THOMPSON RIVERS UNIVERSITY - Campus Plan

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CAMPUS PLAN VISION

Statement

As a result of the Visioning Workshop a Campus Plan Vision statement was developed. In general terms, its purpose is to describe the various physical attributes (look and feel) of the campus as they relate to the experience of students, faculty, staff and visitors and how this character will enable achieving the multi-variate objectives of each stakeholder group.

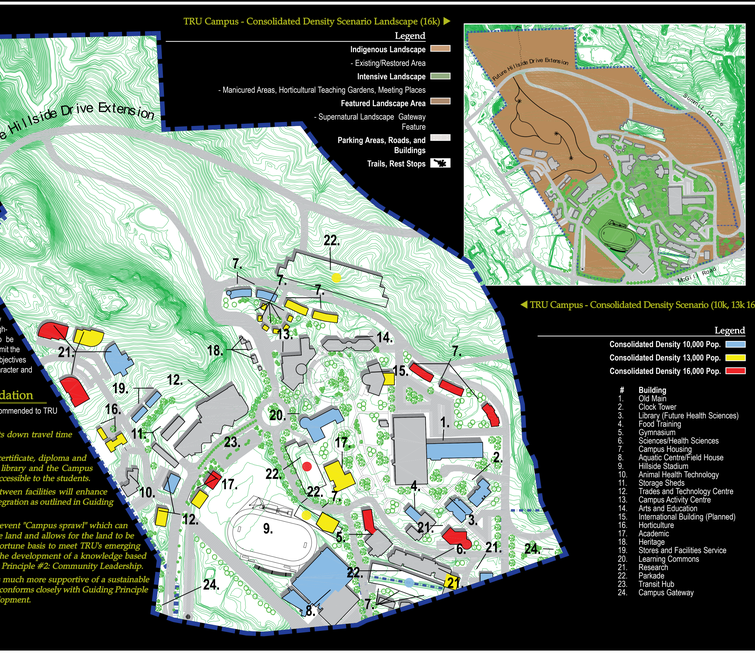
The following statements capture specifically the vision of the future for TRU's campus:

1. *The campus of Thompson Rivers University will be a destination for students, scholars, researchers and visitors from across Canada and around the world to learn, teach and conduct research.*
2. *TRU will be recognized for the integration of its programs and the value it places on all forms of learning.*
3. *People will come to experience first hand a vibrant environment that has become the focal point for economic development in the Kamloops region and which plays a key role in the cultural and recreational activities of citizens.*
4. *The campus is distinguished by its unique landscaping that draws heavily on the plant species indigenous to this semi-arid climate and the dramatic topography with its unparalleled views of the Thompson River Valley.*
5. *On approaching the campus, visitors are struck by the vibrancy of the activity along McGill Road with its housing and shops and even new buildings occupied by emerging businesses and other enterprises spawned by the TRU research program.*
6. *On entering the campus one is also struck by the diversity of the students and the staff who seem to come from many different ethnic backgrounds. Everywhere one sees unique symbols of this international culture: sculpture, flags, even the buildings express uniqueness about this place that sets it apart from other institutions.*
7. *The road system leads you to parking from where it is easy to find the new International Centre, research facility and community recreation facilities. Once parked, one's eye is drawn immediately to the new library, a symbol of the knowledge being created and disseminated by this institution.*
8. *As you proceed toward your destination the experience is similar to a walk in a park; buildings do not dominate but help define the outdoor spaces their entrances are clearly visible and at night well lit. There are numerous opportunities to sit and enjoy the river valley views or the campus landscape itself.*
9. *One is struck by the vitality with people of all ages enjoying their surroundings or going someplace. The smell of cooking wafts from the restaurants and one gets the sense that this is a place where one can stop and enjoy many things as well learn or conduct research.*
10. *Despite all the bustle one has a sense of tranquility and that there seem to be many groups engaged in lively discussion over coffee or just standing about.*
11. *The overall experience is that of an institution with a strong sense of purpose grounded in its expanded role as economic engine and centre of learning.*

RECOMMENDATION

Tactical Scenarios: Adopt A Consolidated Density Approach to Campus Development

The following drawing illustrates for each tactical scenario of 10,000, 13,000 and 16,000 FTE student enrollment, the development phasing based on achieving a slightly higher density of development through incressing the allowable height of certain significant buildings in the Academic Zone. These could include the new library or other academic buildings. A slightly higher density would allow for less land to be devoted to building footprints and overall limit the sprawl of the campus allowing TRU's objectives regarding program integration, image, character and accessibility to be maintained.



Reasons for Recommendation

The consolidated density approach is recommended to TRU for the following reasons:

1. *The proximity of buildings cuts down travel time among them.*
2. *Facilities shared between the certificate, diploma and degree programs, such as the library and the Campus Activity Centre, will be more accessible to the students.*
3. *The decreased travel times between facilities will enhance the new concept of student integration as outlined in Guiding Principle #1: Integration.*
4. *Proximity of facilities helps prevent "Campus sprawl" which can consume all of the developable land and allows for the land to be developed on more of an opportune basis to meet TRU's emerging role as the regional leader in the development of a knowledge based economy as set out in Guiding Principle #2: Community Leadership.*
5. *A more compact urban form is much more supportive of a sustainable approach to development and conforms closely with Guiding Principle #5: Sustainable Campus Development.*

DESIGN GUIDELINES UPDATE

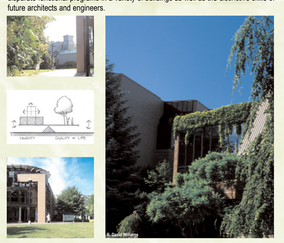
Introduction

The 2003 version of TRU's Campus Plan includes a review of the Design Guidelines developed for the 1991 Campus Development Plan. For the most part the 1991 design guidelines have served TRU well and a number of important buildings including the Trades and Technology Centre and the Campus Activity Centre have been constructed based on these guidelines. Both of these buildings exhibit high standards of design.

The intent of this review is to avoid making unnecessary changes and for the most part few changes are made. The only exception is in regards to building height. Where earlier guidelines recommended a maximum height of three stories the revised guidelines are recommending that certain buildings of significance should be allowed to be up to five storeys in height. As explained in the Campus Plan, the main reason is to create, as the university grows over time, a higher density of development, which will prevent unnecessary sprawl and preserve the underlying principle of integration between all academic programs. As mentioned this should be reserved for special buildings such as the proposed library or "learning commons" and other academically significant structures.

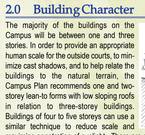
1.0 Design Guidelines

The Campus Development Plan establishes guidelines for future buildings. The development of detailed guidelines is not intended to restrict the freedom of design professionals, but to assist them in making choices that will contribute to an overall sense of unity throughout the campus. Rather than defining a particular architectural style for future buildings, a "kit of parts" approach provides the flexibility needed to accommmodate disparate functional programs in a variety of buildings as well as the distinctive skills of future architects and engineers.



2.0 Building Character

The majority of the buildings on the Campus will be between one and three stories. In order to provide an appropriate human scale for the outside courts, to minimize cast shadows, and to help relate the buildings to the natural terrain, the Campus Plan recommends one and two-storey lean-to forms with low sloping roofs in relation to three-storey buildings. Buildings of four to five storeys can use a similar technique to reduce scale and maximize penetration of sunlight. There are also opportunities given the topography of the campus to "bury" portions of higher buildings into the sides of slopes. Where possible, sloping roofs will complement the prevailing topography, and where the footprint of a building is too large for a single sloped roof, a flat roof and lean-to can be used.



3.0 Existing Finishes

The existing Campus buildings, except the Old Main and Food Training Centre Buildings originally used Clayburn Giant Brick "Walnut". More recent additions to the Library and Science Building have used IXL Giant Brick "Kootenay Brown", similar in colour. The Campus Plan recommends Kootenay Brown Brick on future additions in the vicinity of the existing core. Buildings grouped around other courts, e.g. those proposed for the The Campus Common contained by The Campus Activity Centre and the future Learning Commons, should be of different but compatible colour - e.g. Dark Tweed. When the next scheduled maintenance cycle occurs, the University may wish to change the stucco colour on the Food Training Building to the beige colour utilized on other campus buildings.

4.0 Palette of Finishes

4.1 Exterior Walls

- Giant Brick for academic buildings as per existing with limited color change
- Painted concrete block for utility and industrial buildings the same as the beige color utilized on other buildings
- Use of stucco (cement or acrylic) to be discouraged on academic buildings, but may be used with concrete block on utility and industrial buildings the same as the beige color utilized on other buildings

4.2 Sloped Roofs

- Metal to match Clock Tower or same profile in galvanized steel

4.3 Glazing

- Clear or brown tinted, non-mirrored glass in painted or anodized sash
- Clear or obscured Glass Block used where translucent light penetration is required

4.4 Pedestrian Pathway & Court Paving

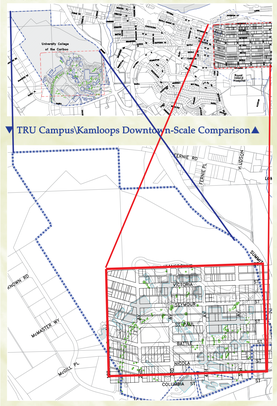
- Granite, brick or interlocking pavers, exposed aggregate, brushed concrete

CAMPUS PLAN CONCEPTS

1.0 The Campus and Downtown Kamloops

Two drawings illustrate the relative size of the University campus and the downtown area. The downtown extending from the south bench where the Royal Inland Hospital (Columbia Street) is located to the rail yards on the north side (Lansdowne Street) between 1st and 6th Avenues, is superimposed on TRU's Campus to the same scale. The illustration shows the downtown block pattern superimposed on the campus building pattern. This image illustrates the significant difference in the approach to the organization of development and use of land. In the downtown, building and other developments are organized by a rectangular pattern of development of streets and blocks, which ensures a clearly understood framework of public circulation, building frontages and addresses and a discipline of building footprint sizes. By contrast the campus is developed with a much looser pattern of buildings organized around a series of open spaces. The density is much lower than that downtown with building footprints occupying a much smaller area and with significantly greater distances between buildings.

The second drawing compares both the downtown and the campus and serves to illustrate the comparative distances. Overall the downtown can fit comfortably within the south half of the campus. Some campus buildings like Old Main and Trades and Technology occupy the equivalent of entire city blocks. More importantly walking distances on campus, for example, to go from the student residences to the Campus Activity Centre, are equivalent to one end of downtown to the other.

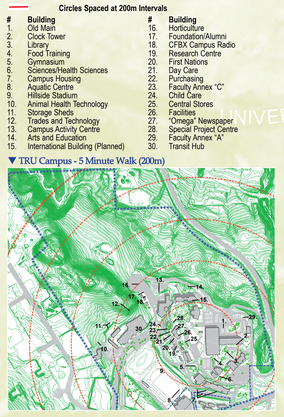


2.0 The Campus Core

TRU's campus has grown primarily by adding new buildings on its periphery. As can be seen by the accompanying drawing, the distance between several of the buildings now exceeds that walkable in five minutes. To walk across campus, say to go from a class in the Animal Health Science building to Old Main or to Library to do research, takes ten minutes. Increasing distances on campus will impact the concept of integration between trades, diploma and degree students and may well lead to the creation of ghettoes.

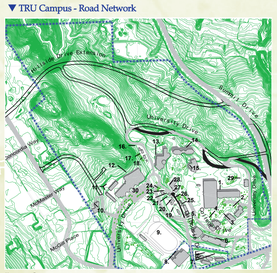
There is considerable advantage as well as convenience, to maintaining a compact set of buildings within relatively short walking distances. Some buildings such as residences and support structures such as greenhouses, maintenance and physical stores buildings can be on the periphery. This facilitates traffic, including trucks accessing these buildings without penetrating the campus core, which should be primarily a pedestrian environment.

New facilities will have to be sited to avoid spreading the campus out too much and maintain a pedestrian friendly environment. This will require balancing the requirement to build higher buildings to increase density, with the desire to maintain the low-rise scale of the campus.



3.0 Road Network

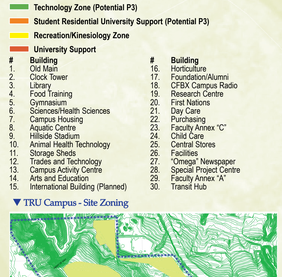
The TRU campus is bounded on the south and east by major arterial roads. Four entrances feed off of these into the campus and form three looping interconnected roadways on campus. Some buildings face the roadways while others are set back in park like settings and accessed through parking lots or green space. There is no clear organization and this has led to problems regarding orientation of visitors on campus. Proposed changes to the road network include taking advantage of the proposed Hillside Drive extension to the north by adding a new access point to the campus from the north. This will significantly improve overall campus access and will also facilitate development of the north bench and land adjacent to Hillside Drive. An additional access point on the west side of the campus from McGill Road is also recommended. This will facilitate access to the Technology Zone as well as the relocated support services (maintenance, grounds and purchasing). This access point will help to ensure that heavy truck traffic and other delivery vehicle penetration into campus will be limited.



4.0 Site Zoning

In the course of developing this version of TRU's Campus Plan a number of land use requirements were identified. These included land dedicated to research and technology facilities, university support services, recreation/kinesiology, academic, student residences (undergraduate and graduate) and long-term development potentially in partnership with the private sector.

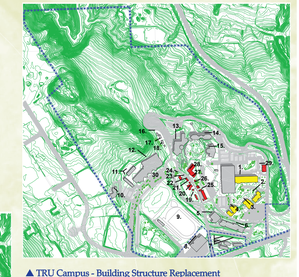
The following drawing delineates these zones. Each is not rigidly defined but may overlap with adjacent zones as opportunities and needs are identified and facilities developed.



5.0 Building/ Structure Replacement

Over the next fifteen years a number of buildings and structures will require replacement due to their age and/or location on campus. Most of these buildings are located in the centre of the campus, are smaller single storey, wood frame construction and occupied by university support functions (purchasing, facilities/stores) for which they are not particularly well suited. In addition this zone of the campus is best suited to academic functions. Given these factors it is recommended that the functions in these buildings be relocated to a university support services zone and the existing buildings demolished. It is also proposed that the daycare be relocated into a new facility in the Academic Zone when its current location is required for campus development.

Another building, Faculty Annex 'A', is a temporary single storey faculty office structure and should be demolished once additional office space is developed to allow for the development of additional student housing.



GUIDING PRINCIPLES

Introduction

Based on the key stakeholder participation process as well as identified assumptions and in response to the challenges and opportunities identified in the environment, a set of Guiding Principles that will shape the development of the Campus Plan and assist in evaluating planning choices has been identified. The purpose of developing these Guiding Principles is to help form and define the current update of the Campus Plan and act as a catalyst in helping to achieve TRU's strategic objectives and, ultimately, its vision as the major engine of economic development regionally. These Guiding Principles represent the unique and sustainable ways by which TRU through its Campus Plan creates value for its students, faculty, staff and the external community of Kamloops and the Thompson-Nicola Regional District.

These Guiding Principles are fundamentally strategic and are derived from the directions made in TRU's Strategic Plan, Education Plan and Strategic Research Plan. The directives inherent in these plans have been translated into a series of physical planning principles that are consistent with the stated priorities and directives of TRU.

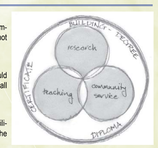
The Campus Plan's six Guiding Principles and their supporting strategic objectives provide the basis for making informed decisions regarding specific capital development initiatives that will, as much as possible ensure the continuation of the high quality academic environment currently enjoyed by students, staff and visitors. They will also help to ensure that as TRU proceeds into its new and expanding role as a leader in the knowledge-based economy it continues to be able to offer a superior environment that will accommodate the teaching, research and campus life needs of TRU.

Guiding Principle #1: Integration

The Campus, buildings and grounds, must continue to promote the integration of the various degree, diploma and certificate programs. It must also support the integration of the university with the adjacent community.

Strategic Objective 1.1

Building functions (research, teaching, community service) should be integrated, not segregated within facilities.



Strategic Objective 1.2

Buildings shared between programs should be sited to be equally accessible from all parts of the campus.

Strategic Objective 1.3

The campus should be planned so that facilities with high public use are adjacent to the community.

Guiding Principle #2: Community Leadership

The Campus Plan will reflect and support TRU's emerging role: locally as the regional leader in the City of Kamloops and the Thompson-Nicola Regional District in the development of a knowledge-based economy; internationally as a leader in Canada in delivering educational services to international students and professionals.

Strategic Objective 2.1

The Campus Plan will enable adaptability and change to respond to and meet new opportunities locally and internationally.

Strategic Objective 2.2

Specialized facilities for incubation of new knowledge-based enterprises, accommodation of international visitors and students and transfer of knowledge locally and internationally will be developed and located so as to be visible and accessible.

Strategic Objective 2.3

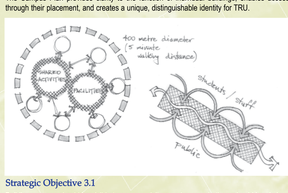
The campus should be planned so that facilities with high public use are adjacent to the community.

Strategic Objective 2.4

The Campus Plan will identify new opportunities for incorporating revenue-generating activities in new campus development including land development of existing campus property. Partnerships with the private sector and other public agencies will be pursued.

Guiding Principle #3: Identity & Accessibility

The Campus Plan provides clarity to the function of individual buildings, enables access through their placement, and creates a unique, distinguishable identity for TRU.



Strategic Objective 3.1

Building purpose should be visible to campus visitors and access to them should be obvious and lead them to the building.

Strategic Objective 3.2

Pathways should facilitate movement between buildings.

Strategic Objective 3.3

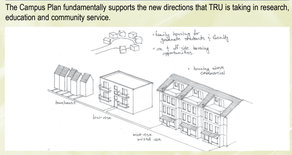
New development must be accessible to students, staff, visitors and the public. Public buildings need to be sited on a public edge. All students must have equal access to shared facilities such as the library, food outlets and the student activity centre. First time users should easily find their way.

Strategic Objective 3.4

One part of the Campus should be readily identifiable as the heart of the campus through the placement of important buildings, landscaping and accessibility from all parts of the campus.

Guiding Principle #4: New Directions

The Campus Plan fundamentally supports the new directions that TRU is taking in research, education and community service.



Strategic Objective 4.1

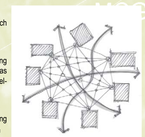
New facilities for increasing the role of research at TRU will be developed.

Strategic Objective 4.2

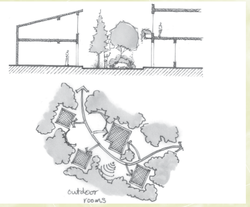
New housing that will support new programming for graduate and international students as well as visiting scholars and researchers will be developed.

Strategic Objective 4.3

The Campus Plan must be supportive of creating new opportunities for informal contact between students, visiting scholars, faculty and staff to facilitate the serendipitous creation of new ideas.



Guiding Principle #5: Sustainable Campus Environment



The Campus Plan will create a sustainable campus community environment that will not compromise the environmental, social or economic systems within which we operate.

Strategic Objective 5.1

The Campus Plan will embrace the native landscape of the region, preserve vistas and views and promote the pedestrian nature of the campus.

Strategic Objective 5.2

The Campus Plan must recognize the exiting topography of the campus and acknowledge the constraints this places on development.

Strategic Objective 5.3

Buildings and open spaces should conform to best practice in environmental design and consideration be given to achieving a consistent and recognized standard such as the LEED rating system of the USGBC.

Strategic Objective 5.4

The Campus Plan will support alternative modes of transportation including bicycles and public transit. Parking and vehicle movement will be limited as much as possible to the periphery of the campus.

Strategic Objective 5.5

The Campus Plan will strike a balance between higher density and open space so as to support and enhance the quality of campus life.

Guiding Principle #6: Safety

The Campus Plan creates a safe environment for students, staff and visitors.

Strategic Objective 6.1

Buildings and open space will be designed to promote visibility, avoid hiding places and have adequate lighting levels and other security.

CAMPUS LANDSCAPE GUIDELINES

Introduction

These Guidelines, together with the Campus Master Plan, are intended to assist future development and improvements by identifying the characteristics of various landscape components.

The existing landscape encompasses significant natural, historical, cultural and horticultural features, which must be preserved and enhanced over time. Landscaping is an integral part of the horticulture program of TRU.

The Guidelines allow some degree of flexibility and choice. TRU's Landscape Advisory Committee has first-hand knowledge of the campus landscape and can provide design input and direction. Assessing design proposals, identifying maintenance and security issues and providing continuity of campus development are some of the functions of the committee.

The objective of the Guidelines is to create and maintain a landscape that reflects the uniqueness of the Kamloops region, and is essential for creating a lasting impression on students, staff, faculty and the community.

1.0 General

1.1 Landscape Design Approval Process

All new development or site disturbances must have an approved landscape plan and include landscape reconstruction for all areas not covered by parking or roadways.

Landscape plans shall be submitted to the Landscape Advisory Committee for review. Comments will be forwarded to the applicant in writing.

1.2 Landscape Types

The campus lands will continue to consist of basically two (2) landscape types:

1.2.1 Intensively Developed or Manicured Landscapes

These include ceremonial spaces, meeting places, pedestrian links and horticultural gardens. Typically these areas are heavy-use, heavy traffic areas on maintained gardens. An example would be the landscape around the Campus Activity Centre.

As new areas in the vicinity of new building or facilities are identified as functional landscapes, these will be developed and may include paved entrances, pathways, herbaceous plantings, trees and shrubs, furnishings, lighting and signage.

The gardens located at the heritage site (#18 on the Landscape Concept Plan) will continue to be a special place on Campus. This important area serves a number of functions including meeting place, a place for special public and campus functions, and as a teaching focus.

Full automatic irrigation is required for all areas and should be designed for water conservation, such as drip irrigation for planting beds and trees.

1.2.2 Indigenous Landscapes

All areas not designed as intensively used manicured landscapes should be preserved in natural native condition or restored as native landscape.

Where native landscape is restored, temporary irrigation may be required.

Existing ponderosa pines should be preserved with appropriate protection and careful grading to maintain existing elevations and drainage patterns, so as not to disturb the trees in their existing condition.

1.3 Site Planning

1.3.1 Existing Landscape Features

Wherever possible preserve all existing large trees or other special landscape features within the context of new campus development.

1.3.2 Parking

Design parking areas to integrate aesthetically with existing grades and vegetation. Break up large expanses of paving, i.e. more than 20 parking spaces, with significant planting areas. Allow for ease of snow removal and areas for snow storage. Maintain a minimum of 10m of landscaping between parking and habitable indoor rooms such as classrooms.

1.3.3 Sight Lines

Design open spaces and pedestrian corridors in consideration of site lines to destinations, safety, and desirable views.

1.3.4 Universal Site Design

Wherever possible provide barrier free pathways to major building entrances. Other design considerations for exterior pathways include 5% maximum gradients and curb cuts. Design of pathways, steps and handrails should meet or exceed the B.C. building code.

1.3.5 Maintenance

All site and landscape design should take into consideration ease and simplicity of maintenance. Locate garbage bins conveniently for loading and pick-up but not in proximity to pathways or passive outdoor facilities.

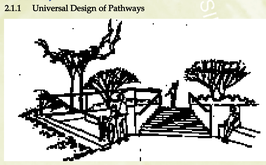
1.3.6 Building Entrance

In addition to barrier free design, provide adequate roof overhangs, drainage and other means of preventing build-up of ice and snow. Provide protected amenities for smokers away from building entrances.

2.0 Hard Landscape

2.1 Pathways

2.1.1 Universal Design of Pathways



All paved circulation systems must be designed to accommodate the disabled. Attention should be paid to the provision of handrails, curb cuts, radii, and contrasting edge demarcation at stairs and walkways.

Exterior ramps should be avoided. However, when necessary, they should be closely associated with stairs and conform to TRU's policy of 5% maximum gradients.

Pathway Type	Definition	Treatment
Formal	Carries large volumes of pedestrian traffic on a daily basis	Minimum width 2.5m, concrete with broom finish surface Minimum 3.0m width for combined bicycle route and high volume pedestrian
Secondary	Carries heavy pedestrian traffic between daily destinations	Minimum width 1.5m, concrete with broom finish surface
Informal	Low volume, for leisure/recreational use in natural landscape areas or interpretive trails	Finely crushed stone such as limestone screenings or shale. Minimum width 1.5m
Temporary / Functional	Provides daily functional access to periphery destinations, temporary parking lots or areas under construction	Width determined by volume, asphalt or crushed stone depending on anticipated life cycle

2.1.2 Pathway Categories

2.1.3 Other Paving Types

Specialty paving treatments may be considered for special ceremonial features or other locations to designate unique functions. Paving types such as stamped and coloured concrete paver stone or high quality exposed aggregate will be approved on a discretionary basis.

2.2 Exterior Stairs

2.2.1 Handrails

The B.C. Building Code requires handrails on exterior stairs with more than 3 risers. Do not configure stair runs with less than 3 risers. In the interest of safety and convenience provide handrails to comply with the B.C. Building Code.

2.2.2 Barrier-Free Design Standards

Exterior stairs must conform to barrier free design standards and should include tactile and visual warning strips.

2.2.3 Stairs as Informal Seating

Tread and riser design proportions should be selected to integrate comfortable informal seating and safe, comfortable ascent and descent. Integrate seating in such a way as to allow for efficient pedestrian circulation

2.2.4 Stair Materials

Materials for stairs should be broom finish concrete or other attractive finishes with protective nosings to reduce skateboard damage.

2.3 Fencing

Chain link fencing should be black vinyl-coated in high visibility areas.

Galvanized chain-link fencing should only be used for security compounds in low traffic/low visibility areas.

2.4 Furnishings

2.4.1 General Guidelines

Provide furnishings as appropriate for the design intent of outdoor spaces, and in consideration of programmed uses. Specify materials and construction for longevity and low maintenance. Design of new furnishings should be compatible with existing furnishing styles on campus.

In intensively developed areas provide opportunities for built-in informal seating such as ledges, retaining walls, steps and grass berms.

2.4.2 Benches, Ash Urns and Litter Receptacles

Provide an ash urn at seating locations and litter receptacles nearby and at logical locations such as near building entrances.

Materials & finishes:

wood-certified plantation wood for bench seats

metal-powder-coated, industrial coating systems, stainless steel, or galvanized

concrete-decorative finish such as exposed aggregate, coloured sandblast, detailed formwork, or stone cladding

Where free-standing furnishings are specified they must be securely anchored in place and comfortable in all seasons. All furnishings must be constructed of high quality, durable and maintenance free materials. Use of recycled materials is encouraged.

2.4.3 Bicycle Racks

Provide bicycle racks at convenient locations such as building entrances.

U-racks are the preferred style of bicycle rack. They allow the cyclist to lock both wheels and frame to the rack. Use all-steel construction with durable finishes.

Racks must be bolted down, set in concrete pads, or otherwise anchored securely in place.

With increased usage of bicycles, end-of-trip facilities, such as bike lockers and showers should be incorporated at convenient locations.

3.0 Soft Landscape

3.1 Planting

3.1.1 General Guidelines

In accordance with the Campus Development Plan the Campus Landscape will continue to be developed as an arboretum providing:

1. Areas for growing a diversity of plant materials; both new and well known varieties.
2. An outdoor laboratory for teaching purposes.
3. An attractive and functional setting for the buildings and users.

3.1.2 Plant Materials Teaching Programs

All proposed plant material should be appropriate to the teaching programs in Forestry, Horticulture and Biological Sciences. A plant list should be developed in consultation with the Landscape Advisory Committee.

3.1.3 Campus Guide and Plant Inventory

The Campus Guide and Plant Inventory for the Campus Landscape should be regularly updated.

3.1.4 Plant Labeling Program

A plant labeling program should continue to be developed to enhance the Campus Landscape as a learning experience, and to aid in the appreciation of plant diversity on Campus.

3.1.5 Water Conservation

Water conservation is a priority in the planning of the landscape.

4.0 Irrigation

4.1 General Guidelines

Optimize energy and water conservation. TRU is implementing a centralized computer controlled irrigation system. Design new irrigation to integrate fully with the computer controlled system.

Provide convenient hose bibs or quick coupling valves in all landscaped areas.

4.2 Landscape Categories

4.2.1 Intensively Developed, Manicured Landscapes

Provide fully automatic underground system for all planting laid out and specified by an irrigation expert. Include an irrigation scheduling chart indicating head types, flow rates and pressures, and calculate optimum run times for each zone.

Include satellite controllers fully integrated with the central computer system.

Utilize pop-up heads, shrub sprays, and drip-type emitters as appropriate.

4.2.2 Indigenous Landscapes

Provide temporary irrigation to all areas being restored or rehabilitated. Minimize disturbances to all indigenous landscape areas.

5.0 Lighting

5.1 General

5.1.1 Lighting Fixture Characteristics

Select lighting fixtures with optical characteristics and distribution patterns that will illuminate only those surfaces and areas required. From an aesthetic and environmental perspective, avoid glare and stray light by selecting optics that are efficient and have high-cut off values.

5.1.2 Lighting Sources

Sources: colour-corrected metal halide.

5.1.3 Continuity of Pole and Fixture Styles

The Campus has existing several pole and fixture combinations. Pole and mounting heights vary depending on the scale of the spaces and their uses. Continue to use similar decorative styles for continuity.

5.1.4 Other General Considerations

Take into consideration the hierarchy of illuminance levels for various functions, safety and security, ease of maintenance and aesthetics.

5.2 Illuminance Levels

In general, follow the illuminance ranges for various outdoor uses as set out by the "Illuminating Engineers Society of North America Lighting Handbook" (latest edition).

Proper lighting design is a complex exercise requiring consideration of proximity to roadways and other illuminated structures, the reflective co-efficient of surfaces, plantings, and ambient light from building windows and relative illuminance of other adjacent areas.

The following is a guideline for area lighting and illuminance levels on campus:

5.2.1 Bikeways and Pathways

■ minimum average horizontal levels	0.6 fc
■ average	1.1 fc

to a distance of 2.5 meters on each side of pathway

5.2.2 Stairways

■ minimum average horizontal levels	1.8 fc
■ maximum to minimum ratio	6:1

Light stairways for safety. Use overhead pole mounted fixtures or wall lights.

5.2.3 Building Entrances

■ minimum average horizontal levels	5 fc

5.2.4 Pedestrian Areas Near Buildings

■ May be discreetly lit by wall mounted fixtures or spill from interior areas

5.2.5 Parking Areas

■ minimum average horizontal levels	0.9 fc
■ maximum to minimum ratio	8:1

Where mounting heights may be higher than for pedestrian areas, use pole mounted fixtures that are similar or complementary to the pedestrian fixtures. Use optics that are also efficient and high cut-off to avoid undesirable spill into adjacent areas.

5.2.6 Lighting for Aesthetics

Selected specimen trees or other landscape features may be illuminated for effect using in-ground up-lights or down-lighting from canopies. Use only high quality metal fixtures with lens covers.

6.0 Signage

6.1 Standard Signage Specifications

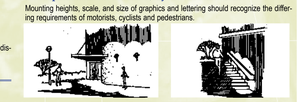
All signage should be coordinated with respect to typeface, colour, material, method of mounting and size and should conform to the standard specification.

6.2 Integration of Signage in the Landscape

Wherever possible signs should be integrated with other street furniture or mounted on buildings so as to minimize the number of poles in the landscape.

6.3 Requirements for Motorists, Cyclists & Pedestrians

Mounting heights, scale, and size of graphics and lettering should recognize the differing requirements of motorists, cyclists and pedestrians.



6.4 Special Signage for Universal Access

Consider special signage requirements for the disabled, such as demarcation of handicapped access and routes.

7.0 Public Art in the Landscape

7.1 Public Art on Campus

TRU acknowledges an important role for public art on campus:

- in enriching the landscape of the campus;
- in providing educational opportunities about art not in TRU curriculum;
- in defining and demarcating important public areas of the campus; and
- in creating a bridge between TRU and the arts community.

7.2 Integration of Public Art in the Landscape

Wherever possible public art installations should be well-integrated with the landscape by:

- taking advantage of natural backdrops of existing vegetation and buildings;
- taking advantage of existing vistas and view corridors;
- offering nearby seating opportunities to view the artwork;
- using sites that offer visibility to passing pedestrians and motorists;
- identifying the piece, its title, artist, donor and other relevant information;
- using appropriate lighting.

7.3 Bequests of Art to Thompson Rivers University

All bequests of public art will be reviewed by the Landscape Advisory Committee with respect to relevance of the art as legacy, potential siting, ongoing care and maintenance issues, and appropriate commemorative signage.

Stantec