

An aerial photograph of a floating neighborhood, likely in the Netherlands. The houses are built on a grid of floating platforms connected by a network of narrow, dark walkways. The surrounding water is a deep, vibrant blue-green, with some darker patches visible. The houses have light-colored roofs and walls, and some have small balconies. The overall scene is a striking contrast between the man-made structures and the natural water environment.

COMMUN

AFLOAT

Designing a water resilient neighbourhood.

<https://competitions.uni.xyz>



Img_1: A voice against Climate Change

Premise

With her slogan “How dare you?” [Greta Thunberg](#) awakened millions and questioned the leaders across the world on **Climate Change and its impact**.

A global change in weather and other adverse indicators have displayed that **climate change** is not a distant future anymore. Although the timing, scope and magnitude of the consequences of global warming remain uncertain, the potential risks continue to grow.

Reduction in Greenhouse gases, mitigation and control of water and air pollution through policies, and other adaptive measures that may seem prudent today are proving to be insufficient for tomorrow. **Forest fires, Floods, droughts, receding shorelines, rising global temperatures**, are some of the natural disasters that have substantially increased in the past decade.



Img 2: [Source](#)

Sinking Cities

Flooding is one of the most frequent natural disasters that has occurred as a consequence of Global Warming and Climate Change. Torrents of rain caused floods in South Asia in 2017 affected over 40 million.

Rising sea levels are now said to be responsible for receding shorelines and would cause the submerging of some of the major coastal cities. [The new research shows that about 150 million people that are now living on land will be below the high-tide line by 2050.](#) Cities like **Mumbai, Shanghai, Jakarta**, etc, lie under this zone and are at great risk. They are on the front line of climate adaptation as they are the ones likely to be most affected. Combined they are home to more than half the world's population and generate roughly 80% of global GDP.

Cities will find themselves in the epicenter of this challenge in no time.



Img_3: Aerial View of Jakarta

Jakarta

Jakarta, is the capital and largest city of Indonesia situated on the northwest coast of the world's most populous island of Java. It is the centre of economy, culture and politics of Indonesia with a population of more than 10 million as of 2014. It is a pluralistic and religiously diverse city. As the capital of Indonesia, Jakarta is the melting point of cultures of all ethnic groups of the country. It is Indonesia's booming metropolitan which attracts migrants in search of work from all across the country.

The northern part of Jakarta is plain land, some areas of which are below sea level and subject to frequent flooding. They are falling at an estimated **25 cm** a year. This is majorly attributed to land subsidence from the over-extraction of groundwater and Climate Change.



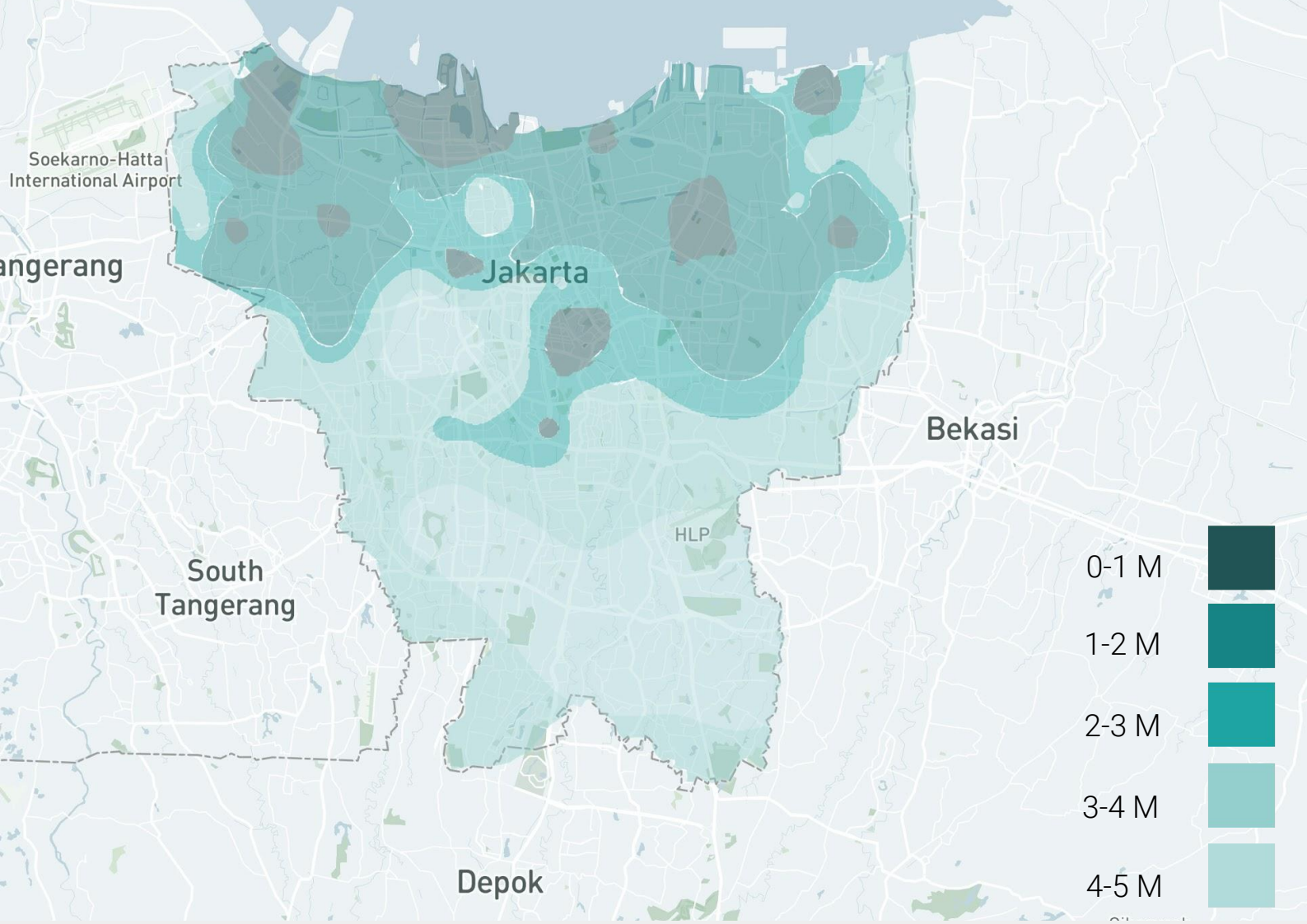
Img 4: [Source](#) Image Credit: Christoffer Rudquist

Brief

In the light of predicted water levels, the Govt. of Indonesia has begun the relocation of their capital city Jakarta to **Borneo**. It is something environmentalists are questioning, due to the scale of its impact on the existing rainforest. This approach is an escape rather than a solution for impending crisis. While we know that the city of Jakarta has already been inhabited and damaged, can design resolve this for the inhabitants of the future by adapting to aquaculture that is going to prevail after major parts of the city have submerged.

Can we be prepared for what is coming ahead and create a retrofit for areas of North Jakarta and design resilient habitats that can be replicated?

Brief: The challenge here is to create a prototype of a replicable Flood Resilient Neighborhood in Jakarta.



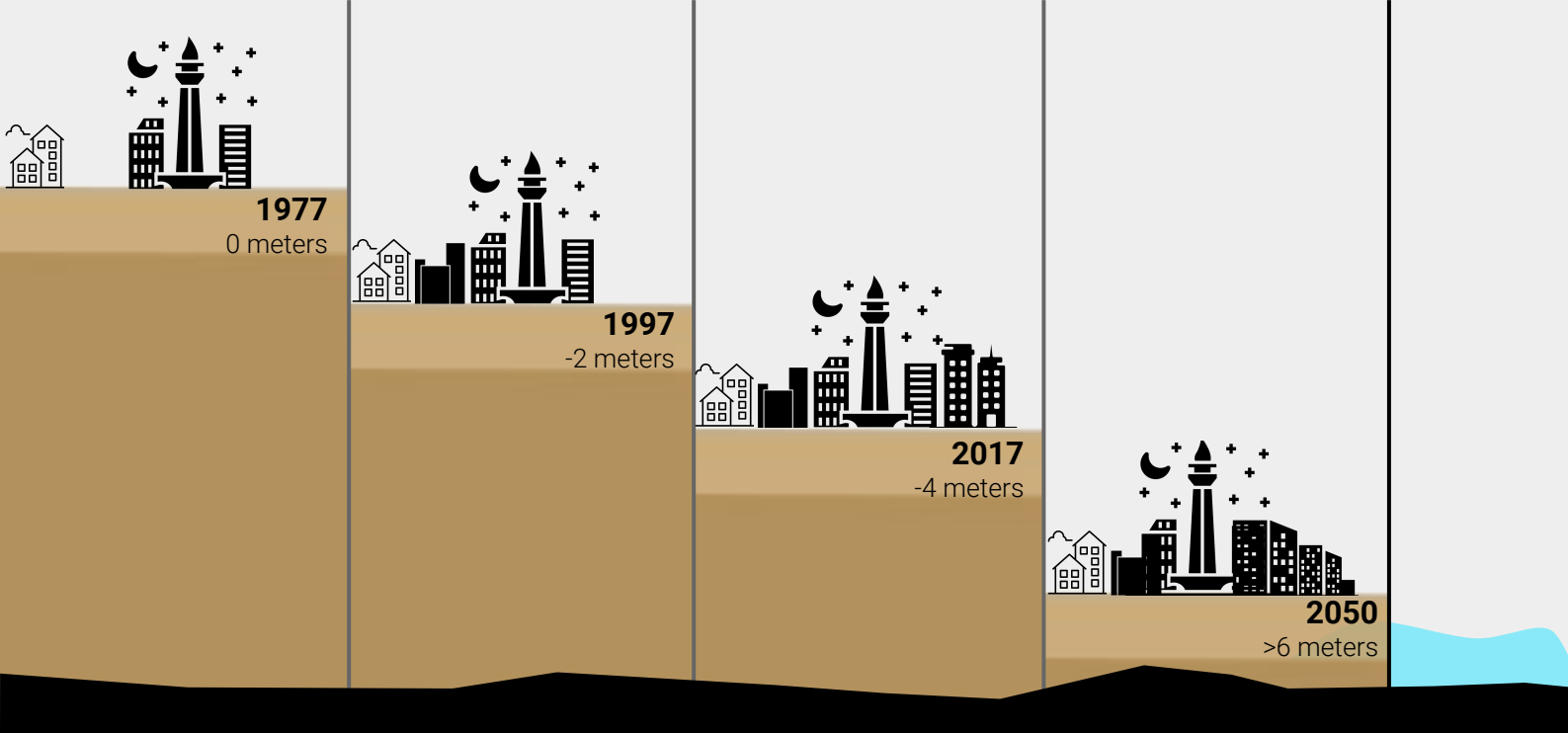
Img 5: Jakarta's land subsidence (amount of land sinking) by the year 2050

2050 Jakarta

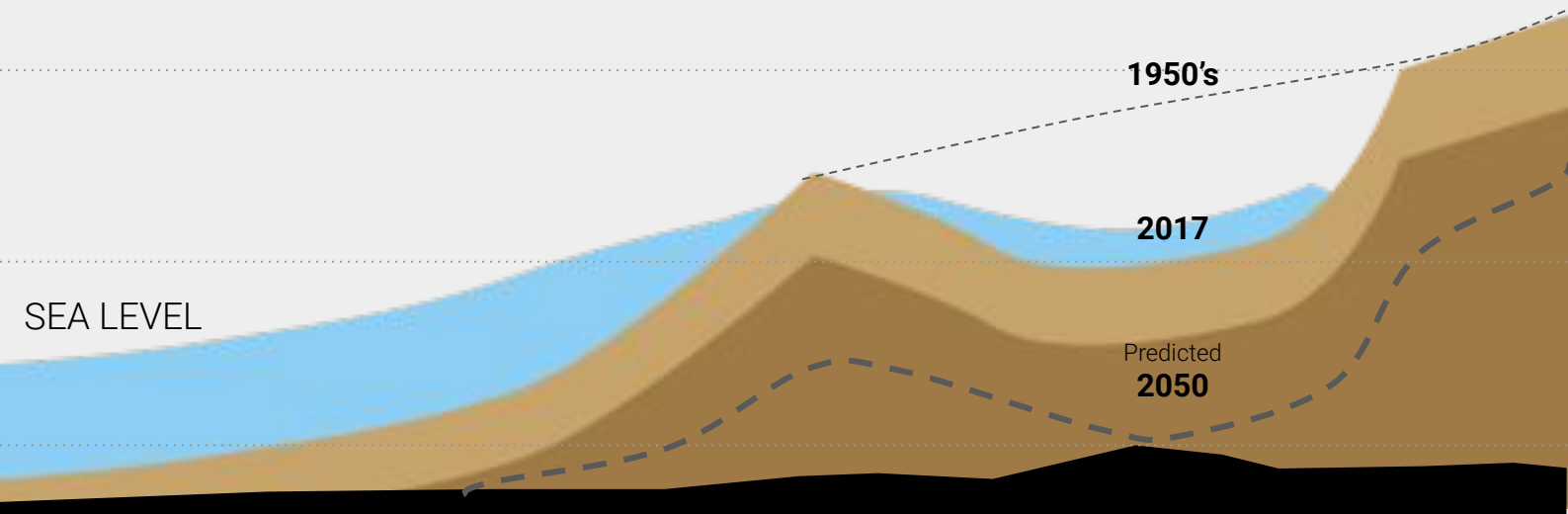
The city has begun work on creating a cluster of 17 islands across the northern shore with a projected total area of **2700 hectares**, it will significantly alter and degrade the already fragile environment of coastal Jakarta.

The non porous concrete jungle of the city does not allow rainwater to percolate, causing frequent floods. Rising seas not only contribute to this, but may also cause greater damage due to storms, faster rates of erosion. It will eventually shrink the water resources, if sea water infiltrates the aquifers. The trend has predicted about **95% of North Jakarta would submerge by 2050** as indicated in the map.

The project is expected to be designed for the coming decades, especially after 2050 when the Northern Part of Jakarta is submerged.



Img_6: Land sinking by years in perspective



Img_7: Sunken land causing water to accumulate and hence flooding.

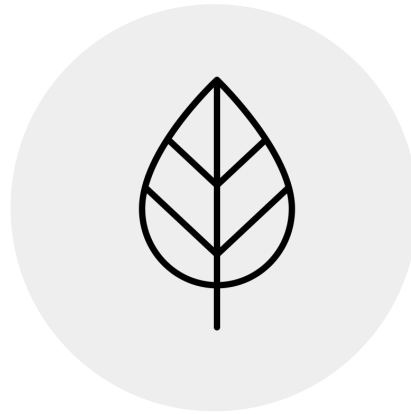
Land Submerging

Over the years, the land has sunk more than 4 m and is predicted to sink even more. The sunken land accumulates water during heavy rainfall or when water level rises. This eventually brings a part of land under water, submerging it completely. The increasing density of population on land makes the situation even more adverse. The challenge here is to accept the adversities that have already occurred and prepare for a resilient future.



Resilient

Capacity of a system to experience shocks while retaining function, structure,



Sustainable

The design must be environmentally conscious.



Modular

The neighborhood must be replicable through the rest of the city if required



Identity

The design must reflect the culture of Indonesia.

Objectives

The following objectives can be a point of beginning to conceive this design. Participants can assume their own contexts and users before initiating their design process. The neighbourhood must contain about 60 housing units on the given site, resilient to rise in water levels.

Residential
Housing units for the
neighbourhood.



A detailed design of housing units is mandatory for this challenge.

Community
Common public areas like
parks, markets, places of
gathering, recreation etc



These can be open areas, or buildings, which need not be detailed for this challenge but can be a part of the masterplan.

Services
Units for healthcare,
administration, etc



These can be open areas, or buildings, which need not be detailed for this challenge but can be a part of the masterplan.

Programmatic Outline

The programme of the **Flood Resilient Neighbourhood** has been broadly categorized into the above based on typology of the structure. However, the participants are free to add other programmatic facilities depending on their design. The number of floors for each housing unit is dependent on design and structural strength. Additionally, apart from the residential facilities, the rest of the provisions only need to be earmarked/designated on the masterplan and not detailed.

TYPE 1.



1 BHK

Number of Units : 15
Number of Rooms: 1
Min. Area per Unit: 450 sq ft

TYPE 2



2 BHK

Number of Units : 20
Number of Rooms: 2
Min. Area per Unit: 600 sq ft.

TYPE 3



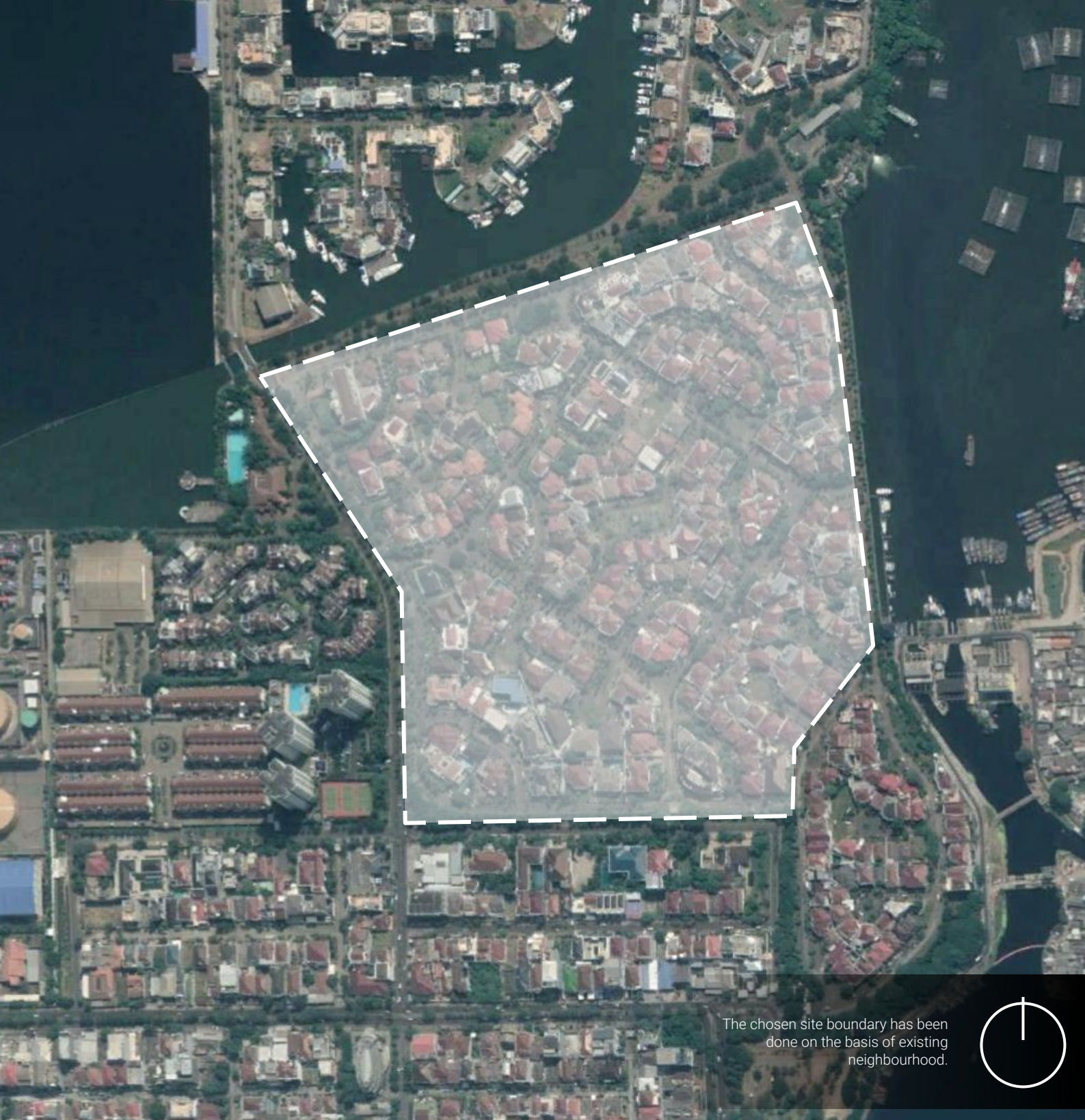
3 BHK

Number of Units : 25
Number of Rooms : 3
Min. Area per Unit: 950 sq ft

Housing Typology

The typology of residences in Flood Resilient Neighbourhood has been broadly categorized into the above based on usual structure of families.

(The participants are free to add the required number of washrooms, kitchen, balcony, etc areas, according to their design idea)



The chosen site boundary has been done on the basis of existing neighbourhood.

[img 6](#): Site Area

Site Plan

The site selected for this project is a part of the northern coast an an existing neighborhood area in the **Jl pantai Mutiara district** which is predicted to be partly submerged by 2050 due to land sinking and rising sea levels. For the purpose of this challenge the plot must be considere vacant / already submerged and a prototype zone for development.

Ground coverage: Unrestricted | Max. FAR **1** | Area 53 Acres | [6° 06'28.2"S 106°47'38.6"E](#) |

Guidelines

You have to deliver an architectural outcome on the following site, based on the given outlines.

- Recommended number of sheets/presentation images/boards:

5 (Five) of size [**2362px x 3544px**] or [**400mm x 600mm in 150 dpi**] in portrait digital format (**JPEG only**).

Minimum 3 (Three) & No maximum sheet limit. Each image should be less than **15MB**. (Do not submit PNG format)

Minimum requisite submission are sheets/boards + Cover image containing:

- Site plan (Compulsory)
- Key conceptual sections x 1 (Minimum)
- 3D views x 4
- Cover image / Thumbnail of size 2000px x 1000px or larger in aspect ratio 2:1.
- Answering 6 FAQs #
- This is the link for new file sizes, [here](#).

#The FAQ's have to be answered as instructed in the FAQ document in the 'additional resources folder'.

Deadlines

Discover the competition schedule and deadlines on the competitions page or on this link - [Schedule](#).

Resources

This competition contains additional resources that contains a set of files useful to complete the competition submission. This folder is made available on your profile dashboard automatically as soon as you register.

This additional resources folder of this competition contains: Submission Format files in PSD | AI | InDD, FAQs, High Res maps, and CAD file of the site plan.

Rules

- + The competitions is open for **students and professionals** from all the disciplines of design.
- + The team limit for this competition is **4 members maximum per team**.
- + You can register more than one team but they have to be registered separately.
- + Ensure that the final sheets submitted **do not include your name or any other mark of identification**. Your submission is linked to your user account which stands as your identification.
- + This is a design **ideas challenge only**. There is no built commission/realization associated with the problem.
- + In case of publication in yearbook we will reach out separately for selected entries.

Pro-Tips

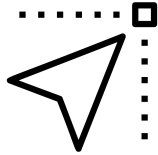
- + Use exploded views to discuss multi levelled conceptual models better.
- + Mention sheet number on corner of every sheet.
- + Plagiarism of any idea / form / design / image will be disqualified with a notice.
- + All the sheets or images will be viewed on a digital device. **e.g.** Laptop screen or projector. Uploaded sheets or images will not be physically printed for evaluation. The submission hence should be prepared for digital viewing only.
- + Submit JPEG images only. (PNG will not function)
- + Learn



Awards

Grants of up to a total of **20,000\$** can be won on this challenge. Learn more about the full conditions on the competition page [here](https://competitions.uni.xyz).

The entries will be judged by an international jury of the competition on the following criteria:



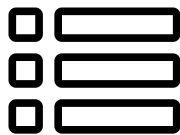
Presentation

The fundamental to a good entry is a good presentation.



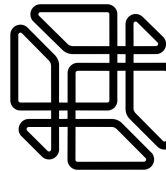
Concept/Idea

Quality of thought and intent in pre-design phase.



Spaces/Programme

How the spaces are calculated and ordered.



Design Outcome

The final architectural outcome of the solution.

Judging Criteria

The judging panel can also add other criteria based on their internal discussions - which will be in line with the problem statement. Participants are advised to fulfil above given criteria first in their design.

About COMMUN

Commun serves as a unit block for UNI in the field of Urban Design. It intends to break the fusion of traditional design barriers and methodologies by making it a platform for experimentation and conceptual exchange of ideas in urbanism, society, culture and ecology. It is a research initiative dedicated to provide opportunities for designers from all domains to explore ideas that go beyond the boundaries of the discipline and enrich our built environment holistically; thereby opening up possibilities for promotion of urban design thought at a global level.

Queries: support@uni.xyz

Discover other competitions: <https://competitions.uni.xyz>

Facebook: <https://www.facebook.com/unidesigntogether/>

Instagram: <https://www.instagram.com/uni.xyz/>

Discover FAQ's about this competition on our help forum here: <https://help.uni.xyz/>

The logo for COMMUN, featuring the word in a white, sans-serif font with a stylized 'U' that has a small gap at the top.

COMMUN

The background of the entire page is a photograph of a traditional Japanese building with a steep, thatched roof, situated on stilts over a body of water. The building is surrounded by lush green trees and foliage, with a large willow tree on the left and other trees on the right. The water is calm and reflects the surrounding greenery.

Resilient **cities** for tomorrow.

Available on:

Institutional  AccessTM

<https://competitions.uni.xyz>