



# Hotel Resort Tongging with Approachment of Neo Vernacular Architecture

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**Abstract.** This journal is about the design process of Resort Hotels located in Tongging by adopting a Neo Vernacular design approach into the building. The problem in this design process is how to apply the Neo-Vernacular architecture approach to this Resort Hotel building. How to create comfortable outdoor and indoor space for visitors to the tourist area?. How to choose the right material according to the current temperature and conditions, so that it can support the character of the building. The purpose of this design is to apply the Neo-Vernacular Architecture approach to the Tongging Resort Hotel building by looking at the locality context, and designing the out and inside spaces that are comfortable for visitors by uniting indirectly between both areas. Choose the right material according to the temperature and existing conditions, to support the building's character. The methodology carried out in this design was location survey (physical data collection), comparative study, literature study, data processing, conceptualization, schematic and arrived at the final design. The discovery in this design is to design a building that is in an area that has strong locality must do research and analysis to get the concept that is suitable and can be received by the surrounding community and visitors. The author also found that the selection of building materials should source from the site location. For general people, this design is useful as a reference to help similar design buildings.

**Keyword:** hotel, neo-vernacular, resort, Tongging,

## 1. Introduction

Tongging is one of the places in Indonesia with its beautiful natural attractions. This natural tourist attraction is one of the tourism destinations. Tongging on one of the shores of Lake Toba is in a strategic location. In addition to Lake Toba which is the main tourist attraction in Tongging, there are several other interesting places such as Sipiso-Piso waterfall, Siodmak waterfall, and at certain events held paragliding attractions in this place. Seeing the increasing tourism needs, that local and foreign tourists will increase to come to Lake Toba. So that the selection of the Tongging location as a Resort Hotel design place is terrified.

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## **2. Literature Review**

### **Object Description**

Hotel Resort is a hotel built in tourist spots [1]. Resort Hotels in Barging can define as a form of financial means of tourism that provides services, lodging, food, and beverages and activities where visitors who stay not conduct business activities and activities of recreation, sports, health, conventions, religious and enjoy the potential of nature around Tongging. Hotels are Buildings that provide rooms for guests to stay, food and drinks, and other facilities that are needed and managed professionally to benefit [2]. Hotels are A form of commercially managed accommodation, provided for everyone to get the following services and lodging to eat and drink [3]. Resort is a place to stay where you have special facilities for leisure activities and sports such as tennis, golf, spa, tracking, and jogging, the concierge is experienced and is well aware of the resort environment, if there are guests who want to hitchhike around the sambal enjoying the beauty of nature around this resort [4]. Tongging is one of the villages in the Toba Caldera Geopark which located in the Merk district, Karo Regency, North Sumatra province. There are several tourist attractions in Tongging, such as Sipiso-Piso Waterfall, Mount Sipiso-Piso, Elephants Elf, and Sapu Juma. The most strategic place to enjoy the beauty of Lake Toba is to be from this location.

### **Theme study theoretically**

Neo-vernacular architecture does apply not only physical elements in the modern form but also non-physical such as culture, mindset, beliefs, layout, religion, and others. The building is an art culture that consists of the repetition of the limited number of types and in its adaptation to the local climate, material, and customs [5]. From the statement of Charles Jencks in his book "Language of Post-Modern Architecture 6 (1991)" then it can be described the following features of Neo-Vernacular Architecture. a. Always use the roof of the ridge. Consider The roof of the hole covers the level of the wall to almost to the ground as a piercing element and better than a wall that described as a defense element that symbolizes hostility, Bricks (in this case a local construction element). The building dominated by the use of 19<sup>th</sup>-century Victorian bricks which is a culture of western architecture, Returns traditional, eco-friendly forms with a more vertical proportion, Unity between the open interior through the modern elements with open space outside the building, Strong colors and contrast.

The Principle of Neo Vernacular Architecture :

As for some of the principles of Neo-Vernacular architectural design in detail are as follows. (a) Direct Relationships, is a creative and adaptive development of local architecture tailored to the values/functions of the present building. (b) Abstract Relation, encompassing interpretation that can use through analysis of cultural traditions and architectural relics. (c) Landscape relations, reflecting and interpreting the environment such as physical conditions including topography and climate. (d) Contemporary, including the selection of technology use, the form of ideas

relevant to the program of architectural concepts. (e) Future Relationships is a consideration to anticipate the conditions that will come.

### 3. Methodology

Currently of designing the object of resort hotels should be reviewed design approach which becomes the reference how the initial stages until the result in the process of designing process. This approach departs from the architecture relationship with the perception of the architect itself. Architectural design criteria need to be determined, then applied in statistical architectural language according to semantic and pragmatic Aspects of approaches such as functional, visual, and structural perceptions are part of the relationship of architecture to it which is the starting point of the architectural plan. Here is the knowledge of the design approach that will use for to the function of space, space location, space form, space constraints, space order, space rules, spatial.

### 4. Result and Discussion

#### Basic Concept

Macro concept applied in this design is to make a Resort Hotel become one of mediator for a visitor who will come tour to Lake Toba to increase the visitor. (Figure 1)

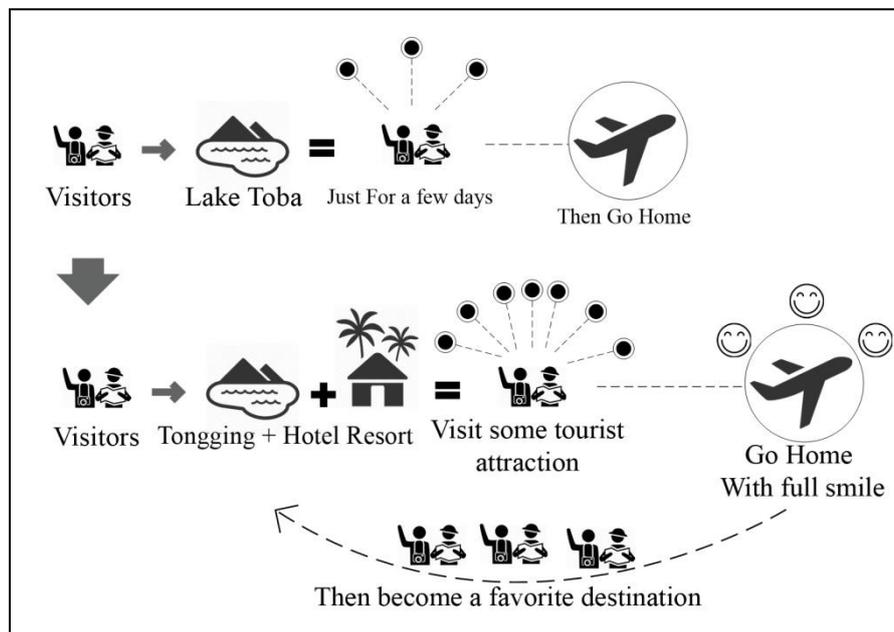
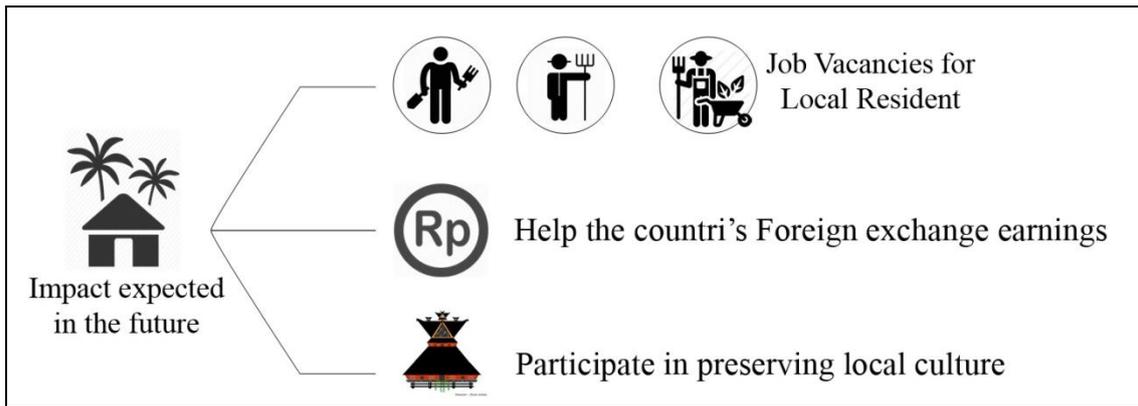


Figure 1. Macro Concept

The impact on the Future will be good for Residents around, Government and Visitors (Figure 2).

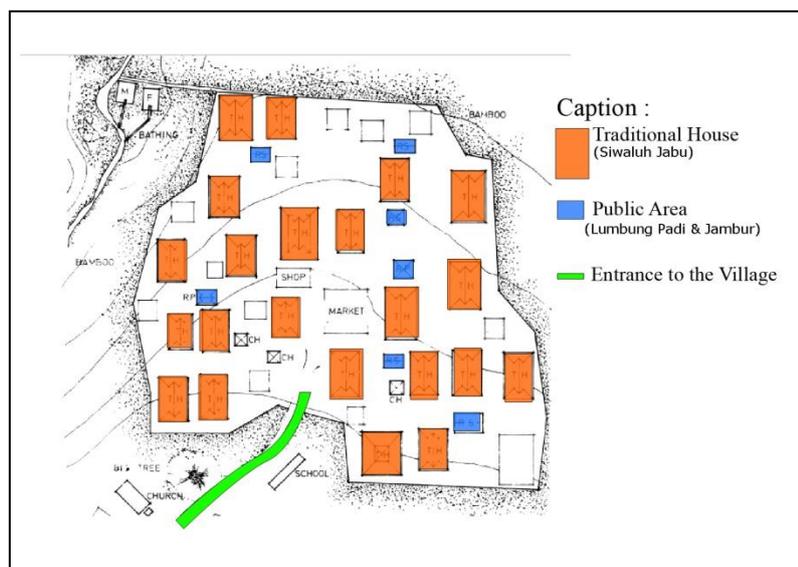


**Figure 2.** The impact in the Future

**Site Design Concept**

**Zoning**

Zoning carried out by the designer is zoning that follows the pattern of the Karo village in Lingga Village. The following is the pattern of the Karo settlement in Lingga Village (Figure 3).



**Figure 3.** Karo Village Pattern in Lingga Village

Can be seen zoning that every house where Karo lives consists of several clusters (groups) of grey Javanese houses and each cluster has its own public space. Access to enter the village is in the middle. Therefore, the designation carried out by the designers at this Resort Hotel will follow the pattern of the Karo settlement in the Lingga Village.

The pattern of Karo village is applied in this resort hotel with a private area as a place for cottages; the public used as spa & cafe as well as outdoor activities (Figure 4).

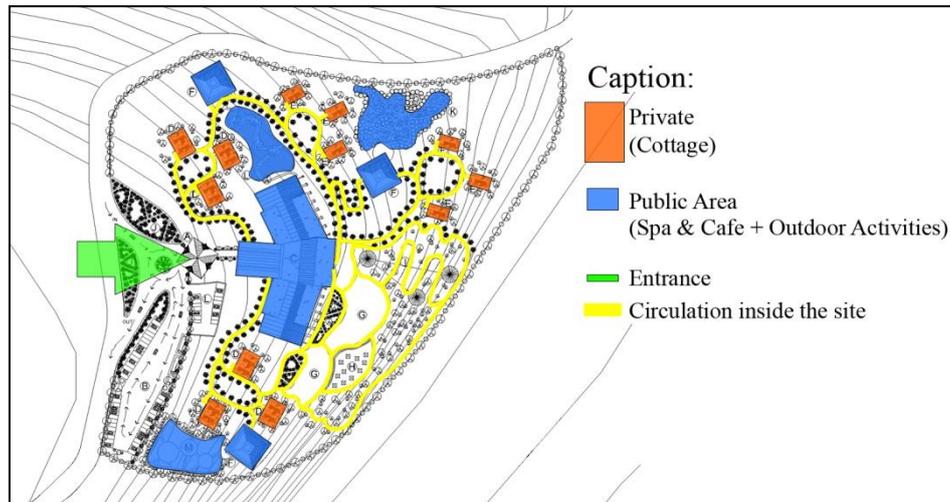


Figure 4. Site Plan of Hotel Resort

**Form and Mass**

The initial concept of building mass adapted from surrounding local buildings, namely the existing local building was Siwaluh Jabu building. So to get the form, some transformations are carried out as follows (Figure 5).

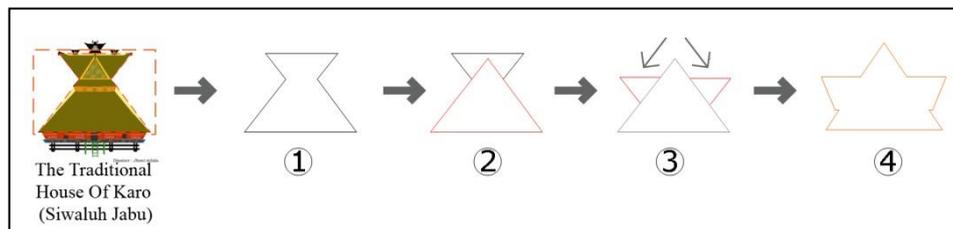


Figure 5. Mass Concept Visualization

for the basic shape of the hotel taken from the transformed from above, some more transformations are carried out (Figure 6).

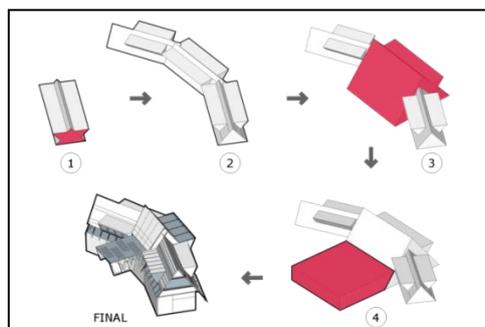
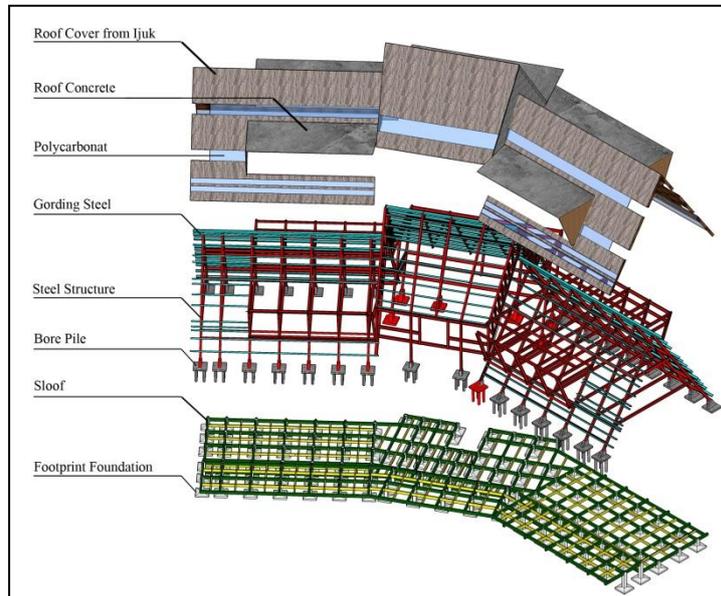


Figure 6. The Process of Massing Transformation

## Structure

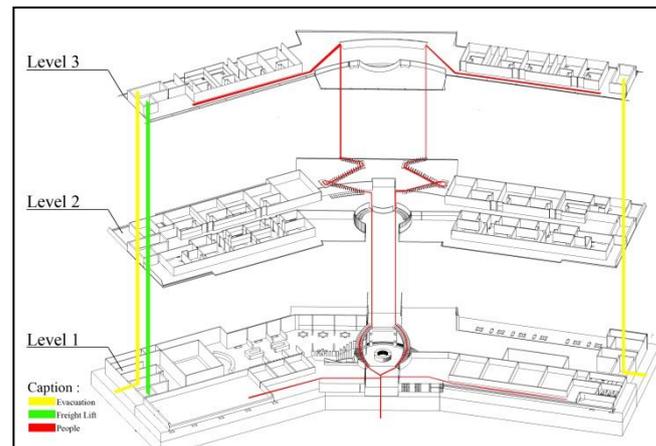
The main structure uses steel as a building frame, for the foundation to use a bore pile foundation (Figure 7).



**Figure 7.** Axonometry of structure

## Circulation

Circulation at the hotel uses stairs to the 2nd floor as well as with freight elevators and evacuation routes (Figure 8).

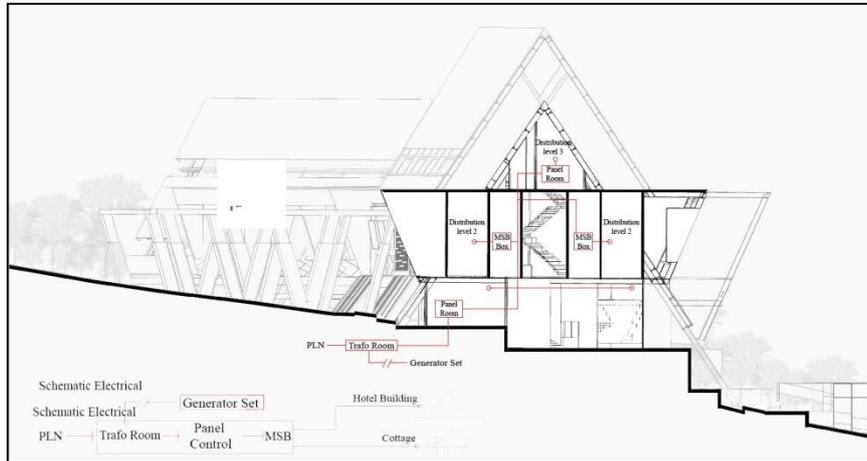


**Figure 8.** Circulation scheme

## Utility

### Electrical Schematic Utility

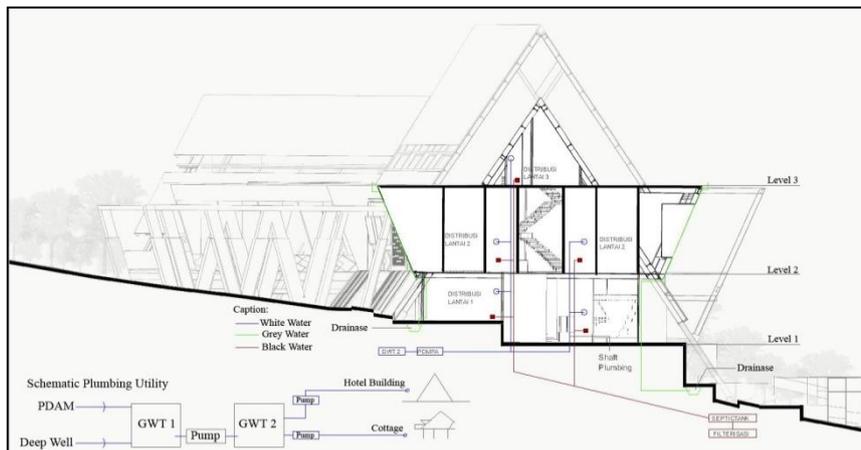
The Electrical Source of this hotel building is PLN. The electrical utility scheme is as follows. (Figure 9)



**Figure 9.** Schematic electrical utility

### Plumbing Schematic Utility

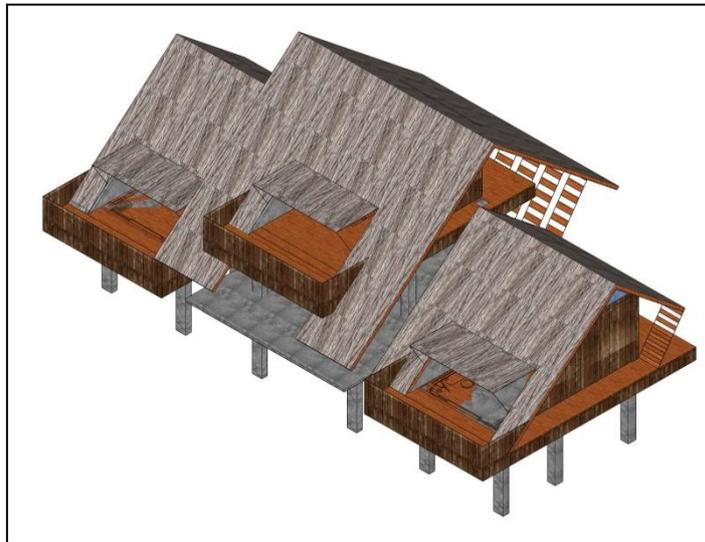
The source of clean water comes from PDAM and drilling well (Deep well). The utilities plumbing scheme is as follows. (Figure 10)



**Figure 10.** Schematic Plumbing utility

### Cottage Concept

Cottages divided into two types. Namely, type A & B. Type A used for people with a large number of more than two people or more. (Figure 11) people.



**Figure 11.** Cottage Type A

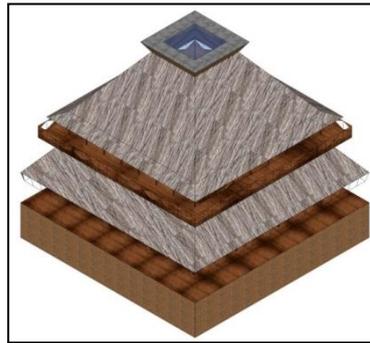
For Type B, it used for people with 2 (Figure 12).



**Figure 12.** Cottage Type B

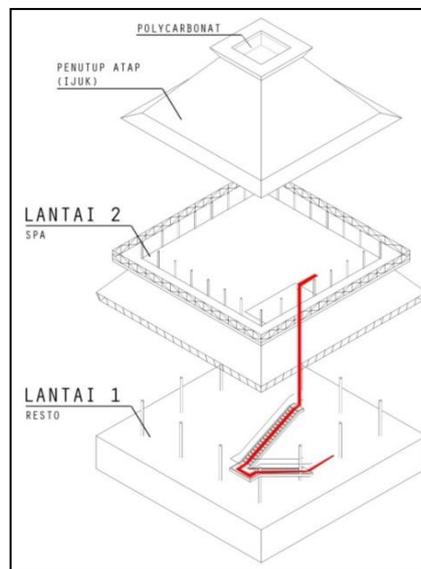
### Spa & Resto Concept

Spa & Resto placed in each cluster of cottages. There are 3 Spas & Resto with Resto concept in each building having different main dishes (Figure 13).



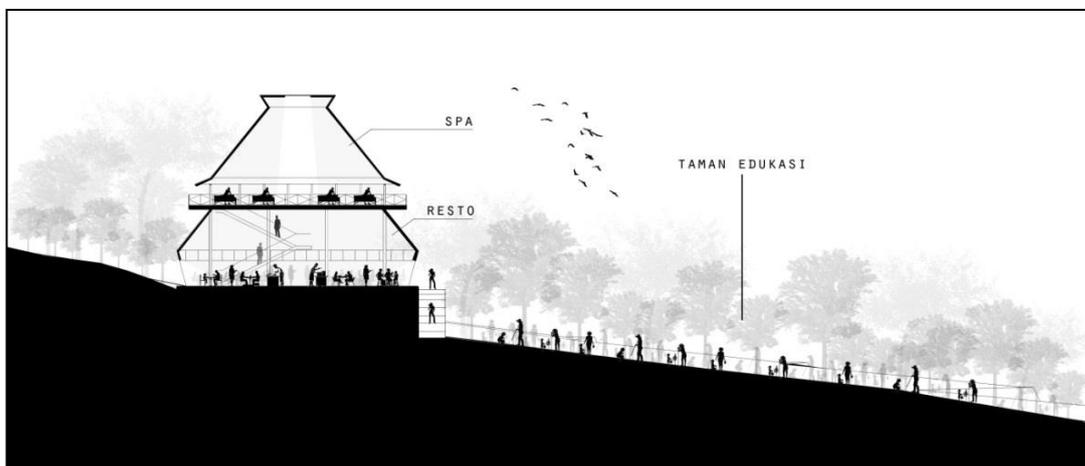
**Figure 13.** Spa & Cafe

On the 1<sup>st</sup> floor is used as a café opening that all the walls and on the 2<sup>nd</sup> floor used as a spa place (Figure 14).



**Figure 14.** Spa & Café axonometric

Spa and Café buildings consist of 3 buildings with each building having an additional outdoor activity each (Figure 15).



**Figure 15.** Outdoor Activities Spa & Cafe

### 3D Impression

At the façade of the main building the hotel uses vines on concrete roofs and uses several skylights for indoor lighting without using electricity (Figure 16).



**Figure 16.** Façade Hotel

The use of materials in cottages uses a lot of local as, which is using palm fiber (Ijuk) roofs and using wood as floor and wall coverings (Figure 17).



**Figure 17.** Perspective Cottage

The use of several compositions in this resort hotel is evident from the eyes of birds, namely the main building which is the composition of the largest and followed by a spa & café afterward cottages (Figure 18).



**Figure 18.** Perspective bird

## 5. Conclusion

The design of the Tongging Resort Hotel with the Neo Vernacular Architecture approach is a design that serves as a place for lodging that has a mild natural feel and outdoor playground. Outbound place facilities directed to visitors who either stay or visit.

The Tongging Resort Hotel is designed to accommodate tourism growth in the area of Lake Toba. For this reason, must consider the need for visitors both domestic and foreign tourists. This building applies many openings and skylights to pamper visitors who come to a good view of the location.

On building masses applied to the Neo-Vernacular theme, namely the first mass of the hotel building is the result of mass composition from the beginning of the building form of the Karo traditional house, namely Siwaluh Jabu. As well as applying the pattern of the Karo village into the division of zones at the resort The use of materials such as palm fiber is referred to match the characteristics of the Neo Vernacular architecture.

The Hotel Resort Tongging located in a tourist area where the contours from the location are quite steep, so it used as a recreational area such as outbound which has a flying fox facility. Also, due to almost steep contour conditions, the design also utilizes the contour as an underground restaurant with an open field on it.

The focus of designing this resort hotel is how to reduce the efficiency of electricity resources and air conditioning within this resort hotel; this is because hotels include having a large electricity supply and considered air conditioning. In solving this design problem, the design uses skylights to utilize sunlight by using materials that do not absorb heat, so that only light enters the building and does not participate in the heat of the sun. And for air conditioning problems, the design applies the concept of cross ventilation as much as possible free air moves inside the building so that cool air inside the building.

With various solutions that have explained, the design of the Tongging Resort Hotel with a Neo Vernacular architectural approach is considered to be one of the stops and as well as new recreation areas that are responsive to the needs of visitors and the surrounding environment.

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