PROCESS BOOK

INDUSTRY

IMPETUS TO URBANITY

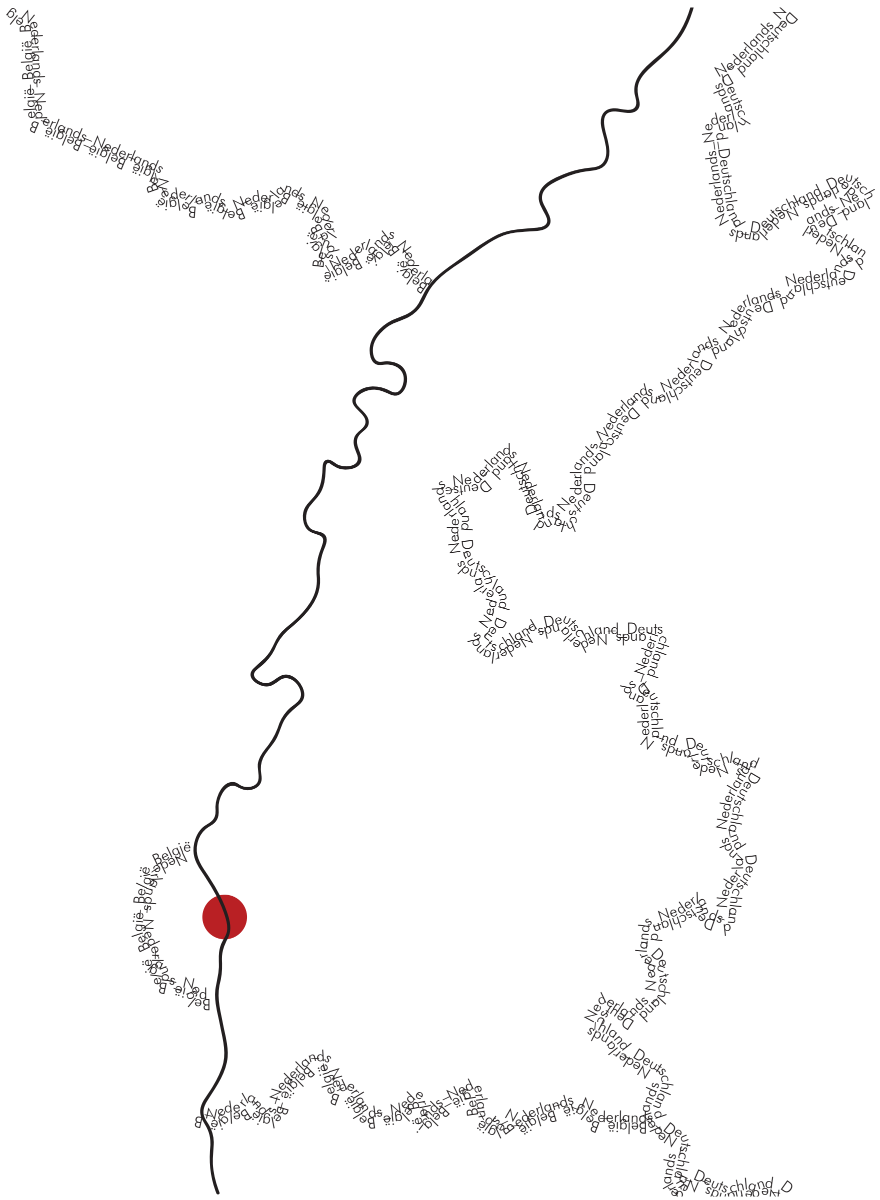
Dilara Turgut

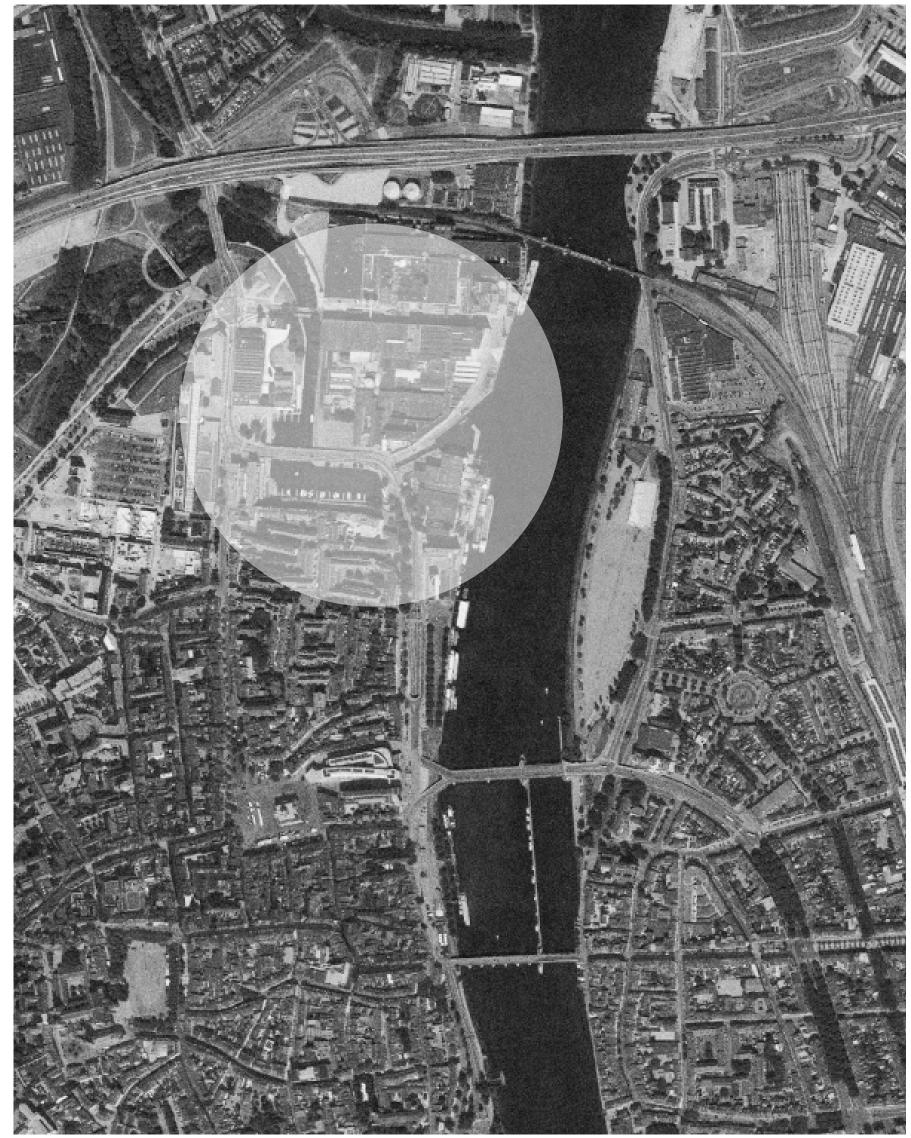
Contents

“They(the objects) had a life and they are still alive. You just need to give them a second chance.”

Agnès Varda, Les Glaneurs et la Glaneuse

Urban Architecture Graduation Studio embraces the theme ‘Gleaning’ under the title of Glanuers, Glaneuses based on Agnes Varda’s documentary called “Gleaners and I”. The studio moves its focus towards Maastricht, located in the southern part of the Netherlands as an in-between city situated between Belgium and Germany, to give it a second chance. Gleaning appears as an act of reading and reaping Maastricht, which eventually leaves us with indefinite borders of Boschstraatkwartier as the intervention site.





Site location

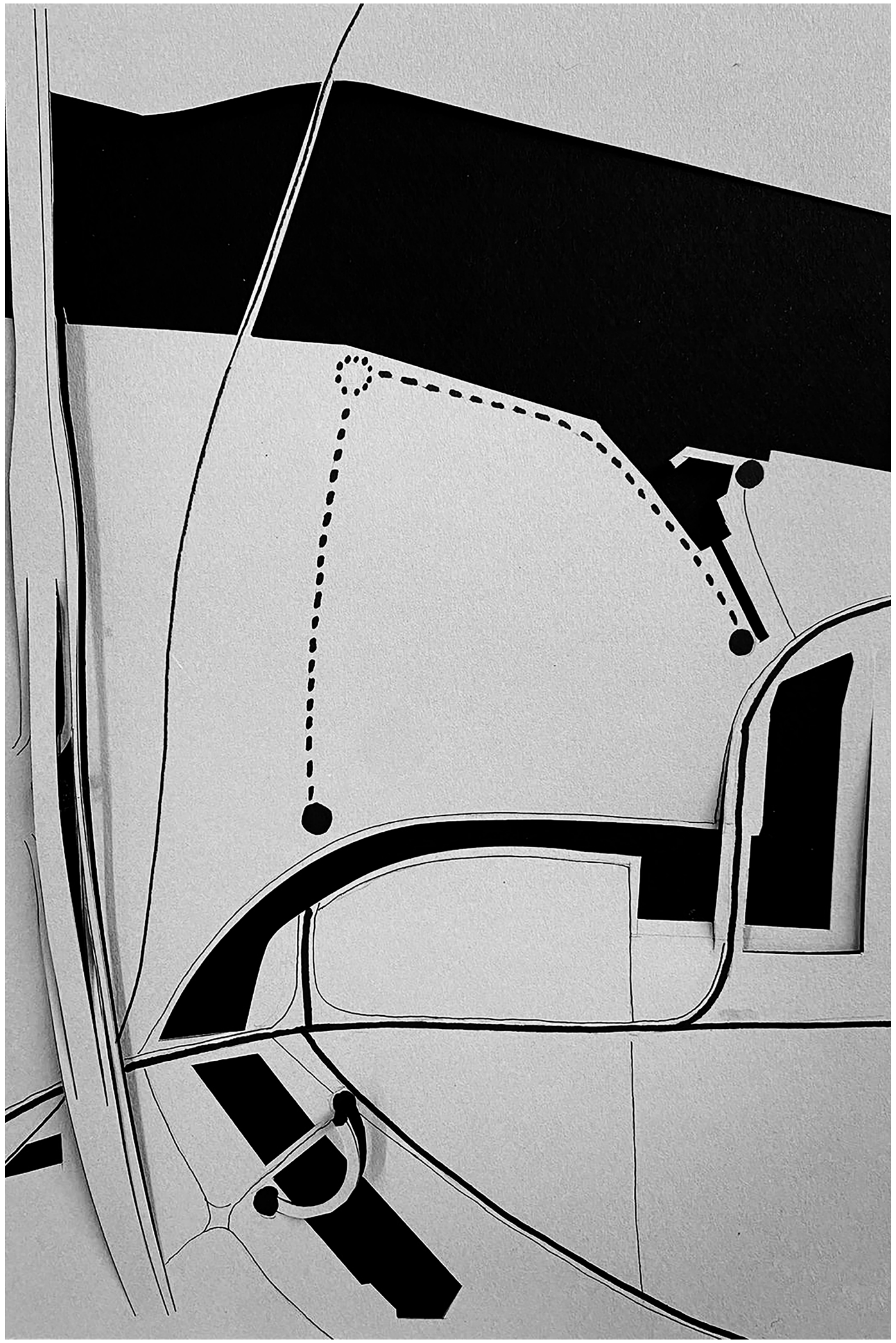
1 OVERHEAD, UNDERNETATH, INBETWEEN

The analysis of the site started with the theme of *overhead, underneath and inbetween*. As a group, we investigated the tangible and intangible layers of the site, sought to understand their literal as well as intangible meanings of the concepts we were given

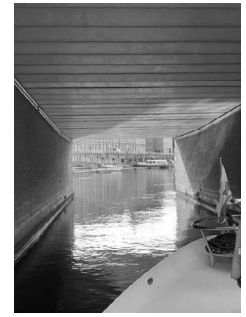
Group Members

Dilara Turgut
Jolien Streng
Karthika Ranjit
Leon Vöckler
Reinder Versloot
Vineet Dhall

overhead
: above one's head
underneath
: under or below an object or a surface
inbetween
: intermediate/between

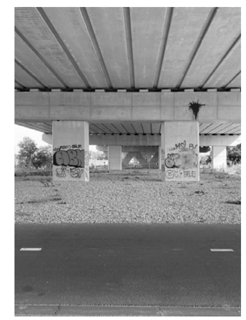


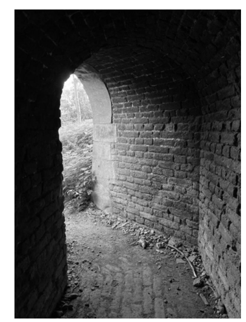
Studying this 'leftover' piece of the city reveals a layered nature where the past is entangled within the built environment, the infrastructure, and the topography. This layered nature provides the opportunity to investigate the present day site through the lenses of 'Overhead, Underneath, and In between' to understand the structure of the site and the city of Maastricht. Through this seemingly infrastructural theme, the study reveals the flows, rhythms, and the potentials of the site.







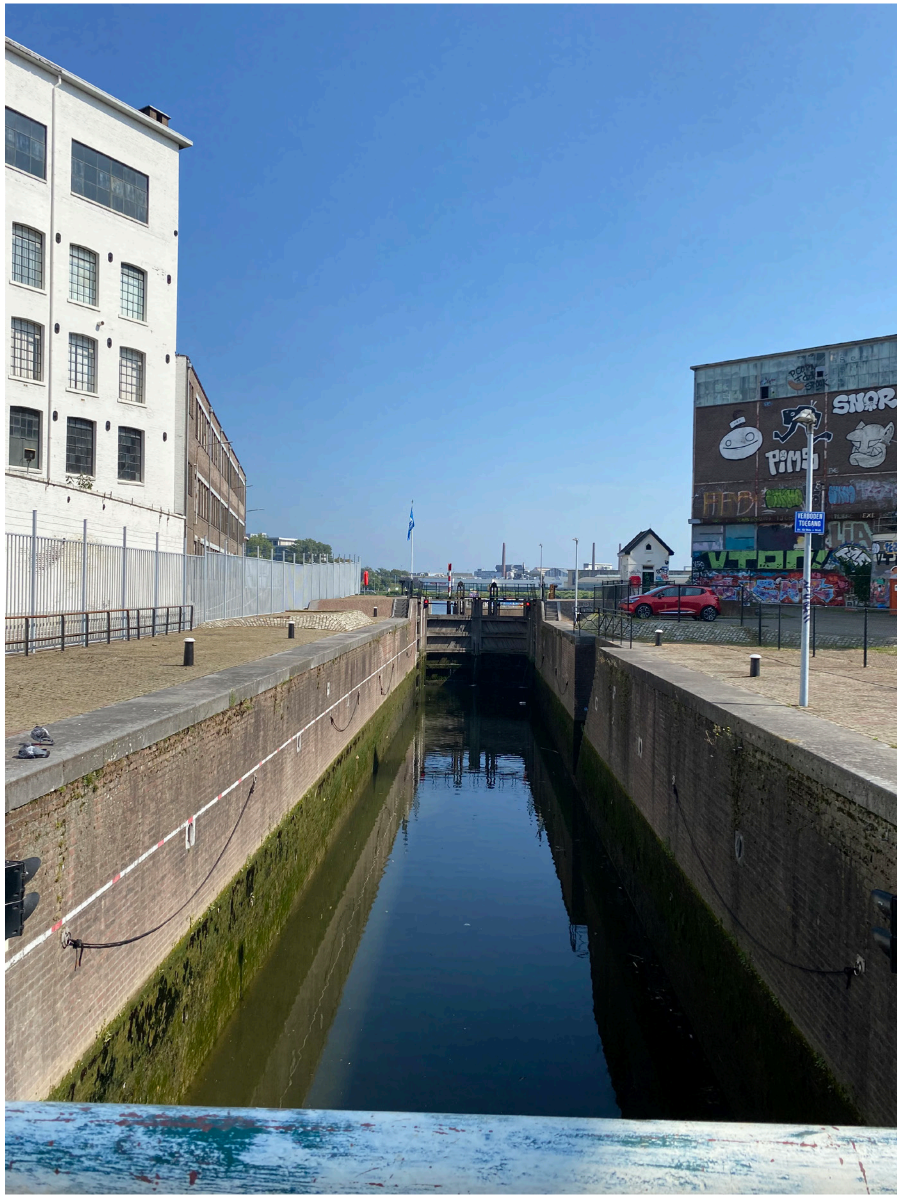




overhead:
above one's head
underneath:
under or below
an object or
a surface
inbetween:
intermediate/
between

a path to Sappi Factory

Maasboulevard

overhead, underneath, inbetween



The lock

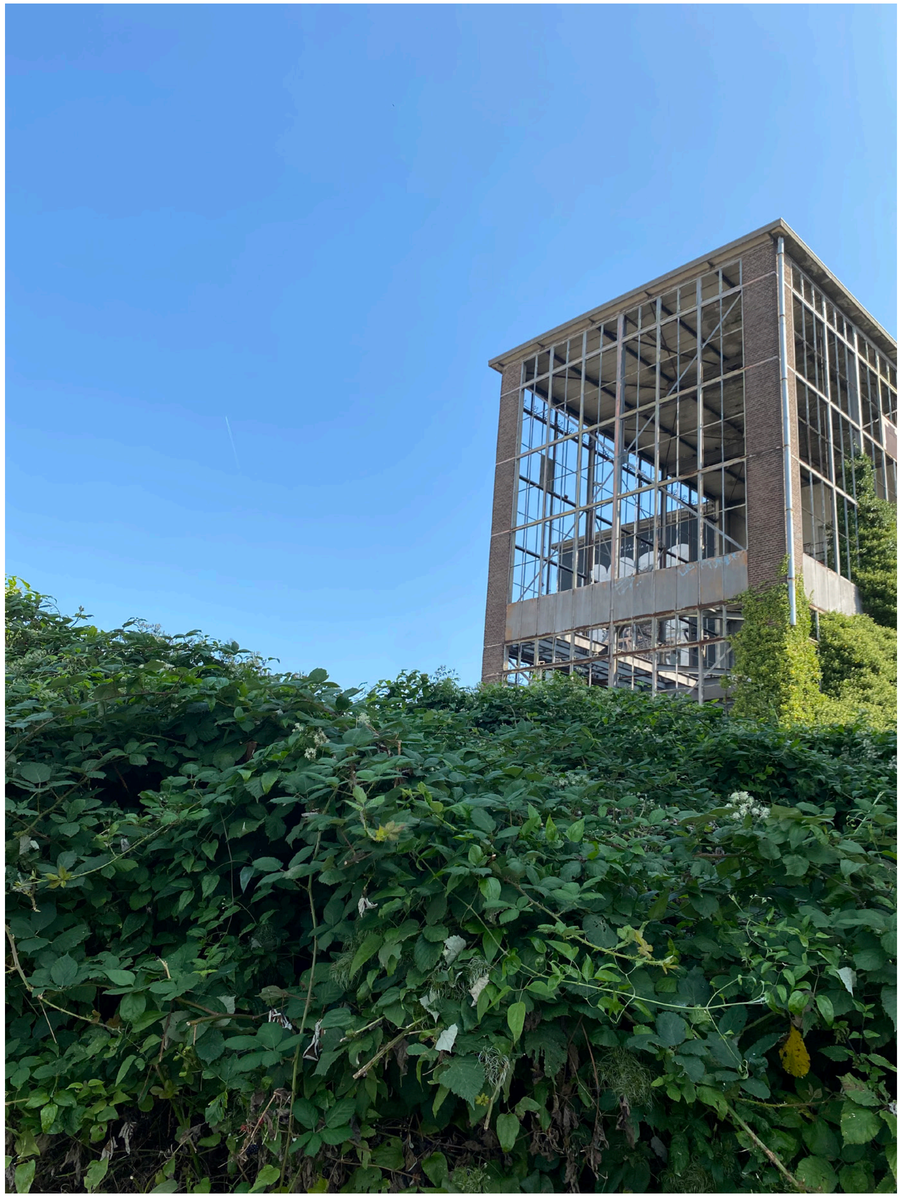
Abandoned clay factory

overhead, underneath, inbetween


From Maasboulevard facing Lumiere and the Student Hotel


The Student Hotel


The Krul

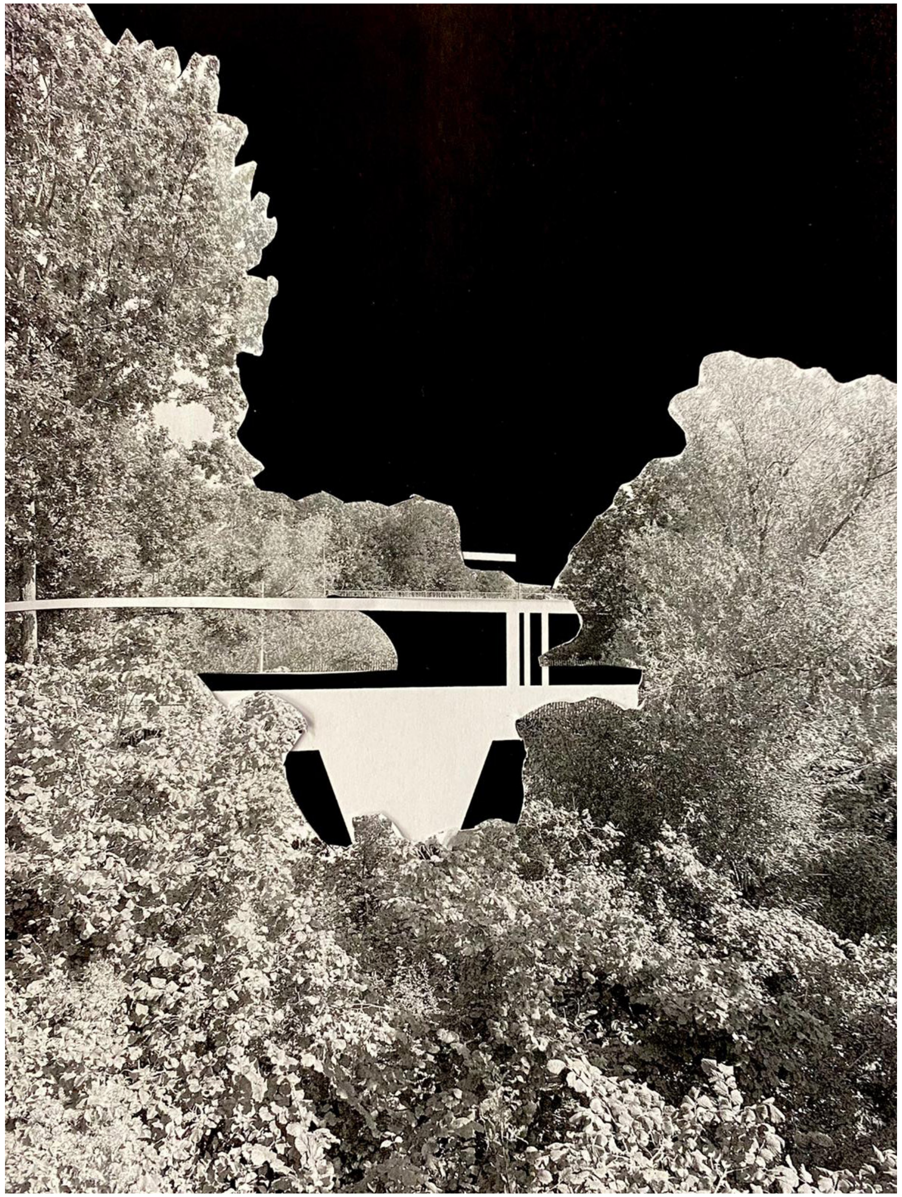


collage study

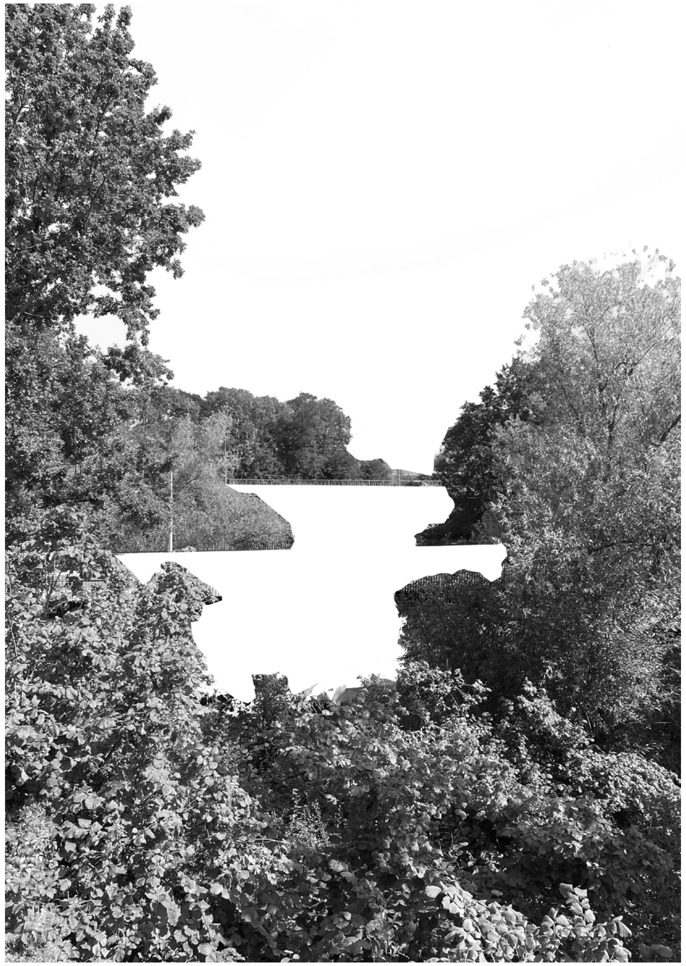
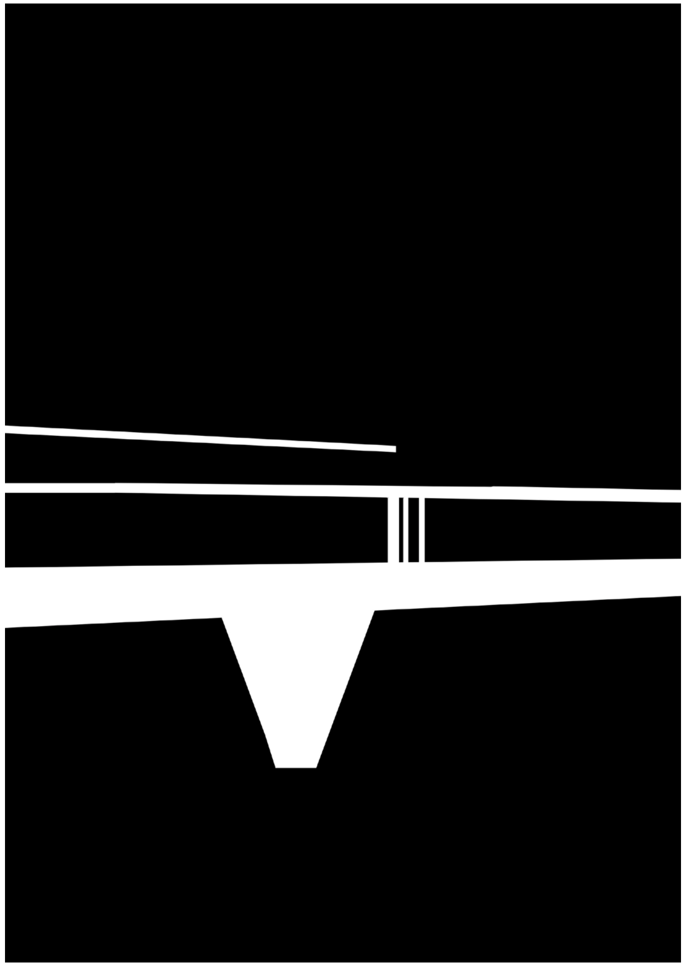
Changing the literal and physical meanings of the layers and given concepts

collage study

Changing the literal and physical meanings of the layers and given concepts

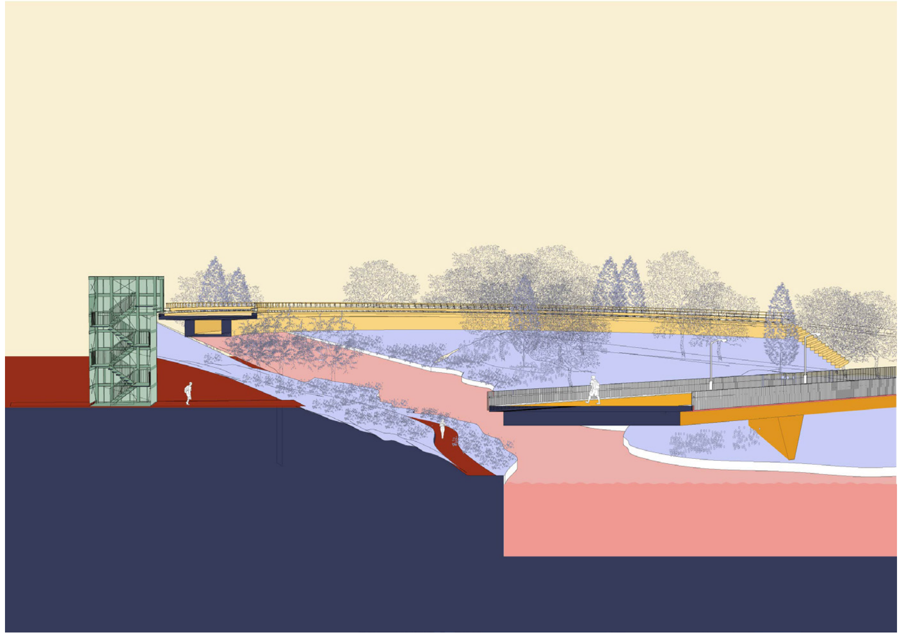


overhead, underneath, inbetween


Negative Space

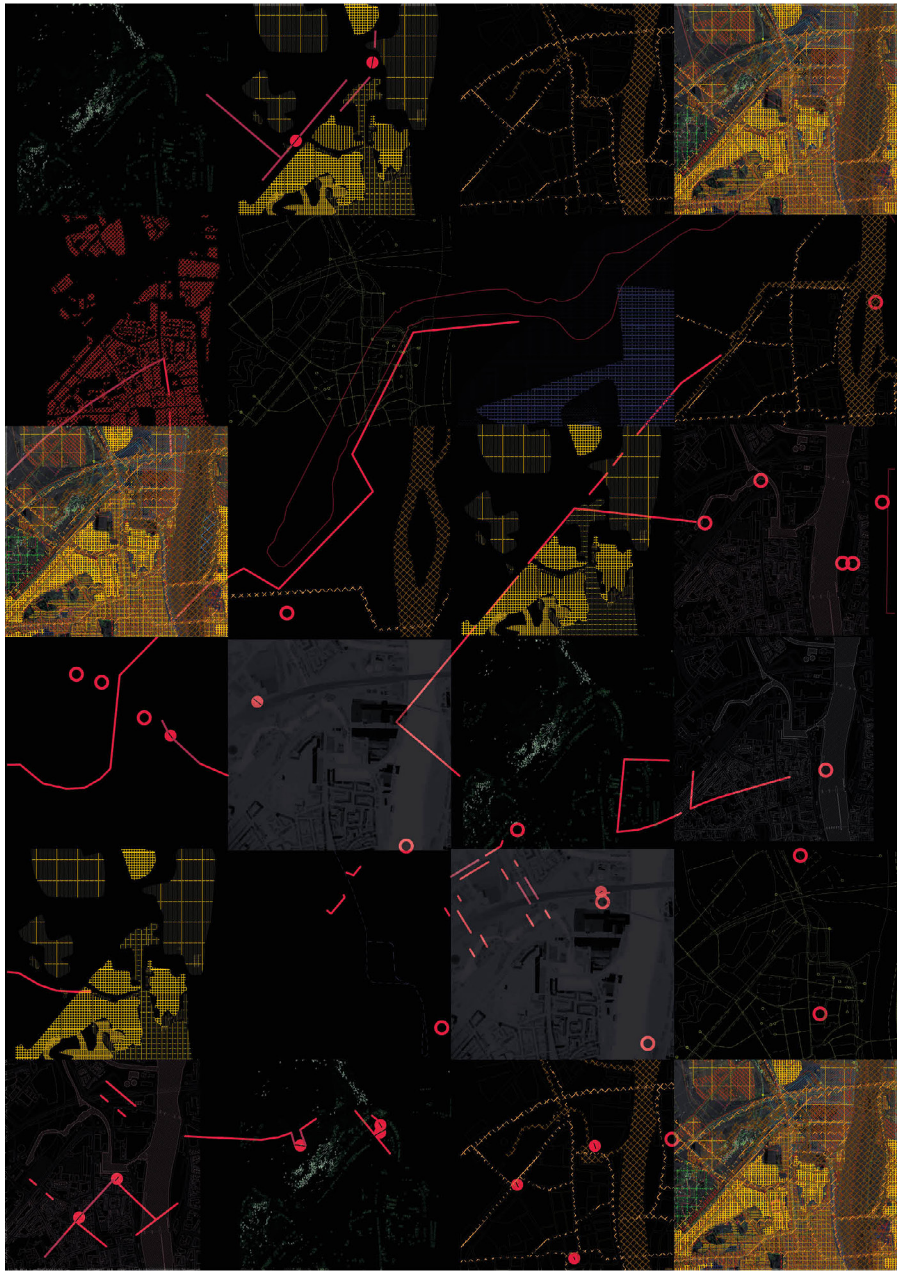
Turning the overhead bridge into an inbetween element
Turning the inbetween green into an overhead element



collage section

Understand the physical levels of the site

overhead, underneath, inbetween



map collage

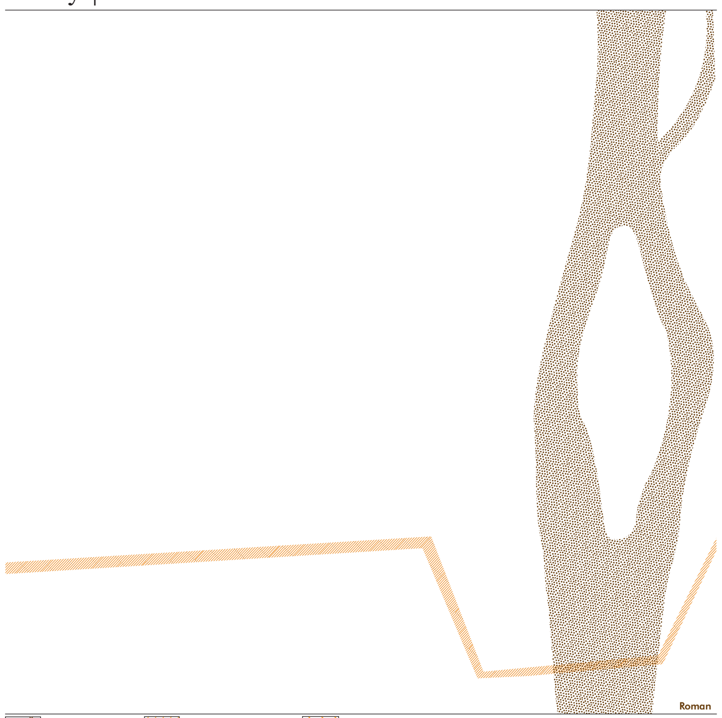
mapping

Exploring the site for instances of 'Overhead / Underneath / In-between' reveals multiple examples within the infrastructure, nature, and structures of the Sphinxstraatkwartier. Abstracting these from their context and recombining them offers new definitions to 'Overhead / Underneath / In-between', bringing to the forefront the complexities of these seemingly straightforward terminologies.
The concepts turn obsolete in their abstraction and consequently define each other through various parameters. This results in an entangled spatial context whose structure is relative to the perspective of the user.

overhead, underneath, inbetween

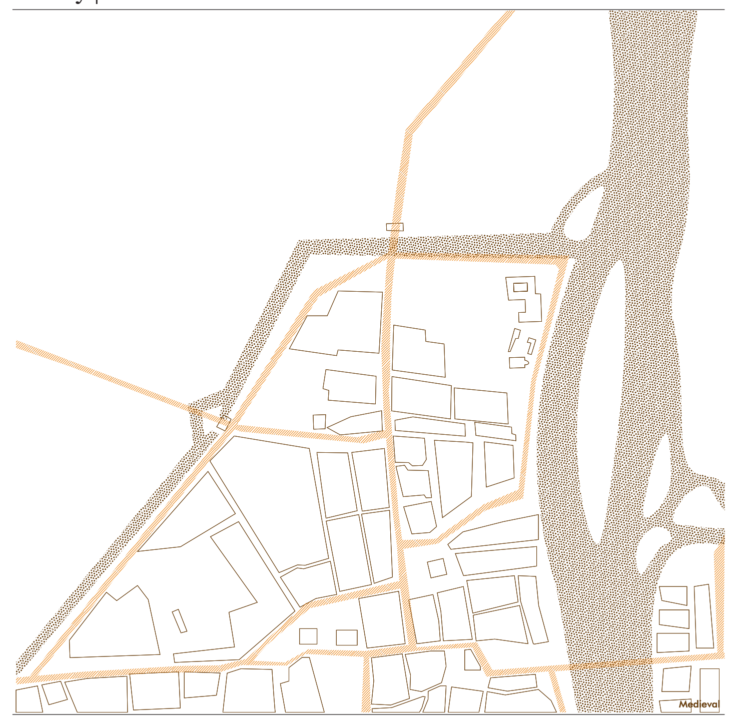
The mapping process started with observing differetn types of movement that were happening on different levels.

history | roman



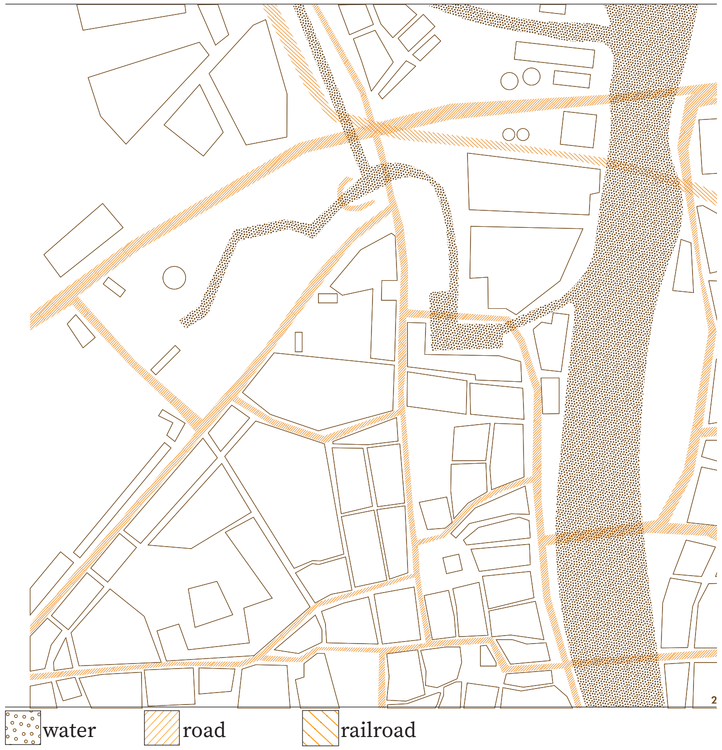
water road railroad

history | medieval

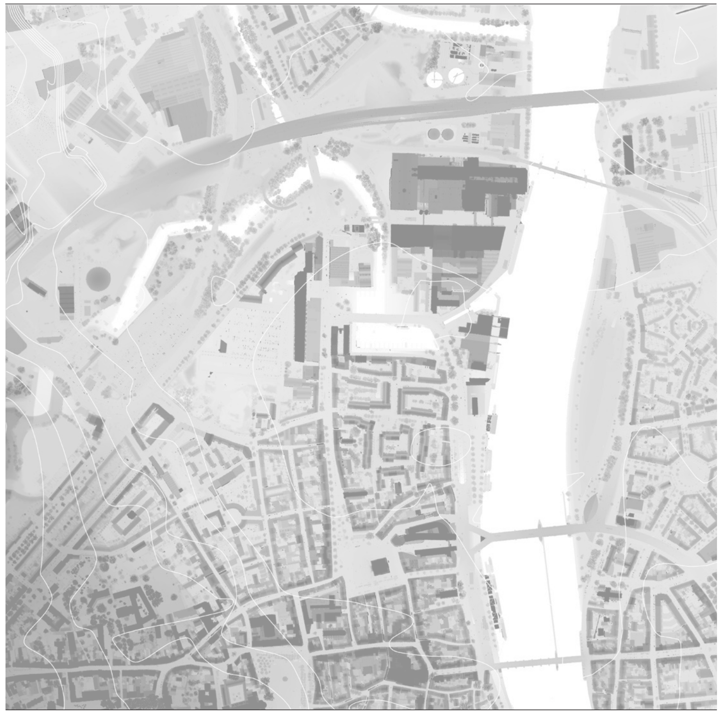


water road railroad

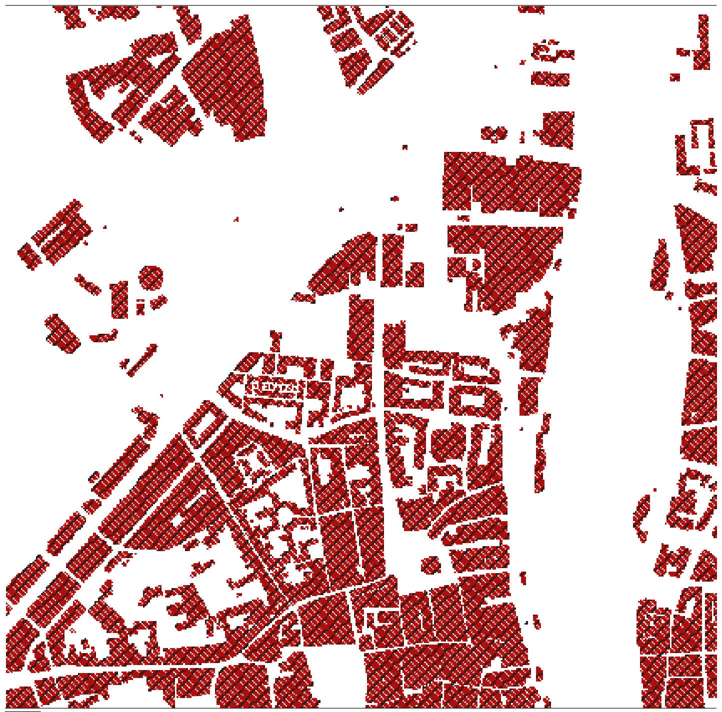
history | 2020



height



built & unbuilt



built

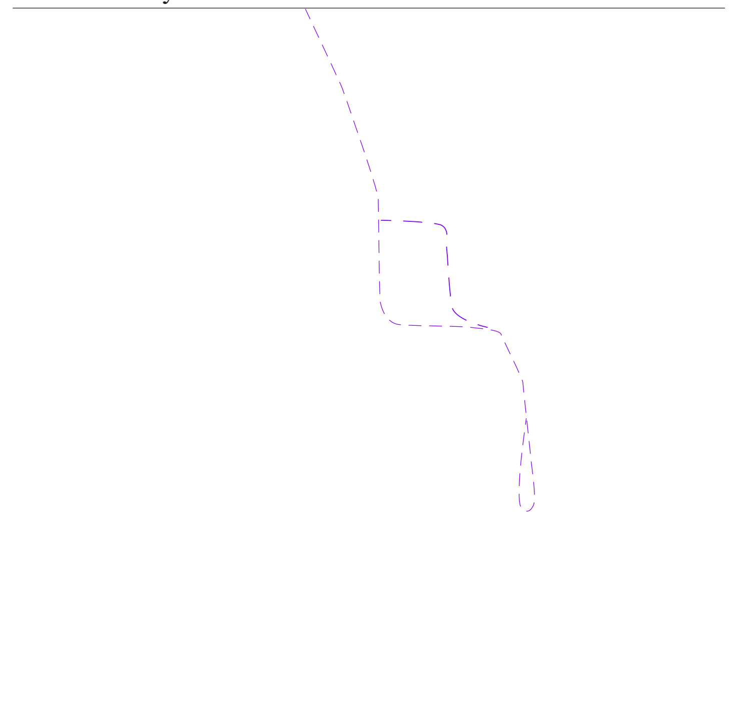
built borders

gates car stoppers walls fences

mobility

pedestrians bicycles railway vehicles fast lane(vehicular)
boats fast lane(boats)

future mobility

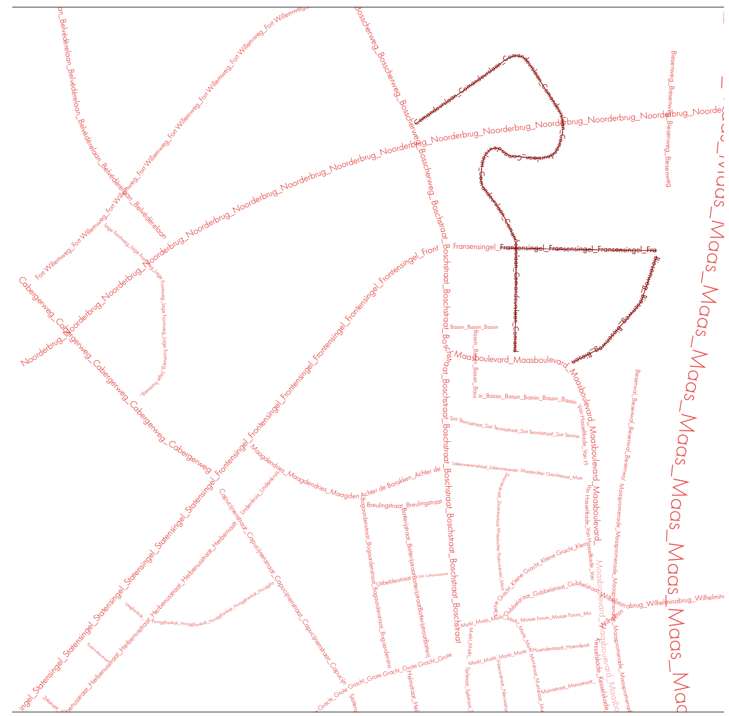


tram fast driving cars

transitions

upper level paths   mid level paths   lower level paths

road names

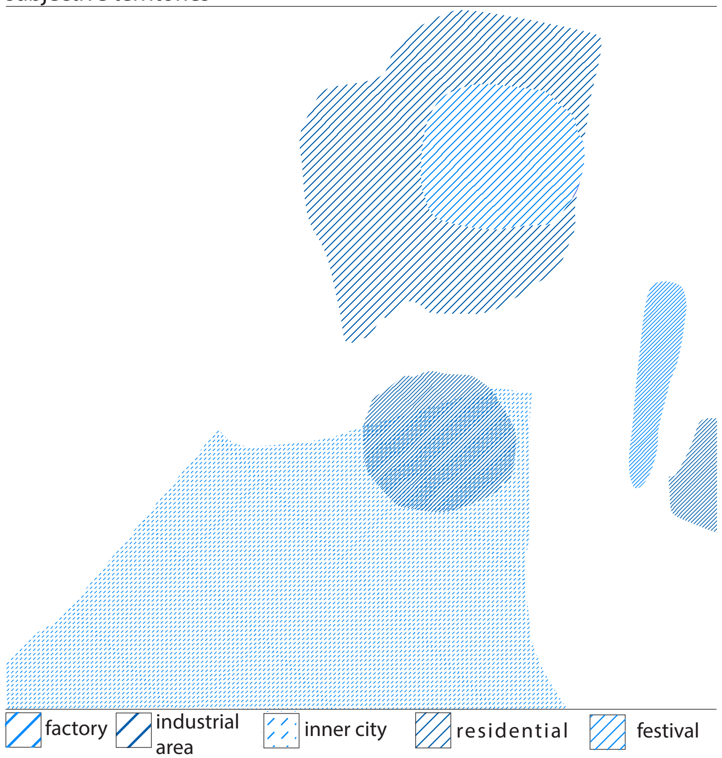


functions

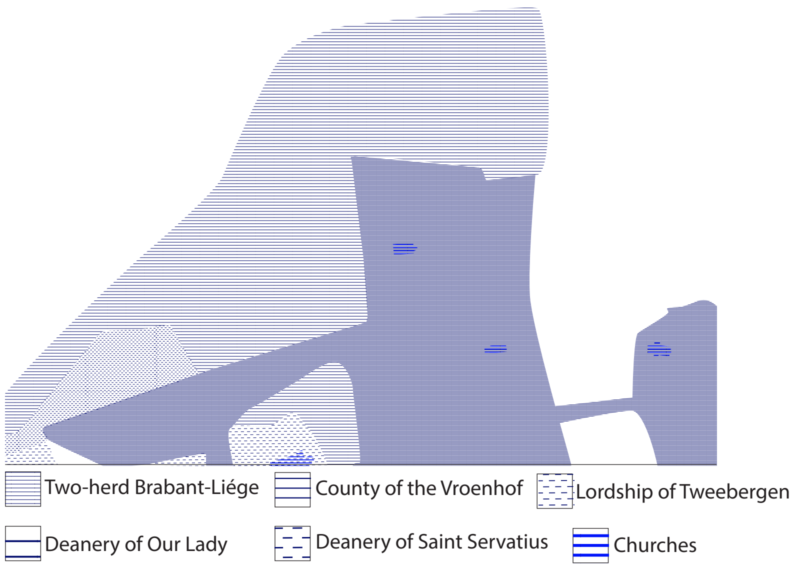
flora & fauna

overhead, underneath, inbetween

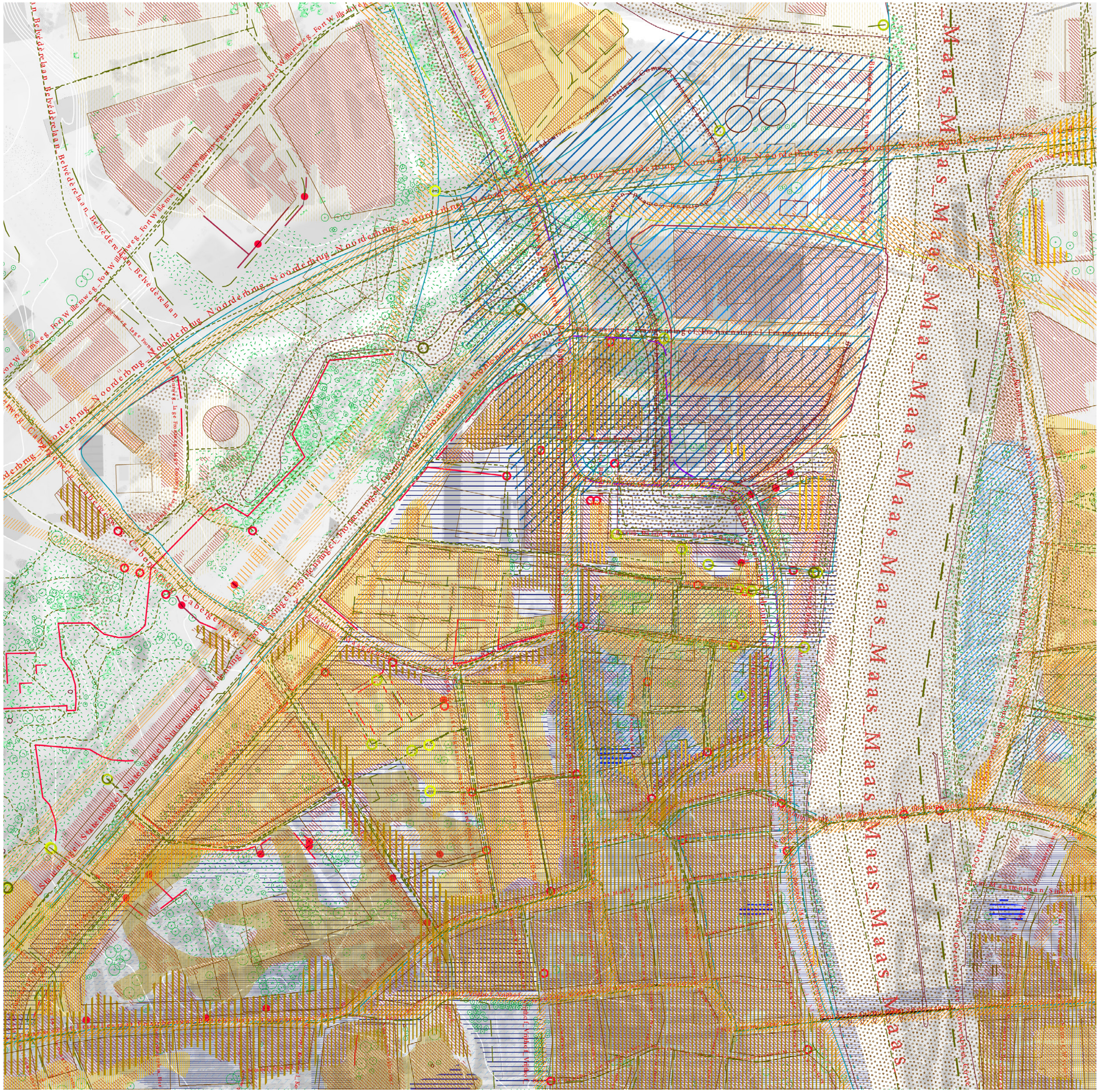
subjective territories



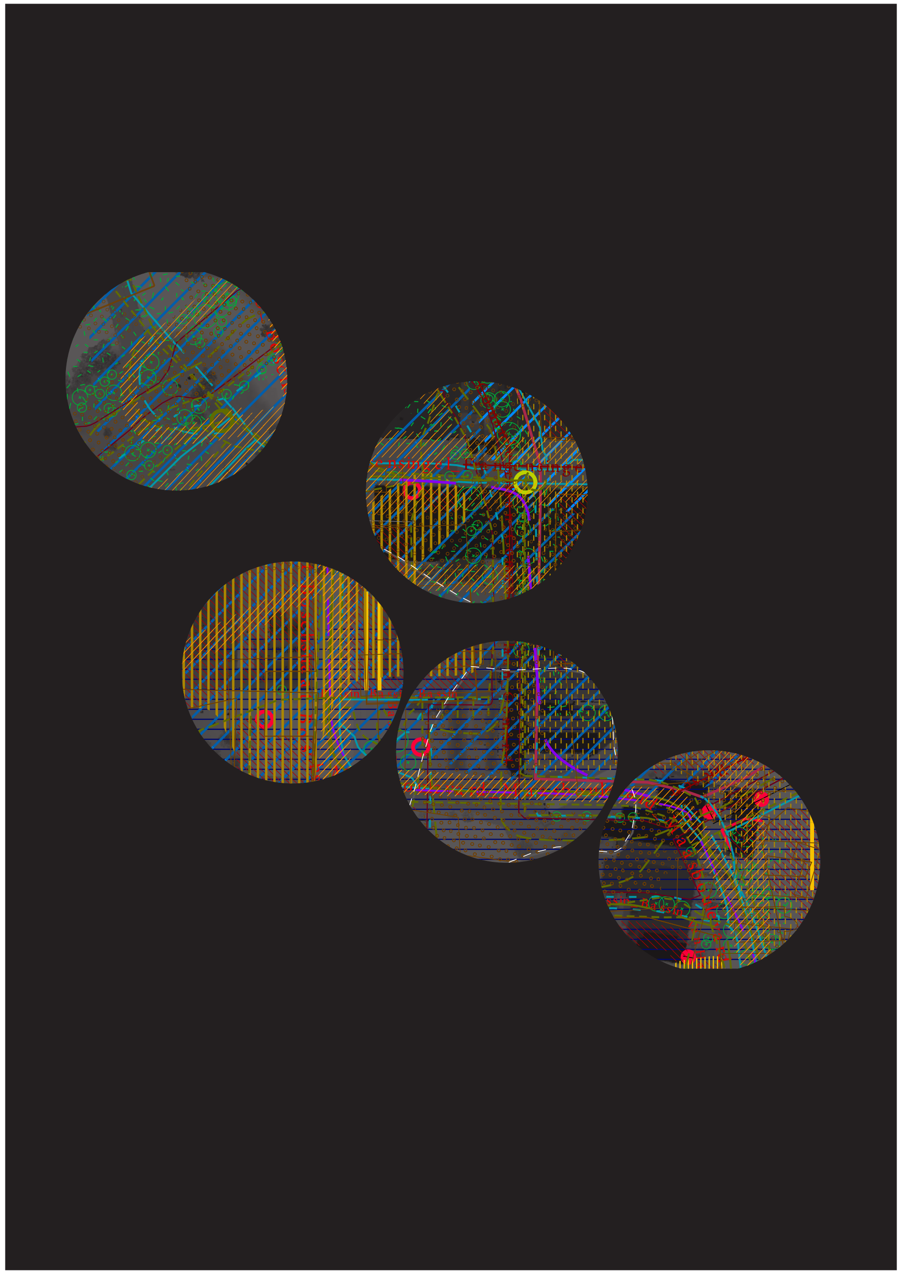
jurisdictions



overhead, underneath, inbetween



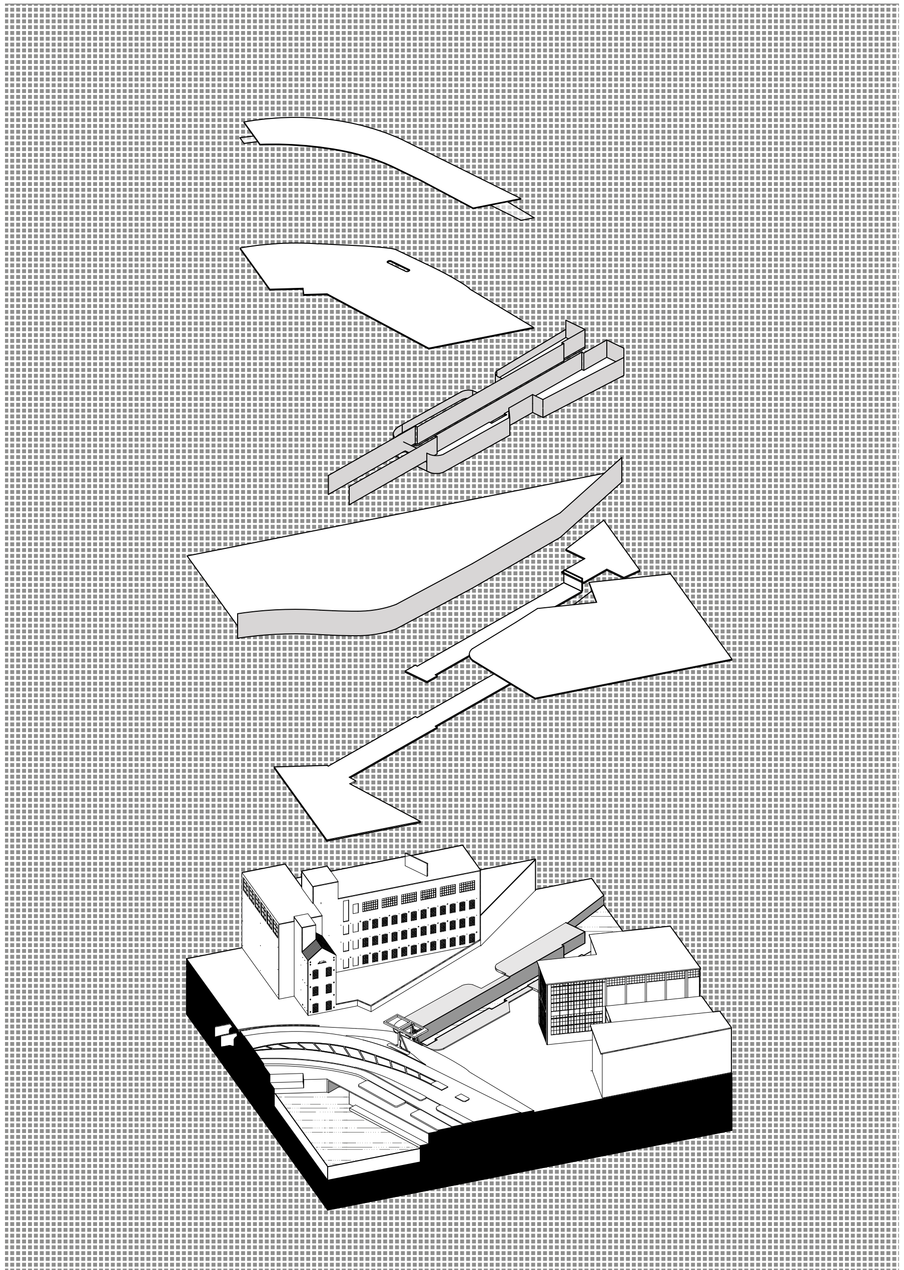
overhead, underneath, inbetween



entanglemennts marked on the palimpsest

entanglements as gleaning

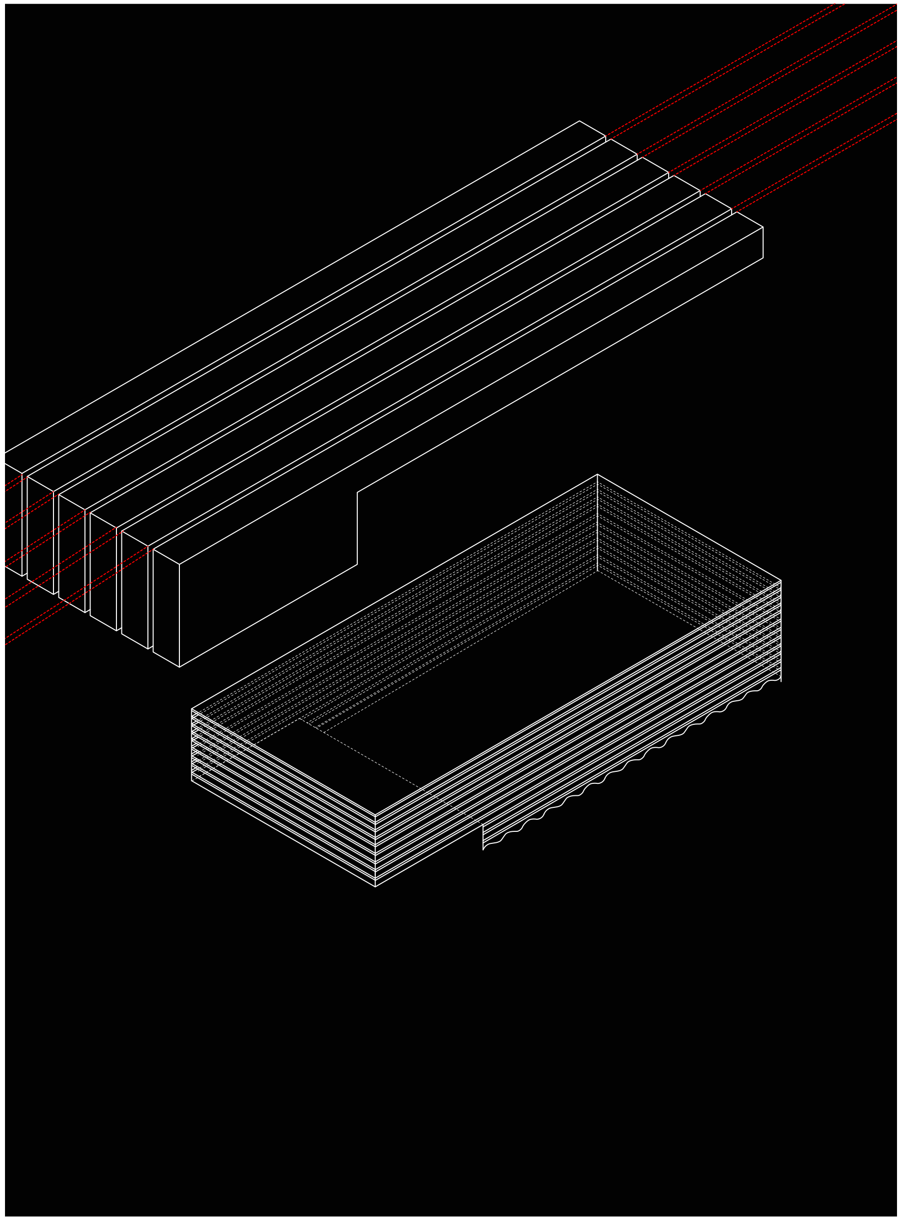
The process of Mapping/Remapping of the Sphinxstraatkwartier portrays the palimpsest nature of the site, highlighting a range of entanglements of intersecting layers. From this rich inventory of entanglements, the study gleans five instances which exhibit unique features of the context. These instances are carefully studied by untangling the principle elements of each and understanding the typologies of the entanglements. Having understood these entanglements, the research continues to explore the potentials of the 'in between' spaces seen within these nodes.



the lock

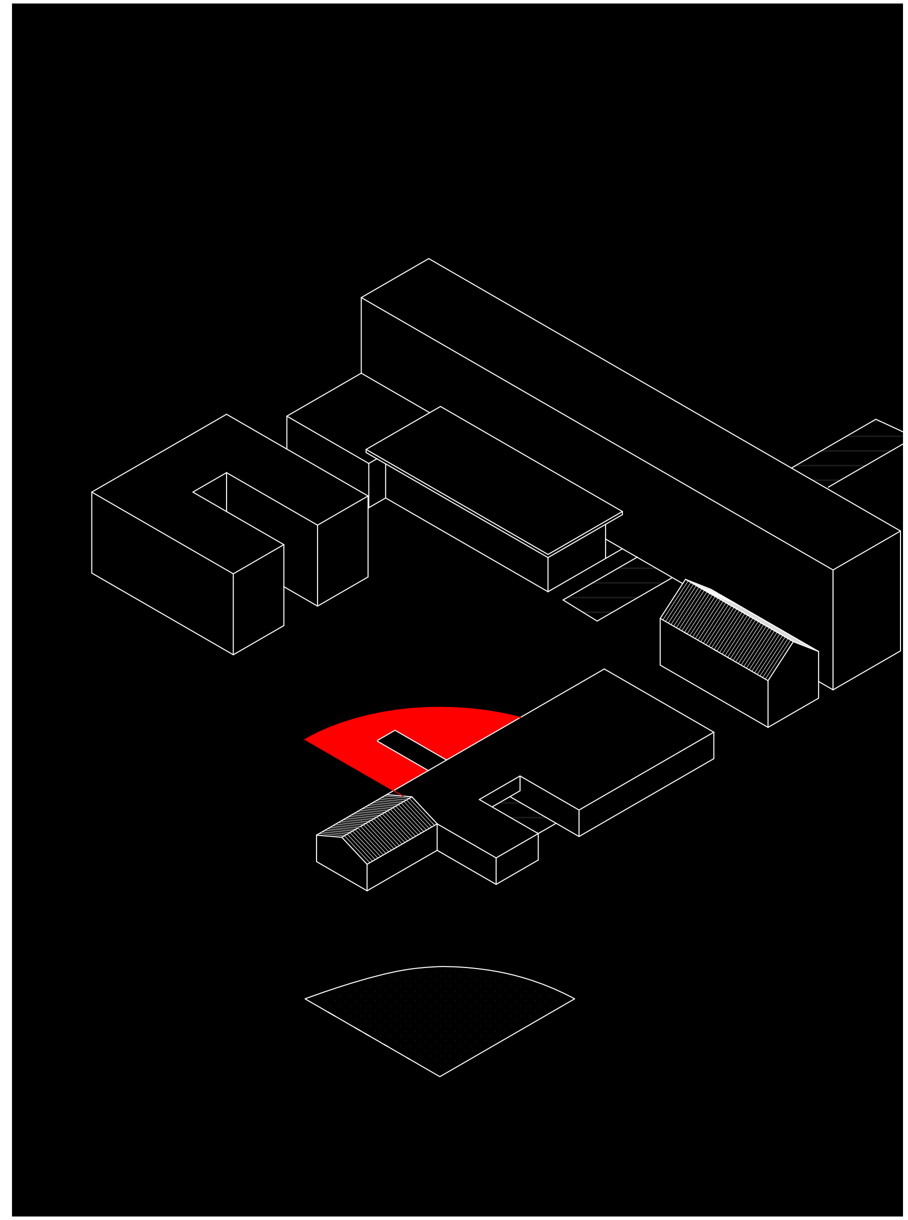
This node is characterised by the various border conditions shaping the two distinct territories. These borders are defined by mobility, speed, elements of nature, or time, highlighting the relative nature of the 'in between' with respect to connections and disconnections.

physical model of the lock



bassin

The entanglement seen within this node is primarily that of movement. The parallel movements defined by the bridge portray a deceptively planar condition which unravels itself into one of multiple levels and speeds, shaping the character of the ‘in between’ through these intertwining movements.

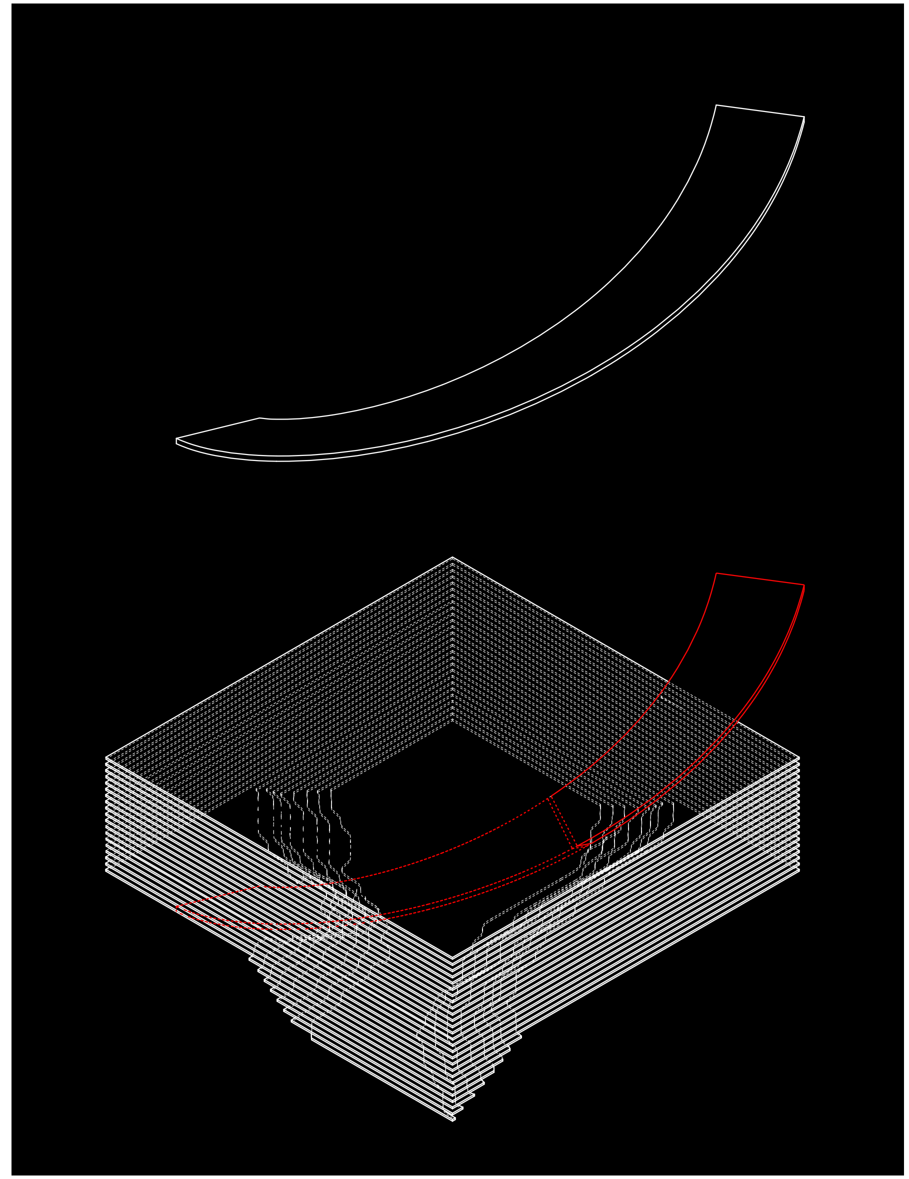


lumiere

This junction reveals the directionality of the movements seen in the previous nodes, defined by the infrastructure. Consequently, the infrastructure shapes the built environment and the unbuilt, creating the ‘in between’ as a buffer, mediating the character of the entanglement.

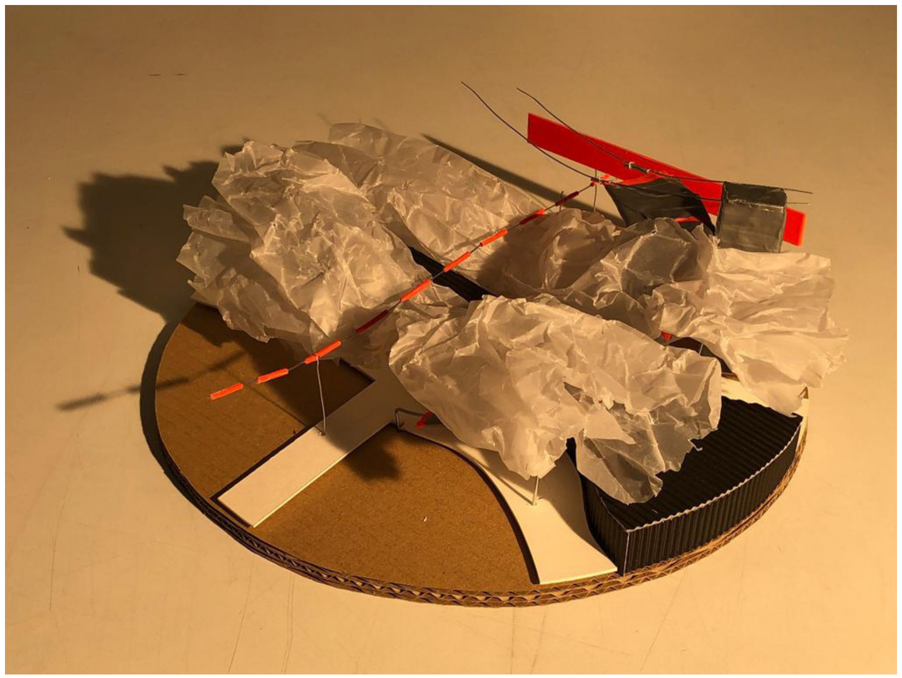
factory

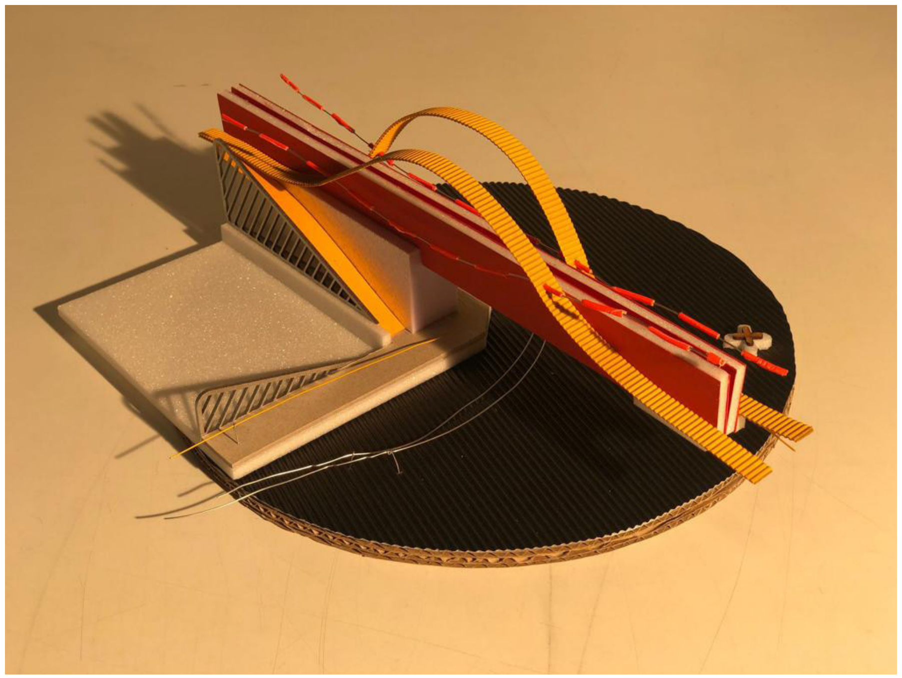
This spatial entanglement portrays a territorial juxtaposition of nature and the factory, with continuous lines of movements disrupted by territorial boundaries, exhibiting various forms of dead ends; physical, visual, territorial etc. Through this node, the relation between the in between and the border further extends to cover these alternate conditions.



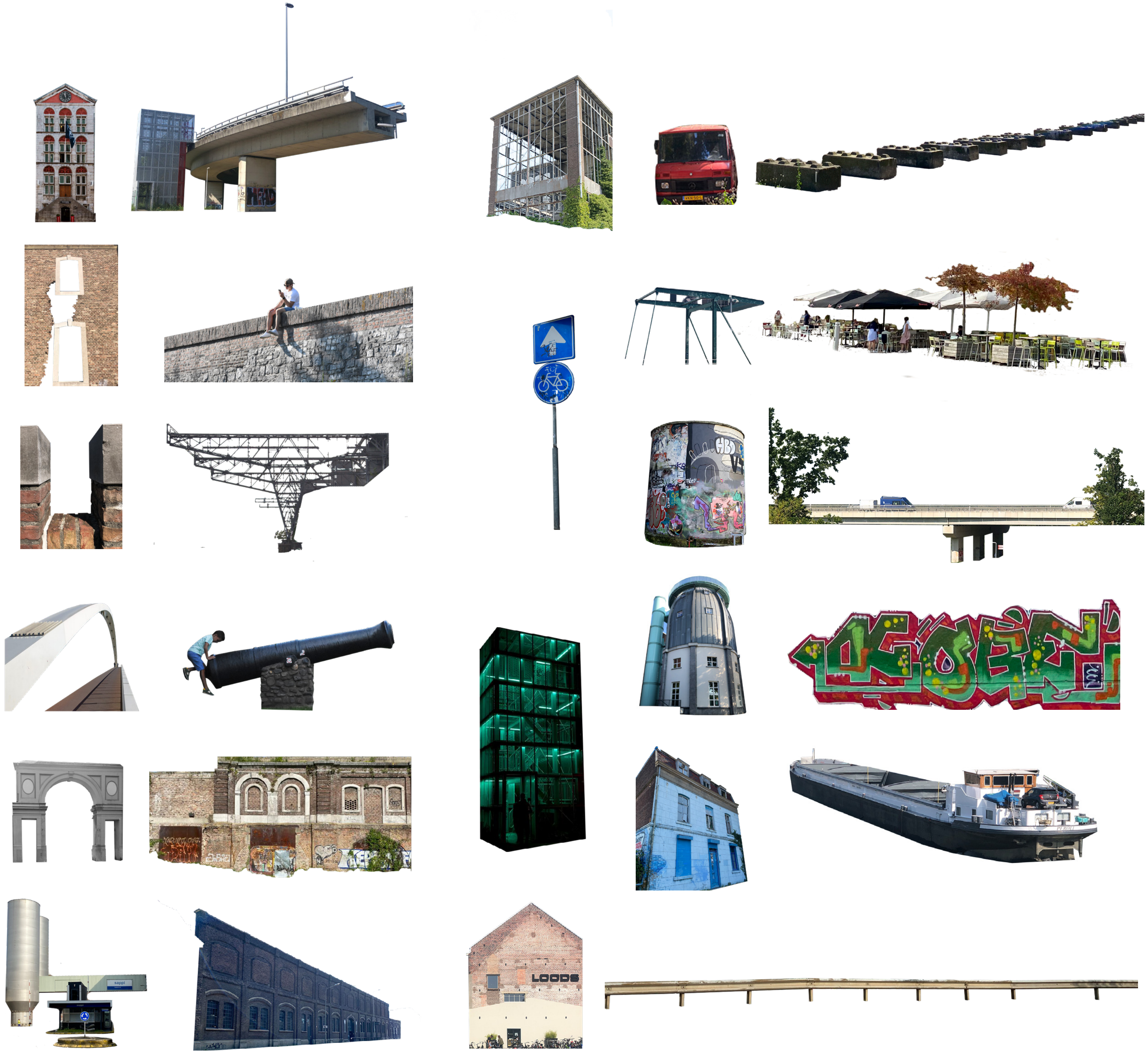
the krul

The Krul is a unique entanglement where the layer of memory is consolidated through the remnants of the dismantled infrastructural element. The nature reclaims the node and envelopes this leftover ‘krul’, creating pockets of urban wilderness and yet another typology of in between spaces defined through the recurrent elements of nature and infrastructure.


conceptual model of an entanglement


conceptual model of an entanglement

overhead, underneath, inbetween



potentials
A consequence of the multiple explorations of the site is the creation of an inexhaustible inventory of everyday elements, activities, and structures gleaned from within and around the Sphinxstraatkwartier. These innately local elements set forth the initial steps into the explorations of the potentials of the site. Through the process of abstracting them from their immediate context and remapping them within the entanglements, the discourse regarding the latent potential of these otherwise leftover or in-between spaces begins.

overhead, underneath, inbetween

image: Leeke Reinders

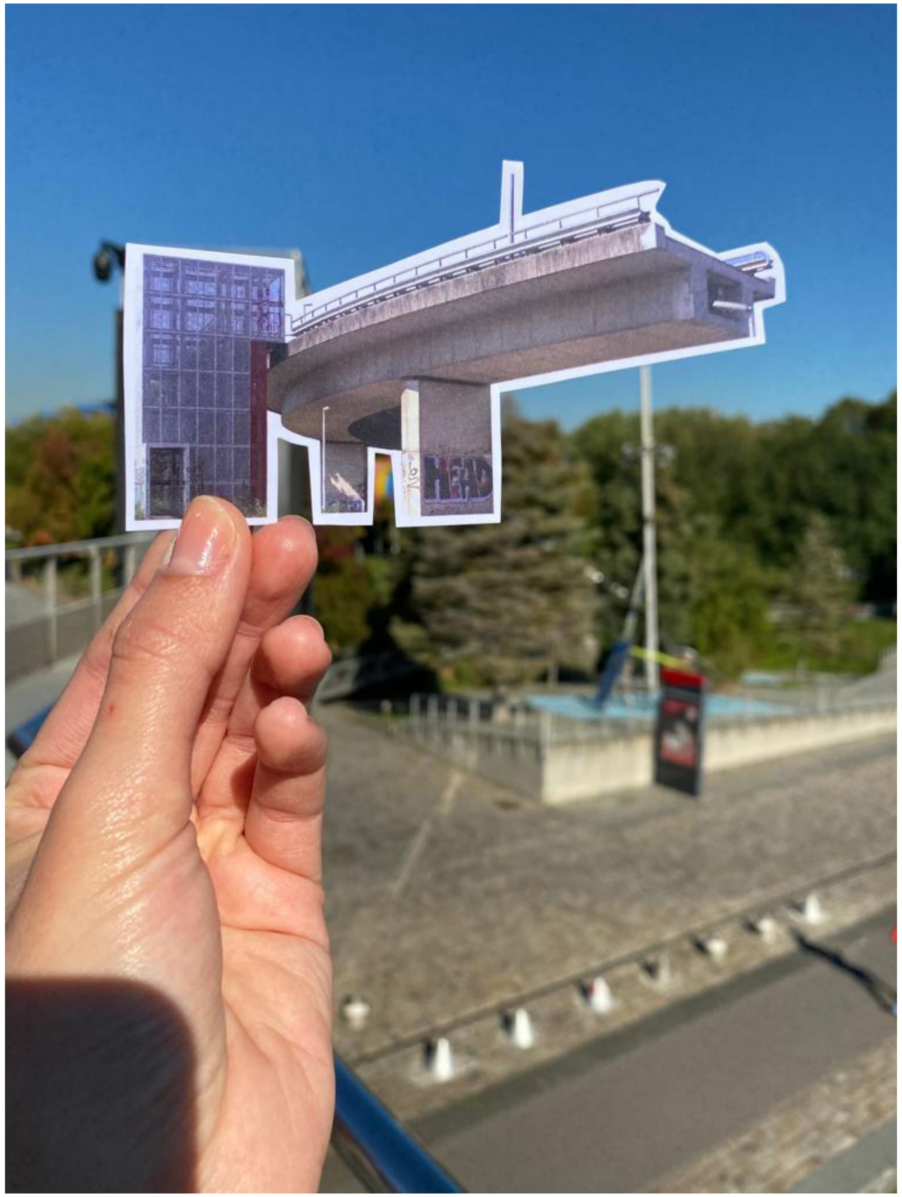
gleaned with potentials

Through identifying, untangling, and exploring the potentials of the five instances of entanglements seen within the Sphinxstraatkwartier, the study begins answering the questions that set forth the research. These entanglements with their multitudes of intersections, reveal themselves as rich sites of opportunities that could have otherwise been overlooked. Gleaning their in-between spaces and potentials through the series of speculations and imaginations sets forth the discourse on possible architectural and urban explorations within the Sphinxstraatkwartier.

Consequently, the study acts as an introduction, opening up different avenues of research into the multifaceted nature of the In-between; through the tangible and the intangible, the natural and the manmade, the chaos and the order, the ordinary and the extraordinary, and, the real and the perceived. Each of which could lead to diverse sets of architectural explorations and hence diverse definitions of the 'In-between'.

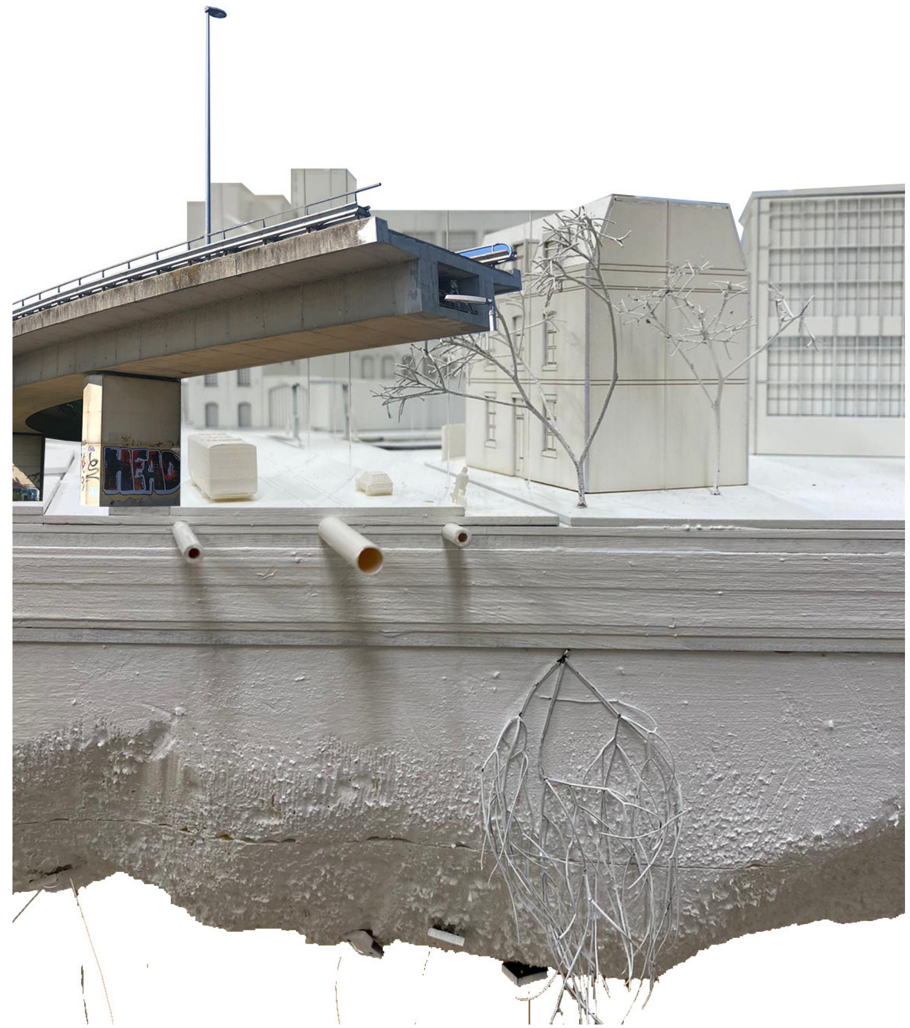
image: Leeke Reinders

image: Leeke Reinders



overhead, underneath, inbetween

collage with the potentials

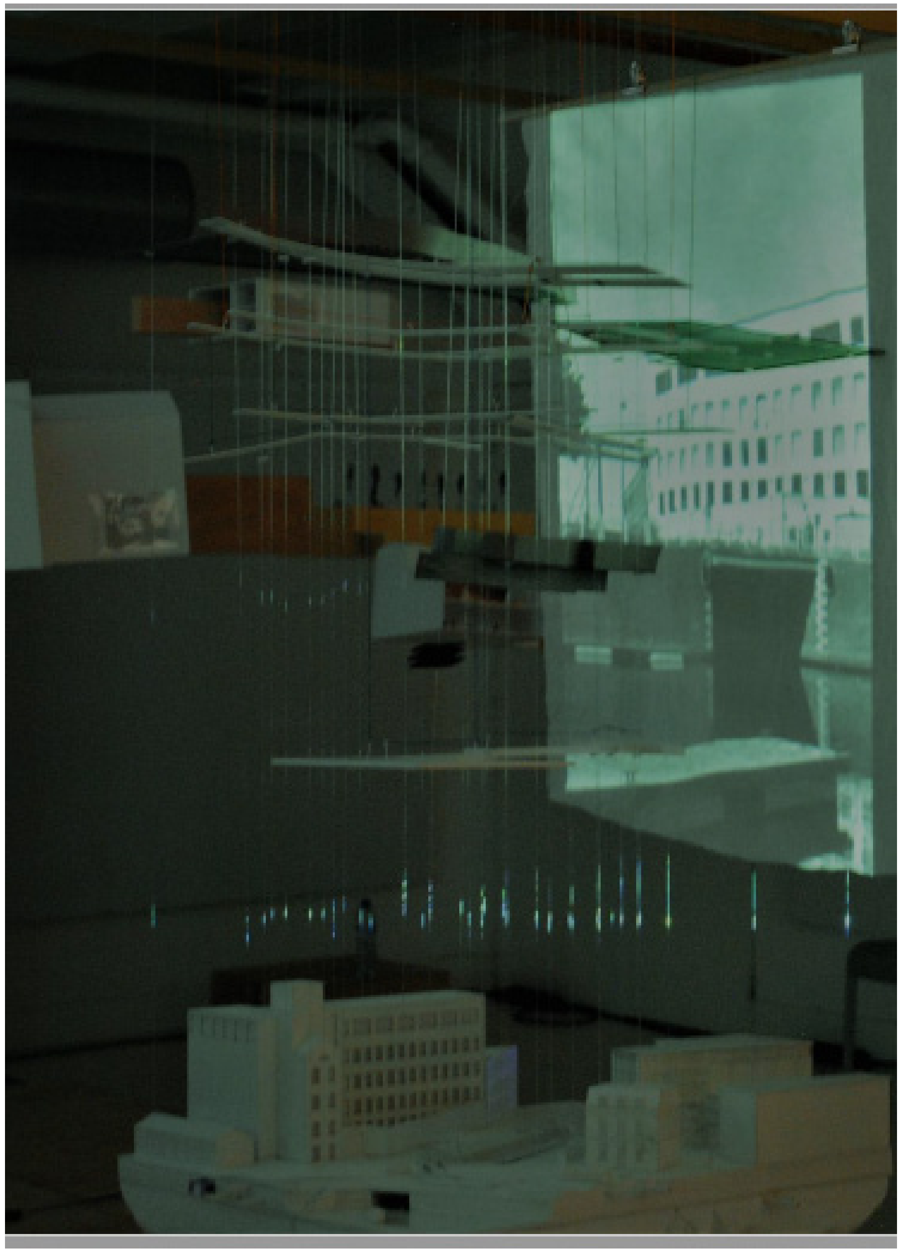


collage with the potentials

collage with the potentials

collage with the potentials

P1 EXHIBITION



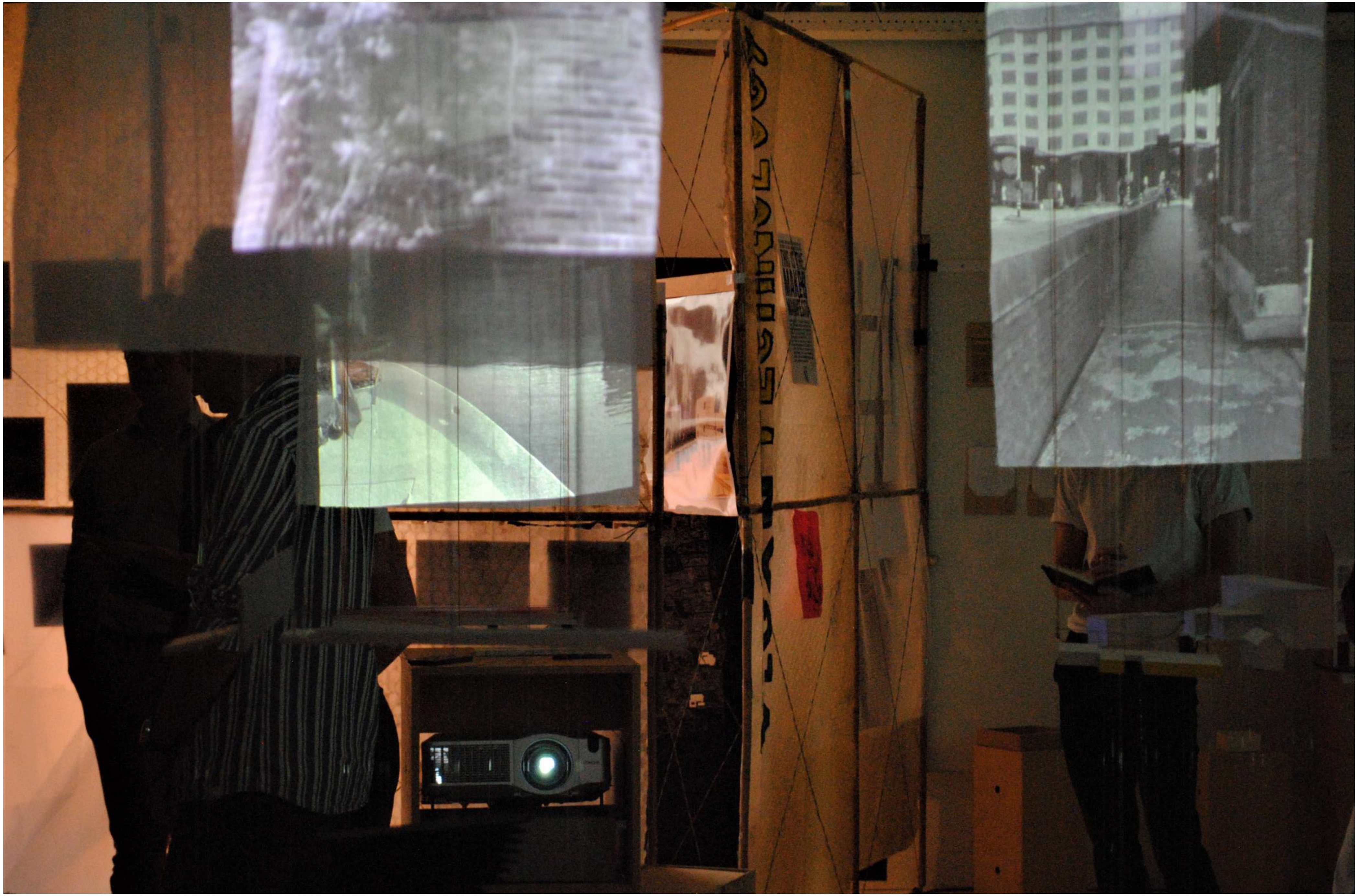


image: Leeke Reinders

image: Leeke Reinders

overhead, underneath, inbetween

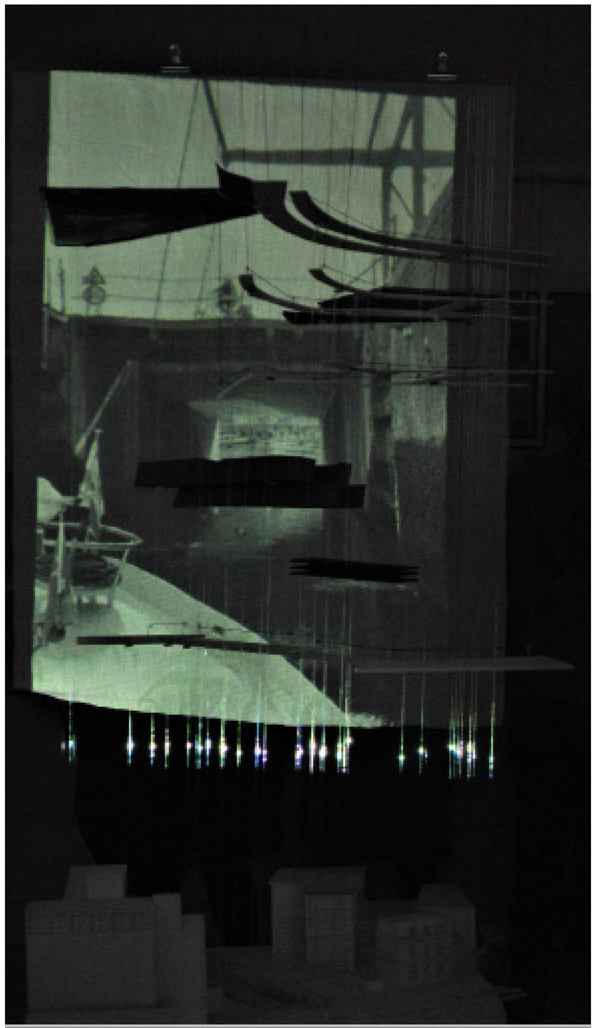


image: Leeke Reinders

image: Leeke Reinders

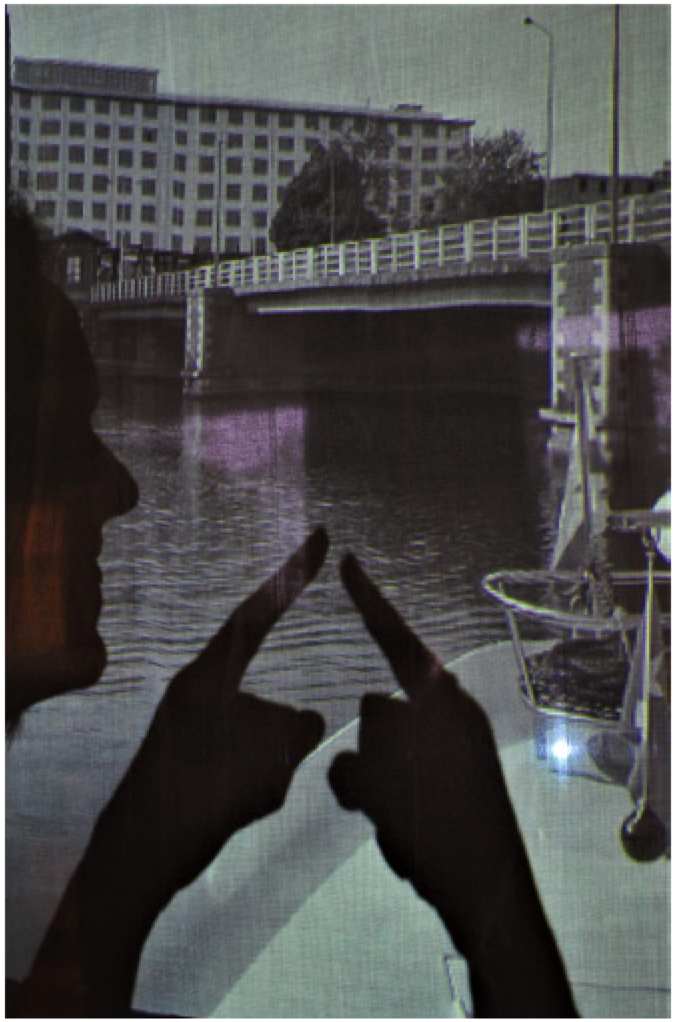


image: Leeke Reinders

image: Leeke Reinders

image: Leeke Reinders

image: Leeke Reinders

image: Leeke Reinders

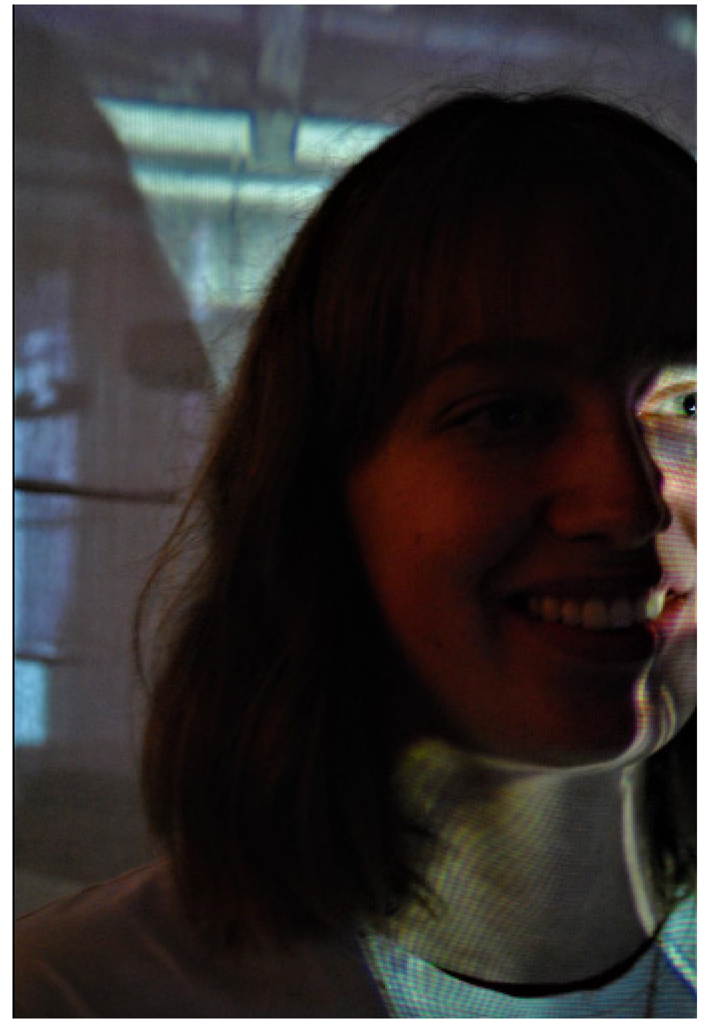
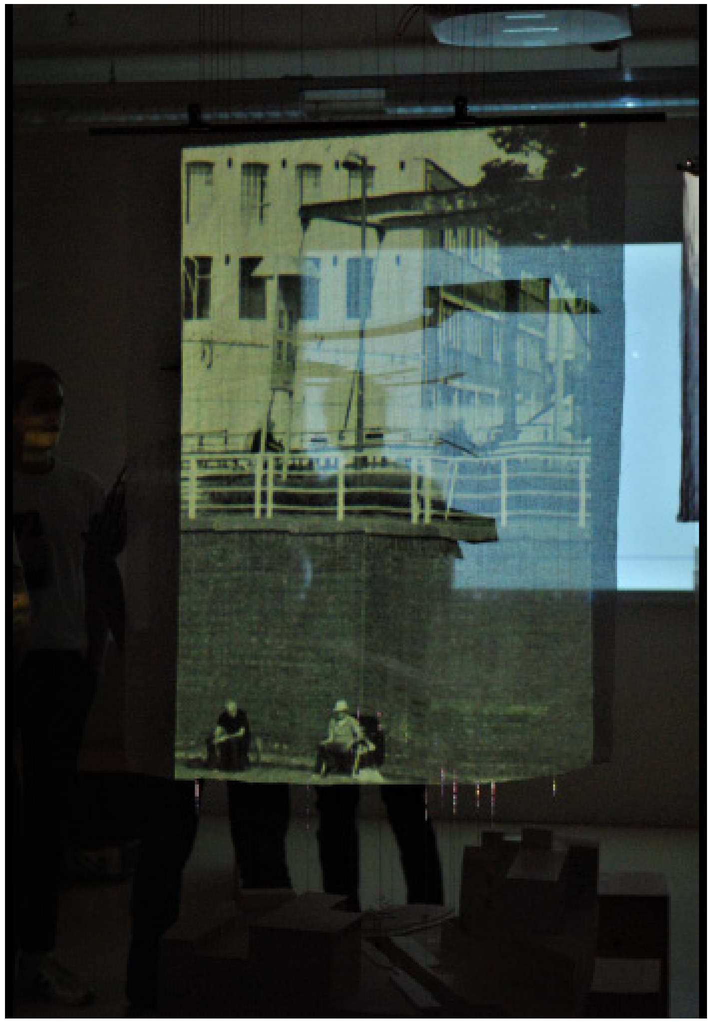


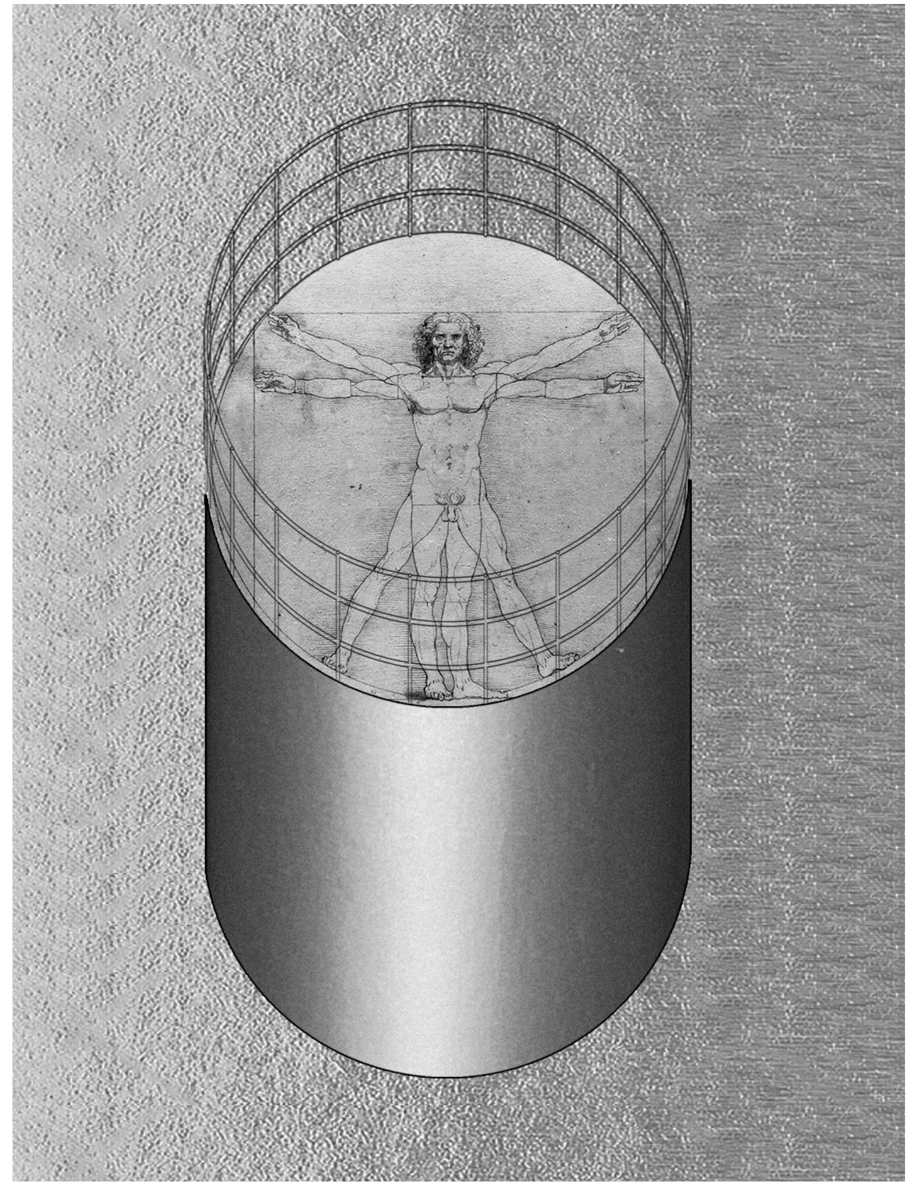
image: Leeke Reinders

image: Leeke Reinders

image: Leeke Reinders

overhead, underneath, inbetween

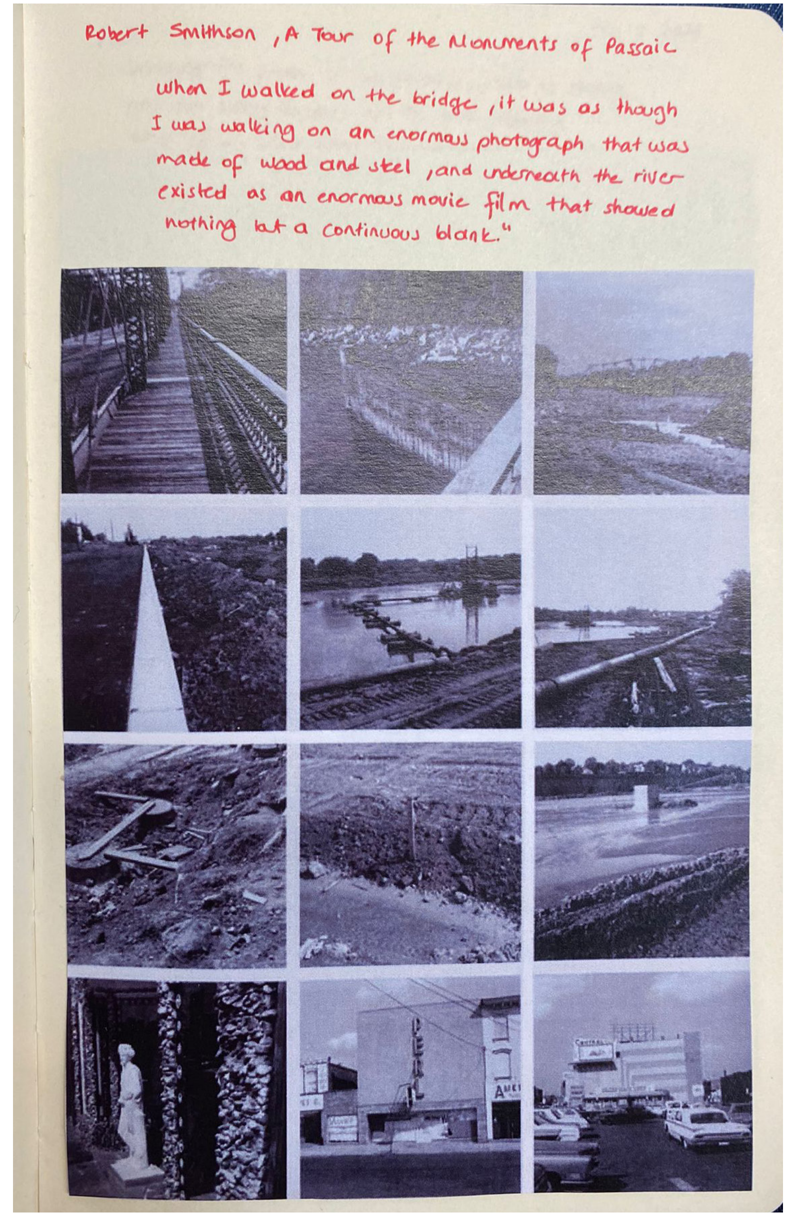


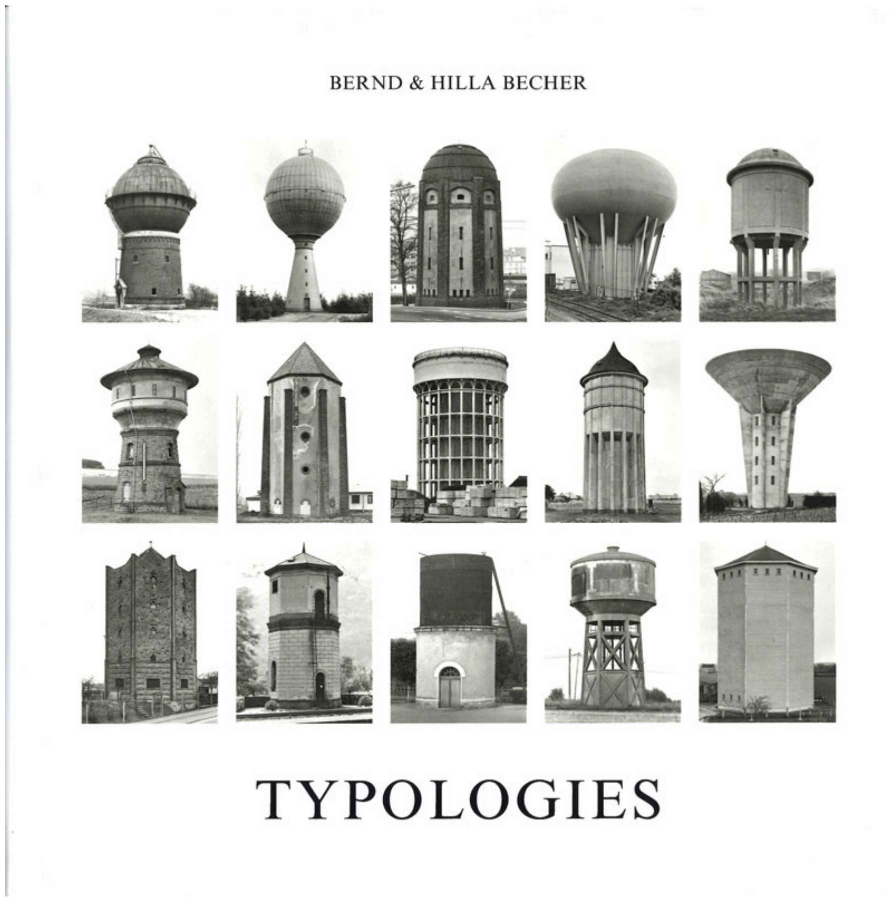


The initial research considered gleaning as act of framing which referred to photography.

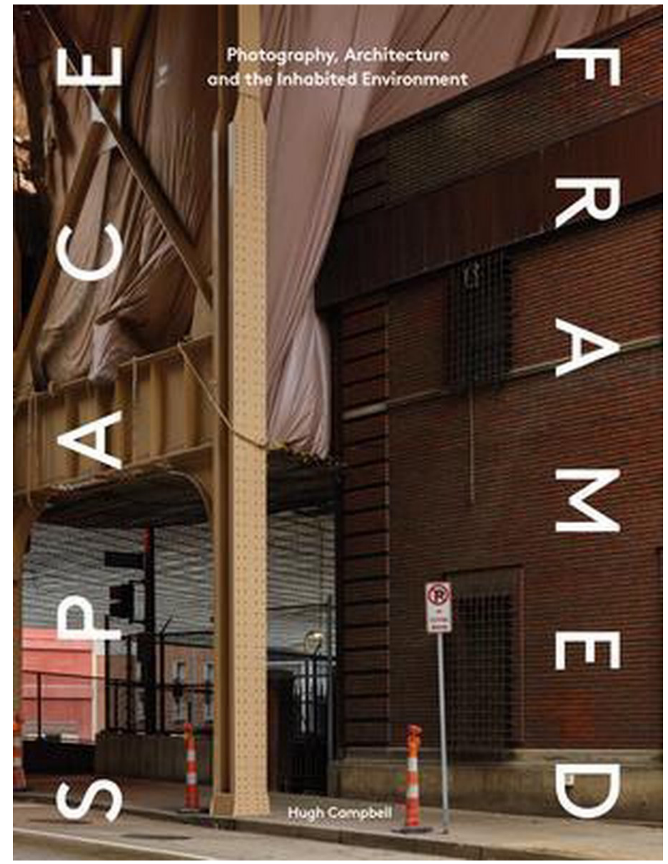
The art of taking a photograph requires framing where the scene is –whether professional or not- delicately created. In an urban environment, people partly capture their personal interests but they mostly tend to frame the elements that create an aesthetically appealing common ground. While doing so, on purpose, some elements in various scales are left out of the frame on purpose: a street light which provides the necessary light for the frame, an abandoned or less appealing building, pipes, benches, bridges, people etc. In that sense, photography appears as the negative space of gleaning. With respect to the role of architecture, the research will focus on the creation of these frames, the common values of aethetics within the frames and left out elements/figures/spaces, and will try to find new meanings in these inbetween leftover spaces to make them ready to be gleaned.

Robert Smithson, A Tour of the Monuments of Passaic, 1967

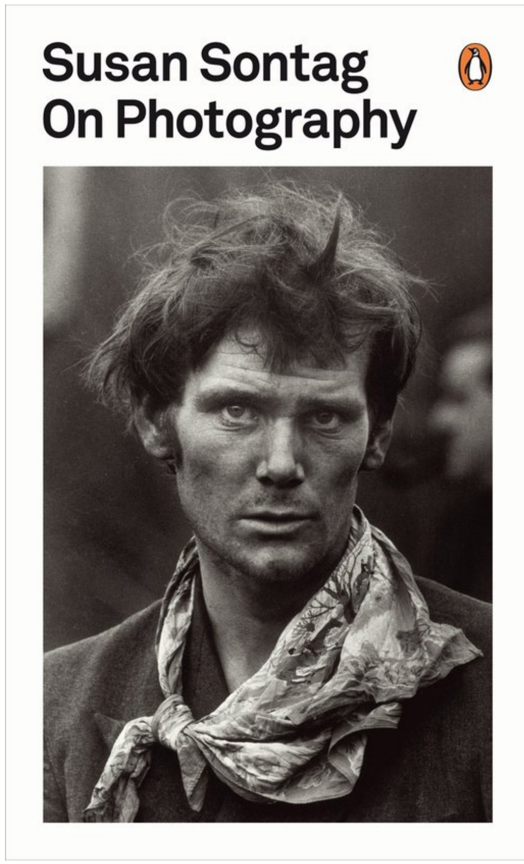




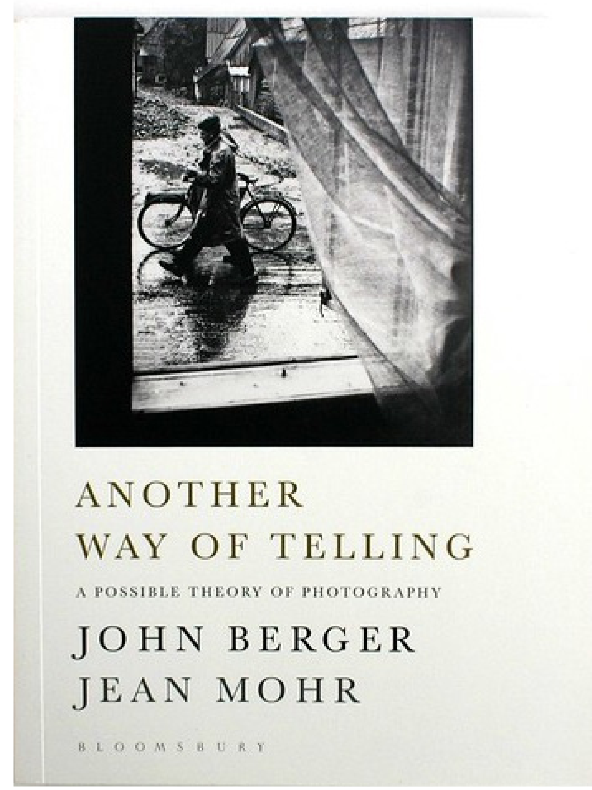
Bernd & Hilla Becher, Typologies



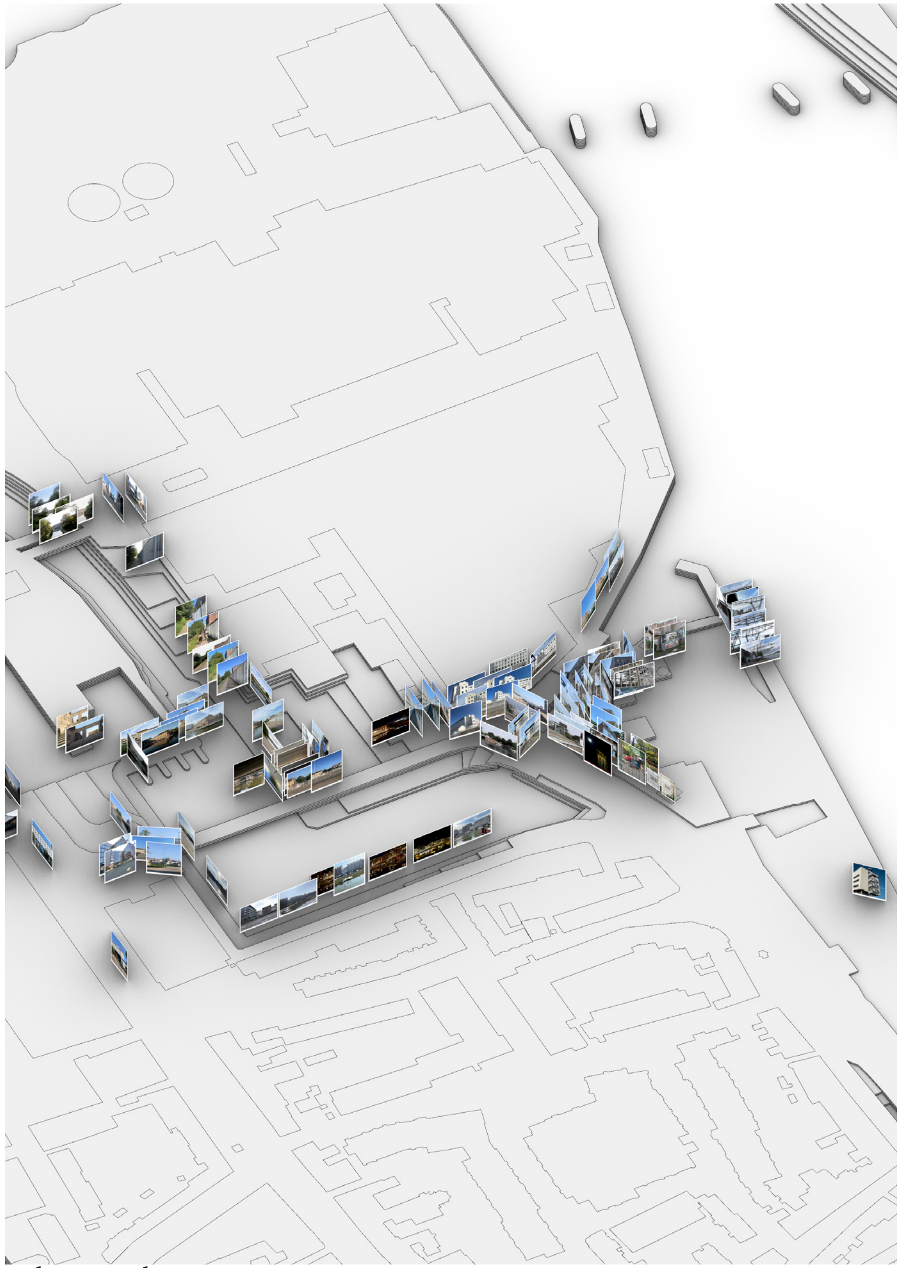
Hugh Campbell, Space Framed: Photography, Architecture and Inhabited Environment



Susan Sontag, On Photography

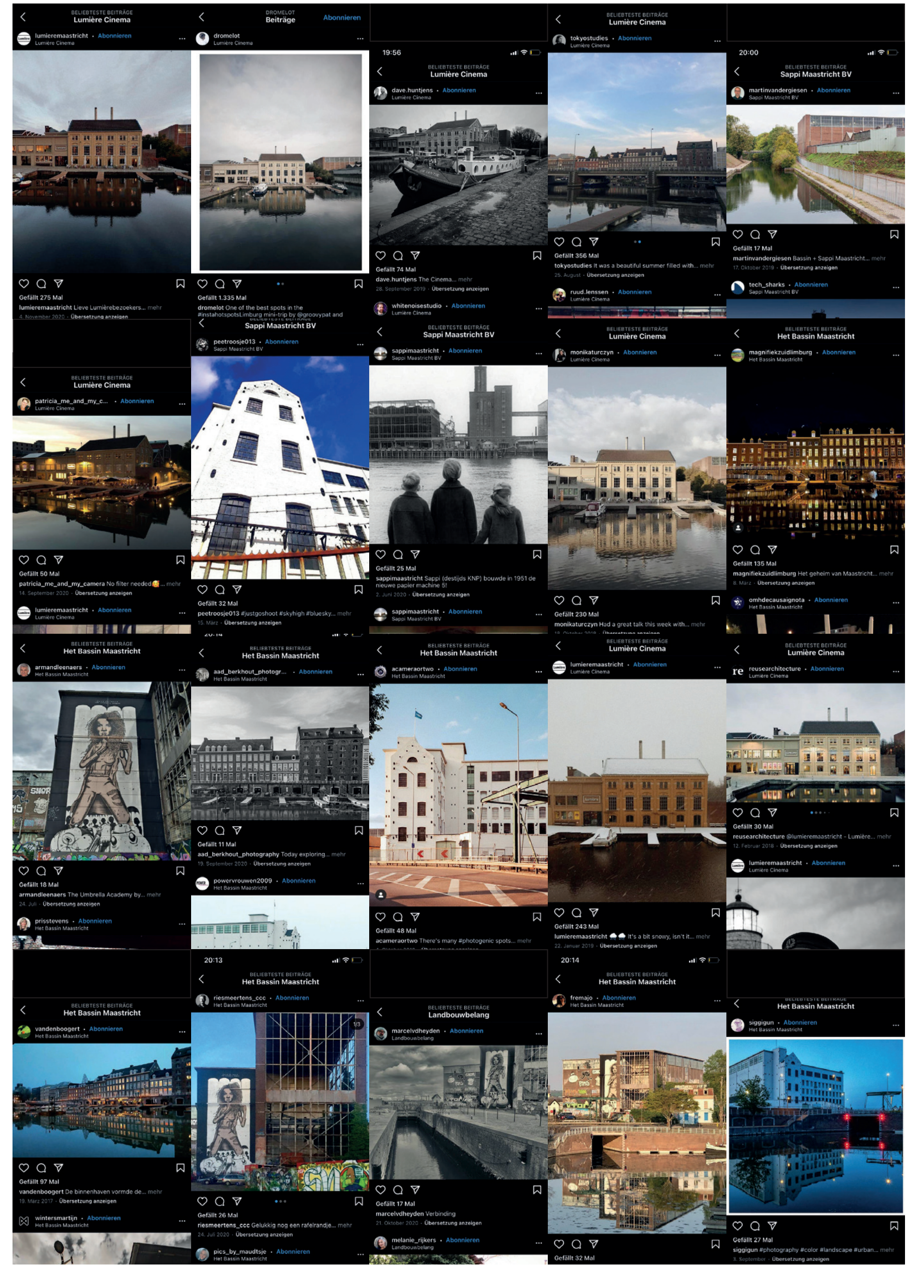


John Berger, Another Way of Telling



photography map

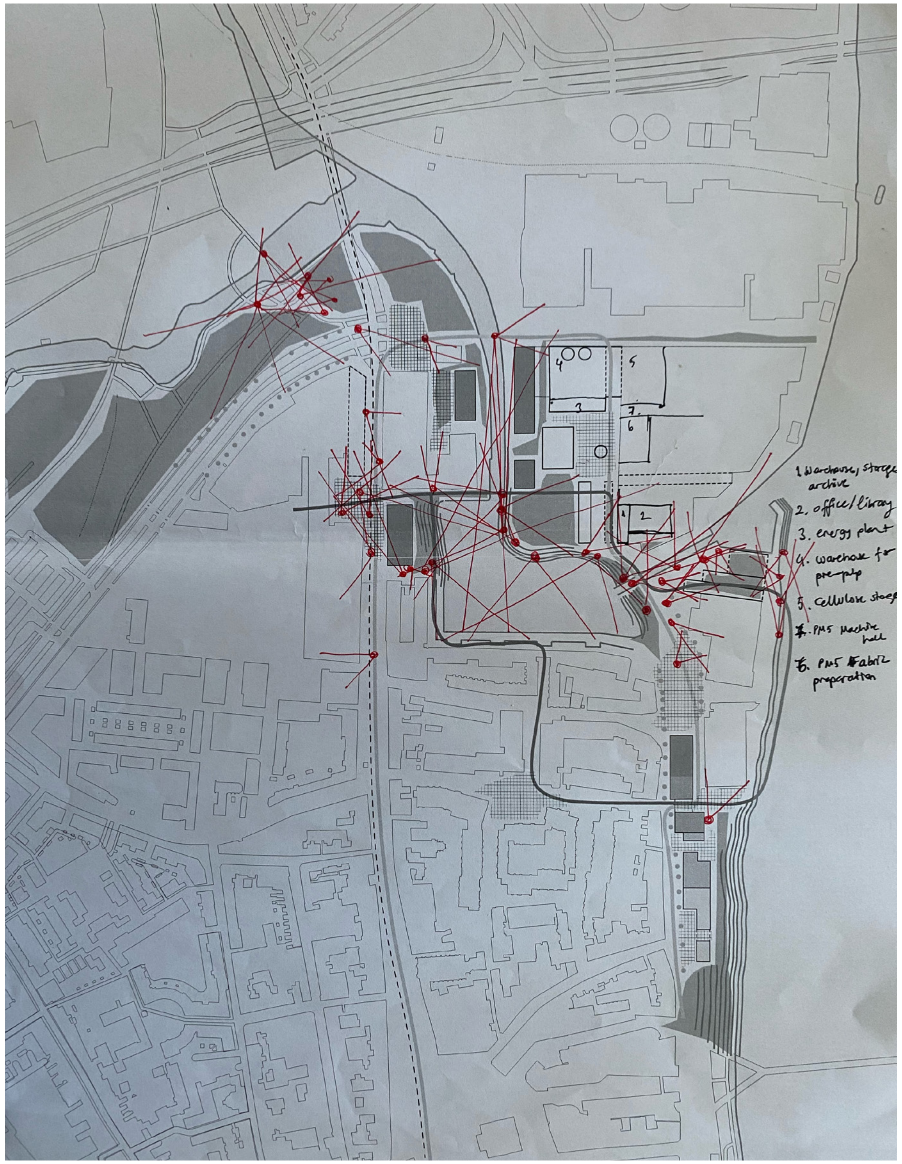
Since our site is a left-over space, I collected photographs from the students of the graduation studio to detect common interest; that is to say, the common ground.



social media investigation

To make the analysis more objective, I went through the photographs of our site posted on social media.

research



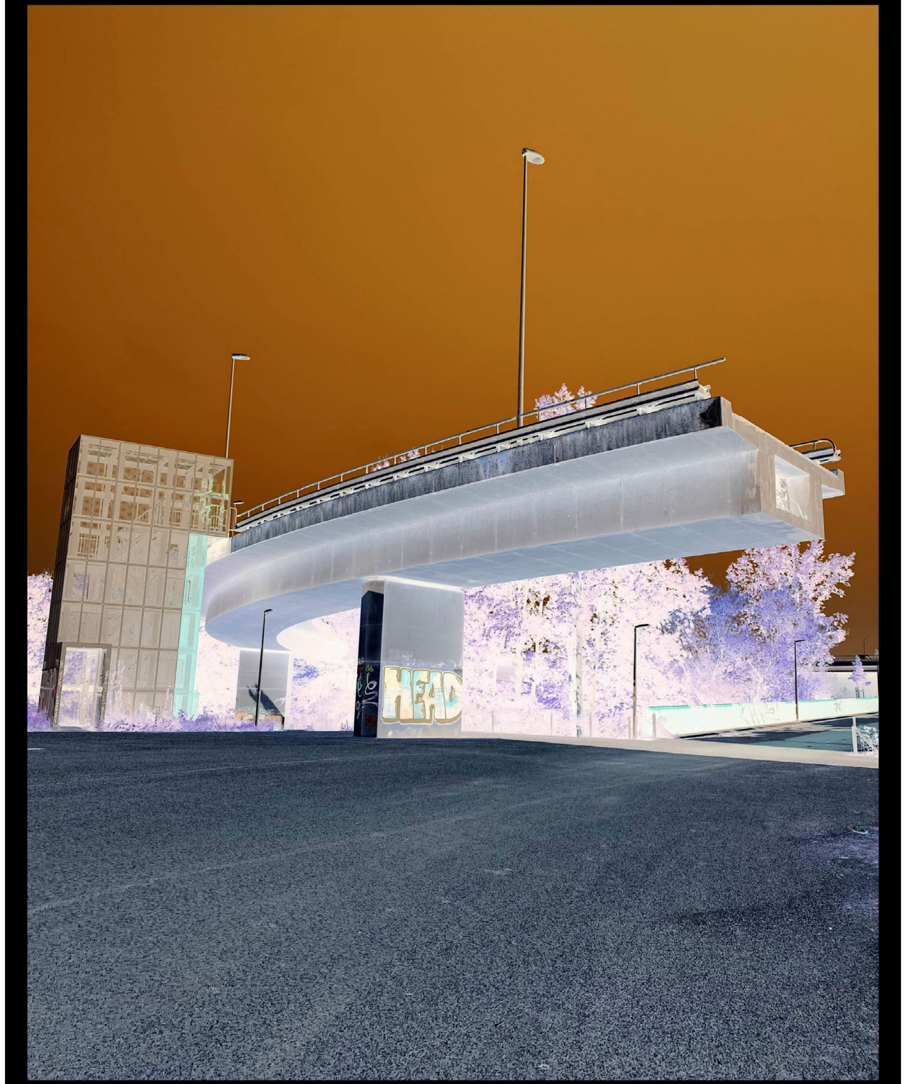
spatial
occupation

In the end, the photography map revealed the areas that are left over within the left-over space.

In other words, it highlights the spatial experience of the site.

research

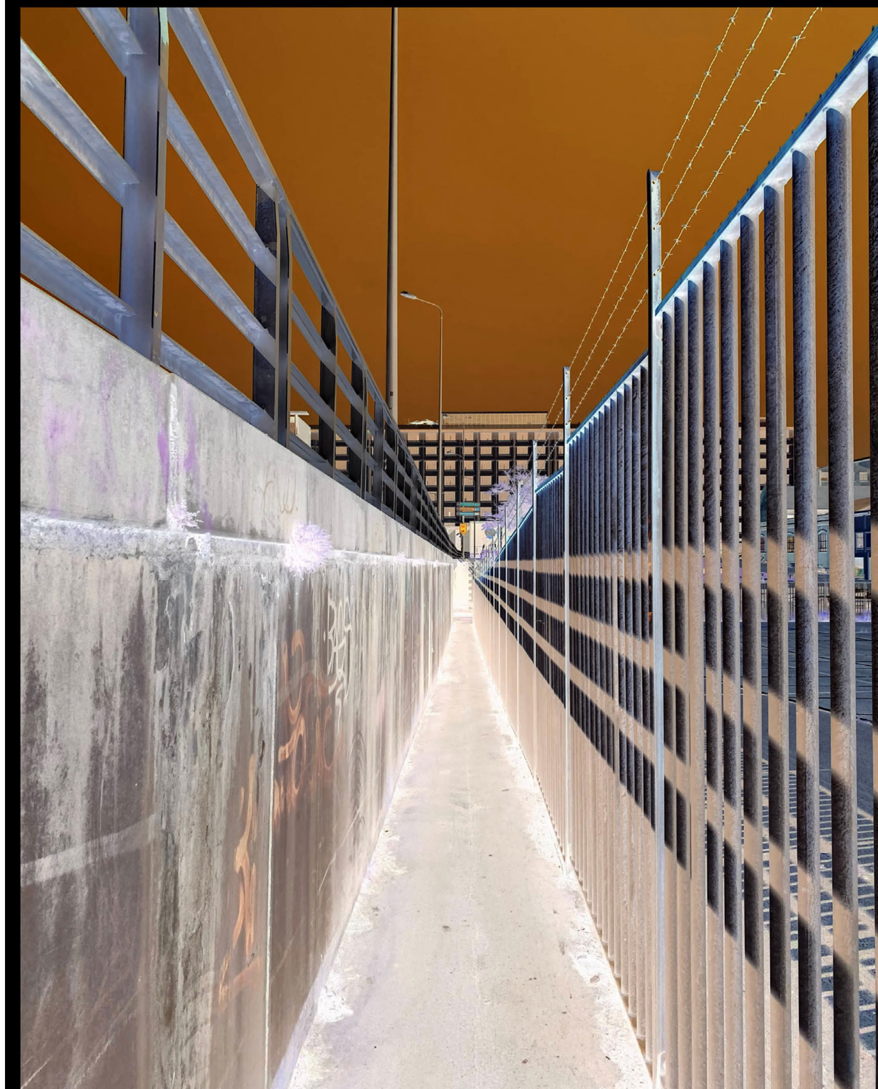
Dilara Turgut



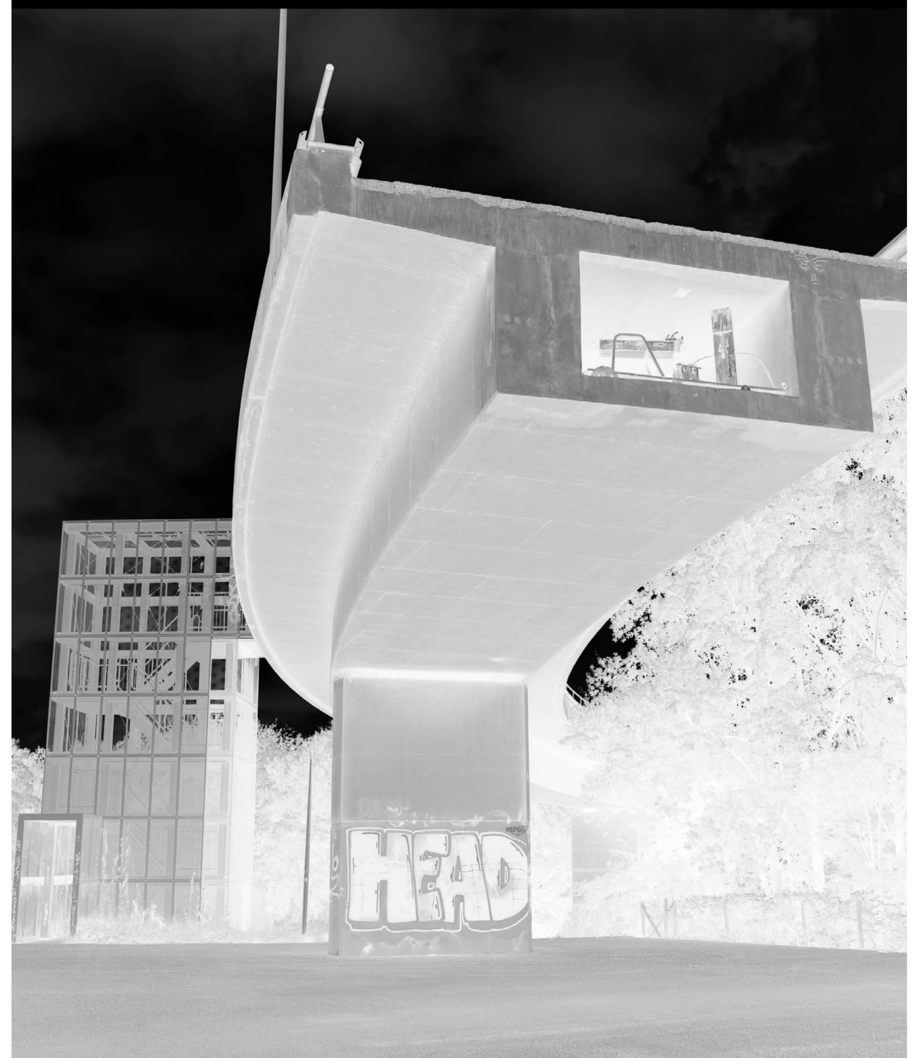
Karthika Ranjit

Pjotr van Noesel

Dilara Turgut

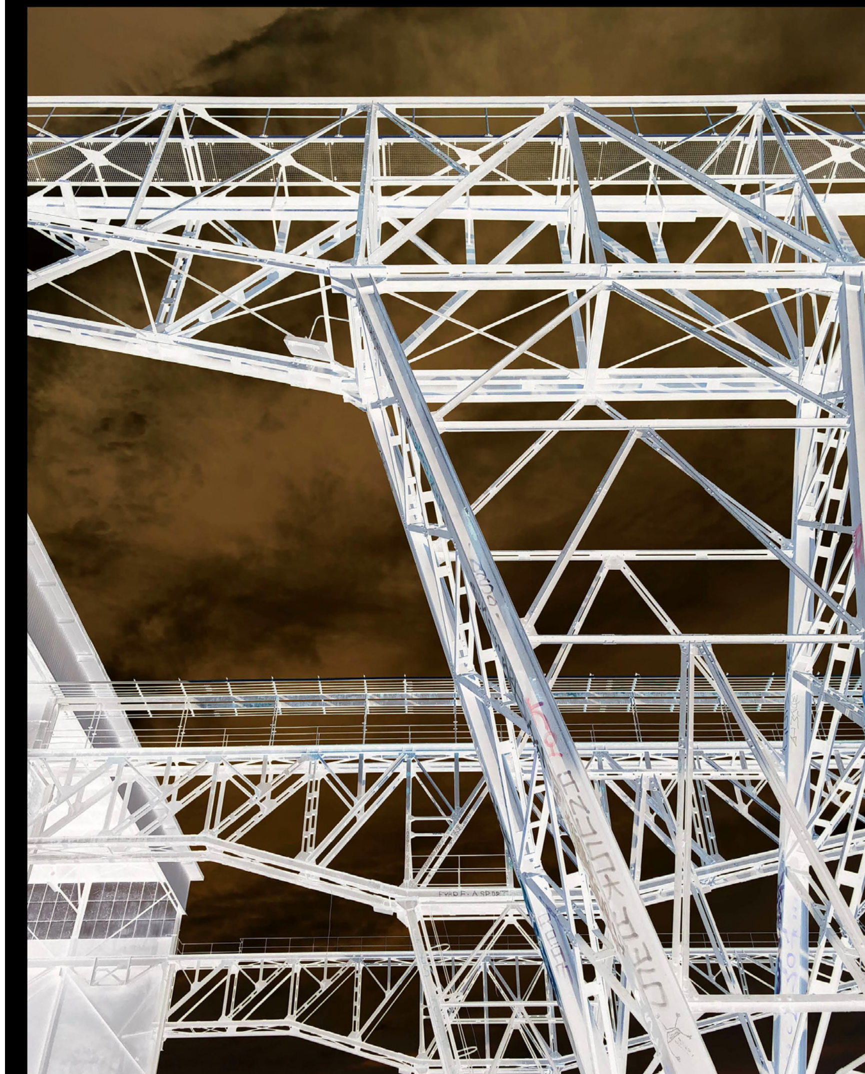


Dilara Turgut

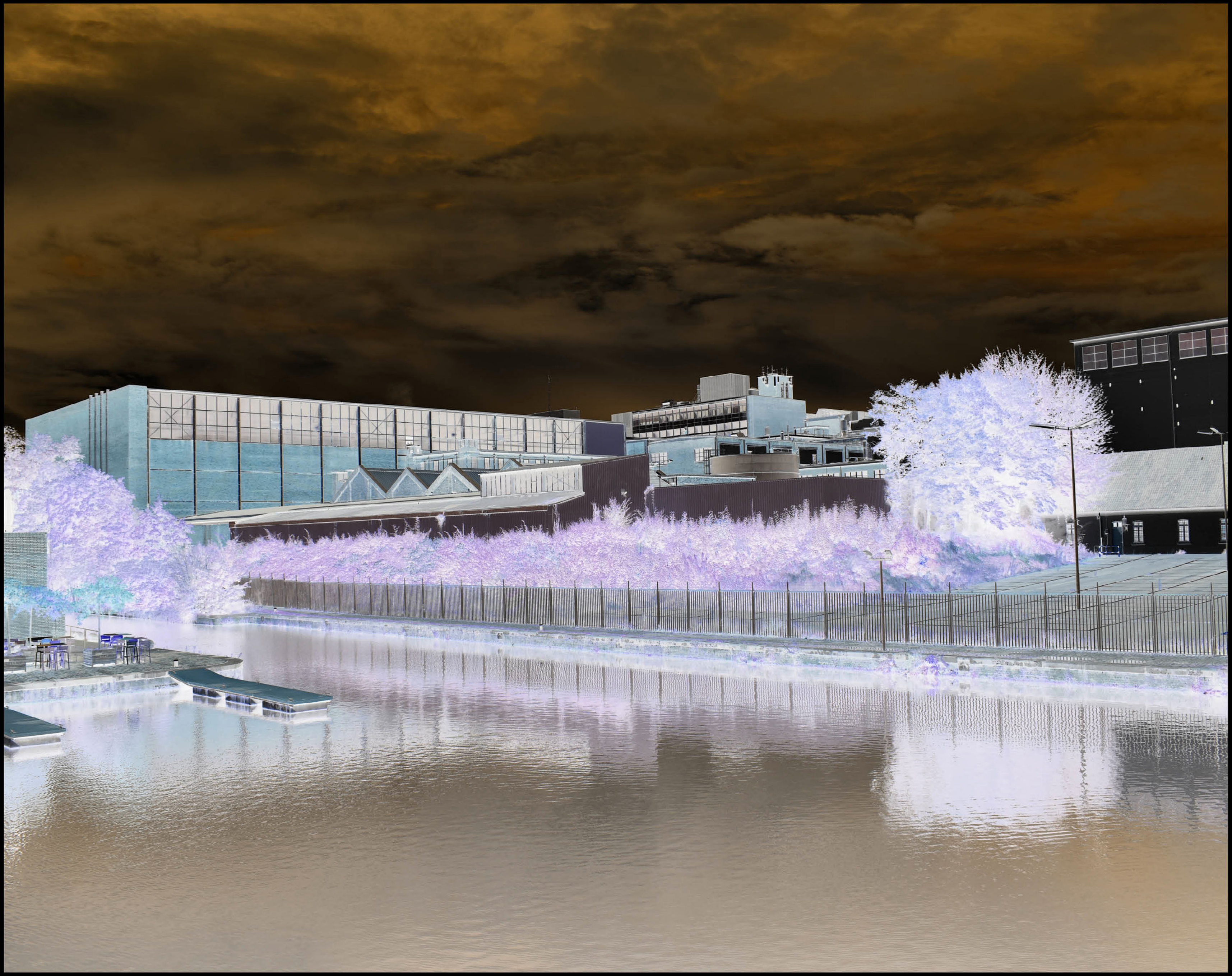


David Fang

Pjotr van Noesel

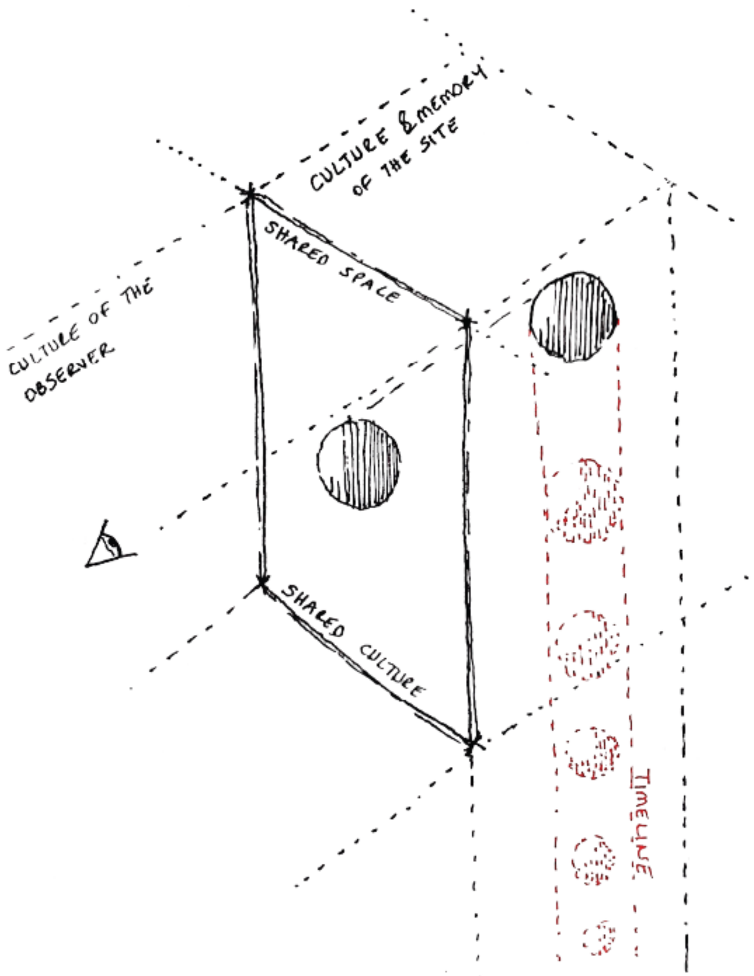


Jolien Streng



Lulu Song

Dilara Turgut

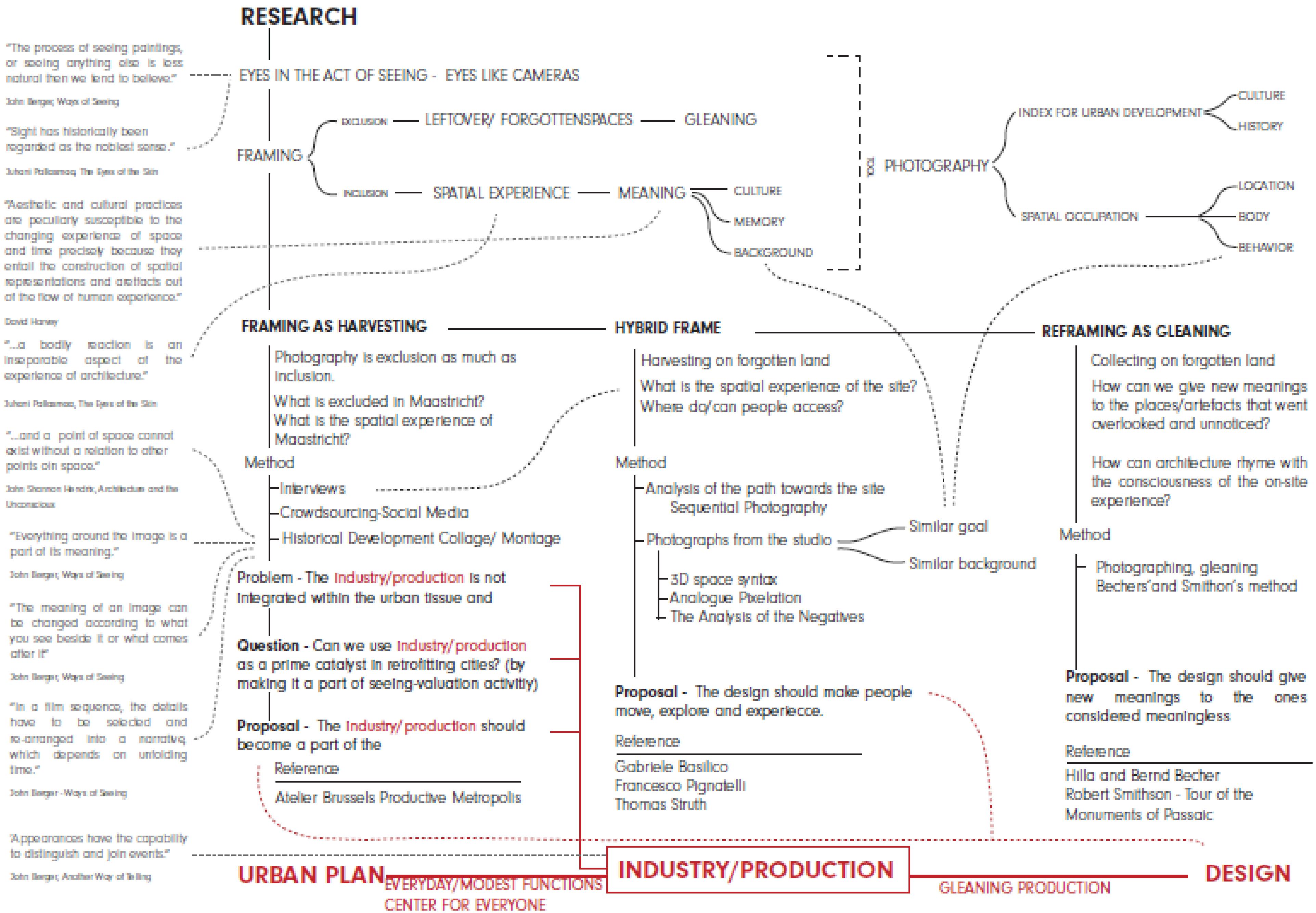


All photographs have been taken out of a continuity
Discontinuity always produces ambiguity — John Berger
WOS

Photography = act of seeing
Photographs quote from the appearances
photographs can relate the particular to general.

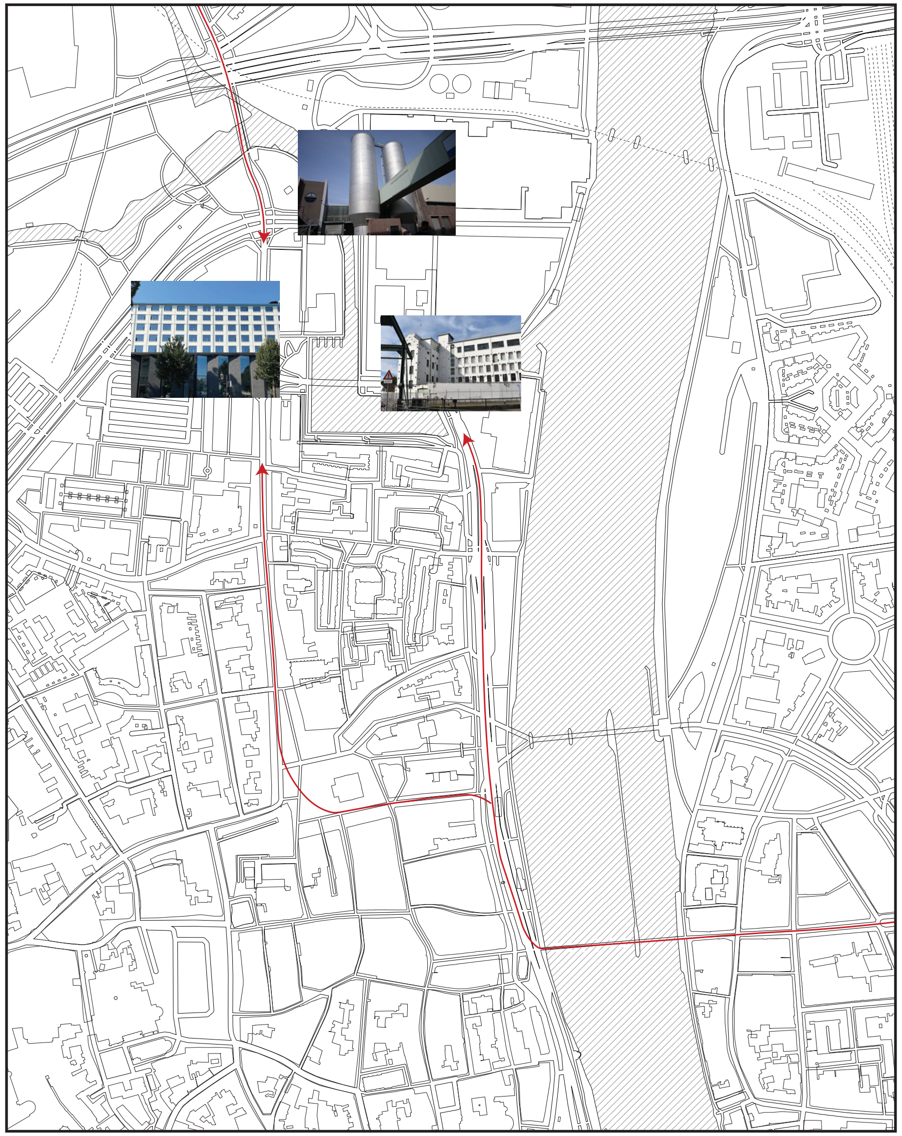
Photograph can prove endlessly revealing.
self and surroundings are closely bound together.

The framing and composition of the photographs are used to produce a rich interplay between architectural intention and lived experience.

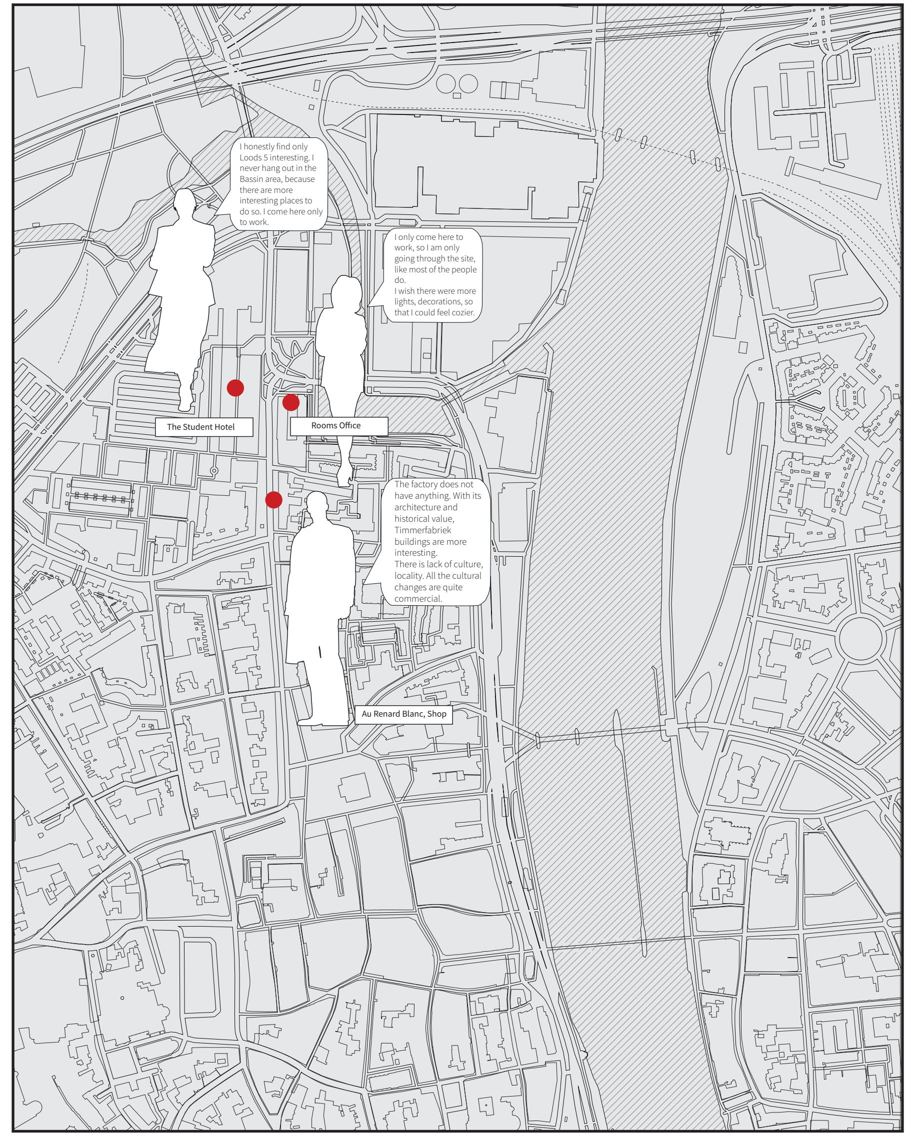


research

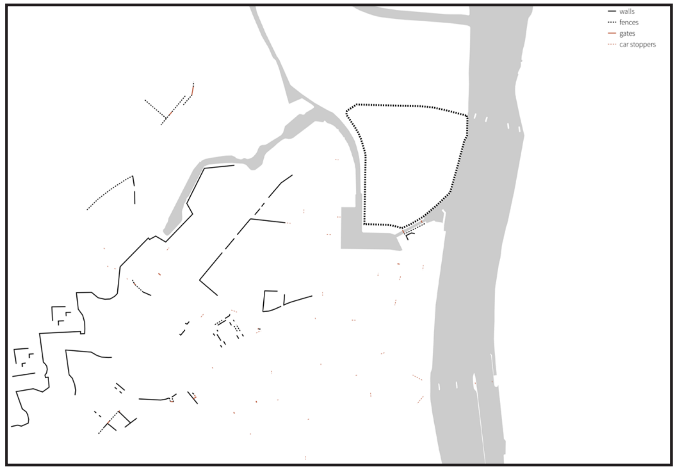
research



how to approach the site

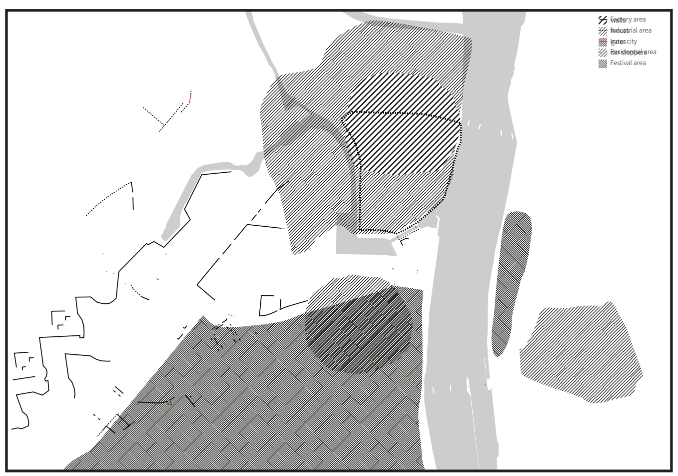


interviews



Borders

Functions



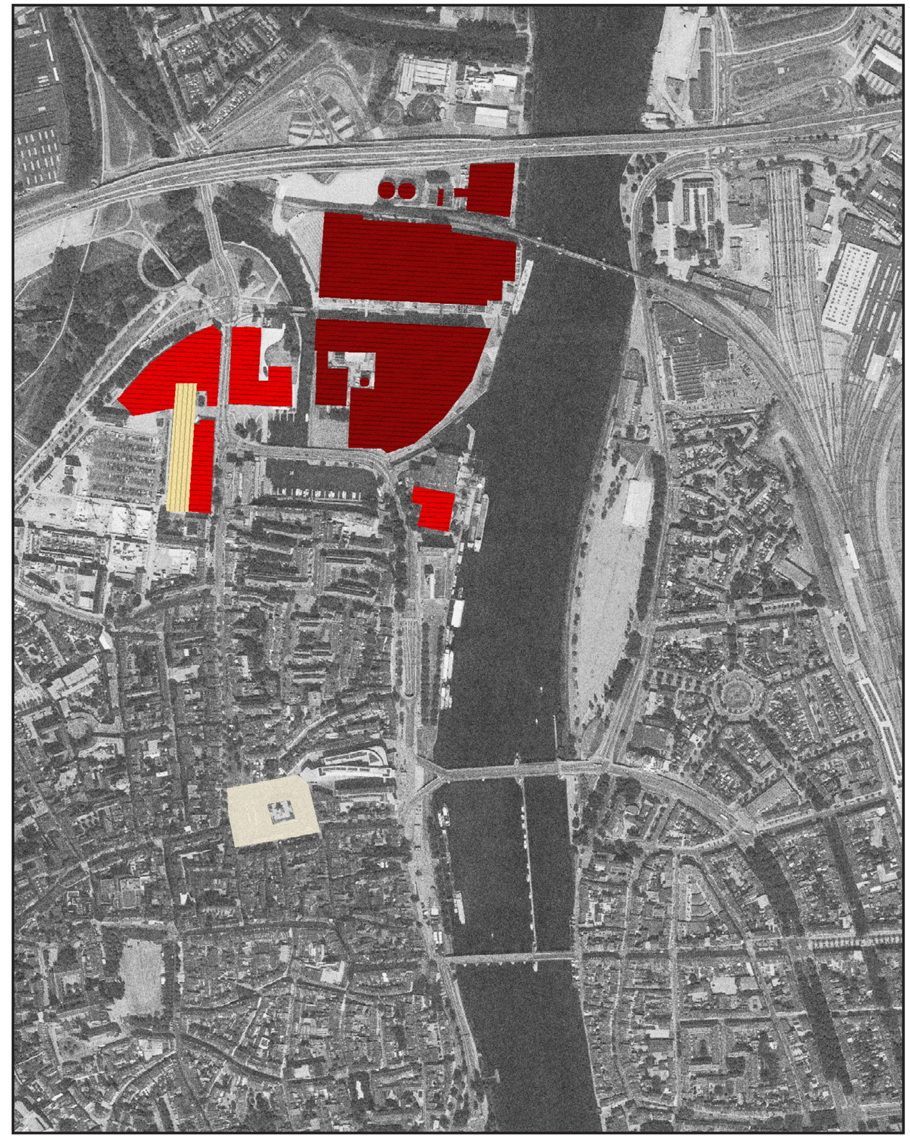
Subjective Territories

unisolated layers

Some layers of the overlapped map are isolated to read the boundries and territories of the site.

The history of the site reveals the disruption of the urban continuity, as the effects have been carried until today. Boschstraatkwartier has been and is an industrial site where post-industrialism can also be observed. The site which used to accommodate an industrial empire is today composed of dwelling, cultural and industrial programs. The latter is represented by the paper factory called Sappi which covers a huge part of the waterfront and also the northern part of the city center. When the necessary layers are isolated, it can be seen that Sappi Factory, the function of production, causes the discontinuity with its enclosed borders, and creates segregation by preventing overlapping functions. Despite the endeavor of changing the characteristics of this leftover industrial site with the integration of new cultural programs, the site is still mostly considered as an industrial area according to the subjective analysis we conducted.

19th-20th century



Current situation

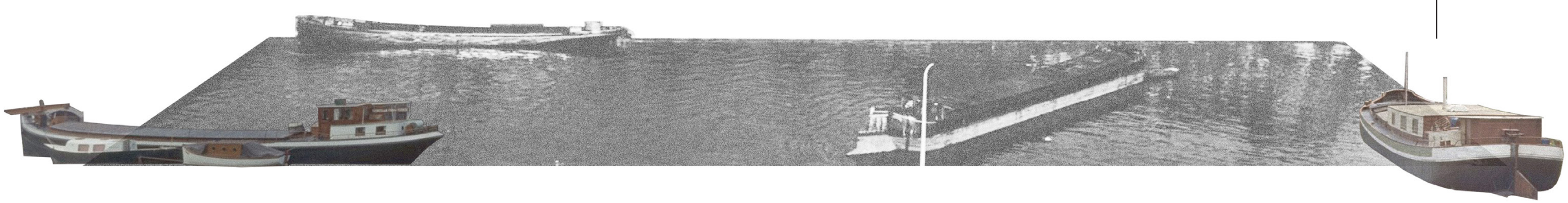
John Berger, Ways of Seeing, 1972

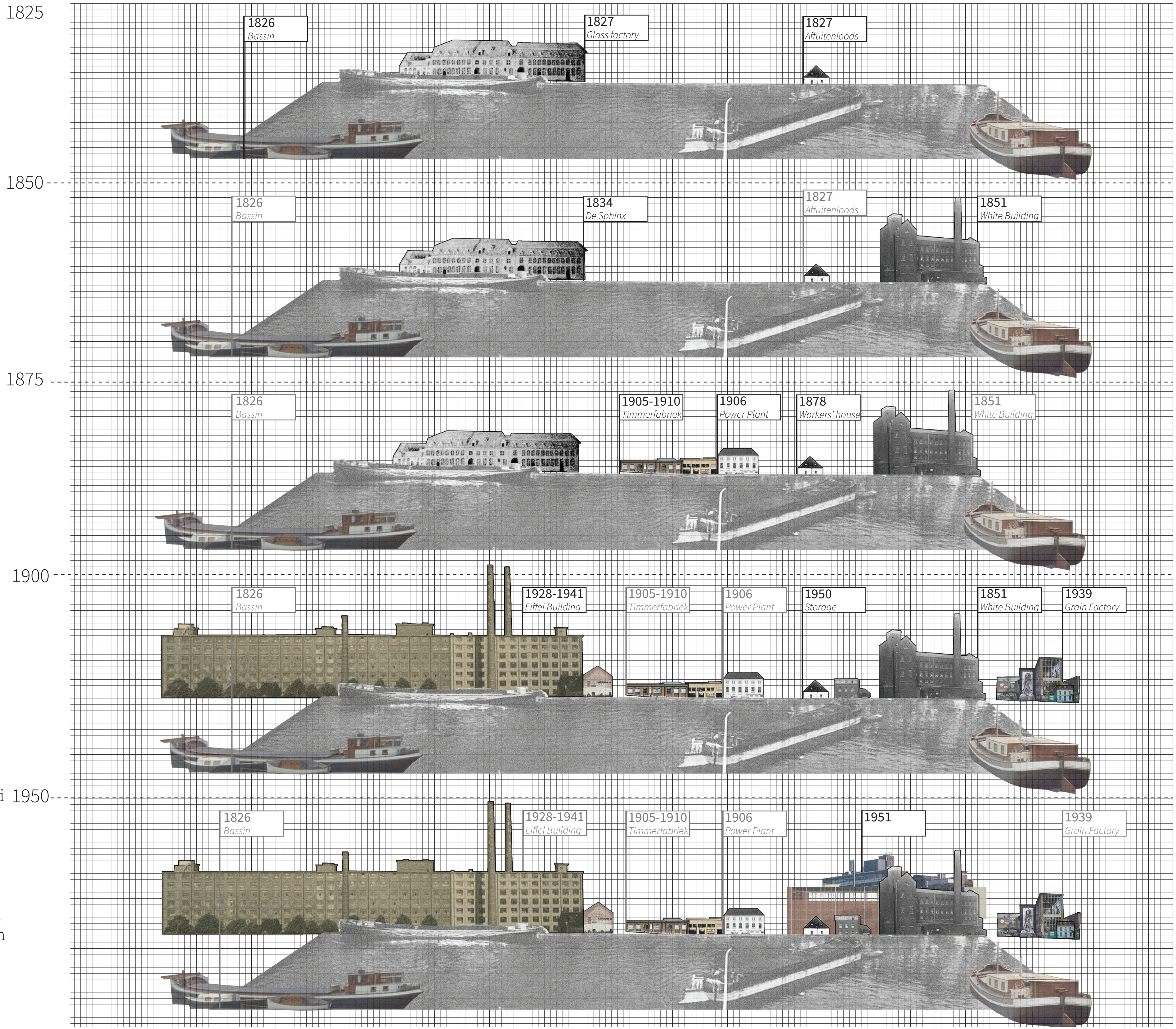
Ways of Seeing

John Berger suggests that everything around the image is a part of its meaning. He cuts of a piece of painting and claims that the cut part would change its meaning depending on what surrounds it. With this idea in the back of my head, I continued to conduct my own analysis and tried to understand what is the meaning of this industrial of this area, and how this meaning affects the urban contunity.

Philippus van Gulpen, Bassin, 1848

Bassin, 1826





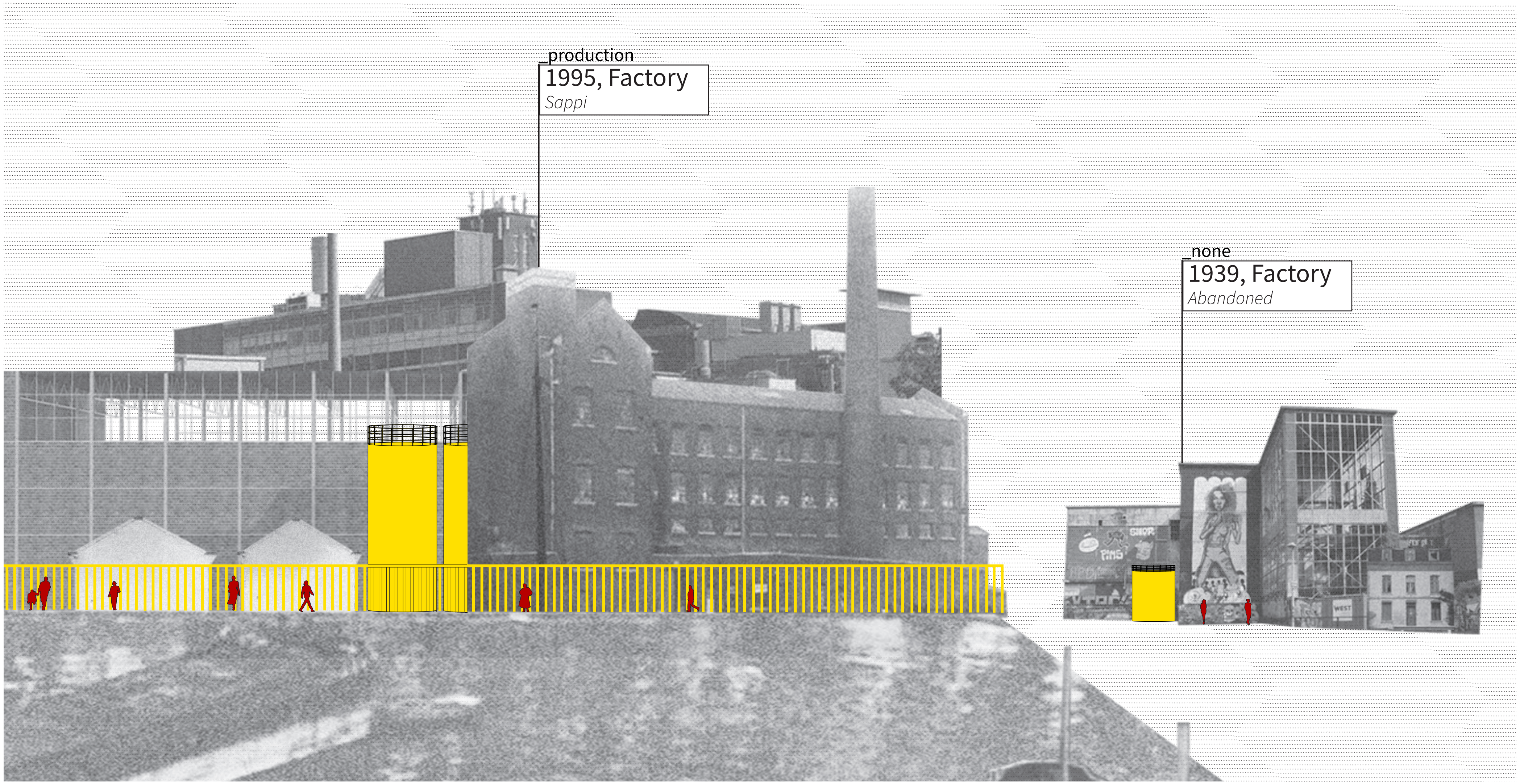
methodology/
industrial
timeline

"The city is in its history."
Also Rossi

Based on Rossi's quote, the industrial timeline enables us to understand the configuration and the architectural character of the site.

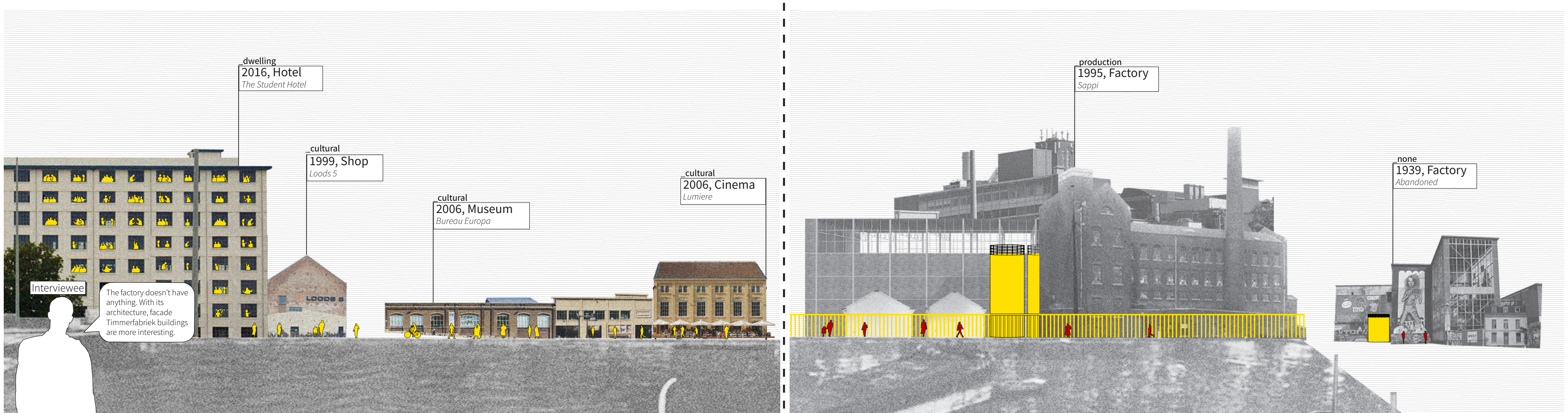
research analysis/ human scale

The left part of the last image is now constituted of cultural functions based on industrial character. To understand the reason behind this, I wanted to relate the image to the human scale. Although the Eiffel Building appears as such a landmark because of its massive size, due to its architectural quality, the rhythm of its windows, light conditions and etc. enabled it to become a dwelling project.



research analysis/ machine scale

The right side of the collage timeline, still remains as massive industrial beings, whose primary users are the silos, industrial artefacts and etc.



dwelling
2016, Hotel
The Student Hotel
cultural
1999, Shop
Loods 5
cultural
2006, Museum
Bureau Europa
cultural
2006, Cinema
Lumiere
Interviewee
The factory doesn't have anything. With its architecture, facade Timmerfabriek buildings are more interesting.
production
1995, Factory
Sappi
none
1939, Factory
Abandoned

Gleaners and I, Agnès Varda, 2000

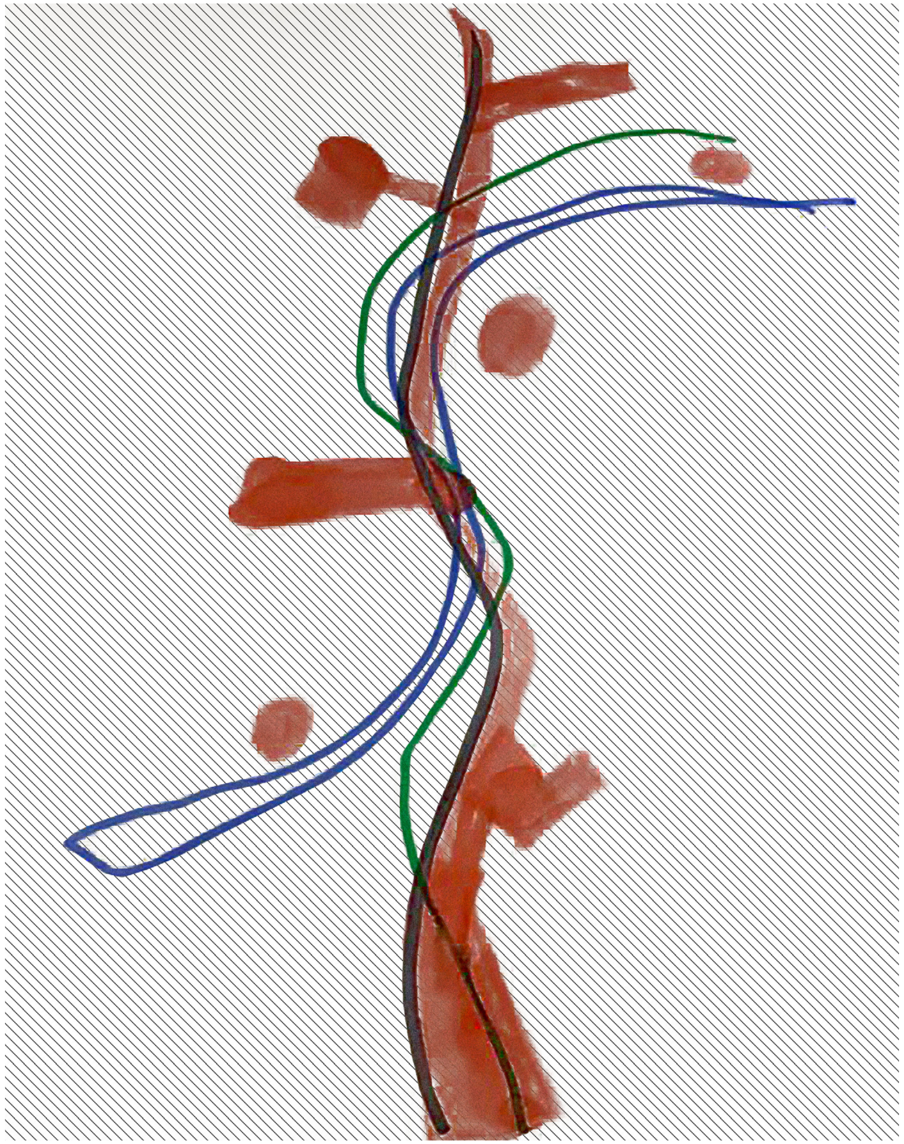
The fact that the industry, as a result, the act of producing, has been isolated from the urban tissue became the main problematization of my research as well as design and set a framework for both.

RESEARCH QUESTION

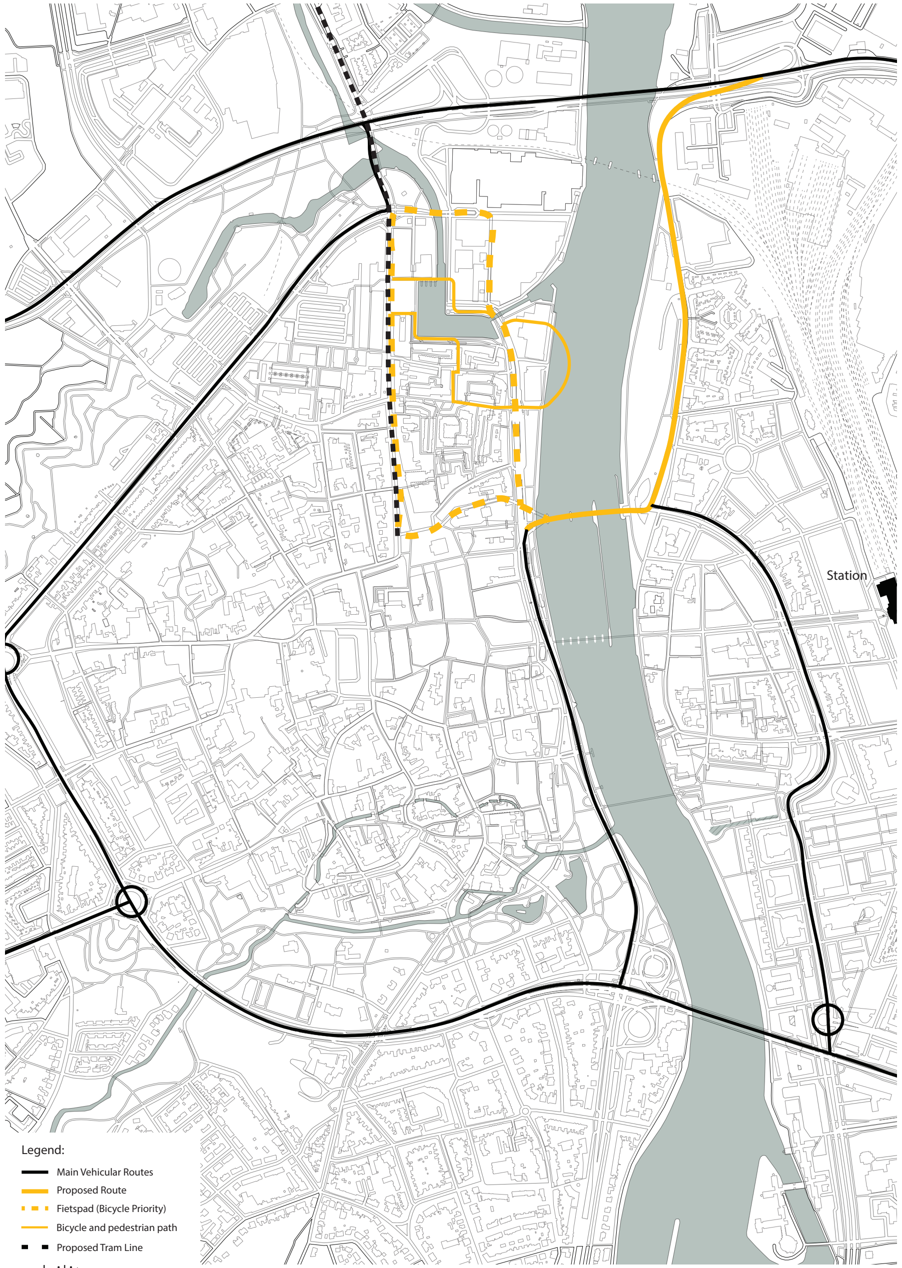
How do we glean non-human scale industrial legacy/production to use it as a prime catalyst in the integration of the urban site?

. Our proposal addresses the problem of segregation and intends to stitch these disruptions in a humble and everyday manner. The urban plan suggests a couple of principles that form an ecological spine that focuses on multiple aspects of the built environment.

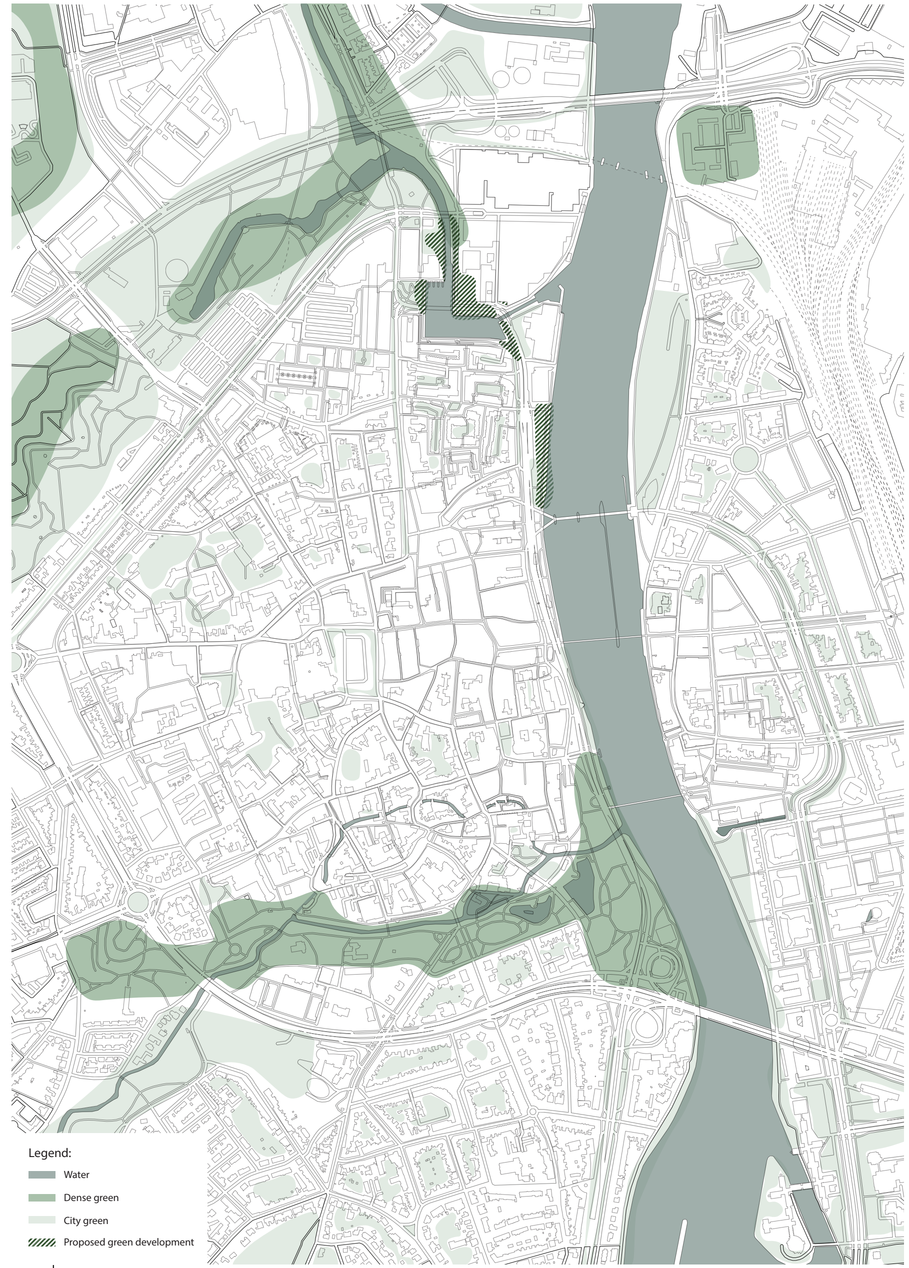
WRITING



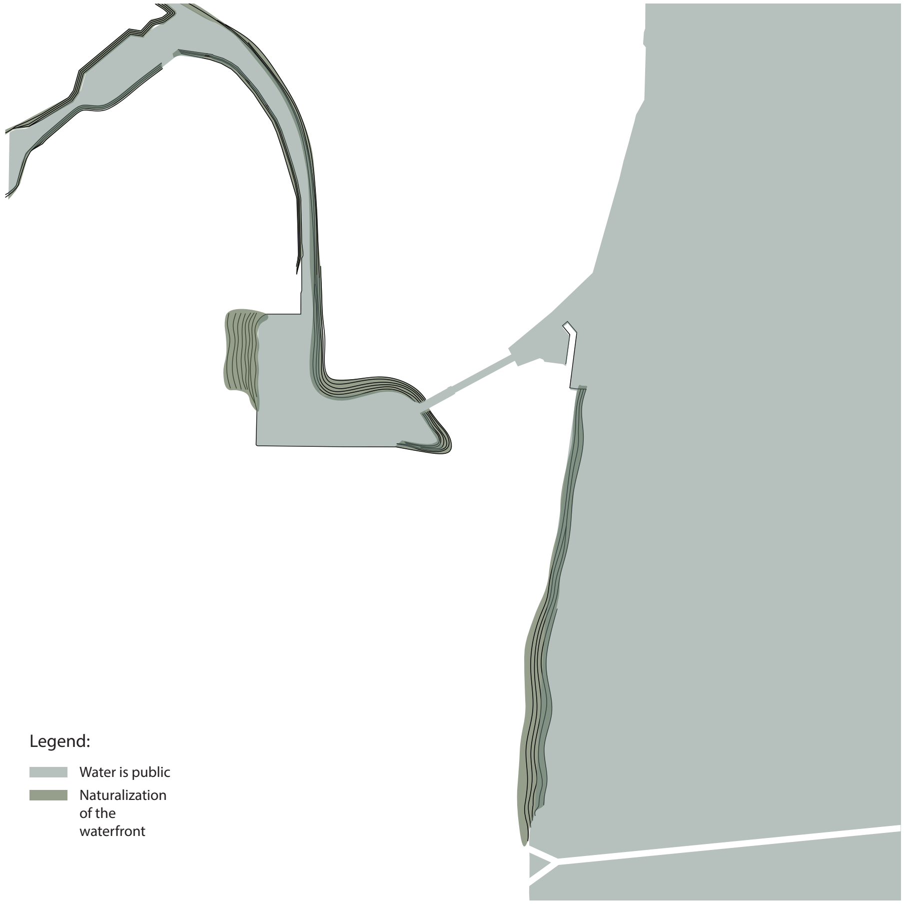
preliminary sketch of the urban approach

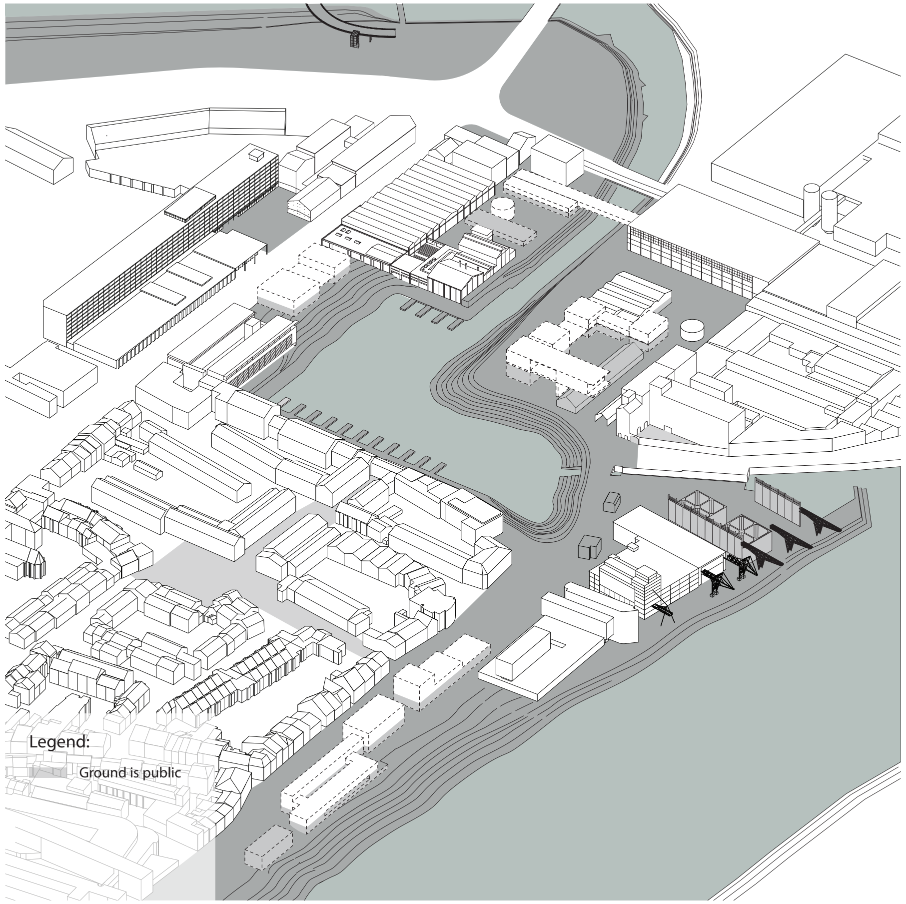


mobility map



ecology map



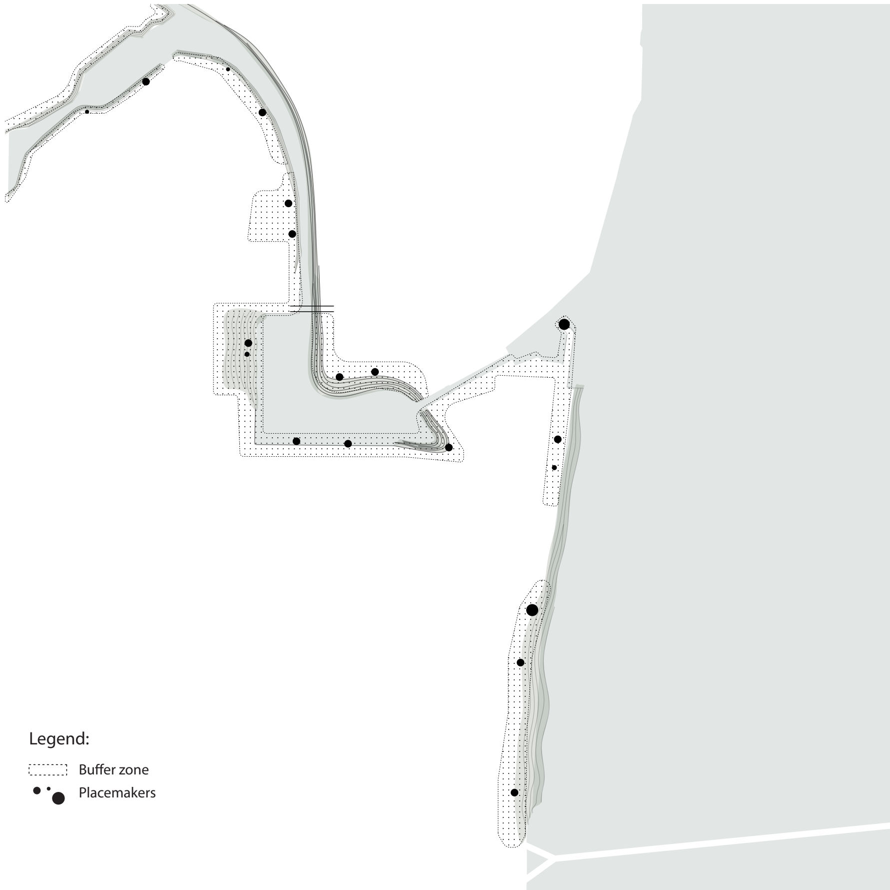


water is public

One of the biggest problems of the site is disintegration. Not only does this effect the flow of the site but also privatize the water front although all of the functions are not private. The factory, which is a private property, covers a huge water front. LBB is not a private property, however as a community, they are not completely public which also affects the water being public. Therefore, our first principle is water is public. That is why naturalization of the water border is one of the first steps we take to make the water front more public.

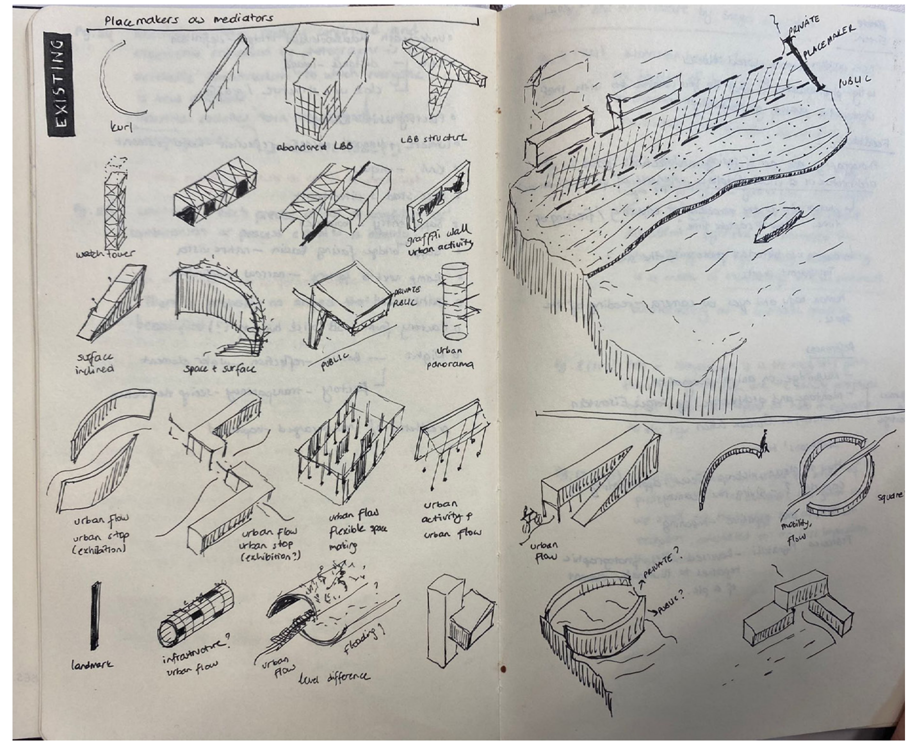
ground is public

Our second principle encouraged more flow within the site. Therefore, we say that the ground is public, so that no private function can hinder the urban flow.



placemakers

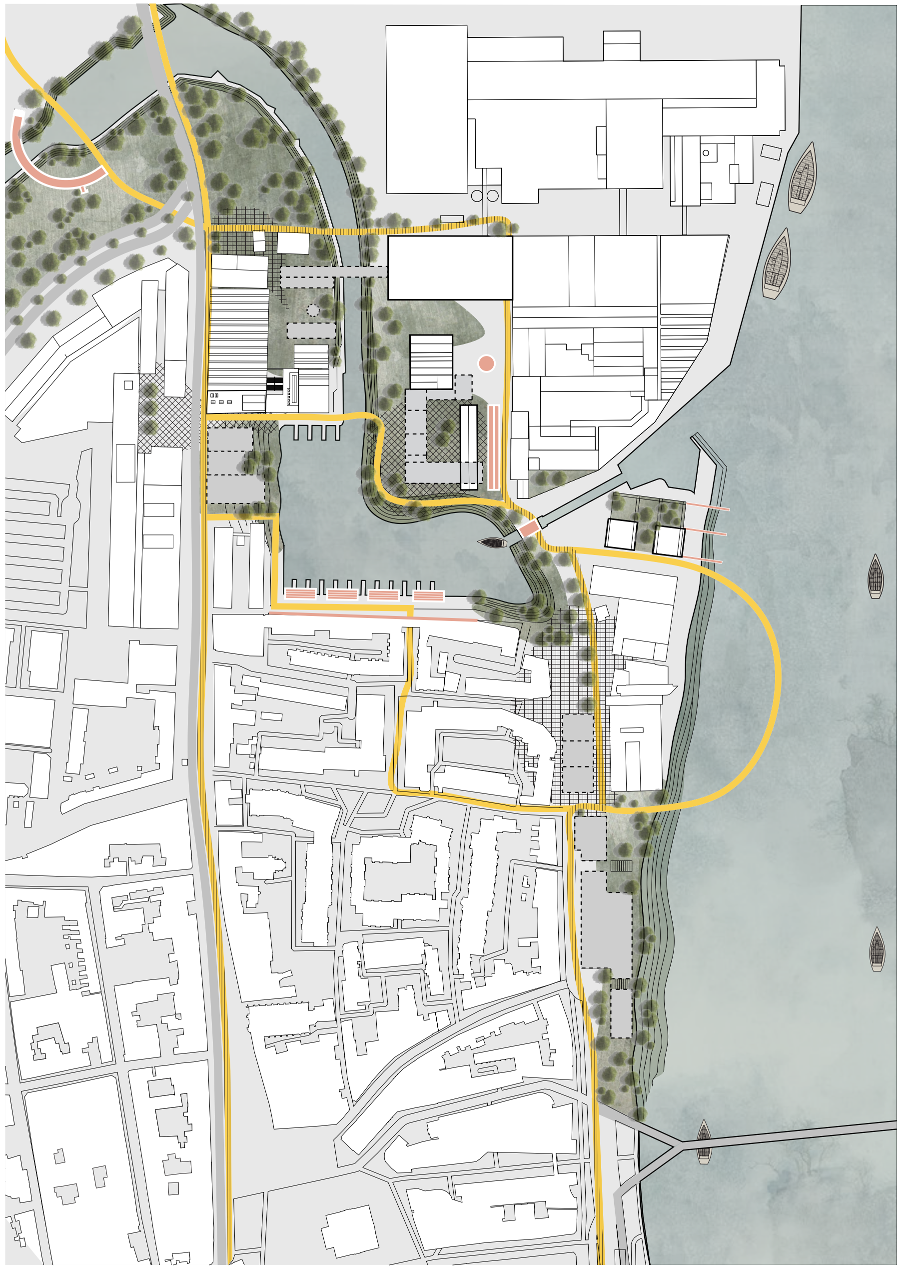
We are aware of the fact that there is always a tension created by the coexistence of public and private programs. Hence, we wanted to introduce the mediators as well call them placemakers between the public and private to balance the tension. We noticed that there are already placemakers on the site and we listed them and tried to understand their nature and potentials.

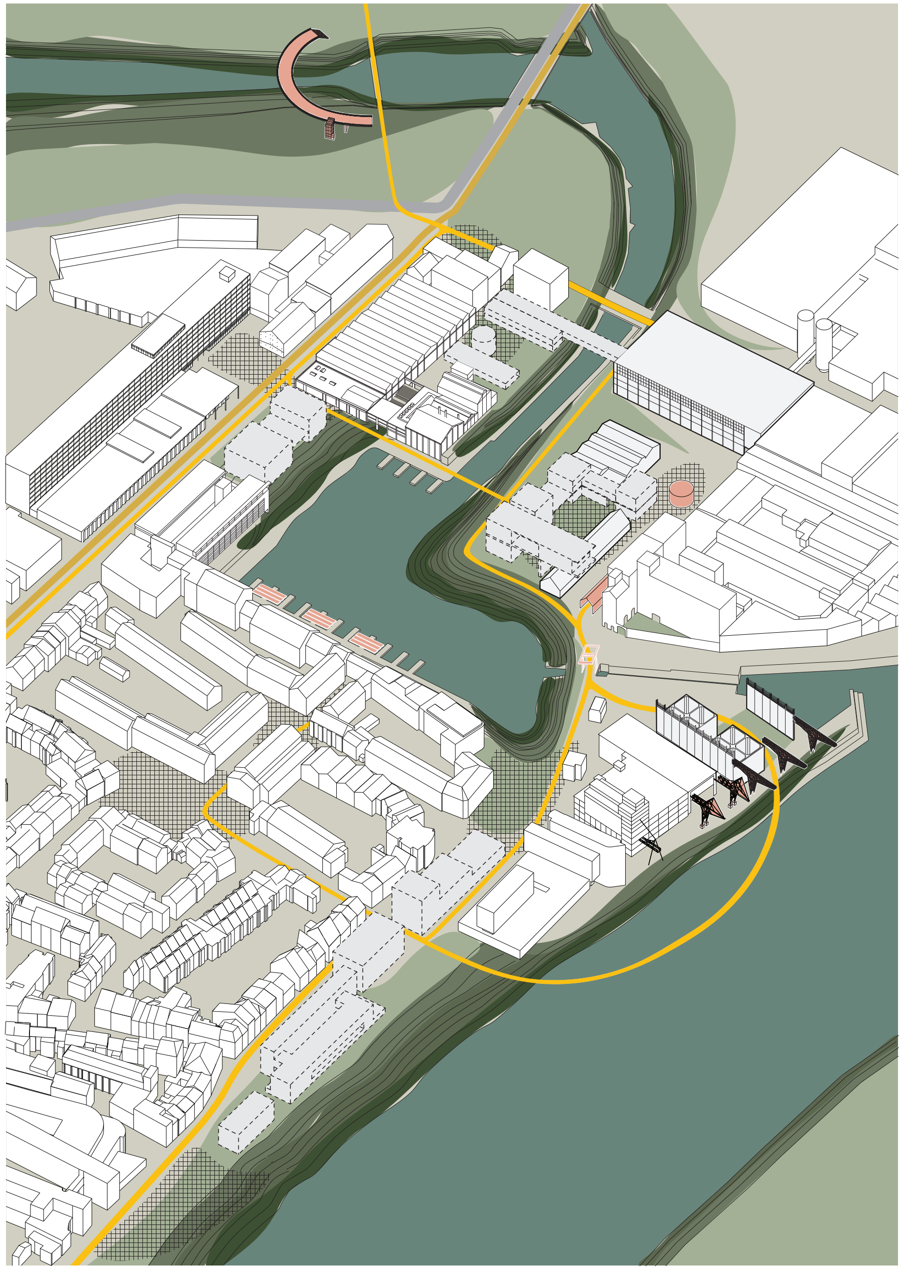


sketches of placemakers

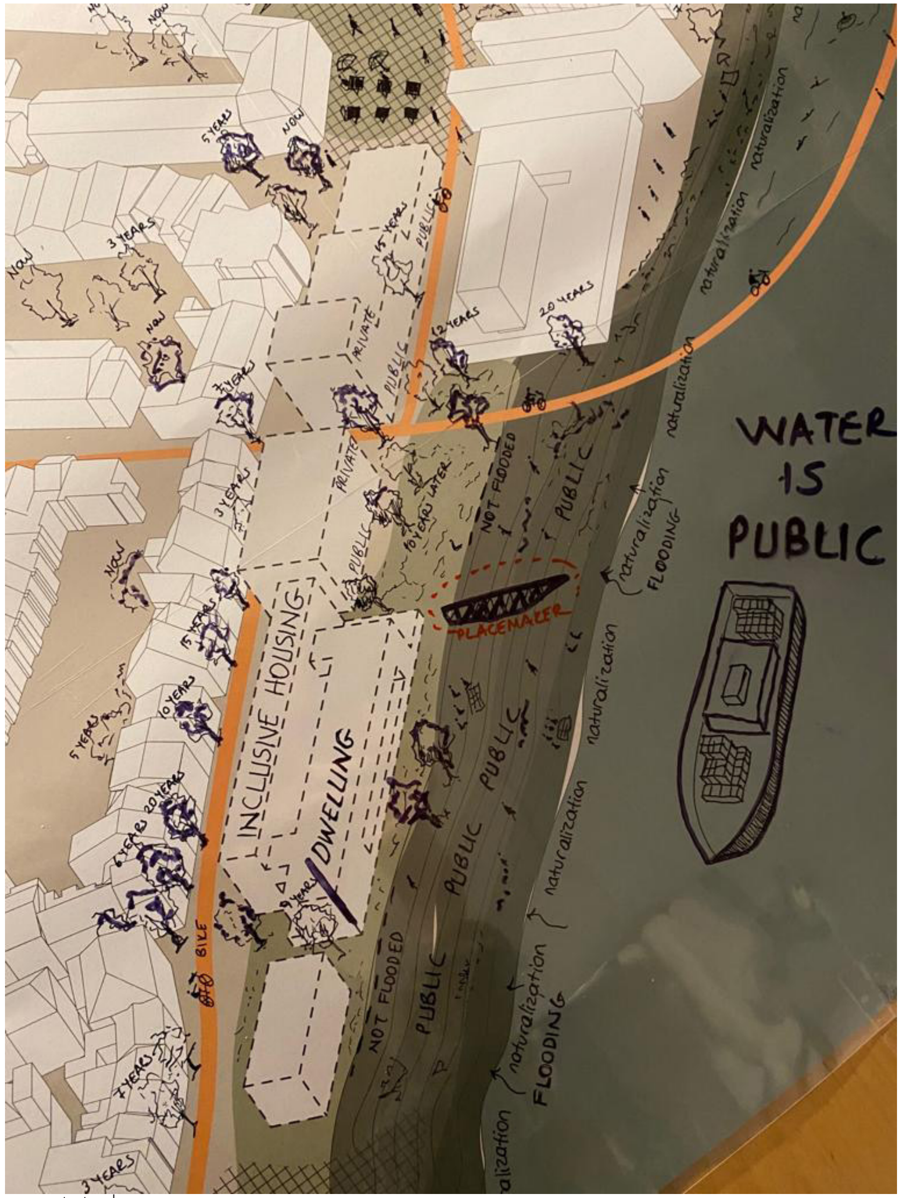
placemakers

demolition plan

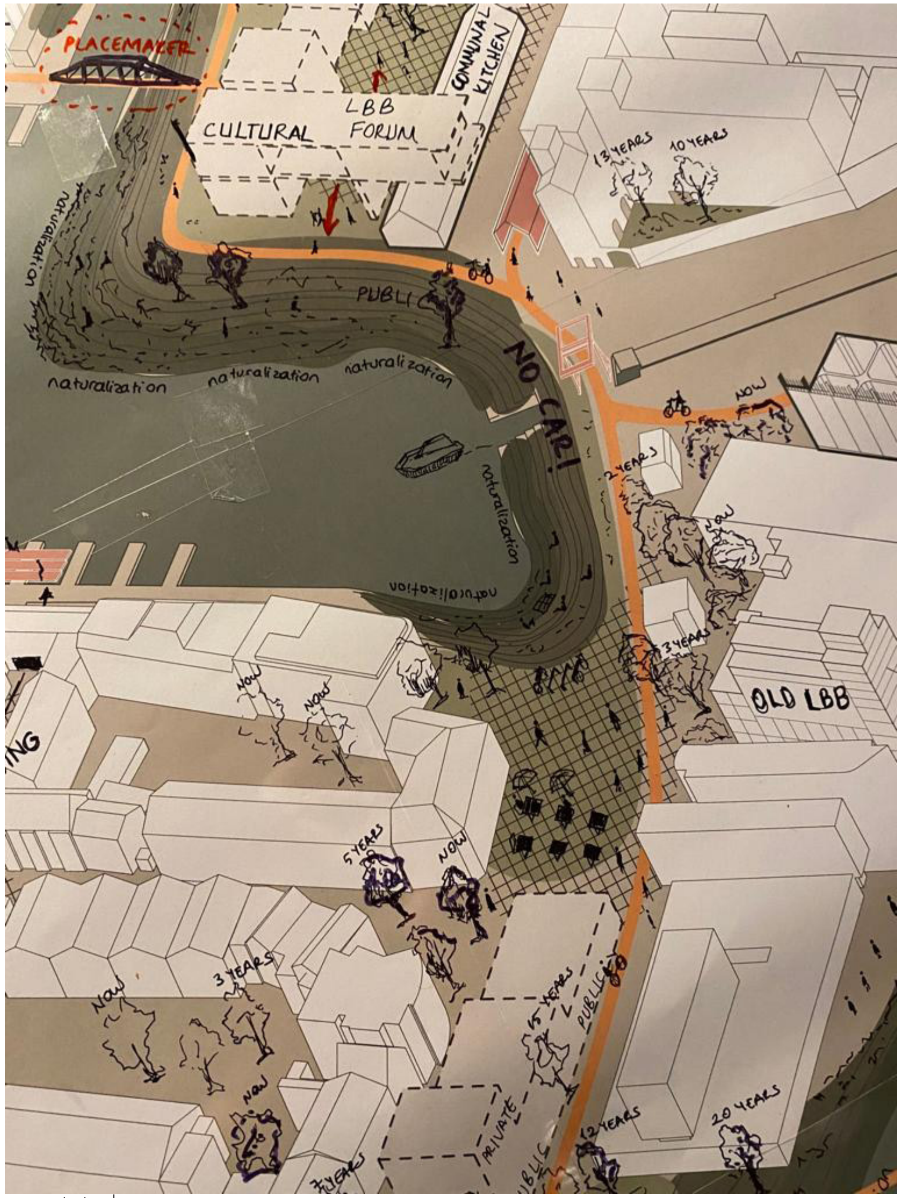

site plan


axonometric site

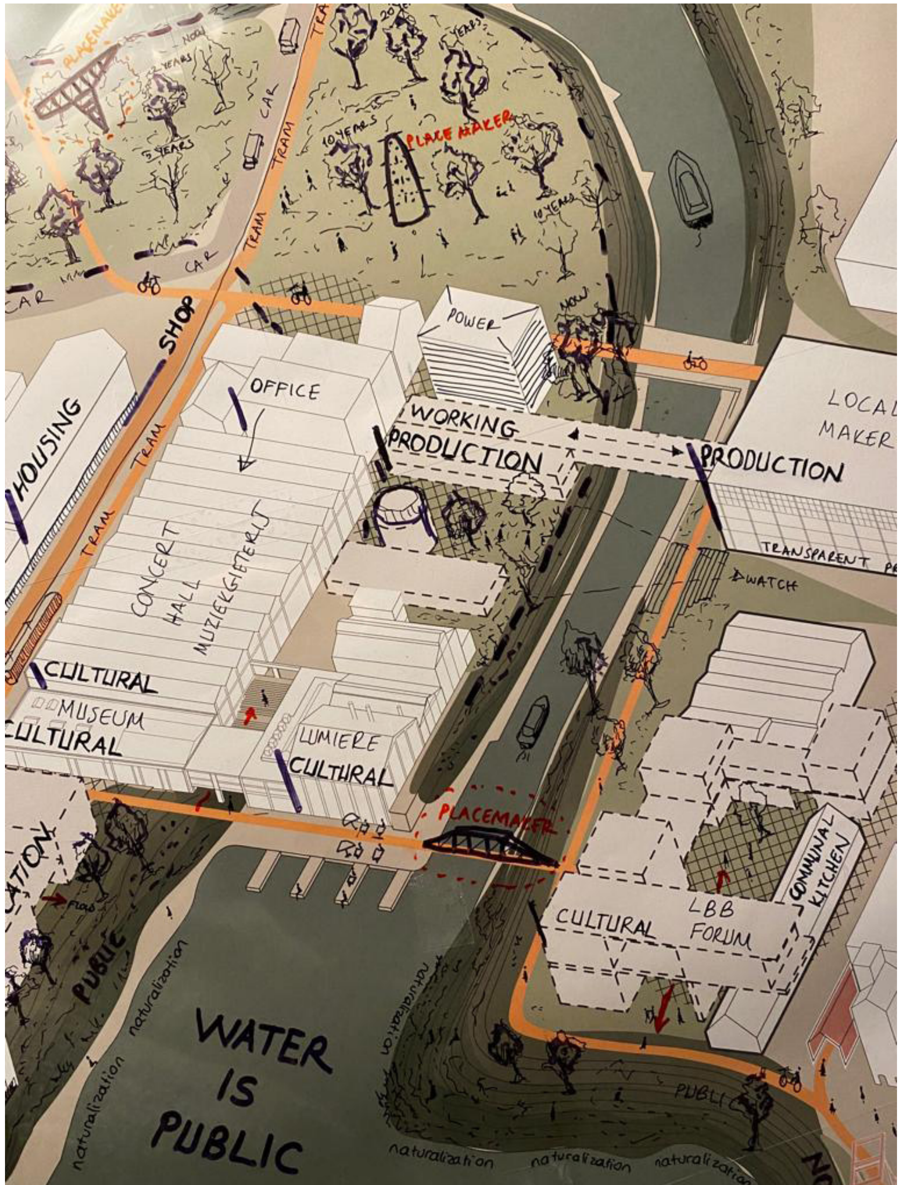
urban proposal



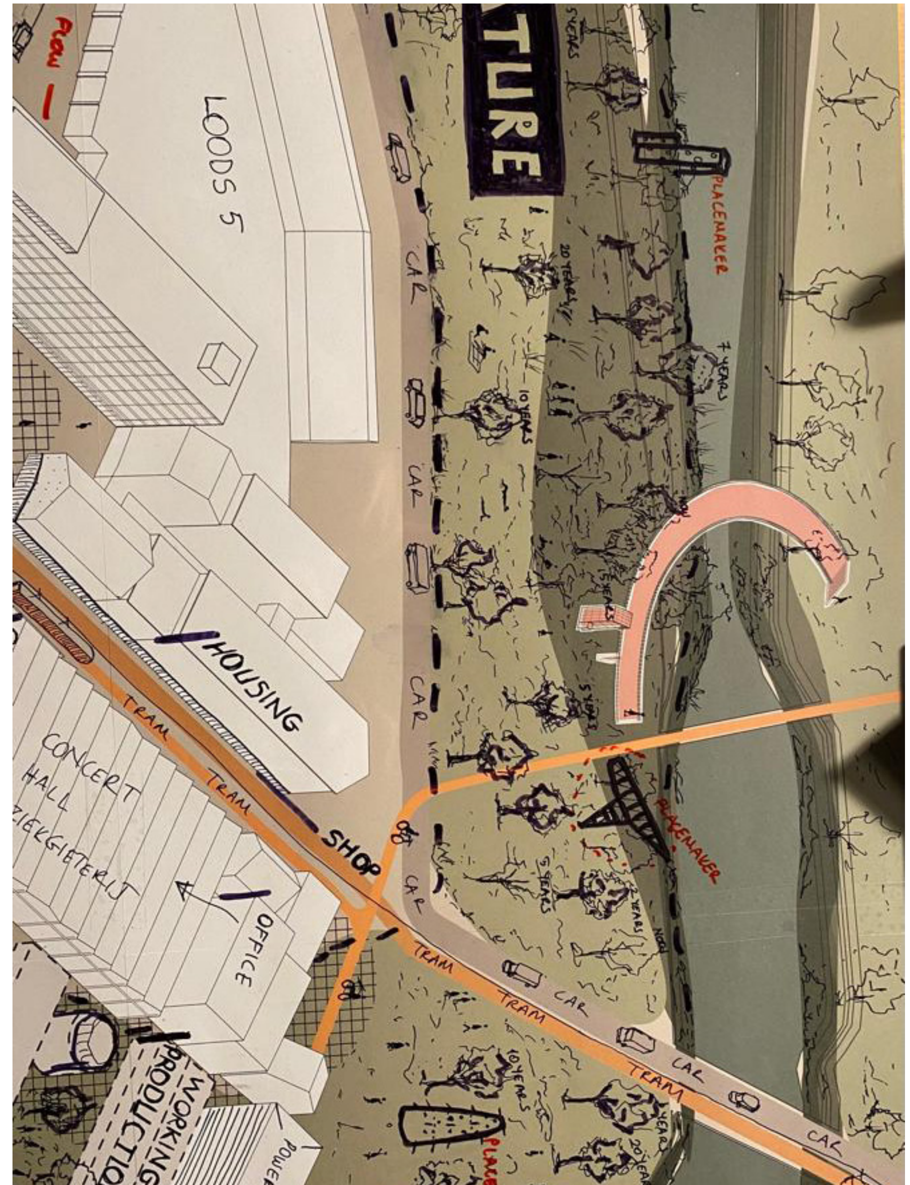
annotated axo



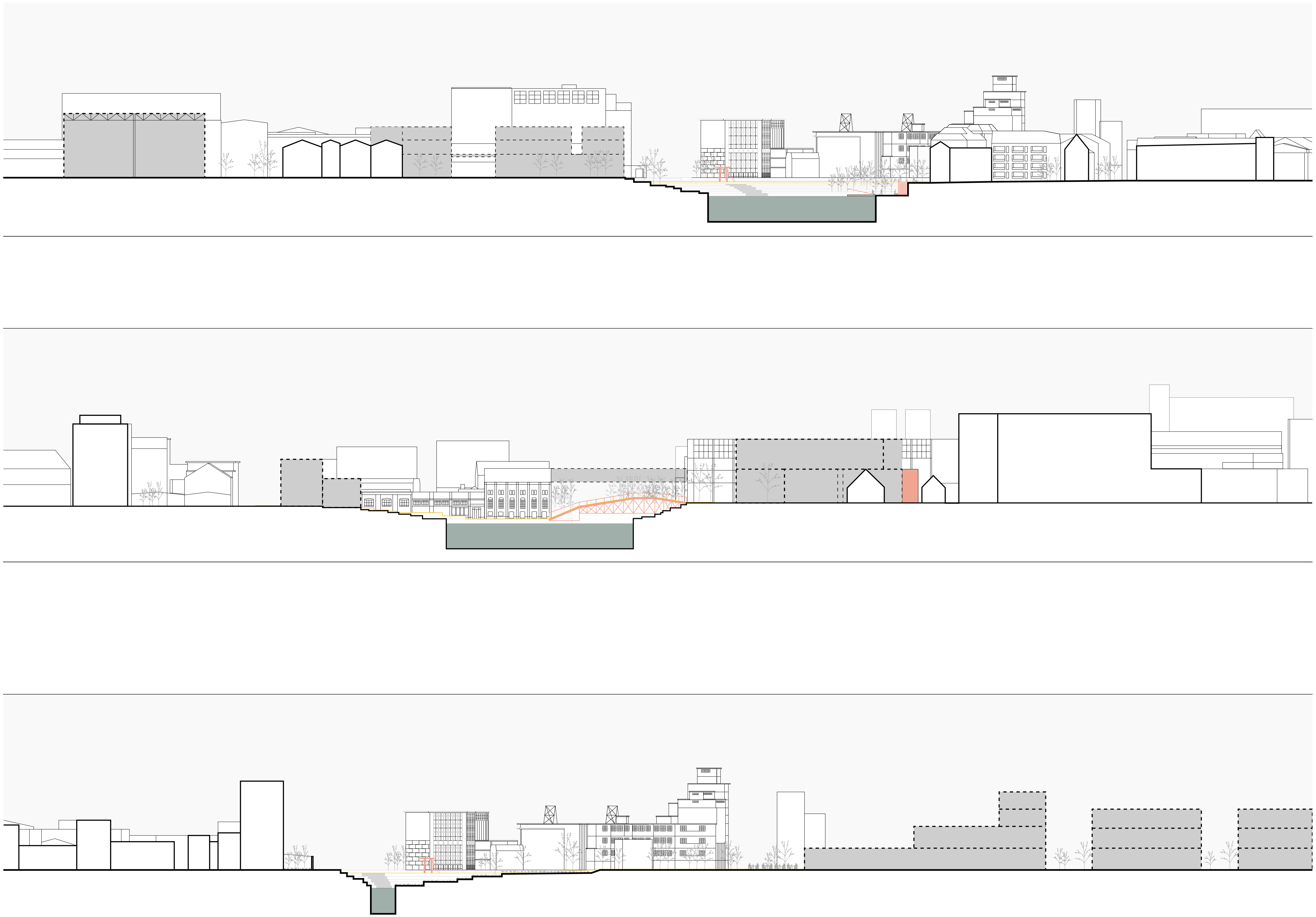
annotated axo



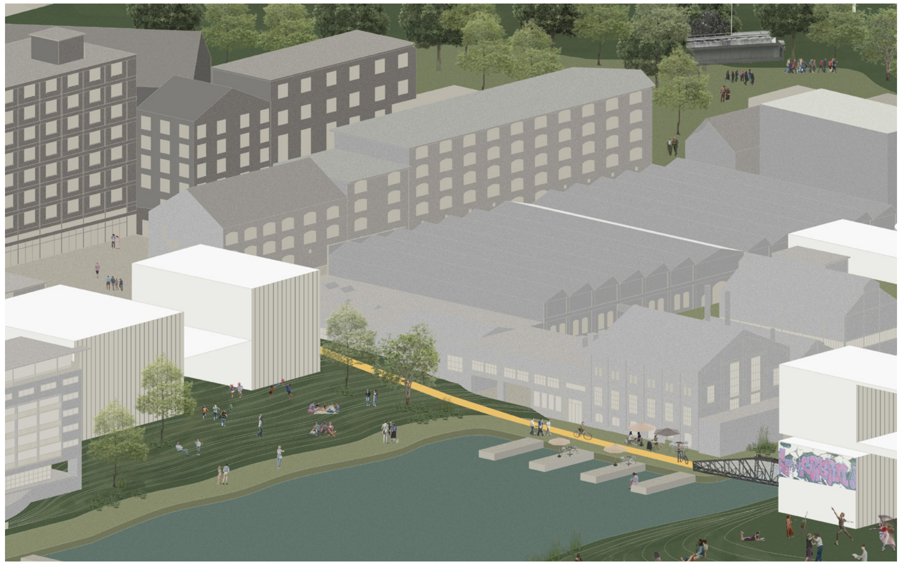
annotated axo



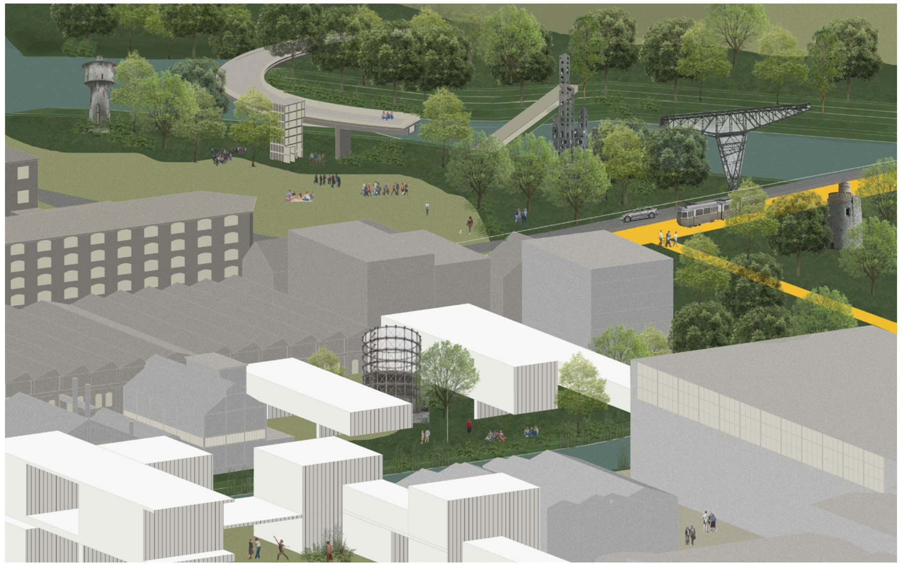
annotated axo



sections



urban views



urban views

The exhibition called 'A Good City Has Industry' welcomed its visitors with the booklet whose opening line read: "Cities are the incubators and the engines of the economy." The indispensable relationship between the city and economy often remains incomprehensible and rather conceptual, as they do not meet in a concrete realm. In the most general sense, the economy represents production and consumption activities in which urban residents participate, yet there is no tangible space in cities where this relationship is physically exhibited and witnessed. The reason being that the industry though a keystone of the economy, has not survived evolution of the urban tissue, resulting in the consequent lack of synergy between the humans and the act of production.

Etymologically, the term industry appears as a synonym of 'diligence' and 'hard work' which allusively refers to that of humans. Though throughout the years the word represented the means of production, this is now out of sight. Production, once indispensable to human existence and the urban tissue, is no longer a part of everyday life. The invention of the steam engine abstracted work from the physical toils of humans and animals, by introducing new actors who replaced the former manpower. The Industrial Revolution eradicated the diligence that vitalized the urban interaction between making and living, a consequence of which was the suppression of the local industries. The industry adopted these non-human actors for whom new spaces were designed. As the existence of production slowly became intangible, the role of humans in production was either erased or subordinated, and the machines were isolated within physical boundaries, all of which are now considered as the norm for the industry. These boundaries tried to maintain themselves within the city using the sources and the infrastructure that cities provide. Nevertheless,

Charles Sheeler

the excessive growth of the industry brought in new dynamics between the urban residents and the industry, which eventually could not embrace the co-existence of humans and machines. Functioning of the machines led to pollution and inadequate sources, while the industry needed bigger and cheaper lands which were hard to possess within the dense city center. This ever-changing dynamic resulted in the subsequent isolation of industry and production to the outskirts; resulting in segregated urban planning where it was not possible to witness the act of making. Now, consumption is the only means of interaction with the function of production.

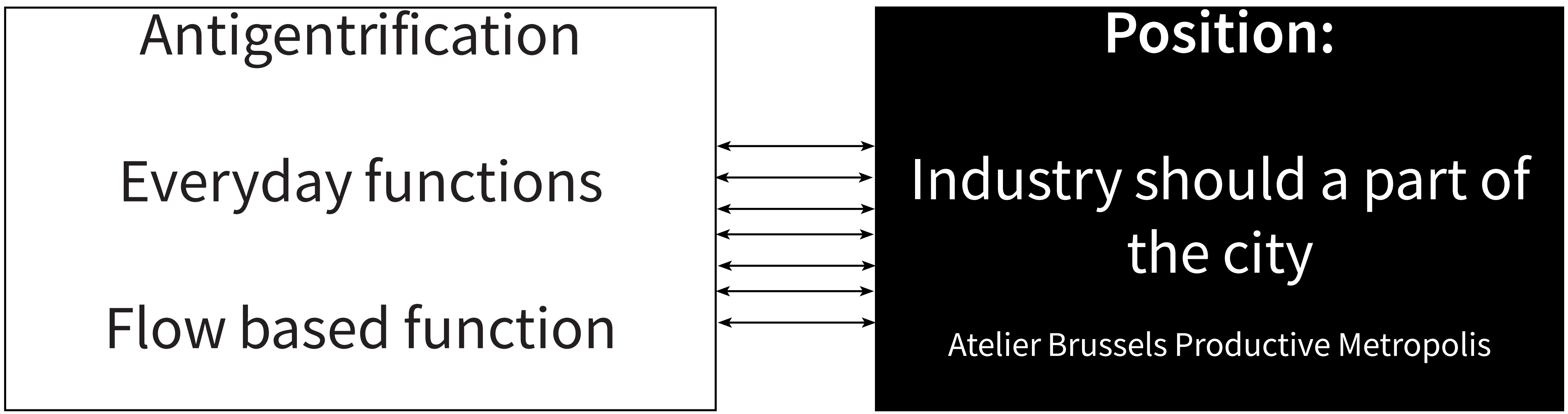
In recent years, this seclusion of the industry found its voice in various urban and architectural discussions, highlighting its irrefutable social and economic impact on urban life and continuity.

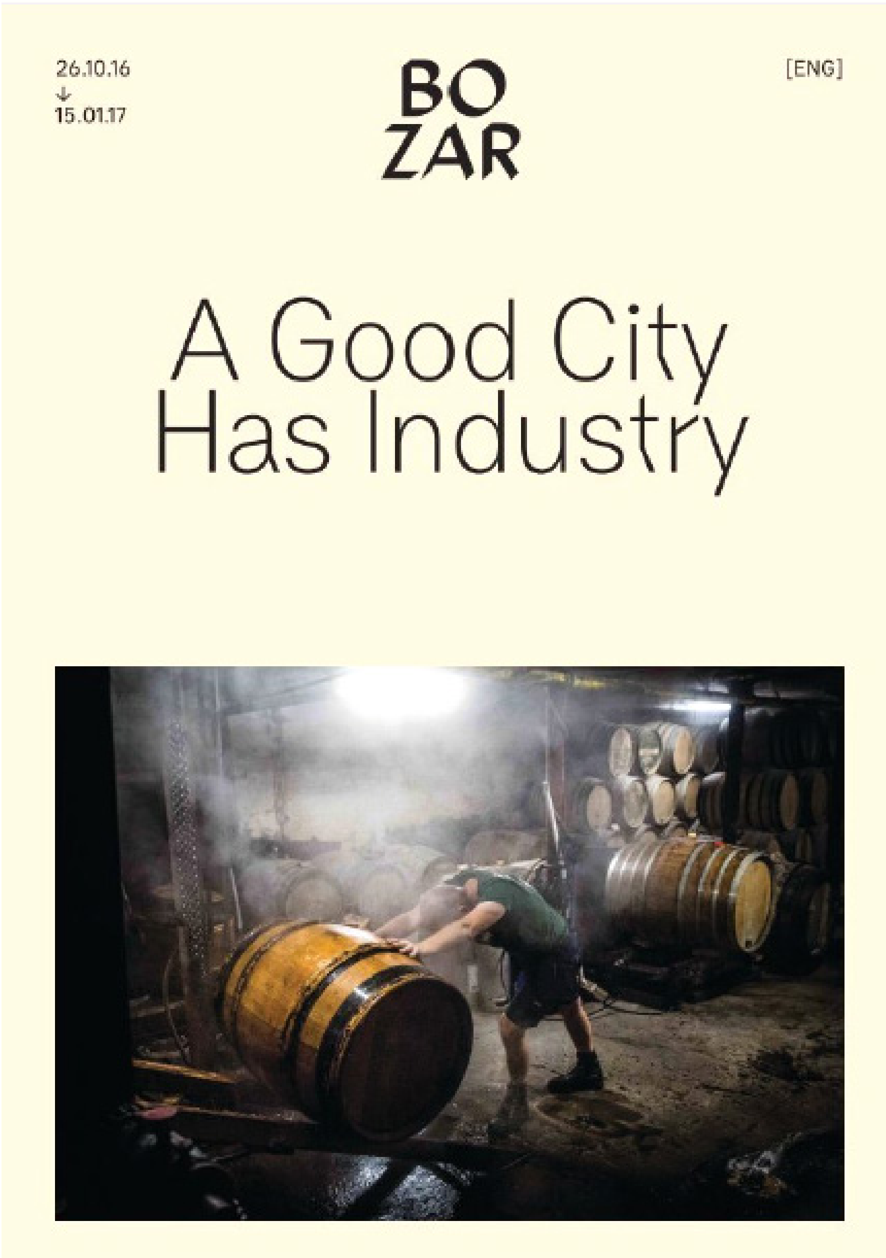
Production is an everyday actor which plays a vital role in the urban flow. Gleaning the industry, collecting and giving it a new meaning, can reintroduce this everyday forgotten existence of production to its city. This way, production would not only represent the economy but also become an urban catalyst to evoke new possible interactions such as the sense of collectiveness. This collectiveness is provided by ever-changing urban dynamics, creating a new understanding of urban culture. Contemporary concepts like sustainability, circular economy, and re-localization, have questioned the scale and the methods of production, which eventually suggested a more interactive way of making. This approach offers shared urban spaces for different types of users, urban residents, makers, manufacturers, and workers. Sharing spaces leads to collaboration, as it blurs the defined borders of segregated functions and groups of people, working towards eliminating the stark scale difference caused by separated actors: the humans and the machines. The act of production scales down to a human scale, when various types of users are able to witness and participate in the act of making.

An essential factor of this reintegration of industry is visibility. The visual connection between the urban residents and production detaches making from being associated with only the idea of consumption as it re-concretizes the production process which was once abstracted with deindustrialization. When the urban industry is able to display its presence, it has the power to become a public hub, even a landmark where tangible and intangible relations occur. Not only does this approach question the dynamics of cities where the understanding of a city center is never linked with urban industry, but also it reinterprets the protagonists of a city and urbanity.

Rethinking the industry as an impetus to urbanity also entangles two concepts that might appear as antonyms: universality and contextuality. The overall position of stitching the industry back to the urban tissue addresses a universal approach where the coexistence of city and industry aims to contribute to the urban role of each side. Making requires infrastructure to sustain itself which is provided by the city and its users, and the production becomes the infrastructure to trigger social interactions by also being a visible proof of the city's economy. On the other hand, this economy depends on the local sources, culture, social, and economic dynamics, which makes production contextual. This contextuality creates a common ground for the urban users, bringing people together through the act of making.

After having been pushed away for years, the industry is now ready to be celebrated, offering unconventional perspectives for new urban and architectural explorations. By enabling many dualities such as humans and machines, contextuality and universality, etc. to exist together, it intends to form a more homogenous urban atmosphere.


Antigentrification
Everyday functions
Flow based function
Position:
Industry should a part of the city
Atelier Brussels Productive Metropolis



Atelier Brussles Productive Metropolis Agenda

A good city has industry.

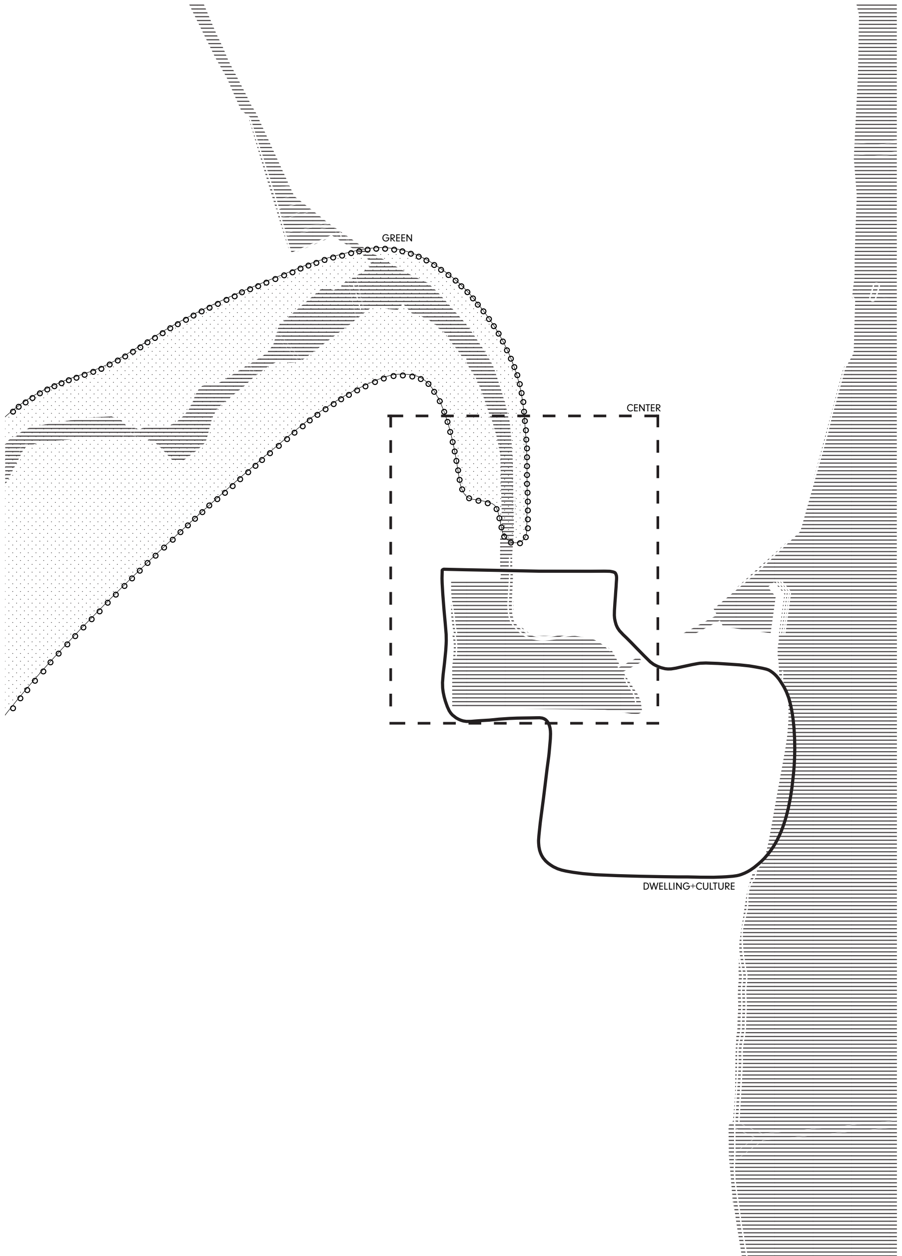
We need to close the gap between thinkers and creators.
The gap between the knowledge and manufacturing economy is also reflected in the space.

Urban industry needs its public visibility and buildings.

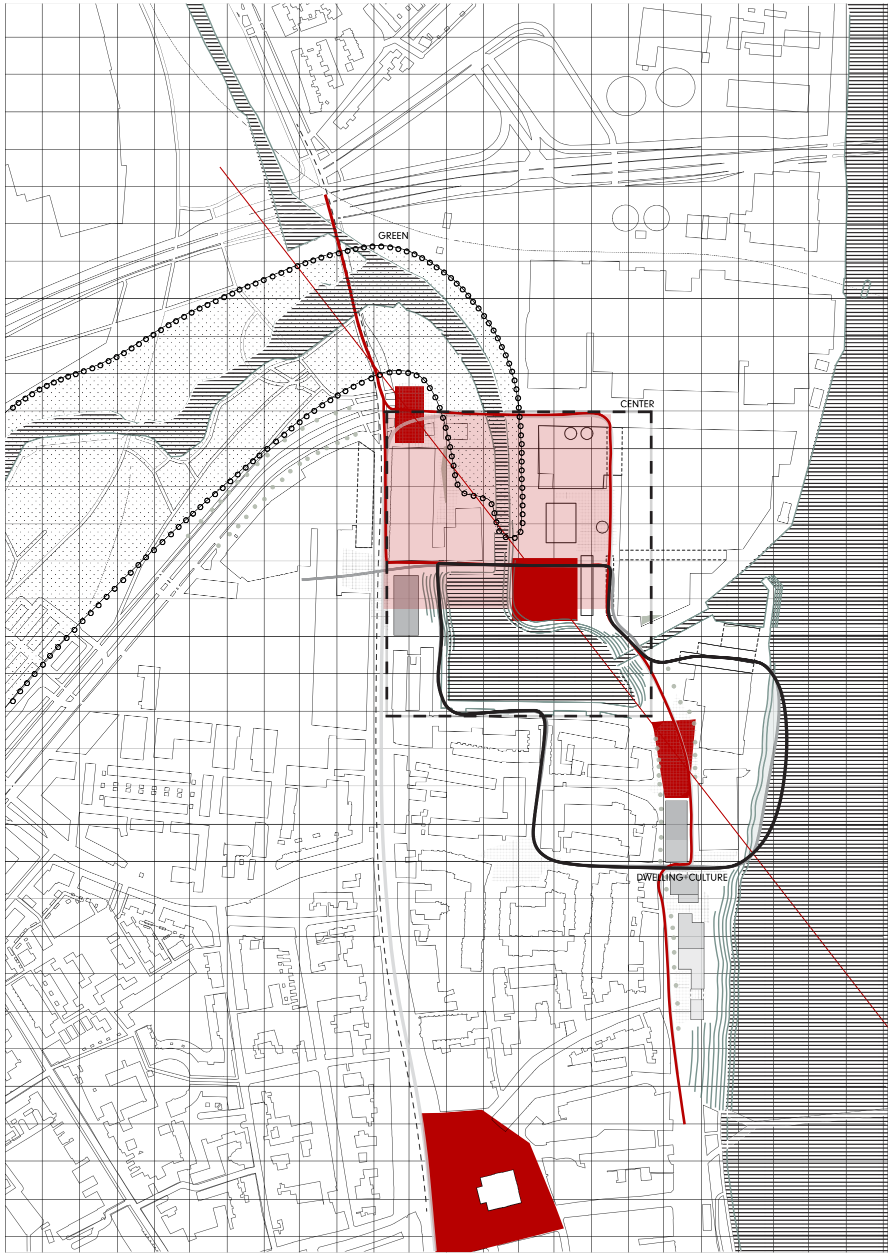
Sharing facilities liberates extra space for the urban economy.

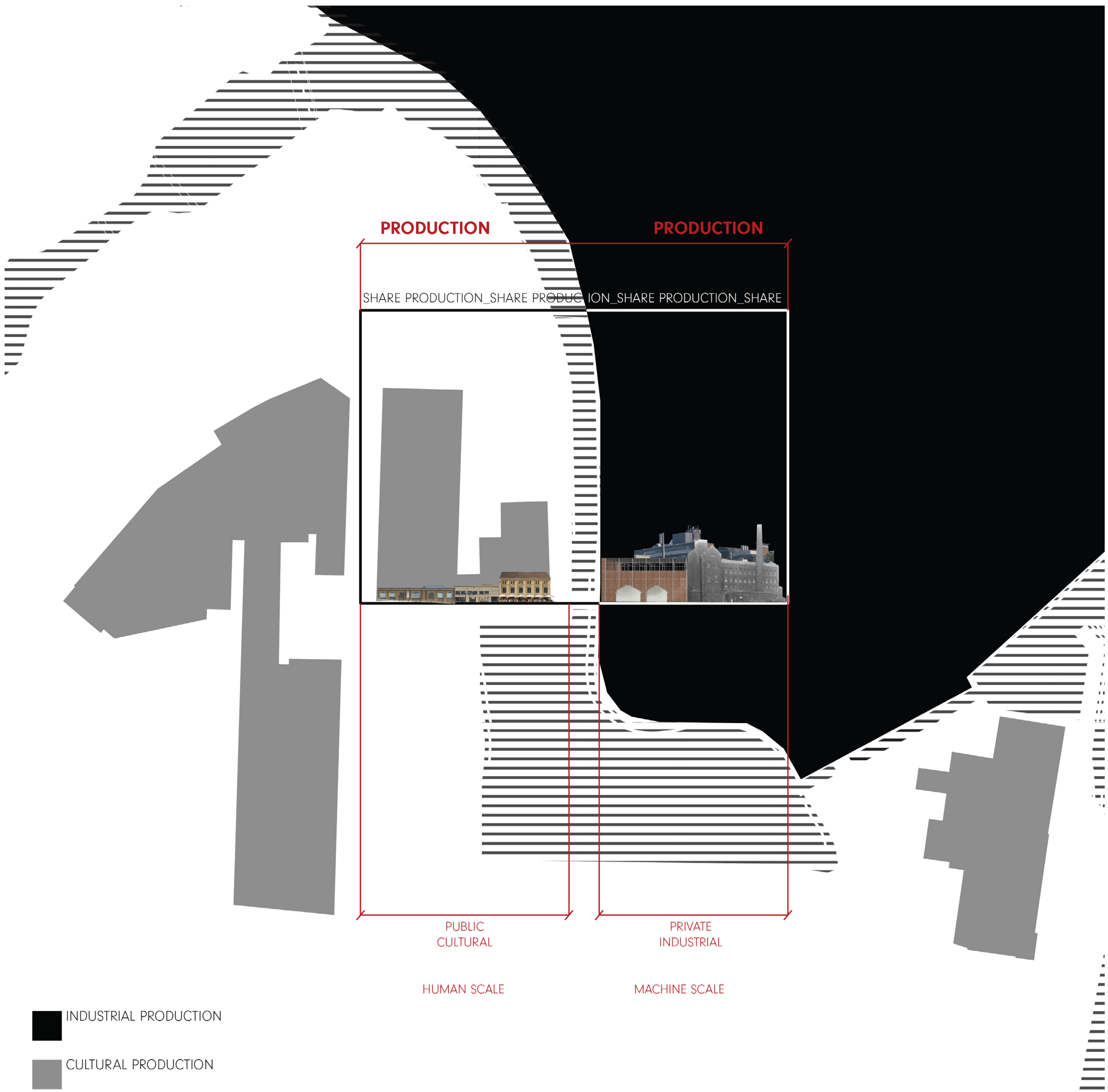
Space is a scarce commodity in the city. If companies use facilities and infrastructure together; rather than each in their own property, we will gain space for the urban economy. Shared spaces also add public places and passages to the urban industrial area.

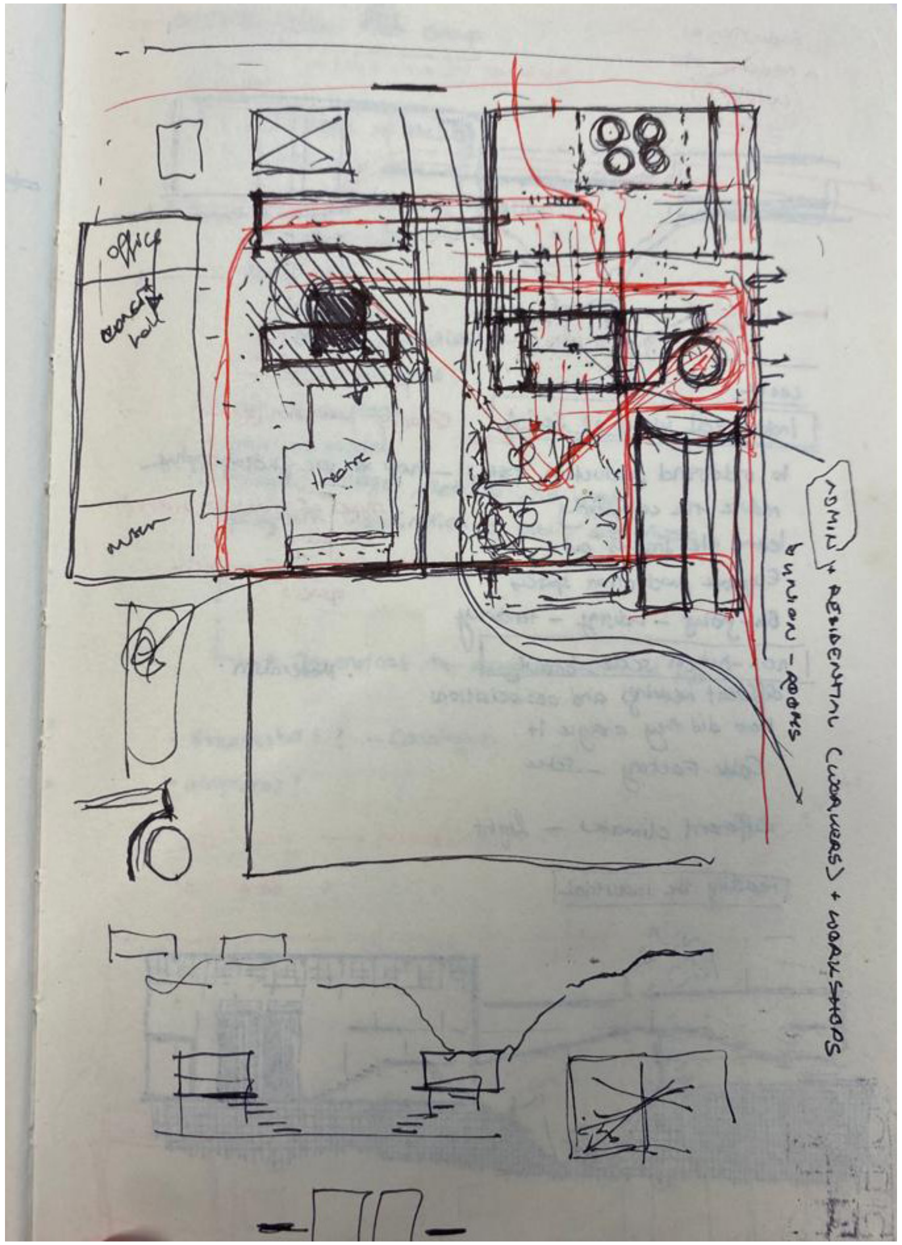
Fostering coalitions between companies allows for maximum use of limited space.



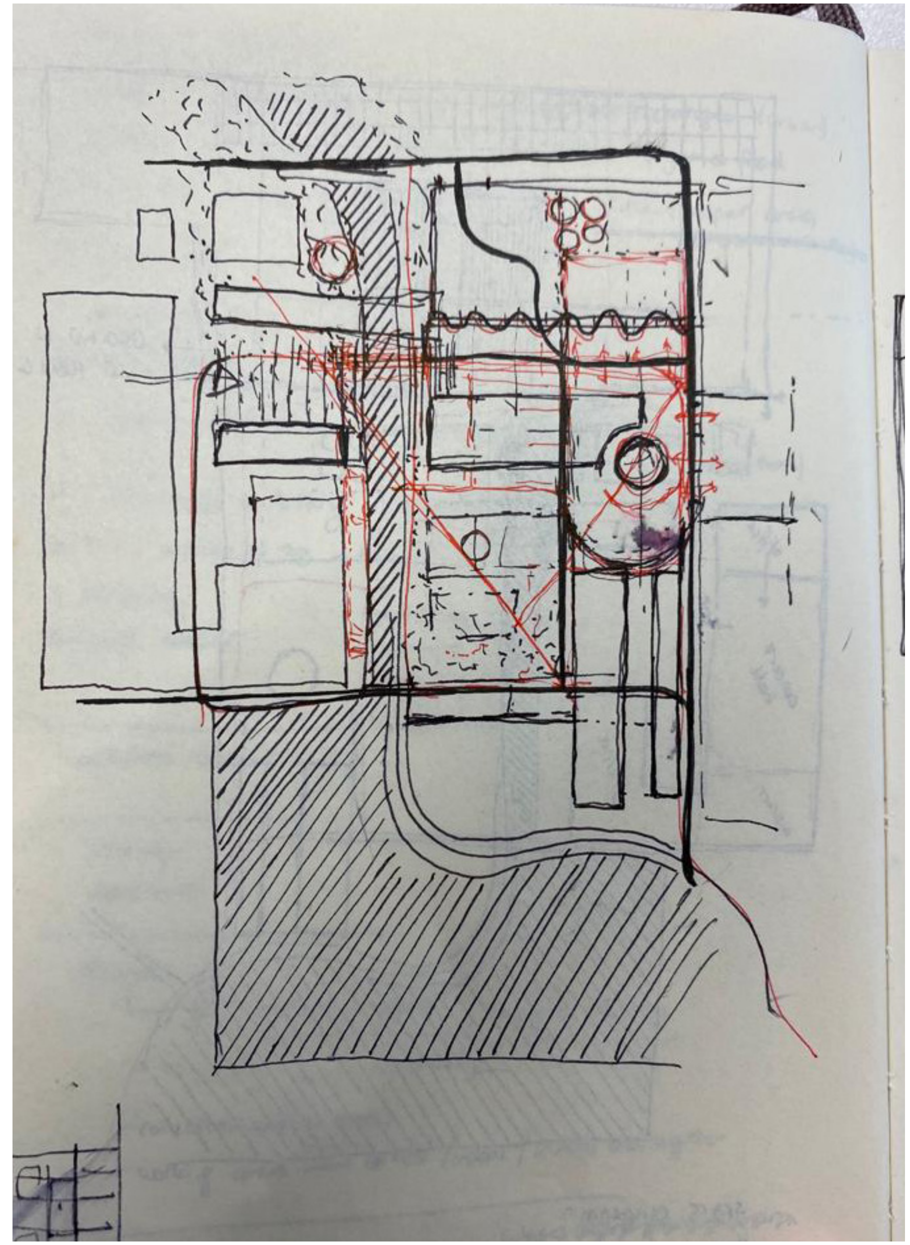
site selection



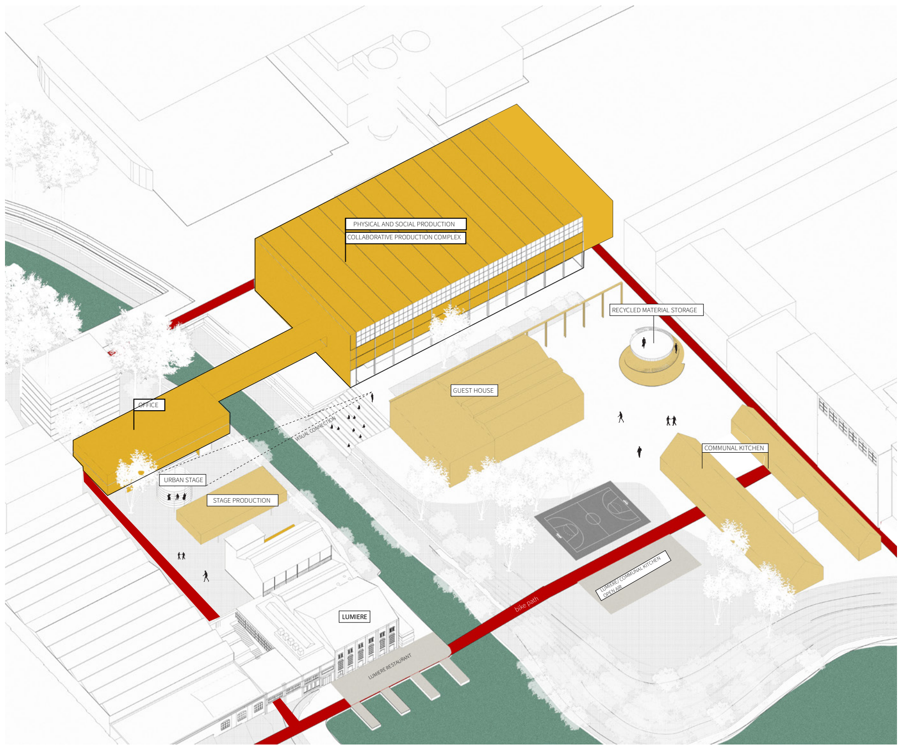

PRODUCTION
PRODUCTION
SHARE PRODUCTION_SHARE PRODUCTION_SHARE PRODUCTION_SHARE
PUBLIC
CULTURAL
PRIVATE
INDUSTRIAL
HUMAN SCALE
MACHINE SCALE
INDUSTRIAL PRODUCTION
CULTURAL PRODUCTION

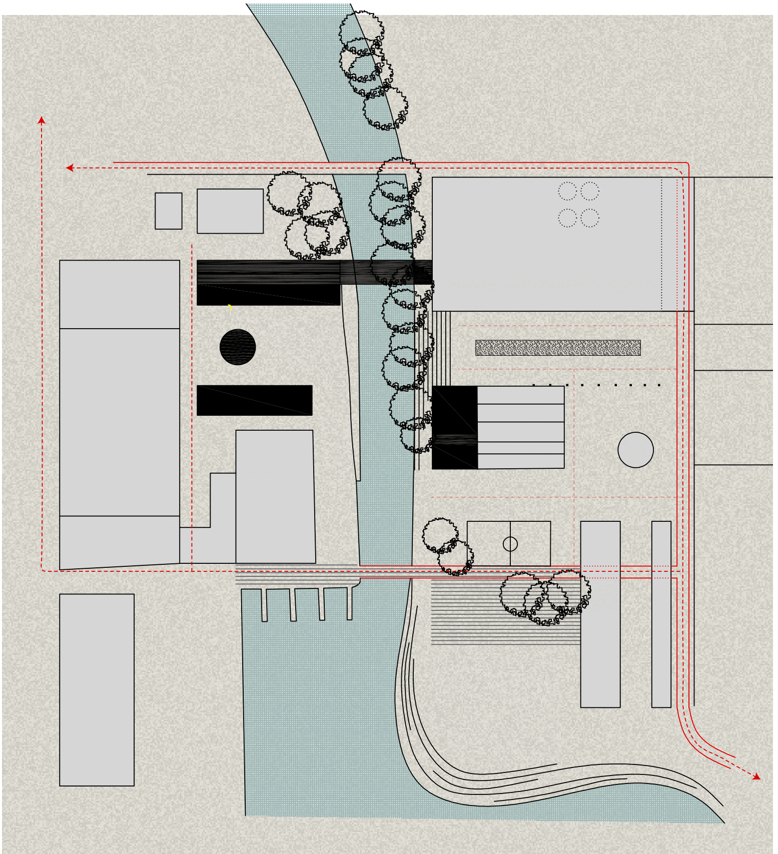


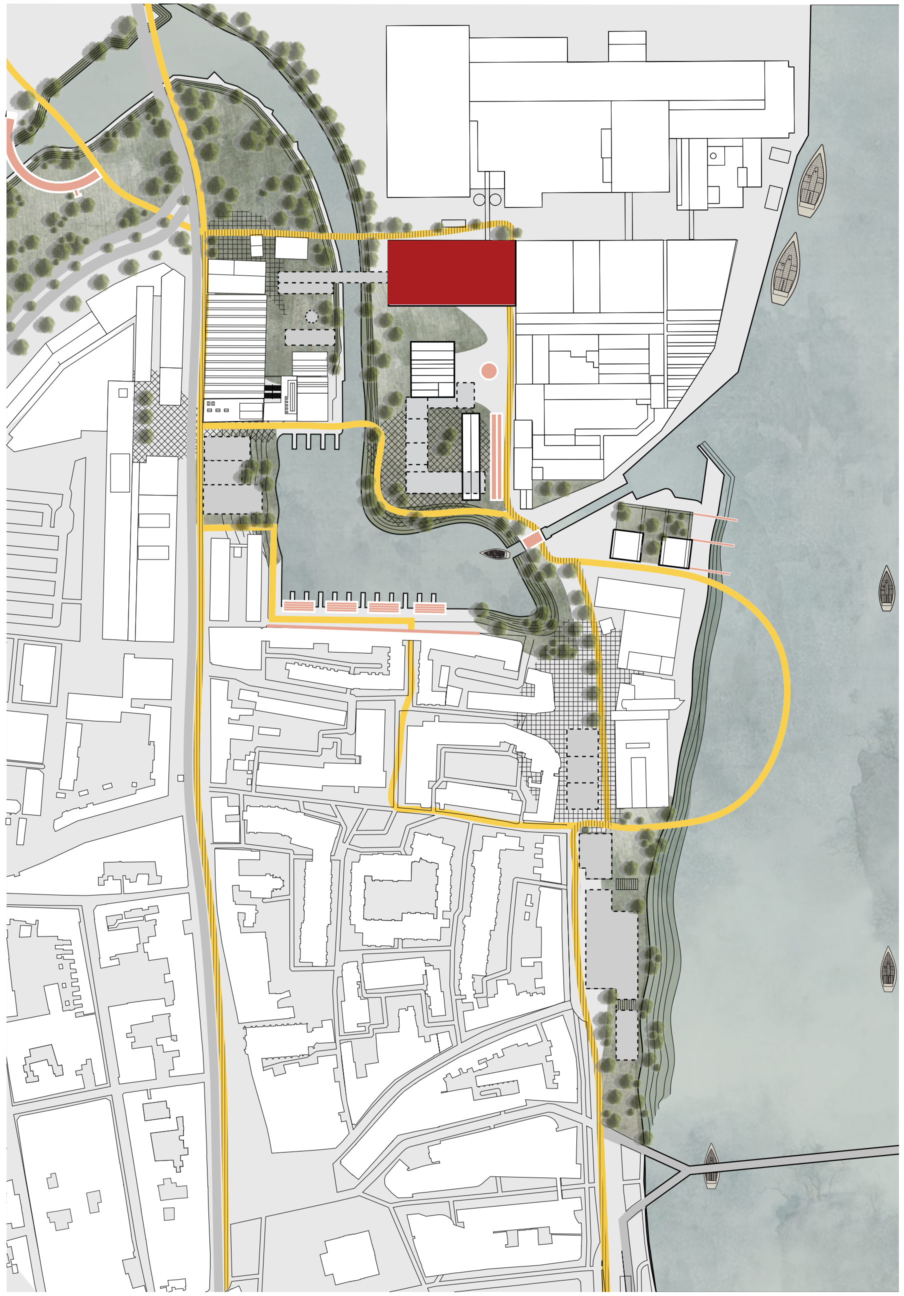
preliminary sketches

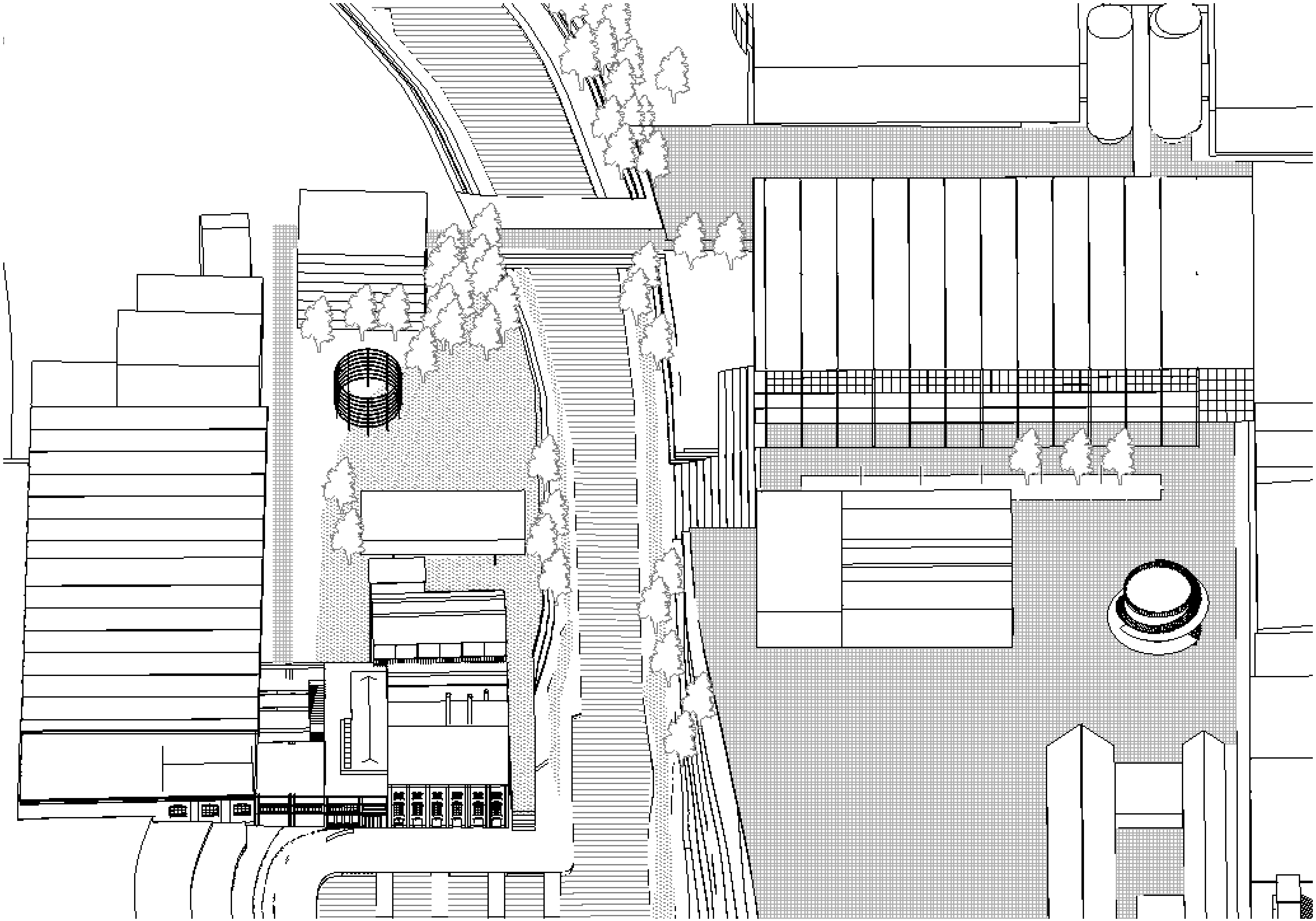


preliminary sketches


PHYSICAL AND SOCIAL PRODUCTION
COLLABORATIVE PRODUCTION COMPLEX
RECYCLED MATERIAL STORAGE
OFFICE
VISUAL CONNECTION
GUEST HOUSE
COMMUNAL KITCHEN
URBAN STAGE
STAGE PRODUCTION
LUMIERE/ COMMUNAL KITCHEN
OPEN AIR
bike path
LUMIERE
LUMIERE RESTAURANT

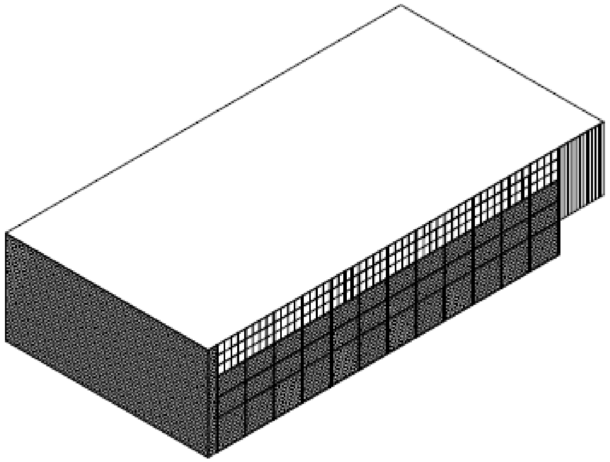


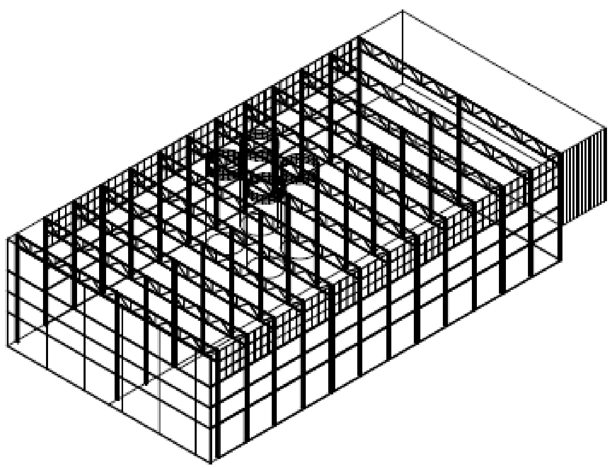




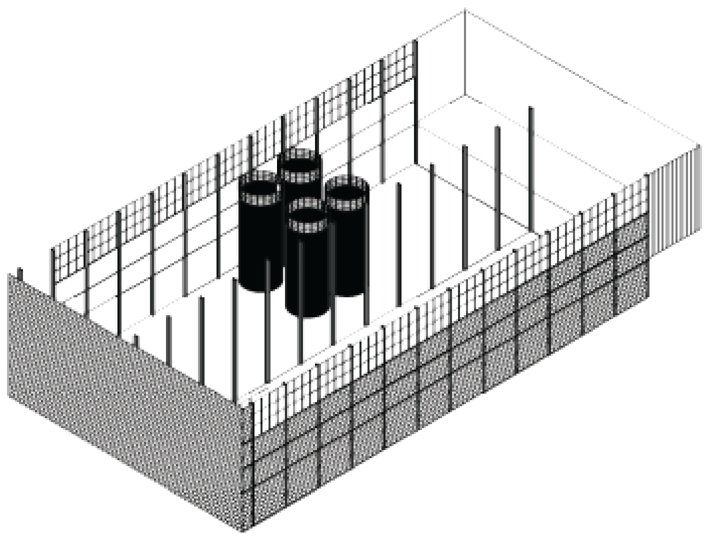
research in design

existing buildingIvehebatia nonihilicam o munte, dius, ius invocch uidentrae vis hilincludac res merte nero, qua no. Astrum, que fat iam ocae ad conte, que me ad intelis con anum cepopot emoris. Mar





CHALLENGES



HOW MUCH OF THE SPACE NEEDS TO BE OCCUPIED?

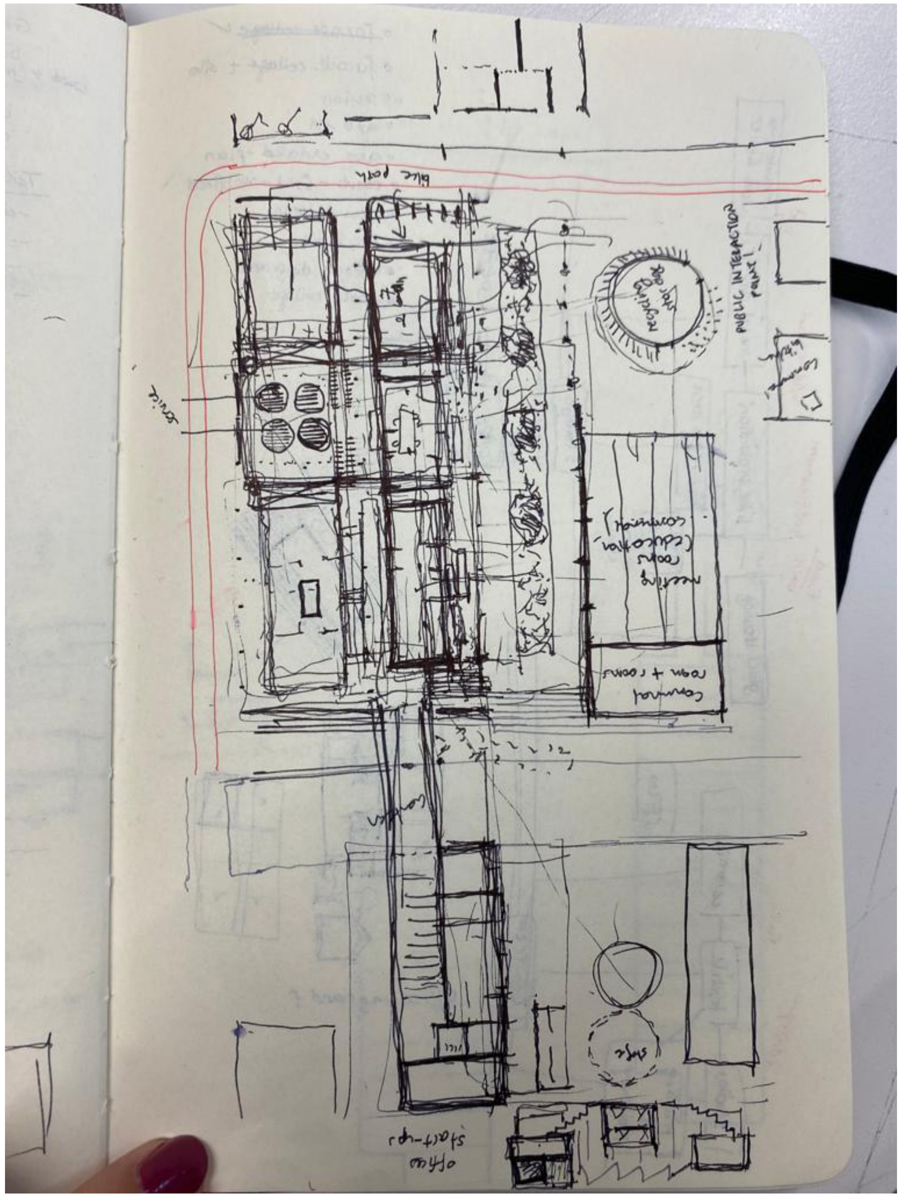
PROTECTION?

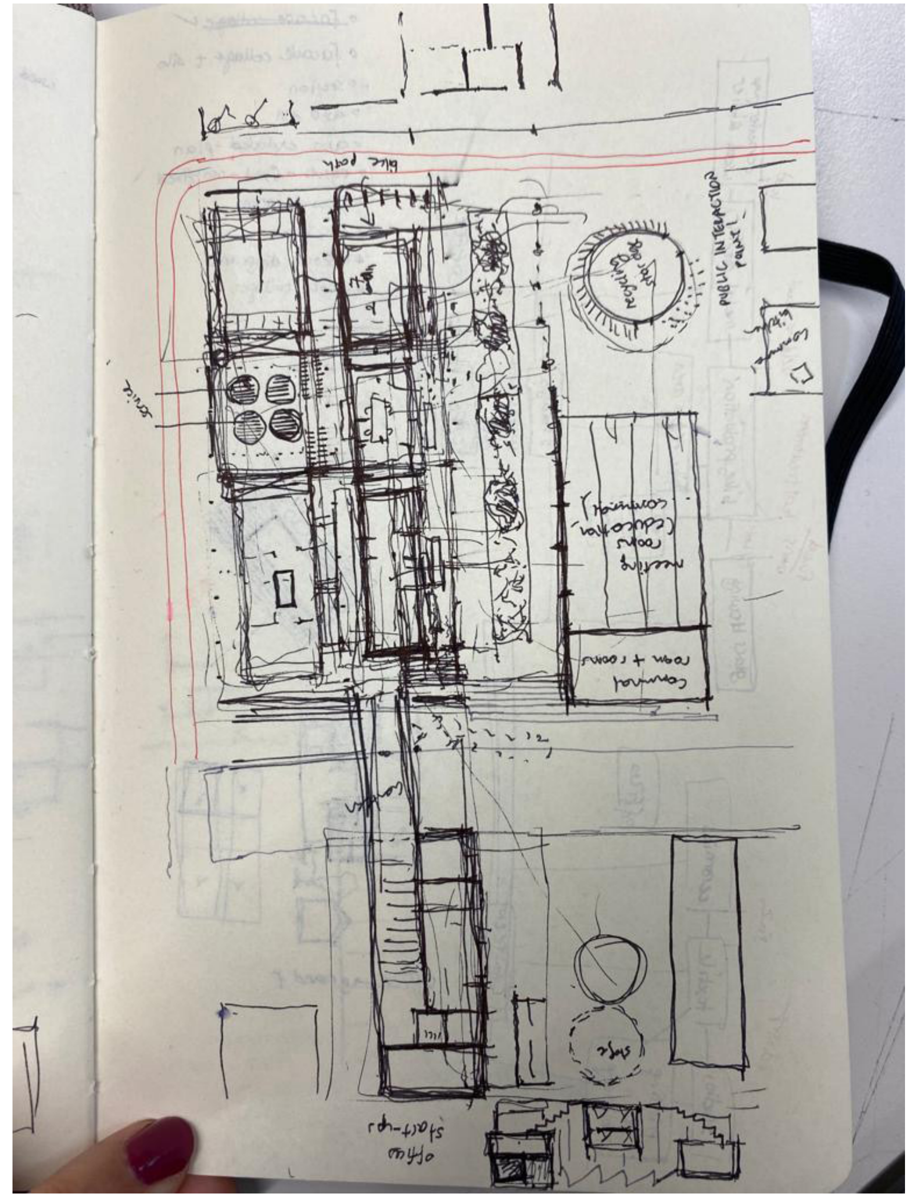
SAFETY

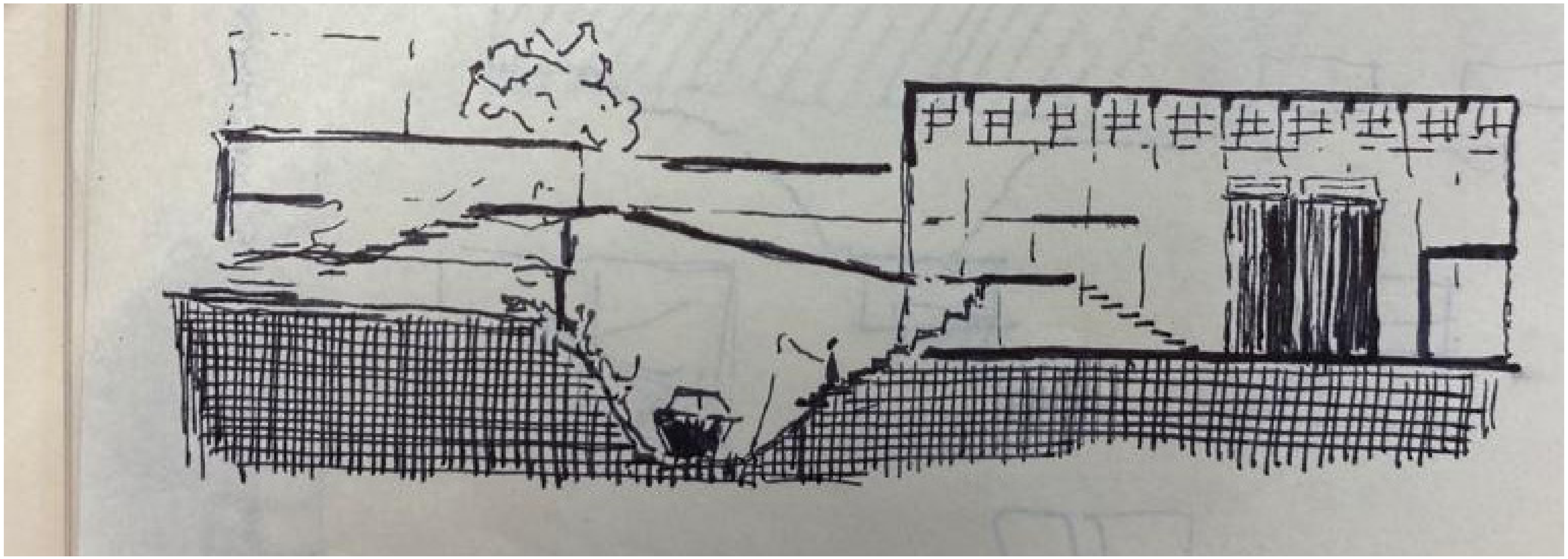
BRICK LAYERING? COMFORT OF THE INNER SPACE?

position collage

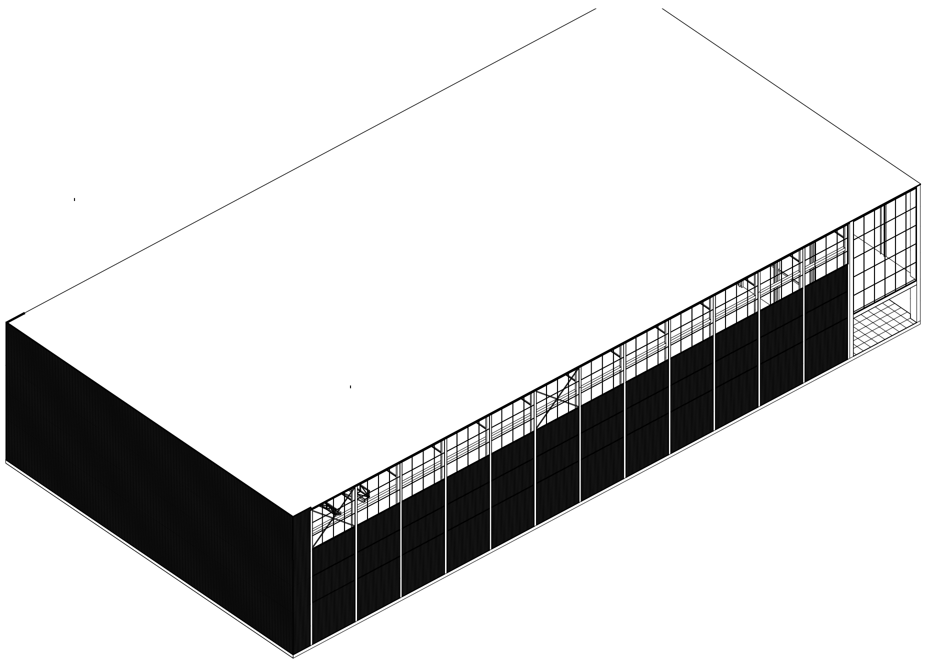
research in design


PUBLIC INTERACTION POINT!
bike park
control room + rooms
office start-ups

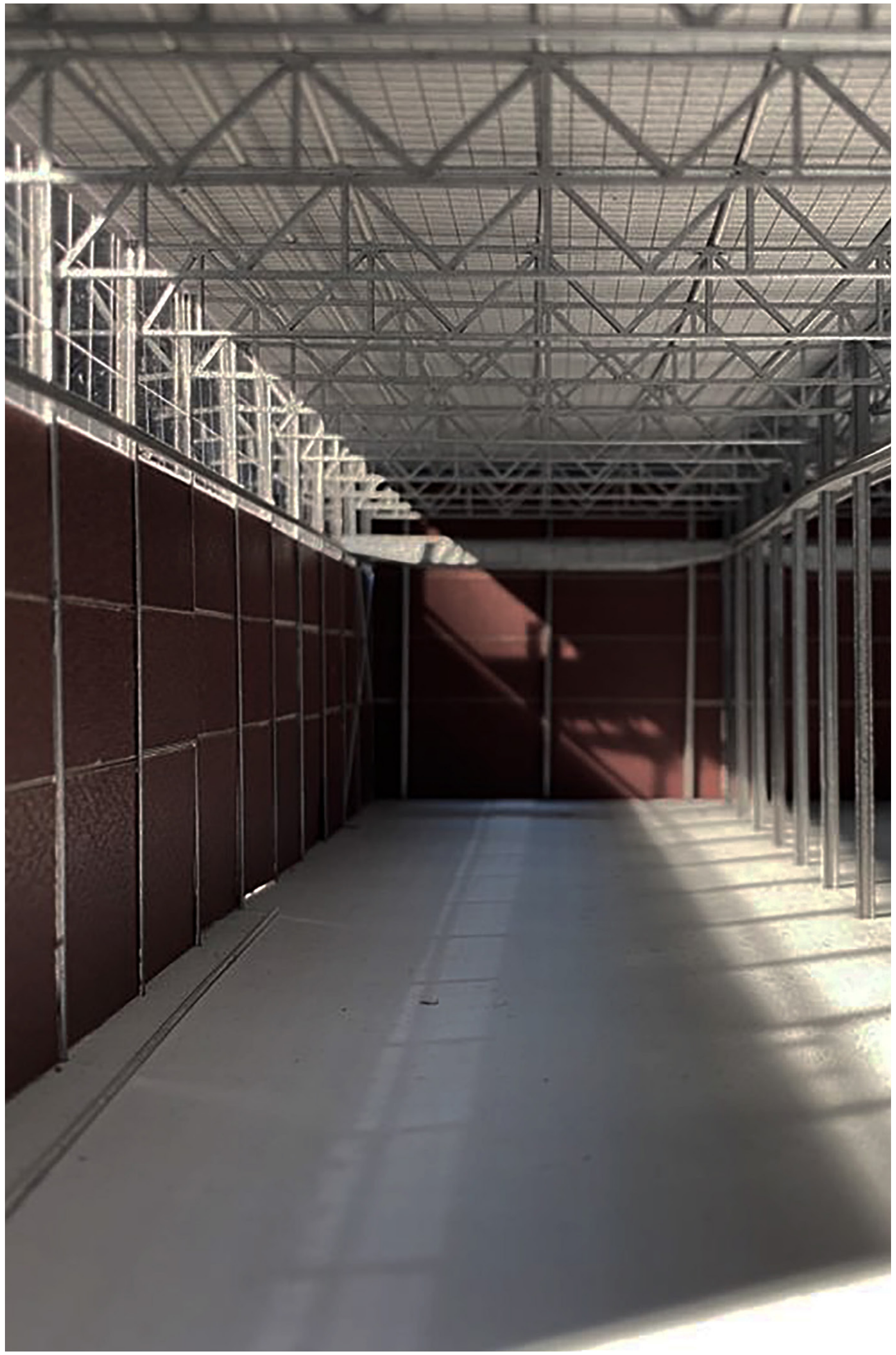

PUBLIC INTERACTION POINT!
bike park
control room + rooms
office start-ups



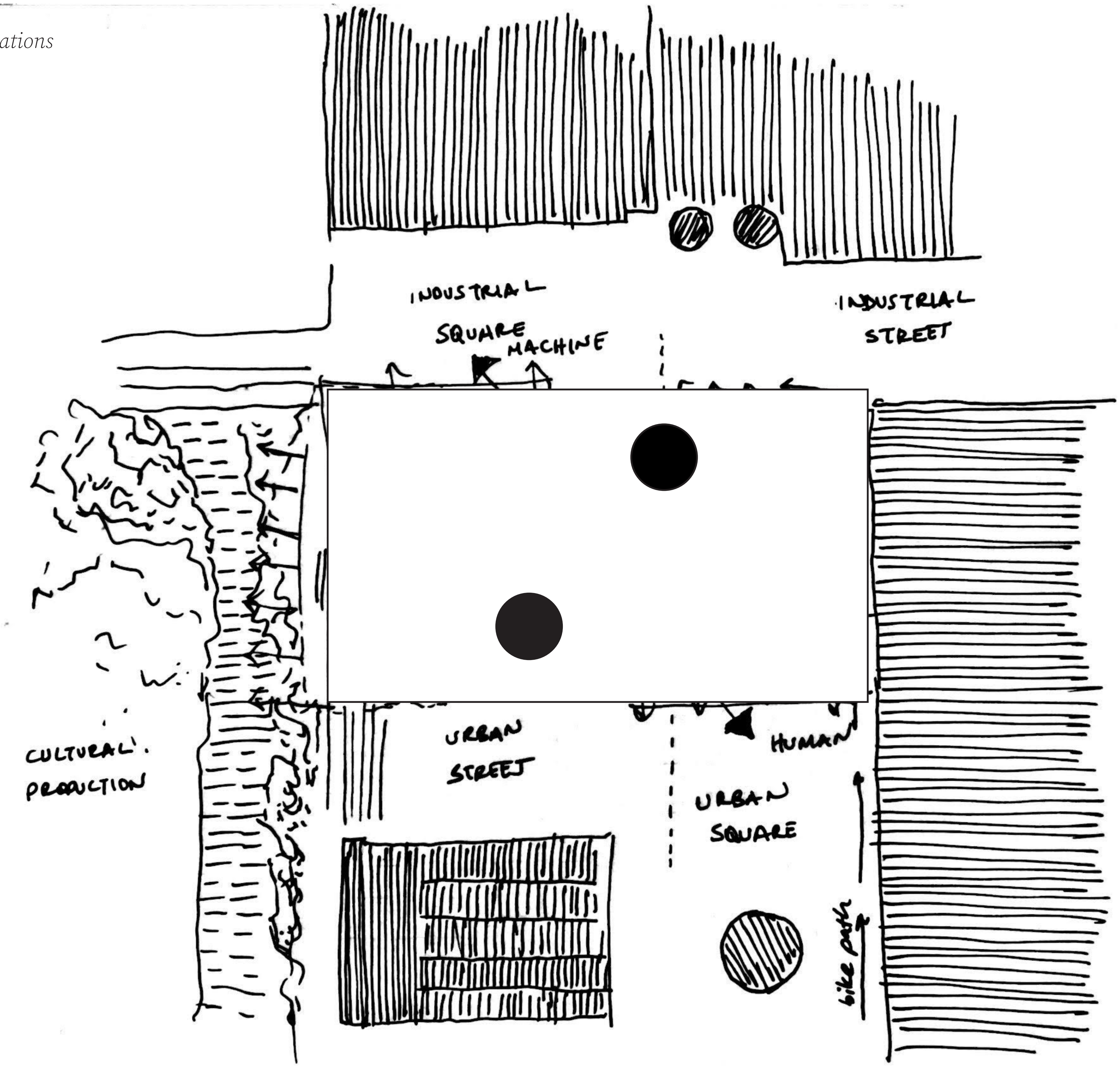
OBJECT
1:500

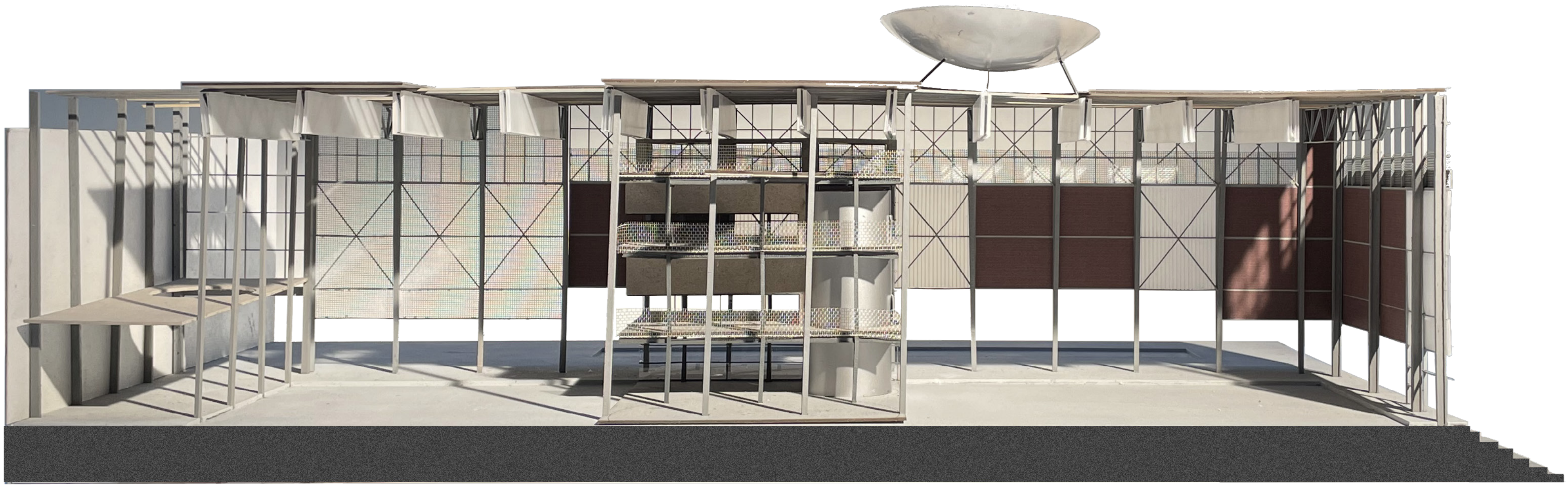


dark
warehouse

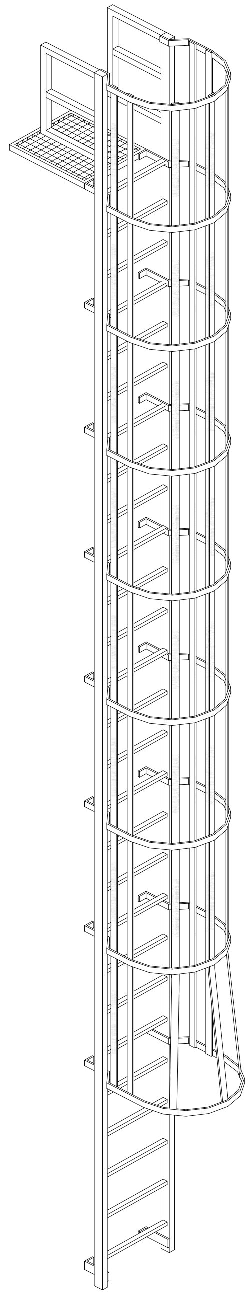


Model of Existing Building


INDUSTRIAL
SQUARE
MACHINE
INDUSTRIAL
STREET
CULTURAL
PRODUCTION
URBAN
STREET
HUMAN
URBAN
SQUARE
bike path



OBJECT
1:100



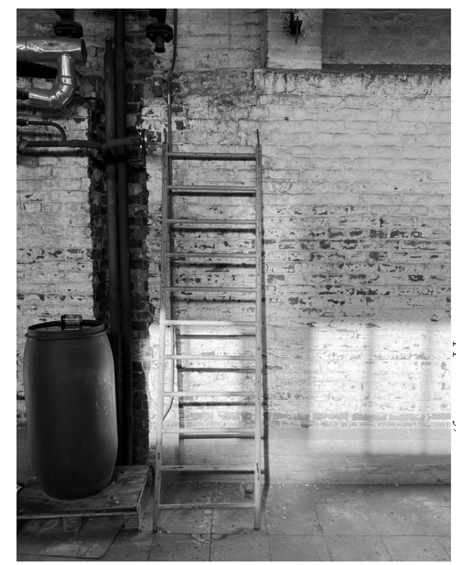
circulation analysis

Human movement in the factory and non-human production spaces are observed to be vertical: either point circulation or extremely steep staircases.

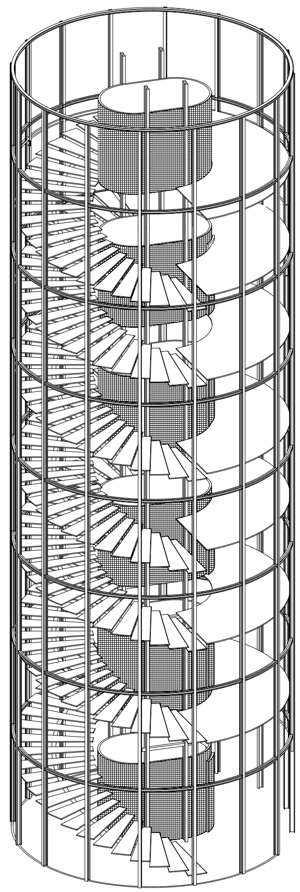
Sappi Factory, PM5

Sappi Factory, PM5

Sappi Factory, Warehouse

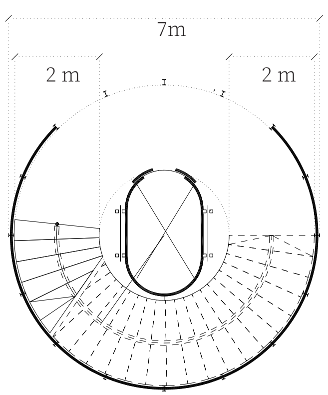


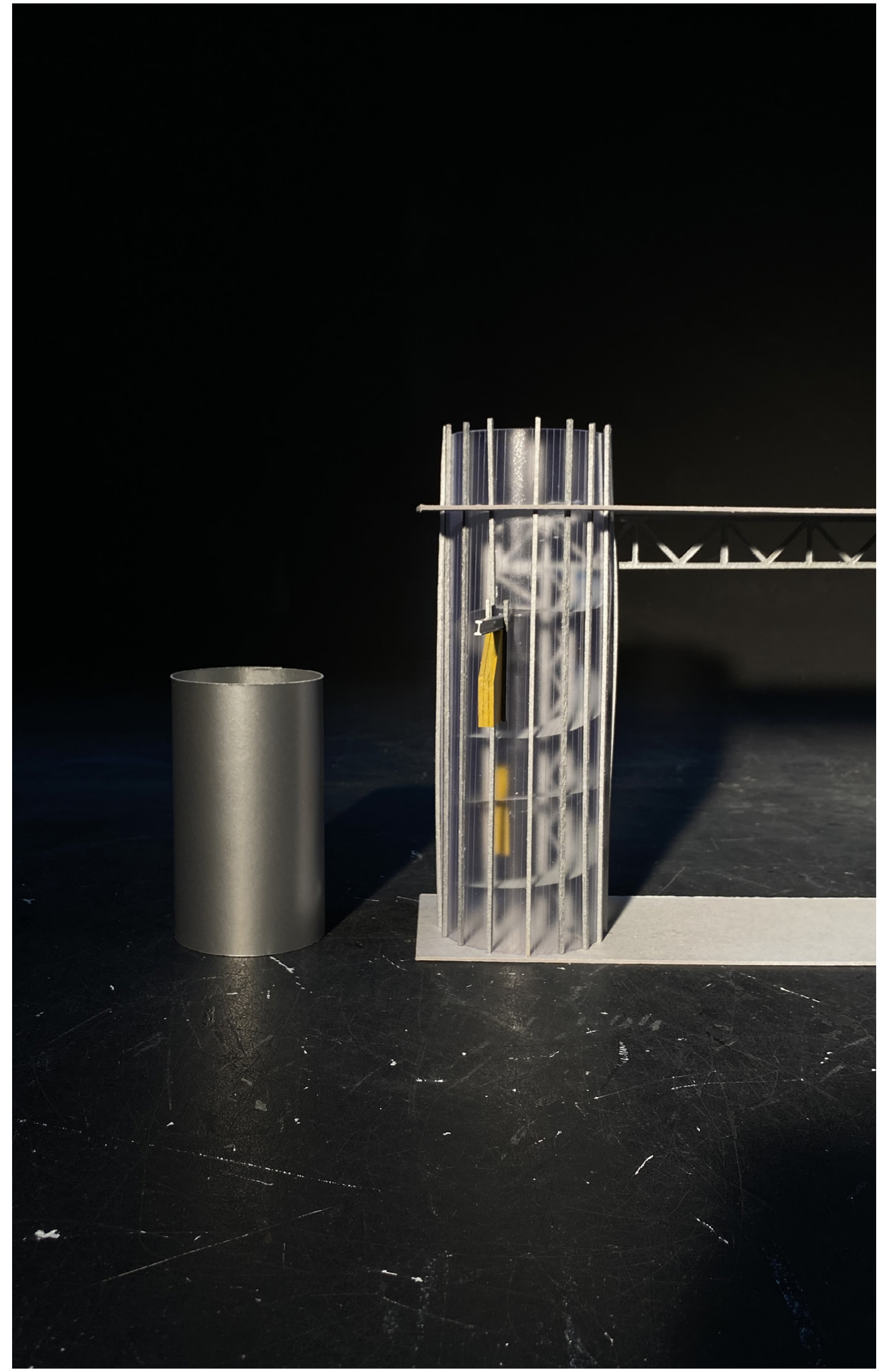
Sappi Factory, Warehouse

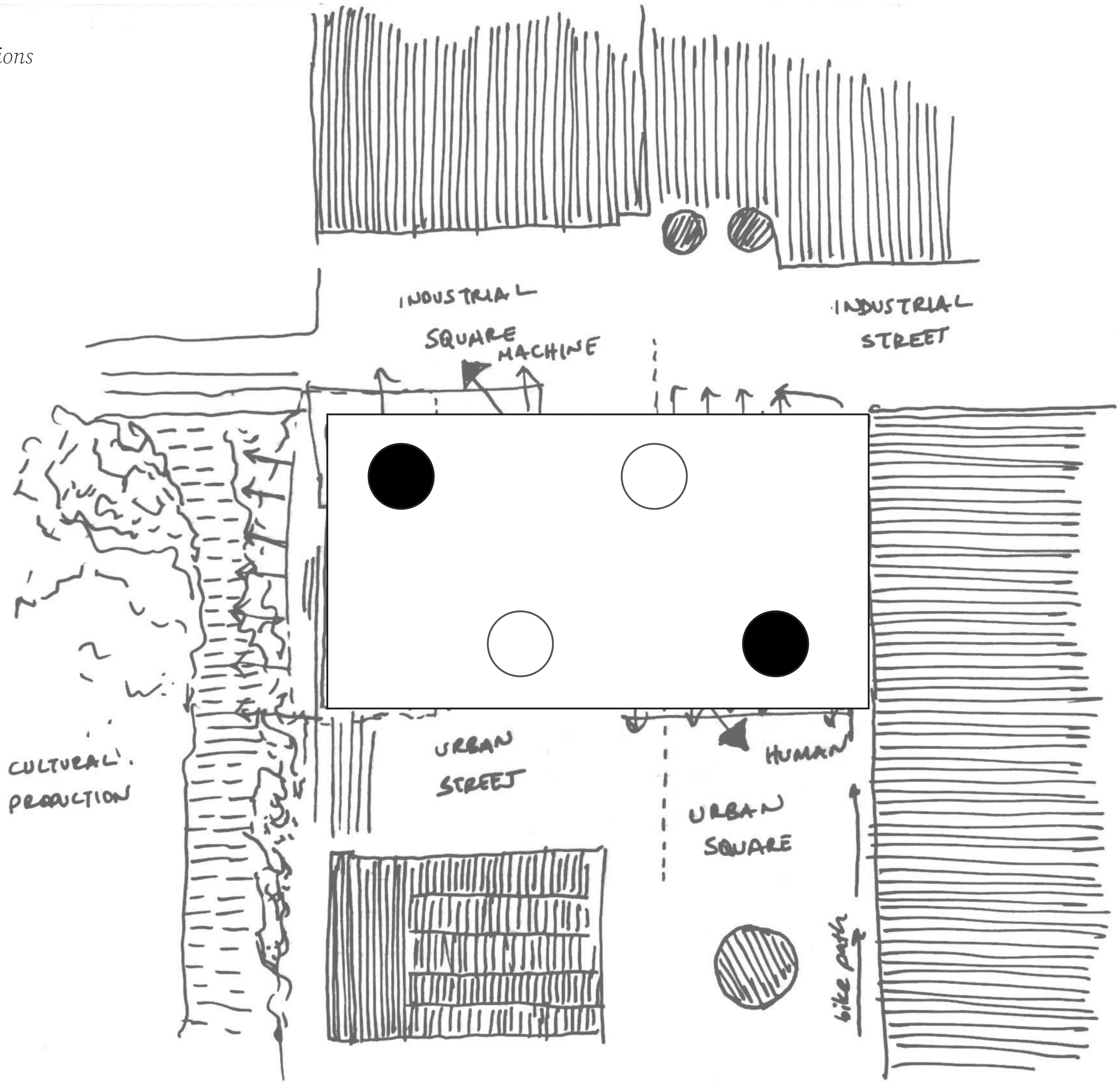


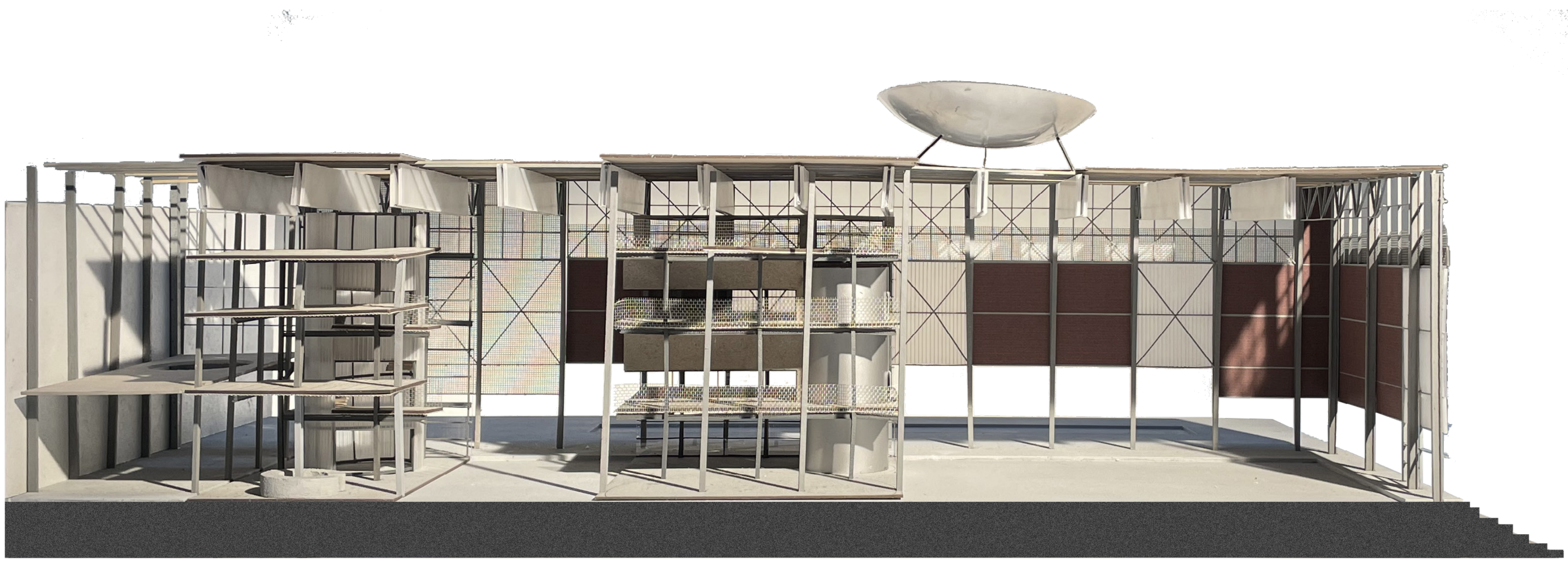
circulation core

The circulation of the building is provided through 2 cores that are placed in the W

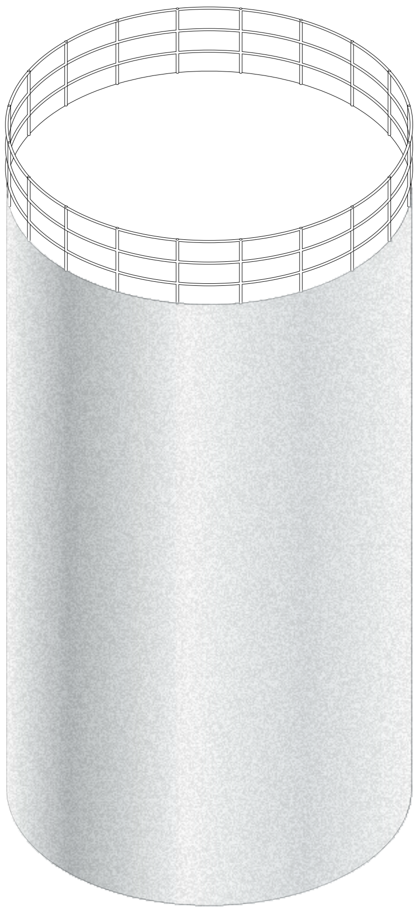





INDUSTRIAL
SQUARE
MACHINE
INDUSTRIAL
STREET
CULTURAL
PRODUCTION
URBAN
STREET
HUMAN
URBAN
SQUARE
bike path

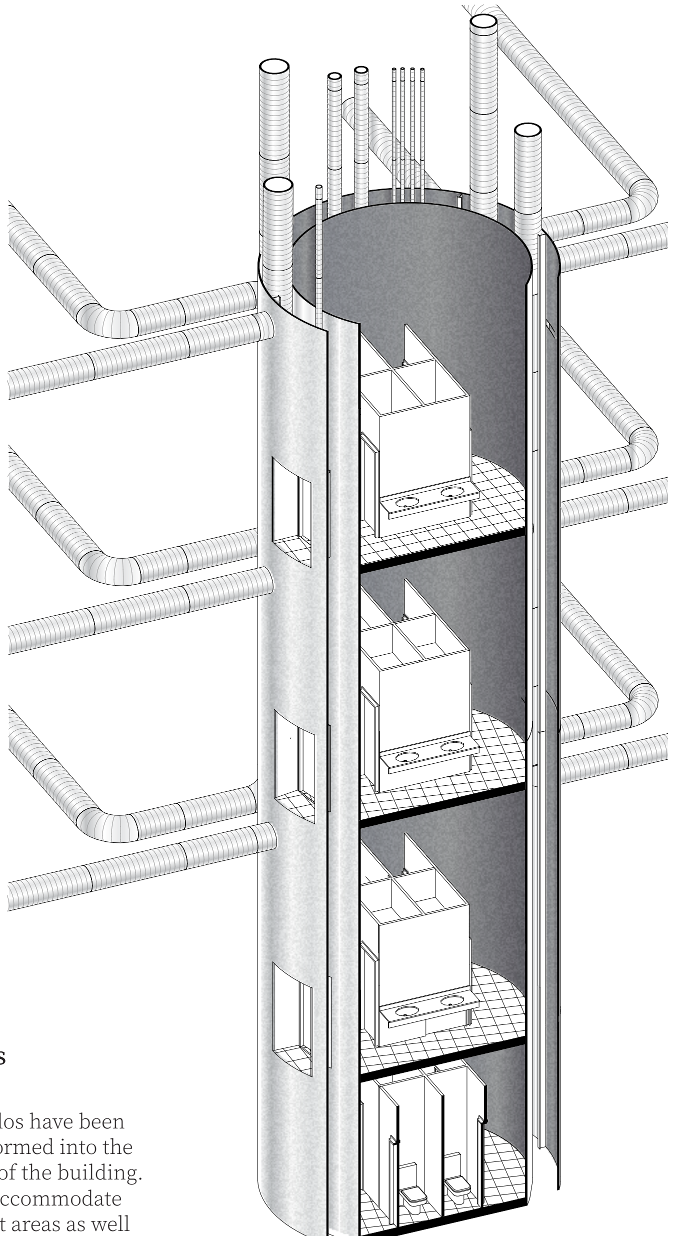


OBJECT
1:100



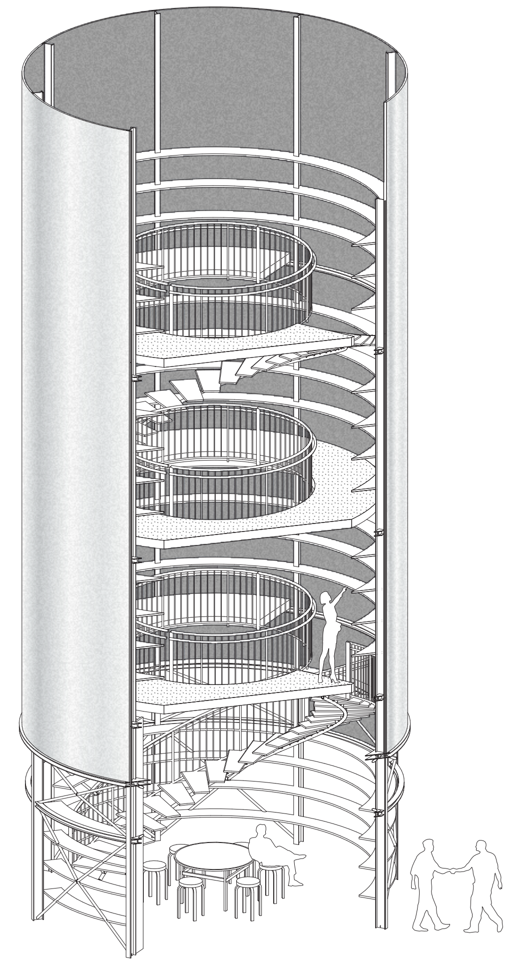
silos

WRITING



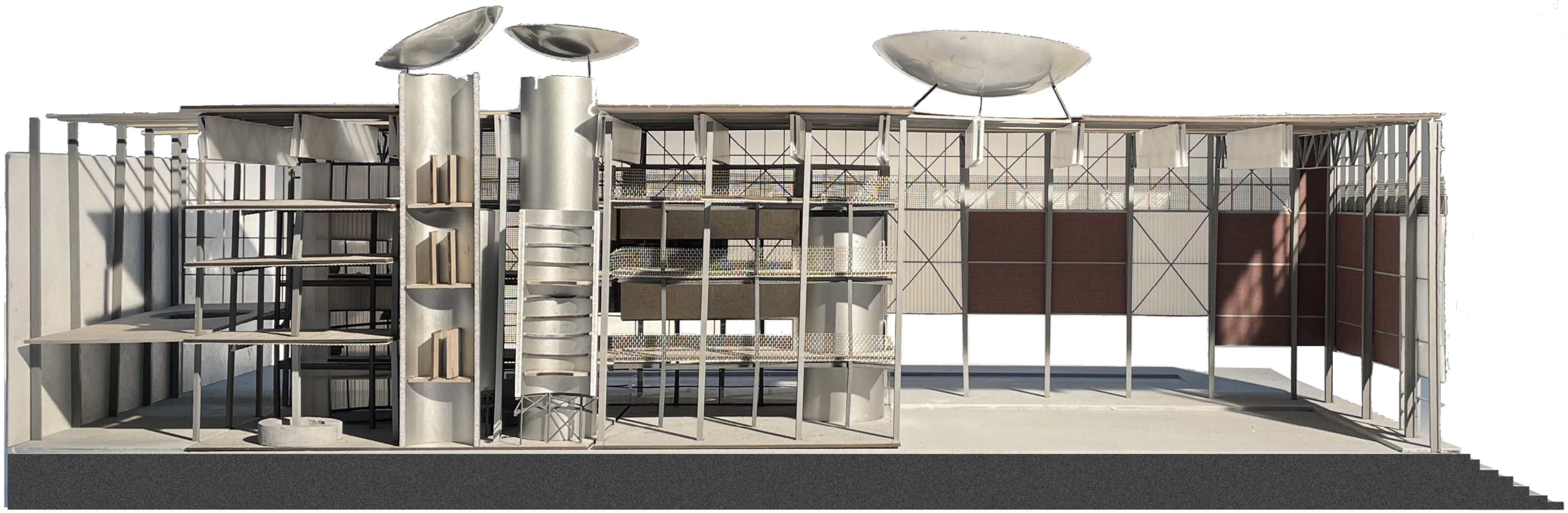
shafts

Two silos have been transformed into the shafts of the building. They accommodate the wet areas as well as all the mechanical shafts and pipes of the building.

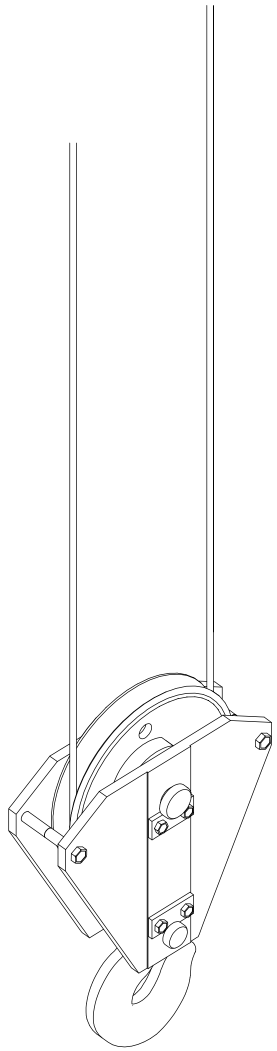


material library

Two silos have been turned into material libraries to enable people and customers to interact with the makers and manufacturers. The silos have been raised to exhibit the interaction transparently.

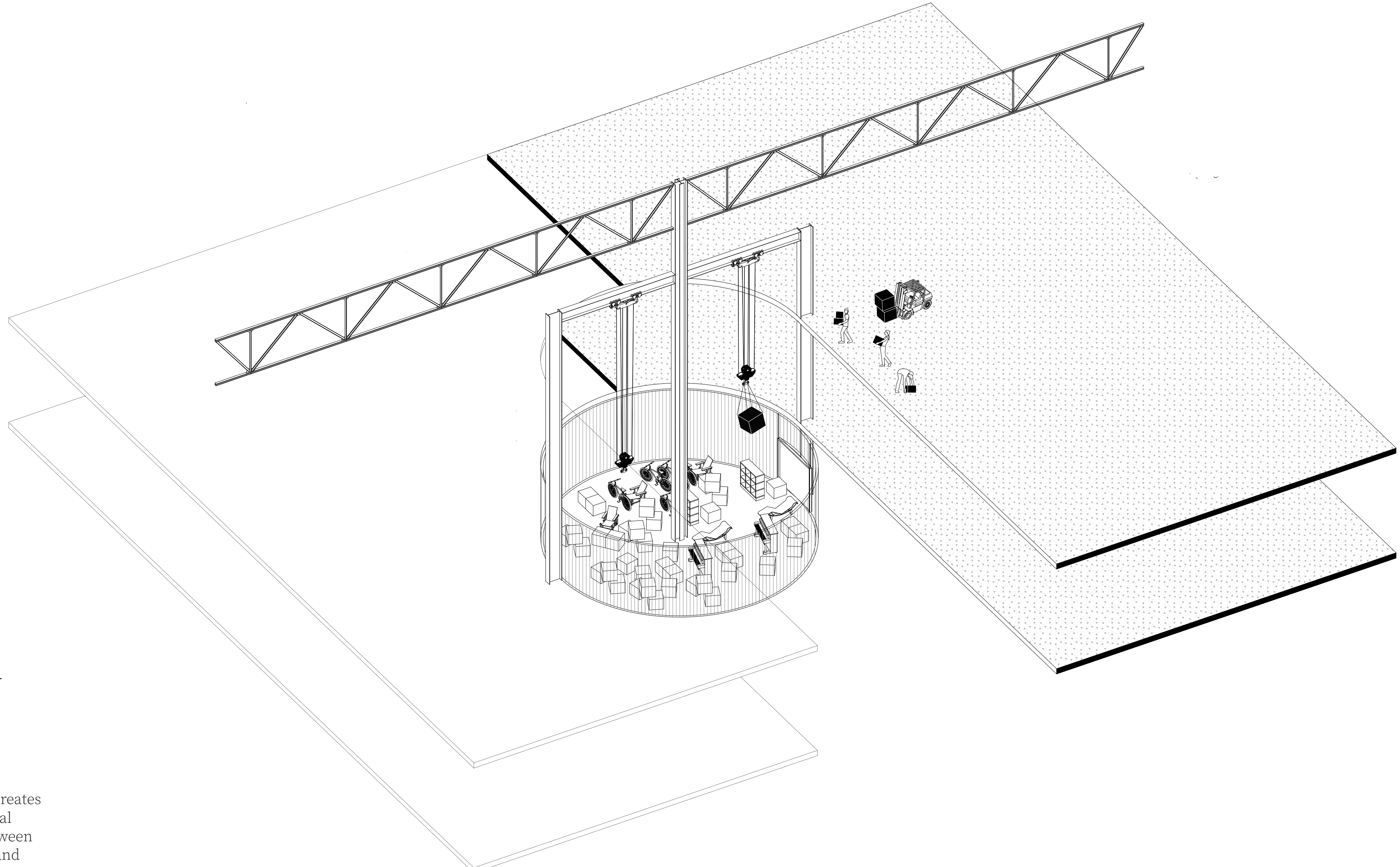


OBJECT
1:100



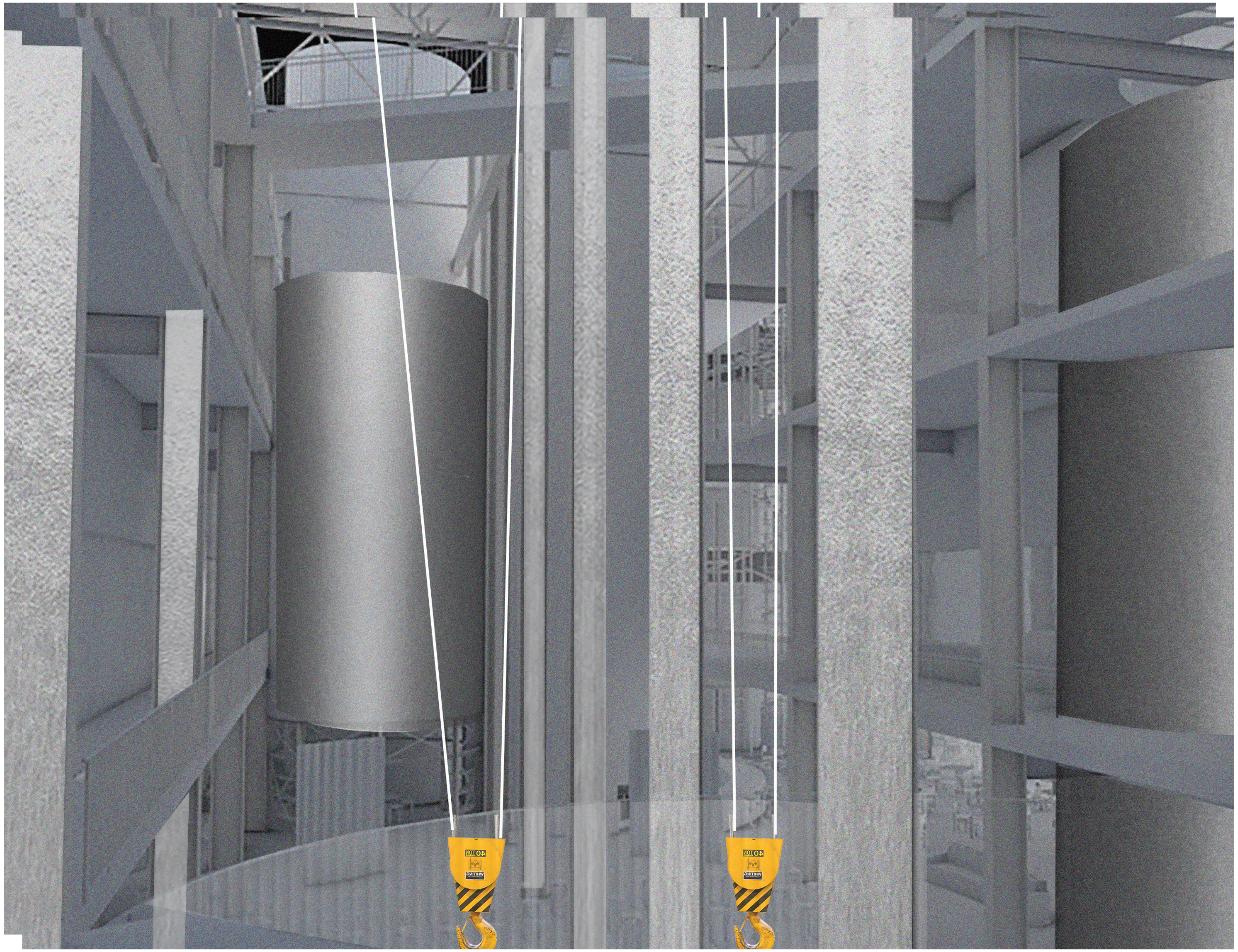
crane hooks

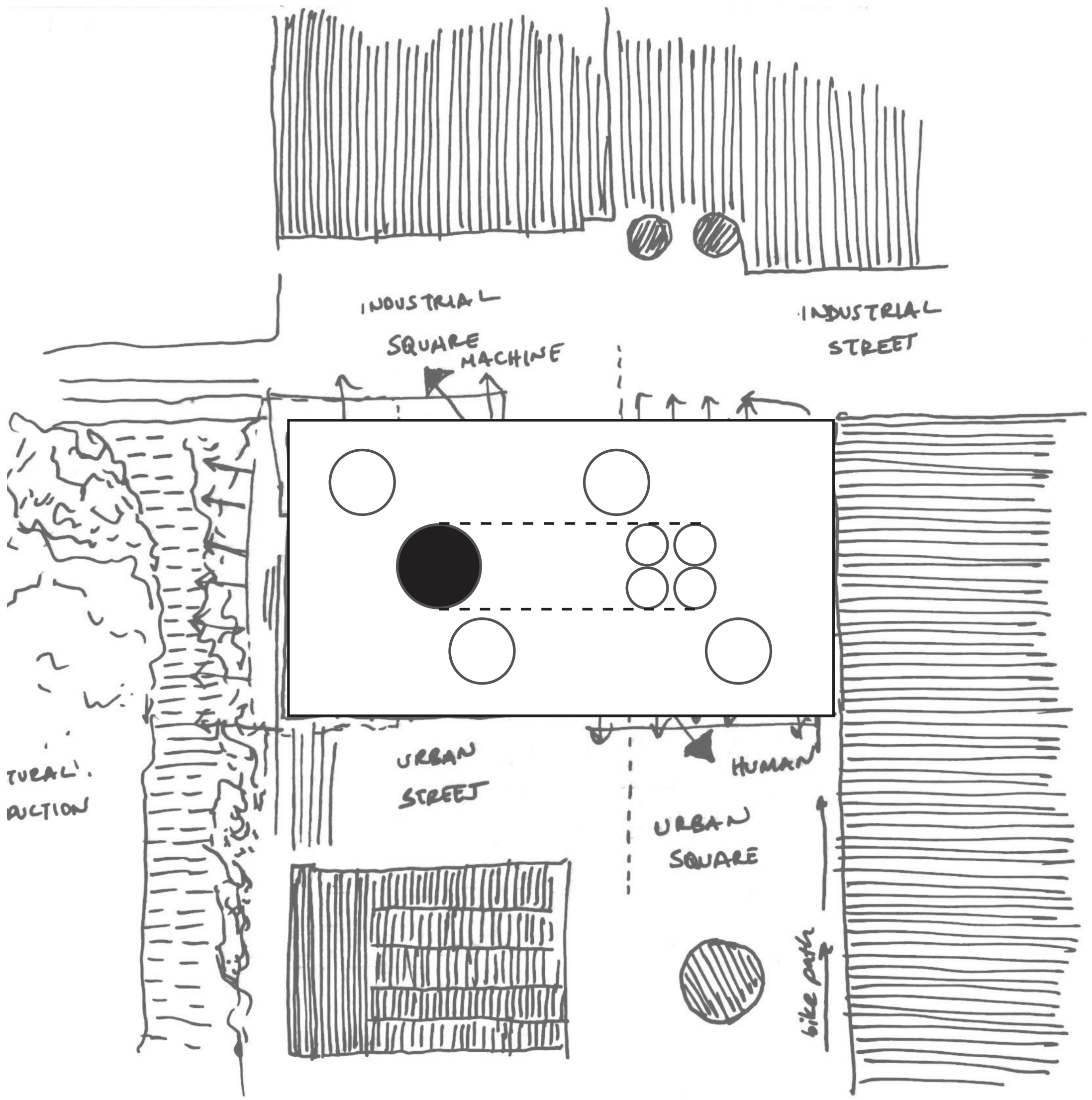
Sappi Factory

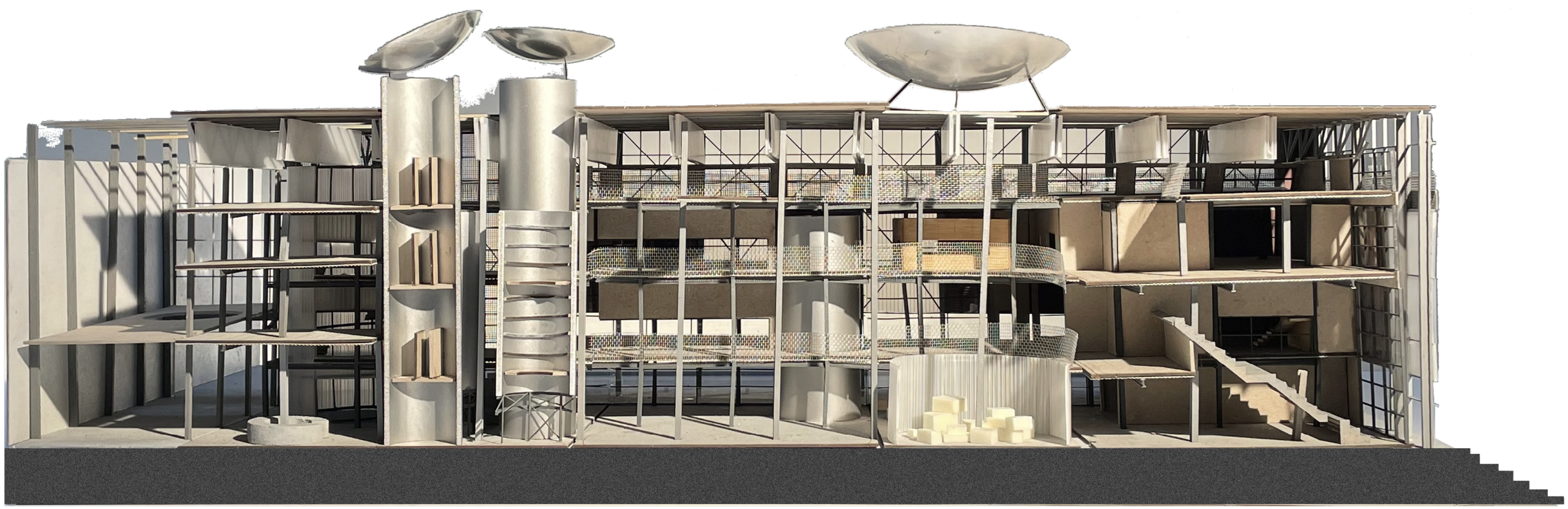


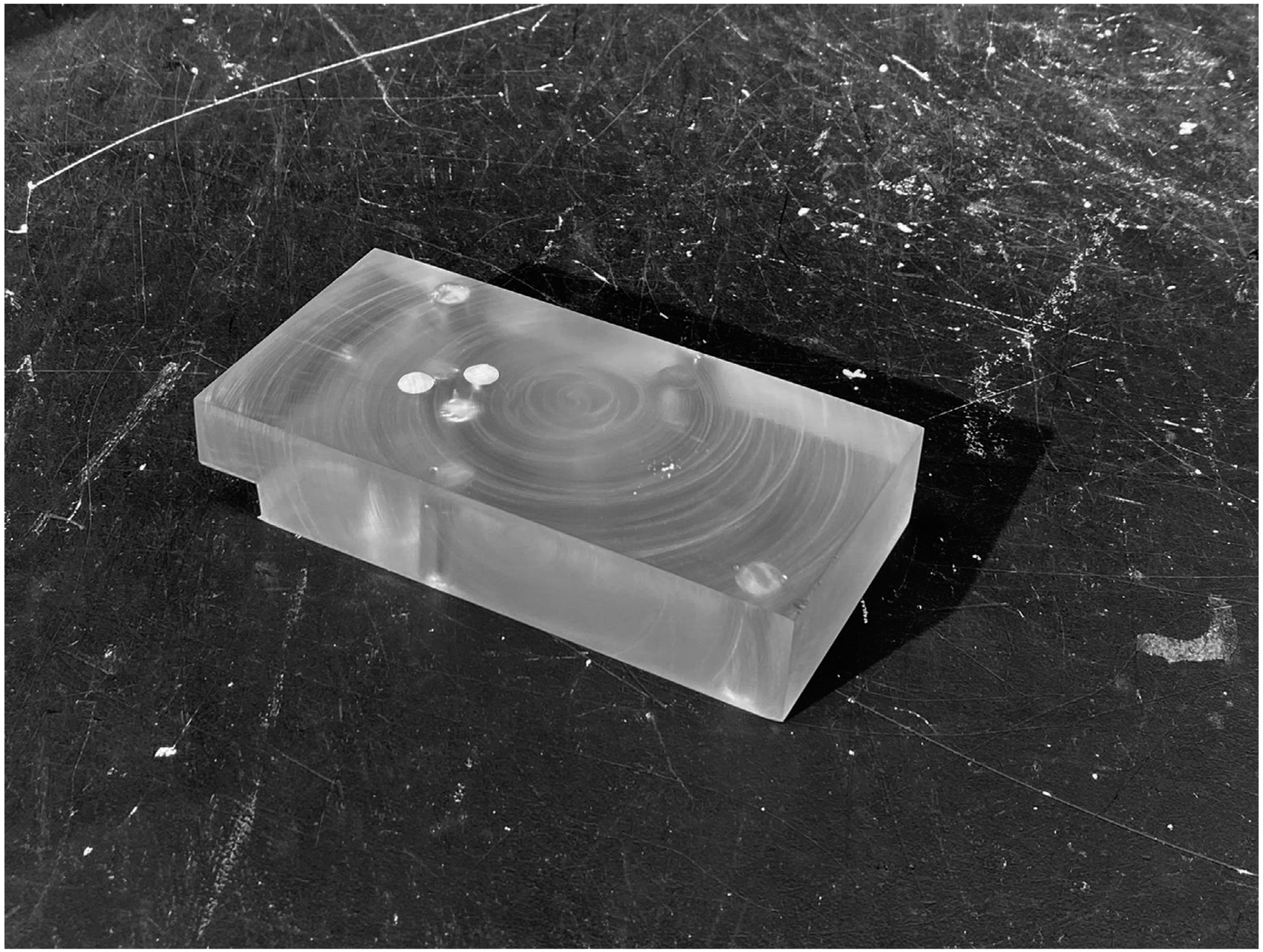
interaction storage

The crane hook transformation offers several interactions. It creates a physical vertical relationship between the production and public. Makers can drop their products with crane hooks into the interaction storage through which the public can observe the products.



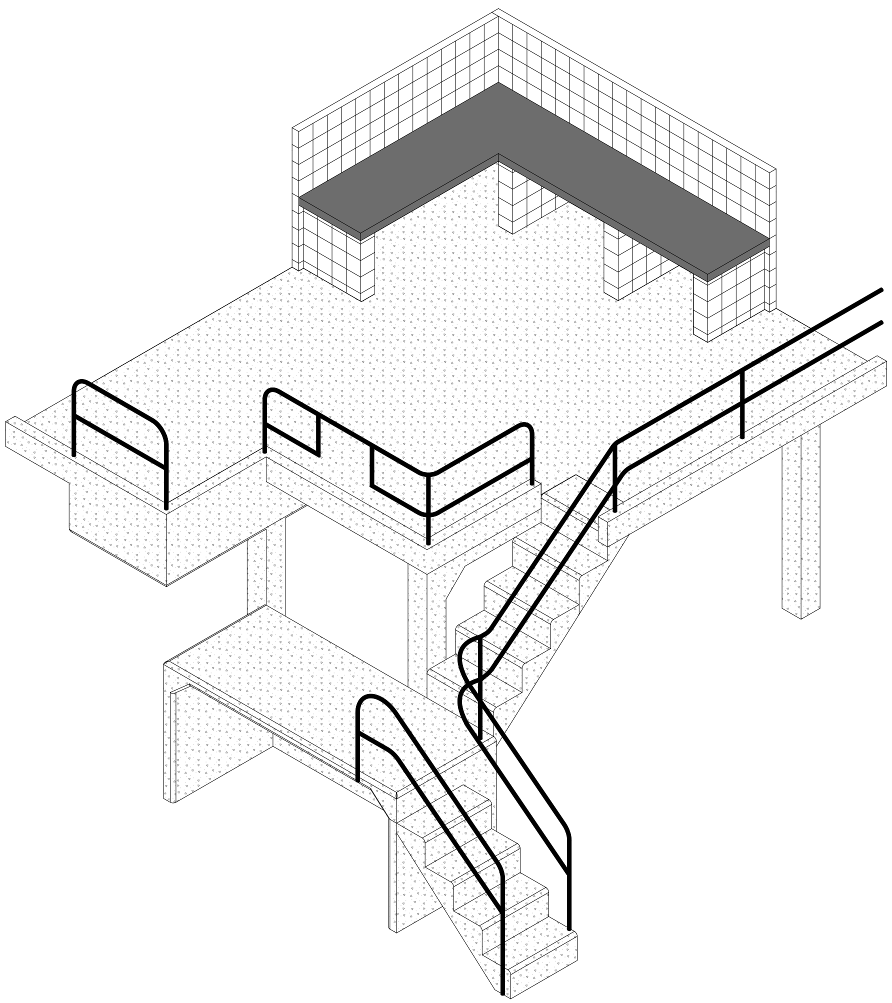

INDUSTRIAL
SQUARE
MACHINE
INDUSTRIAL
STREET
URBAN
STREET
HUMAN
URBAN
SQUARE
bike path



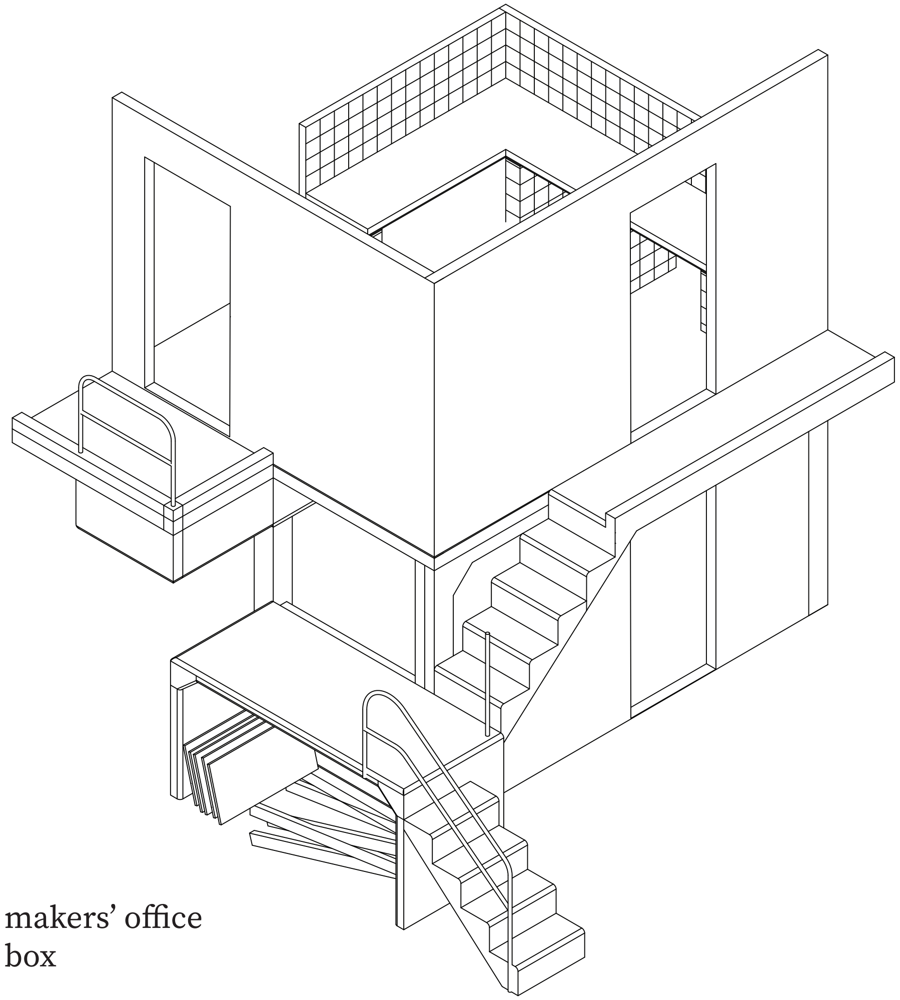


research in design

OBJECT
1:100

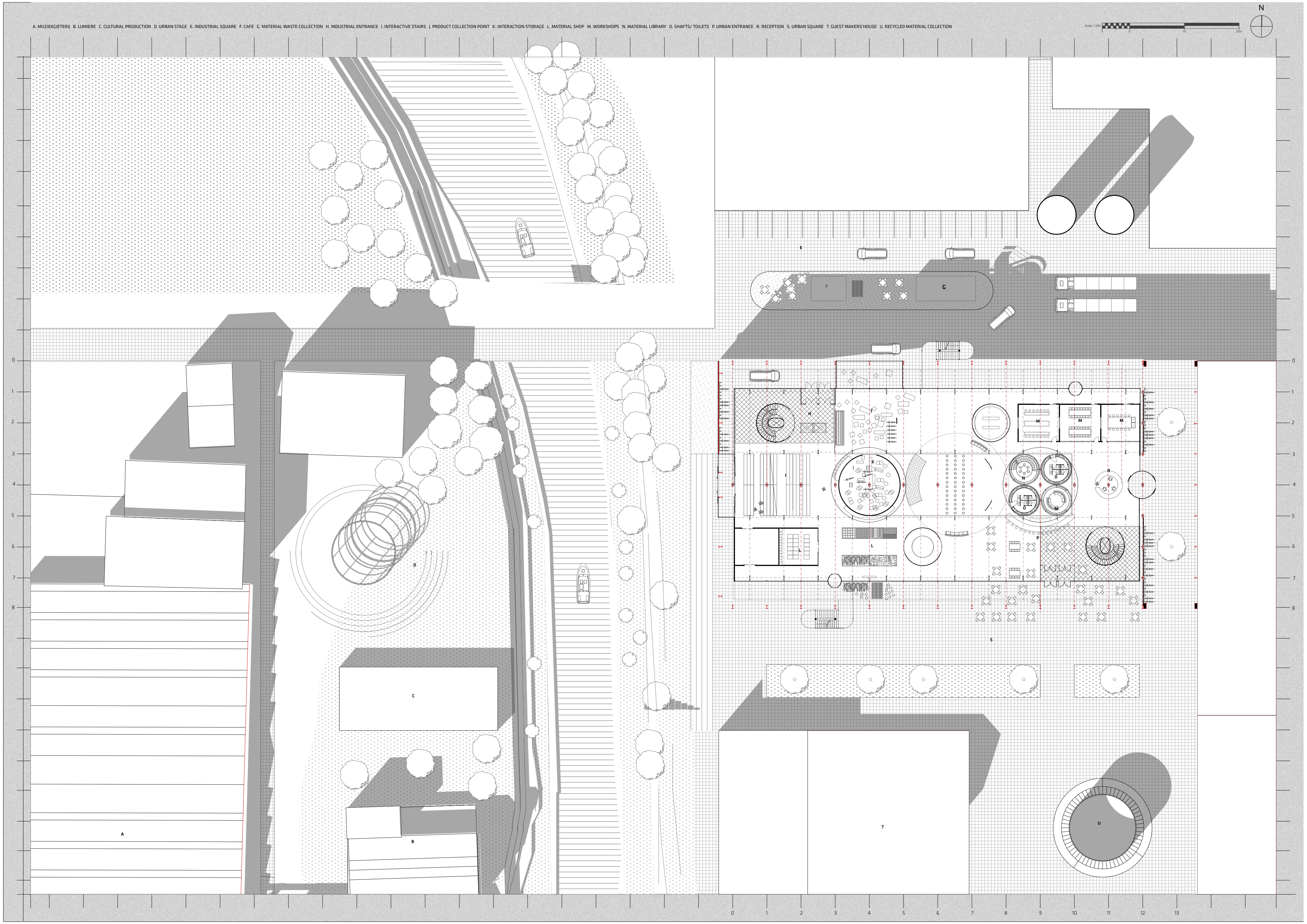


Sappi Factory

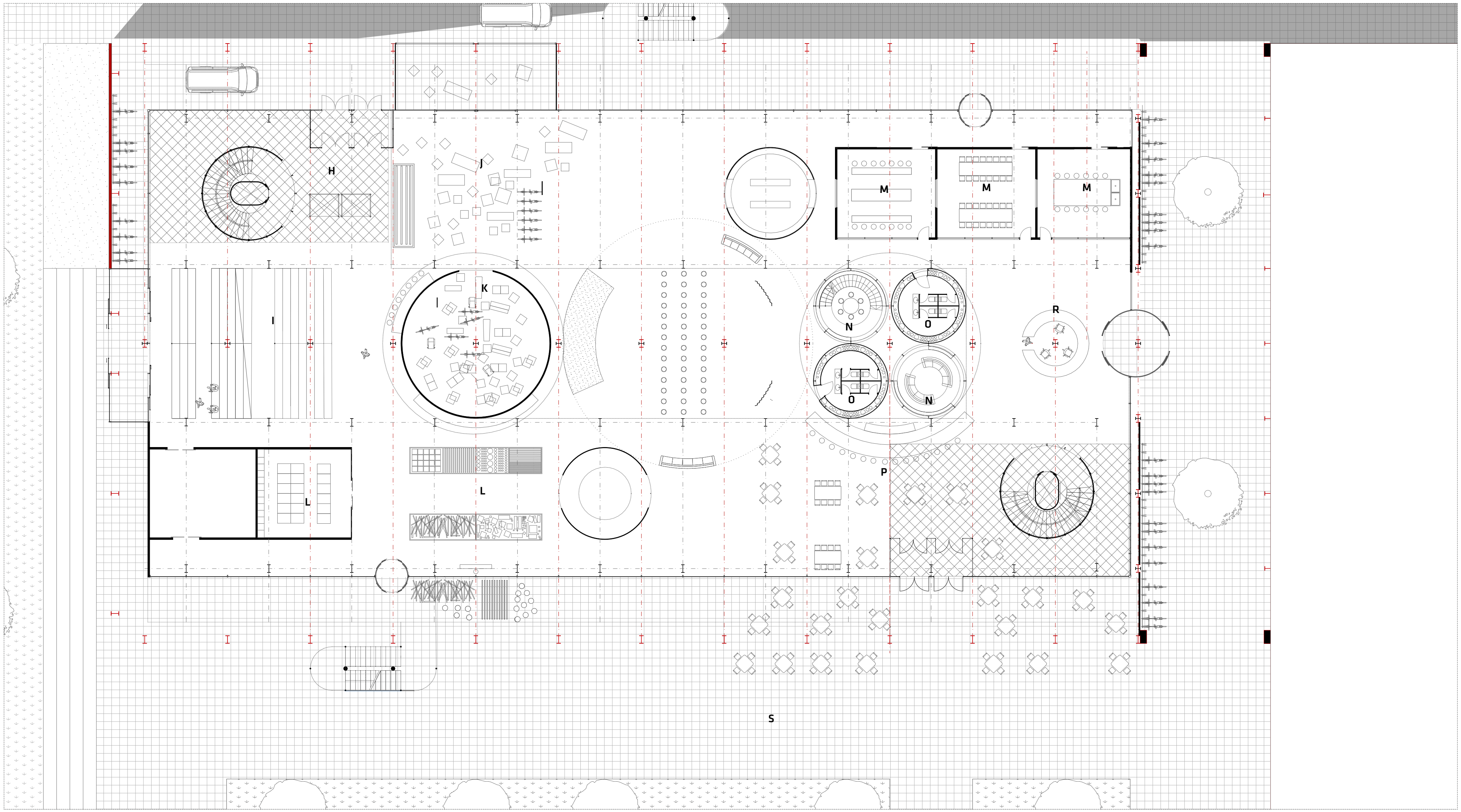


makers’ office
box

Het Werkgebouw

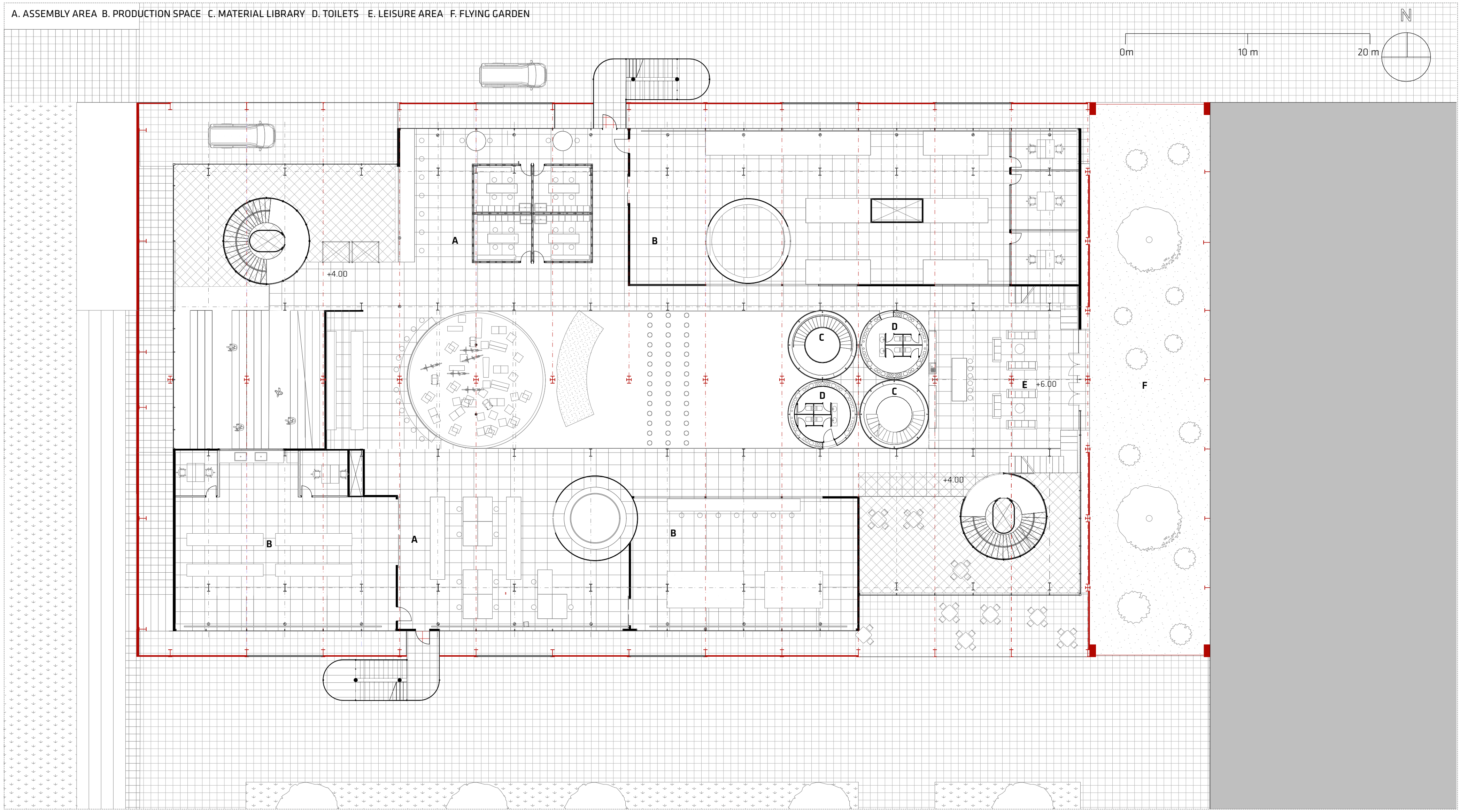


ground floor plan with with the site

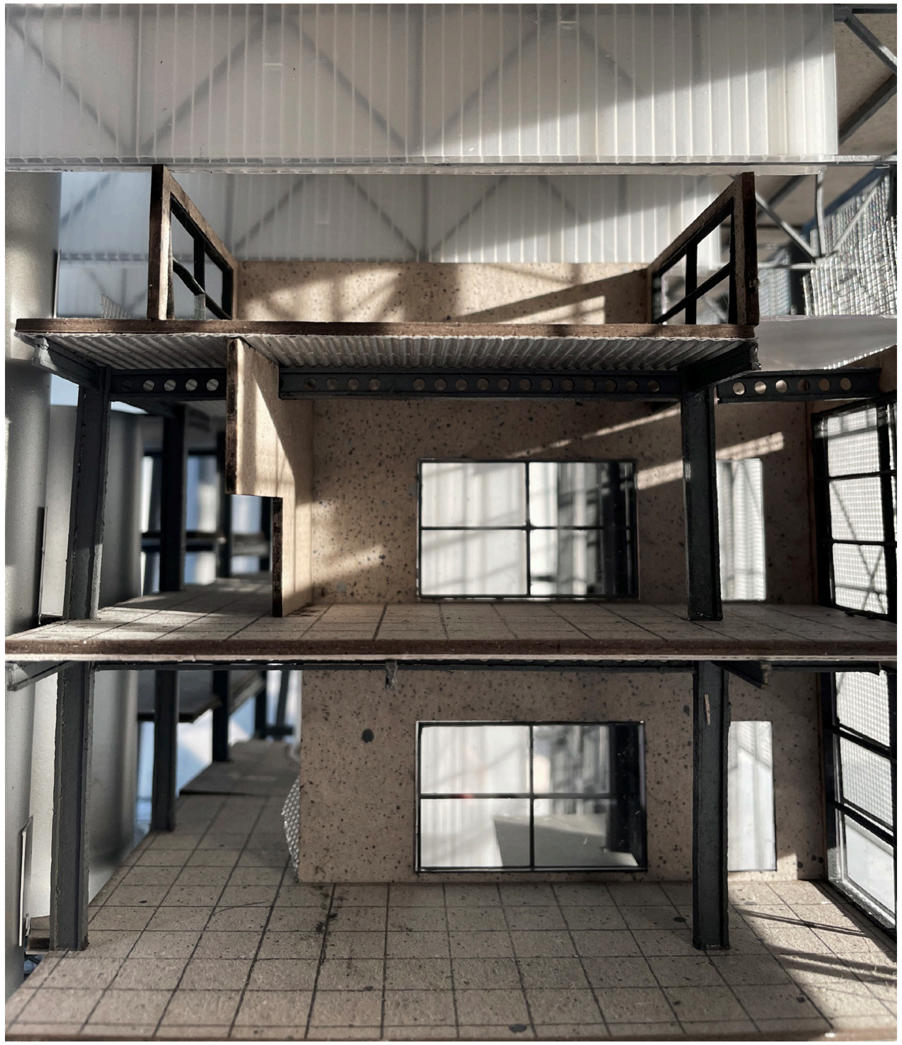


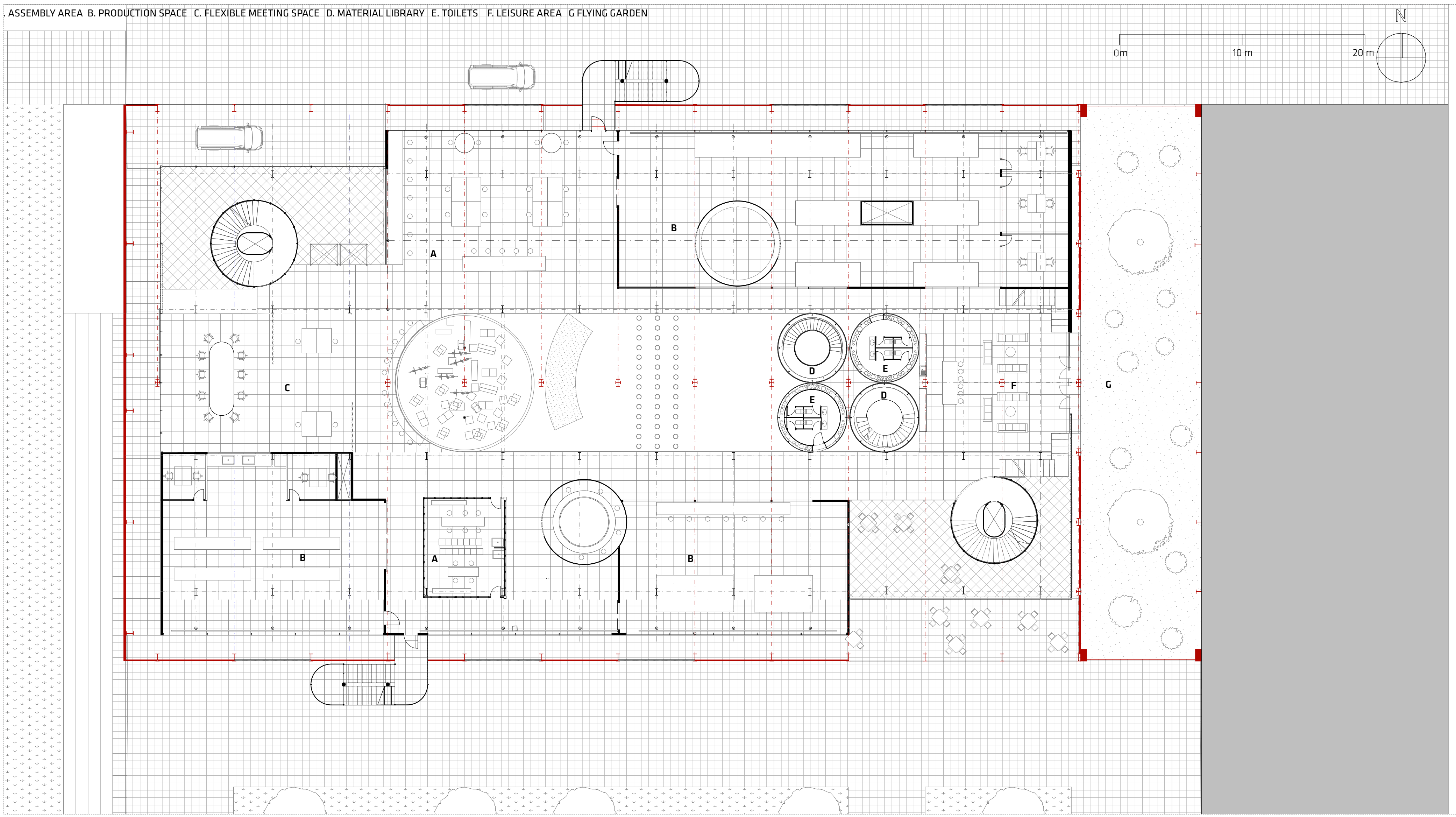
ground floor plan


RECEPTION

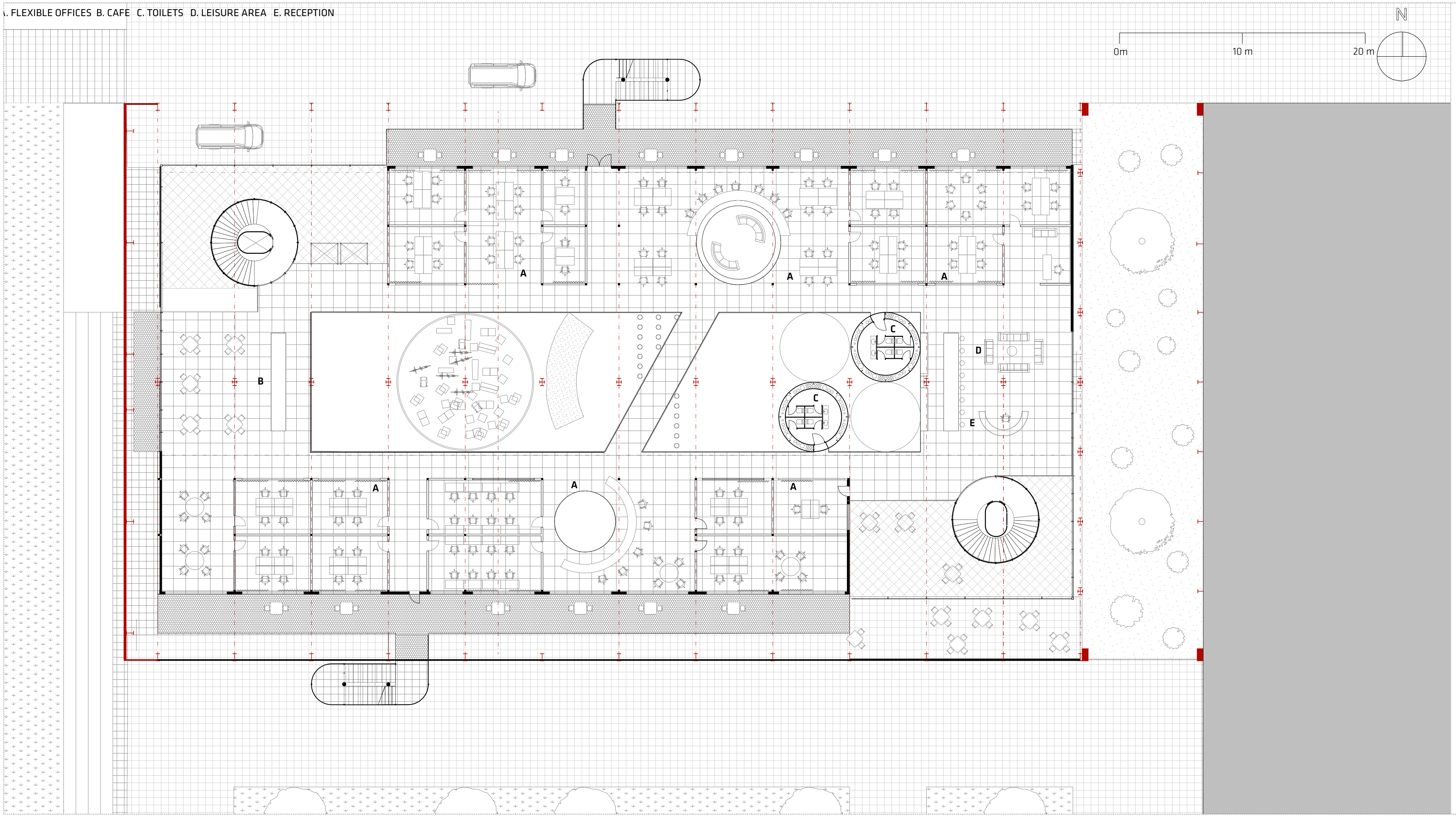


first floor plan

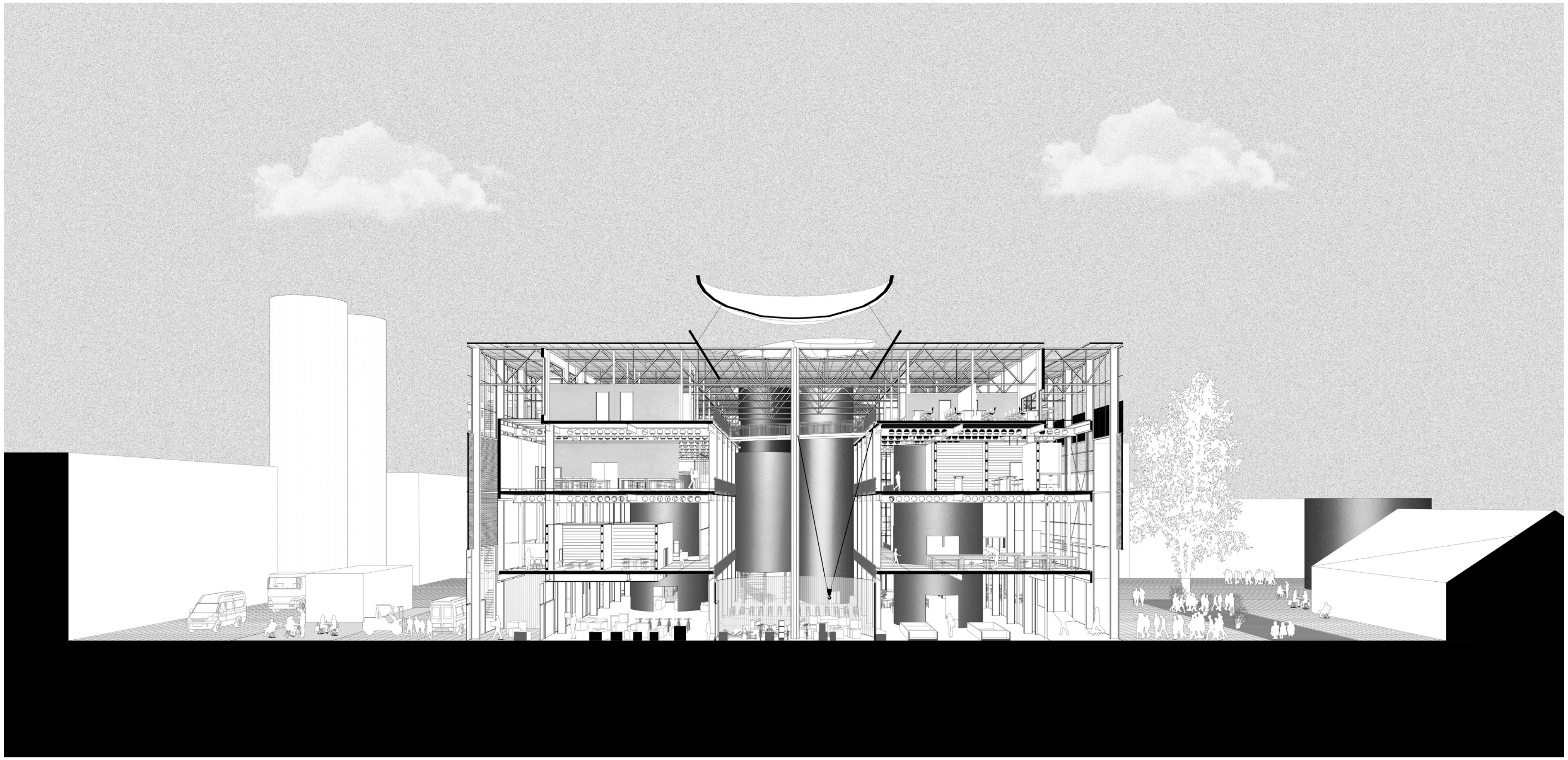




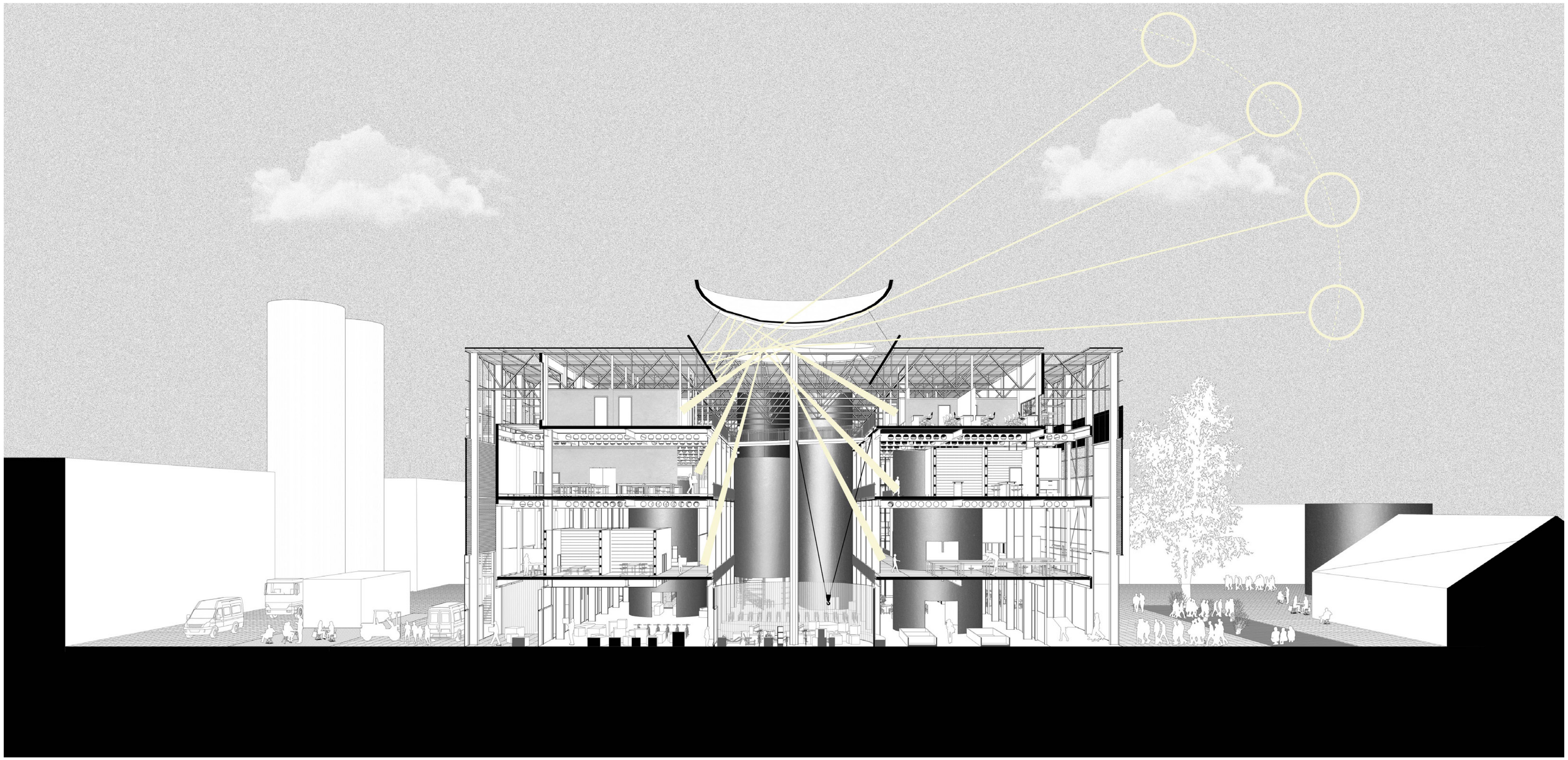
second floor plan



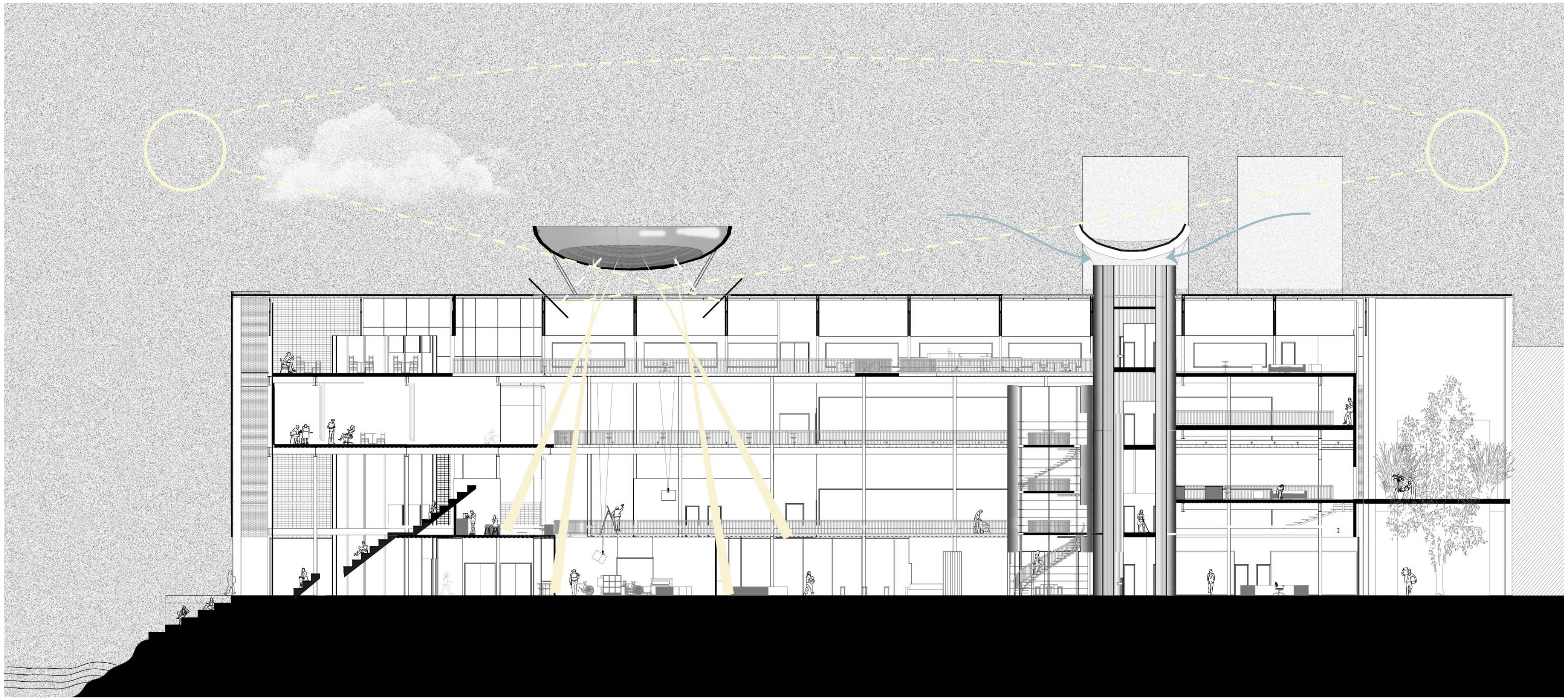
third floor plan



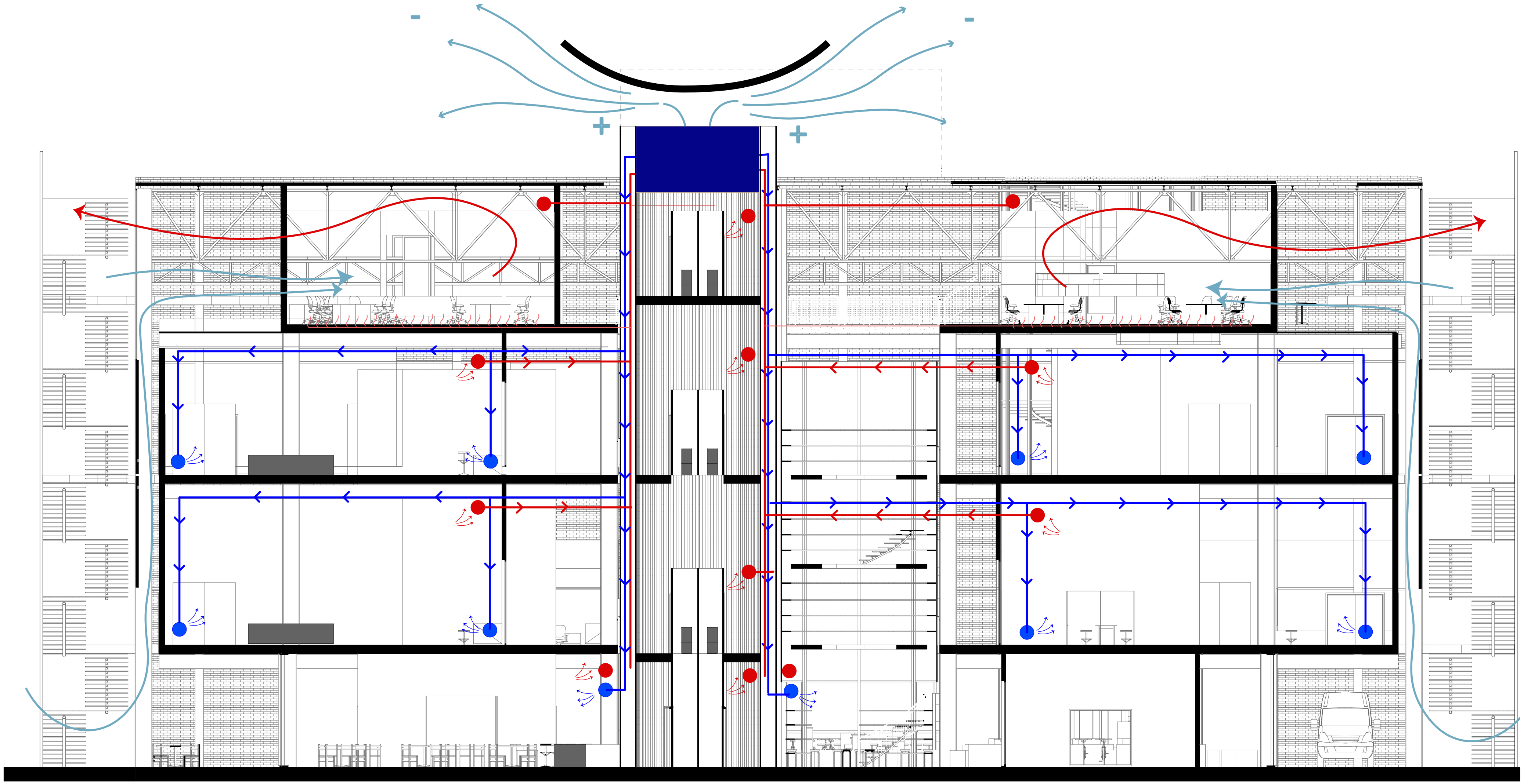
section



section with light diagram



section with light diagram

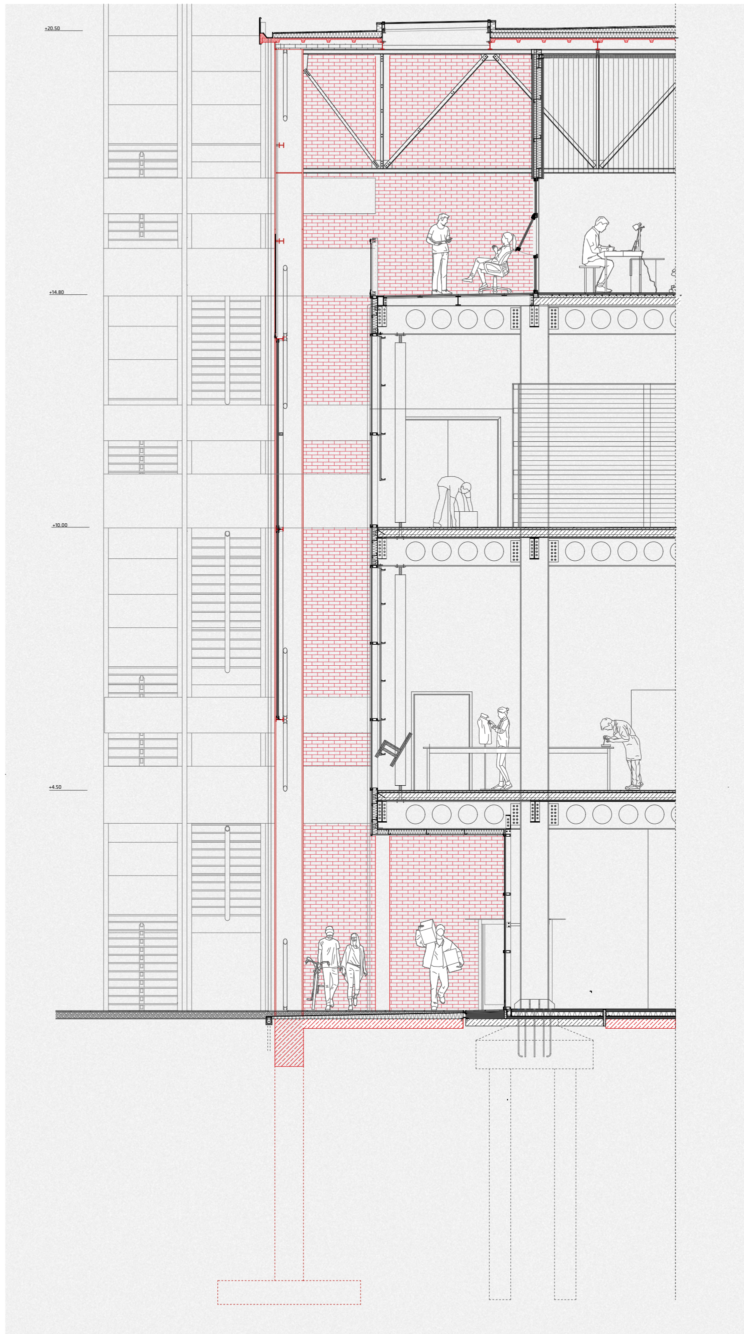


climate diagram

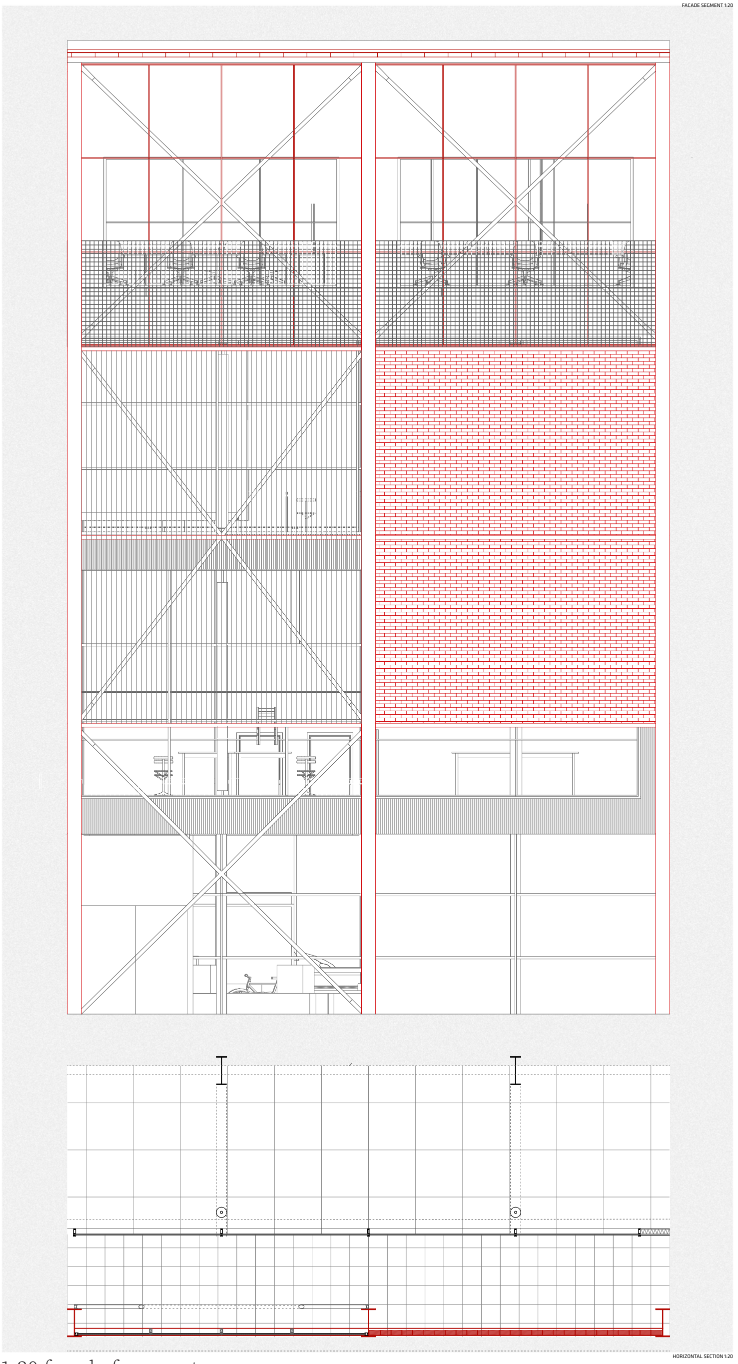
south(urban) facade

north(industrial) facade

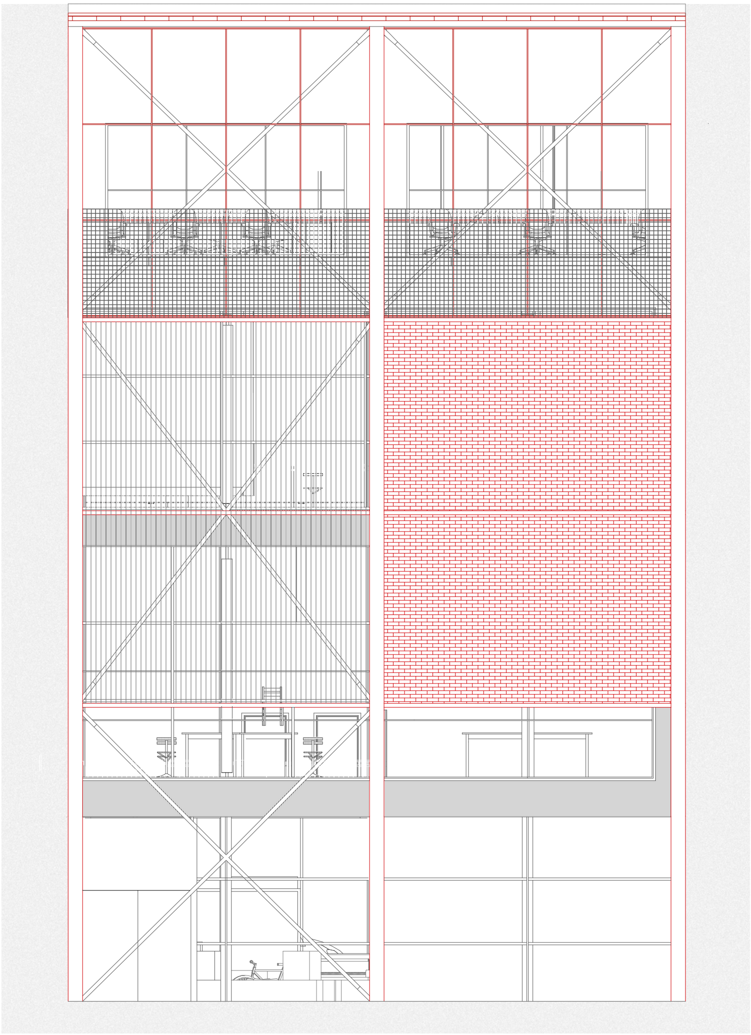
west facade

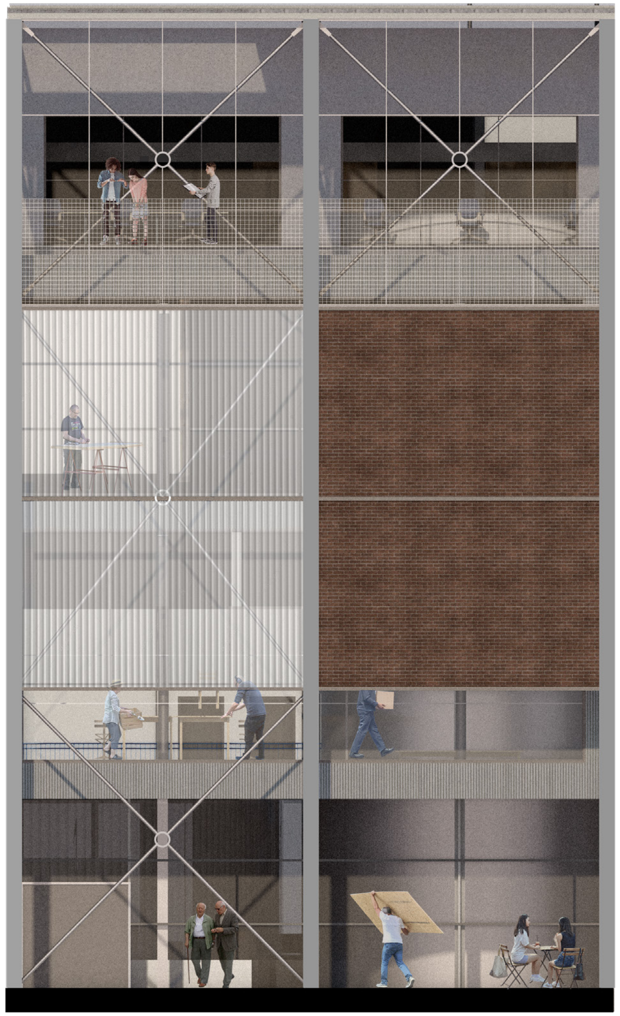


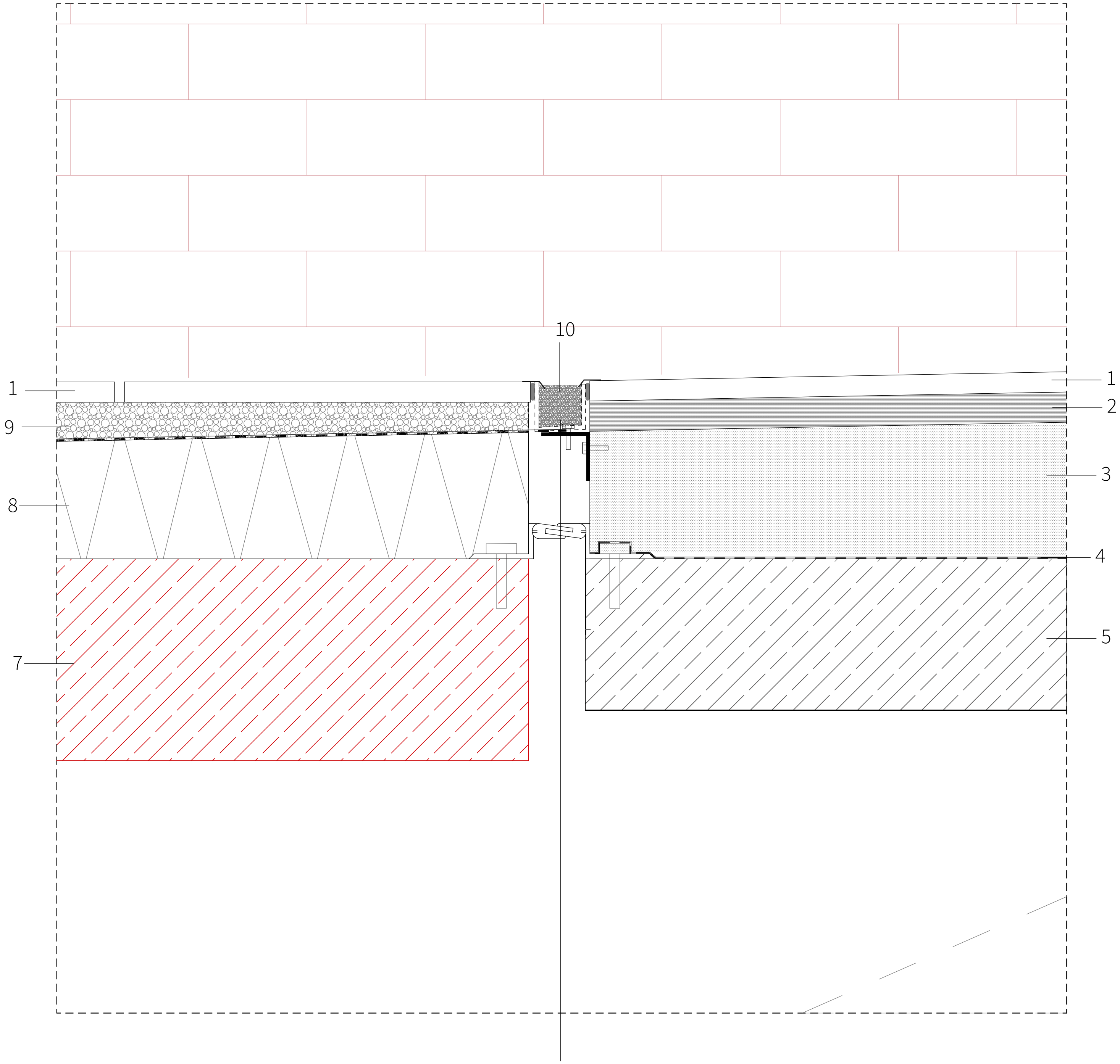
1:20 system detail



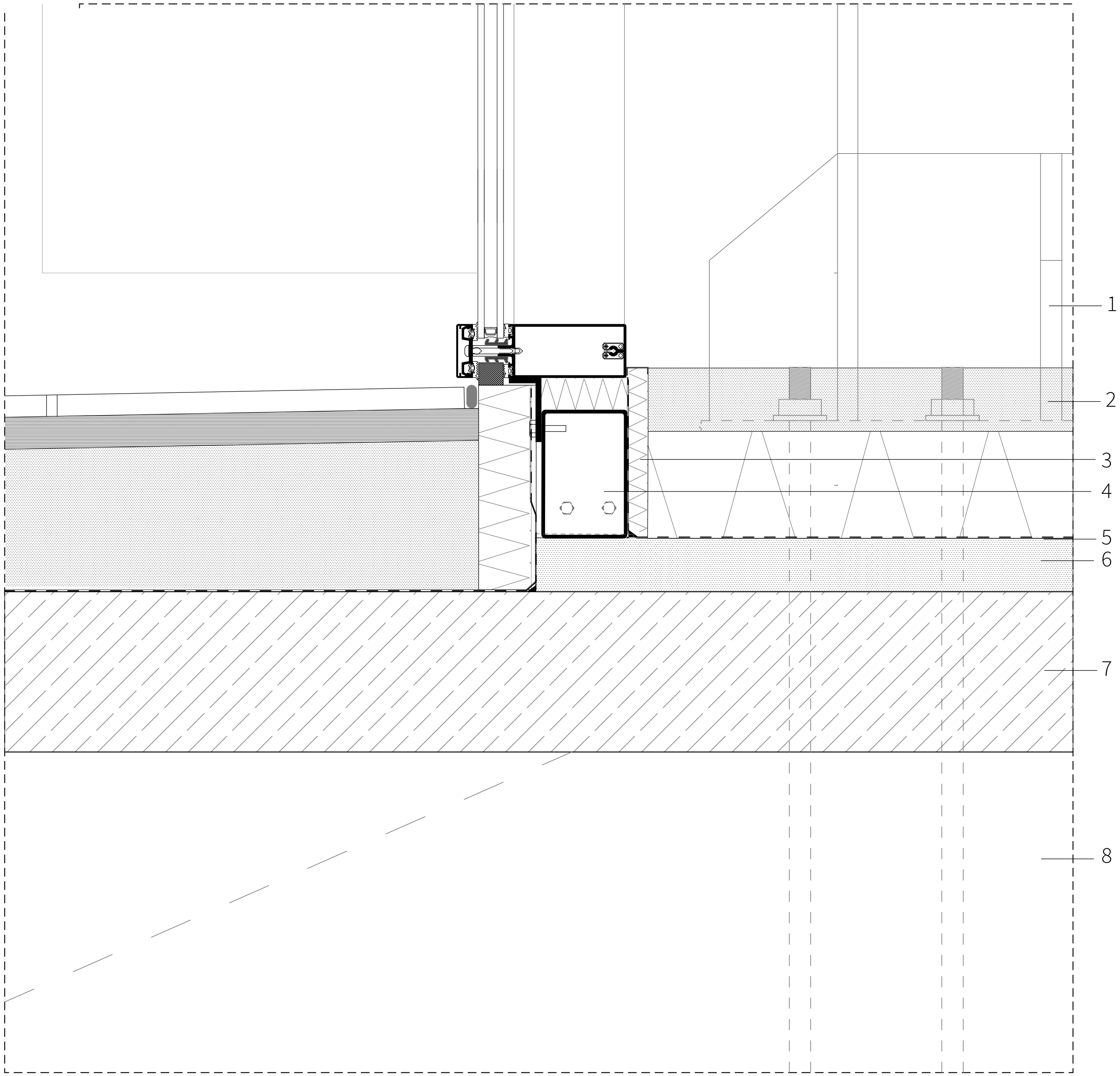
1:20 facade fragment



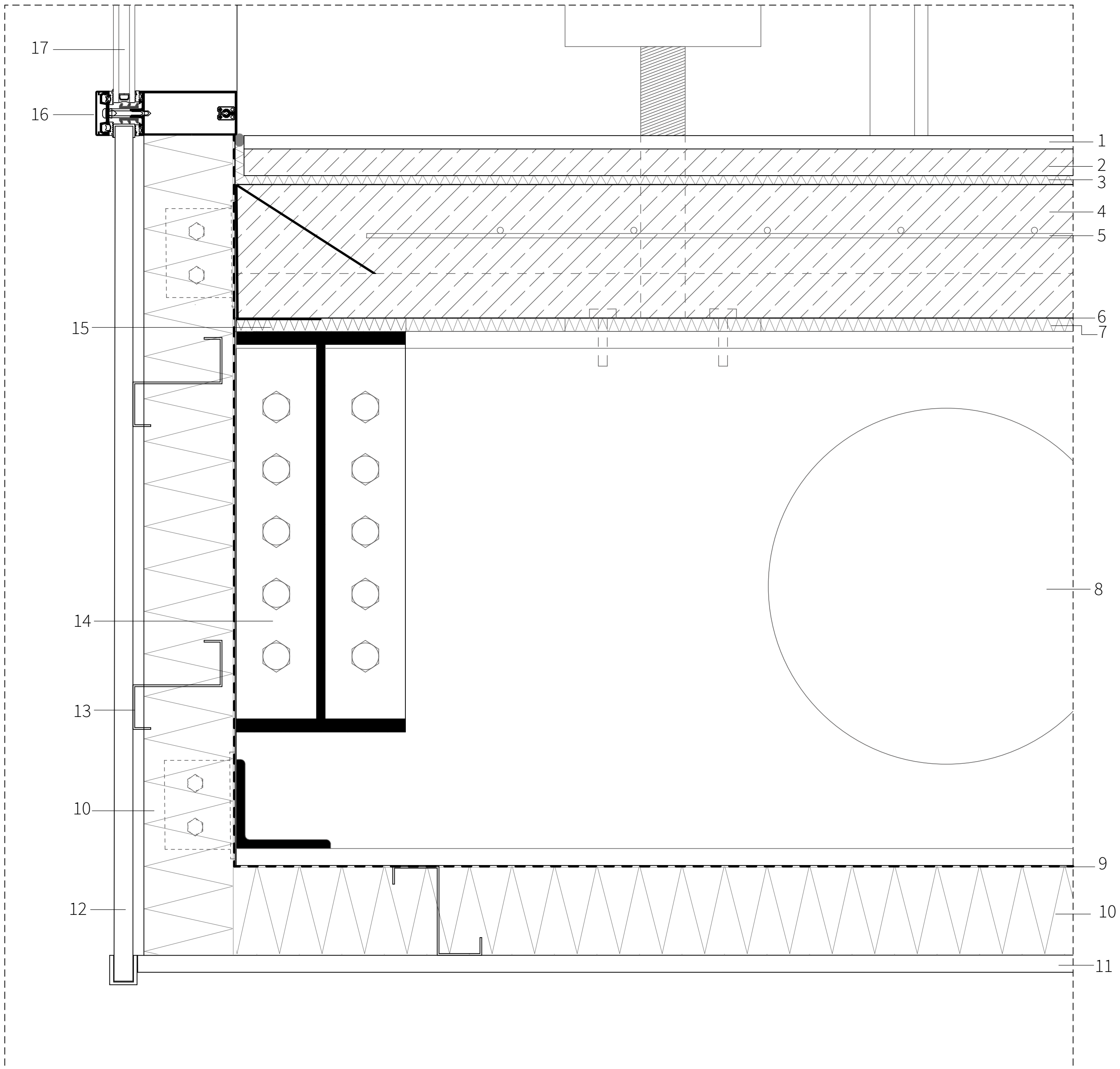




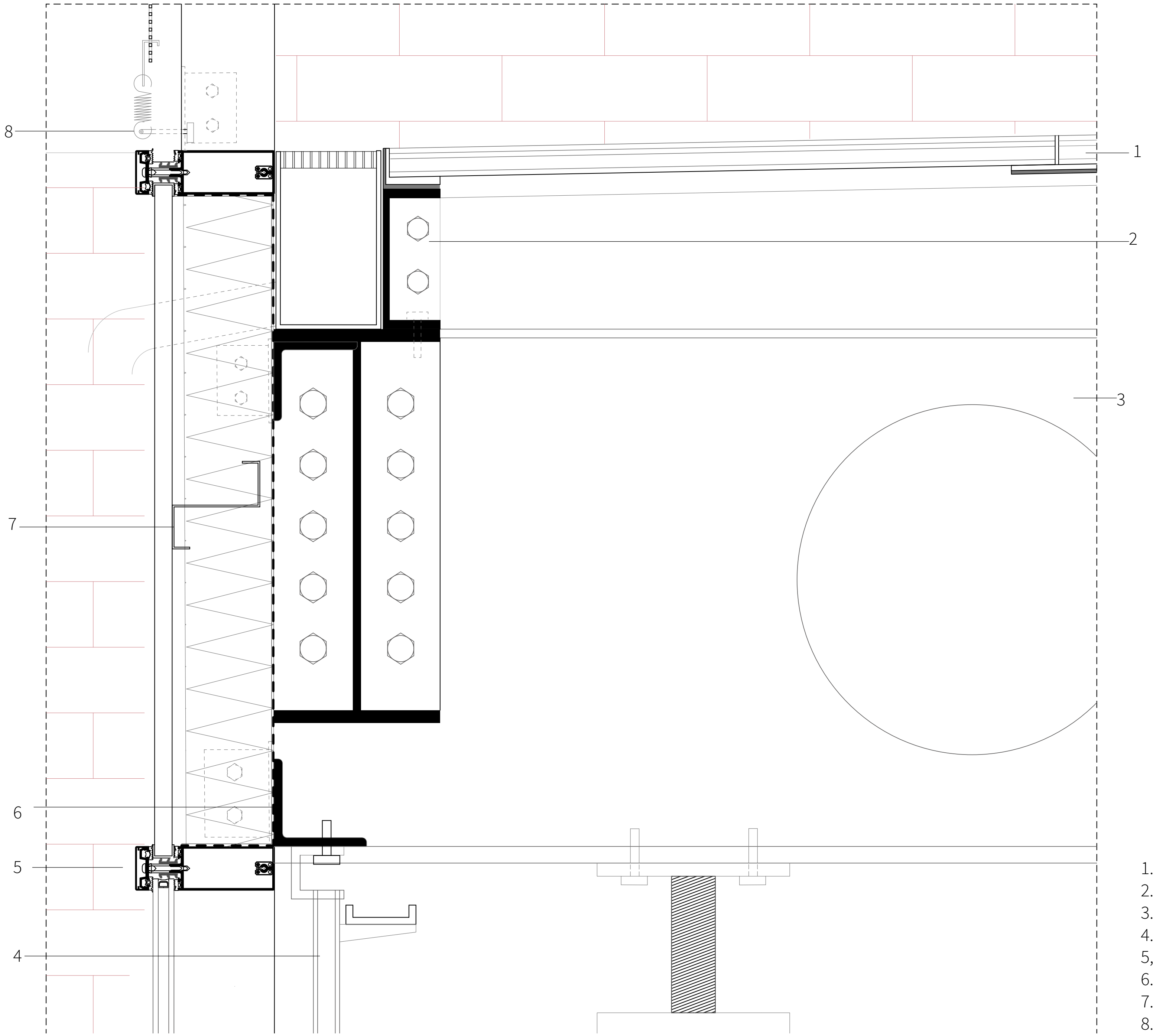
1. 20 mm thick outdoor tile
2. 30mm mortar
3. 150 mm inclined screed
4. Vapour barrier
5. 150mm new concrete slab
6. Expansion joint
7. Existing concrete slab
8. Inclined insulation
9.Gravels
10. Perforated metal profile



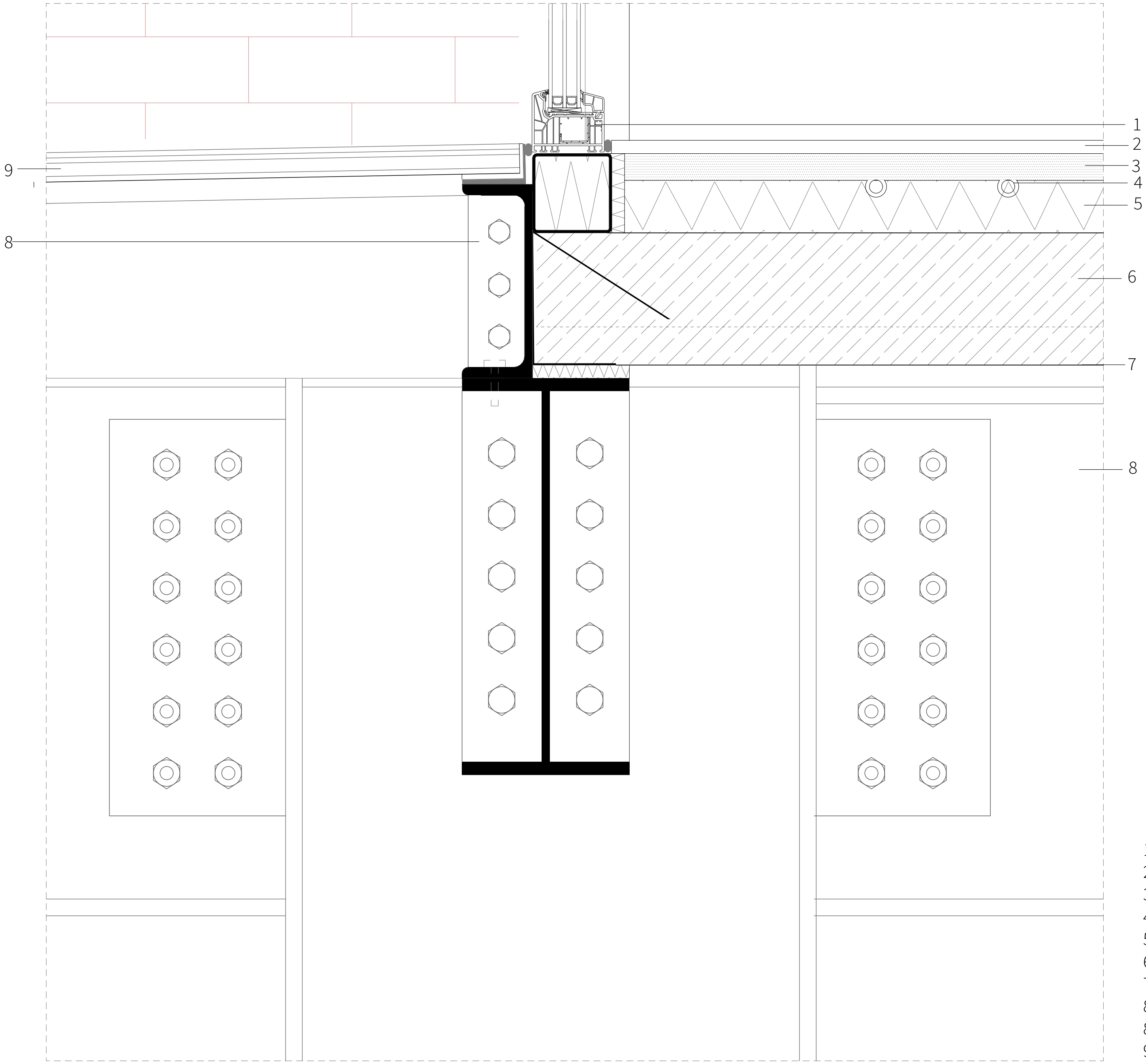
1. IPE 600 columns
2. 600mm screed
3. 20 mm rigid insulation
4. 80x120 steel box profile
5. Vapour barrier
6. 50mm screed
7. 150 mm newconcrete slab



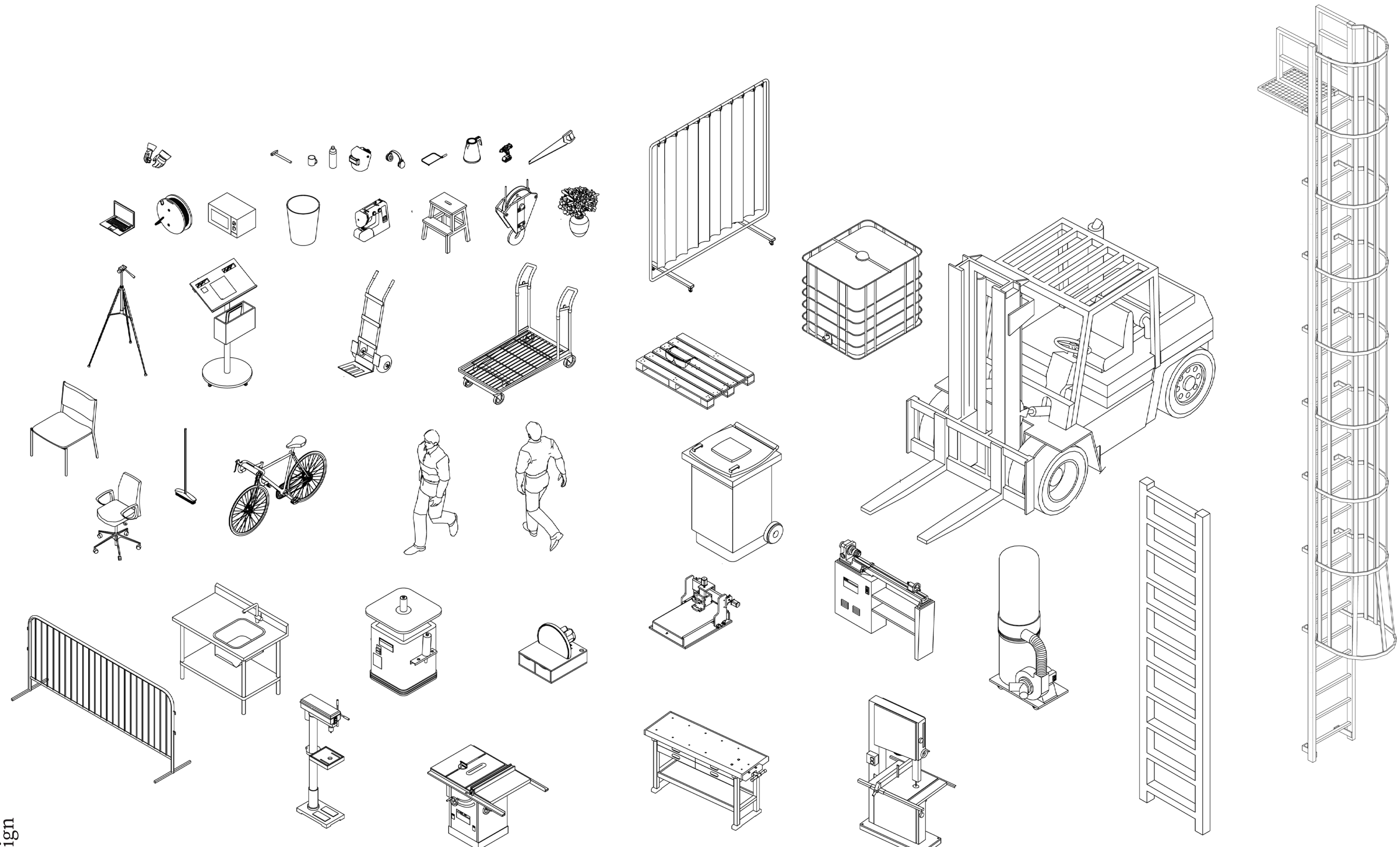
1. 1000mmx1000mmx15mm concrete look porcelain tiles
2. 50mm mortar
3. 10 mm acoustic mat
4. 150mm composite floor slab
5. Welding wire reinforcing mesh
6. Corrugated steel deck
7. 15 mm rubber mat
8. 600 mm deep cellular beam
9. Vapour barrier
10. 100mm rigid insulation
11. Aluminium sheet cladding
12. Corrugated metal Cladding
13. Z profile 100mmx50mmx2,5mm
14. IPE450
15. 15mm rubber mat
16. 50mmx 100mm curtain wall
17. Insulated double glass (6mm-12mm-18mm)

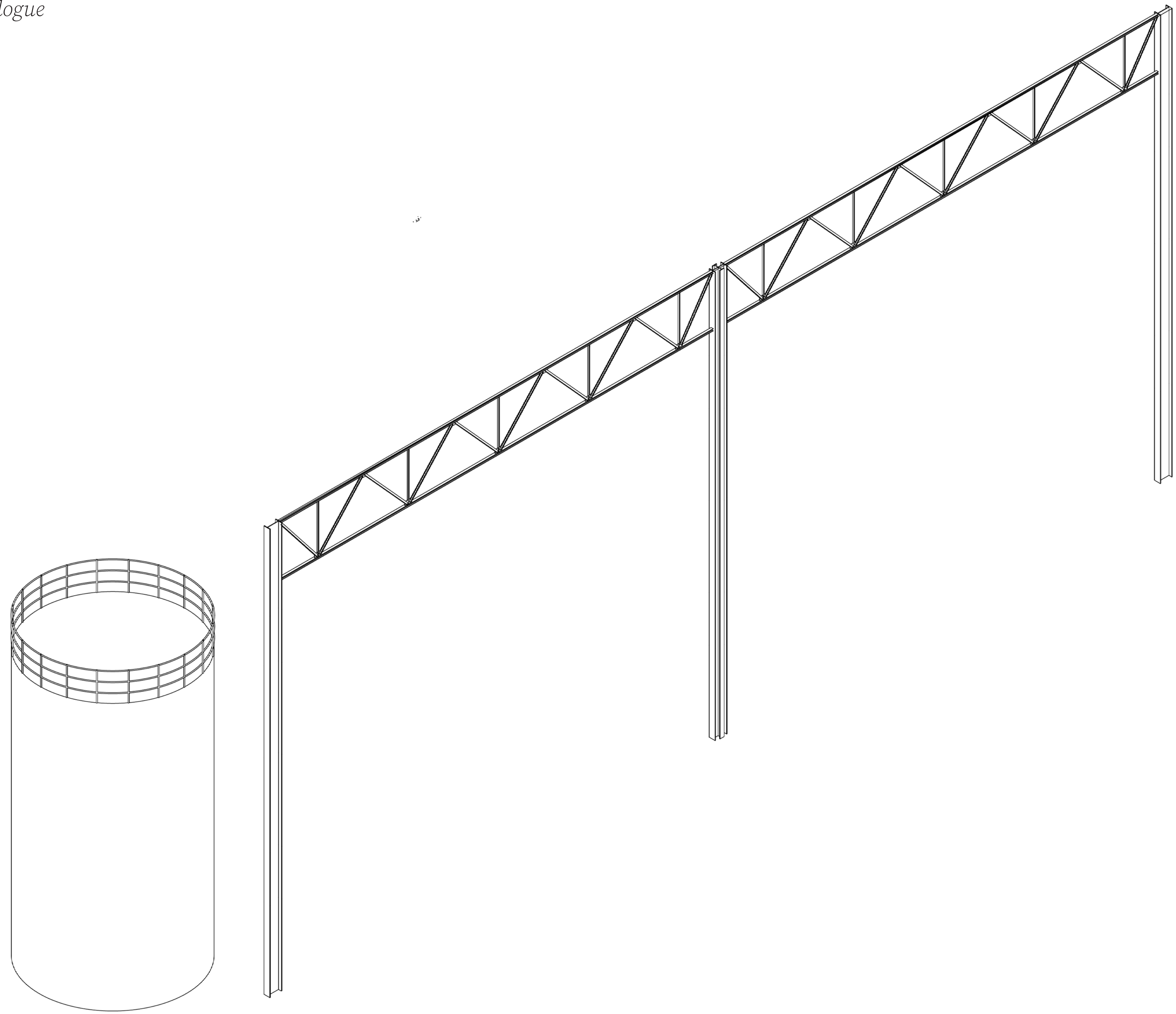


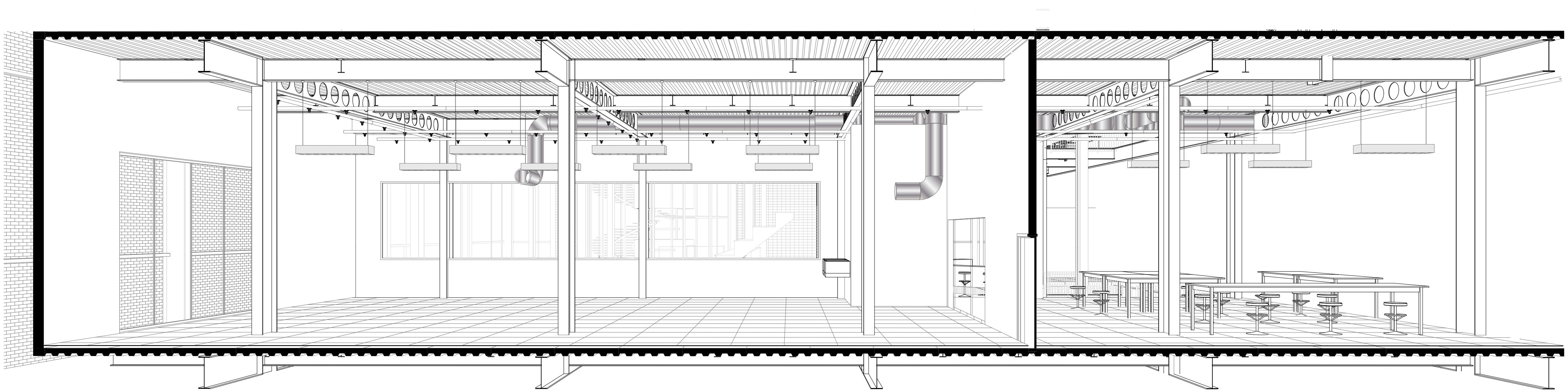
1. Insulated laminated frosted glass
2. UPN 160
3. 600 mm deep cellular beam
4. Cable tray
5, 50mmx100mm curtain wall
6. 100mmx100mm L profile
7. Z profile 100mmx50mmx2,5mm
8. IPE450

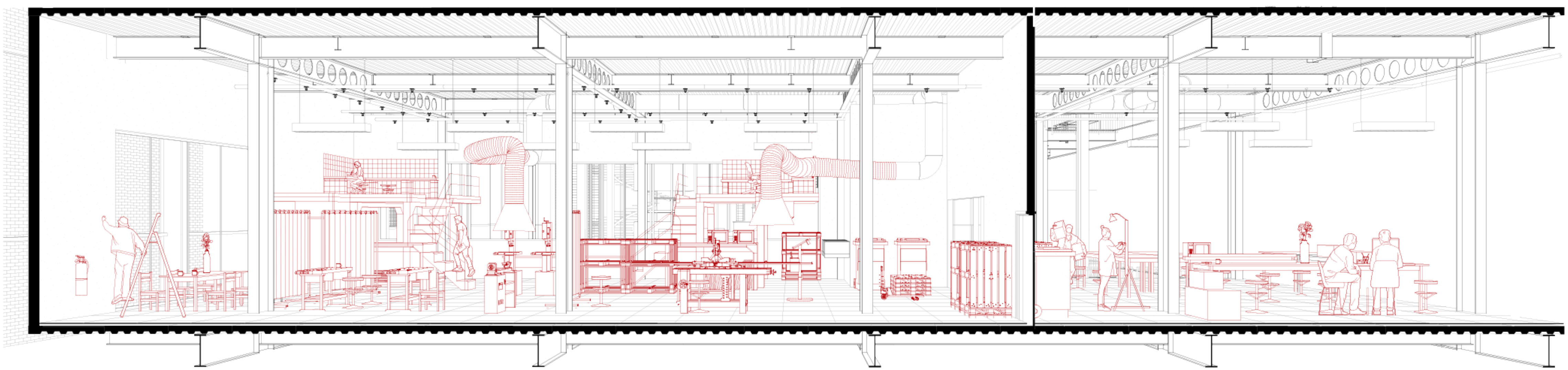


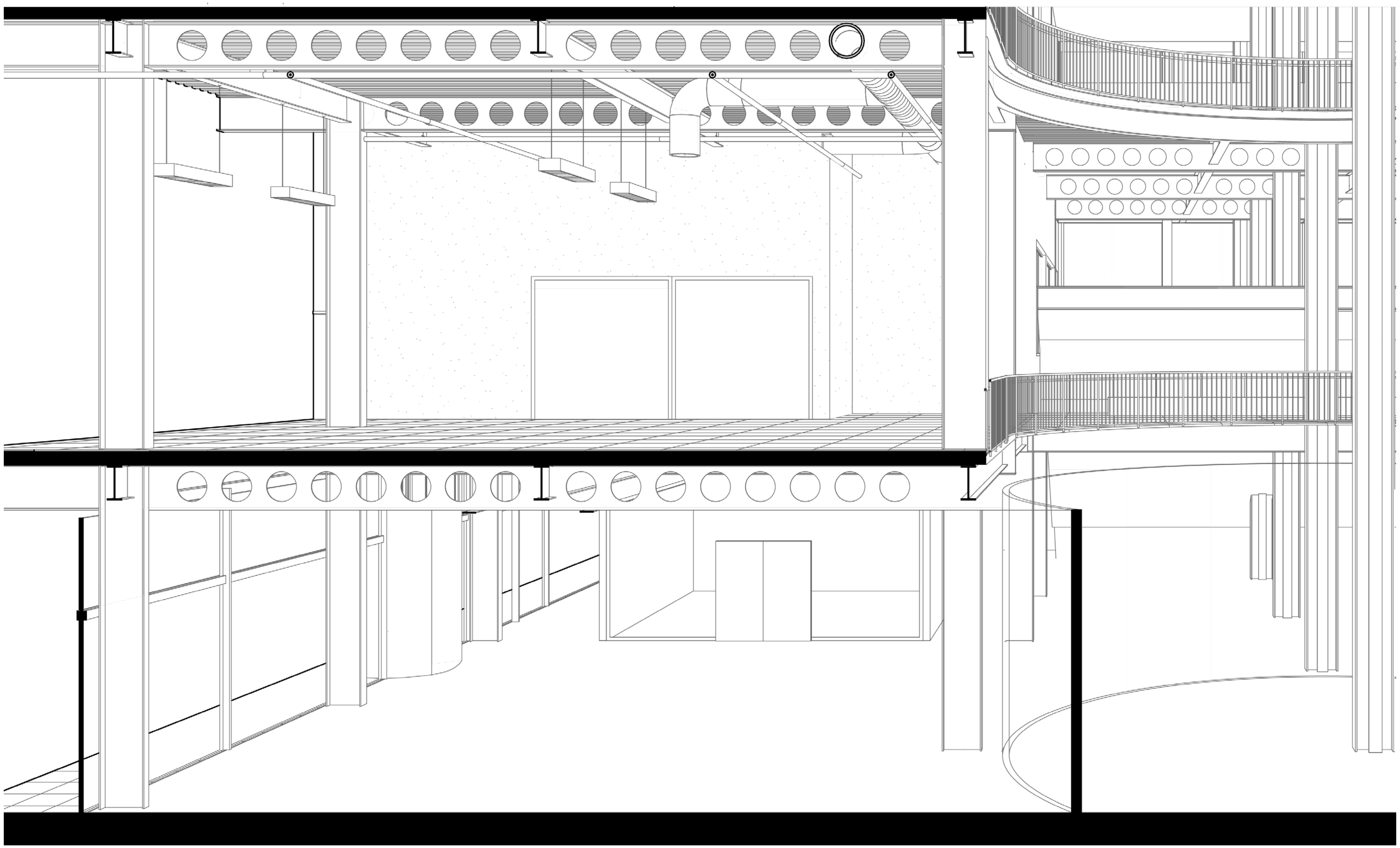
1. Fixed aluminium frame
2. 1000mmx1000m percelain tiles with concrete look
3. 30 mm mortat
4. Underfloor heating pipes
5, 50mm rigid insulation
6. 150 mm composite slab
7. Corrugated steel deck
8. IPE450
8. UPN200
9. Insulated laminated glass floor

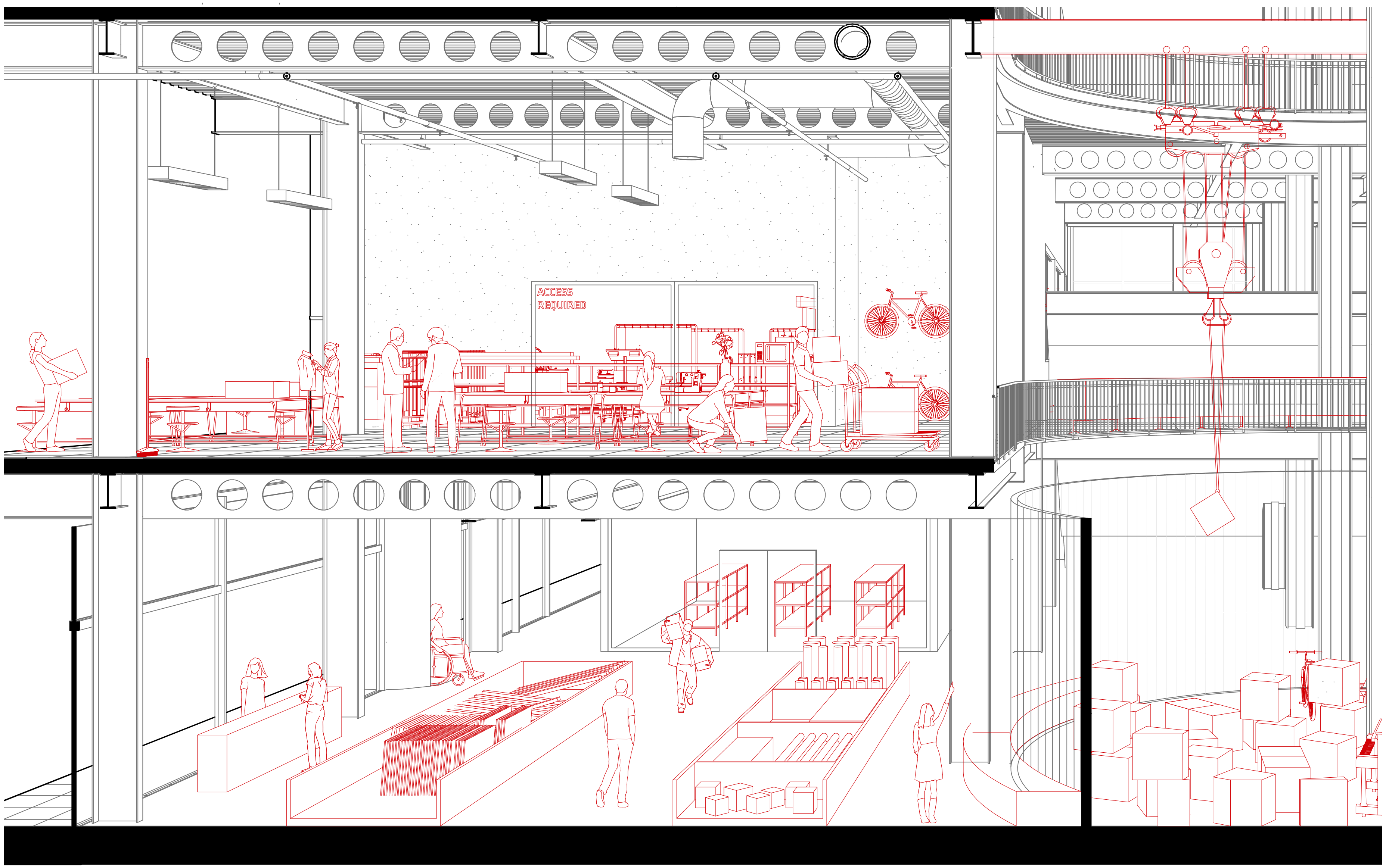


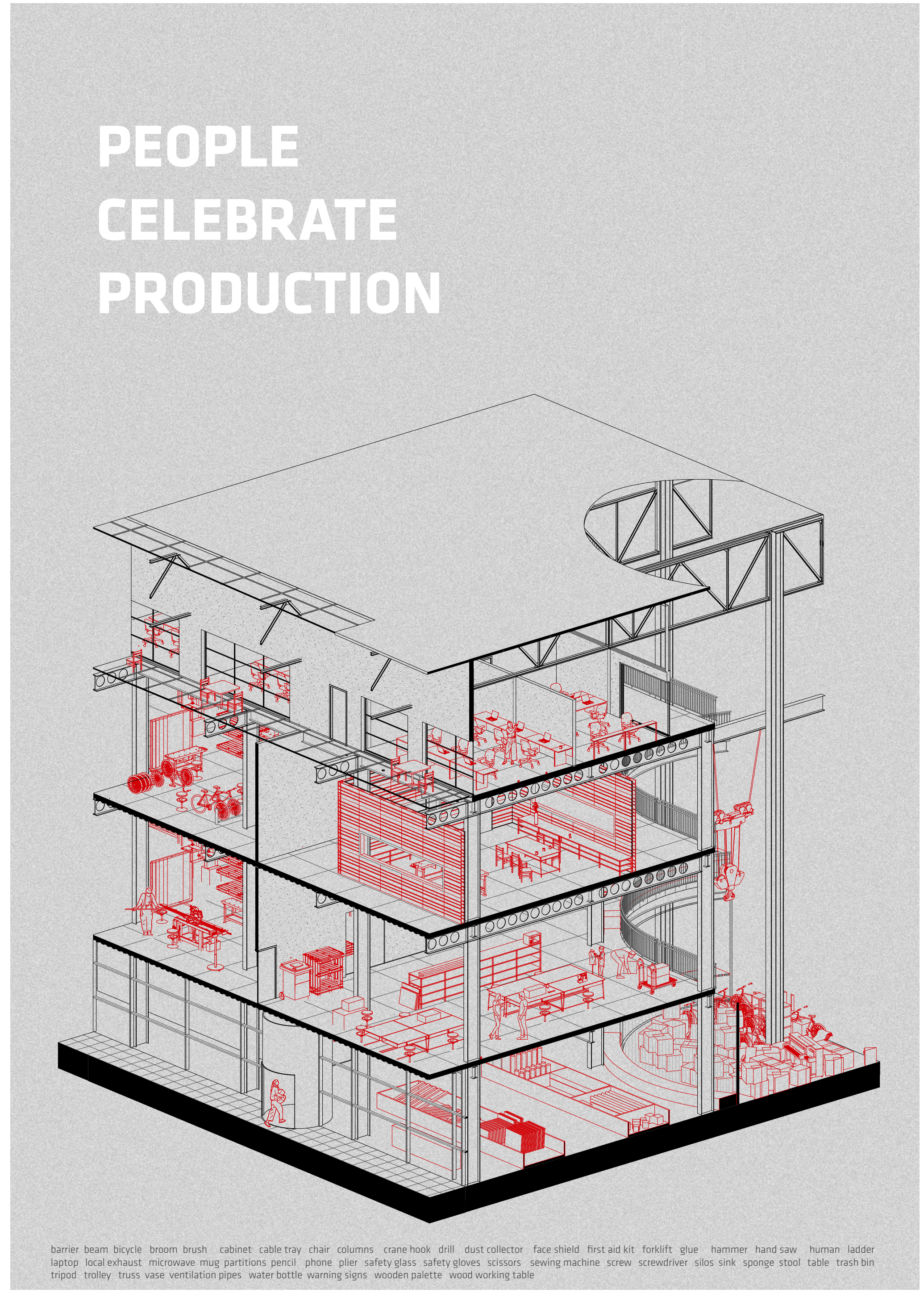









ACCESS
REQUIRED


PEOPLE
CELEBRATE
PRODUCTION
barrier beam bicycle broom brush cabinet cable tray chair columns crane hook drill dust collector face shield first aid kit forklift glue hammer hand saw human ladder
laptop local exhaust microwave mug partitions pencil phone plier safety glass safety gloves scissors sewing machine screw screwdriver silos sink sponge stool table trash bin
tripod trolley truss vase ventilation pipes water bottle warning signs wooden palette wood working table