

RESORT HOTEL AND FLOATING COTTAGE IN BOGOR REGENCY WITH BIOPHILIC ARCHITECTURE APPROACH

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Abstract. Resort Hotel and Floating Cottage, is one of the tourist attractions that many people visit for vacation. The planning of the Resort Hotel and Floating Cottage utilizes the natural beauty in the form of lake and mountain views located in Cigombong District, Bogor Regency and the location is in Kawasan Ekonomi Khusus (KEK) so that the Public-Private-Community Partnership, operational model is applied, namely a partnership between the government, entrepreneurs, and the community. Tourism in Indonesia has an important role in driving national economic growth and improving people's welfare. The natural beauty spread across Indonesia has the potential for tourism development, especially for Resort Hotels and Floating Cottages. In its realization, there are facilities related to local culture so that the community can contribute. This Resort Hotel and Floating Cottage planning is classified as a 3-star Health Resort & Spa type with more complete facilities. In addition, because the planning of this Resort building utilizes the beauty of nature, the Biophilic Architecture approach was chosen which basically has the principle of building a good relationship between humans, nature, and buildings.

Keyword: *Tourism, Resort Hotel, Floating Cottage, Biophilic Architecture.*

INTRODUCTION

Tourism is one of the most important economic sectors in Indonesia. Tourism plays a major role in reducing unemployment and increasing the productivity of a country. The ultimate goal of tourism development is to increase

people's income. One of the things that supports tourism is the abundance of natural beauty spread across Indonesia. In Indonesia itself there are several areas that have the potential to become tourist attractions with their natural beauty and need to be developed. One of these areas is Bogor Regency, precisely in Cigombong District,

where there is natural beauty in the form of a lake that can be developed.

Cigombong District is also one of the areas that has been designated as a Kawasan Ekonomi Khusus (KEK) in the field of tourism, this is stated in Government Regulation Number 69 of 2021. Based on data from the District / City Office of Culture and Tourism (Disbudbar) in West Java, there is an increase in the number of tourism visitors in Bogor Regency from year to year, so that accommodation facilities are needed to meet the needs of tourists. Therefore, this Resort Hotel and Floating Cottage is planned.

In addition to tourism needs and natural beauty that can motivate the planning of tourism areas, because Bogor Regency has culture and arts that can be preserved, so that in planning this tourist area can apply the operational model of the Public-Private-Community Partnership approach.

According to Coltmant (in Idedhyana, et al, 2017) Resort is a place designed for tourists who travel, ranging from simple resorts to luxury ones in which there are various needs, ranging from tourist needs to business needs. According to Hurdawaty and Parantikan (in Asriyandi, 2022: 82) Hotel is a temporary residence that rents several or many rooms for the general public who want to stay overnight and usually provides food and drinks for tenants. And Floating Cottage itself is a cottage or small house as a mean of accommodation that usually floats on the surface of the water.

Because the planning of this Resort Hotel and Floating Cottage utilizes the beauty of nature, the Biophilic Architecture approach was chosen, which basically has the principle of maintaining a good relationship with nature. This approach is a design that coexists perfectly with nature to create green buildings that involve natural components.

METHODS

This architectural design report uses a descriptive method, which in the process of collecting data is divided into two categories, namely primary data obtained through the process of conducting observations at the site location and secondary data obtained through literature studies of books, scientific journals, written sources in the form of articles, and others that have relevance to the design object.

CONCEPT

The planning of this Resort Hotel and Floating Cottage in Bogor Regency uses the Biophilic Architecture approach and is planned as a three-star Resort Hotel (***) with a minimum of 30 bedrooms with more complete facilities. The design of this building object applies the Public-Private-Community Partnership operational model which is basically to be able to create a new tourist area and in line with the local government's goal of increasing the tourism sector so that it has an impact on increasing the economy of the surrounding community.

Site Determination Criteria

There are several site criteria that will be analyzed in order to find out in depth about the selected site location, including:

1. Land Use

Based on the Bogor Regency Regional Regulation 2016-2036, the Central Development Area (WP) is designated for the development of Tourism and Cultural areas.

2. Neighborhood

Strategic location that can be assessed by looking at several points such as its proximity to residents' homes, schools, health services, shopping places and there are also several tourist attractions.

3. Site Availability

Located in the Central Development Area (WP) where there is still some land that can be developed into a tourism area.

4. Convenience

Has availability such as pedestrian paths, the number of public transportation, as well as the availability of infrastructure networks that have been included in the infrastructure network system.

5. Ecological aspects

There are many green open spaces and flanked by two mountains, rivers and lakes as water elements.

Selected Site



Figure 1 Selected Site

Source: Google Earth, 2024

Location : Jl. Raya Danau Lido, Watesjaya, Cigombong District, Bogor Regency, West Java.

Area : 18,000 m²

Fuction : Resort Hotel

KDB : 60%

KLB : 4 Floor

KDH : 10%

GSB : 6 meter

Contextual Aspect Approach

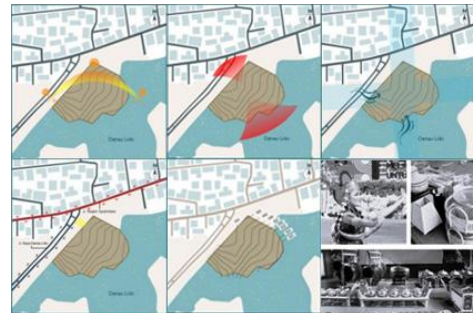


Figure 2 Site Analyst

1. Sun Path

In general, the rear of the site faces southeast in the form of a view of Lake Lido and the front faces west. So that in the morning and evening the ends of the front and rear areas are exposed to sunlight.

2. View

There is Mount Salak to the northwest and Mount Gede Pangrango to the southeast and there is a lake directly in front of the site.

3. Wind

The wind blowing on this site comes from the south and west with the temperature in the Bogor Regency area is 20°- 30°C and the average annual temperature is 25°C.

4. Accessibility

There is Jl. Tangkil as the main road which is then directly connected to an alternative road which is right in front of the site, namely Jl. Raya Danau Lido.

5. Contour

The highest surface is at an altitude of 490 meters above sea level and the lowest surface is at an altitude of 483 meters above sea level and the height of the water surface is at an altitude of 482 meters above sea level.

6. Local Culture

The number of cultures ranging from arts, crafts, and local food that can be an attraction for buildings as well as a place to accommodate the potential of the existing community so that it can have an impact on increasing the income of the local community.

Architectural Concept Approach

According to Browning (in Dewi, et al, 2018: 688) the concept of Biophilic Architecture is a design that is integrated with nature by providing opportunities for humans to live and work in a healthy environment and can reduce stress levels.

So it can be concluded that Biophilic Architecture itself is a design approach that creates a good relationship between humans and nature with the aim of helping to improve the welfare of human life through a space that is integrated with nature for a prosperous life, both through the application of natural materials, natural forms, and natural elements.

There are several characteristics of Biophilic Architecture:

1. Relationship between building materials and nature
2. Pay attention to visual and non-visual relationships
3. The quality of space that can be felt by users when they are in nature
4. Emphasize the principles of biophilic architecture

There are 14 biophilic design patterns and some of them will be the focus in the design of Resort Hotel and Floating Cottage. The following are 14 biophilic design patterns and some that will be the focus in the design:

Konsep	14 Pola Desain
Nature in the Space Patterns	Visual Connection with Nature
	Non-Visual Connection with Nature
	Non-Rhythmic Sensory Stimuli
	Thermal & Airflow Variability
	Presence of Water
	Dynamic & Diffuse Light
	Connection with Natural Systems
Natural Analogues Patterns	Biomorphic Forms & Patterns
	Material Connection with Nature
	Complexity & Order
Nature of the Space Patterns	Prospect
	Refuge
	Mystery
	Risk/ Peril

Figure 3 Pattern of Biophilic Design

Source: Terrapin

a. Visual Connection with Nature

Displaying or presenting natural elements in the design which is implemented in determining the orientation of the building and openings in the building.

b. Non-Visual Connection with Nature

This pattern relies on the senses that humans have, in order to get a more pronounced sense of connection with nature the application of non-visual patterns is also needed.

c. Presence of Water

Utilize or present the element of water inside and outside the building which can indirectly provide tranquility for visitors.

d. Dynamic & Diffuse Light

Utilize changes in light intensity and shadow movement to create conditions that match those that occur in nature.

e. Biomorphic Forms & Patterns

In its implementation, this pattern focuses on providing elements that form and fill spaces that stimulate forms and motifs from nature. The application of this pattern can be realized in

architectural, structural, building details, and space filling elements.

f. Material Connection with Nature

This pattern applies natural materials that will basically change from time to time, so as to depict the atmosphere of the natural environment.

g. Prospect

This pattern uses natural materials that will basically change from time to time, so it can depict the atmosphere of the natural environment.

DESIGN RESULT

The blockplan shows several functions of the area around the site, namely the Kawasan Ekonomi Khusus (KEK), settlements, trade, and also the SPN Polda Metro Jaya. On the Site plan there are two entrances, namely the main entrance for Resort visitors to the right side of the site and there is an entrance for the general public to the left side of the site. For circulation, it follows the existing contour shape, while for the parking area there is parking for managers, visitors and also shuttle parking. The main building is divided into three zones, namely the reception zone, management zone and also a semi-private zone that functions as a conference room, while for supporting buildings there are restaurants, playgrounds, fitness, saunas and spas, art studios, service buildings, community markets, swimming pools, and residences outside the main building there are glamping and floating cottages which are both equipped with reception buildings.



Figure 4 Block plan



Figure 5 Site plan

On the first floor of the main building there are several spaces in the reception zone, namely the lobby, lounge, mini bar, elevator, prayer room, emergency stairs, and lavatory. For the management zone there is a manager's room, assistant manager, meeting room, etc. which is also equipped with a cafeteria, and in the semi-private zone which functions as a conference room equipped with a preparation room.

On the second, third and fourth floors are typical buildings that function as hotels where visitors to the Resort stay, there are 30 rooms with three types of rooms namely 12 types of single rooms, 12 types of deluxe rooms and 6 types of suite rooms, and each floor is equipped with a linen room and a shared lounge. On the second floor there is also a rooftop equipped with vegetation for shade and seating to relax.

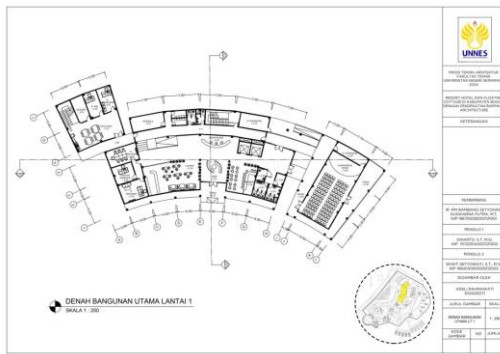


Figure 6 1st Floor Plan Main Building

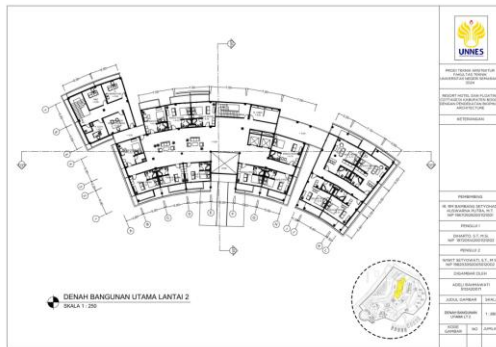


Figure 7 2nd Floor Plan Main Building

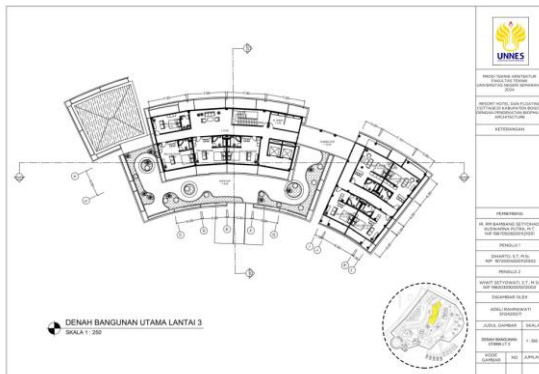


Figure 8 3rd Floor Plan Main Building

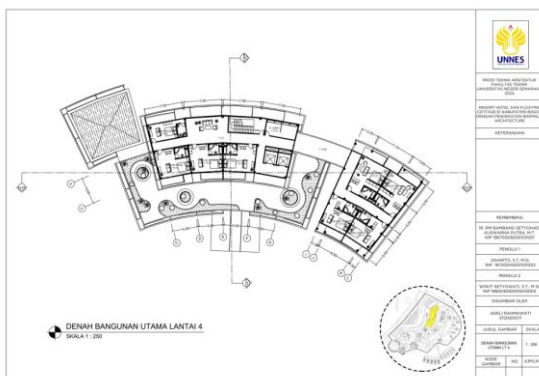


Figure 9 4th Floor Plan Main Building

Furthermore, there is a roof plan, front view, back view, two main building section and principle section. The roof used in the main building is a traditional Sundanese roof, namely type perahu kumureb with the use of a bamboo roof structure and the foundation used is a well foundation. Then the supporting building uses the traditional Sundanese roof type badak heuay with the use of bamboo roof structures, and the foundations used are footplate and stone foundations. The facade uses wooden cladding and metal plate facades that adopt Sundanese ornament patterns.

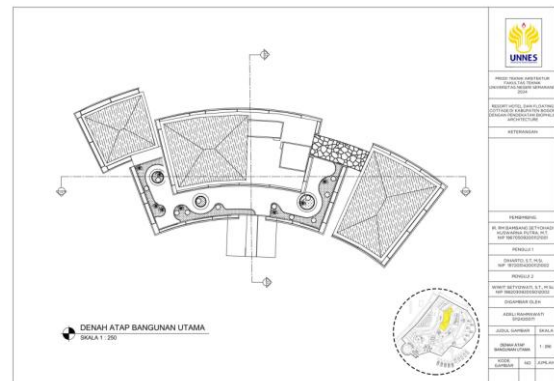


Figure 10 Rooftop Plan



Figure 11 Front Elevation



Figure 12 Back Elevation

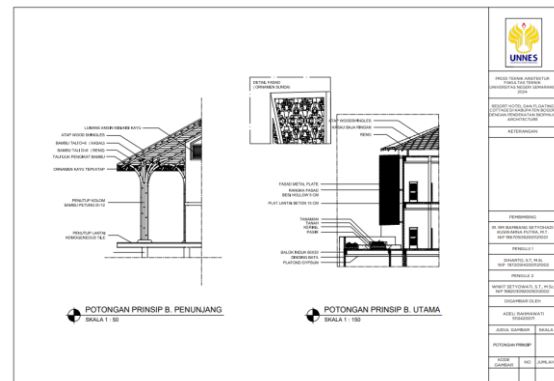


Figure 15 Principle Section

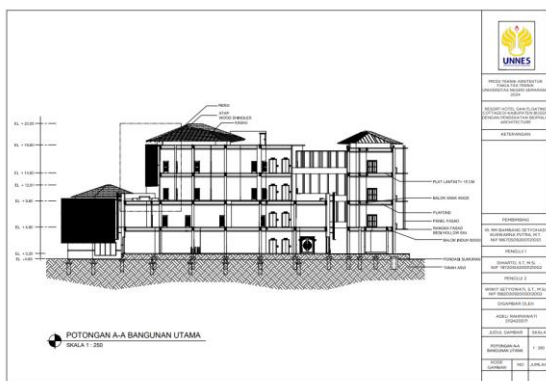


Figure 13 A-A Section

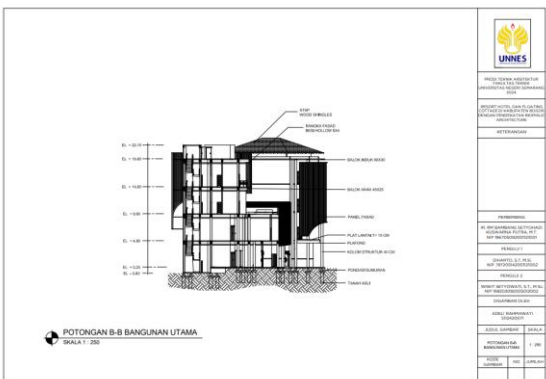


Figure 14 B-B Section

Then there are several perspectives, the first is an exterior perspective in the form of an area perspective, a main building perspective and a floating cottage building perspective. As for the interior perspective, there are bedroom rooms, restaurant rooms, lobbies and fitness rooms.



Figure 16 Exterior Main Building Perspective



Figure 17 Exterior Floating Cottage Perspective



Figure 19 Bedroom Interior



Figure 20 Restaurant Interior



Figure 21 Lobby Interior



Figure 22 Fitness Room



Figure 22 Aerial view Visualization

CONCLUSION

In response to the Bogor regional government's goal of tourism development that is able to handle problem solving related to the community's economy. So a building is planned that can answer the objectives of the local government, namely the planning and design of the Resort Hotel and Floating Cottage. It is known that tourism has a role in increasing and encouraging national economic growth, especially in reducing unemployment.

In responding to the local government's objectives, the planning of the Resort Hotel and Floating Cottage applies a Public-Private-Community Partnership operational model, which is a partnership between three parties to jointly develop a business/service that is mutually beneficial and provides maximum benefit to the wider community.

In addition, because the planning of this tourist area utilizes the beauty of nature, so it must pay attention to how a building can coexist with nature by applying the Biophilic Architecture approach.

The planning of this Resort Hotel and Floating Cottage also includes elements of art such as dance performances, sales of handicrafts and typical regional snacks which in the fulfilment of these facilities involve the role of the community in order to help develop tourism, so that it has an impact on increasing the economy of the local community.

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