

DESIGN OF ART MUSEUM IN MEDAN CITY WITH CONTEMPORARY ARCHITECTURAL APPROACH

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Abstract: *Museums are known as places that store many relics or philosophies of several objects. This Art Museum was built with a new function, namely as a container where several works produced can be collected. Initially, art museums were used specifically for exhibitions of works of art. In their development, these museums are now public/public art buildings which have important collections of works of fine art with presentation rooms as part of commercial fine arts centers. Judging from its function, this museum does not yet exist in the city of Medan, so an idea was formed to design and provide information about things that were thought to be important in designing this design. It is hoped that the design that has been carried out will be a solution to the problem to create a better object that meets the needs of the owner and user. To obtain good design results, it is necessary to compile data by conducting several studies, including: observational studies, literature studies, field studies and comparative studies. By using data collection methods and several comparative studies, we finally found the light on an important design with many functions. This museum with a land area of 3.5 Ha is expected to become one of the icons of Medan City by attracting the interest of users. The shape of the design is also taken from the shape of a diamond which is a symbol of love, purity and unity. Some metaphors say that "Be the diamond that everyone always fights for and dreams of because of a tough personality who radiates beautiful brilliance, which even though it is fought over, only a quality soul can have it. Because getting the best is not easy. Because the best are rare."*

INTRODUCTION

Indonesia is located on the equator which makes Indonesia have a tropical climate with only 2 seasons, namely summer and rainy season. This makes Indonesia have a lot of natural wealth so that the people of Indonesia can open up opportunities to develop interests and talents that produce a brilliant work. Indonesia is also a unitary state in the form of a republic or can be called the Negara Kesatuan Republik Indonesia (NKRI).

(Indonesia, 2020). Indonesia is also rich in local philosophies in an effort to create spaces for human activities. The richness of Indonesia's local philosophies has created many highly sustainable works that have endured until today (Nuraini et al, 2023; Nuraini, 2019)

Medan City is the capital of North Sumatra Province, located on the east coast of North Sumatra. The city has existed since 1590 (Pengantar, n.d.). Medan City has several museums that are very identical, namely the North Sumatra State Museum and Rahmat Gallery Museum. The state museum contains the history of Indonesia, the history of North Sumatra Province, tribes and customs in North Sumatra, the history of the struggle of heroes, and the history of the beginning of human life based on the theory of evolution, etc. While the Rahmat Gallery Museum contains collections of existing and endangered animals.

According to the data Museumnegeri.sumutprov.go.id There are about 6,799 collections in the museum, and the museum stands on an area of 10,468 square meters. According to BAPPENAS data, the number of visitors in this museum has decreased since 2006-2008, the decline in visitors from 72,369 to 46,700 decreased by around 30%. The Art Museum is a place where several works are collected. At first the art museum was used specifically for the exhibition of works of art, in its development now this museum is a public building / public art that has important collections of works of art with presentation spaces as part of a commercial art center. A museum is a place that serves to protect, develop and communicate an object to the public. (Muhajjalín et al., 2020). Simply put, a museum is a place that presents various types of works and historical relics. While Art is a design art that describes many meanings of each design produced.

Design Issues

The formulation of the problem contained in this design is how to design an art museum using a contemporary architectural approach.

Goals

To design an Art Museum with a Contemporary Architecture approach. This objective has a role as one of the designs that have never existed in Medan City.

LITERATURE REVIEW

The design of the Medan City Art Museum with a Contemporary Architecture Approach is carried out to achieve the objectives achieved. The method or data collection is done using design ideas, location data, data analysis, design concepts, and final design. With a number of these stages, a design result will be obtained that will be very useful later. The initial design process will be carried out by linking the meaning of the theme with the supposed design function, the next step is to determine user needs, user activities and space requirements. As can be seen from the design picture that this design can be expected to be one of the iconic tourism of the city of Medan.

Retrieved from Laksito, 2014 in Muhajjalín et al., 2020 Buildings and environments as a form of architectural work have an impact on the surrounding environment and even wider, namely regional, regional and global. The design that has been carried out is expected to be a solution to the problem to realize a better object and in accordance with the needs of the owner and user.

To get good design results, data compilation is needed by conducting several studies, including: observation studies, literature studies, field studies, and comparative stud

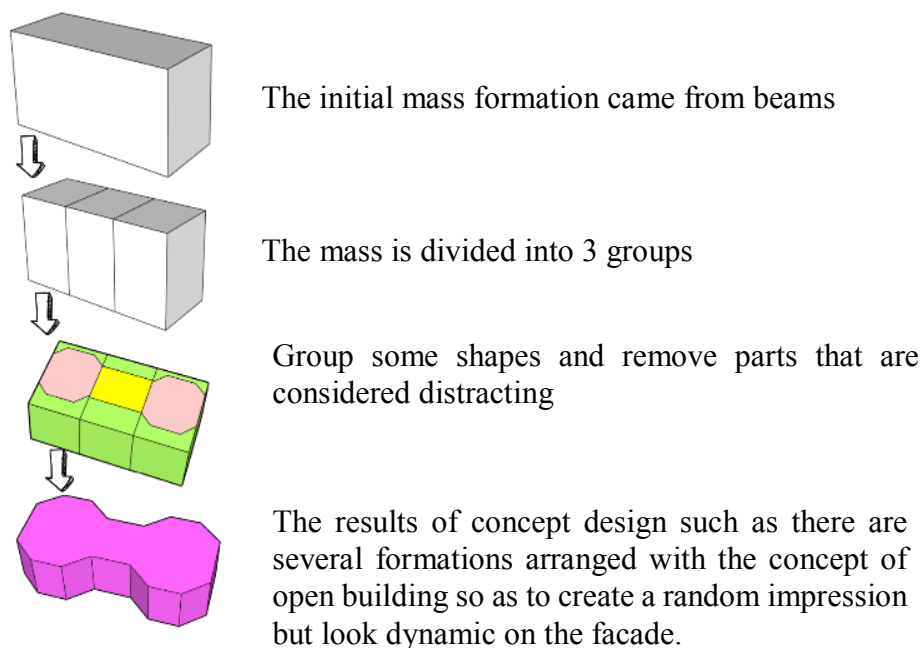


Figure 1. Design Concepts
(Source: Author, 2023)

METHODS

1.Design Location

The design of the Art Museum in Medan City with a Contemporary Architectural Approach is located on Jalan Platina III, Titi Papan, Kec. Medan Deli, Medan City, North Sumatra, with a total area of 3.5 Ha. Site Analysis Data: KDB: 80%, KLB: 3.2m, KDH: 15%, Max Building Height: 4m/18m, Soil contour conditions tend to be flat and moist.



Figure 2. Design Location
(Source: Rdtr Medan City Government and Google Maps)

2.Comparative Studies

a. The Auditorio de Tenerife

The contemporary architectural style building is a building by architect Santiago Calatrava who has indeed spawned many stunning contemporary architectural works. The Auditorio de Tenerife building has a curved and circular shape that actually looks very unconventional for other buildings that have an auditorium function. Interesting, contemporary architectural style makes this auditorium building very iconic.



Figure 3. The Auditorio de Tenerife
(Source: Google, 2023)

b. The Sydney Opera House

This building is another iconic example of contemporary architecture. Although it was inaugurated in 1973, the structure and form of this building became a reference point for the contemporary architectural style. The iconic shape of this contemporary architectural style building itself is inspired by the shape of a ship's sail or a collection of shells stacked on top of each other.



Figure 4. Sydney Opera House
(Source: Google, 2023)

This design is carried out through five process steps. These five process steps include data collection, programming, analysis, conceptualization, and synthesis. Each process is conducted by considering all existing potentials (Nuraini & Sudradjat, 2010)

RESULT AND DISCUSSION

The design is designed with the application of the concept of Contemporary Architecture, where contemporary architecture is a form of architectural work that is happening in the present, which is characterized by freedom of expression, the desire to play a role in the world of fashion. display something different, and is a new flow or merger of several architectural schools. Contemporary architecture is heavily influenced by modern architecture. Contemporary architectural products are very representative of the present in terms of style, style and globalization trends, such as environmentally friendly architecture. Contemporary architecture can be said to be anti-vernacular architecture, maximizing the use of new non-local materials in an aspirational, innovative and high-risk manner. Contemporary architectural products emphasize the use of materials and technology, as well as geometry, which has been a trend in recent years. (Pelangi et al., 2018)

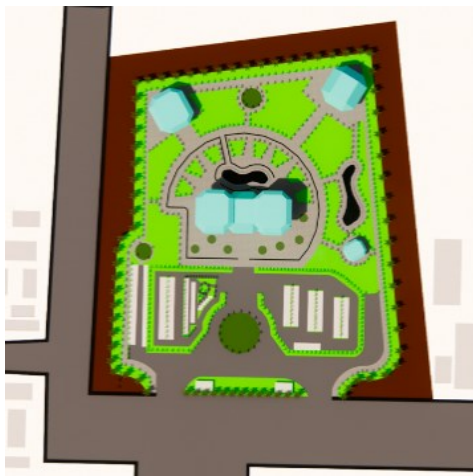


Figure 5. Masterplan Museum

(Source: Author, 2023)

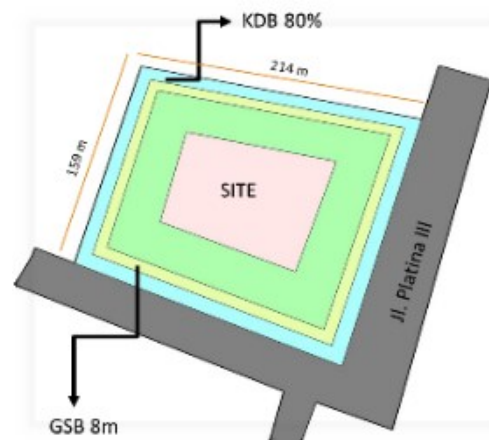


Figure 6. Rdtr Site

(Source: Author, 2023)

The world of fashion in Indonesia has been growing rapidly in the last few decades. This is supported from various sides, from local designers who are getting more potential, the improving economic level, to the rapidly growing retail sector. Retrieved from Dharsono in Pelangi (2018), Fashion is a trend of style that is in vogue at the time and prevails in a certain period of time. Nowadays, local contemporary fashion pays a lot of attention to the development of local designers in order to compete

with foreign countries. The party that plays an important role in the field of fashion in Indonesia is APPMI (Asosiasi Perancang Pengusaha Mode Indonesia) which consists of designers and entrepreneurs engaged in Indonesian fashion.

In this design, the characteristics of contemporary architecture will be applied to the building of Medan City Art Museum Design with Contemporary Architecture Approach. The character of fashion that is always growing following the times has similarities with the characteristics of contemporary architecture. In this era of development, there are many museums in several cities, but there is no fashion and model museum design that gives contemporary characteristics, especially in archipelago and modern fashion, therefore the concept of contemporary architecture is the right choice to be applied to the design of this Art Museum.

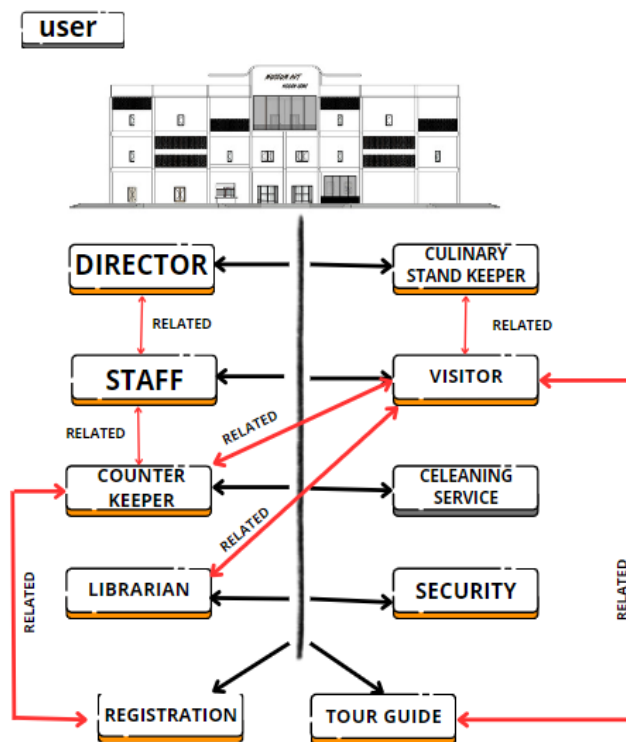


Figure 7. User Data
(Source: Author, 2023)

Conceptual Basis

Characteristics and principles of contemporary architecture according to Ogin Schirmbeck (Schirmbeck, 1988) It has solid building principles, expressive and

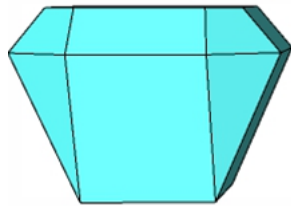
dynamic compositions, open space concepts, harmonization of rooms that blend with outdoor spaces, transparent facades, ultimate comfort and exploration of landscape elements in structured areas. Contemporary Architecture is a style of architecture of its time that is characterized by freedom of expression, the desire to present something different, and is a new style or an amalgamation of several architectural styles. (Gunawan, 2011).



Figure 8. Activity concept in *Museum Art Medan*
(Source : Reconstructed by the author based on canva images)

The conceptual foundation of the museum form comes from the unifying diamond shape, according to the Big Indonesian Dictionary, a diamond is a piece of ordinary mineral stone that has no value, but after going through a long and complicated process, diamonds become the desire of all circles and are of very high value. philosophy of the word diamond Be a diamond that is always contested and dreamed of by everyone because of a tough personality that radiates a beautiful sheen, which although contested, only a quality soul can have it. Because getting the best is not easy. Because the best is rare.

In line with the shape of this museum so that visitors who see can feel things like that meaning. The shape of the building consists of 4 floors, the first floor is the lobby and library, the second floor is the art exhibition room, the third floor is the 3D art room and the fourth floor is the rooftop where the culinary stand is located.



Inspired shapes like diamonds arranged together as the basic form of transformation symbolizing love, purity and unity.

Design Museum Art in Medan

Museum Art built on vacant land that is recorded as a high population density area, the location is not far from Marelan City with a land area of 3.5 hectares which is divided into 4 buildings, the Main Museum Building, Director and Staff Building, Hall Building, and Staff Rest Room. Taking a design with a contemporary approach is to introduce to local residents that architectural design is very broad in its formation. Here is the siteplan of the Museum.

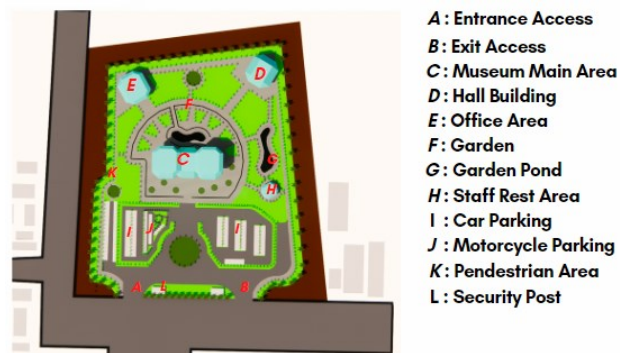


Figure 9. Site Plan *Museum Art Medan*



Figure 10. 1st Floor Plan

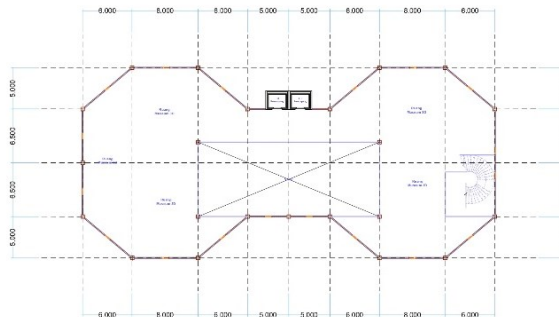


Figure 11. 2nd Floor Plan

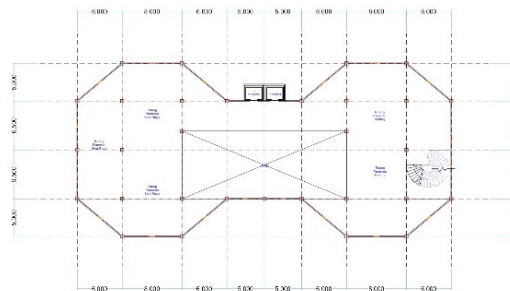


Figure 12. 3rd Floor Plan

Analysis and Concept

a. Circulation

The wind comes in from the west because there are rice fields. Furthermore, it comes in from the east but not too much because it is only traffic vehicles. While from the north and south, the wind tends to enter the site area a little because it is blocked by surrounding buildings.

Response

Providing a lot of vegetation also makes the area around the site cooler, the building on this site also adds a lot of additional ventilation.

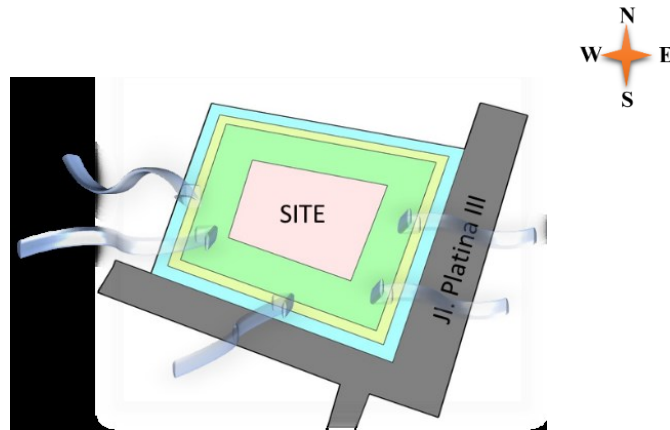


Figure 13. Circulation

b. Accessibility

The entrance to the site location is only through one lane because the surrounding area is minimal land for vehicle access and the exit access is only adjacent to the entrance access.

Response

This access may also result in congestion at the site.

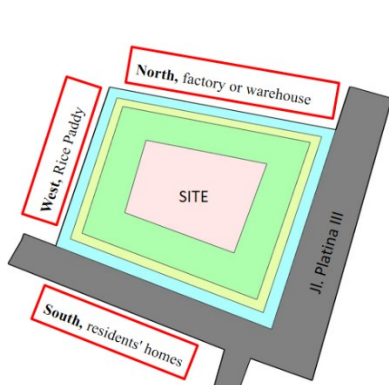


Figure 14. Site Boundaries

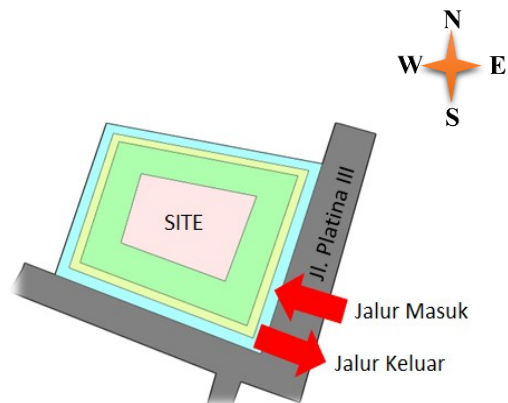


Figure 15. Accessibility

c. Analysis of Sun Movement

The sun moves from east to west. Sunlight is more pronounced in the afternoon to evening. Because the surroundings of the site are dominated by rice fields, so sunlight can thoroughly hit the site.

Response

Sunlight entering the site area can make natural light and give a positive impression such as saving electricity from morning to evening.

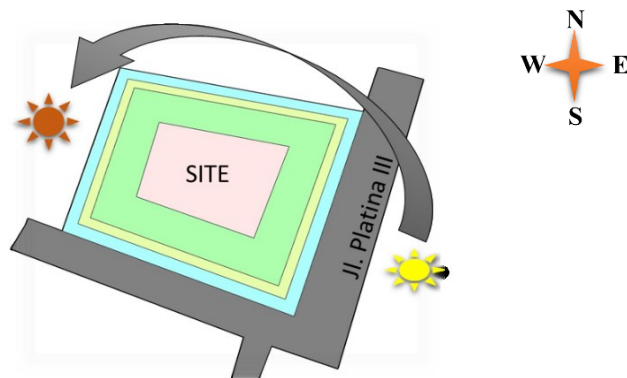


Figure 16. Analysis of Sun Movement

d. Noise Analysis

Noise on this site is very minimal because the location of the site is located very far from the traffic density. Noise only comes from the vehicles of local residents and the number is not much.

Response

The minimal noise on the site is a plus point because it does not disturb visitors too much later.

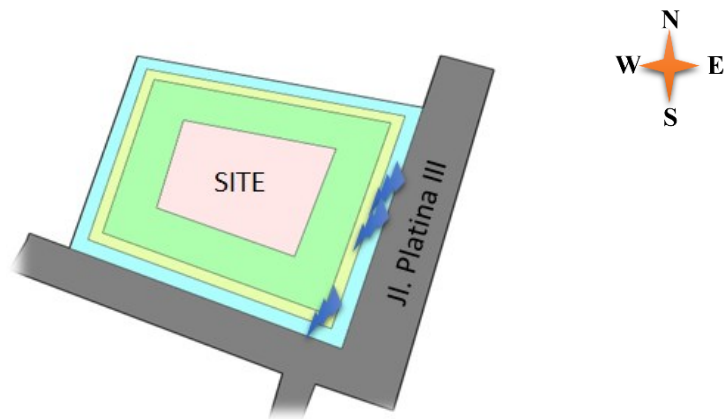


Figure 17. Noise Analysis

The main structure of the Art Museum is dominated by steel structures in the building. The roof truss construction uses concrete deck construction with steel roof combination cover material. There is also an elevator that makes it easier for visitors. The choice of space steel frame structure is because this type of structure has several advantages, namely its lightweight structure.

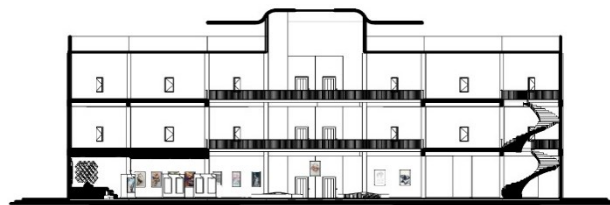


Figure 18. Pieces A-A



Figure 19. Pieces B-B



Figure 20. Pieces C-C

The interior is designed with attention to the needs and comfort of users, the functions displayed are also different during the process of arranging and creating these interior elements using standards that are in accordance with the interior such as the size of each object.



Figure 21. Interior Museum

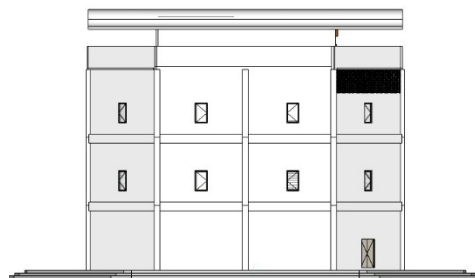


Figure 22. Right side views Museum

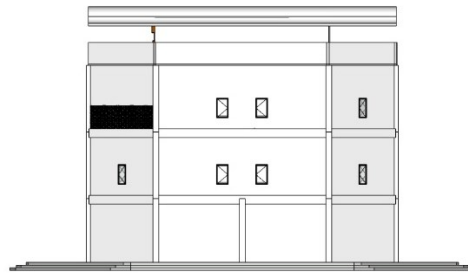


Figure 23. Left side views Museum

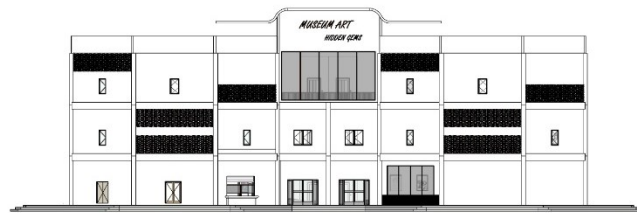


Figure 23. front view Museum

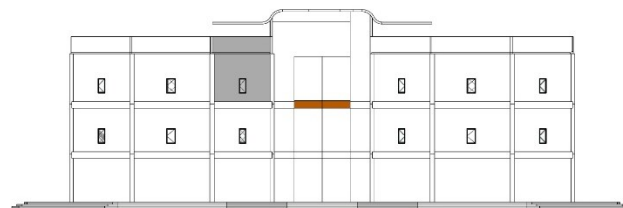


Figure 24. Back view Museum

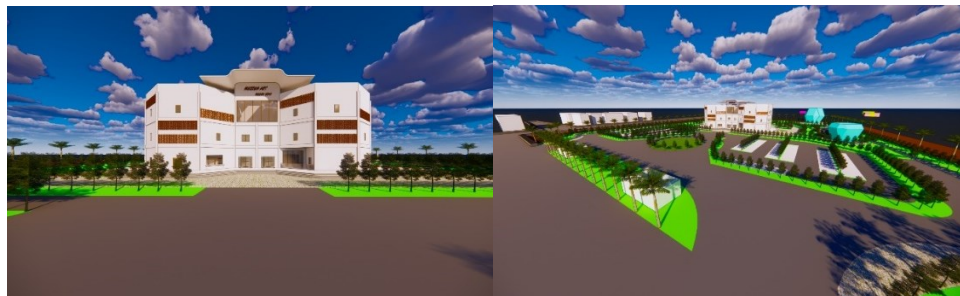


Figure 25. Eksterior Museum

CONCLUSIONS

The Medan City Art Museum design that applies the Contemporary Architecture approach embodies a brilliant design form because it has a form that is categorized as a different form before when associated with local conditions. The Art Museum is designed to meet the needs of the community due to the lack of public knowledge of art which makes this museum will be useful later as a teaching material and knowledge.

there are many rooms in each building and have their respective functions.

The transformation of the museum's shape also comes from the shape of the diamond that unites, according to the Big Indonesian Dictionary, a diamond is a piece of ordinary mineral stone that has no value, but after going through a long and complicated process, diamonds become the desire of all circles and are of very high value. philosophy of the word diamond Be a diamond that is always contested and dreamed of by everyone because of a tough personality that radiates a beautiful sheen, which although contested but only a quality soul can have it. Because getting the best is not easy. Because the best is rare.

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