



b. Pertimbangan Decoding the Economics of Covid-19

1) Tourism and Leisure

Based on the decoding of the covid-19 economy, the tourism and leisure industry is an important contributor to the global economy, especially in the leisure sector. The impact of the COVID-19 pandemic on this sector has resulted in a loss of income and jobs, especially for workers in the tourism and recreation sector. The COVID-19 pandemic has had a significant impact on the tourism and recreation industry in Bulukumba Regency, but the existence of this problem can open up opportunities to make changes and new innovations in Bulukumba Regency, especially in the Bira tourist area so as to attract the return of tourists. Therefore, the design of the Pinisi Cultural Center will open up new experiences in the tourism sector, especially in the cultural tourism sector.

2) Food processing and retail

Food processing and retail in covid-19 decoding refers to the impact on the food processing and sales sector due to the covid-19 pandemic worldwide. Movement restrictions and social restrictions imposed by the government to stop the spread of the virus significantly affect the activities of the food and beverage sector. This also has an impact on MSME activities in the Bira tourist area where MSMEs there are mostly engaged in the souvenir sector, so that the obstruction of MSME activities in the Bira tourist area also has an impact on the economy of the surrounding community. Therefore, the design of Pinisi Cultural Center is a new idea in restoring the economy of the Bira village community.

3.3 Programming : Area Program Activities

3.3.2 Data & Problem

a. Contextual Problem

In the Bira tourism area, there are challenges in the placement of several UMKM selling areas that have long been criticized by tourists who come to visit. Problems that are often faced by visitors are safety issues and the impact of congestion when the area is busy. This is caused by sellers using the side of the road as a place to sell, which should be a pedestrian area.

b. Pinisi as The Cultural Heritage by UNESCO

Bulukumba as one of the districts in South Sulawesi is certainly one of the areas most popular with local and foreign tourists. This is based on the potential possessed by the area called "Butta Panrita Lopi" with its cultural richness and quite diverse tourism potential. One culture that is still preserved today is the Pinisi boat-making culture.

Since December 7 2017, the Pinisi Ship from South Sulawesi was officially designated as a World Cultural Heritage by UNESCO as an intangible cultural heritage. This determination was recorded as PINISI: Art of Boatbuilding in South Sulawesi or the art of building Pinisi Ships in South Sulawesi.

Even though Pinisi is one of the intangible cultural heritages recognized by UNESCO, in the current era there are still many

people who do not know the history of Pinisi ship and the process of making pinisi ship.

c. Development of Bulukumba Tourism

According to the RKPD of Bulukumba Regency in 2024 in the Tourism sector, Bulukumba Regency wants to make Bulukumba Regency a leading tourist destination in South Sulawesi, of course, a goal that is not easily obtained by normative efforts alone. Bulukumba Regency with its unique cultural potential has indeed become a national tourism phenomenon that distinguishes it from other regions. However, with all the potential possessed by Bulukumba Regency, if it is not managed properly, it is not impossible that it will be left behind by other regions. In line with the development of an increasingly competitive tourism industry and increasing market trends, development in this field must be encouraged more strongly and directed appropriately to increase competitiveness in the national and regional tourism map.

Some of the proposed problems that are proposed as priorities are:

1. **Development of tourism facilities** and infrastructure
2. Development of Tourism Promotion, **Development of Cultural and Tourism Events.**
3. Development of Sports Facilities and Infrastructure.

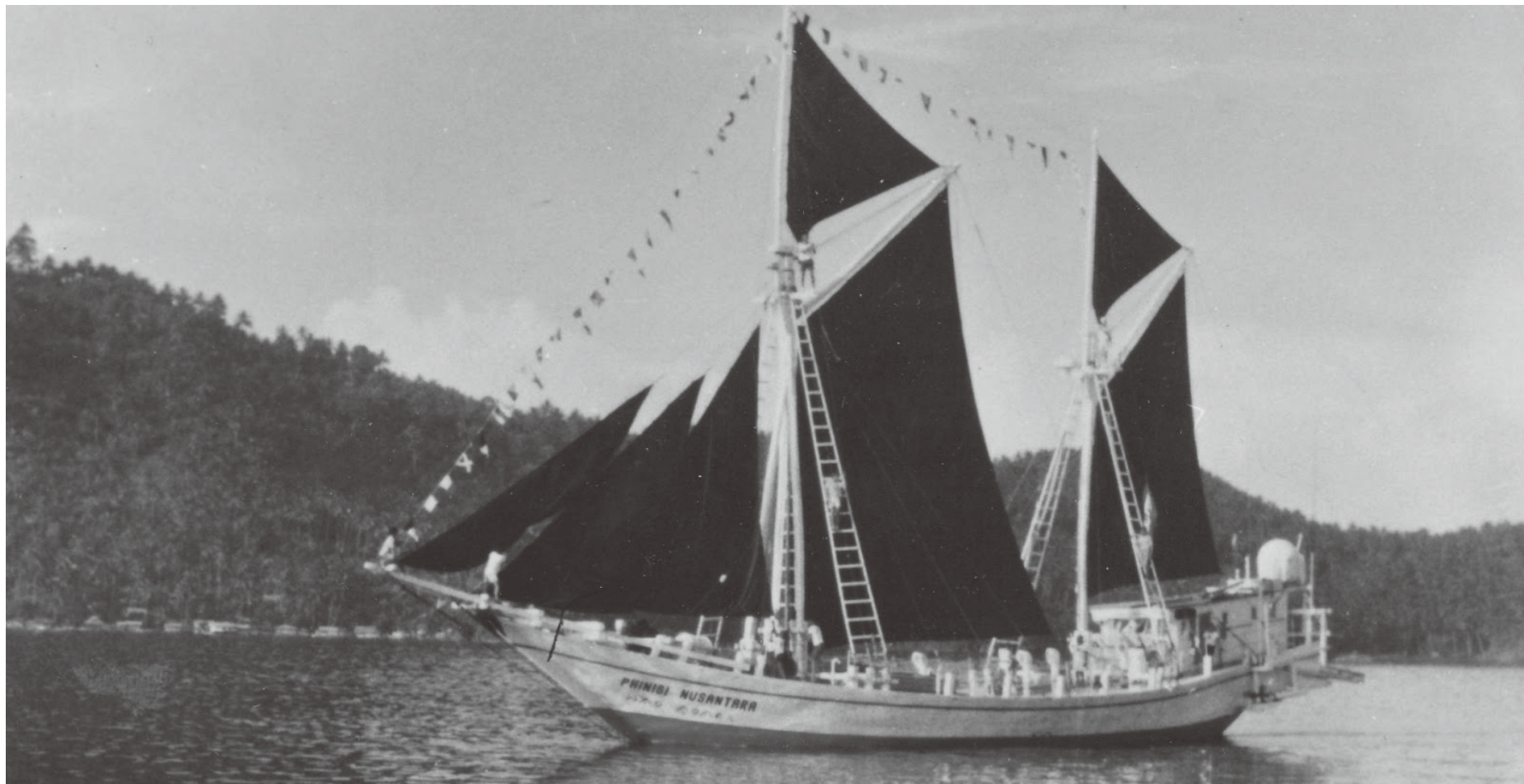


Figure 4.1 Pinisi Nusantara

Source: Wikipedia



Figure 4.2 UMKM Area

Source: Google earth

3.3 Programming : Area Program Activities

3.3.3 Analysis

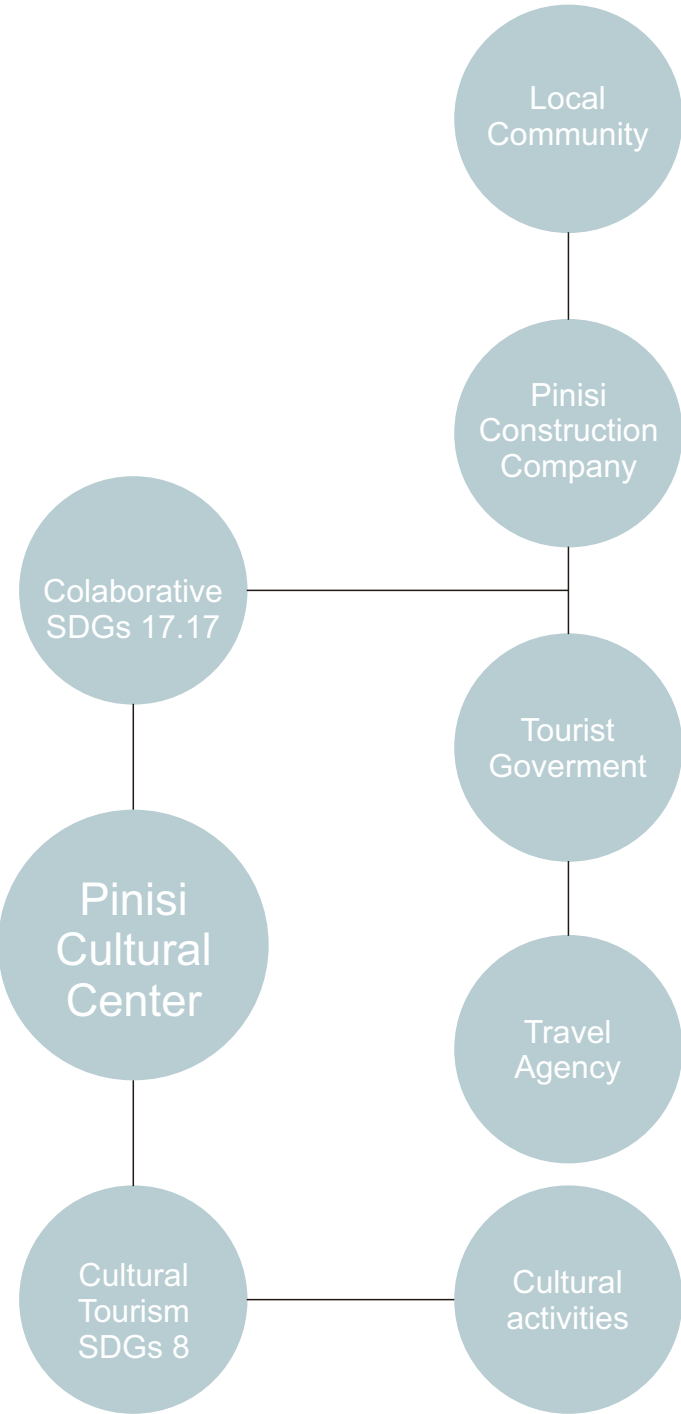
1. Based on the Recommendation of SDGs & Decoding COVID-19 give the recommendation to design of Cultural Center there are some recommendation :

a. Based on SDGs 8.2 dalam perancangan Pinisi Cultural Center mengacu pada aktivitas pameran kapal Pinisi, pembelajaran tentang Kapal Pinisi, dan pameran kebudayaan lainnya. Pengakuan oleh UNESCO terhadap pembuatan kapal Pinisi dari Sulawesi Selatan sebagai warisan budaya dunia menegaskan kekayaan budaya dan sejarah yang dimiliki oleh daerah tersebut. Namun, masih ada kebutuhan untuk meningkatkan pemahaman masyarakat tentang sejarah dan proses pembuatan kapal Pinisi agar warisan ini dapat diapresiasi dan dilestarikan secara maksimal. Oleh karena itu diperlukan beberapa fasilitas yang dapat mewadahi aktivitas kebudayaan tersebut yaitu dengan ruang pameran, ruang pameran kontemporer, ruang pembelajaran, dan sanggar seni.

b. Based on SDGs 8.3 dalam perancangan Pinisi Cultural Center diharapkan mampu menciptakan lapangan pekerjaan pada masyarakat lokal dan juga menyediakan ruang-ruang kreatif dan ruang kewirausahaan. Oleh karena itu maka perancangan Pinisi Cultural Center akan memfasilitasi dengan ruang kreatif dan area UMKM.

c. Based on SDGs 17.17 dalam perancangan Pinisi Cultural Center perlu menyediakan fasilitas yang mendukung kolaborasi pada perancangan tersebut, adapun ruang yang diperlukan adalah sanggar seni, ruang management, office, dan ruang kelas.

Diagram Analysis



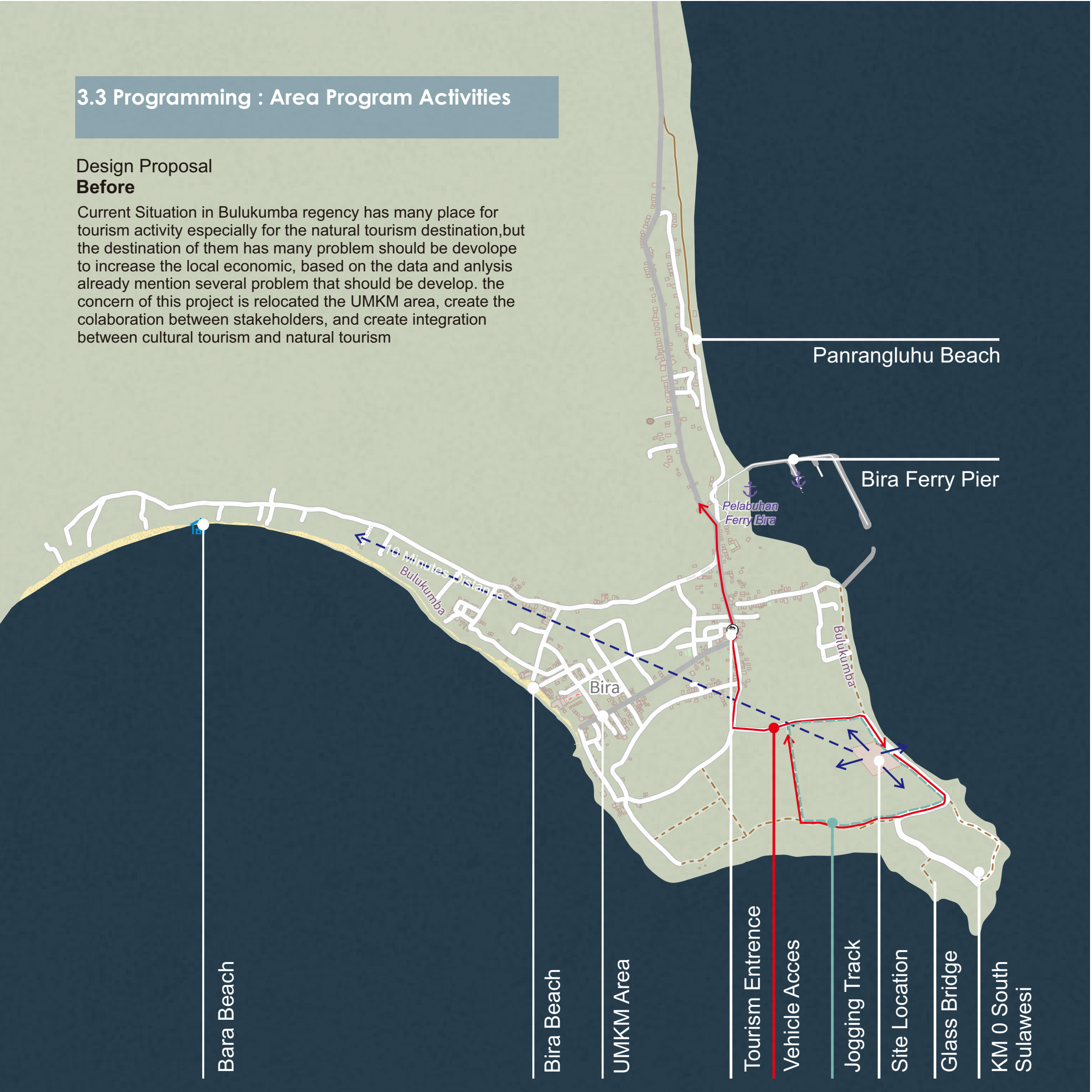
Collaboration in the context of the Cultural Center involving travel agency companies, tourism authorities, local communities, and pinisi ship construction entrepreneurs has an important role in developing and promoting cultural and tourism activities related to pinisi ships. The following is an explanation of this collaboration:

- 1. Travel Agency Company**
Travel agency companies can collaborate with the Cultural Center to develop tour packages that offer unique experiences related to pinisi ships. They can assist in marketing, selling, and promoting the tour packages to local and international tourists. This collaboration provides a double benefit, where the Cultural Center gets support to increase tourist visits, while travel agency companies can offer different and interesting tourism experiences.
- 2. Tourism Government**
Collaboration with the tourism government is essential in obtaining the necessary support, assistance, and resources for the development and promotion of the Cultural Center. The tourism government can provide information on relevant policies, regulations, and incentives. They can also assist in marketing and promoting the Cultural Center as an attractive tourist destination. This collaboration allows the Cultural Center to gain official support and access to resources that can enhance the success of tourism operations.
- 3. Local Communities**
Collaboration with local communities is key to maintaining cultural authenticity and enriching the visitor experience. Involving local communities in the Cultural Center can include participation in art performances, exhibitions, or other cultural activities. Local communities can also act as tour guides or managers of existing cultural heritage. This collaboration allows the Cultural Center to be an inclusive and sustainable place, where cultural activities involve active participation and local wisdom.
- 4. Pinisi Ship Construction Entrepreneur**
Collaboration with pinisi ship construction entrepreneurs has important value in maintaining and promoting the sustainability of the pinisi shipbuilding tradition. The Cultural Center can establish partnerships with pinisi ship construction entrepreneurs to showcase the pinisi shipbuilding process to visitors. They can also act as instructors for training activities or workshops related to pinisi shipbuilding. The design of the cultural center will facilitate space for the company as a marketing office and also a pinisi ship design studio office.

3.3 Programming : Area Program Activities

Design Proposal Before

Current Situation in Bulukumba regency has many place for tourism activity especially for the natural tourism destination, but the destination of them has many problem should be develop to increase the local economic, based on the data and anlysis already mention several problem that should be develop. the concern of this project is relocated the UMKM area, create the colaboration between stakeholders, and create integration between cultural tourism and natural tourism



Potential Activity Surrounding Of the Site Location

The planned Pinisi Center, which will be built in the tourist area of Bira Village, with a location at Teras Bira, has a variety of supporting activities that have been designed to provide a different and captivating experience for visitors. In the public space area of Teras Bira, visitors can enjoy a number of activities including skateboarding, taking pictures, conducting family gatherings, enjoying the beauty of sunset and sunrise, and using the area as a resting place for cyclists.

In an effort to provide entertainment and fun, Teras Bira provides skateboarding facilities so that skateboarding enthusiasts can enjoy a specially designed area for them at Teras Bira.

The public space area of Teras Bira is also an ideal place to take pictures. With stunning backdrops, such as the beautiful

panoramic ocean views, visitors can capture their precious moments in memorable photos. In addition, Teras Bira is also the perfect place for family gatherings. Visitors can gather with their family and friends, enjoy the relaxed atmosphere, and strengthen their family bonds in a beautiful and comfortable environment and of course, Teras Bira provides a sitting area. With a variety of activities available, the Pinisi Center Planning in the bira terrace area can be an exciting hub of activities and cater to the needs of various visitors. From entertainment and recreation, the desire to enjoy the beauty of nature and relax until they can gain new experiences and knowledge related to cultural wealth, especially one of the cultural heritages that has been recognized by UNESCO, namely the Pinisi Ship.



SITE LOCATION

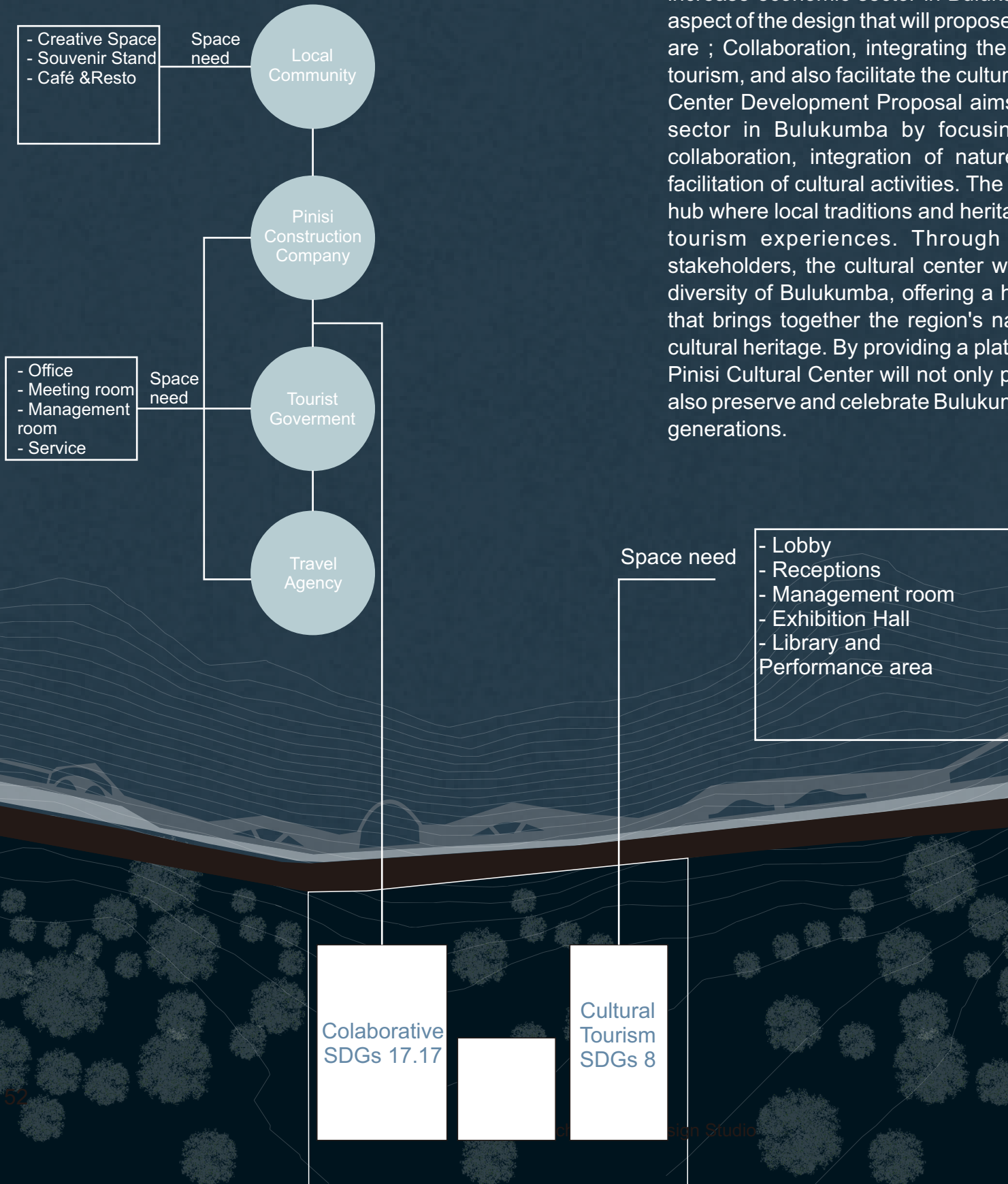
Bira Tourist Destination,

Kel. Tanah Lemo, Kecamatan Bontobahari,

Kabupaten Bulukumba,

South Sualawesi, Indonesia

3.3 Programming : Area Program Activities



3.3.4 Design Proposal After

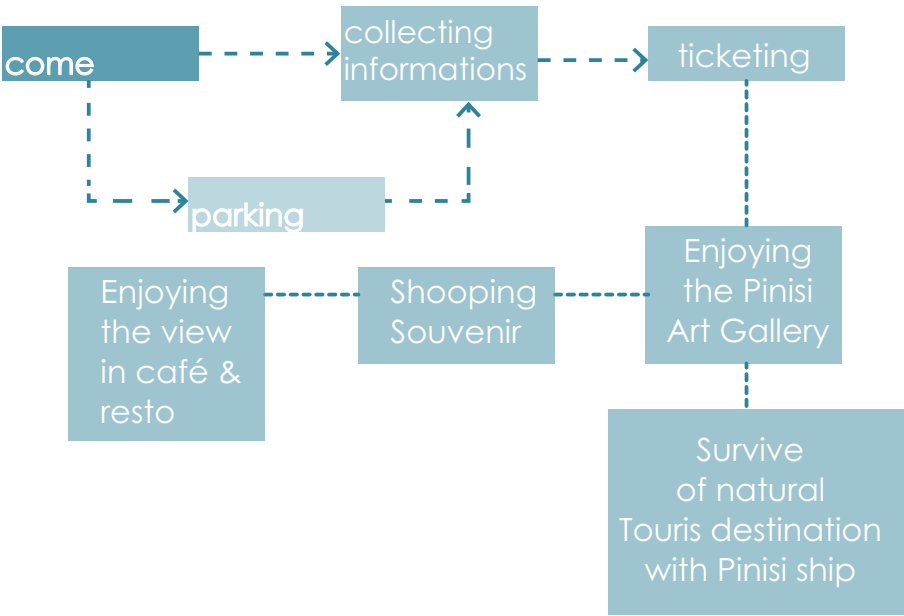
Based on the analysis to develop the Tourism sector, and to increase economic sector in Bulukumba tourist area there are 3 aspect of the design that will propose for this planning project there are ; Collaboration, integrating the natural tourism with cultural tourism, and also facilitate the cultural activity. The Pinisi Cultural Center Development Proposal aims to revolutionize the tourism sector in Bulukumba by focusing on three main aspects: collaboration, integration of nature and cultural tourism, and facilitation of cultural activities. The cultural center will serve as a hub where local traditions and heritage merge with contemporary tourism experiences. Through collaborative efforts with stakeholders, the cultural center will showcase the rich cultural diversity of Bulukumba, offering a holistic experience for visitors that brings together the region's natural beauty with its colorful cultural heritage. By providing a platform for cultural activities, the Pinisi Cultural Center will not only promote economic growth but also preserve and celebrate Bulukumba's unique identity for future generations.

3.4 Users Circulation

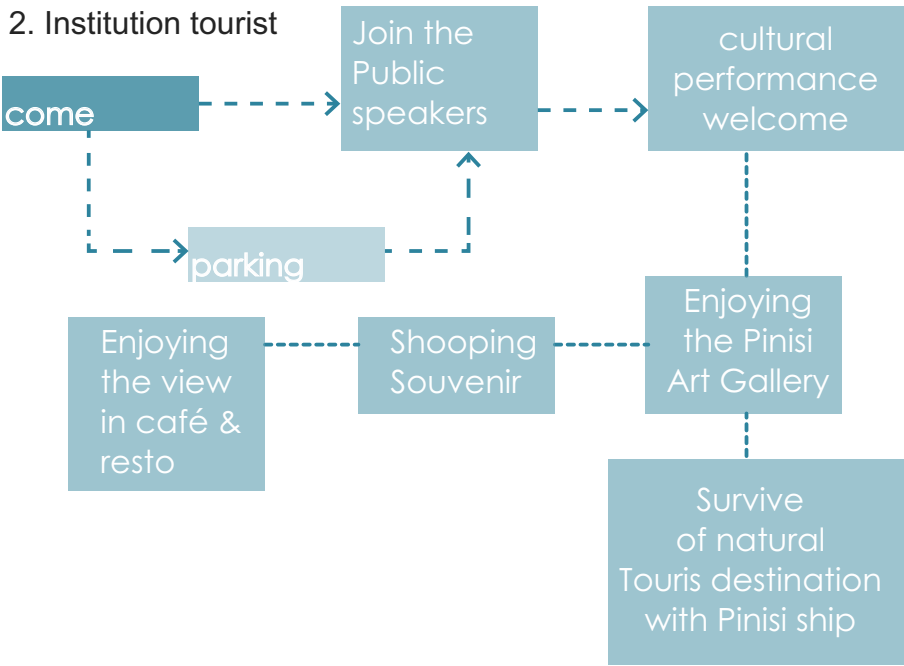
The function of space in the cultural gallery and collaborative will produce activities that are differentiated based on the role of the building users.

In the design of the building it will be devided into six building users, there are:

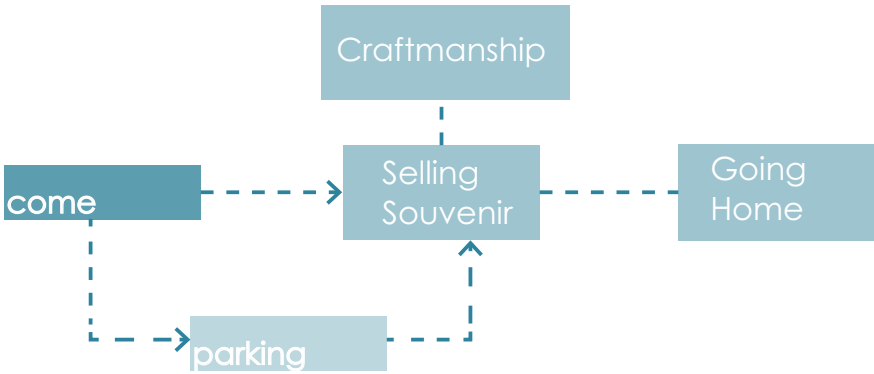
1. Local or international tourist



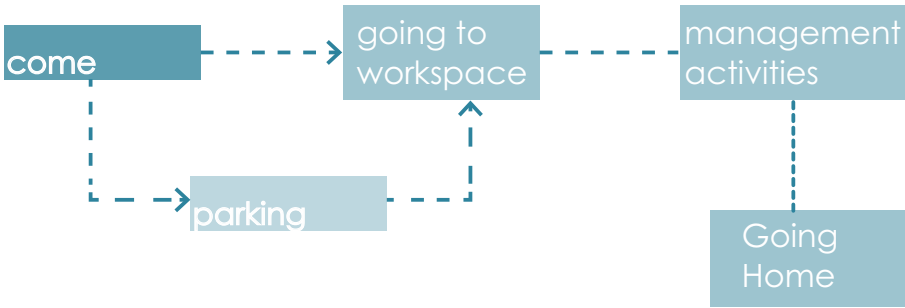
2. Institution tourist



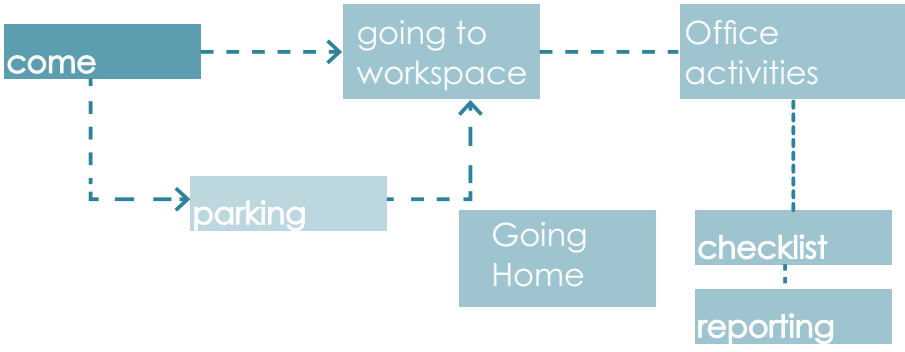
3. Local Community



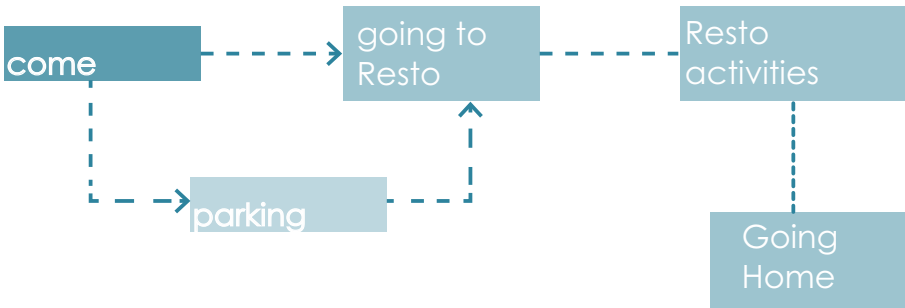
4. Management



5. Workers



6. Resto Management



Property Size

Type Space	Floor Function	Area	Total Area
Cultural	Pinisi Art Gallery	750 m2	2692 m2
	Temporary Exhibition	460 m2	
	Storage	35 m2	
	Management Room	50 m2	
	Tecketing and Lobby	190 m2	
	Information desk	24 m2	
	Atrium	170 m2	
	Art Studio	613 m2	
	Office	300 m2	
	Meeting Room	100 m2	

Type Space	Floor Function	Area	Total Area
Colaborative	UMKM area and souvenir shop	780 m2	3690
	Creative Space	520 m2	
	Resto Area	680 m2	
	Kitchen	100 m2	
	Pinisi Classroom	540 m2	
	Rental Office	1070 m2	

Type Space	Floor Function	Area	Total Area
Central of Building	Lobby	435 m2	753
	Information Desk	24 m2	
	Atrium	170 m2	
	Library	124 m2	

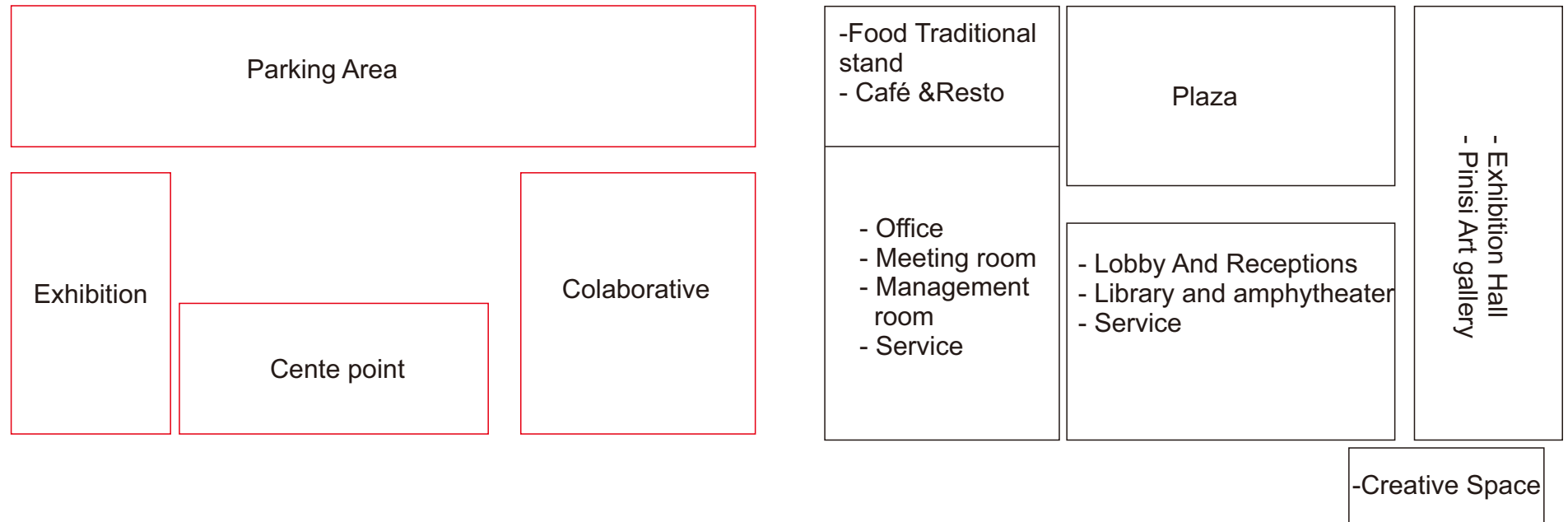
Type Space	Floor Function	Area	Number of spaces	Total Area
Service	Lift Priority	2.5 m2	1	2.5 m2
	Toilet	37 m2	5	185 m2
	ME Room	100 m2	1	100 m2
	AHU room	100 m2	1	100 m2

Type Space	Floor Function	Capacity	Standart	Source	Total Area
Land	Motorcycle Parking	120	2,25 m2	NAD	270 m2
	Car Parking	60	12,5 m2	NAD	750 m2
	Bus Parking	2	68 m2	NAD	136 m2
	Hardscape				3327 m2
	Softscape				2000 m2

Type Space	Total Area	Grand Total
Colaborative	3690	14.005, 5 m2
Cultural	2692	
Central Of Building	753	
Service	387,5	
Land	6483	

Space Needed

After devided the activity of the building user, so that its need to facilitate with the room programming that customized with the activity of the building users.



The spatial arrangement in the Cultural Center has several important functions that contribute to the objectives and activities of the cultural center. Here are some of the functions of the space arrangement within the Cultural Center:

Art Exhibition and Showcase: Exhibition spaces are used to display art collections, cultural artifacts, and local and international artworks. The function of this space is to visually present cultural works and provide an aesthetic experience to visitors. A good arrangement in the exhibition space will allow the artworks to be presented effectively, including proper lighting, an attractive layout, and enough space for visitors to walk around and appreciate the artworks.

Performances and Theater: Cultural Centers often host performances of art, theater, music,

dance, and more. The performance space is designed to facilitate the performance and the audience with good acoustics, proper stage lighting, and a layout that allows the audience to see the performance clearly. The function of this space is to create an engaging experience and integrate visitors with the performing arts.

Creative space: This space is used to hold pinisi boat construction waste workshops for the local community for both young people and housewives.

Community Room: This space is specifically designed as a facility that encourages cooperation and collaboration at the Cultural Center. It is a place where members of the community, be it artists, culturists, local entrepreneurs, or the general public, can gather to share ideas, experiences, and collaborate on diverse cultural projects.

With a comfortable and inclusive design,

this community space creates a welcoming and open atmosphere, inviting active participation and productive interaction. The facilities provided in this space, such as work desks, discussion rooms, internet access, and presentation equipment, can support various collaborative activities and facilitate the creative exchange of ideas.

Administration and Organizing Space: The Cultural Center also requires administration and organization space to manage its daily operations and activities. This space is used for administrative activities, event coordination, collection storage, and other organizational needs. The function of this space is to facilitate efficient management and stewardship of the Cultural Center.

Design Concept Exploration



Picture 3. Ritual Annatta
Source: Merdeka.com

Theory

After obtaining the building functions required in the Pinisi Cultural Center planning design, it is necessary to change the mass and space arrangement that considers the convenience of accessibility and also emphasizes the principle of critical regionalism approach by applying the value of the pinisi ship tradition.

Regionalisme Kritis adalah sebuah konsep dalam arsitektur yang pertama kali diusulkan oleh Alexander Tzonis dan Lionel Lefaire pada tahun 1980-an, dan kemudian diadopsi oleh Kenneth Frampton sebagai bentuk perlawanan terhadap perkembangan arsitektur pada masa itu. Pendekatan ini bertujuan untuk mencapai keseimbangan antara ide-ide desain universal dan penggunaan elemen-elemen khas dari suatu wilayah tertentu. Regionalisme Kritis mengakui dan menghormati keunikan budaya, iklim, dan konteks sosial suatu daerah dalam proses desain arsitektur. Dengan

menggabungkan elemen-elemen lokal dengan elemen-elemen universal, pendekatan ini menciptakan karya arsitektur yang bukan hanya berfungsi secara praktis, tetapi juga memiliki hubungan yang kuat dengan identitas budaya dan lingkungan sekitarnya. Regionalisme Kritis berupaya menghindari homogenisasi dan standarisasi dalam arsitektur modern, serta menciptakan karya yang memperkuat ikatan budaya dan memberikan pengalaman otentik bagi pengguna dan masyarakat. Pendekatan ini mempromosikan keragaman, keberlanjutan, dan penghargaan terhadap keunikan setiap daerah, sambil tetap mempertimbangkan aspirasi global dalam arsitektur kontemporer.

Data

Bulukumba regency has one of the famous rich culture there is Pinisi Ship, This culture can be used for inspiration to develop with the critical regionalism Approach.



Picture 3. Ritual Annyorong lopi
Source: Merdeka.com

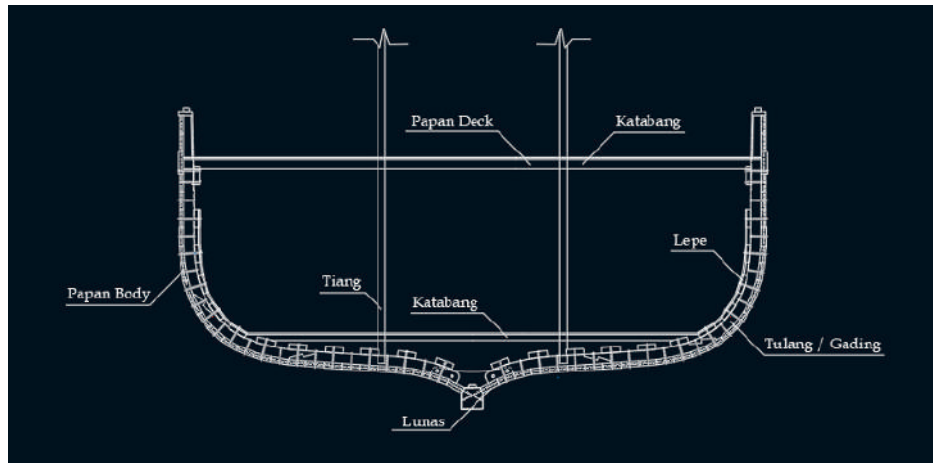
Ritual Tradition

In the process of making a pinisi ship, there are 3 phases that become a tradition inherent in the *Panrita lopi* (Pinisi shipbuilders).

The initial phase in the tradition of pinisi ship construction is anntta', namely connecting the keel which symbolizes the "meeting" of father and mother as the creation of a fetus which will then be processed into a baby in the form of a boat.

The second ceremony in the process of making a boat is ammosi, this ceremony is a symbol of the birth of the baby (boat) after processing for several months since the formation of the boat fetus at the annattara ceremony. then the annyorong lopi ritual is carried out which means the boat is pushed, this ritual is carried out to introduce the boat to the open sea accompanied by the surrounding community.

3.7 Design Concept Exploration



Picture 3. Section of Pinisi ship hull
Source: Merdeka.com



Picture 3. Detail Joint
Source: Merdeka.com



Picture 3. Detail Joint
Source: Merdeka.com



Picture 3. Detail Joint
Source: Merdeka.com

Pinisi Construction Value

The values of ship construction are found in the body of the ship including:

1. Kalabiseng/Lunas

The initial process in the construction of the Pinisi ship begins with the installation of the keel, in starting it there is a tradition that is still maintained today, namely the annatta ritual / in Indonesian, soft cutting at the end of the keel, in building construction the annatta ritual is the same as laying the first stone. (H.Abdullah, 2024)

2. Linggi haluan dan linggi buritan

Linggi is a ship construction that is in the bow and stern with an upright position, the function of the height as the height of the bow pole and the

attachment point of the body skin board connection at the bow and stern.

3. Tiang boss

This construction is under the stern height and above the keel, its function is as a hole for the exit of the propeller shaft.

4. Gading/tulangan

This construction is a hull reinforcement using curved wood, then the distance between each ivory is about 30-45 cm, starting from the stern to the bow of the ship.

5. Lepe/balok memanjang

This construction functions as a component of the longitudinal strength of the ship inside the hull.

6. Kalang/katabang

Kalang is another term for a transverse beam that functions as a deck board holder.

7. Tiang/benteng

This pole serves as a pillar in determining the rooms in the hull of the middle part of the ship. This pole is also a component for attaching bulkhead boards.

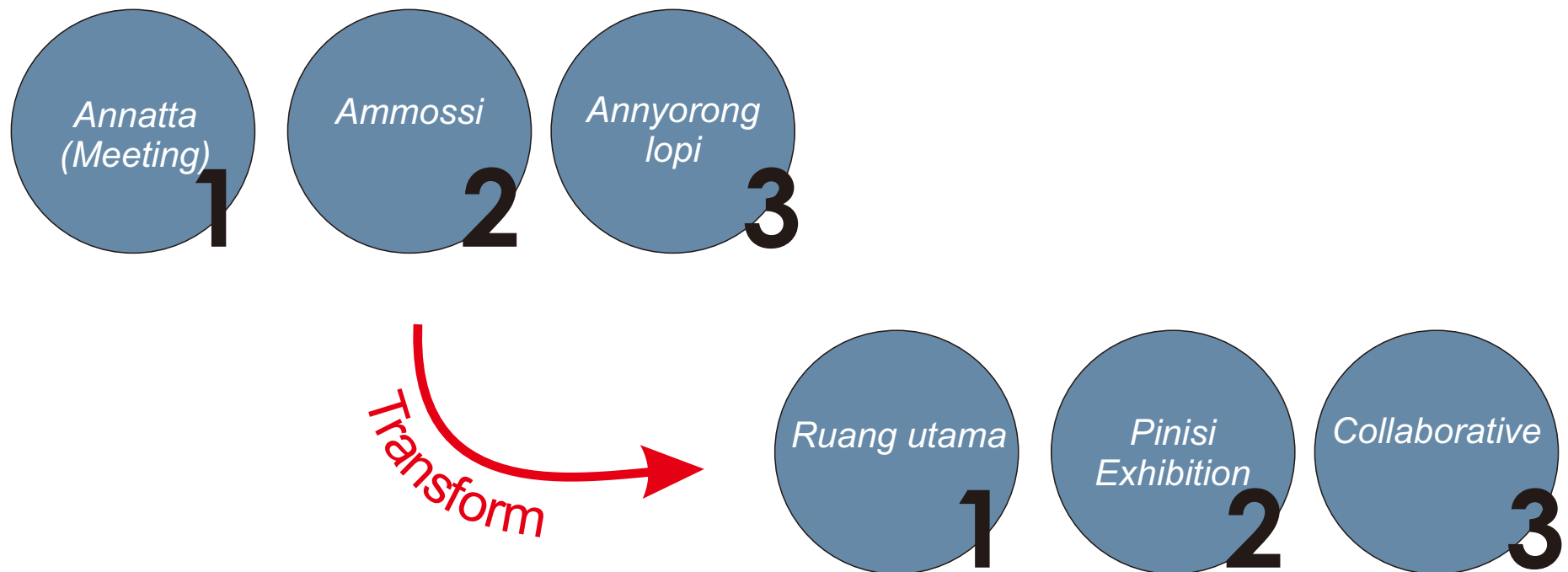
In the construction of pinisi ships there are also 3 types of connections used in assembling the construction of pinisi ships, namely:

1. Sambungan hangga
2. Sambungane berkait
3. Sambungan bibir miring

Analysis

Ritual tradition Transformation

Based on the data explanation about the traditon aspect in bulukumba regency. it can be as the inspiration to findings of the building mass based on the phylosphy of the tradition of Pinisi ritual tradition. the tradition will explained with the diagram of tradition phase and transform in to seperated building function.



from the tradition it can take it the keywords on every phase of ritual tradition, from Annatta phase take the keywords of meeting, ammosi the result of process, and annyorong lopi is the introduction. from this phase trying to transform into the building function.

Annatta (meeting) it will transform as a function of the meeting between visitors and the management of the cultural center.

ammosi (result of process) it will transform as the space for introducing of the pinisi tradition, starting from the historical untill the process of the construction.

annyorong lopi (introduce to the ocean)

it will transform as the colaborative space.

Dari diagram diatas dapat diberikan kesimpulan bahwa dalam proses penentuan ruang dalam rancangan mengacu pada fase ritual pembangunan kapal pinis mulai dari fase awal yang memiliki arti dari pertemuan antar ayah dan ibu yang ditansformasikan kedalam ruang utama sebagai pertemuan antara pengunjung dan pengelola sehingga memunculkan interaksi sehingga dapat memberikan ketertarikan kepada pengunjung terhadap budaya kapal pinisi. kemudian dalam fase yang kedua memiliki arti yaitu proses pembuatan

kapal pinisi yang kemudian ditransformasikan kedalam ruang pameran kapal pinisi yang bertujuan untuk menciptakan interaksi antara pengunjung dengan history kapal pinisi sampai dengan proses konstruksi kapal pinisi. kemudaian yang terkahir adalah fase annyorong lopi yang bermakna pengenalan kapal pinisi kepada lautan setelah melalui dua fase sebelumnya, kemudian ditransformasikan menjadi ruang kolaborative yang bermakna bahawa budaya kapal pinisi mulau dikembangkan dan diperkenalkan kepada beberapa stakeholder.

Design Concept Exploration

Analysis

Problem

Project Pinisi Cultural center is one of the planning of Rencana kerja pembangunan daerah (RKPD) Bulukumba regency.

According to the RKPD of Bulukumba Regency in 2024 in the Tourism sector, Bulukumba Regency wants to make Bulukumba Regency a leading tourist destination in South Sulawesi. Some of the proposed problems that are proposed as priorities are:

1. **Development of tourism facilities** and infrastructure
2. Development of Tourism Promotion, **Development of Cultural and Tourism Events.**
3. Development of Sports Facilities and Infrastructure.

Therefore one of the problems in Bulukumba Regency is the lack of cultural tourism activity spaces that can integrate and promote the cultural heritage of the pinisi ship.

Design Method

Dalam perancangan cultural center terdapat beberapa metode yang digunakan yaitu prinsip **TRIZ** dan prinsip **IF, THEN, BUT.**

TRIZ

Metode triz memiliki 2 fitur yaitu feature to improve and feature to preserve, kedua fitur ini memiliki 39 bagian pokok yang dapat digunakan sesuai dengan kebutuhan dalam memecahkan permasalahan.

IF, THEN, BUT.

Prinsip "if, then, but" adalah konsep yang digunakan dalam berbagai konteks untuk merencanakan tindakan atau skenario alternatif berdasarkan kondisi tertentu. Prinsip ini membantu dalam merencanakan langkah-langkah yang sesuai berdasarkan kondisi yang mungkin terjadi. Berikut adalah penjelasan singkat tentang prinsip "if, then, but":

If: Ini mengacu pada kondisi awal atau situasi yang harus dipertimbangkan.

Then: Ini adalah tindakan atau langkah yang akan diambil jika kondisi awal atau "if" terpenuhi. Ini adalah hasil yang diharapkan dari kondisi tersebut.

But: Ini mengacu pada apa yang mungkin terjadi jika kondisi awal tidak terpenuhi atau jika ada perubahan dalam situasi yang mengarah pada hasil yang berbeda.

Dengan menggunakan prinsip **TRIZ** dan prinsip **IF, THEN, BUT** dapat membantu dalam merancang solusi yang lebih efektif.

IF

Jika nilai tradisi proses pembuatan kapal pinisi dijadikan sebagai salah satu penerapan dalam pendekatan critical regionalisme.

THEN

Maka dapat memperkuat identitas budaya lokal dan mempertahankan keberlanjutan warisan budaya kapal Pinisi.

BUT

Tetapi penekanan pada aspek modern dapat menggeser fokus dari nilai-nilai tradisional yang ada dalam proses perancangan Cultural center. Hal ini dapat mengakibatkan hilangnya beberapa elemen budaya lokal dalam upaya untuk mencapai kesesuaian dengan pendekatan critical regionalisme yang lebih modern.

TRIZ

Solving a problem

1: Describe your problem as a Contradiction →

(i.e. you want to improve the 'Feature to improve' ↑ without damaging the 'Feature to preserve' ⚠)

Contradiction to solve

↑

23: Loss of substance

⚠

10: Force (Intensity)

2: Browse the TRIZ Matrix

Contradiction to Solve		Proposal of Principles to Solve
Feature to improve	23.Loss of Substance	14. Spheroidality- Curvature
		15. Dinamics
Feature to Preserve	10. Intensity	40. composite material

To solve contradictions in the design design, using features in the TRIZ principle.
In this principle, there are 2 features, namely feature to improve and feature to preserve.

In the context of designing a Cultural Center with a contradiction between the application of the Critical Regionalism approach that emphasizes modern aspects and the risk of shifting the focus from traditional values, the selection of “Loss of Substance” in the “Feature to Improve” section in TRIZ shows awareness of the potential loss of valuable local cultural elements in an effort to achieve compatibility with a more modern approach.

The selection of “Loss of Substance” as a feature to improve shows that the importance and strengthening of fundamental local cultural elements in the design of the Cultural Center

despite applying a modern concept.

The selection of “intensity” in the “Feature to Preserve” section is to maintain the strength and intensity of the local cultural aspects that are important to the identity and values of the community in the Cultural Center design. This makes it possible to maintain a connection with the existing cultural heritage while opening up space for innovation and development in architectural design.

The TRIZ Matrix proposes the following Principles to solve the contradiction with the points 14. Spheroidality- Curvature, 15. Dynamics, 40. composite material.

Design Concept Exploration

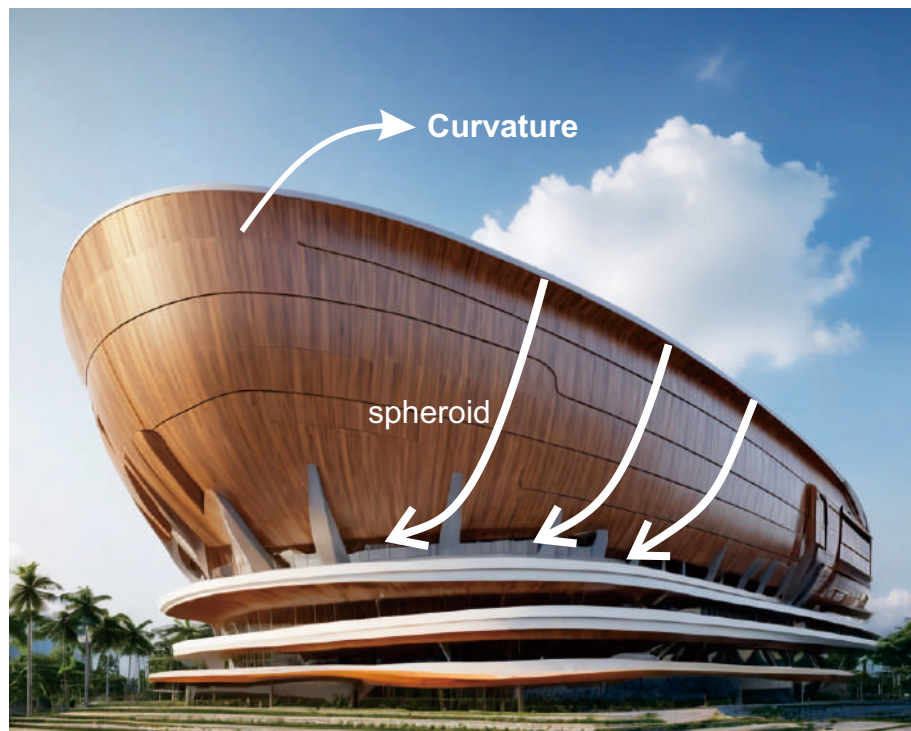
Analysis

TRIZ

14. Spheroidality- Curvature

The principle of spheroidality-curvature refers to the idea of altering or utilizing elements that involve spheroidal or curved shapes in the exterior and interior design of buildings. For example, curved building roofs or building facades that adopt spheroidal shapes can provide an interesting and unique aesthetic.

To illustrate the design recommended by the spheroidality-curvature principle, it is necessary to use AI (Artificial Intelligence) as a tool in visualizing the principle.



This design shows how modern values are applied while still applying the traditional values of the Pinisi ship as inspiration for the design of the cultural center.

Prompt: Give the cultural center design inspired by the hull of the Indonesian Pinisi ship whose curved roof or building facade that adopts a spheroid shape can provide an interesting and unique aesthetic.

15. Dynamics

The “Dynamics” principle in TRIZ can help in overcoming the contradiction between modernity and tradition in the design of the Cultural Center by considering aspects of dynamics and changes that occur in a complex environment and society. By applying this principle, it can develop sustainable and adaptive solutions to achieve a balance between modern innovation and the sustainability of traditional cultural values.



The building demonstrates how architecture can evolve to accommodate the changes and needs of modern society, while still respecting and maintaining traditional cultural values. Its design, which resembles natural forms, such as ships or organic structures, reflects an attempt to harmonize modern innovation with natural elements and local culture.

Prompt: Provide the design that shows the evolution of the Cultural Center design from the past to the future, highlighting how a dynamic approach can help in maintaining cultural values while innovating and the inspiration by the shape of the hull of the Pinisi Ship Indonesia.

Design Concept Exploration

40. Composite material

The Composite material principle refers to the need to use material innovation in the design of the Cultural Center to overcome the contradiction between tradition and modernity. In this case, materials can represent values or elements that build a strong cultural identity.



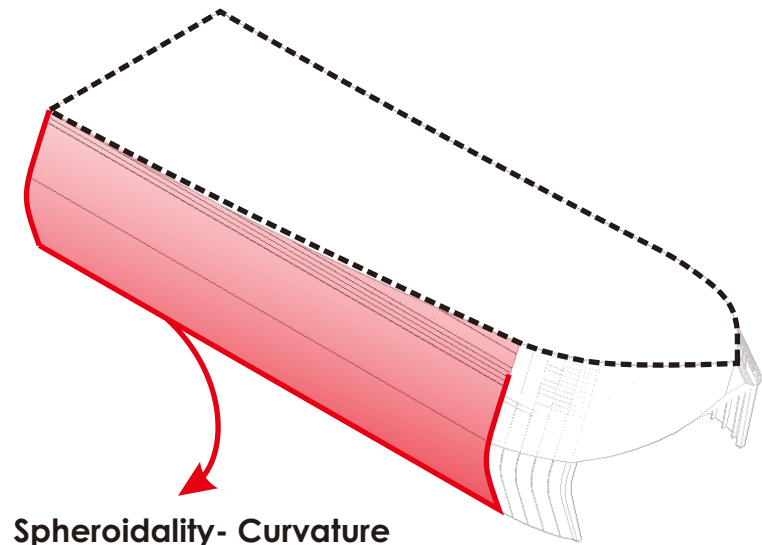
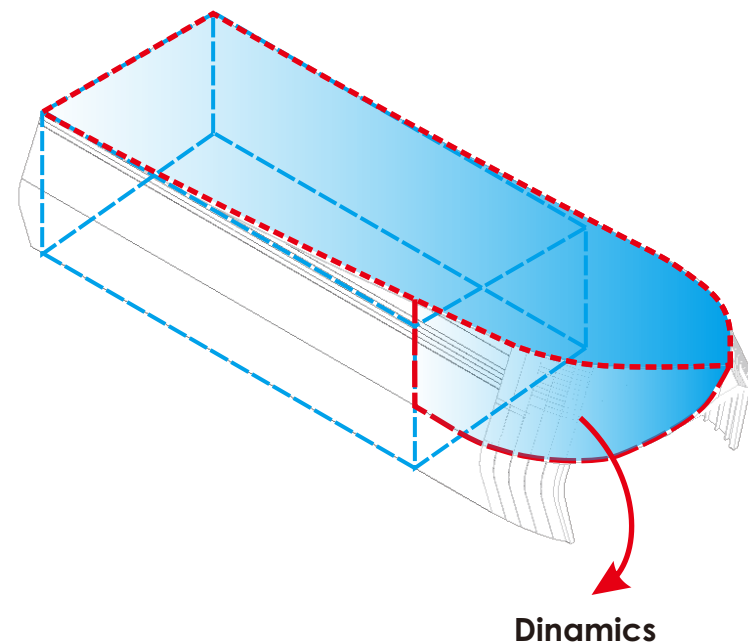
This building shows the use of composite materials as a representation of traditional values in the design.

Prompt : Provide the design that shows the evolution of the Cultural Center design from the past to the future, highlighting how a dynamic approach can help in maintaining cultural values while innovating and the inspiration by the shape of hull of the Pinisi Ship Indonesia.

Design Concept

Composite material

Rekomendasi dari prinsip “40 Composite material dalam penyelesaian kontradiksi yaitu dengan menerapkan material komposit dalam merepresentasikan nilai nilai budaya pada perancangan cultural center.



Design Concept Exploration

Analysis

The operation involved may be explained by the following propositions:

Housing	House	:	Window	:	Wall	: etc.
Code:	Inhabit		Passage of Light		Boundary, Protection, etc.	

Liner	Boat	:	Window	:	Decks	: etc.
Code:	Sail + Inhabit + Movement + Technology		Passage of Light + View + Seat + Sun		Promenade	

Meta-	House					
phor:	Window	$\times$	Liner Window	=	House Window	
	Liner		Light + View		Light + View +	
	Window		Movement +		Movement +	
			Technology + ...		Technology + ...	

Pinisi ship construction inspired the buildings

To applying the pinisi ship construction value as the critical regionalisme approach it can use of the theory of metaphore in design process.

Based on the explanation in journal of design versus non design by Diana Agrest, provides a formulation for applying the metaphorical design process.

Formulasi tersebut menunjukkan cara menghubungkan elemen-elemen dari dua konteks yang berbeda, yaitu perumahan dan kapal, menggunakan jendela sebagai metafora. Pada konteks perumahan, jendela berfungsi sebagai tempat lewatnya cahaya dan memberikan pandangan ke luar, serta berperan dalam melindungi dan memberikan batasan pada rumah. Sementara itu, pada konteks kapal, jendela tidak hanya berfungsi untuk memberikan cahaya dan pergerakan pandangan, tetapi juga memiliki karakteristik tambahan seperti teknologi, serta tempat duduk yang nyaman dan akses ke sinar matahari. Dengan

demikian, jendela pada kedua konteks tersebut memiliki fungsi dasar yang serupa, namun terdapat variasi dan tambahan fungsi pada jendela kapal.

Inti dari formula ini adalah untuk menunjukkan bagaimana elemen-elemen dari satu konteks dapat diterapkan atau digabungkan dengan elemen-elemen dari konteks lain untuk menciptakan desain atau pemahaman yang baru. Metafora jendela membantu dalam melihat keterkaitan dan interaksi antara perumahan dan kapal, menggabungkan karakteristik seperti cahaya, pandangan, teknologi, dan pergerakan. Dengan memahami dan memanfaatkan kesamaan dan perbedaan ini, kita dapat menciptakan solusi desain yang inovatif dan lebih fungsional, menggabungkan yang terbaik dari kedua dunia.

Design Concept Exploration

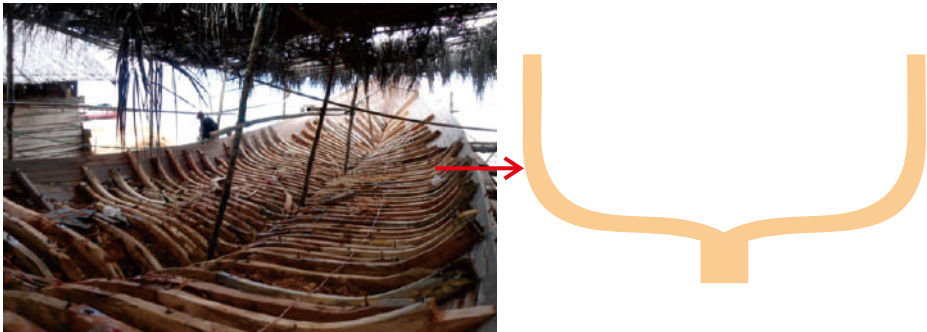
Design Concept

Based on metaphor theory, metaphor can be one of the formulas that can be used by using elements from different contexts. Therefore, the design of the Pinisi cultural center will be conveyed with 2 different codes to create a new concept design. The operation involved may be explained by the following propositions :

Cultural center code / Variable :	<u>Cultural center</u> Gather	▪ <u>Column</u> ▪ <u>Structural Support</u> Repetition
Pinisi Ship code/Variable :	<u>Boat</u> Sail Inhabit Movement Technology	▪ <u>Column / Gading-Gading</u> ▪ <u>Curvy Shape</u> Repetition
Metaphore:	<u>Cultural center</u> Column Gading-Gading	X <u>Gading-Gading</u> Curvy Repetition
	=	<u>Cultural center</u> Column Curvy Shape Repetition

Based on the analysis to find the code or Variable of metaphoric design process, in this analysis do it metaphoric of the column in cltural center wit the context of Pinisi Ship and the findings is the column of the cultural center has 2 Variable there are Curvy Shape, and Repetition.

1.Curvy Variable



2.Repetition Variable



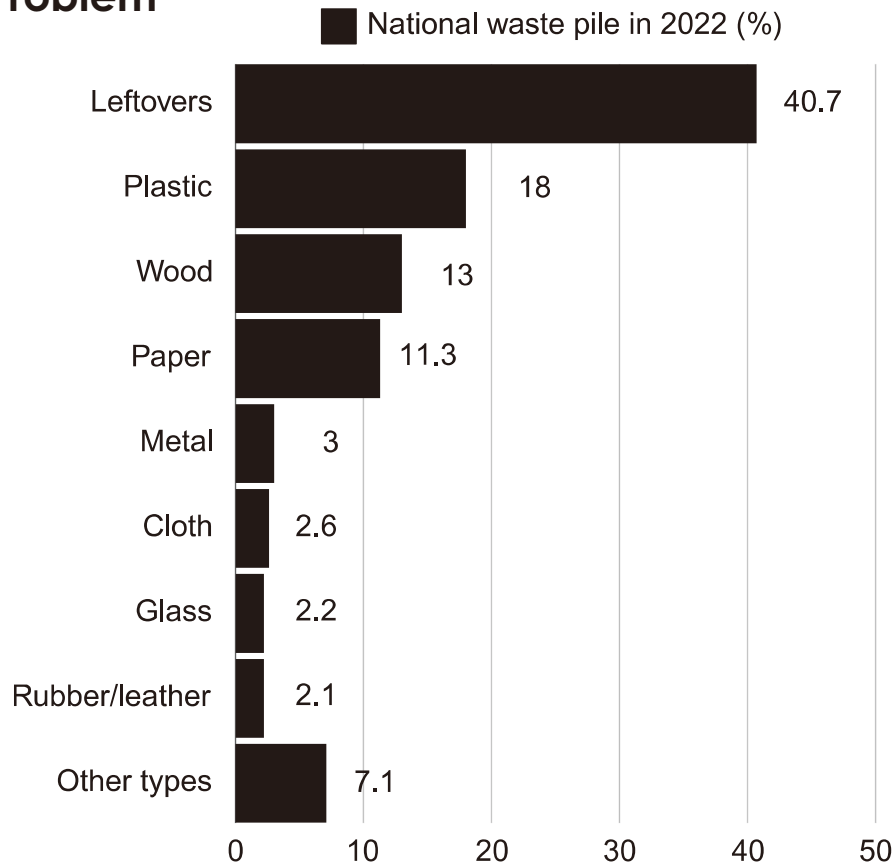
In Pinisi Ship Construction has value of the gading gading, that has unique value of the construction they make it with the repitiion wooden beams as the connection with the hull board. Thus creating space on the hull of the pinisi ship.

In the design process of the building columns, the variable concept of repetition inspired by the Pinisi ship is carefully integrated to create an atmosphere that depicts the space inside the hull of the ship. The use of these repetition values not only enhances the aesthetics of the building, but also provides a unique and impressive visual dimension for the visitors or occupants of the building. Thus, the columns designed with this concept not only function as a supporting structure, but also create an atmosphere that depicts the space inside the hull of the ship.

Design Concept Exploration

Analysis

Problem



<https://databoks.katadata.co.id>

According to data from the National Waste Management Information System (SIPSN) of the Ministry of Environment and Forestry (KLHK), Indonesia produced 35.83 million tons of waste throughout 2022.

Of the total national waste generation in 2022, 22.44 million tonnes or 62.63% of which has been managed, while 13.39 million tonnes or 37.37% has not been managed, including wood waste.

In terms of type, wood waste is in third place, here are the data; food waste with a proportion of 40.7%, then plastic waste 18%, wood/twigs 13%, paper/cardboard 11.3%, metal 3%, cloth 2.6%, glass 2.2%, rubber/leather 2.1%, and other types of waste 7.1%.

Contextual Problem



Woodwaste is one of the problems faced in the current era because it has an environmental impact, especially on the coastal area of the pinisi ship construction, therefore efforts are needed to reduce this waste. one of the efforts that can be applied is to make new innovations that can have an impact on improving the local economy of the community and also be able to open up sustainable jobs.

Jika limbah konstruksi kapal pinisi digunakan untuk fasad bangunan cultural center

IF

Maka akan memberikan partisipasi dalam mengurangi limbah kayu pada pesisir pantai area industri pembuatan kapal pinisi

THEN

Penggunaan limbah kayu pada fasad bangunan akan memerlukan perawatan ekstra dan biaya tambahan untuk memastikan keawetan dan penampilan yang tetap menarik dari waktu ke waktu.

BUT

TRIZ

Solving a problem

1: Describe your problem as a Contradiction ➔

(i.e. you want to improve the 'Feature to improve' ⬆ without damaging the 'Feature to preserve' ⚠)

Contradiction to solve

⬆

16: Durability of non moving obj.

⚠

27: Reliability

2: Browse the TRIZ Matrix

Principles

⬆ Feature to improve = 16: Durability of non moving obj.

⚠ Feature to preserve = 27: Reliability

The TRIZ Matrix proposes the following Principles to solve this contradiction:

34 Discarding and recovering

Make portions of an object that have fulfilled their functions go away (discard by dissolving, evaporating, etc.) or modify these directly during operation.

- Use a dissolving capsule for medicine
- Sprinkle water on cornstarch-based packaging and watch it reduce its volume by more than 1000X!
- Ice structures: use water ice or carbon dioxide (dry ice) to make a template for a rammed earth structure, such as a temporary dam. Fill with earth, then, let the ice melt or sublime to leave the final structure.

Conversely, restore consumable parts of an object directly in operation.

- Self-sharpening lawn mower blades
- Automobile engines that give themselves a "tune up" while running (the ones that say "100,000 miles between tune ups")

27 Cheap short-living objects

Replace an inexpensive object with a multiple of inexpensive objects, comprising certain qualities (such as service life, for instance).

- Use disposable paper objects to avoid the cost of cleaning and storing durable objects. Plastic cups in motels, disposable diapers, many kinds of medical supplies.

6 Universality

Make a part or object perform multiple functions; eliminate the need for other parts.

- Handle of a toothbrush contains toothpaste
- Child's car safety seat converts to a stroller
- Mulching lawnmower (Yes, it demonstrates both Principles 5 and 6, Merging and Universality)
- Team leader acts as recorder and timekeeper
- CCD (Charge-coupled device) with micro-kisses formed on the surface

40 Composite materials

Change from uniform to composites (multiple) materials.

- Composite epoxy resin/carbon fiber golf club shafts are lighter, stronger, and more flexible than metal. Same for airplane parts
- Fiberglass surfboards are lighter and more controllable and easier to form into a variety of shapes than wooden ones.

Contradiction to Solve		Proposal of Principles to Solve
Feature to improve	16. Durability of non moving object	34. Discarding and Recovering
		27. Cheap short living object
Feature to Preserve	27. Reliability	6. Universality
		40. Composite Material

To solve contradictions in the design design, using features in the TRIZ principle. In this principle there are 2 features, namely feature to improve and feature to preserve.

In the application of pinisi ship construction wood waste in cultural center buildings, it can participate in minimizing the environmental impact caused by wood waste, but the contradiction in its application is how the material can be preserved over time. The selection of “Durability of non moving objects” in the “Feature to Improve” section in TRIZ shows how the application of wood waste in buildings can be maintained.

The selection of “Reliability” in the “Feature to Preserve” section is to maintain the sustainability of the woodwaste material. The TRIZ Matrix proposes the following Principles to solve the contradiction with the points 34. Discarding and Recovering, 27. Cheap short living object, 6. Universality and 40. composite material.

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PINISI CULTURAL CENTER
BULUKUMBA REGENCY

Design Concept Exploration

Analysis TRIZ

34. Discarding and Recovering

Discarding and Recovering principle refers to the idea of recovering or engineering wood waste used for building facades with methods that increase durability and reliability, thus minimizing the need for extra maintenance in the future.

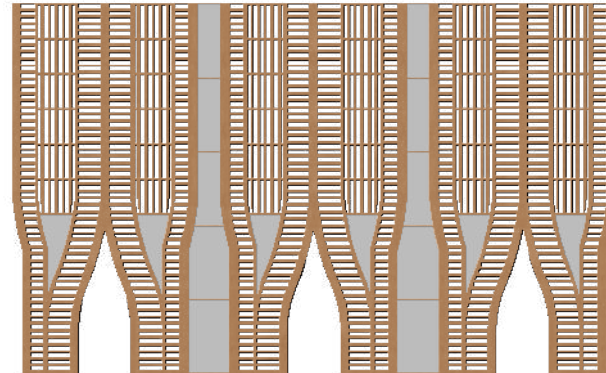
To illustrate the design recommended by the Discarding and Recovering principle, it is necessary to use AI (Artificial Intelligence) as a tool in visualizing the principle.



The picture above shows an interesting innovation in the use of wood waste in building facades, where unused pieces of wood are processed in a creative and abstract way. Through this approach, not only is a unique and artistic facade created, but it also provides a new take on the concepts of sustainability and creativity in architectural design. By utilizing wood waste to create aesthetic compositions, the image illustrates how discarded materials can be transformed into works of art that captivate, inspire and add value to the built environment.

Prompt : give the implimentation of wood waste for the facade
Cultural center.

Design Concept



The sewage treatment design has several considerations that are applied, namely:

1. Pattern and Structure:

- The wooden pieces are arranged in a repetitive and symmetrical pattern.
- This pattern consists of vertical and horizontal lines that form a grid, providing interesting textures and aesthetics.

2. Composition:

- Each wooden element is arranged in a way that creates a consistent and organized form.
- The pieces of wood appear to be arranged in neat rows with little space in between, allowing light to enter through the gaps.

3. Function and Aesthetics:

- In addition to serving as an aesthetic element that enhances the facade of the building, this arrangement of wood also has the potential to improve air circulation and natural lighting in the building.

- Designs like this reuse wood waste, demonstrating a sustainable and eco-friendly approach to architecture.

4. Use of Waste Materials:

- The use of wood waste in this facade emphasizes the importance of recycling and waste management in the construction industry.
 - By processing wood waste into decorative elements, this design reduces the amount of waste disposed of and adds value to a material that was previously considered useless.
- Overall, this design reflects an innovation in architectural design that combines aesthetics with sustainability, utilizing wood waste to create an attractive and functional building facade.

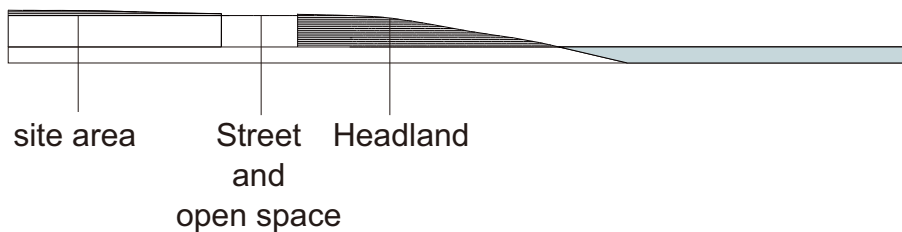
Skin of pinisi construction implement to Architecture secondary skin with wood waste material



The arrangement of planks in the construction of a pinisi ship provides a unique inspiration in creating the cultural center building envelope. This construction not only serves as a visually appealing architectural element, but also plays an important role in properly organizing room lighting. Just like on a pinisi ship, the plank arrangement on the building envelope can function as an effective sun shading, allowing

controlled sunlight to enter the room. Thus, the interior of the cultural center remains bright and comfortable, while maintaining a balance between natural lighting and protection against excessive sunlight.

Site Development



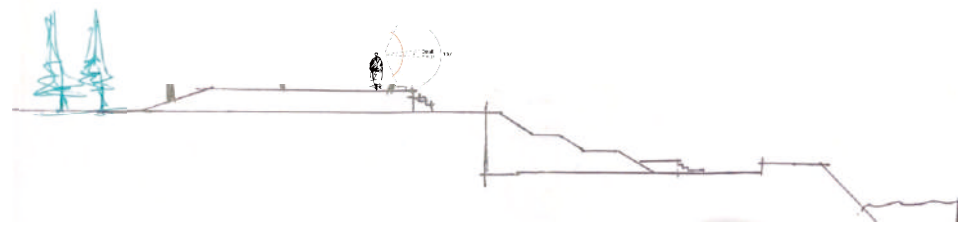
The site area has a land contour that is not steep but still has a difference in elevation levels because it is located in the coastal cape area, the steep contour is located on the lip of the cliff connected to the ocean. This contour data is created using the sketchup application using geo location media and detected in 3d dimensions then traced to become a complete contour, in the modeling section with a height interval of 1 m from each elevation line.

After obtaining the land contour data, then consider several aspects in maximizing the existing contour elevation on the site. as for some of these aspects as follows.

Keep the elevation contour

Dengan adanya elevasi kontur yang alami akan mempermudah pengaturan tata massa bangunan seperti elevasi tertinggi pada site dapat memperoleh ketinggian bangunan secara alami sehingga dapat memaksimalkan view ke lautan.

Optimize the ocean view



To optimize the view towards the ocean, a higher elevation from the road is needed so that tourists can clearly see the beach view. In addition, the design concept will also be made more open, both in organizing the orientation of the building and in the use of architectural elements.

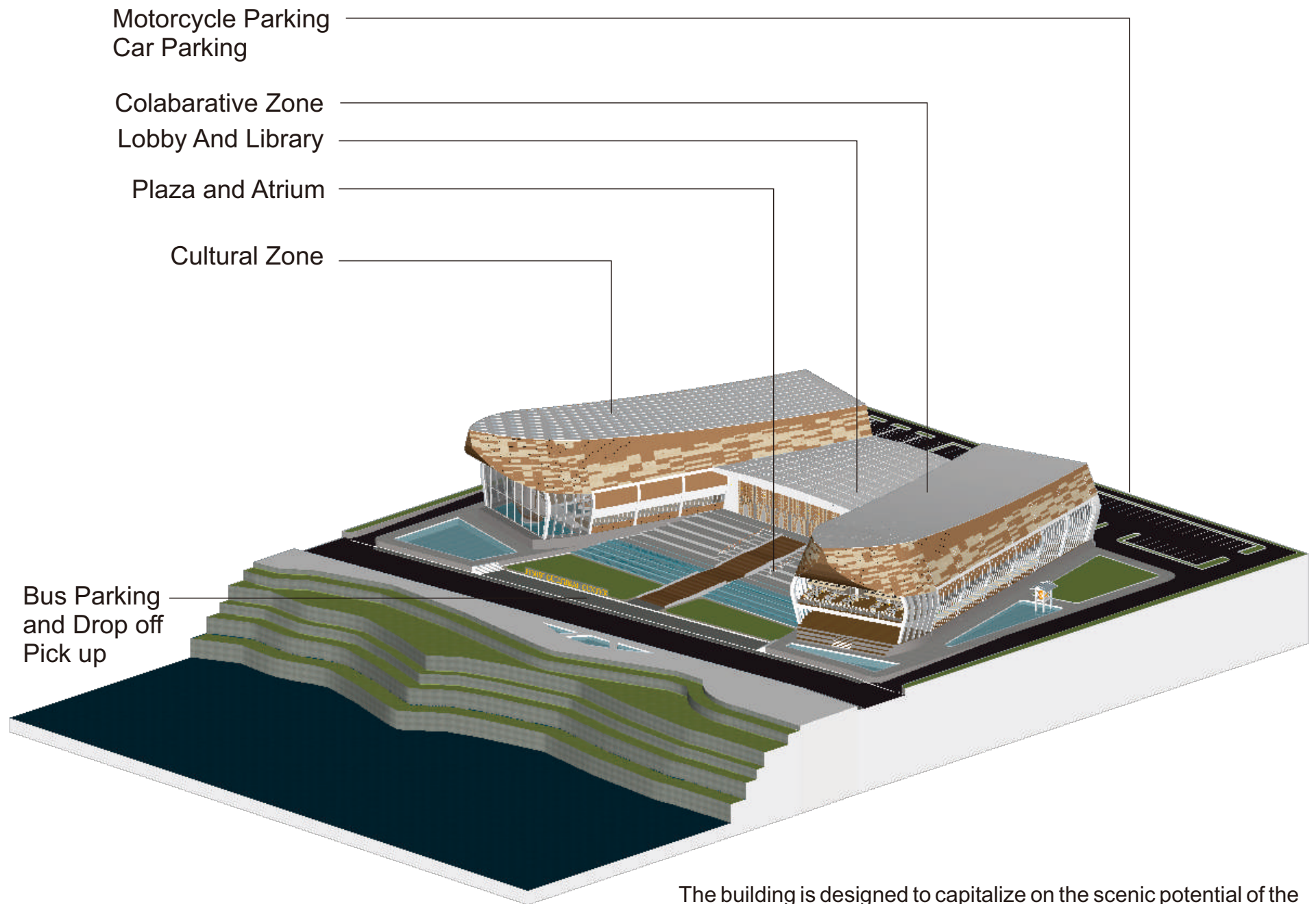
By placing the building at a higher elevation than the road, the tourists will have a view that is not obstructed by physical barriers. This will allow them to clearly look towards the ocean and enjoy the breathtaking coastal scenery.

In addition, in the architectural design, an open concept will be applied to maximize the view to the ocean. The building can be designed by using a lot of glass or other transparent materials on the walls and windows. This will create a visual openness that allows light and ocean views into the interior spaces and provide a more comfortable experience for visitors.

In addition, the orientation of the building will also be considered so that the beach view can be enjoyed better. Key spaces, such as exhibition areas or performance spaces, will be oriented towards the ocean. This will ensure that visitors can easily see and enjoy the stunning view while inside the Cultural Center.

By combining a higher elevation from the street, an open design concept, and proper building orientation, the Cultural Center will be able to optimize the view to the ocean. This will create a great experience for visitors, allowing them to fully enjoy the beauty of the ocean.

Design Result



The building is designed to capitalize on the scenic potential of the vast panoramic ocean views, creating an indulgent visual experience for visitors. In addition, the landscaped area is complemented by an outdoor atrium designed to support various activities outside the building. The atrium can accommodate up to 200 people, providing a spacious and comfortable space to interact and enjoy the atmosphere around the building.

- Customer Service: Provide responsive and friendly customer service to answer customer questions and requests.

5. Revenue Streams:

- Admission: Gain revenue from the sale of admission tickets to events and performances at Pinisi Cultural Center.
- Meeting Room Rental: Generates revenue from the rental of meeting rooms for business events and conferences.
- Cooperation and Sponsorship: Seek cooperation and sponsorship opportunities with companies or organizations interested in supporting cultural activities.

6. Key Resources:

- Facilities: Performance spaces, art galleries, education areas, and other facilities needed to organize cultural activities.
- Workforce: Tour guides, artists, cultural educators, and administrative staff.
- Networks and Partnerships: Relationships with the arts community, educational institutions, tourism partners and potential sponsors.

7. Key Activities:

- Organizing Performances and Exhibitions: Planning,

Tourist Package

Pinisi Cultural center will provide for tourist package, there are several tourist packages:

1. Cultural Education Package:

Description: This package is for schools, universities, who want to learn about the culture of the Pinisi Ship through a visit to the Pinisi Cultural Center.

Duration: Upon request

Features:

- Entrance ticket to Pinisi Cultural Center.
- Traditional Indonesian art performances, including dance, music, and theater as well as public speakers session from Kapal Pinisi Artist.
- Visit to the art gallery to see the works of local artists and the pinisi boat exhibition as well as a visit to the pinisi boat manufacturing industry.
- Lunch with traditional seafood and local dishes at the Pinisi Cultural Center restaurant area.

organizing and executing art performances and exhibitions that showcase Indonesian culture.

- Educational Program Development: Create and organize cultural education programs that are interesting and useful.

- Marketing and Promotion: Develop marketing strategies, promotional campaigns, and collaborate with partners to raise awareness about Pinisi Cultural Center.

8. Key Partnerships:

- Tourism Partners: Travel agents, hotels, and tour providers who can help market the Pinisi Cultural Center to travelers.

- Educational Institutions: Schools and universities interested in engaging students in cultural education programs.

- Sponsors and Donors: Companies or organizations interested in supporting cultural activities and becoming sponsorship partners.

9. Cost Structure:

- Salaries and Wages: The cost of employing permanent and temporary staff.

- Operational Costs: Costs for the management of the Pinisi cultural center

Price: IDR 350.000/person

2. International tourist Package

Description: This package is for schools, universities, who want to learn about the culture of the Pinisi Ship through a visit to the Pinisi Cultural Center.

Duration: Upon request

Features: IDR 1.550.000/person

- Airport transfer.

- Entrance ticket to Pinisi Cultural Center.

- Traditional Indonesian art performances, including dance, music and theater.

- Visit to the art gallery to see the works of local artists and the pinisi boat exhibition as well as a visit to the pinisi boat manufacturing industry.

- Lunch with traditional seafood and local dishes at the Pinisi Cultural Center restaurant area.

- Snorkeling visit at turtle island and maritime tourism tour in bulukumba district using pinisi boat.

4.

Design Exploration Result



Picture 4.1 Perspective rancangan

Source: Author

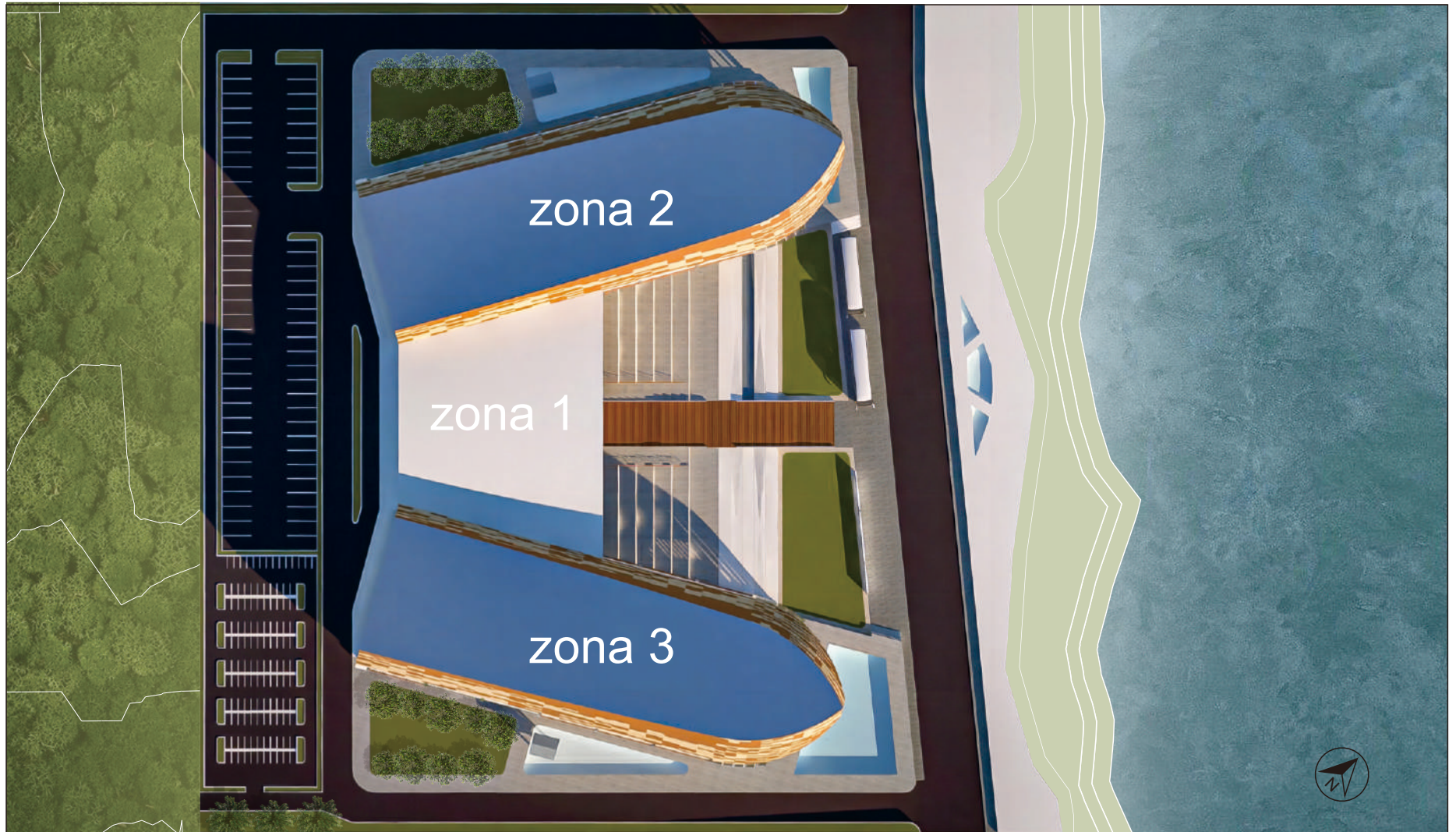
The design of Pinisi Cultural Center in Bulukumba Regency aims to create a new and exciting cultural tourism destination. The facilities provided, such as the Pinisi Art Gallery, Local Cultural Exhibition, as well as a café and restaurant, will provide tourists with a rich experience and understanding of local culture.

One of the main objectives of the design is to have a significant positive impact on the local community, especially in the development of the surrounding local economy. By providing creative spaces, the Pinisi Cultural Center will become a place that encourages the growth and development of Micro, Small, and Medium Enterprises (MSMEs) in the area. This will provide opportunities for local MSME players to showcase their products, collaborate, and scale up their businesses.

In addition, the Pinisi Cultural Center also aims to be a hub of

collaboration between the private sector, local communities, and tourism authorities. Through close cooperation, the main goal is to develop the potential of cultural tourism in Bulukumba Regency, especially in the context of the Pinisi Ship culture that has been recognized by the world. With strong synergy between various parties, innovative and sustainable programs will be created to promote local cultural wealth.

With the presence of the Pinisi Cultural Center, it is expected that there will be a harmonious integration between cultural and natural tourism in Bulukumba Regency. This will utilize the abundant natural potential, such as beaches, islands, and other natural beauty, as an attractive combination with unique cultural experiences. Thus, the Pinisi Cultural Center will be a major attraction for tourists, making Bulukumba Regency an unforgettable tourist destination.



zona 1 : Center of the Space
zona 2 : Collaborative
zona 3 : Cultural Area

Figure 4.1 Site Situation

Source: Author

Pusat Kebudayaan Pinisi dibagi atas tiga zona bangunan yang saling terintegrasi, sesuai dengan gambar yang diberikan. Ketiga zona tersebut memiliki fungsi yang berbeda namun saling mendukung satu sama lain dalam menciptakan lingkungan yang kaya akan nilai budaya dan fungsi praktis.

Zona pertama adalah ruang utama yang terdiri dari atrium indoor, perpustakaan, dan meja

informasi. Atrium indoor berfungsi sebagai pusat aktivitas utama dan titik pertemuan bagi pengunjung. Perpustakaan menyediakan sumber daya informasi dan referensi mengenai budaya dan sejarah Pinisi, sementara meja informasi membantu pengunjung mendapatkan informasi terkait fasilitas dan layanan yang tersedia di pusat kebudayaan ini.

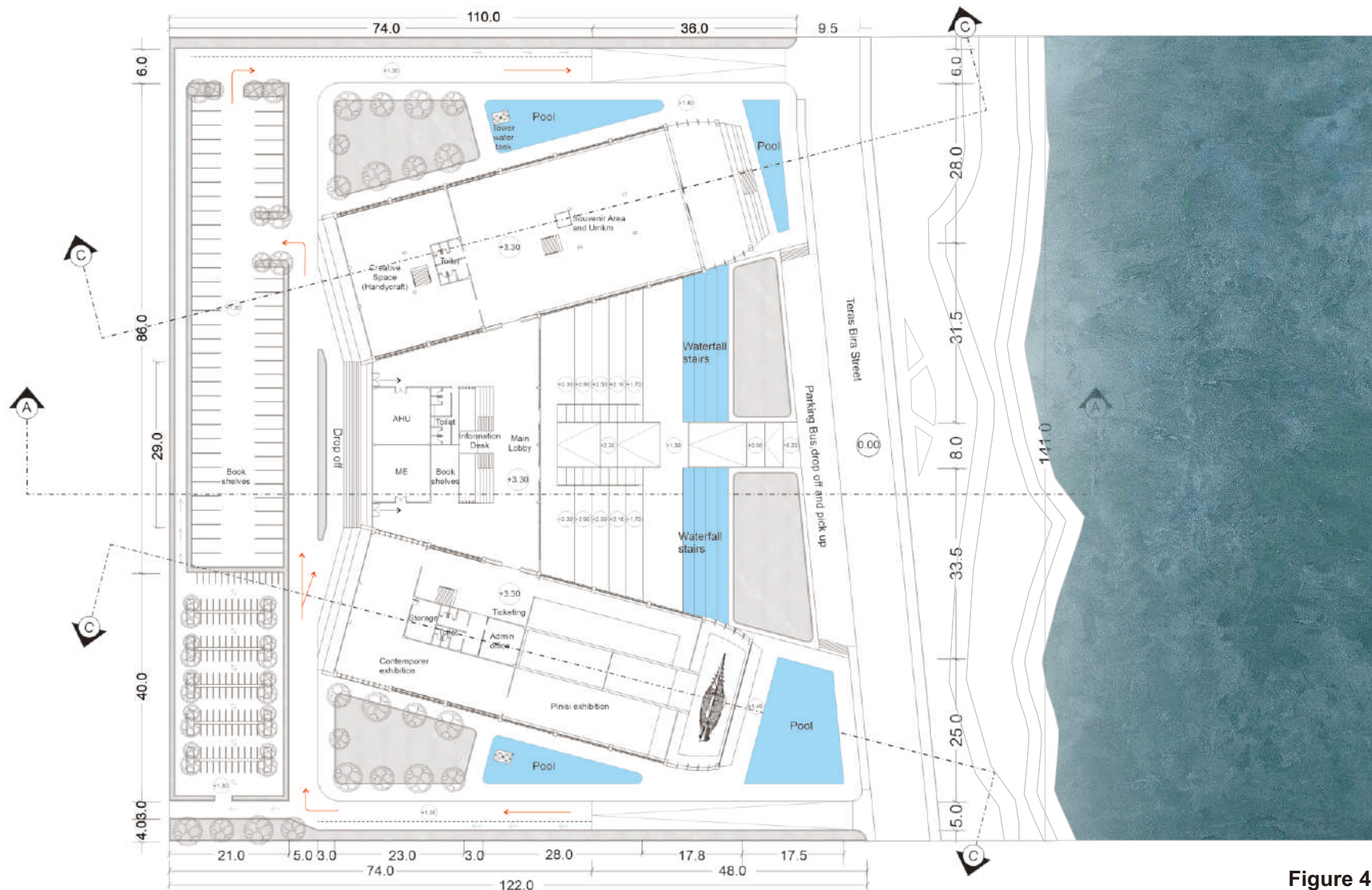


Figure 4.2 Site Plan

Source: Author

The second zone is a collaboration space consisting of office space, a restaurant, a Pinisi ship construction wood waste recycling room, as well as an MSME area and souvenir shop. The office space allows the manager and staff of the cultural center to work and plan various activities. The restaurant provides a dining venue for visitors with a menu that may be inspired by local cuisine. The Pinisi ship construction wood waste recycling room demonstrates the cultural center's commitment to sustainability and environmental preservation. The MSME area and souvenir shop offer local products that can be purchased as mementos.

The third zone is the cultural zone which consists of the Pinisi art exhibition hall, contemporary exhibition, ticket office, art studio,

and management room. The Pinisi art exhibition room displays artworks related to Pinisi culture and history, while the contemporary exhibition displays modern artworks. The ticket office makes it easy for visitors to gain access to events and exhibitions. The art studio provides a space for artists to create and share their skills. The management room ensures the smooth operation of the cultural center.

Overall, the Pinisi Cultural Center was designed with the integration of various functions that support the preservation and development of Pinisi culture in mind. With three separate yet connected zones, the center offers a comprehensive and immersive experience for visitors.

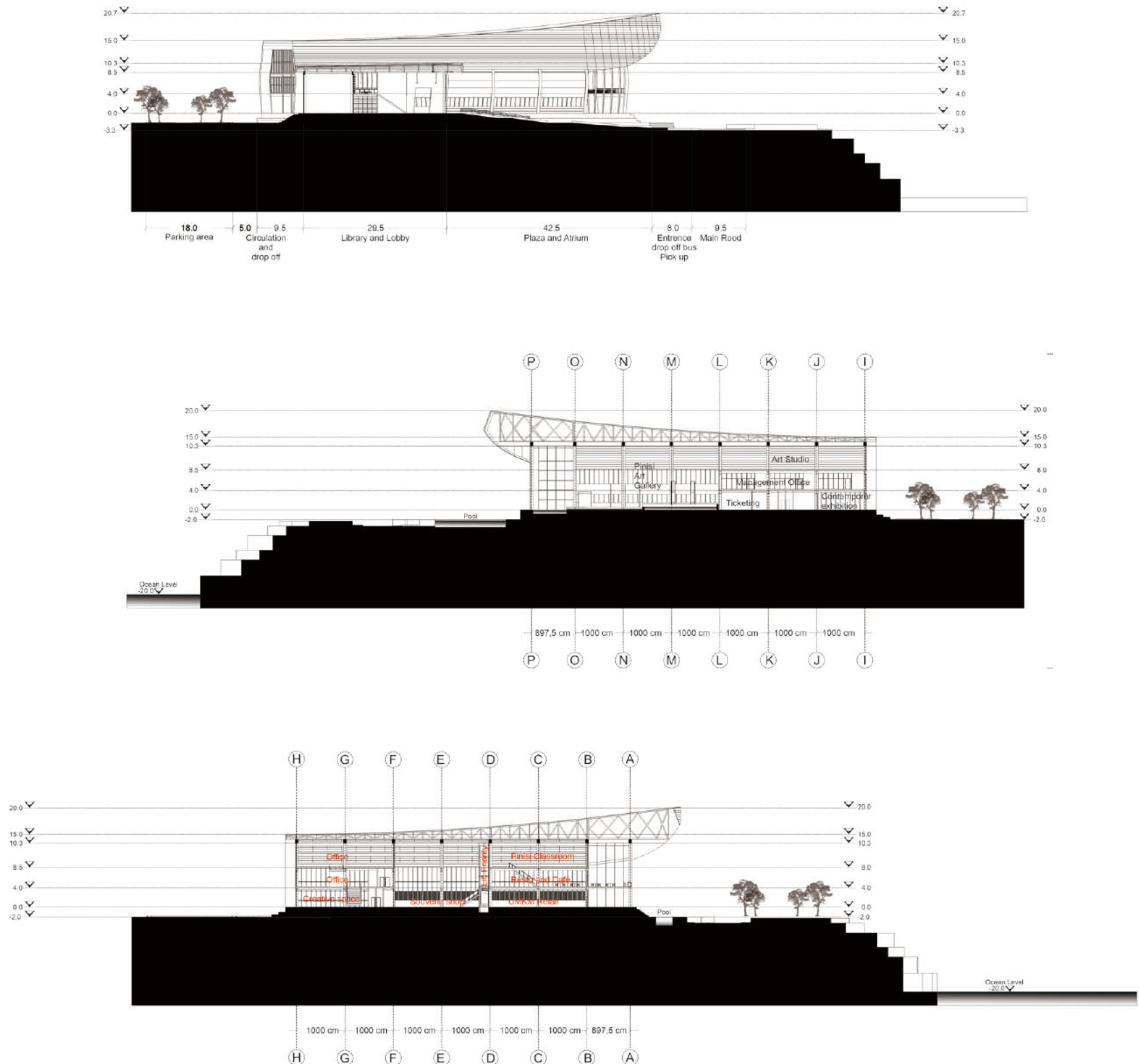


Figure 4.4 Site Section
Source: Author

Axonometric Site

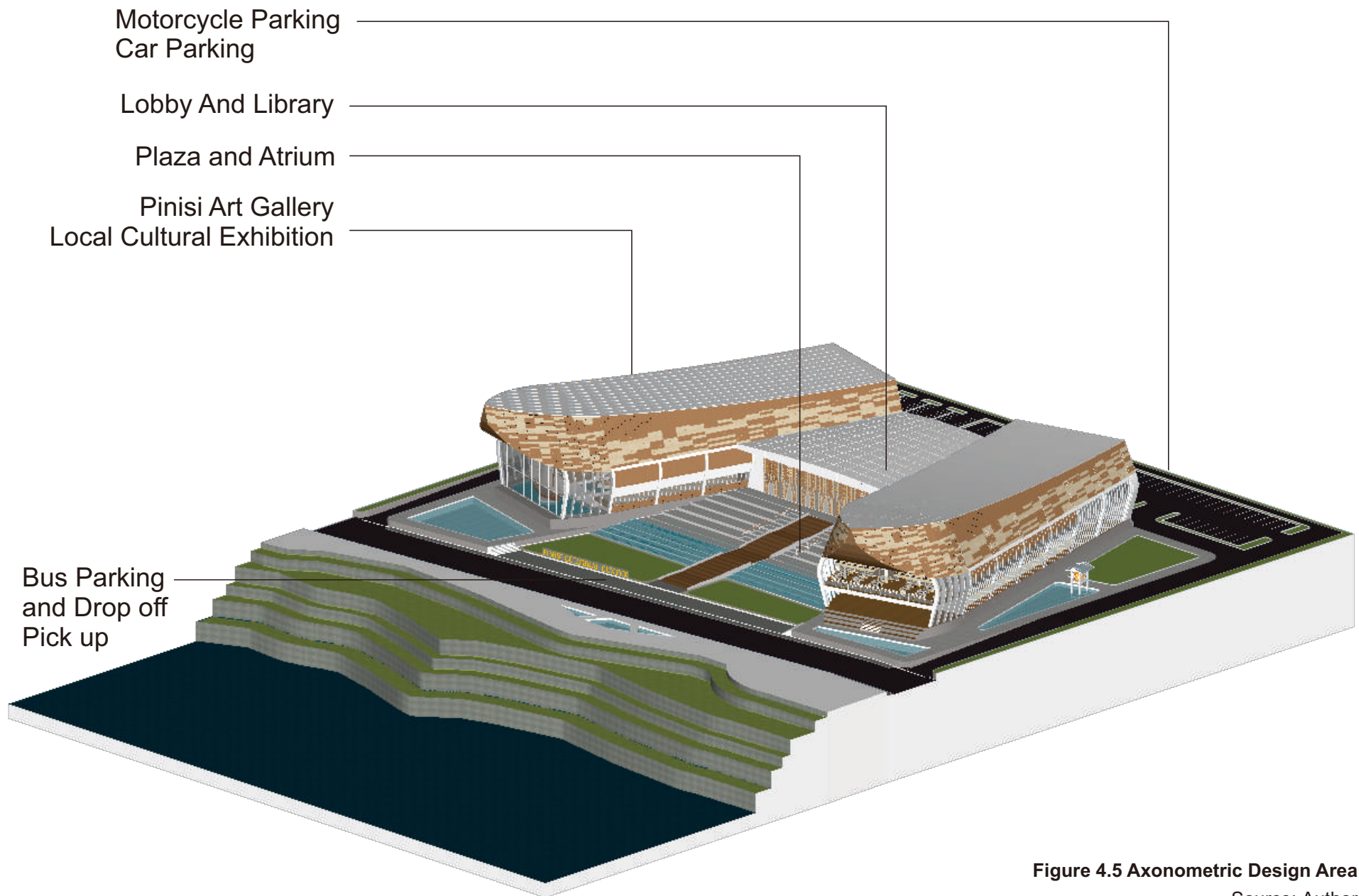


Figure 4.5 Axonometric Design Area

Source: Author

The building is designed to capitalize on the scenic potential of the vast panoramic ocean views, creating an indulgent visual experience for visitors. In addition, the landscaped area is complemented by an outdoor atrium designed to support various activities outside the building. The atrium can accommodate up to 200 people, providing a spacious and comfortable space to interact and enjoy the atmosphere around the building.

Cultural Zona

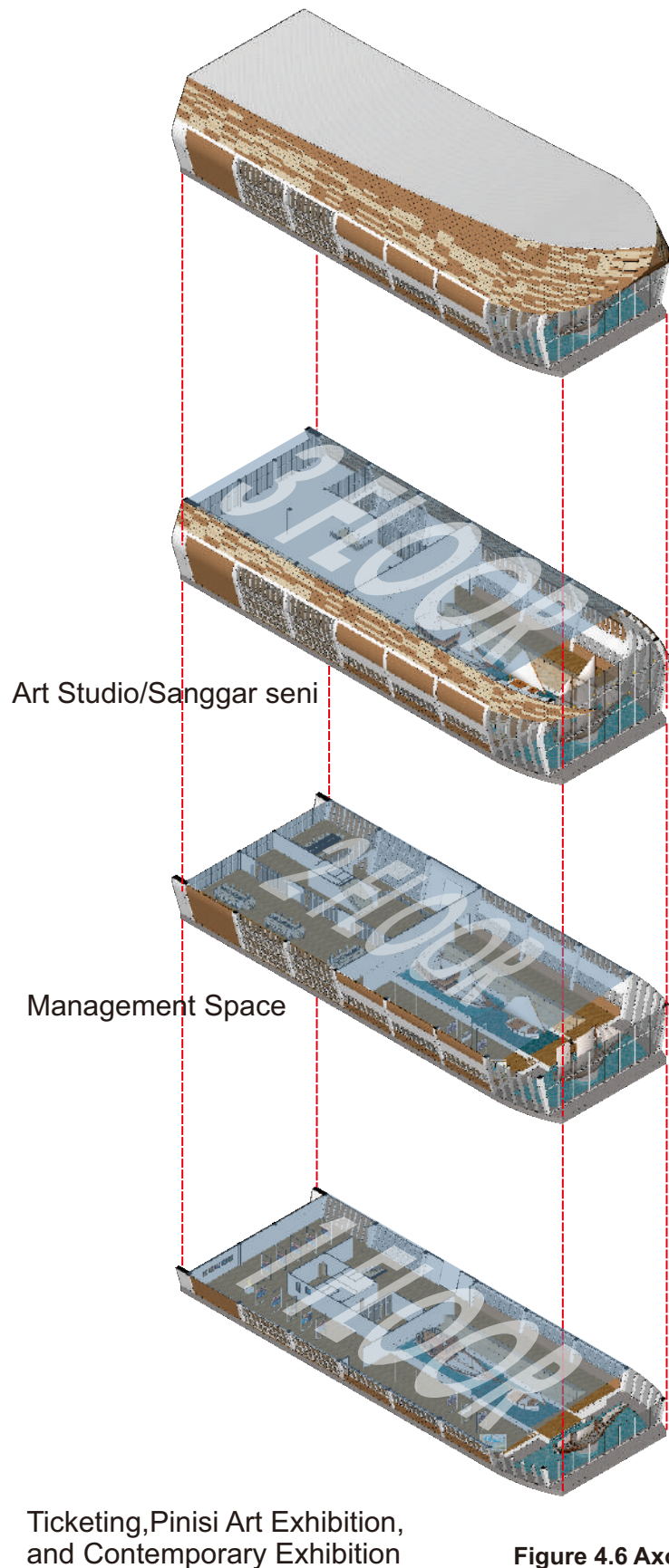


Figure 4.6 Axonometric Plan

Source: Author

The Cultural Zone is divided into three floors, each of which has a specific role. The first floor is the Pinisi art exhibition room, where visitors can enjoy the beauty of Pinisi artwork related to the culture and history of Bulukumba Regency.

On the second floor, the management room as the Cultural center manager.

The third floor is the art studio room. In this space, artists can express themselves, hone their skills, and share inspiration with fellow artists.

Thus, the cultural center zone becomes a place that complements and supports a vibrant arts and culture ecosystem. From the performance of traditional works to modern artistic expressions, from efficient management to collaborative spaces for artists, this zone becomes a place that blends cultural heritage with artistic innovation, creating a place that promotes the diversity of cultural expressions.



Figure 4.7 Pinisi Art Exhibition

Source: Author

Cultural Zona



Figure 4.8 Ticketing Area

Source: Author



Figure 4.9 Contemporary Exhibition

Source: Author

On the first floor, there is also a contemporary exhibition space that not only displays stunning modern artworks, but also provides exhibition display facilities that can be used by artists. The space can be rented out for both individual and group exhibitions, giving creators ample opportunity to showcase their works. The use of wood texture materials in the design of the space not only gives a calm and natural feel to the visitors, but also creates an atmosphere that supports the appreciation of the art on display. Lighting customized to the exhibition area's lux standard adds a touch of professionalism to the space's lighting, ensuring that each artwork can be seen clearly and enjoyed

optimally.

With the display facilities available, artists can present their works in a unique and engaging way, creating a visual dialog between the work and the audience.

With a contemporary exhibition space equipped with amenities and design that pays attention to every aspect, the art experience on the first floor becomes more memorable and immersive. The combination of aesthetically pleasing and functional spaces takes visitors on a captivating art journey, opening the door to a deeper appreciation of the beauty and diversity of contemporary art.



Figure 4.10 Management room

Source: Author

The second floor of the cultural center serves as the management room, the core that controls every aspect of the center. Efficiently organized and well-planned, the management room is responsible for ensuring that all operations in the cultural center run flawlessly. Its duties include careful planning, precise coordination, and careful supervision of every activity that takes place within the cultural complex.

As a decision-making center, the management room is at the center of governing cultural life. From event planning to resource management, this space is the core that organizes the cultural life around it. With a focus on efficiency and effectiveness, the

management room not only ensures that every activity runs on schedule and well, but also ensures that the vision and mission of the cultural center can be achieved to the fullest.

Through careful and comprehensive management, the management room on the second floor is not just an administrative space, but also a strategic activity center that directs the success and sustainability of the cultural center. As the main organizer, the management room takes the cultural center in a purposeful and productive direction, making it a home for diverse artistic and cultural expressions that enrich and enlighten the surrounding community.

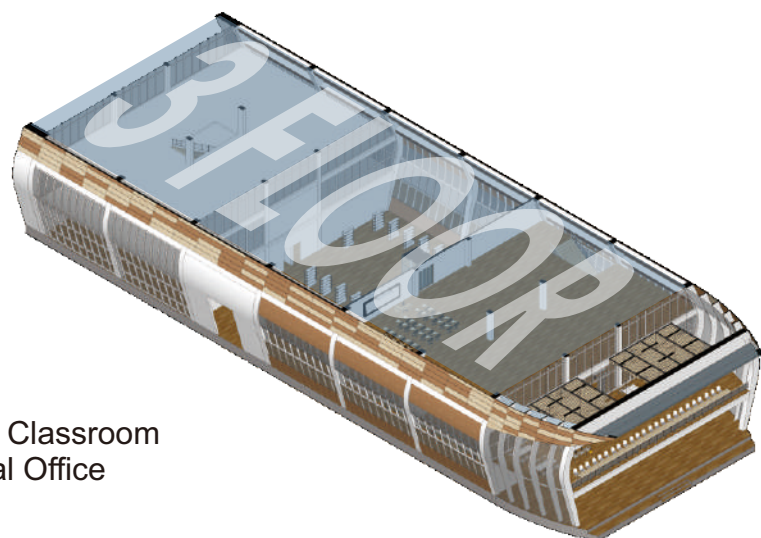


Figure 4.11 Art Studio or Sanggar Seni

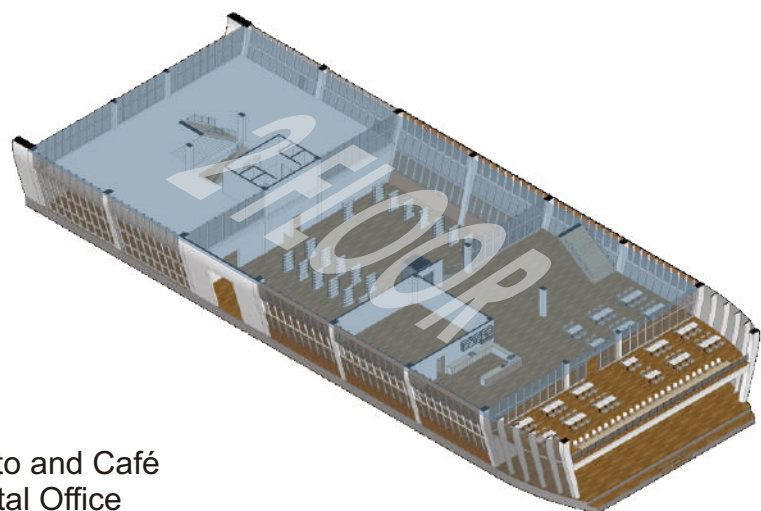
Source: Author

Meanwhile, the third floor is an art studio space. In this space, artists can express themselves, hone their skills, and share inspiration with fellow artists. The art studio is not just a place to create art, but also a place where collaboration and exchange of creative ideas take place, creating an environment that supports the continued growth of the arts.

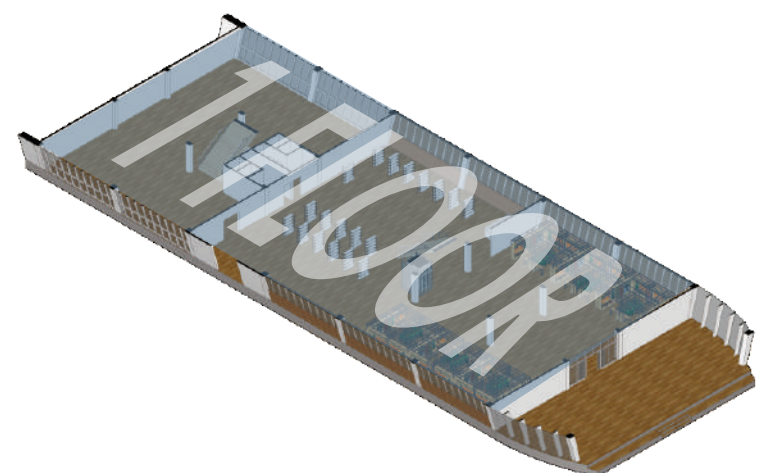
Collaborative Zona



Pinisi Classroom
Rental Office



Resto and Café
Rental Office



Creative Space
Souvenir Shop
UMKM area

Figure 4.12 Axonometric Plan

Source: Author

The collaborative zone is divided into three floors offering different activities. The first floor is a place to recycle wood waste from pinisi boat construction, as well as a venue for local MSMEs and souvenir sales.

The second floor is a relaxing area with a cafe and restaurant, and there are also rental offices separate from the restaurant area.

The third floor also has office space that can be rented, as well as a classroom for learning about pinisi ships. With these facilities, the collaborative zone becomes a hub for activities that include creativity, culinary and learning.



Figure 4.13 Café And Resto

Source: Author

The restaurant has a stunning design with expansive ocean views. Diners can enjoy the calm and soothing atmosphere while sitting in the open-air dining area furnished with tables and chairs arranged neatly on wooden floors. Opening view of the ocean, creating an exceptional dining experience.

One of the main attractions of this restaurant is the opportunity to watch the sunrise. With 24-hour operating hours, diners can come at any time, including dawn, to enjoy the magical moment

when the sun begins to appear over the horizon. This view will certainly be an unforgettable experience for anyone who visits.

The interior design of this restaurant is no less interesting. The unique ceiling with an undulating structure and artistic chandeliers add to the beauty and comfort of the space. Visitors can feel the warm and inviting atmosphere, making them feel at home while enjoying the stunning sea view.

Collaborative Zona



The first floor of this collaborative zone is the center of diverse activities. Here, wood waste from pinisi ship construction is recycled into useful and attractive products. In addition, this floor is also a place for local MSMEs to showcase and sell their unique products. This space creates an opportunity for small businesses to grow and reach more people.

Besides being a place to recycle and showcase local products, the first floor also offers a different shopping experience through the souvenir sales area. Visitors can find a variety of souvenirs related to the Pinisi ship culture or other local artworks. With this area, the collaborative zone is not only a place to shop, but also to support the sustainability of small businesses and promote the richness of local culture.

Through a combination of recycling, supporting MSMEs, and selling souvenirs, the first floor of the collaborative zone becomes a central point for various activities involving the local community and visitors. Thus, this zone is not only a place for transactions, but also a means to strengthen the relationship between art activists, MSME players, and people who care about environmental sustainability and local culture.

Figure 4.14 Souvenir and UMKM area

Source: Author



Figure 4.15 Pinisi Classroom

Source: Author

This collaborative area not only offers space to recycle pinisi ship construction wood waste, showcase local MSME products, and sell souvenirs, but also provides a dedicated classroom for learning about pinisi ships. The classroom is designed to provide an in-depth understanding of the history, construction and cultural values associated with pinisi ships, opening up opportunities for visitors and the local community

to learn and appreciate Indonesia's maritime heritage in an interactive and informative way. With this classroom, the collaborative zone becomes a place that is not only entertaining and shopping, but also a means of education and knowledge that enriches the visitor experience holistically.

Central Zone



Figure 4.16 Library
Source: Author



Figure 4.17 Lobby
Source: Author

Exterior Rendering



Figure 4.18 Exterior Rendering
Source: Author



Figure 4.18 Exterior Rendering
Source: Author

Structural Detail

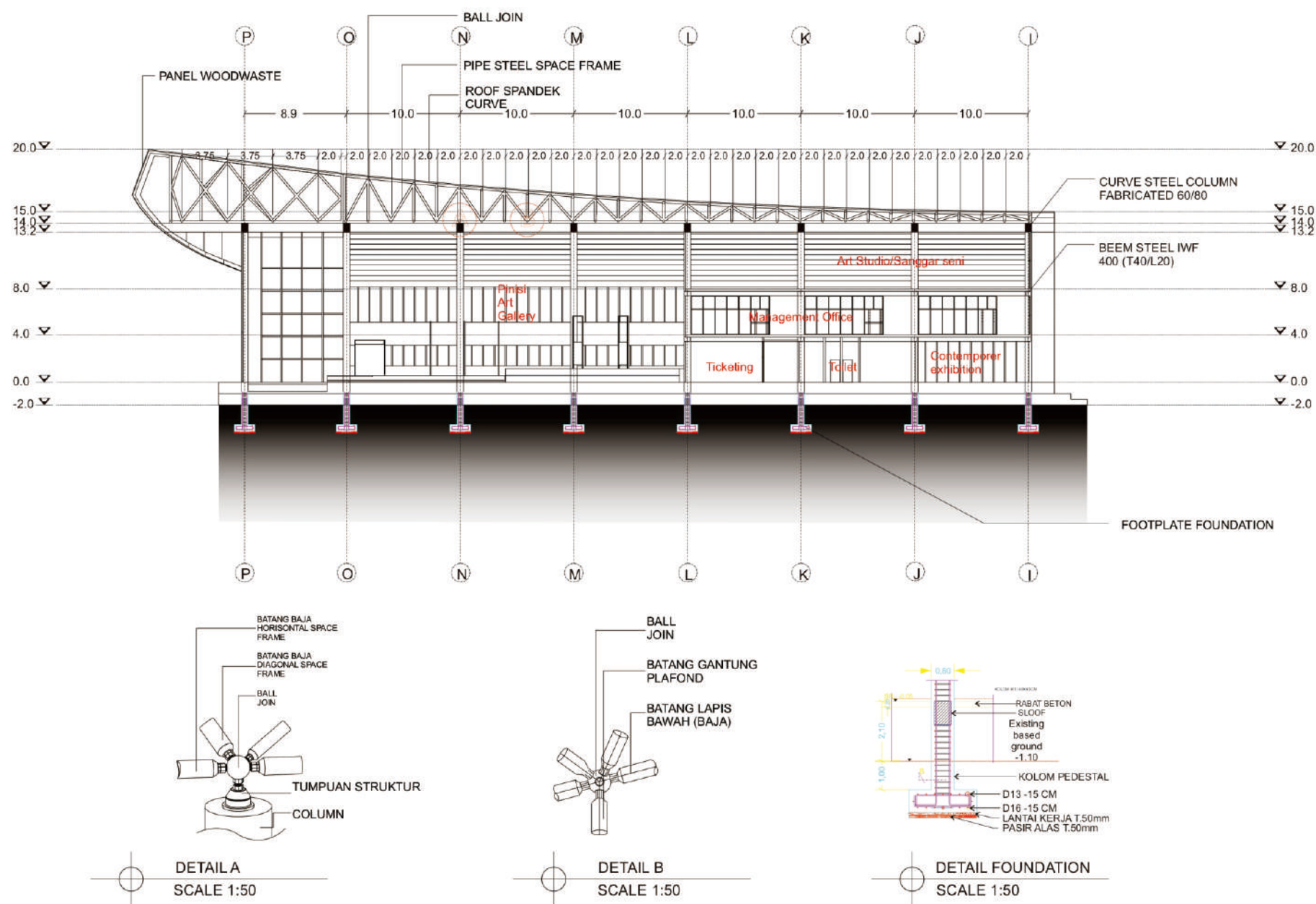


Figure 4.19 Structural Details

Source: Author

Building Envelope

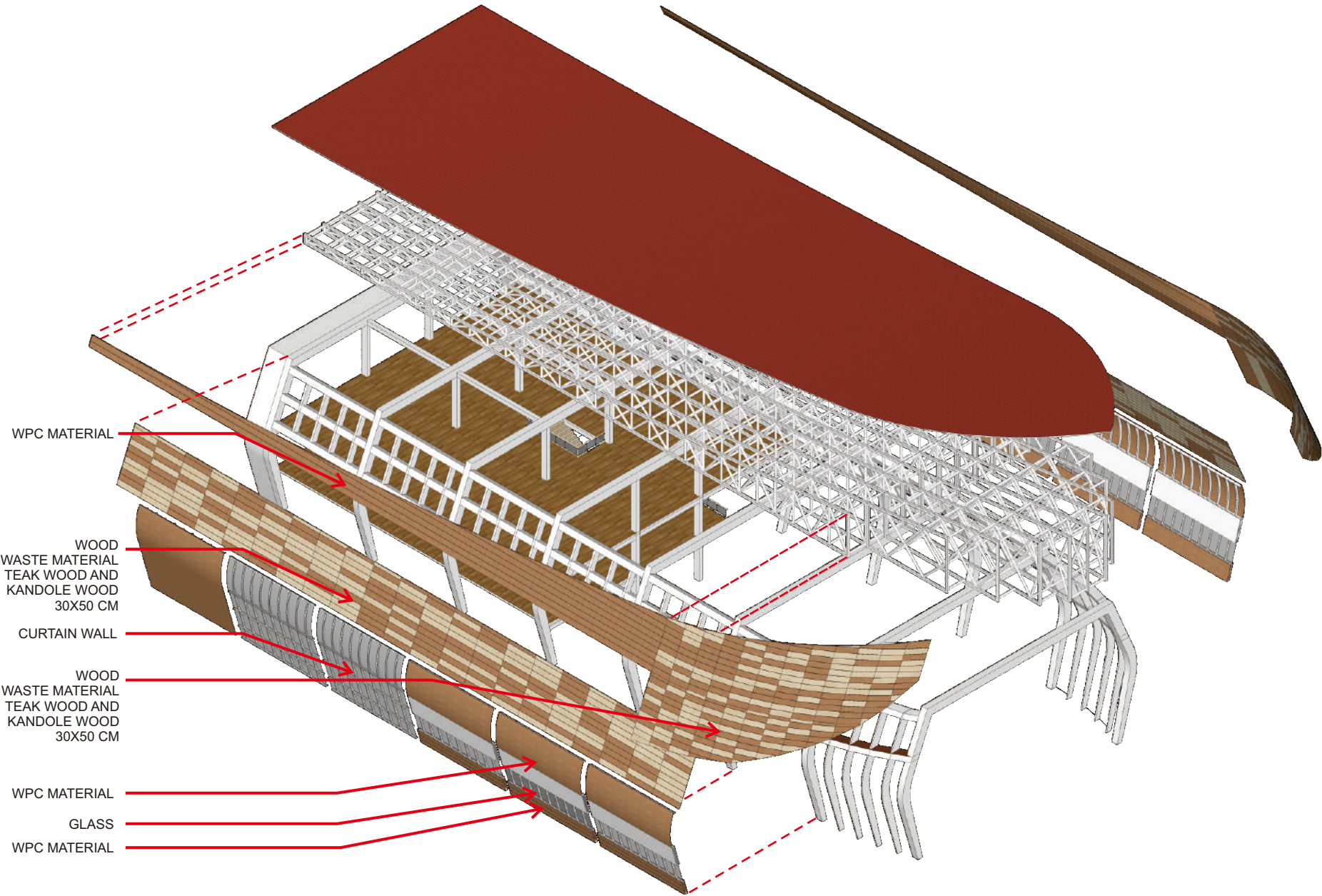


Figure 4.20 Exploded Axonometric
Source: Author

View Area

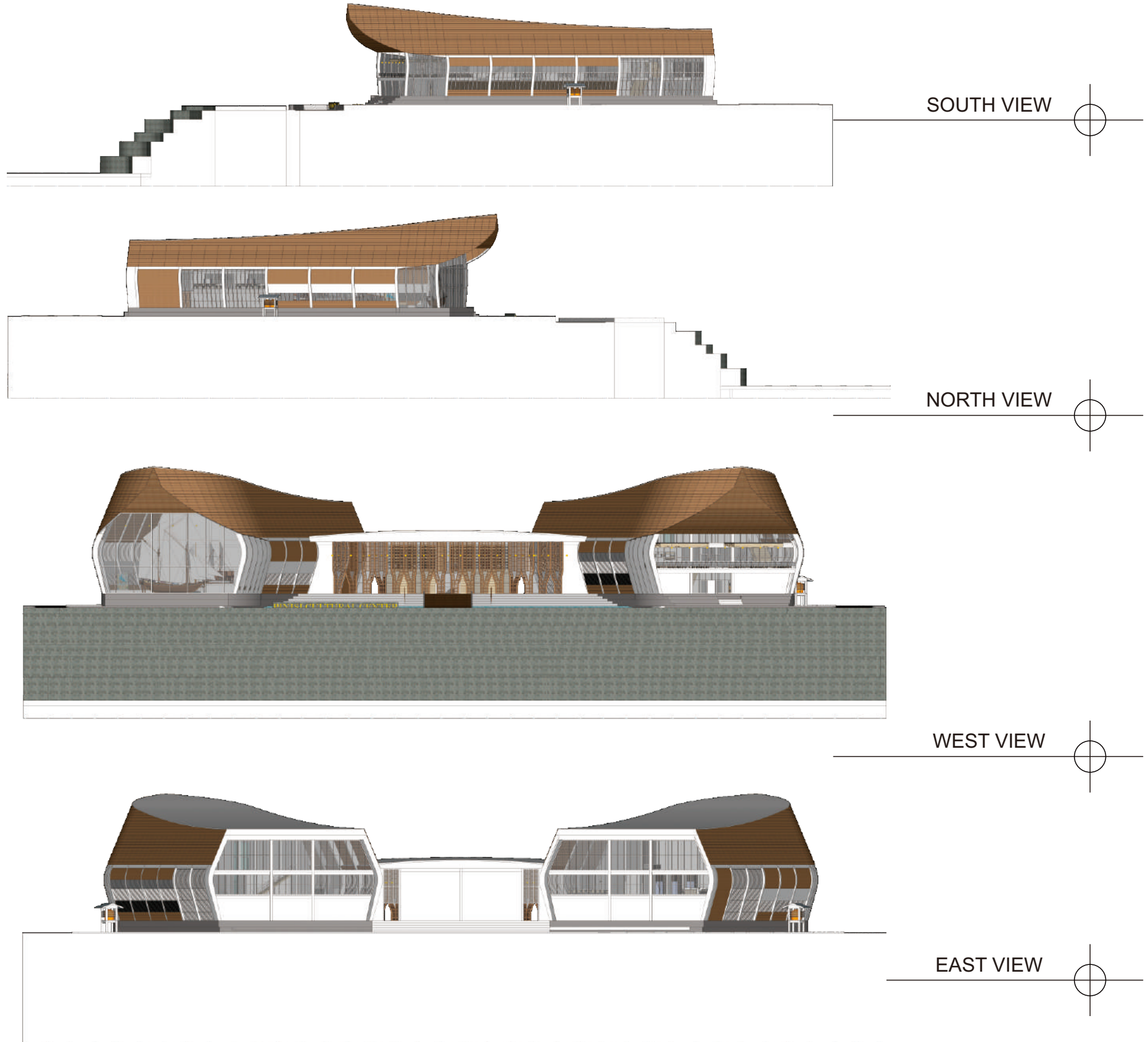


Figure 4.21 View
Source: Author

Building Envelope

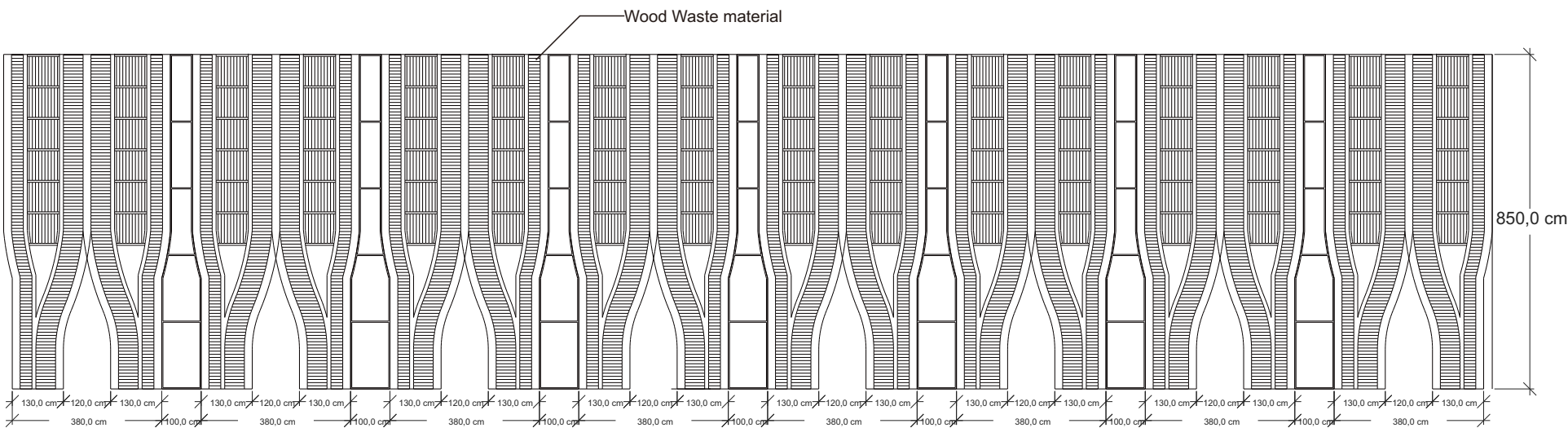
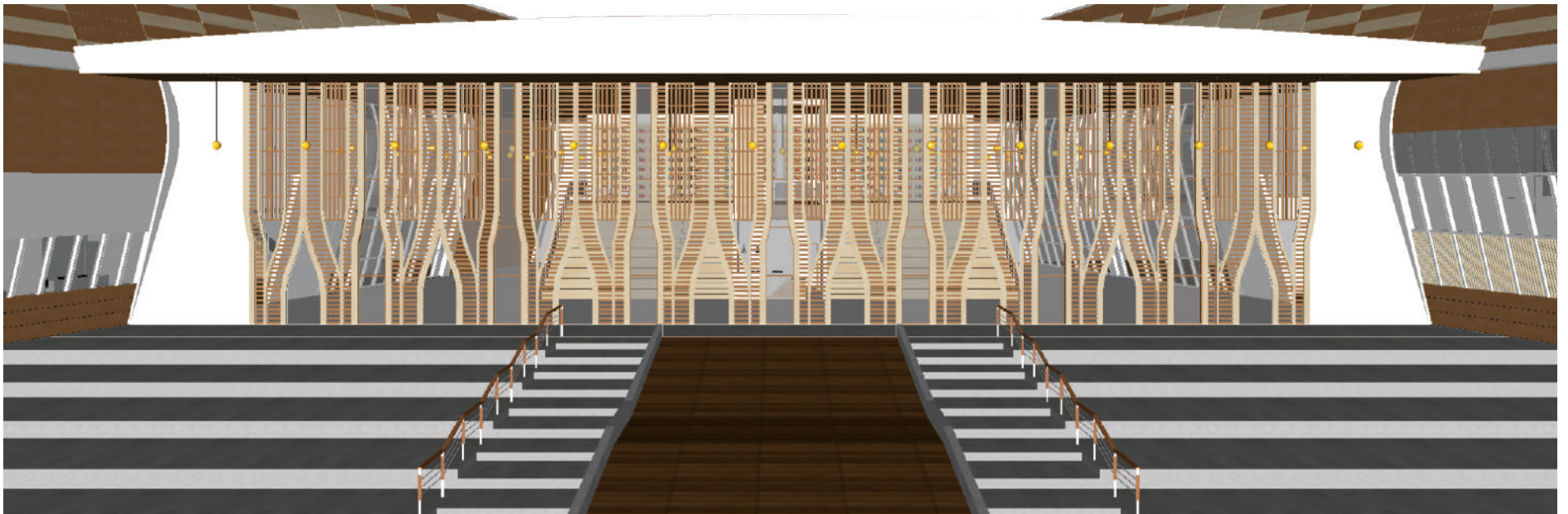


Figure 4.22 Details of Building Envelope

Source: Author

5.

Design Evaluation

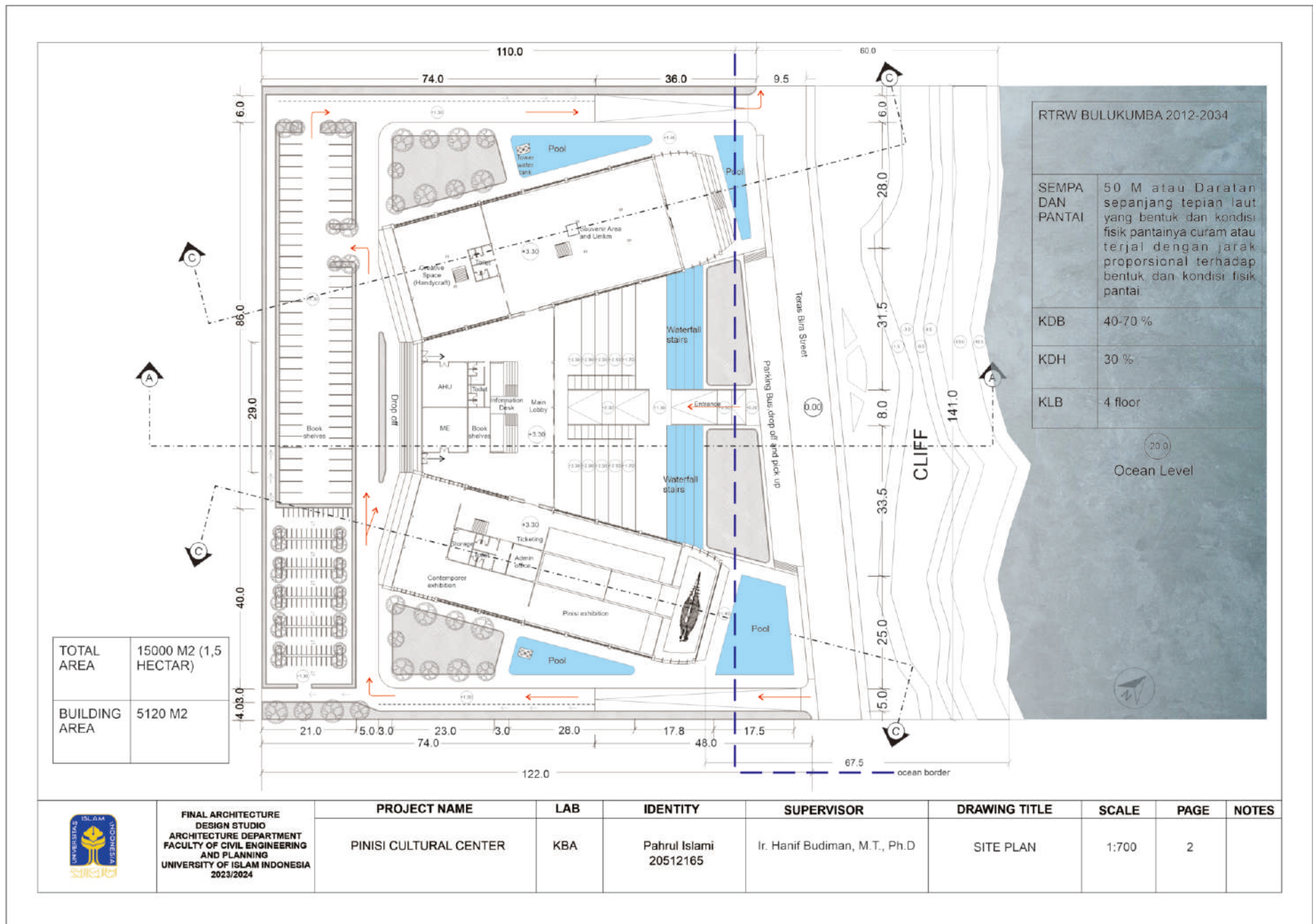


Figure 5.1 SitePlan Revision
Source: Author

5.2 Structural Details Revision

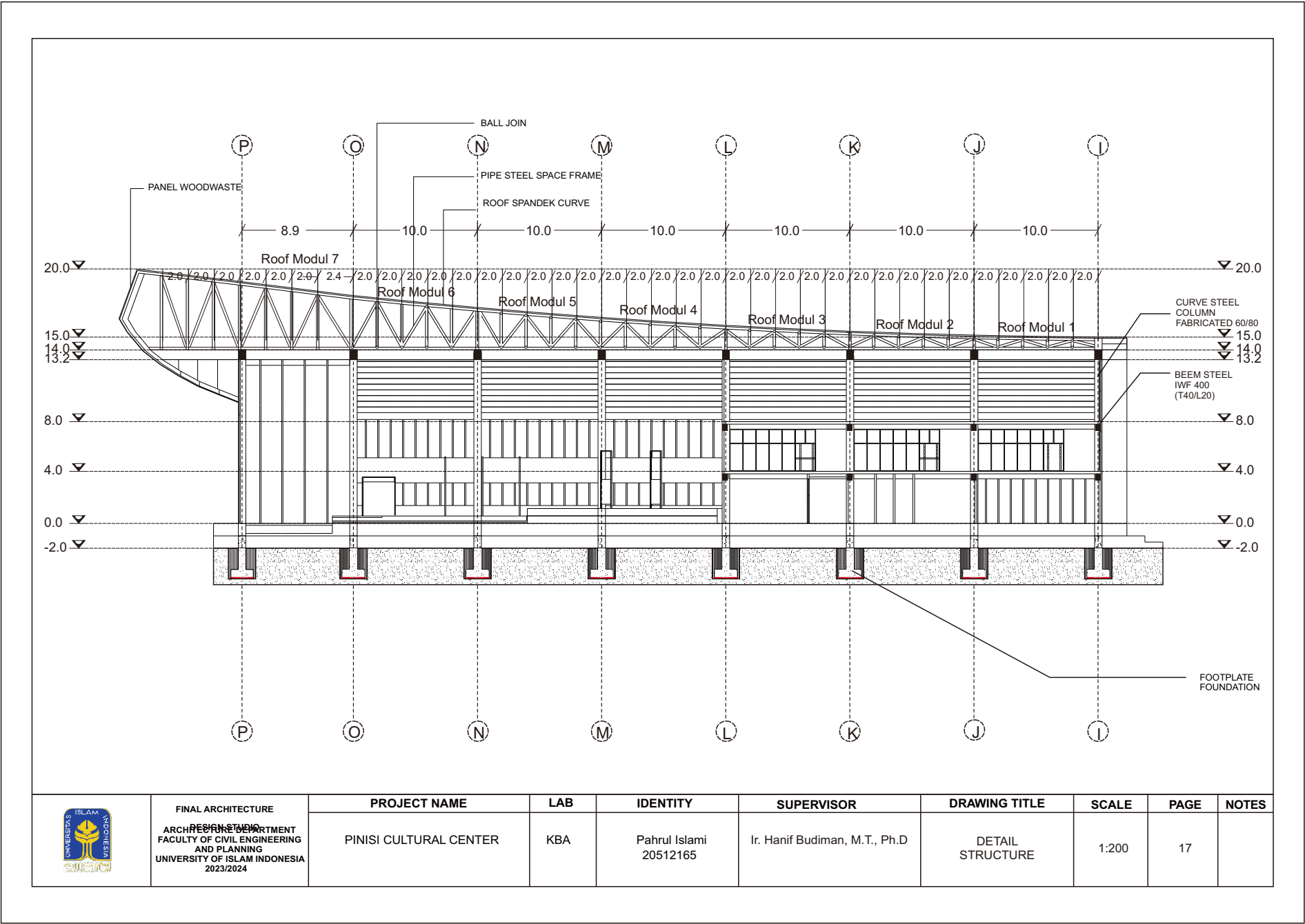


Figure 5.2 Structural Revision
Source: Author

5.3 Roof Details Revision

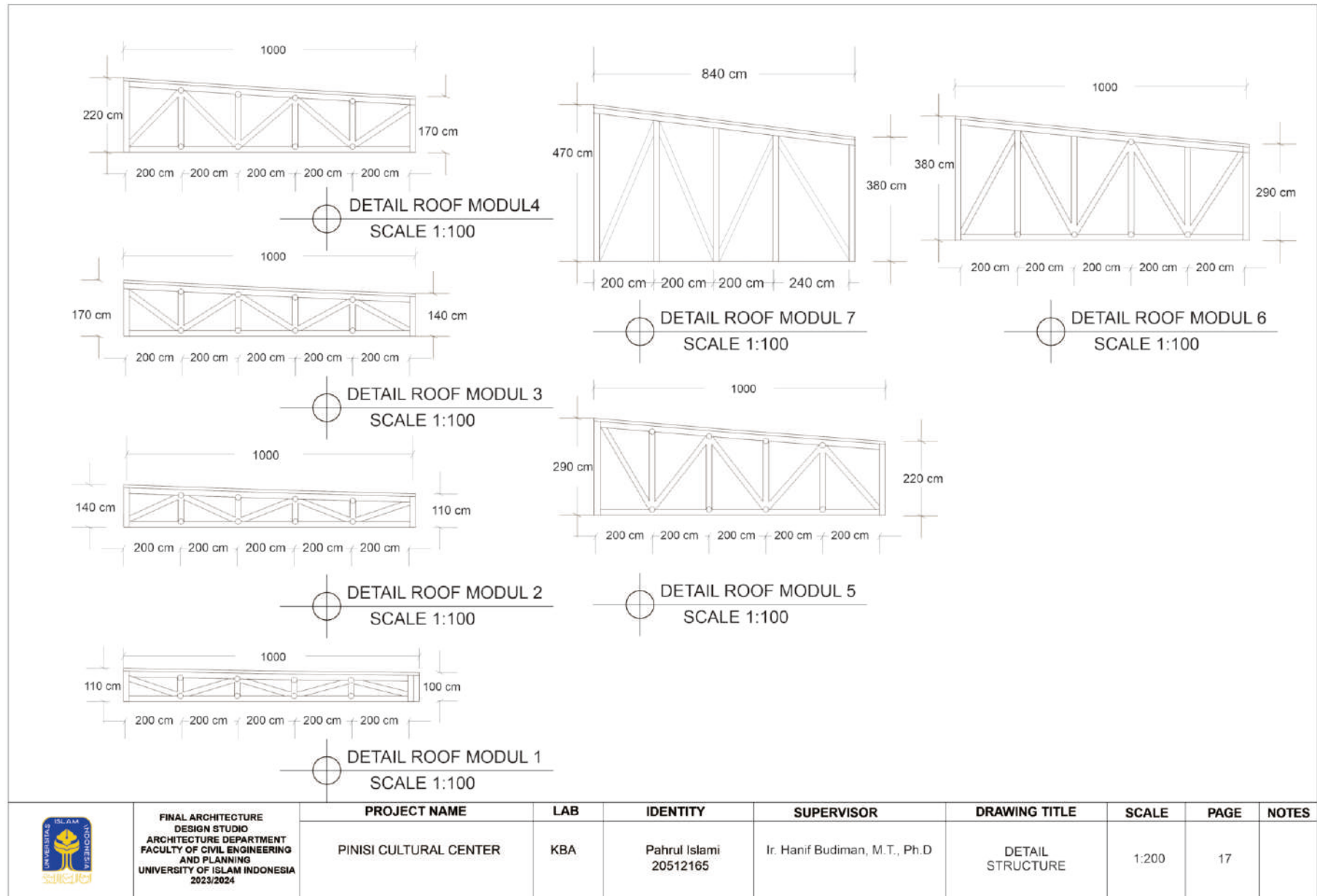


Figure 5.3 Roof Revision
Source: Author

5.4 Roof And Foundation Details Revision

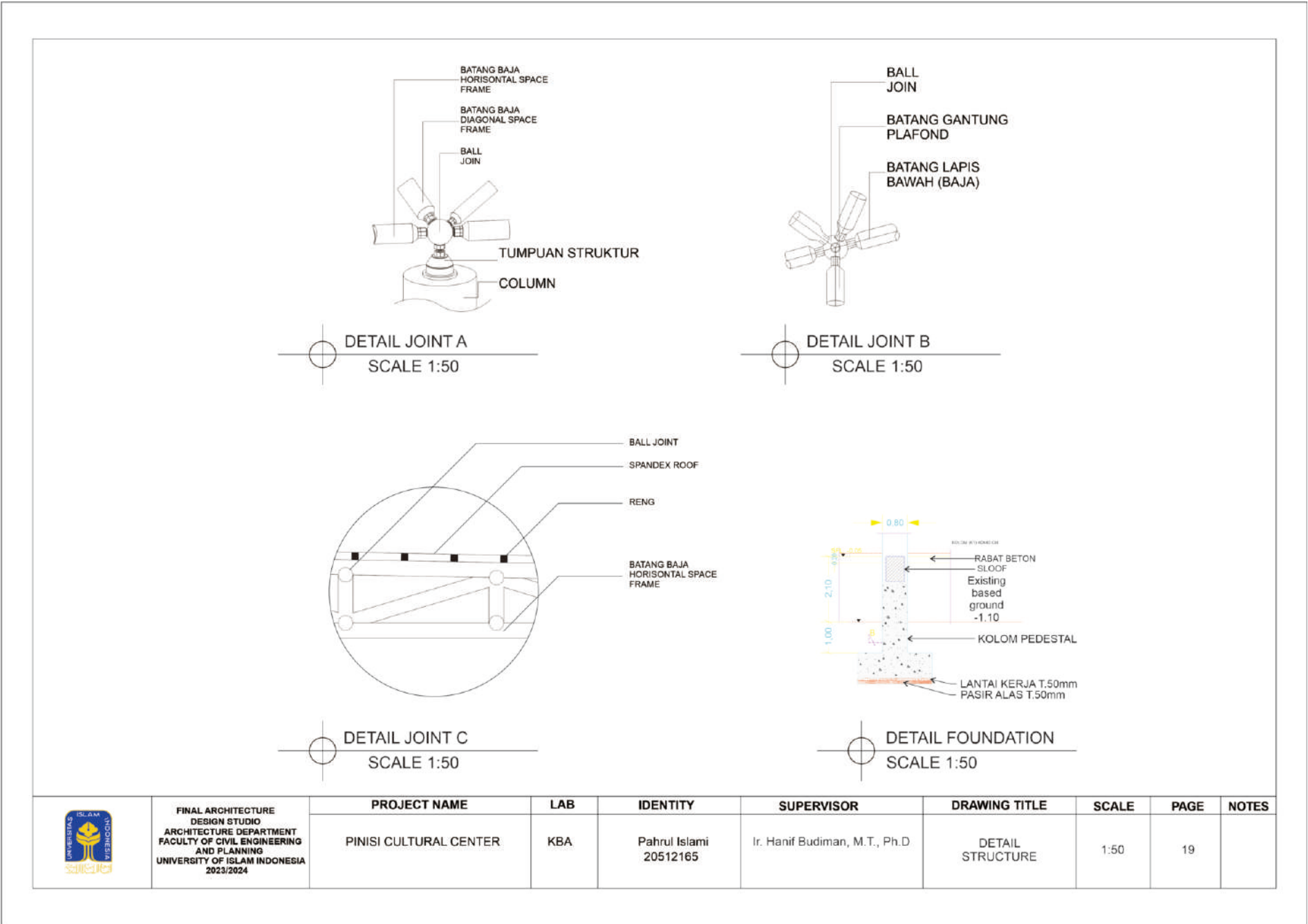


Figure 5.4 Roof And Foundation Details Revision
Source: Author

Structural Details Revision

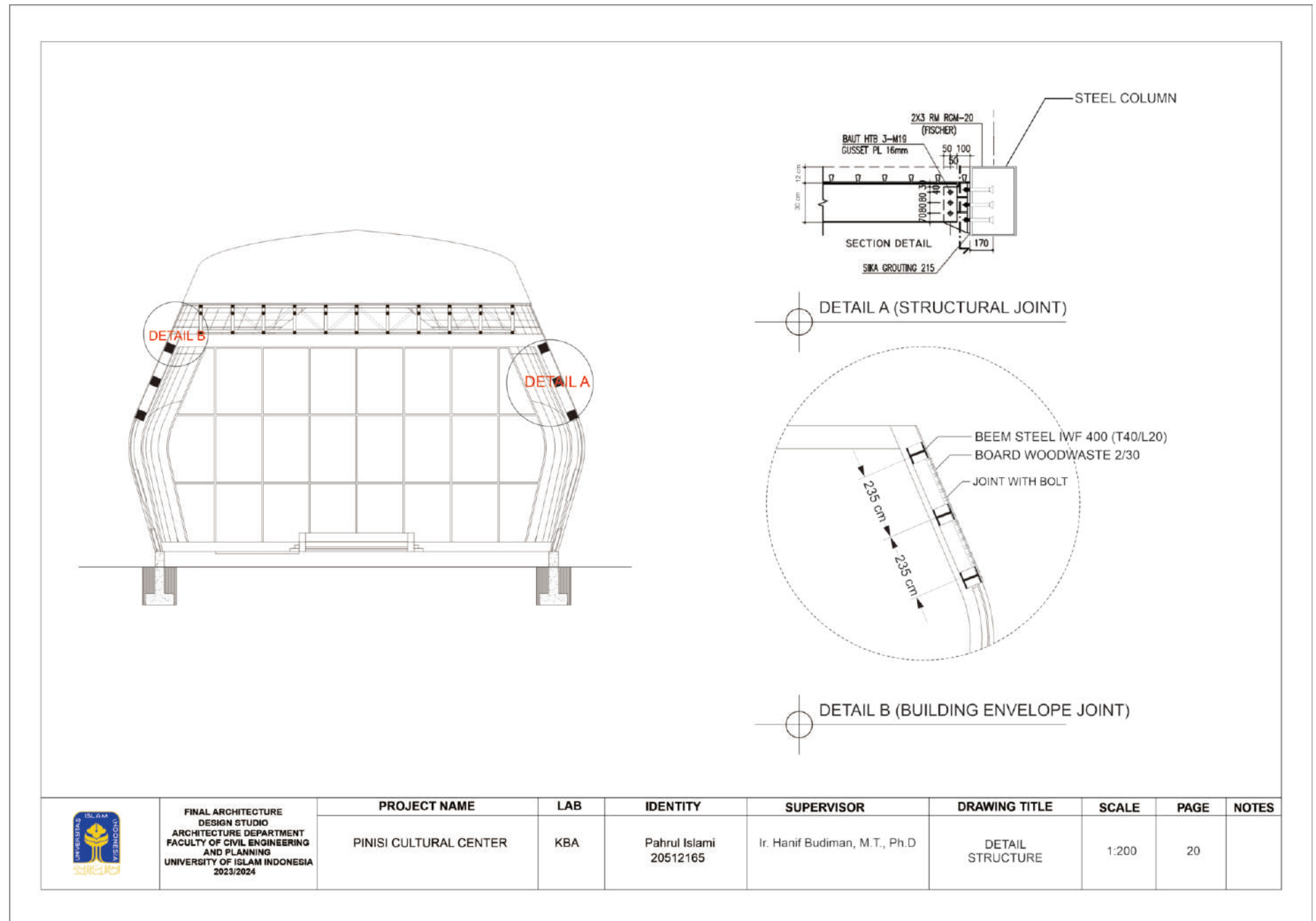


Figure 5.5 Structural Revision

Source: Author

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Nama : Pahrul Islami
Nomor Mahasiswa : 20512165
Pembimbing : Ir. Hanif Budiman., M.T., Ph.D
Fakultas / Prodi : Teknik Sipil dan Perencanaan/ Architecture
Judul Karya Ilmiah : Design of Pinisi Cultural Center as the Integration Between Cultural Tourism and Maritime Tourism as The New Iconic Space in Bulukumba Regency

Karya ilmiah yang bersangkutan di atas telah melalui proses cek plagiasi menggunakan **Turnitin** dengan hasil kemiripan (*similarity*) sebesar **2 (Dua) %**.

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Yogyakarta, 7/29/2024
Direktur



Muhammad Jamil, SIP.

PINISI CULTURAL CENTER

Design Of Cultural Centre As the integration space between cultural tourism and Maritim tourism as the new iconic space of Bulukumba regency, South Sulawesi, Indonesia



HISTORY OF PINISI SHIP



14th Century
In the 14th Century, the Pinisi ship emerged as a traditional ship of the South Sulawesi tribe in Sulawesi, Indonesia. The ship was initially used by the local people as a transportation for trade and maritime exploration in the archipelago.

15th Century
15th century Pinisi ships began to be used by the local people as a means of transport for trade and maritime exploration in the archipelago.

16th Century
They were used to transport various commodities such as pepper, spices, and nutmeg from the interior to the coast.

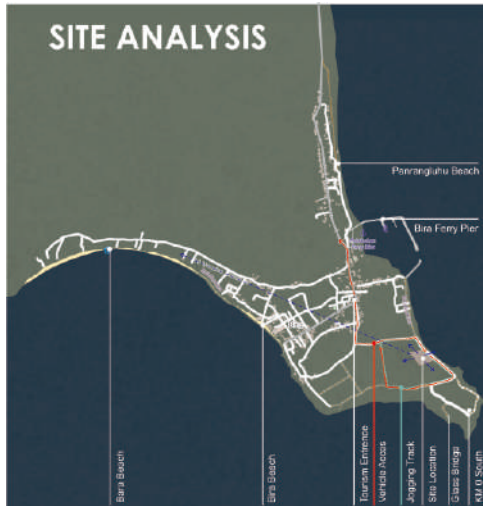
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20th Century
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SITE ANALYSIS



Potential Site

Global Issues

Local Issues

Potential Activity

Site Location

Potential Site

The planned Pinisi Cultural Center, which will be built in the Bira Village tourism area, offers a different, attractive destination for visitors around the village. These destinations include the South Sulawesi Kilometer Zero Point Glass Bridge, Tanjung Liris, parking at Lukung Beach, Bira Beach, Panrangulu Beach, and Bira Ferry Pier.

The South Sulawesi Kilometer Zero Point Glass Bridge is one of the most interesting destinations in Bira Village. Visitors can enjoy the unique experience of walking on a glass bridge that stretches over the sea. From here, one can also see coral reefs from the top of the glass bridge. The destination provides a good experience for visitors.

Leaving the beach is another destination that should not be missed in the area, with beautiful white sandy beaches, clear sea water, and stunning views of the sea. Tanjung Liris is the perfect place to relax, soak up the sun, and enjoy the view of the sea while watching or diving.

Bira Beach and Panrangulu Beach are also good spots for visitors who want to enjoy the surrounding beach or take a dip in the sea. In addition, there are other water activities such as windsurfing or playing beach games.

In addition, on the edge of the Bira Village, there is a potential site for a new destination, around South Sulawesi.

With these attractive destinations, the Pinisi Cultural Center in the Bira Village tourism area offers a complete and satisfying holiday experience. In addition, it is important to maintain the cultural heritage of Bulukumba district, especially the pinisi ship, which can display every history of the pinisi ship, including the history of the pinisi ship, and visitors can place around the village of the pinisi ship.

Global Issues

According to data from the National Waste Management Information System (SNPIS) of the Ministry of Environment and Forestry (KLHK), Indonesia produced 38.3 million tons of waste throughout 2022.

Of the total national waste generation in 2022, 28.4 million tonnes or 74.1% of which has been managed, while 12.20 million tonnes or 31.7% has not been managed, including household waste.

50% in terms of type, waste waste is in kind plastic, followed by the Bira boat waste with a proportion of 45.7%. Bira plastic waste 10%, wood 12%, paper 13%, glass 24%, rubber 2.1%, and other types of waste 7.1%.

Local Issues

Waste is one of the problems faced in the context of the Bira Village tourism area, especially in the coastal area of the Bira Village tourism area. Therefore, efforts are needed to reduce the volume of waste that can be expected to make the area more attractive and also to improve the quality of the environment.

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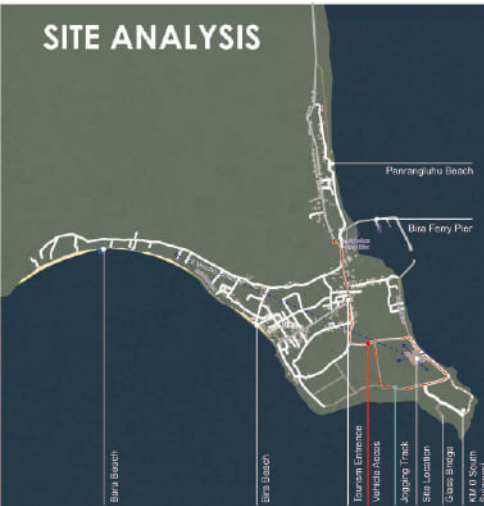
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Final Architectural Design Studio

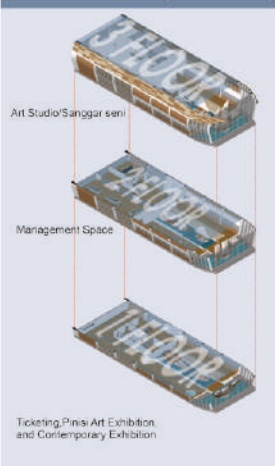
DESIGN RESULT

The design of the Pinisi Cultural Center in Bulukumba Regency aims to create a new and exciting cultural tourism destination. With facilities such as the Pinisi Art Gallery, Local Culture Exhibition, as well as cafes and restaurants, it will provide tourists with a rich experience and a deep understanding of local culture. One of the main objectives of the design is to have a significant positive impact on the local community, especially in the development of the surrounding local economy.

By providing a creative space, the Pinisi Cultural Center will be a place that encourages the growth and development of Micro, Small, and Medium Enterprises (MSMEs) in the area, providing opportunities for local MSME players to showcase their products, collaborate, and grow their businesses. In addition, the Pinisi Cultural Center also aims to be a hub of collaboration between the private sector, local communities, and tourism authorities, with the main goal of developing the cultural tourism potential of Bulukumba Regency, especially in the context of the world-renowned Pinisi Ship culture.



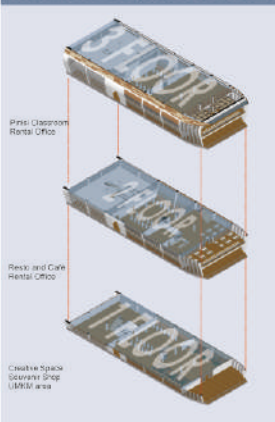
Axonometric Plan (Cultural Zone)



Interior Situation (Cultural Zone)



Axonometric Plan (Colaborative Zone)



Interior Situation (Colaborative Zone)



Axonometric Plan (Central Zone)

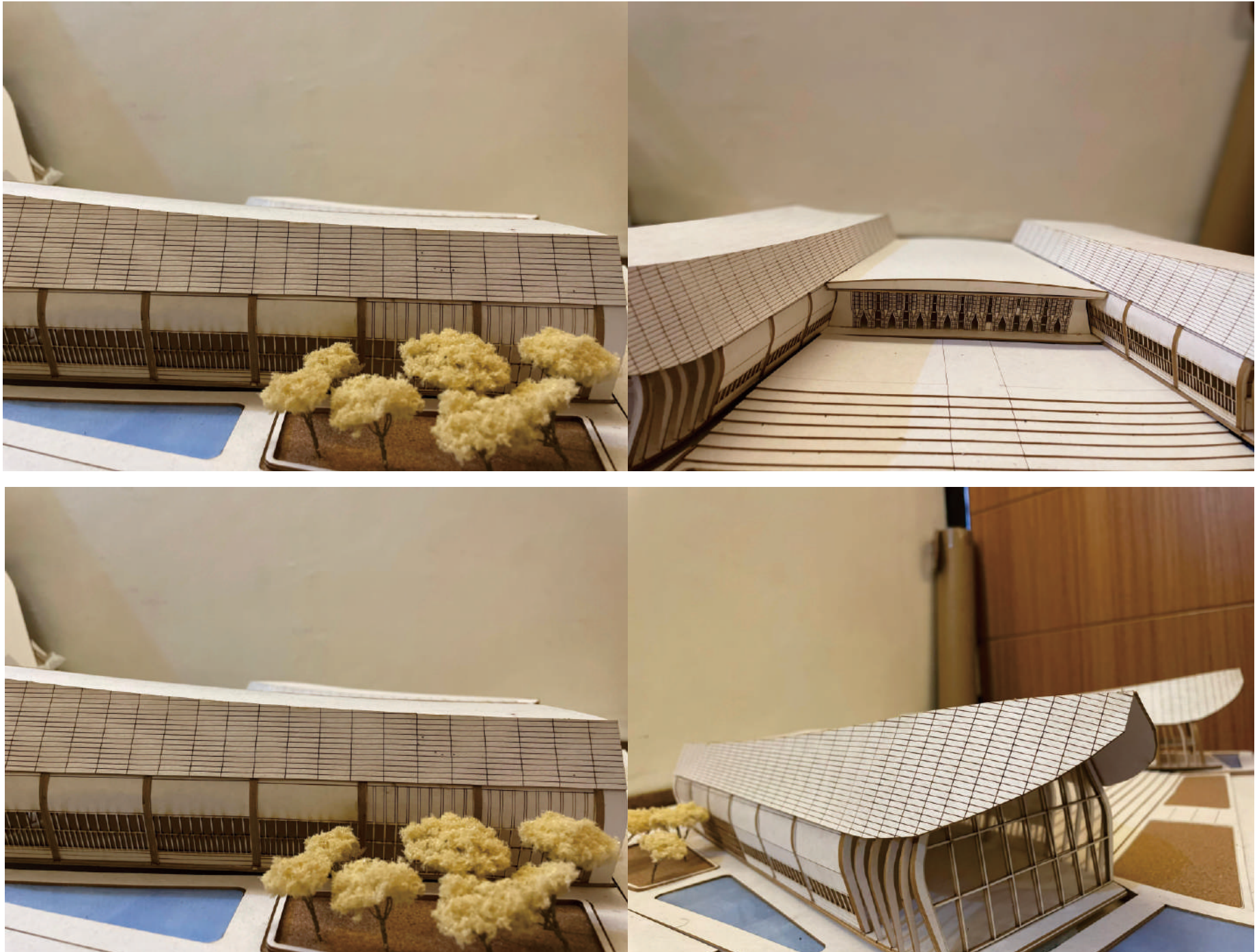


Interior Situation (Colaborative Zone)



Lampiran

3d Models



THANK YOU

