

Conceptual Approach | Layers of History
 Roman Castrum and Diocletian's Palace

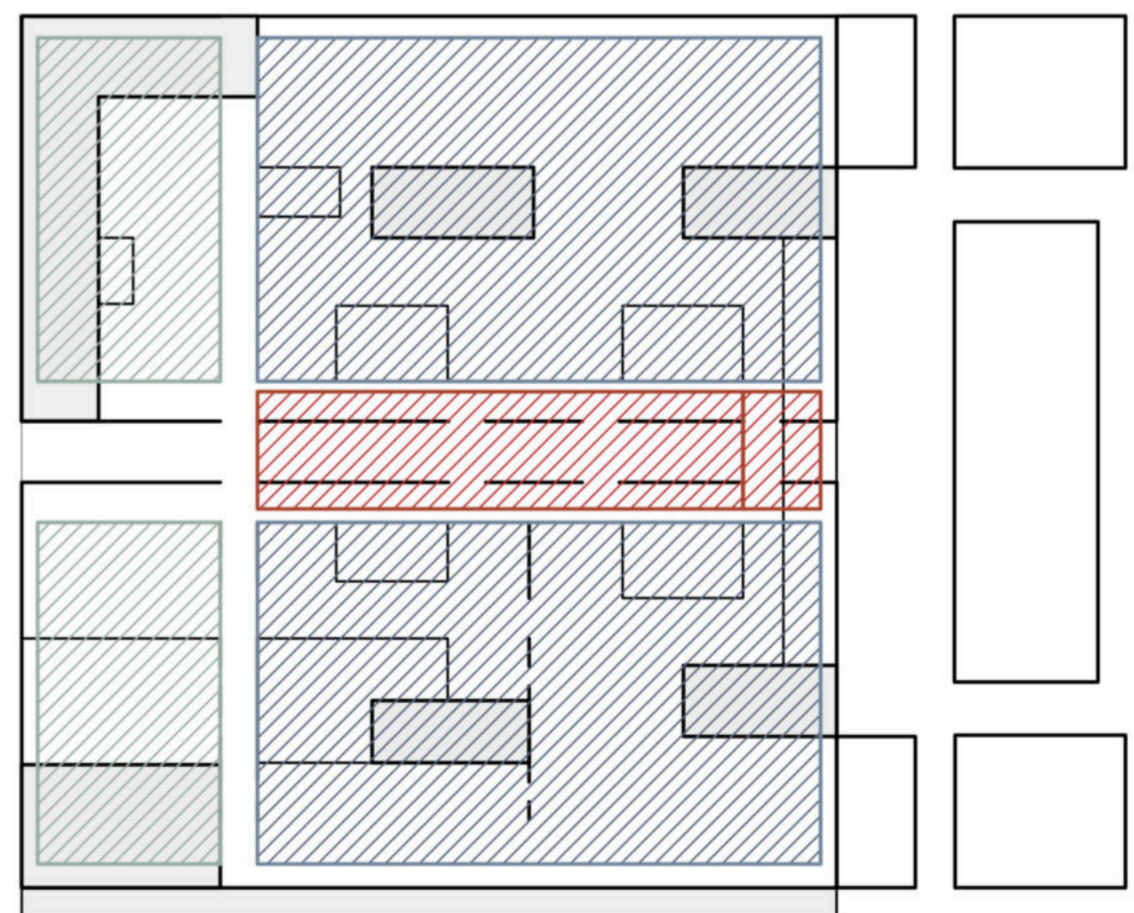
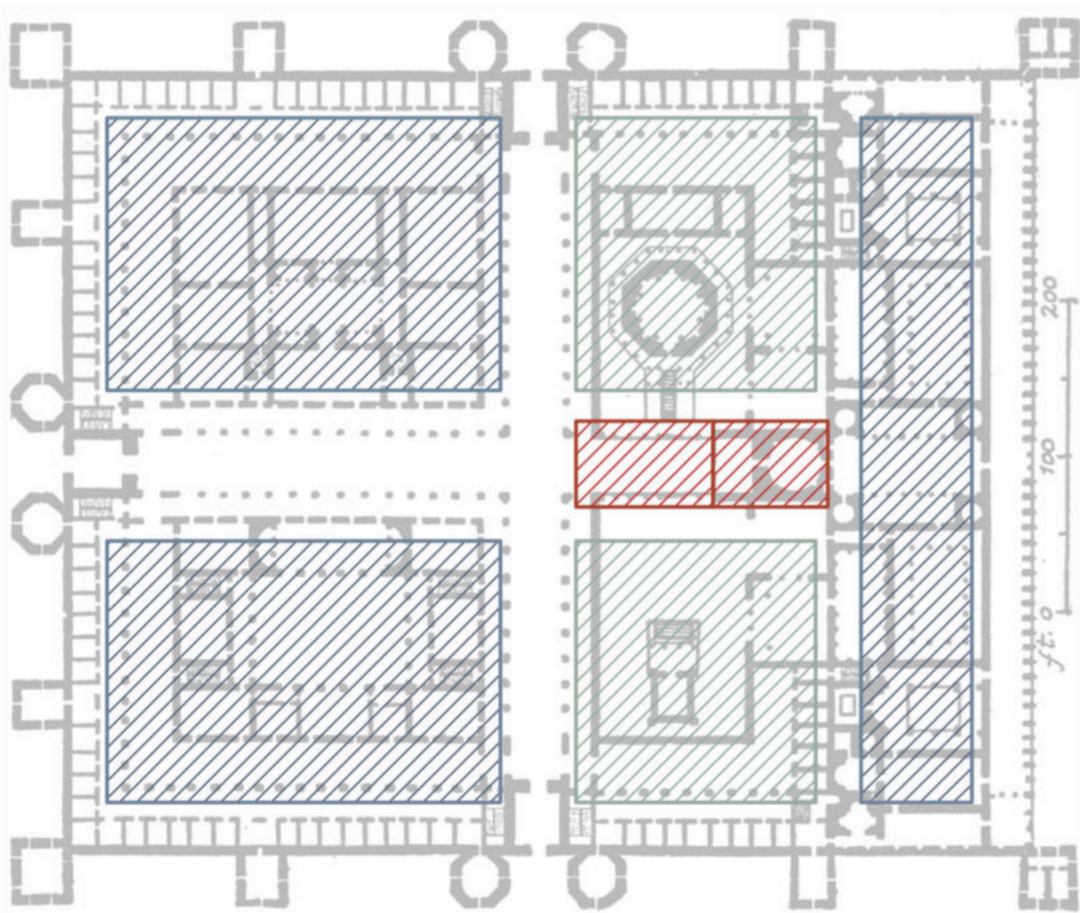


Diocletian's Palace 4th Century AD

Diocletian's Palace Today

Diocletian's Palace in Split, Croatia is half Roman Castrum and half Palace. It is unique in this regard however still strongly resembles classic Castra design in its strict grid like structure and organisation. Although its original design is relatively preserved compared to other Castra examples around Europe, the palace has still changed greatly. These strict orthogonal rules of organisation and hierarchy have been broken down over time resulting in a far more complex, serpentine and compressed organisation. These changes over time marks the conceptual approach to the organisation of the new architecture school within a military hanger which somewhat already resembles a castrum at a smaller scale.

Functional Organisation



Diocletian's Palace 4th Century AD

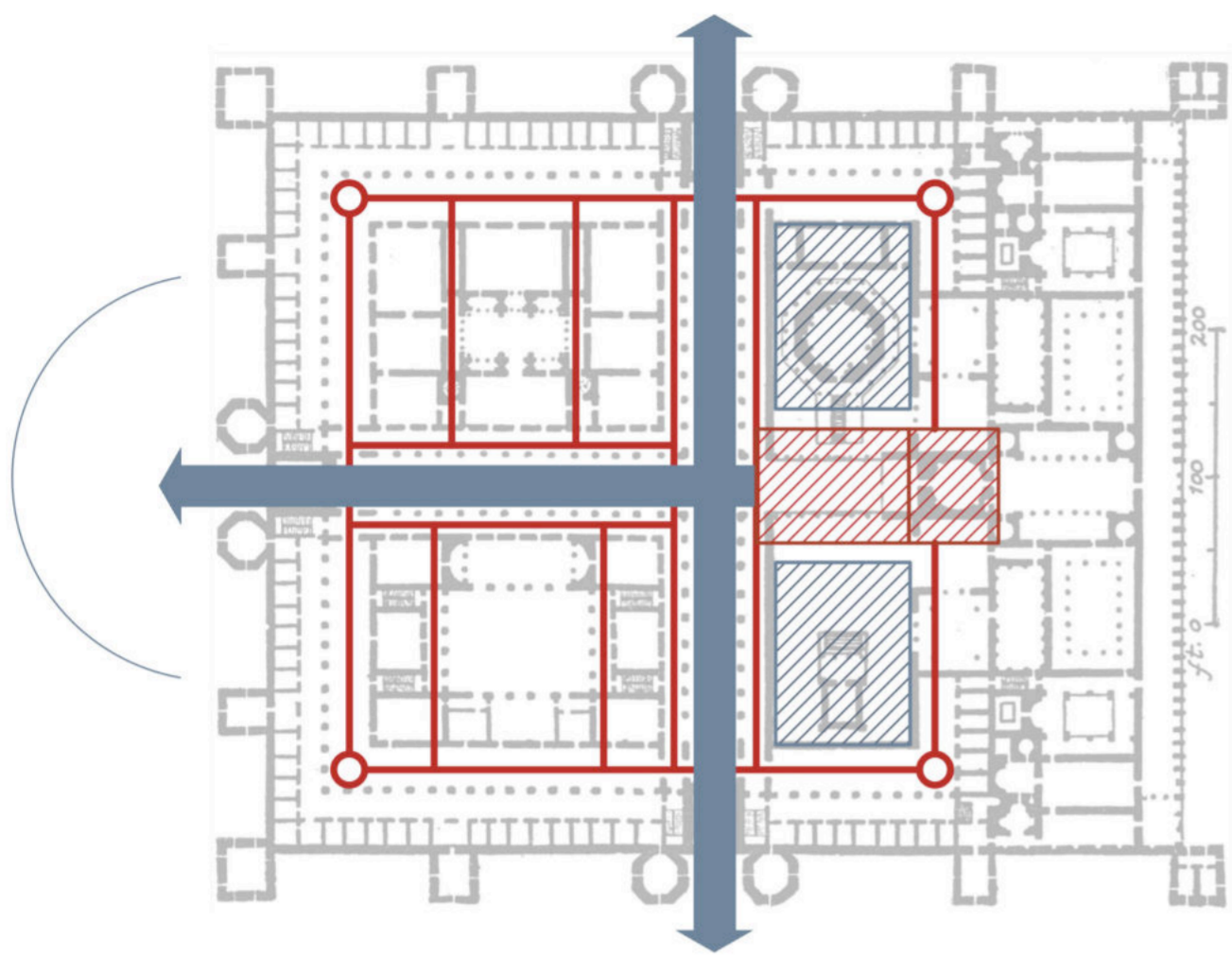
Proposal - Ground Floor

- Residence - Army Barracks / Palace
- Mausoleum / Church + Temple
- Peristyle Forum

- Open Studios
- Public Facing - Exhibition, Cafe, Workshops
- Peristyle 'Crit Pit'

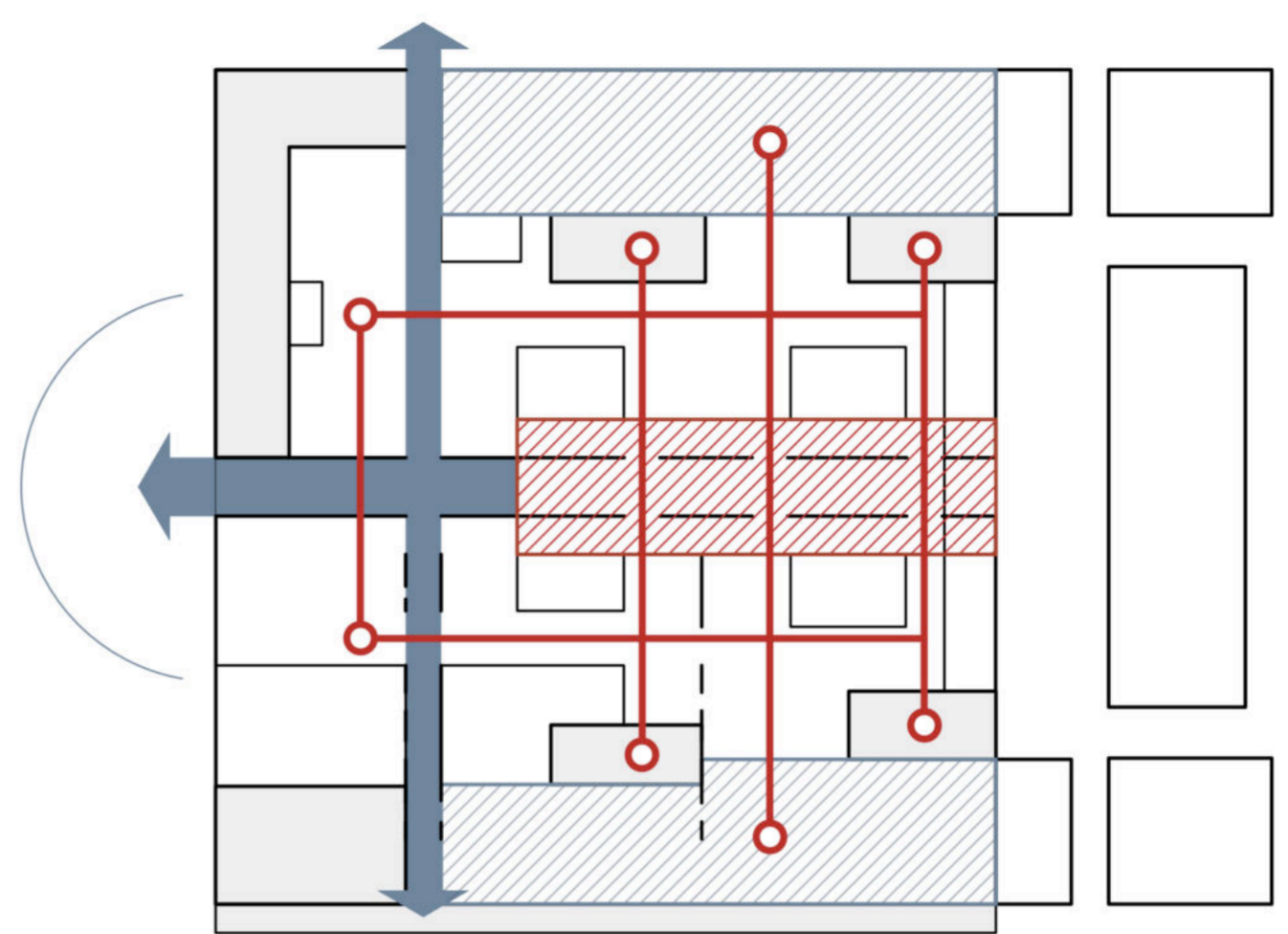
The general organisation of the palace has been adapted and compared to relative functions in the school. For instance, the more public facing functions such as the cafe, exhibition area and workshops are compared with the mausoleum / church and temple areas of the palace. The more private areas in the school for student design learning and thinking such as the open and flexible studios have been compared with the military and palace residences in the original palace. The idea of a forum, in this case in the form of a peristyle has also been adapted at the heart of the school as a place for coming together, and in this case, for sharing of ideas through the creation of a 'crit pit'.

Forums and Circulation - 4th C AD



Diocletian's Palace 4th Century AD

- Mausoleum / Church + Temple
- Peristyle Forum
- Main Axes
- Secondary Axes



Proposal - Ground Floor

- Open Studios
- Peristyle Forum
- Main Axes
- Secondary Axes

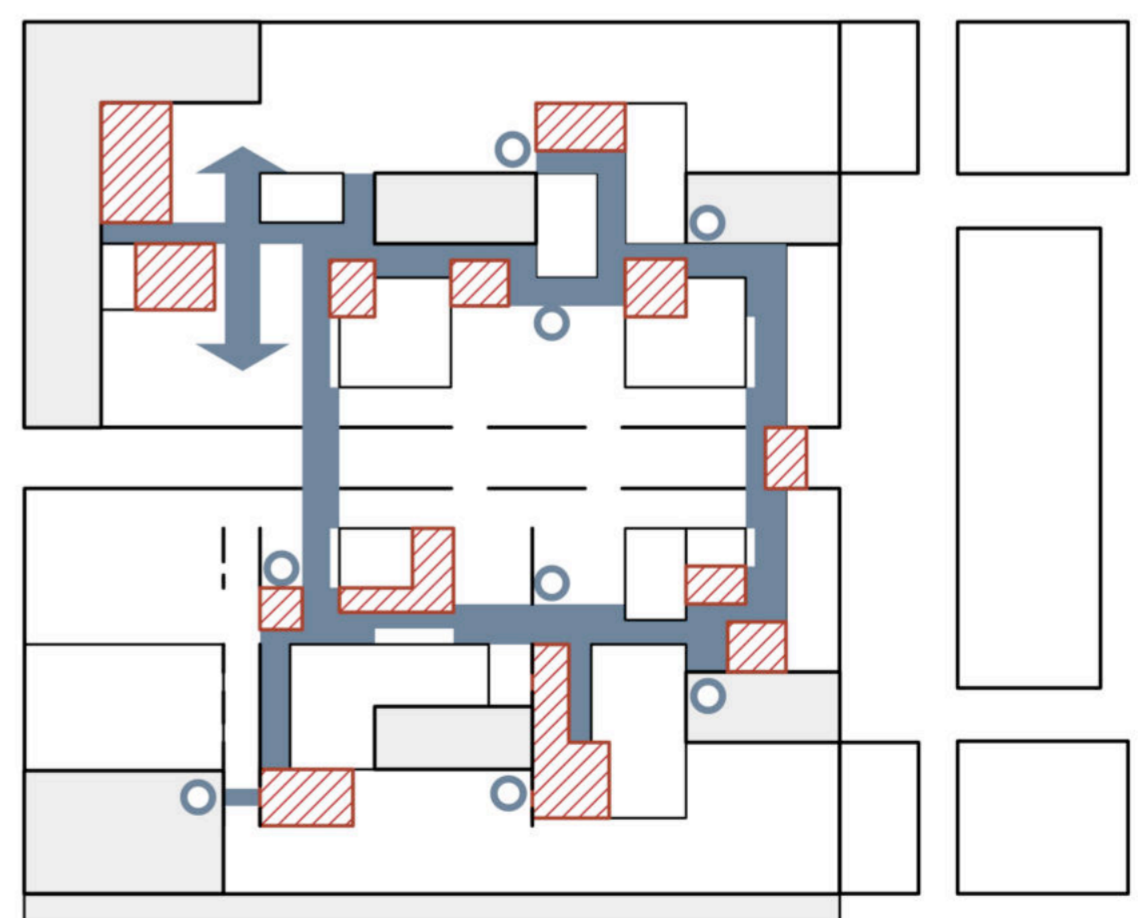
On the ground floor the strict hierarchical layout of the original Castrum / Palace design has been adopted into the floor plan of the school. Practically, this helps to organise the large space effectively and in a simple and understandable manner. The connections with the greater urban environment are reinforced and help to draw the public through the main arterial axes of the school. The secondary axes are implemented in a manner where a connecting end point is always linking the spaces just as with the castrum design. For instance, the two open studios have clear connections and line of site between them, as do the various courtyards placed within the building. The peristyle forum is placed at the centre of these axes marking the space with represents the culmination of all the students work and learnings.

Forums and Circulation - Today



Diocletian's Palace - Today

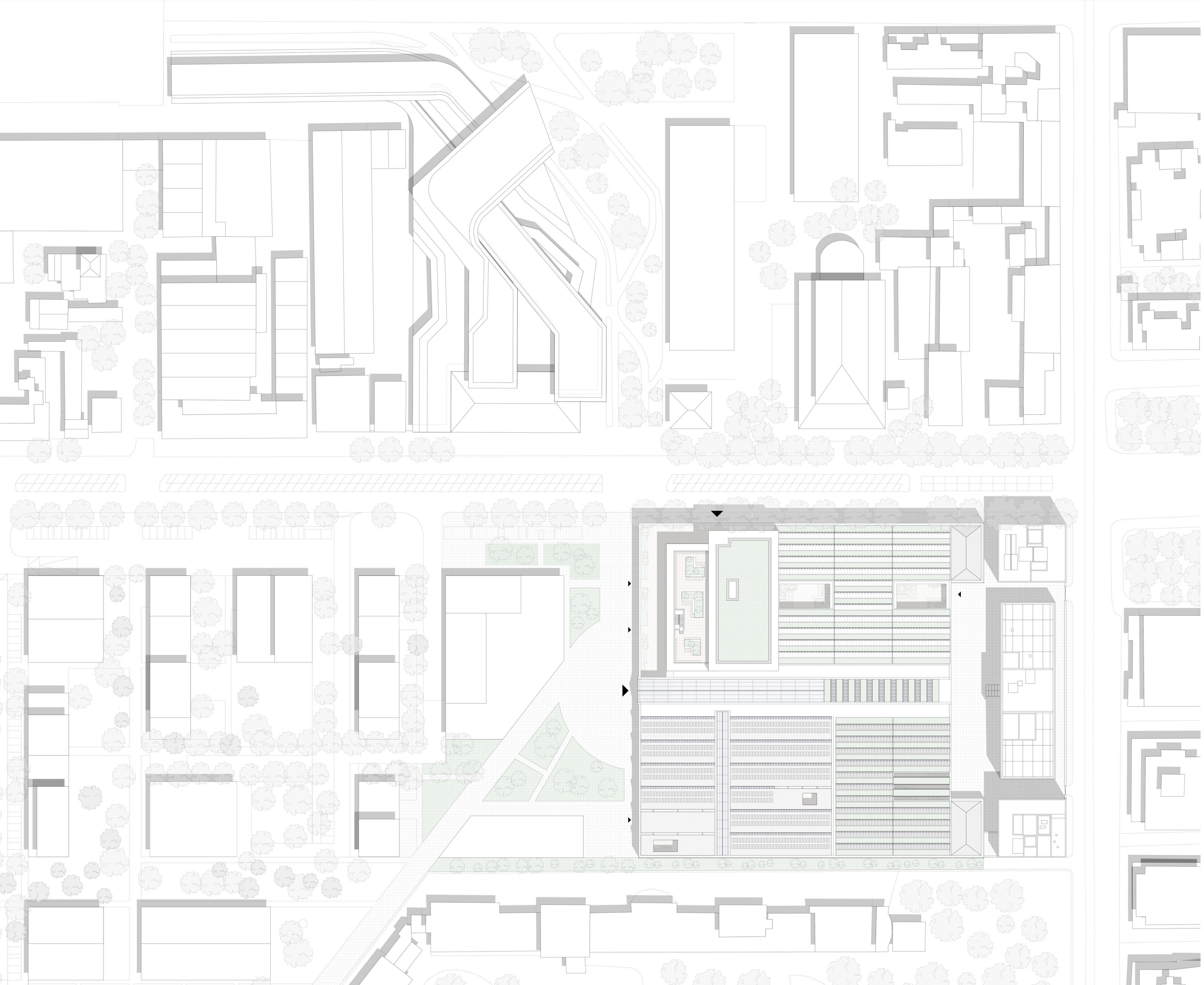
- Mini Forums
- Main Circulation



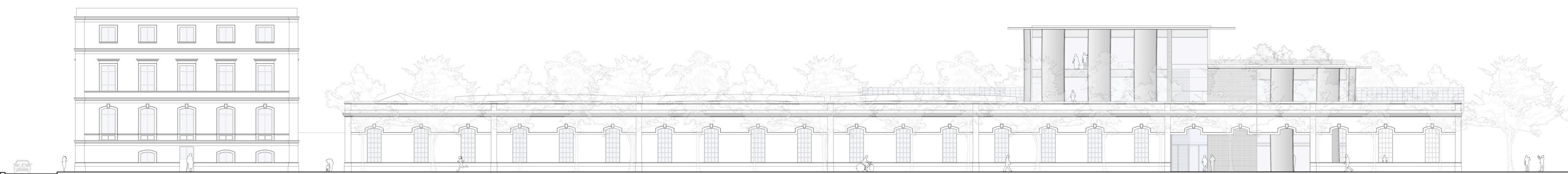
Proposal - Mezzanine Floor

- Mini Forums
- Main Circulation
- Secondary Axes

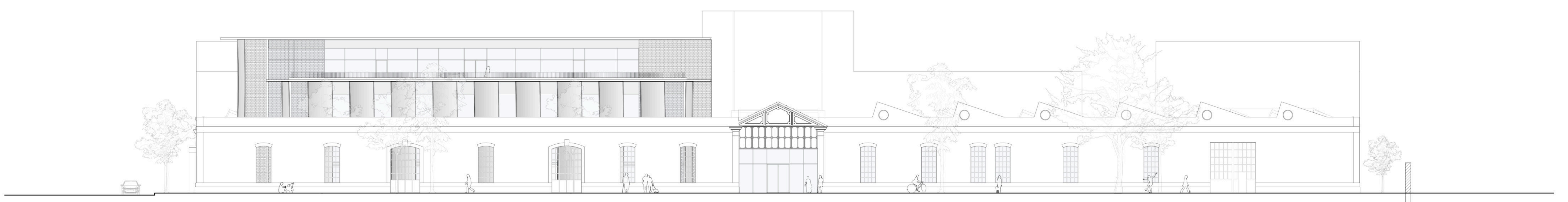
The added mezzanine floor is where the original rules of the castrum and palace are broken. The more complex, intimate and serpentine like organisation and circulation is adapted to represent this new layer of history. Diocletian's Palace in its current form is far less 'organised' and through a more organic growth of structures around the original axes over time has resulted in a series of narrow streets where the simple widening has become the new 'mini' forums where people come together. The proposal translates this idea into a zone with more private and intimate functions such as closed seminar rooms, academic offices and areas where students can work and collaborate in smaller and more intimate spaces.



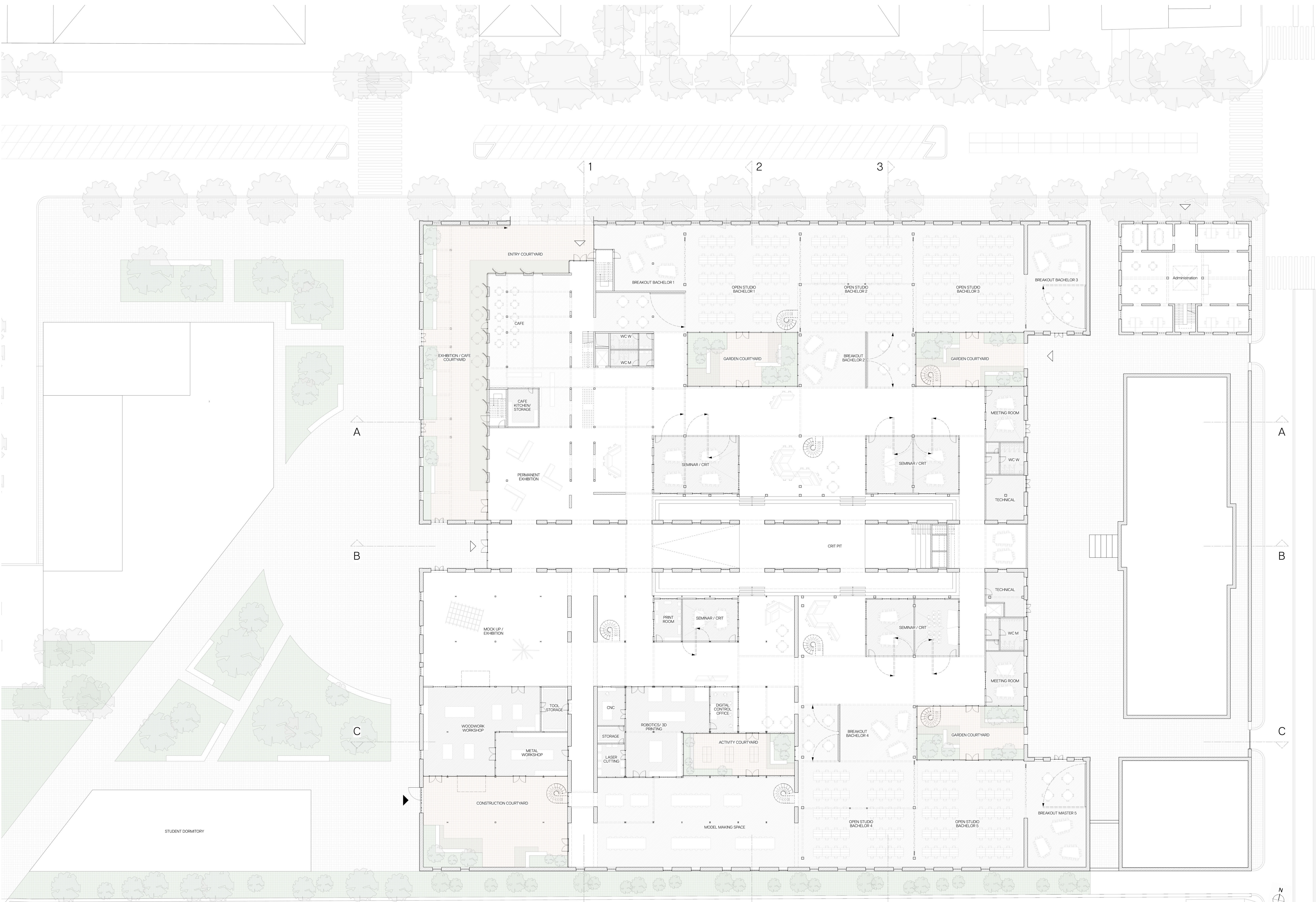
SITE PLAN | 1:500



ELEVATION NORTH | 1:200



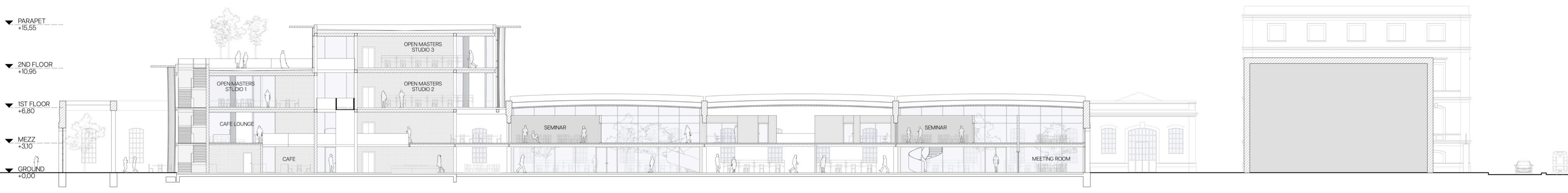
ELEVATION WEST | 1:200



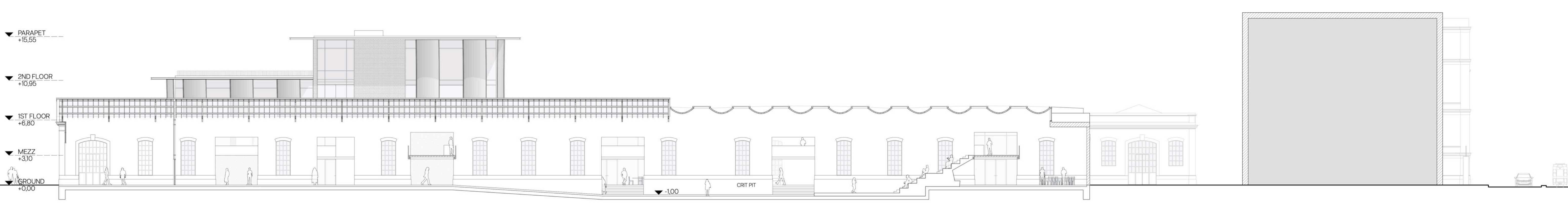
GROUND FLOOR PLAN | 1:200



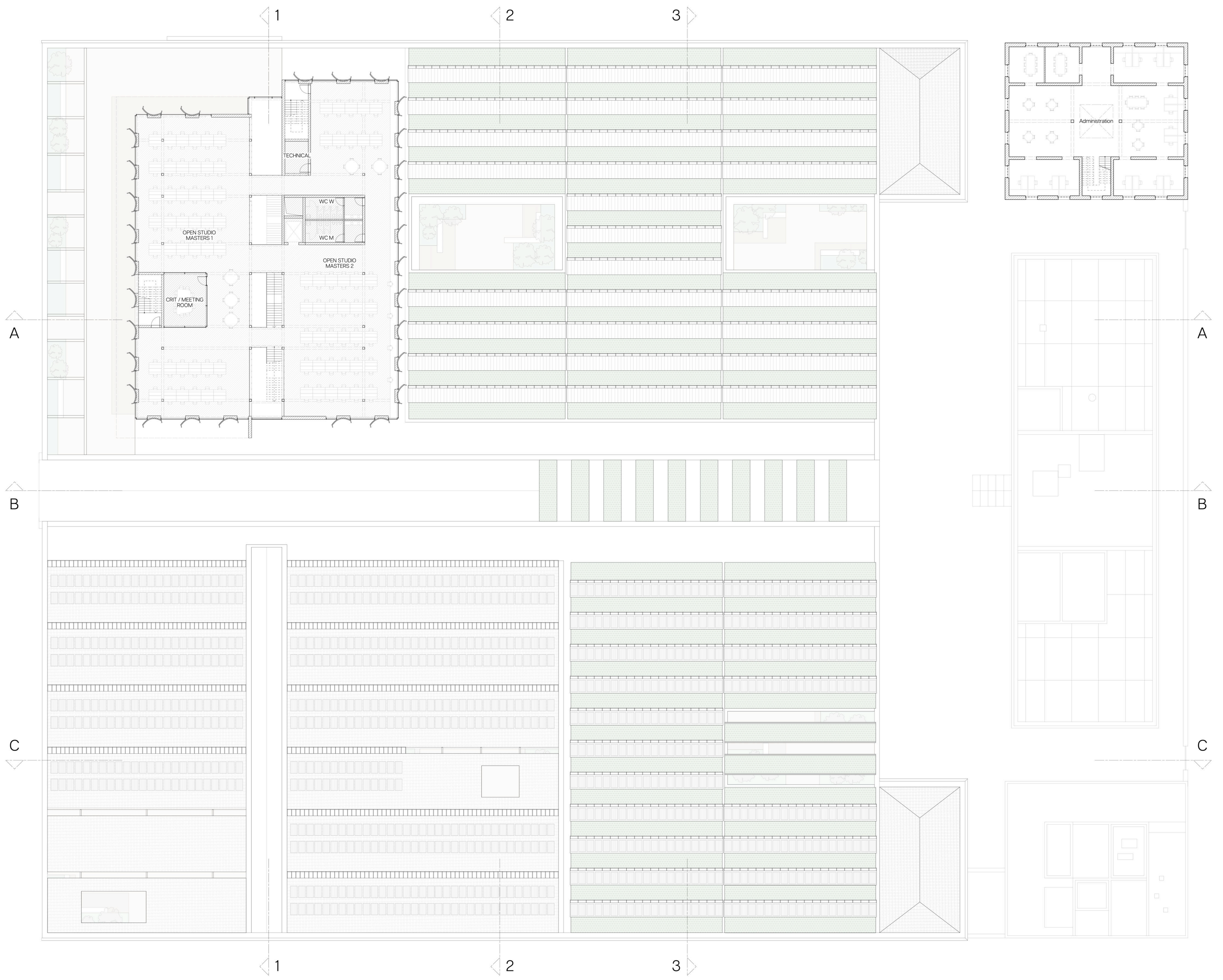
MEZZANINE FLOOR PLAN | 1:200



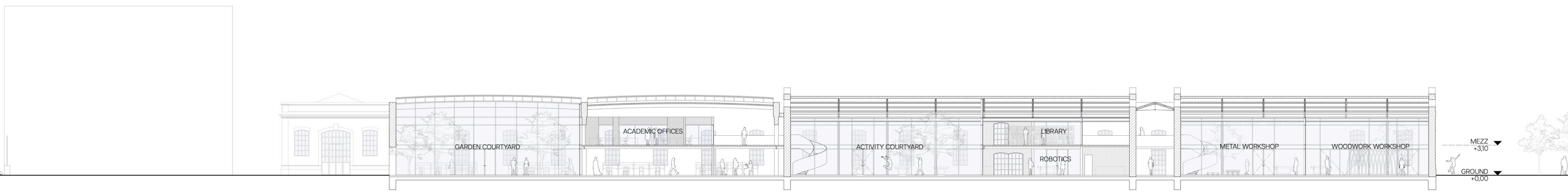
SECTION AA | 1:200



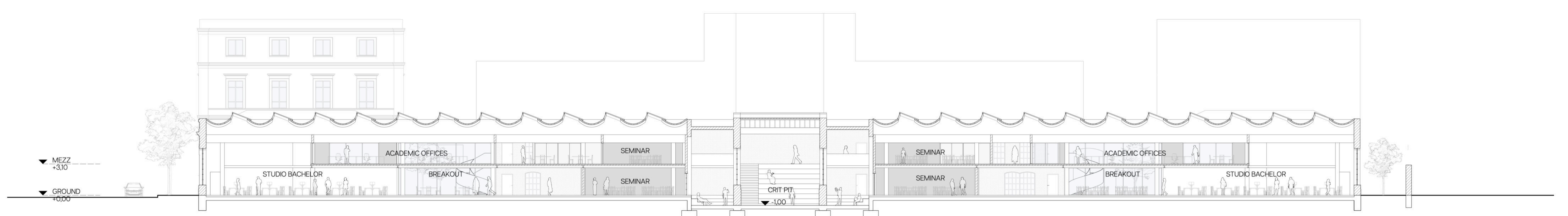
SECTION BB | 1:200



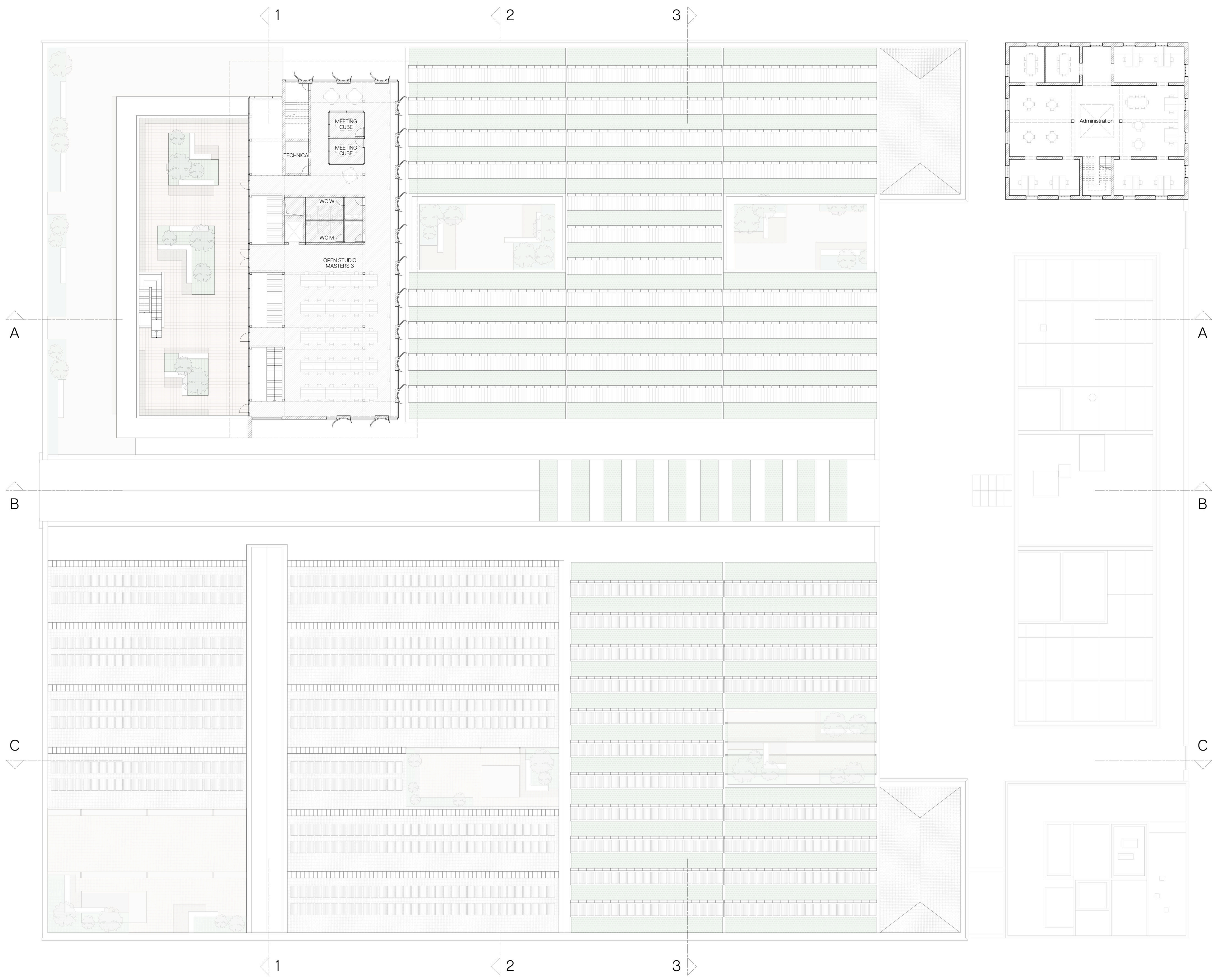
1ST FLOOR PLAN | 1:500



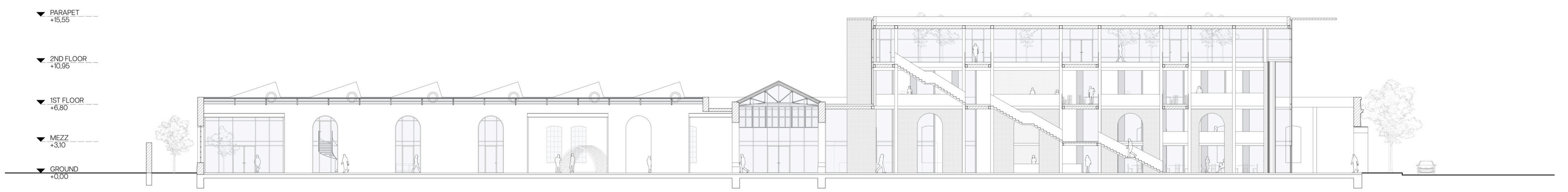
SECTION CC | 1:200



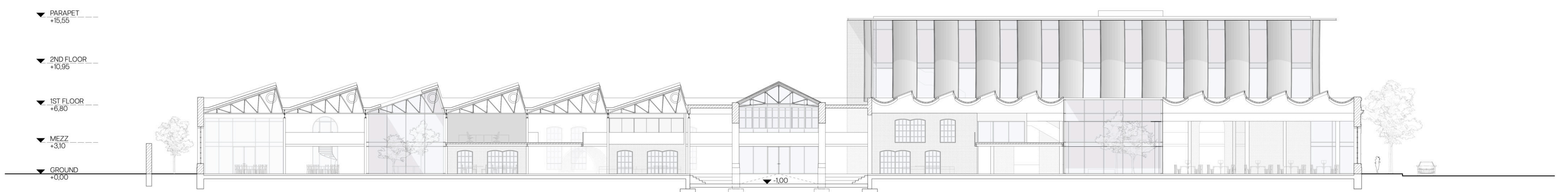
SECTION 3 | 1:200



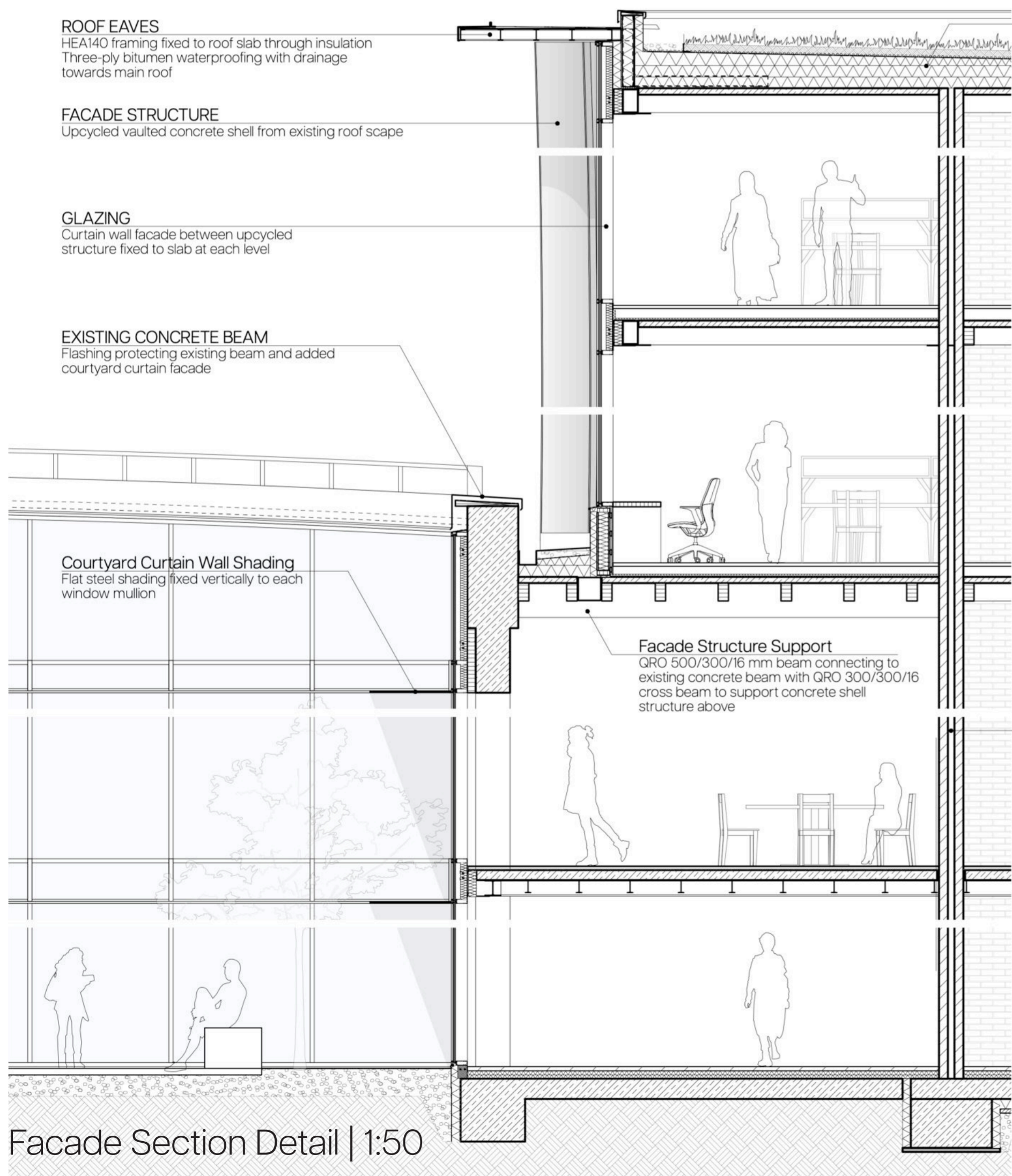
2ND FLOOR PLAN | 1:500



SECTION 1 | 1:200



SECTION 2 | 1:200



Facade Section Detail | 1:50

ROOF EAVES
HEA140 framing fixed to roof slab through insulation
Three-ply bitumen waterproofing with drainage towards main roof

FACADE STRUCTURE
Upcycled vaulted concrete shell from existing roof scape

GLAZING
Curtain wall facade between upcycled structure fixed to slab at each level

EXISTING CONCRETE BEAM
Flashing protecting existing beam and added courtyard curtain facade

Courtyard Curtain Wall Shading
Flat steel shading fixed vertically to each window mullion

Facade Structure Support
QRO 500/300/16 mm beam connecting to existing concrete beam with QRO 300/300/16 cross beam to support concrete shell structure above

BRICK CORE
Recycled brick from neighbouring buildings as core structure providing lateral stability

FLOOR SLAB MEZZANINE
Dry flooring system:
Rubber flooring 3 mm
15 mm dry screed flooring system
30 mm floor leveling gravel
15 mm acoustic insulation,
Pre-fabricated concrete / steel composite slab:
120 mm reinforced concrete slab
I 160 steel beams, ca. 600 mm spacing

Ground Floor Slab
Polished screed 50 mm
2 x mineral wool insulation 50 mm
Steel Reinforced concrete slab with edge frost protection footings and pad footings under columns 600 / 1000 mm
XPA underslab insulation 120 mm

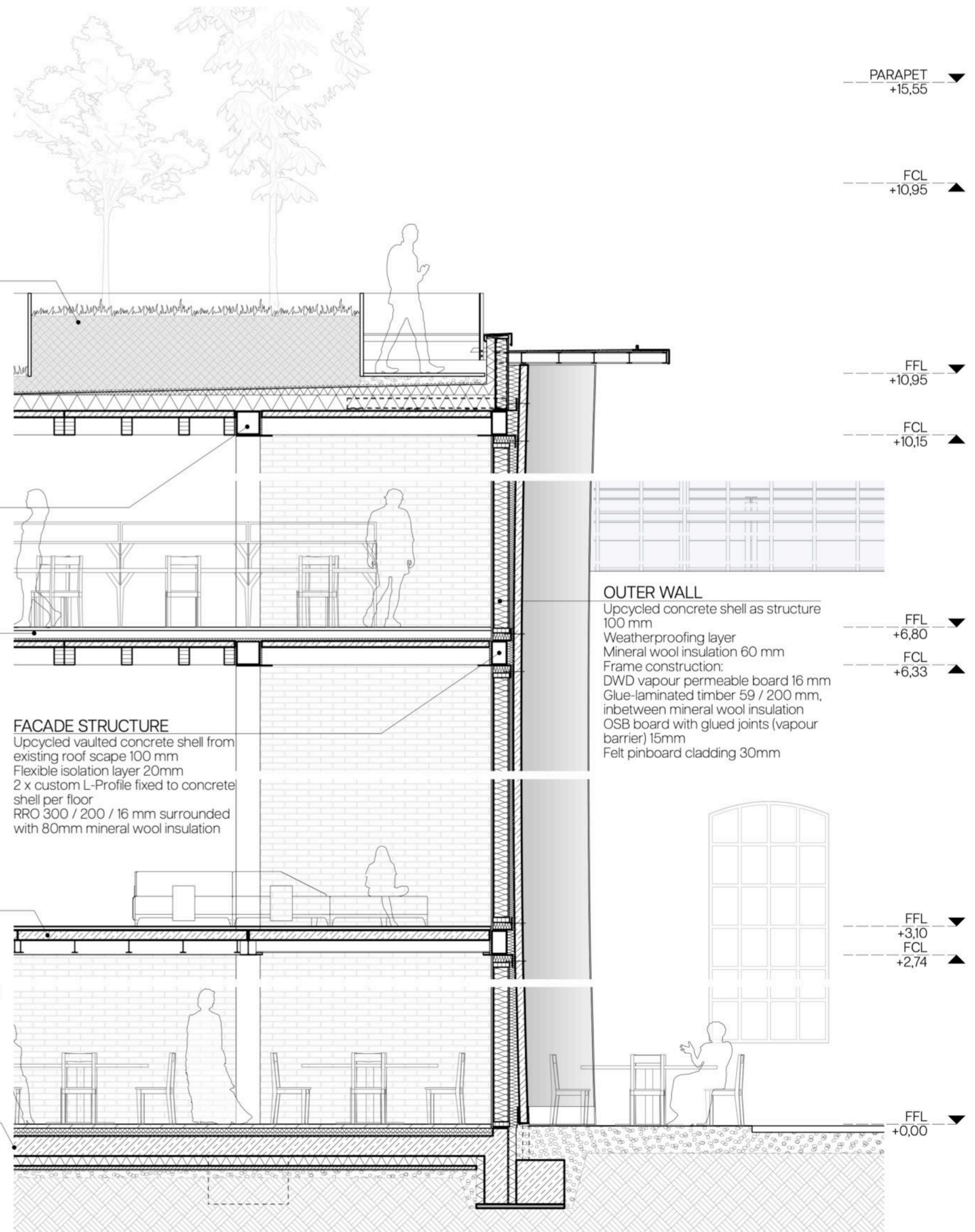
ROOF
Extensive vegetation 100 mm
Drainage layer
Three-ply bitumen weather proofing layer
Gradient wood fiber insulation 0-170 mm
2 wood fiber insulation 140 mm
Vapour barrier
Pre-fabricated hybrid slab:
80 mm reinforced concrete
Glue-Laminated timber, spruce 220/130 mm

Roof Terrace
ca. 900 mm 'planter box' intensive green roofing
Concrete pavers 40 mm
Gravel layer ca. 100 mm
Drainage layer
Gradient wood fiber insulation 0-130 mm
Wood fiber insulation 200 mm
Pre-fabricated hybrid slab:
80 mm reinforced concrete
Glue-Laminated timber, spruce 220/130 mm

Primary Structure
Steel Skeleton structure beam and columns
QRO 300/15 mm with connection plates pre-welded

FLOOR SLAB
Rubber flooring 3 mm
Mineral-based panel, fiber-reinforced 38 mm
Installation layer 130 mm with cavity insulation, mineral fiber 30 mm
Pre-fabricated hybrid slab system:
80 mm Concrete

FACADE STRUCTURE
Upcycled vaulted concrete shell from existing roof scape 100 mm
Flexible isolation layer 20mm
2 x custom L-Profile fixed to concrete shell per floor
RRO 300 / 200 / 16 mm surrounded with 80mm mineral wool insulation



PARAPET
+15,55

FCL
+10,95

FFL
+10,95

FCL
+10,15

FFL
+6,80

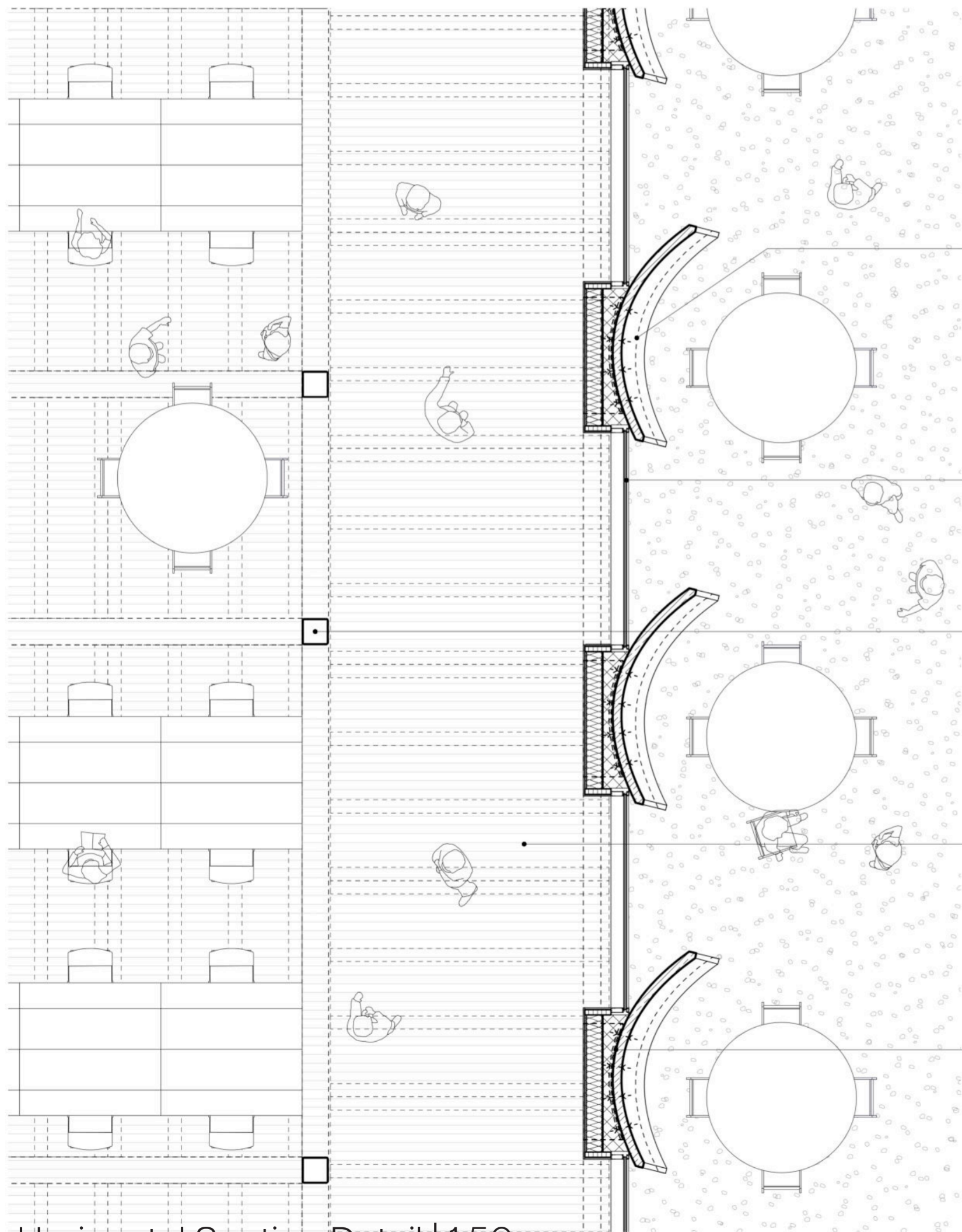
FCL
+6,33

FFL
+3,10

FCL
+2,74

FFL
+0,00

OUTER WALL
Upcycled concrete shell as structure 100 mm
Weatherproofing layer
Mineral wool insulation 60 mm
Frame construction:
DWD vapour permeable board 16 mm
Glue-laminated timber 59 / 200 mm,
inbetween mineral wool insulation
OSB board with glued joints (vapour barrier) 15mm
Felt pinboard cladding 30mm



Horizontal Section Detail | 1:50

OUTER WALL

Upcycled concrete shell as structure 100 mm
 Weatherproofing layer
 Mineral wool insulation 60 mm
 Frame construction:
 DWD vapour permeable board 16 mm
 Glue-laminated timber 59 / 200 mm, inbetween
 mineral wool insulation
 OSB board with glued joints (vapour barrier) 15 mm
 Felt pinboard cladding 30 mm

GLAZING

Double glazed curtain wall facade between
 upcycled structure fixed to slab at each level

Primary Structure

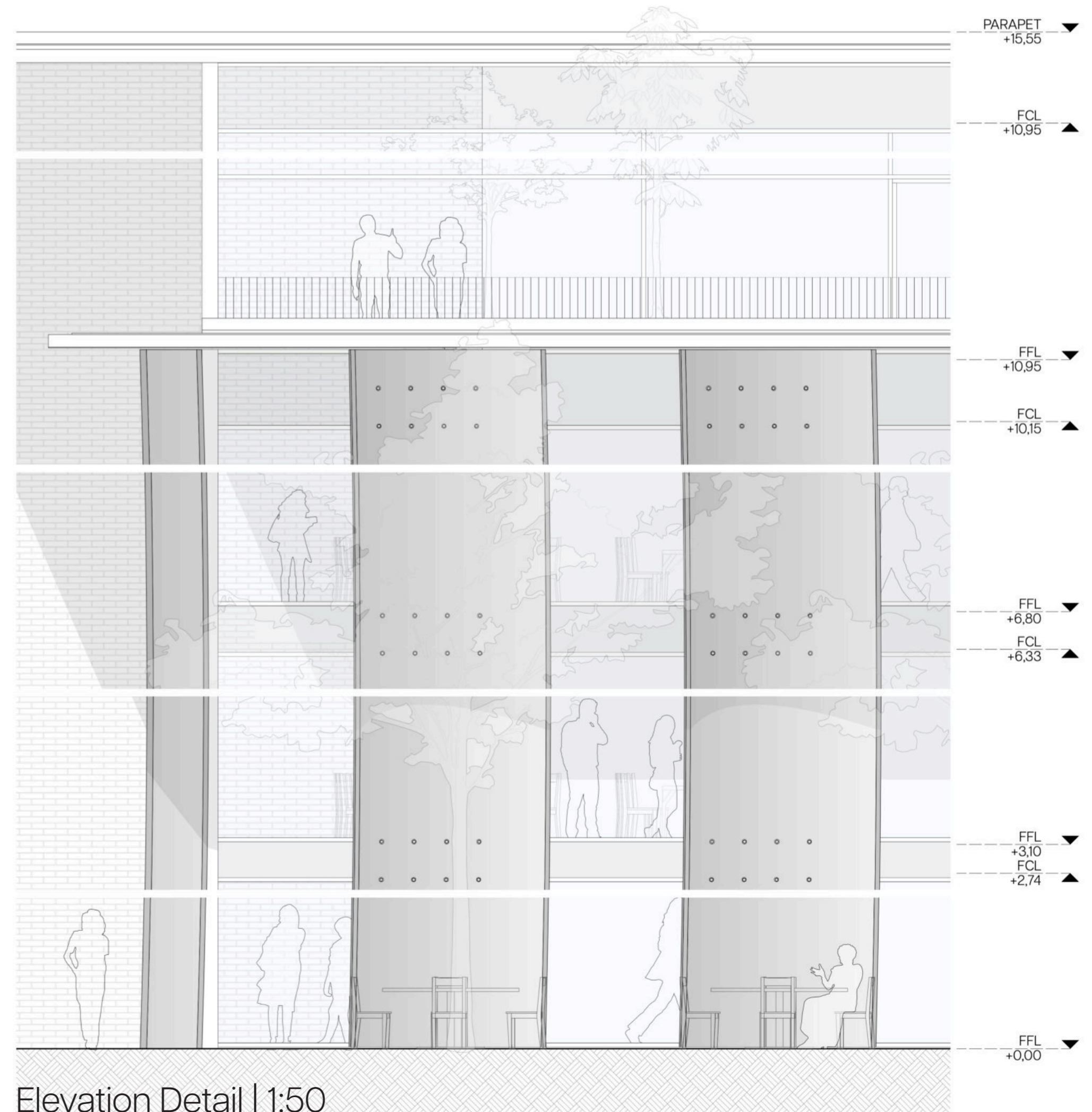
Steel Skeleton structure beam and columns
 QRO 300 / 15 mm with connection plates
 pre-welded

FLOOR SLAB

Rubber flooring 3 mm
 Mineral-based panel, fiber-reinforced 38 mm
 Installation layer 130 mm with cavity
 insulation, mineral fiber 30 mm
 Pre-fabricated hybrid slab system:
 80 mm Concrete

FACADE STRUCTURE

Upcycled vaulted concrete shell from existing
 roof scape 100 mm
 Flexible isolation layer 20mm
 2 x custom L-Profile fixed to concrete shell
 per floor
 RRO 300 / 200 / 16 mm surrounded with
 80mm mineral wool insulation



Elevation Detail | 1:50

PARAPET
 +15,55

FCL
 +10,95

FFL
 +10,95

FCL
 +10,15

FFL
 +6,80

FCL
 +6,33

FFL
 +3,10

FCL
 +2,74

FFL
 +0,00