



# East Campus Neighbourhood Plan

September 2003



THE  
UNIVERSITY  
OF  
BRITISH  
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Think  
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**EAST CAMPUS**

**NEIGHBOURHOOD PLAN**

University of British Columbia

September 26, 2003

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## **1. INTRODUCTION**

### **1.1 Overview**

In July 1997, the Greater Vancouver Regional District adopted an Official Community Plan (OCP) bylaw that covers the UBC campus.

In November 2000, the UBC Board of Governors adopted the UBC Comprehensive Community Plan (CCP) to provide further guidance for campus development and to fulfill, in part, OCP requirements related to local area planning. The GVRD has endorsed the CCP as being consistent with the OCP.

The GVRD and UBC have also signed a Memorandum of Understanding (MOU), dated December 18, 2000, to establish relations between the two parties and processes for neighbourhood planning and development approval.

The next stage of local area planning involves preparation of more detailed neighbourhood plans for each of the eight plan areas identified in the OCP and CCP. These plans will require the approval of the GVRD and the UBC Board of Governors, as outlined in Section 1.3. This neighbourhood plan covers one of these local areas, bounded by Wesbrook Mall to the west, Agronomy Road to the north, Acadia Park housing to the east and the Public Safety Building to the south, (“East Campus Neighbourhood”).

### **1.2 Relationship of Neighbourhood Plan to OCP, CCP and MOU**

This neighbourhood plan has been prepared in accordance with the policies and principles of the OCP, CCP and MOU. It provides further details to guide development within the East Campus local area.

The OCP for UBC applies to the entire campus and two foreshore lots in Pacific Spirit Park, and is intended to guide the long-term evolution of the campus into a “complete community” that balances regional growth management objectives with the University’s academic mission. The OCP sets objectives and targets for land use, green space, community services and transportation, with a particular focus on “non-institutional development.” Most non-institutional development is expected to occur within eight plan areas identified in the OCP, surrounding the academic core. These eight plan areas are to be the subject of further area planning work prior to any non-institutional development.

The CCP describes in more detail how the OCP’s objectives and targets will be met, and outlines how the development capacity established by the OCP will be distributed within the eight plan areas. The CCP goes further than the OCP in establishing a vision and goals for campus development and incorporates elements from other UBC documents

such as the 1992 Main Campus Plan, TREK 2000, Principles for Physical Planning at UBC (A Legacy and a Promise) and the UBC Strategic Transportation Plan. Sets of principles and other parameters are established in the CCP to guide the preparation of neighbourhood plans.

The GVRD/UBC MOU establishes a number of agreements between the GVRD and the University. It consolidates and clarifies understandings regarding implementation of the OCP and achievement of targets therein; it establishes process for preparation of neighbourhood plans and issuance of development permits; it acknowledges an outline of a proposed governance structure; and it establishes a dispute resolution process.

### **1.2.1 Purpose of the Neighbourhood Plan**

The OCP for UBC provides a vision and goals for future campus development, broad land use designations, and the objectives for more detailed planning. The purpose of the CCP and the Neighbourhood Plans is to interpret and apply the OCP's policies and development requirements to the eight specific plan areas identified in the OCP (see Schedule C of the OCP) as a framework for development approval. Non-Institutional development in an area targeted for neighbourhood planning (see Schedule C of the OCP) will occur only after completion of a Neighbourhood Plan.

Each Neighbourhood Plan will contain a detailed land use plan, development controls, design guidelines, and servicing and transportation strategies, consistent with applicable portions of the OCP and CCP. When taken together, the CCP and Neighbourhood Plans fulfill the area planning requirements set out in the OCP and MOU.

It is the intention that neighbourhood planning be undertaken for areas of significant Non-Institutional development and areas of special sensitivity. The OCP identifies such locations on Schedule C of the OCP document.

### **1.3 Process Followed in Preparing the Neighbourhood Plan**

The preparation of each neighbourhood plan follows a process outlined in the MOU. Technical input is provided through a Technical Advisory Committee. Public participation is assured through an Advisory Planning Committee as well as through public meetings. Adoption of the neighbourhood plan consists of approval in principle by the UBC Board of Governors, followed by review of the plan by the GVRD. Once the GVRD Board of Directors endorses the plan as being consistent with the OCP and fulfilling the requirements for local area planning, the UBC Board of Governors considers the neighbourhood plan for final adoption.

## **2. DESCRIPTION OF THE PLAN**

## **2.1 Interpretation**

In this neighbourhood plan, terms shall have the same meaning as in the Official Community Plan. If any provisions of this neighbourhood plan are found to be at variance with the Official Community Plan, the OCP shall prevail.

## **2.2 Approach**

### **2.2.1 Planning Objectives**

- (a) Support and further the objectives of the OCP, in creating a more complete community on UBC campus, with a strong emphasis on pedestrian and bicycle travel, good access to transit, and a reduced need for commuting.
- (b) Support the objectives of the UBC planning principles, creating places that inspire and enrich the lives of those who learn, work, live and visit here.
- (c) Create a new residential neighbourhood with a distinct “university town” character that combines residential use with academic influences, complements adjacent areas, and provides a high quality of life for its residents.
- (d) Plan for a community that includes a multi-generational, multi-cultural population, and that accommodates residents in housing with a variety of tenure and affordability options.
- (e) Encourage an emphasis on pedestrian and cycling modes of travel, and provide for future transit service to the neighbourhood.
- (f) Promote neighbourhood interaction in a variety of ways: by providing community gathering places; by providing a variety of park and open spaces offering differing experiences; by promoting linkages to surrounding areas; by creating places which are meaningful and distinctive.
- (g) Establish a sense of arrival. The main entry to the neighbourhood will be the extension of a re-aligned Thunderbird Road, which will also provide the entry to Fairview Crescent Housing, Acadia Family Housing and Acadia Park Residences.
- (h) Reinforce the important connections between this neighbourhood and other areas of campus. Integrate open spaces and the circulation system with these connections.
- (i) Provide parks and open spaces within the neighbourhood to offer leisure



amenities and recreation opportunities.

### **2.2.2 Existing Physical Environment and Context**

- (a) East Campus Neighbourhood consists of lands along the east side of Wesbrook Mall, between Agronomy Road and the new sorority / fraternity sites adjacent to the Public Safety Building. The extent of the neighbourhood plan area is indicated on Plans P-2 and P-6.
- (b) The James Mather Building site and the surface parking lots to the west of Spirit Park Apartments and Point Grey Apartments are included in this neighbourhood plan and are planned for more intensive use.
- (c) Adjacent buildings such as the Berwick Memorial Centre, Spirit Park Apartments, Point Grey Apartments and the fraternity village are not included within the boundaries of this neighbourhood plan.
- (d) The forested area between the Mather Building and Fairview Avenue is included within this neighbourhood, and constitutes a valuable natural asset for residents of this part of campus.
- (e) The existing alignment of Fairview Avenue between Wesbrook Mall and Western Parkway precludes efficient use of the adjacent lands and promotes fast traffic speeds.

### **2.2.3 Planning Response**

- (a) The OCP and CCP designate the area for predominantly residential uses. As this neighbourhood adjoins housing for faculty, staff and students, an emphasis is placed on housing which directly supports the academic mission.
- (b) Housing types are apartments and townhouses with as many units as possible having an orientation to the street. This will typically be accomplished through direct entrances from the sidewalk to the ground floor units. This will encourage pedestrian travel, provide more street activity, and improve neighbourhood safety via “eyes on the street”.
- (c) The development pattern is intended to be “fine grained”, with multiple connections to encourage pedestrians and cyclists. Roads are designed to restrict vehicle speeds and enhance the pedestrian realm.
- (d) Very few new roads are required to service this neighbourhood. Thunderbird Road will be extended from Wesbrook through the neighbourhood to Osoyoos

Crescent. This new road will provide the primary vehicular access to Spirit Park Apartments, Fairview and Acadia Park. Agronomy Road will be constructed to extend from Wesbrook Mall to Western Parkway, and Fairview Avenue will no longer connect to Western Parkway, but will be accessed only from Osoyoos Crescent. A connection for pedestrians, bikes and emergency vehicles will be provided between Fairview Avenue and the intersection of Western Parkway and Agronomy Road.

- (e) Substantially all of the natural woodland between the Mather Building and Fairview Avenue will be retained as parkland to serve the area neighbourhoods.

## 2.3 Land Uses and Densities

### 2.3.1 Overview

East Campus Neighbourhood is designated for residential use of various types and densities. A summary of land uses, densities and unit types appears in Table 'A'. The configuration of parcels and spaces is shown on Plan P-6, the Land Use Plan.

### 2.3.2 Residential Use

The CCP identifies 16,157 m<sup>2</sup> of land area for residential use within the neighbourhood, and projects that 276 dwelling units will be provided. Of the 276 units, it is projected that approximately 70% will be rental units (approximately 193 units) and the remaining 30% (approximately 83 units) will be available for purchase. The CCP also calls for at least 55 of the units to be ground-oriented.

Up to 25,661 m<sup>2</sup> of gross buildable floor area will be accommodated in the residential areas. This works out to an average FSR of 1.59 for this neighbourhood.

The CCP indicates how the land use statistics for this neighbourhood fit with the overall totals for all CCP areas. (See CCP Tables 1 and 2). This neighbourhood has the following characteristics in relation to overall CCP totals:

- Density is higher than average (FSR = 1.59 compared to 1.2 average, and units/net hectare is 170 compared to 100 average)
- Rental unit percentage is higher than average (70% rather than 20%)
- Ground-oriented percentage is lower than average (20% rather than 40%)

These residential statistics reflect the particular characteristics of this neighbourhood – close to the academic core and to transit, with a strong emphasis on housing for UBC faculty and staff, and with smaller units sizes to promote affordability. The proposed configuration of building sites is indicated on Plan P-6.

### **2.3.3 Residential Use- Adjacent Existing Housing Area**

The two surface parking lots to the west of Spirit Park Apartments and Point Grey Apartments are designated in the OCP as “existing housing”. One of these parking lots has been incorporated into the site of the sorority and fraternity village. The balance of the sorority / fraternity site is on land designated as “future housing” in the OCP. Since these sites will be used for institutional housing (for fraternities and sororities), the “future housing” designation on this site is being relocated to the site of the Mather Building and the surface parking lot to the south of it. The sites are indicated on Plan P-6.

### **2.3.4 Ancillary Uses**

As specified in the UBC Development Handbook, the following ancillary uses are allowed within all land use designations:

- day care
- local commercial – e.g. corner store or coffee shop
- live/work (home occupations consistent with a residential area)
- community buildings.

## **2.4 Parks & Open Space**

### **2.4.1 Provision of Parks and Leisure Services**

Thunderbird Park is located directly across Wesbrook Mall from this neighbourhood. As part of an overall strategy of providing additional recreation facilities on campus, Thunderbird Park will be undergoing extensive renovations to expand the current range of facilities and create a more complete “community park”. This work will be undertaken in accordance with an overall management plan.

The UBC Management Plan for Parks and Leisure Services indicates that the following facilities should be provided to serve the eventual population of East Campus:

- playground facilities within the neighbourhood;
- access to tennis courts at Thunderbird Park;
- access to playing field at Thunderbird Park;
- access to baseball diamond to be constructed at Thunderbird Park;
- trails and greenways – connecting through the community as per the CCP;
- natural parks areas – including the wooded area adjacent to the Mather Building and access to Pacific Spirit Park; and
- “aesthetic” areas – those areas where visual enjoyment is the predominant benefit, located at entries and selected locations through the neighbourhood.

UBC will provide the playground facilities within East Campus neighbourhood and improvements to Thunderbird Park as per the Parks & Leisure Services Management Plan. With the provision of these facilities as the neighbourhood is developed, residents will have a high standard of neighbourhood recreation amenities.

Other facilities such as the UBC Aquatic Centre and new Olympic Rink, which may include a large fitness facility, will also have access provisions for residents.

## **2.4.2 Neighbourhood Parks & Open Space**

The OCP contains a requirement for “useable neighbourhood open space”, based on anticipated population. The useable neighbourhood open space provision for this neighbourhood is 10,878 m<sup>2</sup>, as identified in the CCP.

The Parks & Recreation Management Plan proposes that the recreation needs of East Campus residents will largely be served by facilities at Thunderbird Park, as described in Section 2.4.1. The open space within the East Campus Neighbourhood, identified in the CCP, is the forest area to the north and east of the existing Mather Building. This is a significant open space feature for the campus as well as adjacent neighbourhoods. This space, with its mature evergreens and open, natural understorey, should be maintained in its current natural state, although active play areas such as a children’s playground can be located within this park.

## **2.5 Circulation and Transportation**

### **2.5.1 Transportation Objectives**

- (a) Support the OCP objectives of reducing single occupant vehicle commuting, increasing the use of transit, and creating a fine grained pattern of development and circulation that will encourage pedestrian and bicycle travel.
- (b) Establish a road system that integrates with the University grid, provides a residential character with slow travel speeds, and provides a sense of entry and easy way-finding.
- (c) Ensure that transit can be accommodated in a manner that provides convenient access for transit users, efficient operation for buses and safety for all users of the street.
- (d) Encourage cycling by providing vehicular travel lanes of sufficient width to safely accommodate cyclists along with vehicular traffic, and by providing bicycle markings where appropriate. Design walkways to also accommodate safe

cycling.

- (e) Provide mechanisms for traffic calming. Pedestrian safety and priority should be emphasized at pedestrian crossings through the use of curb extensions, textured paving, wheelchair ramps and raised crosswalks.
- (f) Highlight the pedestrian and cycling emphasis of the neighbourhood by establishing routes that relate to desire lines and are easy to follow. Provide pedestrian connections through the area, both within the East Campus Neighbourhood and into other adjacent campus areas.
- (g) Utilize the road standards described in the CCP for internal local roads, and ensure that design details such as paving, streetlights and street furniture match or complement those used on roads in the academic core. Ensure that street design considers the following performance criteria: safety, ecology, community building, aesthetics and long term investment in high quality materials.
- (h) Through these neighbourhood-based initiatives to reduce dependence on automobiles, help to minimize the volume of single occupant vehicles travelling to and from the UBC campus.

### **2.5.2 Relationship to Other Plans**

This neighbourhood plan is consistent with and provides additional detail to support other transportation related documents including the Official Community Plan, the Strategic Transportation Plan, the Comprehensive Community Plan, the Memorandum of Understanding, and the UBC Landscape Plan as detailed below.

- (a) The Official Community Plan (OCP) contains a variety of provisions relating to transportation demand management (TDM), illustrates an overall access plan for UBC, and provides details of road classifications and potential transit routings. This neighbourhood plan maintains the road classifications and reinforces the transit routing described in the OCP, and contains provisions to support TDM targets in the OCP.
- (b) The Strategic Transportation Plan (STP) lays out a comprehensive and integrated transportation demand management strategy. Policies in the STP include reduction of 24-hour single occupant vehicle commuter traffic volumes to and from UBC. The East Campus Neighbourhood Plan complies with and reinforces this strategy by emphasizing cycling and pedestrian access, and by providing housing on campus for the university community.
- (c) The Comprehensive Community Plan (CCP) builds upon the policies contained

within the OCP and STP. The CCP provides five key transportation principles:

- principles for orientation;
- principles for safety and convenience;
- principles for sustainable neighbourhood circulation;
- principles for transit; and
- principles for parking.

Circulation and access within the East Campus local area are based upon these key principles.

- (d) The GVRD/UBC Memorandum of Understanding (MOU) establishes further targets and actions to build on Transportation Demand Management success to date, in pursuit of the GVRD's goal of reducing SOV's by 20% and increasing transit ridership. This neighbourhood plan will support the MOU objectives.
- (e) The UBC Landscape Plan contains policies relating to entries, movement and wayfinding. Roadways within the campus constitute an important part of the landscape, as well as providing circulation routes.

### **2.5.3 Description of Road Network**

The OCP, STP and CCP designate Wesbrook Mall as an arterial road, and it will continue to function in this capacity.

Thunderbird Road, currently known as Thunderbird Boulevard, is designated as a collector road west of Wesbrook Mall. It will continue to be a collector road, but will be re-aligned and reduced in width. The new alignment will move Thunderbird Road closer to the Thunderbird Winter Sports Centre, on the alignment of the UBC road grid. A four-way signalized intersection will be provided at Thunderbird Road and Wesbrook Mall.

To the east of Wesbrook Mall, Thunderbird Road will be a neighbourhood collector road up to its intersection with Osoyoos Crescent. The suggested cross-section is indicated in Diagram ID-1 (neighbourhood collector with transit), in order to accommodate a possible future local bus route serving the Acadia/ Fairview neighbourhoods.

Agronomy Road will be constructed along an existing Right-of-Way between Wesbrook Mall and Western Parkway. It will be built to a local road standard, as per Diagram ID-2, with parking along both sides. Fairview Avenue will not have a road connection to the new intersection of Agronomy Road and Western Parkway. It will become a connection for pedestrians, bikes and emergency vehicles only.

A local road will be constructed at the south end of the neighbourhood, to provide access to the sorority/fraternity sites and to the townhouse site at the south end of this

neighbourhood.

All residential sites within the neighbourhood will obtain vehicle access to their underground parking from internal roads within the neighbourhood. No vehicular access directly to/from Wesbrook Mall will be permitted. Parking along Wesbrook Mall may be provided, and will be regulated by permits or meters.

#### **2.5.4 Pedestrians and Cyclists**

Pedestrian and cyclist routes and pathways between buildings in the neighbourhood will provide access. All local and neighbourhood collector roads also accommodate cyclists. Due to low traffic volumes and speeds, bicycles will use a shared travel lane, and no separation or bicycle markings are needed.

#### **2.5.5 Transit**

Wesbrook Mall is an existing bus route, providing direct access to the regional transit system. UBC also proposes future campus shuttle services that will link this neighbourhood to other areas of the university. Thunderbird Road is being designed to accommodate future transit.

### **2.6 Sustainable Community Strategies**

#### **2.6.1 Diversity**

This neighbourhood will be an inter-generational and multi-cultural community. Various housing types and forms of tenure will be provided, to accommodate those affiliated with the university as well as other residents. Both market and non-market housing is to be provided.

#### **2.6.2 Compact and Complete Community**

A fundamental aspect of a sustainable community is to use land efficiently and to create an urban form that encourages residents to walk, cycle and use transit. As a neighbourhood within the campus, East Campus will be part of a complete community, where recreation, education, culture, services, shopping, transit and even work are within easy walking distance.

The housing densities within this neighbourhood will promote efficient use of land. Several types of multi-family dwellings are proposed, with no single-family houses on individual lots. In addition to using land more efficiently, multi-family housing is also more energy-efficient, as there are fewer exterior walls. Smaller units, as proposed, also use less energy.

### **2.6.3 Transportation Choice**

The urban fabric of the neighbourhood will encourage alternate transport modes to the automobile. A well-connected pedestrian and cycling network is integral to the plan, as is easy access to transit.

Housing for those who work or attend classes on campus will significantly reduce the need for commuting. Those campus residents who commute to jobs off campus will have easy access to transit, in one of the best-served areas of the region.

### **2.6.4 Landscape**

The landscape of the public realm areas within the neighbourhood will focus on creating spaces and places that foster a sense of community and social interaction. Even the roads are designed to be social spaces. All landscape elements, including plant material and hard elements and surfaces, will be designed to balance the various aspects of sustainability, while maximizing the enjoyment of these facilities by residents.

The surrounding landscape offers abundant recreation opportunities, which will encourage people to walk or bike rather than using cars to access recreation. In addition to UBC's parks and open spaces, the forests and beaches of Pacific Spirit Park are within easy walking distance.

Stormwater management will be based on techniques which best support the objectives for groundwater. In areas where groundwater recharge is beneficial, and where the ground conditions allow, pervious surfaces will be encouraged. In areas where ground conditions are impermeable or where reduction of groundwater may be desirable, runoff will be handled via swales and underground pipes rather than encouraging infiltration. The results of a detailed aquifer analysis and ongoing groundwater monitoring will ensure that sustainable strategies for stormwater management are implemented.

Areas of the public realm may also be made available for community gardens to be administered by a neighbourhood association. In this way, the landscape can contribute to sustainable food production.

## **2.7 Staging of Development**

Development of the residential sites within this neighbourhood will be staged to coordinate with certain other activities, such as relocation of the users of the Mather Building, realignment of Fairview Avenue, and construction of works relating to the



proposed Olympic ice rinks. Plan P6 indicates the five building sites within the East Campus Neighbourhood.

Site 1 requires the construction of Agronomy Road, east of Wesbrook, which will only occur once an alternative access to Osoyoos Crescent is provided along Thunderbird Road. In order for Thunderbird Road to be built, the Mather Building users will need to be relocated and the building demolished. The revised intersection at Thunderbird and Wesbrook, and the realignment of Thunderbird west of Wesbrook Mall will also need to be completed. These improvements will occur in conjunction with the construction of the new Olympic rinks. Therefore, Site 1 will not develop until these other works are undertaken.

Site 2 is the "Park" area, and will be retained as a natural woodland. Some playground equipment, trail construction and landscape improvements can replace the Mather Building once it is removed.

Site 3 is the site for the new Triumpf House facility, and this can be completed in the short term. Although this site will front onto Wesbrook Mall, temporary vehicle access will be obtained from the driveway serving the Mather building, which will be eliminated after the extension of Thunderbird Road. Permanent access will be provided from the extended Thunderbird Road.

Site 4 occupies a portion of the Mather Building site and therefore can only be developed once the Mather Building is removed and Thunderbird Road is extended.

Site 5 can be developed in the short term, providing that the parking needs of the Mather Building can continue to be met, since development of this site will eliminate some existing parking needed by Mather Building users.

Site 6 can be developed in the short term, providing that the development on this site includes provision for underground parking to replace the current surface parking lot serving the Spirit Park Apartments.

### **3. DESIGN GUIDELINES**

#### **3.1 Supporting UBC Planning Principles**

All new development shall support the UBC principles for physical planning contained in "A Legacy and a Promise". The eight planning principles are:

Principle 1: The University Lands – As One

Principle 2: The Community – Vibrant and Ever-Changing

- Principle 3: The Experience – A Place to Remember
- Principle 4: The Environment – Incredible Riches
- Principle 5: The Endowment – A Legacy Retained
- Principle 6: The Perspective – A World Beyond
- Principle 7: The Opportunity – Global Leadership in a Changing World
- Principle 8: The Process – Open and Integrated

Designs for all buildings and spaces shall be evaluated to ensure that the objectives stated in the eight planning principles are satisfied.

## **3.2 Design Guidelines for Streets**

### **3.2.1 General Character and Intent**

Road designs shall be consistent with their function as multi-modal transportation and circulation routes. Road cross-sections, as per the CCP, are included in this plan as Diagrams ID-1 and ID-2.

### **3.2.2 Roadway and On-Street Parking**

Wesbrook Mall is an existing arterial road serving as a primary access route to campus. A new intersection is proposed at Thunderbird Road, and that intersection will provide the primary point of access to the new neighbourhood, along with the Fairview and Acadia neighbourhoods. An appropriate entry feature will be provided.

Along Wesbrook Mall, adjacent to the East Campus Neighbourhood, new sidewalks and pedestrian crossings shall be provided, along with a “marked wide curb lane” to accommodate bicycles. On street parking for residents and visitors will be considered.

Thunderbird Road east of Wesbrook will be a neighbourhood collector. Diagram ID-2 indicates a proposed cross-section for a neighbourhood collector with transit. Vehicles and bicycles are accommodated within a travel surface 8.6 metres wide, with parking along the south side, as it is further to the west in Hawthorn Place neighbourhood (Mid-Campus).

Agronomy Road, Fairview Avenue, and the access road next to the sorority site are local roads. The road cross-sections proposed are shown in Diagram ID-1. A travel surface of 6.0 metres is proposed which will ensure adequate width for vehicular traffic and cyclists. Parallel parking of 1.85 metres shall be provided on at least one side adjacent to the roadway, and shall be managed by either permits or meters.

In order to diminish the perceived width of local roadways, driving aisle surfaces shall be asphalt and parking surfaces a patterned concrete or pavers. Curb extensions and

extensive landscaping shall be used in order to create “pockets” of parking.

### **3.2.3 Sidewalks and Pedestrian Crossings**

Sidewalks shall be provided on all new roadways, as per Diagrams ID-1 and ID-2. The sidewalk treatment shall use UBC sidewalk standards.

The extension of Thunderbird Road will be a key pedestrian access point for this neighbourhood, as it will provide access to Thunderbird Park and a connection to the Main Mall Greenway.

Pedestrian crossings of Wesbrook Mall shall be provided through newly configured intersections at both Thunderbird Road and Agronomy Road.

### **3.2.4 Street Landscape**

Street trees planted in the boulevard shall be provided along both sides of all streets within the East Campus Neighbourhood. Tree selection shall provide sun in winter and shade in summer, to be consistent with goals for passive heating and cooling.

Along Wesbrook Mall, existing street trees in the boulevard and median shall be retained.

Streets and lanes should be considered and landscaped as an extension of the park, open space and greenway system. Landscape treatment, lighting and street furniture shall be provided to reinforce the strong pedestrian orientation of streets and evoke a park-like setting.

### **3.2.5 Street Lighting**

Street lighting shall be provided along streets within the East Campus Neighbourhood. Pedestrian lighting shall be provided along pathways. UBC light standards will be utilized.

## **3.3 Design Guidelines for Other Pedestrian / Bicycle Corridors**

### **3.3.1 Pathways**

Access routes between buildings, especially those fronting Wesbrook Mall, shall typically be provided on easements within the building sites. They shall provide safe routes for both pedestrians and cyclists, and shall be lit at night. (See Sections 3.4.10 and 3.4.11.)

## **3.4 Design Guidelines for Buildings**

### **3.4.1 General Character and Intent**

- a) East Campus presents an opportunity to create a “university town” neighbourhood, providing a diversity of housing and integrating with the academic, residential and recreational fabric of the campus.
- b) Although residential, East Campus will feel connected to both the site and the mission of the university. The campus setting is a strong element in creating a sense of place; building design shall respond to this distinctive environment. A vibrant community will be supported by its natural and built environment.
- c) East Campus Neighbourhood lies adjacent to substantial student and faculty housing complexes and sports facilities. Building form shall facilitate social interaction and community building amongst the residents of the neighbourhood and surrounding areas.

### **3.4.2 Siting and Orientation**

- (a) Building design shall fit with the natural topography of the land, and to the extent possible, shall accommodate retention of existing significant trees.
- (b) Buildings shall be designed, through setbacks and orientation, to optimize sunlight exposure wherever possible.
- (c) The relationship of the buildings to the streets and to the pedestrian and cyclist paths is a primary consideration in the design of the buildings. The design shall ensure that as many ground-oriented units as feasible have direct access from the street in order to contribute to an animated streetscape.

### **3.4.3 Massing**

- (a) Within the overall building envelopes shown in this plan, consideration should be given to setbacks, orientation, and other techniques to minimize overshadowing onto neighbouring site and developments.
- (d) Buildings shall be massed and articulated to incorporate a strong base. Taller buildings may utilize setbacks at the upper floors to reduce visual impact and shadowing. Use of dormers and stepped rooflines will be encouraged, to reduce apparent building mass at the upper stories.

### **3.4.4 Building Style and Architecture**

- (a) No specific design theme is envisioned for the neighbourhood, however building style and architecture must evoke a sense of permanence, durability, high quality and should incorporate elements of style which complement the west coast setting and climate.
- (b) Buildings shall be designed to address the potential technical and physical issues particular to west coast climatic conditions, in order to ensure durable structures.
- (c) Consideration should be given to incorporating appropriate flexibility and adaptability to facilitate future changes in use and technology. An example of a space where flexibility may be appropriate would be ground floor residences in areas where future commercial use might be contemplated. With regard to changing technology, the wiring for buildings could be designed to accommodate retrofits as technological innovations occur.

#### **3.4.5 Materials**

- (a) Exterior finishes and detailing on all buildings shall be of durable quality suitable to our west coast climatic conditions.
- (b) Building materials with low environmental impacts shall be considered if economically feasible. This could include recyclable materials, locally sourced products, materials with recycled content and materials with low embodied energy (i.e. materials with low requirements for energy use in their manufacture and transport). Sections 3.4.12 and 3.4.13 provide further guidelines for “green” buildings.

#### **3.4.6 Parking Access**

- (a) Parking garage access doors and ramps shall where possible be incorporated within the profile of the building and their impact on the streetscape softened through the use of screening, trellises, planters or other landscape elements. Where possible, garage access shall be at the rear, or the least visible elevation of the building, but shall nonetheless be as well designed as other building facades. No direct access to parking shall be provided from Wesbrook Mall.
- (b) Access to any off-street surface parking shall incorporate landscaping to minimize the visual impact of hard surface and to screen parking areas.

#### **3.4.7 Recycling and Garbage Facilities**

Recycling and garbage holding must be provided within the building envelope of new buildings, except for townhouse buildings where a screened exterior location may be

permitted.

### **3.4.8 Building Signage**

Building signage must be properly integrated within the building design or landscape design. For the provisions of emergency safety services, signage should be easily viewable by pedestrians and motorists. Signage illumination shall be front-mounted, warm lamp sources projected onto the sign face.

### **3.4.9 On-Site Landscape**

- (a) The landscape character of new developments shall respect and be responsive to existing adjacent landscape.
- (b) Landscape design should consider view management. Low level planting adjacent to public pedestrian areas in conjunction with proper lighting will enhance a comfortable, and safe public environment. (See also Section 3.4.11)
- (c) Landscape features shall mark entry points and special places.
- (d) The landscape shall be suited for west coast climatic conditions and designed for low requirements for watering, maintenance, and herbicide and pesticide use.
- (e) Existing healthy tree specimens shall be retained wherever possible. Fences shall be minimized and when used, shall be in small sections to provide privacy and screening. The use of hedges and shrubs to define pathways and edges should be considered.

### **3.4.10 Lighting**

For safety reasons, an adequate light level on public streets and walkways shall be maintained. Where possible, pedestrian level lighting along pedestrian routes shall be installed and lighting shall be predominantly low-level, energy efficient fixtures.

### **3.4.11 Safety and Security**

The design of each development shall use Crime Prevention Through Environmental Design (CPTED) principles when designing buildings and landscapes:

- residential buildings shall be designed to overlook the streets, parks, walkways and private open spaces;
- lobbies and entries shall be visible as they are approached;

- indoor common areas should be placed adjacent to outside common areas or overlooking the street to improve overall surveillance;
- fences and walls adjacent to the sidewalk should be designed to ensure some view of the building from the sidewalk, without sacrificing unit privacy, to promote casual neighbourhood surveillance; and
- landscaping shall be designed and located to enhance security.

### **3.4.12 Green Building Guidelines**

- (a) A goal of this Neighbourhood Plan is to encourage and promote innovation in the design and construction of buildings, in order to achieve the following objectives:
- reduce energy consumption
  - ensure long life for buildings
  - ensure high indoor air quality
  - use resource efficient materials
  - conserve water
  - reduce waste
- (b) Green building design is an evolving science, and new technologies and materials are regularly introduced. Programs to promote green buildings should also be flexible and evolve over time, in order to implement the sustainability objectives of this plan.
- (c) This neighbourhood is part of a campus community that is committed to effective and practical sustainability initiatives. The OCP and CCP call for a community where the urban form, transportation choices and social fabric are inherently sustainable. This foundation of a sustainable community provides unique opportunities for green building initiatives:
- The university location fosters research and innovation. Academic and industry research conducted on campus has long been a source of new technology. The university will continue to encourage technological innovation and promote the use of sustainable building practices in the development industry.
  - Housing built by the university will demonstrate economically feasible new technologies and help promote market acceptance. Longer term monitoring of energy use, costs and consumer acceptance is possible in housing owned by

UBC.

- The overall marketing strategy for campus neighbourhoods will emphasize the sustainable benefits of campus living, and foster an awareness and a desire for homes which are designed and built to be “green”.
- Consumers moving to campus neighbourhoods will likely have a greater propensity to demand buildings with enhanced sustainability. Builders and developers will be encouraged to meet this demand, since buildings that accommodate consumer preferences have a natural market advantage.
- The university is in the process of adopting a form of certification to promote sustainable building practices (see Section 3.4.13).

### **3.4.13 Sustainable Building Rating System**

- (a) A sustainable building rating system is in the process of being implemented for application within the neighbourhood. The rating system is based upon “LEED” (Leadership in Energy and Environmental Design), customized for local conditions and the University situation. Characteristics of the rating system are:
- Ratings will be based upon a points system.
  - In order to qualify, projects must meet some initial criteria and other measures are optional (with points assigned).
  - The rating system will be market driven with a minimum required standard.
  - The rating system is currently known by the acronym of EAP (Environmental Assessment Program).
  - It is anticipated that EAP will be in effect prior to the construction of buildings within this neighbourhood.

## **4. DEVELOPMENT CONTROLS**

### **4.1 Overview**

As described in Section 1.2.1, the Neighbourhood Plan establishes a detailed plan for the East Campus Neighbourhood and contains criteria for evaluating development proposals. The development controls described in this section provide an overall view of the



general controls determined for this neighbourhood.

#### **4.2 Development Handbook**

The UBC Development Handbook contains general regulations that apply to development within this neighbourhood. The provisions in the sections 4.3 through 4.8 are based on definitions as contained in the UBC Development Handbook.

#### **4.3 Building Envelopes**

Site boundaries and the maximum extent of building envelope are indicated on Plan P-6. Buildings can be situated within these sites based on the provisions of this neighbourhood plan. Actual building siting will be determined at the Development Permit stage.

#### **4.4 Height**

Within the overall height framework determined for the East Campus Neighbourhood, height limits for each parcel have been outlined. The height maximums for each lot are indicated on Plan P-6.

#### **4.5 Setbacks**

Minimum setbacks are indicated in general form on the land use plan (Plan P-6). Specific setbacks for each site will be established in tender documents, and enforced through the Development Permit process.

Relaxations for elements such as fireplaces and bay windows may be permitted within setbacks up to a maximum of 24 inches.

Overhang roofs and pitched roofs are permitted to extend into setback areas in order to encourage their use without penalty.

#### **4.6 Site Coverage**

Site coverage will be specified for each site by development permit. No site shall exceed 50% coverage, in order to provide appropriate open space and landscaping within the neighbourhood.

#### **4.7 Vehicular Parking**

Underground or covered off-street parking is generally required for new buildings within this neighbourhood. Limited on street parking may also be available for resident and

visitor use by means of permits, meters or other such controls. The extent to which on-street parking may be used as part of the parking allocation for each site will be determined by the Development Permit, and will depend on the extent of adjacent street frontage and other factors.

A primary element of this neighbourhood will be its reduced reliance on automobile use. Vehicular parking standards will comply with the CCP and the Strategic Transportation Plan, and shall not exceed the maximum standards in those documents. The standards for market residential units are further reduced in this neighbourhood, to reflect the smaller unit sizes which are likely to be provided, and to ensure that parking ratios are related to unit size.

a) Market Residential:

- (i) Apartment Units [see also clause (ii)]:
  - Maximum of 1.0 space for each 70m<sup>2</sup> (753 ft<sup>2</sup>) of gross floor area, or 1.8 stalls per unit, whichever is less.
  - 0.1 spaces per unit for visitor
  - 0.1 spaces per unit for handicap, relaxed for handicap units
- (ii) For all buildings where resident parking is provided in a common parking garage or area:
  - one parking space per unit may be included within the base purchase or rental price for a dwelling unit; and
  - a second parking space may be made available to building residents for an additional payment or fee. A second space shall not be included in the base purchase or rental price.

b) Non-market Residential:

Faculty/staff – 1.0 stall per unit, a portion of which may be on the street

Single student – 0.25 stalls per bed (maximum)

Family student – 0.8 stalls per unit, plus up to 0.2 stalls shared if needed (maximum)

Visitors – 0.1 stalls per unit (maximum)

- minimum 1 parking stall per 50 units for a cooperative auto network/shared vehicle parking stall
- Neighbourhood Electric Vehicle (NEV) and Natural Gas Vehicle (NGV) recharging outlets at each building.

## 4.8 Bicycle Facilities

Parking requirements for bicycles are contained in Section 7.6 of the UBC Development Handbook.

## **5. INFRASTRUCTURE AND SERVICING**

### **5.1 Overview**

All services for East Campus Neighbourhood are being designed in accordance with a campus-wide Master Servicing Plan (MSP), prepared in conjunction with UBC Utilities. The goal of the servicing plan is not only to service newly developing areas, but to rectify deficiencies and limitations of the current systems.

### **5.2 Drainage**

East Campus straddles the drainage divide between the north and south catchment areas. The majority of the land drains to the south, while the portion close to Agronomy Road drains to the north.

The north catchment area flows to the GVRD's spiral drain located near Cecil Green Park. It is proposed that a second outfall be added for the north catchment area to accommodate demand beyond existing capacity. The small area of East Campus that drains to the north will not affect the current outfall. Pipes draining north along Wesbrook Mall are adequately sized to accommodate design flows, and a new pipe with capacity for 10-year storm flows will be provided along Agronomy Road east of Wesbrook Mall.

The south catchment area flows to an existing outfall within Pacific Spirit Regional Park to the south of the campus. This outfall is presently experiencing problems with erosion and mitigation measures must be taken. The recommended option is for all or part of the flow in the south catchment area to be diverted to a new biofiltration ditch proposed for the east flank of SW Marine Drive, leading to a proposed new outfall to the Fraser River. This outfall would be a conduit down the slope through Pacific Spirit Park, and could be a combination of vertical spiral drain and tunnel. This outfall would be situated at the south end of the campus, and could replace three outfalls which currently drain over the cliffs and cause erosion.

With regard to onsite drainage works in East Campus, analysis has indicated that the following principles should be followed:

- Generally, stormwater will be collected through intakes, lawn basins and roof drains and conveyed in pipes to the low point in the neighbourhood.
- Typically, infiltration will not be appropriate due to the impermeability of the glacial till comprising the upper soil layer. In some locations where the till layer is thinner,

it may be possible to implement groundwater infiltration. This could reduce the amount of water entering the piped system, but would not likely reduce the peak flows or allow for reduced pipe sizes.

- Infiltration would not be particularly beneficial nor harmful to the subsurface aquifer, so there is no hydrological basis to either encourage or discourage groundwater recharge.

The onsite system within East Campus and south along Wesbrook Mall will be designed for the 10-year storm, with 100-year flow routing by way of roads, swales or pipe. The downstream system through South Campus, including pipes, biofiltration ditch and outfalls, would be designed to accommodate the 200 year peak storm event.

Any changes to UBC's stormwater management are to be reviewed through the GVRD-UBC cliff erosion management process. Development proposals are to be prepared and reviewed in context with the principles, considerations and actions identified in the management plan. Any works proposed within Pacific Spirit Park will need to be approved by the GVRD Park Committee and GVRD Board. Any proposed works affecting the Fraser River shoreline will be reviewed by FREMP.

### **5.3 Sanitary Sewer**

As with the storm sewers, the sanitary sewers serving East Campus flow to both the north and the south. An existing main in Wesbrook Mall conveys sewage north from approximately Thunderbird Boulevard. Another main, also in Wesbrook Mall, conveys sewage south from this point. The onsite sewers to serve new buildings within East Campus will be connected to these existing mains on Wesbrook Mall. Therefore, the high-rise site will drain to the north catchment area, and all other sites in the neighbourhood will drain to the south catchment area. Both sewers ultimately drain to GVS&DD sewer interceptors leading to the regional sewage facility on Iona Island.

A comprehensive strategy for upgrading of sanitary sewer mains has been prepared by consultants in conjunction with UBC Utilities, and is included in the MSP. Upgrades are required as development of CCP areas proceeds, but the East Campus area will not trigger these upgrades.

The proposed development in East Campus Neighbourhood is not anticipated to trigger any upgrade requirements to either the GVS&DD interceptor sewers or within the City of Vancouver.

### **5.4 Water**

The water distribution system for East Campus is being designed within the context of a

campus-wide strategy for water distribution, included in the MSP. Water demands for all uses on the campus have been projected and a computer model analysis performed. A comprehensive program of water network improvements is being implemented, but no particular upgrading is triggered by development of the East Campus Neighbourhood.

## **5.5 Infrastructure Maintenance**

A maintenance jurisdiction plan is being developed to define operational and funding responsibility for maintenance of infrastructure elements including roads, sidewalks, landscape areas, trees, street furniture, lighting, signage and related services.

## **6. COMMUNITY FACILITIES**

### **6.1 Community Facilities**

The Official Community Plan contains a requirement to provide a community centre in South Campus. The OCP specifies a size requirement and timing for construction of that facility.

### **6.2 University Neighbourhoods Association**

A new organization referred to as the “University Neighbourhoods Association” consisting of elected residents and university representatives is proposed for new residential neighbourhoods on the campus, including the East Campus Neighbourhood.

A contribution from the service levy for new residential development is intended to be managed by the Association, to pay for those community services to be undertaken by the Association. This concept will be refined through a process parallel to enactment of this neighbourhood plan. The University Neighbourhood Association is intended to be functional as new residents move into the neighbourhood.

### **6.3 Community Services**

#### **6.3.1 Health, Safety and Education**

The UBC campus is currently served by a variety of services related to health, safety and security, fire protection, education, and other essential services. These are generally provided by other parties (e.g. R.C.M.P., Vancouver School Board, etc.) UBC will work with the providers of these services, and new services as required, to ensure that additional capacity is provided at appropriate times to match increases in the campus population.

#### **6.3.2 Social Services**

Some social services such as day care are provided on campus by the University. Other services are provided by volunteer associations and other service providers. UBC will continue to work with the various parties to ensure that appropriate additional social services are provided, in order to meet residents needs as growth occurs.

## LIST OF PLANS

Cover	Oblique Aerial Photo UBC. Campus – East Campus Neighbourhood Location
P-1	UBC Campus Plan showing eight local areas for neighbourhood planning
P-2	East Campus Neighbourhood – Aerial Photo Campus Context
P-3	Roads Context for East Campus Neighbourhood
P-4	Transit Context for East Campus Neighbourhood
P-5	Open Space Context for East Campus Neighbourhood
P-6	Land Use Plan
P-7	Neighbourhood Open Space and Connections
P-8	Illustrative Plan

## **LIST OF ILLUSTRATIONS AND DIAGRAMS**

- ID-1 Collector Road Cross-Sections
- ID-2 Local Road Cross-Sections



**TABLE A****OVERALL LAND USE, DENSITY CALCULATIONS  
AND TYPE OF UNITS****FOR THE EAST CAMPUS NEIGHBOURHOOD LOCAL AREA**

Residential Land sq.m. (net)	Floor Space Ratio <sup>1</sup> (Residential Average)	Gross Buildable Area (sq.m.) <sup>2</sup> (Residential)	# of Units
<b>16,157</b>	<b>1.59</b>	<b>25,661</b>	<b>276</b>

Useable Neighbourhood Open Space <sup>3</sup>	# of Rental Units (Minimum)	# of Units for Purchase (Maximum)	Ground Oriented Units (Minimum)	Estimated Population
<b>12,000</b>	<b>193 (70%)</b>	<b>83 (30%)</b>	<b>55 (20%)</b>	<b>552</b>

**NOTES FOR TABLE A:**

1. Floor space ratio (FSR) is the ratio of building floor area to the area of the building site. All FSR calculations are based on net site area as defined in the OCP
2. Gross buildable area (GBA) is the net site area multiplied by the permitted FSR.
3. For details of Open Space, see Plan P-7.