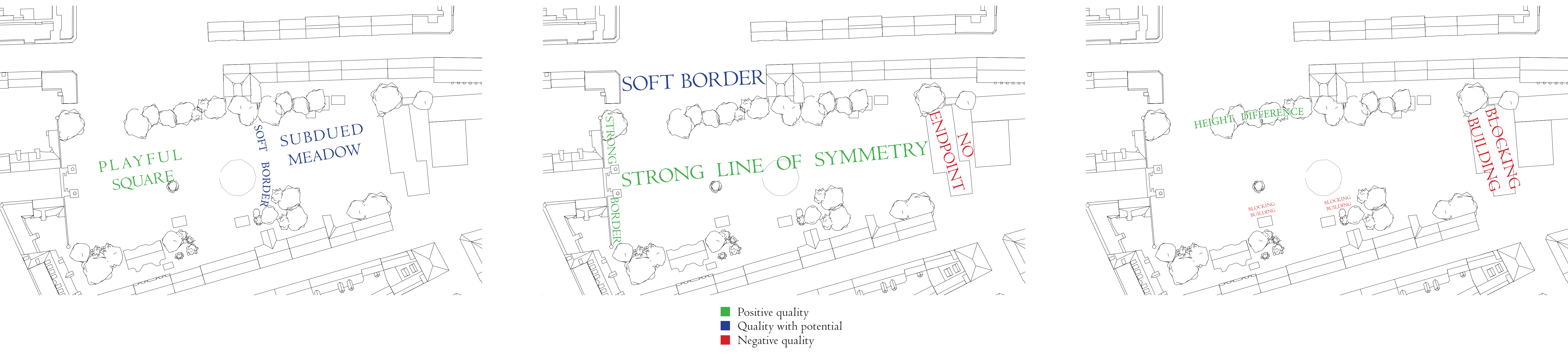
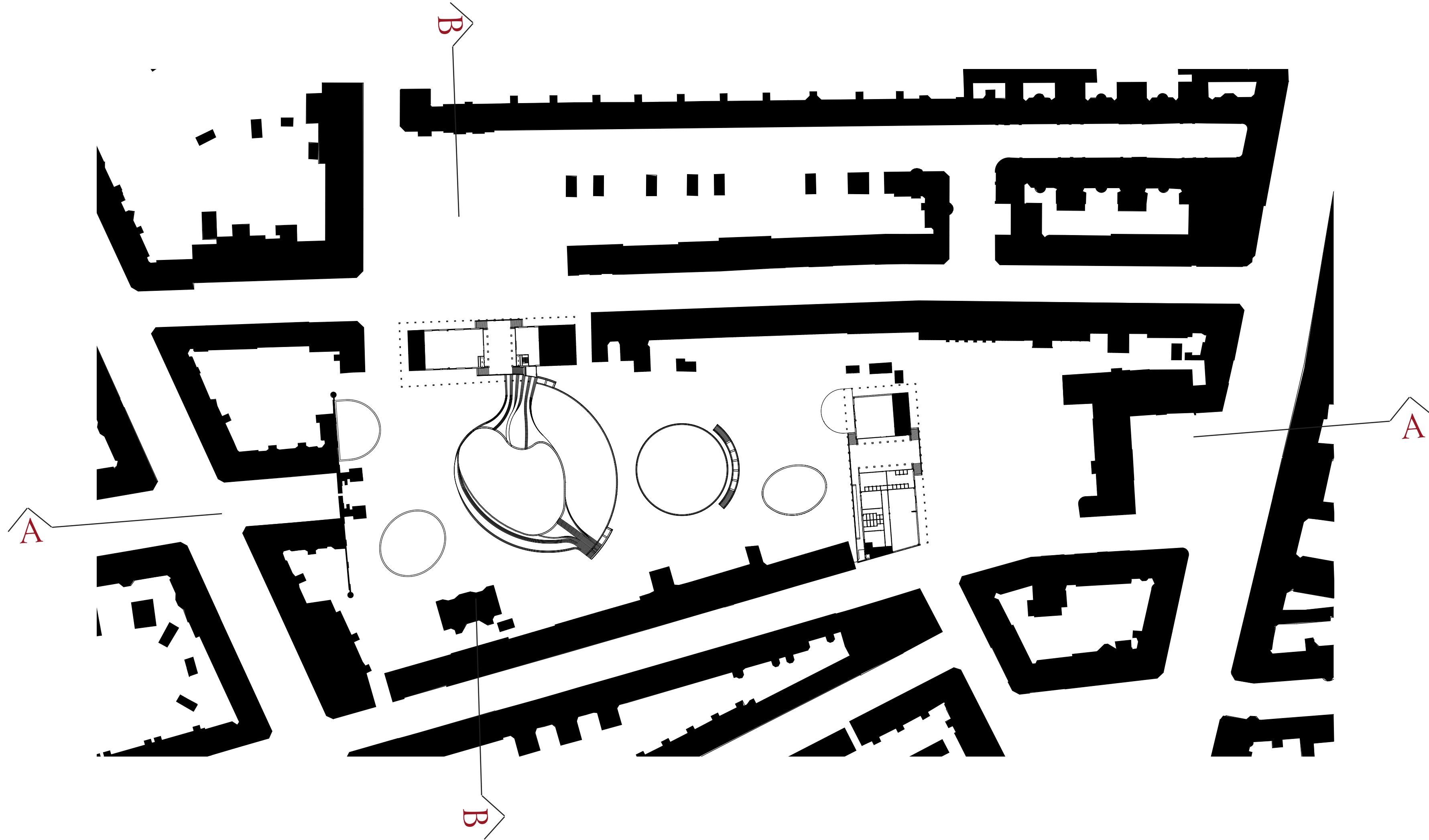




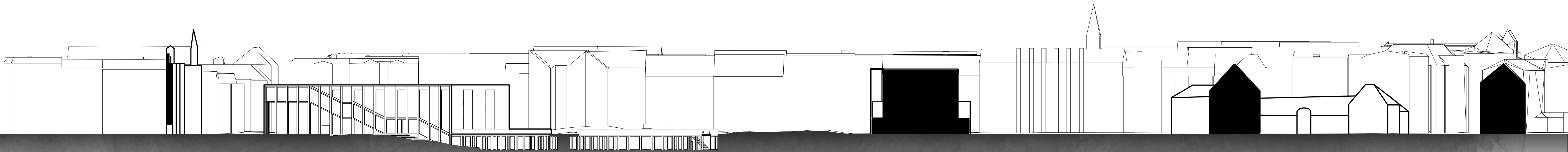
Context analysis



Nolli map
I:1000



Section A
I:500



Section B
I:500



Interaction
proposal and wall



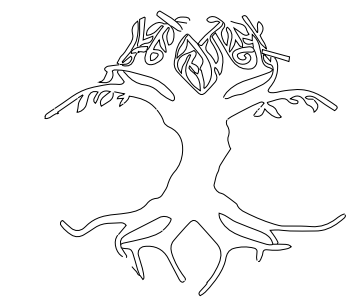
Three intertwined elements



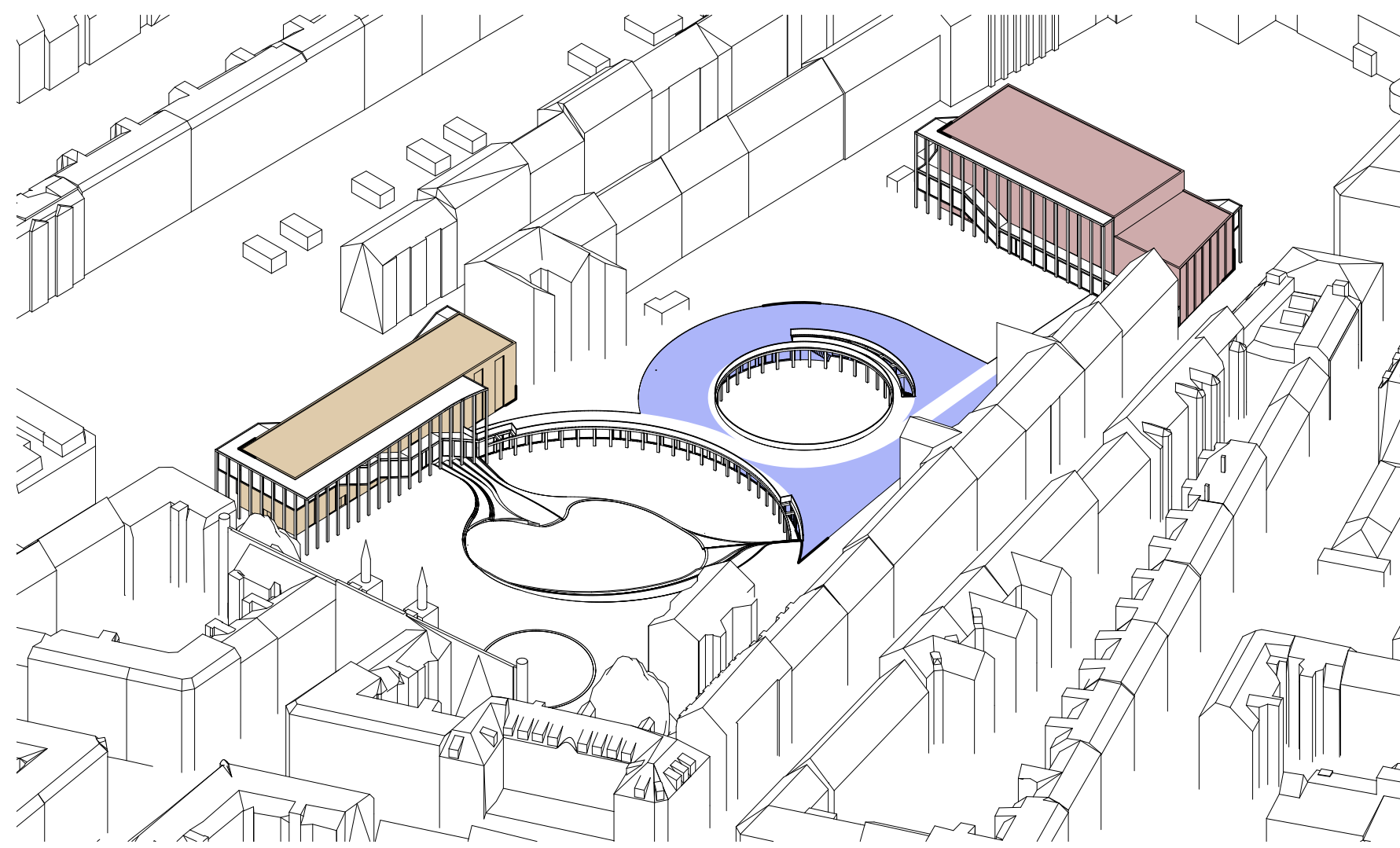
The Cores
The buildings which provide the indoor programme



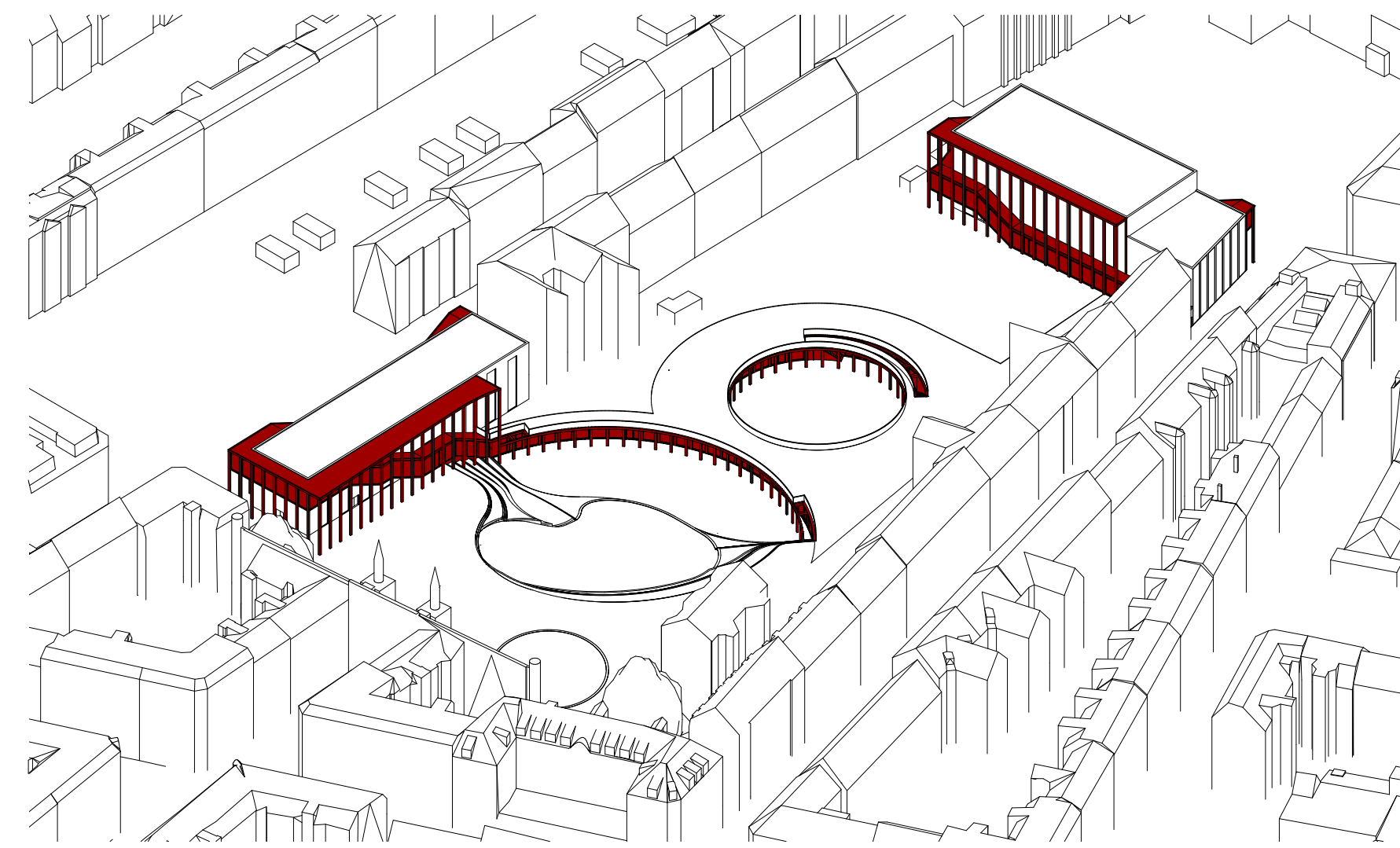
The Framework
The building elements used to frame the Skydebanehaven



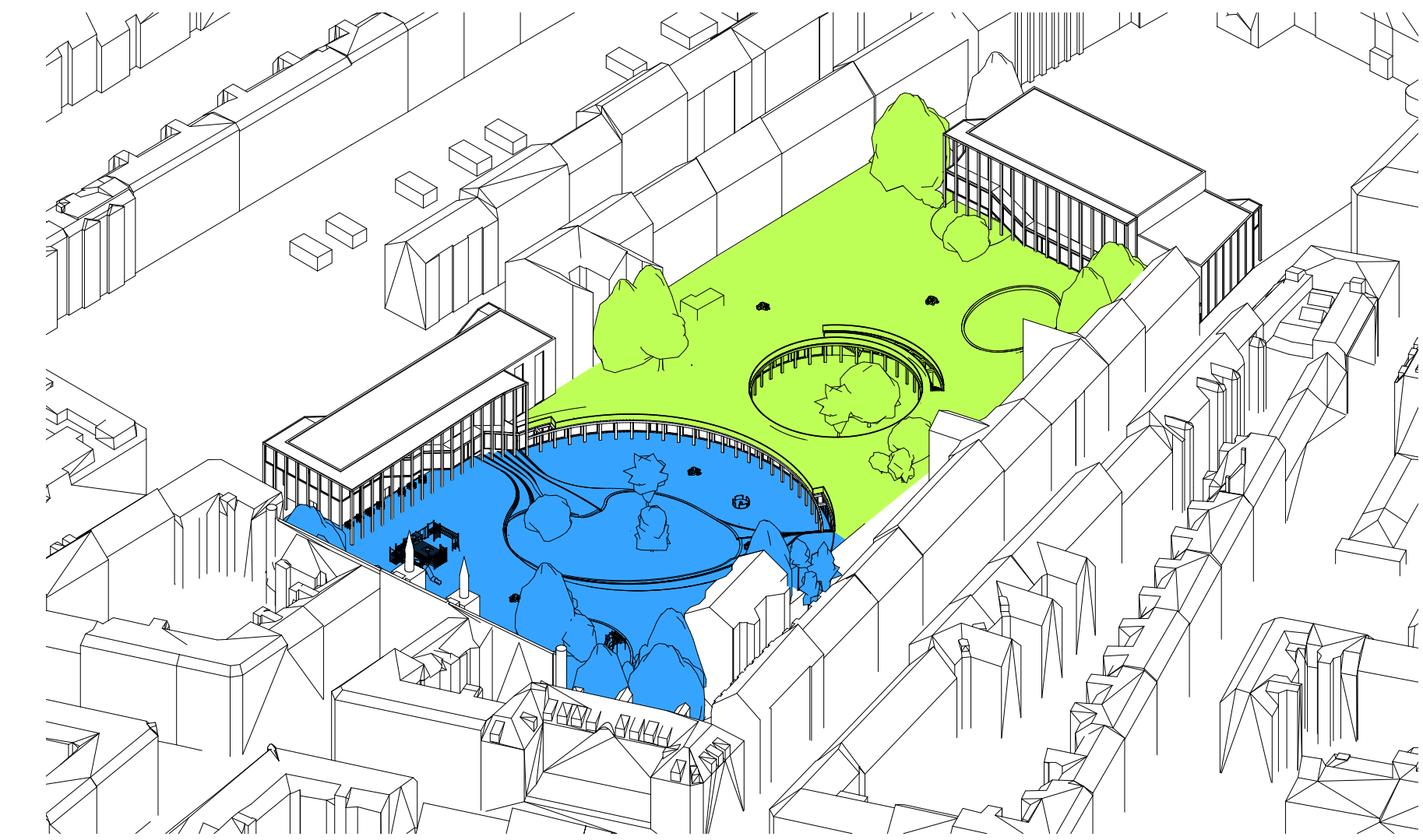
The Landscape
The framed element - the Skydebanehaven



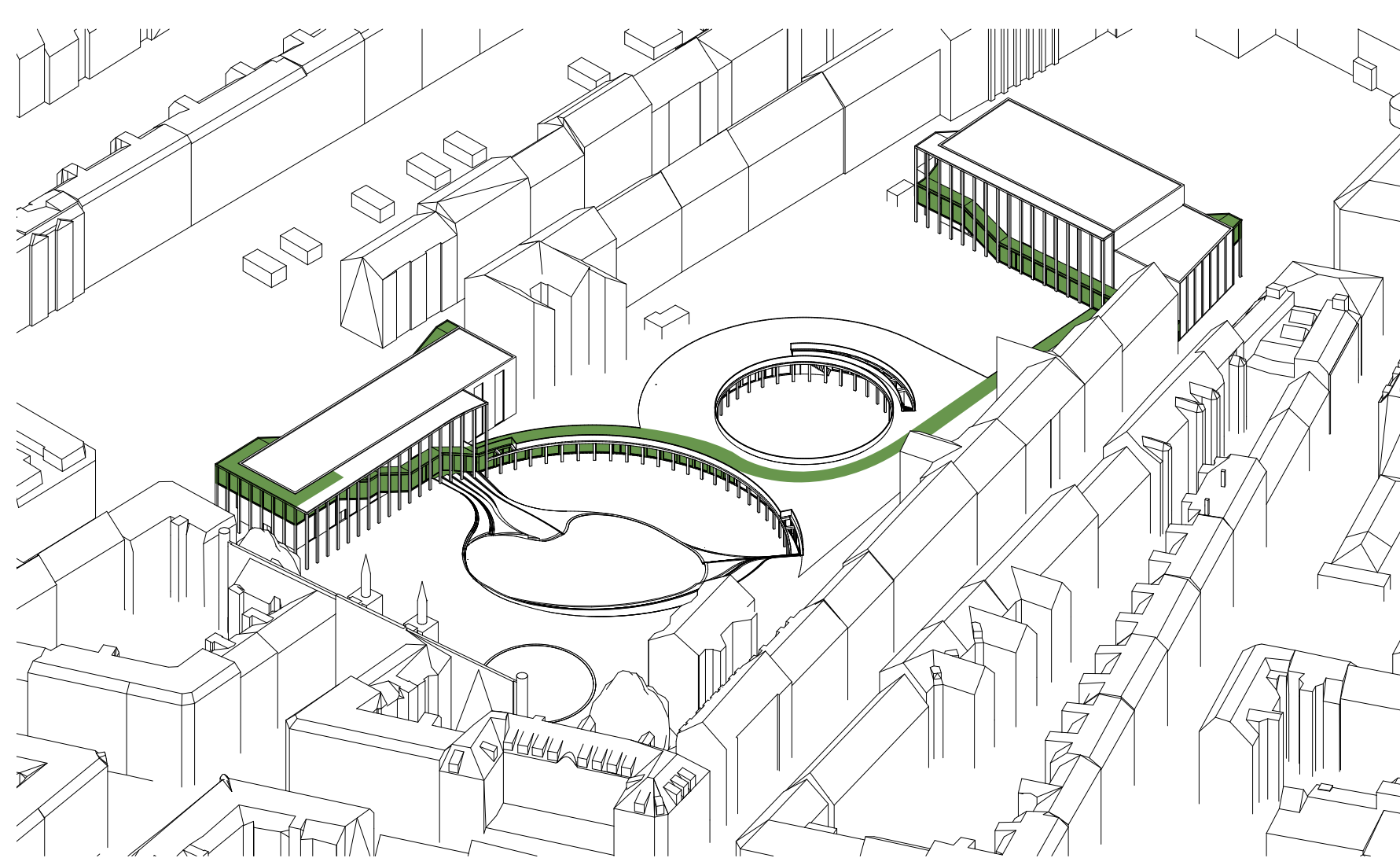
■ Healthcare building
■ Healthy mind building
■ Healthy body building



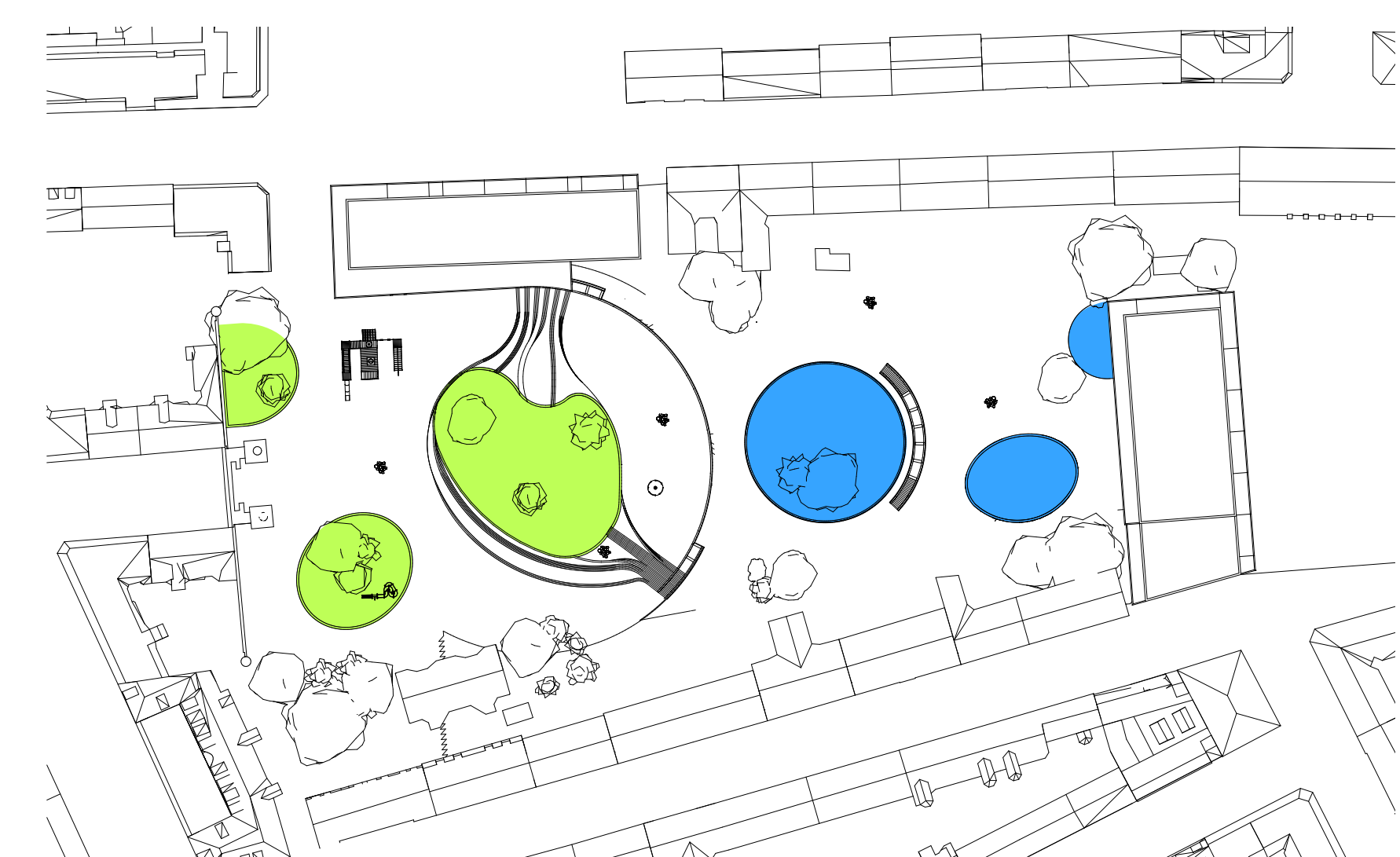
■ Framework



■ Playful square
■ Natural park



■ Connecting hallway



■ Square elements
■ Park elements

Final Programme

I. A healthy mind

1.1 Exposition room	400 m ²
1.1.1 Storage	60 m ²
1.2 Library	480 m ²
1.2.1 Storage	30 m ²
1.3 Multifunctional gym room	225 m ²
1.3.1 Changing room	60 m ²
1.3.2 Storage room	30 m ²
1.4 Technical room	40 m ²
1.5 Sanitation room	65 m ²
<hr/>	
	1390 m ²

2. A healthy body

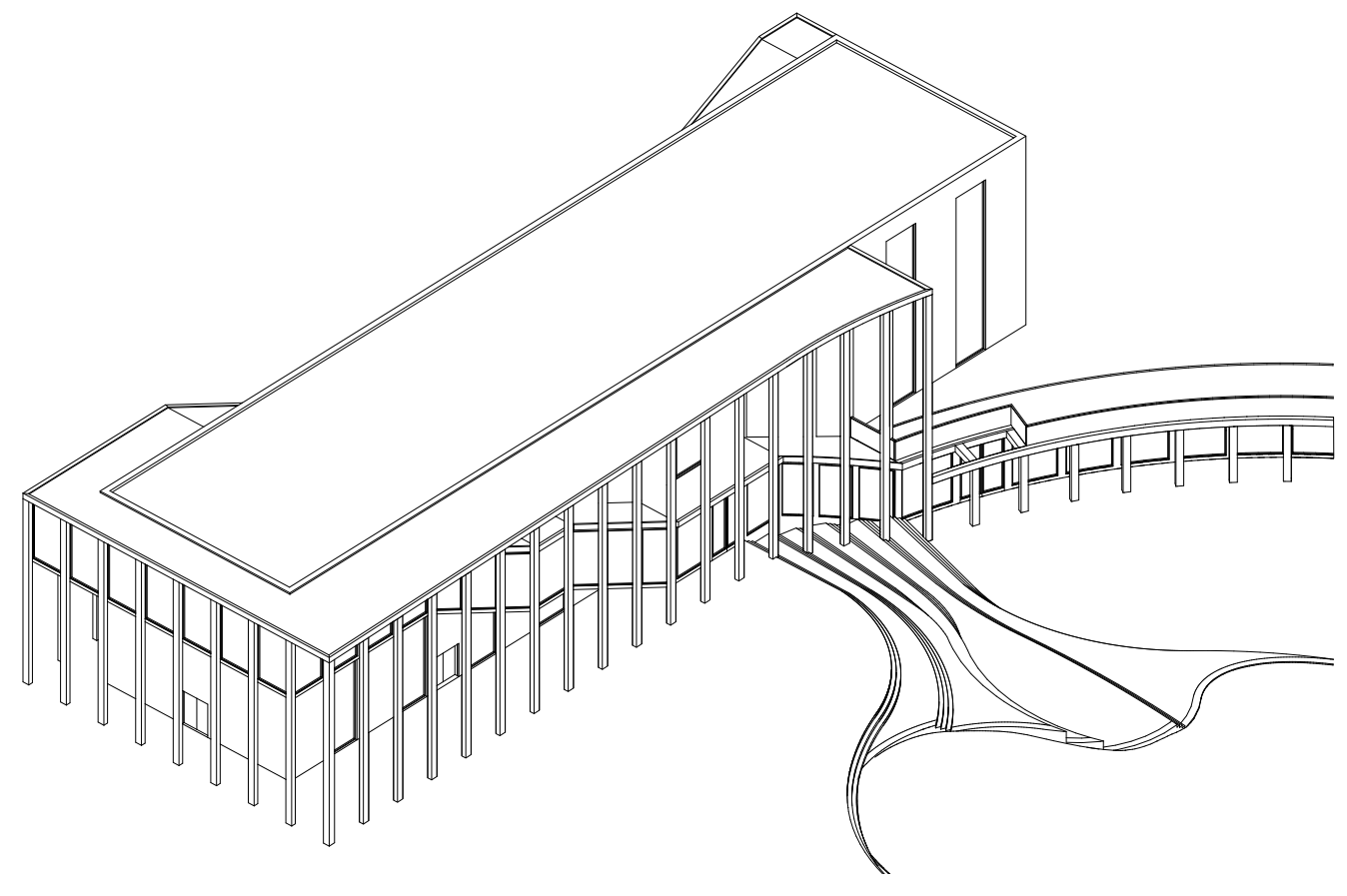
2.1 Entrance hall	250 m ²
2.2 Multifunctional gym room	250 m ²
2.2.1 Storage room	50 m ²
2.2.2 Changing room	100 m ²
2.2.3 Tribune	100 m ²
2.3 Multifunctional gym rooms (multiple layouts/sizes possible)	500 m ²
2.3.1 Changing rooms	100 m ²
2.3.2 Storage	50 m ²
2.4 Gym	400 m ²
2.4.1 Changing room	80 m ²
2.5 Technical room	40 m ²
2.6 Sanitation room	80 m ²
2.7 Café	150 m ²
2.7.1 Kitchen	40 m ²
<hr/>	
	2190 m ²
Total	5640 m ²
Total (with hallway)	~ 6500 m ²

3. Healthcare

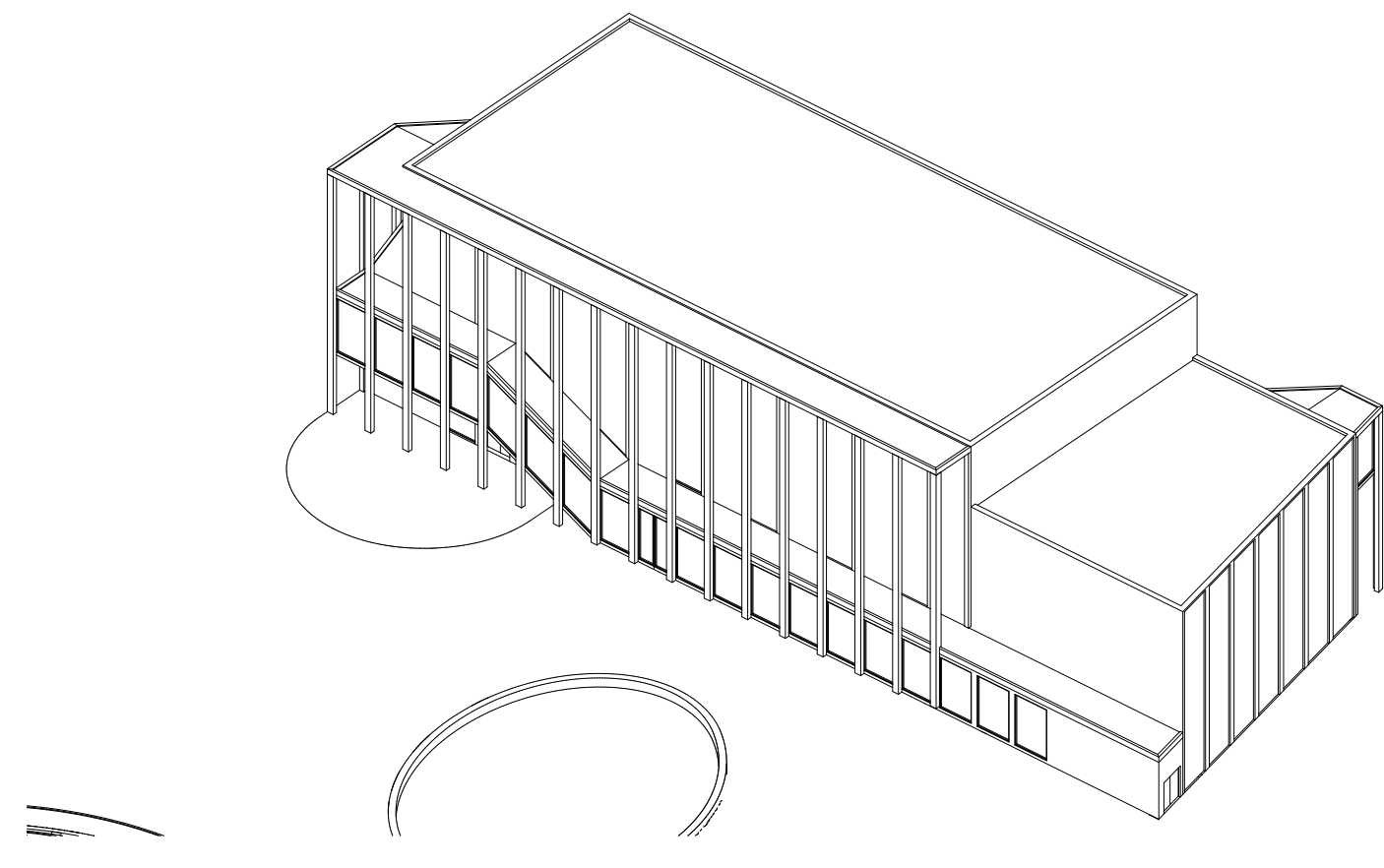
3.1 Entrance hall	180 m ²
3.2 Café/restaurant	250 m ²
3.2.1 Kitchen	65 m ²
3.3 Pharmacy	75 m ²
3.2.1 Storage	100 m ²
3.2.2 Laboratory	65 m ²
3.4 Doctors clinics	290 m ²
3.4.1 Waiting room	60 m ²
3.4.2 Staff room & reception	60 m ²
3.5 Office space	660 m ²
3.5.1 Sanitation room	60 m ²
3.5.2 Storage	65 m ²
3.6 Technical room	60 m ²
3.7 Sanitation room	70 m ²
<hr/>	
	2060 m ²

Proposal ensemble



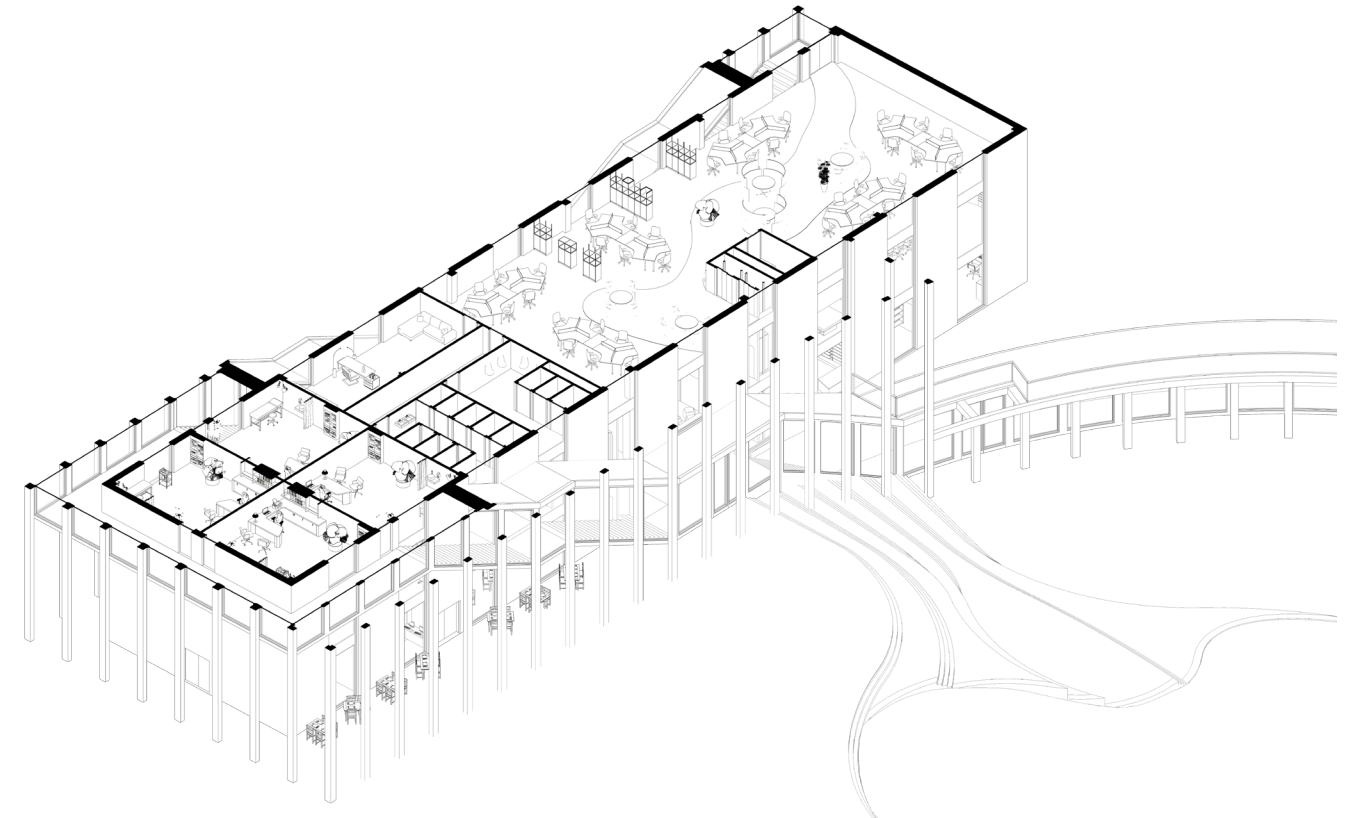


Axonometrics
I:500

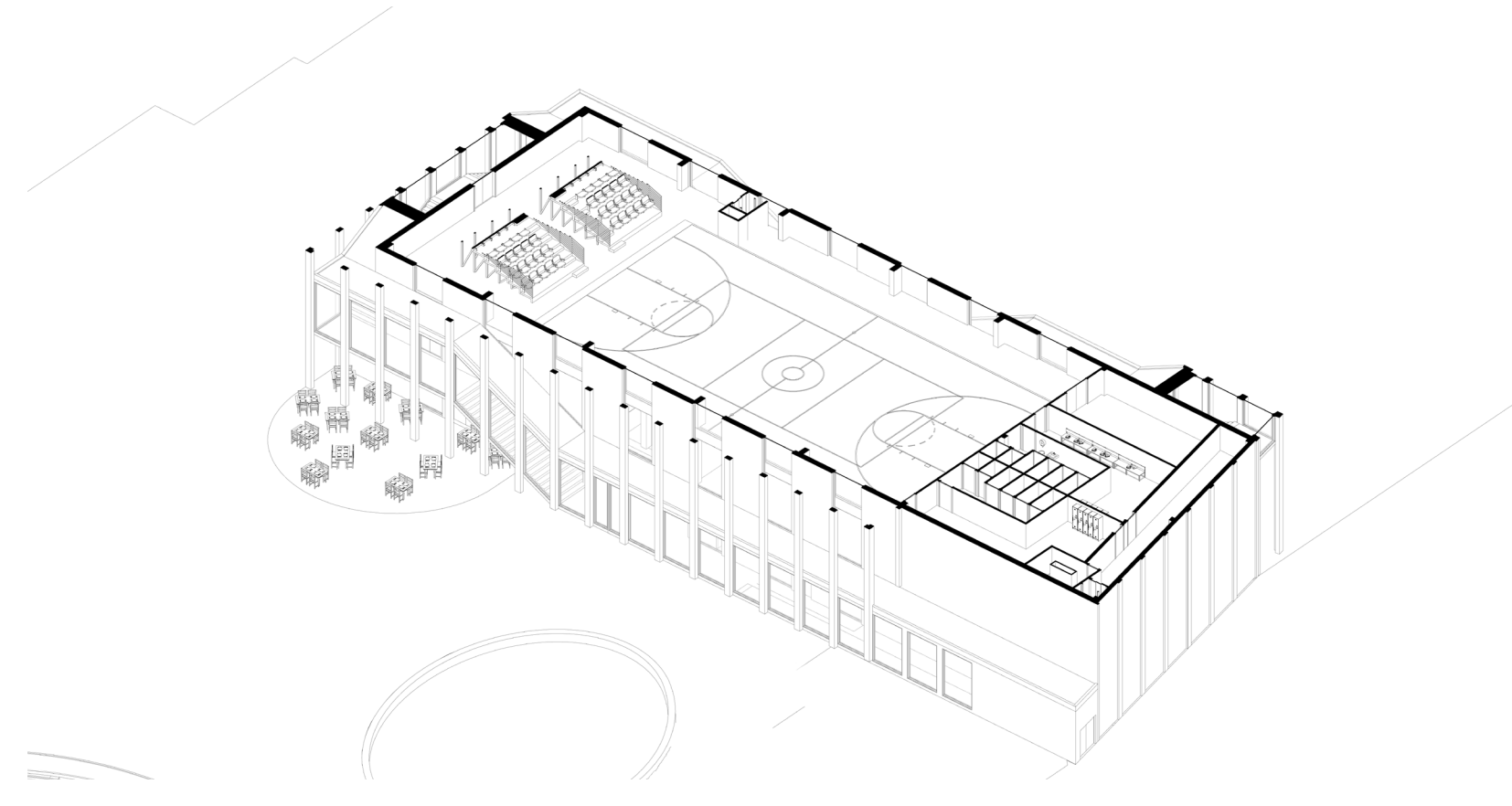


Sections
I:200

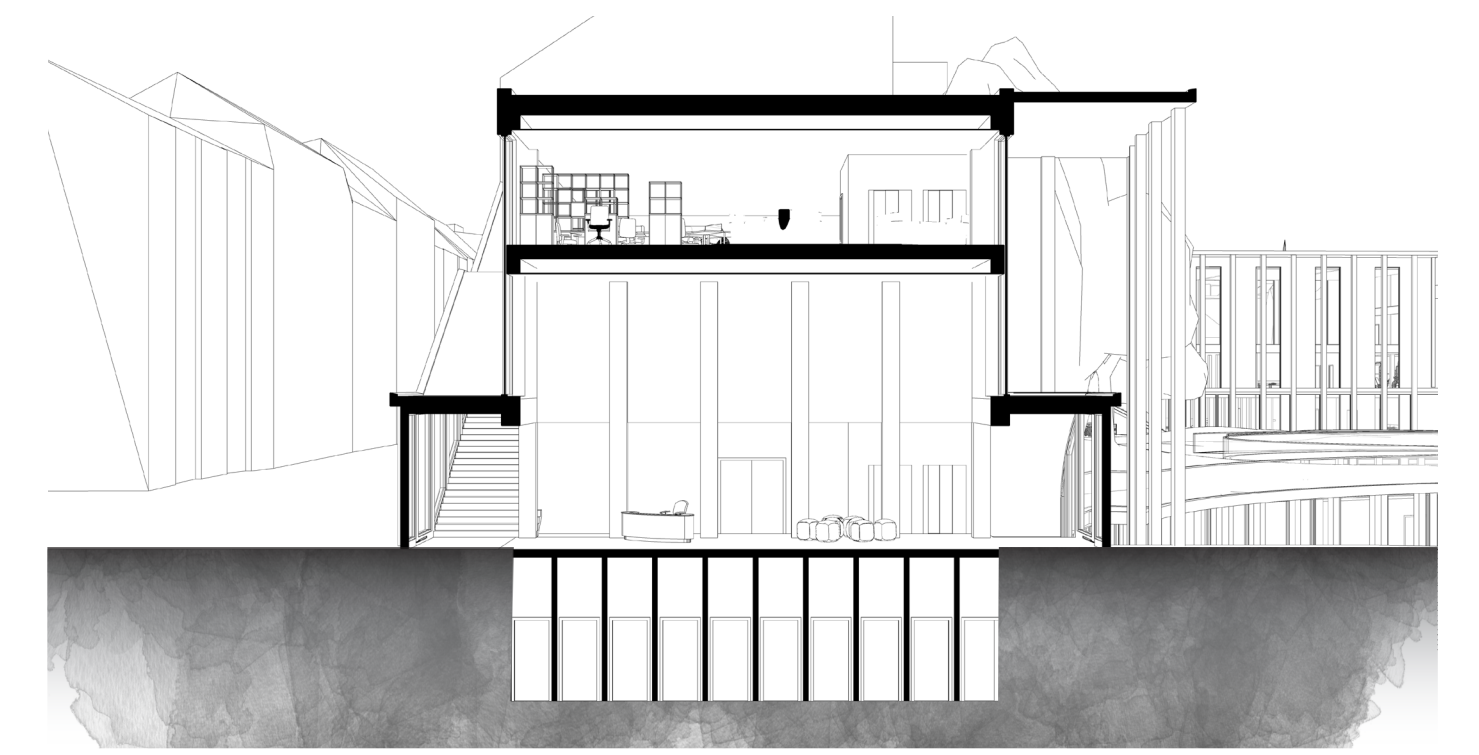
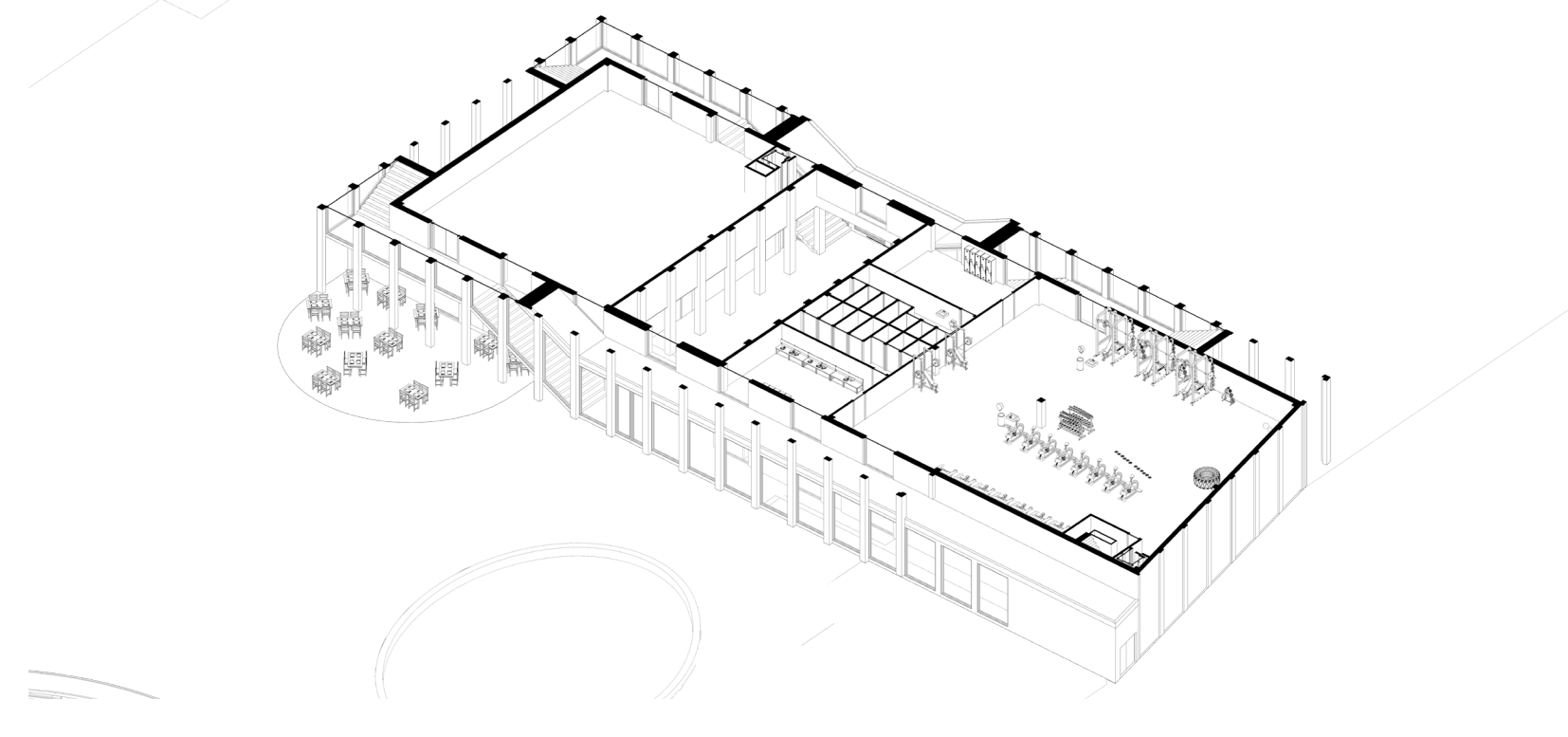
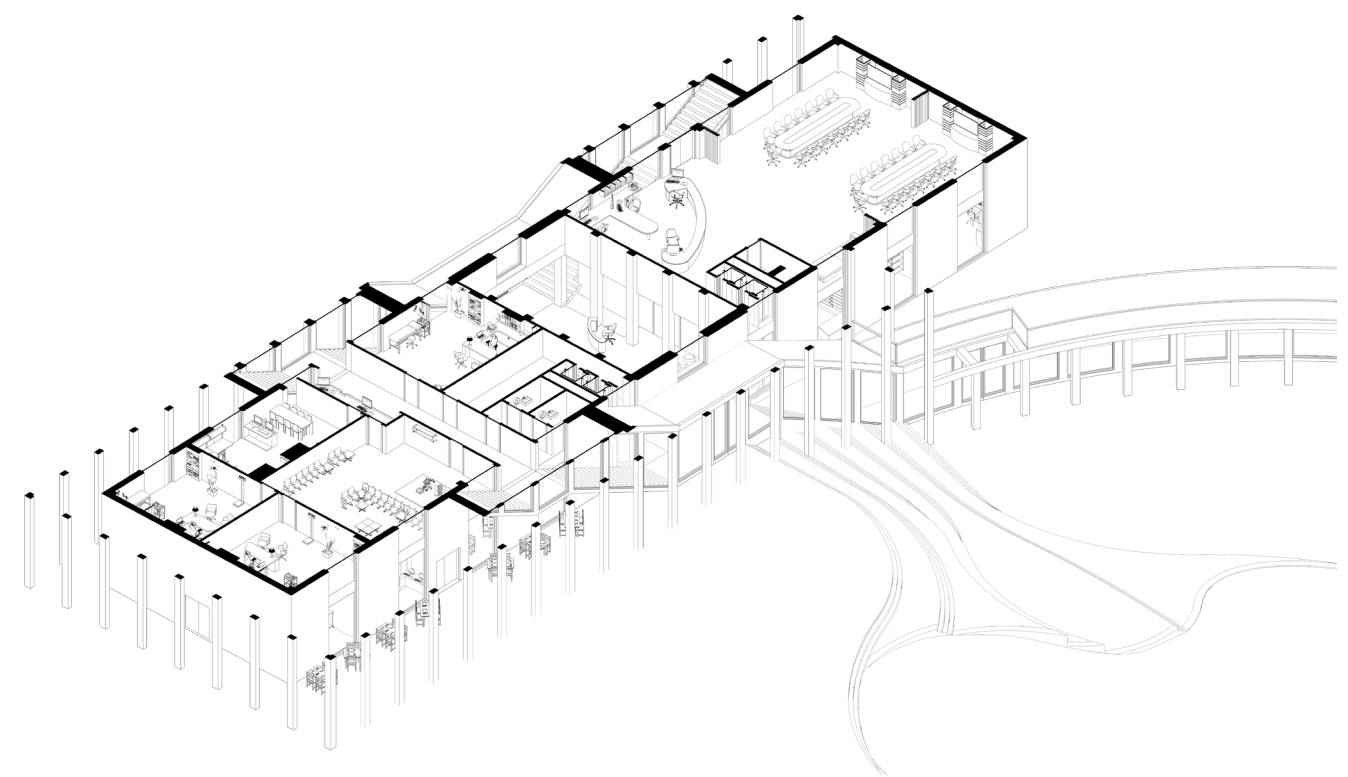
A



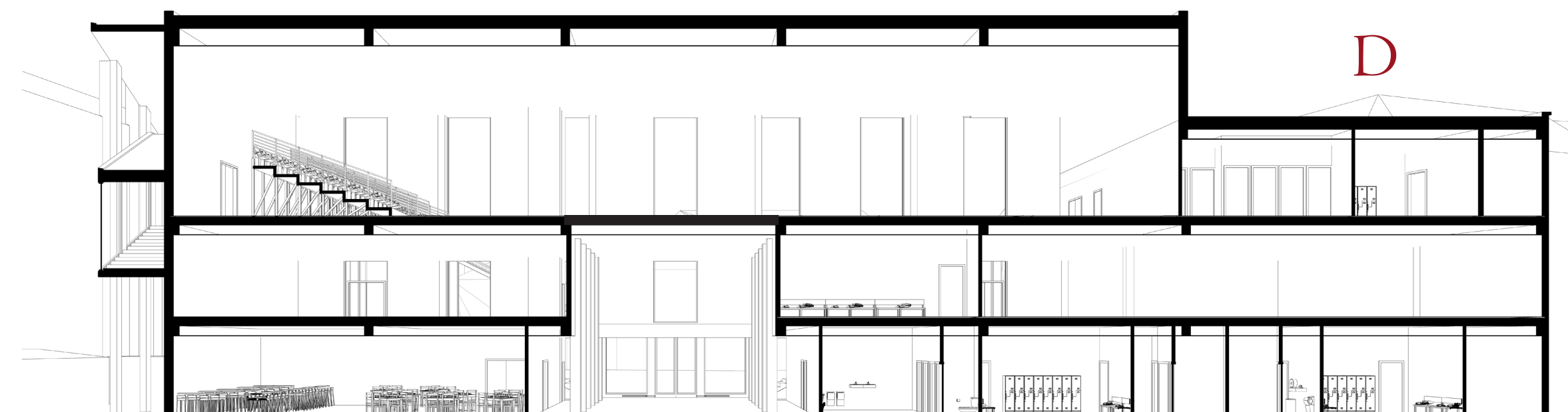
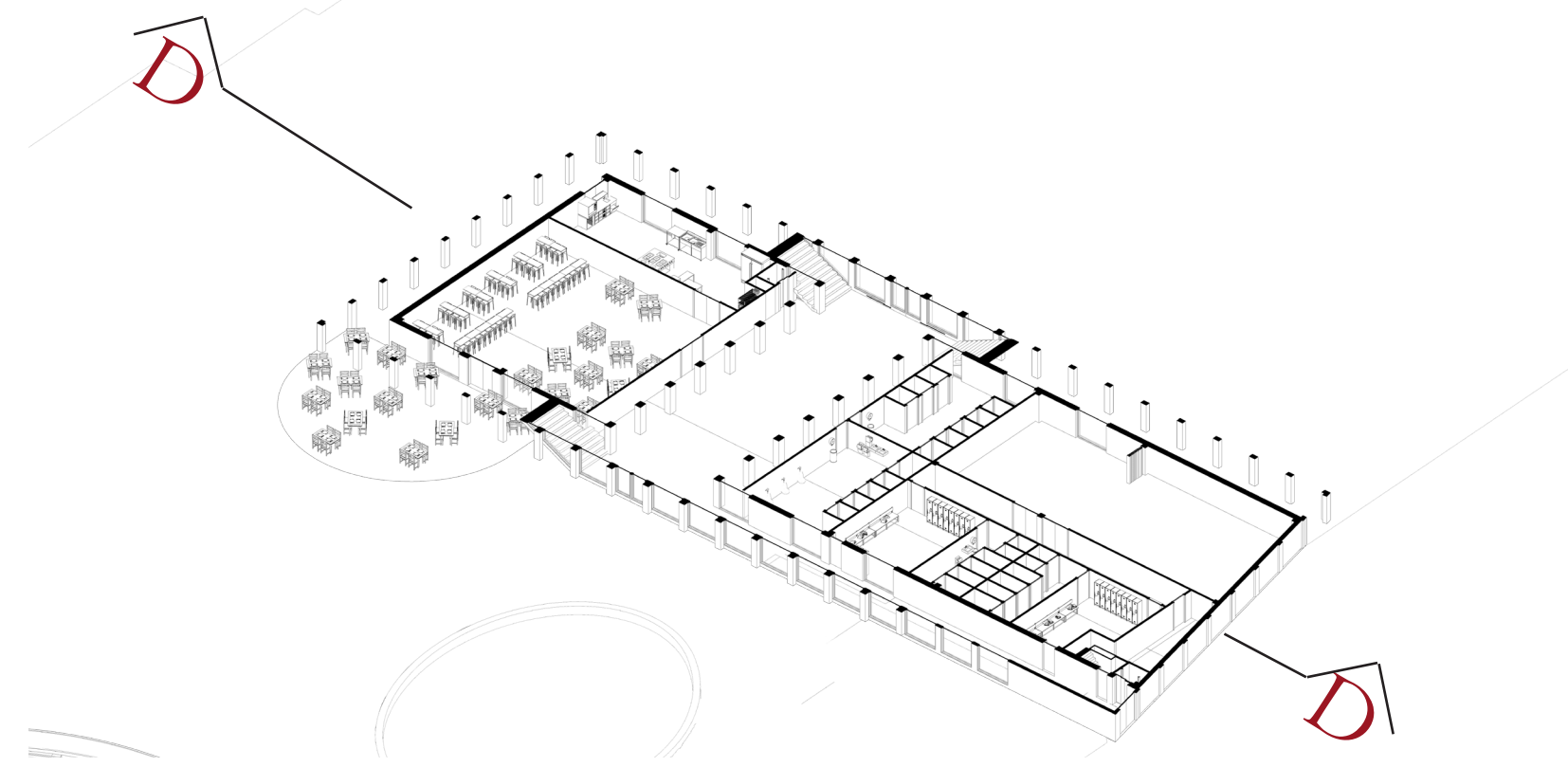
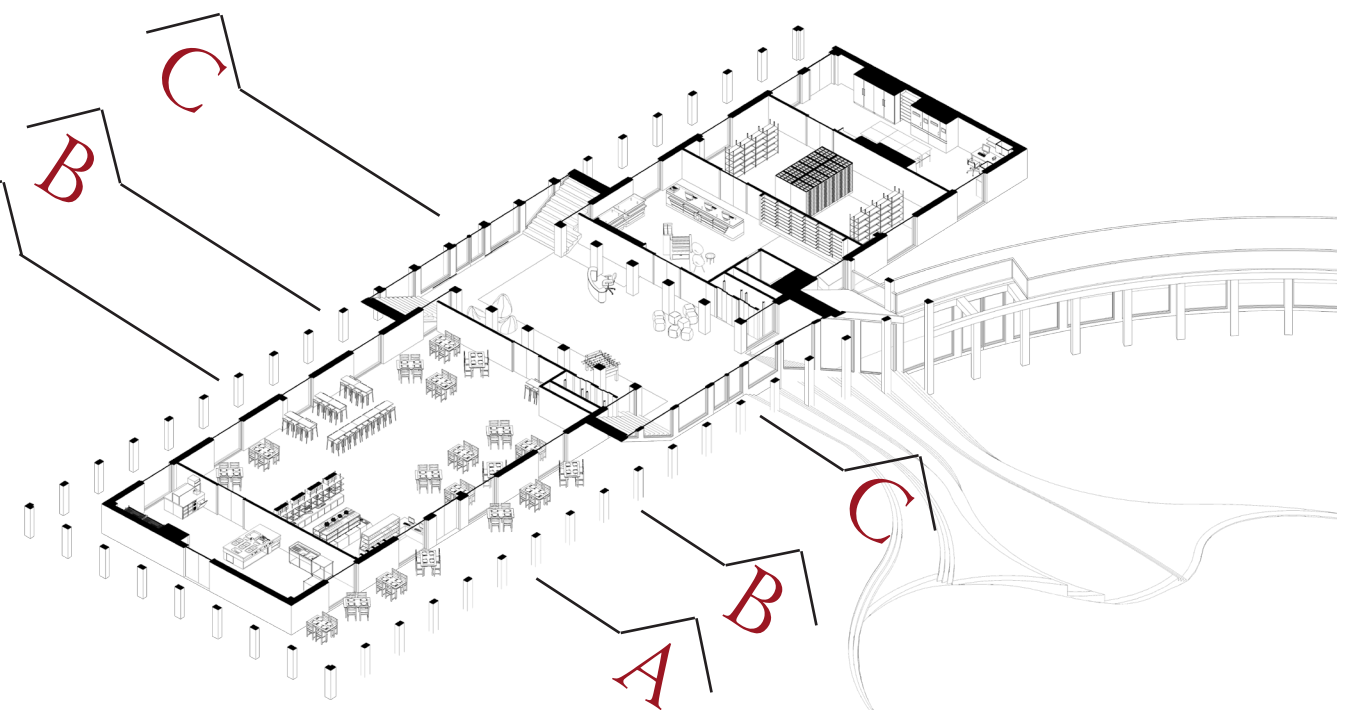
Floorplans
I:500



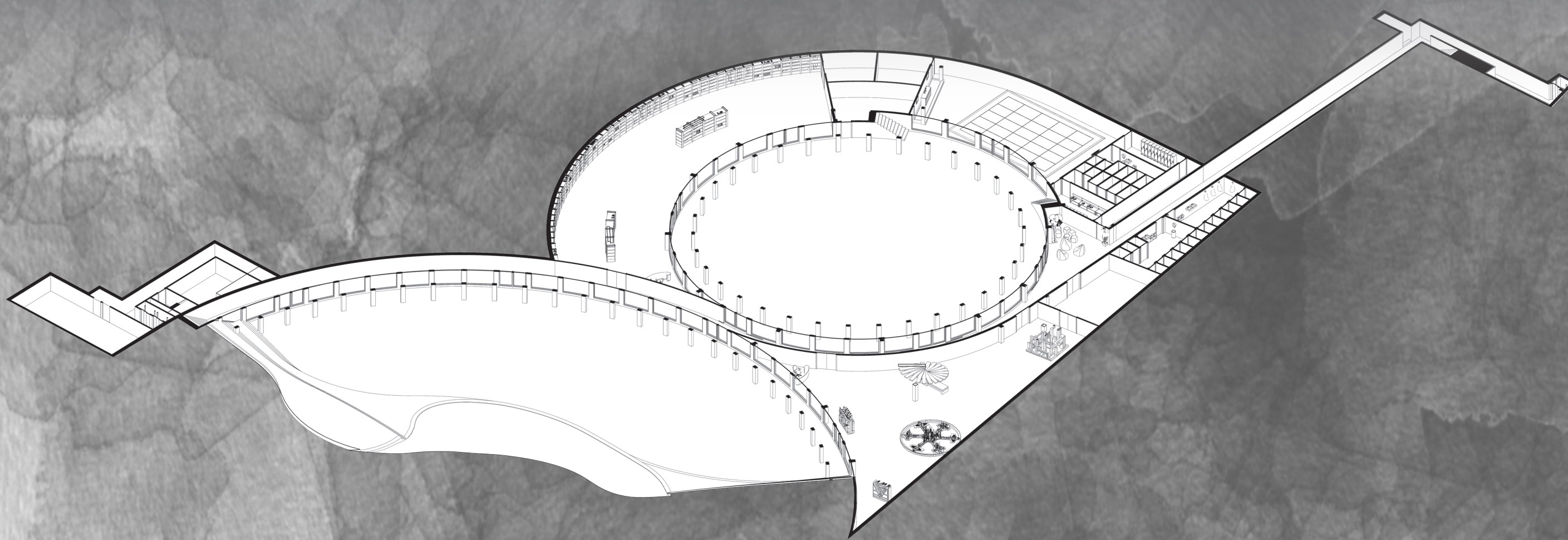
B



C



D

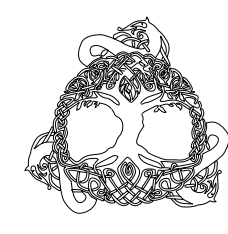


The cores are designed as purely functional, with no extra hallways inbetween. By wrapping the hallway around the entire design, the aesthetic of the proposal is achieved. This also creates the “connector typology” of this project.

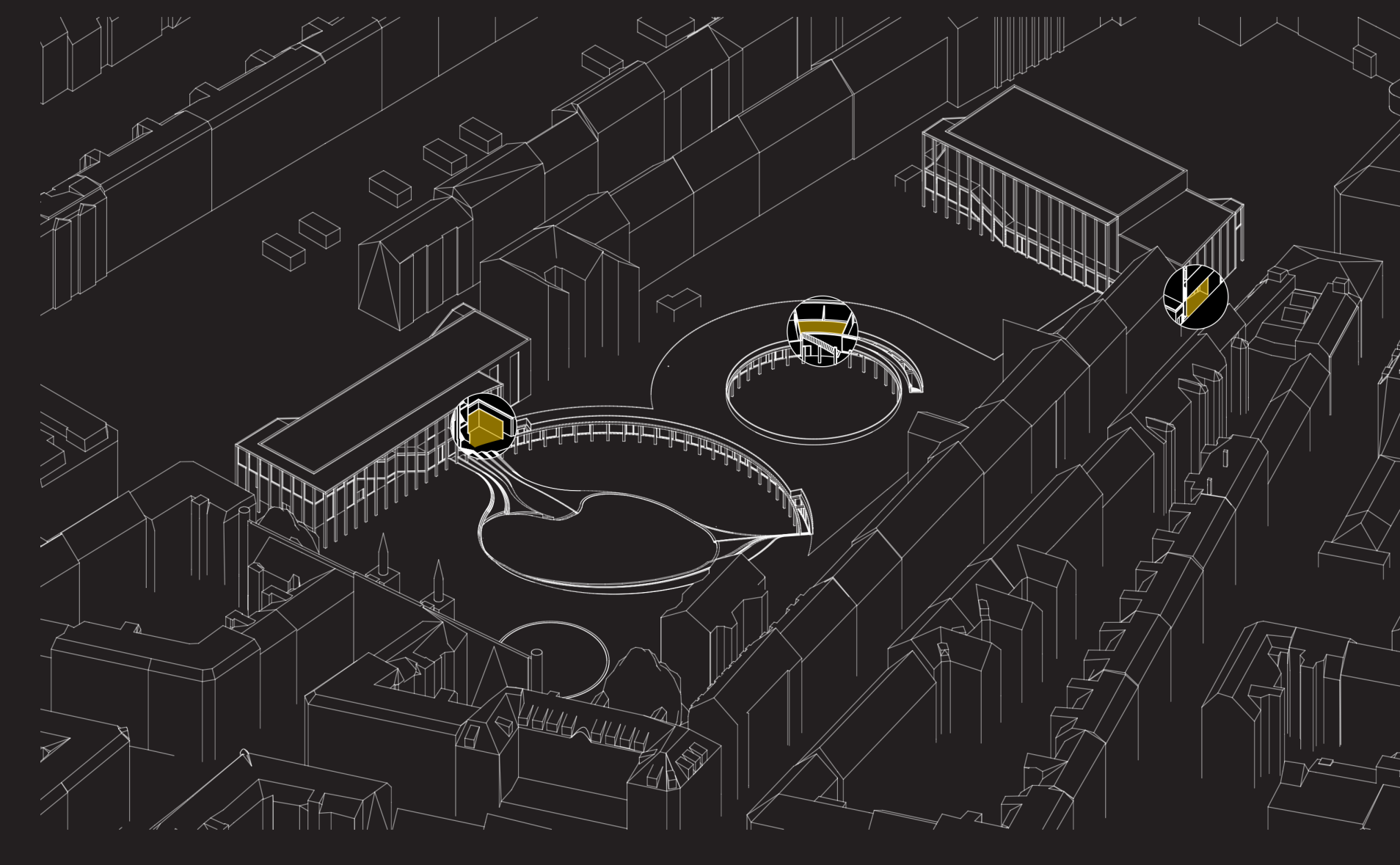
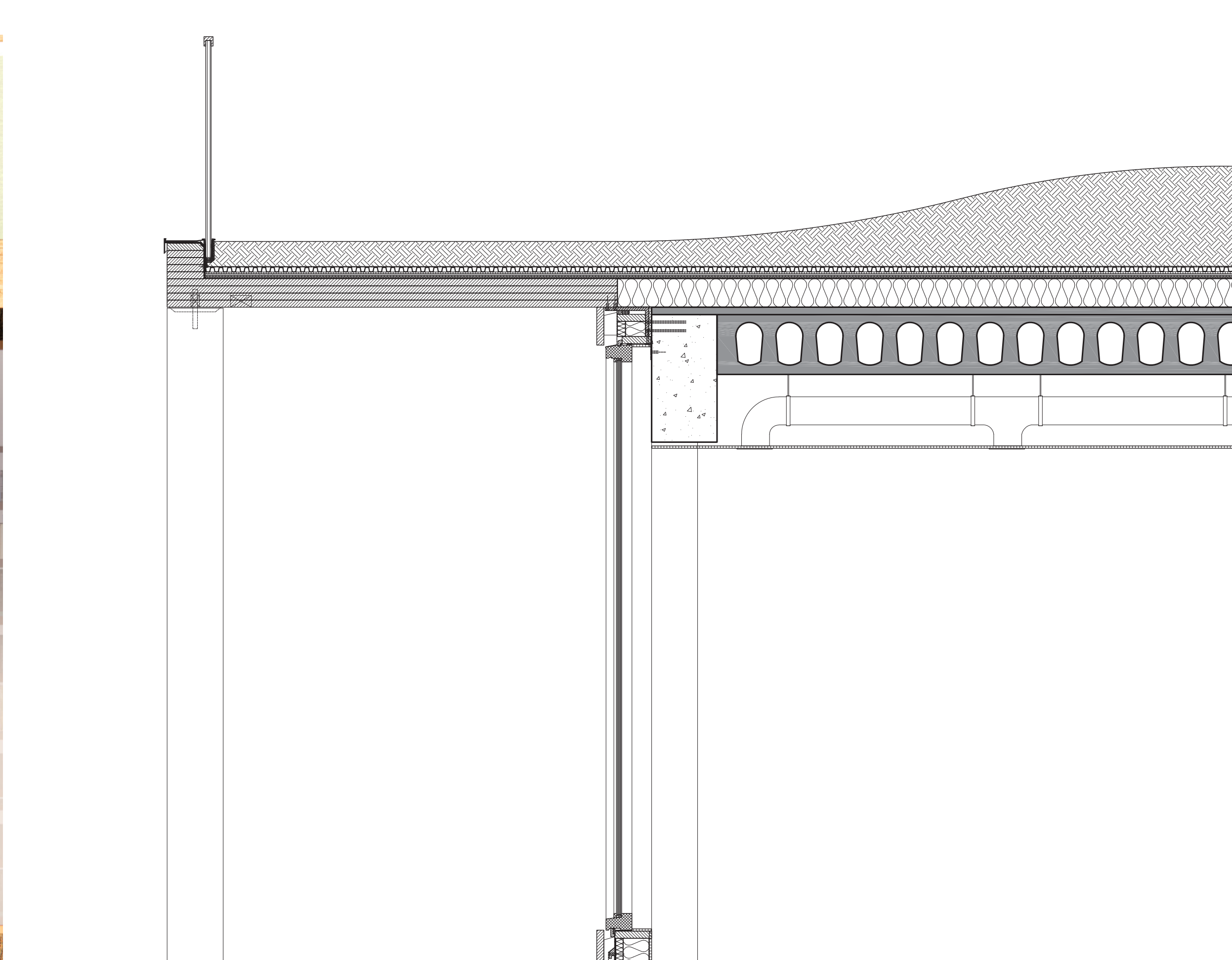
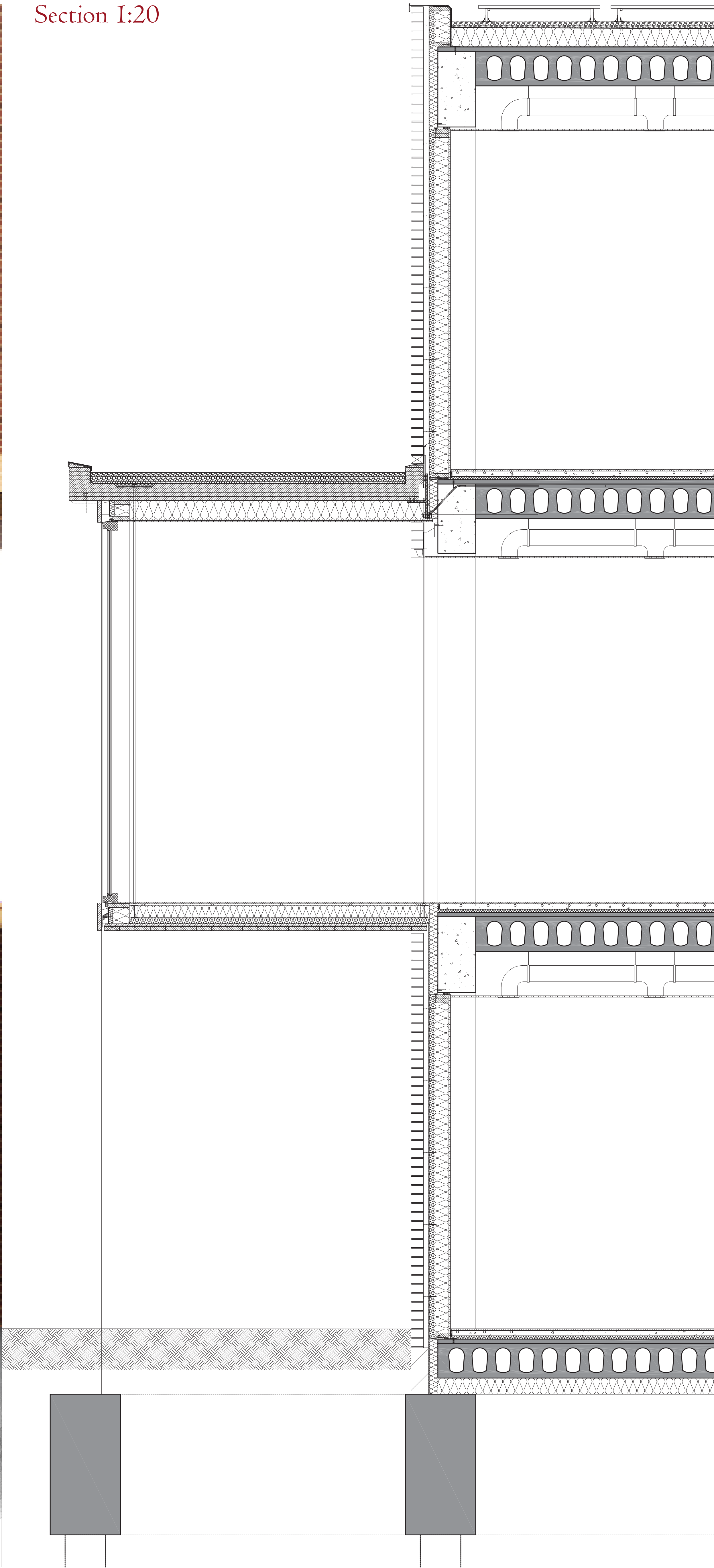
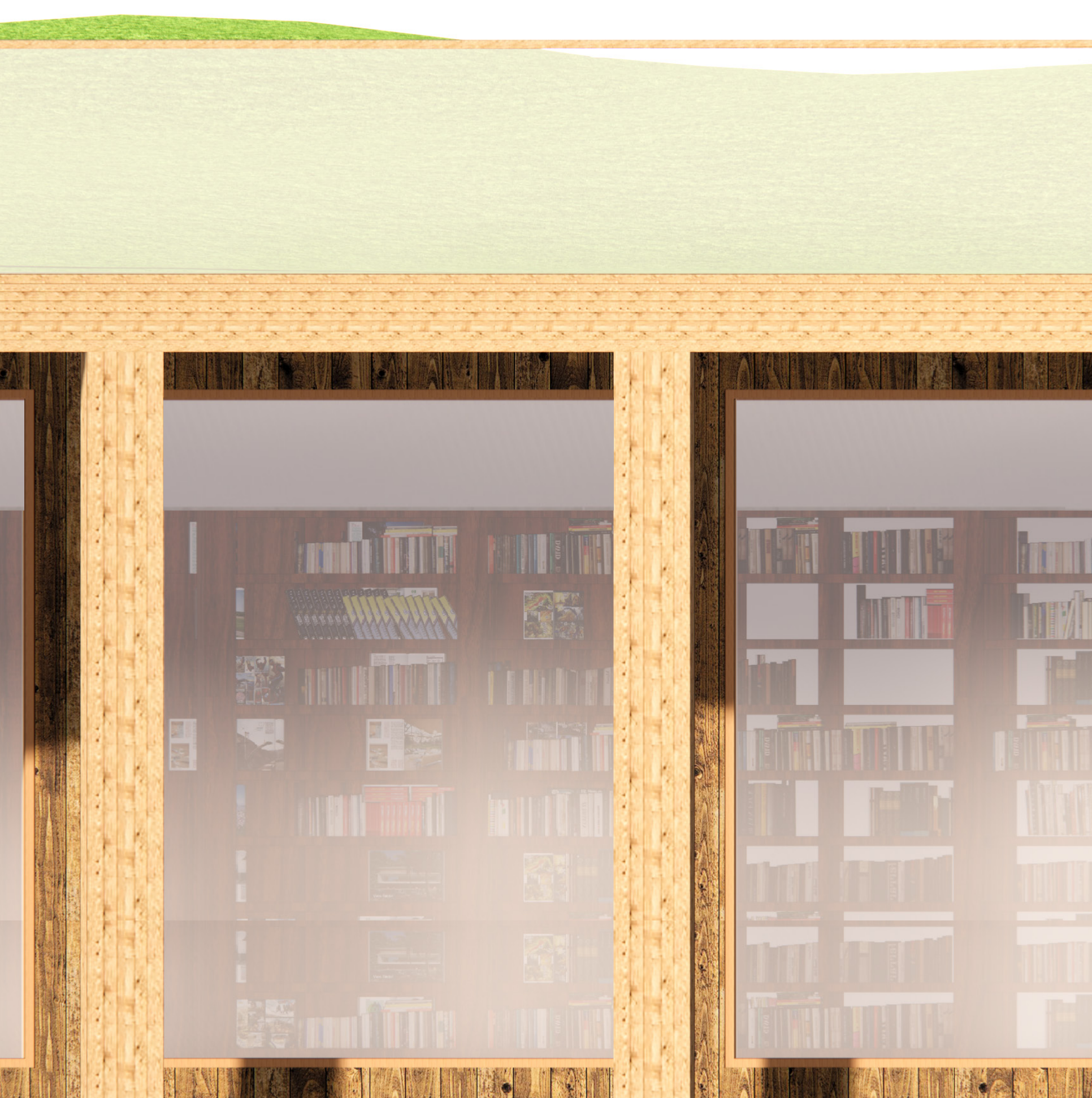
In the proposal, the previously mentioned framework is very important, as an element that ties everything together. This element is based on the relational system of the “Plastische getal”, by Dom Hans van der Laan.



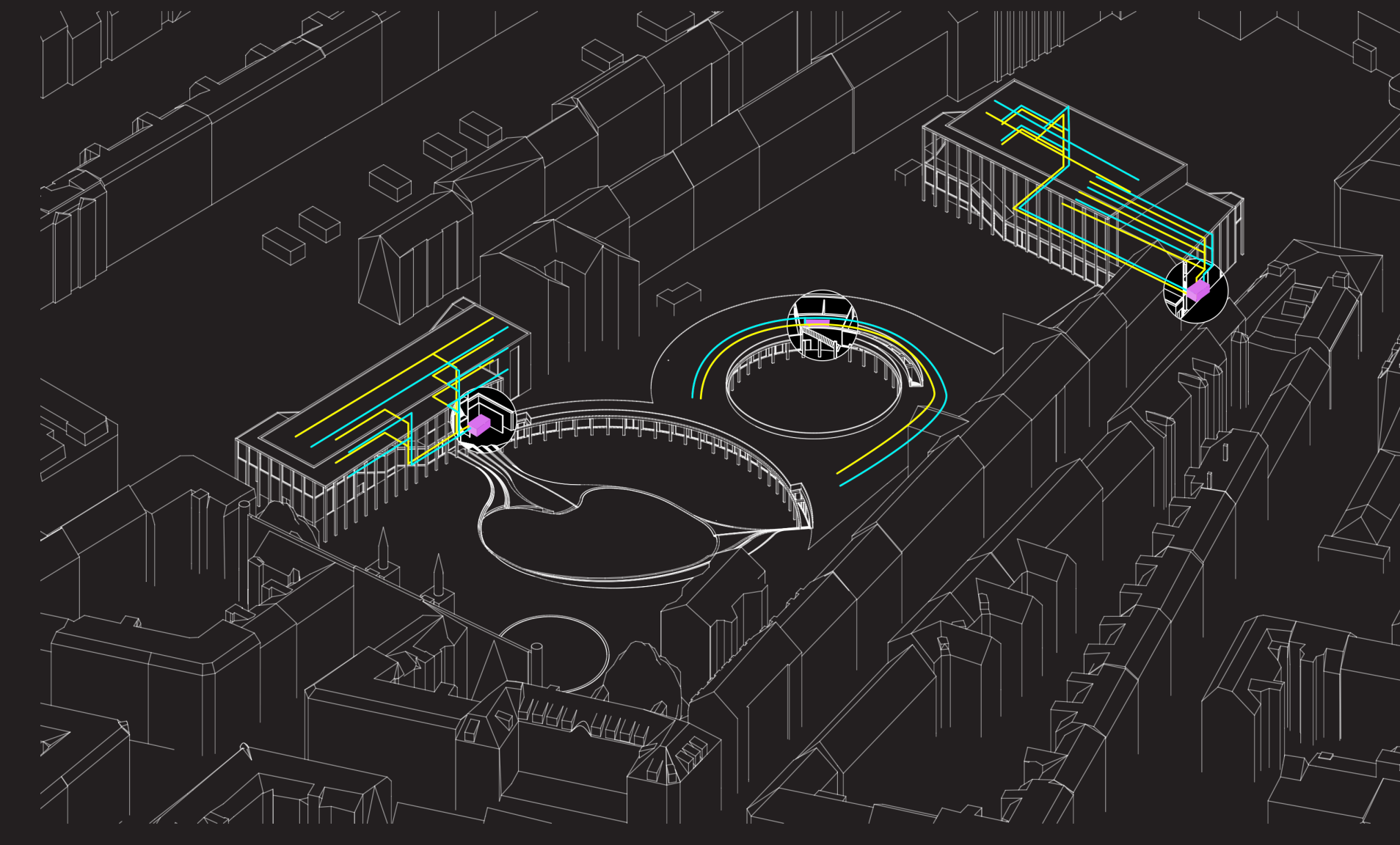
Interior
impressions



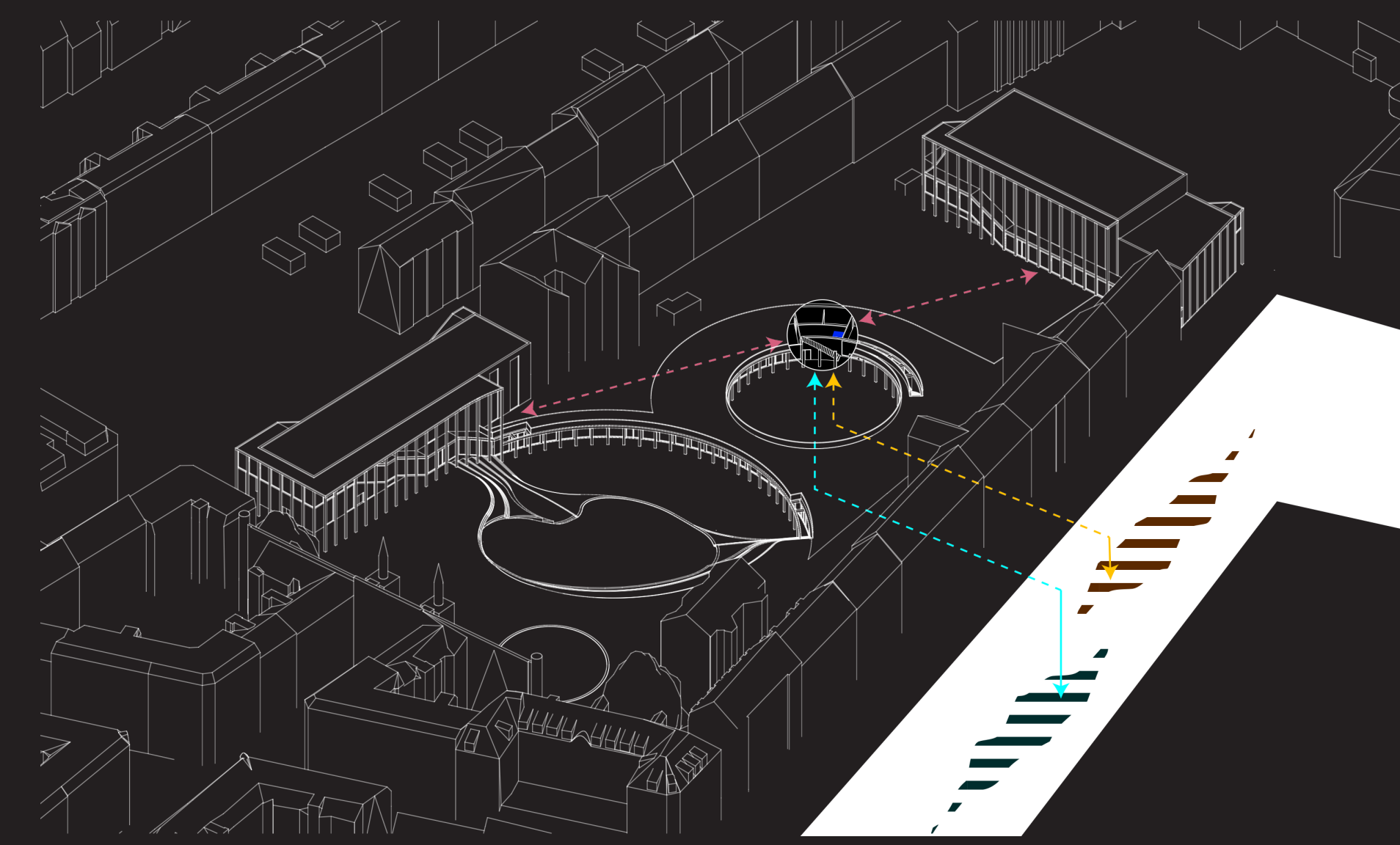
Section I:20



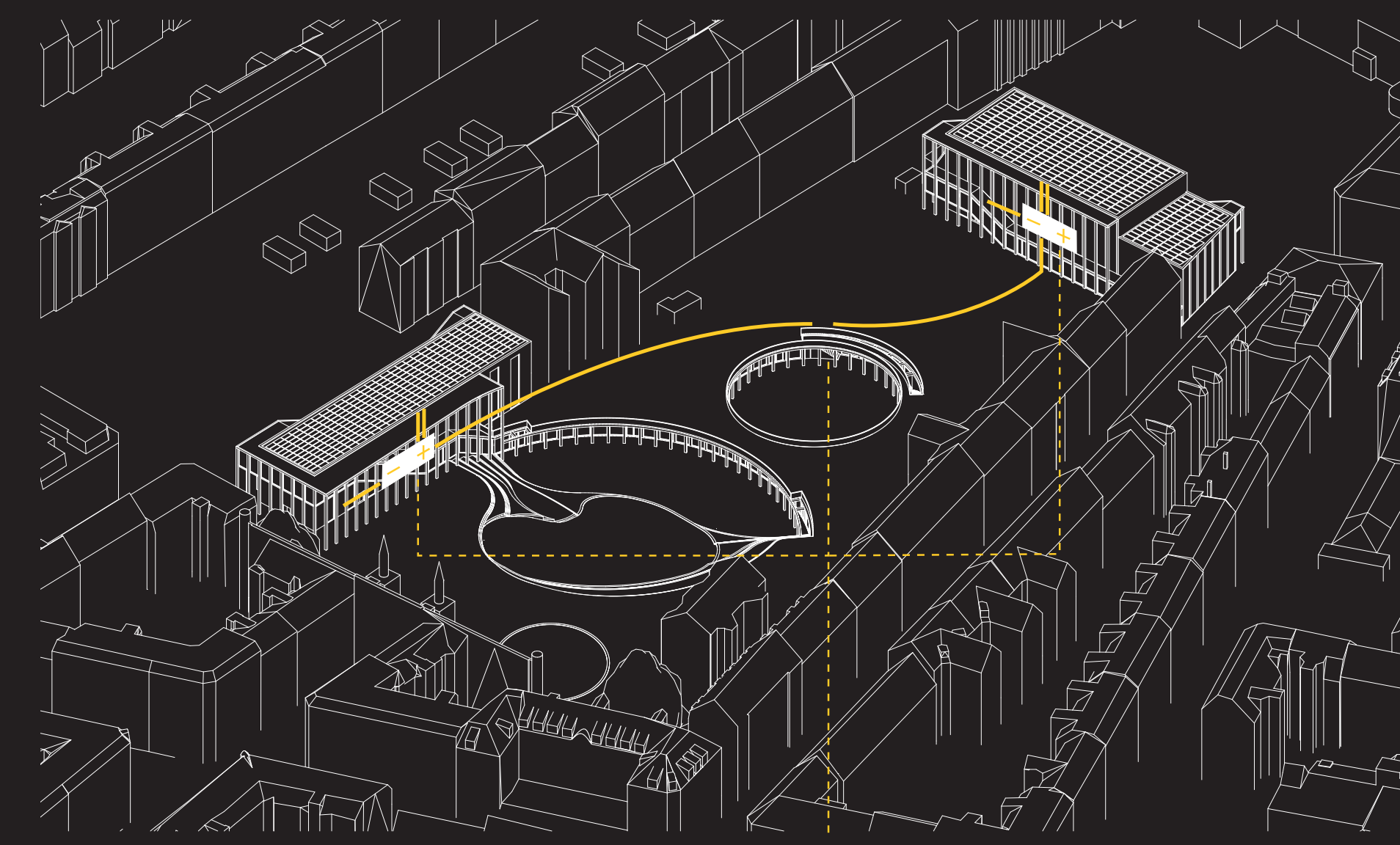
■ Technical room
All cores have their own technical room and work independantly



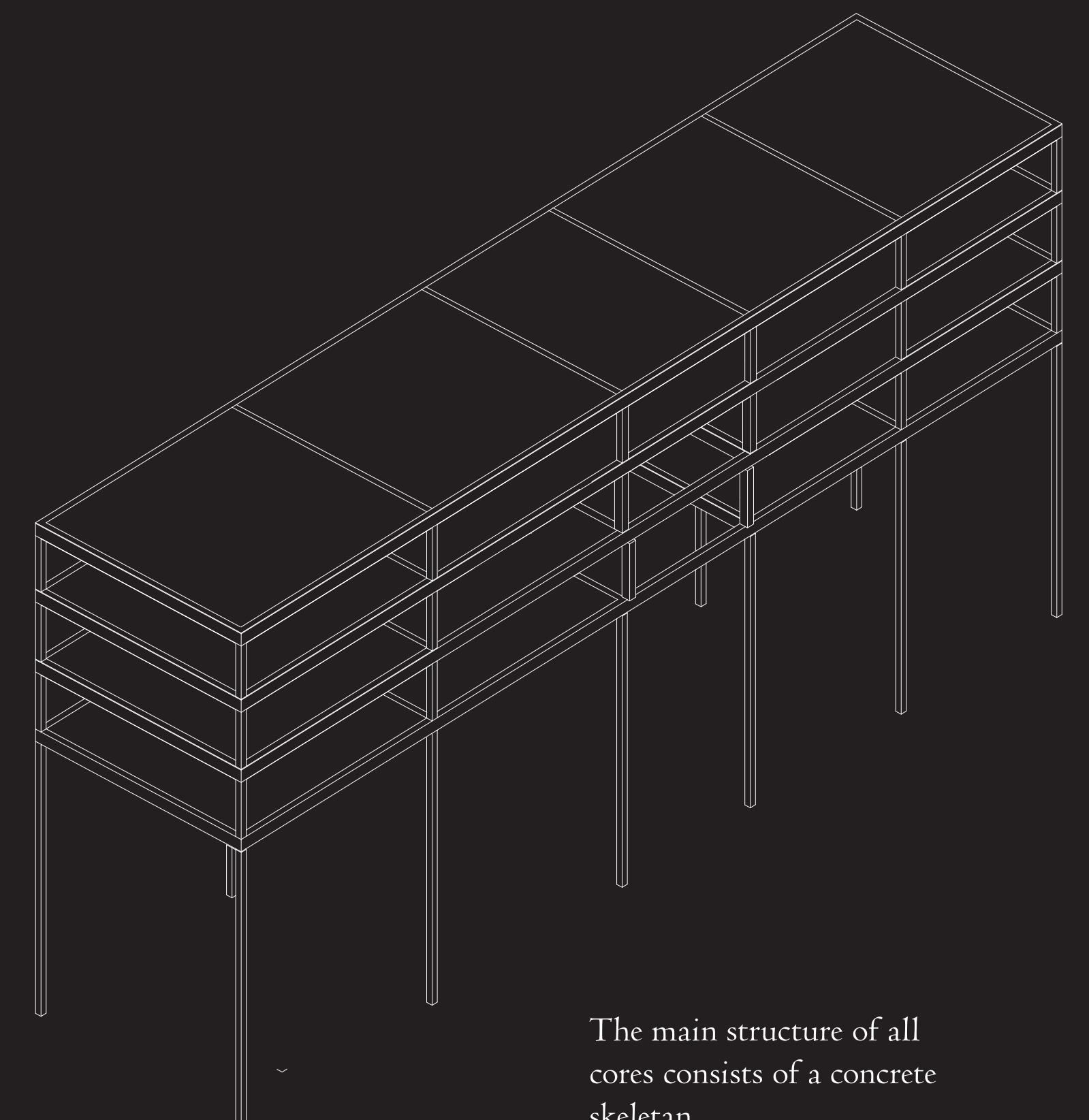
■ Main air drainage duct
■ Main air supply duct
■ Air Handling unit
Mechanical air supply
Mechanical air drainage



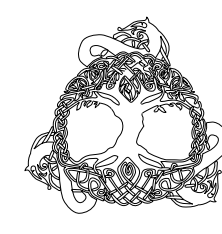
■ Heat pump
■ Hot water storage
■ Cold water storage
- - Water distributing pipe
One central heat pump, coupled with thermal energy storage system



■ Main energy connection
□ Solar panel
- - Reserve energy connection to power grid
Solar panels on both outer cores provide the entire complex with energy



The main structure of all cores consists of a concrete skeleton



- 1 Moisture barrier
- 2 Tapered insulation
- 3 Two-ply polymer bitumen membrane
- 4 Rubber granulate building protection mat
- 5 Gravel - 75 mm
- 6 Solar panel
- 7 Copper titanium parapet flashing
- 8 Timber frame construction framework
- 9 Wooden platematerial - 12,5 mm
- 10 Rockwool insulation - 140 mm
- 11 XPS insulation board - 45 mm
- 12 Wall anchor
- 13 Steel L-profile connector
- 14 Poured concrete pressure layer - 40 mm
- 15 Hollow core slab floor - 320 mm
- 16 Kooltherm insulation - 80 mm
- 17 Concrete construction - 700 mm X 350 mm
- 18 Brickwork
- 19 Sealant seam
- 20 Lowered ceiling
- 21 Timber frame construction framework - double top
- 22 Lead profile
- 23 Steel connector profile - 13 mm
- 24 "Isokor"™ connection - concrete / steel
- 25 Continuous steel profile - carrying the laminated timber
- 26 Double wooden ceiling plates - 25 mm total
- 27 Insulation - 175 mm
- 28 Laminated timber - 150 mm
- 29 Steel plate - to distribute the force from the tension cable
- 30 Rockwool insulation - in order to flatten the gap in the timber

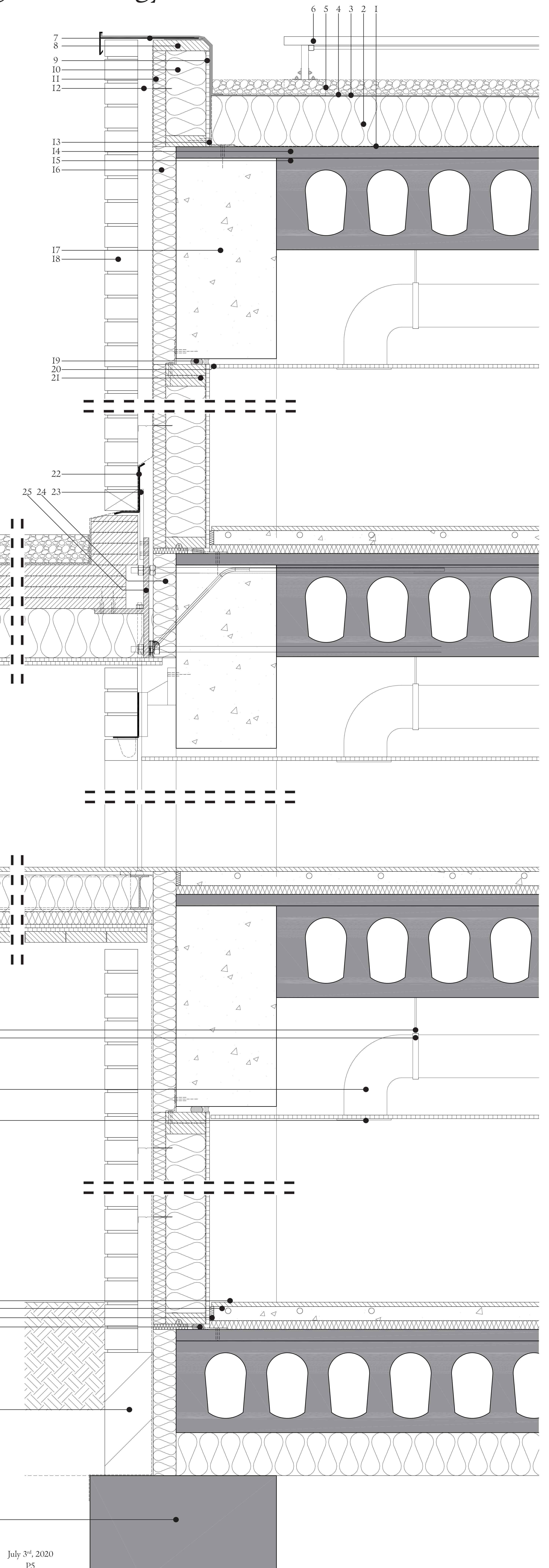
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- 31 Two-ply polymer bitumen membrane
- 32 Rubber granulate building protection mat
- 33 Gravel - 100 mm
- 34 Copper titanium parapet flashing
- 35 Stainless steel dowel
- 36 Expansion joint
- 37 Elastomeric bearing pad
- 38 Treated batten
- 39 Wooden header board - 38 mm
- 40 Wooden window frame
- 41 Tripple glazing
- 42 Tension cable - 15 mm
- 43 Wooden profile
- 44 Recessed light fixture
- 45 Wood planks ceiling - 38 mm
- 46 Double wooden ceiling plates - 25 mm total
- 47 IPE 120 profile
- 48 XPS insulation board - 45 mm
- 49 Rockwool insulation - 130 mm
- 50 Wooden screed
- 51 Ventilation duct hanger cable
- 52 Ventilation duct hanger
- 53 Ventilation duct
- 54 Ventilation roster
- 55 Wooden screed
- 56 Suspended flooring screed - 50 mm - with floor heating
- 57 Side insulation - suspended flooring screed
- 58 Spring anchor
- 59 Concrete toe board
- 60 Concrete foundation - pile foundation

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- 1 Hollow core slab floor - 320 mm
- 2 Poured concrete pressure layer - 40 mm
- 3 Tapered insulation
- 4 Vapor barrier
- 5 Sealing layer
- 6 Root repellent layer
- 7 Drainage layer and water reserves
- 8 Filter layer
- 9 Ground - with grass and flowers on top
- 10 Wooden handrail profile
- 11 Laminated glass
- 12 Copper titanium parapet flashing
- 13 Clamping profile for the railing
- 14 Recessed light fixture
- 15 CNC cavity for dowel
- 16 Expansion joint
- 17 Elastomeric bearing pad
- 18 Stainless steel dowel
- 19 Sealant seam
- 20 Steel L-profile connector
- 21 Rockwool insulation - 130 mm
- 22 XPS insulation board - 45 mm
- 23 Treated batten
- 24 Wooden header board - 38 mm
- 25 Wooden window frame
- 26 Tripple glazing
- 27 Concrete construction - 700 mm X 350 mm
- 28 Ventilation duct hanger
- 29 Ventilation duct
- 30 Ventilation roster
- 31 Lowered ceiling
- 32 Wooden screed
- 33 Suspended flooring screed - 50 mm - with floor heating
- 34 Side insulation - suspended flooring screed
- 35 Spring anchor
- 36 Steel profile - gutter and edge profile for tiling
- 37 Tiling
- 38 Concrete slab
- 39 Concrete toe board
- 40 Concrete foundation - pile foundation

