

DESIGN ALTERNATIVES

March 20, 2012



University of Lethbridge:
University Campus Master Plan



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Context



Context



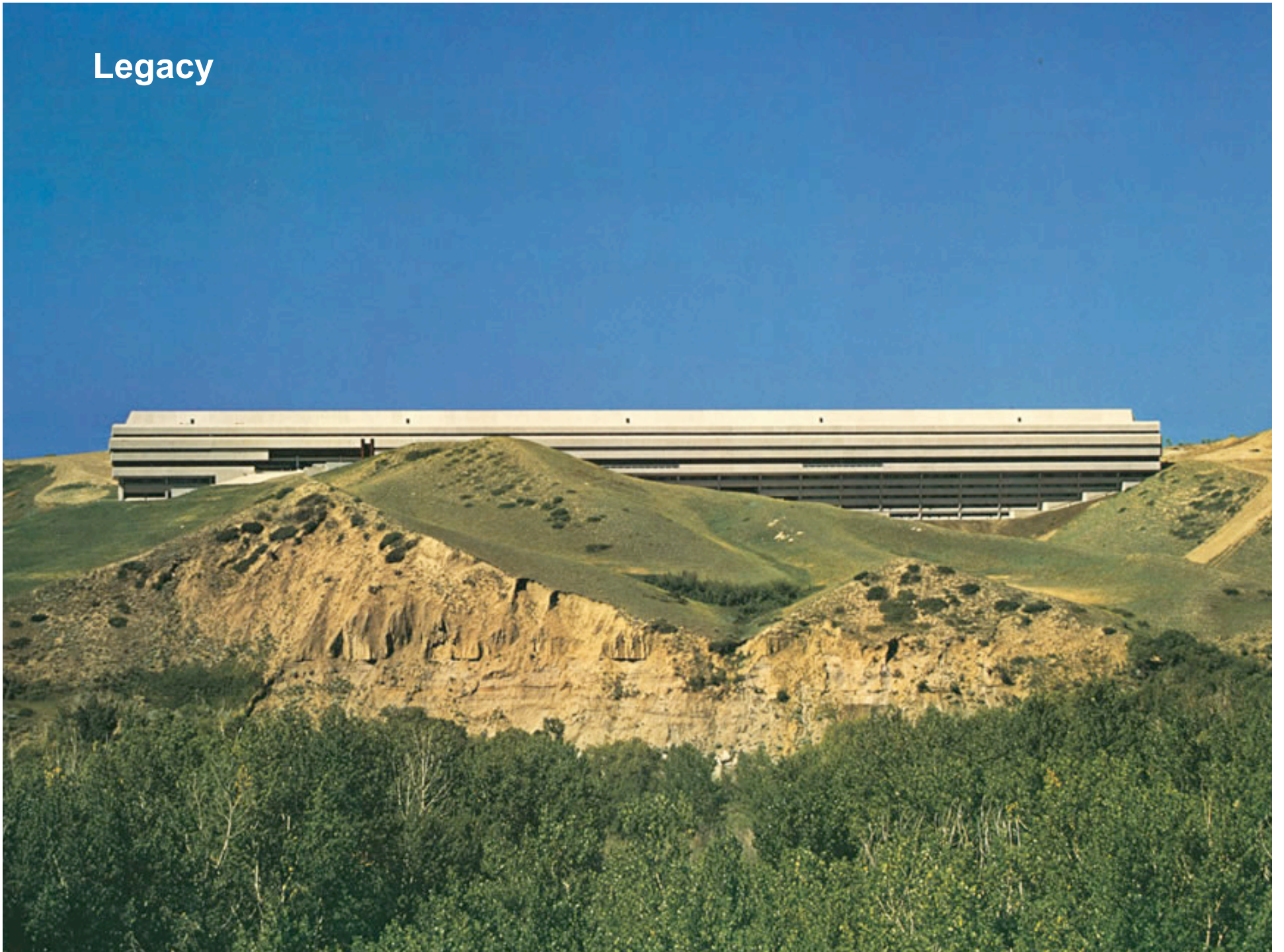
Context



The Site



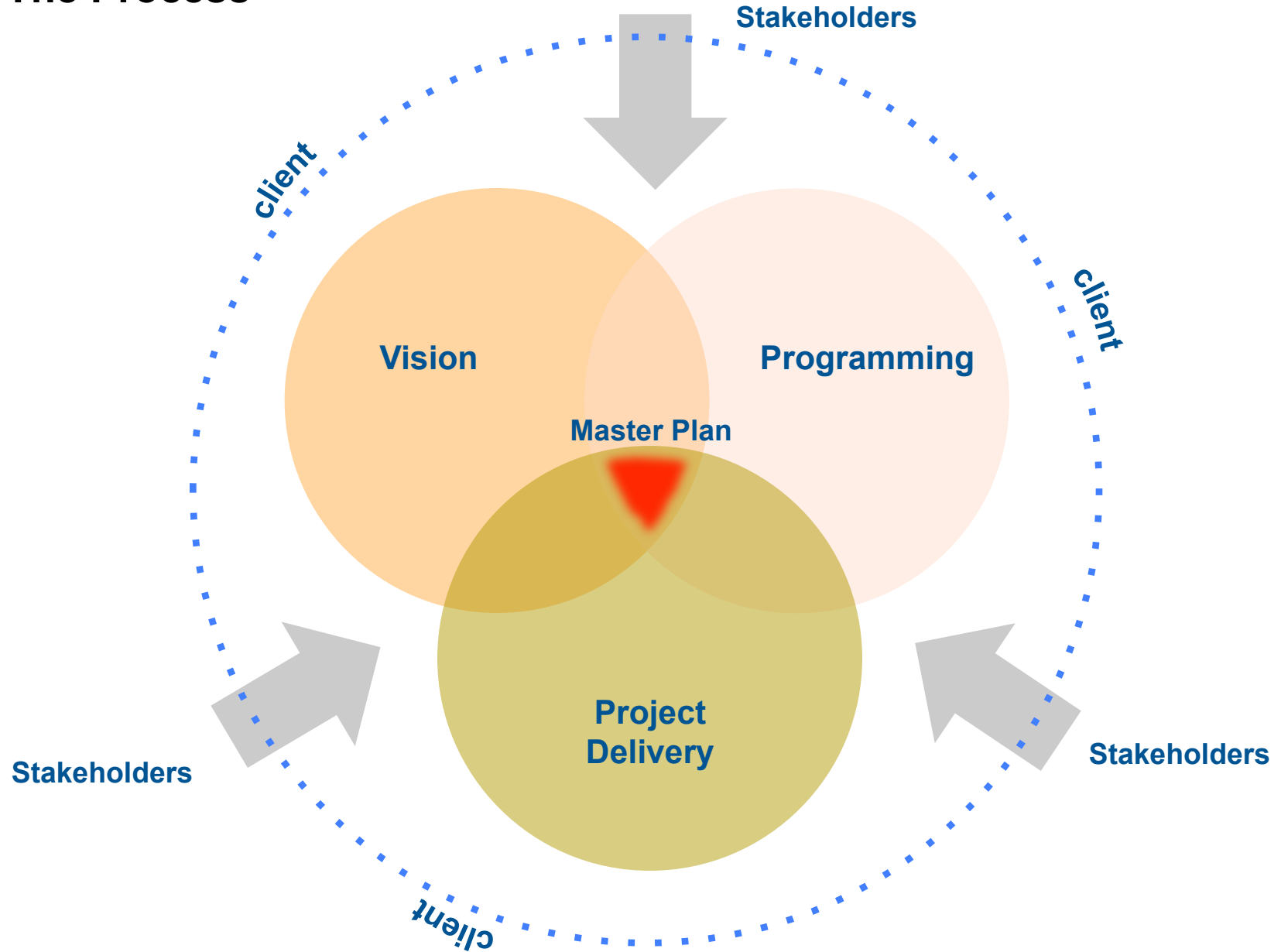
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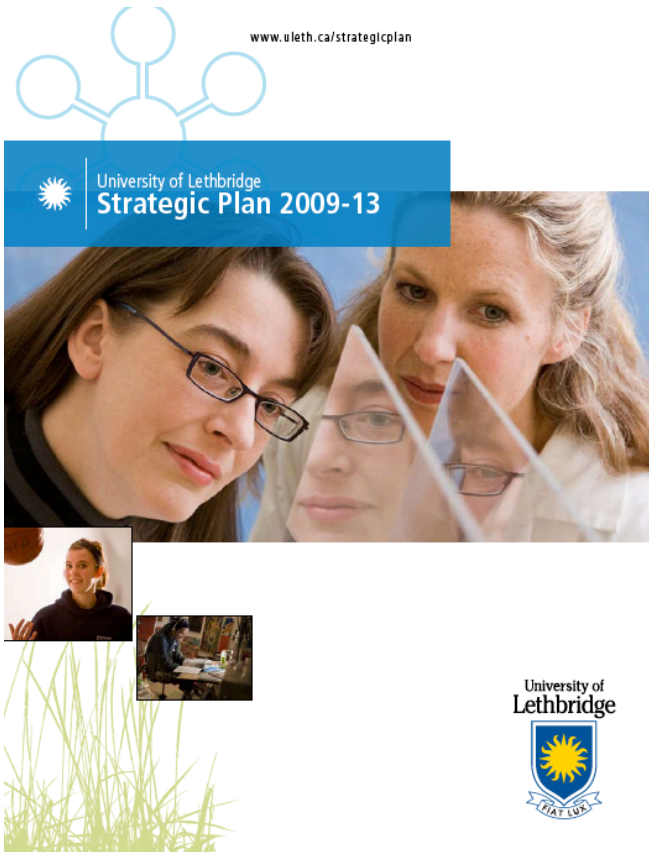
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The Process

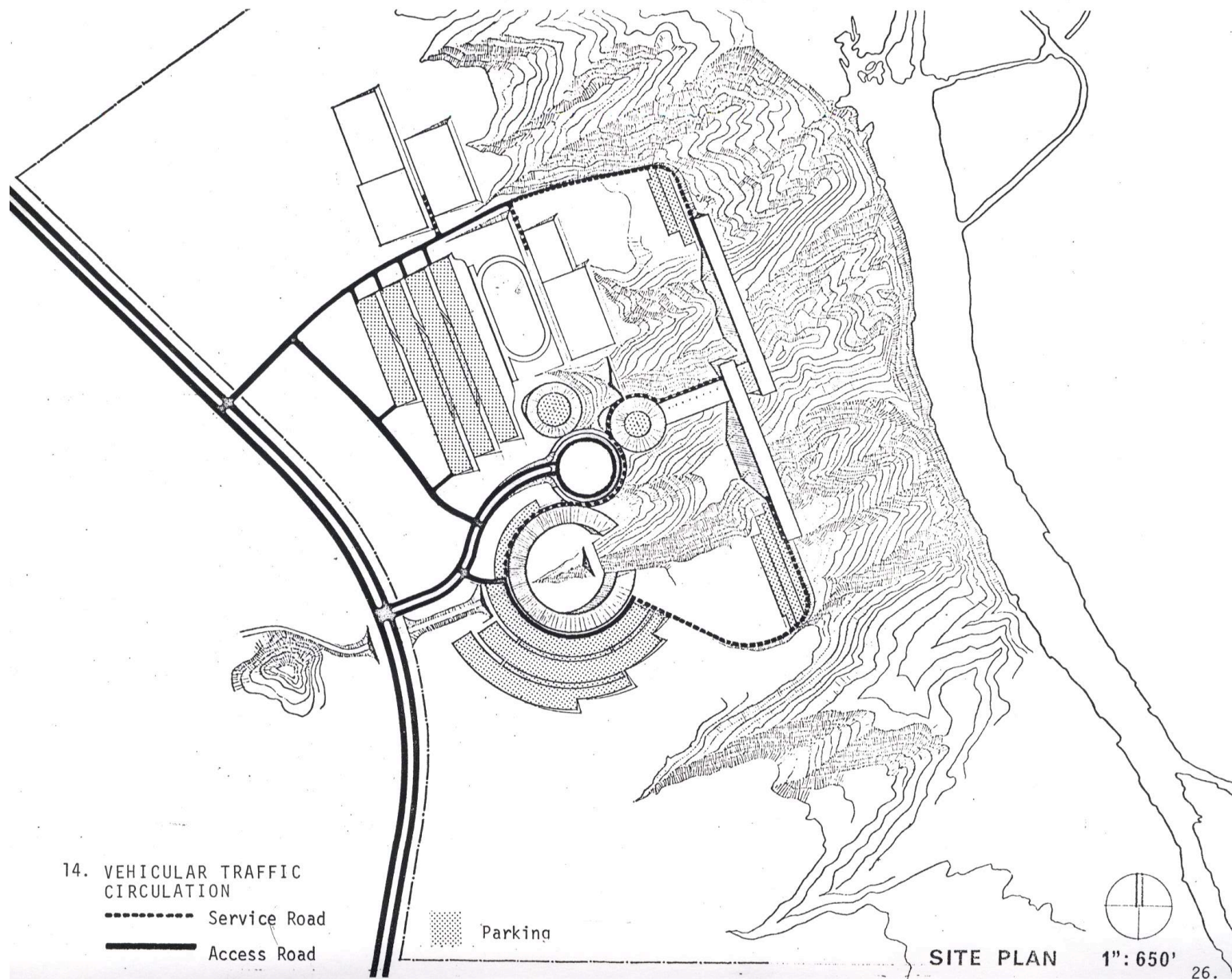


“How will we reach our preferred future?”



University of Lethbridge
2006 – 2016
Capital Plan

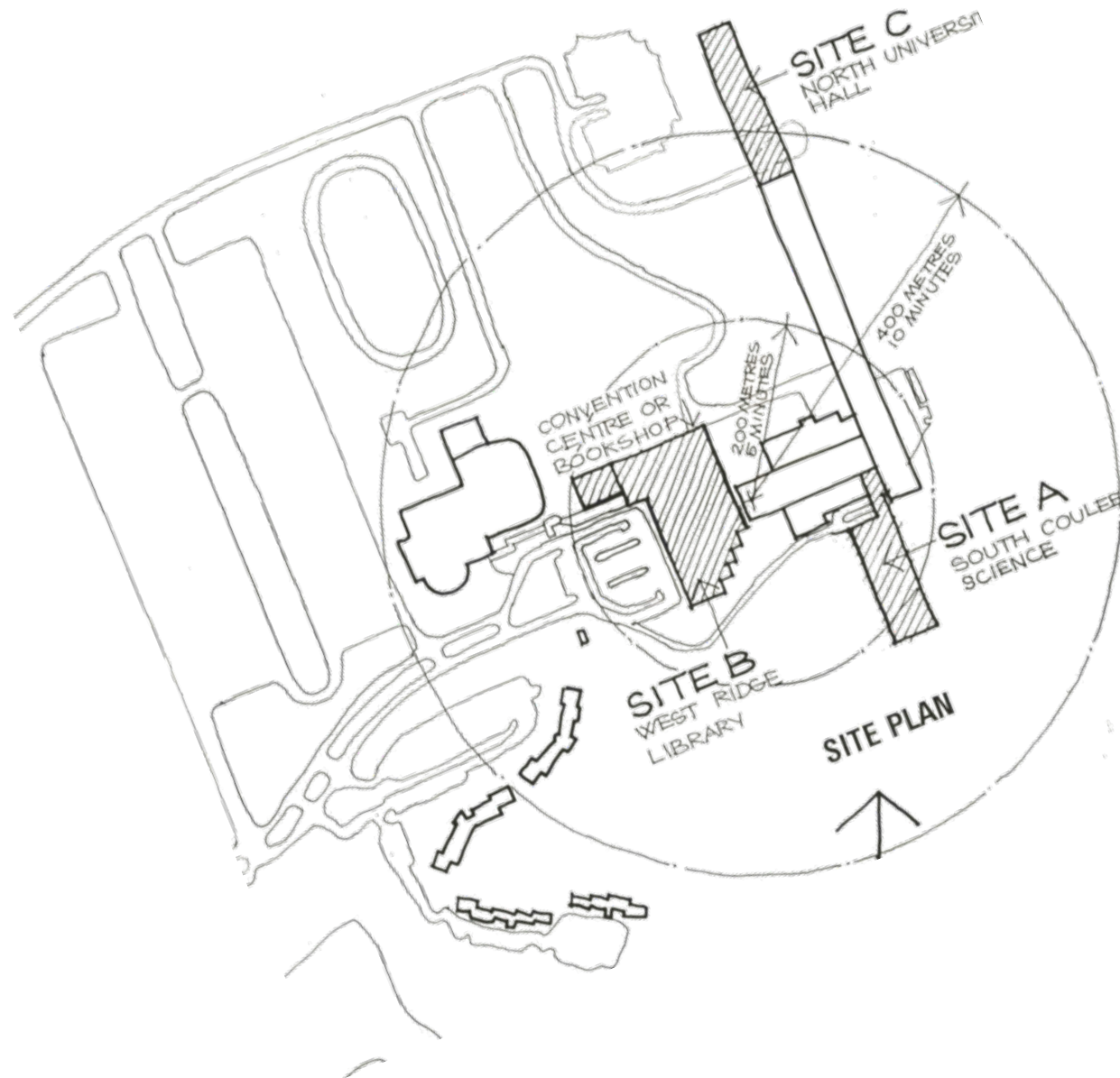
Erickson Massey Development Plan (1969)



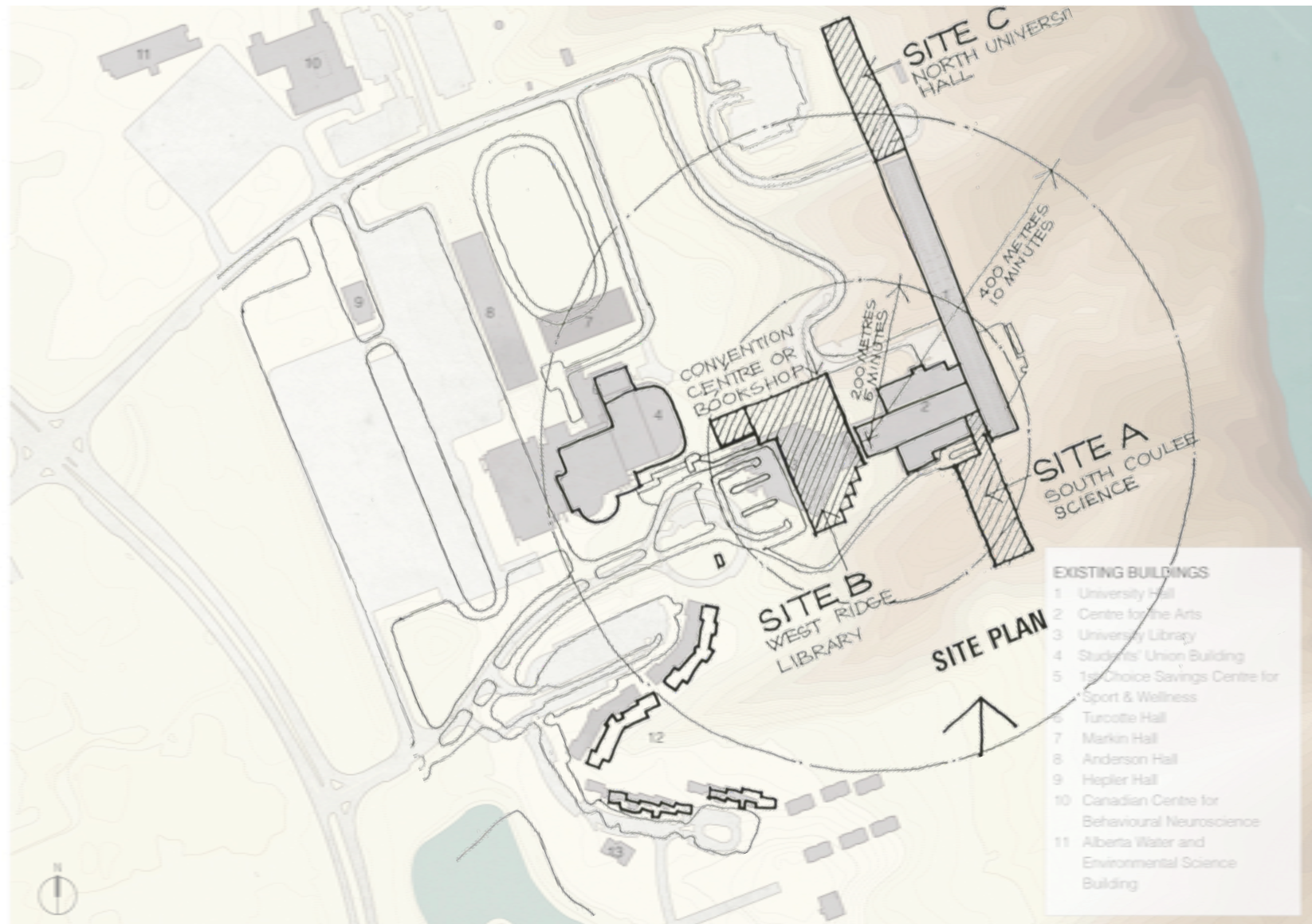
Erickson-Massey Development Plan (1969): Objectives

- Strengthening existing site and building features;
- Ensuring a compact campus;
- Integrating with nature;
- Allowing for an appropriate brand of architecture; and
- Creating a unique Campus identity and experience

Campus Development Plan (1993)



Campus Development Plan (1993) – Overlay



John Andrews International Master Plan (2000)

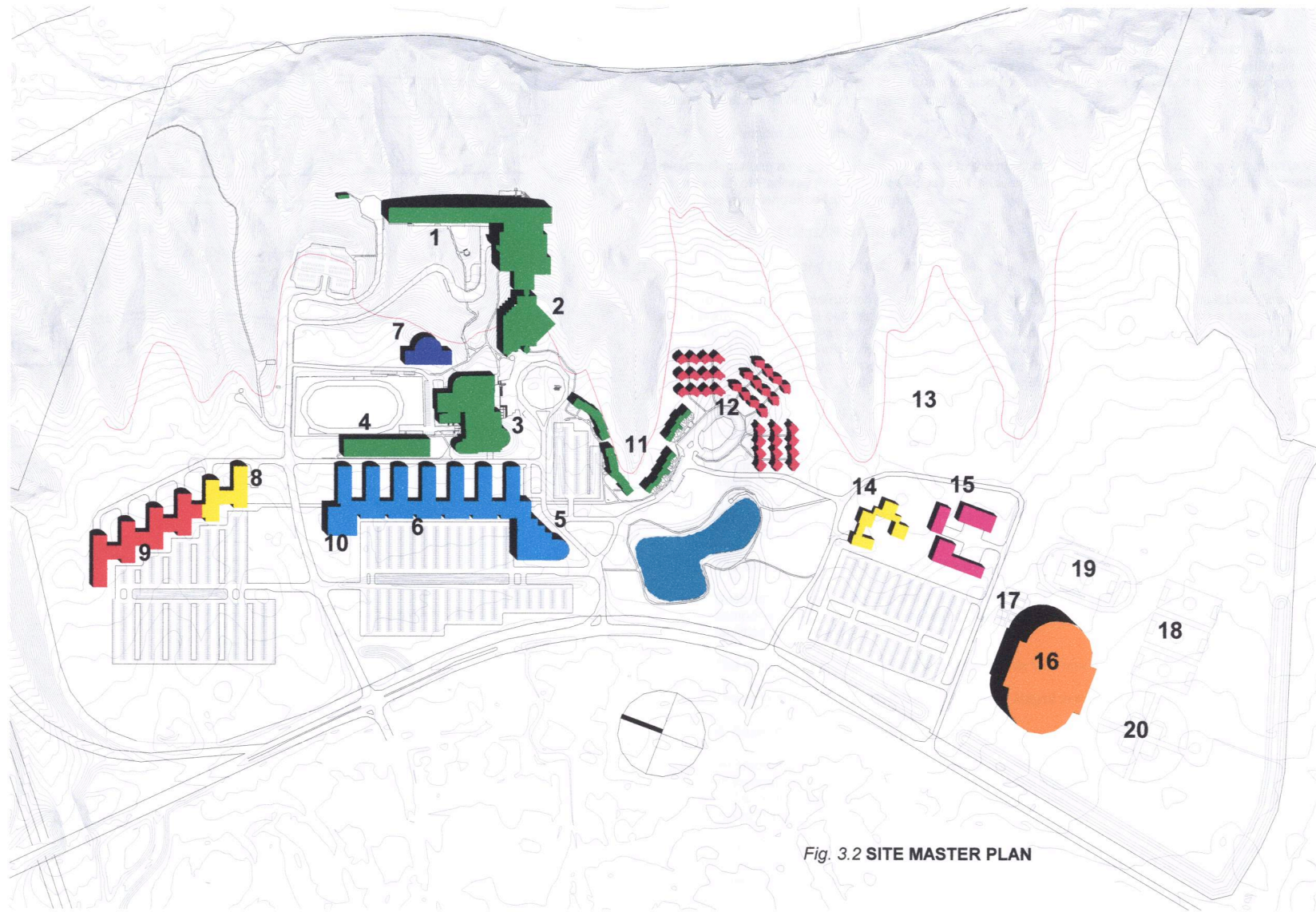


Fig. 3.2 SITE MASTER PLAN

- | | | | |
|-----------------------|------------------------------|--------------------------------------|------------------|
| 1 UNIVERSITY HALL | 6 ACADEMIC FACILITIES | 11 EXISTING STUDENT HOUSING | 16 FIELD HOUSE |
| 2 L.I.N.C. BUILDING | 7 FOOD SERVICES / STAFF CLUB | 12 PROPOSED STUDENT HOUSING | 17 TENNIS COURTS |
| 3 PHYSICAL EDUCATION | 8 LIFE SCIENCES BUILDING | 13 FUTURE STUDENT HOUSING | 18 BASKETBALL |
| 4 ANDERSON HALL | 9 RESEARCH PARK | 14 JUDO / JAPANESE CULTURAL CENTER | 19 TRACK |
| 5 THEATER ART GALLERY | 10 CONFERENCE CENTER | 15 SERVICE FACILITIES / FIRE STATION | 20 FIELD SPORTS |

Core Campus Expansion Plan (Brook McIlroy, 2001)



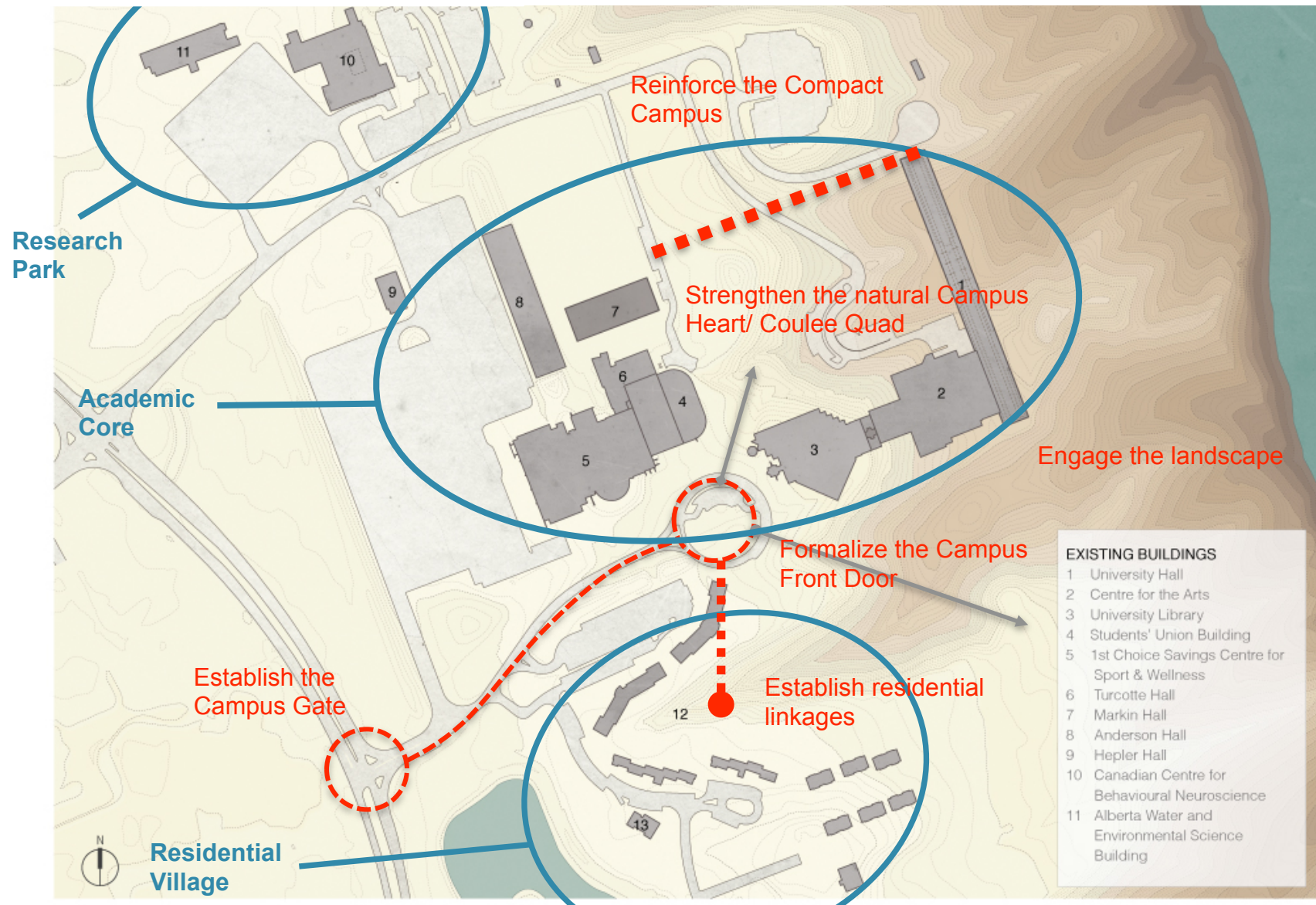
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2000 and 2001 Master Plan: Observations

- Ensures linkages with Research Park not University Hall;
- Decentralized plan;
- Minimal engagement/views with coulee and surrounding landscape;
- Brand of architecture is not dependent on unique location ; and
- Campus identity and experience is not based on unique location

Planning Principles



Experience of Arrival

How will the University of Lethbridge create a sense of destination?



*Bard College
Annandale-on-Hudson, NY*



University of Lethbridge

Vibrant public spaces

How can the University of Lethbridge build more social spaces?



*Virginia Commonwealth University
Richmond, VA*



University of Lethbridge

Outdoor Space

How will the University of Lethbridge enhance and use existing outdoor space?



*UCLA
Los Angeles, CA*



University of Lethbridge

Sustainability

How will the University of Lethbridge continue to transform the University into a sustainable community?



*Drake University
Des Moines, IA*



University of Lethbridge

Safety and Security

How will the University of Lethbridge ensure a 24/7 campus?



*Bryn Athyn College
Bryn Athyn, PA*



University of Lethbridge

Learning everywhere, learning anywhere...

How does the University of Lethbridge facilitate informal learning outside the classroom?



*Bard College
Annandale-on-Hudson, NY*



University of Lethbridge

Classrooms

How does the University of Lethbridge create a physical and intellectual environment that fosters and promotes creativity, research and innovation?



*Bard College
Annandale-on-Hudson, NY*



University of Lethbridge

Ensuring Flexibility and Adaptability

How does the University of Lethbridge plan on accommodating for class change?



*Waubensee College
Sugar Grove, IL*



University of Lethbridge

Gateways

How does the University of Lethbridge create a Campus that is universally welcome and engaging?

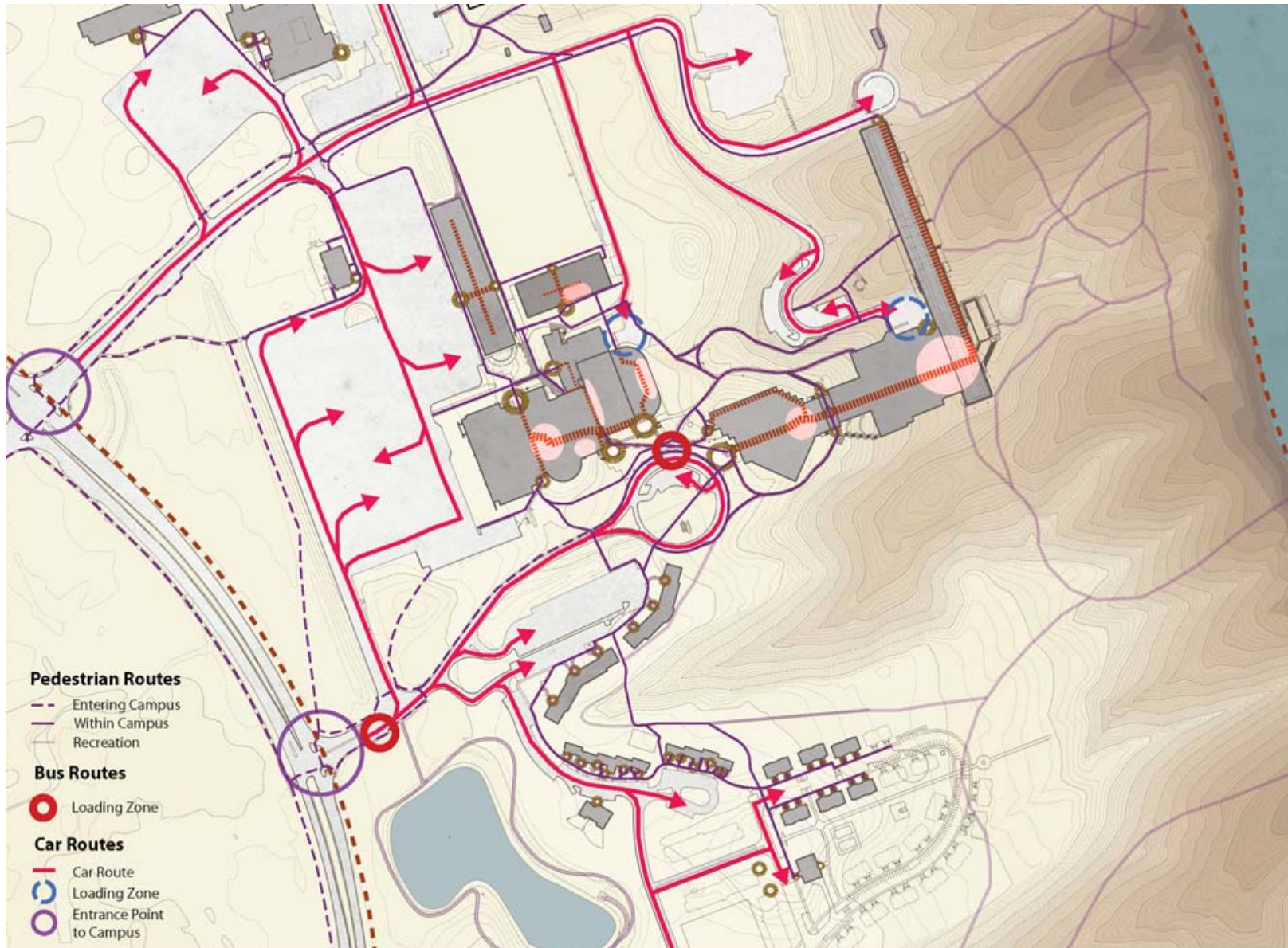


*Syracuse University
Syracuse, NY*

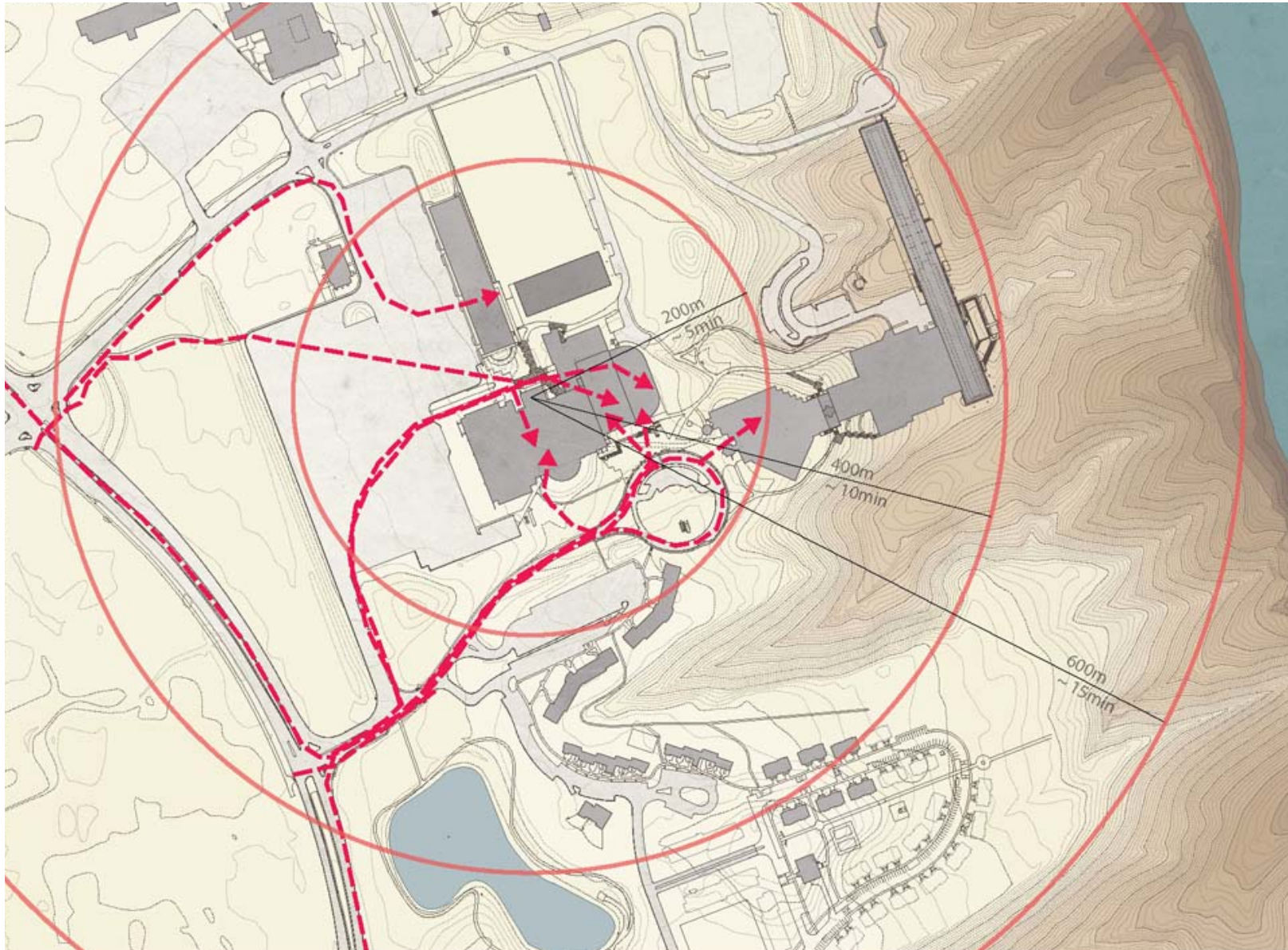


University of Lethbridge

Existing: Pedestrian Network



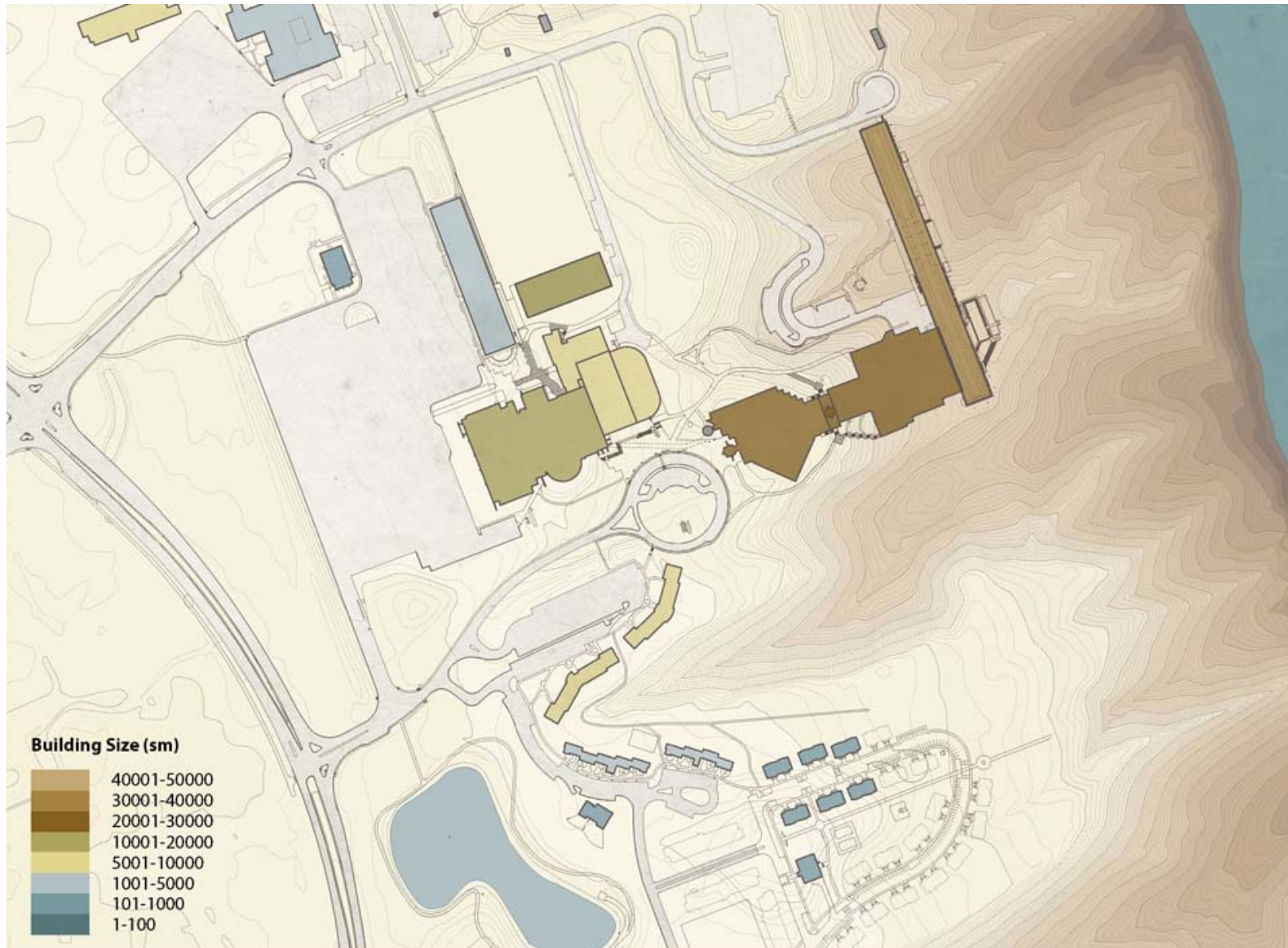
Existing: Distances



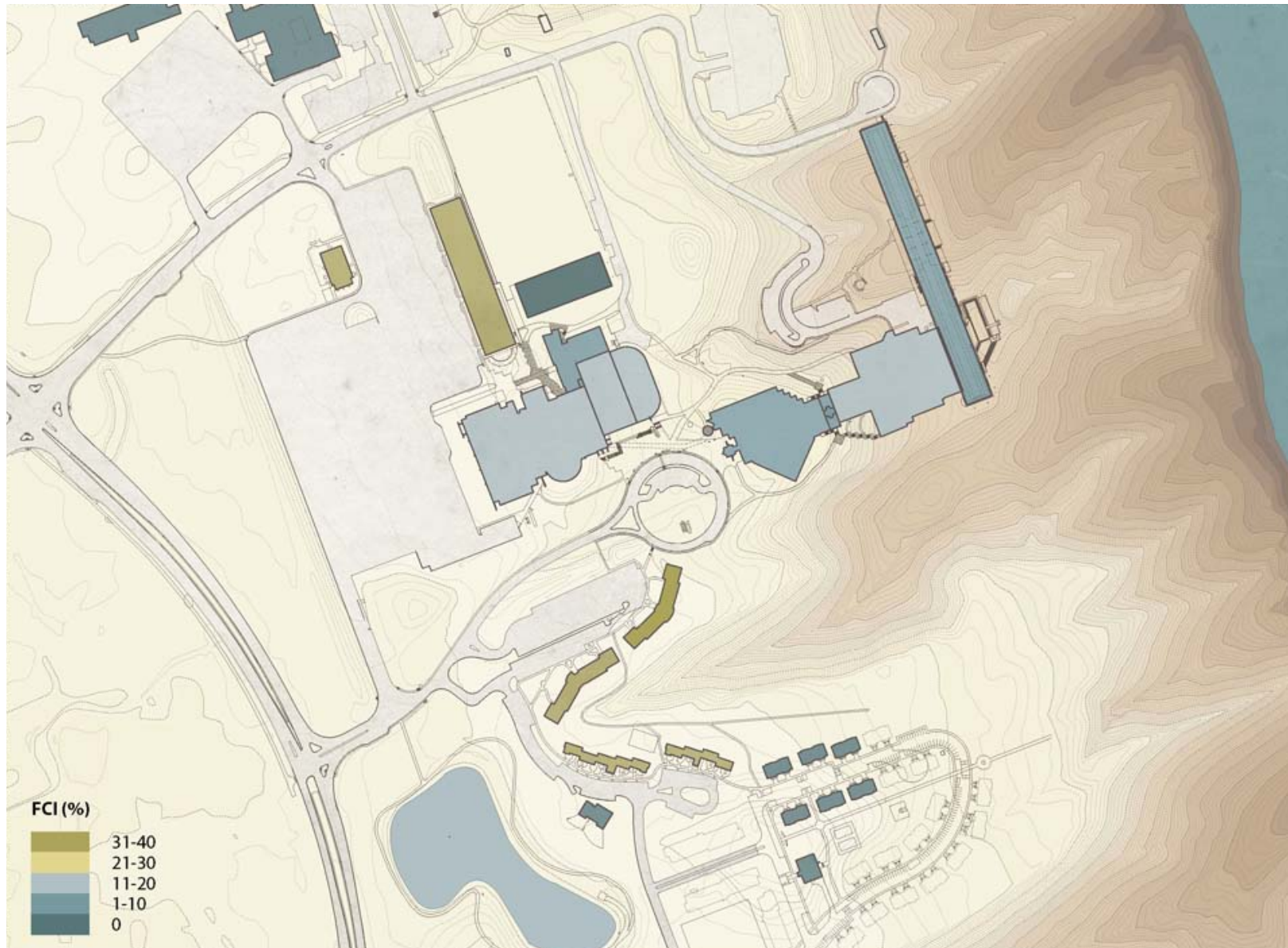
Existing: Building Age



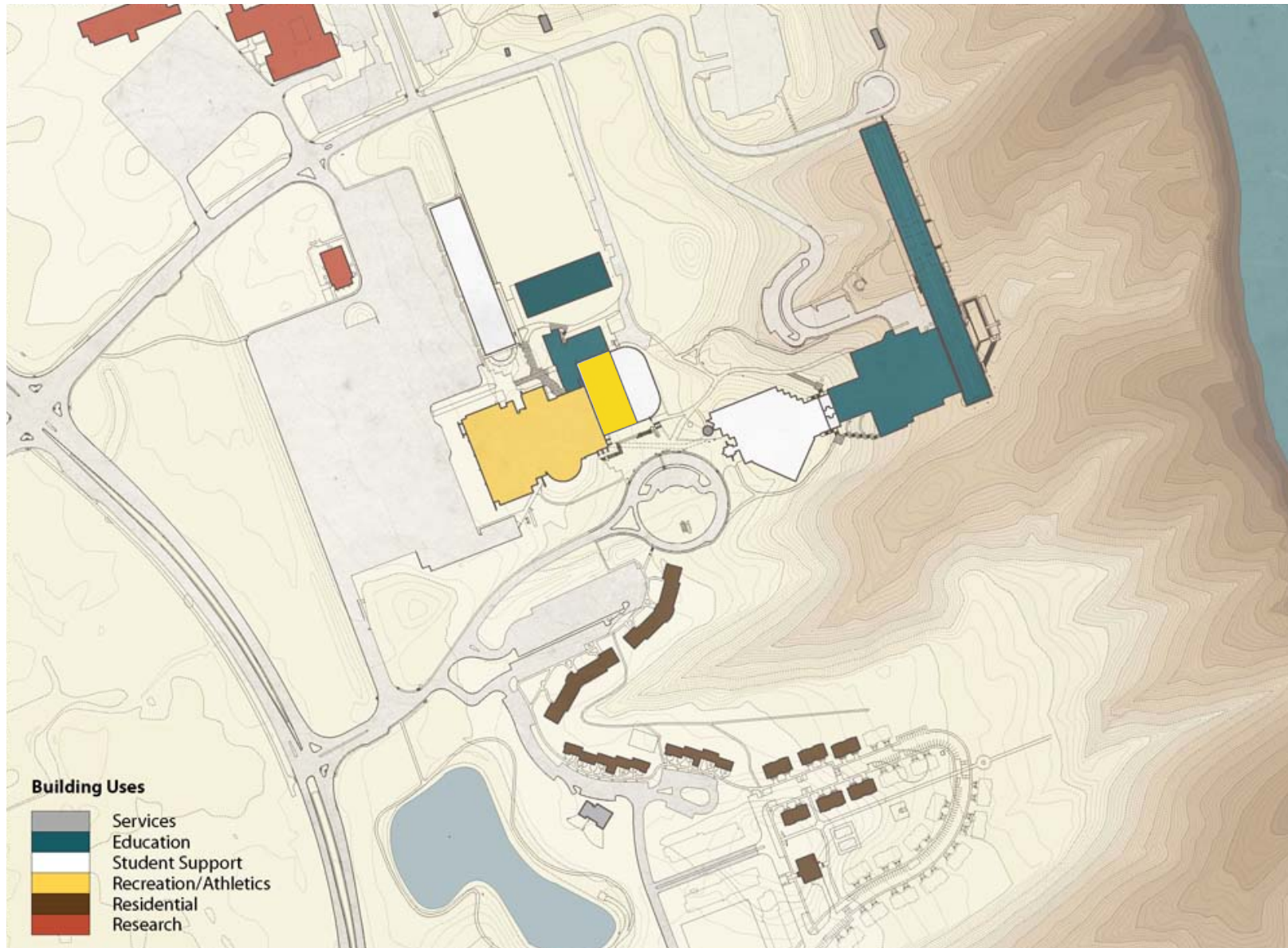
Existing: Building Size



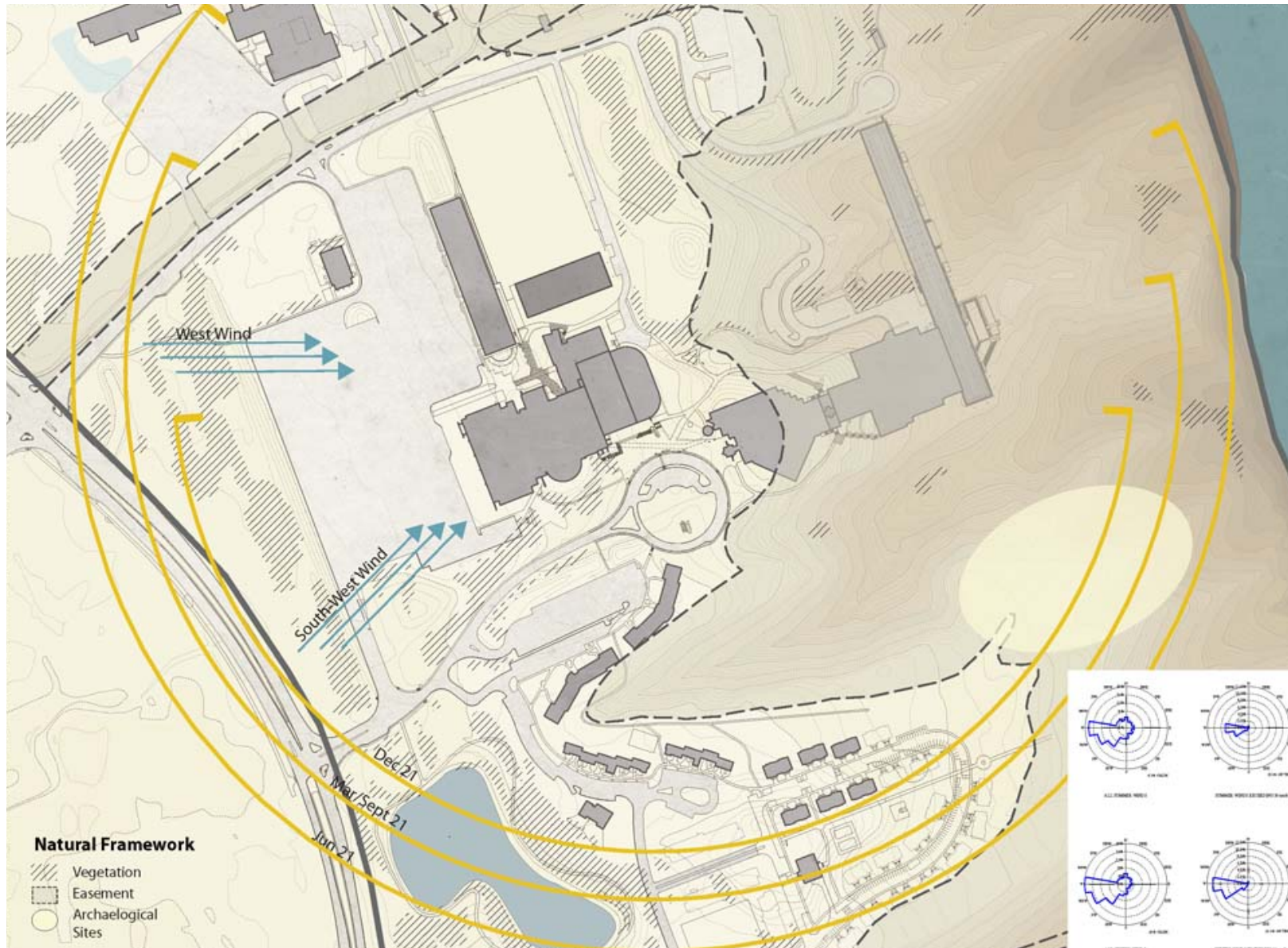
Existing: FCI



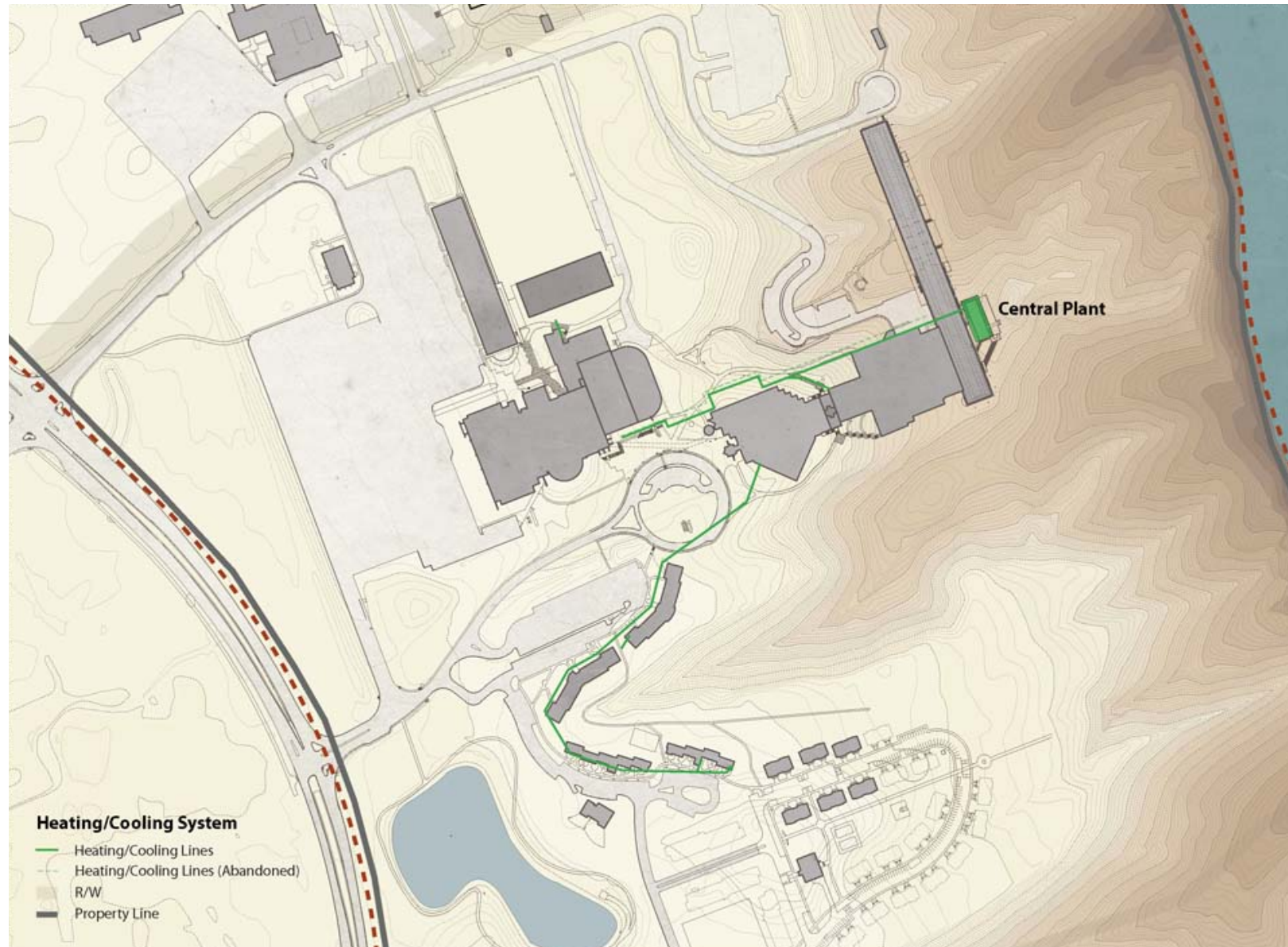
Existing: Building Program



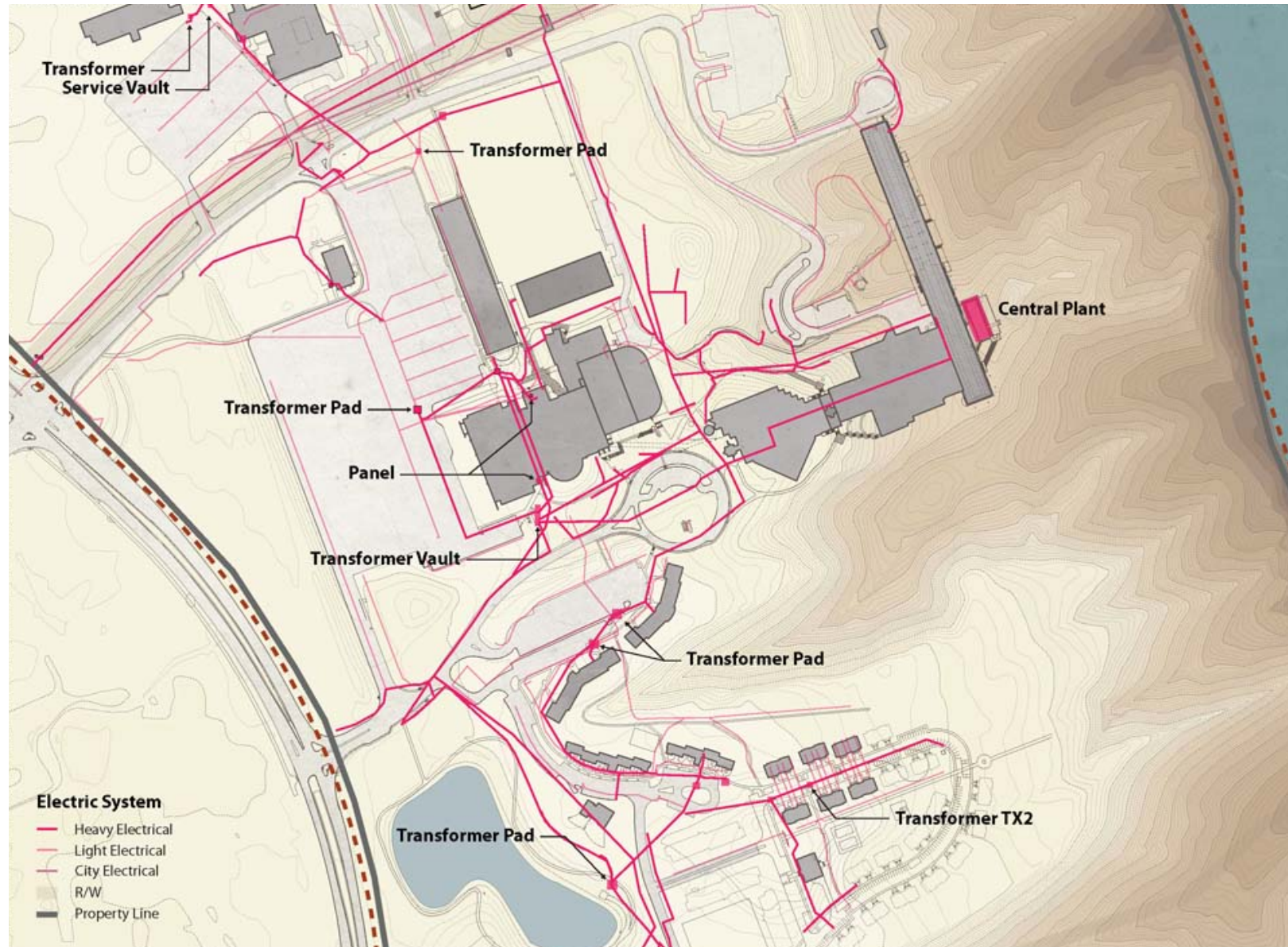
Existing: Natural Framework



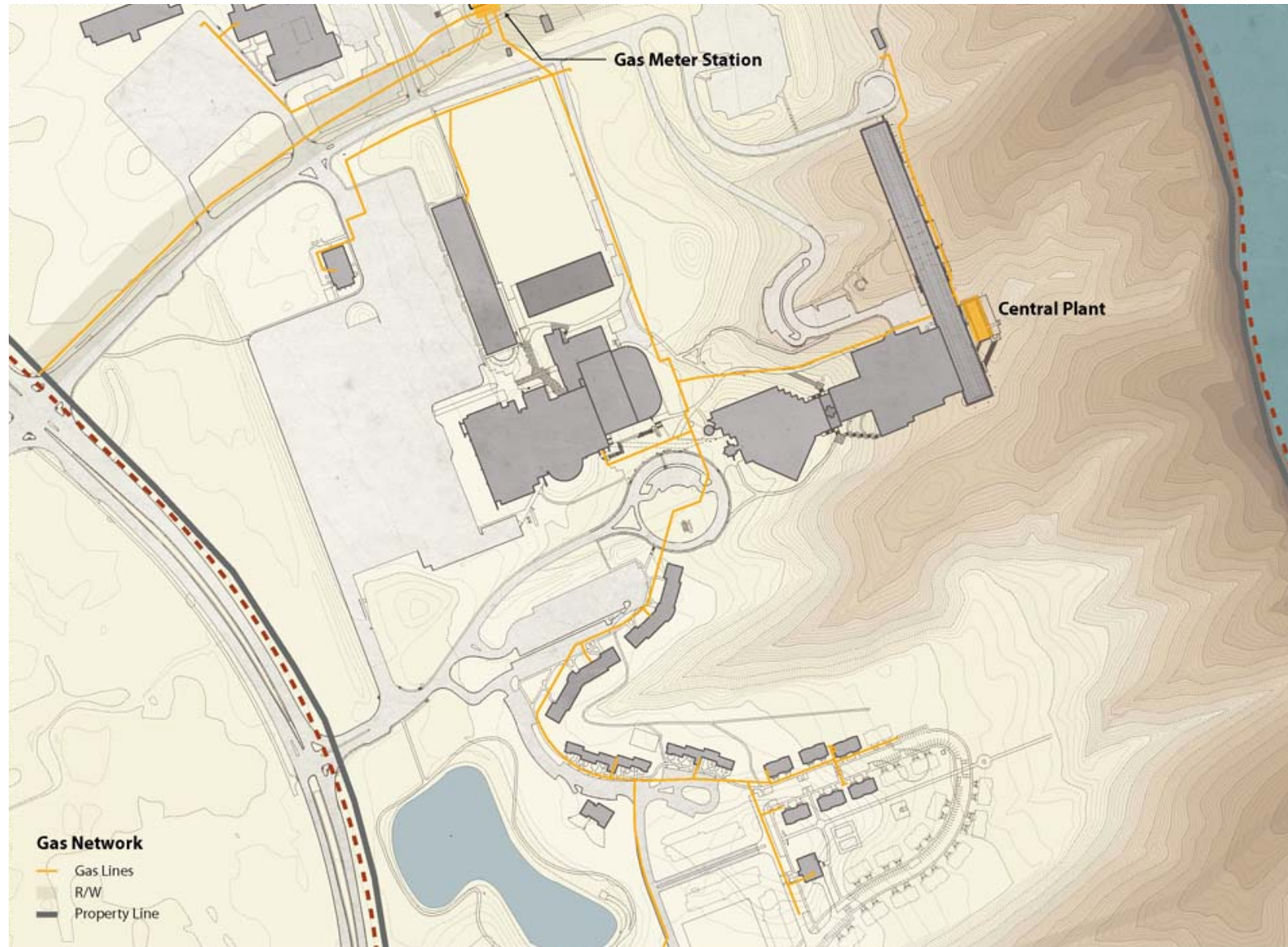
Existing: Heating/Cooling System



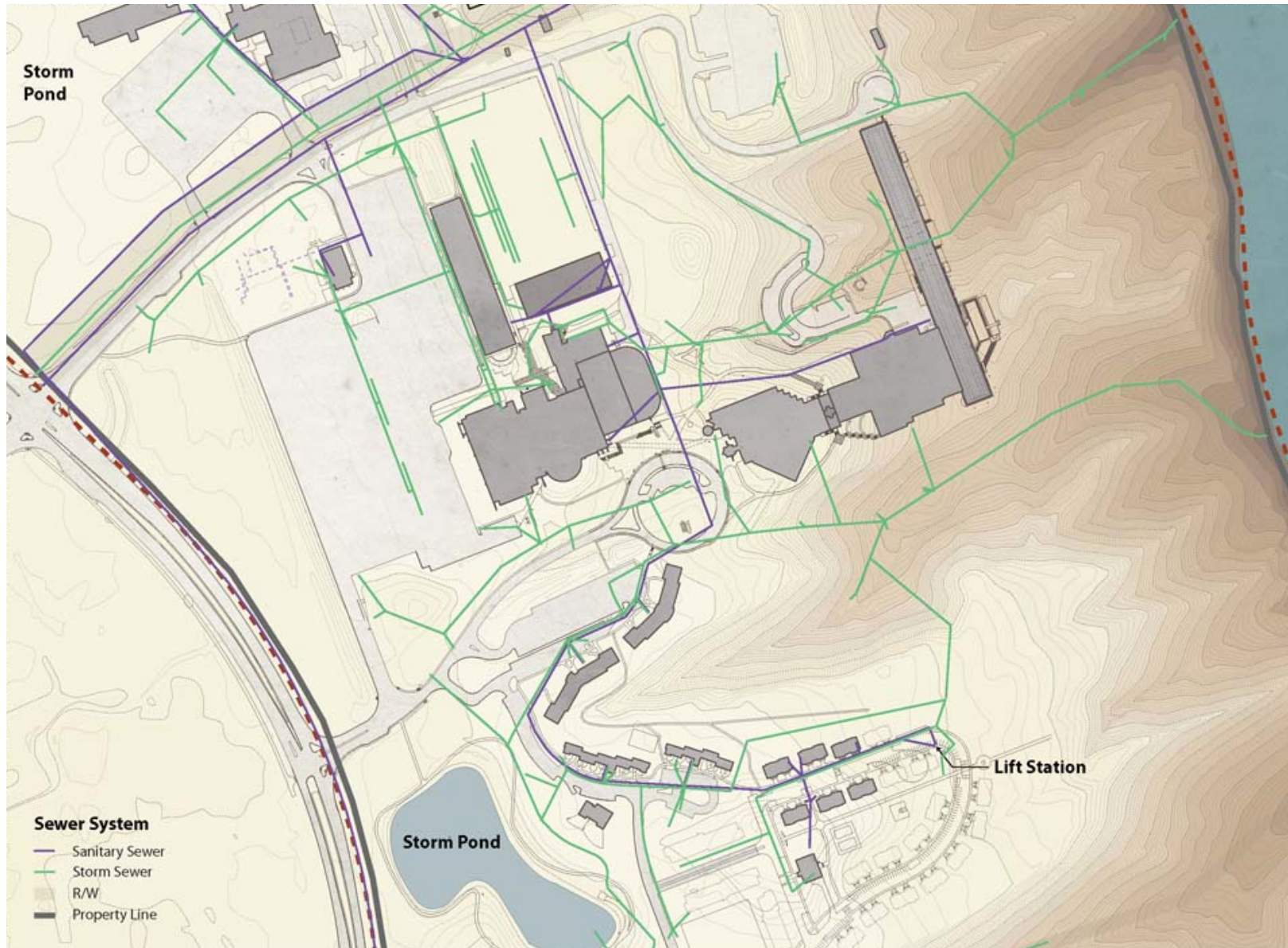
Existing: Electrical System



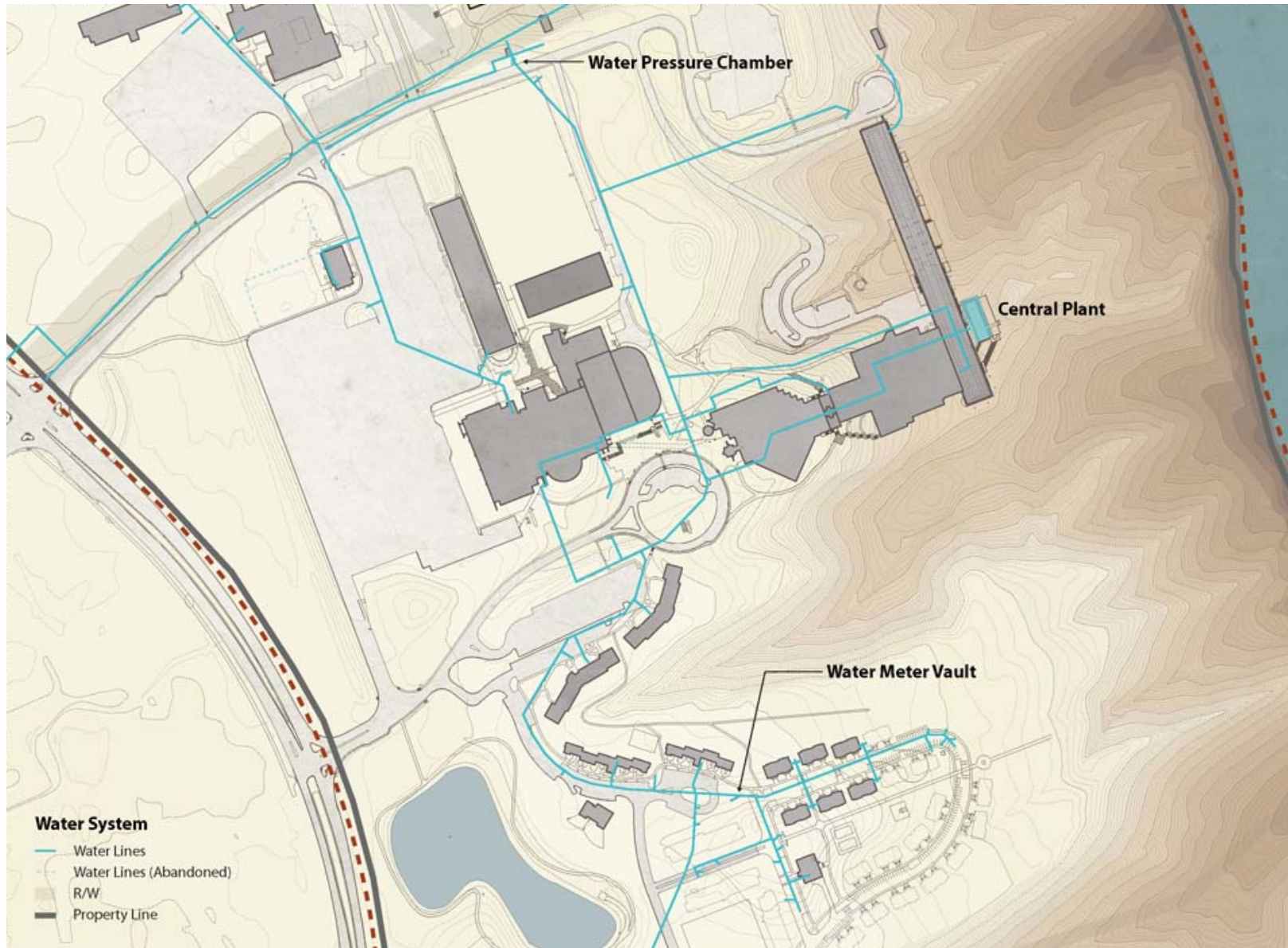
Existing: Gas Network



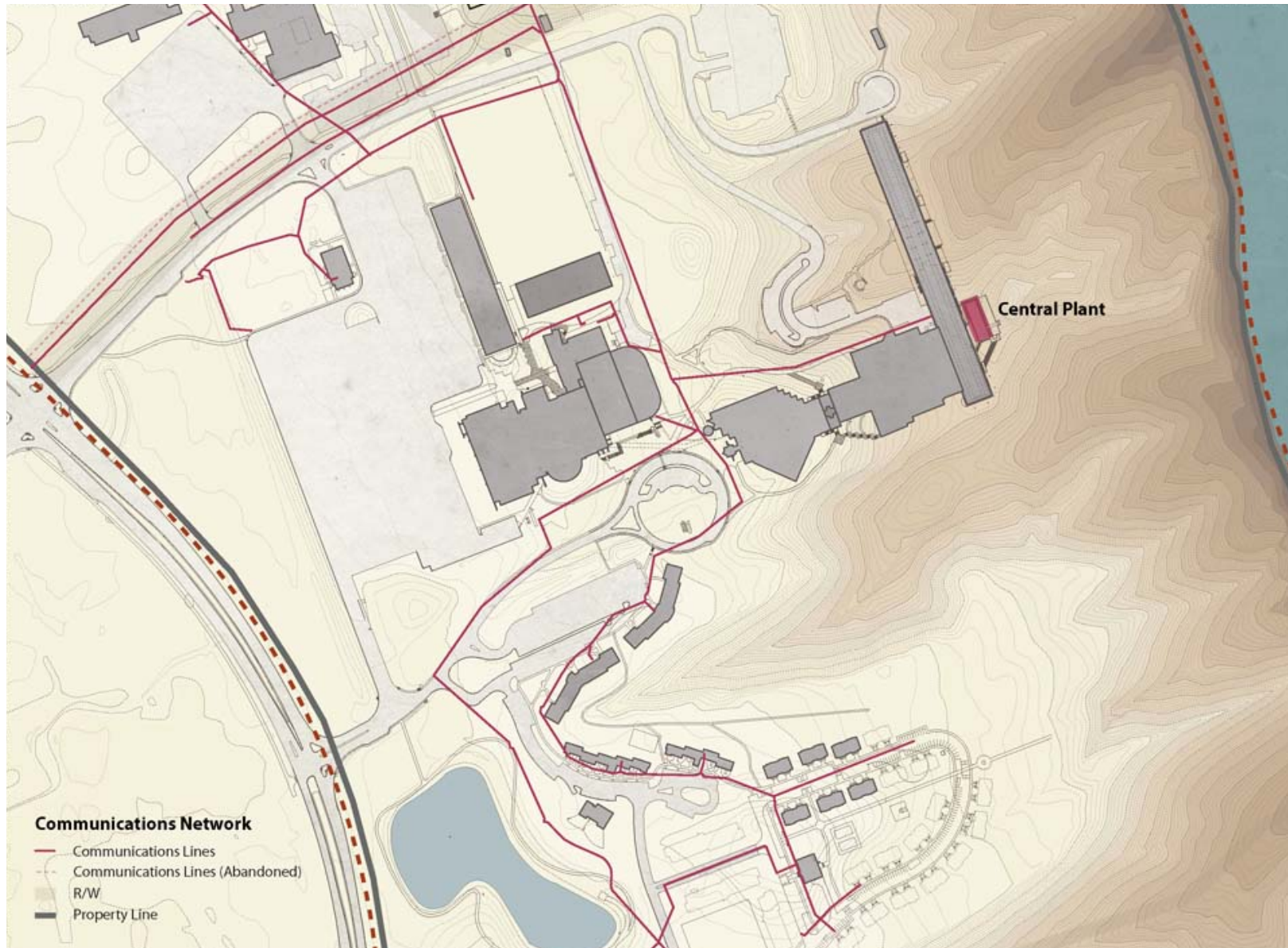
Existing: Sewer Systems



Existing: Water System



Existing: Communication Network



ECS: Enhancement of the Campus Master Plan (2012)



A time of transition, a time of possibilities

University of Lethbridge
Enhancement of the Campus Master Plan

Master Plan Directions



Final Report

February 7, 2012

Educational Consulting Services Corp.
Sub-consultants to Moriyama & Teshima Architects

ECS: Enhancement of the Campus Master Plan (2012)

Summary Space Requirements

Table 4-5: Summary Space Requirements

Space Category		Inventory 2010 NASM	Estimated Area required in 2021 NASM	Estimated Area required in 2036 NASM	Shortage or Surplus over 2011 NASM
Instructional	Classrooms	7,716	12,300	14,760	-7,044
	Labs	9,211	16,099	20,533	-11,323
Research	In discipline groups A & D	17,958	5,674	6,173	11,785
	In discipline groups B, C, E	1,014	1,890	2,070	-1,056
Office	Academic	15,682	19,583	26,544	-10,861
Office	Administrative	6,788	10,881	11,425	-4,637
Learner Support		11,302	10,000	12,000	-698
Sport/Recreation /Wellness		13,199	9,000	10,800	2,399
Farm Facilities					0
Campus Services	Central Support Services	5,318	4,897	5,297	22
	Assembly and Exhibition	4,685	3,000	3,600	1,085
	Ancillary Operations & Student Community	6,230	13,000	15,600	-9,370
Total Required NASM					-44,989
Total Required GSM (NASM x 1.66)					-74,681
Residence		17,576			-78,424
		22,770 GSM			-98,030 GSM

University of Lethbridge 2011-2015 Capital Plan

The University's capital priorities are:

New Facility Projects (in January 2011 dollars)

1. Science Complex	\$255,000,000
2. First Nations Gathering Centre	\$5,000,000
3. Distributed Learning Centre	\$1,300,000
4. Art Learning Centre	\$30,000,000
5. Office/Classroom Complex	\$75,000,000
6. Research Transition Facility	\$10,000,000
Total	\$376,300,000

Expansion Projects (in January 2011 dollars)

1. Student Residences	\$32,000,000
2. Alberta Water & Environmental Sciences Building, Phase II	\$24,000,000
Total	\$56,000,000

Preservation Projects (in January 2011 dollars)

1. Dr. Foster James Penny Building Upgrades	\$6,200,000
2. Physical Education Building Upgrades	\$5,600,000
3. Tunnel and South Plaza Replacement	\$3,200,000
Total	\$15,000,000

In addition to the major capital projects listed above, the University is planning a number of smaller capital projects (under \$3M) related to specific research initiatives and internal renovations of existing buildings.

Note: The projects that are listed above and described in the University of Lethbridge 2011-2015 Capital Plan may change as a result of the Master Plan, which will likely propose alternative ways to achieve the same functional and growth objectives.

ECS: Enhancement of the Campus Master Plan (2012)

The development of the University of Lethbridge Campus Master Plan will be guided by three overarching directions, which are further developed in the objectives described on the following pages:

- A. Accommodate the University's development and growth plans, in support of its newly acquired designation as a **Comprehensive** Academic and Research Institution.

A "Comprehensive" institution offers the full continuum of post-secondary degree opportunities, from undergraduate degrees to post-doctoral work.

- B. Strengthen the quality of the built and natural environments to help brand the University as a **destination** institution, with particular emphasis on improving campus life and student experiences.

The University community is expecting that the University of Lethbridge will be known eventually as a "go-to-place" in the same way that other small Canadian institutions enjoy national reputations for the quality of their teaching traditions, the physical beauty of their campuses, their school spirit, the experience of first year students and the pride they generate in surrounding communities.

- C. Demonstrate **leadership** in the management and planning of building assets and the careful stewardship of land holdings.

The University will be known as an institution that values its resources through leading-edge environmentally-responsible designs of new buildings and renovations of existing ones, and the sensitive integration of structures within the coulee setting. It will also be known as an institution that is successful at leveraging its resources efficiently.

ECS: Enhancement of the Campus Master Plan (2012)

Direction A

A Comprehensive University Campus

The Master Plan will guide the University in building critical mass to fulfill its mandate as a Comprehensive and Academic Research Institution.



Objectives

- A1. The main campus of the University of Lethbridge will accommodate 12,000 full-time equivalent students by 2036.

A surge in enrolment is expected at the main campus within the next ten years, from 6,703 FTE to 10,000 FTE. A planned enrolment cap of 12,000 FTE will be achieved by 2036. The University is not envisioning open-ended growth for the main campus.

- A2. Enrolment growth will require an additional of 45,000 GSM to campus inventory by 2021 and an additional 30,000 GSM for a total of 75,000 GSM by 2036, primarily in instructional and office space.

The University also aims to provide housing to 20% of the projected enrolment of 12,000 by 2036, which will mean 2,400 beds representing 96,000 NASM (2,400 beds X 40 NASM). The University has 17,576 NASM in residence facilities as of 2011 and therefore will need to add about 78,424 NASM (98,030 GSM @ 20% gross-up) in new residence facilities by 2036.

Expansion of other space categories is not critically necessary. However reconfiguration of some areas, such as assembly and exhibition spaces may be desirable.

- A3. Graduate and research programs will be developed and promoted and capacity will be expanded across all faculties with particular attention to non-laboratory intensive disciplines.

Reallocation or reconfiguration of some research spaces may be desirable. Most importantly, the research enterprise will be integrated into the campus fabric in an attempt to reverse a past trend to isolate research facilities on the periphery of campus.

- A4. The Master Plan will ensure the multi-disciplinary and transparent character of campus in support of the rich liberal education tradition at the University of Lethbridge.

Opportunities will be provided for students, faculty, researchers, and staff to meet and interact together informally as a matter of course and formally in public forums. New buildings or reconfiguration of existing buildings will feature multi-functionality to attract broad cross-sections of the campus community.

ECS: Enhancement of the Campus Master Plan (2012)

Direction B **A Destination Campus**

The Master Plan will create a strong campus identity that will complement a vibrant student life.



Objectives

- B1. The physical and programmatic linkages between University Hall and the rest of campus will be strengthened.

Development of campus over the past 20 years moved up the hill and away from Arthur Erickson's iconic building. University Hall, once the heart of campus is now located at the eastern periphery. The Master Plan will re-integrate the building as a vital component of campus.

- B2. A new heart of campus will be identified as a visible and natural point of convergence where students, faculty and staff will meet, socialize, and access key services.

The location of this core will help to recalibrate campus and a concentration of services and amenities will create the kind of density that attracts people and makes them want to spend time on campus.

- B3. The location of future residences and related ancillary services will be more closely integrated with the remainder of campus.

Existing residence spaces are in University Hall and on the southwest edge of the campus academic core. The Master Plan will identify where future housing should be located to bring the community of learners living on campus closer to the learning environments and social spaces that will define their years at the University of Lethbridge.

- B4. The main campus gateway and experience of arrival will be improved.

The Master Plan will identify where the University's main ceremonial entrance and secondary entrances should be located and further identify the path along which students and visitors proceed to the heart of campus or to other destinations.

- B5. The Master Plan will ensure that the coulee setting is celebrated and respected.

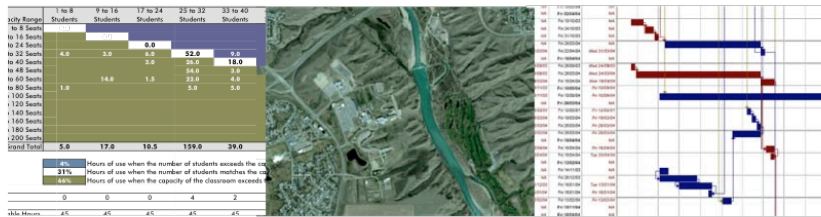
Building sites for new facilities and pedestrian and vehicular circulation routes will be selected with a view to incorporating and enhancing the University's natural environment into campus design.

ECS: Enhancement of the Campus Master Plan (2012)

Direction C

A Campus that Demonstrates Leadership

The Master Plan will set the stage for the University to be recognized as a national leader for the quality of the built form, openness to surrounding communities, and best practices in the management and stewardship of assets.



Objectives

- C1. Ensure that campus inventories are aligned with growth plans, funding opportunities, and condition of facilities.
The Master Plan will respond to demonstrated need for growth by space type, to facility condition issues of existing buildings, and to the realities of the funding environment and the University's reliance on financial support for the development of campus infrastructure.
- C2. Use the campus as a demonstration setting for best practices in sustainable buildings and land use.
The University already has facilities and systems that demonstrate principles of environmental and fiscal responsibility and sustainability. The Master Plan will highlight those efforts and incorporate best practices in sustainability in all new buildings and land use.
- C3. Achieve balance between growth and quality of student experience by ensuring a personal, small community of learners and researchers.
The Master Plan will recognize the University's desire to grow as a comprehensive institution while retaining the kind of intimate environment characteristic of the best liberal arts universities. Campus design will be framed by an upper enrolment target of 12,000 and will focus on providing learning and social environments that convey a warm and welcoming 'small-town feel'.

- C4. Enhance support for First Nations, Metis, and Inuit students (FNMI)
Buildings and interior spaces will be used to celebrate FNMI culture on campus. In addition, the proposed First Nations Gathering / Education Centre will occupy a prominent location that speaks to the importance of FNMI values and culture within an inclusive University.
- C5. Further engage and attract the local and regional community to campus with shared facilities and programs.

The University has expressed a desire to reach out to the community to a greater extent. The Master Plan will build on the success of the 1st Choice Savings Centre for Sport and Wellness model to develop resources that will benefit both the community at large and the University.



Precedent: Hillside Art Center



Precedent: Hillside Art Center



Precedent: Hillside Art Center



Precedent: Hillside Art Center



Precedent: Simon Fraser University



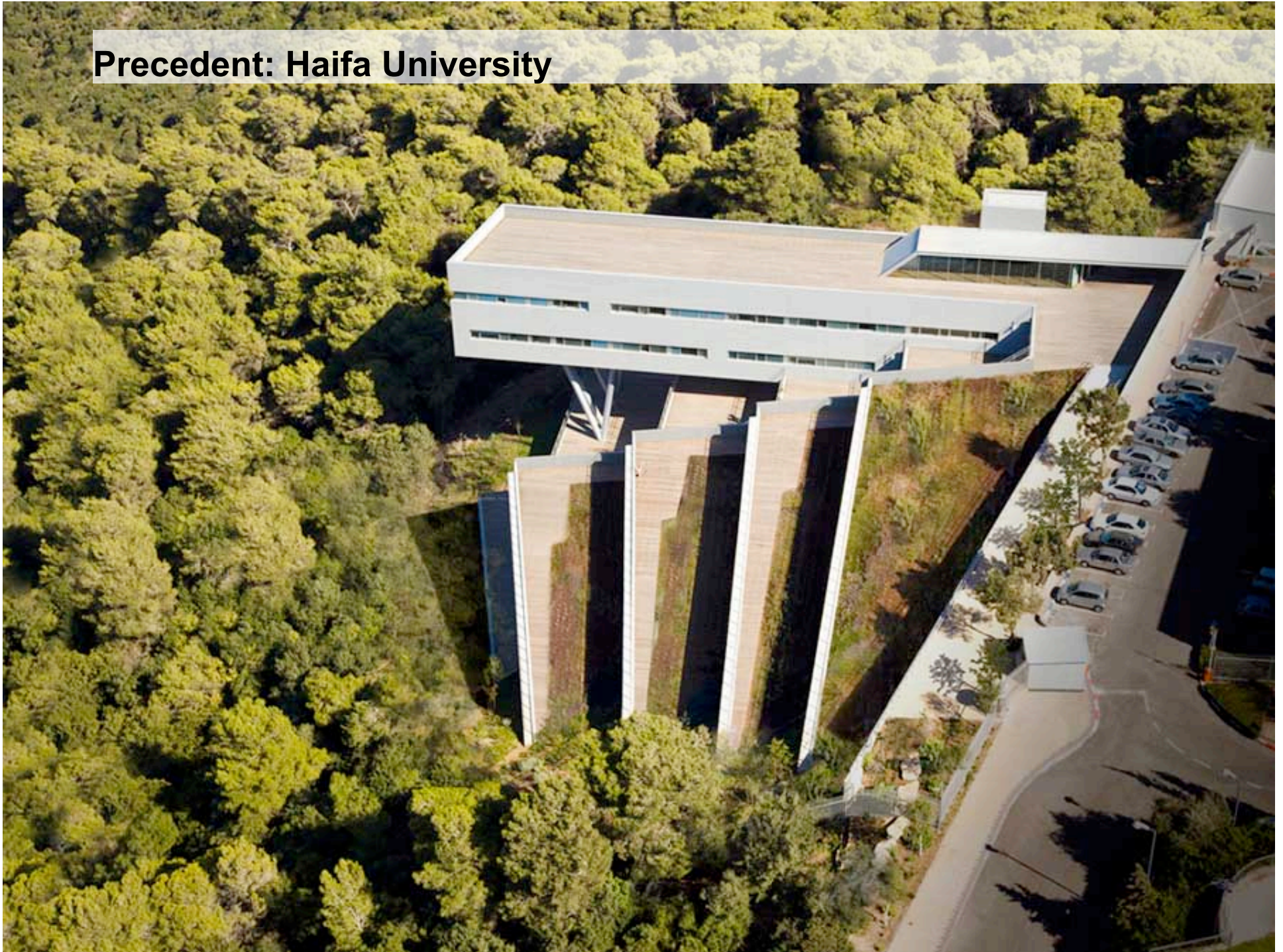
Precedent: Simon Fraser University



Precedent: Simon Fraser University



Precedent: Haifa University



Precedent: Haifa University



Precedent: Haifa University



Precedent: Ewha University



Precedent: Ewha University



Precedent: Delft Library



Precedent: Delft Library



Precedent: Shanghai University



Precedent: Sun Moon Lake



Design Objectives

1. Gateways

- a. Create gateways to the campus which clearly identify the University of Lethbridge within its surrounding context, while communicating and displaying to the neighbouring community the University's brand, the work of students, faculty and staff, as well as public events of the University.

2. Experience of Arrival

- a. Reinforce existing visual and pedestrian axis within the campus and create new ones. Create a series of 'desire lines' that make walking across the University campus easy and pleasurable. Through visual connections, physical urban landscapes, lighting, urban furniture and branding, extend beyond the precinct and continuously aim at linking the core of the campus to the campus periphery;
- b. Highlight the legacy of University Hall

Design Objectives

3. Vibrant Public Spaces

- a. Create a tight pedestrian-oriented core to the campus with an environment conducive to academic excellence and vibrant student life, as well as a comfortable pedestrian microclimate in the heart of the campus.

4. Outdoor Space

- a. Define the public realm core of the campus through signature elements of landscape, urban furniture, and lighting to create a cohesive collegial sense of community;
- b. Develop a consistent urban design approach within the University of Lethbridge which clearly defines the boundaries of the individual academic precincts;
- c. Identify secondary circulation routes within the University Campus and ensuring elements of the public realm, such as lighting, street furniture, and landscaping are integrated as part of the greater public space network on campus;
- d. The coulees are protected and utilized as celebrated open space, surrounded by University uses. Both active and contemplative, the exterior space becomes the central forum of interaction for students, faculty and staff of the University of Lethbridge.

Design Objectives

5. Sustainability

- a. Enhance accessibility to the campus by increasing public transit opportunities;
- b. Enhance 'green' accessibility to the University campus by establishing designated cycling lanes throughout the campus connecting to the city's proposed cycling network. Interior bicycle storage on campus would reinforce this commitment.

6. Safety and Security

- a. Provide transparency and accessibility at grade, as well as programs which are conducive to social interaction and enhance a strong sense of collegiality.

7. Learning Everywhere, learning anywhere

- a. Explore opportunities to bring natural light through the roof and upper levels to activate the grade level.
- b. Create social hubs throughout University of Lethbridge.

Design Objectives

8. Space Utilization

- a. Take advantage of the unused density on the University Campus' own lands to meet academic space needs and revitalize the the campus core while preserving the existing green spaces of the college.

9. Ensuring Flexibility and Adaptability

- a. Create harmonic relationships between the existing campus and contemporary new buildings;
- b. Primary emphasis should be given to locating any future University Campus academic developments within the appropriate precinct, an area defined by a maximum of a 10-minute walk, and in proximity to University Hall.