ECOSYSTEM: MERGING THE CITY WITH THE EXISTING LANDSCAPE

White-Tailed Eagle

White Cattle Bird

Roe Deer

Porejaojaoi

Wild Boar

European Badger

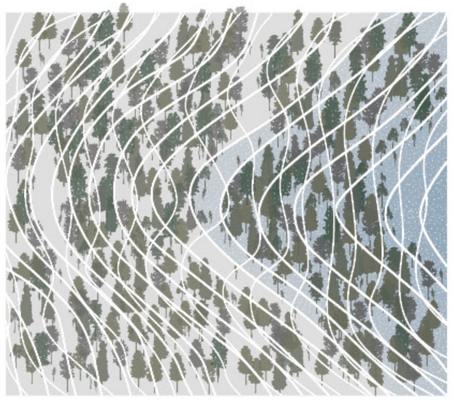
Small Shrew

Poplar

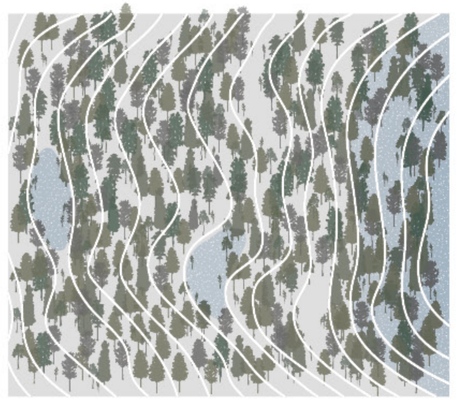
Ash

DANUBE MEANDERS NATURAL SYSTEM

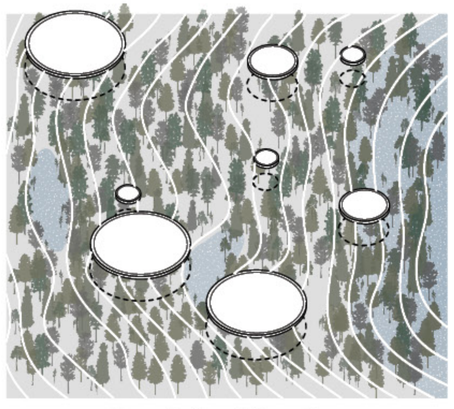
Generic Forest



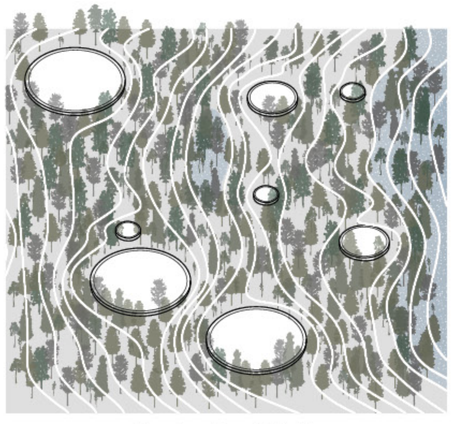
Forest affected by Meanders



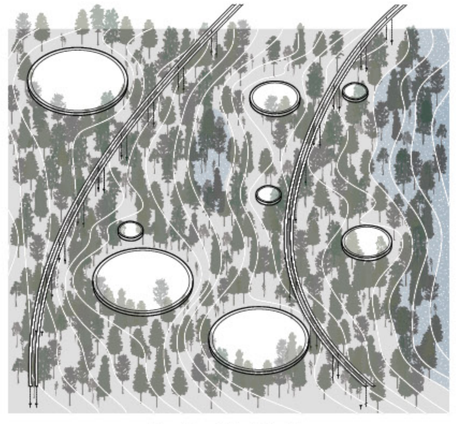
Resulting Forest [Existing Condition]



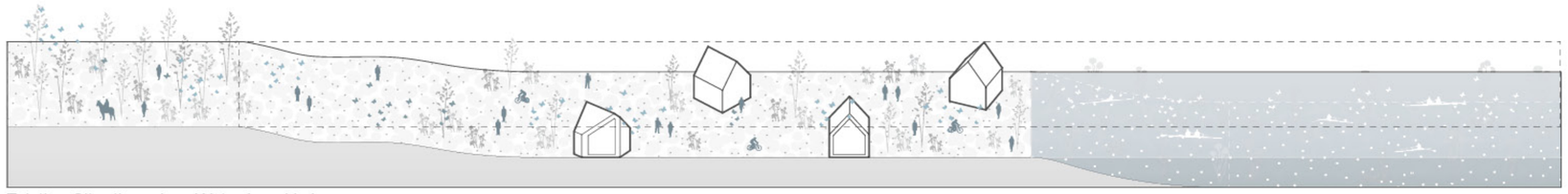
Consolidation of Open Spaces



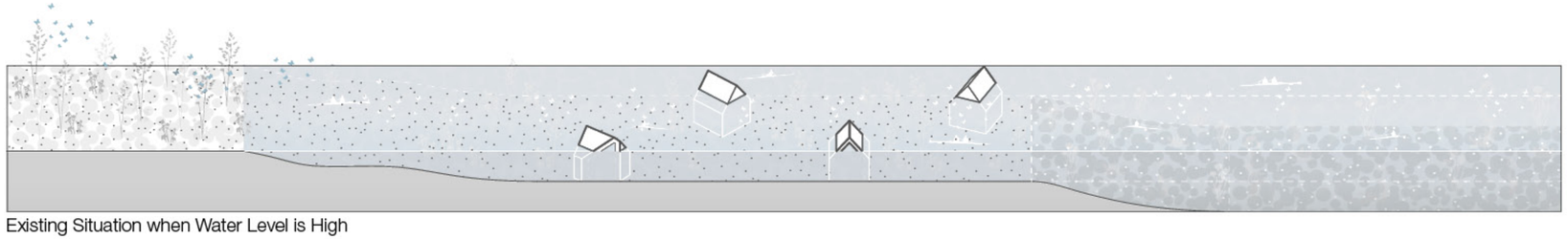
Flooding Forest Strategy



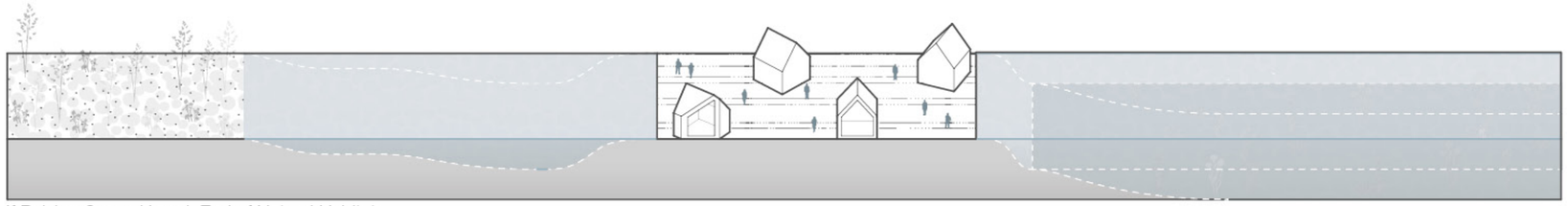
Floating City Strategy



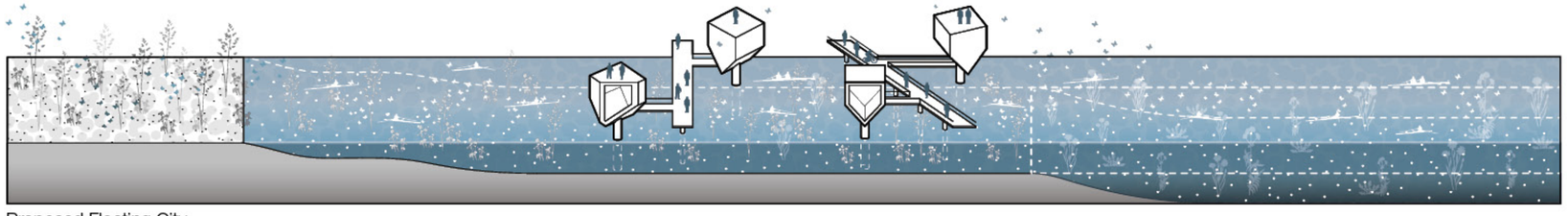
Existing Situation when Water Level is Low



Existing Situation when Water Level is High

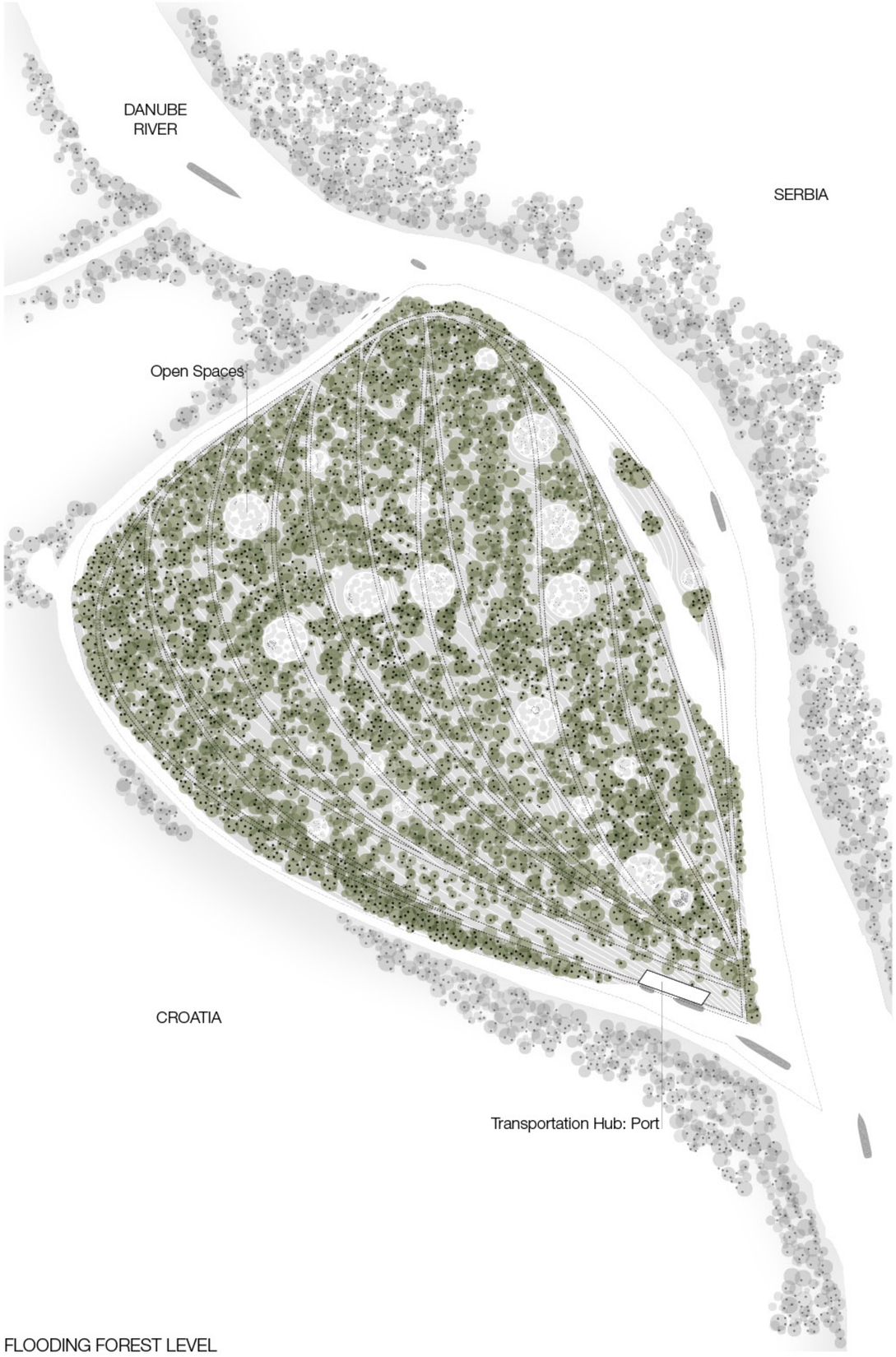


If Raising Ground Level: End of Natural Habitat



Proposed Floating City

FLOODING CONTROL STRATEGY



FLOODING FOREST LEVEL

FLOATING CITY LEVEL

INFRASTRUCTURE: LIGHT TOUCH, ELEVATED CITY

Arriving at Liberland Not Arriving at Liberland

Airbus A319 -
156 pax - runway 1575 m

Boeing 777-200LR -
440 pax - runway 2701 m

McDonnell Douglas 90-50 -
175 pax - runway 1480 m

Airbus A340-500 -
375 pax - runway 2489 m

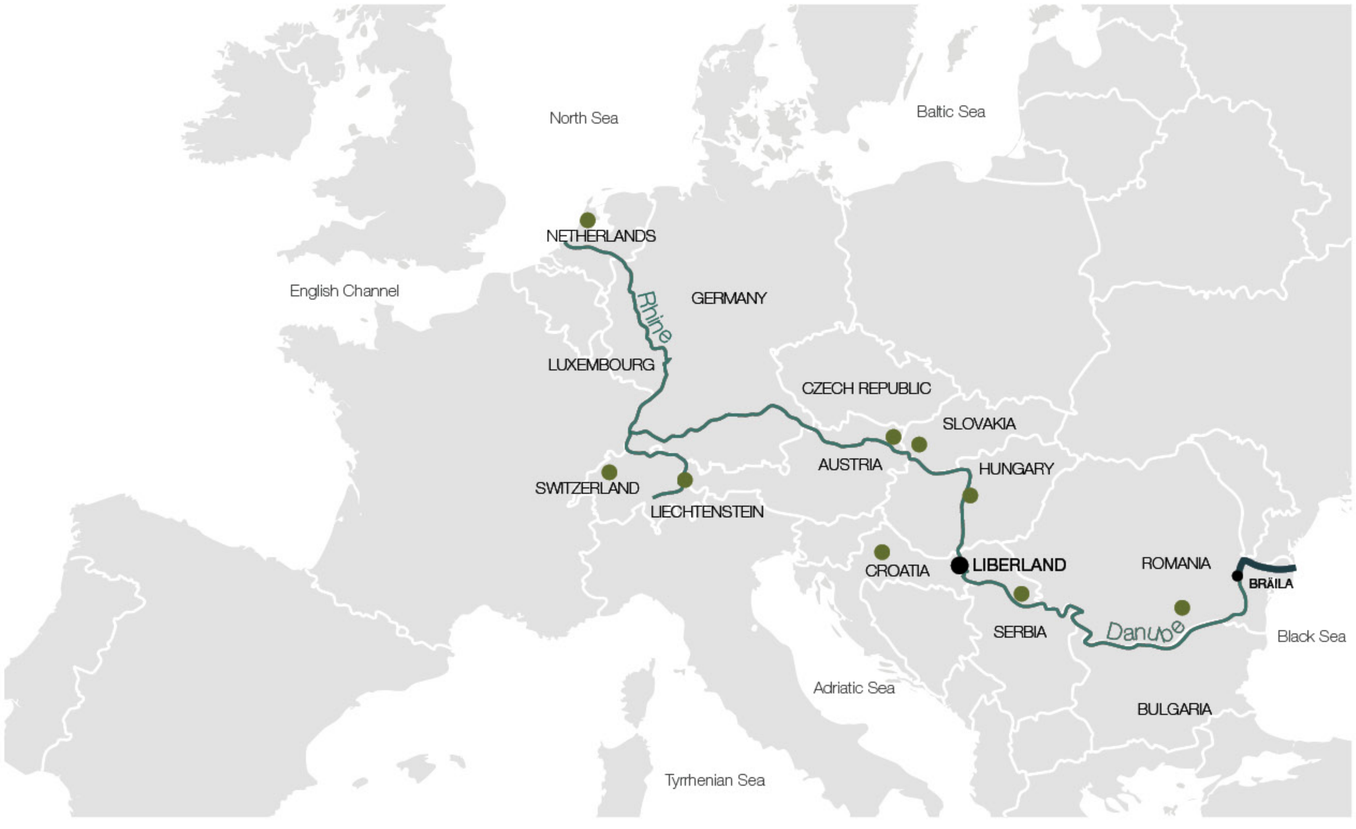
Embraer 175 -
88 pax - runway 1020 m

Boeing BBJ 747-8 -
605 pax - runway 2871 m

Boeing 717-200 -
117 pax - runway 1490 m

Airbus A380-800 -
853 pax - runway 2881 m

INTERNATIONAL AIRPORT



INTERNATIONAL PORT

Arriving at Liberland

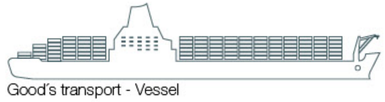
Good's transport - Barge

Tourisim - Small Cruise

Fisshing - Boat

Private Ship

Arriving at Bräila (Romania), not at Liberland



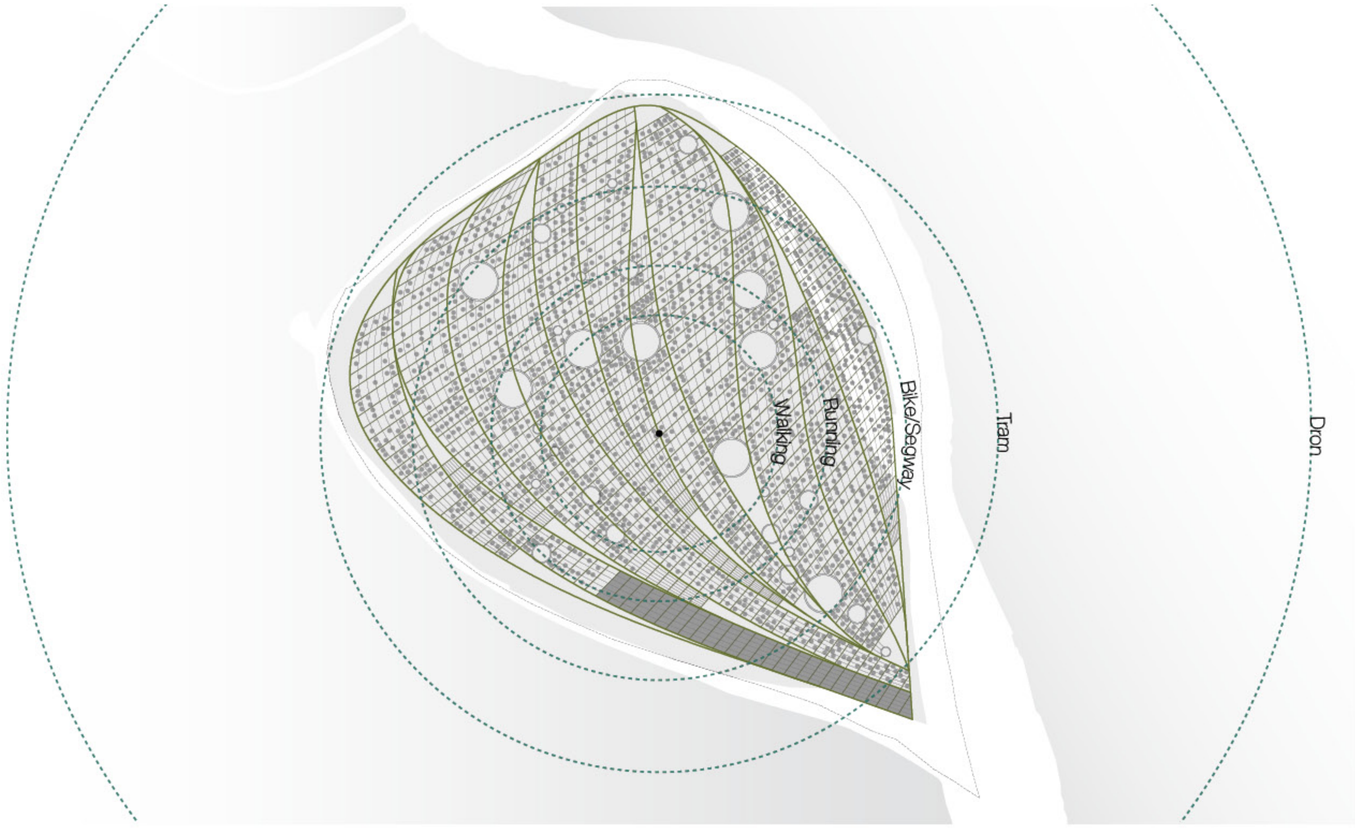
Good's transport - Vessel

Tourism - Cruise

Navy - Submarine

Navy - Boat

INTERNATIONAL PORT



Means of transportation in Liberland

Gantry Crane
(goods transportation)

Dron - 5 min -
3300 m. (40 km/h)

Tram - 5 min - 1600 m. (20 km/h)

Bike/Segway - 5 min -
1250 m. (15 km/h)

Running/Walking - 5 min -
850/600 m. (10/6 km/h)

Not Necesary in Liberland

Motorbike

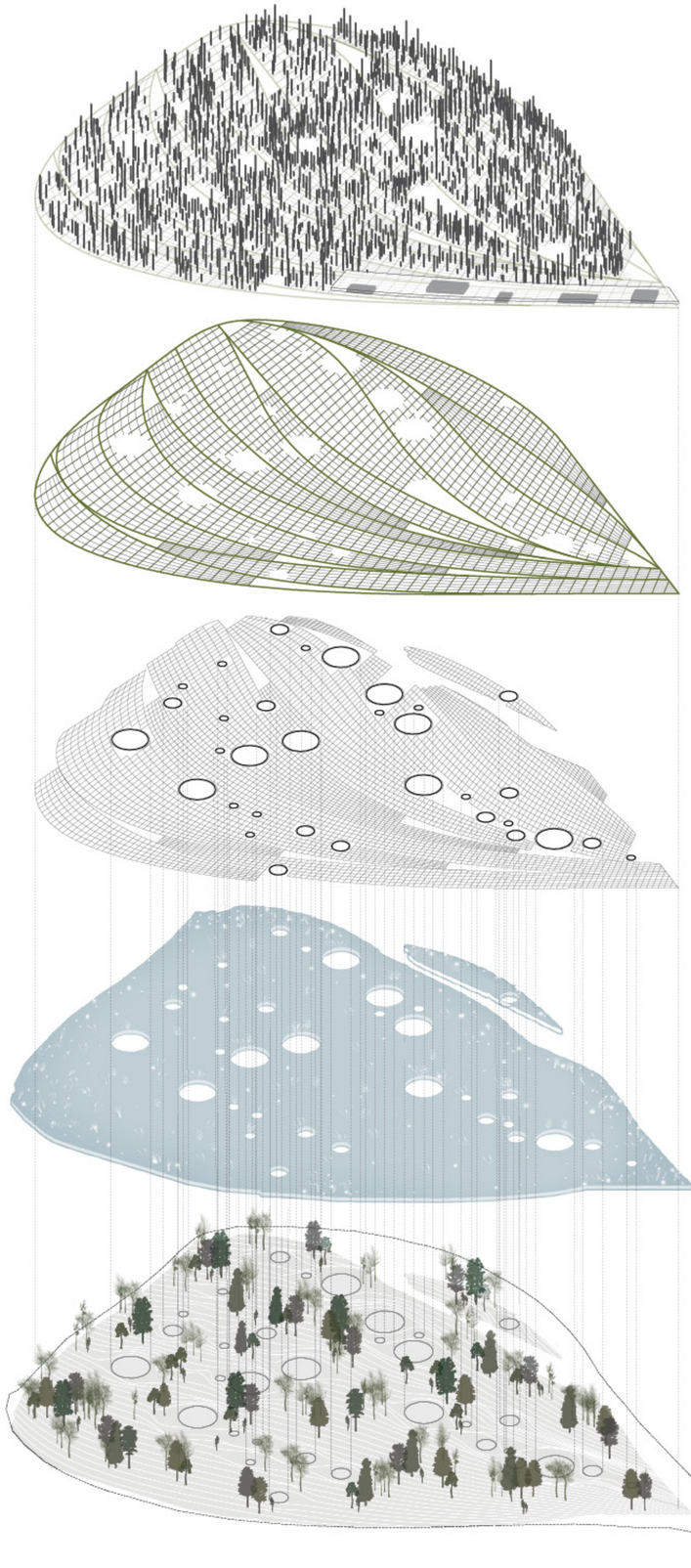
Car

Bus

Bulldozer

Mixer

LOCAL TRANSPORTATION



Buildings

Liberland offers a wide variety of building possibilities by combining different plots. As a measure to reinforce the preservation of nature, each building's main body is elevated from the ground, occupying only thirty percent of the plot area and touching just five percent of the ground. This condition reduces at a minimum the removal of existing trees and increases sun lighting for the natural reserve at lower level.

Avenues and Streets

The project develops a grid strategy based on the Manhattan logic but adapted to the natural existing pattern. Avenues follow the main directions and streets organize the space in between. Furthermore, it is also possible to create anarcho-bridges between buildings in any direction or height. Besides a tram system running along avenues, Liberland is fully pedestrian, reinforcing the relationship between people and nature.

Plots ans Open Spaces

Land in Liberland is divided in average plot size of 35x50m. They can be developed independently but also consolidated into larger plots to increase building's footprint. Apart from regular plots, there are circular open spaces which function is to host activities that require big extensions of land. These spaces offer different alternatives, enriching the cultural life and creating new ways of inhabiting the forest.

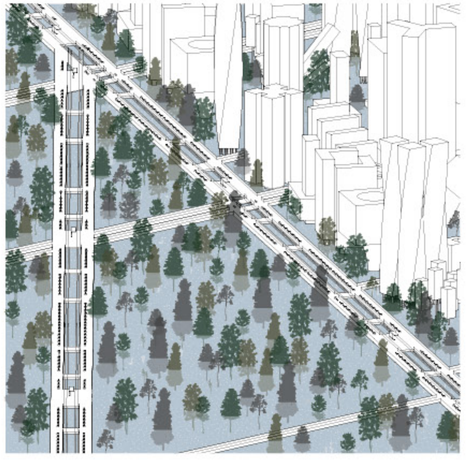
Water

Water is a fundamental part of Liberland's ecosystem. The Danube River dynamics generate lateral migration according to the geometry of the meanders, shaping the landscape of Liberland and preserving the richness of the soil. When water level raises, it floods the entire territory except for the consolidated Open Spaces.

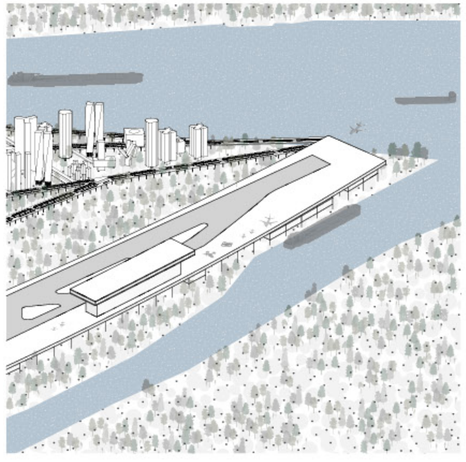
Flooding Forest Ecosystem

Liberland's rich ecosystem is respected as such, enabling a total fluidity of flora and fauna underneath the city. The ground is left as a natural reserve that embraces water instead of trying to avoid it. This ecosystem is accessible from the upper level by the use of pedestrian ramps, connecting both realities and allowing forest inhabitation.

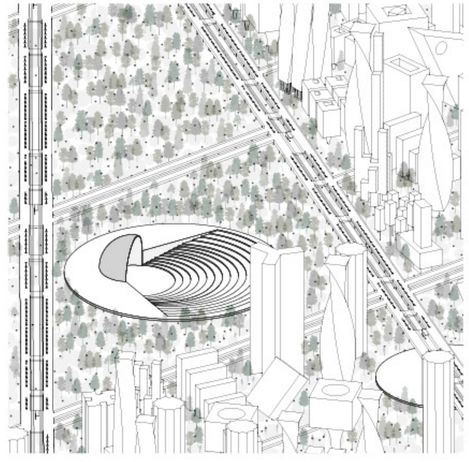
DEVELOPMENT: A CONTINUOUSLY EVOLVING CITY



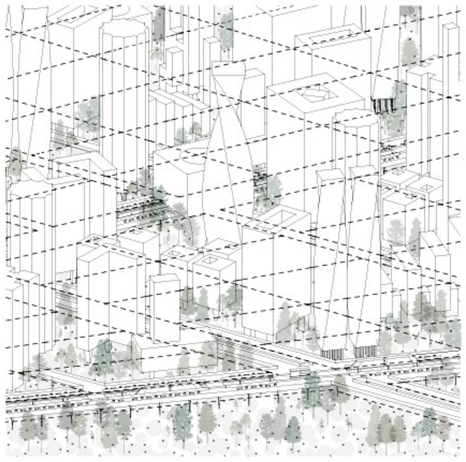
Flooding Forest



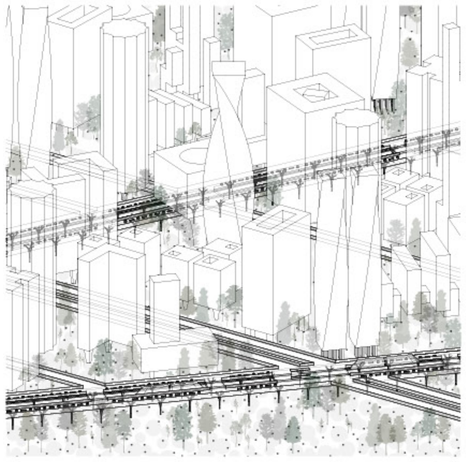
Transportation Hub



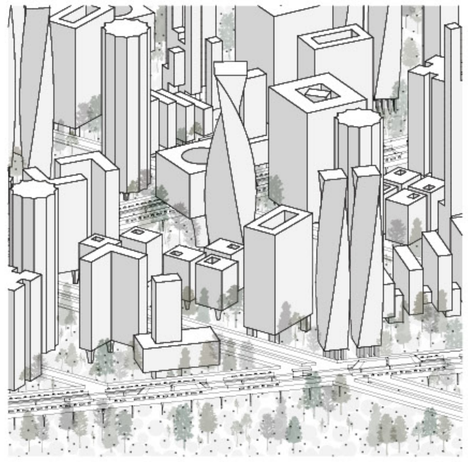
Open Spaces



Plots

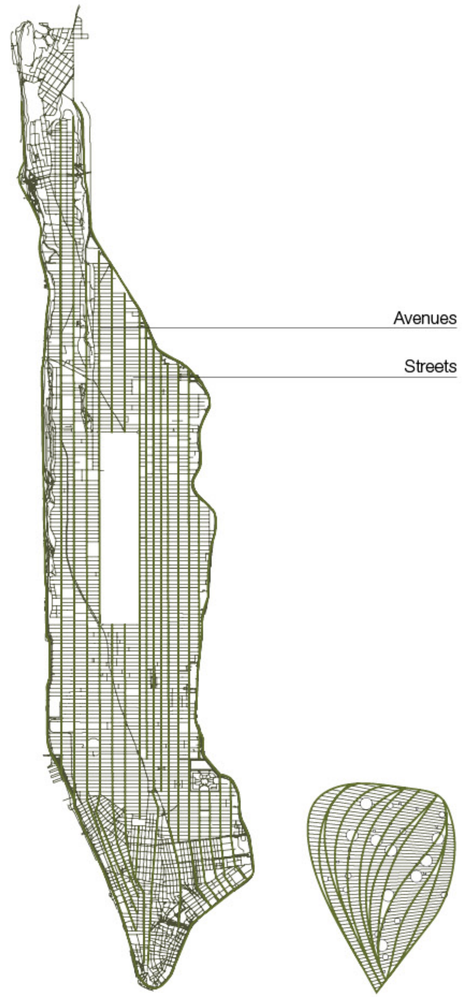


Streets

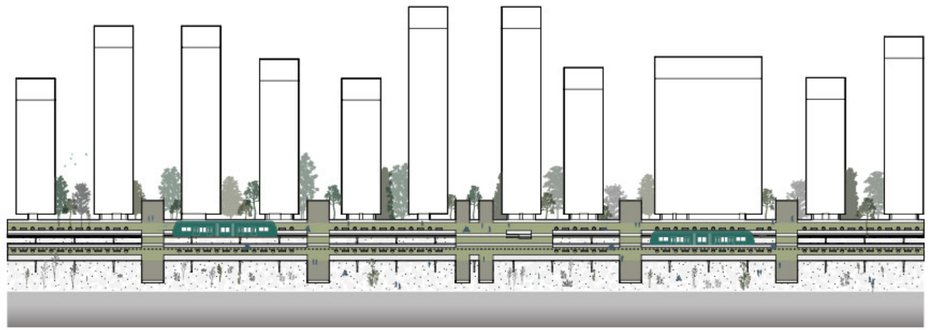


Buildings

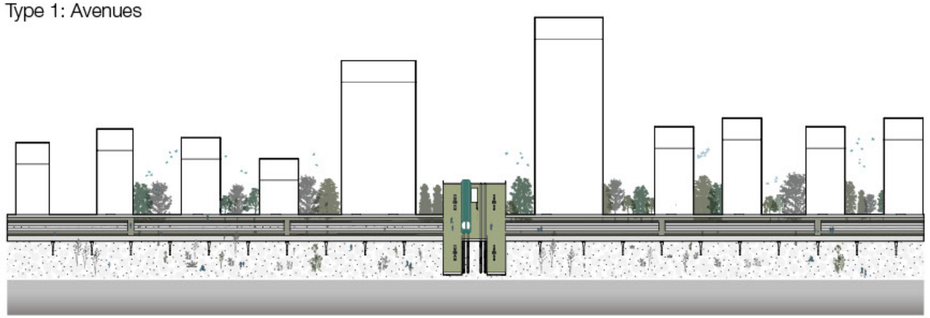
URBAN ELEMENTS



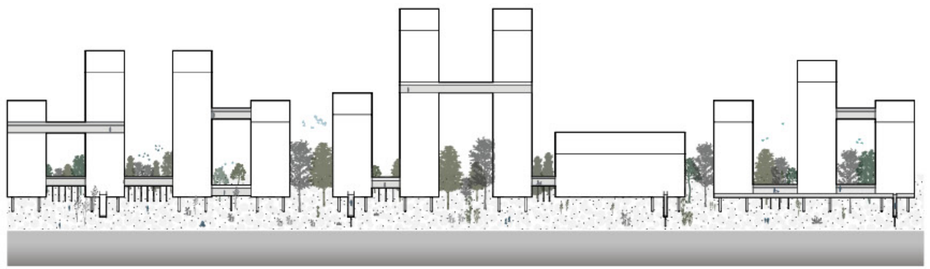
Manhattan Re-Visitation



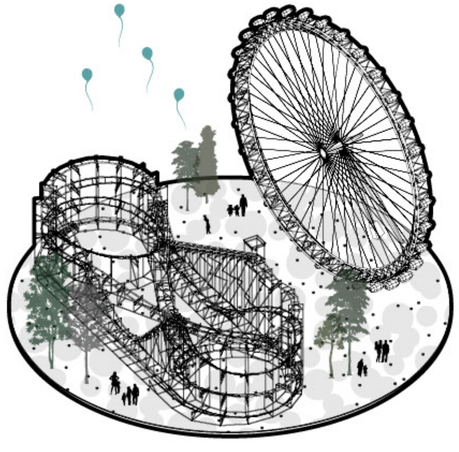
Type 1: Avenues



Type 2: Streets

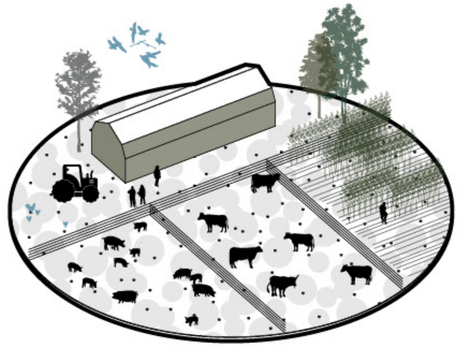


Type 3: Anarcho-Bridges

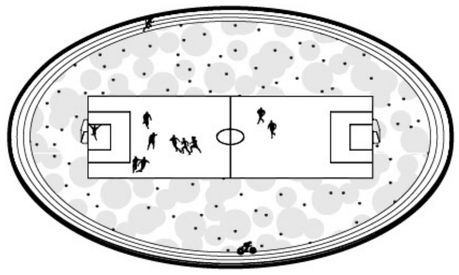


Recreation

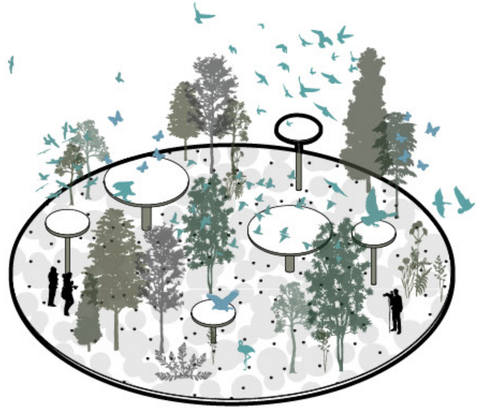
Adventure



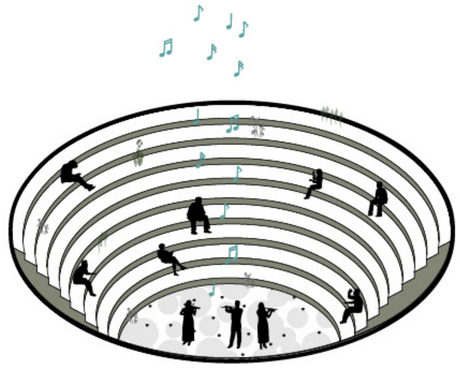
Food Production



Sports



Natural Preservation



Cultural Activities

LAND USE

TOTAL PLOTS IN LIBERLAND: 2150 U.

MAX. SUPERFICIAL OCCUPATION PER PLOT: 30%

MAX. GROUND OCCUPATION/WATERPROOFING PER PLOT: 0,5%

AVERAGE LOT

AVG. PLOT SIZE: 1750 M2

AVG. SUPERFICIAL OCCUPATION PER PLOT (30%): 525 M2

AVG. GROUND OCCUPATION/W. PROOFING PER PLOT (5%): 87,5 M2

GENERIC OPTION FOR 340.000 PEOPLE

LIVING SPACE PER PLOT

80% PLOT OCCUPATION: 1.720

AVG. PEOPLE PER PLOT (340.000 P/ 1720 U): 197

AVG. OCCUPATION PER FLOOR (525 M2/ 25 M2 PER PERSON): 21 P/F

AVG. RESIDENTIAL FLOORS PER BUILDING (197 P/ 21 P/F): 9 FL.

WORKING SPACE PER PLOT

WORKING PEOPLE (APPROX. 65%WORK AGE): 221.000 P

PEOPLE WORKING OUTSIDE THEIR HOMES (85%): 187.850 P

NEEDED WORK SPACE (10 M2 / PERSON): 1.878.500 M2

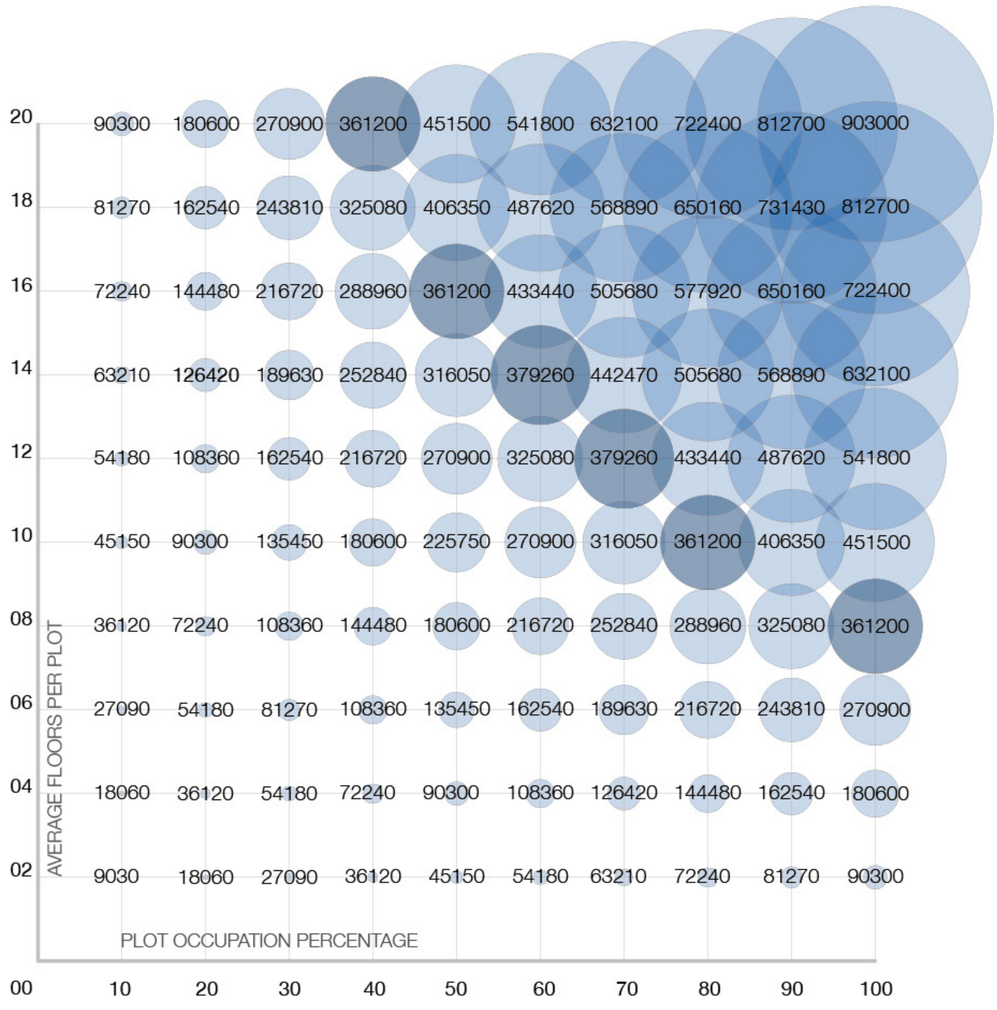
AVG. SUPERFICIAL OCCUPATION PER PLOT (30%): 525 M2

AVG. COMMERCIAL/OFFICE METERS PER PLOT: 1192 M2

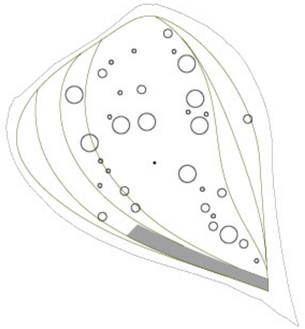
AVG. COMMERCIAL/OFFICE FLOORS PER PLOT (1192/525 M2): 2 FL.

AVERAGE FLOORS PER PLOT FOR 340.000 PEOPLE: 11 FLOORS

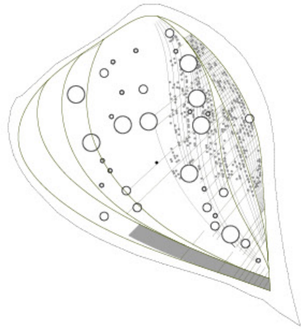
Density Calculation



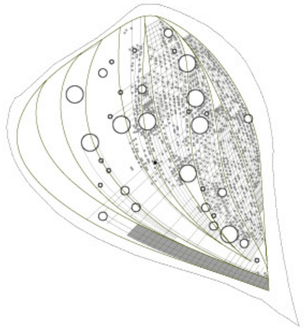
Liberland Inhabitants



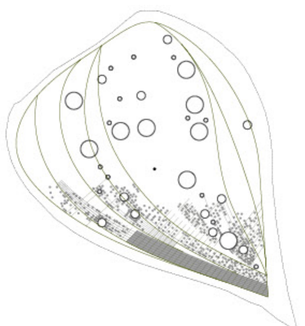
1- Initially only nature, the *Transportation Hub* (as main infrastructure), some streets and *Open Spaces* are present. Liberland's evolution is uncertain and its development will be based on the spontaneous order set by its inhabitants.



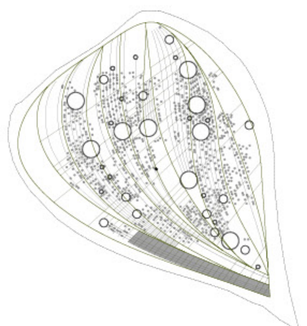
2- First settlements appear on the coast over the Danube obtaining the best views and proximity to the river for water sports and activities. The disadvantage is the long distance from buildings to the *Transportation Hub*.



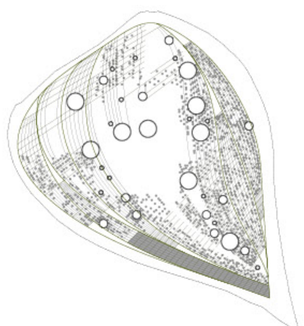
3- Liberland continues growing next to the coast as extension of the first settlements. Once the first settlements are located, people may tend to continue that trend and build on consolidated areas.



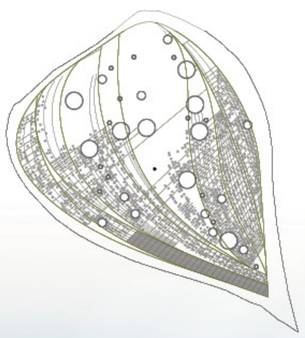
4- First settlements appear next to the *Transportation Hub* to take advantage of the proximity to infrastructure. This option reduces the initial efforts facilitating and speeding growth.



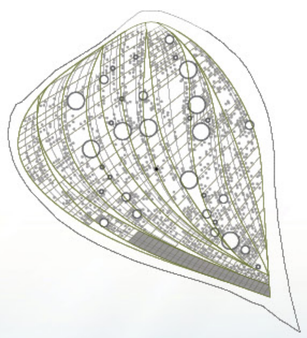
5- Inhabitants of Liberland start building on the center of the country. This strategy creates a community in the heart of a rich ecosystem but requires long streets and infrastructures both to the *Transportation Hub* and the river.



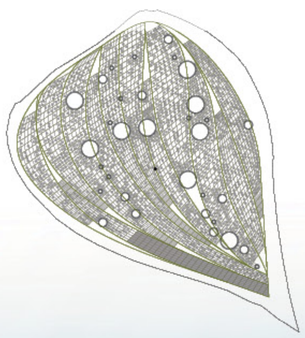
6- Liberland grows in the borders of the country, next to the water, which is often considered a plus for buildings since it provides views and nice strolls along the coast.



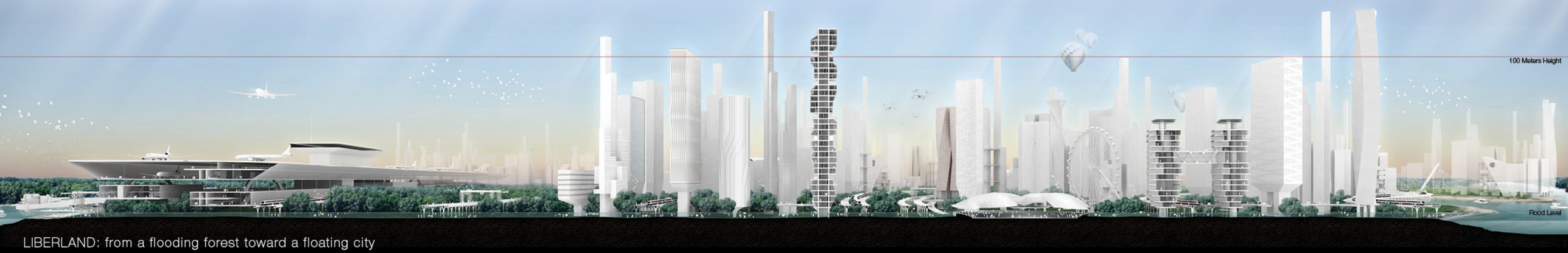
7- Liberland continues growing in the proximity of the Transportation Hub. Once first settlements are located, people may tend to build on consolidated areas where people and activities are concentrated.



8- Liberland grows without a clear center. If all plots are offered in the market at the same time, buyers will most probably have different preferences and the country may start growing without clear areas.



9- Liberland almost fully occupied (80% of the plots.) This occupation at an average height of 11 floors can host 340.000 people and every related activity to create a vivid community in the heart of a rich ecosystem.



LIBERLAND: from a flooding forest toward a floating city