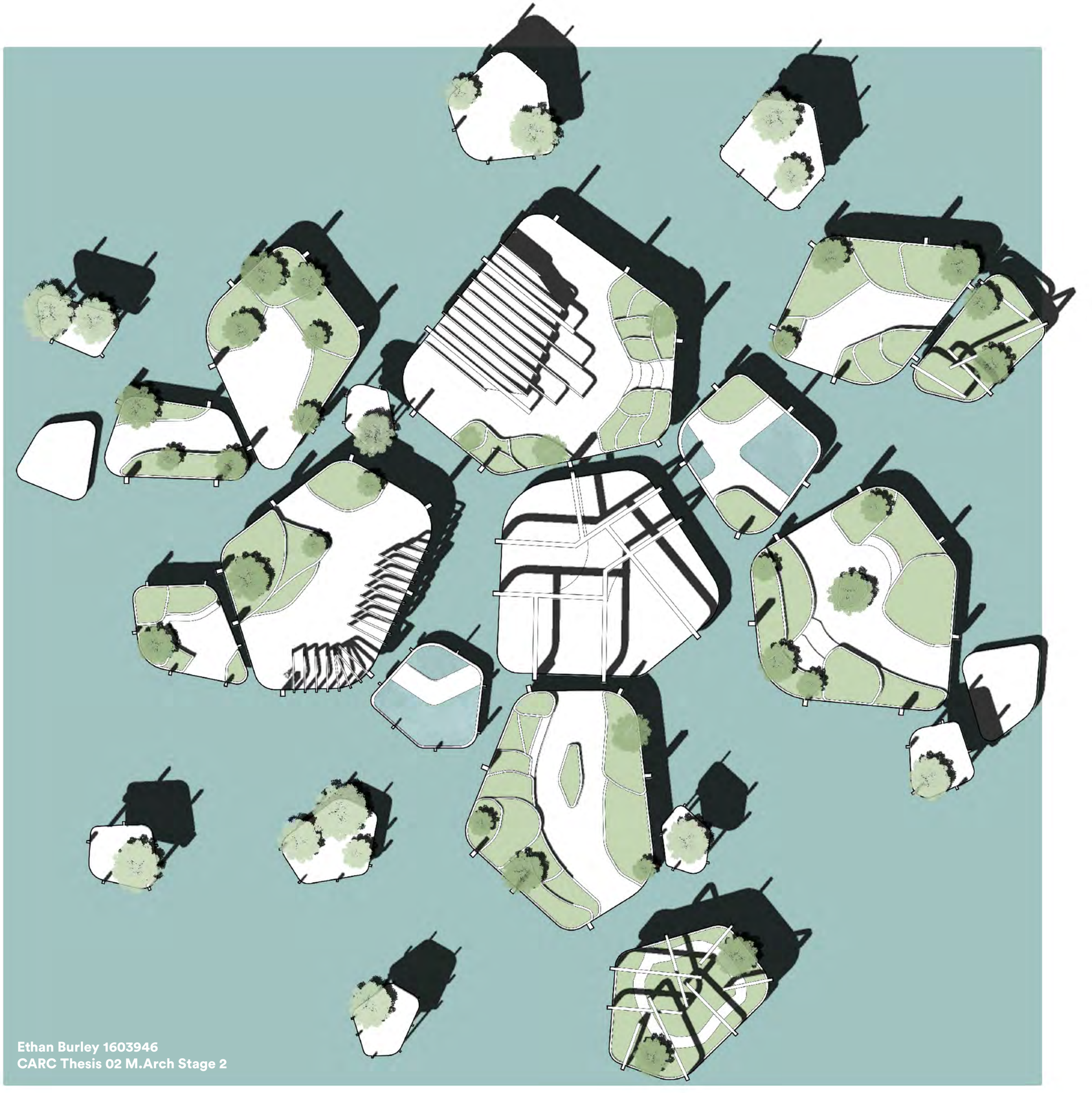


Fragmental Gardens

A re-imagination of the urban ‘greenspace’

The term green space describes an area of vegetation in an otherwise urban environment reserved for recreational or aesthetic purposes. Unfortunately, in the case of current major cities such as London this leads more to the latter as urban greenspaces are designed using types of flora and vegetation meant to be low maintenance to fill ‘void’ spaces in order to break up the city blocks and unusable plots of land. This leads to declines in wildlife diversity which require the wild flowers to survive. Additionally, the overly dense urban landscape results in very little recreational space for many of its residents with many not ever owning a garden. This leads to the development of multiple mental disorders among the urban dwellers.

Situated in Woolwich, London The Fragmental gardens aim to use the banks of the Woolwich area to form a hub for the reintegration of the local wildlife back into the urban area. The project is made up of a multitude of floating islands creating plots of land for diagnosed residents using gardening as a tool of rejuvenation and wellbeing. The community garden then forms the foundations for the revival of the wildlife through pollinators and flora.

SITE ANALYSIS

0.5 miles/0.8 km

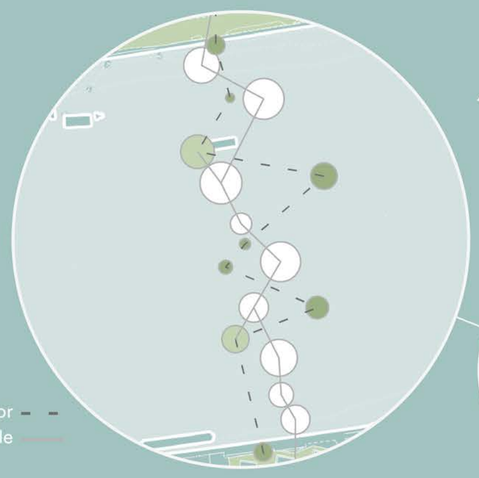
0.3 miles/0.5 km

Scale 1/10000

N

Key

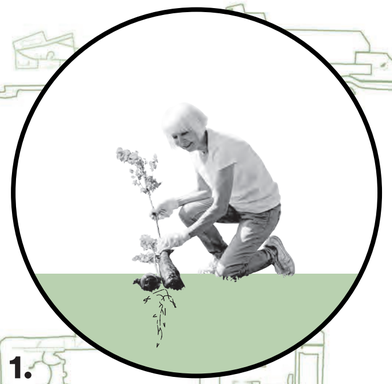
- Average walking distance of a person per break
- Average flight distance of a pollinator for food per day
- Woolwich highstreet
- Ferry crossing path
- Water current direction
- Proposed green corridor routes
- Potential green corridor routes
- Proposed island connections
- Existing green corridor
- Greenspaces with potential for wildflowers
- Potential overgrowth hubs



Isolated islands
Isolated islands give the potential for a natural development of the greenspace unhindered by human interference

Masterplan
The major approach to this program is to connect the identified green route on the North and South sides of the Thames. This will be done by identifying two routes of migration across the river one for people and one for pollinators with overlaps where the two meet. This is represented through a multitude of islands, some linked and others left isolated. The program will bridge not just the Thames but go a step further to provide a bridge across the London city airport utilising the landing strip green to continue a path of wildflowers along the route.

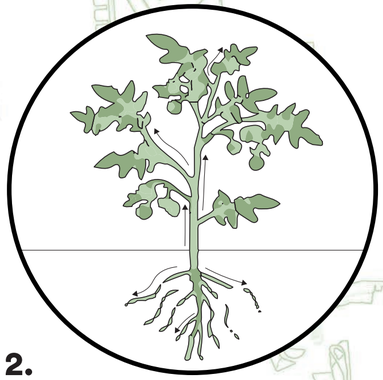
GUERRILLA GARDENING



1.

Community garden plots

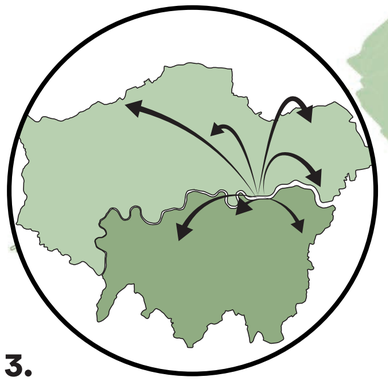
The use of the community garden plots to nuture selected pollinator seedlings to adult stage.



2.

Sprouting of pollinator friendly saplings

Pollinator friendly flora are then grown to maturity so that they can be more self sufficient and be allocated to the surrounding greenspace.



3.

Propagation of saplings

The now adult saplings can be transported and replanted in other greenspaces around the urban scene allowing a restructuring of the urban greenspace.

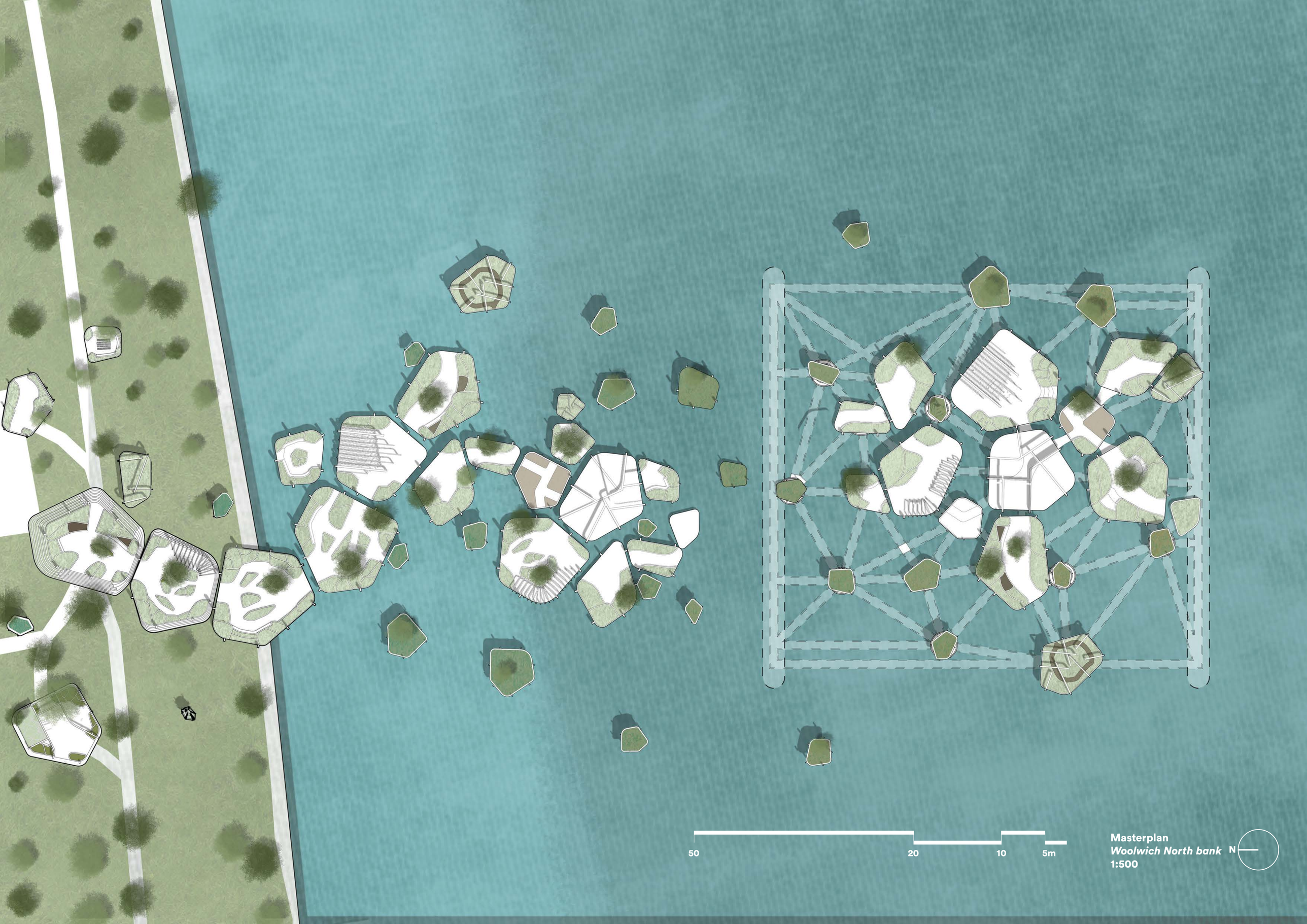
Guerrilla Gardening

The final phase of this project program is the expanse of the pollinator friendly public garden ideals to the other misused ‘greenspaces’ around the urban scene. As the majority of this land is publically accesible and owned by the local councils, it allows for the idea of a forced intervention in the form of Guerrilla gardening where ‘Starter kits’ in the form of mature saplings can be distributed to interested local communities for their use in nearby ‘greenspaces’.

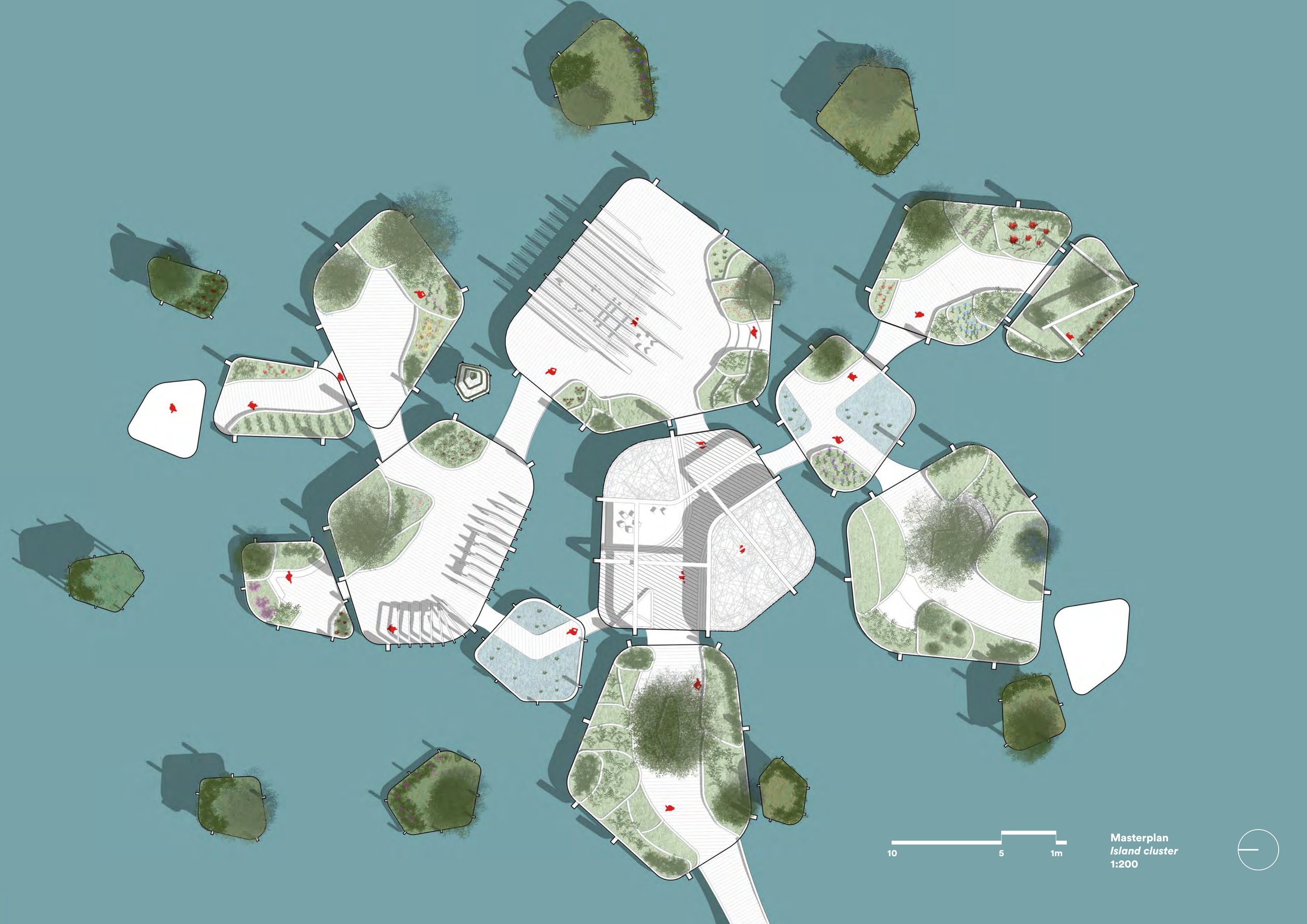

Masterplan 1:1000
N

1. Meeting points for groups prior to crossing the bridge
2. Bee hive typologies allowing for direct pollinator interaction
3. *First step island* the landing point of the bridge
4. Lounge area for pedestrians to meet those who work on the bridge
5. Communal tool shed with basic gardening supplies for the bridge gardeners
6. Direct pedestrian footbridges between clusters
7. Wildflower reserves acting as interaction between pollinators and pedestrians
8. Community plant & produce market for the outsourcing of pollinator friendly flora
9. Openings between clusters for boat traffic

Isometric
Woolwich crossing Northbank



Masterplan
Woolwich North bank
1:500

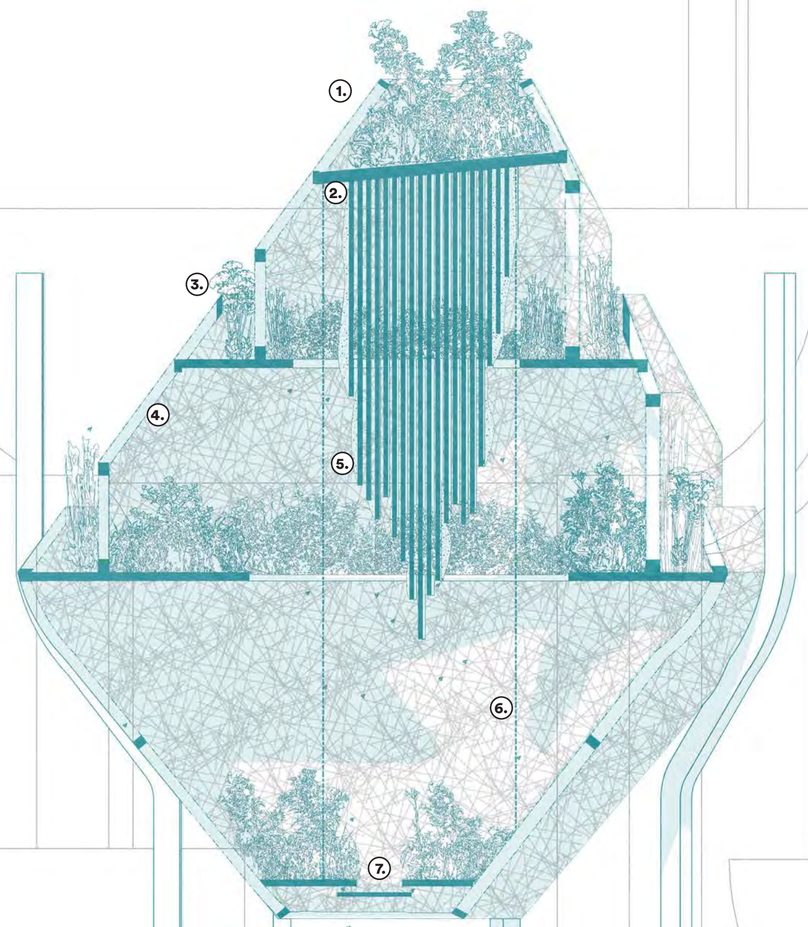


Masterplan
Island cluster
1:200

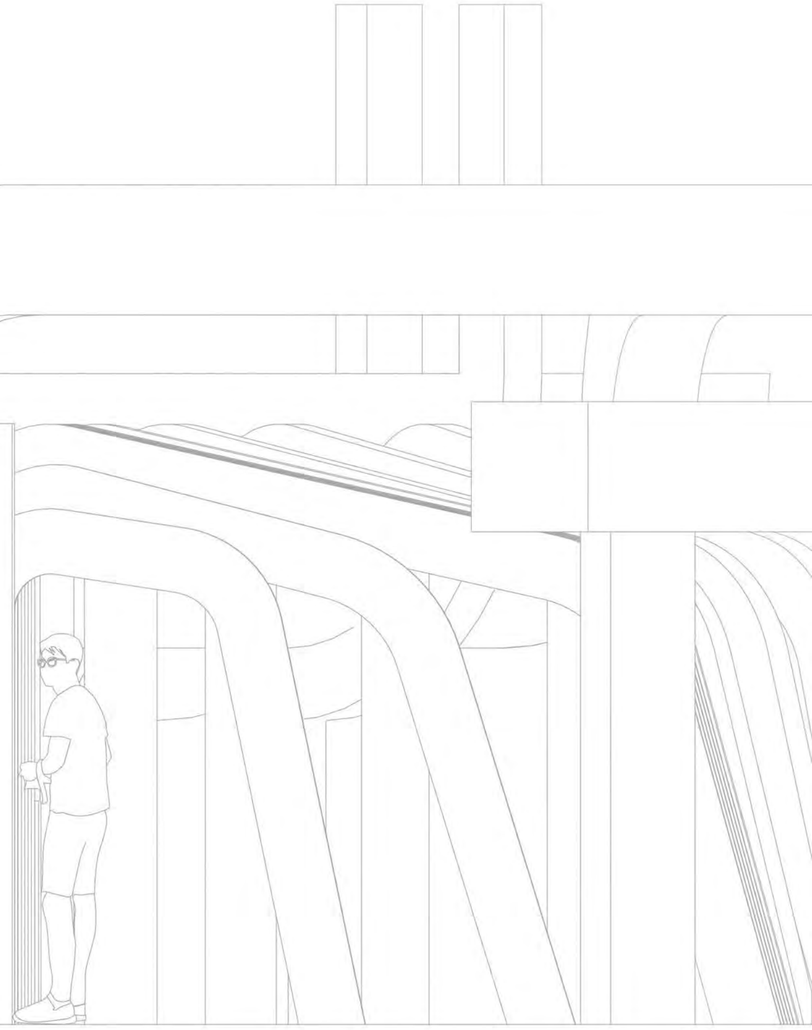
1. Bee hive island
2. Lounge cafe area
3. Water collection well
4. Communal tool shed
5. Sapling market island

10 5 2 1m

Floor plan
Island cluster
1:100

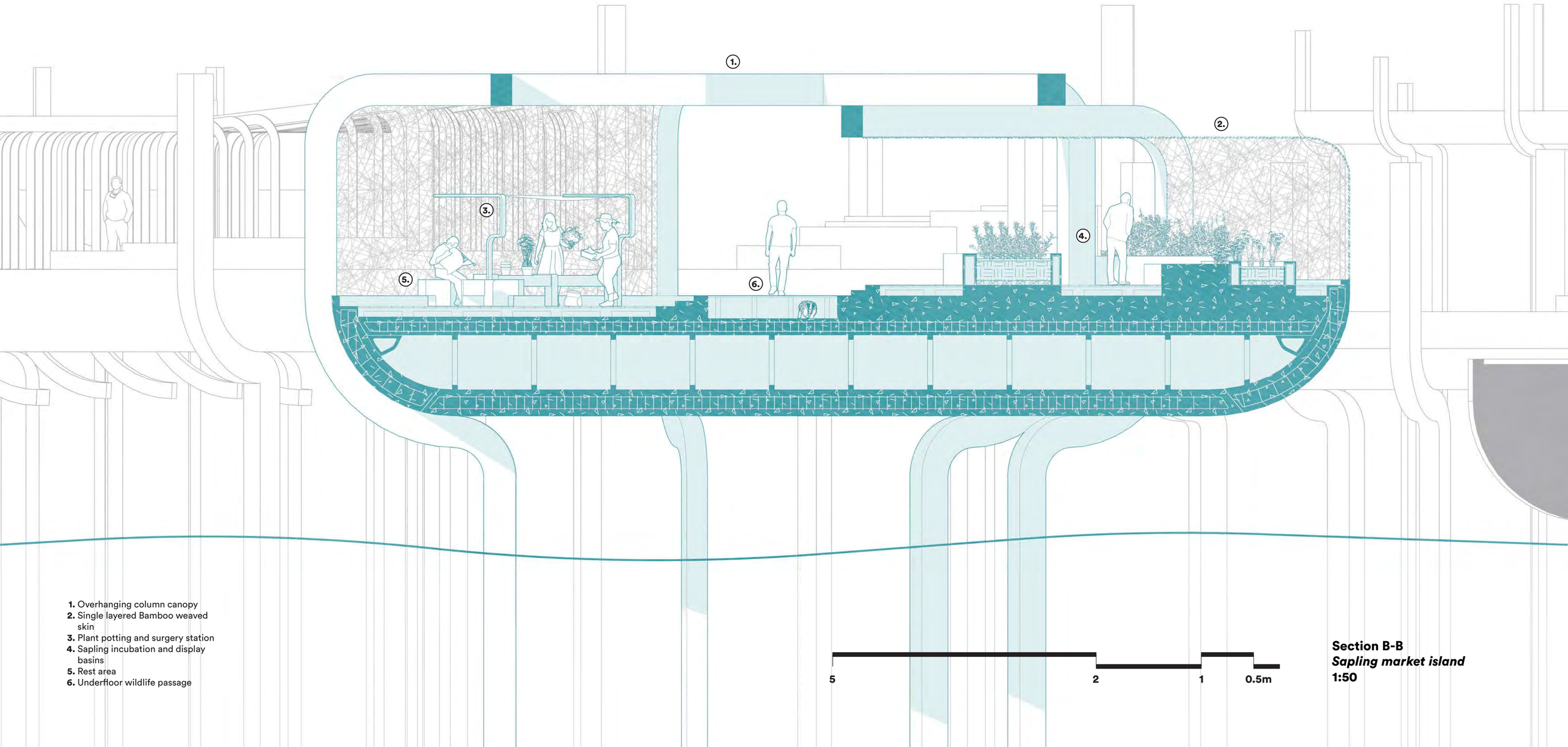


1. Open top with filter wildflowers
2. Pitched ceiling draining rainwater to lower levels
3. Wildflower shelves
4. Double layered Bamboo weaved skin
5. Timber Bee hive prefabricated structure
6. Pearmeable mesh column
7. Hatched accessway



3000 1000 30 10mm

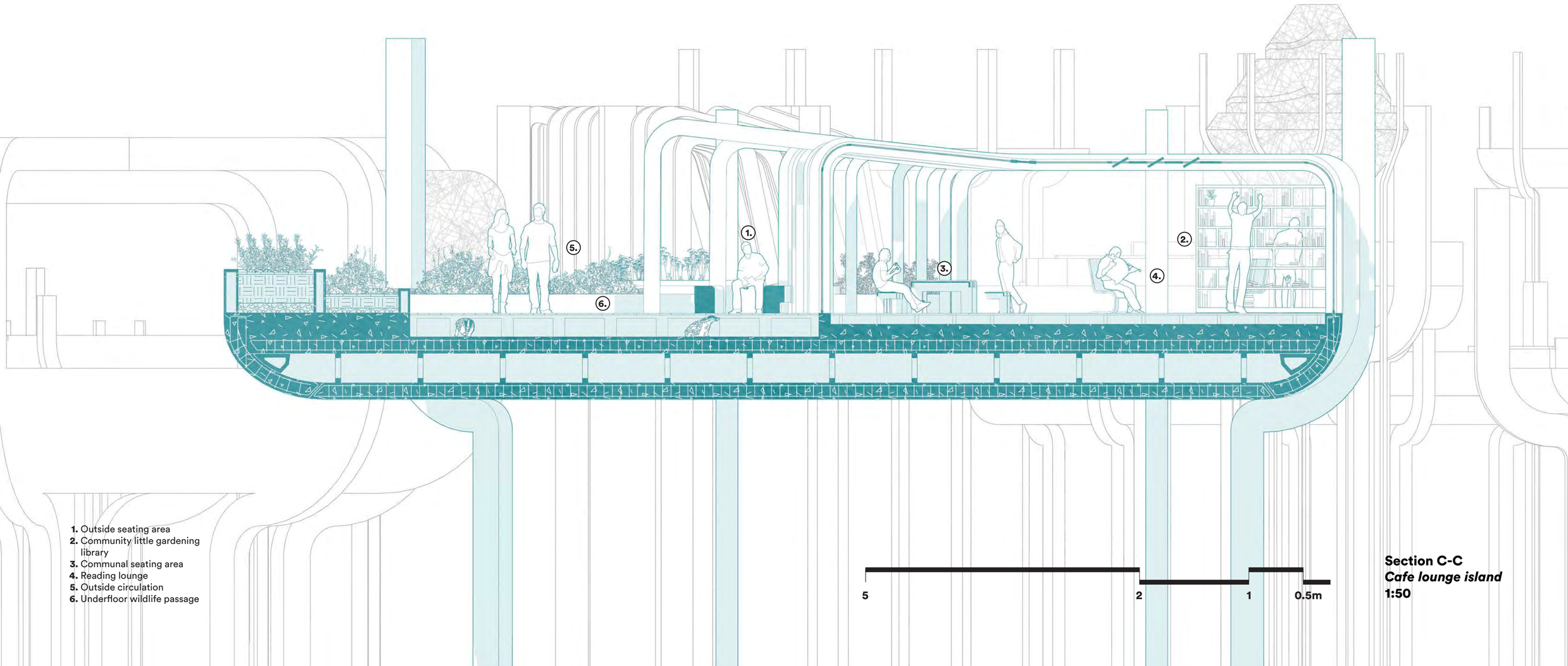
Section A-A
Bee hive island
1:20



1. Overhanging column canopy
2. Single layered Bamboo weaved skin
3. Plant potting and surgery station
4. Sapling incubation and display basins
5. Rest area
6. Underfloor wildlife passage

5 2 1 0.5m

Section B-B
Sapling market island
1:50



1. Outside seating area
2. Community little gardening library
3. Communal seating area
4. Reading lounge
5. Outside circulation
6. Underfloor wildlife passage

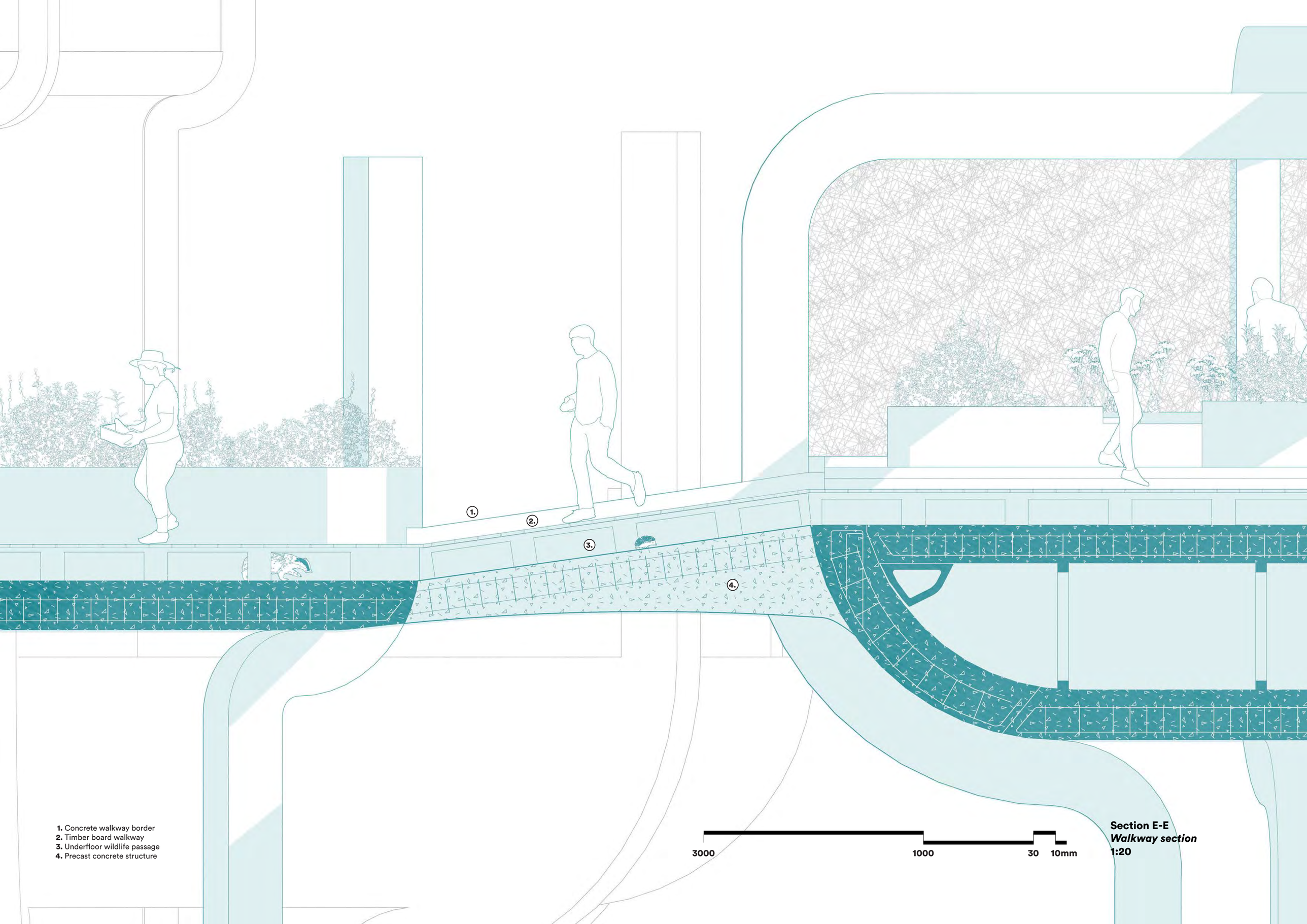
5 2 1 0.5m

Section C-C
Cafe lounge island
1:50

1. Semi translucent polycarbonate panels
2. Personal storage
3. Garden tool rack
4. Workbench tables & Fertiliser
5. Wheel barrow bin

5 2 1 0.5m

Section D-D
Tool shed island
1:50

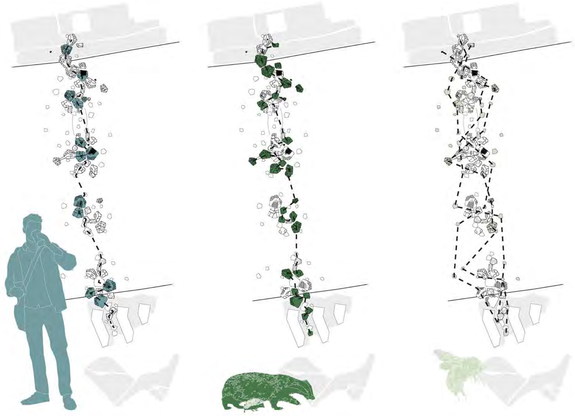


1. Concrete walkway border
2. Timber board walkway
3. Underfloor wildlife passage
4. Precast concrete structure

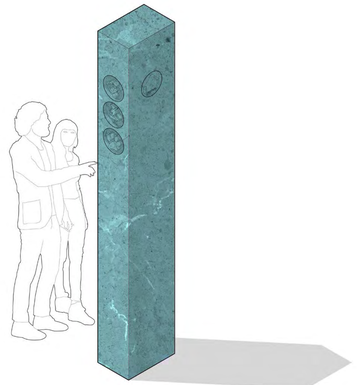
3000 1000 30 10mm

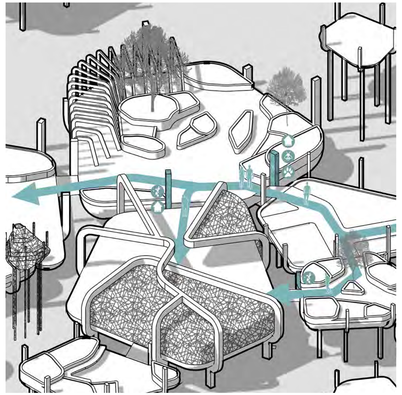
Section E-E
Walkway section
1:20

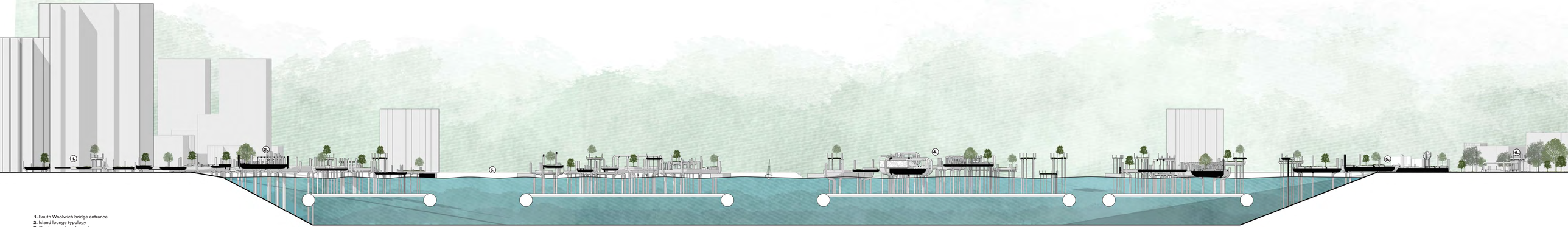
WALKROUTES



WAYFINDERS



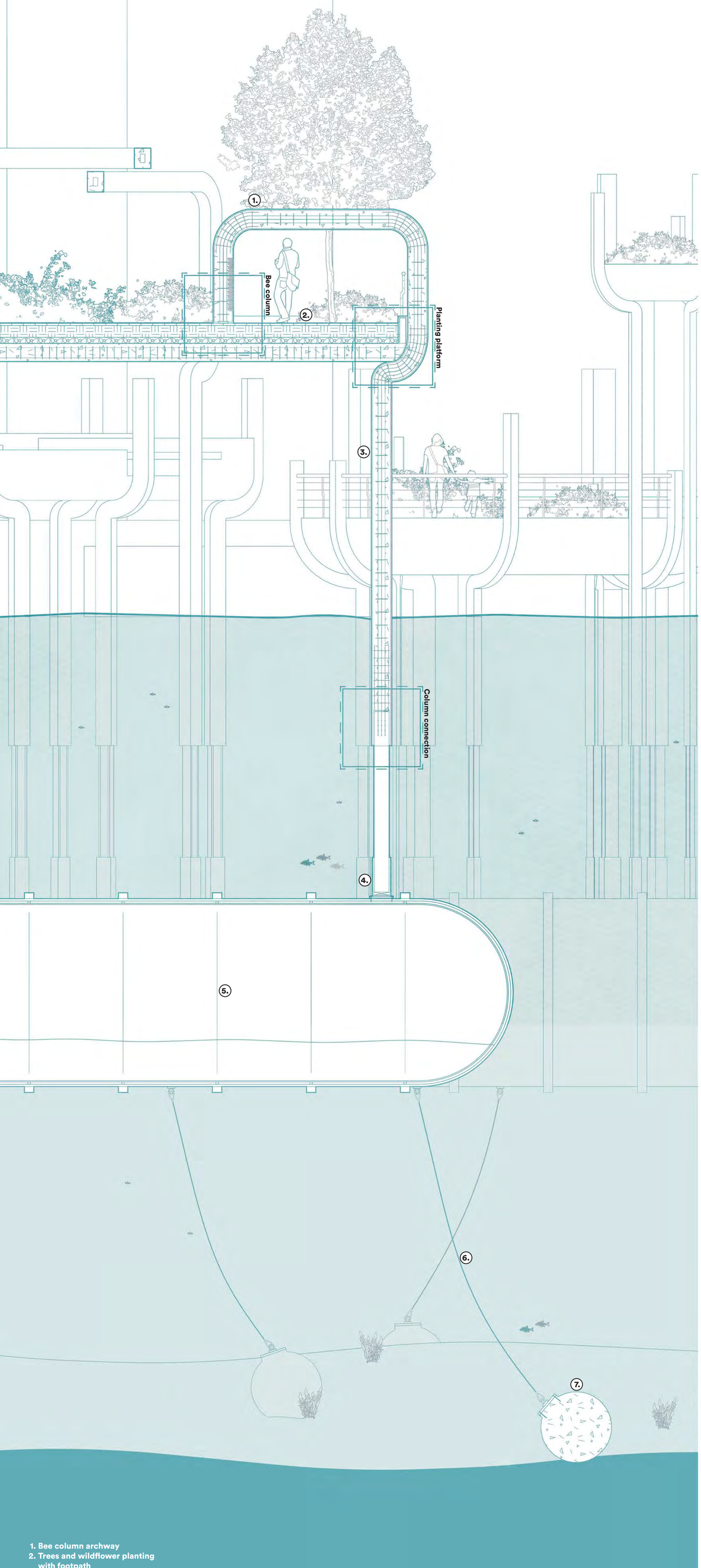




1. South Woolwich bridge entrance
2. Island lounge typology
3. Cluster spacings for water access
4. Plants & Produce market
5. North Woolwich bridge entrance
6. Royal Victoria gardens

Long section
Woolwich crossing section
1:500

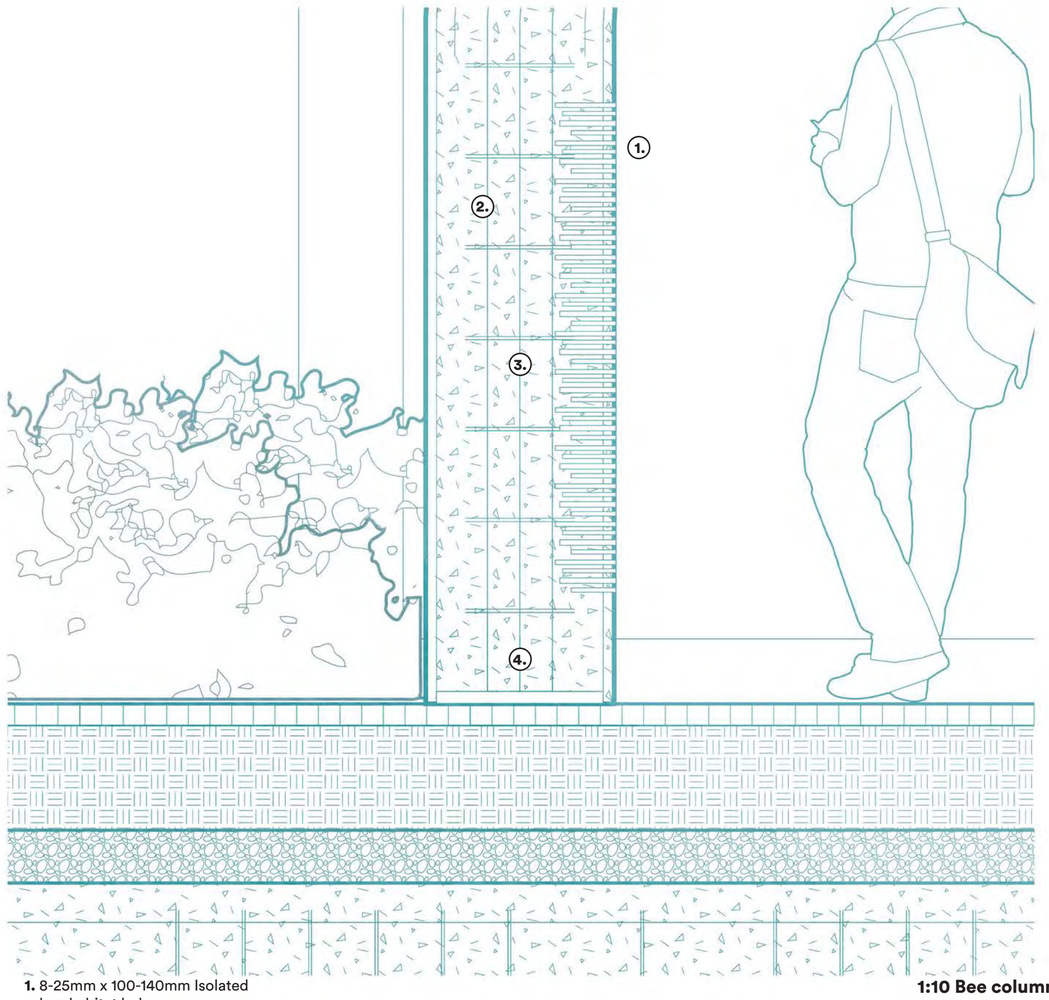
Island structural detail
Section 1:50



1. Bee column archway
2. Trees and wildflower planting with footpath
3. Island 'leg' concret column
4. 40mm Steel bracket fashioned into steel pontoon framing
5. Steel buoyancy pontoon
6. Steel retaining tether
7. ConcreteW deadweight anchor

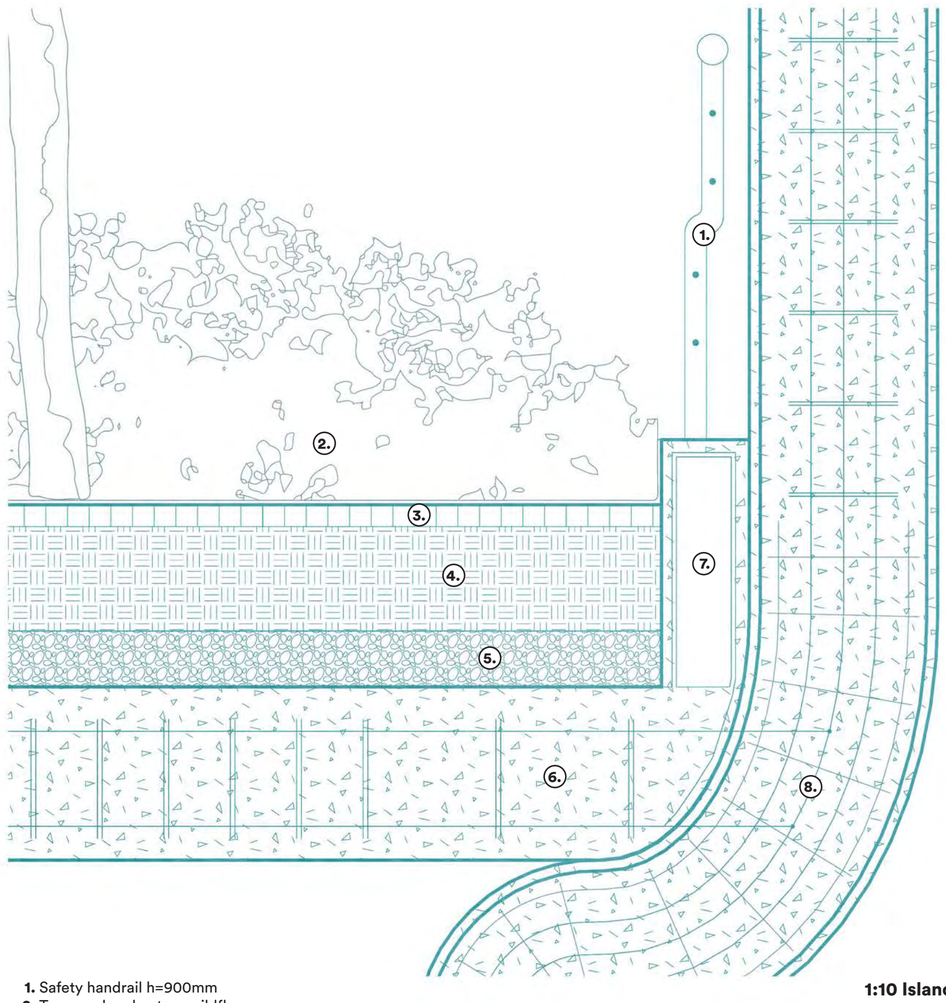
1:50
Section detail

0m 1m 5m



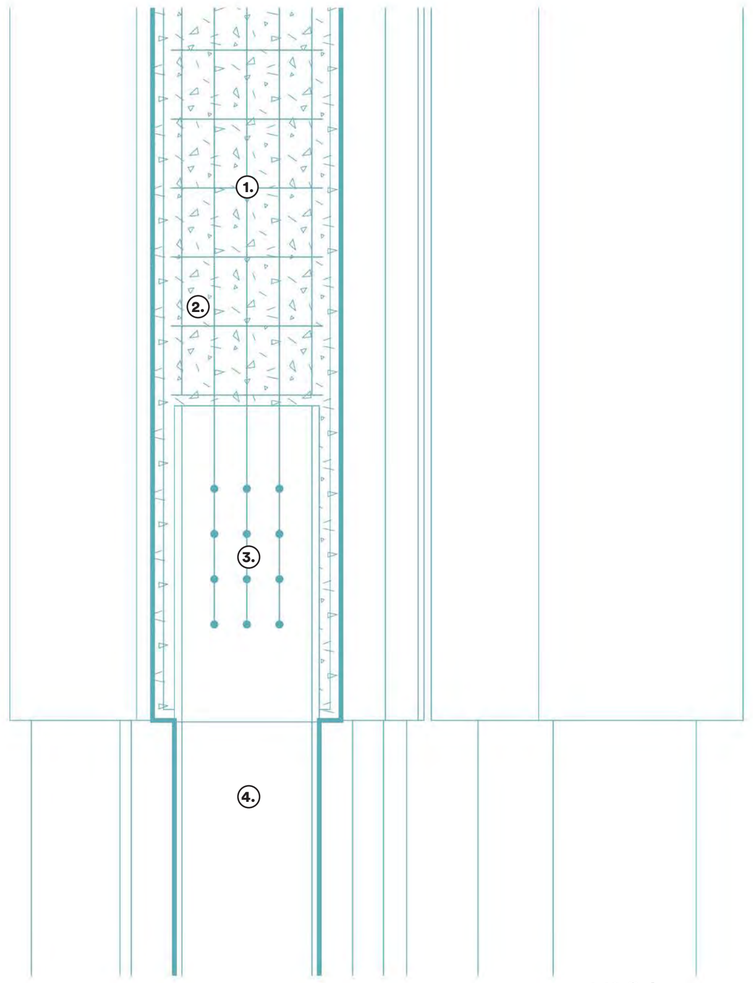
1. 8-25mm x 100-140mm Isolated bee habitat holes.
2. Infill Green concrete
3. 250mm steel concrete ties
4. 30mm Steel plate cap

1:10 Bee column detail



1. Safety handrail h=900mm
2. Trees and understory wildflower planting
3. Top soil and wildgrass
4. 240mm planting soil
5. 120mm drainage layer
6. 400mm Precast reinforced structural slab
7. Precast pot edge
8. Rebar spot welding

1:10 Island connection detail



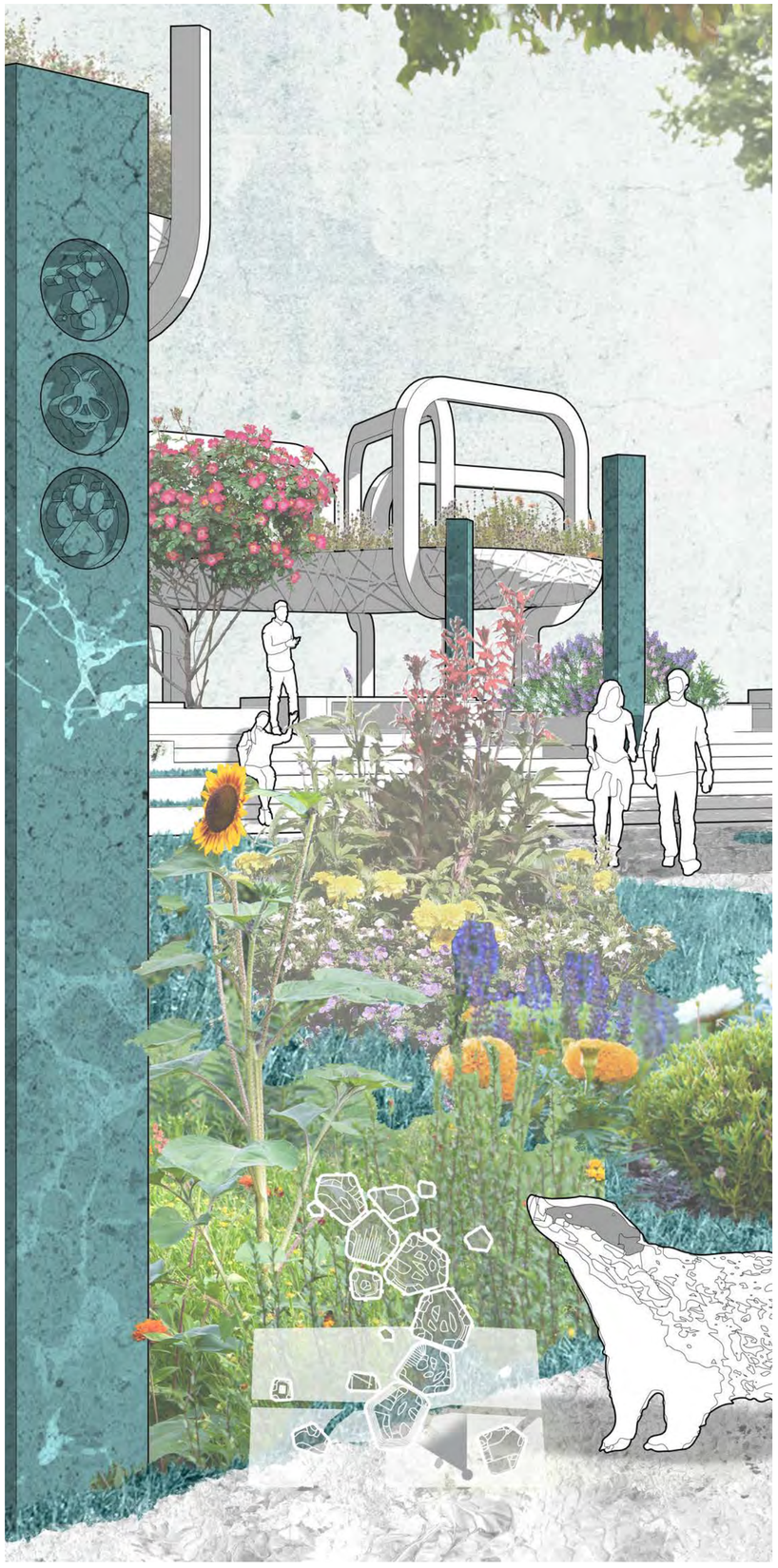
1. Prefabricated steel rebar reinforcement cage
2. Infill Green concrete
3. Rebar to I beam spot welding
4. 660×229mm Steel I beam

1:10 Column connection detail

Wayfinding

Wellness Through Exploration

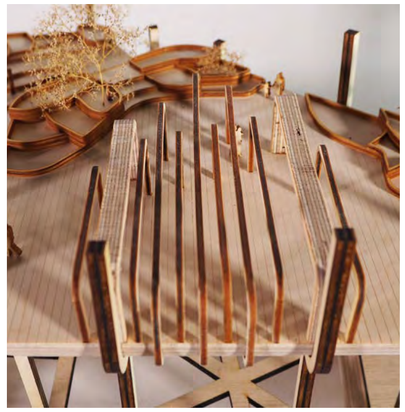
Plants & Produce

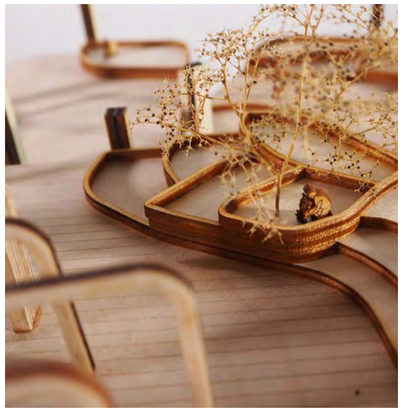


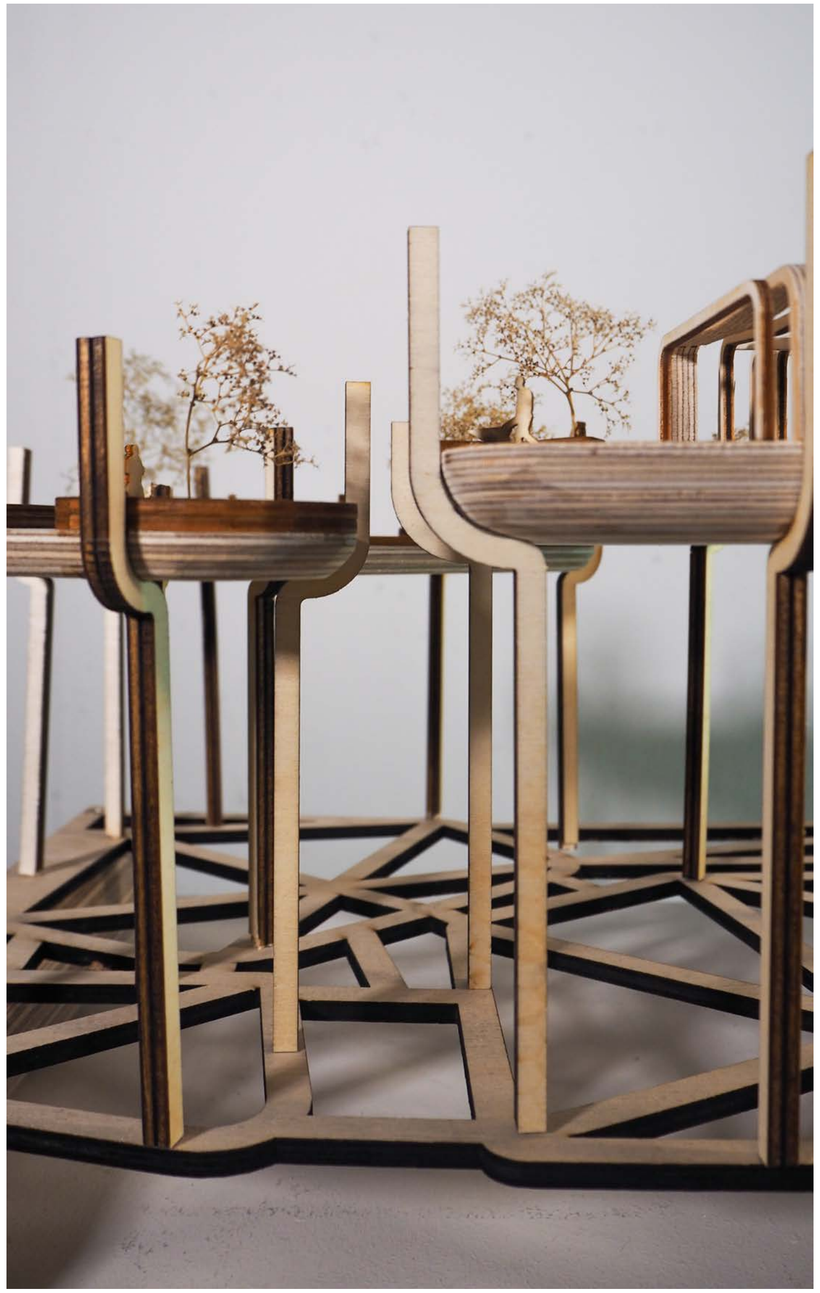
Wayfinding
Markers signifying gathering points before embarking on the crossing.

Wellness Through Exploration
A unique passage to find tranquility among the collective gardens.

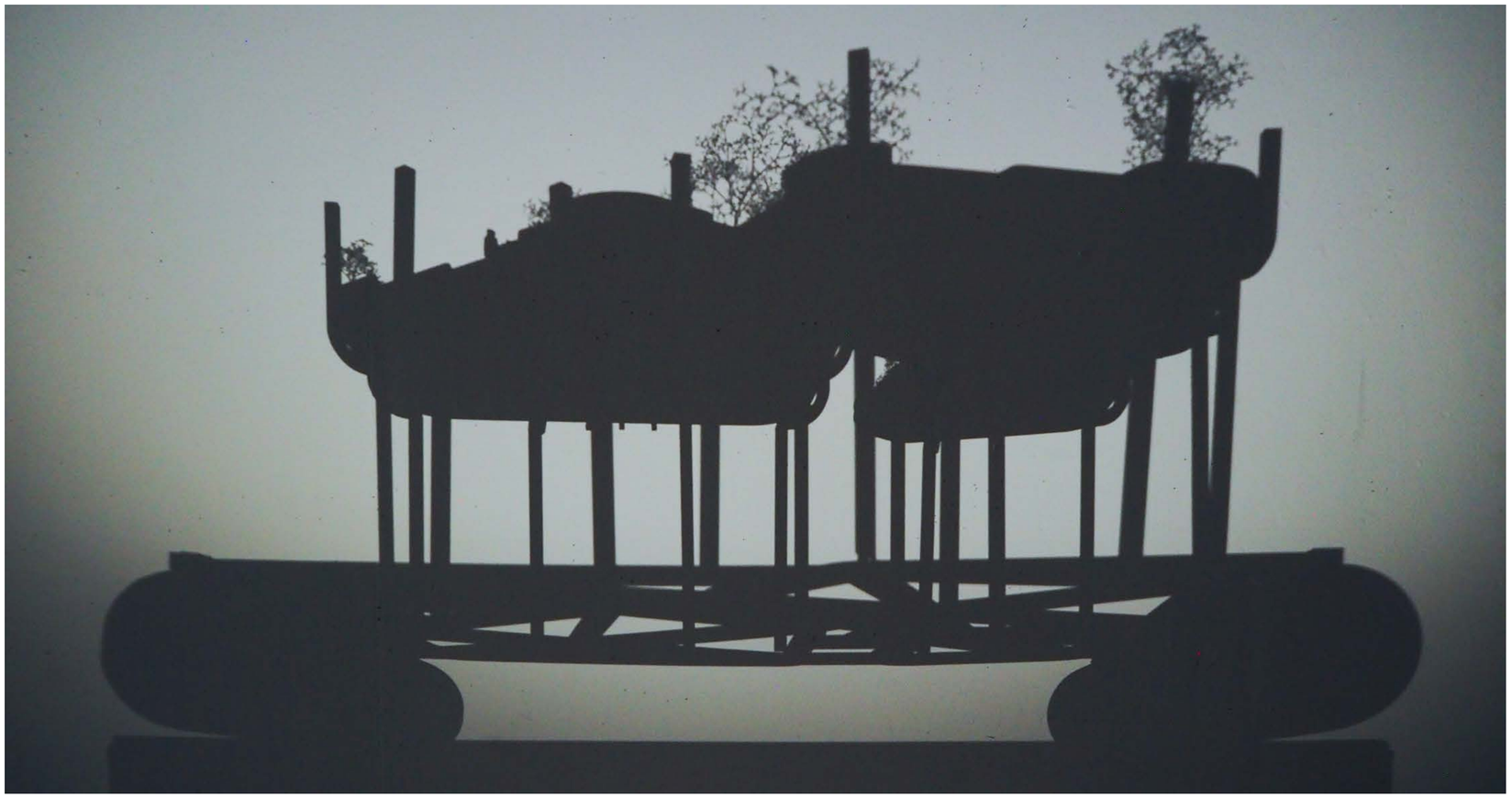
Plants & Produce
The exchanging and propagation of pollinator friendly flora within the wider community

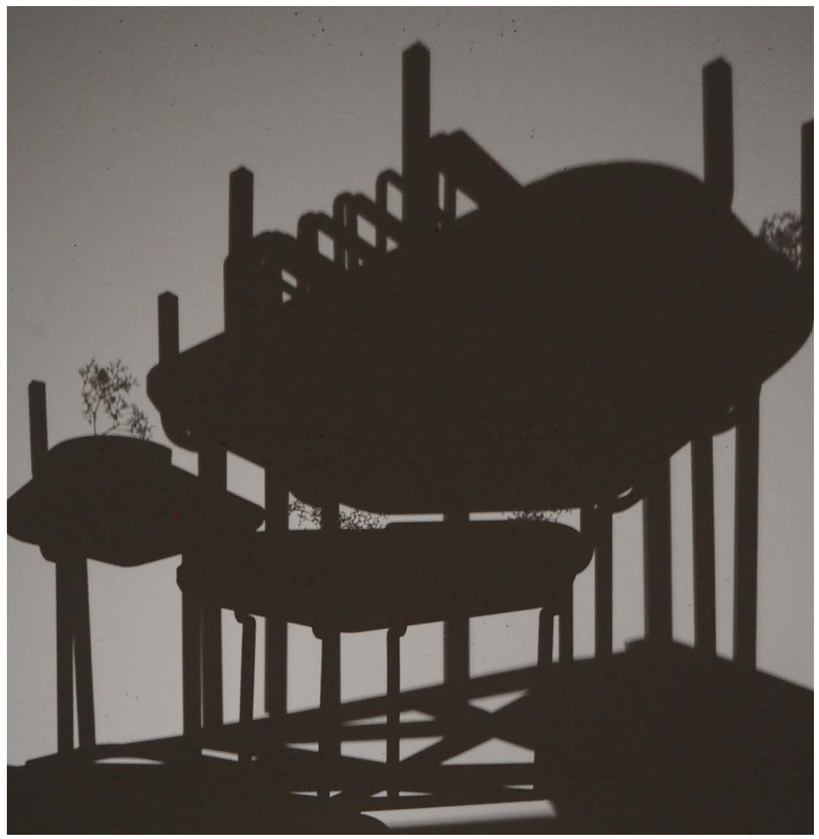






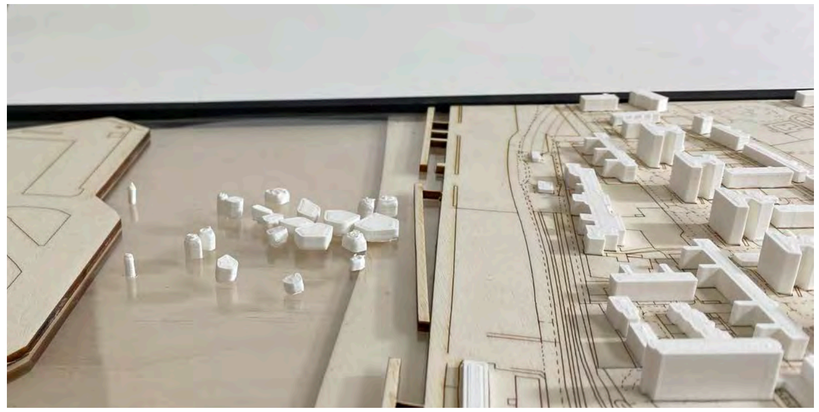
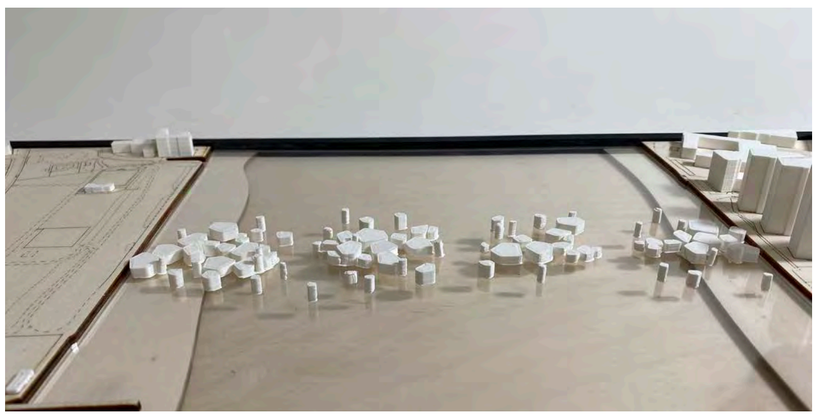
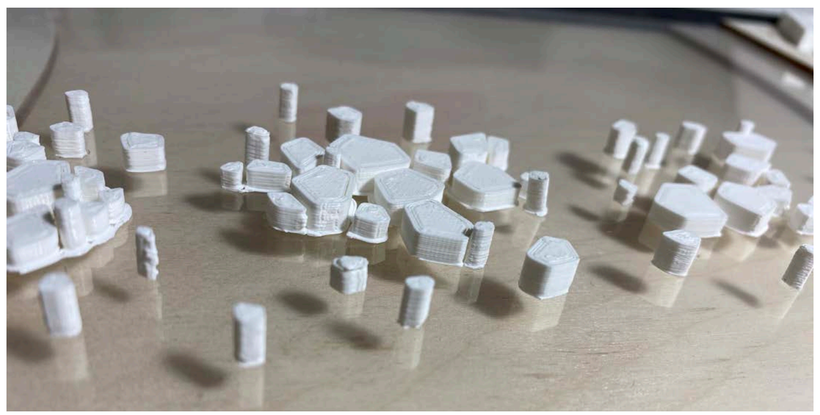
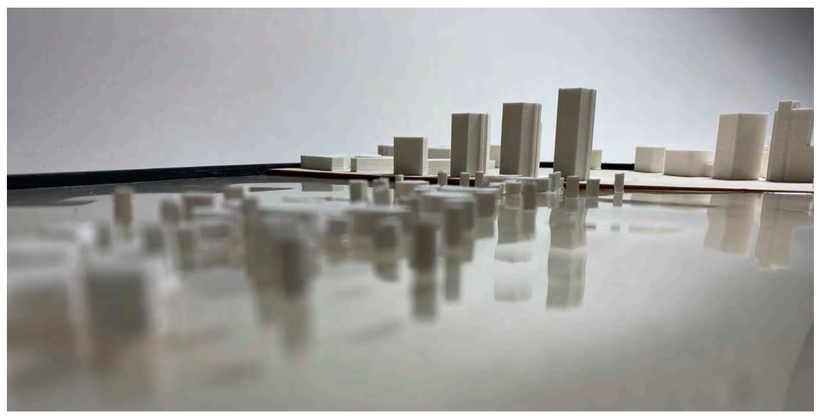
1:100 Islands Model Photographs



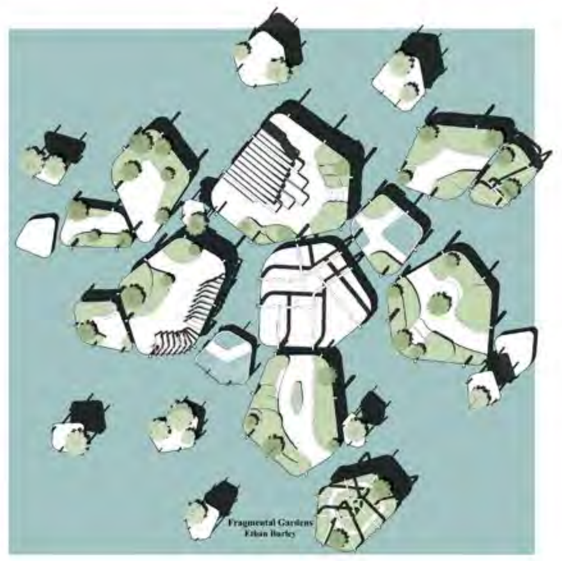


1:100 Islands Model Projections Photographs



1:2000 Masterplan Model Photographs



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