



**REVITALIZATION OF FISH AUCTION AND  
CULINARY MARKET CILINCING  
FISHERMEN'S VILLAGE, NORTH JAKARTA  
WITH CRITICAL REGIONALISM APPROACH**

Supervisor :

**Tony Kunto Wibisono, Ir.,MSc., GP**

**Hafidz Farouq Ash Siddiqy**

19512171



# Lembar Pengesahan.

Validity sheet.

**Studio Akhir Desain Arsitektur yang Berjudul :**

*Final Architecture Design Studio Entitled*

Revitalisasi Pelelangan Ikan dan Pasar Kuliner Kampung Nelayan Cilincing, Jakarta Utara dengan pendekatan regionalisme kritis

Revitalization of Fish Auction and Culinary Market Cilincing Fishermen's Village, North Jakarta With Critical Regionalism Approach

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**Penguji 2**

*2nd Jury*

Baritoadi Buldan Rayaganda  
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# Catatan Dosen Pembimbing.

## Supervisor's Notes.

### Penilaian Buku Laporan Tugas Akhir

#### Bachelor Final Project Report Book Assesment

### Perancangan Resor Pantai dengan Pendekatan Regionalisme Lintas Budaya di Kawasan Sedau, Singkawang, Kalimantan Barat

Design of Beach Resort with a Cross-Cultural Regionalism Approach in the Sedau Area, Singkawang, West Kalimantan

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Kualitas pada buku laporan akhir :

Kurang, Cukup, **Baik**, Sangat Baik

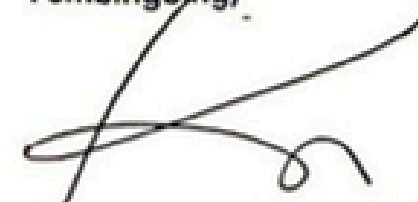
\*) Mohon dilingkari

Sehingga,

Direkomendasikan/Tidak Direkomendasikan

\*) Mohon dilingkari untuk menjadi acuan produk tugas akhir

Yogyakarta, Rabu 5 juni 2024  
Pembimbing,

  
Tony Kunto Wibisono, Ir.,M.Sc.

# Pernyataan Keaslian.

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## Statement of Authenticity.

Yang bertanda tangan dibawah ini :

Nama : Hafidz Farouq Ash Siddiqy  
NIM : 19512171  
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Dengan ini saya menyatakan bahwa tugas akhir saya yang berjudul "Revitalisasi Pelelangan Ikan dan Pasar Kuliner Kampung Nelayan Cilincing, Jakarta Utara dengan pendekatan regionalisme kritis" adalah sebuah karya yang dibuat oleh saya sendiri kecuali karya yang disebut referensinya dan tidak ada bantuan dari pihak lain baik seluruhnya ataupun sebagian dalam proses pembuatannya. Saya juga menyatakan tidak ada konflik hak kepemilikan intelektual atas karya ini dan menyerahkan kepada Jurusan Arsitektur Universitas Islam Indonesia untuk digunakan bagi kepentingan pendidikan dan publikasi.

Yogyakarta, 5/06/2024

  
He i qy

## Design Premise

The revitalization of the Fish Auction & Culinary Market in Cilincing Fishermen's Village, Utara Jakarta, merges contemporary design with the rich regional architectural heritage of Indonesia. By embracing a Critical Regionalism architectural approach, this project seeks to reinvigorate the traditional market, breathing new life into its historical significance while catering to the needs and preferences of a modern society. This endeavor aims to honor the unique cultural identity of Cilincing Fishermen's Village by infusing elements of traditional Indonesian architecture, employing local materials, and incorporating indigenous design aesthetics. Simultaneously, it envisions the integration of sustainable practices and advanced technologies to create an ecologically responsible and economically viable space. This marriage of tradition and innovation not only preserves the village's heritage but also propels it into a prosperous and sustainable future, attracting locals and visitors alike to experience a harmonious blend of past and present.



DEPARTMENT *of*  
**ARCHITECTURE**



Berdasarkan SK BAN-PT  
No. 3123/SK/BAN-PT/Akred-196/5/V/2020



한국건축학 교육인증원  
Korea Architectural Accrediting Board



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# Kampung Nelayan

## as a fishing tourist area in Cililitan



**Picture 1.1** Kampung nelayan view Source : <https://www.journaliberta.com/>

Kampung Nelayan Cilincing is a coastal settlement in North Jakarta, Indonesia, where the fishermen and their families live. The village is located in Cilincing Village, Cilincing District, near the coast of the Java Sea. The village has a history of being a place where fishermen from various regions dock their boats and sell their catch. The village also provides various seafood commodities, such as fish, shrimp, squid, crab, and green mussels. The village is also known for its colorful and diverse houses, which reflect the creativity and identity of the people. The village offers a glimpse of the traditional and modern aspects of the Indonesian coastal life. Some of the attractions and activities that can be enjoyed in Kampung Nelayan Cilincing are:

- Visiting the fish auction market, where fresh seafood can be bought at affordable prices.
- Exploring the craft studios, where local artisans make various products from recycled materials, such as bags, wallets, accessories, and souvenirs.
- Learning about the art and culture of the coastal communities, such as traditional music, dance, and puppet shows.
- Taking pictures of the colorful houses and murals that adorn the village.

Based on a research study conducted in June 2023, the population of the fishing village in Cilincing Village, Cilincing District, North Jakarta was estimated to be 1,102 families, with a sample size of 110 families. The study used purposive sampling with the criteria of fishing and non-fishing families, intact families consisting of father, mother and child, and having children who go to school. The study also found that 85% of the residents were fishermen. **The diversity of resources in the Cilincing Fisherman's Village has great potential to be utilized for productive economic purposes.** However, public interest in this village is **decreasing** with **minimal visits** to local culture as seen in the many abandoned public facilities and lack of tourist interest. This lack of interest causes cultural identity and aspects of tourism to be less felt, this phenomenon mainly showed up because the **environmental conditions are slum and polluted by rubbish and waste**, the Cilincing fishing village itself has serious environmental problems, such as accumulation of **rubbish, water pollution, flooding, erosion and land subsidence**. Apart from that, the facilities and infrastructure in the Cilincing fishing village are also **inadequate, such as road access, clean water, sanitation, electricity and public spaces**.



**Picture 1.2** Ilustrasi pengolahan sumberdaya laut Source : <https://www.journoliberta.com/>



**Picture 1.3** Ilustrasi pelelangan ikan Source : <https://www.beritasatu.com/>



**Picture 1.4** Ilustrasi pembuatan kerajinan daur ulang Source : <https://www.journoliberta.com/>

**1** Illustration of marine resource processing

**2** Illustration of Fish Auction Process

**2**

# TPI Kampung Nelayan



Picture 1.5 TPI kampung nelayan view Source : <https://www.journaliberta.com/>

The pier in the Cilincing fishing village is a fish auction market (TPI) which is the center of economic and social activity for fishermen and local residents. This pier is located in Cilincing Village, Cilincing District, North Jakarta, close to the Java Sea coast.

This pier has several facilities, such as a place for drying salted fish, a place for cleaning green mussels, free study classes for children, a fish market, and places of worship for various religions. This pier has also been equipped with a floating pier which was built in 2023.

This floating pier aims to streamline the process of loading and unloading catches at sea, reduce the risk of accidents and improve the welfare of fishermen.

This pier is an interesting tourist attraction for visitors who want to see the life of the residents of the Cilincing fishing village with all its activities. This pier also offers views of the sea and the colorful houses that decorate the fishing village.



Picture 1.6 TPI kampung nelayan view Source : <https://www.journaliberta.com/>



Picture 1.7 TPI kampung nelayan view Source : <https://www.journaliberta.com/>



# TPI Kampung Nelayan

As an economic supporting element for the Kampung nelayan community



**Picture 1.8** TPI kampung nelayan view Source : <https://www.journaliberta.com/>

TPI is a place where fishermen can sell their catch to traders or consumers, and get a fair and reasonable price. TPI also provides facilities and services for fishermen, such as cold storage, ice machines, scales and quality control systems. TPI is a place where village residents can develop their potential as entrepreneurs, by producing and marketing various fish products, such as salted fish, fish crackers, fish sauce and fish soup. TPI is a place where village residents can access various sources of funding and assistance, such as government subsidies, grants, loans, and training programs. This can help village residents to increase their capital, technology, skills and knowledge.

According to data from interviews with local residents, the number of family heads who work as fishermen in the fishing village is around 150 people, and the amount of fish coming in is around 200 kg per day. Based on the data that the author obtained, TPI fishing villages have a lot of facilities and potential that can be used by the village community as facilities to support the community's economy.

However, in reality, many facilities are not used thoroughly, thereby wasting their potential. Not only is the potential being wasted, but the fact that the TPI fishing village can be classified as a slum area is one of the author's concerns because in fact the TPI itself should be a tourist attraction location and an economic support facility in the Cilincing Fisherman's Village.

1	The building for fish sales transactions is equipped with a display room, administration room	✓
2	Fish handling room	✓
3	Cooling room or storage area	✓
4	K5 facilities, namely fire extinguishers, Hydrant, Amphibious, floor cleaning car, Dump truck and Temporary Disposal Area (TPS).	✗
5	A place for maintaining boats and fishing equipment	✗
6	Installation supplies, including: clean water supply installations, fuel oil (BBM) installations, Ice Installation, and Electrical installation.	✓
7	Integrated service post, The integrated service post at the fish auction site is a facility that aims to provide complete and integrated services to fisheries business actors, especially fishermen and fish buyers.	✓
8	Port administration office. The port administration office at the fish auction site is a facility that is responsible for managing various administrative and operational aspects of the fishing port, such as: Managing permits, regulations and policies relating to the fishing port, Providing facilities and supporting facilities for the fishing port, Carrying out supervision and control quality of fish and other sea products entering and leaving fishing ports, Marketing and distribution of fish and other sea products auctioned at fishery ports, such as establishing auction mechanisms, determining basic auction prices, Collecting data and information about fishery ports, such as fish catch data, fish auction results data, fishing port income data, fishermen activity data.	✗
9	Fishermen's meeting hall	✗
10	Environmental sanitation and health facilities, such as clean water channels, waste disposal channels, trash cans and toilets	✓
11	Fisherman's guesthouse	✗
12	Security and health post	✗
13	Religious facilities	✓
14	Parking space for 2 and 4 wheels	✓
15	Shops and restaurants	✗
16	Port and Fish Auction information in the form of site plan, videotrons and so on.	✗

**Picture 1.9** Source : [kcp.go.id](http://kcp.go.id) with author's modifications, 2023

# Statement of Design Problems and Limitation

## Non - Architectural Issues

- Loss of public/tourist interest in TPI fishing villages
- Economic Vulnerability
- Changes in social structures or erosion of cultural practices that impact the sense of community and identity among residents

## Architectural Issues

- The lack of integration of the layout of the location causes a lack of effectiveness in the performance of fishermen
- Lack of an auction platform which results in ineffective sales quantity
- The lack of building design that able to trigger tourist interest

## Formulation

- How to create a space that could trigger the increase of fisherman effectiveness that act as a means of income for both street vendors and fishermen which can increase economic values and attract tourist interest in TPI of Cilincing fisherman village, North Jakarta

# Maps of Problematique

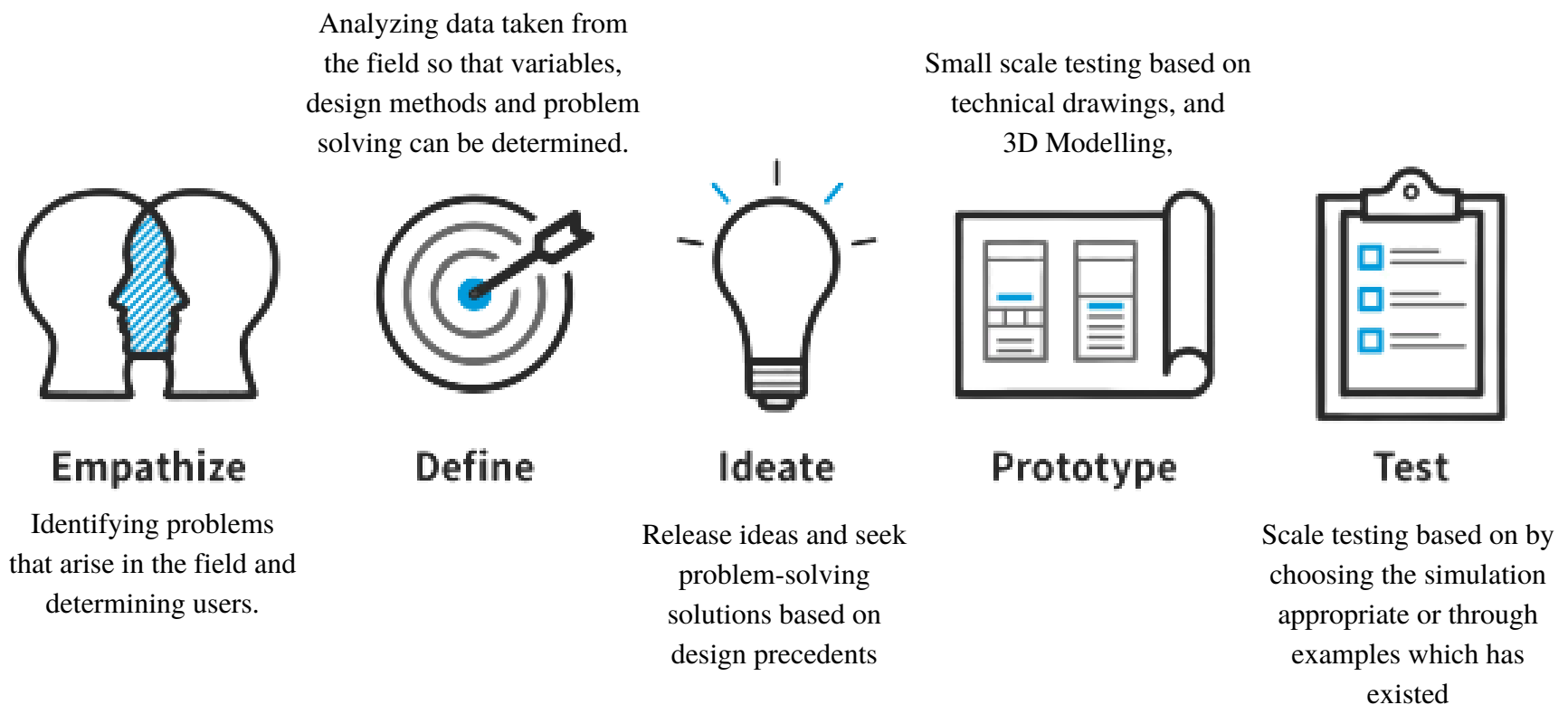
	Cilincing Fisherman's Village as an area fishing tourism	TPI Kampung Nelayan as a sector of fishermen's income	TPI Fishermen's Village acts as a supporting point for the identity of the tourist area
<b>General Problem</b>	How to create a space that could trigger the increase of fisherman effectiveness that act as a means of income for both street vendors and fishermen which can increase economic values and attract tourist interest in TPI of Cilincing fisherman village, North Jakarta using Critical - Regionalism approach.		
<b>Specific Problem</b>	How to design a Fish Auction Market as a space that provide the selling, tourism activity based on the regional regulatory architecture standard?	How to design a Fish auction Market (TPI) using critical regionalism approach?	
<b>Goals &amp; Objectives</b>	<p>The aim of this design is to revitalize the Fish Auction Place (TPI) area of Kampung Nelayan, which is a fishing beach tourist area that responds to aspects of fishermen's cultural identity, as well as designing buildings that can accommodate activities in the TPI area with Critical Regionalism approach.</p> <p>The targets to be achieved in this planning are:</p> <ul style="list-style-type: none"> <li>• Revitalization of TPI</li> <li>• Typology of spaces and buildings that respond to the main community/actors, namely: fishermen, fishing villages, street vendors and tourist.</li> <li>• Developing the potential of building function and regionalism.</li> </ul>		

# Design Problem Solving

## Data Gathering

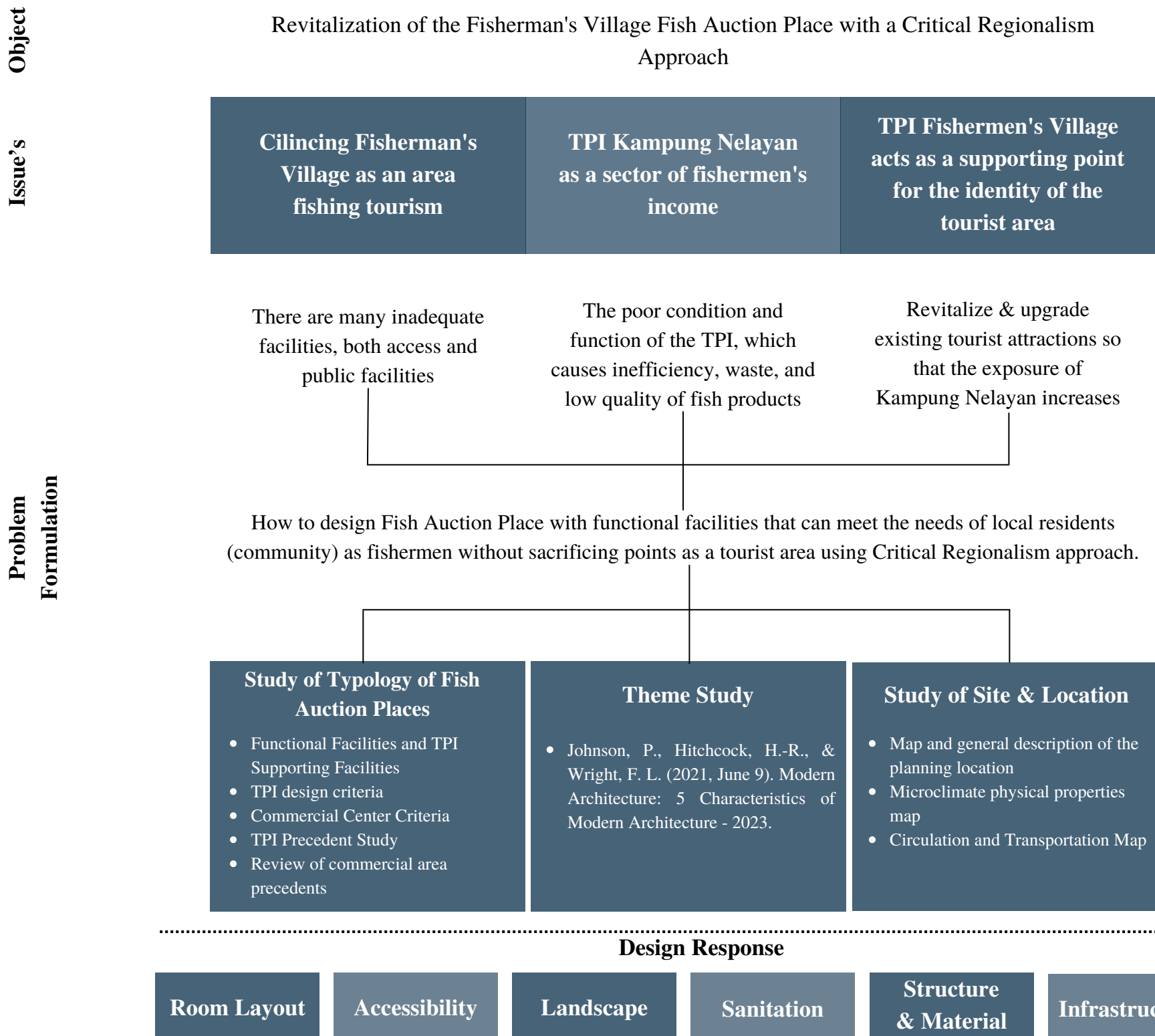
- **Primary Data** : The data collected is in the form of direct observations in the field and interviews with space users regarding the physical conditions of the site area.
- **Secondary Data** : The data collected is in the form of factors that influence the functional and technical aspects of the public space facilities of the TPI Cilincing fisherman village. Secondary data was collected through document research from books, journals, the internet, e-books and others.

## Design Methods



Picture 1.10 Design Thinking Process. Source : <https://www.interaction-design.org/>

# Design Problem Solving



## Originality & Novelty

**Judul : Perencanaan Ruang Budaya Sungai Selili di Samarinda Dengan Pendekatan Space**

**Syntax**

Penulis : Yugo Pratomo

Tahun Terbit : 2020

Universitas : Universitas Islam Indonesia, Yogyakarta

Tipologi Bangunan : Tempat Pelelangan Ikan

This design focuses on planning a cultural space located at the fish auction site on the Selili River, Samarinda. The author uses a space syntax approach to obtain a descriptive strategy for configuring space by producing a theoretical understanding of how to create and use space configurations.

**Judul : Perancangan Tempat Pelelangan Ikan Higienis dengan pendekatan Open Building di Sadeng, Gunungkidul**

Penulis : Febriansah Wijaya

Tahun Terbit : 2020

Universitas : Universitas Islam Indonesia, Yogyakarta

Tipologi Bangunan : Tempat Pelelangan Ikan

Author explained the renovation plan involves strategies for smooth operations at the facility dock the fish so that all activities can be reviewed and implemented Support fishing activities so that they run smoothly. The author applies this strategy what Muniruddin explained in the PPI Cikidang project was good starting from the business model to the design of functional and supporting facilities.

## Originality & Novelty

**Judul : Redesain Pasar Ikan Pabean Surabaya Dengan Gaya Arsitektur Kolonial**

Penulis : Muchamad Irvan, Rofii, ST., MT., Zuraida, ST., MT.

Tahun Terbit : 2015

Universitas : Universitas Muhammadiyah, Surabaya

Tipologi Bangunan : Fish auction place

This design focuses on planning a cultural space located at the fish auction site on the Pabean fish market, Surabaya. The author uses a colonial architectural style on designing the revitalized fish market.

**Judul : Perencanaan dan Perancangan Ulang Fasilitas Pangkalan Pendaratan Ikan di Muncar Banyuwangi, Jawa Timur**

Penulis : Muniruddin

Tahun Terbit : 2002

Universitas : Universitas Islam Indonesia, Yogyakarta

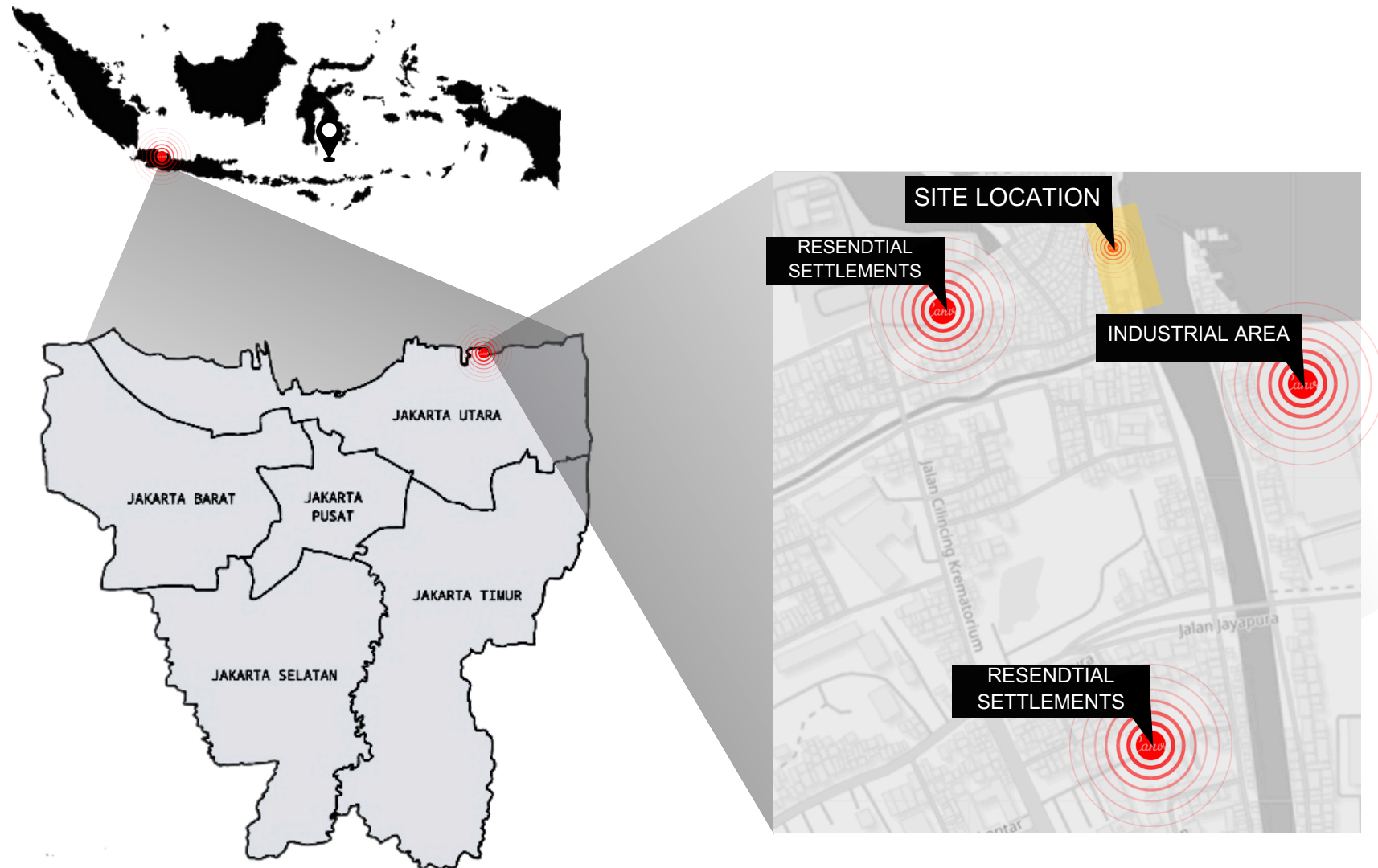
Tipologi Bangunan : Pangkalan Pendaratan Ikan

Muniruddin's reform plan outlines a strategy to streamline the function of fish landing sites so that all functions are appropriate and support the smooth flow of fishing activities. The author applies the strategy explained by Muniruddin in planning PPI Cikidang, starting from the operational model to supporting planning and operational facilities.



# CHAPTER 2





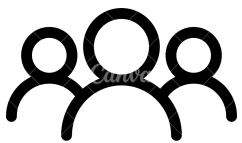
Gambar 2.1 Map Location Macro - Micro design Source : openstreetmap.org

## Fisherman's Village Actors



According to one of the residents of the Cilincing fishing village as reported by Ratih Waseso Kontan.co.id, there are around 150 heads of families who depend on their livelihood as fishermen in this place. They use traditional ships called klotok, which have a cargo capacity of between 1-2 tons.

Cilincing fishing village is a village located on the north coast of Jakarta, precisely in Cilincing Village, Cilincing District, North Jakarta. The Cilincing fishing village is a resting place and residence for hundreds of fishermen who earn their living at sea.



Apart from being fishermen, residents of the Cilincing fishing village also have other activities to earn income, such as selling fresh or salted fish, peeling and cleaning green mussels, or working in warehouses storing fish catches.

In this place there are also various marine-caught commodities, such as fish, shrimp, squid, crab, crab and green mussels.



Unit

Metric

Area

4,641.81 m<sup>2</sup>

Perimeter

337.19 m

## Site Area and Building Regulation

**REGULATION OF THE GOVERNOR OF THE SPECIAL REGIONAL PROVINCE  
CAPITAL JAKARTA NUMBER 41 OF 2017, Stated**

Building Base Coefficient (KDB) : 60%

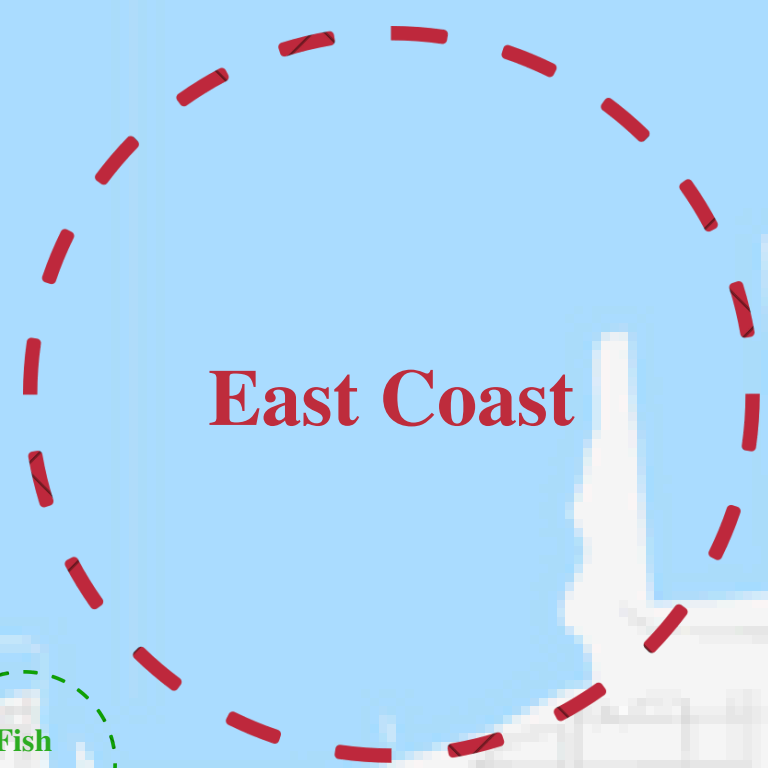
Building Floor Coefficient (KLB) : 5

Minimum Green Area Coefficient (KDH) : 20%

This location is located on Jalan Karet Pasar Baru Barat V, Jakarta, DKI Jakarta with a site area of ± 4640 m<sup>2</sup>



**West Coast**



**East Coast**



**Fisherman's  
Settlement**



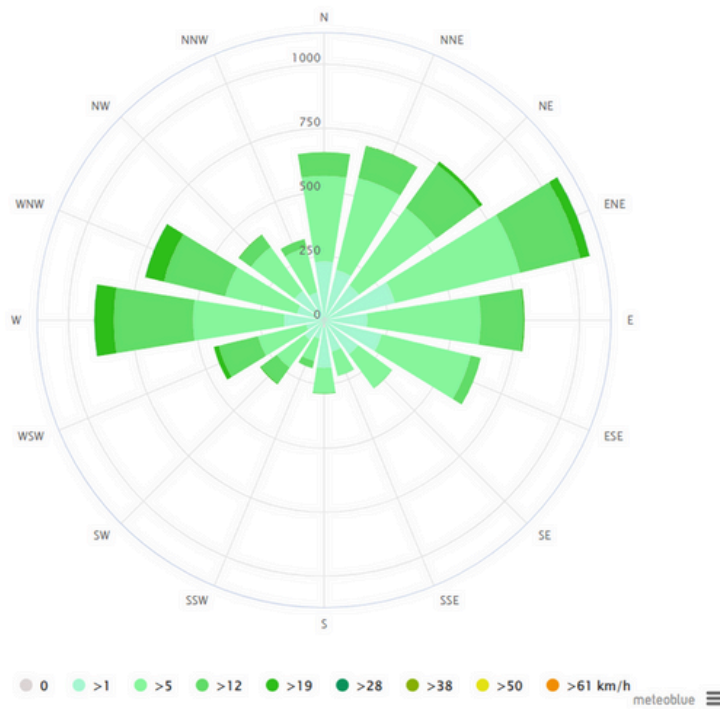
**Fisherman's  
Settlement**



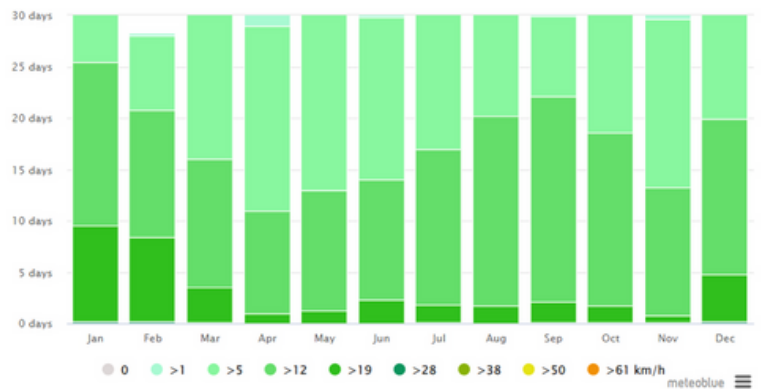
**Fish  
Auction**

**Kali Baru**

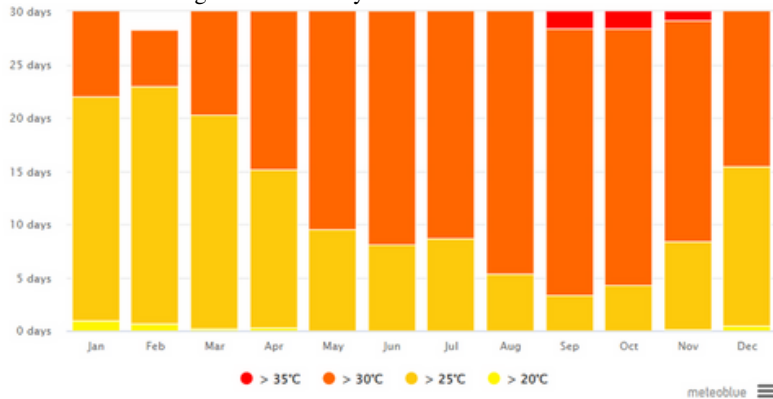
**Cilincing**



Wind Orientation Data. Source : meteoblue.com



Average Wind Velocity. Source : meteoblue.com



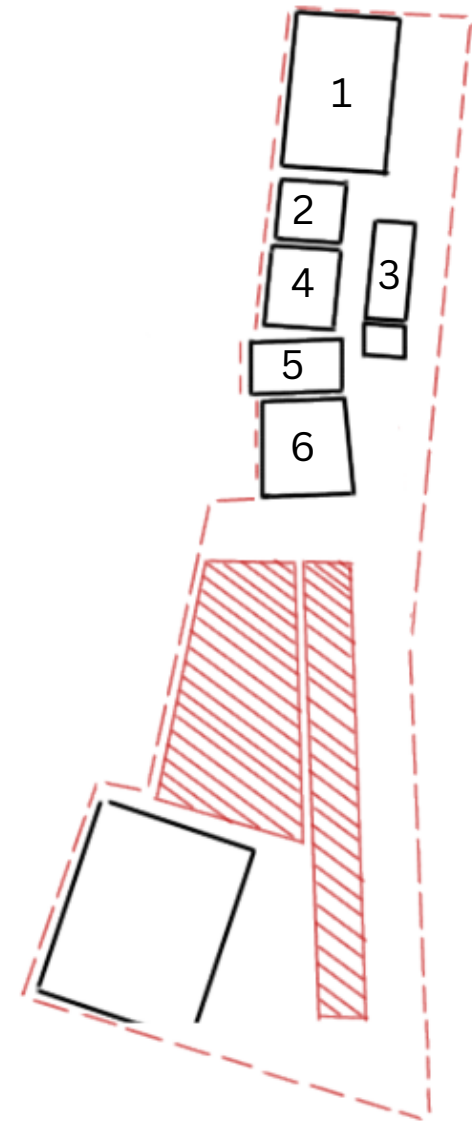
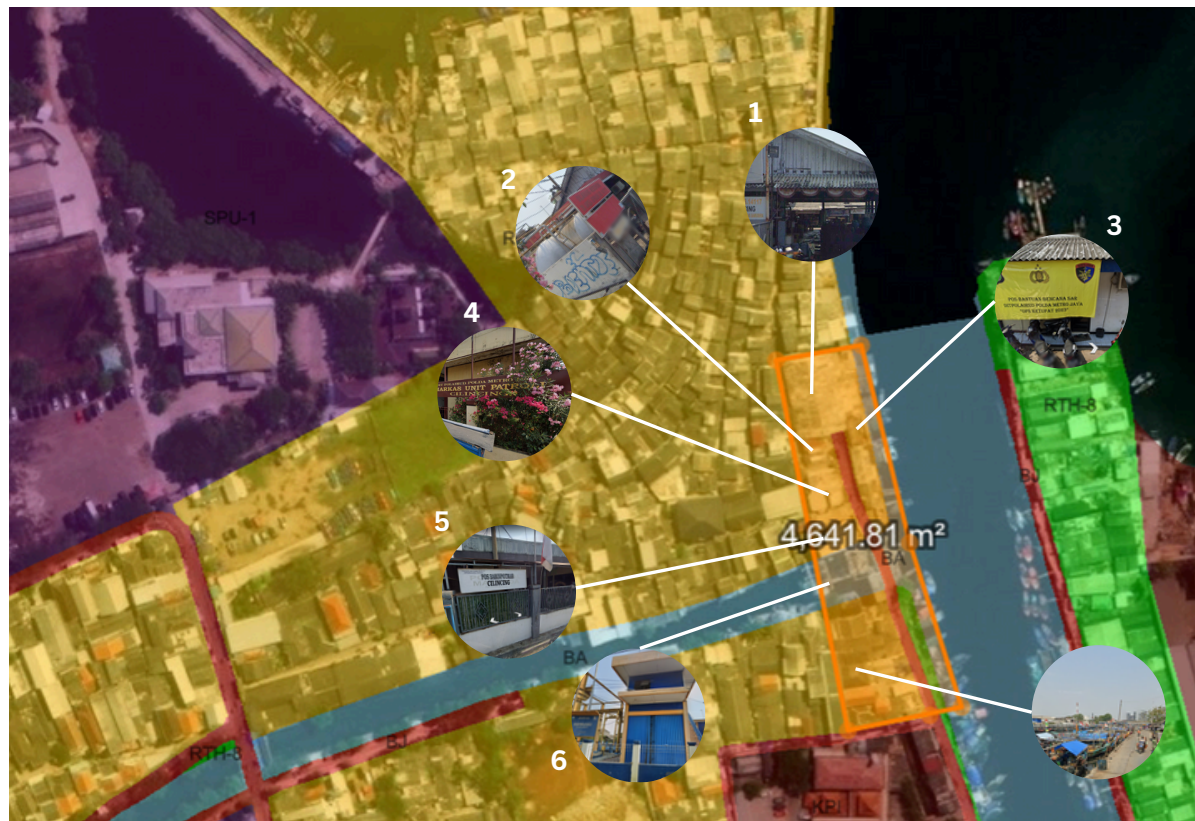
Average Temperature Data. Source : meteoblue.com

Wind orientation data, and wind speed at the site location with geographical location is at -6.098604990780738, 106.93966293851287 indicating:

- Wind rose data (wind orientation) shows how many hours per year the wind blows from the direction shown and has a wind orientation that tends to be towards the East and North East with an average speed of 12-28 km/hour.
- Average daily maximum" shows the average maximum temperature for each month in the Fisherman's Village area for the hottest day of each month in the last 30 years.
- Sunchart data is used as an overhang to minimize solar radiation. Based on these data, it can be concluded that wind orientation, wind speed, average temperature can be a consideration or reference for recommendations in developing site potential in designs such as passive cooling systems, and optimizing the potential for sound by the wind in design planning.

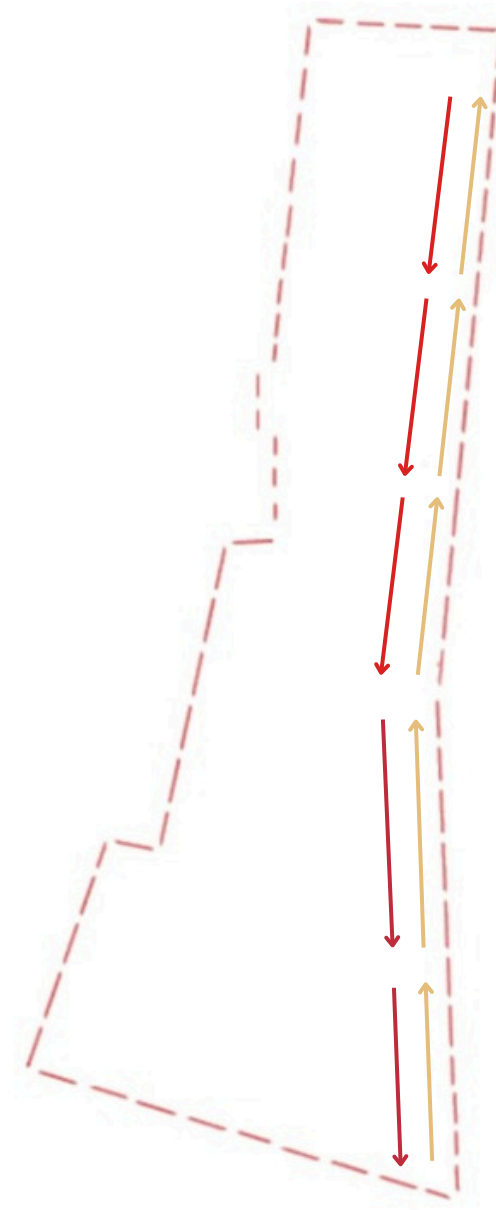


Sunchart Data. Source : SunCalc.org



## Existing Features

- 1 : Fish Market
- 2 : SPBN
- 3 : Disaster Relief Post
- 4 : Regional Police Office (Polda)
- 5 : Maritime Potential Development Non-Commissioned Officer post
- 6 : Banglo Water Pump Station



- Public vehicle route
- Private vehicle route
- Pedestrian route
- Pedestrian route

## S

- Rich potential of marine economy, such as fisheries and tourism
- Availability of various seafood commodities, such as fish, shrimp, squid, crab, and green mussels
- Cultural and historical value of the coastal community

## W

- Lack of settlement support facilities, resulting in slums and unorganized areas
- Limited access to public services and infrastructure, such as transportation, electricity, water, and sanitation
- Social and physical degradation, such as shops closing, abandoned facilities and buildings, and environmental pollution

## O

- Development of auction methods, such as timed auction and flash auction, to increase the efficiency and convenience of the auction process
- Promotion of local culture and products, such as klotok (traditional boat engine), kerang hijau (green mussels), and sejarah Cilincing (history of Cilincing)

## T

- Natural disasters and climate change, such as floods, storms, and sea level rise
- Intense economic competition with other areas, such as ports, warehousing, and shopping centers
- Rapid urbanization and population growth, leading to overcrowding and resource depletion

## User Analysis

Nestled against the northern shore of Jakarta, Kampung Nelayan Cilincing emerges as a living testament to the enduring maritime legacy of Indonesia. The rhythmic embrace of the Java Sea shapes the daily lives of its inhabitants, weaving a tapestry of tradition, resilience, and community spirit.

This exploration is driven by the imperative to conduct a nuanced user analysis, delving specifically into the intricate occupational landscape within Kampung Nelayan Cilincing. Occupations, as pivotal facets of community life, play a crucial role in shaping the socio-economic fabric of this village.

- **Fisherman:** They are the people who work in the village, either as employees or entrepreneurs. They have various occupations related to fishing, such as catching, sorting, selling, processing, cooking, and educating. They depend on the sea for their income and livelihood. They have various skills and knowledge related to fishing, such as bargaining, weighing, cutting, preserving, flavoring, shaping, cooking, and teaching.
- **Residents:** They are the people who live in the village, either as natives or migrants from other regions. Most of them come from West Java, such as Indramayu, Cirebon, and Karawang. They speak Sundanese as their daily language. They live in simple houses, often made of wood and bamboo, near the shore or the river. They face various challenges, such as poverty, pollution, flooding, and eviction.
- **Visitors:** They are the people who visit the village, either as tourists or researchers. They have various interests and purposes, such as exploring, learning, enjoying, or documenting the village's culture, cuisine, and environment. They often interact with the residents and fisherman, either as customers, students, guests, or partners. They have various impacts and contributions to the village, such as bringing income, awareness, appreciation, or innovation.



## Building Function Study

### Fish Auction Market (TPI)

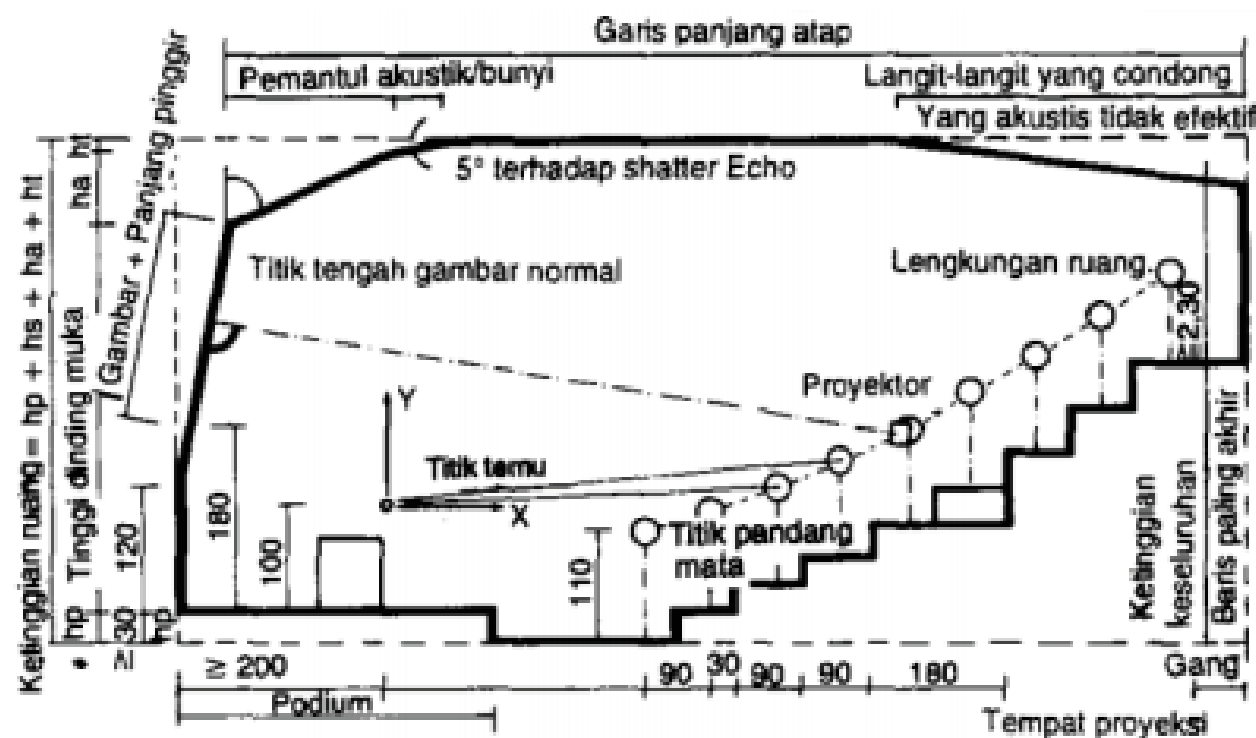
A Fish Auction Place (TPI) is a market where fish/seafood sales transactions take place, whether by auction or not, and is usually located within a Fish Landing Facility (PPI). TPI requirements are to have a permanent home, not be able to travel, have a sales coordinator and obtain approval from the authorized agency (Central Statistics Agency, 2013).

TPI's functions include:

- Supporting the activities of fishermen who want to sell fish quickly and at a good price
- Supporting the fishing activities of fishermen.
- Facilitate the processing of caught fish.

Spatial Performance Requirements at Fish Auction Places:

- Comfortable visibility at the meeting point, created when the chairs are raised.
- Production To have good hearing, it is necessary to pay attention to sound reflections in the ceiling area.



Gambar 2.17 Ilustrasi Ruang Pelelangan Sumber : Ernst Neufert, Data Arsitek edisi 33

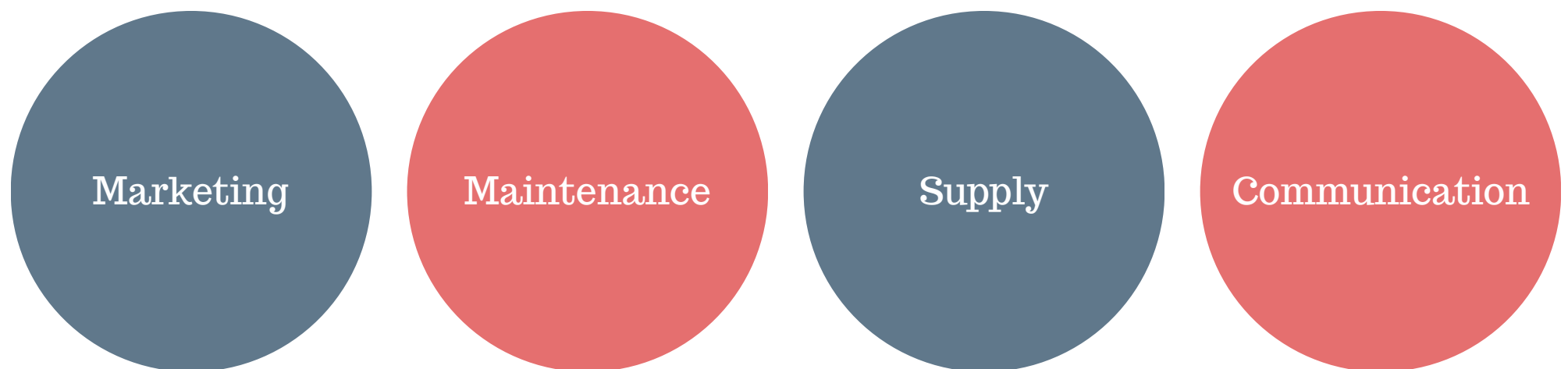
## Building Function Study

### Fish Auction Market (TPI)

According to Lubis (2000), functional facilities or supra-structures in fishing ports are designed to enhance the use value of basic port facilities. These are categorized into four main groups based on their functions:

1. Handling Catches and Marketing: This includes facilities like the Fish Auction Place (TPI), maintenance and processing areas for fish catches, ice factories, refrigeration and cooling facilities, and marketing buildings.
2. Maintenance and Repair Facilities: These cater to the fleet of vessels and fishing equipment, encompassing engine rooms, drying areas for fishing equipment, workshops, slipways, and net warehouses.
3. Supply Facilities: This category covers tanks, and installations for drinking water and fuel.
4. Communication Facilities: These include telephone network stations and radio SSB.

The Directorate General of Fisheries (2004) specifies that the fish auction building should be adjacent to the pier and parking terminal, with a floor width of 4 to 8 meters to facilitate easy access for transport vehicles. Murdiyanto (2002) expands on this by including additional functional facilities such as shipping navigation and communication tools, lighthouses, watchtowers, clean water, ice, and electricity supplies, vessel and fishing equipment maintenance areas, net repair places, transit sheds for handling and processing fishery products, quality development laboratories, administrative offices, transportation equipment for fish and ice, and waste treatment facilities. These facilities are essential for the efficient operation and further development of a fishing port.

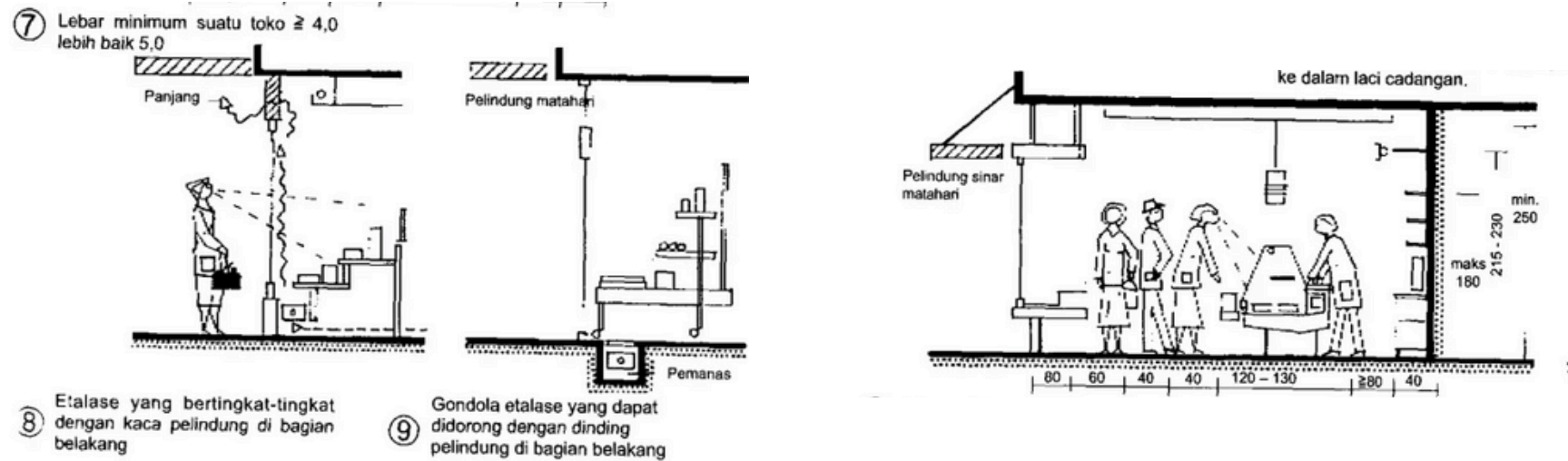


# Building Function Study

## Fish Auction Market (TPI)

### Shops

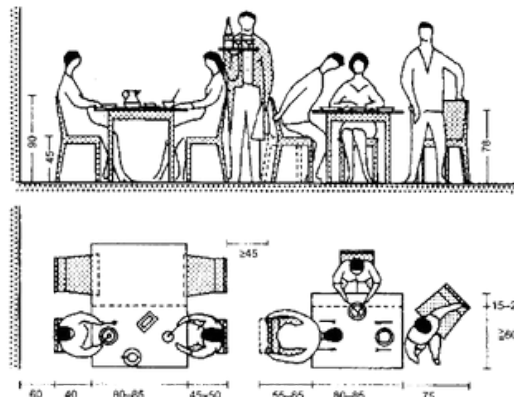
A rental - based shops that can be rented by sellers to sell various kinds of merchandise.



Gambar 2.17 Ilustrasi Ruang Pelelangan Sumber : Ernst Neufert, Data Arsitek edisi 33

### Restaurant

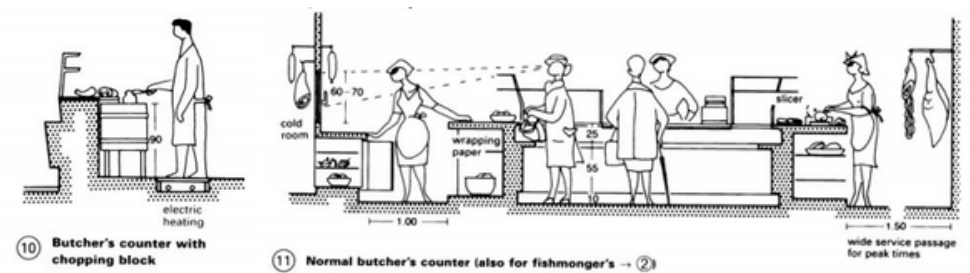
The restaurant is located in the same building as the fish auction so that visitors can enjoy dishes from the fish they have chosen.



Gambar 2.17 Ilustrasi Ruang Pelelangan Sumber : Ernst Neufert, Data Arsitek edisi 33

### Fish Market

A fish market that is specifically aimed at buyers who will choose their fish to be processed in restaurants.



Gambar 2.17 Ilustrasi Ruang Pelelangan Sumber : Ernst Neufert, Data Arsitek edisi 33

## Building Function Study

### Fish Auction Market (TPI)

According to Neufert Architect Data in the fourth book the recommendations for TPI design is :

- The minimum area of the TPI should be 1000 m<sup>2</sup>, with a minimum width of 20 m and a minimum length of 50 m.
- The TPI should have a roof that covers the entire area, with a minimum height of 4 m.
- The TPI should have a concrete floor with a slope of 1:100 towards the drainage channel, which should be 0.5 m wide and 0.3 m deep.
- The TPI should have a water supply system that can provide 10 liters of water per second, with a pressure of 2 kg/cm<sup>2</sup>.
- The TPI should have a lighting system that can provide 300 lux of illumination, with a minimum of 10 lux at the darkest point.
- The TPI should have a ventilation system that can provide 10 air changes per hour, with a minimum of 2 m/s of air velocity.
- The TPI should have a sanitation system that can dispose of the waste water and solid waste generated by the fish auction activities, in accordance with the environmental regulations.
- The TPI should have a storage area that can accommodate the fish and ice, with a minimum of 0.5 m<sup>3</sup> of space per ton of fish.
- The TPI should have a weighing area that can measure the weight and quality of the fish, with a minimum of 2 scales per 1000 m<sup>2</sup> of TPI area.
- The TPI should have a display area that can show the fish to the buyers, with a minimum of 10 m of display table per 1000 m<sup>2</sup> of TPI area.
- The TPI should have a bidding area that can facilitate the auction process, with a minimum of 1 microphone and speaker per 1000 m<sup>2</sup> of TPI area.
- The TPI should have a payment area that can collect the money from the buyers, with a minimum of 1 cashier per 1000 m<sup>2</sup> of TPI area.

# Typological Studies

## Fish Auction Market

A fish auction market is a place where fish and fish products are sold through a bidding process. Buyers and sellers compete with each other to determine the price and quantity of the fish. A fish auction market can be a part of a fish market, where seafood is also sold to individual consumers, or a separate facility, where only wholesale trade takes place. Fish auction markets are common in many countries, especially those with large fishing industries or coastal communities. The layout of a fish auction market is the arrangement of the spaces and facilities that are used for the fish trading process. The layout can vary depending on the size, location, function, and design of the market, but some common elements are:

- A landing area, where the fish are unloaded from the fishing vessels or trucks and sorted by species, size, and quality.
- A storage area, where the fish are kept in ice or refrigerated containers until they are ready for auction.
- An auction hall, where the fish are displayed on tables or trays and bid by buyers using different methods, such as verbal, electronic, or clock auctions.
- A payment area, where the buyers pay for their purchases and receive invoices or receipts.
- A loading area, where the buyers collect their fish and load them into their vehicles or transport them to other destinations.

### Material :

**The material should be water-resistant, mold-resistant, easy to clean and hygienic to maintain the quality and safety of the fish and the workers, strong and resistant to impact, corrosion, and fire**

### Floor

Epoxy resin: Epoxy resin is a synthetic polymer that can be applied as a coating or a flooring system over concrete or other substrates. Epoxy resin can be used for the floors and walls of the market. Epoxy resin is suitable for fish auction markets because it is water-resistant, non-slippery, easy to clean, hygienic, resistant to abrasion, impact, corrosion, and chemical agents.

### Wall

Concrete: Concrete is a durable and versatile material that can be used for the foundation, walls, floors, and roofs of the market. Concrete can also be reinforced with steel bars or mesh to increase its strength and stability. Concrete is suitable for fish auction markets because it can withstand water, heat, and corrosion. Concrete can also be easily shaped and molded to create different forms and structures

# Building Function Study

## Fish Auction Market Classification

- Class 1: Fish auction place that serves large fishing vessels (above 100 GT) with a quantity of fish landed of more than 50 tons/day. Class 1 fish auction places must have complete facilities such as docks, warehouses, auction rooms, cold rooms, processing rooms, laboratories, offices and sanitation facilities. An example of a class 1 fish auction place is TPI Juwana in Pati Regency.
- Class 2: Fish auction place that serves medium-sized fishing vessels (50-100 GT) with a quantity of fish landed of 10-50 tons/day. Class 2 fish auction places must have facilities such as docks, warehouses, auction rooms, cooling rooms and sanitation facilities. An example of a class 2 fish auction place is TPI Pengambengan in Jembrana Regency.
- Class 3: Fish auction places that serve small fishing vessels (under 50 GT) with the number of fish landed being less than 10 tons/day. Class 3 fish auction places must have minimum facilities such as docks, warehouses and sanitation facilities. An example of a class 3 fish auction place is TPI Banyuwangi in Banyuwangi Regency.

## Fish Auction Place Management (TPI)

A Fish Auction Place (TPI) has employees who have duties and their respective functions for the sustainability of a TPI. According to Simarmata (2011), as manager of the Fish Auction Place, managers and fish auction implementers have mandatory duties and responsibilities carried out are:

### 1. Auction Leader

The auction leader carries out his daily duties accordingly with the following job description:

- a) Lead and coordinate daily fish auction activities;
- b) Prepare and submit a routine financing plan for implementation daily fish auctions for a certain period of time to chairman of the organization holding the fish auction;
- c) Make an accountability report for each fish auction activity end of the month concerned to the head of the organizing organization fish auctions and periodically to the District Government through District Fisheries Service and to the work unit where TPI is located.

### 2. Clerk or Fish Auction Administration

Duties and responsibilities of the fish auction clerk or administration are as follows :

- a) Set registration and auction serial number, day of auction for ships or boats that will auction their fish at TPI;
- b) Regulate the use of TPI equipment or supplies;
- c) Arrange work, fish owners or fishermen and traders who are raised to enter the auction room using identification cards to ensure the smooth running and safety of the fish being auctioned;
- d) Make records and reports on auction activities, including data on the number of ships or boats auctioning their fish, fish production (type/volume), auction turnover (unit price, total price), and retribution deductions and guarantee the purity of these data/records;
- e) Carry out auction administration activities such as correspondence, comprehensive activity reporting at TPI and so on;
- f) Assist the auctioneer in recording data on fish owners, buyers, number and type of fish, and auction transaction prices as well as filling out auction tickets; And
- g) Auction clerk/administrator, in carrying out daily duties is responsible to the auction leader.

## Fish Auction Place Management (TPI)

### 3. Auctioneer

The auctioneer has the following duties:

- a) Organize the fish entering the demonstration/auction room;
- b) Carrying out fish auctions to traders openly;
- c) Announce the auction winner;
- d) Record in a special notebook: the owner of the auction, the trader who won the auction, the number and type of fish and the amount of the auction value;
- e) Fill in the auction tickets, respectively for the fish owner, auction winner and auctioneer archives;
- f) Order the auction winner to pay the price of the fish in accordance with what is stated on the auction ticket plus a levy to the TPI cashier; And
- g) The auctioneer in carrying out his daily duties is responsible to the auction leader.

### 4. Weigher

- a) Carry out weighing of fish submitted to auction;
- b) Provide a label/note on each basket or container indicating the type, weight and name of the fish owner or other information;
- c) Provide notes/bookkeeping of weighing results which include data on fish type, fish weight and owner's name; And
- d) The weigher in carrying out his daily duties is responsible to the auction leader.

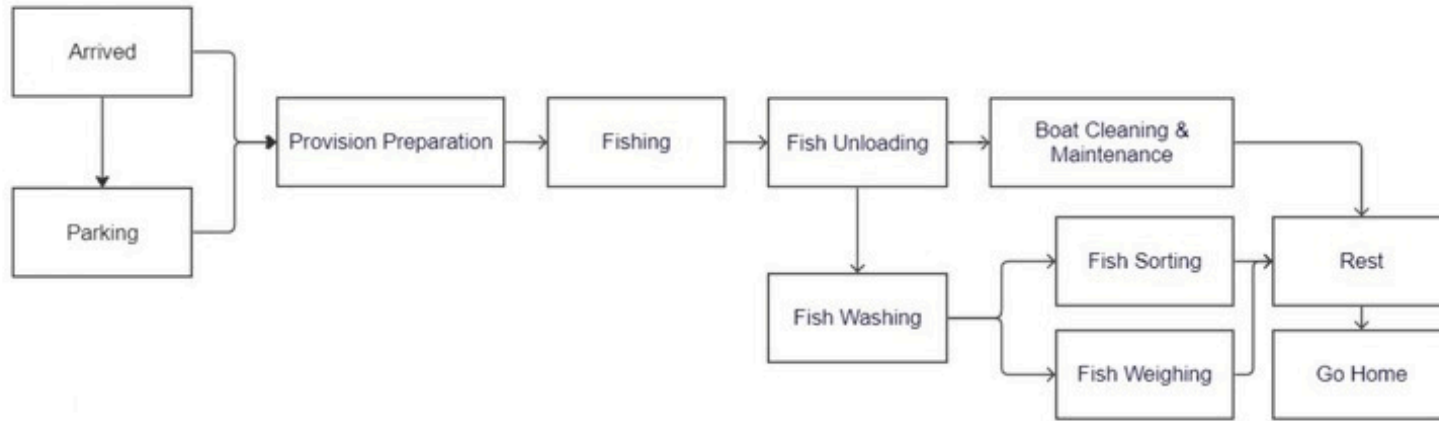
### 5. TPI special cashier/treasurer

- a) Collect/receive auction money in cash to or from traders and buyers who win the auction in the amount stated in the auction ticket plus levies in the amount in accordance with applicable regulations;
- b) Fill in the receipt note from the winning trader/buyer auction;
- c) Make immediate payment of money to the owner/fisherman in the amount according to the data stated in the auction ticket minus the levy levy in the amount adjusted with applicable regulations;
- d) Make a note as proof of payment;
- e) Carry out recording and bookkeeping of the amount of receipts and payments as well as daily retribution deductions in accordance with the instructions of financial management regulations;
- f) Deposit the results of the receivables bill of the organization/work unit where TPI is located;

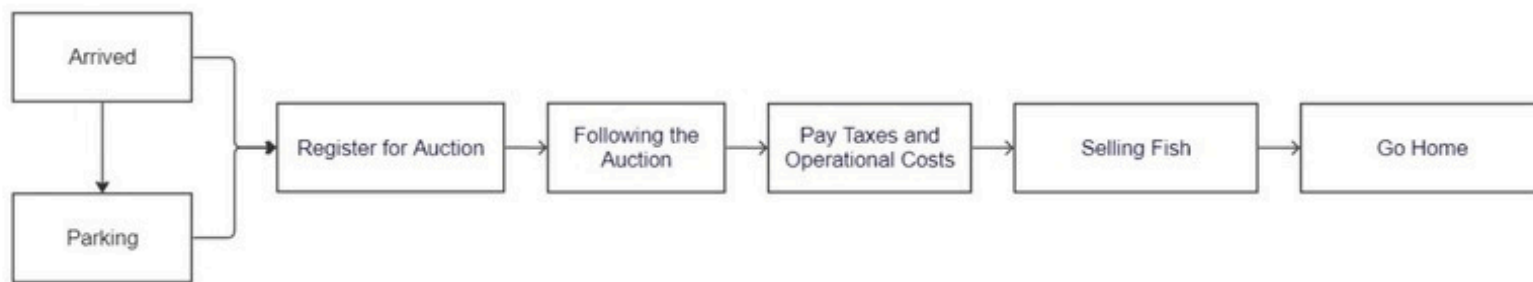


# Activity Flow

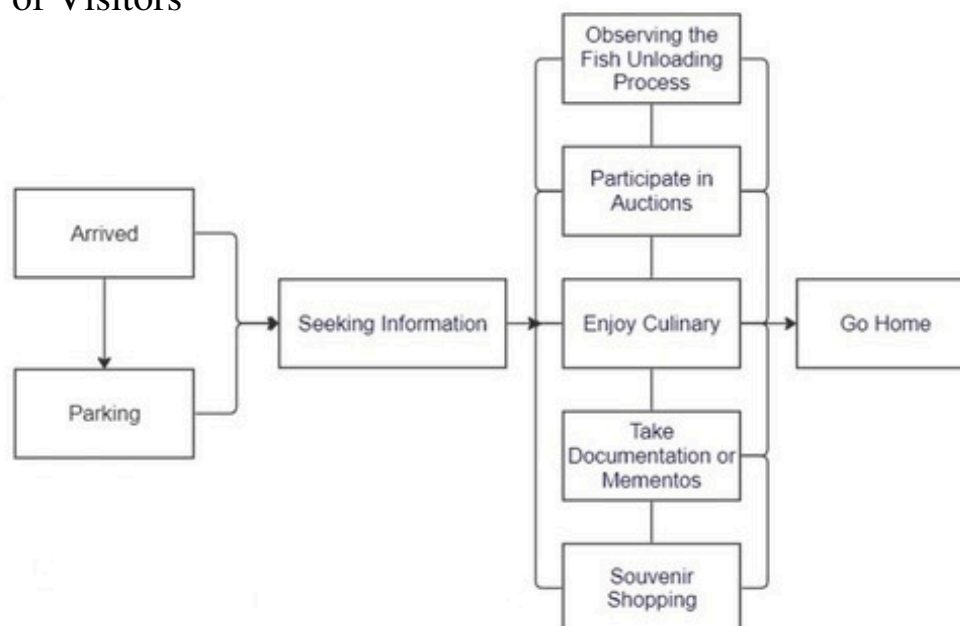
## Activity of Fisherman



## Activity of Street vendors / Resident



## Activity of Visitors



## Building Existing Data



# 1

### TPI

TPI yang terletak di ujung pesisir yang berfungsi sebagai tempat masyarakat sekitar menjual tangkapannya.



# 2

### Office Area

Area kantor yang terletak di dalam TPI yang berfungsi untuk mengendalikan keamanan di wilayah TPI yang tidak beroperasi dengan baik.



# 3

### Fuel Installation Unit

The ship fueling station is located right next to TPI which is still functioning well.



# 4

### Patrol Unit Headquarters

Markas patroli yang secara keseluruhan masih berfungsi dengan baik menjaga ketertiban dan keamanan masyarakat di kampung nelayan.

## Building Existing Data



# 5

### Maritime surveillance post

The Indonesian Navy's maritime monitoring post is located opposite the fuel installation unit which is no longer functioning properly.



# 6

### Water supply unit

Area kantor yang terletak di dalam TPI yang berfungsi untuk mengendalikan keamanan di wilayah TPI yang tidak beroperasi dengan baik.



# 7

### Ship Dock Area

## Site Context Study

### Festival Pesisir

A newcomer to the festival scene, this festival is held at the Sunda Kelapa harbour, with cities and districts across Indonesia also participating. Festival Kampung Tugu is a part of Pesisir and is held in front of the Portuguese Tugu Church in Cilincing, north Jakarta. The inhabitants of this small but historic community are direct descendants of captive Portuguese who were liberated and allowed to settle there by the Dutch in the sixteenth century.

Kampung Tugu is the birthplace of Kroncong music, a fusion of Portuguese-influenced and indigenous music. Festival Pesisir Cilincing is a cultural event that celebrates the life and traditions of the coastal community in Cilincing, North Jakarta. It is also known as Nadran Pesta Laut or Festival Kampung Nelayan, which means Sea Festival or Fishermen Village Festival. The festival is organized by the Cilincing Fishermen Community (Kunci) as a way of expressing gratitude to the Creator for the abundance of the sea.



## Design Approach Study

### Critical Regionalism

Critical regionalism is an approach to architecture that tries to balance the global and the local influences in design. It aims to create buildings that are meaningful and rooted in their context, but also responsive to the modern challenges and technologies. Critical regionalism is not the same as vernacular architecture, which is based on traditional forms and materials. Critical regionalism is a creative and critical way of designing that respects the culture, history, climate, and geography of a place, but also incorporates contemporary elements and innovations. Some of the architects who are known for their critical regionalist works are Tadao Ando, Charles Correa, Glenn Murcutt, and Alvaro Siza. They have designed buildings that reflect the identity and diversity of their regions, while also engaging with the wider world. Critical regionalism is an important approach in architecture because it helps to create a sense of place and belonging, and also promotes sustainability and diversity.

### Parameters of Critical Regionalism approach

- Responding to the cultural and geographical context of the place, while avoiding sentimental or nostalgic imitation of vernacular forms.
- Balancing between the global and the local influences, while resisting the homogenizing and placeless effects of globalization.
- Enhancing the qualities of the landscape and the natural environment, rather than imposing artificial forms on the existing topography.
- Integrating local definitions of space, limits, public and private, while addressing universal concerns and ideas.
- Emphasizing the tactile and the sensory aspects of architecture, rather than the visual and the scenographic.
- Using materials and technologies that are appropriate and sustainable for the specific location and climate.

## Design Approach Study

### Design Application

Creating a space that enhances the effectiveness of fishermen and acts as a source of income for both street vendors and fishermen, while also increasing economic value and attracting tourists at the Tempat Pelelangan Ikan (TPI) in Cilincing Fisherman Village, North Jakarta, can be achieved through a Critical-Regionalism approach. This approach blends local cultural elements with modern architectural practices to create a space that is both functional and culturally significant.

- 1. Integration of Local Culture and Modern Design:** The design should reflect the local maritime culture and traditions of the Cilincing Fisherman Village while incorporating modern architectural elements. This can include using local materials and design motifs in the construction of the TPI, making the space a reflection of the community's identity.
- 2. Efficient Layout for Fishermen and Vendors:** The space should be designed to optimize the workflow for fishermen and vendors. This includes strategic placement of the fish auction area, processing units, and vendor stalls to ensure smooth operation and easy access for both fishermen and buyers. Ensuring that the fish auction area is adjacent to the docking and unloading area, as per the guidelines of the Directorate General of Fisheries, can significantly increase efficiency.
- 3. Public Spaces for Community and Tourist Engagement:** Incorporating public spaces where tourists can interact with the local community is essential. This can include viewing galleries at the TPI, areas for cultural performances, and educational spaces where visitors can learn about the local fishing industry and its significance.
- 4. Sustainable Practices and Environmental Responsibility:** The design should incorporate sustainable practices such as efficient waste management, use of renewable energy, and conservation of the marine ecosystem. This not only supports the long-term sustainability of the fishing industry but also appeals to environmentally conscious tourists.
- 5. Enhanced Connectivity and Accessibility:** The TPI should be easily accessible to both locals and tourists. This includes good transportation links, clear signage, and facilities that cater to a diverse range of visitors, including those with disabilities.
- 6. Spaces for Innovation and Skill Development:** Including areas for skill development and innovation, such as workshops or training centers, can help improve the effectiveness of fishermen and vendors. These spaces can be used for training in new fishing techniques, preservation methods, or entrepreneurial skills.
- 7. Integration of Technology:** Incorporating technology such as digital information boards, online marketplaces, and modern communication tools can help fishermen and vendors expand their reach and improve their business practices.

By applying these principles in the design of the TPI, the space can become a hub of economic activity, cultural exchange, and community development, effectively increasing the effectiveness of fishermen and vendors, boosting the local economy, and attracting tourists to the Cilincing Fisherman Village.

## Precedents Studies



**Jaffa Harbor Market** is a new shopping, dining and entertainment destination with stands providing exciting experiences inspired by history, culture and cuisine at its location Warehouse center No. 1 in the riverside harbor regeneration area Israel. The material is inspired by seaports, fishing nets, dilapidated steel structures, warehouses and boats moored in harbors. The material palette includes stainless steel mesh, solid wood, and brick steel plate; The material will naturally withstand saline and damp locations. At the same time providing a distinctive but neutral atmosphere, it gives the impression of a certain freedom to each trader. Express your culinary personality. Based on the results of previous research regarding the design of the Jaffa Port market, we can conclude that:

1. Use materials based on the local intellectual identity of daily life of fishermen and materials that are appropriate to the regional context.
2. Use open space typography in commercial areas. Merchants can connect with each other.



**Sydney Fish Market** combines traditional fish market displays with modern features and aims to forge strong relationships with the community Waterfront at Blackwattle Bay. Fish market design applies the concept of contemporary spatial perception to basic market patterns; The large semi-open space is occupied by rows of street vendor stalls. The ground floor has all the traditional functions associated with a fish market, while the amphitheater stairs and waterfront promenade allow visitors to enjoy commercial functions and internal operations, from a safe distance. The amphitheater's stairs lead from the square to the public market creating a riverside promenade and connecting the neighborhood with the central business district. Markets are the social centers of cities around the world, often consisting of a series of covered outdoor stalls and set in spacious squares. The main aim of the new building is to maintain an authentic market atmosphere. Maintaining a free-spirited, human-scale atmosphere was a key design goal. The wavy roof shape maintains the interconnected essence of the structure and creates a modern symbol for the waterfront (Allen, K. (archdaily), 2018)

Traditional markets tend to be open areas, and fish markets tend to be closed off from public areas due to the health risks of the machines and processes. However, this design creates a strong visual connection with the interior and allows indirect public participation within the building.

A large auditorium connects the ground floor plaza with the public plaza and allows visitors access as they traverse the riverside path. There are also public spaces in the form of seating, meeting and recreation rooms with plants that filter turbid water from the building at both ends of the building. The design for the market promotes a sustainable strategy that combines rainwater and gray water recycling, biofiltration and a mechanical filtration system. The waste system also prioritizes recycling strategies to reduce unnecessary waste.





**Tsuki to toyosu** is a phrase that means “from Tsukiji to Toyosu” in Japanese. It refers to the relocation of the famous fish market in Tokyo from the old site of Tsukiji to the new site of Toyosu in 2018. The relocation was a major event that involved various challenges and impacts for the market operations, the traders, the customers, and the city. The old site of Tsukiji was established in 1935 and became one of the largest and busiest fish markets in the world. It was also a popular tourist attraction, especially for its tuna auction and sushi restaurants. However, the old site faced problems such as aging facilities, overcrowding, sanitation issues, and limited space for expansion

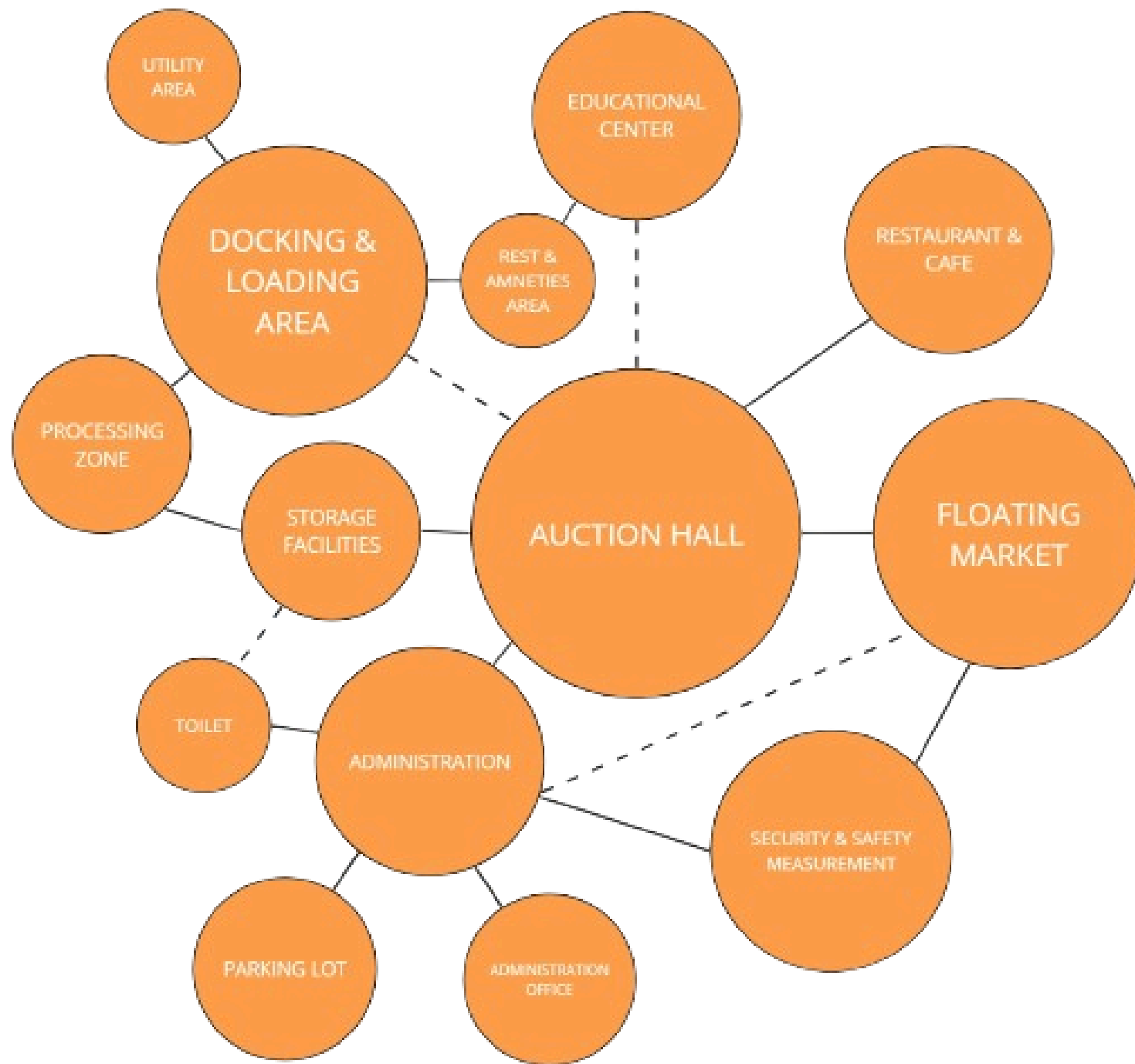
Lesson learned :

- Environmental and health concerns: The new site of Toyosu was formerly a gas plant, and there were fears of soil and groundwater contamination that could affect the food safety and quality
- Cultural and emotional impacts: The old site of Tsukiji was not only a market, but also a cultural icon and a tourist attraction. It had a rich history and a unique atmosphere that attracted many people from around the world.



# CHAPTER 3

# Exploration of Building Function Concept



— : Direct Relationship

- - - : Indirect Relationship

# Exploration of Building Function Concept

## PUBLIC AREA

ROOM	SPACE REQUIREMENTS	STANDARD	SOURCE	CAPACITY	AREA
ADMINISTRATION	<ul style="list-style-type: none"> <li>RECEPTION AREA</li> <li>LOUNGE</li> </ul>	<ul style="list-style-type: none"> <li>0.65 sqm/person</li> <li>1.8 sqm / person</li> </ul>	<ul style="list-style-type: none"> <li>NAD</li> <li>NAD</li> </ul>	<ul style="list-style-type: none"> <li>10</li> <li>50</li> </ul>	<ul style="list-style-type: none"> <li>6.5 sqm</li> <li>90 sqm</li> </ul>
	<ul style="list-style-type: none"> <li>Lobby Area</li> <li>Lobby Area + Circulation (20%)</li> </ul>				<ul style="list-style-type: none"> <li>96.5 sqm</li> <li>115.8 sqm</li> </ul>
PARKING AREA	<ul style="list-style-type: none"> <li>VISITOR AREA</li> </ul>	<ul style="list-style-type: none"> <li>2 sqm/moto</li> <li>12 sqm/car</li> </ul>	<ul style="list-style-type: none"> <li>NAD</li> <li>NAD</li> </ul>	<ul style="list-style-type: none"> <li>20</li> <li>20</li> </ul>	<ul style="list-style-type: none"> <li>40 sqm</li> <li>125 sqm</li> </ul>
	<ul style="list-style-type: none"> <li>Parking Area</li> <li>Parking Area + Circulation (20%)</li> </ul>				<ul style="list-style-type: none"> <li>165 sqm</li> <li>198 sqm</li> </ul>
TOILET	<ul style="list-style-type: none"> <li>MALE TOILET</li> <li>FEMALE TOILET</li> <li>DISABILITIES TOILET</li> </ul>	<ul style="list-style-type: none"> <li>2.52 sqm/person</li> <li>2.52 sqm/person</li> <li>2.85 sqm/person</li> </ul>	<ul style="list-style-type: none"> <li>NAD</li> <li>NAD</li> <li>NAD</li> </ul>	<ul style="list-style-type: none"> <li>5</li> <li>5</li> <li>1</li> </ul>	<ul style="list-style-type: none"> <li>12.6 sqm</li> <li>12.6 sqm</li> <li>2.85 sqm</li> </ul>
	<ul style="list-style-type: none"> <li>Area</li> <li>Area + Circulation (20%)</li> </ul>				<ul style="list-style-type: none"> <li>28.05 sqm</li> <li>33.66 sqm</li> </ul>
AUCTION HALL	<ul style="list-style-type: none"> <li>PODIUM</li> <li>DISPLAY AREA</li> <li>STORAGE</li> </ul>	<ul style="list-style-type: none"> <li>2m x 3m</li> <li>0.65 sqm/person</li> <li>4m x 5m</li> </ul>	<ul style="list-style-type: none"> <li>NAD</li> <li>NAD</li> <li>NAD</li> </ul>	<ul style="list-style-type: none"> <li>5</li> <li>50</li> <li>1</li> </ul>	<ul style="list-style-type: none"> <li>30 sqm</li> <li>90 sqm</li> <li>20 sqm</li> </ul>
	<ul style="list-style-type: none"> <li>Area</li> <li>Area + Circulation (20%)</li> </ul>				<ul style="list-style-type: none"> <li>140 sqm</li> <li>168 sqm</li> </ul>
FOOD COURT	<ul style="list-style-type: none"> <li>DINING AREA</li> <li>SERVICE AREA</li> </ul>	<ul style="list-style-type: none"> <li>1.3 sqm/person</li> <li>5% dining area</li> </ul>	<ul style="list-style-type: none"> <li>NAD</li> <li>NAD</li> </ul>	<ul style="list-style-type: none"> <li>30</li> </ul>	<ul style="list-style-type: none"> <li>39 sqm</li> <li>2 sqm</li> </ul>
	<ul style="list-style-type: none"> <li>AREA</li> <li>AREA + CIRCULATION (20%)</li> </ul>				<ul style="list-style-type: none"> <li>41 sqm</li> <li>49.2 sqm</li> </ul>

## PRIVATE AREA

ROOM	SPACE REQUIREMENTS	STANDARD	SOURCE	CAPACITY	AREA
DOCKING & UNLOADING STATION	• LOADING AREA	• 10 sqm/person	• NAD	• 5	• 50
	• Area • Area + Circulation (20%)				• 50 sqm • 60 sqm
FISH PROCESSING AREA	• WORKSPACE	• 4 sqm/person	• NAD	• 10	• 40 sqm
	• Area • Area + Circulation (20%)				• 40 sqm • 48 sqm
PACKAGING & GRADING AREA	• WORKSPACE	• 2 sqm/person	• A	• 5	• 10 sqm
	• Area • Area + Circulation (20%)				• 10 sqm • 12 sqm
REST & AMENITIES AREA	• RESTING AREA • MEETING AREA	• 1.8 sqm/person • 6	• NAD • NAD	• 30 • 1	• 54sqm • 6 sqm
	• Area • Area + Circulation (20%)				• 60 sqm • 72 sqm
SAFETY SECURITY AREA	• GUARD ROOM • MEDICAL ROOM		• A • A	• 2 x 3 • 2 x 3	• 6 sqm • 6 sqm
	• AREA • AREA + CIRCULATION (20%)				• 12 sqm • 14.4 sqm
TRAINING & EDUCATIONAL CENTER	• CLASSROOM	• 2.2 sqm/person	• NAD	• 10	• 22 sqm
	• AREA • AREA + CIRCULATION (20%)				• 22 sqm • 26.4 sqm

# Zoning & Plotting Design Concept

## 1. Docking and Unloading Area:

- The layout starts with a well-organized docking area where fishing vessels can easily unload their catch. This area includes dedicated spaces for each vessel, equipped with efficient unloading mechanisms.

## 2. Processing Zone:

- Adjacent to the docking area is the processing zone. This area includes facilities for cleaning, sorting, and initial processing of the fish. It is designed to streamline the transition of fish from the vessels to processing.

## 3. Storage Facilities:

- Connected to the processing zone is a climate-controlled storage facility. This area allows for the immediate storage of processed fish in optimal conditions before auctioning.

## 4. Auction Hall:

- Centrally located is the auction hall, easily accessible from both the processing zone and storage facilities. This space is equipped with technology for efficient and transparent auctioning processes.

## 5. Packaging and Grading Area:

- Adjacent to the auction hall is a dedicated space for packaging and grading. This area is equipped with tools and equipment for efficient packing and quality control immediately after the auction.

## 6. Loading Zone:

- Connecting the packaging and grading area is a loading zone designed for quick and easy transportation of packaged fish. This area provides convenient access for vehicles to load the fish for distribution.

## 7. Rest and Amenities Area:

- Positioned strategically within the site is a rest and amenities area. This space offers a comfortable environment for fishermen to rest between activities, including restrooms, a break room, and a small cafeteria.

## 8. Training and Educational Center:

- Integrated into the layout is a training and educational center. This facility provides a space for ongoing education and training programs to enhance fishermen's knowledge of best practices and safety measures.

## 9. Administrative Offices:

- Near the entrance of the site are administrative offices. This central hub facilitates coordination of activities, paperwork handling, and administrative tasks necessary for the smooth operation of the fish auction site.

## 10. Safety Measures:

- Throughout the site, safety measures are implemented, including emergency exits, first aid stations, and clear signage to ensure the overall safety of everyone present.

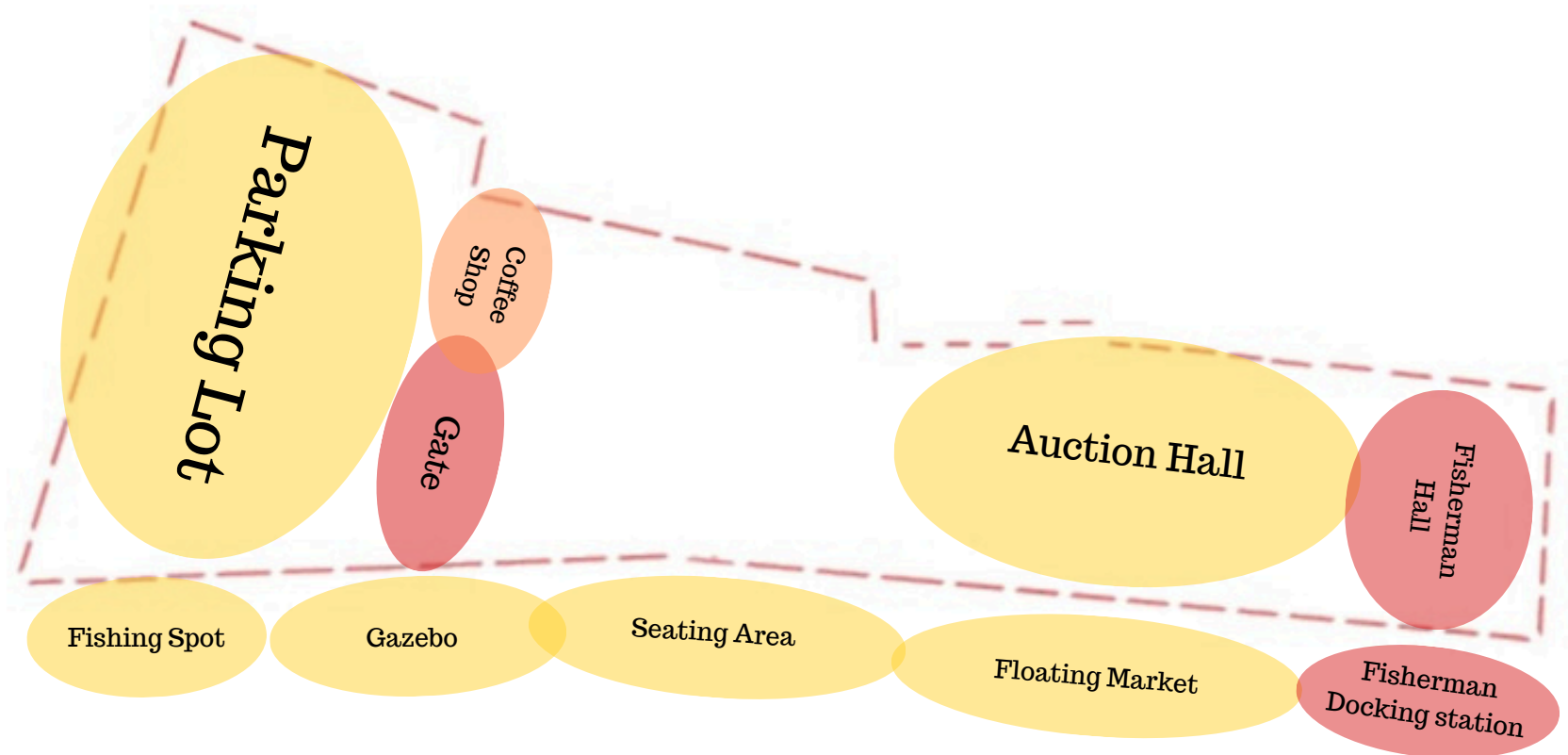
## 11. Technology Integration:

- The entire site is equipped with technology for efficient record-keeping, inventory management, and communication among stakeholders. This includes RFID tagging systems or a digital platform for auction transactions.

## 12. Floating Market

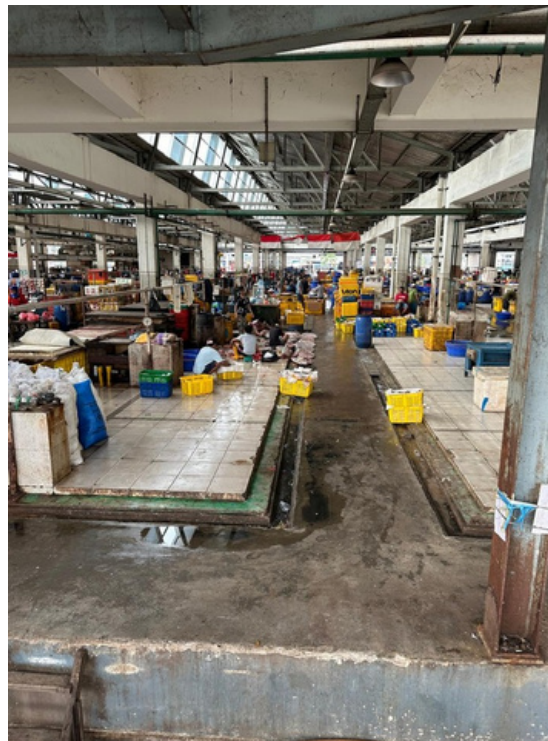
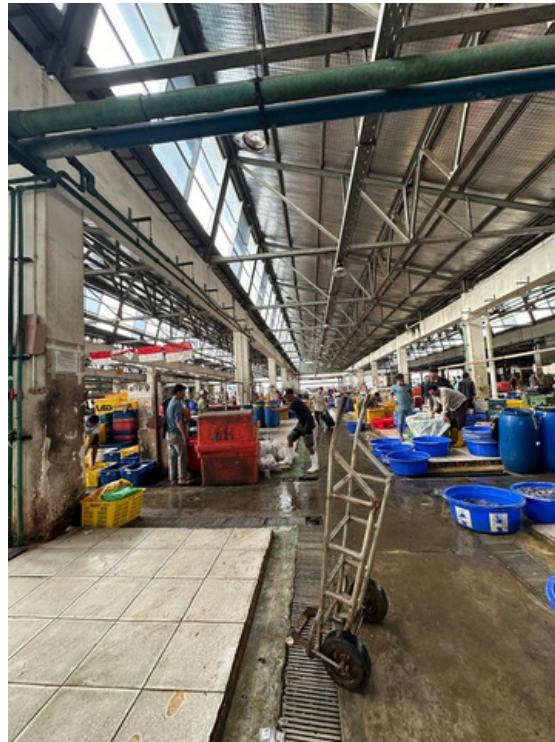
This sequential layout is designed to create a logical and efficient flow of activities, from the arrival of fish at the docking area to their auctioning, processing, packaging, and eventual distribution. Regular reviews and updates should be conducted to ensure the layout remains optimized for productivity and meets the evolving needs of the fishermen and the industry.

## Zoning & Plotting Design Concept



- The location of the fish market and TPI are close together so that visitors can watch and enjoy the dishes they choose directly while at the fish market
- Facilitate access for fishermen to TPI facilities such as ship maintenance areas and fishing equipment, including: workshop, dock/slipway and fuel installation.
- The ship maintenance area has ready access to the dock as it is slipway to facilitate the transportation of ships from the dock to the maintenance area to be maintenance.

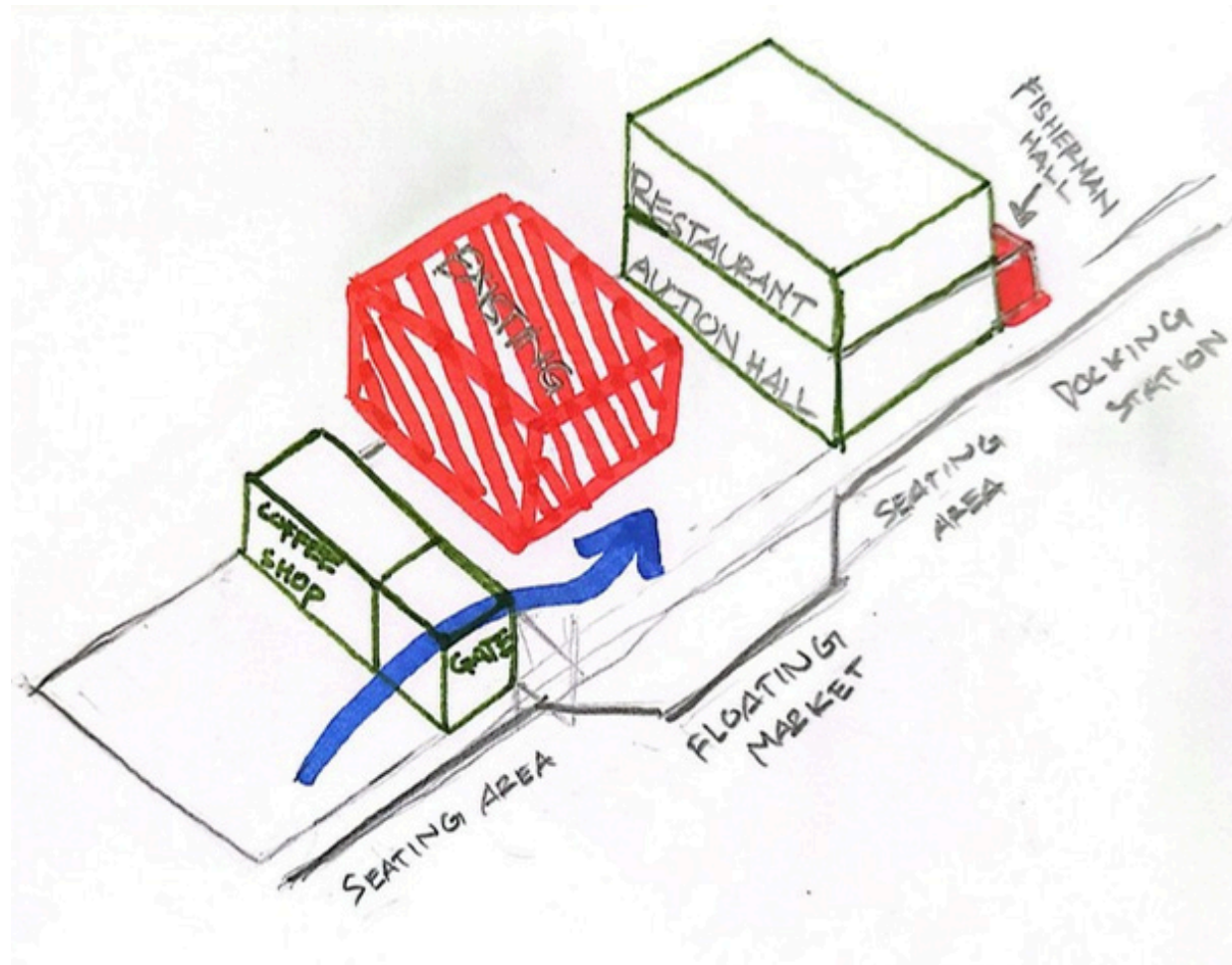
# Fish Stall Concept





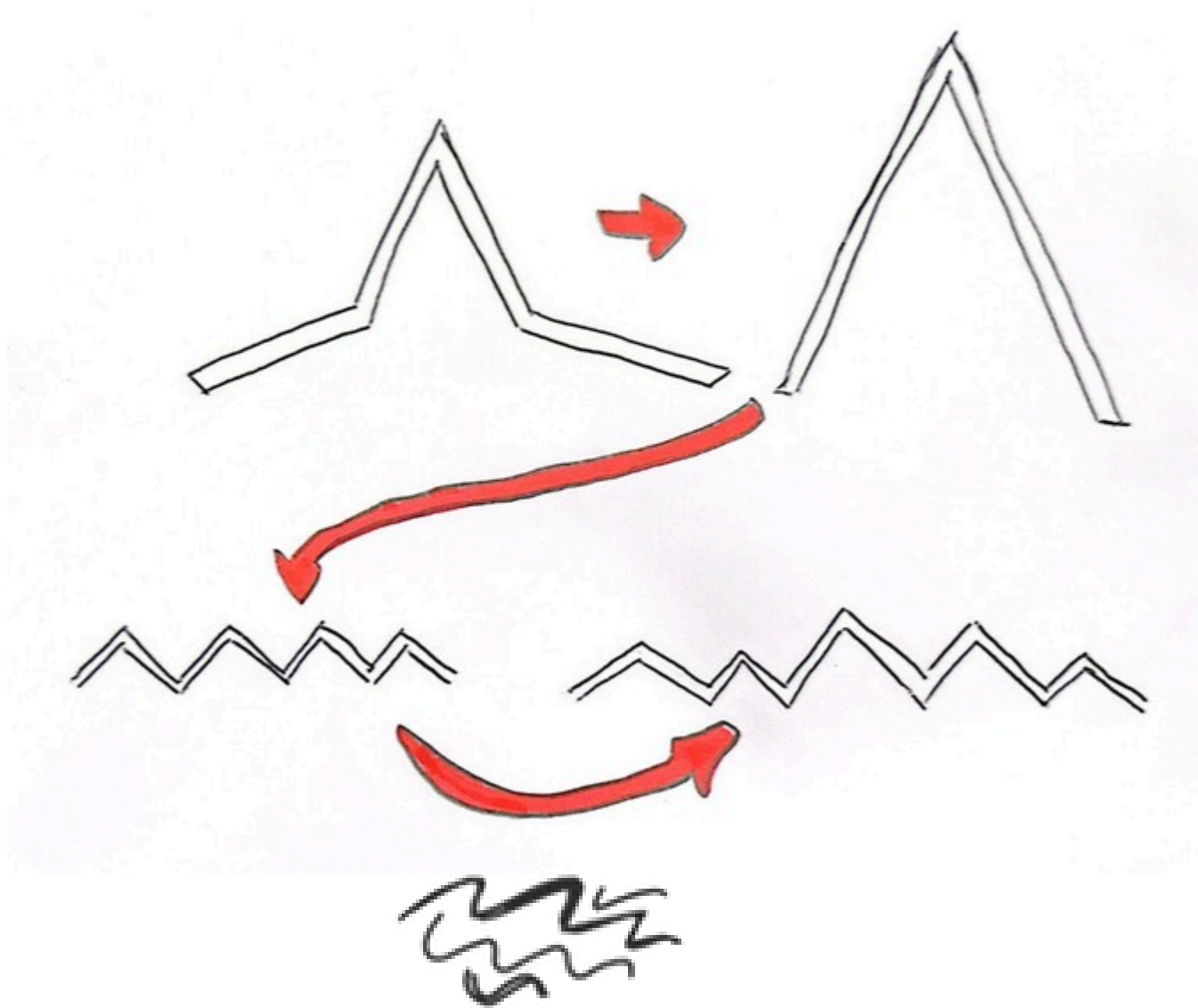
## Layout Design Concept

The integration and interaction of the TPI with the surrounding environment and community, which can affect the social, economic, and cultural aspects of the fishery sector. For example, a TPI can have a multifunctional space that can be used for various activities, such as restaurant, coffee shop, floating market, riverside seating area and also fisherman hall which will provides the fisherman needs.

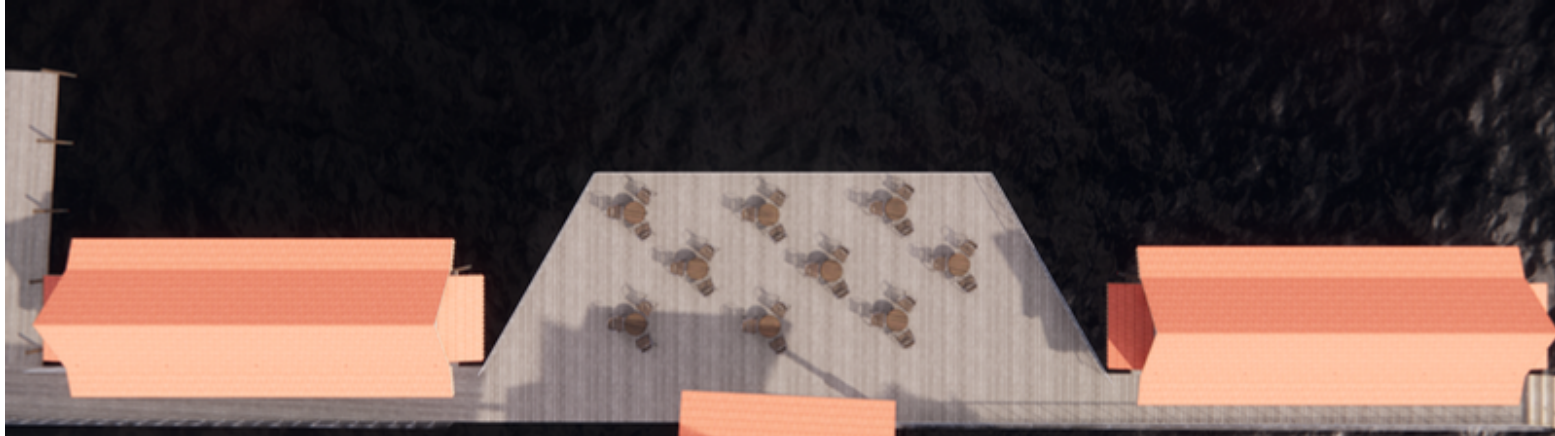
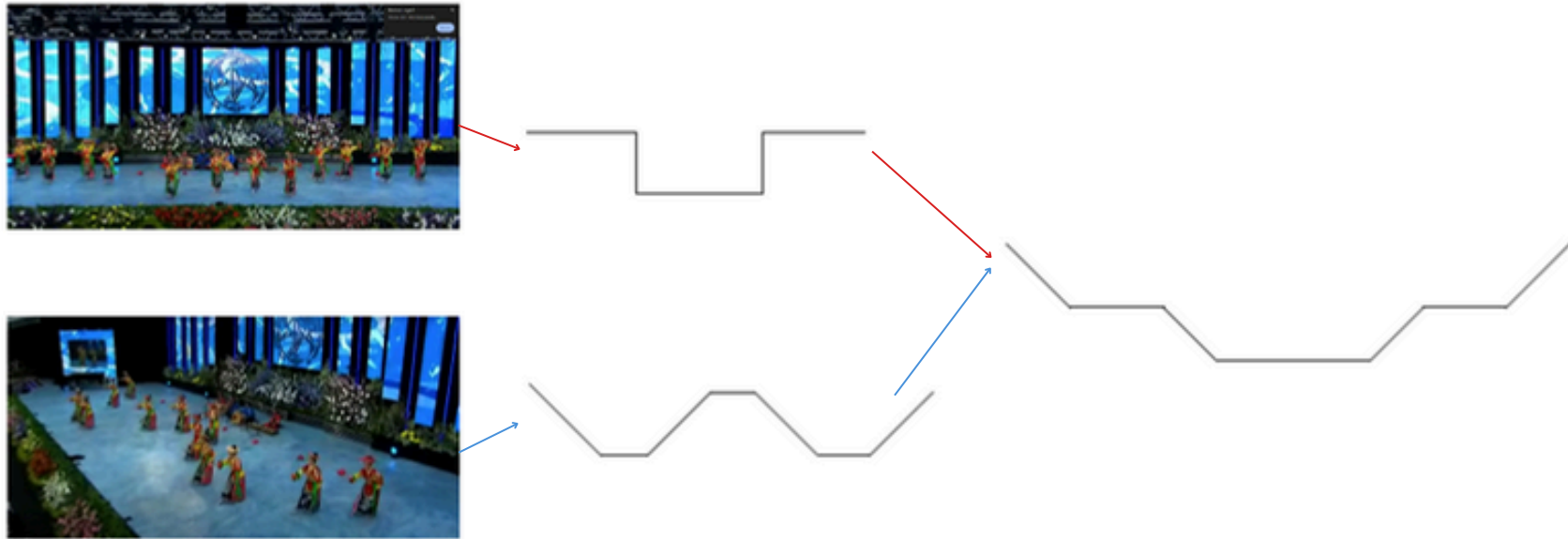


## Roof Design Concept

The roof design concept is taken from betawi traditional house roof shape, *rumah kebaya* and reshape it into gable roof like shape and combine it with more wave form from local context and create an irregular gable roof design



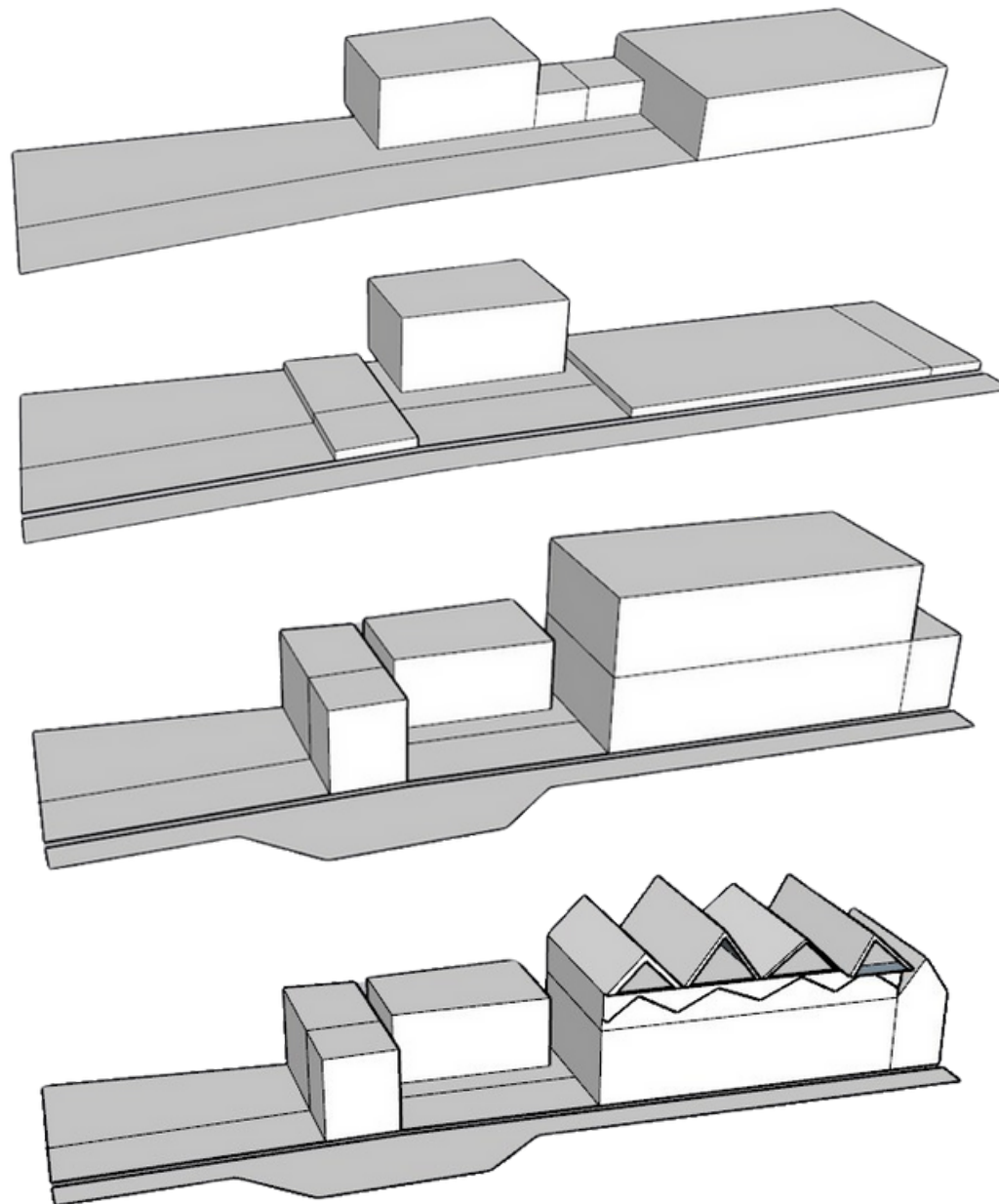
## Critical Regionalism Concept



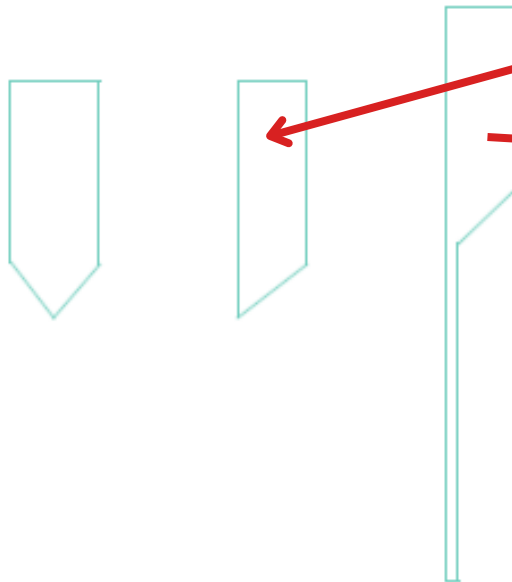
- The shape of the dock is inspired by the formation of betawi traditional dance called *tari topeng*.
- The shape it self is the combination of 2 different formation of the *tari topeng*.

## Building Shape Concept

The layout and function of the spaces and facilities, which can affect the usability, safety, and quality of the services provided. For example, the facilities can have a clear and logical circulation, a flexible and adaptable space, and a user-friendly and accessible design.

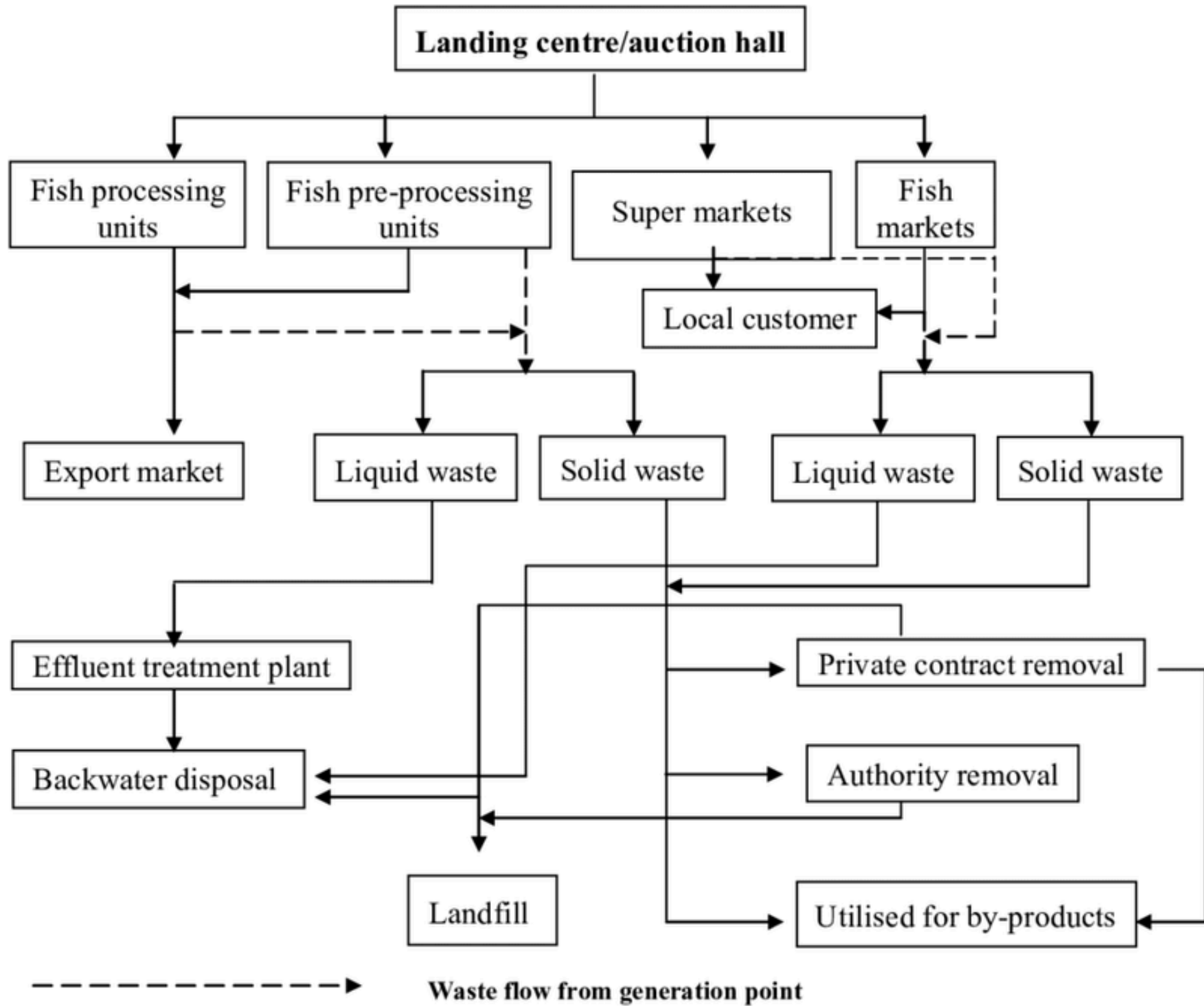


## TPI Design Transformation Concept



- The secondary skin material uses wood obtained from used wood or leftovers from ship construction or restoration as a cost saving concept.
- The shape of the secondary skins is inspired by the shape of the motif of *pucuk rebung* and transform into more modern and effective shape.

# Disposal Concept



## Tourist Attraction Concept



The introduction of a floating market at the Tempat Pelelangan Ikan (TPI) in Kampung Nelayan, Cilincing, North Jakarta, presents a novel solution to boosting tourism in the area. This unique concept combines the traditional charm of a fisherman's village with the vibrant allure of a floating marketplace. Set against the backdrop of the bustling TPI, the floating market would offer tourists a picturesque and authentic experience of local culture and commerce.

# Materiality Concept



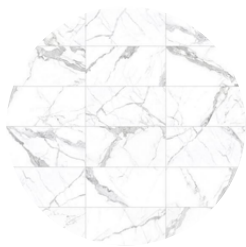
## Concrete

For the structure of the building, concrete is a common choice due to its strength and longevity. It can withstand the damp conditions of a fish auction center.



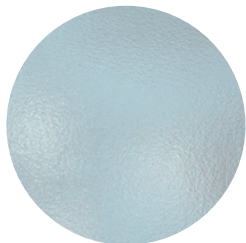
## Steel

It's used for frames and structures within the center. Steels offer durability, flexibility and hygiene.



## Ceramic Tiles

For flooring, ceramic tiles are a popular option as they are easy to clean and maintain. They also resist water and stains, making them ideal for areas where fish are handled.



## Glass

For display areas, glass is often used due to its transparency and ease of cleaning.

The best material for a fish auction center depends on several factors including durability, hygiene, cost, and suitability for the specific environment.





# CHAPTER 4



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DEPARTMENT OF ARCHITECTURE  
FACULTY OF CIVIL, ENGINEERING AND PLANNING  
UNIVERSITAS ISLAM INDONESIA



PROJECT NAME

RENTALIZATION OF FISH AUCTION AND  
CULINARY MARKET CLANGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

LOCATION

CLANGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

SUPERVISOR

Tony Kunto Wibisono S., M.Sc.

JURY

1. Barito Adi Sultan ROR, ST, MA., DR  
2. Pado Ayo Purnomawan A, Dr, Ing, S.T., M.A.

DESCRIPTION

DRAWN BY

NAFISE FARUQAH SIBIDI

DRAWING TITLE

ENVIRONMENT  
SITUATION

SCALE

1:300



NOTE



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FACULTY OF CIVIL, ENGINEERING AND PLANNING  
UNIVERSITAS ISLAM INDONESIA



PROJECT NAME

RENOVATION OF FISH AUCTION AND  
CULINARY MARKET CLANGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

LOCATION

CLANGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

SUPERVISOR

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JURY

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2. Peko Ago Pramono A, Dr. Ing., S.T., M.A.

DESCRIPTION

DRAWN BY

HAFISE FARUQAH SIBOEH

DRAWING TITLE

AXONOMETRIC  
ENVIRONMENT  
SITUATION

SCALE

1:250

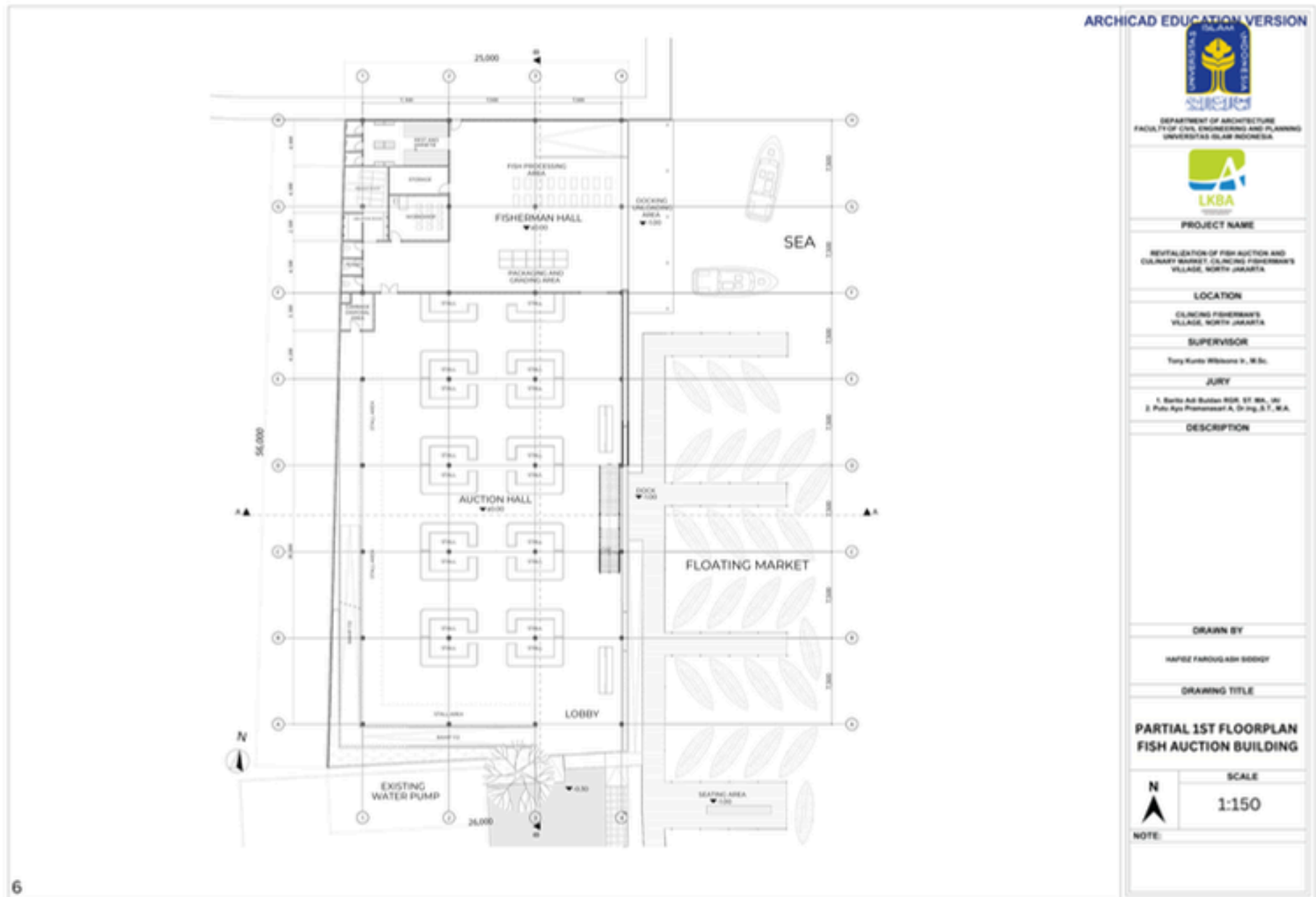
NOTE

2









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FACULTY OF CIVIL, ENGINEERING AND PLANNING  
UNIVERSITAS ISLAM INDONESIA



PROJECT NAME

RENTALIZATION OF FISH AUCTION AND  
CULINARY MARKET CLANGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

LOCATION

CLANGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

SUPERVISOR

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JURY

1. Barito Ad Sultan ROR, ST, MA., DR.  
2. Pado Ayu Purnamasari A, Dr. Ing., S.T., M.A.

DESCRIPTION

DRAWN BY

NAFISE FARUQAH SIBOHY

DRAWING TITLE

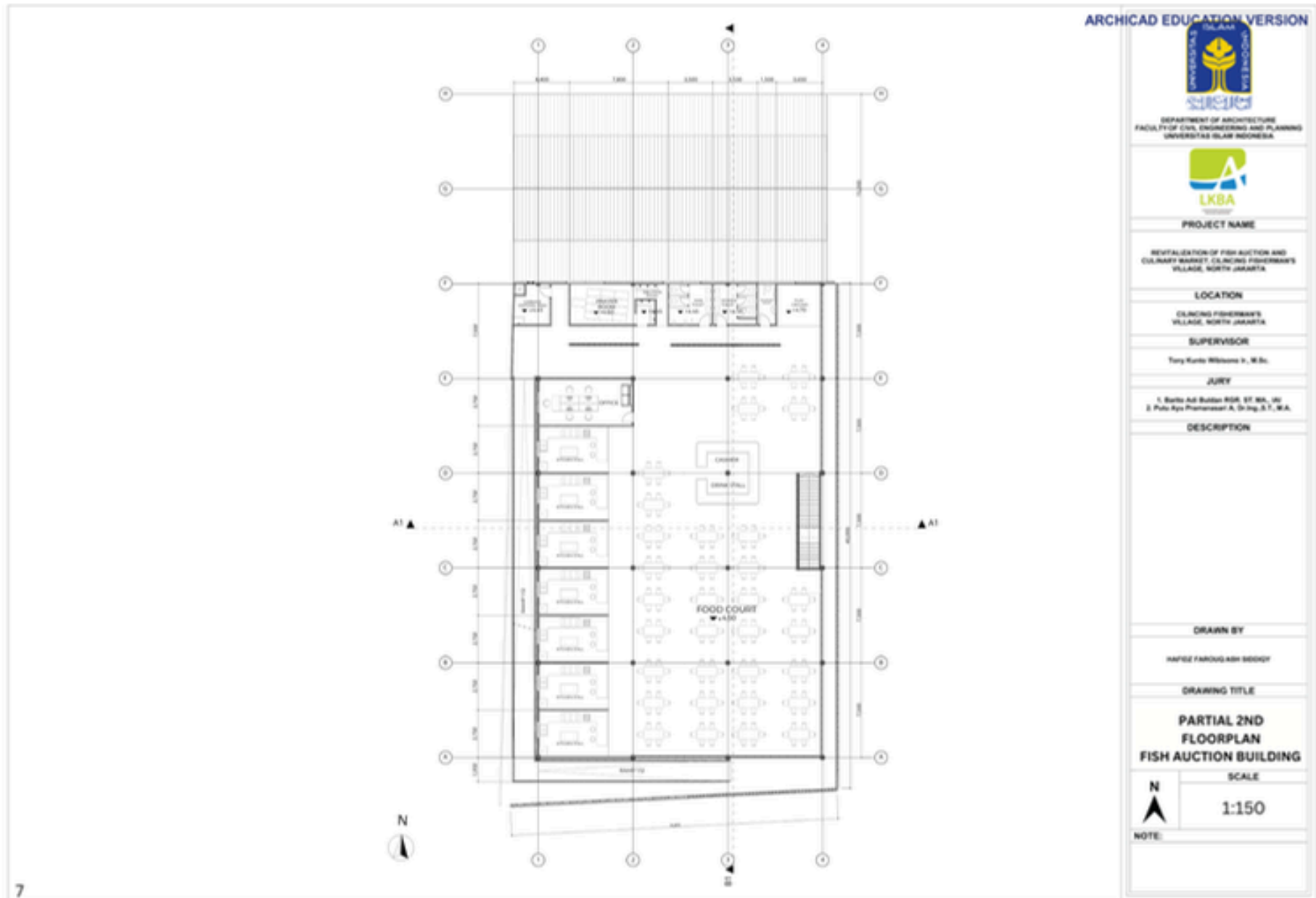
**PARTIAL 1ST FLOORPLAN  
FISH AUCTION BUILDING**

SCALE

1:150




NOTE









FRONT ELEVATION PARTIAL FISH AUCTION BUILDING  
SKALA 1:400



SIDE ELEVATION PARTIAL FISH AUCTION BUILDING  
SKALA 1:400

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UNIVERSITAS ISLAM INDONESIA  
DEPARTMENT OF ARCHITECTURE  
FACULTY OF CIVIL ENGINEERING AND PLANNING  
UNIVERSITAS ISLAM INDONESIA



PROJECT NAME

RENTALIZATION OF FISH AUCTION AND CULTURAL MARKET CLUNGING FISHERMAN'S VILLAGE, NORTH JAKARTA

LOCATION

CLUNGING FISHERMAN'S VILLAGE, NORTH JAKARTA

SUPERVISOR

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JURY

1. Bertha Ad Sultan ROR, ST, MA., UI  
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DESCRIPTION

DRAWN BY

HAFEE FAROUQASH SOEYIT

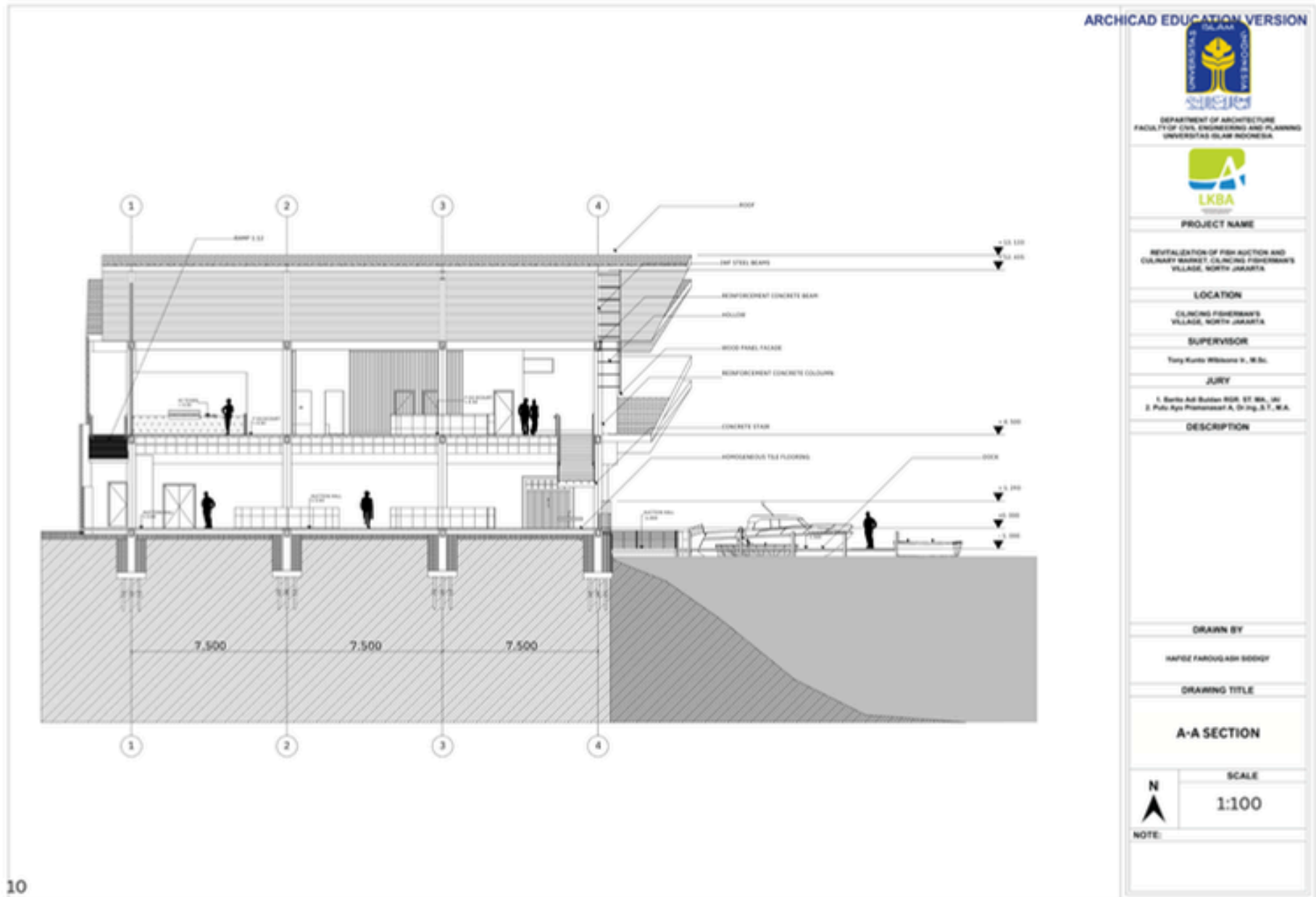
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**PARTIAL ELEVATION  
FISH AUCTION**

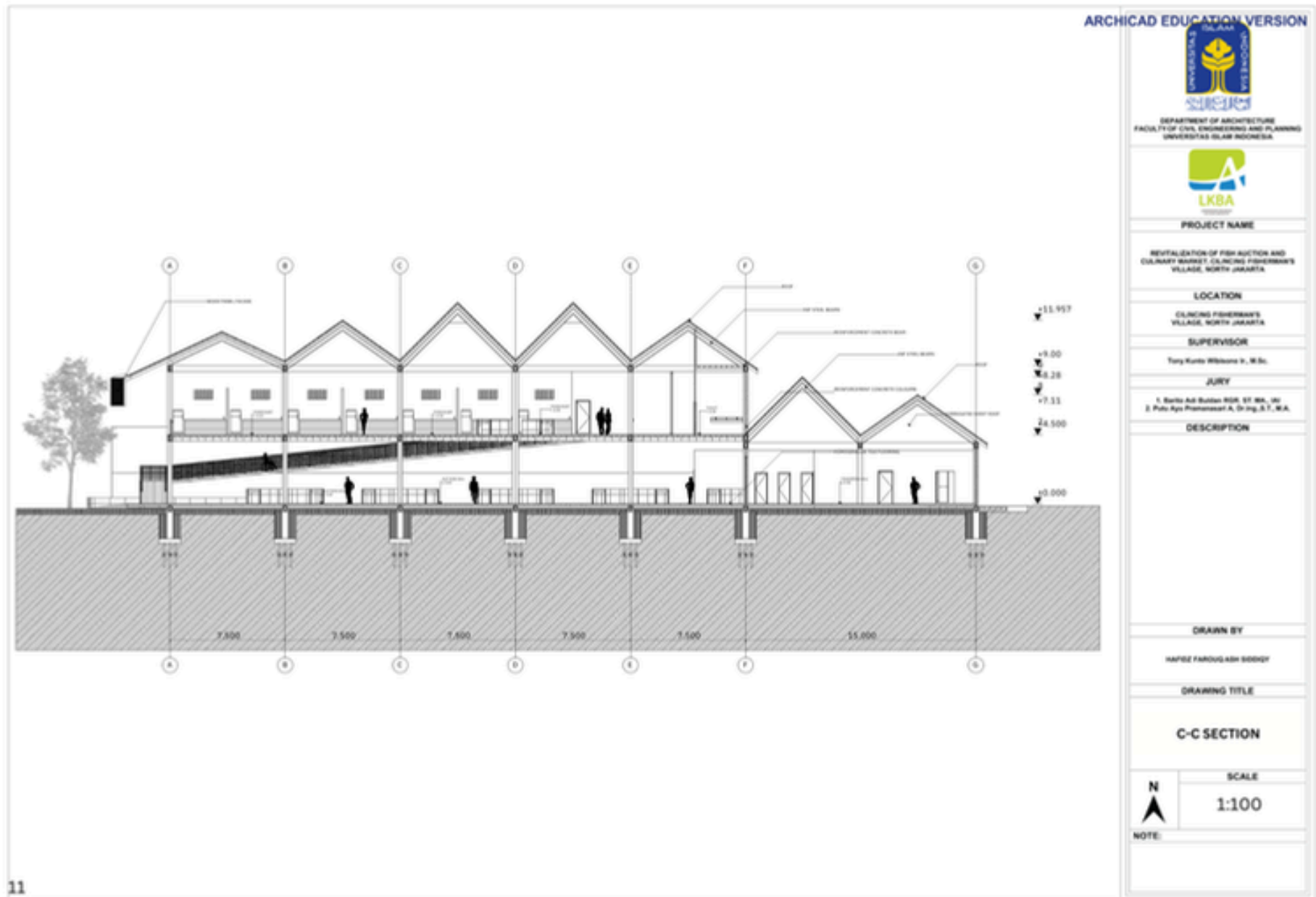
SCALE

**1:120**

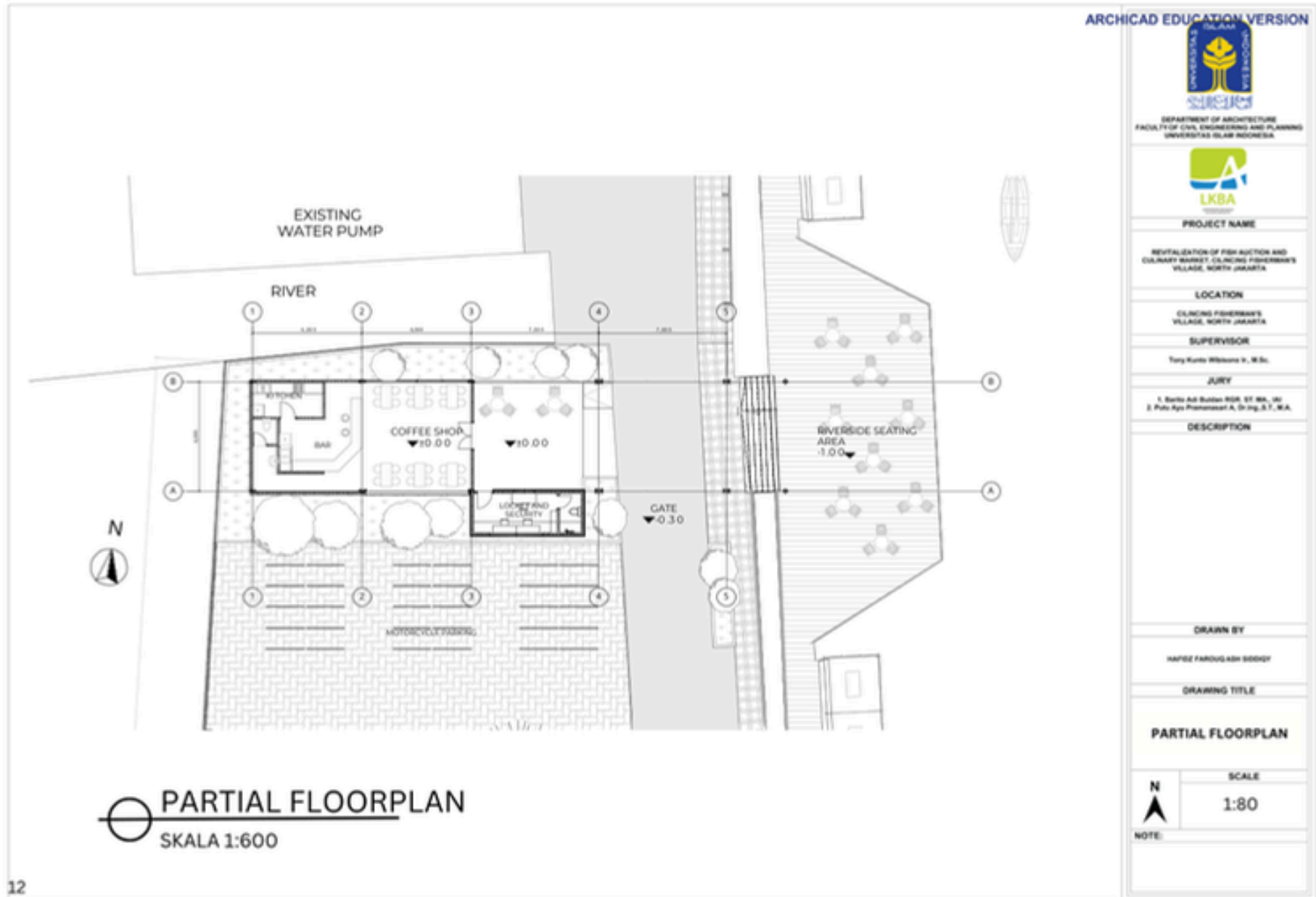
NOTE:



10



11



12



FRONT ELEVATION PARTIAL FISH AUCTION BUILDING  
SKALA 1:400



TAMPAK DEPAN PARSIAL FISH AUCTION BUILDING  
SKALA 1:400

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DEPARTMENT OF ARCHITECTURE  
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UNIVERSITAS ISLAM INDONESIA



**PROJECT NAME**

RENTALIZATION OF FISH AUCTION AND  
CULINARY MARKET CLUNGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

**LOCATION**

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VILLAGE, NORTH JAKARTA

**SUPERVISOR**

Tony Kunto Wibisono S., M.Sc.

**JURY**

I. Barito Adi Budian ROR, ST. MA., IRI  
I. Pado Ayo Purnomawan A. Dr. Ing. S. P., M.A.

**DESCRIPTION**

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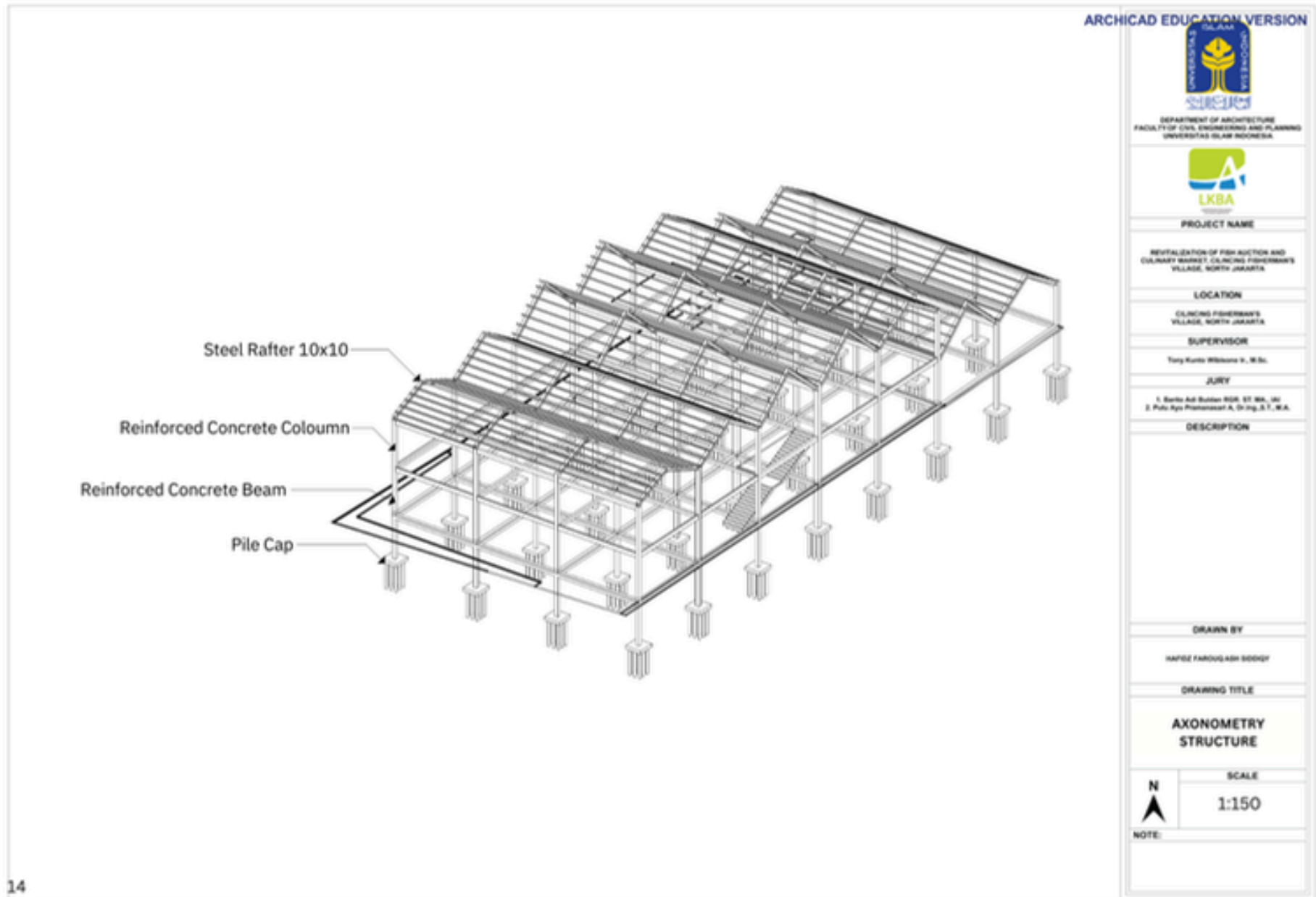
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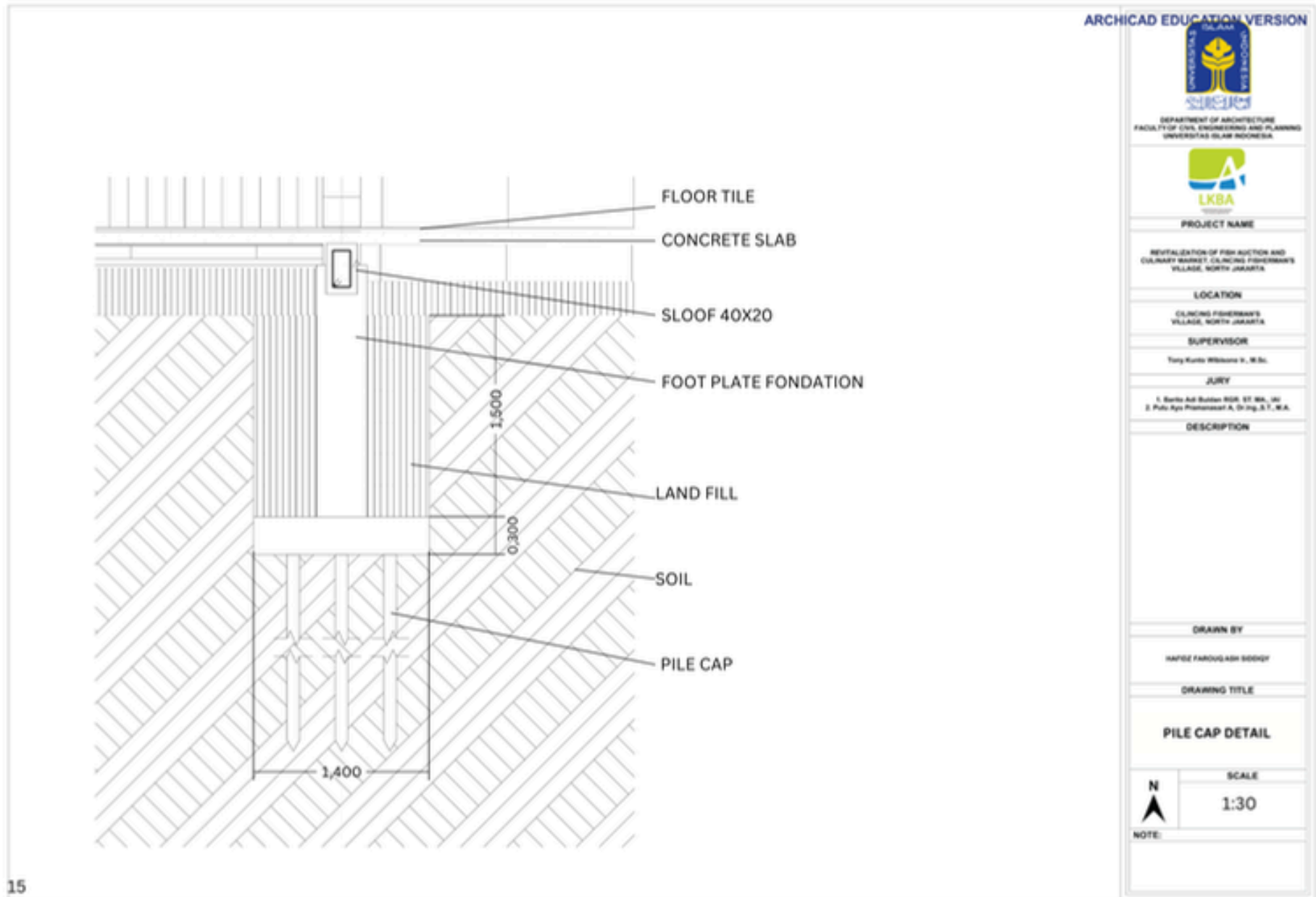
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**PARTIAL ELEVATION**

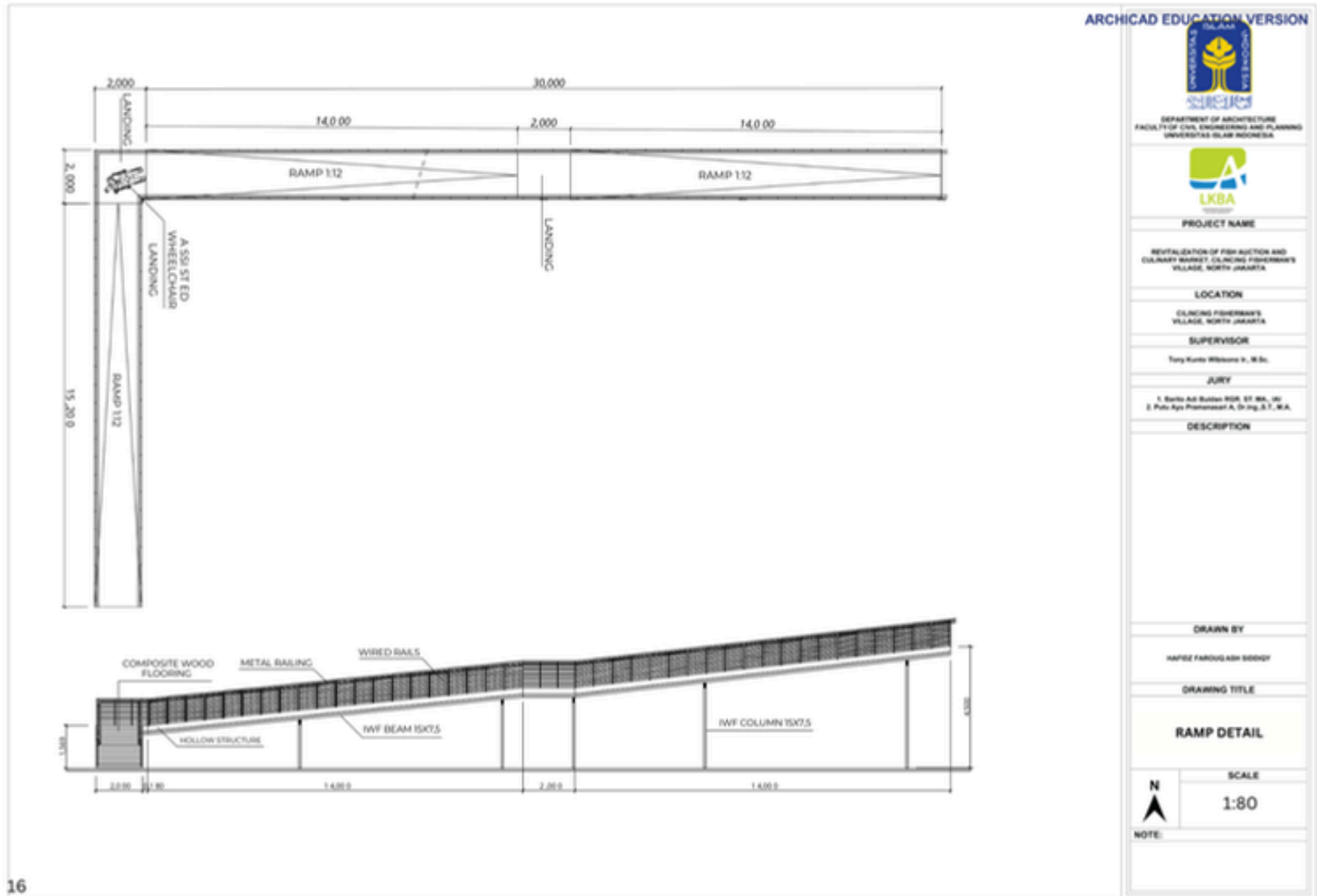
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<b>NOTE:</b>	



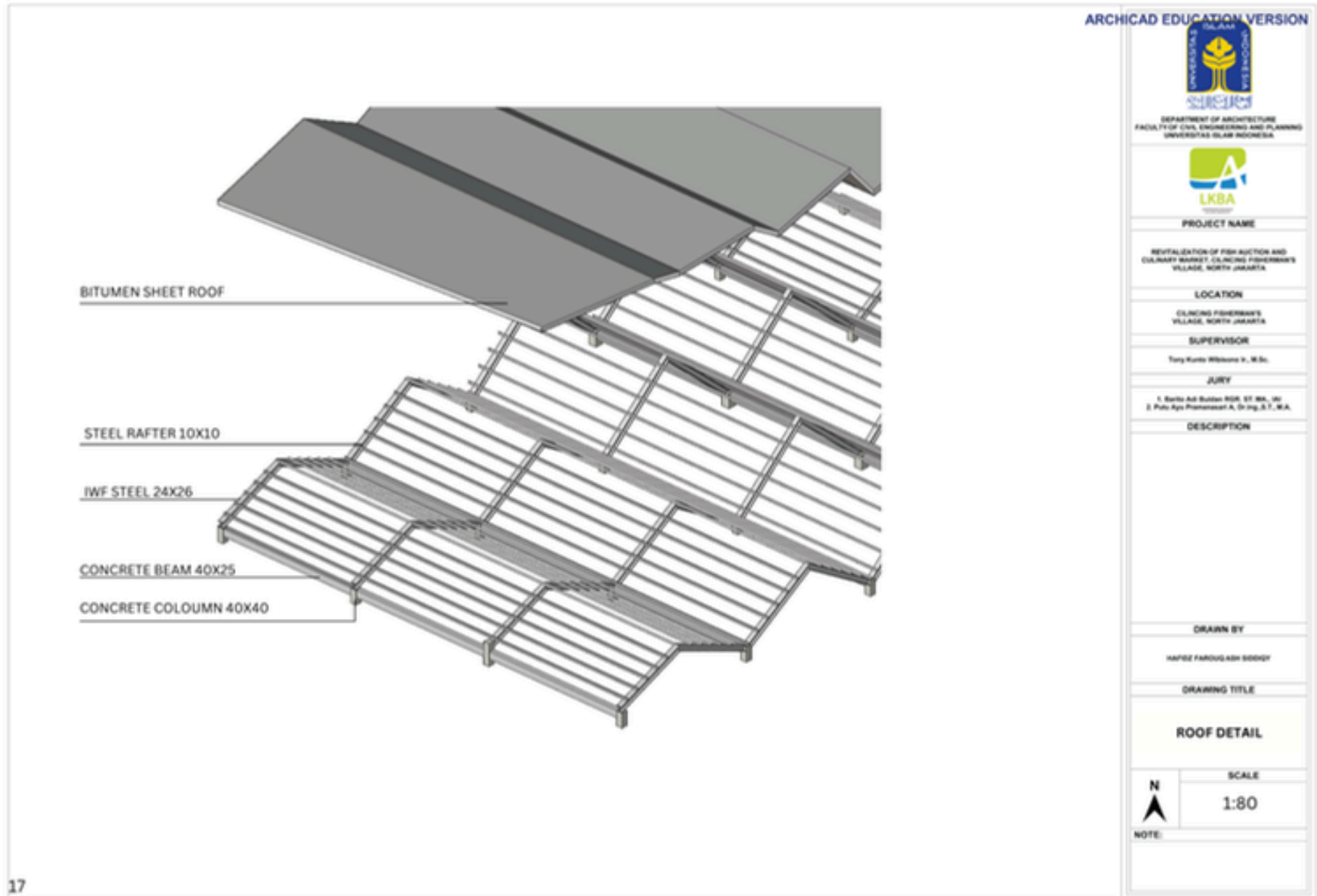
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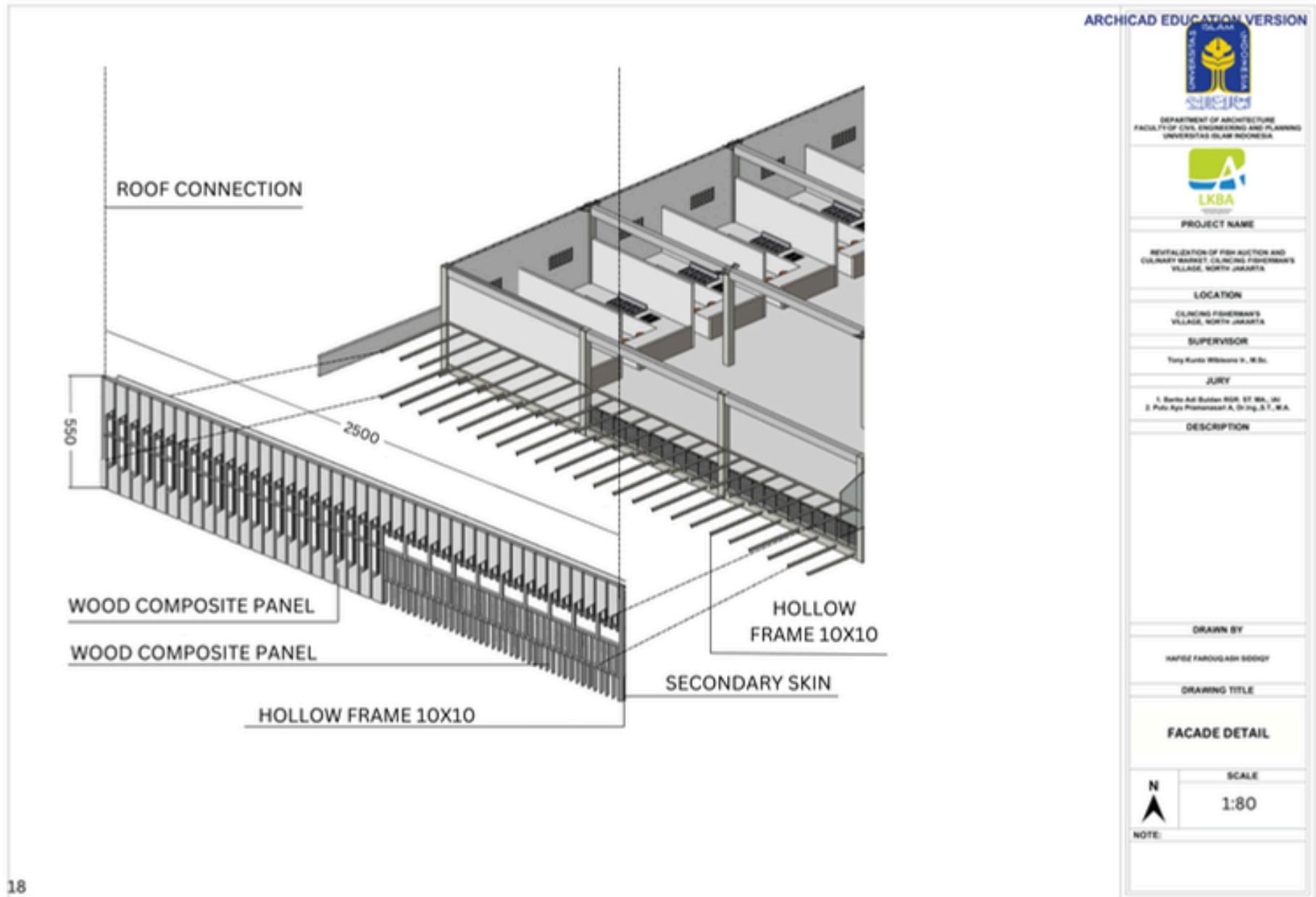




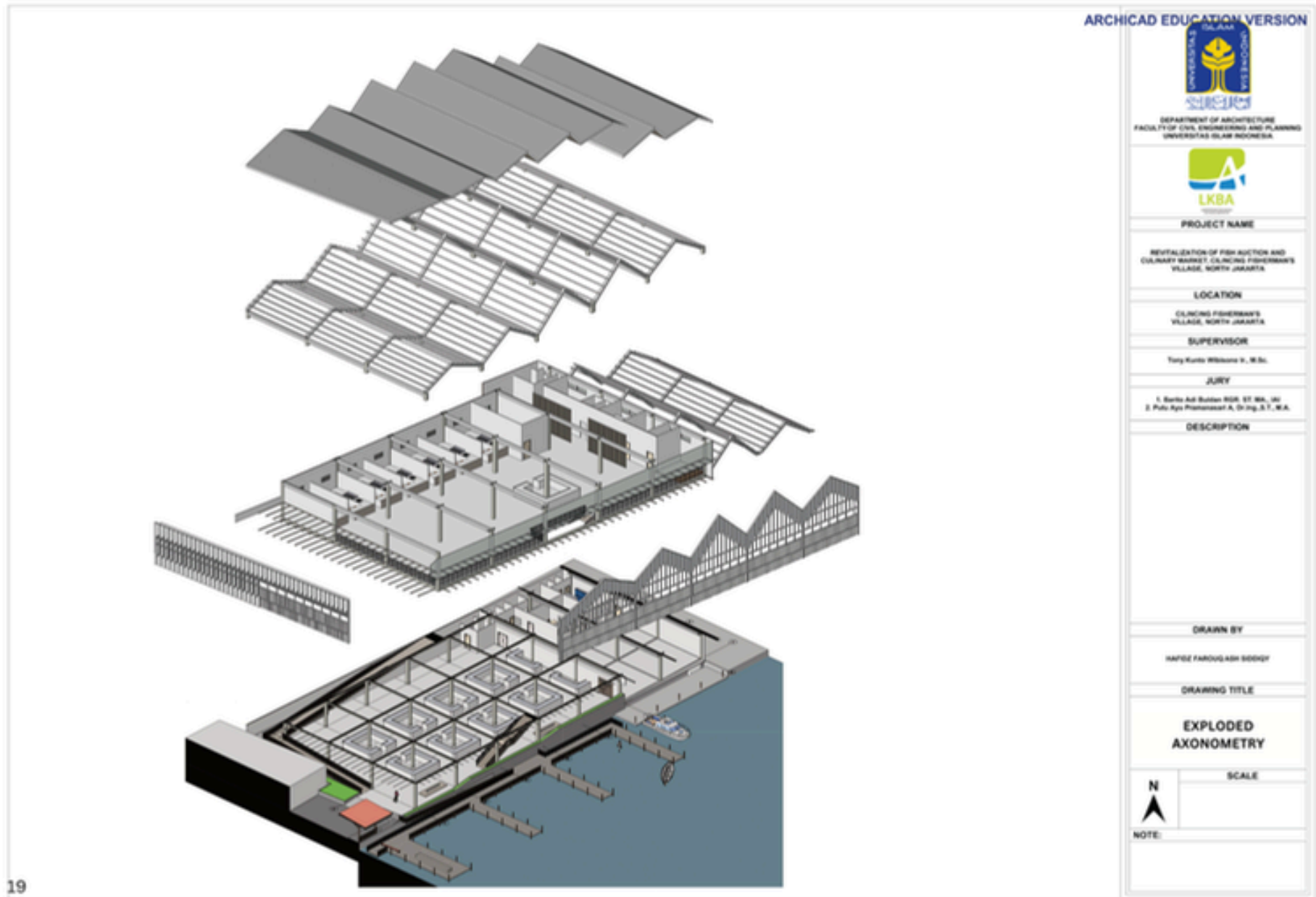
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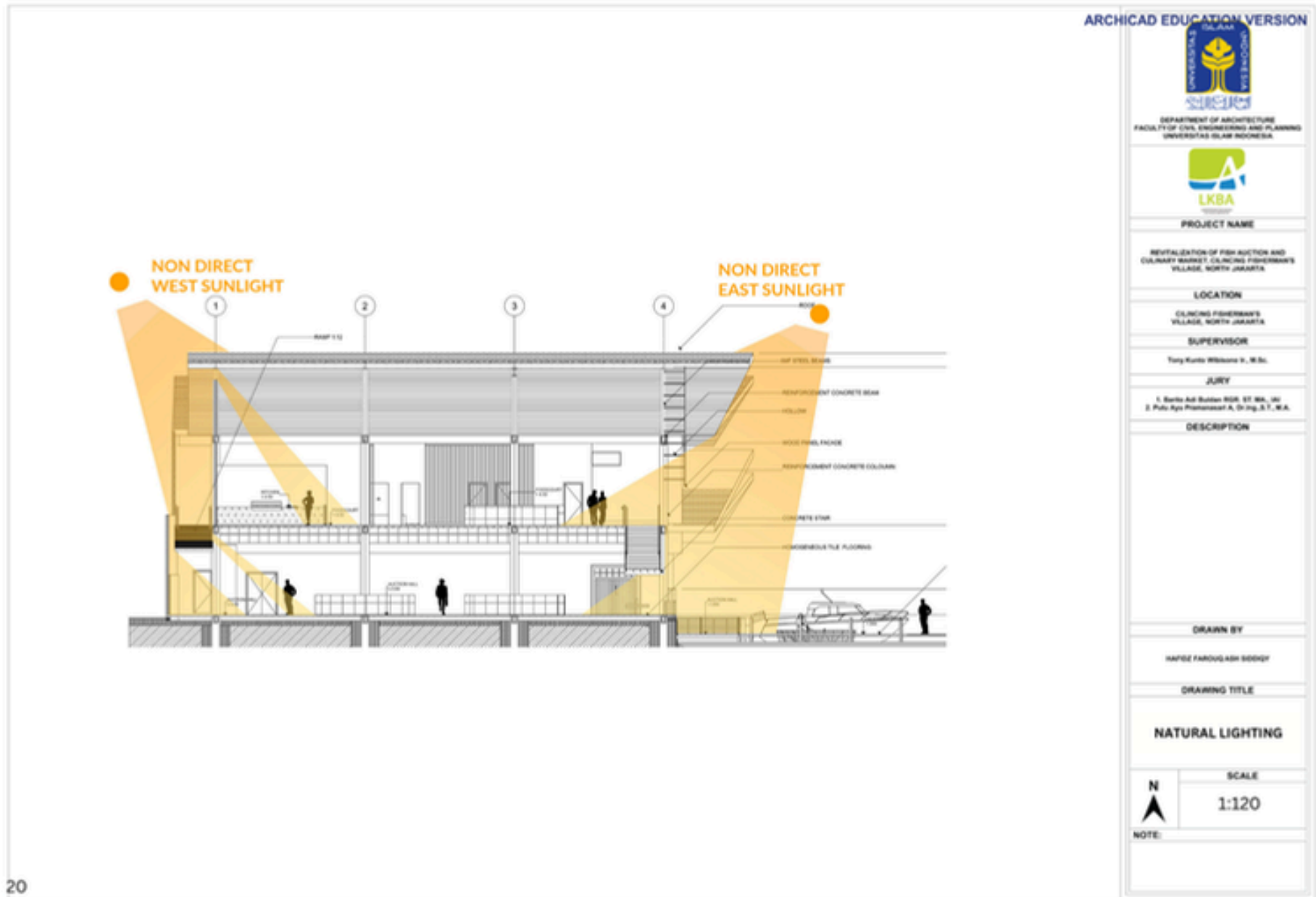
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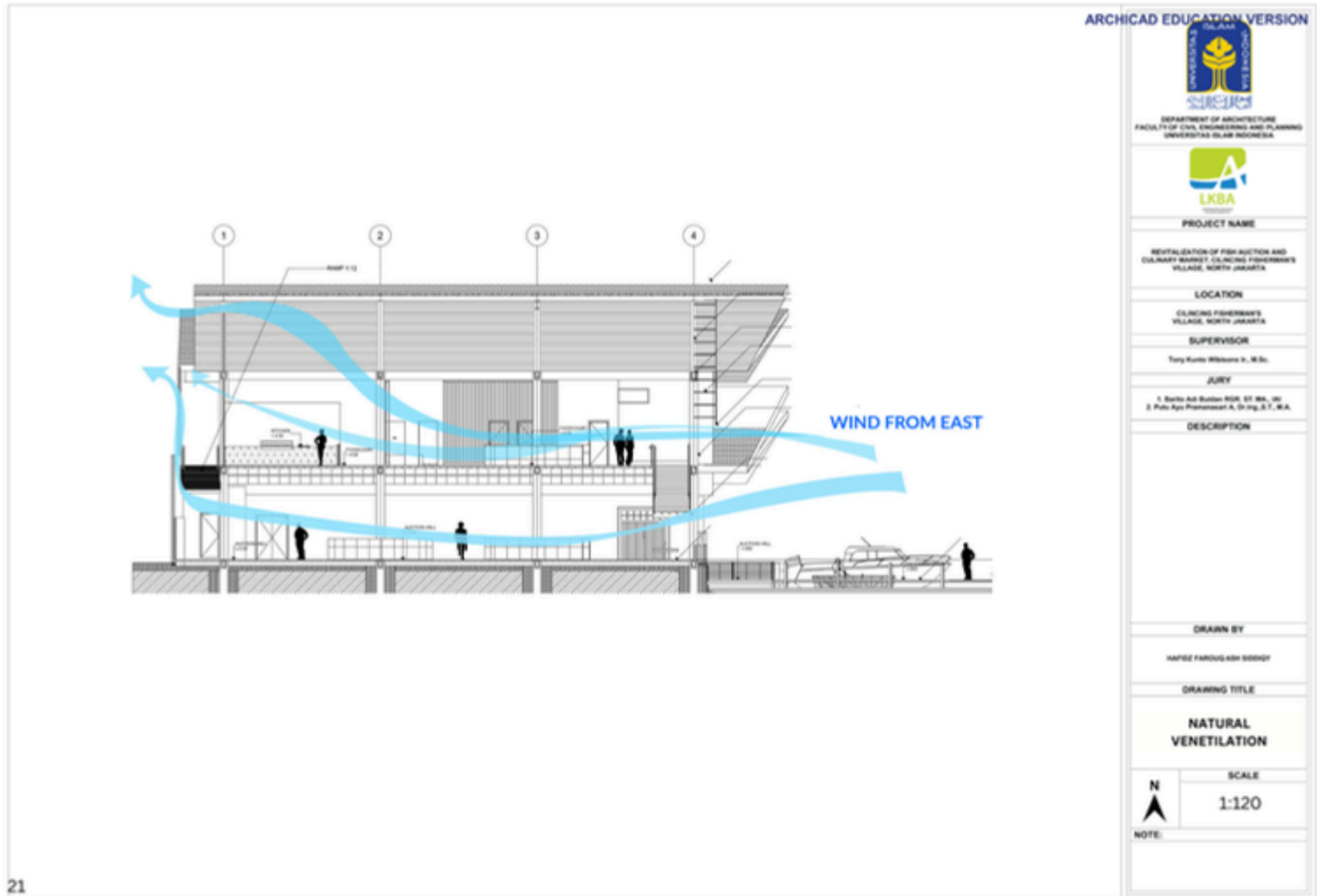


18



19





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FACULTY OF CIVIL, ENGINEERING AND PLANNING  
UNIVERSITAS ISLAM INDONESIA



PROJECT NAME

RENTALIZATION OF FISH AUCTION AND  
CULINARY MARKET CLANGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

LOCATION

CLANGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

SUPERVISOR

Tony Kunto Wibisono S., M.Sc.

JURY

1. Barito Ad Sultan ROR, ST, MA., DR.  
2. Pado Ayo Purnomawan A, Dr. Ing., S.T., M.A.

DESCRIPTION

DRAWN BY

NAFISE FARUQAH SIBIDIH

DRAWING TITLE

**NATURAL  
VENTILATION**

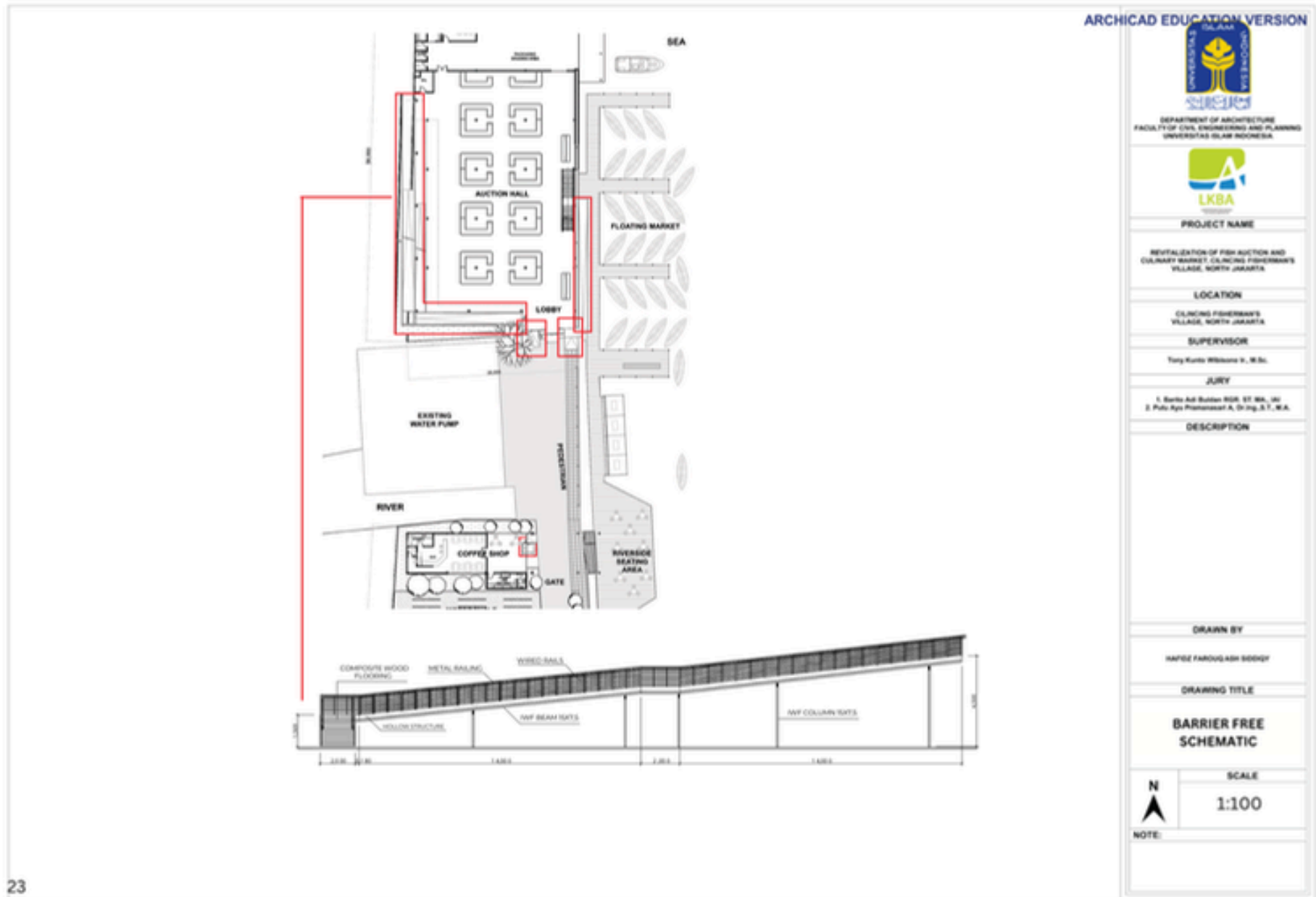


SCALE

1:120

NOTE

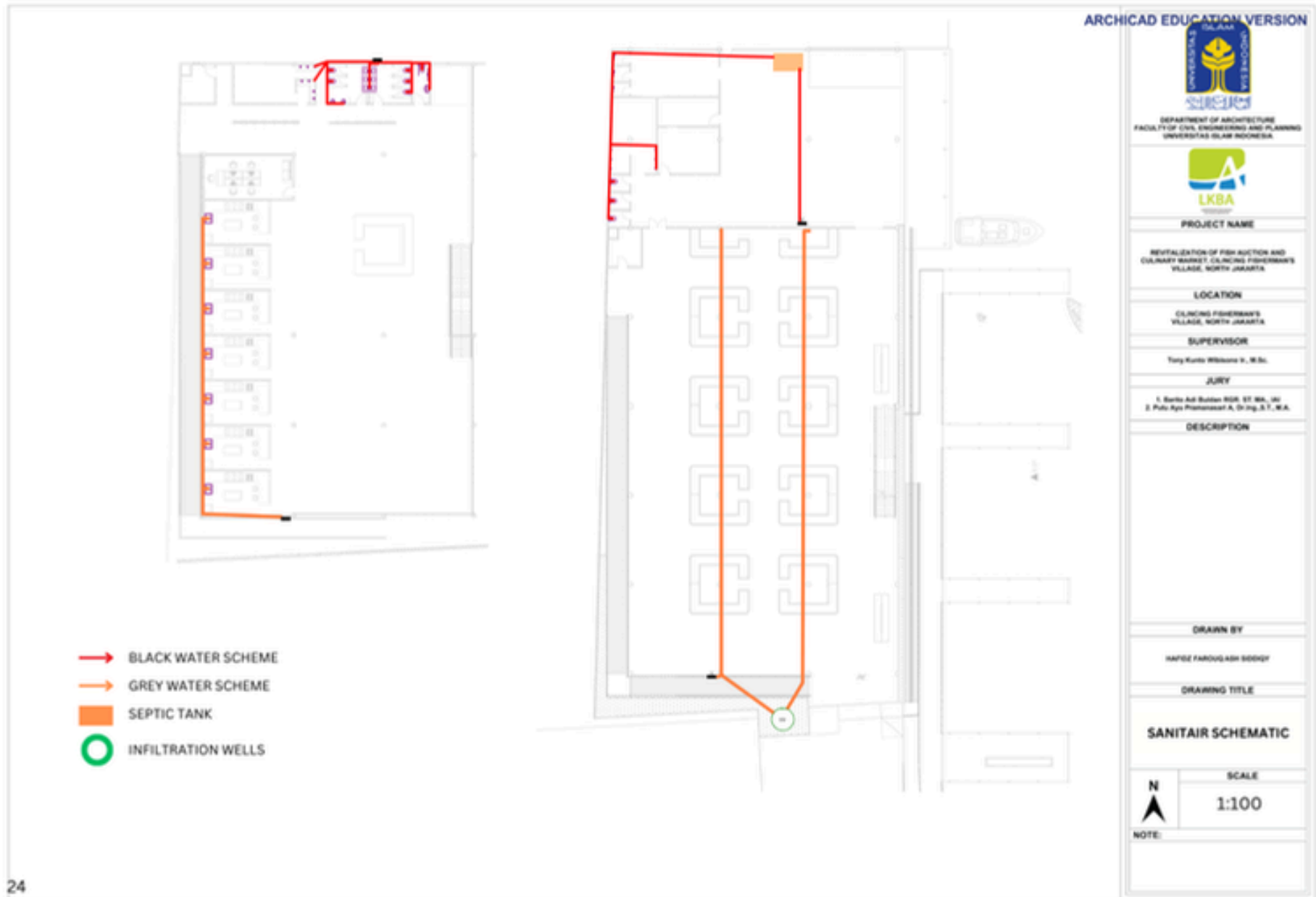




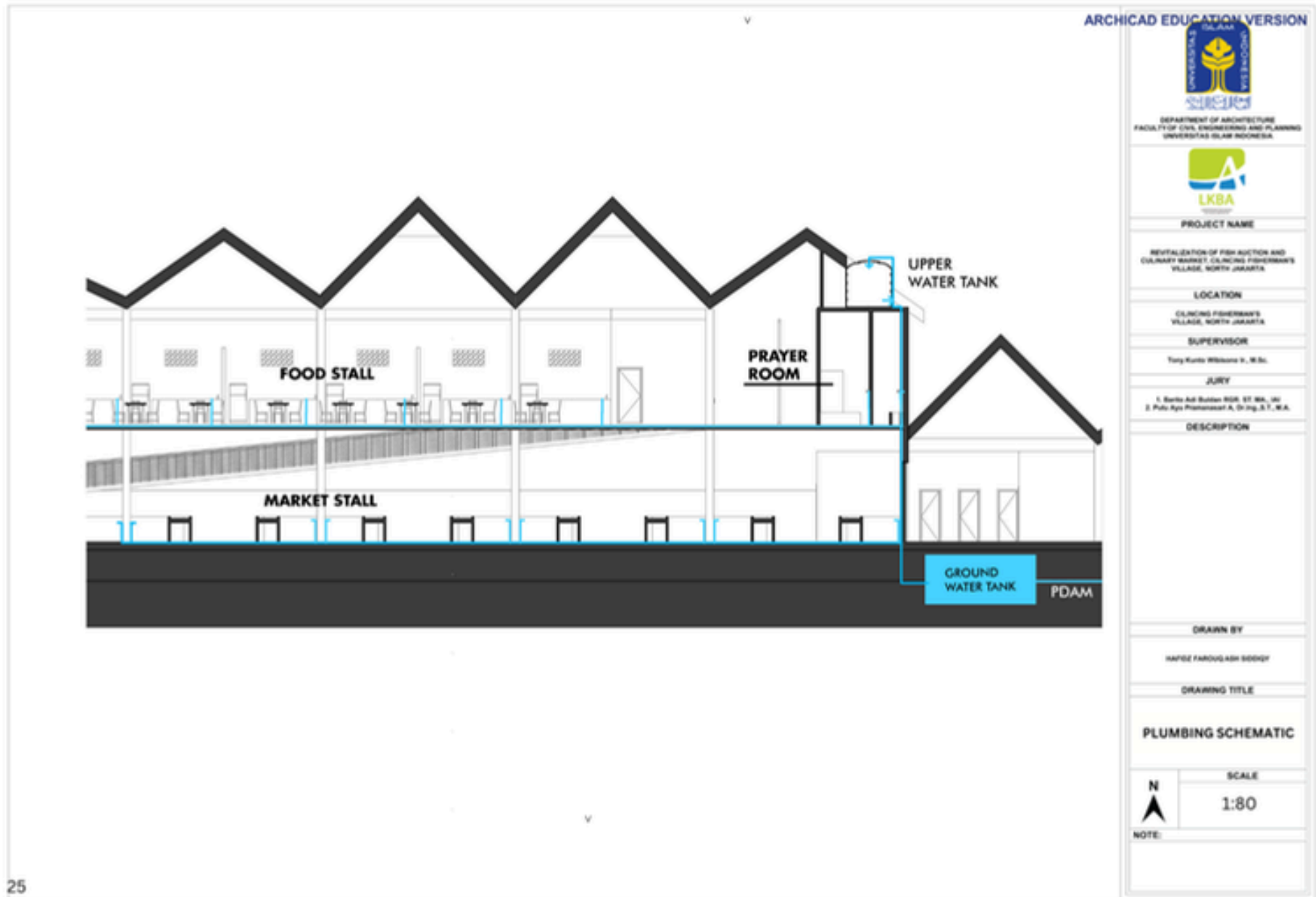
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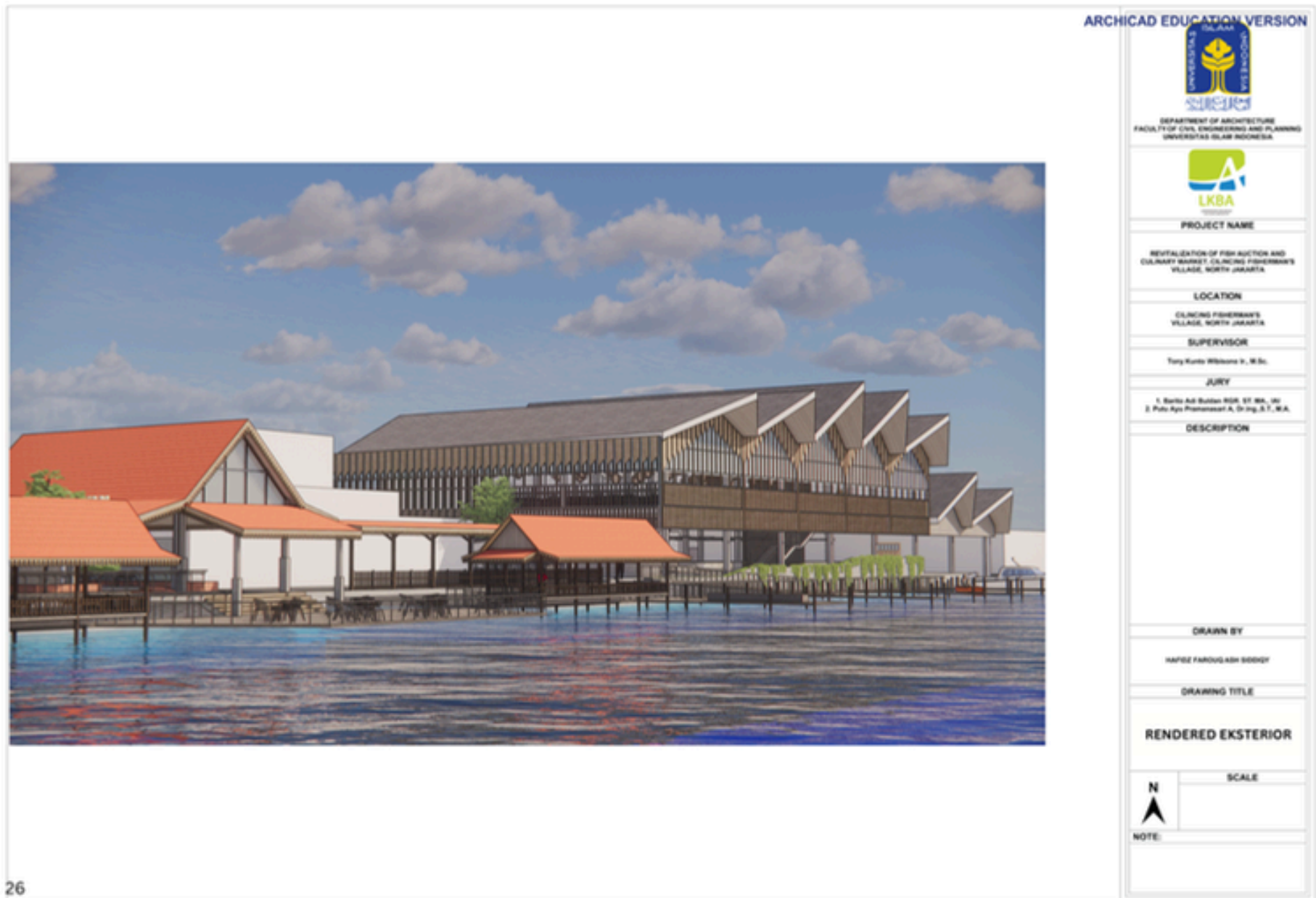




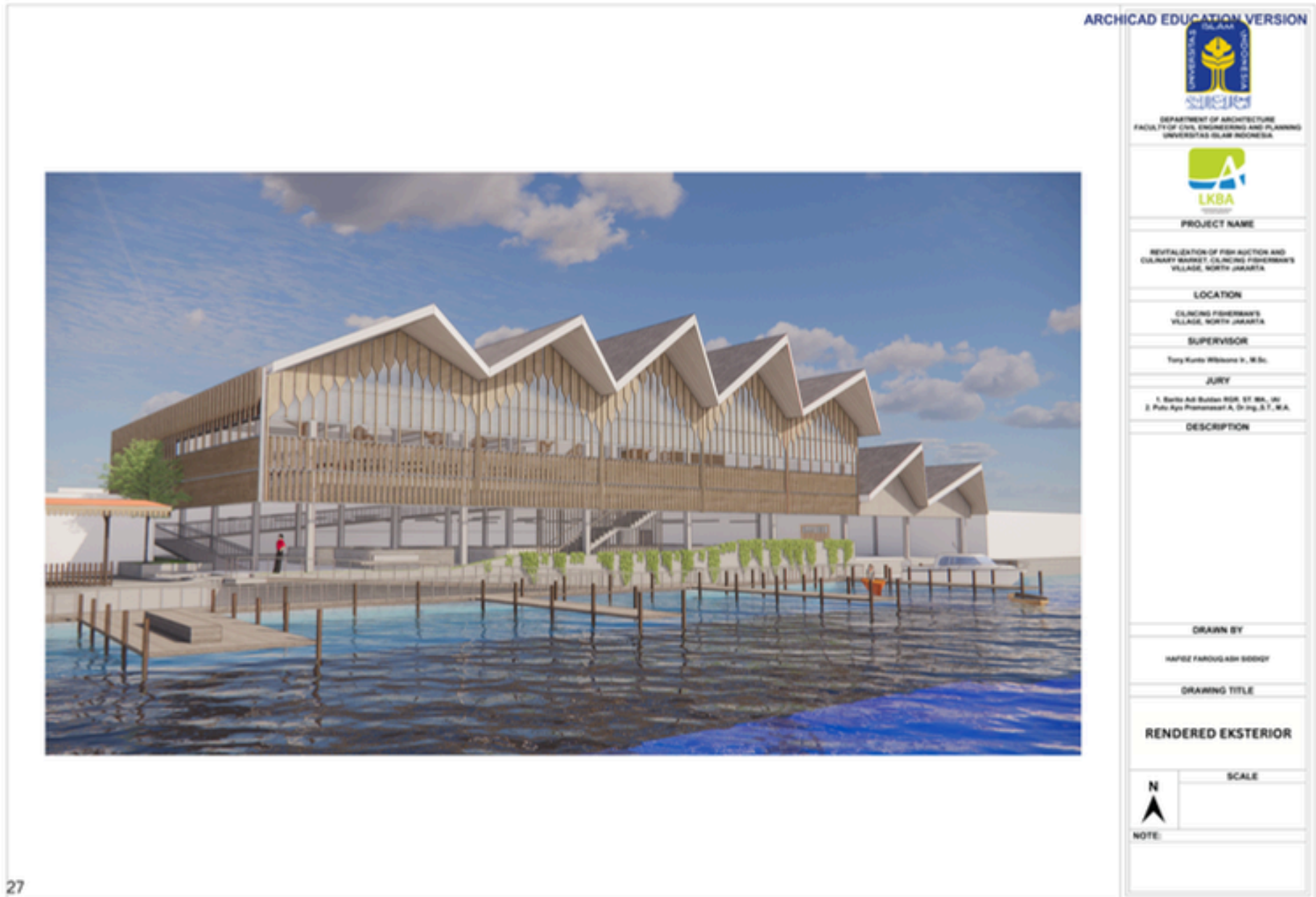
24



25



26



27



ARCHICAD EDUCATION VERSION



DEPARTMENT OF ARCHITECTURE  
FACULTY OF CIVIL ENGINEERING AND PLANNING  
UNIVERSITAS ISLAM INDONESIA



PROJECT NAME

REHABILITATION OF FISH AUCTION AND  
CULINARY MARKET CLUNGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

LOCATION

CLUNGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

SUPERVISOR

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DESCRIPTION

DRAWN BY

NAFISE FARUQIASH SIDIQI

DRAWING TITLE

RENDERED EKSTERIOR

SCALE



NOTE:

Property Size Existing Data				
Building Size	Auction Hall	1107	3696	m2
	Fisherman Hall	433		
	Cafe & Gate	195		
	Dock	400		
	Floating Market	540		
Floor Count Commercial (FCC)		2	Floor	
Building Coverage (KDB)		60	%	
Green Coverage (KDH)		20	%	
Floor Area Ration (KLB)		5	Floor	
Land Area		4650	m2	

Property Size Analysis				
Total Floor Area		2	Floor	
Rentable Area	Auction Hall	315	1826	m2
	Restaurant	375		
	Cafe & Gate	195		
	Dock	400		
	Floating Market	541		
Parking Lot		951		
Building Height		9	m	

Investment Analysis				
Rentable area	1826	m2	IDR 300,000	IDR 547,000,000
Building Construction Cost	3610		IDR 5,000,000	IDR 18,050,000,000
Land aquisition & Dev	951		IDR 10,000,000	IDR 9,510,000,000
Total Investment				IDR 27,560,000,000
Payback Period Oppurtunity				4,2 Years

# REVISION



# CHAPTER 5

**Revision :** Increasing the number of stairs as an effort to reduce crowding during emergency situations

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DEPARTMENT OF ARCHITECTURE  
FACULTY OF CIVIL, ENGINEERING AND PLANNING  
UNIVERSITAS ISLAM INDONESIA

**PROJECT NAME**

REVITALIZATION OF FISH AUCTION AND  
CULINARY MARKET, CLANING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

**LOCATION**

CLANING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

**SUPERVISOR**

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2. Pulu Ayu Paramanant A, Dr. Ing. S.T., M.A.

**DESCRIPTION**

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**DRAWN BY**

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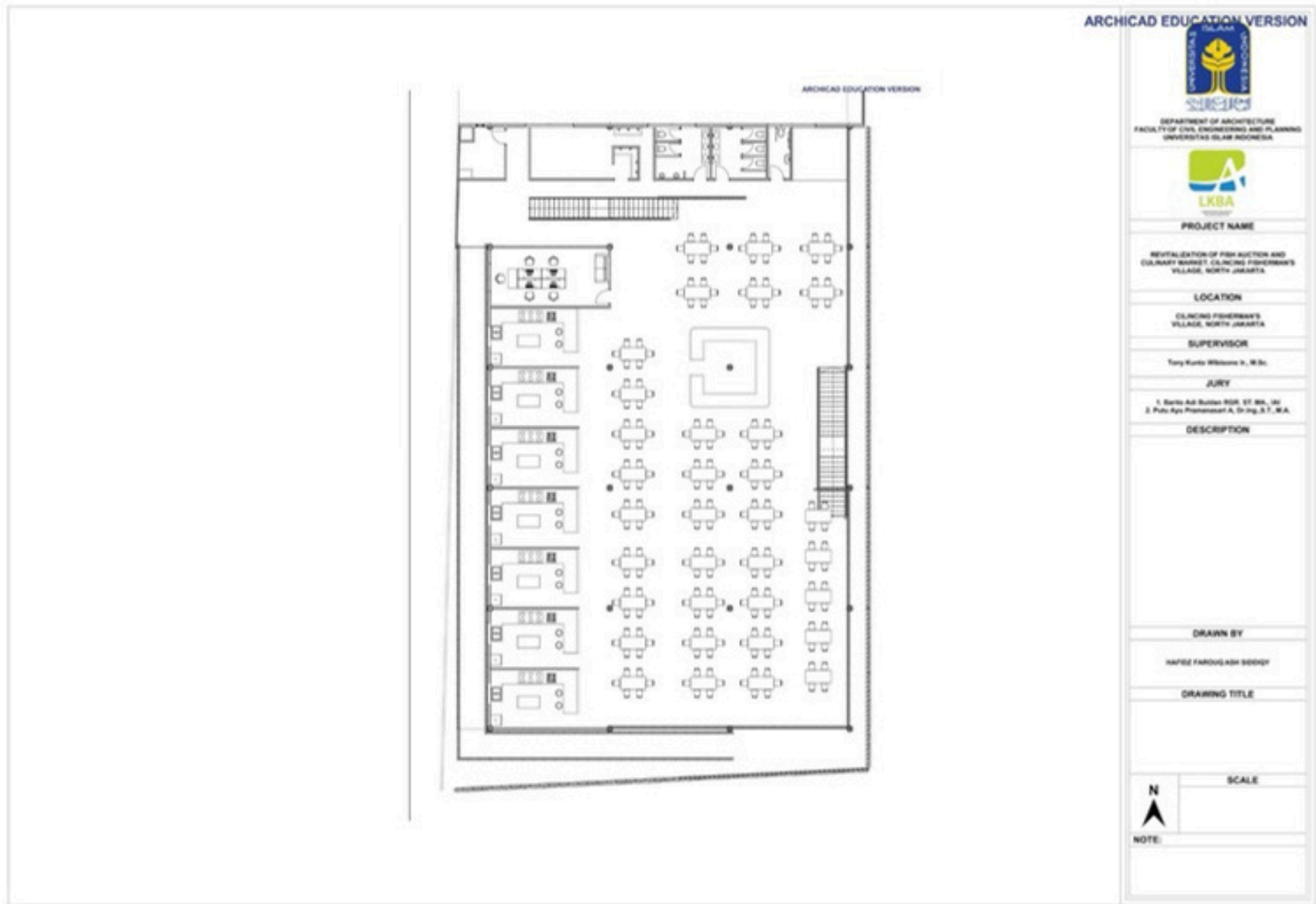
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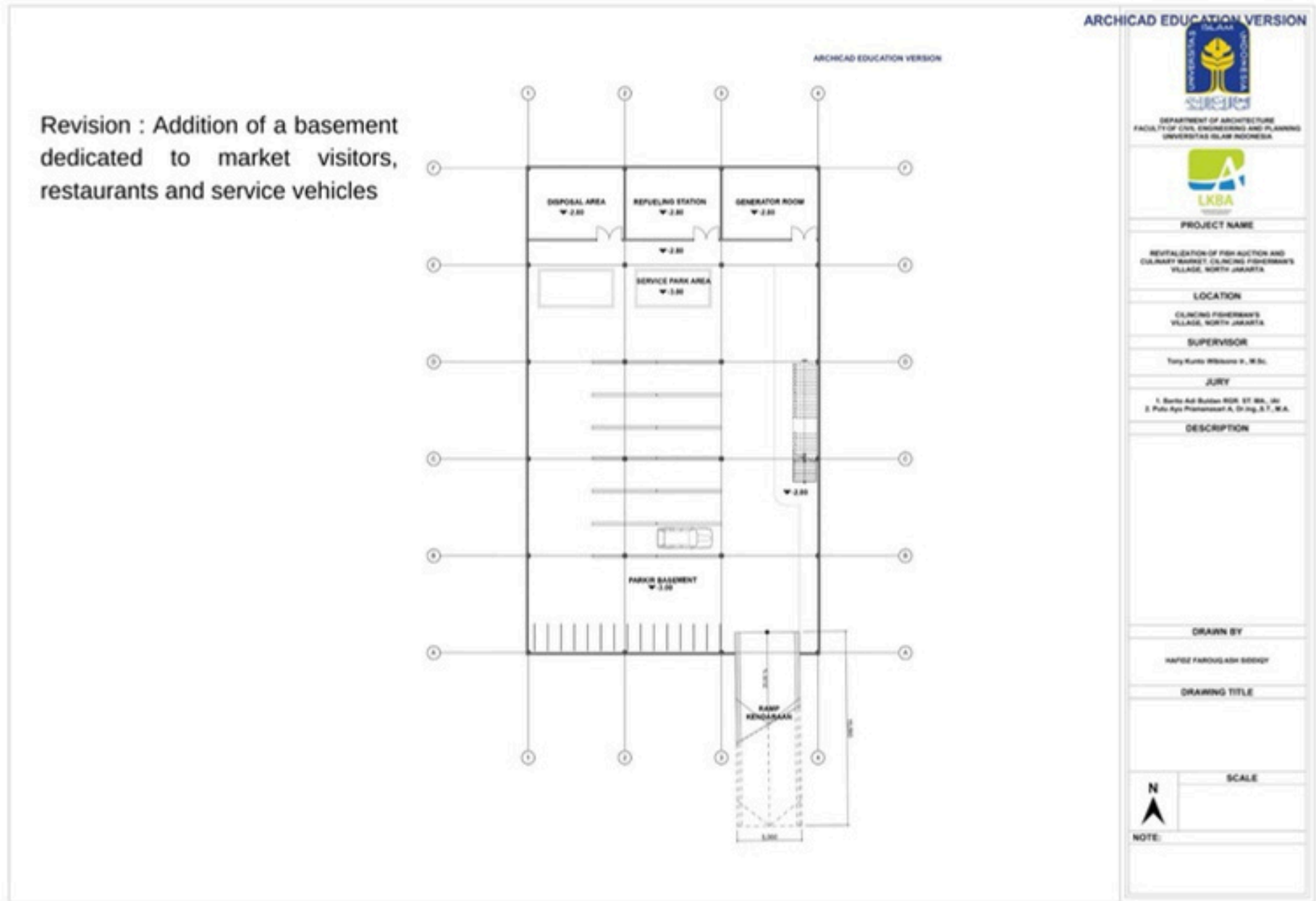
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**SCALE**

N  
↑  
NOTE:









ARCHICAD EDUCATION VERSION

Revision : Addition of a basement dedicated to market visitors, restaurants and service vehicles

ARCHICAD EDUCATION VERSION



DEPARTMENT OF ARCHITECTURE  
FACULTY OF CIVIL, ENGINEERING AND PLANNING  
UNIVERSITAS ISLAM INDONESIA



PROJECT NAME

RENTALIZATION OF FISH AUCTION AND  
CULINARY MARKET, CLUNGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

LOCATION

CLUNGING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

SUPERVISOR

Tony Kunto Wibisono S., M.Sc.

JURY

I. Bertha Adi Sultan RDK, ST. MS., UI  
E. Pulu Ayu Paramanant A, Dr. Ing. S.T., M.A.

DESCRIPTION

---

DRAWN BY

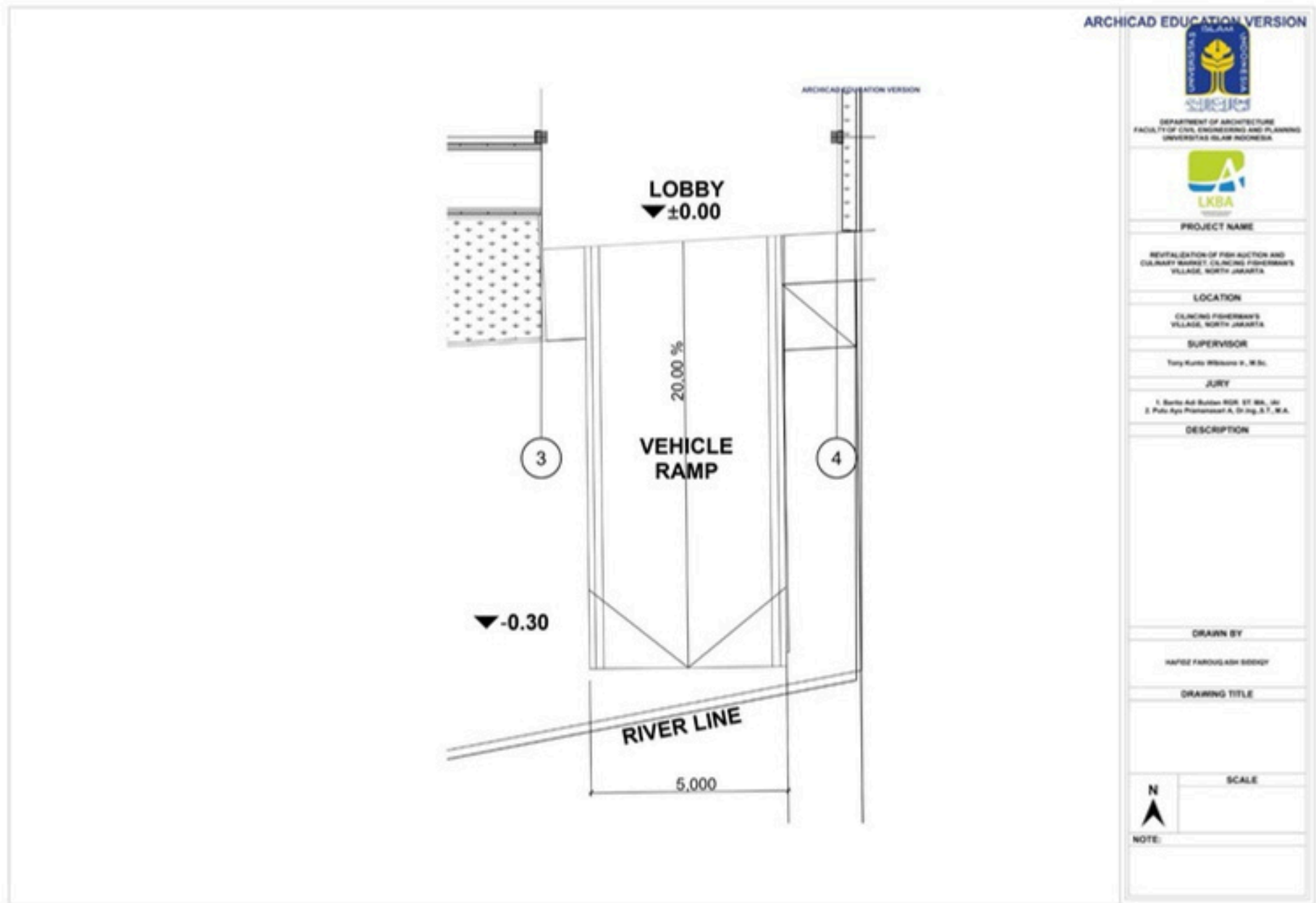
NAFISE FARUQIYAH SIDDIQY

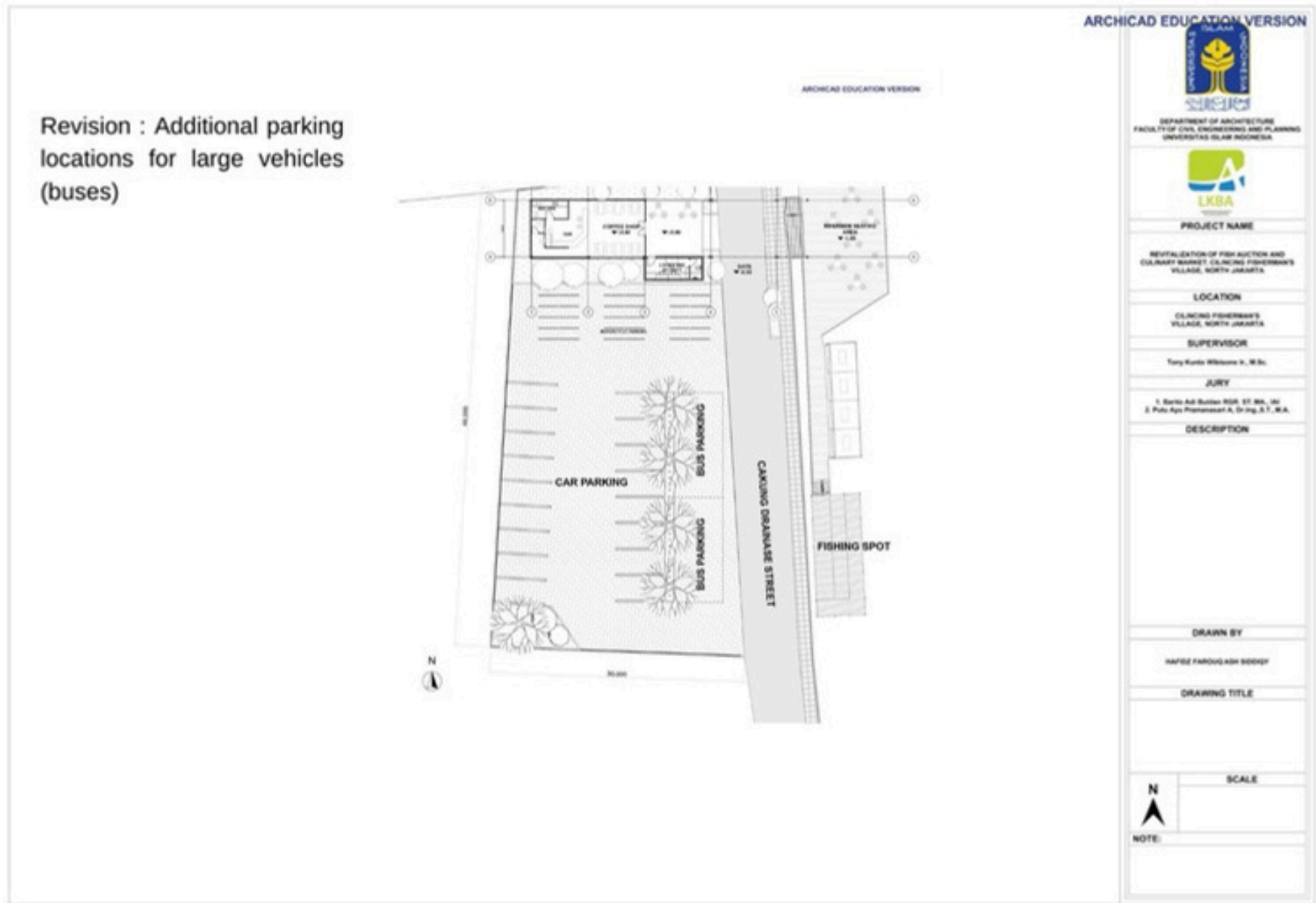
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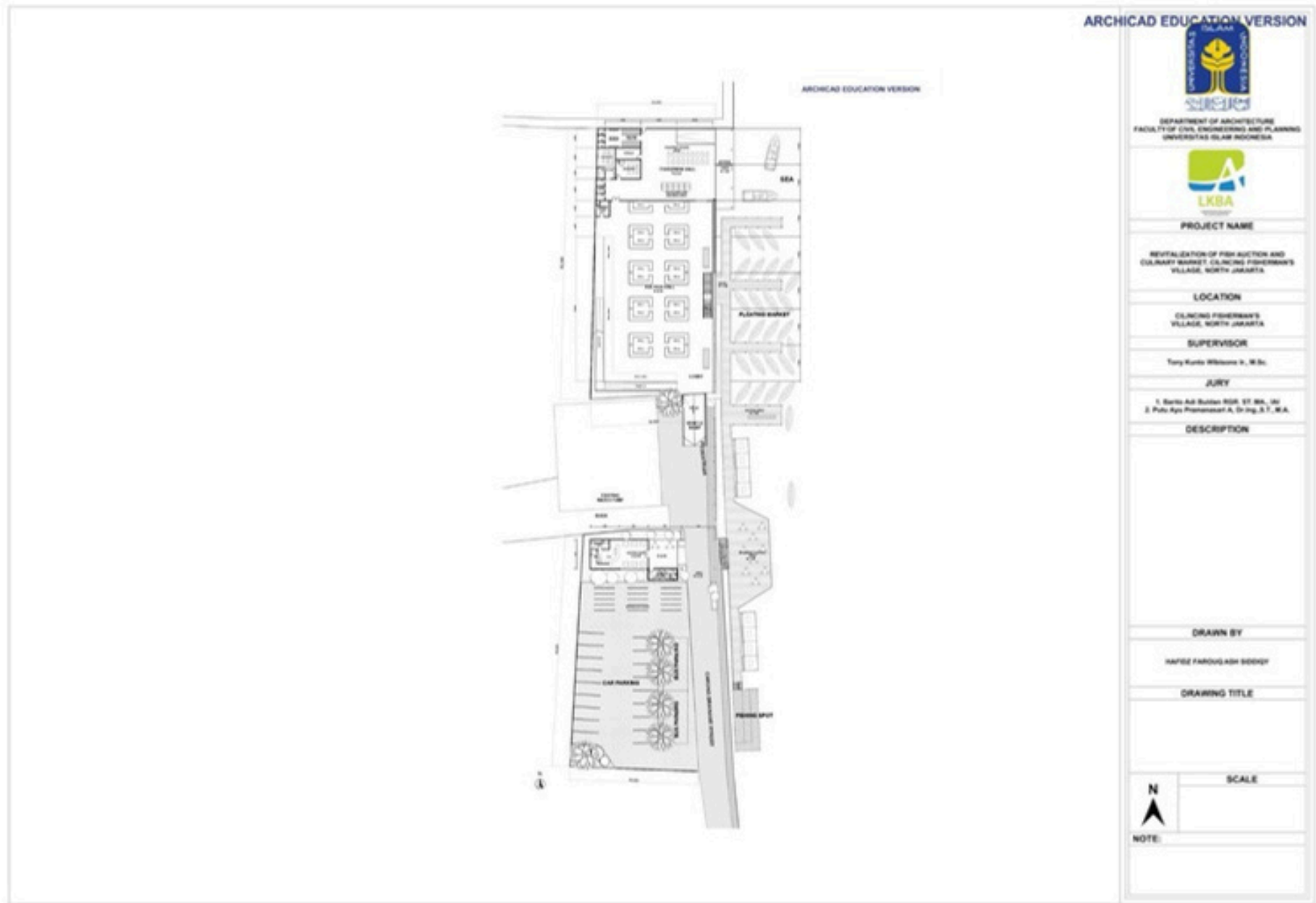
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SCALE

NOTE:







ARCHICAD EDUCATION VERSION



DEPARTMENT OF ARCHITECTURE  
FACULTY OF CIVIL, ENGINEERING AND PLANNING  
UNIVERSITAS ISLAM INDONESIA



PROJECT NAME

REUTILIZATION OF FISH AUCTION AND  
CULINARY MARKET, CLANING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

LOCATION

CLANING FISHERMAN'S  
VILLAGE, NORTH JAKARTA

SUPERVISOR

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JURY

I. Nuris Adhikusnanda, S.T., M. Sc., Ph.D.  
& Pulu Ayu Pranawati A., Dr. Ing., S.T., M.A.

DESCRIPTION

DRAWN BY

HAFIDE FAROUKASH BODHEY

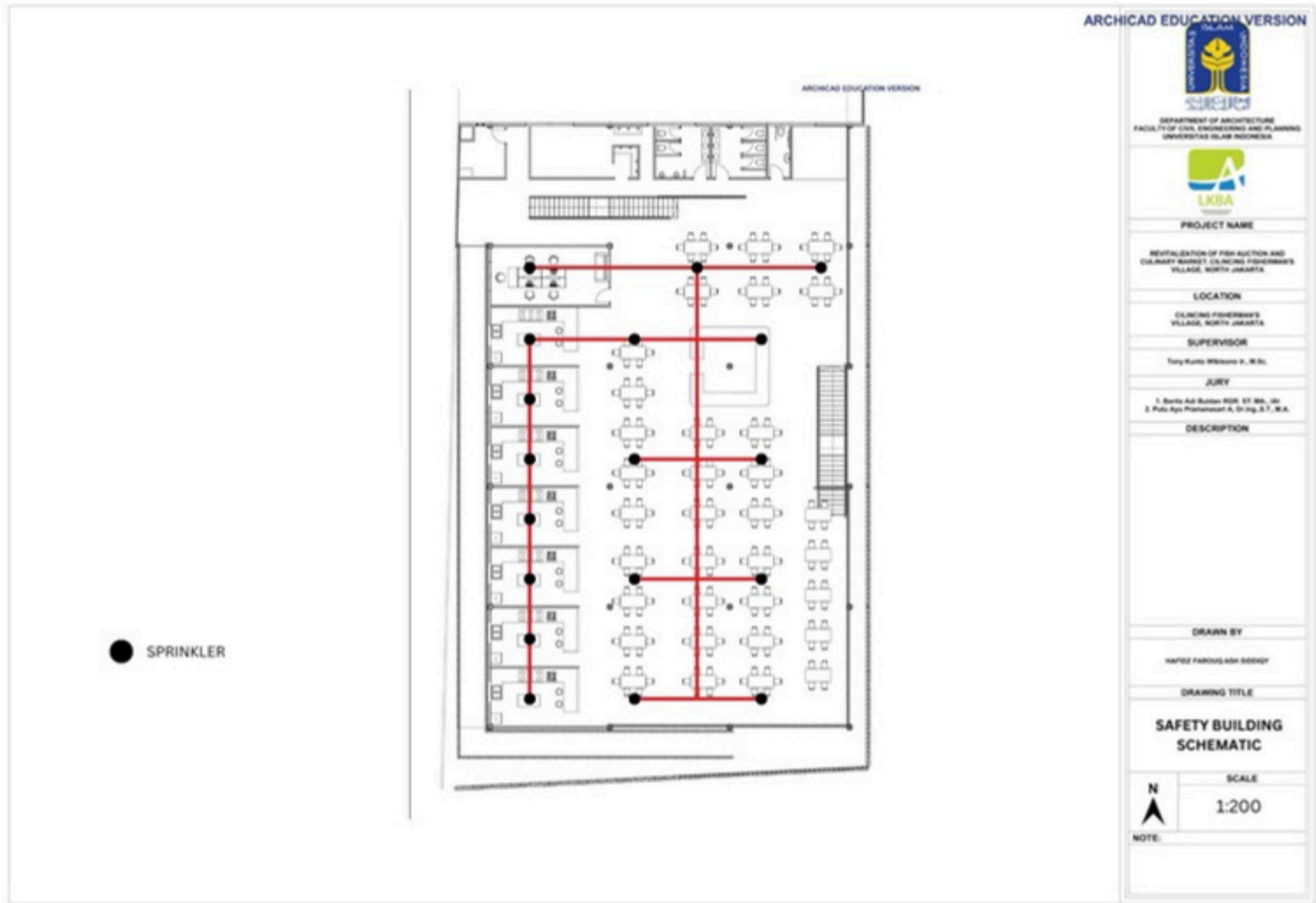
DRAWING TITLE

SCALE



NOTE:







Revision :

- Separation of stall prices that can be considered hot zones and those that are considered normal
- Reduction of rentable area size based on stall size only

Property Size Analysis				
Total Floor Area			2	Floor
Rentable Area	Auction Hall A (center)	450	1,020	m2
	Auction Hall B (side)	150		
	Restaurant	375		
	Cafe & Gate	195		
	Floating Market	348		
Parking Lot			951	
Building Height			9	m

Investment Analysis				
Rentable area	1,020	m2	IDR 300,000	IDR 306,000,000
Rentable area B	498		IDR 200,000	IDR 99,600,000
Building Construction Cost	3610		IDR 5,000,000	IDR 18,050,000,000
Land aquisition & Dev	951		IDR 10,000,000	IDR 9,510,000,000
Total Investment				IDR 27,560,000,000
Payback Period Opportunity				5,6 Years



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**SURAT KETERANGAN HASIL CEK PLAGIASI**  
Nomor: 2388875164/Perpus./10/Dir.Perpus/II/2024

*Bismillaahirrahmaanirrahiim*

*Assalamualaikum Wr. Wb.*

Dengan ini, menerangkan Bahwa:

Nama : Hafidz Farouq Ash Siddiqy  
Nomor Mahasiswa : 19512171  
Pembimbing : Tony Kunto Wibisono, Ir.,MSc., GP  
Fakultas / Prodi : Teknik Sipil dan Perencanaan/ Arsitektur  
Judul Karya Ilmiah : Revitalization of Fish Auction and Culinary Market Cilincing  
Fishermen's Village, North Jakarta

Karya ilmiah yang bersangkutan di atas telah melalui proses cek plagiasi menggunakan Turnitin dengan hasil kemiripan (*similarity*) sebesar 6 (Enam) %.

Demikian Surat Keterangan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

*Wassalamualaikum Wr. Wb.*

Yogyakarta, 5/27/2024

Direktur



Muhammad Jamil, SIP.

## References

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- BERITA FOTO: Mengenal Lebih Dekat Warga Kampung Nelayan Cilincing dengan Segala Aktivitasnya. (2022, September 13). Megapolitan - KOMPAS.com. Retrieved September 27, 2023, from <https://megapolitan.kompas.com/read/2022/09/13/16540291/berita-foto-mengenal-lebih-dekat-warga-kampung-nelayan-cilincing-dengan>
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