

The University of British Columbia

Vancouver Campus Plan

PART 2 CAMPUS PLAN



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

UBC VANCOUVER CAMPUS PLAN

Part ① Campus Plan Synopsis

Part ② Campus Plan

Part ③ Design Guidelines

To obtain copies of *Part 1 Campus Plan Synopsis* and *Part 3: Design Guidelines* please contact Campus and Community Planning or visit our website at www.planning.ubc.ca.

ADOPTED | JUNE 2010

The UBC Board of Governors formally adopted *The UBC Vancouver Campus Plan* in accordance with powers conferred on the Board by the University Act. *The UBC Vancouver Campus Plan* is a part of the body of Governance Requirements established by the Board for the management, administration and control of the University's real property, buildings and structures, as defined in the Board of Governors' Policy 92 (Land Use and Permitting).

The official name of this document is *The UBC Vancouver Campus Plan*. For brevity, it will be referred to as *The Campus Plan*.

TABLE OF CONTENTS

PART 2: CAMPUS PLAN

1	Purpose and Vision	5
1.1	Vision	5
1.2	Principles	6
1.3	Plan Scope and Format	7
2	Sustainability	10
2.1	Sustainability and Campus Planning	10
2.2	Sustainable Actions and Outcomes	11
3	Campus Land Use	14
3.1	Academic	14
3.2	Student Housing	19
3.3	Recreation and Child Care	20
3.4	Mixed-Uses and Hubs	21
4	Public Realm and Open Space	23
4.1	Public Realm Improvements	24
4.2	Academic Use of the Public Realm	25
4.3	Universal Accessibility	26
4.4	Open Space	28
5	Movement and Circulation	29
5.1	Campus Circulation Network	29
5.2	Pedestrian and Cyclist Friendly Campus	31
5.3	Public Transit and Community Shuttles	33
5.4	Roads and Intersections	33
5.5	Parking	34
5.6	Service Vehicle Routes and Access	34
5.7	Wayfinding and Signage	35
5.8	Lighting	35
6	Infrastructure and Utilities	36
6.1	Existing Infrastructure	37
6.2	Sustainable Practices	38

7	Campus Character	41
7.1	Design Strategies and Guidelines	42
7.2	Heritage Conservation	43
7.3	Outdoor Public Art	44
8	Campus Plan Implementation	46
8.1	Project Review and Approvals	47
8.2	Strategic Initiatives	47
8.3	Coordinated Planning and Operations	48
8.4	Plan Monitoring	49
8.5	Plan Amendments	49
9	Maps & Tables	50
	Map 2-0: Generalized Future Academic and Housing Locations	50
	Map 2-1: Teaching, Learning and Research Land Use	51
	Map 2-2: Student Housing Land Use	52
	Map 2-N: Future Academic and Housing Locations	53
	Map 2-3: Open Space Network	54
	Map 2-4: Generalized Academic Communities and Social Interaction Opportunities	55
	Map 2-5: Getting To and From UBC	56
	Map 2-6: Getting Around UBC	57
	Map 2-7: Road and Pathway Improvements	58
	Map 2-8: Service Access	59
	Map 2-9: Potential Waste Heat Sources	60
	Map 2-10: Heritage Resources: Themes 2 and 3	63
	Map 2-11: Heritage Resources: Themes 4 and 5	64
	Map 2-12: Heritage Resources: Themes 6, 7 and 8	65
	Map 2-13: Outdoor Public Art and Commemoration Locations	66
10	Appendices	67
	Appendix 1: Facilities To Be Replaced	67
	Appendix 2: Population Growth Assumptions to 2030	69
	Appendix 3: Facility Growth Assumptions to 2030	70
	Appendix 4: Future Floor Space Capacity	72
	Appendix 5: Current Land Use on Campus	74

1 PURPOSE AND VISION

The *UBC Vancouver Campus Plan* provides the vision and strategies to create a physical campus with an exceptional teaching, learning and research environment befitting a globally significant University. By providing a framework for where and how future academic and research activities, student housing and associated campus services will be accommodated, *The Campus Plan* supports the University's strategic plan, *Place and Promise: The UBC Plan* and academic mission.

1.1 VISION

The following Vision and Outcomes Statement, developed in consultation with the UBC community, guides the physical evolution of UBC's Vancouver campus over the next 20 years.

The UBC Vancouver Campus Plan supports UBC's world-class community of scholars with a beautiful, functional, sustainable and cost-effective campus that provides the optimal environment for teaching, learning and research; reflects the stature of the university; encourages a unique community life; strengthens its connections with its neighbours and is responsible to future generations.

— Endorsed by the Board of Governors, May 2007

The *Campus Plan* provides the framework for UBC's Vancouver campus to achieve the following outcomes:

- Embody a campus that achieves the next level of performance in sustainability.
- Have an academic core focused on a community of scholars that provides the optimal environment for academic pursuits and is the hub of the University's unique community life.
- Have a campus that balances the social, recreational and other needs of the campus community with the university's academic and research focus and creates vibrancy in campus life that is appropriate to the university context.
- Have a safe, healthy and physically accessible campus that meets user needs where the pedestrian experience is substantially improved and principles of universal design are integrated, and more facilities for cyclists and better transit service are realized.
- Have a beautiful campus that reflects its natural west coast setting and sense of place.
- Have clear implementation tools and well-understood implementation procedures to advance *The Campus Plan*.

1 Purpose and Vision

2 Sustainability

3 Campus Land Use

4 Public Realm and Open Space

5 Movement and Circulation

6 Infrastructure and Utilities

7 Campus Character

8 Campus Plan Implementation

9 Maps

10 Appendices

1.2

PRINCIPLES

Important physical planning and design principles that influenced development of *The Campus Plan* concepts and policies are highlighted below.

Academic and Research Leadership

UBC's academic mission is the University's core business. The physical change and design strategies for future growth embodied within *The Campus Plan* must reinforce the University's academic teaching, research and learning objectives by providing an environment for creativity and innovation.

Sustainability

Environmental, social, and economic sustainability principles drive *The Campus Plan*, leading to location, density, shared common facilities, system integration, construction standards and policies that make UBC's physical infrastructure and buildings work on many levels simultaneously. *The Campus Plan* supports academic enquiry and leadership in sustainability through using its campus as a Living Laboratory to promote and support pilot projects, research and teaching of sustainability. *The Campus Plan* procedures will accommodate desirable technological innovations in support of alternative energy, reduced emissions, zero-waste and reduced water consumption.

Smart Campus Growth Principles

The Campus Plan embraces smart growth principles such as providing a more complete range of academic community needs (academic, housing, social, recreational and convenience services) within compact and strategic development patterns. Providing transportation alternatives encourages more walking, cycling and transit. *The Campus Plan* also supports the principles of preserving open space, minimizing commuting emissions, minimizing infrastructure costs and fostering a community where people will linger and participate more in campus life.

A Place to Remember

UBC's unique history, culture and beautiful natural west coast forest setting combine to give the campus a unique character, sometimes called its "sense of place." By understanding the campus framework and elements that contribute most significantly to this character, *The Campus Plan* guides new physical growth to contribute positively to, rather than detract from, UBC's special sense of place.

Design Principles

High quality of design is a key expectation of *The Campus Plan*. *Design Guidelines* have been developed in order to set out design expectations for architecture, building materials, public realm design, and landscape. Embedded Universal Design principles require a dignified, inclusive and welcoming approach to

the design of buildings, the public realm and features like cross walks and lifts. The design guidelines are also consistent with the principles of Crime Prevention through Environmental Design, including natural surveillance and territorial reinforcement that reduce crime and make people feel safe.

Decision Making Principles

The Campus Plan procedures support predictable, fair and cost-effective approval decisions for all new growth and change on campus, including opportunities for campus community and stakeholder engagement during project review.

1.3

PLAN SCOPE AND FORMAT

The Campus Plan subject area only includes institutional lands but incorporates the North Campus and University Boulevard neighbourhoods due to their academic uses. The family housing neighbourhoods are excluded as these areas are not focused on accommodating UBC's academic uses.

The 24 hectare South Campus land reserve, where the UBC Farm is located, is excluded from *The Campus Plan* subject area at the request of the UBC Board of Governors and subject to a separate academic planning process. *The Campus Plan* will be amended to reflect the land uses determined for this area once the Board's conditions, identified below, have been met.

No market housing is to be pursued in the 24 hectare South Campus area as long as the University's housing, community development and endowment goals can be met through transferring housing density to other parts of campus. Current land uses remain until an academic plan is complete and the density has been transferred. The *South Campus Academic Plan* must be for teaching and research purposes that are academically rigorous and globally significant around issues of sustainability and enhance UBC's position as Canada's most sustainable university and a recognized world leader in campus sustainability.

The assumptions of future spatial and physical needs for the Vancouver campus are derived from the University's overall strategic, academic and operational plans. *The Campus Plan* does not address the timing and funding of specific projects. These aspects will continue to be determined by various academic, administrative, business and facility planning processes. In addition, *The Campus Plan* does not address detailed operational strategies, such as waste management or energy management, except as they connect to the physical development of the campus.

1 Purpose and Vision

2 Sustainability

3 Campus Land Use

4 Public Realm and Open Space

5 Movement and Circulation

6 Infrastructure and Utilities

7 Campus Character

8 Campus Plan Implementation

9 Maps

10 Appendices

Format

The Campus Plan comprises the following three documents:

Part 1: Campus Plan Synopsis — an overview of the plan strategies, policies and implementation actions

Part 2: Campus Plan — policies with their context, protocols, reference maps and campus growth assumptions

Part 3: Design Guidelines — architecture, landscape and infrastructure design requirements for new capital projects, renovations and activities associated with operations and maintenance

Parts 2 and 3 are the Plan's reference documents and, if a conflict exists, take precedence over the content of Part 1 Campus Plan Synopsis.

Policies

UBC's Board of Governors is responsible for managing the University's property and facilities. The Boards' authority is described in Policy 92, Land Use and Permitting. *The Campus Plan*, along with UBC's *Land Use Plan* and associated documents, details the goals, policies and procedures regarding land use.

The Campus Plan policies are organized under the following categories:

- Sustainability
- Campus Land Use
- Public Realm and Open Space
- Movement and Circulation
- Infrastructure and Utilities
- Campus Character

Planning Process

The Campus Plan was developed through a process approved by the Board of Governors in mid 2006. Each phase of the planning process included technical studies and community consultation. The process was guided by the Steering Committee with detailed input from the Technical Advisory Committee and Project Team. Committee members represented students, alumni, faculty, professor emeriti, staff and the university community.

A summary of the public consultation events in Phases 2 to 4, and how the feedback informed *The Campus Plan*, is included in the *Consideration Memo of Consultation Input*, prepared by Campus and Community Planning in October 2009. **Table 2-1** contains a summary of the main activities in each phase in the *Vancouver Campus Plan Review*.

TABLE 2-1

UBC VANCOUVER CAMPUS PLAN REVIEW — A SIX PHASE PROCESS

	TECHNICAL WORK	COMMUNITY CONSULTATION
Phase 1 <i>Initiate the Plan 2006</i>	<ul style="list-style-type: none"> Defining Scope and Budget Planning Process Consultation Approaches Existing Policy Framework 	<ul style="list-style-type: none"> Initial Workshop
Phase 2 <i>Identify Issues and Ideas 2007</i>	<ul style="list-style-type: none"> Policy Review Existing Land Use Analysis Open Space Analysis Comparative Campus Development Study 	<ul style="list-style-type: none"> Campus Community Outreach 1992 Main Campus Plan Retrospective Issues and Ideas Workshops Campus Plan Website 6 Big Questions and Blogs Phase 2 Consultation Summary Report Speaker Series
Phase 3 <i>Talk About the Future 2007</i>	<ul style="list-style-type: none"> Academic Development Scenario Access and Movement Study Built Form and Heritage Study Public Spaces Study Vision and Outcomes Statement 	<ul style="list-style-type: none"> Campus Community Outreach Focus Group Discussions Campus Plan Website 6 Big Questions and Blogs Phase 3 Consultation Summary Report
Phase 4 <i>Options Review 2008</i>	<ul style="list-style-type: none"> Social and Ecological Sustainability Assessment of UBC Campus Plan Options Financial Impact Analysis Social and Environmental Sustainability Futures Campus Plan Key Directions Public Realm Improvement Plan GIS Database of Campus & Visualization and Analysis Model South Campus Bioscience and Research Precinct Land Use Plan UBC Gateway Study UBC Historical Context and Themes 	<ul style="list-style-type: none"> Campus Community Outreach Policy Roundtables UBC Farm Principles Online Feedback Form Options Review Workshops Open Houses Discussion Guide and Feedback Form Campus Plan Website Online Feedback Form Phase 4 Consultation Summary Report
Phase 5 <i>Draft Plan 2009</i>	<ul style="list-style-type: none"> Consolidate Background Materials Draft Campus Plan Design Guidelines 	<ul style="list-style-type: none"> Campus Community Outreach Open Houses Discussion Guide and Feedback Form Campus Plan Website Online Feedback Form Phase 5 Consultation Summary Report Consideration Memo of Consultation Input
Phase 6 <i>Adopt the Plan 2010</i>	<ul style="list-style-type: none"> Final Campus Plan Board of Governors Approval of Final Plan 	

1 Purpose and Vision

2 Sustainability

3 Campus Land Use

4 Public Realm and Open Space

5 Movement and Circulation

6 Infrastructure and Utilities

7 Campus Character

8 Campus Plan Implementation

9 Maps

10 Appendices

2 SUSTAINABILITY

Sustainability is a core UBC community value that is embedded in university policy and guides the university's strategic directions. UBC Policy 5, Sustainable Development, adopted in 1997, commits to developing environmentally responsible campus communities, assuming a leadership role through practicing sustainable development and instilling sustainable development values in graduates and employees through research, teaching and operations. *Place and Promise: The UBC Plan* includes sustainability as a core value and sets out a range of relevant initiatives.

The Campus Plan focuses on setting long-term sustainability directions for land, infrastructure, buildings and landscape. Additional information on the University's other sustainability initiatives can be obtained from www.sustain.ubc.ca.

2.1

SUSTAINABILITY AND CAMPUS PLANNING

The sustainable use of land resources is a fundamental goal of *The Campus Plan*, requiring more efficiency in land use patterns, higher densities, less sprawl and careful stewardship of future potential. More sustainable land use leads to enhanced social interaction; improved health, safety and access; reduced demand for energy, water and other resources and more cost-effective projects and infrastructure systems. This approach complements actions to mitigate climate change, especially the reduction of energy demand and shift to renewable sources of energy.

The Campus Plan supports UBC's sustainability commitments by ensuring the integration of environmental, economic and social considerations in *The Campus Plan* and its implementation processes.

Policy 1 The Campus Plan, *building on the University's significant achievements in sustainability, will deliver continuous improvements in sustainable land use, buildings, infrastructure and landscape over time, and encourage systems-based integration of these elements as part of using the campus as a living laboratory for sustainability solutions and innovation. Sustainability principles underpin the plan's policies and will inform its implementation*

Campus as a Living Laboratory

UBC fosters a thriving community of sustainability researchers, teachers, students and operational experts. UBC is now turning itself into a living laboratory and innovation hub for sustainability solutions by intentionally combining its sustainability leadership in teaching, research and operations. *The Campus Plan* supports use of the campus as a living laboratory and

anticipates research and pilot projects across campus, like UBC's Bioenergy Research and Demonstration Project.

Support for Related Initiatives

The Campus Plan supports the physical land use and spatial needs of the sustainability initiatives listed in [Table 2-2](#) to maximize the effectiveness of all strategies combined.

TABLE 2-2
SUSTAINABILITY INITIATIVES ON THE UBC VANCOUVER CAMPUS

Climate Action Plan	Reduce greenhouse gas emissions and take UBC to a fossil free future
Alternative Energy Study	Identify alternatives for progressively reducing UBC's reliance on fossil fuels for the campus district energy system
Sustainability Academic Strategy	Support the academic initiative of "Campus as a Living Lab"
South Campus Academic Sustainability Plan	Define an academically rigorous and globally significant role for the 24 ha area in South Campus in supporting the University's Sustainability Academic Strategy
UBC Sustainability Plan Update	Reduce energy and water consumption, waste and emissions through operational and maintenance improvements

- 1 Purpose and Vision
- 2 Sustainability**
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

2.2

SUSTAINABLE ACTIONS AND OUTCOMES

The Campus Plan goes beyond provincial requirements that new publicly-funded facilities receive green building certification and embeds sustainability principles across the full spectrum of policies including land-use distribution patterns, public realm and open space, movement and circulation, infrastructure and utilities and campus character.

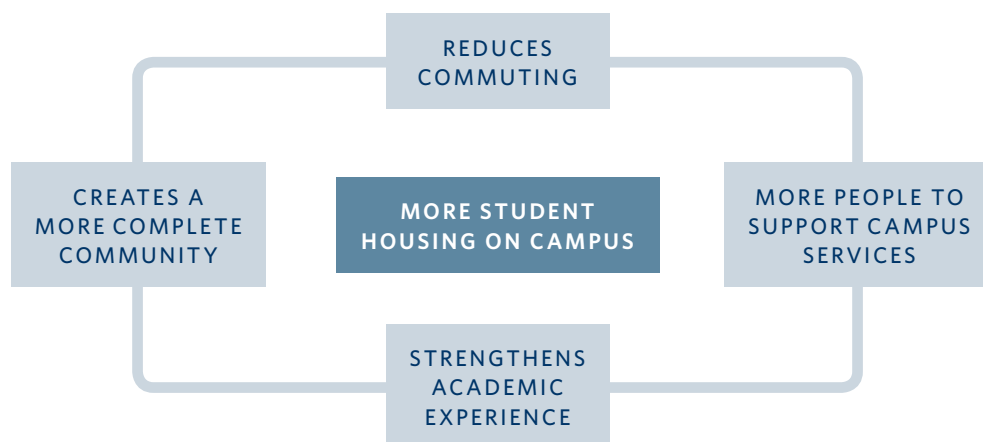
Land Use

As *The Campus Plan* is implemented over time, new academic facilities will be concentrated at infill locations in the main campus to improve proximity, minimize new infrastructure costs and improve walkability. In addition, all new facilities will be designed and constructed at higher density standards to minimize the land consumed.

Increasing the capacity for on-campus student housing will result in more affordable and convenient housing and better student engagement with academia and campus life. A larger supply of student housing and more mixed use throughout the campus will support a pedestrian and cyclist friendly campus and significantly reduce the number of vehicular trips. Less vehicular travel will

contribute to a reduction in greenhouse gas emissions. Having more people living and lingering on campus will support longer hours for child care, recreation, social and campus services, thereby enlivening campus life and also reducing the need to travel.

Policy 2 *UBC will use its land resource sustainably and develop a denser, compact form through infill and taller buildings to avoid sprawl, improve walkability, strengthen social connections and reserve land for open space and future academic needs.*



Public Realm and Open Space

Improvements in the public realm will support a more pedestrian and bicycle friendly campus and create more spaces for informal learning and socializing. Those improvements will also continue to reduce the barriers to universal accessibility, fostering more equitable access to the campus and its facilities.

Landscaping that uses more native and edible plants as well as low maintenance and pesticide-free practices will reduce water and chemical use and increase the biodiversity on campus. Interpretive education programs will facilitate teaching and learning about these landscaping practices.

The shift to a campus with denser, compact form will be complemented by identifying an open space network consisting of large and local commons, greenways and some natural areas.

Movement and Circulation

The Campus Plan identifies a number of road, pathway and intersection improvements. The provision of more and improved facilities for pedestrians, cyclists and transit users will make those modes of travel more convenient and continue to reduce single-occupant vehicle travel. Road and intersection improvements will improve safety for pedestrians and cyclists and create a better sense of place for the campus.

A clearly defined service vehicle network will complement the pedestrian priority zone and improve the efficiency of truck movement around campus, thereby reducing emissions. Improved lighting that is energy efficient and dark sky friendly will improve personal safety and wayfinding.

Infrastructure and Utilities

A number of measures will help to reduce infrastructure costs and facilitate the shift to a more energy- and water-efficient campus. The future costs of moving underground utilities will be reduced by incrementally and consistently relocating utility corridors under roadways and sidewalks as new development occurs. Focusing new development in infill locations will maximize the environmental and economic benefits of shared infrastructure and allow opportunities for heat and energy sharing amongst facilities. Energy management studies will be undertaken as part of the design process for each mixed-use hub to explore the feasibility of reducing fossil fuel use through heat sharing and utilizing low carbon energy sources. Stormwater management strategies will take a natural systems approach to manage runoff volume and quality within the constraints of UBC's unique hydrogeology and concerns with cliff erosion.

Campus Character and Design

All new publicly funded capital projects and major renovations will be certified at a minimum Gold level, preferably Platinum level, in the Leadership in Energy and Environmental Design (LEED®) green building rating system or equivalent. These higher performance standards for campus facilities will reduce emissions, energy use, water consumption and maintenance requirements and improve liveability. The *Design Guidelines* for improving campus character will also strengthen the sense of place, an important quality for sustainable communities to embody. The conservation of campus heritage resources within the constraints of a modern, public research university will support the University's management of its historically valuable assets for future generations.

Implementation

Shifting the construction, operation and maintenance of facilities to more sustainable practises also means that the life cycle of the facility across all its dimensions must be considered in the design and decision-making process.

- 1 Purpose and Vision
- 2 Sustainability**
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

3 CAMPUS LAND USE

The Campus Plan designates land areas and sites to accommodate UBC's anticipated growth at the Vancouver campus over the next 20 years. In addition to adding academic facilities and functions, UBC will increase the capacity and appropriately distribute student housing and campus services such as child care, recreation and social spaces.

Capital projects and new growth are important opportunities for improving the campus fabric. Every new academic facility provides a strategic opportunity to reinforce the academic excellence, sustainability, character and community-building aspects of campus.

The following sections provide detailed policies for these land uses:

1. Academic (Teaching, Learning and Research)
2. Student Housing
3. Recreation and Child Care
4. Mixed-Uses and Hubs

Policies regarding the design of facilities and the campus landscape are listed in the section on [Campus Character](#).

3.1 ACADEMIC

The Campus Plan recognizes the University's academic mission as paramount and accommodates growth and renewal for future teaching, learning and research facilities. As of 2008, the total built floorspace on the Vancouver campus for academic uses, including student housing and campus services, is about 14.2 million square feet (1.3 million square metres). Over the next 20 years a minimum of one million square feet (95,850 square metres) of new teaching and research facilities will be required to meet anticipated needs. These new facilities for teaching, learning and research will be located primarily in the academic core of the main campus. For land-based academic areas, future growth can be accommodated through more intensive use of existing sites.

Focus Academic Growth in Main Campus

New academic development will be concentrated in the main campus core north of West 16th Avenue, as shown on [Map 2-1 Teaching, Learning and Research Land Use](#). The goals are to facilitate greater interaction between allied disciplines, foster more academic interaction between students and faculty, protect the open space network, support a pedestrian and bicycle friendly campus and more fully utilize existing facilities and infrastructure.

The first phase of infill will occur on existing surface parking lots or will replace facilities, such as temporary huts. The space in demolished facilities may need to be replaced and is in addition to new academic needs. The Appendix contains a list of facilities to be replaced by infill.

Policy 3 *New known academic facilities will be located on designated near-term infill sites, as shown on [Map 2-1](#), Teaching, Learning and Research Land Use.*

Protect Large Sites for Large Facilities

UBC is ranked among the world's top research-intensive universities. An important aspect of supporting UBC's vision to produce outstanding research is having the capacity to provide the necessary infrastructure for researchers. UBC will preserve future options for creating new teaching, learning and research facilities, like the Museum of Anthropology or the Life Sciences Centre, by protecting larger development sites on the Vancouver campus.

Policy 4 *Large sites will be protected in their entirety for the future development of significant teaching, learning and research facilities. Academic projects with smaller space needs will be encouraged to locate within the mixed-use hubs or to co-locate with other smaller projects in one facility.*

Reserve Sites for Long Term Academic Needs

To maintain options for future generations of UBC scholars, a number of sites will be reserved for academic projects beyond the 20-year time frame of this plan. Similar to the recognition that urban areas cannot continue to sprawl if they are to be more sustainable, so must the University constrain its development to designated sites that support a compact and more complete campus. Also, the Research Area in South Campus is intended primarily for university-related research activities not suited to the core campus.

Policy 5 *When older facilities are being assessed for their renewal potential, they will also be assessed for their potential as redevelopment sites.*

Policy 6 *The Long Term Academic Infill development sites, shown on [Map 2-1](#), Teaching, Learning and Research Land Use, will be reserved for academic projects that are identified in the future.*

[1 Purpose and Vision](#)

[2 Sustainability](#)

[3 Campus Land Use](#)

[4 Public Realm and Open Space](#)

[5 Movement and Circulation](#)

[6 Infrastructure and Utilities](#)

[7 Campus Character](#)

[8 Campus Plan Implementation](#)

[9 Maps](#)

[10 Appendices](#)

NEW BUILDING SITE SELECTION COMMITTEE/ MEMBERSHIP

DIRECTOR OF PLANNING, CHAIR

With representatives from:

- *Provost's Office*
- *UBC Architect*
- *Campus + Community Planning Policy Planning*
- *Infrastructure Development*
- *Sponsoring department*
- *UBC Properties Trust*
- *Other affected departments as required*

Site Selection Protocol

New capital building project ideas come from a range of sources including:

- academic proposals through the Office of the Provost;
- student housing, athletics or parking facilities through individual ancillary units on campus; or
- third party research and other groups on leased land.



In all cases, it is critical that the project proposals be assessed through a review against the endorsed *Campus Plan* long range objectives and discussed with other departments and UBC's Planning and Property Advisory Committee (PPAC).

Site location approval for a given project requires Board 1 approval by the Board of Governors. Prior to that stage, staff technical review will be coordinated through a *New Building Site Selection Committee* chaired by the Director of Planning, with representatives from the Vice-Provost, Academic Resources; UBC Architect; Campus and Community Planning Policy Planning; Managing Director of Infrastructure Development; UBC Properties Trust and the sponsoring department (e.g., faculty, Athletics, Housing and Parking).

Other affected departments may be included on a case-by-case basis. Senior administrators of surrounding buildings will be briefed, with their commentary recorded and reported to Executive and PPAC as appropriate. Site selection recommendations from the New Building Technical Site Selection Committee will be forwarded to the Executive and PPAC prior to Board 1 approval.

The criteria to be considered in the determination of the best site for new projects will include the following:

Sponsoring Department Program Needs

1. The preferred site for the proposed project shall be suited to the sponsoring departments' program needs.
2. For academic programs, the preferred site might be adjacent to or near similar academic program units to support collaboration within and between disciplines and build a sense of community.

Contributes to long range Campus Plan, Design and Community Building Objectives

3. All future mainstream academic facilities are to be located north of Thunderbird Boulevard in the core campus wherever possible to protect long-term research expansion capacity in South Campus.
4. The site selection of buildings shall:
 - a. respect identified heritage resources where possible;
 - b. contribute to completing one of the priority elements in the *UBC Vancouver Public Realm Plan*;
 - c. play a significant role in campus design and wayfinding by building massing; and
 - d. provide direct access for people with disabilities and to the pedestrian and cycling networks.

Sustainability Considerations

5. The site selection of buildings shall:
 - a. represent an efficient use of land;
 - b. use existing infrastructure capacity and where new services are required, contribute to rationalizing the location of infrastructure corridors; and
 - c. provide co-location opportunities for utilizing waste heat, generating energy and managing stormwater and potable water.
6. Ideally, the facility program can incorporate several academic uses—classrooms, flexible learning spaces and shared labs—in one building.
7. Consider renewal of existing buildings, where existing structures are an efficient use of land.

Adjacent Impacts

8. The proposed uses must not preclude future options for more densification on adjacent sites.
9. The risk assessment of air emissions from adjacent facilities and operations (or from the proposed facility to adjacent facilities) must indicate the health and safety of existing and future building occupants will not be impacted.
10. Proposed uses do not introduce unreasonable functional impacts to neighbours activities.

1 Purpose and Vision

2 Sustainability

3 Campus Land Use

4 Public Realm and Open Space

5 Movement and Circulation

6 Infrastructure and Utilities

7 Campus Character

8 Campus Plan Implementation

9 Maps

10 Appendices

Reasonable Time Limits

11. Once a site is endorsed by Board 1 approval, the site will be reserved for that sponsoring department for five years to allow time for fundraising, design and approval and commencement of construction. If the project is not funded and begun within five years, the site will become available for other project proposals.

Policy 7 *Site selection of all new academic and ancillary buildings and facilities on campus will follow the Site Selection Protocol in Part 2 Campus Plan.*

Protect Land-Based Areas for Teaching and Research

UBC's Vancouver campus has superb gardens and athletic facilities that support teaching, research and varsity life as well as various levels of access for public enjoyment. The future of Thunderbird Stadium may be reviewed and changed at some point, given the University's consideration of different futures for its varsity programs.

Policy 8 *The current locations of Botanical Gardens, Nitobe Gardens, and Thunderbird Fields, as shown on [Map 2-1](#) Teaching, Learning and Research Land Use, will be retained to meet academic and university varsity and recreation needs.*

Several land-based research activities require either sites with controlled access to ensure their field work and operations are not disturbed, or sites with specific conditions conducive to their research. Locating new academic facilities on infill sites in the main campus complements the following policy of retaining specific areas for land-based research with associated facilities.

The South Campus Bioscience research precinct is primarily intended for consolidating and hosting bioscience uses that benefit from a site near the university, are compatible with adjacent future housing and cannot be better accommodated either in the main academic core or at off-campus sites. The UBC support area at the south end of campus, which includes plant and utility facilities that service campus operations, is compatible with the bioscience research uses.

Policy 9 *The BioScience Reserve in South Campus and the south half of Totem Field will be retained for land-based research and teaching projects. In addition, the research precinct in South Campus will be reserved for specialized research activities.*

Policy 10 *Existing operational support services in South Campus will be gradually relocated from academic areas and consolidated into the southern tip, as academic demand intensifies.*

The 24 hectare South Campus land reserve, in which the UBC Farm is located, is excluded from *The Campus Plan* subject area, as described in [Section 1.3 Plan Scope and Format](#).

Create More Informal Learning Spaces

The nature of campus life is changing with the recognition that learning goes beyond the classroom, laboratory and individual and group study spaces to include informal learning spaces. Students engage in academic discourse in a variety of indoor and outdoor spaces across campus: sitting on a bench in the corner, standing around the coffee bar in the cafeteria, gathering in a group on Main Mall or studying in a library hallway. The setting may be loosely structured and the grouping may be spontaneous, but the learning is intentional and genuine. [Map 2-4 Academic Communities and Social Interaction Opportunities](#) shows the existing and future known informal learning spaces across campus.

Policy 11 *Opportunities to maximize the amount of informal learning spaces will be pursued as new facility and public realm projects are developed, as appropriate within the scope and context of each project.*

3.2 STUDENT HOUSING

In 2007, UBC's Vancouver campus housed 29 per cent of full time undergraduate and 24 per cent of graduate students, for a total of just over 8,500 beds. *The Campus Plan* identifies land use strategies that could nearly double the number of beds for all students, subject to available funding, providing for a total of just over 16,600 beds by 2030.

Policy 12 *The land use capacity to house 50 per cent of full-time students on campus will be maintained.*

Providing a greater capacity to house students on campus will result in more affordable and convenient housing, compared to off-campus rentals and better student engagement with academia and campus life. Reducing the need for thousands of students to commute to campus will help reduce greenhouse gas emissions and other impacts of vehicular traffic. Having more people living on campus also means campus services can afford to operate longer hours and throughout the year.

The increased capacity for student housing will be implemented by providing a greater variety of housing styles and tenures. The location and type of student housing can play a large role in addressing other academic, sustainability and campus character priorities. Future student housing locations in the academic area of the campus are indicated on [Map 2-2, Student Housing Land Use](#).

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use**
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

Policy 13 *New student housing will be provided by creating more spaces in the form of traditional residences, student family housing and independent-style living units, as shown on [Map 2-2](#) Student Housing Land Use, with delivery determined through related business planning processes.*

Create More Spaces in Traditional Residences

Additional space will be built in infill locations east of existing traditional residences at Place Vanier and Totem Park, where existing capacity for large scale food services and commons block programming can be used to better advantage. This infill, in combination with the other new housing, will move UBC closer to a first-year guarantee for students new to UBC.

Renew and Expand Student Family Housing

The aging housing in Acadia Park will be renewed in phases with mid-rise and apartment style housing. New student family housing on the north portion of Totem Field, and south of Westbrook Place in South Campus, will benefit from the proximity to the existing family housing areas and their social networks and amenities. The student family housing areas will all have easy access to open space areas.

Enliven the Campus with Independent-Style Student Housing

For upper year and graduate students, independent-style residences like Marine Drive Residence and Gage Towers are popular. Additional independent-style units will be located in five mixed-use hubs in the academic core. Within each hub, the upper level floor space will be student residential housing, with various combinations of academic, social and recreational spaces, child care and campus life services on the lower floors.

See [Section 3.4](#) *Mixed-Uses and Hubs* for more information on the function and location of hubs.

3.3

RECREATION AND CHILD CARE

The University supports the health and wellness of students, faculty and staff by providing space and facilities for recreation and child care services among other initiatives such as student health services. *The Campus Plan* focuses on recreation and child care because both services have five-year expansion plans, starting in 2010, to better accommodate existing demand and allow for future growth.

Upgrade and Expand Recreation Facilities

UBC Athletics and Recreation provides university sport, recreation and fitness programs for the benefit of students, the University of British Columbia and the community. Planned recreation facility upgrades and expansion, such as the new Tennis Centre identified in the *Athletics and Recreation Master Plan*, will take place

within the current areas allocated for athletic fields and the student recreation centre.

In addition, new outdoor and indoor recreation spaces will be located in each mixed-use hub. These facilities could be operated by UBC Athletics and Recreation, Student Housing and Hospitality Services or through agreements with student organizations.

Policy 14 *The completion of current recreation facility improvements identified in the Athletics and Recreation capital plans that were approved as of 2009 will be accommodated in Thunderbird Fields and the Student Recreation Centre locations. In addition, capacity will be provided in the hubs to distribute smaller fitness and recreation facilities across campus. The future of Thunderbird Stadium may be reviewed depending on changes being considered for the Varsity program.*

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use**
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

Distribute More Child Care Spaces Across Campus

Compared to other Canadian universities, UBC has the largest child care program. Nonetheless, in 2010, a significant wait list exists for the nearly 525 full- and part-time child care spaces on the UBC Vancouver campus. The existing spaces are primarily located at the southern edge of the student family housing area in Acadia Park. The *UBC Child Care Expansion Plan* identifies a long-term strategy to double the number of spaces by adding a range of facilities on campus and in the family neighbourhoods. These facilities would be built as funding and demand allow.

On campus, approximately 275 new centre-based spots are desirable in multiple locations to maximize people's ability to walk or bus to the facilities. Each new hub in the campus core will accommodate a new licensed child care facility containing approximately 25 spaces. An additional child care centre with 25–50 spaces will be located in a new building close to, or within, the University Boulevard Neighbourhood.

Policy 15 *Sites and capacity in the hubs will be provided to support the expansion of child care facilities that are identified in the UBC Child Care Expansion Plan (2009).*

3.4

MIXED-USES AND HUBS

A safe, interesting and vibrant campus encourages people to linger, socialize and develop lasting relationships. UBC's Vancouver campus is large and dispersed, with many people feeling it lacks a central, vibrant focus. Others would like more amenities and services to be distributed across campus to help to strengthen the sense of community and create a more cohesive campus.

The Campus Plan provides for both strategies: an animated central heart with smaller mixed-use hubs distributed around the academic core of main campus. This approach will concentrate social and housing uses in specific locations, allowing for the majority of the academic campus to remain less intensely developed.

A key component of creating a more vibrant campus is providing food services in proximity to places where people linger, such as informal learning spaces, outdoor plazas and commons. Food services can also act as a draw to places like the new mixed-use hubs.

Complete the Heart of Campus

The University Boulevard Neighbourhood will become the heart of the Vancouver campus, functioning as the main social hub for the university community and a welcoming point for visitors. This area will offer a variety of university-related services in addition to institutional and residential uses. The buildings in this pedestrian-friendly neighbourhood will reflect a strong university character and have a variety of uses at street level to draw people to this area.

A new Student Union Building and Alumni Centre will be built at University Square, as part of the overall development of the University Boulevard Neighbourhood.

Policy 16 *The University Boulevard Neighbourhood will continue to be developed as the heart of UBC's Vancouver campus, with a focus on the community of scholars.*

Create Mixed-Use Hubs

Five mixed-use hub locations, near the following intersections, are identified for the main campus:

1. Gage Road and East Mall
2. Memorial Road and West Mall
3. University Boulevard and West Mall
4. Agronomy Road and West Mall
5. Agronomy Road and Westbrook Mall

These five hubs will feature independent-style student housing that is complemented by a range of other uses including academic, child care, recreation, food, social and convenience services. The hubs would each have an outdoor commons and possibly an upper-level public lounge to provide access to views. In terms of movement and circulation, the hubs would directly link to pedestrian pathways, be close to shuttle stops and provide secure bicycle storage as well as disabled and service parking. The opportunities for using district heating or renewable energy sources at each hub will be explored.

Two smaller hubs may be considered in South Campus and Acadia Park. In South Campus, the hub would be subject to sufficient demand for student housing and

associated amenities related to the research and academic community in the area and subject to lease status. In Acadia Park, the hub would be subject to sufficient demand for academic facilities in addition to student housing.

All hubs, in addition to providing student housing, will be required to supply a mix of academic support and campus life program elements compatible with the adjacent academic precincts and existing services and open to the campus community. These elements are listed in the textbox, with more detail provided in the *Design Guidelines, Section 3.5.1 Hubs Architecture*.

Food and social activities are a natural synergy. Therefore, hubs and the campus core are preferred locations for future permanent food and beverage facilities. Lounge facilities of various types will be permitted and encouraged within new hubs, including one liquor licensed lounge or pub in each hub, subject to user group demand and prevailing licensing regulations on campus.

Policy 17 *Mixed-use hubs, featuring independent-style student housing, child care, recreation facilities, food services and social space, and appropriate academic uses will be developed at the sites identified on [Map 2-2](#) Student Housing Land Use to foster social interaction and provide needed support services within a short walk of all academic precincts.*

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space**
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

4 PUBLIC REALM AND OPEN SPACE

The founders of UBC chose a beautiful setting for the Vancouver campus on Point Grey. This campus is a place where teaching, learning and research greatly benefit from being conducted in a visually appealing, safe and accessible environment. It is a place that inspires and enriches the lives of those who learn, teach, research, work, live and visit here.

The outdoor spaces that most people associate with the Vancouver campus are its forested setting, the mountain and ocean views, the grass median along Main Mall and the small courtyards tucked in and between academic buildings. This shared space for the university community and campus visitors—the public realm—plays a significant role in strengthening the university’s identity and supporting campus life.

The policies and strategies in this chapter cover:

- Improving the public realm
- Using the public realm as an academic resource
- Creating a barrier-free environment
- Identifying an open space network

The design of the public realm is covered in [Section 7](#) *Campus Character*.

4.1

PUBLIC REALM IMPROVEMENTS

As the density of campus development increases, so does the importance of having a well-functioning public realm. The public realm on the Vancouver campus requires substantial improvement to ensure it reflects the quality and stature befitting a globally significant University.

A dedicated funding source is available for these improvements, which will be guided by the strategy and principles in *The UBC Vancouver Public Realm Plan* (2009). Additional opportunities to change and improve elements of the public realm will occur in coordination with the construction of new academic facilities and infrastructure upgrades.

The Campus Plan objectives are to create a network of outdoor public spaces that:

- Animate, invigorate and bring life to the campus
- Enhance the educational experience with outdoor informal learning
- Promote the sharing of ideas, creative expressions and interaction across disciplines
- Support and nurture the physical and mental health of our students, faculty and staff
- Instil pride and identity in UBC’s culture, showcasing it to visitors from around the world
- Garner community use and support
- Remain economically sustainable

Over the next 15 years, the *Public Realm Plan* will focus on improvements in the areas identified in [Table 2-3](#).

TABLE 2-3
PRIORITY AREAS FOR PUBLIC REALM IMPROVEMENTS

PRIORITY AREAS	IMPROVEMENTS
Organizing Spines	Main Mall and University Boulevard upgrades
Large Commons	Fairview Commons, Library Commons, and University Square upgrades. Plazas created at the Student Union Boulevard North Plaza and the University Commons
Local Commons	Smaller scaled intimate spaces between buildings within major blocks or precincts upgraded
Pathway links	Improved pathways that connect outdoor spaces
Gateways	New welcoming entryways at five locations

Policy 18 *The public realm will be improved to better reflect the stature of the university through the implementation of The UBC Vancouver Public Realm Plan (2009), and will integrate outdoor teaching and learning spaces, Knowledge Walks and interpretative gardens and landscapes to improve academic use of these areas.*

4.2

ACADEMIC USE OF THE PUBLIC REALM

The outdoor spaces on the Vancouver campus provide a wide range of opportunities for teaching, learning and research. UBC's Vancouver campus is one of only a few North American campuses where students, faculty and researchers can access an arboretum, forest, farm and botanical gardens on campus with cliffs, an ecological reserve and the ocean close to campus.

More educational and interpretive installations will be encouraged across campus to facilitate outdoor teaching and learning and to showcase the University's contributions to various areas of knowledge. The following projects illustrate how to make use of the outdoor campus as a valuable academic resource. Details about the design and siting of these projects can be found in the *Public Realm Plan*.

Outdoor Teaching and Learning Spaces

Improvements to the large and local commons will include flexible places, seating for individuals and groups and relevant features that allow for lectures, group projects and exhibitions.

Knowledge Walks

Along existing roads and pathways, interpretive signage will be provided to identify various knowledge walks: Science Walk, Arts Walk, Arboretum Walk and Athletes Walk to start. These walks will celebrate the theme and possibly showcase projects. The final routes and themes for interpretation will be subject to further discussion with interested groups on campus.

Interpretive Gardens and Landscapes

Participation by on-campus groups in the development and stewardship of naturalized, low maintenance indigenous plant gardens and interpretive signage will be encouraged.

The design of courtyard plantings in future capital projects will be encouraged to include indigenous and low maintenance plantings, appropriate to the campus character zone in which they fall (see *Design Guidelines*), along with interpretive information.

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space**
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

UNIVERSAL DESIGN
PRINCIPLES

- *Equitable use*
- *Flexibility in use*
- *Simple and intuitive*
- *Perceptible information*
- *Tolerance for error*
- *Low physical effort*
- *Accessible*

4.3

UNIVERSAL ACCESSIBILITY

Although UBC's Vancouver campus is recognized for its beauty, it has several inherent challenges to the equal participation by persons of varied and often reduced abilities. The challenges to moving around campus for people with disabilities include having long distances between buildings on a large campus, a complicated network of formal and informal pedestrian routes, a major slope rising from the West Mall to the Main Mall, limited parking and vehicle access in the campus core and inconsistent access to main entrances, especially in older buildings.

This *Plan* aims to create a barrier-free environment, as part of creating an exceptional learning environment that is mutually respectful and fosters equity among all people regardless of their physical, sensory or cognitive abilities, backgrounds or experience.

To ensure the equal participation by people of all abilities in the future, *The Campus Plan* goes beyond basic compliance with accessibility standards. It seeks to create a barrier-free campus by encouraging the application of universal design principles in planning and designing new facilities, major renovations and retrofits to facilities and the public realm.

Policy 19 *A barrier-free environment will be created on the Vancouver campus over time, based on the principles of universal design.*

Policy 20 *Modifications to heritage resources will be supported where such changes improve accessibility to older facilities and landscapes.*

Creating a barrier free campus environment relies on three inter-related strategies:

- land use changes
- pathway and connectivity improvements
- facility design and retrofits

The objective is to create a linked network of facilities and pathways that welcome equal participation by people with disabilities.

Land Use Changes

The land use policies in *The Campus Plan* will increase the density of facilities and allow for mixed uses in the campus core. Facilities with high use, such as the Student Union Building and mixed-use hubs, will be in close proximity to transit shuttle routes. Over time, these changes will help reduce the distance travelled between academic, residential and service facilities. In addition, these changes will reduce the need to travel off campus by providing a broader range of services for daily conveniences, social and recreational needs.

Pathway and Connectivity Improvements

Eliminating physical barriers along pathways and improving connectivity from buildings to those pathways will also improve the accessibility of the Vancouver campus. The typical types of improvements include continuing to implement the signage system that clearly indicates accessible routes, building entrances and any special facilities; improving exterior lighting; providing smooth surfaces; making pathways sufficiently wide to accommodate wheelchairs and other walking aids; and providing dignified and inclusive strategies for moving over steeper grades.

With limited funding for public realm improvements, the priorities will focus on improving the routes with the highest use and most barriers, especially the east-west corridors as noted below.

- East-west corridors: Memorial Road, Agricultural Road, University Boulevard and the portion of Agronomy Road adjacent to the mixed-use hub.
- Complete pathways between the two sections of Bio Sciences Road and between Stores Road and Applied Science Lane.

Providing barrier free access to large commons and building courtyards will also be a priority.

Facility Design and Retrofits

The design of new facilities, including the mixed-use hubs, must ensure the following elements are in place:

- Main entrances that are clearly visible, well lit and at grade to avoid the need for ramps.
- Well-defined connections to the network of accessible pedestrian paths.
- Parking spaces for people with disabilities within 100 metres of the new facility, except in the pedestrian priority zone, where parking for people with disabilities will be provided as close as possible. In both cases, the parking spaces must be linked to the facility via accessible pedestrian paths.
- Drop-off areas close to and visible from entrances.

With facility retrofits and Renew projects, these elements will be pursued to the degree possible, given available funding.

Universal design standards will be encouraged for as many student residence suites as possible and every student residence building must include some fully accessible suites.

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space**
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

4.4

OPEN SPACE

Balancing the amount of open space with the density and height of facilities helps to define the character of the campus. As more infill sites are developed, the importance of retaining open space increases. In addition to their central role in defining campus character, open spaces on campus serve multiple purposes including non-motorized transportation routes, sites for outdoor informal learning, places to nurture the physical and mental health of the campus community and landscapes for stormwater management. Many of these uses rely on and benefit from the ecosystem services provided by open space, including pollination, nutrient cycling, the regulation of stormwater flows, views and natural beauty, and habitat.

Open Space Network

On the Vancouver campus, the open space network includes the greenways, large and small commons and natural areas. At the campus boundaries, the network connects with major trails in Pacific Spirit Regional Park to provide connectivity beyond the campus. The athletic fields, gardens and land-based research areas belong to the category of academic land use.

Policy 21 *The open space network for UBC's Vancouver campus, identified in [Map 2-3](#) Open Space Network, will balance the effect of infill in the campus core and host outdoor informal learning spaces, places to nurture the physical and mental health of the campus community, routes for non-motorized transportation and spaces for ecosystem services such as stormwater management.*

Allowable Uses in Open Space

The open space network may be modified or upgraded over time, subject to case-by-case review. For example, adjustment of some academic quadrangles and courtyards may be considered for building additions.

The integration of bikeways, pedestrian paths and surface-level stormwater management components into the open space network is encouraged.

Underground utilities within the open space network are discouraged and will be redirected to road corridors.

Additions and Changes

New open space elements will be added to the network as the campus continues to develop. Additions will include:

- Main Mall Greenway extension south across West 16th Avenue and along the western edge of Westbrook Place neighbourhood to connect with the eastern portion of Pacific Spirit Regional Park

- A new Fairview Commons
- A ground-level commons in each new hub

The final alignment of the southernmost Greenway in the South Campus Research Precinct will be reassessed before construction. This assessment will ensure the proposed east-west alignment meets the objective of providing people with a pedestrian and cycling pathway between Pacific Spirit Regional Park and Southwest Marine Drive while ensuring a clear distinction exists between public and private functions in the area. An alternative alignment along the eastern border of the University could be considered if more land is needed for research or operations.

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation**
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

5 MOVEMENT AND CIRCULATION

The Campus Plan supports a well-connected and accessible campus that works internally for daily navigation and externally for commuters and service providers to connect to the region. Commuting and daily travel demand to and from campus will be reduced by providing capacity for a greater variety of the services, activities and housing needed by the academic community.

The next two sections describe the external and internal circulation networks. The remaining sections provide detailed policies and priorities for these movement and circulation themes:

- Pedestrian and cyclist friendly campus
- Public transit and community shuttles
- Roads and intersections
- Parking
- Service vehicle routes and access
- Wayfinding
- Lighting

5.1

CAMPUS CIRCULATION NETWORK

The campus continues to be a major regional destination: in fall 2008, over 116,000 daily trips were taken by various travel modes. Of those trips, 44 per cent were by transit, which is an extraordinary achievement in sustainable transportation. The campus circulation network has two overlapping systems: getting to and from campus and getting around campus.

Getting To and From Campus

UBC's priority is to have people use transit, bicycles, or carpools to travel to and from campus instead of relying on single occupancy vehicle trips. Currently, regional bus routes terminate at a temporary loop near University Boulevard and Westbrook Mall. Six vehicle parkades are mostly located at the main campus edges to maintain a pedestrian and bicycle friendly environment in the core campus. Some short term parking is provided close to major attractions like the Bookstore and the few remaining surface parking lots are scattered across campus.

The road network, as illustrated on [Map 2-5 Getting To and From UBC](#), identifies arterial and collector roads. Arterial roads are used by regional transit, trucks and all vehicles. Collector roads provide access to parking facilities and are the main access routes for service vehicles.

Policy 22 *The destinations for vehicles travelling to campus will be located at the perimeter of the campus, in structured parkades or below-grade parking facilities, with the exception of vehicles with disabled access privileges. Surface parking lots will be discontinued over time, through their use as future building sites or for other interim uses such as recreational areas.*

Getting Around Campus

The preferred travel modes between campus destinations are walking and cycling. The campus core between West Mall and East Mall and Crescent Road and Thunderbird Road, is primarily for pedestrians.

Bicycles, which are welcome on all parts of campus, share roads with vehicles and paths with pedestrians. Bicycle storage, both secure and temporary, is distributed across the main campus.

The Community Shuttle routes, operated by TransLink, are not intended to replace regular walking trips on campus, but instead provide options for people with mobility impairments, people traveling longer distances across campus, people carrying large or heavy objects and people walking at night. The service is used by student residents, others who live on campus and visitors to significant facilities like the Museum of Anthropology.

Emergency vehicles have access everywhere on campus. University service vehicles are not permitted to travel through the pedestrian core in accordance with the *Transportation Plan*. See [Map 2-6 Getting Around UBC](#) for local circulation routes and support facilities.

5.2

PEDESTRIAN AND CYCLIST FRIENDLY CAMPUS

Enhanced and attractive pedestrian scale lighting will be emphasized along all public realm routes and at building entries so it is safe and easy to walk the campus at night, especially given the increasing residential nature of campus (see *Design Guidelines* for standards).

Establish a Pedestrian Priority Zone

During development of *The Campus Plan*, the consultation feedback strongly supported having a more pedestrian-friendly campus. *The Campus Plan* reinforces existing policies by formally establishing a pedestrian-priority zone and brings clarity to the definition and protection of the zone.

Policy 23 *Vehicular access in the pedestrian priority zone, defined on [Map 2-6](#) Getting Around UBC, will be limited to emergency and security vehicles and vehicles with disabled access privileges. Existing roads in this zone will be re-engineered over time to emphasize the pedestrian nature of the area.*

The physical changes required to support this zone are:

1. Redesign Main Mall so it is a pleasant pedestrian and cycling greenway that encourages social interaction.
2. Install passable barriers in key locations around the pedestrian core to provide access for emergency, security and other authorized vehicles but limit the access by other vehicles. By definition, roads within the pedestrian-priority zone have restricted access.
3. Over time, re-engineer portions of the roads bordering or running through the pedestrian-priority zone to be “shared streets,” so the paving and other design features give visual cues for pedestrian priority. The first pilot project for a shared road on campus would be the section of East Mall between University Boulevard and Walter Gage Road.

Policy 24 *Roadways between the pedestrian priority zone and the campus perimeter will be re-engineered over time to be “shared streets” that better balance walking, cycling and other individual modes of travel with service vehicle access. Commuter vehicle use of these shared streets will be discouraged.*

Maintain East-West Pedestrian Routes

East-west movement for pedestrians is primarily by paths. Therefore, future development needs to preserve the continuity of existing pathways to support a pedestrian-friendly campus, as shown on [Map 2-7](#) *Road and Pathway Improvements*.

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation**
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

Policy 25 *The continuity of routes for the east-west pedestrian pathways indicated on [Map 2-7](#) Road and Pathway Improvements will be maintained to strengthen pedestrian access through the campus.*

In addition, the major east-west connections across campus require upgrading to support a pedestrian-friendly and barrier-free campus. Examples of pathways improvements include repaving, wayfinding signage, installing benches, improving night lighting and providing some weather protection. These improvements will be put in place when implementing the public realm plan, when facilities are developed adjacent to routes or when both occur together. The accessibility and design criteria for improving pedestrian routes are explained in the *Design Guidelines*.

Complete the Main Mall Greenway

About half of the Main Mall Greenway is in place: the current northern terminus is the Rose Garden and the southern terminus is Stadium Road. The southward completion of the Greenway across West 16th Avenue and then along South Campus Road to the border with Pacific Spirit Regional Park will provide a safe and pleasant pedestrian and cyclist link between South Campus and the Main Campus.

Improve Cycling Facilities

The *Transportation Plan* includes a number of investment priorities for cyclists, including improved route mapping, pavement markings, more bicycle racks and secured parking either under cover or in parkades. The University will also explore the development of a bike-share system on campus.

In addition, the number of end-of-trip facilities for cyclists will increase with the requirement for all new academic buildings and the mixed-use hubs to provide end-of-trip cycling facilities (lockers, showers and covered secure bicycle storage) in scale with the floorspace of the facility. In the first development phase of the hubs, one large end-of-trip facility will be required, which will be a shared amenity for people in the immediate area.

Policy 26 *Cycling facilities on campus will be improved with better route mapping and wayfinding, increased secure storage facilities, and increased end-of-trip facilities as identified in the Transportation Plan.*

5.3

PUBLIC TRANSIT AND COMMUNITY SHUTTLES

A transit hub, consisting of facilities for regional diesel and trolley bus service and community shuttles, will be created near the University Boulevard Neighbourhood to provide a safe, comfortable, attractive and sociable arrival and departure experience in the heart of campus.

As each new hub is built, the University will work with TransLink to explore the relocation of the nearest community shuttle stop to that hub, allowing a more convenient, safe and pleasant waiting and drop-off location.

The University will continue to negotiate all shuttles schedules, in relation to demand, with TransLink. In addition, the University will encourage TransLink to construct all permanent transit stops to meet accessibility guidelines.

In 2008, the Provincial government announced its intention to fund a rapid transit service to UBC within 20 years, connecting the campus to the Vancouver International Airport and the Metro Vancouver region. Given the preliminary nature of the planning process to date—the technology and route alignment have yet to be determined—it is difficult to allocate space for the terminus. The University will work towards locating the rapid transit terminus near the future transit hub, where transit users will have easy and convenient access to a variety of transit modes within a compact, well defined area.

Policy 27 *The University will work with the campus community, TransLink, and the provincial government to create permanent trolley and diesel bus facilities, and the future rapid transit station close to the University Boulevard Neighbourhood. The facilities will be safe, accessible, weather protected, convenient and attractive. The University will also work with TransLink on increasing and revising the routes of community shuttle services to better fit with the evolving campus structure and transit demand.*

5.4

ROADS AND INTERSECTIONS

The Campus Plan fine tunes, rather than expands the established road system for service, campus and public vehicles. The improvements will be for the purposes of improving safety for pedestrians and cyclists, reducing speeds and improving wayfinding for vehicle drivers by providing more clarity. The locations of these improvements are indicated on [Map 2-7 Road and Pathway Improvements](#).

Policy 28 *The University will work with provincial authorities to implement traffic management initiatives at locations identified on [Map 2-7 Road and Pathway Improvements](#) with the purpose of reducing speeds and accidents and improving wayfinding.*

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation**
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

5.5

PARKING

As surface parking lots become infill sites for new academic facilities, drivers will be encouraged to use alternative forms of transportation or will be redirected to existing parkades. The loss of approximately 500 surface stalls can be accommodated by existing parkades given that most parkades are currently operating below capacity, the projected growth in academic facilities is modest, a large increase in student housing will reduce the number of commuters and the growing success of transportation demand management measures.¹

For new academic capital projects, new surface parking lots for building occupants will no longer be permitted beyond that required for universal access and emergency, security and service needs. New academic projects may provide underground parking for visitors or special clientele, if sufficient budget exists for the additional cost and the building site is accessible from a road outside the pedestrian priority zone.

Two locations are identified for possible new parking structures, should they be needed in future.

- An underground parkade may be required for the future academic building site at the south west corner of Main Mall and Agronomy Road, to keep vehicle access off Main Mall.
- The South Campus research precinct will eventually need a parkade, once the surface parking lots are used as infill sites for future academic facilities. Ideally, the parkade site would be central to the major destinations in that area, close to the existing traffic circle.

5.6

SERVICE VEHICLE ROUTES AND ACCESS

The UBC Vancouver campus will benefit from having a convenient, efficient and clearly defined network for the movement of service and delivery vehicles. This network will improve the ability of service and delivery vehicles to move around campus and complement the creation of a pedestrian priority zone where access by service vehicles is restricted.

The service access network for the campus is shown in [Map 2-8 Service Access](#). Campus and Community Planning will continue to review and refine this network in discussion with affected departments, with the goal of maintaining practical access while removing the need to travel through the pedestrian priority zone. A centralized courier drop-off program will also be explored to reduce courier traffic on campus. A pilot project is currently underway.

¹ Details related to operations, fees and transportation demand management issues are covered in the UBC Strategic Transportation Plan and UBC Parking Services operational and business plans.

Policy 29 *Service vehicles will use the servicing routes identified on [Map 2-8 Service Access](#). Use of service routes inside the pedestrian priority zone will require authorization from the Managing Director of Building Operations.*

5.7

WAYFINDING AND SIGNAGE

Clearly labelled pedestrian and vehicular routes help to define the spatial structure of the campus by improving legibility of the campus fabric and clarifying movement and direction for those with visual impairments and learning disabilities.

The *UBC Wayfinding Plan* provides a strategy for clear, consistent and continuous directions to guide students, staff and visitors from the campus's various entry points to destinations within the University. The *Wayfinding Plan* will continue to be improved. For example, increasing community use of learning, cultural and outdoor venues on UBC's campuses and sites is one of the objectives in UBC's Strategic Plan. Therefore, specialized wayfinding installations and signage will be designed and installed to support greater visitor use of academic outreach venues like cultural facilities and special gardens. Capital resources to accelerate implementation of wayfinding improvements will be sought.

Policy 30 *The University will seek to accelerate improvements to the campus wayfinding system, with a priority for cultural venues on campus.*

All signage on campus must follow *The UBC Sign Standards and Guidelines* to ensure campus signage is consistent and reflects UBC's visual identity. The types of signs used on campus include exterior wayfinding, interior wayfinding and commercial, temporary and other signage. Permits authorizing signage must be obtained from Campus and Community Planning.

Policy 31 *Signage on campus will be dignified and cohesive, and will comply with The UBC Sign Standards and Guidelines.*

5.8

LIGHTING

The implementation of the updated Lighting Strategy for the campus, as detailed in the *UBC Lighting Strategy* report available from Campus and Community Planning, will lead to improved lighting across the campus consistent with contemporary university needs. The campus needs to be a place where people can safely move about campus at all hours of the day and night. In addition to providing greater safety, lighting provides a nuanced and artistic sensitivity to the long-term character vision for the Vancouver campus.

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation**
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

The *Design Guidelines* for lighting address the following campus design features within the best possible standards of sustainability:

- accentuate gateways
- reinforce the hierarchy of all corridors and commons
- accentuate character districts and hubs
- connect all residential areas safely to the campus core and its facilities
- appropriately light all building entries and circulation
- reinforce the connections between the Main and South campus
- accentuate the campus character, beauty and sense of place

Policy 32 *Lighting on campus will be improved with particular attention to improved night lighting for safety and security and to enhanced lighting for special features on campus such as ceremonial walkways.*

6 INFRASTRUCTURE AND UTILITIES

The utilities on UBC's Vancouver campus support a large research and teaching university as well as over 15,000 residents in student housing and family neighbourhoods. Metro Vancouver provides potable water and sanitary services to the campus and UBC and other organizations manage the distribution of these services within the campus. The campus covers four catchment areas related to stormwater management, which are shared with the Ministry of Transportation and Metro Vancouver Regional Parks. UBC manages the collection of solid waste on the academic campus and operates the in-vessel composting facility.

Campus and Community Planning works collaboratively with other UBC units and other jurisdictions in the responsible management of the infrastructure for utility services. That means ensuring the health and safety of the campus community now and in the future by following best practices, coordinating development and striving to become more sustainable.

The *Campus Plan* supports an integrated approach to infrastructure planning with the physical planning for buildings and landscape in a way that is functional and provides multiple benefits. The future of sustainability is these three elements working together effectively.

The detailed policies and priorities for infrastructure are divided into two sections that cover the following themes:

- **Existing infrastructure:** utility corridors, solid waste storage, campus infrastructure modelling
- **Sustainable practices:** integrated planning for energy and water, stormwater management and Living Laboratory projects

6.1

EXISTING INFRASTRUCTURE

The following strategies will assist in managing and maintaining the University's infrastructure assets to maximize their effectiveness.

Establish Utility Service Corridors

As the Vancouver campus continues to densify, situations arise where underground utilities need to be moved to accommodate a new building. To avoid this situation in future and reduce the costs of development, all roadways, including sidewalks, will be protected as below-grade utility corridors. Though this approach, future utility installations will not compromise the best building sites, open spaces or deep tree root zones.

Policy 33 *All roadways, including sidewalks, will be protected as below-grade utility corridors for the distribution of steam, hot water, electricity, natural gas, communications, water and future technologies and the collection of sewage and stormwater. New or replacement utility and infrastructure works must be located in these corridors.*

Improve Storage of Solid Waste

The Vancouver campus recycling and composting programs are very successful in diverting waste from landfill. What is less successful is how waste and recycling containers are stored outside facilities. In some cases, waste bins obstruct pedestrian access to entrances or are unsightly. In addition, collection trucks tend to use pedestrian streets to access the storage bins. Two approaches are required to improve these conditions.

First, for existing buildings, Campus and Community Planning will work with the Utilities Department to develop waste container storage solutions that are more compatible with the design and function of the public realm. The collection system will be fine-tuned to ensure the optimal container and vehicle size and routing are used. In addition, the design of new facilities will be required to incorporate visual screening for the outdoor storage of waste and recycling containers.

Policy 34 *The impact of waste storage containers on campus circulation and the public realm will be minimized through right-sizing infrastructure, managing locations, implementing standards for screening and other mechanisms.*

Maintain Current Models of Campus Utility Infrastructure

UBC's Vancouver campus utility infrastructure comprises potable water, sewer and stormwater utilities and electrical, natural gas and steam. Following best practices in infrastructure management, the capacity of these systems

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities**
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

will be appropriately designed and sized to support current and future development. The models will include projected demand reductions due to higher sustainability performance.

The University will maintain a current model of the campus utility infrastructure within the Campus Master Servicing Plans to provide academic projects, including student housing, with relevant design criteria for infrastructure. As projects are completed, they will be required to provide as-built conditions to update the model.

Policy 35 *The sponsors of new facilities are responsible for providing UBC with as-built drawings for campus utility infrastructure, which comprises potable water, sewer, and stormwater and power (electrical, natural gas, steam, hot water) utilities.*

Policy 36 *Campus and Community Planning will maintain updates to the Campus Master Servicing Plans including plans for future servicing upgrades.*

6.2

SUSTAINABLE PRACTICES

Several utility systems may reach peak servicing levels over the next decade. The conventional supply management approach is to provide additional service or pipes to meet demand. A more sustainable approach is to undertake integrated planning of campus infrastructure systems in order to maximize the design and performance efficiency of existing assets, reduce carbon emissions, reduce long term costs and manage demand.

This integrated approach has the additional benefit of complementing UBC's *Climate Action Plan*, Alternative Energy Study and Smart Energy Systems initiative for the Vancouver campus. In addition, federal and provincial funding for infrastructure is increasingly based on integrated sustainable infrastructure plans.

An integrated planning approach includes conservation and efficiency, integrated resource recovery and opportunities for greening infrastructure—where natural systems can replace hard infrastructure. The opportunities to apply these approaches in relation to building new facilities and the potential impacts on land use are explained below.

Integrated Energy Planning

The steam power plant, located in the campus core, provides space heating and process steam to the majority of facilities within the campus core. The boilers, which currently burn natural gas, will need to be replaced by 2020. Given the University's commitment to reducing carbon emissions to mitigate the impacts of climate change, a feasibility study is looking at alternatives to natural gas for space heating. Although the final technology is not known at this time, *The*

Campus Plan will support the transition to alternative energy sources by balancing the land use requirements for on-campus energy production with the protection of sites for future academic facilities and student housing.

At a smaller scale, project proponents will be encouraged to evaluate demand side management strategies to minimize consumption and alternatives to using steam or natural gas boilers for space heating and heating hot water. One option is to utilize waste heat from existing buildings to heat new buildings, taking into account building programming compatibility and proximity to waste heat sources, as indicated on **Map 2-9 Potential Waste Heat Sources**. The Centre for Interactive Research on Sustainability (CIRS) building is pioneering this approach on the Vancouver campus and its experience will be incorporated into future applications. Some sites have capacity for installing ground source heat and cooling pumps.

Policy 37 *At the pre-design stage, project proponents will be expected to evaluate alternative energy sources, including the waste heat sources indicated in **Map 2-9 Potential Waste Heat Sources**, and demand side management strategies to minimize consumption of thermal and electrical energy.*

Policy 38 *Each new mixed-use hub will undertake an energy management study which will include heat recovery and heat sharing options, along with alternative energy supplies and small district systems, as part of the feasibility and design process.*

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities**
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

Natural Systems Approach to Stormwater Management

Stormwater management has traditionally focused on the safe collection and discharge of runoff to reduce the risk of flooding and minimize impacts on the receiving environment. In future, stormwater management at UBC will shift to a natural systems approach, which values rainwater as a resource.

Examples of acceptable best management practices for this approach include:

- Integrate rain gardens and bio-swales into road redesign, parking lots and open space within the public realm
- Where practical, use rain water storage to irrigate campus landscapes and for non-potable use in facilities
- Explore the feasibility of using retained rainwater to supply water features in the public realm

An important aspect of stormwater management at UBC will be mitigating the impacts of climate change. In future, the timing and frequency of precipitation events in the Metro Vancouver region may deviate from historical trends as a result of climate change. Modeling predictions for this region suggest small increases in winter precipitation and moderate decreases in summer precipitation by the middle of this century.

The design of UBC's stormwater management system will continue to be evaluated in response to new risk estimates and upgraded when necessary. These steps will help to minimize the potential risks from more frequent localized flooding and major flood damage to campus facilities, infrastructure and land as well as to the cliffs surrounding UBC.

The natural systems approach to stormwater management is limited by UBC's unique hydrogeology and cliff-erosion concerns. At all locations on campus, stormwater may be directed to the deep aquifer. Passive infiltration to the upper aquifer will only be allowed where it does not contribute to the risk of cliff erosion. Stormwater flows will be managed at the catchment level. More detailed project guidance related to stormwater management is provided in the *Design Guidelines*.

***Policy 39** To the extent that the unique hydrogeology and cliff-erosion concerns at UBC's Vancouver campus allow, stormwater management strategies will incorporate a natural systems approach in managing runoff volume to mitigate downstream impacts.*

Integrated Water System Planning

UBC's Vancouver campus currently receives its potable water from the Capilano Reservoir, part of the regional water supply system. Approximately 75 per cent of that water is used only once before being discharged to the regional sanitary sewer system. The wastewater is pumped several kilometres to the Iona Wastewater Treatment Plant for primary treatment, where the effluent is discharged into the Strait of Georgia. Reducing demand for water is a primary objective, along with exploring opportunities for reuse of greywater in the future.

The University will make continuous improvements to reduce water demand from existing student residences, research facilities and utility operations. New facilities will be encouraged to go beyond LEED requirements for water conservation and develop water management strategies that minimize potable water consumption, maximize water re-use and minimize wastewater transported off site. Water conservation strategies will be coordinated with energy and waste reduction strategies.

Living Laboratory Infrastructure Projects

The University will support land use requirements for integrated resource recovery practices in both research and the University's utility operations to maximize the recovery of value from waste streams. In particular, the University will investigate opportunities to work with faculty and students to develop demonstration projects involving alternative energy systems, stormwater management practices and integrated water management. Projects that promote an understanding of infrastructure systems by increasing their transparency to the campus community will also be pursued.

Policy 40 *Land use requirements for Campus as a Living Laboratory projects will be supported, and sponsors will be encouraged to design these projects in ways that increase their visibility and transparency to the campus community.*

Living Lab Demonstration Projects

The following projects, which are either underway or proposed, illustrate how the concept of Living Laboratory can be applied on the campus to explore new directions in integrated resource recovery and other sustainability directions.

BIOMASS GASIFICATION FACILITY

The UBC Bioenergy Research and Demonstration Project, announced in early 2010, will be the first North American biomass-fueled heat-and-power generation system. This demonstration project, which is a partnership between faculty, UBC operations, industry and local government, will provide research and learning opportunities for faculty and students, yield valuable new knowledge in the clean energy sector, inform new global standards for bioenergy system performance, and help UBC meet its aggressive GHG reduction targets.

STORMWATER CAPTURE AND REUSE: FAIRVIEW SQUARE HEADWATERS

This project will demonstrate that capturing rainwater, at the point of interception, is technically cost effective and meets the ecological and social goals of sustainability.

PROPOSED ROAD NARROWING AND INTERSECTION IMPROVEMENT: SECTION OF EAST MALL

The stretch of East Mall between University Boulevard and Walter Gage Road could test the design treatment for the pedestrian streets within the pedestrian priority zone where emergency and limited service vehicle traffic must be accommodated.

7 CAMPUS CHARACTER

A beautiful, memorable and evocative campus that resonates with faculty, students, and staff will encourage people to form lasting memories of the physical setting in which they spent their university years. To continue to attract outstanding students, faculty and staff and the support of the community, donors and alumni, the University needs to maintain the Vancouver campus as a place with its own clear identity unlike any other campus in the world.

This chapter outlines the strategies and policies for campus design, cultural heritage and outdoor public art. Refer to the [Public Realm and Open Space](#) section in this document for information about the open space network, which also contributes substantially to campus character.

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character**
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

7.1

DESIGN STRATEGIES AND GUIDELINES

The Campus Plan strategies for character improvement are to:

- Improve the **cohesiveness** of the design of campus buildings and landscapes
- Accentuate UBC's sense of place and **natural west coast beauty**
- Encourage a campus quality and stature befitting a **globally significant University**

The following descriptions illustrate how these strategies will be achieved on UBC's Vancouver campus.

Cohesiveness

The Campus Plan encourages a more cohesive campus design by:

- Positioning new facilities to reinforce the traditional campus structure of malls and roads
- Defining the siting, massing, setbacks and orientation of facilities
- Simplifying and specifying architectural, landscape and paving material palettes
- Identifying standard campus furniture and lighting

Natural West Coast Beauty

The Campus Plan accentuates UBC's sense of place and natural west coast beauty by:

- Featuring the forest setting along the western edge of the campus
- Capturing celebrated views through viewpoints at-grade and in public spaces on upper floors of buildings
- Designing strong indoor-outdoor relationships between new buildings and their surroundings

World-Class Campus

The Campus Plan encourages a globally significant University campus by:

- Creating Gateways that support positive and memorable arrival experiences for pedestrians, cyclists, transit users and drivers
- Encouraging signature buildings built to superior architectural standards at major campus gateways
- Improving the architecture of buildings along Westbrook Mall and other designated locations to better represent the University to the broader community
- Introducing high-quality improvements to the Public Realm

- Defining ceremonial routes for special occasions
- Respecting and conserving UBC's cultural heritage in future development
- Encouraging high-quality outdoor public art in prominent locations

Design Guidelines

The strategies described above will be achieved over time as new projects follow the design guidance provided in the *Design Guidelines*. Forming *Part 3 of The Campus Plan*, the *Design Guidelines* are a tool to guide and coordinate effective design as well as a mechanism to regulate physical design changes on campus over the next 20 years. Project proponents and designers will need to address campus-wide guidelines as well as the guidelines relevant to the character district in which their project is located.

Policy 41 *All new facilities, renovations, additions and public realm improvements must follow the Design Guidelines for UBC's Vancouver campus to improve the cohesiveness of the campus built form and landscape, to accentuate UBC's sense of place and natural west coast beauty and to realize a campus quality and stature befitting a globally significant University.*

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character**
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

7.2

HERITAGE CONSERVATION

The history of UBC's Vancouver campus lands and culture is embodied in its buildings, landscapes and other designed features. This campus heritage is fully explored in the 2009 background document, UBC Cultural Landscape Study, available from Campus and Community Planning. The study uses eight broad themes that together tell the story of how the campus and its culture developed and identifies heritage resources associated with each theme. These resources can be significant for a number of reasons, including their location, materials, form, use and associated cultural history. A few important resources, such as the Museum of Anthropology, may embody several themes.

The management strategies for heritage conservation focus on the retention of heritage themes, which is not necessarily the same as retaining the resources.

Table 2-4 *Heritage Conservation Themes and Management Strategies*, located in **Section 9 Maps**, provides a description of each theme together with the relevant management strategies for conserving the associated heritage resources.

Maps 2-10 to 2-12 indicate the location of relevant heritage resources for all but the first theme.

Heritage conservation is one of several university interests. Therefore, development sites with identified heritage resources need to find the balance between meeting financial, programmatic, sustainability, campus design and land use and heritage priorities. This assessment includes testing the viability of heritage conservation at the commencement of a project.

Policy 42 *The heritage resources management strategies in Part 2 Campus Plan will be used in assessing future development proposals on UBC's Vancouver campus.*

Policy 43 *Heritage resources identified on [Maps 2-10](#), [2-11](#), and [2-12](#) in Part 2 Campus Plan, embody cultural meaning to the campus community and shall be retained where viable, as determined by comparing the costs, functionality, campus fit, and ecological and heritage impacts of retention versus replacement; the depth of analysis will be scaled to the significance of the resource.*

7.3

OUTDOOR PUBLIC ART

UBC aspires to host an expanded, high-quality public outdoor art collection that is worthy of UBC's world class ranking on other academic fronts. A vibrant outdoor art collection supports *The Campus Plan* Vision by bringing meaning and interest to the campus landscape, furthering the reach of existing art-related education and outreach programs and reflecting UBC's commitment to and engagement with, the creative and artistic ideas of the day.

Policy 44 *The acquisition and installation of outdoor public art on UBC's Vancouver campus will be encouraged and will follow the requirements and procedures in the Outdoor Public Art Protocol in Part 2 Campus Plan, including following siting as identified in [Map 2-13](#) Outdoor Public Art and Commemoration Locations.*

Outdoor Public Art Protocol

Purpose: Additions to the outdoor public art collection are encouraged as a means of enhancing the beauty and interest of UBC's Vancouver campus. This protocol ensures that appropriate reviews occur through the Development Permit process administered by Campus and Community Planning.

TYPES OF ACQUISITIONS

1. Acquisitions of merit to be considered part of the formal UBC Art Collection will be under curatorial responsibility of the Belkin Gallery.
2. UBC will also permit informal displays of outdoor art that are not in the formal UBC Art Collection, termed community level art for the purpose of this policy, where it is created by or has significant relevance to the UBC campus community.
3. UBC will explore other means of encouraging art contributions.

ROLE OF UNIVERSITY ART COMMITTEE

4. New acquisition efforts, to be coordinated through the Provost Committee on University Art (PCUA) and the Curator of the Belkin Gallery, will focus on increased international and aboriginal content and other pieces of enduring

quality so that investments in the collection and public realm accrue and give pleasure for years to come.

5. New outdoor art acquisition opportunities or gifts proposed by other sources on campus will also be referred to the PCUA for recommendation and commentary to the Administration, prior to acceptance or purchase and prior to Development Permit Approval.
6. The PCUA will be invited to provide commentary to help guide the Administration and Development Permit review process for community level outdoor art installations.

OUTDOOR ART SITING OPPORTUNITIES

7. Opportunities for siting outdoor art and commemorative installations of various types are identified (See [Map 2-13 Outdoor Public Art and Commemoration Locations](#)).
 - a. High prominence outdoor art locations on campus will be reserved for artworks of considerable distinction in the formal collection, with meaning to the whole campus community.
 - b. Community level artworks (not part of the formal outdoor art collection) will be encouraged to locate in internal courtyards of and in close proximity to the sponsoring buildings or precincts for whom they hold relevance.
 - c. Art is encouraged in locations visible from campus social spaces or main vehicle and pedestrian routes.
 - d. A sculpture garden will be encouraged in the Library Gardens as a pre-eminent display area for a number of acquisitions.
 - e. The majority of the collected outdoor art works are to be concentrated within five minutes walking distance of the campus core or high density academic hubs, to increase the collection's impact and accessibility to the campus community.
 - f. All outdoor art will be sited in a manner consistent with prominence and significance of the piece and the prominence or character of the campus setting.
 - g. In the South Campus Research precinct, locate public art in the high visibility zone between the south Westbrook roundabout and where the Main Mall greenway intersects with Westbrook Mall.
 - h. All formal collection works will be installed where they can be seen by the broader UBC community, with the use of accessible pathways or viewing points from which to enjoy the art.

INTERPRETIVE SIGNAGE FOR OUTDOOR ART

8. The meaning and origin of the outdoor art pieces will be interpreted and available to people through high quality signage, possibly supplemented by other means including but not limited to materials available on the website and in the Belkin Gallery. Better understanding will increase the community's understanding, interest, pleasure and pride in the collection.

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character**
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

LIABILITY AND MAINTENANCE

9. Maintenance agreements will be established for each outdoor art work prior to installation approval, to ensure clarity on maintenance, repair funding and work responsibilities.
10. UBC will retain the right to relocate or remove any outdoor art works, at its discretion, whether within the formal UBC Art Collection or not.

PERMIT REQUIREMENTS

11. All outdoor public art installations require an approved Development Permit.

8 CAMPUS PLAN IMPLEMENTATION

The Campus Plan supports the academic mission, values and commitments of the University by providing a framework for physical growth and change on UBC's Vancouver campus that in turn provide academic, social, financial and environmental benefits. *The Campus Plan's* policies and associated design guidelines provide a decision-making framework for the Board of Governors, the Administration and delegated representatives, to carry out their responsibilities for managing the University's property and facilities.

The Campus Plan comprises the land use policies and protocols in *Part 2* and the design guidelines contained in *Part 3*. *Parts 2* and *3* are the *Plan's* reference documents and take precedence over the content of *Part 1 Campus Plan Synopsis*, if a conflict exists.

The Campus Plan will be implemented in the following ways:

1. Through the policies in *Sections 2 to 7* of this plan that guide coordinated planning and decision-making by a wide range of University departments. Examples include the new development model for the mixed-use hubs;
2. Through systematic project review processes that bring the policies into focus on specific capital projects;
3. Through strategic investment in projects such as the *UBC Vancouver Public Realm Plan*, the *Transportation Plan* and others;
4. Through ongoing stewardship of campus assets, in accordance with policies; and
5. Through ongoing monitoring and communication of plan implementation.

Policy 45 *The Campus Plan will be implemented by integrating the Plan's policies with other university initiatives; by reviewing capital projects, infrastructure works, signage and public art projects in a permitting process that ensures each project contributes to the Plan's objectives; by strategic investments; and by ongoing monitoring and reporting on progress.*

8.1

PROJECT REVIEW AND APPROVALS

Successful implementation of *The Campus Plan* largely relies upon effective project review and permit approval processes for all capital projects initiated by specific academic departments, ancillary units or third party leaseholders. In all cases, project proposals need to be assessed through a review against the endorsed *Campus Plan* objectives and discussed with other departments and relevant committees.

The principles, policies and guidelines in *The Campus Plan* apply to all publicly funded academic projects; ancillary unit projects, including student housing; and third party institutional projects.

Permits and Approvals

All new facilities, major structural renovations and outdoor public art projects require a Development Permit. Following the issuance of a Development Permit, all new structures require a Building Permit. New utility infrastructure, landscape alterations, road and pathway improvements require a Street and Landscape Permit. These permits are issued by Campus and Community Planning and must be obtained before any construction occurs.

All exterior wayfinding, interior wayfinding and commercial, temporary and other signage on campus must follow UBC's *Sign Standards and Guidelines* to ensure campus signage is consistent and reflects UBC's visual identity. A permit authorizing signage must be obtained from Campus and Community Planning.

STRATEGIC INITIATIVES

Improving the quality and design of the public realm on the Vancouver Campus and creating vibrant mixed-use hubs will significantly improve the character of campus. These initiatives will help realize the vision of creating a world-class campus that provides the optimal environment for teaching, learning and research.

Public Realm Plan

The UBC Public Realm Plan, a phased \$46 million, 15 year planning and investment strategy, will be used to improve the quality of priority areas, including Main Mall, large and small commons, pathways and gateways. Improvements will include replacing road beds of Main Mall with high quality promenade treatments, plus courtyard and plaza special paving, new plantings, seating, lighting and gateway features in designated areas. For more detail, see the *UBC Vancouver Public Realm Plan (2009)*, which can be accessed from the Campus and Community Planning website.

Cycling Facility Improvement Plan

The Transportation Plan includes a number of investment priorities for cyclists, including improved route mapping, pavement markings, more bicycle racks and

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation**
- 9 Maps
- 10 Appendices

secured parking either under cover or in parkades. The University will also explore the development of a bike-share system on campus.

New Development Model for Hubs

Collaborative partnerships will be needed for projects comprising student housing, academic and academic support and convenience services to proceed in the mixed-use hubs. The University's administrative and ancillary units will need to collaborate on the timing, funding and delivery of these important projects.

The five mixed-use hubs will have student housing, academic facilities and child care spaces complemented by a range of other uses including recreation, food, social and convenience services. Currently, the capital planning cycle, funding mechanisms and operations and maintenance budgets for student housing, academic space and ancillary units are all different, resulting in most built facilities being single purpose.

To allow realistic budgeting and fundraising, the upfront and shared costs of building, operating and maintaining the hub facilities must be clearly defined. The planning stage will provide a detailed assessment of the overall costs and timing for a hub project. The step that requires more definition is how to divide the costs equitably and strategically between project proponents and phases.

To address the high degree of coordinated planning and investment required, UBC will establish coordinating mechanisms that may include assigning the hub development program to a development or project manager, establishing a Hub Development Steering Committee, or other mechanisms.

Some cost savings will be realized through sharing amenity and service spaces, such as an outdoor commons, end-of-trip cycling facilities, lighting and service and loading facilities. Academic units going into hubs will be expected to contribute the equivalent cost and area of informal learning space they would have provided in stand-alone buildings.

8.3

COORDINATED PLANNING AND OPERATIONS

An important aspect of implementing *The Campus Plan* is to integrate its vision, policies and design guidelines with ongoing planning and operational activities on the Vancouver campus.

Detailed Planning for Mixed-Use Hubs

Before each hub is developed, campus design, programming and orientation studies will be completed to provide detailed guidance for its design. That guidance will include siting, the location of open space, connections to the public realm and utilities, the location and scale of amenities in the context of adjacent buildings and needs and the ideal sequence of construction. The financing and

administrative arrangements discussed in the next section will also guide the site-specific planning of the mixed-use hubs.

Guiding Operations and Maintenance

The buildings and grounds of the Vancouver campus change incrementally with the replacement of lighting fixtures, pathway and small repairs, painting, planting and pruning. These routine operations and maintenance activities by works personnel must be coordinated with the Design Guidelines. The University Architect and Landscape Architect in collaboration with Building Operations, will develop an ongoing program of design stewardship to implement *The Campus Plan* for operations and maintenance activities.

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation**
- 9 Maps
- 10 Appendices

8.4

PLAN MONITORING

The UBC Vancouver Campus Plan was developed in consultation with the campus community and academic and operational representatives who considered likely growth needs in response to anticipated future conditions and new technologies. As the university moves forward with putting *The Campus Plan* into practice, the effectiveness of *The Campus Plan* will need to be monitored.

A monitoring program will include a report to the Board of Governors on a two-year cycle. The report will document implementation activities and assess *The Campus Plan's* effectiveness.

After ten years, Campus and Community Planning will undertake a comprehensive review of *The Campus Plan*, involving consultation with the campus community.

The monitoring and review programs are important because they:

- a. Keep *The Campus Plan* relevant and up-to-date;
- b. Provide opportunity to communicate and share successes and to engage new members of the community in *The Campus Plan* vision; and
- c. Provide transparency and accountability to the Board of Governors and those who participated in *The Campus Plan's* development.

8.5

PLAN AMENDMENTS




All amendments will require Board of Governors endorsement, with any significant changes triggering public notification and public information meetings. *The Campus Plan* monitoring program will likely indicate where adjustments to *The Campus Plan* are needed. Furthermore, new and unforeseen proposals might necessitate a change in *The Campus Plan*. The campus community will have the opportunity to comment on significant changes to *The Campus Plan*.

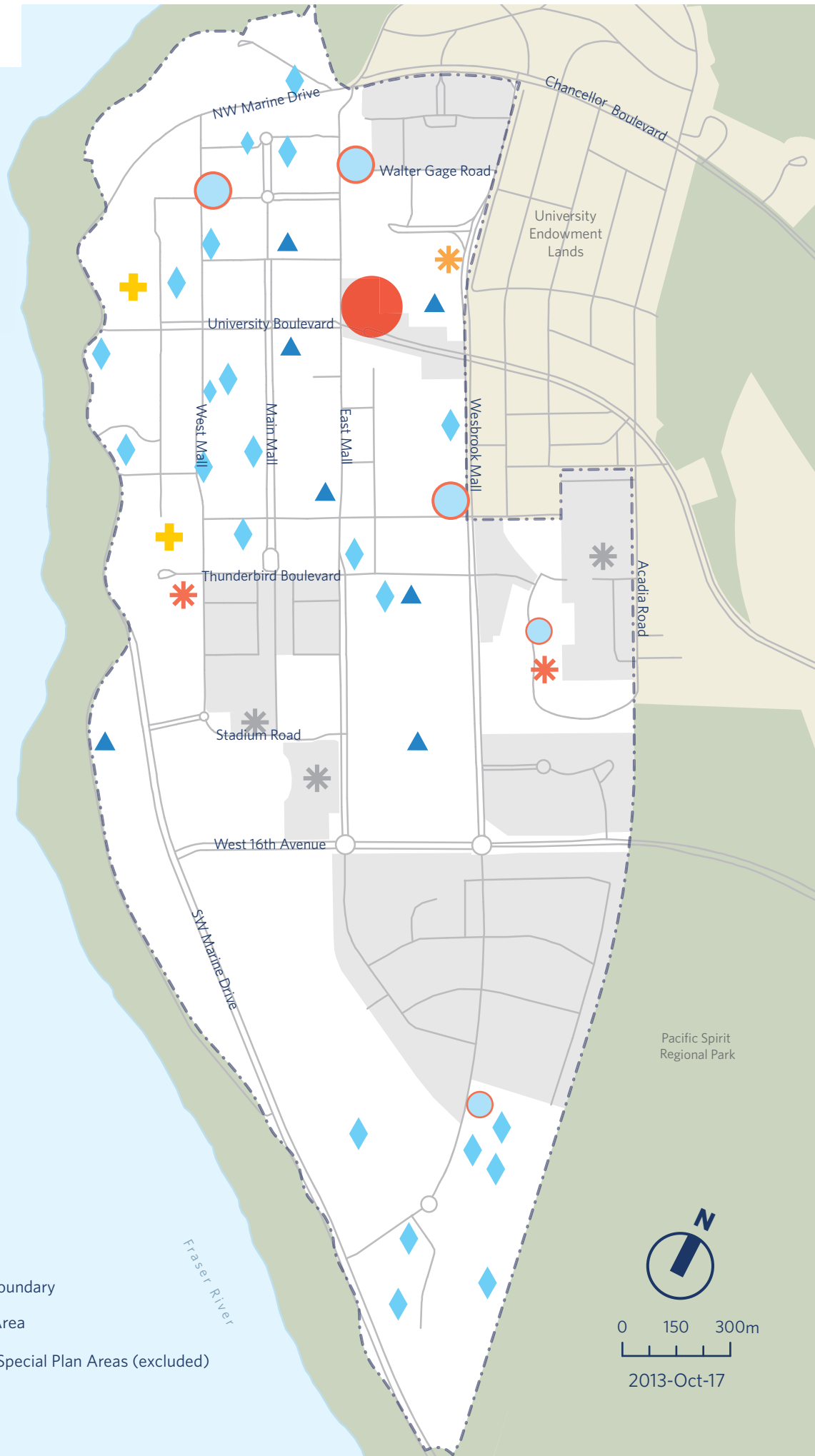
MAP

2-0

Generalized Future Academic and Housing Locations

-  Campus Heart
-  Mixed-use + Student Housing Commons
-  Potential Commons
-  Academic Infill Sites - Known Projects
-  Academic Infill Sites - Not Assigned
-  Student Residence Infill
-  Student Family Housing
-  Student Independent Living
-  Family Housing

-  UBC Vancouver Campus Boundary
-  Vancouver Campus Plan Area
-  Neighbourhood Housing/Special Plan Areas (excluded)



0 150 300m

2013-Oct-17

MAP 2-1

Teaching, Learning and Research Land Use

- Land-based Academic Areas
- UBC Building Operations Support Area
- Completed Renew Projects
- Mixed-use Commons

Future Infill Sites to 2030

- Mixed-use Commons
- Known Projects to 2030

Future Infill Site Opportunities

- No Replacement Needed
- With Replacement
- For Review as Redevelopment Sites

- UBC Vancouver Campus Boundary
- Vancouver Campus Plan Area
- Institutional Building Footprints
- Neighbourhood Housing/Special Plan Areas (excluded)



MAP

2-2

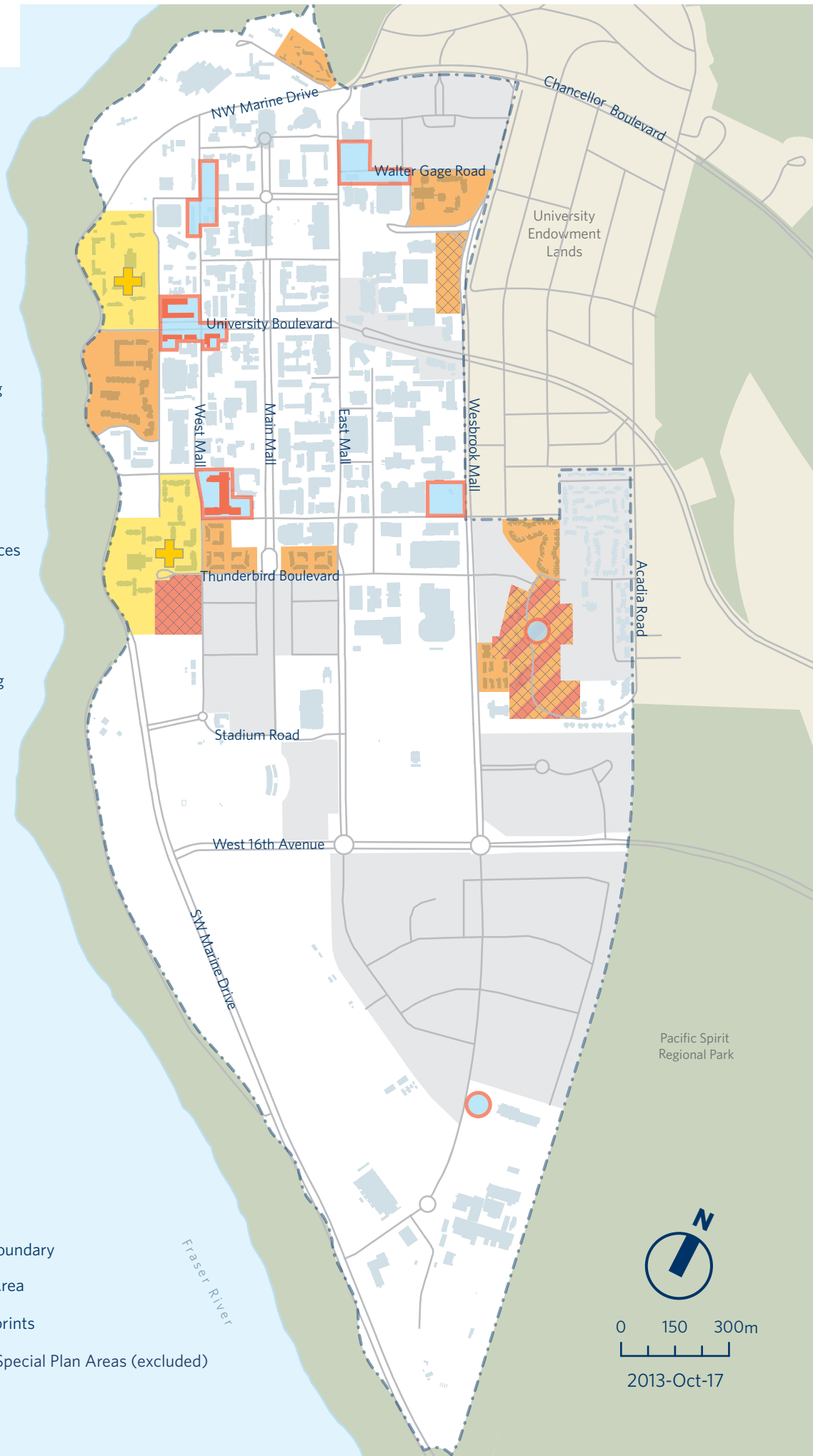
Student Housing Land Use

-  Traditional Residences
-  Student Independent Living
-  Student Family Housing
-  Mixed-use Commons for Independent Living

Future

-  Infill for Traditional Residences
-  Mixed-use Commons for Independent Living
-  Potential Commons
-  Student Independent Living
-  Student Family Housing

-  UBC Vancouver Campus Boundary
-  Vancouver Campus Plan Area
-  Institutional Building Footprints
-  Neighbourhood Housing/Special Plan Areas (excluded)



MAP 2-N

Future Academic and Housing Locations

- Land-based Academic Areas
- UBC Building Operations Support Area
- Completed Renew Projects
- Mixed-use Commons

- Future Infill Sites to 2030**
- Mixed-use Commons
- Known Projects to 2030
- Known Projects - Built

- Future Infill Sites Post 2030**
- No Replacement Needed
- No Replacement - Built
- With Replacement
- For Review as Redevelopment Sites
- New, Change or Built since 2010

- Traditional Residences
- Student Independent Living
- Student Family Housing

- Future**
- Infill for Traditional Residences
- Student Independent Living
- Student Family Housing

- UBC Vancouver Campus Boundary
- Vancouver Campus Plan Area
- Institutional Building Footprints
- Neighbourhood Housing/Special Plan Areas (excluded)



MAP


2-3

Open Space Network

Existing

 Commons, Plazas, and Natural Areas

 Green Academic

 Greenways and Green Edges


Future Additions

 Commons and Plazas

 Greenway

 UBC Vancouver Campus Boundary

 Vancouver Campus Plan Area

 Institutional Building Footprints

 Neighbourhood Housing/Special Plan Areas (excluded)

Fraser River

University
Endowment
Lands

Pacific Spirit
Regional Park






0 150 300m

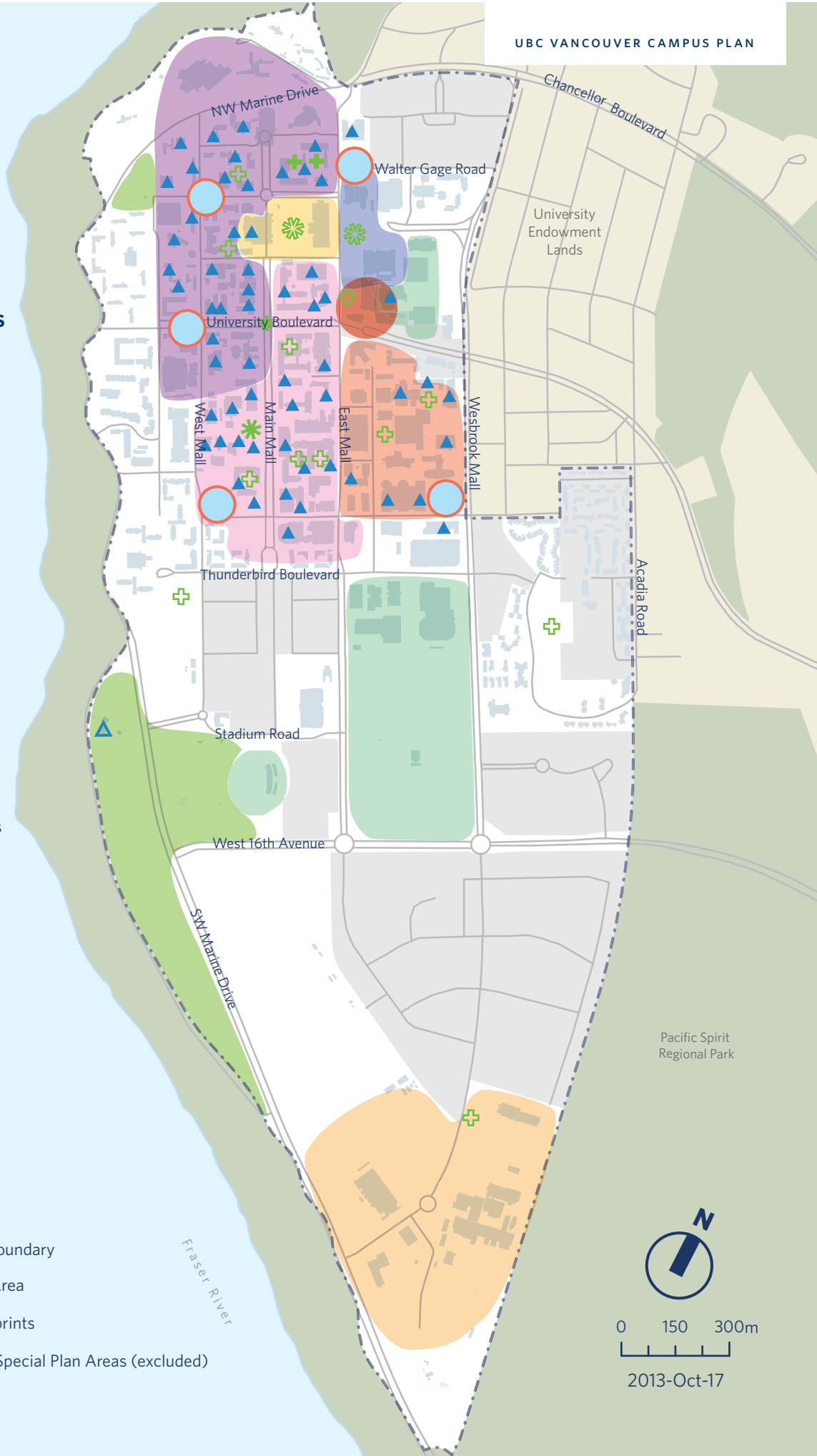
2013-Oct-17

MAP

2-4












Generalized Academic Communities and Social Interaction Opportunities





-  Campus Heart
- Academic Communities
 -  Arts
 -  Athletics + Varsity
 -  Botanical Gardens
 -  Health Sciences
 -  Central Libraries
 -  Sciences
 -  South Campus Research
 -  Student Services
- Informal Learning Spaces in Facilities
 -  Existing
 -  Future Known Sites
- Outdoor Informal Learning Spaces
 -  Existing Small Commons
 -  Future Small Commons
 -  Existing Large Commons
 -  Future Large Commons
-  Mixed Use Hubs
-  UBC Vancouver Campus Boundary
-  Vancouver Campus Plan Area
-  Institutional Building Footprints
-  Neighbourhood Housing/Special Plan Areas (excluded)



MAP 2-5

Getting To and From UBC

-  Arterial Roads
-  Collector Roads
-  Bicycle Routes
-  Gateways
- Secured Shared Bicycle Storage
 -  Existing
 -  Future
- Regional Transit Routes
 -  Existing
- Parkades
 -  Existing
 -  Future
- Surface Parking
 -  Existing
 -  Future Infill Sites

-  UBC Vancouver Campus Boundary
-  Vancouver Campus Plan Area
-  Institutional Building Footprints
-  Neighbourhood Housing/Special Plan Areas (excluded)

- Transit Terminals**
- 1 - Diesel Buses (temporary)
 - 2 - Trolley Buses
 - 3 - Community Shuttles



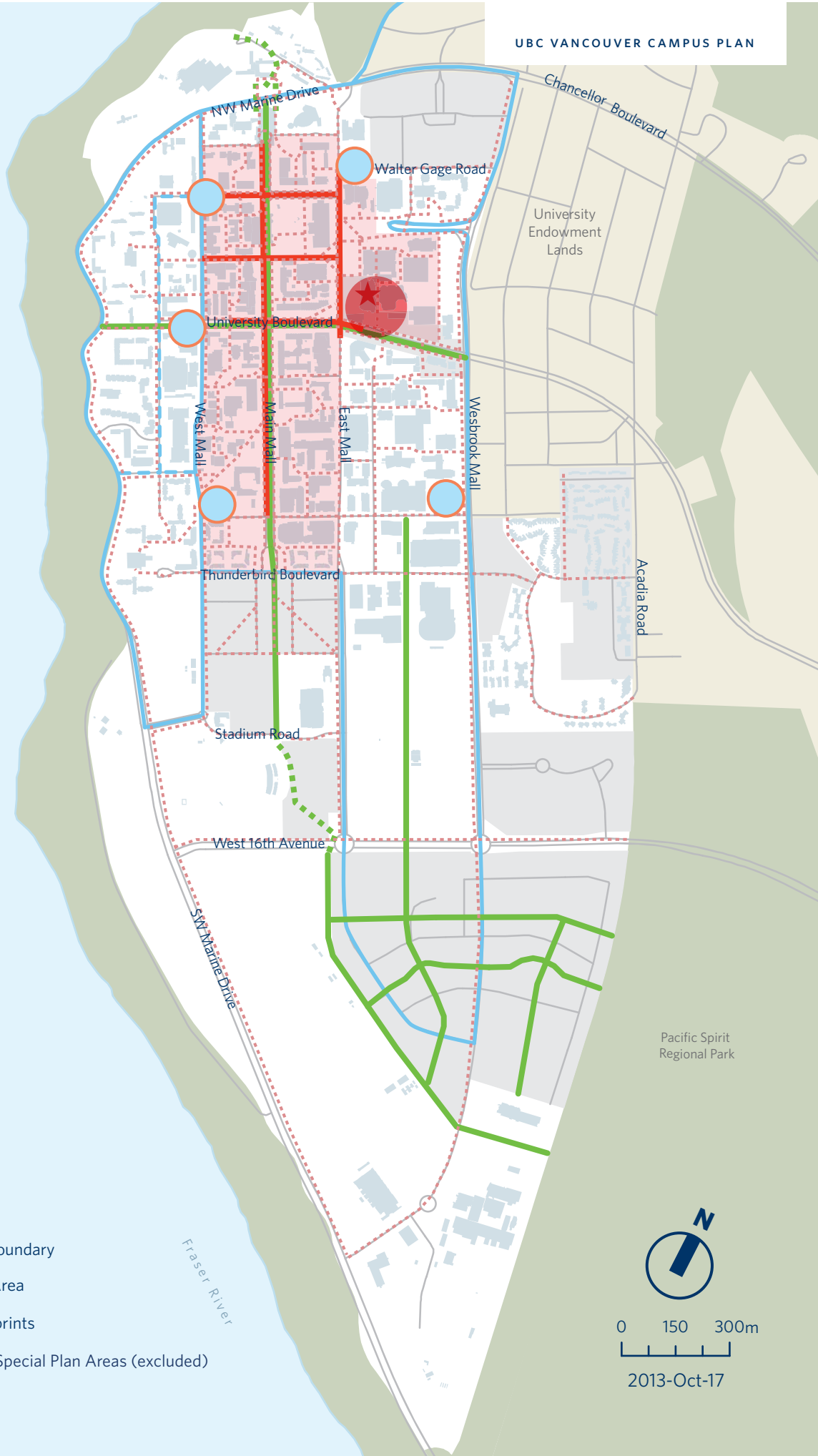
MAP

2-6

Getting Around UBC

- Pedestrian Priority Zone
- Pedestrian Paths
- Restricted Vehicle Access
- Greenway**
 - Existing
 - Future
- Community Shuttle Route**
 - Existing
 - Future for Consideration
- Mixed-use Commons
- Campus Heart
- AMS Bike Kitchen + Co-op

- UBC Vancouver Campus Boundary
- Vancouver Campus Plan Area
- Institutional Building Footprints
- Neighbourhood Housing/Special Plan Areas (excluded)



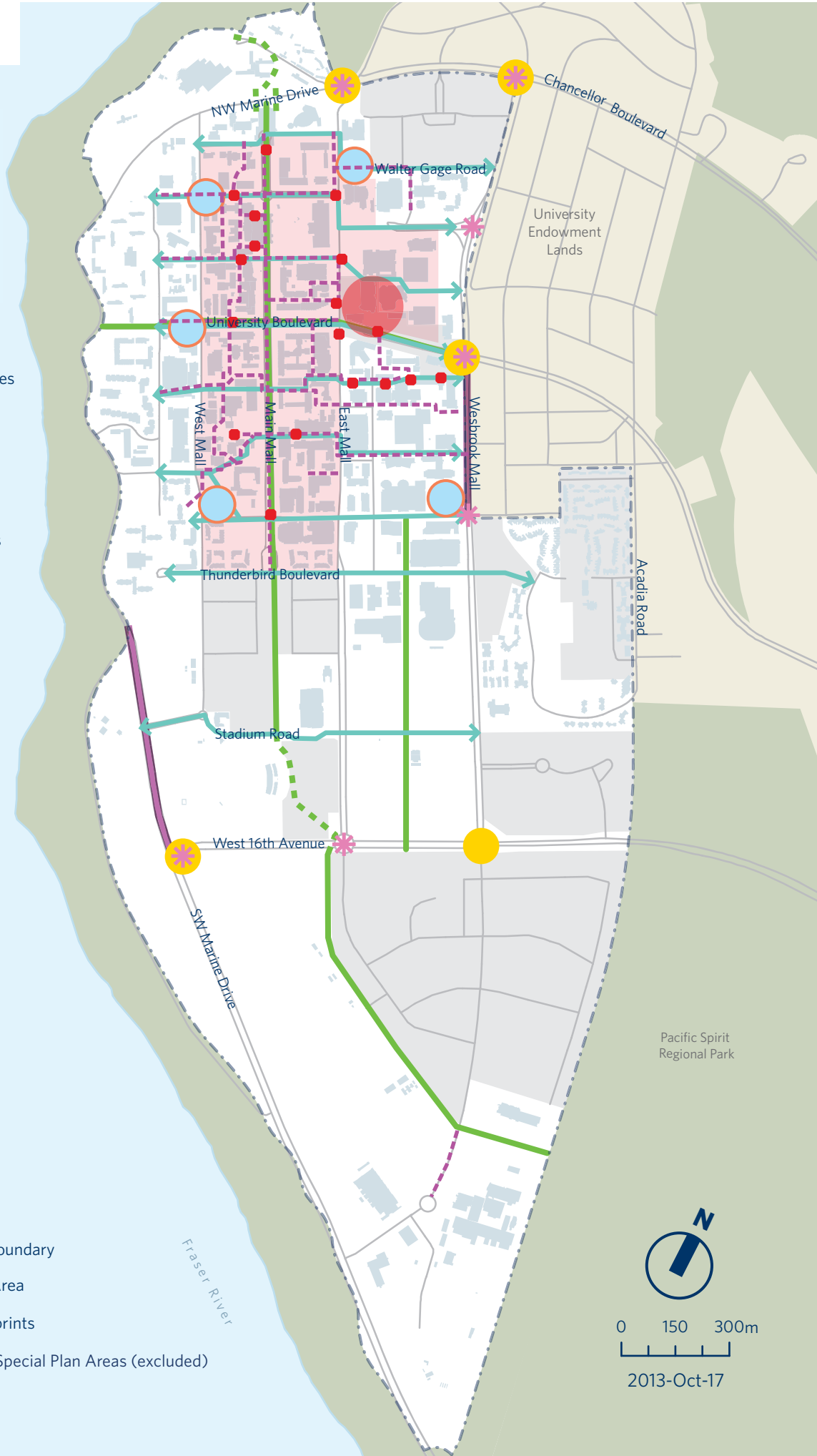
0 150 300m

2013-Oct-17

MAP 2-7

Road and Pathway Improvements

- Pedestrian Priority Zone
- East-West Pedestrian Routes
- Bollards
- Pathway Improvements
- Potential 4 Lanes Reduced to 2 Lanes
- Intersection Improvements
- Gateways
- Campus Heart
- Mixed-use Commons
- Existing Greenway
- Future Greenway
- UBC Vancouver Campus Boundary
- Vancouver Campus Plan Area
- Institutional Building Footprints
- Neighbourhood Housing/Special Plan Areas (excluded)



0 150 300m

2013-Oct-17

MAP

2-8

Service Access

Access Routes

- Access to Loading Facilities
- Access Revised Subject to Hub Precinct Plans

Loading Areas

- Major Designated Loading Area
- Minor Designated Loading Area
- Major Unofficial Loading Area
- Minor Unofficial Loading Area
- New Access To Commons
(To be confirmed at Commons Precinct Plan Stage)
- Mixed-use Commons
- Bollards
- Pedestrian Priority Zone
(restricted vehicle access)

--- UBC Vancouver Campus Boundary

Vancouver Campus Plan Area

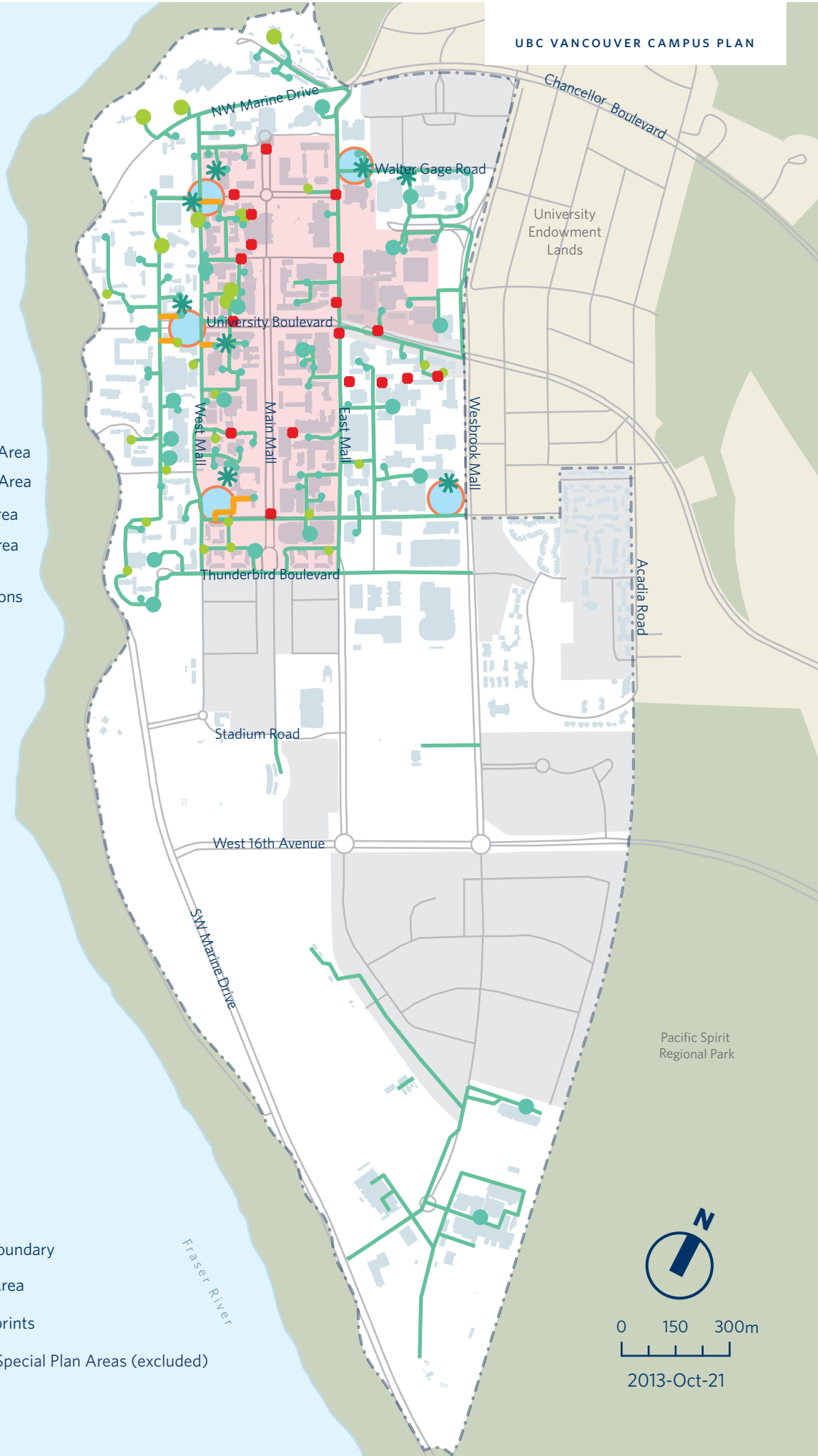
Institutional Building Footprints

Neighbourhood Housing/Special Plan Areas (excluded)



0 150 300m

2013-Oct-21



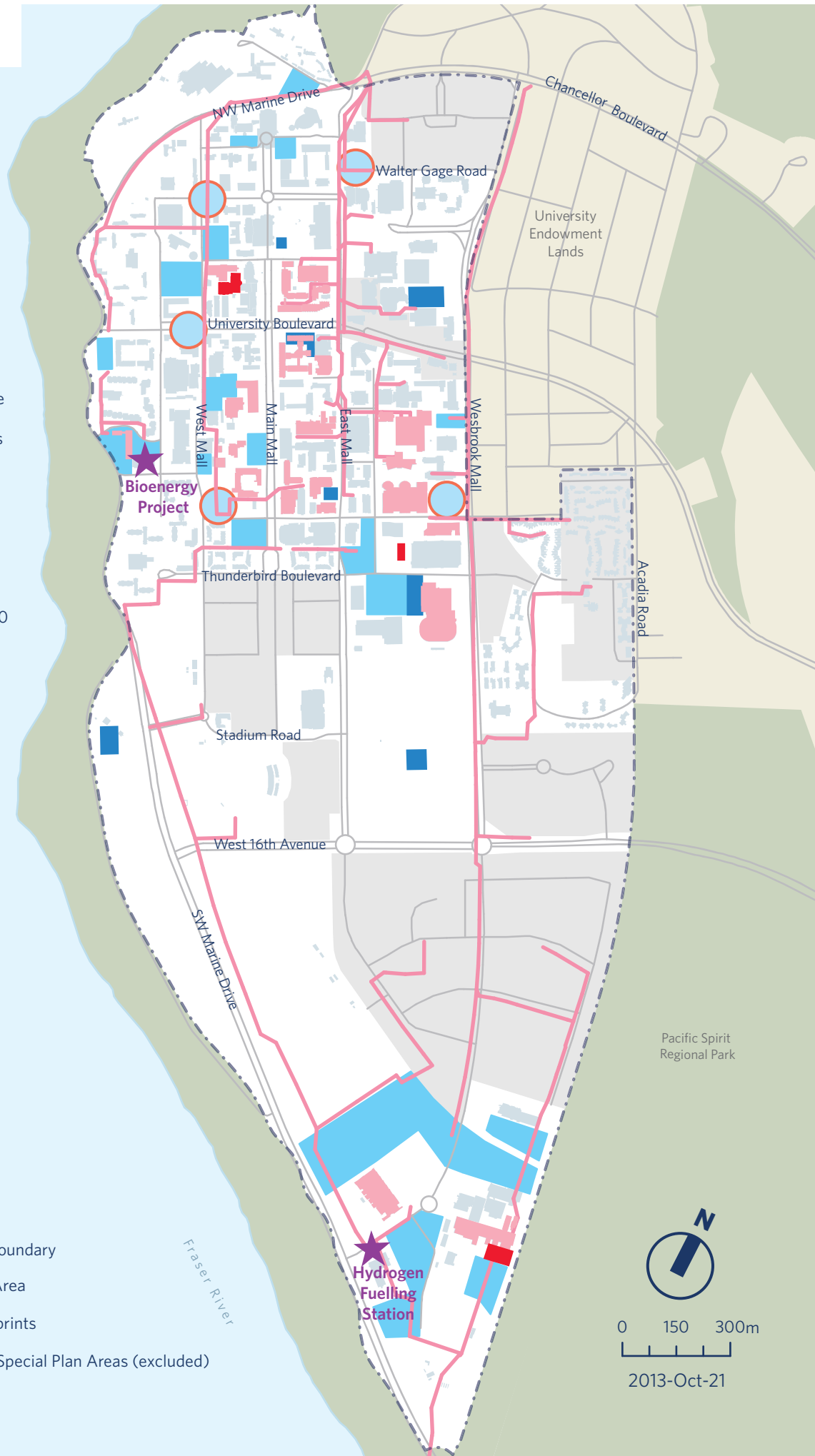
MAP

2-9

Potential Waste Heat Sources

- Large Waste Heat Source
- Smaller Waste Heat Source
- Alternative Energy Projects
- Waste Heat From <10" + Sewer Lines
- Mixed-use Commons
- Future Infill Sites to 2030
- Future Infill Sites Post 2030

- UBC Vancouver Campus Boundary
- Vancouver Campus Plan Area
- Institutional Building Footprints
- Neighbourhood Housing/Special Plan Areas (excluded)



0 150 300m

2013-Oct-21

TABLE 2-4
HERITAGE CONSERVATION THEMES AND MANAGEMENT STRATEGIES

HERITAGE CONSERVATION THEMES	MANAGEMENT STRATEGIES
All themes	<ul style="list-style-type: none"> Retain representative examples of each theme where possible.
1. The Forest Clearing No reference map <p>From its beginning, the development of the campus has been inspired and informed by the physical realities of being located in a forest clearing. The dialogue between the native forest and the cultivated clearing was and continues to be, a defining aspect of the campus. Siting the campus in the clear-cut section of second-growth forest allowed the institution to physically begin with a clean slate, lending to the university culture a sense of being able to engage in creative thinking unencumbered by the press of civic life outside the clearing. With the sea and the North Shore Mountains as an impressive natural setting, the forest clearing became a defined place set apart for lofty academic pursuits.</p>	<ul style="list-style-type: none"> Conservation measures for this theme are found in the Design Guidelines for the public realm. Retain the sense of passage into and out of the clearing in the design of the campus gateways. Maintain and cultivate the distinction between the historical forest and clearing through planting and landscaping policies.
2. Commanding Position Refer to Map 2-10 <p>The <i>1914 Plan</i> envisioned a visually prominent north end to the campus, providing the university with the impressive physical setting for its cultural and social ambitions. These ambitions were visually supported by the stature of the early stone-faced buildings of Edwardian character. In addition, semi-permanent 1920s buildings and permanent 1940s buildings located in the <i>1914 Plan</i> precinct helped define the <i>Plan</i>'s grand malls and boulevards and made reference to the grand stone-faced buildings in their character.</p>	<ul style="list-style-type: none"> Retain where possible the 1920s and 1940s buildings giving particular regard to the massing and facades fronting the <i>1914 Plan</i> malls and boulevards. Conserve Cecil Green Park House and grounds. Conserve the Main Mall stone cairn commemorating the 1923 Great Trek.
3. Room for Research Refer to Map 2-10 <p>While the physical prominence of the north end of the campus became a key feature of the university's identity, the south end of the campus provided room for scientific research. From the earliest agricultural research fields to today's high-tech laboratories, the campus's south end holds a physical record of the university's important role as a site for research. The remaining early agricultural buildings mark the origins of UBC's identity as a leading research institution. The South Campus Research Precinct and land-based research areas are current evocations of this theme.</p>	<ul style="list-style-type: none"> Retain, where possible, some examples of the identified early agricultural research buildings and their associated surrounding landscapes. Celebrate the South Campus Research Precinct and other land-based research areas as the current locations of this theme.
4. Modern Openness Refer to Map 2-11 <p>Following the Second World War the university experienced. Increased investment in the sciences, expansion of departments and degrees, and the growth of the student population, created demand for student residences, classrooms and laboratories at the same time that the Modernist architectural aesthetic was in ascendancy.</p> <p>The campus exhibits a significant record of this in its structures and landscapes.</p>	<ul style="list-style-type: none"> Retain, where possible, examples of the modernist buildings and their associated landscaping.
5. Cultural Expansion and Inclusion Refer to Map 2-11 <p>A record of the expansion of the university culture from its early British roots to one with a global composition can be found on the campus. The Musqueam culture has also influenced the university's identity.</p>	<ul style="list-style-type: none"> Retain where possible the resources and their associated uses and landscaping giving particular regard to cultural references in their design.

HERITAGE CONSERVATION THEMES

MANAGEMENT STRATEGIES

6. Community Building Refer to [Map 2-12](#)

The challenge of maintaining a sense of belonging grew in response to having a larger campus population. Student and faculty initiatives to maintain community spirit can be seen as a bulwark against increased anonymity of the burgeoning campus community.

- Encourage the continued use of the identified buildings for community related activities.
- Where possible, retain the integrity of the identified clusters of student housing buildings and associated landscapes.
- Retain where possible the Ladner clock tower and Engineering Cairn.

7. Making an Impact Refer to [Map 2-12](#)

From its inception, the university has taken pride in its position as a pre-eminent post-secondary institution in the province and has cultivated its intellectual and cultural leadership. The extending reach of the university is exemplified in its drive to be a leading research institution nationally and internationally. Cultural and intellectual pre-eminence and leadership, the gradual replacement of temporary facilities, and the university's central role in the professionalization of the provincial public education system and workforce, all contributed to the institution's eminence.

- Retain where possible the identified resources and their associated uses. In the case of the C.K. Choi building, retain or enhance its sustainability measures.

8. Resourcefulness Refer to [Map 2-12](#)

The campus is marked by resourcefulness in meeting pressing needs. The adaptive re-use of the remaining army huts and work camp structures for academic, research, residential and social space is the clearest illustration of this resourcefulness. The pioneers' willingness to make do is one of the major stories of the University's culture and is a contributor to a feeling of pride in the institution amongst alumni.

- Retain some examples of huts on their original sites where possible and relocate if necessary.

MAP

2-10

Heritage Resources: Themes 2 and 3

Theme 2

Commanding Position

- Facilities and Buildings
- Landscape
- 1914 Campus Boundary

Theme 3

Room for Research

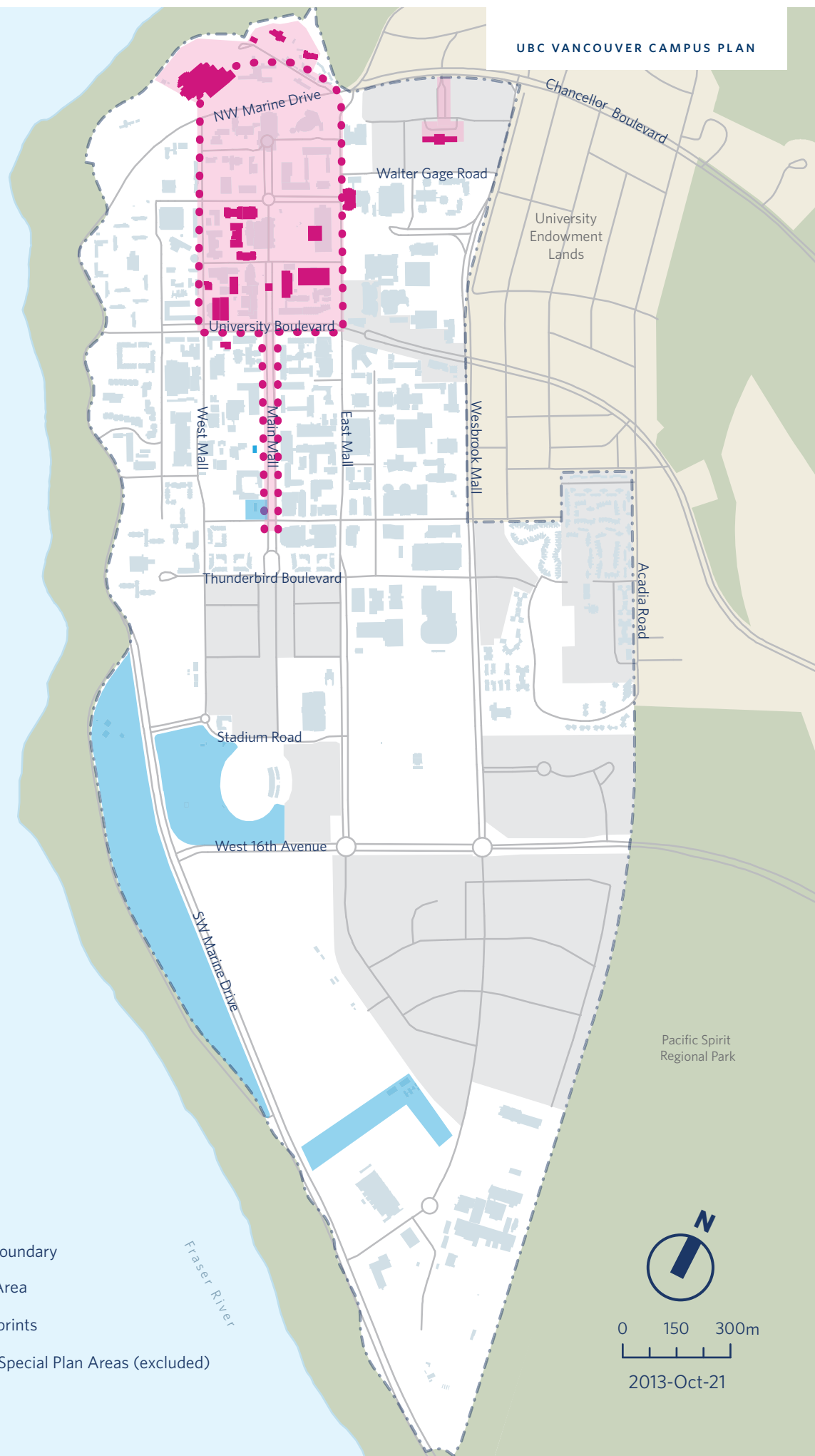
- Facilities and Buildings
- Landscape

UBC Vancouver Campus Boundary

Vancouver Campus Plan Area

Institutional Building Footprints

Neighbourhood Housing/Special Plan Areas (excluded)



0 150 300m

2013-Oct-21

MAP

2-11

Heritage Resources: Themes 4 and 5

Theme 4

Modern Openness

- Facilities and Buildings
- Landscape

Theme 5

Cultural Expansion and Inclusion

- Facilities and Buildings
- Landscape

--- UBC Vancouver Campus Boundary



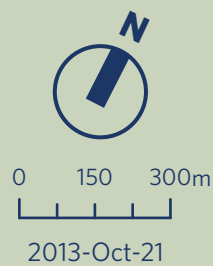
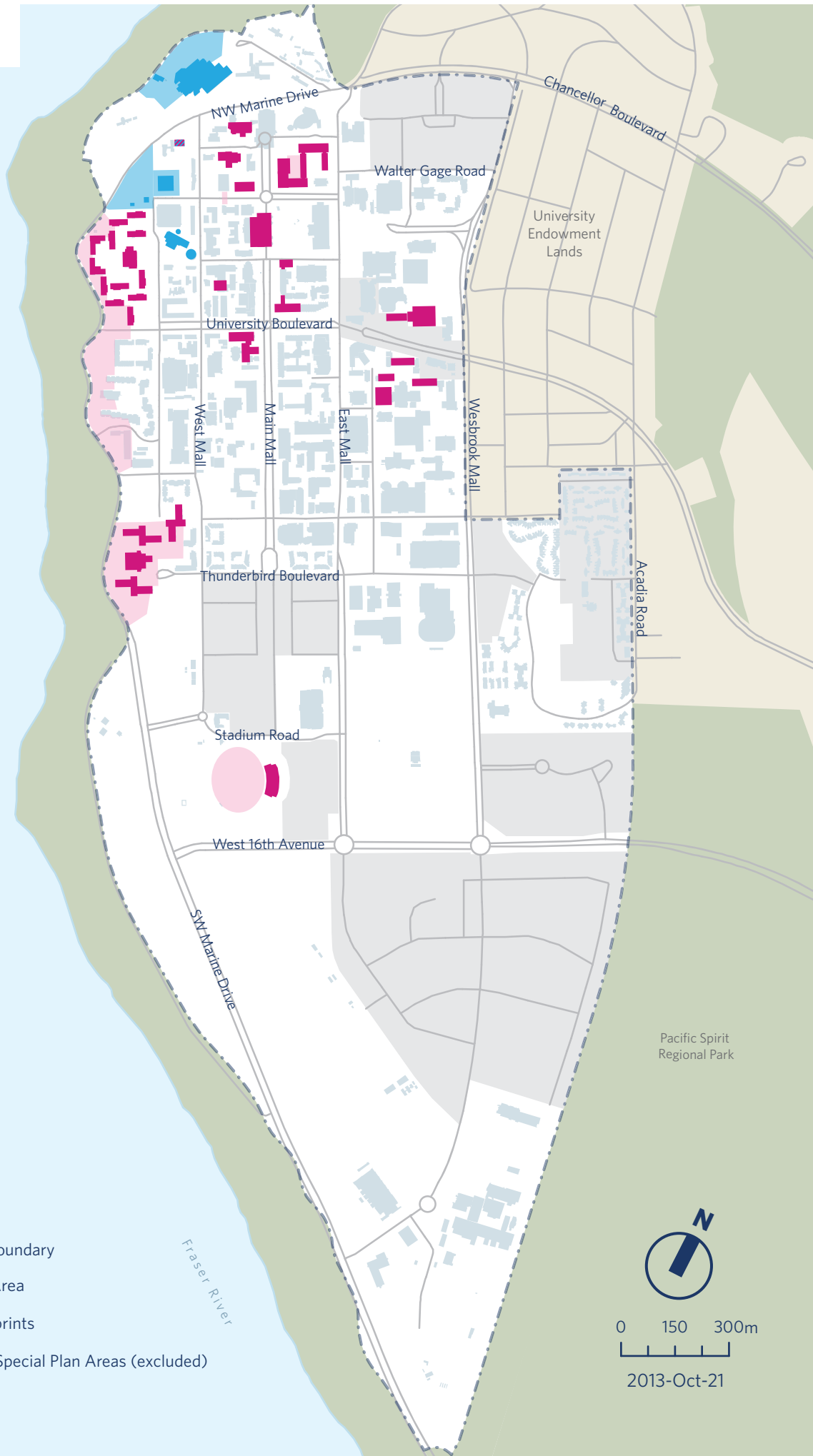
Vancouver Campus Plan Area



Institutional Building Footprints



Neighbourhood Housing/Special Plan Areas (excluded)



MAP

2-12

Heritage Resources: Themes 6, 7 and 8

Theme 6

Community Building

- Facilities and Buildings
- ✱ Monuments
- ⬢ Landscape

Theme 7

Making an Impact

- Facilities and Buildings
- ⬢ Landscape

Theme 8

Resourcefulness

- Facilities and Buildings

--- UBC Vancouver Campus Boundary

Vancouver Campus Plan Area

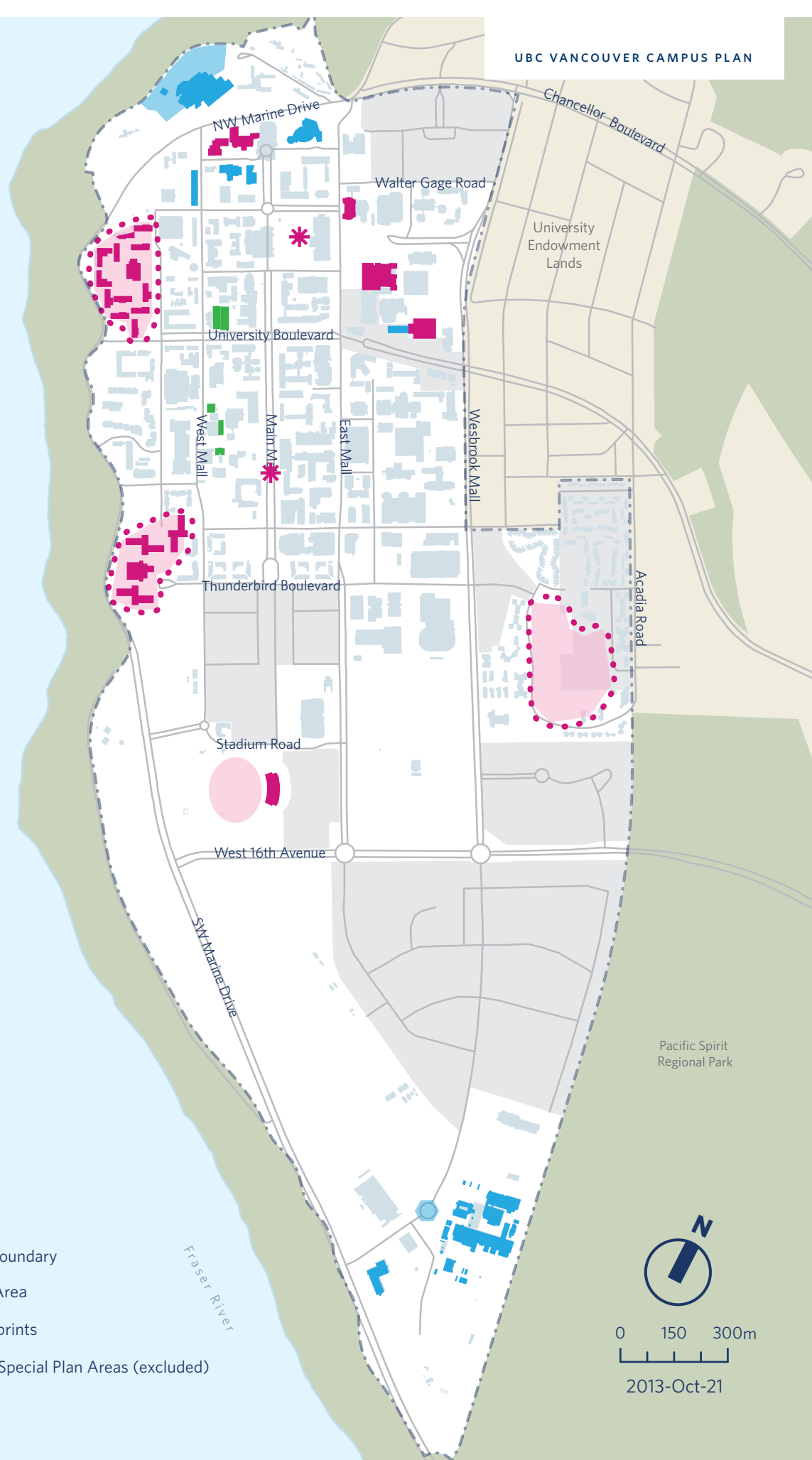
Institutional Building Footprints

Neighbourhood Housing/Special Plan Areas (excluded)



0 150 300m

2013-Oct-21



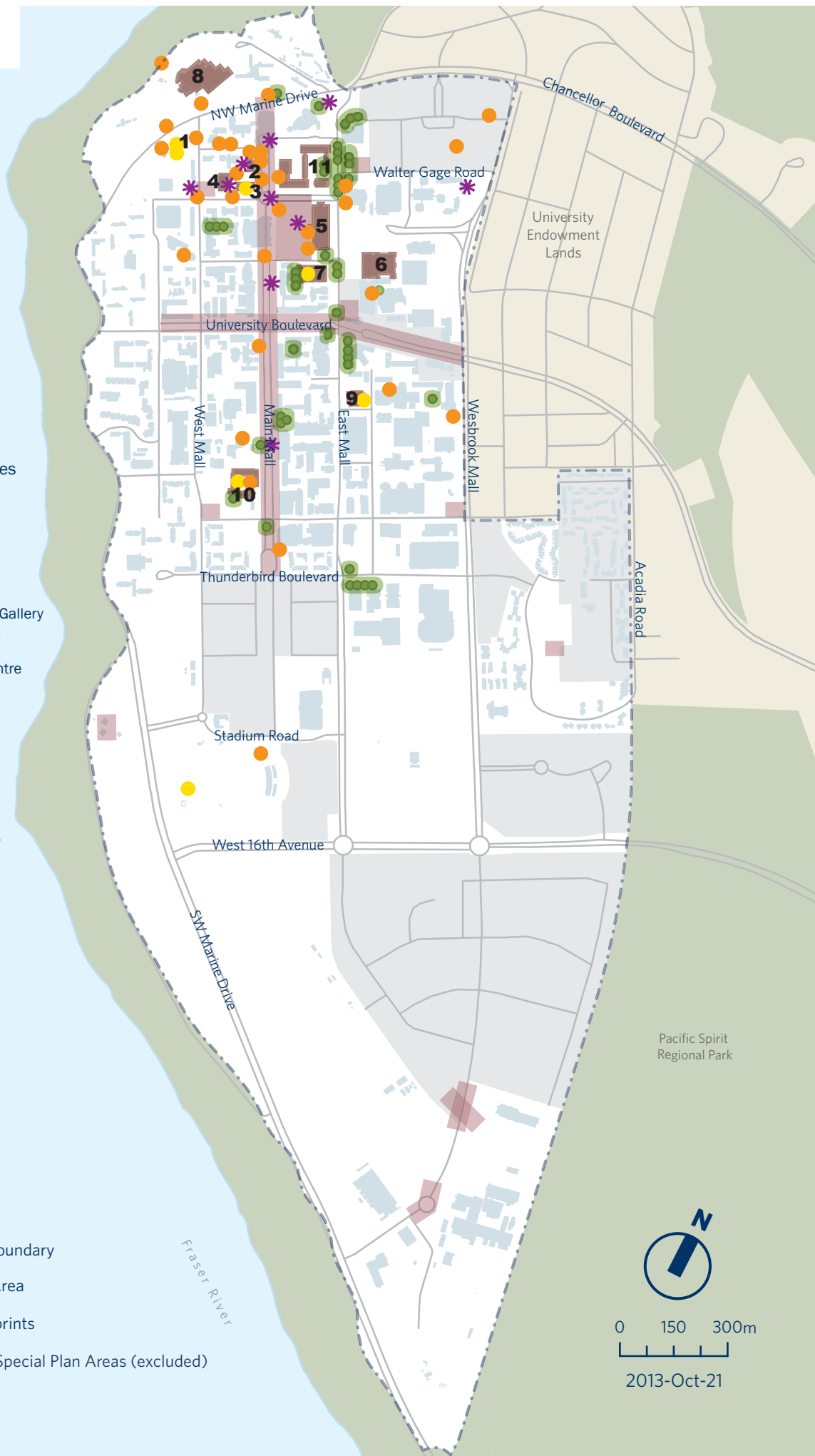
MAP

2-13

Outdoor Public Art and Commemoration Locations

- Outdoor Art Curated by Belkin Gallery
- Other Outdoor Public Art
- ✱ Existing Commemoration Sites
- Existing Graduation Trees
- UBC Buildings that House Public Art
 1. International House
 2. Morris & Helen Belkin Art Gallery
 3. Frederic Lasserre Building
 4. Music Building
 5. Irving Barber Learning Centre
 6. Student Union Building (AMS Art Gallery)
 7. Henning Building
 8. Museum of Anthropology
 9. Library Processing Centre
 10. Macmillan Building (Faculty Of Agriculture)
 11. Buchanan Building
- Significant Opportunities for Siting Outdoor Public Art

- - - UBC Vancouver Campus Boundary
- Vancouver Campus Plan Area
- Institutional Building Footprints
- Neighbourhood Housing/Special Plan Areas (excluded)



0 150 300m

2013-Oct-21

10 APPENDICES

APPENDIX 1

FACILITIES TO BE REPLACED

The facilities listed in [Table 2A-5](#) would be replaced over time to accommodate new academic and student housing facilities on the infill sites identified in [Map 2-1 Teaching, Learning and Research Land Use](#) and [Map 2-2 Student Housing Land Use](#). The majority of facilities in [Table 2A-5](#) are temporary structures or have reached the end of their building life-cycle.

TABLE 2A-5

LIST OF FACILITIES TO BE REPLACED ON THE VANCOUVER CAMPUS 2009-2030

BUILDING NUMBER	BUILDING NAME	MIXED-USE HUB	SITE FOR KNOWN ACADEMIC FACILITY
539	Ambulance Station		X
045	Auditorium Annex Offices A		X
863-2	Auditorium Annex Offices B		X
098	Botanical Garden Centre — Campbell Building	X	
729	Botany Annex		X
113	Brock Hall Annex		X
632	Plant Operations Annex F	X	
580	Plant Operations Nursery — Gardener's Residence and Lab	X	
583	Plant Operations Nursery — Greenhouse No. 1	X	
581	Plant Operations Nursery — Soil Shed	X	
730	Ponderosa Annex H		X
192	Ponderosa Centre		X
726	Power House — Oil Storage Facility		X
863-1	West Mall Annex		X

The facilities listed in [Table 2A-6](#) are located on sites designated for infill development after 2030, once the infill sites for known projects to 2030 have been used. The decision to replace the facilities identified in [Table 2A-6](#) can be re-evaluated post 2030 in view of conditions at that time.

- [1 Purpose and Vision](#)
- [2 Sustainability](#)
- [3 Campus Land Use](#)
- [4 Public Realm and Open Space](#)
- [5 Movement and Circulation](#)
- [6 Infrastructure and Utilities](#)
- [7 Campus Character](#)
- [8 Campus Plan Implementation](#)
- [9 Maps](#)
- [10 Appendices](#)**

TABLE 2A-6
LIST OF POTENTIAL REPLACEMENTS ON THE VANCOUVER
CAMPUS POST-2030

BUILDING NUMBER	BUILDING NAME
871-2	Ponderosa Annex Office E — English Annex
090	Botanical Gardens — Workshop
079	Botanical Gardens — Greenhouse and Workshop
643	Campus & Community Planning 1
029	Campus & Community Planning 2
865-1	Ponderosa Office Annex A
077-2	Botanical Garden Nursery — Shadehouse
051	The Barn Coffee Shop
871-3	Ponderosa Annex Office F — Student Services
513	Library Processing Center
077-1	Botanical Garden Nursery — Greenhouse
865-3	Ponderosa Office Annex C
638	South Campus Warehouse
579	Labour Hut
766	Refuse Compaction Site
765	South Campus Substation — Switching Station 12KV
430	Robert F. Osborne Centre — Unit 1
022	Lower Mall Research Station
614	Mary Bollert Hall
431	Robert F. Osborne Centre — Unit 2
024-6	Research Station Annex 6
024-5	Lower Mall Header House
401	Geography Building

APPENDIX 2

POPULATION GROWTH ASSUMPTIONS TO 2030

Campus and Community Planning used three types of campus population estimates to determine the future demand for academic facilities and space not covered by the capital plan.

- The estimates of students, using full time equivalents (FTE) as the measure, by faculty are used for planning the amount of academic and research space.
- The estimates of full time students are used in determining the potential demand for on campus housing.
- The estimate for total enrolment (full- and part-time students) provides an indication of how many people would be on campus at any one time, which affects the day to day demand for food services and recreation.

Summaries of these estimates are shown below in *Table 2A-7*.

TABLE 2A-7
ESTIMATING ACADEMIC POPULATION CHANGE FOR THE VANCOUVER CAMPUS TO 2017

		2007/08	2017*	DIFFERENCE
a. Total Campus Population using Full-Time Equivalent (FTE) Values for Students	Undergraduates FTE	30,809	28,400	(2,409)
	Graduates FTE	6,780	11,308	4,528
	Faculty Full-Time	2,208	2,262	54
	Faculty Part-Time	562	576	14
	Staff	9,207	9,432	225
	Total	49,566	51,978	2,412
b. Full-Time (FT) Student Population	Undergraduates FT	23,564	21,679	
	Graduates FT	6,996	11,683	
	Total Full-Time Students	30,560	33,362	2,802
c. Total Student Enrolment	Total Full- and Part-Time Students	44,720	47,623	2,903

* The student population is expected to be capped at the 2017 level, until 2030 and beyond.

The 2007/08 UBC Vancouver population for undergraduate and graduate full time equivalents (FTEs) and full- and part-time students were obtained from UBC Planning and Institutional Research (PAIR). The projections to 2017 are based on UBC academic plans and growth projections provided by the Provost office and the Office of Vice-President Research in December 2007. For more information, contact the Campus and Community Planning office for *UBCV Campus Plan Update: Planning for 2017*.

- Purpose and Vision
- Sustainability
- Campus Land Use
- Public Realm and Open Space
- Movement and Circulation
- Infrastructure and Utilities
- Campus Character
- Campus Plan Implementation
- Maps
- Appendices**

A projection to 2017 was not provided for part-time faculty or staff. Therefore, Campus and Community Planning estimated the 2017 values as follows: the part-time faculty estimate is based on the 2007/08 ratio of part time to full-time faculty. The estimate for staff, including related academic staff, is based on the 2007/08 proportion of all staff to all faculty.

APPENDIX 3

FACILITY GROWTH ASSUMPTIONS TO 2030

Campus and Community Planning estimated future growth by first looking at demand projections for the following types of facilities:

- academic and research
- campus life, which includes student housing, food services, recreation and athletics, child care, arts and culture and retail
- campus support services including parkades, administrative offices, plant operations and utilities

These projections were obtained from Campus Plan Project Team, whose members represent key UBC departments, and by direct input from the following academic and operational departments:

- Provost Office
- Vice-President Research Office
- UBC Office of Planning and Institutional Research (PAIR)
- Land and Building Services Units:
 - » Capital and Facility Planning
 - » Plant Operations
 - » Utilities
 - » Sustainability Office
- Housing and Conferences
- UBC Food Services
- UBC Athletics
- UBC Parking Services

For the academic and research facilities' needs on campus, the Provost Office coordinated a collective response, which was compatible with UBC's *Academic Plan* and based on its own recent consultation process with Deans and Vice-Presidents in the *Academic Plan* process. Therefore, individual faculties were not canvassed.

The facilities capital plan provided estimates of known floor space demand for teaching and research facilities to 2017. In addition, some ancillaries estimated their future floor space requirements to provide support to the core academic

needs. Where ancillaries did not forecast floor space requirements to 2030, Campus and Community Planning used campus enrolment forecasts to estimate future per capita floor space metrics. The demand for outdoor research areas was identified through technical reports. The demand for floor space and land was then assessed against the available land base for the campus.

The resulting future floor space and land demand to be accommodated by *The Campus Plan* are summarized in [Table 2A-8](#).

TABLE 2A-8
VANCOUVER CAMPUS BUILT FLOOR SPACE: CURRENT INVENTORY AND PROJECTION TO 2030

FACILITY TYPE	CURRENT AREA*	ACADEMIC PROJECTS TO 2017	NEW PROJECTS TO 2030	TOTAL NEW FLOOR SPACE 2017 TO 2030	TOTAL FLOOR SPACE BY 2030
Academic/ Research	489,460	95,850		95,850	585,310
Housing	349,370		295,700	295,700	645,070
Allied Research	33,095	10,500		10,500	43,595
Campus Life	85,985		17,980	17,980	103,965
Infrastructure & Operational Support Services	256,315		16,590	16,590	272,905
Non-Assigned **	105,095				105,095
Total Built Floor Space	1,319,320	106,350	330,270	436,620	1,755,940
Totals as gross sq. ft.	14,169,497	1,142,199	3,554,997	4,699,739	18,900,780

All values are in gross square metres unless otherwise indicated

* Figures approximated based on November 2008 inventory

** Includes space not used for classrooms and offices in academic buildings, greenhouse facilities and SUB.

These estimates suggest *The Campus Plan* shall seek to accommodate an increase in floor space by about 436,620 gross square metres over the next twenty years. The largest demand for floor space within that figure would be for student housing, which in turn is dependent on policy decisions about what proportion of housing to provide.

To compare to past trends, between 1988 and 2008, 476,970 gross square metres of institutional facilities were added to UBC's Vancouver campus (an average of 23,850 gross square metres per year for 20 years). A projection of that annual facility growth rate between now and 2030 would total approximately 524,700 gross square metres.

In addition to the projected demand for built facility floor space, the demand for outdoor research was compiled. For outdoor research, approximately 61 hectares are needed for the UBC Farm, Totem Field Research, Botanical Gardens and Bioscience Reserve. This amount of land is already being used for these purposes. The existing inventory of open space, which includes parks, plazas, gardens,

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices

corridors and outdoor recreation fields, is 50 hectares. Given the relatively small growth in campus population, additional open space requirements can be readily accommodated through new projects and redevelopment.

On the 326 hectares of academic space on the Vancouver campus, the existing academic land uses cover approximately 231 hectares, leaving 95 hectares available for future academic needs.

APPENDIX 4

FUTURE FLOOR SPACE CAPACITY

Student Housing

In the case of student housing, Campus and Community Planning estimated the future floor space capacity needed to house 50 per cent of full-time undergraduate and graduate students, as shown in [Table 2A-9](#).

TABLE 2A-9
FUTURE STUDENT RESIDENTIAL FLOOR SPACE CAPACITY ON
THE VANCOUVER CAMPUS NEEDED TO HOUSE 50 PER CENT OF
FULL-TIME STUDENTS

	NUMBER OF FULL-TIME STUDENTS	EXISTING BEDS	NUMBER OF BEDS FOR 50% CAPACITY
Under-graduates			
2007	23,564	6,824	11,782
2030	21,679		10,840
Difference between future demand and existing beds			4,016
New floor space (39 gsm/bed)			156,605
Graduates			
2007	6,996	1,710	3,498
2030	11,683		5,842
Difference between future demand and existing beds			4,132
New floor space (39 gsm/bed)			161,129
All Full-Time Students			
2007	30,560	8,535	15,280
2030	33,362		16,681
Difference between future demand and existing beds			8,146
New floor space (39 gsm/bed)			317,694

Discussion will continue within appropriate departments on the pace and timing of bringing new student housing on-stream. For campus planning purposes, however, providing a greater capacity to house students is prudent for the following reasons:

- The UBC community wants more student housing to address a shortage of affordable housing for students within reasonable range of the campus.
- On-campus student housing reduces commuting time, which allows students to engage more fully with their campus all day and week leading to greater academic success. Reduced commuting time also reduces greenhouse gas emissions and other impacts as a result of fewer vehicle trips.

Many other North American universities are also striving to house more of their full time enrolment on campus for the same reasons.

Floor Space Capacity within Hubs

Table 2A-10 shows the approximate floor space to be accommodated for student housing and academic uses within each mixed-use hub. The academic floor space, which is distinct from student housing, will be limited to the following approximate maximum areas to protect the preferred student residential capacity and ratio. Campus life program activities will be accommodated within both these categories.

TABLE 2A-10
ESTIMATE OF STUDENT HOUSING AND ACADEMIC FLOOR SPACE
IN EACH HUB

	STUDENT HOUSING		ESTIMATE OF STUDENT Beds/Hub	ACADEMIC FLOOR SPACE	
	Square Feet	Square Metres		Square Feet	Square Metres
Hub 1	342,000	31,773	685	25,000	2,323
Hub 2	345,000	32,052	690	150,000	13,935
Hub 3	450,000	41,806	900	22,000	2,044
Hub 4	448,000	41,621	900	30,000	2,787
Hub 5	217,000	20,160	435	200,000	18,581

- 1 Purpose and Vision
- 2 Sustainability
- 3 Campus Land Use
- 4 Public Realm and Open Space
- 5 Movement and Circulation
- 6 Infrastructure and Utilities
- 7 Campus Character
- 8 Campus Plan Implementation
- 9 Maps
- 10 Appendices**

APPENDIX 5

CURRENT LAND USE ON CAMPUS

UBC has a total land area of 402 hectares (994 acres). Excluding the 76 hectares (188 acre) area of the residential neighbourhoods, but including the North Campus and University Boulevard neighbourhoods, leaves a remaining campus land area of 326 hectares (805 acres). Approximately 1.4 million gross square metres of campus-related floor space is concentrated into a footprint of approximately 57 ha or 572,000 gross square metres.

As shown in [Table 2A-11](#), about 95 ha of land is available (not covered in permanent infrastructure) to accommodate all future facility growth and open space in the foreseeable future.

TABLE 2A-11
VANCOUVER CAMPUS LAND INVENTORY 2007

	TYPE OF USE	HECTARES	ACRES
1	Campus area	326	805
2	Built footprint	57	141
3	Building setback allowance (15% of footprint)	9	21
4	Roads and parking	54	134
5	SUBTOTAL (LINE 1–LINES 2-4)	206	509
	Open Space/ Outdoor Research		
6	Parks	11	27
7	Plazas/ Courtyards	4	9
8	Varsity/ Recreation	23	57
9	Gardens	5	12
10	Corridors	8	20
11	Outdoor Research Space ¹	61	150
12	TOTAL OPEN SPACE/OUTDOOR RESEARCH (LINES 6-11)	111	275
	Remainder (line 5–line 12)	95	235

¹ Outdoor research space includes 24.0 ha Farm, 1.5 ha Totem Field Research, 12 ha Bioscience Reserve, 23.5 ha Botanical Gardens.

Data source for open space components and Botanical Gardens is “Public Spaces Study” (2007) by C. Berris Associates.



a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

UBC Campus and Community Planning
2210 West Mall, Vancouver, BC V6T 1Z4
Tel. 604-822-8228 Fax. 604-822-6119

WWW.PLANNING.UBC.CA

Please note, this publication had a limited print run in an effort to reduce paper waste. Should you require printed copies, please contact Campus and Community Planning. Interactive PDF copies of all three parts can be downloaded any time from our website.