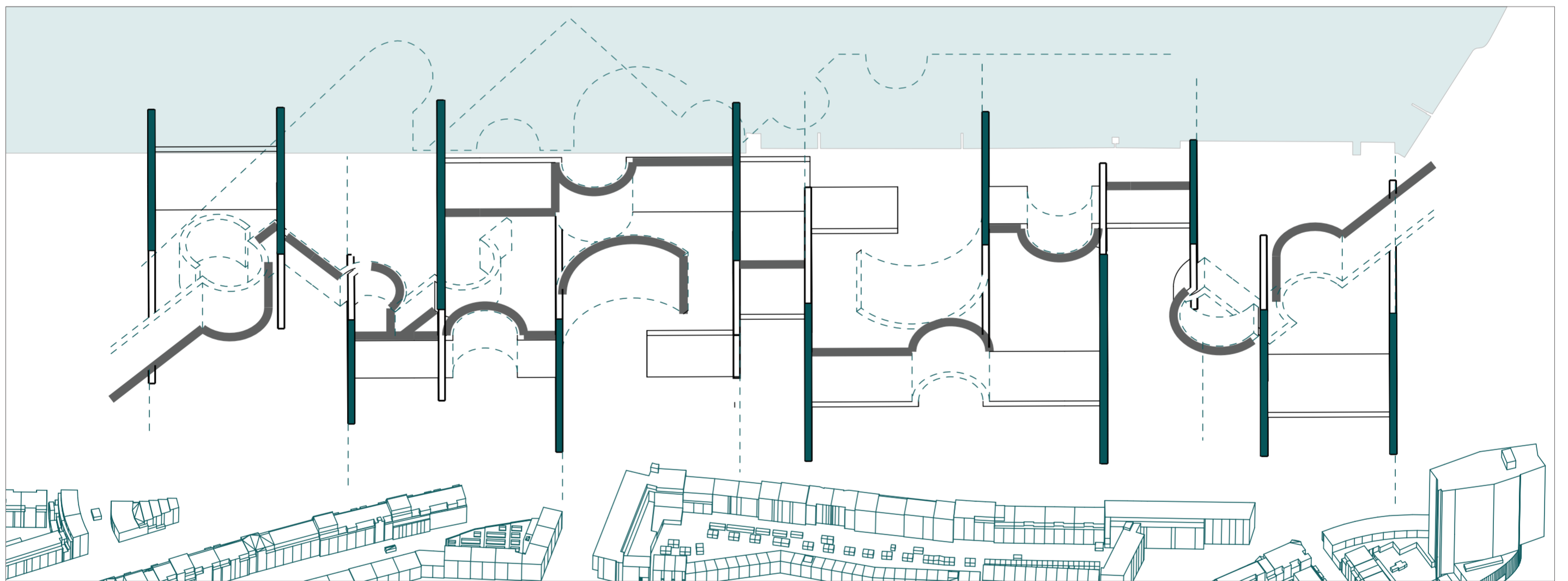


/ **CONCEPT** / *Migrating through boundaries*

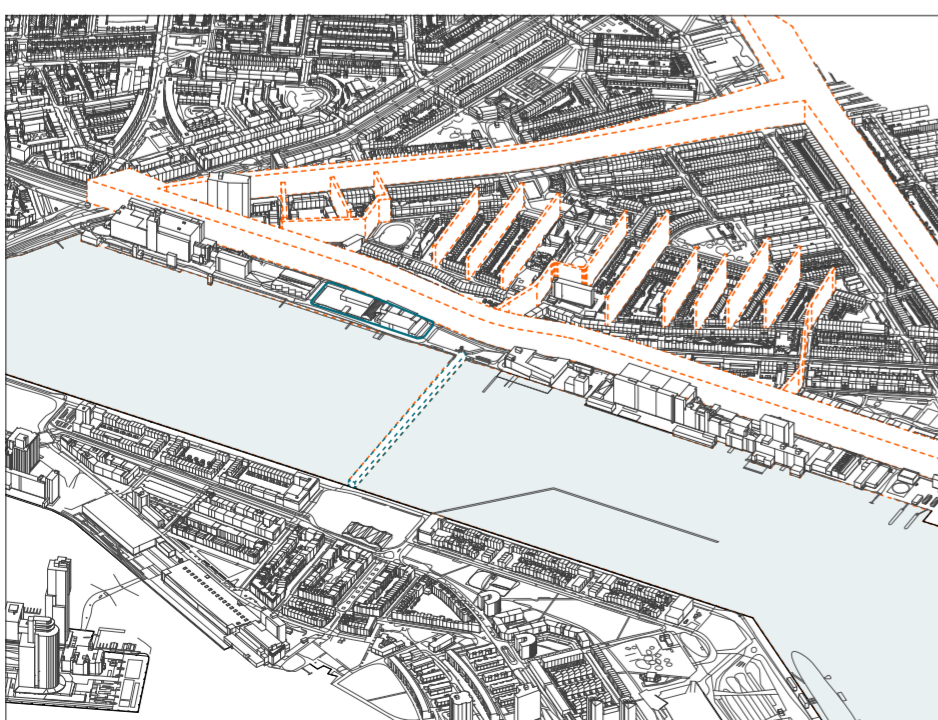


I. **Manifesto & Architectural Form**

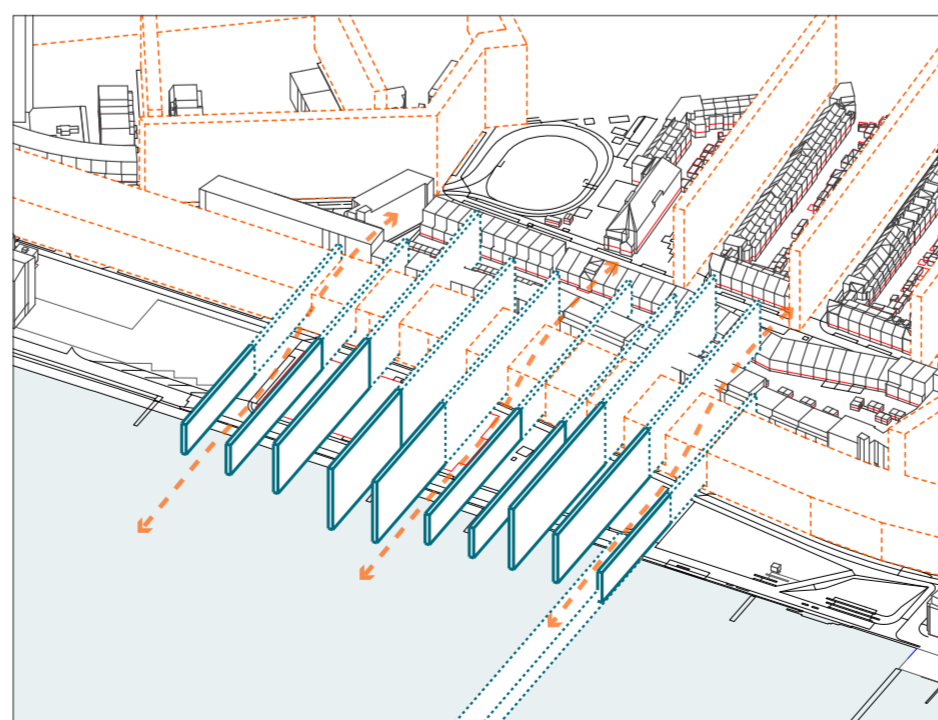


*The Boundless Museum:
intercultural exchanges beyond boundaries*

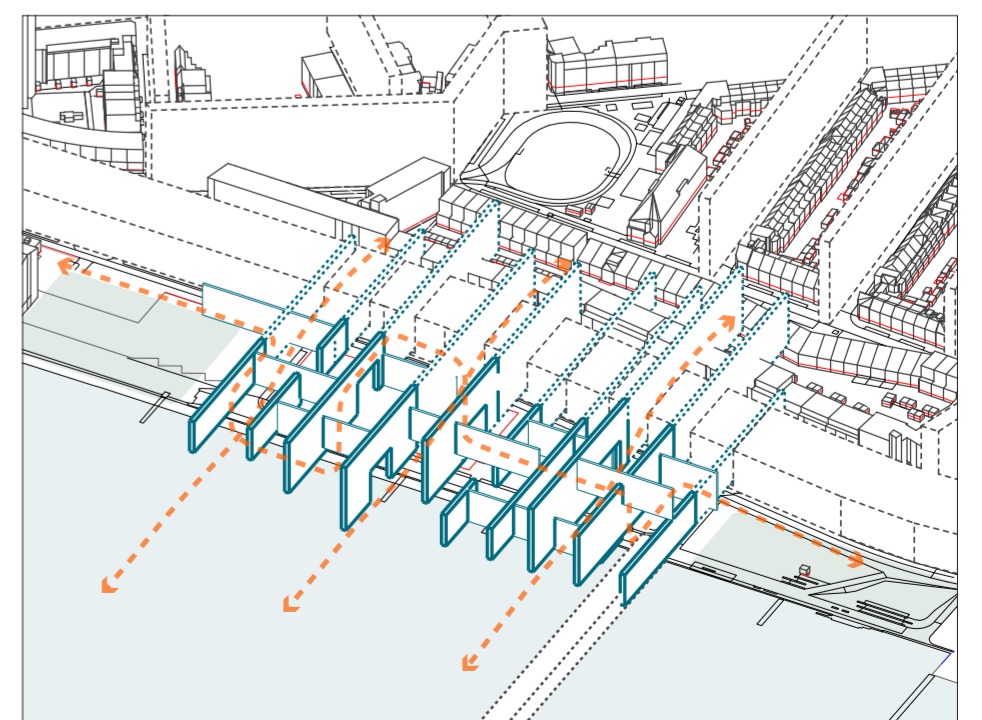
II. **Site Conditions & Architectural Form**



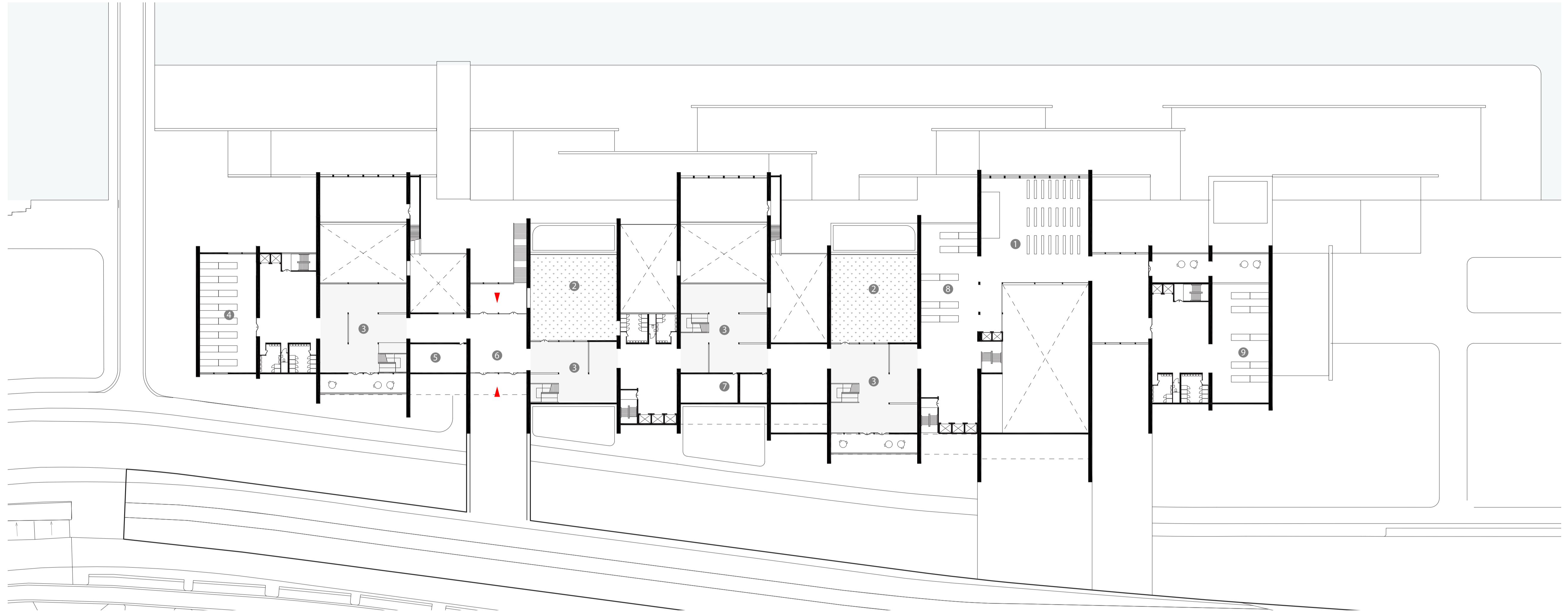
Existing boundaries due to traffic network and dyke



Relinking the site to the south and extending it to the harbour



Directing EW and NS orientated interaction lines



- 1 MULTIPURPOSE/ PERFORMANCE AREA
- 2 GREEN ROOFTOP AREA
- 3 TEMPORARY EXHIBITION
- 4 VIEWDECK
- 5 VIEWDECK
- 6 RECEPTION/ INFORMATION AREA
- 7 LIBRARY
- 8 ARTIST STUDIO
- 9 EQUIP. RM

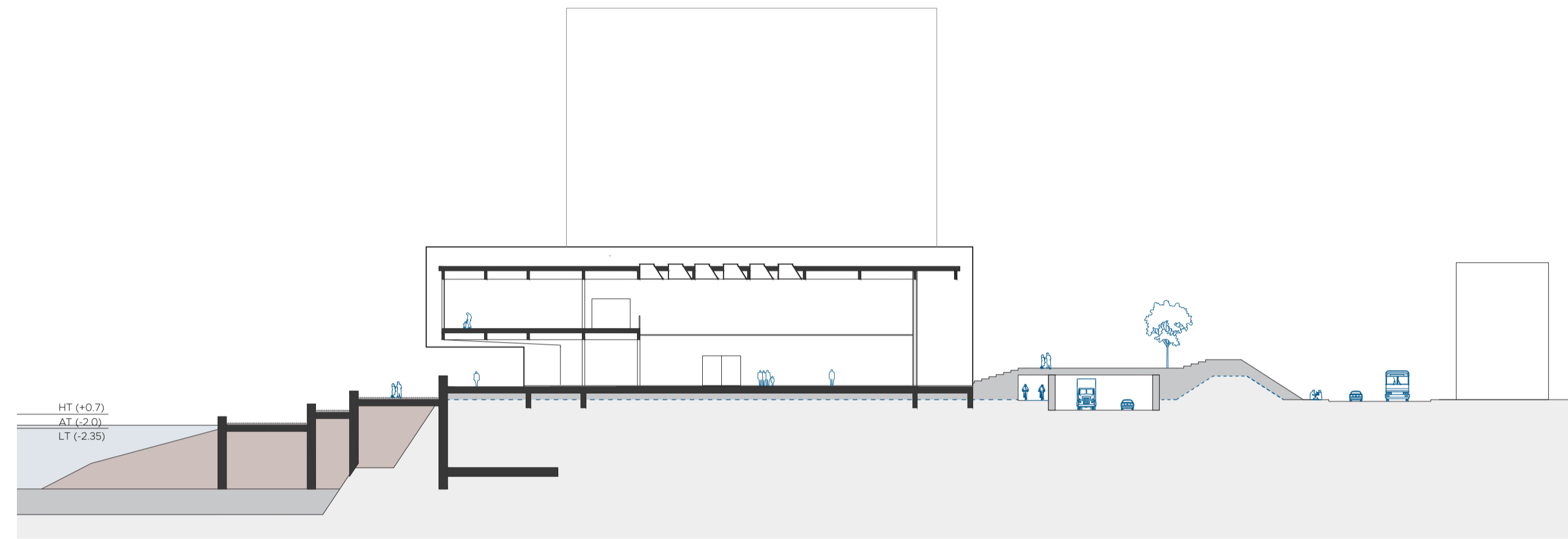
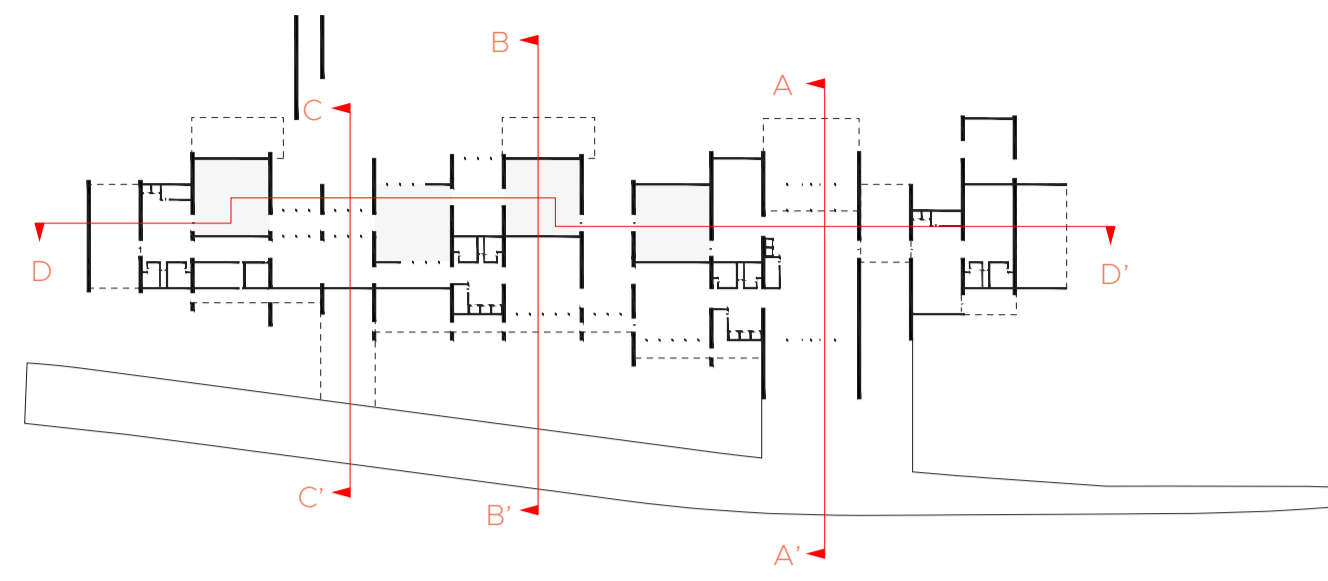
1F Plan 1:500



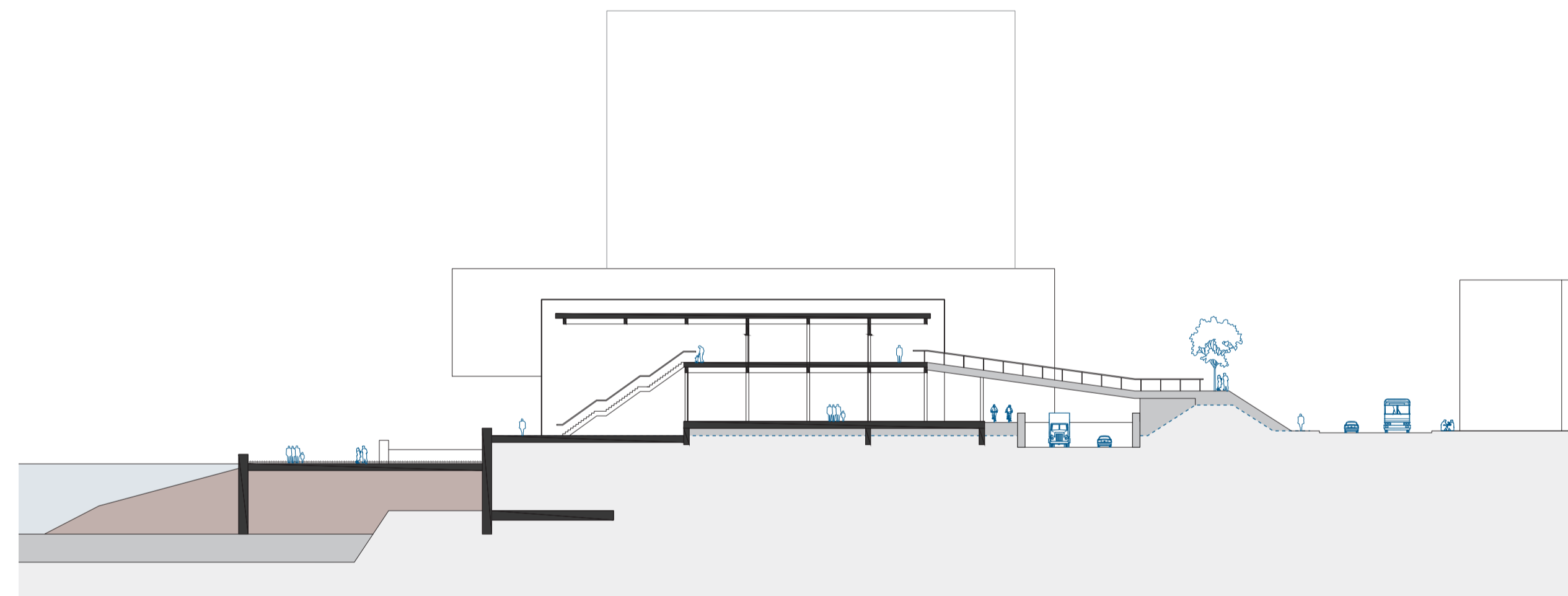
- 1 LOBBY
- 2 STORE
- 3 EXHIBITION HALL 1 - DEPARTURE
- 4 EXHIBITION HALL 2 - ARRIVAL
- 5 EXHIBITION HALL 3 - ESCAPE
- 6 EXHIBITION HALL 4 - RETURN
- 7 PUMP RM
- 8 EQUIP. RM
- 9 BICYCLE PARKING
- 10 FREE EXHIBITION AREA
- 11 RESTAURANT
- 12 MANAGEMENT OFFICE
- 13 STORAGE
- 14 L/UL AREA

GF Plan 1:500

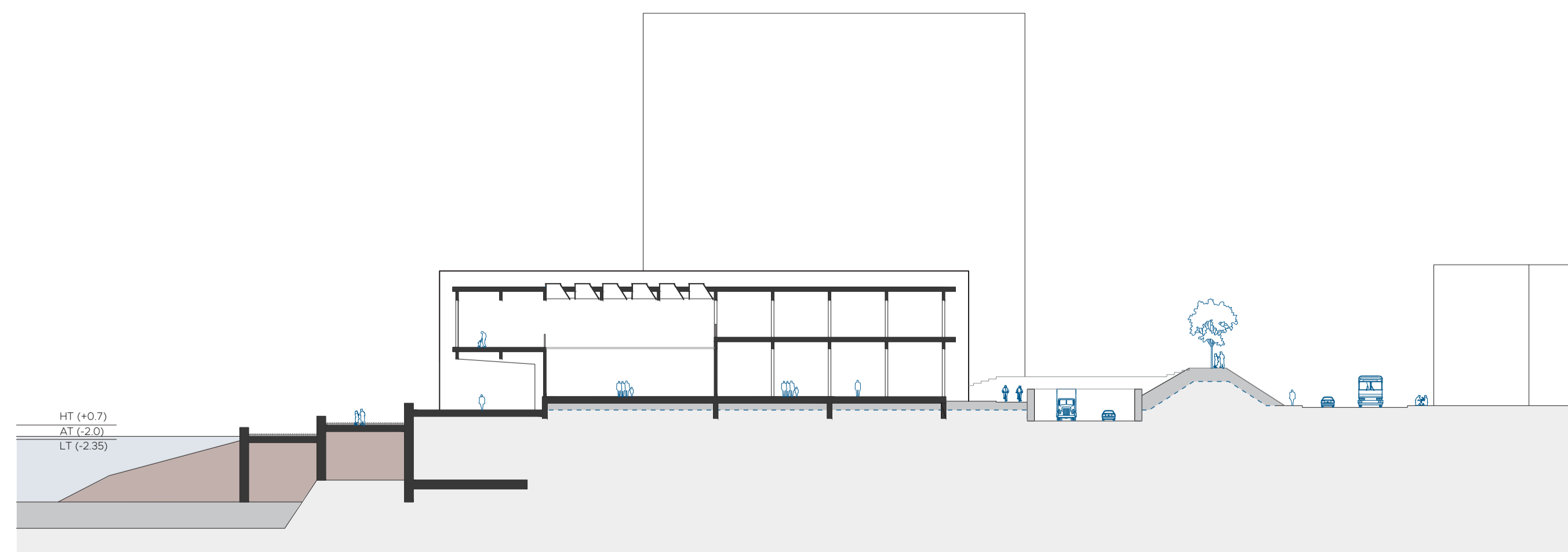
/ DESIGN / Tidal Park and Dike Reinforcement



Section AA' 1:500



Section CC' 1:500



Section BB' 1:500



Harbourfront Promenade



Southern connection to the dyke



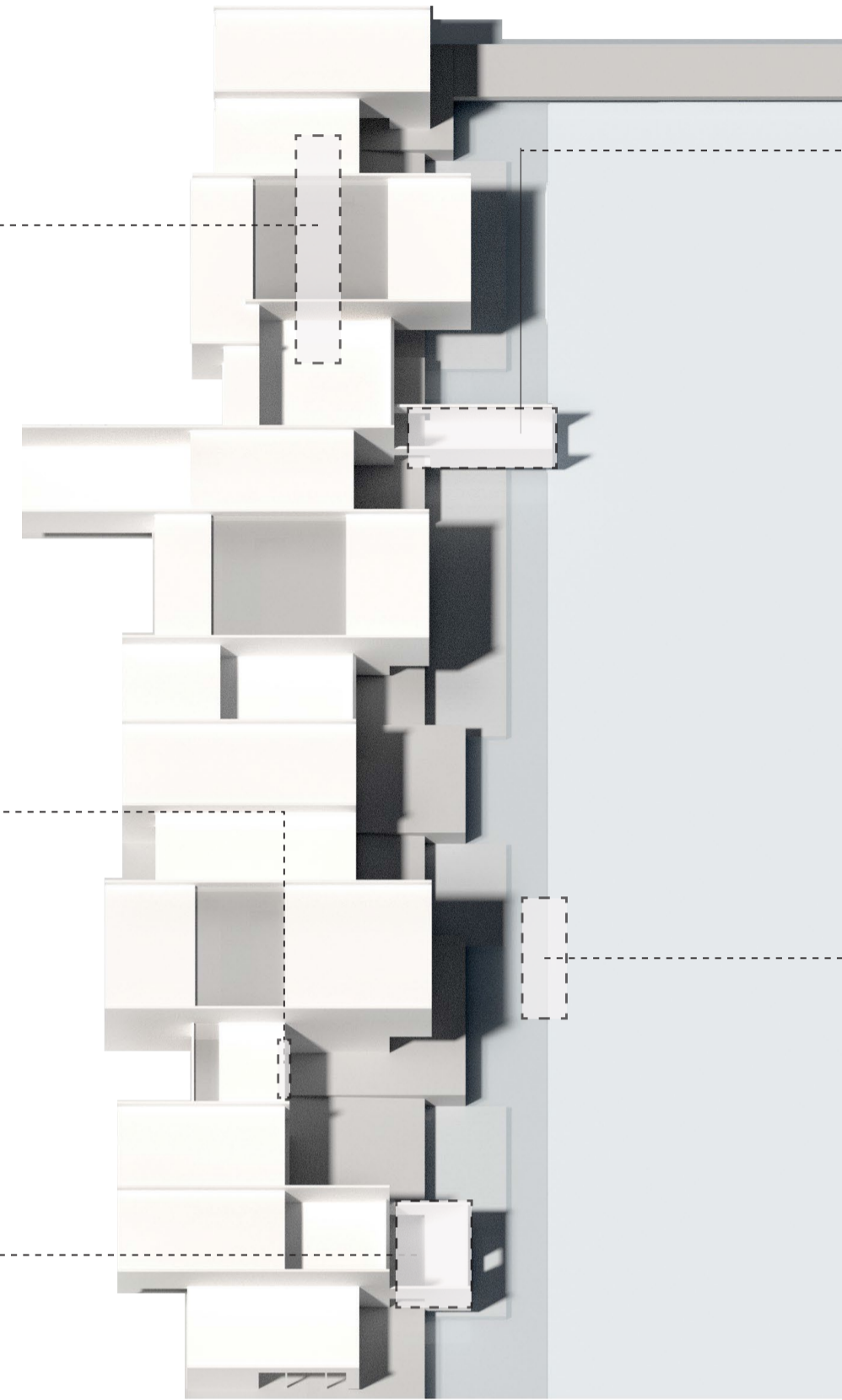
Safe Passage (2016)
Ai Weiwei
Photos/Sculptures



Open Door (2019)
ICY and SOT
Installation



The Sea of Pain (2016)
Raúl Zurita
Poem



A Voyage (2013)
Adrian Paci
Video scene



Mediterranean rescue ship (2020)
Banksy
Real Event



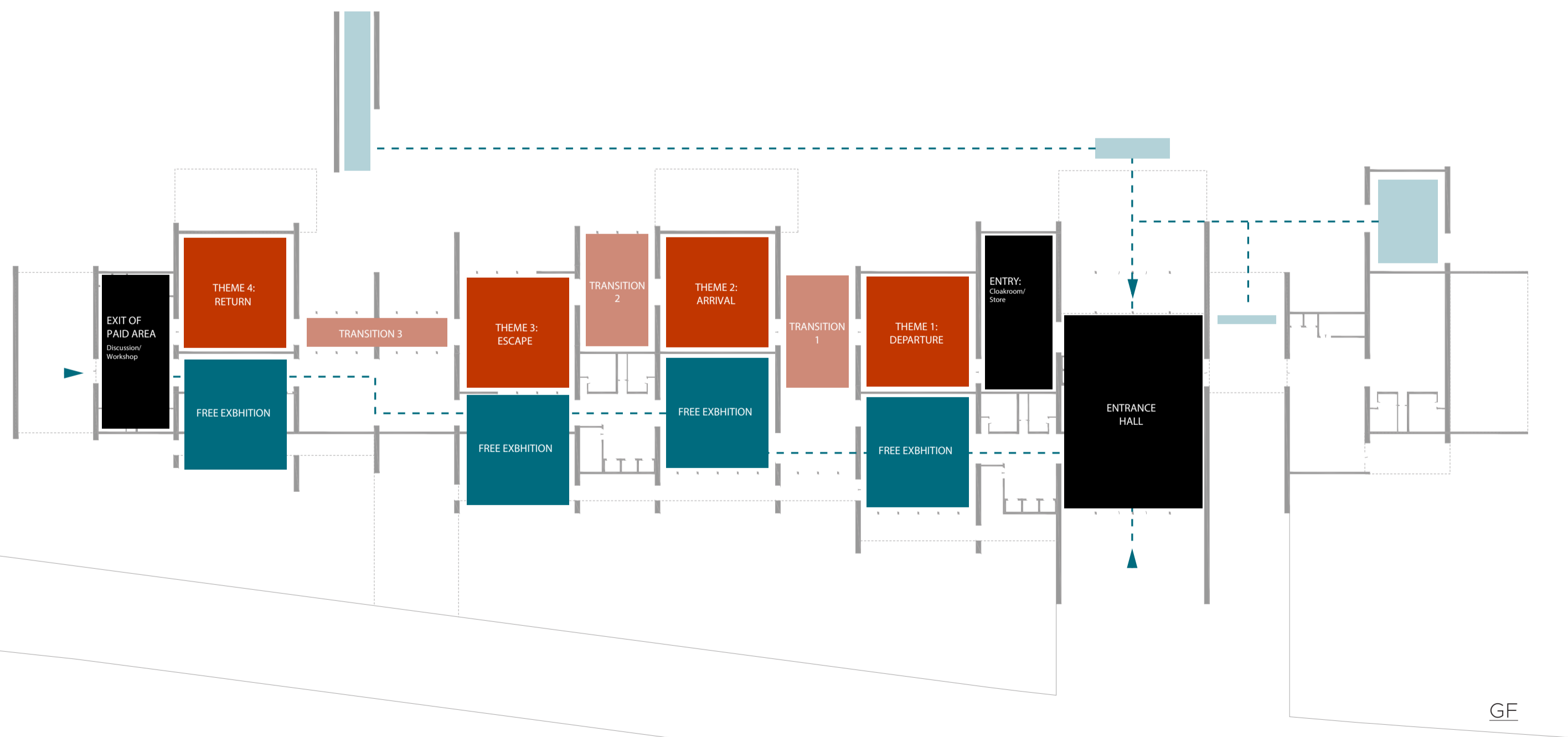
The Sea of Pain (2016)
Raúl Zurita



Open Door (2019)
ICY and SOT



Column (2013)
Adrian Paci



- PAID EXHIBITION AREA
- TRANSITION AREA
- FREE EXHIBITION AREA

GF

II. Indoor Exhibition Halls



Exhibition Hall 2 & 4 (Departure & Return)



GF Free Exhibition Area



Exhibition Hall 1 & 3 (Departure & Escape)



Mezzanine Floor (Exhibition)

III. Indoor & Outdoor Transitions



Indoor Transition between exhibition halls

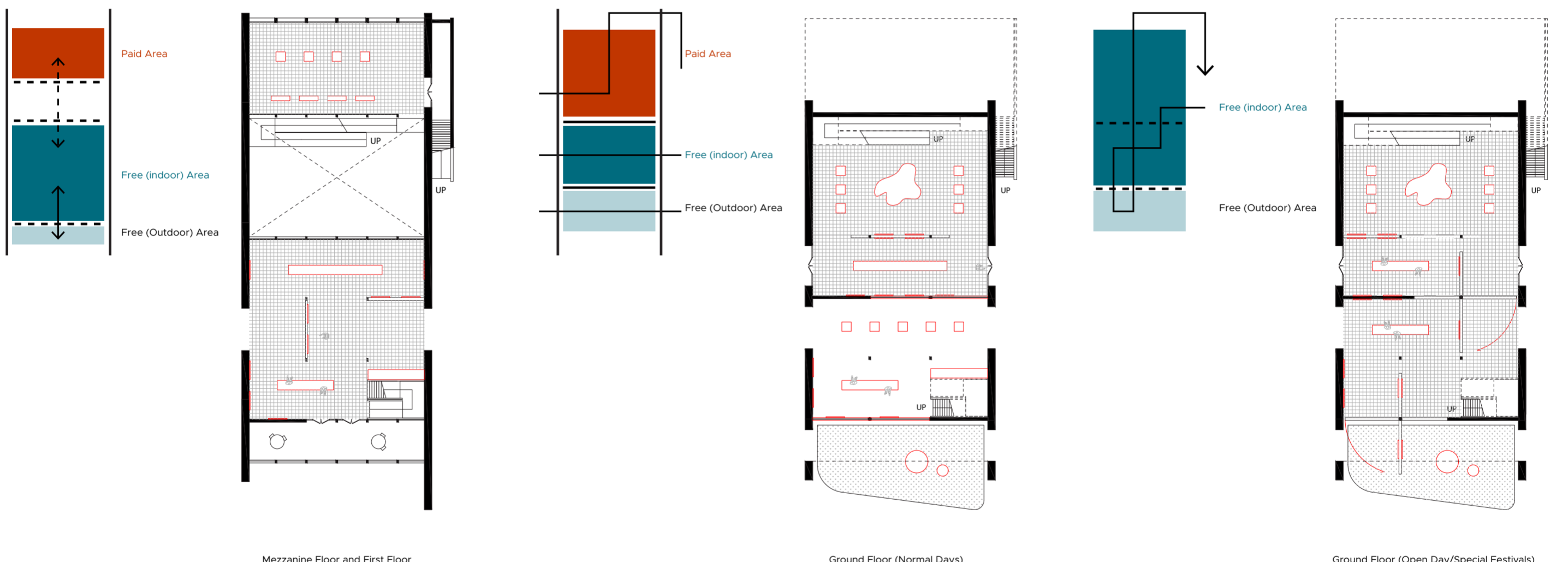


Outdoor Transition between exhibition halls

/ SPATIAL BOUNDLESSNESS / *Breaking through spatial boundaries*



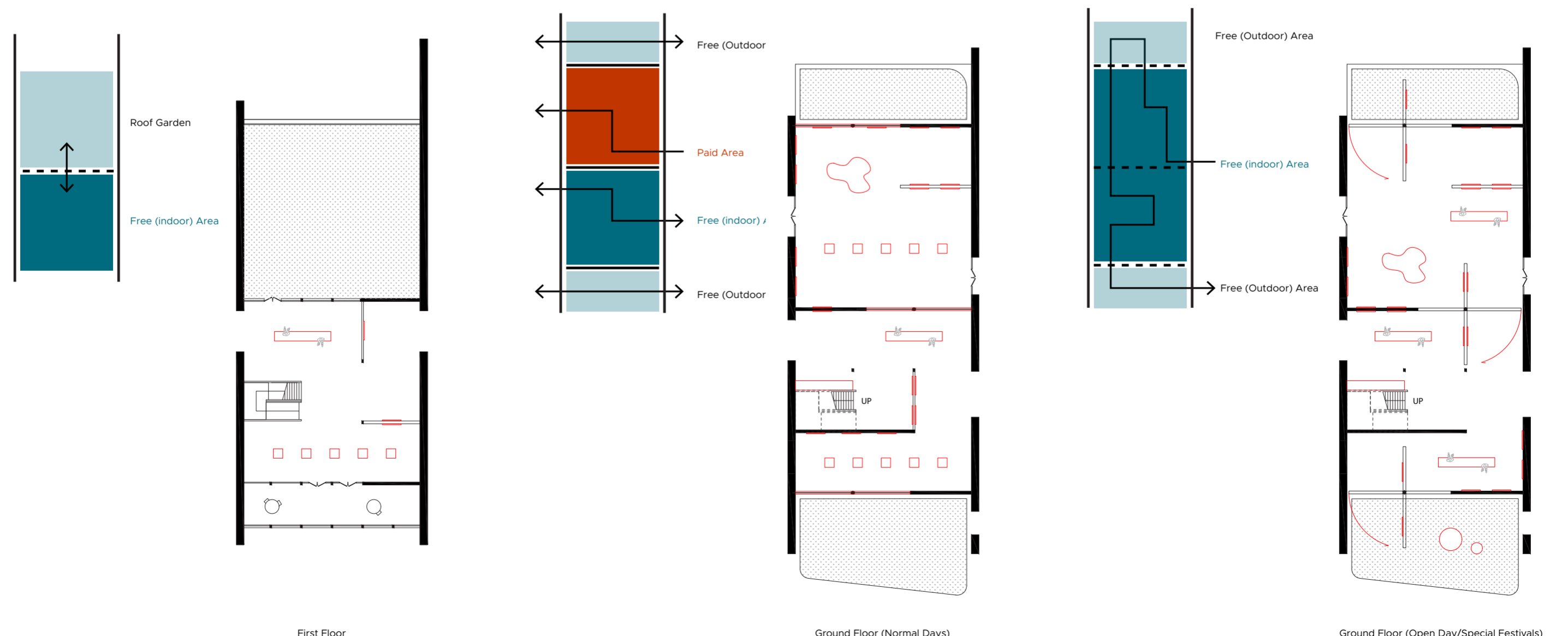
GF Free exhibition zone with pivot walls opened



Mezzanine Floor and First Floor

Ground Floor (Normal Days)

Ground Floor (Open Day/Special Festivals)



First Floor

Ground Floor (Normal Days)

Ground Floor (Open Day/Special Festivals)

/ STRUCTURE / Loading bearing AAC blockwork, pilasters and steel beams

I. Choice of Materials, Wall System and Reference Projects

Name of project: Villa Mörnäs

Location: Stockholm, Sweden

Architect: Fourfoursixsix

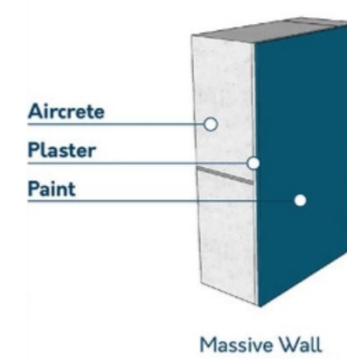
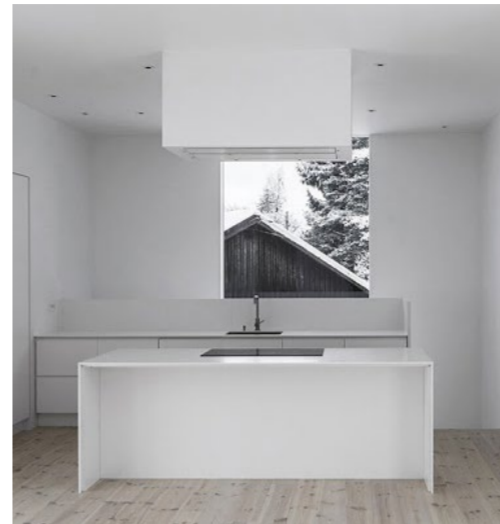
Year of completion: 2014

Design specifications:

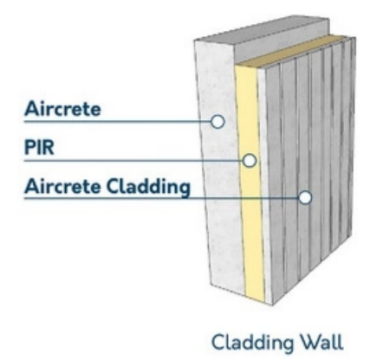
- single-leaf 300mm insulative aerated concrete block, natural lime render



(Source: Divisare)



Massive Wall



Cladding Wall

Name of project: Hornehoof

Location: Vogelsbleek, NL

Architect: Inbo Architecten, Architecten Aan de Maas

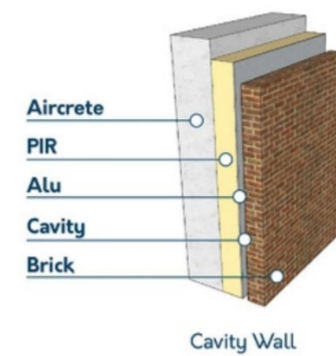
Year of completion: 2017

Design specifications:

- double-leaf 300mm aerated concrete block, PIR insulation panels, brick facing



(Source: weertdegekste.nl)

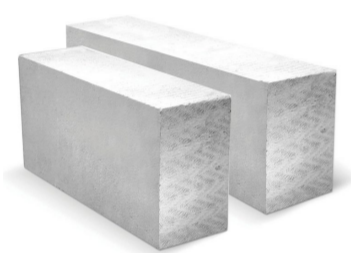


Cavity Wall

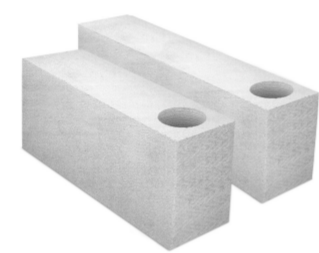


CFS Aircrete Wall

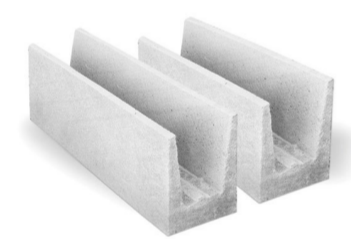
Types of Application of Aircrete (AAC) on walls
(Source: Willem van Boggelen)



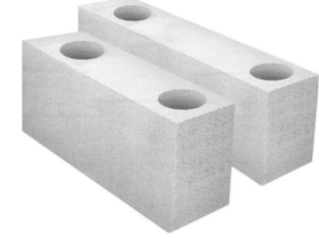
Type 1: Solid block (300x200x608mm)



Type 2: O block (300x200x608mm)



Type 3: U block (300x200x608mm)



Type 4: Double-O block (300x200x608mm)

Clay Brick Facing

Insulation

AAC blockwork

Type 1

Type 3

Type 4

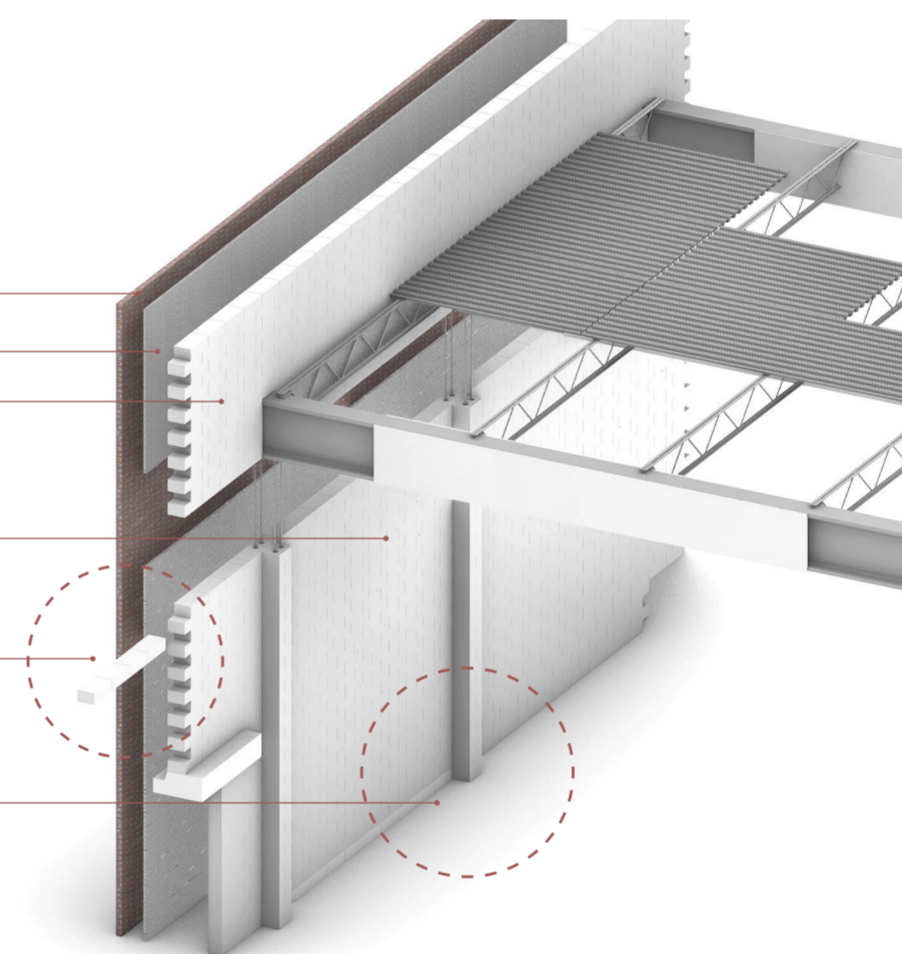
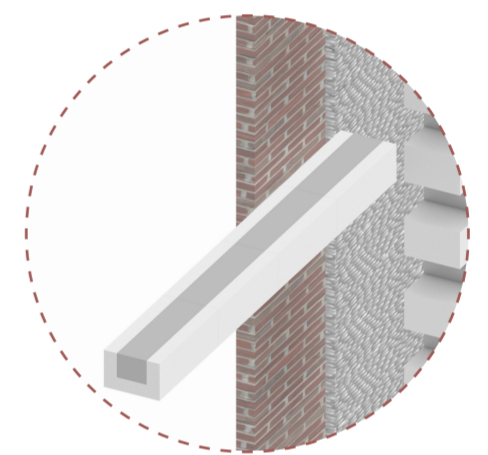
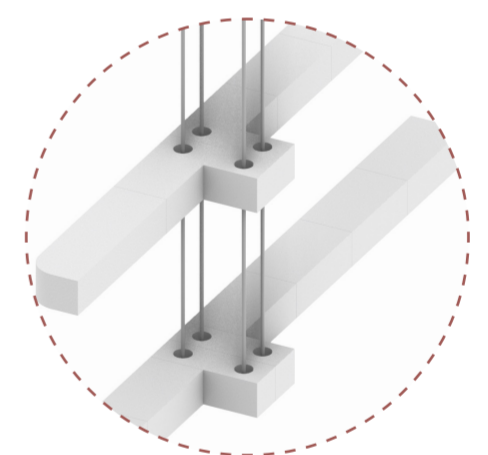


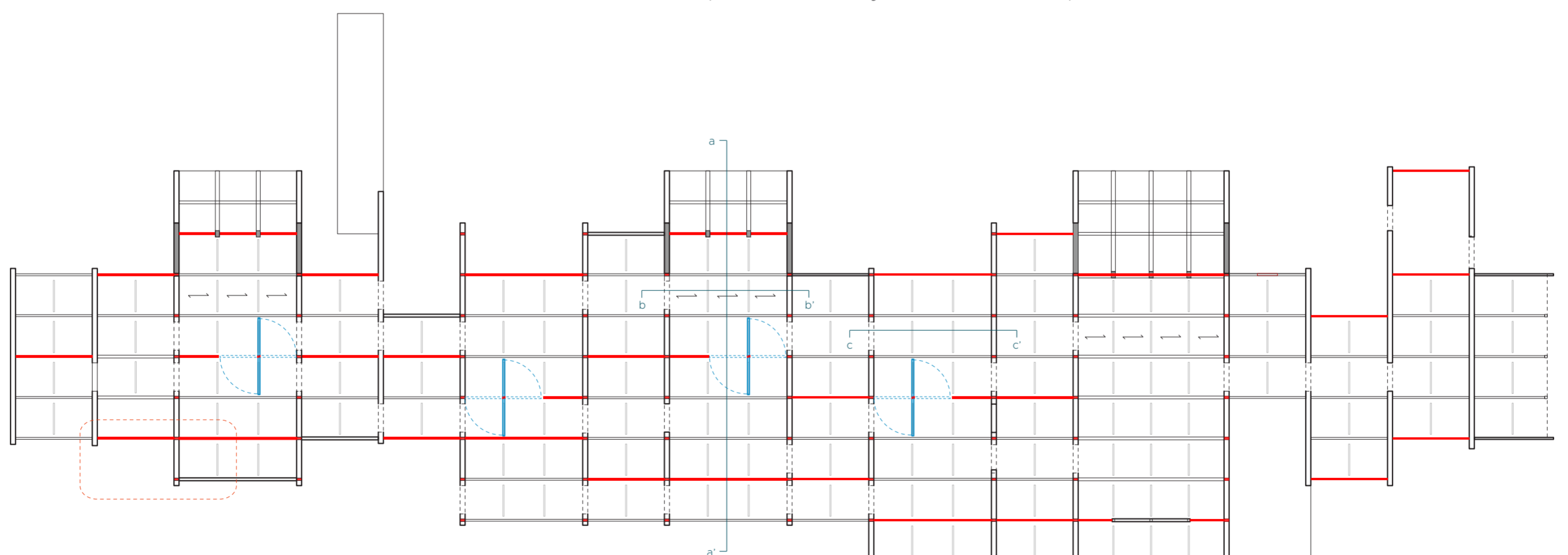
Illustration of structural composition (Wall to floor system connection)



Type 3: U block



Type 4: Pilasters made by double-O blocks



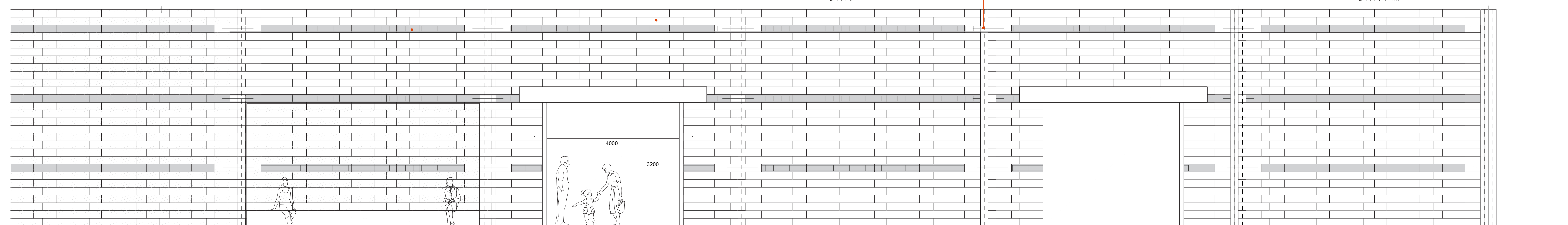
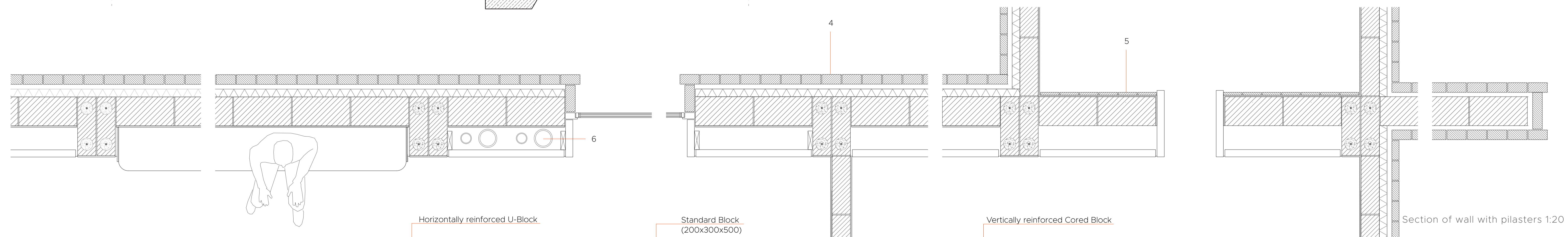
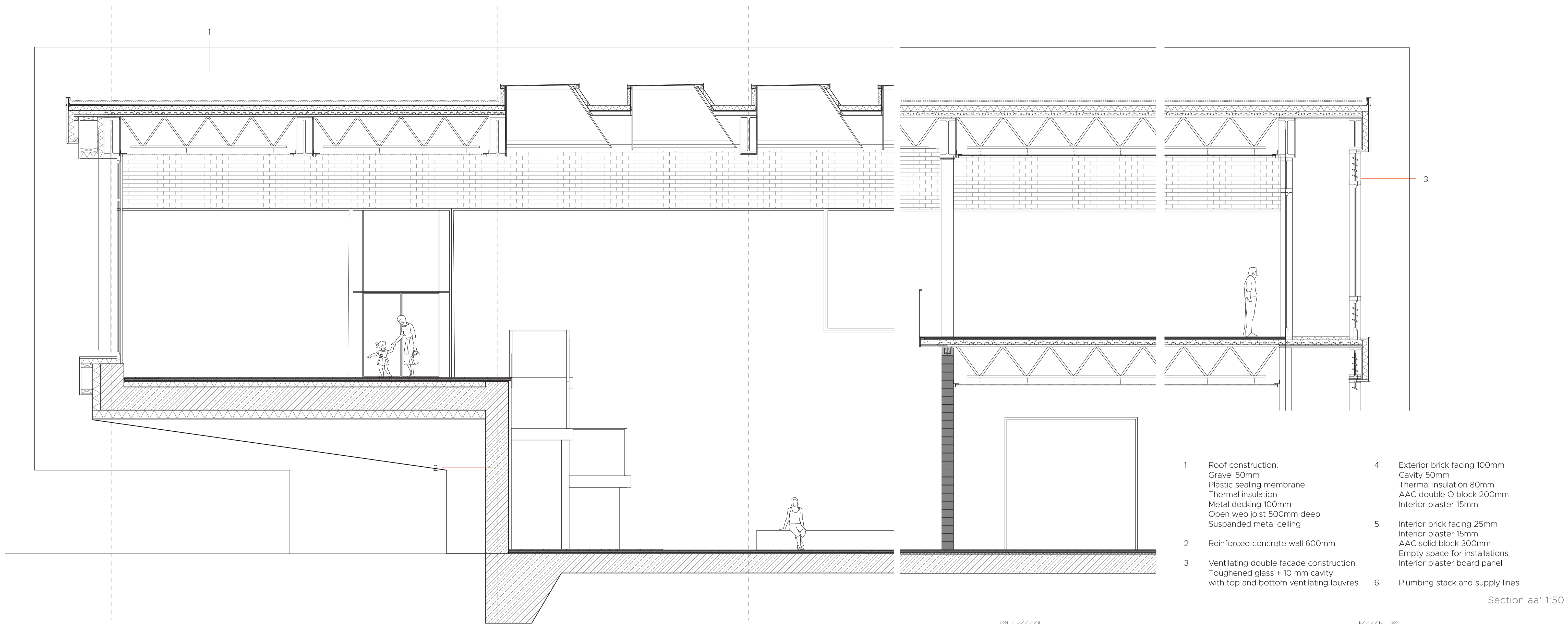
AAC Structural wall (Block based, 300mm thick)

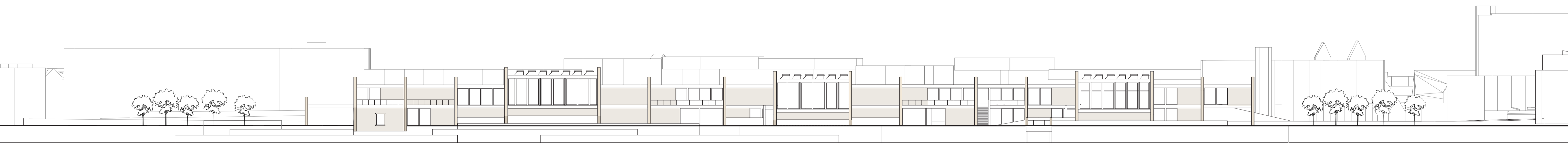
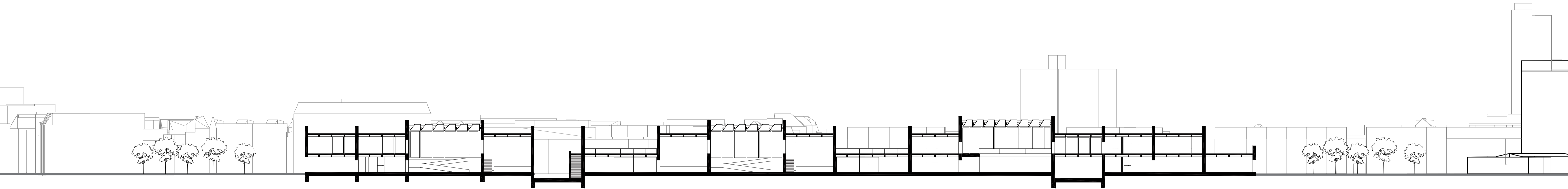
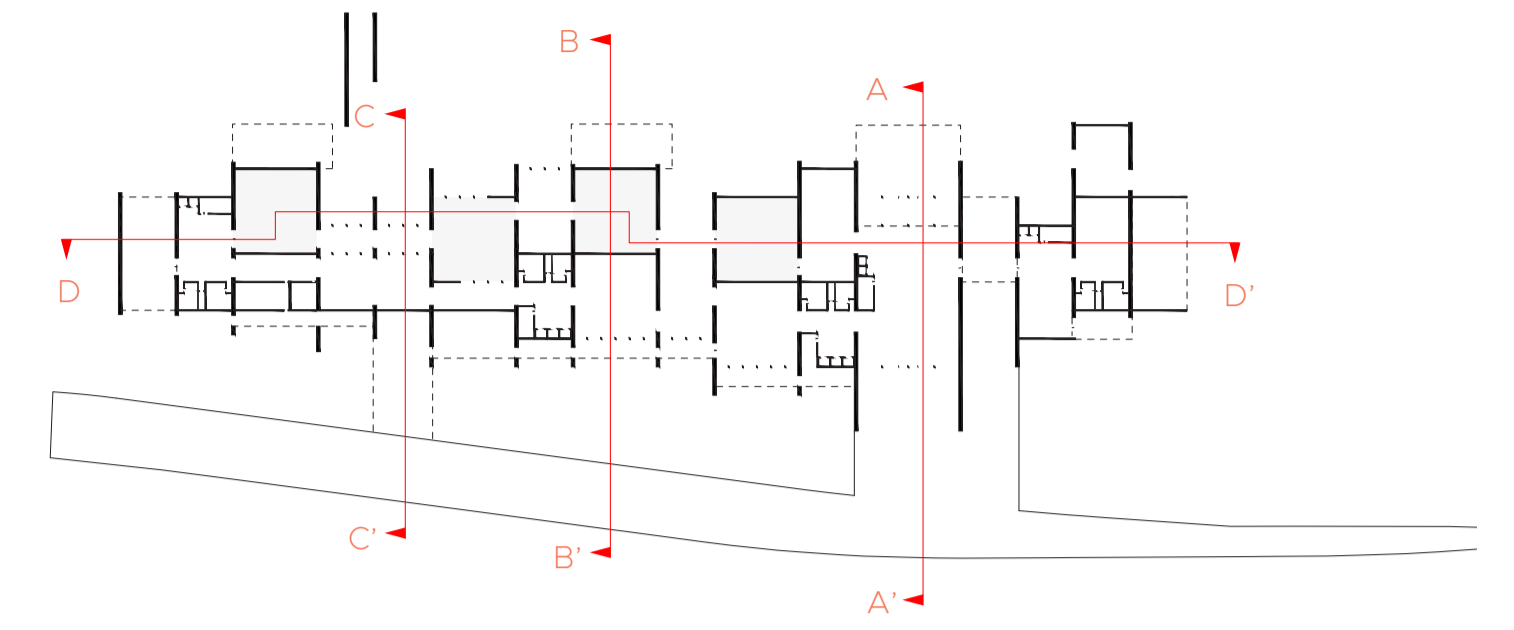
Secondary Steel Open web truss (800 deep)

Primary Steel Universal Beam (1000mm deep)

AAC Structural wall (Block based, 200mm thick)

Pilasters (Open Center & Alternate), 200mm thick





/ ANALYSIS / Programs, circulation

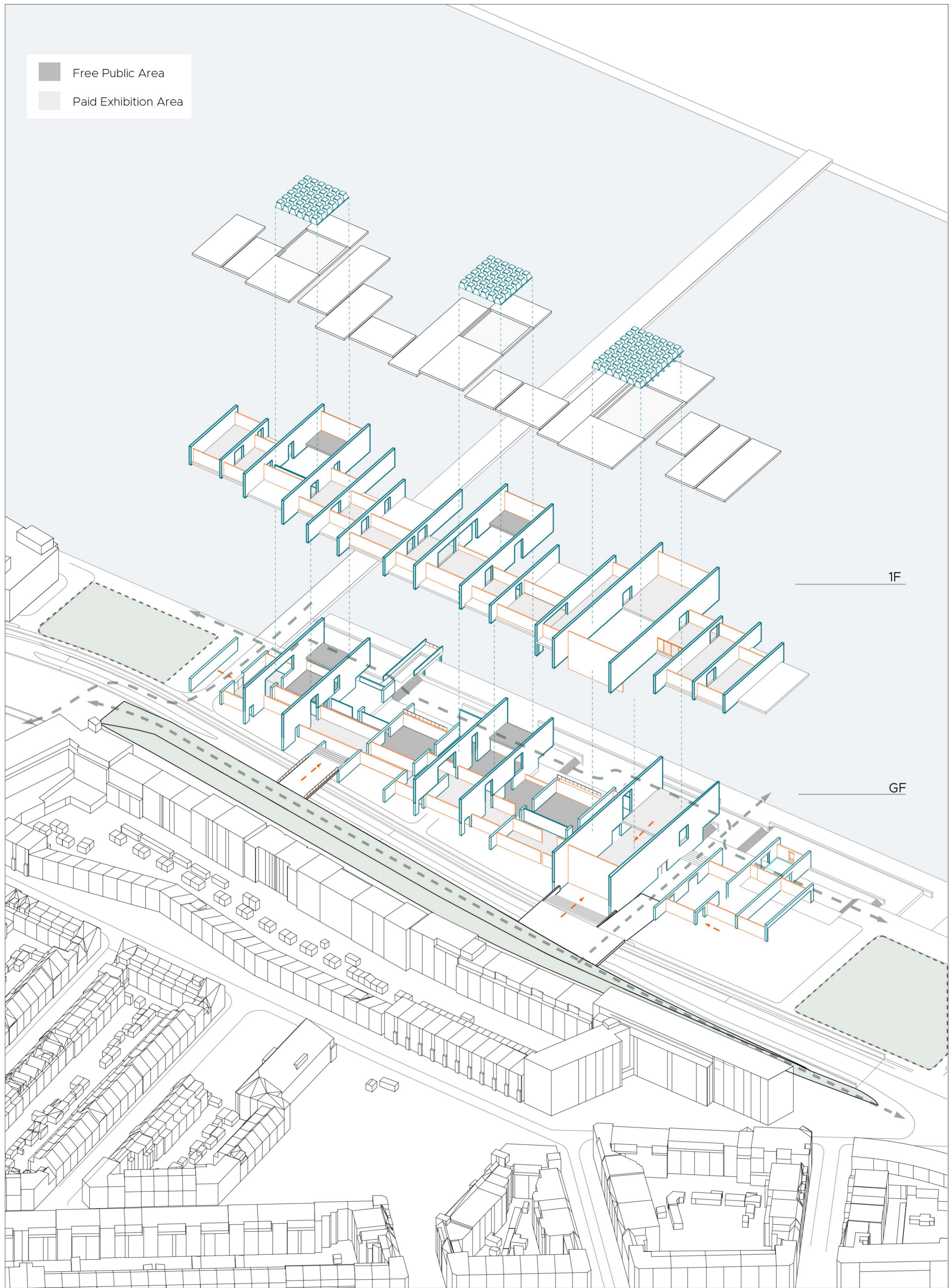
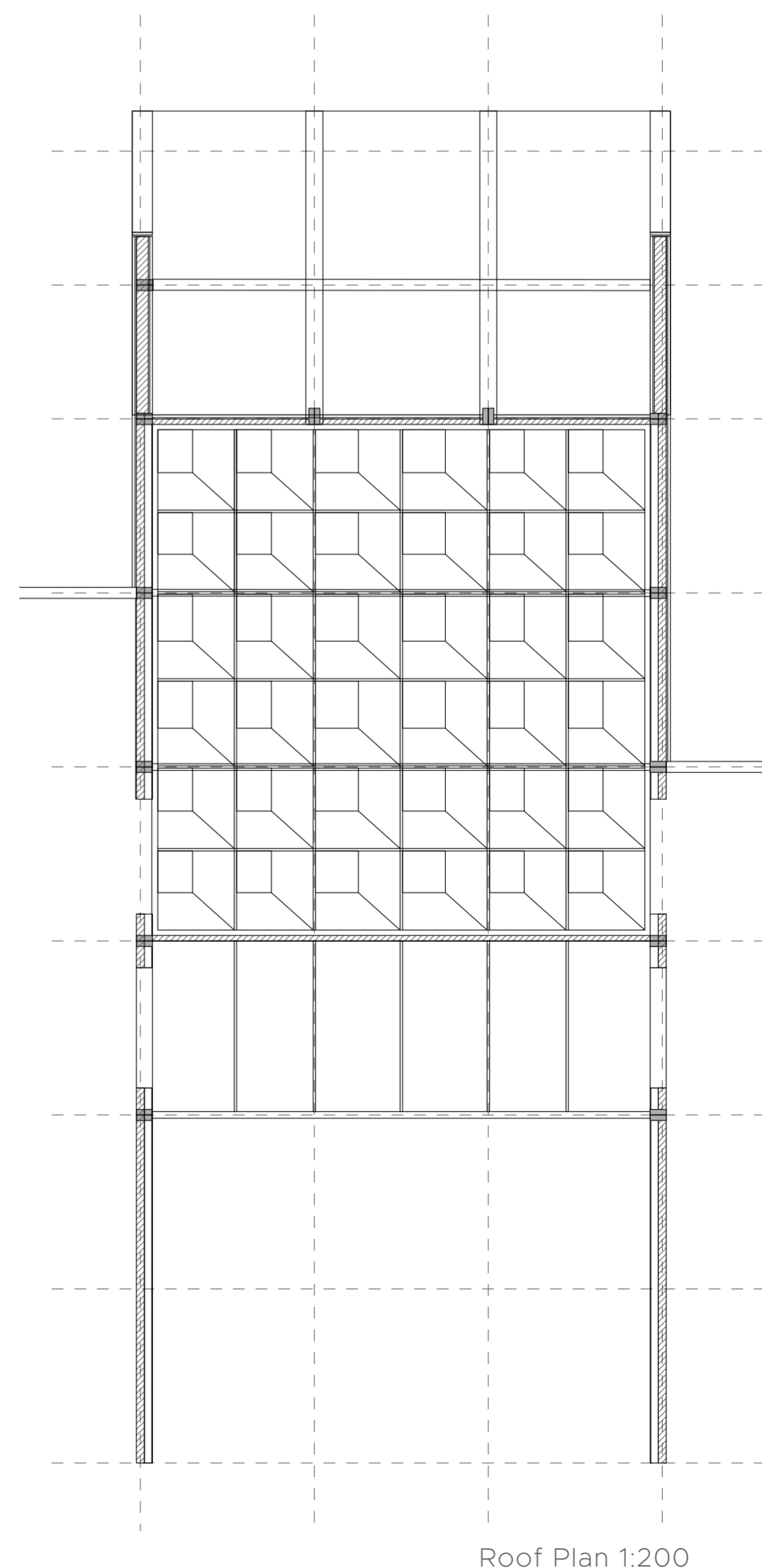
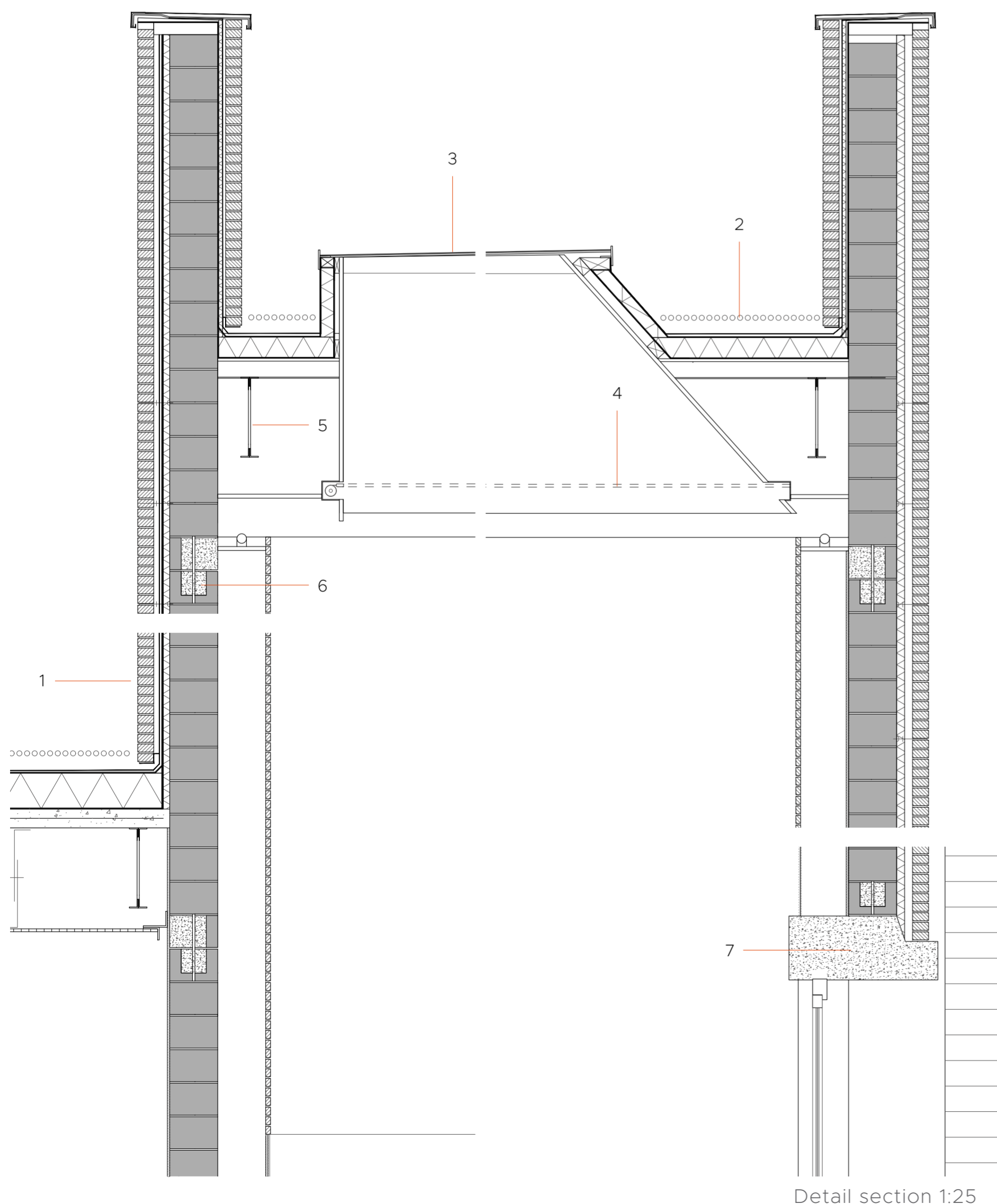
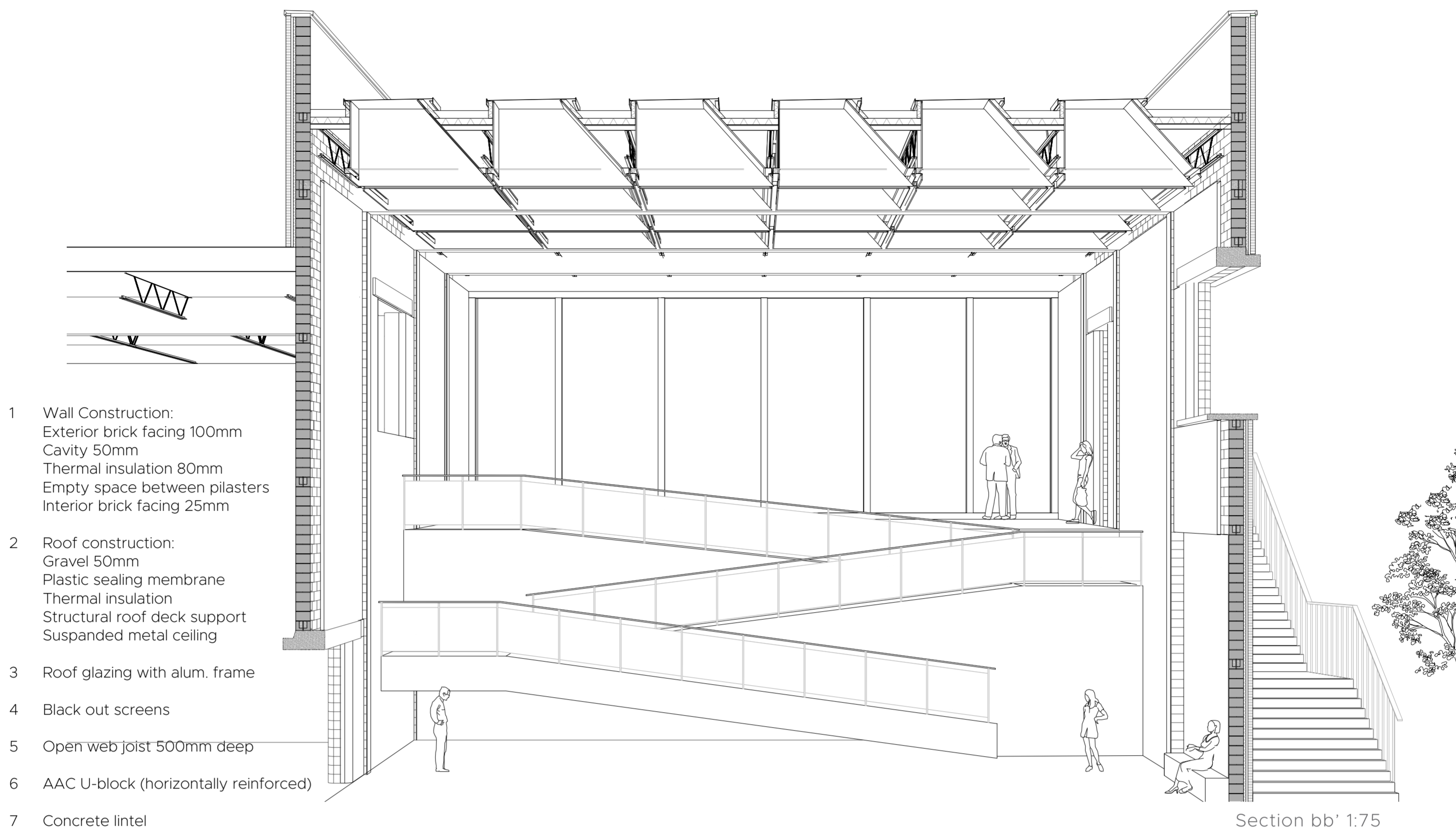


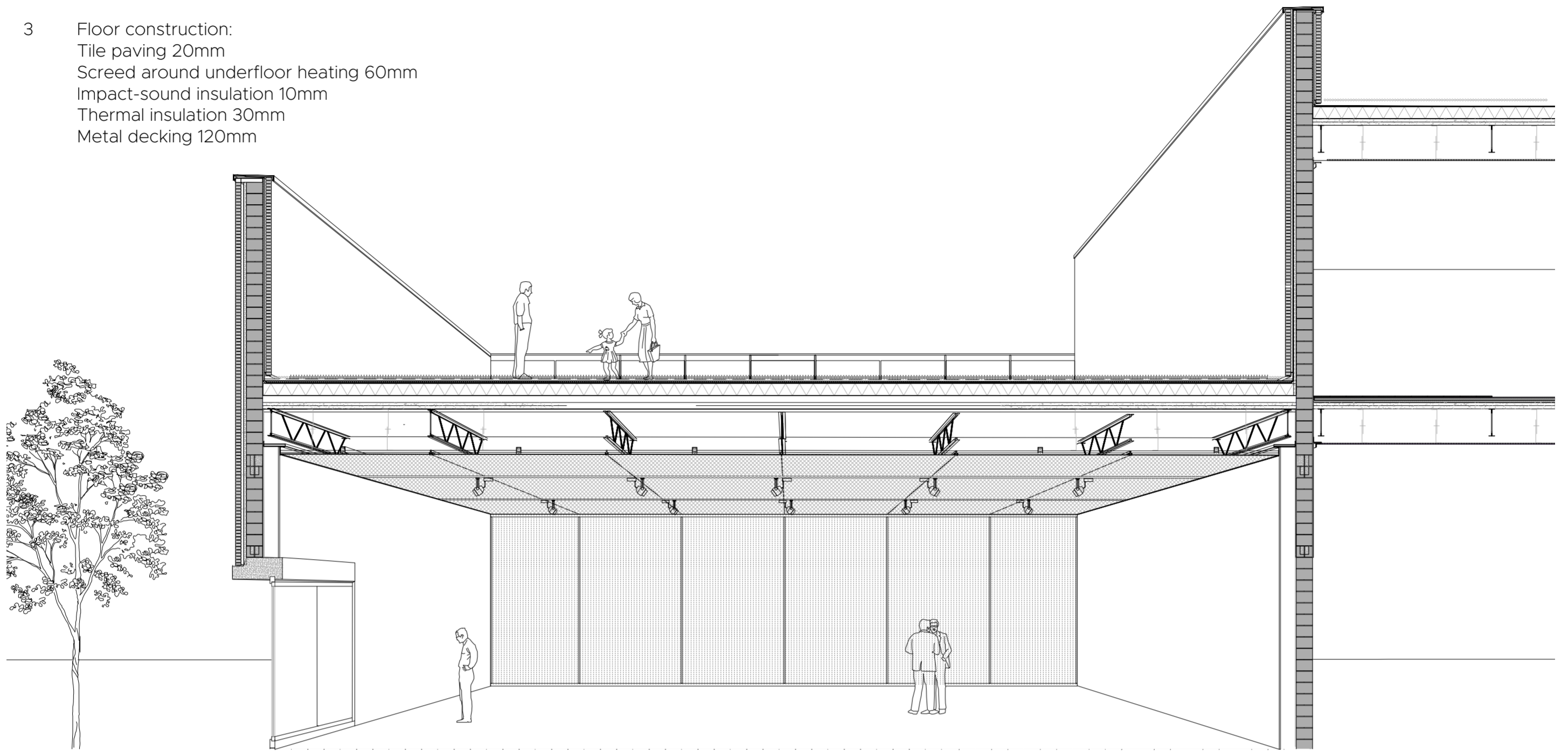
Illustration of context-building relationship

/ HALL NO. 2 & 4 (ARRIVAL & RETURN) / *Visibility, Openness*

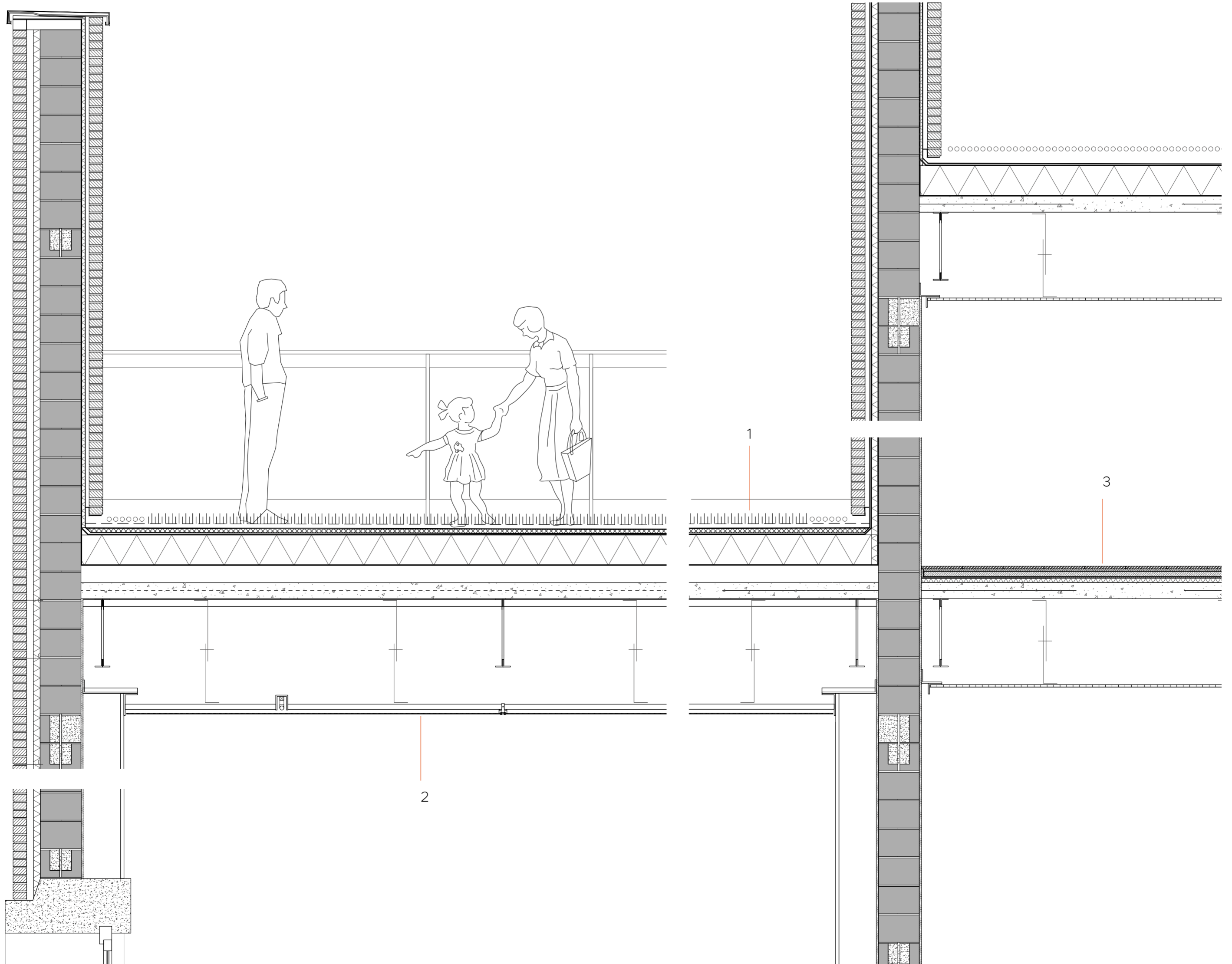


/ HALL NO. 1 & 3 (DEPARTURE & ESCAPE) / Artificial Light, Rigidity

- 1 Green Roof Construction:
Substrate, filter mat 80mm
Bituminous roofing seal
Polystyrene insulation 200mm
Metal decking 120mm
- 2 Suspended metal ceiling
- 3 Floor construction:
Tile paving 20mm
Screed around underfloor heating 60mm
Impact-sound insulation 10mm
Thermal insulation 30mm
Metal decking 120mm



Section cc' 1:75



Detail section 1:25

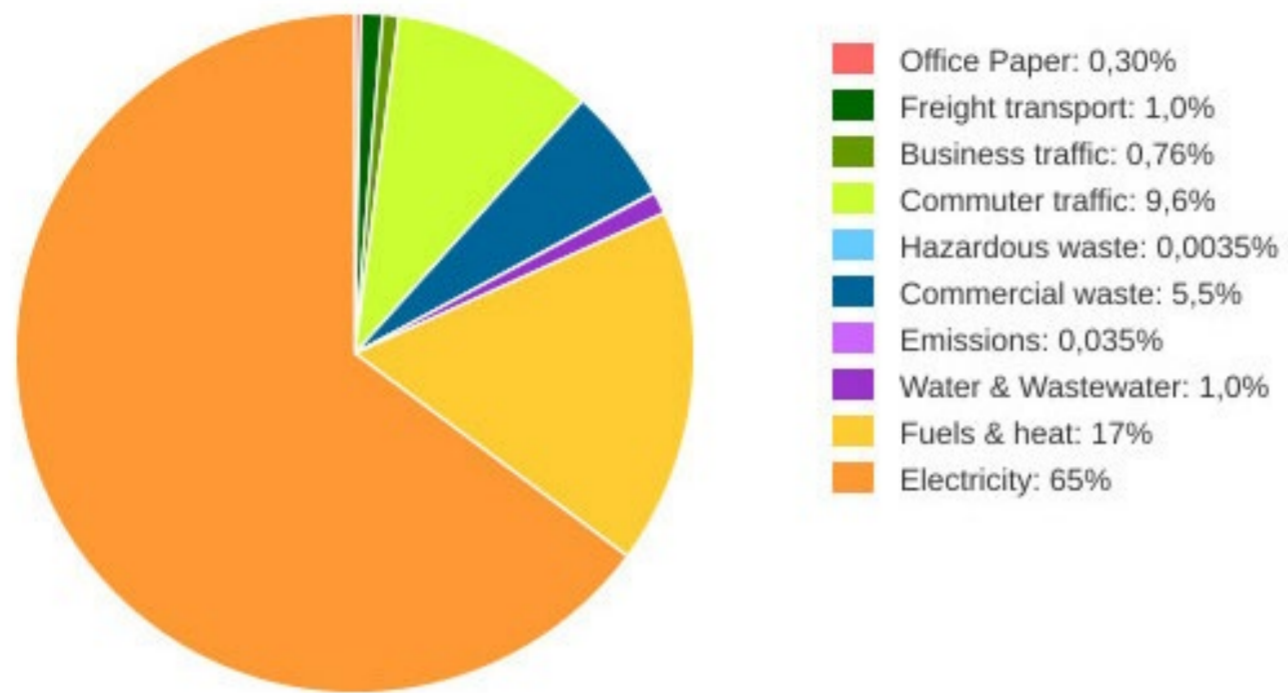
I. Energy Consumption and Conservation in museums

Energy Consumption (%) in Museums



Measures of Energy Conservation
(Reducing use of Electricity & Heat Energy)

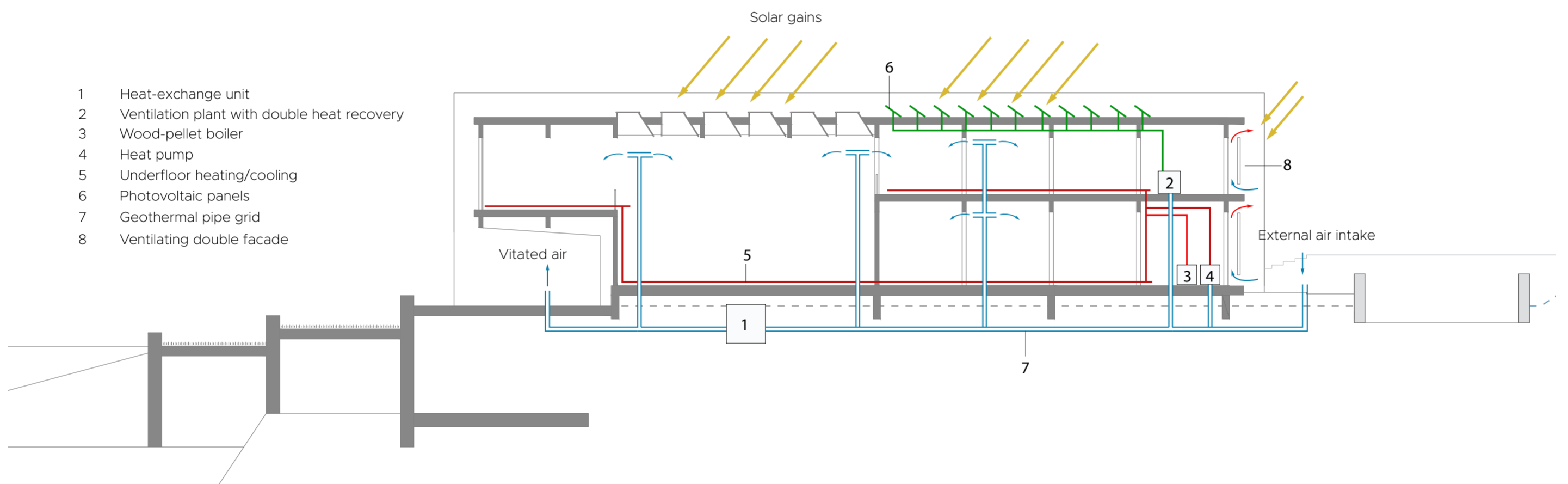
Average environmental impact of the museums in Netherlands



Specific needs of museums	Components	Measures
Stable indoor climate (Thermal capacity)	Walls/Roof/Floor	Insulation
		Cavity
		Masonry structure
Electricity/Heating	Building system	Double/Triple glazing
		Photovoltaic panels /Solar hot water storage
Cooling	Building system	Sea water cooling
		Green Roof
		Rainwater collection
Dehumidification (Moisture buffering)	Walls	Vapor barrier
Ventilation	Building system	Natural Ventilation

Source: Envirometer, 2017

II. Energy Use (Ventilation/Heating/Cooling)



III. Overall Passive Strategies

