

# Tentacular interfaces

## Uncovering latent qualities of East London industrial waterfronts

Keywords: waterfronts, industrial landscape, 4th nature, re-transformation, territory, terrain vague, bodies of water, disembodiment

Marta Adamik
Heterogenous City:
Architectural Design Crossovers
Graduation Studio
2022/2023



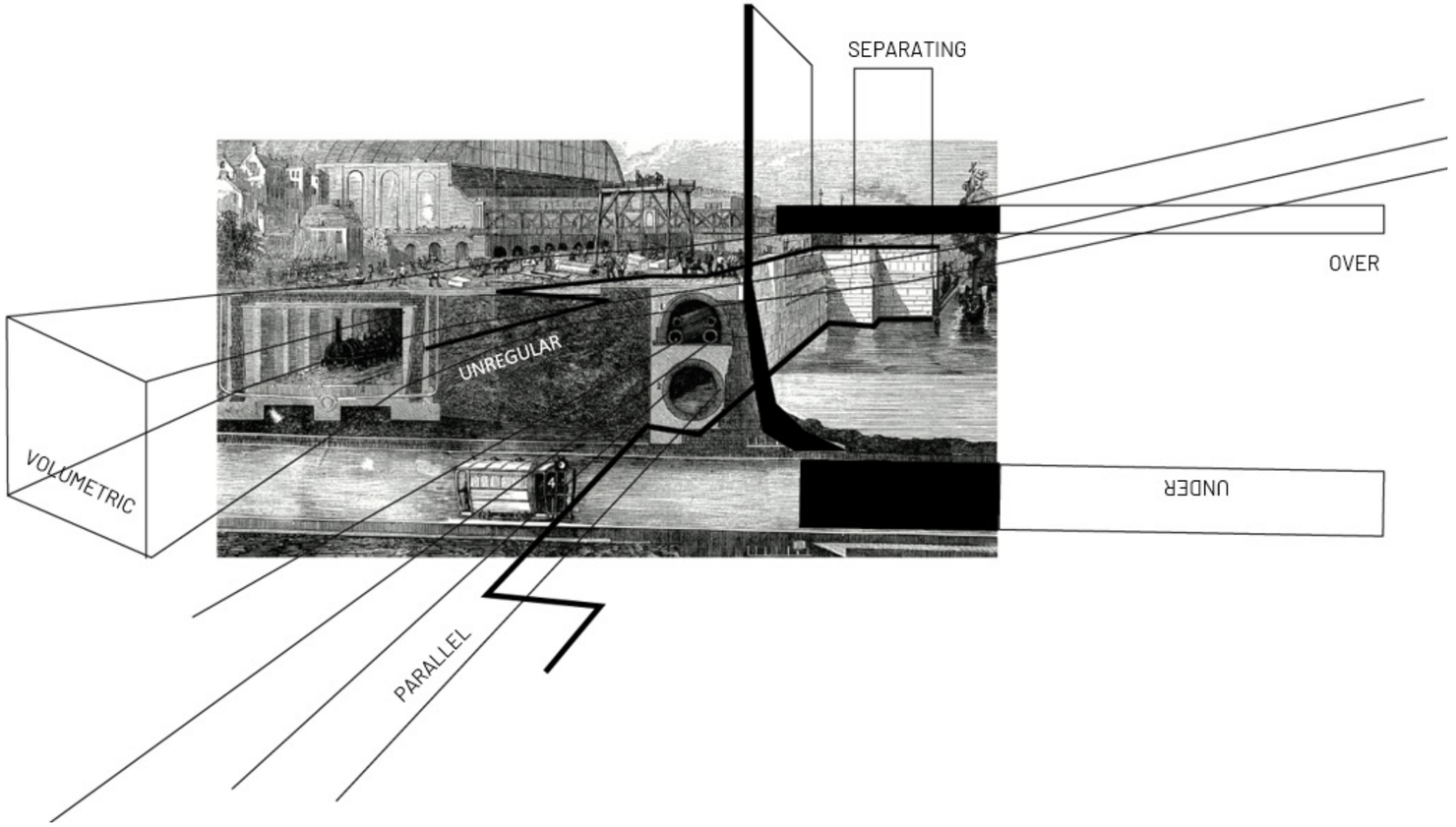


Polluted Thames 1950s

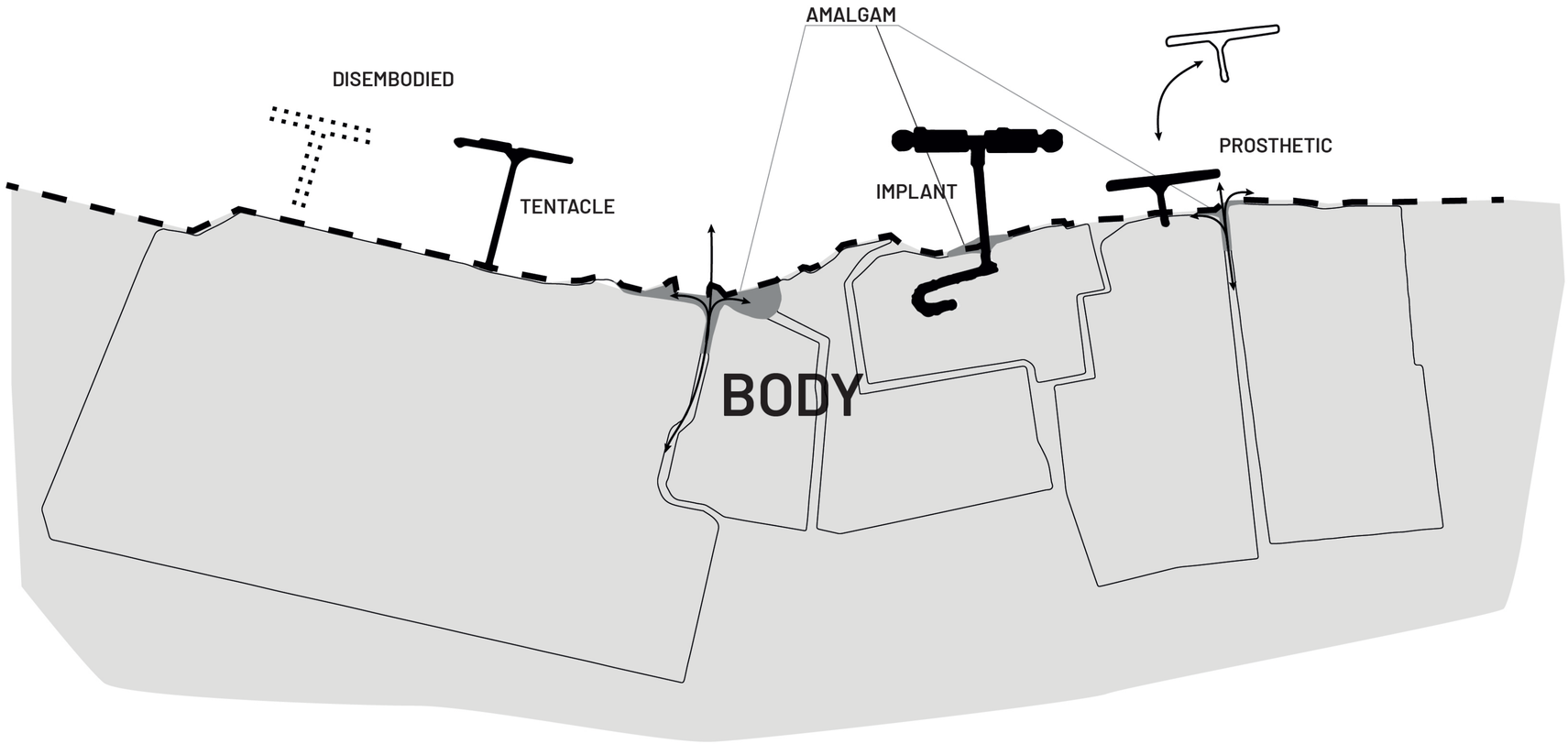


infrastructure

Thames as infrastructure




Engineered border




Tentacles, prosthesis and disembodied objects






Left behind by the chanigng industry



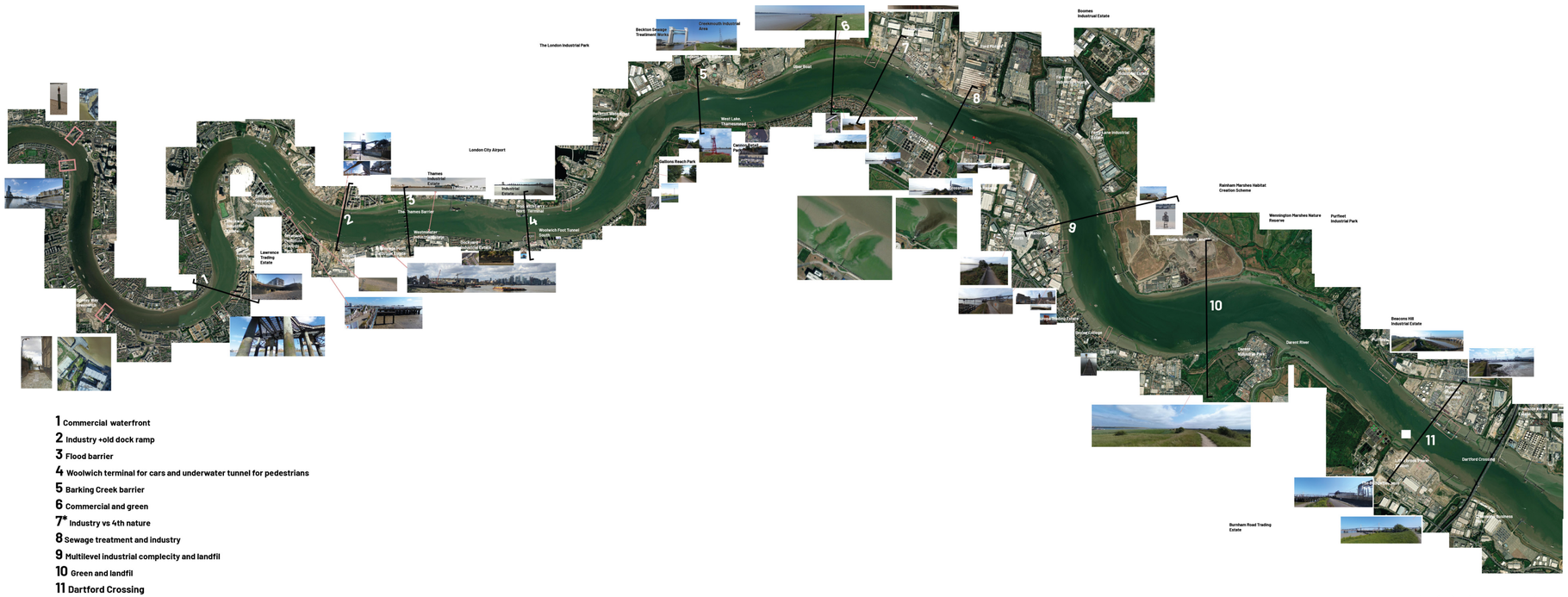






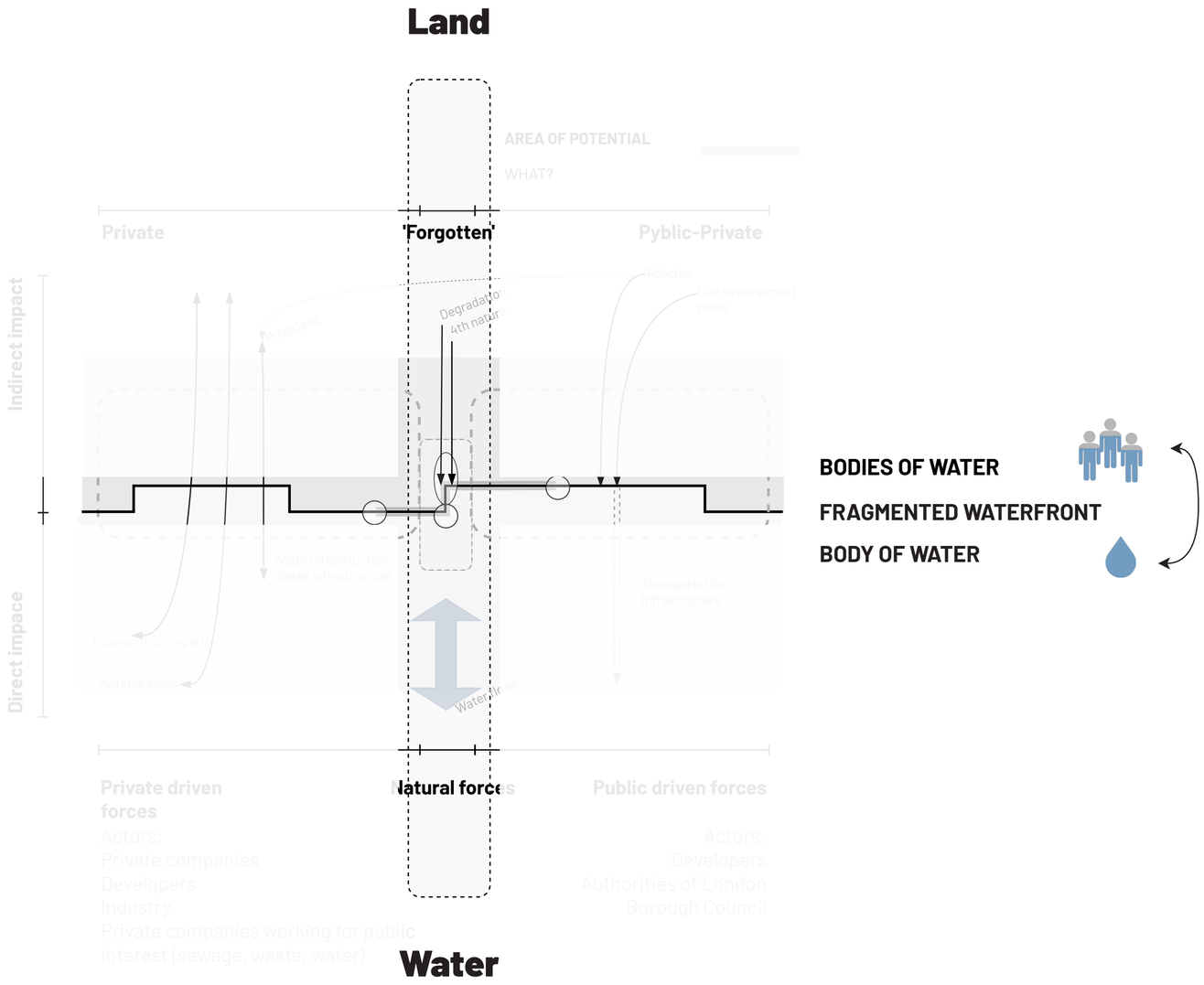
Neglected vs commercialised

**”Given the fragmented, industrial landscape of East London waterfronts, how can the value of post-industrial  spaces and structures be uncovered, and how can a spatial intervention act towards their regeneration with preservation of the existing qualities?”**




Initial mapping

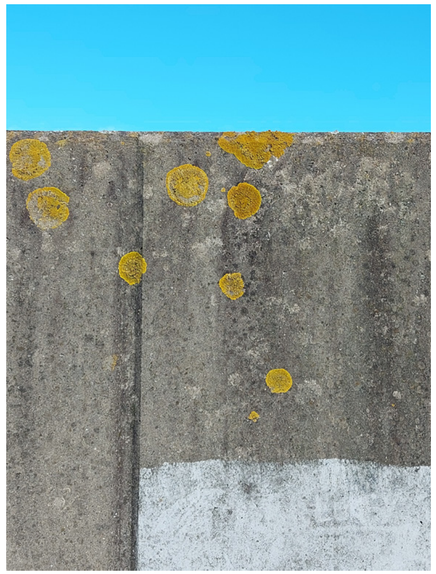
Research statement




Research environment

**“We spend very little time thinking about where our water comes from, or how our power is produced, where our food is grown, how far it travels, and how it gets there, or even where our shit goes.” (Pierre Belanger, 2017)**







Bodies of water




# What are the flows?



Industrial landscape




Soft border



Terrain vague







Nature pockets









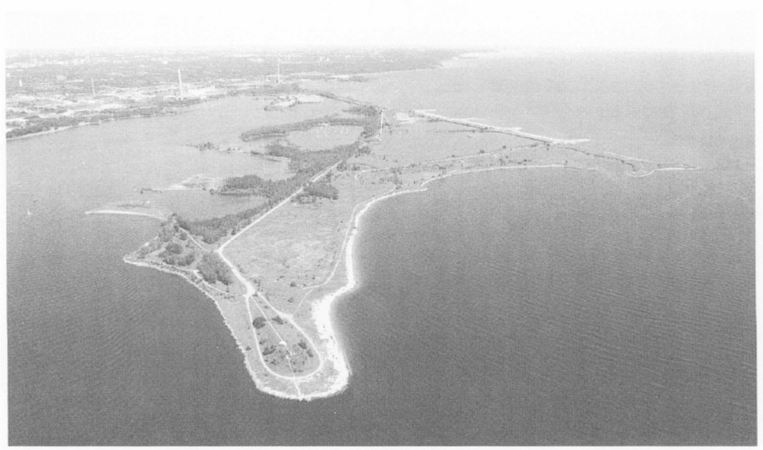
4th nature



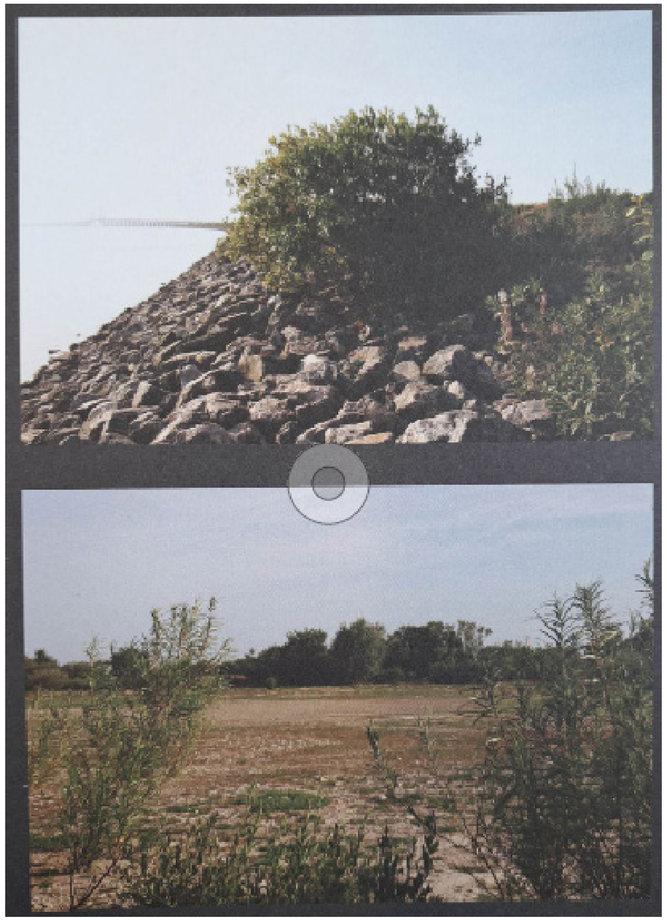


https://floating-berlin.org/

Example with 4th nature and social program







Constructed Ecology: the crenellated jetty of the Leslie
Street Spit which
Peberholm Denmark - island from rubble from construction of Malmo-Copenhagen bridge

## Self-constructing ecologies




# Abandonement



Abandonment

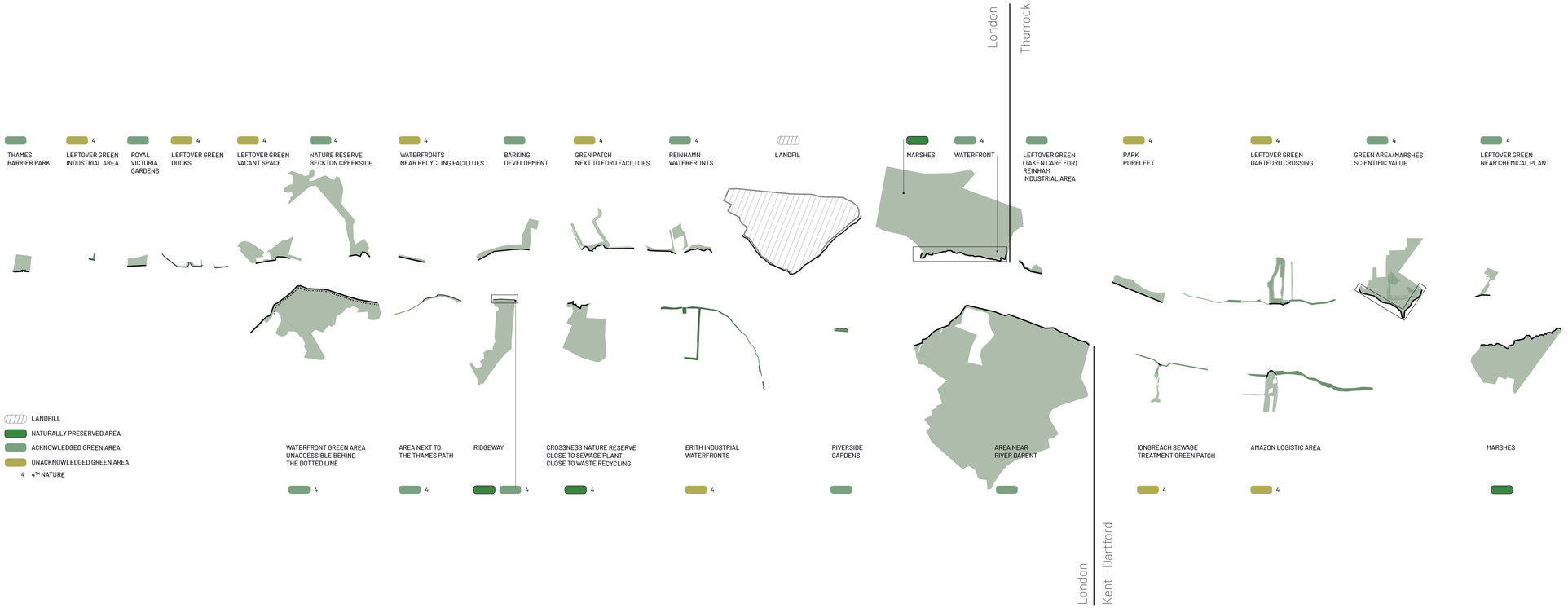
Observing and intervening

Rewilding

Finding balance




Green belt at waterfronts




# Classifying green patches


London
Thurrock
THAMES BARRIER PARK
LEFTOVER GREEN INDUSTRIAL AREA
ROYAL VICTORIA GARDENS
LEFTOVER GREEN DOCKS
LEFTOVER GREEN VACANT SPACE
NATURE RESERVE BECKTON CREEKSIDE
WATERFRONTS NEAR RECYCLING FACILITIES
BARKING DEVELOPMENT
GREN PATCH NEXT TO FORD FACILITIES
REINHAMN WATERFRONTS
LANDFIL
MARSHES
WATERFRONT
LEFTOVER GREEN (TAKEN CARE FOR) REINHAM INDUSTRIAL AREA
PARK PURFLEET
LEFTOVER GREEN DARTFORD CROSSING
GREEN AREA/MARSHES SCIENTIFIC VALUE
LEFTOVER GREEN NEAR CHEMICAL PLANT
LANDFILL
NATURALLY PRESERVED AREA
ACKNOWLEDGED GREEN AREA
UNACKNOWLEDGED GREEN AREA
4 4TH NATURE
WATERFRONT GREEN AREA UNACCESSIBLE BEHIND THE DOTTED LINE
AREA NEXT TO THE THAMES PATH
RIDGEWAY
CROSSNESS NATURE RESERVE CLOSE TO SEWAGE PLANT CLOSE TO WASTE RECYCLING
ERITH INDUSTRIAL WATERFRONTS
RIVERSIDE GARDENS
AREA NEAR RIVER DARENT
IONGREACH SEWAGE TREATMENT GREEN PATCH
AMAZON LOGISTIC AREA
MARSHES
London
Kent - Dartford

# Uncovering


CONTAMINATED LANDFILL AREA
CONTAMINATION
NATURE RESERVE -(MARSHES)
-TO THE LEFT ARE A BUILT FROM EARTH FROM SUPER SEWER PROJECT
PARK
TO BE REDEVELOPED FOR HOUSING
POTENTIAL FOR ACCESSIBLE INDUSTRIAL WATERFRONT
CONTAMINATION
AREA OF SCIENTIFIC IMPORTANCE (NATURE)
POTENTIAL FOR ACCESSIBLE INDUSTRIAL WATERFRONT
CONTAMINATION
CONTAMINATED AREA (CLOSED SOON)
RSPB
GREYS
PURFLEET THAMES TERMINAL LTD.
SCIENTIFICALLY IMPORTANT AREA

# Thresholds



















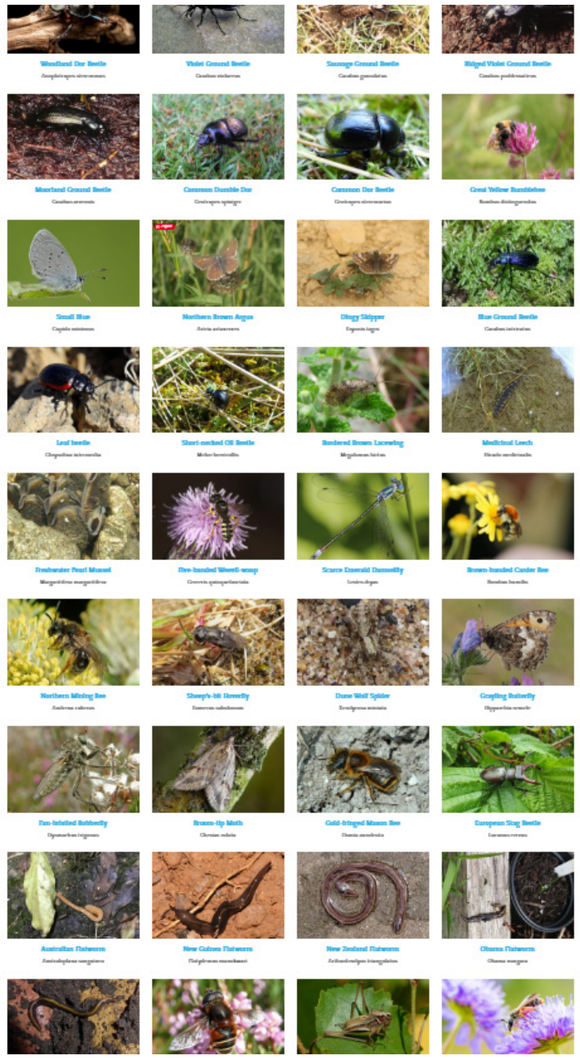





RSPB

buglife

Land of the Fanns




Narrowing down to Thurrock




Logistic cluster



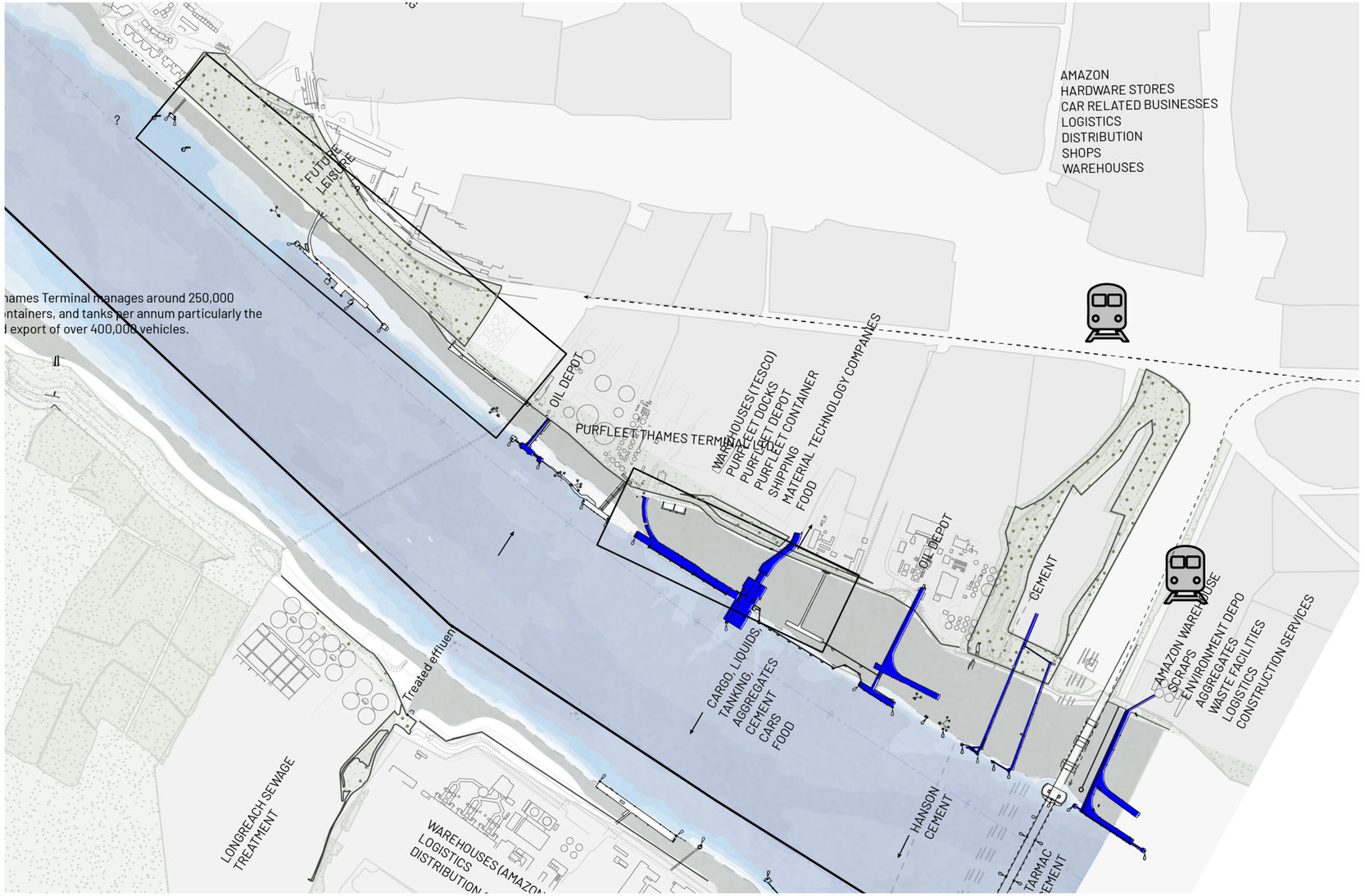
Purfleet





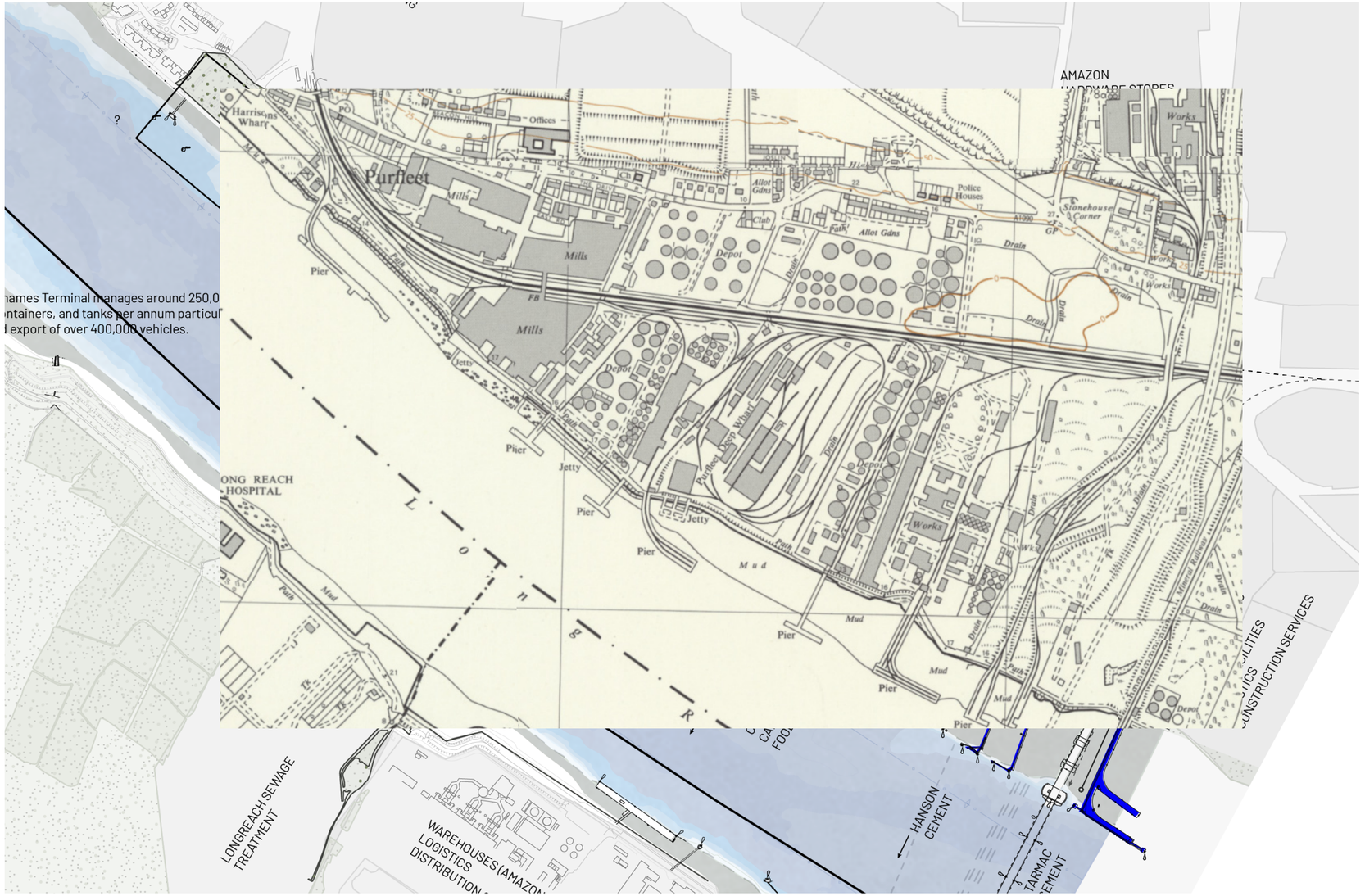



# Purfleet - planning the future




https://maps.nls.uk

# Industrial cluster



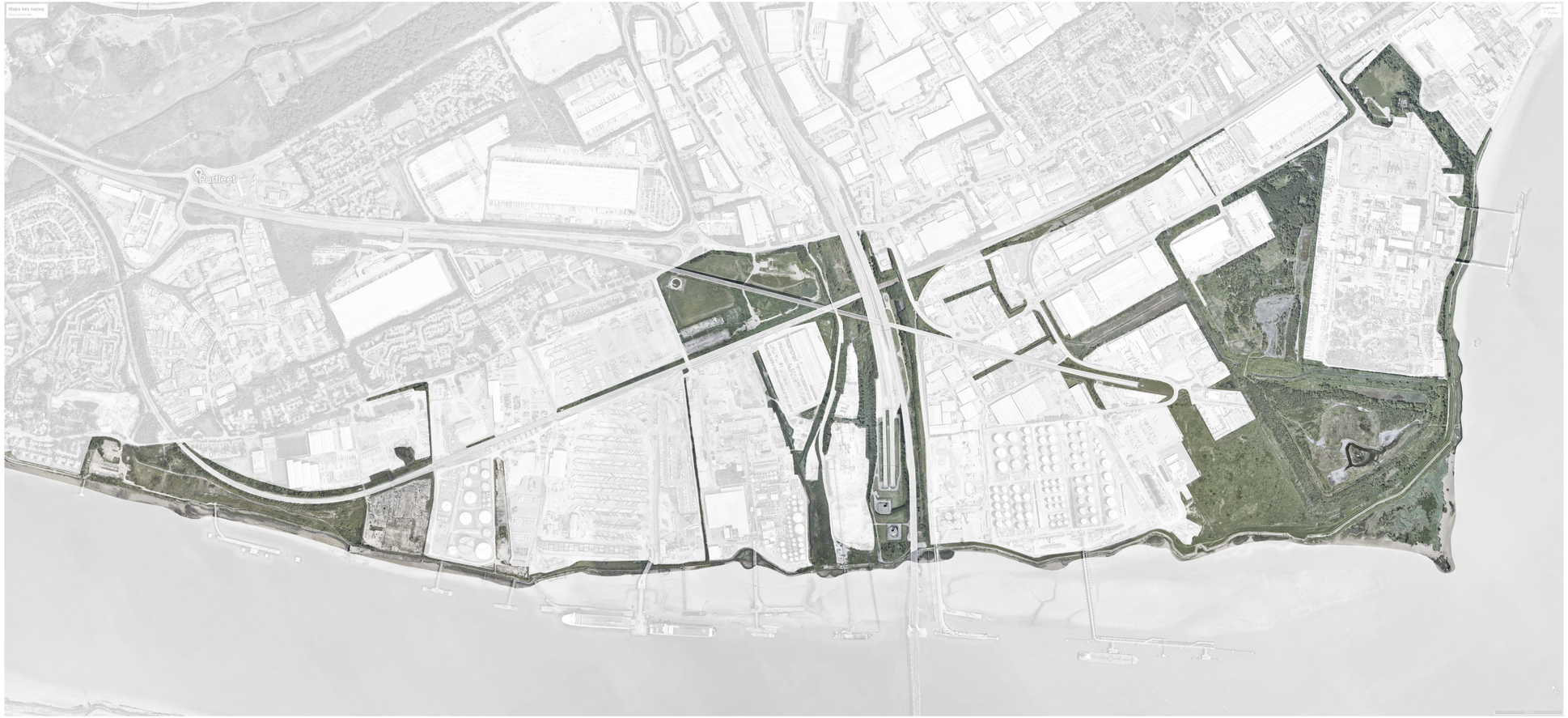

1948-1972

https://maps.nls.uk

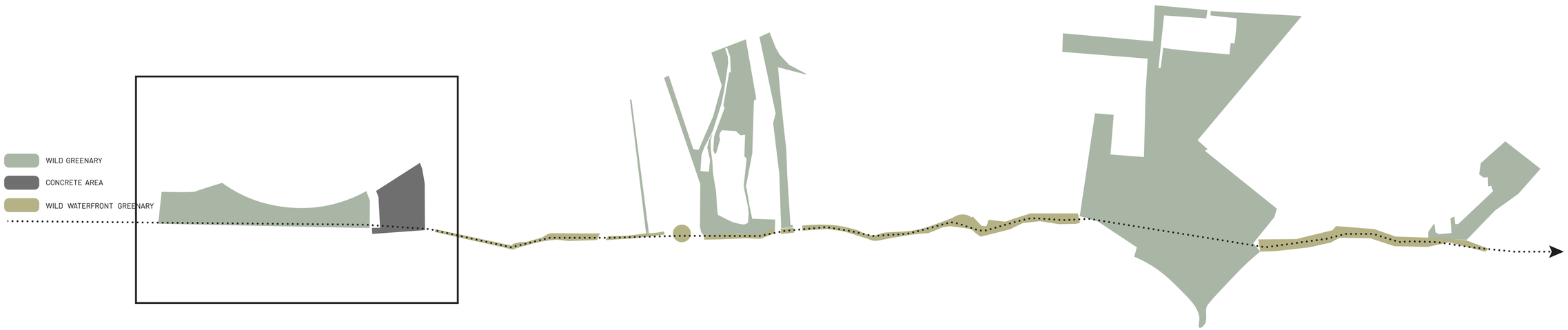



2023

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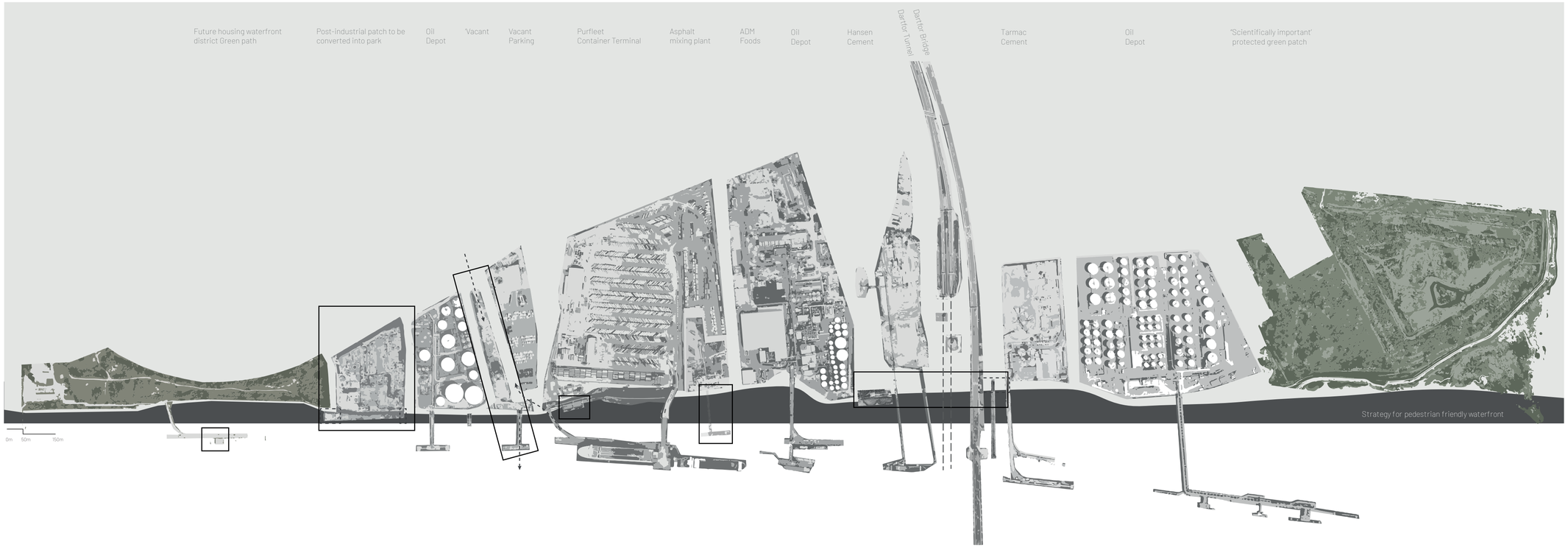



Nature pockets






# Ecological corridor




**Park**
**Reinham Marshes**

***Control house**

Considering the future development for ferry transport the small control space/waiting area could be added to the pier.

*Fostering greener logistic peripheries.*
*Connecting people*
*Excrescence*

**'Post industrial' Park**

Post industrial land park design with 4th nature driven design and phytoremediation.

*Designing green spaces with concern to their origin.*
*Grafting*

**River Distribution Center**

Redevelopment of land for light freight sorting facility(Parcel hub). With possility to host other functions. Pier reactivation.

*Fostering greener logistic peripheries. New axis of transmission.*
*Prosthesis*

**Skeleton**

Possible redesign of the firm structure for interesting observation space and work with the embankment.

*Access to water, different quality spaces.*

*Embodyment*

**Bio pier**

Foster plants and nature grow with use of derelicting structures.

*Fostering nature regrowth.*

*Grafting*

**Interface**

Uncovering the green patch and designing a 'stop-by space' and pleasent path to travel in land.

*Access to water, different quality spaces.*

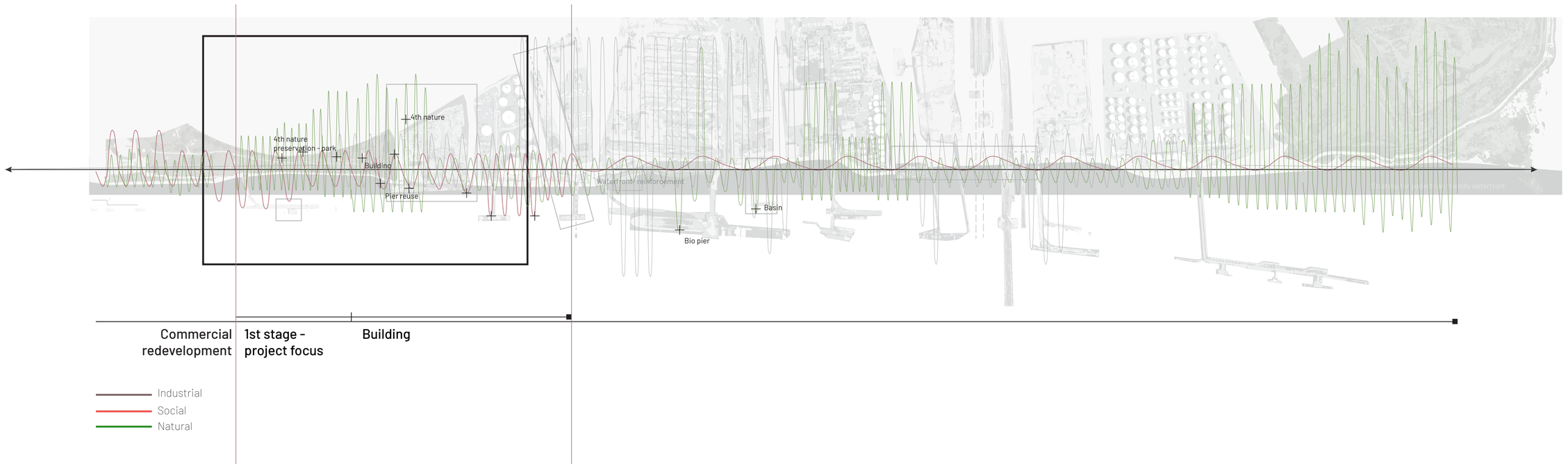
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**Waterfront path strategy**

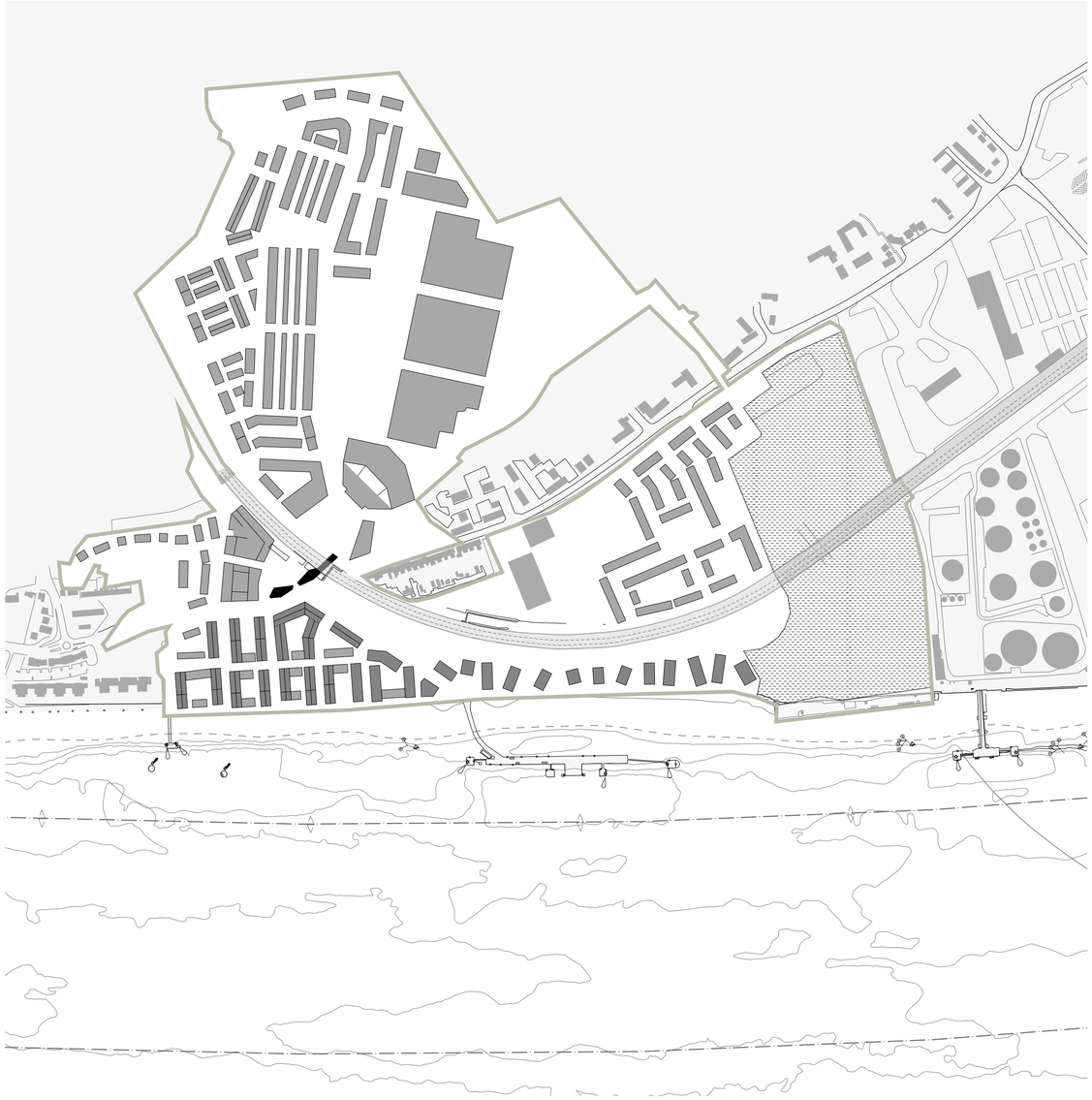
A design strategy: materialisation and principles on the pedestrian friendly waterfront redesign. Solution to some of the difficult spaces.

**Greys**
**Tilbury Port**

# Proposing reactivation




# Potential location

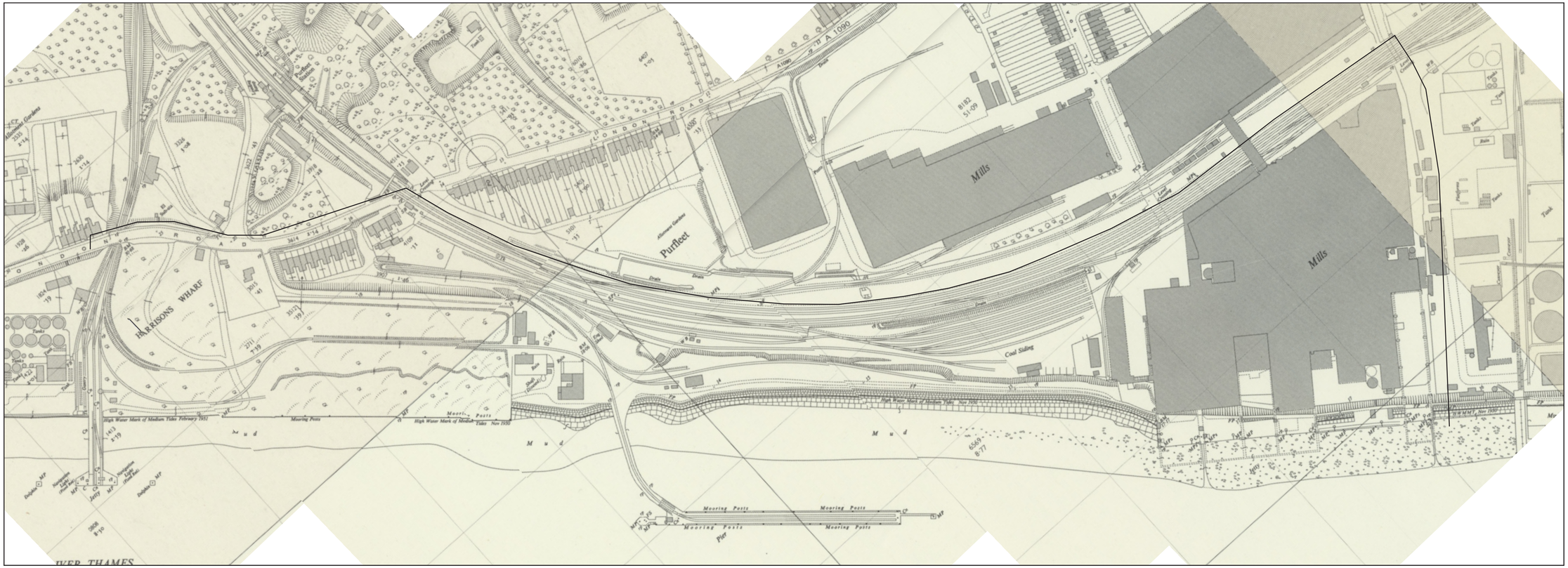


Site plan - developers proposition



Site plan - alternative

# The site transformation



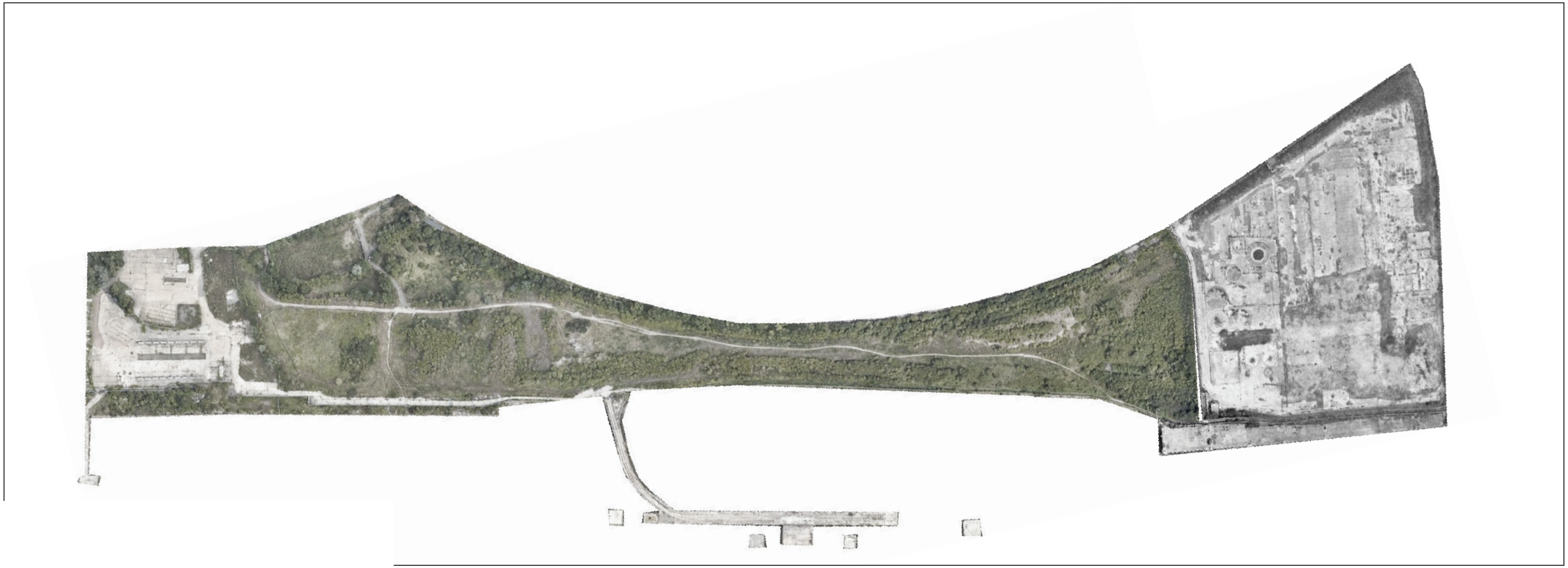

1972

https://maps.nls.uk



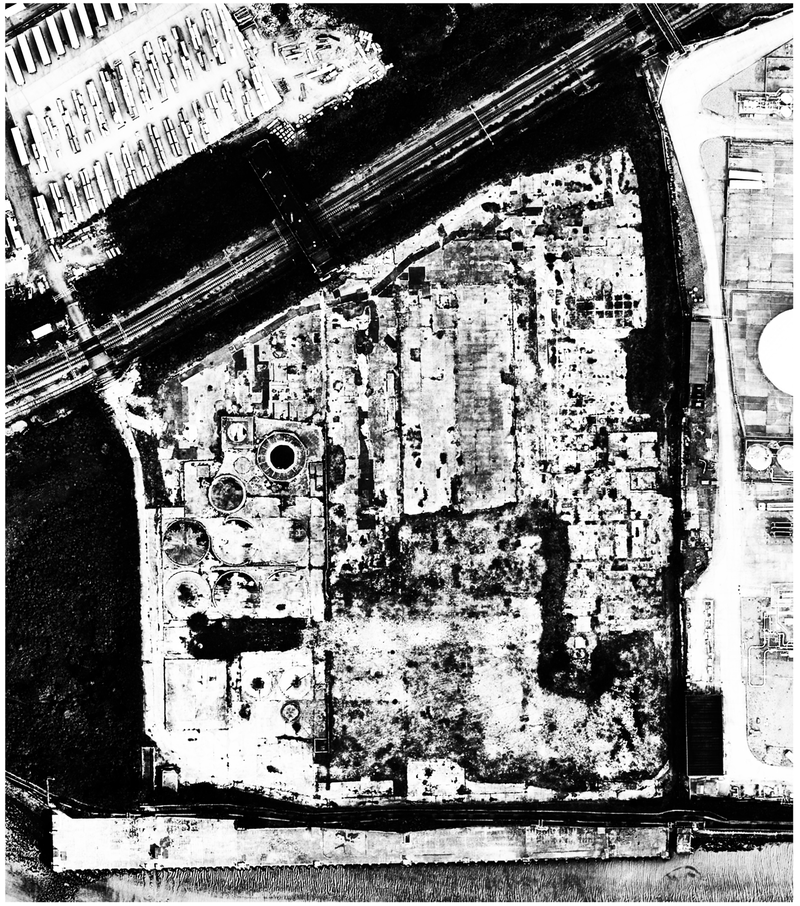

1972

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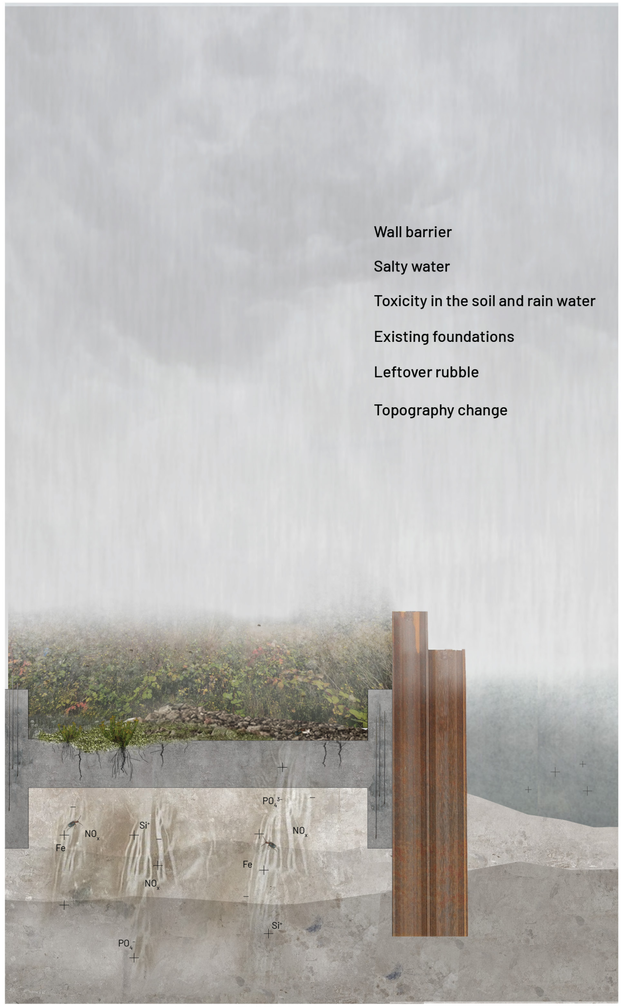




2023

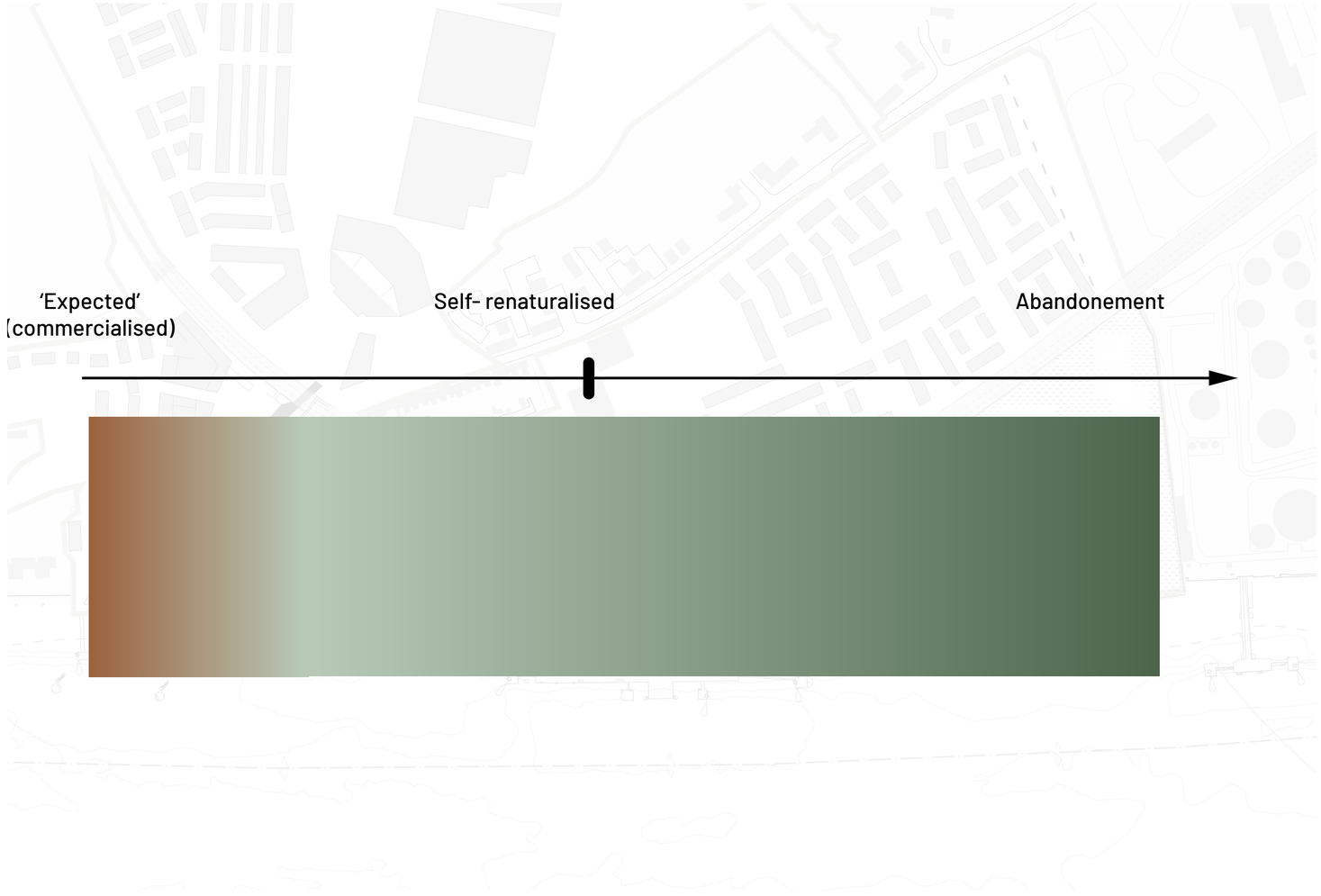


Traces and scars

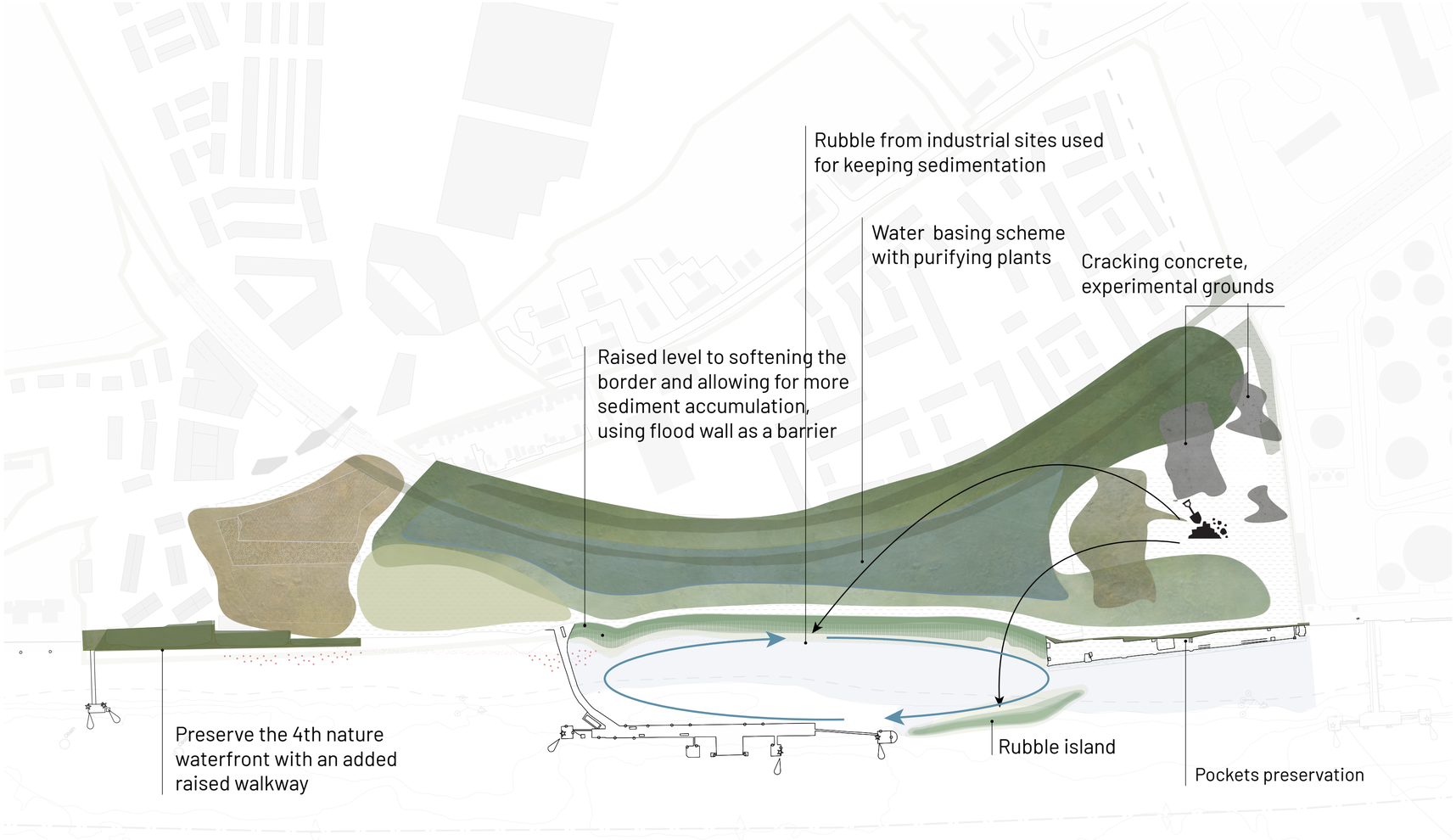



# Seeing the unseen

# Landscape strategy



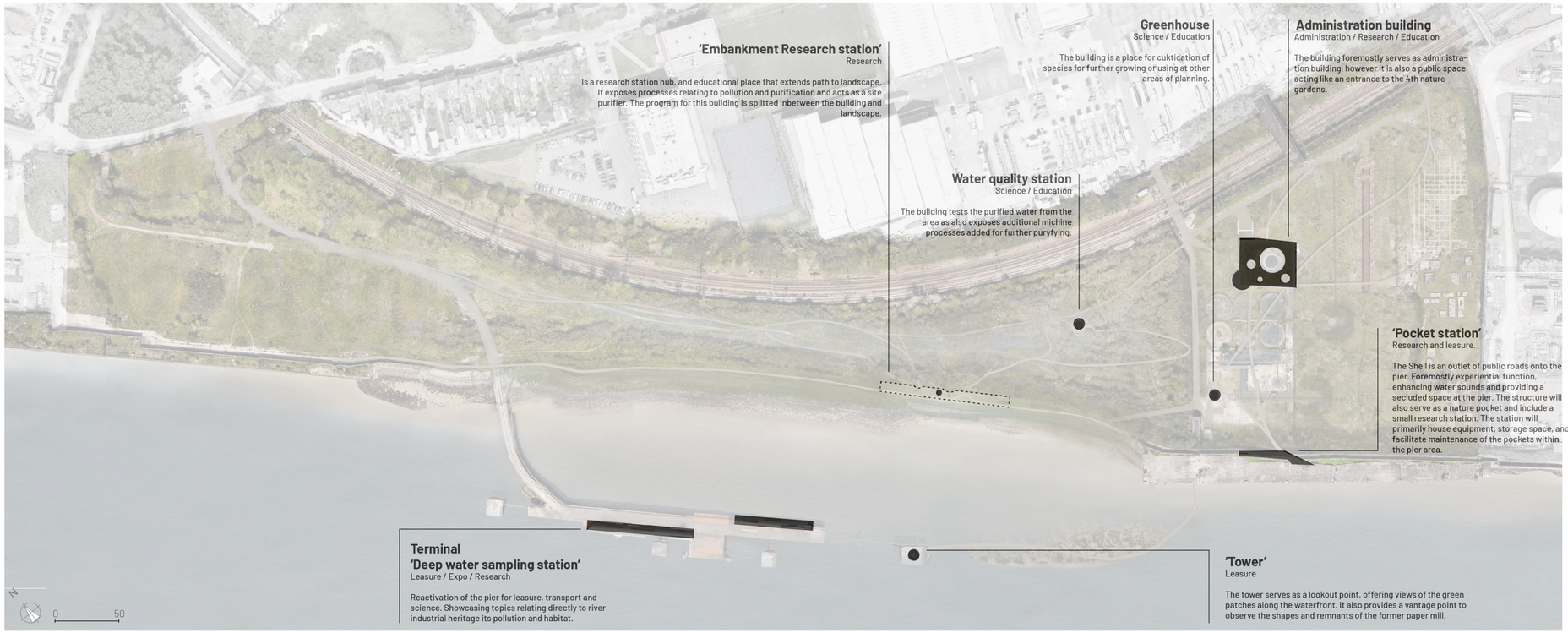

Conceptual approach to landscape




# Intervening and observing




Site plan


'Embankment Research station'
Research
Is a research station hub, and educational place that extends path to landscape. It exposes processes relating to pollution and purification and acts as a site purifier. The program for this building is splitted inbetween the building and landscape.
Greenhouse
Science / Education
The building is a place for cuktication of species for further growing or using at other areas of planning.
Administration building
Administration / Research / Education
The building foremostly serves as administration building, however it is also a public space acting like an entrance to the 4th nature gardens.
Water quality station
Science / Education
The building tests the purified water from the area as also exposes additional michine processes added for further puryfying.
'Pocket station'
Research and leasure.
The Shell is an outlet of public roads onto the pier. Foremostly experiential function, enhancing water sounds and providing a secluded space at the pier. The structure will also serve as a nature pocket and include a small research station. The station will primarily house equipment, storage space, and facilitate maintenance of the pockets within the pier area.
Terminal
'Deep water sampling station'
Leasure / Expo / Research
Reactivation of the pier for leasure, transport and science. Showcasing topics relating directly to river industrial heritage its pollution and habitat.
'Tower'
Leasure
The tower serves as a lookout point, offering views of the green patches along the waterfront. It also provides a vantage point to observe the shapes and remnants of the former paper mill.
N
0
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Site plan

## Social and infrastructural program

### Transport

- Enhancing access to Purfleet and London
- Reactivation the pier
- Small marina

## Ecological program

### Agency

- Overlooking
- Planning
- Reacting to developments
- Cooperation between organisations

### Cultivation and research

- Nursery - local species
- Observing learning and acting
- Preservation
  - Eco area - Park nursery and „redevelopment”
  - Green corridor at waterfronts
  - Waterfronts - shallow habitat
  - Island
- Consequent incorporation of greenary in the program
  - Brownfield sites
  - Post industrial elements
- Rain water management
- Waste management

### Social program

- Lecture sessions
- Social activities in the area
- Gardening sessions (experimental - uncovering)
- Cleaning the riverfront
- Program on the piers ‘Bodies of water’

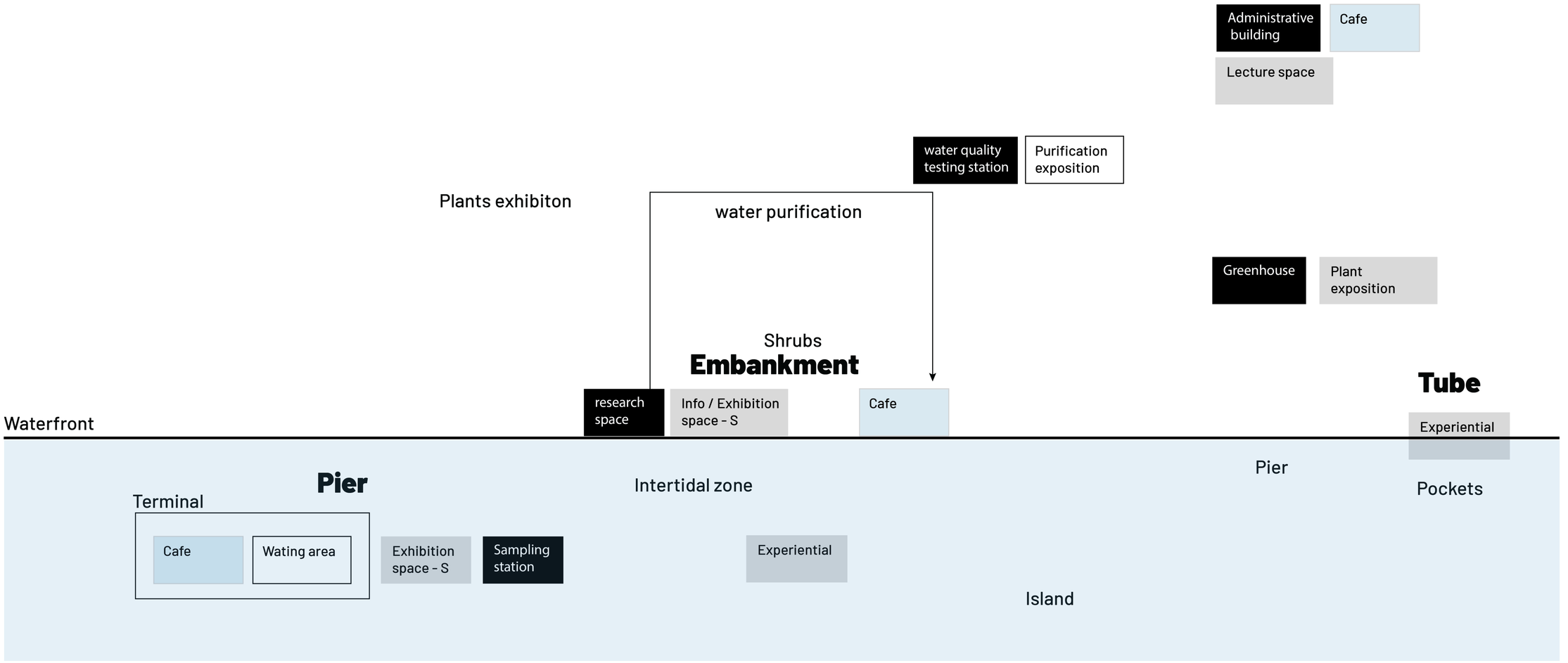
### Education on ecology and industrial infulece

- Thurrock industries and its ecologies
- Educating on local fauna and flora
- Advisory
  - Landscape - designing
  - biodiversity (for city and citizens)
  - water management and resiliant design
- Exposition of purification processes
- Exposition of plants

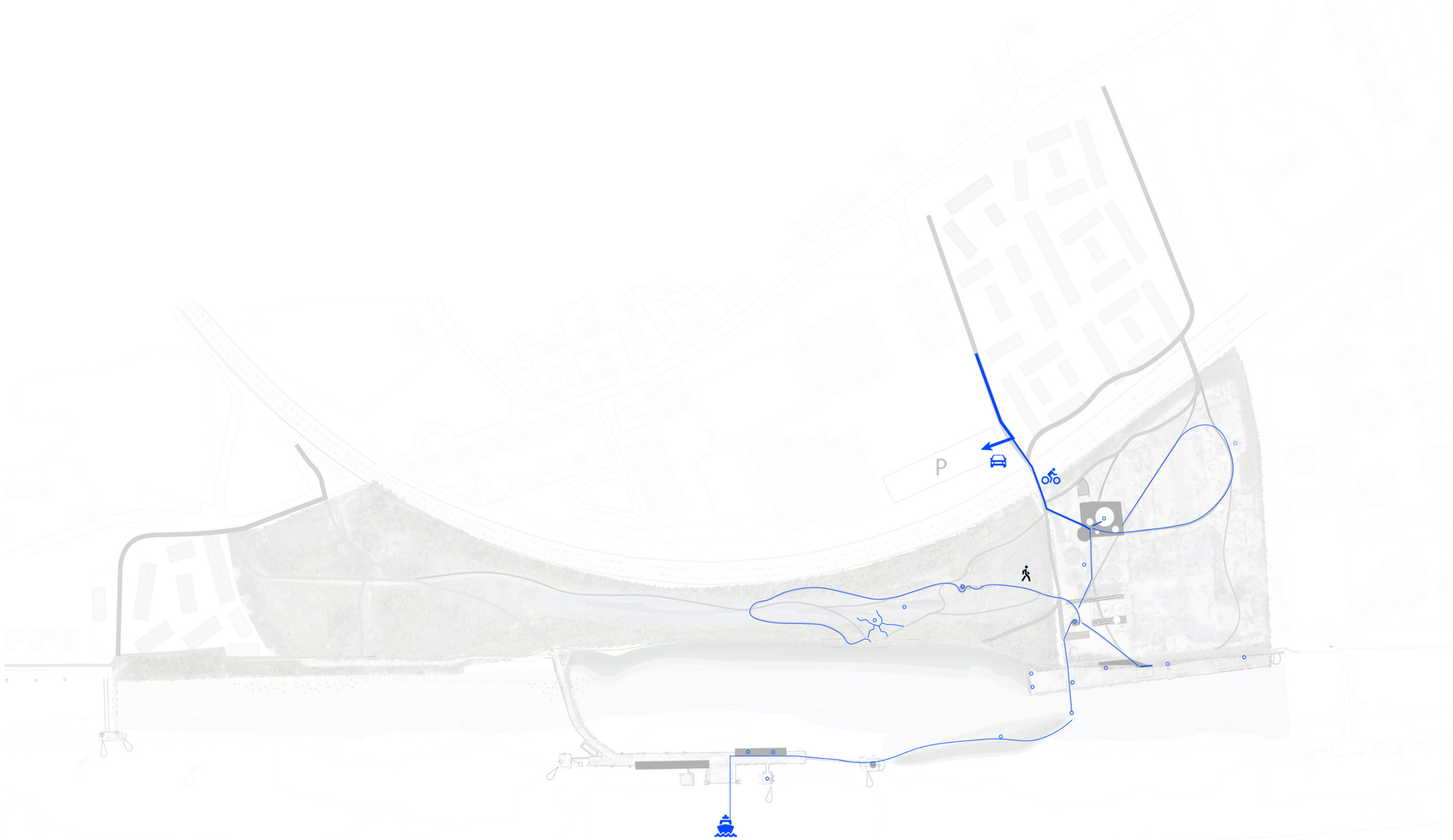
Legend:

- Indoors
- Outdoor
- Other piers

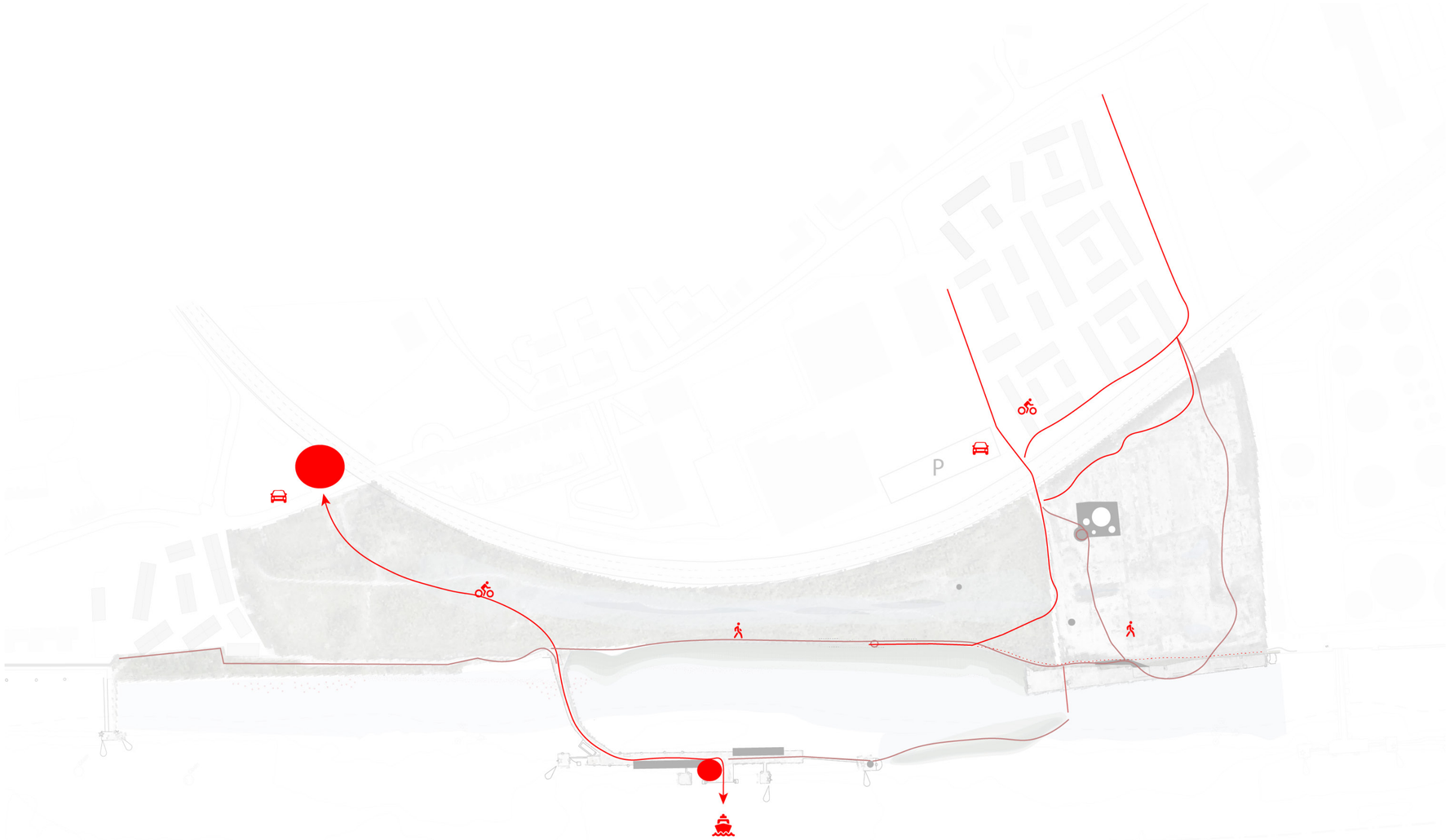
Program



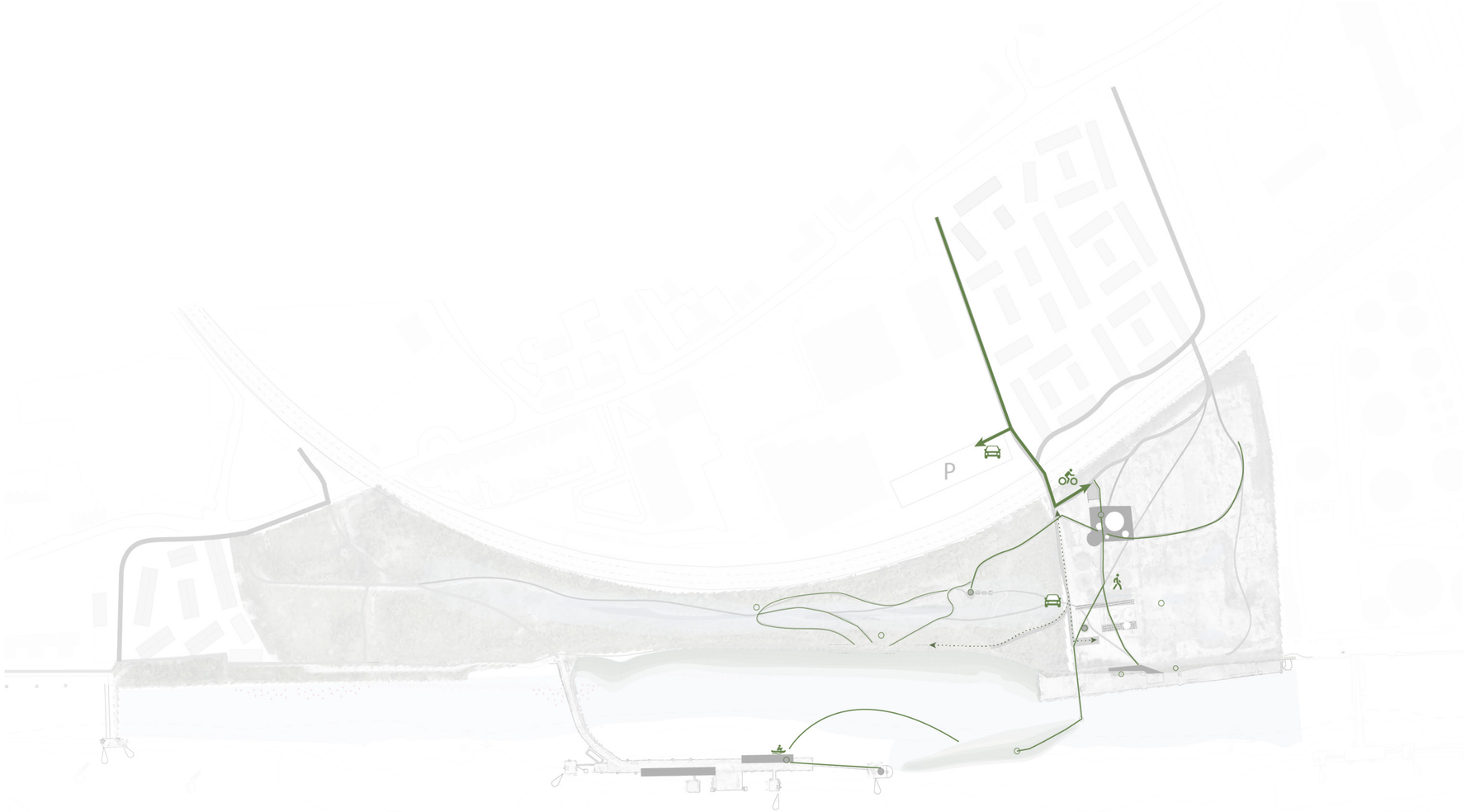

Distributed program




Visitors




Passersby




Researchers

# Buildings materiality and relation to the site

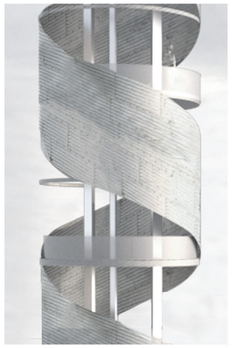


Nox - sweet water salty water pavilion
Anish Kapoor - memory
Endo Shuhei Architect Institute
Son-O-House By NOX/Lars Spuybroek
JamesMorris_Halle

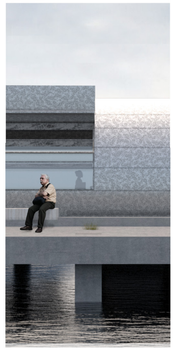
Steel ship construction

Sanaa - pockets of nature and exposing the process

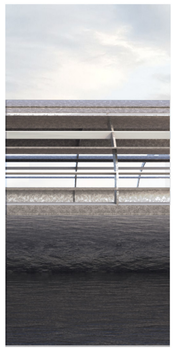
# Inspirations



Tower



Pier terminal



Pier terminal



The Tube



Embankment research station



Water quality testing lab



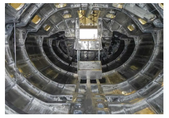
Greenhouse



Administration building

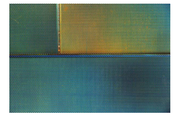




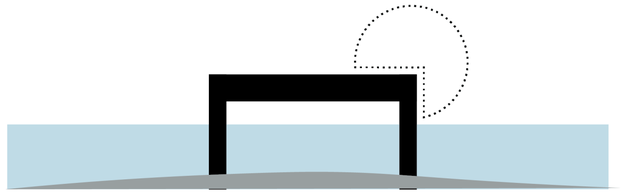




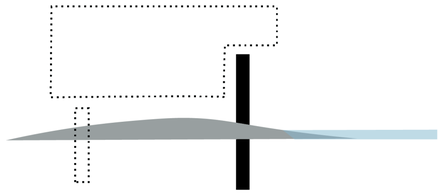




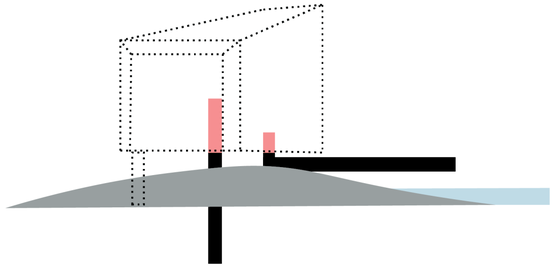




**Pier**

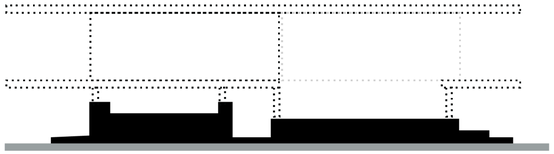


**Flood wall**



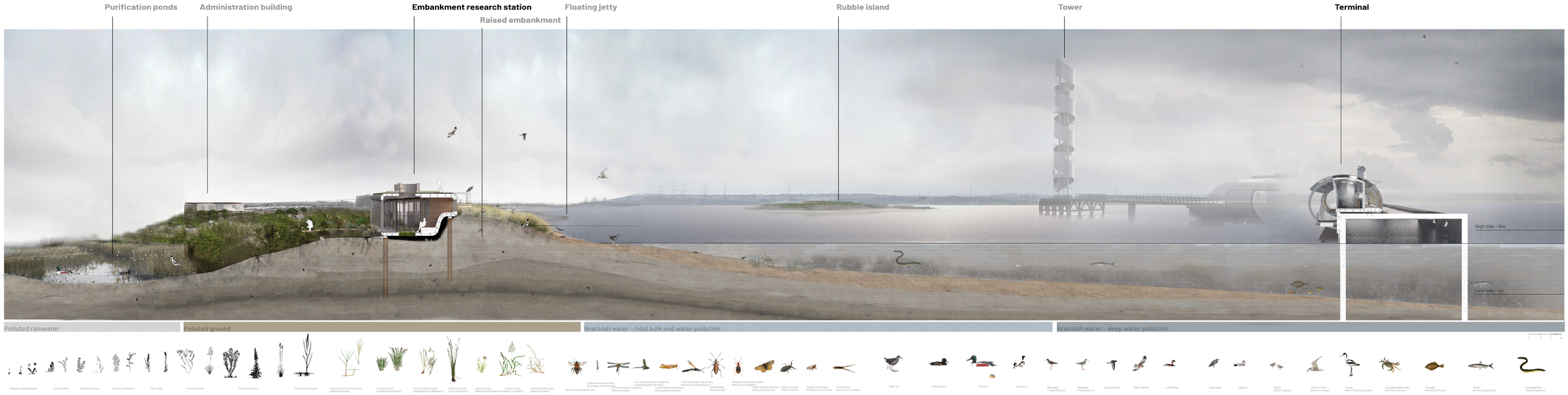
**Embankment with pier**

**Waterfront**



**Foundations**

Attaching




# Site section

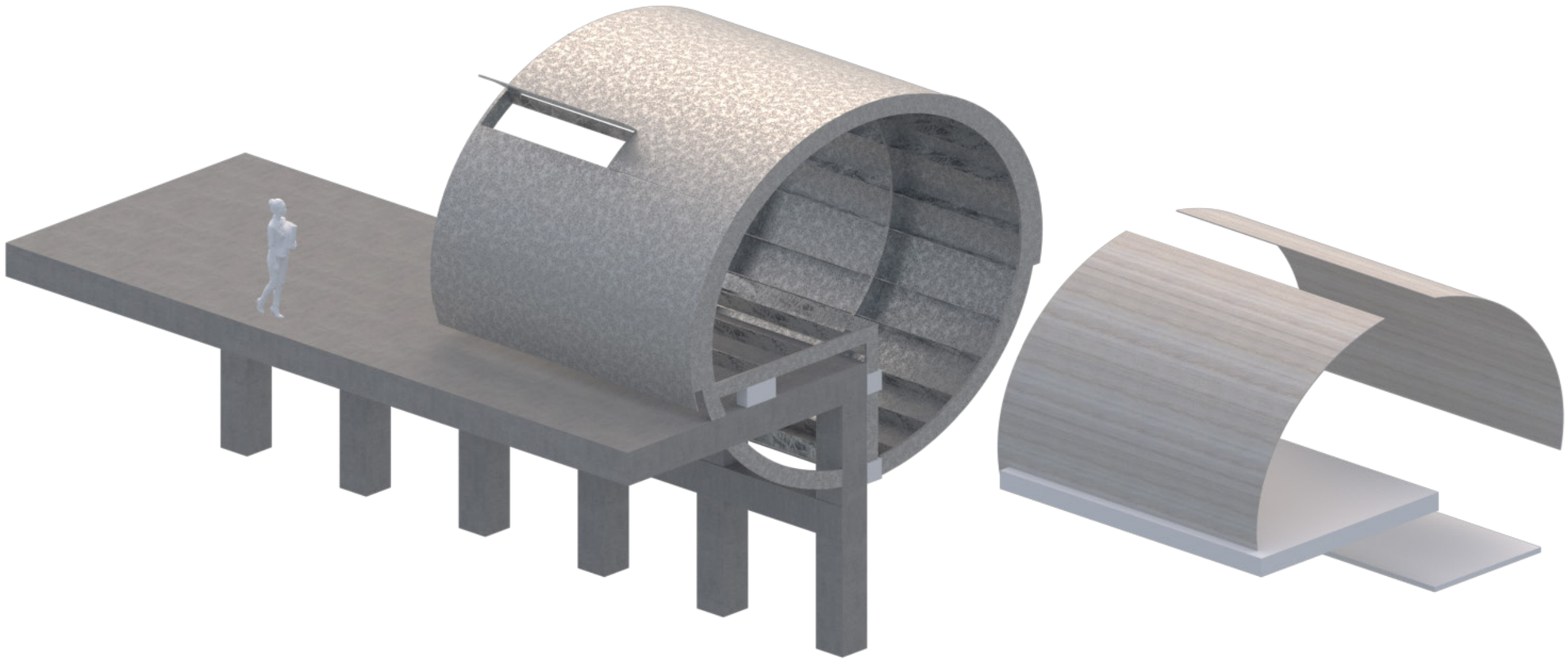
**The pier terminal**

The embankment building

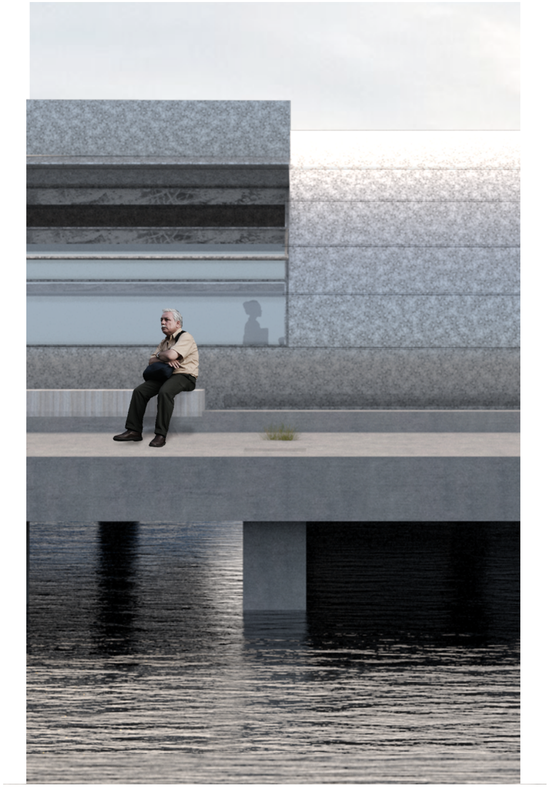

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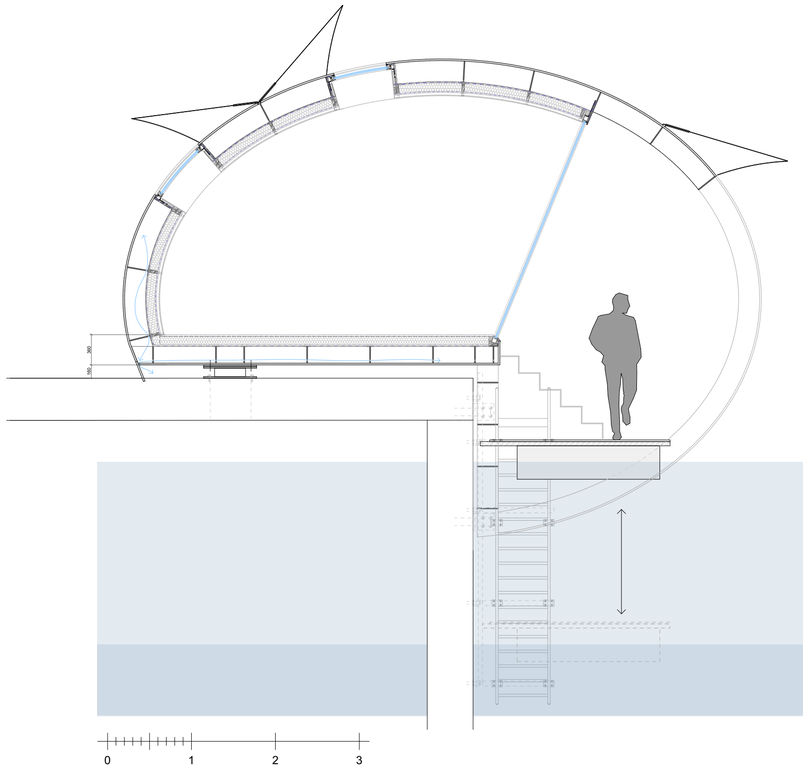






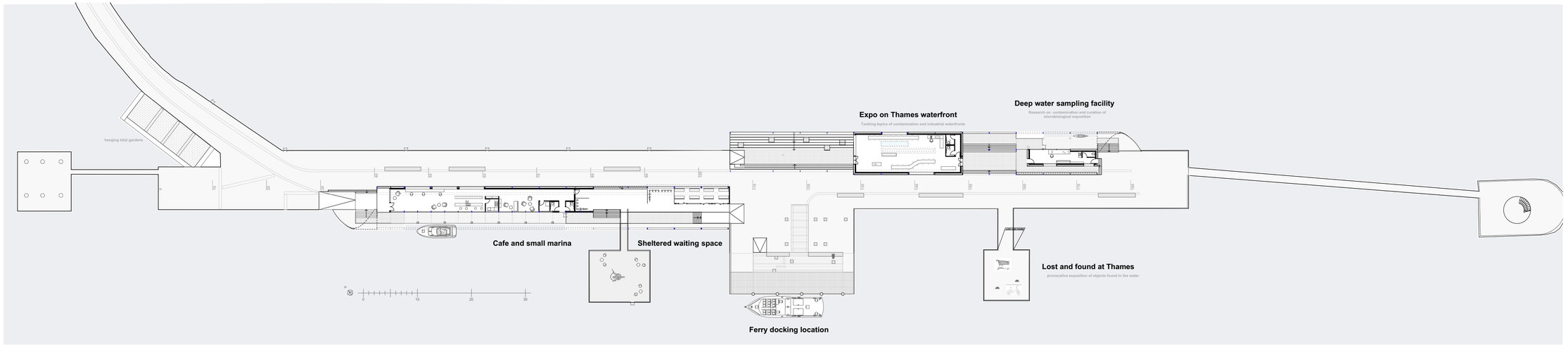
Shell system



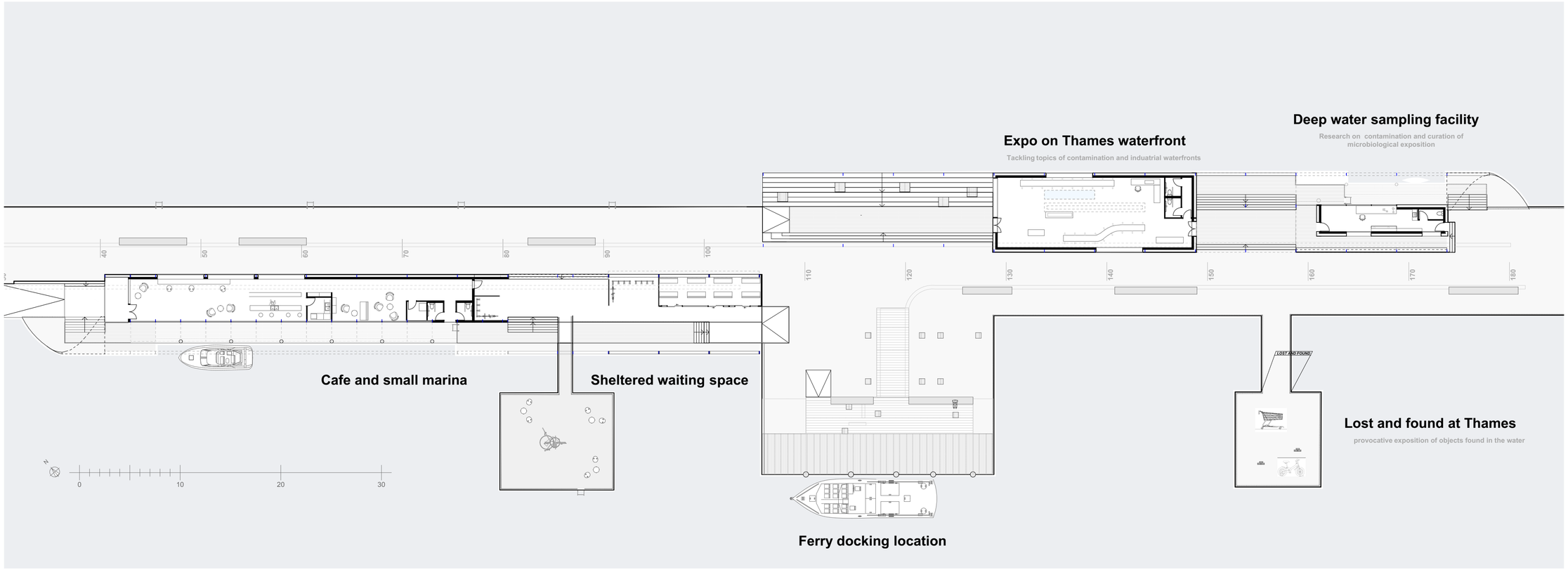




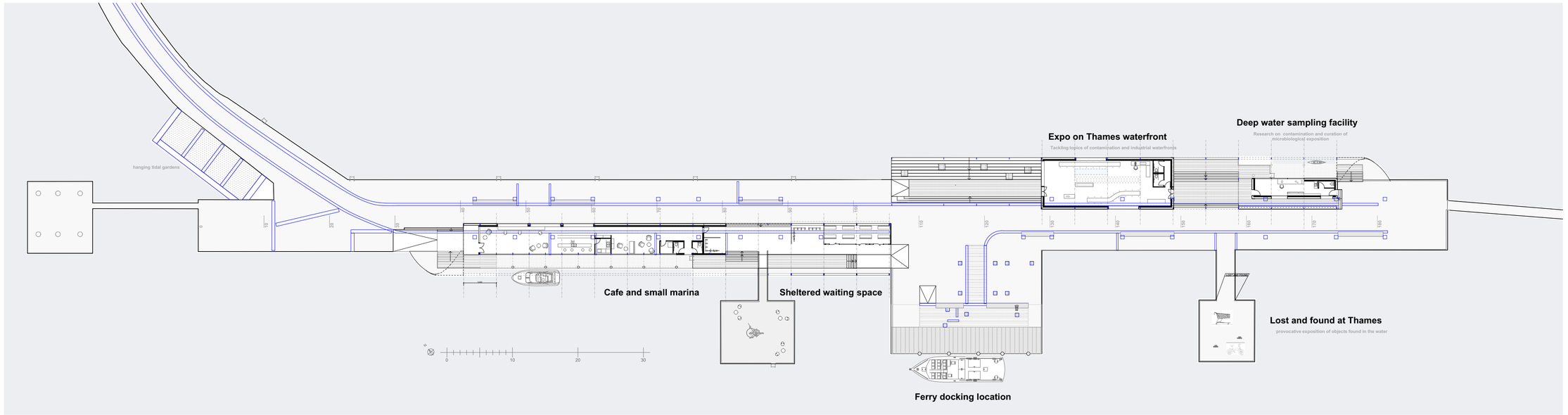

# The pier terminal



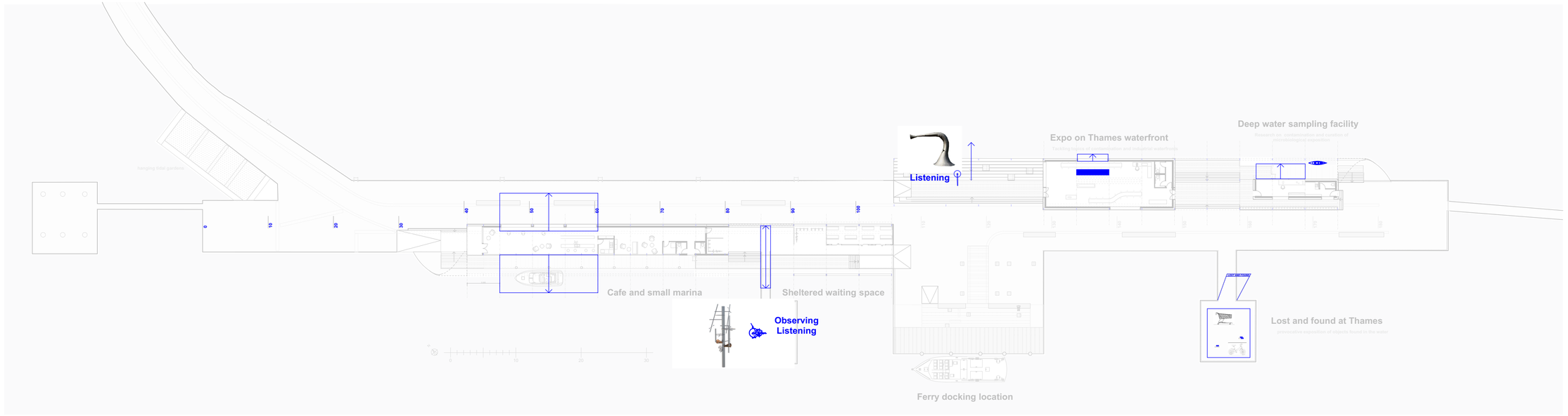

# Terminal - floorplan




# Terminal - floorplan zoomin

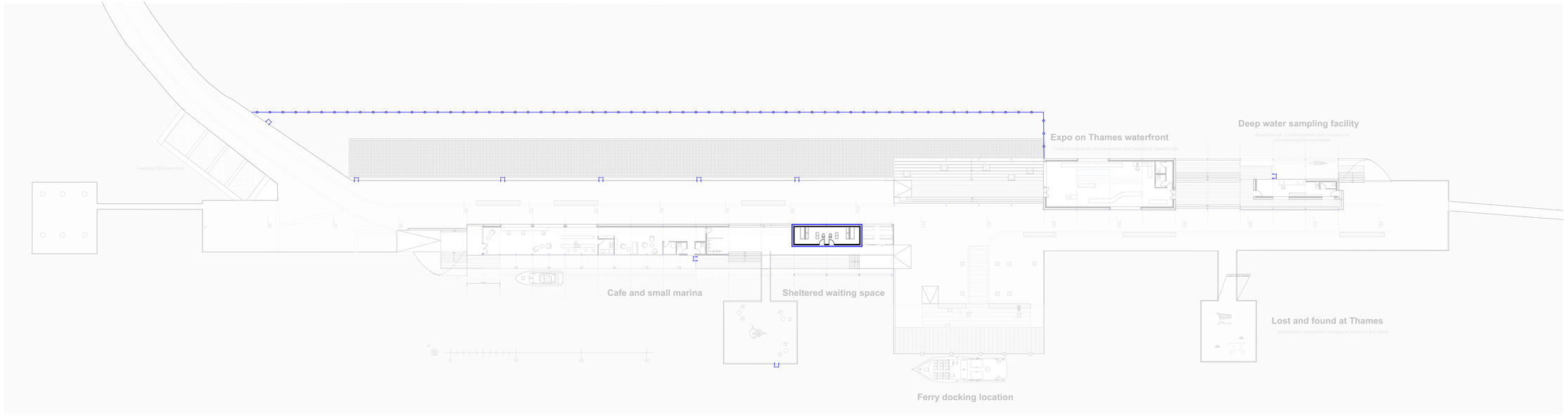



# Uncovering - connecting to industry

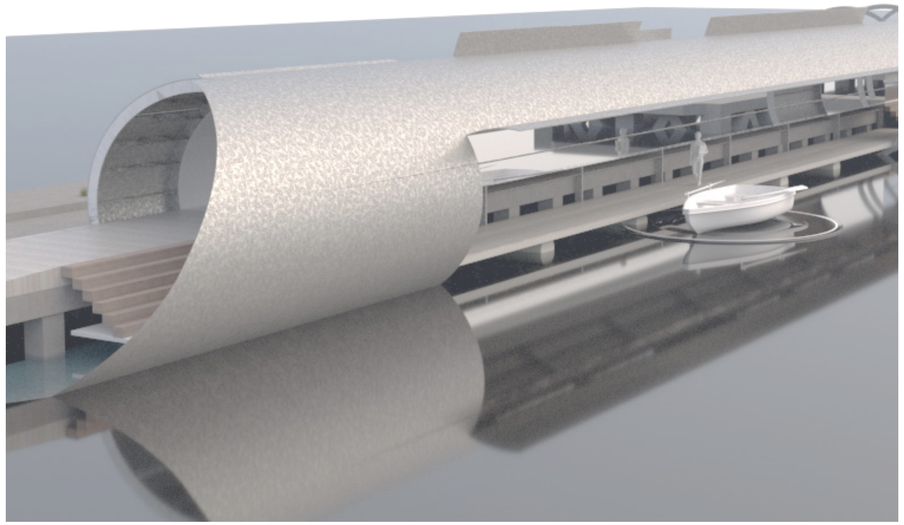


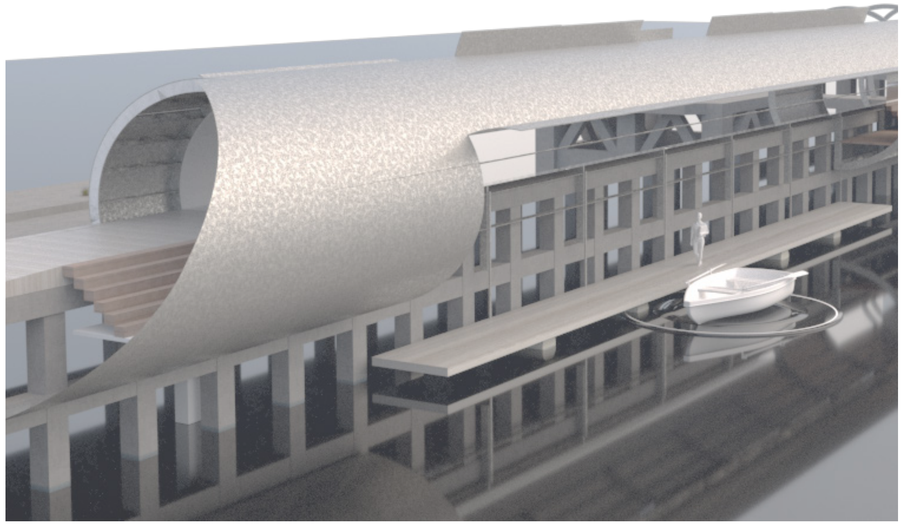

# Connecting to the river


GVB




# Future scenario



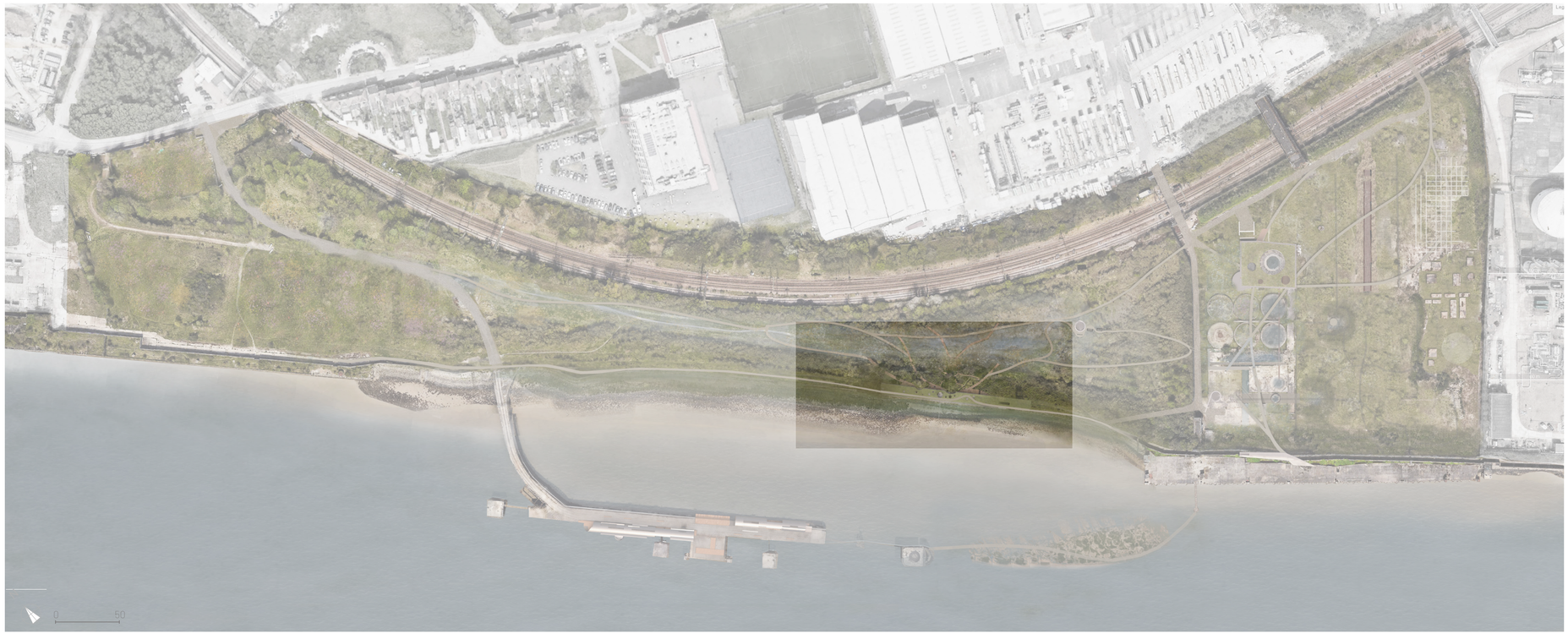


Tidal differences



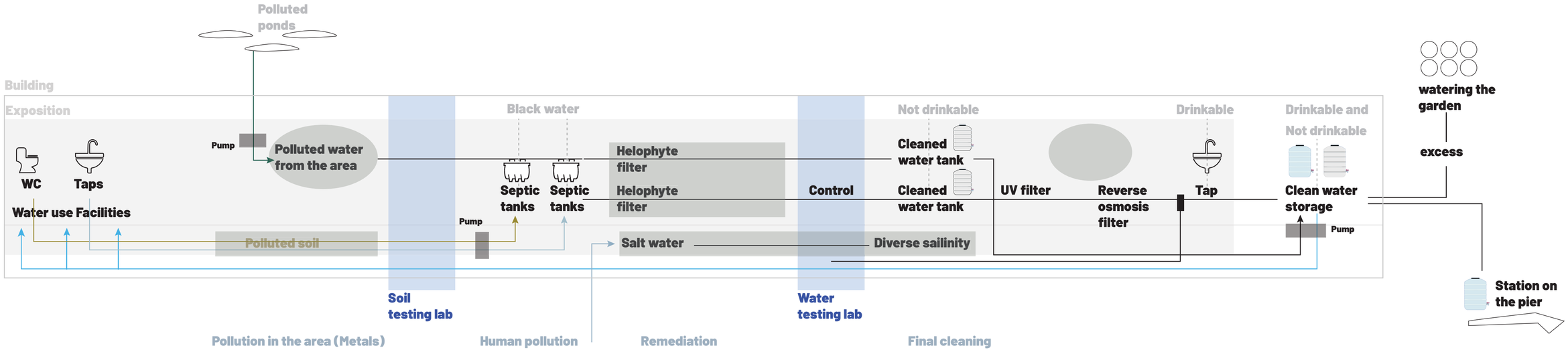
The pier terminal

**The embankment building**

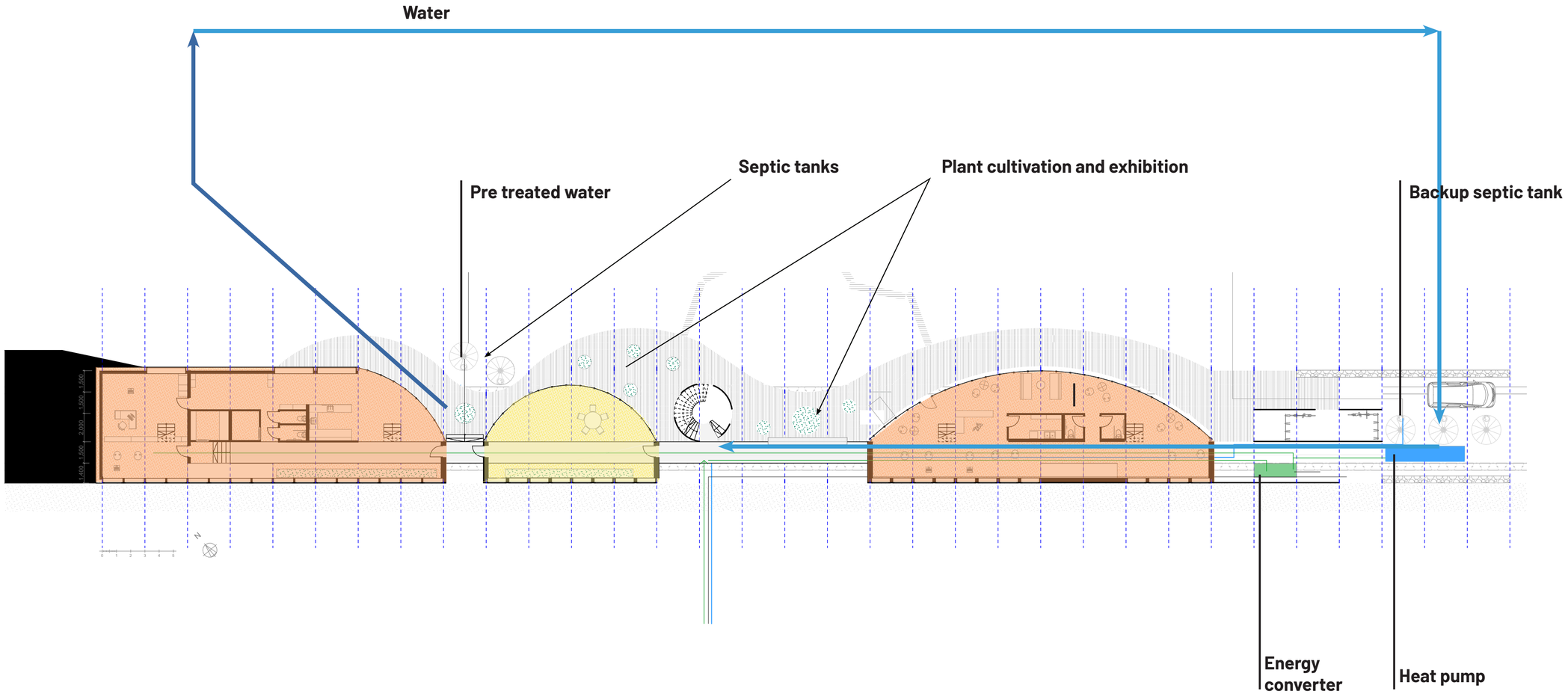

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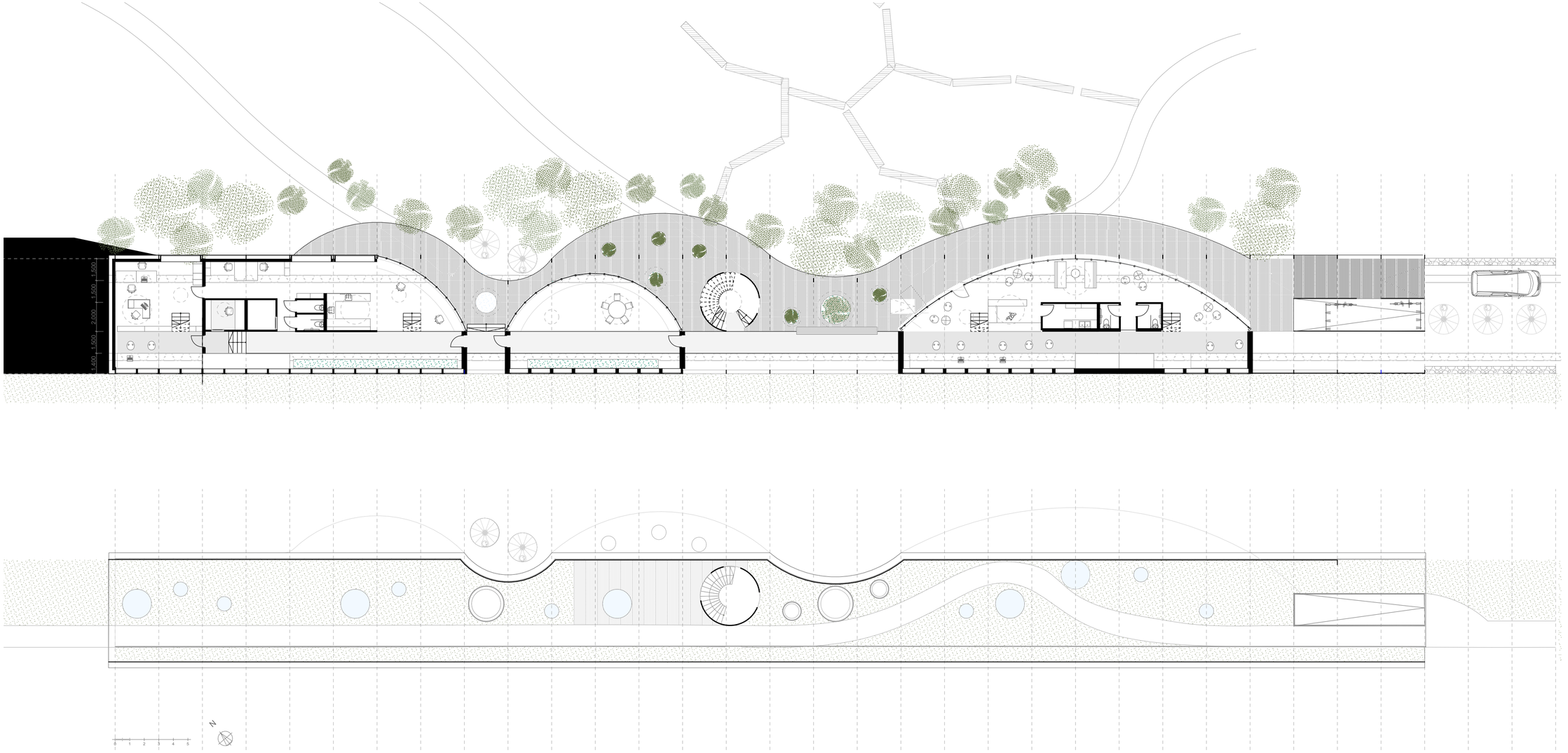
The embankment building



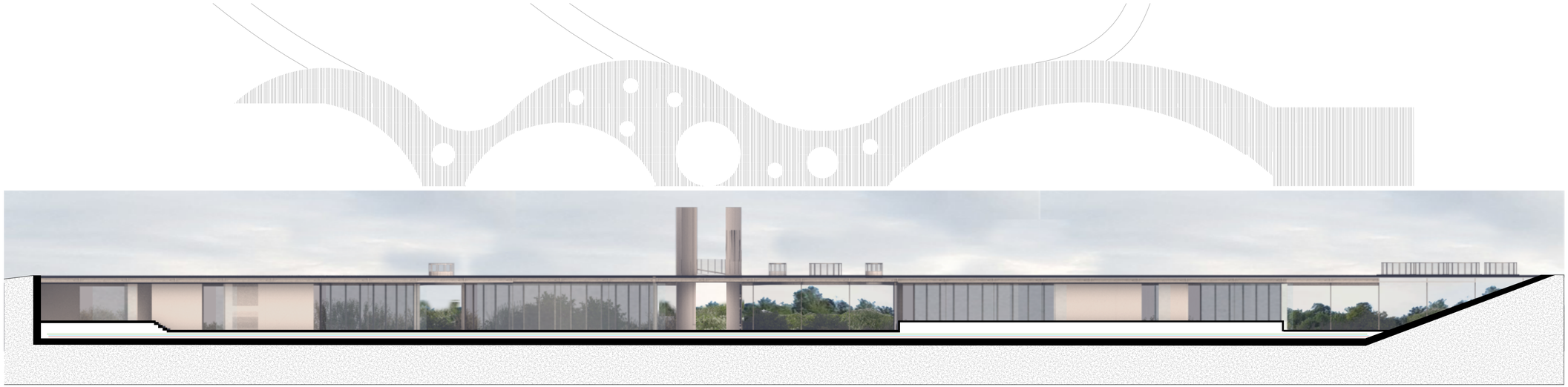

Building for processes




Building processes

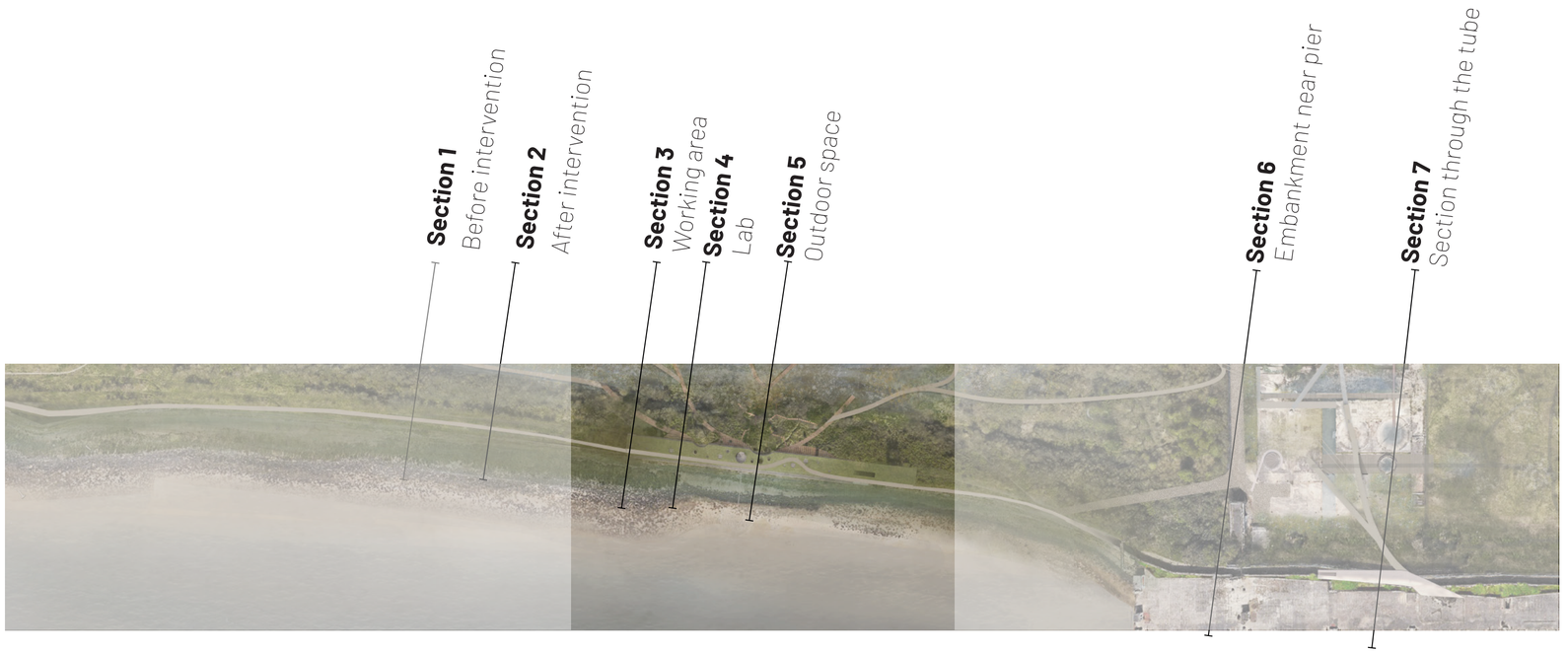


# Floorplans

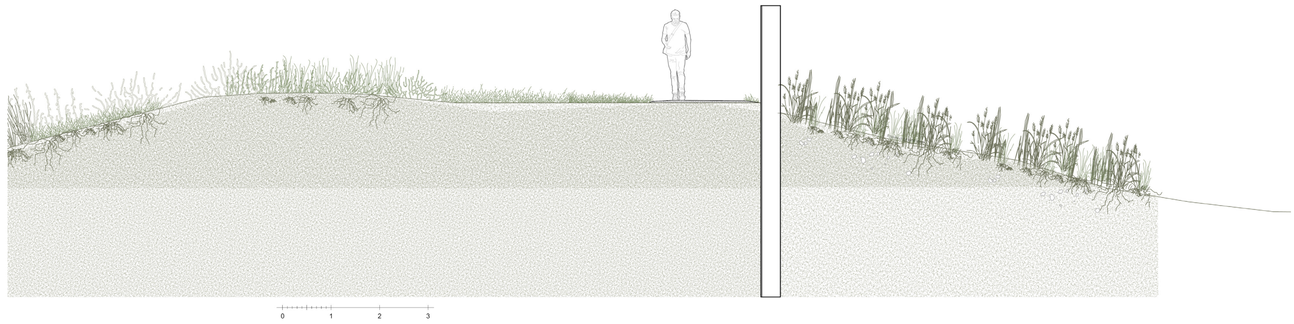


## Indoor - outdoor



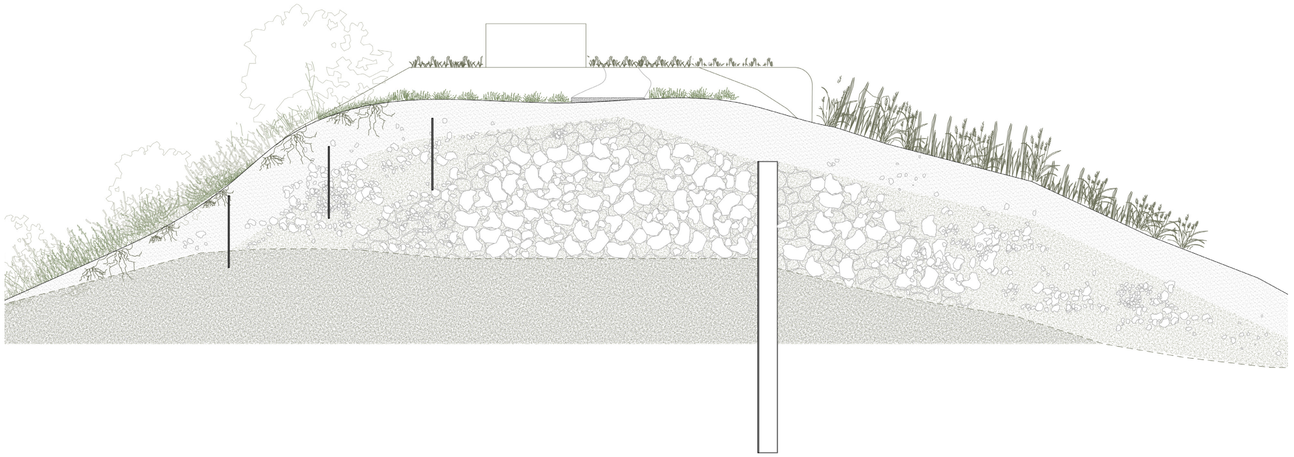



Map with sections



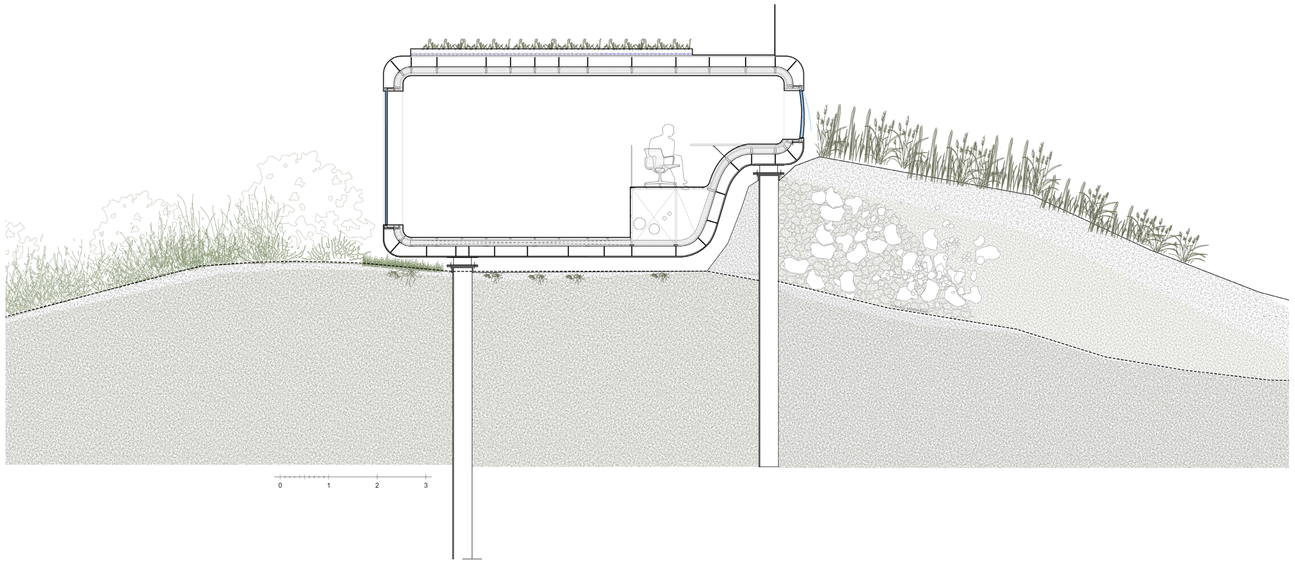

Section 1

# Before intervention



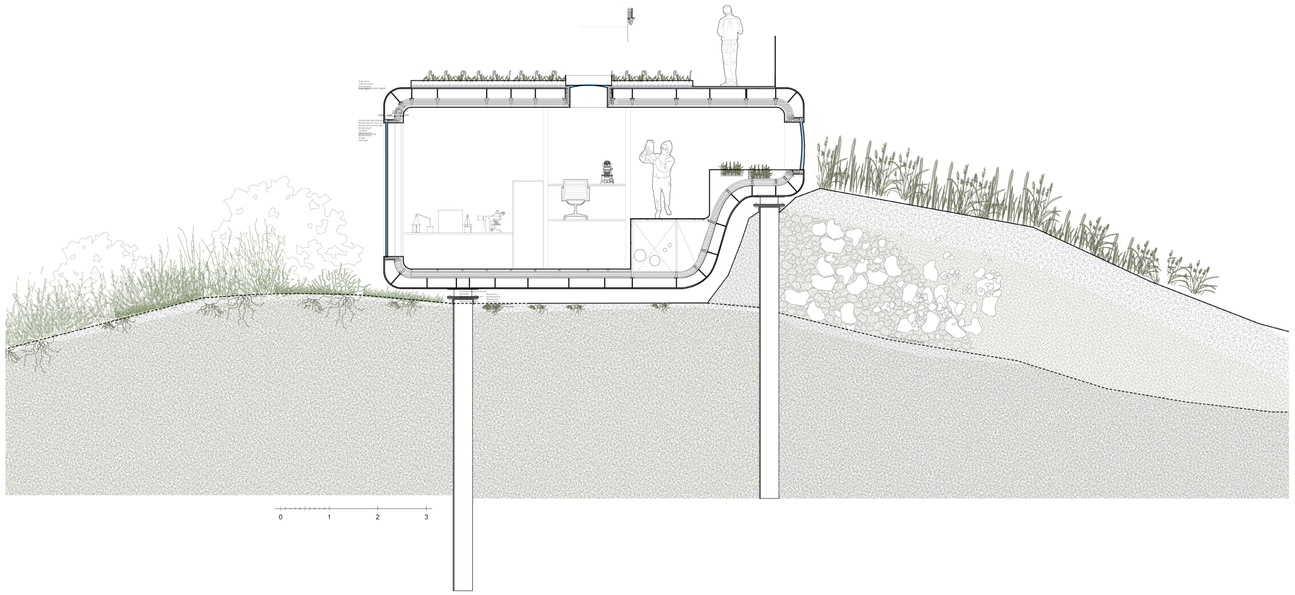
Section 2

# Raising the embankment



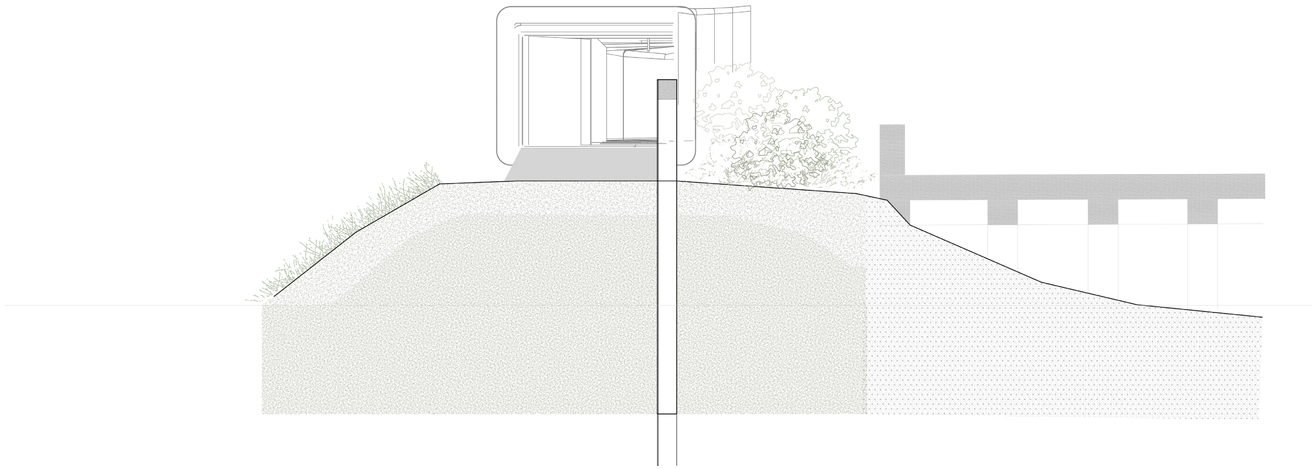

Section 3

# Section through the working area

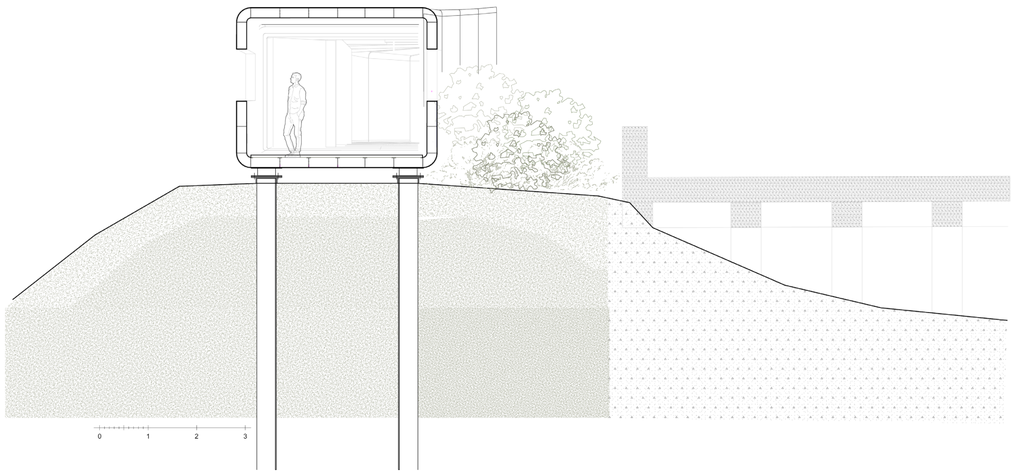



Section 4

# Section through the research station



Section through the working area




Section through the working area



Waterfront view



Inside the tube











Research stations?

**Greenhouse**
Science / Education

The building is a place for cuktication of species for further growing or using at other areas of planning.

**Administration building**
Administration / Research / Education

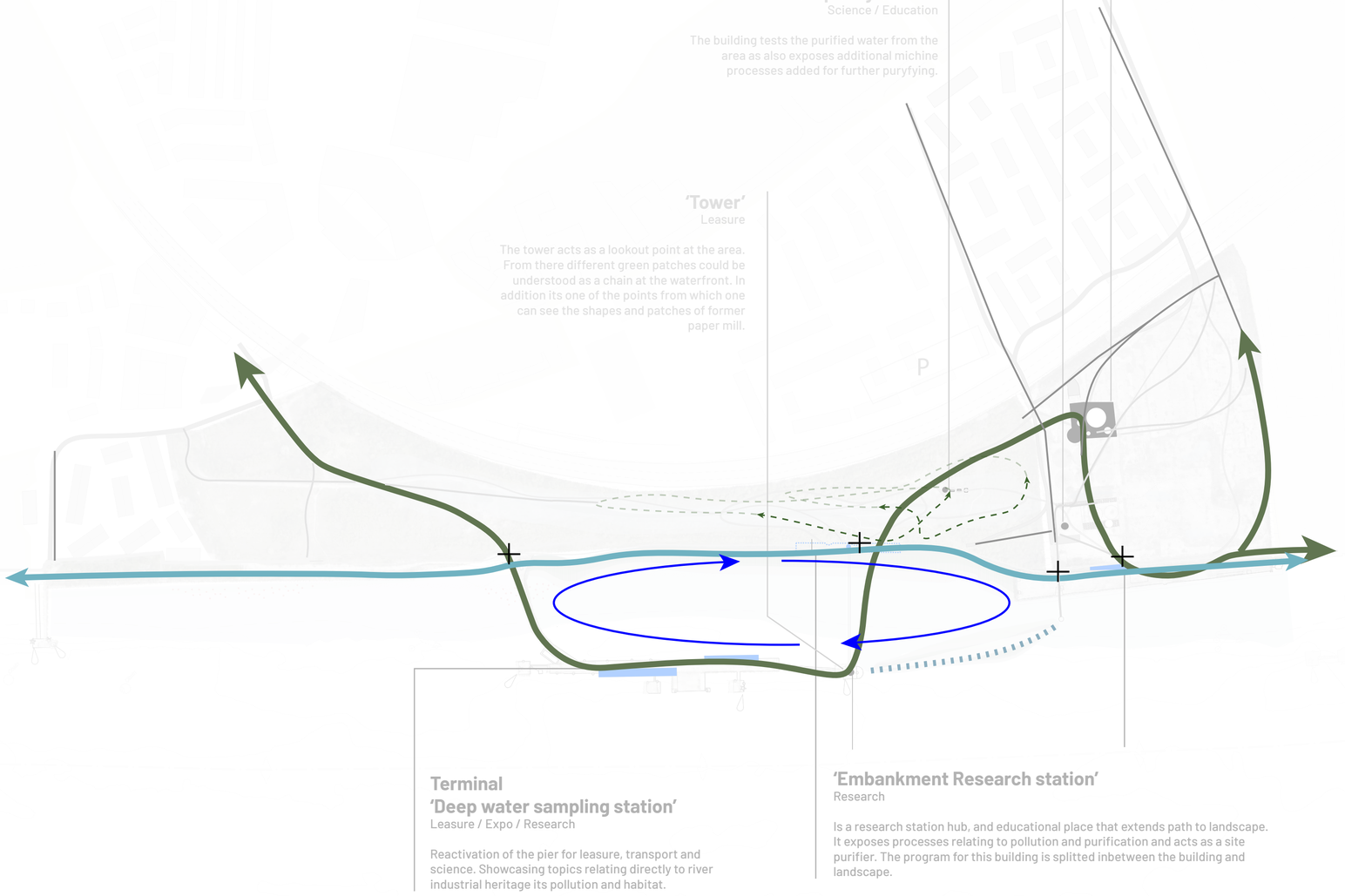
The building foremostly serves as administration building, however it is also a public space acting like an entrance to the 4th nature gardens.

**Water quality station**
Science / Education

The building tests the purified water from the area as also exposes additional michine processes added for further puryfying.

**'Tower'**
Leasure

The tower acts as a lookout point at the area. From there different green patches could be understood as a chain at the waterfront. In addition its one of the points from which one can see the shapes and patches of former paper mill.



**Terminal**
**'Deep water sampling station'**
Leasure / Expo / Research

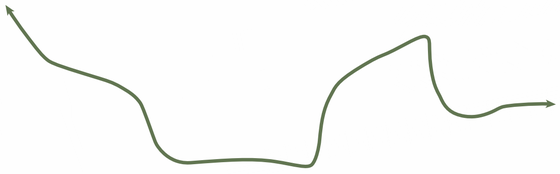
Reactivation of the pier for leasure, transport and science. Showcasing topics relating directly to river industrial heritage its pollution and habitat.

**'Embankment Research station'**
Research

Is a research station hub, and educational place that extends path to landscape. It exposes processes relating to pollution and purification and acts as a site purifier. The program for this building is splitted inbetween the building and landscape.



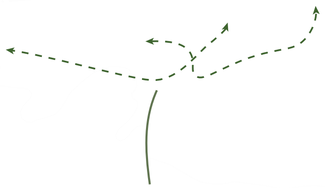
**Circulation around the tidal area**



**Amplitude**

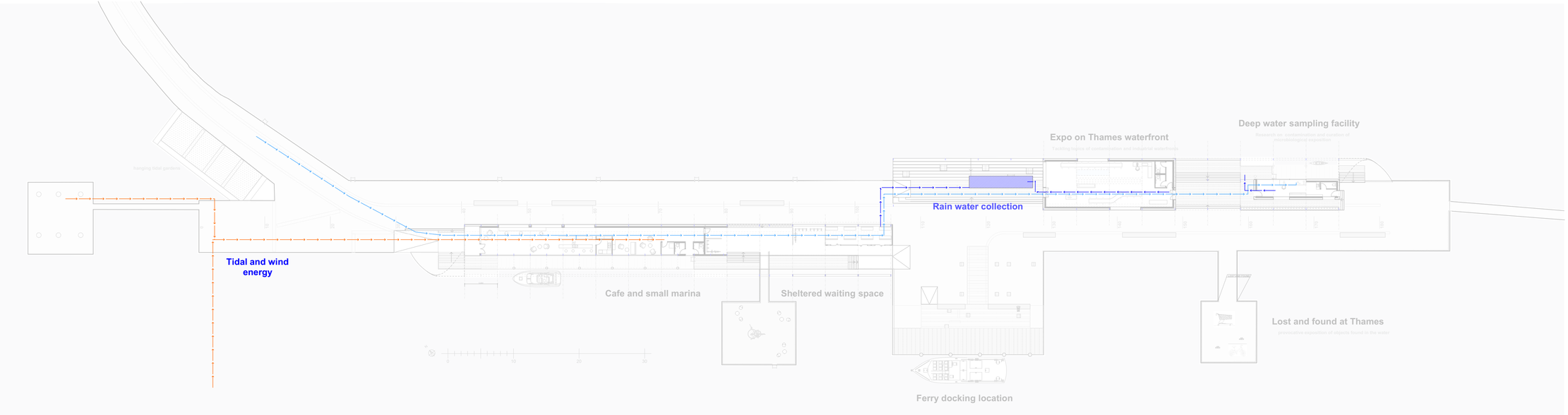


**Waterfront path**

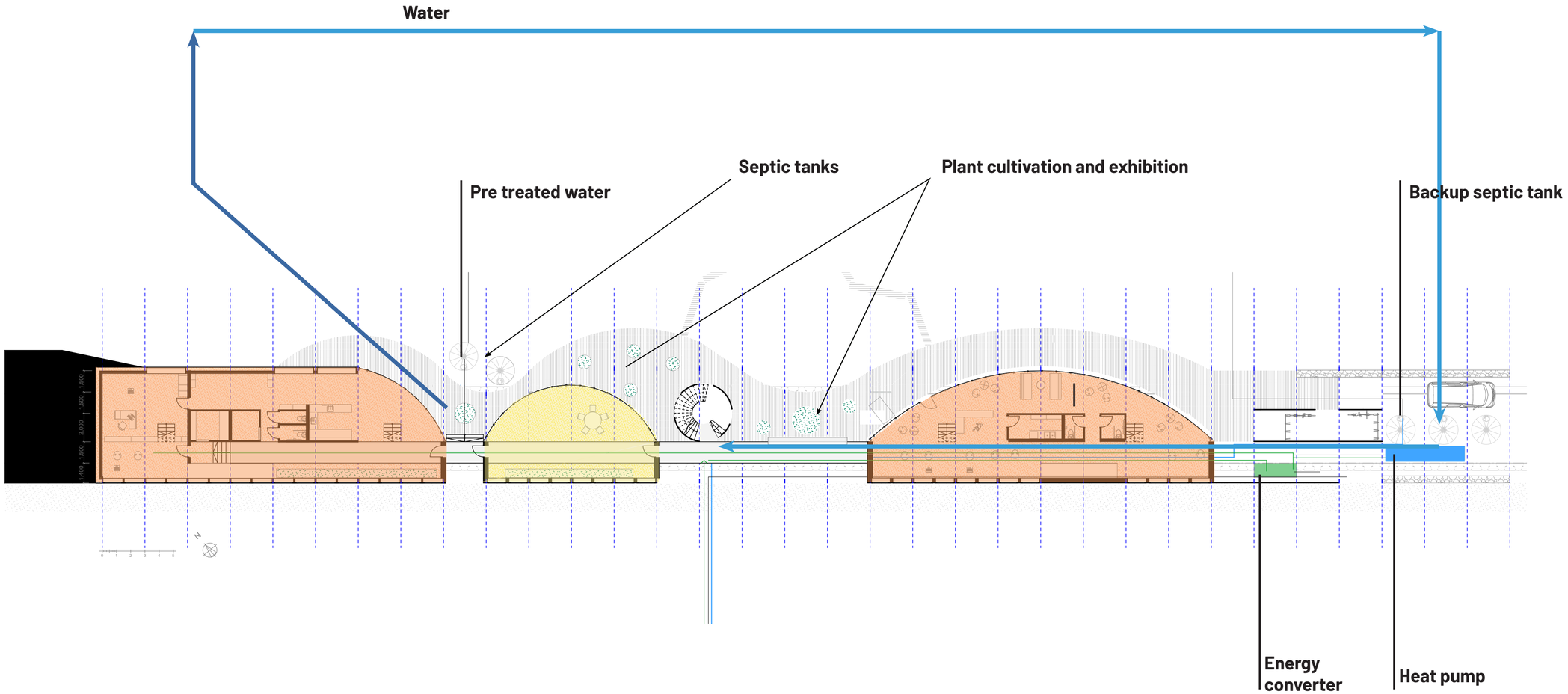


**Tentacles in land**

# Conceptual lines




# Infrastructure




Building processes