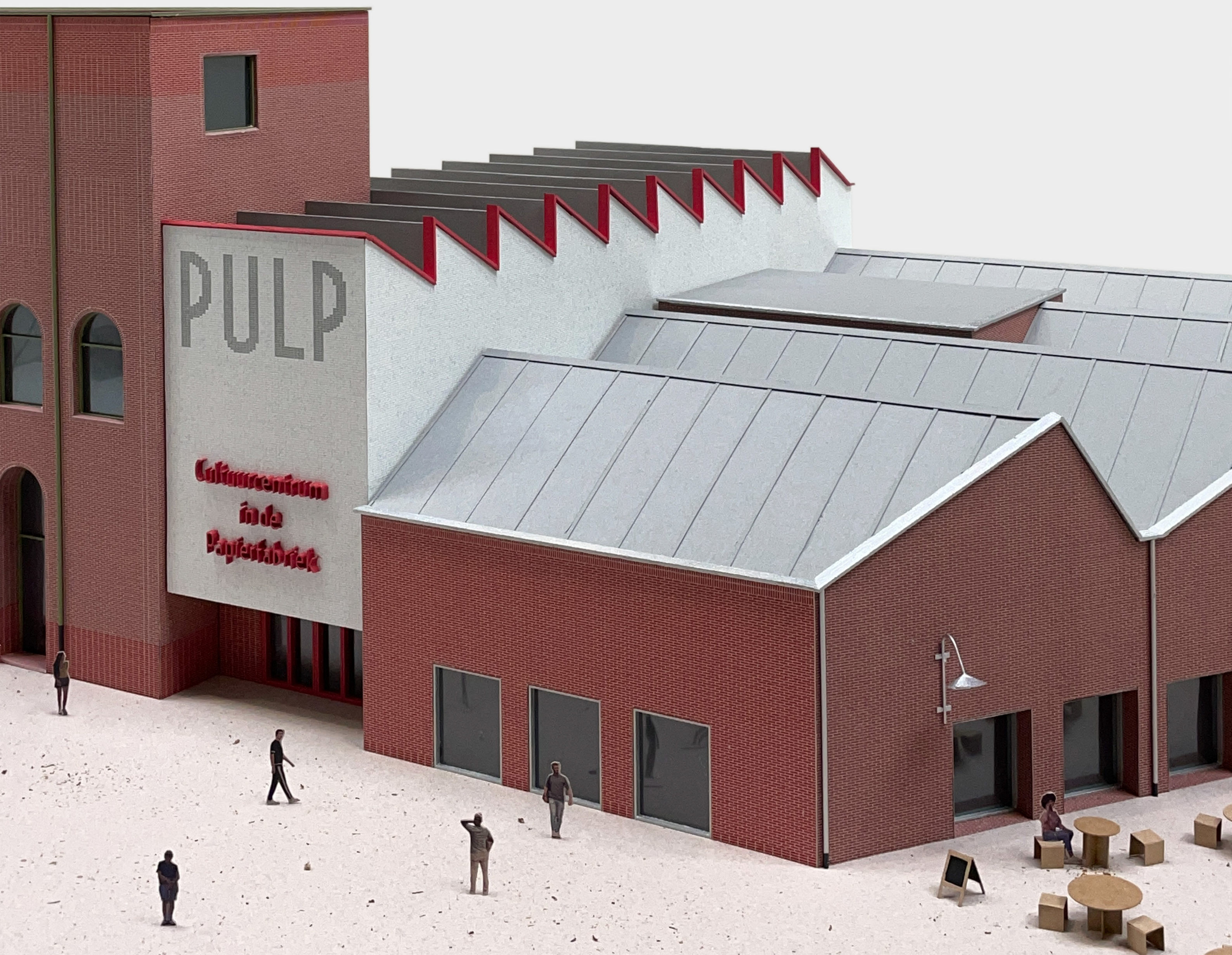


PJOTR VAN NOESEL

CULTURAL CENTER IN A PAPER MILL

TU Delft
Architecture and the Built Environment
Graduation studio Urban Architecture
Year 2021/2022
P5 presentation



I

THE PAPER MILL

II

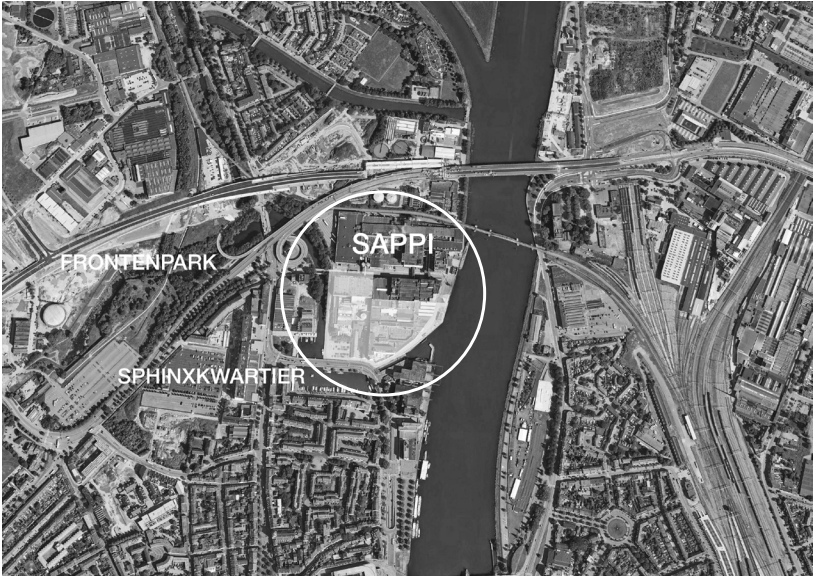
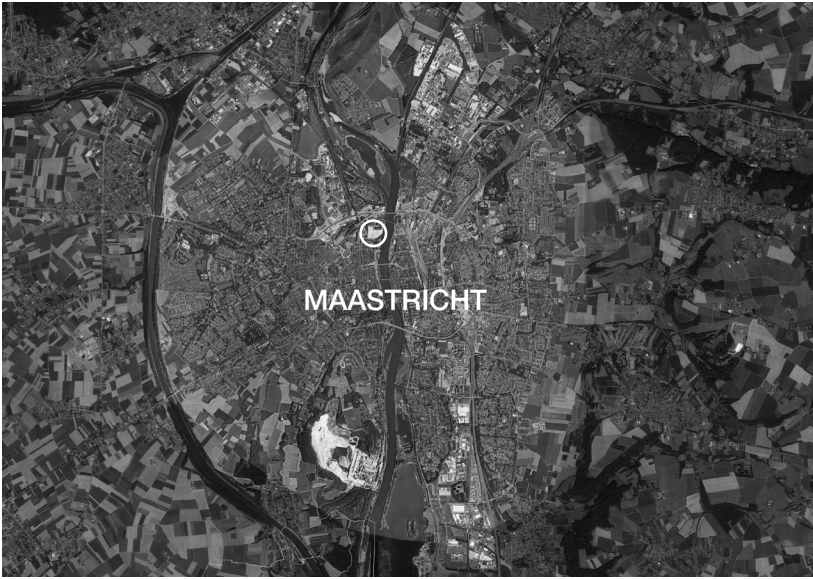
THE URBAN PROPOSAL

III

THE CULTURAL CENTER

THE PAPER MILL

ON FACTORIES, SITE AND THEMATICS



LOCATION



LOCATION

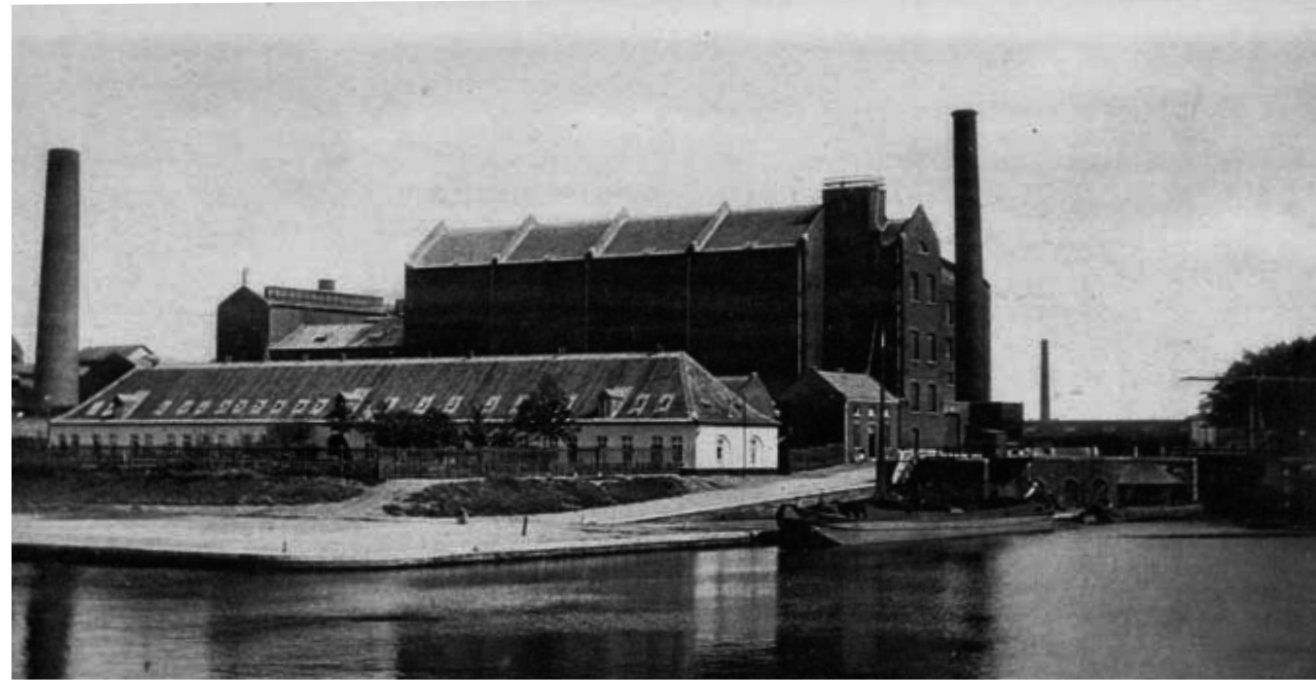


Agnès Varda - Les glaneurs et la glaneuse



Jean-François Millet- Les glaneuses





THE ROYAL DUTCH PAPER MILL



THE LAYERED FACTORY



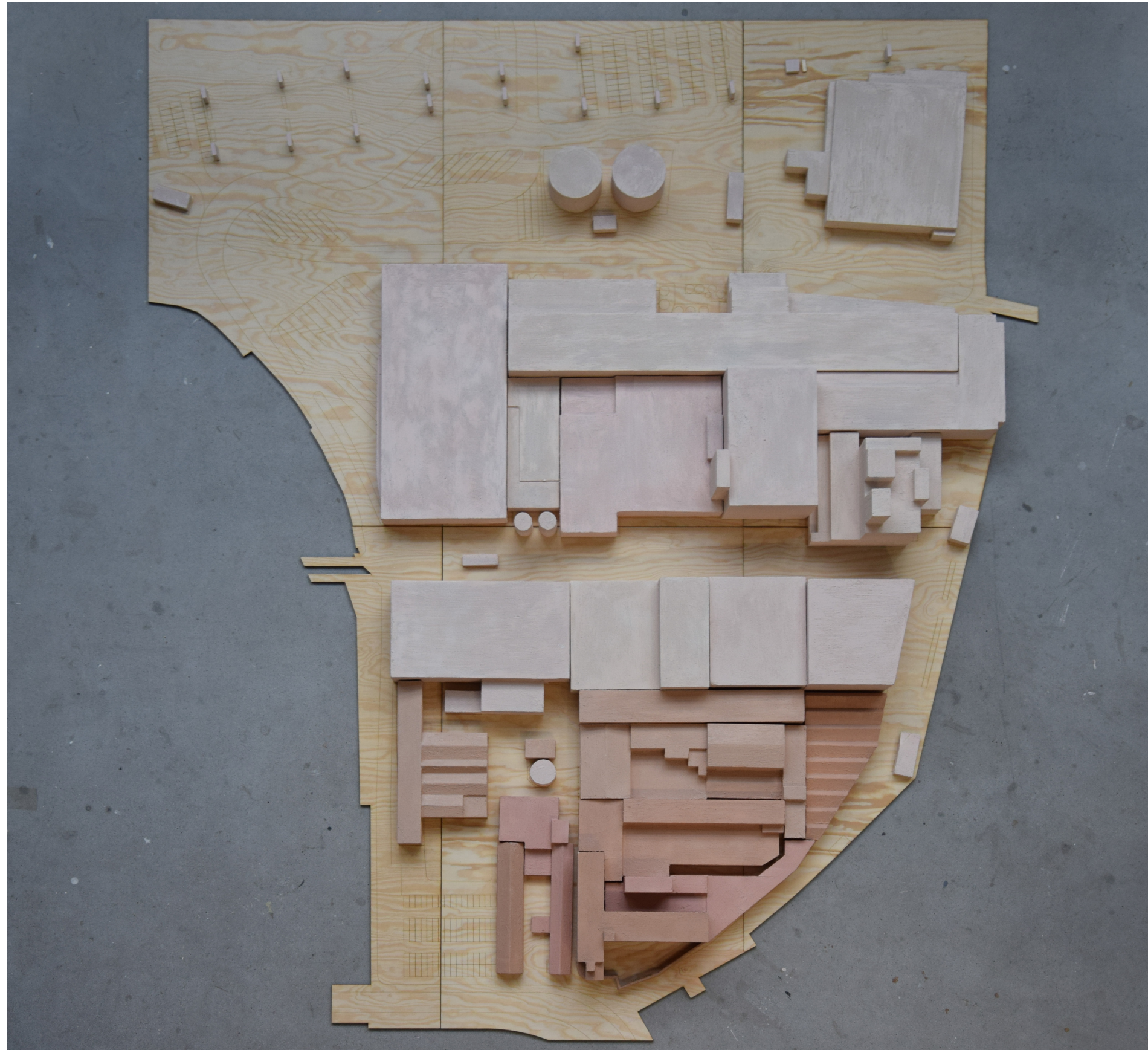
FACTORY COLLAGE



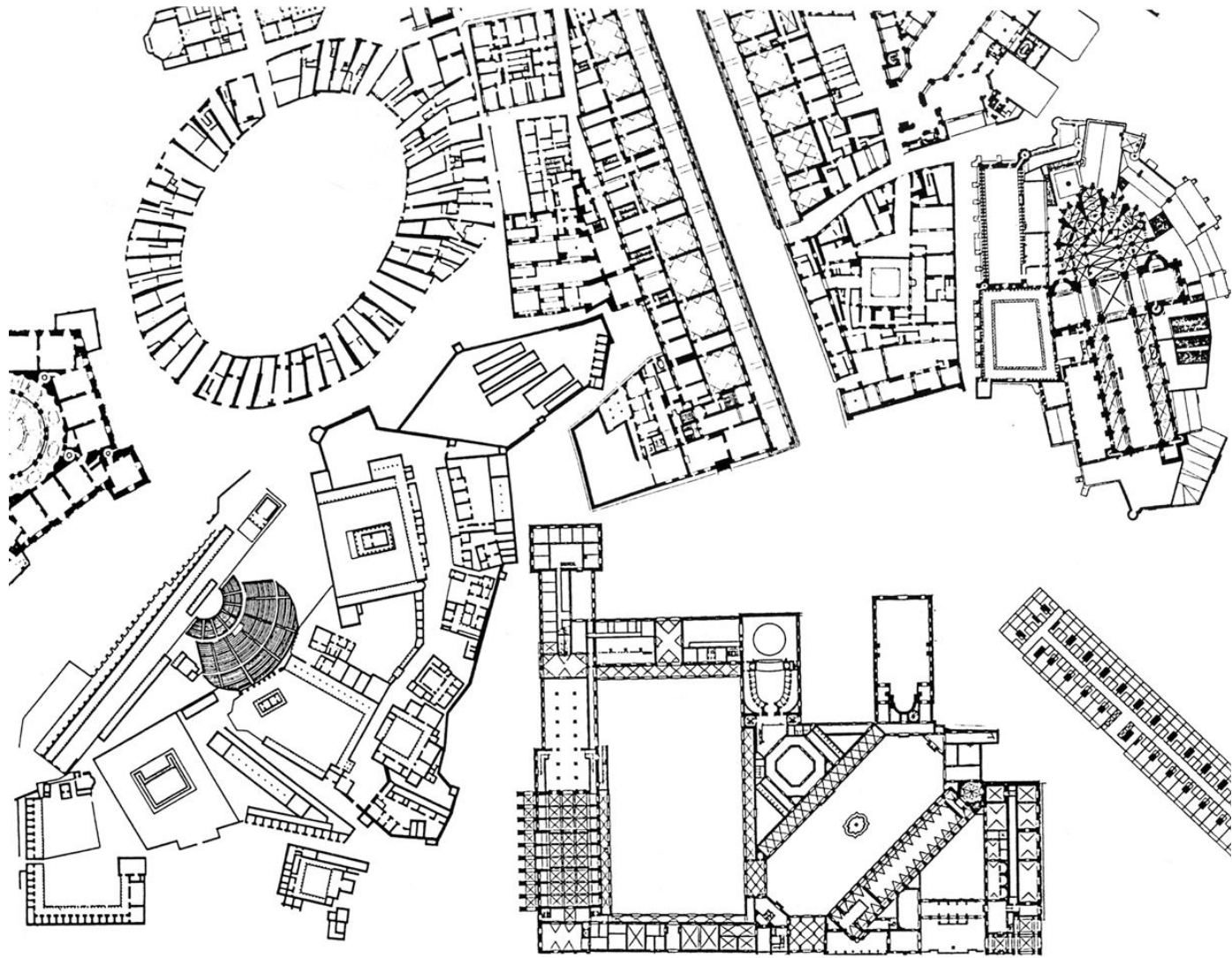
MODELLING THE PAPER MILL



ELEMENTS OF THE PAPER CITY



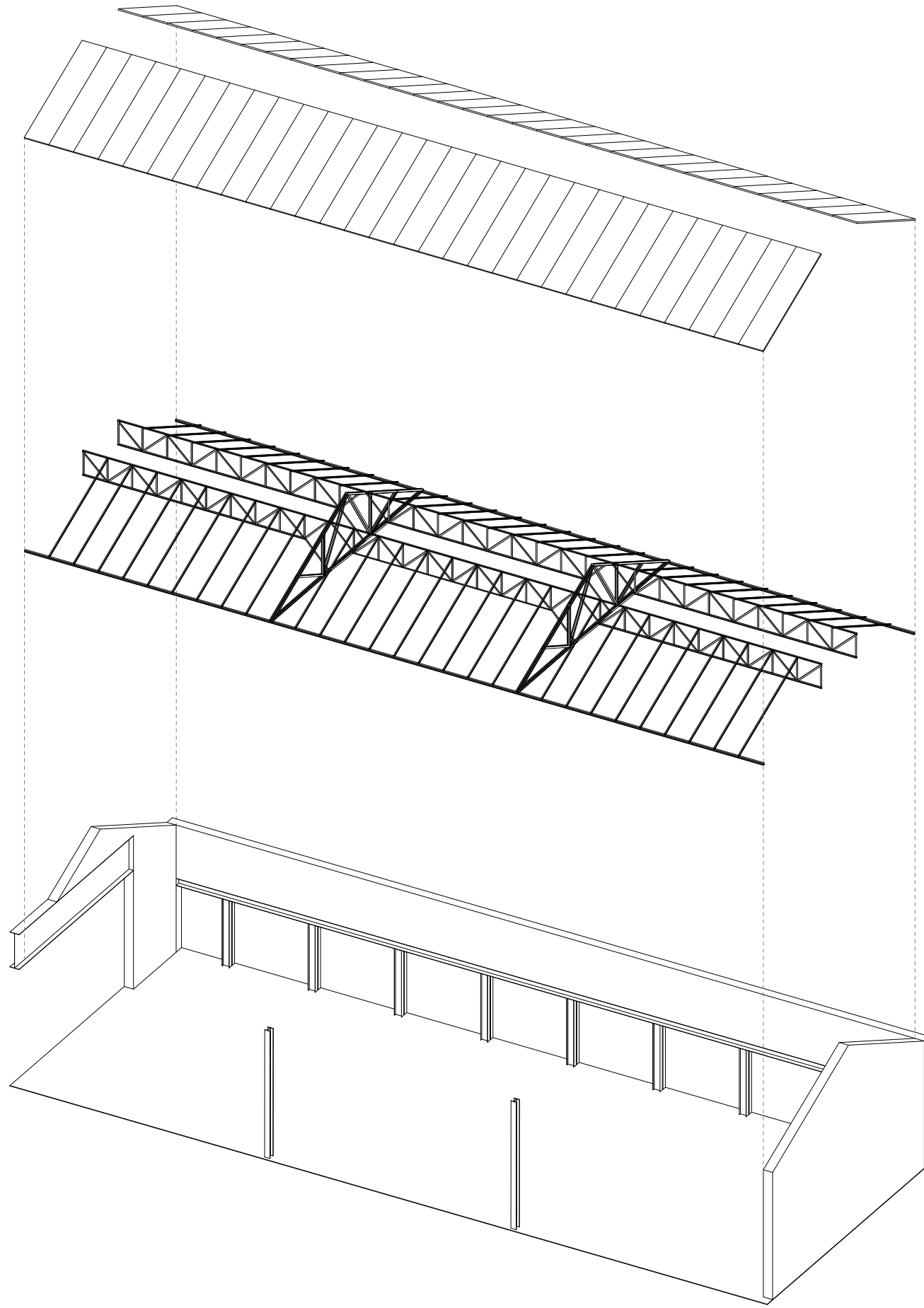
PROMISES OF URBANITY



David Griffin and Hans Kolhoff, City of Composite presence





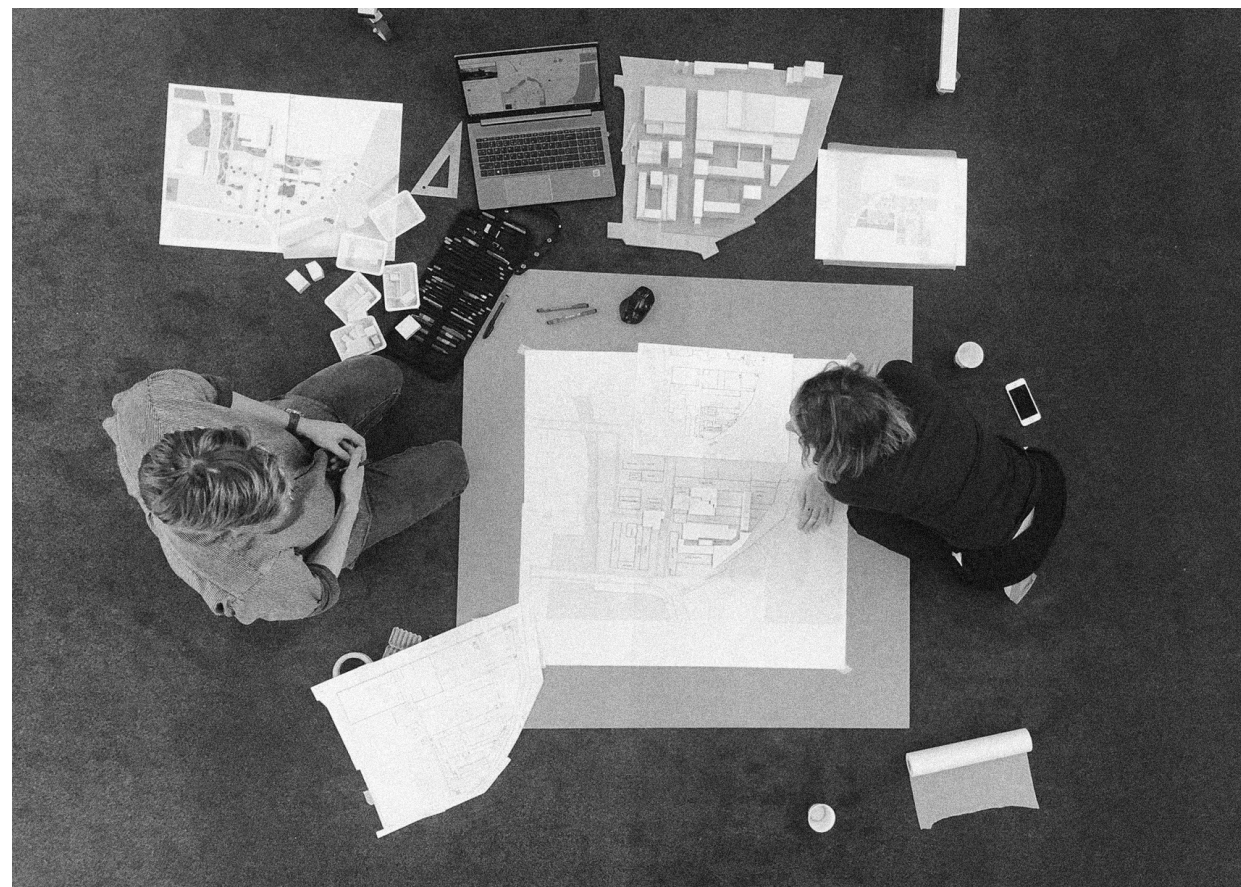


ASSEMBLED CITY

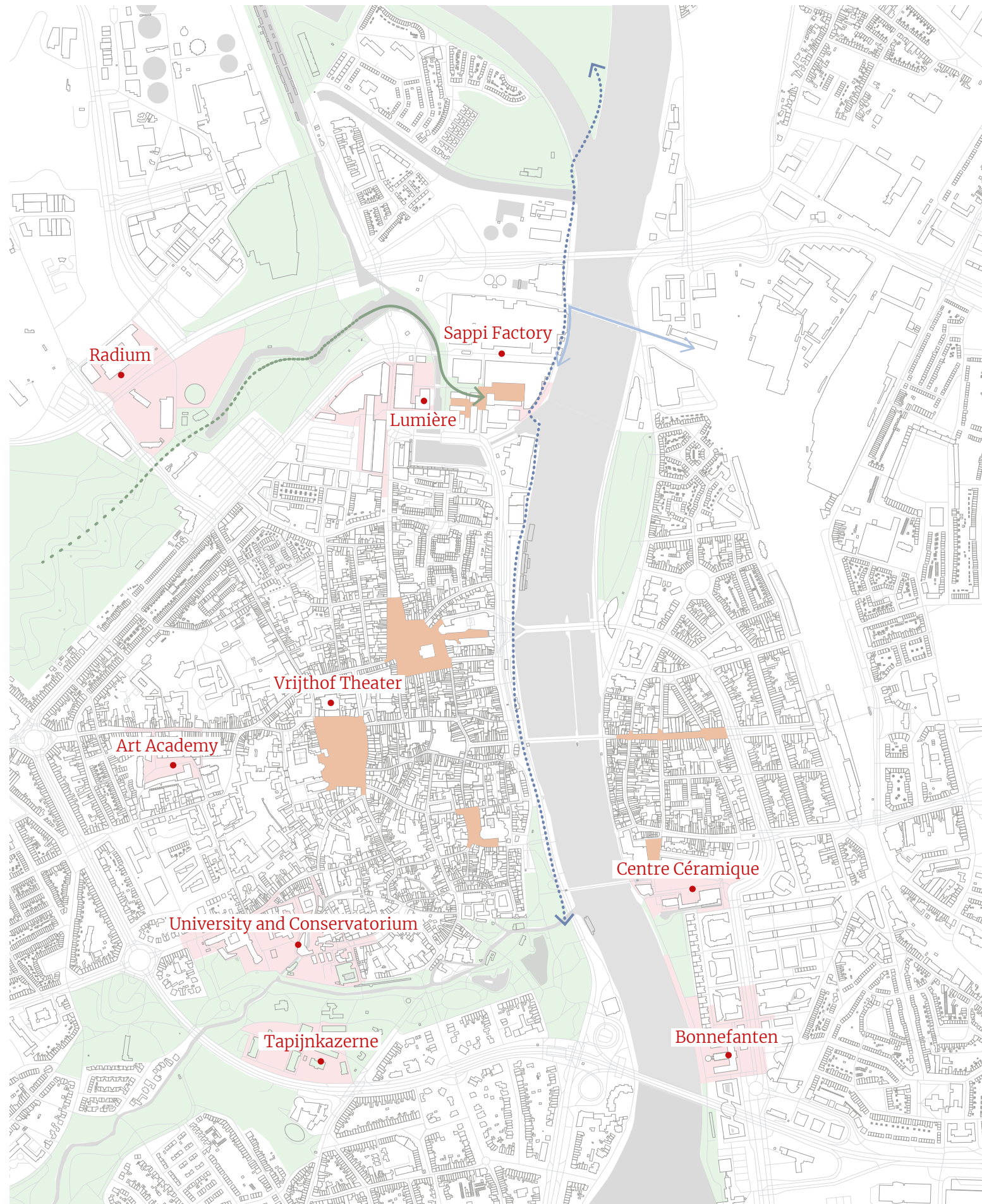


COMPLEX WHOLES

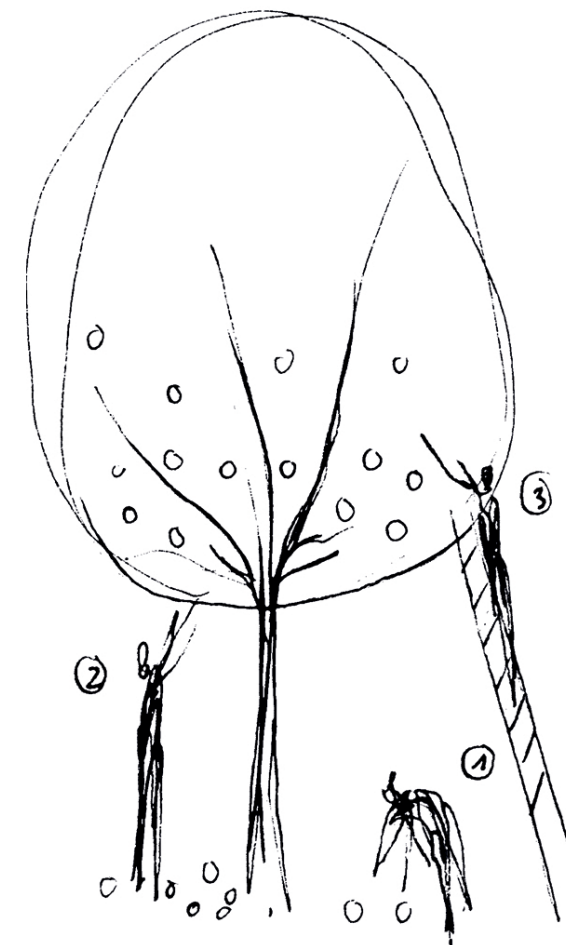
THE URBAN PROPOSAL

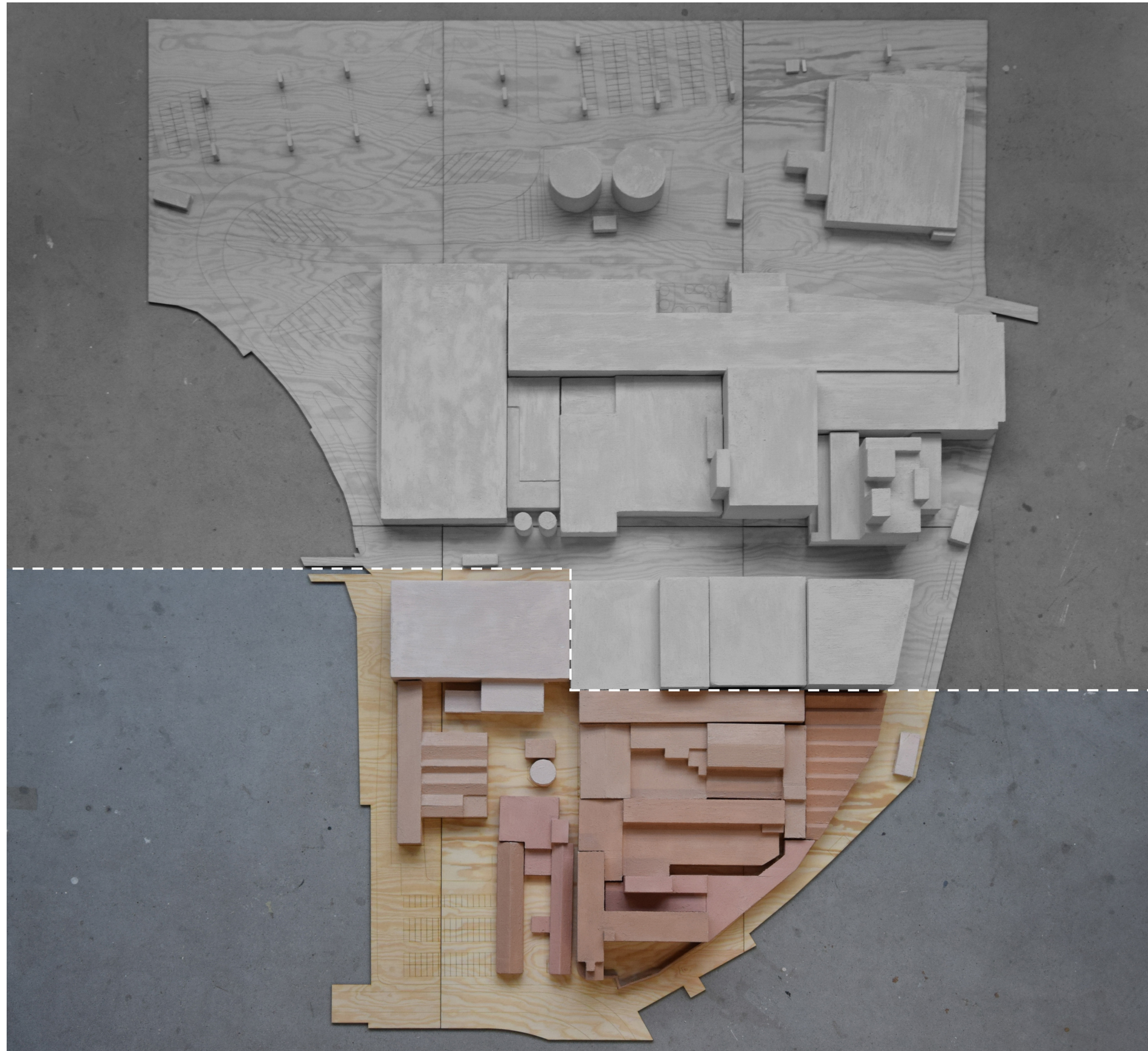


CONCEPTKRIEMERS



-  Built structures
-  Infrastructure
-  Green Structures
-  Creative Industry
-  Urban Meeting Spaces
-  Continuation of historical green
-  Activation of the waterfront
-  Connecting Urban Fabric





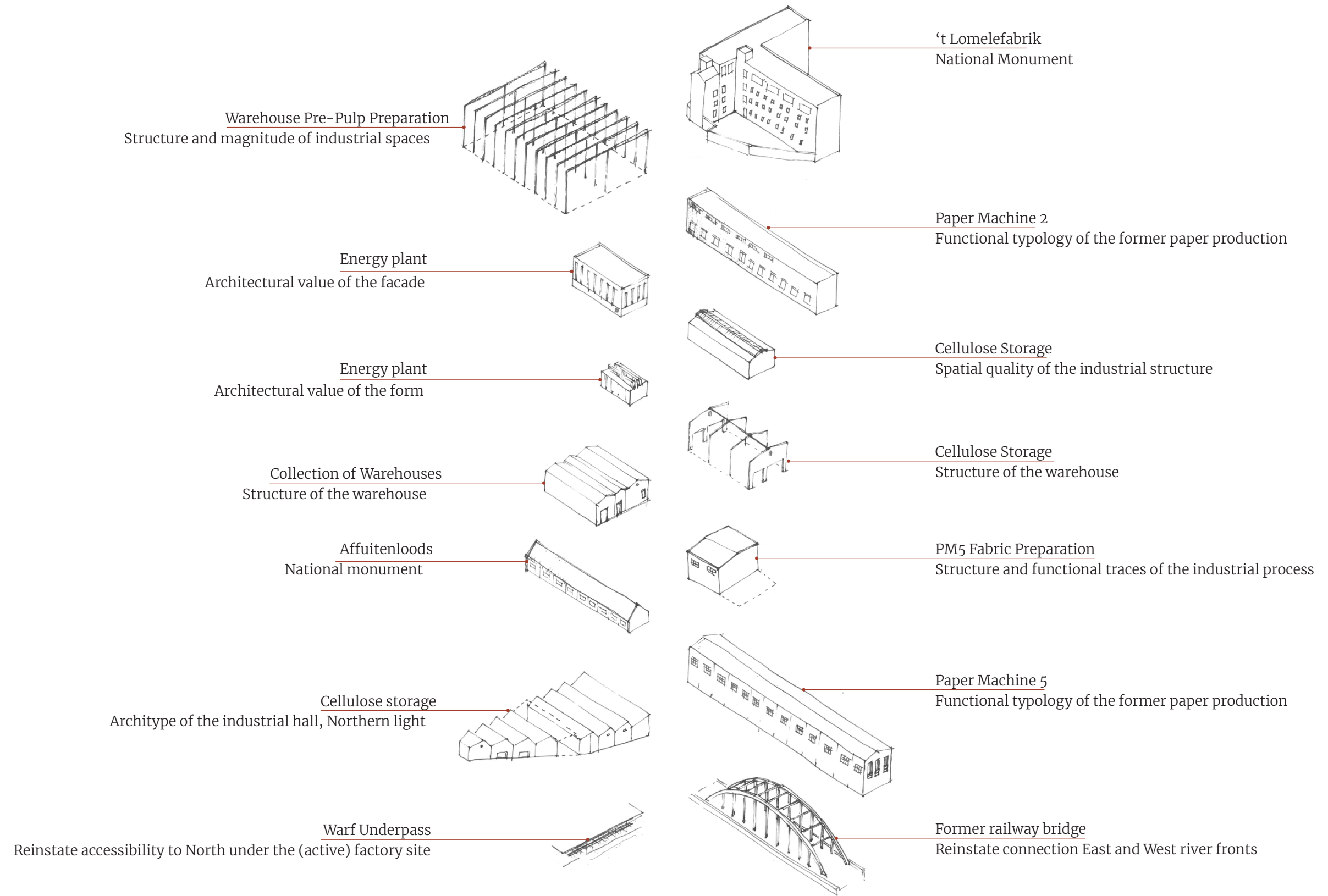
SAPPI SOUTH



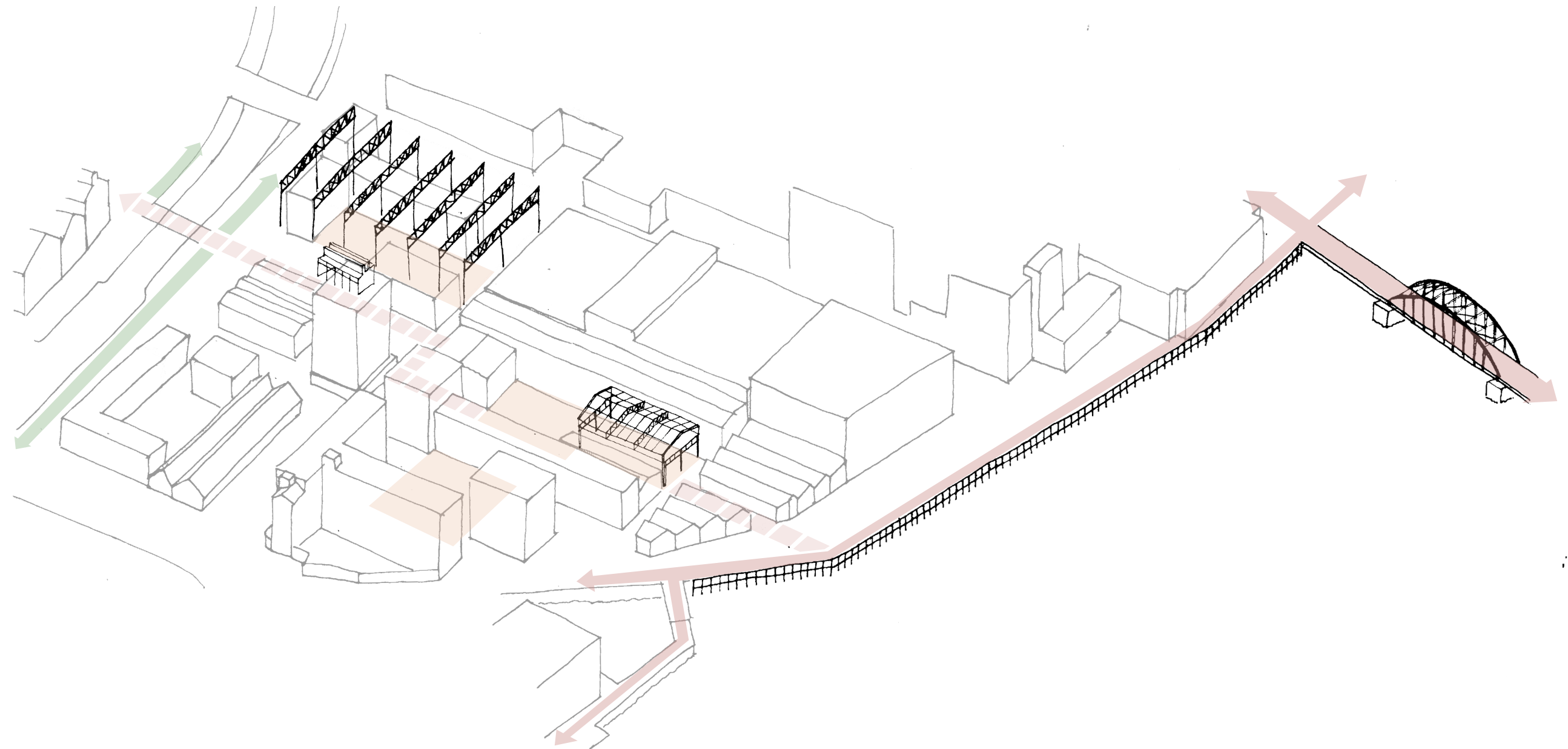
A CLASH OF SPECTACLES



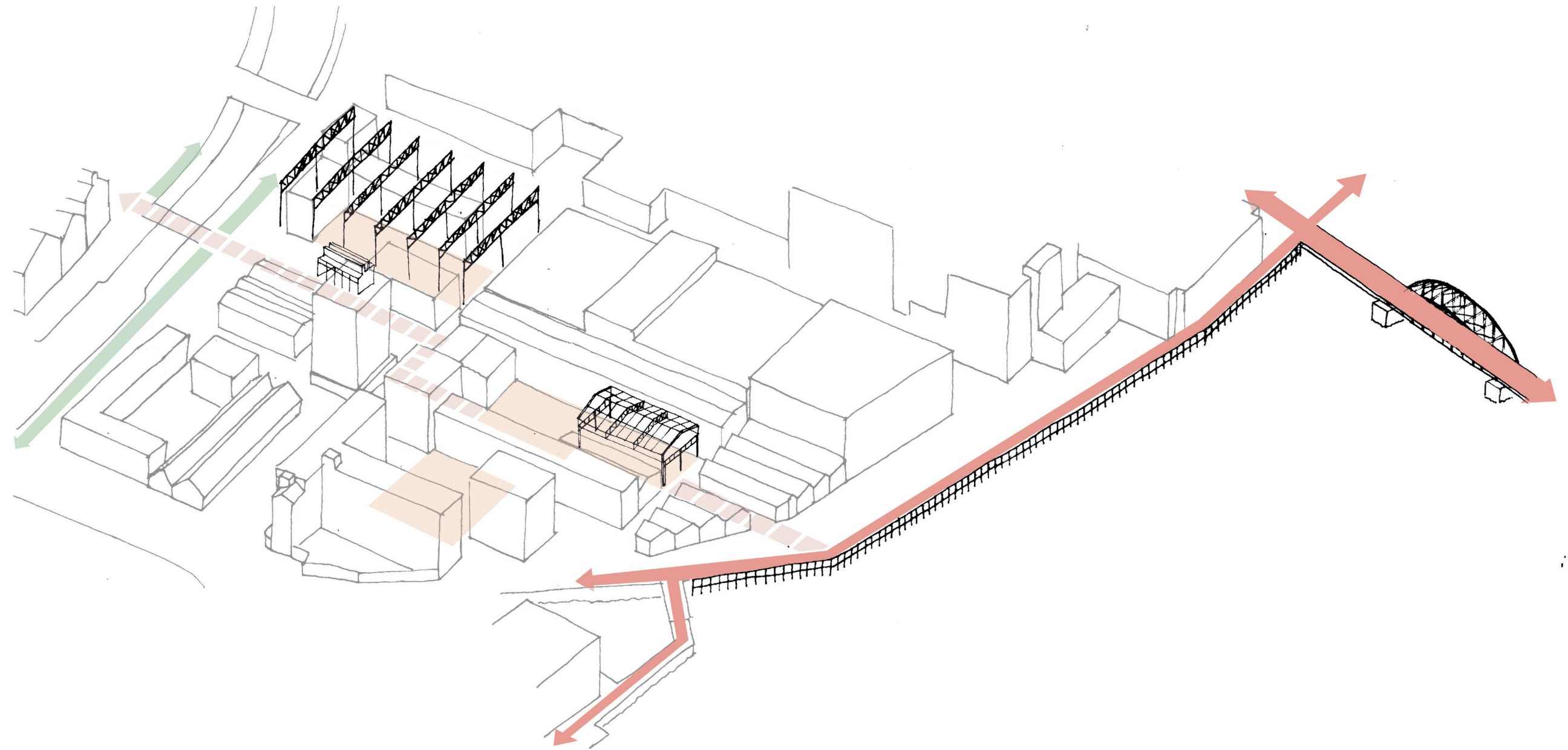
POST HARVEST

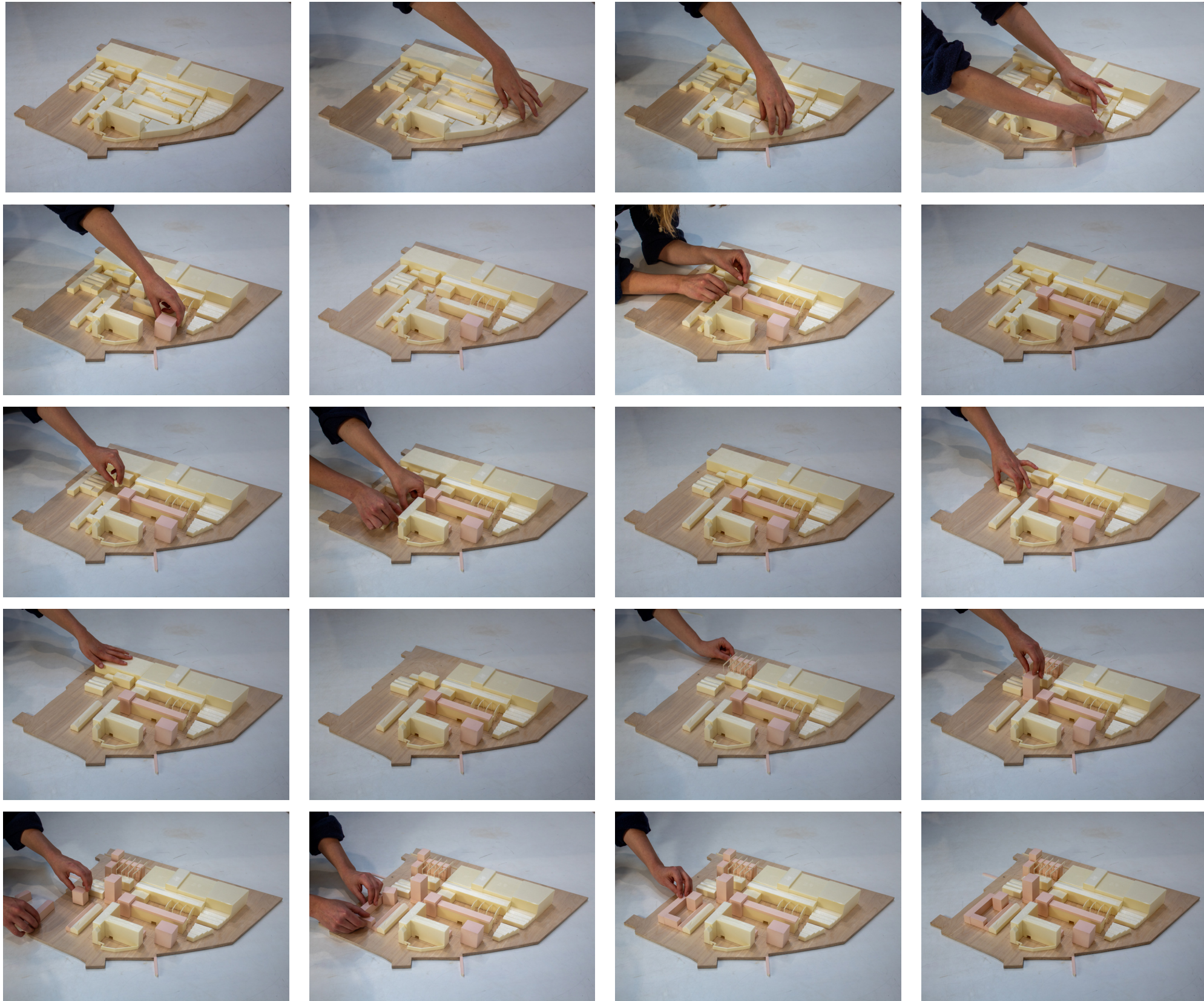


GLEANNING THE PAPER MILL

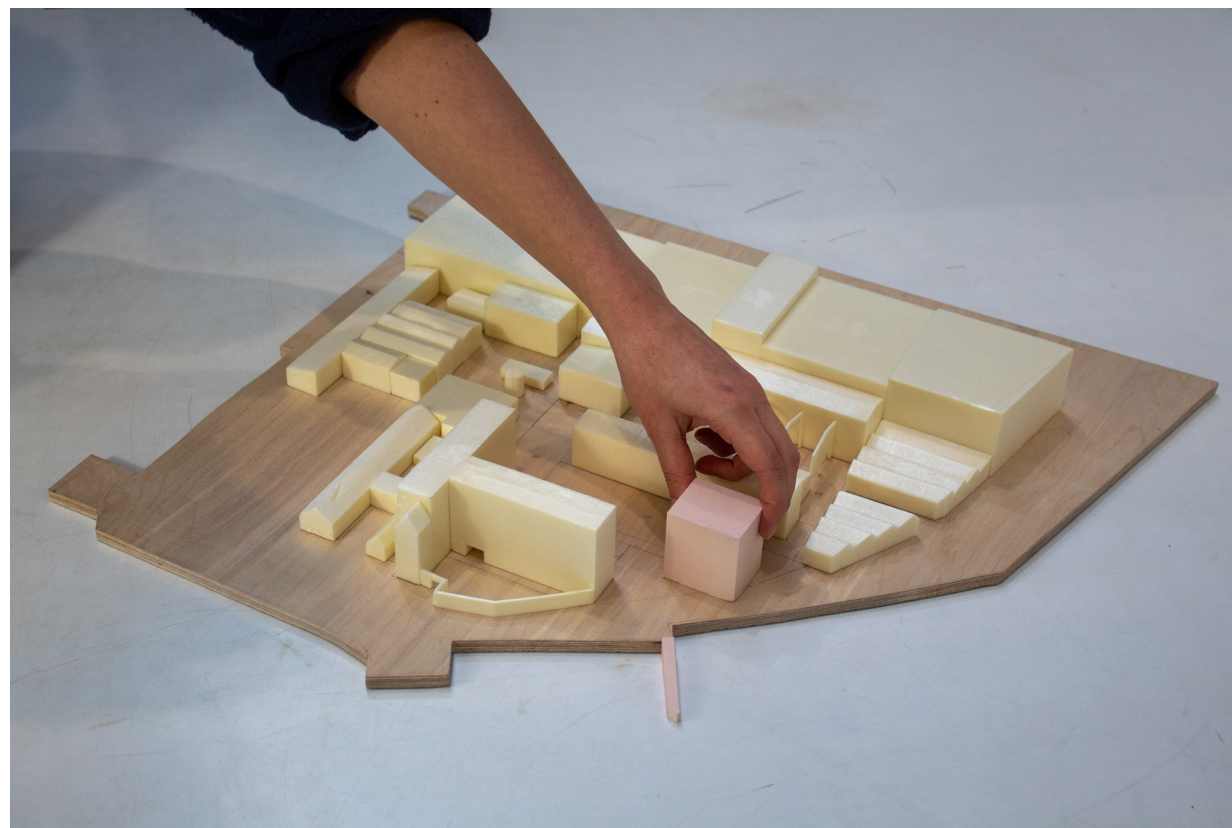


APPROPRIATED ARTEFACTS

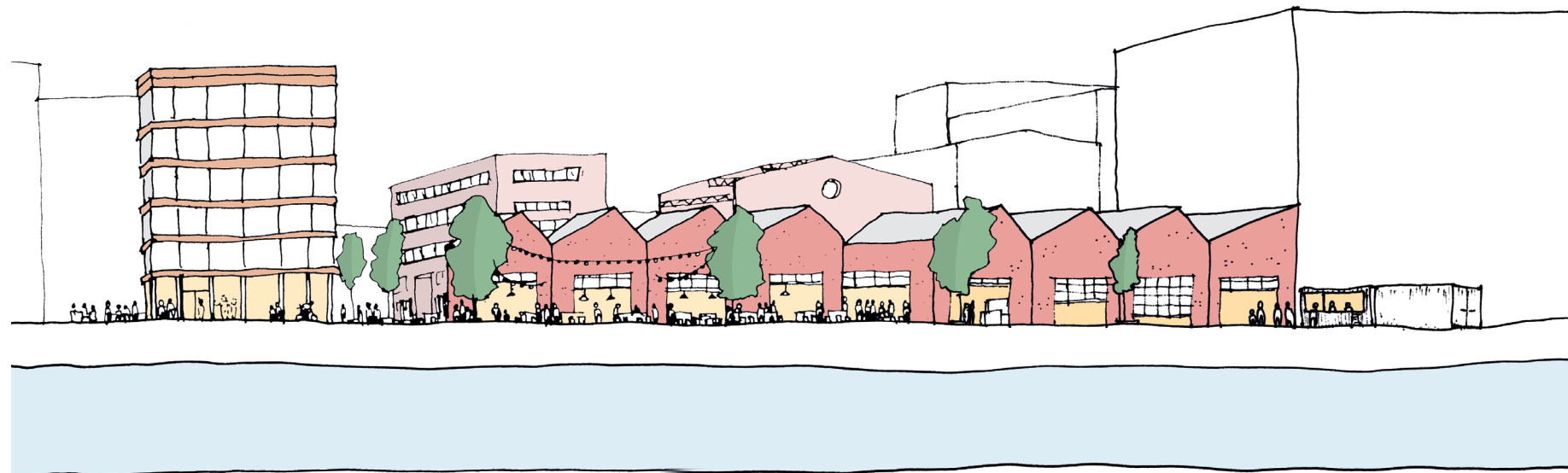




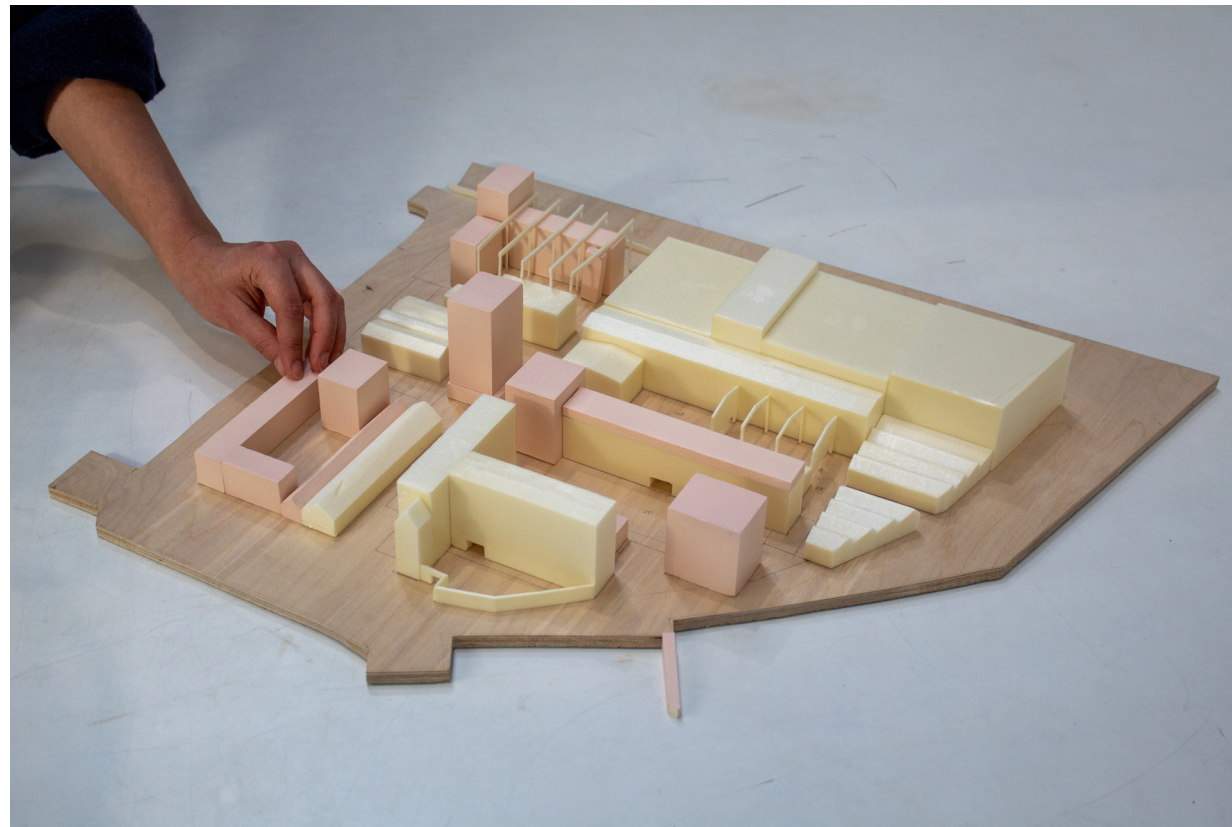
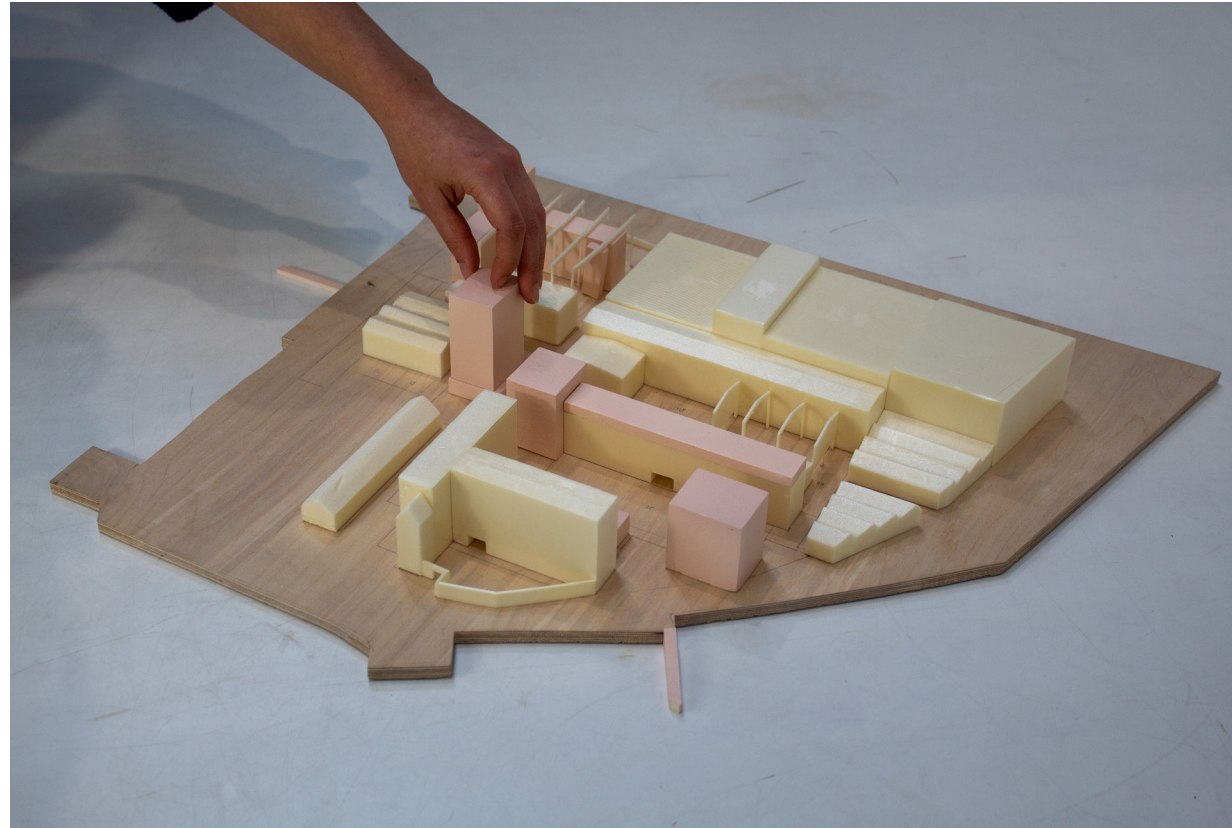
PHASED PLANNING



WATERFRONT ACTIVATION



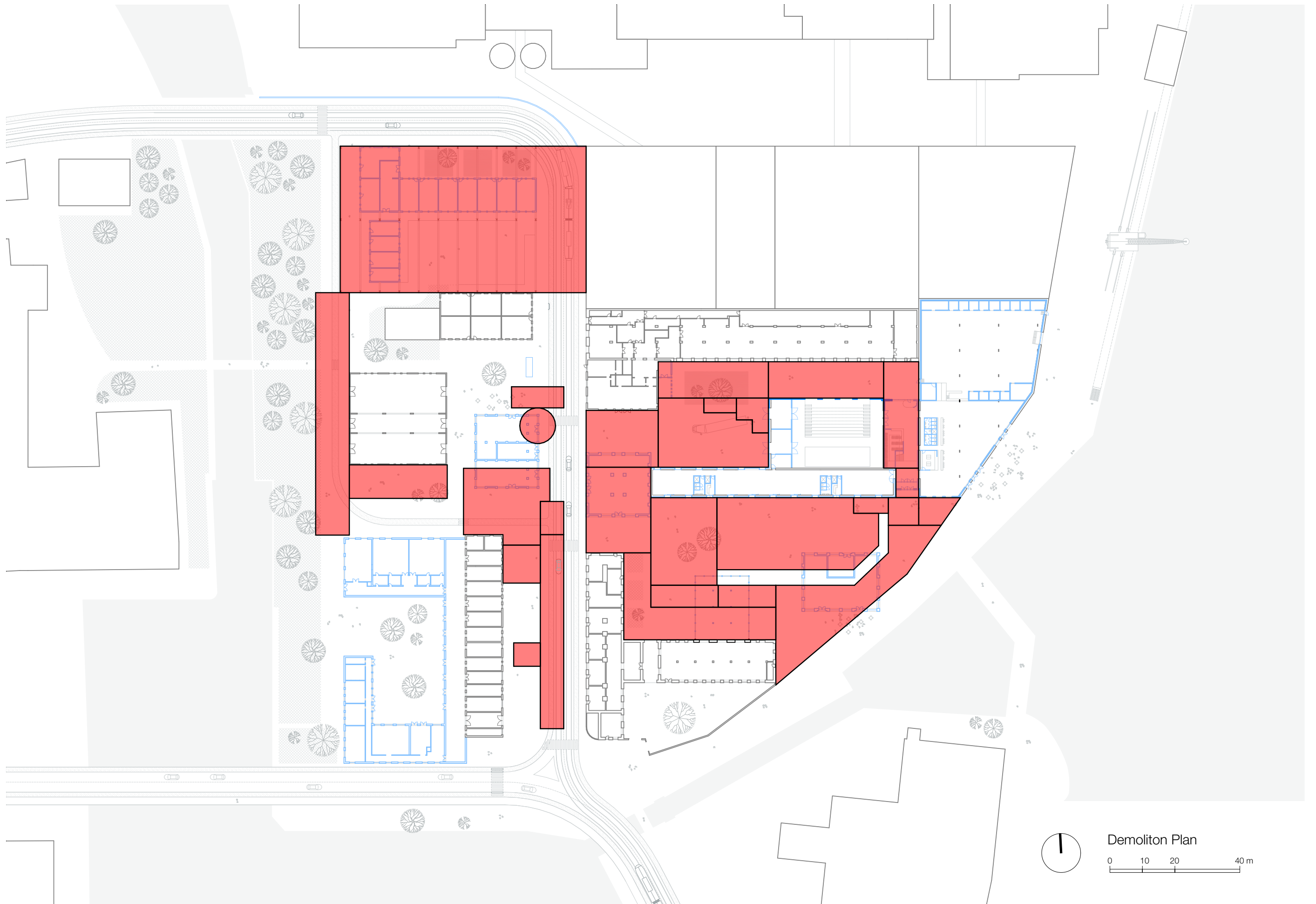
WATERFRONT ACTIVATION



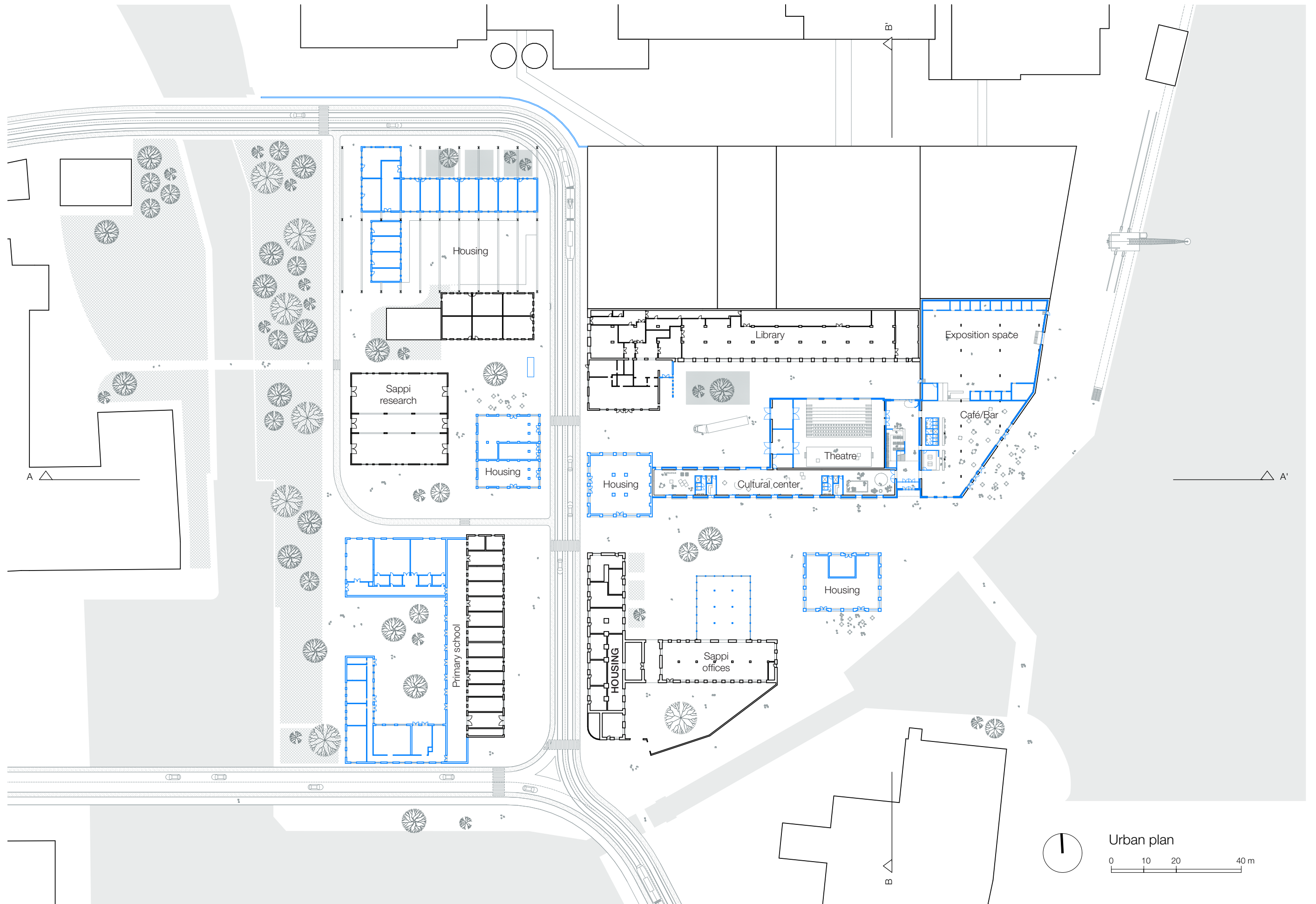
MAIN STREET TOWARDS LUMIÈRE



MAIN STREET TOWARDS LUMIÈRE



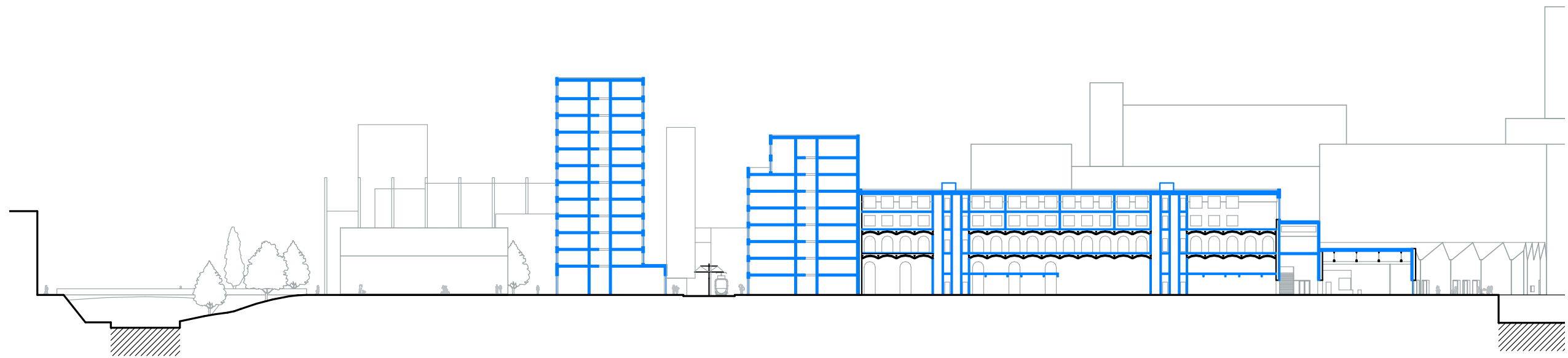
DEMOLITION PLAN



URBAN PLAN

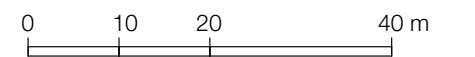
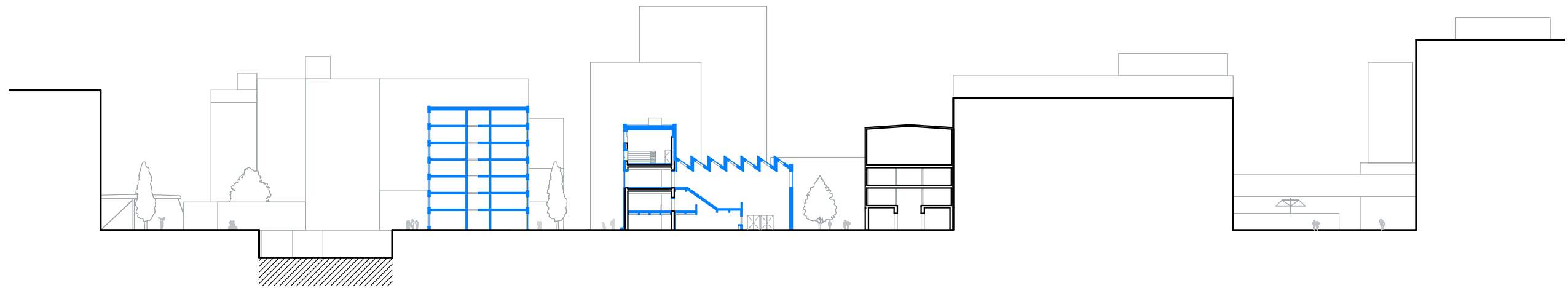
A

A'

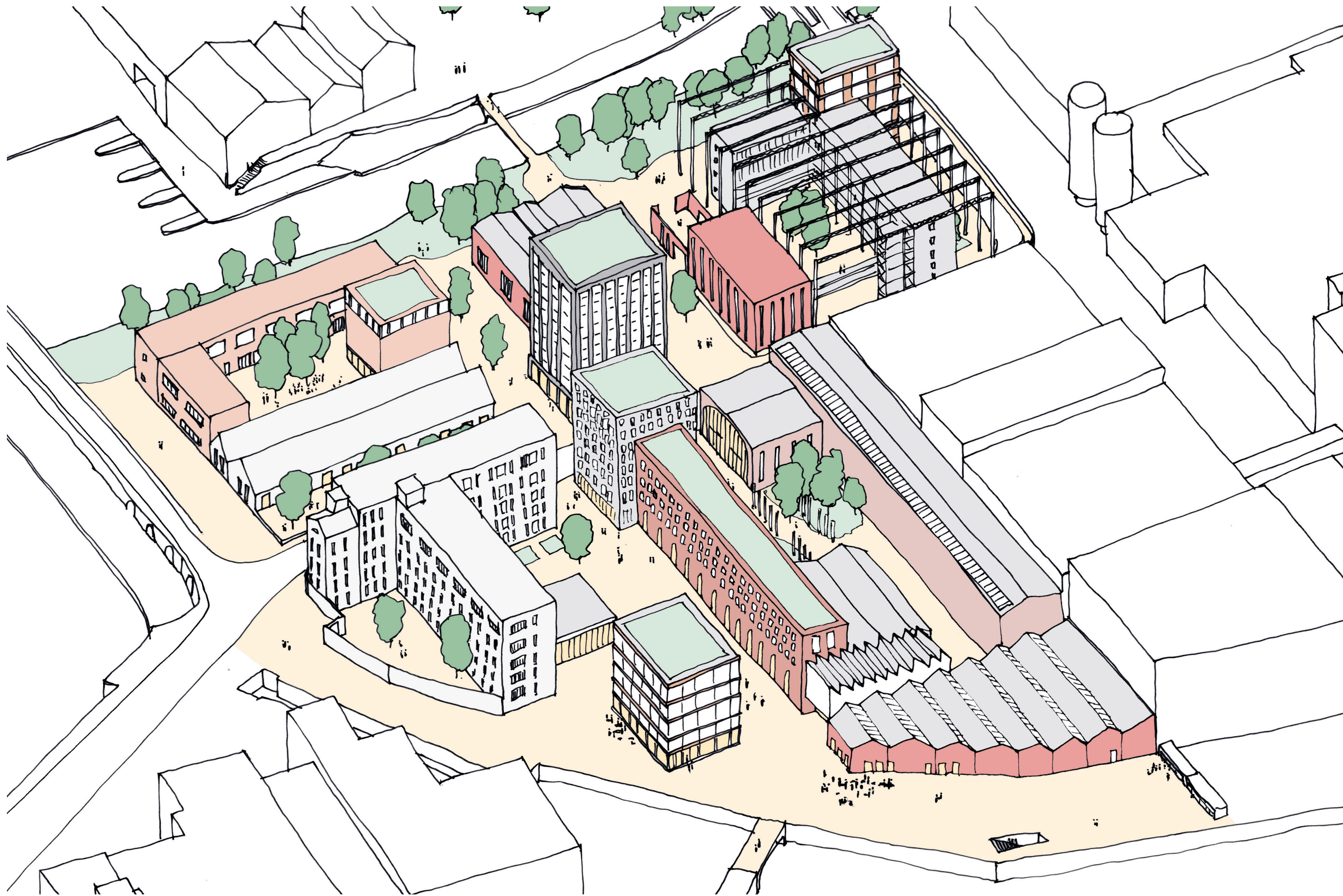


B

B'

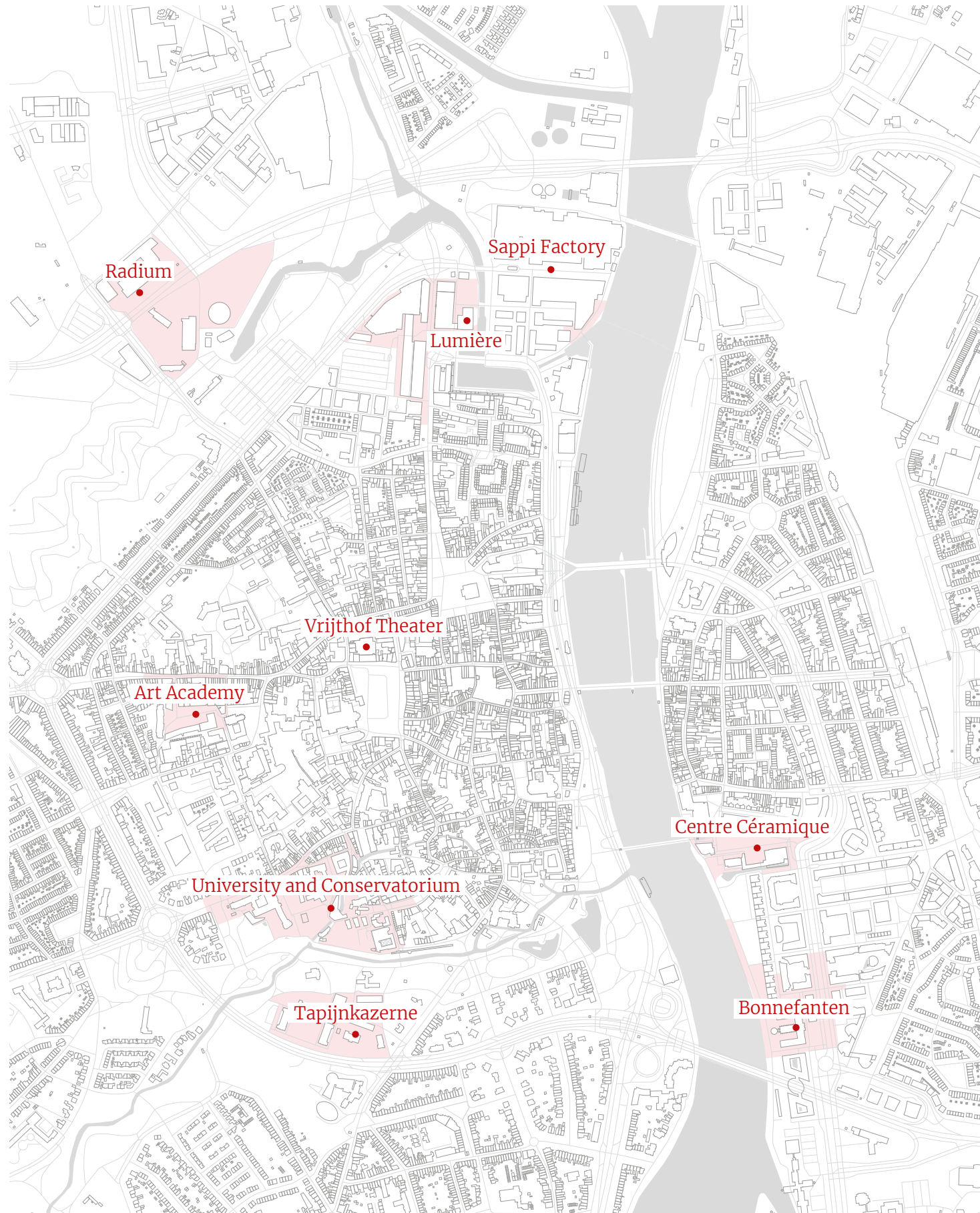


URBAN SECTIONS



“DE PAPIERFABRIEK”

THE CULTURAL CENTER



AMBITIONS

PODIUMKUNSTEN:

groot symfonisch orkest
 muziektheatergezelschap
 professioneel projectkoor klassieke en moderne muziek
 stedelijk toneelgezelschap
 stedelijk dansgezelschap
 kleinere theatergroepen (cofinanciering FPK)
 talentontwikkelingsorganisatie
 stadtheater
 stedelijk poppodium
 festival popmuziek
 festival jazzmuziek
 festival sacrale muziek
 concours opkomend jong muzikaal talent
 festival dans
 breed palet aan amateurverenigingen

BEELDENDE KUNSTEN, FILM EN MEDIA:

presentatie-instelling beeldende kunst
 instelling voor betaalbare huisvesting van ateliers
 meerdaags evenement beeldende kunst en vormgeving
 filmtheater
 euregionaal platform voor film en media
 meerdaags evenement mode
 postacademische instelling voor beeldende kunst en vormgeving
 lokale omroep voor radio en tv

MULTIDISCIPLINAIR:

meerdaags stadsfestival voor amateurs en professionals
 opening cultureel seizoen voor amateurs en professionals

EDUCATIE EN PARTICIPATIE:

instelling voor erfgoed, kunsteducatie en participatie
 organisatie voor cultuur in de wijken



“Verkenningen uitvoeren panden in het Sphinxkwartier/ Sappi-Zuid om in te zetten voor de doelgroep.”

“Het Sphinxkwartier is op stedelijk niveau het beste voorbeeld in Maastricht van ruimte geven en laten voor de creatieve maakindustrie. Zowel qua huisvesting als programmering.”

“Belangrijke presentatieplekken met voor de creatieve maakindustrie vinden daar hen plek o.a.: Bureau Europa, Lumière, Muziekgieterij.”



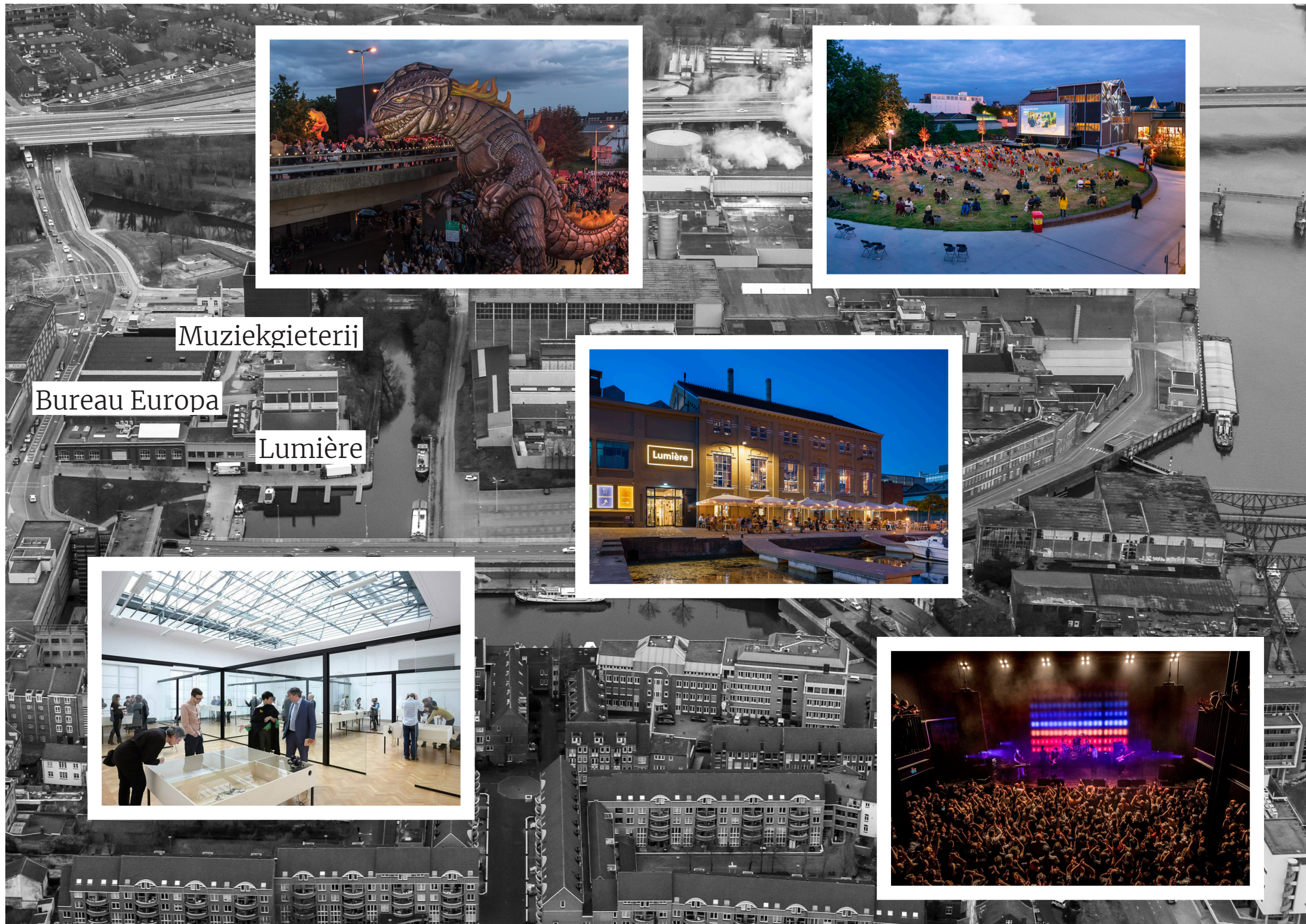
“Sphinxkwartier leent zich uitstekend voor een concentratie van culturele functies. Deze unieke locatie kan bijdragen aan de kwalitatieve en kwantitatieve groei en ontwikkeling van Maastricht als Cultuurstad en tegelijkertijd van een nog grotere betekenis zijn voor de stad en regio voor een langere termijn.”



“Daar waar zich kansen voordoen in de stadsontwikkeling kijken we zorgvuldig naar mogelijkheden om gemeentelijk vastgoed strategisch in te zetten om startende kunstenaars, kunstinitiatieven en kunstvakopleidingen te faciliteren.”

“Voormalige industriële gebieden en vrijkomende industriële gebouwen als kansen/voorbeelden.”

“Zichtbaar en bereikbaar voor iedereen, hoogwaardige faciliteiten. Cultuur in het openbare”



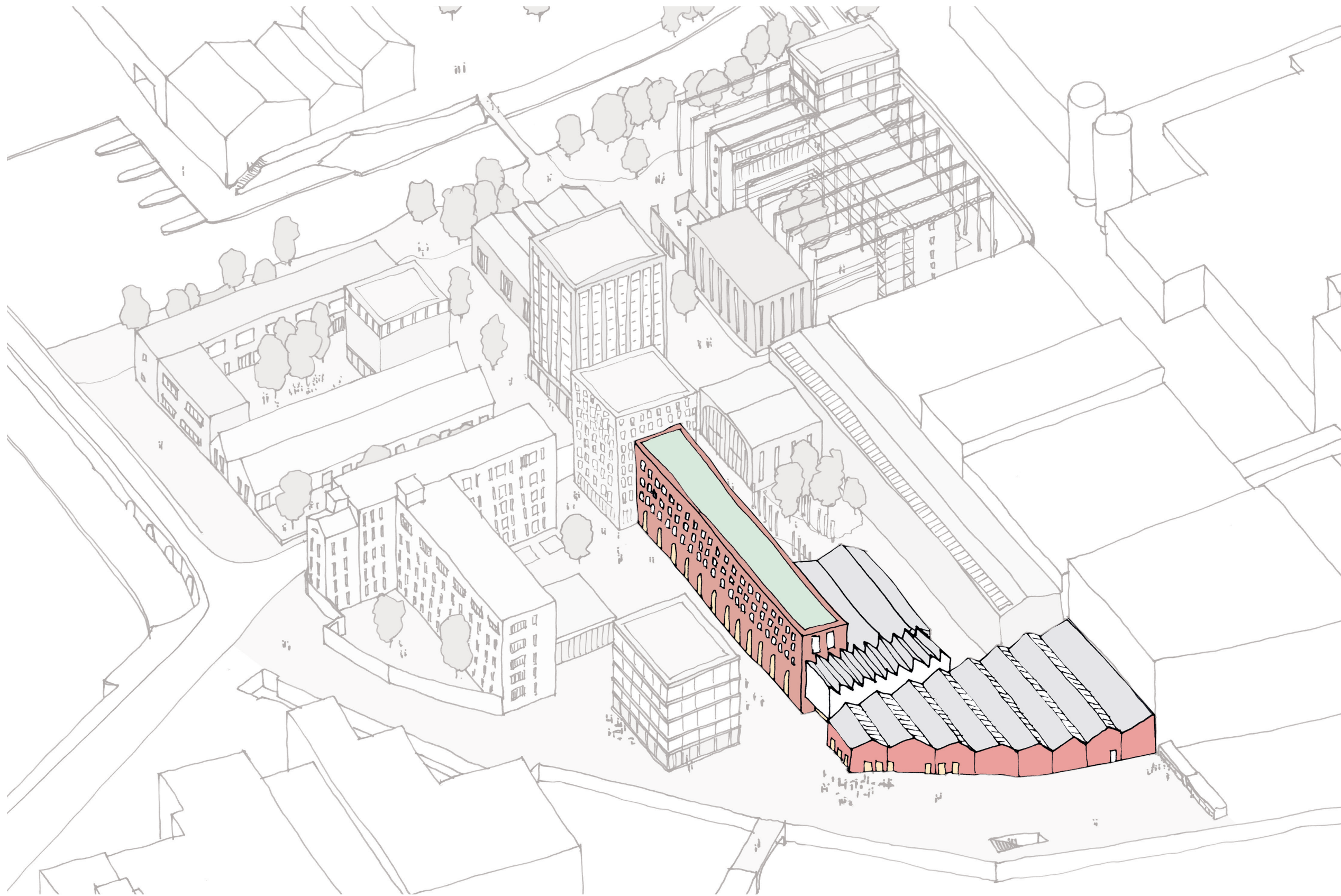
Muziekgieterij

Bureau Europa

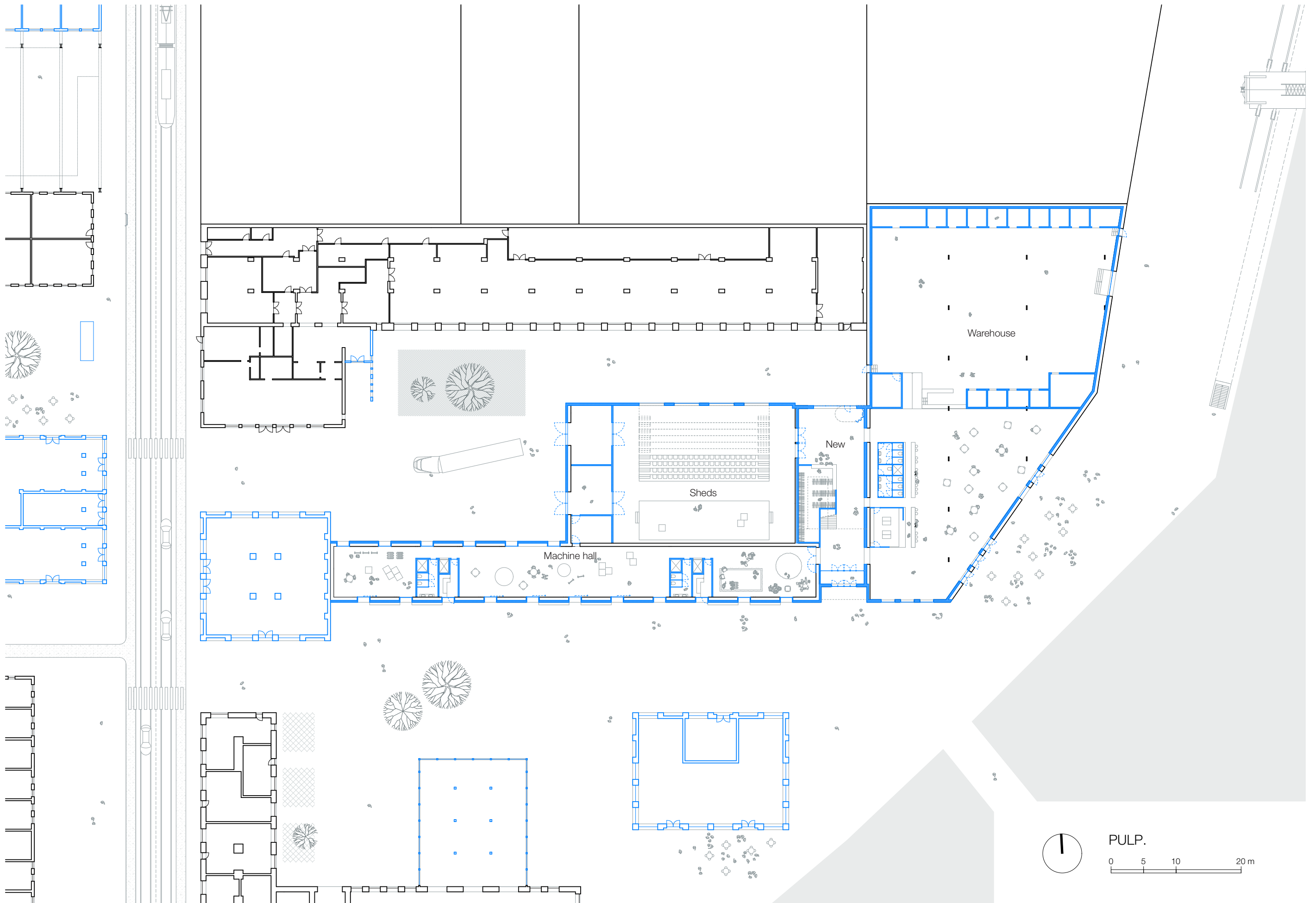
Lumière



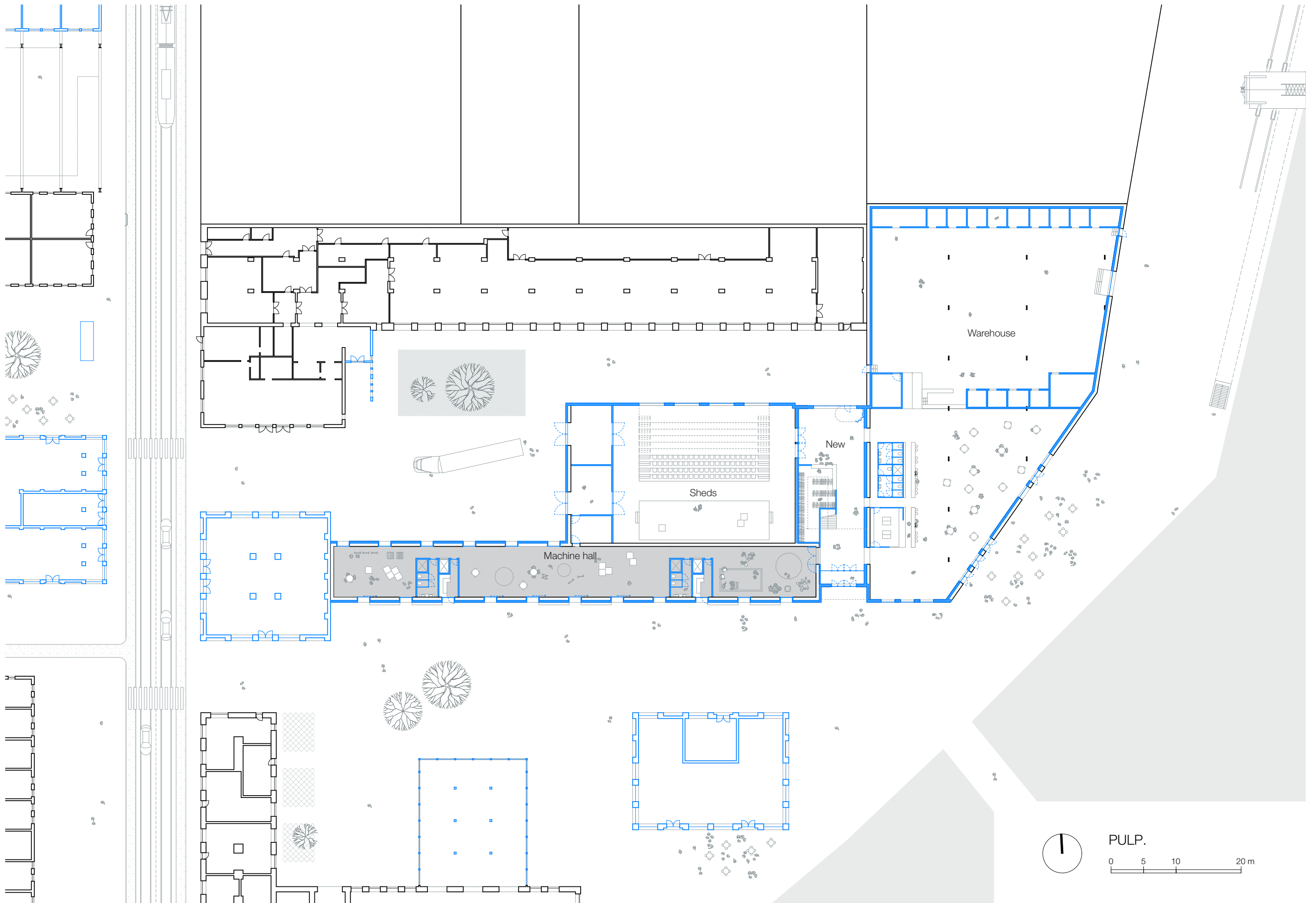
GROWING IDENTITY



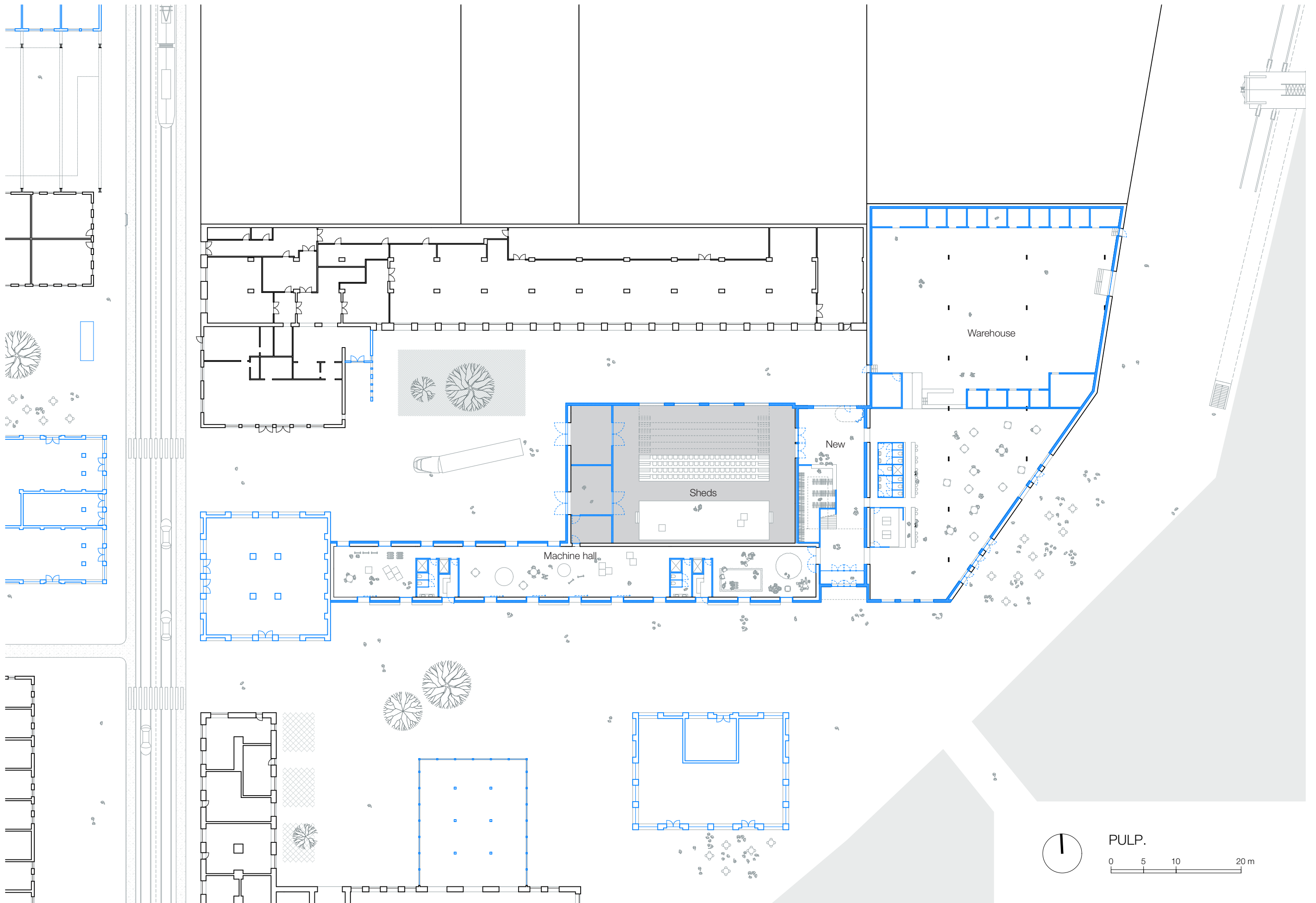
CULTURAL CENTER IN A PAPER MILL



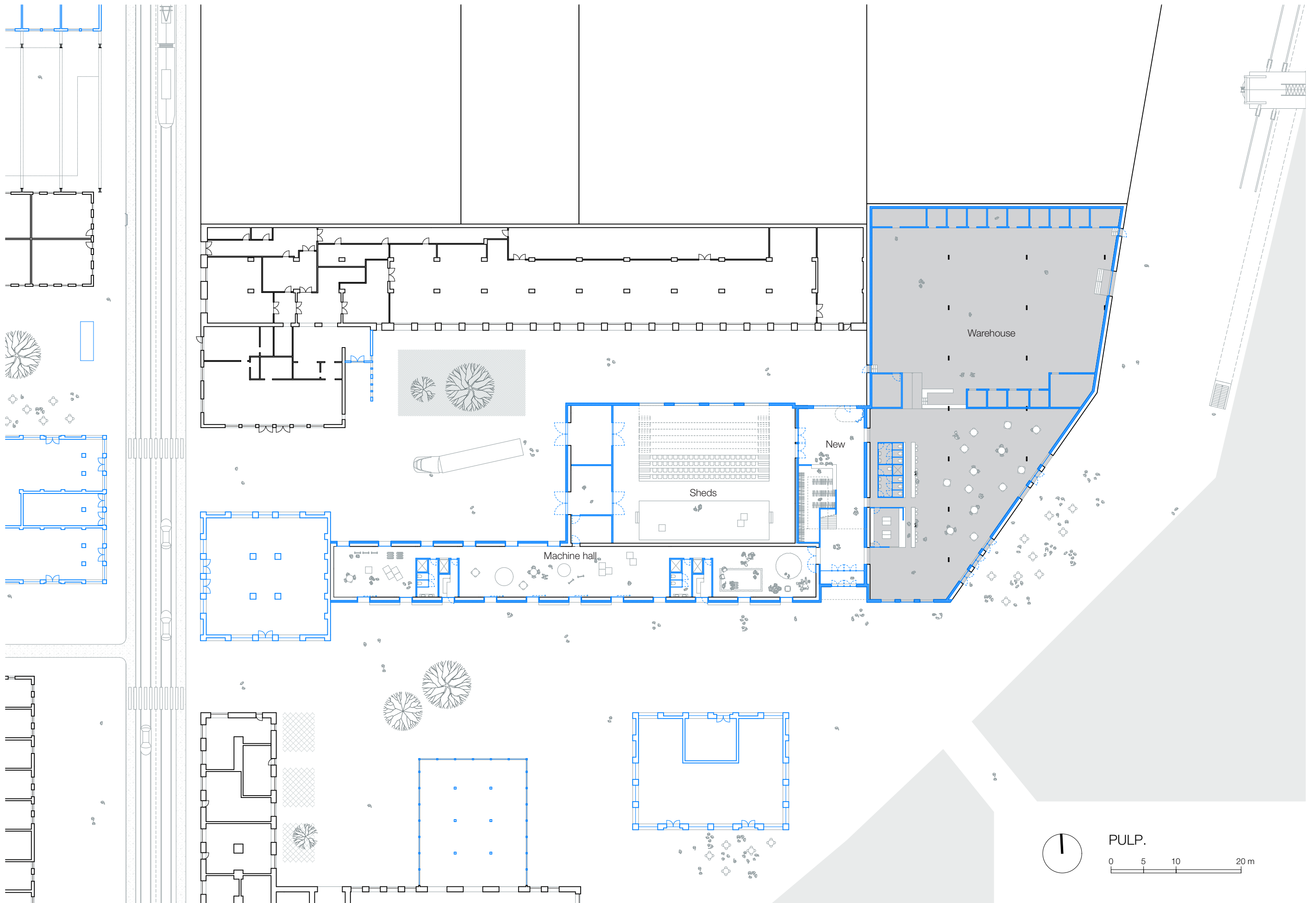
PULP



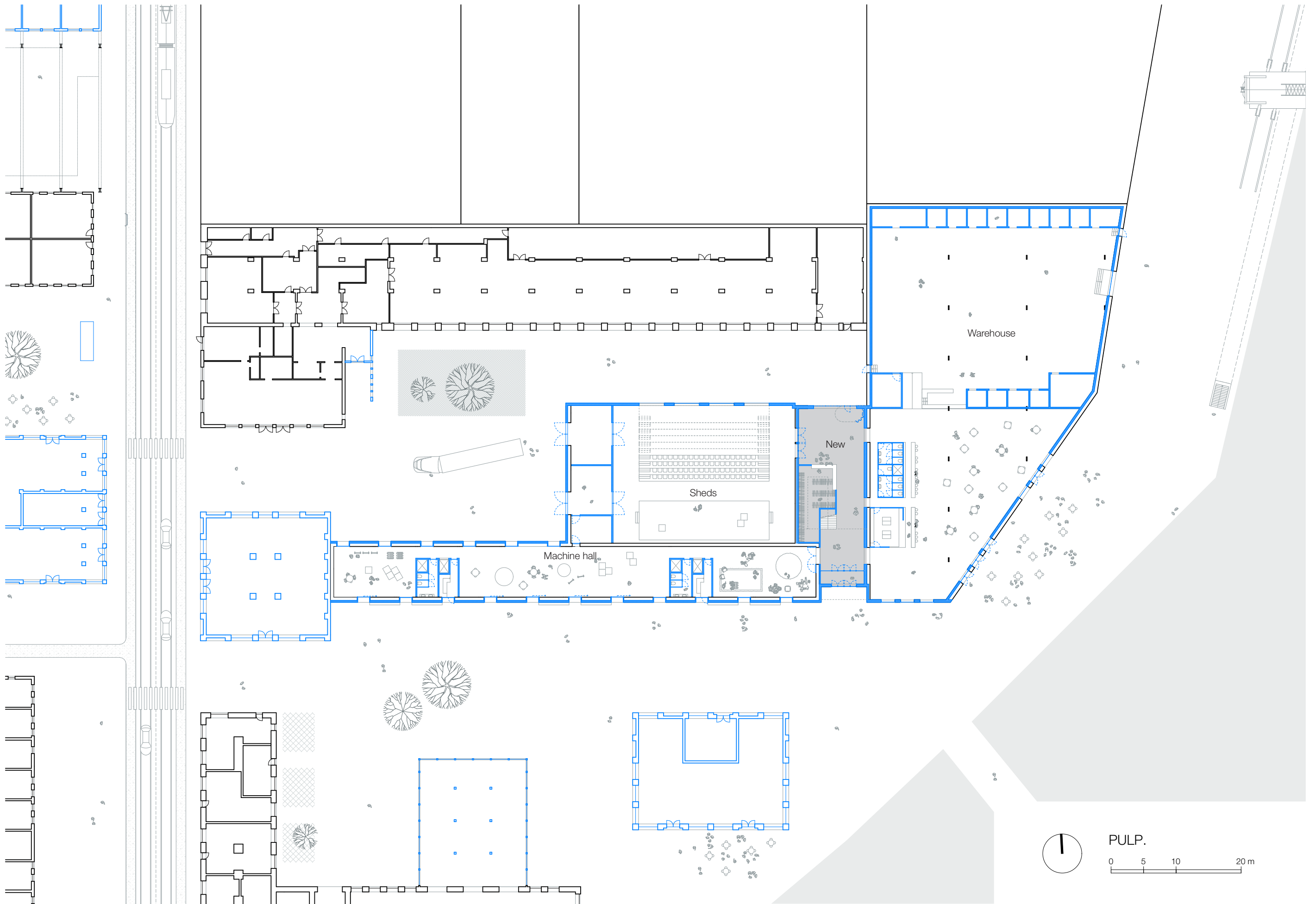
ADAPTATION



ADAPTATION



ADAPTATION



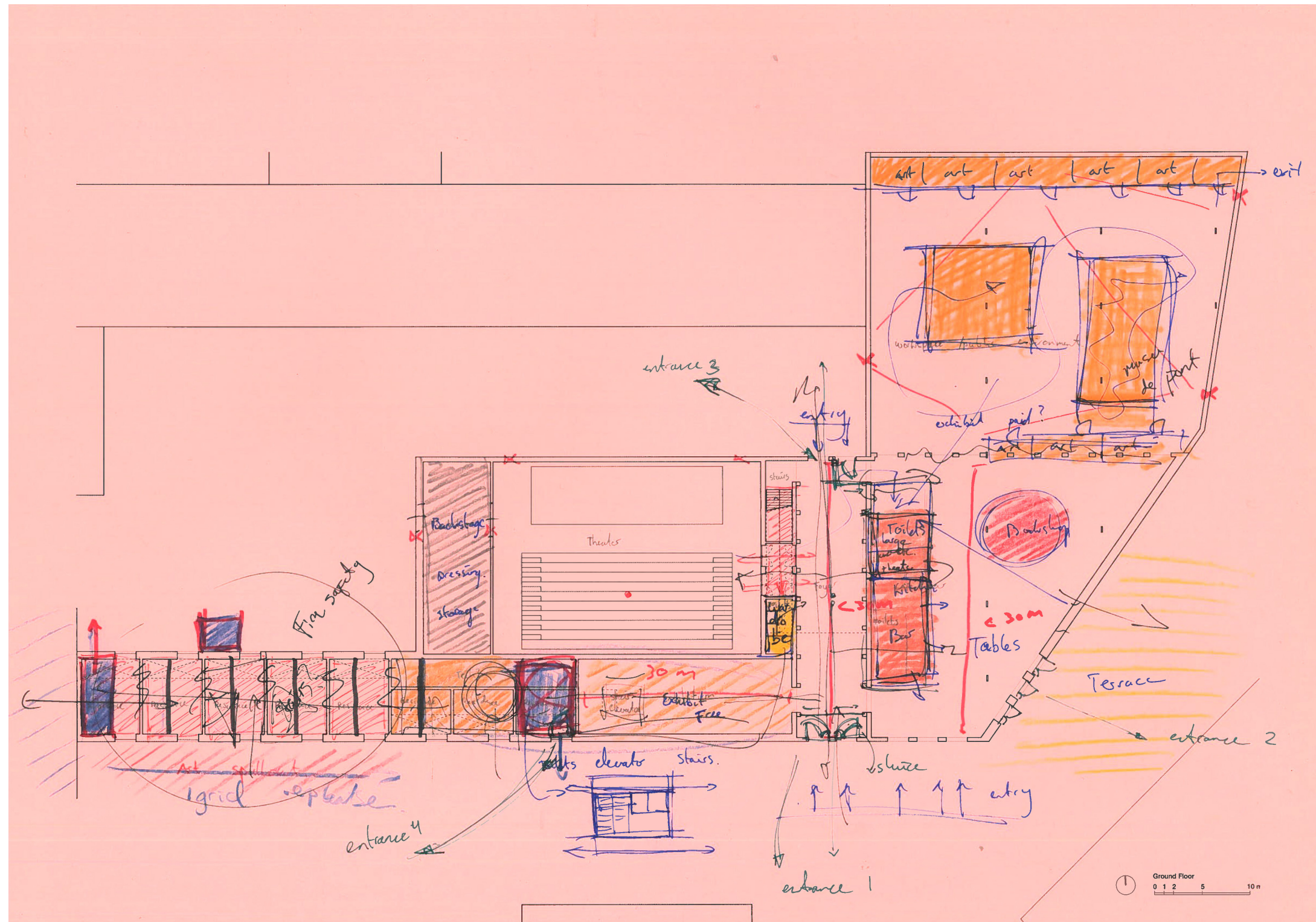
ADDITION



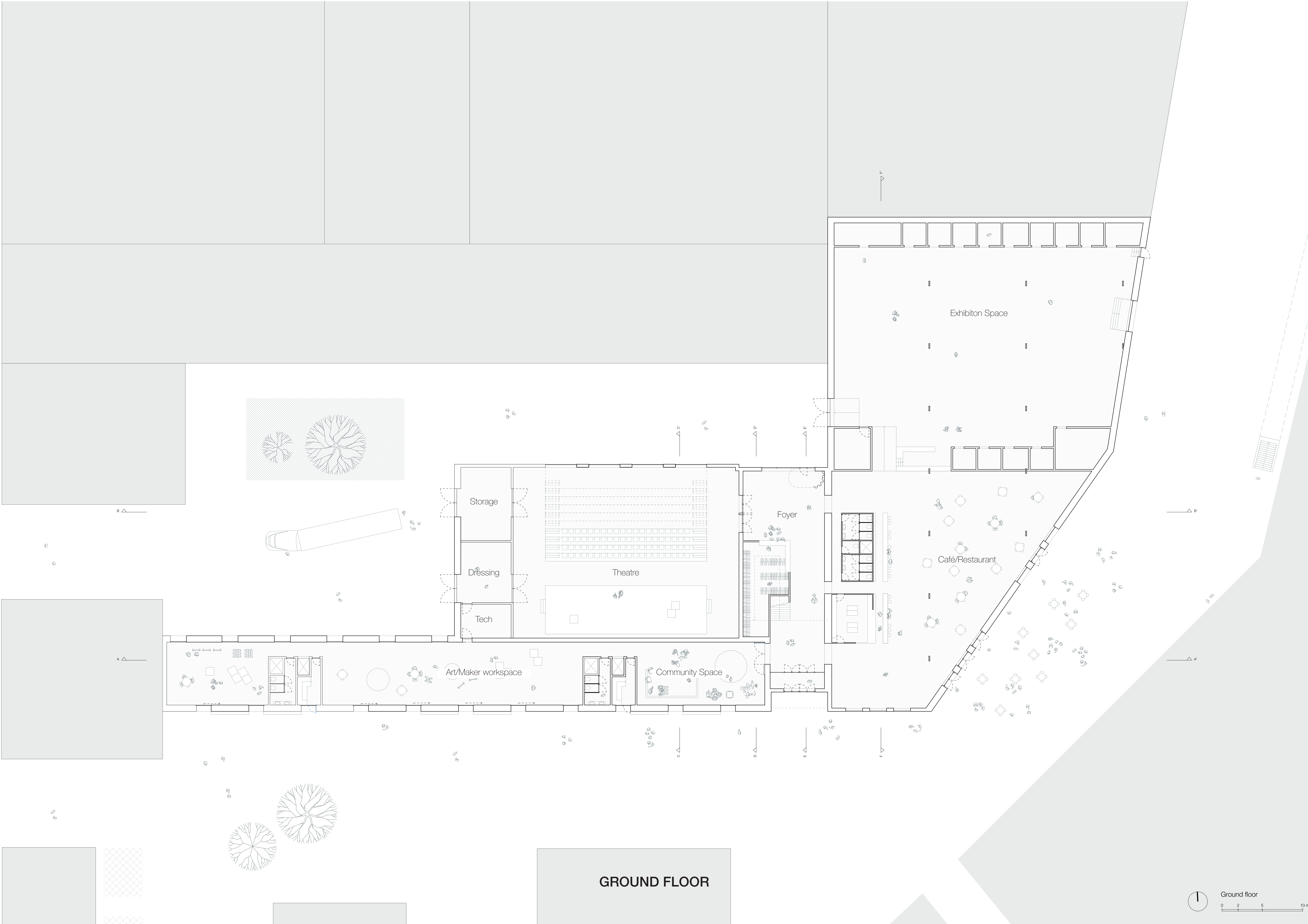
ATMOSPHERES



WALLS AND VAULTS

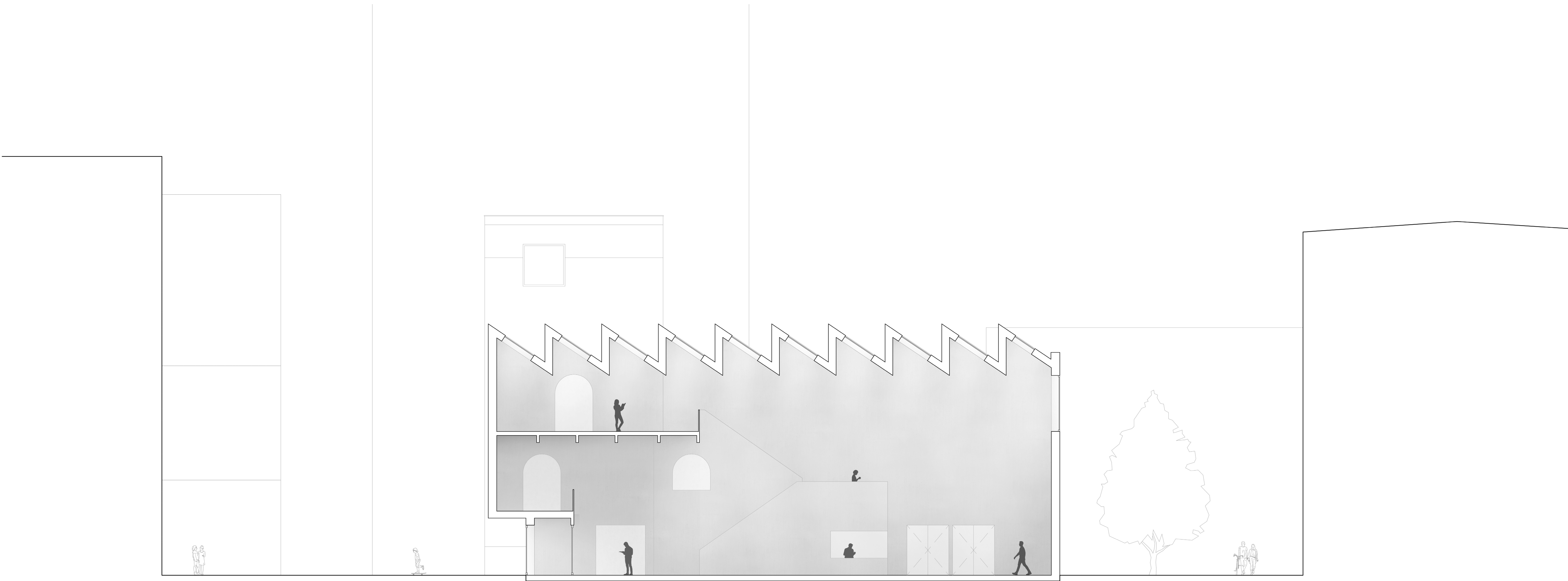


THE CONNECTED CULTURAL CENTER

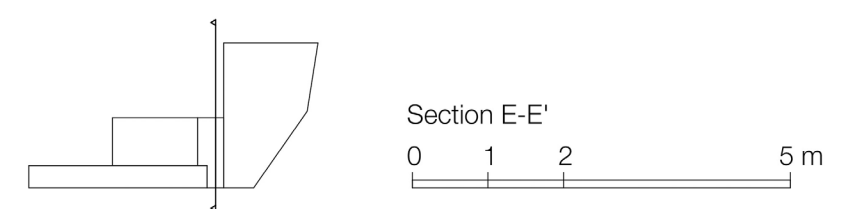


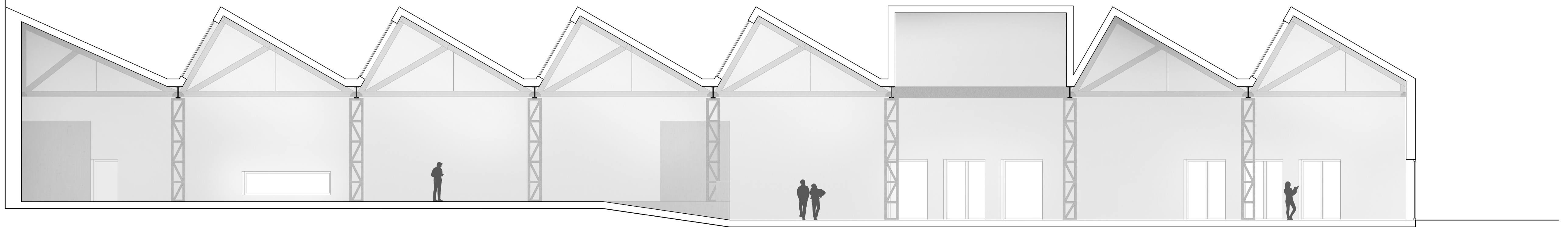
GROUND FLOOR



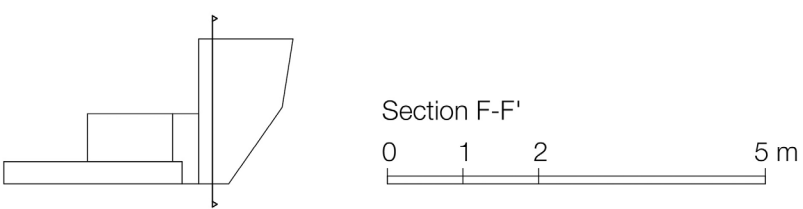


SECTION E-E'



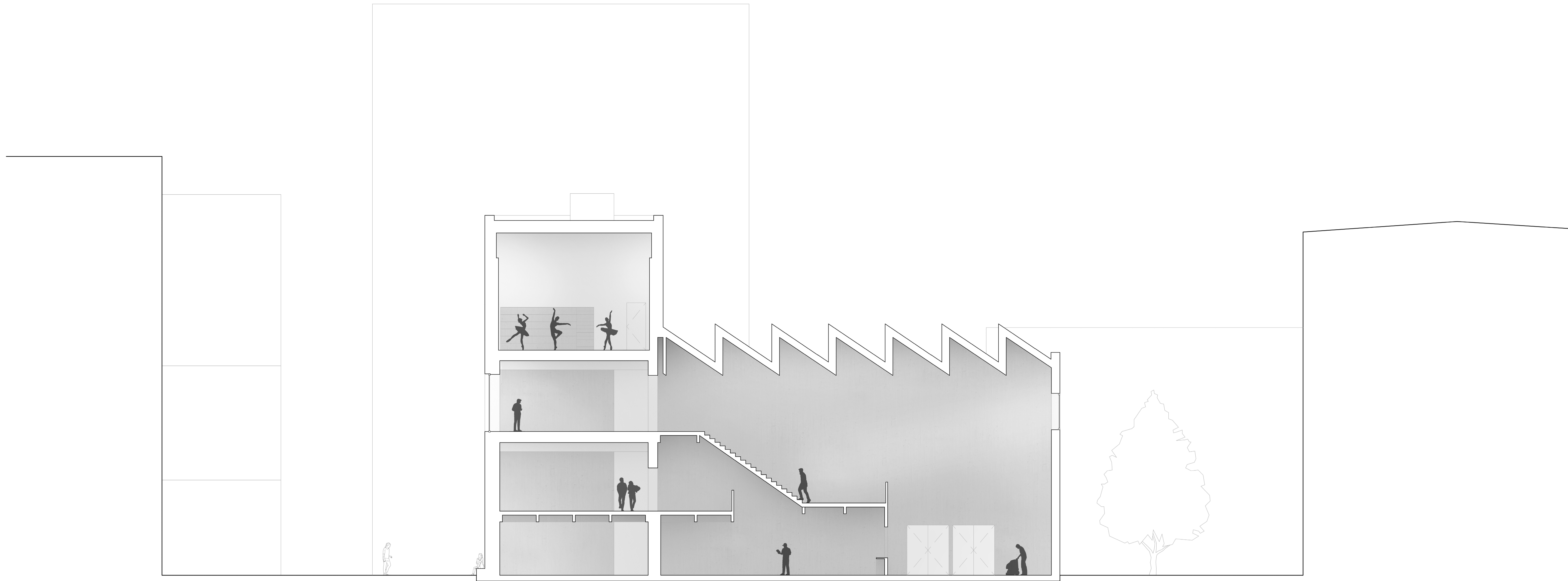


SECTION F-F'

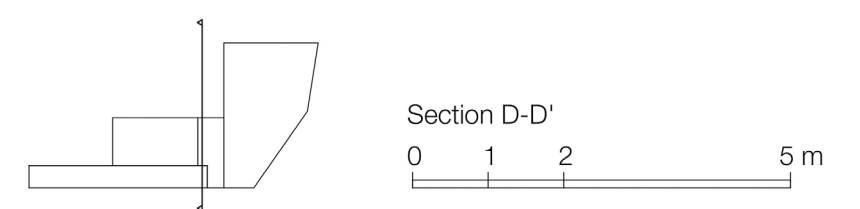




FOYER



SECTION D-D'







FIRST FLOOR

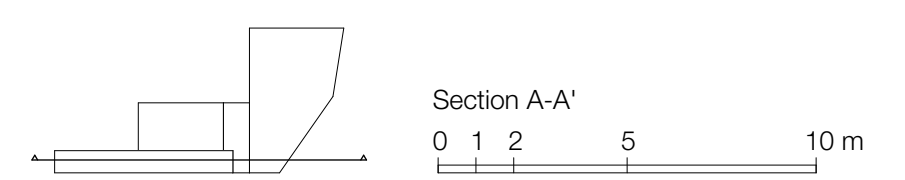
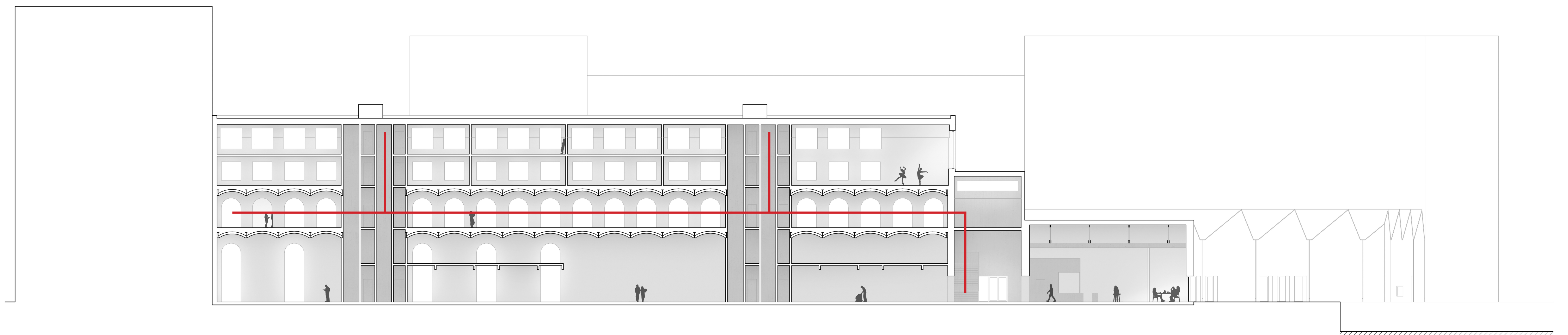


First floor
0 2 5 10 m

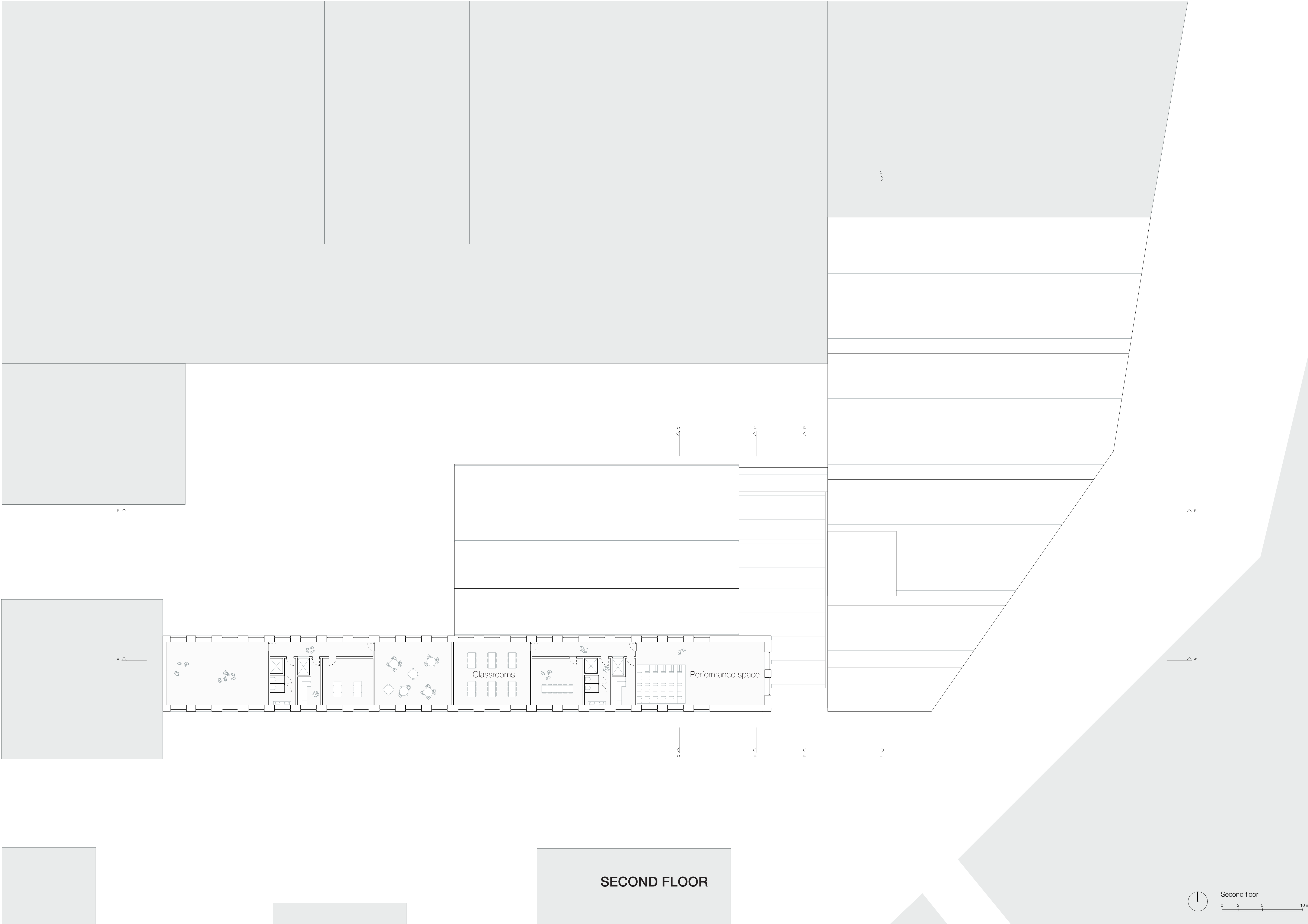


THIRD PLACE





SECTION A-A'



A

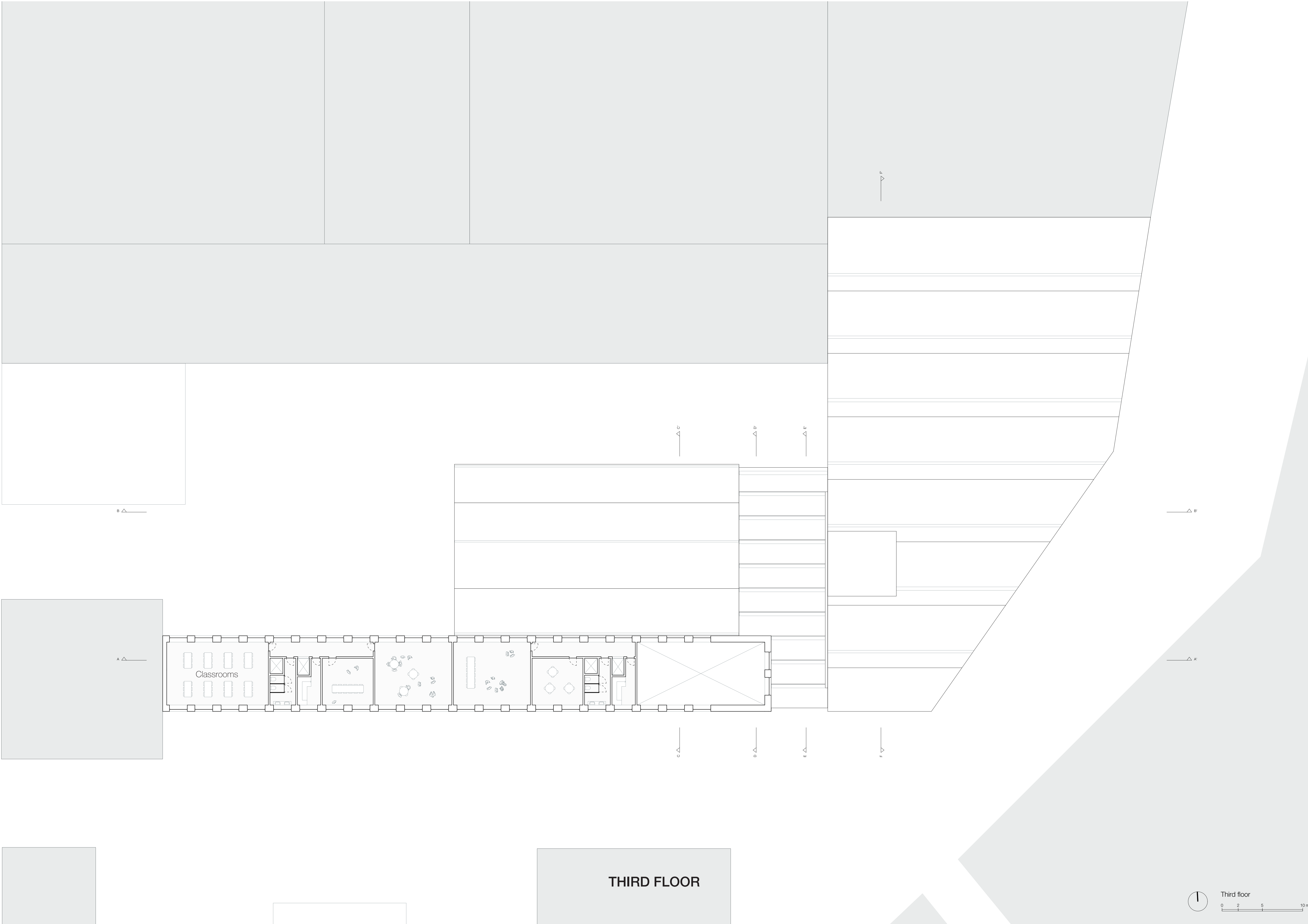
B

Classrooms

Performance space

SECOND FLOOR

Second floor
0 2 5 10 m



THIRD FLOOR

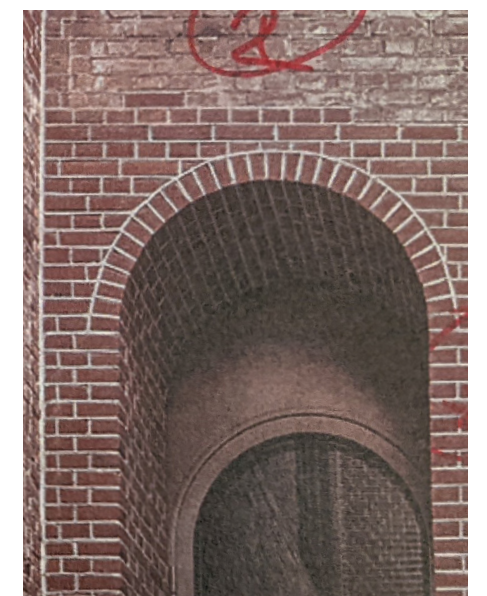
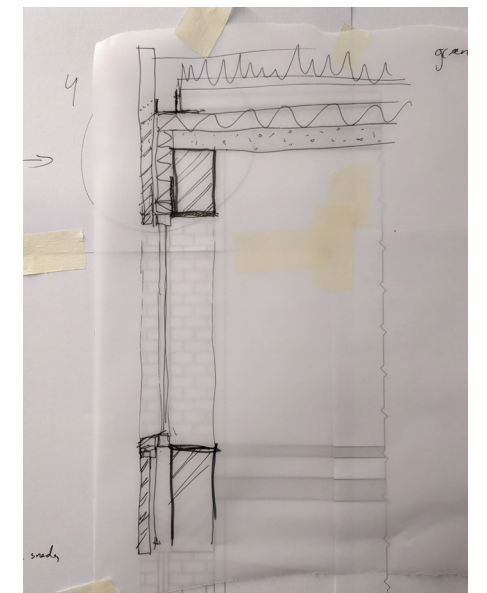
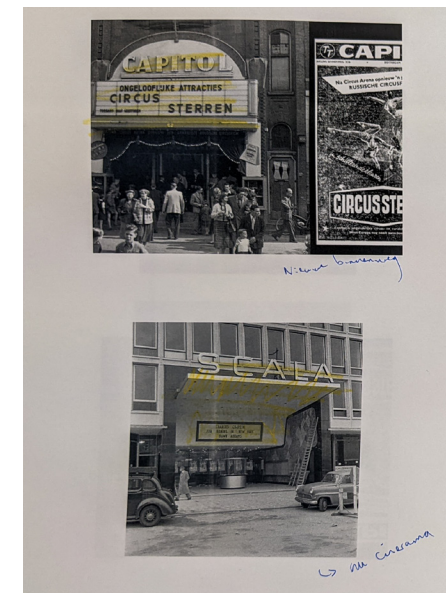
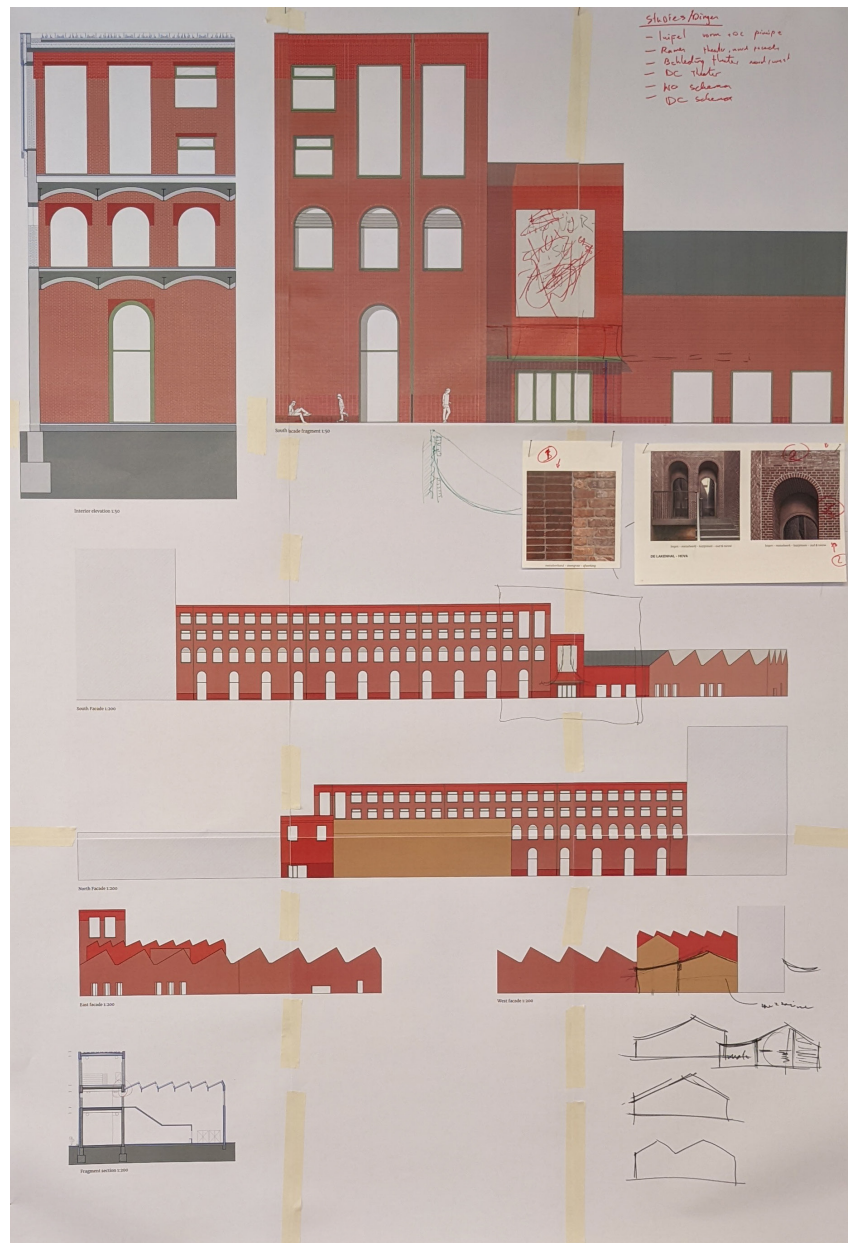




WATERFRONT

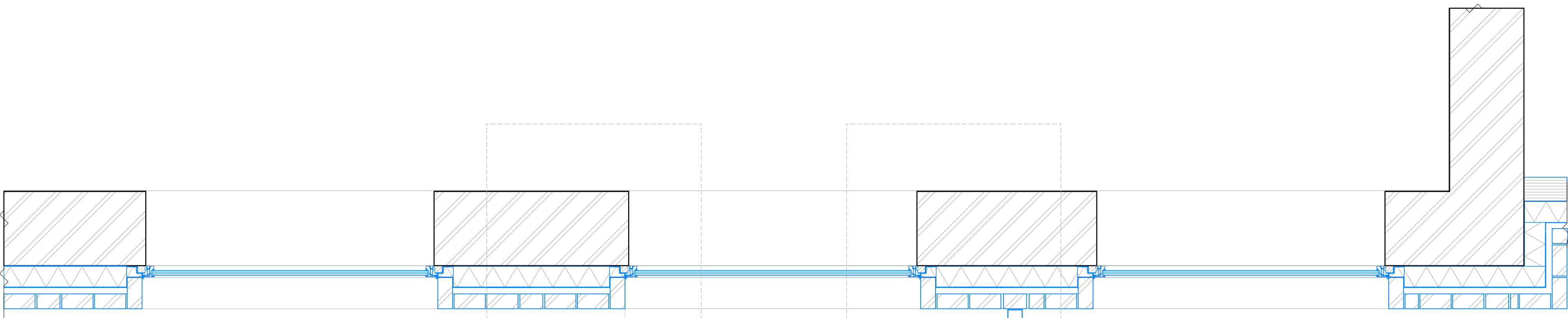
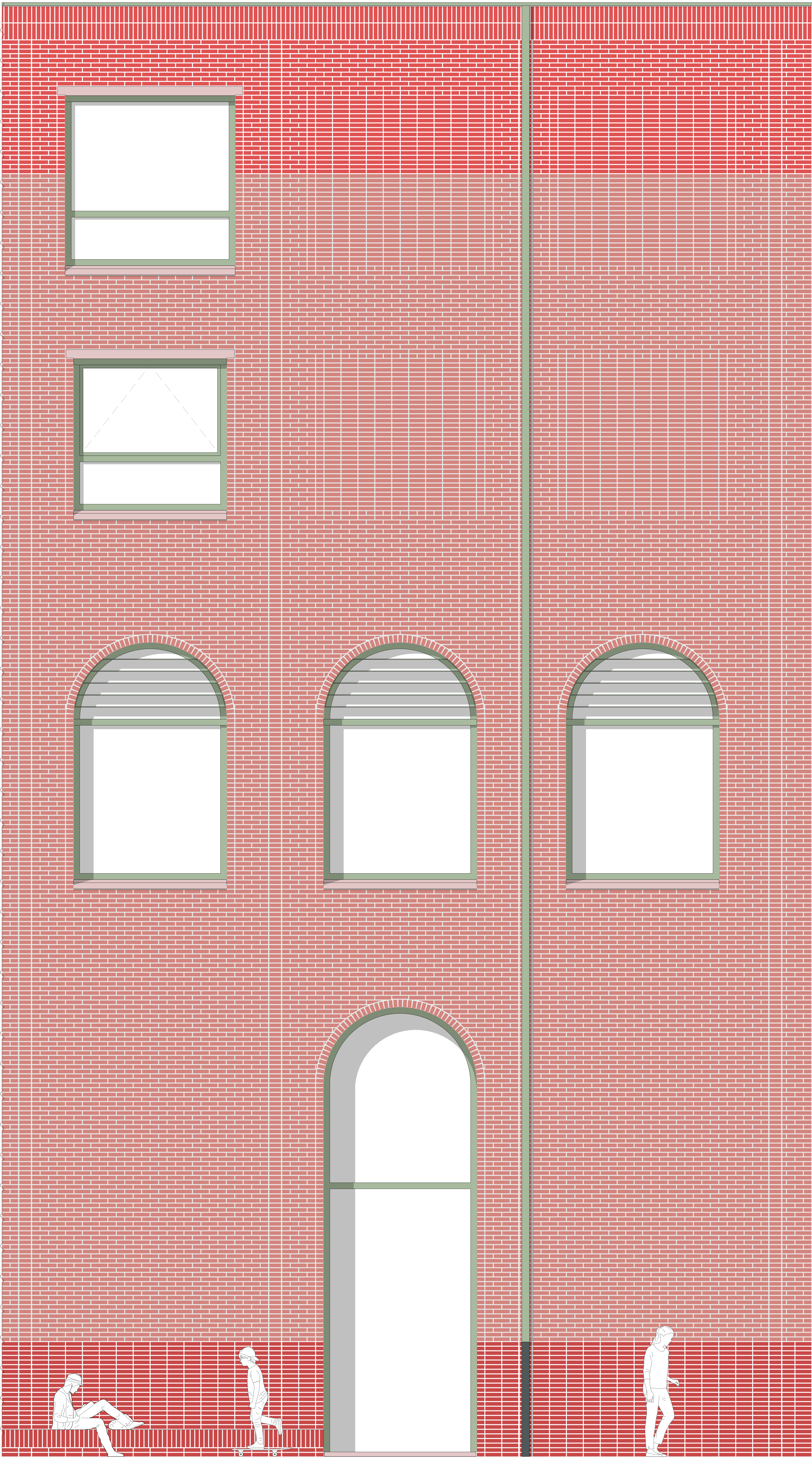








SOUTH FACADE



▽ +19.020

▽ +18.100

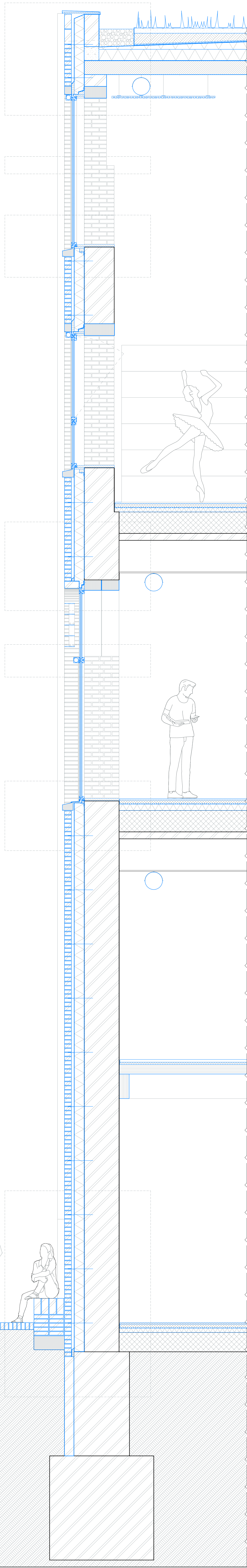
▽ +11.940

▽ +10.920

▽ +7.670

▽ +6.620

▽ +120



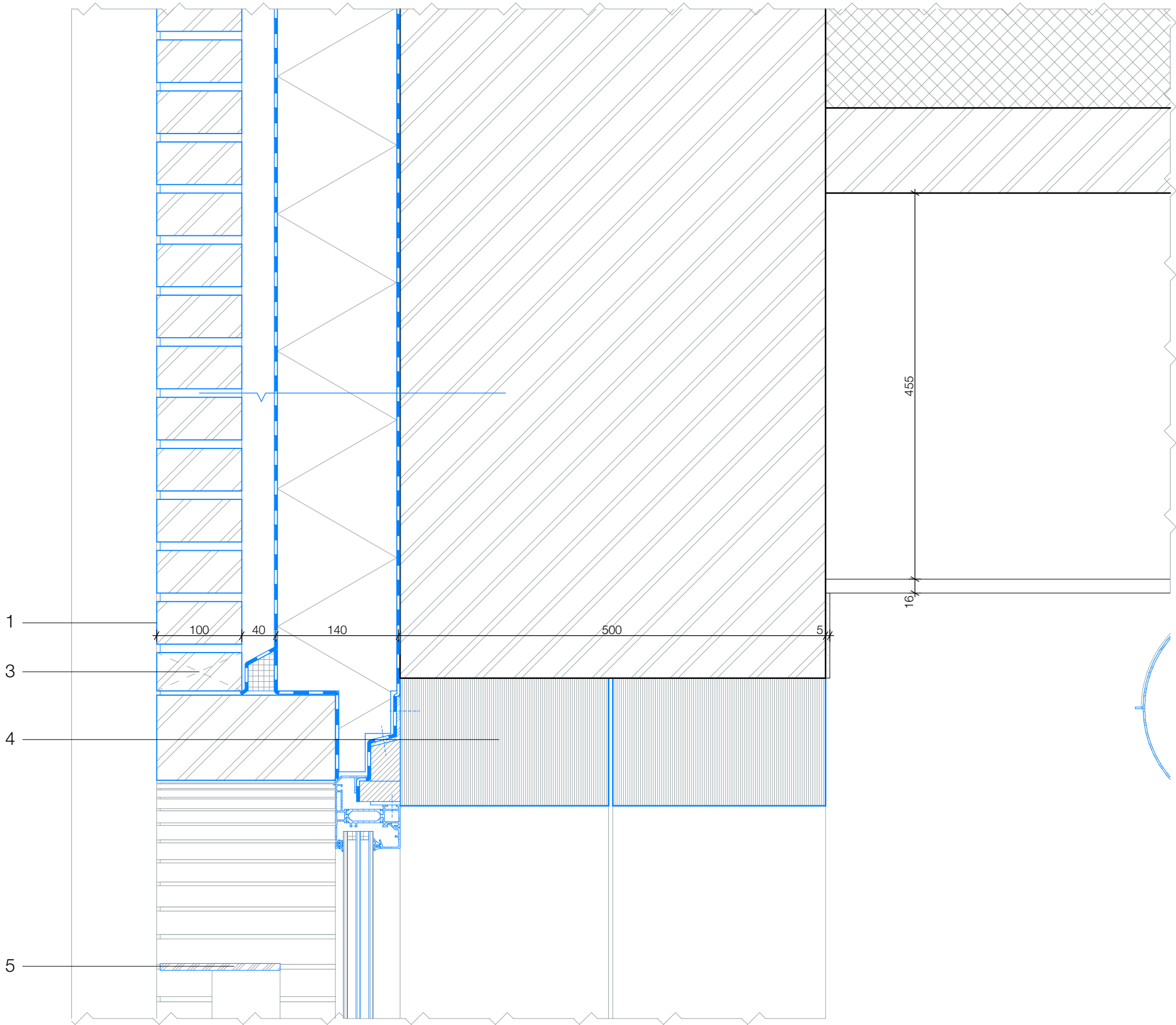
PM 2 Fragment

0 20 50 100 cm



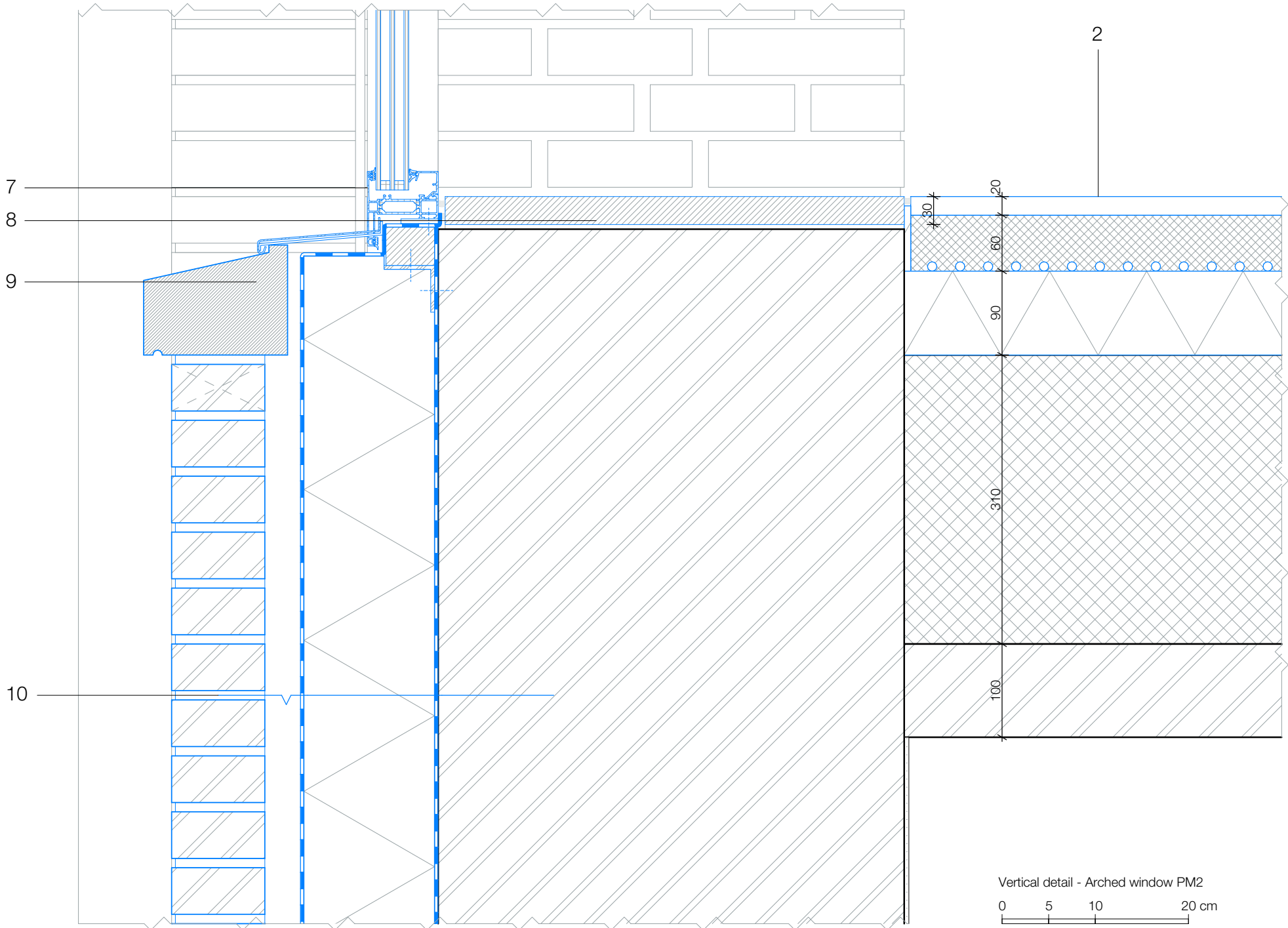
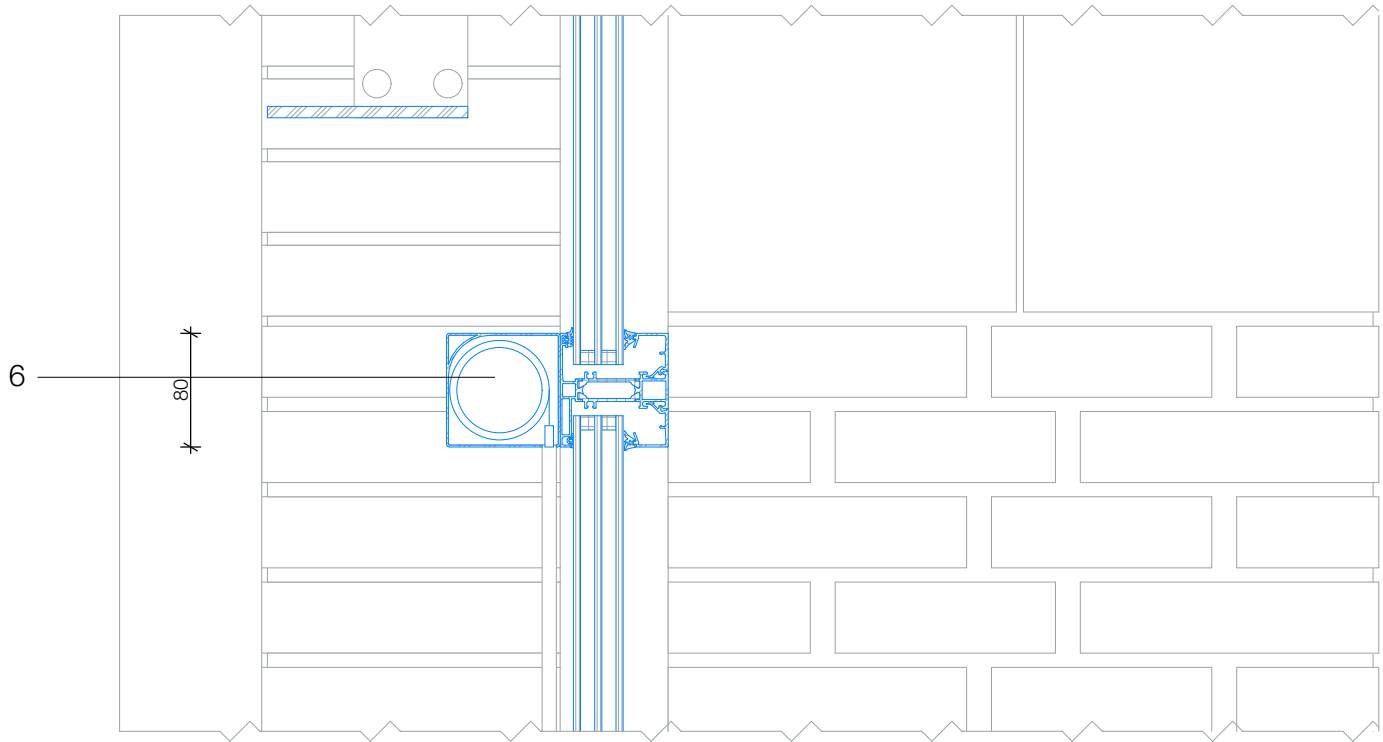
Vertical detail - Arched window PM2
Scale 1:5

- 1 Wall construction PM2 (U = 0.20 W/m K):
5 mm Stucco
500 mm Brick existing
Vapour barrier
140 mm Pavatherm woodfiber insulation
Waterproof layer
40 mm Ventilated air cavity
100 mm Reused brick
- 2 Floor construction:
100 mm Existing vaulted brick structure
on I-beams (200 x 580)
310 mm Existing cast concrete
90 mm insulation
60 mm cast concrete on floor heating system
20 mm floor finishing
- 3 Ventilation joint
- 4 2 x Precast concrete lintel 150 x 250 mm
- 5 Powder coated steel slit sunscreen on prefabricated
steel element RAL 6011
- 6 Sunscreen in powder coated aluminium casing RAL 6011
- 7 Powdercoated aluminium windowframe RAL 6011
Tripple glazed window (U = 0,6 W/m K)
- 8 Windowsill pinewood 30 mm
- 9 Precast coloured concrete sill
- 10 Stainless steel wall tie



exterior

interior



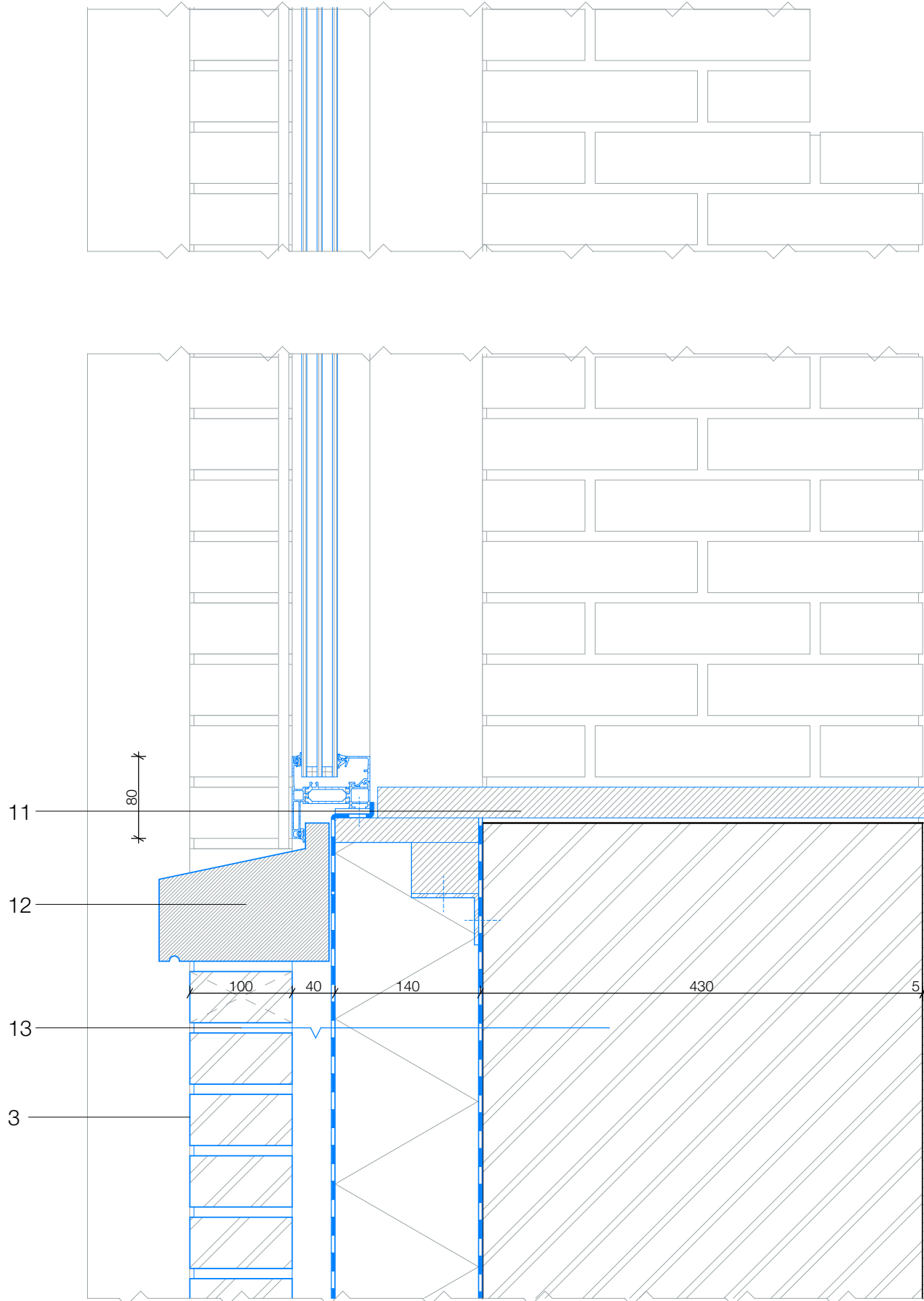
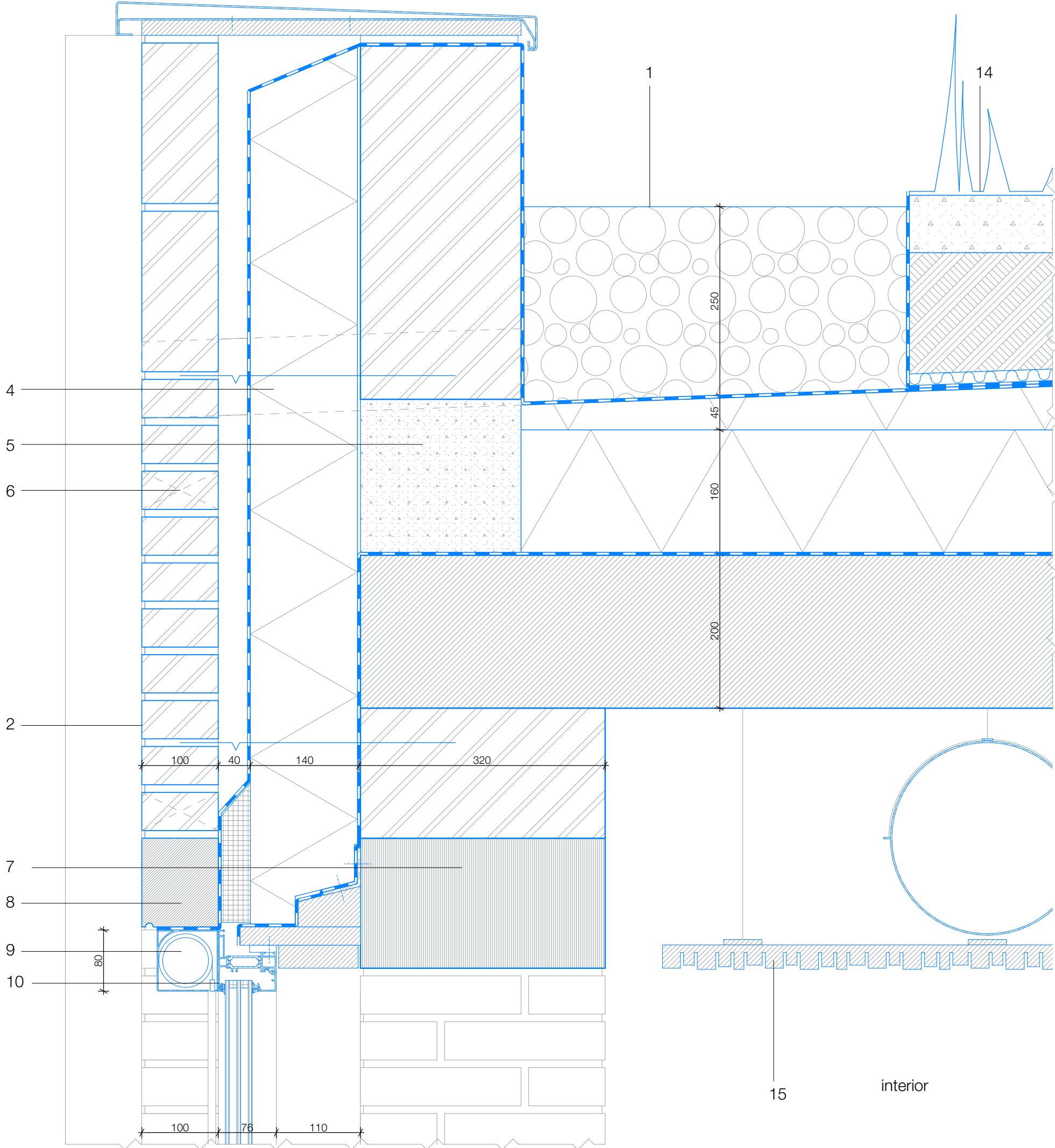
ARCHED WINDOW PM2

Vertical detail - Roof and window PM2
Scale 1:5

- 1 Roof construction PM2 (U = 0.21 W/m K):
200 mm Precast concrete floor slabs
Vapour barrier
160 mm Isorooft woodfiber insulation
45 mm Foamboard insulation layer for drainage
Waterproof layer
250 mm Gravel
- 2 Wall construction PM2 (U = 0.22 W/m K):
320 mm Brick dark red
Vapour barrier
140 mm Pavatherm woodfiber insulation
Waterproof layer
40 mm Ventilated air cavity
100 mm Brick dark red
- 3 Wall construction PM2 (U = 0.20 W/m K):
5 mm Stucco
430 mm Existing brick
Vapour barrier
140 mm Pavatherm woodfiber insulation
Waterproof layer
40 mm Ventilated air cavity
100 mm Reused brick brown-red
- 4 Canal to drainage pipe
- 5 Aerated concrete thermal bridge prevention
- 6 Ventilation joint
- 7 Concrete lintel 170 x 320 mm
- 8 Precast coloured concrete lintel
- 9 Sunscreen in powder coated aluminium casing RAL 6011
- 10 Powdercoated aluminium windowframe RAL 6011
Tripple glazed window (U = 0,6 W/m K)
- 11 Windowsill pinewood 30 mm
- 12 Precast coloured concrete sill
- 13 Stainless steel wall tie
- 14 Greenroof structure:
Waterproofing
Drainage layer
100 - 230 mm Green roof substrate
Vegetation
- 15 Lignotrend accoustic wood panneling

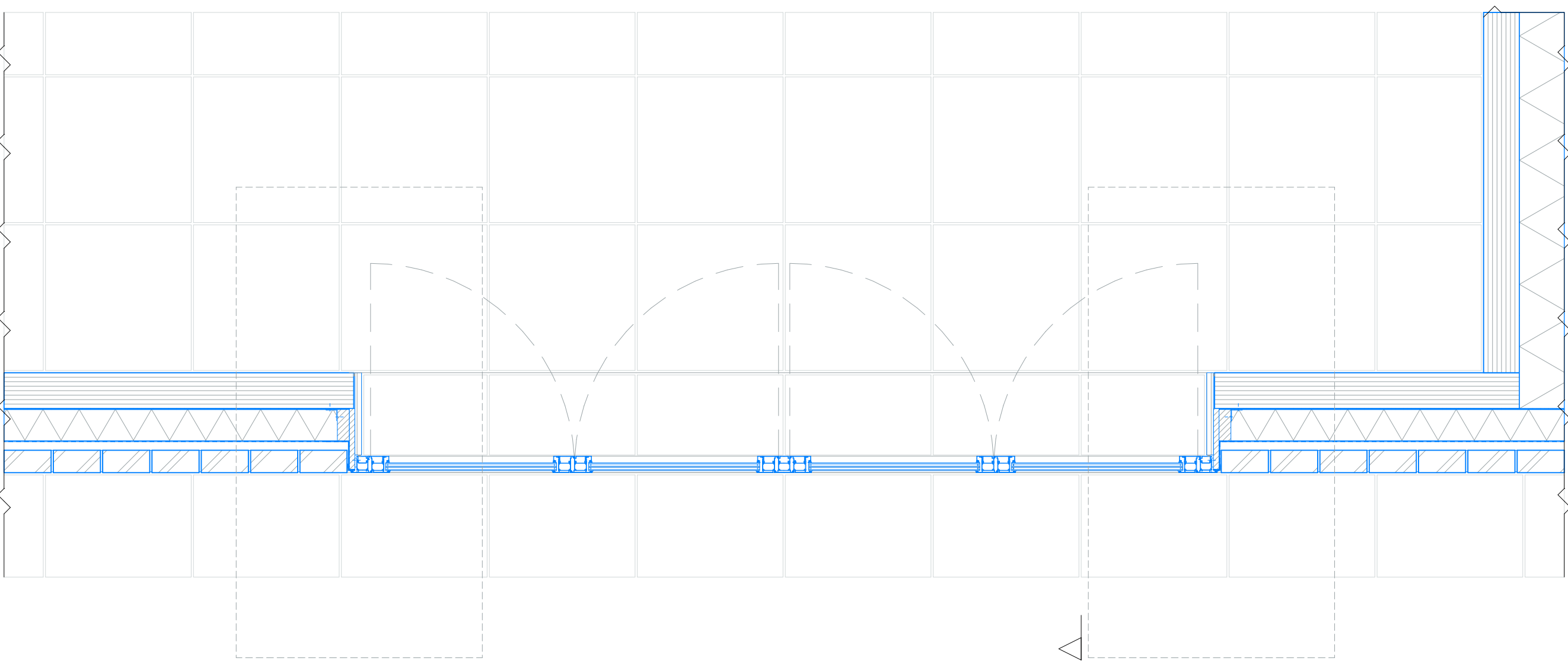
exterior

interior



Vertical detail - Roof/window PM2
0 5 10 20 cm

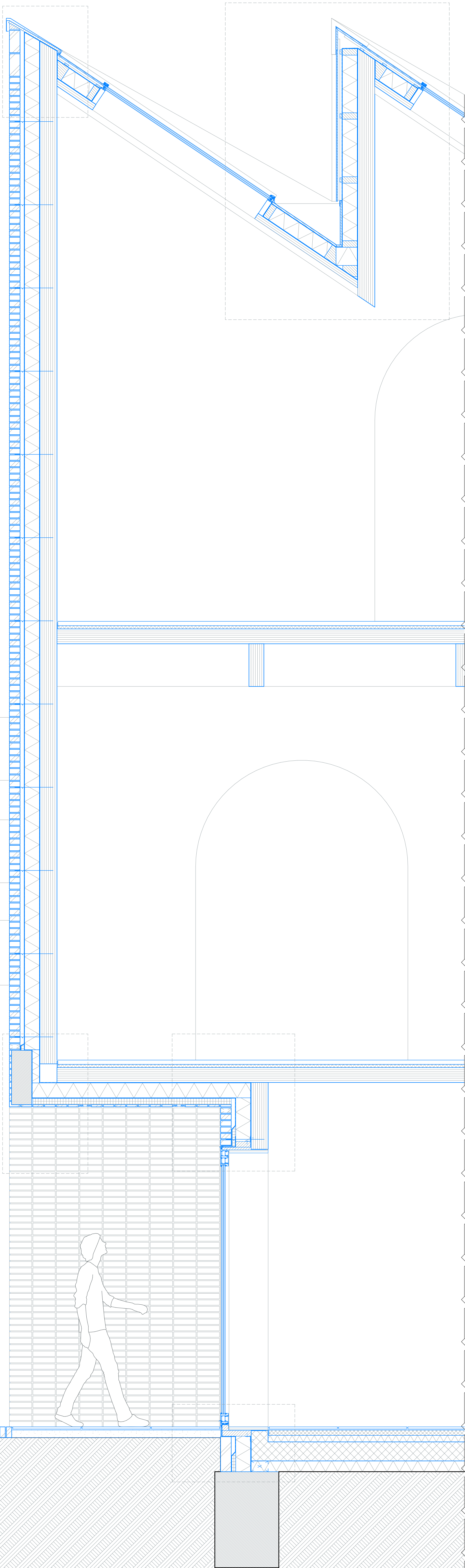
ROOF/WINDOW PM2

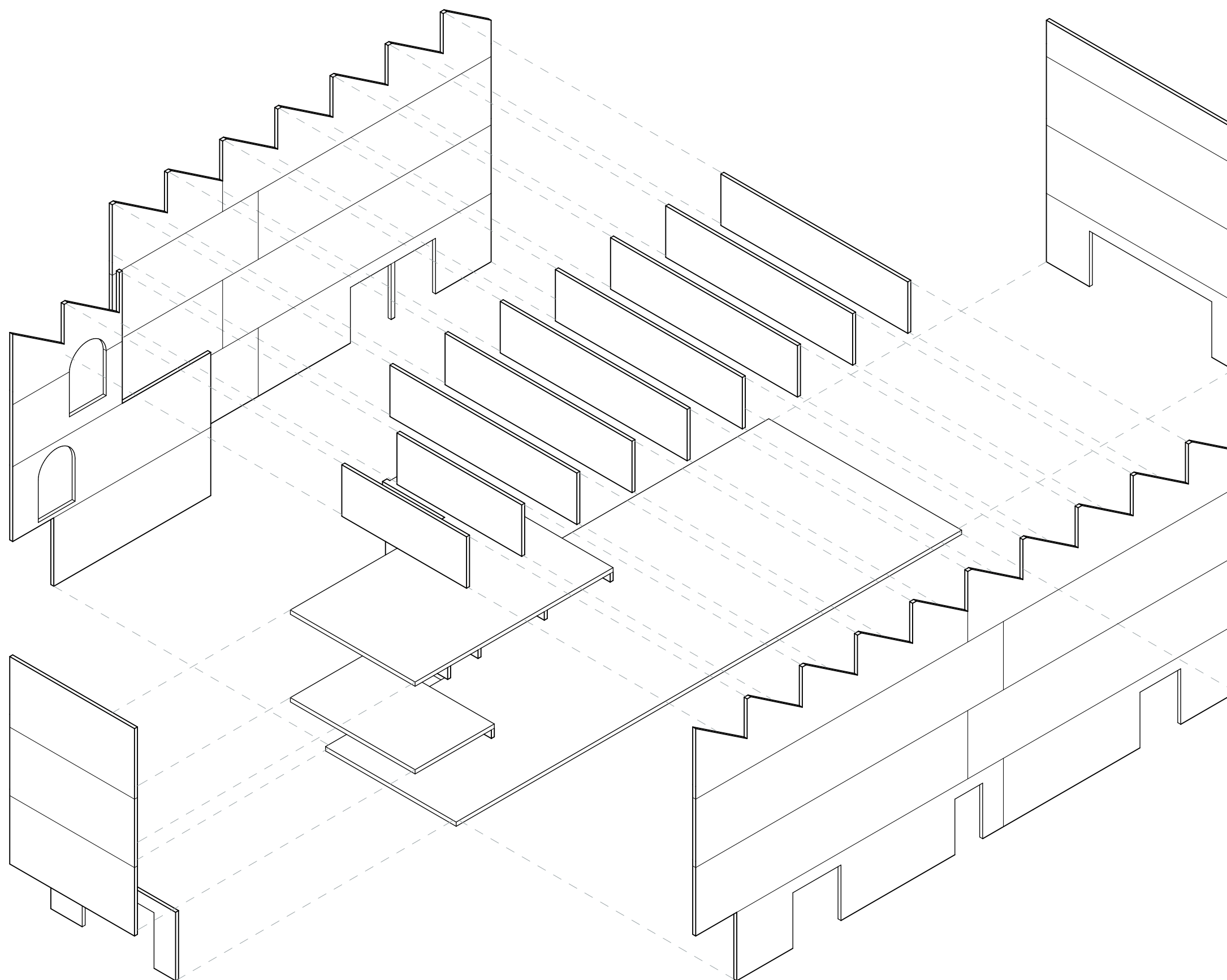


▽+13.300

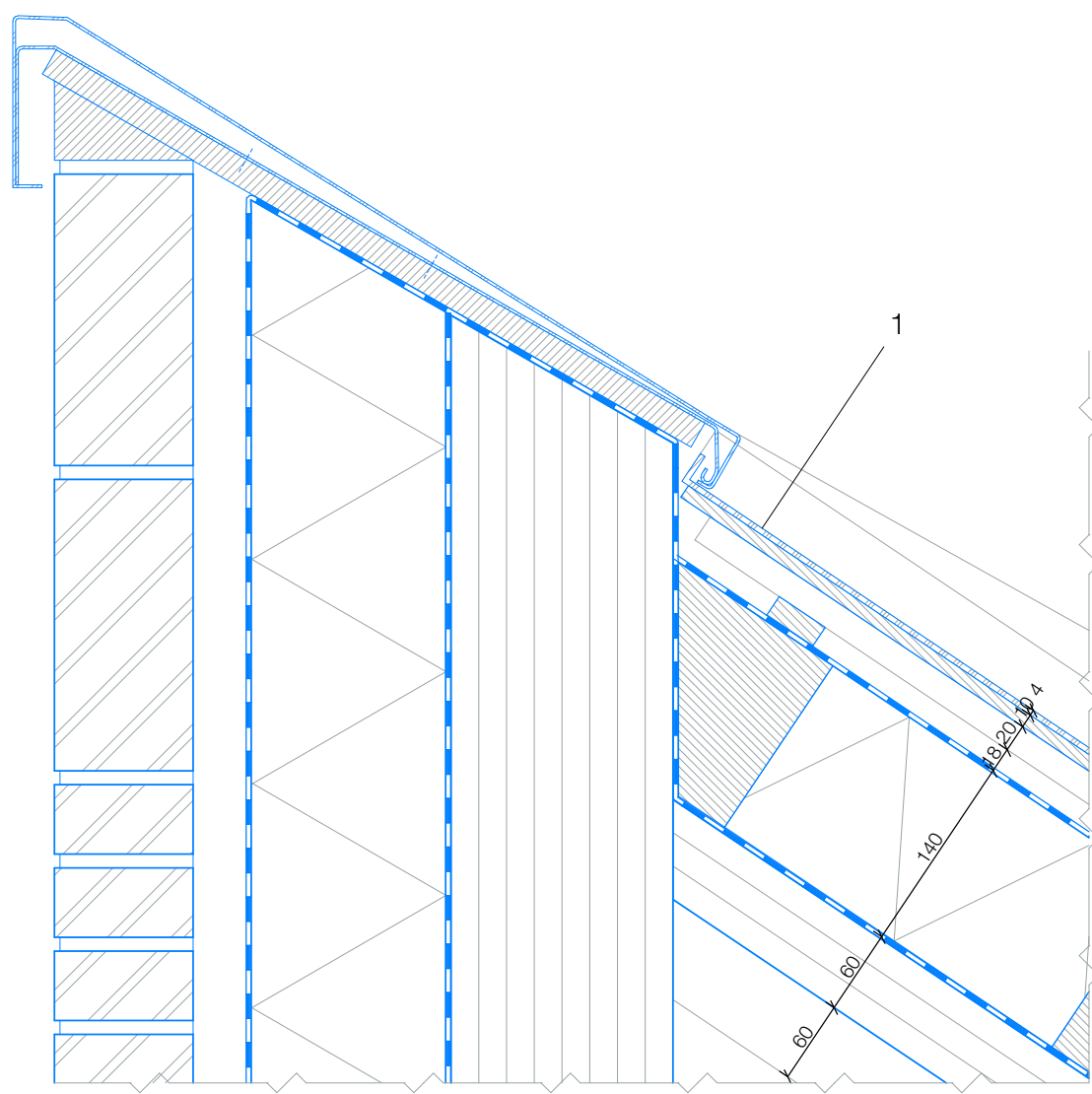
▽+3.120

▽+120





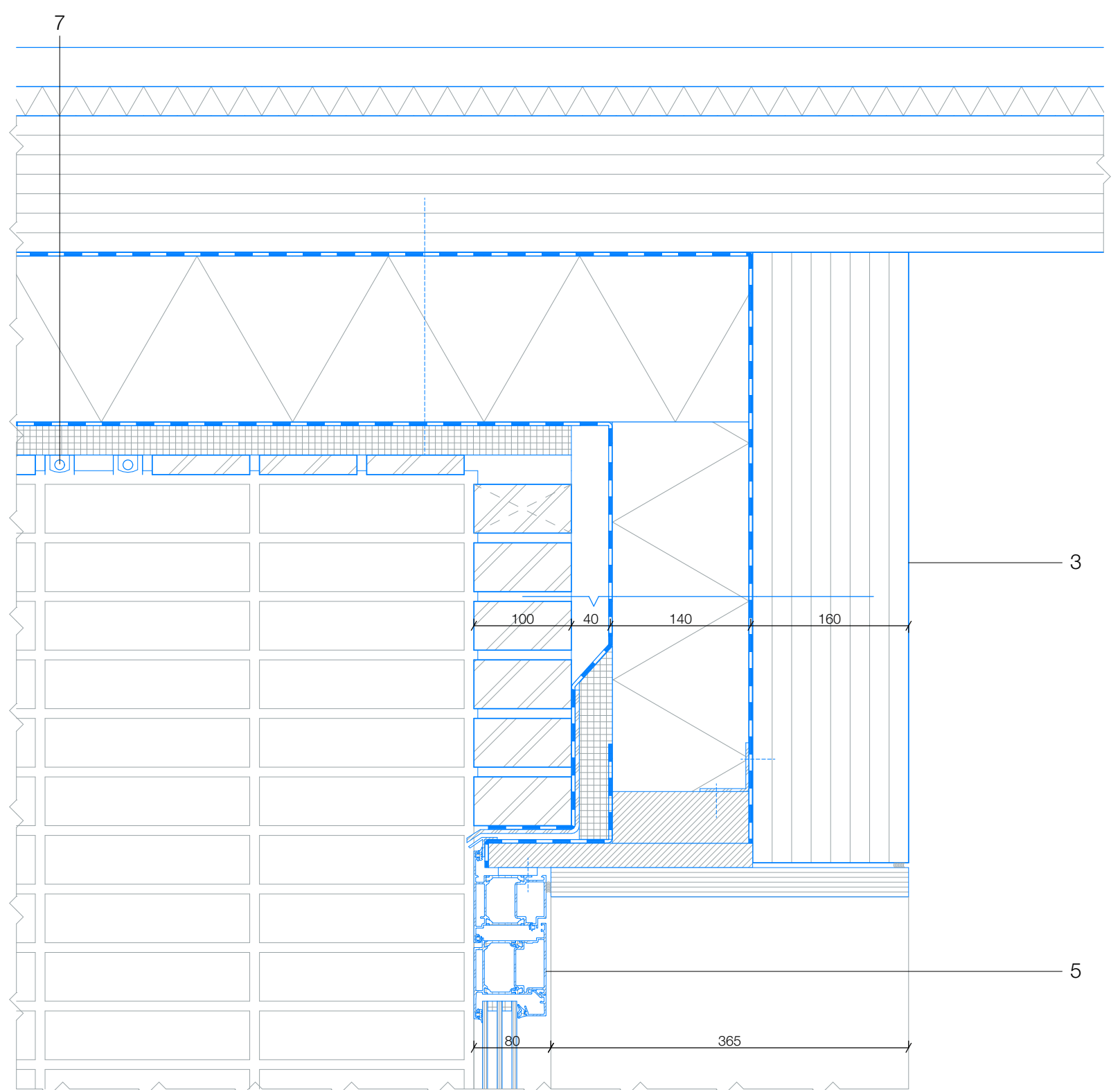
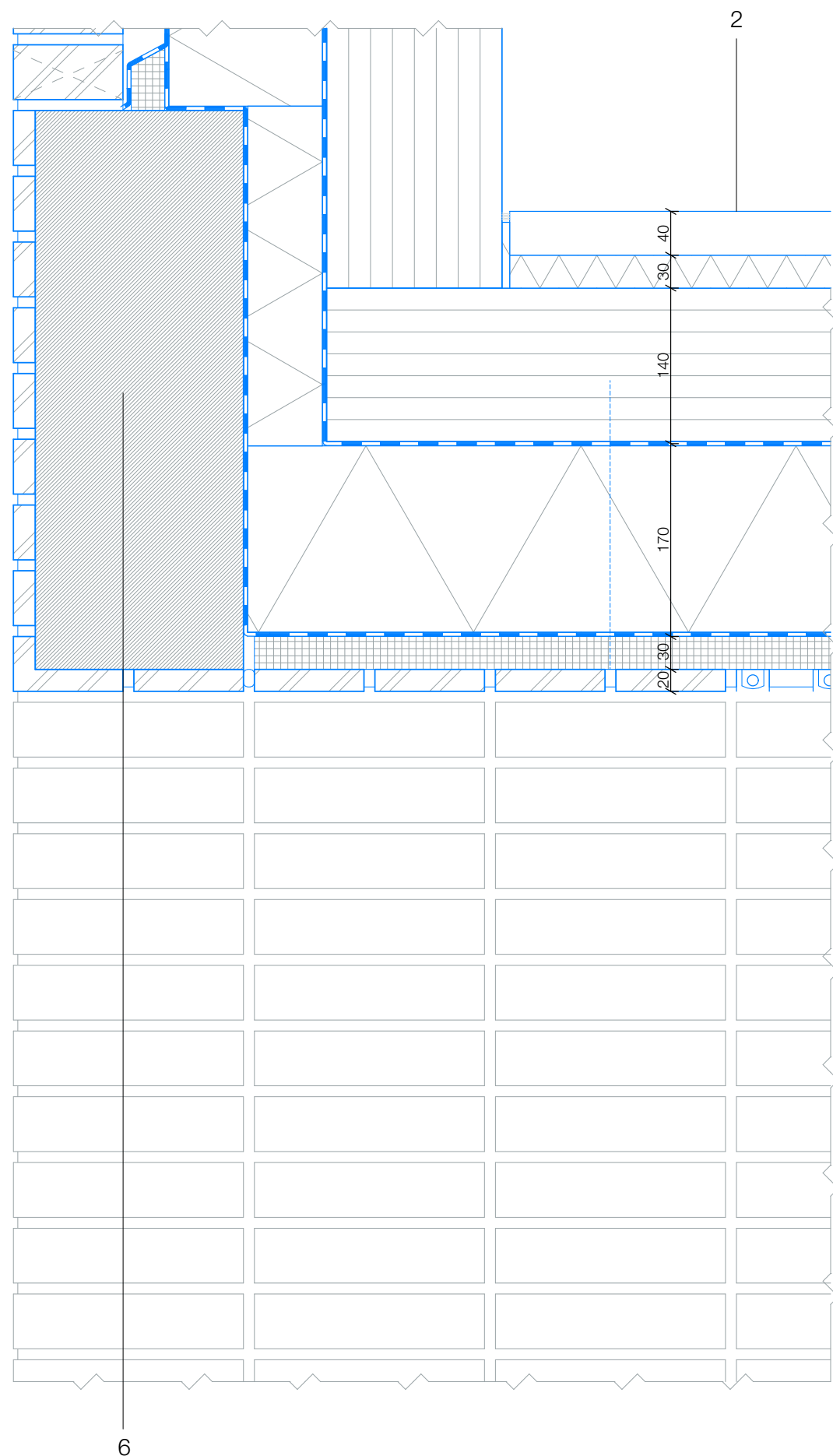
CROSS LAMINATED TIMBER FOYER



Vertical detail - Entrance/Foyer front
Scale 1:5

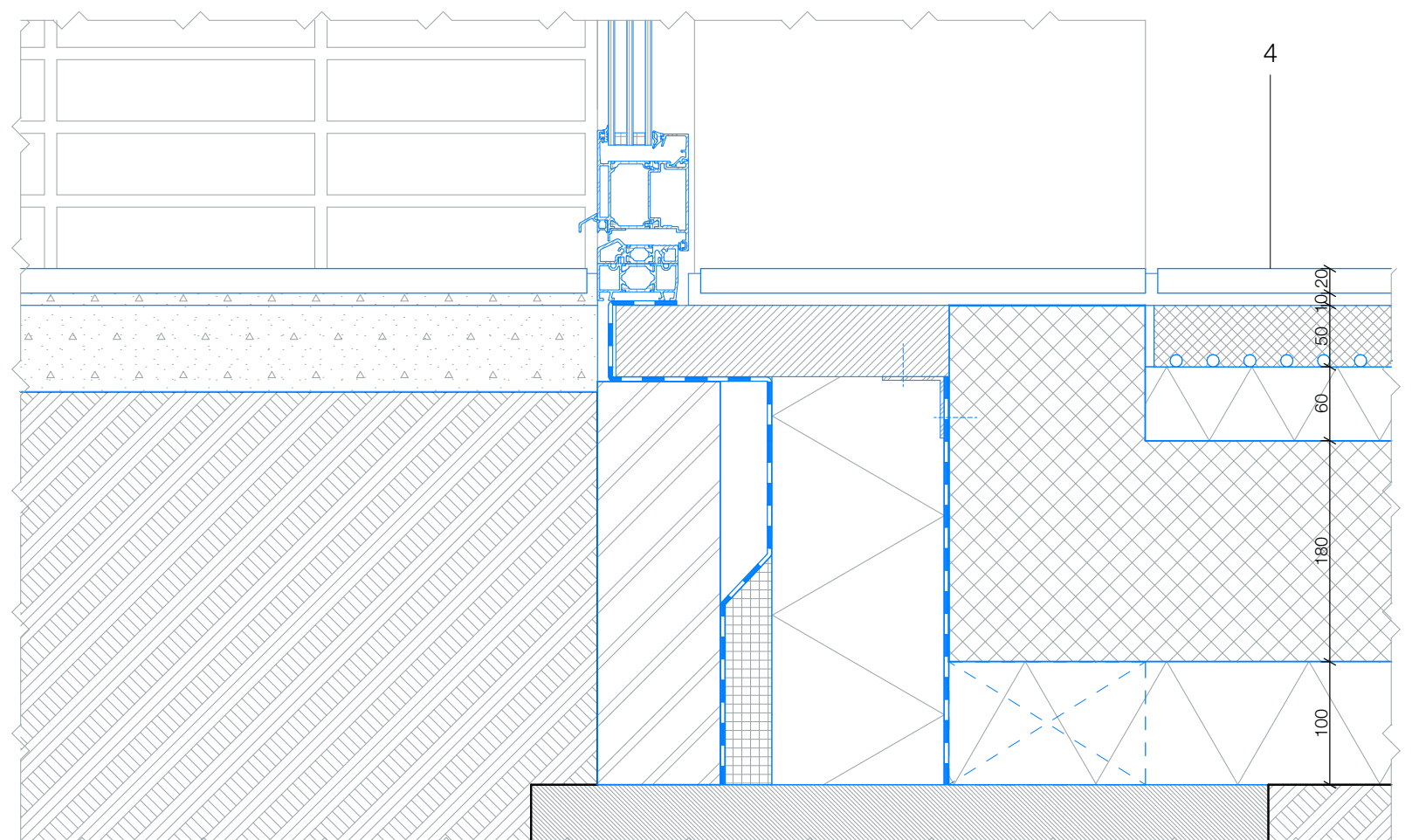
Vertical detail - Entrance/Foyer front
0 5 10 20 cm

- 1 Roof construction PM2 ($U = 0.24 \text{ W/m K}$):
60 x 80 mm Timber beam
60 mm Cross laminated timber
Vapour barrier
140 mm Isoroof woodfiber insulation
Waterproof layer
20 mm horizontal wooden battens
20 mm vertical wooden battens
10 mm plywood
4 mm zink plating
- 2 Floor construction:
40 mm floor finishing t.b.d.
30 mm insulation
140 mm Cross laminated timber
Vapour barrier
170 mm Isoroof woodfiber insulation
Waterproof layer
30 mm cement-bound woodfiber panel
Glue layer for brick strips
20 mm Glazed brick strips dark red
- 3 Wall construction PM2 ($U = 0.21 \text{ W/m K}$):
160 mm Cross laminated timber
Vapour barrier
140 mm Isoroof woodfiber insulation
Waterproof layer
40 mm ventilated air cavity
100 mm Brick dark red
- 4 Floor construction:
100 mm Rigid insulation
180 mm Cast concrete
60 mm Rigid insulation
50 mm Cast concrete on floor heating system
10 mm Mortar
20 mm Granite tiles
- 5 Powdercoated aluminium doorframe RAL 6011
Tripple glazed window ($U = 0,6 \text{ W/m K}$)
- 6 Concrete lintel (500 x 190)
- 7 Fixture for led light strip



exterior

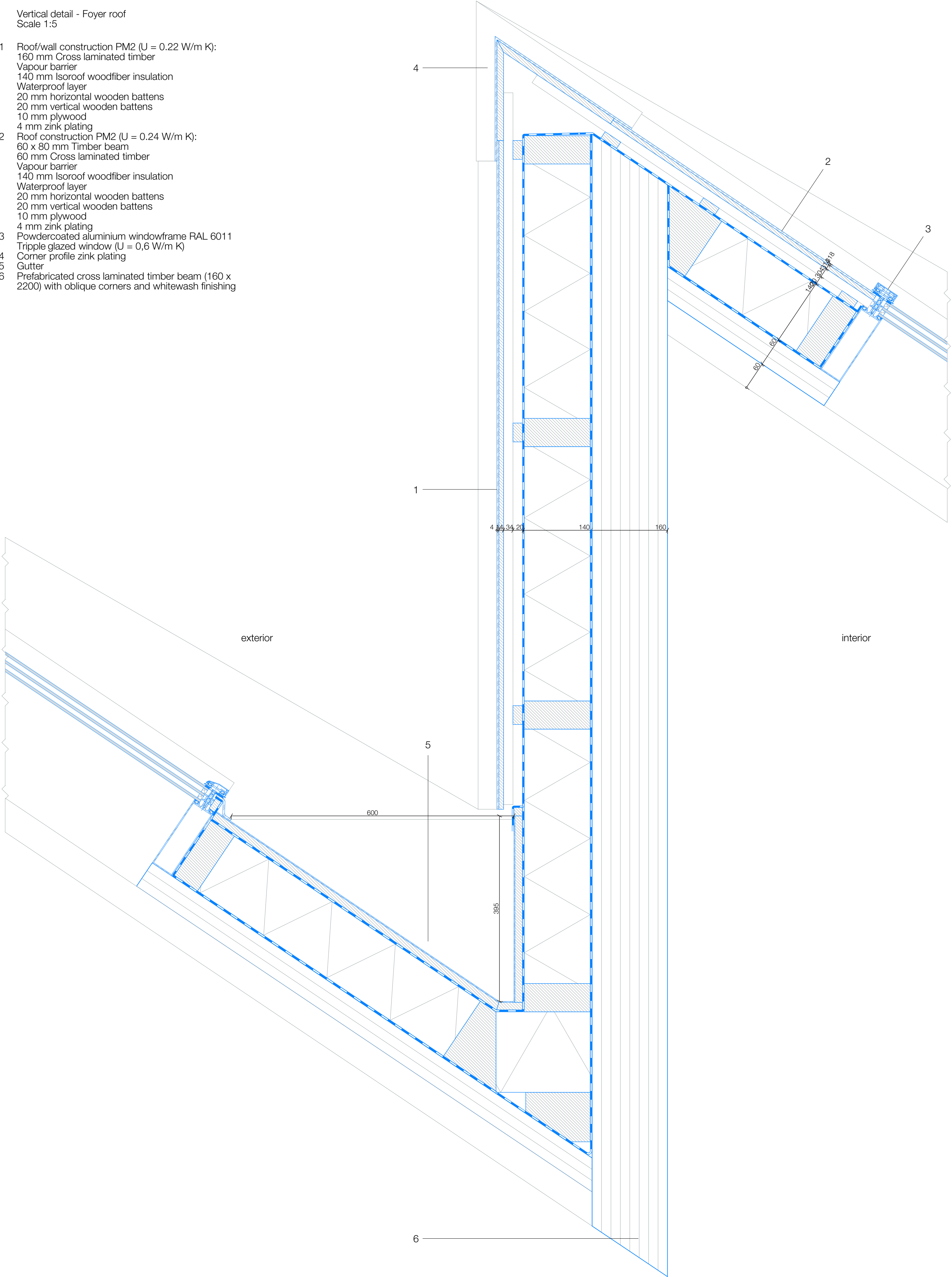
interior



ENTRANCE/FOYER FRONT

Vertical detail - Foyer roof
Scale 1:5

- 1 Roof/wall construction PM2 (U = 0.22 W/m K):
160 mm Cross laminated timber
Vapour barrier
140 mm Isoroof woodfiber insulation
Waterproof layer
20 mm horizontal wooden battens
20 mm vertical wooden battens
10 mm plywood
4 mm zink plating
- 2 Roof construction PM2 (U = 0.24 W/m K):
60 x 80 mm Timber beam
60 mm Cross laminated timber
Vapour barrier
140 mm Isoroof woodfiber insulation
Waterproof layer
20 mm horizontal wooden battens
20 mm vertical wooden battens
10 mm plywood
4 mm zink plating
- 3 Powdercoated aluminium windowframe RAL 6011
Tripple glazed window (U = 0,6 W/m K)
- 4 Corner profile zink plating
- 5 Gutter
- 6 Prefabricated cross laminated timber beam (160 x 2200) with oblique corners and whitewash finishing

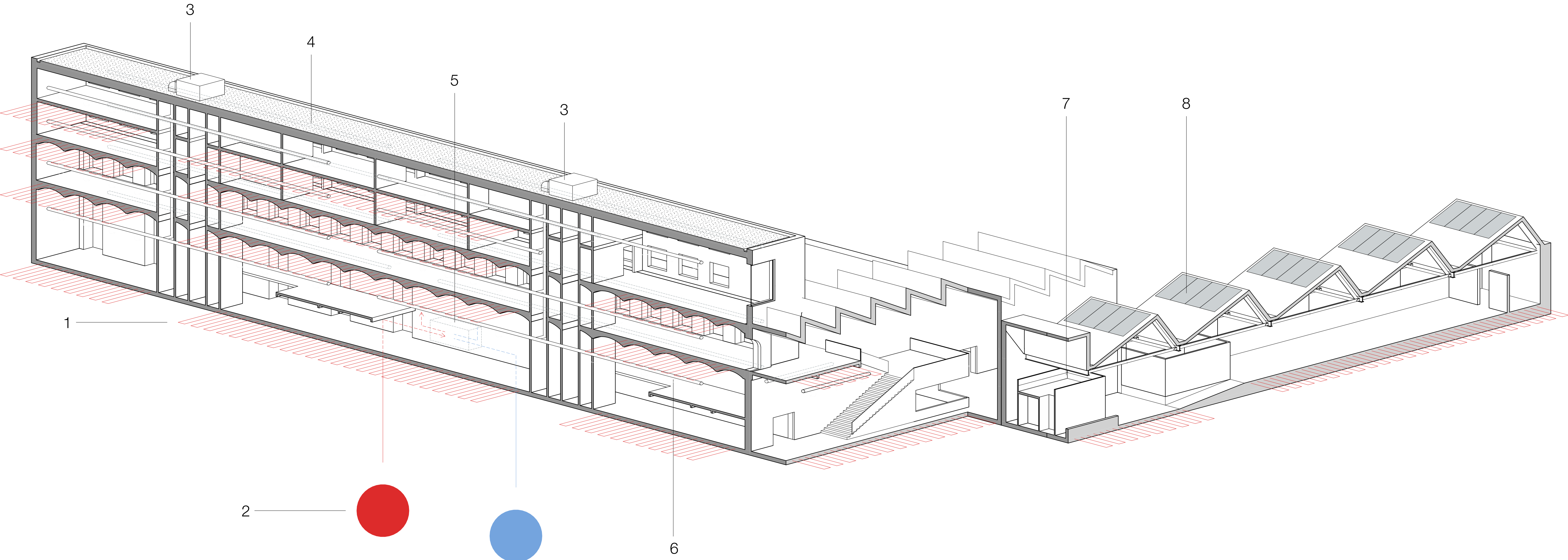


FOYER ROOF

Vertical detail - Foyer roof
0 5 10 20 cm

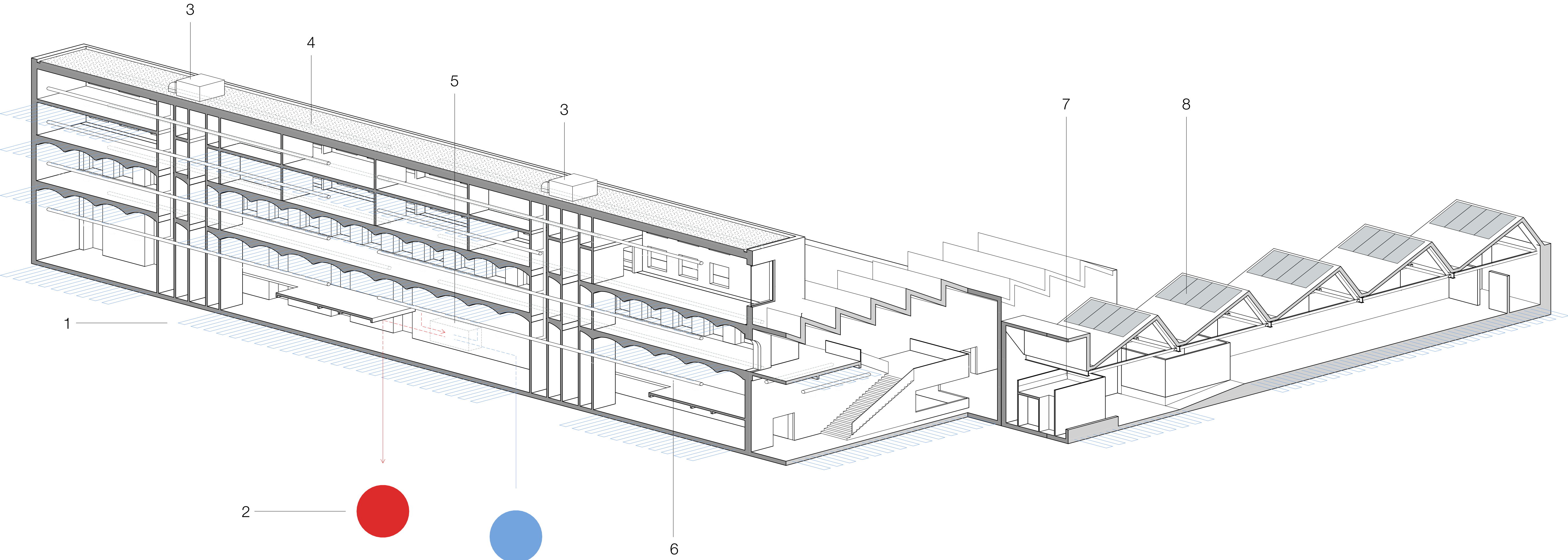
Climatization scheme - winter situation:

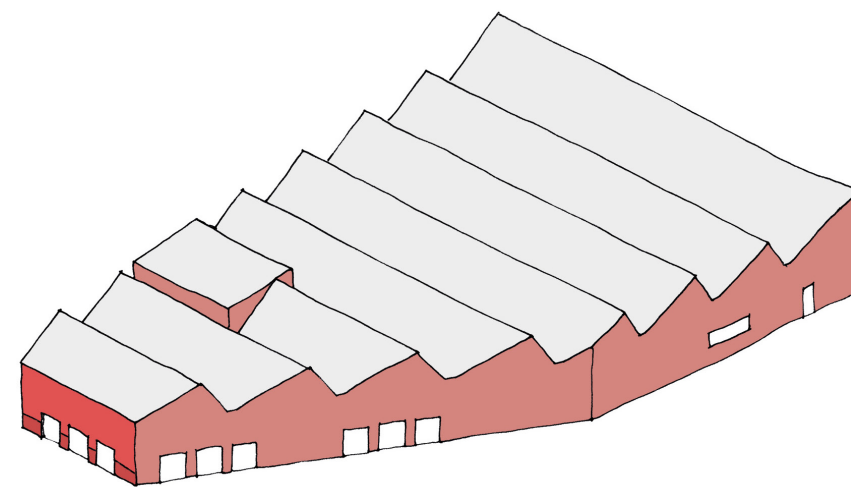
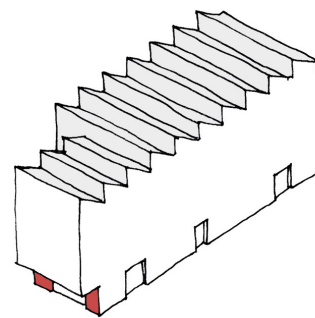
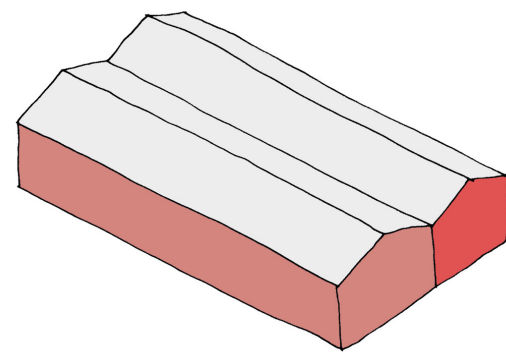
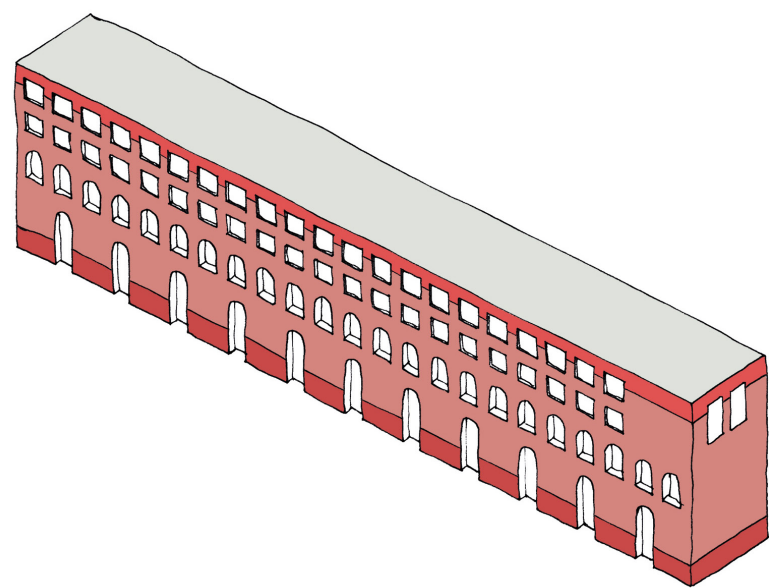
- 1 Floor heating network
- 2 Heat/Cold reservoir:
Hot water is pumped up
Cold water is stored
- 3 Air handling unit with heat exchange
- 4 Green roof
- 5 Heat/cold pump
- 6 Air ventilation system
- 7 Greywater collection
- 8 Solar energy through PV panels



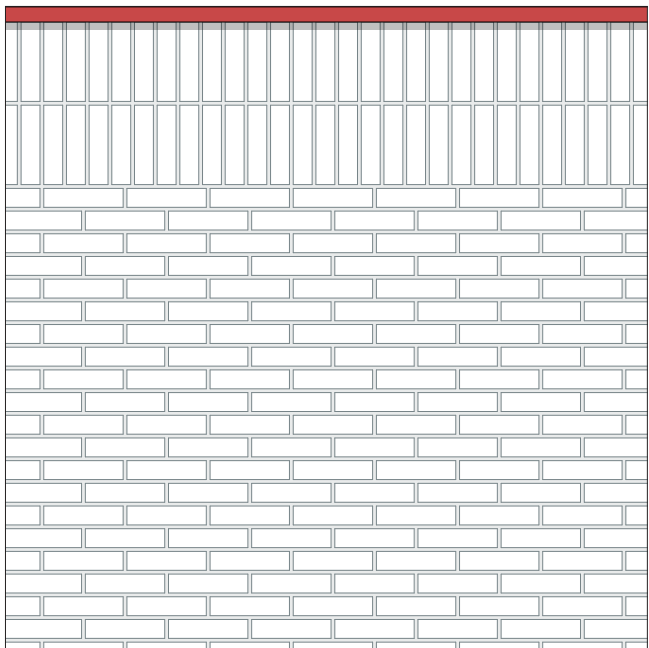
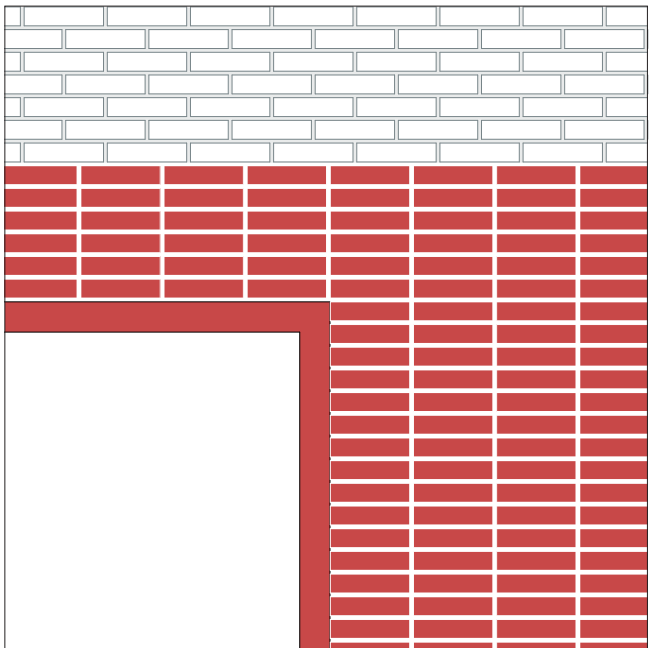
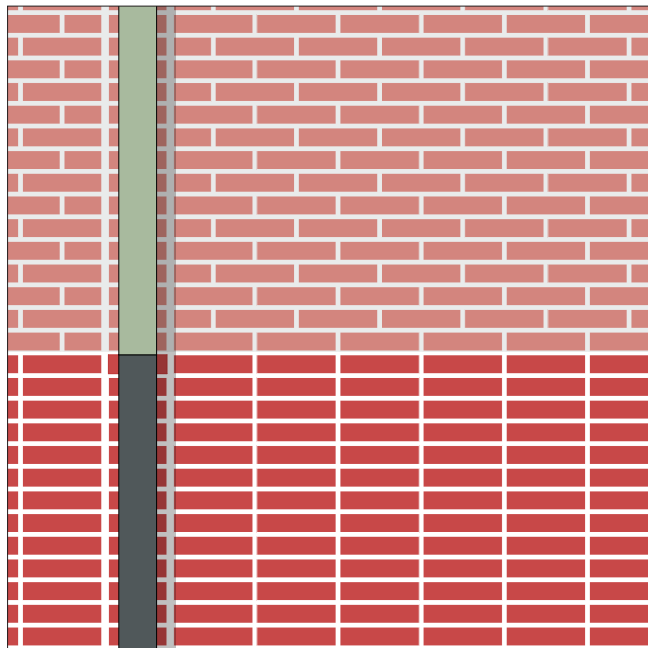
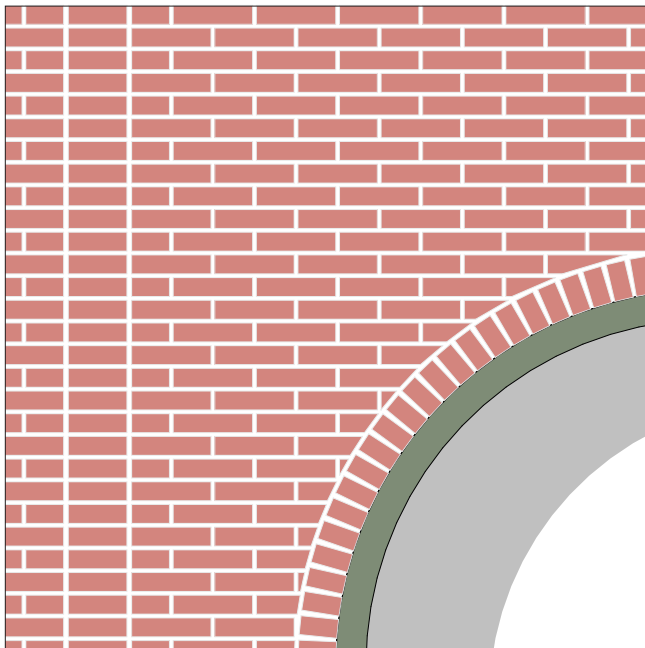
Climatization scheme - summer situation:

- 1 Floor cooling network
- 2 Heat/Cold reservoir:
Cold water is pumped up
Hot water is stored
- 3 Air handling unit with heat exchange
- 4 Green roof
- 5 Heat/cold pump
- 6 Air ventilation system
- 7 Greywater collection
- 8 Solar energy through PV panels



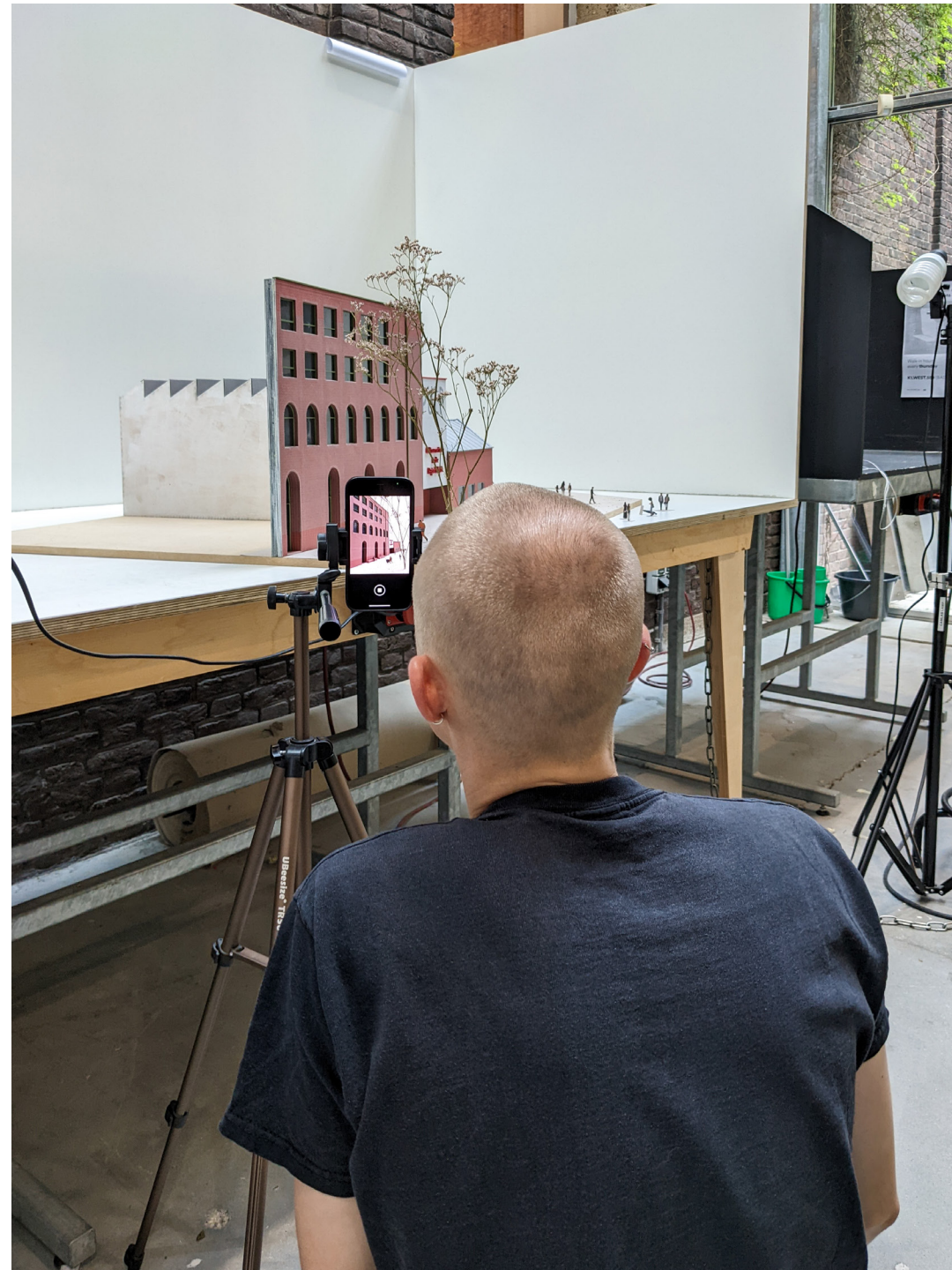


CHARACTERS









LAURENS THE PHOTOGRAPHER



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