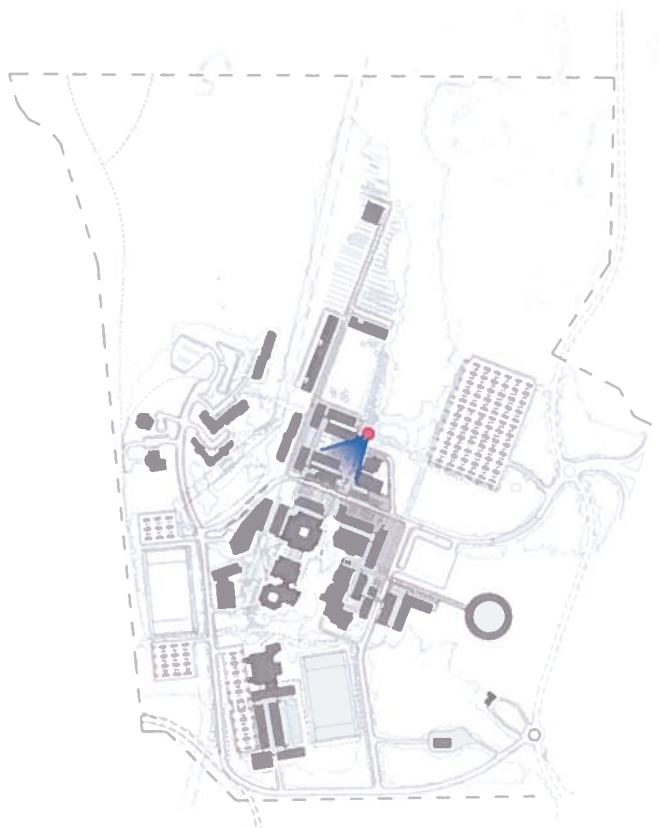
This view illustrates the narrow Mews between the Commons and the combined academic and residential buildings that form its edges to the north and west. Cars and bicycles share the paved surface of the Mews and the Commons is busy with people sitting, sunning, and playing.



DEMONSTRATION PLAN - PERSPECTIVE VIEW NORTH TO COMMONS

DEMONSTRATION PLAN - PERSPECTIVE VIEW

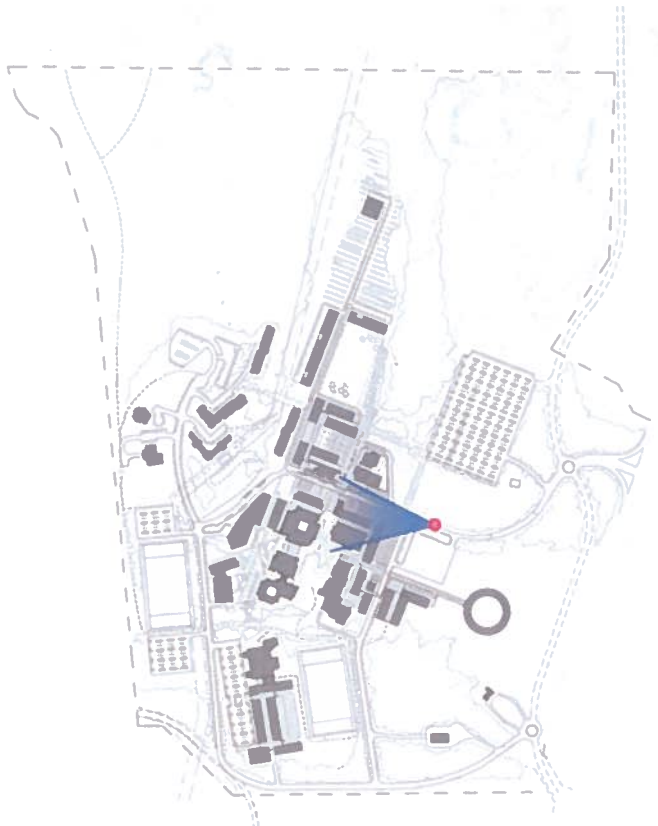
This view looks into the heart of the University Centre Plaza with the drama and lecture theatres on the left and the University Centre on the right.



DEMONSTRATION PLAN - PERSPECTIVE VIEW SOUTH TO UNIVERSITY CENTRE

DEMONSTRATION PLAN - PERSPECTIVE VIEW

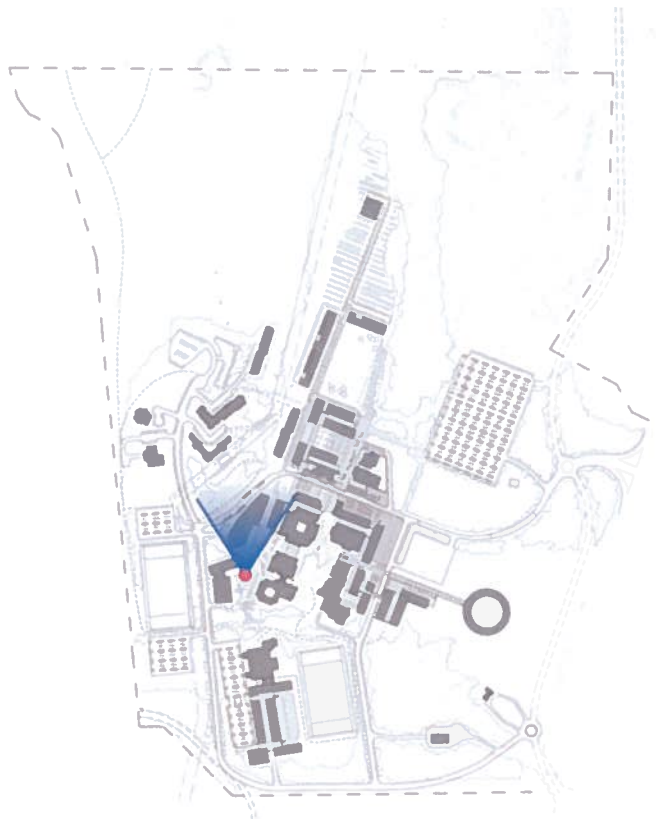
This view looks west along University Way near its intersection with South Gate. The Learning Commons is on the left and the drama theatre in University Centre on the right.

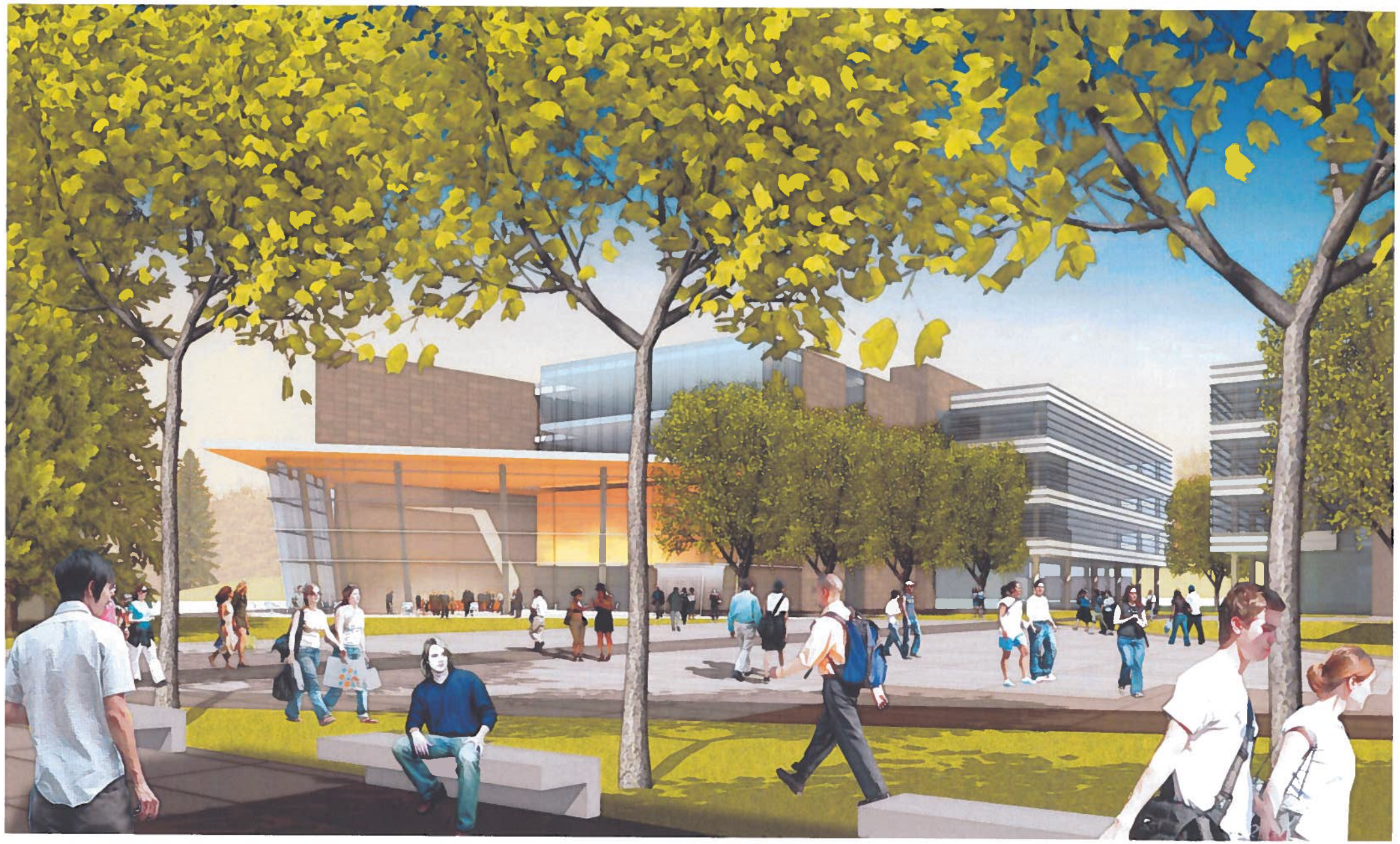


DEMONSTRATION PLAN - PERSPECTIVE VIEW WEST ALONG UNIVERSITY WAY

DEMONSTRATION PLAN - PERSPECTIVE VIEW

The Arts and Science Courtyard is crisscrossed by students, staff, and faculty moving among the academic and social spaces facing onto it.





DEMONSTRATION PLAN - PERSPECTIVE VIEW NORTH TO ARTS AND SCIENCE COURTYARD

GENERAL GUIDLINES

There are General Guidelines that are relevant across the campus as the Master Plan is implemented; these are presented on this page. Guidelines that are specific to individual buildings and landscapes are set out on the following pages. The Master Plan illustrates the framework for the campus to 2010. The Demonstration Plan is a more detailed conceptualization of how the Master Plan could be delivered that is consistent with the Master Plan and the general and specific design guidelines.

Urban Design Guidelines

The orientation of the existing campus grid, skewed from true north-south, should set the geometry of the Core and Commons Precincts. Siting of buildings in other precincts responds to the topography and need not have the orientation of the core.

Buildings should be sited to provide defining edges to the courtyards, streetscapes, and other social spaces in the Master Plan. The edges that front on important spaces should be transparent and programmed to animate the adjacent outdoor spaces. Active ground floor uses should be especially near entrances and at corners.

Universal access should be maximized for all new and renovated buildings and open spaces.

Planning, programming, and design should be strategized to encourage mixing and interaction, flexibility, legibility and wayfinding, including donor identification.

Architectural Guidelines

The extensive use of dark red brick will continue to characterize the central courtyard. It should be used as a material in the campus palette for accent and continuity along with other materials including a substantial proportion of glazing, especially at ground level, concrete, and exterior panels in tans and greys that complement the colours of the Okanagan landscape.

Atrium spaces should be considered in new and renovated buildings to maximize daylighting to interior spaces, to support natural ventilation through mechanically operated ventilating windows, and to support the strategy of creating indentifiable spaces for mixing and interaction.

The composition of buildings should relate to the proposed figures of open space by controlling massing, scale, materials, proportions, and program distribution within the buildings.

Architectural design should reinforce the hierarchy of buildings on campus in order to contribute to wayfinding by urban design legibility. Important spaces and main entries should be marked by architectural elements such as vertical elements or prominent entry features.

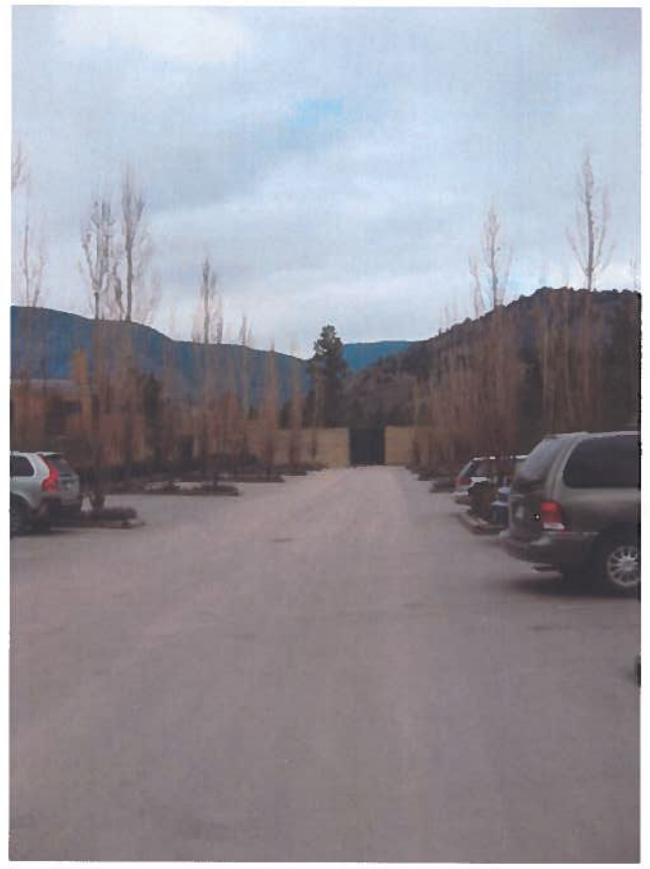
Residential buildings should be readily identifiable as more finely textured and articulated than academic buildings. Where residential buildings are sited on sloping topography, they should be designed to respond to the slope rather than require substantial grading to create a flat site.

Landscape Guidelines

Manicured landscape should be located only in the core and in proximity to buildings. Expanses of lawn should be found only on the Commons and sportfields. Other, peripheral landscapes should take their design cues from the characteristic Okanagan landscape typologies of grassland, wetland, and pine forest and use drought tolerant native species.

North-south streetscapes generally should be lined with regularly spaced street trees except where breaks are made in response to site-specific purposes. The extension of Hollywood Road near the highway is an exception; a grassland landscape should predominate.

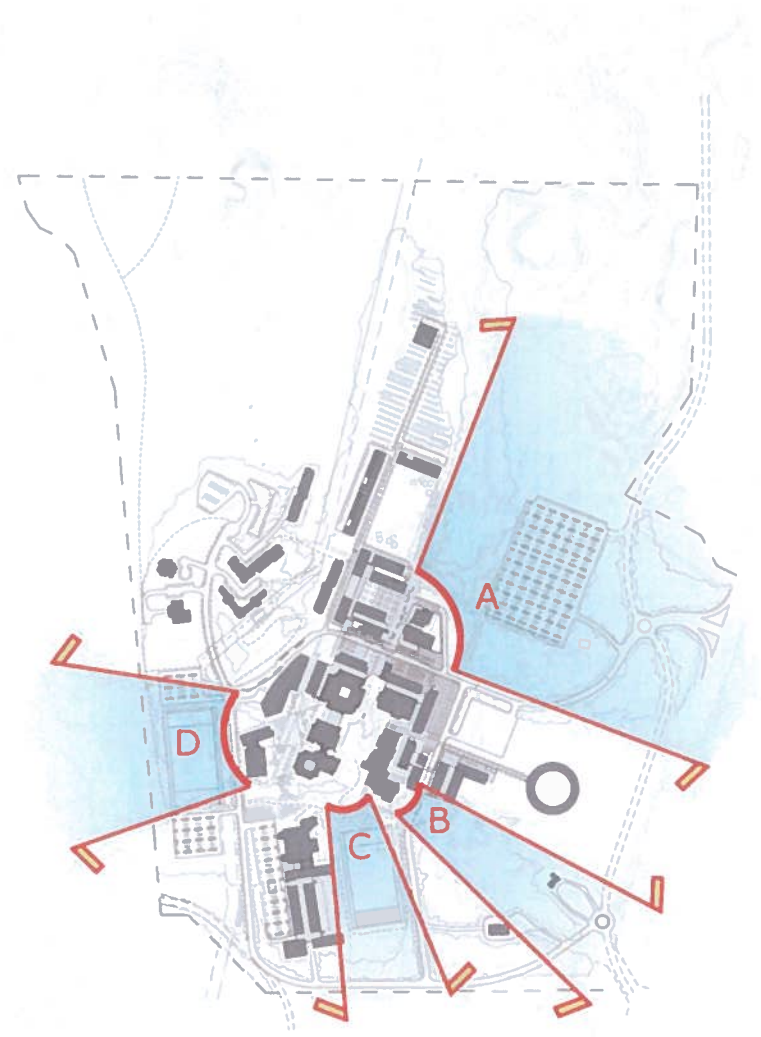
Parking lots should be landscaped with internal rows of trees a maximum of five parking spaces apart for visual interest and shading of the pavement.



GENERAL GUIDELINES

View Preservation Guidelines

The Master Plan has been structured around the principle of maximizing view opportunities from many places on campus in order to provide a strong sense of place within the Okanagan landscape. The major view corridors should be preserved in the implementation of the Campus Plan and managed over time to maintain views from encroachment of trees, parking lots, and other elements that block or degrade their intrinsic attractiveness.



VIEW PRESERVATION CORRIDORS

Sustainability Guidelines

Opportunities should be sought to make buildings as energy efficient as possible and to build on the investment in geothermal heating that has been endorsed for UBC O. Strategies for consideration include natural ventilation, displacement ventilation, operable windows, heat recovery, and robust concrete structural systems suited to radiant heating.

Daylight access to interior spaces should be maximized to reduce use of electric lights and is part of the motivation for including atriums in many building concepts. Systems that monitor and adjust lighting levels should be part of the sustainable building strategies.

Stormwater management should be integrated into the design of roads, plazas, and other paved surfaces for recharge into the ground or direction to wetland ponds.

Other sources of water than potable supplies for use in landscape irrigation should be sought, including rainwater capture and storage and, potentially, utilization of grey water.

BUILDING INFORMATION + GUIDELINES

LEARNING COMMONS (BUILDING 'A')

The Learning Commons transforms the existing Library through the addition of new library space, reading and meeting rooms, and offices to the north and east linked to the current building with atrium spaces on axis with the atrium in the Multipurpose Building (E) and the walkway to the Engineering and Management Courtyard. Uses that benefit from an exterior location with windows and views move into the new wings, making internal space available for expansion of the library stacks to accommodate new holdings.

Part of Phase 3, the Learning Commons occupies an important site as the first building seen by visitors to campus as they drive up the entry road at Main Gate. It will remain the entry landmark for many years, well past the 2010 timeframe of the Master Plan, until a future building is built to its east. The Demonstration Plan illustrates a prominent glazed social space at this key corner and a tower element to mark this as an important building at the corner where University Way and University Walk intersect.

In addition to library functions, a small food service is included in the program for the convenience of library users and to help animate the main entrance from University Way.

DESIGN GUIDELINES

The Learning Commons should be a welcoming building with visible activity by day and be a well-illuminated lantern at night.

Massing: The program requirements generate six stories; one level is below the ground floor occupying and animating the northeast corner of the building at University Way. The fourth and fifth floors should step back so that the mass of the building reads primarily as a three storey form of similar height and mass to the Multipurpose Building (E) across University Walk to the west.

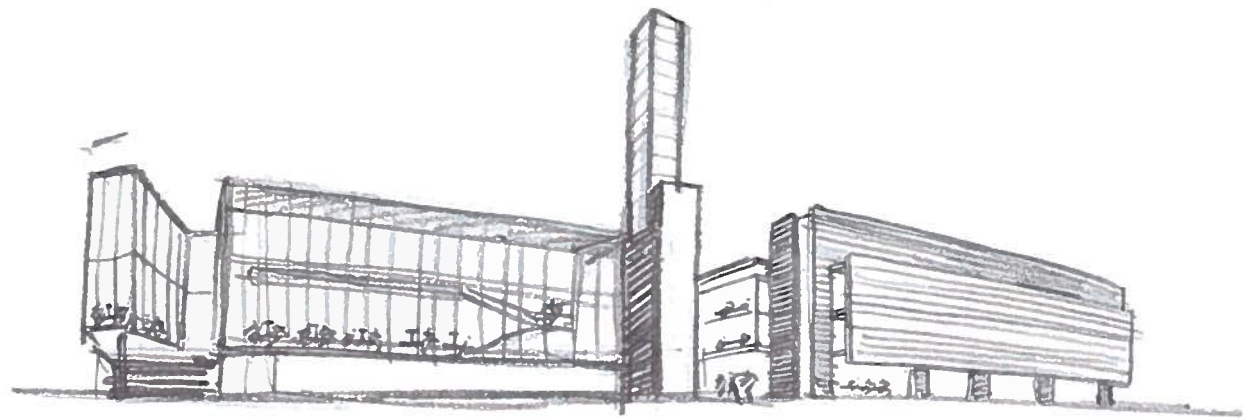
Relationship to Adjacent Buildings: The east-west atrium should align with the atrium of the Multipurpose Building with an entrance so that people can move directly from one weather-protected space to the other. The north-south atrium should be on the axis of the walkway that passes between Buildings B and C enroute to the Engineering and Management Courtyard.

Relationship to Landscape: The west and south sides of the Learning Commons retain the existing relationship to the Academic Courtyard. The north facade addresses University Way with a streetscape treatment and social space that expands on the landscape that mediates between the Multipurpose Building and University Way. There should be a minimum setback of 20 meters between the Learning Commons and the roadway of South Gate with a double or triple row of trees forming a bosque along the building edge, breaking across the path to the Gathering Place, and extending to the Management Engineering Building.

Relationship to Views: The building design should capitalize on the panoramic views across the valley to the northeast.

JOSEPH S. STAUFFER LIBRARY, QUEEN'S UNIVERSITY KINGSTON, ON (KPMB ARCHITECTS)

TRINITY COLLEGE LIBRARY AND INFORMATION TECHNOLOGY CENTRE, HARTFORD CONNECTICUT (KPMB ARCHITECTS)

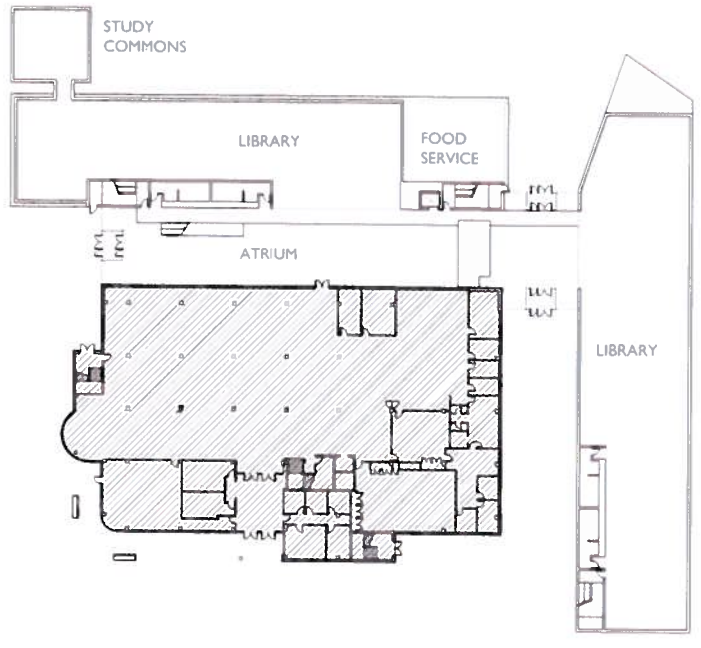


PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM	
A1-FOOD	145
A2-LIBRARY	13960
A3-LEARNING SERVICES	1088
A4-CLASSROOMS	400
A5-STUDY COMMONS	90
A-TOTAL NSM	5688
A-GSM TOTAL	9093

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
-100 LEVEL	641
100 LEVEL	2595
200 LEVEL	2031
300 LEVEL	2027
400 LEVEL	1181
500 LEVEL / PENTHOUSE	617
TOTAL	9092

BREAKDOWN BY SPACE TYPE:

A1-FOOD	145
A2-LIBRARY	3961
A3-LEARNING SERVICES	1088
A4-CLASSROOMS	434
A5-STUDY COMMONS	91
CIRCULATION / SERVICE	1817
LOADING / STORAGE	512
TOTAL	9092



CONCEPTUAL FLOOR PLAN 1:500

BUILDING INFORMATION + GUIDELINES

MANAGEMENT WITH ENGINEERING (BUILDING 'B')

The Management with Engineering Building (B), and the concurrent Building V, are the first academic structures to be wholly built for UBC Okanagan and respond to the strong interest by student applicants for these programs. The co-location of these two programs responds to the Academic Plan and the recognition that there is a synergy between these courses of study and the students and faculty attracted to them.

Building B houses a mix of offices, labs, and classrooms. On its west side, it forms the edge of a new outdoor social space, the Engineering and Management Courtyard with the existing building that currently serves as the Student Services Centre. On the west, it creates a streetwall, as a pair with Building V, along South Gate.

DESIGN GUIDELINES

Buildings B and V are anticipated to be implemented at the same time and should be designed to work together as a gateway for people arriving on campus from the south along South Gate. There should be setback a similar dimension from the street and present the same length of facade along the streetscape. If it supports the integration of the Engineering and Management programs, then a second or third level bridge over the street to connect Buildings B and V should be implemented.

Siting: Building B should form an 'L' shaped footprint to create both north and east built edges that define the Engineering and Management Courtyard. Its western facade should be aligned to delineate a pedestrian route on the axis of and relating to the geometry of the north-south atrium of the Learning Commons.

Massing: Building B should be a three storey structure to relate comfortably to the mass of existing Building C for a coherent building wall around the Engineering and Management Courtyard. The Demonstration Plan envisions a penthouse setback at the third level for this reason.

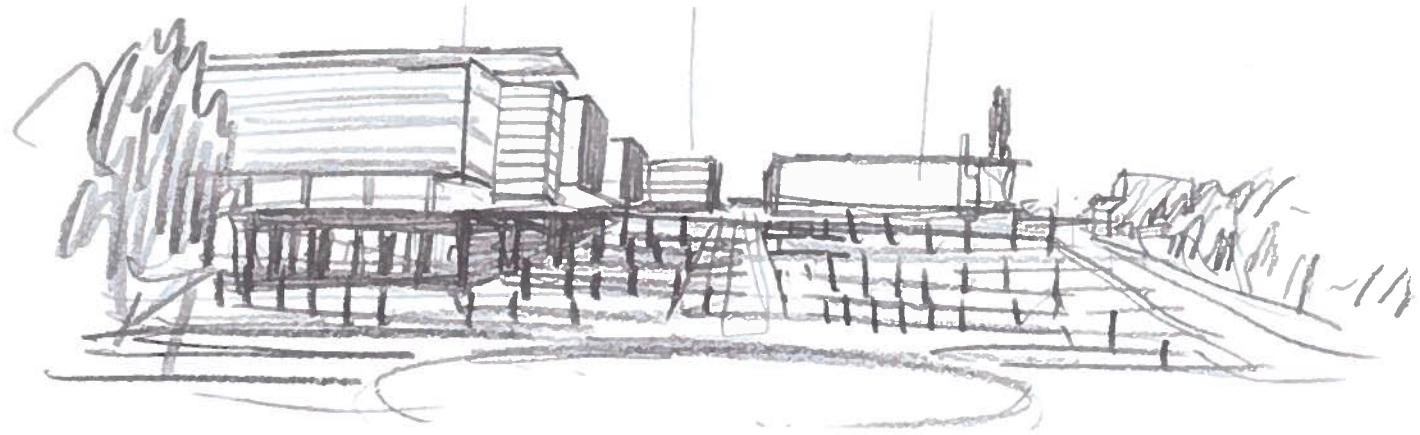
Relationship to Adjacent Buildings: The east facade should be dimensioned and designed in dialogue with the street fronting facade of Building V. The north end should relate to the geometry of the south end of the adjacent new wing of the Learning Commons.

Relationship to Landscape: The bosque of trees along the east side of the Learning Commons should be echoed for at least two rows of trees at the northeast corner of Building B and on the south side of the path that will, in time, lead to the Gathering Place. The building provides an edge to several pedestrian routes, including the Gathering Place to Academic Courtyard link, the Learning Commons to Engineering and Management Courtyard link, and a path south from the Engineering and Management Courtyard, and should provide views into internal corridors and other spaces where possible to add interest for passers-by.

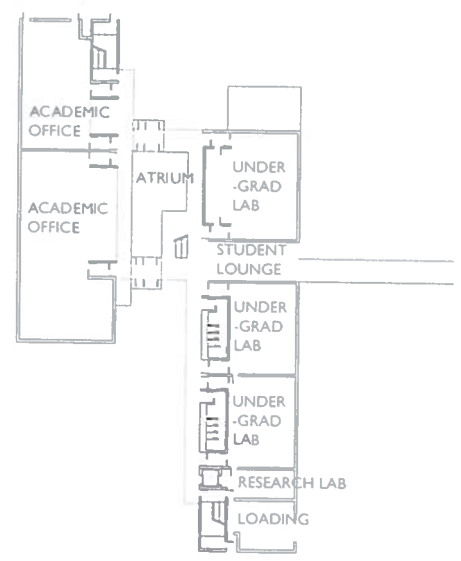
Relationship to Views: The architecture and internal layout of spaces should respond to the opportunities for views into the pine forest to the southeast, across the playing field to the south, and to the northeast across the entry landscape.

SCHOOL OF MANAGEMENT, UNIVERSITY OF TORONTO SCARBOROUGH CAMPUS, SCARBOROUGH, ON (KPMB ARCHITECTS)

CENTENNIAL HP SCIENCE AND TECHNOLOGY CENTRE, SCARBOROUGH, ON (KPMB ARCHITECTS)



PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM		
B1-CLASSROOMS		100
B2-MANAGEMENT		747
B2.1-UNDERGRAD LABS	273	
B2.2-RESEARCH LABS	24	
B2.3-ACAD. DEPT. OFFICES	294	
B2.4-DEAN'S OFFICE	129	
B2.5-FACULTY LOUNGE	27	
B3-APPLIED SCIENCE		1634
B3.1-APPLIED SCIENCES	918	
B3.2-RESEARCH LAB	216	
B3.3-ACADEMIC OFFICES	500	
A-TOTAL NSM		2481
A-GSM TOTAL		3970



CONCEPTUAL FLOOR PLAN 1:500

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
100 LEVEL	1473
200 LEVEL	1433
300 LEVEL / PENTHOUSE	1279
TOTAL GSM	4185

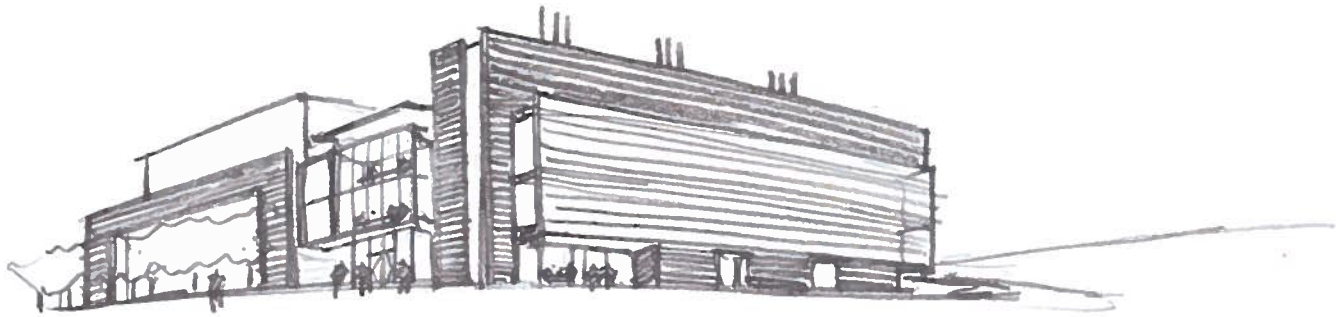
BREAKDOWN BY SPACE TYPE:		
B1-CLASSROOMS		107
B2-MANAGEMENT		771
B2.1-UNDERGRAD LABS	267	
B2.2-RESEARCH LABS	30	
B2.3-ACAD. DEPT. OFFICES	296	
B2.4-DEAN'S OFFICE	148	
B2.5-FACULTY LOUNGE	30	
B3-APPLIED SCIENCE		1649
B3.1-APPLIED SCIENCES	942	
B3.2-RESEARCH LAB	212	
B3.3-ACADEMIC OFFICES	495	
STUDENT LOUNGE		*189
CIRCULATION / SERVICE		1212
PENTHOUSE		204
LOADING		53
A-GSM TOTAL		4185

PLEASE NOTE: ADDITION OF STUDENT LOUNGES HAS ADDED 189 NSM TO THE OVERALL GSM TOTAL.

BUILDING INFORMATION + GUIDELINES

MULTIPURPOSE BUILDING (BUILDING 'E')

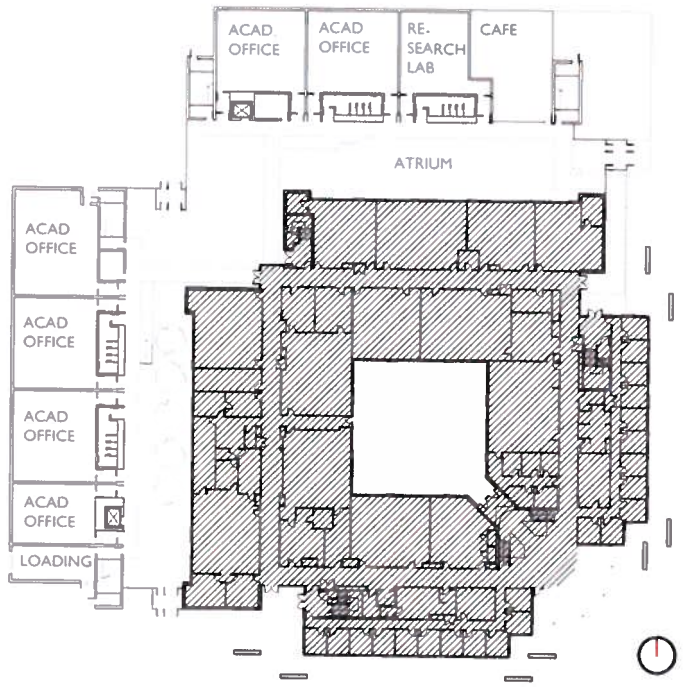
The Multipurpose Building (E) has been given approval by the Board of Governors and is currently in detailed design. Board One approval was granted on the basis of the Campus Master Plan framework as it was conceptualized in Stage Two of the master planning process. The form, massing, siting, and preliminary architectural concept has remained constant through Stage Four for Building E, given that it had advanced to detailed design.



PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM		
E1-ACADEMIC OFFICES, SCIENCE		750
E3-CHEMISTRY		2761
E3.1-UNDERGRAD LABS	1517	
E3.2-RESEARCH LABS	1244	
E4-PHYSICS		1058
E4.1-UNDERGRAD LABS	735	
E4.2-RESEARCH LABS	323	
E2-FOOD		145
E-TOTAL NSM		4714
E-GSM TOTAL		8014

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
100 LEVEL	2533
200 LEVEL	1737
300 LEVEL	1707
400 LEVEL	1329
500 LEVEL	1329
600 LEVEL / PENTHOUSE	772
TOTAL GSM	9401

BREAKDOWN BY SPACE TYPE:		
E1-ACADEMIC OFFICES, SCIENCE		757
E3-CHEMISTRY		2772
E3.1-UNDERGRAD LABS	1517	
E3.2-RESEARCH LABS	1255	
E4-PHYSICS		1047
E4.1-UNDERGRAD LABS	699	
E4.2-RESEARCH LABS	348	
E2-FOOD		144
CIRCULATION / SERVICE		3860
LOADING		49
PENTHOUSE		772
E-GSM TOTAL		9401



CONCEPTUAL FLOOR PLAN 1:500

SCHOOL OF MANAGEMENT, UNIVERSITY OF TORONTO SCARBOROUGH CAMPUS, SCARBOROUGH, ON (KPMB ARCHITECTS)

CENTENNIAL HP SCIENCE AND TECHNOLOGY CENTRE, SCARBOROUGH, ON (KPMB ARCHITECTS)

BUILDING INFORMATION + GUIDELINES

CINÉMATHÈQUE / ACADEMIC (BUILDING 'F')

Building F completes the edges of the Arts and Science Courtyard with a structure that contains both academic space (labs, classrooms, offices, lounges space) and one of the two 400 seat lecture theatres in the Master Program. This theatre will be used for large academic lectures and be equipped as a cinematheque. This film-viewing function will be used by the Creative Studies programs and for community entertainment purposes in the evenings.

A small food service supports both academic and entertainment activities within Building F and will spill out into the courtyard in good weather conditions, helping to animate this important social space shared by many arts and science disciplines.

DESIGN GUIDELINES

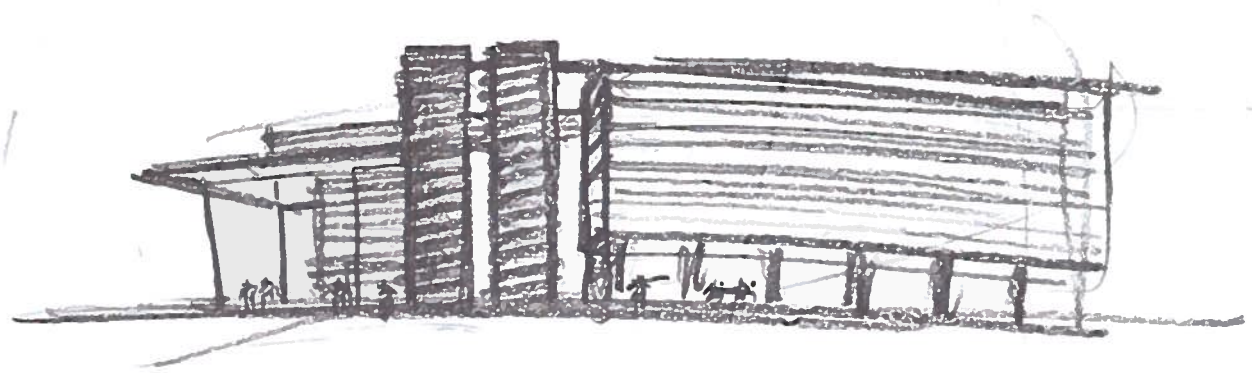
Siting: The siting of Building F plays a role in the shaping of several outdoor spaces and movement routes. The north end of the building is aligned parallel to the new west wing of the Multipurpose Building (E) to make a passageway that continues the alignment of the Mews south of University Way. The south end, with the cinematheque and lobby, breaks from the rectilinear geometry of the central core to respond to the irregular siting of the existing Fine Arts and Health Building.

The west side of Building F creates a built edge for the relocated section of University Way where the transit exchange is planned. A change in elevation tucks this side of the structure into the bank and allows a service access to be partially screened from the road and bus stops.

Massing: In the Demonstration Plan, Building F is massed as a five storey form with the upper floor as a penthouse with a smaller floor area than the levels below. The cinematheque and its lobby are one storey spaces with ceilings as high as several floors of the adjacent academic portion.

Relationship to Adjacent Buildings: All the buildings around the Arts and Science Courtyard have similar heights and massing. The relatively opaque bulk of the existing buildings is contrasted with three light and transparent glazed social spaces at intervals around the edges of the Arts and Science Courtyard: the atrium in the Multipurpose Building, the Irving K. Barber Atrium, and the Cinematheque lobby .

Relationship to Adjacent Landscape and Views: The west and south sides of Building F overlook views across the new playfield to the agricultural landscape beyond.

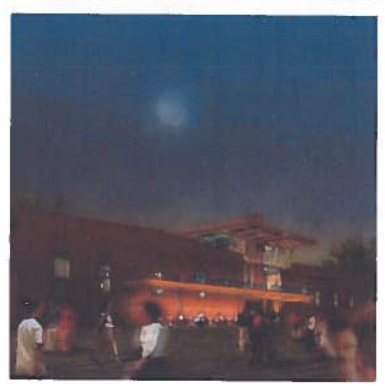


PROPOSED BUILDING BREAKDOWN BY LEVEL:	
100 LEVEL	2643
200 LEVEL	1956
300 LEVEL	1279
400 LEVEL	1282
500 LEVEL / PENTHOUSE	429
TOTAL GSM	7588

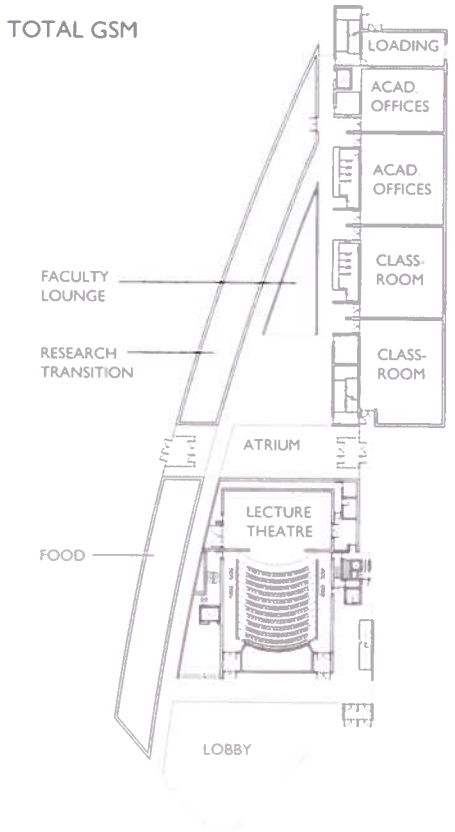
PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM		
F1-CLASSROOMS		300
F2-ACADEMIC OFFICES, SCIENCES		1140
F3-ARTS AND SCIENCE		422
F3.1-DEAN'S OFFICE	352	
F3.2-FACULTY LOUNGE	70	
F4-FOOD		145
F5-LECTURE THEATRE		165
F6-RESEARCH TRANSITION		200
F7-STUDY COMMONS		90
F8-FACULTY OFFICE, ARTS		1500
F-TOTAL NSM		4358
F-GSM TOTAL		6973

PROPOSED BUILDING BREAKDOWN BY SPACE TYPE:		
F1-CLASSROOMS		292
F2-ACADEMIC OFFICES, SCIENCES		1142
F3-ARTS AND SCIENCE		421
F3.1-DEAN'S OFFICE	352	
F3.2-FACULTY LOUNGE	69	
F4-FOOD		160
F5-LECTURE THEATRE		416
F6-RESEARCH TRANSITION		213
F7-STUDY COMMONS		89
F8-FACULTY OFFICE, ARTS		1507
CIRCULATION		2920
LOADING		49
PENTHOUSE		379
TOTAL GSM		7588

CENTENNIAL HP SCIENCE & TECHNOLOGY CTR. SCARBOROUGH, ON (KPMB ARCHITECTS)



YOUNG CENTRE FOR THE PERFORMING ARTS TORONTO, ON (KPMB ARCHITECTS)



CONCEPTUAL FLOOR PLAN 1:1000

BUILDING INFORMATION + GUIDELINES

HEALTH, WELLNESS AND RECREATION (BUILDING 'H1 and H2')

Health, Wellness and Recreation are combined into a complex of buildings as a response to ideas from the Academic Plan that seek innovative synergies among academic programs and that encourage a well-rounded life for the campus community. It is structured around the existing gym and fulfills its original concept by completing the upper running track deck and providing a better location for fitness facilities so that the current fitness centre can be used for storage, as planned. It also takes advantage of the adjacent sportsfield and the planned location for a second one nearby.

Programs in these buildings include the expansion of recreation and the co-location of Psychology, Nursing, Dentistry, Health, and Human Kinetics. Some of these programs have a community outreach aspect that is well served by the proximity of Health, Wellness and Recreation to road access, surface parking, and the College Heights development site. Psychology has counselling services and Dentistry offers a community clinic while the gymnasium and other recreation facilities are regularly used by groups from off-campus.

A residential component is also part of the program for Health, Wellness and Recreation. This is one of the few locations on campus that is believed to be acceptable for a 10 storey building; the third through tenth floors of the tower element shown in the Demonstration Plan are planned for residences.

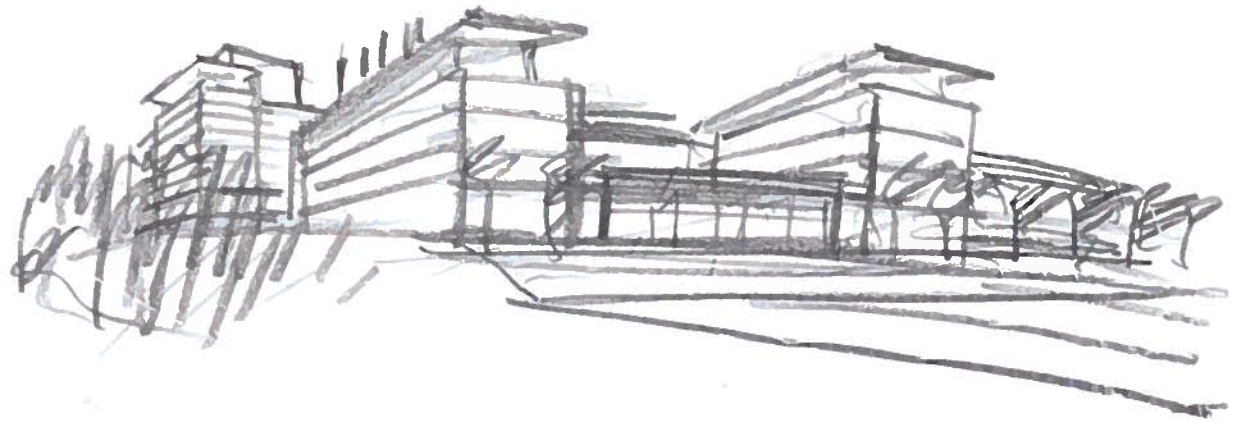
DESIGN GUIDELINES

Health, Wellness and Recreation should be animated at grade by the program elements that invite public use. The food services should be located to open, in good weather, onto the public deck open space so that it can be readily used by the public and by spectators of sports events on the sports field that is overlooked from this deck.

Siting: The topography slopes toward the east across the site of Health, Wellness and Recreation. The open space is elevated on the south side to capture maximum sunlight. The slope is used to advantage to gain access to underground parking from the southeast corner of the complex.

Massing: Building elements of varying height are used to breakup the large volume of space within Health, Wellness and Recreation. The residential tower provides a vertical mass that contrasts with the substantial bulk of the gym expansion.

Relationship to Landscape and Views: Health, Wellness and Recreation should be buffered from the main road access along South Gate with a strip of trees, either retained or replanted. These trees will buffer the campus from the planned College Heights development as well as traffic. Existing trees on the north side of the playfield should also be maintained. The landscape between these treed buffers and between the buildings and the playfield should be treated as a grassland meadow. Views will be available from the buildings over and through the trees from many vantage points over the plaza towards the agricultural lands to the southeast.



RICHMOND CITY HALL, RICHMOND BC (KPMB ARCHITECTS / HOTSON BAKKER)

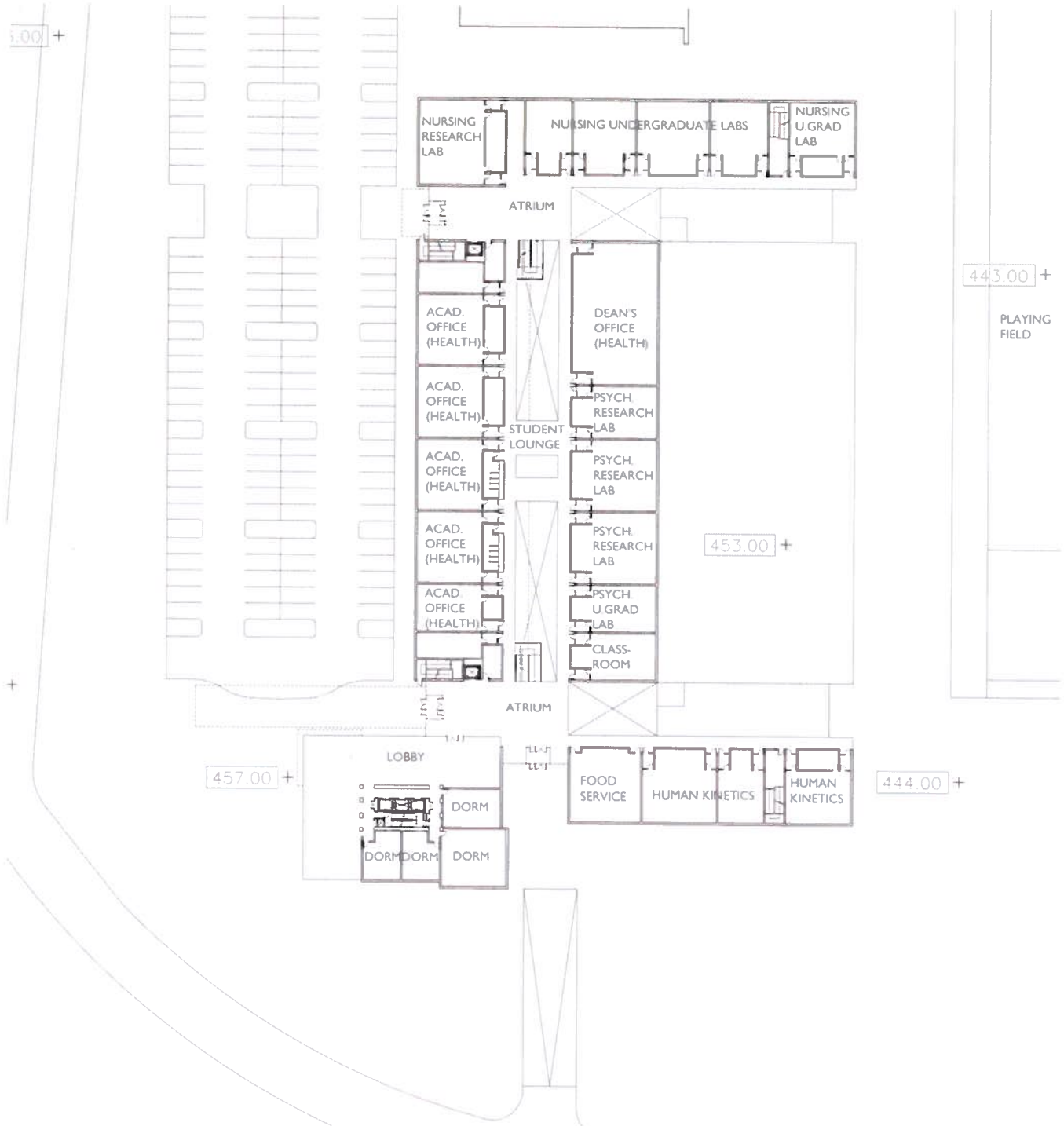
JAMES STEWART CENTRE FOR MATHEMATICS HAMILTON, ON (KPMB ARCHITECTS)

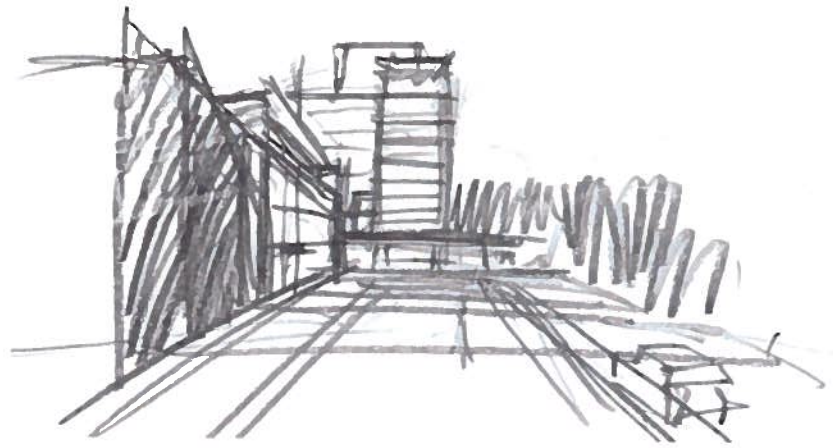
PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM		
H1-RECREATION		3837
H1.1-ATHLETIC / REC.	3619	
H1.2-ADMIN. OFFICE	163	
H1.3-COMMON USE	55	
H2-PSYCHOLOGY		872
H2.1-UNDERGRAD LABS	105	
H2.2-RESEARCH LABS	767	
H3-NURSING		786
H3.1-UNDERGRAD LABS	588	
H3.2-RESEARCH LABS	198	
H4-HUMAN KINETICS		426
H4.1-UNDERGRAD LABS	369	
H4.2-RESEARCH LABS	57	
H5-DENTISTRY		6768
H5.1-CLASSROOMS	1015	
H5.2-UNDERGRAD LABS	3213	
H5.3-RESEARCH LABS	1217	
H5.4-ACAD. DEPT. OFFICE	795	
H5.5-ADMIN. OFFICE	165	
H5.6-COMMON USE	359	
H6-HEALTH		1196
H6.1-ACAD OFFICES (H + HK)	828	
H6.2-DEAN'S OFFICE	341	
H6.3-FACULTY LOUNGE	27	
H7-ANIMAL		410
H7.1-ANIMAL RESEARCH LAB	360	
H7.2-ACADEMIC OFFICES	50	
H8-CLASSROOMS		300
H9-FOOD, FOOD SERVICES		145
H-TOTAL NSM		14736
H-RESIDENCES GSM TOTAL		6830
GSM TOTAL		29257

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
P2 / STUDIO LEVEL	2636
P1 LEVEL	288
100 LEVEL	4768
200 LEVEL	4612
300 LEVEL	4532
400 LEVEL	4429
500 LEVEL / PENTHOUSE	831
SUB-TOTAL GSM	22096
PROPOSED RESIDENCE	
P1 LEVEL	470
200 LEVEL	786
300 - 900 LEVEL (782 EACH)	5474
1000 LEVEL / PENTHOUSE	107
SUB-TOTAL RESIDENCE GSM	6837
TOTAL GSM	28933

BUILDING INFORMATION + GUIDELINES

HEALTH, WELLNESS AND RECREATION (BUILDING 'H1 and H2')





PROPOSED BUILDING
BREAKDOWN BY SPACE TYPE:

H1-RECREATION		3843
H1.1-ATHLETIC / REC.	3621	
H1.2-ADMIN. OFFICE	168	
H1.3-COMMON USE	54	
H2-PSYCHOLOGY		897
H2.1-UNDERGRAD LABS	109	
H2.2-RESEARCH LABS	788	
H3-NURSING		788
H3.1-UNDERGRAD LABS	589	
H3.2-RESEARCH LABS	199	
H4-HUMAN KINETICS		440
H4.1-UNDERGRAD LABS	383	
H4.2-RESEARCH LABS	57	
H5-DENTISTRY		6745
H5.1-CLASSROOMS	1017	
H5.2-UNDERGRAD LABS	3188	
H5.3-RESEARCH LABS	1216	
H5.4-ACAD. DEPT. OFFICE	795	
H5.5-ADMIN. OFFICE	166	
H5.6-COMMON USE	363	
H6-HEALTH		1192
H6.1-ACAD OFFICES (H + HK)	825	
H6.2-DEAN'S OFFICE	340	
H6.3-FACULTY LOUNGE	52	
H7-ANIMAL		442
H7.1-ANIMAL RESEARCH LAB	390	
H7.2-ACADEMIC OFFICES	52	
H8-CLASSROOMS		306
H9-FOOD, FOOD SERVICES		145
CIRCULATION		6292
LOADING		175
PENTHOUSE		831
H-TOTAL NSM		22096

H-RESIDENCES GSM TOTAL		6837
HR1-DORMITORY	5739	
HR2-LOADING	470	
HR3-LOBBY	521	
HR4-PENTHOUSE	107	
H-GSM TOTAL		28933

BUILDING INFORMATION + GUIDELINES

LECTURE THEATRE / DRAMA CENTRE (BUILDINGS 'I' AND 'J')

The buildings on the east side of University Centre are two theatres: one is a 'black box' drama theatre, considered to be a highly valuable resource for the campus that will require a donor to implement, and the other is one of the two 400 seat lecture theatres to fulfill the requirements of the Master Program. Together these theatres are a destination for the campus community and the public and the wide variety of uses that will be accommodated within them will ensure day and evening activity that will also help to make food, retail, and other facilities of the University Centre successful. The Master Plan provides the flexibility to build these two theatres at one time or separately, as funding is available.

The drama centre fronts on University Way and its lobby space should be transparent and programmed to create interest from the street side and to spill onto the streetscape during events. The transparent lobby wraps around the lecture theatre providing social spaces for both theatres with flexibility to be used separately or combined to meet the program needs for academic, conference, and public purposes.

The east side of the buildings is shown in the Demonstration Plan an enclosed service yard to support theatre activities at the grade of the University Way and the access to underground parking at a level down. Visual access should be available into these outdoor support spaces for the interest of passing pedestrians.

DESIGN GUIDELINES

Although theatres are 'black box' buildings, the concept of wrapping the exteriors with glazed lobby space ensures that they will add interest and ambient light at night to the public realm.

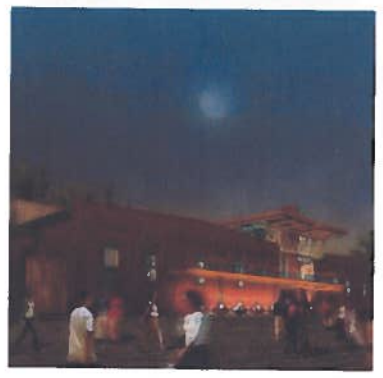
Siting: The setback of the Drama Centre from University Way should be the same as that of the University Centre (K1) to define a continuous streetwall. The west facade should contain the edge of University Walk.

Massing: The glazed lobby space should be high enough to enclose the bulk of the theatres behind it.

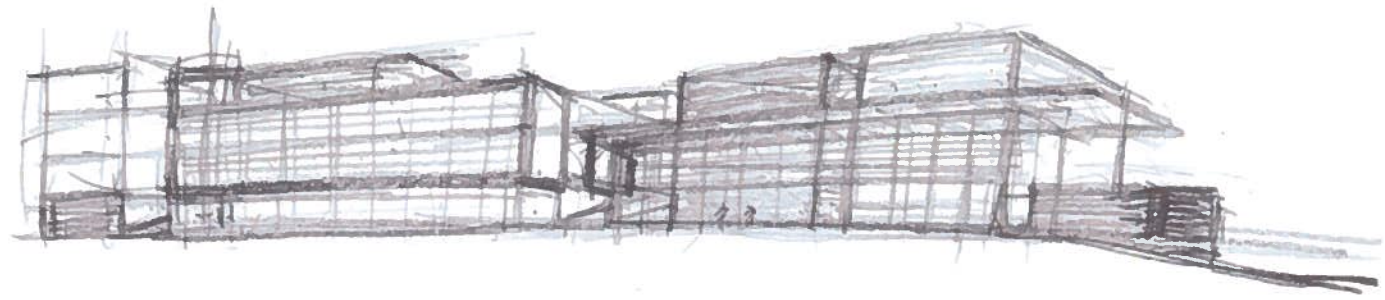
Relationship to Adjacent Buildings: These buildings define and create pedestrian-scale interest for University Walk and University Way. They should read as two related but distinct structures. The architecture of both should be coordinated; the second one implemented should respond to the form, massing, and materials of the first.

Relationship to Landscape and Views: The external lobby where views can be seen should emphasize the contrast between views into the active heart of the university to the south and east with views of pine forest to the north. The forest buffer on the west and north sides should be protected, and replanted where necessary after construction, as a buffer to the parking lot downhill and to the west of University Centre.

ROYAL CONSERVATORY OF MUSIC, TORONTO, ON (KPMB ARCHITECTS)



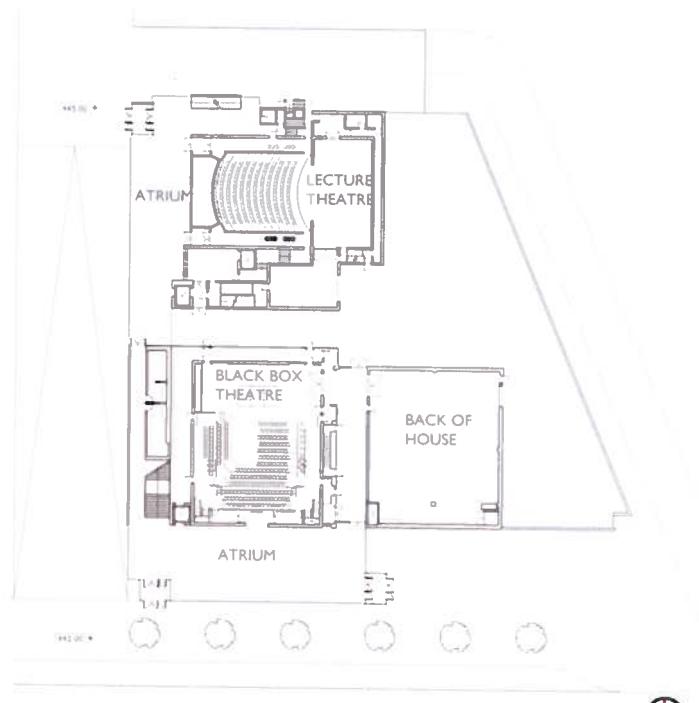
YOUNG CENTRE FOR THE PERFORMING ARTS TORONTO, ON (KPMB ARCHITECTS)



PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM	
I-LECTURE THEATRE	561
I-GSM SUB-TOTAL	898
J2-BLACK BOX THEATRE AND SUPPORT	935
J2-GSM SUB-TOTAL	1496
I / J2 GSM TOTAL	2394

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
100 LEVEL	1944
200 LEVEL / PENTHOUSE	450
GSM TOTAL	2394

BREAKDOWN BY SPACE TYPE:	
I-LECTURE THEATRE	310
J2-BLACK BOX THEATRE	338
J2-BACK OF HOUSE (B.O.H)	527
CIRCULATION / SERVICE	769
PENTHOUSE	450
I / J2 GSM Total	2394



CONCEPTUAL FLOOR PLAN 1:1000

BUILDING INFORMATION + GUIDELINES

UNIVERSITY CENTRE (BUILDINGS 'K1' and 'K2')

The University Centre is the compact co-location of a number of facilities that serve students, faculty, staff, and the larger Okanagan community and therefore generate movement and activity. The Centre will be implemented in two phases. The first phase (K1) will be completed in the second phase to begin the process of creating a social heart for the campus. The first building brings together a variety of food services at a location closer to the residences than the present cafeteria, student and campus services, the facilities for the Student Association, the Bookstore and other retail space, and the campus Welcome Centre.

The second phase (K2) will house the UBC O Museum and Gallery, facilities for Continuing Studies, and a mix of computer labs, classrooms, meeting rooms, and a lecture hall that will be shared among disciplines and used for conferences. The Agroecology Department is included in the northern part of the building, giving it proximity to the Productive Landscape and its research fields and greenhouses.

DESIGN GUIDELINES

University Centre is the hub of action for the campus and the first place that visitors come for orientation and information. It is sited at the intersection of the most important circulation routes: University Way and University Walk. This location should make its role and top place in the hierarchy of the Campus Plan readily apparent to anyone coming to UBC O for the first time.

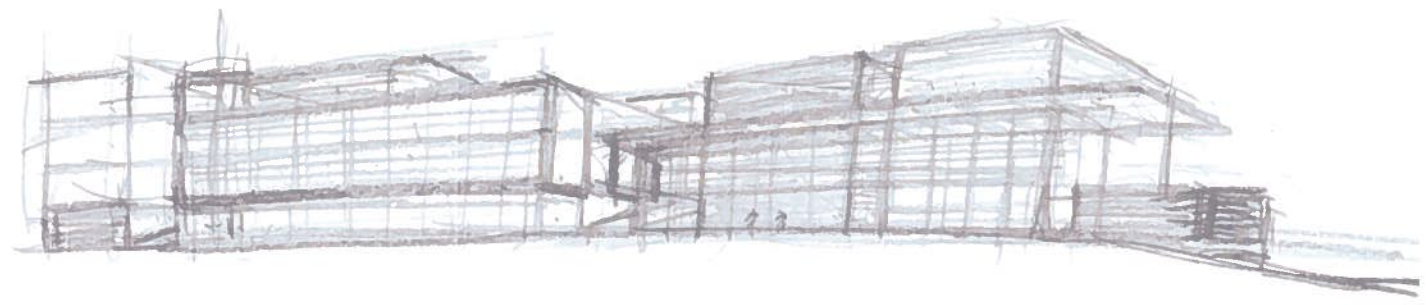
Siting and Elevations: The buildings of the University Centre should be sited to provide the built edges of several key social and circulation spaces and to align with other buildings with these roles: the south facade of K1 should work with the adjacent building edge of the Drama Centre as the streetwall of University Way, the west facade should define a strong and linear streetwall on the Mews, and the north facade of K2 should contain the Commons in concert with M, N, and O.

Massing and Interrelationships among Buildings: Atriums should provide social space and weather controlled circulation routes throughout University Centre. These atriums mediate among building wings of varied mass and work to unify the architectural expression. Buildings are predominantly five storeys in the Demonstration Plan; heights and mass may vary with refinement of the program and with the involvement of donors; heights should be a minimum of three and a maximum of six storeys.

Relationship to Landscape and Views: University Centre is internal to the Campus Plan and circled by buildings, nevertheless several long distance views are available to the north and southwest. The landscape is hardscape on all sides except the Commons and is subject to specific landscape guidelines.

SCHOOL OF MANAGEMENT, UTSC
SCARBOROUGH, ON (KPMB ARCHITECTS)

CENTENNIAL HP SCIENCE & TECHNOLOG CTR
SCARBOROUGH, ON (KPMB ARCHITECTS)

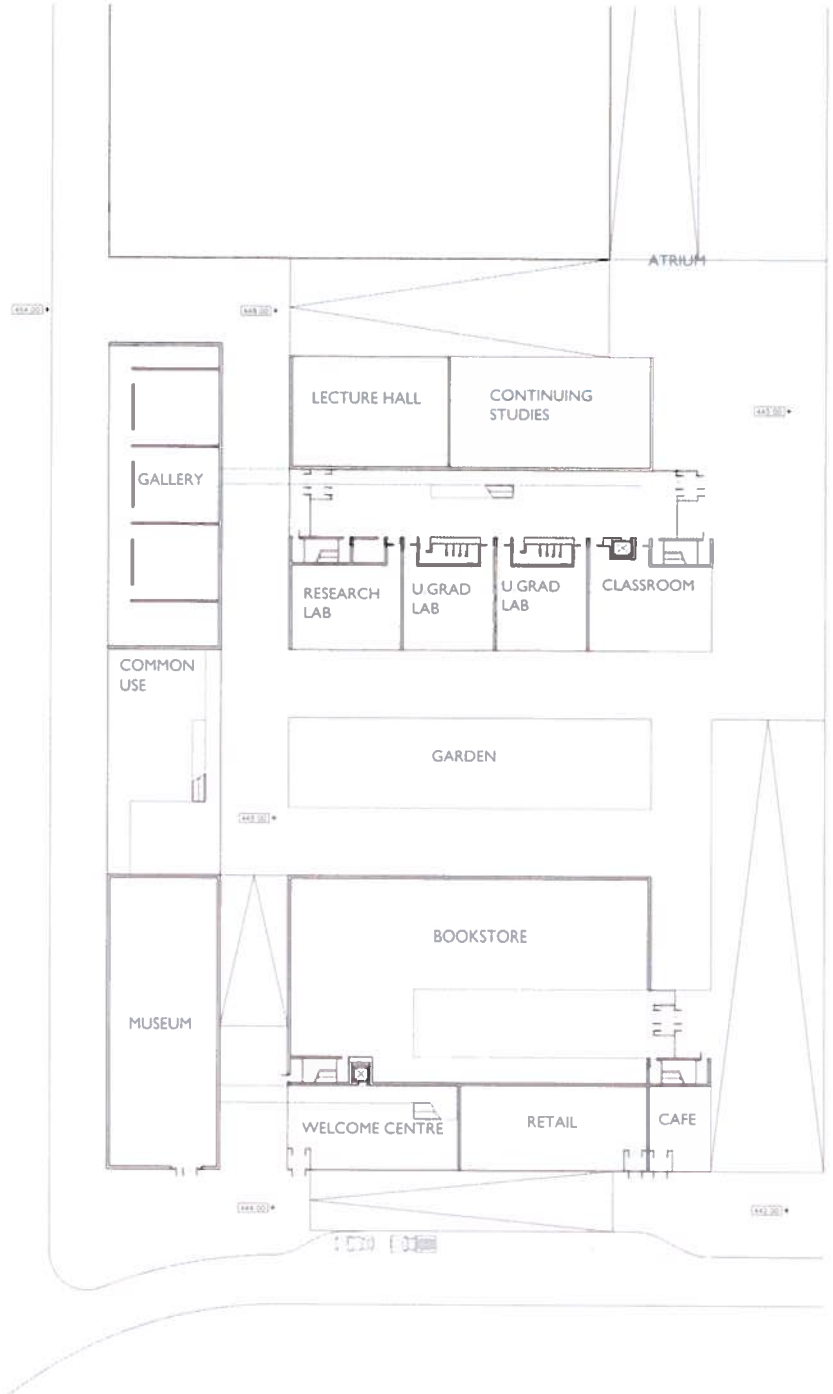


PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM		
K(1)1-FOOD		450
K(1)2-STUDENT AND CAMPUS SERVICES		1321
K(1)2.1-ADMIN, AVP	733	
K(1)2.2-HEALTH SERVICES	132	
K(1)2.3-COMMON USE	225	
K(1)2.4-EXEC. ADMIN	231	
K(1)3-WELCOME CENTRE		20
K(1)4-SUPPORT SERVICES - CLUSTER 3		7
K(1)5-RETAIL SPACE		370
K(1)6-BOOKSTORE, PUB, MERCHANDISING		1208
K(1)7-COMMON USE & STUDENT ACTIVITY		727
K(1)8-CONCIERGE		10
K(1)9-STUDENT ASSOCIATION		343
SUBTOTAL NSM		4456
SUBTOTAL GSM		7130
K(2)1-CLASSROOMS		200
K(2)2-AGROECOLOGY		4067
K(2)2.1-UNDERGRAD LABS	2396	
K(2)2.2-RESEARCH LABS	1671	
K(2)3-CONTINUING STUDIES		382
K(2)4-LECTURE HALL (SMALL)		300
K(2)5-COMPUTER LABS		1063
K(2)5.1-UNDERGRAD LABS	888	
K(2)5.2-RESEARCH LABS	175	
SUBTOTAL NSM		6012
SUBTOTAL GSM		9619
J-GALLERY AND MUSEUM		839
SUBTOTAL NSM		839
SUBTOTAL GSM		1342
GSM TOTAL		18091

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
P1 LEVEL	2741
100 LEVEL	5606
200 LEVEL	4253
300 LEVEL	2792
400 LEVEL	1937
500 LEVEL / PENTHOUSE	735
SUB-TOTAL GSM	18064

BUILDING INFORMATION + GUIDELINES

UNIVERSITY CENTRE (BUILDINGS 'K1' and 'K2')



CONCEPTUAL FLOOR PLAN 1:1000

PROPOSED BUILDING
BREAKDOWN BY SPACE TYPE:

PROGRAM REQUIREMENTS -
AS NOTED IN THE MASTER PROGRAM

K(1)1-FOOD		460
K(1)2-STUDENT AND CAMPUS SERVICES		1314
K(1)2.1-ADMIN. AVP	730	
K(1)2.2-HEALTH SERVICES	129	
K(1)2.3-COMMON USE	224	
K(1)2.4-EXEC. ADMIN	231	
K(1)3-WELCOME CENTRE		20
K(1)4-SUPPORT SERVICES - CLUSTER 3		8
K(1)5-RETAIL SPACE		371
K(1)6-BOOKSTORE, PUB, MERCHANDISING		1275
K(1)7-COMMON USE & STUDENT ACTIVITY		845
K(1)8-CONCIERGE		10
K(1)9-STUDENT ASSOCIATION		343
K(2)1-CLASSROOMS		199
K(2)2-AGROECOLOGY		4041
K(2)2.1-UNDERGRAD LABS	2396	
K(2)2.2-RESEARCH LABS	1671	
K(2)3-CONTINUING STUDIES		382
K(2)4-LECTURE HALL (SMALL)		300
K(2)5-COMPUTER LABS		1058
K(2)5.1-UNDERGRAD LABS	891	
K(2)5.2-RESEARCH LABS	161	
J-GALLERY AND MUSEUM		1123
J1-LOADING		220
CIRCULATION		2028
PENTHOUSE		1590
GARAGE		2471
GSM TOTAL		18064

BUILDING INFORMATION + GUIDELINES

SCHOOL OF EDUCATION / RESIDENCES (BUILDING 'M')

Building M is one of two paired structures that together create a building wall along the west edge of the Commons. The lower floors are academic while the upper floors are residential.

The Demonstration Plan considers that the School of Education would occupy two floors, with three floors of residential above. This split accommodates the current Master Program for the School of Education, a small food service, and an additional daycare to serve the campus. At detailed design development, a different split between academic and residential should not compromise the design guidelines as long as the ground floor remains non-residential.

DESIGN GUIDELINES

The ground floor of Building M should include some program elements that attract use from people across campus so that the Commons maintains its role as a campus-wide social space rather than one serving a specific group of residences. An academic use avoids issues of privacy that would occur with a residential program. If a daycare is included, its outdoor play space should not encroach on the Commons but should occupy the outdoor area to the south of this building.

Siting: Buildings M and N should have the same setback from the Mews and this should coincide with the frontmost building line of Building L at the Mews. Surface parking may, if required, be sited at the rear of the buildings and should not be visually obtrusive from the Mews or Commons.

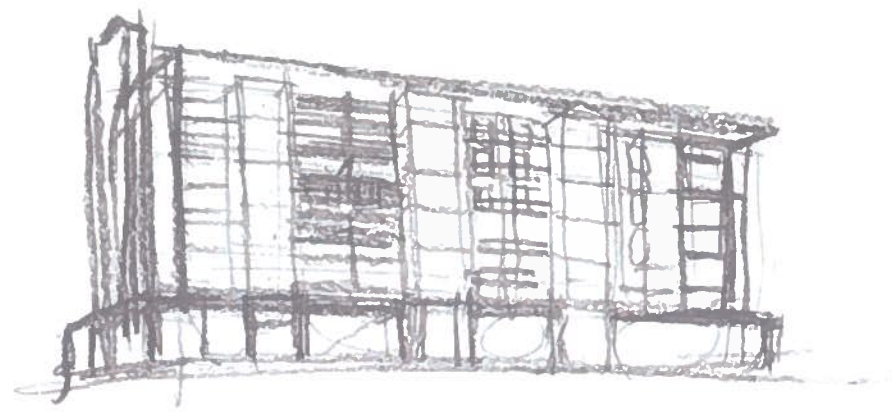
Massing: Buildings M and N should both be massed to create a building wall of similar height and breadth. The buildings should be a minimum of three storeys and a maximum of five storeys with a smaller penthouse as the fifth floor. The ground floor should be expressed as a distinct from the upper floor with a higher proportion of glazing and defined by an overhang that creates a shadow on the facade.

Relationship to Adjacent Buildings: Buildings M and N should relate to the architecture of the University Centre and the Scholar's Retreat as a related grouping around the Commons.

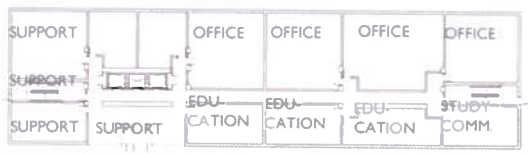
Relationship to Landscape and Views: Both M and N have access to panoramic views across the Commons to the valley to the east. To the west, both buildings look into the pine forest. A band of pine forest should be retained to provide a buffer and privacy between the residences in Buildings M and N and the first phase dormitory (R) up the hill to the east.

LE QUARTIER CONCORDIA, MONTREAL, QC (KPMB ARCHITECTS / FICHTEN SOIFERMAN)

JAMES STEWART CENTRE FOR MATHEMATICS HAMILTON, ON (KPMB ARCHITECTS)



PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM		
M1-DAYCARE		370
M2-FOOD		145
M3-EDUCATION		695
M3.1-EDUCATION	330	
M3.2-RESEARCH LABS	19	
M3.3-ACAD. DEPT. OFFICE	200	
M3.4-DEAN'S OFFICE	119	
M3.5-FACULTY LOUNGE	27	
M4-SUPPORT CLUSTER 1		210
M5-LECTURE HALL		300
M6-STUDY COMMONS		90
M-TOTAL NSM		1810
M-GROSS TOTAL		2896
MR-RESIDENCES (GSM TOTAL)		2137
M-GSM TOTAL		5033



CONCEPTUAL FLOOR PLAN 1:1000

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
100 LEVEL	1076
200 LEVEL	1076
300 LEVEL	1076
400 LEVEL	1076
500 LEVEL / PENTHOUSE	730
TOTAL GSM	5034

BREAKDOWN BY SPACE TYPE:		
M1-DAYCARE		370
M2-FOOD		145
M3-EDUCATION		695
M3.1-EDUCATION	321	
M3.2-RESEARCH LABS	19	
M3.3-ACAD. DEPT. OFFICE	216	
M3.4-DEAN'S OFFICE	119	
M3.5-FACULTY LOUNGE	27	
M4-SUPPORT CLUSTER 1		221
M5-LECTURE HALL		300
M6-STUDY COMMONS		90
CIRCULATION / SERVICE		739
PENTHOUSE		653
MR-RESIDENCES (GSM TOTAL)		1814
M-GSM TOTAL		5034

BUILDING INFORMATION + GUIDELINES

ACADEMIC / RESIDENCES (BUILDING 'N')

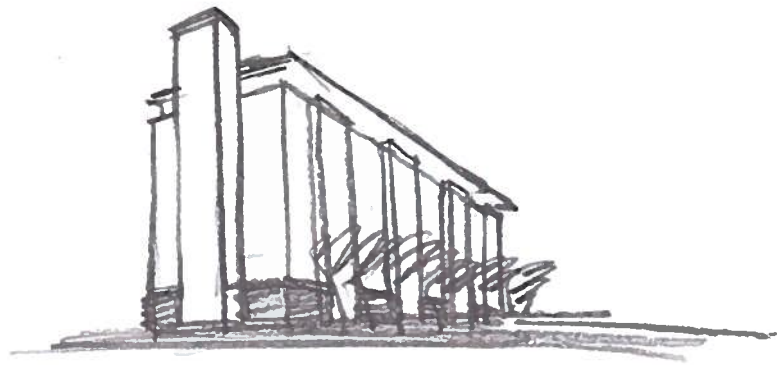
Building N is one of two paired structures that, together with Building M, create a building wall along the west edge of the Commons. The lower floors are academic while the upper floors are residential.

The Demonstration Plan considers that academic space not yet allocated to a specific program but required to meet the 2010 Master Program would occupy two floors of building N, with three floors of residential above. At detailed design development, a different split between academic and residential should not compromise the design guidelines as long as the ground floor remains non-residential.

DESIGN GUIDELINES

The ground floor of Building N should include some program elements that attract use from people across campus so that the Commons maintains its role as a campus-wide social space rather than one serving a specific group of residences. An academic use avoids issues of privacy that would occur with a residential program.

The design guidelines for Building M (page 35) apply equally to Building N.



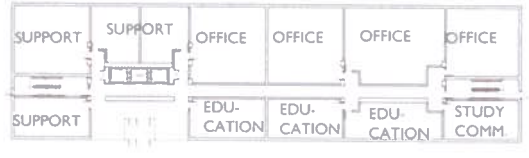
PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM		
M1-DAYCARE		370
M2-FOOD		145
M3-EDUCATION		695
M3.1-EDUCATION	330	
M3.2-RESEARCH LABS	19	
M3.3-ACAD. DEPT. OFFICE	200	
M3.4-DEAN'S OFFICE	119	
M3.5-FACULTY LOUNGE	27	
M4-SUPPORT CLUSTER 1		210
M5-LECTURE HALL		300
M6-STUDY COMMONS		90
M-TOTAL NSM		1810
M-GROSS TOTAL		2896
MR-RESIDENCES (GSM TOTAL)		2137
M-GSM TOTAL		5033

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
100 LEVEL	1076
200 LEVEL	1076
300 LEVEL	1076
400 LEVEL	1076
500 LEVEL / PENTHOUSE	730
TOTAL GSM	5034

BREAKDOWN BY SPACE TYPE:		
M1-DAYCARE		370
M2-FOOD		145
M3-EDUCATION		695
M3.1-EDUCATION	321	
M3.2-RESEARCH LABS	19	
M3.3-ACAD. DEPT. OFFICE	216	
M3.4-DEAN'S OFFICE	119	
M3.5-FACULTY LOUNGE	27	
M4-SUPPORT CLUSTER 1		221
M5-LECTURE HALL		300
M6-STUDY COMMONS		90
CIRCULATION / SERVICE		739
PENTHOUSE		653
MR-RESIDENCES (GSM TOTAL)		1814
M-GSM TOTAL		5034

GENOMICS & PROTEOMICS RESEARCH BUILDING MCGILL UNIVERSITY, MONTREAL, QC (KPMB ARCHITECTS / FICHTEN SOIFERMAN)

CENTENNIAL HP SCIENCE & TECHNOLOGY CTR. SCARBOROUGH, ON (KPMB ARCHITECTS)



CONCEPTUAL FLOOR PLAN 1:1000

BUILDING INFORMATION + GUIDELINES

SCHOLAR'S RETREAT / RESIDENCES (BUILDING 'O')

The north end of the Commons is anchored by a specialized residential and social building -- the Scholar's Retreat. It provides accommodations for VIP's and guests on campus, for the Writer in Residence, the Artist in Residence in comfortable surroundings and related spaces for gathering and entertaining. The Convergence Facility, identified in the Master Program, is housed in the Scholar's Retreat.

The Demonstration Plan illustrates the Scholar's Retreat with a large component of residential space as a five storey building of similar height to the adjacent Buildings M and N fronting the Commons. In this configuration, the upper floors could accommodate housing for mature students or operate as a quasi-hotel for conferences. From a phasing and costing perspective, Building O is not funded by Provincial formulae and is identified as a building requiring donor support. Consequently, it could be built as a low building of two or three floors as a donor building with the program of the Scholar's Retreat or donor money could be combined with residential development financing to deliver the four or five storey combined program.

DESIGN GUIDELINES

The guidelines for Building O are generally applicable to either development model (donor only or mixed donor with residential), unless otherwise noted.

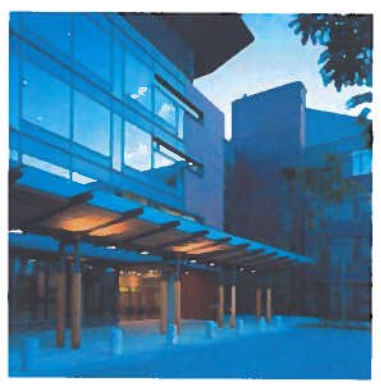
Siting: The Scholar's Retreat should be sited to form a building wall along the north end of the Commons; its front facade should respond to the geometry of the Commons by being rectilinear and parallel to the edge of the Commons. Its west facade should have a similar setback to the Mews as those of Buildings M and N. Surface parking may be located at the rear but should be screened by the building from view from the Commons.

Massing: The building should be massed within the footprint established in the Siting guidelines and may be two to five storeys in height depending on its program.

Relationship to Adjacent Buildings: The architectural design should relate to Buildings M and N to create a harmonious ensemble around the Commons.

Relationship to Landscape and Views: The Scholar's Retreat enjoys the best views on campus: across the length of the Commons to the University Centre to the south, wide unobstructed views over the valley to the east and north, and into pine forest and the productive landscape to the northwest. The architectural design should capitalize on these views with extensive glazing and the placement of social spaces to capture the best orientations.

CARDINAL AMBROZIC HOUSES OF PROVIDENCE TORONTO, ON (KPMB ARCHITECTS)



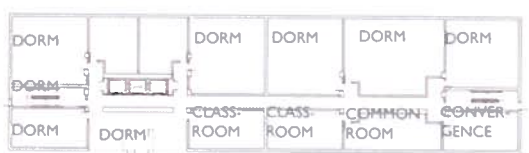
BEYELER FOUNDATION BASEL, SWITZERLAND (RENZO PIANO)

PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM	
O1-CONVERGENCE FACILITY	90
O2-VISITING SCHOLAR'S RESIDENCE	322
O3-CLASSROOMS	200
O-TOTAL NSM	612
O-GSM TOTAL	979
OR-RESIDENCES (GSM TOTAL)	3763
GSM TOTAL	4742

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
100 LEVEL	1076
200 LEVEL	1076
300 LEVEL	1076
400 LEVEL	1076
500 LEVEL / PENTHOUSE	440
TOTAL GSM	4744

BREAKDOWN BY SPACE TYPE:

O1-CONVERGENCE FACILITY	86
O2-VISITING SCHOLAR'S RESIDENCE	323
03-CLASSROOMS	198
OR-RESIDENCES	2442
COMMON ROOM	492
CIRCULATION / SERVICE	763
PENTHOUSE	440
GSM TOTAL	4744



CONCEPTUAL FLOOR PLAN 1:1000

BUILDING INFORMATION + GUIDELINES

ENGINEERING WITH MANAGEMENT (BUILDING 'V')

Building V responds to the significant interest among the students entering their first year at UBC O in engineering and to the desire of the participants in the Academic Plan process for integration of related arts and sciences programs to encourage synergies among disciplines. It is programmed to contain labs, classrooms, offices, and support space that is anticipated to serve primarily applied sciences but to be shared with the School of Management. It is paired with Building B with a similar program and may be linked with an upper level crossing to facilitate the combined program for Engineering and Management.

DESIGN GUIDELINES

Engineering with Management is a substantial building nestled into the edge of pine forest along a ridge above the wetland.

Siting: Building V is sited to form matched streetwall facades around South Gate and, as a result, a gateway into the compact core of the campus. It is L-shaped with a wing extending eastward to form an edge along the pedestrian route to the Gathering Place.

The south side of the building drops a floor in level to the east from South Gate making an opportunity for loading access and shops to be located where they will be screened from view by the adjacent pine forest.

Massing: The Demonstration Plan exploration of the program for Building V results in a five storey structure with a footprint of 2800 square meters. Setbacks from the first to upper floors and again above the fourth floor to create a penthouse are suggested to reduce the apparent mass.

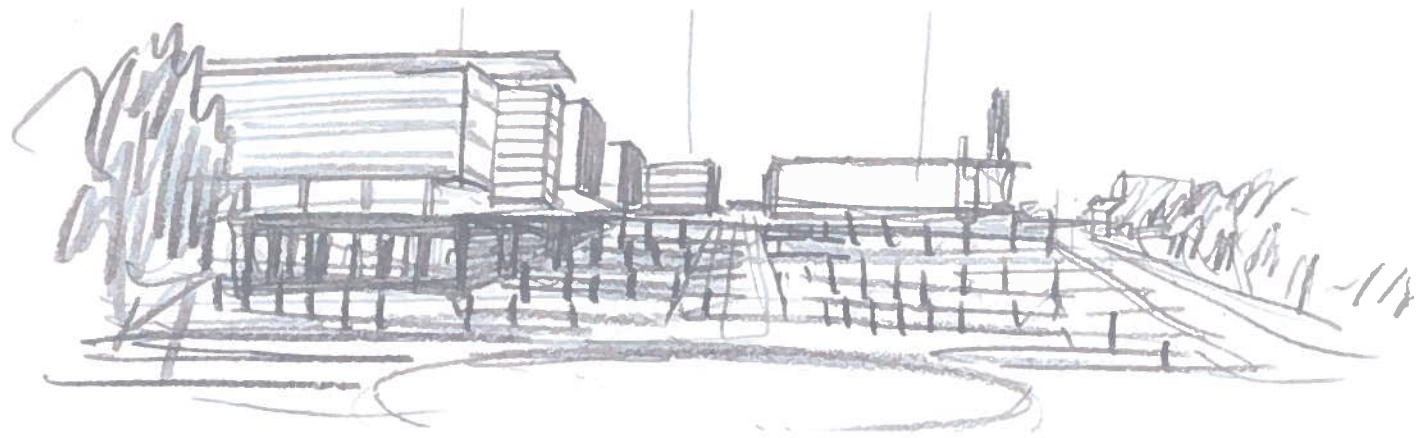
Relationship to Adjacent Buildings: V is expected to be designed at the same time as B, probably with the same design team. This should facilitate that they work together and have a shared palette of materials and design vocabulary.

Relationship to Landscape and Views: Building V should take full advantage of its overview of one of the campus' most significant view corridors over the wetland and forest that occupy the southeast corner. Views will be available from both building wings.

The west and north sides of the building form built edges that define the streetscape of South Gate and the pedestrian promenade to the Gathering Place respectively. The south and east facades of the eastward wing, by contrast, are set adjacent to the grassland landscape; these edges should be integrated into the naturalized landscape.

CENTENNIAL HP SCIENCE & TECHNOLOGY CTR. SCARBOROUGH, ON (KPMB ARCHITECTS)

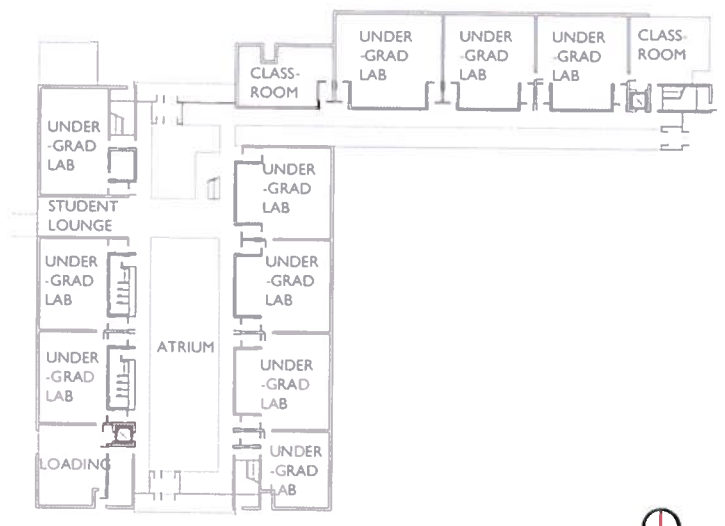
SCHOOL OF MANAGEMENT, UTSC SCARBOROUGH, ON (KPMB ARCHITECTS)



PROGRAM REQUIREMENTS - AS NOTED IN THE MASTER PROGRAM		
V1-RESEARCH TRANSITION		200
V2-CLASSROOMS		300
V3-APPLIED SCIENCES		5903
V3.1-UNDERGRAD LABS	2700	
V3.2-RESEARCH LABS	2300	
V3.3-DEANS' OFFICE	339	
V3.4-FACULTY LOUNGE	27	
V3.5-ACADEMIC OFFICES	537	
V-NSM TOTAL		6403
GSM TOTAL		10309

PROPOSED BUILDING BREAKDOWN BY LEVEL:	
100 LEVEL	2847
200 - 400 LEVEL	2344
500 LEVEL / PENTHOUSE	430
TOTAL GSM	10309

BREAKDOWN BY SPACE TYPE:		
V1-RESEARCH TRANSITION		200
V2-CLASSROOMS		314
V3-APPLIED SCIENCES		5900
V3.1-UNDERGRAD LABS	2662	
V3.2-RESEARCH LABS	2353	
V3.3-DEANS' OFFICE	339	
V3.4-FACULTY LOUNGE	27	
V3.5-ACADEMIC OFFICES	519	
PENTHOUSE		888
CIRCULATION		2636
LOADING		119
STUDENT LOUNGES		252
GSM TOTAL		10309



CONCEPTUAL FLOOR PLAN 1:1000

BUILDING INFORMATION + GUIDELINES

GATHERING PLACE (BUILDING 'W')

The Okanagan First Nation students and other aboriginal community representatives who participated in the discussions about the Campus Plan advocate that their traditional relationship to the land should be recognized and celebrated on the UBC O campus. It was suggested that a Gathering Place, sited to be the first structure encountered by people entering the campus at the Main Gate, should be incorporated into the plan. Information on the symbolism of the circle, the arbours built by the Okanagan First Nation in other places throughout the area, and the events that take place in these arbours was circulated to the Master Plan project team and Steering Committee and shaped the concept for the Gathering Place.

The Gathering Place is envisioned as a large circular structure, roofed at its edge and open to the air in its middle and along the sides, and sited within the grassland landscape oriented towards the main entry to the campus. It is a place, embedded in the Okanagan landscape, to gather both informally and for events.

Since it is not an academic building and not part of the funding provided by the Provincial government, it will be implemented through the participation of donors and fundraising and, therefore, could occur at any time in the future.

DESIGN GUIDELINES

The Gathering Place is not envisioned in the Master Plan as an enclosed, weather controlled building but rather as an open-air arbour and social space that is integrated into its landscape setting.

Siting: The footprint is a circle and it is sited within a slight depression in the existing topography. A paved and tree lined promenade provides primarily pedestrian access but would accommodate service vehicles on a limited basis. The Demonstration Plan illustrates the Gathering Place with an 80 meter diameter, based on diagrams submitted by Okanagan First Nation representatives.

Massing: A one storey form with a sloping shed roof is typical of the arbours already in use around the Okanagan.

Relationship to Views and Landscape: The arbour should be set into the surrounding grassland landscape and will have appropriate and varied views in all directions: the entry along University Way to the north, grassland in the foreground with the valley beyond to the east, pine forest and wetland to the south, and the campus core to the west.

BUILDING INFORMATION + GUIDELINES

BUILD-TO LINES

As a tool for implementation of the plan, the key build-to lines for building footprints are illustrated and their design rationales summarized. A build-to line establishes a location at which a building mass must be sited in order to meet specific urban design objectives regarding the creation of planned campus social space. (Refer to individual building guidelines for massing and height details) These lines define the most important social and movement spaces where a building is intended to provide a containing wall and, in specific cases, to animate the space with interesting and activity-generating adjacent uses.

The Scholar's Retreat (O) provides a rectilinear edge to the Commons. Social, non residential uses should occupy the ground floor.

Buildings M and N are to be built to the same setback to create an edge to the Mews and the Commons. Social, non residential uses should occupy the ground floor.

Buildings K1 and K2 define a strong geometry for the University Centre with build-to lines on the west to contain the Mews and on the east to structure University Walk. The south side of K1 provides a streetwall to University Way and should have retail and food service uses at grade. The north side of K2 provides the third edge of the Commons and should have uses that can be viewed from the adjacent walkway.

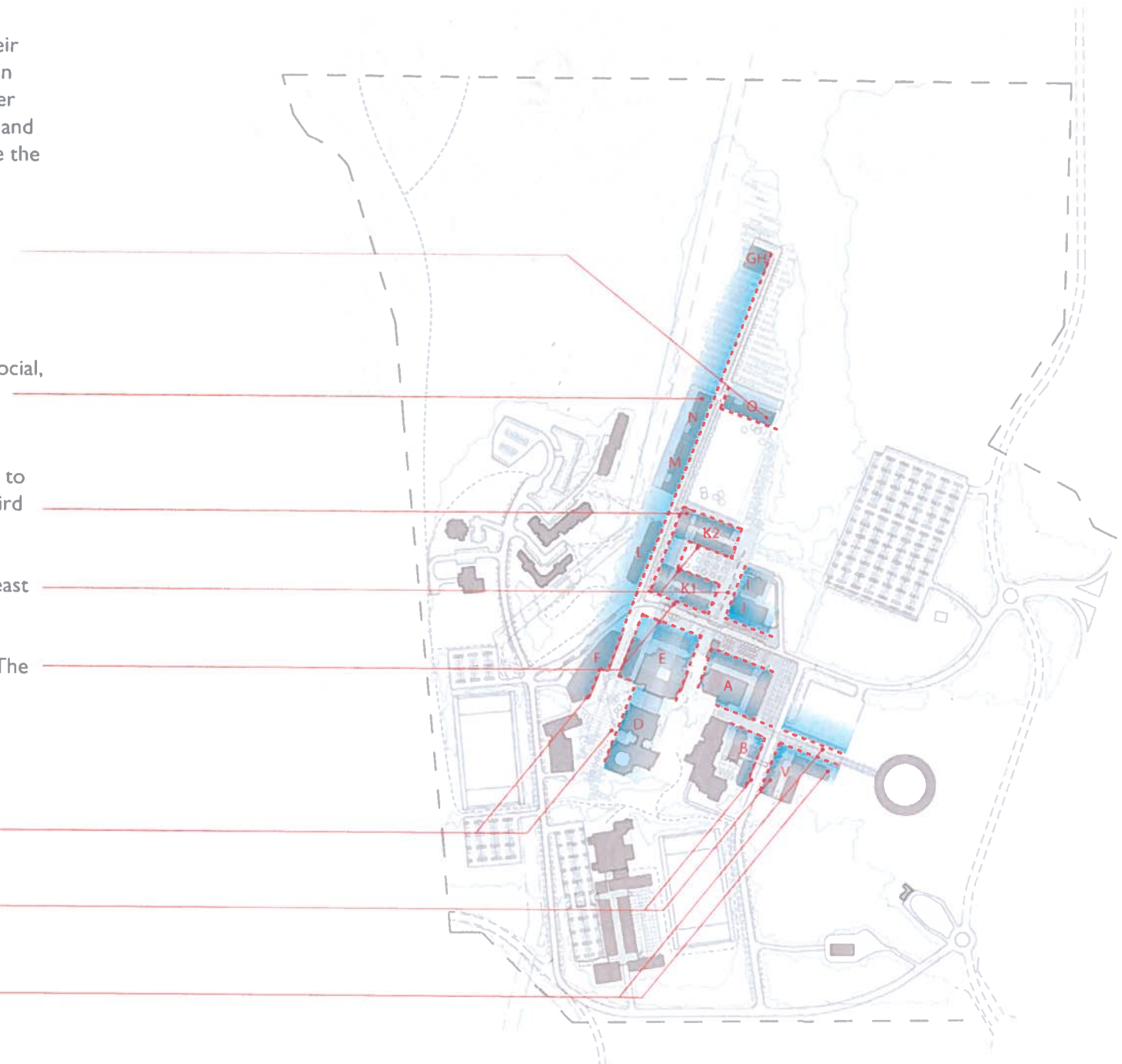
The University Plaza is formally defined by building walls of K1 and K2 on three sides and of I and J on the east side of University Walk.

University Way will have the character of a high street. Massing to be defined by K1 and potentially, by E. The build-to line of J and A create a complementary social space animated by glazed activity spaces within these buildings.

F, E, and D define the containment for the Arts and Sciences Courtyard.

B and V define a gateway into the campus from the south.

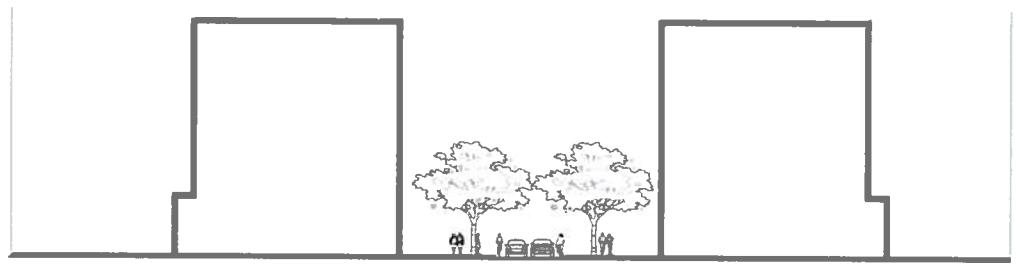
The pedestrian axis centred on the Gathering Place is defined by required build-to lines.



LANDSCAPE INFORMATION + GUIDELINES

STREETSCAPES

The design of the streetscapes on campus should readily communicate a hierarchy of importance and thus aid in wayfinding for visitors. The typical local road throughout the campus should be dimensioned for two moving lanes, one in each direction, and sufficiently wide to make cycling comfortable without permitting on-street parking. The roadway should have curbs in the intensive heart of the campus where an urban character is desired and soft shoulders in the Hilltown precinct, adjacent to playfields and open spaces, and, generally, at the periphery of campus. A single row of street trees should be planted along these roadways, where space permits. Sidewalks are not required since pedestrians will move through campus primarily on pedestrian routes or traffic-calmed shared mews or lanes.



South Gate, the road that will be developed along the southern edge of campus, should have a dedicated right-of-way that meets the City of Kelowna standards for a collector road with two lanes in each direction, since it is planned to eventually be a link between the Glenmore Valley and the Highway 97 corridor. In the short-term, South Gate should be constructed to the two lane standard with soft shoulders since this size meets current needs and is more in keeping with the desired campus character; street trees should be omitted on South Gate due to the stands of pine forest along most of its length.

The guidelines for typical streetscapes are varied in a number of specific locations described below.

UNIVERSITY WAY STREETSCAPE

The streetscape for University Way changes character and function along its length. Between the entrance at Highway 97 and the planned roundabout at the new intersection with Hollywood Road, University Way is not anticipated to be rebuilt within the 2010 timeframe of the Master Plan. The roundabout is an opportunity to begin to introduce a campus rather than transportation aesthetic to the design of University Way and should feature a landscape that expresses an Okanagan character and uses local plants; a signage element should be included.

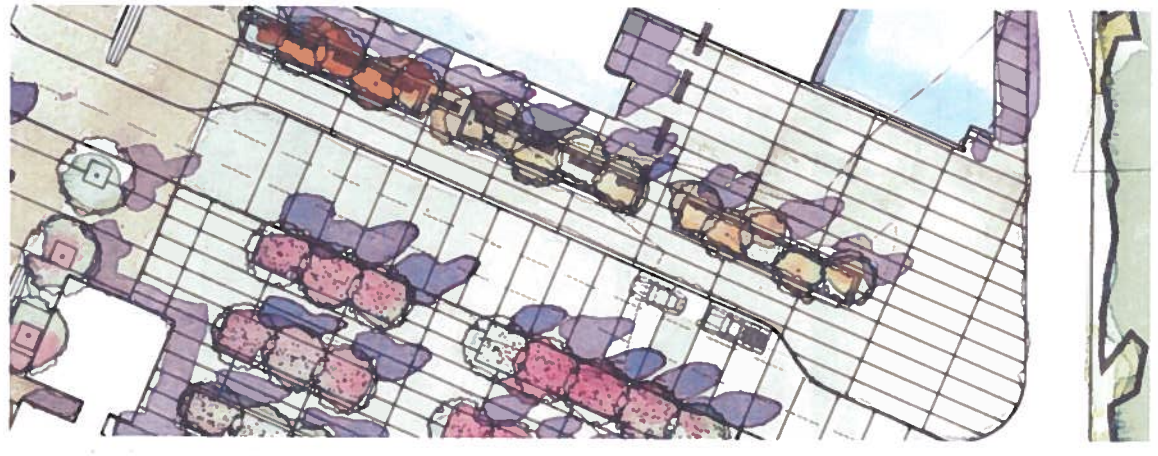
Between the roundabout and the intersection with South Gate, University Way will generally retain its current alignment and treatment. Minor changes to its elevation will be needed to meet planned elevation in the University Centre. New access with appropriate signage will be introduced for planned parking lots. Street trees should not be used in this segment of University Way; the existing groups of trees, managed to provide glimpse views to the campus, provide an appropriate landscape character and should be retained.

BUILDING 'A' STREETSCAPE

University Way changes to a more active and urban character as it enters the University Centre west of the intersection with South Gate. The Learning Commons (A) has a generous setback along the south side of University Way that is planned to accommodate a social space that invites people to linger, watch the passing crowd, engage in quiet conversation, or read a book. A regular grid of trees related to ample seating opportunities should be the cornerstone of the design of this key campus space and will provide users a choice of places from full sun to deep shade.

BUILDING 'J' STREETSCAPE

The north side of University Way within the University Centre is envisioned as a place of intensive activity where the uses of adjacent buildings have been programmed to spill out into the streetscape and provide day and evening animation for the campus community, visitors, and residents of surrounding Okanagan municipalities. The streetscape next to the theatre (J) should be programmed to function in concert with adjacent theatre lobby as a place for conference events, parties, and opening night galas.

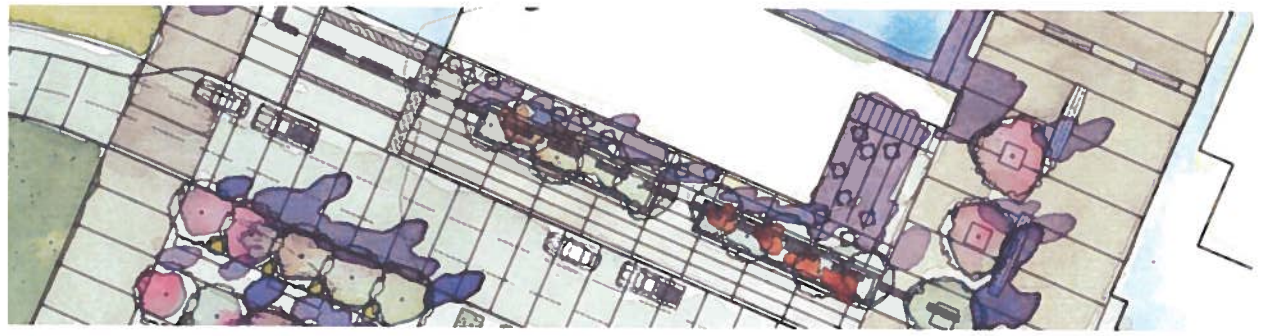


LANDSCAPE INFORMATION + GUIDELINES

STREETSCAPES

BUILDING 'K' STREETSCAPE

In front of the University Centre, the streetscape takes on a high street character with tables and chairs for eating outdoors and sidewalk display of merchandise for the retail outlets that should line this section of streetscape. To support the high street character, on-street parking is included in lay-bys on the north side of the street only, interrupted by a narrowing of the roadway to facilitate pedestrian crossing at University Walk. The paving pattern should be continuous between the streetscapes in front of J and K while the streetscape design should be driven by the quite different programs of the two areas.



BUILDING 'E' STREETSCAPE

Depending on the setback of Building 'E' on University Way, its streetscape should respond either to the guidelines for Building 'A' or create a complimentary high street space based on the dimensions of Building 'K's streetscape. The uses of the ground floor of Building 'E' fronting University Way should be active and engaging for passers-by.

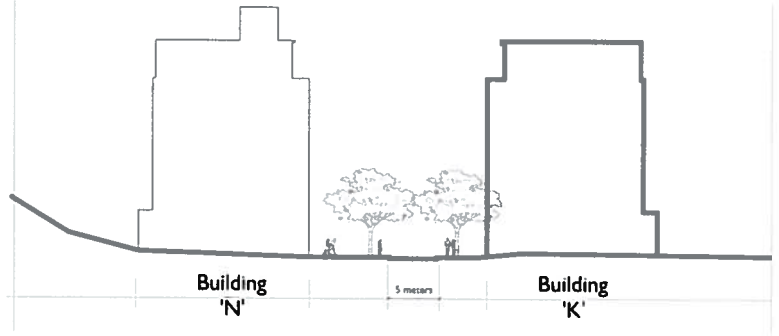
TRANSIT EXCHANGE

West of the University Centre and the intersection with the Mews, University Way changes its role again to that of transit exchange. This road segment is relocated from its current location to the west and is also lowered in elevation from existing. Street side lay-bys for buses should be planned on both sides. (Refer to the discussion on transit on page 9 for more details.)

THE MEWS

The Mews is a narrow streetscape intended for shared use by pedestrians, cyclists, and vehicles. Because the Mews is not a through street it will have limited traffic demand so that all users can safely mingle on the paved road surface. No sidewalks are needed but street trees should be planted in a regular rhythm along a curbed edge.

The siting of the buildings that line the Mews is intended to create a streetwall that reinforces its linearity and provides spatial containment along its edges except where the Mews opens up to wide views of the Commons and the valley beyond.



SOUTH GATE ENTRY AND HOLLYWOOD ROAD

The new entry from Highway 97 will be engineered to highway standards to a roundabout at its intersection with the extension of Hollywood Road along the eastern edge of the campus. Hollywood Road itself will likely be designed as a collector road to City of Kelowna standards. The preferred character of this road, whether it is four or two travel lanes wide, is without on-street parking, street trees, or curbs so that it blends as much as possible with the surrounding pine forest and grassland landscape and recedes from views over it and the adjacent Highway 97.

The roundabout should have a landscape treatment that parallels that of the roundabout at the Main Gate entry with a native and characteristic Okanagan landscape treatment and signage.

COURTYARDS + PLAZAS

In consultation during the Campus Plan process, questions were often raised about the ways that the physical campus concept promotes the Vision, Mission, Imperatives and Pathways of the Academic Plan and, in particular, the intentions to enable "students and faculty from traditionally segregated disciplines to mix and collaborate more easily, enhancing interdisciplinary education, research and community engagement." (Academic Plan, June 2005, page 3)

Emphasis on collaboration, communication and teamwork has been expressed in the creation of a wide variety of social spaces and facilities that will be shared on a daily basis by faculty, students and staff from many disciplines.

The Irving K. Barber Atrium currently being implemented on a site between the existing Arts and Science Buildings is envisioned as promoting cross-disciplinary dialogue.

Precedent Image for the Irving K. Barber Atrium
St. Andrew's College, Aurora, ONT. (KPMB)

ARTS AND SCIENCE COURTYARD

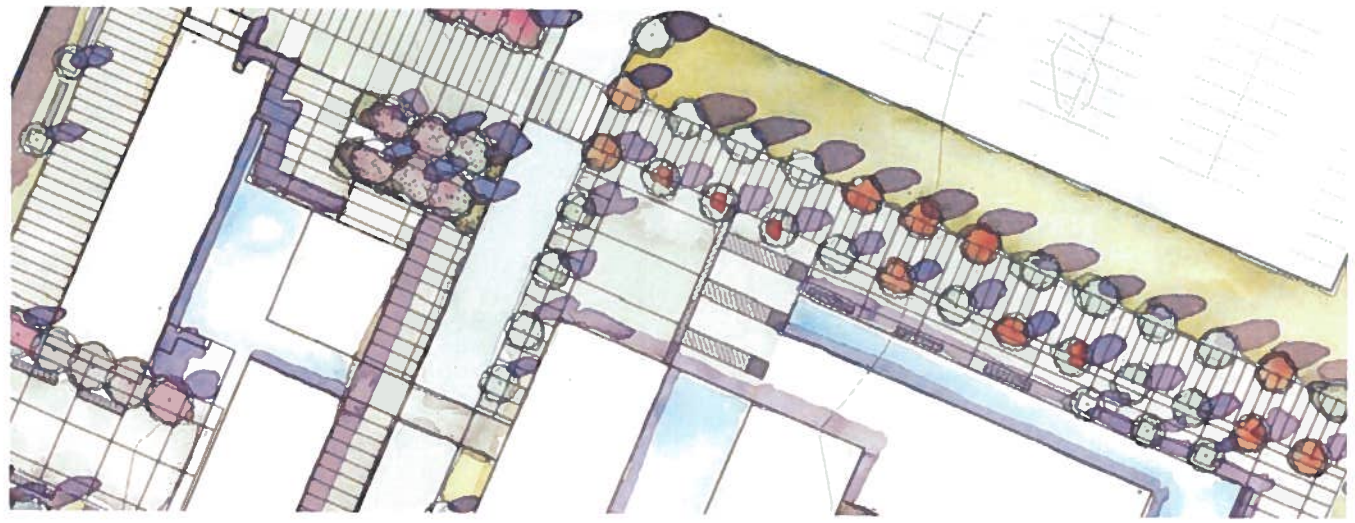
The Arts & Science Courtyard will be a major outdoor space at the centre of four academic buildings housing a number of Creative Studies, Science, and Research disciplines. A 400 seat theatre for lectures and films and outdoor displays of student art will help to enliven this courtyard and promote a community-wide evening use. A small food service will support both the academic and entertainment uses of the Cinematheque and the animation of the courtyard.

The Demonstration Plan illustrates a design concept for the Arts & Science Courtyard that emphasizes the pedestrian routes that connect the entrances to all of the buildings around the courtyard in its paving pattern. Public art on themes of Science and the Arts, especially film, should be encouraged.

Precedent Image for the Arts and Science Courtyard
Surrey City Centre, Surrey, B.C. (PFS)

ENGINEERING AND MANAGEMENT COURTYARD

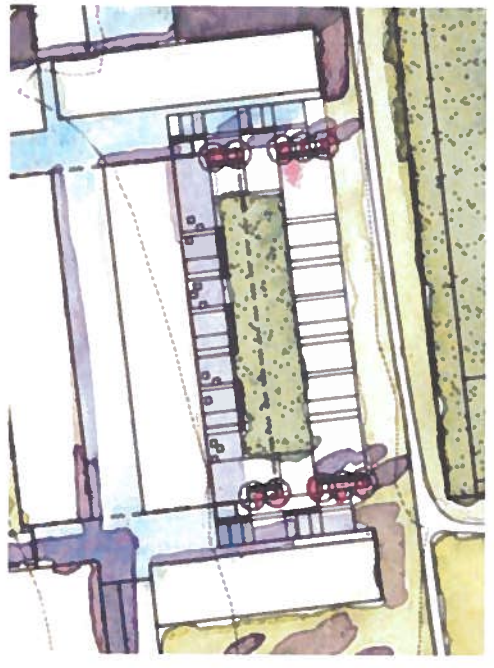
The arrival plaza of the current Student Services Building will be reinvented to serve as the social space mediating between this existing structure, with its evolving academic program, and the Management and Engineering buildings that will be built in one of the early phases of Master Plan implementation. Its geometry and patterning should relate to the strong entry architecture of the present building and the entries to new Building B. It should have a formal structure that contrasts with the remnant pine forest retained to its south.



WELLNESS COURTYARD

The Wellness Courtyard occupies the roof of a parking structure for the Health, Recreation and Wellness complex, one of two parking structures in the Master Plan. This area will be elevated above the adjacent playfield and will therefore invite use by game spectators; it will also command impressive views that will attract users year-round.

Food services will help to animate this space with outdoor eating in good weather and use by residents of the tower will add activity at all hours. The design should respond to the building architecture and be programmed for both daily use by a variety of user groups and special events, especially related to sports tournaments and related gatherings.



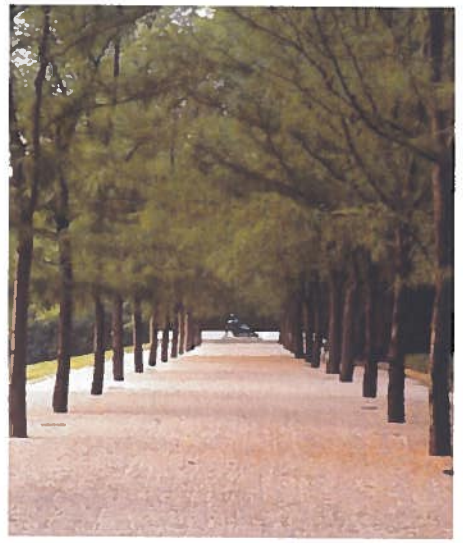
UNIVERSITY CENTRE

The University Centre will be the heart of campus activity, both day and night, with facilities to attract everyone on campus and the surrounding communities, including a drama theatre, another 400 seat lecture theatre, as well as food services, retail outlets, and student association spaces and services.

UNIVERSITY WALK

University Walk is the interim name for the primary north-south pedestrian spine of the campus. It embraces the existing central courtyard and extends it, on the same axis, northward to link through the University Centre and beyond to the Scholar's Retreat. Over its length, it changes several times in its roles and design intentions.

The Master Plan assumes that the existing courtyard will remain in its present configuration through its 2010 time horizon. In the area around University Way, from the entries to the new atriums for the Learning Commons (A) and Multipurpose Building (E) through the University Centre, University Walk should have an integrated design approach with an urban character and a consistent paving treatment and width of approximately 20 meters. North of the University Centre (K2), University Walk becomes an informal path along the east side of the Commons.

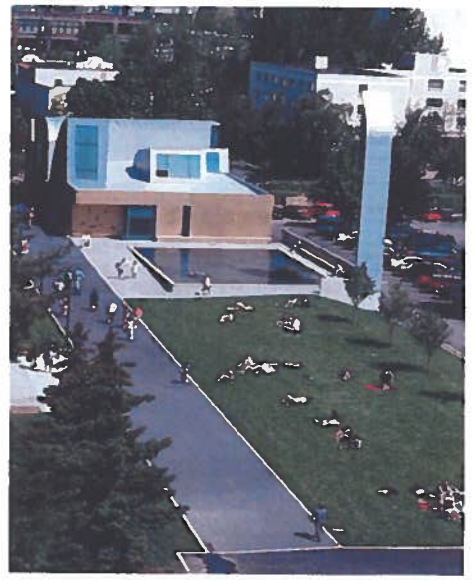


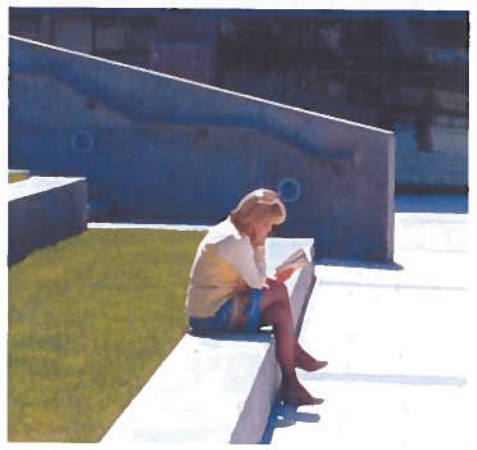
UNIVERSITY CENTRE PLAZA

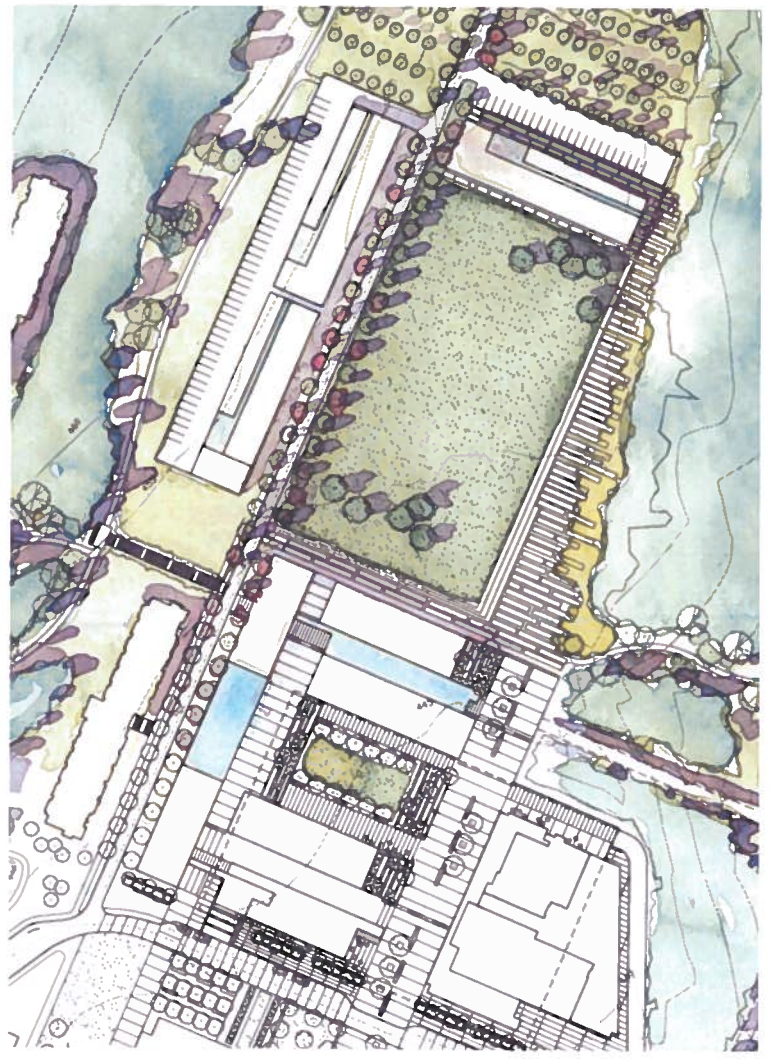
A hard-surface plaza is the social heart of the University Centre, animated by people moving among the many destinations within buildings K1 and K2, the Drama Theatre, and the adjacent 400 seat lecture theatre. This plaza is on grade with the ground floor of K2 and the second storey of K1 as a means to resolve the sloping site in this area without extensive use of stairs. The design should offer weather protection at the edges and ample seating in both sun and shade locations.

THE COMMONS

The Commons is the place for gathering when the sun is shining and the weather is warm. A substantial and generously sized lawn with a formal geometry is a quintessential open space on university campuses. The Commons can accommodate classes moving outside for group discussion, individual sunbathers, games of catch, hackysackers, all at the same time. In order to achieve a level lawn, the south edge will need to be elevated above grade level of the University Centre (K2); broad steps with lawn contained within seating walls is suggested to achieve this grade change in a way that provides additional spaces that can be occupied by groups or individuals as well as used as an informal amphitheater space. A few specimen trees in groups to provide areas of shade may be used within the Commons but most of its central area should be an uninterrupted and well maintained lawn.







LANDSCAPE INFORMATION + GUIDELINES

LANDSCAPES

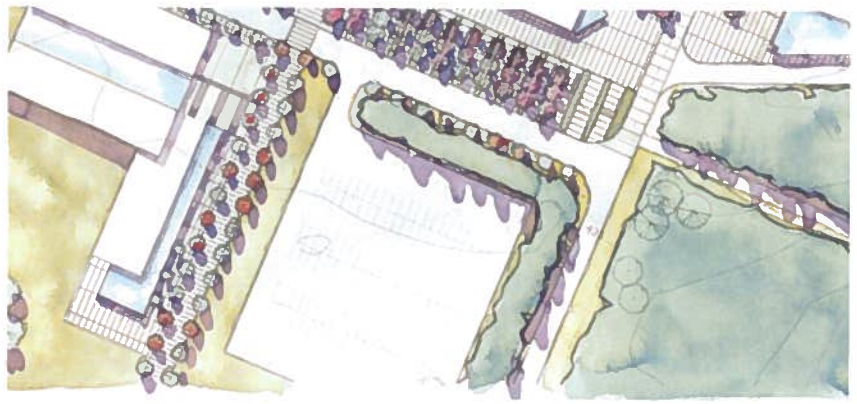
There are a number of landscapes on the campus that together represent the characteristics of the Okanagan region. Some of these landscapes exist as natural remnant or have been naturalized on disturbed sites: the pine forest, the wetland, the open grass meadow fronting on the highway should be managed to maintain their health and their value as backdrop to the campus for such time as they are retained.

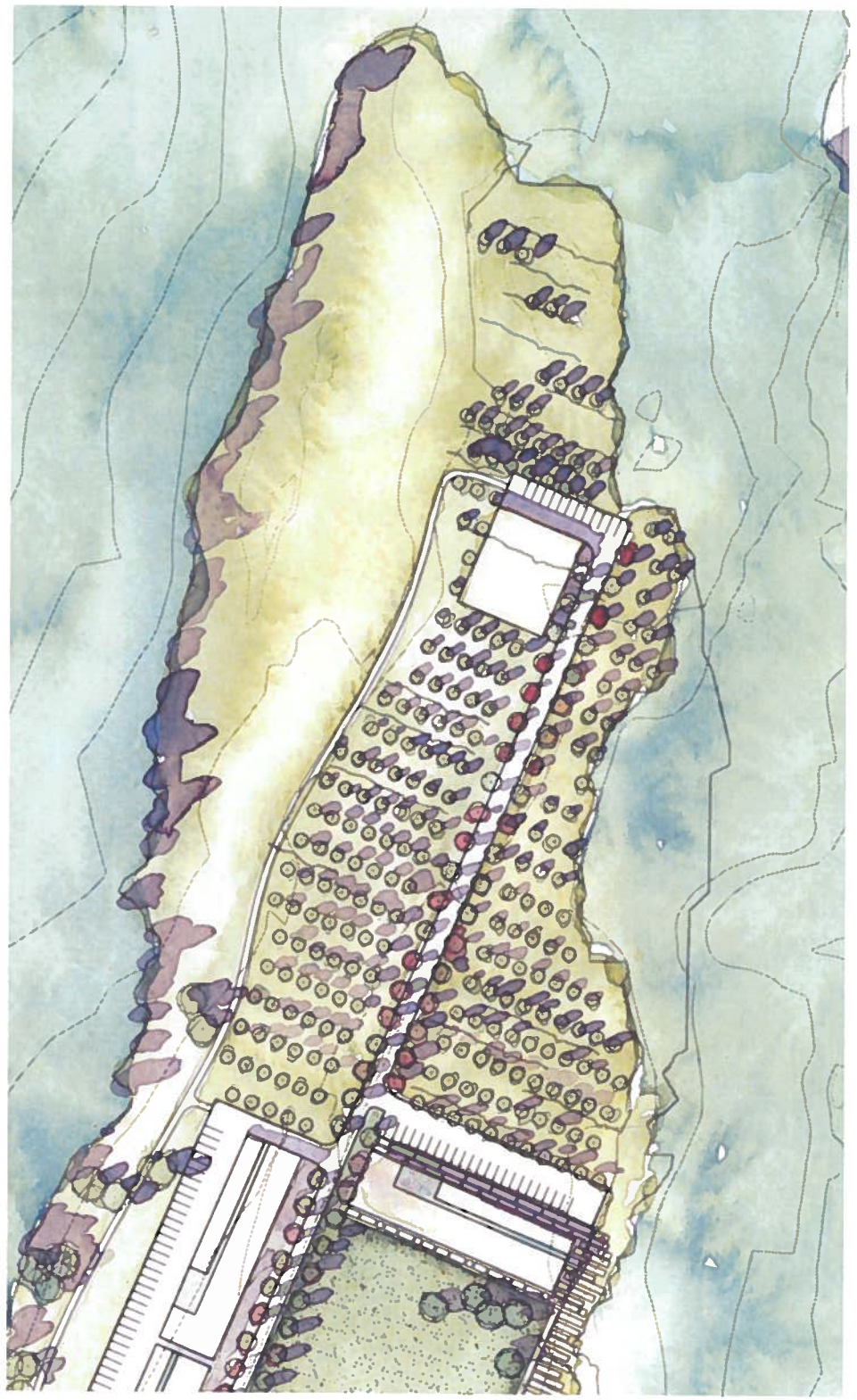
PRODUCTIVE LANDSCAPE

The disturbed area north of the Commons Precinct is well suited for research plots that support academic programs. The site design should both be pragmatic, responding to varying research needs over time, and structured to emulate the ordered rows of traditional Okanagan agriculture: the orchard and the vineyard. Greenhouses are readily integrated into this landscape.

CAMPUS WOODLAND TRAIL

A looping trail is part of the Master Plan that connects through the more natural and passive landscapes on campus, including the pine forest and the wetland, to offer the campus community a place to walk that takes them away from the active, built campus for recreation, respite, and a chance to think. This trail should be surfaced in gravel or crushed limestone rather than paving to suit its predominantly natural setting.





LANDSCAPE INFORMATION + GUIDELINES

SOCIAL SPACES AND THEIR FUNCTIONS

The Master Plan provides a rich variety of social spaces, including streetscapes with specific characters and functions, courtyards animated by movement among adjacent buildings, and green spaces with either active sports or informal play. Many of these spaces function in the day-to-day life of the campus, yet they have the potential to be used for special, temporary large-scale events.

The Commons – a lawn area with some clusters of trees at its edges for socializing and informal play; suited to outdoor classes and large gatherings, either open air or in temporary tents

Surface parking lot – potential for use as event venue with temporary tents

University Square – informal gathering and active crossroads space with urban character; outdoor space with some weather protection at edges; suited to outdoor booths for information, clubs, secondhand textbook sales etcetera

Urban 'rooms' – hard surfaced spaces along movement corridors with seating for people watching and socializing

High Street – activity area with opportunities for outdoor eating and display of retail merchandise

University Walk – primary circulation space; route for campus parades ending in gatherings on the Commons

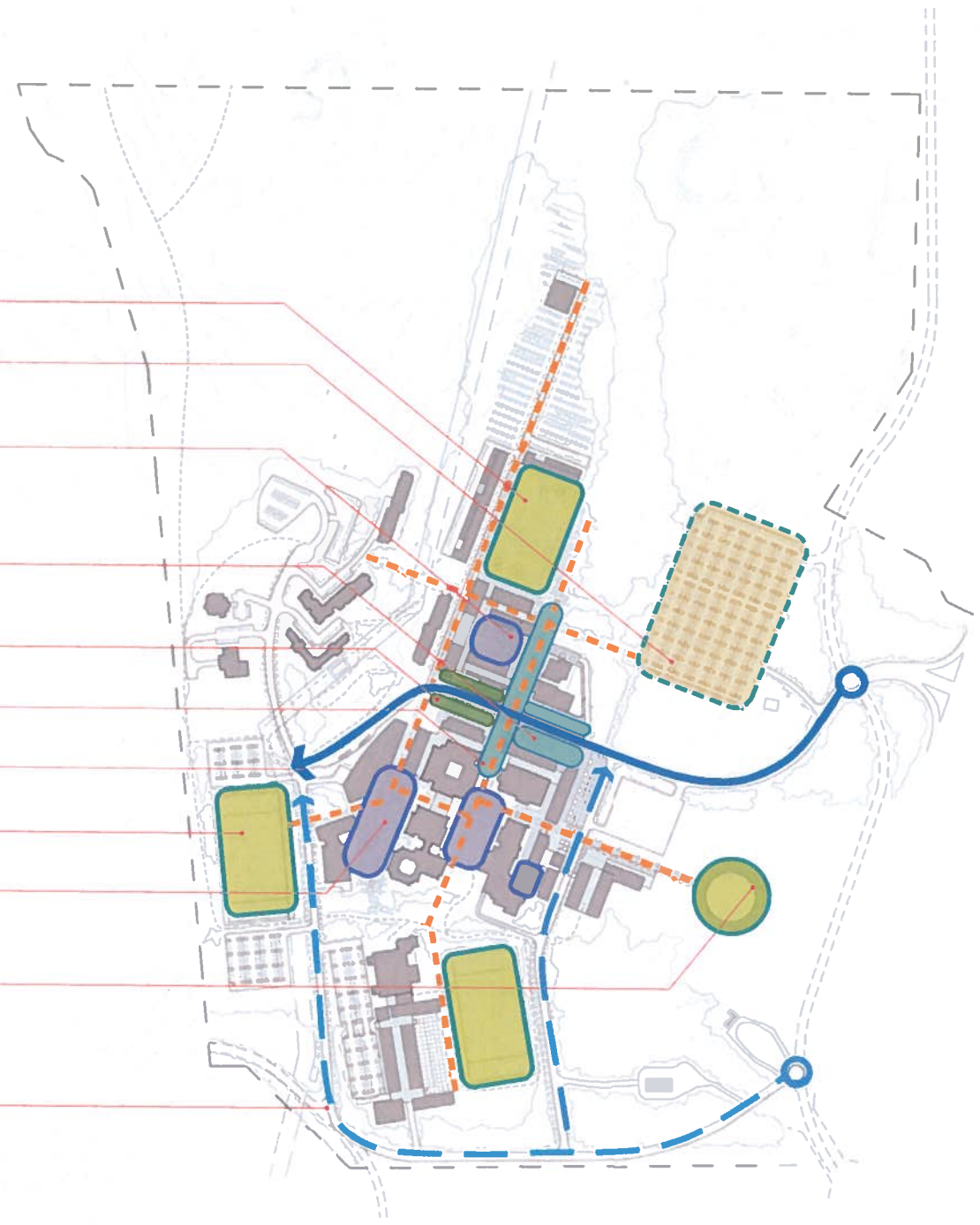
University Way / Main Gate – primary ceremonial route for visitors, especially dignitaries

Sports fields – informal play when not programmed for active sports

Plazas – outdoor gathering and socializing; outdoor eating associated with interior food services

Gathering Place – informal daily use; potential for large scale gatherings

South Gate – daily entry sequence for arrival from Kelowna



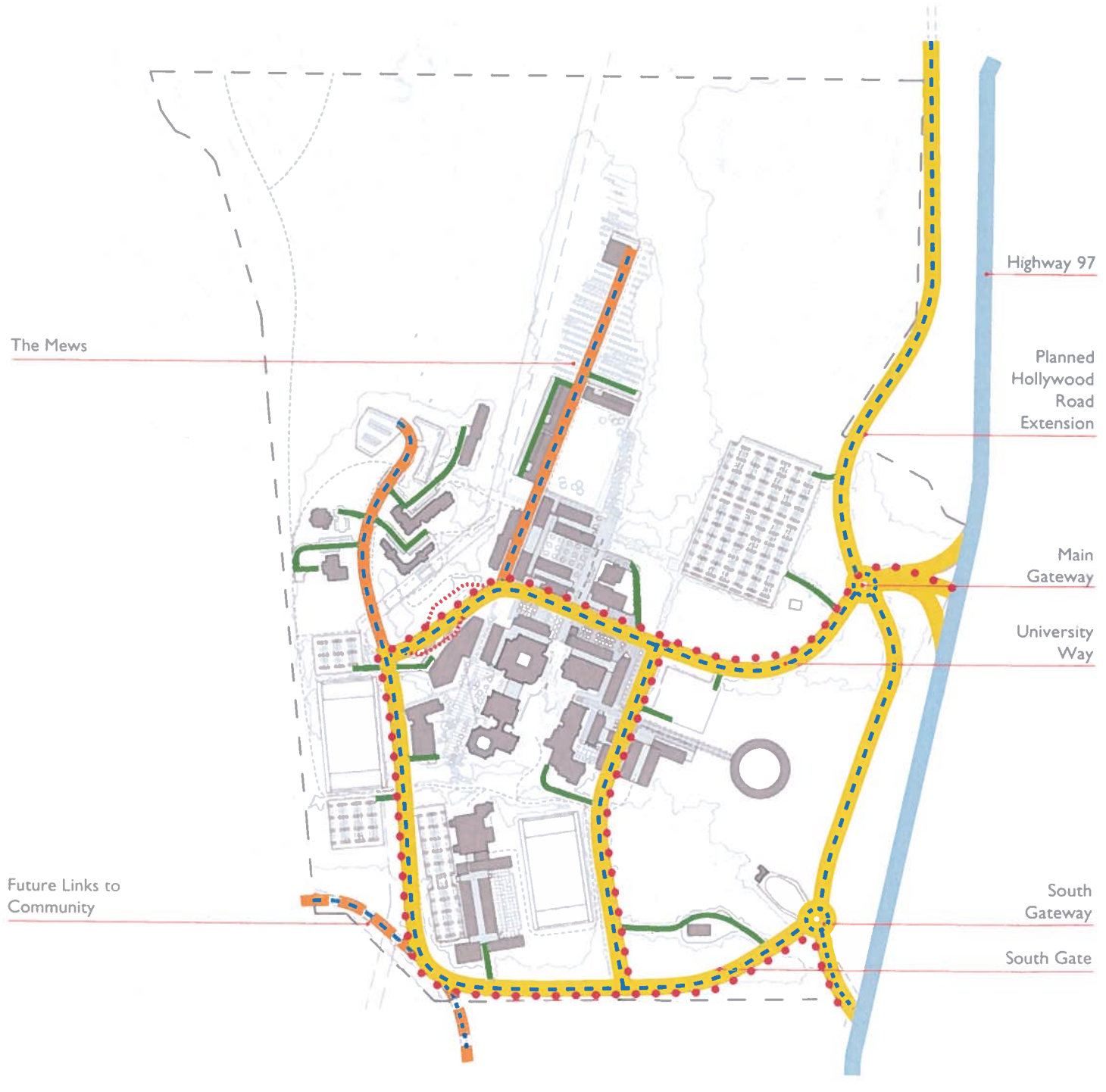
LANDSCAPE INFORMATION + GUIDELINES

CIRCULATION NETWORK HIERARCHY

The streetscape and landscape guidelines for the campus are summarized in this diagram that shows their roles in the road network hierarchy.

LEGEND

- Highway 97
- Secondary Road
- Primary Road
- Bicycle Route
- Transit Exchange
- Service Lane
- Bus Loop



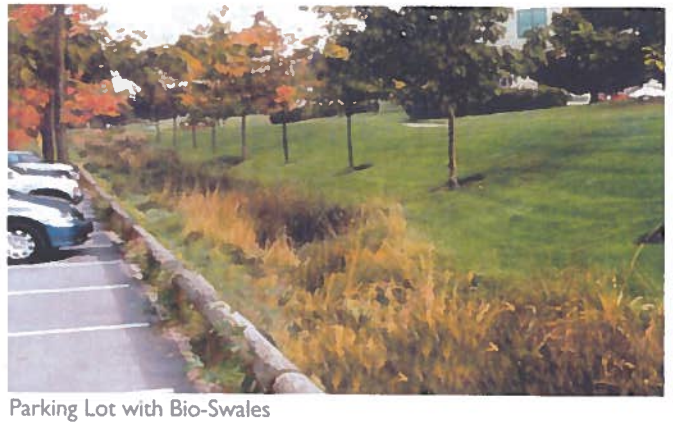
SUSTAINABLE BUILDING + SITE INITIATIVES

Sustainable development initiatives are supported by the University of British Columbia's mandate and have been incorporated into the planning process for its new campus in the Okanagan.

Through workshops and consultation, a number of ideas for sustainable initiatives have been identified that are suited to this campus:

- Planning is already underway for a geothermal energy project for heating and air conditioning with very significant benefits to the environment as well as favourable life-cycle cost projections.
- The aquifer below the campus, used for the geothermal energy system, could also provide a source of water for non-potable uses, especially for maintaining landscapes on campus that are not drought tolerant such as playfields and the Commons, pending applications for its use and environmental assessment.
- Most of the peripheral campus landscape will be designed with native plants suited to the Okanagan climate that, once established, will not be irrigated.
- Buildings will be designed to be energy efficient with the goal of LEED certification and with features to promote non-mechanical ventilation, natural light and passive solar heating.
- The existing wetland will be enhanced and will become part of the stormwater management system.
- The proposed surface parking lot layout will allow for one tree per five parking stalls to minimize the amount of hard surface and integrate the lot within the adjacent forest. The parking lot may be used in a number of different ways when not occupied by cars including outdoor markets/fairs.

Existing Wetland



Parking Lot with Bio-Swales

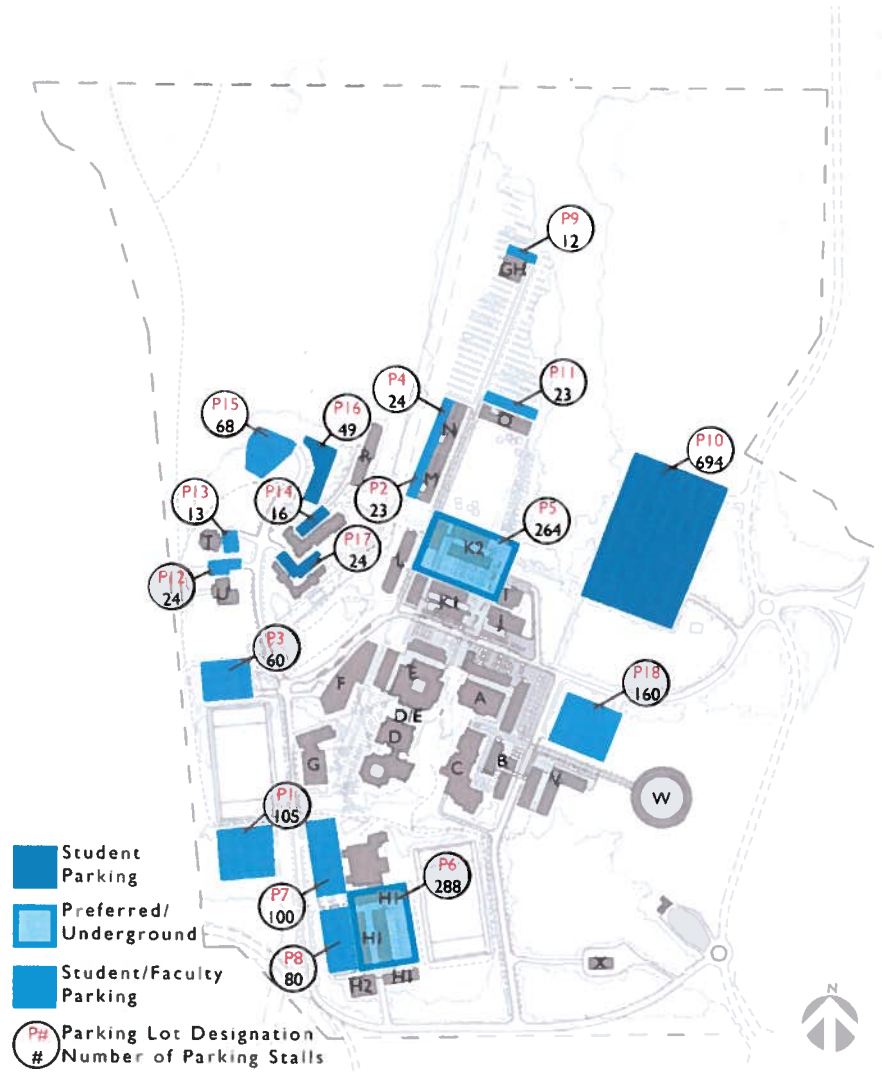
A number of strategies to reduce reliance on the private automobile have been considered in the development of the Master Plan and include significantly improved transit access and potential for a UPass System, bicycle access and secure storage, connections to pedestrian and cycling trails, and improved campus amenities to encourage resident students to be less reliant on the automobile.

Nevertheless, the need for a substantial component of primarily surface parking is recognized since measures to move away from a car-oriented, commuter campus towards increased transit, cycling, and pedestrian access and a larger proportion of on-campus residents will take time and cannot be expected to change dramatically by 2010. The parking plan includes 2027 parking spaces, an increase of 419 spaces over the 1608 on campus today.

A large student lot will be built in stages, as existing parking lots become sites for new buildings. A proportion of spaces, built in the later phases of development, are proposed to incorporate sub-surface lots in locations where high numbers of visitors to campus are expected who will be willing to pay extra for the convenience of parking immediately next to their destination. By 2010, about 25% of the parking is planned to be sub-surface. Some of the remaining surface lots will be identified as future building site for post-2010, should the campus expand beyond 7,500 FTE.

PARKING PLAN TO 2010

2027 Total Stalls: 552 Underground, 1475 Surface



PHASING

PHASE 1: 2006		
E:	MULTIPURPOSE BUILDING	
E:	3RD FLOOR ADDITION	
D:	3RD FLOOR ADDITION	
L:	DORMITORY	
R:	DORMITORY	
	TOTAL PHASE 1	
PHASE 2: 2007-2008		
B:	MANAGEMENT WITH ENGINEERING	
K1:	UNIVERSITY CENTRE	
M:	SCHOOL OF EDUCATION/RESIDENCES	
V:	ENGINEERING WITH MANAGEMENT	
	LANDSCAPE AND SITE PROJECTS	
	TOTAL PHASE 2	
PHASE 3: 2008-2009		
A:	LEARNING COMMONS	
F:	CINEMATHEQUE/ACADEMIC	
I:	LECTURE THEATRE	
K2:	UNIVERSITY CENTRE	
N:	ACADEMIC/RESIDENCES	
P5:	UNDERGROUND PARKING	
	LANDSCAPE AND SITE PROJECTS	
	TOTAL PHASE 3	
PHASE 4: 2009-2010		
H1 :	HEALTH WELLNESS, AND RECREATION/RESIDENCES	
H2:	HEALTH WELLNESS, AND RECREATION/RESIDENCES	
GH:	RESEARCH GREENHOUSE	
P6	UNDERGROUND PARKING	
	LANDSCAPE AND SITE PROJECTS	
	TOTAL PHASE 4	
DONOR DEPENDANT		
D/E:	IRVING K. BARBER ATRIUM	
H1-P	H1 PARTIAL	
J:	DRAMA THEATRE	
O:	SCHOLAR'S RETREAT	
W:	GATHERING PLACE	
	LANDSCAPE AND SITE PROJECTS	
	TOTAL DONOR DEPENDENT	
	TOTAL	

The phasing of the Campus Plan to 2010 is illustrated in four phases based on current information on student enrollment in the programs that will be offered each year from 2006 to 2010. If enrollment and programs change then the phasing will be adapted to respond to expectations. If additional information is available before the completion of Stage 4 of the Master Plan, then adjustments will be reflected in the final document.

The academic buildings are funded through government funding formulae. Residential buildings are funded on a case by case basis to respond to demand for on-campus accommodation. This demand is less predictable than enrollment since the proportion of students who will commute from homes in the surrounding communities is not yet known. The Master Plan identifies several buildings and structures that will require funding through donors and fundraising since they are not part of government funding: the Theatre (J), the Gathering Place (W), the Scholars' Retreat (O), and the Irving K. Barber Atrium (D/E). The phasing of non-formula, donor buildings is flexible within the Master Plan since the timing of their funding depends on finding willing contributors.

The anticipated first phase of development for 2006 includes three buildings already in design or proposal stages: two new student residences of 180 beds each (L and R) and the Multipurpose Building (expansion of E).

The second phase for 2007 / 2008 includes the new buildings for Engineering and Management (B and V) due to the high response to these programs from applicants to UBC O. A part of the University Centre (K1), across the street from the expanded Multipurpose Building, will be expedited to begin the development of the active campus heart and to provide needed food service and student facilities. Completion of this first component of the University Centre will result in academic space becoming available for adaptive reuse in the current Student Services Centre building (C). The School of Education / Residences combined use building (M) will provide both residential and academic space.

The third phase (2008 / 2009) anticipates the completion of the University Centre (K2), the transformation of the existing Library into the Learning Commons (A), and the Cinematheque / Academic building (F) that will complete the Arts and Science Courtyard. The Academic/ Residences combined use building (N) will complete the west edge of the Commons, and the second of the 400 seat lecture theatres (I) will be developed, ideally in conjunction with the Drama Theatre (J).

The fourth phase (2009 / 2010) completes the remaining program in the 2010 Master Plan that will accommodate an enrollment of 7,500 FTE: the Health, Wellness and Recreation complex (H). When the Health, Wellness and Recreation complex (H) is ready, Health will move out of the existing Fine Arts and Health building (G) making this building available for additional arts-related use. The Research Greenhouses are also included in this fourth phase.

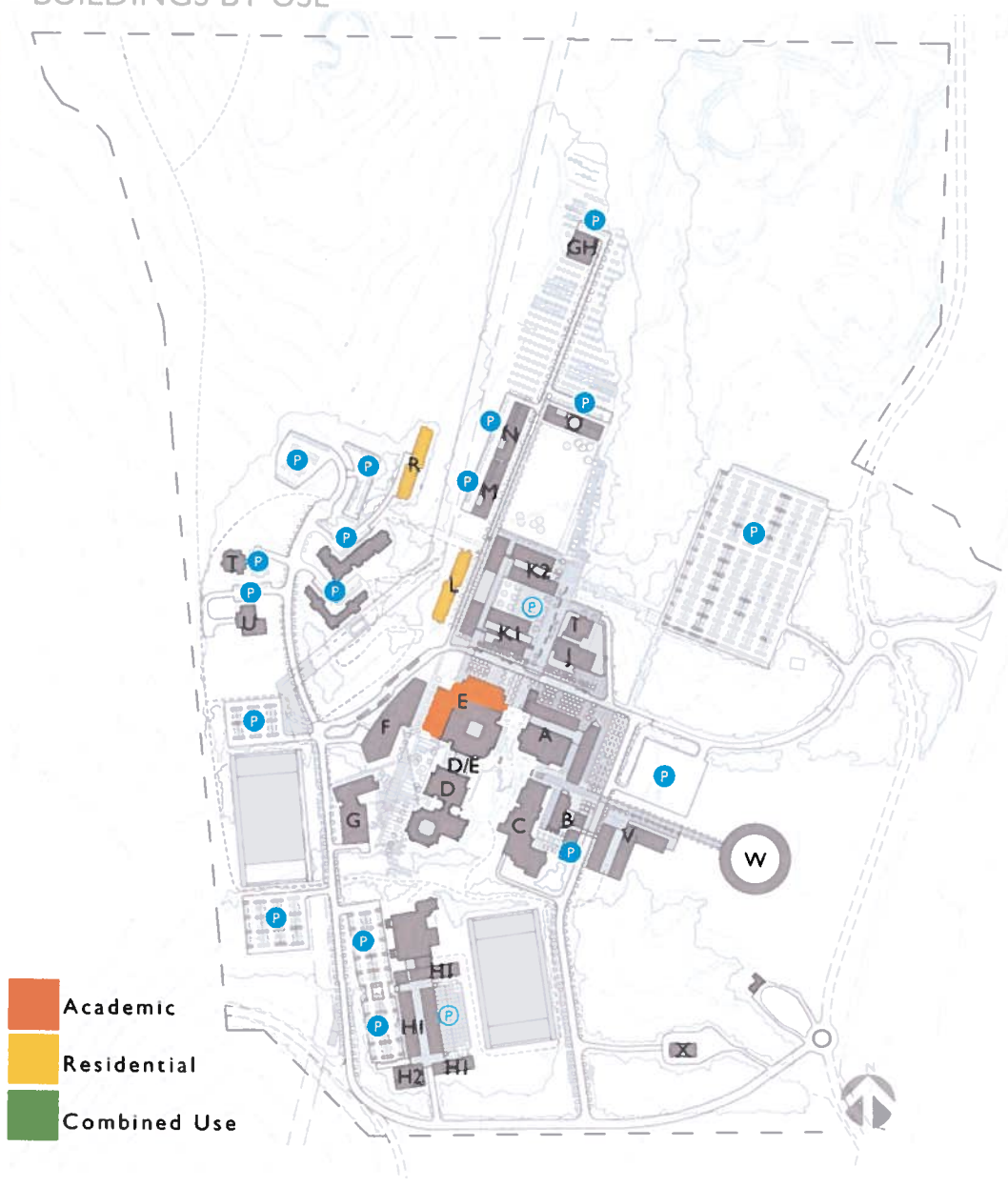
Several projects have been included in the Master Plan that will require donor support to be implemented including an atrium between the Arts and Sciences buildings, the Drama Theatre, the Scholar's Retreat, and the Gathering Place. These can occur at any phase.

PHASING

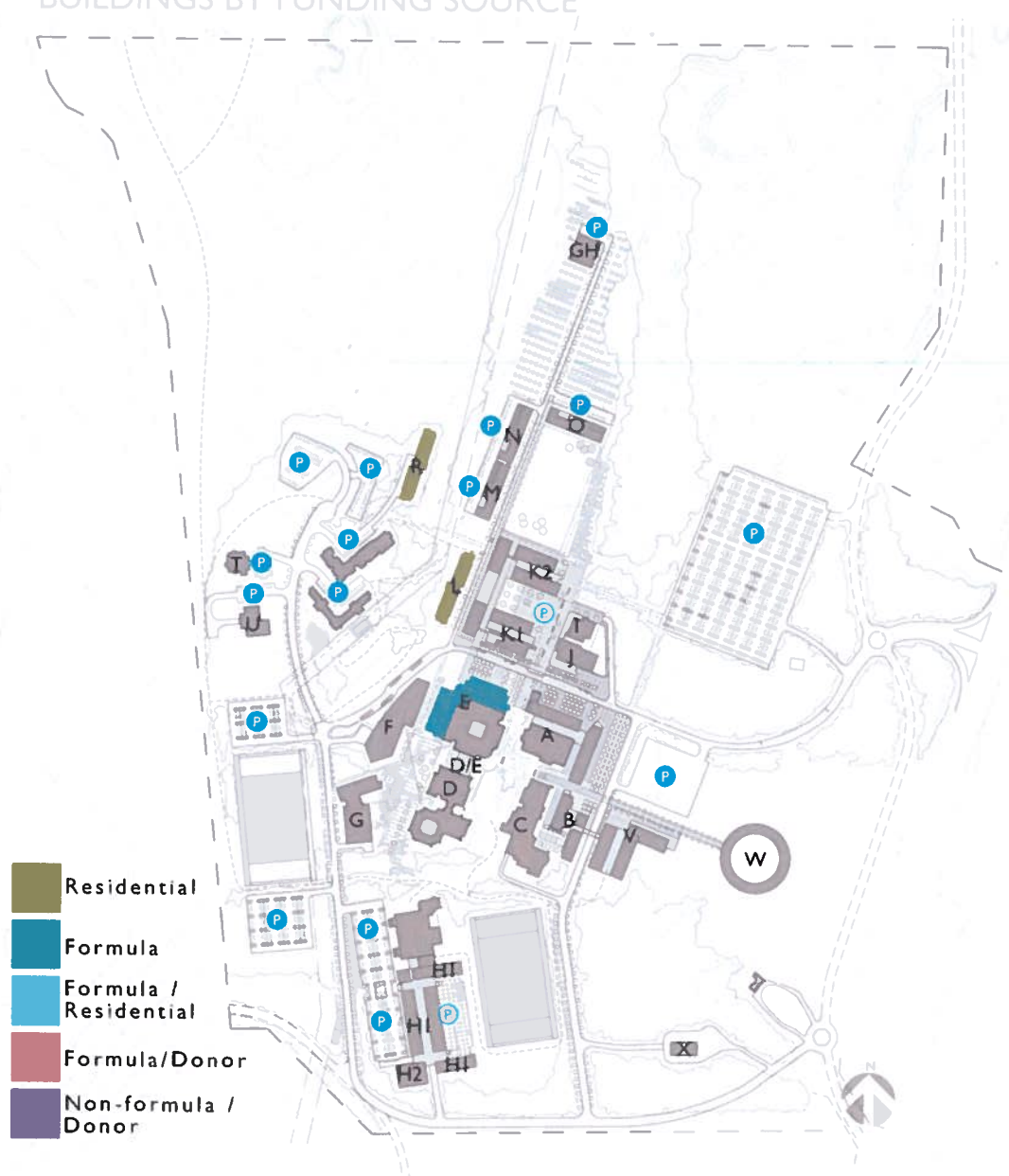
PHASE 1, 2006

Phase 1 includes the third floor additions to buildings D and E, the expansion of E as the Multipurpose Building, and two dormitories (L and R).

BUILDINGS BY USE



BUILDINGS BY FUNDING SOURCE

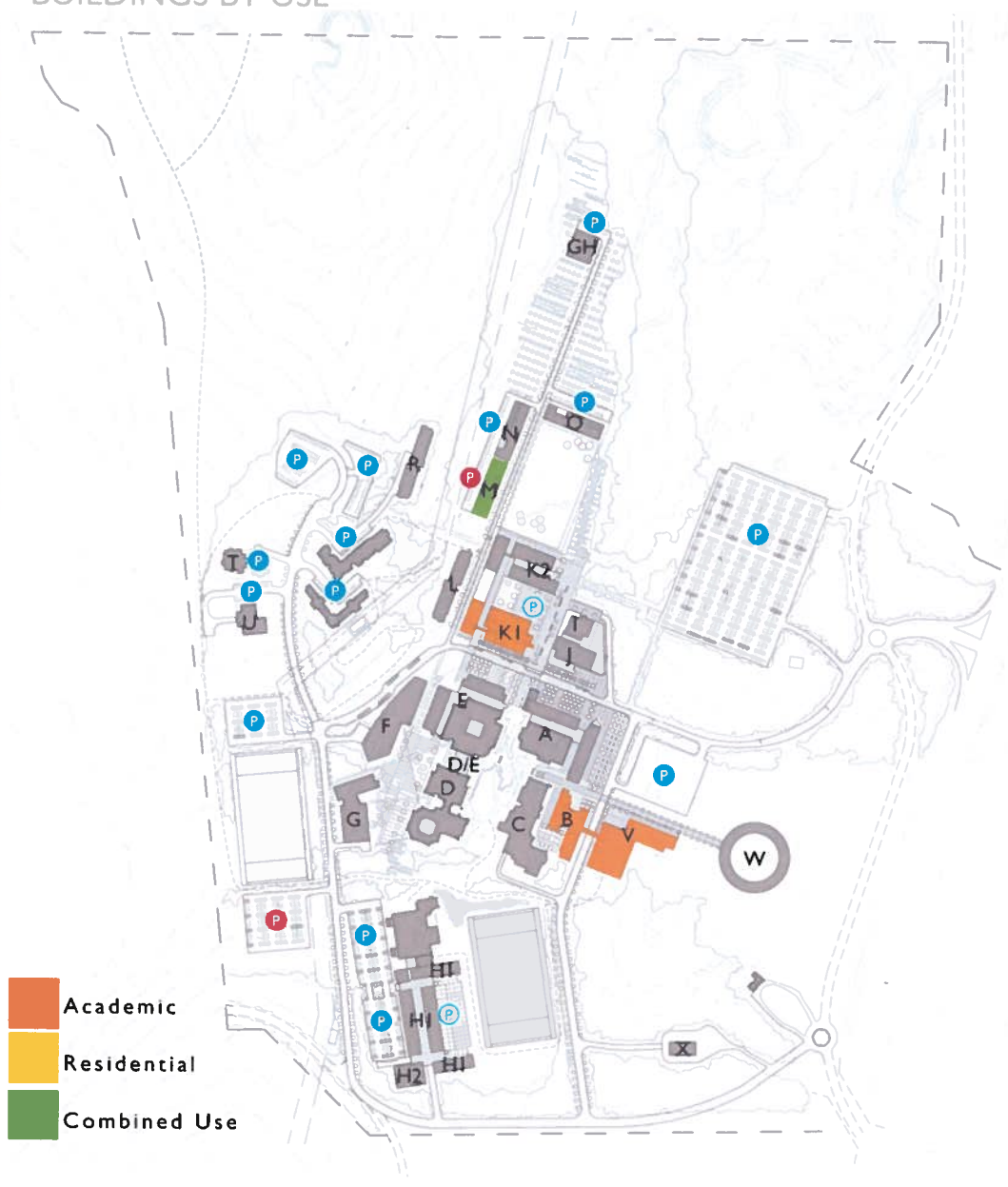


PHASING

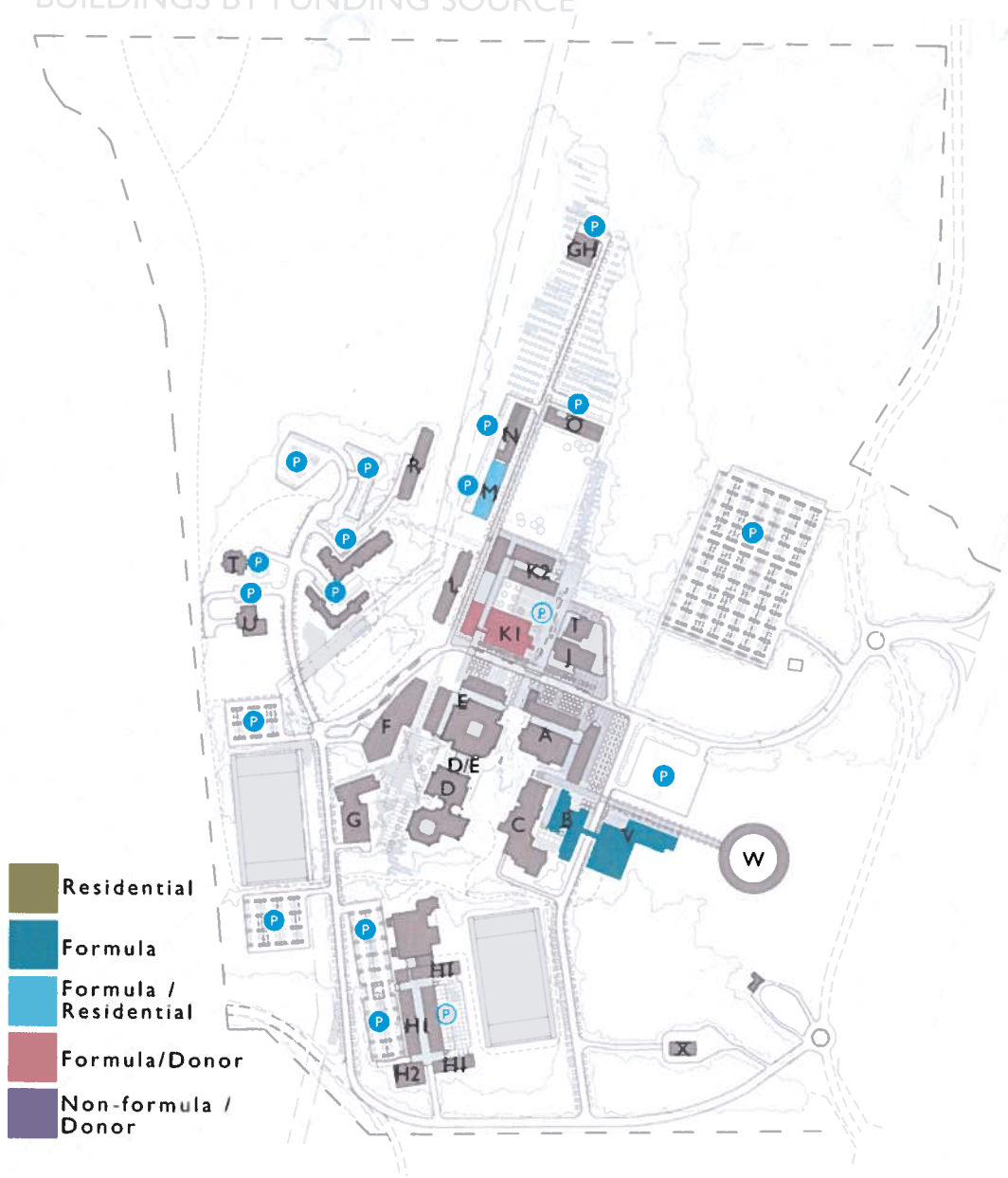
PHASE 2, 2007-2008

Phase 2 includes Building B: Management with Engineering, Building K1, the first stage of the University Centre, Building M, School of Education/Residences, and Building V, Engineering with Management.

BUILDINGS BY USE



BUILDINGS BY FUNDING SOURCE

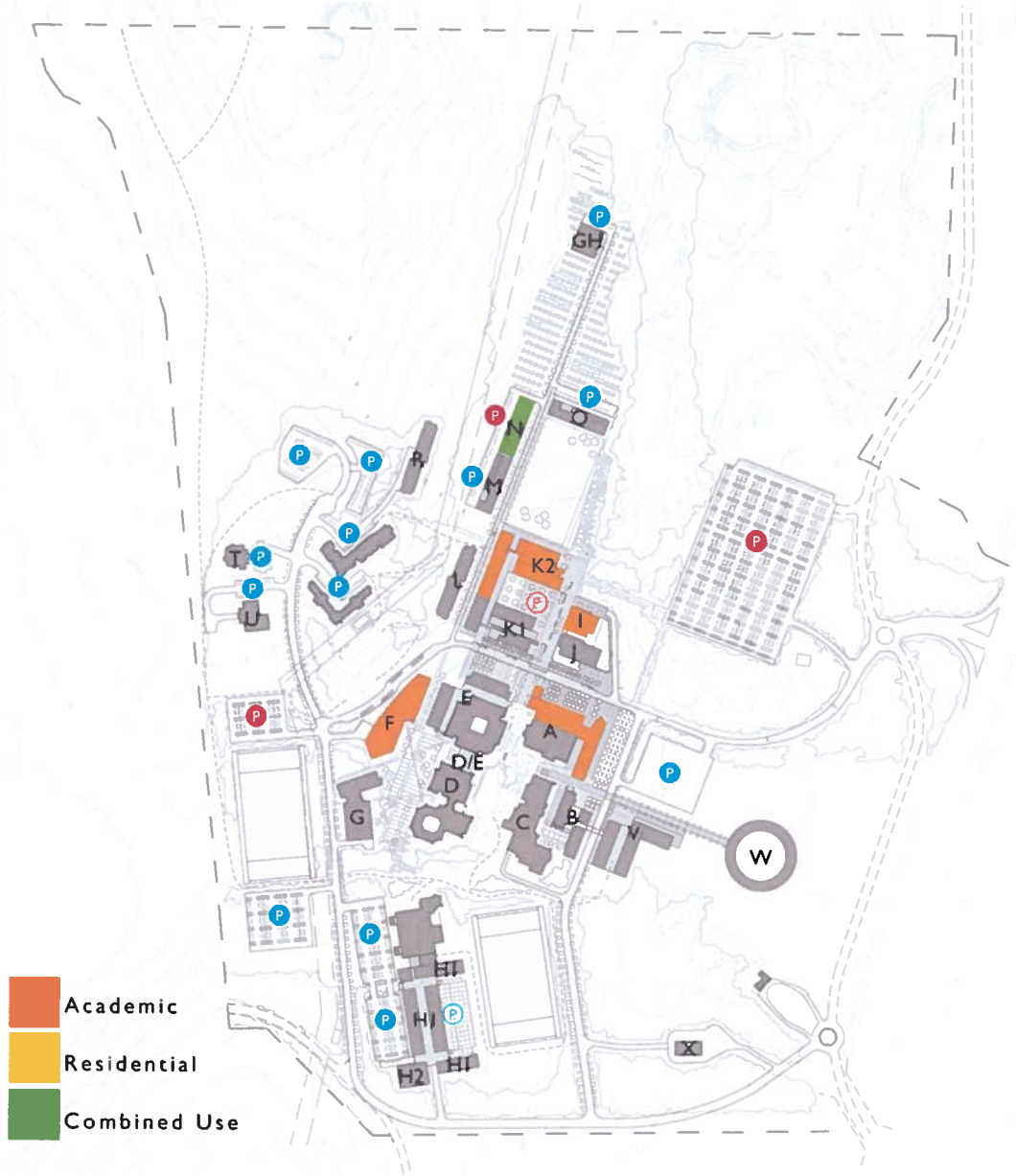


PHASING

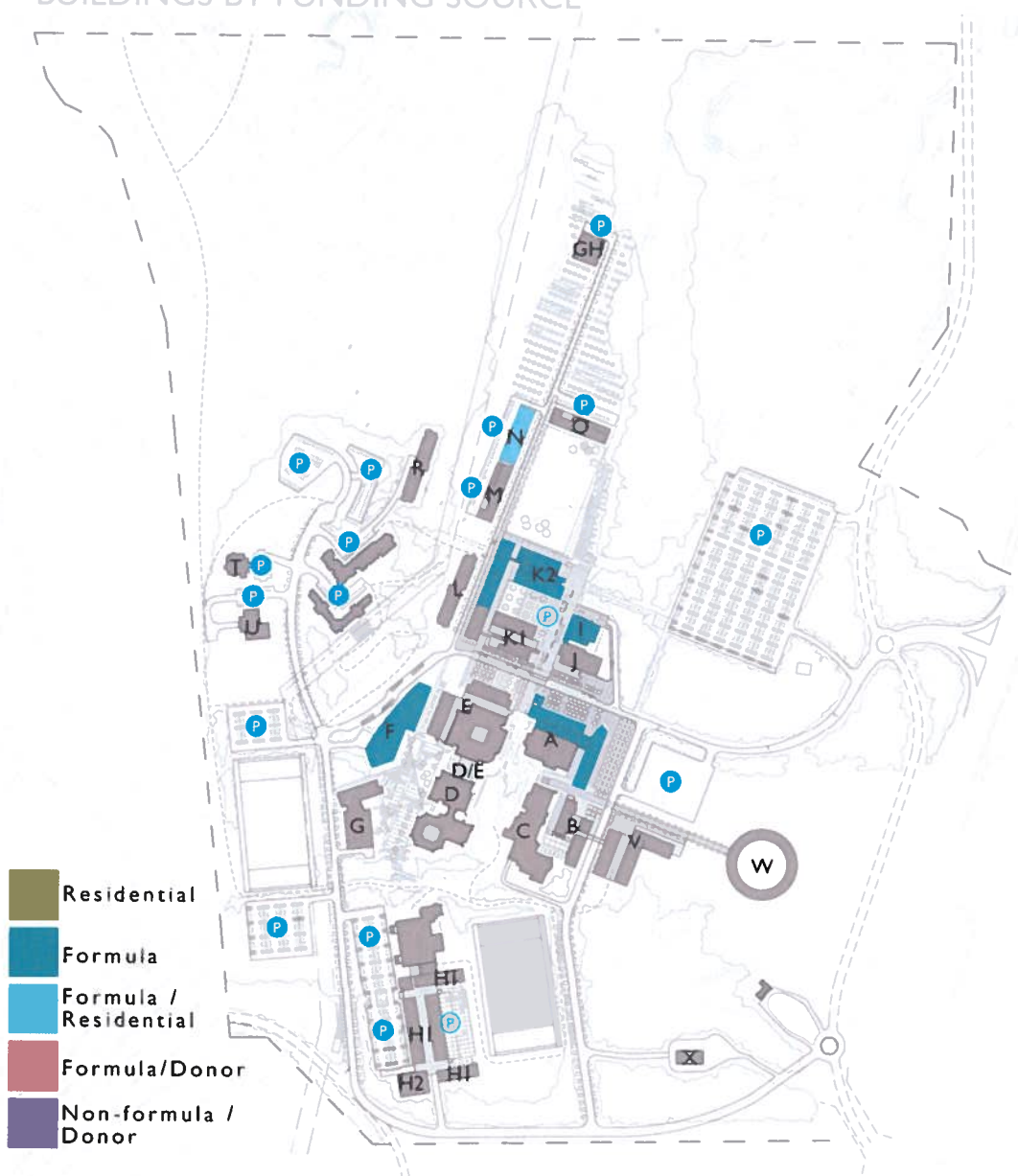
PHASE 3, 2008-2009

Phase 3 includes the expansion of the Library as the Learning Commons (A), Building F, with the Cinematheque, a 400 seat lecture theatre, and academic space, another 400 seat lecture theatre (I), completion of the University Centre (K2), a mixed academic and residential building (N), and Underground Parking (P5).

BUILDINGS BY USE



BUILDINGS BY FUNDING SOURCE

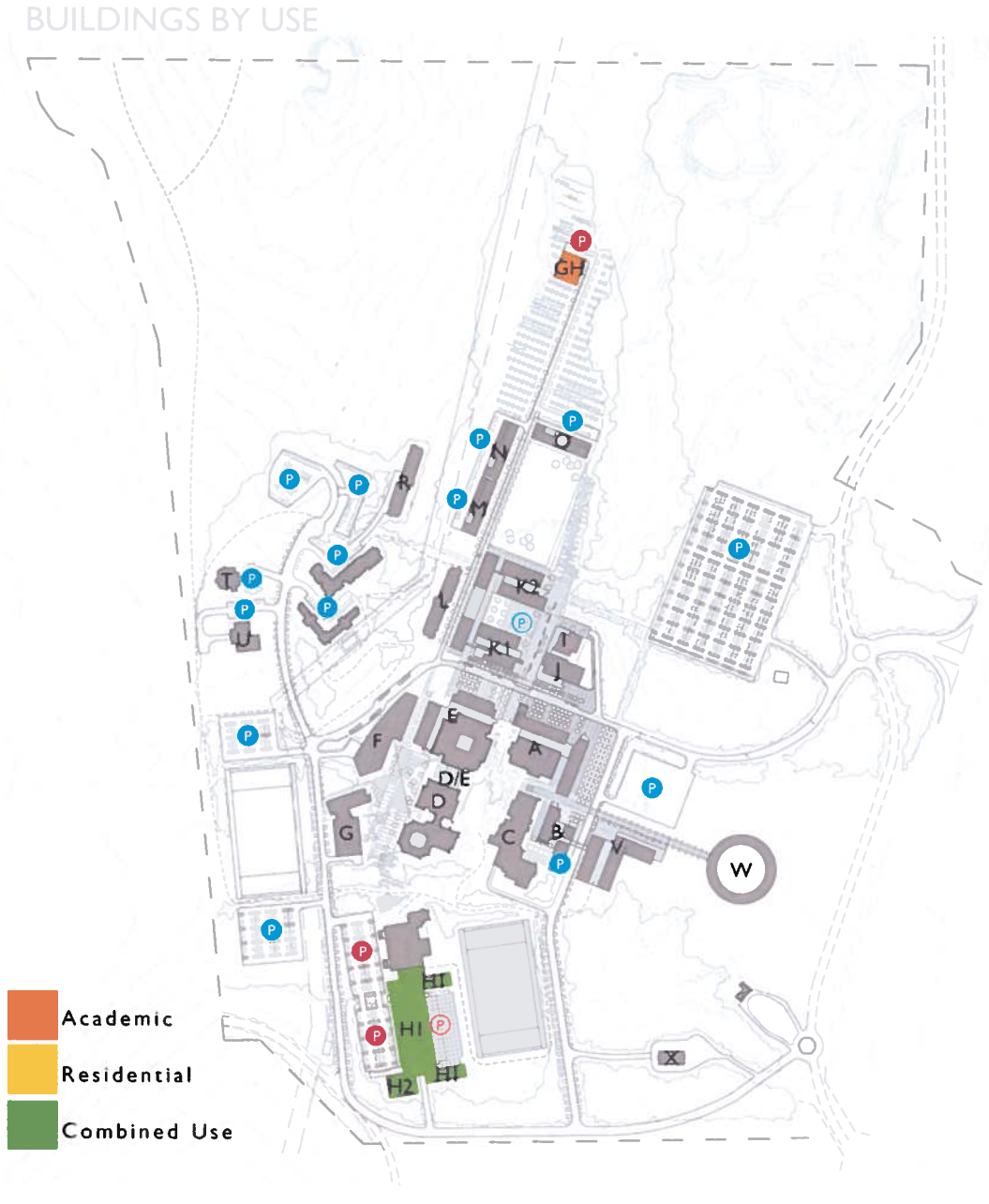


PHASING

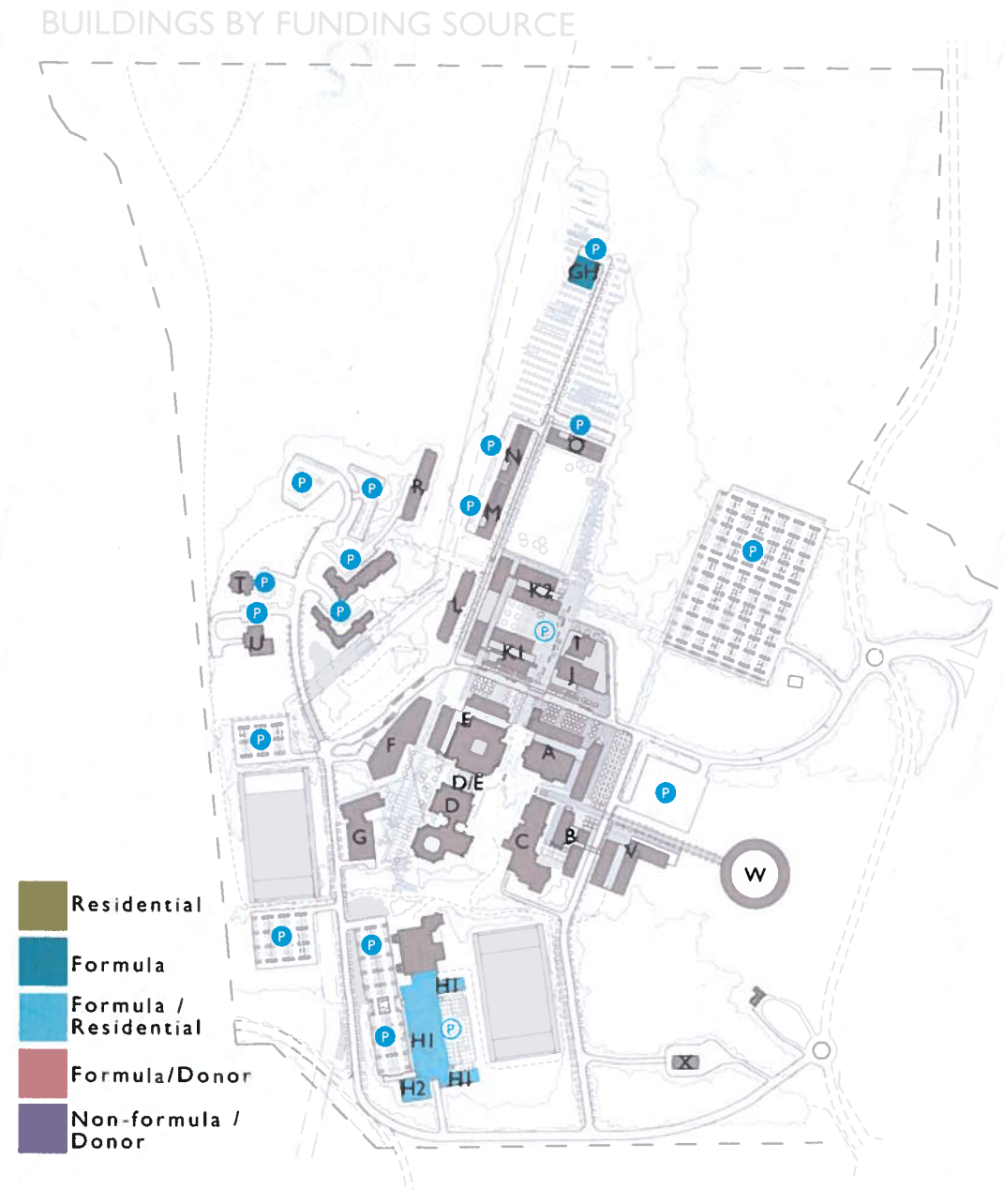
PHASE 4, 2009-2010

Phase 4 includes the Health Wellness, Recreation/Residences buildings (H1 and H2), the Research Greenhouses (GH), and underground parking (P6).

BUILDINGS BY USE



BUILDINGS BY FUNDING SOURCE

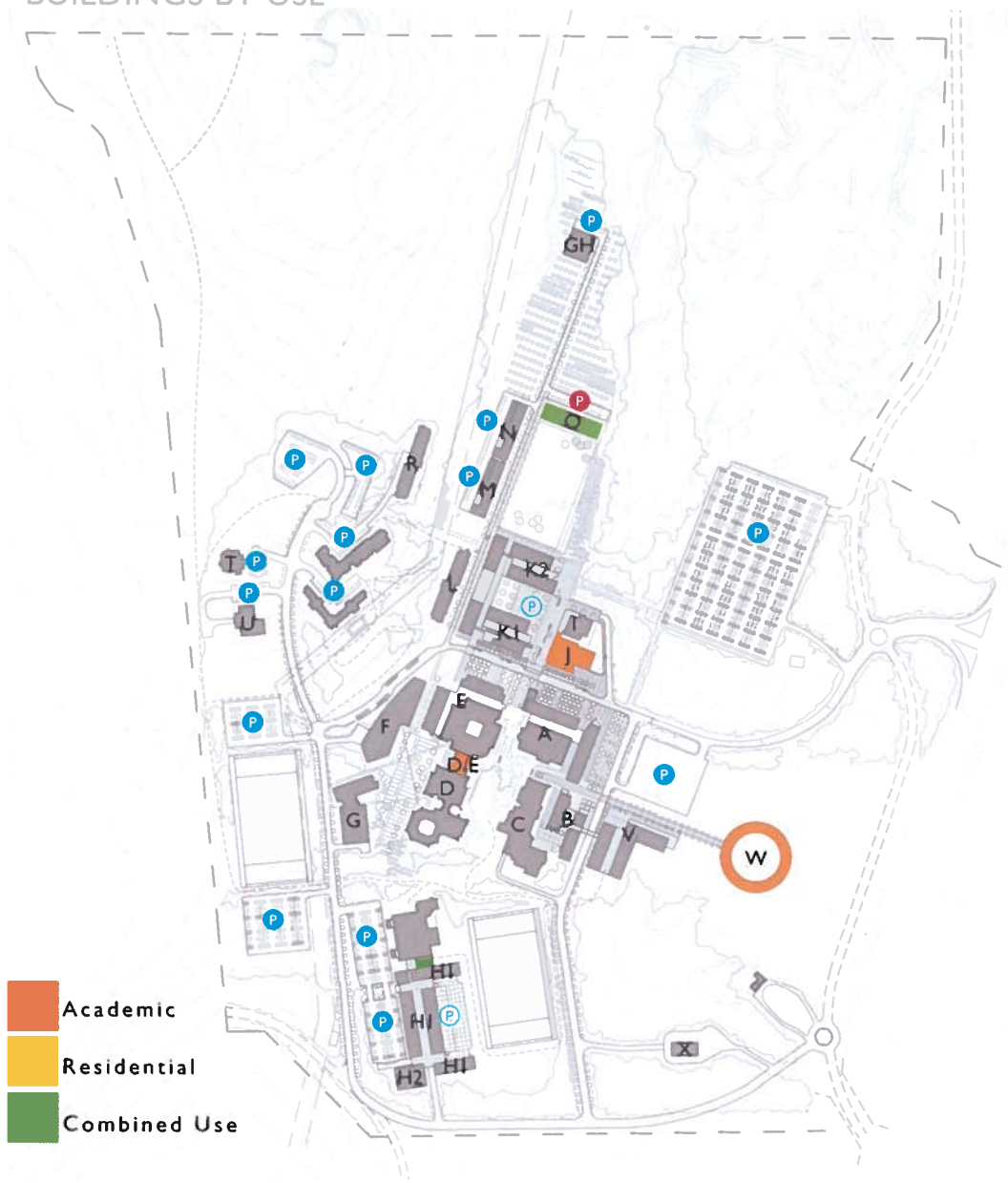


PHASING

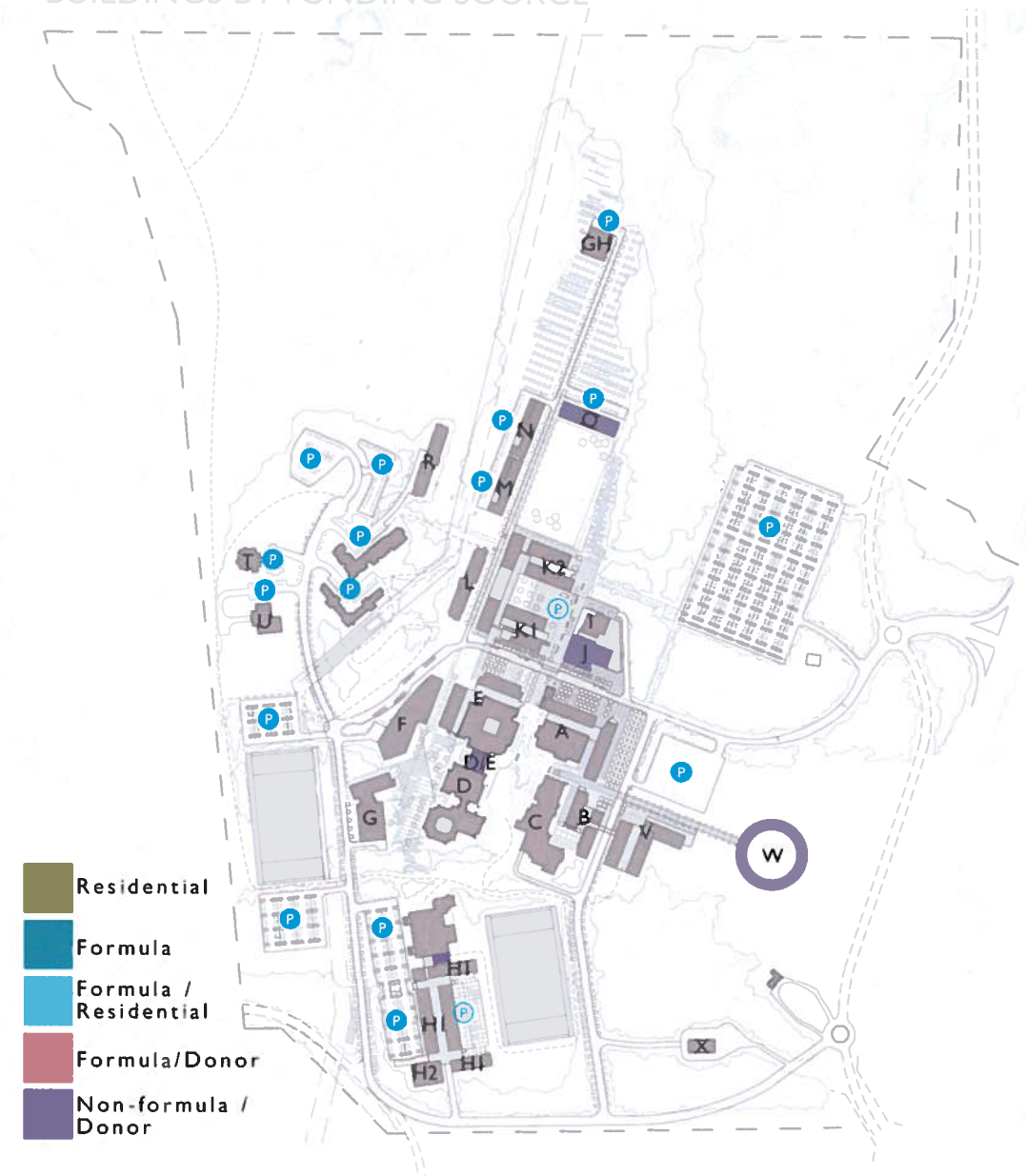
DONOR DEPENDENT

The buildings that require the sponsorship of donors can occur at any phase and include the Irving K. Barber Atrium, the Drama Centre (J), H1 Partial (H1-P), the Scholar's Retreat/Residences (O), and the Gathering Place (W).

BUILDINGS BY USE



BUILDINGS BY FUNDING SOURCE



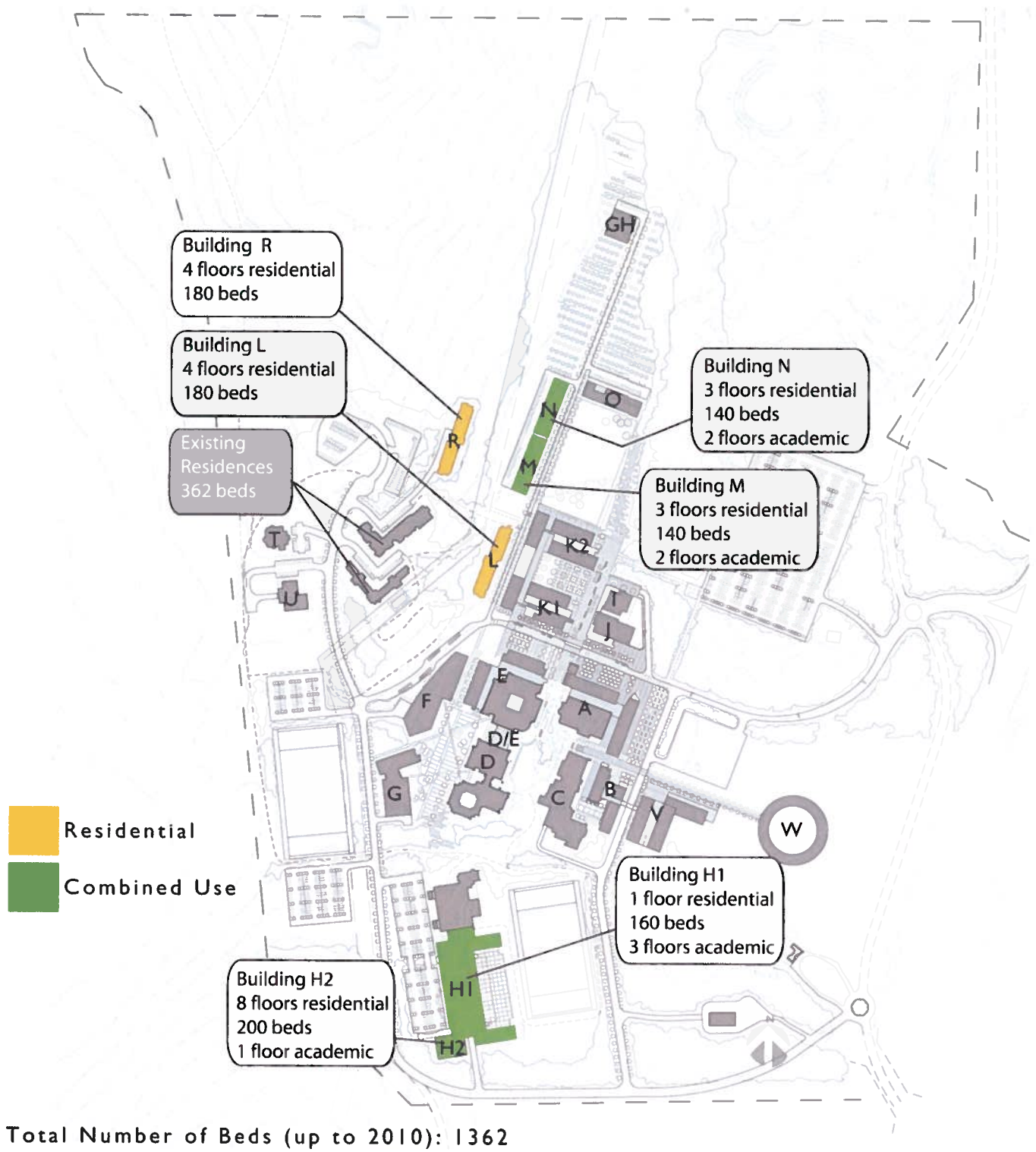
RESIDENCES

The hopes for UBC Okanagan are for a university that will have an active campus life supported by a significant portion of students, especially in their first and second years, living in residence. It will take a few years to make the transition from a local serving campus with most students commuting from homes in the Okanagan to one that attracts numbers of students from across Canada and internationally.

In recognition that residences will follow demand for residential accommodation, the 2010 Plan adds 1000 new beds in a variety of types and configurations. The post-2010 expansion plan (page 53) illustrates a number of additional locations suited to residential and combined use (academic / residential) construction, enough to accommodate 2500 beds. Should the demand for residences exceed 1000 beds prior to the 2010 timeframe of the Master Plan, then the post-2010 sites should be accelerated to suit the type of accommodation required.

It is intended that Buildings M and N will be designed together so that they will create a cohesive streetwall along the Commons. Building M could then be implemented. To be ready for use one or two years before Building N.

Phase	Building	Beds	Type	Description
1	L	180	1	One of two soon-to-be constructed dormitories
1	R	180	1	One of two soon-to-be constructed dormitories
2	M	140	2	Three floors of residential accommodation over two lower floors of academic program space
3	N	140	2	Three floors of residential accommodation over two lower floors of academic program space
	O	N/A		The Scholars' Retreat will be phased based on fundraising and identification of a donor; it will contain a mix of residential accommodation for campus visitors and special appointments such as Writer and Artist in Residence but not for students
4	H	360	2	An eight floor residential building with lower two-storey wings as part of the Health, Wellness and Recreation complex over a ground floor with academic program space
Total		1000		



Total Number of Beds (up to 2010): 1362

POST - 2010 PLAN

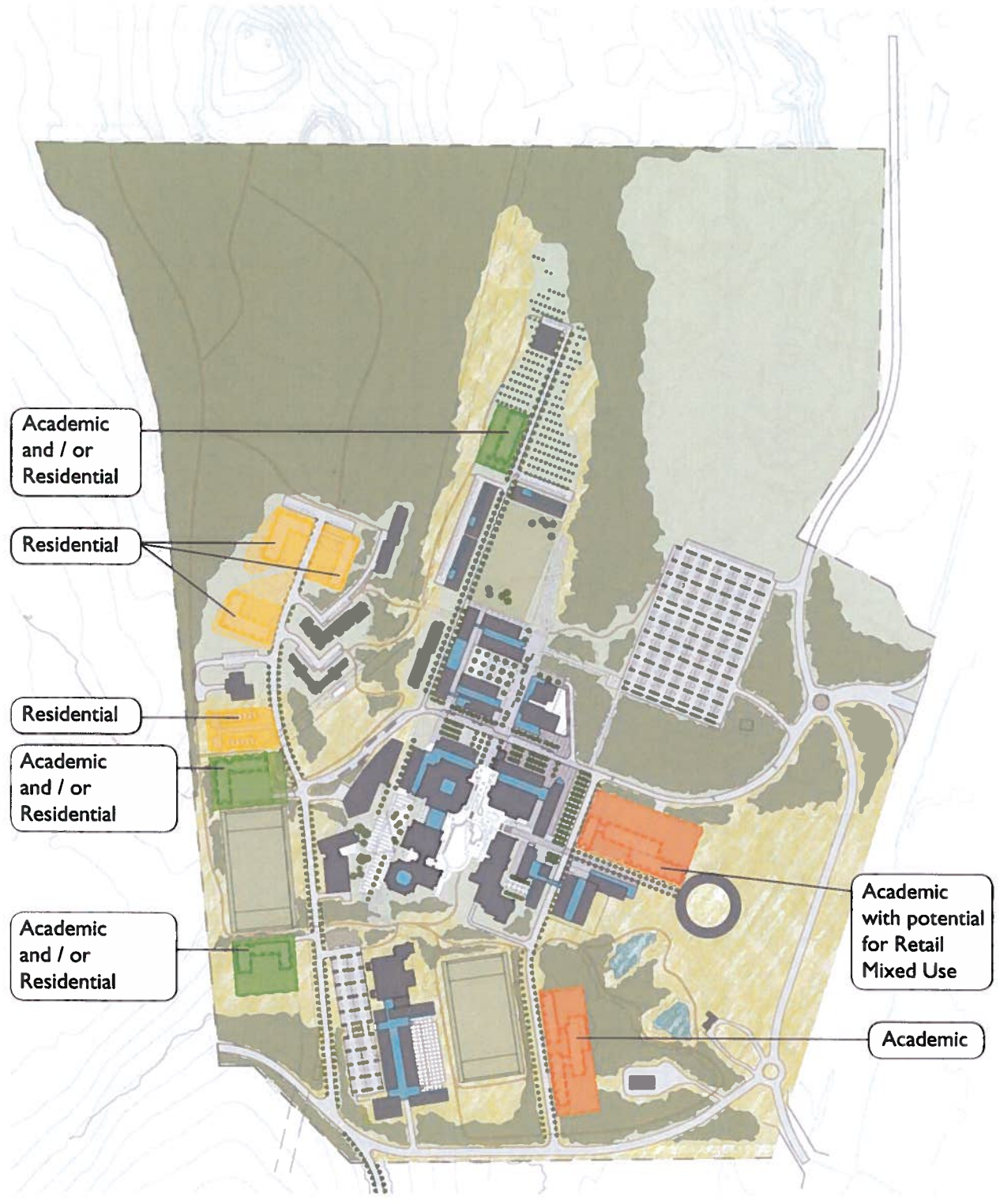
The Master Plan has a time horizon of 2010 based on the Master Program with the same timeframe. Given the uncertainties of student enrollment and funding from many sources, the Master Plan may not be fully built out by 2010; it is unlikely to be completed sooner.

In order to provide confidence in the Master Plan and to ensure that there will be room to expand and develop the campus further after the 2010 Plan is in place, a diagram has been prepared to show longer-term building sites that are consistent with the plan and flexible with respect to the types and functions of future development.

There are a number of locations for future academic buildings in close proximity to the core including a large site on the east side of South Gate across from the existing sportsfield and a site that would occupy a portion of the Productive Landscape precinct at the north end of the Mews. Remaining surface parking lots at the southeast corner of University Way at South Gate and to both the north and south of the planned second playfield are excellent sites and could readily be developed with underground parking that takes advantage of slopes for access. Any of these sites could also include some residential development as a use in upper floors. The site immediately east of the Learning Commons and University Centre should be considered as the location for any expansion of campus retail and student services uses.

In addition to residential opportunities combined with academic building projects, there are a number of appropriate residential sites within the Hilltown precinct, some on current surface lots, some on open sites, and one that would develop the daycare site more intensively with a replacement daycare in or nearby the new building. It is anticipated that post 2010 development will be less reliant on single occupant vehicular access to campus as the residential population grows and transit service expands. In the future it may, as a result, be possible to remove some surface parking to free up building sites. Underground parking may also be more financially feasible in the future.

The lands along Hollywood Road in the northeastern corner of the campus will also likely be developed post 2010 when complementary development has occurred on lands nearer the airport in the Gateway area. These site could generate revenue for UBC O or even accommodate research related development that would work in partnership with campus-based research and employ students and graduates of UBC O.



IMPLEMENTATION OF THE MASTER PLAN

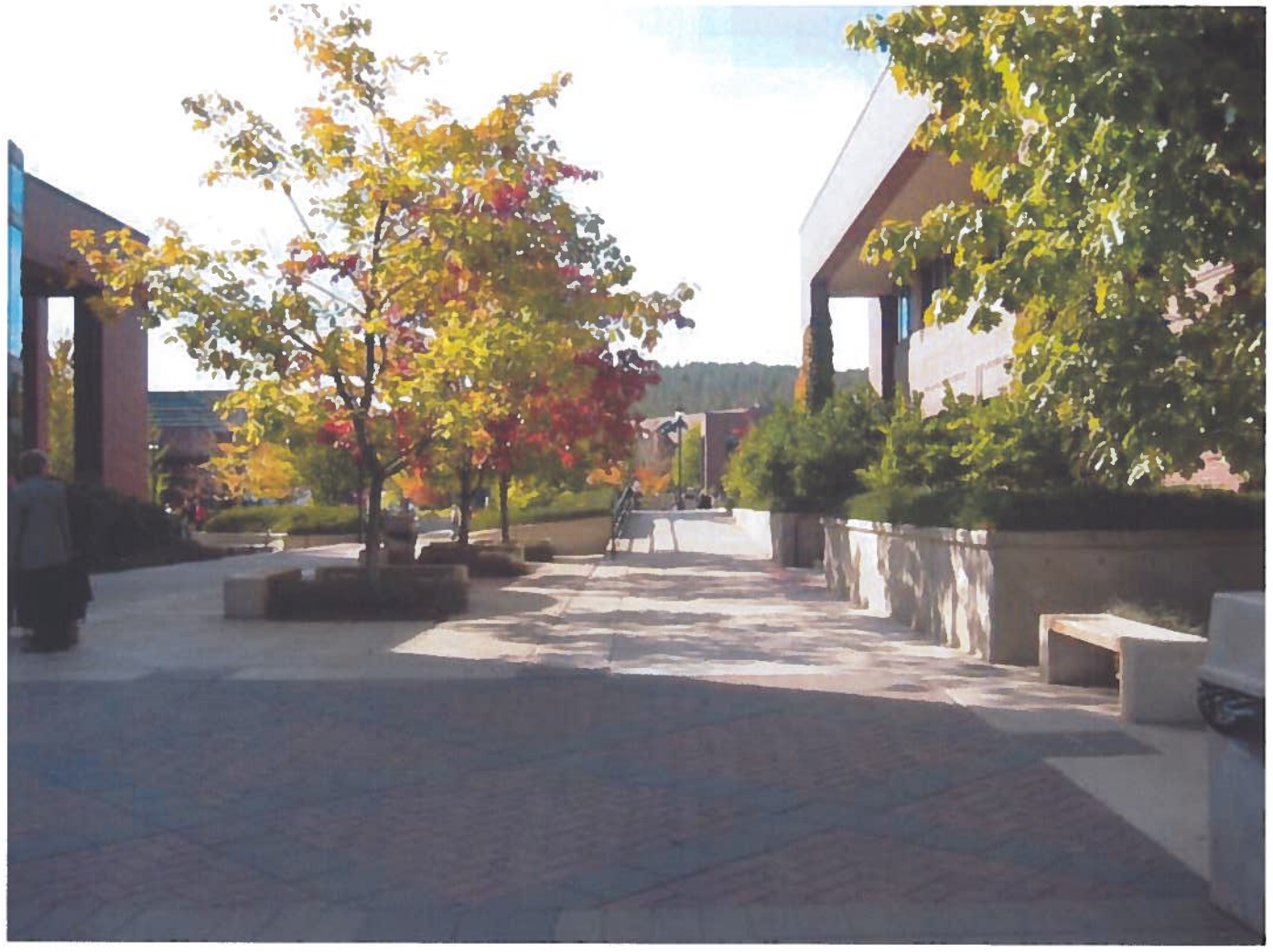
Implementation of the Master Plan will involve negotiations and detailed planning processes with several government agencies. The Master Plan will be the starting point for rezoning the entire campus to a Comprehensive Development zone that meets the policies and standards of the City of Kelowna. The City will then review all development applications for buildings, infrastructure, and site development projects with reference to the new zoning by-law and related development permit guidelines. In the interim, the City is processing applications for the implementation of Phase One of the Master Plan under existing zoning that applies to the portion of campus where these buildings are located.

The City of Kelowna and the BC Ministry of Transportation are both involved in negotiating with UBC O on the detailed design and implementation of the new access connection from Highway 97 and associated roadworks both on and off the campus. An agreement has been made for the three parties to share the costs of these infrastructure improvements. The Master Plan reflects the preliminary conceptual location for these roadworks; the design development process will result in more definitive plans.

Each specific building and major landscape project will be identified for implementation based on the Master Plan and a review of program requirements and funding sources to consider new and changing information. These projects will proceed through the standard Board of Governors approval process and the UBC process for selection of consultants.

While academic buildings are funded through the Provincial formula process, each building is associated with outdoor open space and infrastructure projects in its vicinity that need to be considered for funding and timely construction. Because the campus is on a sloping site, new buildings must be integrated into surrounding grades at planned not existing elevations or opportunities for unimpeded universal access will be lost. For example, the Master Plan has established elevations along University Way and relocated it to the north for its western end; these elevations are critical to having gentle slopes, without stairs, on University Walk and the Mews.

Consultation with the UBC O community should continue on a regular basis and include updates and opportunities to comment on each project that comes forward for implementation. The structure of this process has not been finalized and will be discussed as the campus resumes operation in the fall of 2005.



VIEW SOUTH TO EXISTING ACADEMIC COURTYARD