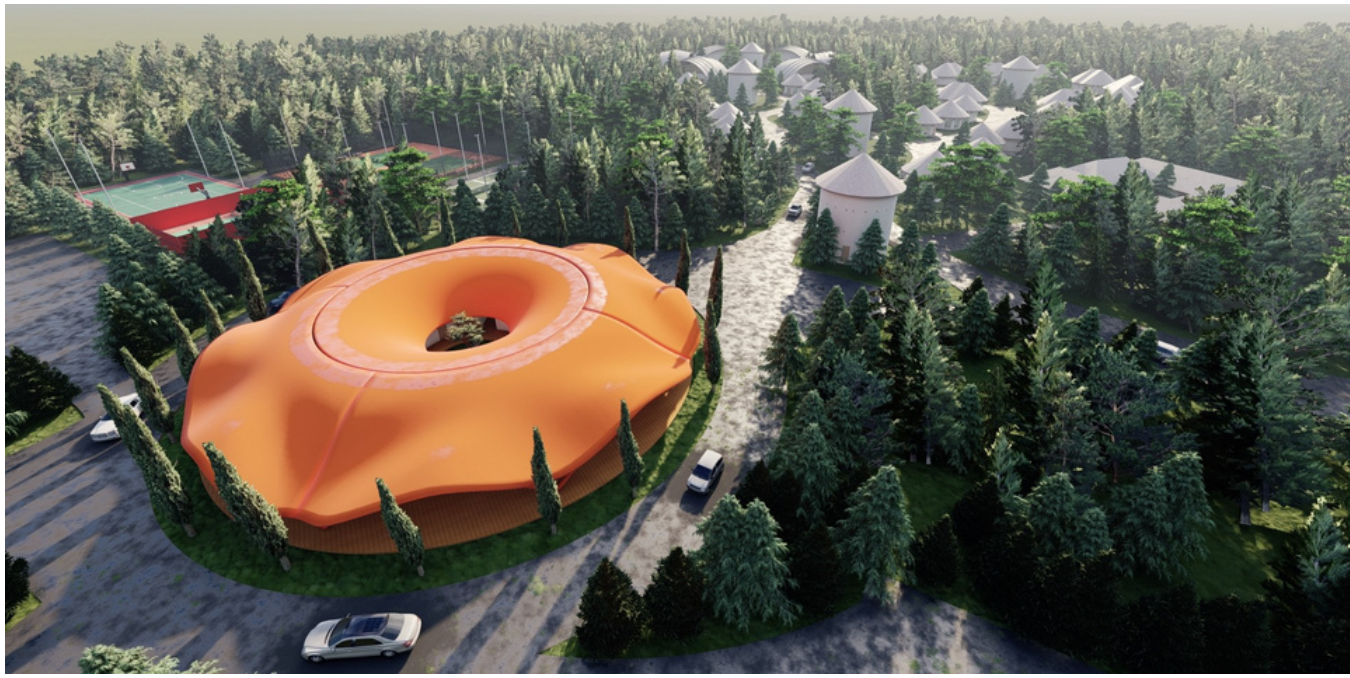
2021/2022

FINAL ARCHITECTURE DESIGN STUDIO

Laboratorium Pemodelan Arsitektur dan Perkotaan

DESIGN OF RESORT IN PANJANG BEACH, BENGKULU WITH SWALLOW SANCTUARY APROACH

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UNIVERSITAS ISLAM INDONESIA — DEPARTMENT of ARCHITECTURE

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PERANCANGAN RESORT DI KAWASAN PANTAI PANJANG, BENGKULU DENGAN PENDEKATAN SUAKA BURUNG WALET

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FAKULTAS TEKNIK SIPIL DAN PERENCANAAN
UNIVERSITAS ISLAM INDONESIA

2021/2022

DESIGN OF RESORT IN PANJANG BEACH, BENGKULU WITH SWALLOW SANCTUARY APPROACH

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FACULTY OF CIVIL ENGINEERING AND PLANNING
INDONESIAN ISLAMIC UNIVERSITY

2021/2022

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Student Name : **Retno Putri Wulandari Rahadi**

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Has been evaluated and agreed on : **23rd December 2022**

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Acknowledge by:
Head of Architecture Undergraduate Program

FAKULTAS TEKNIK SIPIL DAN PERENCANAAN

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Faculty : Faculty of Civil Engineering and Planning
University : Universitas Islam Indonesia
Title : Design of Resort in Panjang Beach, Bengkulu with Swallow Sanctuary Approach

I, state that this Final Architectural Design Studio Project that I write and work, not the transfer of other people's writings or thoughts that i acknowledge as my own results or the thoughts. As for the final Architectural Design Studio work, there are parts of quotes from other people's work that I have written down according to the norms, rules, and ethnics in writing.
If later it is proven or can be proven that this final Architectural Design Studio is completely plagiarized, I am willing to accept the consequence

Yogyakarta, 26th December 2022



Retno Putri Wulandari R. 17512152

FOREWORD

Assalamu'alaikum Warahmatullahi Wabarakatuh

All praise and gratitude to Allah SWT who have showing His blessing, mercy, and guidance. Without it, the author wouldn't be able to complete this Final Architectural Design Studio project. The author is well aware that the process and journey of completing this final project could not be possible without the support of people around her that stays until the end. Therefore, the author would like to dedicate this foreword as a form of appreciation and gratitude to:

1. Rohimah(mother) and Rasdi, author's late father who always showering her with love and support throughout her lifetime. Even if he's not here,they are the author's number one reason to finish her project and keep on living.
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6. Eko Rahadi, Dwi Rahadi, Wahyu Rahadi, and Fitra Rahadi, the author's big brothers who always support me and helping me as they can to finish this project.
7. Yassar Purwa Nandana who has always show love to the author and be there to support the author anytime and anywhere.
8. Mode Jutta, Ilia Raiskha, Imara Dzakia, Rohadatul Aisy, and Aris Ryant who have fought together to finish this studio.
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10. All the people that have helped the author along this learning process that have not been mentioned, thank you for their help and support for the author to be even better.

UNIVERSITAS ISLAM INDONESIA

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DESIGN PREMISE

As an attempt to promote the post pandemic tourism in Bengkulu, a resort on the Panjang beach could be one of the ways. Bengkulu’s city post pandemic tourism development is considered slow but has the potential. With their well known Agro-business and natural sources, swallow bird is used as this resort's attractiveness. Swallow bird's nest is famous for their benefits and one of Bengkulu's commodity export. Whilst the bird's singing also give the customer a tranquility, it's will give the peaceful ambience and make the customer feel more comfortable. The humidity in Bengkulu is perfect for swallow bird's sanctuary as the bird require a damp place to live in and make their nest.





Therefore, the visitors can experience the product of the swallow bird at the cafe and also enjoy the relaxing sing of the bird's while they stay at the resort. There are also other facilities for the visitors, such as ; spa, gym, sport fields, resto, etc. With this, it is expected to attract more visitors to Bengkulu and help with the tourism sector to be better.

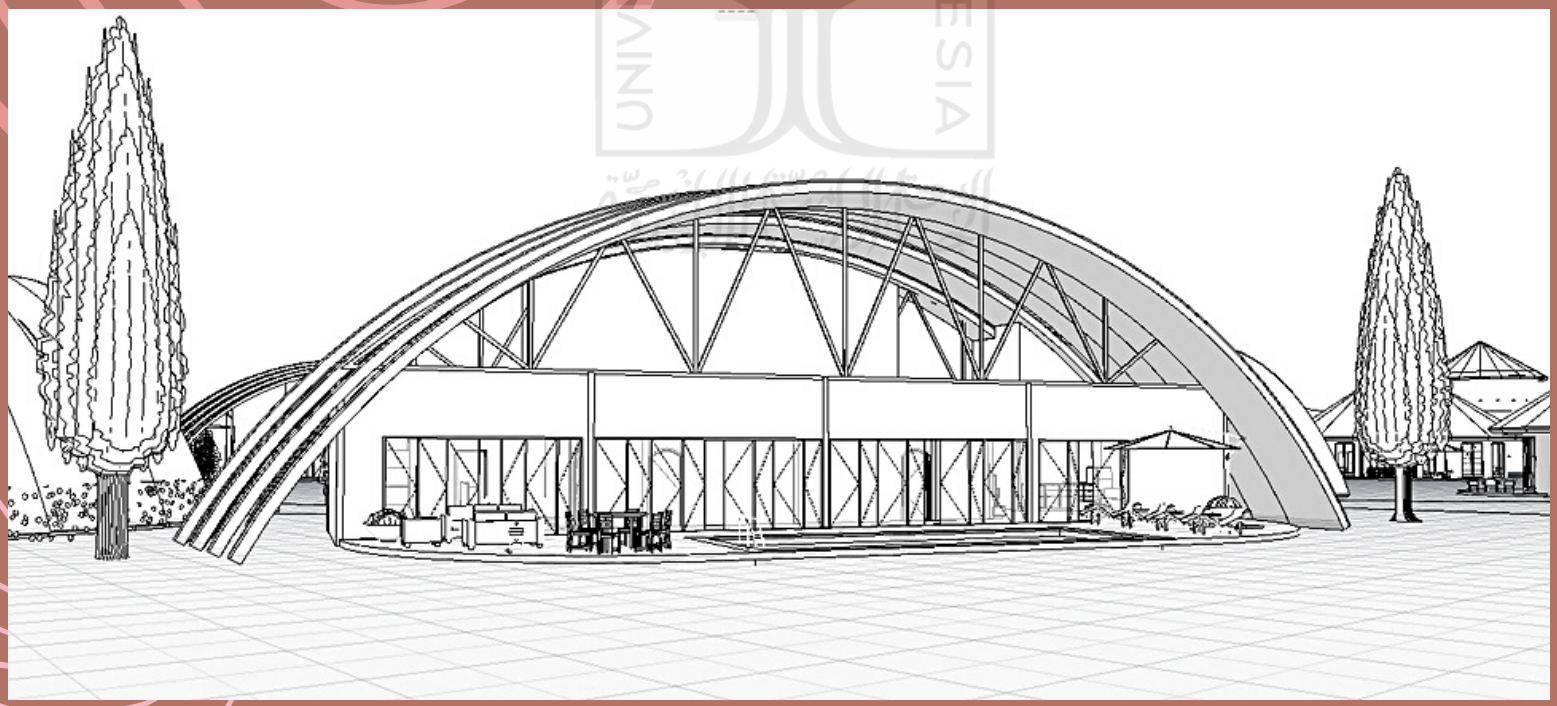




CHAPTER 1

PRELIMINARY

Background
Problem Formulation
Design Limitation
Design Method
Originality & Novelty
Design Hypotheses



1.1. BACKGROUND

Bengkulu is located on the west coast of Sumatra Island and has a coastline of 525 km facing the Indian Ocean. it has 10 districts, 126 sub-districts, and 1.356 villages with a total area of 19.919,33 km2. Bengkulu city is the capital of the province of Bengkulu. Bengkulu is enriched with natural sources, such as agriculture, mining, as well as eco-tourism.

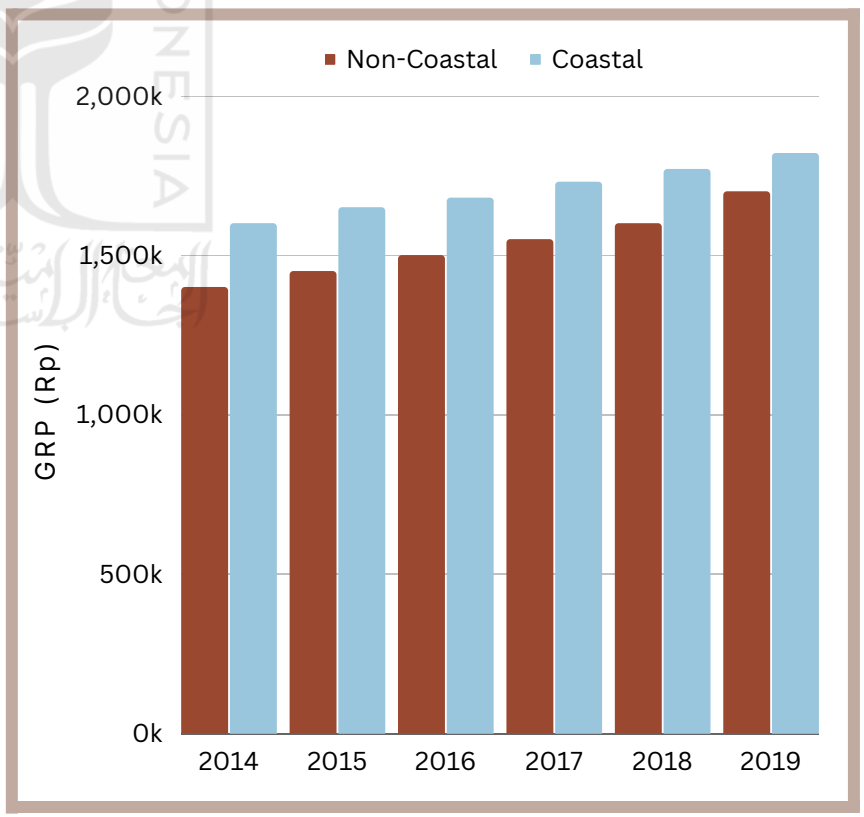
1.1.1. Economic Condition in Bengkulu

According to the Indonesian Medium-Term Development Plan (RPJM), Bengkulu is one of the leading provinces of Sumatera and has great potential in foreign trade through the export of various commodities, especially of those derived from natural resources.

Economic Growth in Bengkulu

Coastal and Non-Coastal Economic Growth in Bengkulu Province, 2011-20119 The results indicated that the economic growth (Gross Regional Domestic Product -GRP) in coastal areas was higher than in non-coastal areas. Per capita income in Bengkulu Province, both coastal and non-coastal areas, shows an increasing trend in line with economic growth, this is indicated by an increase in GRP.

The economic structure in Bengkulu's coastal area has a great potential for tourism.




U
West Sumatra Province
Jambi Province
South Sumatra Province
Lampung Province
INDIAN OCEAN
Lubukpinang
Talangpetai
Mukomuko
Muko-Muko Airport
Sungaipuh
Saribulan
Airdikit
Pasarbantal
Bungatanjung
Airhitam
Ketangno
Gajahmakmur
Bukitharapan
Pasaripuh
Airrami
Muaraaman
Tes
Seblat
Tanjungdalam
Pageralam
Sukarami
Rimbopengadang
Ketahun
Argamakmur
Kp.Melayu
Padangpulaktanding
Gawok
Curup
Airduku
Darati
Penampung
Lais
Airkotok
Suraubaru
Rejabesi
Kepahiang
Airmapa
Talangkambu
Padangsukasu
Nakau
BENGKULU
Karangtinggi
Pagardewa
Fatmawati Soekarno Airport
Baai Island Seaport
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Tanjungsur
Muarasaung
Padangguci
Pulaugelondi
Bintuhan Port
Bintuhan
Muaranasal
Enggano Port
Enggano Island
Capital City
City
Main bridge
Toll road
National road
Medium road
Small road
Railroad
International Airport
Domestic Airport
International Port
Domestic Port / Harbour
Existing Industrial Estate
Industrial Estate in Development

1.1.2.Tourism Sector Post-Pandemic in Bengkulu

The direction of Bengkulu Province's development is currently leading towards tourism sectors. Bengkulu City as the capital city of Bengkulu Province is indirectly affected by tourism development. One of the supporting economic sectors of tourism is the market, hotel and restaurant sector. Which has a very large income to the GRDP (Gross Regional Domestic Product) of Bengkulu City when compared to other economic sectors.

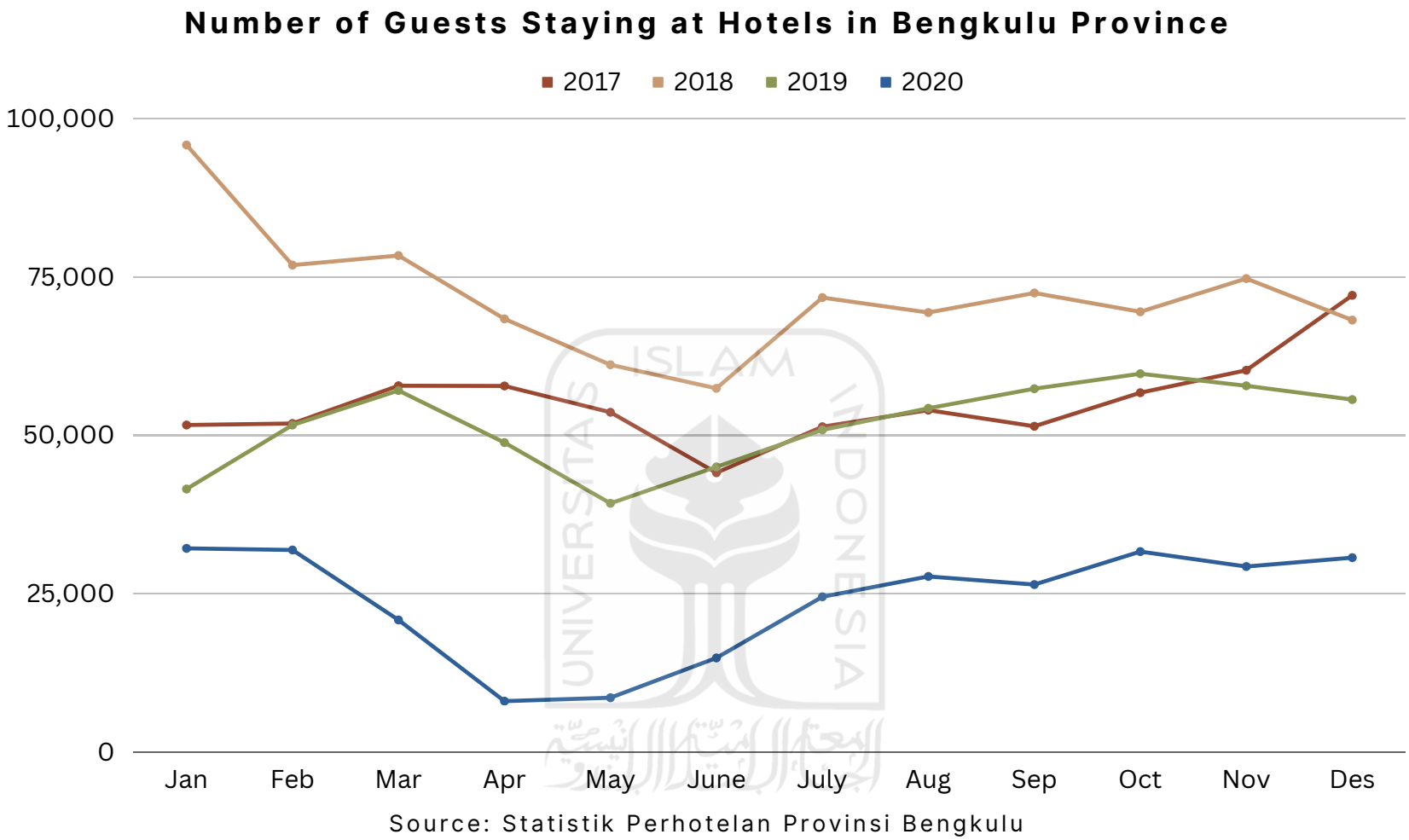
Market Sector in Bengkulu



With the revival of the tourism sector, it can trigger other sectors to develop so that the people's economy can get back on track. In this post-pandemic situation, activities such as tourism markets (pasar wisata) that offer a variety of handicraft, culinary, and tourism facilities are one of the solutions and are very good for reviving the people's economy, especially in the tourism sector.



Hospitality Sector in Bengkulu



Source: Statistik Perhotelan Provinsi Bengkulu

Although the number of hotels and other accommodations in Bengkulu Province in 2020 has increased compared to conditions in 2019, but in general conditions hospitality and other accommodation services in Bengkulu Province in 2020 experienced decrease compared to the previous year, in terms of Room Occupancy Rate (TPK), Average Length of Stay (RLMT), as well as from the number of guests staying. This condition occurred due to the Covid-19 that happen in Indonesia and also other countries in the world.

1.1.3. Agribusiness Potential in Bengkulu

Bengkulu succeeded in exporting swiftlet nests to Taiwan with a total export value of Rp. 40,6 Trillion in 2018. Indonesia Agricultural Quarantine Agency continue to encourage the growth of regional agricultural commodity exports with two programs, one of them are Agro Gemilang. The Agro Gemilang program is a technical guidance for millennial prospective exporters so that the exported commodities can meet the sanitary and phytosanitary (SPS) standards of the destination country in hope that the increase in exports of agricultural commodities will continue to grow.



From data released by the Central Statistics Agency (BPS, 24/6/2019) stated that the export growth of agricultural commodities was positive with a growth of 25.19% compared to last year (year on year) or worth 0.32 billion US dollars. BPS noted that the increase in the value of agricultural exports was one of the important variables that led to an increase in national exports in May 2019 which amounted to 14.74 billion US dollars, up 12.42 percent on a monthly basis (month on month).

With more than 1,000 tons of swiftlet nests exported worldwide, Indonesia only consumes 5% of production (around 50 tons). The low level of public interest is a factor in the low domestic consumption. Moreover, the domestic selling price is still relatively lower when compared to exports. Therefore producers still prefer to export their products to get a bigger profit

Criteria for Swallow's Nest

- Rain-prone areas: the more often it rains, the better the quality of building humidity for swallow nests.
- Coastal areas: the beach area is closely related to food and water sources, so this location is strategic for foraging for swallows.
- Plantation areas and rice fields are also strategic places in the construction of swallow houses. The plantations that the herds usually visit in search of food are oil palm, coconut and fruit plantations.
- The forest is also one of the places that Swallow likes. Swallow flocks usually fly far from the nest to some surrounding forest areas.

Potential Products

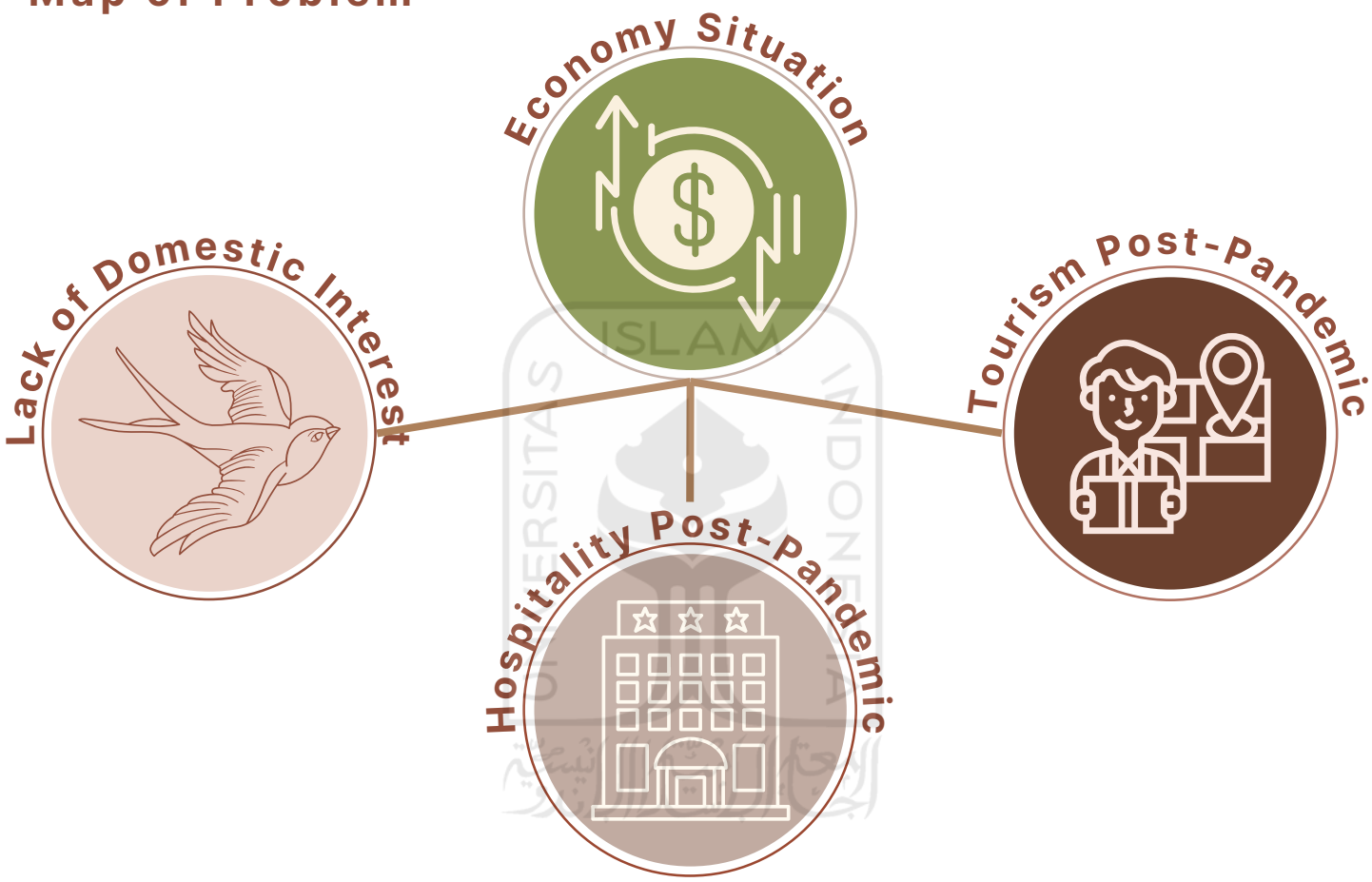
- Swallow Nest's Drink
- Swallow Nest's Soup
- Cosmetic Product such as Mask
- Raw Swallow Nest
- Suplements





1.2. Problem Formulation

Map of Problem



Non Architectural Issue

1. The level of interest in Indonesia towards swallow nest is still low because of a lack of knowledge about swallow nests which are rich in benefits
2. The pandemic has an impact on the economy in tourism sector

Architectural Issue

1. The function of agribusiness and resort tourism in Bengkulu is not optimal yet
2. The pandemic has an impact on the economy agriculture and tourism

Problem Statement

The urgency of developing tourism in the design of resorts and agrobusiness is an effort to increase the potential value of tourist areas that can be empowered optimally so that it can help increase economic value in Bengkulu through tourism sector, also to empower the potential area around the resort.

General Problem

How to design Resort in Bengkulu that integrate swallow's preservation in the design of beach resort as a means for supporting tourism development?

Specific Problem

1. How to design a Resort with agrotourism approach?
2. How to design a resort that could stand on a swampy land?

Goals

This design aims to help tourism in Bengkulu to increase their income from the existing tourism economic sector and educate tourists about swallow nests by providing user experience. The economic and cultural potential of the local community can be a power that can unite and support tourist destinations around the area.

Objective

The planning for the development of agribusiness and resorts is to develop recreational and educational tourism activities with the involvement of farming, animal husbandry and processing where there are seaside resorts to rest while enjoying nature and are also linked by introducing existing cultural values.

1.3. **DESIGN LIMITATION**

The design is focused on the coastal area located at Panjang Beach, Bengkulu City, Bengkulu Province. Which will function as a development activities in tourism, specifically the construction and form of buildings with tourism functions such as resorts and swallow as agro-tourism. There are also area boundaries according to the function to be delivered in the design, which is lodging, recreation and service functions



1.4. DESIGN METHOD

PROBLEM IDENTIFICATION METHOD

Identify the architectural issue and non-architectural issue that exist in Bengkulu and its surroundings so that the problems are discovered to be handled. Problems that encountered can result in design themes and functions.

DATA COLLECTION METHOD

PRIMARY DATA

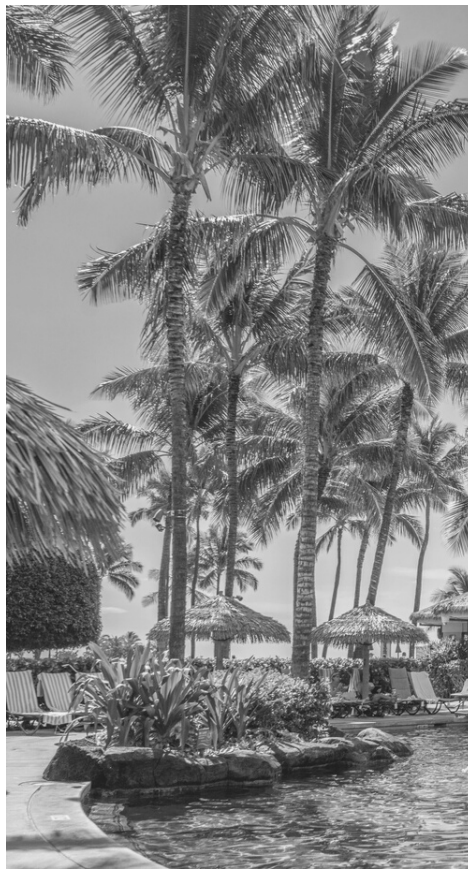
Data was collected by the author through collecting context data of the existing site location in Bengkulu

- observation
- Interview to gather information through related source

SECONDARY DATA

the author only need to collect the data that has already been published. Secondary data including:

- RDTR Bengkulu , RTRW Bengkulu and other related regulations.
- Theoretical review
- Precedents
- Figures and supporting information from the internet.





1.5. ORIGINALITY & NOVELTY

Existing Title in UII	Author	Problem & Focus
Perancangan Resort dengan Fasilitas Seafood Store di Jepara dengan Konsep Mixed-Use Waterfront	Zakiyya Rona A.	Resort that following Covid-19 protocol
Perancangan Resort di Kawasan Guning Kidul dengan Pendekatan Arsitektu Bioklimatik	Jilanaura Abiyya K.	Surrounding climate
Telaga Batu Arang Resort Design of Resort in Sangatta with the Approach to Critical Regionalism Architecture	Nela Dwianti	Developing tourism through regionalism architecture
Perancangan Galang Resort dengan Pendekatan Arsitektur Biomimetik di Kota Batam	Dimas Mbajeng Rudiputra	Developing tourism through architecture biomimatic
Perancangan Green Resort di Pantai Jungwok Gunungkidul, Yogyakarta dengan Pendekatan Arsitektur Hijau	Alrizki Kharisma	Energy efficient resort building that utilize the natural surrounding

1.6. DESIGN HYPOTHESES

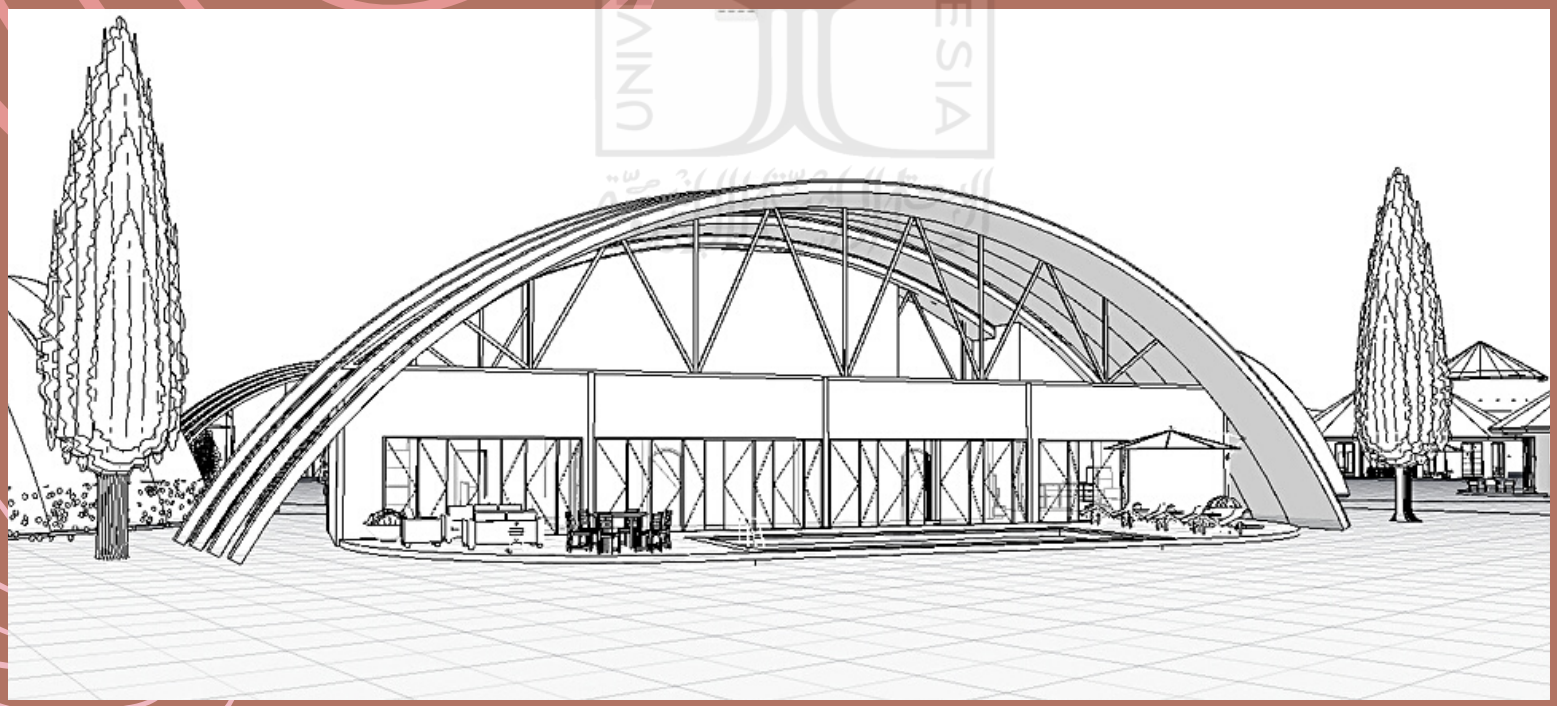
The initial design hypothesis is that the author wants to make agro-tourism from swiftlet cultivation on the coast of Bengkulu City because from the available data, swallow nest consumption in Indonesia is still very small and knowledge about how to process and consume swallow's nest is also still minimal, in it there will be an educational process to participatory from visitors to be able to learn and have fun exploring swallow bird agro-tourism in Bengkulu.



CHAPTER 2

DESIGN STUDY

Contextual review
Site selection
Regulation and building codes
Climatology
Site condition
Preliminary design studies
Precedents



2.1. CONTEXTUAL REVIEW

2.1.1. Location Context

Bengkulu is the Indonesian province of Bengkulu's capital. It has a total area of 151.70 km2 and a population of 373,591 according to the 2020 Census. The city is also the provincial capital of Bengkulu. The terrain is low-lying and prone to wetlands. Bengkulu has a tropical rainforest environment with plenty of rain throughout the year. With an average daily maximum temperature of only 31 degrees Celsius, Bengkulu is one of Indonesia's coldest locations. It is warm or hot all year.



2.2. SITE SELECTION

2.2.1. Panjang beach

The file beach tourism development area is administratively located in the area of the Teluk Segara District Government, where the location is located in the northern part of Jl. Pariwisata. The Beach area has a coastline span of 233 m.





2.2.2. Physical Condition of Pantai Panjang area

The coastal area consists mostly of inns and places to eat which are almost scattered along the road. The entrance to this area is quite good because there is a big road, namely Jl. Pariwisata. For the infrastructure of this area is also fairly good because almost everything is met, starting from the provision of electricity to water, this area is quite dense as can be seen from the table below:

Kecamatan	Jumlah Penduduk Kota Bengkulu (Ribu Jiwa)					
	Penduduk			Kepadatan Penduduk		
	2016	2017	2018	2016	2017	2018
SELEBAR	67 574,0	71,7	75,9	1 457,6	1,6	1,6
KAMPUNG MELAYU	39 435,0	41,5	43,6	1 704,2	1,8	1,9
GADING CEMPAKA	43 575,0	44,2	44,7	3 021,8	3,1	3,1
RATU AGUNG	50 683,0	50,8	50,7	4 599,2	4,6	4,6
RATU SAMBAN	25 338,0	25,4	25,4	8 921,8	8,9	8,9
SINGARAN PATI	41 814,0	42,1	42,3	2 895,7	2,9	2,9
TELUK SEGARA	23 478,0	23,3	23,1	8 506,6	8,5	8,4
SUNGAI SERUT	23 767,0	24,0	24,2	1 756,6	1,8	1,8
MUARA BANGKAHULU	43 826,0	45,3	46,7	1 890,7	2,0	2,0
Kota Bengkulu	359 488,0	368,1	376,5	2 369,7	2,4	2,5

The infrastructure around the file area is relatively very good, the main road used by tourists so that getting to the resort to be built can be reached easily, along Pariwisata road there are also various kinds of residents who open shops to mini markets. Electricity and water have also been managed by PDAM and PLN in this Teluk Segara area.

Berkas street condition





2.3.

REGULATION AND BUILDING CODES

2.3.1. Building Land Size Data and Related Regulations



Based on, PERDA NO. 8 TAHUN 2020 TTG BANGUNAN GEDUNG, here are the regulations:

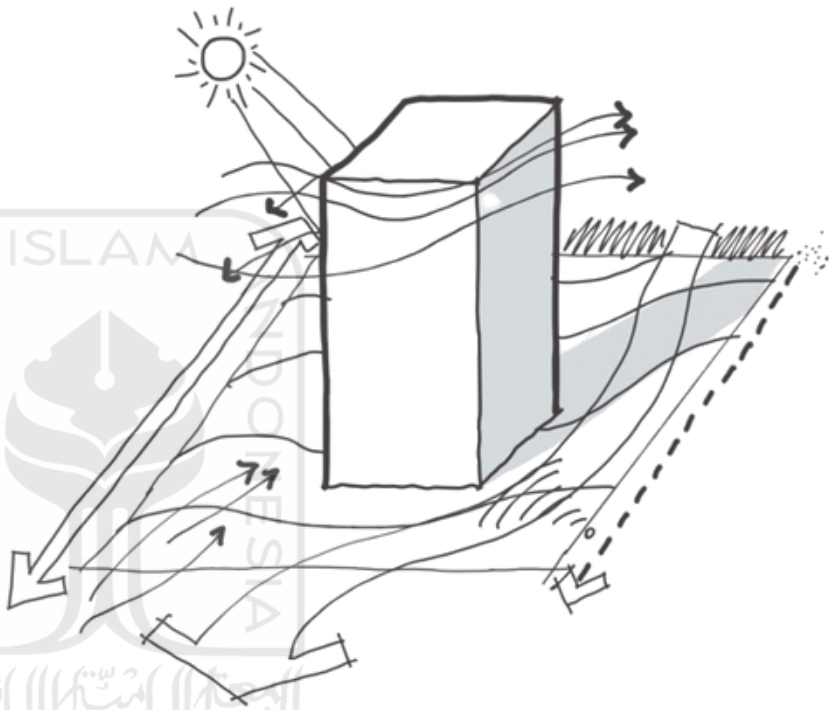
Project location data:

1. Total site area = 88.328 m²
2. KDB max = 80%
3. KLB = 6
4. Maximum building height = 8 floors
5. Building boundary line = 10 m

2.4. CLIMATOLOGY

2.4.1. Site analysis

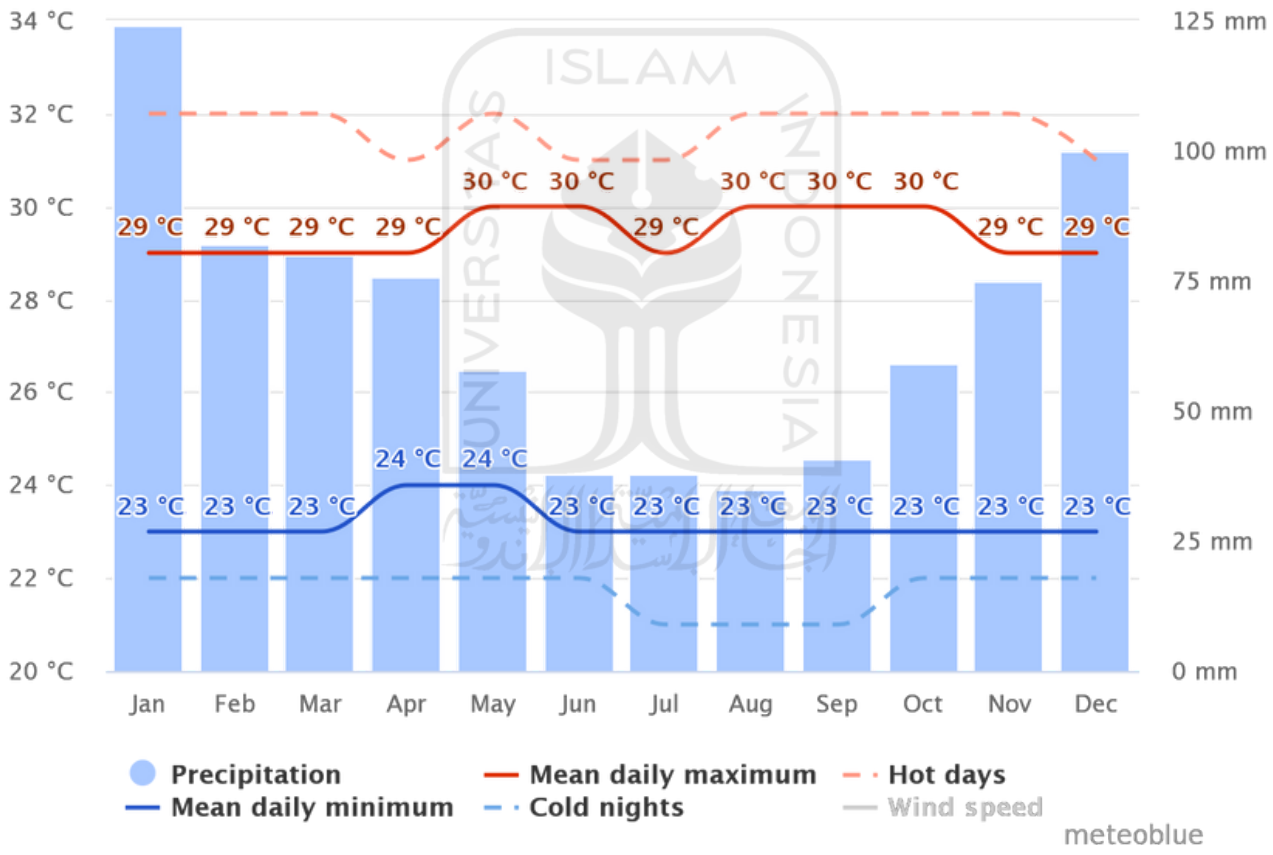
In planning this panjang beach resort, it is done by considering several factors. One of the factors to be considered is the response to the site. Sunlight is one that is considered because it greatly affects the quality of lighting and the thermal comfort of the room. Sunlight can also reduce humidity in the room. The response to sunlight is to optimize the opening and the direction of the building so that it can maximize natural lighting during the day.



In addition to sunlight, wind is also very considered in the design of this resort, because in addition to optimizing windmills for electricity purposes, wind is also used to reduce the use of artificial ventilation and also to reduce the maximum temperature of the panjang Beach area.

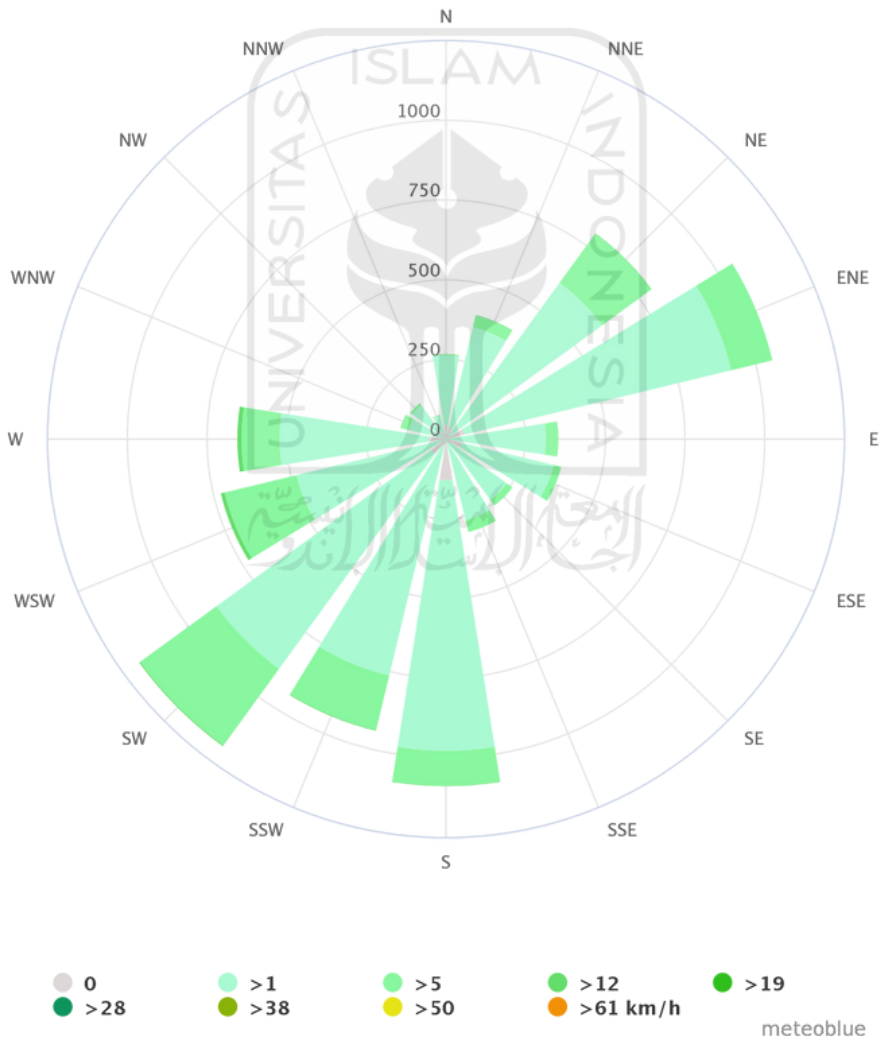
2.4.2. Average temperature in Bengkulu

Humans are most comfortable between 22 and 27 degrees Celsius, therefore Bengkulu's typical temperature is relatively high which have average of 30 degrees. This should take into consideration for passive cooling system in the design



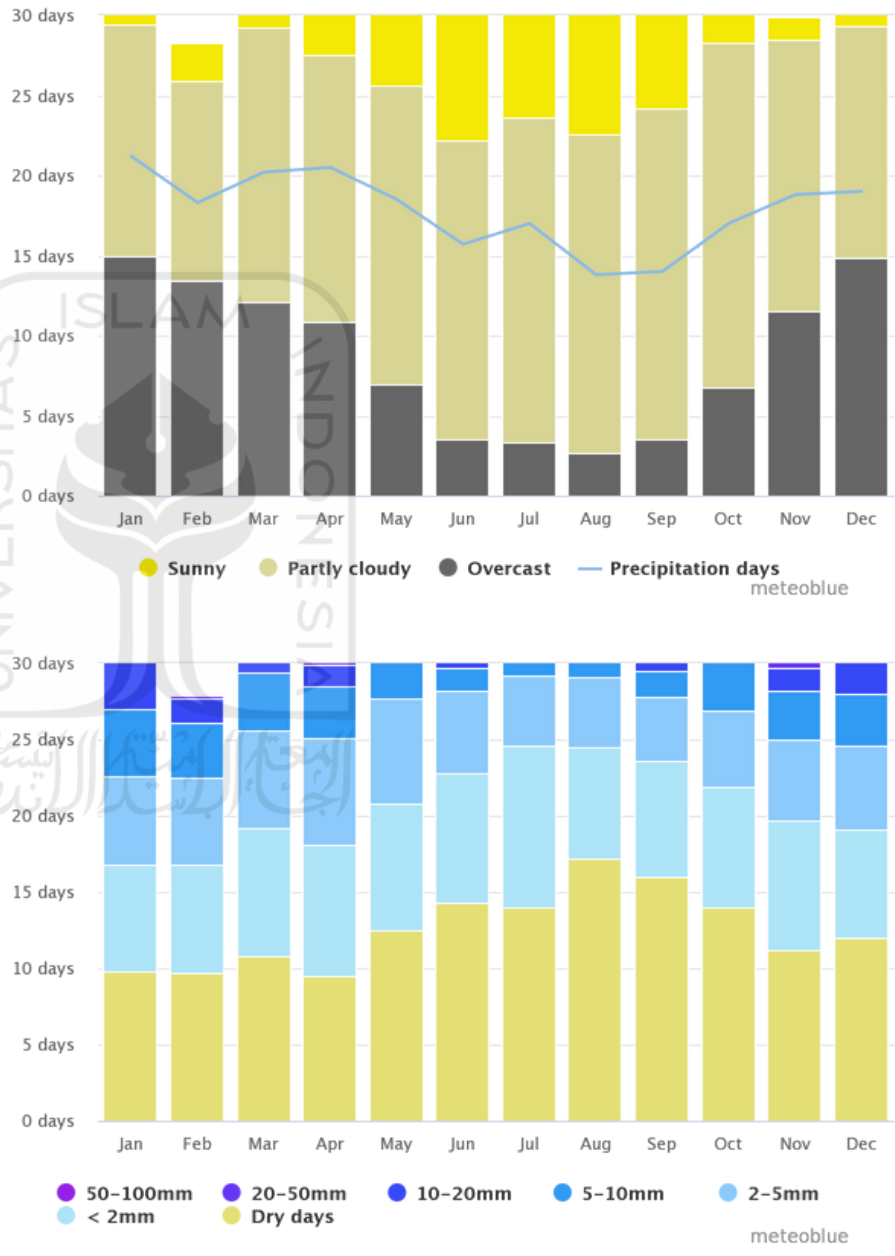
2.4.3. Windrose in Bengkulu

Bengkulu has the most wind exposure from the east, south, and southwest, according to the windrose index. The wind direction can have an impact on the shape and envelope of a building's design, especially when it comes to its orientation. It has the benefit of allowing airflow into the building through an entrance in the south section of the building.

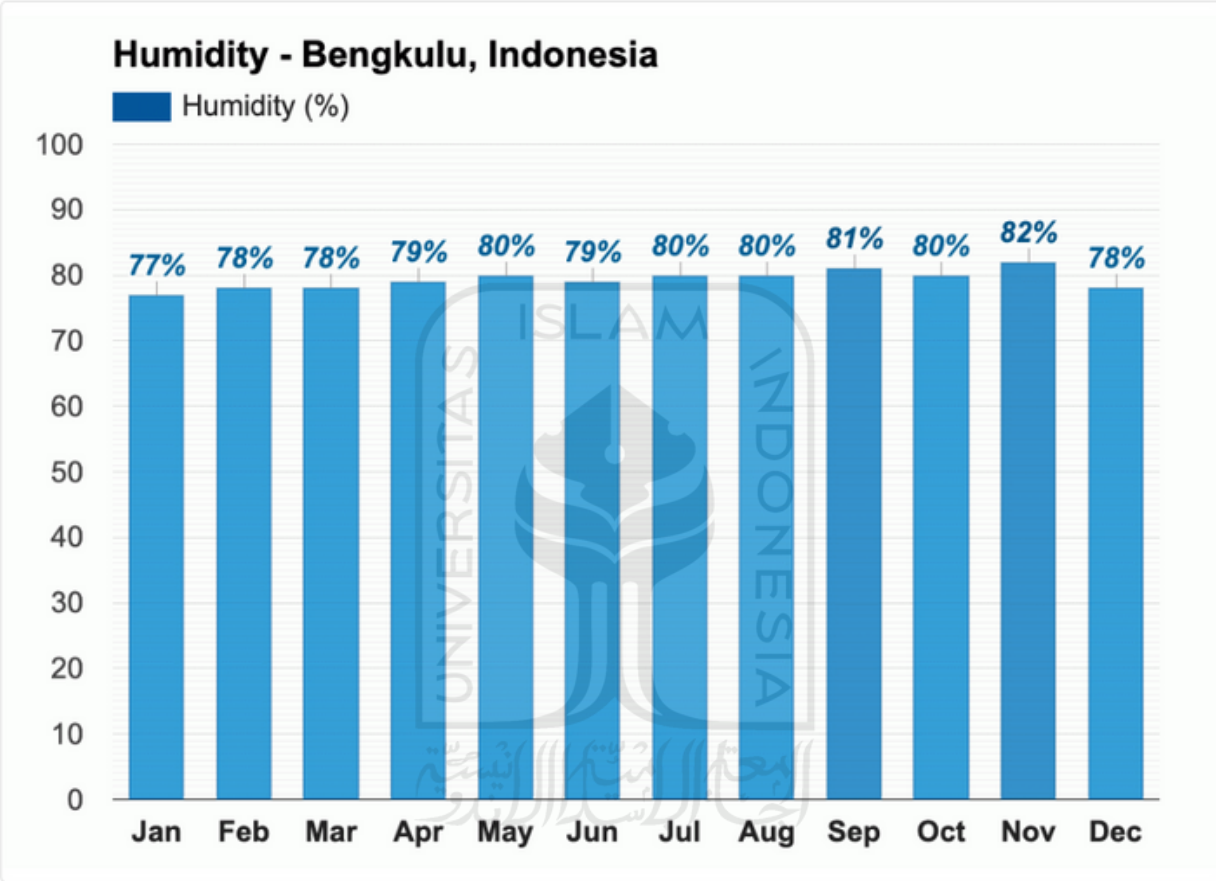


2.4.4. Precipitation days & amount in Bengkulu

The precipitation diagram for Bengkulu shows on how many days per month, certain precipitation amounts are reached. In tropical and monsoon climates, the amounts may be underestimated.



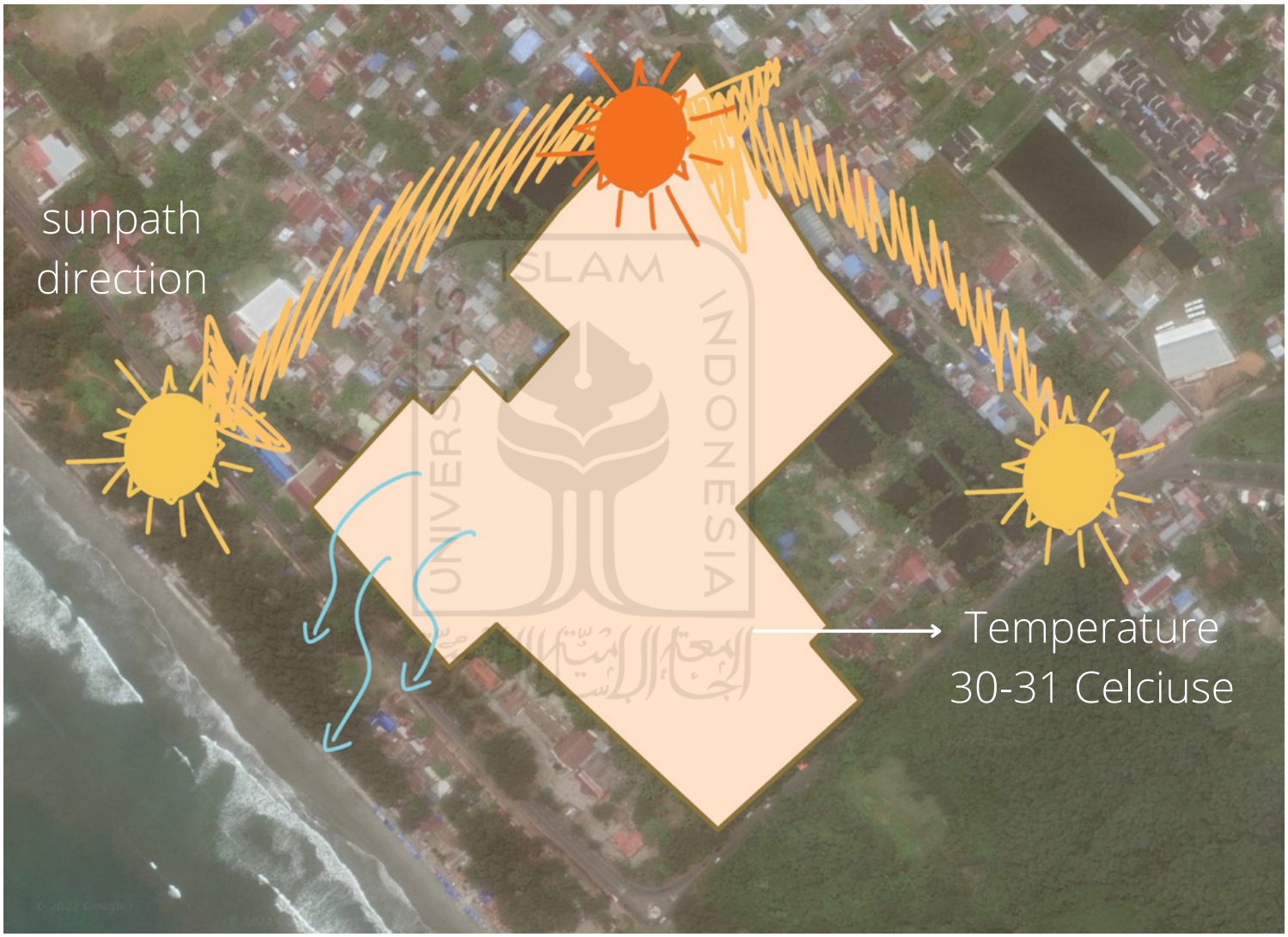
2.4.5. Average humidity in Bengkulu



The average annual humidity level is 80.0 percent. The Relative Humidity is quite high throughout the year, as shown in the graph. Because the comfort level is between 40% and 60%, several adjustments and the installation of cross ventilation for each mass and room are required.

2.5.

SITE CONDITION



When creating this design, the environment of the Bengkulu place was considered. As a result, this design was made specifically for the Bengkulu and would be improper if built somewhere else. The average wind speed at the site is over 12 km/h, and it blows from the south to the east, according to previous data analysis. Because the wind speed is very high, it is recommended that it be lowered. The sun rises in the east and sets in the west.

2.3.

PRELIMINARY DESIGN STUDIES

2.6.1. Typology Study

1. Resort development

According to Lawson in his writing titled Hotel and Resorts: Planning, Design and Refurbishment, resort destinations are diverse, it is reacting to the area's tourism attractions as well as marketing requirements. As his explanation, in the 1970s large-scale dominant resort complexes catering to mass travel and packaged vacation markets have been surpassed by more significant designs reflecting environmental concerns and the need to cater to a wider range of tourism interests. In addition to resort amenities, many modern resort projects provide home ownership such as condominiums and other residential properties. It shows that resort development concerning current trend and globalization creates people's awareness that it boosts regional tourism increased and other wider-scale of investment benefit.





2. Characteristics of Resort

2.1. Location

In regard to location characteristic as Lawson mentioned, resorts may be blended into the back land with proper landscaping. For example, it built into cliffs and among rocky outcroppings to diminish the silhouette, stepped down slopes concealed by planted terraces or kept below the height of indigenous trees to protect the environment and other views. While the views and location of the sea or lake are important, nevertheless, the majority of the recreational activities are usually concentrated on the resort grounds. Swimming pool placement and landscaping can be used to generate attention for accommodation and restaurants located away from the beach. Compensation views may be supplied by the development of linked golf courses and other outdoor sporting interests in larger resort's site. Fred also emphasises that beach resorts in general offer a variety of attractions for family holidays, while high-end resorts may cater to clients with more sophisticated needs.

2.2. Planning

As Lawson mentioned in his book, individual resorts are frequently required to be huge in order to promote effectively and finance substantial leisure facilities. Major developments typically have 300-400 rooms, whereas more exclusive luxury resorts have 200-300 rooms. Resorts affiliated with established resorts typically provide a broader selection of accommodations. In addition to the main resort building, the development could contain ancillary accommodations such as executive lanai suites, individual villas, or village-style projects to give long-stay or family visitors more options.

Smaller-scale units can be integrated into the grounds, linked to certain recreational activities (golf, horseback riding, fishing), and built in a local or traditional style. The site area is usually large enough to accommodate recreational requirements and gardening. Future phases of development and infrastructure requirements must be factored into the planning process from the beginning.



2.3. Facilities

Lawson also emphasises on facilities that resort owner should have consider at least these three things. First, room facilities. A resort's bedrooms must be spacious enough to accommodate vacationers (for up to two weeks) and convention attendees (for up to seven days). There must be ample day and sleeping space, as well as extensive wardrobe and luggage storage. Normally, balconies are preferred and must be at least 1.5m (5ft) wide to accommodate two sets of loungers and chairs as well as a table. The majority of rooms are designed for twin beds, with a small percentage of double bedrooms and family room combinations.

Second, it has public areas. Lawson believes the lobby of a resort should acts as a hub for information, gathering, and relaxation. To make access easier, shops may be part of the lobby or an arcade outside the main buildings. Restaurants and lounges are larger to accommodate the increased demand for breakfast and dinner at the same time. The lounge, piano bar, and traditional spaces may be connected to allow for entertainment events to be extended. The main restaurant is frequently partitioned to provide more personal space and a wider range of options. Typically, there is a themed specialty or gourmet restaurant, as well as a cafe-bar, pool bar, and grilling area.

Third, Back-of-house. Because of the lack of or remoteness of outside services, individual provision for cooking, laundry, maintenance, and plant rooms is frequently extensive. Local utility supplies in developing countries, in particular, may be insufficient or unreliable, necessitating considerable storage, treatment, and generation plant development as well as supporting its resort value.

2.4. Recreation

Furthermore, another characteristic as Lawson's offer is that the majority of the facilities are supposed to be located outside, in beautiful gardens. However for extended season marketing, an indoor swimming pool, activity area, and gymnasium may be necessary. Where there are high-quality tennis courts and golf courses, clubhouse facilities are frequently available. Other recreational developments may be linked to resorts (marinas, harbours theme parks) as this research will focusing on how resorts can utilize nature, especially the coastline of Pantai Panjang.

3. Main & Supporting Facilities

3.1. Parking Area

This area must be able to accommodate vehicles guests as needed. The visitors who come to a place of recreation in general use different types of vehicles including public and private transportation. The following are the standard sizes of parking areas of various transportation type:

Vehicle Type	Length (m)	Width (m)
Motorcycle	2,20	0,70
Private Car	5,00	2,50
Bus	12,00	4,00

Source : Neufert, 2013:105

3.2. Resort Lobby

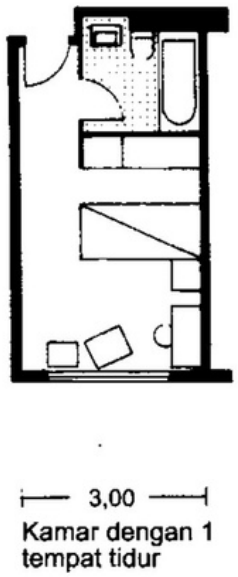
It is an area where guests come to register their arrival and departure (check in and check out), an area where the guest of the resort meets other guests. These are the following table regarding the standard lobby resort:

Room Type	Source	Standart
Main Lobby	BPDS	0,65-0,9 m2/prs
Lounge Area	NAD	2,5 m2/prs
Receptionist	BPDS	10 m2/ prs
Cashier Room	NAD	2,75 m2/prs
Customer Service	NMH	12 m2/prs
Public Toilet	NAD	3,6 m2/prs

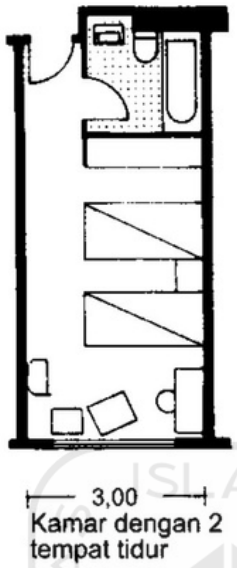
3.3. Resort Room Unit

Resort rooms units are the main facilities for the resort. Various types of rooms and various facilities that are available according to each type. These are the examples of rooms with their qualifications according to Agustinus Darsono (2011:52) as follows:

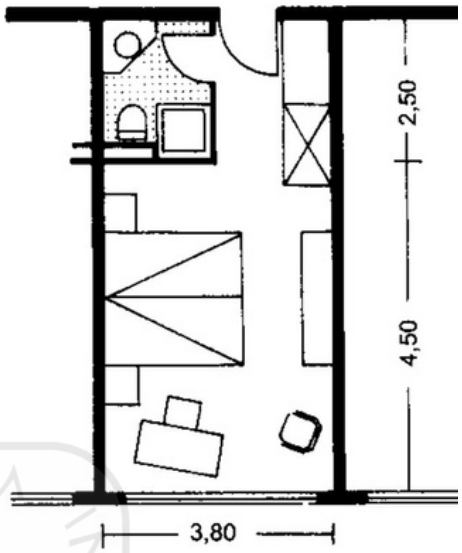
- Single Room - The economy standard type guest room equipped with one bed for one visitor.
- Twin Room - The economy standard type guest room equipped with two beds for two visitors.
- Triple Room - The economy standard type guest room equipped with two beds or one bed queen type double bed with one bed extra for three guests.
- Superior Room - This guest room type is quite luxurious equipped with one double bed (queen type) or twin bed. Queen bed type are used for two guests.
- Suite Room - Types of luxury guest rooms, equipped with several guest rooms, dining room, kitchenette and a bedroom with a king bed.
- President Suite Room - Resort rooms with complete facilities and the highest price.



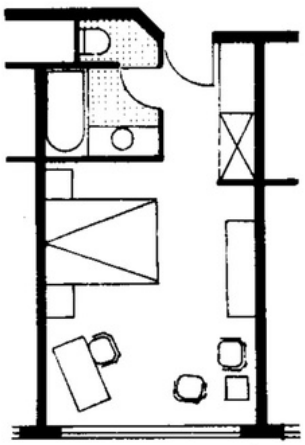
Single Room



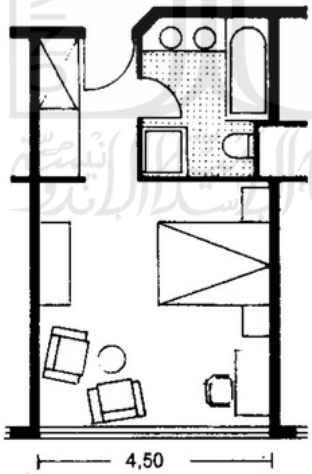
Double Room



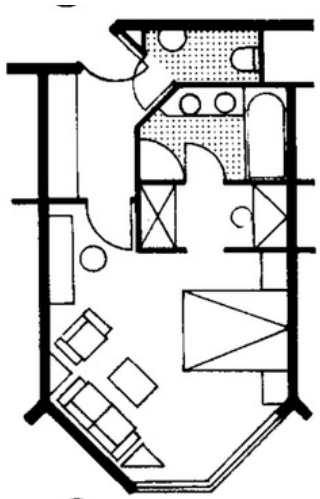
Triple Room



Superior Room



Suit Room



President Room

Source : Neufert, 2012:128

3.4. Restaurant

This is a place to sell food or drinks. Various types of restaurants are offered to meet the needs of guests such as coffee shops, specialty restaurants (Indonesian, Japanese, and western), and others.

The following table standard restaurant:

Room	Source	Standard Width (m)
Restaurant	NAD	2,5 m2/person
Cafe	NAD	2,5 m2/person
Storage	NAD	250x0,24 m2

Source: Neufert, 2013:105

3.5. Meeting and Function Room

Meeting and Function room Is a place for rent for various needs such as meetings, conferences, seminars and so on. This room is also known as the banquet room.

The following is the standard meeting room table

Room	Source	Standard Width (m)
Meeting Room	HMC	1,1-1,3 m2/person
Function Room	HMC	1,8 m2/person

Source: HMC

3.6. Laundry and Drycleaning Service

It is a facility for washing, drying and ironing guest clothes. This facility is a supporting facility for profit.

The following is a standard table of laundry and drycleaning:

Room	Source	Standard Width (m)
Chief Laundry	TSS	7,5-9,5 m2/person
Laundry	TSS	0,5 m2/person
Laundry's Storage	HDP	0,0023 m2/room

Source: Neufert, 2013:105

4. Additional Supporting Facilities

4.1. Parking Area

This area must be able to accommodate vehicles guests as needed. The visitors who come to a place of recreation in general use different types of vehicles including public and private transportation. The following are the standard sizes of parking areas of various transportation type:

Vehicle Type	Length (m)	Width (m)
Motorcycle	2,20	0,70
Private Car	5,00	2,50
Bus	12,00	4,00

Source : Neufert, 2013:105

4.2. Storage Room

This space is to support operational services such as food, beverages, storage equipment and so on.

The following table shows the standard storage/warehouse space

Room	Source	Standard Width (m)
Food Storage	HPD	0,1 m2/room
Beverage Storage	NAD	0,18 m2/room
Refrigerated Storage	HPD	0,1 m2/room
Material Room	NAD	0,14 m2/room
Washing Room	TSS	0,2 m2/room

Source: Neufert, 2013:105

4.3 Office

This space is for various types of activities in the resort, starting from the general manager, front office manager, F&B manager, chief accounting, personal manager, to the lowest level.

The following table standard office:

Room	Source	Standard Width (m)
General Manager	TSS	1,33 m2/person
Secretary	TSS	1,8-2,3 m2/person
F&B Manager	HPD	7,5-9,5 m2/person
Admin Staff	HPD	1,8-2,3 m2/person
Accountant	HPD	7,5-9,5 m2/person
File Staff	HPD	0,02 m2/person
Meeting Room	HPD	1,5-2 m2/person

Source: Neufert, 2013:105

2.6.2. Design Theme Study

1. Definition of Ecotourism

Ecotourism, like sustainability, is a notion that is easy to grasp as a general concept but harder to explain in depth.

2. General Views of a Definition Ecotourism

There is currently no clarity on the concept of ecotourism, and its identification and use are fraught with ambiguity and dispute. According to Buckley (2009:2), Parks Canada appears to have used the phrase "eco-tour" for the first time in the 1960s. According to Wearing (2008:6), ecotourism is one of the categories of the tourist business that is developing three times faster than the others. This concept merely emphasizes the difference in growth rate between ecotourism and the other major tourist industry, mass tourism. As a result, this definition falls short of clarifying and covering all aspects of ecotourism, including as its link to the economy, environment, and people.

3. Location and Definition of Ecotourism

One of the variables that contributes to differing definitions of ecotourism is the place where it happens. In contrast to Lascurain's definition, which emphasizes undisturbed or uncontaminated areas as places where ecotourism can take place, Weaver (1999:795) argues that, while such environments (for example, protected areas like national parks) clearly constitute a desirable context for appreciating natural attractions for obvious reasons, there is no a priori basis for excluding modified landscapes attractive to certain types of wildlife, such as reservoirs, mammoths, and other animals.

4. General Views of a Definition Ecotouris

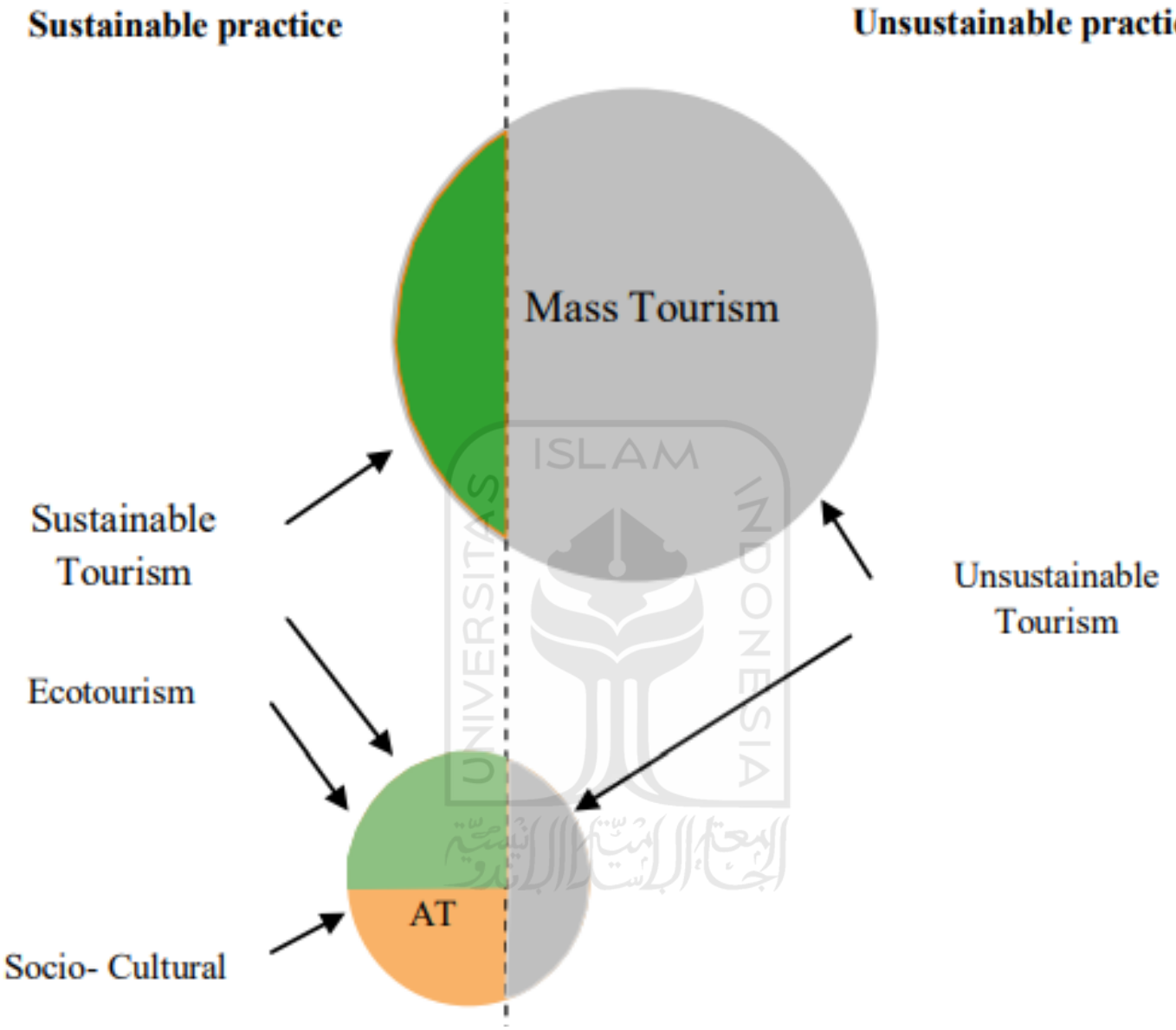
There is currently no clarity on the concept of ecotourism, and its identification and use are fraught with ambiguity and dispute. According to Buckley (2009:2), Parks Canada appears to have used the phrase "eco-tour" for the first time in the 1960s. According to Wearing (2008:6), ecotourism is one of the categories of the tourist business that is developing three times faster than the others. This concept merely emphasizes the difference in growth rate between ecotourism and the other major tourist industry, mass tourism. As a result, this definition falls short of clarifying and covering all aspects of ecotourism, including as its link to the economy, environment, and people. Even the remaining "modified" land and water resources, according to this viewpoint, have the capacity to meet demand for ecotourism and other leisure pursuits. Furthermore, once a pristine environment is transformed into an eco-tourist attraction, it loses its pristine status and must be modified. This implies that ecotourism cannot rely solely on natural landscapes.

5. Sustainability and Definition of Ecotourism

Ecotourism's primary distinguishing feature in comparison to other parts of the tourism business is its commitment to sustainability. Ecotourism, according to more current criteria, "must be commercially feasible, ecologically sensitive, and culturally suitable" (Wall, 1997, p.483). Ecotourism and its growth, according to this definition, cannot be characterized as "ecotourism" if they have detrimental effects on environmental resources, tourists, host communities, and their economic systems.

6. Definition of Ecotourism as a Segment of Alternative Tourism

Ecotourism has become synonymous, and even identical with, phrases like sustainable tourism and alternative tourism, which are both contentious and hotly disputed. Buckley (2009:18) describes ecotourism as a subset of a larger tourist product sector that encompasses nature, wildlife, adventure, culture, and maybe agricultural or rural tourism. Weaver (1999:797) considers ecotourism to be a subset of alternative tourism. Weaver (1999:797) also claims that alternative tourism (AT) is often characterized as a locally managed sector conforming to vernacular architectural principles and attracting a more allo-centric or community focused sort of customer, at least in its ideal configuration. Figure 2.4 displays a typical understanding of the links between various forms of tourism.



Internally, alternative tourism may be divided into nature-oriented and socio-cultural components, depending on whether the emphasis is on natural or "genuine" cultural attractions, according to Weaver (1999:798). However, because the preceding definition of ecotourism necessitates consistency with sustainability, ecotourism can only be defined as nature-based AT that is located on the sustainable side of Figure on top.

2.7. PRECEDENT



2.7.1. Alila Villas Uluwatu

Project Name : Alila Villas Uluwatu
Completion Date : June, 2009
Location : Bali, Indonesia
Designer : WOHA Singapore
Area : 144,000 sqm

This design is exclusively designed that combines luxury with the latest innovations so that it displays a contemporary style.

Balinese inspired design seen in the natural landscape, each villa is specially designed according to sustainable architecture, not only blending with the surrounding environment but also respecting and utilizing it to showcase the richness of Balinese culture.

All swimming pools, pavilions and villas have beautiful sea views that make users feel calm, special and different from other resorts.

bedrooms, 5 villas 3 bedrooms on the cliff side and 25 private villas, each of which has a private pool and private pavilion overlooking the Indian Ocean.

All Villas feature contemporary interiors refined with a touch of nature and traditional Balinese accents seen in wood, water, stone and rattan.

Walkways and bridges connect the relaxation pavilion and swimming pool to the spacious living area and the open design allows gentle sea breezes to enter throughout the villa.



Plan Alila Uluwatu
Sumber: Resort of 10 Leading Brands

1. Hill top look out
2. Three - bedroom
3. Hotel Villa
4. Temple
5. Guard House
6. Parking
7. Bedroom cliff vill
8. Hotel public area
9. The restaurant 10. Main pool



2.7.2. AYANA Resort and Spa Bali

Project Name : AYANA Resort and Spa Bali
Completion Date : 2009
Location : Jimbaran Bay, Bali, Indonesia
Designer : Wimberly Allison Tong and Goo
Area : 770,000 sqm

This design is perched on a limestone cliff up to 30 meters above the Indian Ocean near Jimbaran Bay on the southwest Bali peninsula. This design has a very beautiful view in a remote location along the 1.7 kilometer coastline.

Designed as a retreat for guests with, there are 78 luxury villas with private pools surrounded by tropical gardens.

This villa offers stunning cliff top views and the privacy of a secluded location. This villa is perfect for visitors who want to feel good serenity and privacy, there is also exclusive and safe access.

Balinese architecture and decor blends harmoniously with innovative modern comforts, rice fields and fountains flowing gently at the entrance reminiscent of Bali.



(A) Ayana Resort areal view, (B) View from Ayana lobby, (c) Ocean beach pool
Source: Ayana Resort and Spa Bali



2.7.3. Shangri-La's Rasa Sayang Resort and Spa, Penang

Project Name : Shangri-La's Rasa Sayang Resort and Spa
Completion Date : September, 2006
Location : Batu Feringgi Beach, Penang, Malaysia
Designer : LTW Designworks
Area : 121,406 sqm

This resort is located along the northern coastline overlooking the Andaman Sea in a tropical area with an area of 30 hectares.

Although equipped with modern facilities, this resort uses the appearance of traditional Malay architecture seen from the roof which is inspired by the iconic Minangkabau.

This resort is an embodiment of Malay and local culture, the collection of traditional art and artifacts that adorn each hallway and lobby of the resort serves as a narrative of culture, art and tradition.



1. Par 3 executive golf course
2. Tepi laut Bar
3. CHI Spa village
4. New pool
5. Guestroom
6. Pool bar
7. Garden Wing pool
8. Spice Market café
9. Spice Garden
10. Tennis & sports recreation centre
11. CHI Spa entrance
12. Feringgi Grill & Bar
13. Ballroom/conference facilities
14. Main lobby
15. Lobby lounge


A
C
D
B
E


A


B


C


D

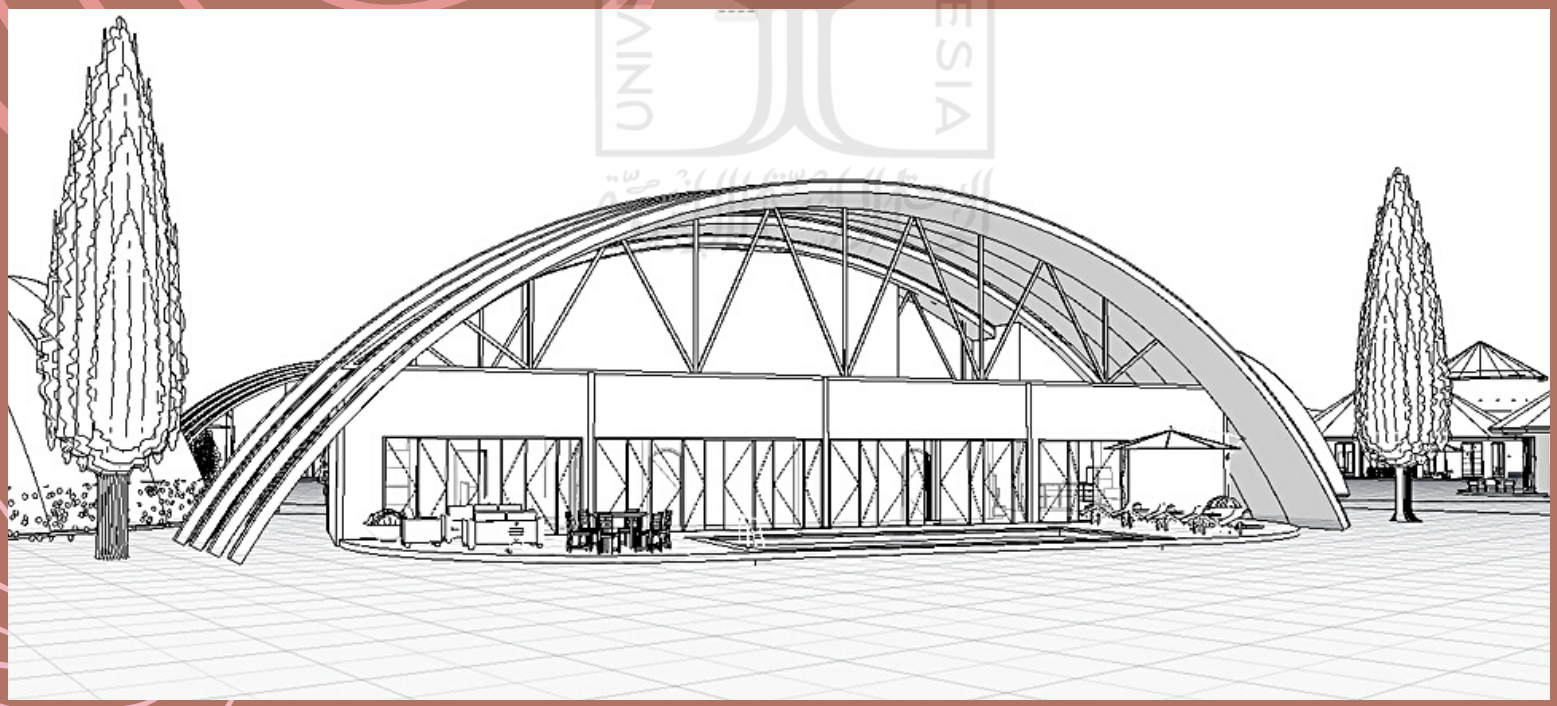

E


F

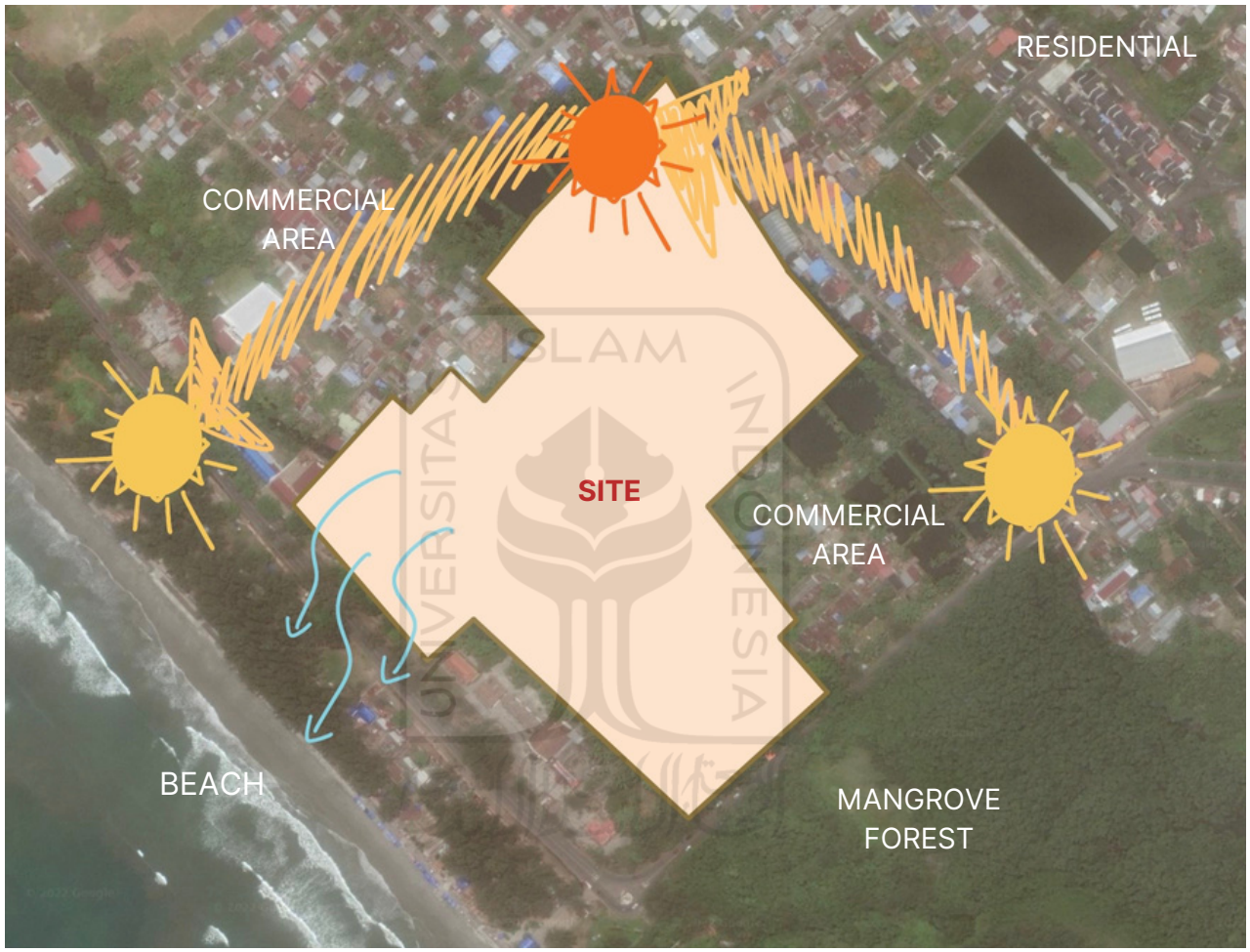
CHAPTER

3 SCHEMATIC DESIGN

Exploration of Site Context
Design Exploration
Design Concept



3.1. **SITE DEVELOPMENT**



The site is surrounded with mostly commercial area like restaurant, cafe, shop, etc. There are also public facilities like school, daycare, office, public health center, park, and worship place. Across the road of the site is an open beach, which is a good place for swallow preservation. Hence, we need a zone analysis to determine the location of the required area.

ZONING CONCEPT

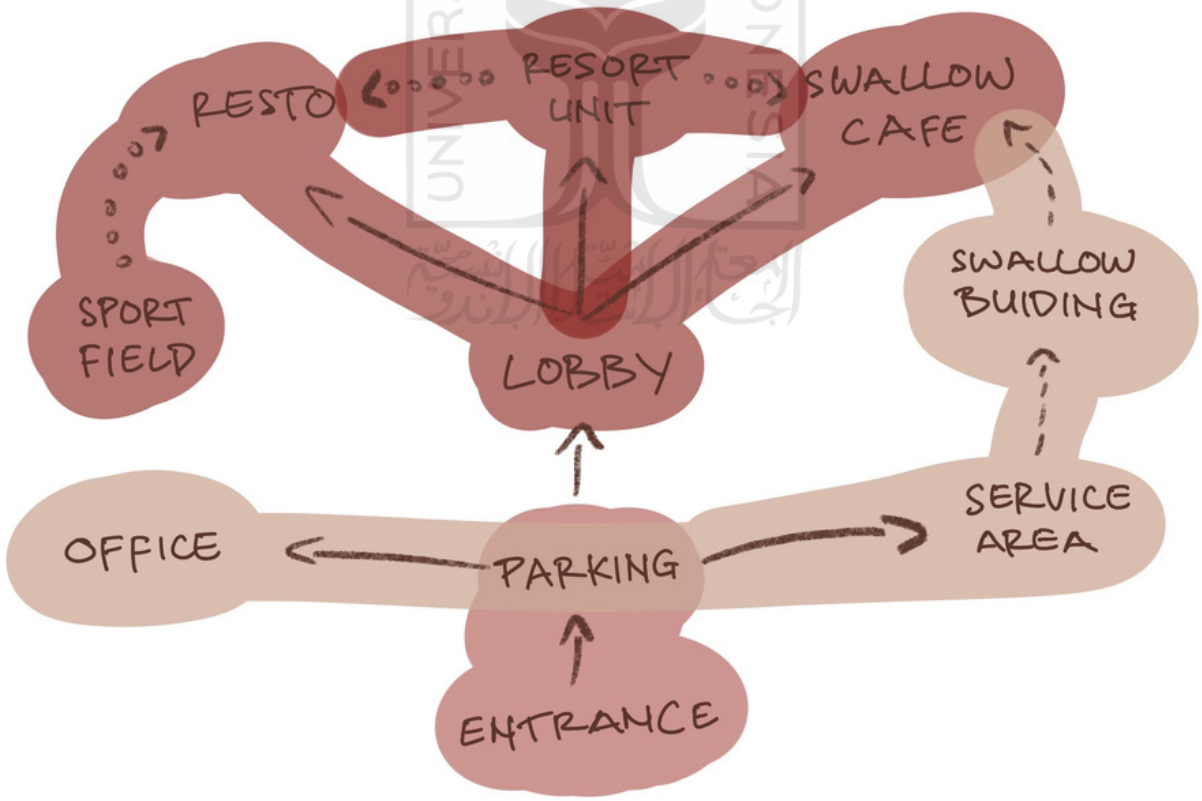
This zoning will be differentiated based on the user activity, which is resort visitors (stay/use resort facilities), recreational visitors (agritourism and market visitors), and management (staff and services), the zone is divided into 3, including:

Private

Public

Management

- Private zone: Lodging area for people that are going to stay at the resort or just going to use the facilities (restaurant and pool).
- Public zone: Recreational area for people that not staying at the resort and only visiting the and swallow preservation, swallow cafe, sport fields, spa, and gym.
- Management zone: Services area that only can be accessed by the staff.



VEHICULAR ACCESS CONCEPT



There are several possibilities for the area placement that has been obtained from a predetermined zone based on access around the site, such as possible entrances, possible parking locations area, possible recreation area, and possible resort units location.

Conclusion from the vehicular access concept

Entrance

The possible access from the entrance area is very appropriate because the position of the site which is on the hook and right on the main road makes it easy to place the entrance. Because there are two possible entrance, we could divide it into public entrance and service entrance.

Parking

The parking area is also appropriate because the entrance will be divided into public entrance and service & management entrance, then it will be proper if the parking area is also distinguished between the visitors and the staff.

Public Facilities

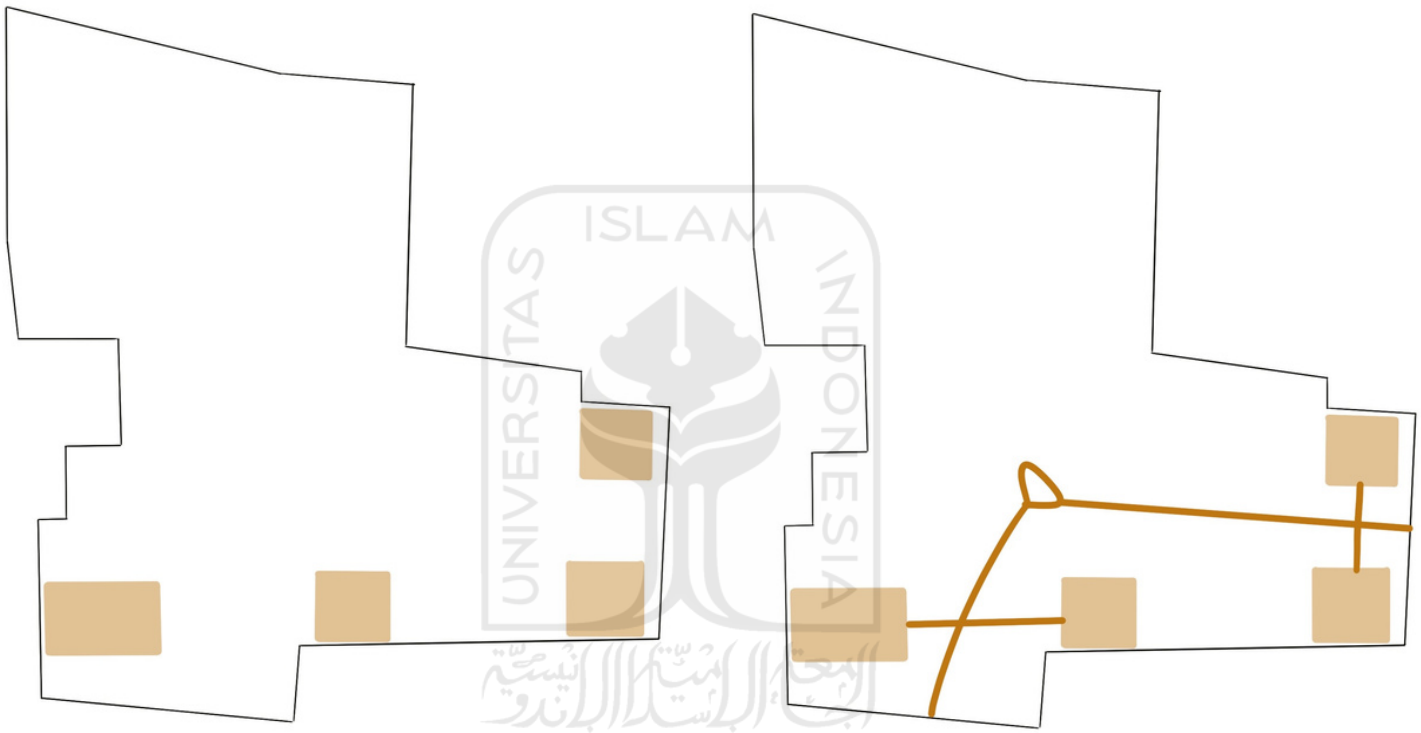
The public facilities being placed in the middle between the public entrance and the service entrance is very appropriate because the public facilities and the service area & management area is better to put side by side, if being separated too far it will be difficult for the staff mobilization.

Resort

Then for the resort placement, being located at the back of the site is also very appropriate because it will give the privateness and because it is far from the road, it the resort area will be more quite. If placed in the middle of the site, it will be passed by visitors who do not stay at the resort and will disturb the privacy of the resort visitors

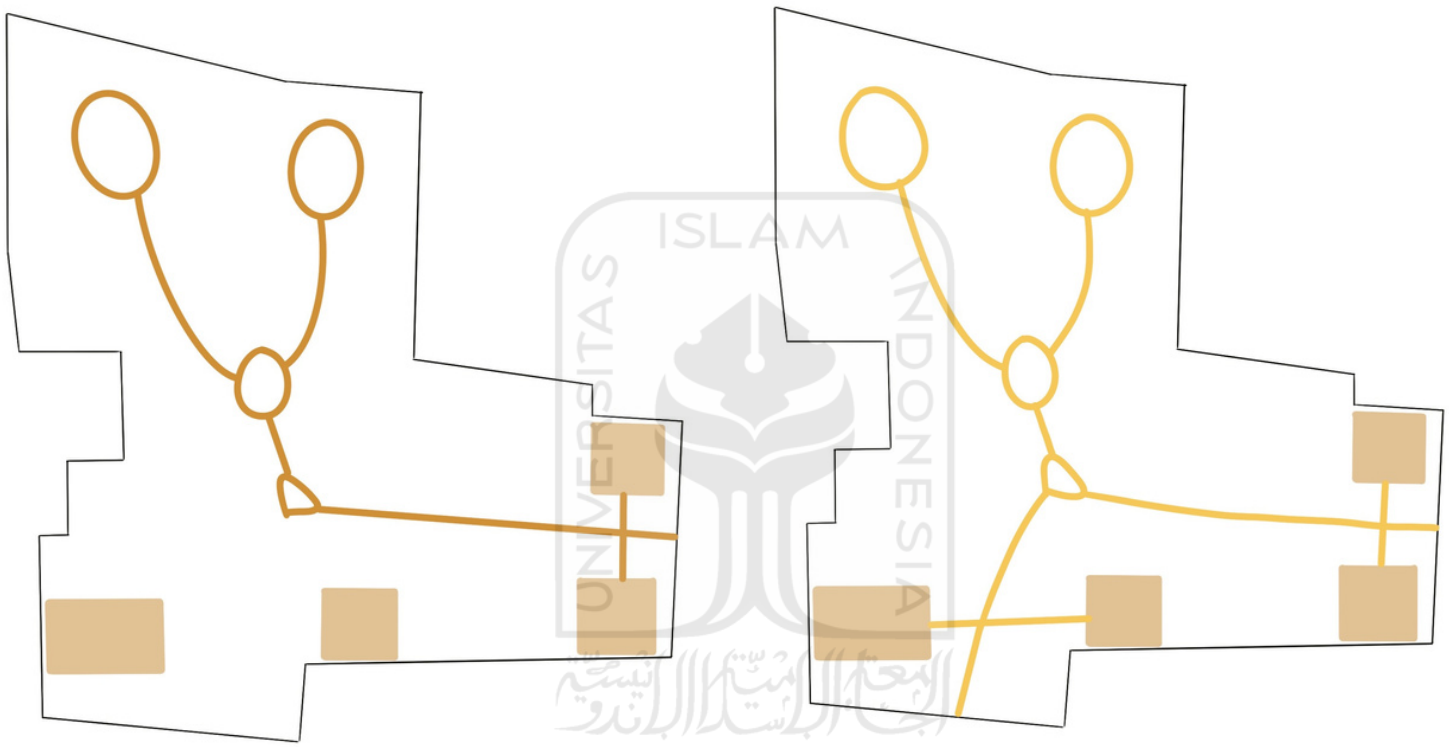
3.2. DESIGN EXPLORATION

CIRCULATION CONCEPT



Site with parking area

Additional access for the visitors that are not not staying at the resort and only using the public facilities such as; cafe, resto, spa, and gym.

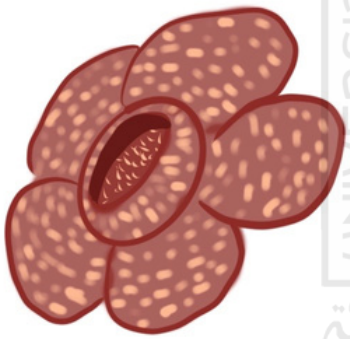


This is the access for service and management, allowing the staff to go to the resort units faster and easily.

The visitor that staying at the resort have the access to all the facilities in the are available at the site.

SHAPE CONCEPT

Going after one of the rarest flower, rafflesia flower can be found in random places in the forest of Bengkulu. Their appearance can not be predicted so the local usually give sign on the side of the road to show that there are rafflesia near by.



Rafflesia flower as one of Bengkulu's most well known icon, could be the icon of the resort too.



By trying to implement it as the roof.

Exploration of Building Spatial Forms



The initial layout of the rafflesia flower is predominantly round

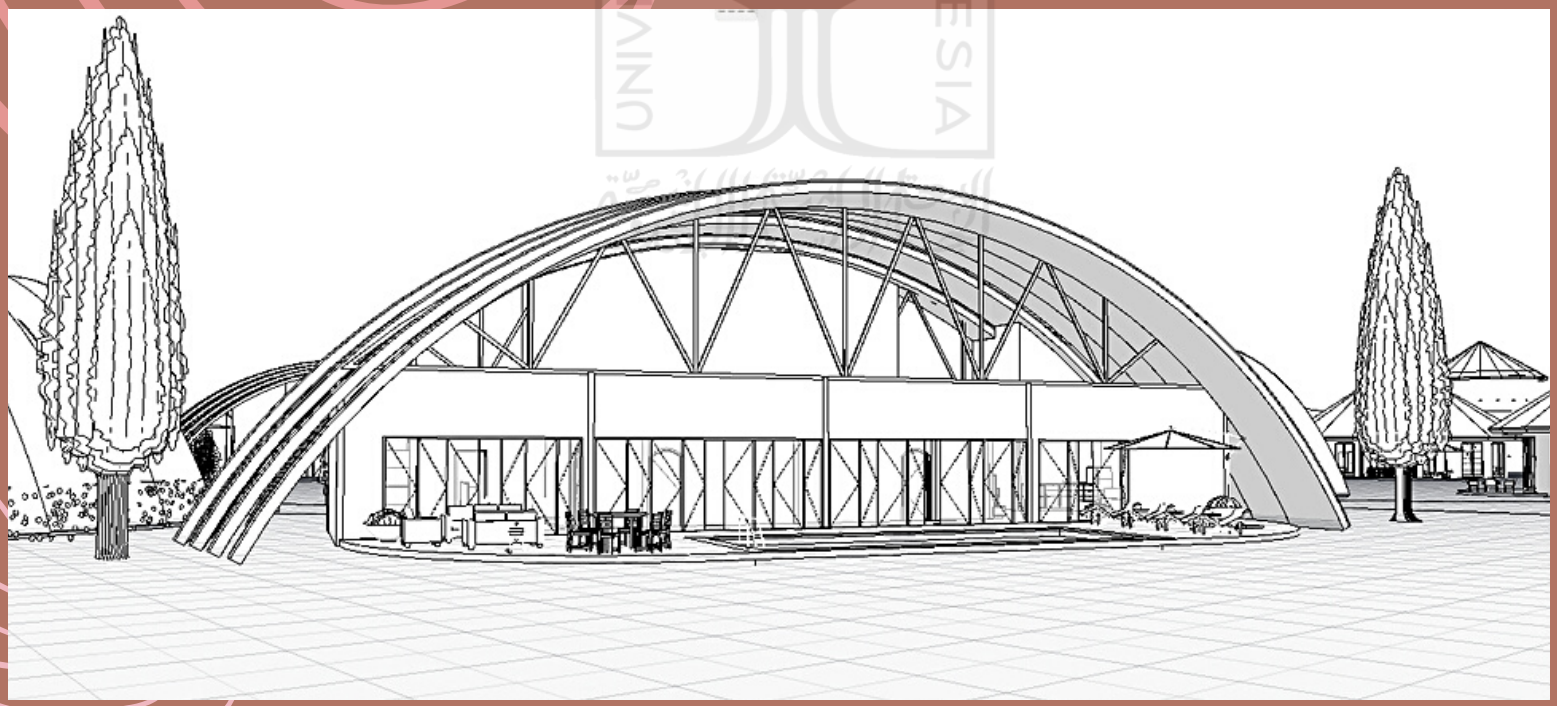
Carry out with the detail of the window of rafflesia cakram

The center being open for inner garden to mimic the natural shape of the flower.

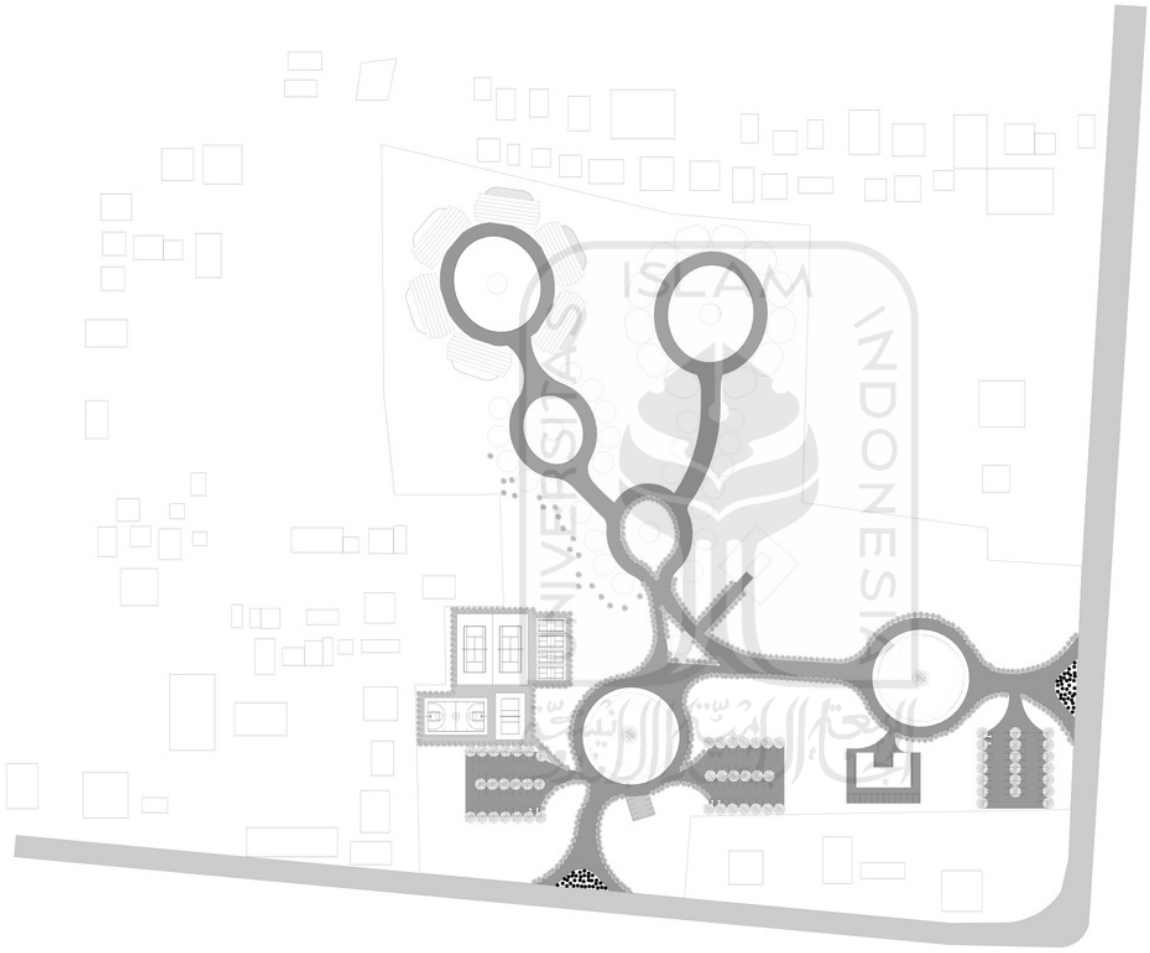
CHAPTER

4 FINAL DESIGN

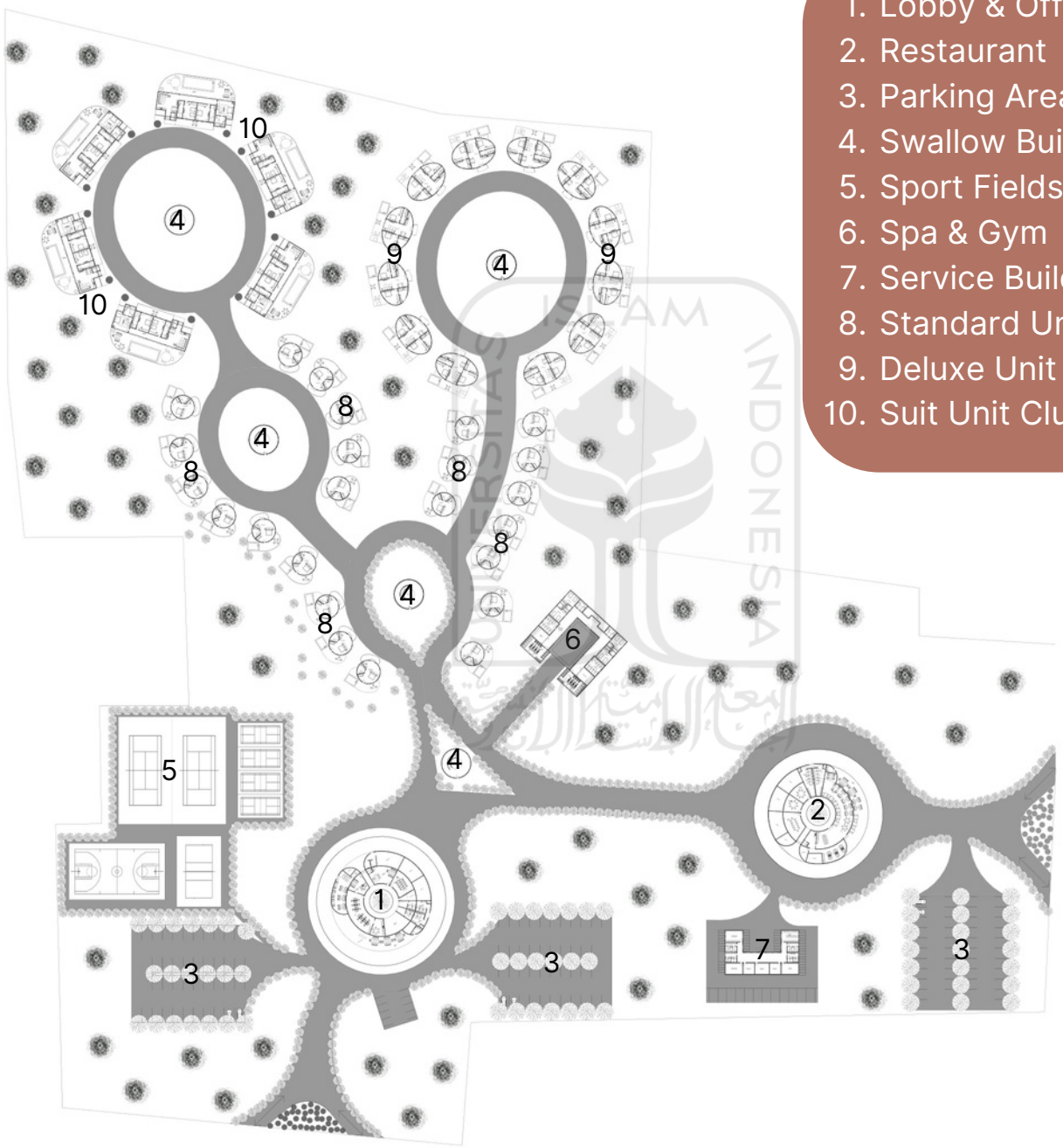
Site Plan
Floor Plan
Elevation
Detail Structure
Detail Architectural
Exterior
Interior



SITUATION PLAN

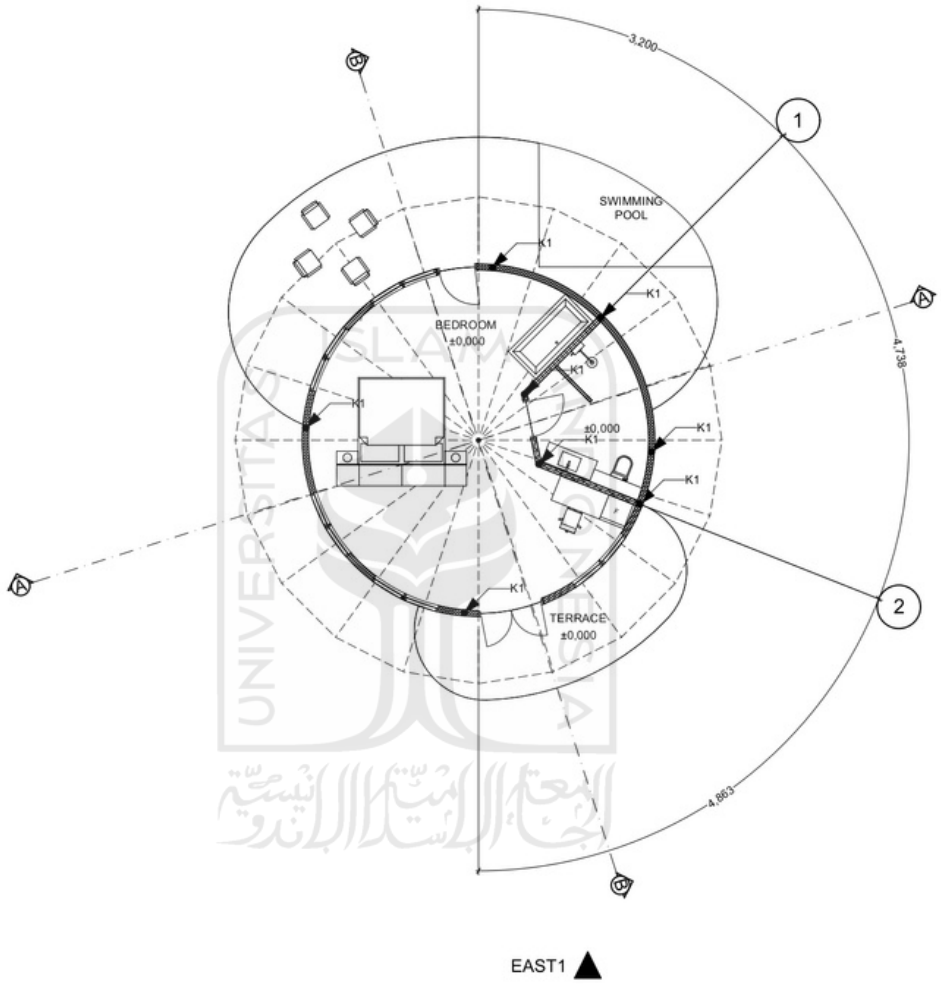


SITE PLAN



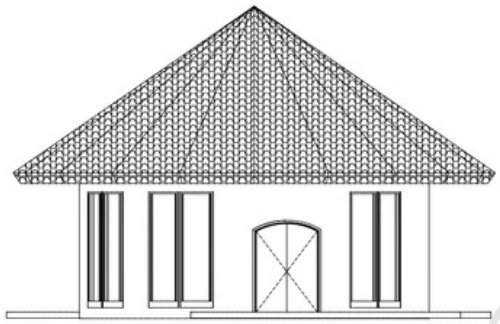
1. Lobby & Office
2. Restaurant
3. Parking Area
4. Swallow Building
5. Sport Fields
6. Spa & Gym
7. Service Building
8. Standard Unit Cluster
9. Deluxe Unit Cluster
10. Suit Unit Cluster

STANDARD PLAN

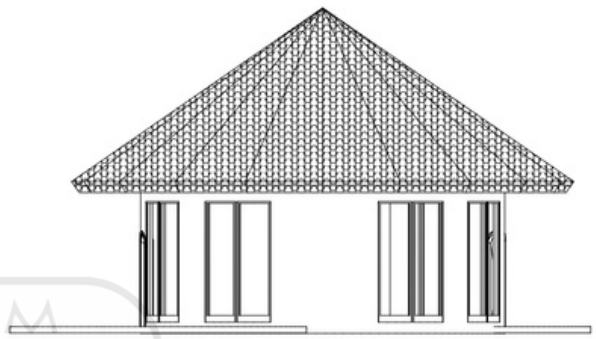


The standard unit is designed for 1 to 2 people, so the villa only have one bedroom. Equipped with a swimming pool, this unit is perfect for couples on honeymoon or to enjoy alone for your work from home.

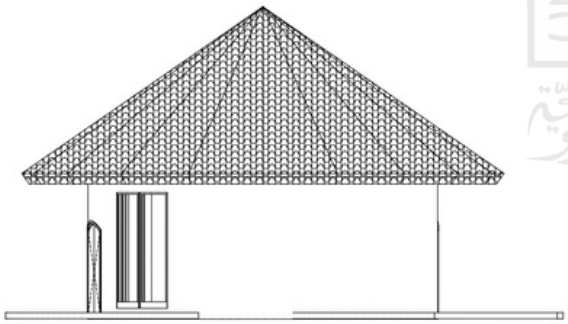
STANDARD UNIT ELEVATION



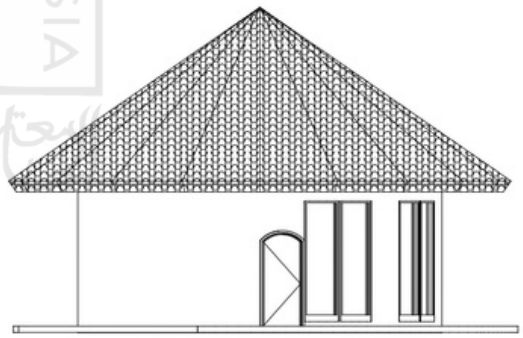
FRONT ELEVATION



LEFT ELEVATION



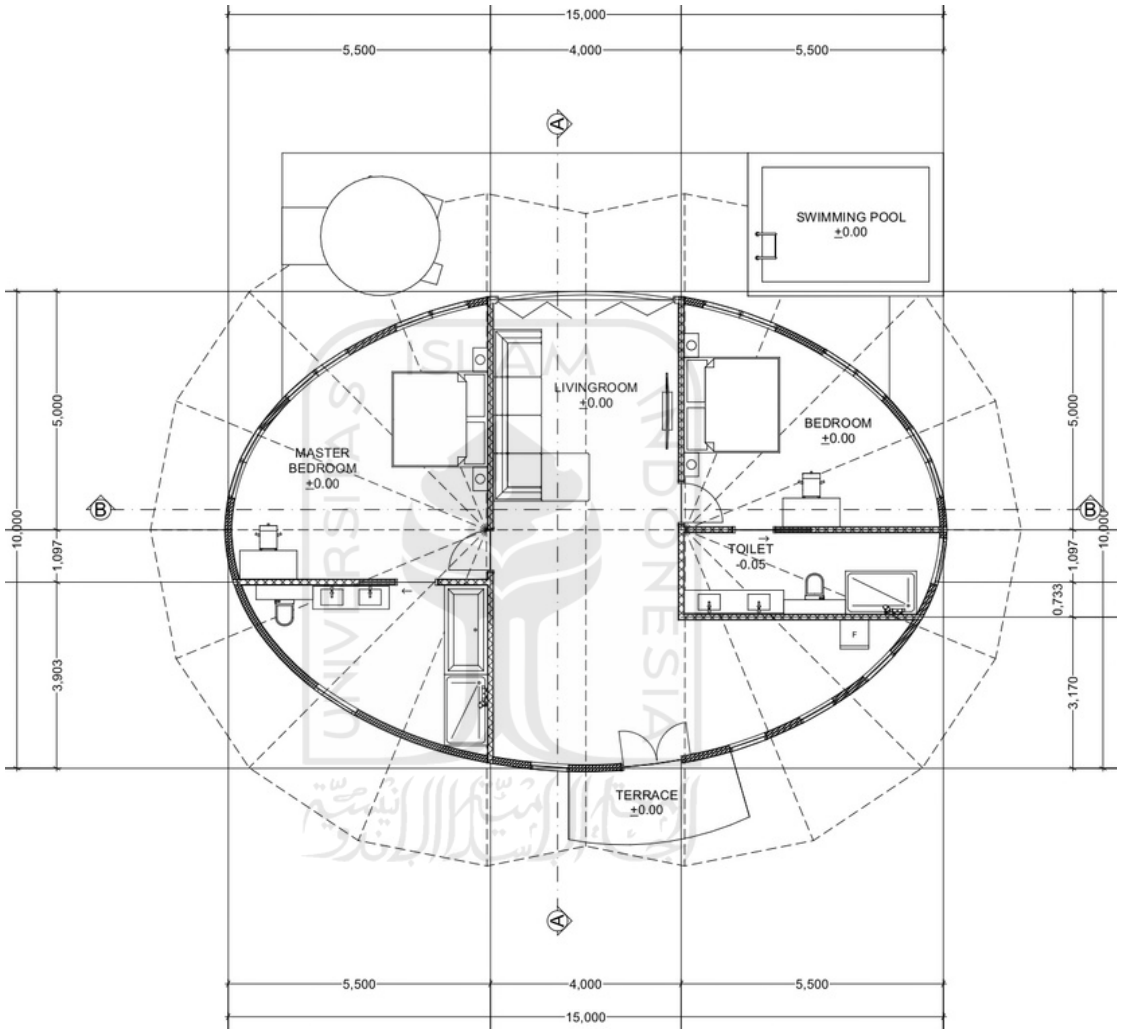
RIGHT ELKEVATION



BACK ELKEVATION

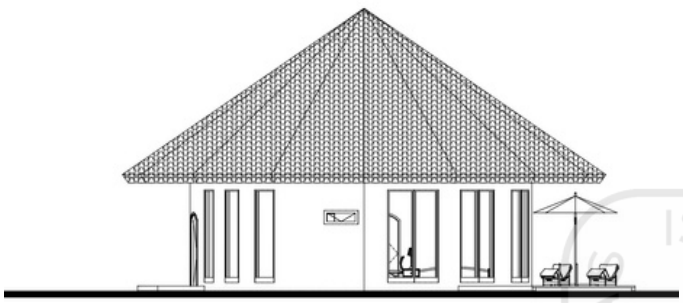
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DELUXE PLAN

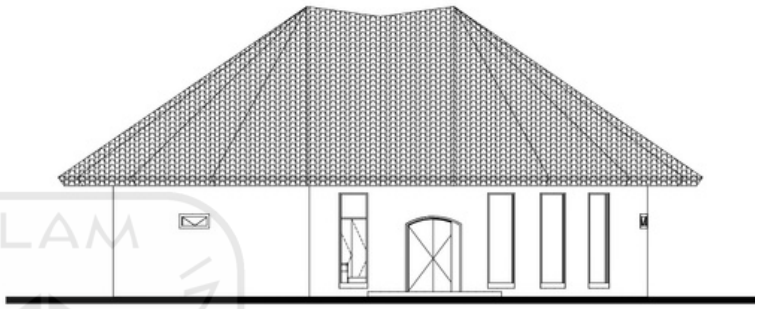


The deluxe unit is designed for up to 4 people, the villa have 2 bedrooms. This unit have a living room and it's own kitchen with dining table. Equipped with a swimming pool, this unit offer a comfortable place for small family or group of friends to stay.

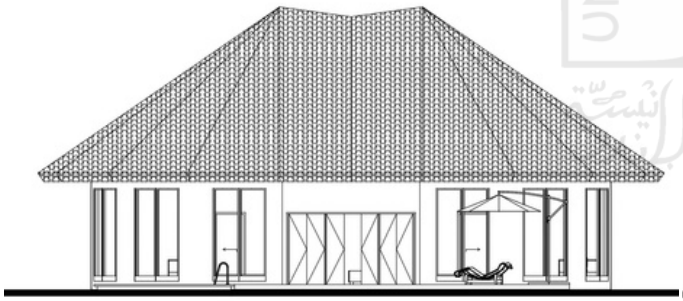
DELUXE UNIT ELEVATION



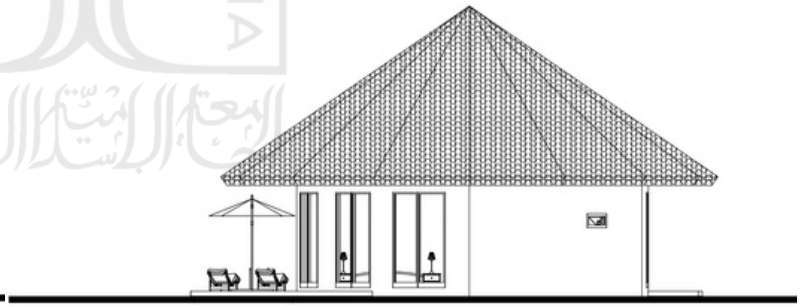
RIGHT ELEVATION



FRONT ELEVATION

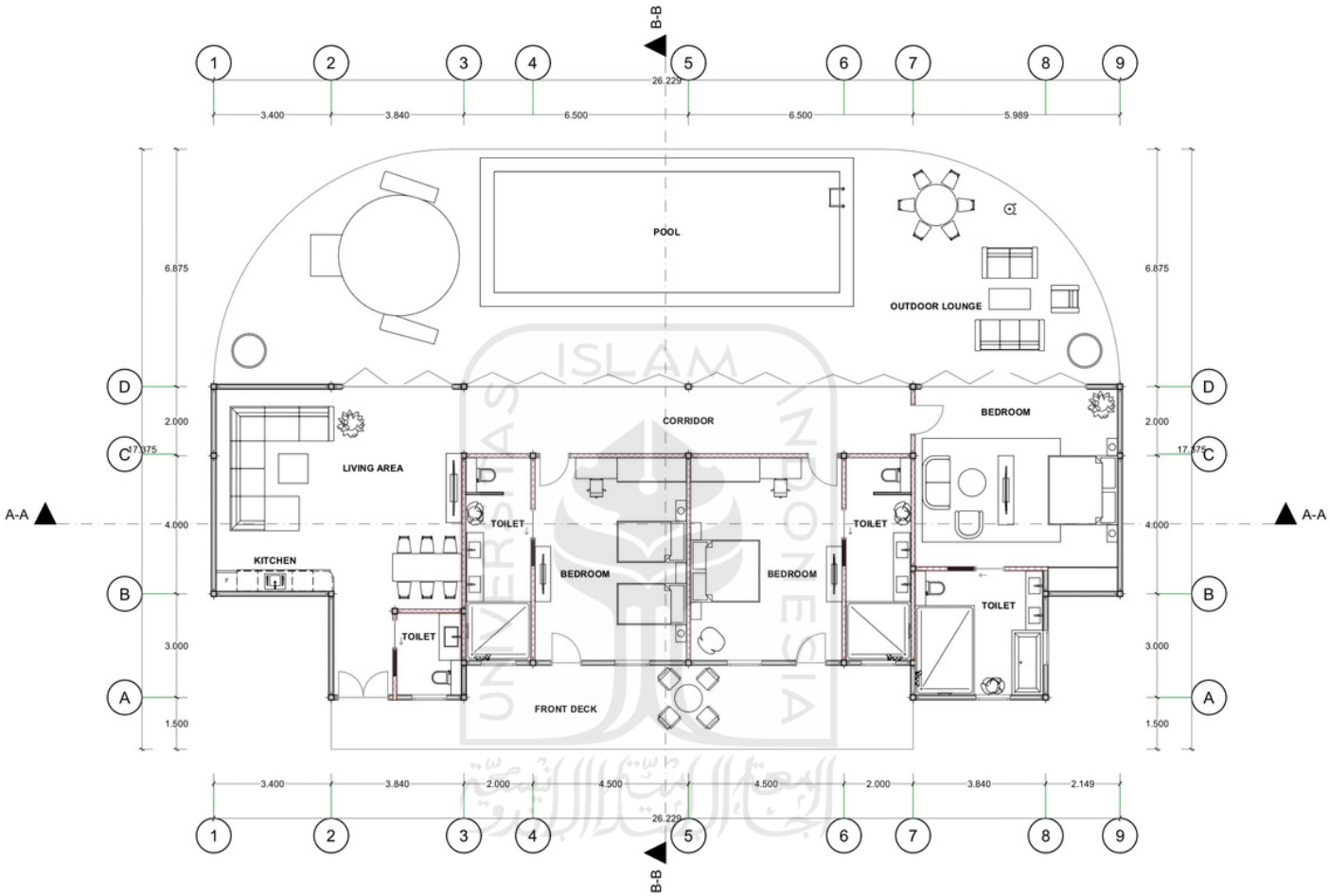


BACK ELEVATION



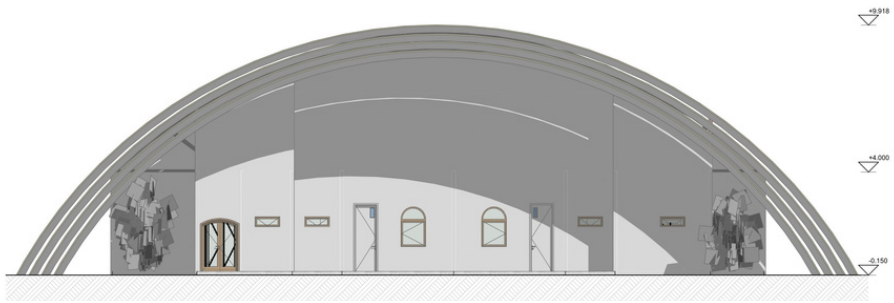
LEFT ELEVATION

SUIT PLAN

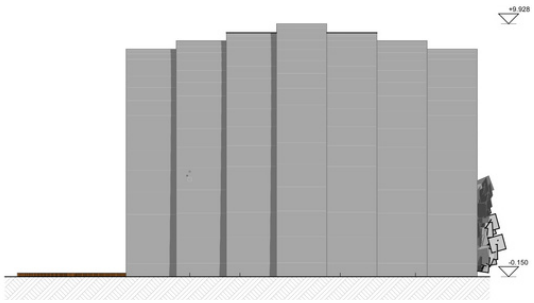


The suit unit is designed for up to 6 people, this villa only have three bedrooms with their own bathroom inside. This unit also have living area, dining area, and kitchen. Equipped with a large swimming pool and private bbq tools, this unit offer more spacious villa for family or group of friends to stay and celebrate special occasion.

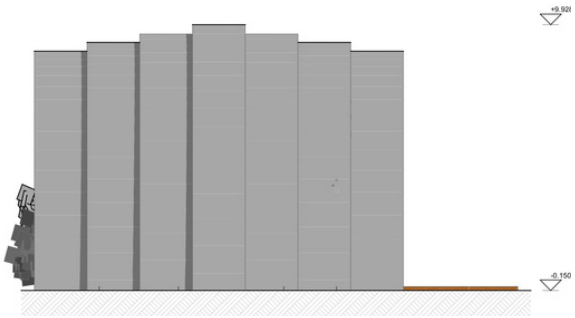
SUIT UNIT ELEVATION



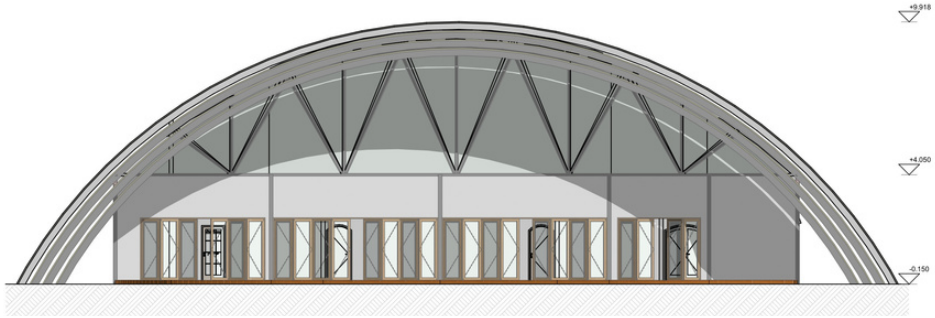
FRONT ELEVATION



LEFT ELEVATION

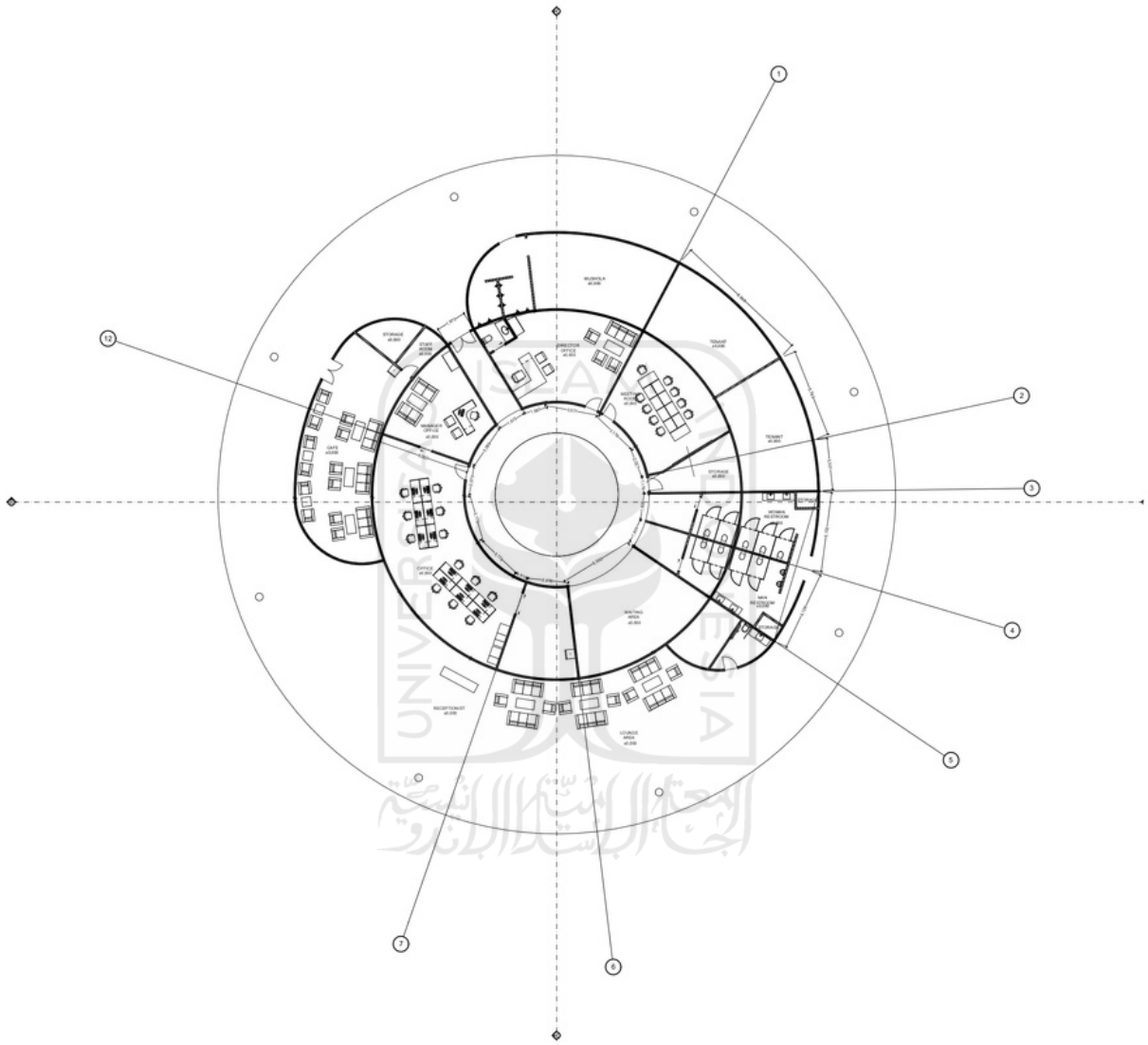


RIGHT ELKEVATION



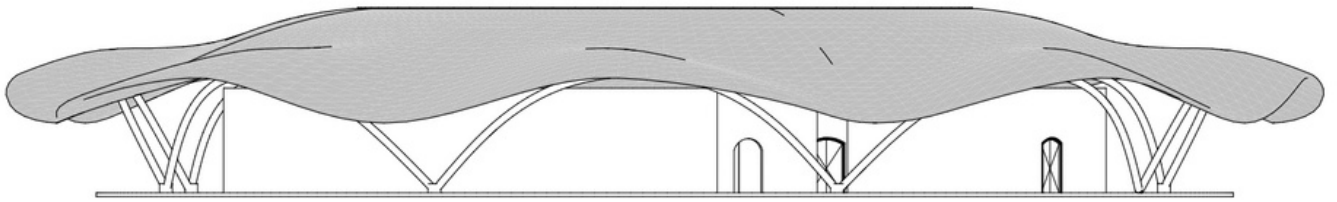
BACK ELKEVATION

LOBBY PLAN

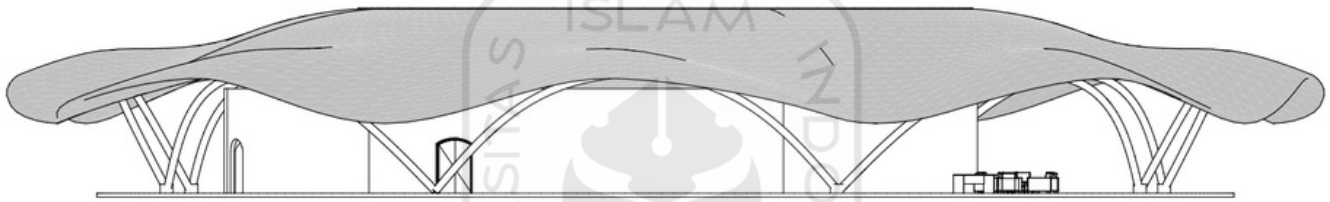


The lobby is shaped like Bengkulu's icon which is Rafflesia flower. It is divided with 2 area, the outer circle is for receptionist, lounge, cafe for the swallow bird nest's product, prayer room, and there are also tenants space available. Whilst the inner circle is used as the office, there are also manager office room and director office room.

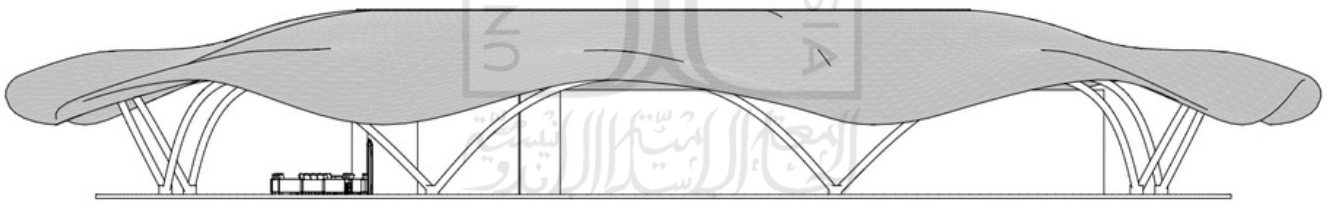
LOBBY ELEVATION



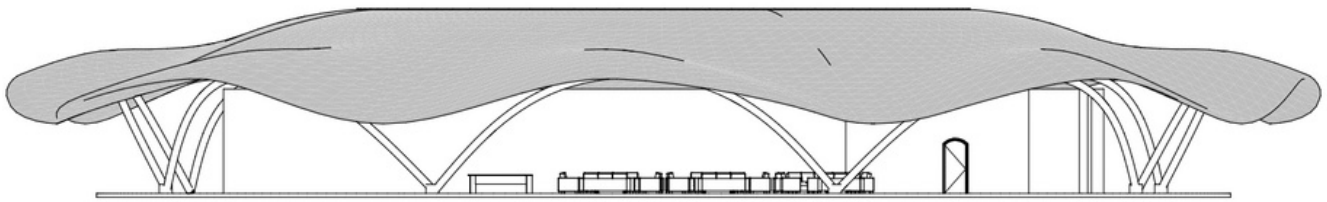
FRONT ELEVATION



RIGHT ELKEVATION

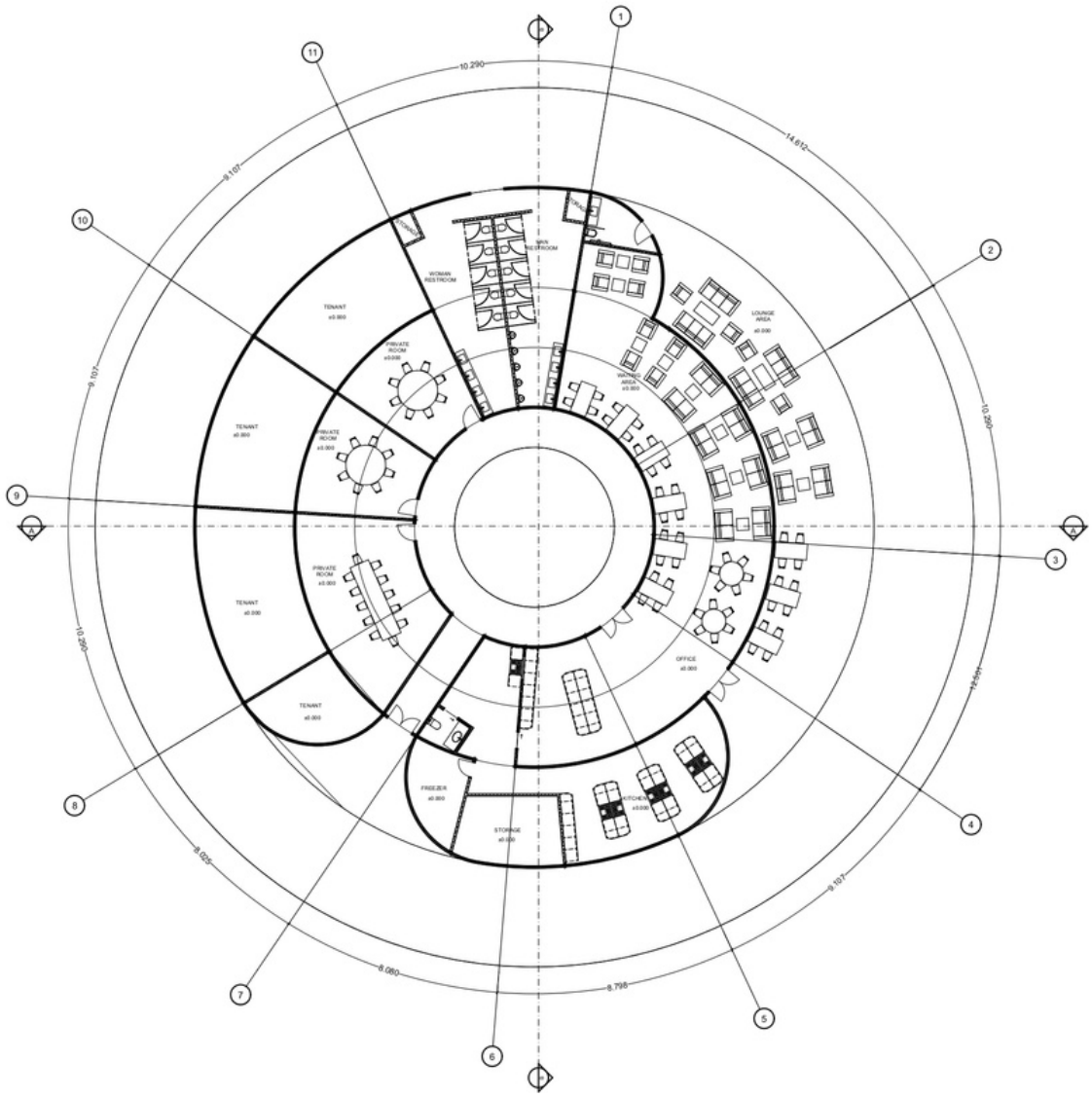


LEFT ELEVATION



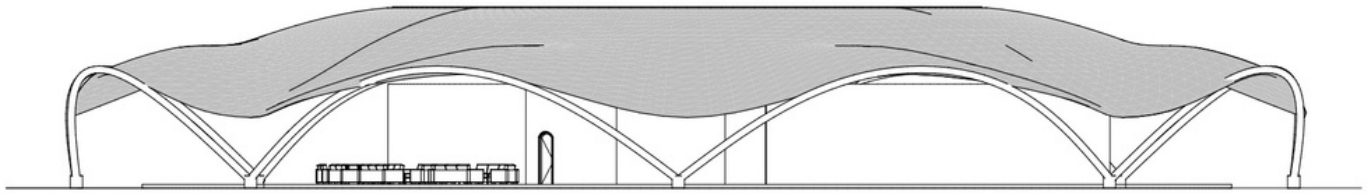
BACK ELKEVATION

RESTAURANT PLAN

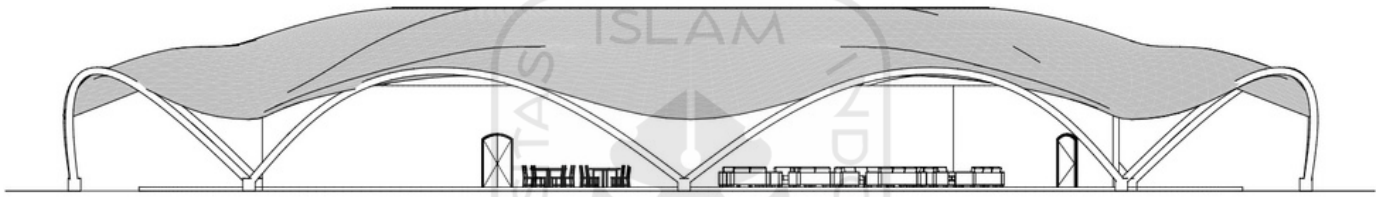


The restaurant building is also shaped like Bengkulu's icon which is Rafflesia flower. It is divided with 2 area, the outer circle is for the kitchen, semi outdoor dining area, and there are also tenants space available. Whilst the inner circle is used as indoor dining area and private dining area.

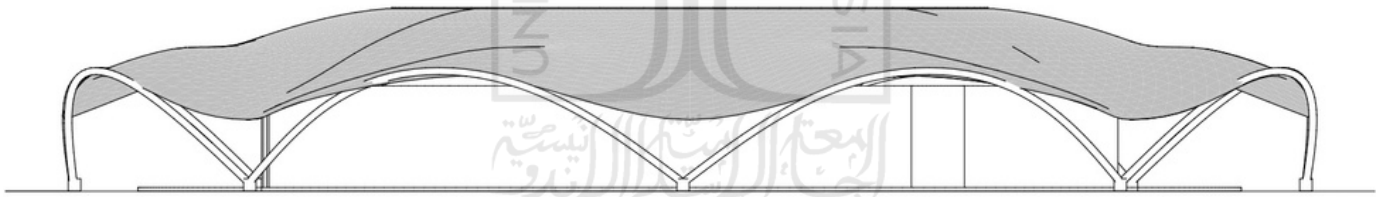
RESTAURANT ELEVATION



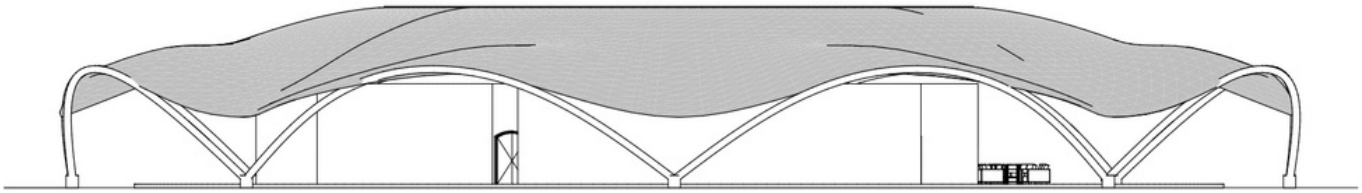
FRONT ELEVATION



RIGHT ELKEVATION

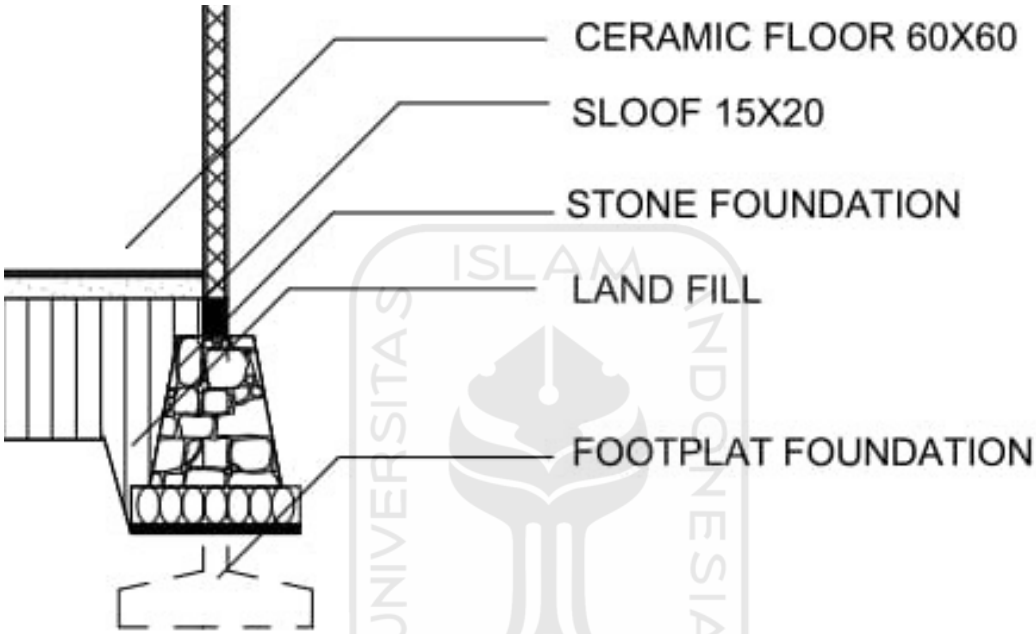


LEFT ELEVATION



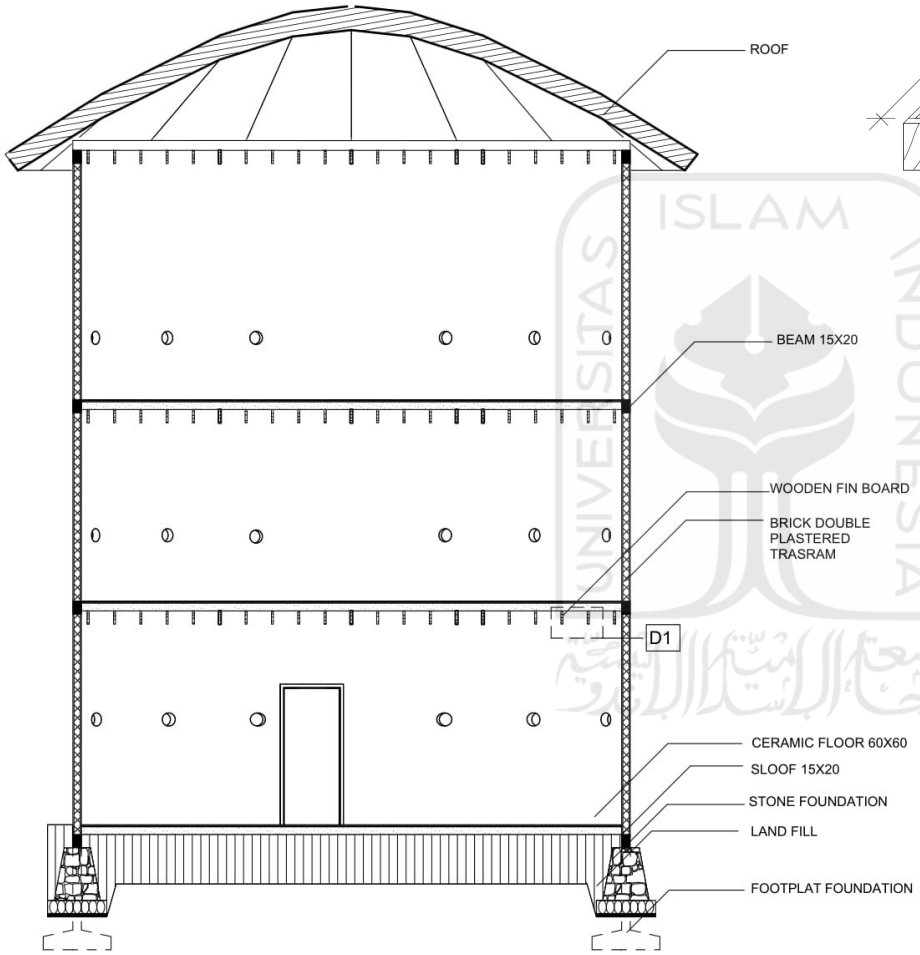
BACK ELKEVATION

DETAIL STRUCTURE

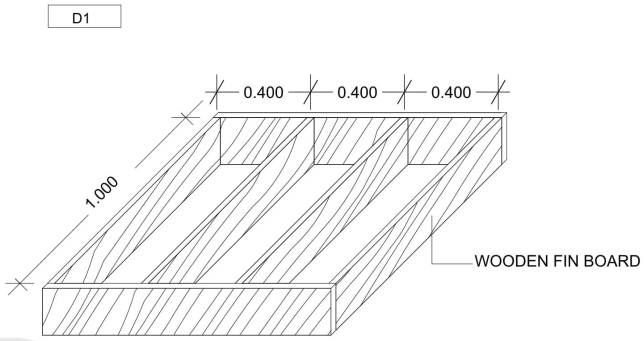


As an attempt to build the building on a swampy land, we use a stone foundation with extra foot plat foundation

DETAIL ARCHITECTURAL



DETAIL INTERIOR SWALLOW NEST
1:100



DETAIL SWALLOW NEST MOLD
1:15

LOBBY









STANDARD UNIT











DELUXE UNIT













SUIT UNIT





SWALLOW BUILDING





SPORT FIELDS





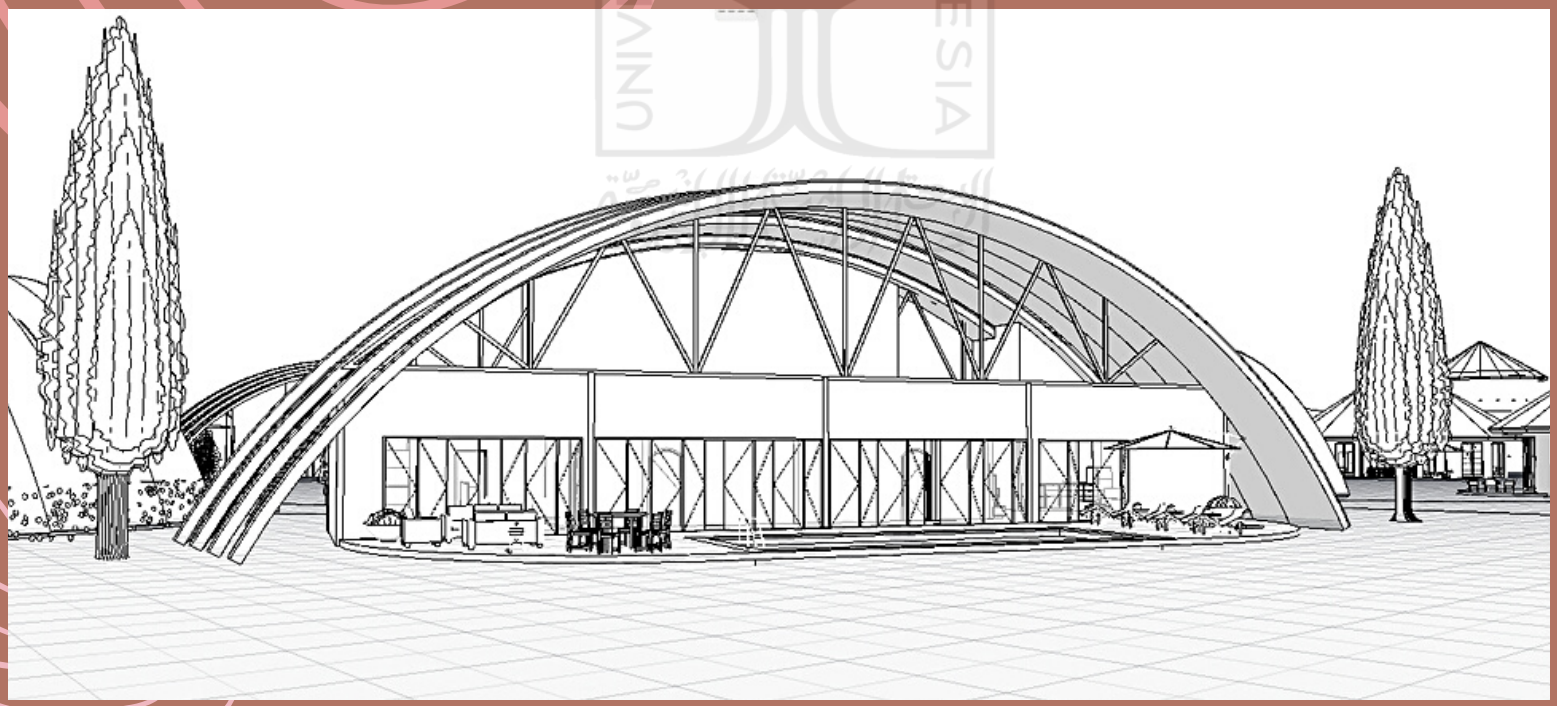




CHAPTER

5 DESIGN EVALUATION

Design Reflection



This chapter will describe about the evaluation that have been carried out by supervisor and examiners towards the design developmemt stage, so that there are several responses from these evaluation, in the process of evaluating the design. The design of resort located in Panjang Beach, Bengkulu, is able to answear spesific problems as well as the main problems by applying the architectural concept of tourism which applies several criteria and parameters as technical aspect that must be considered in the design. From the explanation listed above, it can be found the results of the evaluation of the response of the testers to the design.

- **The Material selection of the roof is inprecise.**
  Changing the material of the roof of the lobby, restaurant, and deluxe unit.
- **The determination of the problem is missed**

Removing the swampy land as the problem of the site as it cause more problem.

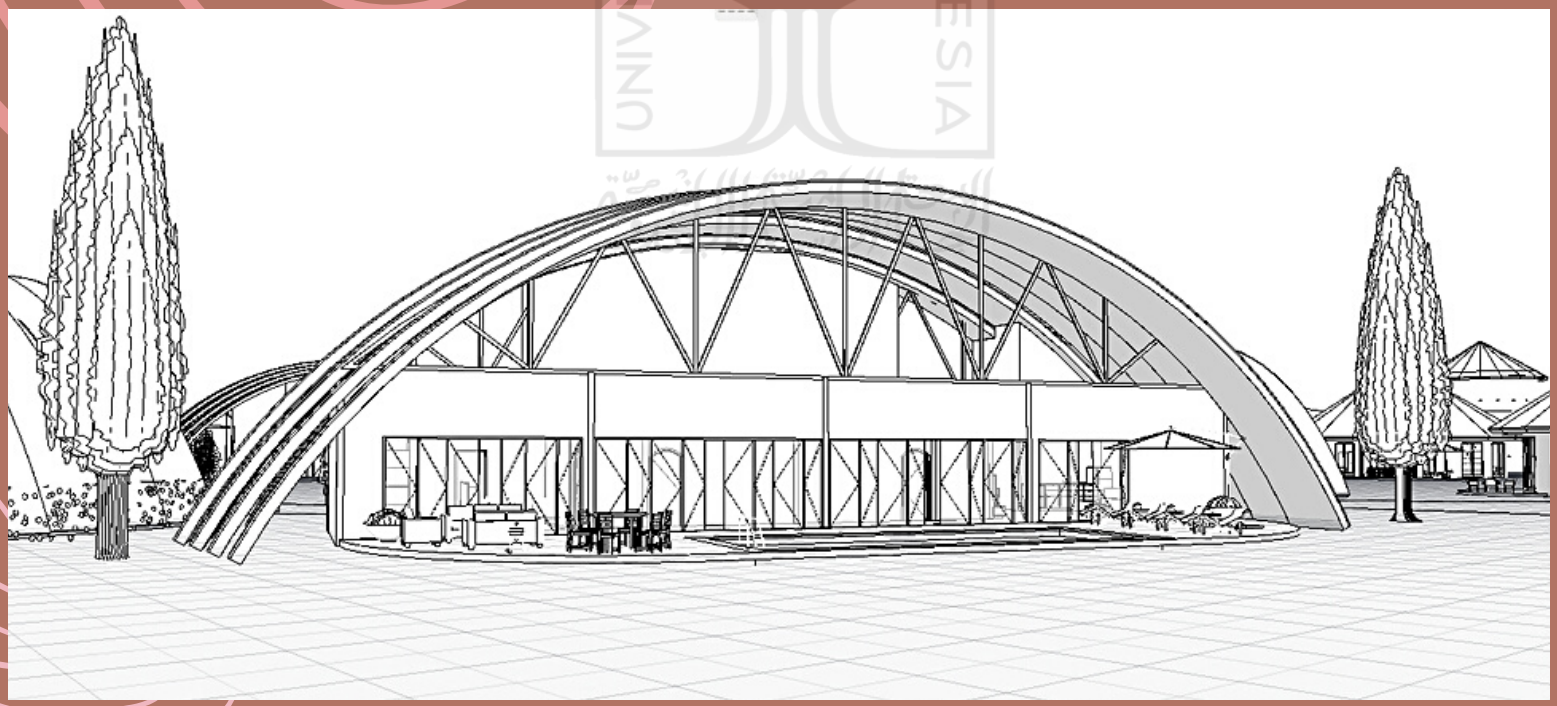
- **Lack of in the pictures explanation.**
  Re-check and adding missed explanation on the design or pictures.
- **Consider the pine forest on the site**

Minimising the tree around the units and replacing it with bush as the fence between units.

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CHAPTER 6

References & Attachment



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