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SKILLS
AUTO CAD
ADOBE PHOTOSHOP
ADOBE ILLUSTRATOR
ADOBE INDESIGN
ARCGIS
SKETCHUP
LUMION

EDUCATION

BACHELOR OF TECHNOLOGY
LANDSCAPE ARCHITECTURE
FUJIAN AGRICULTURE AND FORESTRY UNIVERSITY
FUZHOU, FUJIAN, CHINA
2015-2018

BACHELOR OF TECHNOLOGY
LANDSCAPE ARCHITECTURE
DALHOUSIE UNIVERSITY
TRURO, NOVA SCOTIA, CANADA
2018-2019

INTERNSHIP

ASSISTANT HORTICULTURE TECHNICIAN
CHANGCHUN ZOOLOGICAL AND BOTANICAL PARK
JINLIN, CHANGCHUN, CHINA
2019.7-2019.9
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OTHERS

XIREN ZHANG
This project is a study of a campus open space, and students were required to re-design the site to improve some of the current problems based on investigation and analysis. Green space design is also a primary purpose for this project.
SITE ANALYSIS

The site is located on the main campus of Fujian Agricultural & Forestry University, surrounded by teaching buildings, which is also the primary way for people to pass through between north and south on campus.

The main ways of transportation for students are walking, cycling, and scooter. Because the site is like a transportation hub, it will face the flow of people and various means of transportation in different directions, so it is very often to cause traffic chaos.

2004
Not much vegetation, some trees have just been planted.

2007
More trees and shurbs; The lawn has been trampled into a road because of the frequent traffic.

2018
The trees turned flourishing; The university had to pave the road.

The road on the lawn reflects people's demand for the direction and width of the way under the most natural conditions.
These are the three groups that most often pass through the area, and we can see the rush times in a day.

Different crowd composition determines the path width design of different positions.

**Restriction**
Raise the elevation of the square in front of the teaching building, limit the access of scooters and bicycles with steps.

**Separation**
Create more private space with green space and plants.

**Connection**
Design roads where people subconsciously like to go through and brake the green space to create connections.

**Pattern**
Ice cracking is a traditional pattern for Chinese people.
The new plan limits the routes for bicycles and scooters, which will significantly improve the efficiency of traffic in front of the Innovation Building with the most abundant flow of people on foot.

The small square is a semi-closed space, which will provide people a more private place to talk, study, and relax.

There is no specific parking lot on the site, which makes illegal parking very common. The new parking lot will alleviate this problem.
GREEN STRATEGY

IMPROVEMENT

GREEN RATIO: 28.7%

EXISTING
Lack of design sense, some places do not have proper functions

GREEN RATIO: 23.5%

PROPSAL
Turned 5% greenspace into parking to increase the function of the site; Enrich the road and space composition

LANDSCAPE TYPE

EXISTING

STRATEGY 1- MULTIPLE UNDERSTORIES

STRATEGY 2- LANDSCAPE TO BUFFER SPACE

STRATEGY 3- BIOSWALE TO IMPROVE DRAINAGE

BIOSWALE RESEARCH

Bioswale can effectively drain water to solve the problem of water accumulation

* Pictures from one of my course practice for bioswale in Dalhousie University
The architectural project is located on the new campus of Fujian Agricultural & Forestry University. The building is about a campus museum, which aims to show the history of the university, great works of students and teachers, as well as some other art and academic works. The requirement is to integrate into the surrounding environment and have the characteristics of transparency.
The red line is located by the lake of the campus with pleasant scenery, and it used to be a green land. Academic buildings and basketball courts surround it so that it will be noisy in rush hours.

**SITE ANALYSIS**

- **CONSTRUCTION**
  - Grass block paving
  - Gray granite paving
  - Asphalt road
  - Wooden pavilion
  - White tile
  - Glass curtain wall

- **NATURE**
  - Natural water system
  - Waterfront
  - Open field
  - Flower bed
  - Shade tree
  - Bird Habitat

- **ACTIVITY**
  - Study
  - Reading
  - Outdoor sports
  - Indoor sports
  - Eating
  - Ceremony & Competition
CONCEPT & SURROUNDING LANDSCAPE DESIGN

INSPIRATION

WATER CURTAIN CAVE

Water Curtain Cave is a scene depicted in the Chinese classical literature Journey To The West. The cave is hidden behind the speeding waterfall and is isolated from the outside world, providing a mysterious feeling to people.

GREENHOUSE

A greenhouse is a structure with walls and roofs to cultivate plants. It provides plants with controllable temperature and sufficient light. Roofs are usually made of glass and have a particular angle for sunlight to pass through.

FEATURES

The main body of the museum adopts the shape of Water Curtain Cave. The top and front glasses simulate the texture of the water flow, which can be well integrated with the surrounding waterscape. The skylight refers to the roof of the greenhouse and has good light transmittance.

PLANTS SELECTION

Cinnamomum camphora
Lagerstroemia indica
Magnolia grandiflora
Ginkgo biloba
Sorbaria japonica
Osmanthus fragrans
Photinia × frasere
Loropetalum chinense (tree)
Loropetalum chinense (shrub)
Ligustrum lucidum
Cycas revoluta
Camellia japonica
Different window designs on the upper and lower floors create two types of exhibition halls with different atmospheres in the bright and dark, which can facilitate the exhibition of different kinds of things and also bring people a variety of sensory experiences.

According to the research, the incident angle of light should be between 0°-40° so that the transmittance is better, and the less the angle is, the brighter the museum would be. And due to the sunlight condition of Fuzhou at 26.08°N, the incident angle of 25° is selected finally.
Workspace mainly consists of four offices, a conference room and an archive room. They are all on the same floor, so it is convenient for the staff to look for files and discuss issues.

Front door, two staircases and two elevators are accessible for visitors.

Backdoor and a staircase for staff to use.

Reading room is for both visitors and staff.

Visiting area consists of four exhibition areas, an atrium with plants and cafe. There is a change of bright and dark in exhibition areas, and different themes can be set.

The unique shape of the museum will arouse people’s curiosity and attract people to get in.

The environment of the atrium takes people away from the outside noise as if they are in another world.

The documents in the exhibition hall let people understand the history of the college; academic achievements and works of art inspire people’s ideas.

People can relax not only physically, but also mentally.

The building and the scene inside will be memorable.

After leaving the museum, the building and the scene inside will be memorable.

Mental Experience

Curiosity

Release

Inspiration

Relaxation

Aftertaste

Staff’s daily working and visitors’ activities do not interfere with each other.
COMMUNITY DESIGN - TATAMAGOUCHE CREAMERY SQUARE

This is a redesign for Creamery Square in Tatamagouche, to make it a more comfortable and popular place and better integrate into the surrounding environment.

After communicating with the local people and the field trip, I deeply realized the historical culture and local customs of this village, which is a fantastic design experience for me.
Tatamagouche is a village in Nova Scotia, Canada, which is situated on the Northumberland Strait and is on the south side of Tatamagouche Bay at the mouths of the French and Waugh Rivers.

**INTRODUCTION & HISTORY**

**TIMELINE**

- **1700:** PRE
- **1710:** Mi’kmaq
  - Acadians arrived and built a relationship with Mi’kmaq
- **1755:** European Settlers
  - British began the “Expulsion of Acadians”, burning the village and imprisoning the people
- **1780:** Shipbuilding
  - Scots arrived, followed by Irish, English and New England settlers
- **1824:** Railways
  - Trans-Canada railway built adjacent to Creamery Square site
- **1871:** Acadians
  - Tatamagouche began an era of shipbuilding
- **1887:** Railway
  - Railway use discontinued. Train station began to use as an inn
- **1900:** Railway
  - Railway removed to create Trans Canada Trail
- **1968:** Creamery
  - Creamery facility established on the site
- **1986:** Tourism
  - Creamery buildings and land donated to CSA
- **1992:** Conservation
  - Scotsburn Dairy Group stopped operations and scheduled buildings to be demolished
- **2003:** History of Tatamagouche
  - Butter factory transformed into Heritage Centre
- **2004:** Victorian Era
  - Farmer’s Market building added to site
- **2006:** Victorian Era
  - Grace Jollymore Joyce Arts Centre opened
- **2015:** Victorian Era
  - Trans Canada Trail (The Great Trail)
- **2019:** Victorian Era
  - Tartan Trail

**HISTORY OF TATAMAGOUCHE**

**1710**
- Acadians arrived and built a relationship with Mi’kmaq

**1755**
- British began the “Expulsion of Acadians”, burning the village and imprisoning the people

**1765**
- The Montbeliardians occupied Tatamagouche, which becomes a farming and fishing community

**1780**
- Scots arrived, followed by Irish, English and New England settlers

**1824**
- Tatamagouche began an era of shipbuilding

**1871**
- First building on Creamery Square: J. Bonyman & Sons Sash and Door Factory

**1887**
- Trans-Canada railway built adjacent to Creamery Square site

**1900**
- Railway use discontinued. Train station began to use as an inn

**1968**
- Creamery facility established on the site

**1992**
- Scotsburn Dairy Group stopped operations and scheduled buildings to be demolished

**2003**
- Creamery Square Association (CSA) was formed to preserve the heritage site

**2006**
- Farmer’s Market building added to site

**2015**
- Grace Jollymore Joyce Arts Centre opened

**2019**
- Trans Canada Trail (The Great Trail)

**Picture Reference:** novamuse.ca (butter factory); tatatrainstation.com (train station inn); villageoftatamagouche.com (Trans Canada Trail)
**SITE ANALYSIS**

Creamery Square is a waterfront development site in Tatamagouche beside Waugh River, which is like a community centre for local people with farmers’ market and theater. It is 10 minutes walk from downtown and 5 minutes walk from Train Station Inn. Due to the remoteness of the site and the lack of guide signage, tourists who pass through the Main Street or stay in Train Station Inn can always miss the site.

**PROBLEMS**

lack of:
- Signage
- Shade
- People don't want to stay in hot weather
- Tourists always miss the site
- Hard to park when going shopping
- Hard to find a place to rest
- Nearly no activity and is idle in winter
- Year-round Use
- Public land
- Private residential land
- Private vacant land
- Land owned by CSA

**What Makes Creamery Square and Tatamagouche Unique**

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Survey from local residents

The year-round population of Tatamagouche is about 700, jumping to 5000 during the summer months with the arrival of cottagers.
STRATEGIES

1- PROGRAM

AESTHETICS

- NATURAL LANDSCAPE
- ARTS CENTRE

SOCIAL

- HERITAGE CENTRE
- FARMERS’ MARKET

LEISURE

- CAFE
- CAMP

SPORTS

- TRAIL
- SKATING RINK

ECOLOGY

- WATERFRONT
- BIRD HABITAT

2- CONNECTION

Most of the tourists are active in the trail, Main Street, and the inn, so adding rest places and signage around these places can effectively attract them to the site.

The vacant land beside is a natural wetland with a pleasant ecological environment and natural landscape. So connecting the site with it with a buffer zone is a good way to improve the site environment and conserve the habitat.

3- BIRD HABITAT

Site Typical Birds
- Sitta canadensis
- Tachycineta bicolor
- Anas rubripes
- Larus argentatus

Site Typical Trees
- Prunus virginiana
- Acer saccharum
- Pinus banksiana
- Picea mariana
The main idea is to increase the comfort of the square and connect it with the surroundings.
Inside the square, add more benches and build pavilions to create shade. Add parking lots.
Outside the square, place rest areas and gateway at key positions can attract passers-by to stop and guide them to the site with boardwalk.
The boardwalk and platforms besides the water can bring a changing landscape and better viewing experience.
DETAILS & EFFECTS

Skating rink can be used as a playground during warm time.
MODELS & CONSTRUCTION

TEA HOUSE
INDIVIDUAL WORK

LANDSCHAFTSPARK
TEAM WORK

RESIDENTIAL DISTRICT
INDIVIDUAL WORK

OUTDOOR CLASSROOM
TEAM WORK