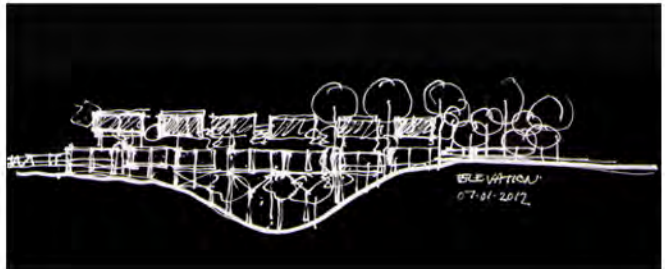


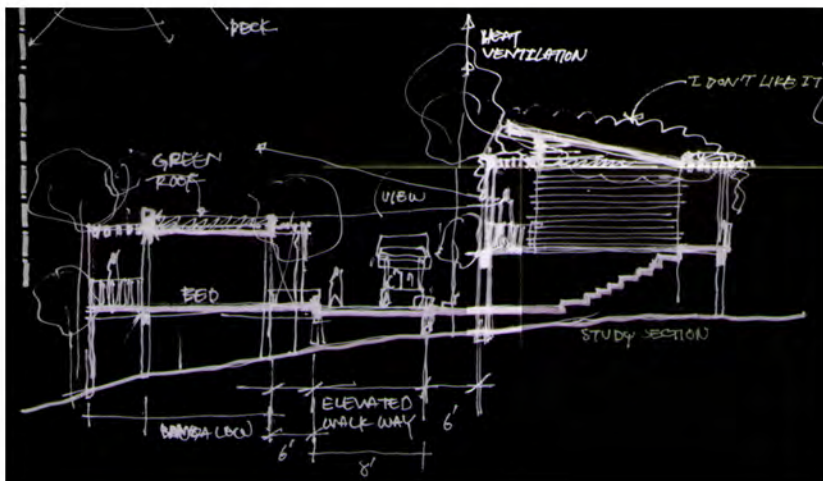
project
ORCHARD HOME-STAY

arc 550
Regional Graduate
Architecture
Studio

School of Architecture
College of Applied Sciences and Arts
Southern Illinois University



designed by :
adulsak chanyakorn | otto



Contents

Introduction.....	2
Site Analysis.....	3
Functions in the Project.....	5
Conceptual	
Design Diagram.....	7
Schematic Design.....	9
Design Development.....	11
Inspiration.....	23



Introduction

According to the Food and Agriculture Organization, "during the last century, 75 per cent of crop genetic diversity has been lost, a phenomenon of agro-biodiversity erosion" (sustainabletable.org).

The central causes of loss of agro-biodiversity are industrial farming and seed monopolies. Today, due to monoculture farming, the diversity of plants, animals, and soil has been drastically reduced. Pesticides and fertilizers have decreased the potential of natural pollination, which may cause extinction of certain species. Loss of biodiversity has also created problems for the food supply chain. Two examples are the Irish potato famine of the 1840s and U.S. Corn Leaf Blight in 1970.

Industrial agricultural expansion has directly affected the earth's biodiversity system. Industrial farms depend on a few species of crops. Now, a lot of non-commercial crops have disappeared and some are extinct.

Biodiversity is very important for our lives because we rely on it in many ways. It impacts drinking water, crop pollination, nutrient cycling and climate regulation, which support our food supply chain.

Currently, many people are not aware of this problem and continue to consume and support mono-cropping produce. We are abandoning local farmers who have cultivated biodiversity of our food supply chain and the ecosystem because of a lack of knowledge on these topics.

Therefore, it is necessary to create educational facilities that will help people understand and appreciate biodiversity.

Project Location

Southern Illinois | Carbondale
Region : green communities
focused on local produce, outdoor activities. Many visitors to parks and forests.

Site Location: context is farm, forest, wineries, orchards. The landscape is beautiful and scenic. The site itself supports the proposed program.

Educational Purposes

1. Preserving Biodiversity
2. Visitor interaction in the orchard | garden
3. Seed Preservation
4. Connect people with nature (integration of nature and human culture)

These educational functions will be demonstrated through:

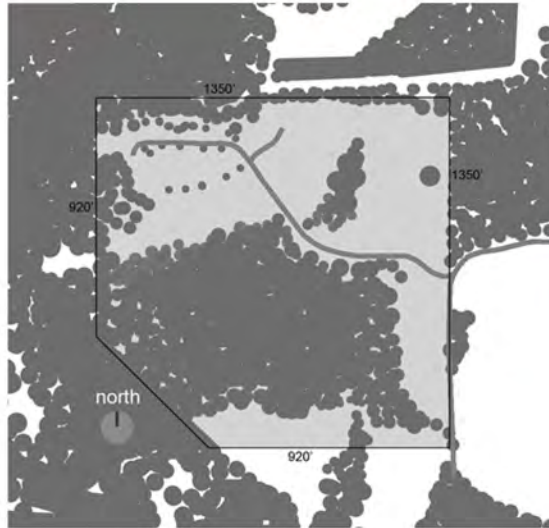
Orchard: naturally grow a variety of apples and peaches from different regions | people will be able to come visit and taste them.

Organic and Non-GMO Vegetable garden: Naturally grow different kinds of vegetables.

Save the seeds to exchange or give them away in order to cultivate heirloom varieties.

Guests interact with orchard | gardens by picking produce to cook in our shared kitchen.

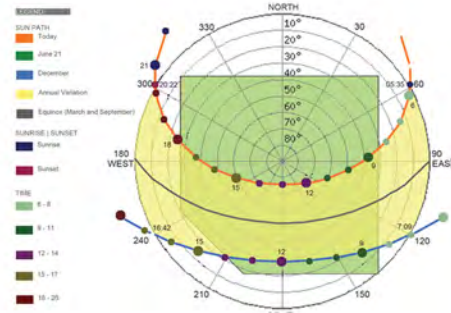
Site Analysis



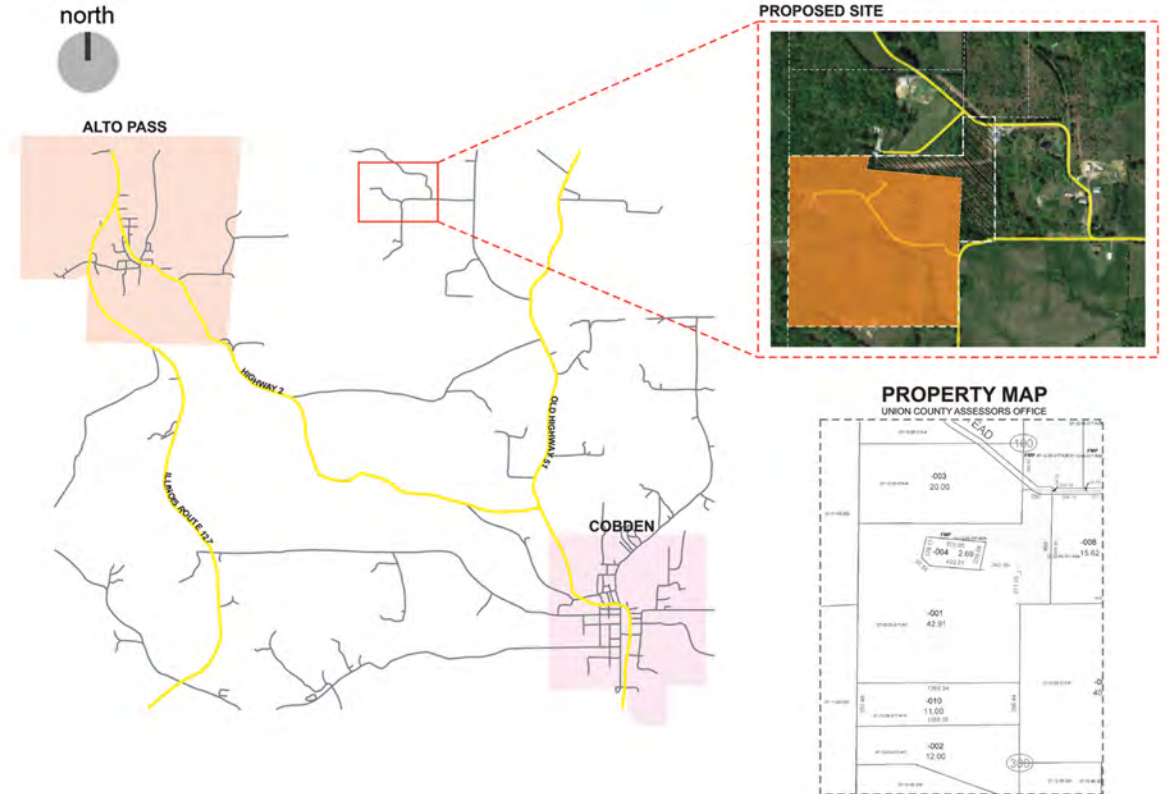
site location

points of analysis

- environmental analysis
- geological and agricultural analysis
- contextual analysis
- historical analysis



site analysis



view of the site



functions in the home-stay project

Public spaces

indoor spaces

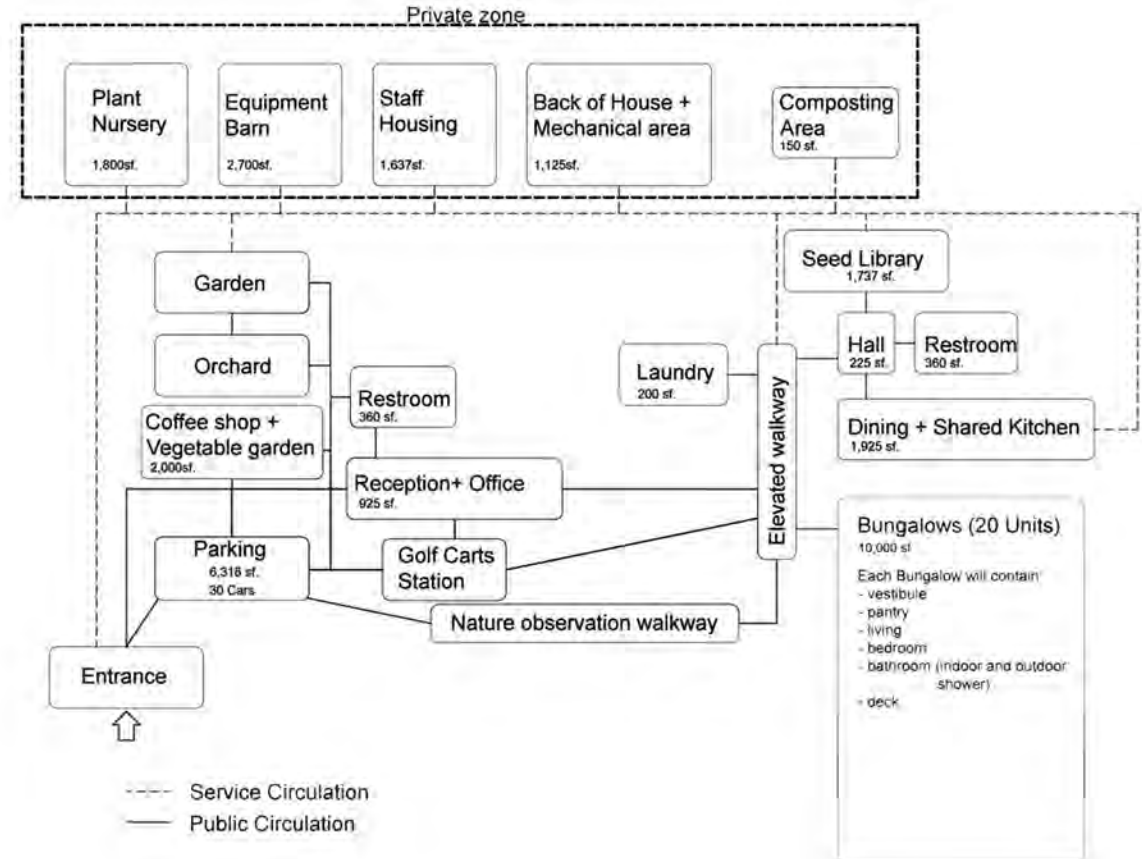
parking space | reception area
office | coffee shop | guest
bungalows | shared kitchen
and dining area | library and
seed center area | laundry area
| restroom area

outdoor spaces

orchard | vegetable garden |
nature observation walkway

Private spaces

equipment barn | plant nursery |
staff office | staff housing | staff
dining area | back of house and
mechanical area

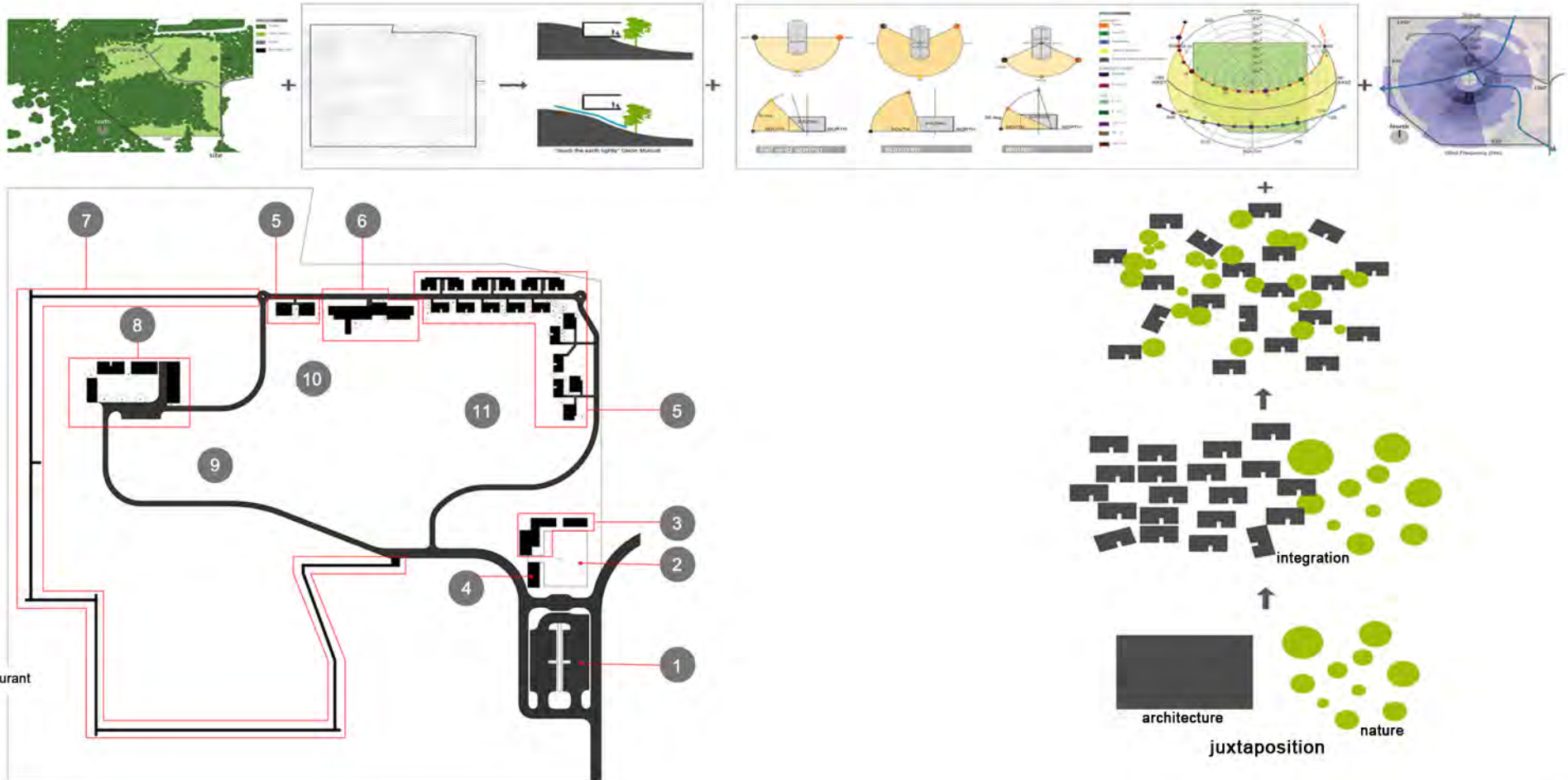


Conceptual Design Diagram

- focus on not disturbing nature
- let nature be the focus, not architecture
- the architecture should showcase and highlight the natural beauty of the landscape
- passive design
- respect to regional architecture
 - building scale
 - local building materials

KEY PLAN

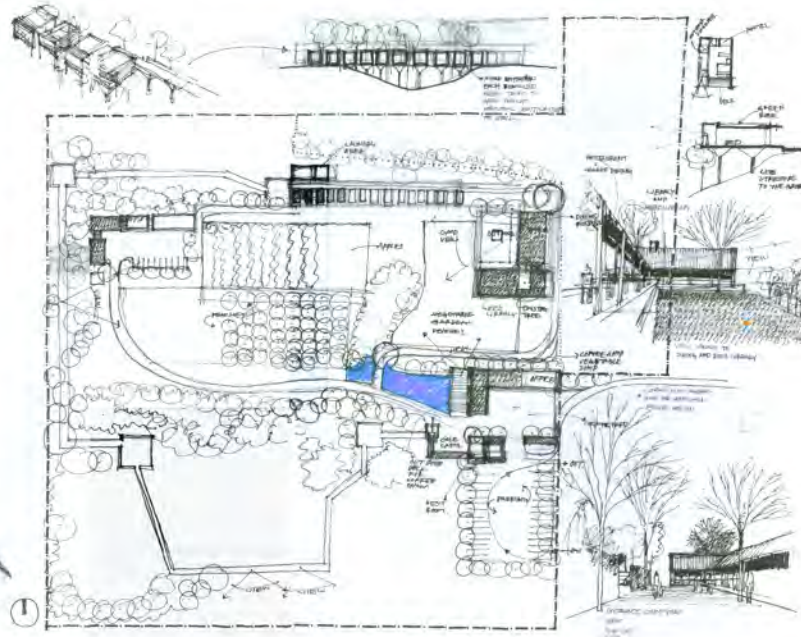
- 1 Parking Area
- 2 Multipurpose Plaza
- 3 Vegetable shop and Information Center
- 4 Golf Cart Station
- 5 Guest Bungalows
- 6 Seed center + Library and Shared Kitchen + Restaurant
- 7 Natural observation walkway
- 8 Staff zone
- 9 Organic Orchard (apples)
- 10 Organic Orchard (peaches)
- 11 Organic vegetable garden



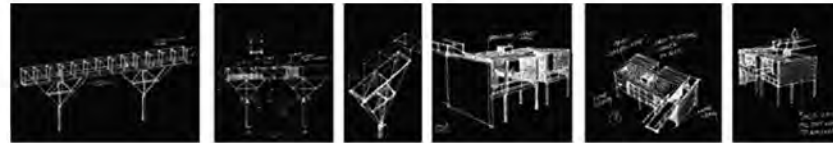
SCHEMATIC DESIGN

1st scheme

This scheme experiments the idea of putting all the guest bungalows at the highest point of the site location. Each bungalow will be able to see the panoramic view of the site and the guests will also have visual connections with the context around the site as well.

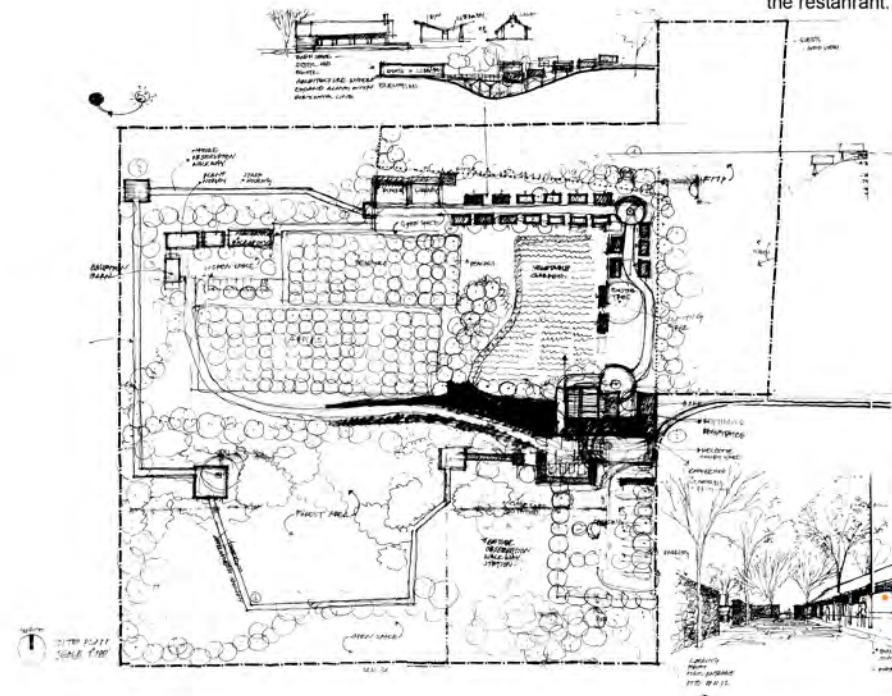


Initial sketch to study the architectural character of restaurant and seed canopy

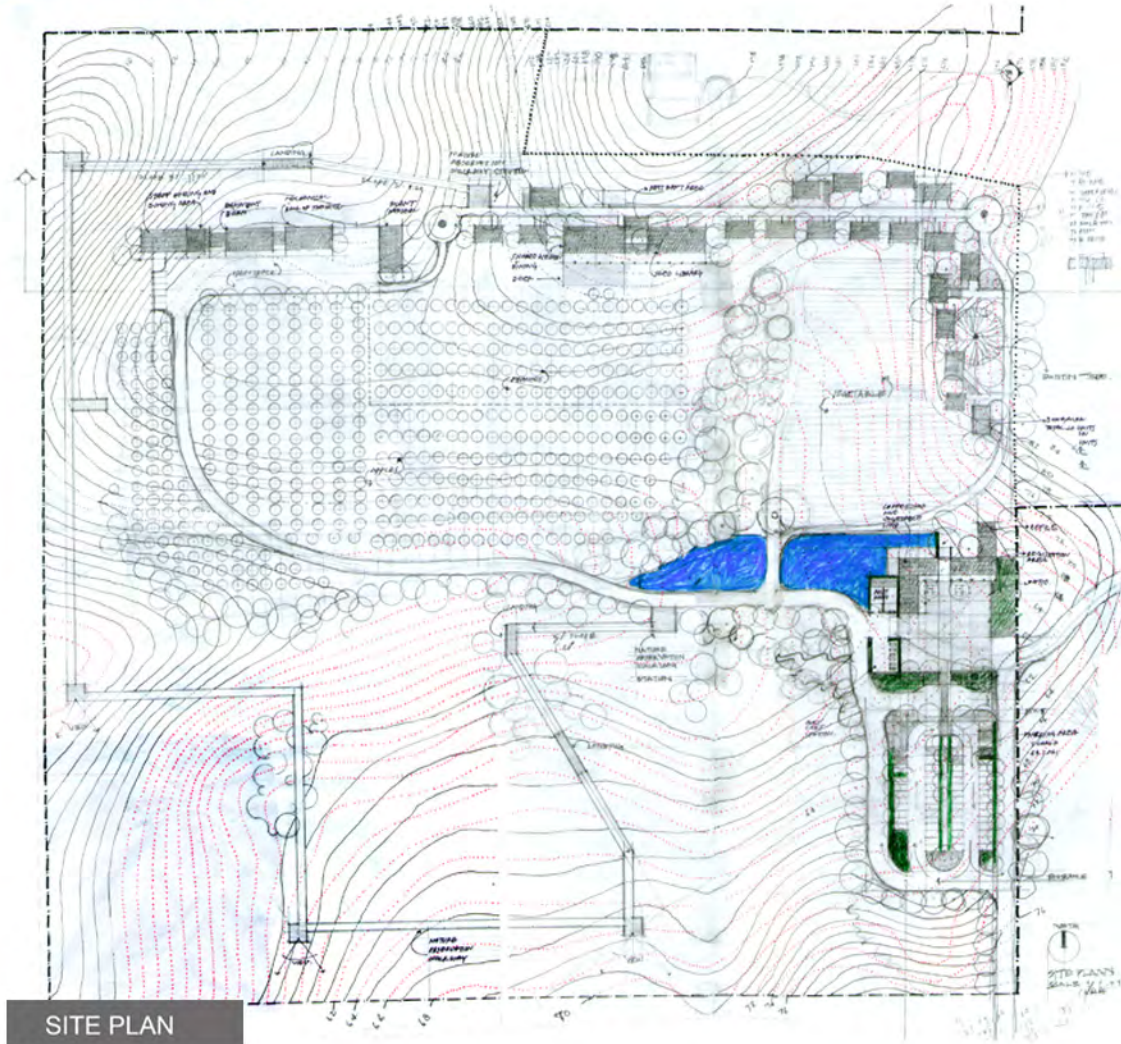


2nd scheme

This scheme moves the public spaces such as the shared kitchen, restaurant, library and seed bank to the best location of the site. This scheme allows guests and temporary visitors to have an equal opportunity to access every part of the project. From this scheme, guests will be able to observe the scenic atmosphere along the way when they travel from the information building to the seed bank or the restaurant.

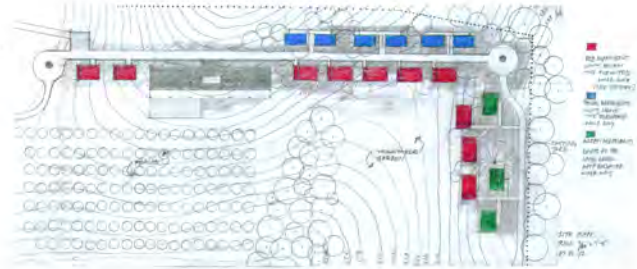
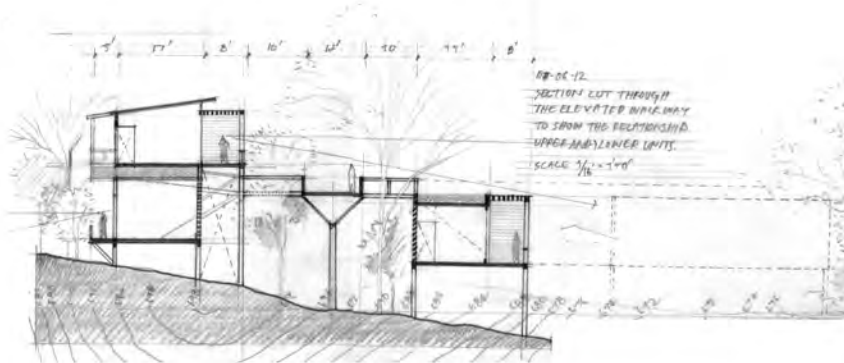
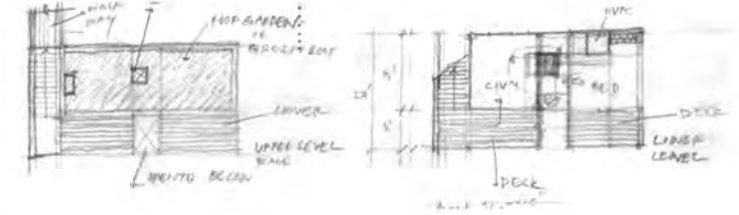
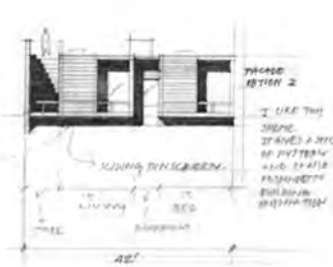
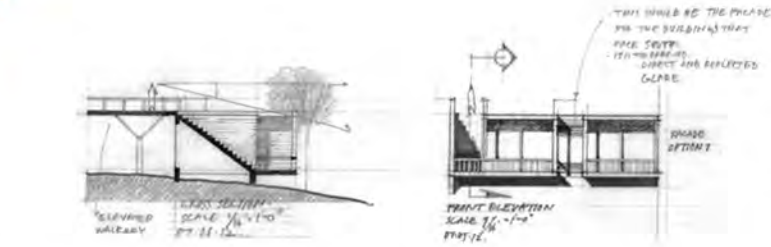
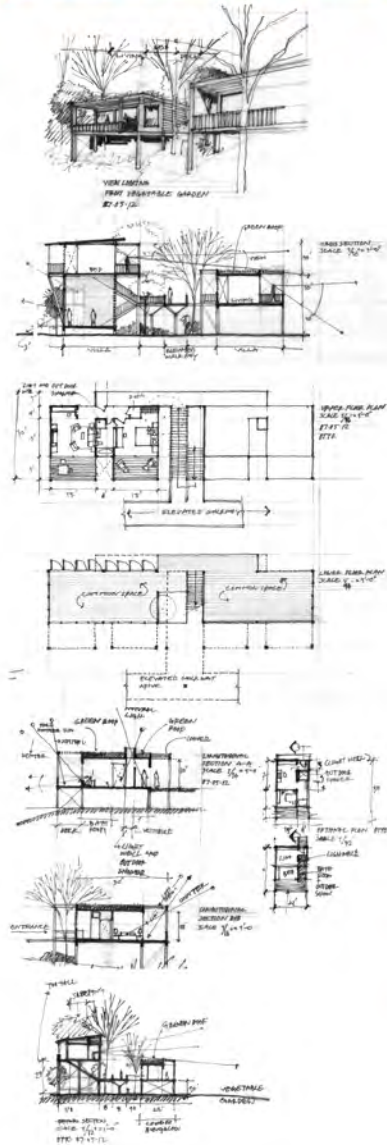


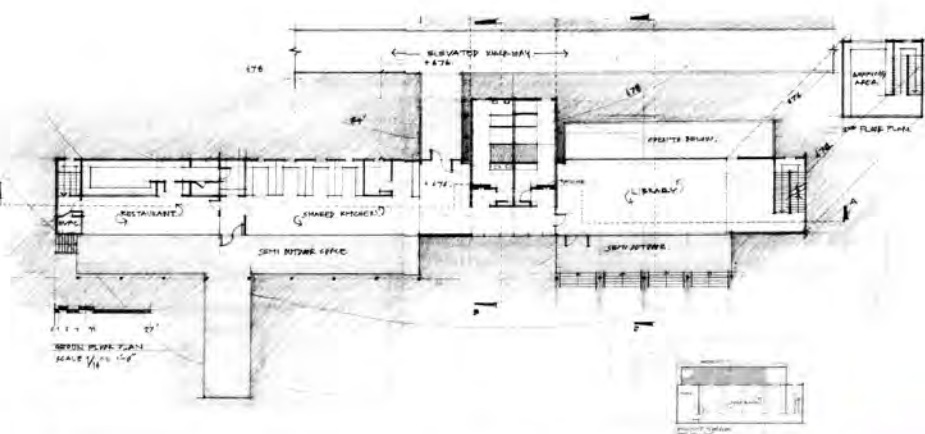
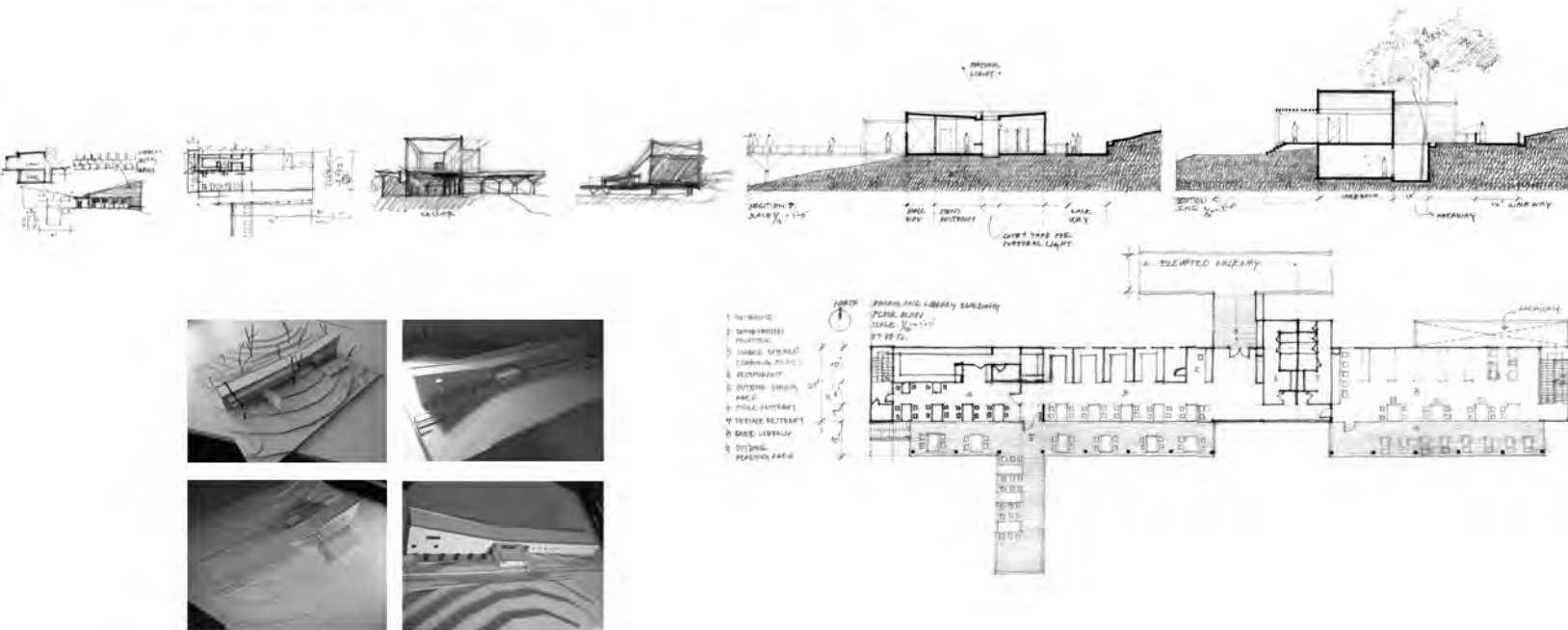
Initial sketch to examine the spatial courtyard for the reception building.



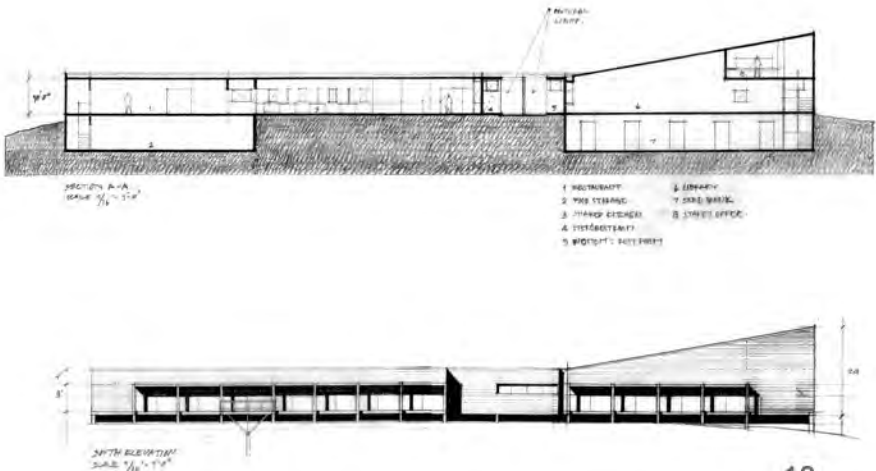


LONGITUDINAL SECTION

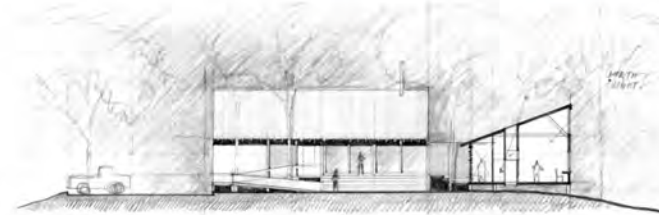
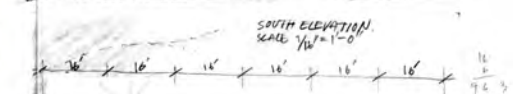
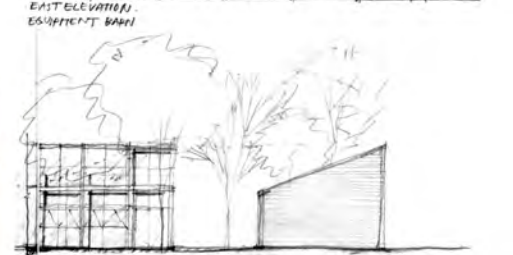
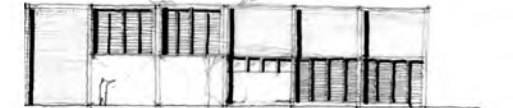
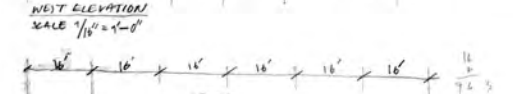
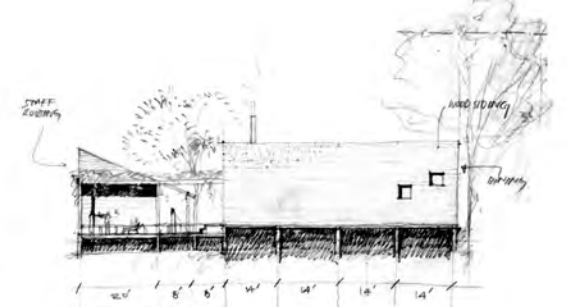
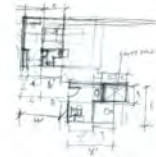
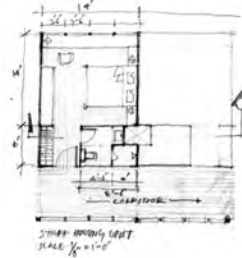
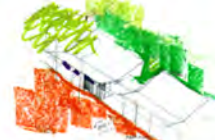
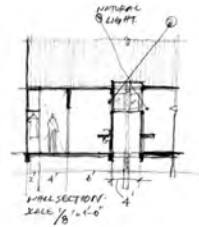
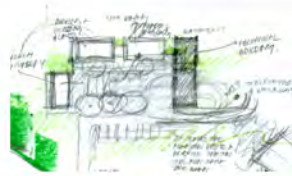
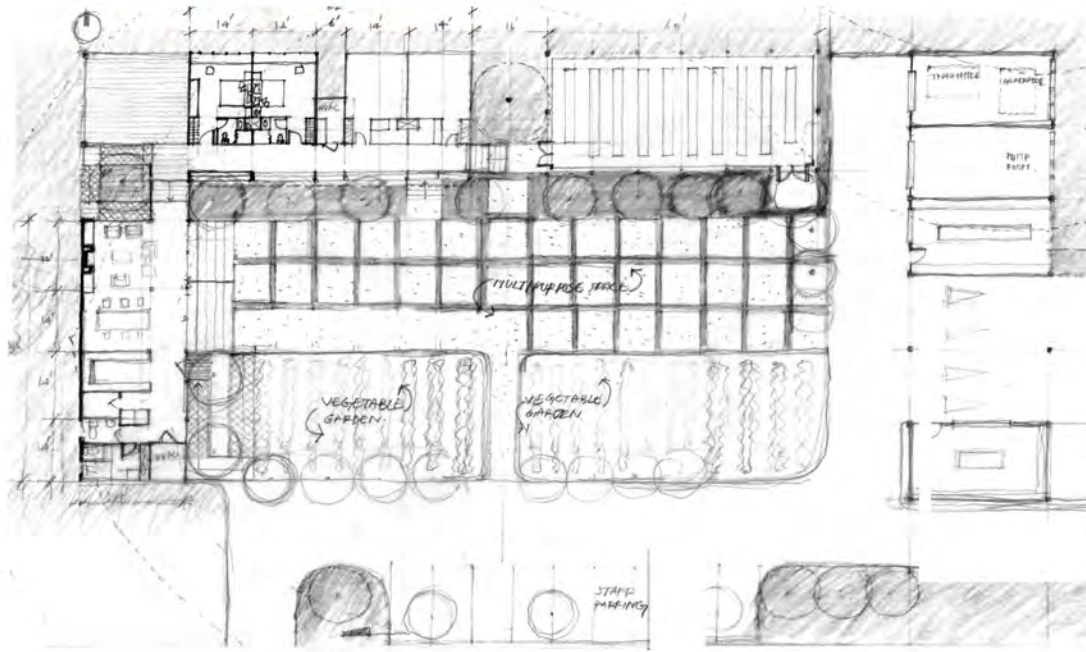




SEED CENTER + RESTAURANT



Design Development



21



22

Inspiration

book:
the botany of desire | Michael Pollan

places:
Pun Pun Seed Center | Chiang Mai | Thailand
Green school | Bali | Indonesia

architects:



"The verb to draw means to bring out, and to bring out is to reveal, and to reveal is to understand" Glenn Murcutt.

"To draw one self, to trace the line, handle the volumes, organize the surface....all this means first to look and then observe and finally perhaps to discover.... and it is then inspiration may come"
Le Corbusier.

Adulsak Chanyakorn

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Traveling is one of the most important aspects of my self-education. I spent my time traveling and studying architecture in South- East Asia. I witnessed ancient temples and vernacular architecture in Thailand, Laos and Cambodia. I visited Beaux-Art and Modern Architecture in some part of USA. In those places, I could feel the spirit of architecture as translated through different lifestyles, societies and cultures to create their own character. While traveling, I also sketched and painted. Sketching and painting helped me to visualize architecture in different perspective.

In my view, architecture is one kind of art, and its purpose is to incorporate function, materials, lighting, technologies, and structure under the condition of context and culture; organize them into aesthetical space and physical form to create its own characteristic. This combination reflects a certain spirit or feeling that can be experienced in a well-designed space as many ancient ruin architecture. I'm interested in creating contemporary architecture that still contains its own spirit by capturing the essential of its own traditional space, and convey it through the new architectural language.