

VERA BAERVELDT  
P5 PRESENTATION

20/04/2023  
EXPLORELAB  
GRADUATION  
TU DELFT

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MATTHIJS KLOOSTER (BT)

# P O I N T S O F A R R I V A L



# P O I N T S O F A R R I V A L

AN EXPLORATION OF HOW COLOUR IN THE EXTERIOR  
OF ARCHITECTURE CAN CONTRIBUTE TO A VERSATILE  
EXPERIENCE OF ARRIVAL



# EXPERIENCING ARCHITECTURE



red mass  
jumps in volume  
openings

# EXPERIENCING ARCHITECTURE



red mass  
jumps in volume  
openings



pixelation of facade  
verticality of glass



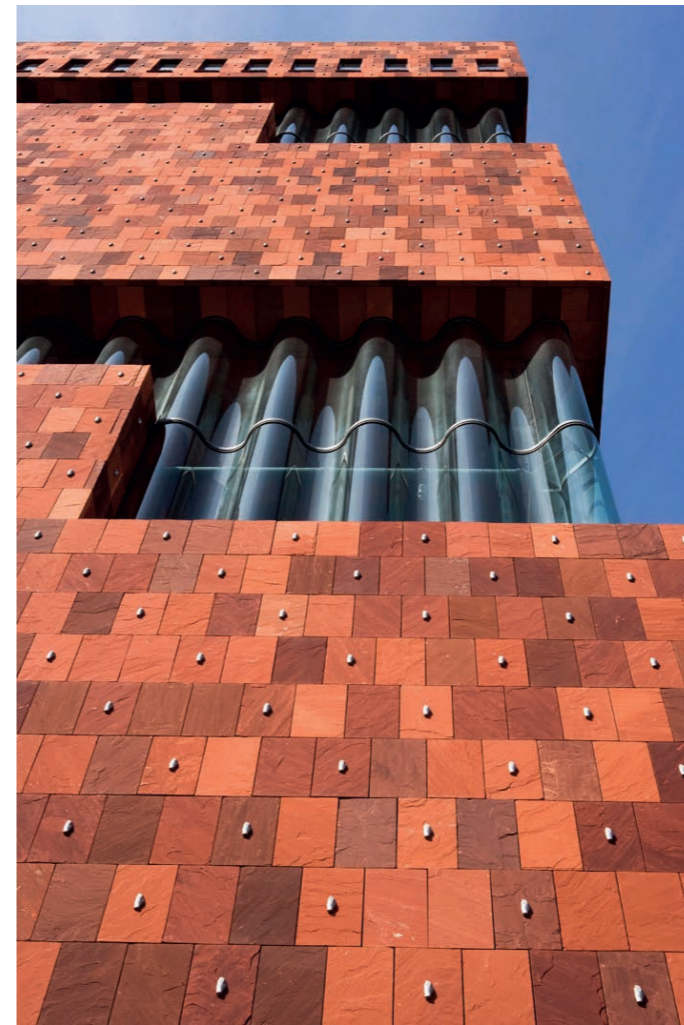
# EXPERIENCING ARCHITECTURE



red mass  
jumps in volume  
openings



pixelation of facade  
verticality of glass



pixelation of facade  
waved glass  
points on facade



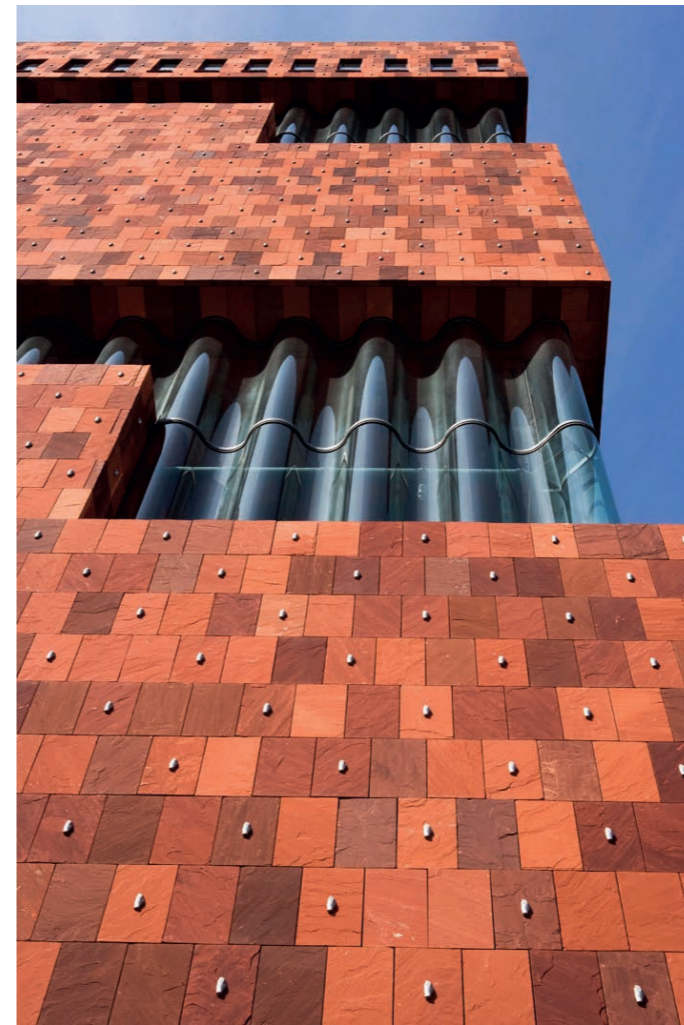
# EXPERIENCING ARCHITECTURE



red mass  
jumps in volume  
openings



pixelation of facade  
verticality of glass



pixelation of facade  
waved glass  
points on facade



textures  
hands



# (NO) COLOUR IN ARCHITECTURE

black & white

material owned

consequential

education

## COLOUR IN ARCHITECTURE

*“Much has been written on colour theory and science, but little on the everyday decisions made by architects who may, sheepishly, admit that their use of colour is uninformed and somewhat arbitrary.” (McLachlan, 2012, p. ix)*



Figure (1): Blood Center by F A A B Architektura Adam Białobrzęski & Adam Figurski, Raciborz, Poland (Architizer n.d.)

“How can the used colour contribute to the versatile experience one has while approaching a building from far away towards the entrance?”

“How can the used colour contribute to the versatile experience one has while approaching a building from far away towards the entrance?”

### Research

“How can the painting technique of pointillism be translated into a way of using colour in the exterior of architecture?”

### Design

“How can the building design provide for a sequential process of arrival?”



# METHOD

Figure (5):  
Museum  
Brandhorst in  
Munich, Germany.  
(Sauerbruch +  
Hutton, n.d.)



Figure (6):  
The Yardhouse in  
London (Grandorge,  
D, n.d.)

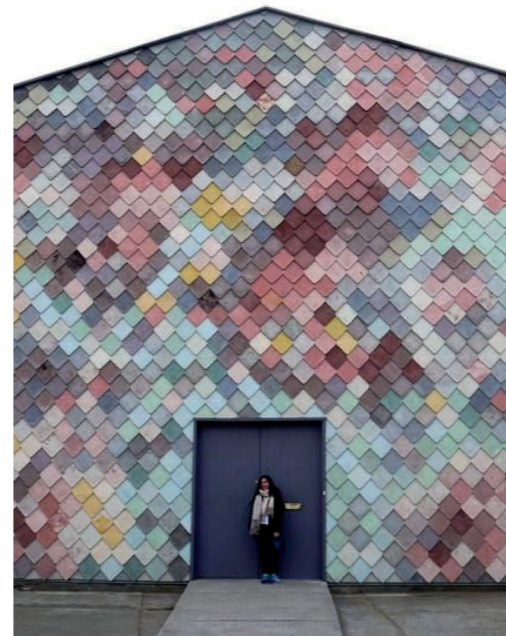


Figure (7):  
Auditorium for  
L'Aquila, Italy by  
Renzo Piano.  
(Caselli Nirmal,  
n.d.)



Figure (4): Cathedra  
by Barnett Newman  
(1951) 243 x 543cm.  
(Stedelijk Museum  
Amsterdam, n.d.)



Figure (3): La Seine  
à la Grande-Jatte  
(1888) by Georges  
Seurat (Geleyns,  
n.d.)



Figure (2):  
De Nachtwacht  
by Rembrandt  
(1642) 3,63  
m x 4,37 m.  
(Rijksmuseum,  
n.d.)

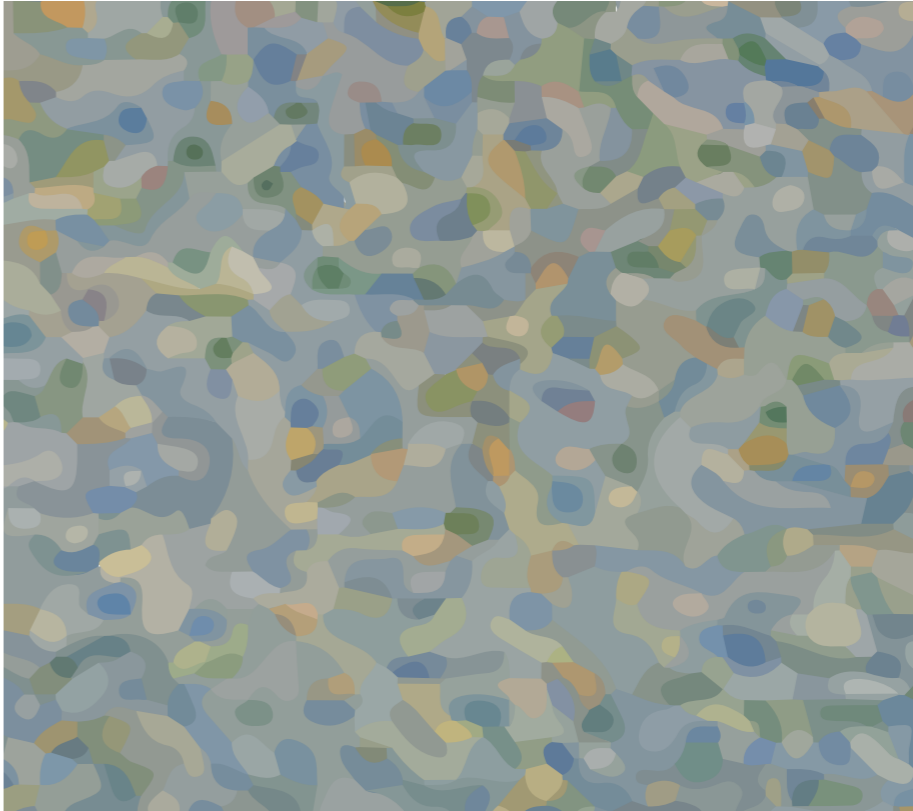




POINTILLISM



Figure (3): La Seine à la Grande-Jatte (1888) by Georges Seurat (Geleyns, n.d.)





POINTILLISM

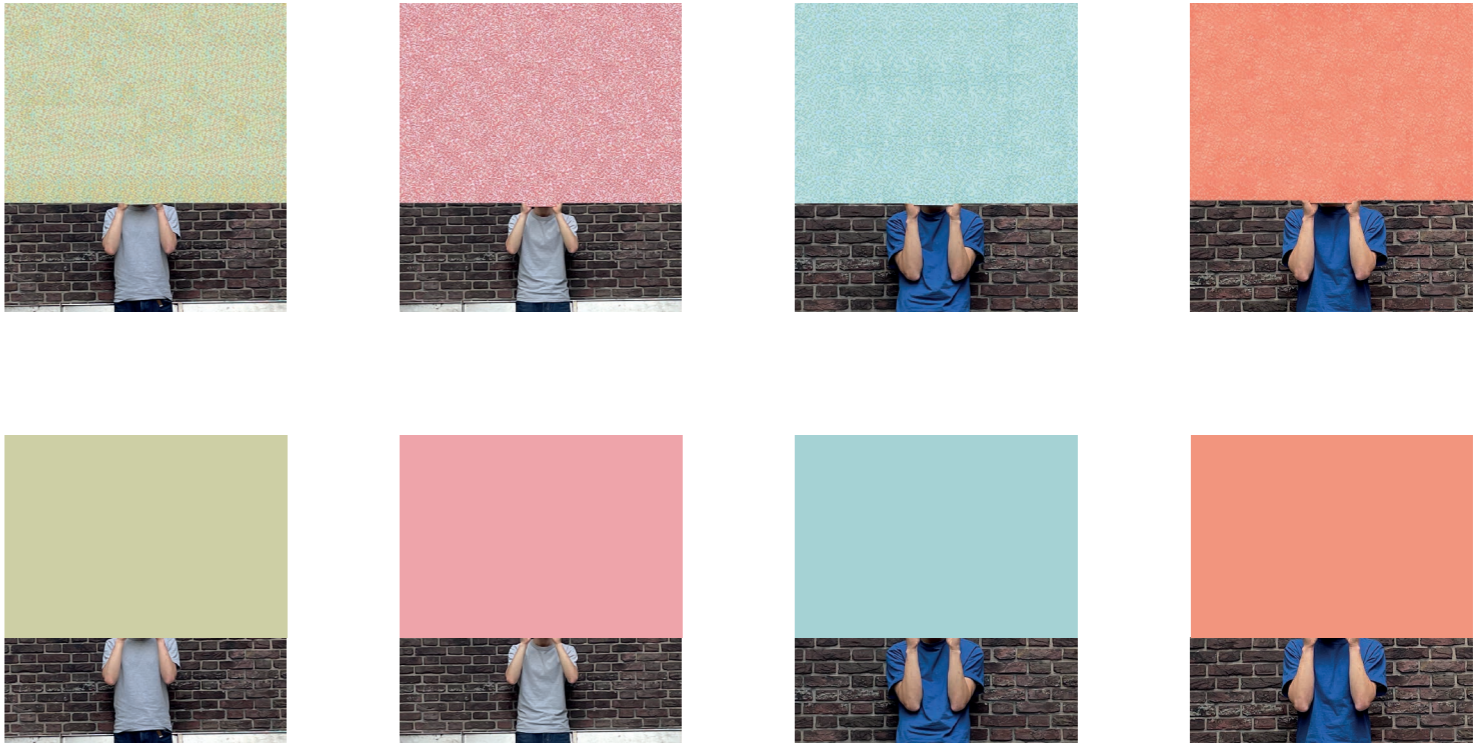
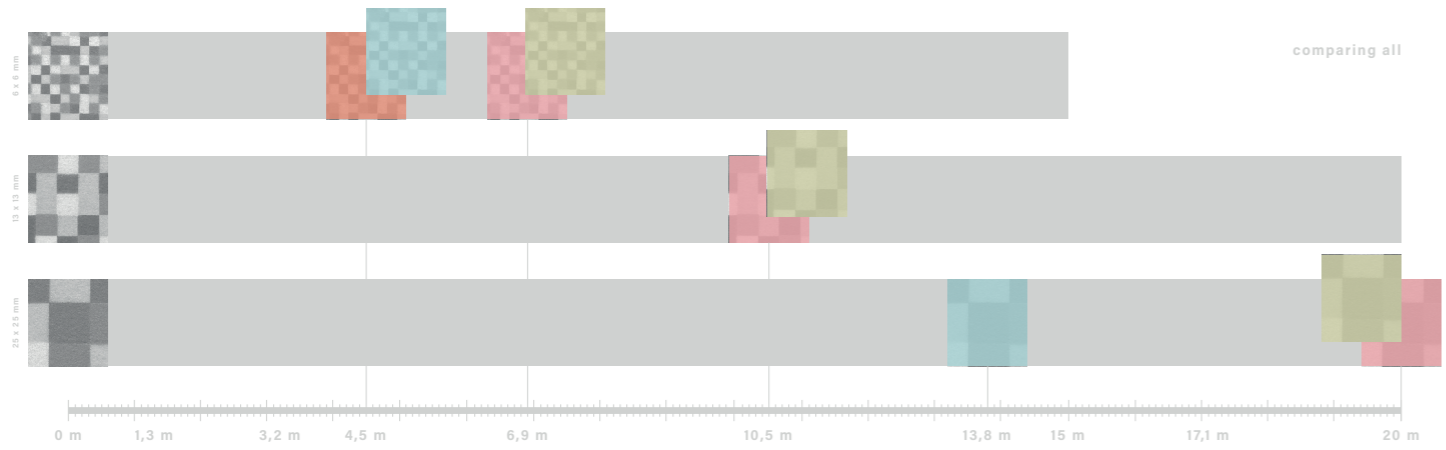
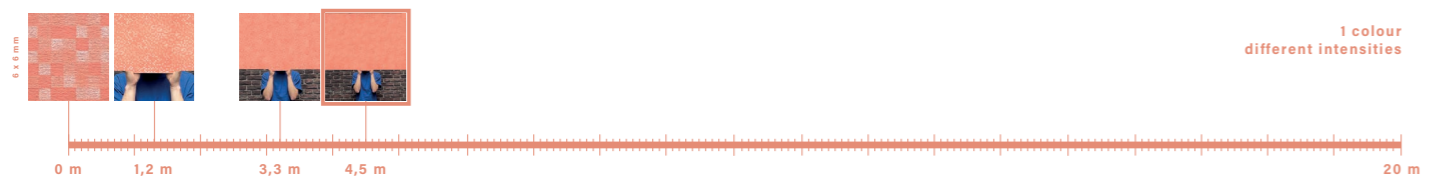
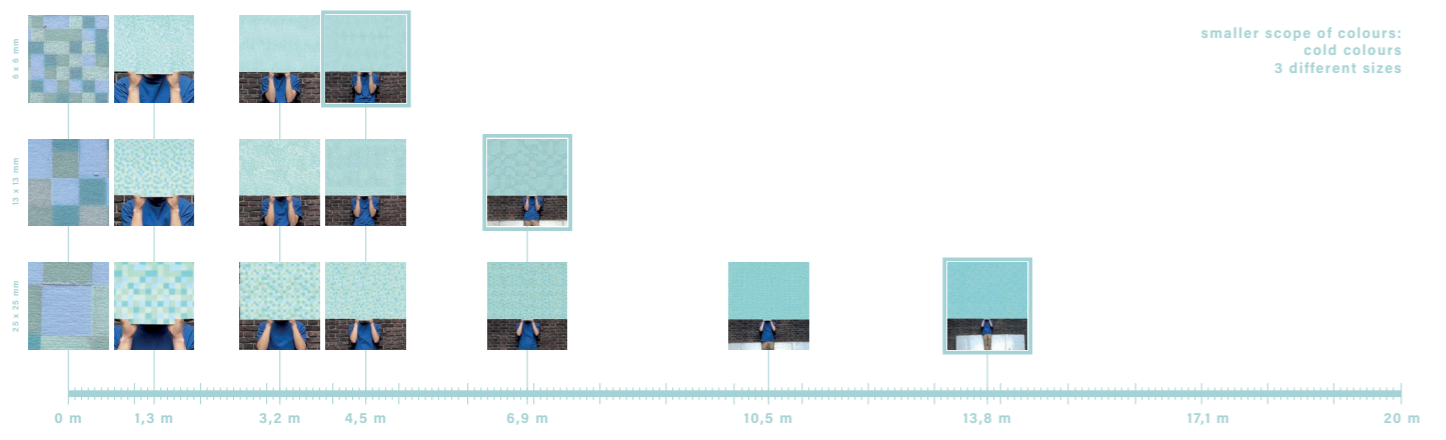
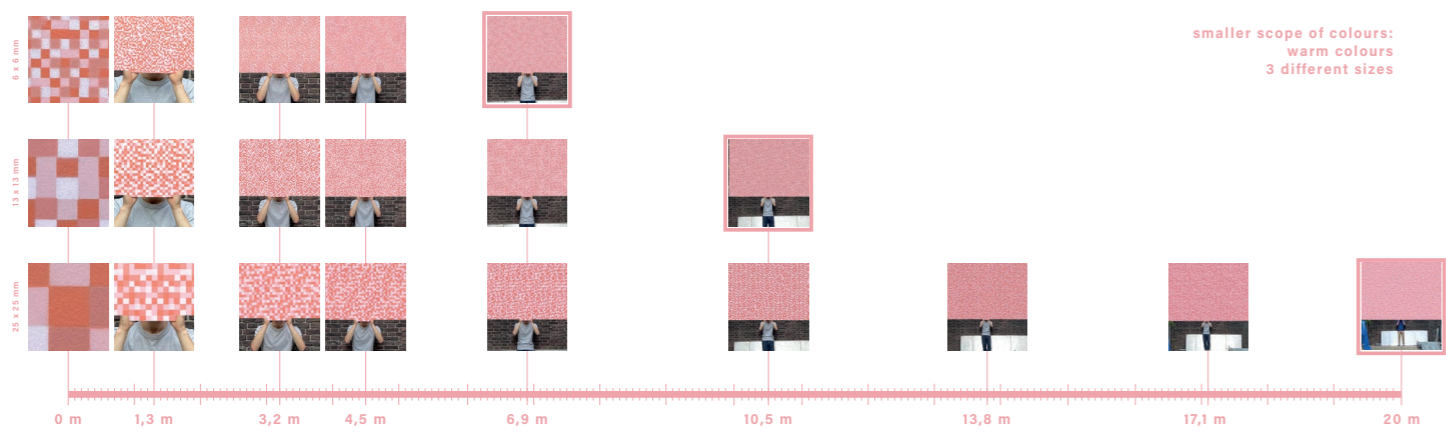
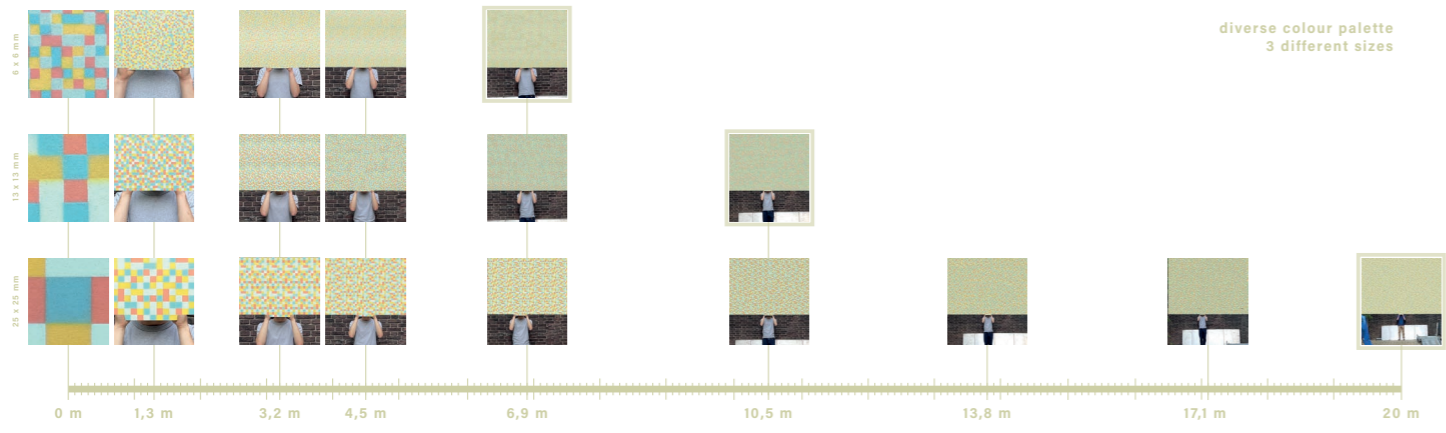


Figure 8: Four colours build up from pixels vs. their non pixelated version. Own material.

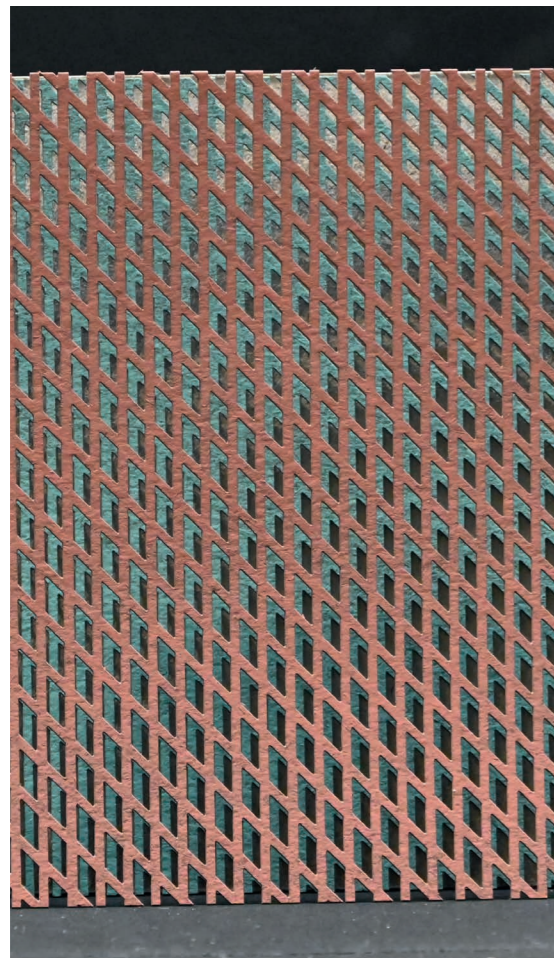
# POINTILLISM







# INTERPRETATIONS



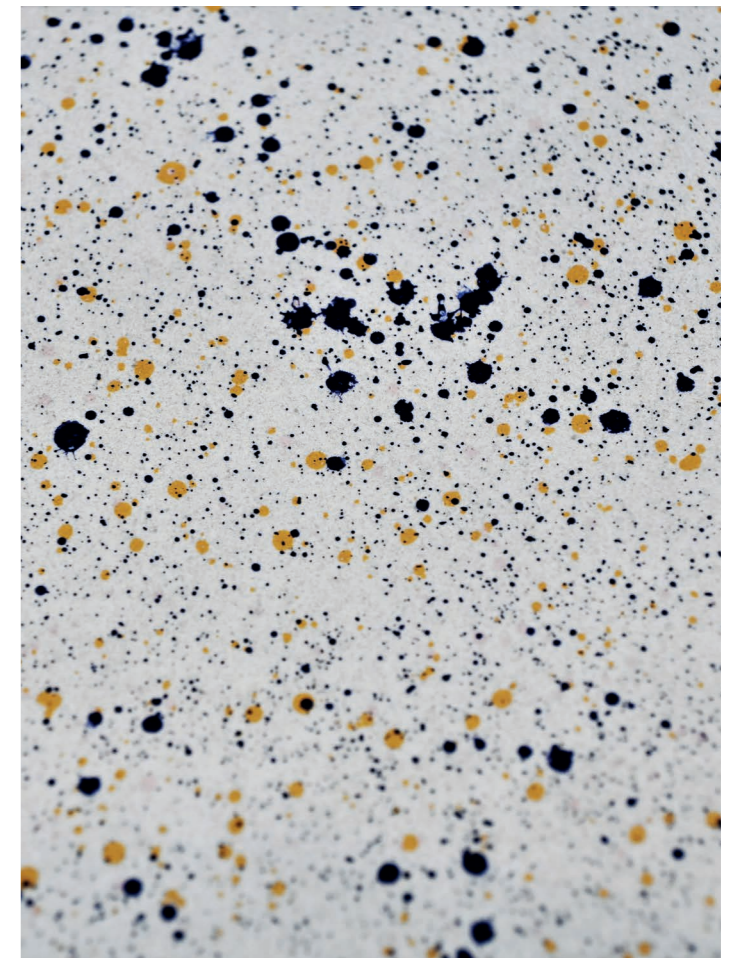
layers



textures



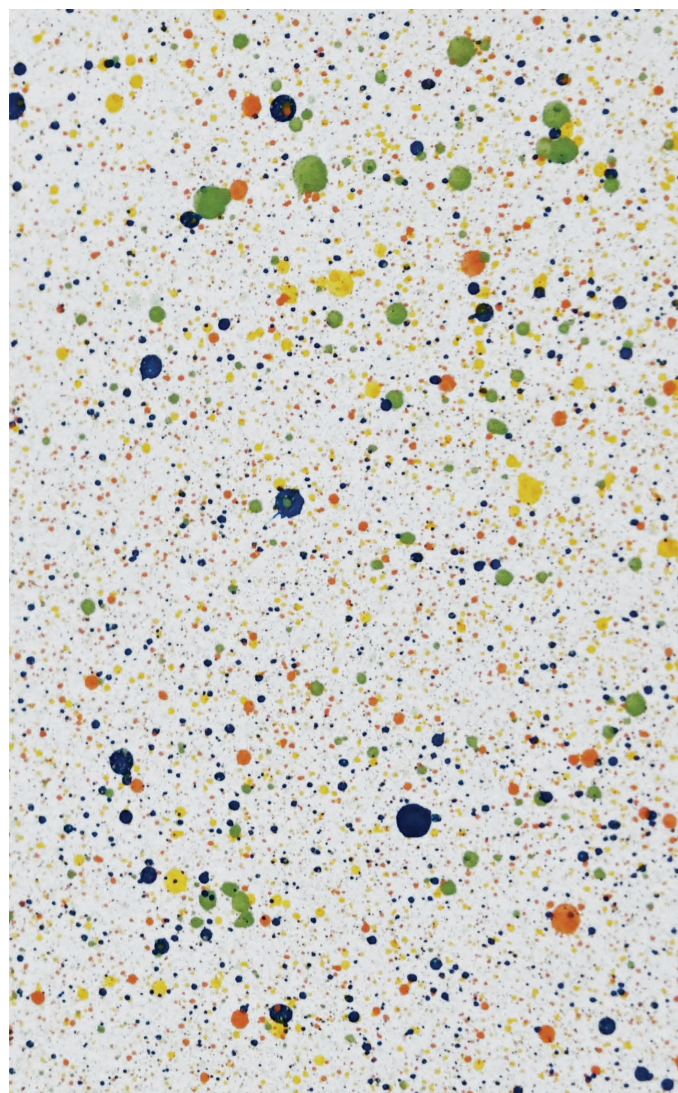
elements



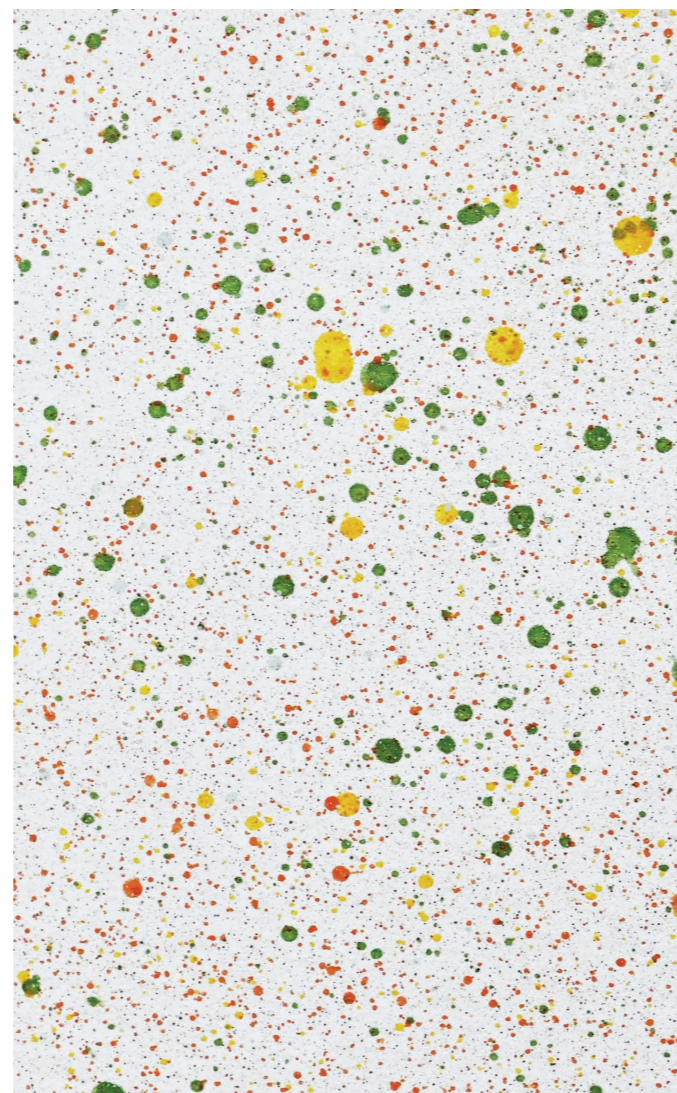
one surface



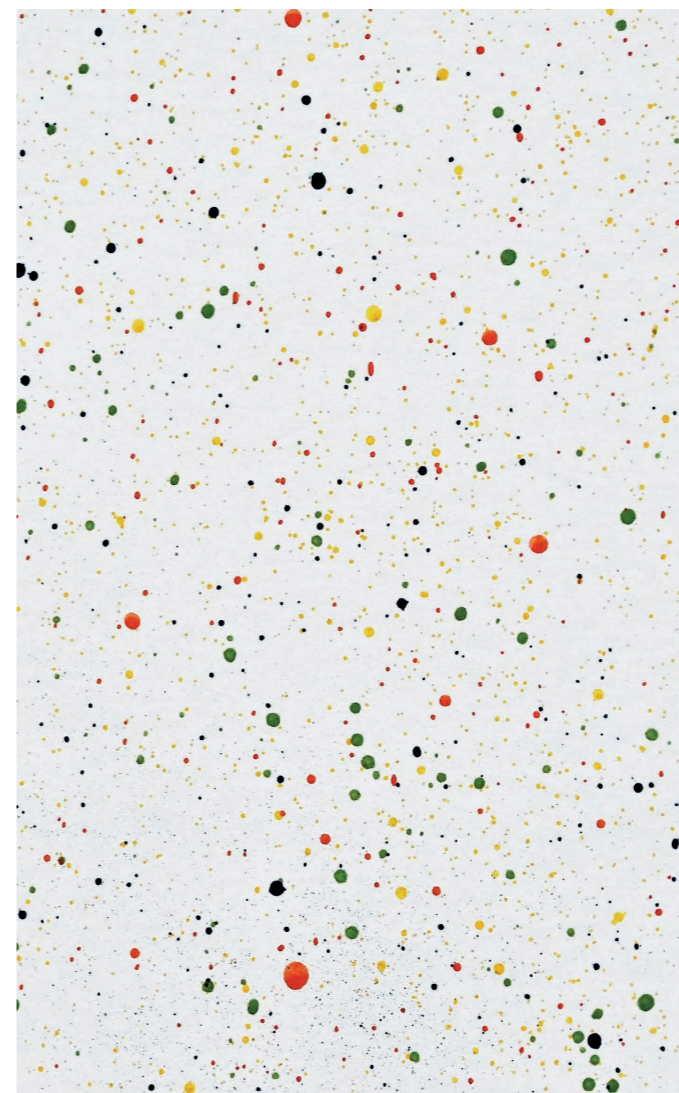
# LESSONS



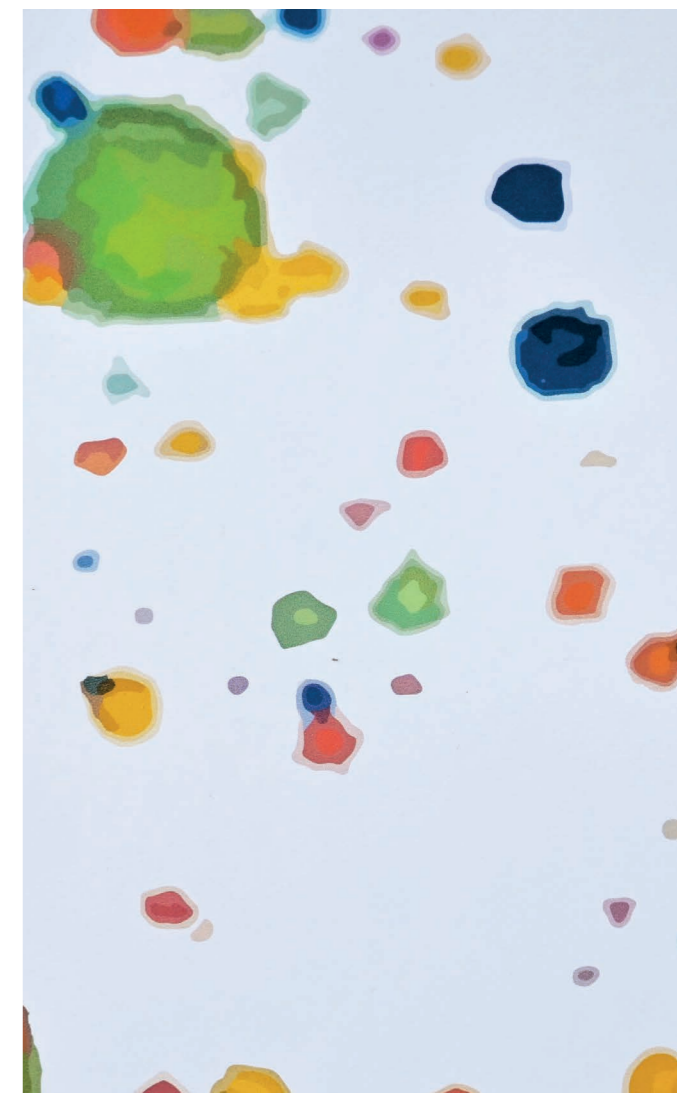
high density  
contrasting colours



high density  
no contrasting colours



low density  
contrasting colours



bigger size



# MATERIAL

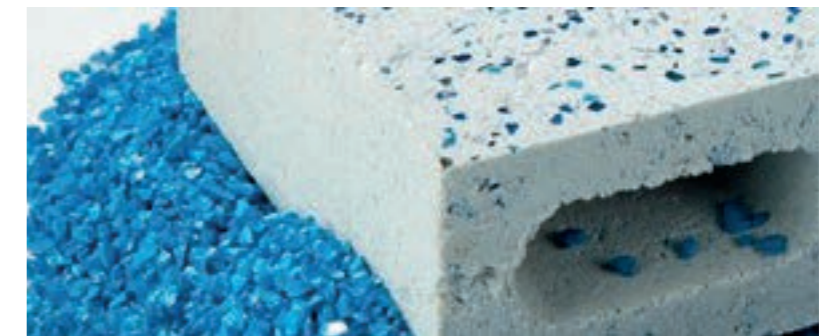
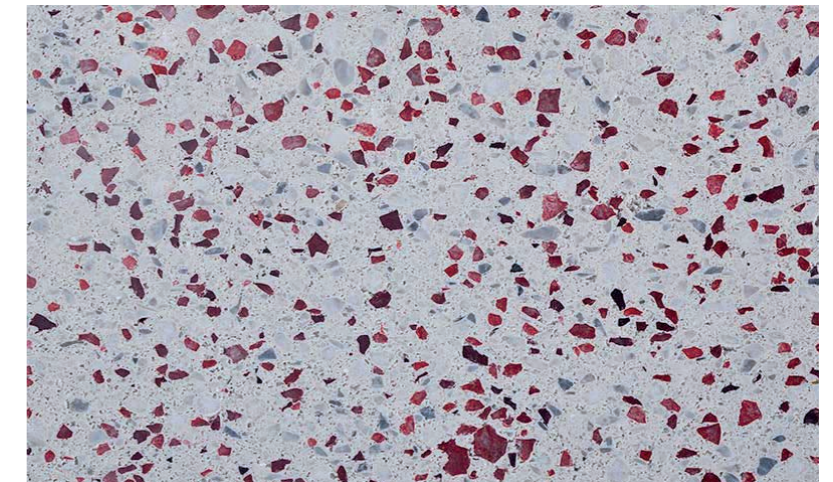
Figure 24 (left): Terrazzo 'Napels' sample. Studio Minéral (n.d.).



Figure 26 (middle): Panels of recycled plastic, customized. Smile Plastics (n.d.).



Figure 27 (right): Concrete blocks with recycled glass bits in it. Westbrook Concrete Block (n.d.).



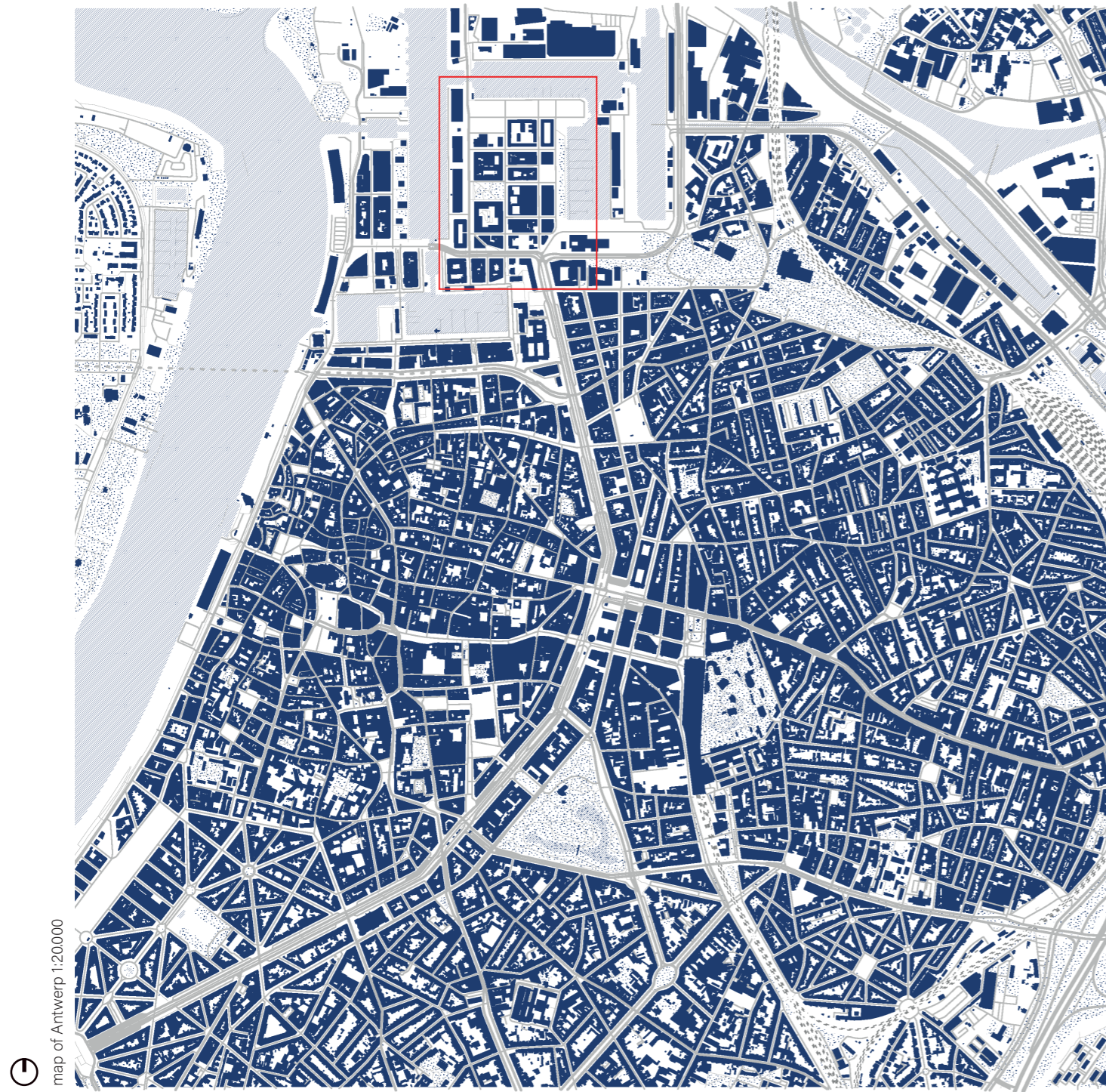


CADIX' POINT OF ARRIVAL

# CADIX' POINT OF ARRIVAL

"How can the building design provide for a sequential process of arrival?"

# ANTWERP

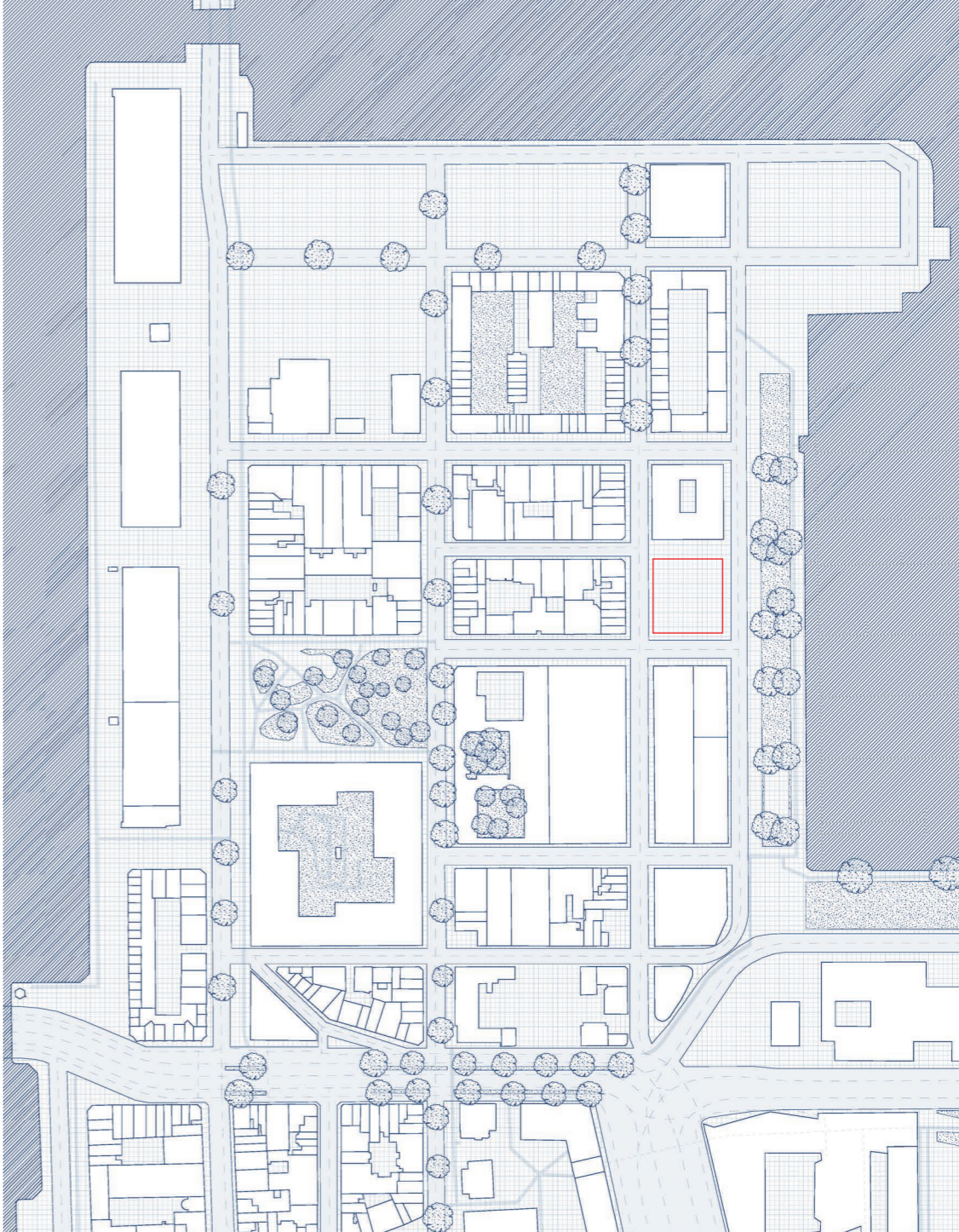




map of Antwerp 1:20000



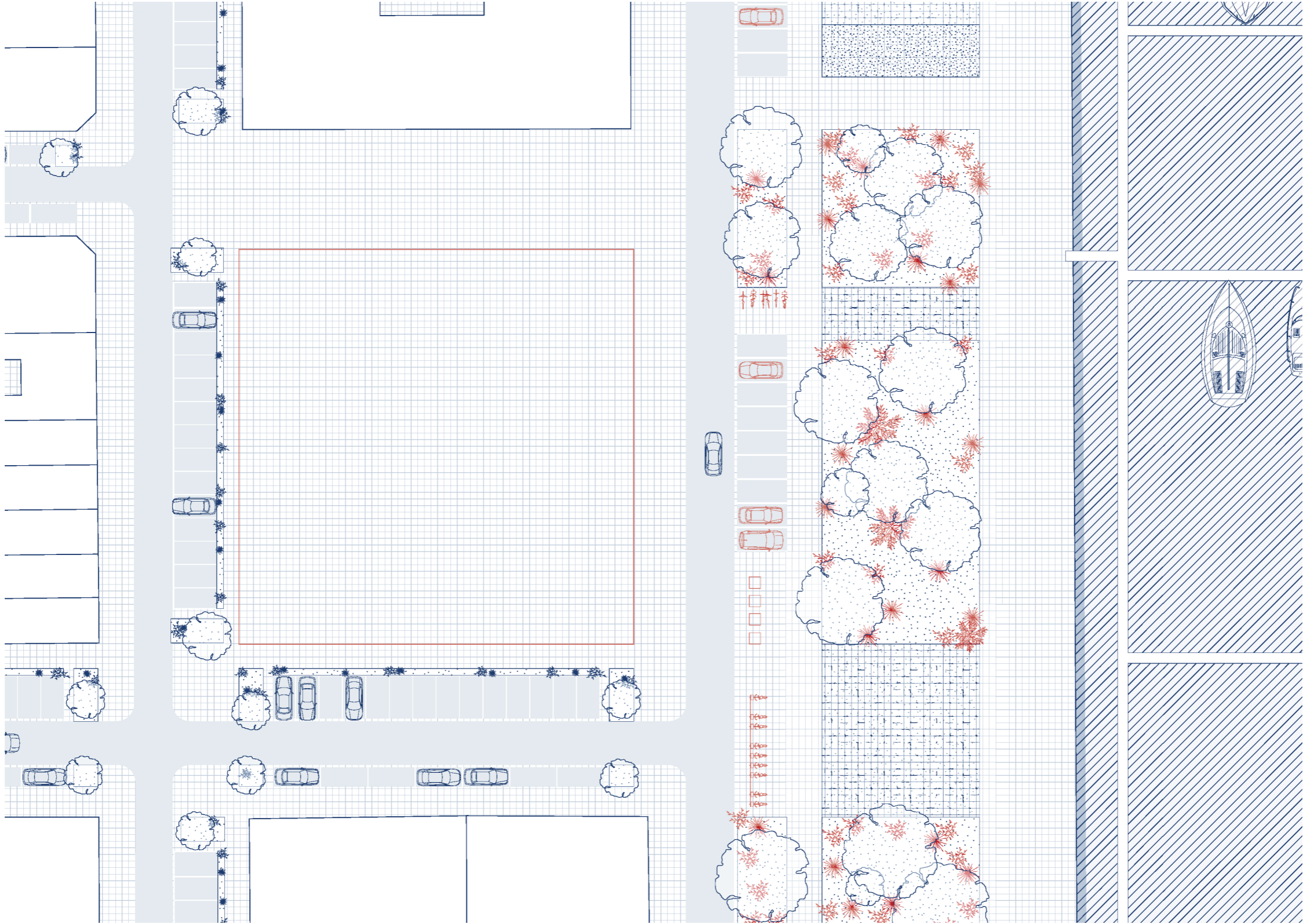
map of CADIX 1:4000





# PLOT

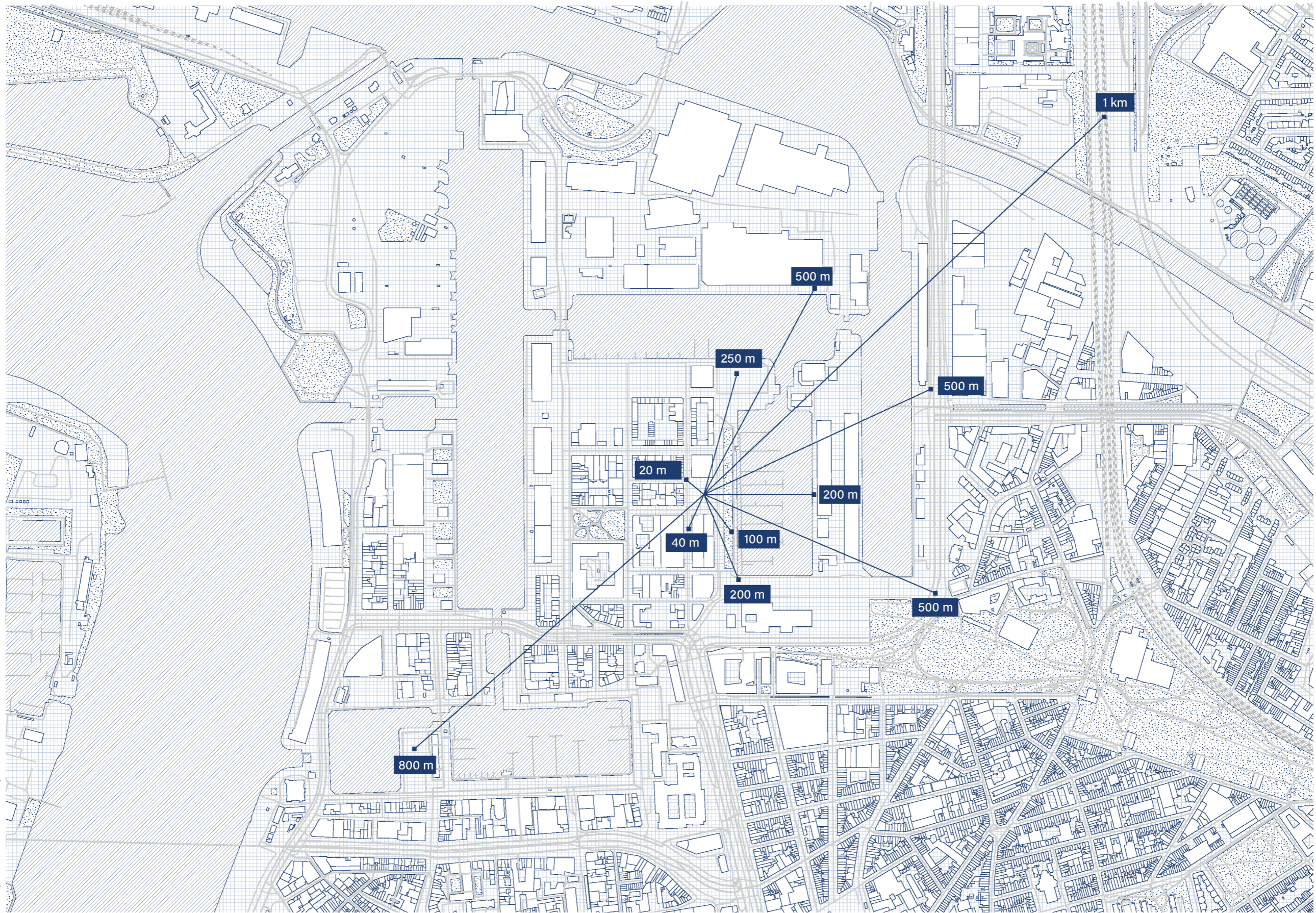
plot 1:500





# DISTANCES

viewpoints distances to plot - 1:9,000





# SURROUNDING



plot



secondary school



plot from east side



after work drinks

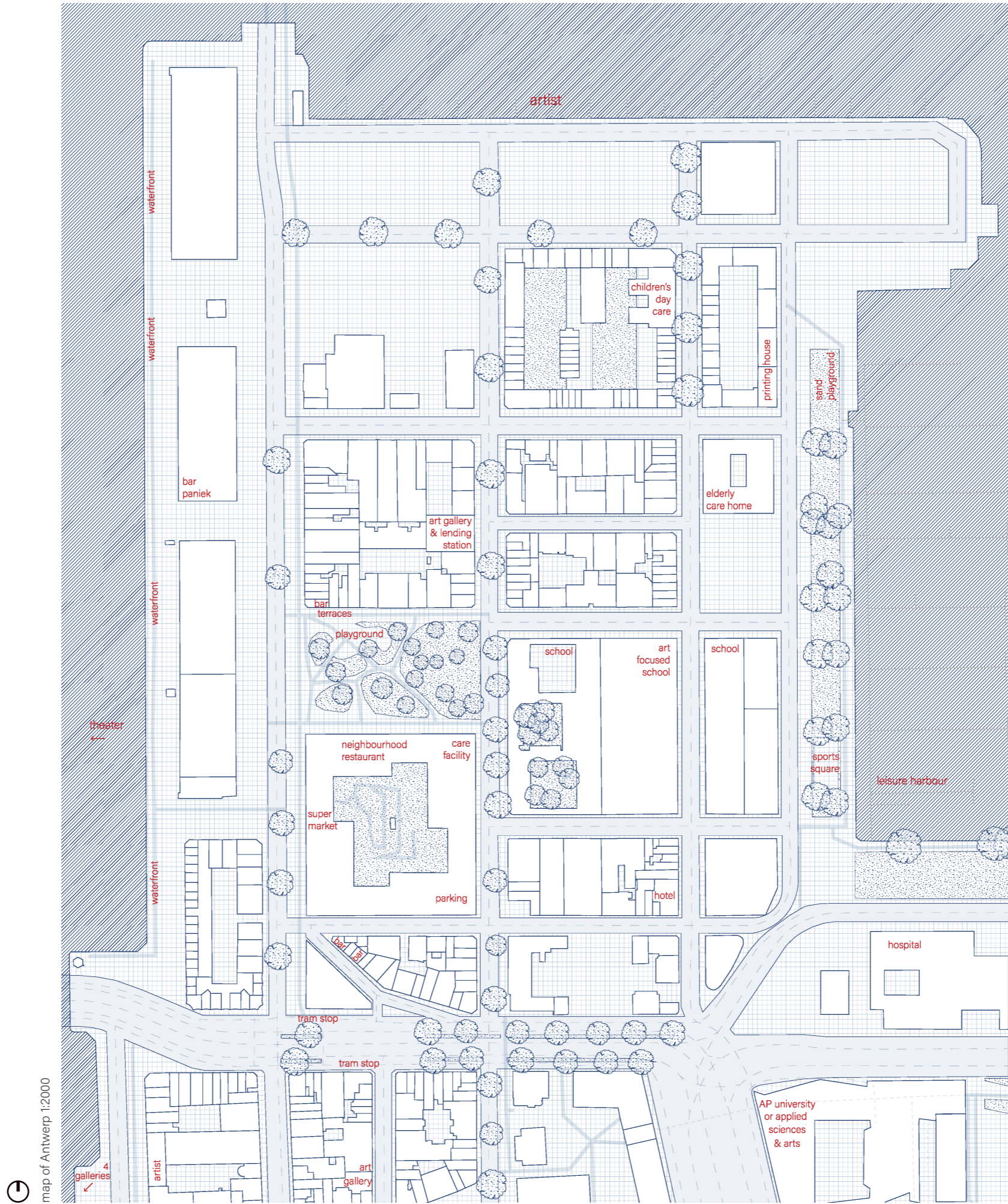


plot 1:500 model



elderly using outside space





map of Antwerp 1:2000



Temporary housing for artists  
that make their arrival to the  
city of Antwerp

Temporary housing for artists  
that make their arrival to the  
city of Antwerp

An artistic hub where individuals:

become a **community**,

**share** their work

**learn** from each other

**teach** the next generation

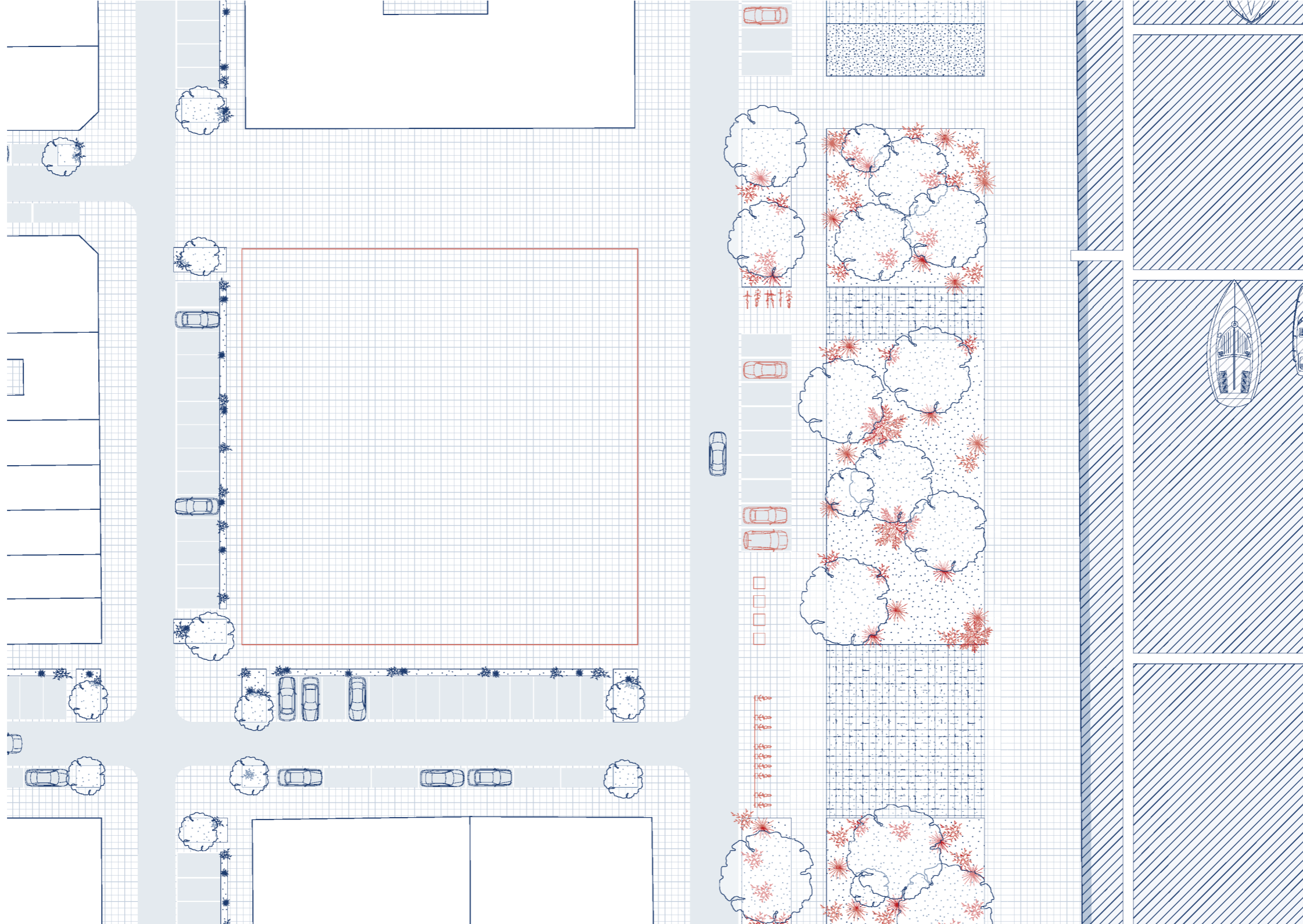
**welcome** travelling and touring artists



# **BUILDING DESIGN**

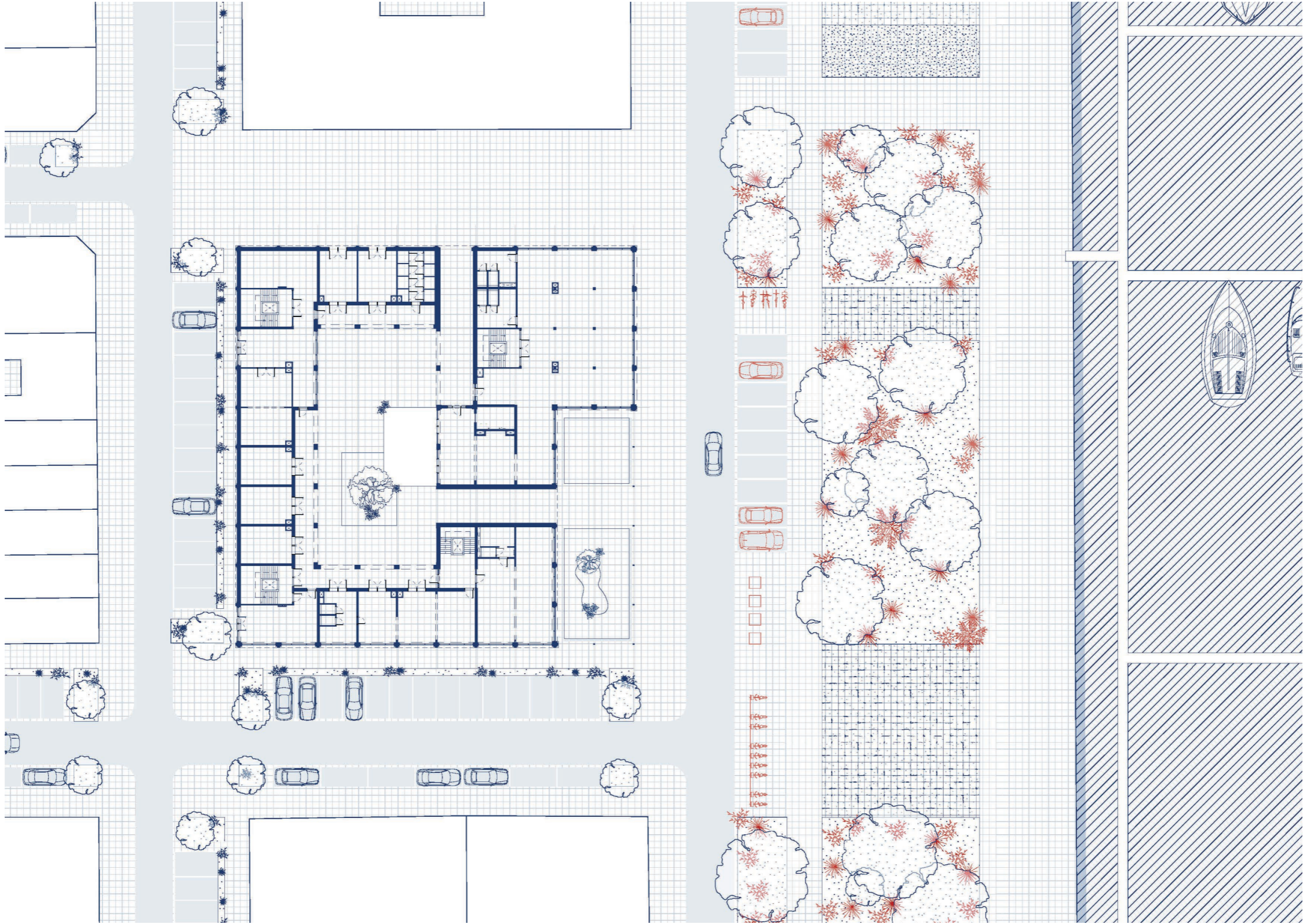
# SITUATION

plot 1:500





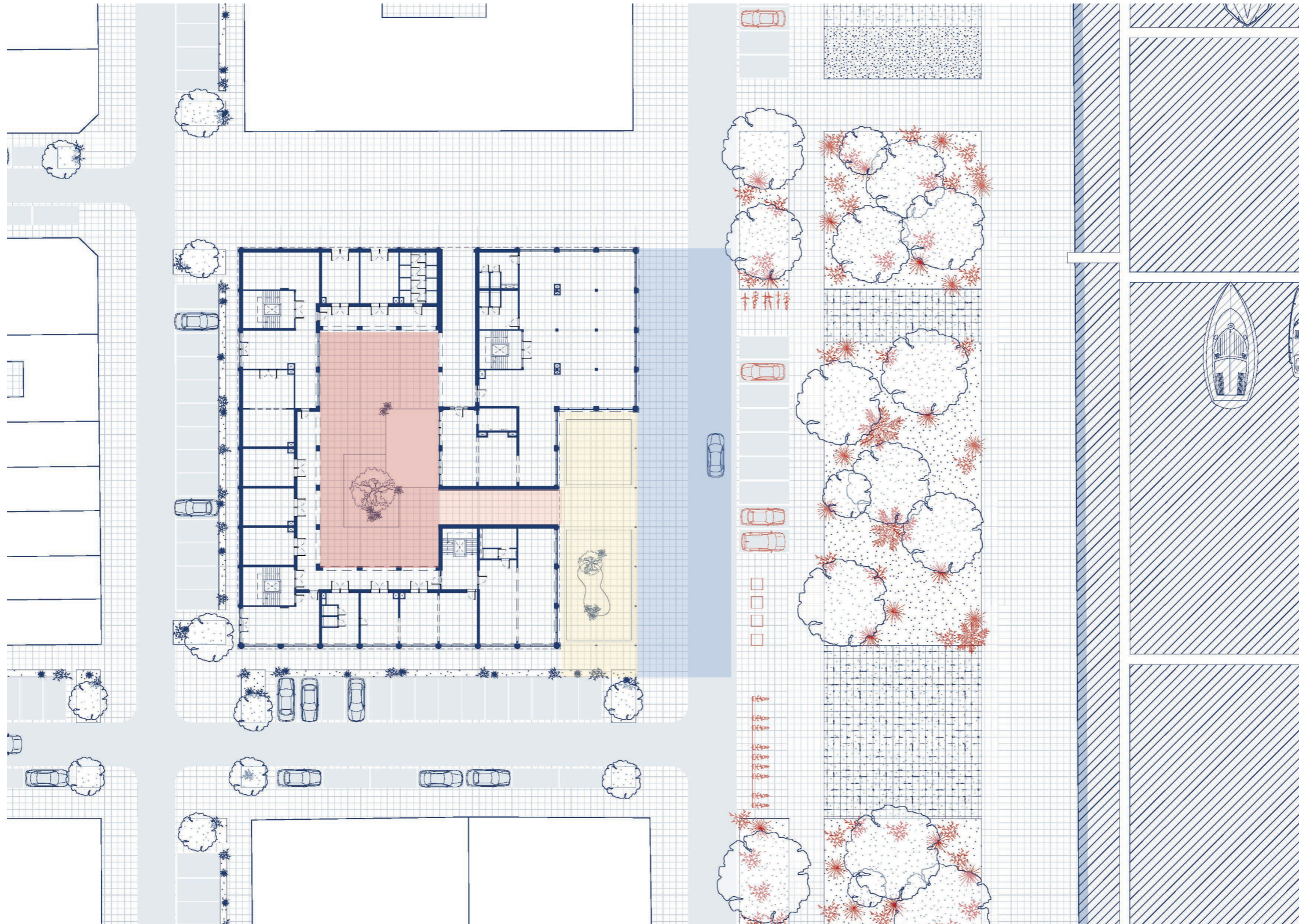
⌚ ground floor plan in situation 1:500





# TRANSITION

ground floor plan in situation 1:500



- public
- front square
- entrance 'tunnel'
- common courtyard







# FRONT SQUARE



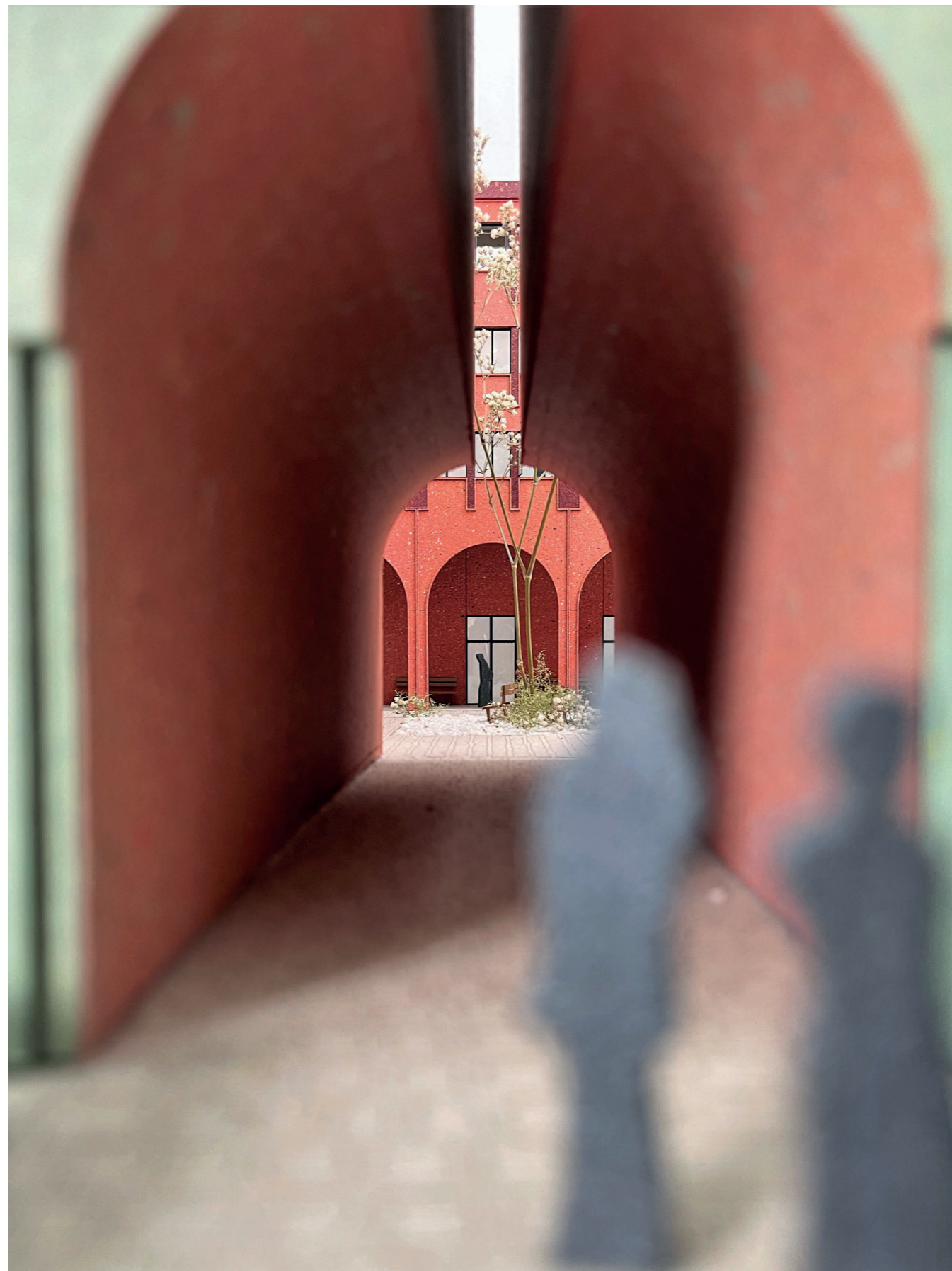


# FRONT SQUARE





# ENTRANCE





# ENTRANCE



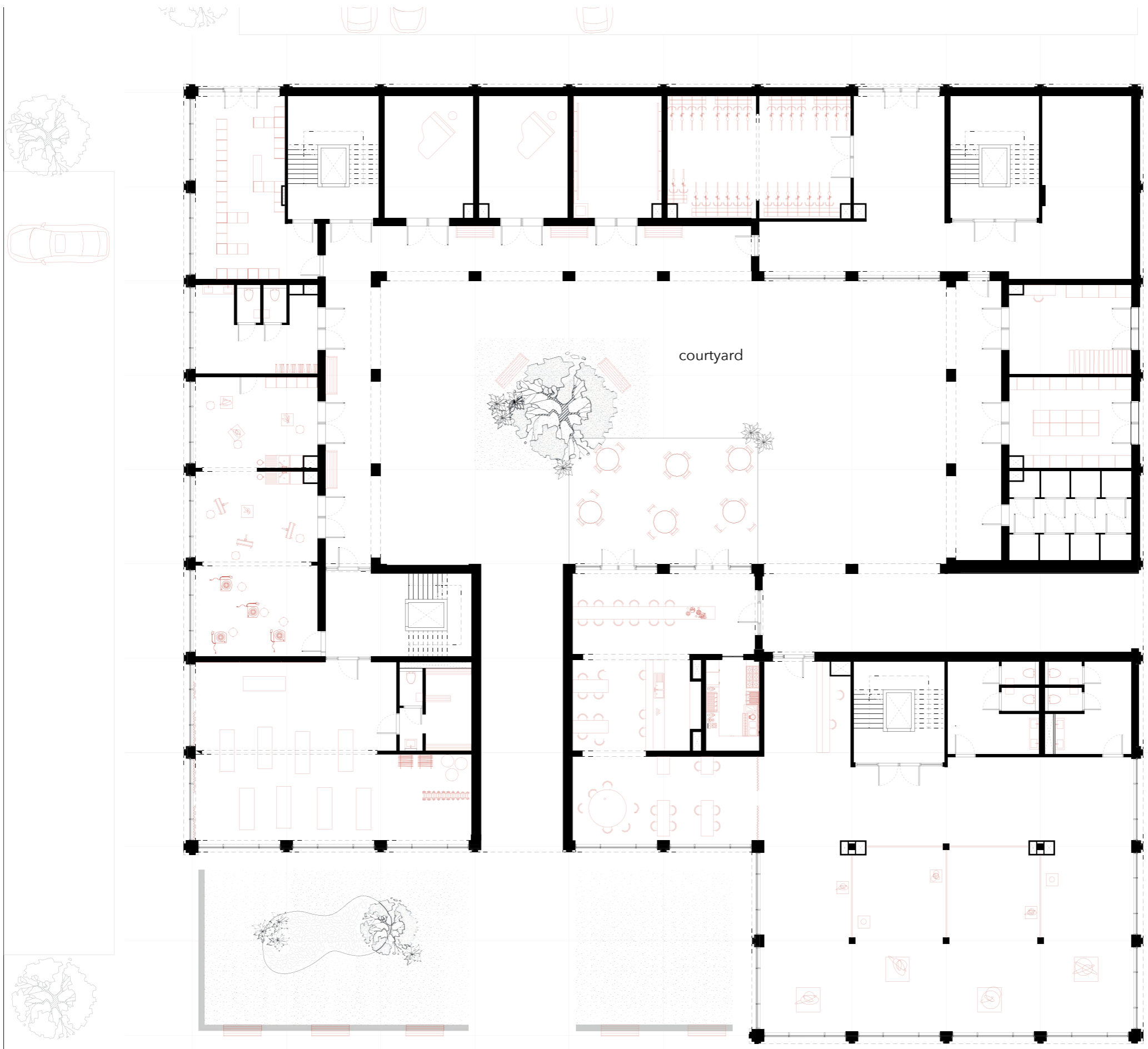


# ENTRANCE





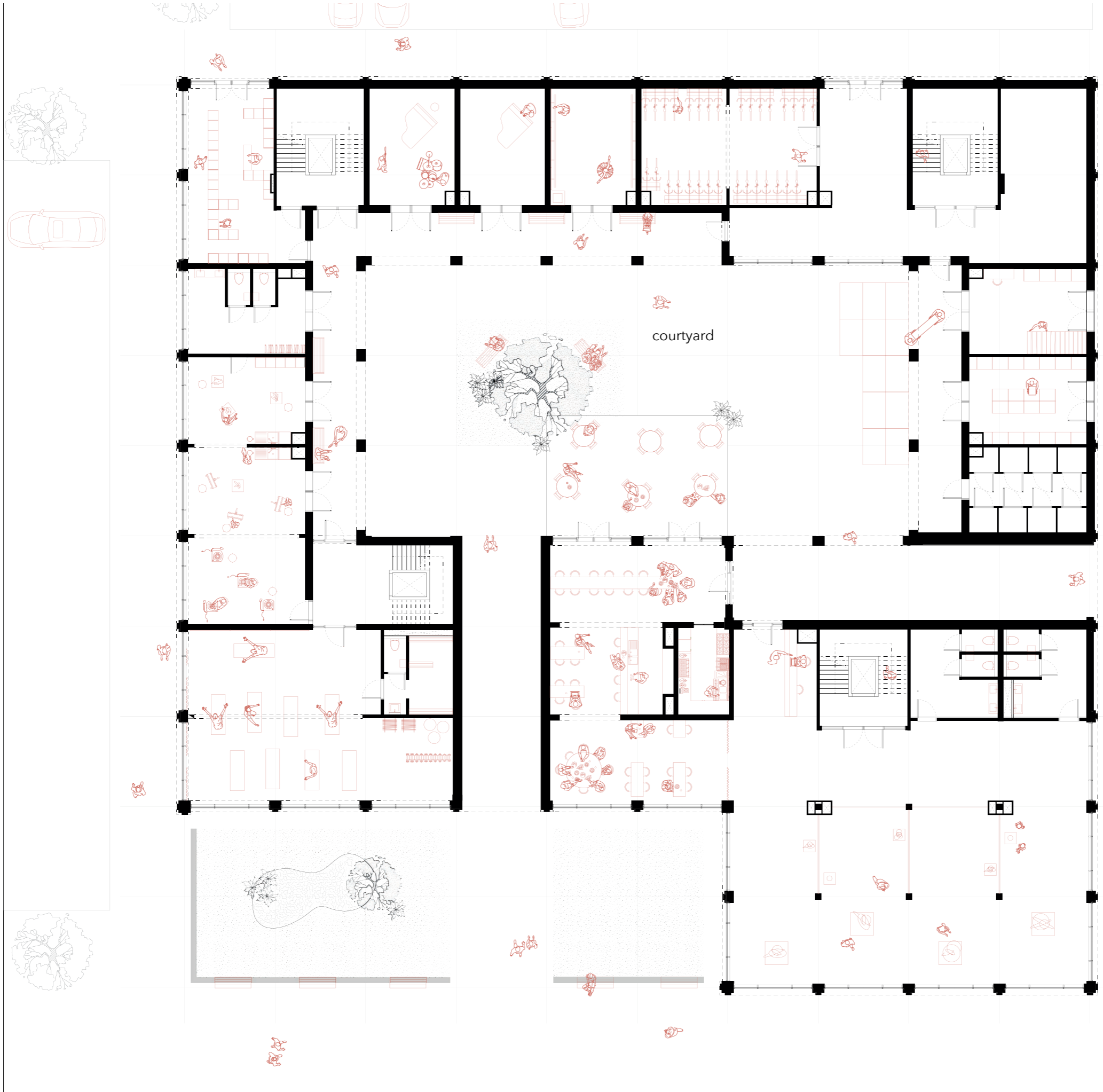
GROUND FLOOR



G  
ground floor plan



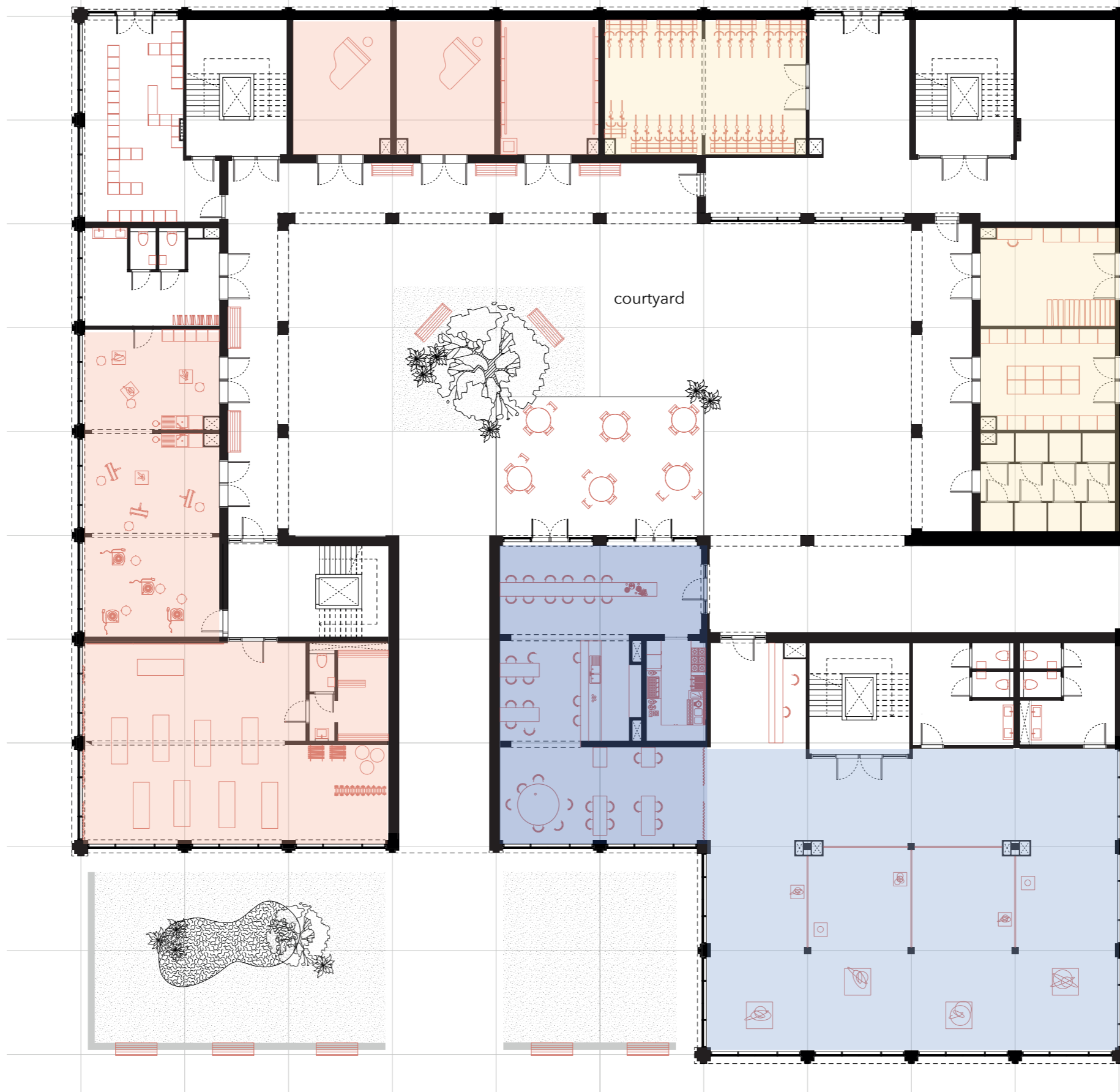
# GROUND FLOOR







G  
ground floor plan



# GROUND FLOOR

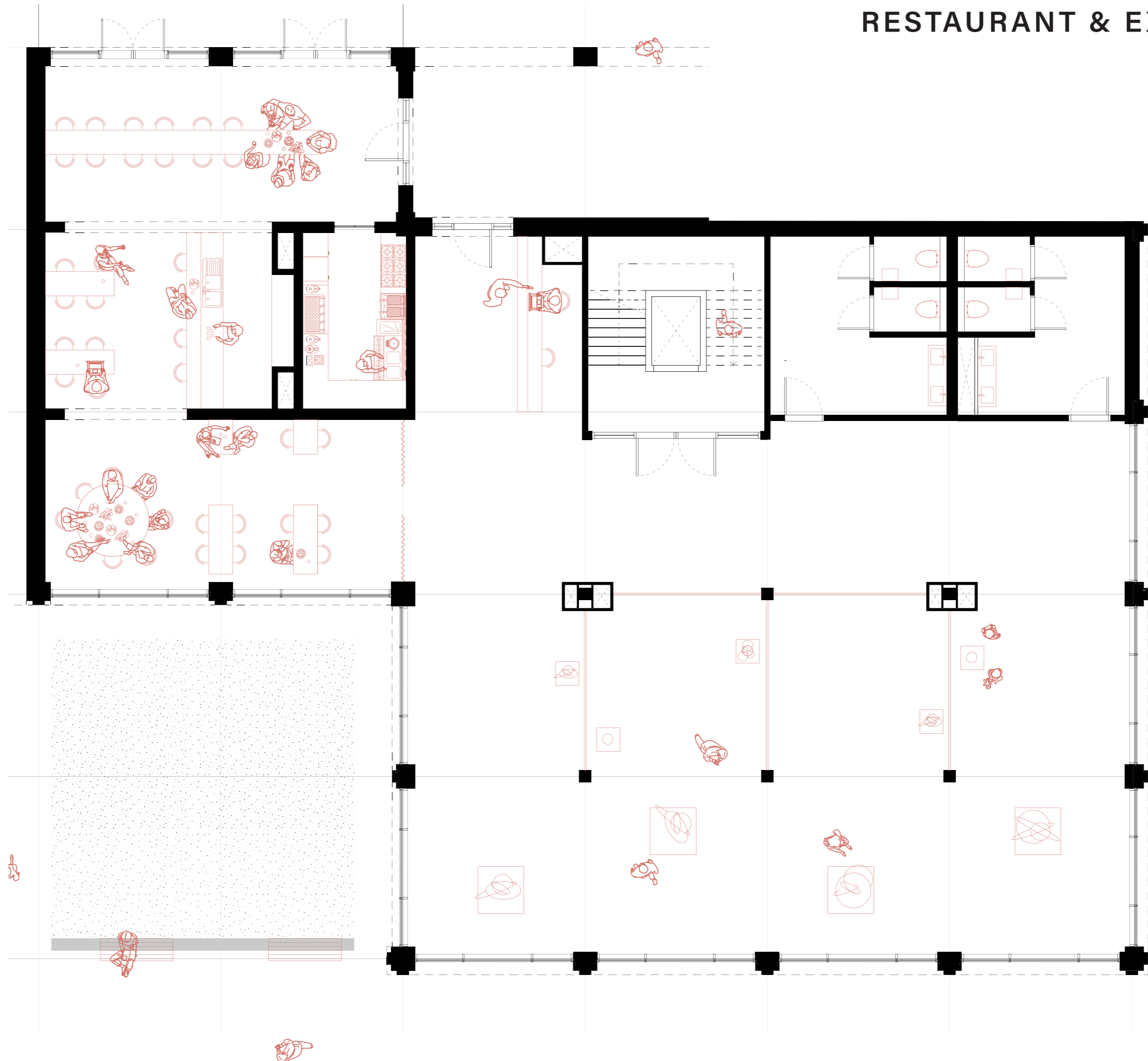


ground floor plan 

-  restaurant
-  exhibition space
-  storage spaces
-  workshop spaces



# RESTAURANT & EXHIBITION



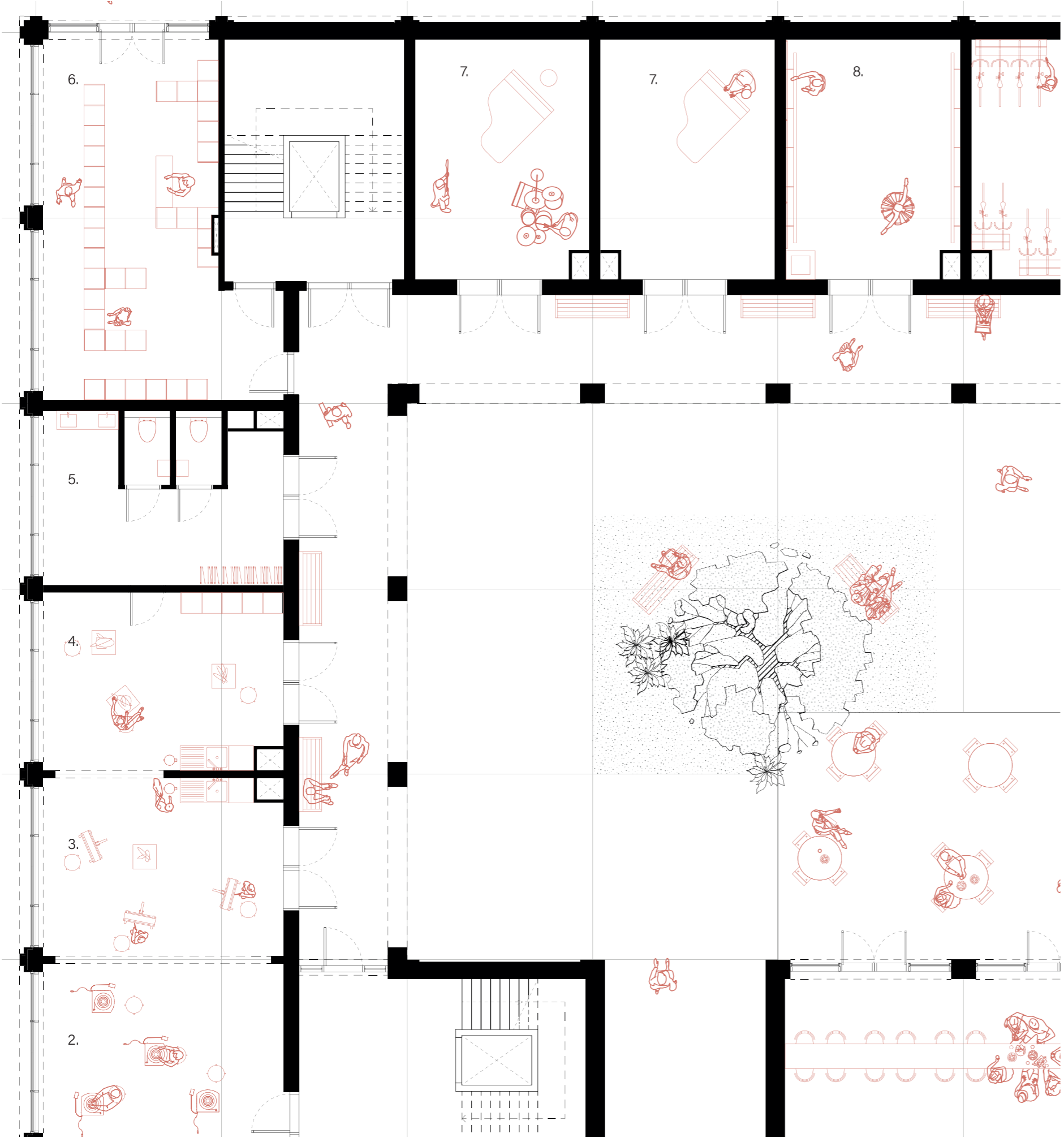


RESTAURANT





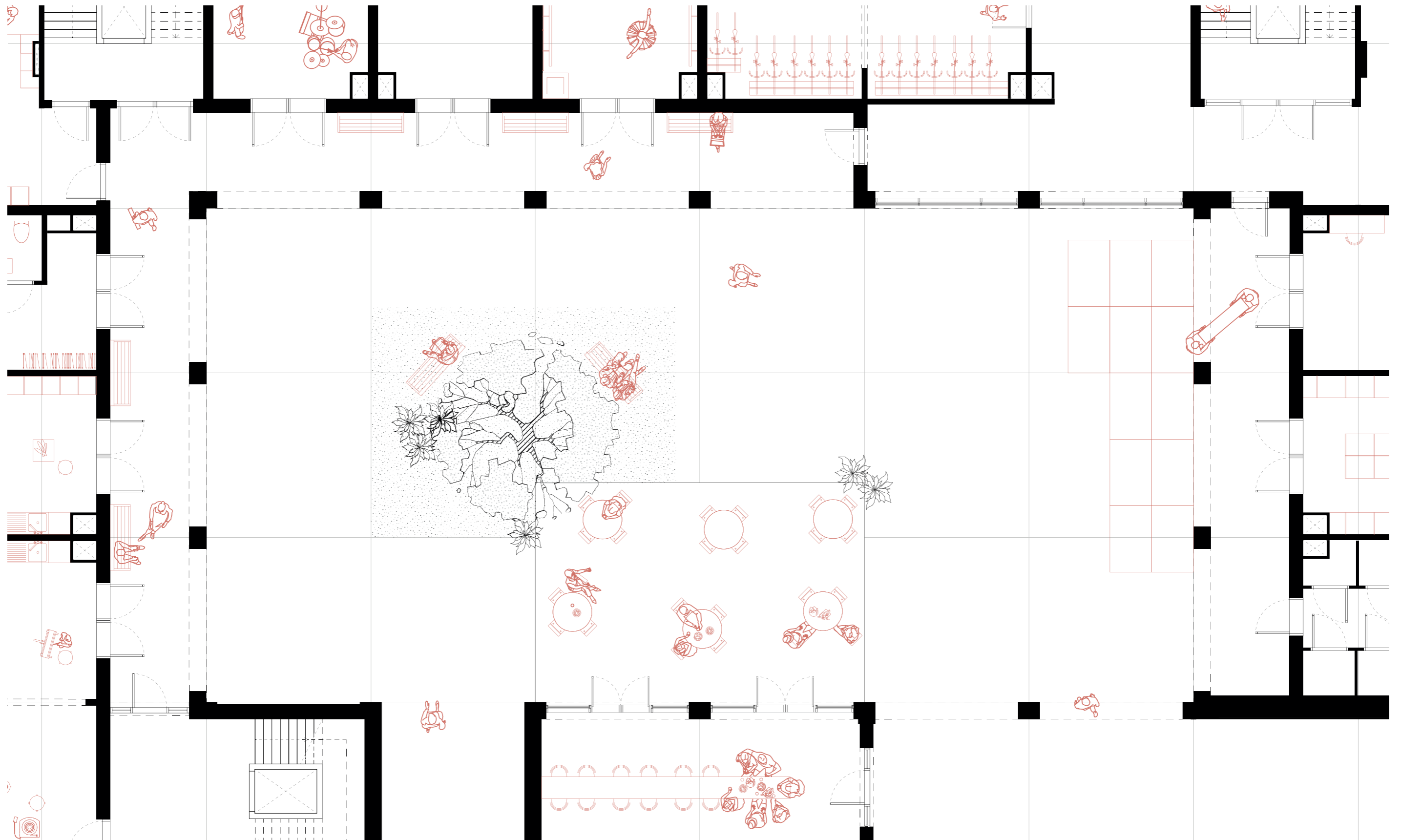
# WORKSHOP SPACES AND SHOP



- 1. body & mind studio
- 2. pottery studio
- 3. painting studio
- 4. sculpture studio
- 5. toilets
- 6. art supply shop
- 7. music rooms
- 8. solo ballet studio



# COURTYARD





COURTYARD





# TERRACE

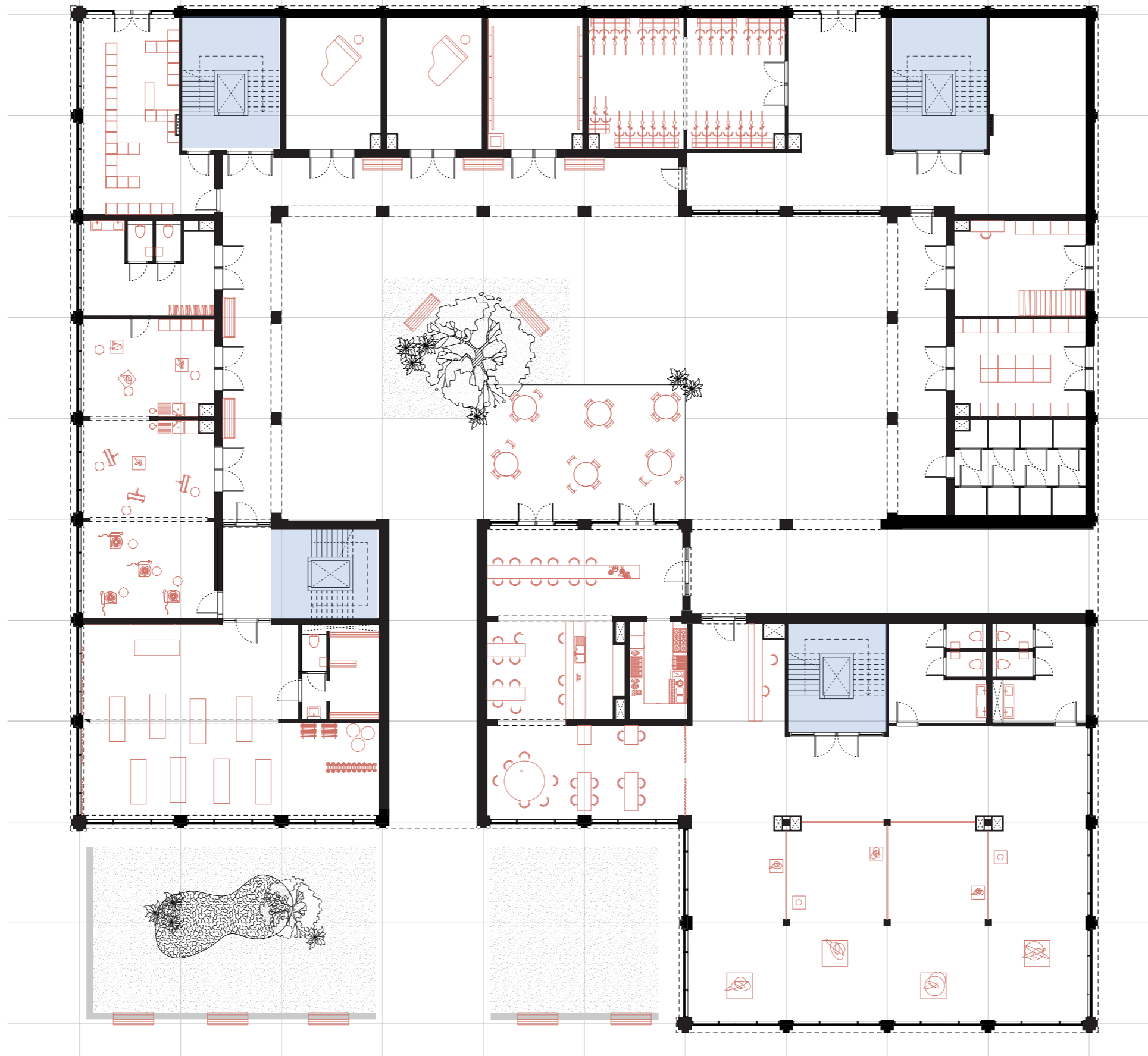






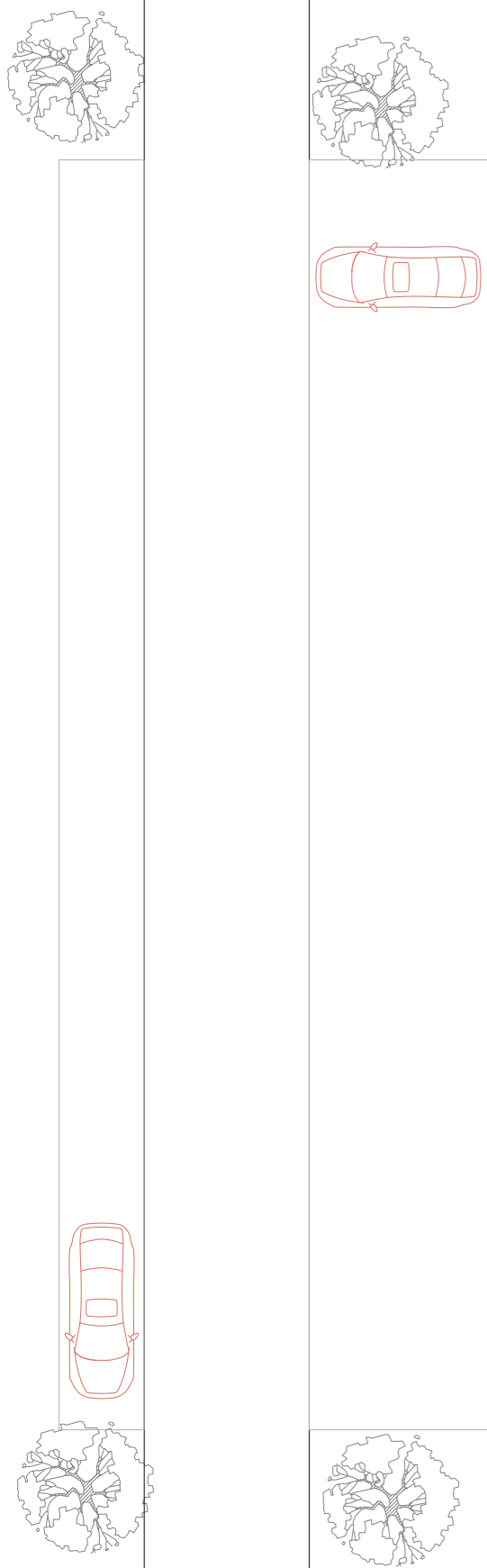




# CIRCULATION CORES

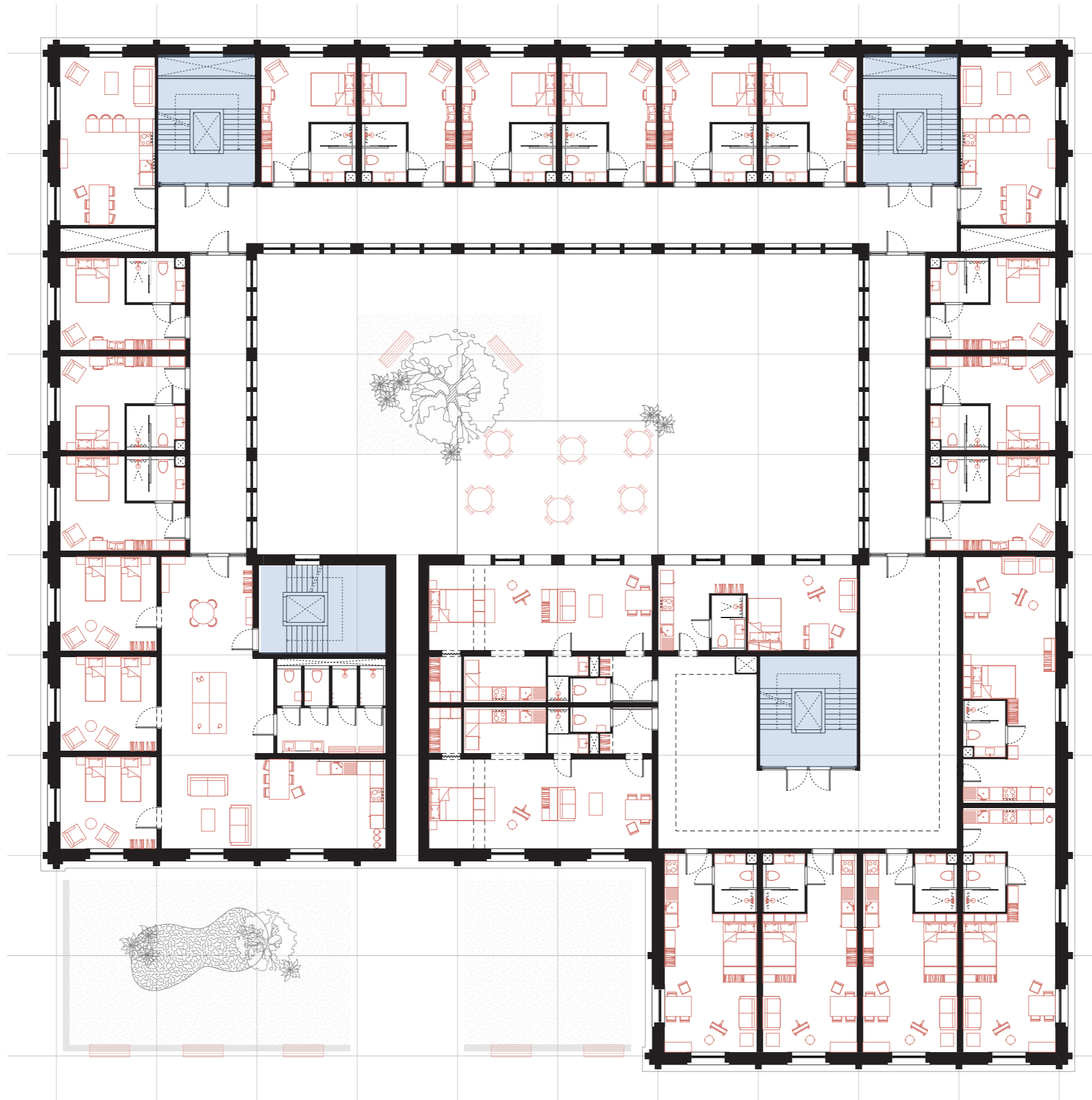


ground floor plan   
exhibition space 






# UPPER FLOORS

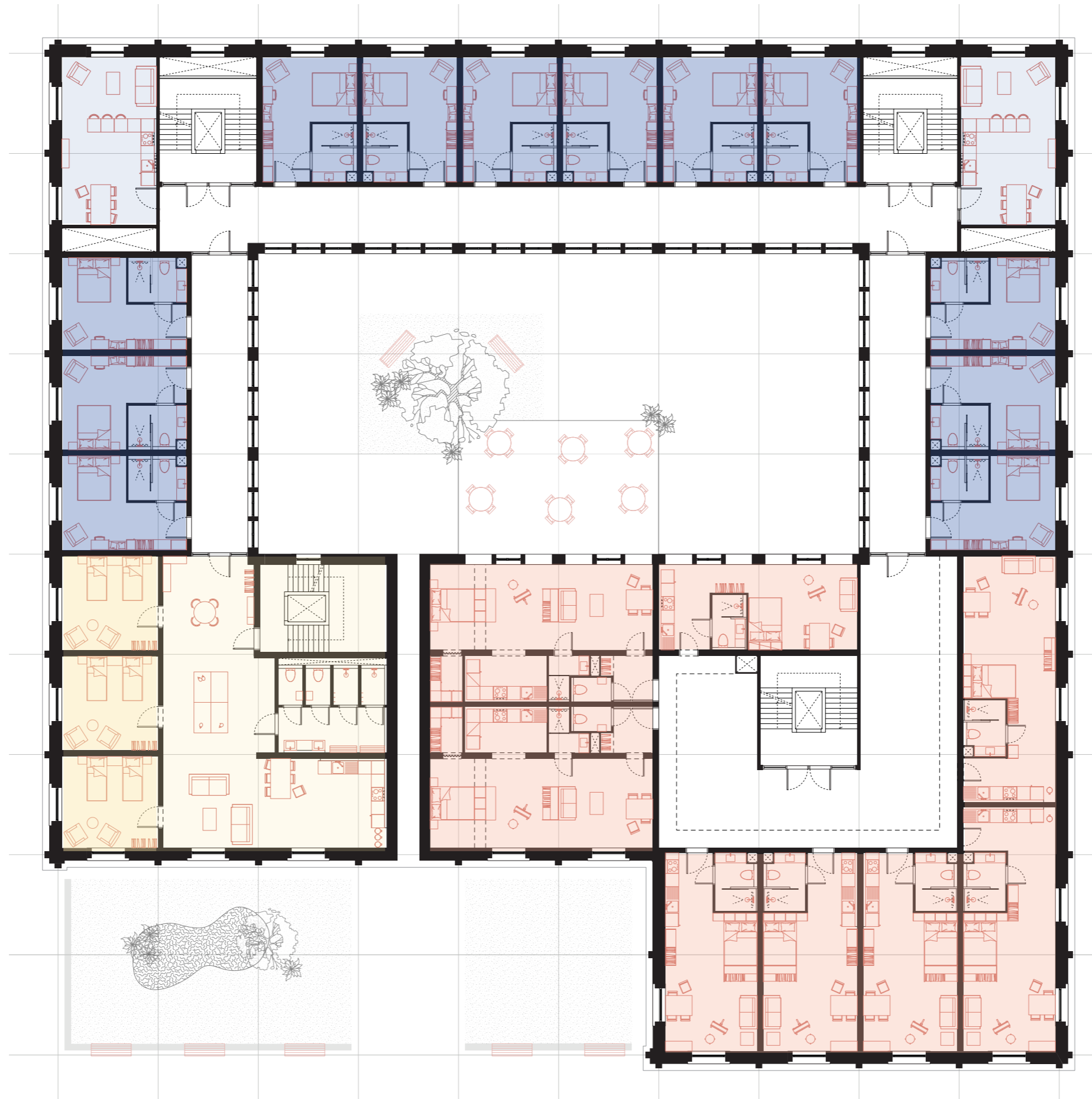



first floor plan 




 exhibition space



# UPPER FLOORS



first floor plan 

-  hotel typology
-  group housing typology
-  artist in residence typology



# GROUP HOUSING

ca. 160 m<sup>2</sup>

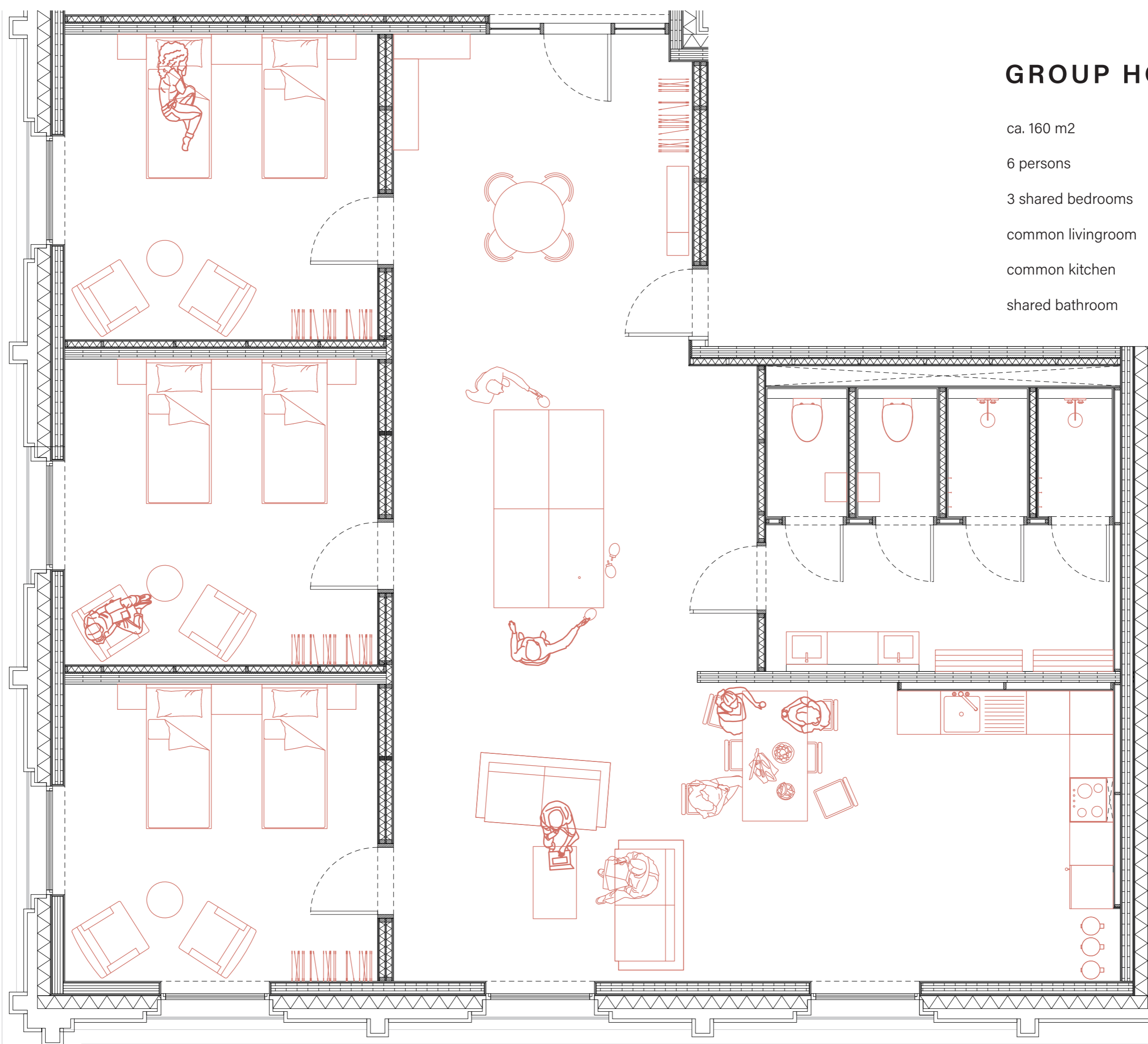
6 persons

3 shared bedrooms

common livingroom

common kitchen

shared bathroom





# HOTEL TYPOLOGY

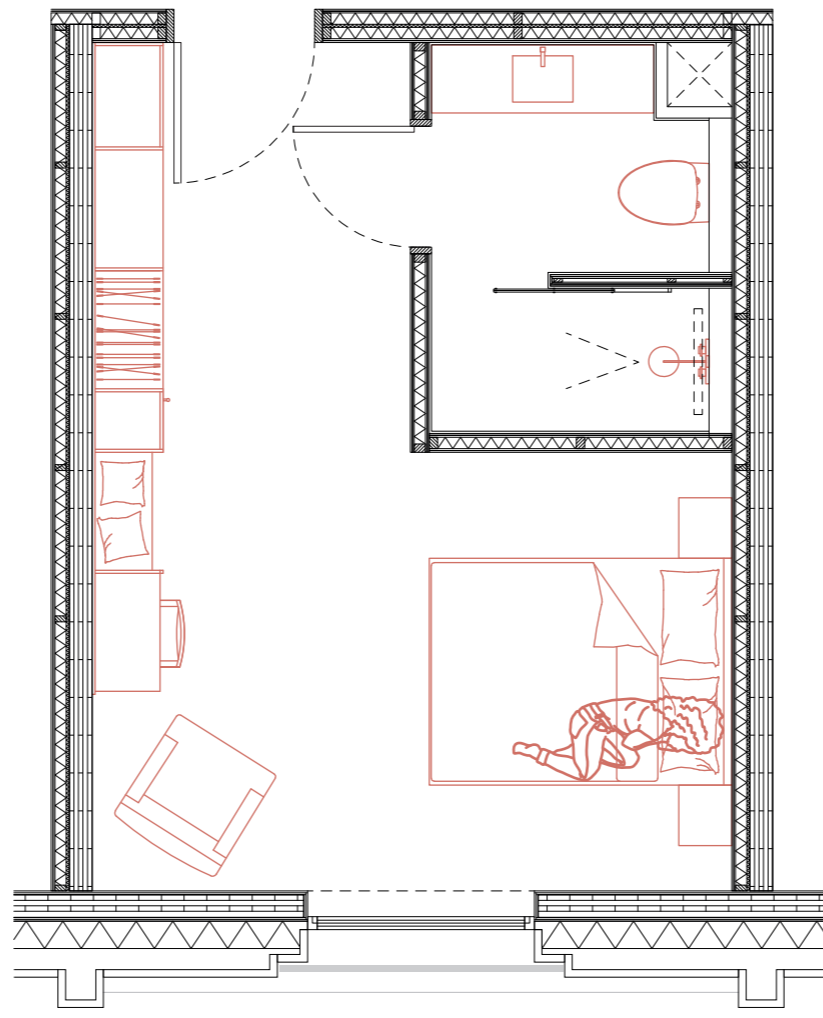
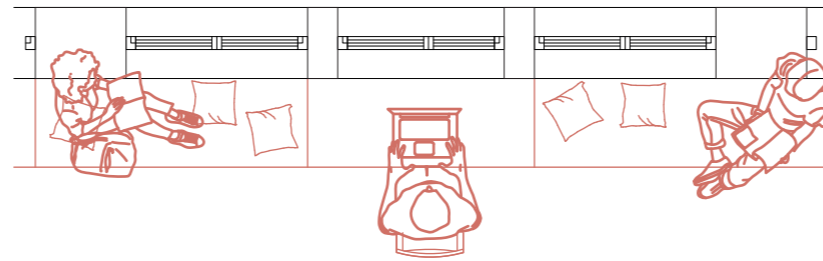
ca. 27 m<sup>2</sup> room

1-2 persons

own bathroom

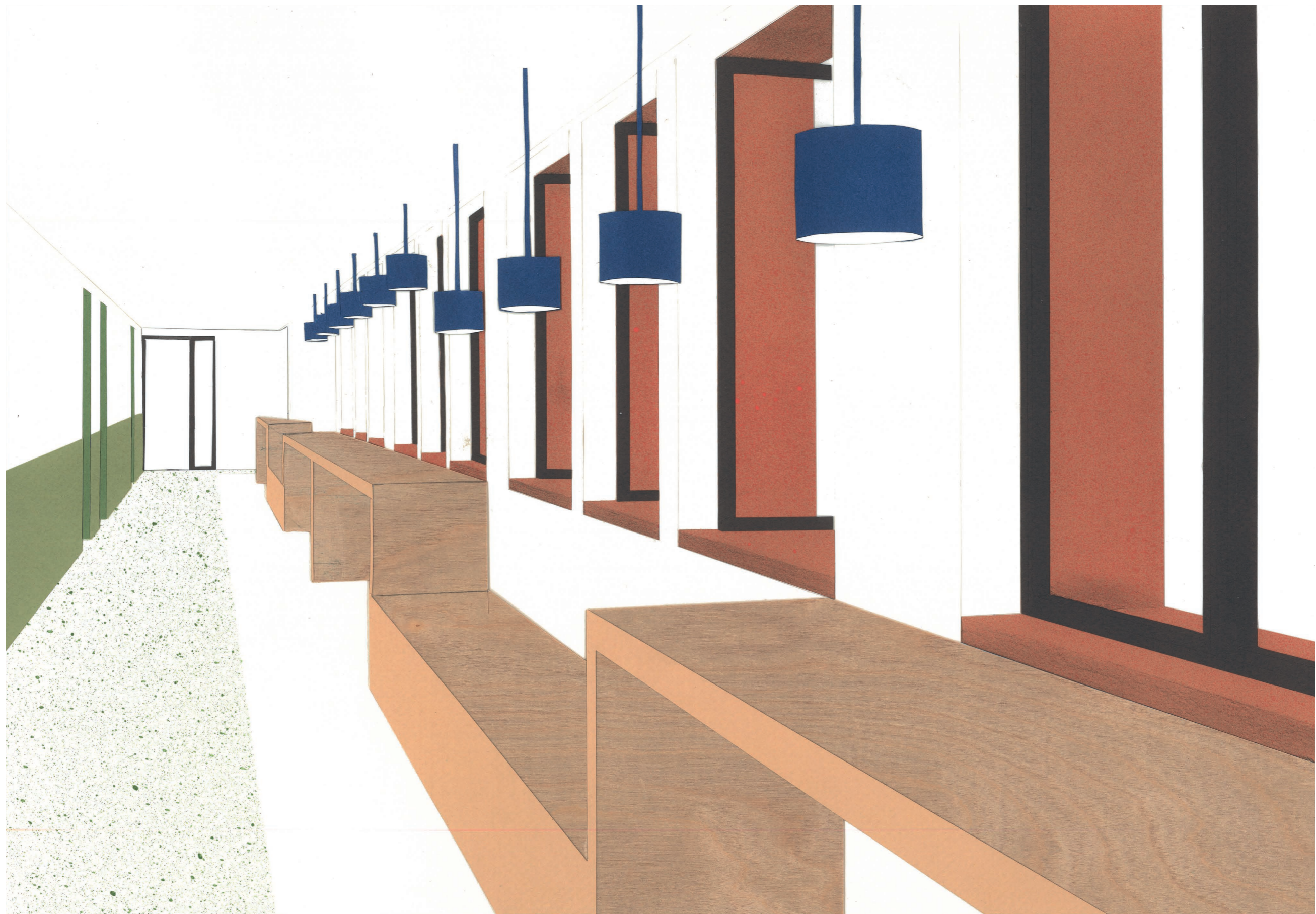
common livingroom & kitchen

in hallway





# USE OF HALLWAY





## USE OF HALLWAY





# ARTIST IN RESIDENCE

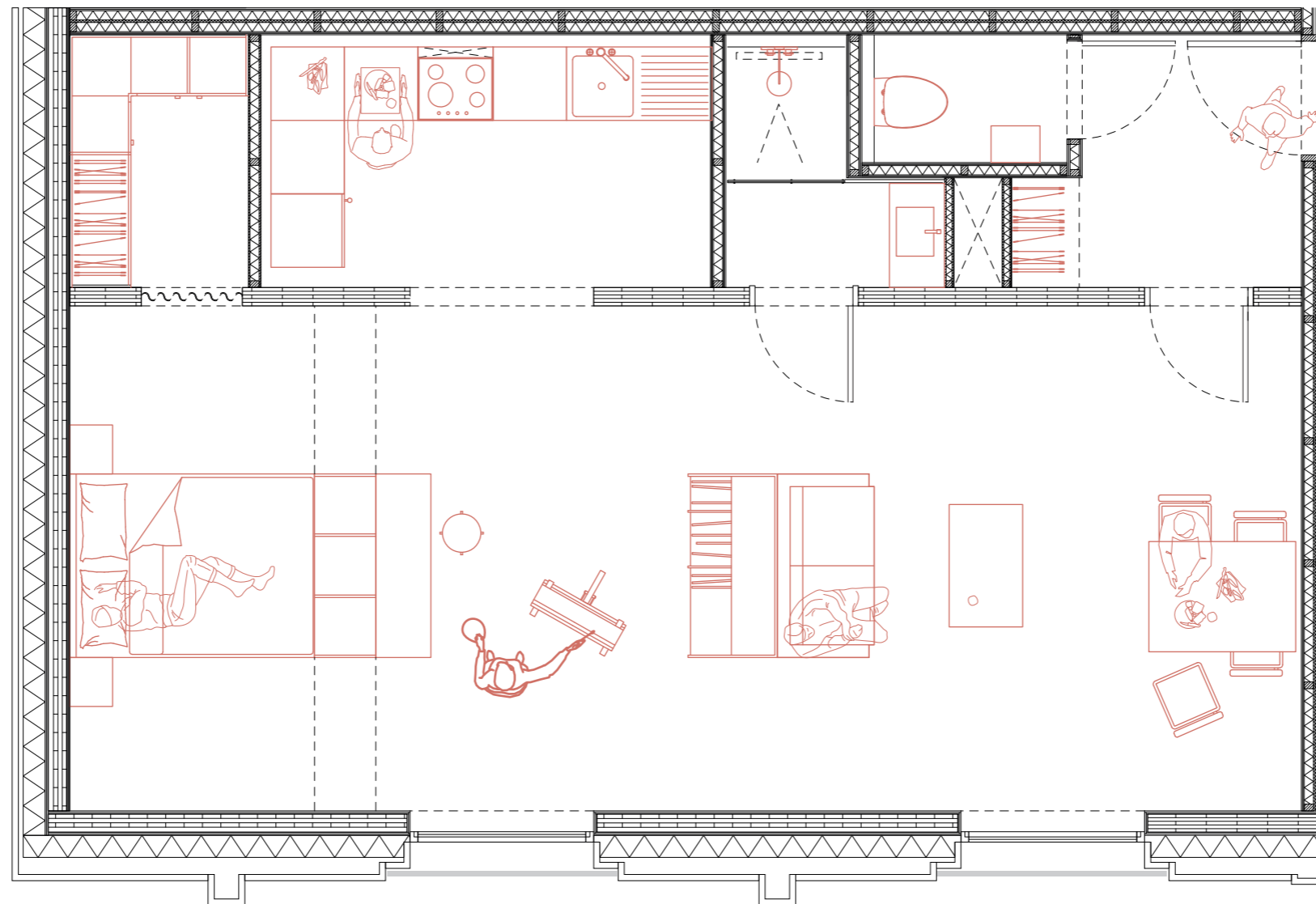
50 - 60 m2 studio

1-2 persons

own bathroom

own kitchen

own living & atelier space



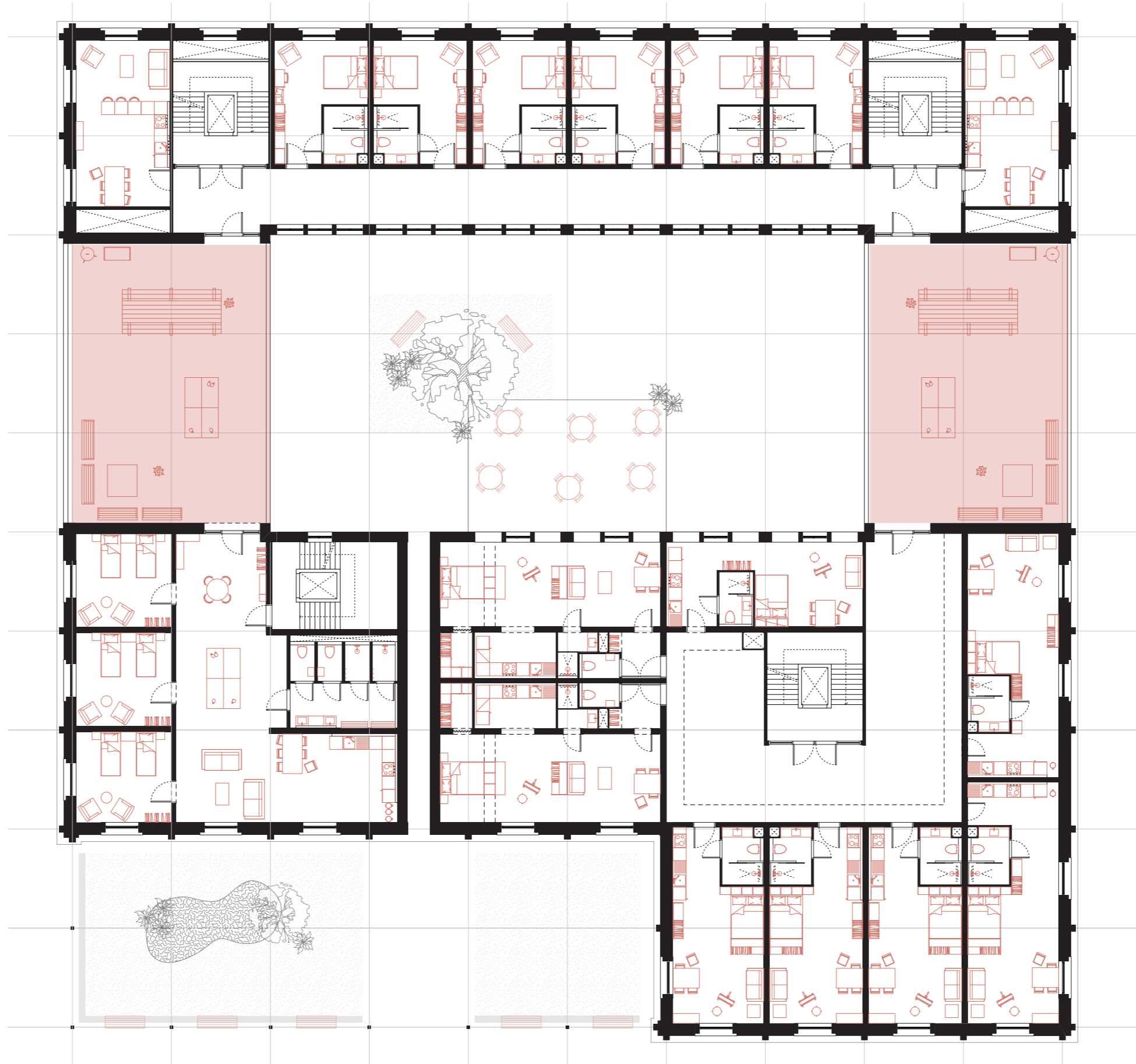


ARTIST IN RESIDENCE





# ROOF TERRACES



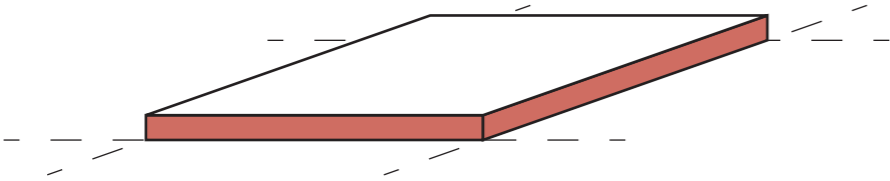
third floor plan



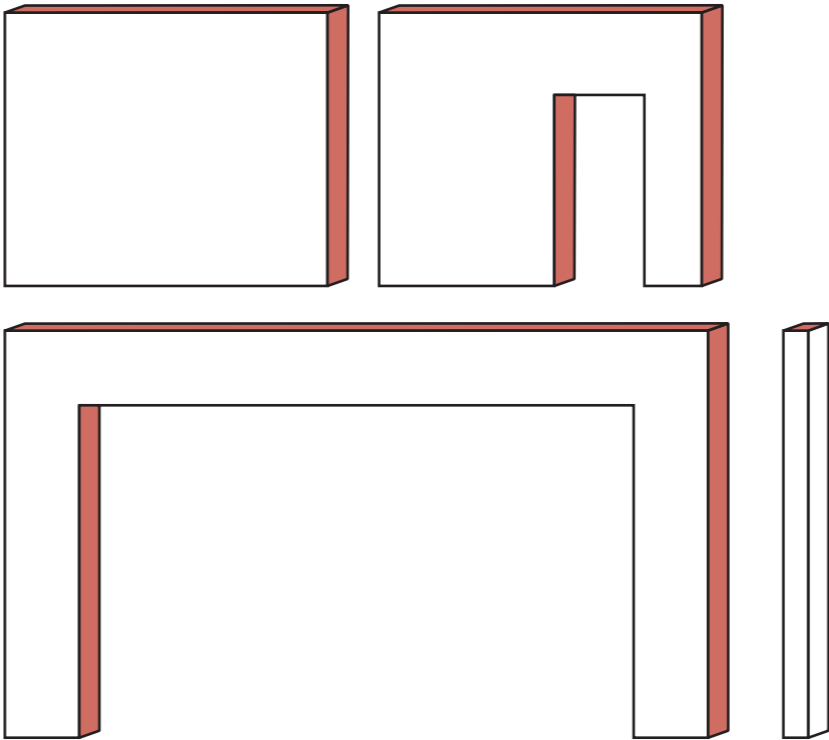
■ roof terraces



# STRUCTURE

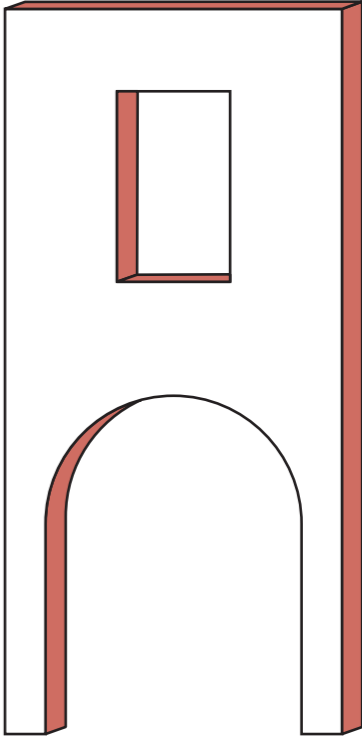


CLT floors on a 4,50m span



CLT inner walls on a 4,50m grid

exception:  
glue-lam columns ground floor or  
CLT frames spanning 9m

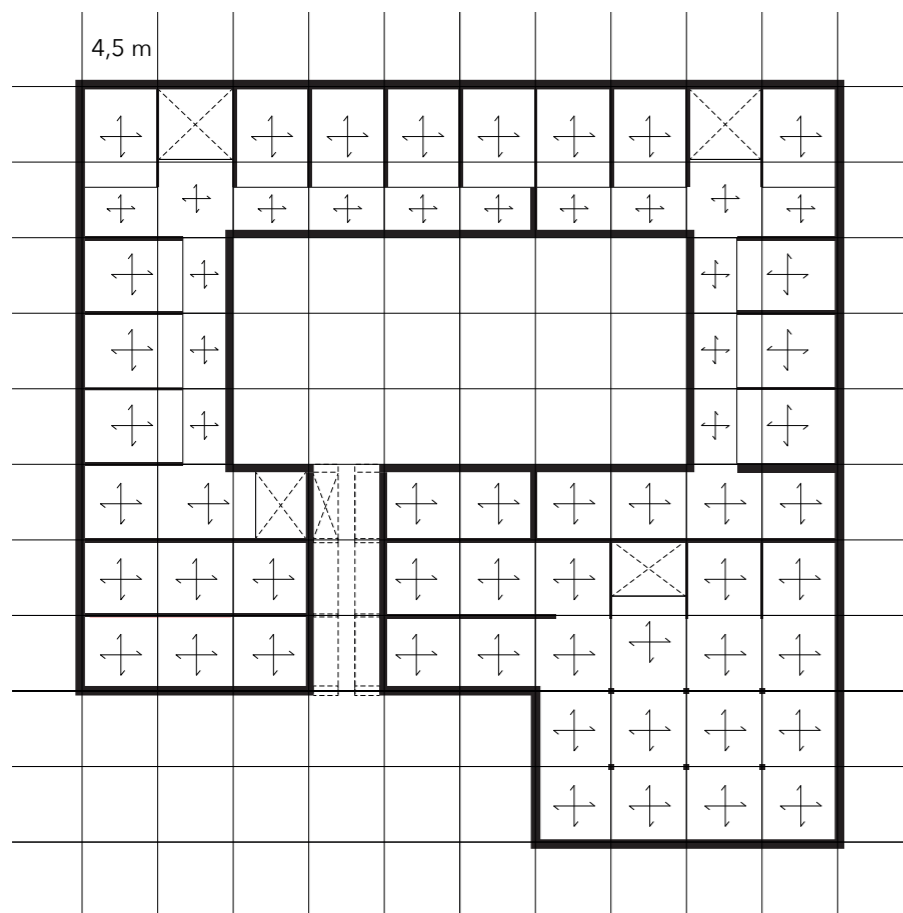


structural CLT outer walls

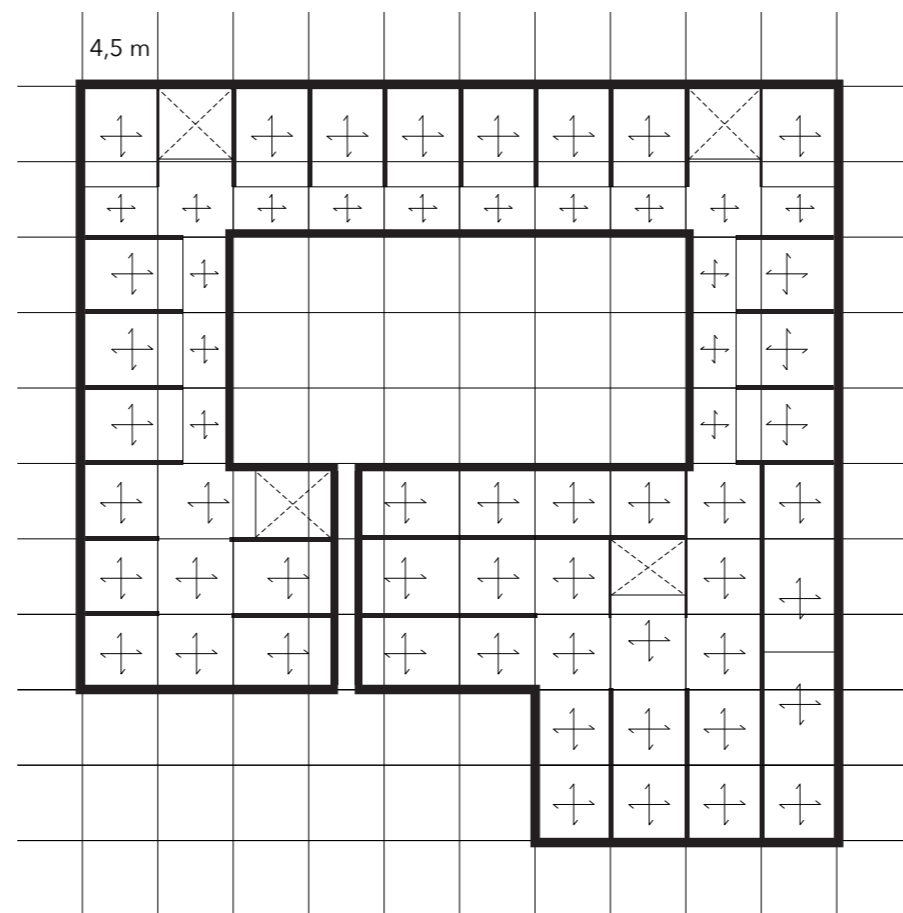
with self-carrying concrete  
facade in front



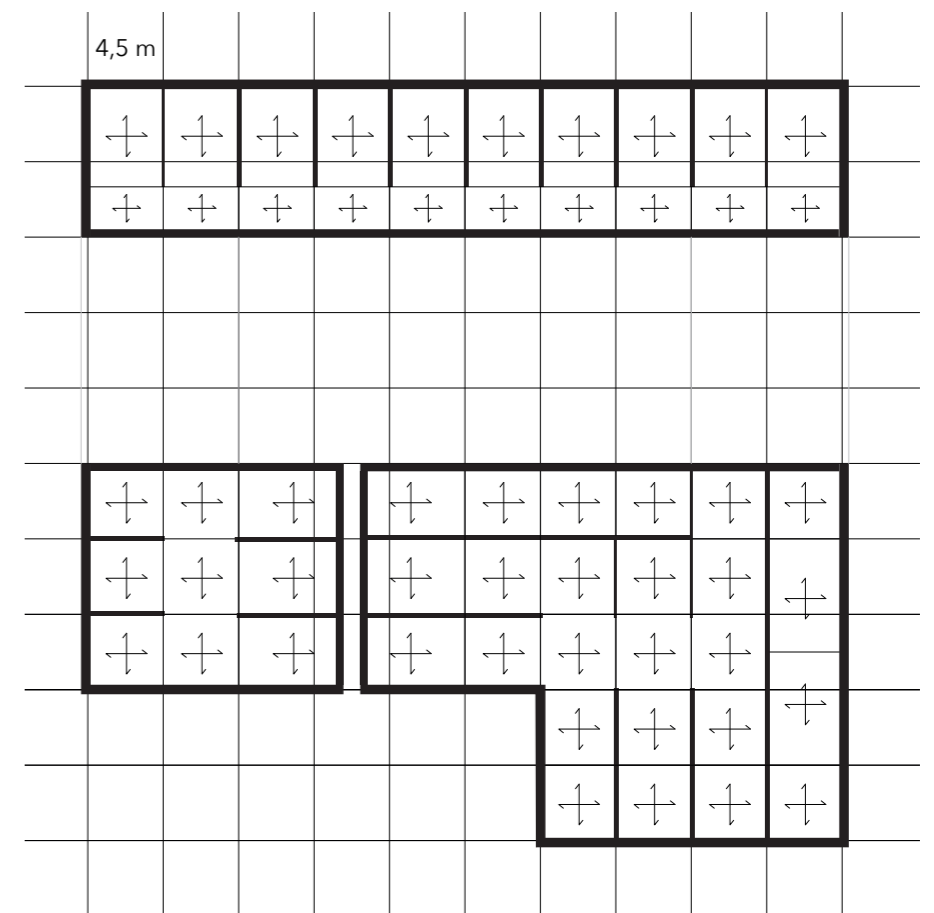
# STRUCTURE



ground floor



1st & 2nd floor



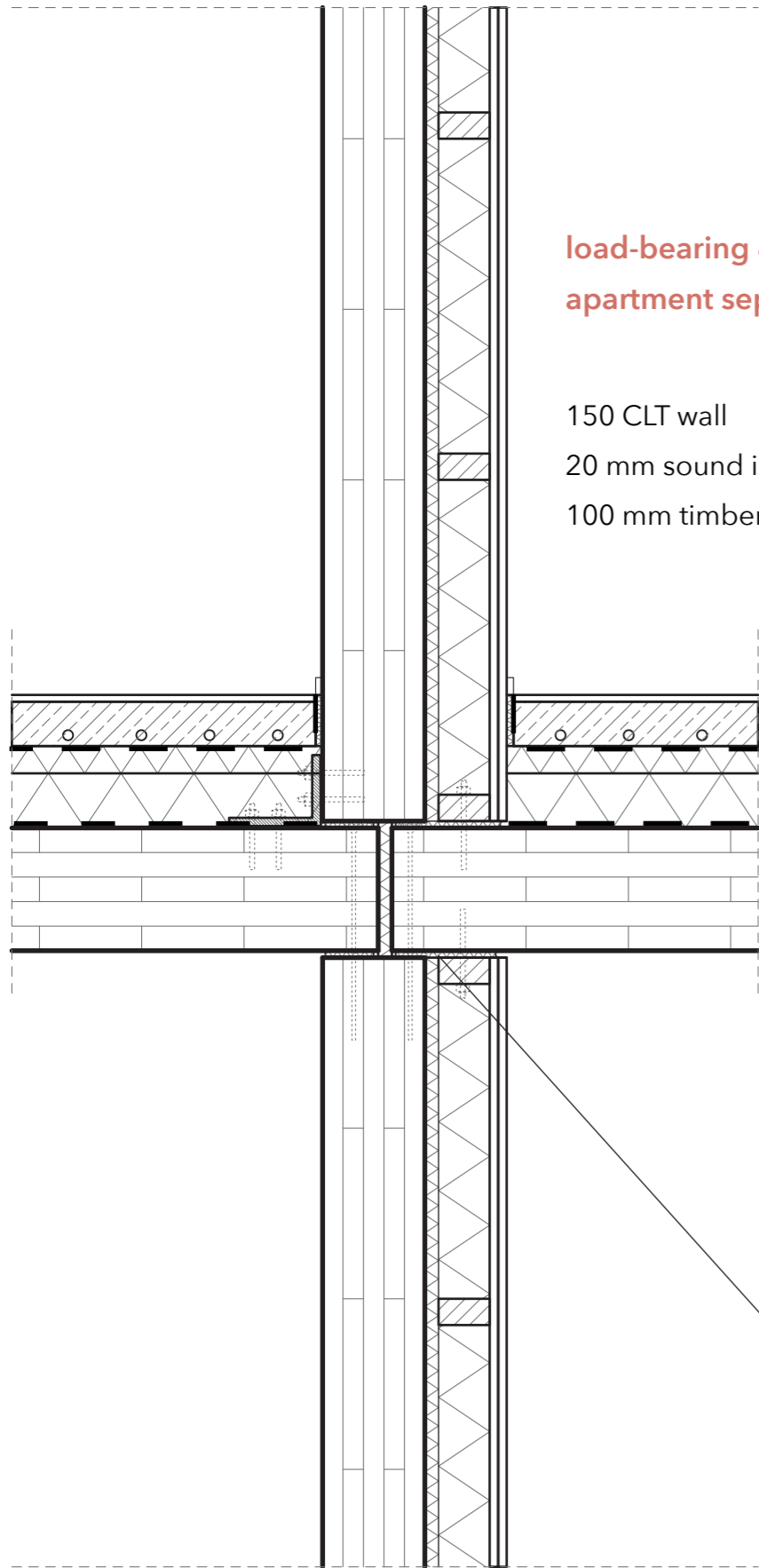
3rd floor



# TYPES OF WALLS

load-bearing &  
apartment separating wall

150 CLT wall  
20 mm sound insulation  
100 mm timber stud wall

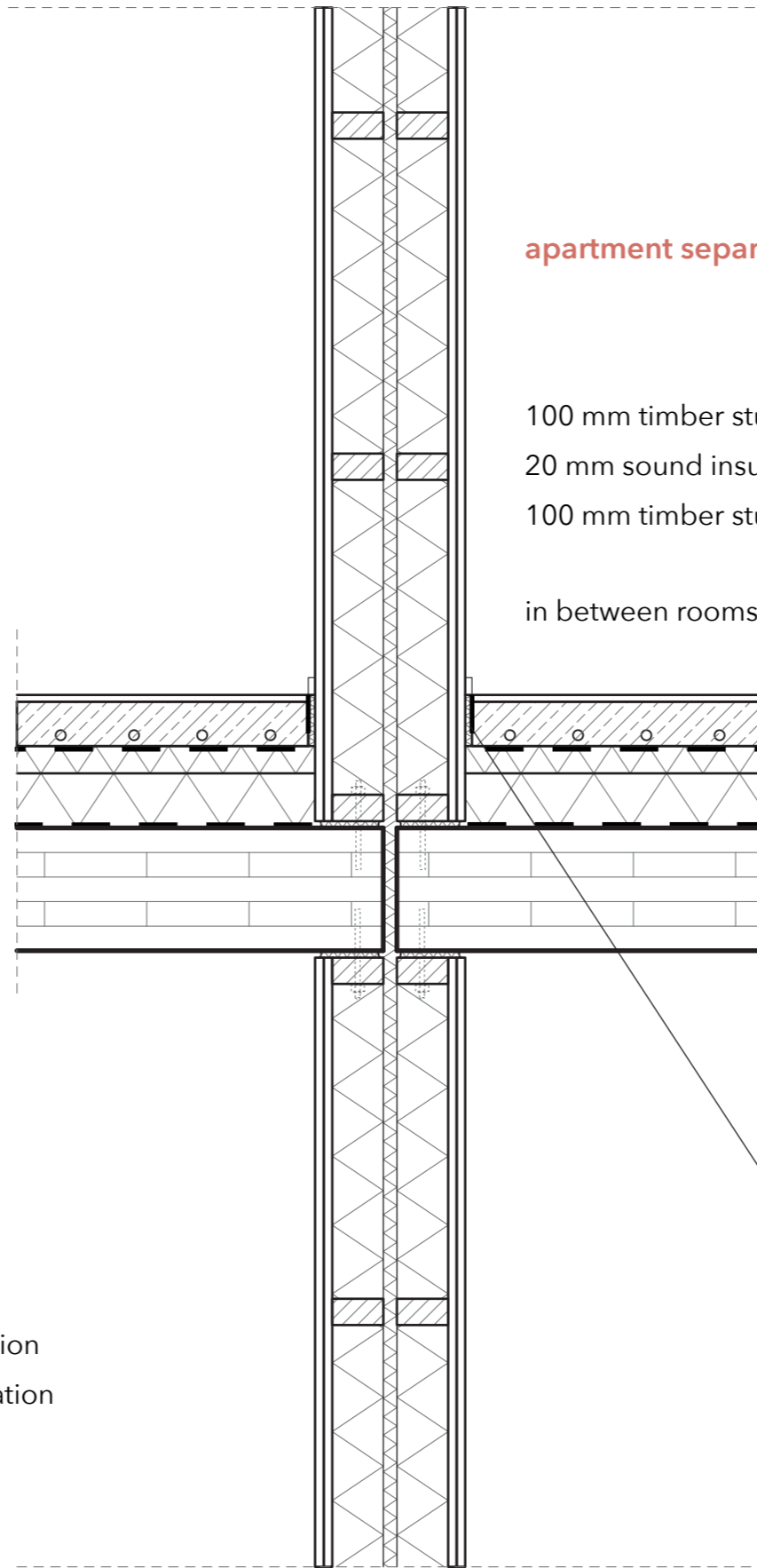


rubber connection  
for sound insulation

apartment separating wall

100 mm timber stud wall  
20 mm sound insulation  
100 mm timber stud wall

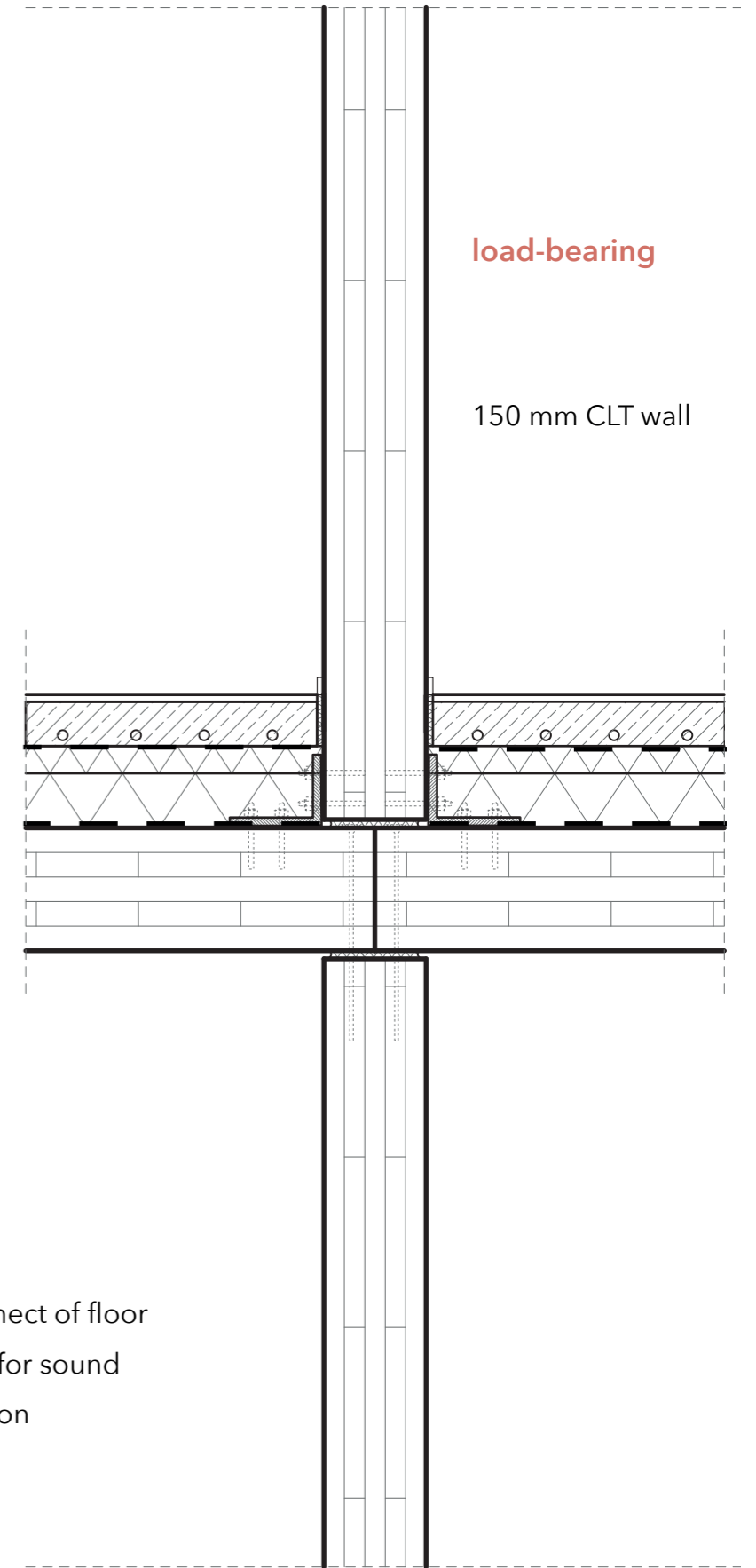
in between rooms and hallway



disconnect of floor  
to wall for sound  
insulation

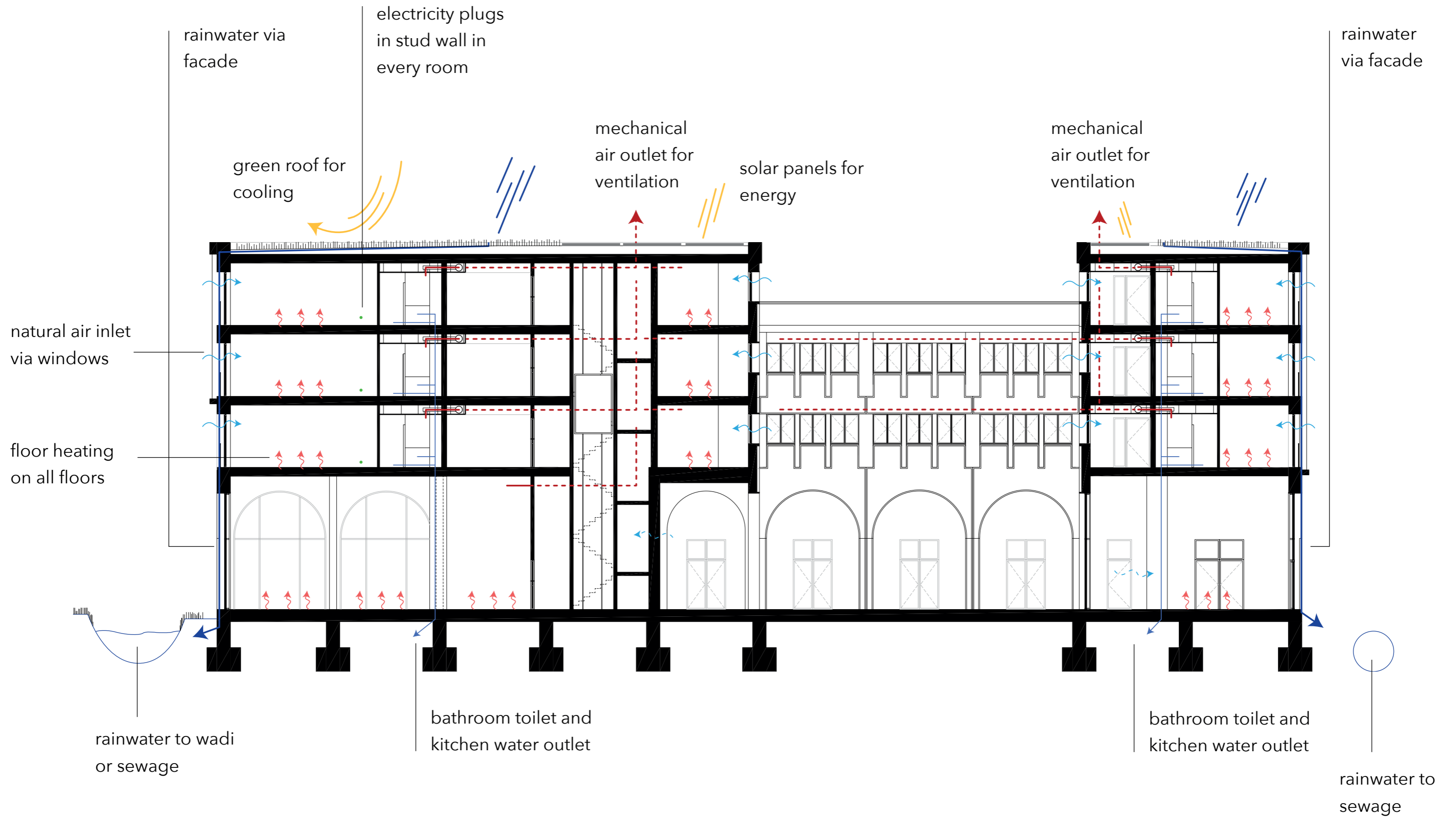
load-bearing

150 mm CLT wall





# CLIMATE DIAGRAM





# OUTSIDE FACADES



east facade  
1:100



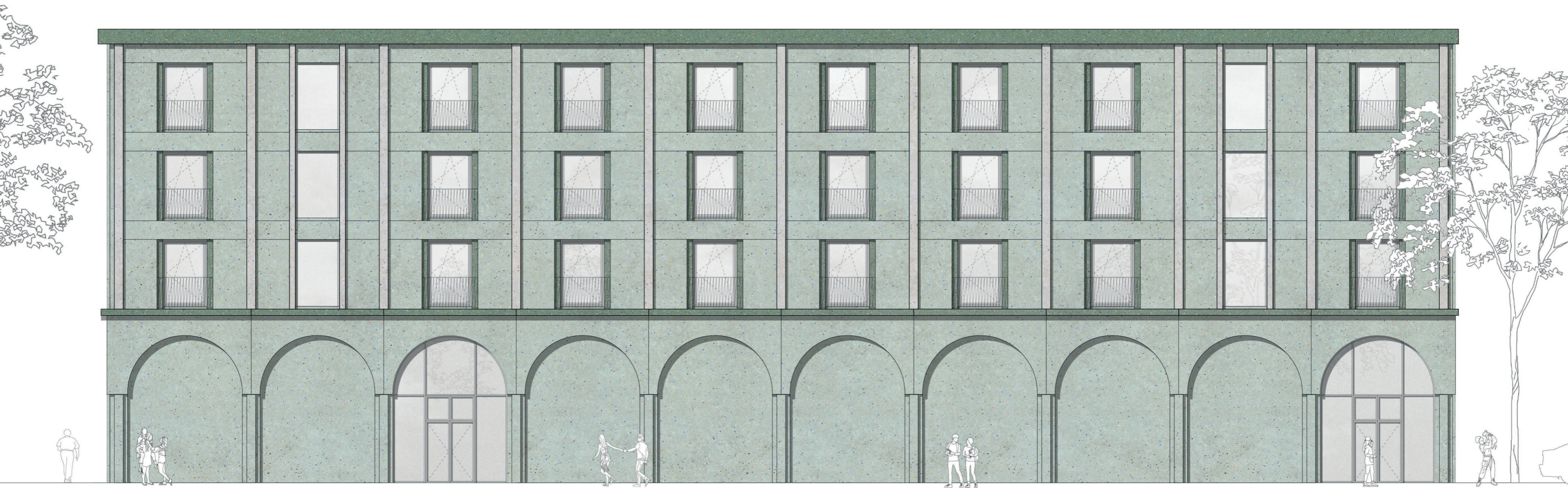
# OUTSIDE FACADES



south facade  
1:100



# OUTSIDE FACADES



west facade  
1:100



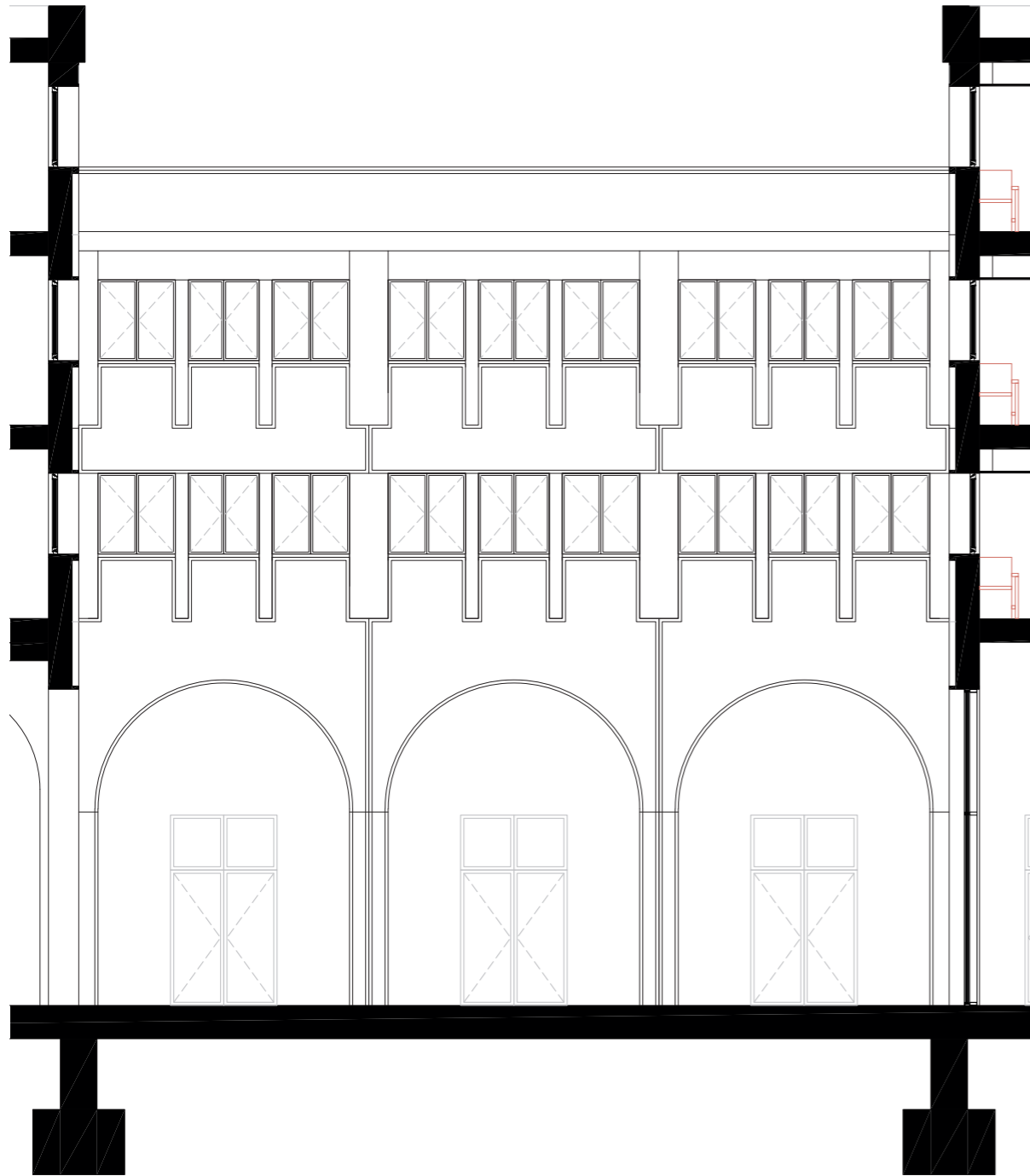
# OUTSIDE FACADES



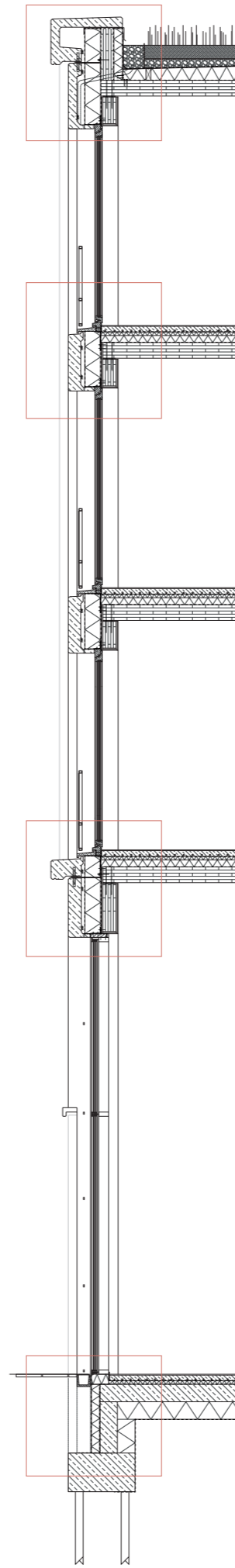
north facade  
1:100



# COURTYARD FACADES





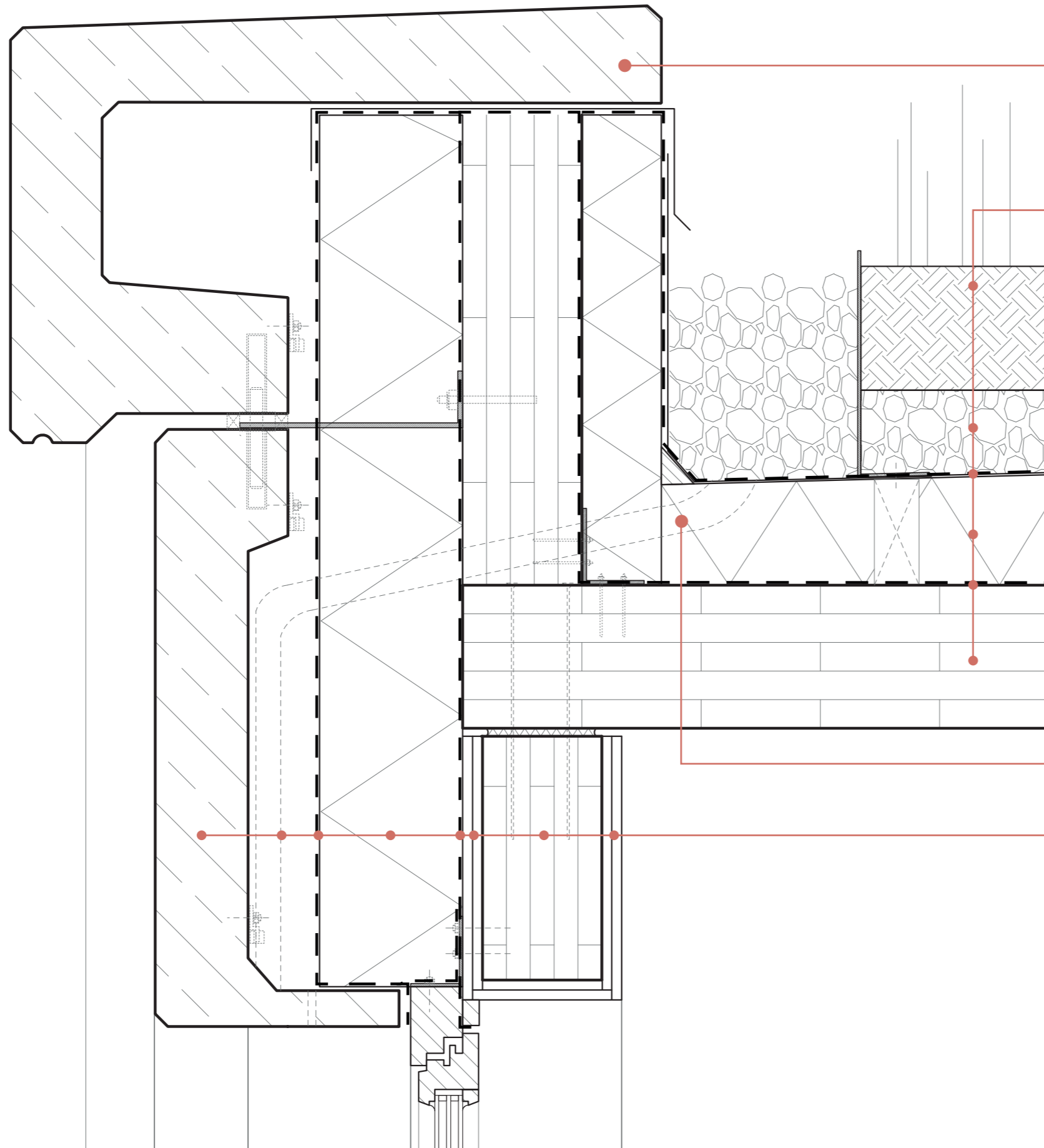


# FACADE FRAGMENT



# DETAILS

roof edge  
1:5



facade element as  
protective layer

vegetation roof  
100 mm sloping soil layer  
betumen layer  
130 mm insulation  
vapour permeable film  
CLT floor panel

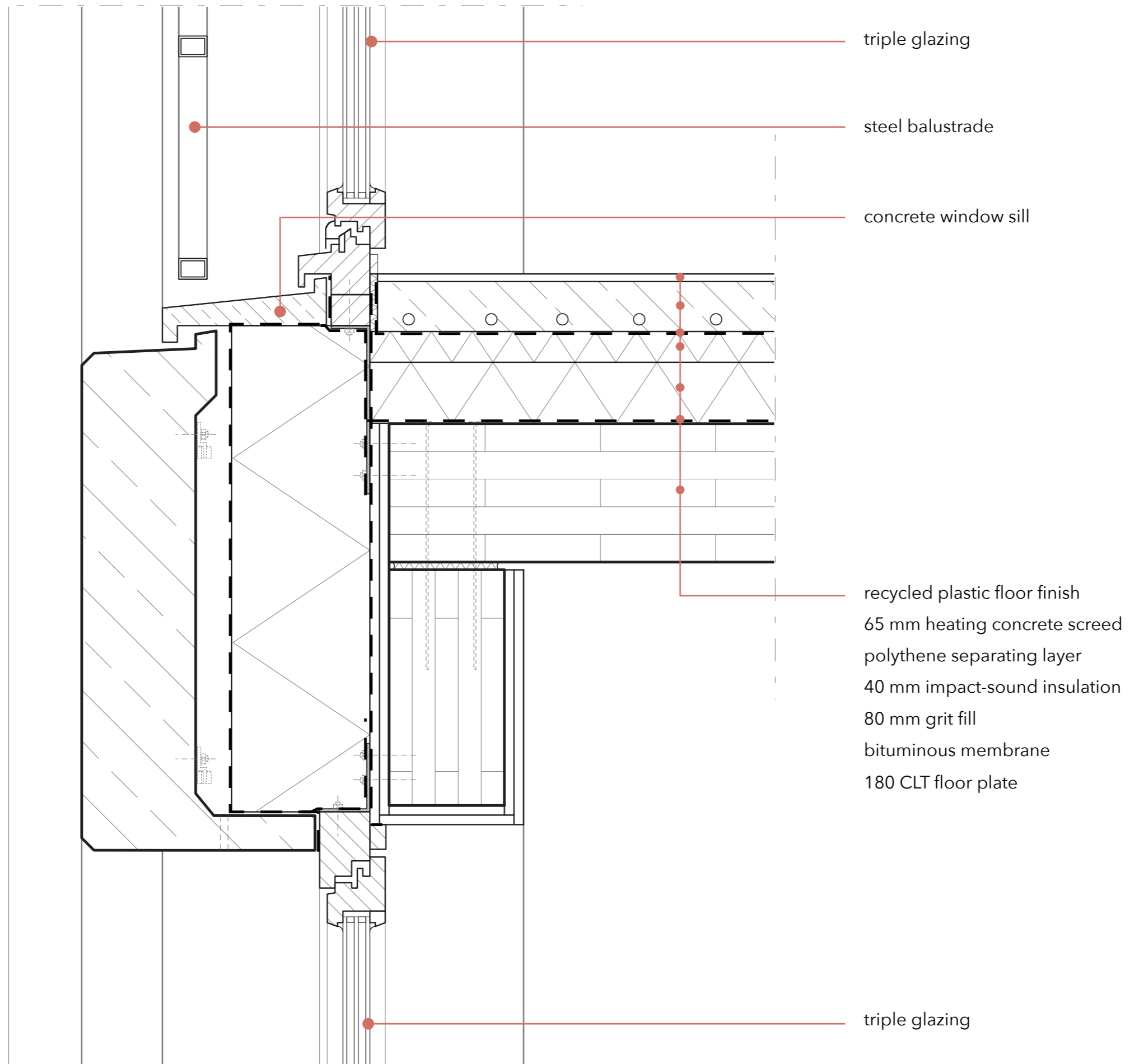
rain water drainage

concrete facade element (various sizes)  
air cavity  
waterproof foil  
180 mm insulation  
vapour permeable film  
2 x 12,5 mm plaster board  
150 mm CLT wall  
2 x 12,5 mm plaster board



# DETAILS

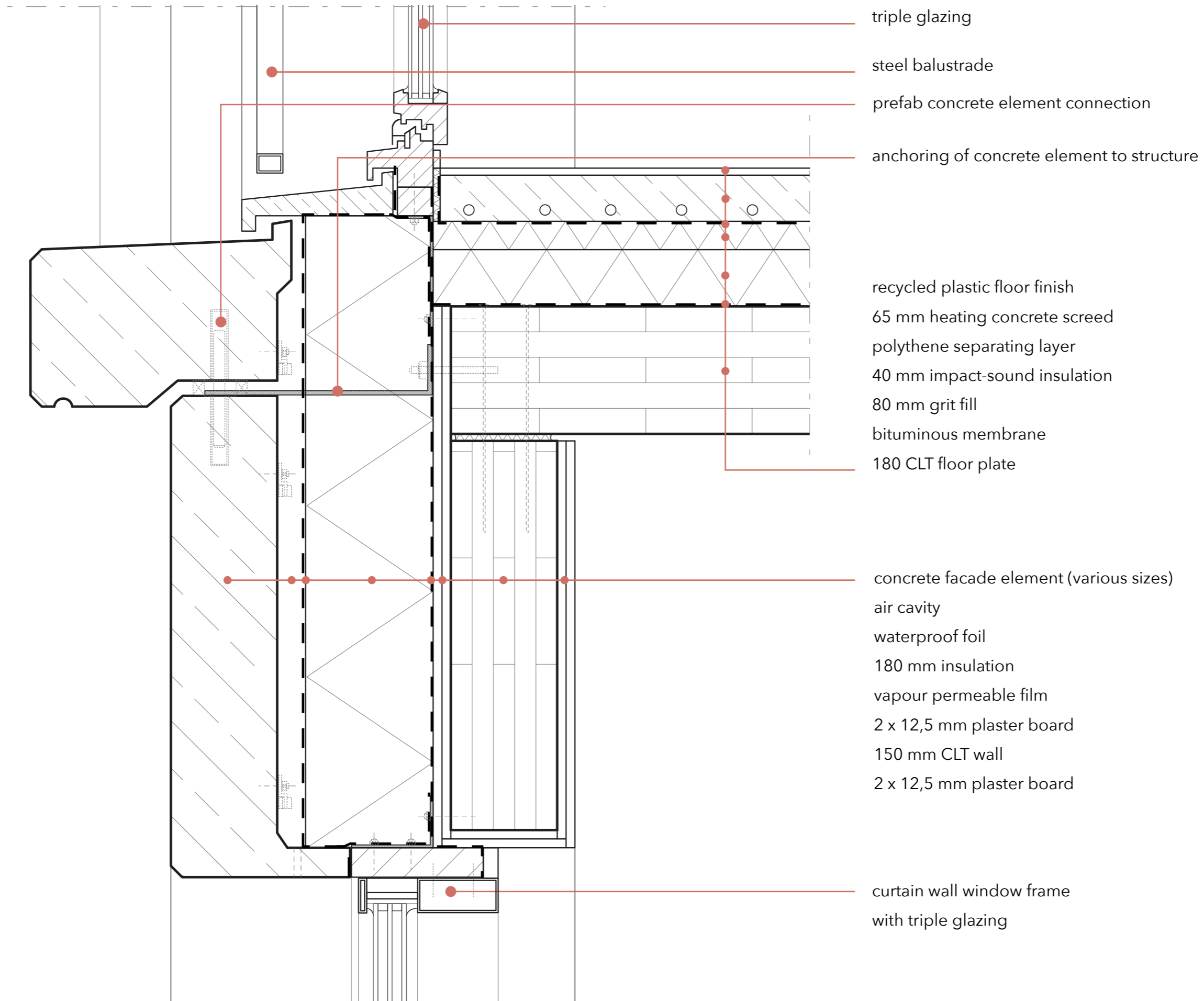
1st to 2nd floor  
1:5





# DETAILS

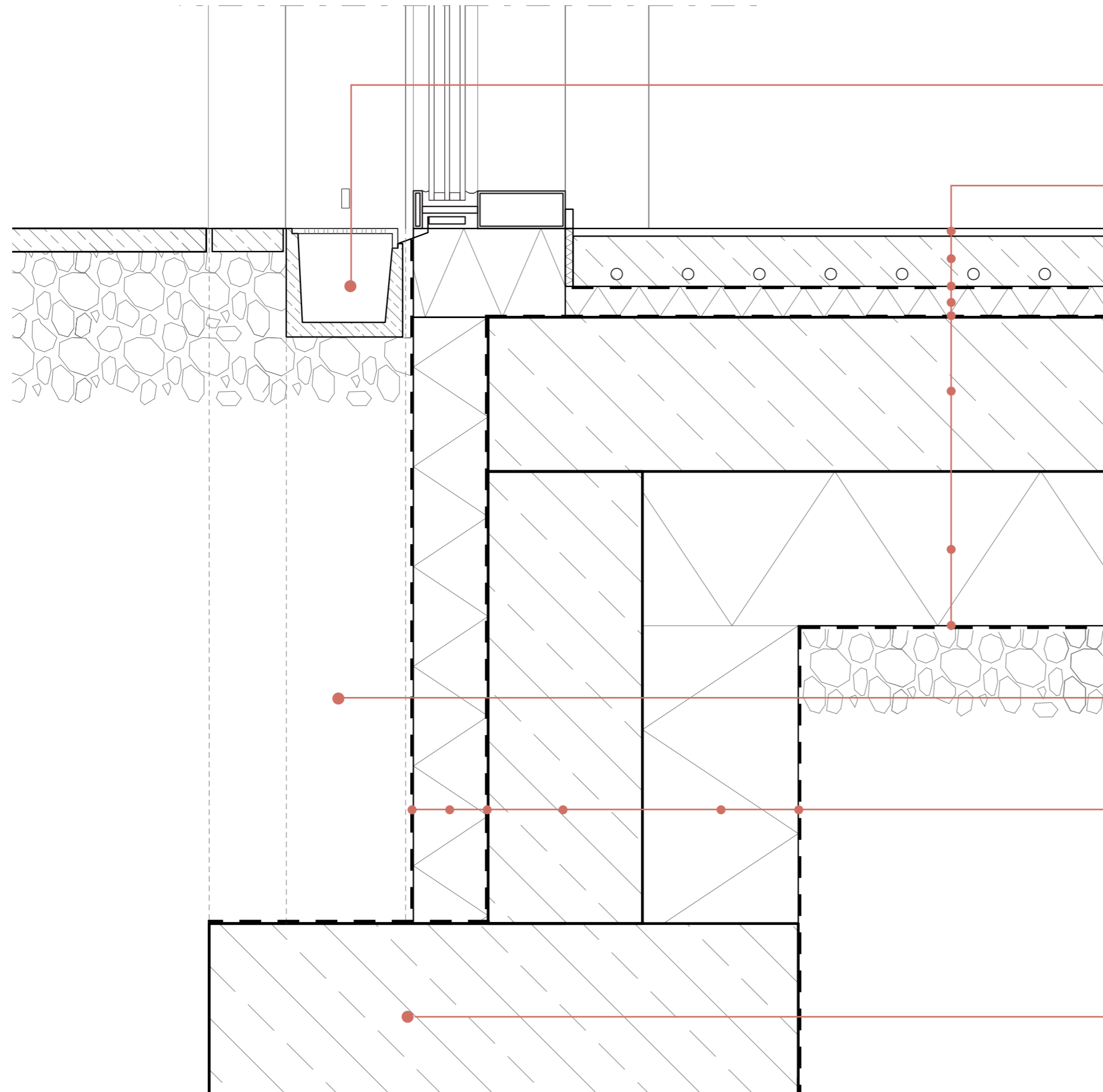
BG to 1st floor  
1:5





# DETAILS

ground floor  
1:5



water drainage

recycled plastic floor finish

65 mm heating concrete screed

separating layer

40 mm sound insulation

vapour permeable foil

200 mm reinforced concrete slab

200 mm insulation

waterproof foil

self carrying facade elements resting  
on foundation

waterproof foil

100 mm insulation

vapour permeable foil

200 mm concrete wall

200 mm insulation

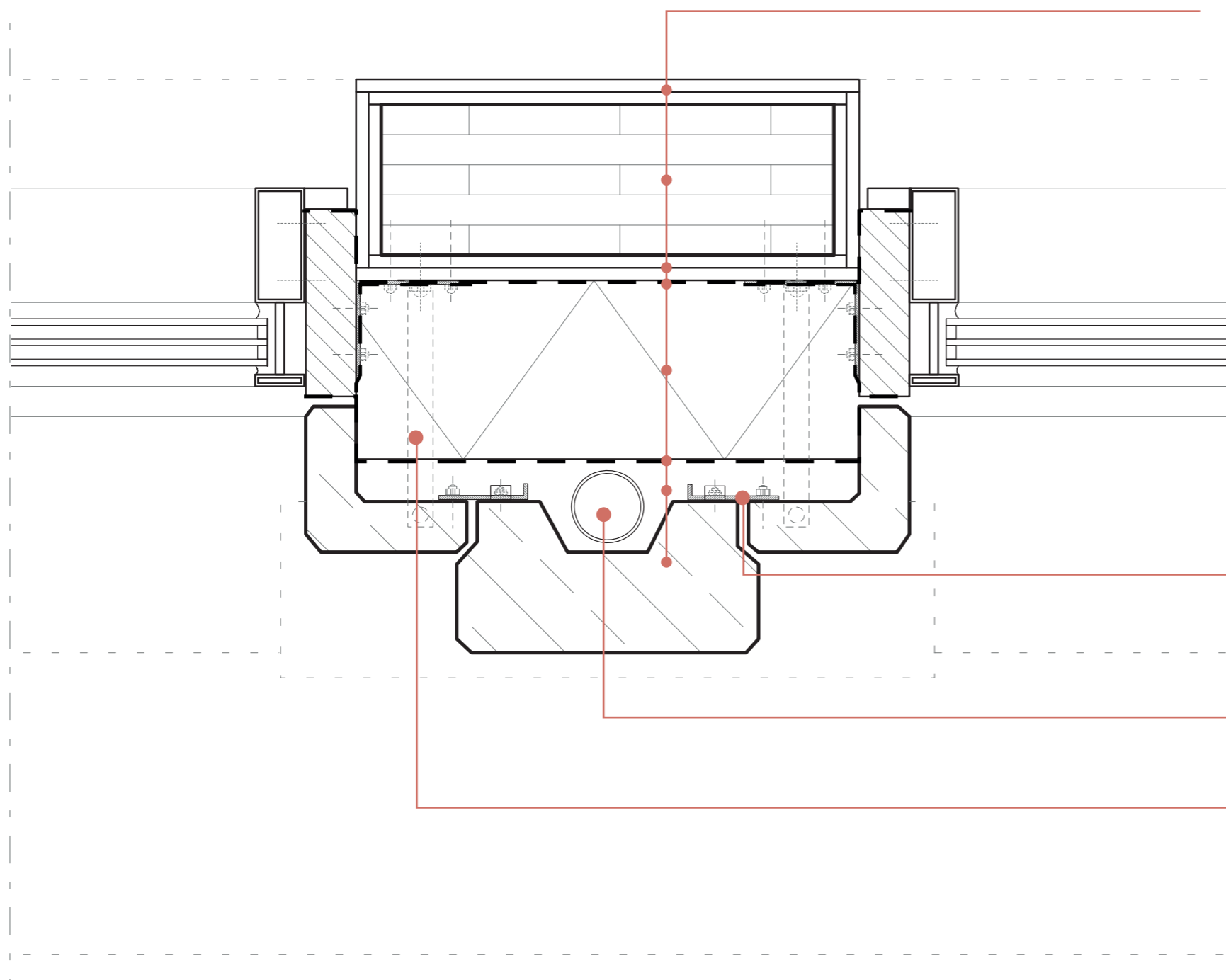
waterproof foil

foundation beam



# DETAILS

ground floor  
1:5



2 x 12,5 mm plaster board  
150 mm CLT wall  
2 x 12,5 mm plaster board  
vapour permeable film  
180 mm insulation  
waterproof foil  
air cavity (minimal 40 mm)  
concrete facade element (various sizes)

horizontal connection of concrete elements

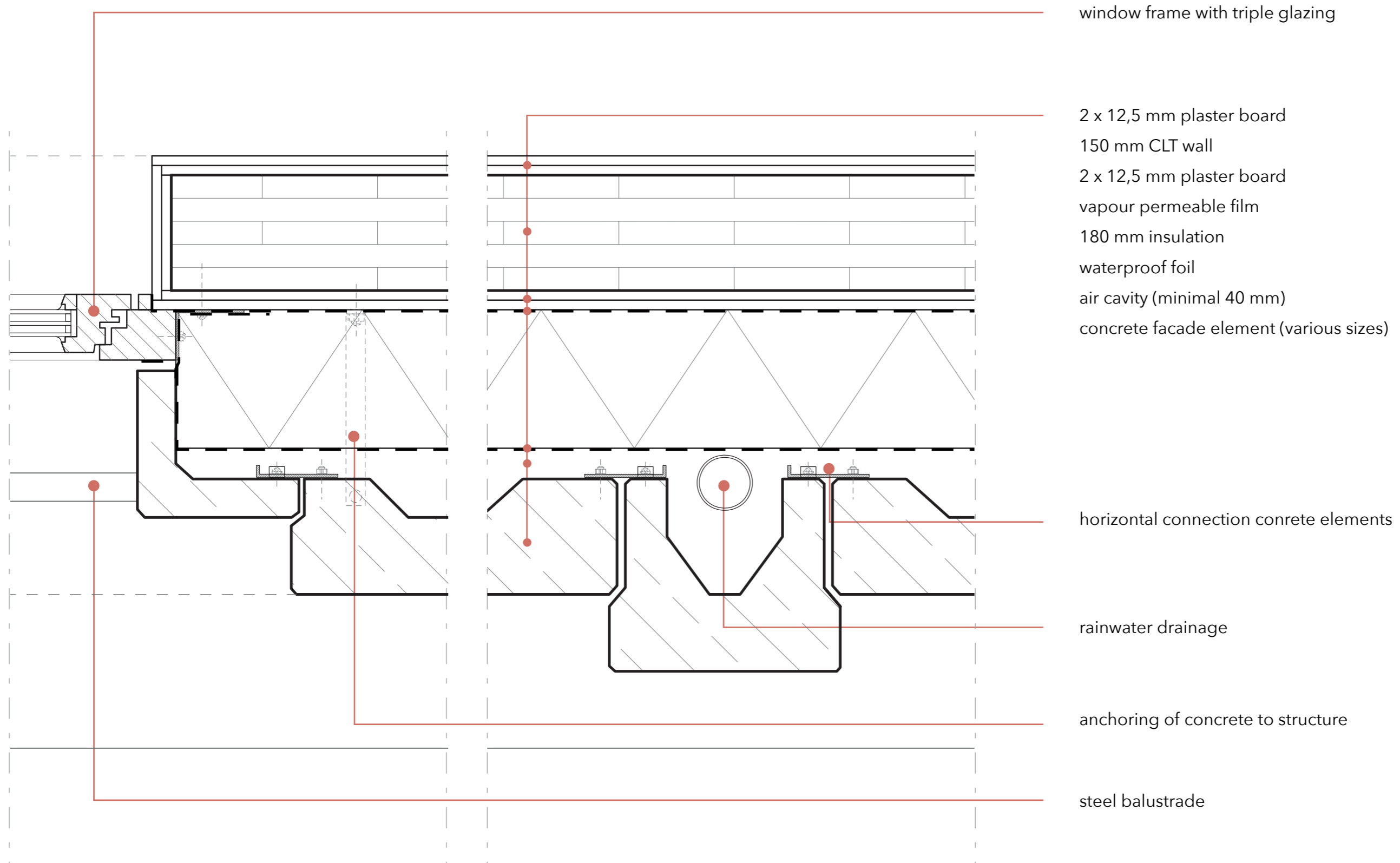
rainwater drainage

anchoring of concrete to structure



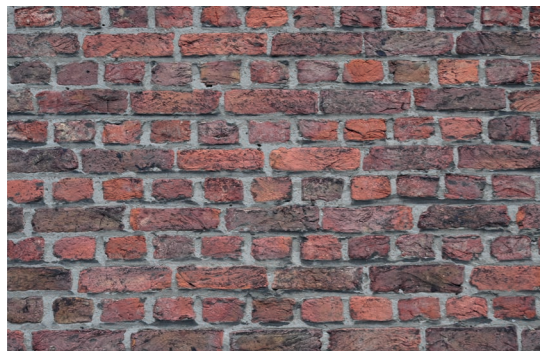
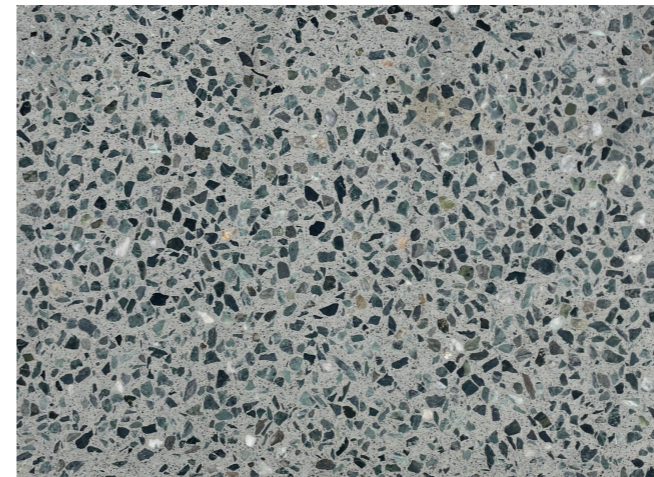
# DETAILS

first floor  
1:5





# SURROUNDING MATERIALS





# FACADE MATERIAL



1:1 material representations



FACADE MATERIAL





## SEQUENCE OF ARRIVAL



green mass





green mass



arches  
openings





green mass



arches  
openings



elements on facade





green mass



arches  
openings



elements on facade



facade panelling  
relief by elements  
window frames & railings





green mass



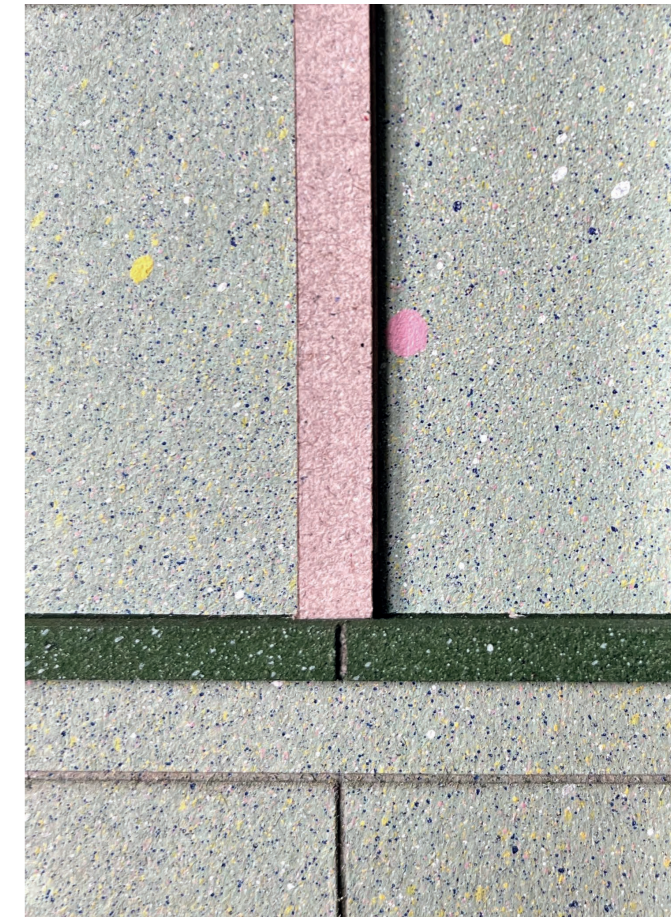
arches  
openings



elements on facade



facade panelling  
relief by elements  
window frames & railings



sprinkles  
gaps



THANK YOU!

