

OCEAN VIEW RESORT KEBUMEN WITH AN ECOLOGICAL ARCHITECTURE APPROACH

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Abstract. Indonesia is the largest archipelago in the world with a variety of natural resources that can be a great tourism potential so that if it can be managed and developed properly, it will provide benefits for the State in the tourism sector. One of the areas that has tourism potential to be visited is Kebumen. Based on the Central Bureau of Statistics in 2023, recorded tourist visits to Kebumen increased by around 2.03 million visits compared to the 2022 period which only reached 1.46 million visits. This was triggered because Kebumen has a variety of tourist attractions, one of which is often visited is the coastal area. With this phenomenon, the need for accommodation such as lodging will also increase and is needed for tourists who are on holiday in Kebumen. Therefore, the planning and design of Ocean View Resort was chosen as one of the lodging and tourist attractions that has a view of the southern sea. The Ocean View Resort planning is located in Ayah District, Kebumen Regency which is one of the locations of the Tourism Area. In its realisation, the facilities in the resort are related to local culture so that the community can contribute. The Ocean View Resort planning is categorised as a four (4) star resort with various complete facilities in it, as well as utilising natural beauty. In addition, the resort applies the concept of Ecological Architecture that utilises the resources around Kebumen. There are five (5) principles of ecological architecture as the basis in designing, namely Solution Grows from Place, Ecological Accounting Informs Design, Design with Nature, Everyone is a Designer, and Make Nature Visible. This concept is applied to minimise the impact of environmental damage and apply building materials from nature so as to give a natural impression and blend with nature.

Keywords: *Tourism; Resort; Ocean View; Ecological Architecture; Kebumen.*

INTRODUCTION

Indonesia is the largest archipelago in the world that has a variety of natural resources, cultures and customs with its own

characteristics and uniqueness that are not owned by other countries. This diversity can be a great tourism potential so that if it can be managed and developed properly, it will

provide benefits for the State in the tourism sector. One of the areas that has tourism potential to be visited is Kebumen. Kebumen is one of the regencies in Central Java Province which is located along the southern coast of Java Island. Geographically, Kebumen Regency has an area of 1,281.12 km² and a sea area of 6,867 km², which is the prima donna of Kebumen tourism. In addition, there are also many other tourist attractions in Kebumen, ranging from artificial tourism, tourist villages, and natural tourism.

Of the many tourist attractions in Kebumen Regency, beaches are still one of the attractions that are often visited by tourists. There are many beaches in Kebumen Regency, such as Karang Bolong Beach, Karang Agung Beach, Logending Beach, Menganti Beach, Sawangan Beach, Watu Bale Beach, and many more beach attractions in Kebumen.

According to the Kebumen Regency Tourism Statistics Data, the number of tourist visits to beach attractions could reach around 1.70 million tourists in 2023. Tourists who visit not only come from the archipelago, but there are some from abroad. This growth rate increased by 42.7% from the previous year. When viewed from the growth of tourists during the Covid-19 pandemic, namely 2020 to 2022, the achievement of visits in 2022 is quite high, around 1.19 million. Where in 2020, total tourist visits to beach attractions alone reached 563 thousand, while in 2021, it increased to 662 thousand. For visits before the pandemic, especially in 2019, the number of tourist visits could reach 1.34 million people. From this data, it can be concluded that tourist visits to Kebumen beach tourism objects are likely to continue to increase every year. With the increase in tourists, of course, accommodation such as lodging is needed. The need for lodging, such as hotels or resorts, is one of the factors

to increase the number of visits. Besides being able to enjoy the beauty of the blue sea panorama from the building, this can be an attraction in itself for tourists who visit later.

Based on the current condition, there are still relatively few lodgings close to the beach, so some local residents rent out their houses to be used as lodgings for tourists. Based on this phenomenon, there is a need for a resort close to the Kebumen beach that can provide a comfortable stay for tourists, both from within and outside the country and be able to reach various beach attractions and their surroundings in Kebumen.

Resort is an inn built on a plot of land with fresh and beautiful conditions and surrounded by beautiful scenery and full of trees (Wibisono & Handinoto, 2022). This resort is planned to be located in the hilly area of Ayah, which has a natural feel and a view of the ocean. The purpose of building such a resort is of course as an accommodation facility for tourism. For the design, it needs to be equipped with various facilities for recreation so that tourists are comfortable and do The resort building is planned using the concept of ecological architecture that utilises the surrounding natural resources.

This ecological architecture concept is one of the architectural concepts that has a main orientation on the development model by paying attention to the balance of the natural environment and the artificial environment that is harmonious between the environment, humans, and buildings. With this concept, of course, it can minimise the impact of environmental damage, and of course apply building materials from nature so as to give a natural impression. The location of the building in Kebumen is expected to be able to reach the beach and surrounding tourist attractions, as well as utilising the natural scenery view into the building. With this natural design can make the building have the impression of blending with the surrounding nature whose

atmosphere is still beautiful. not feel bored while at the resort.

METHODS

This Final Project Report uses descriptive method by presenting a picture, explanation, and description related to the planning and design of Ocean View Resort Kebumen with an Ecological Architecture approach. In accordance with the existing terms and conditions, the data used in the planning and design process is classified into two categories:

1. **Primary Data:** Primary data obtained through observation and documentation studies are used for observation and data collection.
2. **Secondary Data:** are collected through literature studies, books, and various sources related to the Ocean View Resort Kebumen with an Ecological Architecture approach. Additionally, technical requirements and standards are considered in determining the facilities to be used in this planning.

CONCEPTS

Overview of Architectural Concept Emphasis

The design approach for Ocean View Resort in Kebumen is based on the topic of planning and designing a program that functions as a place of relaxation and recreation. An ecological architectural was selected as the primary design approach, as it prioritizes to minimise the impact of environmental damage, and of course apply natural building materials to give a natural impression.

Site Determination Criteria

According to the Kebumen Regional Regulation (Perda) No. 23/2012 concerning the Regional Spatial Plan of Kebumen Regency for 2011-2031, area is used for tourism and cultivation designation.

The selection of a building site must consider the functions and activities planned for the building. In determining the location, it is essential to consider several key factors, including:

1. **Utilities and Infrastructure**
The site must be equipped with good utilities and infrastructure to support building functions so that operations and activities inside and outside the building can run smoothly. Utilities and infrastructure can include electricity, sewerage, dirty water, drainage, and street lighting.
2. **Accessibility**
Good access on a site is very necessary and is the main point in the continuity of building operations. Because the planning building which has a use as a lodging building as well as tourism really needs easy access, both achieved by private vehicles, public transportation, and pedestrians.
3. **View from site**
In building a resort, an attractive view is necessary. It is an added value of a resort. Many tourists visit resorts not just to stay overnight. However, they can also relax their minds by taking a holiday to enjoy the beautiful scenery, away from the noise of the city.
4. **Neighbourhood Around the Site**
The location of the site is in the Tourism Area, so it is strategic to establish an inn that reaches the surrounding attractions.
5. **Site Area**
The selected site must maximise to accommodate all activities operations in the resort building.

SELECTED SITES

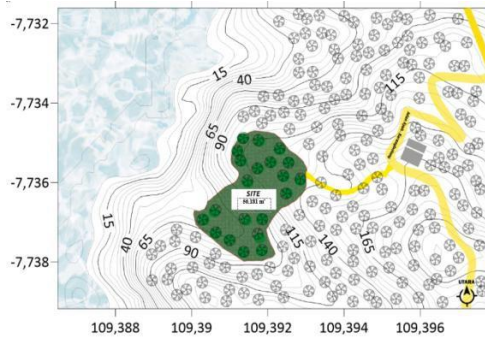


Figure 1 Site Planning Location

The data associated with this site is presented in the following section.

Location : Jl. Raya Ayah – Karangbolong, Desa Argopeni, Kecamatan Ayah, Kabupaten Kebumen

Area : 56.181 m² or 5,6 Ha

Land use : Tourism Land

Street Functio : Primary Collector Roads

Width of Road: 7 m

Area Boundaries

- North : Teak Forest (Wanalela)
- East : Jl. Raya Ayah–Karangbolong
- South : Teak Forest (Wanalela)
- West : Teak Forest (Wanalela)
- KDB : 60%
- KLB : 1,25
- KDH : 20%
- GSP : 100 m, from the highest tide line, on the shore.

CONTEXTUAL ASPECT APPROACH

1. Circulation

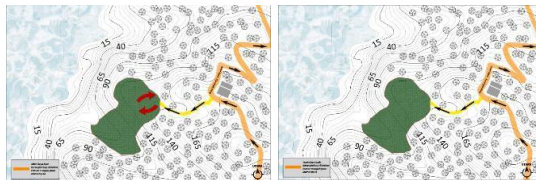


Figure 2 Circulation Analysis

The site can be accessed via Jalan Raya Ayah - Karangbolong which is the main road in the eastern part of the site which is a two-way road with asphalt road material. Jalan

Raya Ayah - Karangbolong is a primary collector road with relatively busy road conditions because it is the main access to the coastal area in Kebumen.

The results, due to the elongated shape of the site, the main entrance (ME) of the site is placed on the east side of the site adjacent to the main road. The primary collector road, located in the eastern part of the site, serves as the main entrance to the resort area. Entry and exit access are separated for driving comfort, namely by distinguishing the entry and exit lanes.

2. Sensory Analysis

a. View

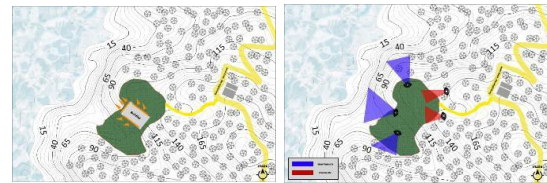


Figure 3 View Analysis

The site is located in a hilly area that has views of the hills and the south sea.

The result, based on the analysis of view to site and view from site, the area that is optimised as an attraction is the back area of the site facing the south sea. The rear area of the site that has a view towards the south sea is maximised as a point of interest for the building.

b. Sensory

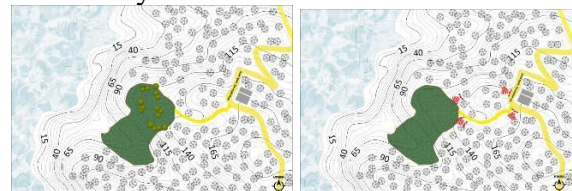


Figure 4 Sensory Analysis

The site is located in a hilly area with a forest environment to the south and north of the site. In addition, the site has a very attractive ocean view for a resort. Vehicle

intensity is not too high on Jalan Raya Ayah - Karangbolong.

The result, from these data, it can be seen that the environment around the site can generally be a potential area to build an Ocean View Resort. The noise level in this area is not too noisy. Because, the noise on the site comes from Jalan Raya Ayah - Karangbolong.

3. Climatology (Sun and Wind Direction)

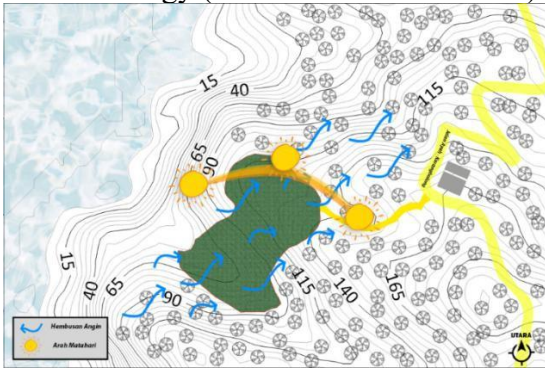


Figure 5 Climatology Conditions

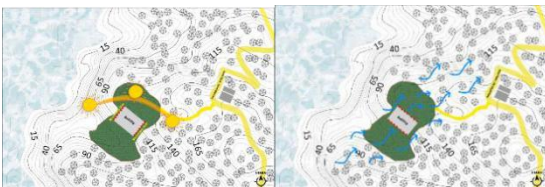


Figure 6 Climatology Analysis

Morning sunlight comes from the east and afternoon sunlight from the west. This can be utilised for natural lighting of the interior spaces in the resort.

Based on the data, analysis carried out by looking at the shadows that occur due to the direction of the sun from the east to the west of the cover is used on the east side of the site and west of the site, vegetation is needed as a barrier to light and heat from the sun entering the building so that the incoming light does not glare and the heat is not too hot, sunlight is also maximised on the east and west sides which makes the refraction of light entering the space and site used as building aesthetics or natural lighting, optimising openings in the building

by using a cross ventilation system in order to take maximum advantage of wind movement, the facade that appears is a facade that is able to break the arrival of wind direction to the side of the building by using materials that can withstand erosion against the wind for a long time, and the building design that is applied according to rainfall and wind direction is in the form of a roof slope of 30° with a tritisan that has a length that is proportional to the building and the use of cross ventilation for natural air flow.

ARCHITECTURAL ASPECT APPROACH

Ecological Architecture is a concept of environmental management by utilising the conditions of natural resources without any indication of destruction of the surrounding environment. By using this concept approach, it directly invites visitors and resort staff, as well as the surrounding community to take responsibility for nature in preserving the environment by providing personal experience and increasing public awareness of the importance of the environment.

To plan and design it, it refers to the principles of ecological architecture proposed by Cowan and Ryn (1996),

- a. **Solution Grows from Place**, Based on the topographic conditions of the selected site, the contours of the land on the site tend to be uneven due to the location of the contours in the hilly area. For this reason, in the concept of building design, it will use a resort building pattern that can adjust the site so that the impact does not damage the surrounding environment and the need to determine the right building orientation, so that the typical resort appearance can be clearly seen in the building design.

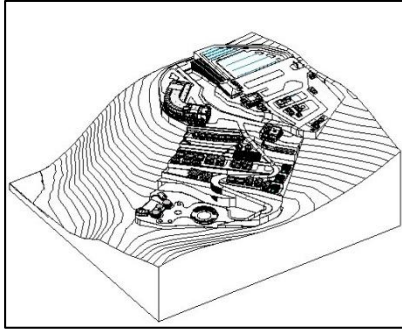


Figure 7 Topographic Conditions of the Selected Site

- b. **Ecological Accounting Informs Design**, to fulfil the environmentally friendly standard, the resort building is equipped with a Sewage Treatment Plant that functions to treat dirty water into clean water so that the water can be flowed to the plants.
- c. **Design with Nature**, natural lighting can be done through large windows throughout the room so that lighting during the day and evening utilises sunlight through solar cells. Then, maximum use of circulation through a void system that connects one room to another so that the space seems connected.



Figure 8 Maximise Circulation with Wide Windows

- d. **Everyone is a Designer**, the design stage of the resort building is a presentation of creativity involving the owner and architect to produce an attractive building form. In addition, in order to maintain the integrity

of the building for a long time, resort staff need to check, maintain the building.

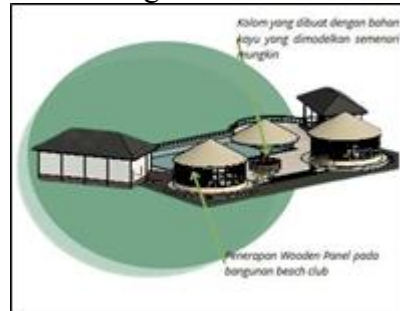


Figure 9 Building Materials

- e. **Make Nature Visible**, in its planning and design, the Ocean View Resort building shows the surrounding natural conditions that make nature visible as a form of building design that shows aspects of survival so as not to have a bad impact on the surrounding environment.



Figure 10 buildings with ocean view

DESIGN RESULT

Masterplan

The Ocean View Resort Kebumen building is located on Jalan Raya Raya Ayah – Karangbolong, occupying a site area of 56,181 m². The building site plan incorporates a parking area for cars and motorbikes at the front of the site. The building comprises thirteen distinct masses: 8 types of residential buildings,

the main building, lobby, beach club, spa and gym, and resort office.



Figure 11 Masterplan Buildings in Resort

In an Ocean View Resort area, residential buildings and supporting buildings are designed to complement each other. There are 8 types of rooms that can later be occupied by visitors, namely Cottage Deluxe, Deluxe Villa, Deluxe Villa with Private Pool, Superior Family Villa 2br, Superior Family Villa 3br, Superior Family Villa 2br with Pool, Superior Family Villa 3br with Pool, and Suite Villa. The supporting buildings are the Lobby, Resort Office, Main Building, Spa and Gym, and Beach Club.

a. Residential Buildings

Residential building is the main building of a resort. this building is used for visitors who will stay and recreate in a resort, there are 8 types of residential buildings, here are the details of the residential buildings in Ocean View Resort.

1) Cottage Deluxe

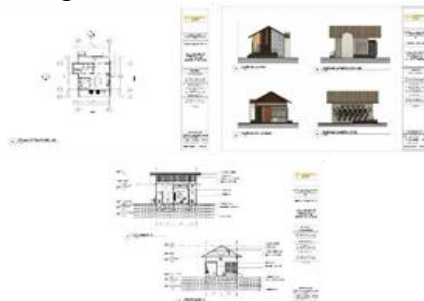


Figure 12 Floor Plan, View, and Section of Cottage Deluxe

2) Deluxe Villa



Figure 13 Floor Plan, View, and Section of Deluxe Villa

3) Deluxe Villa with Private Pool



Figure 14 Floor Plan, View, and Section of Deluxe Villa with Private Pool

4) Superior Family Villa 2BR



Figure 15 Floor Plan, View, and Section of Superior Family Villa 2BR

5) Superior Family Villa 3BR



Figure 16 Floor Plan, View, and Section of Superior Family Villa 3BR

8) Suite Villa



Figure 19 Floor Plan, View, and Section of Suite Villa

6) Superior Family Villa 2BR with Pool

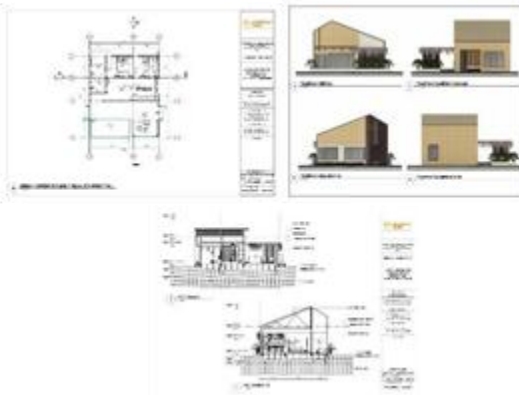


Figure 17 Floor Plan, View, and Section of Superior Family Villa 2BR with Pool

7) Superior Family Villa 3BR with Pool



Figure 18 Floor Plan, View, and Section of Superior Family Villa 3BR with Pool

b. Supporting Buildings

Support buildings are complementary buildings of a resort. This building functions as a support. People who visit a resort certainly want to enjoy relaxing and recreational time. for this reason, resort supporting buildings are made, such as beach clubs, spas and gyms, and other buildings.

1) Lobby

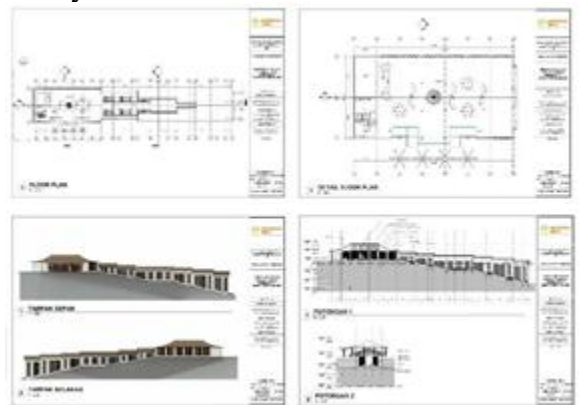


Figure 20 Floor Plan, View, and Section of Lobby

2) Resort Office



Figure 21 Floor Plan, View, and Section of Resort Office

5) Beach Club

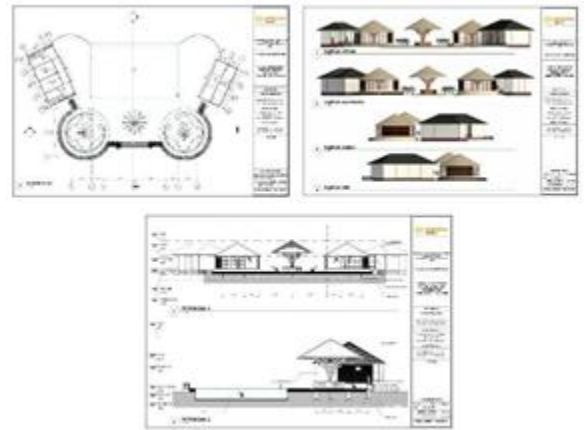


Figure 24 Floor Plan, View, and Section of Beach Club

3) Main Building

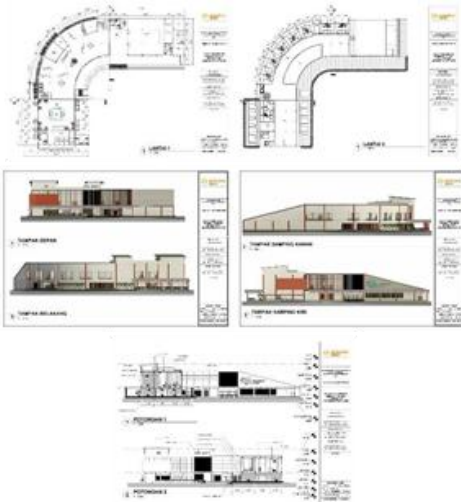


Figure 22 Floor Plan, View, and Section of Main Building

Prospective Design

Residential buildings are neatly built in the centre of Ocean View Resort. The building has a direct view of the ocean.



Figure 25 Residential Buildings (Exterior)

4) Spa and Gym

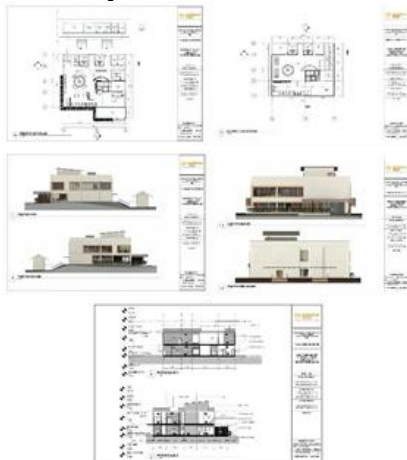


Figure 23 Floor Plan, View, and Section of Spa and Gym

The supporting building of Ocean View Resort is an additional building within the resort area. This supporting building serves to support the main activities of the visitors who come to the resort.



Figure 26 Supporting Buildings (Exterior)

The bedroom is the main facility in an inn. The rooms in Ocean View Resort are well designed and have a direct view of the ocean. This will provide the best experience for the visitors who come.



Figure 27 Residential Buildings (Interior)

Beach Club, Lobby, Resort, and Spa and Gym are part of one of the supporting buildings in the Ocean View Resort Area. These buildings

are needed to provide the best experience when recreating at the resort.



Figure 28 Supporting Buildings (Interior)

CONCLUSION

To respond to the high number of tourists visiting Kebumen Regency, both from foreign and local tourists, but lodging accommodation is still not sufficient and adequate. Therefore, planning a resort building is one of the solutions to this problem. It should also be noted that tourism has a role in increasing and encouraging national economic growth, especially in reducing unemployment.

Kebumen Regency is one of the regencies that has tourism potential to be visited. This is because there are various tourist attractions that are quite numerous in Kebumen, ranging from artificial tourism, tourist villages, and natural tourism. Of the many tourist attractions in Kebumen Regency, the beach is still one of the attractions that is often visited by tourists, both foreign and local tourists. Seeing the number of tourists visiting, especially to the coastal area, however, the need for lodging in the area is still considered inadequate. Therefore, Ocean View Resort is one of the temporary lodging accommodations that has a view of the southern sea built in Kebumen Regency, precisely in Ayah District, which is one of the development areas as a centre for tourism development, fisheries, and tourism support activities. As well as its strategic location adjacent to the surrounding beach area.

The planning and design of Ocean View Resort in Kebumen Regency uses an Ecological Architecture approach, due to its location on a hill area and the surrounding teak forest. This makes the area still maintained the beauty of the environment. Therefore, the Ecological Architecture approach is very appropriate because this approach still utilises the beauty of the local environment without changing and reducing it or even destroying the potential of its natural resources, and can utilise local materials from Kebumen Regency.

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