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## UBC Okanagan Design Guidelines

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# 1 INTRODUCTION

## Purpose

The *UBC Okanagan Design Guidelines* (The Guidelines) are provided as a compulsory design reference tool for use in the design of all future facilities on the University of British Columbia (UBC) Okanagan Campus.

The Guidelines are supplementary to the approved *UBC Okanagan Campus Master Plan* (The Master Plan) prepared by Phillips Farevaag Smalberg in association with Kuwabara Payne McKenna Blumberg in 2005. The Guidelines refine the Master Plan's broader planning and design principles, and have also incorporated additional design ideas derived from recent consultation with the UBC Okanagan Campus community.

These Guidelines will help designers eliminate time-consuming and expensive guesswork on more detailed questions such as build-to-lines, exterior light fixtures and furnishing standards, street tree selection or paving materials on major walkways and courtyards. Standards, criteria, and detailed specifications are outlined where appropriate. Special treatment, ceremonial and gateway opportunities are identified, and preferences are documented in terms of roof lines, building massing, and material palettes. The more detailed design direction of the Guidelines promotes cohesion and consistency across the campus, while still allowing enough flexibility to ensure architectural delight and innovation remain possible on each project.

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The guidelines are intended for use by:

- Project managers and designers embarking upon new campus projects
- Campus and Community Planning staff reviewing projects
- Members of the UBC Board of Governors and any interested faculty, students or staff seeking convenient reference to the design standards for the UBC Okanagan Campus.



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## Guidelines Development & Community Consultation

Preparation of the UBC Okanagan Design Guidelines was coordinated by the Campus and Community Planning Department of UBC. Guidance and oversight was provided by the UBC Okanagan Campus Design Guidelines Steering Committee, comprised of the following representatives:

- Associate Vice President Planning, UBC (Chair), Nancy Knight
- General Manager, Housing and Conferences, UBC Okanagan, Shannon Dunn
- Associate Vice President Operations, UBC Okanagan, Aidan Kiernan
- UBC Okanagan Senate Representative, Scott Reid
- Deputy Vice Chancellor Executive Committee Representative, Dean Bauer
- Vice President UBC Properties Trust, Joe Redmond
- Manager Development Services, Campus and Community Planning, UBC Lisa Colby

Professional design expertise, research, workshop facilitation and authorship of the guidelines have been provided by Ramsay Worden Architects in collaboration with Perry and Associates Landscape Architects. Updated campus community input was invited through two workshops and an Open House. These events attracted participation and ideas from various members of the UBC Board of Governors, UBC Okanagan Senate, UBC Okanagan Deputy Vice Chancellor Executive Committee, faculty, staff and students.

## UBC Okanagan Masterplan Context

The *UBC Okanagan Campus Master Plan* prepared by Phillips Farevaag Smallerberg in association with Kuwabara Payne McKenna Blumberg was adopted by the UBC Board of Governors in 2005 and forms the current development policy context for the campus. It is founded on the academic and program requirements identified in the UBC Okanagan Campus Academic Plan and extensive consultation with the campus community. The Master Plan identifies facilities and infrastructure anticipated to the year 2010, their proposed general locations, and general planning and design principles.



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The Masterplan describes an overall design vision that weaves the new facility requirements into a uniquely beautiful Okanagan landscape and between the existing built infrastructure components. It choreographs a mingling and mixing of students, faculty and disciplines through its core framework of interconnected walkways, streets, open spaces, courtyards and internal social spaces. Siting and orientation of all new development projects is designed to hinge on this organizing social and circulation framework to ensure that institutional buildings engage with each other, that the rhythms and energies of campus life flow throughout, and that the campus becomes a memorable place.

At the time of the Master Plan approval, the Board of Governors recognized more detailed design work was required and directed staff to prepare a set of design guidelines to help bridge the gap between the broader principles of the Master Plan and the detailed project design decisions that would be required on a given project. The UBC Okanagan Design Guidelines now provide that additional layer of design guidance while remaining fully consistent with the vision and principles of the Masterplan.

## Organization

*The UBC Okanagan Design Guidelines* are organized into three main design categories:

**Section 2: The Overall Campus Experience**, provides maps and guidelines that reinforce the character and structure for the larger campus framework, including direction on gateways, ceremonial routes, outdoor spaces and the connecting loop road and pathways throughout campus.

**Section 3: Architectural Design Guidelines**, addresses building massing, materials, colours and sustainable design for campus architecture.

**Section 4: Landscape Design Guidelines**, provides guidance on campus-wide landscape treatment.

The document also provides two critical reference sections:

**Section 5: Key Plans**, provides colour-coded geographical references to special treatment areas on select themes such as Street Trees, Paving, Lighting and Exterior Public Art locations. Applicants can see at a glance where their site fits into design treatment hierarchy on these subjects.

**Section 6: Component Catalogue**, provides detailed catalogue specifications and lists of the various components that designers will need (i.e. tree or shrub species lists, site furnishing, tree grate, bike rack, and light fixture specifications).

There will also be a need over time to amend this document to reflect shifted policy, updated specifications, expanded or revised plant lists and so on. Future endorsed changes of this nature will be organized into an appendix to this document entitled "Appendix A - Revisions". Project managers and designers should always check with UBC Campus and Community Planning to confirm whether an "Appendix A - Revisions" has yet been endorsed and obtain the latest copy for reference along with these guidelines.



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## Design Review Procedures

All new buildings, additions and significant exterior campus projects must submit plans for review by Campus and Community Planning, prior to Board of Governors consideration. Plans will be reviewed for consistency with these *UBC Okanagan Design Guidelines* and other Board-approved policies including the:

- *UBC Okanagan Campus Master Plan*
- *Trek 2010*
- *Infrastructure Servicing Plan*
- *UBC O Wildland Fire Management Plan*
- *A Legacy and a Promise: Physical Planning Principles at UBC*
- City of Kelowna Zoning Regulations
- Transport Canada Height Regulations

As part of the design review, Campus and Community Planning will refer projects to the University Architect and UBC Okanagan Campus executive body for comment. The results of the planning review along with other relevant project information are then forwarded to the UBC Board of Governors for final design and funding approval.

Relaxations to the *UBC Okanagan Design Guidelines* will be considered where justified. Applicants should submit such requests to Campus and Community Planning along with reasons supporting the proposed alternatives.

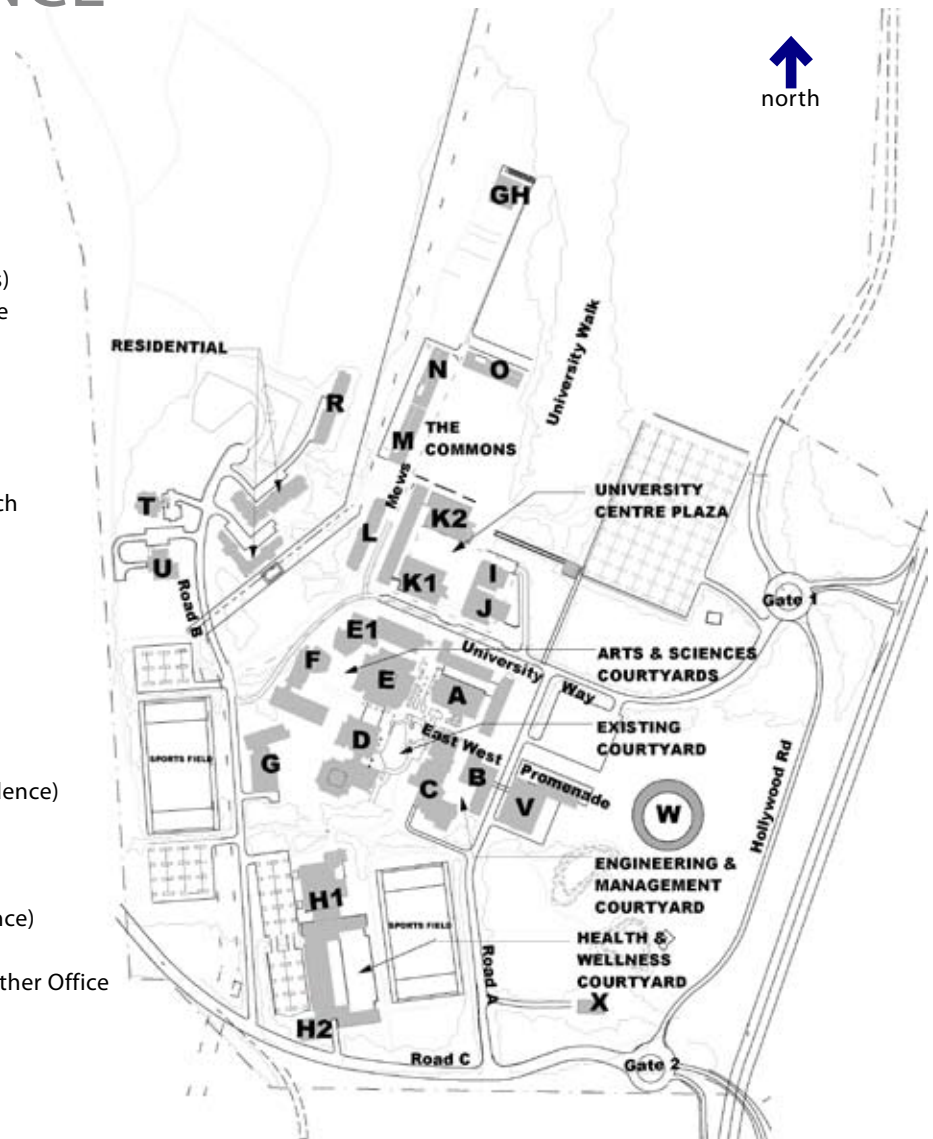
All project designers are encouraged to consult with UBC Campus and Community Planning prior to commencing design plans to ensure a full understanding of the context and design issues for a given project.



## 2 THE OVERALL CAMPUS EXPERIENCE

### Legend:

A	Library (Learning Commons)
B	Possible Future Building Site
C	Student Services Centre (University Club)
D	Arts Building
E	Sciences Building
E1	Charles E. Fipke Centre for Innovative Research
F	Arts and Sciences Building
G	Fine Arts
H1	Health and Wellness (Gym)
H2	Health and Wellness Tower
I	Lecture Theatre
J	Drama Theatre
K1	University Centre South
K2	University Centre North
L	Dormitory (Kalamalka Residence)
M	School of Education
N	Academic
O	Scholar's Retreat
R	Dormitory (Valhalla Residence)
T	Daycare
U	Operations / Mountain Weather Office
V	Engineering / Management
W	Gathering Place
X	Maintenance
GH	Research Greenhouses



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### Using Building Form to Reinforce and Support the Master Plan Open Space Structure

The UBC O Campus Master Plan is conceived as a varied network of social spaces, both indoor and out, with the goal of creating the richest possible environment for learning and teaching. The social life of the campus is to be contained equally within the buildings and the open spaces that knit the campus together; therefore, the design of buildings and open space is highly inter-dependent.

This section deals with the ways that individual elements can support the overall structure of the Master Plan with the goal of ultimately creating a vibrant and cohesive social environment.

Design teams should thoroughly review and understand the Master Plan before proceeding with design work. The Master Plan contains specific design directions for many of the buildings. For convenience, those building specific directives have been consolidated and are found in Key Plan 5.5 of this document.



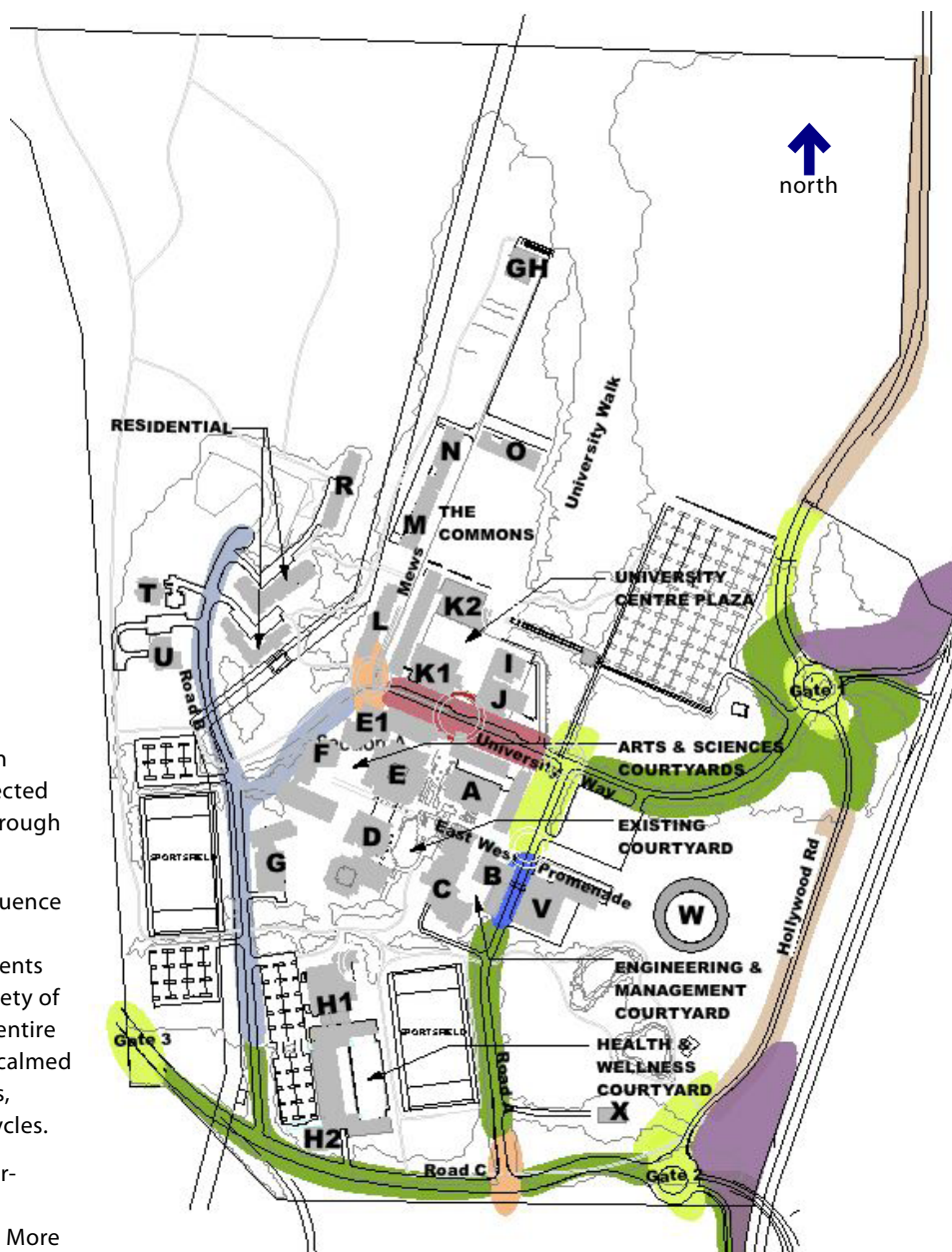
## 2.1 CAMPUS ARRIVAL AND ACCESS

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This plan indicates the main character zones to be respected along the vehicular loop through campus.

The arrival and journey sequence through UBC O campus is a choreographed series of events and experiences with a variety of landscape characters. The entire ring road should be traffic-calmed to safely accommodate cars, buses, pedestrians and bicycles.

A description of each colour-coded zone is provided in Section 2.1.1 through 2.1.8. More detailed information on planting lists, paving, lighting, exterior public art locations, materials and furnishings can be found in Sections 3, 4, 5 and 6 of this document.



### Legend:

	Ponderosa Pine Forest		Okanagan Grassland
	Orchard-like Bosque		University Way High Street
	Threshholds		Engineering and Management Gateway
			Semi-urban Streetscape

Refer to page 9 for Building Legend



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### 2.1.1 Campus Gateway

The Gateway experience at UBC O is to be achieved through a layered approach, employing the following family of components, located in specified zones as shown on the Key Plans specified in the guidelines below. The family of elements includes, a signature contour wall, schematic entry monument with bench, and a specific planting scheme and palette.

The experience of arrival at UBC Okanagan will be of engaging with the Okanagan landscape, beginning with encountering distinctive fragments of wall along Highway 97 and through the future research area. Within this experience, the roundabouts announce a distinct threshold; however the “gateway” is designed to be the integrity of the entire landscape that defines the eastern edge of the university.

- a. Repair the Entry Fore-court Grassland: The sloping grassland that looks out across the valley serves as a fore-court for the Campus. The first step in the gateway development will be to repair and extend this grassland so that it flows throughout the entire fore-court area. This entry experience begins at Highway 97.
- b. Repair the Forest Edge: The fore-court is bordered by remnant stands of Pine forest, showing signs of Beetle damage. The second step in the gateway development then is to enhance and repair this forest incrementally with young pine and fir species, intermixed with the occasional aspen. This new forest will create a frame for the fore-court and extend to Highway 97 so that the sense of place will be apparent even for passers by.
- c. Introduce Architectural Structure: Structure will be used to emphasize and bring the landscape into focus. Memory will also be used, through repetition – starting at hwy 97, to help pull this large landscape together. Cutting into the soil, and retaining it will allow the profile of the rolling land to be revealed, in the same way that a river cuts through a landform, and reveals the layering of history in it’s banks.
  - i. Walls: This landform history will be highlighted through installation of fragments of a low sinuous wall constructed of local stone and concrete layered as in an eroded river bank. The use of a continuous flow of words embedded in the wall will speak to aspirations of higher learning in the region and to the past and future of UBC. These inscriptions could be chosen through a consultation process or competition.
  - ii. Custom Benches/Sculpture: Benches will be added at strategic intervals to allow for resting places for pedestrians in the Gateway zones. One sample custom bench (see fig. 5.6 for location) is developed to be evocative of first nations constructs such as fishing weirs, and basketry (see conceptual design, fig. 5.6.1-5.6.3). This strong vertical element, robust but carefully detailed and finished, will signal the direction north along Hollywood road from the first round-about, and will include identification signage cast into the concrete base. Other custom bench designs might also be considered.



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- d. **Special Entry Planting Scheme:** A bosque of Ornamental Cherry trees adjacent to the north and south ends of Hollywood references the fruiting orchards and provide a visual contrast to the surrounding naturalized landscape. The orchard-like trees provide the iconic expression of the Okanagan and identify the campus as a special place. The springtime blooms will be seasonally appealing, and may greet the first summer term students or visiting prospective students. The geometric planting pattern of trees planted at 6m on centre will offer interest to the passer-by. See Reference plan 5.8 and 5.8.1
  - e. **Special Entry Signage:** Special signage announcing arrival at UBC occurs at various locations and scales.
    - i. All UBC Campus identification signage shall be restricted to the zones shown on the Special Entry Signage Plan (fig. 5.7) and shall be consistent with character guidelines in Section 2.1.1
    - ii. Identification signage is written into Wall 1 (see fig. 5.5.1) along the shoulder of Hwy 97, south of the overpass, as well as in the entry monument (see fig. 5.6.1-5.6.3) and on Wall 6.
    - iii. A lit pylon sign previously purchased by UBC O is to be located where shown on plan 5.7. This sign will be visible from a distance.
    - iv. UBC wayfinding signage in the special zones on Plan 5.7 must be approved and demonstrate compatibility with other gateway features and sight lines.
    - v. No 3rd party commercial signage shall be permitted in the Special Signage Zones.
    - vi. See UBC O Design Guidelines Section 4.5 for sign guidelines on the remainder of the campus.
  - f. **Artful Lighting:** Low level lighting should be added to illuminate the trees and walls at each wall location, in accordance with UBC O Design Guideline Section 6.4.
  - g. **Future Gateway Points:** In future, when the Glenmore Connector and Hollywood road extensions are completed, additional gateway features demarcating entry to the campus from the north and west are recommended. Future detailed design for these entry features and associated landscape, should be similar to and within the same design family as the primary entry way signature pieces currently proposed for the north and south roundabouts and the Highway 97 flyover. All designs or design modifications on signature entryway pieces will require approval by UBC Campus & Community Planning.



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### 2.1.2 Ponderosa Pine Forest

- a. The native Ponderosa Pine forest in these areas will reflect the Okanagan landscape character. Trees should consist of predominantly Ponderosa Pine, with components of Douglas Fir and Spruce mixed in. The percentage of the mix should vary over time as necessary to respond to the Pine Beetle or other epidemic infestations.

The areas between tree groupings in this zone should be dominated by native grass species. (See 2.1.5 Okanagan Grassland)

Shrub and herb species should be planted mostly below trees and include:

- *Balsamorhiza sagittata* (Arrow-leaved Balsamroot)
- *Amelanchier alnifolia* (Saskatoon)
- *Achillea millefolium* (Yarrow)
- *Crepis atrabarba* (Slender Hawksbeard)
- *Astragalus miser* (Timber Milk-vetch)
- *Antennaria microphylla* (Rosy Pussytoes).

- b. The forest is to be managed according to the *Wildland Fire Management Plan*, as follows:

- Dead trees are to be removed.
- Tree limbs which overhang building roofs or grow under building eaves are to be removed.
- Stands are not to be planted/thinned evenly, but should produce canopy gaps and openings.
- Trees are to be planted in clumps that are spaced 20-30 meters apart.



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### 2.1.3 Orchard-like Bosque

- a. The first threshold to the campus core is to be in the form of an orchard-like bosque. Fruiting trees are preferred; however, if they are not available, the trees should have similar characteristics such as deciduous, medium size and preferably flowering.

### 2.1.4 Thresholds

Threshold points are important in campus wayfinding and should be distinctive. Acknowledge thresholds through signage and planting treatments.

- a. Plantings at thresholds are to be visually interesting, mixing leaf colour and textures (See Section 6.1 and Section 6.2 for species options).
- b. Threshold areas should contain wayfinding signage (See Section 4.5).

### 2.1.5 Okanagan Grassland

- a. The future road linking the North and South Gates will pass through the native grassland that forms the “forecourt” for the campus. This area should be kept clear of trees, services and visual clutter to maintain its character and the views beyond.

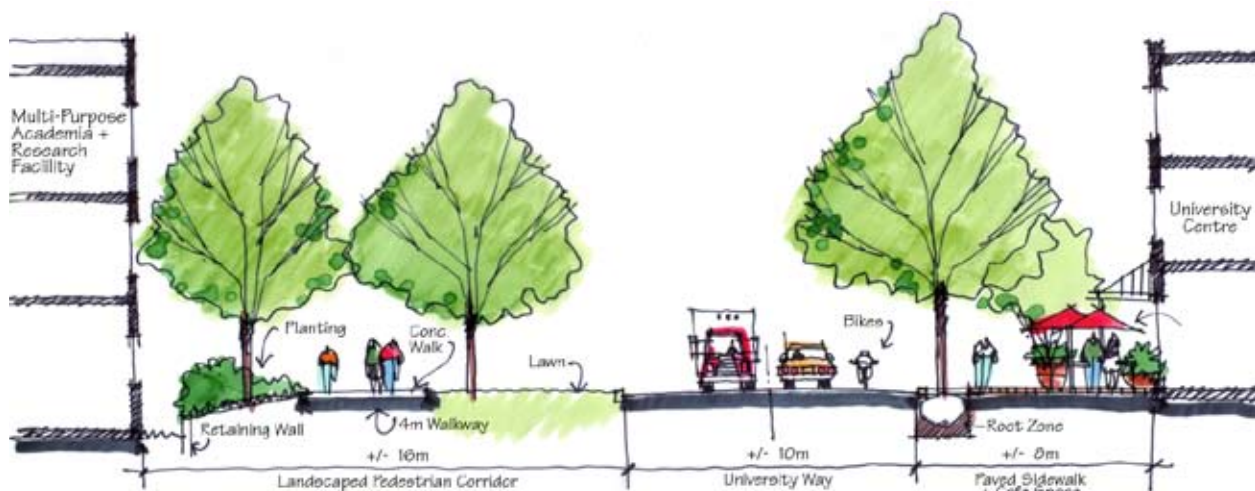
Areas in this zone should be dominated by native grass species including:

- *Agropyron spicatum* (Bluebunch Wheatgrass)
- *Festuca* spp. (Rough or Idaho Fescue).



### 2.1.6 University Way High Street

- This area is envisioned as an active crossroads with retail and service outlets, especially in front of Building K. The area is enlivened by sidewalk café seating and by automobile drop-off and short term on-street parking.
- Sidewalks, boulevards, street trees, and vehicular lanes shall be configured as outlined below in Section A
- Planting is to be formal with multiple rows of trees and lots of seating.
- Sidewalks are to be on both sides of the street.
- Further information on landscape treatment within this area can be found in the open space plan and related legend.



Section A - University Way

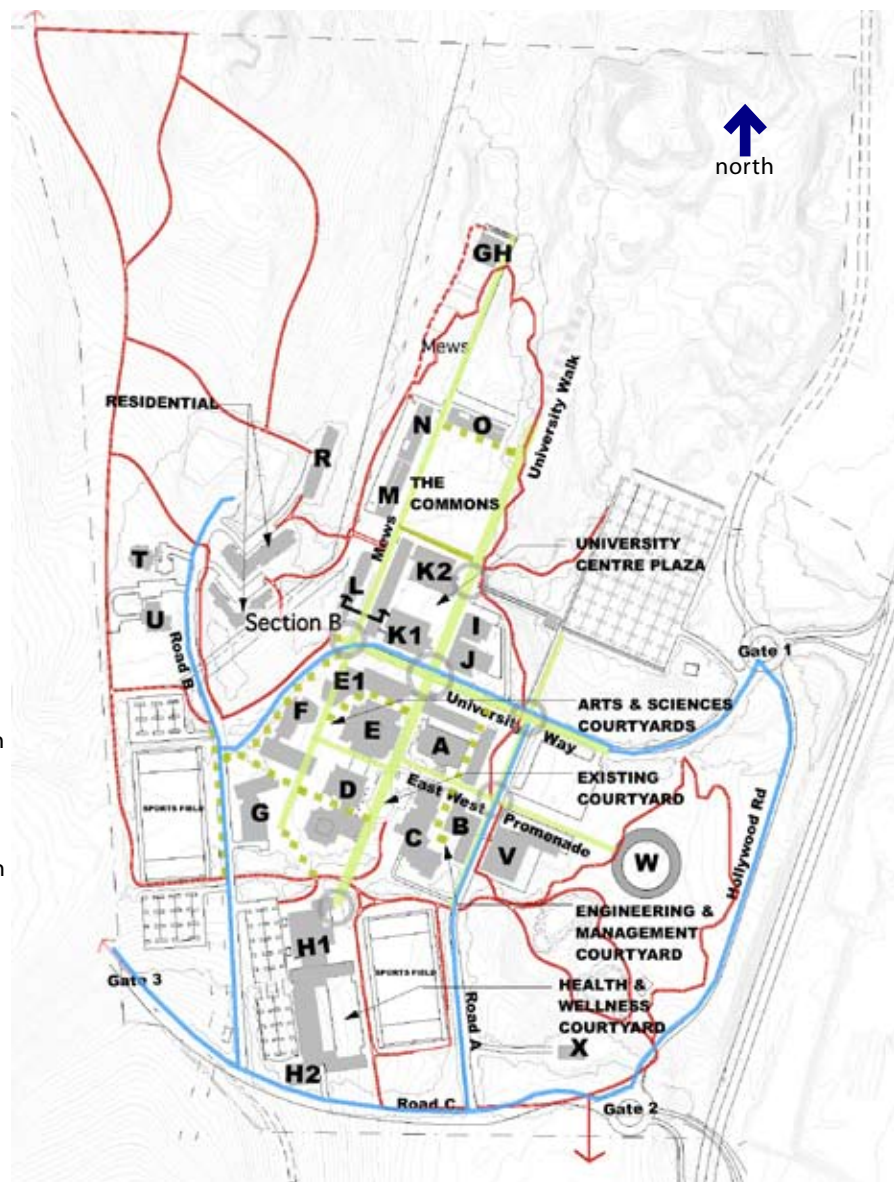
### 2.1.7 Engineering and Management Gateway

The buildings on either side of Road A at this point form a gateway in and out of the Campus core. The building facades and spaces on either side of the roadway should be designed to work together to support this transitional function by way of similar or complementary scales and massing.

### 2.1.8 Semi-Urban

This portion of the Ring Road has an urban character with street trees on both sides and a sidewalk on at least one side of the road. Designers should be careful that, although buildings E1, F and G are oriented toward the courtyards, the facades of buildings facing this portion of the road are not to be considered as "backsides" and therefore require appropriate care and attention.

## 2.2 PEDESTRIAN AND CYCLING NETWORK



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This plan identifies the pedestrian and cycling route and trail options for the UBC O campus. More specific surface treatment information is provided in Section 5.2 Key Plans (Paving Plan).

### Legend:

- Primary Network (All new to be H/C accessible)
- Secondary Pathways and Connections (All new to be H/C accessible)
- Multi-purpose Trails
- Connections to community trails
- Dedicated cycle paths and sidewalks

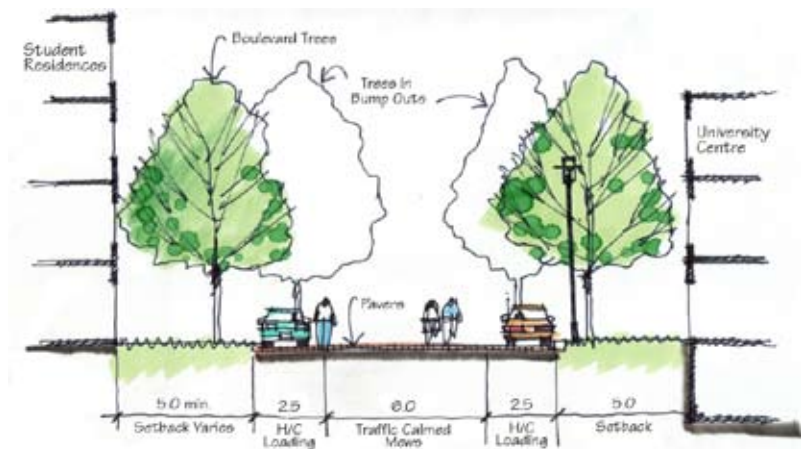
Refer to page 9 for Building Legend



### 2.2.1 Primary Network

Primary pedestrian circulation forms the core grid structure of the campus. These paths are to be in the form of sidewalks, mews and pass through courtyards. The primary circulation paths are to be lit at night. Paths are to be designed as multi-use paths, with priority for pedestrians. Some of the main components of this network are:

- a. University Walk
- b. The Mews (Section B)
- c. University Way
- d. The East West Promenade



### Section B- The Mews North of University Way

#### 2.2.2 Secondary Pathways and Connections

Secondary pedestrian circulation will link the primary paths to all destination buildings on campus. These paths are lower in the campus hierarchy and may be a concrete sidewalk 1.5m wide. These paths may have limited lighting or may be lit by ambient lighting.

These routes need special attention to ensure that they are safe and pleasant alternate routes. See Section 2.12 with regard to CPTED.

#### 2.2.3 Multi-purpose Trails

Informal trails are to be a part of a jogging and nature trail system. Trail heads should be clearly marked with a map and a distance. Trails are not to be lit at night, as pedestrians are to be encouraged to stay on the primary pedestrian system after dusk.

- a. A looping trail connects through the more natural and passive landscapes on campus. This pathway serves as a walking, cycling or jogging trail with a variety of possible routes.
- b. Connections to community trails should be clearly marked as part of the campus wayfinding system.
- c. The goal of completing trail connections is dependent upon the future development of surrounding parcels of land. UBC should work together with the city of Kelowna and private property owners/developers to ensure that these connections are realized.

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#### **2.2.4 Dedicated Cycle Paths and Sidewalks**

- a. All access roads including, but not limited to Road A, Road B, Road C, and Hollywood Road are to be designed to safely accommodate pedestrian and bicycle traffic.
- b. Cycle lanes and sidewalks should be added to existing roadways where such is currently missing.
- c. A minimum 1.5m sidewalk is to be provided on both sides of all access roads. As Road C will be constructed in phases, it should have a sidewalk only on the north side until the remainder of the roadway is constructed.
- d. A 1.5m wide bicycle lane is to be included on both sides of these roadways.

#### **2.2.5 End-of-Trip Facilities**

End-of-trip facilities for cyclists are to be designed as part of the program for each new building. The UBC TREK office is in the process of developing more detailed end-of-trip facility guidelines that, when completed, will be added to this document.

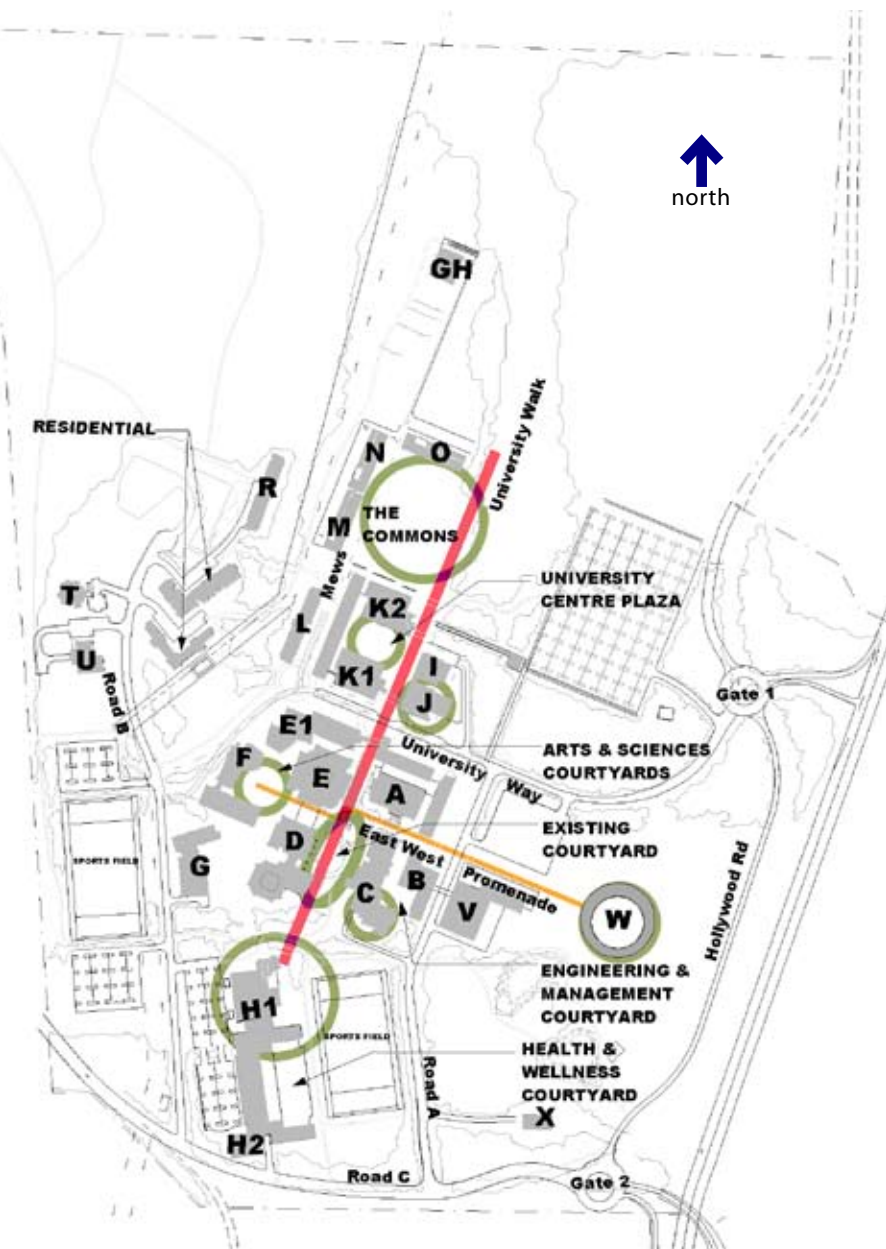


## 2.3 CEREMONIAL ROUTES

This plan identifies key ceremonial routes on campus. It allows for flexibility in the planning of convocation and other ceremonies. University Walk and the East-West Promenade, together with outdoor and indoor venues along the way, are designed as the primary locations for these ceremonies.

In recent years, convocation ceremonies have taken place in the Gymnasium, H1, after a procession beginning in the existing courtyard (and preparation in the Student Services Building, C). This plan allows for this routine to be maintained and also gives flexibility in providing alternatives as the campus develops. For example, a future Theatre, J, may be used for indoor ceremonies with the commons used as a staging area for the procession. In effect, the paving, lighting and planting guidelines will ensure that the entire length of University walk, together with the courtyards and open spaces to either side will be designed with a suitable quality for ceremonies.

Refer to Section 5 - Key Plans for more detail on lighting, tree planting and paving.



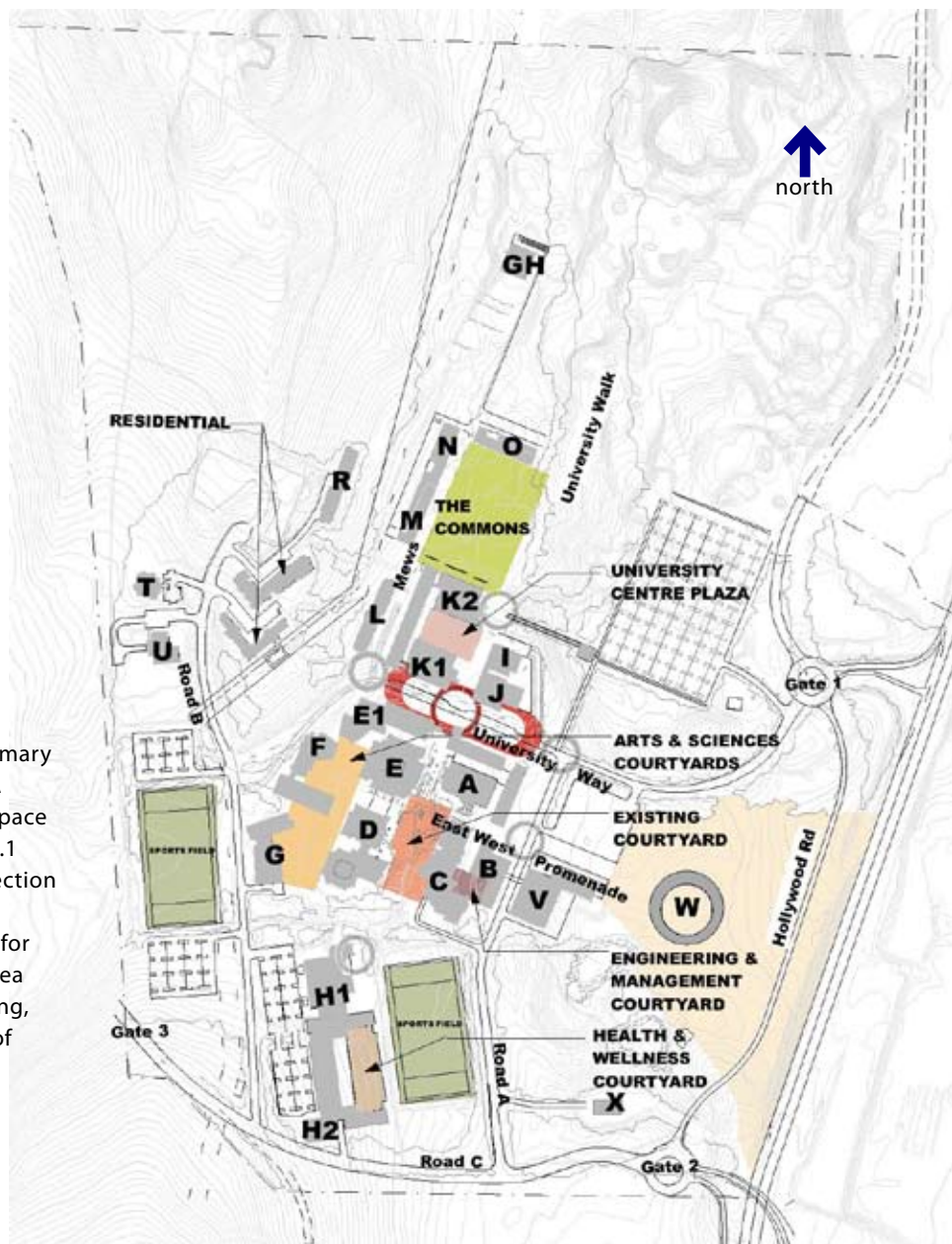
### Legend:

- University Walk
- The East-West promenade
- Potential Staging and event areas











## 2.4 OPEN SPACE

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This plan identifies the primary open spaces on campus. A brief description of each space is provided in Sections 2.4.1 through 2.4.10. Refer to Section 5 - Key Plans and Section 6 - Component Catalogue for more detail within each area on planting, paving, lighting, furnishings, and location of exterior public art.



### Legend:

	The Commons		Arts and Science Courtyards
	Sports Fields		Engineering and Management Courtyard
	University Centre Plaza		Health & Wellness Courtyard
	Existing Courtyard		Highstreet / University Walk Crossroad
	Entry Landscape - Okanagan		Secondary Crossroads

Refer to page 9 for Building Legend





#### 2.4.1 The Commons

The commons will be a large open green field that offers informal outdoor seating and recreation, and also acts as one end of the processional route for ceremonies and convocation marches.

- a. The commons is to be informal, breaking away at the edges becoming a pine forest on the north and east edges.
- b. Seatwalls are to be designed to retain the grade along the southern edge, bordered by the University Centre.
- c. The flowering trees that line University Walk will begin in the commons.
- d. Large shade trees are to line the western edge (See Sections 5.1 & 6.1).

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#### 2.4.2 Sports Fields

The sports fields are formal fields that also act as a place for festivals, concerts and other outdoor events. Fields should be equipped with lighting to allow evening use.

#### 2.4.3 University Centre Plaza

This plaza should be designed as the social heart to the campus.

- a. Sunny southern seating is to be provided in addition to seating with shade by deciduous trees.
- b. Awnings should extend from the buildings to provide pedestrians with protection from the weather.
- c. The paving for this square is to be detailed to express its social importance to the campus (See Key Plan 5.2).
- d. As the paving pattern for the square meets the University Walk paving a concrete band is to separate the two textures.
- e. This square is a good location for both temporary and permanent pieces from the public art collection (See Key Plan 5.4).
- f. Functional art pieces such as seating, tree grates and bike racks are to be included.



#### 2.4.4 Existing Courtyard

Minimal intervention is proposed in the existing courtyard until re-design is warranted in the future. At that time continuation of light poles with banner arms and flowering trees shall be instated. Prior to the redesign of the existing courtyard, vertical elements, possibly permanent public art pieces are to be placed on the north and south ends of the courtyard to act as directional cues identifying University Walk.

#### 2.4.5 Entry Landscape - Okanagan Grassland

An iconic Okanagan grassland character characterizes the campus entry and would surround the aboriginal cultural Gathering Place (Building W).

- a. The promenade connection to the Gathering Place (Building W) is to be paved and partially lined with trees. No trees are to be planted along the promenade east of the Engineering / Management Building.
- b. Planting is to be seasonal and mostly native.
- c. Respect the existing views in this area.

#### 2.4.6 Arts and Science Courtyards

Located at the terminus of the Mews, the Arts and Science Courtyard is identified as one of the major outdoor spaces at the university.

- a. Seating, tables, and weather protection are to be provided in the courtyard.
- b. This is a good location for temporary public art and functional public art (tables, chairs, tree grates).
- c. Feature planting is to be located at entry ways to the adjoining buildings.
- d. A minor pathway is to continue towards the Health and Wellness precinct.

#### 2.4.7 Engineering and Management Courtyard

Seating and tables that can accommodate student work is to furnish this courtyard.

- a. Paving patterns and art installations are to reflect engineering research and accomplishments.
- b. Custom benches that have a technical character are to be included.
- c. Planting is to be bold and structural.





#### 2.4.8 Health & Wellness Courtyard

- a. Provide therapeutic garden spaces that have private seating.
- b. Provide open seating areas that overlook the sports field.
- c. Provide a variety of sunny and shaded areas with some weather protection.

#### 2.4.9 Highstreet / University Walk Crossroad

The streetscape in front of the University Centre (Building K) and Drama Theatre (Building J) should be an animated colourful Highstreet in the heart of campus. High quality materials and formal urban design characterize this crossroad.

- a. Paving is to take cues from the buildings located at each of the corners in this area.
- b. Customized site furnishings are encouraged (see Section 6.3).
- c.. Light poles with banner arms when not being used as a part of convocation ceremonies, can be used to mark important campus events.
- d. Exterior public art is encouraged in this high profile area.



#### 2.4.10 Secondary Crossroads

Some of the same fine quality materials that predominate the campus heart are to be used as accents in the secondary crossroads.



Buildings arranged to define outdoor rooms

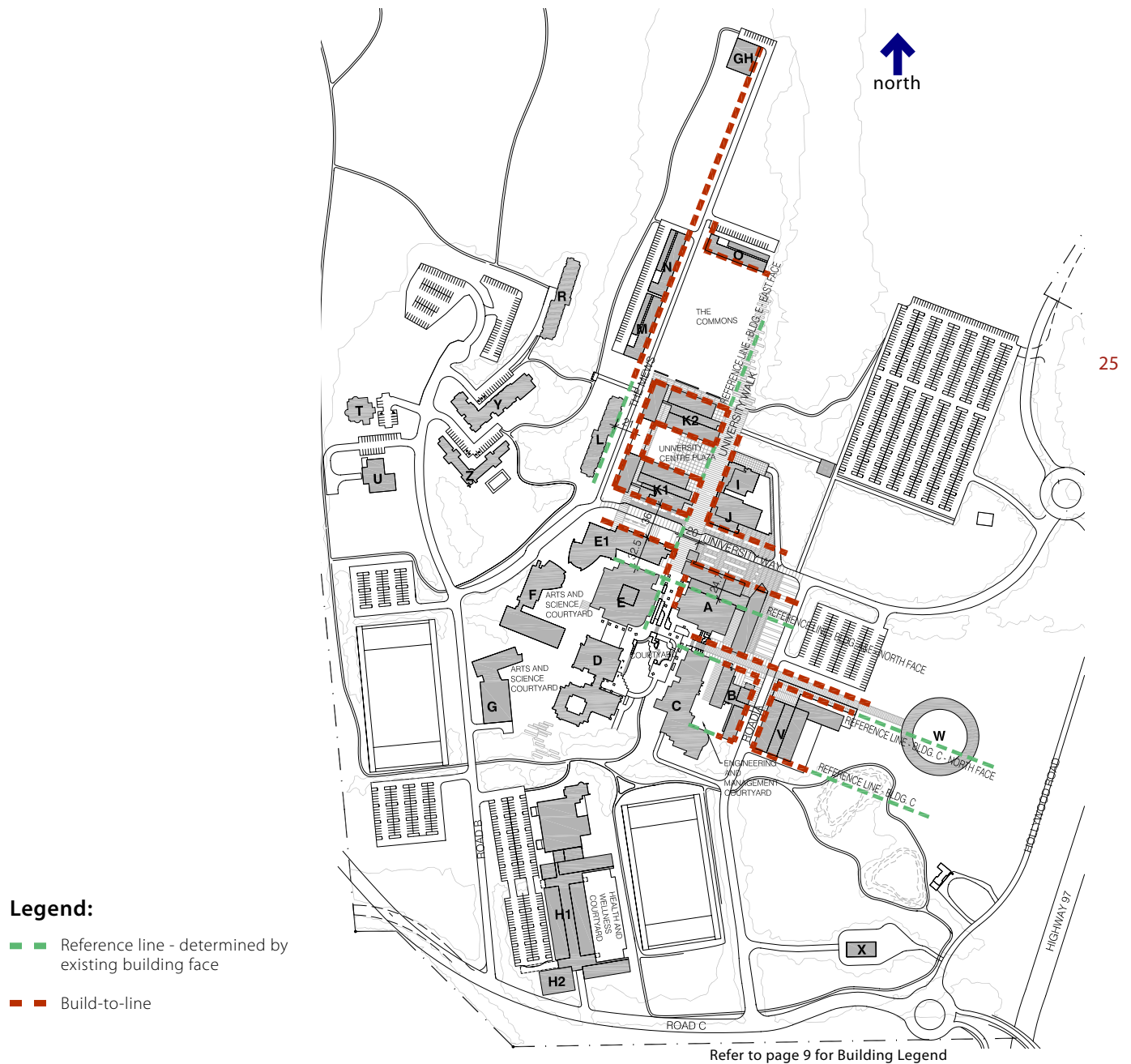


## 2.5 USE BUILDINGS TO DEFINE AND ANIMATE OUTDOOR SPACES

- a. Locate and shape buildings to create well defined “outdoor rooms” and “corridors”. Optimize winter solar access for these spaces. Outdoor seating should be located for both winter sun and summer shade. An appropriate balance between the demands for winter sun and summer shading can be met through the use of deciduous trees, arbours, seasonal shade structures, or by providing multiple seating groups within a space.
- b. Locate and design building entries and interior spaces to animate open spaces. Incorporate substantial areas of glazing to provide “eyes on the street” and to create a vibrant and lively pedestrian experience wherever possible. Use of clear glass is preferred. Generous visual connections between indoors and outdoors provide increased visibility and security, and are to be employed wherever possible.
- c.. Locate windowless laboratories, storage rooms, and other windowless spaces underground, internally, or otherwise away from active public pathways and courtyards.
- d. Arrange internal circulation within buildings around atriums when feasible. Ensure circulation widths are widened to allow seating and study areas looking into atrium spaces, to create busy, multi-level activity zones. Locate common areas (cafeterias, lobbies, etc.) to create visual and physical links from these atriums to the outdoors to further enrich activity in these spaces.
- e. Where possible, provide “through” visibility between courtyard spaces.

## 2.6 BUILD-TO-LINES

Build-to lines identified in the map below reinforce the campus structure and should be respected. Reference lines to which Build-to lines are linked are determined by selected faces of existing buildings, as indicated on the plan below.



	Views
<b>Bldg A</b>	Capitalize on the panoramic views across the valley to the northeast.
<b>Bldg B</b>	Respond to the opportunities for views into the pine forest to the southeast, across the playfield to the south, and to the northeast across the entry landscape.
<b>Bldg C</b>	East and Southeast views from the cafeteria.
<b>Bldg D</b>	Internal views to courtyard.
<b>Bldg E</b>	Internal views to courtyard.
<b>Bldg F</b>	The west and south sides of Building F overlook the new playfield to the agricultural landscape beyond.
<b>Bldg G</b>	
<b>Bldg H1</b>	Over the plaza towards the agricultural lands to the southeast.
<b>Bldg H2</b>	Same as Building H1
<b>Bldg I</b> <b>Bldg J</b>	Views into the active heart of the university to the south and east with views of pine forest to the north.
<b>Bldg K1</b>	Long distance views are available to the north and southwest.
<b>Bldg K2</b>	Several long distance views are available to the north and southwest.
<b>Bldg L</b>	
<b>Bldg M</b>	Panoramic views across the Commons to the valley to the east, as well as views to the pine forest to the west are available.
<b>Bldg N</b>	Panoramic views across the Commons to the valley to the east, as well as views to the pine forest to the west are available.
<b>Bldg O</b>	The Scholar's Retreat enjoys views to the University Centre to the south, wide unobstructed views over the valley to the east and north, and into pine forest and the productive landscape to the northwest.  Capitalize on views with extensive glazing and the placement of social spaces to capture the best orientations
<b>Bldg V</b>	View over the wetland and forest to the southeast. Views will be available from both building wings.
<b>Bldg W</b>	

## 2.7 VIEWS

- Designers should acknowledge and take advantage of continuous view opportunities from all buildings, particularly to the east, south and south-west (see plan below).
- View preservation corridors are to be respected (see plan below).
- Designers should acknowledge and take advantage of internal axial views within the existing and planned campus network.
- Specific view opportunities from the master plan have been summarized in the table at left.



### Legend:

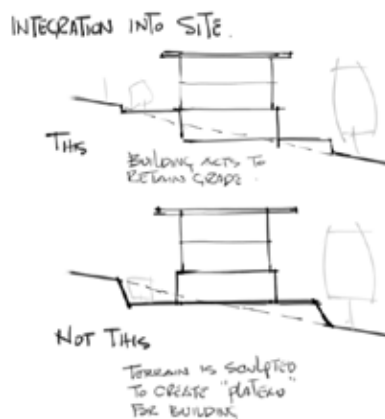
- Continuous view opportunities
- View preservation corridors

Refer to page 9 for Building Legend





Horizontal Layered massing



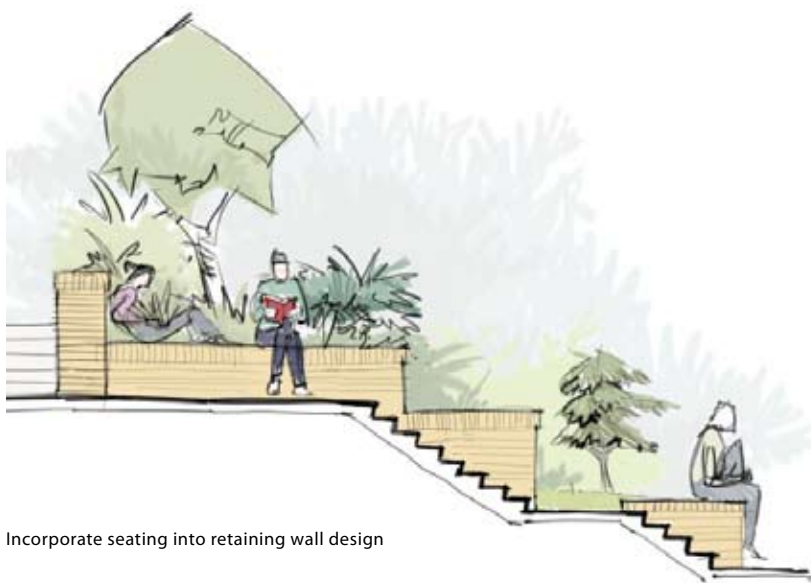
Building as Retaining Walls



Sunny Landscape Stairs

## 2.8 INTEGRATE BUILDINGS WITH THE TOPOGRAPHY

- Where buildings are located on steep grades, use buildings to retain the elevation change, instead of “benching” the site.
- Integrate retaining walls with the base massing and materials of the building.
- Where stairs are necessary, design them to provide sunny social spaces for impromptu gatherings, places to study, or in conjunction with gathering spaces. Landscape stairs in conjunction with plazas and outdoor spaces provide opportunities for vibrant gathering spaces.
- Limit the height of retaining walls in the landscape to 24” where use of walls as casual seating is appropriate and where site gradients allow. Incorporate seating and/or planting (see section 4.3 Site Furnishings for additional guidelines).



Incorporate seating into retaining wall design

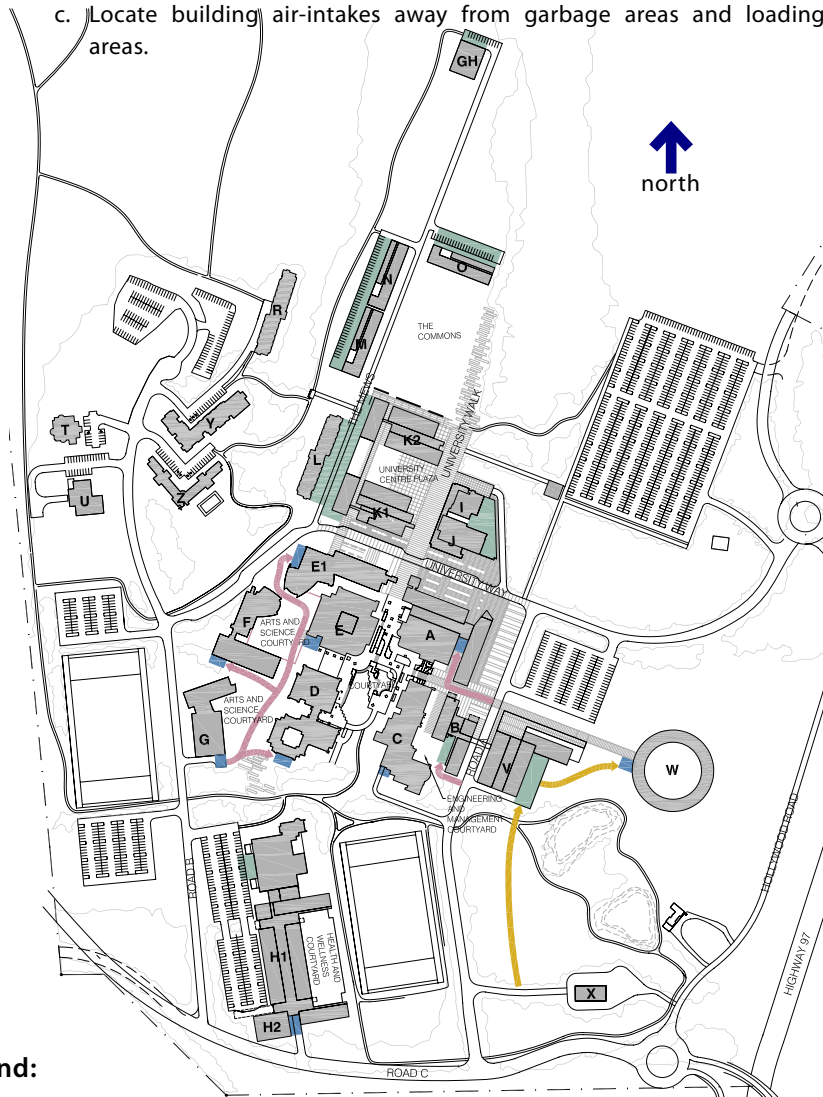
## 2.9 ACCESSIBILITY

While contributing to the unique character of the campus, significant grade changes occur at the UBC O Campus which could create barriers for students and visitors who are mobility impaired. Because universal accessibility is a stated principle within the Master Plan, it is a requirement for all UBC O buildings. Accessibility is to be provided as per the British Columbia Building Code and as follows:

- All new, primary and secondary circulation routes identified on Plan 2.2, and front door access links from parking and sidewalk areas are to be designed accordingly. Any of these routes which can not accommodate a wheelchair or disabled walker must be accompanied by an alternative access route within a reasonable distance.
- Where ramps are required they should be designed as an integral part of the landscape or building. Handrails and guardrails should also receive careful attention.

## 2.10 SERVICES

- Locate building services and service entries away from public pathways and plazas. The provision of carefully designed screening is required for services, including garbage containers. If visible from public areas, service doors should be designed to complement the architecture.
- Location of service areas to all buildings shall be as shown on the plan below.
- Locate building air-intakes away from garbage areas and loading areas.



### Legend:

- Service Zone - services located in these discretionary zones are required to be compact and discrete. Special attention to location, screening etc. is required.
- Service Area - fixed service locations.
- Limited Service Access through multi-function courtyards.
- Future service road access in this location may be considered, subject to further topographic and environmental analysis.

Refer to page 9 for Building Legend





Transparency is desirable at grade level for improved CPTED

## 2.11 WEATHER PROTECTION

While the Okanagan climate is generally not extreme, there is a benefit in providing rain and snow protection particularly in a manner which further reinforces the main pedestrian structure and framework. Summer shading is a major consideration (Refer to Sections 2.1 and 3.3.)

- a. Provide weather protection at building entries.
- b. Provide weather protection along building facades which run along major walkways and courtyards.
- c. Weather protection may be in the form of integrated canopies, overhanging or cantilevered upper floors, or colonnades.
- d. In addition to the generalized convenient exterior seating for buildings and open spaces (see Section 4.3), the university in the past has provided special weather-protected seating structures adjacent to academic and student support service buildings, for use by smokers. Design of any further specialized seating areas for this purpose must be approved by Campus and Community Planning, should be in keeping with evolving architecture on campus, in accordance with the architectural and landscape design guidelines, and these areas/ structures should be located away from building entries and air intakes."

## 2.12 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

- a. CPTED considerations are embodied in many of these guidelines. Designers are directed to resources such as The Design Centre for CPTED : [www.designcentreforcpted.org](http://www.designcentreforcpted.org).
- b. See also Section 3.6





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## 3 ARCHITECTURAL DESIGN GUIDELINES



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The UBCO Campus is envisioned as a community of buildings that work together to create a cohesive whole. At the same time, each building is encouraged to express its unique personality and respond to its particular position within the campus framework. This will be achieved through the imaginative responses of the individual design teams to the unique character of the Okanagan landscape and climate, and through the specific design goals and specific context of each building within the overall campus framework.

Materials must be selected to harmonize with the materials of the existing campus as well as the surrounding landscape, and are required to be durable and sustainable.

For all new development on Campus, this section provides general campus-wide architectural guidelines for:

- massing and articulation
- building heights
- upper level setbacks
- materials and colours
- sustainable design

Refer also to Plan 3.7 Architectural Features and the associated table for building-specific design considerations dealing with design, siting, massing and relationships to neighbouring buildings.





The iconic Okanagan landscape



Layered massing



Layering of facade



Layered massing, modulated base, with glazed ground level

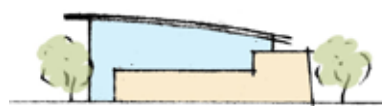
### 3.1 BUILDING MASSING AND ARTICULATION

- a. Building massing should emphasize horizontal proportions to reflect the horizontal nature of the rolling Okanagan landscape.

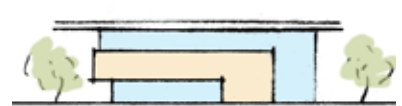


- b. On smaller buildings a simple and carefully proportioned massing should be employed. This massing should be enhanced through the simple and careful proportions of windows and other building elements and through the careful use of materials.
- c. Care should be taken with the design of larger facades to avoid a monolithic appearance. At the same time, buildings are encouraged to be confident and expressive. These goals can be achieved through an interplay of discrete massing elements or through the layering and interlocking of façade elements.
- d. Connection to the landscape is important. This can be achieved through a strong base plane rooted in the landscape, through the use of landscape elements that support the base massing, or through a "floating" base plane that allows for a high level of transparency at the ground level. Design buildings to feel connected to the grade particularly where building bases are largely glazed. Landscape elements in the form of planters, retaining walls, or other devices may be used to strengthen the necessary ground connection.

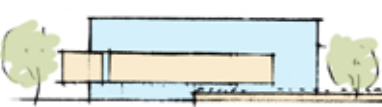
#### Illustrated Massing Concepts



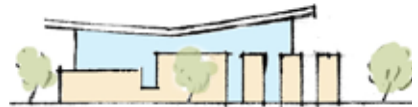
Layered massing with "rooted" base plane



Layered massing with "floating" base plane



Layered massing with "floating" base plane



Modulated base



Layered massing with vertical accent



Connection to landscape through the use of retaining walls and planters





Manipulate facades to decrease scale



The appearance of roofs that can be viewed from above must be considered



- e. Mitigate the scale of large facades through the use of texture, patterns of openings or other techniques.
- f. Designers are encouraged to explore opportunities for individual expression within an overall massing framework.



Within the established massing framework, there are opportunities for individual expression

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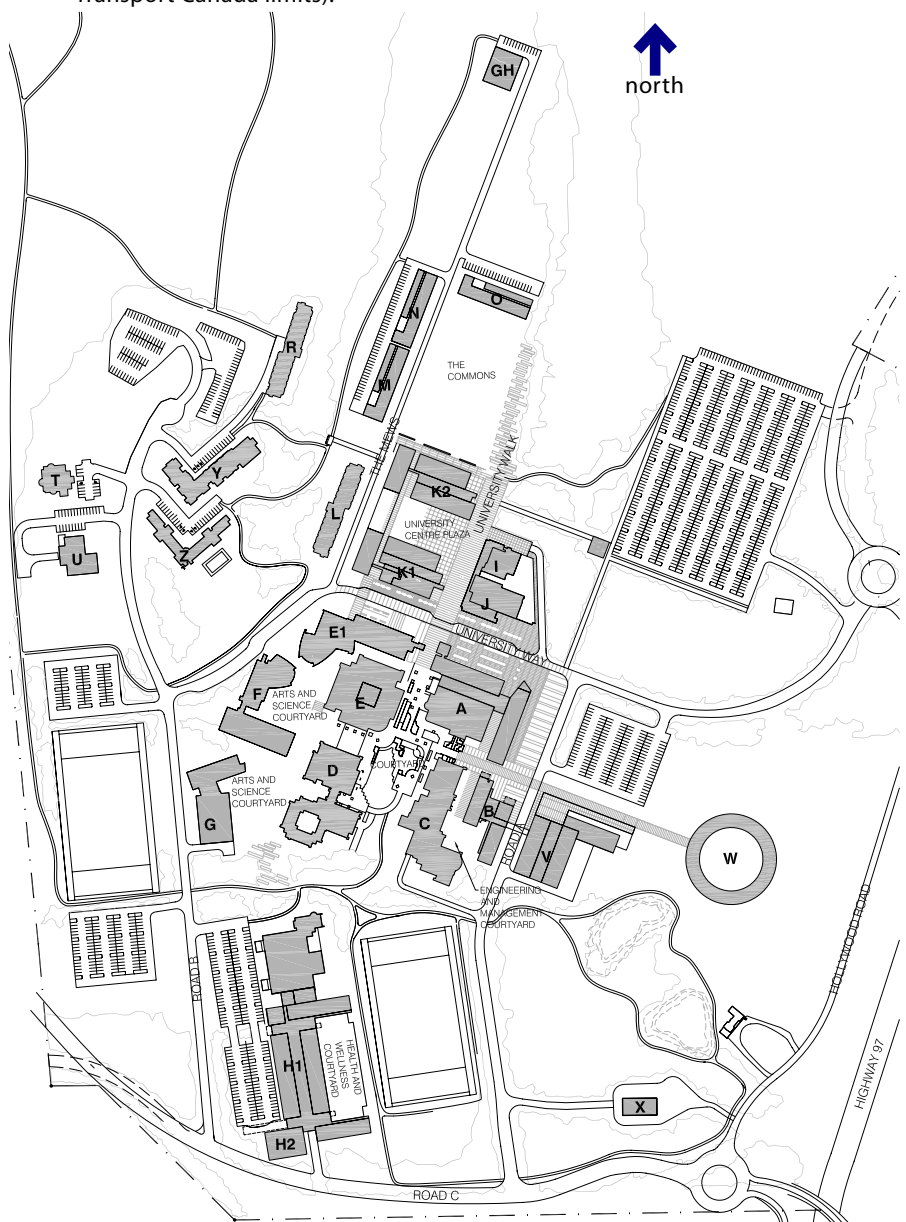
- g. Roof designs are to respond to and visually support the massing of buildings. Flat or low pitch (including low curved) roof lines are preferred. The size of roof planes requires consideration to ensure that roofs are neither too large, nor broken into sections which are too fragmented or complex. Since the UBC O campus provides many opportunities for overlook, the appearance of roofs that can be viewed from above requires attention in regards to scale and details. Green roofs are also an effective strategy in this regard.
- h. Screening and/or architectural treatment of rooftop vents, mechanical equipment etc. is mandatory. The design of all rooftop elements should support and enhance the design of the building.



## 3.2 BUILDING HEIGHTS

- Building heights should generally be consistent with those anticipated in the Master Plan and summarized in the table on the left.
- Project managers/designers must compare the height of each proposed new building against the latest Transport Canada maximum height zoning regulations (related to nearby airport landing and takeoff). The building heights referenced in guideline 3.2.a) above may not be consistent with Transport Canada limits in some cases. As soon as potential conflicts are identified, project managers/designers should contact Campus and Community Planning to discuss the University's preferred approach for that project (i.e. either application to Transport Canada to vary limit, or modification of building design to conform to Transport Canada limits).

	No. of Stories	Height Notes
Bldg A	5+1 below grade	One level is below the ground floor occupying and animating the northeast corner of the building at University Way.
Bldg B	3	Relates to mass of Building C
Bldg C	Completed	
Bldg D	Completed	
Bldg E	approved	
Bldg E1		
Bldg F	5	
Bldg G	Completed	
Bldg H1	6	Building Elements of varied heights to break up the large volume of the Health, Wellness and Recreation Building
Bldg H2	10	A vertical mass that contrasts with the bulk of the gym.
Bldg I Bldg J	Not defined	"Glazed lobby space should be high enough to enclose the bulk of the theatres behind it."
Bldg K1	3-6	Predominantly 5
Bldg K2	3-6	Predominantly 5
Bldg L	Completed	
Bldg M	3-5	
Bldg N	3-5	
Bldg O	2-5	
Bldg R	4	
Bldg T	1	
Bldg U	2	
Bldg V	5	The south side of the building drops a floor in level to the east from South Road making an opportunity for loading access and shops.
Bldg W	1	
Bldg X	1	
Bldg Y	3	
Bldg Z	3	
Bldg GH	1	



Refer to page 9 for Building Legend



### 3.3 UPPER STOREY SETBACKS

	Upper storey Setbacks	Notes
Bldg A	Levels 4 and 5	3 storey form similar to Multi-purpose Bldg E.
Bldg B	Level 3	3 <sup>rd</sup> level setback to relate to the mass of Bldg. C
Bldg C		Complete
Bldg D		Completed
Bldg E		Approved
Bldg E1		
Bldg F	Level 5	5 <sup>th</sup> floor setback
Bldg G		
Bldg H1		
Bldg H2		
Bldg I Bldg J		The architecture of both should be coordinated; the second one implemented should respond to the form, massing and materials of the first.
Bldg K1		
Bldg K2		
Bldg L		
Bldg M	Level 5	5 <sup>th</sup> floor setback
Bldg N	Level 5	5 <sup>th</sup> floor setback
Bldg O	Level 5	
Bldg V	Setbacks from the first to upper floors and again above the fourth floor to create a penthouse.	The south and east facades are adjacent to the grassland landscape and should be integrated into the naturalized landscape.
Bldg W		2 <sup>nd</sup> floor setback from first. Upper floor setback.

- a. The Master Plan suggests that some new buildings incorporate setbacks on upper stories. Setbacks are desirable on the south side of plazas, courtyards or other open spaces to mitigate the effects of shading on adjacent outdoor spaces, as well as to promote consistency around courtyards and street edges in regards to consistent building heights and massing. These setbacks have been incorporated into the table at left.. Architects are required to submit shadow studies for review showing building shadows at 10:00 am, 2:00 pm and 4:00 pm for June 21, Sept 21 and Dec. 21. These setbacks are to be significant - a minimum of 2.5 metres back from the main building facade, but may be relaxed for up to 20% of the length of the building facade for architectural purposes, at the discretion of Campus and Community Planning.

#### Legend:

Upper storey setback





### 3.4 MATERIALS AND COLOURS

The selection of appropriate materials and colours is critical to the creation of a harmonious, vibrant and lasting campus. Natural materials, particularly those which can be acquired locally, and which are durable, or can be located for minimal exposure to weather, vandalism, and general wear and tear are preferred.

Materials are to be selected and applied in accordance with the most current *Wildland Fire Management Plan* and according to the guidelines following. Alternative material and colour selections are only permitted subject to review and approval by Campus and Community Planning.

#### 3.4.1 Wall Cladding

- a. Quality cladding materials which are durable, sustainable and which integrate well into the existing campus and the surrounding landscape are mandatory. Suitable materials include:
  - Brick - see Section 3.4.7.b
  - Architectural pre-cast and architectural cast-in-place concrete
  - Stone - see Section 3.4.7.c
  - Metal - natural finishes and colours
  - Wood - natural finishes and colours. Use in locations where weathering or day to day wear and tear will not create undue maintenance.
  - Spandrel glass
- b. The following are not acceptable as primary cladding materials:
  - Concrete block
  - Tilt-up panels
  - Stucco
  - Manufactured cladding (manufactured stone, and vinyl or concrete siding which mimics traditional wood or corrugated siding)
- c. Wall cladding colours which acknowledge the natural colours of the Okanagan landscape are required outside of the campus core. (See section 3.4.7 for approved Colour Palette).
- d. The dark red brick (or compatible alternate) which forms the heart of the UBC O campus is to be incorporated into all major buildings throughout the Campus. It should not, however, be used in the singular manner of the existing Core Buildings but rather as an accent, base, or as one of several materials in a layered façade approach.



Structural Expression - Wood



Structural Expression - Wood

### 3.4.2 Structure

The honest expression of structure is encouraged and the quality and colour of these exposed elements are important.

- a. The use of exposed timber structure is encouraged either solely or in combination with steel or concrete.
- b. Wood structural members are to be protected from weather, vandalism and wear-and-tear.
- c. Bright accent colours may be used on exposed structure.

### 3.4.3 Roofs and Soffits

- a. Roofs which can be viewed from above are to incorporate patterning, green roofs, or other methods of improving appearance.
- b. Selection of membrane and ballast colours must be sympathetic to the natural Okanagan landscape.
- c. Similarly the colour and material treatment of roof soffits is important and should be considered early in the design process (See section 3.4.7 for approved Colour Palette).

### 3.4.4 Doors and Windows

Doors and windows are important to the overall character of buildings and warrant careful design.

- a. Natural finishes such as anodized aluminum, wood, glass, etc. are encouraged.
- c. Operable windows are encouraged.
- d. Clear glass is preferred rather than dark tinted glass.

### 3.4.5 Accents

- a. The use of wood accents in a natural finish is encouraged where it will not create undo maintenance or fire hazard concerns.
- b. Wood is encouraged for exposed structure and interior detailing and finishes.
- c. Bright accent colours may be acceptable within the overall concept of layered planes, if they are sympathetic to the predominant colours of the Okanagan landscape (See section 3.4.7 for approved Colour Palette).
- d. Local stone accents are encouraged - refer to 3.4.7.c.

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### 3.4.6 Appurtenances

Entry canopies, door hardware, doors, adjacent handrails, retaining walls, built-in benches, and other architectural details are to be integrated into the overall design of buildings, and are to be constructed of high quality materials.

### 3.4.7 Colours



A palette of colours has been developed for the UBC O Campus (See Section 3.4.7(a) Approved Paint Selections, Section 3.4.7(b) Approved Brick Selections, and Section 3.4.7(c) Accent Colours and Finishes). These colours are based on 3 primary aspects of the natural landscape: the Grassland, the Pine Forest, and the Sky. Designers are to submit colour and material boards for approval with each project.

#### The Grassland - Tans, Yellow-Golds

- Brick selections
- Other masonry
- Paints
- Wood Finishes

#### The Pine Forest - Greens, Blue Greens, Grey-Greens

- Paint Colours
- Pre-finished Metal Colours

#### The Sky - Blues and Greys

- Paints
- Naturally finished metal such as;
  - Galvalume
  - Zinc
  - Alucabond
  - Galvanized steel
  - Clear or grey anodized Aluminum
- Glass accents (see 3.2.7.c.)

### 3.4.7.a Approved Paint Selections

These are examples of colours that meet the intent of the colour palette. Others may be acceptable, subject to review and approval by Campus and Community Planning. *Note: These colours are not accurate. Refer to Benjamin Moore colour swatches.*



### 3.4.7.b Approved Brick Selections (refer to 3.4.1.c and d.)

Other Masonry claddings should be in the same tone and colour range.



IXL 691 Western Buff



IXL 698 Pacific Sand



IXL 697 Dark Red Smooth



Mutual Tan Terra



Mutual Goldenrod

### 3.4.7.c Stone



Local Stone - Kettle Valley



Kettle Valley Ledge Stone

Stone cladding options include locally quarried ledge stone from the Kettle Valley Stone Company. Stones are to be set with tight joints, and careful detailing of corners, flashings, parapets, openings etc. is mandatory.



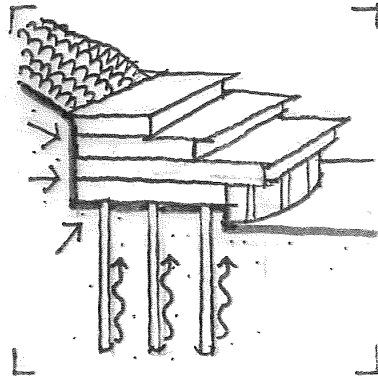
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#### 3.4.7.d Accent Colours and Finishes.

A limited palette of “accent” colours in the traditional sense of trims and borders is not prescribed here, however deeper or brighter colours in combination with the primary colours can be effective in giving depth and vibrancy to wall planes or can be used to highlight structural elements. Designers are encouraged to artistically explore this potential.

Examples of wall planes enlivened with accent colours





Promote Geoexchange



### 3.5 SUSTAINABLE DESIGN

UBC is committed to being a leader in sustainable development at the Okanagan campus.

- a. Academic Buildings at UBC O are to be constructed using accepted standards to be able to achieve the minimum LEED™ silver rating.
- b. Residential buildings are to conform to UBC's Residential Environment Assessment Program (REAP) standards.
- c. While these standards allow some flexibility in meeting the targets, design teams are particularly encouraged to explore the following aspects of sustainability:
  - i. Energy and resource conservation.
  - ii. Incorporation of ground source heat exchange technology.
  - iii. Passive and active solar techniques and technologies.
  - iv. Design for maximum use of natural daylight within buildings, keeping in mind that careful light control is essential in classrooms, labs, and anywhere computers are used.
  - v. Provision of sun shading to allow winter sun to provide passive solar heat, while still shading windows in summer to minimize cooling requirements.
  - vi. Incorporation of materials with minimal off-gassing the use of low VOC paints and finishes.
  - vii. Selection of materials with low embodied energy that minimize greenhouse gas emissions.
  - viii. Use of sustainably harvested materials.
  - ix. Utilization of high fly-ash content concrete.
  - x. Grey water/storm water management, and opportunities to re-use grey water and recycle rain water. Promote retention and infiltration of storm water. Incorporation of green roofs is supported. Green roofs provide control of storm water run off as well as aesthetic, microclimate, and other environmental benefits.
  - xi. The use of locally sourced and durable materials and details.
  - xii. Design for adaptability and expandability to meet changing program requirements.
  - xiii. Incorporation of air lock type vestibules for cold weather at all main and secondary entries.
  - xiv. Use of wood, particularly locally harvested, pine beetle damaged timber is encouraged. Buildings which use wood can provide significant net storage of carbon, which contributes to decreasing greenhouse gases.
- d. In keeping with the University's role as an educator, opportunities to visually express strategies for sustainability and advanced building performance should be taken wherever possible.



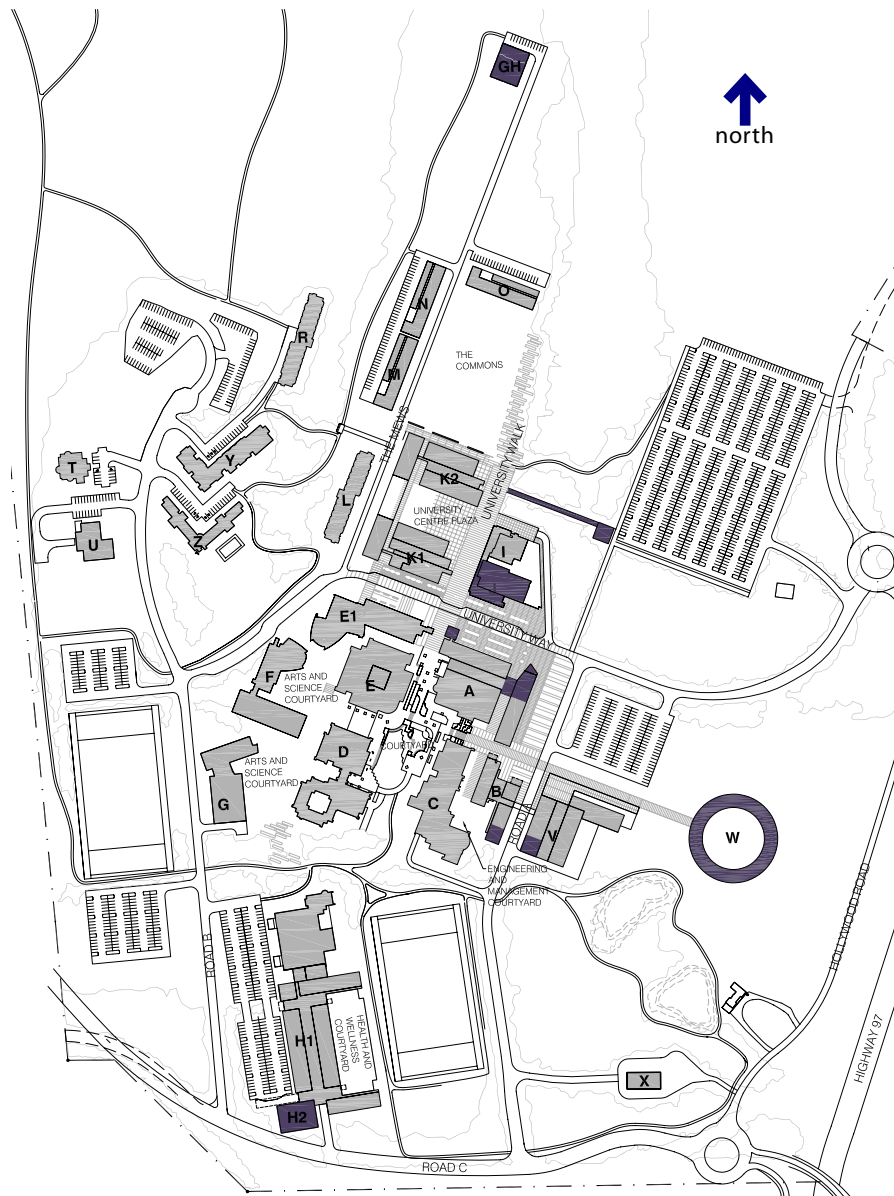
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### **3.6 SECURITY**

Building designs submitted for review to UBC Campus and Community Planning are required to include a security plan.



### 3.7 ARCHITECTURAL FEATURES AND BUILDING SPECIFIC DESIGN DIRECTIVES



#### Legend:

Feature Buildings and Architecture

This plan identifies all planned and existing campus buildings by letter. The table on the following page summarizes unique design considerations for some building, where applicable. This plan also identifies certain buildings and building elements that have particular responsibilities for establishing the quality of the campus architecture.

It is understood that academic space programming needs may change and there must be some flexibility to accommodate buildings that shift or footprints that change. However, basic respect for build-to lines, key axes, framing of open green spaces, view protection principles and other design guidelines will still be expected.

Refer to page 9 for Building Legend



	Design	Siting	Massing	Relationship to adjacent bldgs
<b>Bldg A</b>	<p>A welcoming building with visible activity by day and be a well-illuminated lantern at night. Acts as a gateway building on the east end of University Way.</p> <p>The Master Plan illustrates a prominent glazed social space at this key corner and a tower element to mark this as a community focal point at the corner where University Way and University Walk intersect.</p>		3 storey form similar to Multipurpose Bldg E.	Align entrances so that people can move directly from one weather-protected space to the other. The north-south atrium should be on the axis of the walkway that passes between Buildings B and C enroute to the Engineering and Management Courtyard.
<b>Bldg B</b>	Buildings B and V should be designed to work together as a gateway for South Road. They should be setback a similar dimension from the street and present the same length of facade along the streetscape. A second or third level bridge over the street to connect Buildings B and V may be considered.	Siting: Building B should form north and east built edges that define the Engineering and Management Courtyard.	Relates to mass of Building C  coherent building wall around the Engineering and Management Courtyard.	East Façade dimensioned and designed in dialogue with the street fronting façade of Building V Buildings B and V are to have a shared palette of materials and design vocabulary. The north end should relate to the geometry of the south end of the adjacent new wing of the Learning Commons.
<b>Bldg E</b> <b>Bldg F</b>		<p>The north end of the building is aligned parallel to the new west wing of the Multipurpose Building (E)</p> <p>The south end, responds to the irregular siting of the existing Fine Arts and Health Building.</p>		All the buildings around the Arts and Science Courtyard are to have similar heights and massing.
<b>Bldg GH</b>	Acts as a terminus at the north end of the Mews.			
<b>Bldg H1</b>	Animated at grade by program elements that invite public use. The food services should be located to open, in good weather, onto the public deck open space.	The open space is elevated on the south side to capture maximum sunlight. The slope is used to advantage to gain access to underground parking from the southeast corner of the complex.	Building elements of varying height. The residential tower provides a vertical mass that contrasts with the substantial bulk of the gym expansion.	
<b>Bldg H2</b>	Tall building visible from the distance. Animated at grade by program elements that invite public use. The food services should be located to open, in good weather, onto the public deck open space.	Same as Building H1.	Same as Building H1.	Same as Building H1.
<b>Bldg I</b> <b>Bldg J</b>	<p>Building J acts as a gateway building on the east end of University Way, as well as a focal point during special events.</p> <p>Although theatres are 'black box' buildings, the concept of wrapping the exteriors with glazed lobby space ensures that they will add interest and ambient light at night to the public realm.</p>			Define and create pedestrian-scale interest for University Walk and University Way. They should read as two related but distinct structures.
<b>Bldg K1</b>	Atriums should provide social space and weather controlled circulation routes throughout University Centre.	<p>The south facade of K1 should work with the adjacent building edge of the Drama Centre as the streetwall of University Way</p> <p>The west facade should define a strong and linear streetwall on the Mews</p>		
<b>Bldg K2</b>		The north facade of K2 should contain the Commons in concert with M, N, and O.		

continued



continued

	Design	Siting	Massing	Relationship to adjacent bldgs
<b>Bldg L</b>	Now complete			
<b>Bldg M</b>	Ground floor should include some program elements that attract people from across campus.	Same setback to Mews as N – to coincide with front of Building L.	Building M and N are to be massed to create a building wall of similar height and breadth.  Ground floor is to be expressed as distinct from the upper floor, with a higher proportion of glazing and defined by an overhang that creates a shadow on the façade.	Relate to the architecture of the University Centre and the Scholar's retreat as a related grouping around the Commons.
<b>Bldg N</b>	Ground floor should include some program elements that attract people from across campus.	Same setback to Mews as M – to coincide with front of Building L.	Building M and N are to be massed to create a building wall of similar height and breadth.  Ground floor is to be expressed as distinct from the upper floor, with a higher proportion of glazing and defined by an overhang that creates a shadow on the façade.	Relate to the architecture of the University Centre and the Scholar's retreat as a related grouping around the Commons.
<b>Bldg O</b>		Sited to form a building wall along the north end of the Commons; its front façade should be rectilinear and parallel to the edge of the Commons.  West façade is to have same setback to the Mews as Buildings M and N.		Architectural design is to relate to buildings M and N.
<b>Bldg V</b>	The south side of the building drops a floor in level to the east from South Road making an opportunity for loading access and shops.	Building V is sited to form matched streetwall façades around South Road.  Building V forms an edge along the pedestrian route to the Gathering Place.	The west and north sides define the streetscape of South Road and the pedestrian promenade to the Gathering Place.  The south and east façades are adjacent to the grassland landscape and should be integrated into the naturalized landscape.	Façade are to be dimensioned and designed in dialogue with the street fronting façade of Building B. Bldgs B and V are to have a shared palette of materials and design vocabulary.
<b>Bldg W</b>	Symbolic building set into the landscape.	The footprint is a circle and it is sited within a slight depression in the existing topography. A paved promenade provides primarily pedestrian access but would accommodate service vehicles on a limited basis.	A one storey form with a sloping shed roof is typical of the harbours already in use around the Okanagan.	



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## 4 LANDSCAPE DESIGN GUIDELINES



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The landscape design guidelines found within this section are based on a single open space structure and framework developed from the *UBC O Master Plan*. Although the guidelines intend to encourage creative design solutions for individual areas across the campus, they also aspire to unify the campus into a cohesive experience.

The landscape character is to reflect and celebrate local character such as orchards, productive land, rolling hills, and vineyards. Landscape close to buildings is to be more formal and controlled, becoming less formal further away. Stands of healthy trees shall be conserved where possible. The guidelines require that all landscape interventions must abide by the *UBC O Wildland Fire Management Plan*, employ CPTED principles and environmental best practices.

A hierarchy of landscape spaces is to be demonstrated through the landscape details and materials. The guidelines require that the designer consider conditions, view corridors, and make use of local materials where possible.

For all new development on Campus, this section provides campus-wide landscape guidelines for: planting, paving, site furnishings, lighting, signage and wayfinding, public art, parking and transit stops.





## 4.1 PLANTING

Special area tree planting requirements are indicated on Key Plan 5.1. Designers must verify whether all or part of their site is indicated. For areas that have not been identified, the palette options listed in section 6.1 and 6.2 apply. The following planting guidelines shall apply to all campus sites:

### 4.1.1 Firewise Planting Around Buildings

- a. Use firewise planting structure:
  - i. Plantings close to the structure (within 6m) are to be well irrigated and to provide space for fire suppression equipment in the event of an emergency.
  - ii. Plantings close to the structure (within 10m) shall have fire resistant characteristics. These characteristics include supple leaves, water-like sap, thick bark, high moisture content, low resin content, and sparsely limbed trees.
  - iii. In areas further away from buildings (beyond 10m) use low-growing plants and well-spaced trees. The areas furthest from structures are to gradually become more natural, blending into native vegetation.
  - iv. Plantings are to be carefully spaced.
  - v. Avoid bark mulch and flammable top dressings.
- b. Guidelines as set out by the *UBC O Wildland Fire Management Plan* include:
  - i. Remove and dispose of all tree limbs and shrubs that overhang roofs or grow under building eaves and maintain this condition.
  - ii. Establish a defensive space around all buildings by:
    - Providing ample spacing of all coniferous trees, and maintaining and pruning of all remaining trees.
    - Removing and disposing of all needles, dead twigs and branches and maintaining the lands free of such accumulation.
    - Retaining or planting acceptable vegetation such as watered/mowed lawns, low shrubs, deciduous trees and pruned/spaced coniferous trees.
    - Clean-up and disposal of combustible plant litter.
  - iii. Trees close to buildings are to be deciduous trees.
  - iv. Coniferous tree canopy is to be limbed up to 3-4 metres from ground.

### 4.1.2 Drought Tolerant Planting

- a. Landscaped areas that are not in close proximity to buildings, such as the landscape between the main parking lot and the Commons are to use drought tolerant plants.
- b. Educational signs are to be installed at key points to inform passers-by of xeriscaping concepts. (Refer to Section 4.5 Signs and Wayfinding).



#### 4.1.3 Planting at Building Entries & Nodes

- a. Plant seasonal colourful or flowering plants at social nodes. For example, plant colourful plants with contrasting textures in the University Centre Plaza.
- b. Select accent plants with fragrance, contrasting seasonal colours and textures for building entrances.

#### 4.1.4 Planting Style

- a. Express the Okanagan character through planting. For example, align a grove of flowering trees as they would be planted in an orchard or espalier vines along fences like a vineyard planting.



#### 4.1.5 Planting: Trees

Applicants should refer to colour coded Key Plan 5.1 for specific tree species or category designations on a given site. Refer also to Section 6.1 for Tree List options where there are none indicated on Key Plan 5.1.

- a. Spacing of boulevard tree is to be in the range of 8-10 meters on centre allowing for adjustments to site conditions.
- b. Tree size at time of planting is to be minimum 75mm caliper if deciduous or 3m height if conifer.
- c. Planting techniques are to follow current best practices as put forth by the BCLNA and the City of Kelowna Tree Planting Tips.
- d. Use deciduous trees in landscape locations where shade is desired during summer months and optimal light is desired during the winter months.
- e. Planting of aphid host tree species is discouraged particularly when tree drip line will extend over paved surfaces or structures.

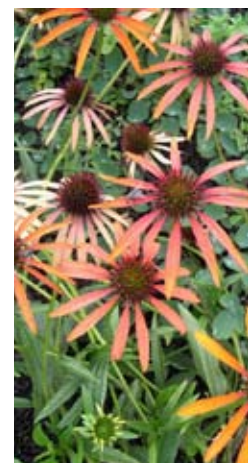
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#### 4.1.6 Planting: Shrubs, Perennials & Ground Covers

This sub-section provides information to those designing landscapes in conjunction with buildings. In identifying certain species of plant material, it is not the purpose of this section to be prescriptive, but rather to provide examples of plant species that would fulfill the defined design objectives. The intent is to assure continuity in individual planting schemes so that the overall impression of a cohesive “campus” is expressed.

- a. All planting and landscape installations are to meet or exceed the BCSLA/BCLNA landscape standards.
- b. Tree plantings, shrubs, perennials and ground cover planting are to reflect the relative site prominence on campus.
- c. Plants with higher visual impact are to be used at arrival points and in prominent courtyards and plazas.
- d. Plants that reflect the Okanagan character are to be used in key locations.

Shrubs, perennials and ground covers for landscape plans adjacent to buildings that would fulfill the defined design objectives can be found in section 6.2. Additional species may be considered, subject to review and approval by Campus and Community Planning.







## 4.2 PAVING

Designers should refer to special area paving requirements on Key Plan 5.2 to verify whether their site is affected. For all other paving, the following general guidelines should apply.

- Use fine grain paving materials and patterns at building entries and gathering spaces.
- Use regional materials wherever possible.
- Use warm toned masonry unit detail at edge of pathways or at regular distances to aid in wayfinding.
- Where there will be equipment cart traffic, minimize amount of bumpy surfacing.
- Twelve 0.3x0.3m granite insets shall be provided at the sidewalk/main entry to each academic or student support service building. These granite inlays are to be inscribed with designs that may include words, iconic identifiers or motifs related to the Okanagan campus or building programming. Tiles can be randomly ordered or combined to create a larger mosaic. Tile designs will be reviewed by UBC Campus and Community Planning on a project by project basis.
- Additional inlays and motifs representative of the Okanagan may also be coordinated by Campus & Community Planning for use in public realm paving areas throughout campus, with guidance from the University Architect, and/or the Public Art Program.

## 4.3 SITE FURNISHINGS

### 4.3.1 Seating

Designers should refer to Section 6.3 for a complete list of permitted site furniture options and specifications.

- Make use of retaining walls at grade changes to provide additional seating.
- Place seating nodes at view opportunities.
- Provide seating for groups in social plazas, and courtyards.
- In addition to the generalized convenient exterior seating for buildings and open spaces, the university in the past has provided special weather-protected seating structures adjacent to academic or student support service building buildings, for use by smokers. Design of any further specialized seating areas for this purpose must be approved by Campus and Community Planning, should be in keeping with evolving architecture on campus, in accordance with the architectural and landscape design guidelines, and these areas/ structures should be located away from building entries and air intakes.

### 4.3.2 Tables

Provide tables for studying and eating in courtyards and gathering spaces.





## 4.4 LIGHTING

Special area lighting zones are indicated on Key Plan 5.3 Lighting. Please also refer to lighting catalogue list in section 6.4 for options and specifications. For all other lighting requirements, the following general guidelines should apply.

- Use dark sky compliant fixtures that use cut-off or full cut-off lighting strategies.
- Do not over light. Use lights to create soft pools of light.
- Use lights with a larger light spectrum.
- Use lights that are integral to walls and steps rather than free-standing bollards where possible.

## 4.5 SIGNS & WAYFINDING

Signs in the public realm fulfill two main functions, namely campus identity and way finding. Campus identity signs include campus gateways, institutional signs, retail signs, and special destination facilities. Wayfinding signs are both off-campus and on-campus and include (but are not limited to) directional signs, maps and consistent addressing.

If signage is required for a category not covered below, designers are directed to the *UBC Sign Manual* for a consistent university standard. All signs are subject to review and approval by Campus and Community Planning.

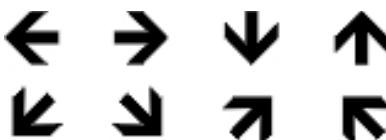
### 4.5.1 Campus Gateways Identity

- Project gateway identity signs for the Campus are to be located at the site arrival points.
- Consideration is given to form, colour and use of materials of other elements in the public realm so that a consistent design vocabulary is achieved.
- Signs at main campus entries are to convey a welcoming message.
- Refer to Section 2.1.1 for more design guidelines on campus entries.

### 4.5.2 Campus Institutional Identity

Campus identity signs are to follow UBC sign standards with a consistent logo, colour, typeface and arrows. The following information has been taken from the *UBC Sign Standards*.

- The UBC O logo shall adhere to the *UBC Visual Identity Guidelines*. To download the official UBC logos go to [www.publicaffairs.ubc.ca/ubclogo](http://www.publicaffairs.ubc.ca/ubclogo)
- UBC O colours are Blue: PMS288 and Gold PMS 131 (or metallic gold PMS 873)
- UBC O typeface is Frutiger Bold
- UBC O standard arrows are as illustrated.
- Building identification sign content is to be limited to the building name and street address, with a panel for accessibility information if the main entrance is not wheelchair accessible.



Standard arrows



### 4.5.3 Project Identity Signs for Retail Uses

#### 4.5.3.1 Retail Uses Along the High Street

Retail identification signs may have 0.3 linear meters of fascia sign for each lineal metre of business frontage. In no case should the total area of exterior signage for each retail unit exceed 3 square meters.



The following types of signs are restricted on campus entirely:

- Signs that are larger in size than the university identifier signs.
- Self-illuminated signs.
- Signs that contain movement, flashing or moving lights, or changeable copy.
- Signs that are located on the roof of a building, or attached to the building that project above the building's roof.
- Fascia signs that extend beyond the face of the wall or project more than 0.3 meters from the wall. Fascia signs are not to have an area larger than the business frontage times 0.9m in total.
- Signs hanging over sidewalks with less than 2.6 meters vertical clearance.
- Third party advertising signage.

The following commercial signs are acceptable and encouraged on campus:

- Pedestrian scaled signs.
- Signs that utilize natural and regional materials e.g. stone, pine beetle kill wood.
- Fascia signs that are in keeping with the building materials.
- Blade signs - Commercial retail units may have one blade sign for every 5m in frontage length. Blade signs are not to exceed 1 square metre in area.
- Signs applied to windows.
- Canopy signs with at least 2.6 meters clearance over sidewalks.
- All signs are to be at ground storey.





#### 4.5.3.2 Retail Signs Outside of the High Street Area

- a. Exterior retail identifier signs are not to be illuminated either directly or indirectly.
- b. Maximum sign area is to be 1 sq. m. in total.
- c. Permitted materials, hanging elevation, and third party advertising limitations for signs are as specified in the guidelines in Section 4.5.3.1

#### 4.5.4 Special Destination Signs

University buildings that will be used by the general public may have identity signs that are unique to them. Buildings such as the theatre building or the gymnasium are campus buildings that may have unique identity signs.

- a. These buildings are still to have the campus-wide sign strategy but may also have a more distinguishable identifier sign.
- b. These signs must conform to the same guidelines and character as the landscape and buildings. For example a layered massing using colours found in the inherent Okanagan landscape.

#### 4.5.5 Wayfinding System

A sequence of information from various sources is provided, directing visitors in a step-by-step process to their ultimate destination. The wayfinding program, based upon the idea of providing only the information that a visitor can use in that location, includes site maps, vehicular and pedestrian directional signs and a consistent address system. The design style of this system is to be consistent with campus themes.

The following are components of the way finding system:

- a. Signs at all entry points.
- b. Directional signs on and off campus that identify campus entries, service, parking and vehicular access points.
- c. A consistent sign system for streets, parking entrances, service areas, transit locations and buildings.
- d. Information site maps at the points where visitors transition from vehicular to pedestrian mode.
- e. Map kiosks shall be erected at all campus parkades.
- f. Accessible path and route markers are to be installed on buildings to indicate 24 hour elevator service for campus accessibility.

#### 4.5.6 Interpretive Signs

- a. Interpretive signage is to be provided to explain xeriscaping and fire-wise planting concepts.
- b. Signage is to be small, discrete, durable and to be coordinated with the wayfinding system

## 4.6 EXTERIOR PUBLIC ART



The campus art committee will make decisions on the acquisition and approval for display and location of art on campus. However, recommended locations for the placement of temporary and permanent exterior art on campus are indicated on Key Plan 5.4. Exterior Public Art.

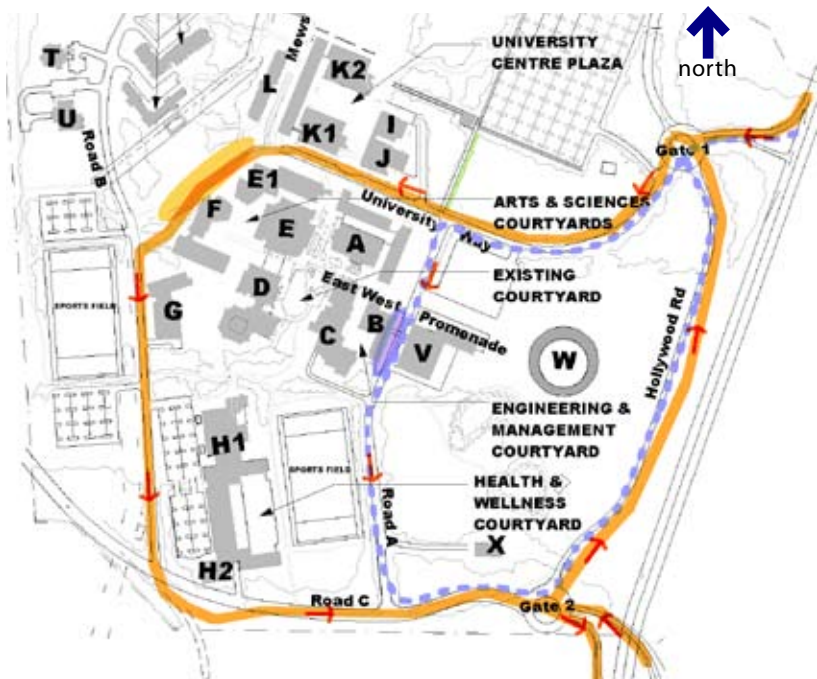
- a. Public art installations are to reinforce goals and objectives for the public realm that have been identified in the master plan. It is recommended that the educational environment in addition to cultural and regional context would be expressed in the art.
- b. Showcase student art in temporary installations.
- c. Showcase and educate with pieces that display current campus research.
- d. Consider functional public art where possible for example art benches or tree grates.
- e. Consider vertical public art to assist in wayfinding.
- f. Consider stamping poetry or significant quotes into concrete sidewalks. These will be reviewed by Campus and Community Planning on an individual basis. Typeface should use upper and lower case, sans serif, no smaller than 100mm in height.





#### 4.7 PARKING LOTS / BUS STOPS

- Benches are to be provided in consultation with the transit authority.
- Bus stops shall be located where shown on the map below.
- Weather protected shelters are encouraged at, or near bus stops.
- Use bio-swales at edges of parking lots where possible, to encourage natural drainage, avoid artificial costly drain structures and recharge ground water.
- Tree planting in parking lots shall be deciduous, drought tolerant species, to provide summer shade, allow maximum winter sun and relieve vast expanses of paving. Allow for at least one tree per 10 parking spaces for effective density.
- Wheel stops made from recycled plastic products are required where cars will overhang flush planting areas.



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This plan identifies planned bus routes on campus. In the short term, upon completion of Road A, buses shall follow the loop shown in purple.

In the longer term, should service closer to residences be desired, bus service could be extended further into campus on the loops shown in orange.

#### Legend:

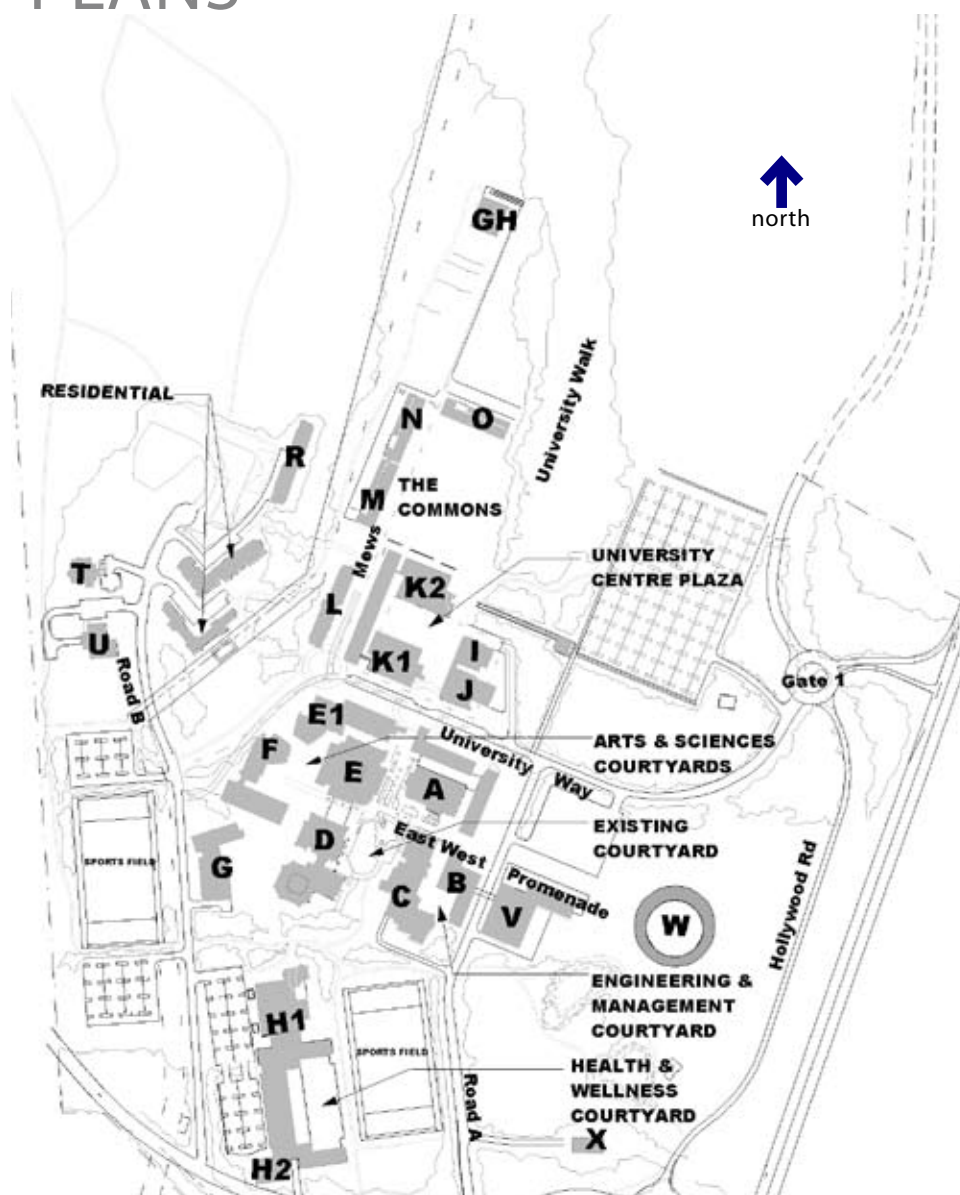
- Short-term bus routes
- Short-term bus exchange - allow for 6 buses
- Long-term bus route
- Long-term bus exchange - allow for 6 buses
- Travel Direction

Refer to page 9 for Building Legend





## 5 KEY PLANS



Refer to page 9 for Building Legend

Key plans are to be used as geographical reference tools for special treatment areas on select themes: Tree planting, paving, lighting, exterior public art and architectural features. Special treatment information indicated on key plans is supplementary to and working in conjunction with general guidelines from Sections 2, 3 and 4 and with detailed specification and catalogue components listed in Section 6.

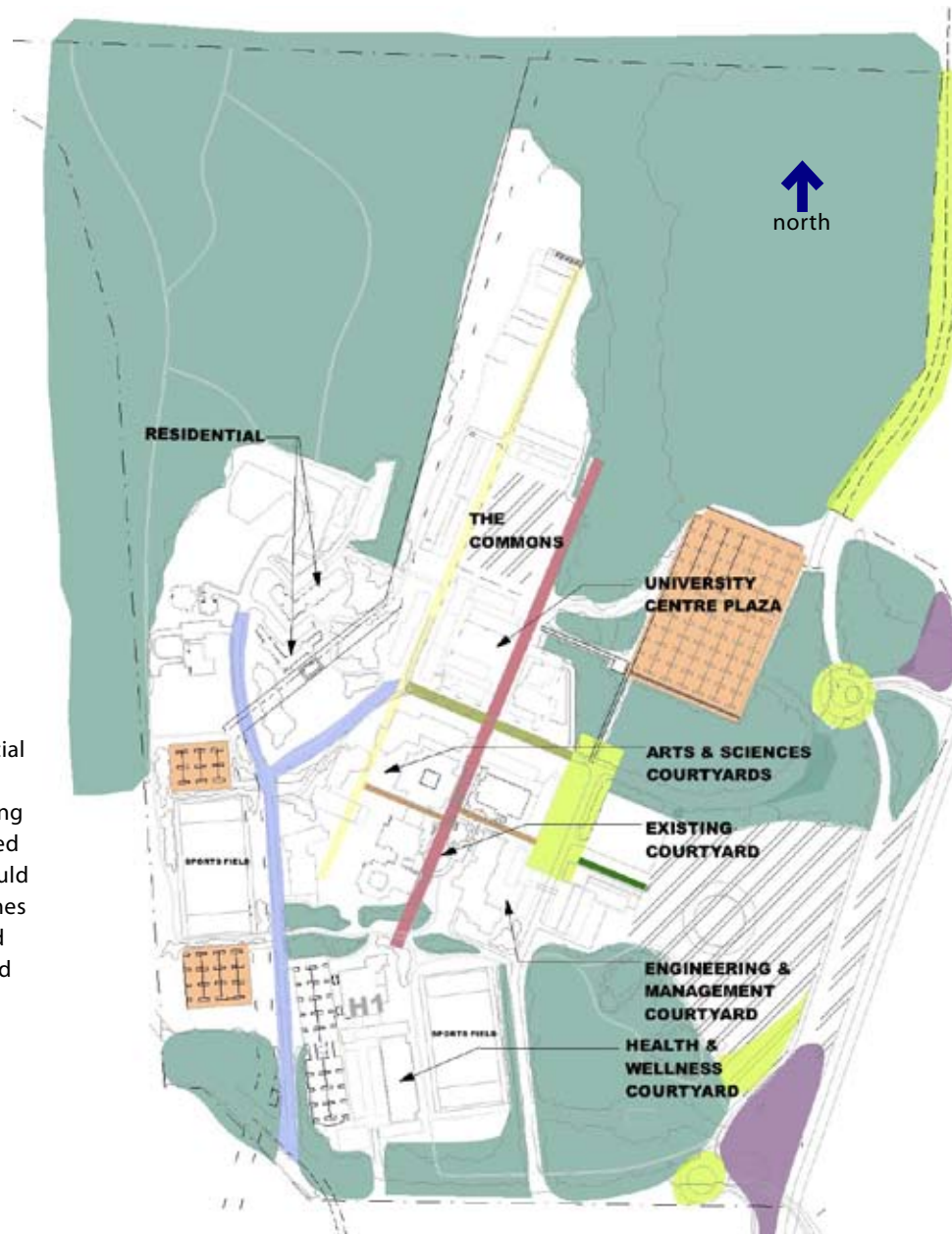
If the subject project site is not highlighted on a given key plan, all remaining guidelines and specifications of sections 3,4 and 6 of this document still apply.

Any requested relaxations from the guidelines are to be presented with a full rationale to UBC.



## 5.1 TREE PLANTING

## Key Plan



This plan identifies special tree planting areas. Where no special planting information is designated for a site, designers should refer to general guidelines Section 4.1 Planting and Section 6.1 for permitted tree palette.

### Legend:

Conifers - Mix of Ponderosa Pine, Douglas Fir and Spruce	Pyrus calleryana - Chanticleer Pear to line the Mews	Campus Entries - Populus tremuloides - Quaking Aspen
Orchard-like trees in bosque composition	Acer Platanoides - Norway Maple to line the street	Tree to be reviewed by Campus and Community Planning at time of design
Fraxinus Pennsylvanica "Marshall"- American Ash to line University Way	Cornus kousa - Kousa Dogwood to line the walkway	No tree planting
June flowering trees - Kolreuteria paniculata- Golden Rain Tree	Populus tremuloides- Trembling Aspen to line the walkway	Parking lots - deciduous trees, no aphid hosts suggested species: Zelcova serrata, Ginko biloba, Carpinus betulus

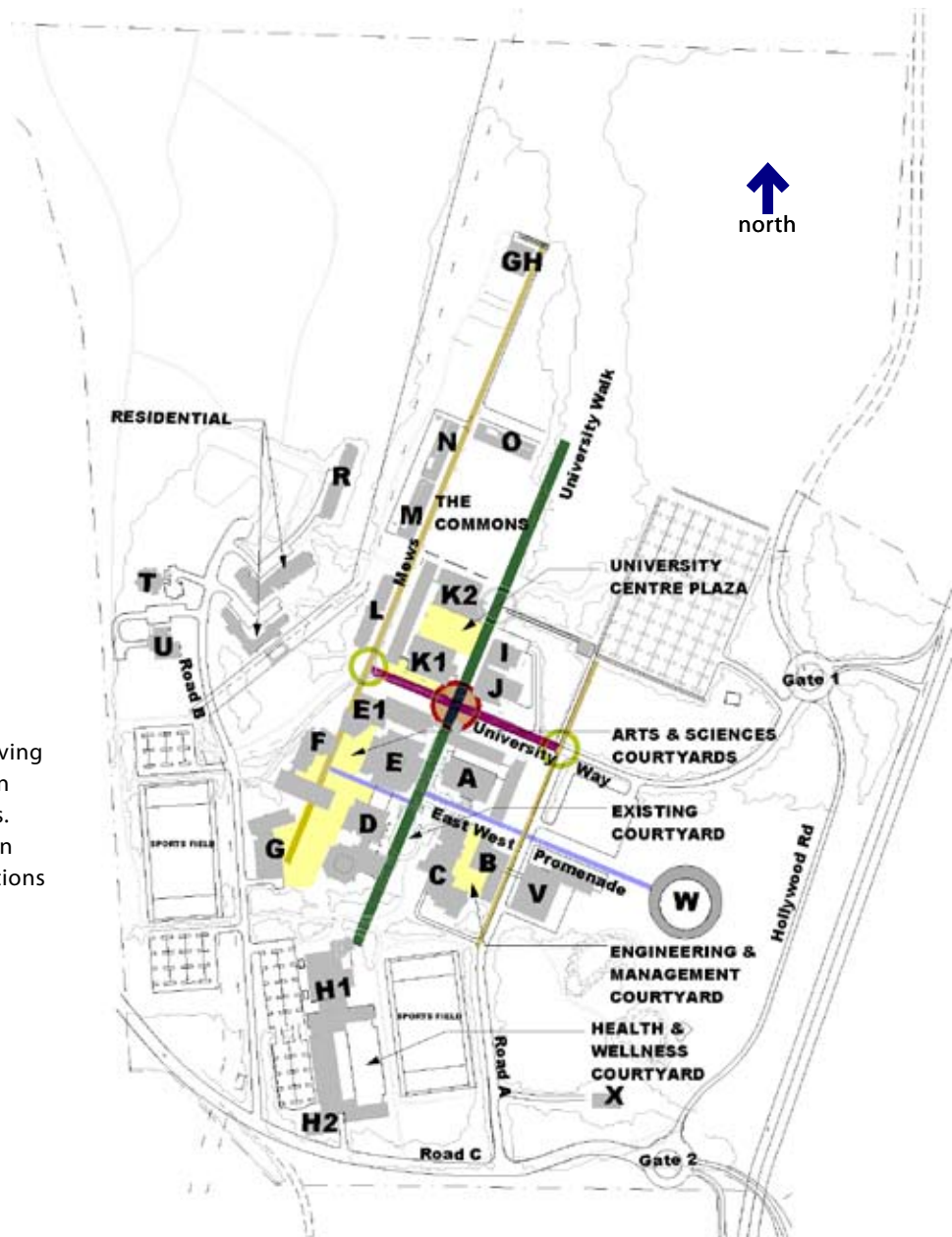
Refer to page 9 for Building Legend











## 5.2 PAVING

## Key Plan

This plan identifies the paving treatment or consideration within colour coded zones. The zones are described on the following page in Sections 5.2.1 through 5.2.8.

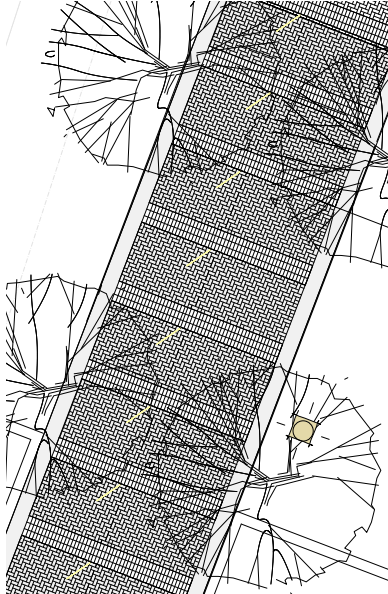


### Legenda:

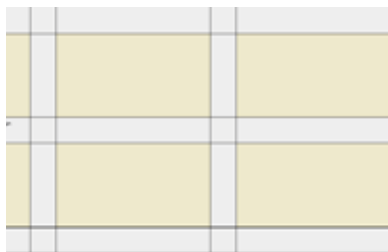
- |  |   |
|--|---|
|  University Walk                        |  Walk to the Gathering Place  |
|  Mews, East Gate Sidewalk               |  Courtyards and Plazas including Arts and Science Courtyard, Engineering and Management Courtyard, University Centre Plaza and Wellness Courtyard |
|  University Way / Highstreet            |  Other sidewalks  |
|  Highstreet / University Walk Crossroad |   |
|  Secondary Crossroads                   |   |

Refer to page 9 for Building Legend





Paving Pattern: University Walk, Mews & East Gate Sidewalk



Paving Pattern: University Way / Highstreet

### 5.2.1 University Walk

As the primary north-south pedestrian spine, University Walk should obtain the highest standards. This axis is to have continuous paving treatment that is only interrupted for the existing plaza located in the campus core.

- The basic path is to be constructed with concrete masonry units - Standard or Holland shape in Desert Sand and Standard Brown colours.
- The paving pattern has 1.8m (6') fields of desert sand pavers in an interlocking herringbone pattern interspaced with .45m (1.5') bands of standard brown pavers in an interlocking herringbone pattern.
- Concrete bands or roll curbs are to be placed at the edges of the paving in place of a soldier course wherever this paving comes in contact with another paving surface.
- As the path joins the Commons, the eastern edge begins to fragment- reflecting the rough edge of the naturalized planting.

Pavers: Abbotsford Concrete Products

Toll Free - 800-663-4091

### 5.2.2 Mews, East Gate Sidewalk

Paving should be consistent along the entire length.

- The roadway is to be paved using 80mm thick standard or Holland shape concrete unit pavers. The pedestrian portions of the path may use 60mm thick pavers.
- The paving pattern has 1.8m (6') fields of natural colour pavers in an interlocking herringbone pattern interspaced with .45m (1.5') bands of **standard brown coloured** pavers in an interlocking herringbone pattern.
- Concrete bands or roll curbs are to be placed at the edges of the paving in place of a soldier course.
- The path may vary in width.

Pavers: Abbotsford Concrete Products

Toll Free - 800-663-4091

### 5.2.3 University Way / High Street

Paving along this portion of University Way is to be standard shape concrete unit pavers composed in a plaid-like grid.

- The bands are 2m wide separated by 12m when at 90° to University Way Road.
- Bands that are parallel to University Way Road are 2m wide separated by 6.5m. Field is 12m by 6.5m.
- Pavers are to be set into a herringbone pattern.
- Bands are natural colour and the field is desert sand.
- Pavers are to be 80mm thick where vehicular traffic is expected.

Pavers: Abbotsford Concrete Products

Toll Free - 800-663-4091

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#### 5.2.4 Highstreet / University Walk Crossroad

The campus heart is located at the crossroads of University Way and University Walk. The paving reflects the relative importance of this area in the hierarchy of the campus.

- Paving is to be primarily composed of local stone and accented with a material that is complementary to the buildings at each corner.
- Paving is to identify a safe walk zone across University Way.

#### 5.2.5 Secondary Crossroads

- The secondary crossroads use local stone as an accent with the majority of the paving to match the context of the surrounding buildings.
- A transitional concrete band between 300- 450 mm wide is to be placed between different paving patterns.
- The band will have a broom finish with no trowel marks at the joints or edges.

#### 5.2.6 Walk to the Gathering Place

Paving for the walkway to the gathering place is to accommodate the occasional service vehicle.

#### 5.2.7 Courtyards and Plazas

- Major courtyards and plazas are to have paving materials and patterns that are cohesive to the surrounding buildings while reflecting their order of importance to the entire campus.
- Paving in plaza and courtyard space is to have a concrete transition band between 300 - 450 mm wide between different paving types.
- The band will be broom finished with no trowel marks at the joints or edges.

#### 5.2.8 Other Sidewalks and Building Entries

Other sidewalks are to be reviewed on a one by one basis by Campus and Community Planning.

- ***The minimum width of sidewalks on campus is to be 1.8m.***
- It is suggested that concrete sidewalks be broom finished with no visible trowel edges.

At the main entry for all academic or student support service buildings, allow for twelve .3x.3m granite insets that are inscribed with designs that may include words, UBC iconic identifiers or motifs related to the use of the building. Tiles can be randomly ordered or combined as a group to create a larger mosaic. Inscriptions and tile arrangements will be assessed by Campus and Community Planning as part of the design review for each project.

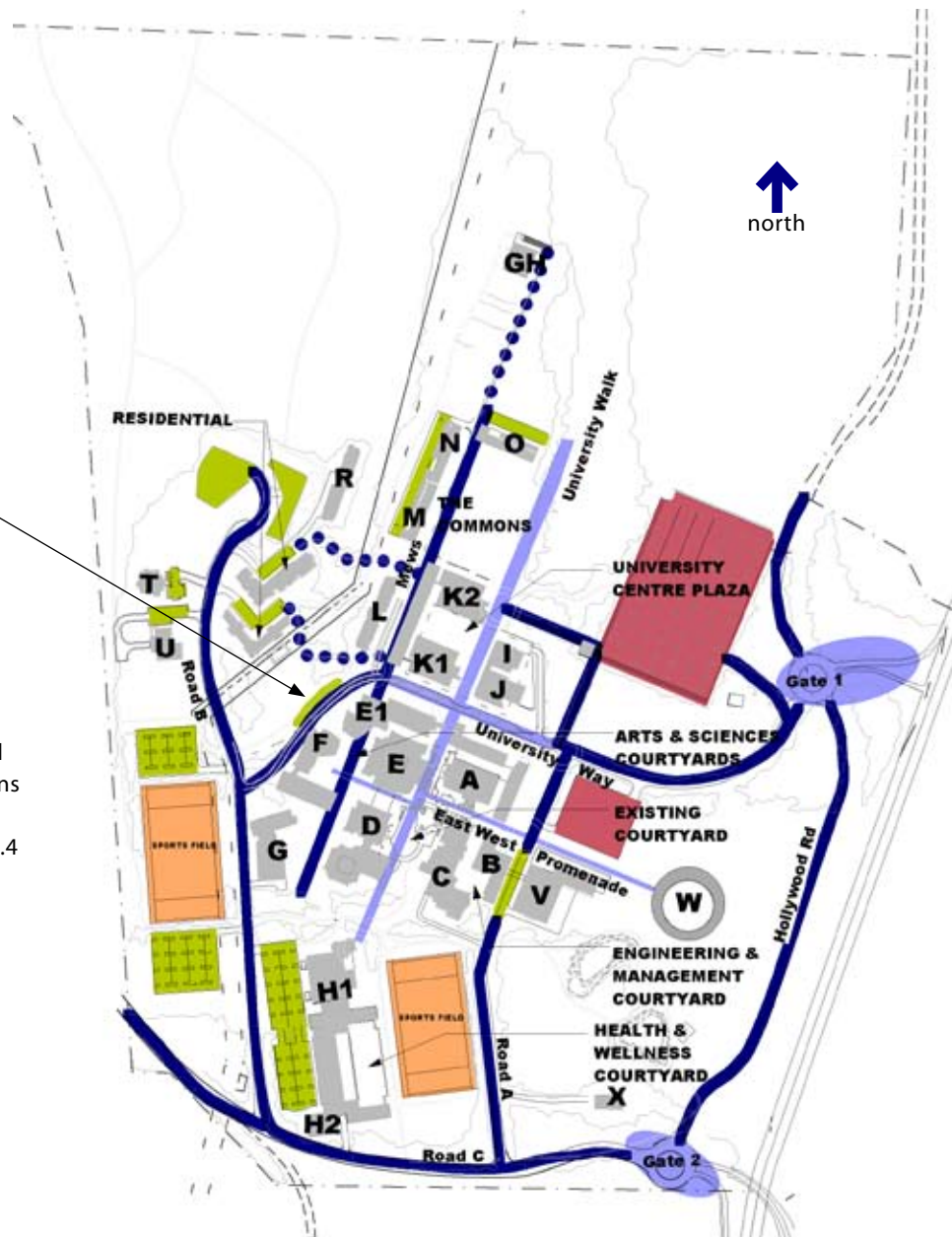


### 5.3 LIGHTING

### Key Plan

Lighting to be added in conjunction with long term bus loop.

This plan identifies special area lighting considerations and refers to relevant specifications in Section 6.4



#### Legend:

- Main Parking lot lighting - Type 6.4.3. To be lit from dusk till dawn
  - Sport field lighting - to be operated on demand by prior arrangement through campus operations.
  - Minor Parking lot lighting - Type 6.4.1 or 6.4.2
  - All other Lighting to be reviewed by Campus and Community Planning. Lighting in special courtyards may match building lighting. Bollard lights (6.4.2) are to be used sparingly, never to light an entire path or space.
  - Light Poles with banner arms 6.4.1
  - Light Poles without banner arms 6.4.1
  - Light Poles without banner arms 6.4.1 - increased spacing
- See Section 6.4 for Lighting Specifications

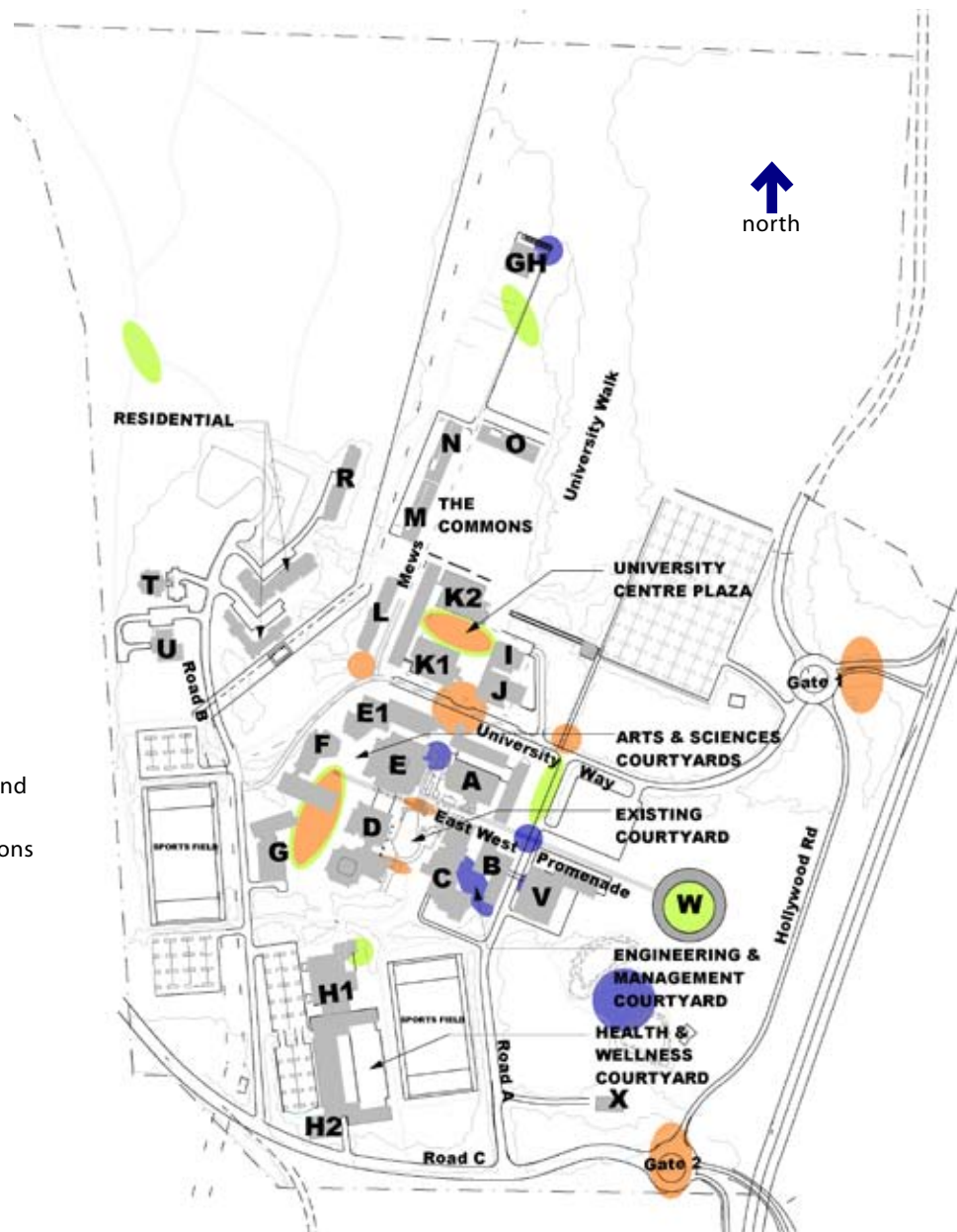
Refer to page 9 for Building Legend



## 5.4 EXTERIOR PUBLIC ART

### Key Plan

This plan identifies recommended locations and opportunities for exterior public art. All art acquisitions and installations must be approved by UBC.



#### Legend:

- Permanent Art- to serve as landmarks and place makers. Permanent art locations to be planned and incorporated during design. Some art displays are to be in hidden locations to allow passers-by to discover them.
- Temporary Art- to be rotated throughout the year. Student art work is encouraged. Some temporary art displays are to be in hidden locations to allow passers-by to discover them.
- Research and Educational Art - to display current campus research. Research art locations are to be planned and incorporated during design.

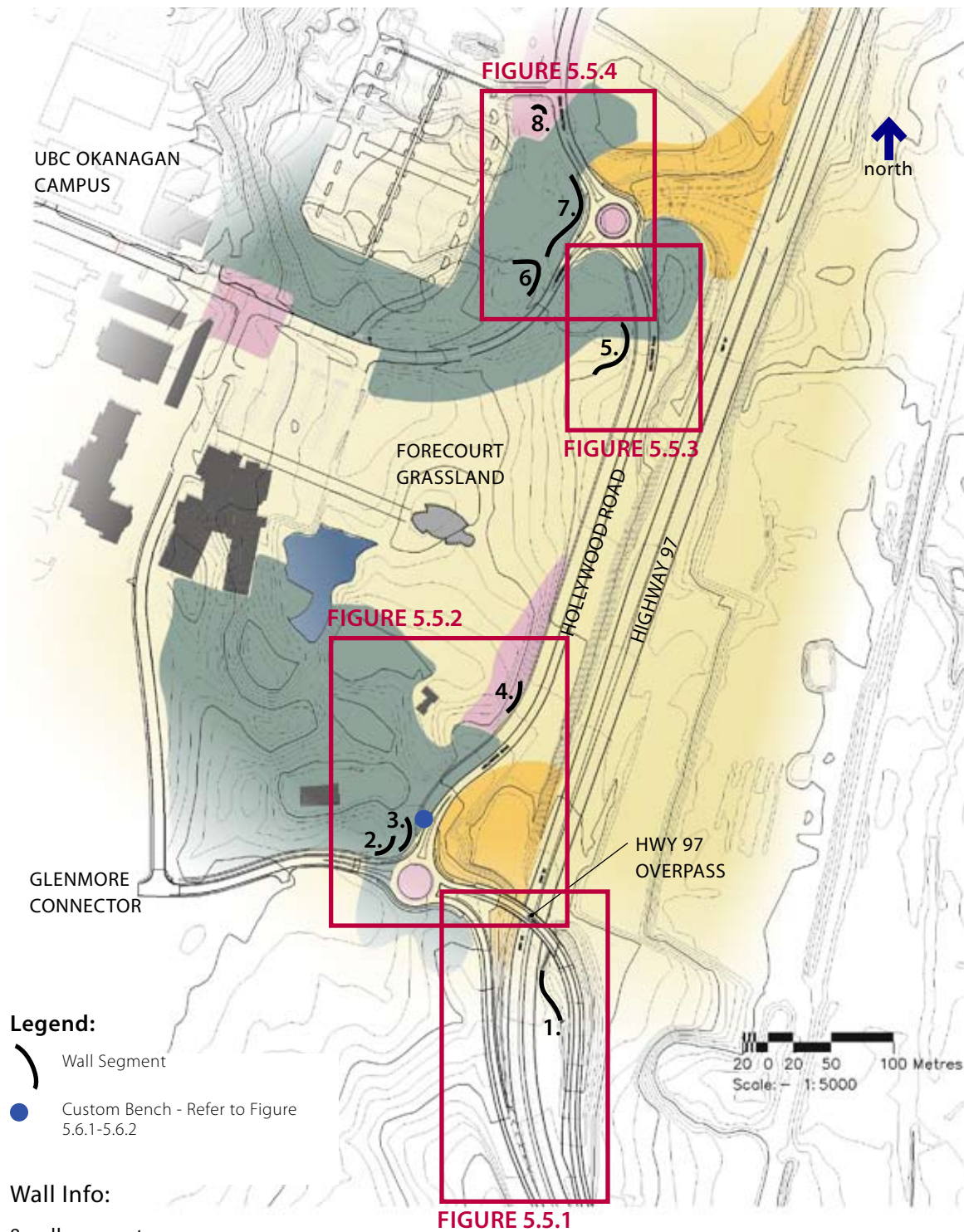
Refer to page 9 for Building Legend



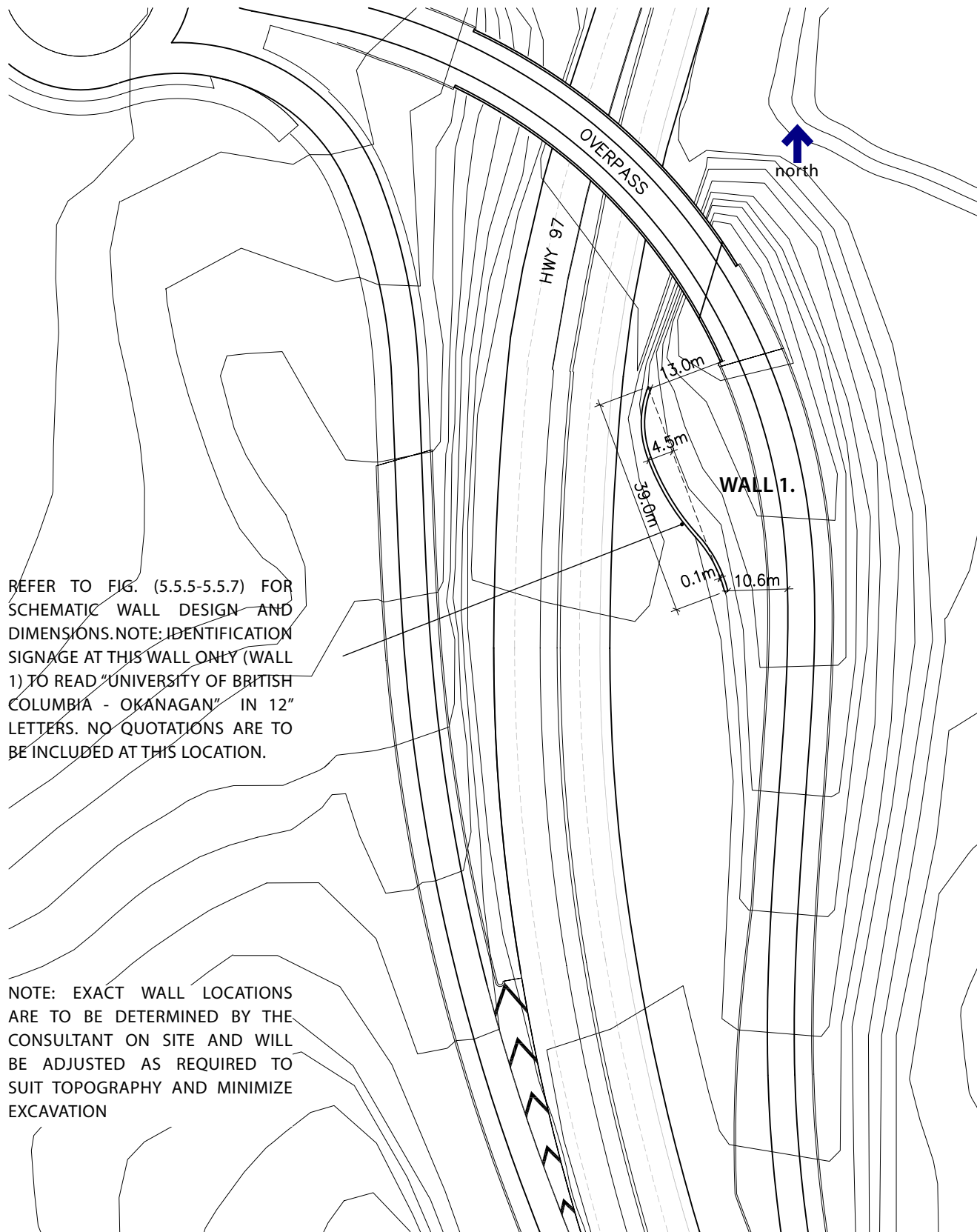


## 5.5 GATEWAY WALLS

## Key Plan



### 5.5.1 - SCHEMATIC WALL CONCEPT AT OVERPASS

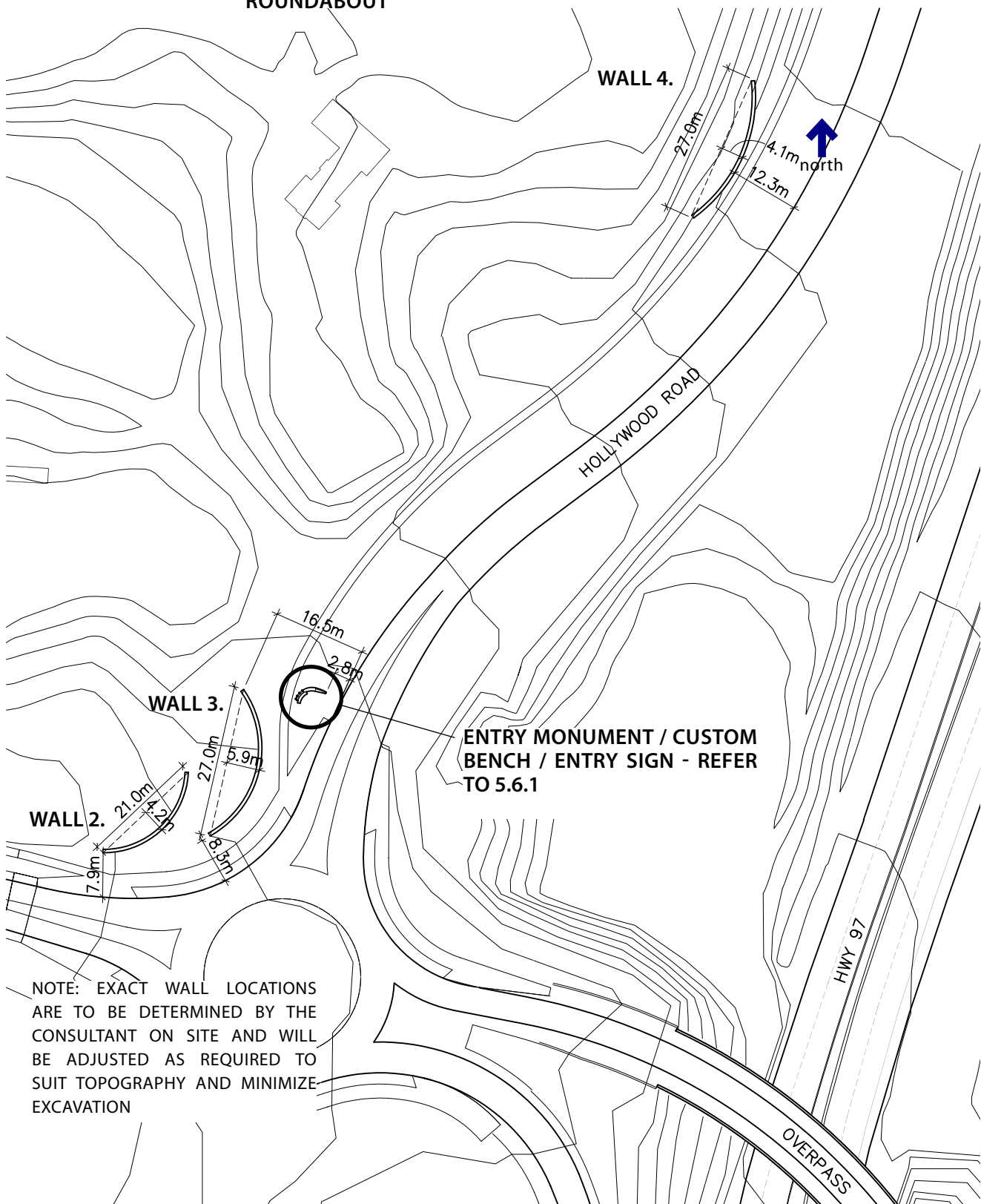


REFER TO FIG. (5.5.5-5.5.7) FOR SCHEMATIC WALL DESIGN AND DIMENSIONS. NOTE: IDENTIFICATION SIGNAGE AT THIS WALL ONLY (WALL 1) TO READ "UNIVERSITY OF BRITISH COLUMBIA - OKANAGAN" IN 12" LETTERS. NO QUOTATIONS ARE TO BE INCLUDED AT THIS LOCATION.

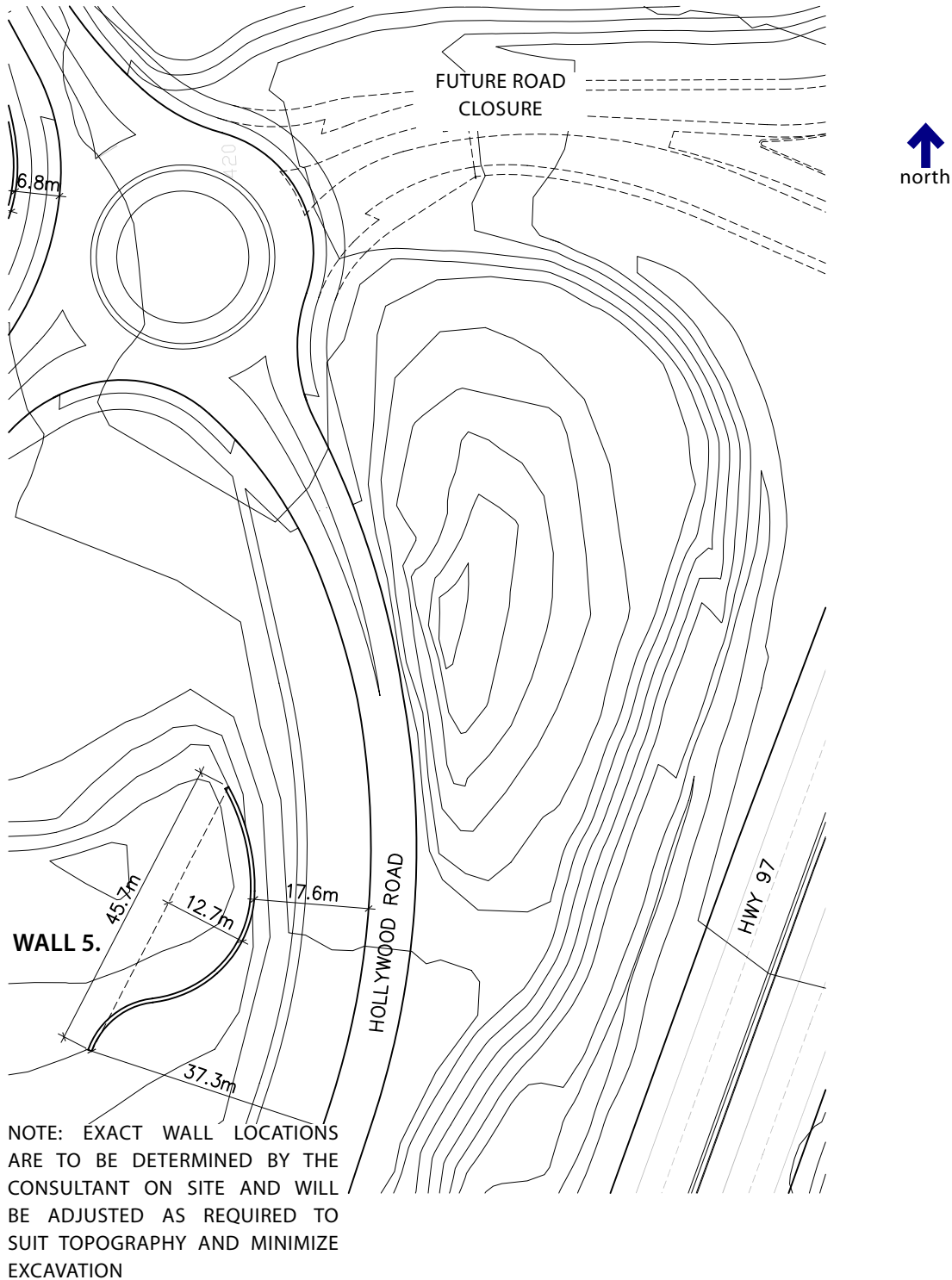
NOTE: EXACT WALL LOCATIONS ARE TO BE DETERMINED BY THE CONSULTANT ON SITE AND WILL BE ADJUSTED AS REQUIRED TO SUIT TOPOGRAPHY AND MINIMIZE EXCAVATION



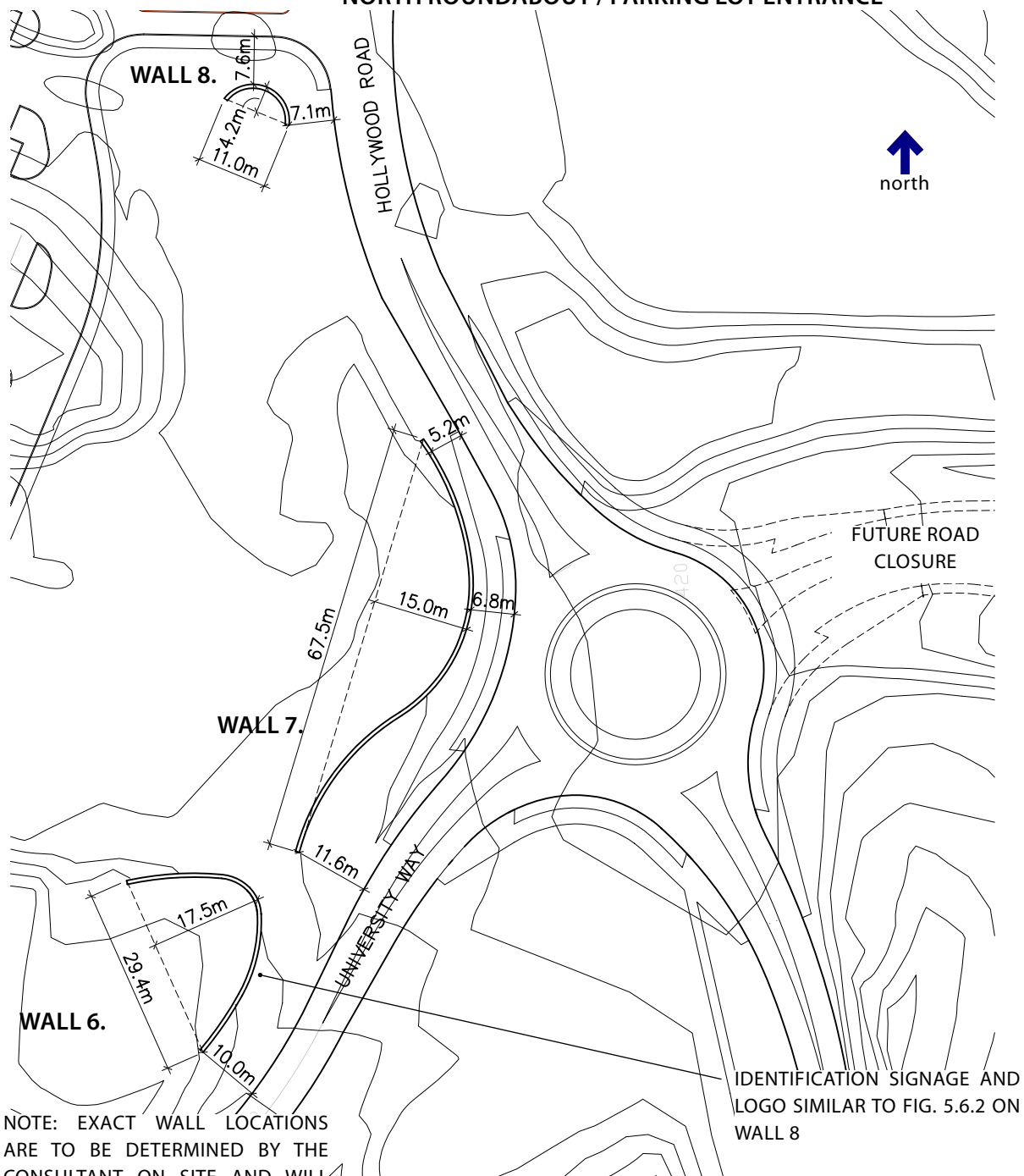
## 5.5.2 -SCHEMATIC WALL CONFIGURATION -SOUTH ROUNDBOUT



### 5.5.3 - SCHEMATIC WALL CONFIGURATION - HOLLYWOOD ROAD



#### 5.5.4 -SCHEMATIC WALL CONFIGURATION - NORTH ROUNDABOUT / PARKING LOT ENTRANCE



5.5.5 - SCHEMATIC WALL ELEVATION

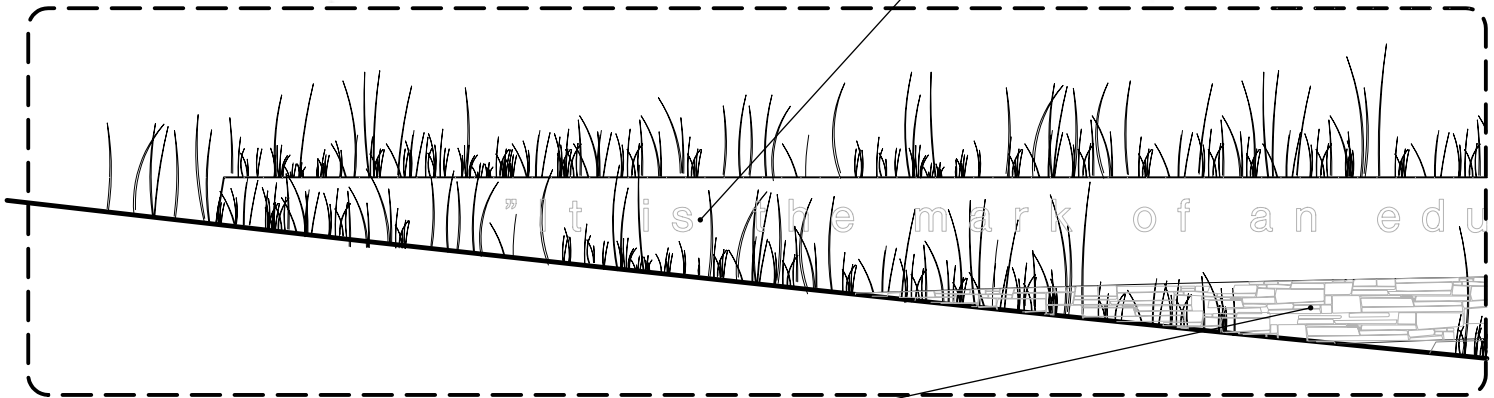


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5.5.6 - WALL ELEVATION

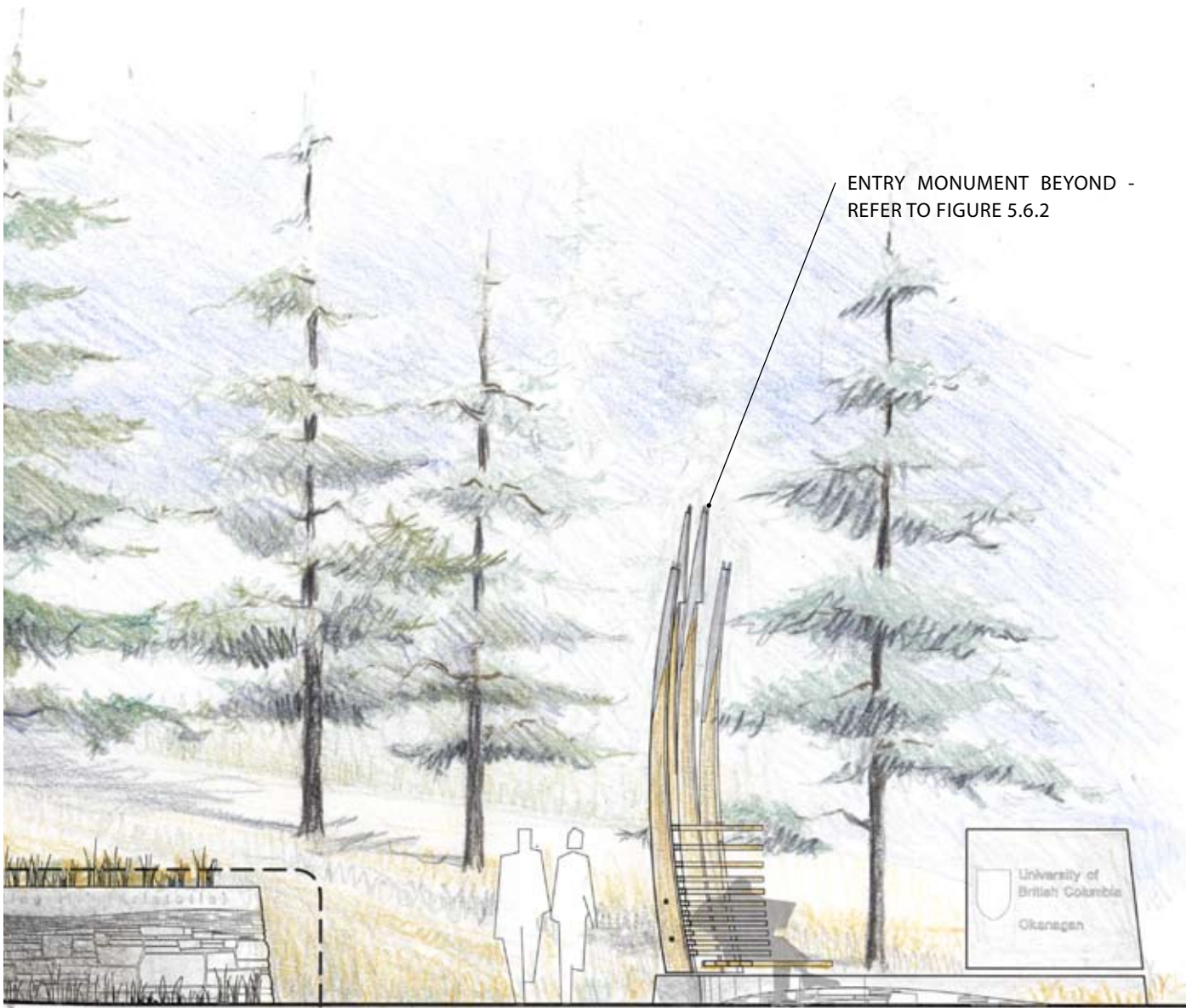
4" LETTERING RECESSED INTO  
FACE OF CONCRETE CAP



SMALL ROCKS AND PEBBLE STRIP -  
WIDTH VARIES

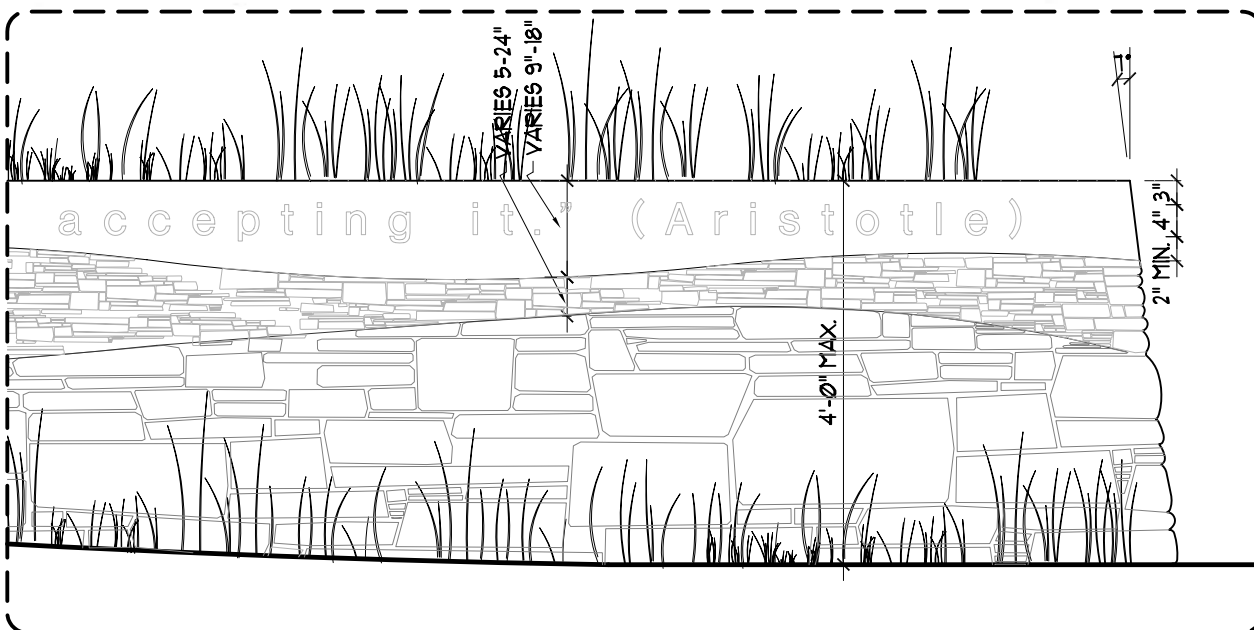
Scale: - 1/2"=1'-0"



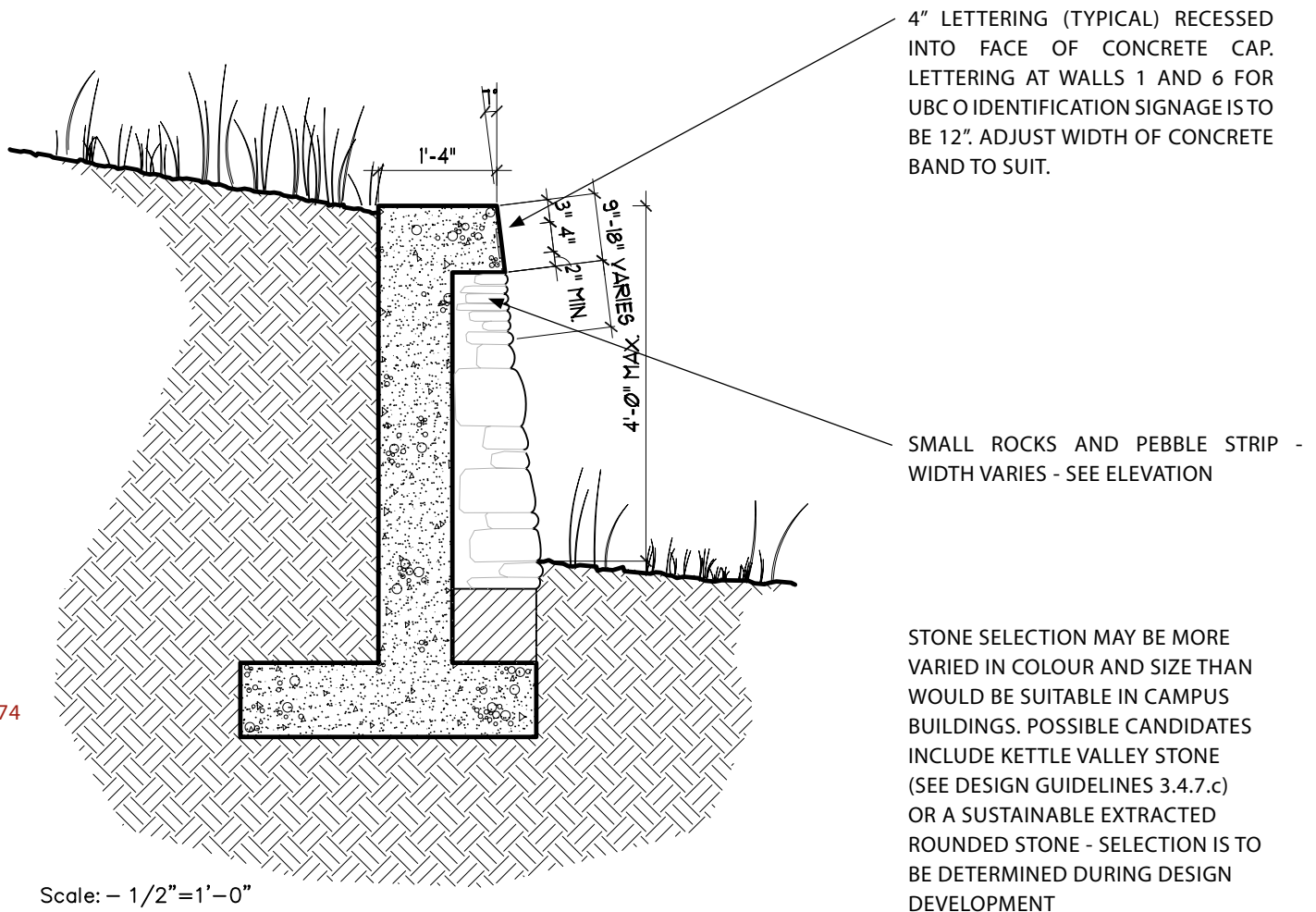


ENTRY MONUMENT BEYOND -  
REFER TO FIGURE 5.6.2

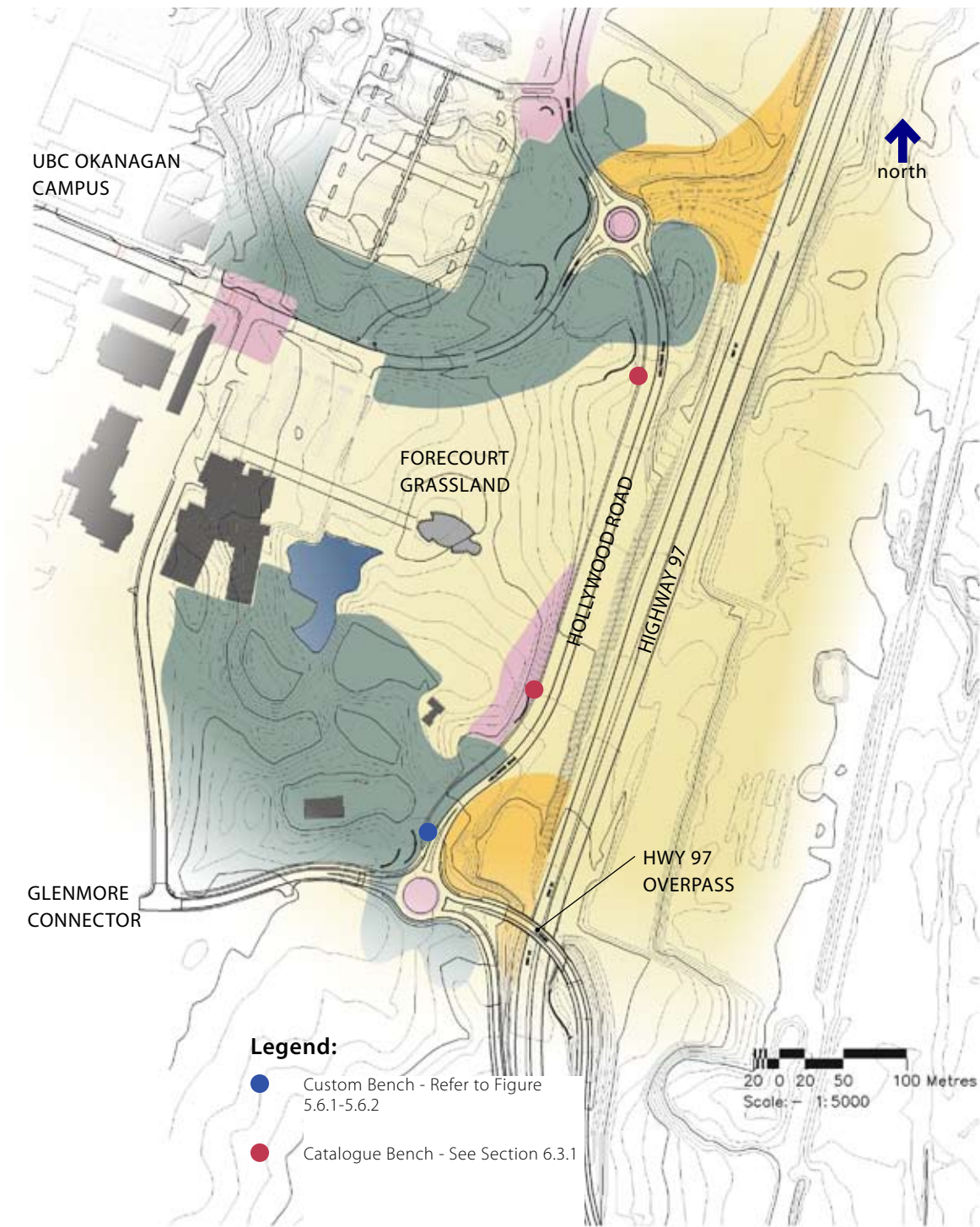
73



### 5.5.7 - SCHEMATIC WALL SECTION



## 5.6 ENTRY BENCH / SEATING CONCEPT PLAN



### 5.6.1 - SCHEMATIC ENTRY MONUMENT / CUSTOM BENCH - PLAN VIEW

1-1/2" x 3 1/2" CURED  
WOODEN BENCH SLATS  
LAMINATED FROM 13mm  
WOOD STRIPS C/W.  
TRANSPARENT STAIN -  
FASTEN TO GALVANIZED  
STEEL POST BRACKETS

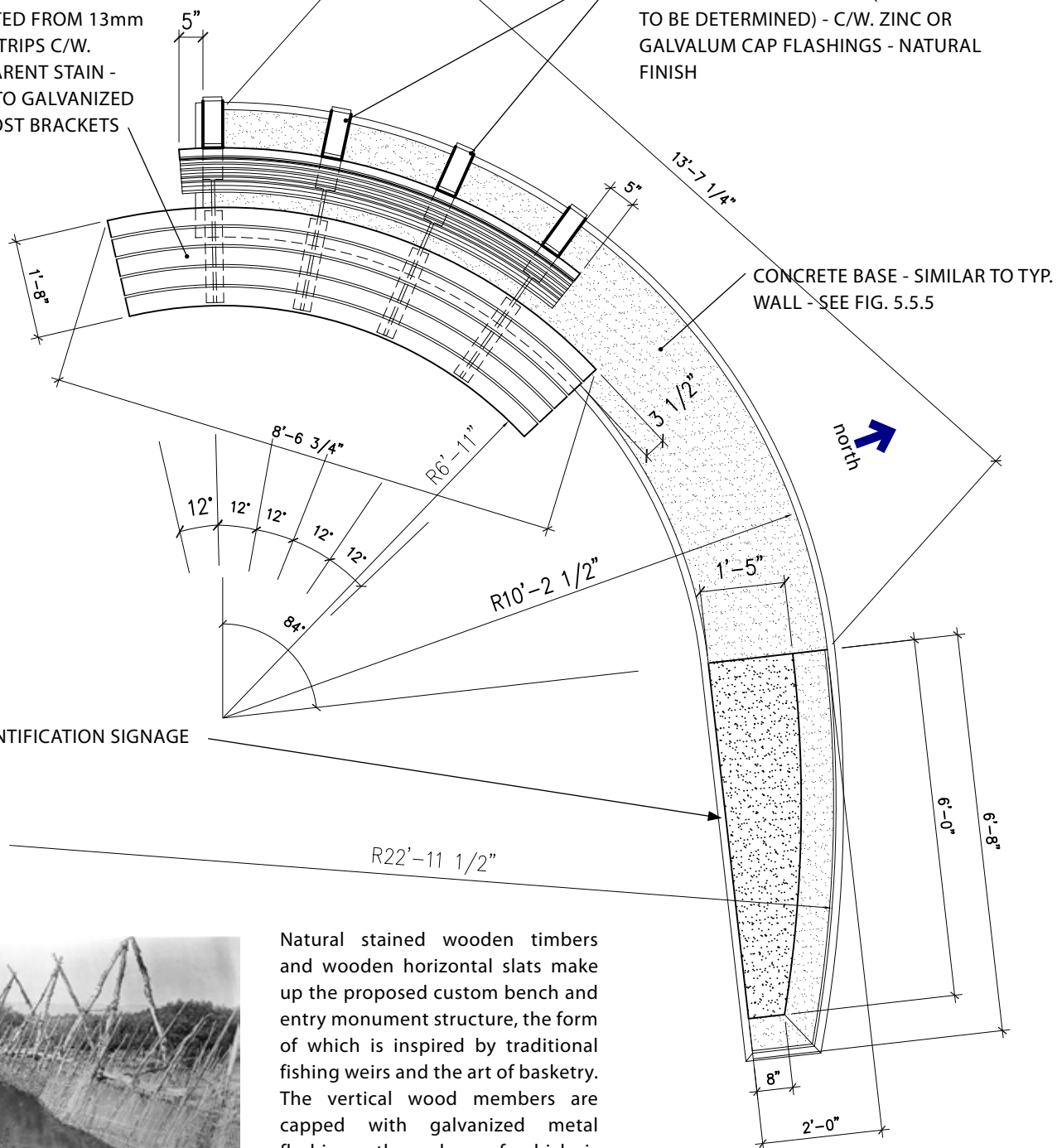
CURVED GLUE-LAMINATED COLUMNS  
W/. TRANSPARENT STAIN - (COLOUR  
TO BE DETERMINED) - C/W. ZINC OR  
GALVALUM CAP FLASHINGS - NATURAL  
FINISH

CONCRETE BASE - SIMILAR TO TYP.  
WALL - SEE FIG. 5.5.5

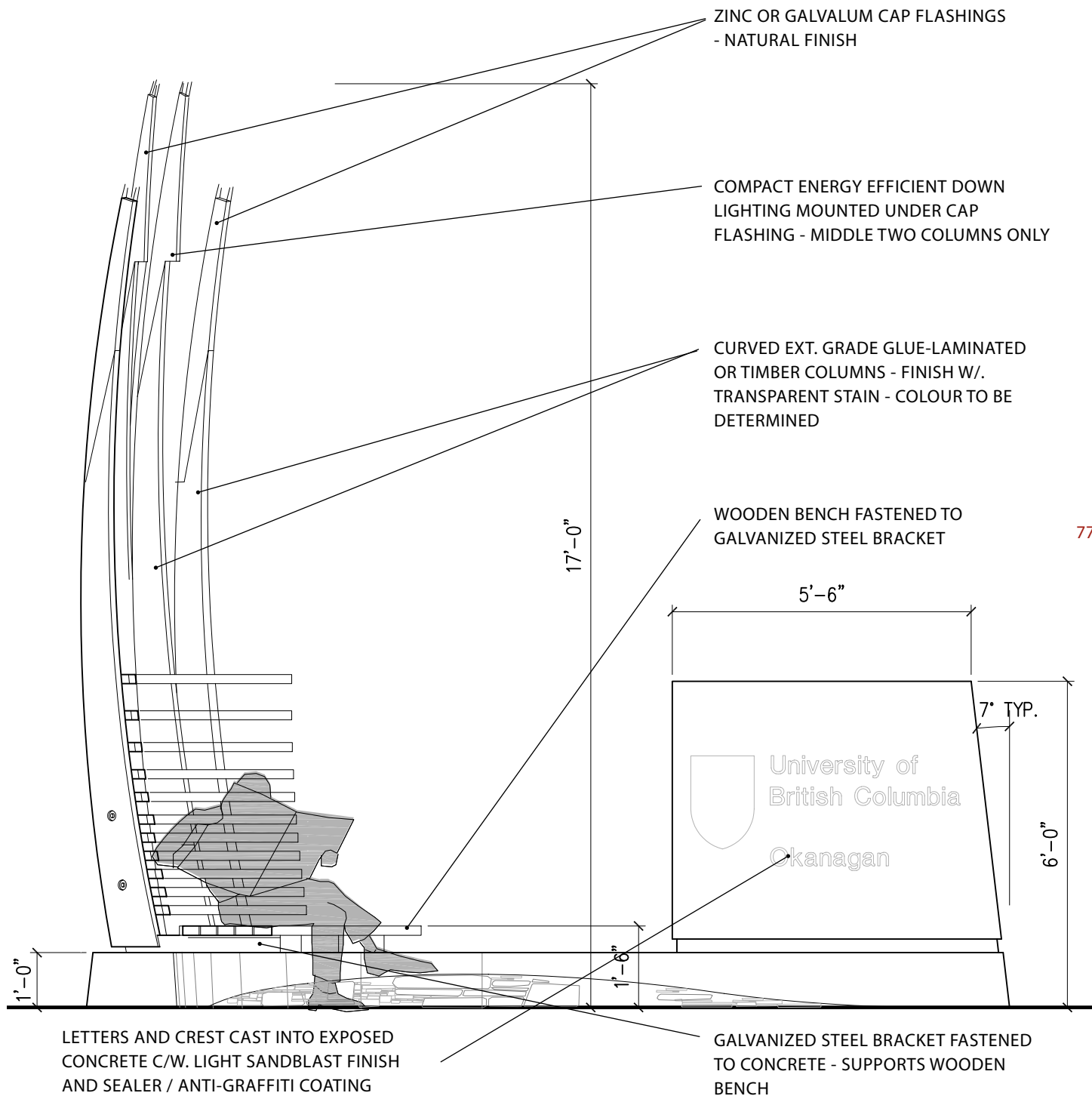
UBC IDENTIFICATION SIGNAGE



Natural stained wooden timbers and wooden horizontal slats make up the proposed custom bench and entry monument structure, the form of which is inspired by traditional fishing weirs and the art of basketry. The vertical wood members are capped with galvanized metal flashings, the colour of which is reminiscent of old wood, turned silver by years of weathering. A base, constructed of concrete and local stone is reminiscent of the gateway walls.



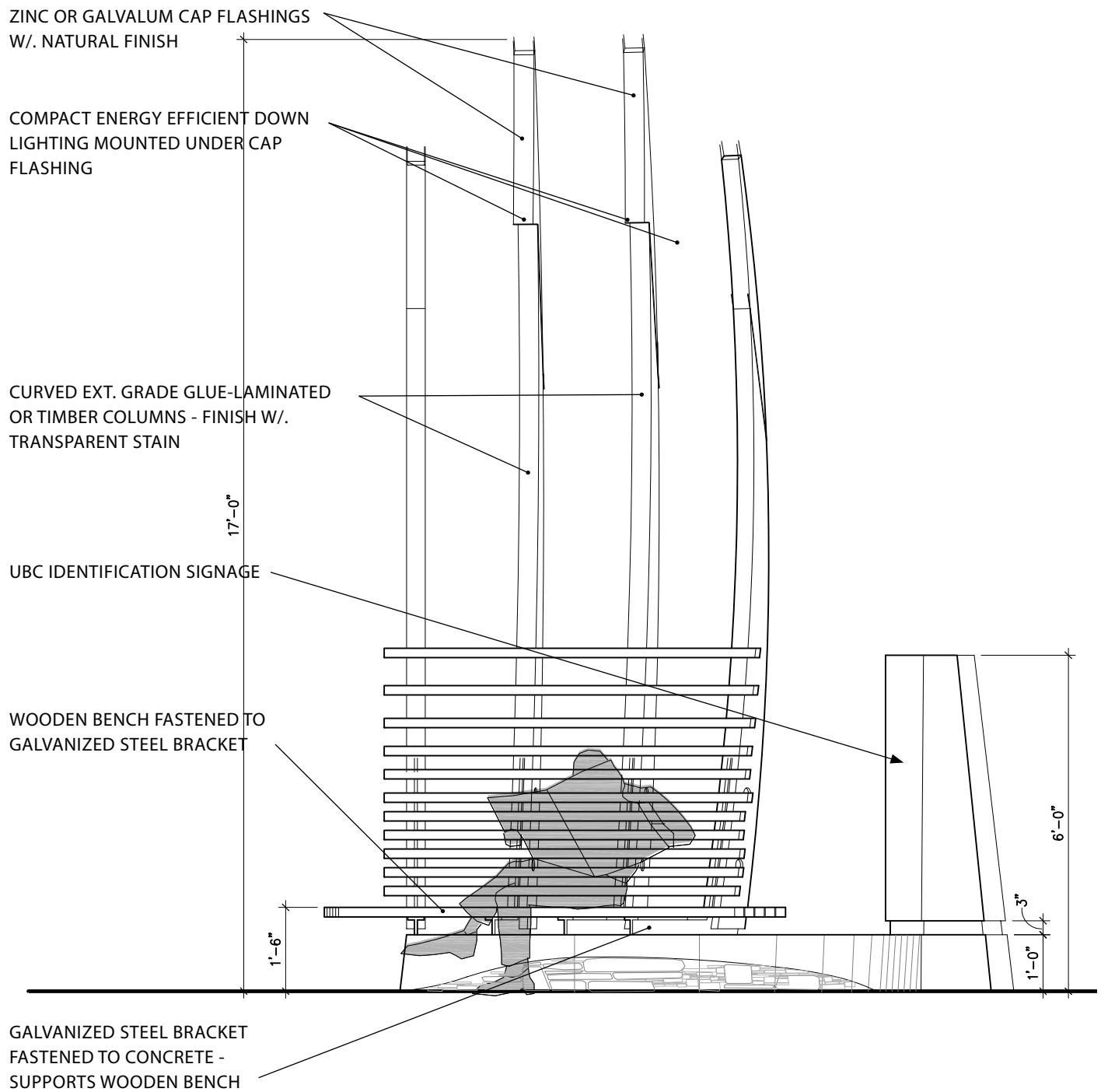
## 5.6.2 -SCHEMATIC ENTRY MONUMENT - FRONT ELEVATION



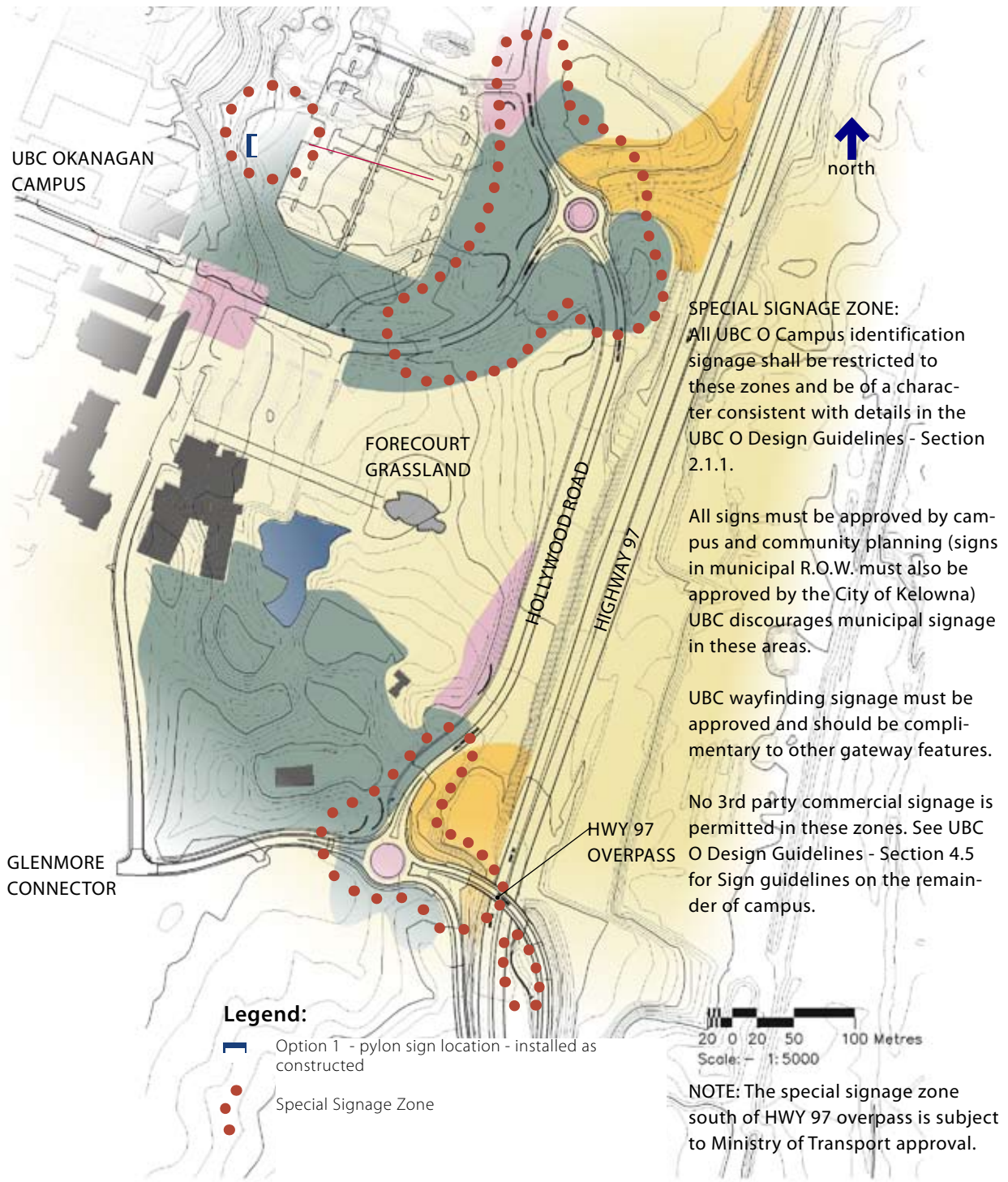
77



### 5.6.3 -SCHEMATIC ENTRY MONUMENT - SIDE VIEW



## 5.7 SPECIAL SIGNAGE ZONES





## 5.8 PLANTING CONCEPT

## Key Plan

Bosque species- Prunus kwansan Ornamental Flowering Cherry - or other flowering tree substitute, subject to City approval - future development to northward is to incorporate approved flowering trees as street trees along Hollywood Road, and on driveways and parking lots.

Aspen Grove - wide spacing, informal arrangement - plant native grass species for groundcover.



Bosque species- Prunus kwansan Ornamental Flowering Cherry - or other flowering tree substitute, subject to City approval

Replant native conifers - refer to Design Guidelines - Section 2.1.2

Repair and replant native grasses - refer to Design Guidelines - Section 2.1.5

Bosque species- Prunus kwansan Ornamental Flowering Cherry - or other flowering tree substitute - plant at 6m o.c. in orchard-like rows, following contours - plant native grass species for groundcover.

Bosque species- Prunus kwansan Ornamental Flowering Cherry - or other flowering tree substitute, subject to City approval

Freeway Planting - refer to Figure 5.8.1

Aspen Grove - wide spacing, informal arrangement - plant native grass species for groundcover.

**FIGURE 5.8.1**

20 0 20 50 100 Metres  
Scale: - 1:5000

# 5.8.1 - PLANTING CONCEPT AT WALL SOUTH OF FLYOVER

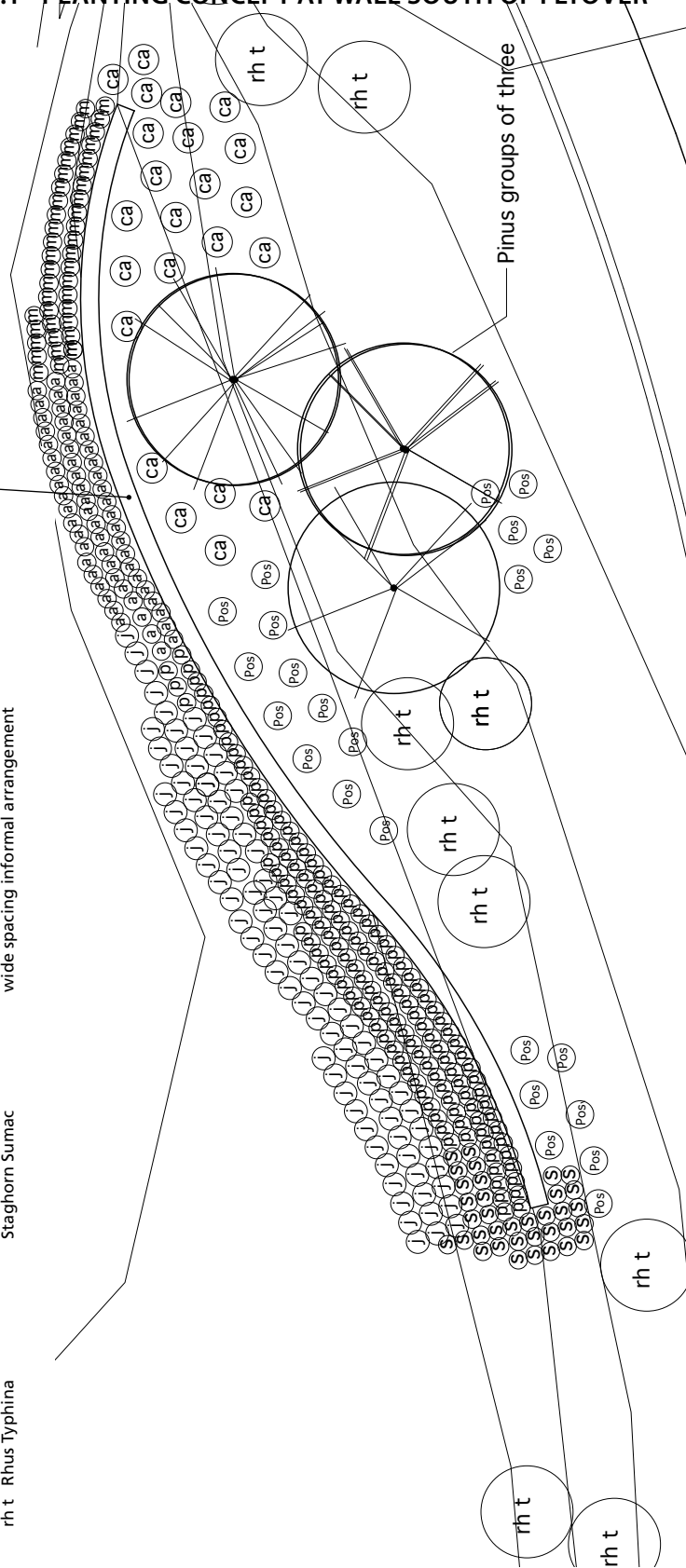
REFER TO 5.5.1 FOR WALL INFORMATION

## Plant list In front of wall

a	Artemisia frigida	Low Native Sage Brush or Lavendula Munstead	Munstead lavender	.60m OC
j	Juniper horizontalis 'Hughes'	Hughes Juniper		.75m OC
m	Mahonia repens	Creeping Mahonia		.6m OC
p	Pennisetum alopecuroides	Fountain Grass or Helectotrichen sempervirens	Blue Oat Grass	.45m OC
s	Sedum spectabile Autumn Joy	Autumn Joy Sedum		

## Behind wall

Ceanothus velutinus	Snowbrush- optional	wide spacing informal arrangement
Cornus stolonifera	Red Twig Dogwood	wide spacing informal arrangement
Pinus nigra	Austrian Pine or Pinus species	
Populus tremuloides	Trembling Aspen - optional	wide spacing informal arrangement
Potentilla fruticosa	Bush Cinquefoil	wide spacing informal arrangement
Rhus Typhina	Staghorn Sumac	



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## 6 COMPONENT CATALOGUE





## 6.1 TREES LIST

Unless tree species is otherwise indicated on Key Plan 5.1 (Tree Planting), trees should be selected from the following list of options. Species listed are also consistent with City of Kelowna regulations and are fire resistant.

Due to insect and disease control, fruiting trees are restricted in the Okanagan. The use of trees not on this list must be reviewed and approved by Campus and Community Planning, the City of Kelowna, and other authorities having jurisdiction.

<i>Abies concolor</i>	White Fir
<i>Acer platanoides</i>	'Columnare' Norway Maple
	'Crimson Sentry'
	'Erectum'; 'Olmsted'
<i>Betula species</i>	Birch Tree
<i>Carpinus betulus</i>	European Hornbeam
<i>Cercis Canadensis</i>	Redbud
<i>Chamaecyparis nootkatensis</i>	Nootka False Cypress
<i>Cornus kousa</i>	Kousa Dogwood
<i>Eucommia ulmoides</i>	Hardy Rubber Tree
<i>Fraxinus americana</i> 'Autumn Purple'	White Ash
<i>Ginkgo biloba</i>	Maidenhair Tree
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Honeylocust
	'Skyline'
	'Shademaster'
<i>Halesia tetraptera</i>	Carolina Silverbell
<i>Koelreuteria paniculata</i>	Goldenrain Tree
<i>Nyssa sylvatica</i>	Tupelo
<i>Pinus ponderosa</i>	Ponderosa Pine
<i>Populus tremuloides</i>	Quaking Aspen
<i>Prunus Domestica</i>	Prune Plum
<i>Pseudotsuga menziesii</i> var. <i>glauca</i>	Blue Douglas Fir
<i>Pyrus calleryana</i> 'Chanticleer'	Chanticleer Pear
<i>Quercus robur</i>	English Oak
<i>Thuja plicata</i>	Western Red Cedar
<i>Zelkova serrata</i>	Japanese Zelkova

## 6.2 LANDSCAPE SPECIES LIST



Shrubs, grasses, ferns and perennial plant species listed below emphasize a palette of blue, chartreuse, and burgundy leaf colour, offer seasonal interest, drought tolerance, and have fire resistant characteristics. Plants specified on project Landscape plans should be chosen from the plant list below. Additional plant options will be considered if it can be demonstrated that they have similar characteristics. All additional plant selections must be approved by Campus and Community Planning.

### 6.2.1 Shrubs



Abies balsamea 'Nana'	Balsam Fir
Arctostaphylos uva-ursi	Bearberry
Artemisia tridentata	Wormwood
Berberis thunbergii 'Atropurpurea'	Japanese Barberry
Ceanothus velutinous 'Snowbush'	California Lilac
Cornus alba 'Elegantissima'	Redtwig Dogwood
Cotinus coggygria	Purple Smoke Bush
Gaultheria shallon	Salal
Lonicea nitida 'Red Tips'	Boxleaf Honeysuckle
Nandina domestica 'Firepower'	Heavenly Bamboo
Parthenocissus species	Vine
Rhamnus species	Buckthorn
Rhododendron 'Hino-Crimson'	'Hino Crimson' Azalea
Rhododendron X 'Scarlet Wonder Dwarf'	Rhododendron
Rhus species	Staghorn
Ribes cereum	Wax Currant
Rosa gymnocarpa	Baldhip Rose
Rosa rugosa	Shrub Rose
Sarcococca humilis	Sweet Box
Spiraea japonica 'Goldmound'	Japanese Spirea
Syringa species	Lilac
Weigela 'Midnight Wine'	Dwarf Weigela
Yucca filamentosa	Adam's Needle

### 6.2.2 Grasses, Ferns and Perennials

Ajuga reptans	Carpet Bugleweed
Arctostaphylos uva-ursi	Bearberry
Artemisia species	Wormwood
Aster conspicuous	Aster
Cerastium tomentosum	Snow in the Summer
Echeveria species	Hens and Chicks
Gaillardia species	Blanket Flower
Heuchera species	Coral Bells
Hakonechloa macra 'Aureola'	Forest Grass
Hemerocallis hybrids	Daylilies
Kniphofia uvaria	Red-hot Poker
Lavandula sp.	Lavender
Liriope muscari 'White'	Lily Turf
Lupinus sericeus	Silky Lupine
Pachysandra terminalis	Japanese Spurge
Polystichum polyblepharum	Japanese Tassel Fern
Sedum species	Stonecrop
Sempervivum species	Chicks and Hens





## 6.3 SITE FURNITURE

Seating associated with all projects on campus shall be selected from the range of standard, catalogue bench, or custom bench options listed below.

### 6.3.1 Catalogue Bench

The Catalogue Bench shall be to the specifications below, unless otherwise approved by Campus and Community Planning.

Wishbone Industries - Modena

Colour- Seating - Sand - Recycled plastic  
Metal - Silver

Dimensions: 0.86m (34") h x 0.78m (31") d x 1.852m (60") l

Wishbone Modena Benches have a high content of recycled material. One bench may include 728 Pop cans or 112 License Plates and 256 Milk Jugs and pop bottles.

Supplier: Wishbone Industries

ph: (604)626-0476

toll free: 1(800)626-0476

fax: (604)626-0496

www.wishboneltd.com

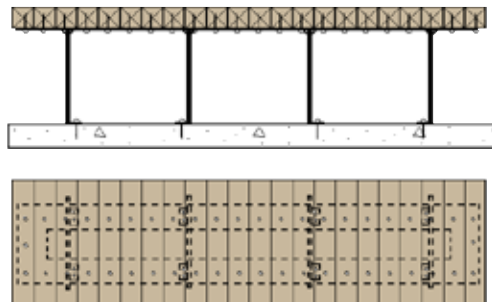
### 6.3.2 Custom Bench 1

Custom benches are encouraged in prominent courtyards and plazas as identified in Section 2.4. Designers are urged to use cedar or pine beetle kill wood 89x89x52 planks attached to steel plate. Local wood is preferred on these benches.

Variations on this theme are acceptable subject to Campus and Community Planning approval.

### 6.3.3 Custom Bench 2

Designers are encouraged to make use of the campus terrain and develop seating walls integral to the landscape to be approved by Campus and Community Planning.





### 6.3.3 Litter Receptacle

Litter receptacles shall be to the specifications below, unless otherwise approved by Campus and Community Planning.

Landscape forms -Chase Park

Colour- RAL 7043 gray

Style- 36 or 40 gallon side-opening style (includes black, polyethylene liner)

Optional sand pan, attached with cable

Optional UBC logo may be specified

May be left freestanding or surface mounted on site

Dimensions: Side opening .6m (24") dia. X 1.02m (40")h

Chase Park Litter Receptacles have a recycled material content of 61% or greater, of which 37% or greater is post consumer and 24% or greater is post industrial. Chase Park receptacles are 100% recyclable.

Supplier: Landscape Forms  
Martin Petersen  
BC & Alberta Sales Office  
ph: (604)987-7461  
toll free: 1(866)987-7461  
cell: (604)803-2781  
fax: (604)987-7924  
martinp@landscapeforms.com

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At the time of writing there are three Sybertech in-ground trash receptacles being used on an experimental, trial basis. These receptacles are designed to accommodate a far greater volume of trash than regular receptacles by using a specialized bag liner in a plastic cylinder sunk 6 ft into the ground. These receptacles have the advantage of requiring less frequent emptying but the receptacles are large and inconsistent with the campus aesthetic. Until the trial period is over it is also difficult to know whether bag leakage, odour or other concerns may arise.

It is recommended that purchase of additional receptacles of this type be deferred until an improved above-ground component can be agreed upon, subject to review by Campus and Community Planning, and that this type of trash receptacle be restricted to high volume or remote locations such as the sports fields and bus exchange. It is recommended that only authentic materials (no plastic) be used to clad the receptacle and that they be designed to fit within the rest of the landscape palette identified in these guidelines.

### 6.3.4 Tables

Custom tables are to complement the architecture and landscape furnishings palette. Design or selection of tables shall be reviewed on a project-by-project basis.

Refer to Section 2.4 for possible open space locations of tables.





### 6.3.5 Tree Grates

Tree grates shall be used in largely hardscaped areas, including the following:

- University Way in retail area
- University Centre Plaza

Tree grates shall be to the specifications below, unless otherwise approved by Campus and Community Planning.

Catalogue grate:

Dobney Foundry Limited – ST Series

Material ductile iron

16" inner circle can be broken away to permit growth

Options 36" (914mm) ST-36 or 48" (1215mm) ST-48

Supplier:

Dobney Foundry

13101-78A Ave

Surrey BC

ph: (604)596-7407

fax: (604)596-1713



### 6.3.6 Custom Tree Grate

Where possible Public Art tree grates that reflect the character or use of the surrounding courtyard and building space are encouraged along ceremonial routes or in exterior public art locations (See Key Plan 5.5 and Plan 2.3).

Custom designs must be approved by Campus and Community Planning.

Custom tree grates are to be unique in character and reflective of the Okanagan landscape. For instance, the grate pattern may include themes of vineyards and winemaking, orchards, or desert landscape, or other motifs developed for use around campus (see guideline 4.2.f).





Covered bicycle parking



Pi bike rack



Art bike rack

### 6.3.7 Bike Racks

Bicycle parking, including some covered parking, is to be incorporated into all building projects.

Bike racks shall be to the specifications below, unless otherwise approved by Campus and Community Planning.

Dobra Design- Pi

Stainless steel bike rack available in various sizes.

Can accommodate 2-10 bikes per rack.

Has two point support.

Colour preference is given to unpainted stainless steel or galvanized steel racks. If paint is required it should be grey: RAL 7043 (If bike rack is in close proximity to bench and trash receptacle it is required to match the metal colours).

All racks include fasteners and instructions for secure installation on concrete.

Supplier:

Scott Hicks

Dobra Design

ph: (604)733-9486

toll free: 1(888)642-3722

fax: (604)733-2453

email: [info@dobradesign.com](mailto:info@dobradesign.com)

web site: [www.dobradesign.com](http://www.dobradesign.com)

### 6.3.8 Custom Bike Rack

Unique custom racks incorporating public art are encouraged along ceremonial routes or in exterior public art locations, subject to review and approval by Campus and Community Planning. (See Key Plan 5.5 - Exterior Public Art and Plan 2.3 - Ceremonial Routes)

Ensure custom bicycle rack designs are practical, and will accommodate all styles of bicycle designs.



## 6.4 LIGHTING

Project designers should refer to Key Plan 5.3 - Lighting for directions on the format of lighting to be used in different areas of the campus. Standard specifications for each general format are listed below. All new lighting should conform to these specifications unless otherwise approved by Campus and Community Planning.

- a. Use dark sky compliant fixtures.
- b. Do not over light, use lights to create soft pools of light.
- c. Use lights with a larger light spectrum.

### 6.4.1 Pole Light

The Pole light shall be to the specifications below, unless otherwise approved by Campus and Community Planning.

Selux Saturn type 1 with loop or type 2

Silver louver

Pole colour - RAL 7043 gray

Banner arms -in processional location or key points that may have public events- theatre

### 6.4.2 Minor Parking Lot Light

The Parking Lot Light shall be to the specifications below, unless otherwise approved by Campus and Community Planning.

Selux Saturn type 1 without loop or type 2- can have multiple fixtures per pole

Silver louver

Pole colour – RAL 7043 gray

#### Supplier

SLS Lighting

Hazel Neill

ph: (604)874-2226

toll free: 1(877)309-0425

fax: (604)874-4949

email: Hazel.Neill@SLS\_lighting.com



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### 6.4.3 Main Parking Lot Light

The Parking Lot Light shall be to the specifications below, unless otherwise approved by Campus and Community Planning.

Cooper OVH Flat Glass

Lamp wattage 25

Lamp type M

Ballast W

Voltage 9

Pole 7.6m/28' tall

Colour of light and pole - RAL 7043 gray

#### Supplier

MAC's Agencies

Paul Gill

ph: (604)540-6646

toll free: 1(877)511-6227

fax: (604)540-6602



### 6.4.4 Bollard Light

- a. Bollards are to be used sparingly, not as the primary lighting along pathways.
- b. The bollard light shall be to the specifications below, unless otherwise approved by Campus and Community Planning.

Cooper Lumiere Aspen- 1900- OA

Colour - RAL 7043 gray

#### Supplier

MAC's Agencies

Paul Gill

ph: (604)540.6646

toll free: 1(877)511-6227

fax: (604)540-6602



