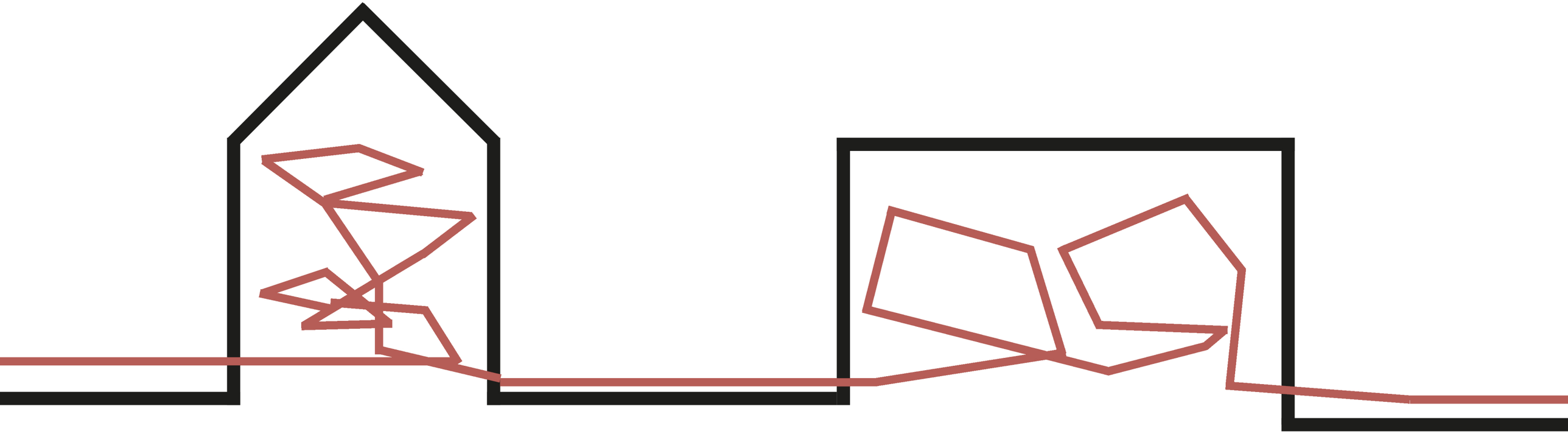
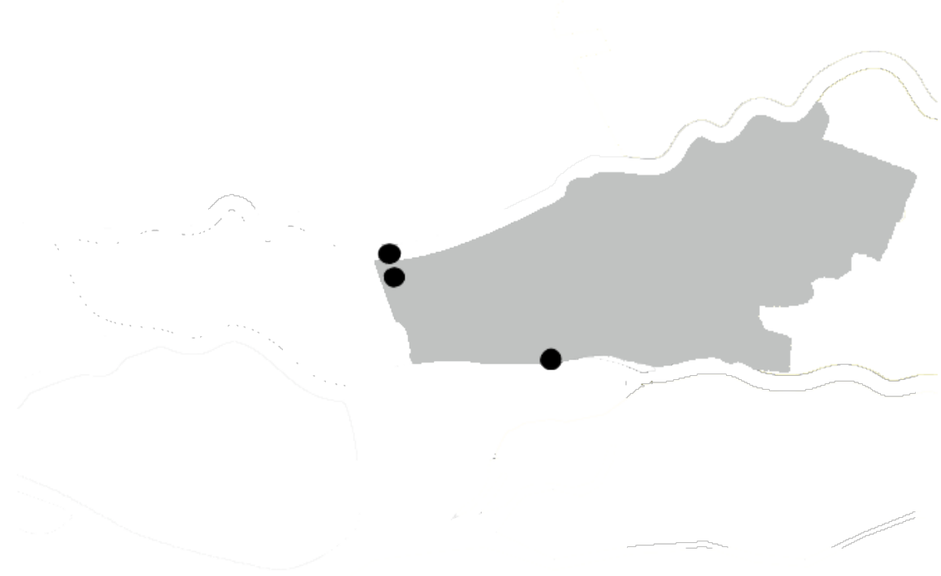
The throughline



MSC 3 maritime heritage : Baggermuseum
Frederica Bouwstra - 5721091

The Waterdriehoek



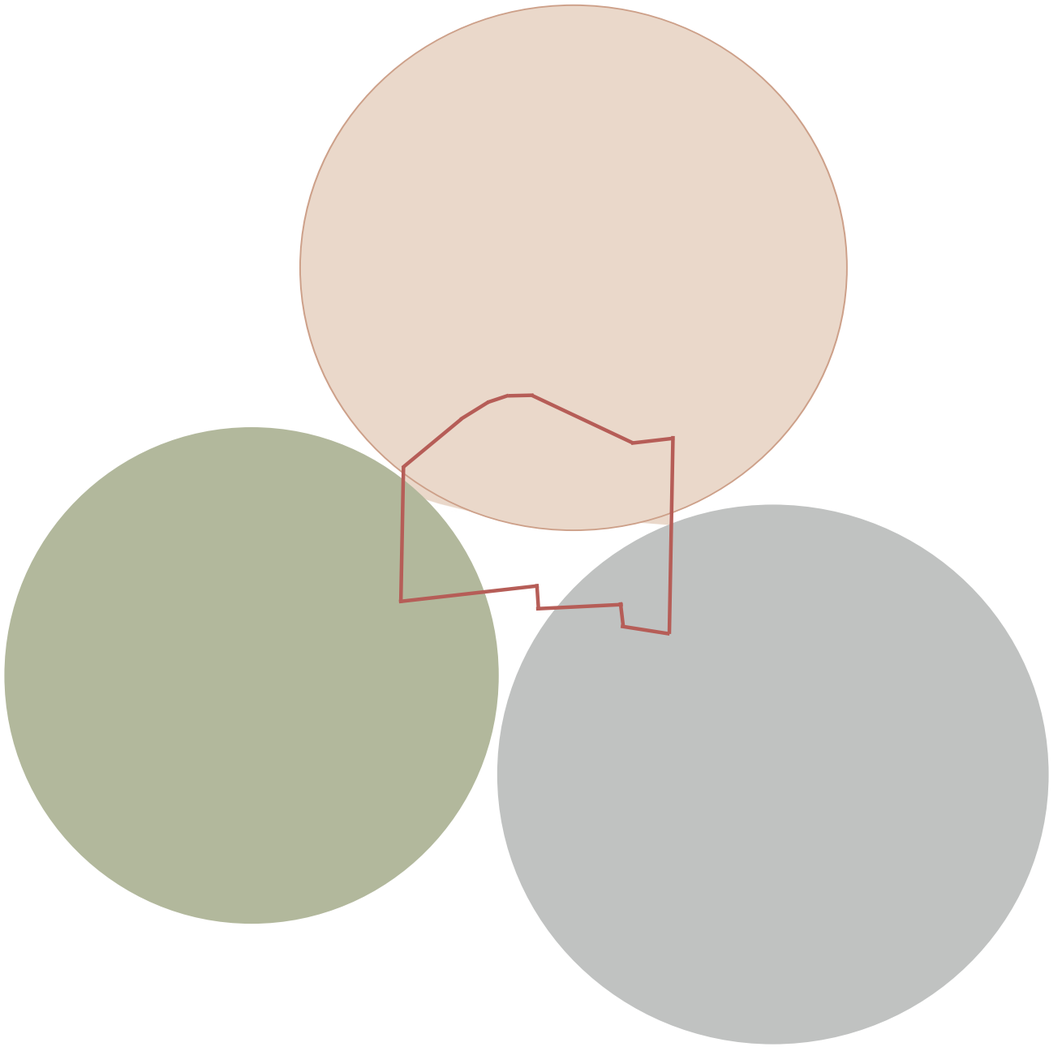


The location



The vision



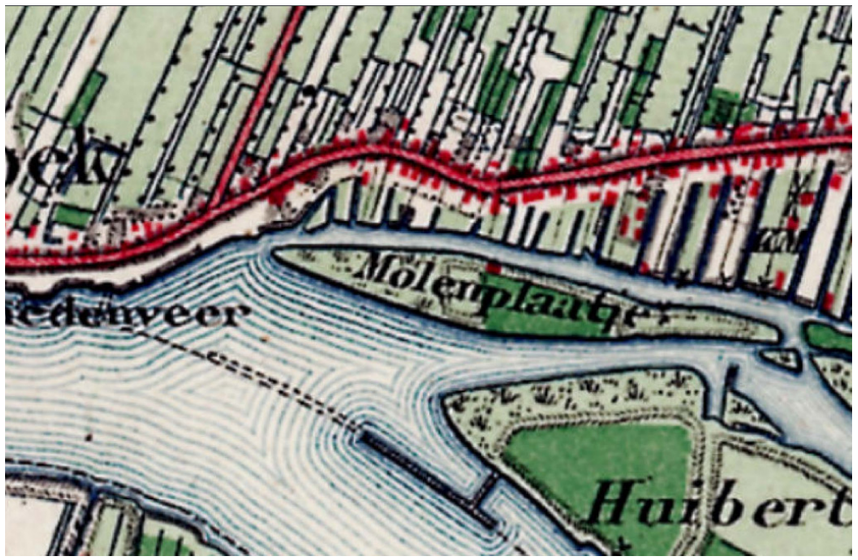




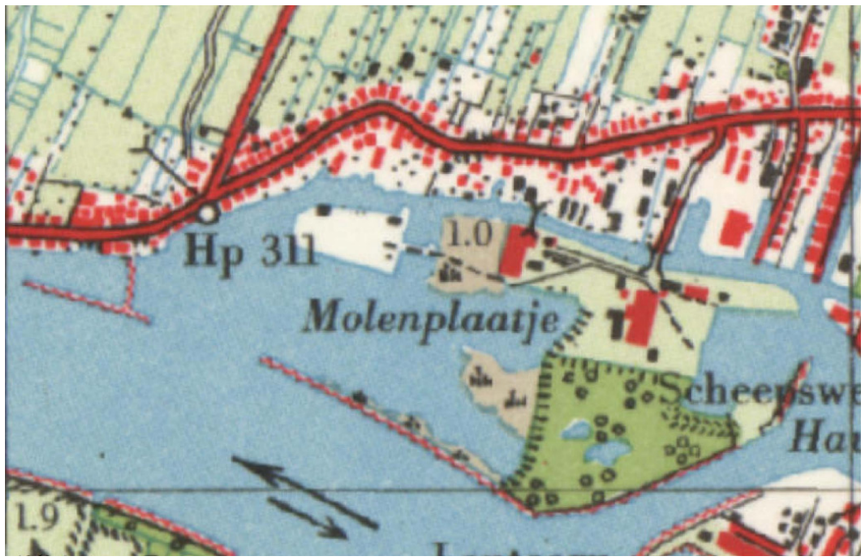








1883



1937



1990



2010




MUSEUM






Rotterdam Steel Works

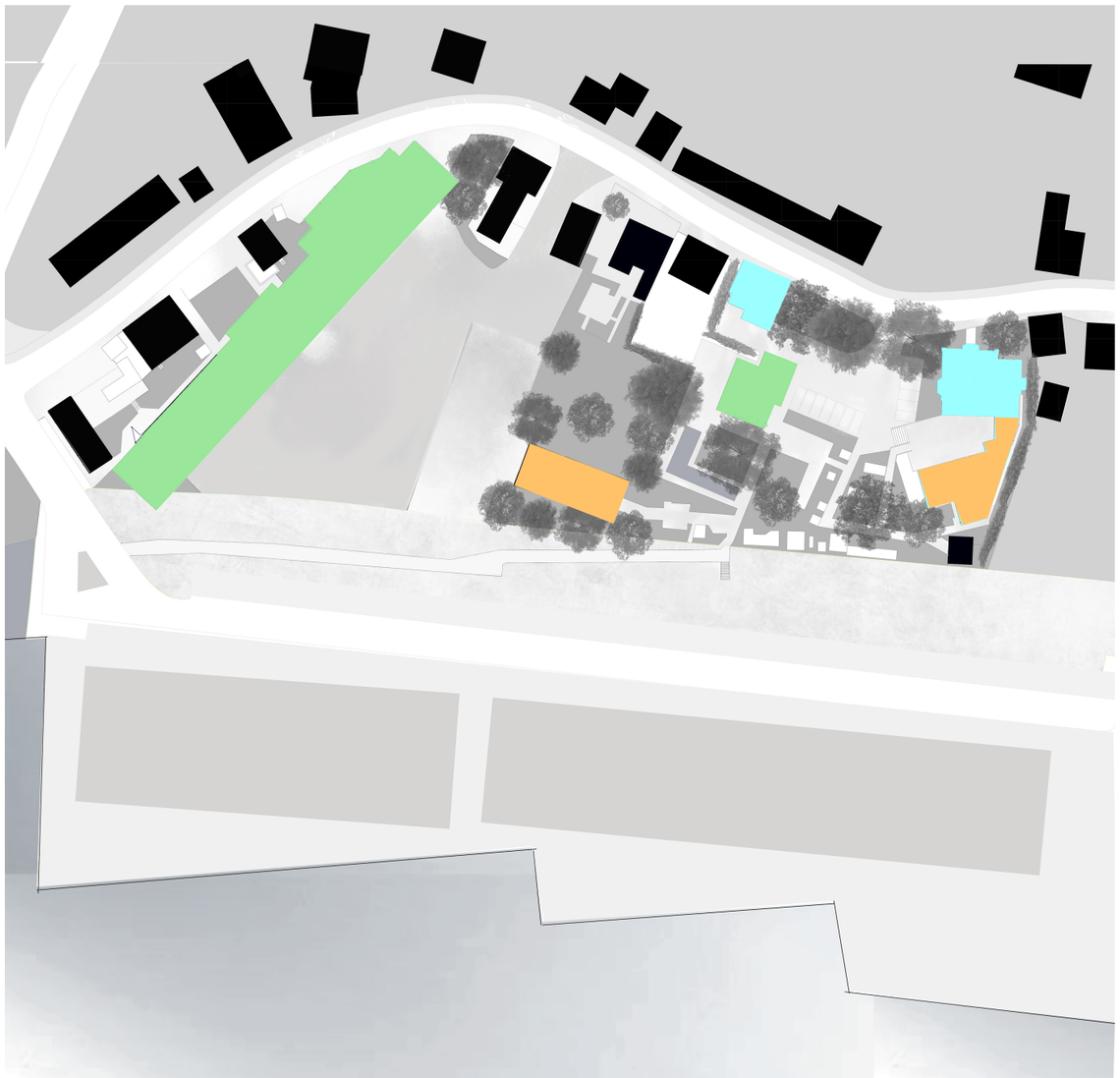




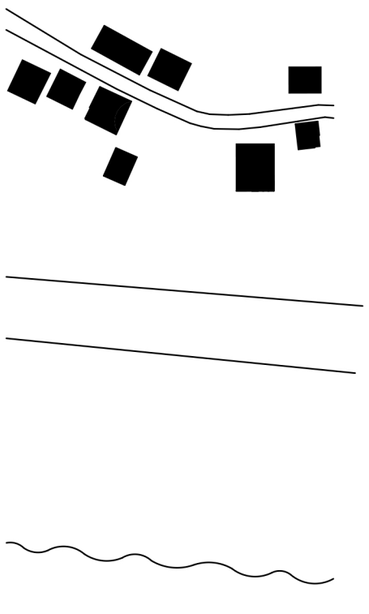




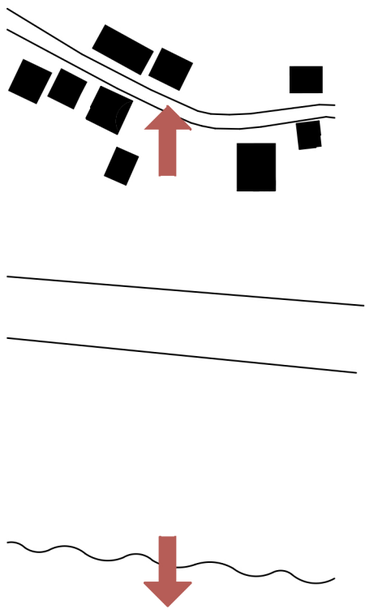

ks bv



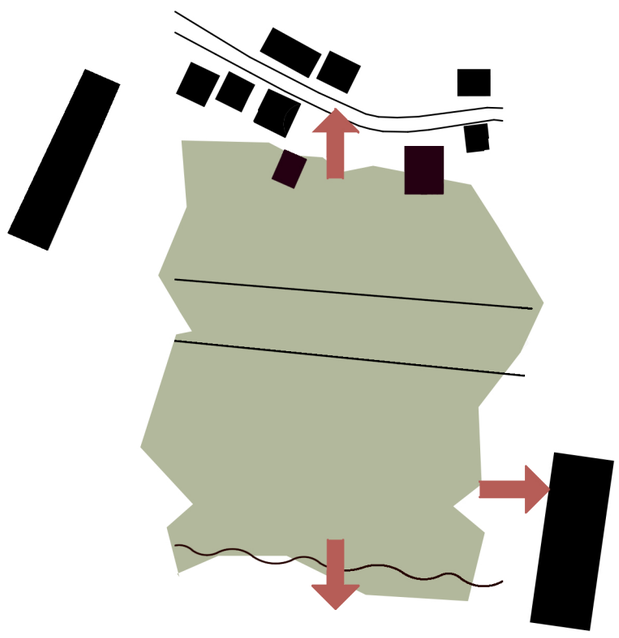
The concept



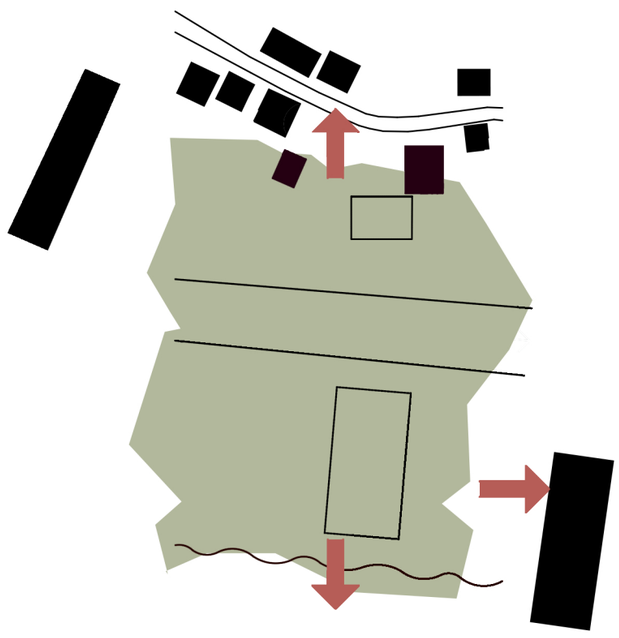
1 characteristics of the site



2 The throughline
from dikeribbon to waterfront

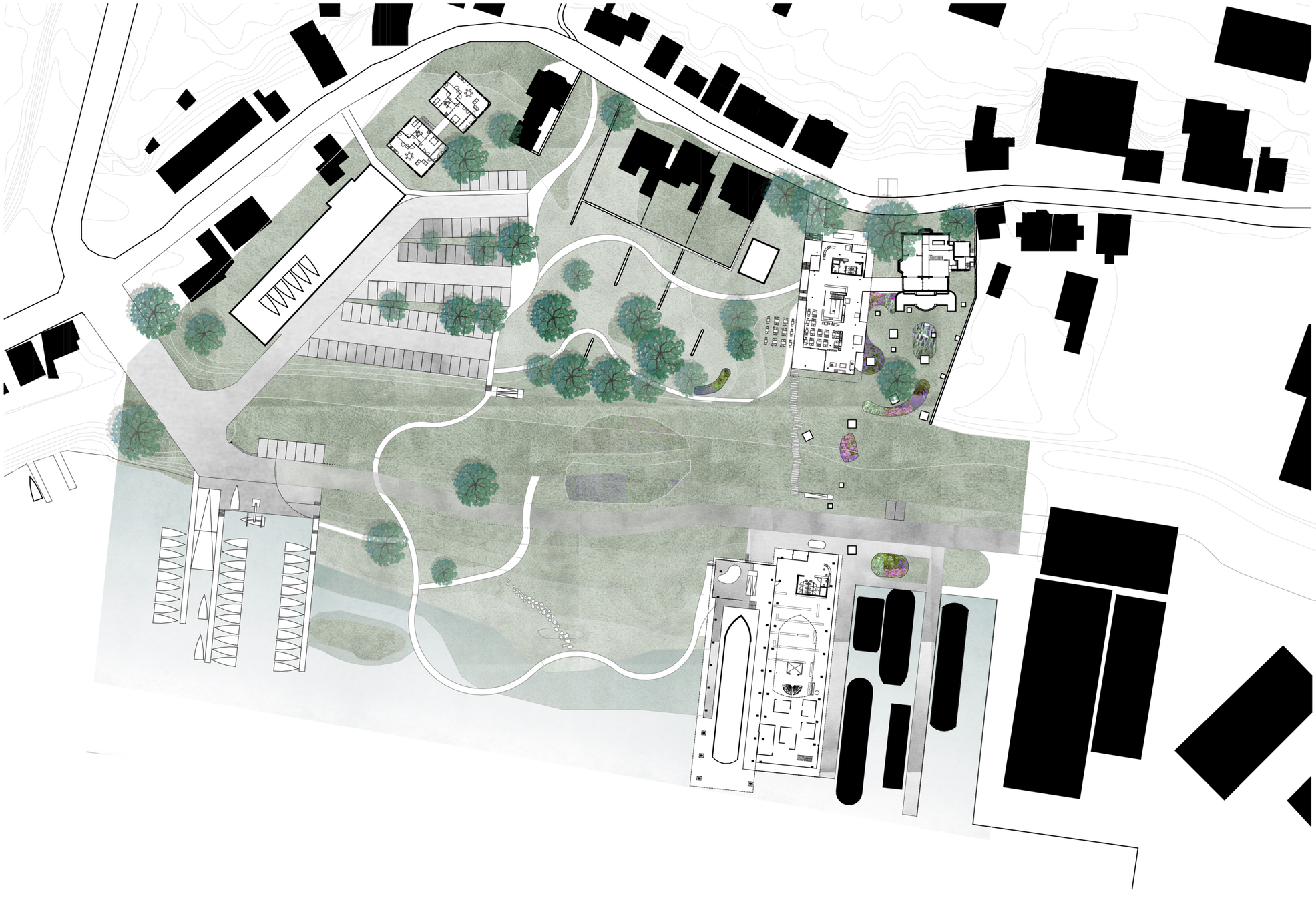


3 The park as connection
between all typologies

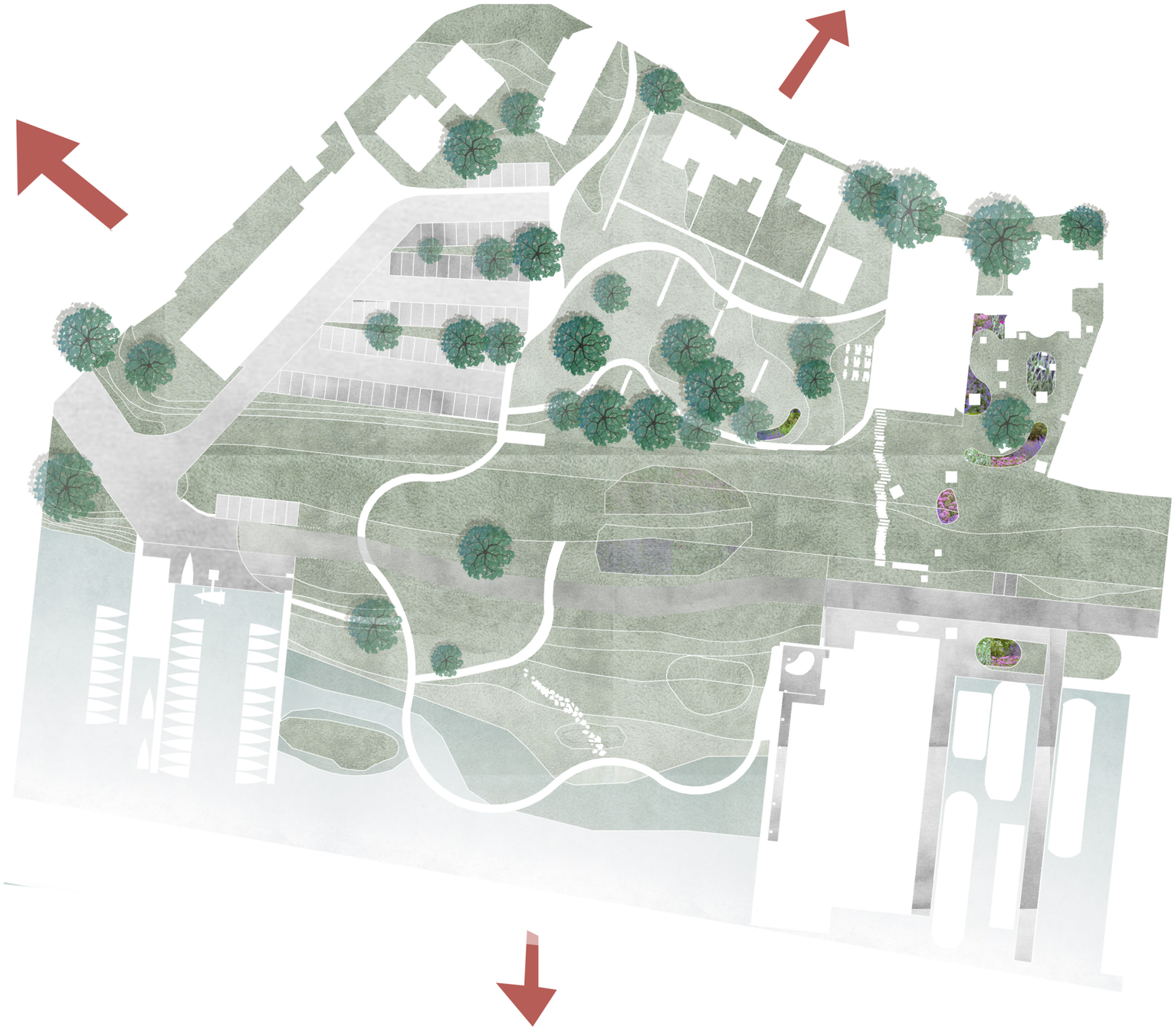


4 The new buildings are in line
with the typologies

The masterplan



The park



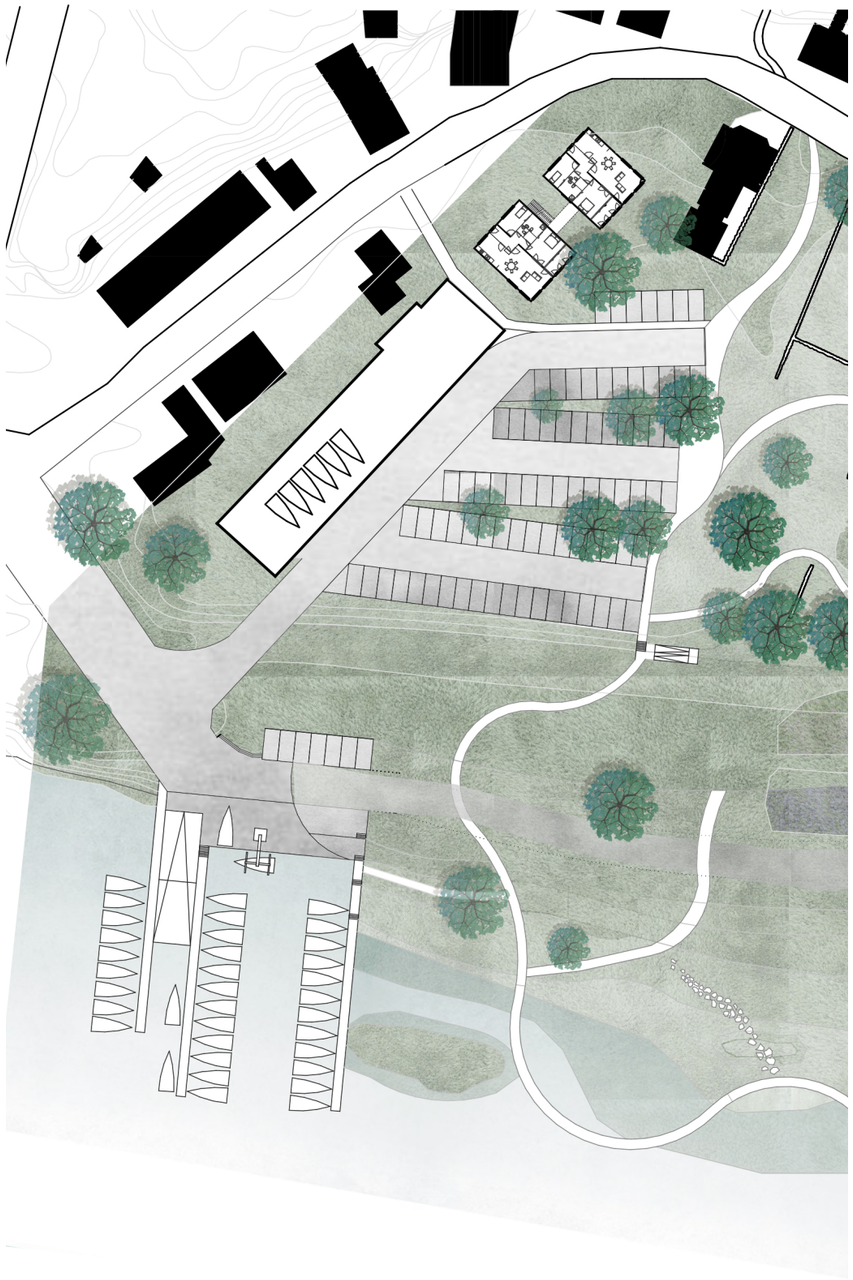


Inner dike park



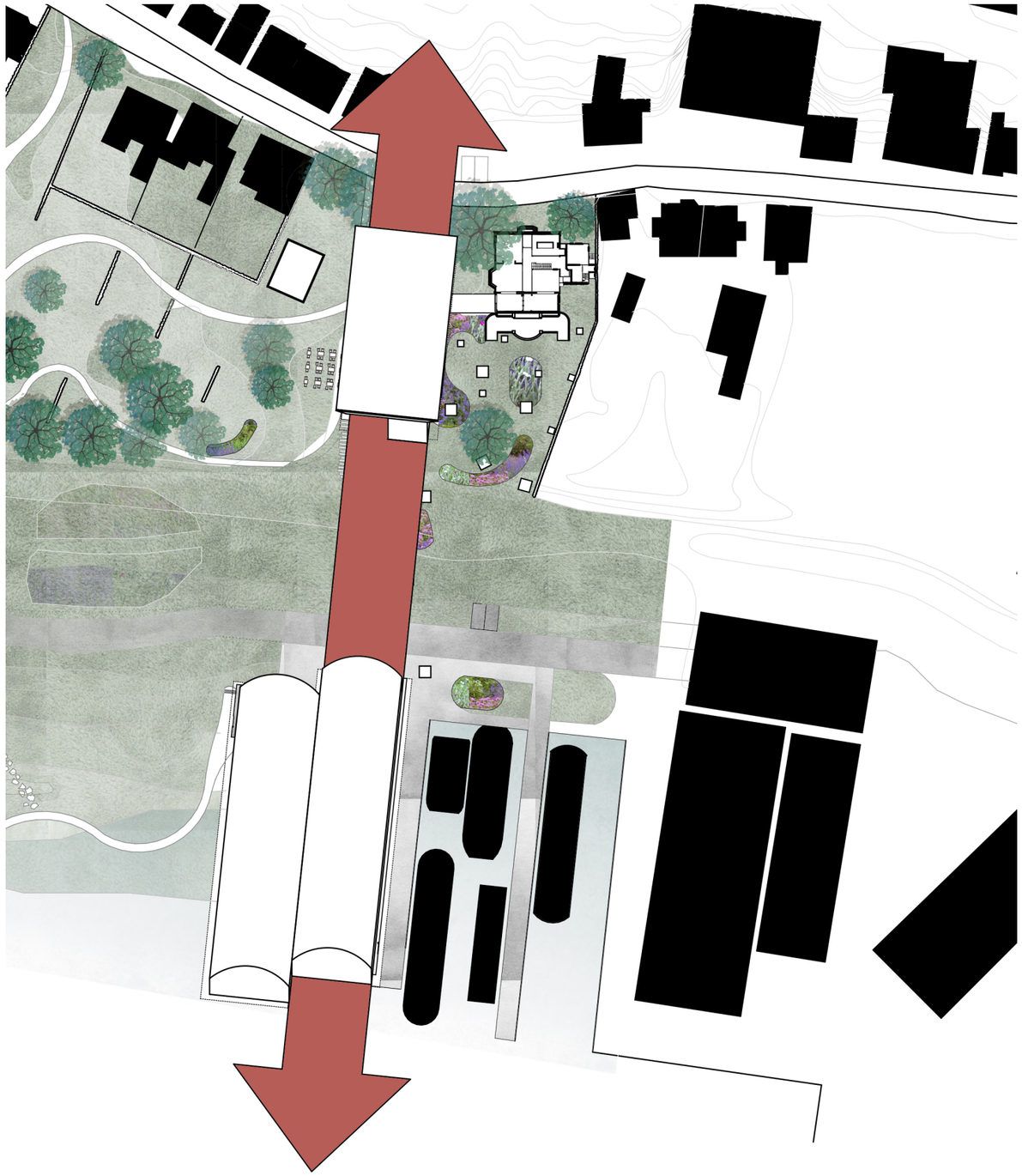
Outer dike park

The shipwharf





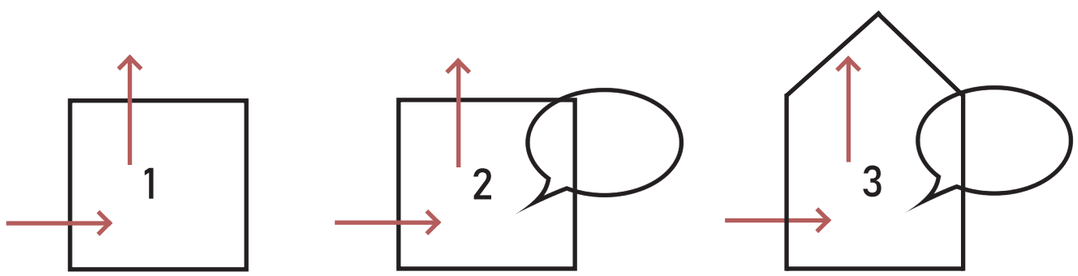
The museum





The research

‘How can interior circulation design support the story of a museum?’



Explaining circulation types > Exploring circulation types on the story > Reviewing circulation types on a case study

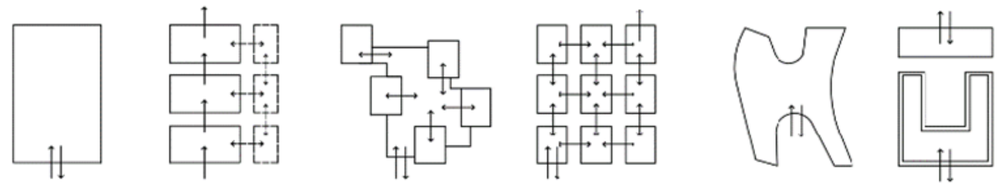
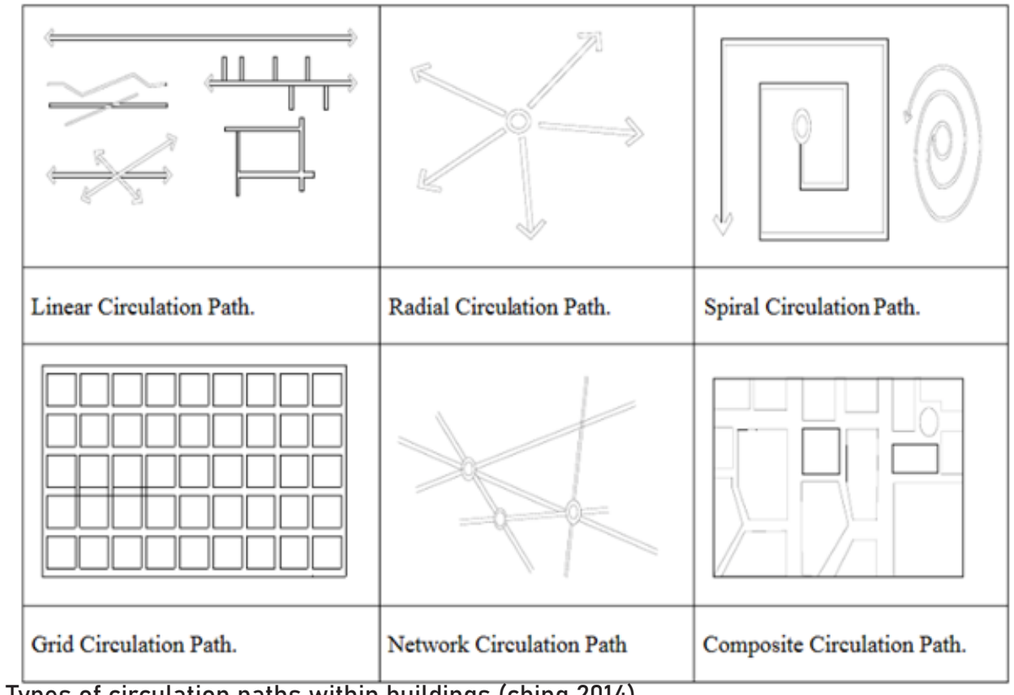
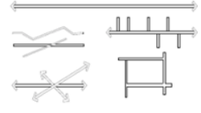
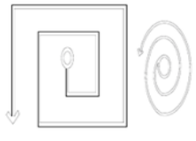
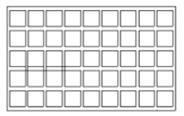
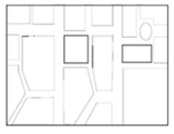


Fig. 2. Scheme of six basic types of exhibition space Layout according to Naredi-Rainer and Schnell (Naredi-Rainer, Schnell)

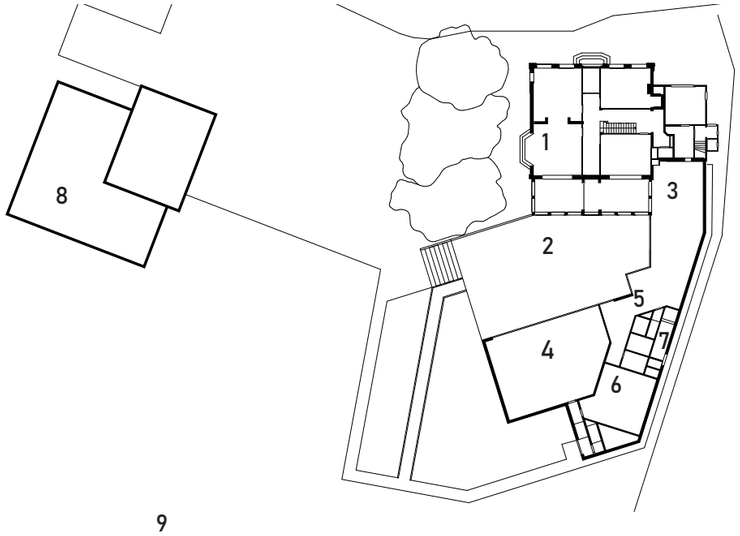


Types of circulation paths within buildings (ching 2014)

Exploring circulation types

	Narrative	Engagement with exhibits	Exploration	Wayfinding	
Linear	Singular narrative or perspective, leading visitors through the exhibition in a specific sequence.	The curated sequence ensures that key concepts or pieces are encountered at the optimal moment in the visitor's journey, maximizing their impact and educational value.	Linear configurations can limit opportunities for exploration and personalization. Visitors follow the same path, which may lead to monotomy.	Easy navigation	
Spiral	The spiral configuration lends itself to a gradual unfolding of the narrative, mirroring the spirals physical progression.	Spiral paths can be an efficient use of space, allowing for a large number of exhibits to be displayed within a relatively compact area without feeling cramped	The physical act of following a spiral path can also have a psycho-logical impact, creating a sense of journeying towards (or away from) a central goal or conclusion.	Visitors may find it difficult to exit the exhibition before completing the entire path.	
Radial	The radial layout naturally supports thematic organizations, with each radiating path potentially dedicated to different facets of the exhibitions narrative.	The central point in a radial configuration can serve as a powerful narrative and visual anchor, setting the tone for the exhibition and providing a key thematic or literal centerpiece.	Visitors may be encouraged to make repeat visits to explore different paths they did not initially take. It can also potentially overwhelm visitors with choices.	The central hub of a radial layout aids in orientation, providing a clear point of reference for visitors as they navigate the exhibition.	
Grid	The grid layout supports a multiplicity of narratives, enabling visitors to navigate through the exhibition in various sequences.	In a grid configuration, there's an opportunity to place equal emphasis on all exhibits, as no single path dictates the visitors journey.	The inherent structure of a grid con-figuration encourages non-linear exploration, visitors can choose their path, piecing together their narrative based on their interests.	The uniformity and predictability of a grid layout simplify navigation.	
Network	Network configurations allow for a wide range of narratives and non-linear narratives, where the story does not follow a strict chronological or thematic sequence.	Allows for a more flexible presen-tation of content, accommodating diverse historical periods, artistic movements, or scientific concepts within the same exhibition.	Each intersection offers multi-ple choices, placing agency in the hands of visitors to explore and experience the exhibition. This may also pose visitor overwhelm.	The abundance of choices and potential for fragmented experien-ces can make it difficult for some visitors to grasp the exhibition's overall narrative and navigation.	
Composite	A composite layout enables a more layered and complex narrative experience. Visitors can encounter different storytelling methods within the same space.	Opens up creative possibilities for curators and designers to craft unique spatial experiences that defy conventional exhibition layouts.	Composite configurations can stri-ke a balance between straight-forward navigation and the joy of discovery. The variety of paths and experiences could potentially frag-ment the narrative.	Easy navigation as well as more complex layouts, together may lead to challenges in spatial cohesion.	

A framework based on 4 bullitpoints



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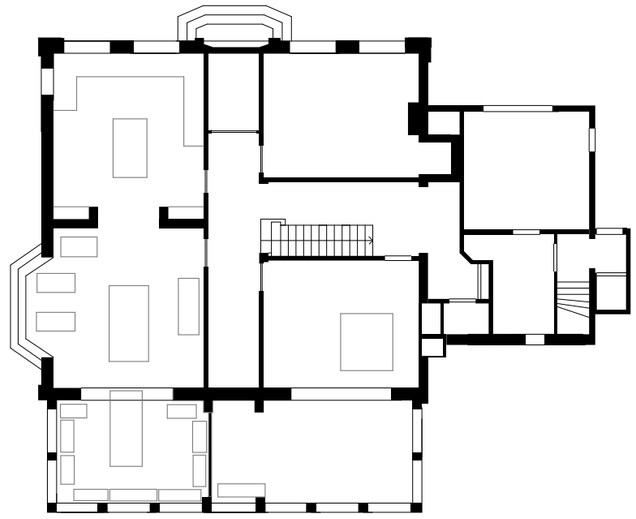
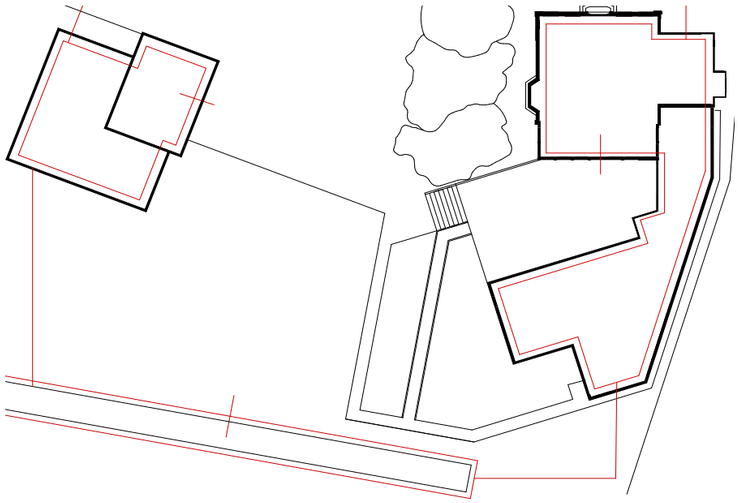
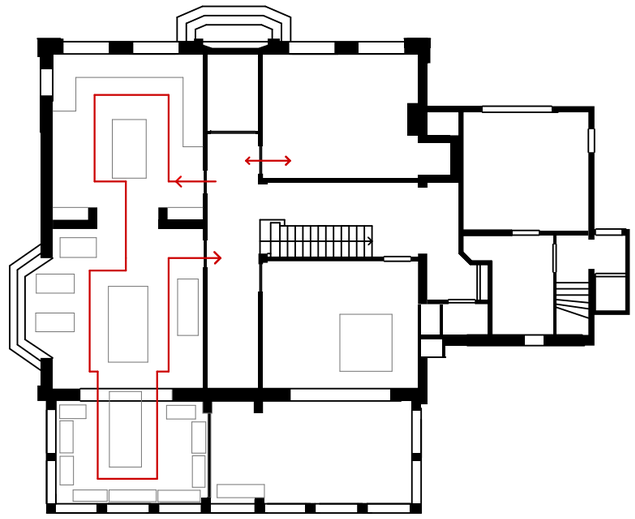


10

1 museum
2 terrace
3 kantine
4 multifunctional space
5 toilets
6 movieroom
7 basement - depot
8 practical garden
9 ship components
10 dredging ship

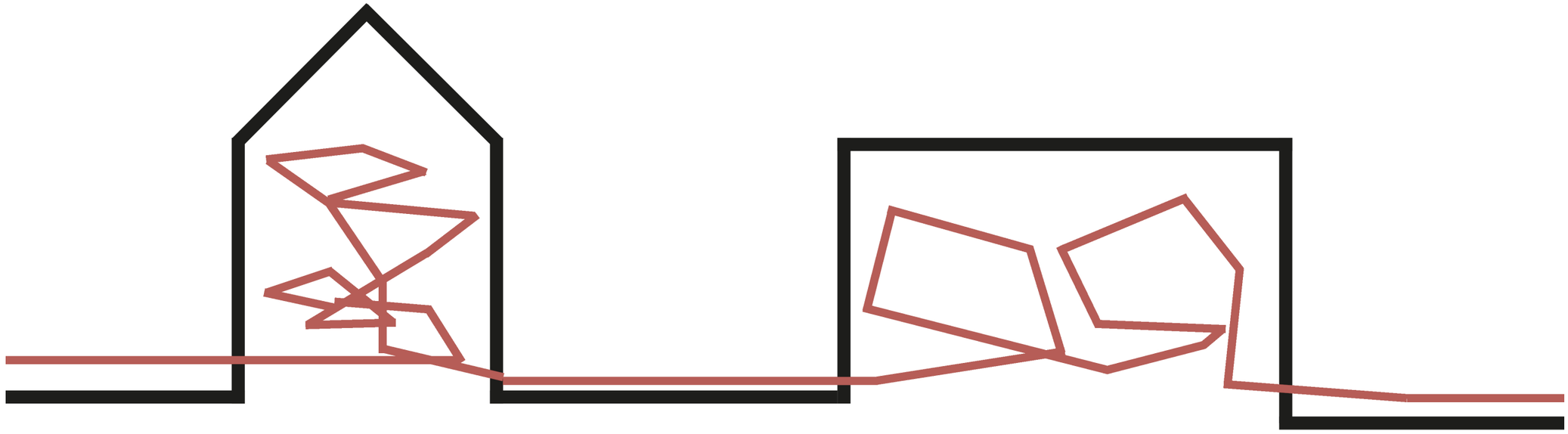


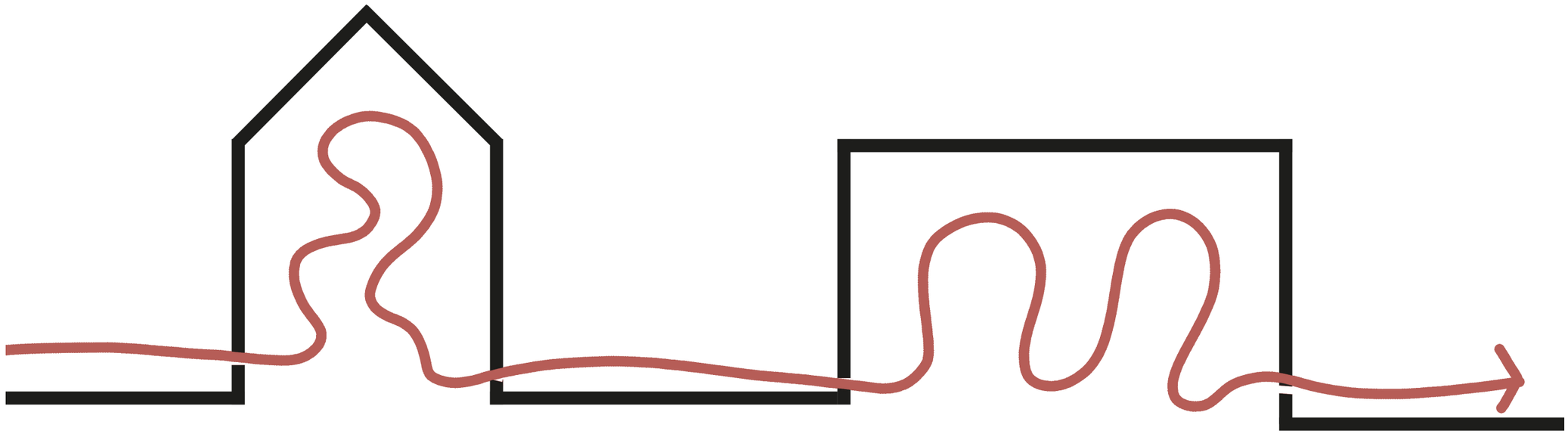
Spatial isolation and interpenetration

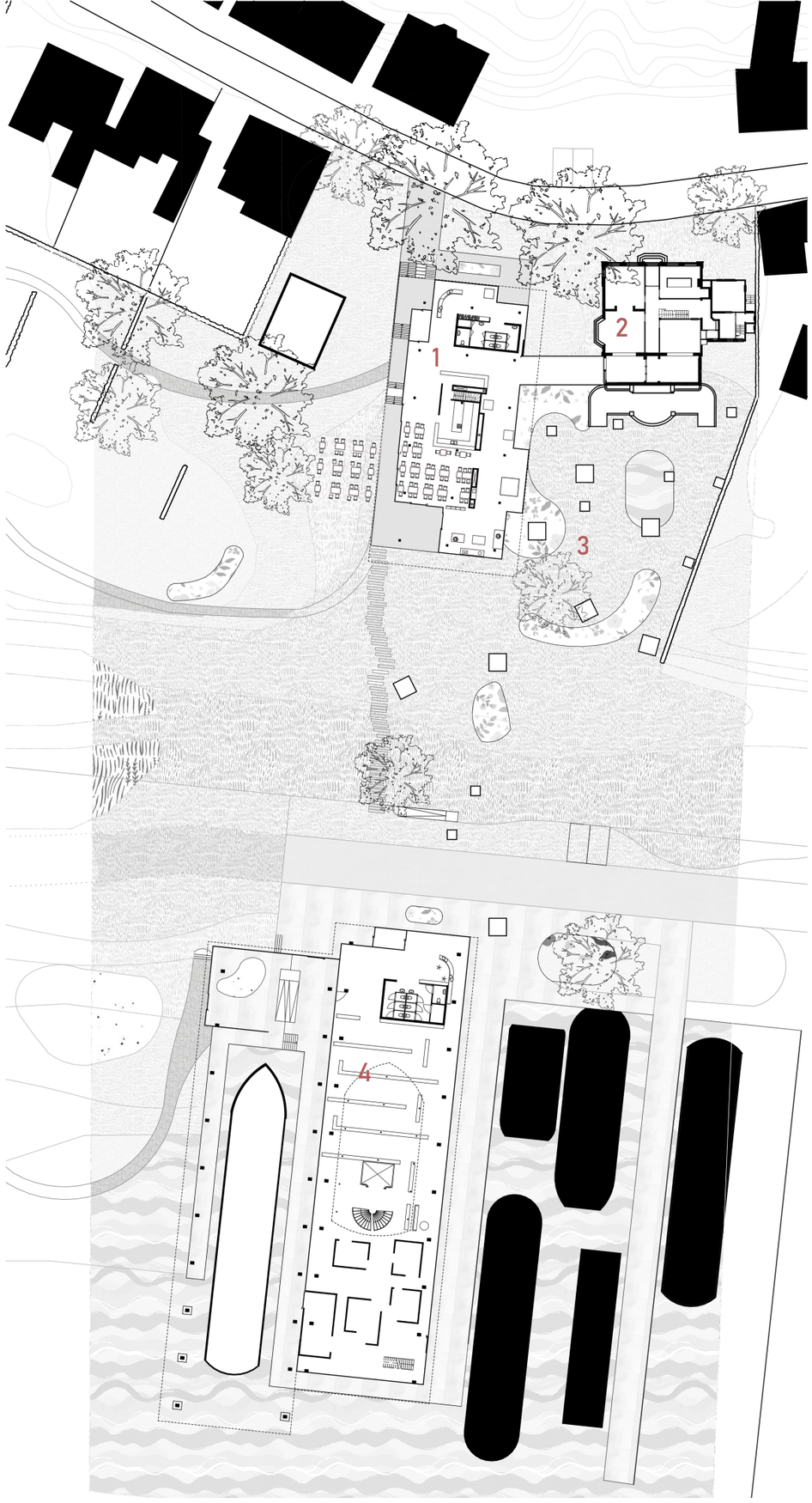


Conversion of a monument

Chronological storyline ≠ layout

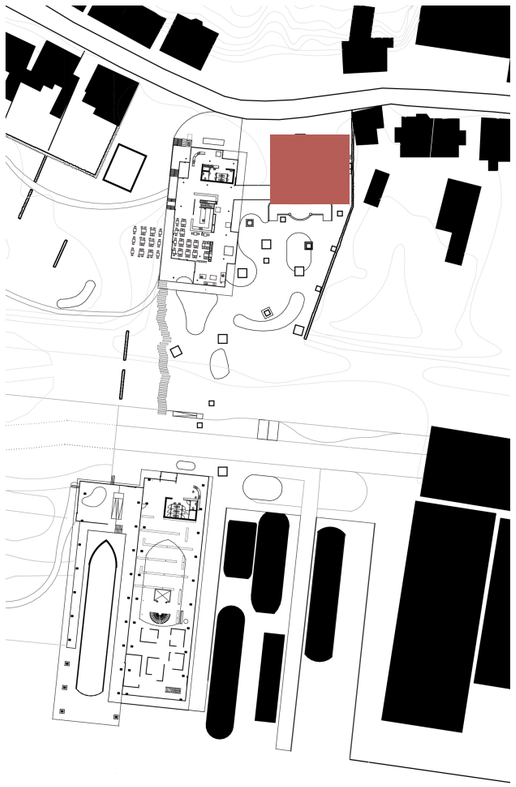




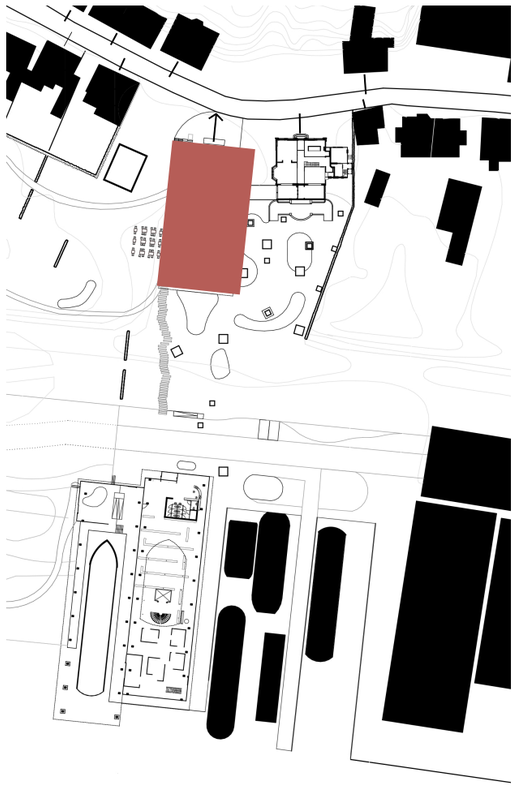


Adapt and apply circulation types

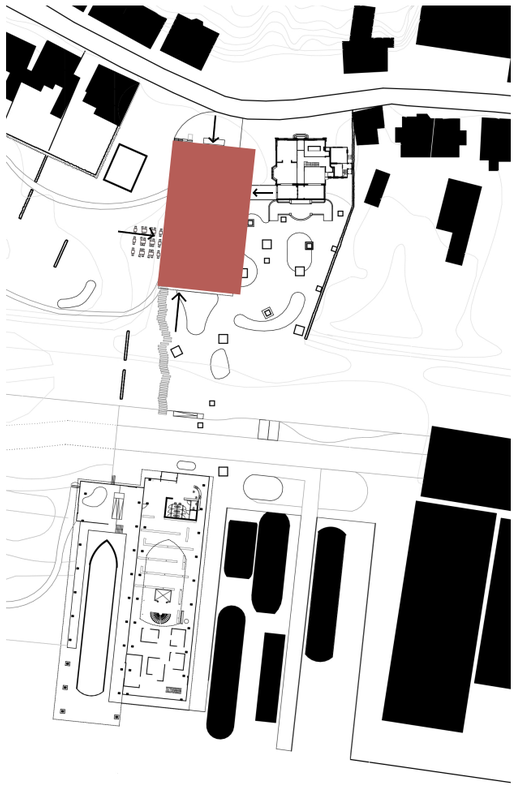
1 the pavilion
2 the monument
3 the sculpture garden
4 the ship shed



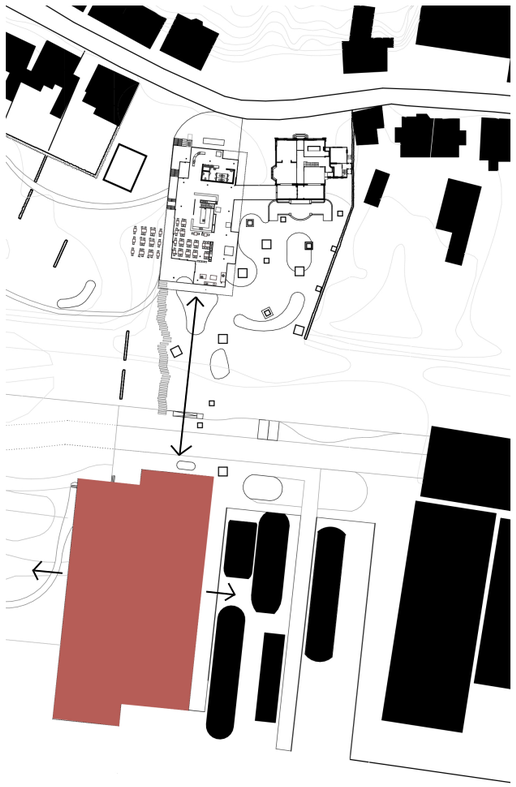
1 The original building is kept



2 New building is added to the dike ribbon

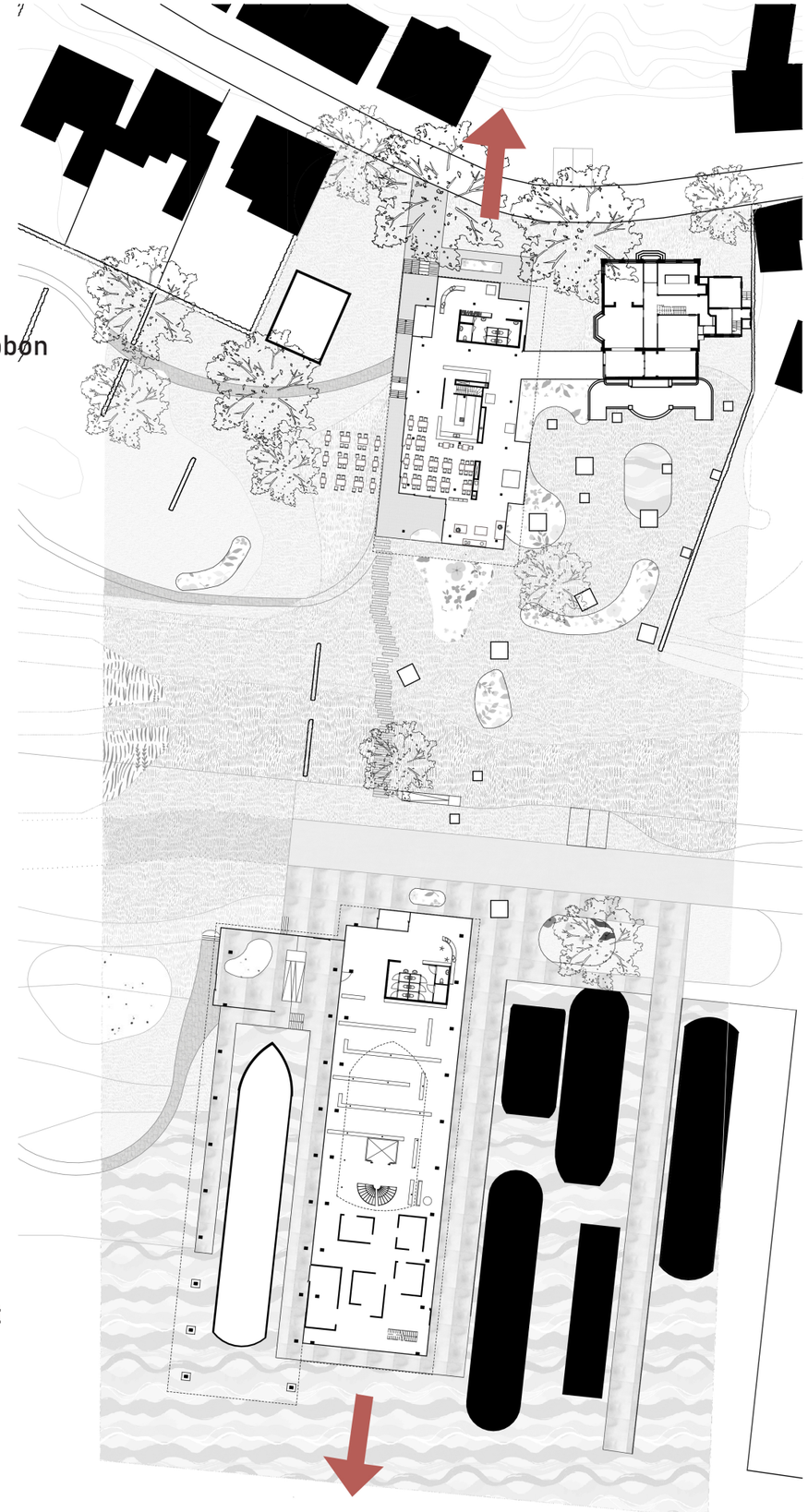


3 The building functions as node



4 New building outside the dike

From dike ribbon



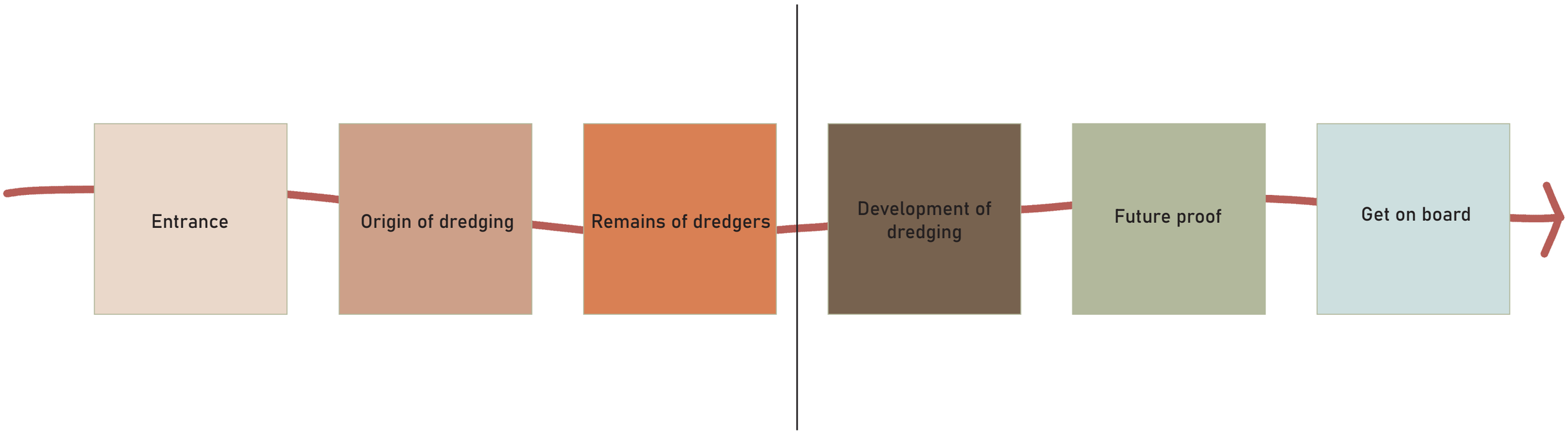
To waterfront

From history

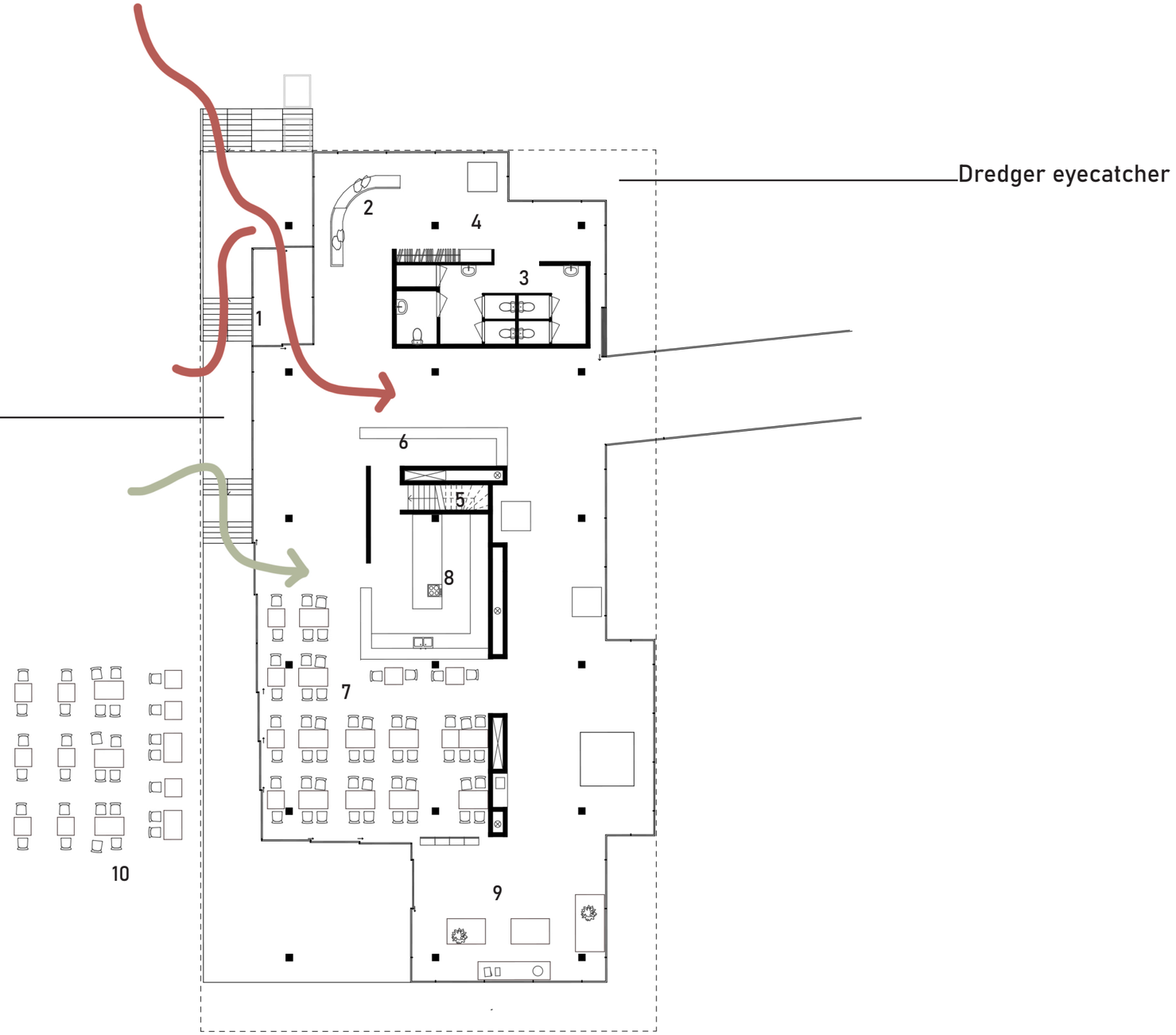
To future developtments



The museum story



The pavilion

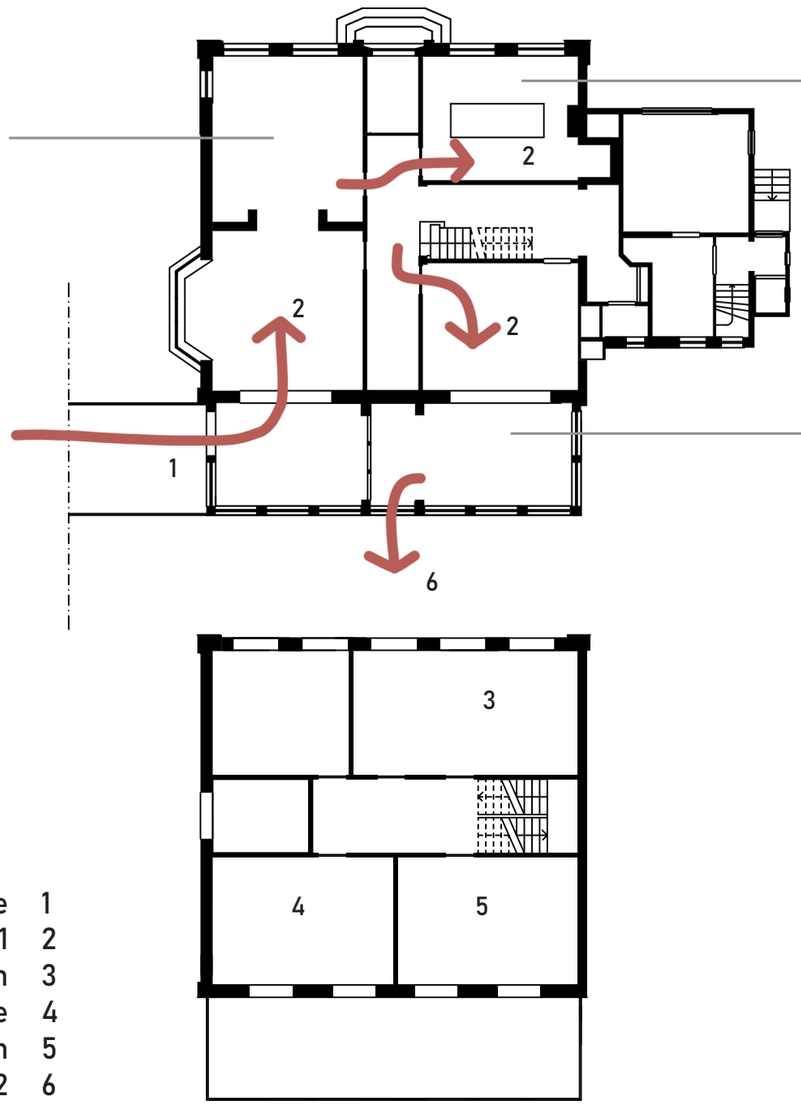


1 entrance
2 rest area
3 toilets
4 lockers and coat reck
5 storage
6 counter
7 cafe
8 kitchen
9 shop
10 terrace

Entry building with cafe and shop

Exhibit 1
The Volkers monument

En-suite living room
The people behind dredging



The office of Volkers
Where plans are made

Sliedrecht as dredging capital

entrance	1
exhibit 1	2
meetingroom	3
office	4
administration	5
exhibit 2	6

The building itself serves as an exhibit, combined with stories of the history of dredging and dredgers
Conversion of a monument

The monument















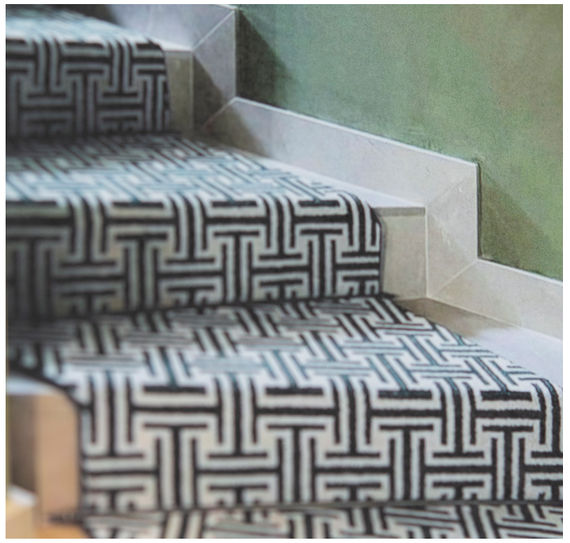
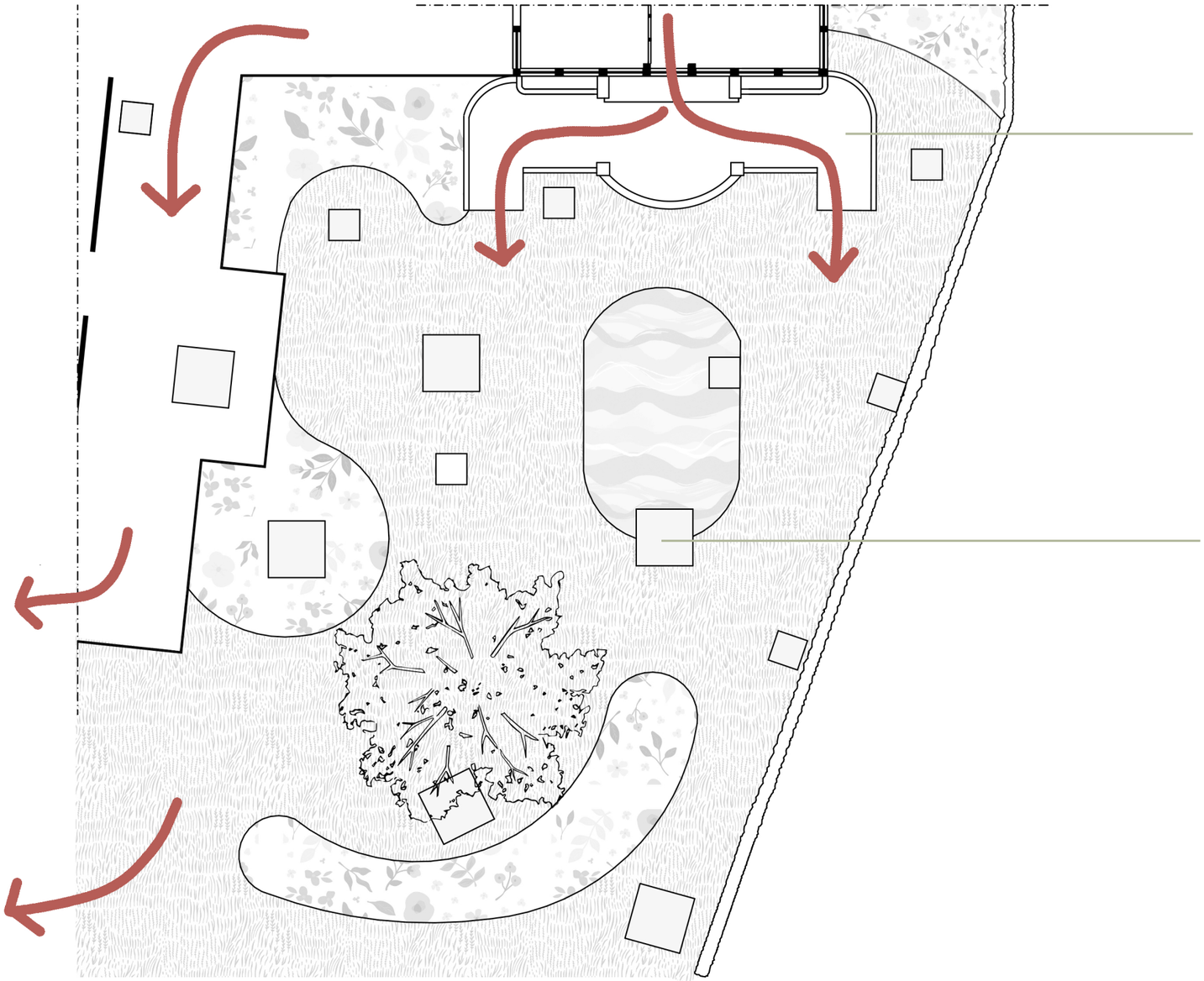


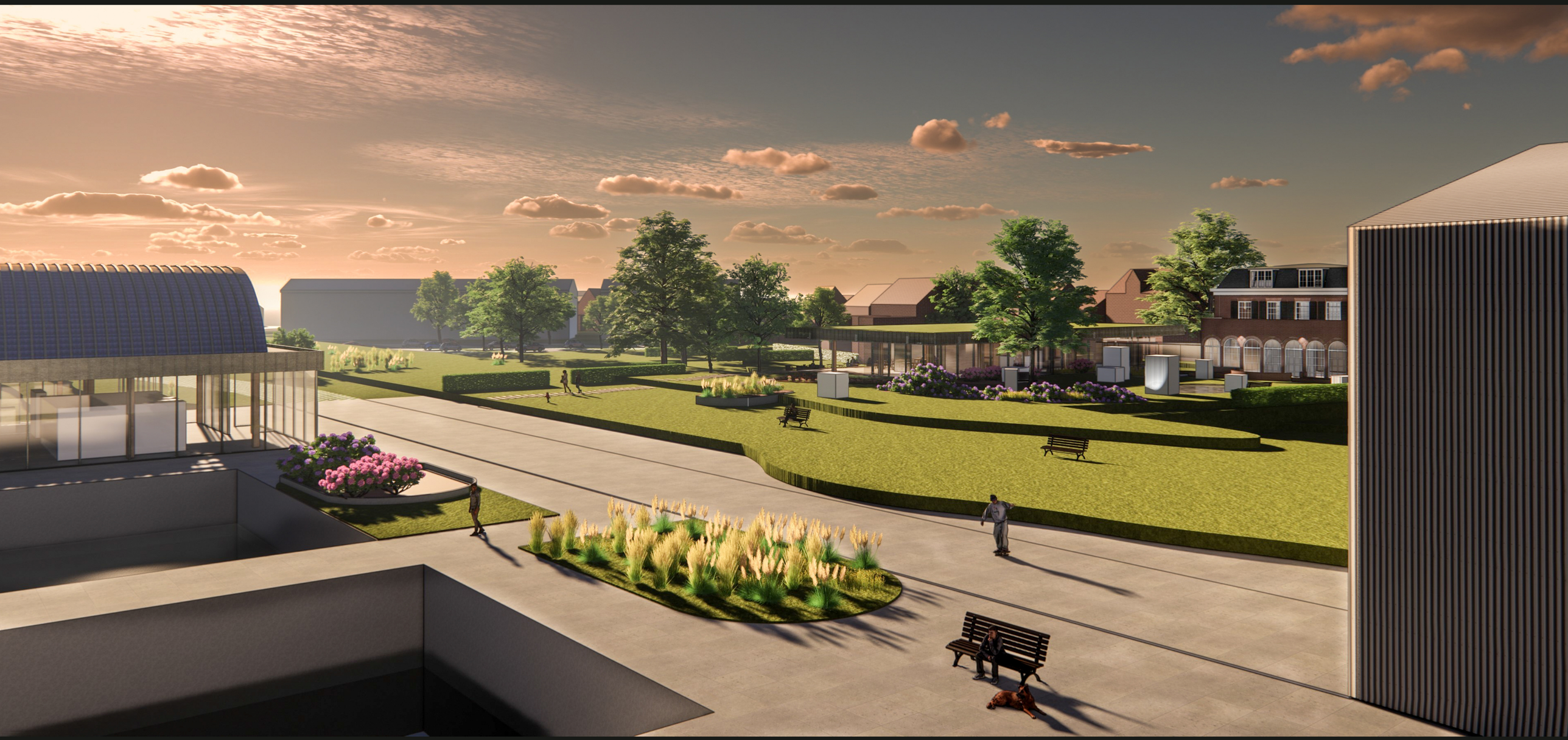
Exhibit 2
‘Sculpture garden’



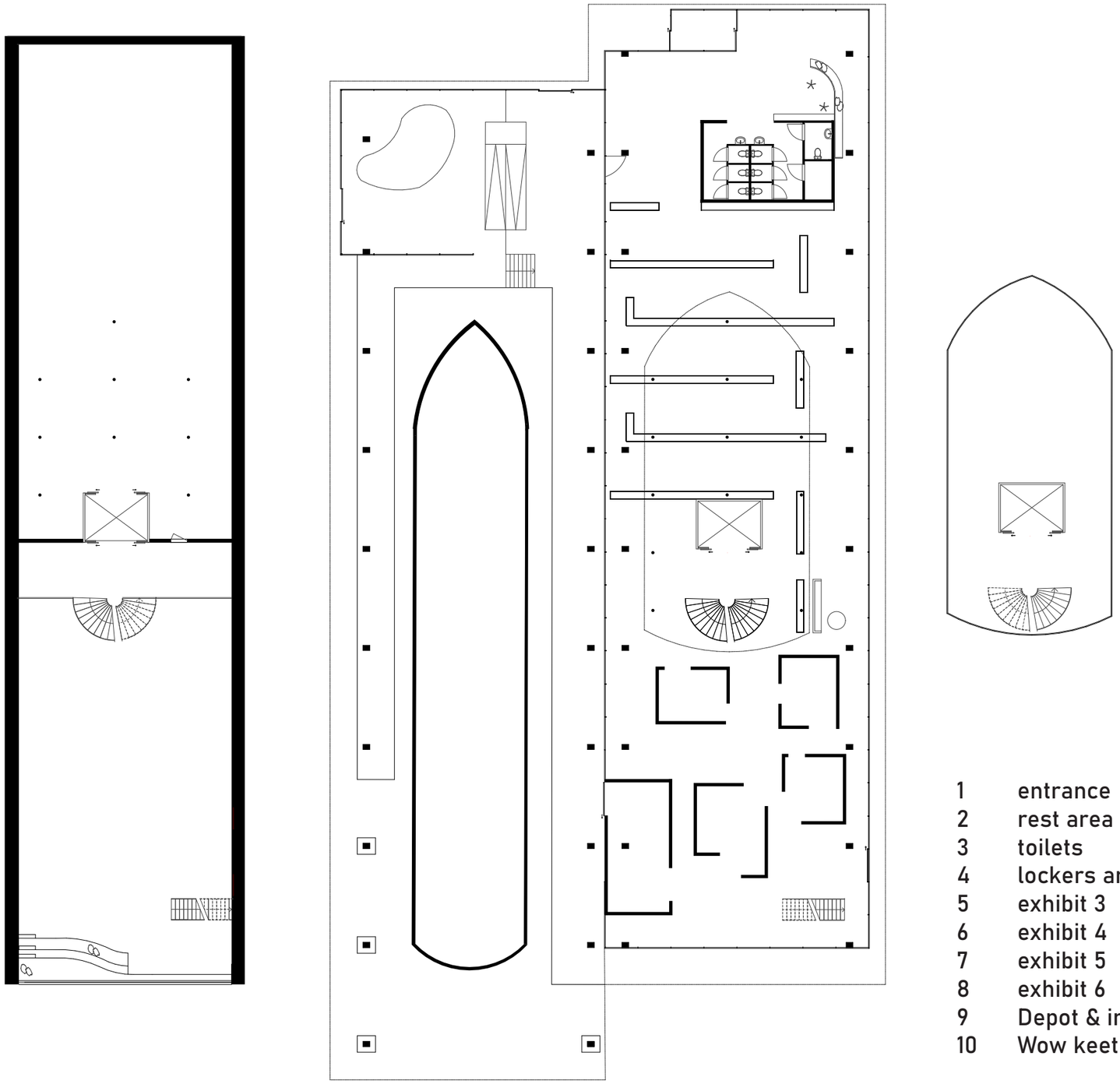
Historic ‘sculpture garden’ with ship components
Free form- space



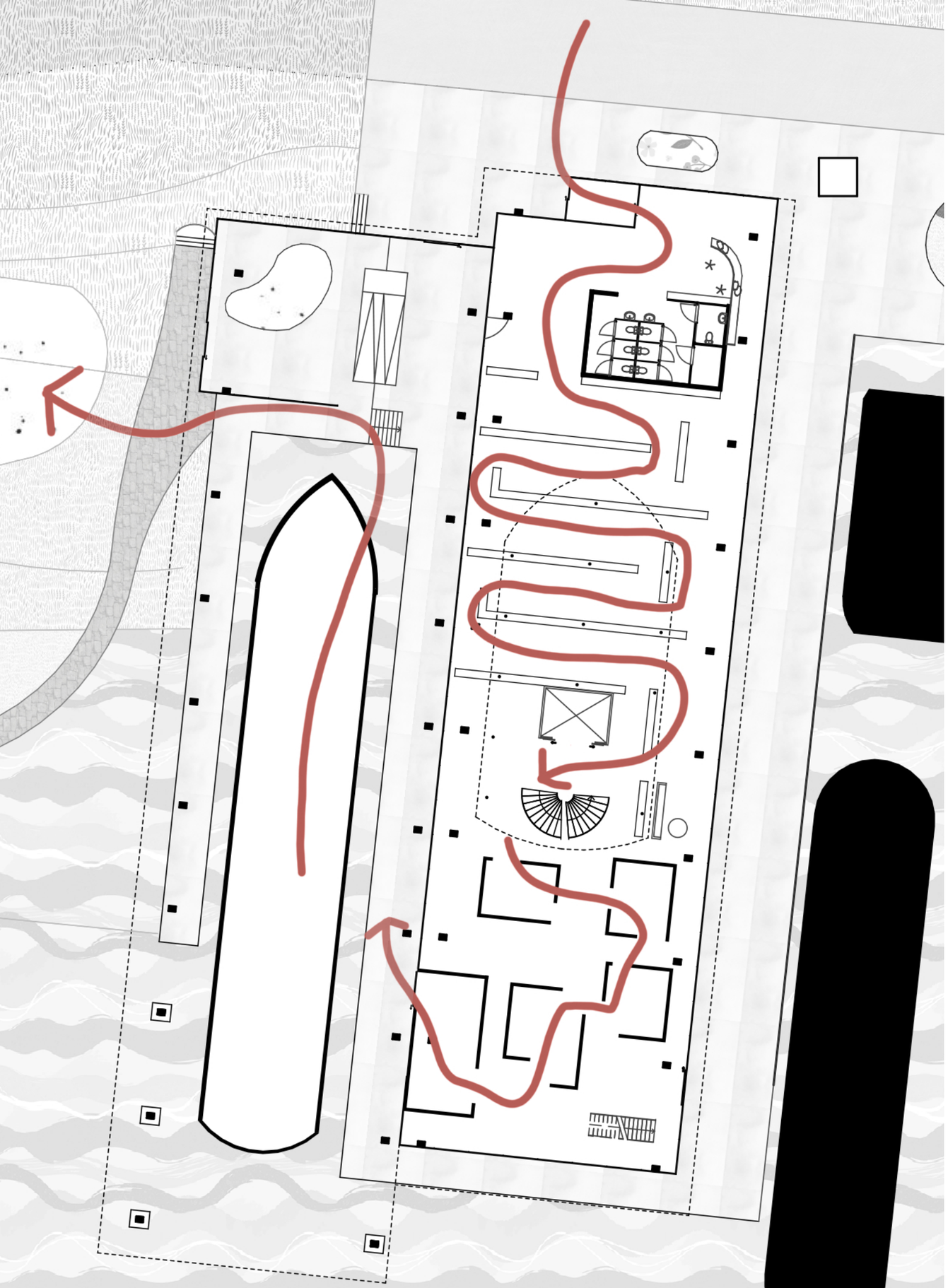




The shipshed



1 entrance
2 rest area
3 toilets
4 lockers and coat reck
5 exhibit 3
6 exhibit 4
7 exhibit 5
8 exhibit 6
9 Depot & installations
10 Wow keet & multifunctional space



Open space + composite layout on several exhibitions about dredging

(interactive) models and games combined with informa-


TSHD 1000

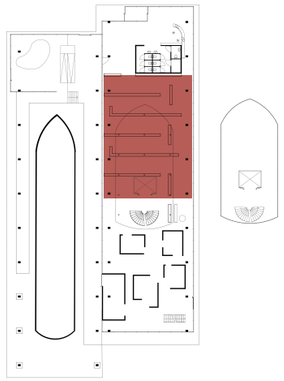
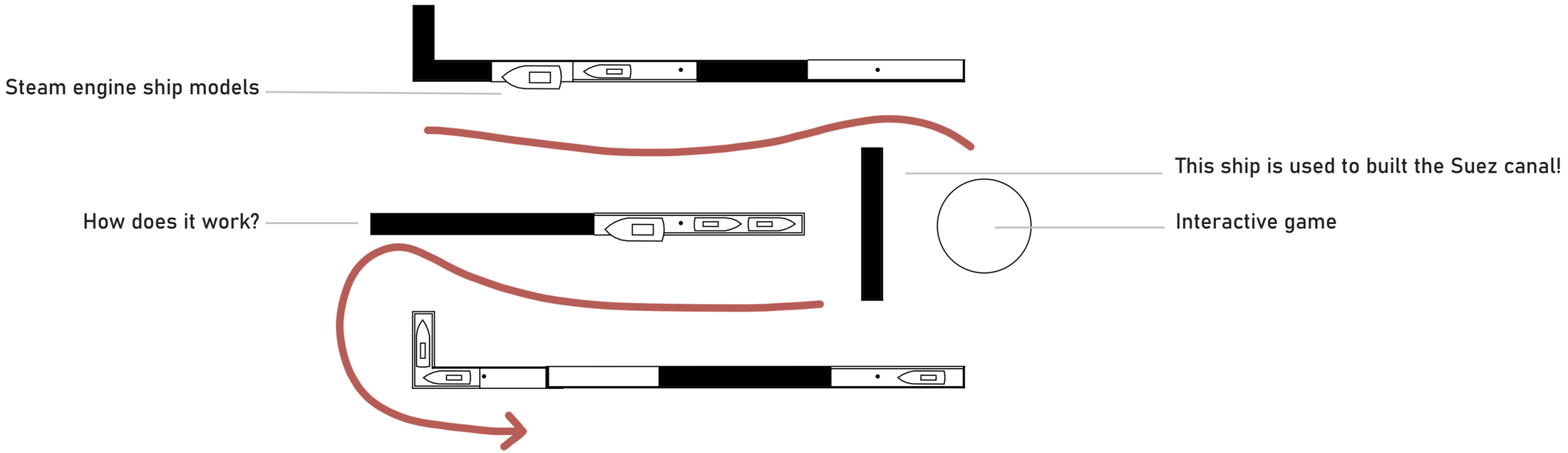


Exhibit 3
Development of dredging and dredgers



Chronoligical story on the theme of dredging
linear chaining

(interactive) models and games combined with informative text, video and image

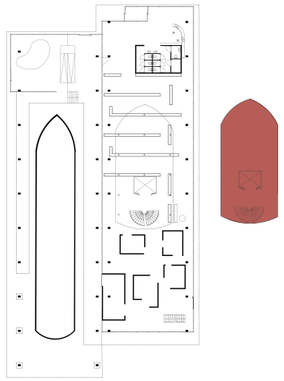
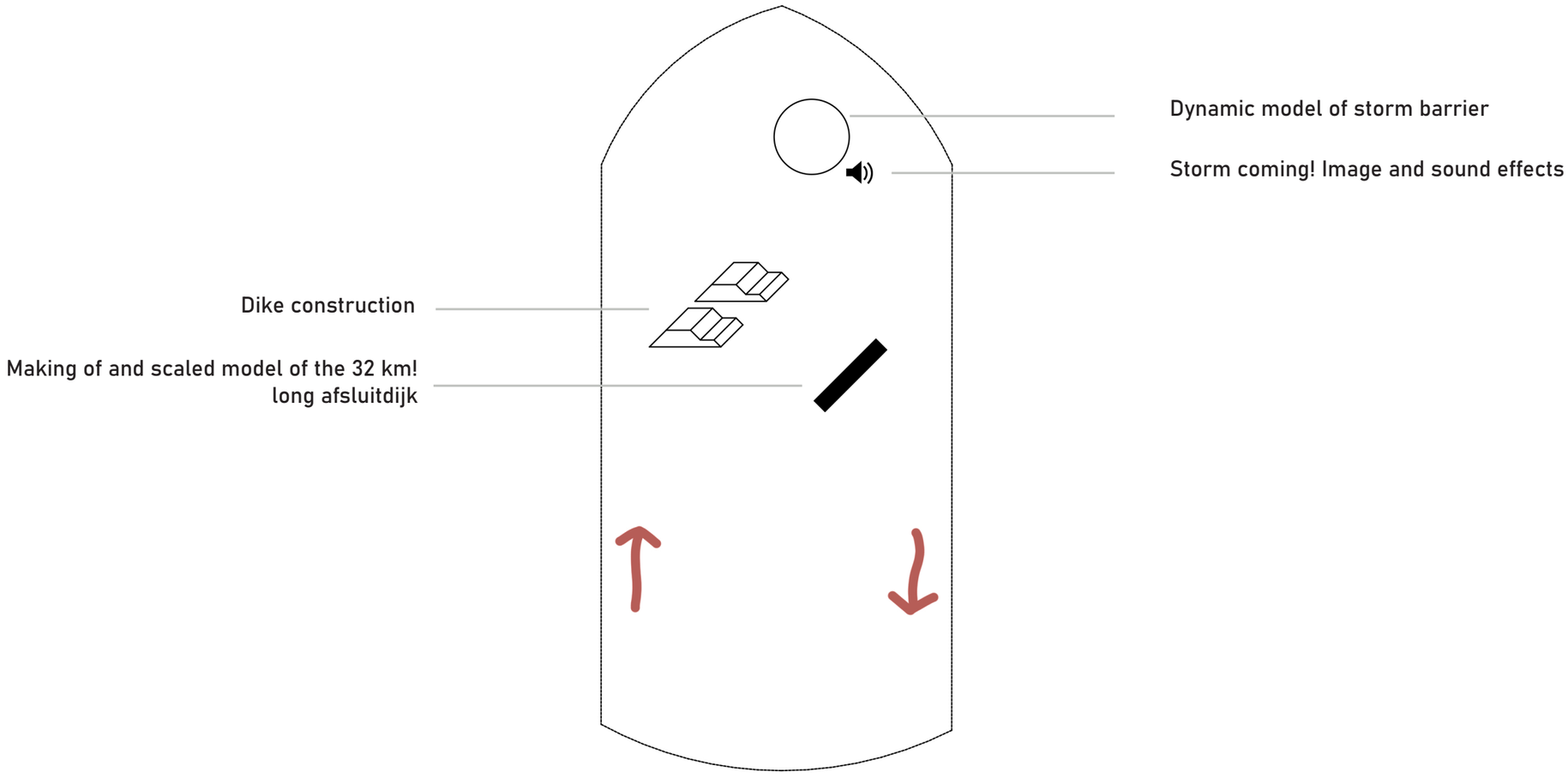


Exhibit 4
Waterworks



Sub examples on the theme of waterworks.
Open space

(interactive) models and games, combined with informative text, video and image

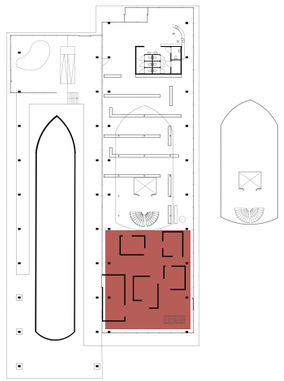
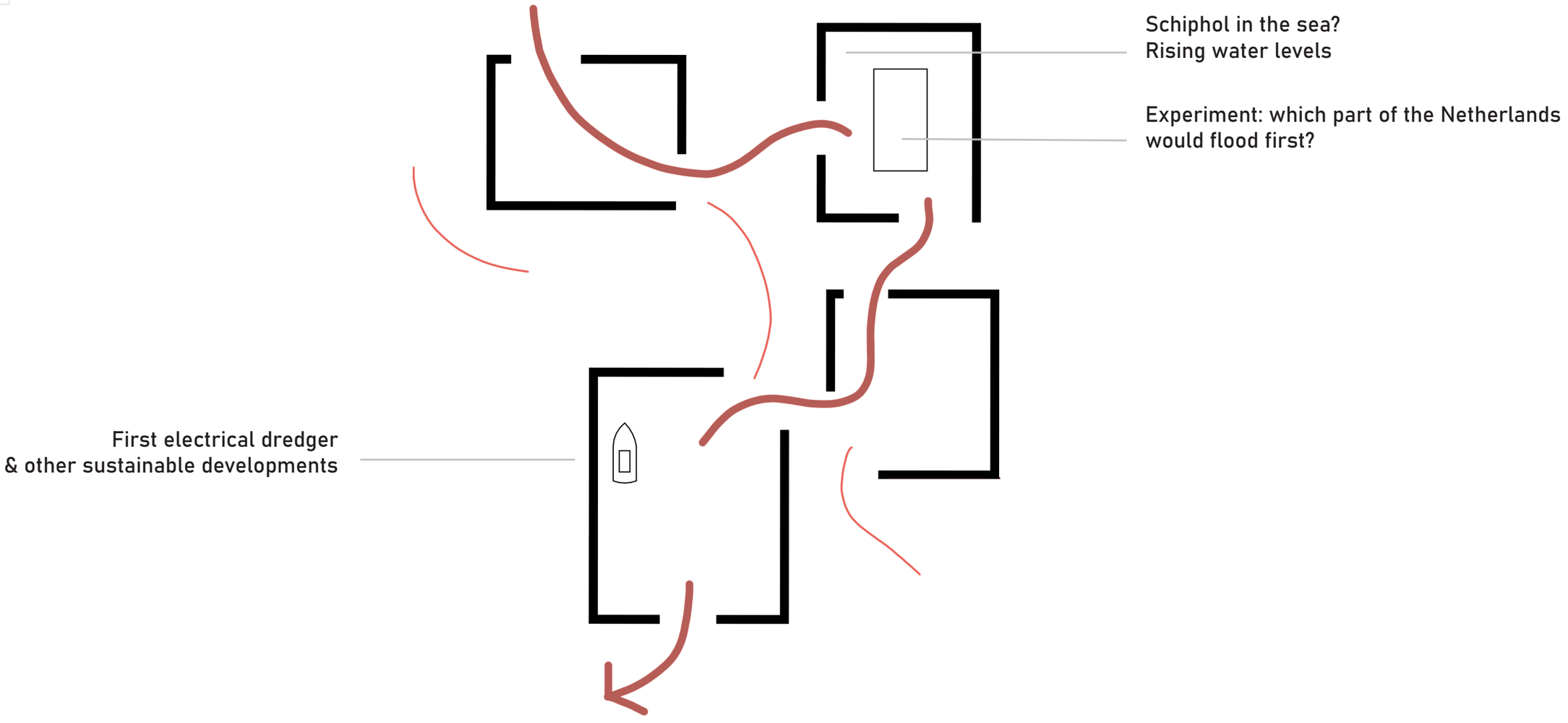


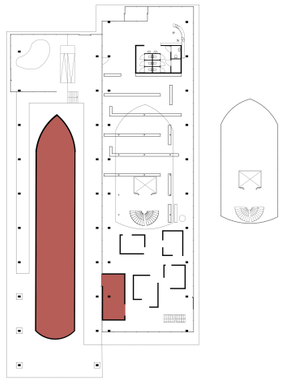
Exhibit 5
Future proof

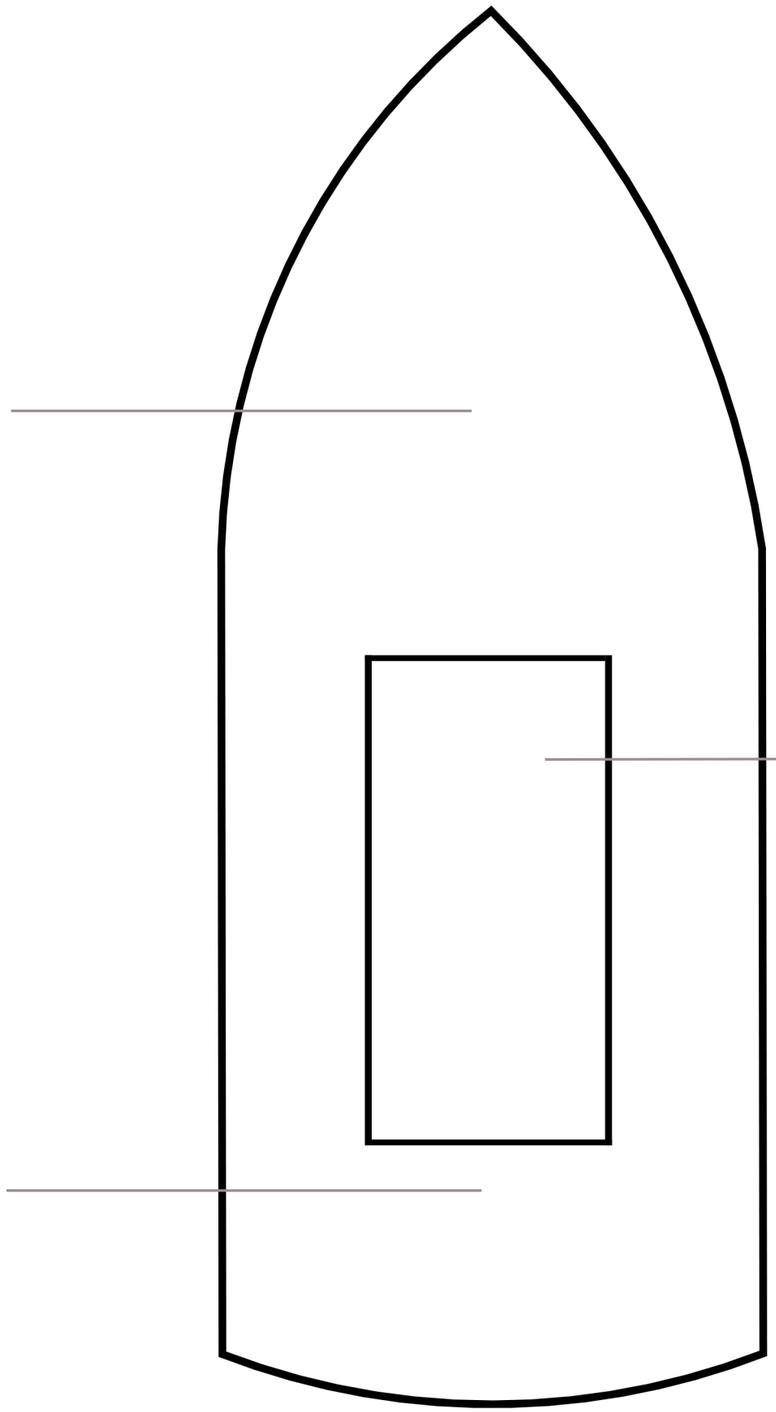


Subaspects on the theme of dredging
Spatial interpenetration & spatial isolation in combination with linear chaining

(interactive) models and games combined with informative text, video and image

Exhibit 6
Get on board!





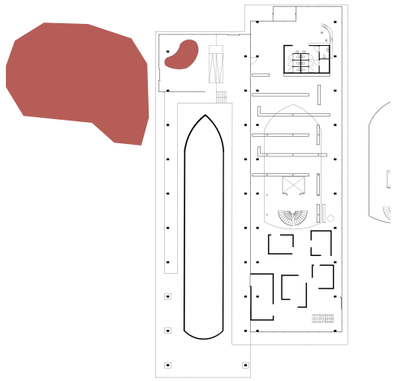
Interactive game: project expidition

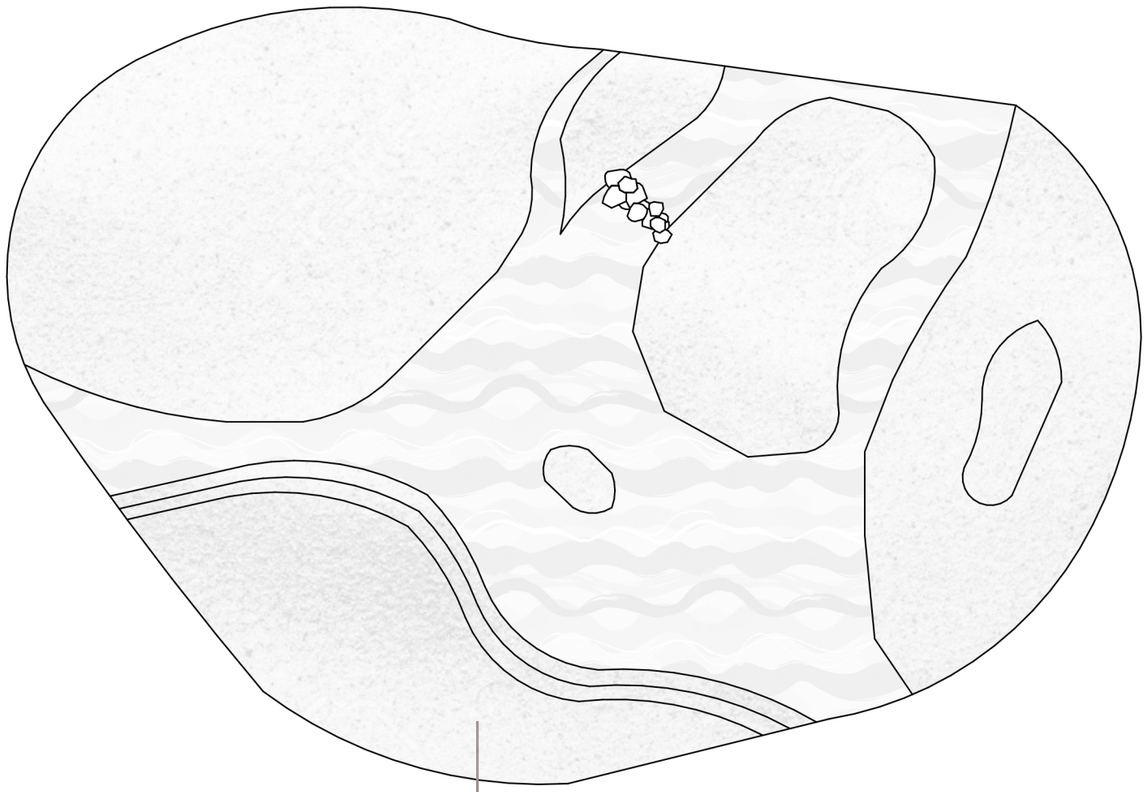
How does the ship function?
look at the engine room and wheel-house

Get ready to go on board

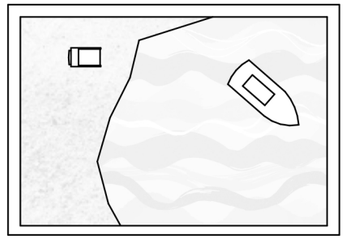
What is it like to live and work on a dredging ship?
Stories and experiences

Water playground





Built islands and dikes,
dig ponds,
and change the land



Bad weather? Let's built inside!

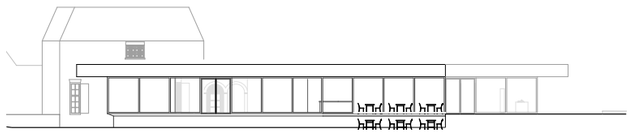
Ensemble

The monument



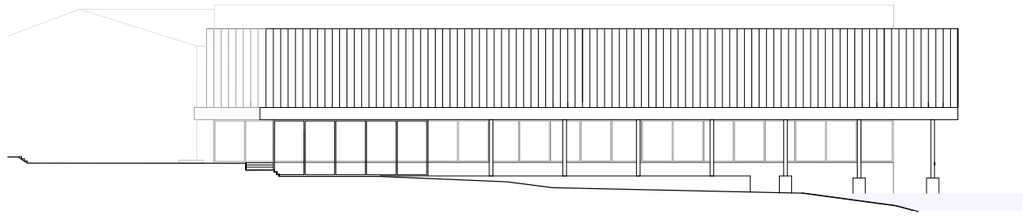
Dike ribbon typology

The pavillion



Link between the 2 typologies

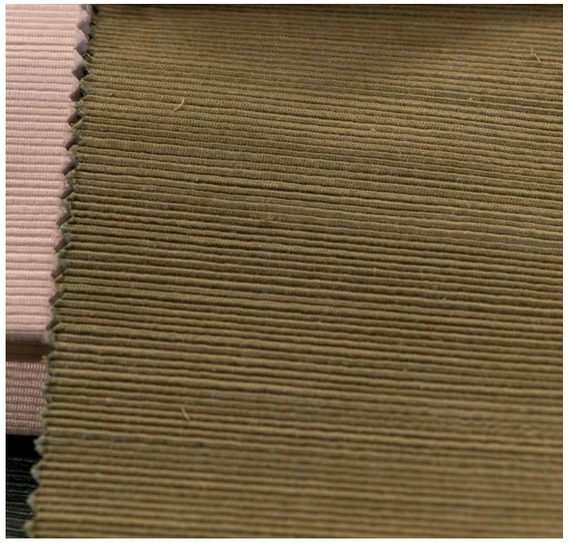
The shipshed



Maritime typology



















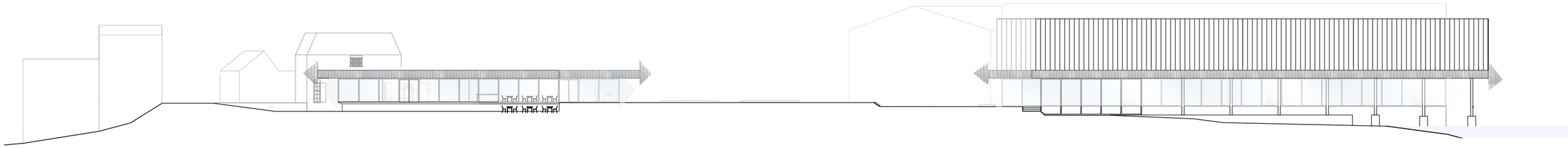


Current situation

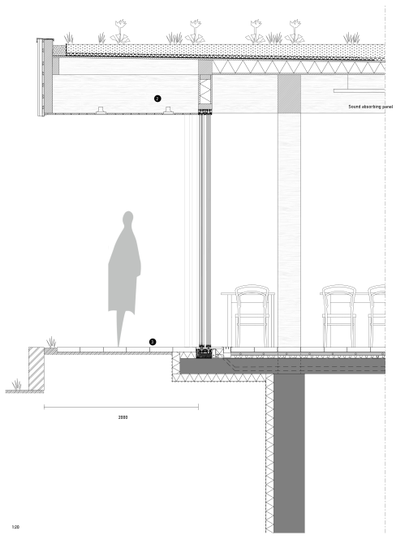


New siuation with corridor

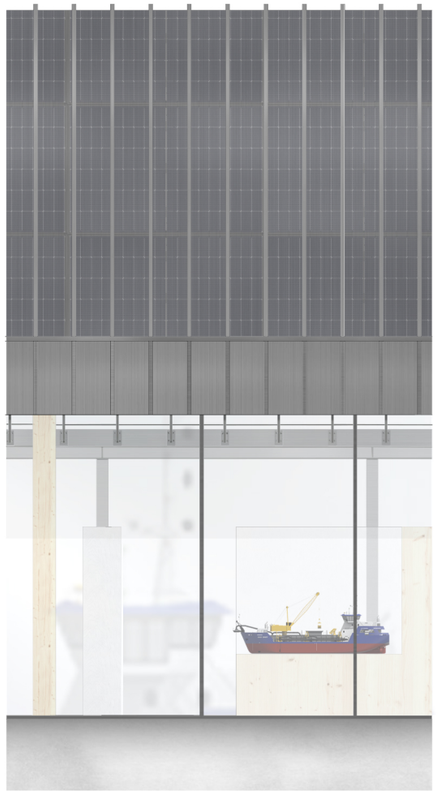


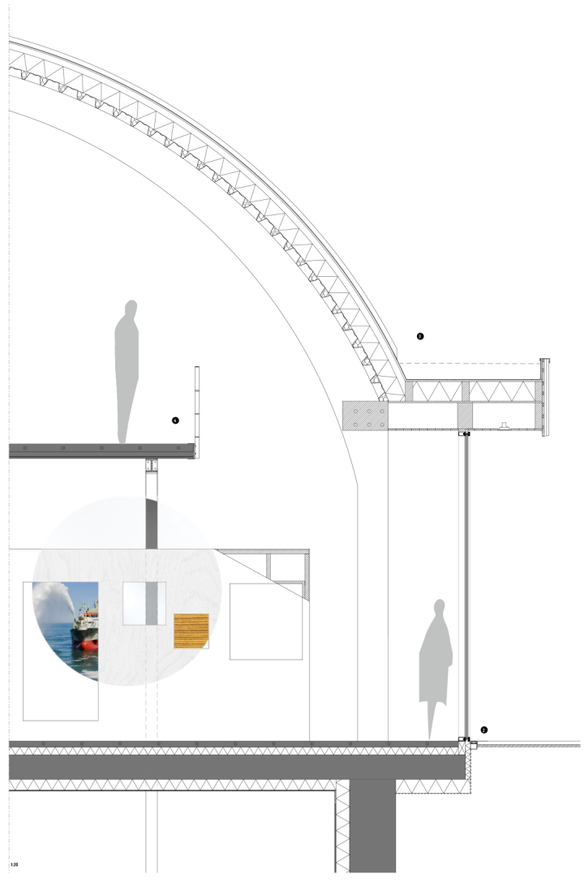




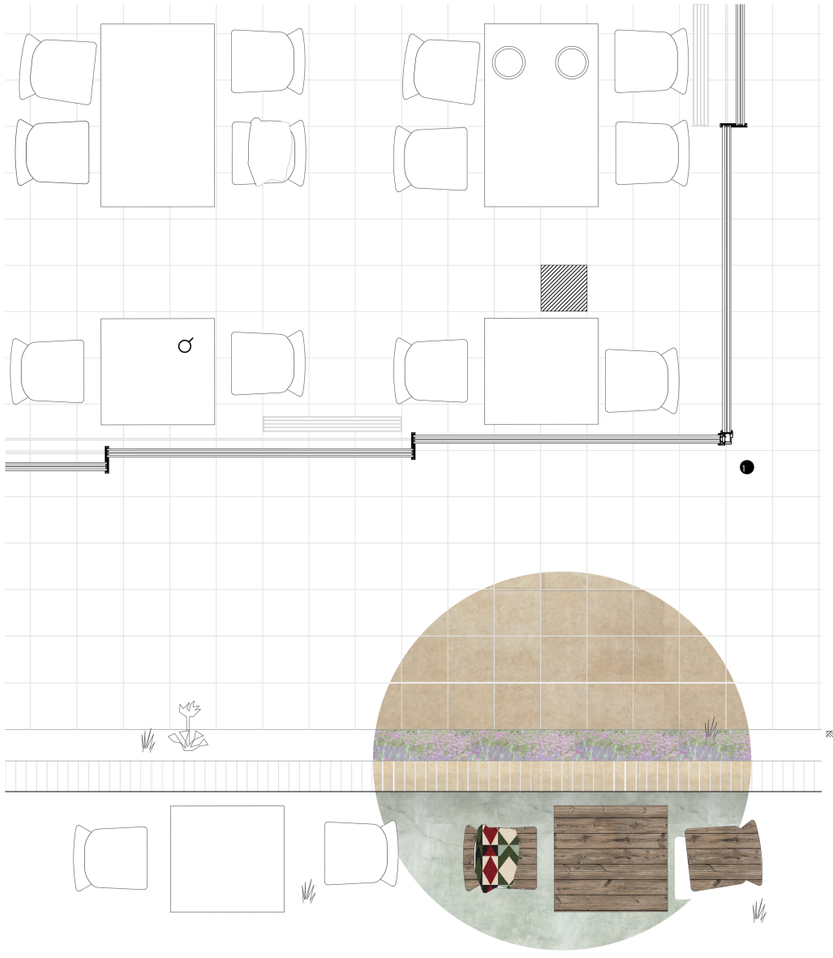

Sound absorbing panel
2000
1:20

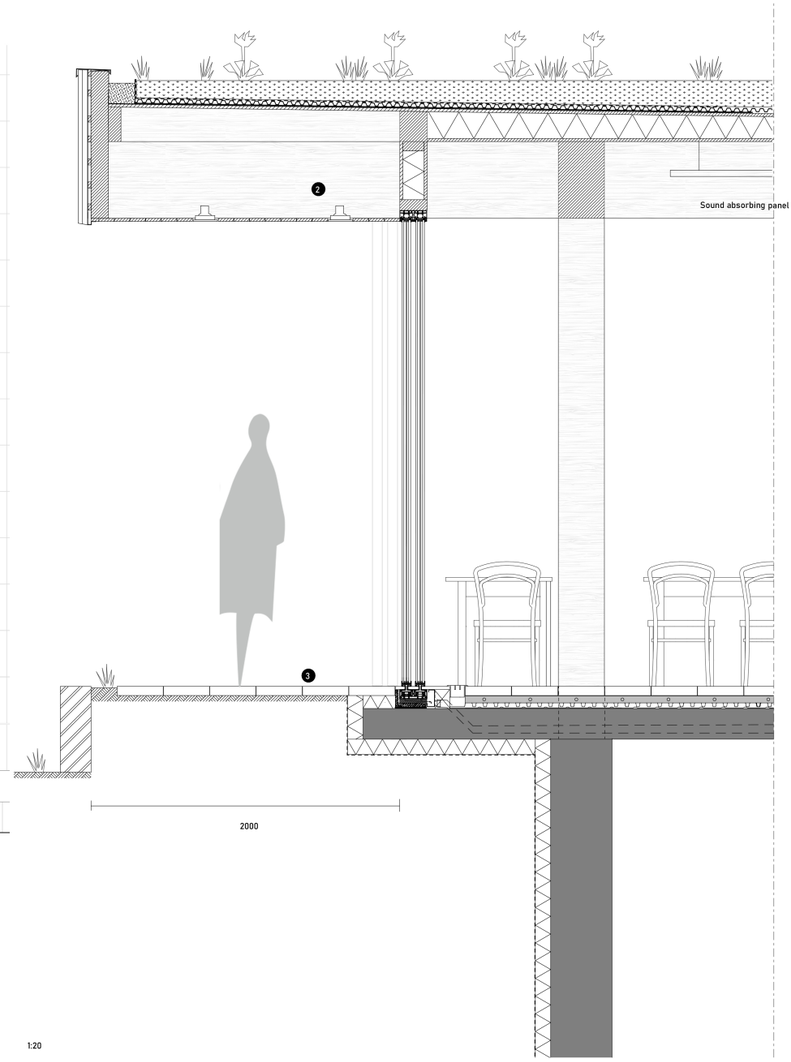





1:20

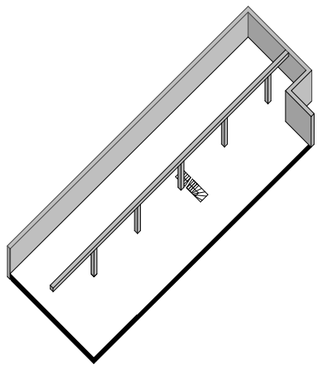
The pavilion
Climate, construction & architecture

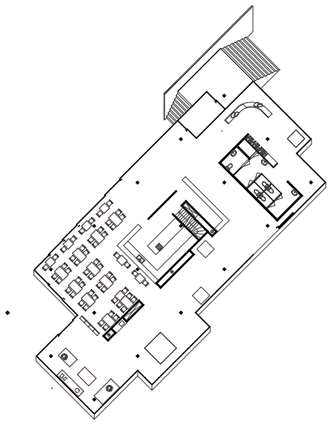


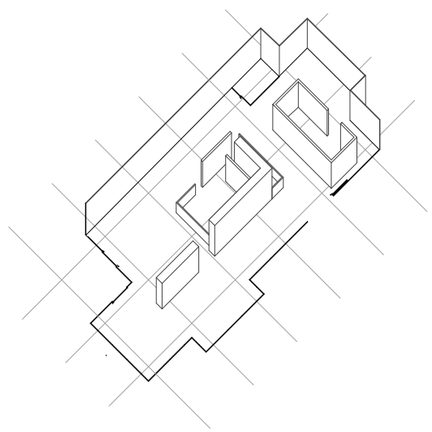


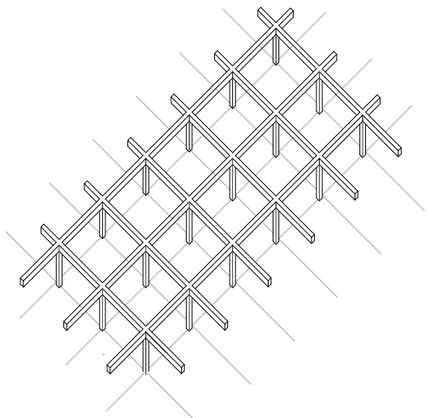


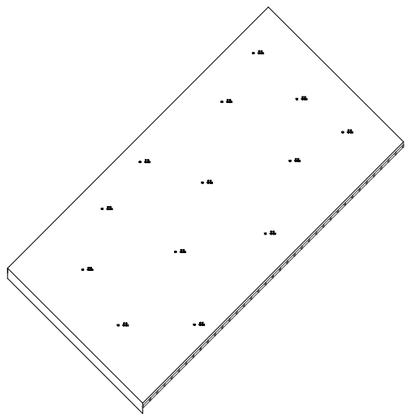


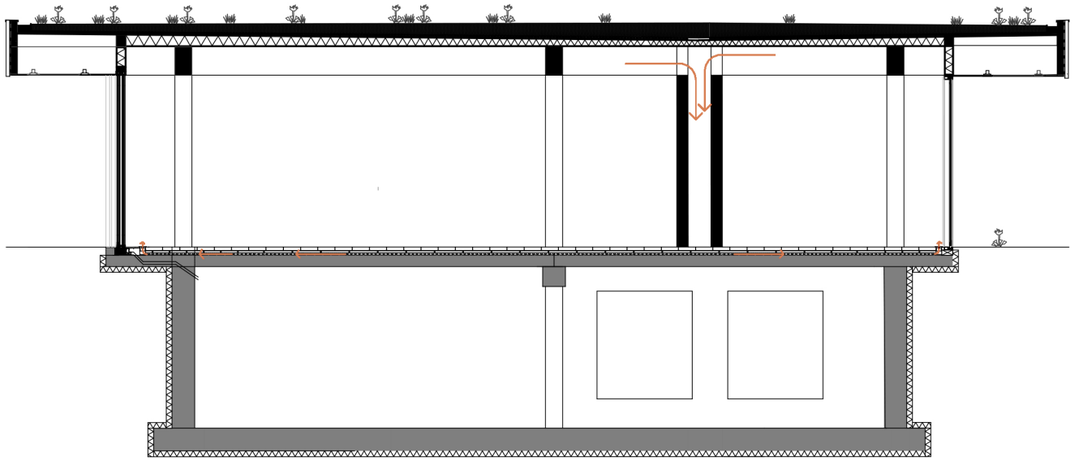










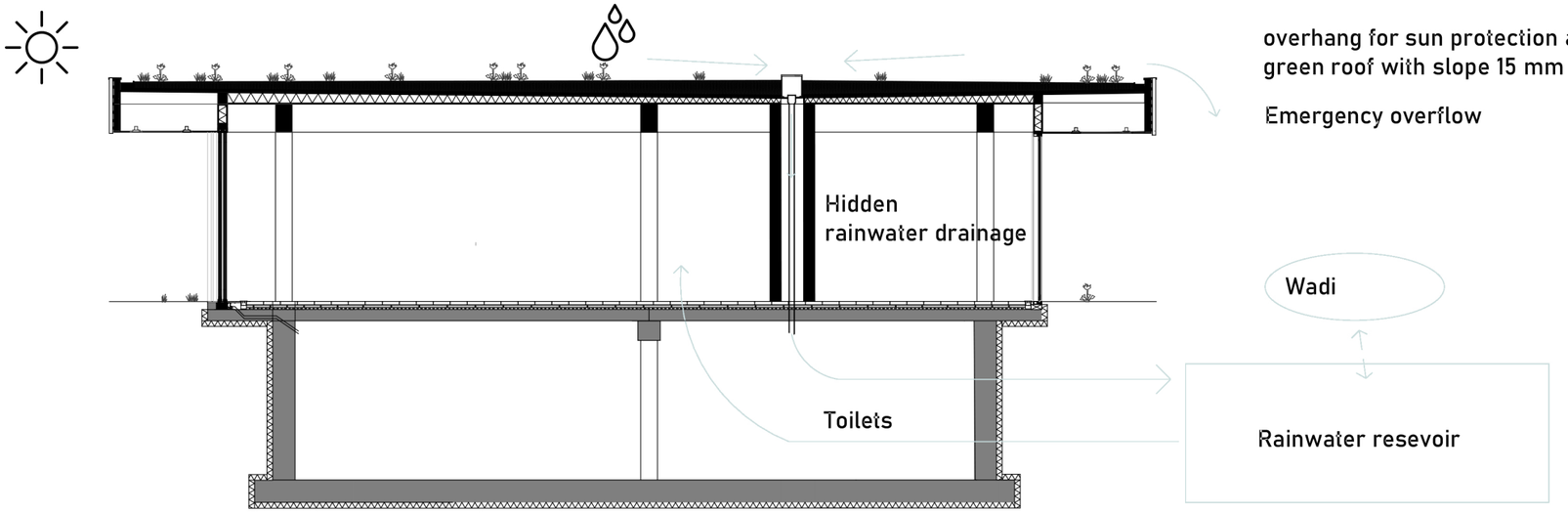


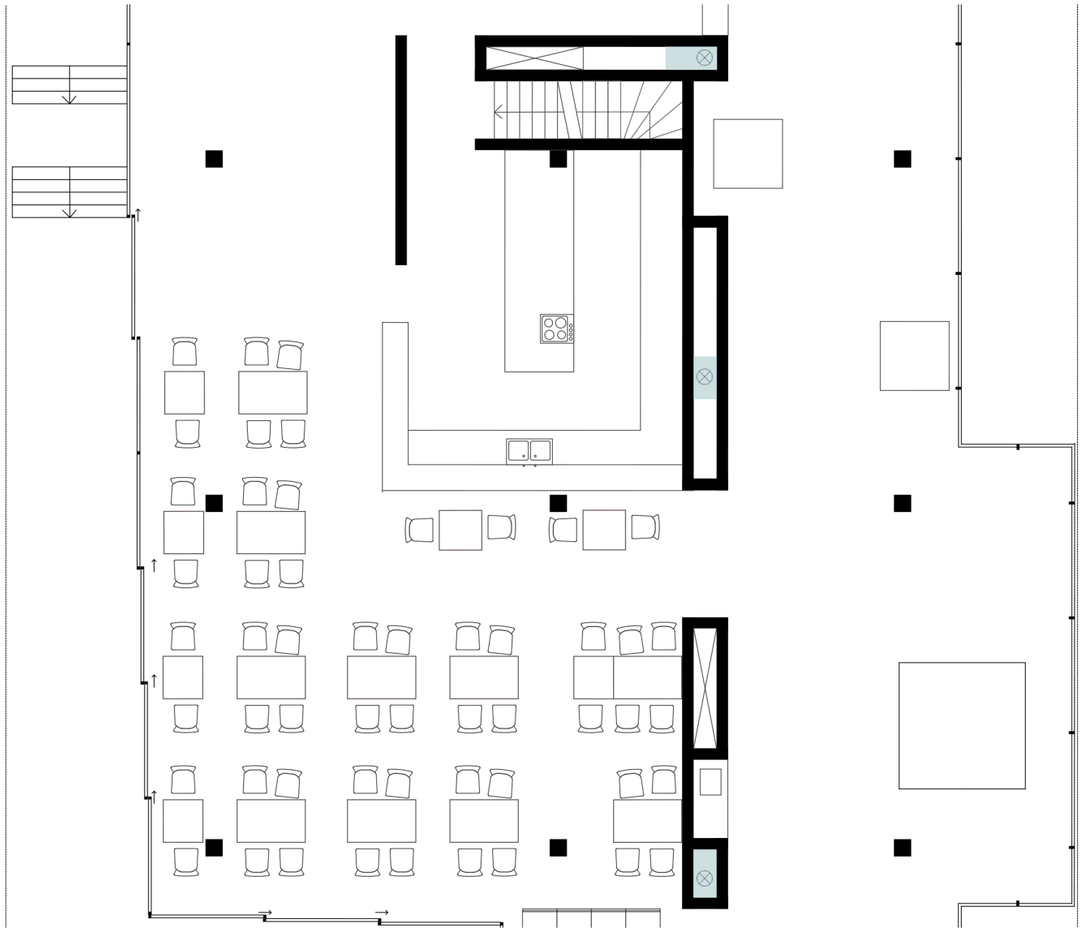
Mechanical extraction
through grilles in the wall

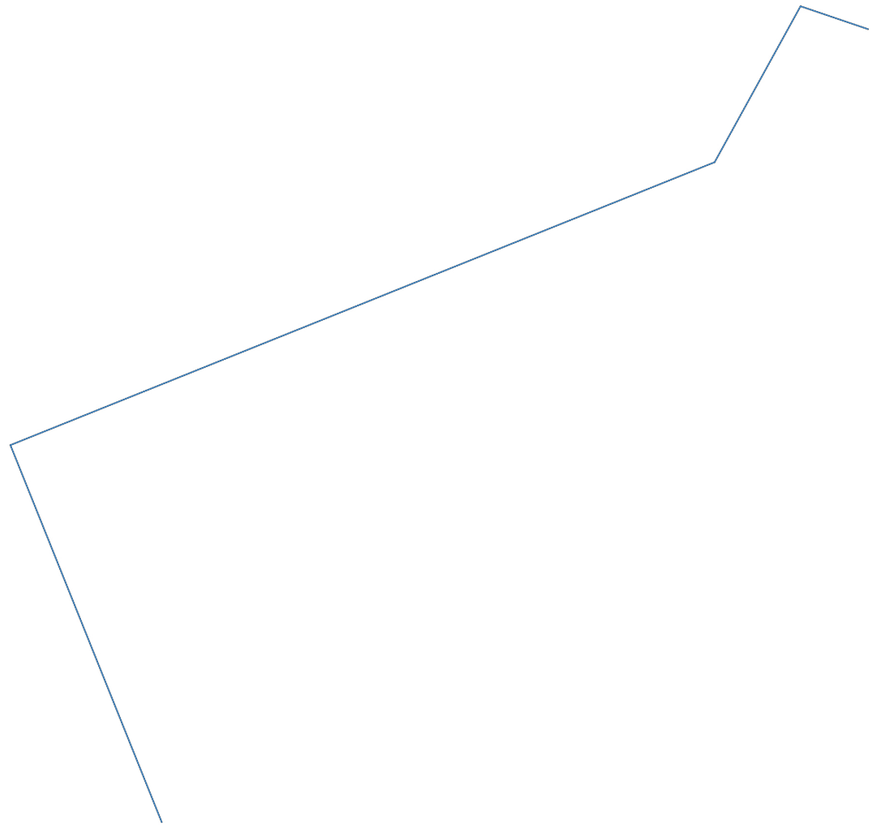
The floor provides cooling,
heating & ventilation with
underfloor heating &
ventilation grilles.

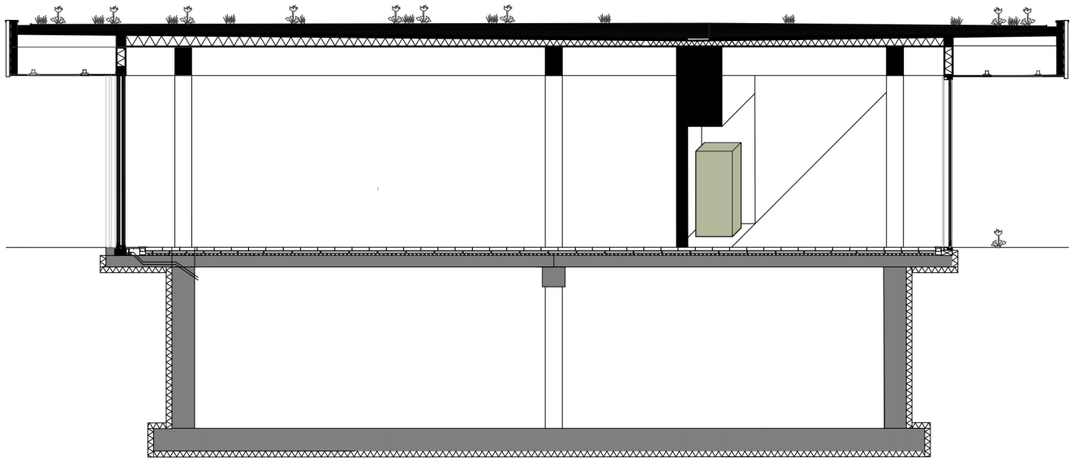
Heat pump & air treatment
in the basement




overhang for sun protection and
green roof with slope 15 mm / m
Emergency overflow
Hidden
rainwater drainage
Wadi
Toilets
Rainwater resevoir

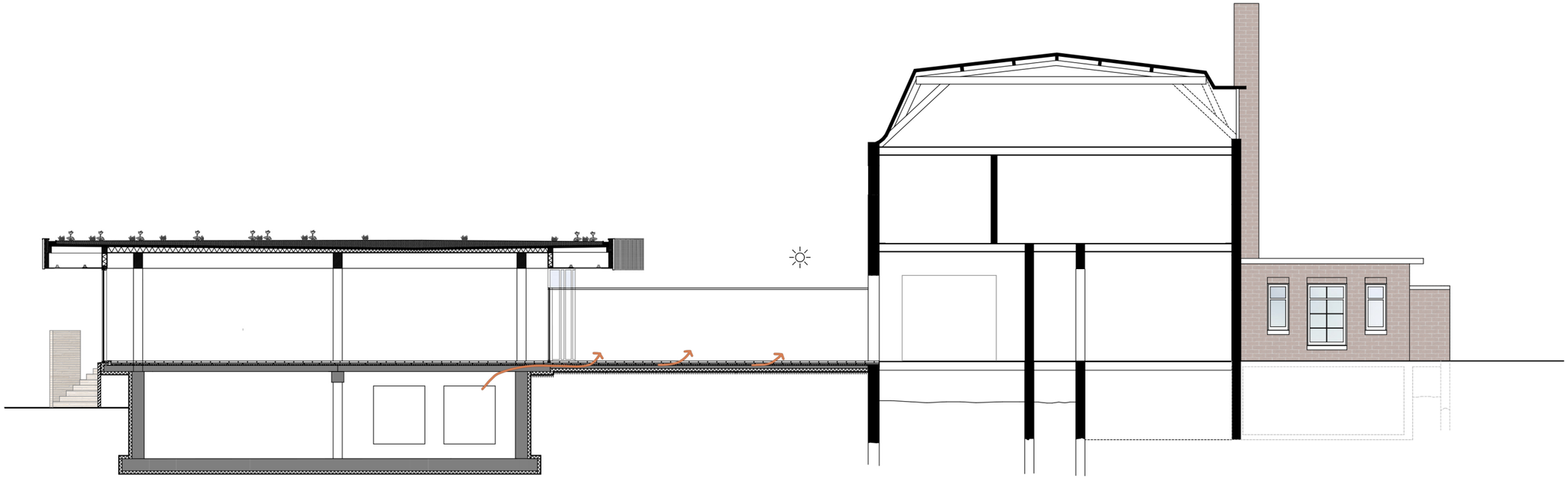






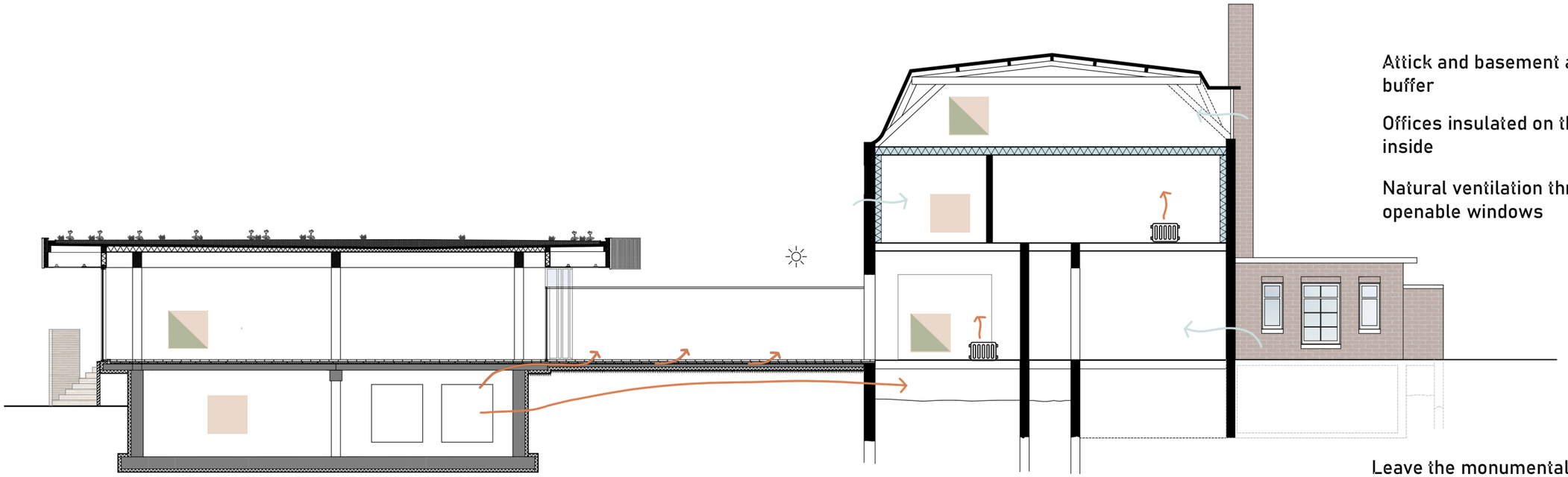
Integrated wall niche for exhibit items and catering elevator





Layered glass with UV resistant foil to prevent heat

Continuous climate floor in corridor



Attick and basement as buffer

Offices insulated on the inside

Natural ventilation through openable windows

Leave the monumental exhibition spac intact with a heating efficiency of 18 de

Connecting the radiators in the buildir the pavilions heat pump system

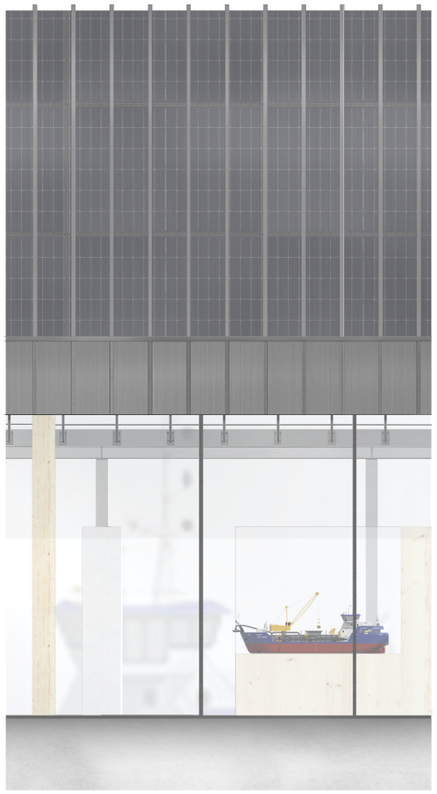
Climate zones

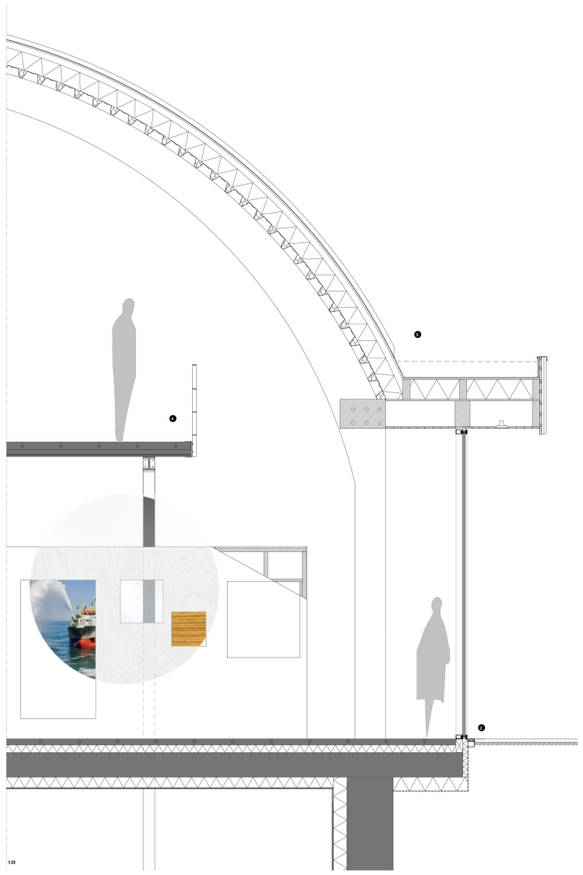
People

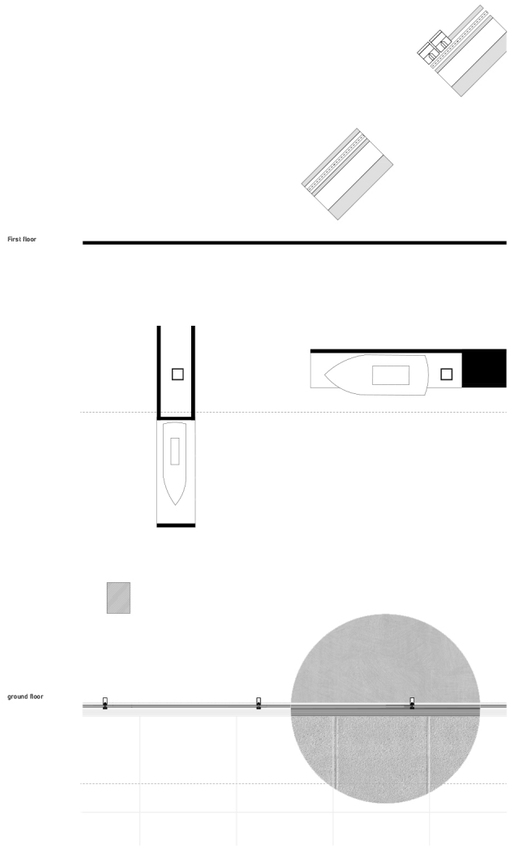
Collection

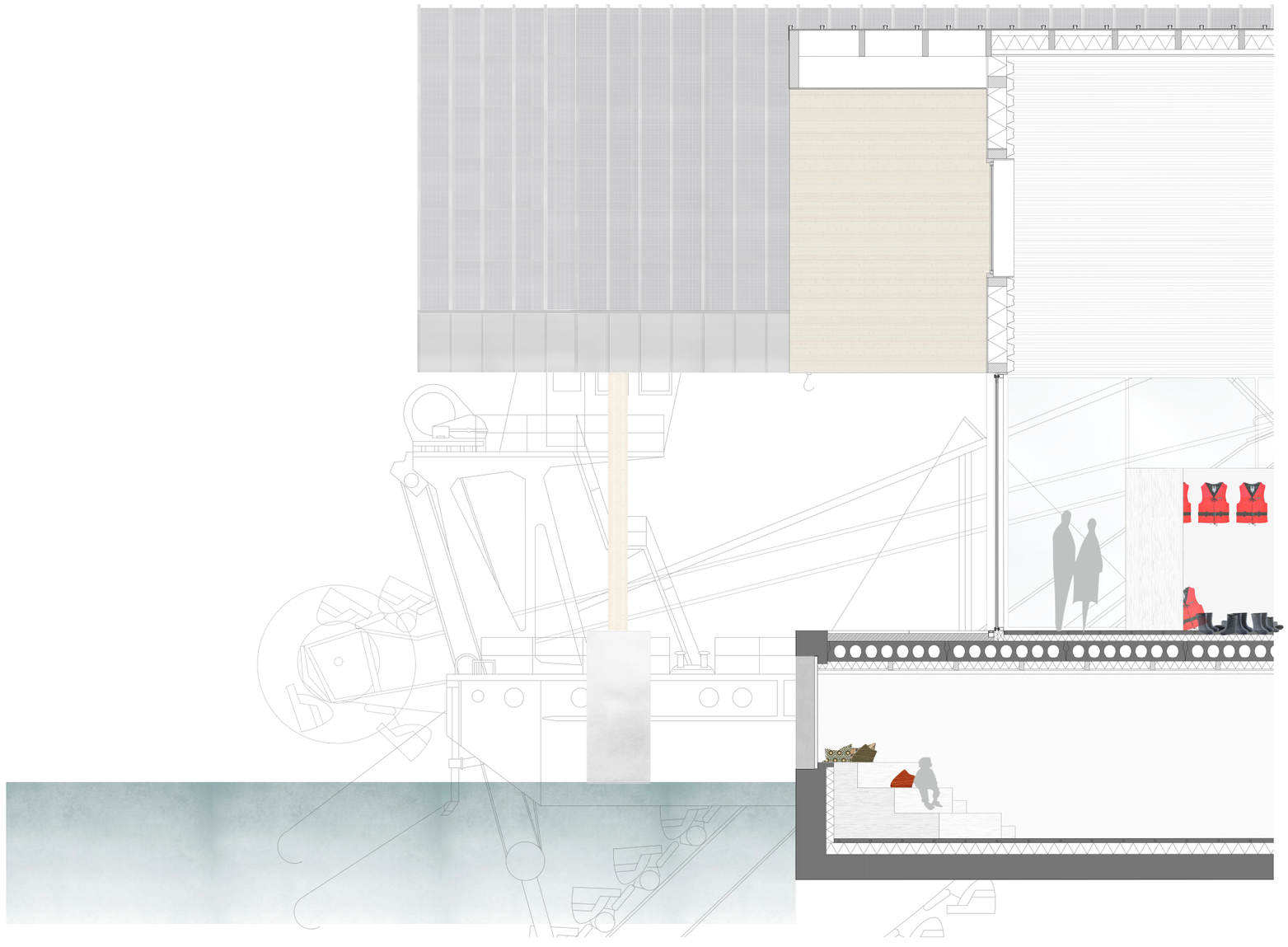
People & collection

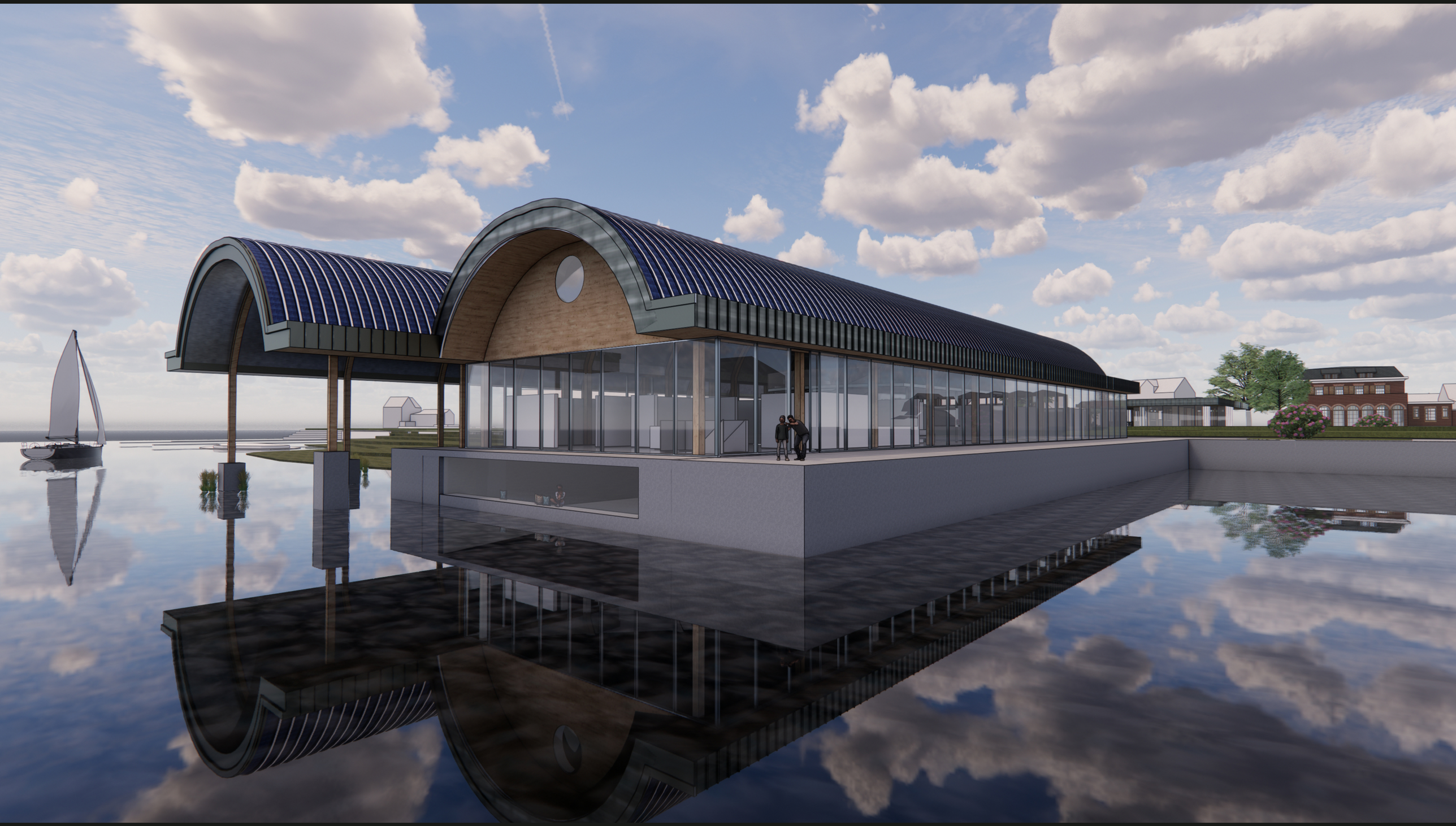
The shipshed
Climate, construction & architecture

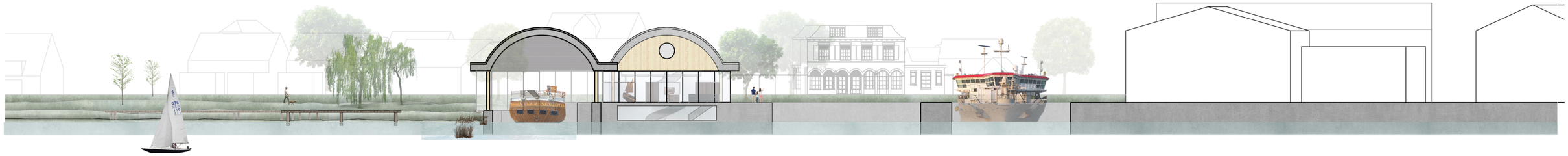


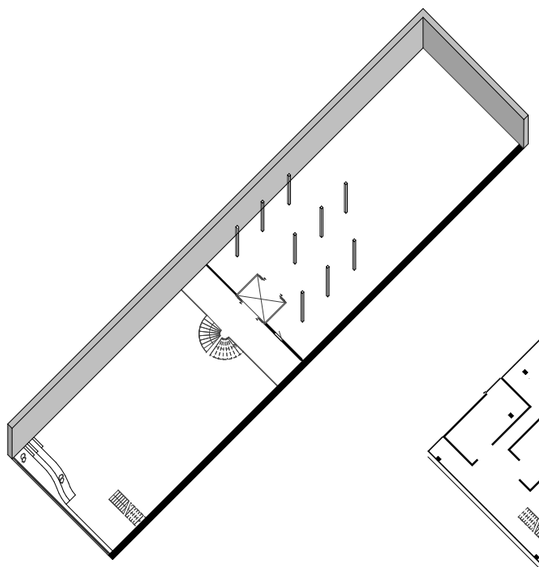


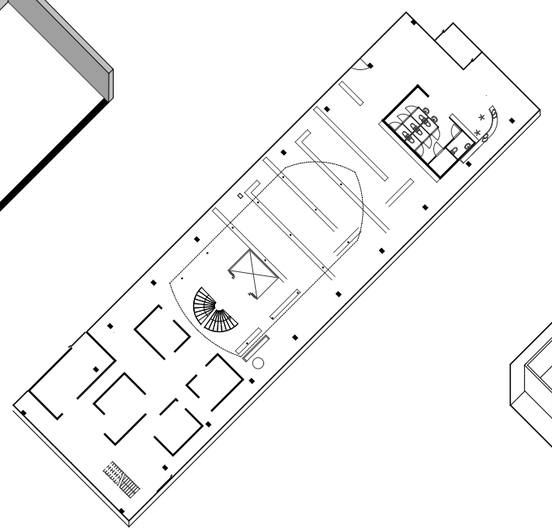


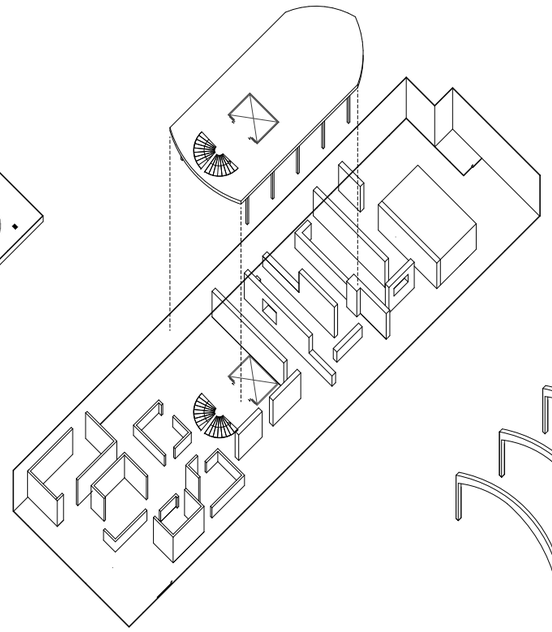


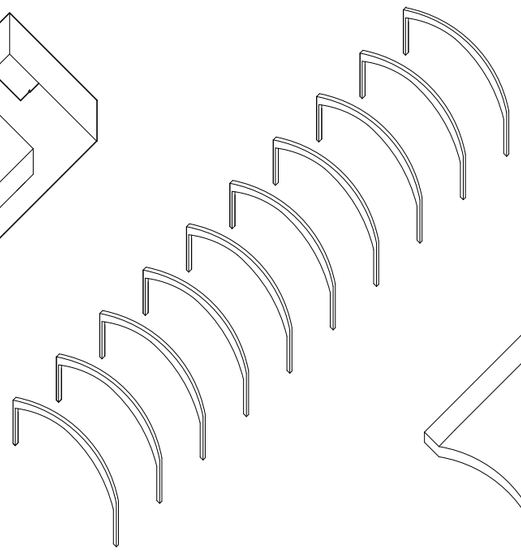


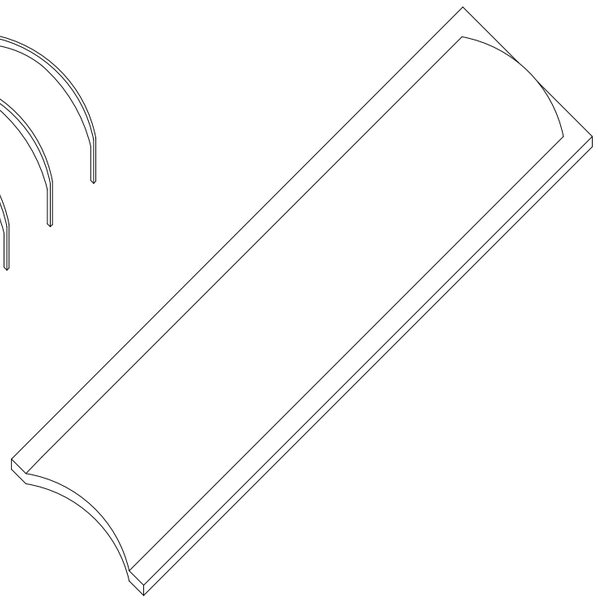


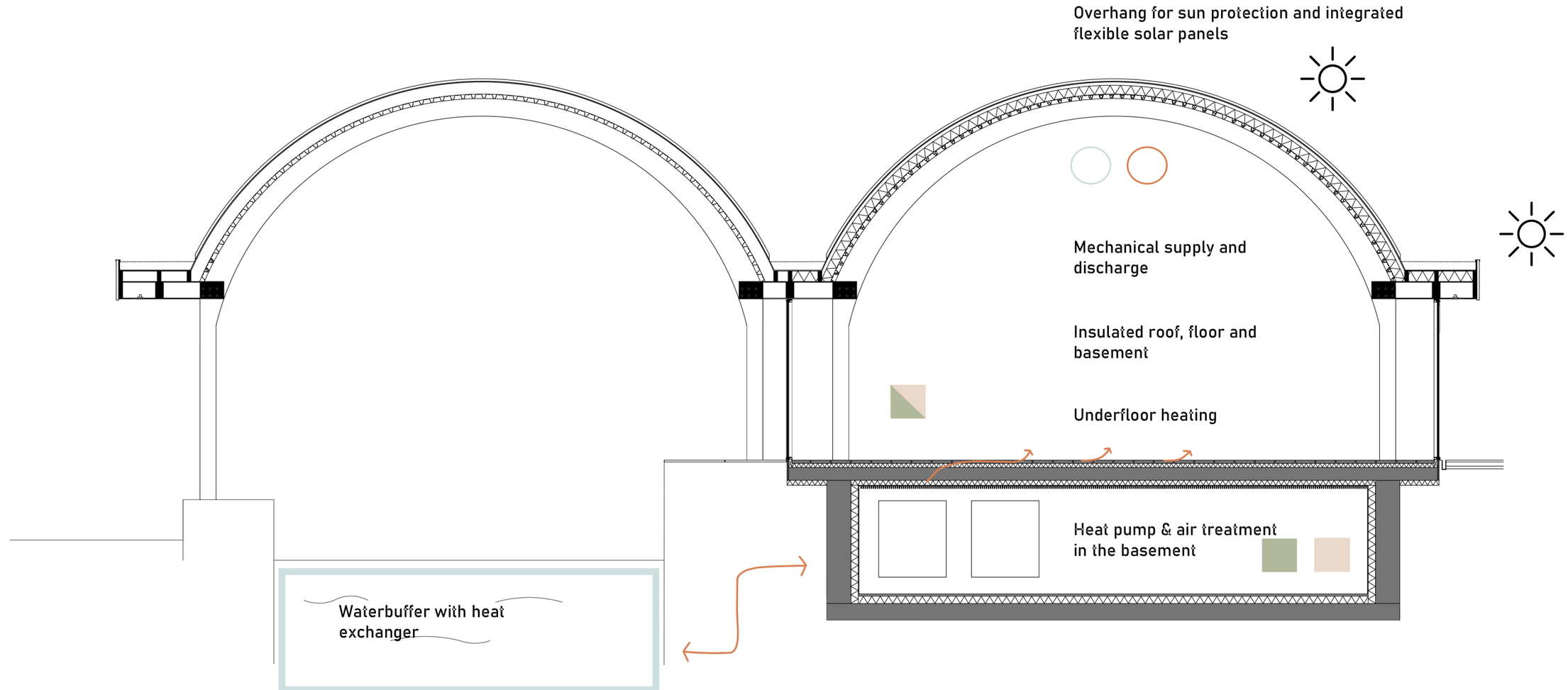












Climate zones

People

Collection

People & collection

