

ONWARD EDGES

in-between architecture for
peripheral
entanglements

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Edge: The undesired margins of urban systems.

Onward: To not forward into new centres, but instead maximize quality of life on the edge.

Onward Edges: How to live with the undesired but critical functions of the edge.



Looking back from the edge towards Antwerp, it's new district high-rise development Antwerp Zuid.

1. Site

2. Masterplan



Masterplan site located in southern Antwerp

3. Plot

4. Programme

5. Design by programme

A. Bathhouse

B. Filtration Garden

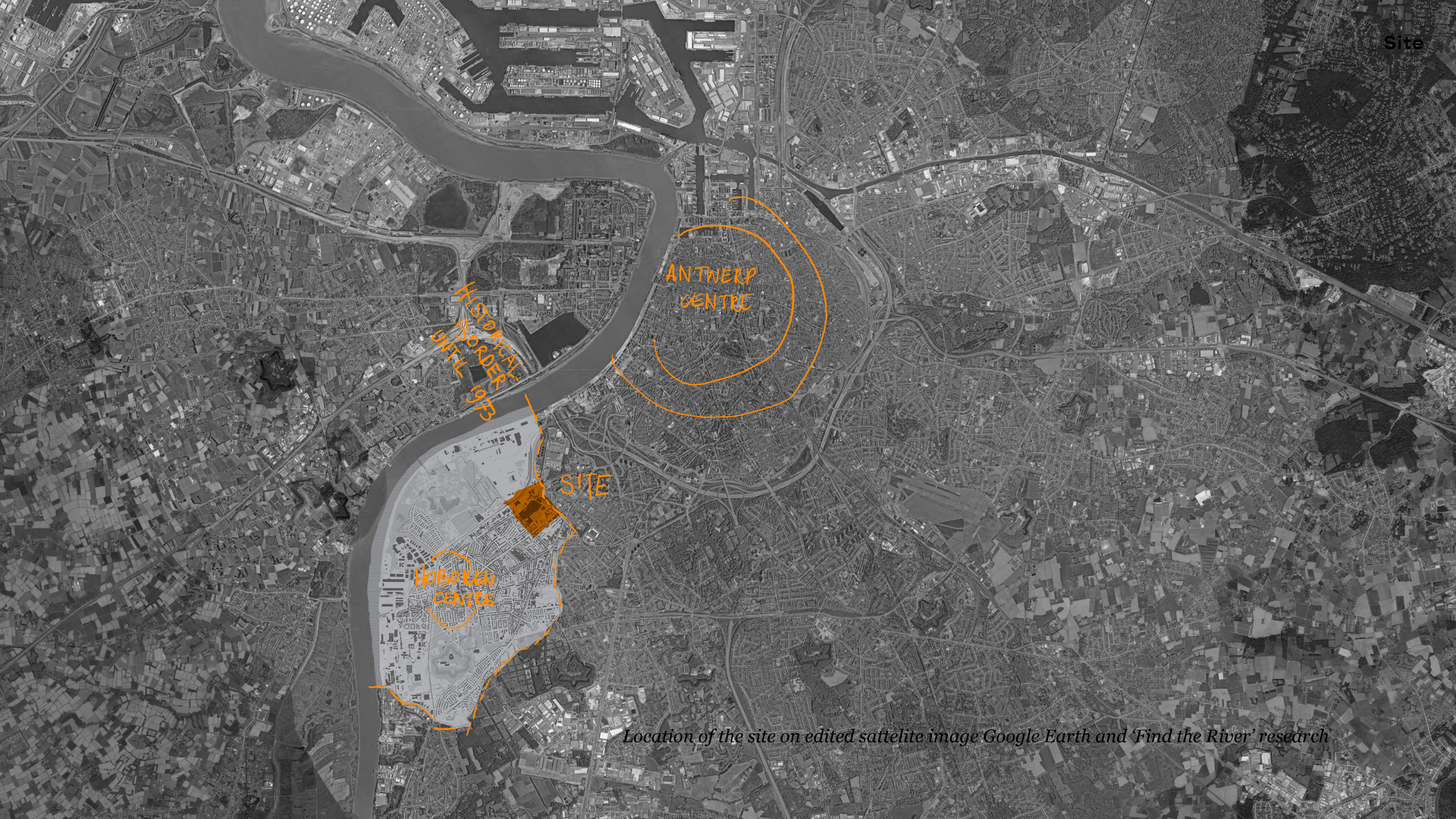
C. Housing



Within the collective Masterplan for the site lies the architectural design.

6. Entanglement

Within the architectural design there are several functions



Site

ANTWERP
CENTRE

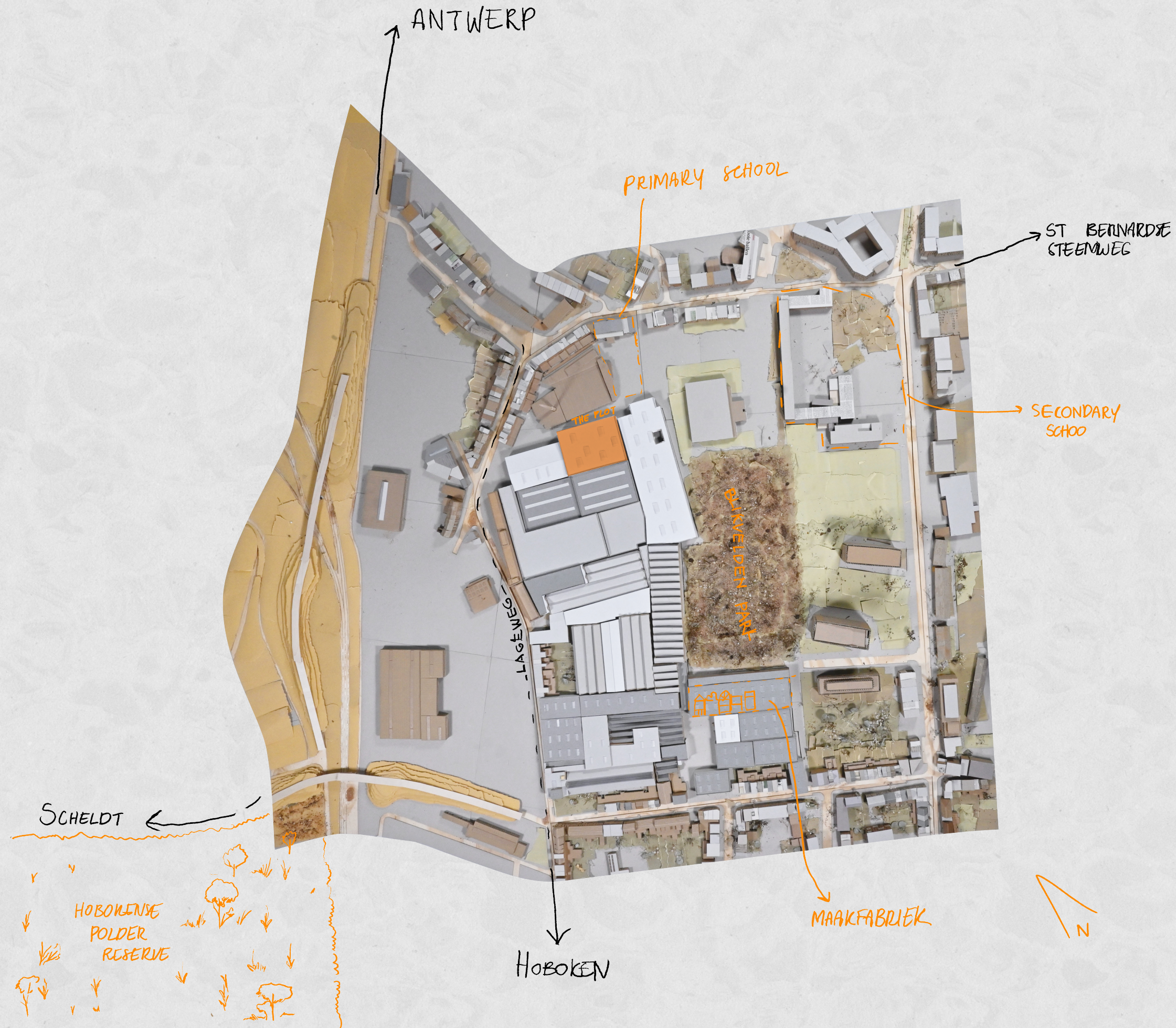
HISTORICAL
BORDER
UNTIL 1973

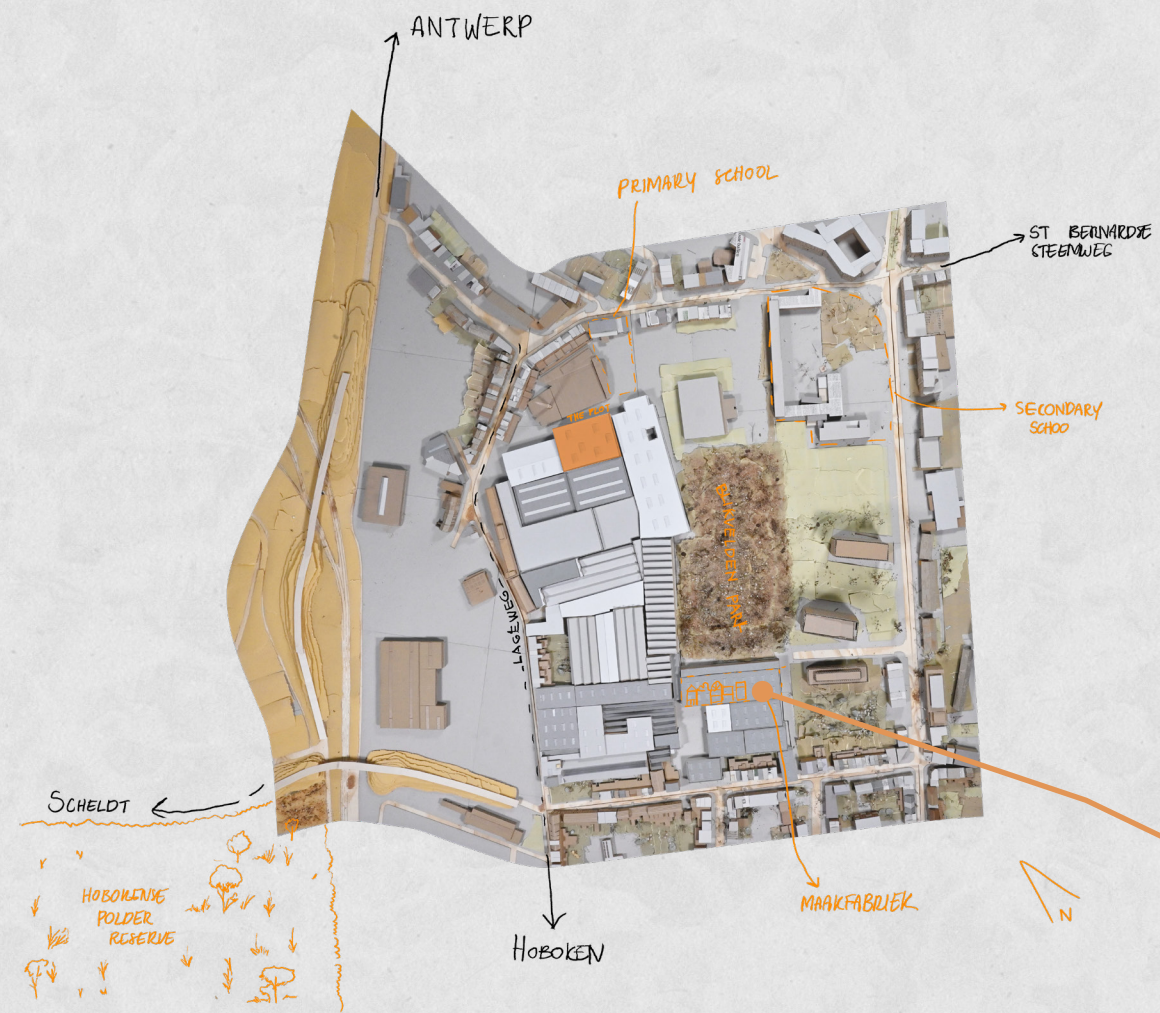
SITE

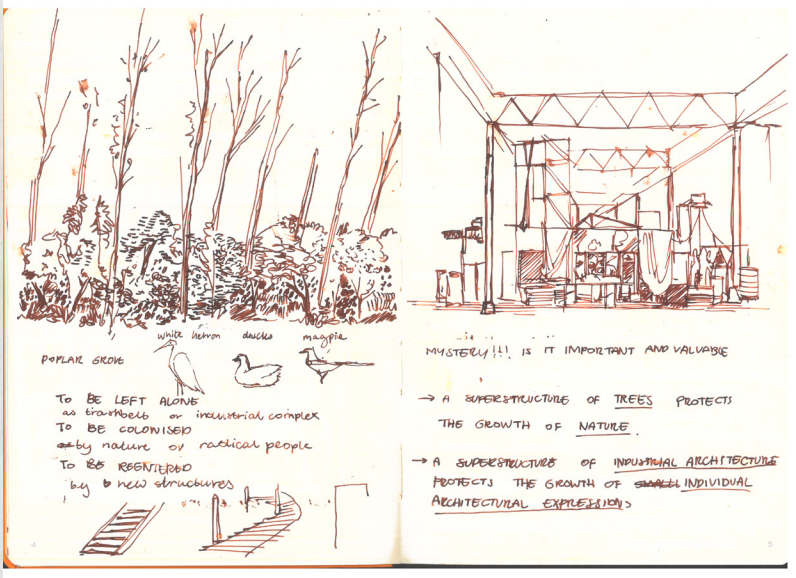
HOBOKEN
CENTRE

Location of the site on edited satellite image Google Earth and 'Find the River' research

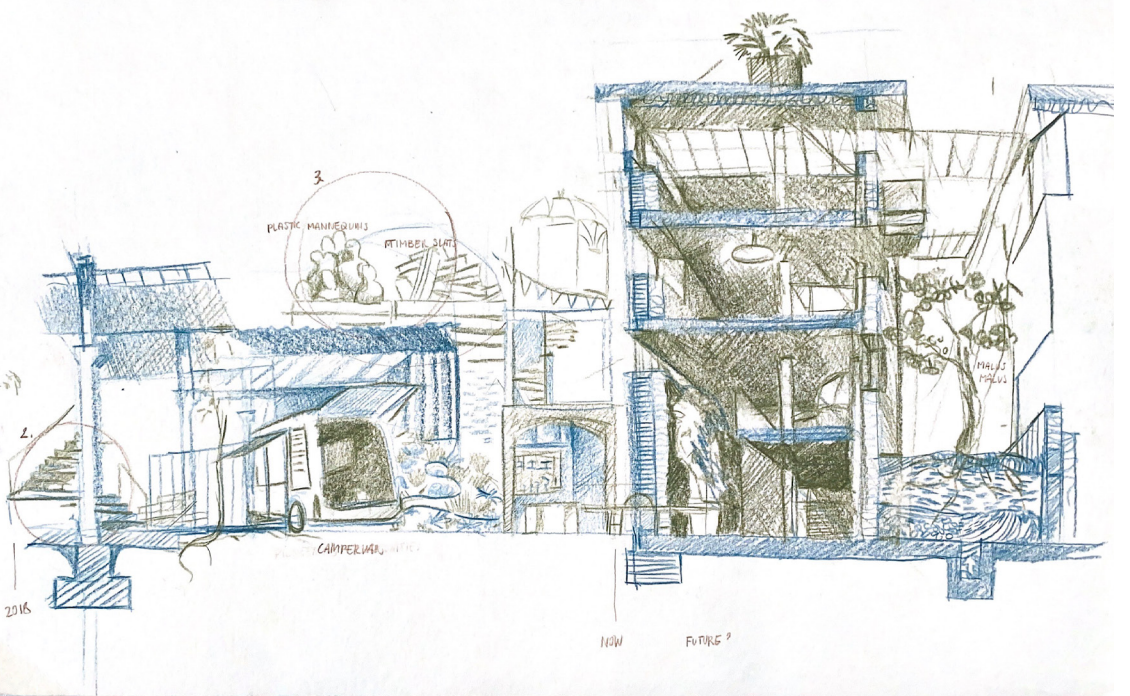
Model of the site.



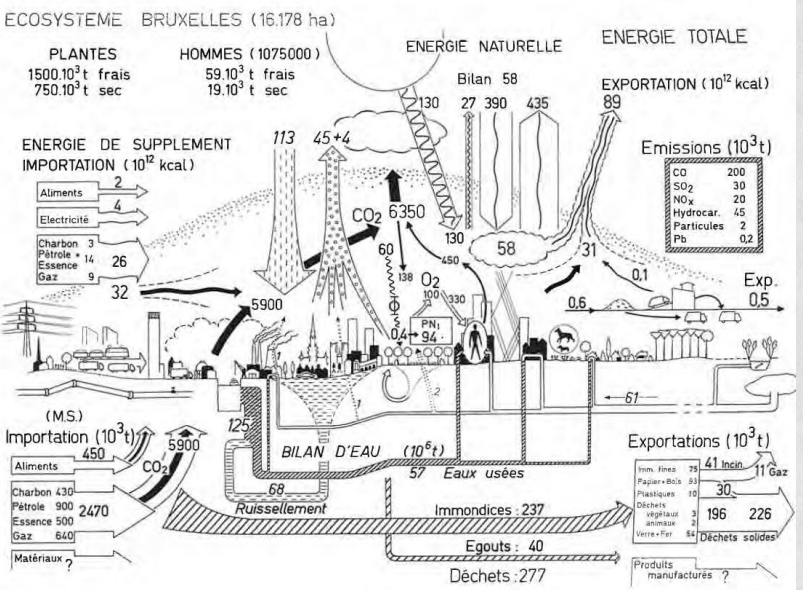




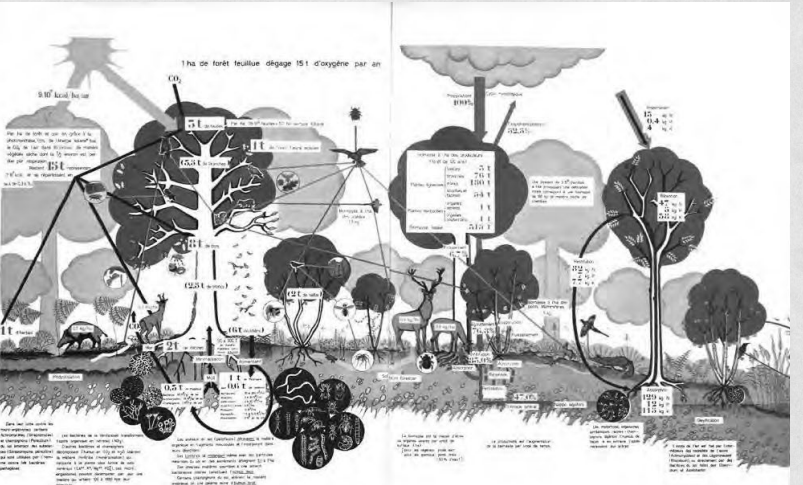
Notes from first excursion comparing Hobokense Polder and Maakfabriek



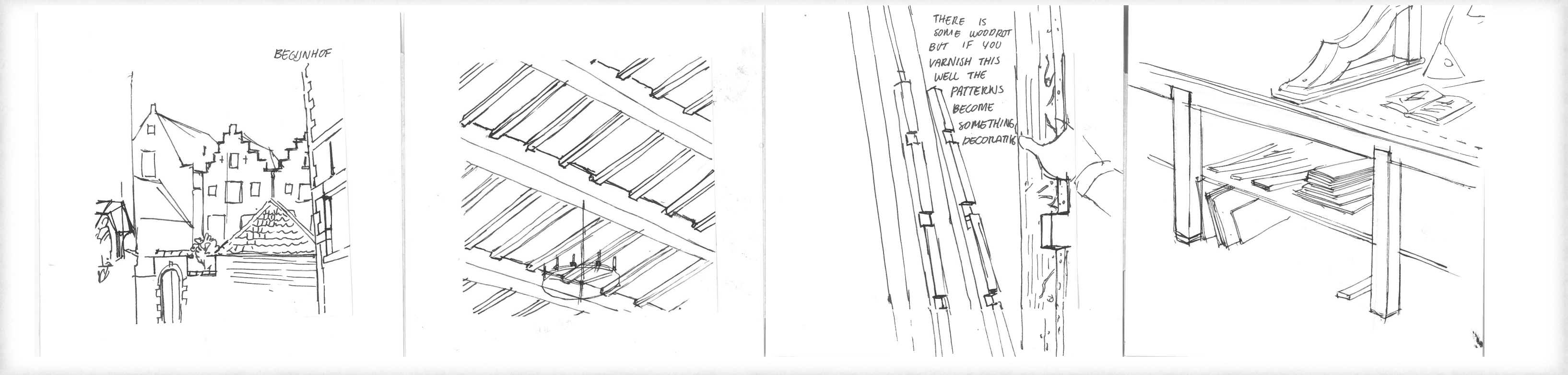
Imagining Maakfabriek and Hobokense Polder successional development.



Metabolism of the Brussels Ecosystem, from Duvigneaud, P. and Denaeyer-De Smet, S. (1977) 'L'Ecosystème urbs : l'écosystème urbain Bruxellois'



Schematic representation of the forest ecosystem in Upper Belgium, from Duvigneaud, P. (1980) La Synthèse Ecologique

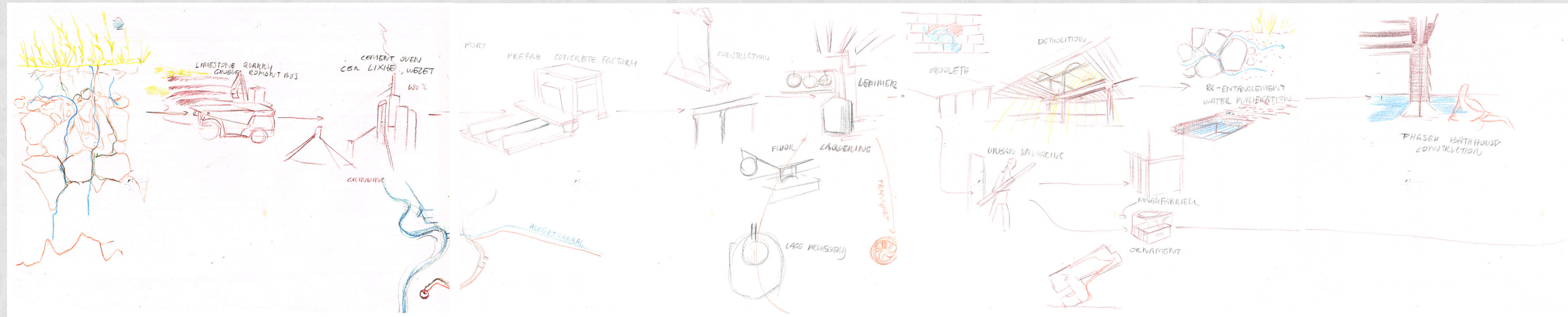
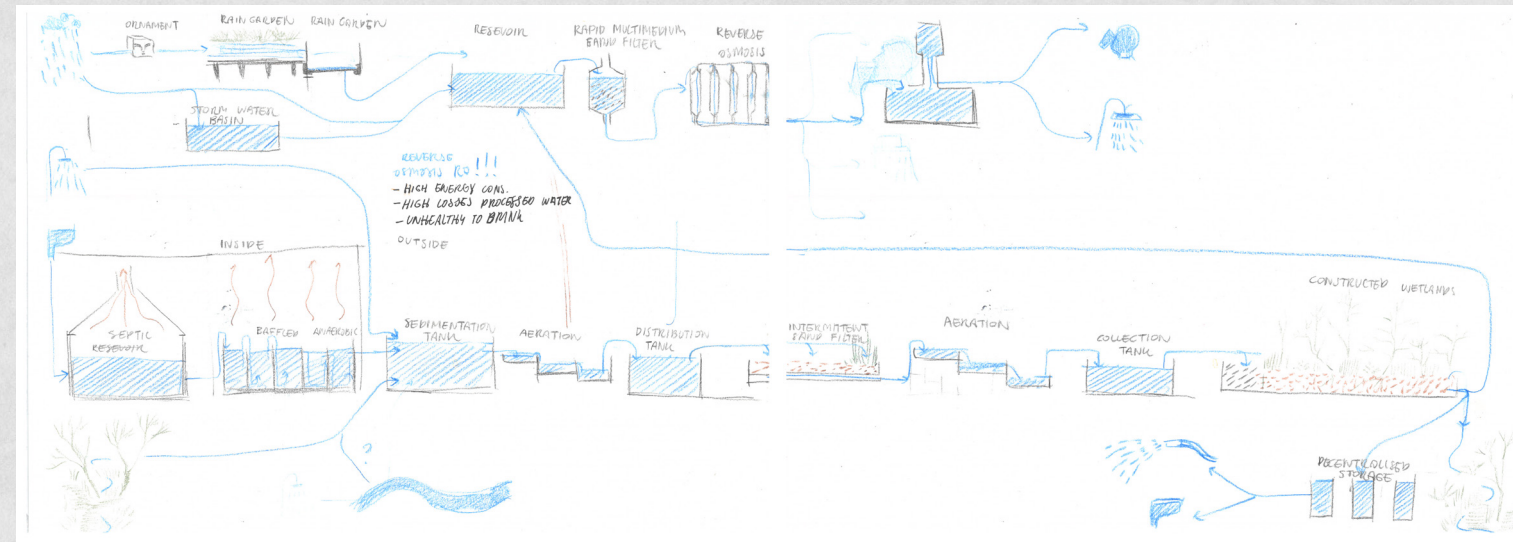


Maakfabriek inhabitant Justin recuperating timber child beams from het begijnhof in Antwerp's historic centre for the construction of his desk.



Fokke using driftwood presumably from older buildings to build and sell artpieces.

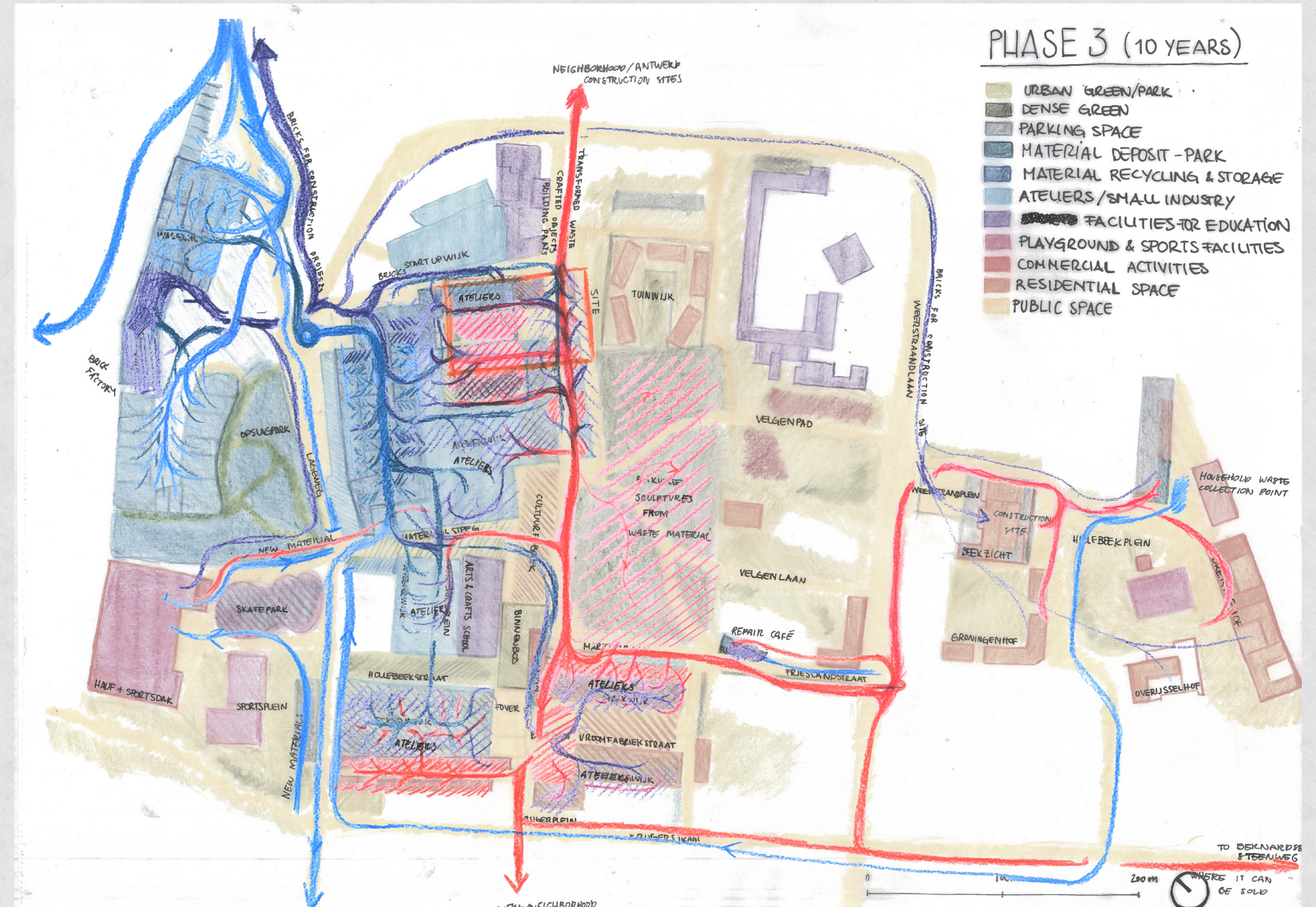
Strips of different unseen ecologies affecting humans.



Functioning as bottom-feeder in the urban ecology



Streams of materials flowing from Antwerp through the masterplan.

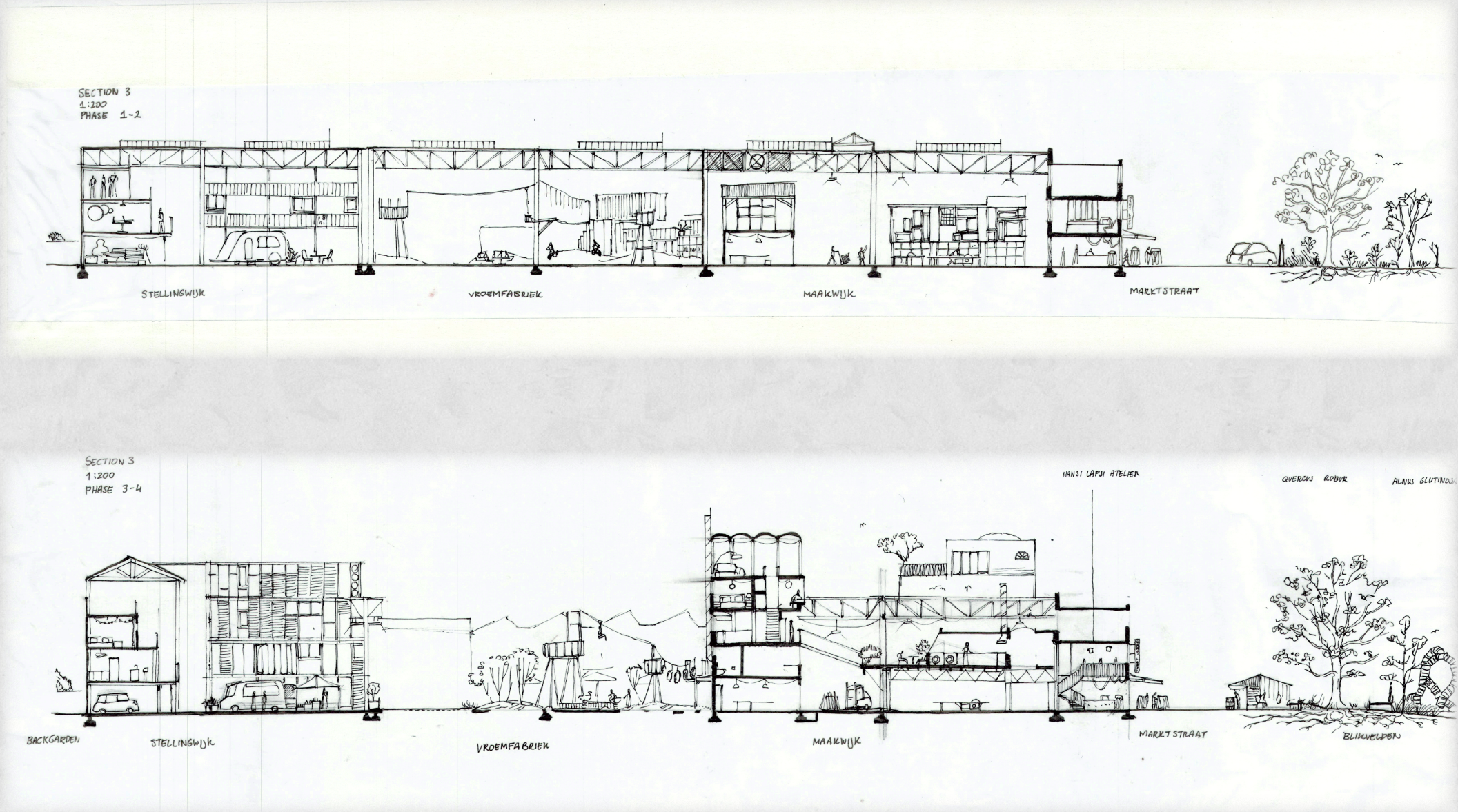


last imagined phase of the masterplan showing material flows.

Phased to respond to availability of re-usable demolition material.



Drawing of programme in plan of different hases



Section showing self-built workshops built inside halls, can over time expand and even outgrow the hall that they are in.

*Model of the new
masterplan with
architectural design in
blue*

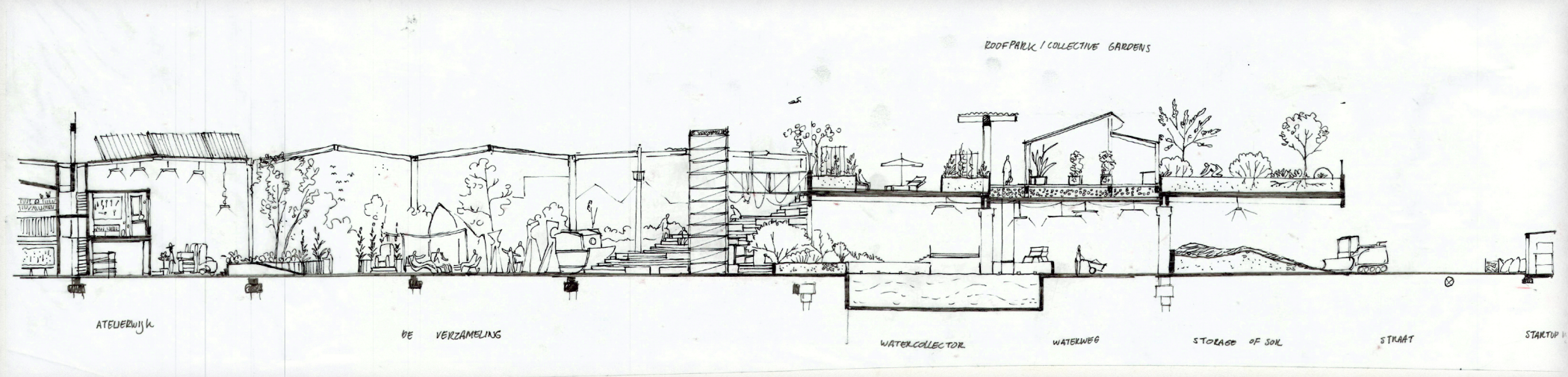


Schematic map of important axis overlaid with model
Materiaal As for the distribution of left-over, waste material.
Tentoonstellingsas, a public axis along many facilities that bridge the industrial and human.
Hollebeek-as an infrastructure catering to non-humans
On the Activiteits-as sports and recreational facilities are located.

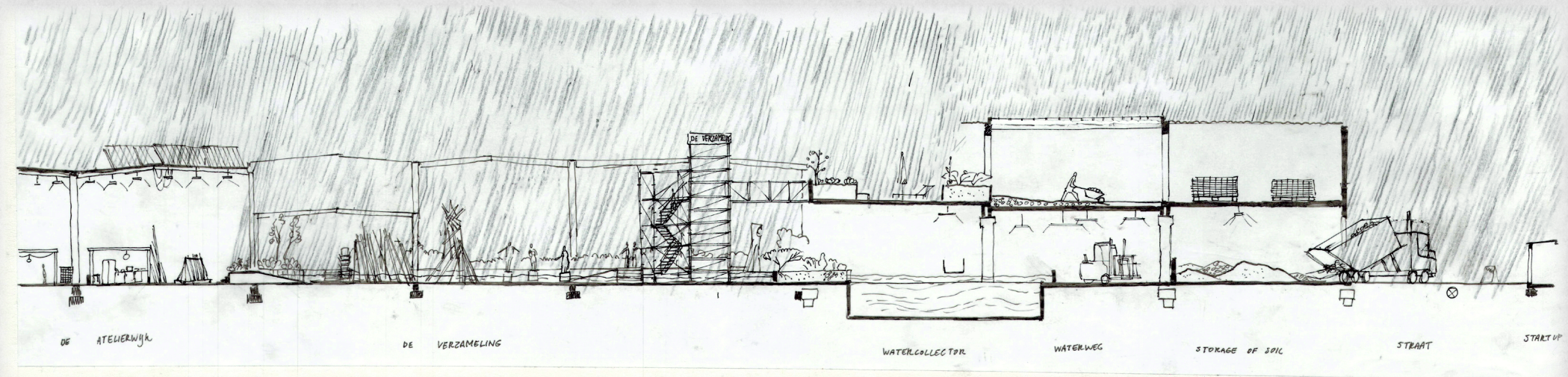




Map showing the area where rainwater is collected.



Sections depicting collection of water and materials over time.





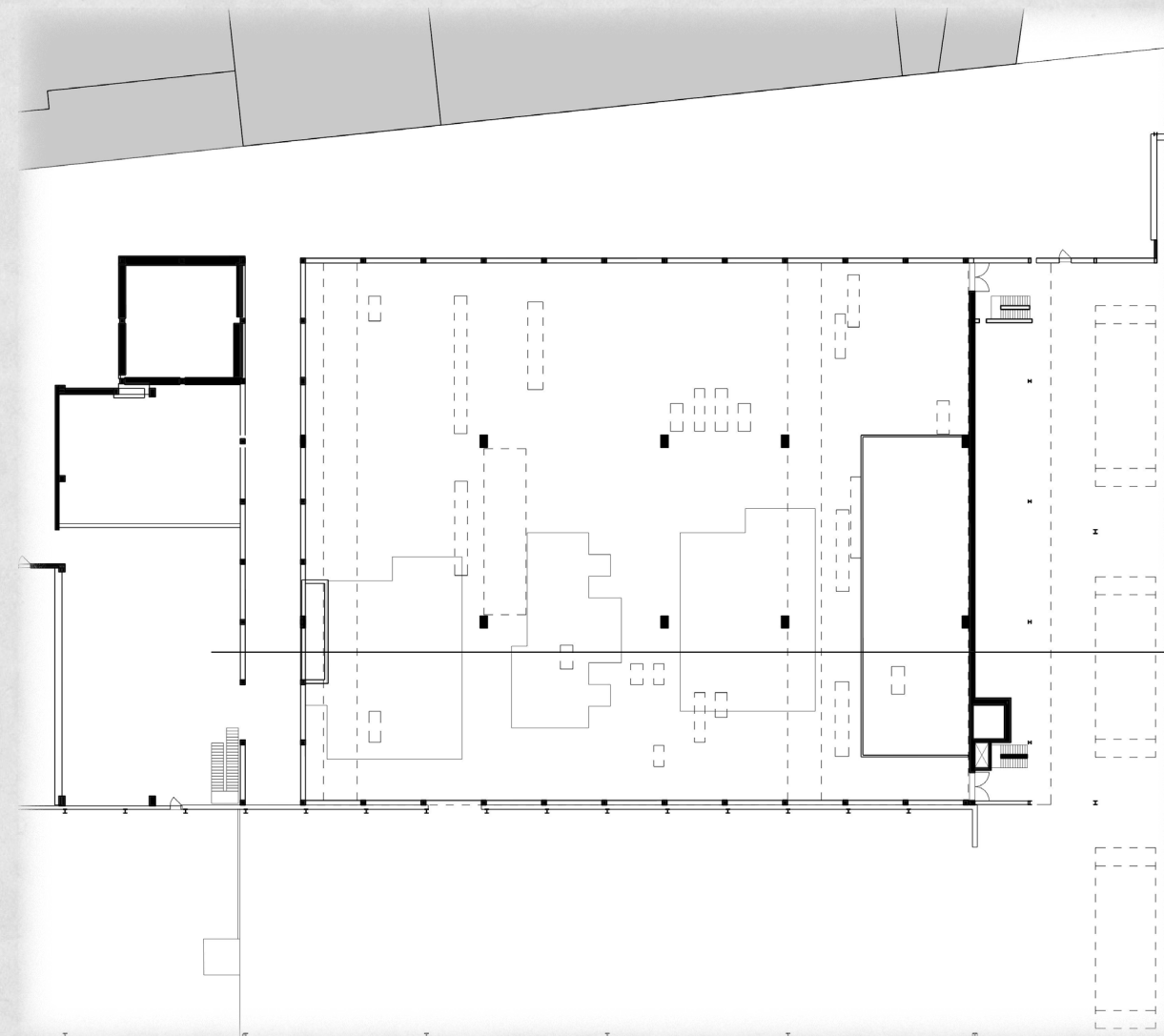
Plot in model, in orange.



Plot highlighted in a satellite image.



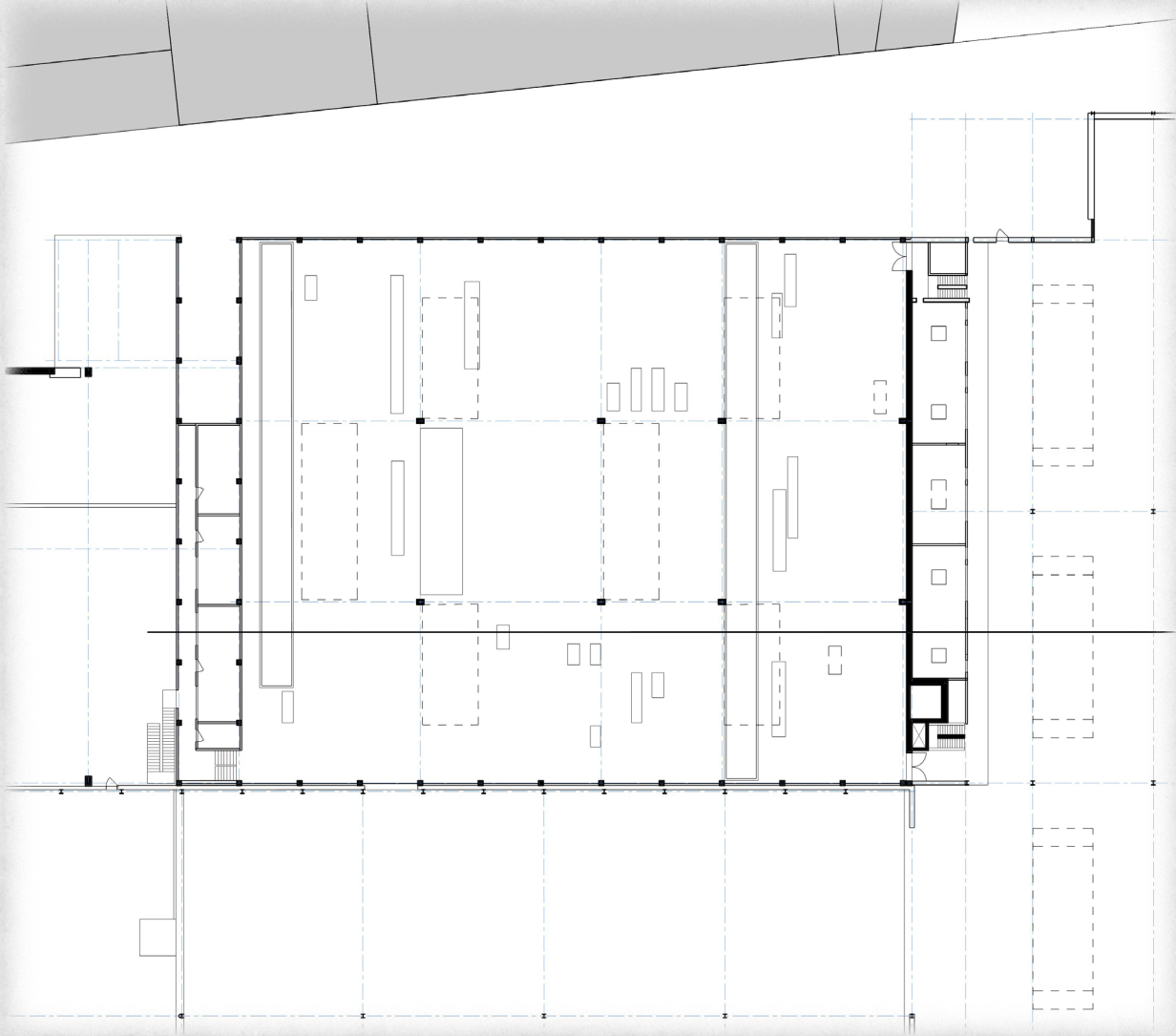
Photo of the concrete hall on groundfloor level with large basins and heavy concrete construction.



Floorplan ground floor existing.



Photo of the concrete hall with a light steel roof and large roof lights; and existing prefab gutters.



Floorplan 1st floor existing.

Water



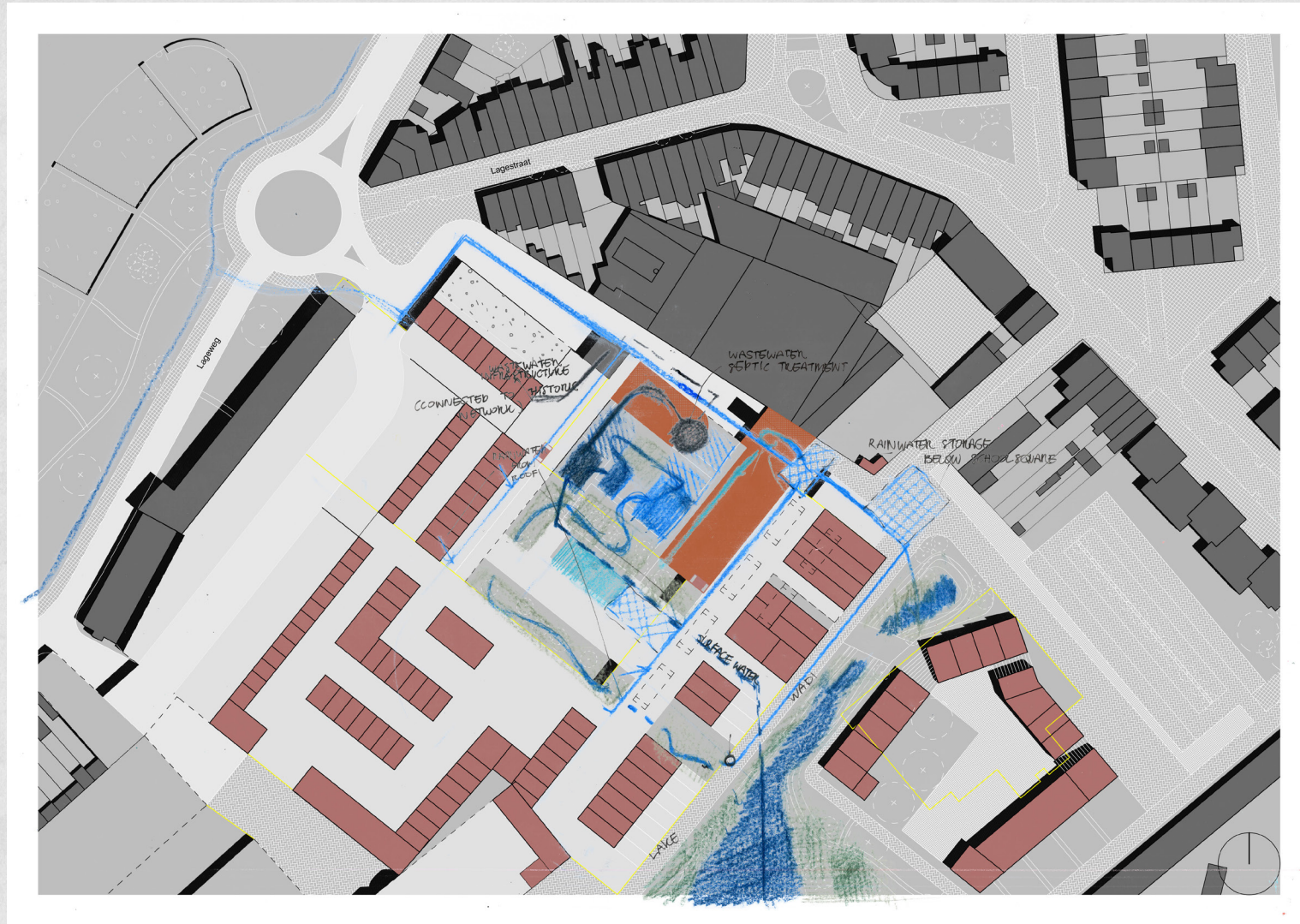
the architecture



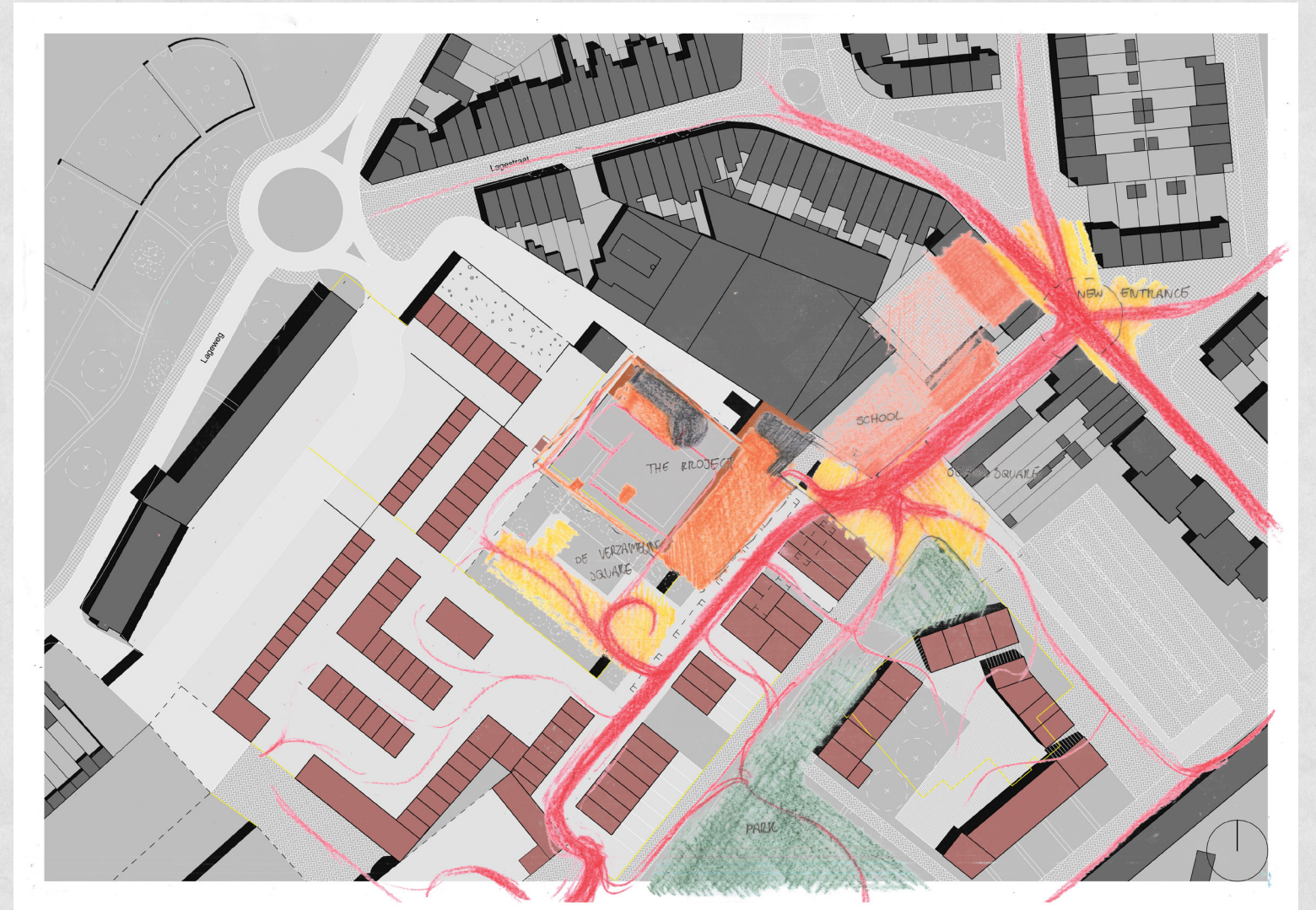
Geology



Humans



Water cycles from the surroundings into the building



Movement of people into the building.

Phase I opening up: surface water treatment, to filter polluted soils and bodies of water in the area.

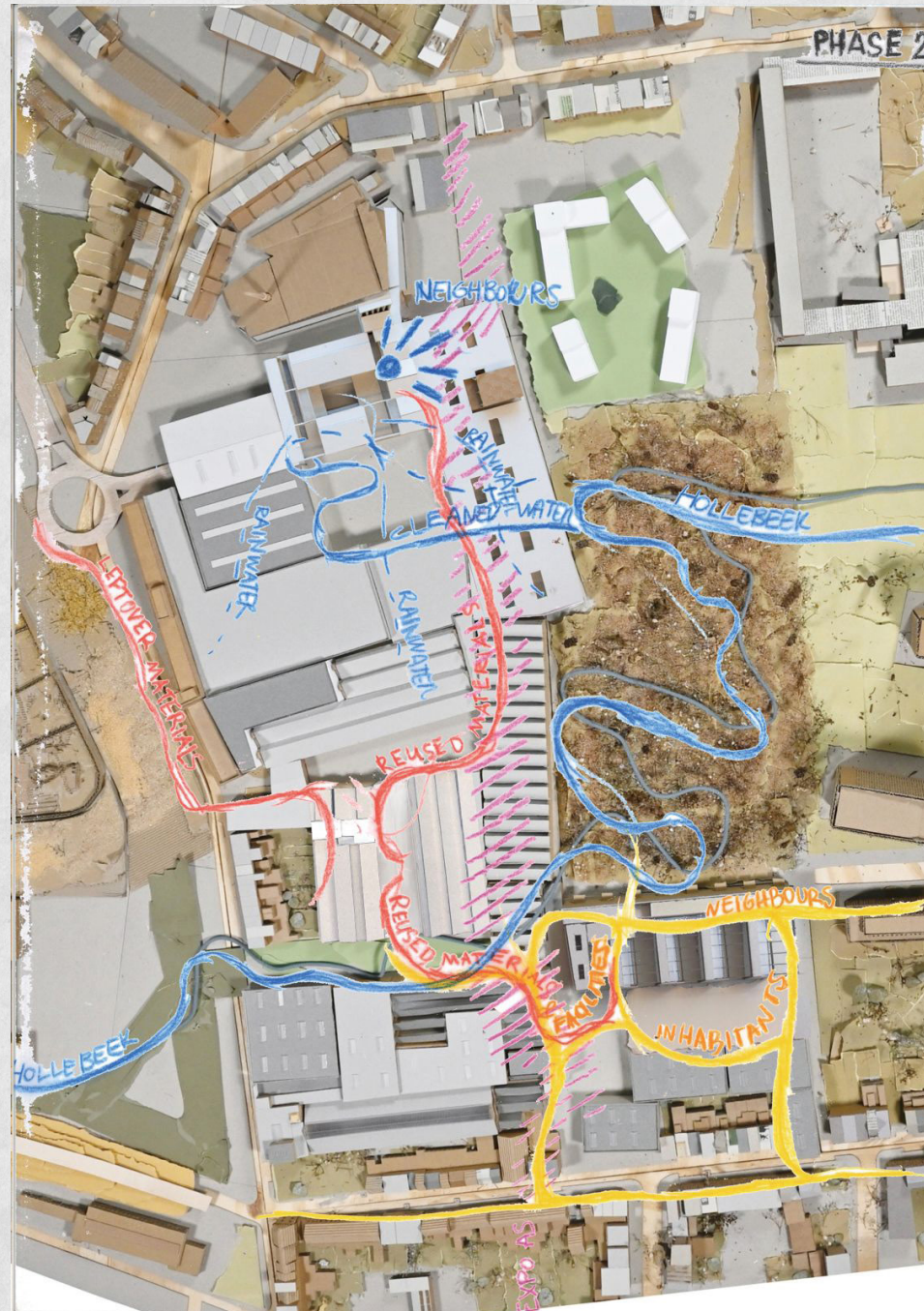


*A drawing showing the combined ongoing of the three architectural project in the masterplan:
Red = herbouwhuis (Raf), a vocational school teaching students how to build with demolition and waste material.
Yellow = gathering (Marianna), a complex of experimental housing and neighborhood facilities.*



Photo of model ground floor

Phase II connecting: Accomodating bathhouse facilities, showers and sauna's for surrounding workshops.



*A drawing showing the combined ongoing of the three architectural project in the masterplan:
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Yellow = gathering (Marianna), a complex of experimental housing and neighborhood facilities.*

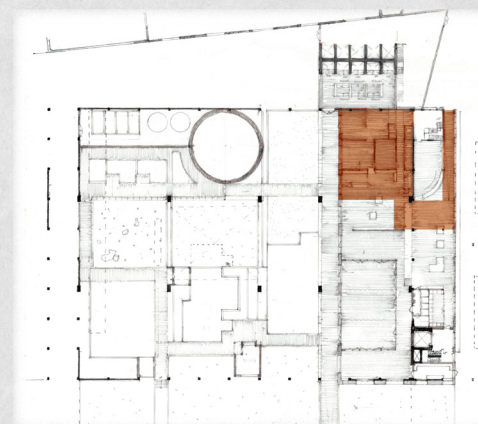
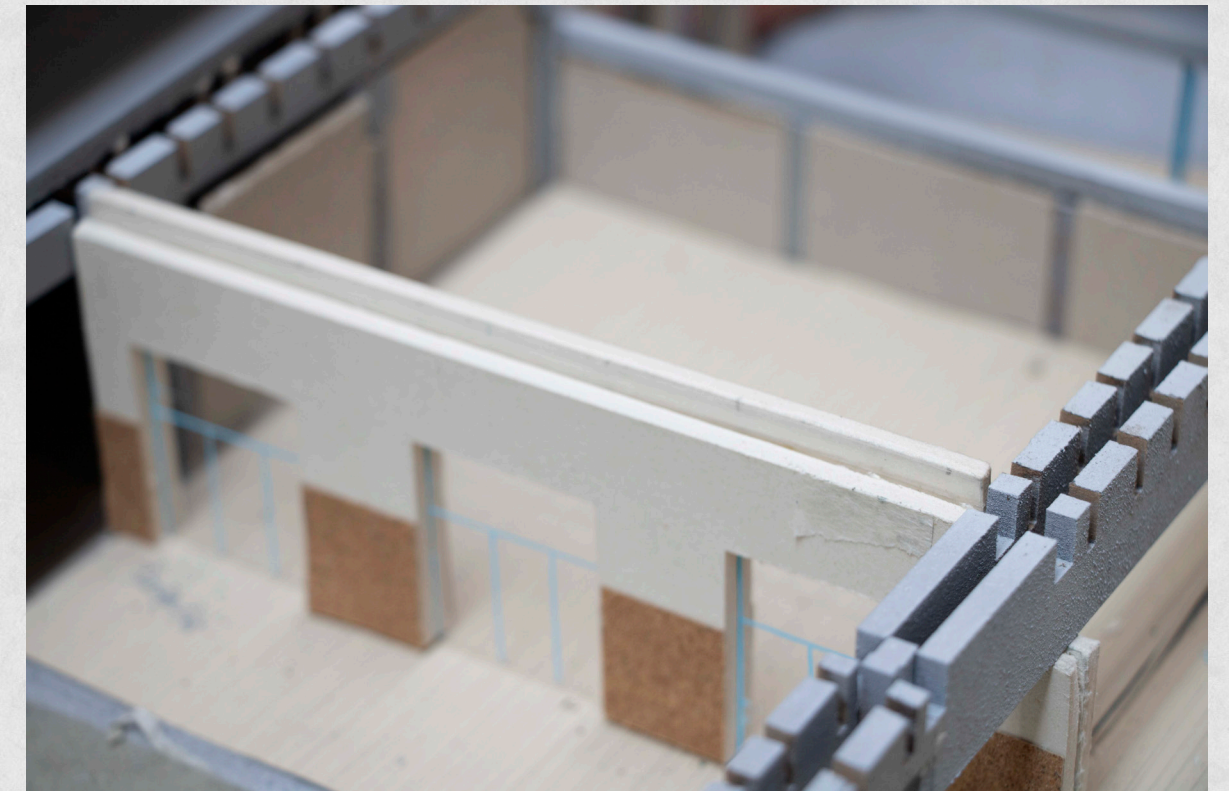
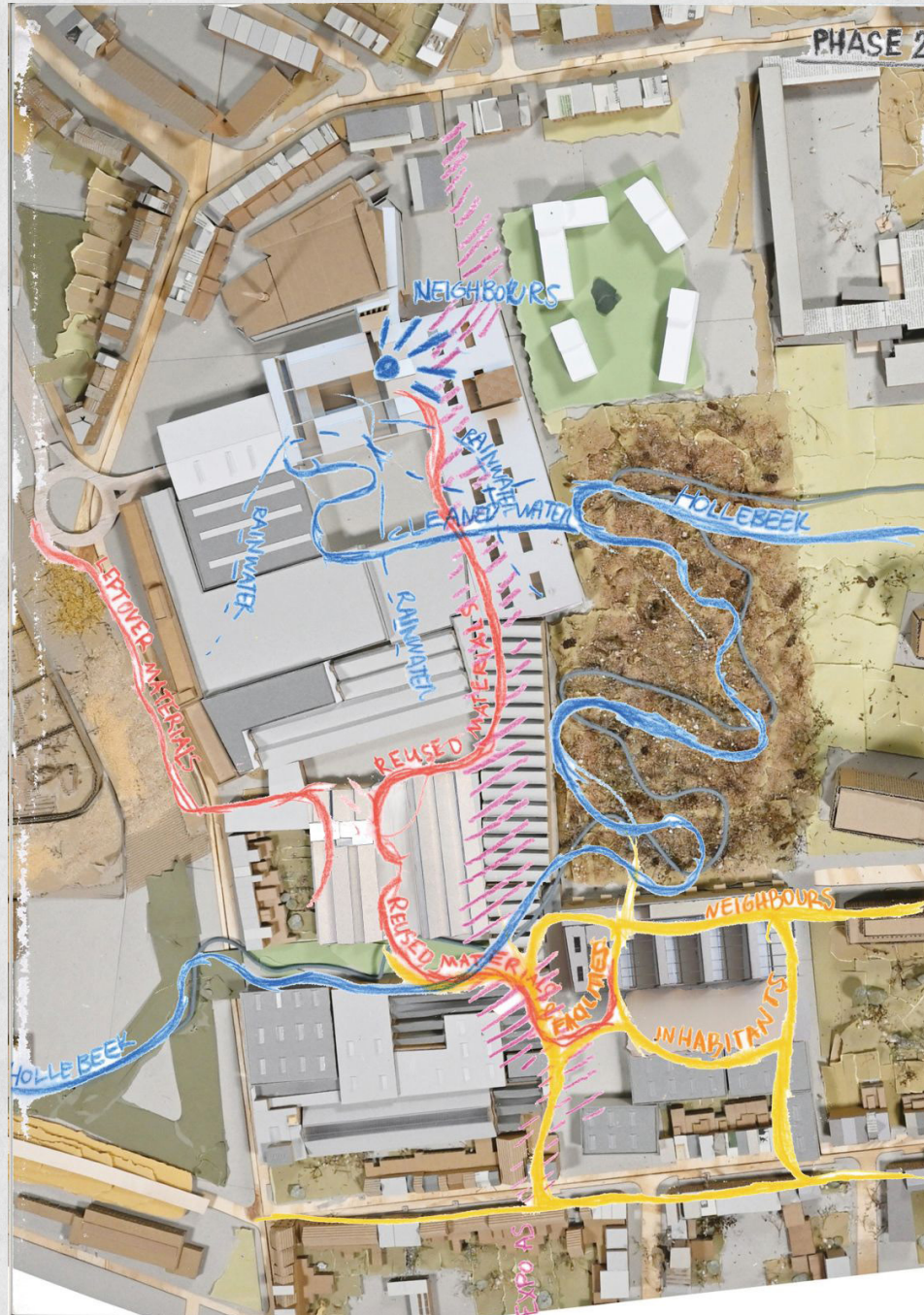


Photo of first bathhouse facilities

Phase II connecting: Involvement in rainwater infrastructure to facilitate potable water to the neighbourhood.

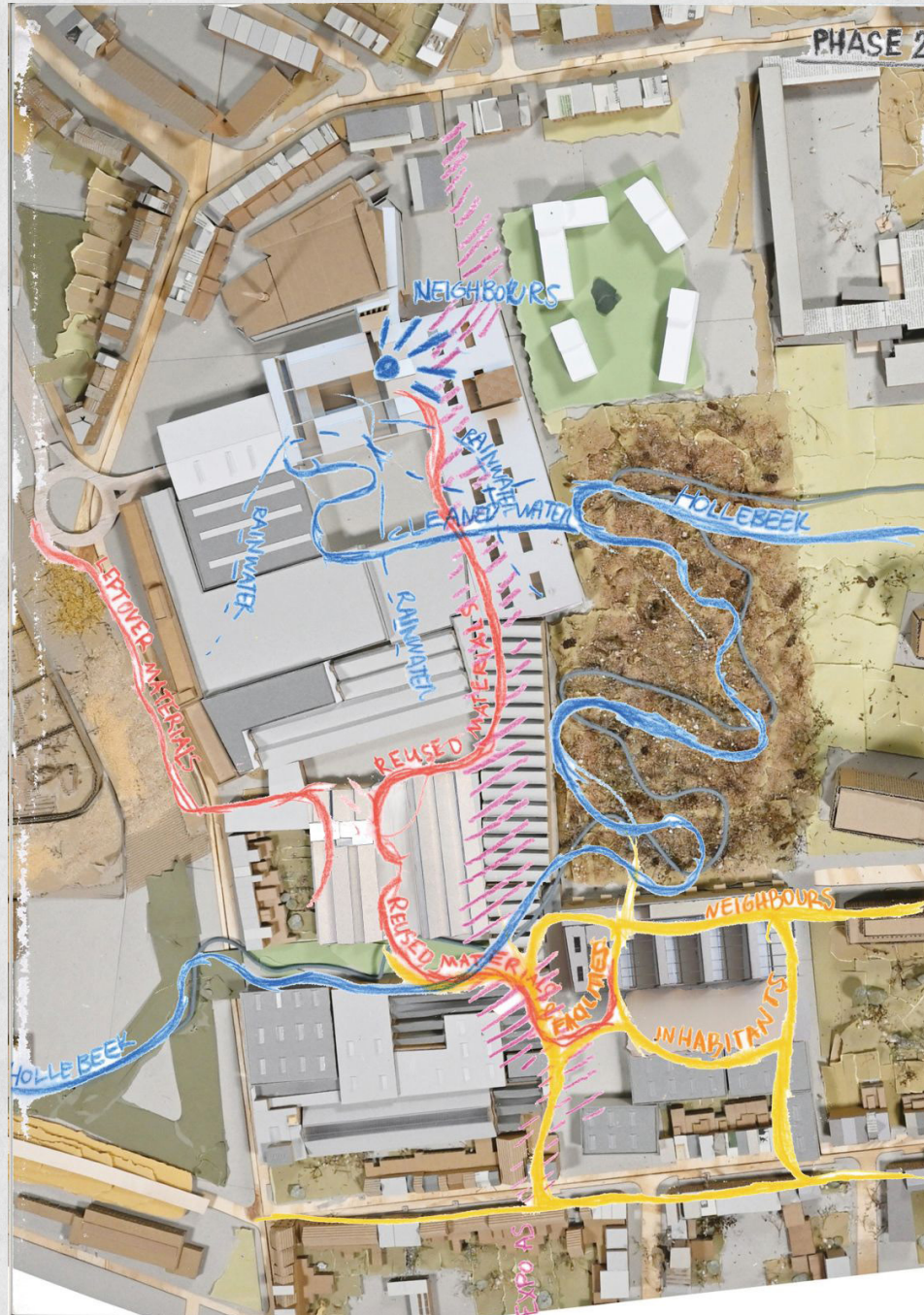


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Photo of model watertower with the water purification facilities underneath in a new extension.

Phase II connecting: And Sewage treatment...



A drawing showing the combined ongoing of the three architectural project in the masterplan:
 Red = herbouwhuis (Raf), a vocational school teaching students how to build with demolition and waste material.
 Yellow = gathering (Marianna), a complex of experimental housing and neighborhood facilities.



Photo of model watertower with the water purification facilities underneath in a new extension.

Phase III growing: A courtyard of housing on the first floor.



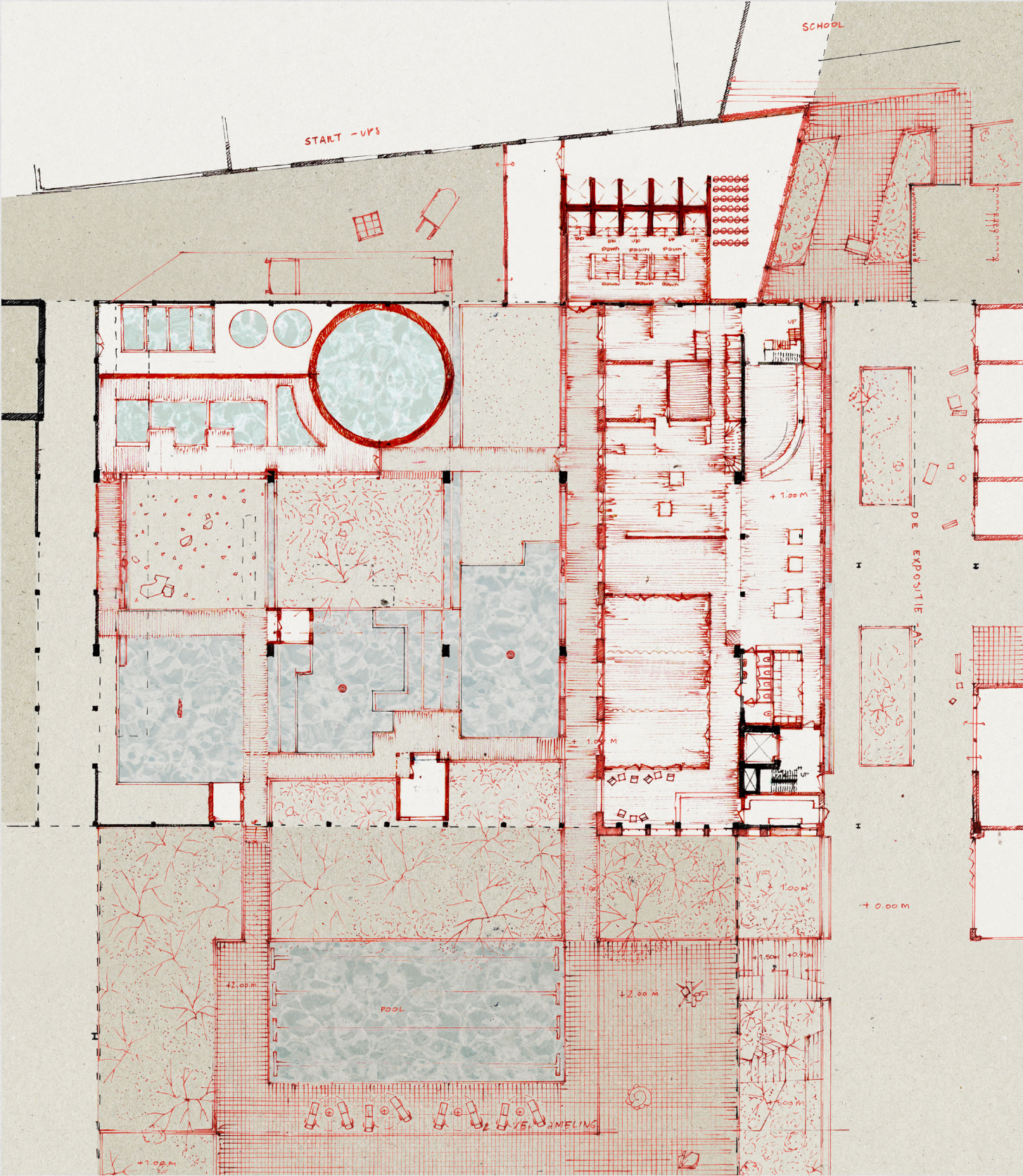
Photo of model constructing the courtyard.

Phase III growing: Bathhouse expansion with more developed facilities, such as baths, café and programmable space.



Four buildings:

- Hammam
- Sauna's
- Baths
- Main building



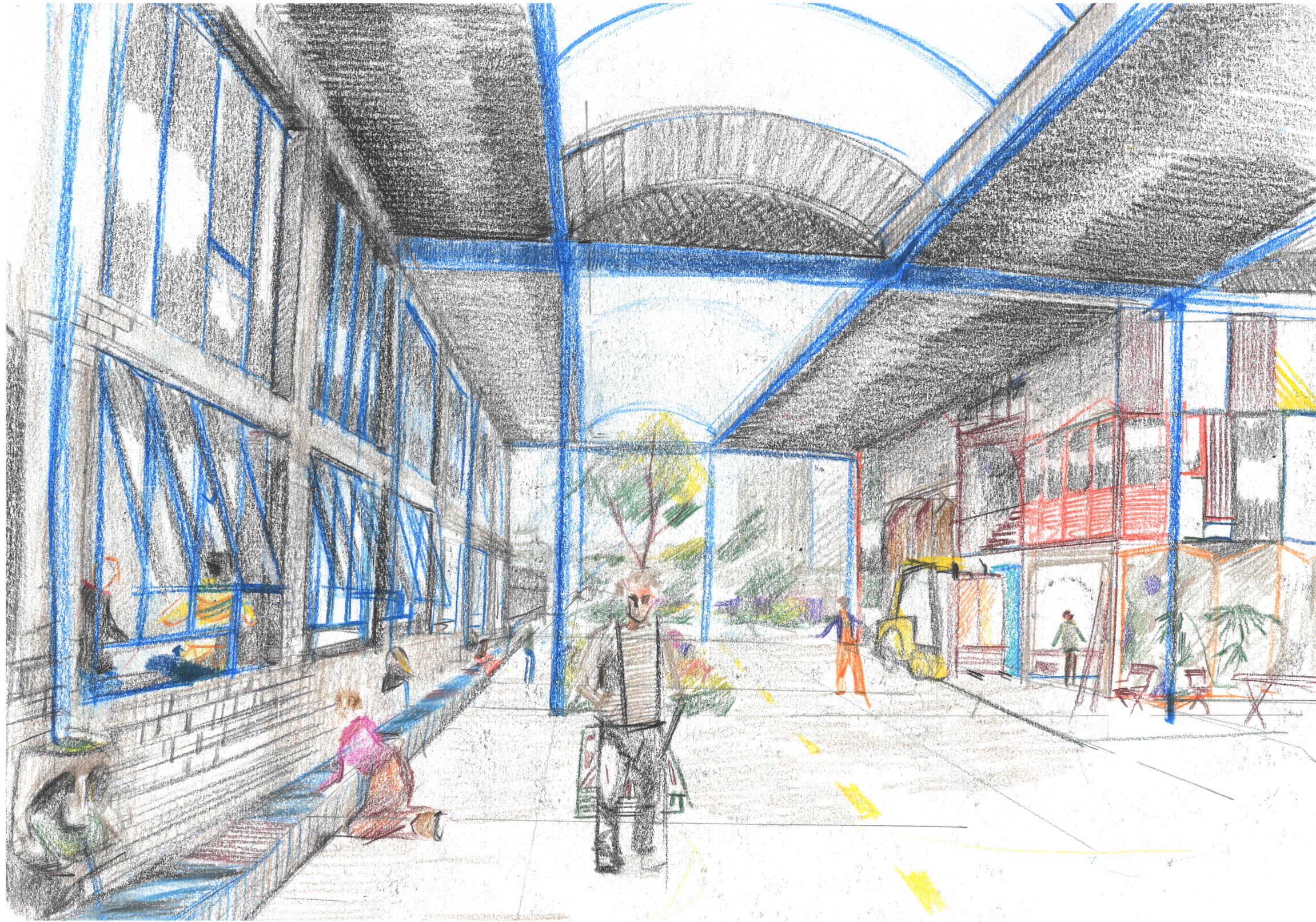
Plan of the
groundfloor 1-200



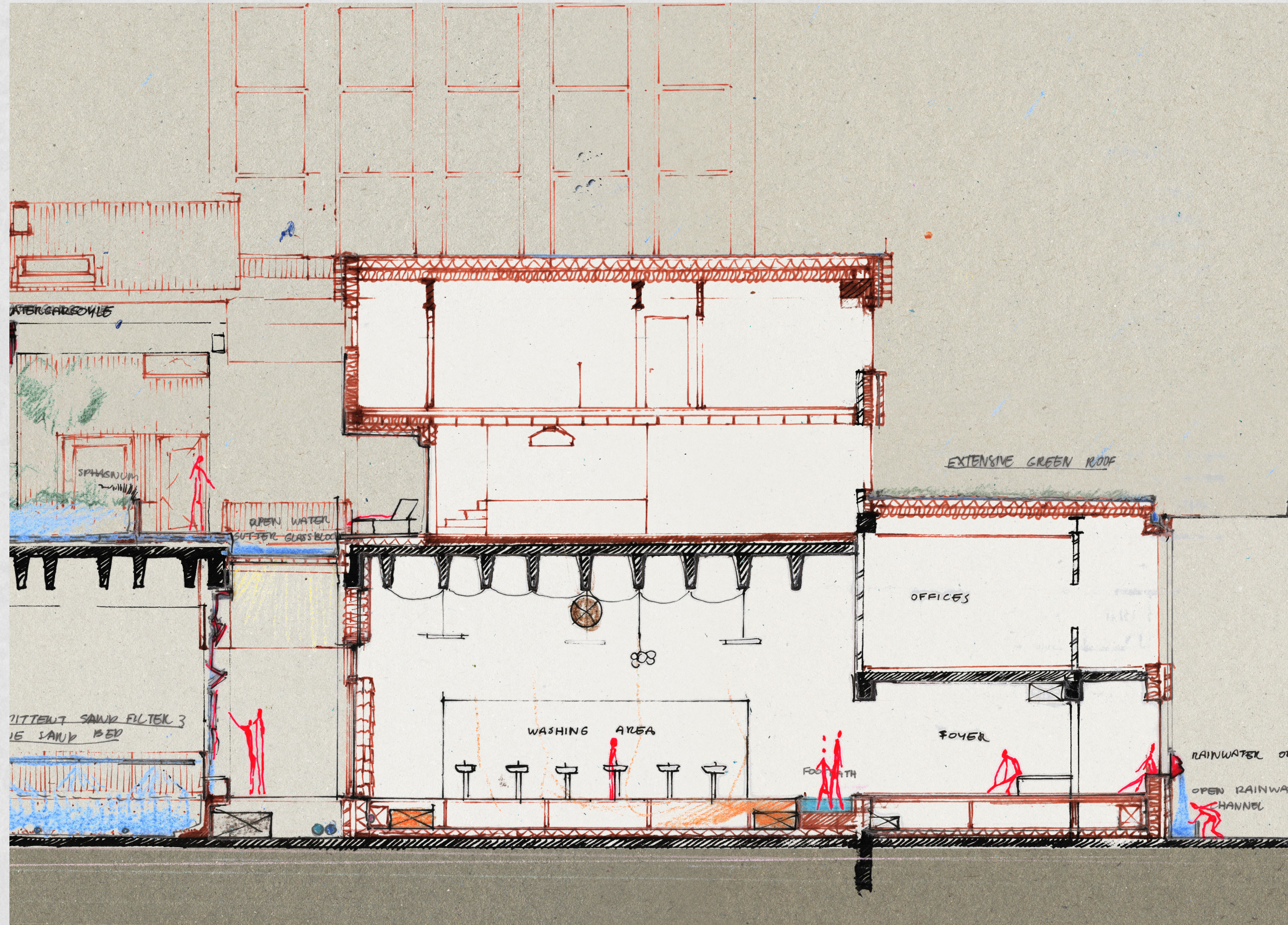
*Parents taking
their children
from school at
the schoolsquare
underneath the
characteristic
watertower.*



*Southeastern
elevation, brown
beads represent
a space for
ornaments
made by artists.*



*Perspective
drawing along
the bathhouse
façade.*

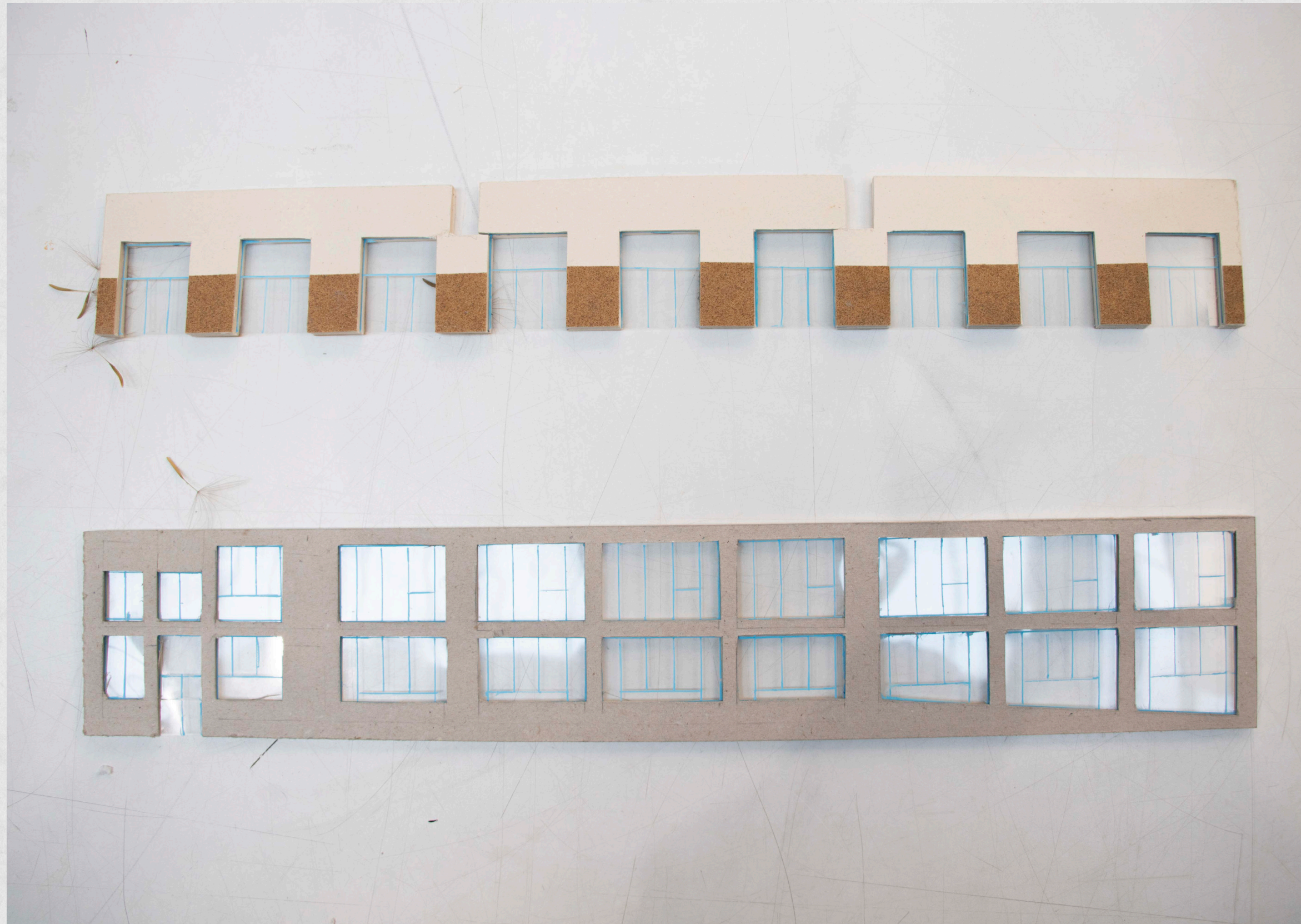


Zoom in of
section B.

Expositie-as

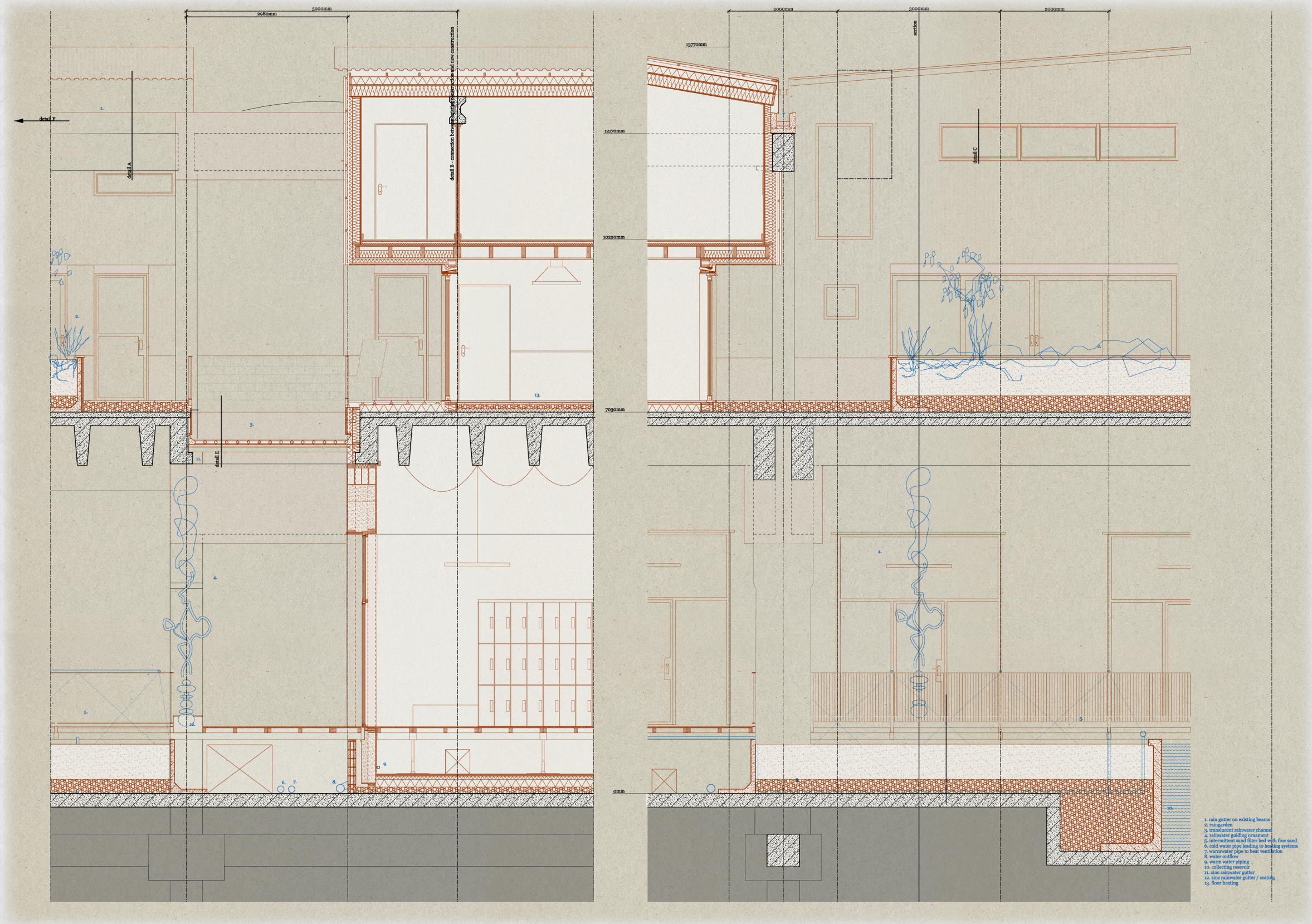


*Perspective from
foyer towards
filtration
garden.*

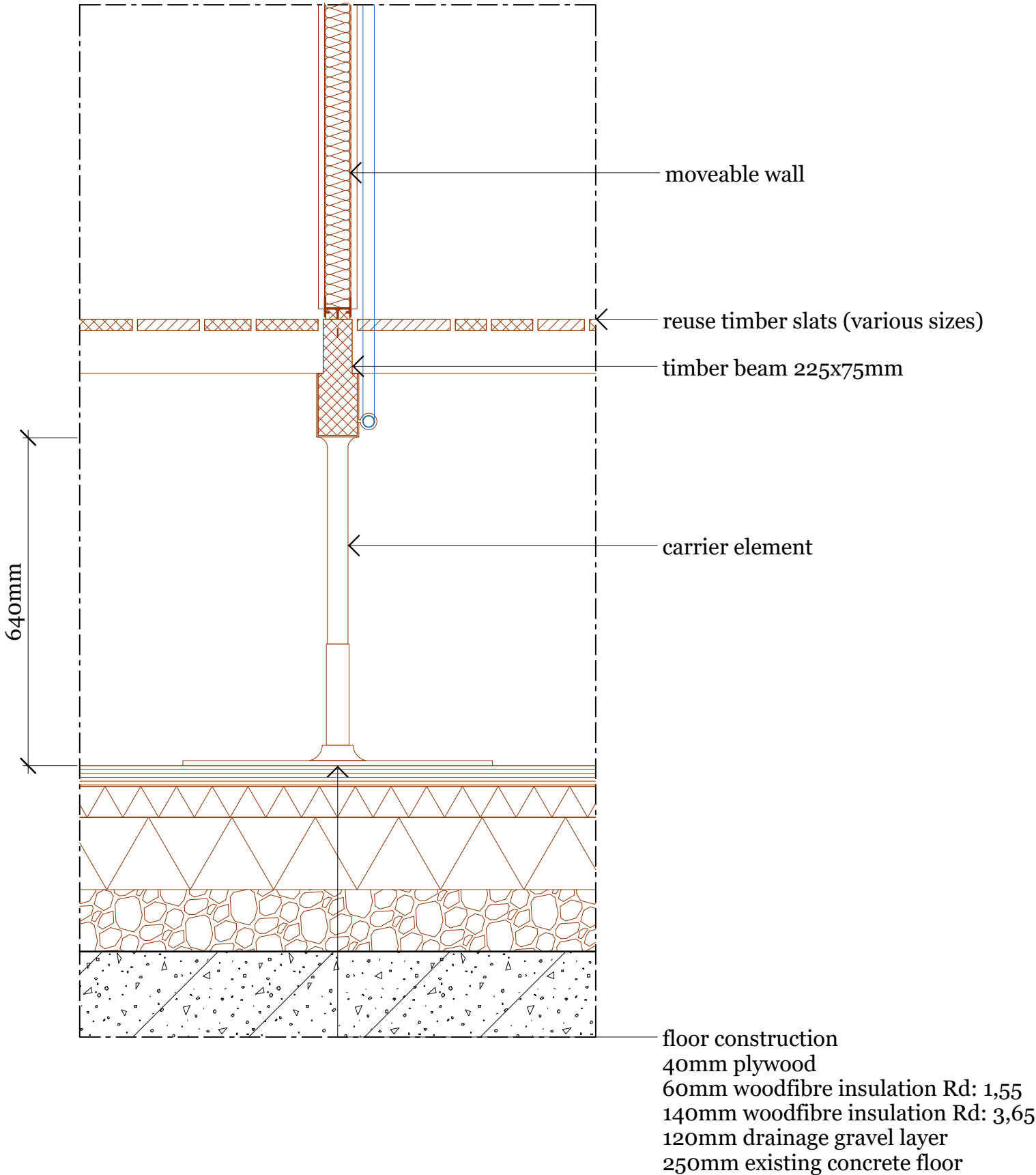


*Elevation of the
interior façade
compared to the
exterior façade.*

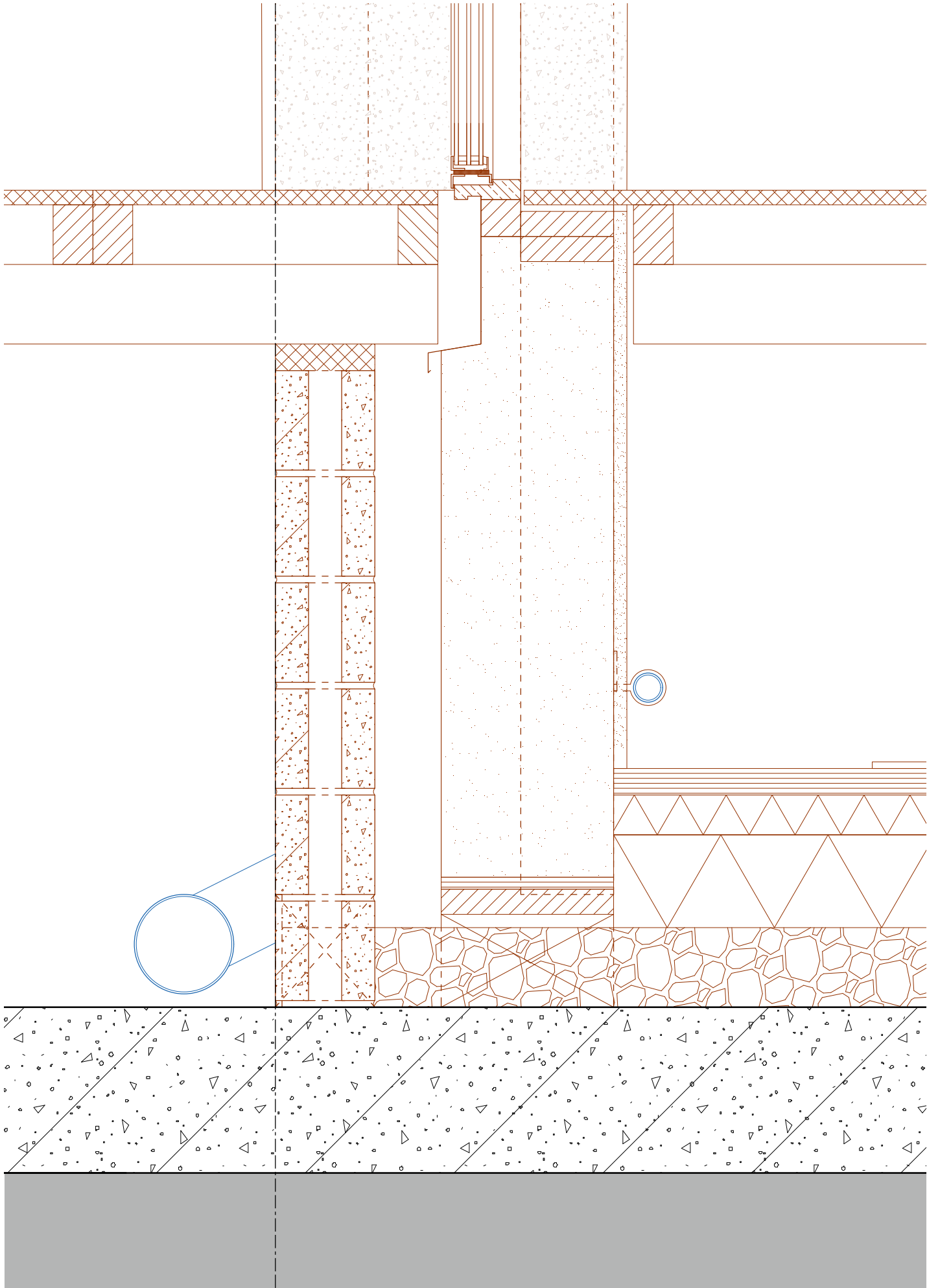
Elevation of the
interior façade
compared to the
exterior façade.



Detail D



Detail G
floor to wall
connection

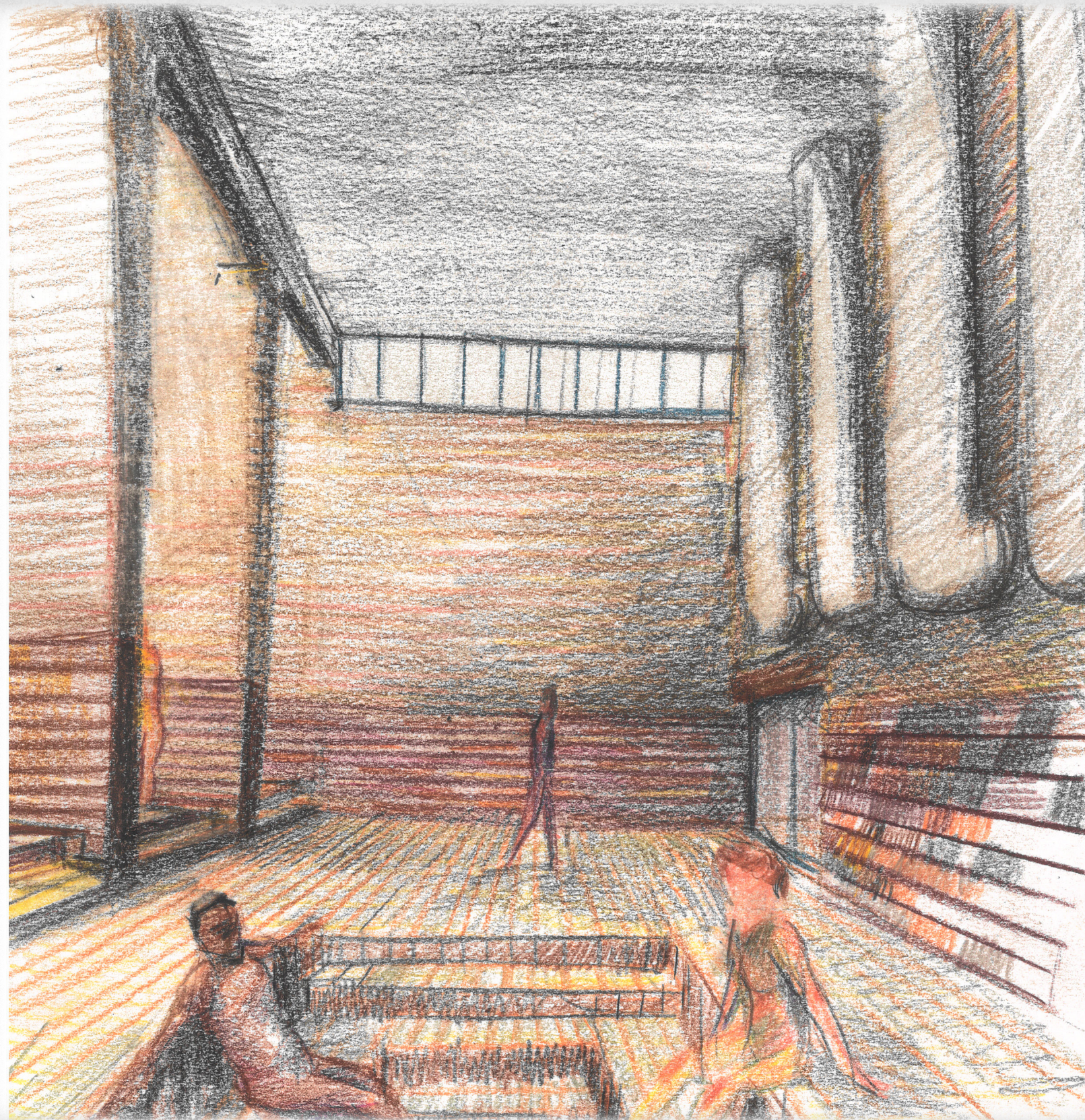


Floor construction
40mm multiplex
60mm woodfibre insulation Rd: 1,55
140mm woodfibre insulation Rd: 3,65
120mm draining gravel
250mm concrete

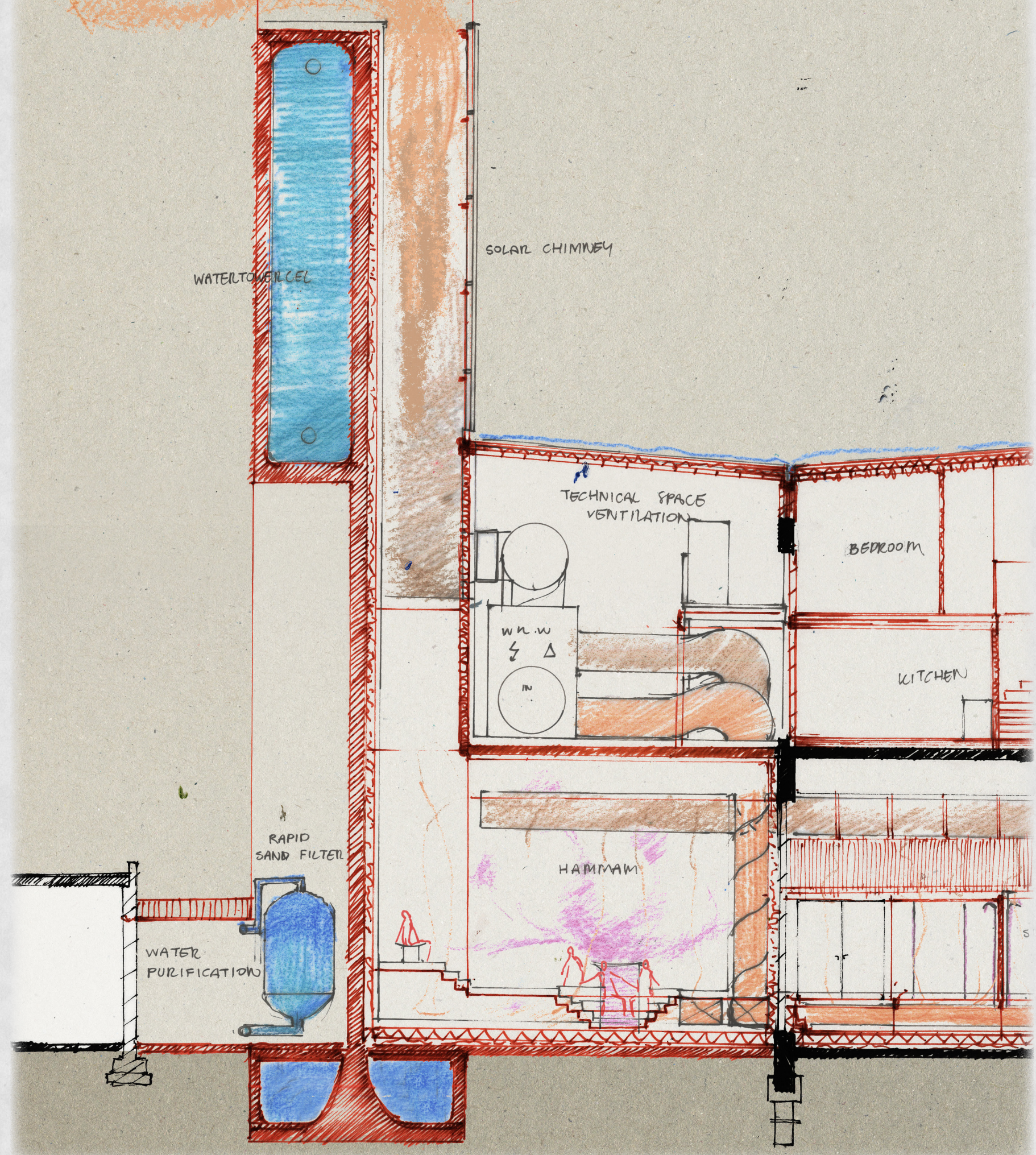
Detail D
showing
raised floor
construction.



*Coloured pencil
drawing of the
walkway along
the interior
façade.*



*Coloured pencil
drawing of the
Hammam.*



1:100 section
through the
Hammam



*Photograph of
bathing facility
façade in model*



*Photograph
of the model
showing sauna's
hidden in the
filtration garden*

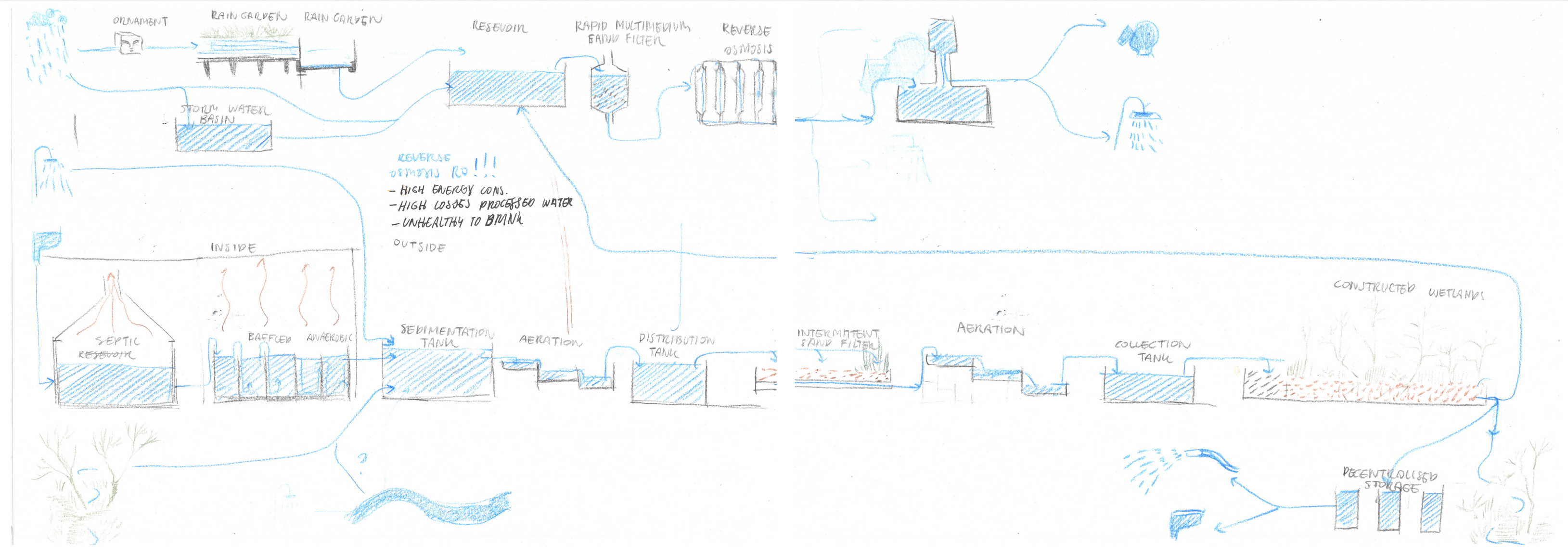
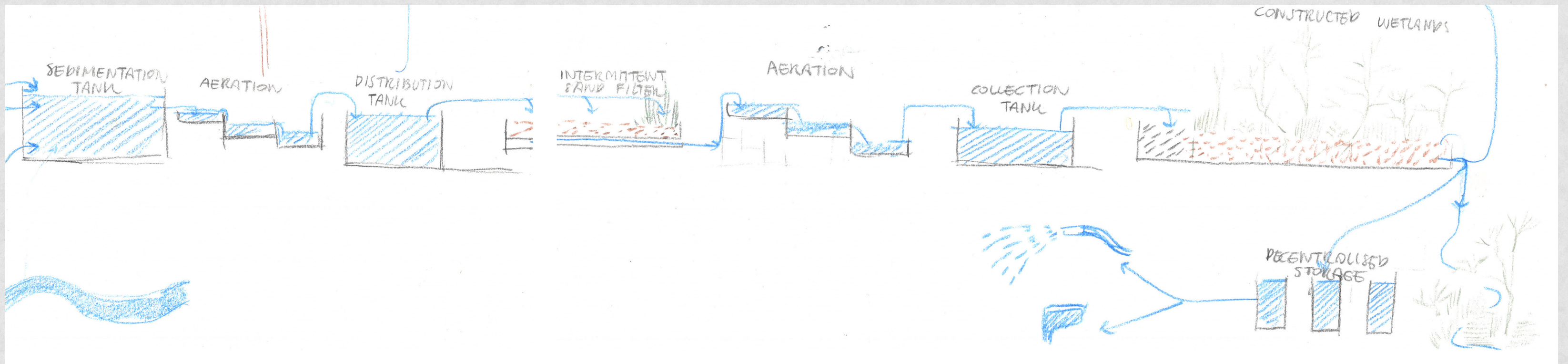
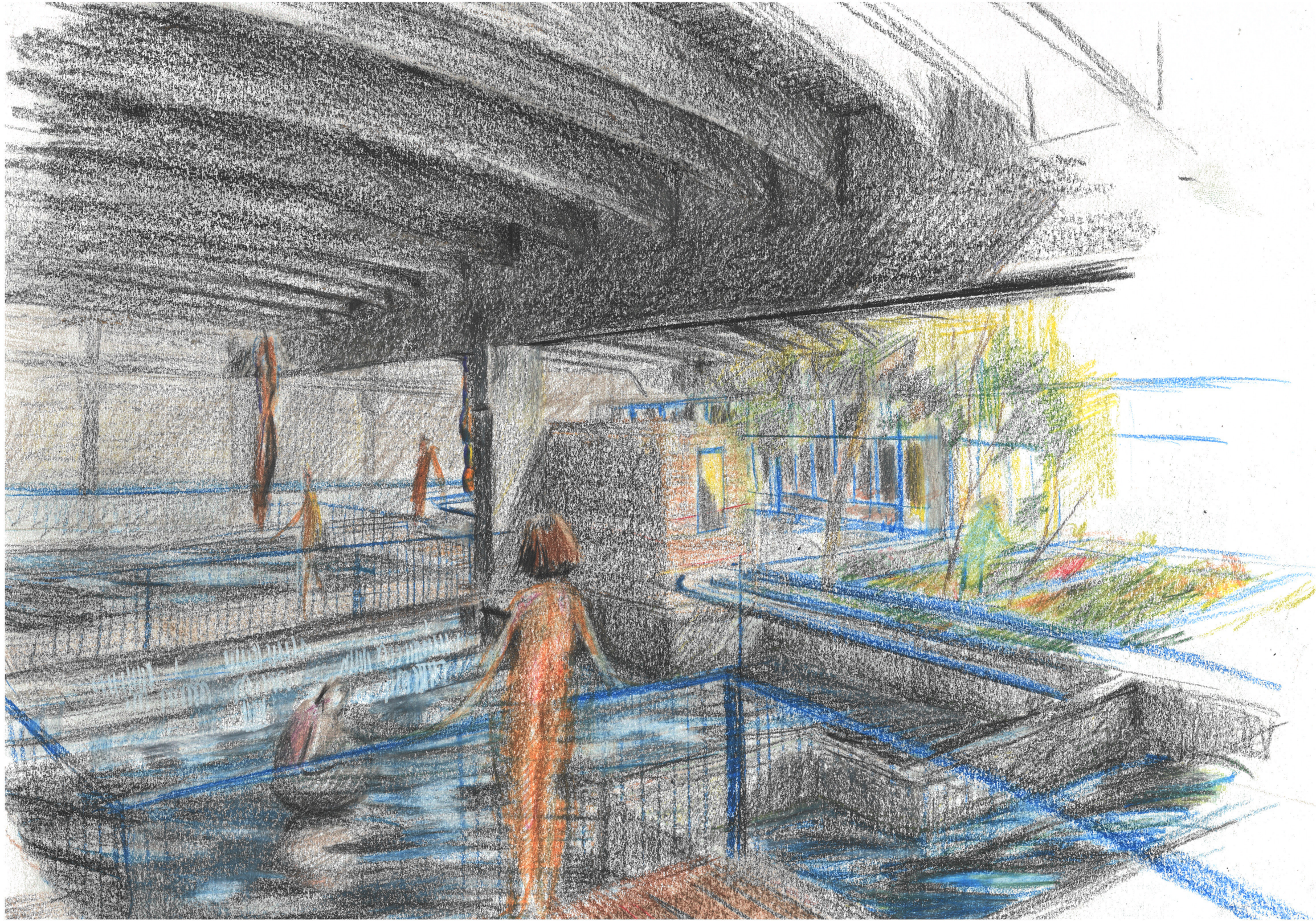


Diagram of the three different systems of water filtration.

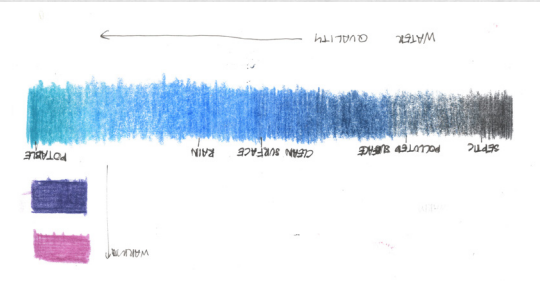
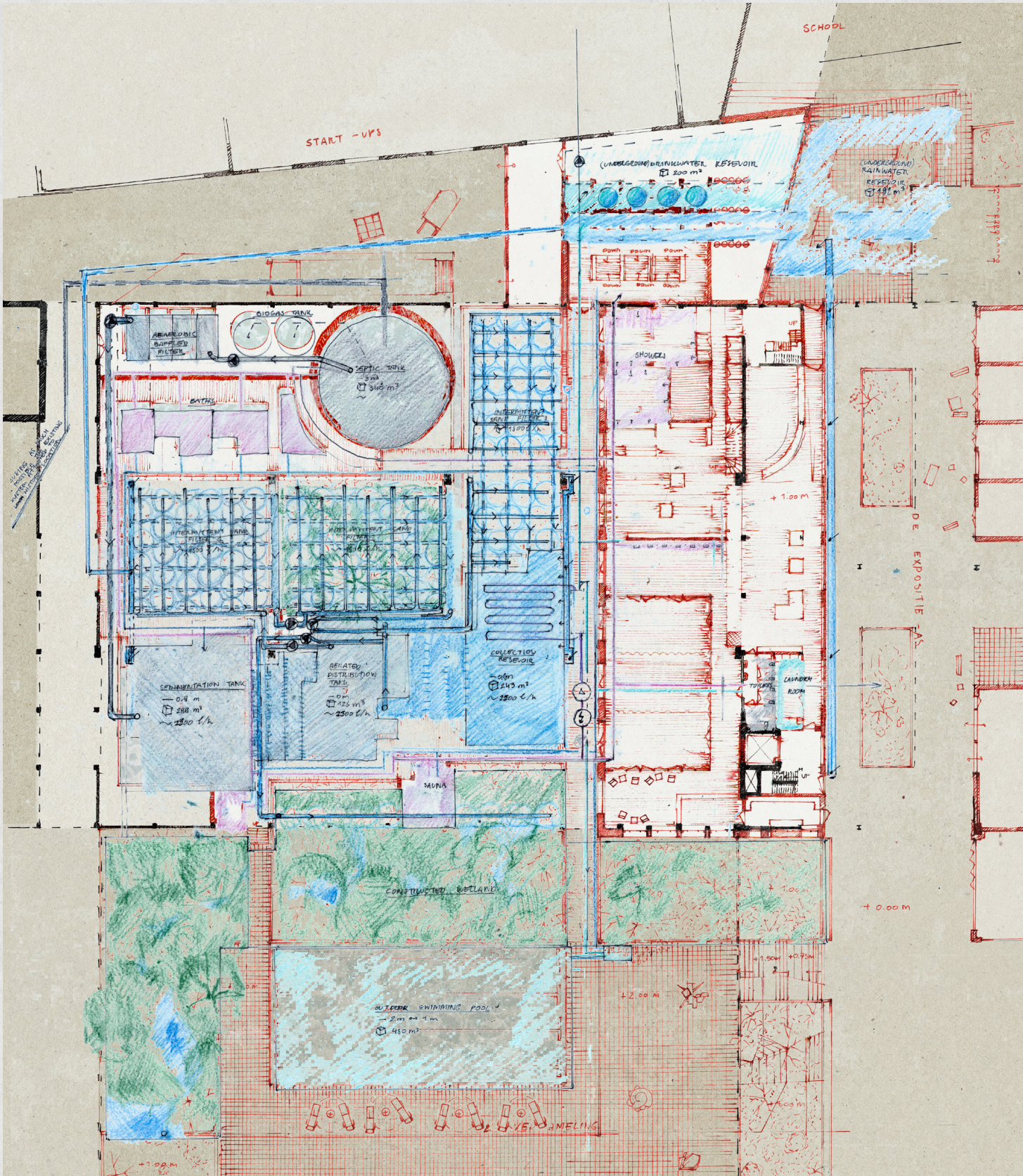


*Elements of the
surface water
filtration.*

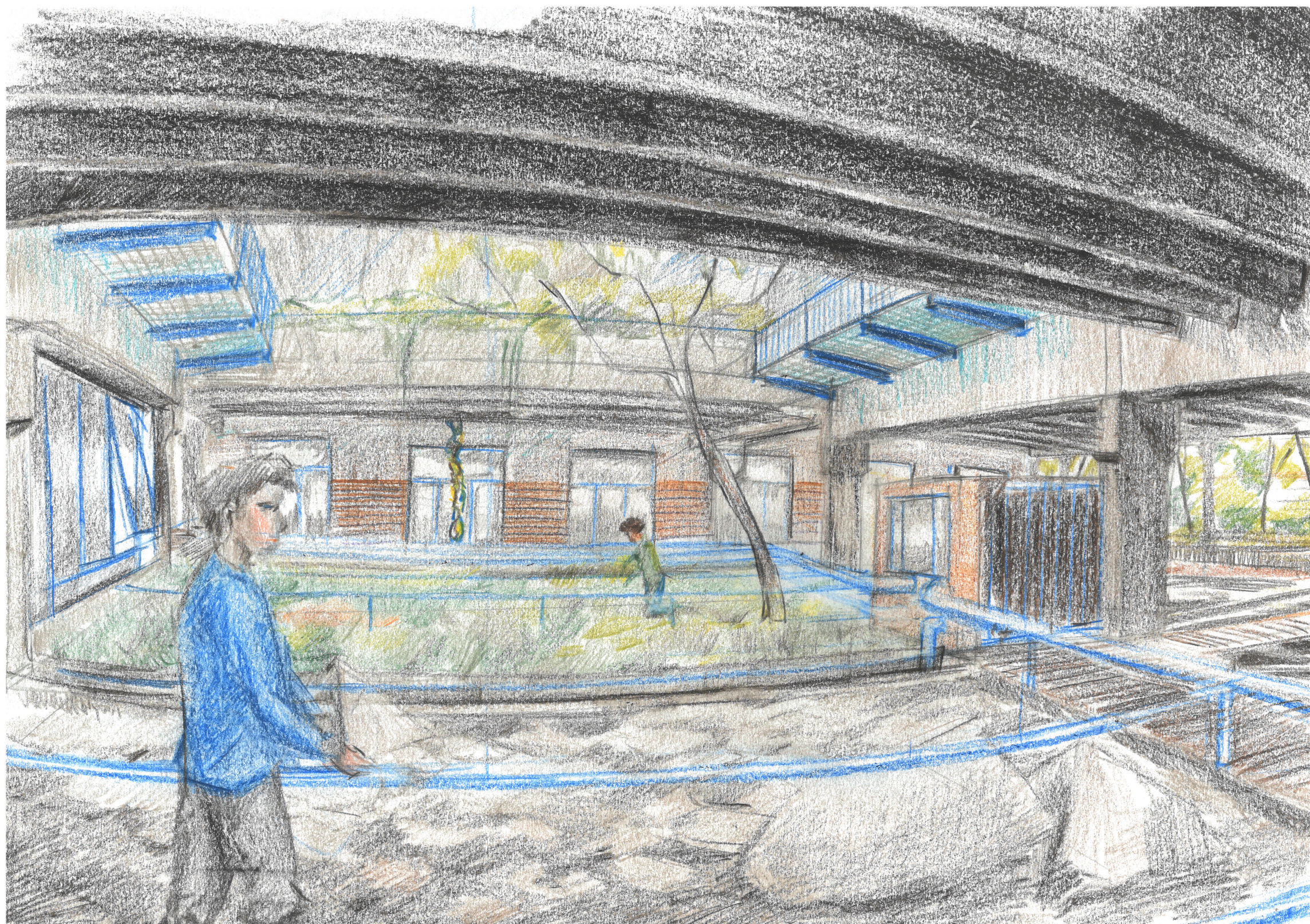
Perspective showing the water filtration garden, the installations such as the cascades bring a serene atmosphere for the bathhouse visitors.



Filtration Garden & Treatment Plant

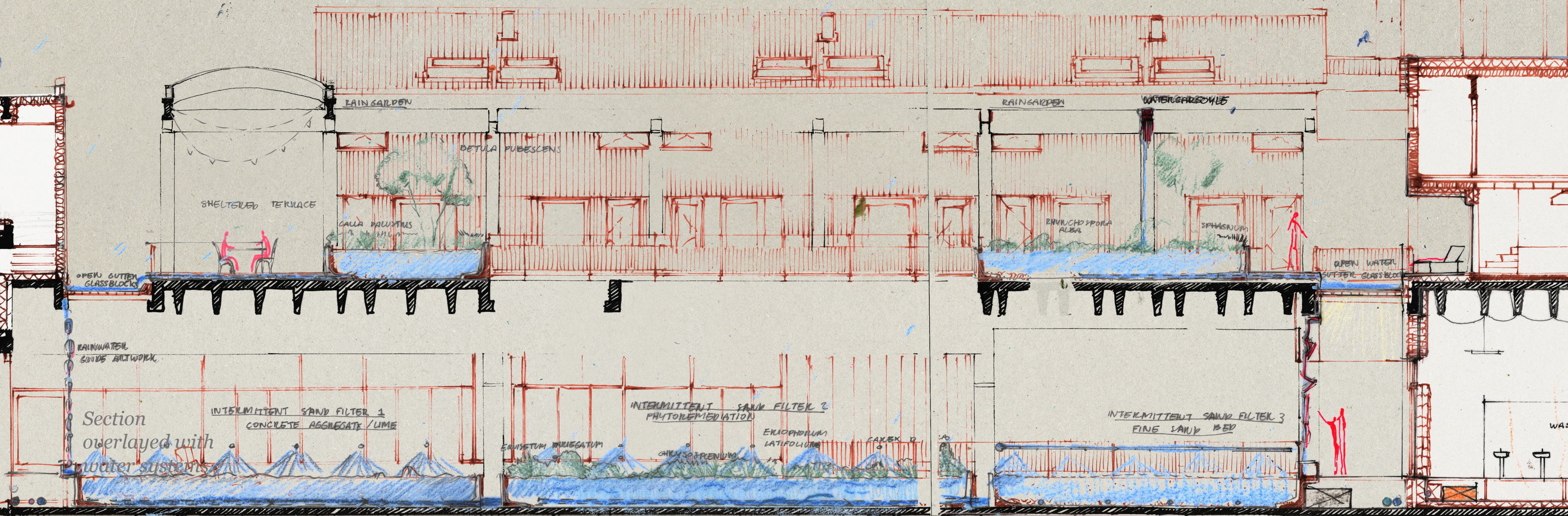


Plan with overlayment of waterfiltration system.

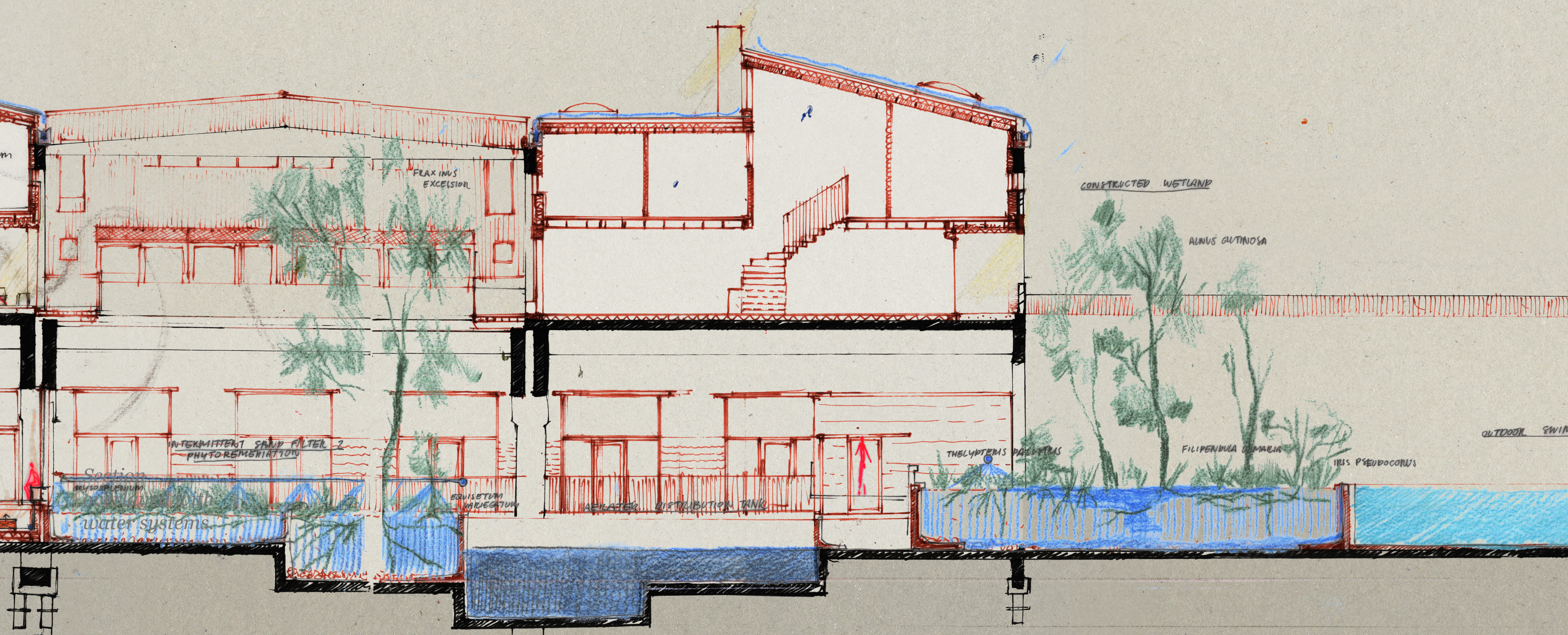


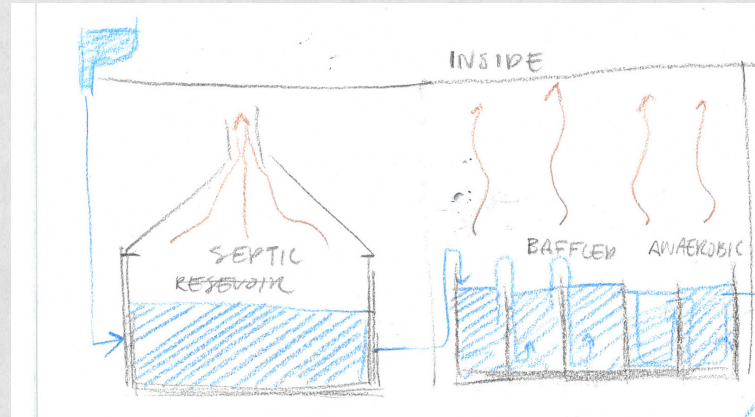
*Maintenance on
the sand filters
before opening
hours.*

Filtration Garden & Treatment Plant



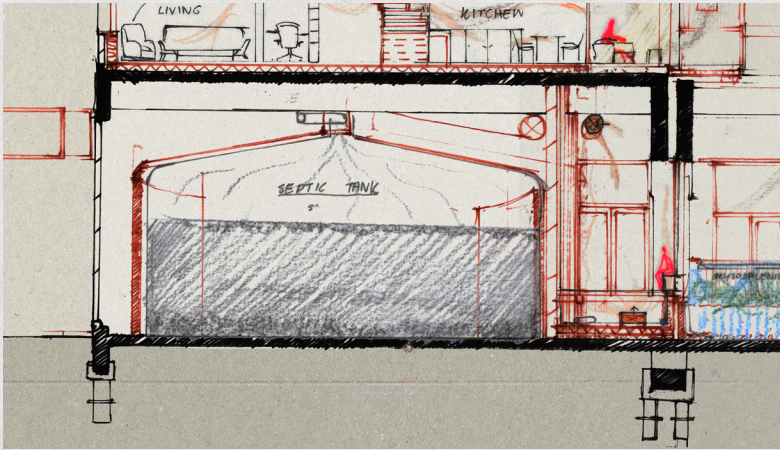
Filtration Garden & Treatment Plant



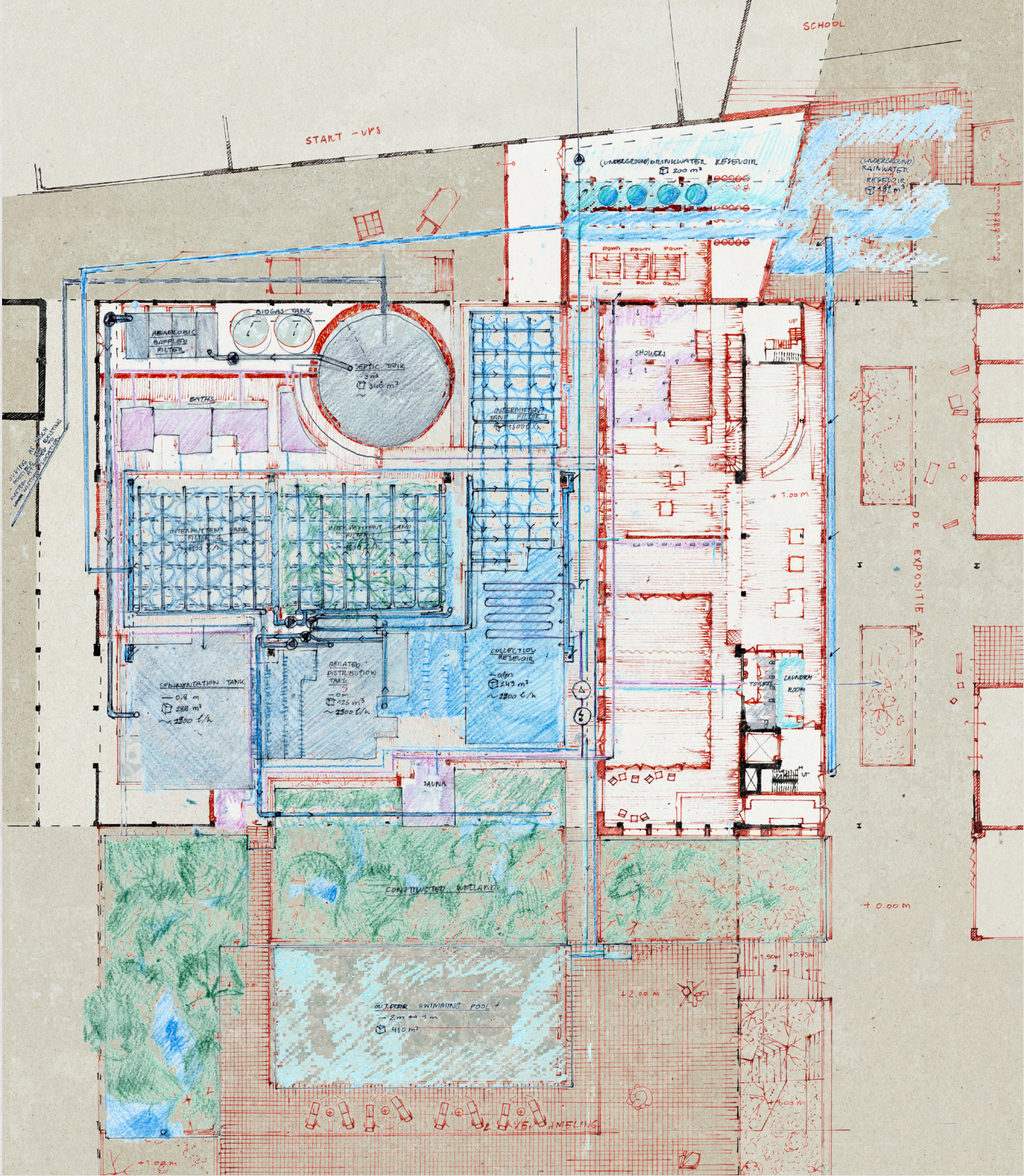


*Photo of the
model of the
wastewater
treatment
building.*

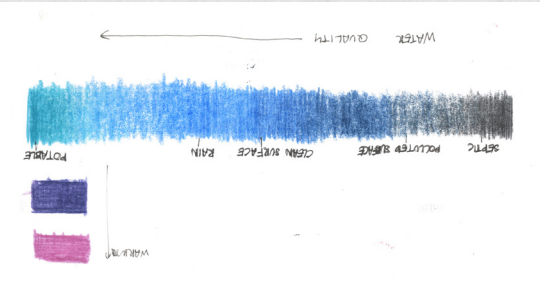
Filtration Garden & Treatment Plant



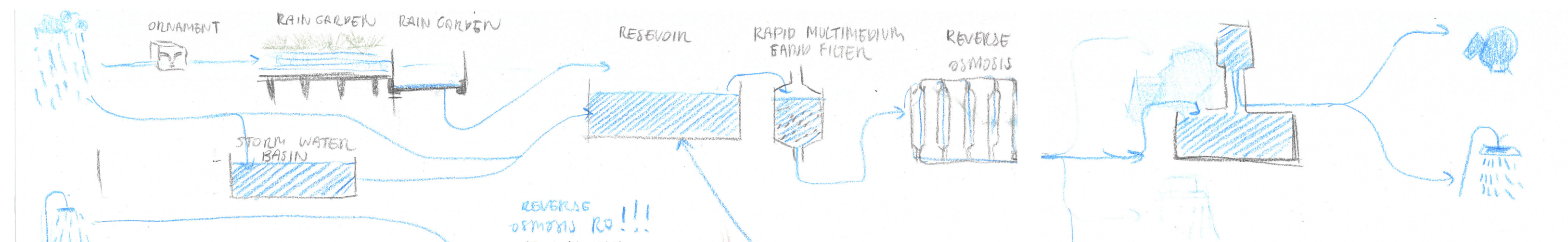
Septic tank in section.



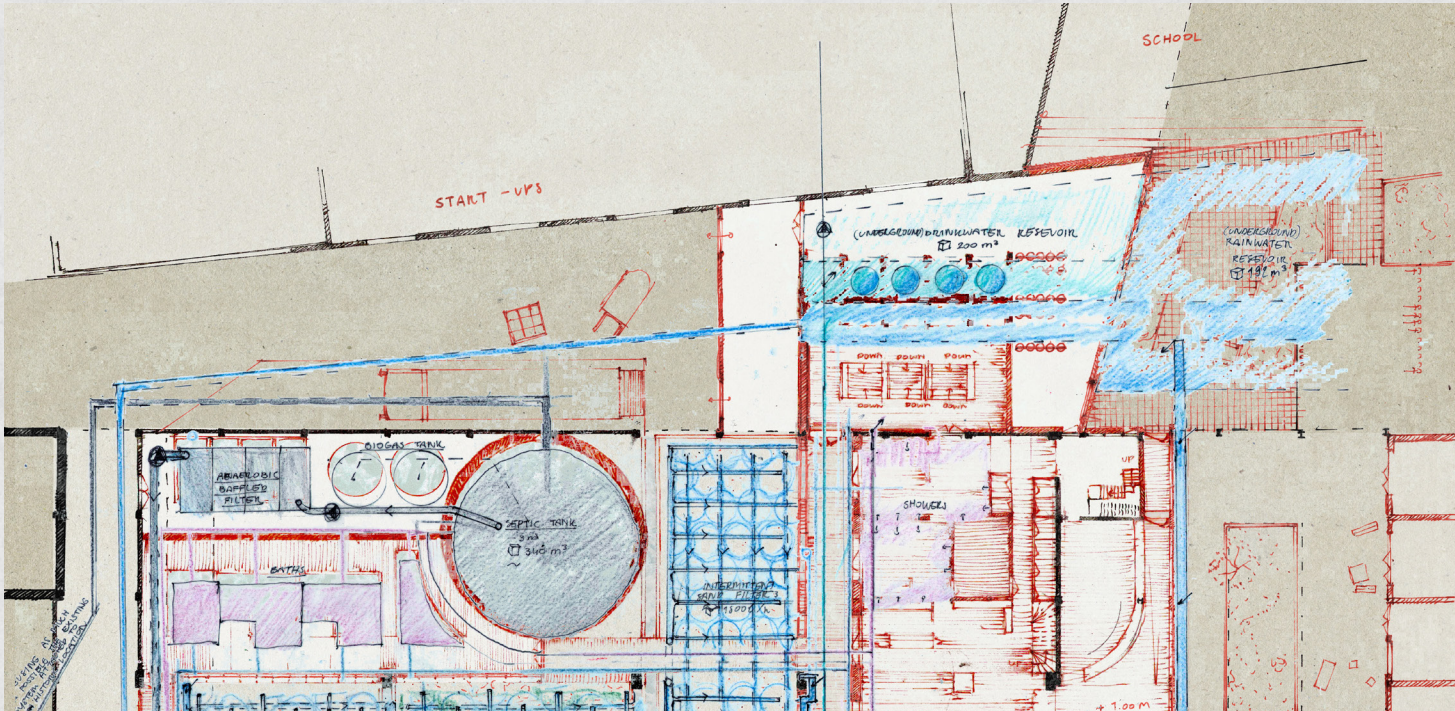
Plan with overlayment of waterfiltration system.



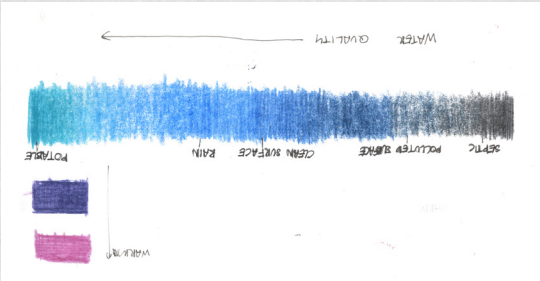
Filtration Garden & Treatment Plant



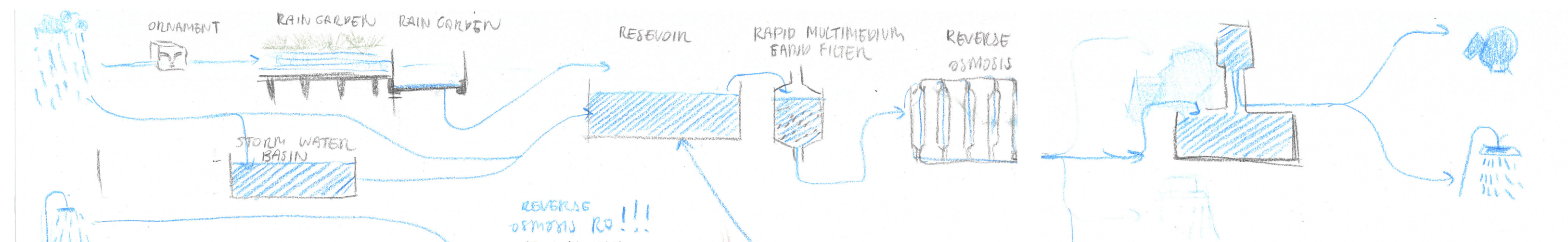
Rainwater
purification
system.



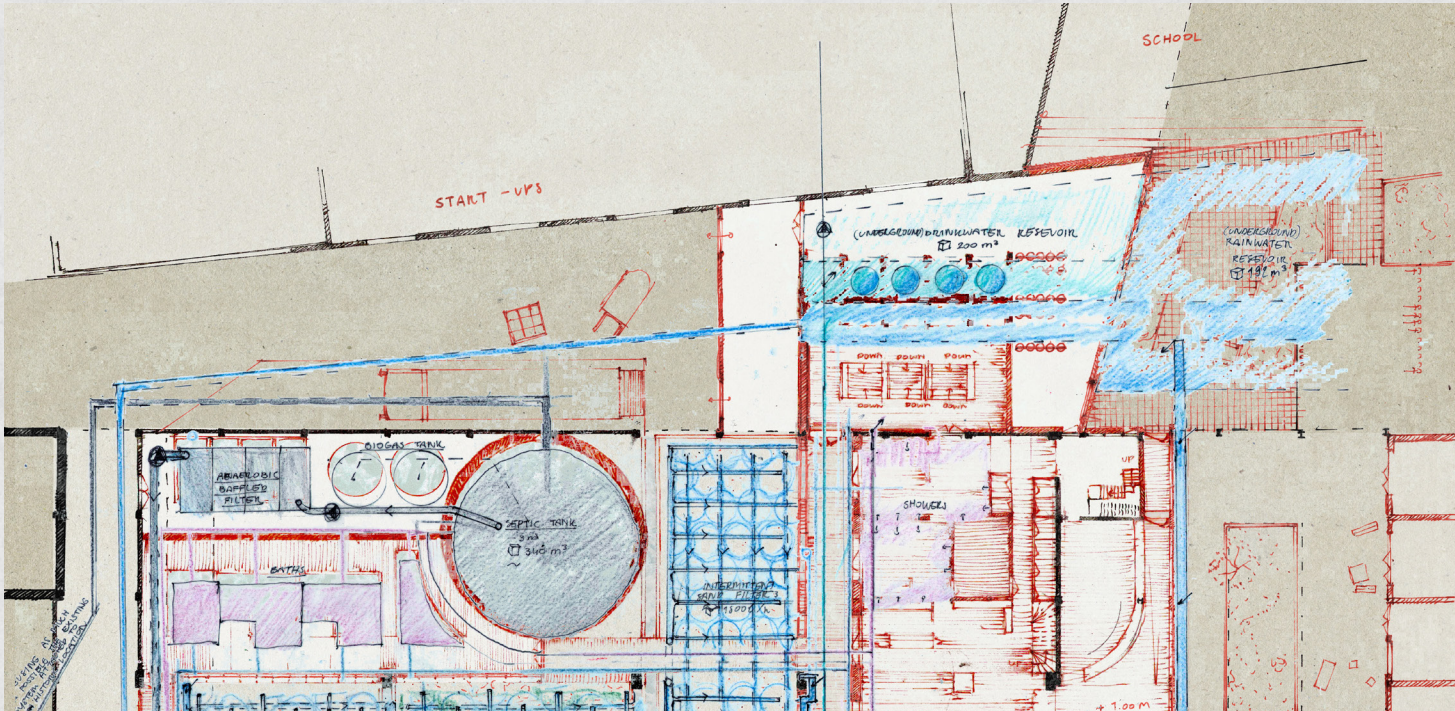
Plan with
overlayment of
waterfiltration
system.



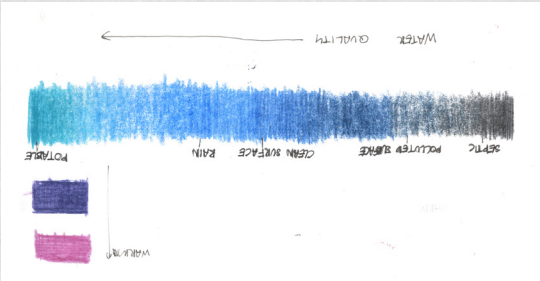
Filtration Garden & Treatment Plant



Rainwater
purification
system.



Plan with
overlayment of
waterfiltration
system.





*Photo in model
of the courtyard
of housing.*

*Photo in model
of the entrance
on street level to
the courtyard.*

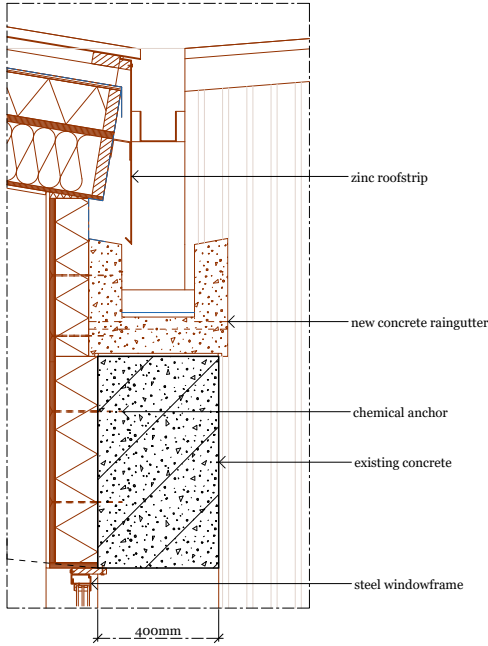


*Plan of the 1st
floor.*

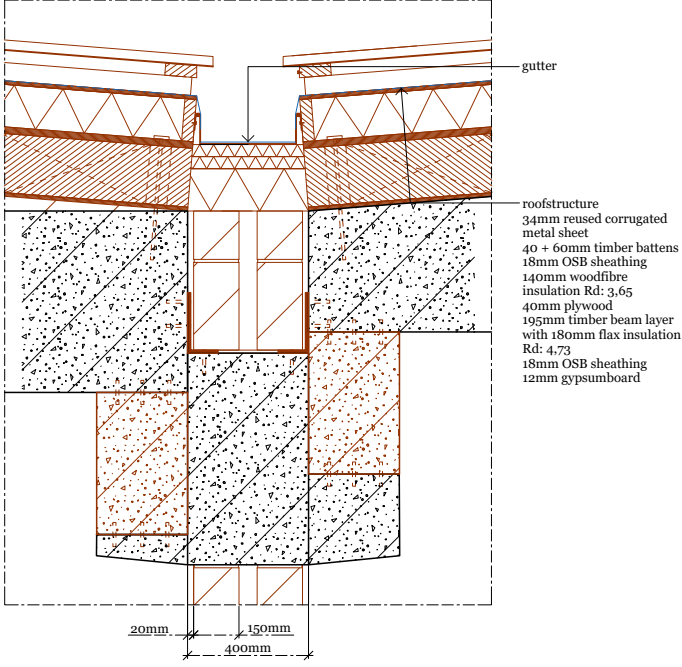


Perspective sketch depicting placement of the ornament in the courtyard.

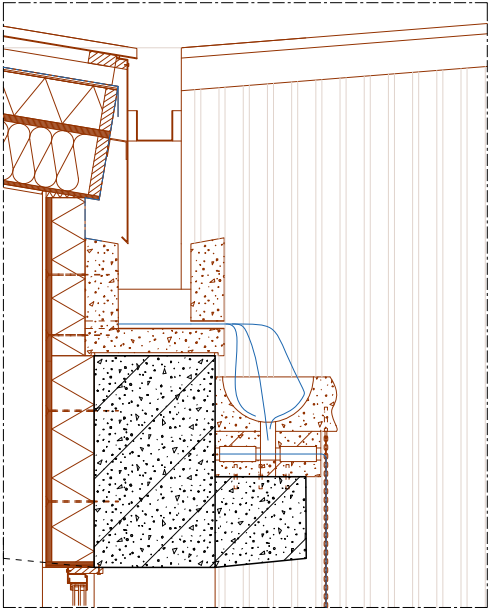
Detail A



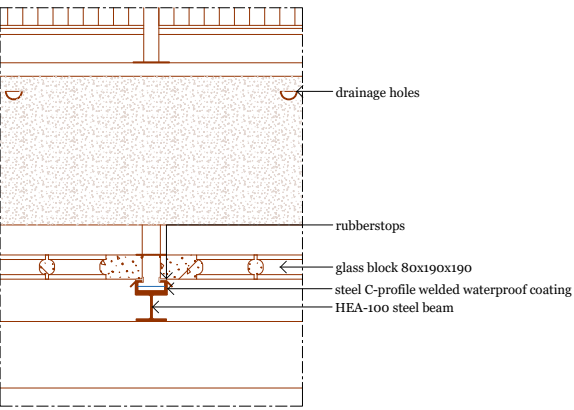
Detail B



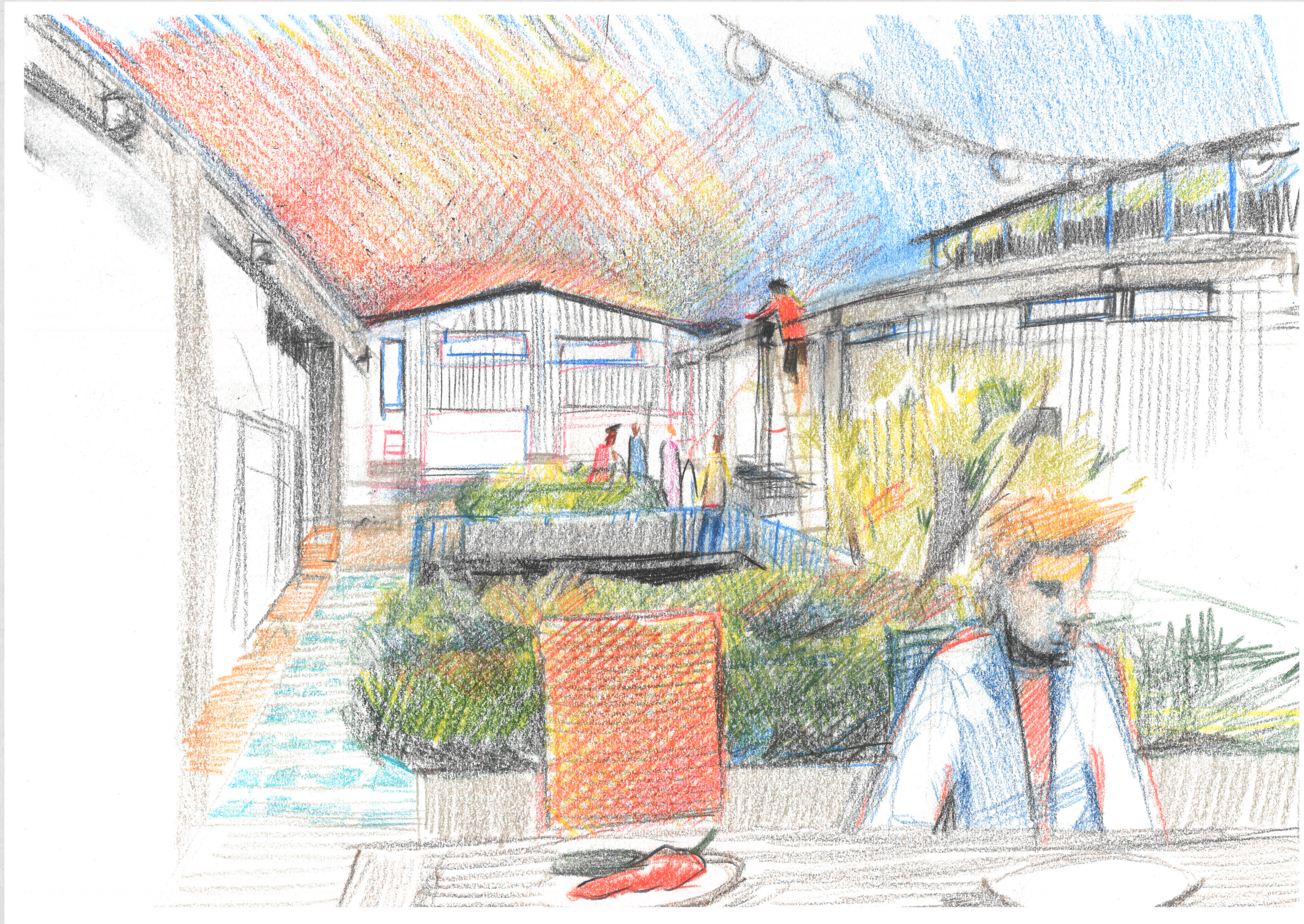
Detail F



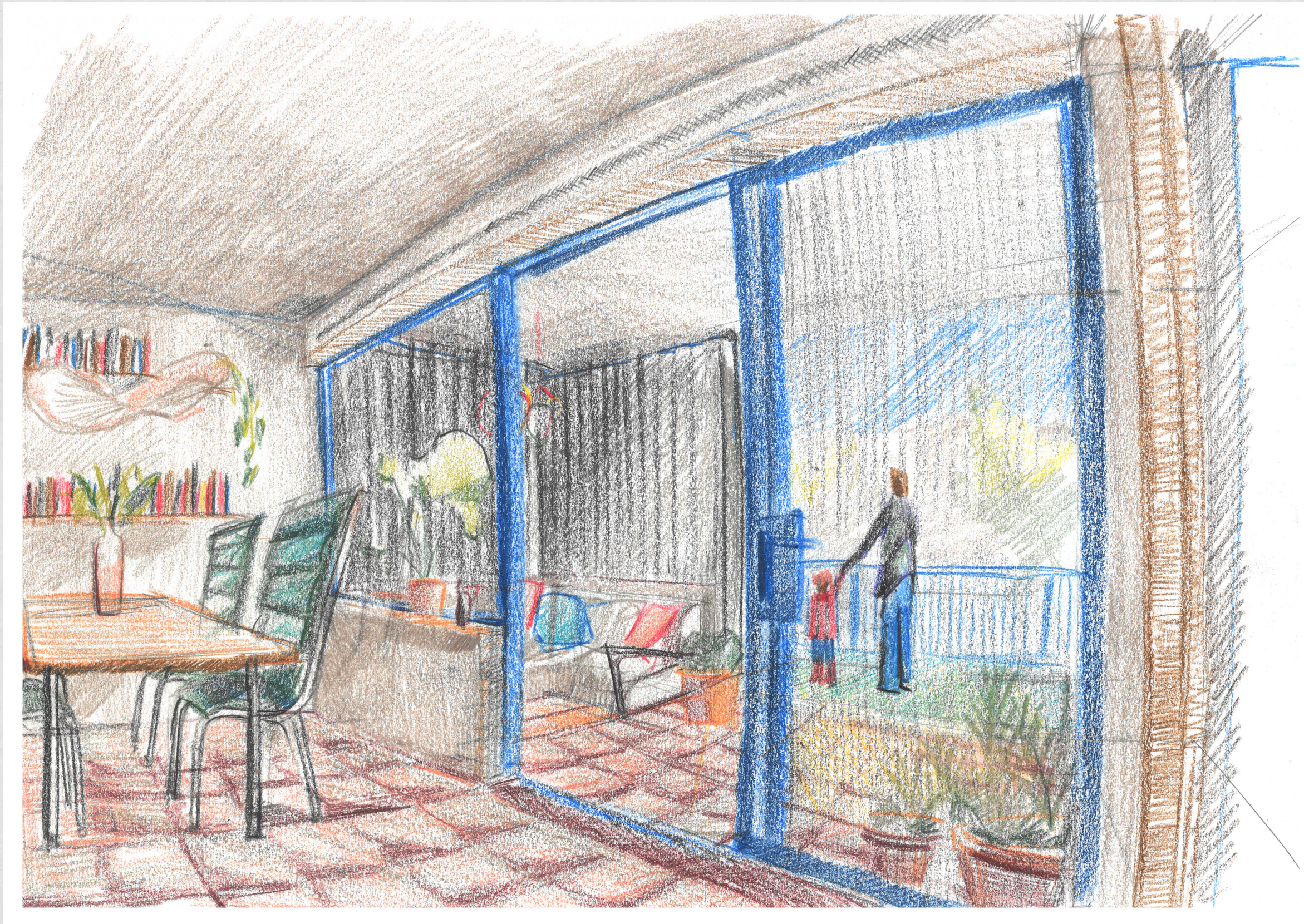
Detail E



Series of details
showing how
rainwater
is lead
downwards.



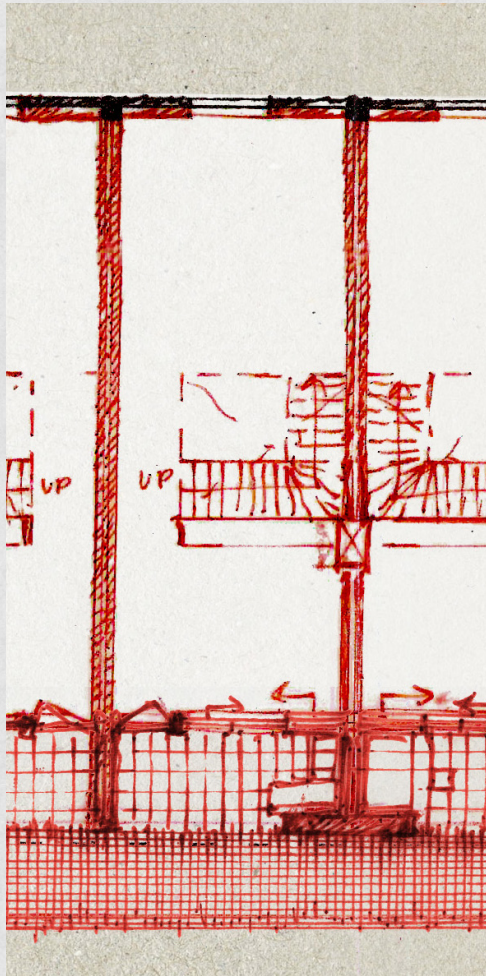
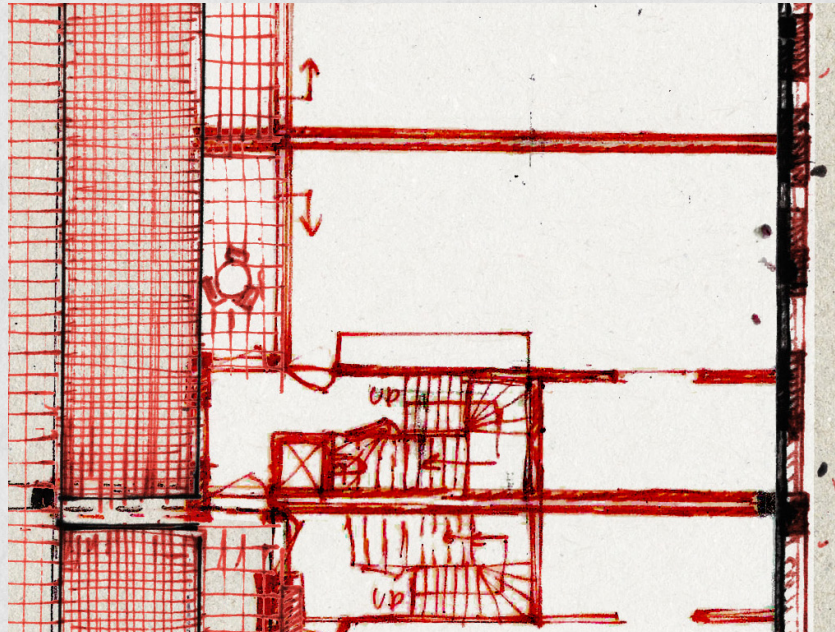
*BBQ under
sheltered patio,
installation of
the ornament
happening in the
background*



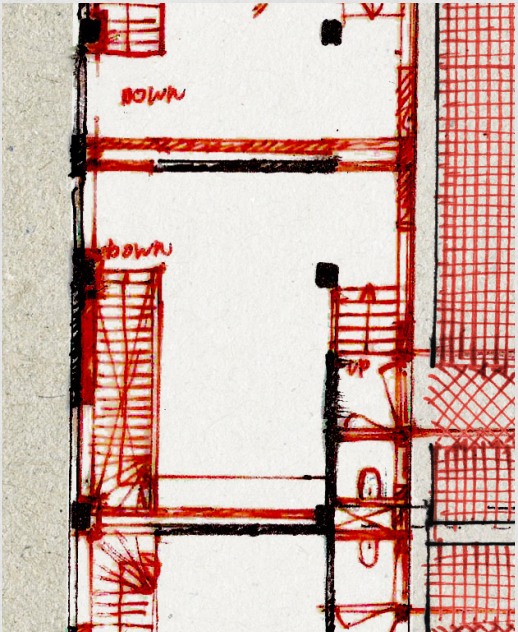
Perspective drawing of the housing interior overlooking the courtyard.



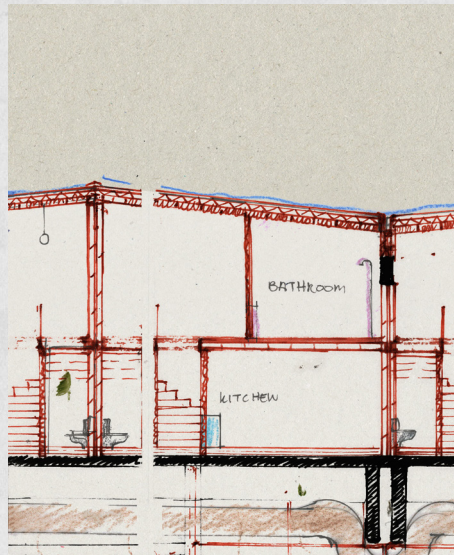
*Photo of
different façades
in model.*



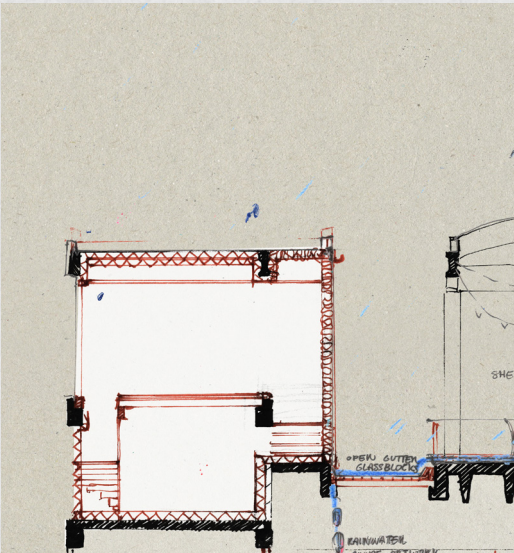
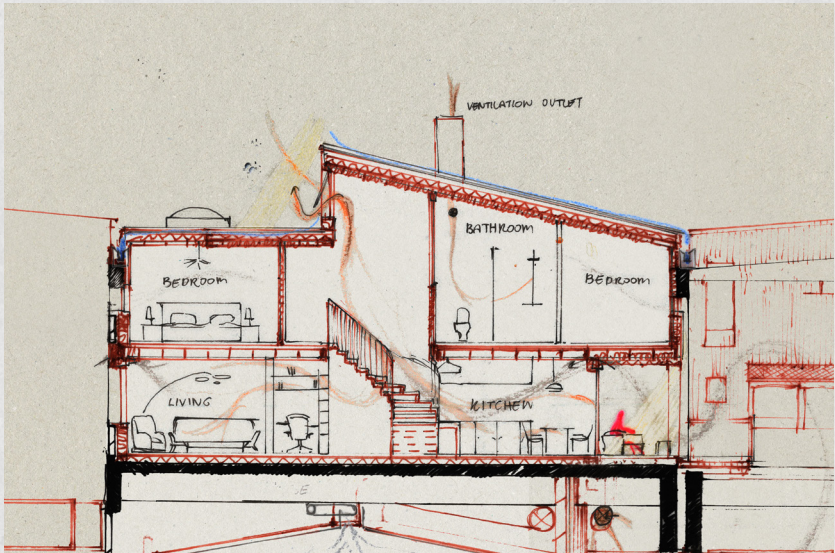
Typology B



Typology C



Typology A



Entanglement with the building
and water by creating ornaments.



*Concrete blocks found in the existing building,
to be re-used for the ornament.*



Casting the ornament in Fokke's workshop.



The ornament



Bird's eye of model



Final result