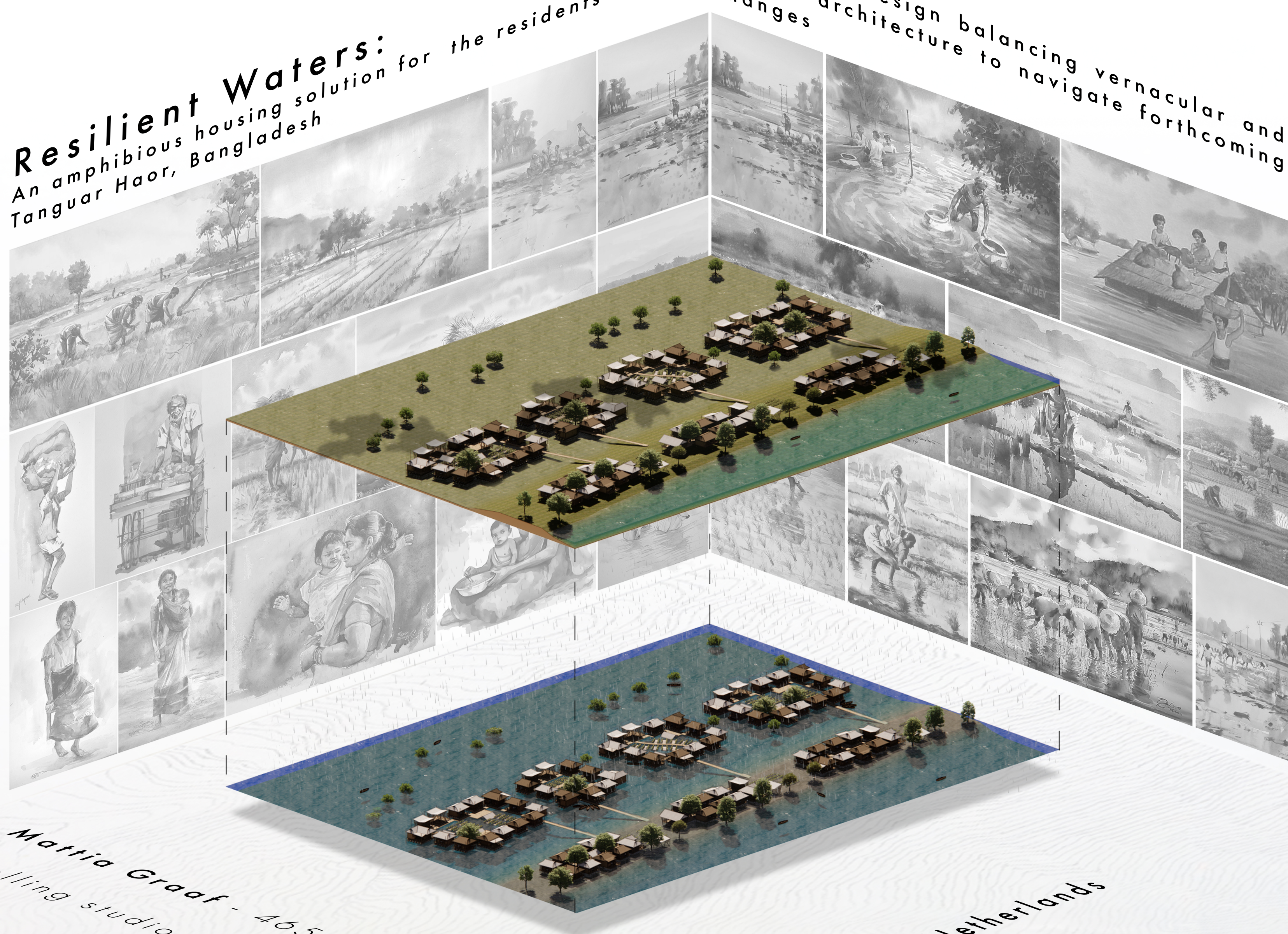


Resilient Waters:

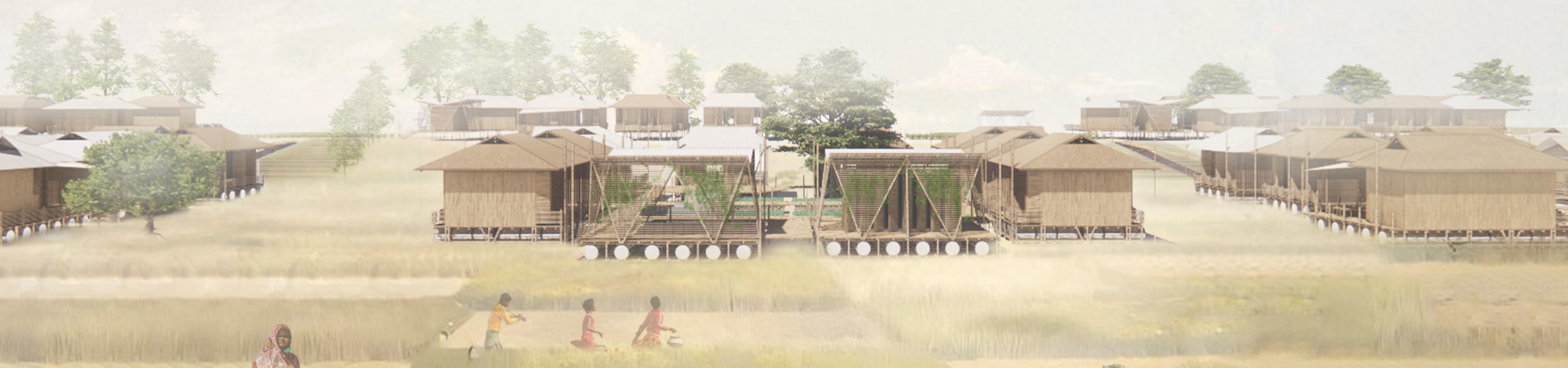
An amphibious housing solution for the residents of Tanguar Haor, Bangladesh

A resilient design balancing vernacular and modern architecture to navigate forthcoming changes



Marija Graaf - 4652584
Dwelling studio 2023/2024: Global Housing

TU Delft, The Netherlands
July 1st 2024

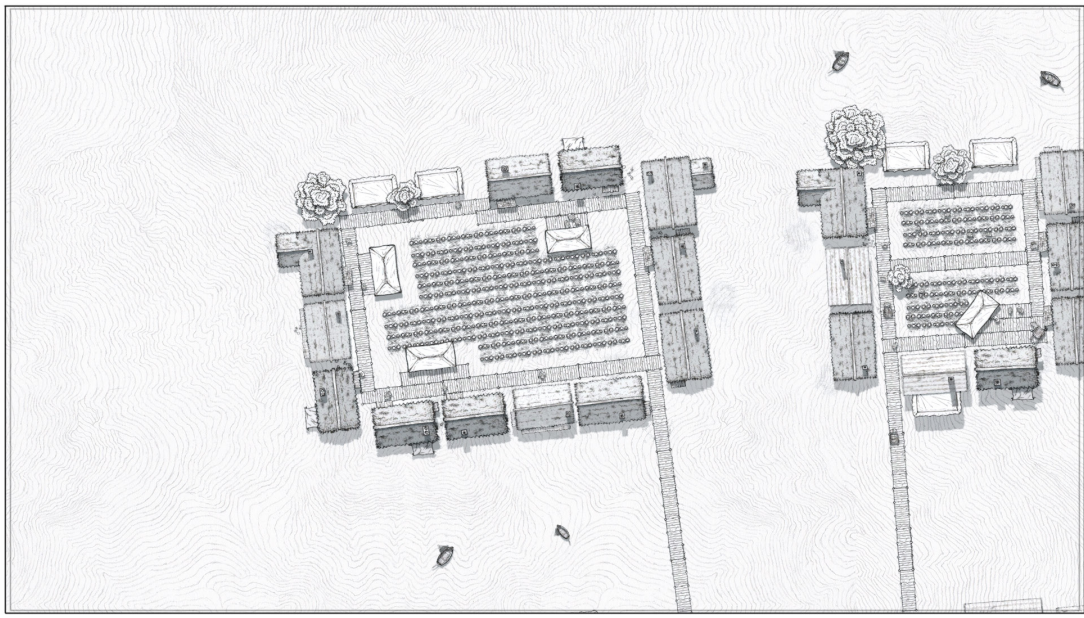




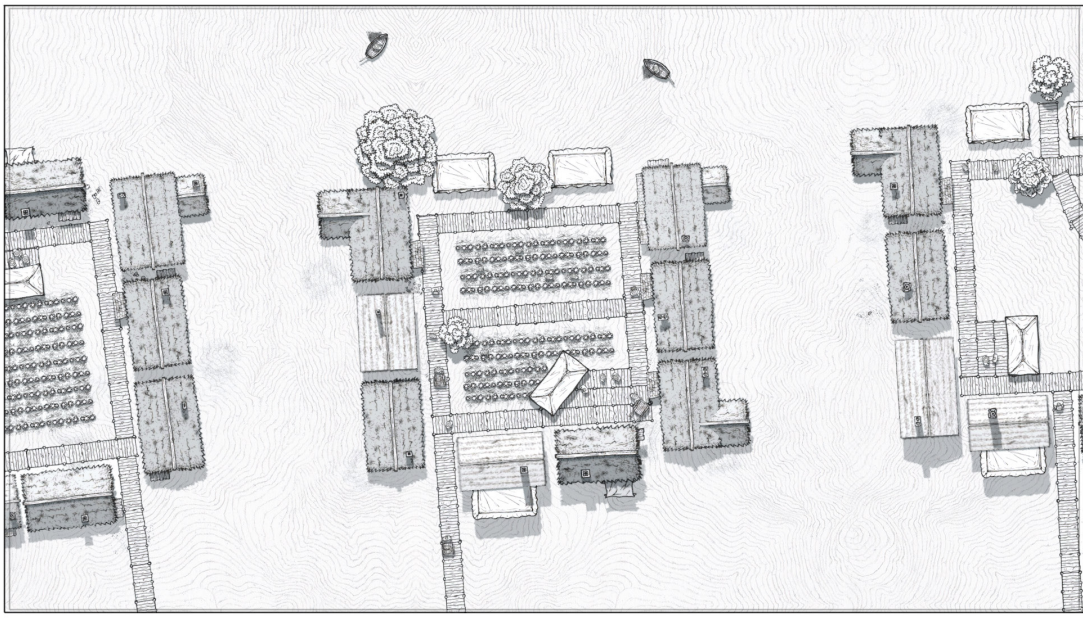
1:2000
(rescaled to 1:750)



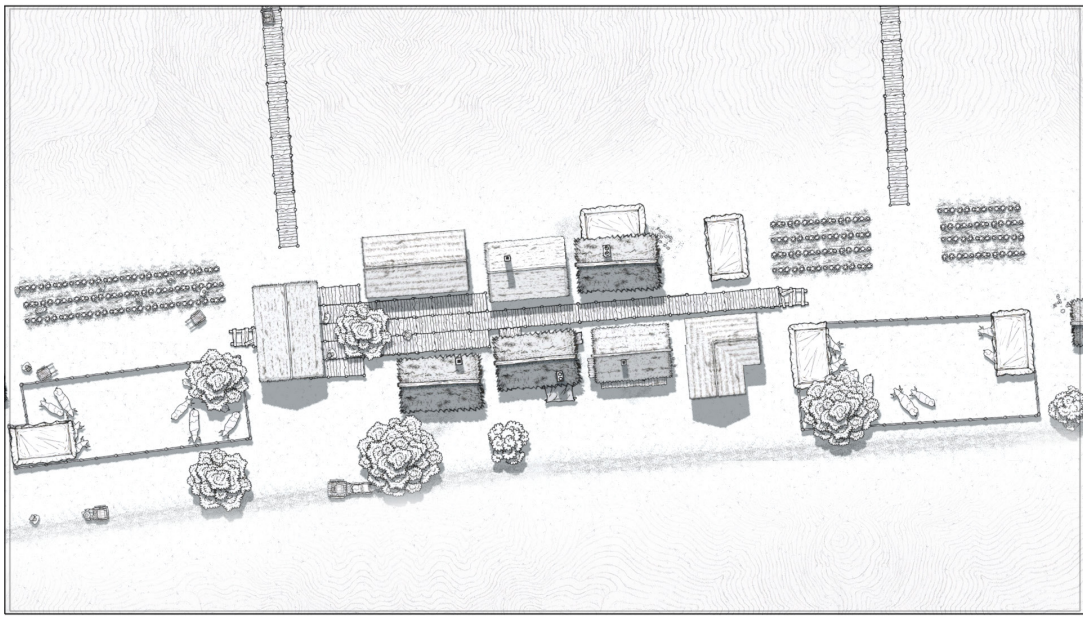
Masterplan: Monsoon period



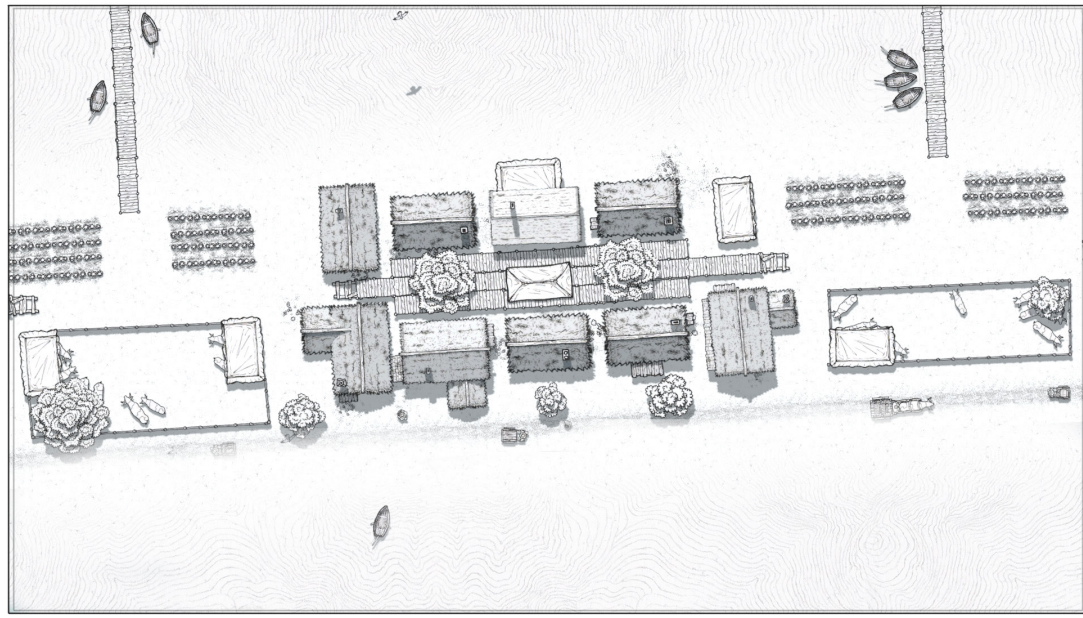
1. Amphibious cluster 10 dwellings



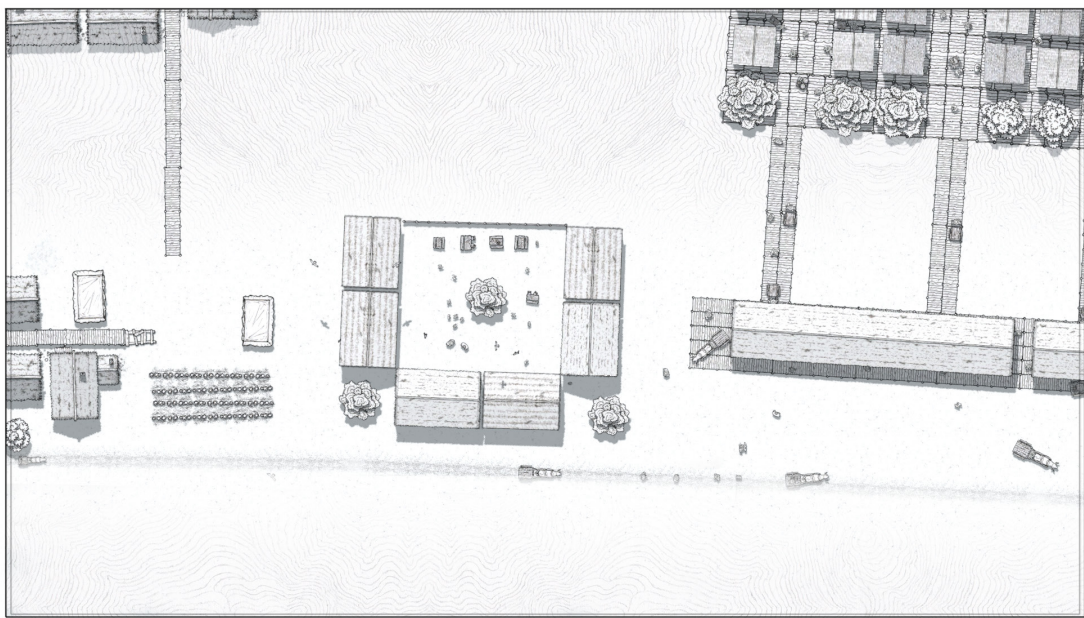
2. Amphibious cluster 8 dwellings



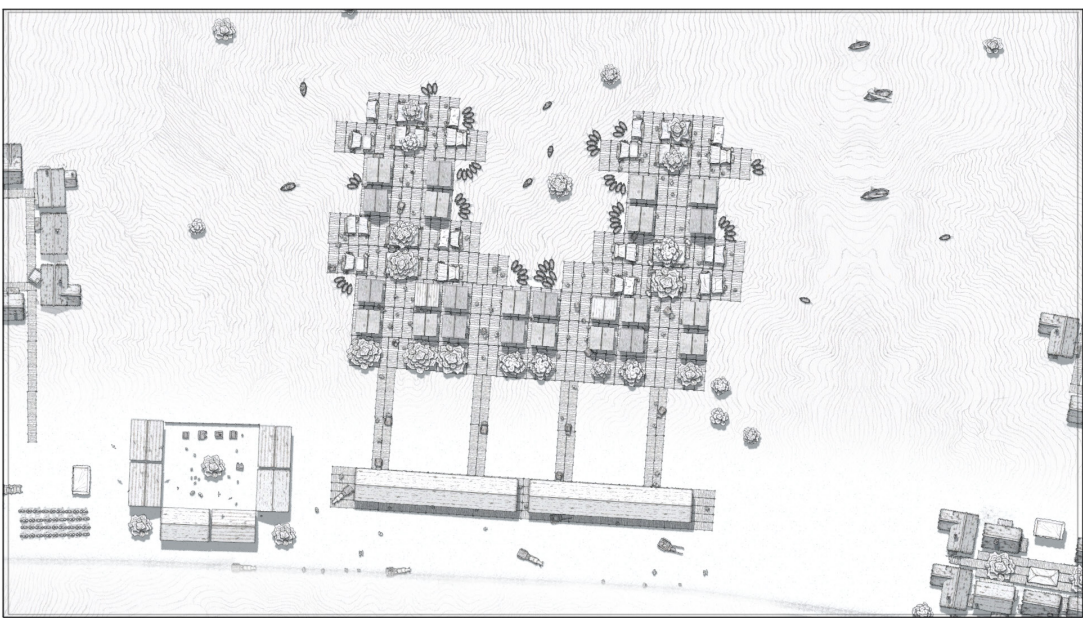
3. Stilt cluster 7 dwellings



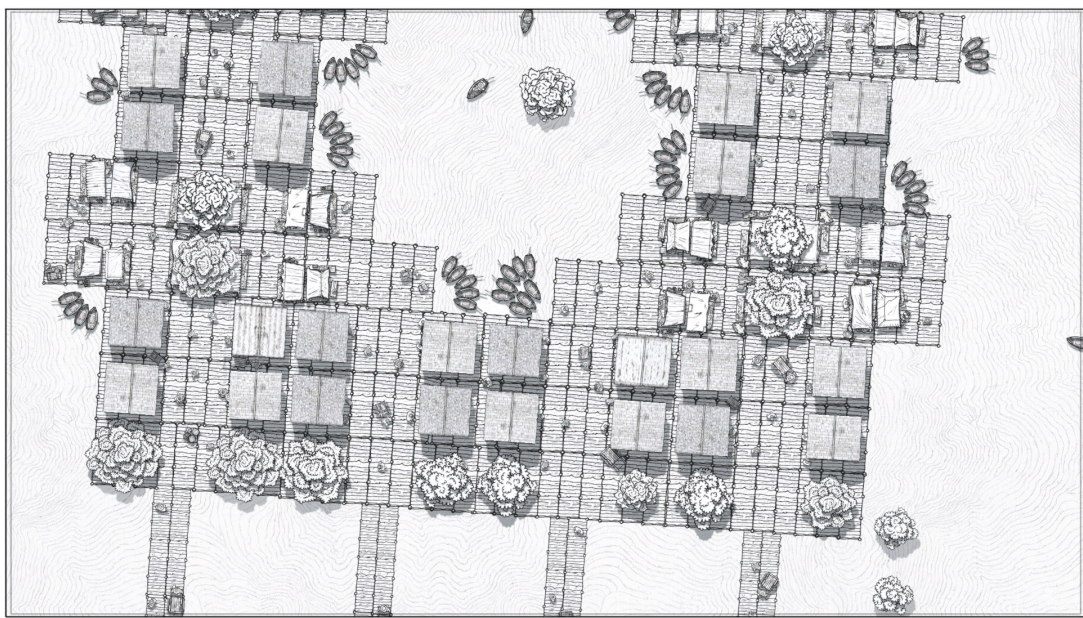
4. Stilt cluster 9 dwellings



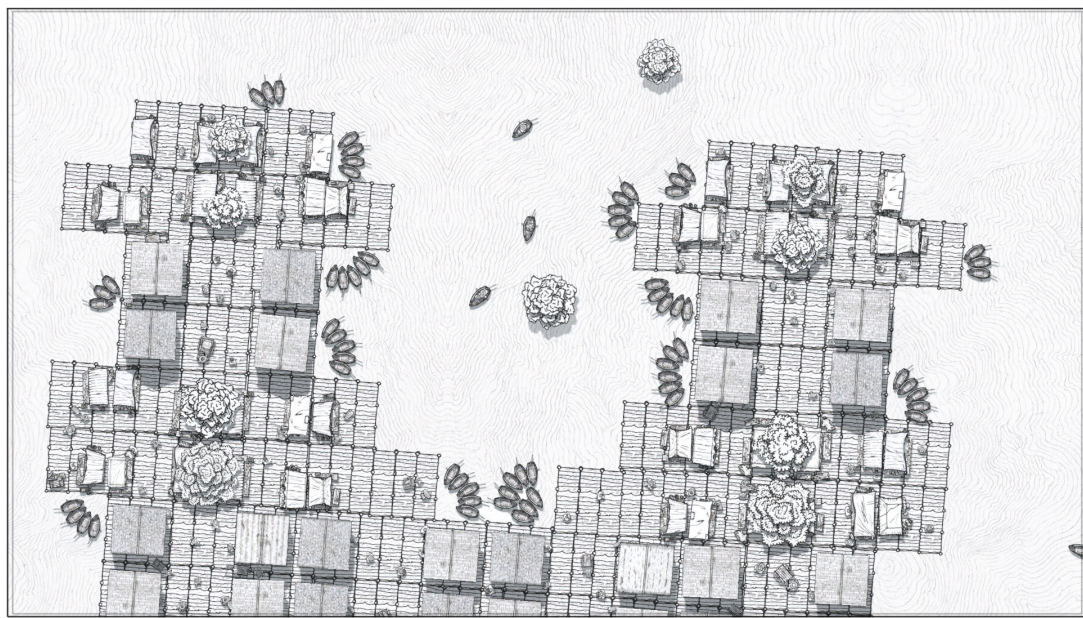
5. School



6. School & Floating market



7. Market activities

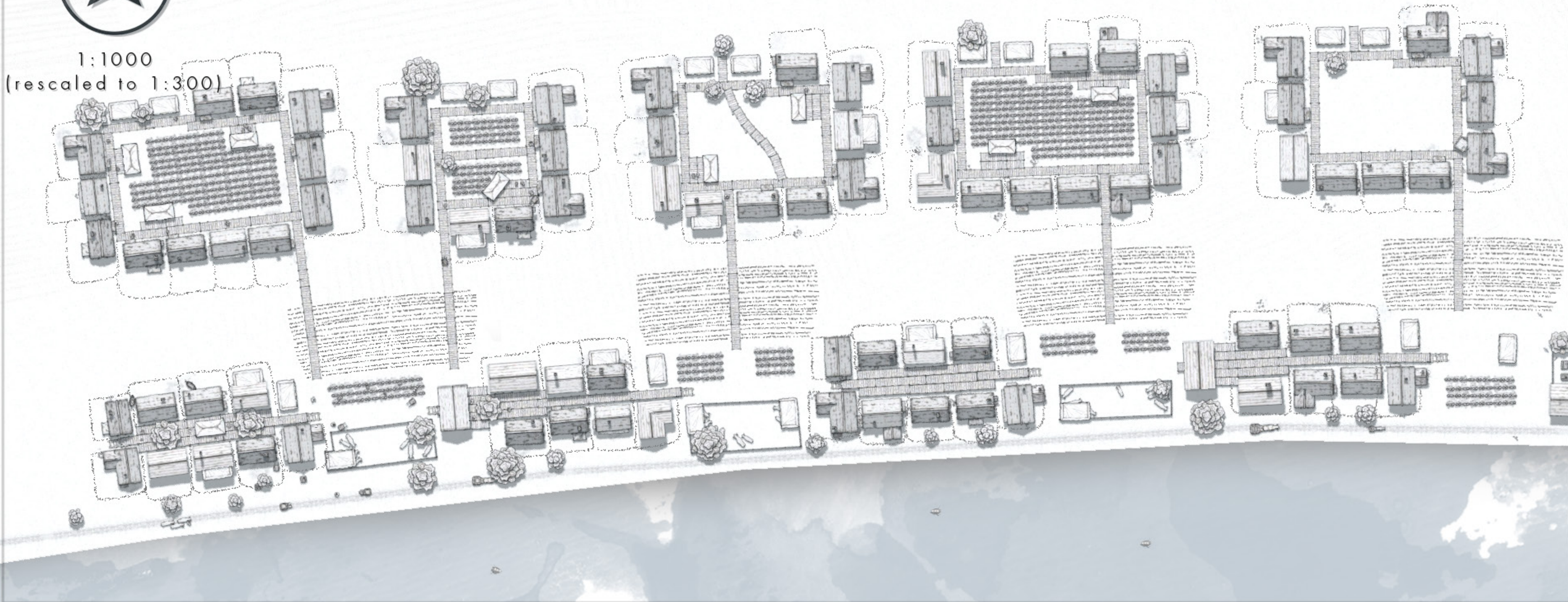


8. Market activities & transport

Masterplan: Clusters & plot sizes situation



1:1000
(rescaled to 1:300)



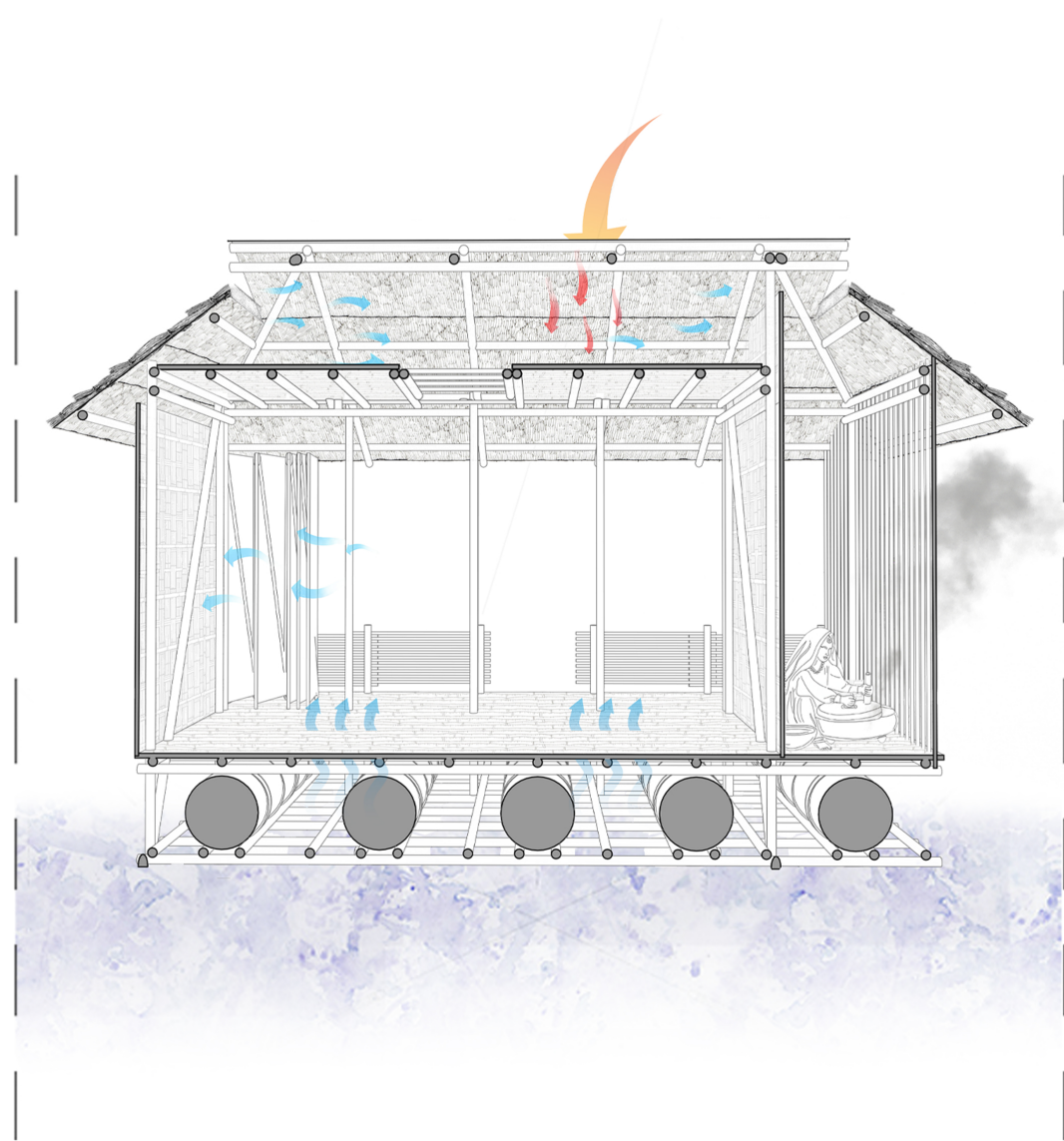
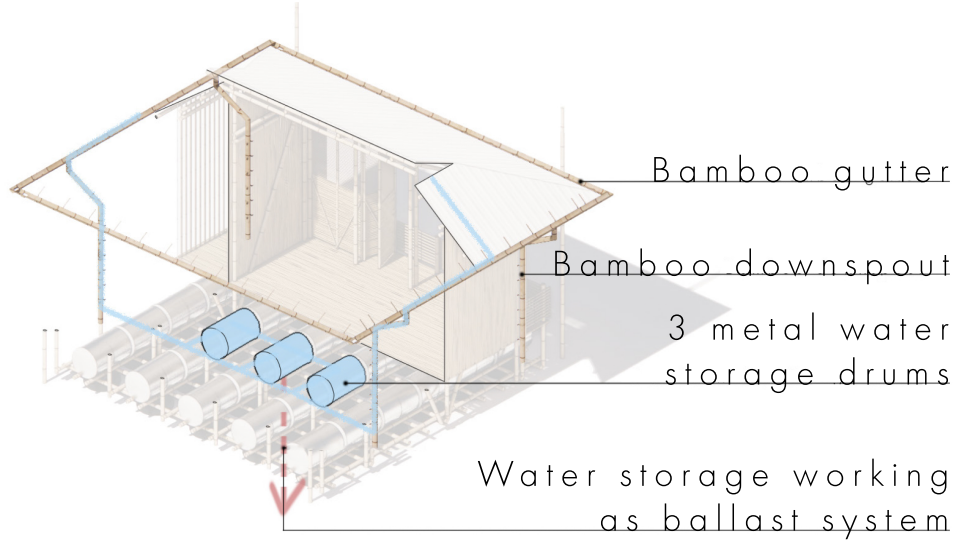
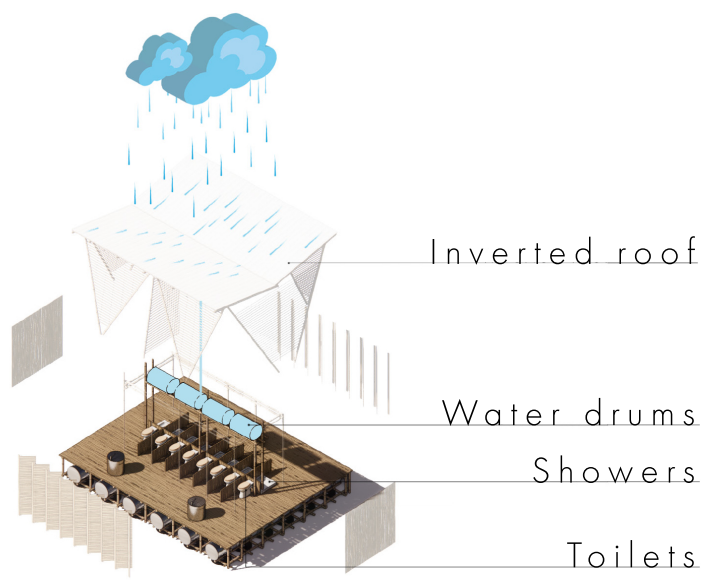
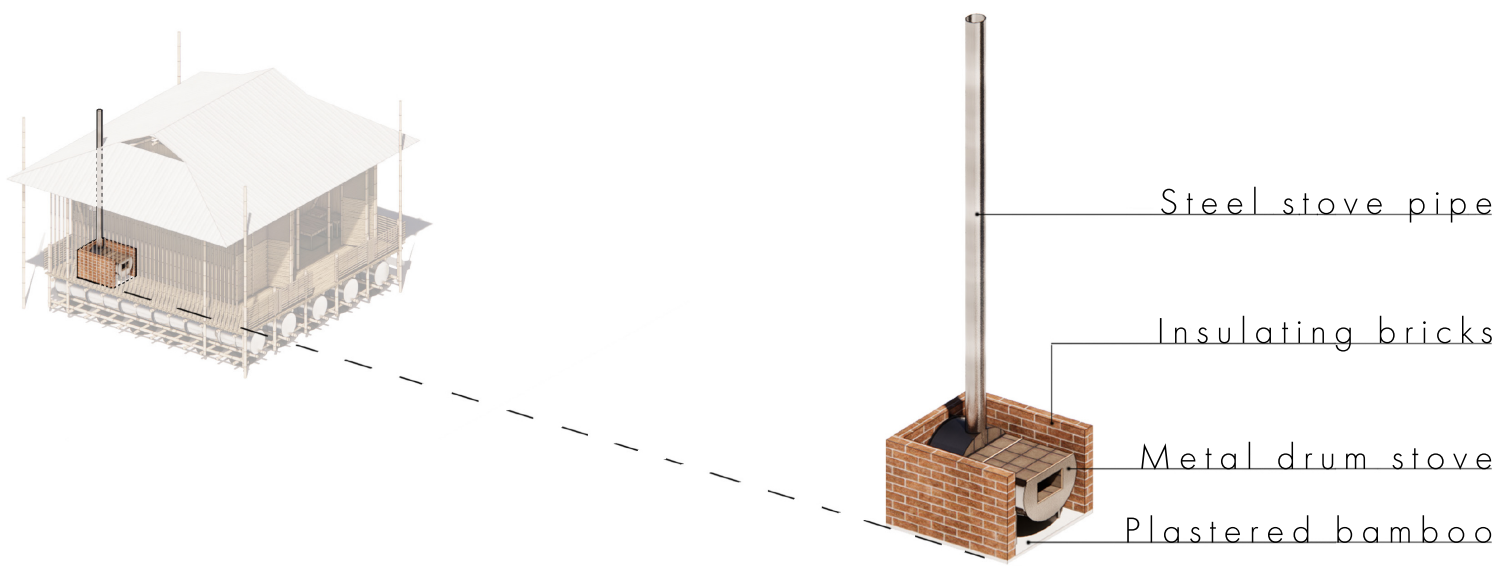
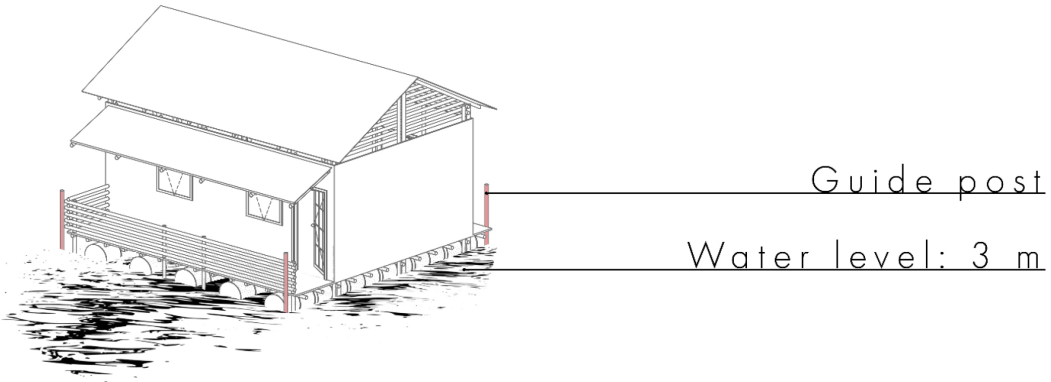
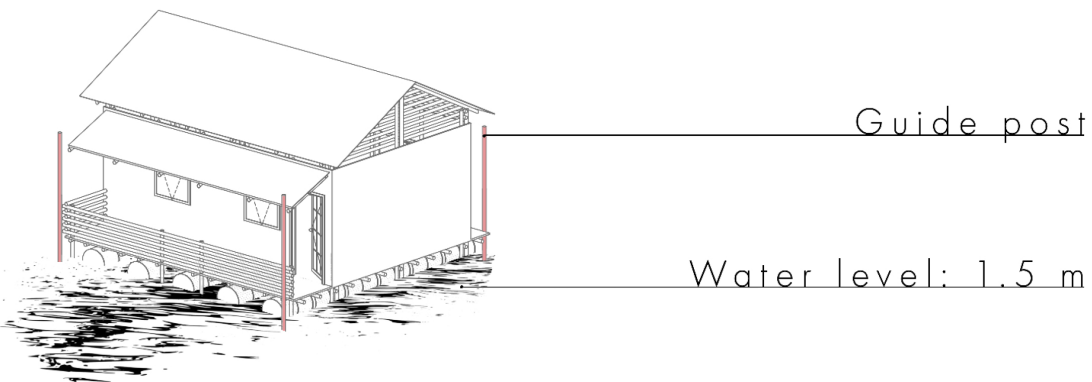
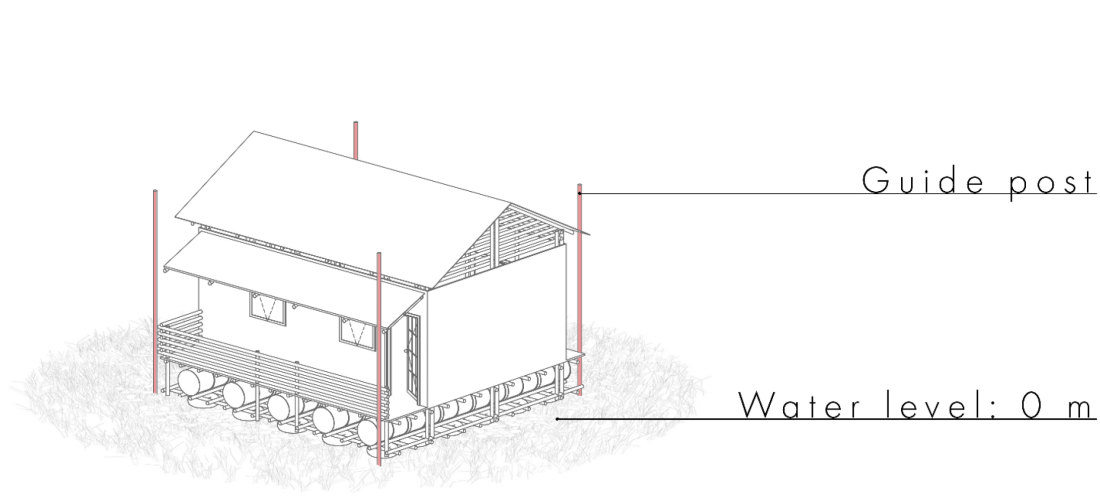


resilient waters modules

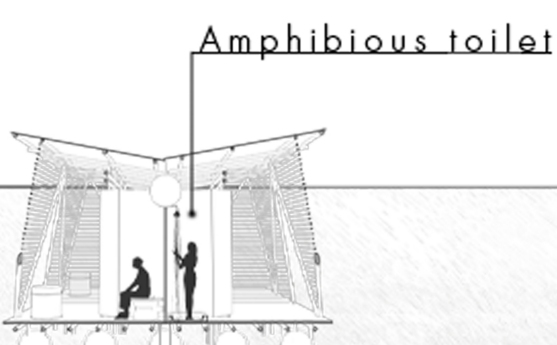
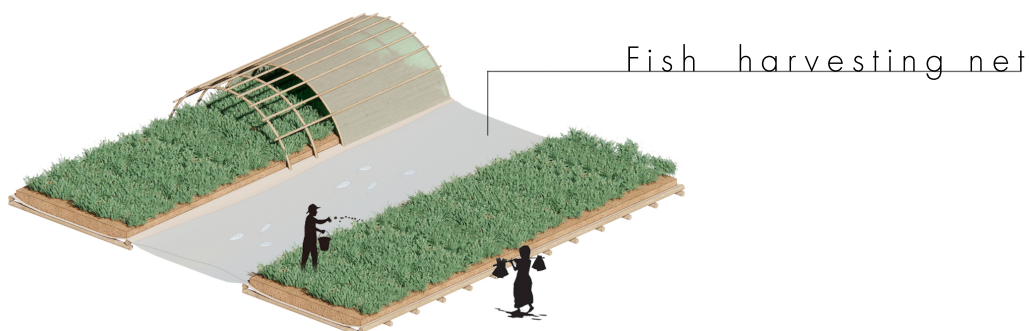
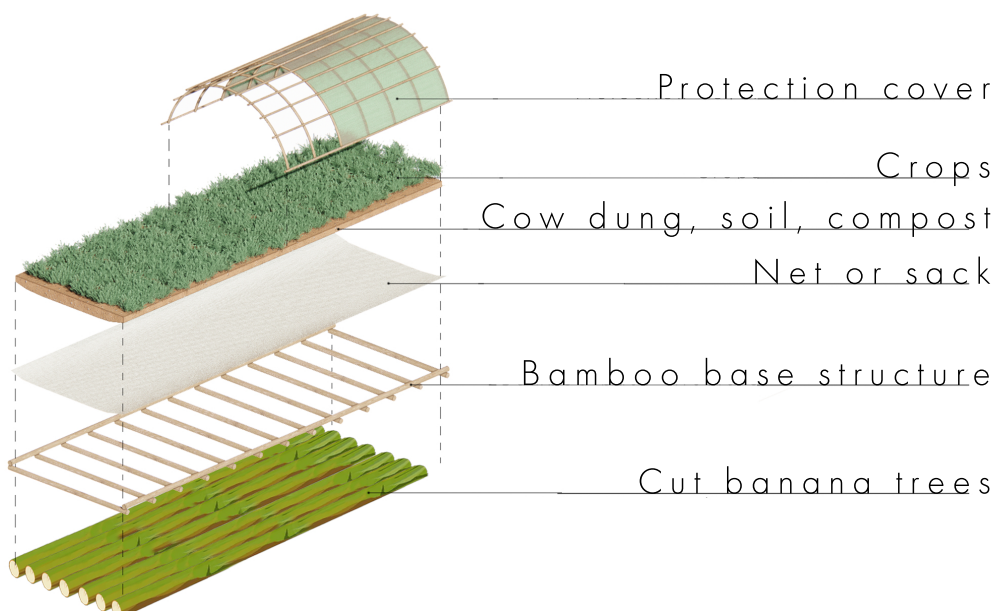
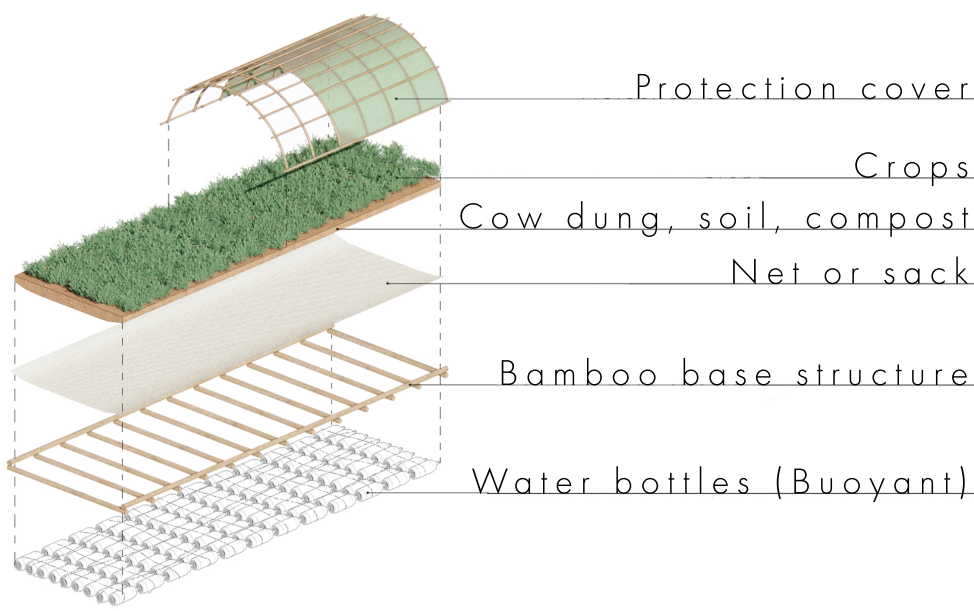




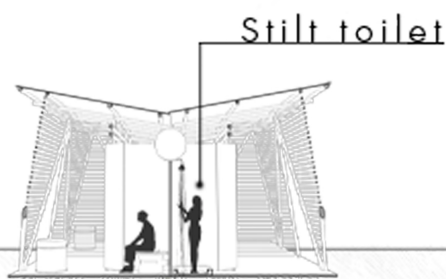
building technology



Climate section



Amphibious toilet



Stilt toilet

Bamboo farming

Gravel & Sea

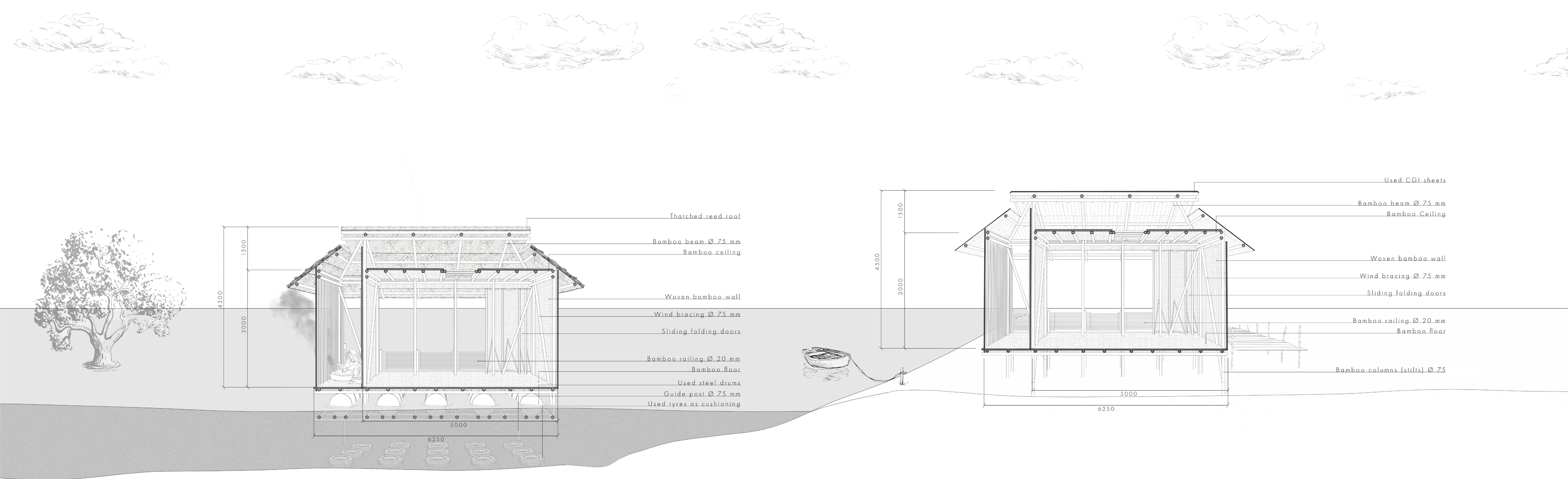
Sand-filter

Drainage network

Water

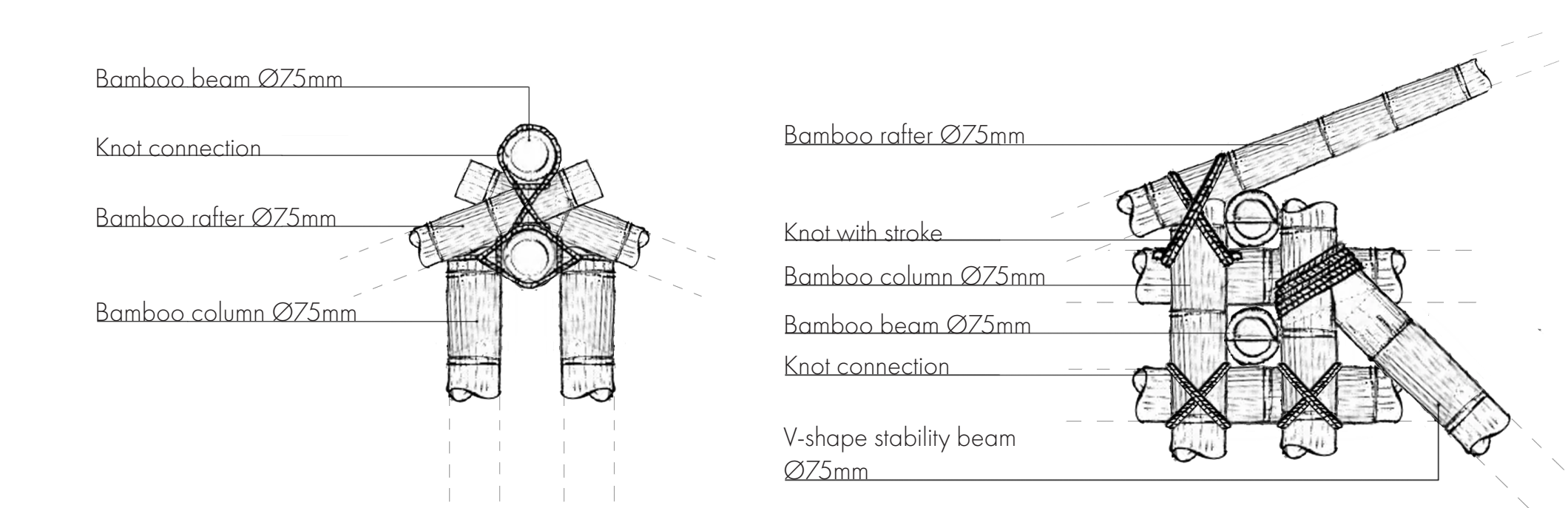
Pump

Settling tank



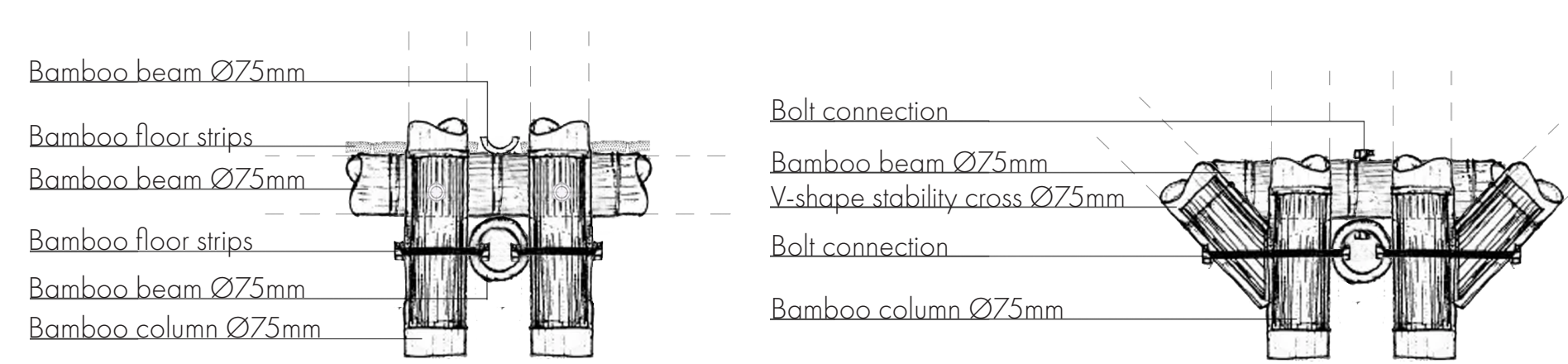
Structural section (amphibious dwelling) 1:50

Structural section (stilt dwelling) 1:50



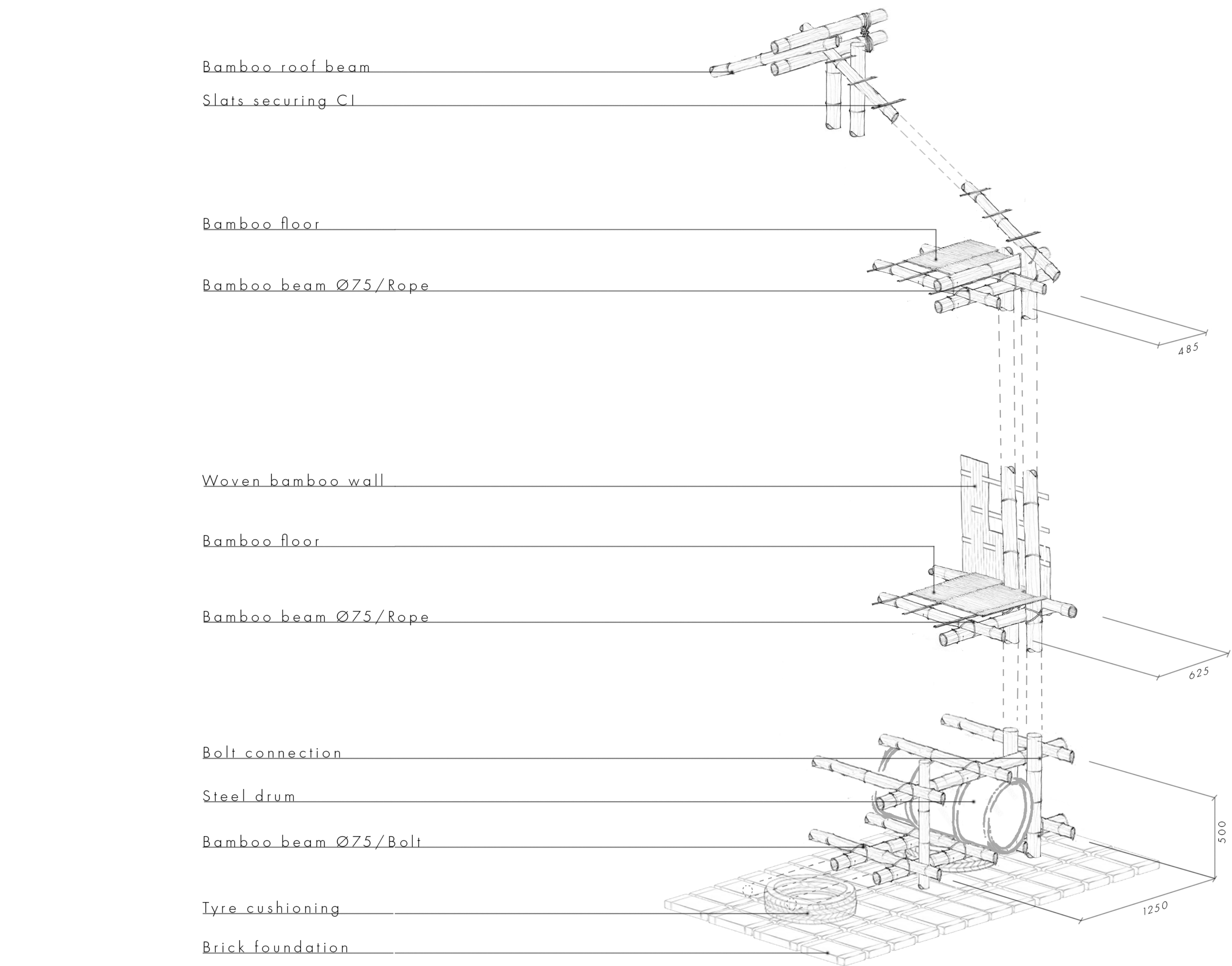
Ridge 1:5

1st floor 1:5



Ground floor 1:5

Amphibious structure 1:5



1:20 fragment