



# Thatsama Leeumnadwong

I am a technology enthusiast with a strong passion for enhancing architecture design and construction. I am a quick learner with great attention to detail, and my adaptability and easy-going nature enable me to collaborate effectively with others. I am committed to creating functional and visually appealing spaces.

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## Education

2017 - 2021  
B.Sc. in Architectural Design from INDA,  
Chulalongkorn University

2015 - 2016  
Ged (The General Educational Development)

## Experience

2021 - Treescape @ Sukhumvit 95/1  
2020 - INDA Dex 2020  
2019 - Chinatown Effect @ Att 19  
2018 - Hello Wood at Space Saloon 2018

## Skills

Rhinoceros	Adobe Illustrator	Notion
Grasshopper	Adobe Photoshop	
V-Ray	Adobe Indesign	
Autocad	Adobe Premier pro	
Blender	Adobe After Effect	
Enscape		

## Work

03/2021 - 03/2023  
**Rungcharoensteelwork  
(Architect)**  
Design  
Architectural Drawings  
On Site

01/2021 - 03/2021  
**AR129 Architect Studio  
(Architect)**  
Design  
Architectural Drawing  
Furniture Planning  
Rendering  
On Site  
Slide Presentation  
Pitching

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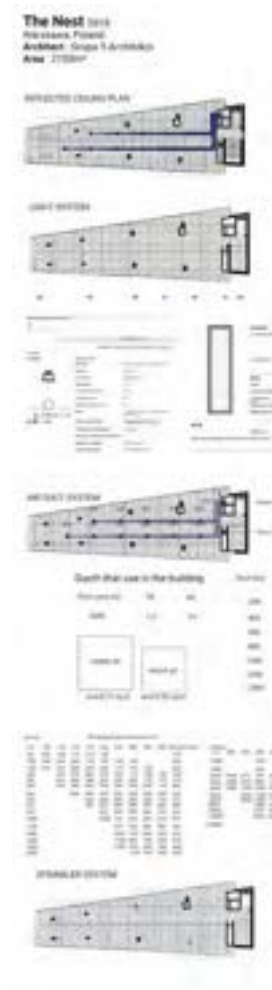
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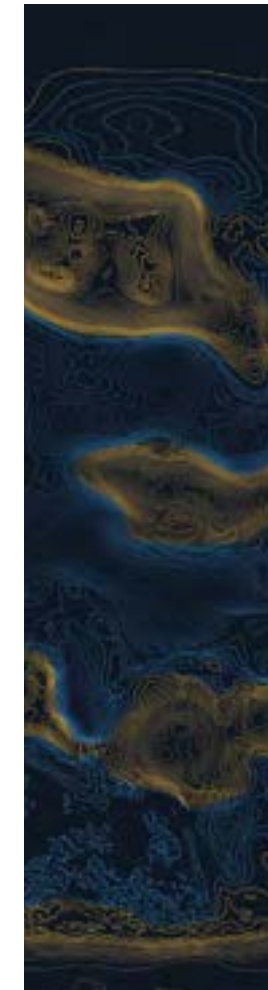
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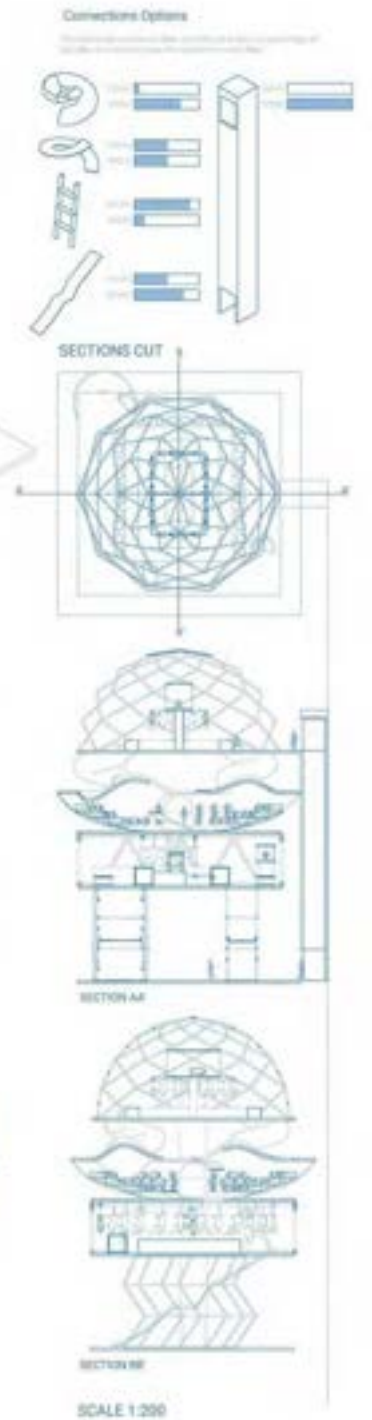
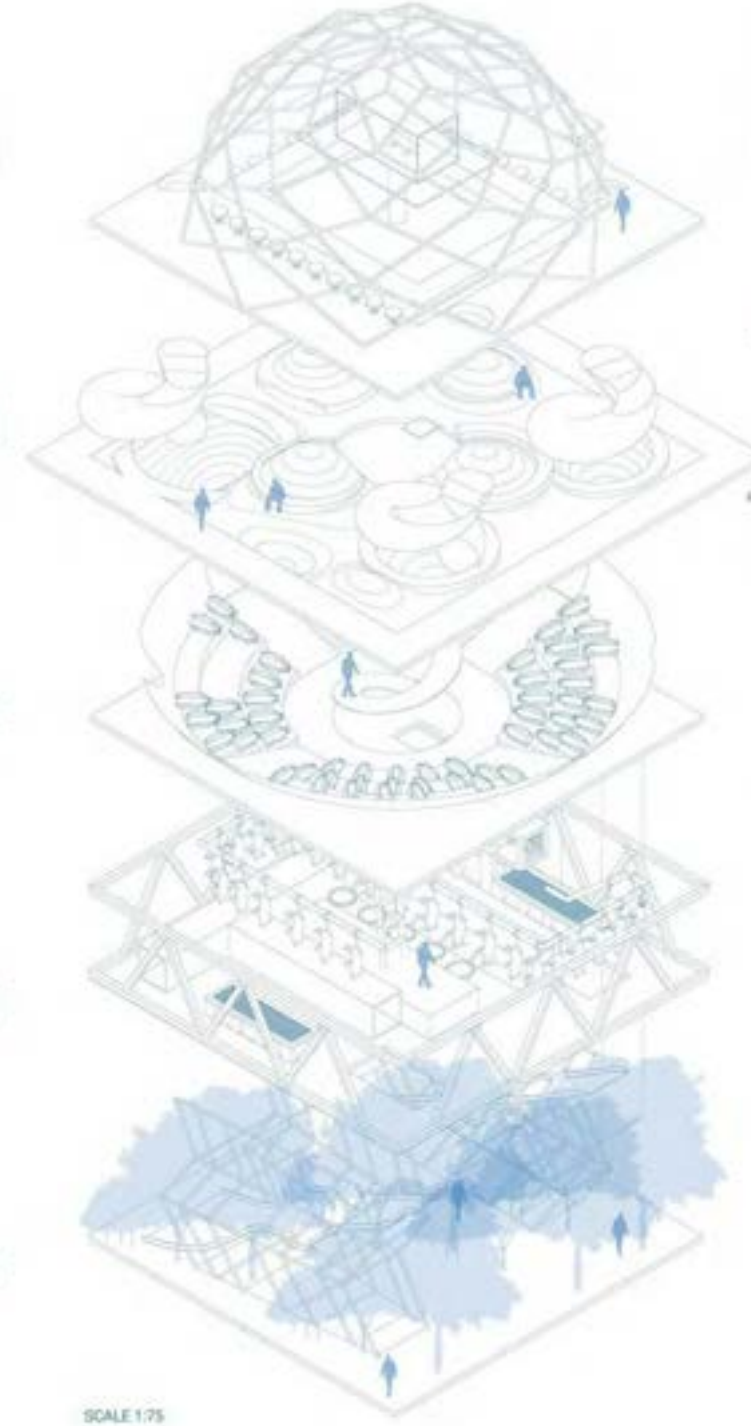
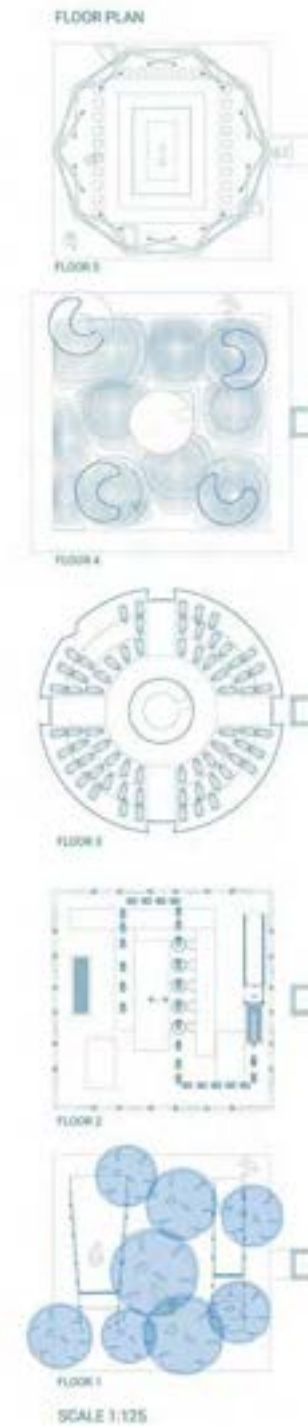
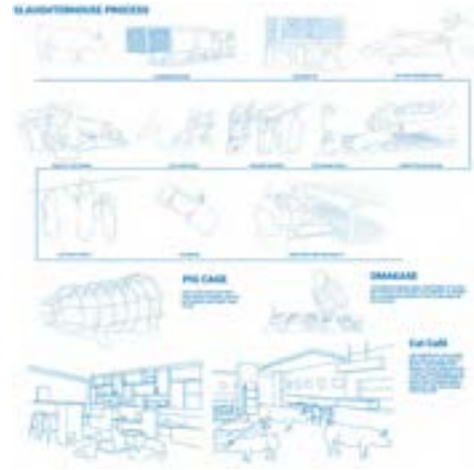
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Machine Landscapes  
of the Post  
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## Pig Experience

According to the problem of pig importing demand in South Korea is highly. I am designing the space that people will get an experience that realize this problem. I think the point of this experience can not force you to stop eating pork but to reduce instead .

I am research and analyzing the element of how pig become food or how they live and the concept of speciesism of pig and also the experience of food.

I am designing a space that people who visit this will get four main experience .I am separate in to five floor and we are force people to go to the top floor first and then go down to every single floor and I am using connections option between floor to make people get more experience in every single floor.

### First Floor - Public Space

I am putting this floor to be the first floor to attractive people from side walk to see this building.

### Second Floor - Slaughter House

This floor are showing the process of slaughter house that how pig turning in to food

### Third Floor - Pig Cage

I am using the concept of Panopticon Cage to make people who visit this floor get an intense mood of cage

### Forth Floor - Pig Cafe

This floor are forcing people to think that does pig born to be a food or not.

### Fifth Floor - Omakase

Nowadays we are involved in food transitions like J festival the people can use tofu to be same texture and taste as pork.

## Elephant Building

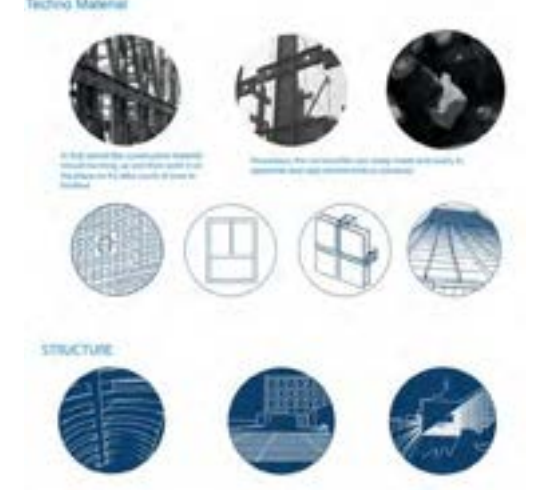
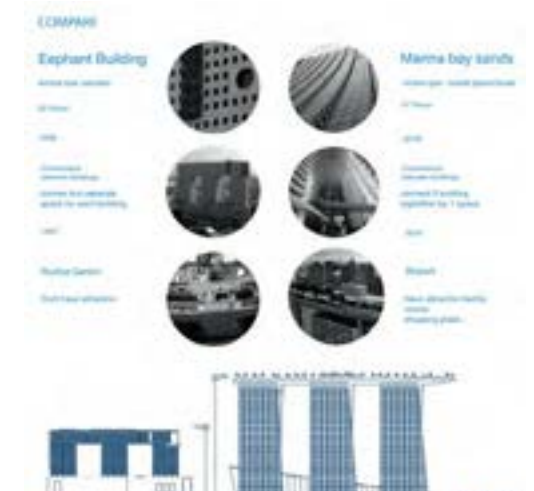
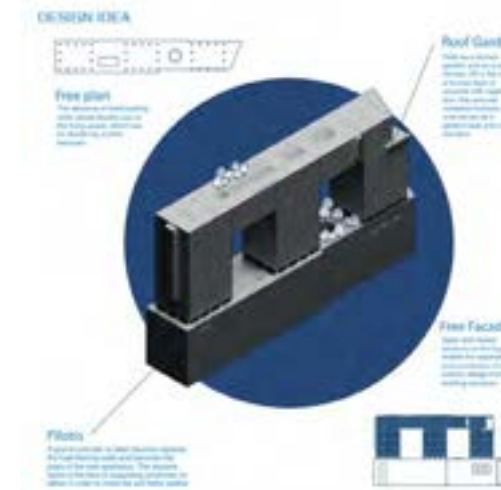
Time change the facility and functions also change to adapt to this period. The office tower and condominium has changed to office tower condominium and hotel. Firstly the building was do a tower A and B to be office tower and C is condominium. Now its separate to 3 tower 3 functions. Tower A for hotel, Tower B for office tower C for condominium. For the top part of the building the back of elephant firstly is a suite room but now it changing in to resident space.

For the facility in this building that they used the free space between the tower and roof top tower to do a facility. This idea is coming from

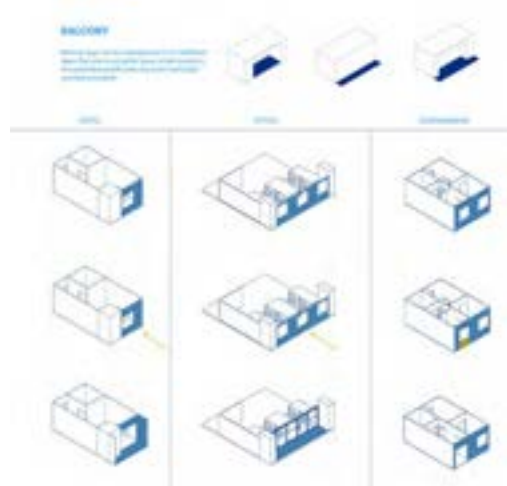
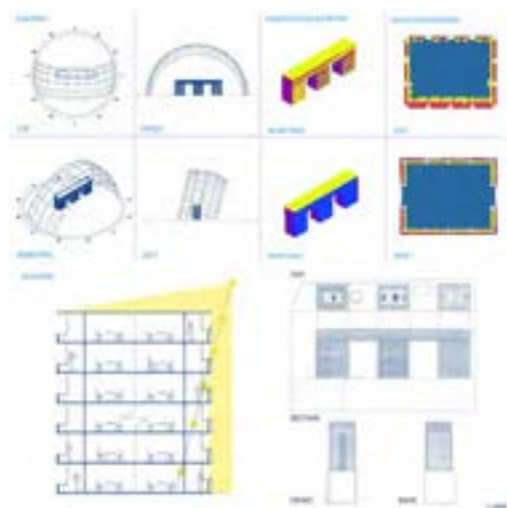
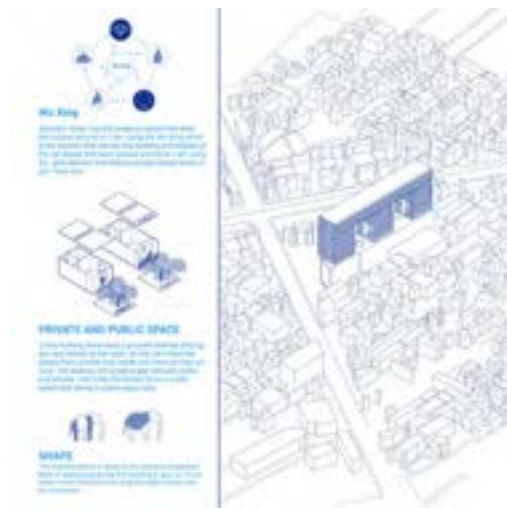
5 points of architecture by Le Corbusier. In that period most of architecture in Thailand got influenced by him, so most of style in that period will be modern style

This building was an iconic but it also categorized to an ugly building. Most of component in this building make it obsolete. Another case study that I choose to compare is Marina Bay Sand in Singapore that has similar form and functions that has 3 tower and connected on the top and lower part, but to point out the element that make marina bay sand more successful.

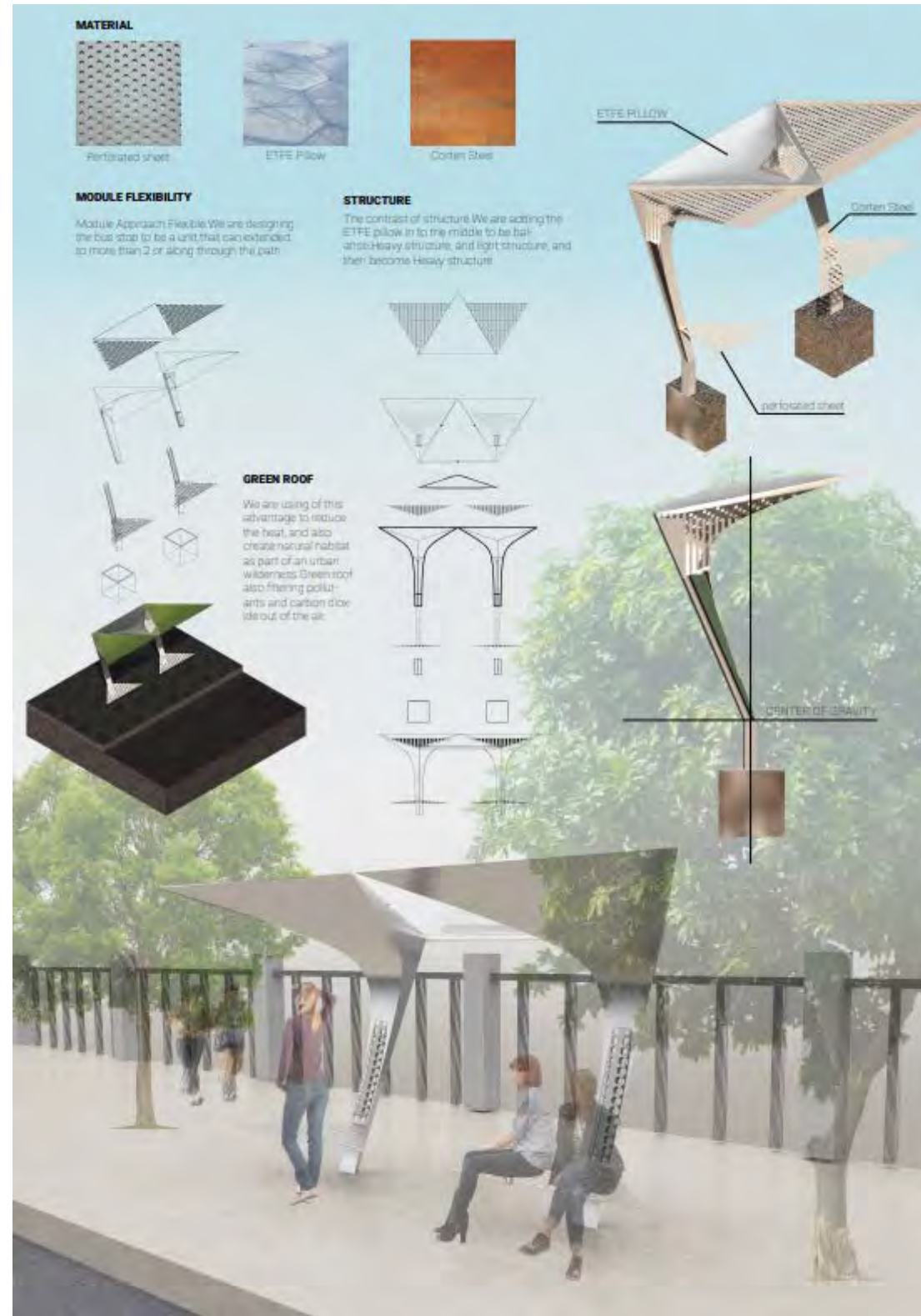
Elephant building has 32 floors and it is 102m height but Marina bay is 57 floors and 207m height. So the scale is also effect that they can have more space and organized the space or adding facility. The construction is also affect the obsolete building Elephant buildings was started in 1991 but marina bay was done in 2010, so the material the technology of construction also develop and has more options to build buildings





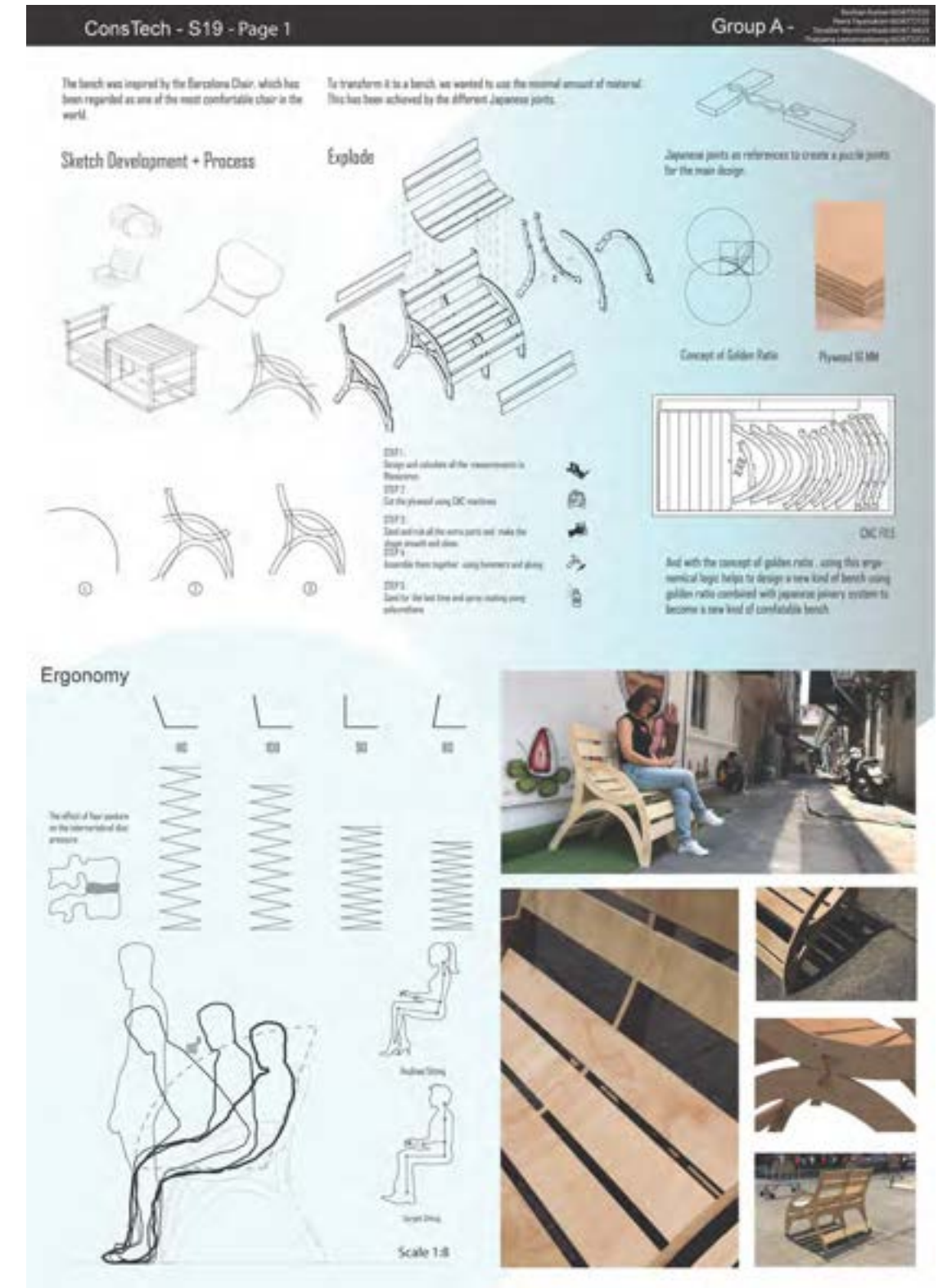




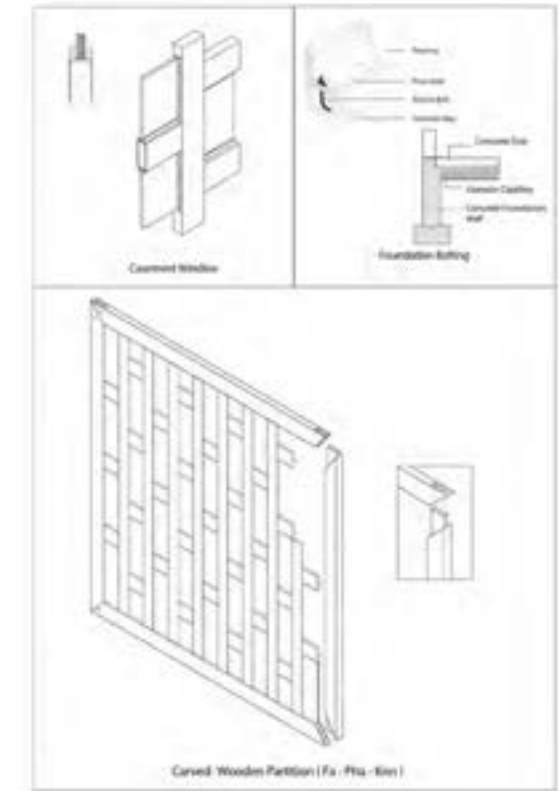
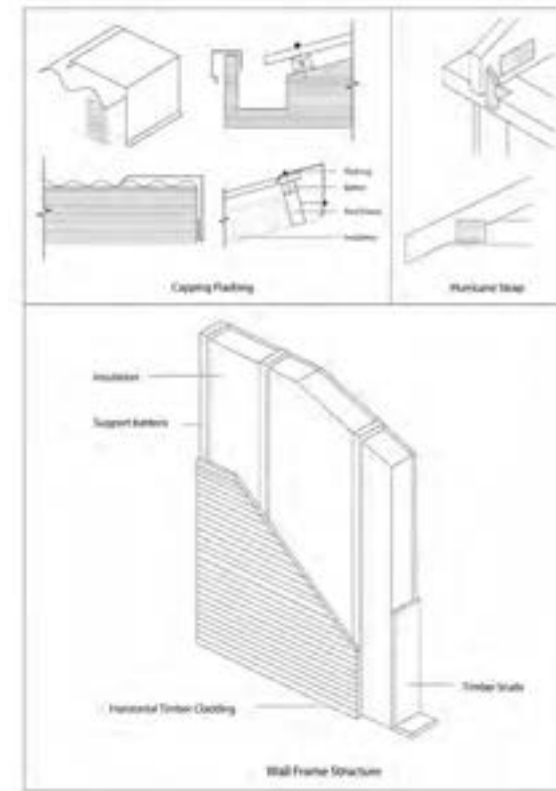


## Construction

My bus shelter construction project and bench design was a challenging but rewarding experience. The aim of the project was to create a functional and aesthetically pleasing shelter and bench that could withstand harsh weather conditions and heavy use. To achieve this, I carefully selected materials that were durable and easy to maintain, such as powder-coated steel and polycarbonate panels. I also ensured that the design of the shelter and bench was in line with the principles of universal design, making it accessible and inclusive for all users. The shelter features a sloped roof to prevent the accumulation of snow and rain, while the bench incorporates curved shapes that provide ergonomic support and comfort. Throughout the project, I paid close attention to every detail, from the design of the shelter and bench to the construction and installation process. The result is a beautiful and functional bus shelter and bench that enhances the user experience and adds value to the community.



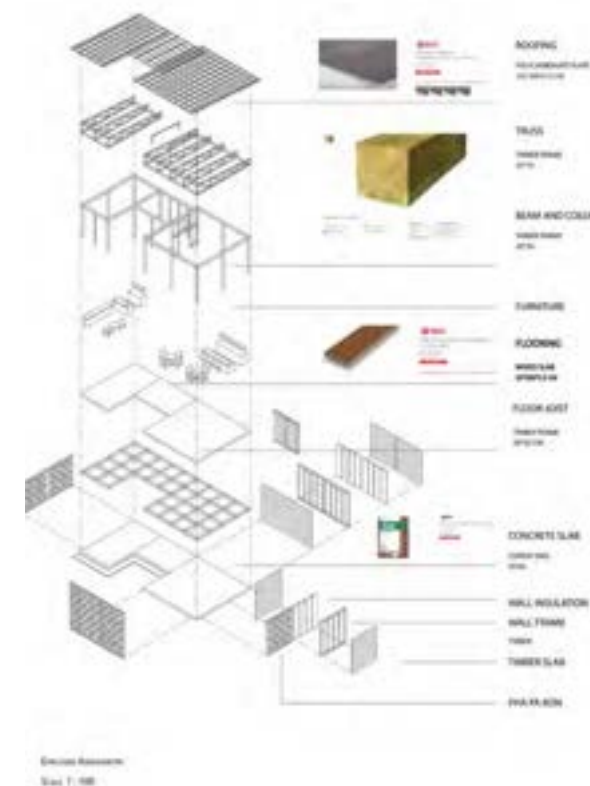




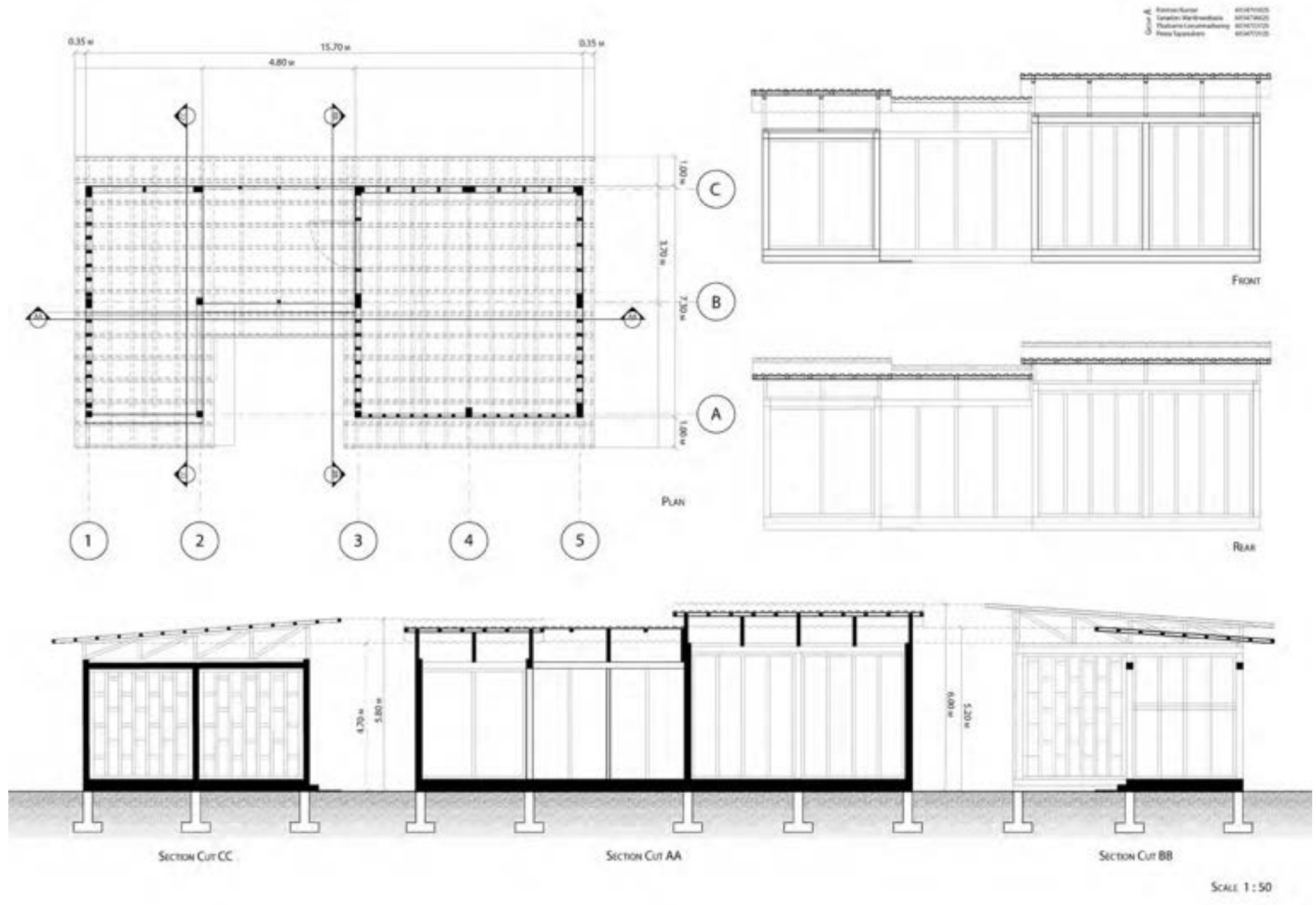
## Pavillion

The design and construction of the cafe pavilion was a challenging yet rewarding experience. The pavilion was designed to be a multi-functional space that serves as a cafe during the day and a gathering space in the evening. To achieve this, a combination of durable and sustainable materials were used in the construction process. The structural frame was made of locally-sourced timber, chosen for its strength and natural aesthetic, while the exterior cladding was made of corrugated metal panels that are both visually appealing and resistant to harsh weather conditions. Large glazed windows were incorporated to allow ample natural light to enter the space, creating a bright and welcoming atmosphere. The overall design of the pavilion was aimed at providing a comfortable and inviting space that complements the natural surroundings.

The construction details of the pavilion were carefully thought out to ensure a smooth and efficient building process. The structural frame was assembled on-site, with each timber beam carefully measured and cut to precise dimensions. The metal cladding was installed using a clip system, allowing for easy maintenance and replacement. Interior finishes were chosen to create a warm and inviting atmosphere, with natural wood flooring and custom-made furniture. The cafe pavilion was designed and constructed with both form and function in mind, creating a space that is not only aesthetically pleasing but also practical and sustainable. The result is a stunning structure that enhances the natural beauty of the surrounding landscape while providing a comfortable and welcoming space for visitors to enjoy.







### The Nest

The Nest is a modern building with an innovative architecture system that includes air ducts, sprinklers, lights, and return air. However, the current system may require re-designing to enhance functionality and improve the indoor air quality. The redesign process will involve studying the building's layout, reviewing the existing architecture system, and making necessary adjustments to meet the desired outcomes.

We will design a functional, visually appealing conference room in The Nest, incorporating the new architecture system. It will have ample lighting, efficient air conditioning, and well-distributed audio. A BOQ will detail the budget, ensuring efficiency, quality, and cost-effectiveness.

**The Nest 2018**  
Warszawa, Poland  
Architect : Grupa 5 Architekci  
Area : 2100m<sup>2</sup>

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6034733725

**REFLECTED CEILING PLAN**

**LIGHT SYSTEM**

**OVERALL STRUCTURE SYSTEM**

**VERTICAL CIRCULATION SYSTEM**

**AIR DUCT SYSTEM**

**DUCT SYSTEM**

**WATER AND SPRINKLER SYSTEM**

**SPRINKLER SYSTEM**

Item	Description	Quantity	Unit	Material/Spec	Remarks
001	Office Chair	10	EA	Executive Chair	10 - 10 Chairs
002	Office Desk	1	EA	Office Desk	1 - 1 Office Desk
003	Office Light	10	EA	Office Light	10 - 10 Office Lights
004	Office Table	1	EA	Office Table	1 - 1 Office Table
005	Office Chair	10	EA	Office Chair	10 - 10 Office Chairs
006	Office Desk	1	EA	Office Desk	1 - 1 Office Desk
007	Office Light	10	EA	Office Light	10 - 10 Office Lights
008	Office Table	1	EA	Office Table	1 - 1 Office Table
009	Office Chair	10	EA	Office Chair	10 - 10 Office Chairs
010	Office Desk	1	EA	Office Desk	1 - 1 Office Desk
011	Office Light	10	EA	Office Light	10 - 10 Office Lights
012	Office Table	1	EA	Office Table	1 - 1 Office Table
013	Office Chair	10	EA	Office Chair	10 - 10 Office Chairs
014	Office Desk	1	EA	Office Desk	1 - 1 Office Desk
015	Office Light	10	EA	Office Light	10 - 10 Office Lights
016	Office Table	1	EA	Office Table	1 - 1 Office Table
017	Office Chair	10	EA	Office Chair	10 - 10 Office Chairs
018	Office Desk	1	EA	Office Desk	1 - 1 Office Desk
019	Office Light	10	EA	Office Light	10 - 10 Office Lights
020	Office Table	1	EA	Office Table	1 - 1 Office Table

**The Nest 2018**  
Warszawa, Poland  
Architect : Grupa 5 Architekci  
DESIGN CONCEPT & REFERENCES

**RENDERING**

**MEASUREMENT LIST**

Item	Description	Quantity	Unit	Material/Spec	Remarks
001	Office Chair	10	EA	Executive Chair	10 - 10 Chairs
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**KEY PLAN**

**CEILING PLAN**

**FLOOR PLAN**

**SECTION A**

**SECTION B**

**SECTION C**

**SECTION D**

**KEY PLAN**



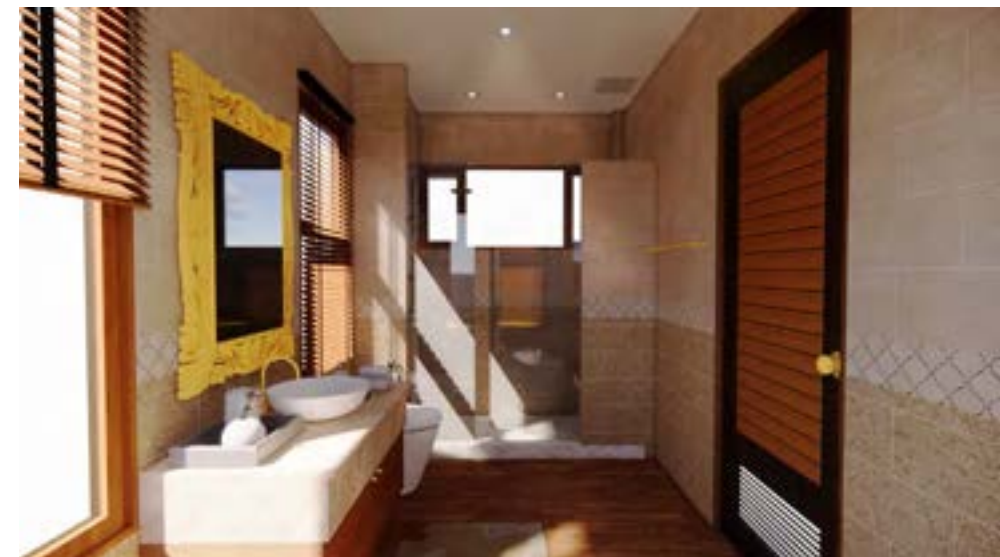


## AR129 Architecture Studio

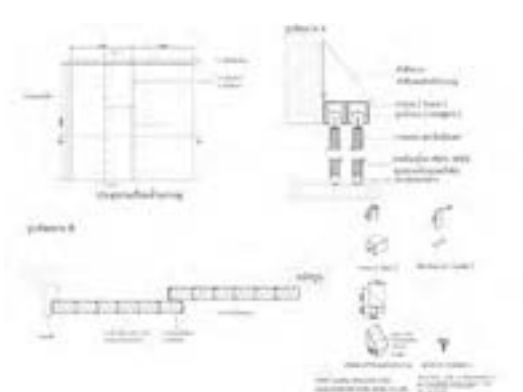
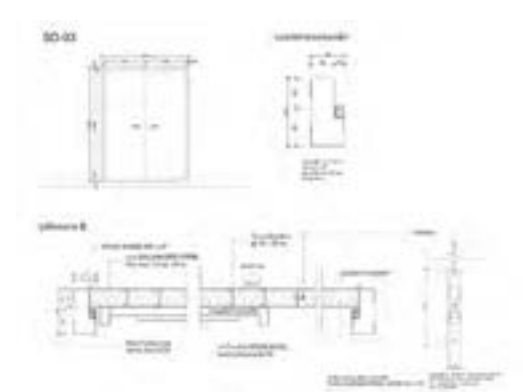
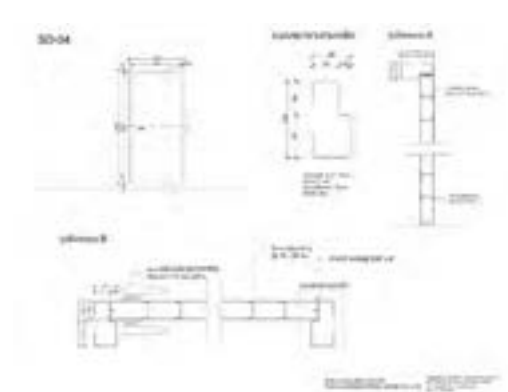
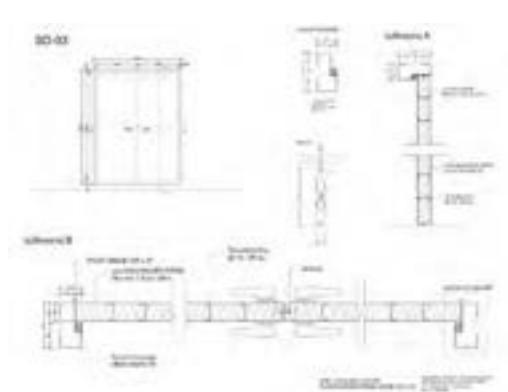
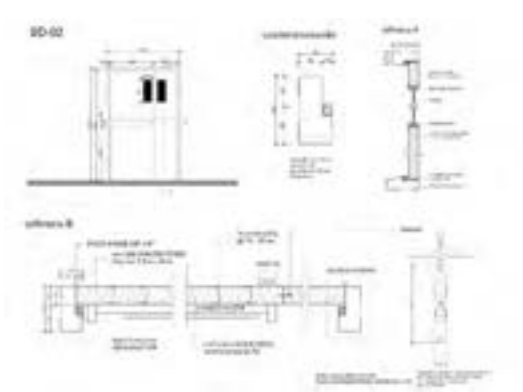
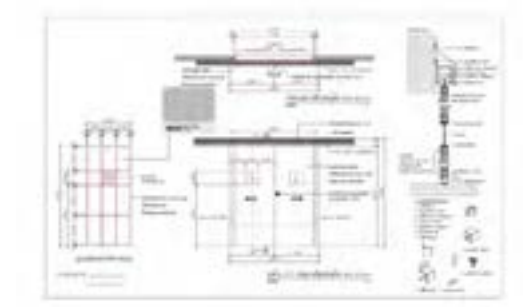
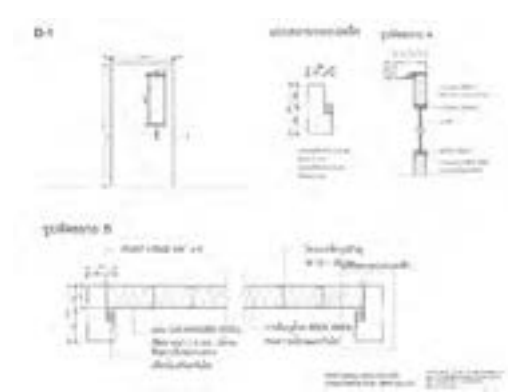
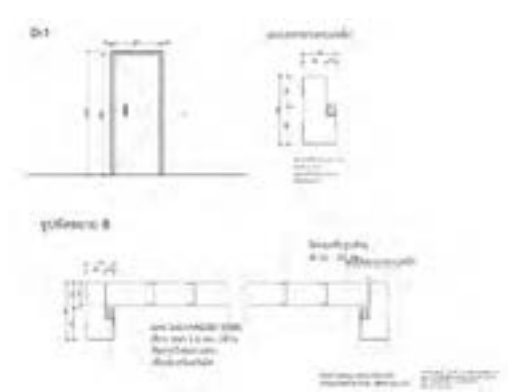
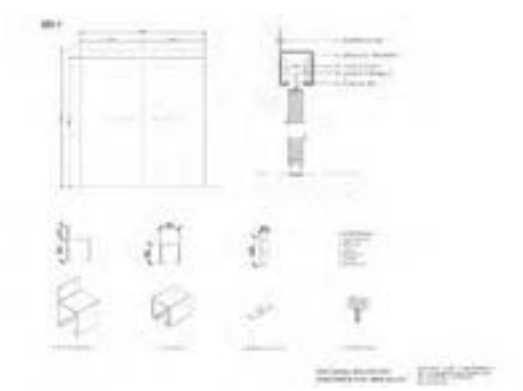
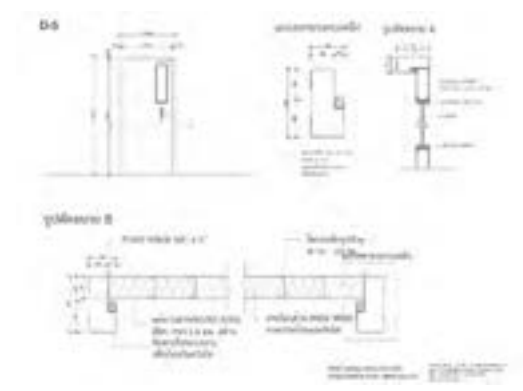
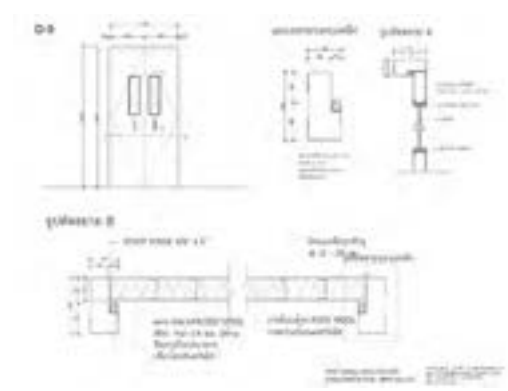
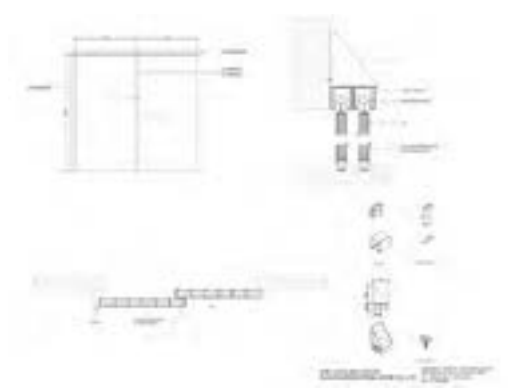
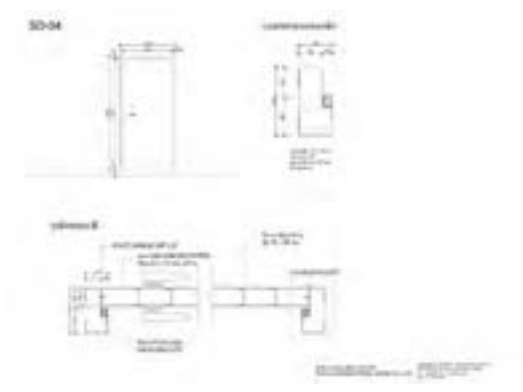
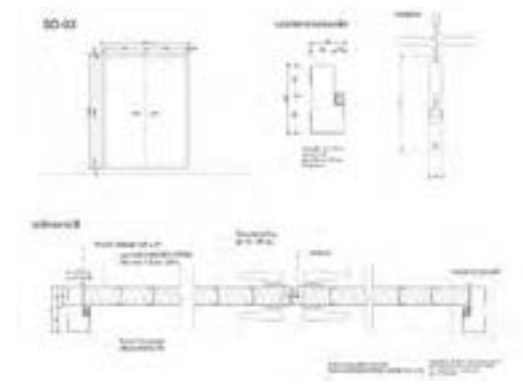
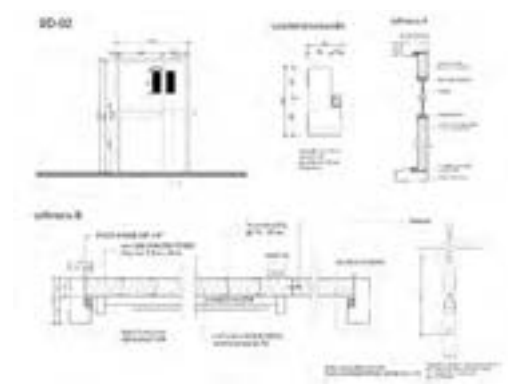
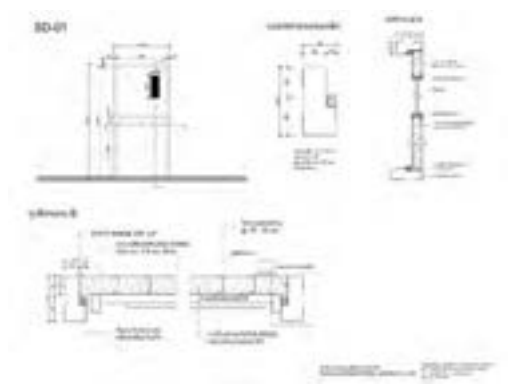
During my internship at AR129 architecture studio, I had the opportunity to work on several projects, one of which involved designing a pump track for an extreme sports facility at Taco Lake. The site already featured a wakeboarding area, and I decided to take advantage of the surrounding environment in my design for the pump track. To achieve this, I carefully studied the terrain, topography, and vegetation of the area to create a track that would not only be challenging for riders but would also blend seamlessly into the natural landscape. Throughout the project, I collaborated with other team members, including engineers and landscape architects, to ensure that my design was feasible and sustainable.

Another project I worked on during my internship at AR129 architecture studio involved designing a bathroom that met the specific requirements of the client. This project challenged me to think creatively while also adhering to the client's budget and practical needs. I began by meeting with the client to discuss their vision for the bathroom, taking into account their preferred style, color scheme, and materials. Based on their preferences, I developed several design concepts that met their needs while also adhering to the building codes and regulations.

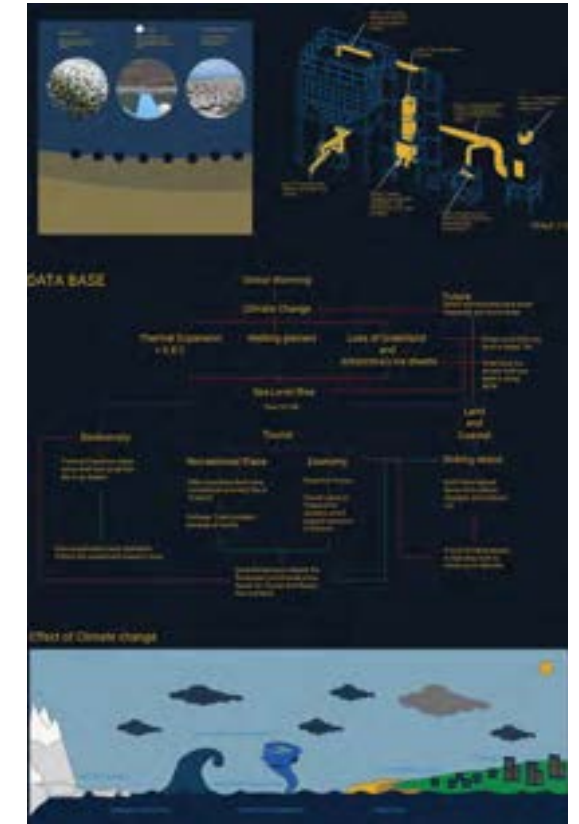
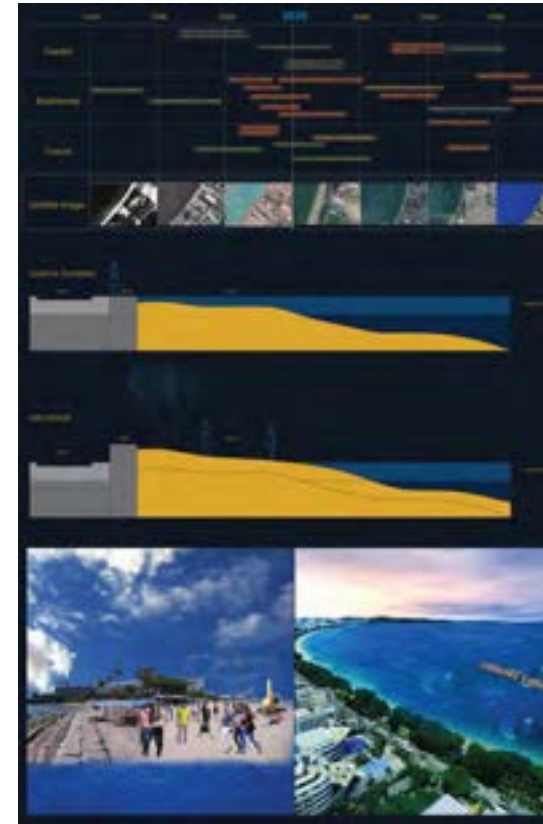
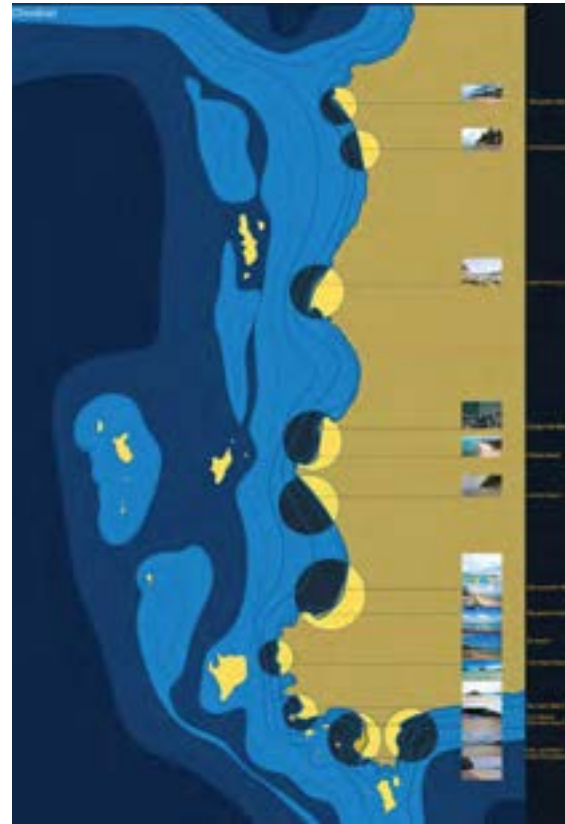
Once the bathroom design was finalized, I prepared a detailed Bill of Quantities (BOQ) for the project, listing all materials, fixtures, and labor required for construction, along with their costs. This experience helped me develop valuable skills in managing costs and a better understanding of the construction process.











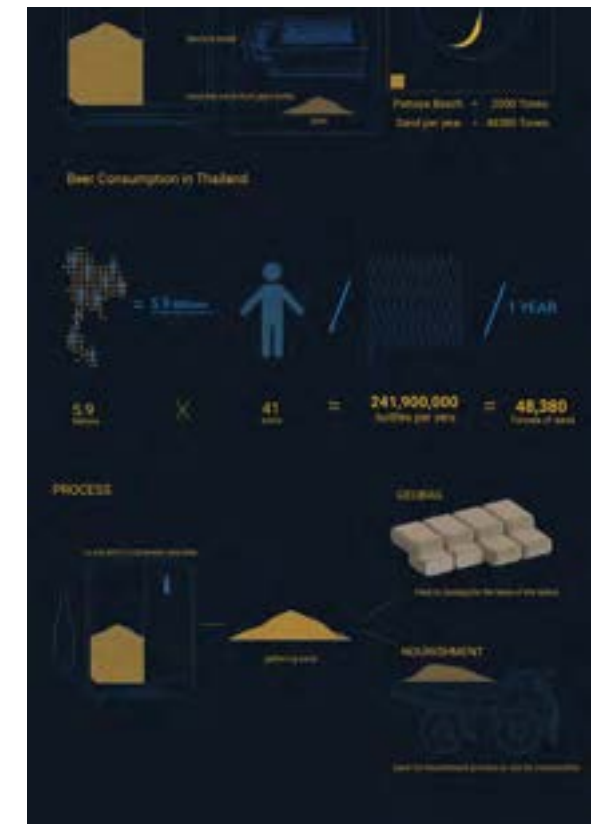
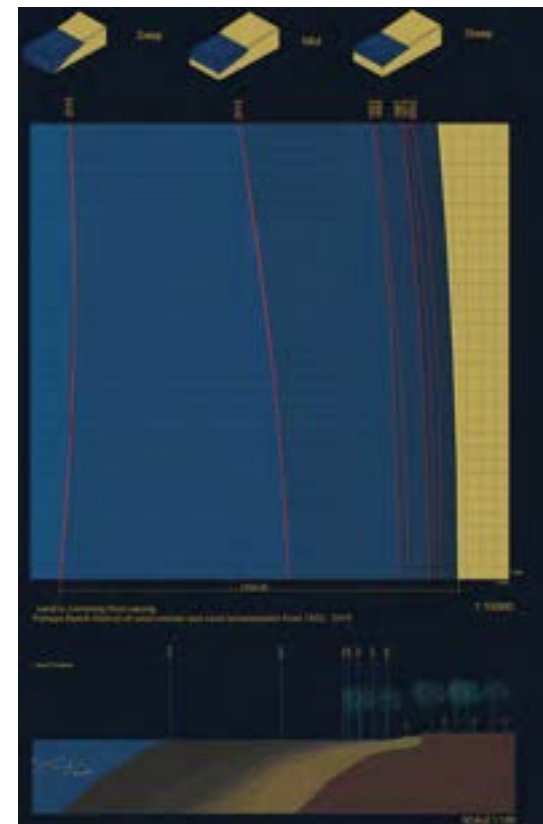
## Beer to Beach

Coastal erosion is a significant problem in Chonburi, and the area is categorized by the province's different topography. Bangsaen has a deep sand topography, a lot of ports, and only one beach, while Pattaya City is the most popular area with a middle depth of sand topography, plenty of tourists, and recreational activities. Sattahip province has the steepest topography and a preservation center.

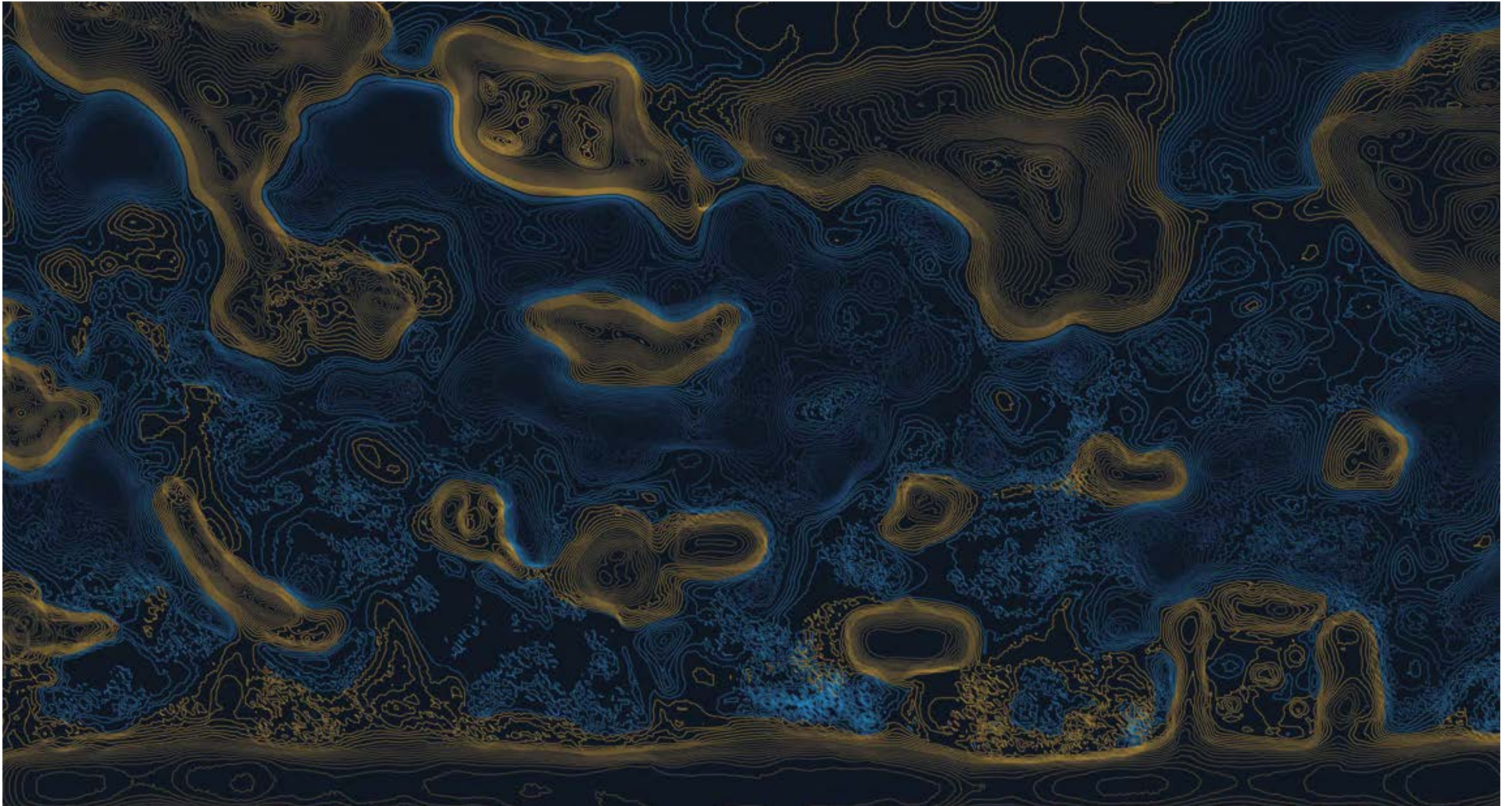
The government has attempted to fight back coastal erosion and attract tourists to boost the economy by reclaiming beaches. The timeline shows a significant sand reclamation that occurred in 2018 and 2019. Coastal protection measures such as breakwaters and jetties can also help slow down the waves and prevent coastal flooding. The scientific data predicts that climate change, such as sea level rise, will cause significant coastal erosion in the future.

To prevent coastal flooding, we can increase the original beach's height and find ways to produce sand sustainably. Crushing glass bottles is an innovative way to produce sand for beach nourishment. With quick math, we found out that beer consumption in Thailand can produce sand more than the significant reclamation in Pattaya.

Geobags can be used to construct newly built islands that can serve as a long-term solution to prevent coastal erosion. The process involves crushing bottles, gathering sand for geobags or beach nourishment, and using leftover sand for construction material. We can use the center of the island as a place for the bottle crushing machine and the island for functions such as a bar. Outer parts of the island can serve as an ecology island to bring back the lost ecology and become a second barrier to protect the original beach from erosion.











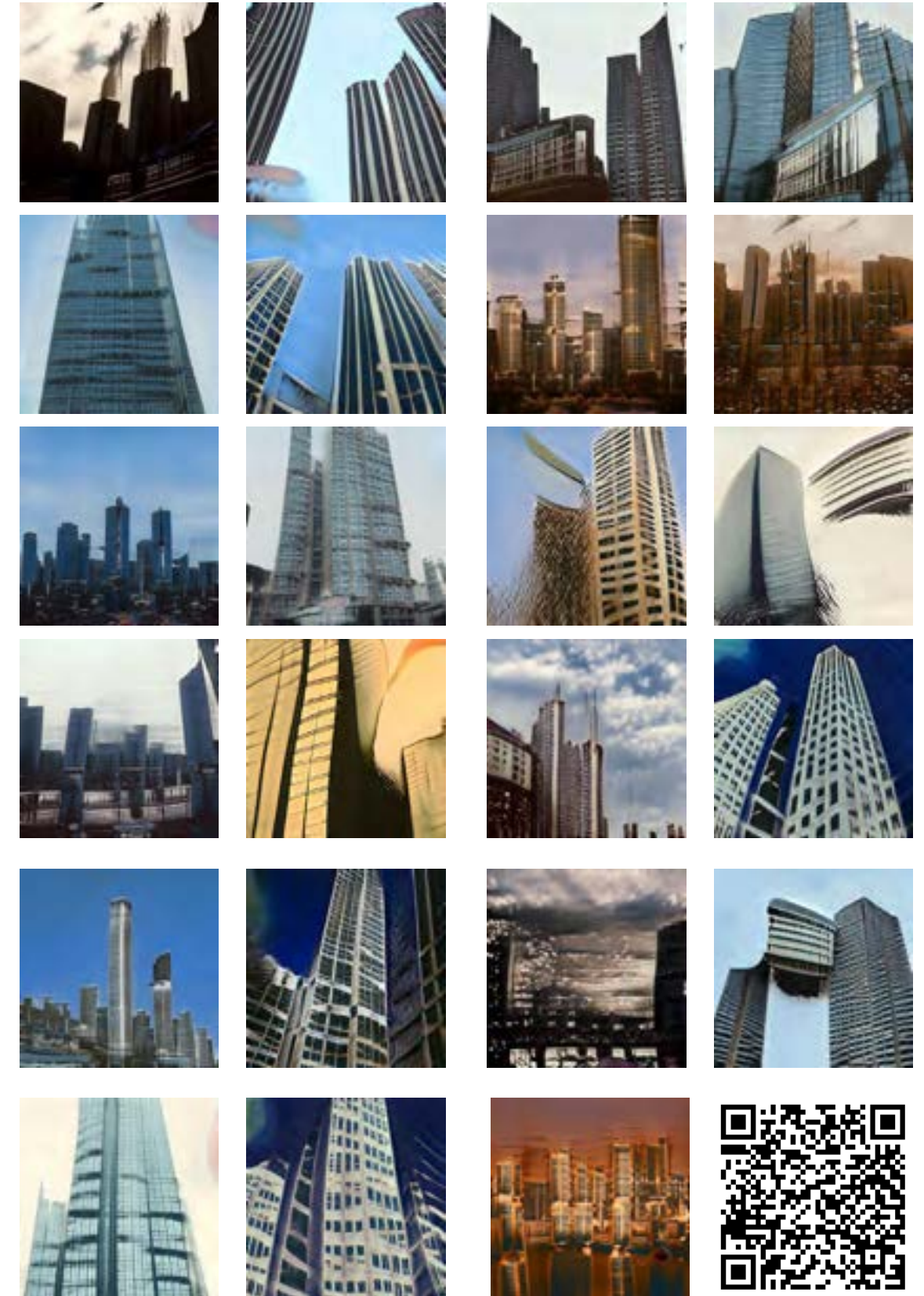




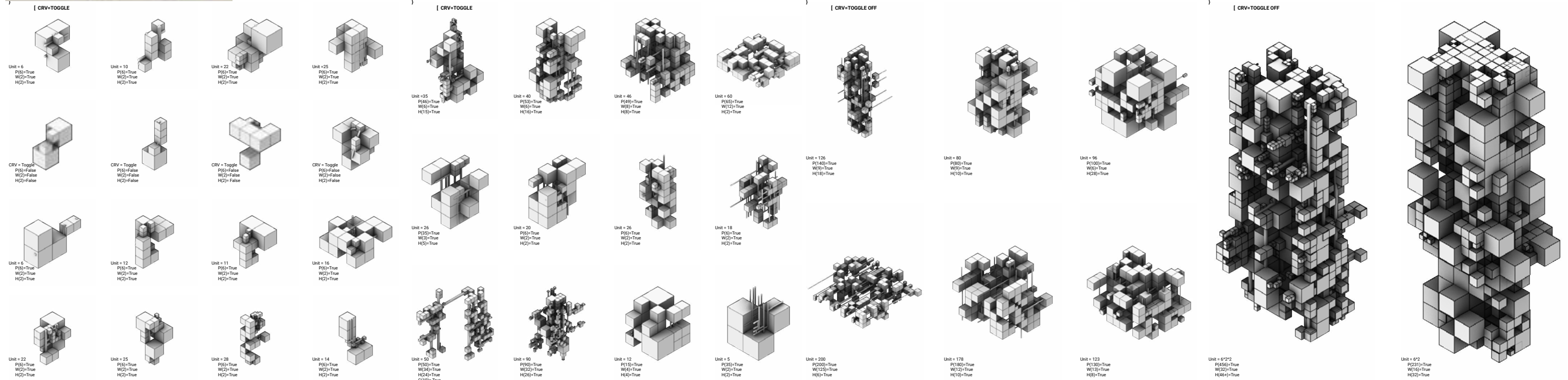
## Machine Landscapes of the Post Anthropocene

Current developments in machine learning algorithms are challenging and destabilizing disciplinary practices and expectations. From GAN algorithms that instantly generate a range of interior floor plans to adapt to any bounding box to algorithms that can apply any architectural style to any facade organisation, how do we envision a future where the role of the architect is still vital to the design process - particularly in typologies where space-planning and proximity can be easily rationalised? To test this question, the project engages in a range of machine learning tools that target the organisation and design of residential buildings. Based on a series of set rules, the residential building is a typology that has a range of tested formats, from the double loaded corridor to the central core, which are based on given parameters such as site conditions and building heights.

The project is ultimately a first hand investigation into various emerging applications of AI in architecture that poses the question: Will automation and AI render the human hand obsolete or will it simply shift our focus







### Unit Life

This project delves into the fascinating world of automation technologies and their impact on the field of architecture. In particular, it aims to explore the ways in which new forms of artificial intelligence are transforming our built environment and reshaping the role of architects within the profession. With the rise of machine learning, robotics, and other advanced technologies, the field of architecture is undergoing a major paradigm shift, and it is important to understand the implications of these changes for the future of design and construction. Through this project, we hope to gain a deeper understanding of how automation is changing the architecture industry and what this means for the architects and designers of tomorrow.





