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AR4AP120  
Public Building Graduation Studio



# ECONOMISCHE AGENDA SAMEN WERKEN



ONS  
**NIJ BEGUN**  
MAKEN WE SAMEN

13 juni 2025



# Nij begun

Op weg naar erkenning,  
herstel en perspectief

User-Driven

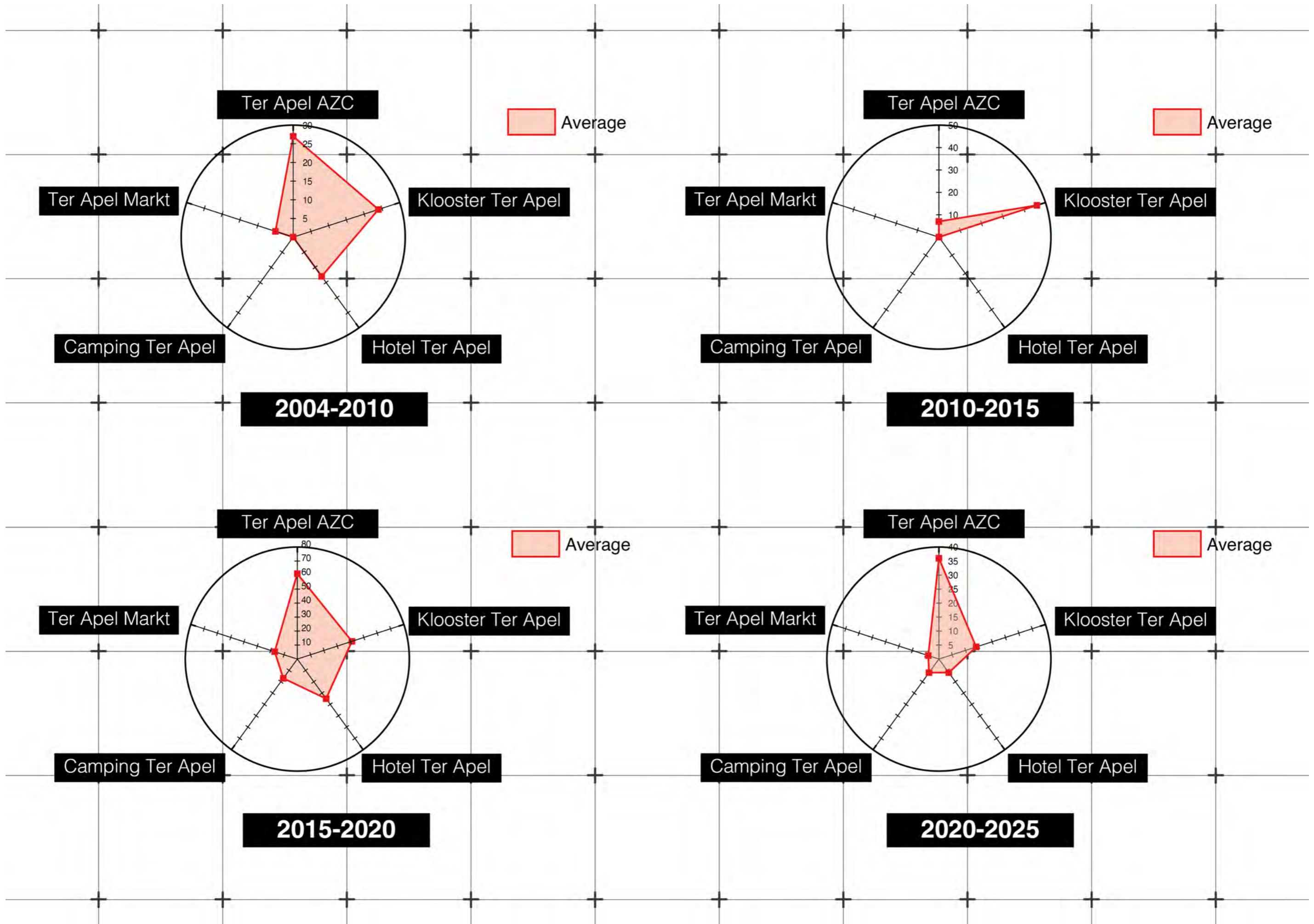


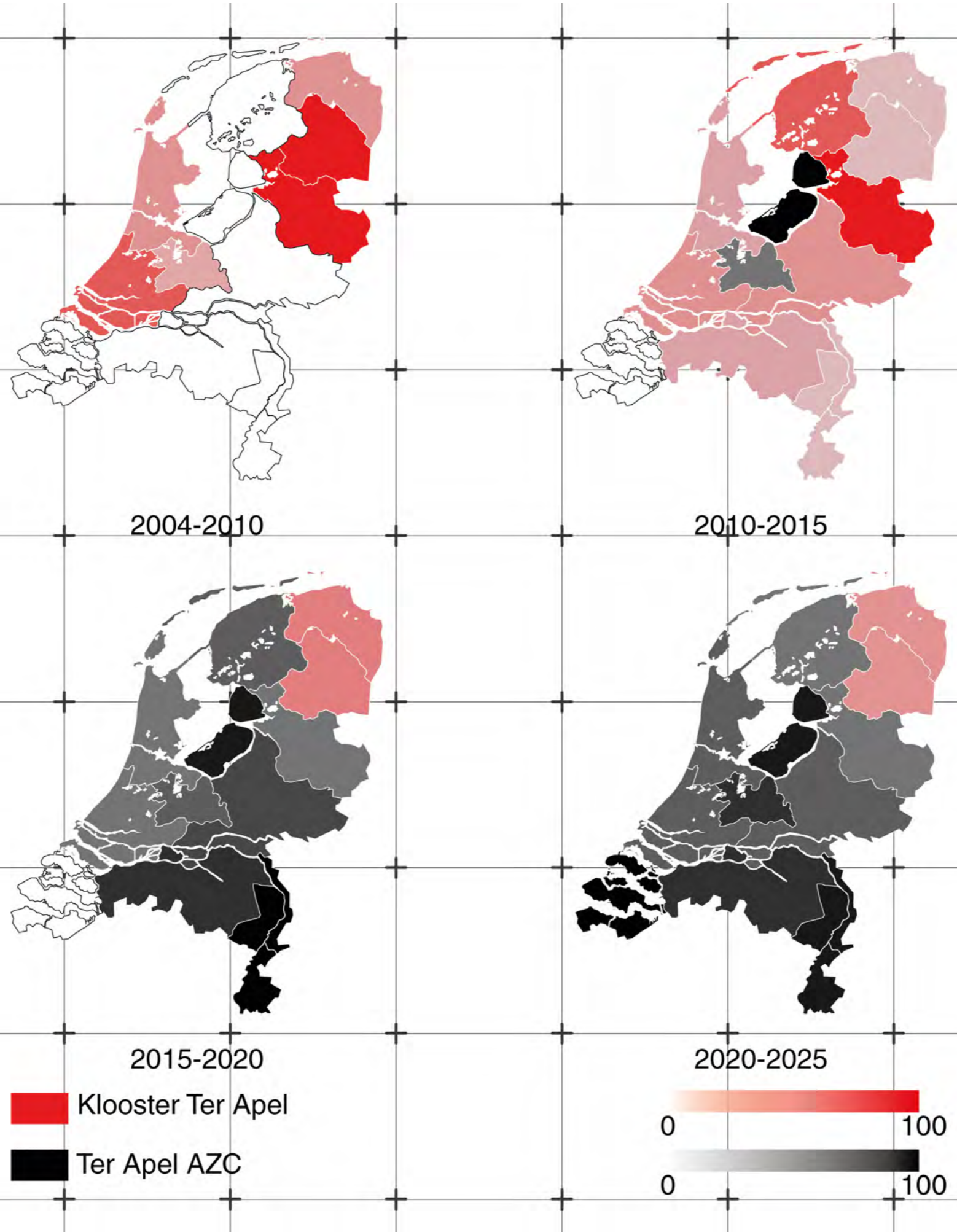
Adaptive

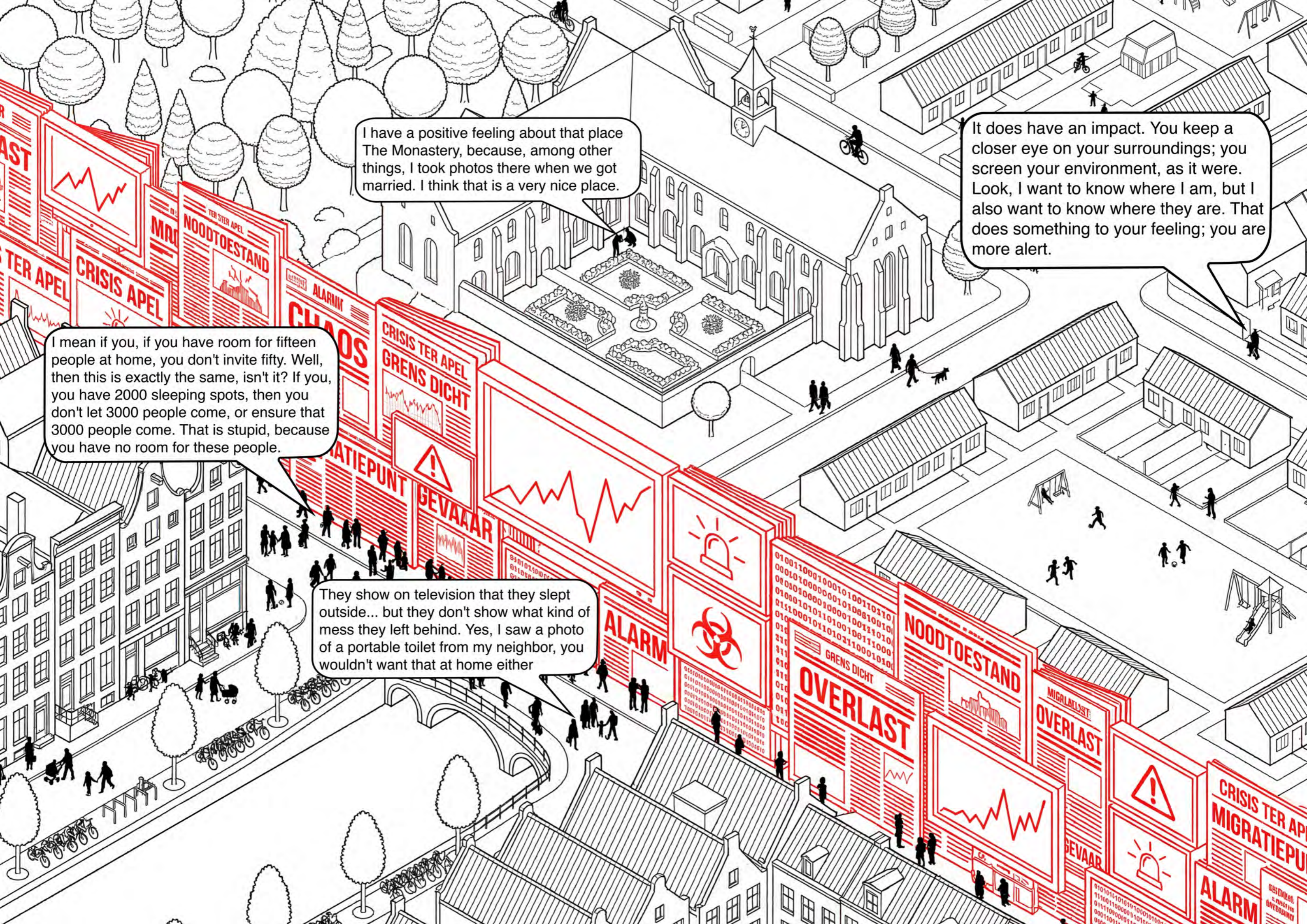


Data-Driven









I have a positive feeling about that place The Monastery, because, among other things, I took photos there when we got married. I think that is a very nice place.

It does have an impact. You keep a closer eye on your surroundings; you screen your environment, as it were. Look, I want to know where I am, but I also want to know where they are. That does something to your feeling; you are more alert.

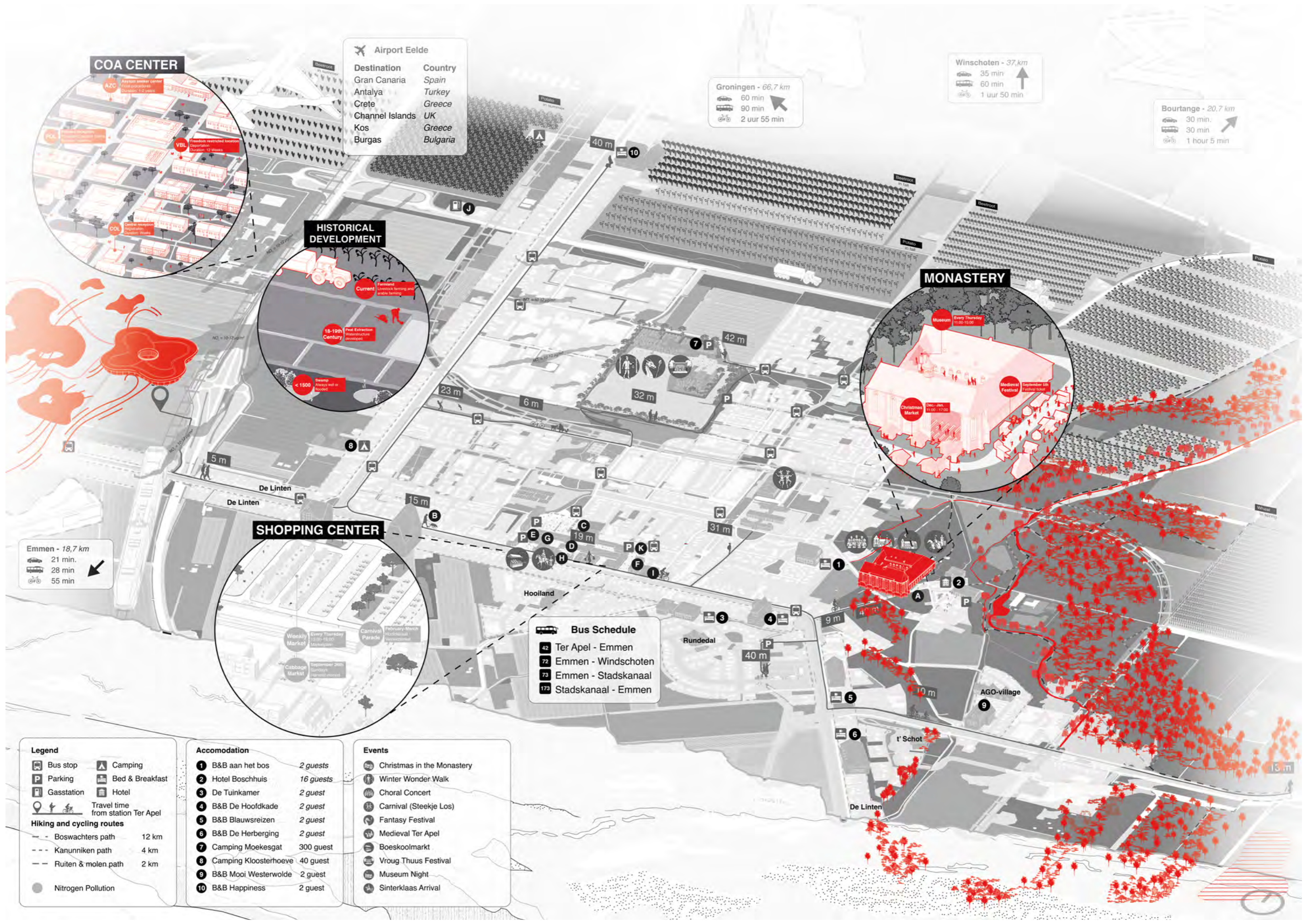
I mean if you, if you have room for fifteen people at home, you don't invite fifty. Well, then this is exactly the same, isn't it? If you, you have 2000 sleeping spots, then you don't let 3000 people come, or ensure that 3000 people come. That is stupid, because you have no room for these people.

They show on television that they slept outside... but they don't show what kind of mess they left behind. Yes, I saw a photo of a portable toilet from my neighbor, you wouldn't want that at home either

CRISIS TER APEL  
MIGRATIEPUNT  
ALARM



# The Spatial Mediator | Tourist Map Conclusion



**Airport Eelde**

Destination	Country
Gran Canaria	Spain
Antalya	Turkey
Crete	Greece
Channel Islands	UK
Kos	Greece
Burgas	Bulgaria

**Groningen - 66,7 km**  
 60 min  
 90 min  
 2 uur 55 min

**Winschoten - 37, km**  
 35 min  
 60 min  
 1 uur 50 min

**Bourtange - 20,7 km**  
 30 min  
 30 min  
 1 hour 5 min

**Emmen - 18,7 km**  
 21 min.  
 28 min  
 55 min

**Bus Schedule**

42	Ter Apel - Emmen
72	Emmen - Winschoten
73	Emmen - Stadskanaal
173	Stadskanaal - Emmen

**Legend**

	Bus stop		Camping
	Parking		Bed & Breakfast
	Gasstation		Hotel
	Travel time from station Ter Apel		
<b>Hiking and cycling routes</b>			
	Boswachters path	12 km	
	Kanunniken path	4 km	
	Ruiten & molen path	2 km	
	Nitrogen Pollution		

**Accommodation**

1	B&B aan het bos	2 guests
2	Hotel Boschhuis	16 guests
3	De Tuinkamer	2 guest
4	B&B De Hoofdkade	2 guest
5	B&B Blauwsreizen	2 guest
6	B&B De Herberging	2 guest
7	Camping Moekegat	300 guest
8	Camping Kloosterhoeve	40 guest
9	B&B Mooi Westerwolde	2 guest
10	B&B Happiness	2 guest

**Events**

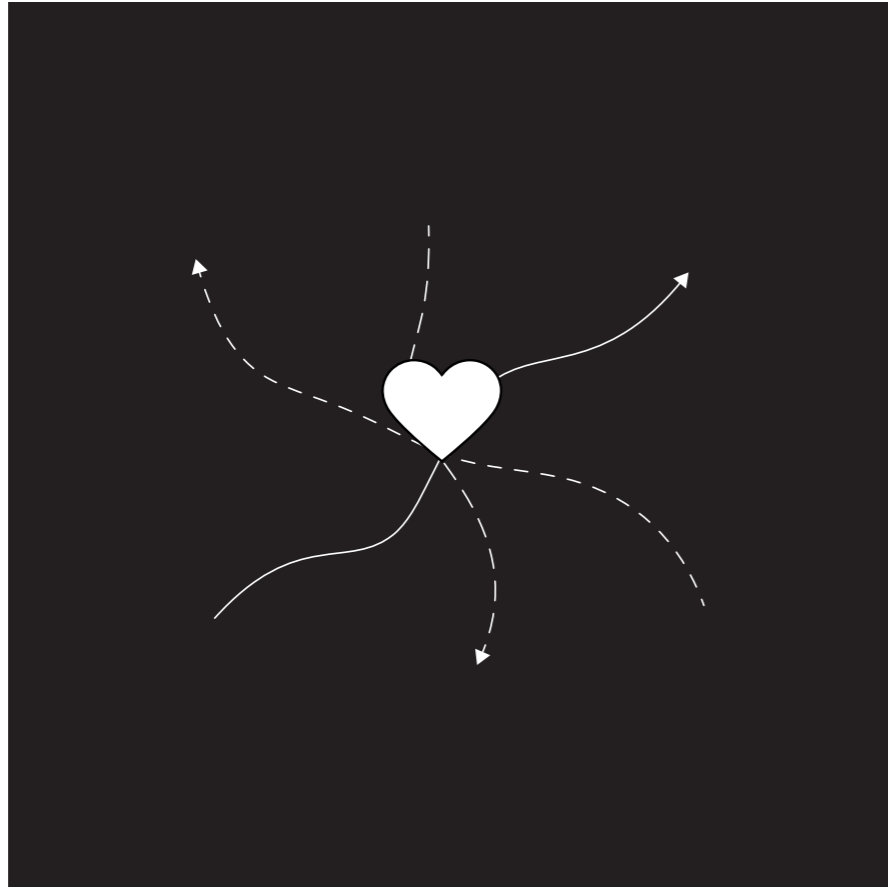
	Christmas in the Monastery
	Winter Wonder Walk
	Choral Concert
	Carnival (Steekje Los)
	Fantasy Festival
	Medieval Ter Apel
	Boeskoolmarkt
	Vrouw Thuis Festival
	Museum Night
	Sinterklaas Arrival

Ter Apel is **not** ready for **tourism**.

How can a **strategic** architectural **intervention** in Ter Apel support the **transformation** of local **identity** from a landscape of **crisis** to a place of dignified reception and community **function**, by spatially **mediating** the conflicting flows of locals, refugees, and tourists through **data-driven** design and agile **architecture** with flexible programming?

# The Spatial Mediator | Design Ambitions

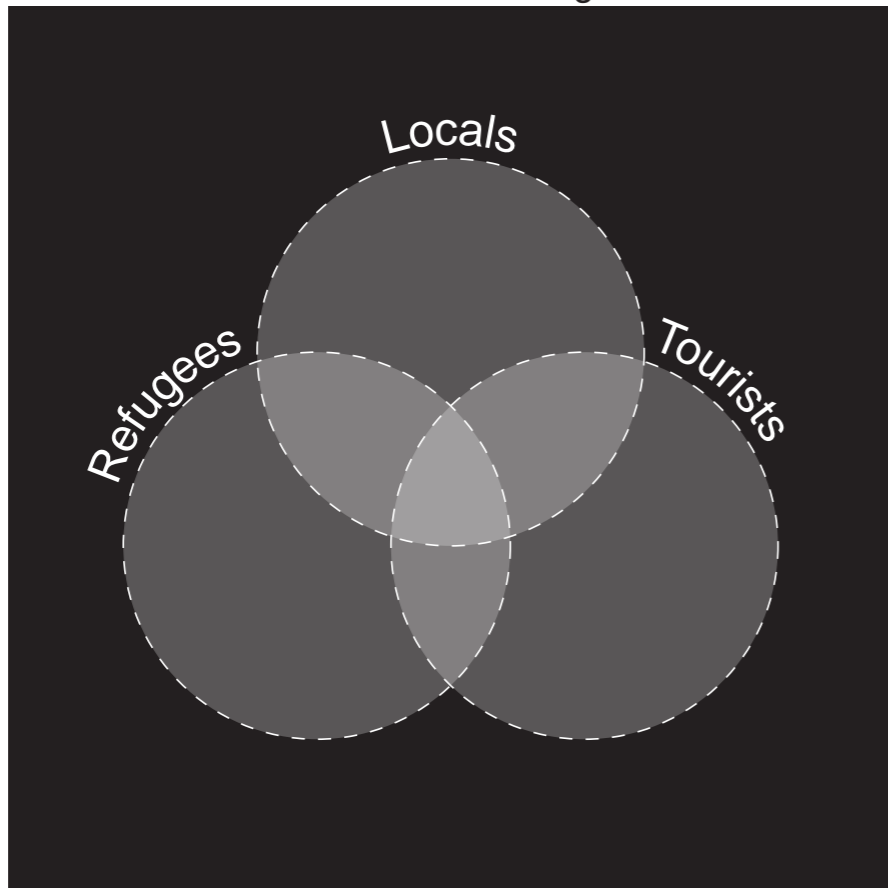
Orchestrating Flow & Connection



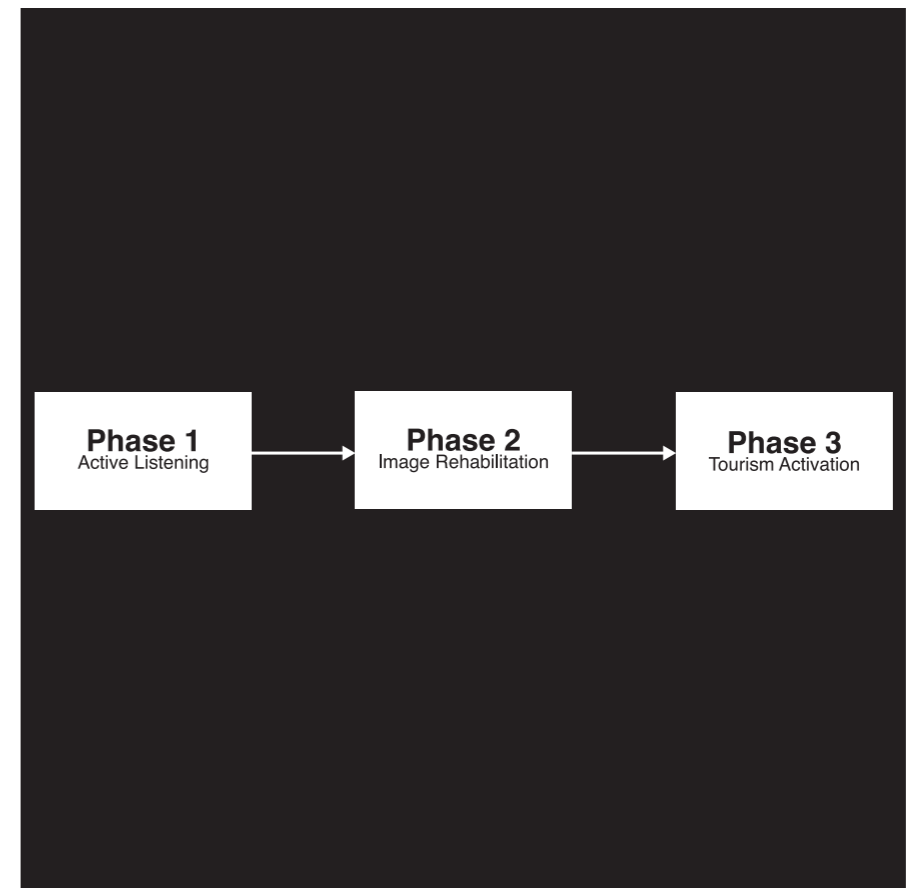
Designing with Data



The Convergence of Narratives



Phased Transformation



# The Spatial Mediator | 3 User Groups

Tourists/ Outsiders

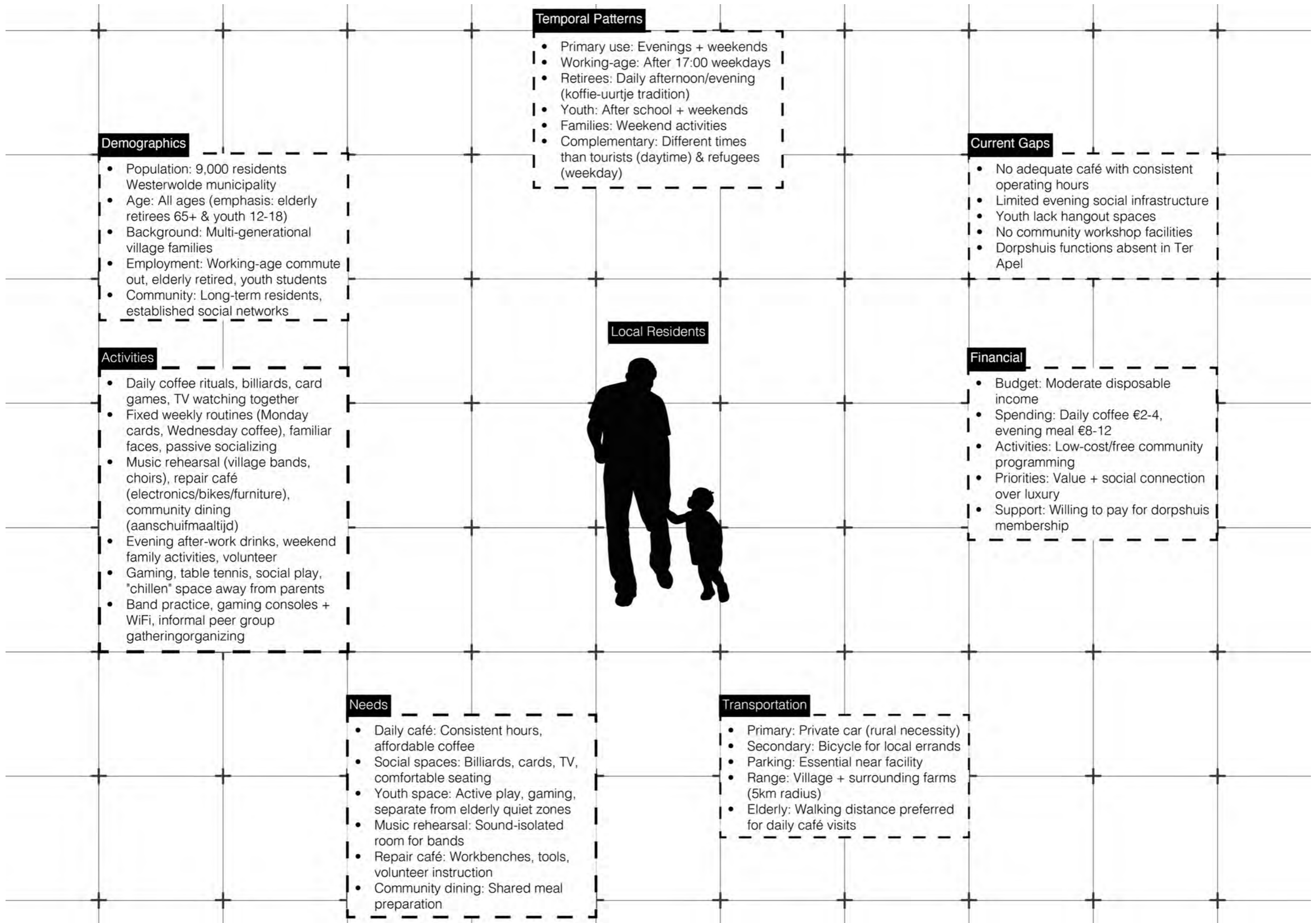


Refugees



Local Residents





## Geographic Origin

- Primary: Dutch Randstad + northern provinces
- Secondary: German border region (Niedersachsen, Nordrhein-Westfalen)
- Tertiary (post-2035): Twente, Achterhoek, Hannover, Ruhrgebiet

## Demographics

- Age: 40-70 years (peak: 55-70, active retirees)
- Education: Higher educated
- Mindset: Culture/nature/history oriented
- Values: Environmental consciousness, authenticity over convenience

## Trip Characteristics

- Duration: Multi-day stays
- Seasonality: Year-round preference
- Pace: Slow, contemplative
- Pattern: Fewer locations, longer per place

## Tourists/ Outsiders



## Spending Behavior

- Budget: Higher disposable income
- Priority: Quality and authenticity over price
- Willingness: Pay premium for local/sustainable
- Food: Preference for regional products, visible preparation

## Activities

- Primary: Walking, cycling (extensive route networks)
- Cultural: Heritage sites
- Food: Farm-to-table, streekproducten, visible production
- Contemplative: Museum retreats, mindfulness, nature immersion

## Accommodation

- Type: Small-scale (B&Bs ≤6 rooms, camping ≤25 pitches)
- Style: Local/regional building traditions
- Quality: High-quality over budget options
- Setting: Integrated with landscape, not dominant

## Transportation

- Current: Car-dependent (limited public transit)
- Preferred: Sustainable modes when available
- Future (2035+): Train + bicycle rental
- Cycling distance: Accommodation within bike range of station

## Demographics

- Population: 2,000 capacity at COA Ter Apelervenen
- Age: All ages (families with children 0-12, working age adults, elderly)
- Origins: Diverse national backgrounds (Syria, Afghanistan, Eritrea, etc.)
- Religion: Primarily Muslim (Islamic prayer facilities required)
- Family status: Singles, couples, families with children

## Legal Status

- Type: Open reception center (vrij verkeer)
- Duration: 70-84 weeks average processing time
- Restriction: Meldplicht (reporting requirement)
- Freedom: Can leave center except for reporting times
- Uncertainty: Waiting for asylum decision

## Daily Pattern

- Unstructured time: Extensive waiting periods
- Movement: Walks to village center for shopping/services
- Constraints: Limited activities in center
- Temporal: Weekday daytime availability
- Routine: Meldplicht reporting + language classes

## Refugees



## Spatial Needs

- Privacy: Counseling rooms, confidential spaces
- Cultural: Qibla-oriented prayer spaces, gender separation
- Childcare: Safe play spaces while parents attend services
- Learning: Classroom setup with presentation equipment
- Informal: Casual seating for language café
- Accessible: Ground floor, no entry fees

## Financial

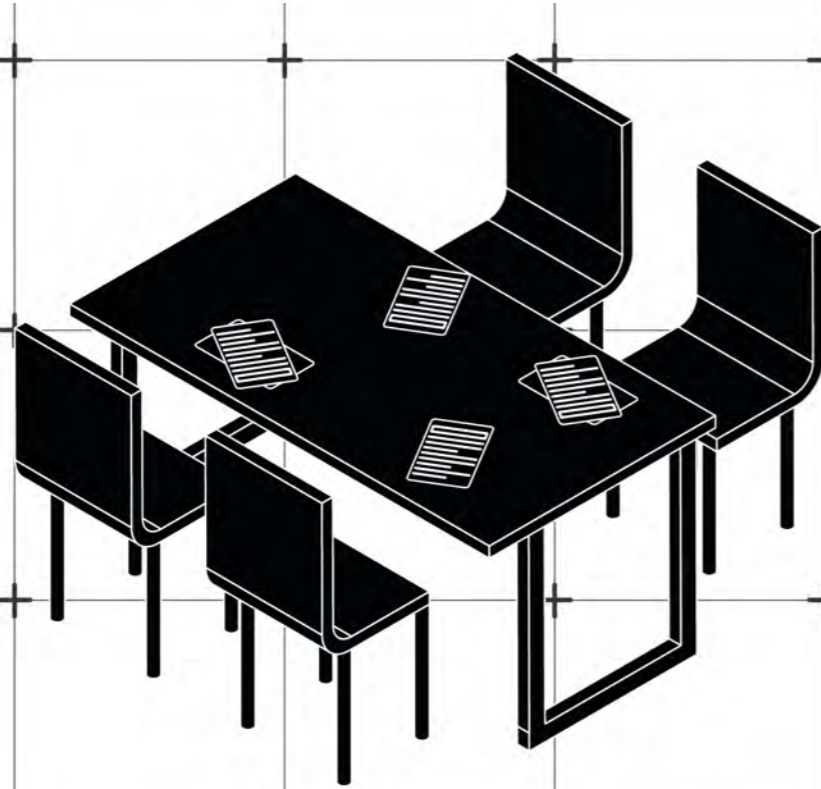
- Budget: Minimal weekly allowance from COA
- Spending: Very limited (€5-10 per week approximate)
- Affordability: Entry fees prohibitive (Monastery = full week allowance)
- Access: Affordable meals essential
- Services: Free programming preferred

## Activities

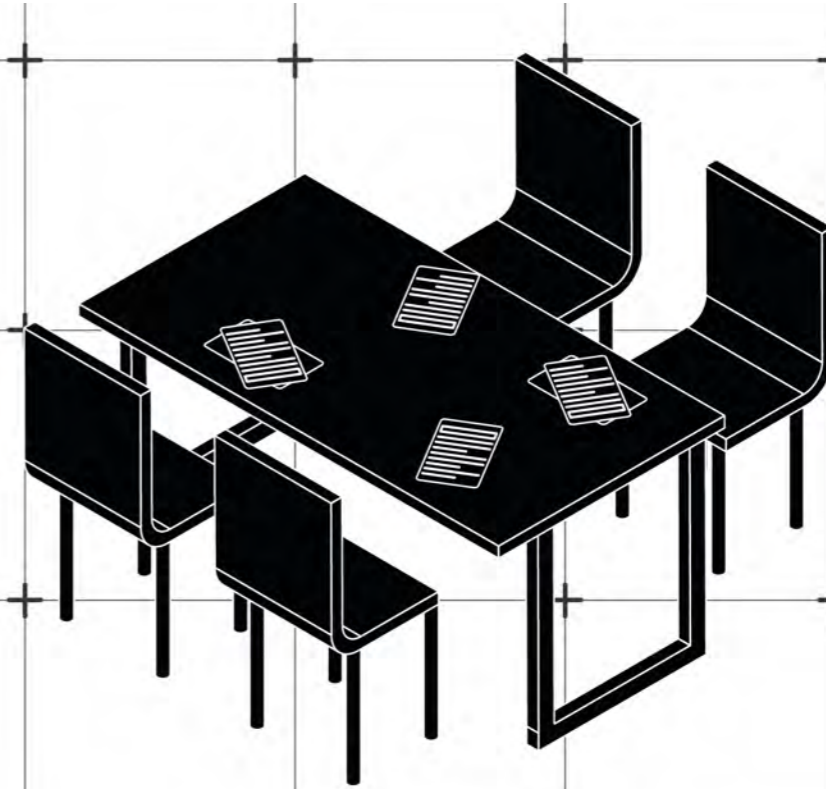
- Social: Group sports (KLABU programming)
- Practical: Repair skills, cooking, computer skills
- Education: Language learning (formal + informal)
- Cultural: Food preparation from home countries
- Recreation: Low-cost/free activities
- Community: Contact with locals and other refugees

## Transportation

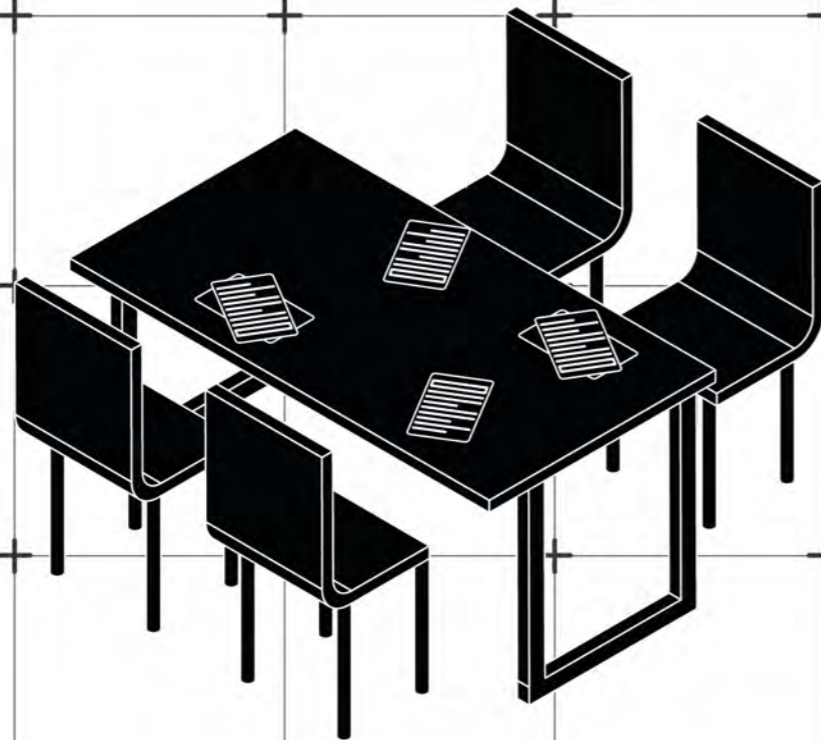
- Primary: Walking (no car ownership)
- Public transit: Limited bus service to/from Emmen
- Cycling: Bicycle rental/access needed for mobility
- Range: Walking distance from AZC (2km max)
- Barrier: Bus costs limit accessibility



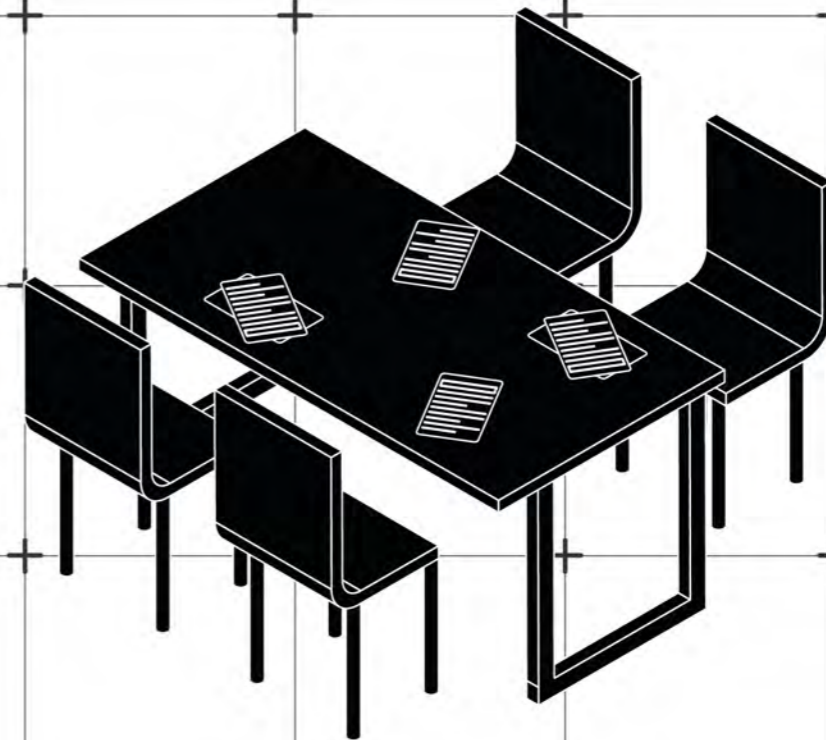
Language 1



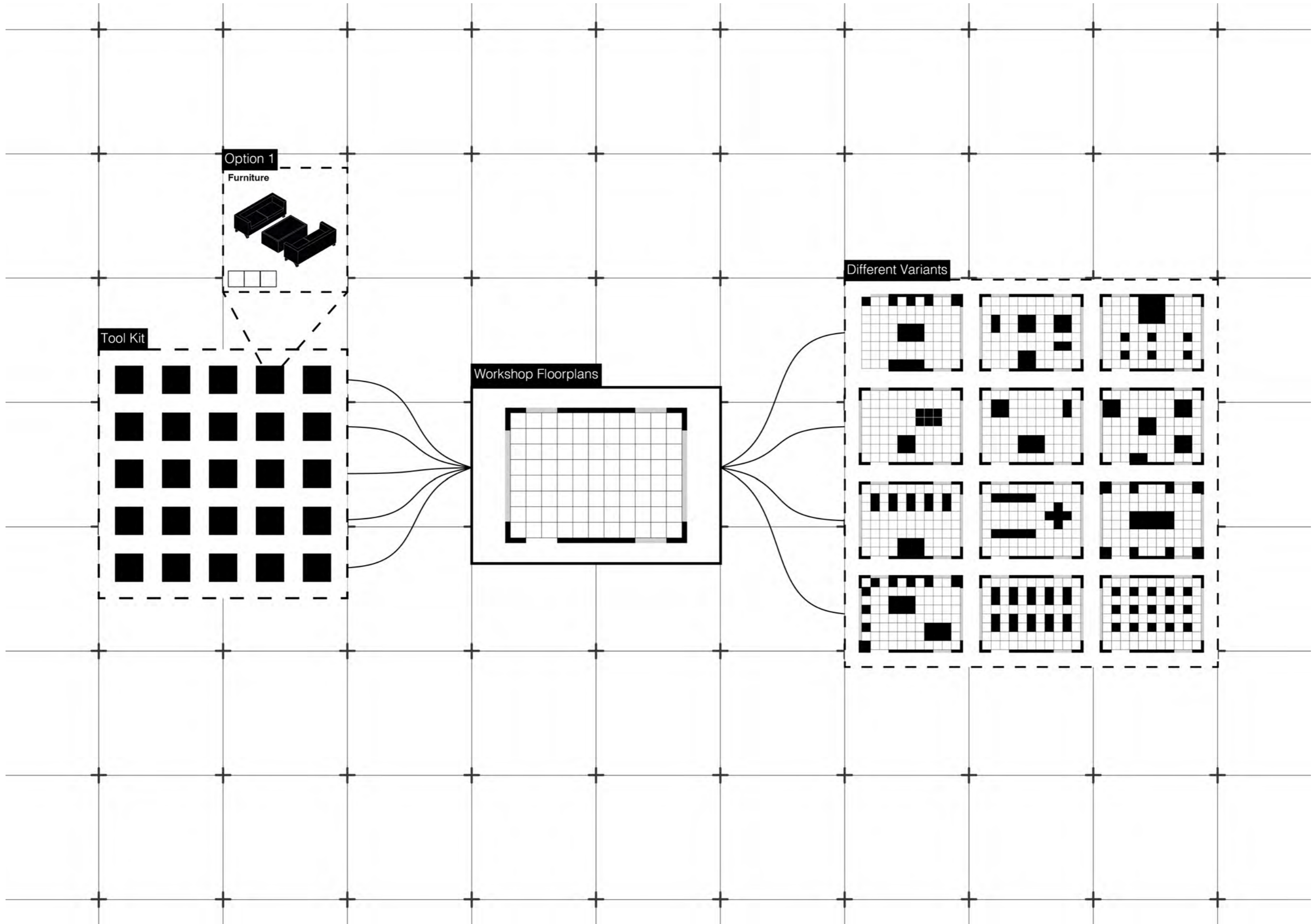
Language 2



Language 3



Language 4





الوسيط المكاني  
ورشة عمل

Workshop The  
Spatial Mediator

میانجی فضایی  
کارگاه

Public Building Graduation Studio AR&P120

Public Building Graduation Studio AR&P120

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Booklet number: \_\_\_\_\_

TU Delft Faculty of Architecture and the Built Environment | Workshop The Spatial Mediator

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Taller El  
Mediador Espacial

Uzlaştırıcı  
Mekan Çalıştayı

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Public Building Graduation Studio AR&P120

Public Building Graduation Studio AR&P120

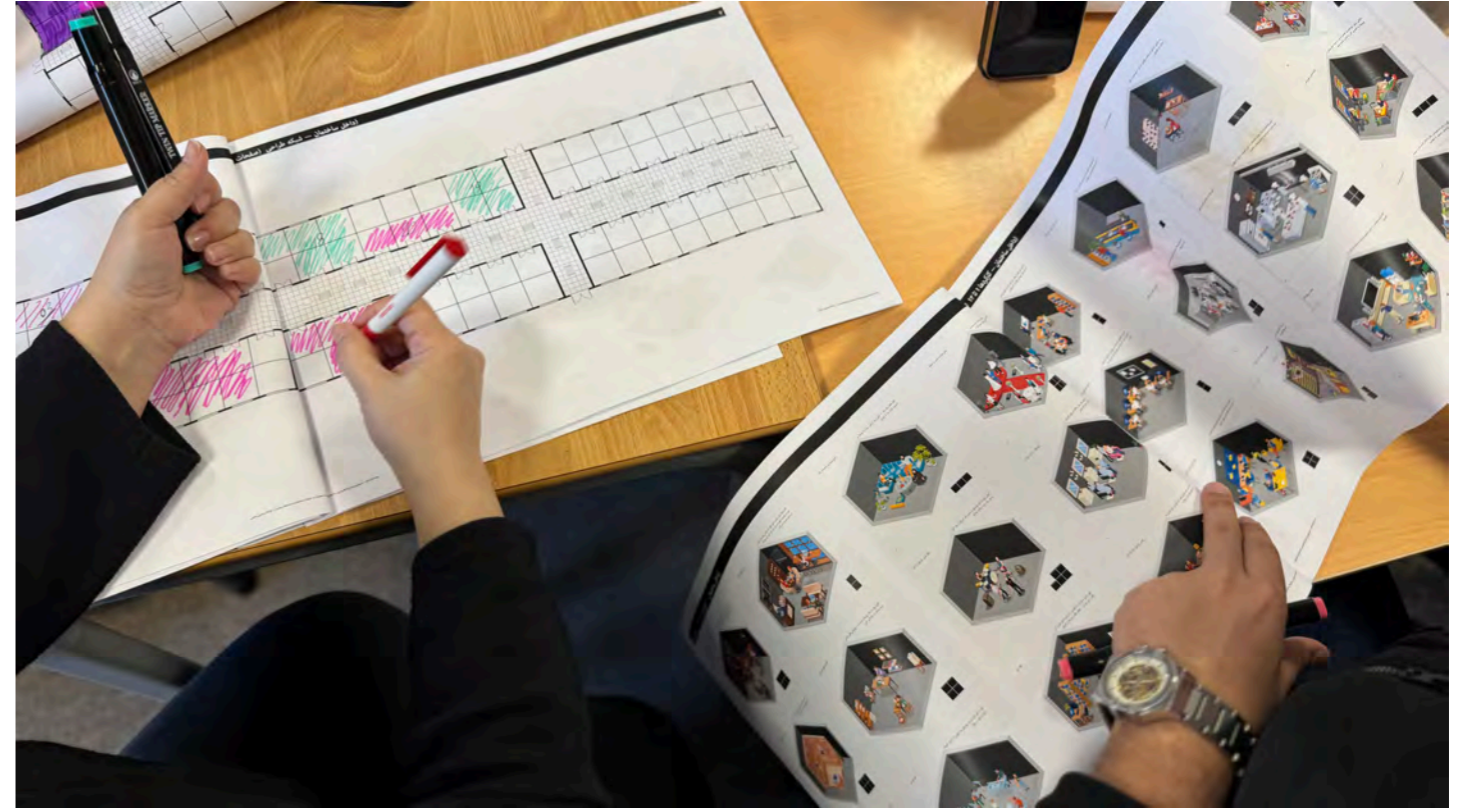
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TU Delft Faculty of Architecture and the Built Environment | Taller El Mediador Espacial

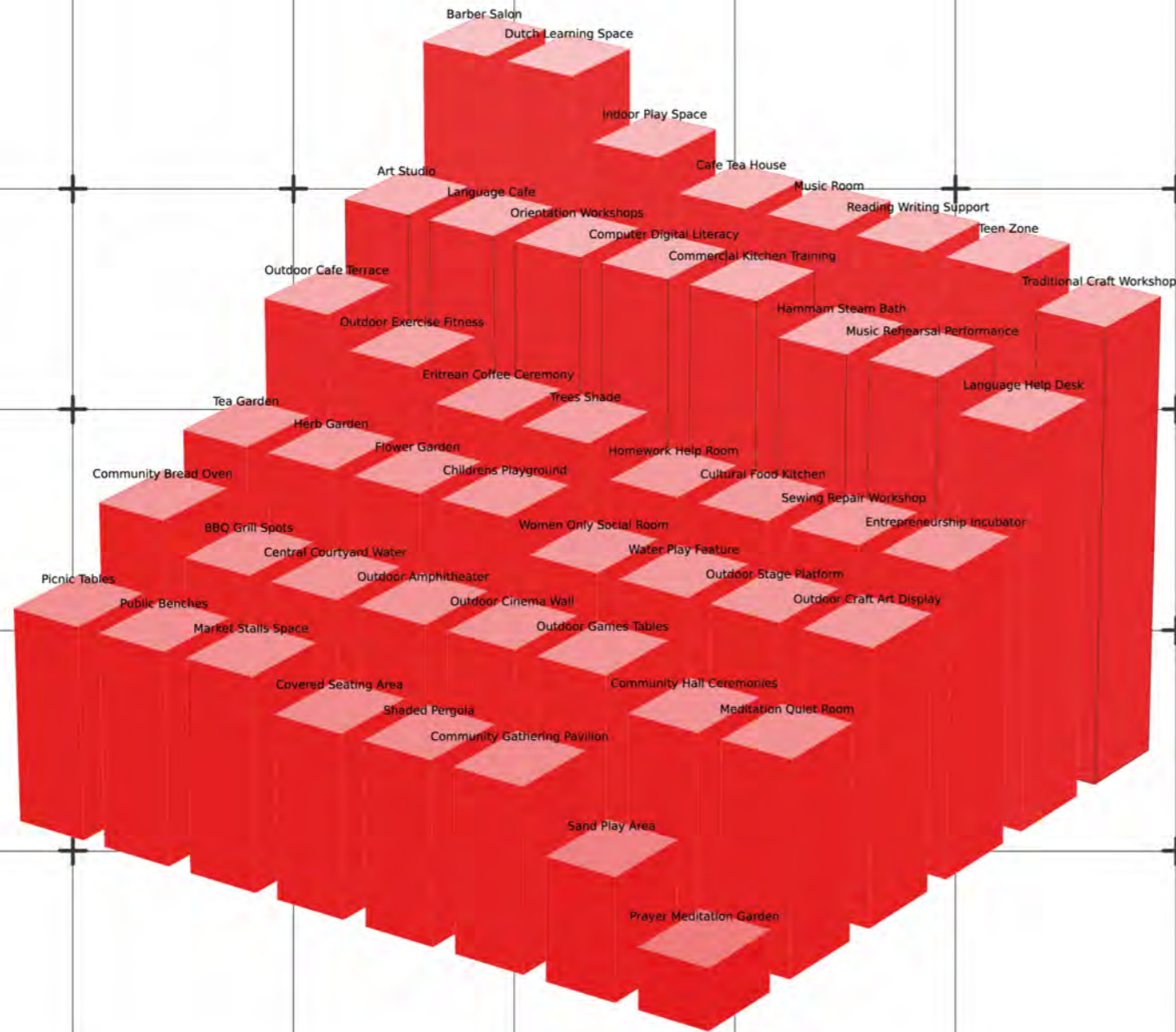
Public Building Graduation Studio AR&P120

Public Building Graduation Studio AR&P120



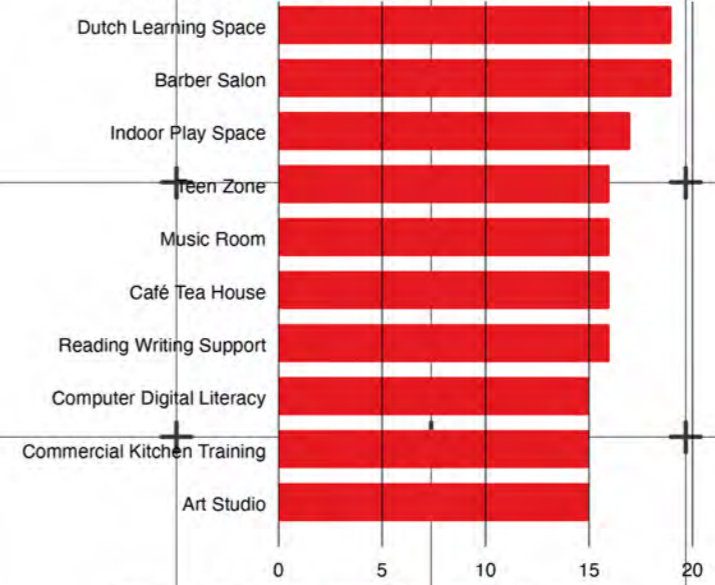


# The Spatial Mediator | COA Workshop Conclusion

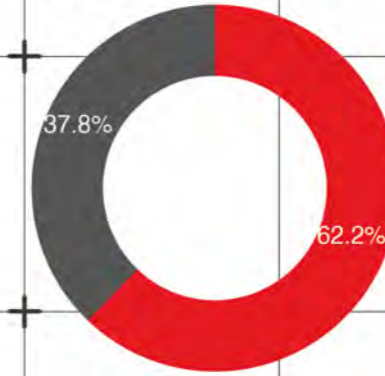


## GLOBAL INSIGHTS

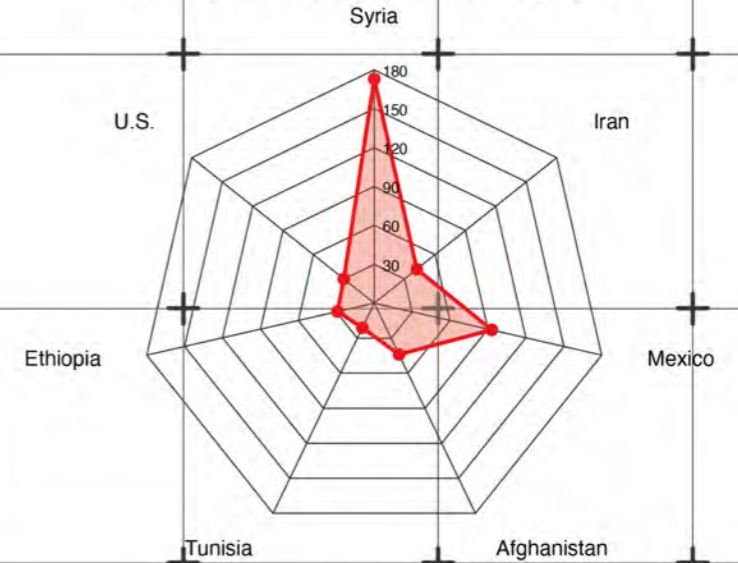
### TOP 10 REQUESTED SPACES



### TOTAL VOTES: INSIDE VS OUTSIDE



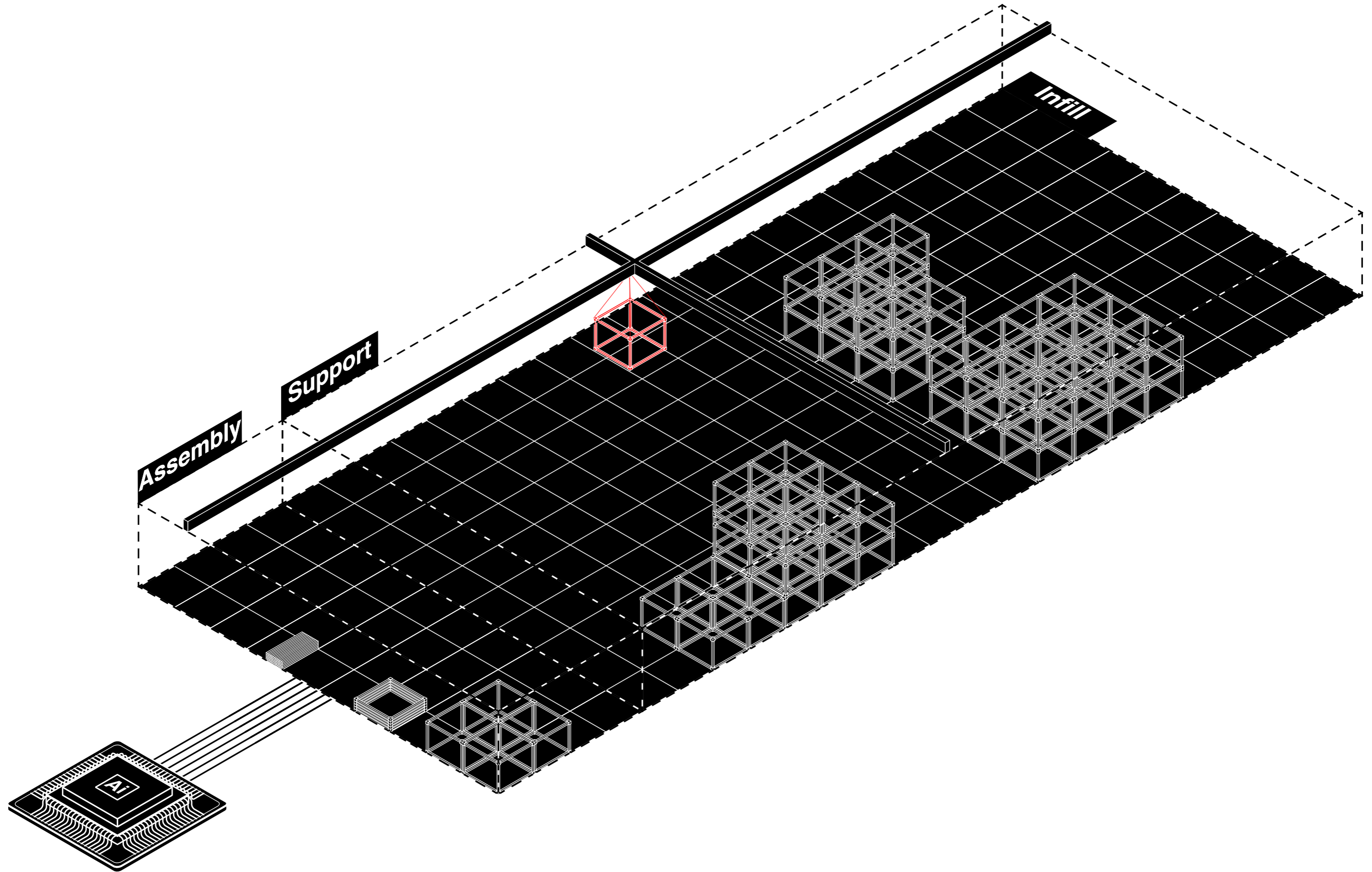
### VOTES PER COUNTRY OF ORIGIN



But what **makes** this building so **special**?

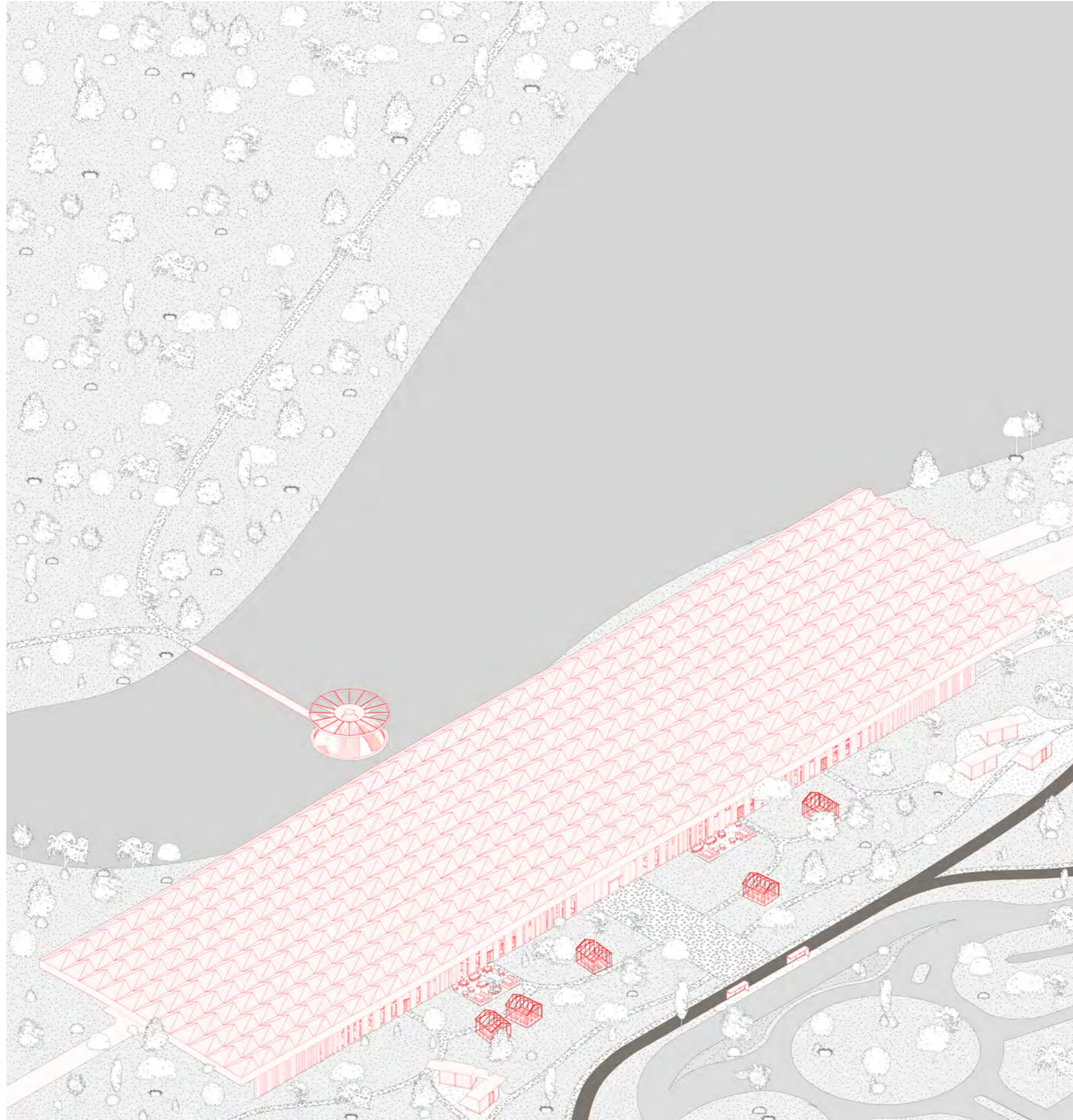
**This building is shaped by users.**

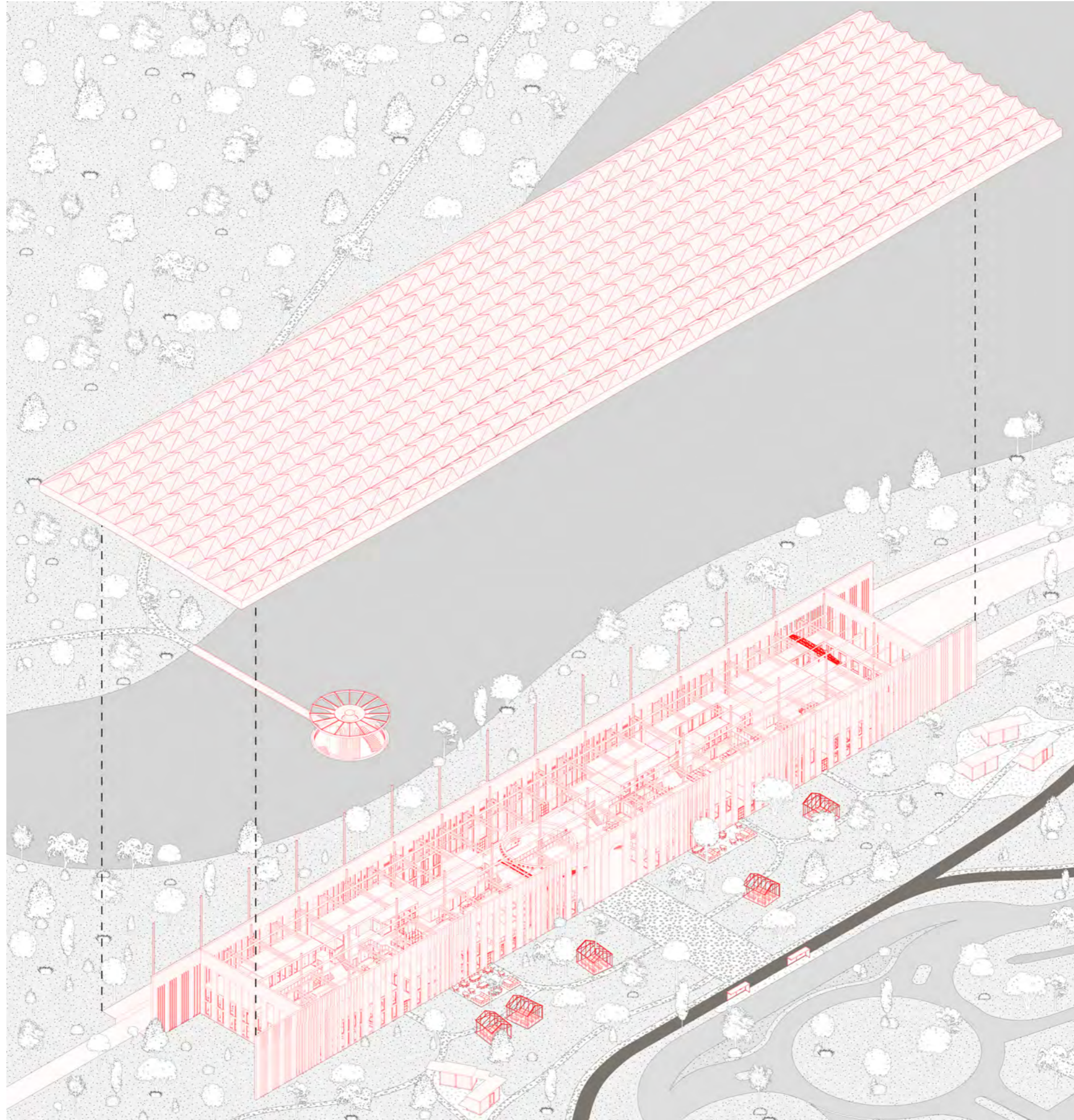
# The Spatial Mediator | Support vs Infill Ai Concept

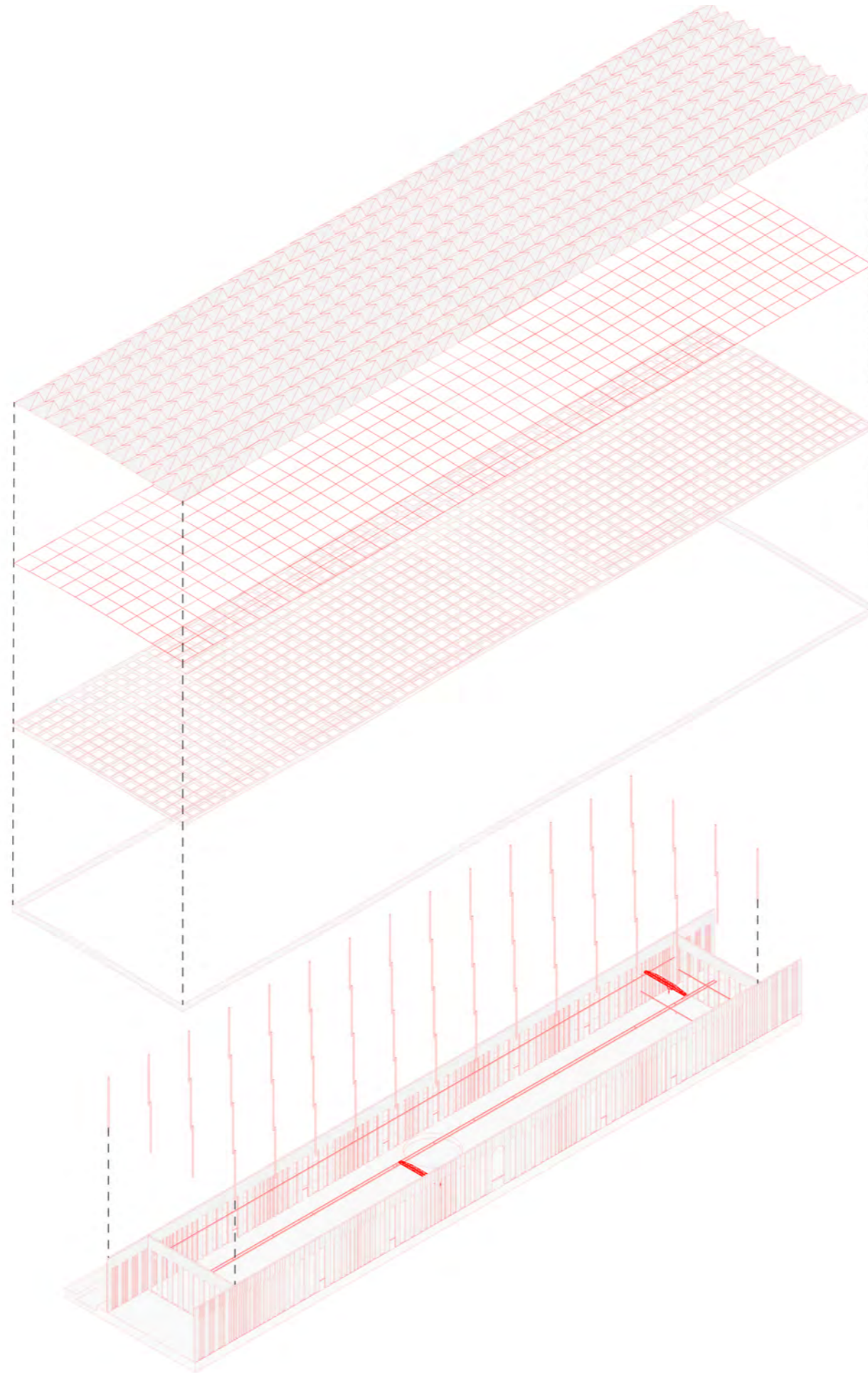


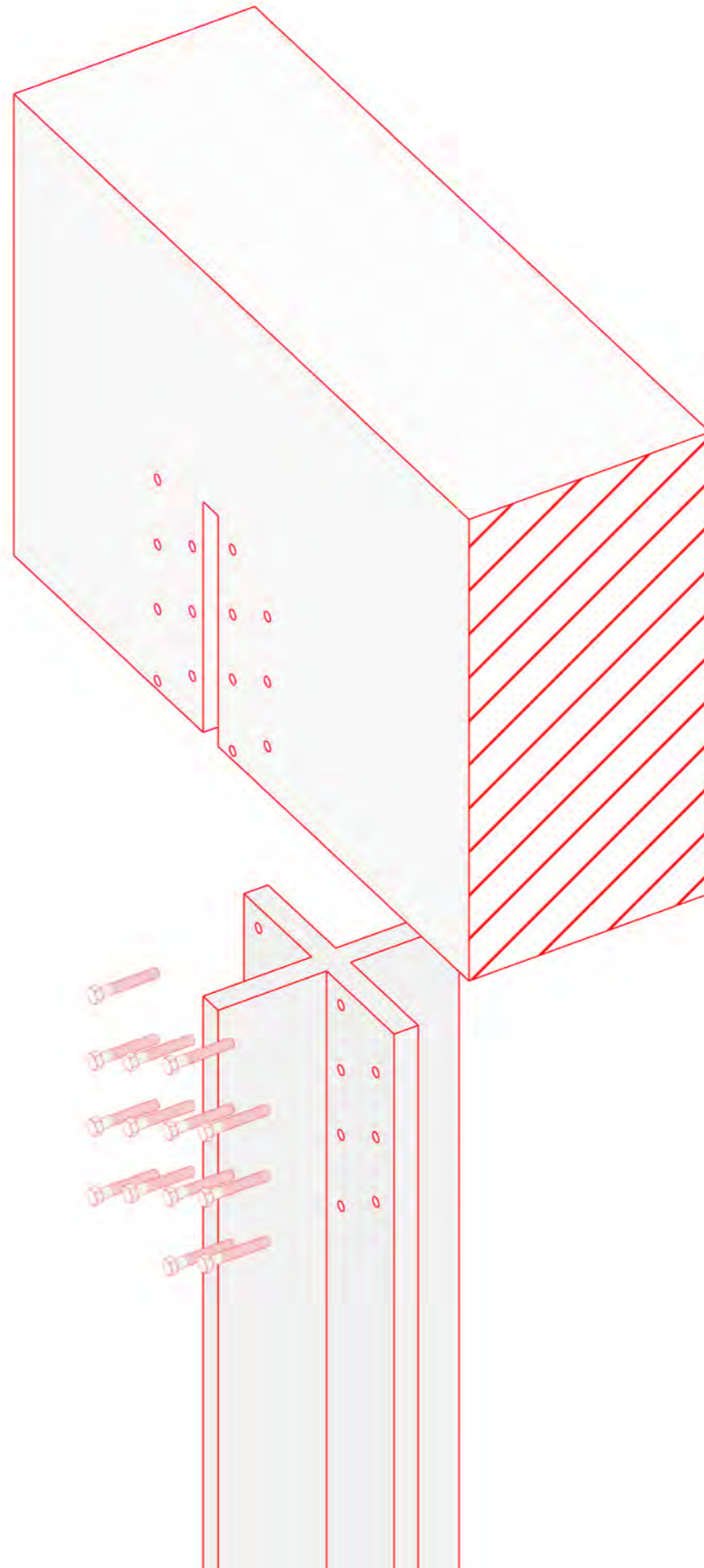
# Support vs Infill

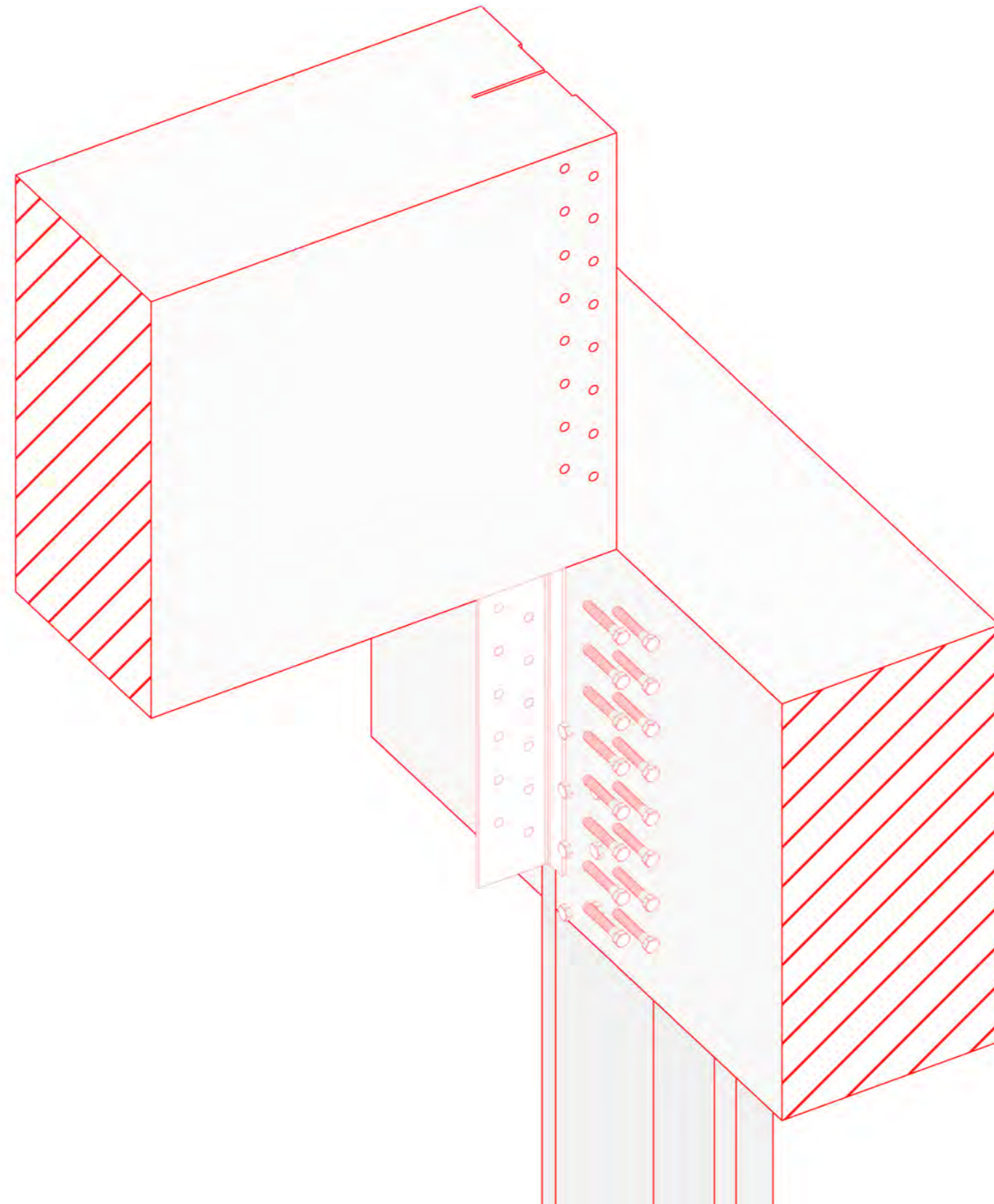
# Support vs Infill

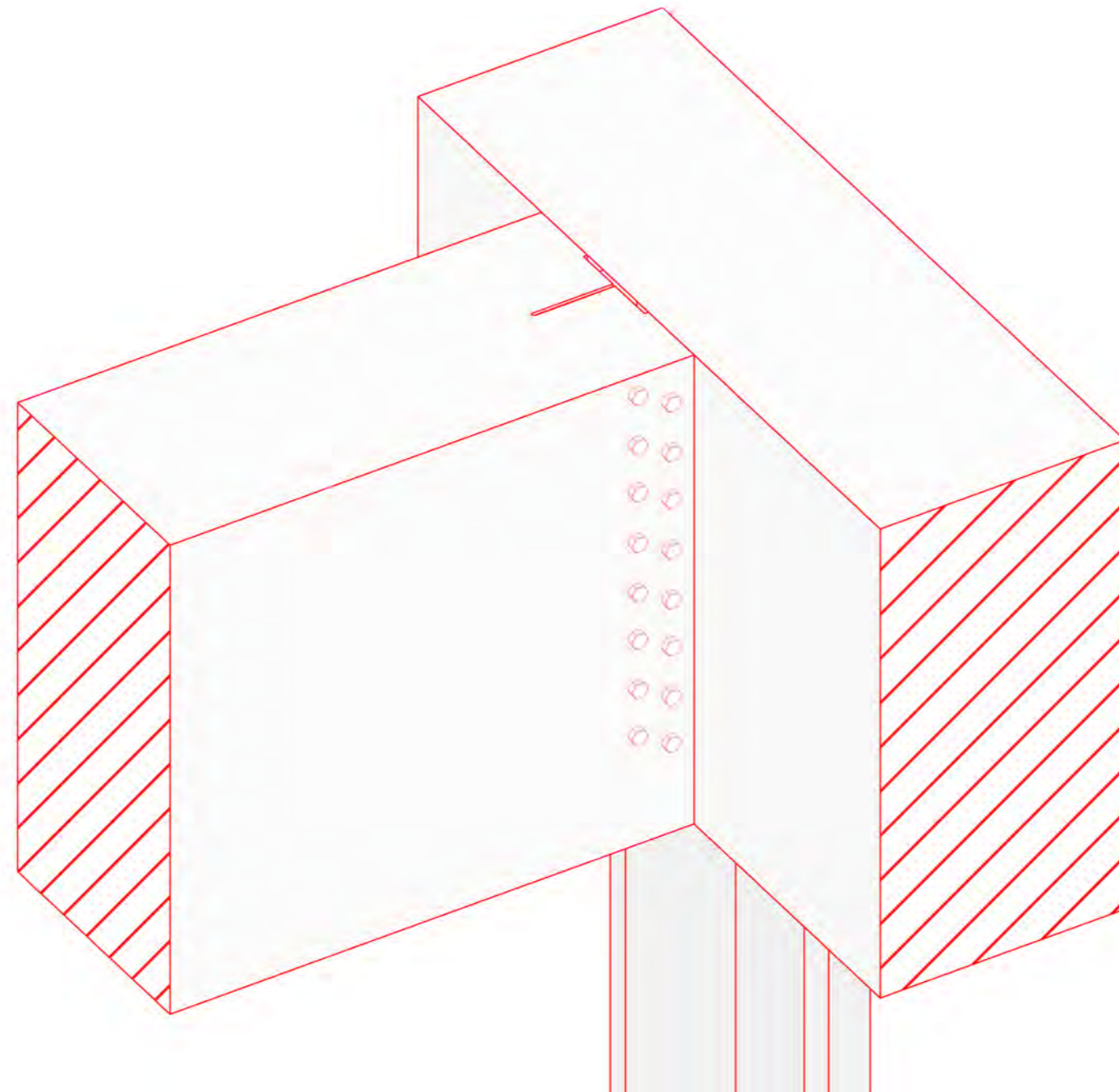


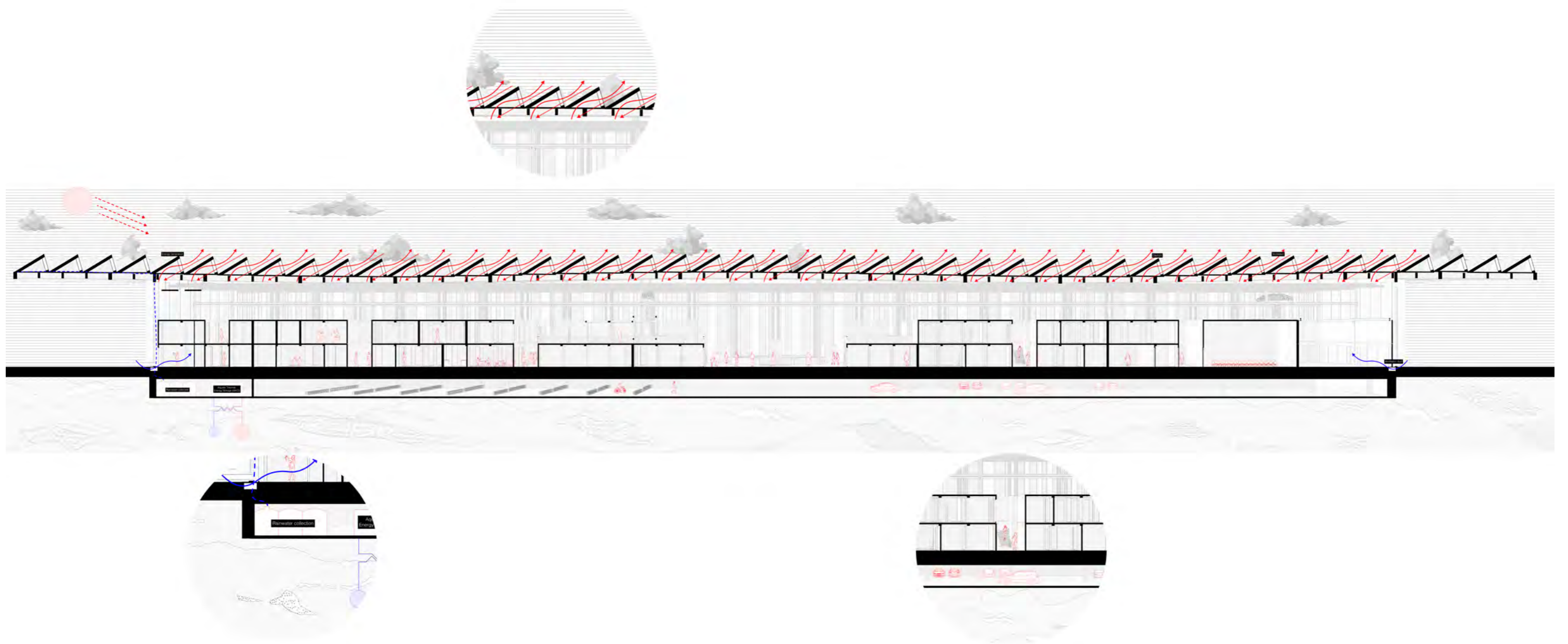






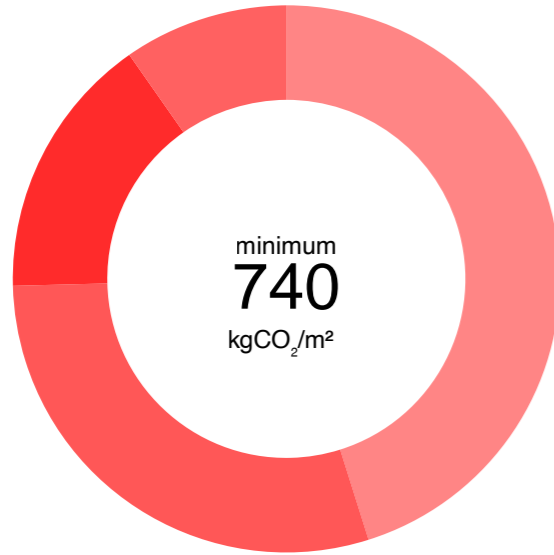






EMBODIED CARBON ASSESSMENT · MODULES A+B

## The Spatial Mediator, Ter Apel



DISTRIBUTION BY SHEARING LAYER

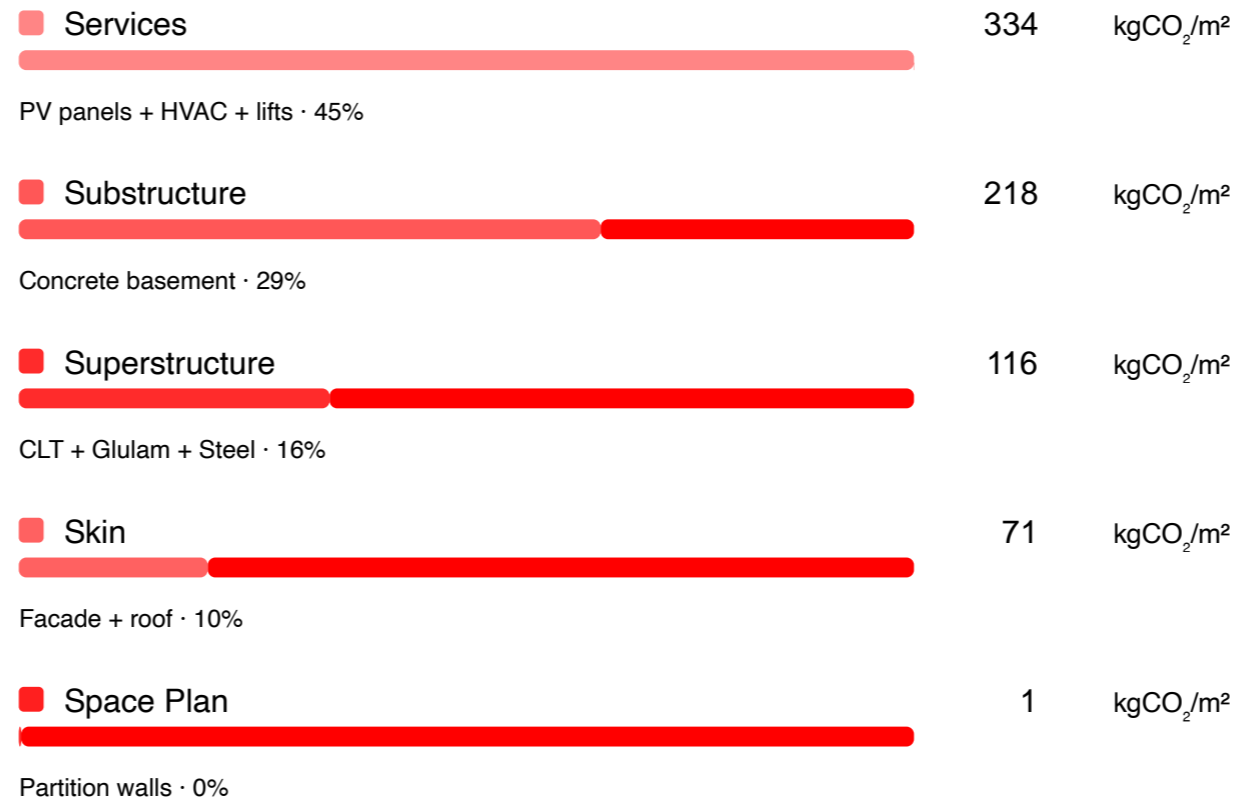
SCORE

# 740

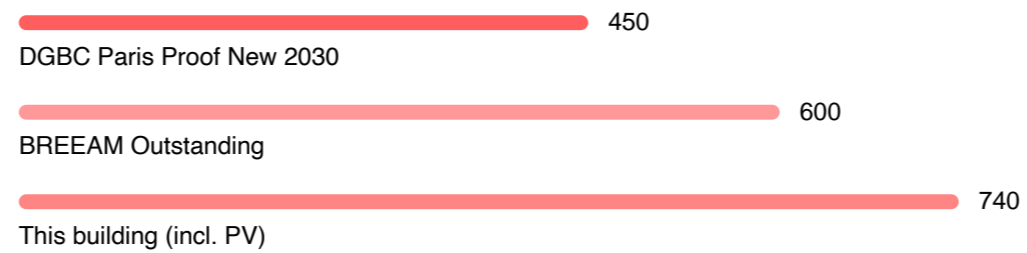
kgCO<sub>2</sub>eq/m<sup>2</sup> · minimum scenario

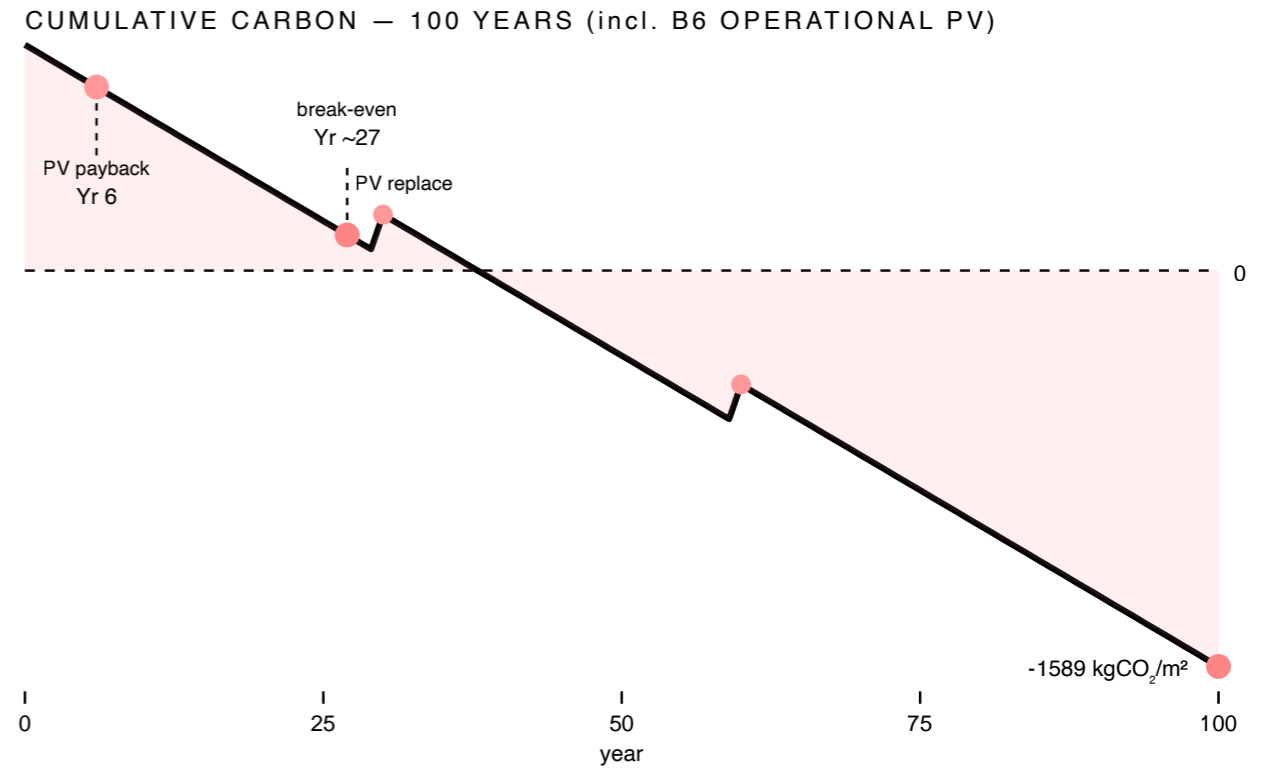
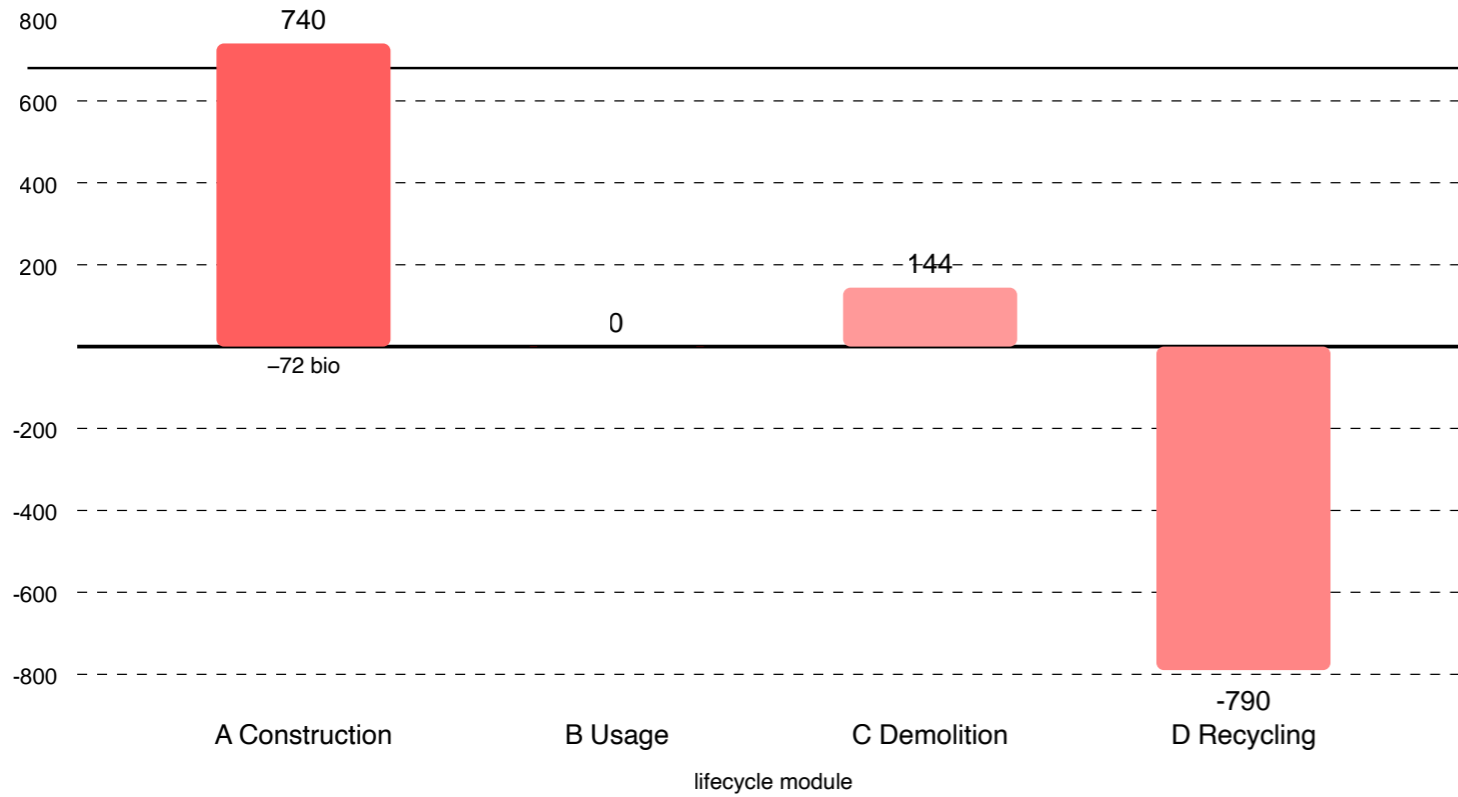
SUFFICIENT

### BREAKDOWN



### CONTEXT — EUROPEAN BENCHMARKS

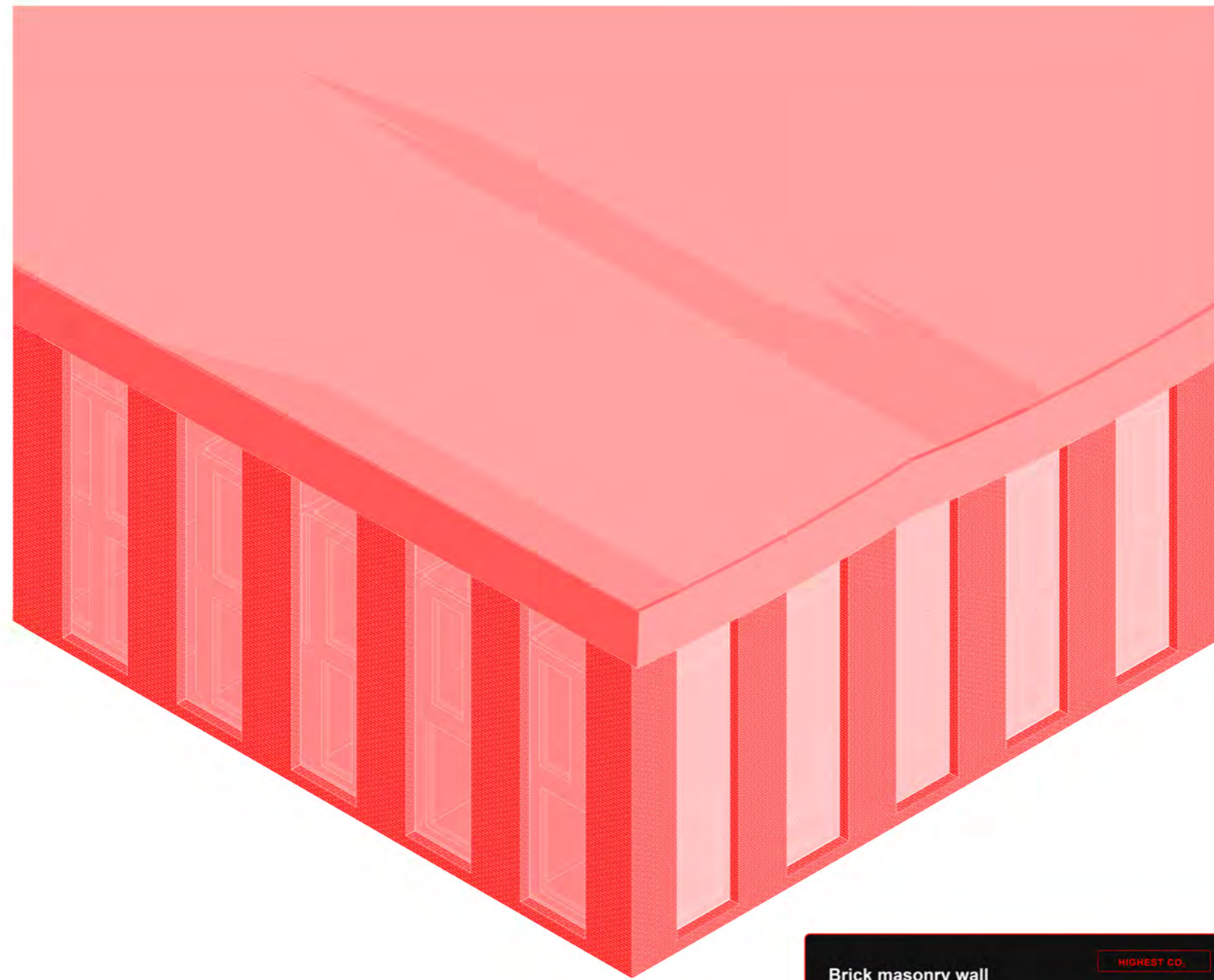




<p>Net A+C+D</p> <p><b>+120</b></p> <p>kgCO<sub>2</sub>/m<sup>2</sup></p>	<p>Timber recycling bonus</p> <p><b>-764</b></p> <p>kgCO<sub>2</sub>/m<sup>2</sup></p>	<p>Net lifecycle (100yr, incl. B6)</p> <p><b>-2.068</b></p> <p>kgCO<sub>2</sub>/m<sup>2</sup></p>
---------------------------------------------------------------------------	----------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------

<p>Year 6</p> <p>PV CO<sub>2</sub> paid back</p>	<p>Year ~27</p> <p>Full embodied paid back</p>	<p>Year 100</p> <p>-2,068 kgCO<sub>2</sub>/m<sup>2</sup></p>
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**Brick masonry wall** HIGHEST CO<sub>2</sub>

Fired clay brick 100mm + mortar

**752**

kgCO<sub>2</sub>eq/m<sup>2</sup>gfa · total building score

vs. current: +12 25 kgCO<sub>2</sub>/m<sup>2</sup>gfa 150 kgCO<sub>2</sub>/m<sup>2</sup>facade

SHARE OF TOTAL SCORE

TOTAL ON 1,425.7 m<sup>2</sup> OPAQUE FACADE

**~214,000 kg CO<sub>2</sub>**

Robust public character · high durability · highest embodied of three options



**Timber cladding** LOWEST CO<sub>2</sub>

Solid timber planks (22mm, generic)

# 731

kgCO<sub>2</sub>eq/m<sup>2</sup>gfa | total building score

vs. current: -9    4 kgCO<sub>2</sub>/m<sup>2</sup>gfa    22 kgCO<sub>2</sub>/m<sup>2</sup>facade

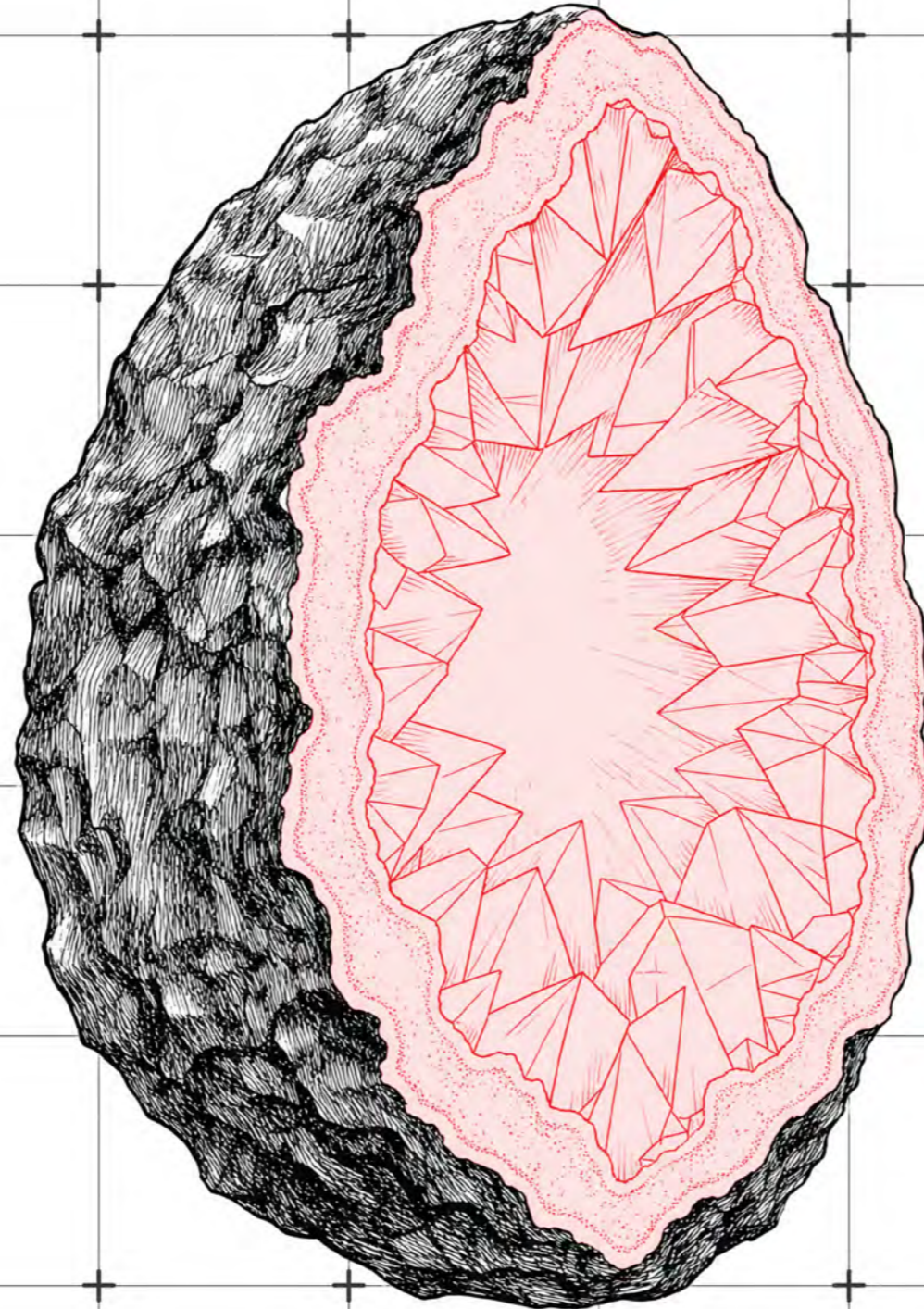
SHARE OF TOTAL SCORE

95%

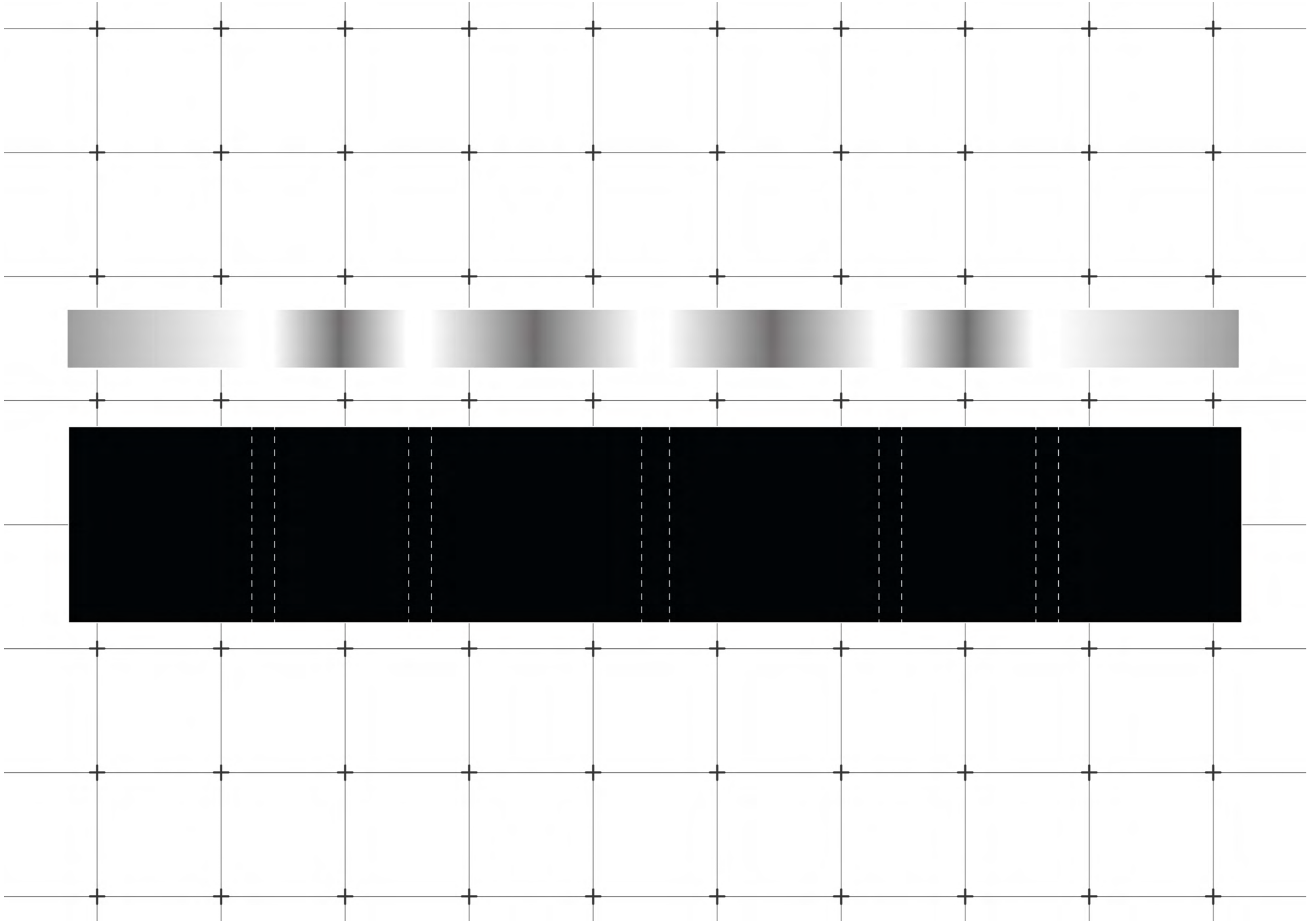
TOTAL ON 1,425.7 m<sup>2</sup> DPAQUE FACADE

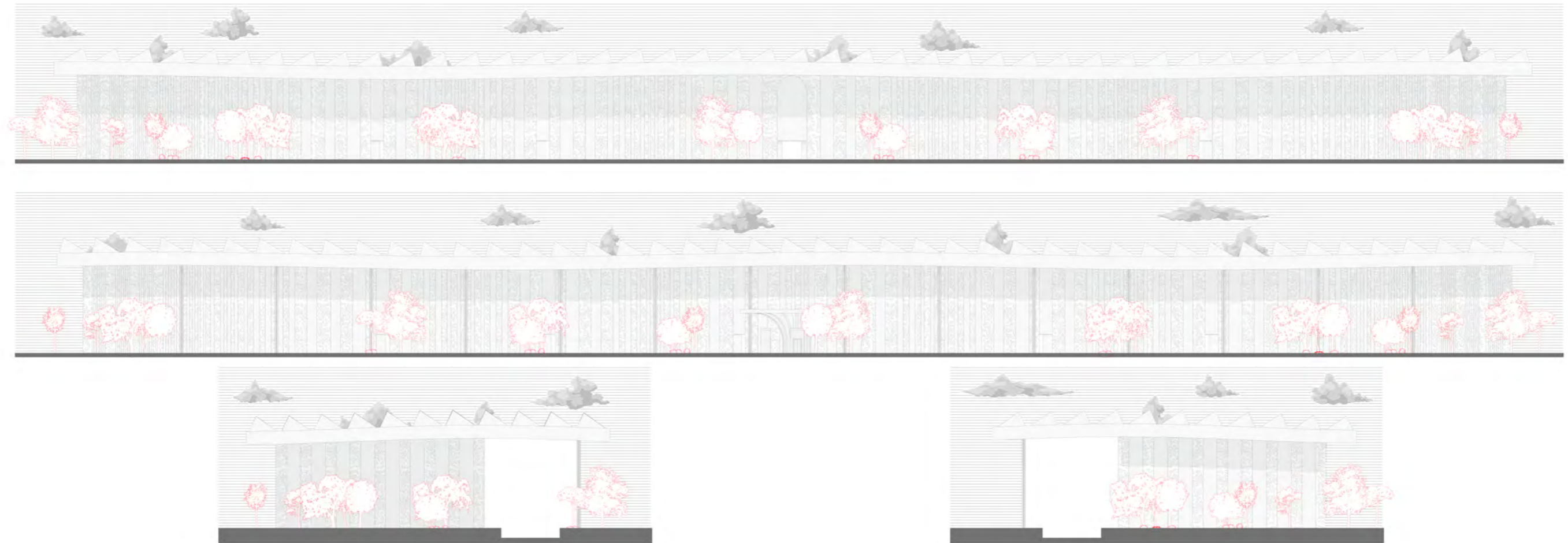
## ~31,000 kg CO<sub>2</sub>

Consistent with CLT structure | biogenic carbon stored  
lowest embodied CO<sub>2</sub>

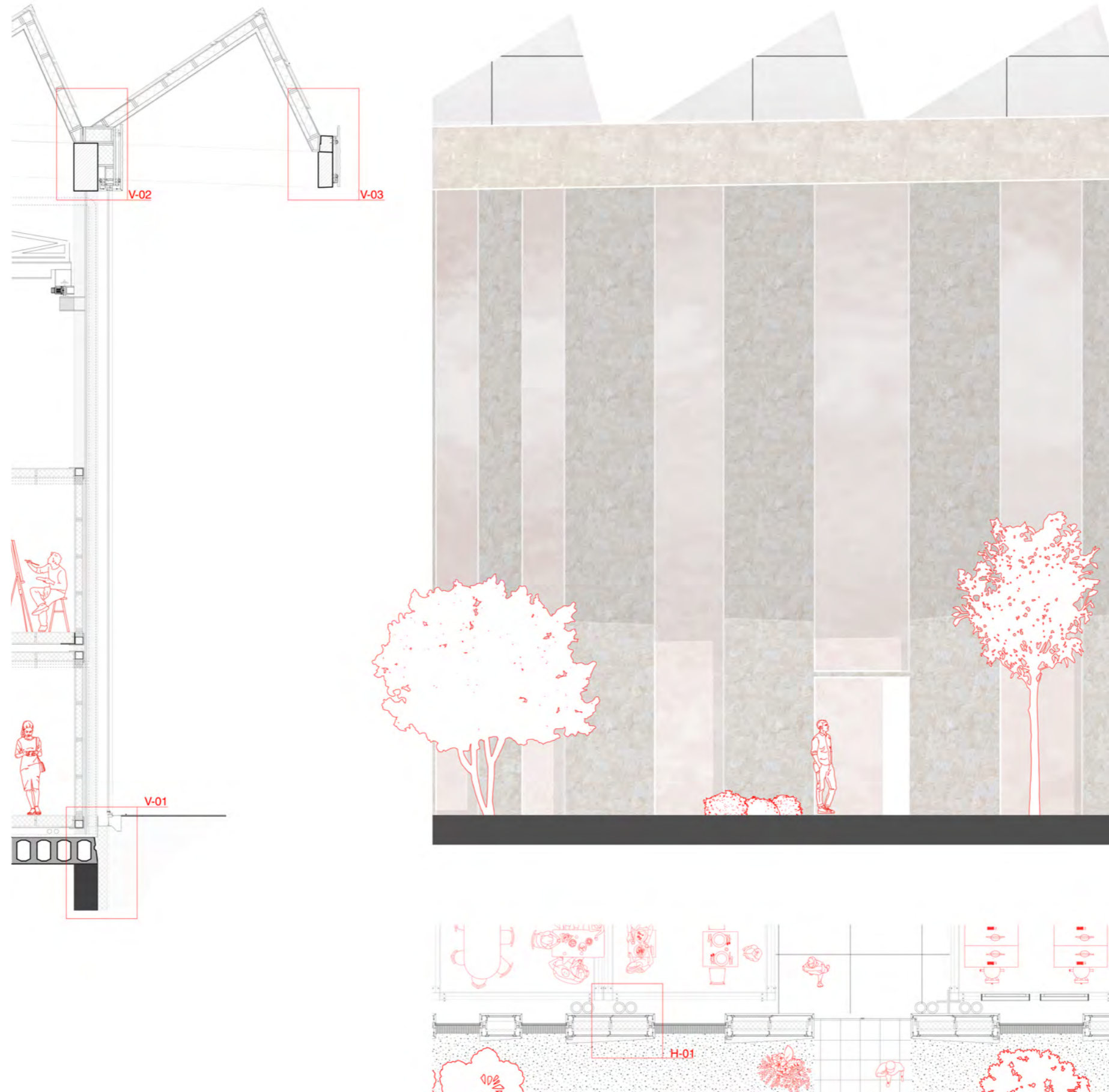


# The Spatial Mediator | Facade Concept

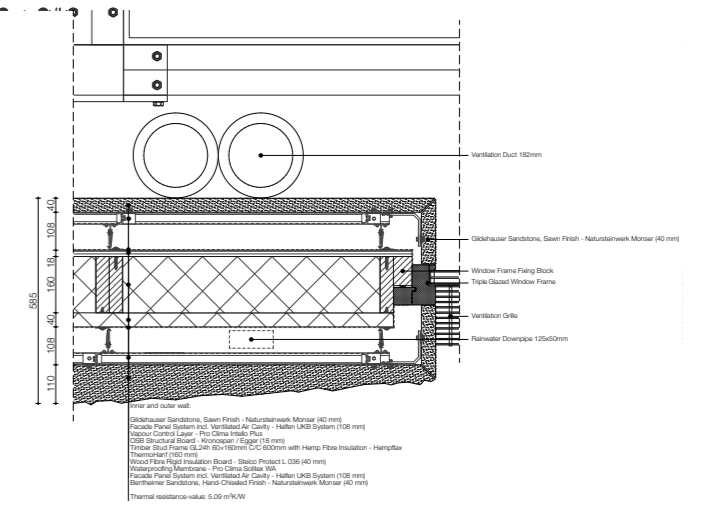
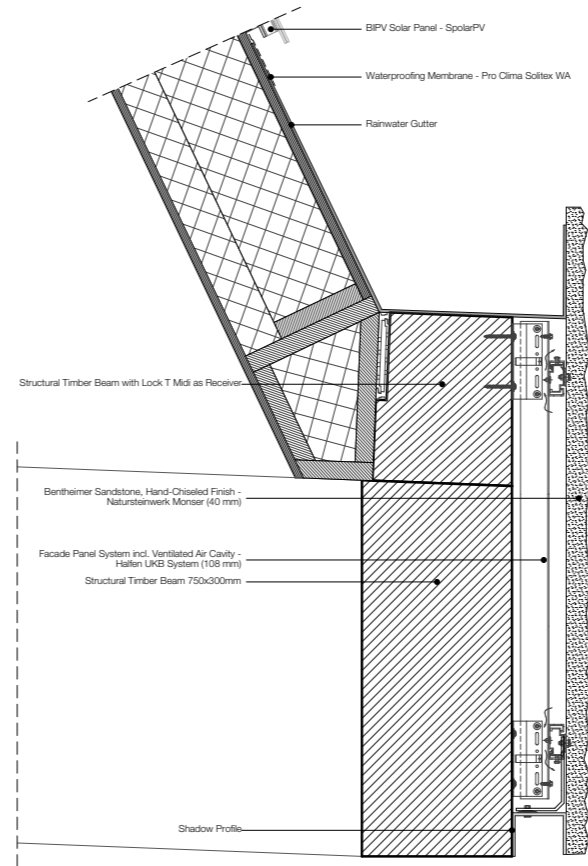
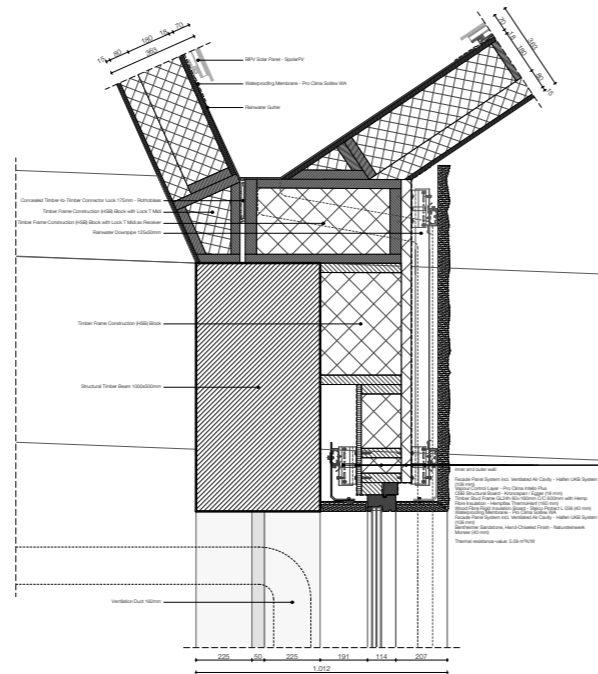
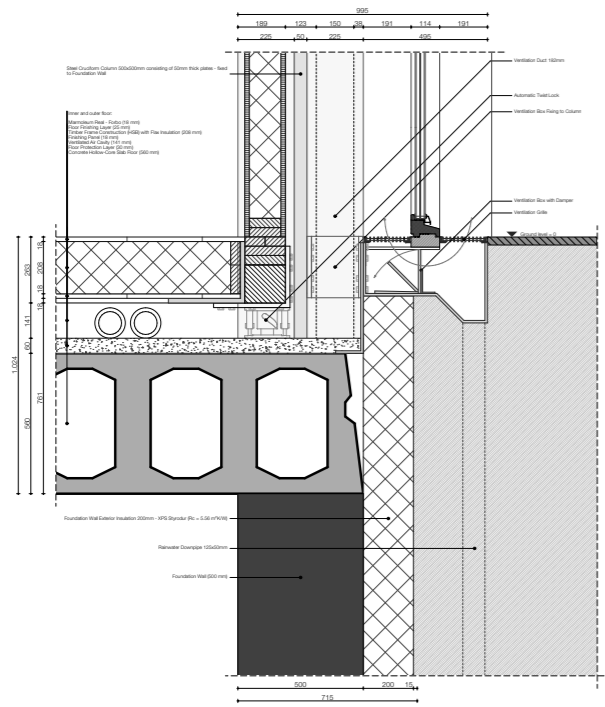




# The Spatial Mediator | Fragment

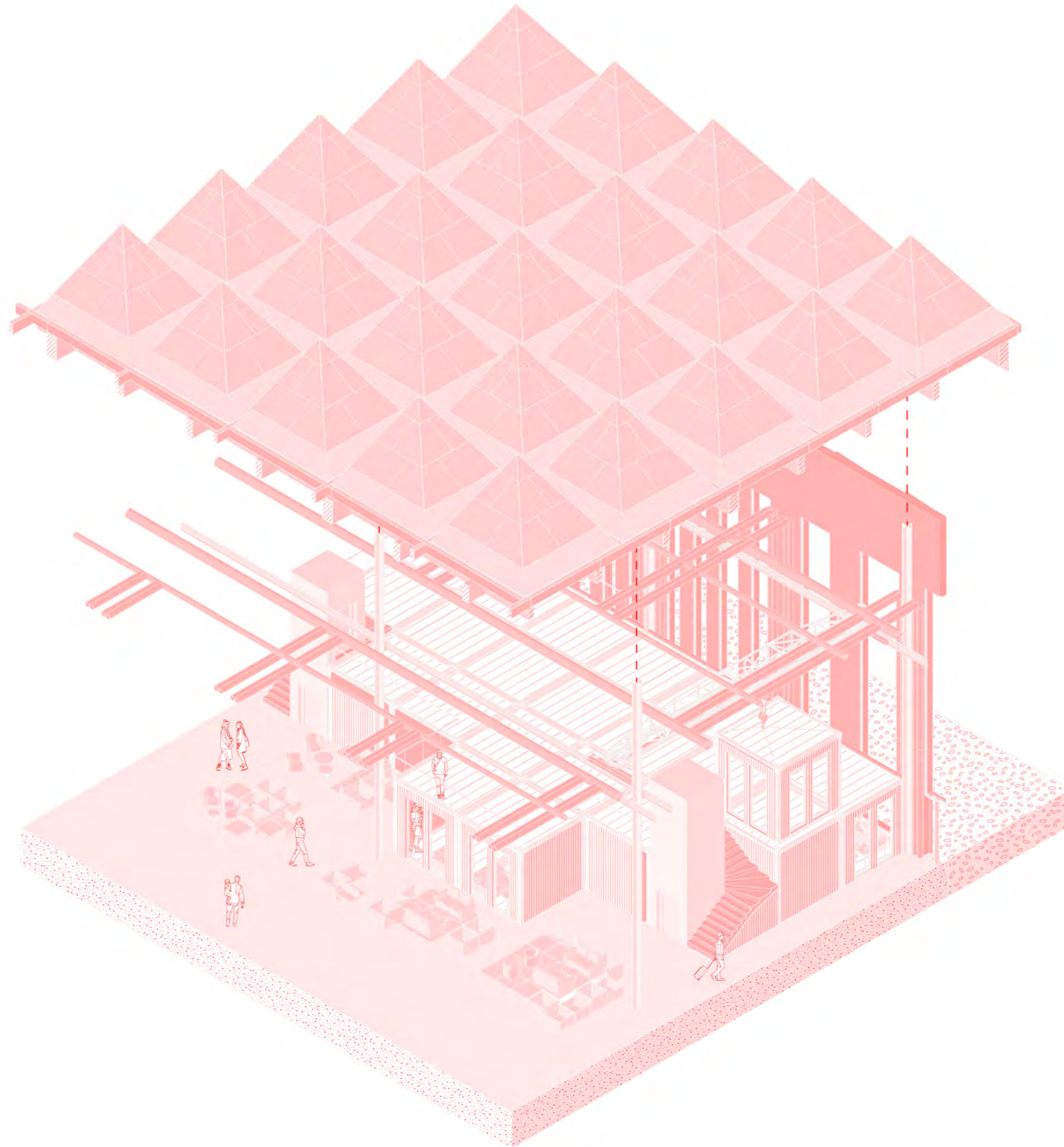


# The Spatial Mediator | Details

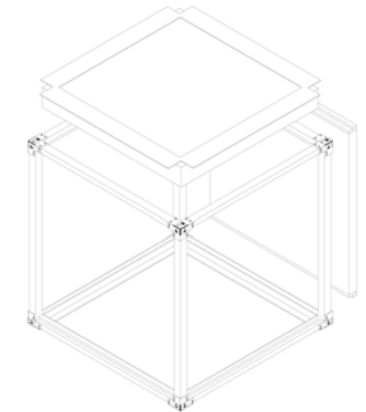
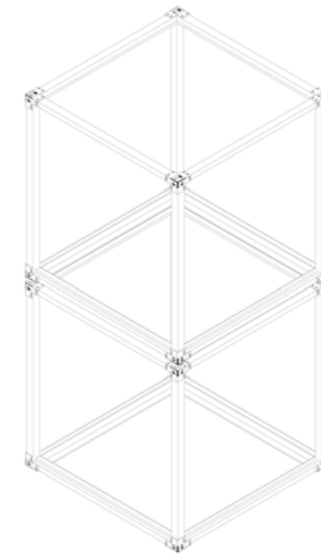
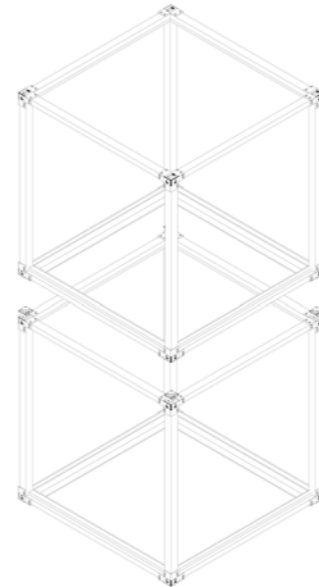
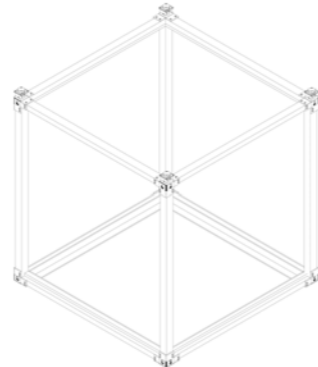
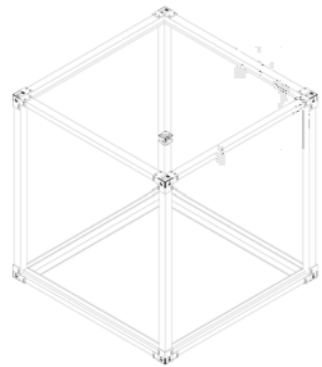
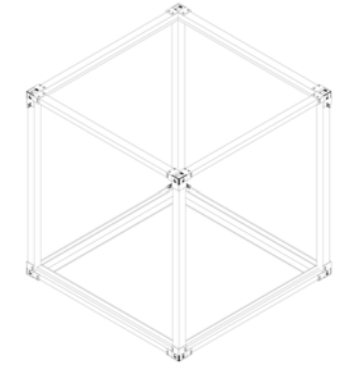
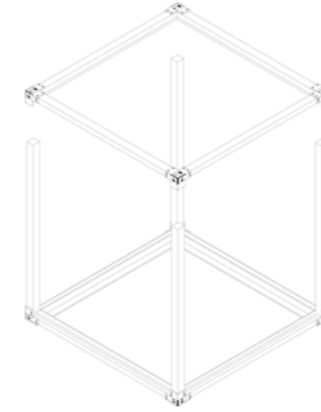
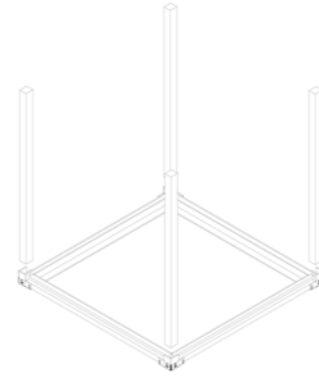
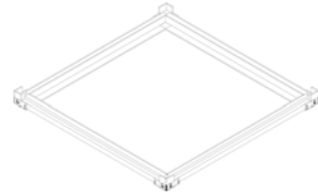
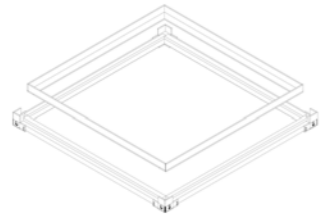


# Support vs Infill

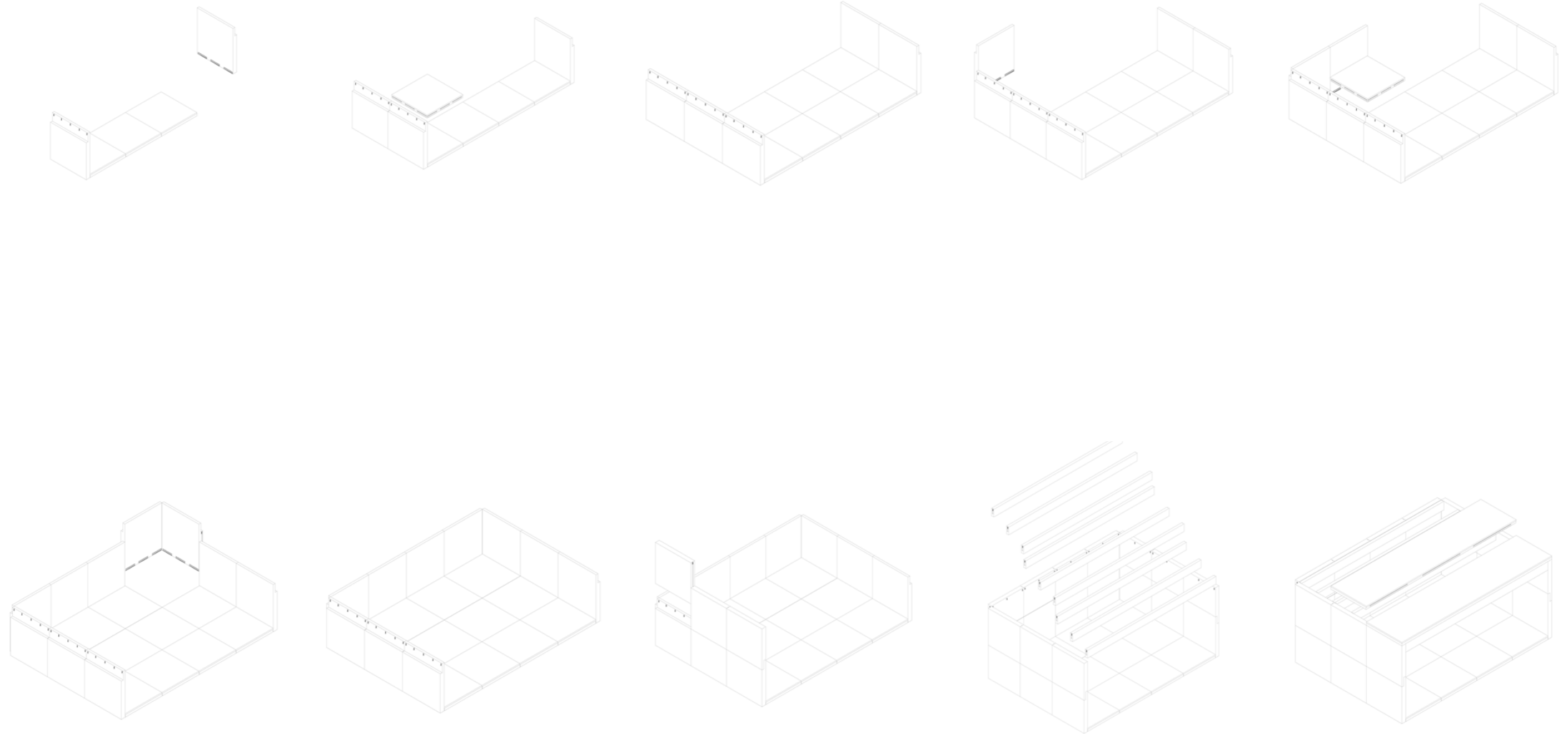
# Support vs **Infill**



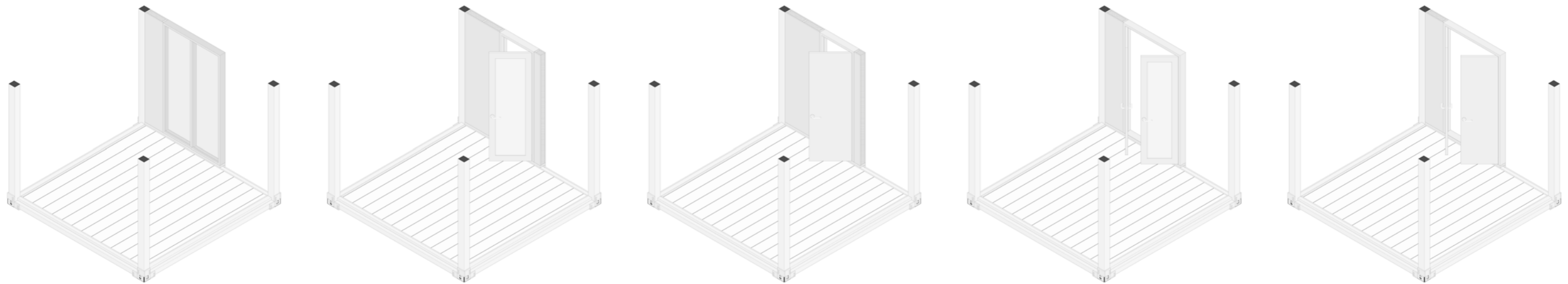
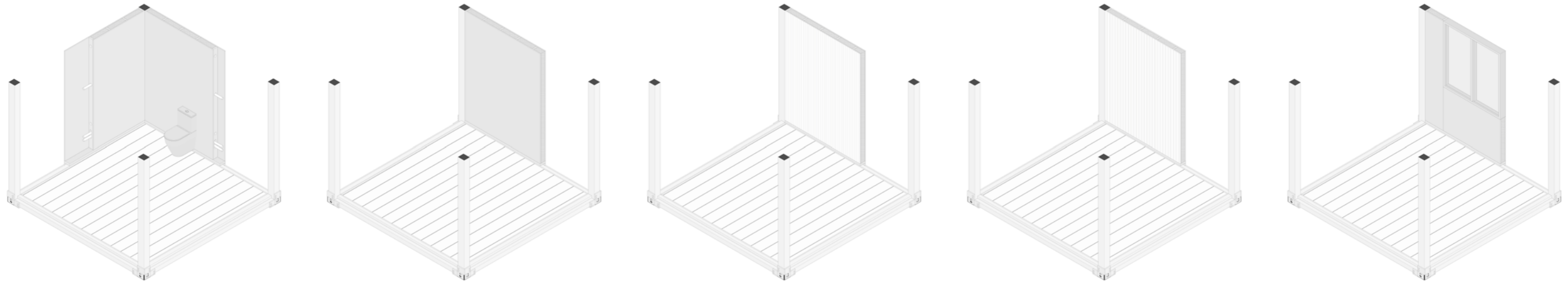


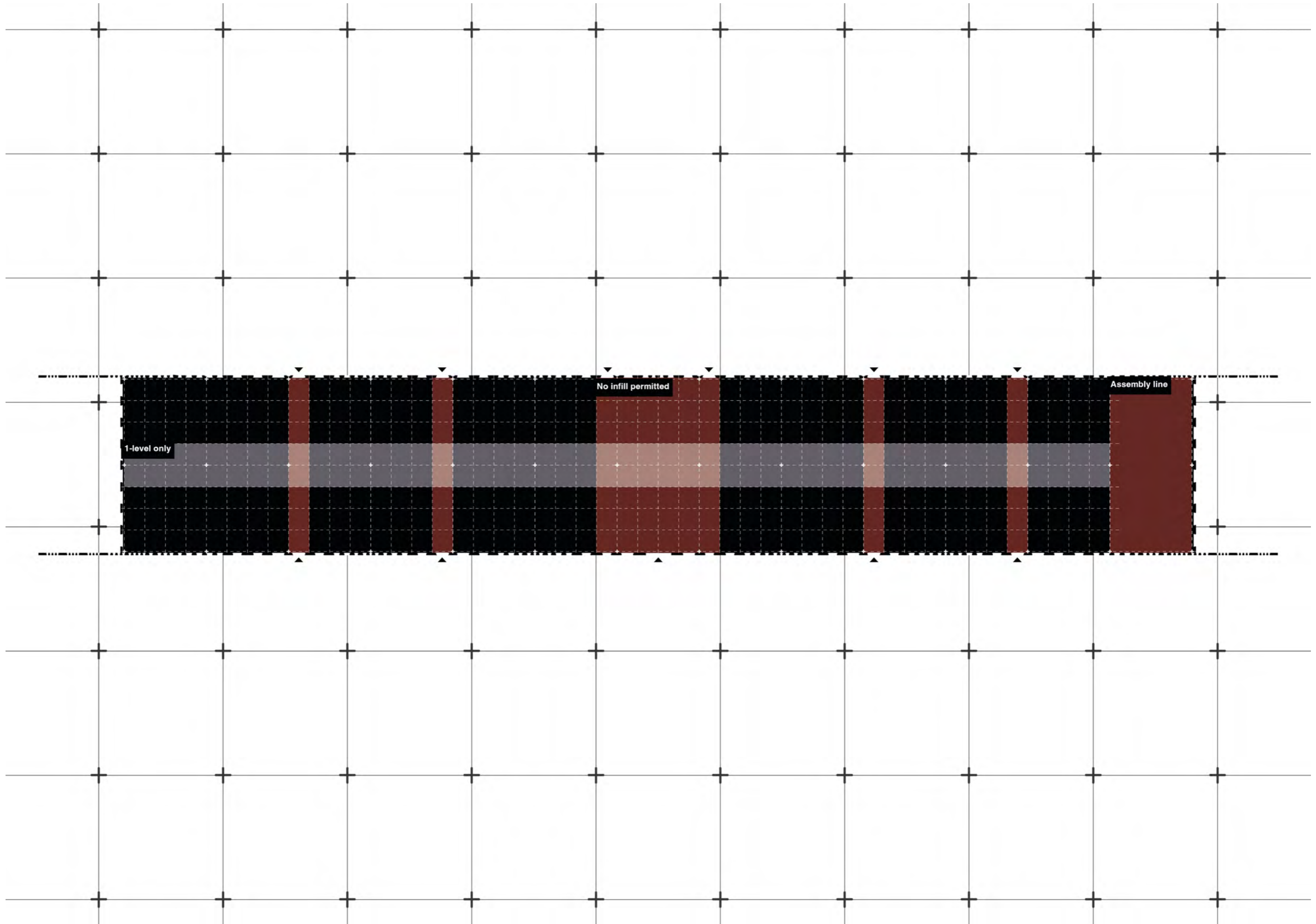


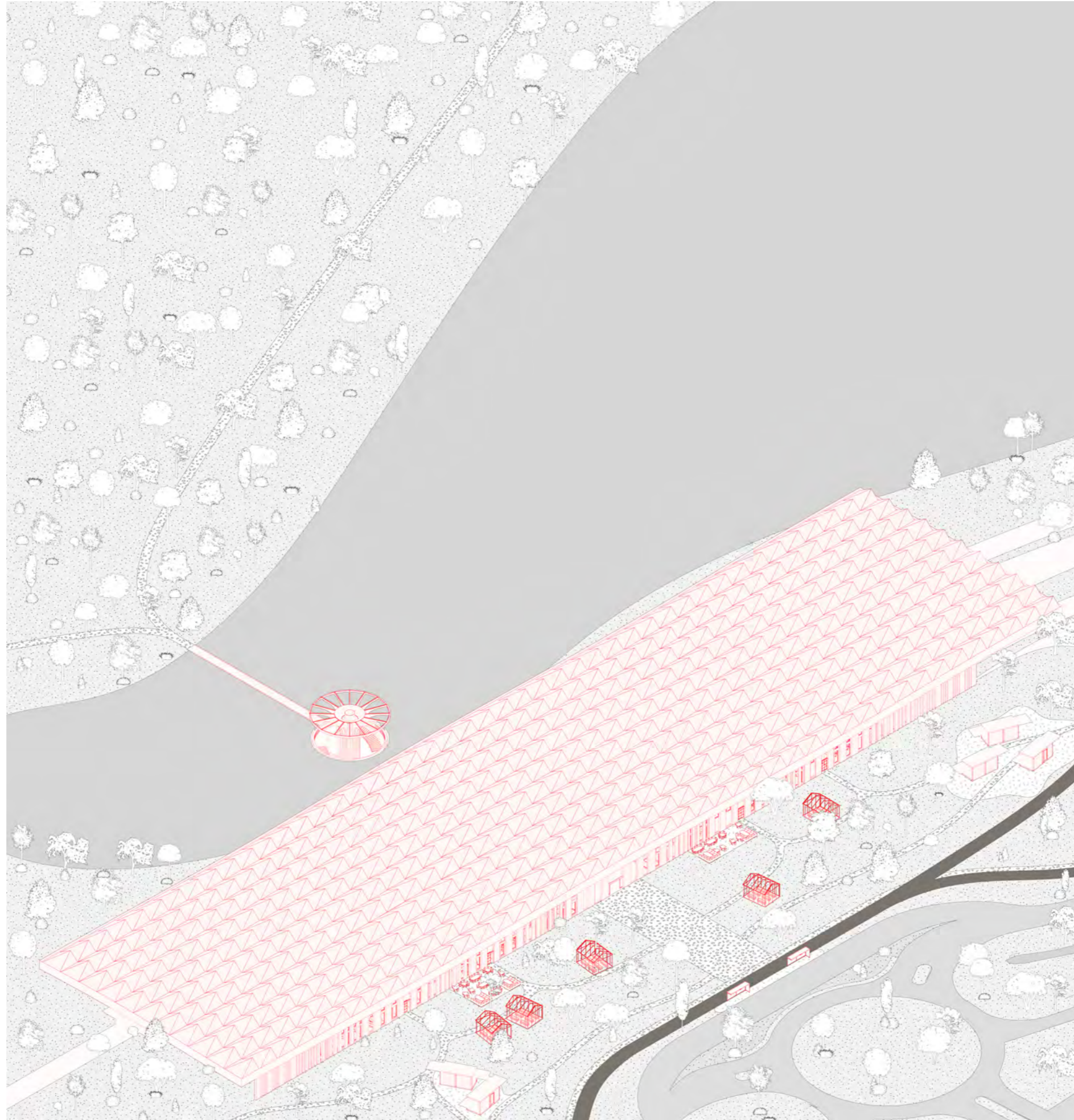
# The Spatial Mediator | Modular Wall & Floor System

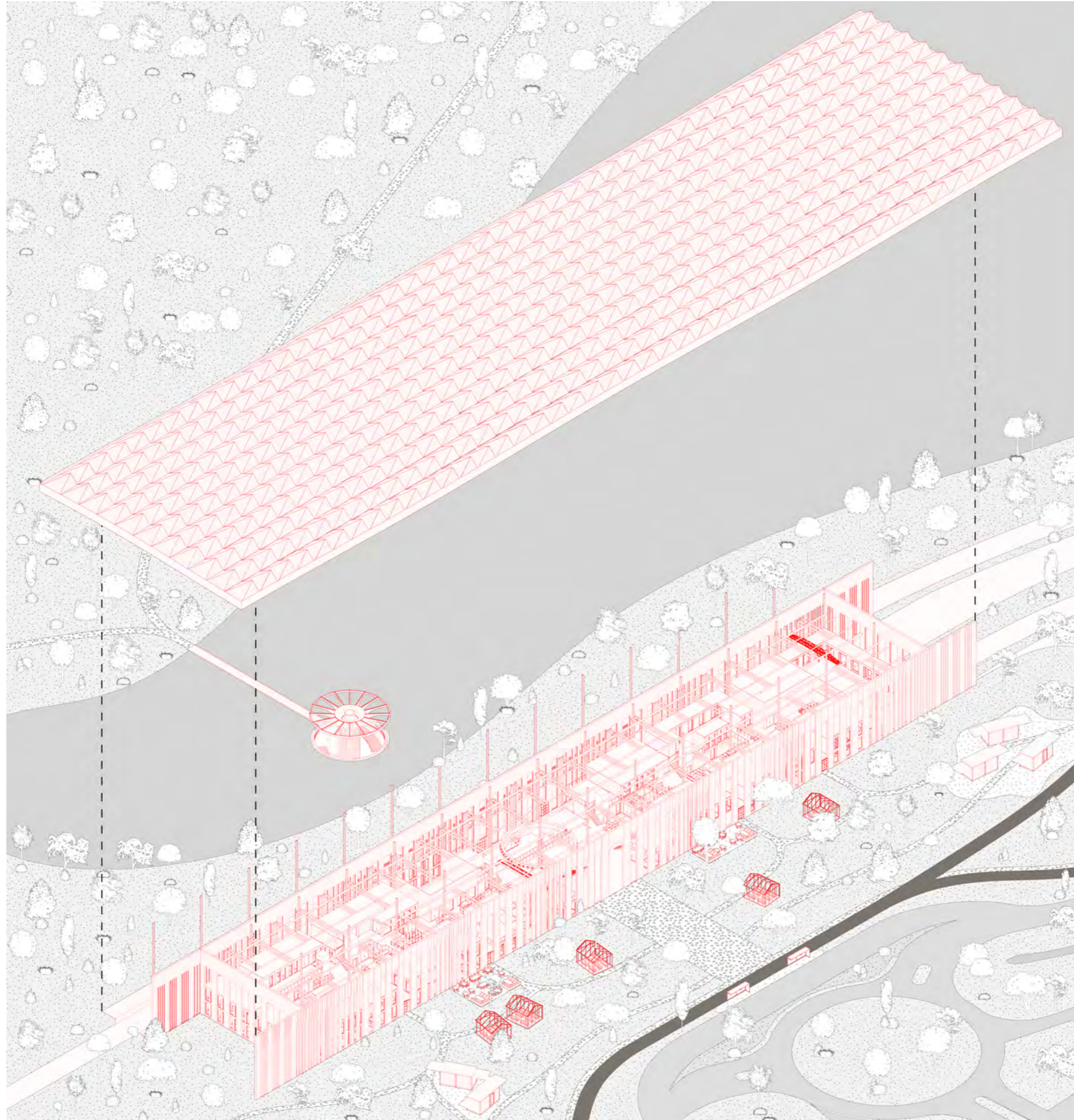


# The Spatial Mediator | Infill System

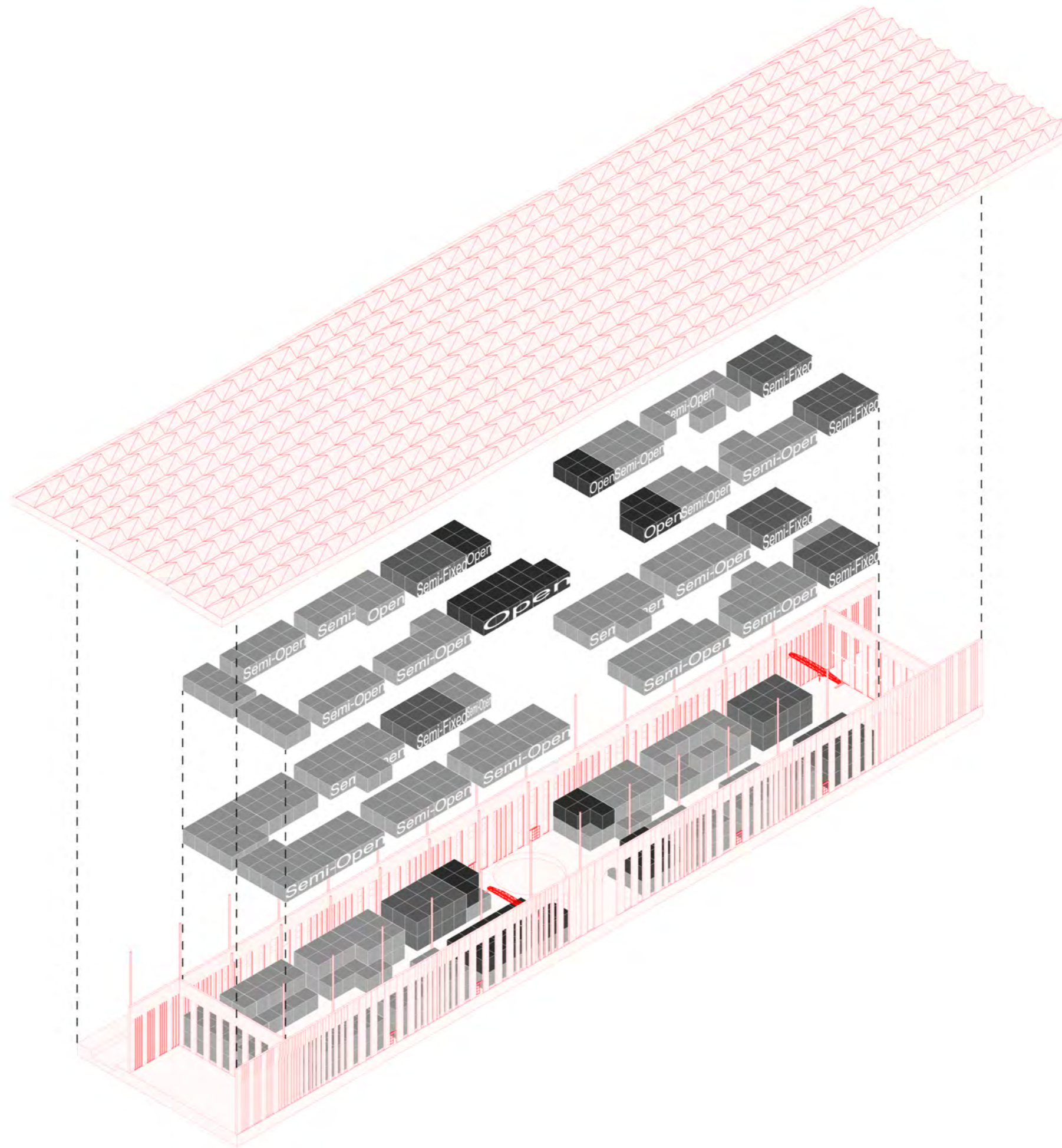


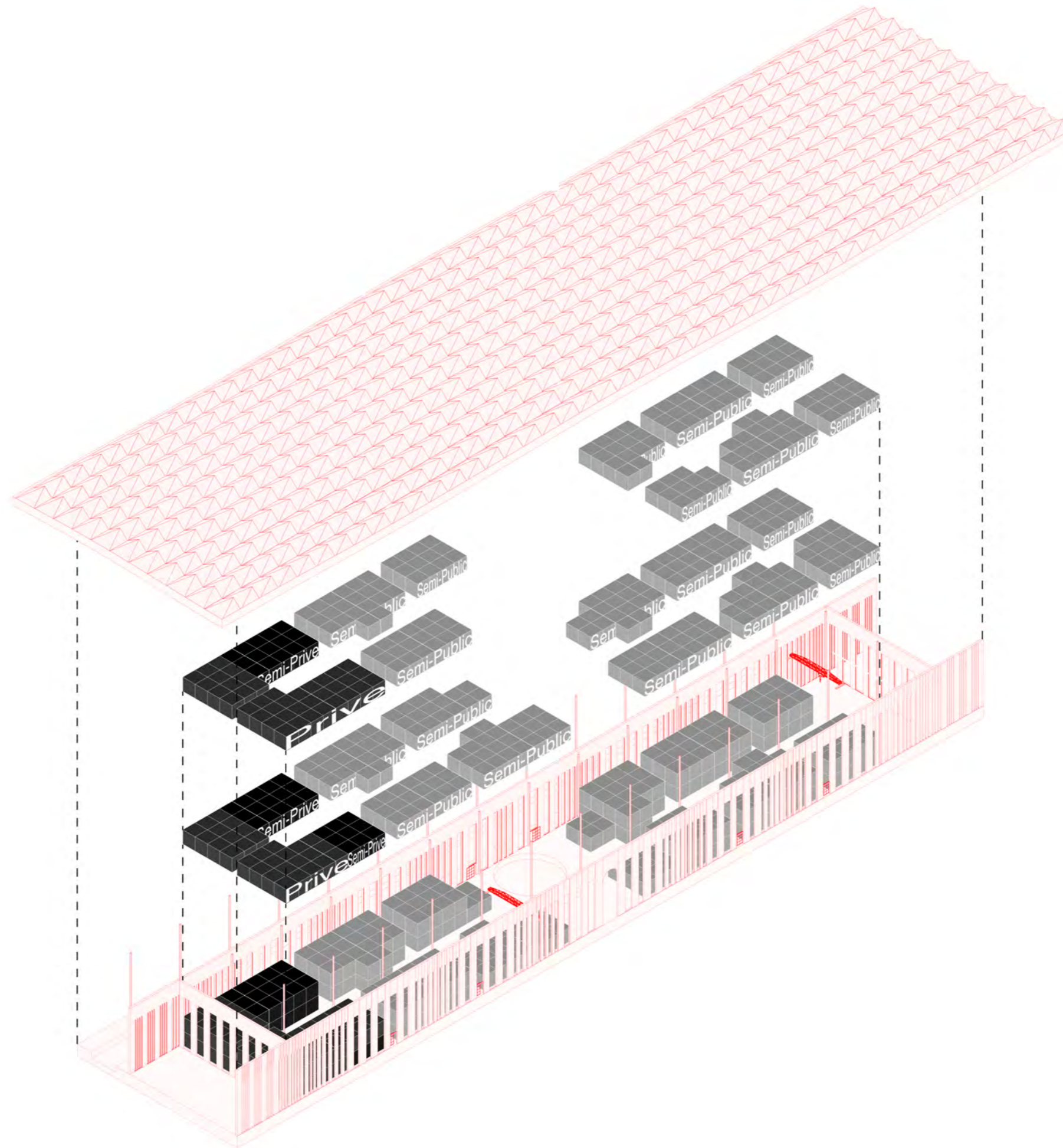


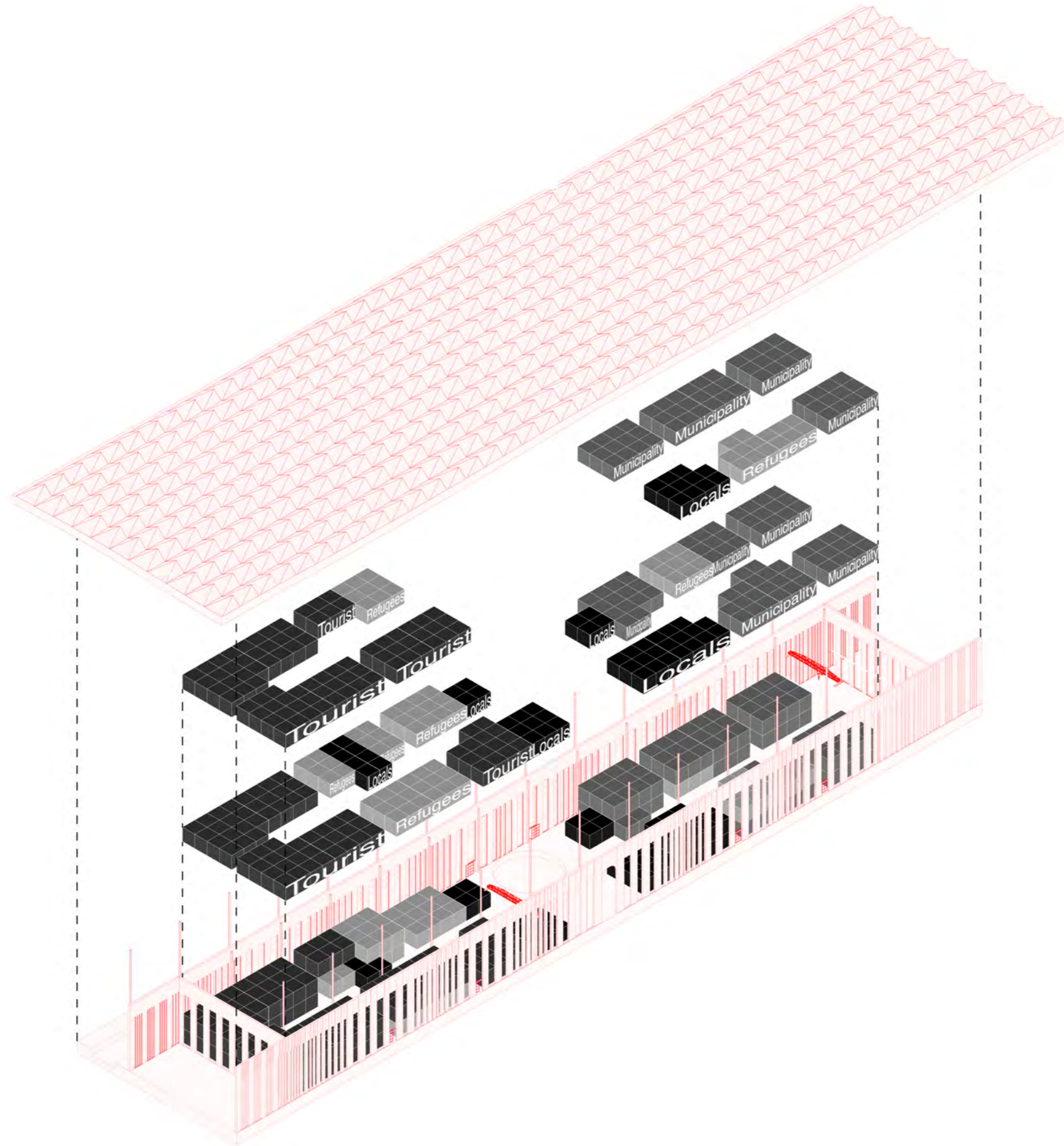




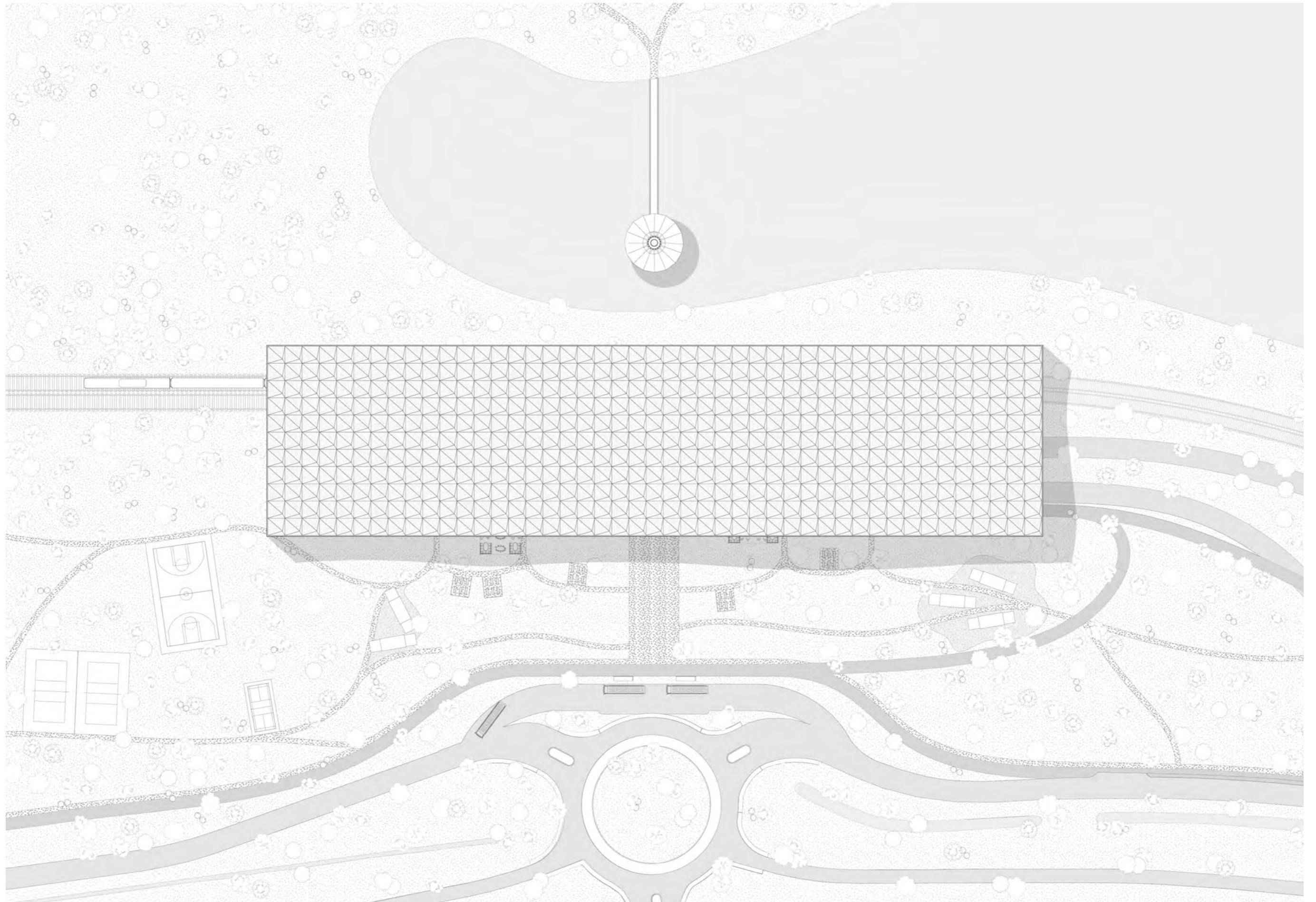
# The Spatial Mediator | Open vs Fixed

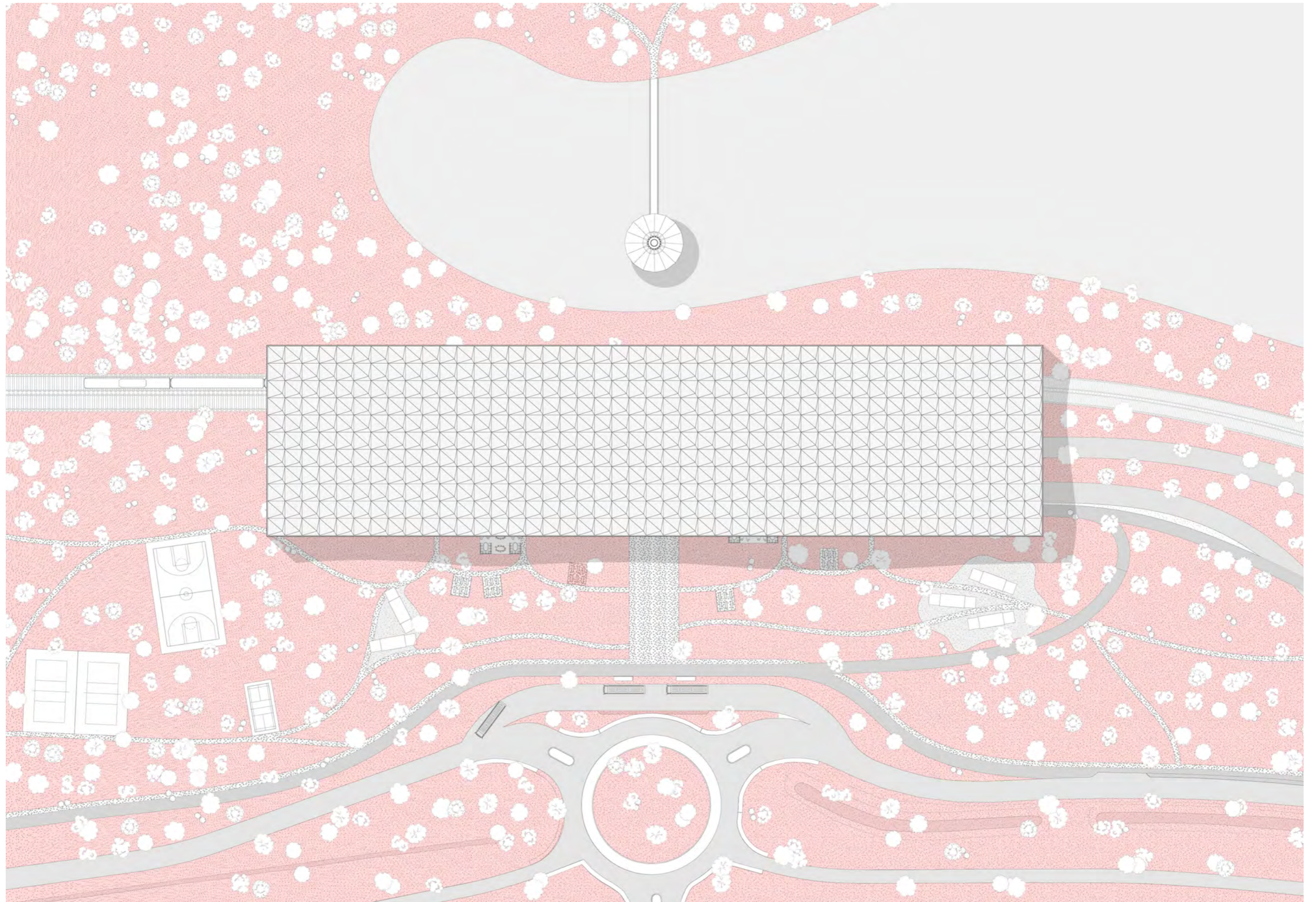


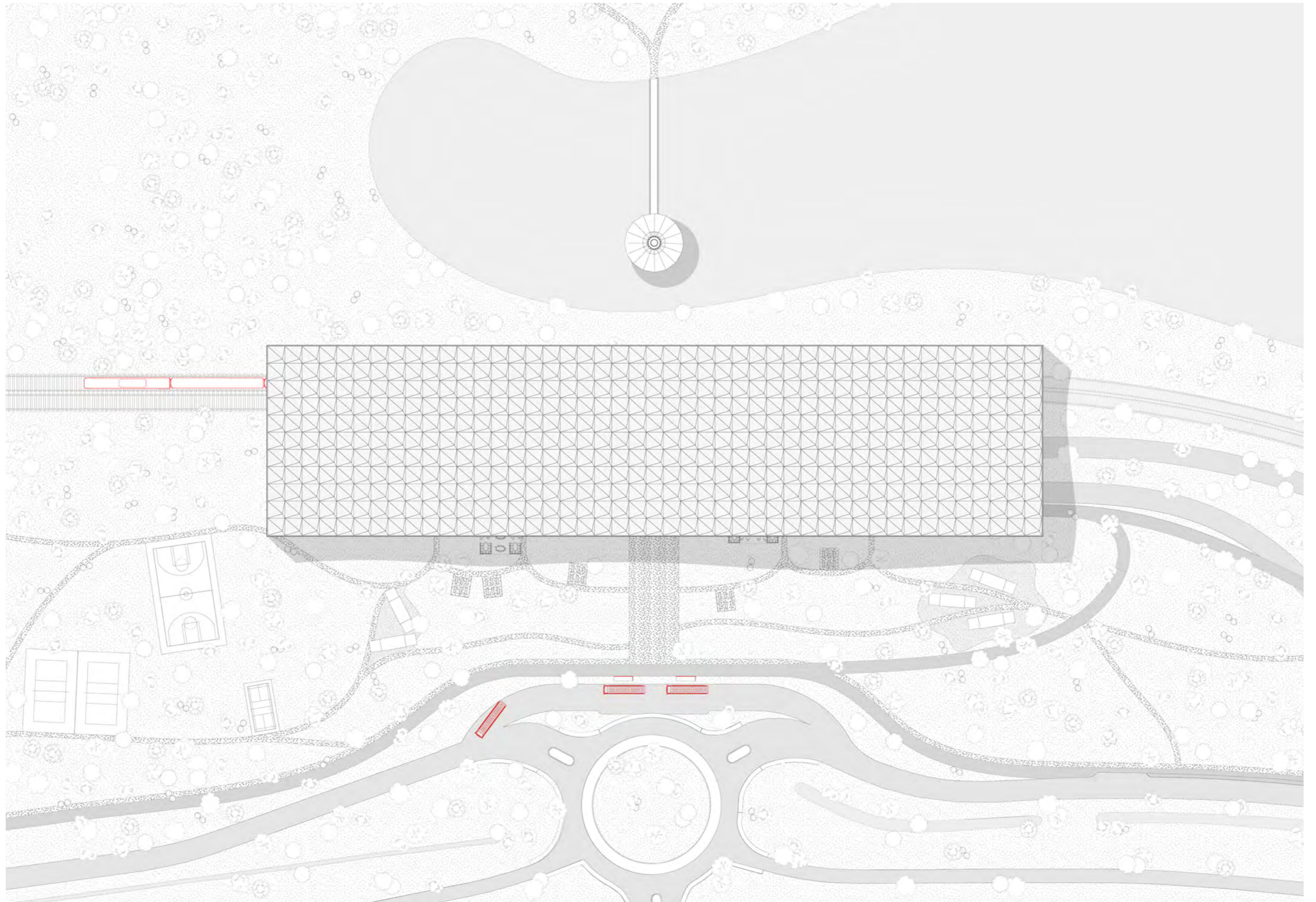




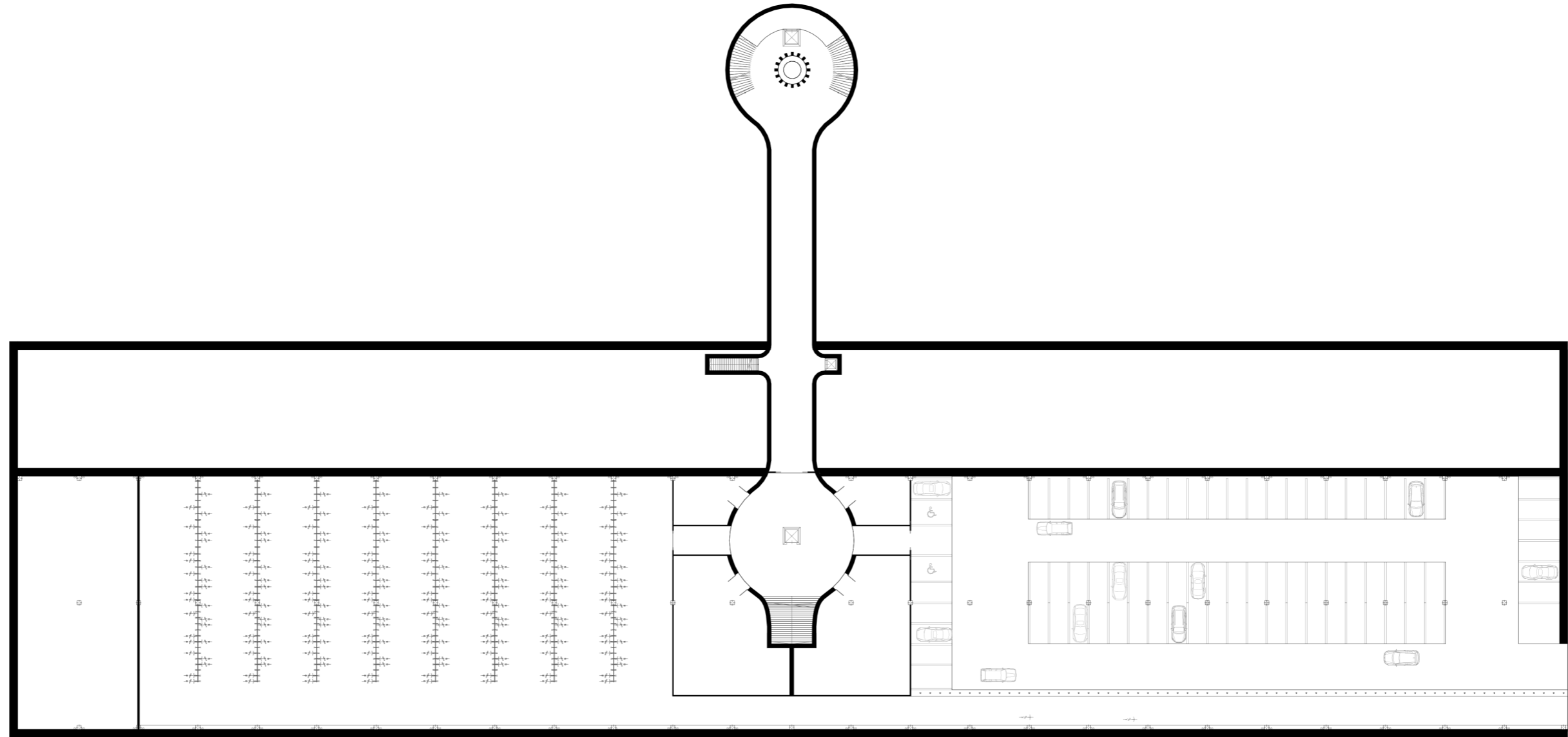


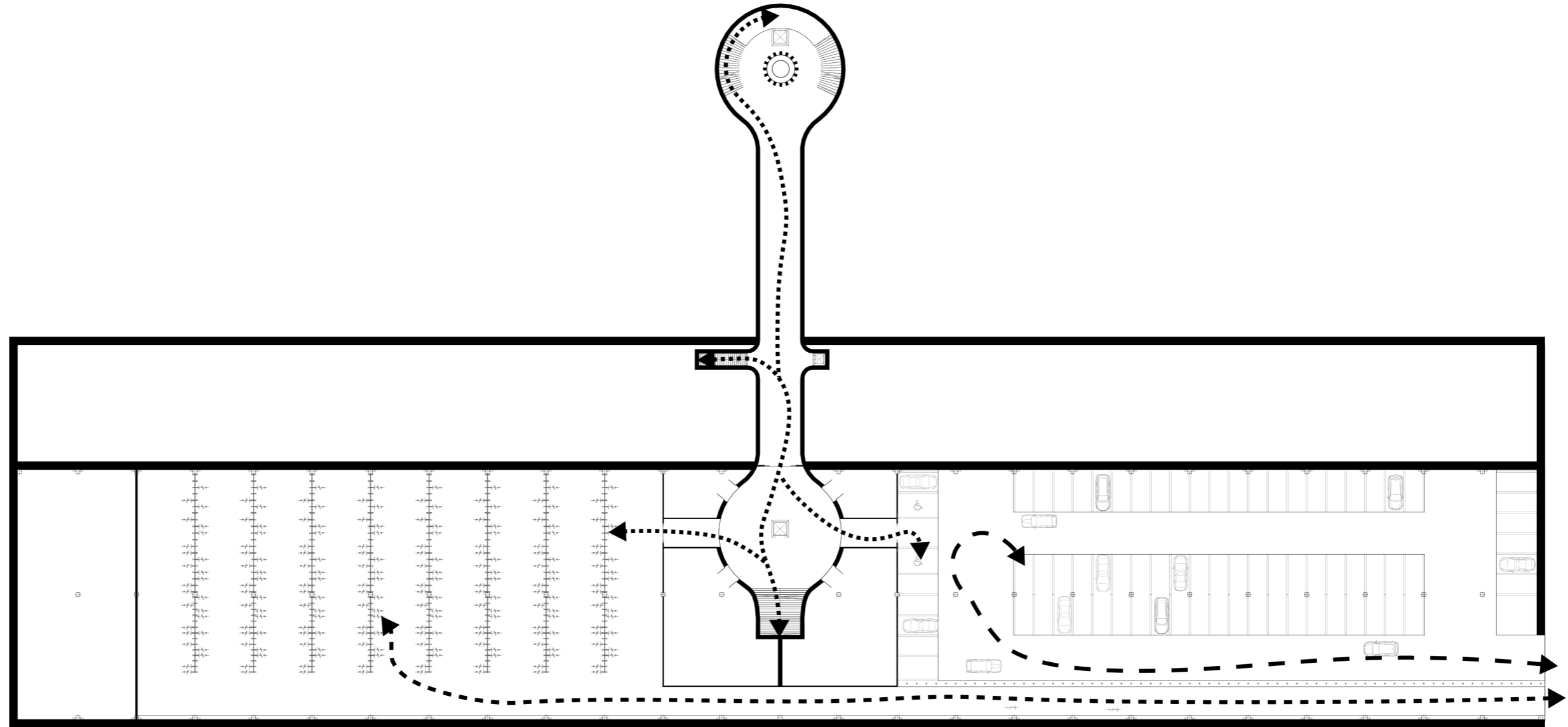


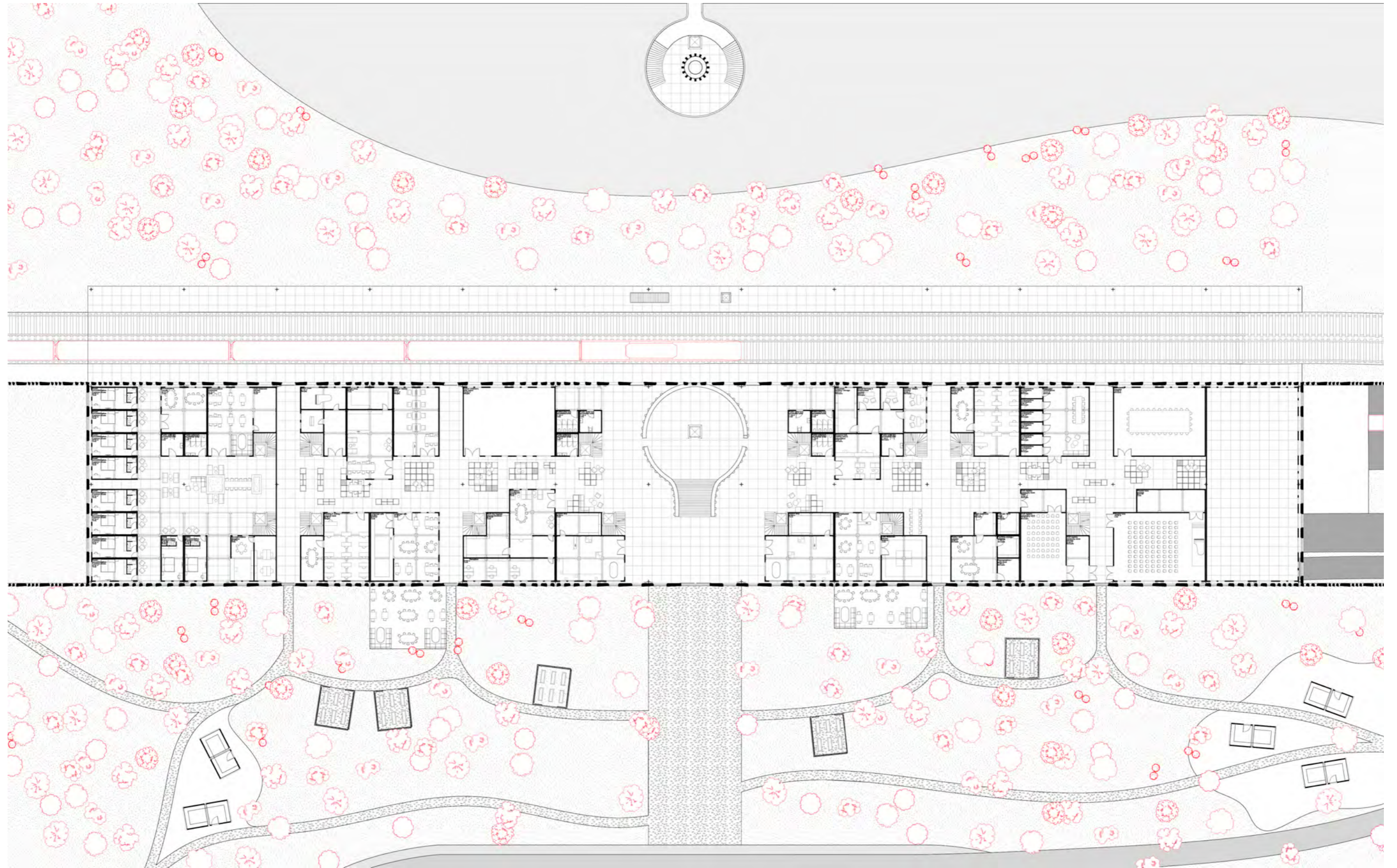


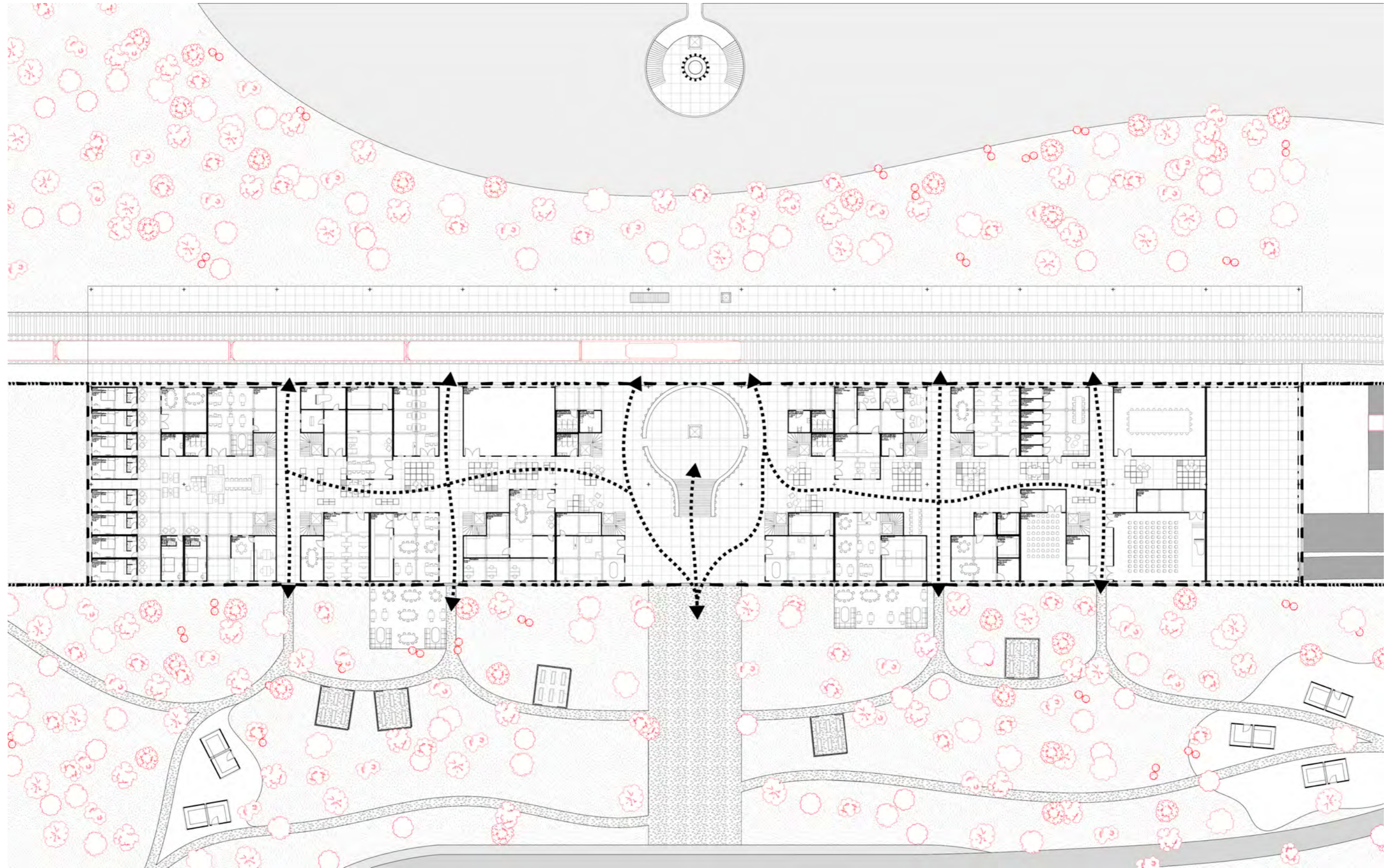




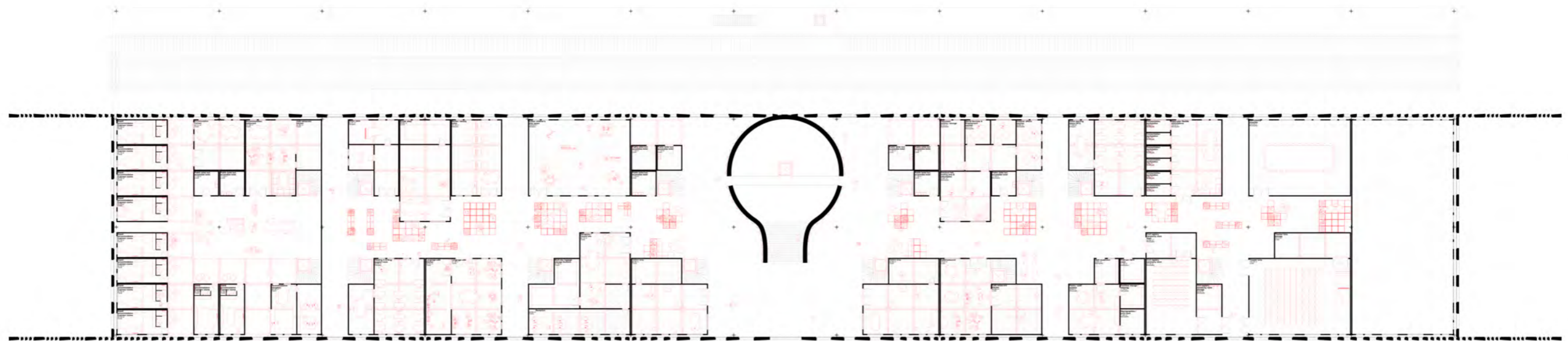


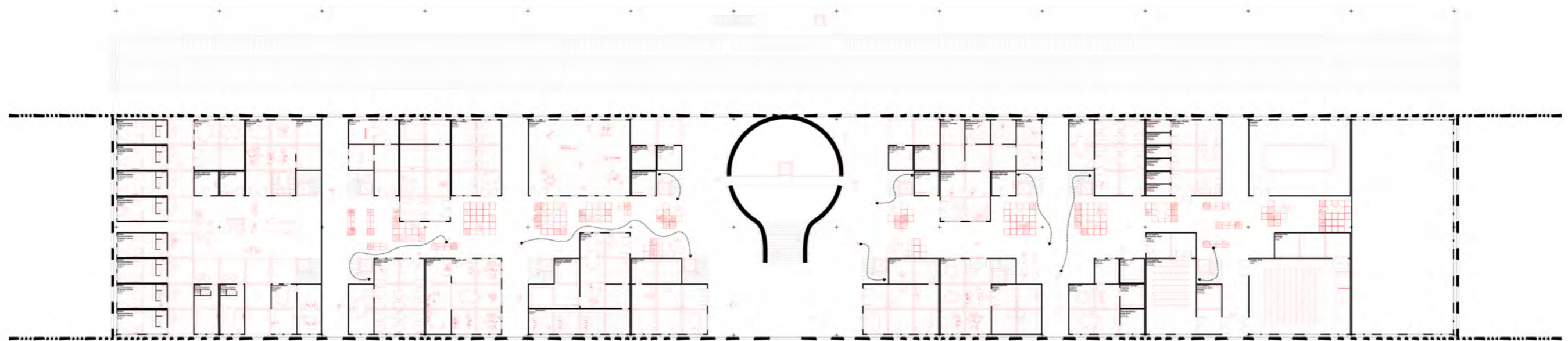








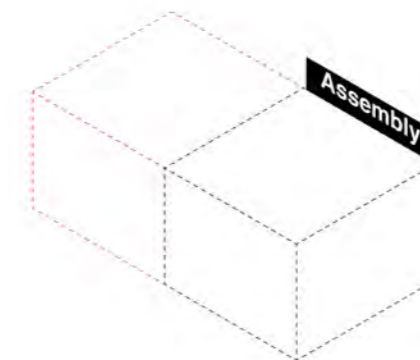


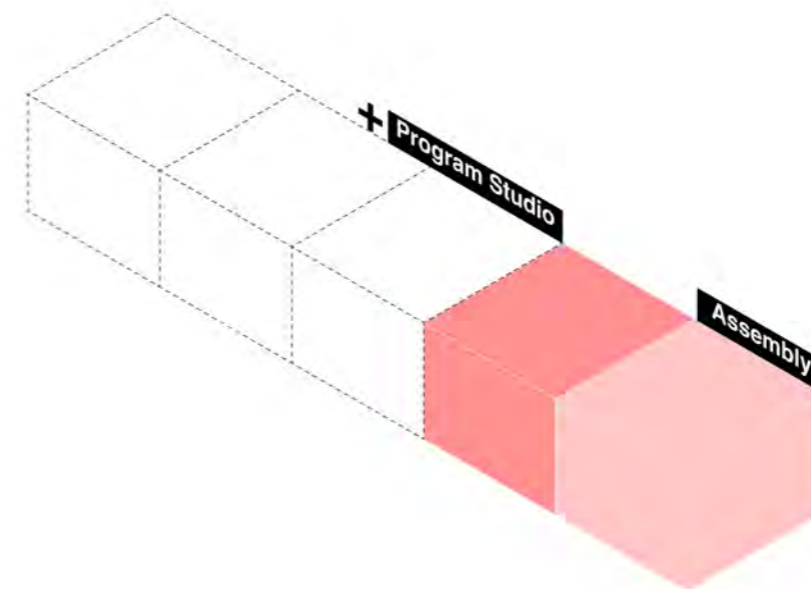


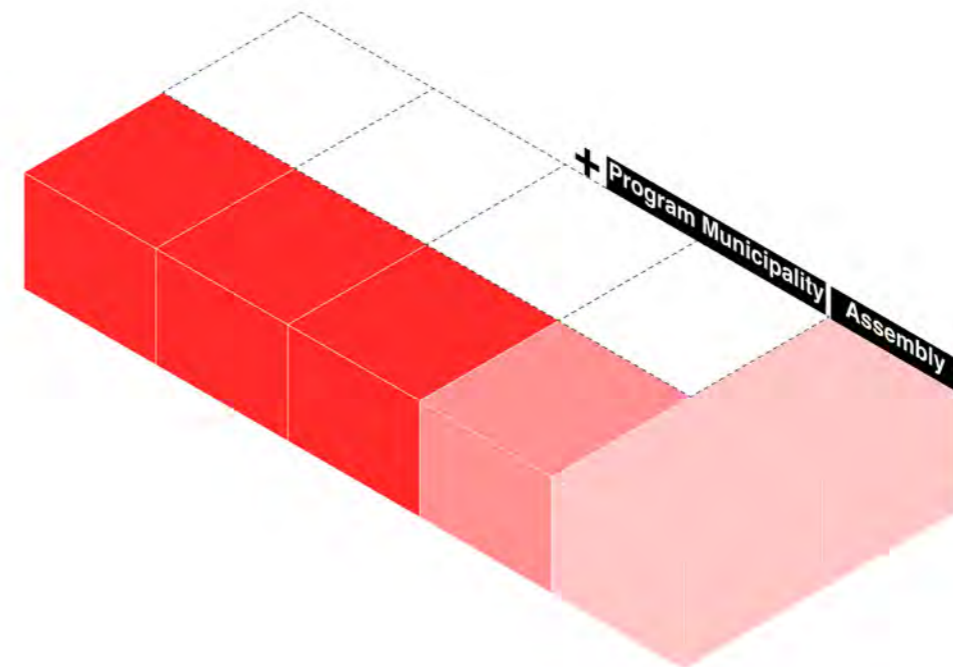


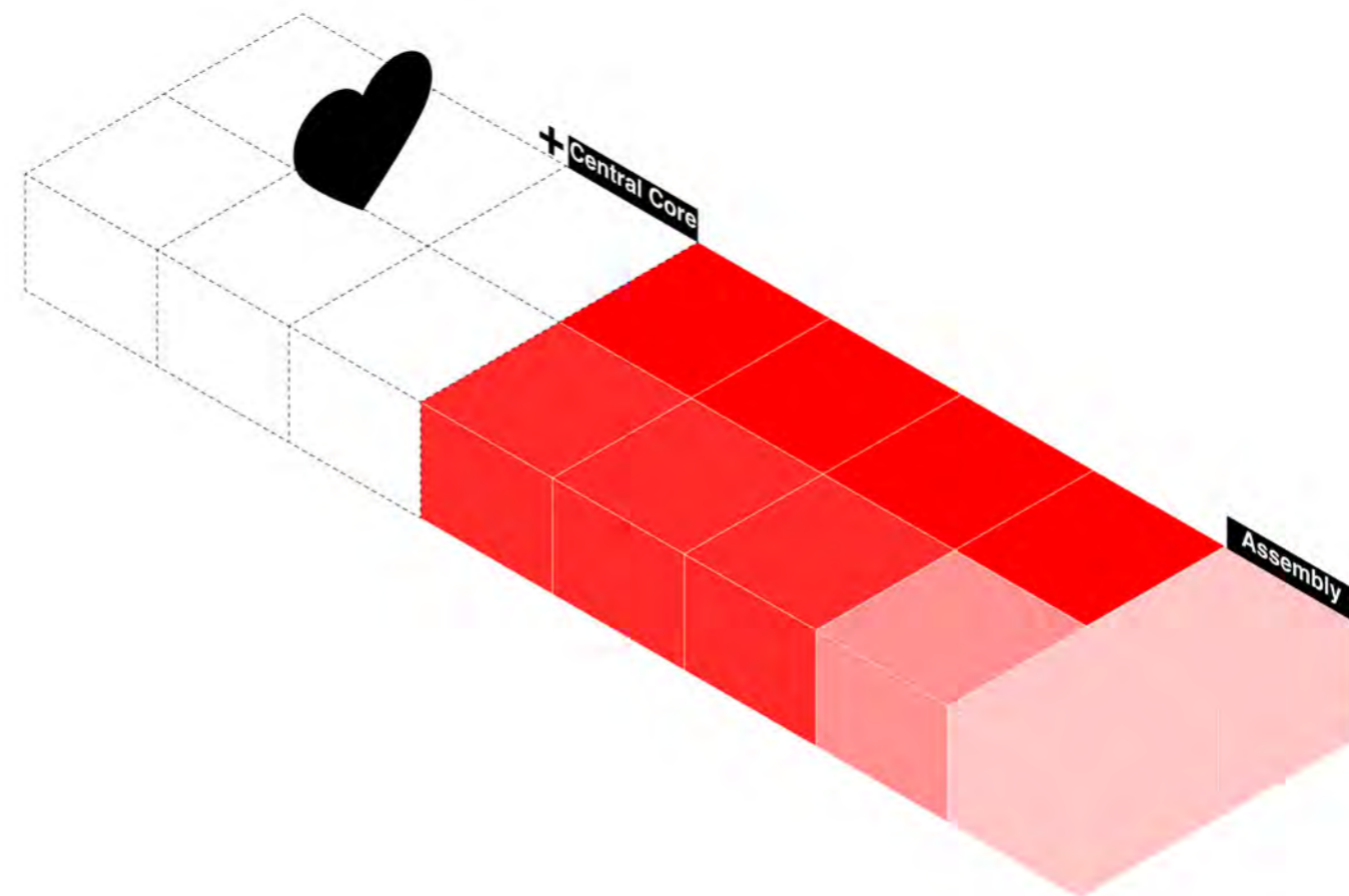


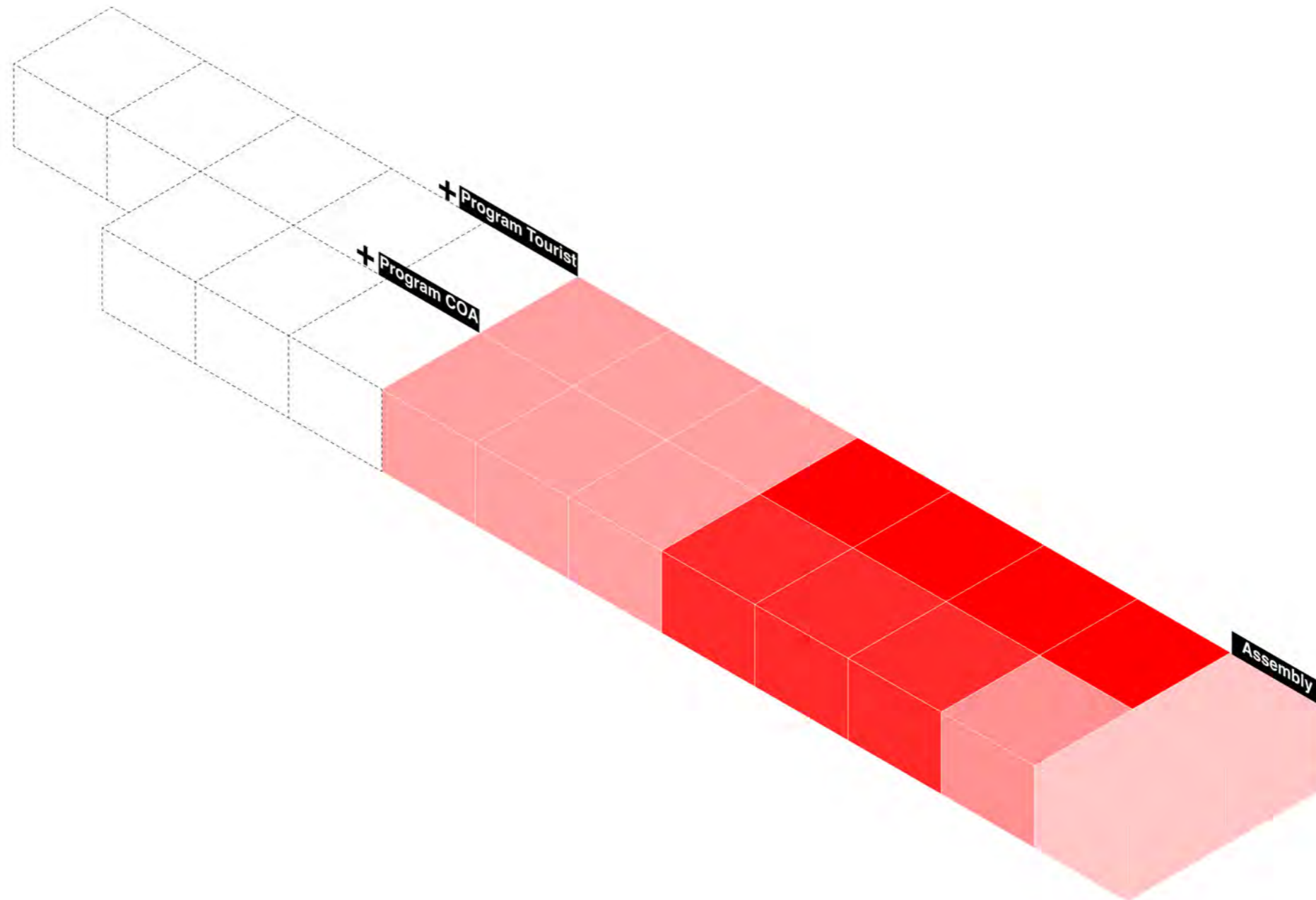




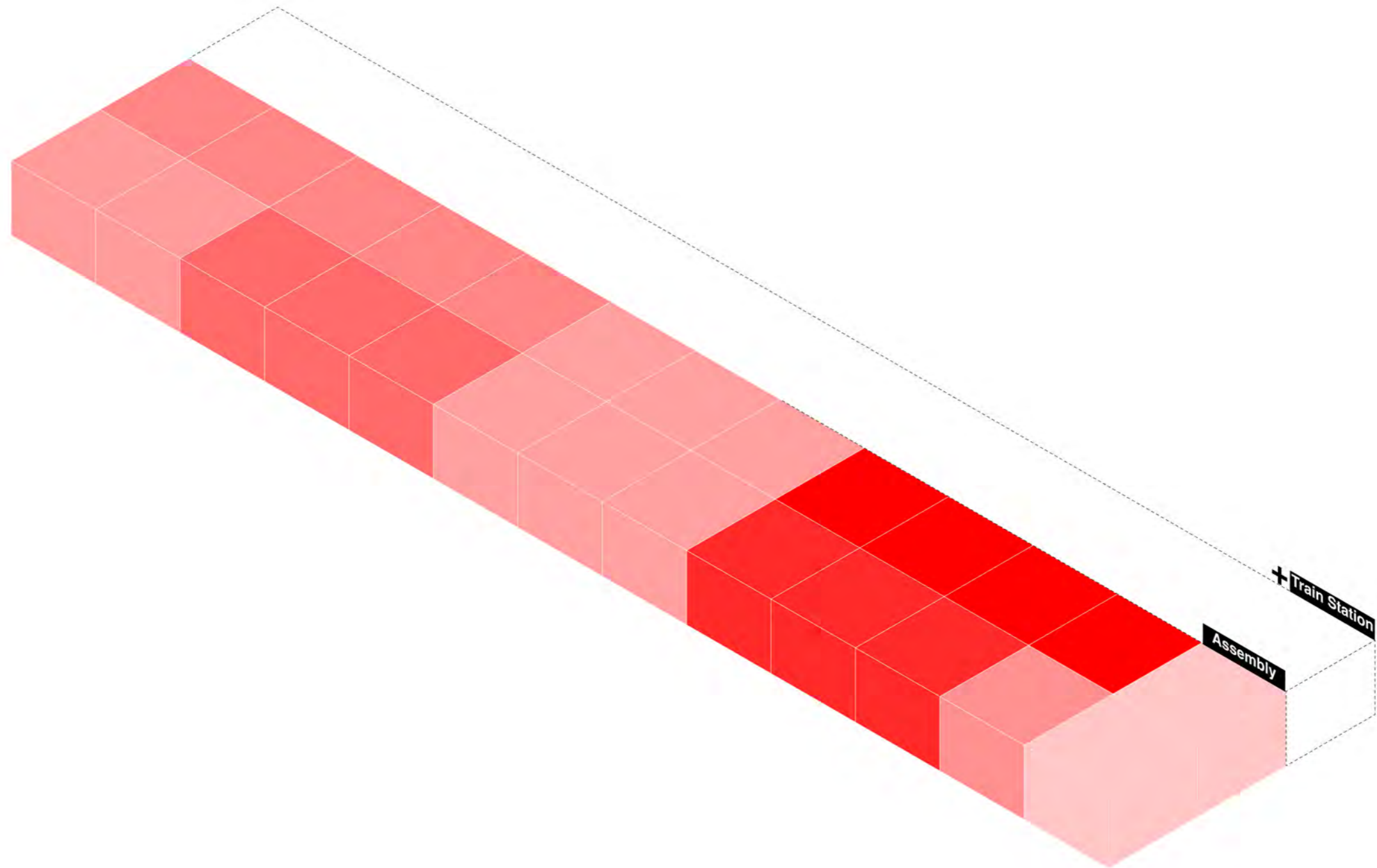


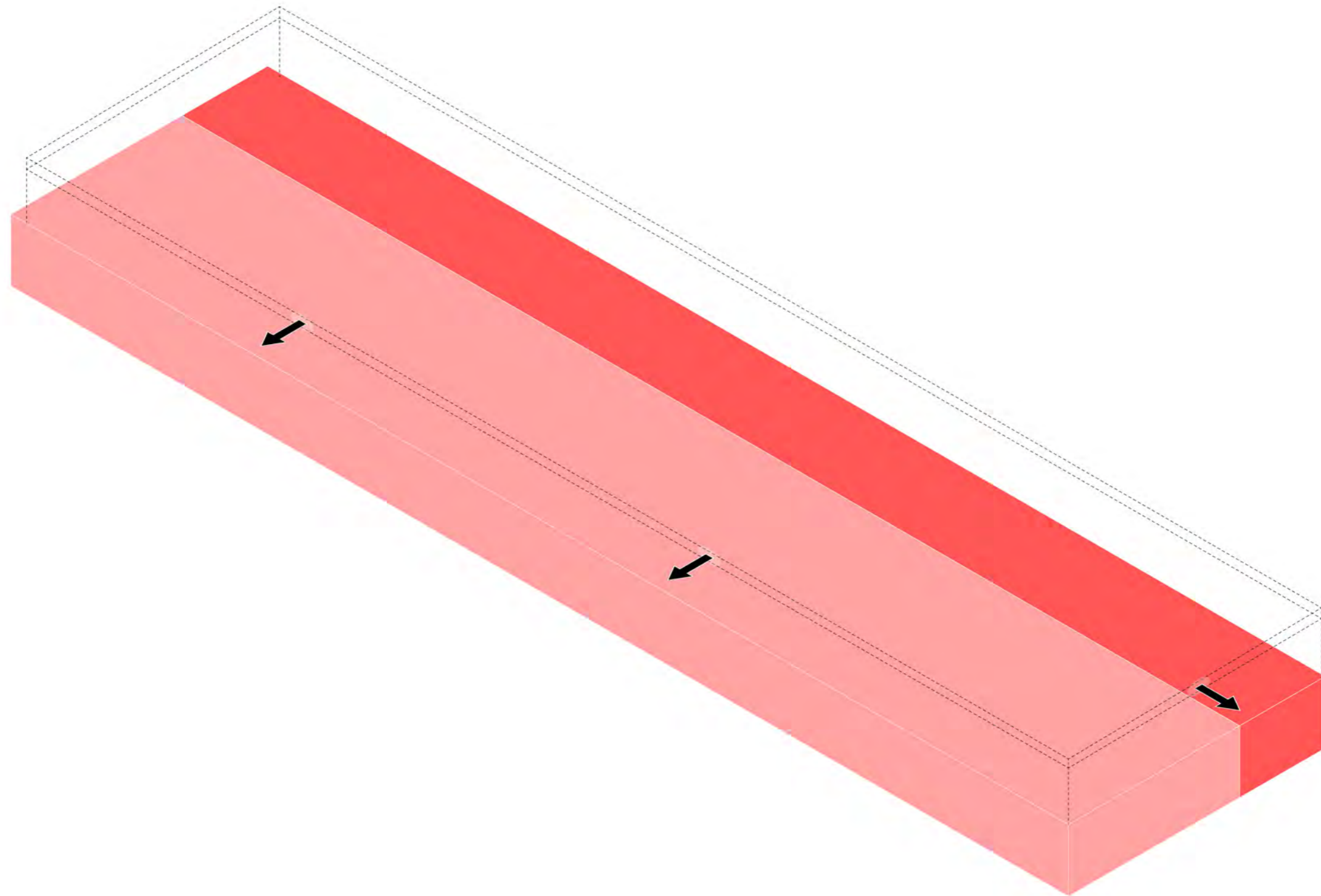


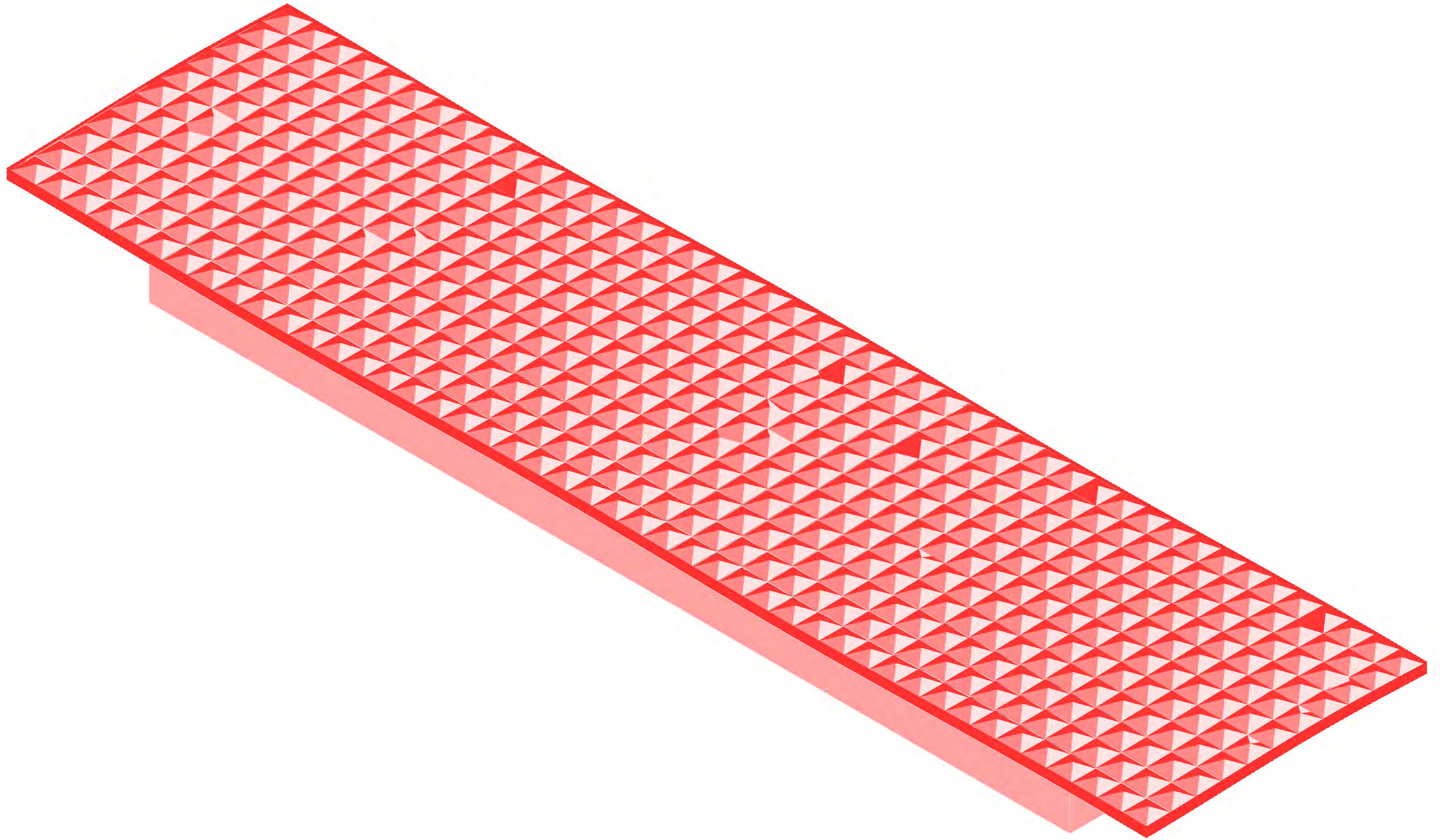


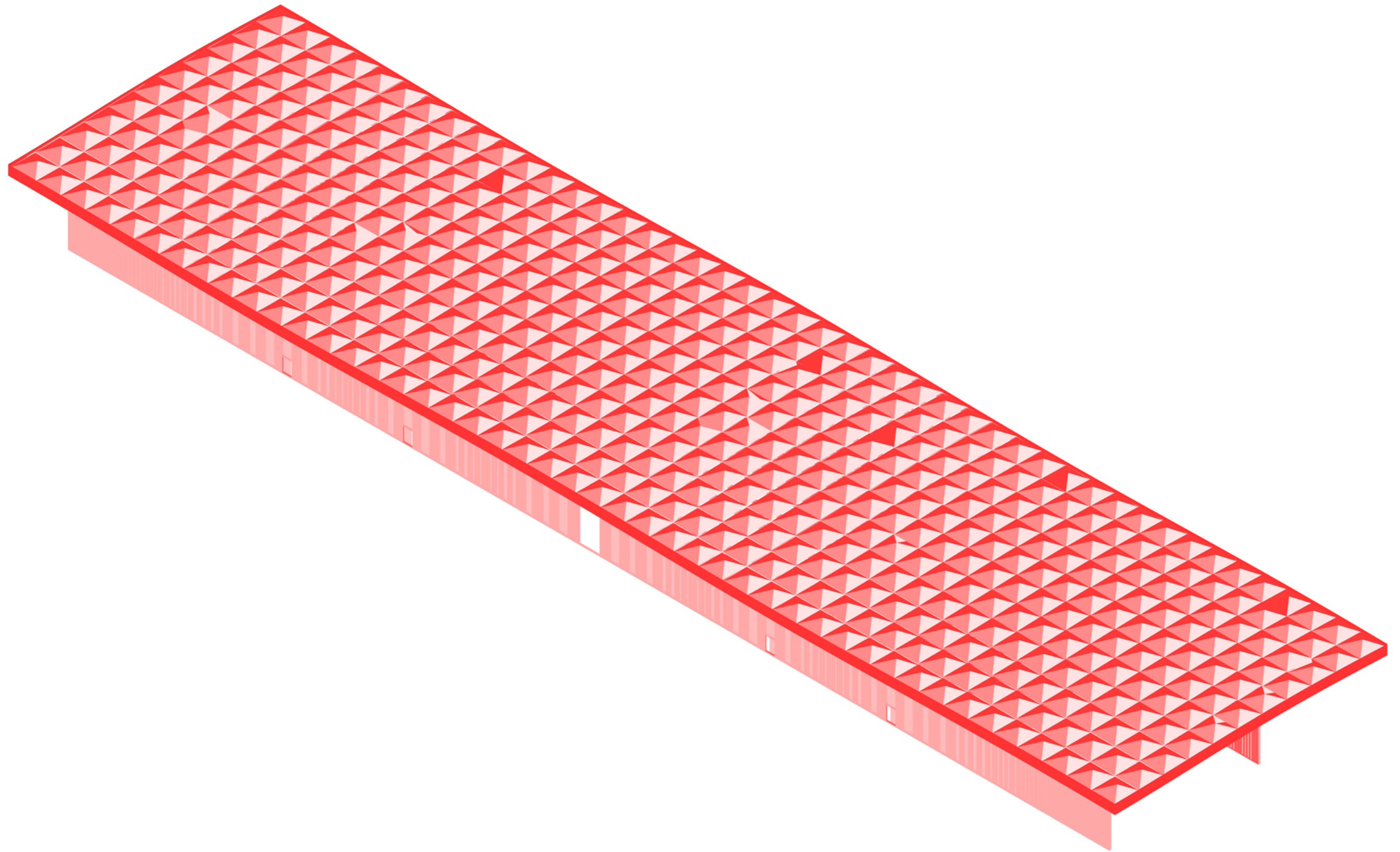


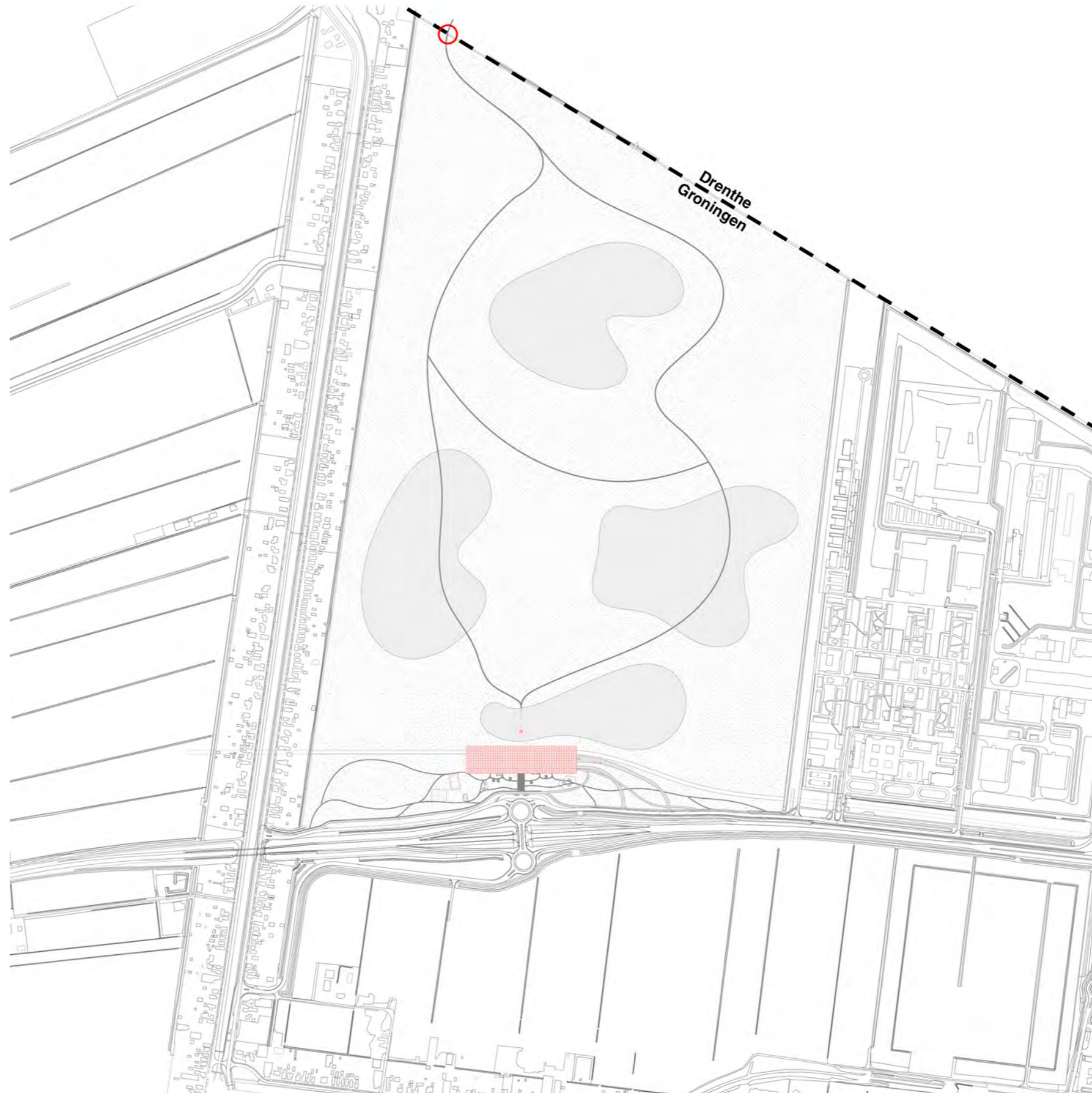




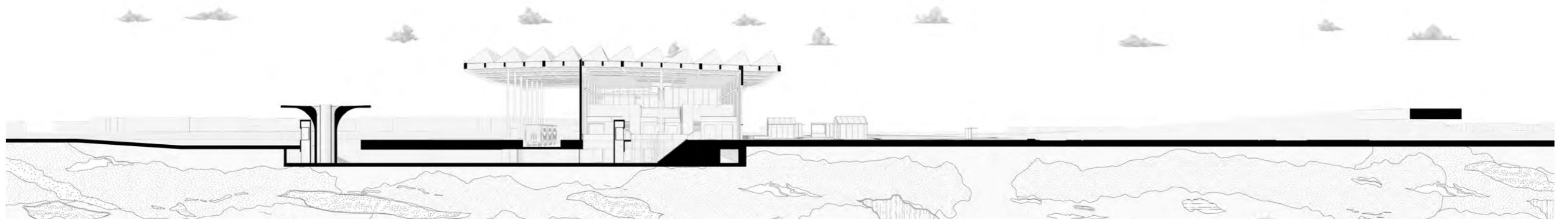


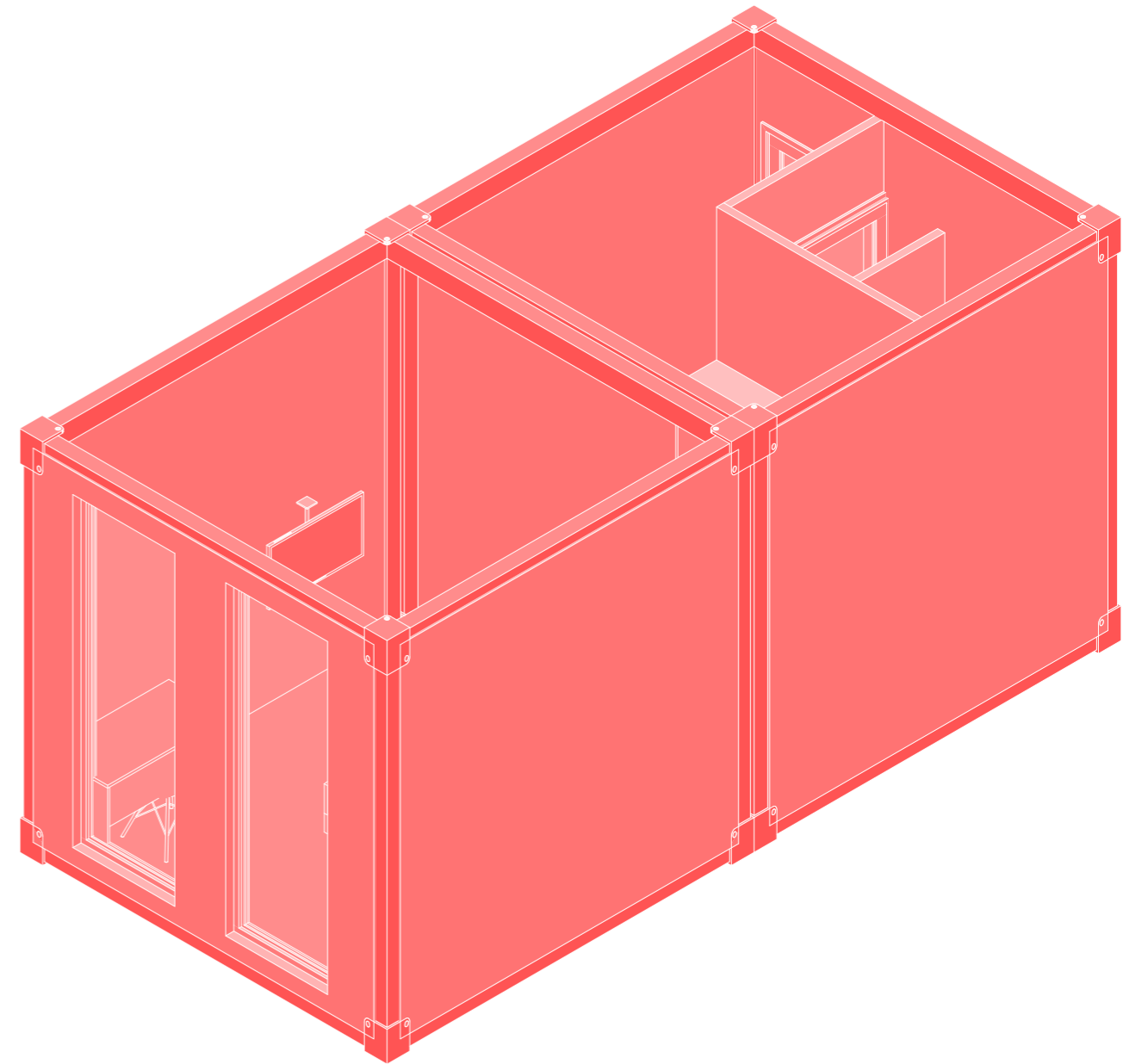
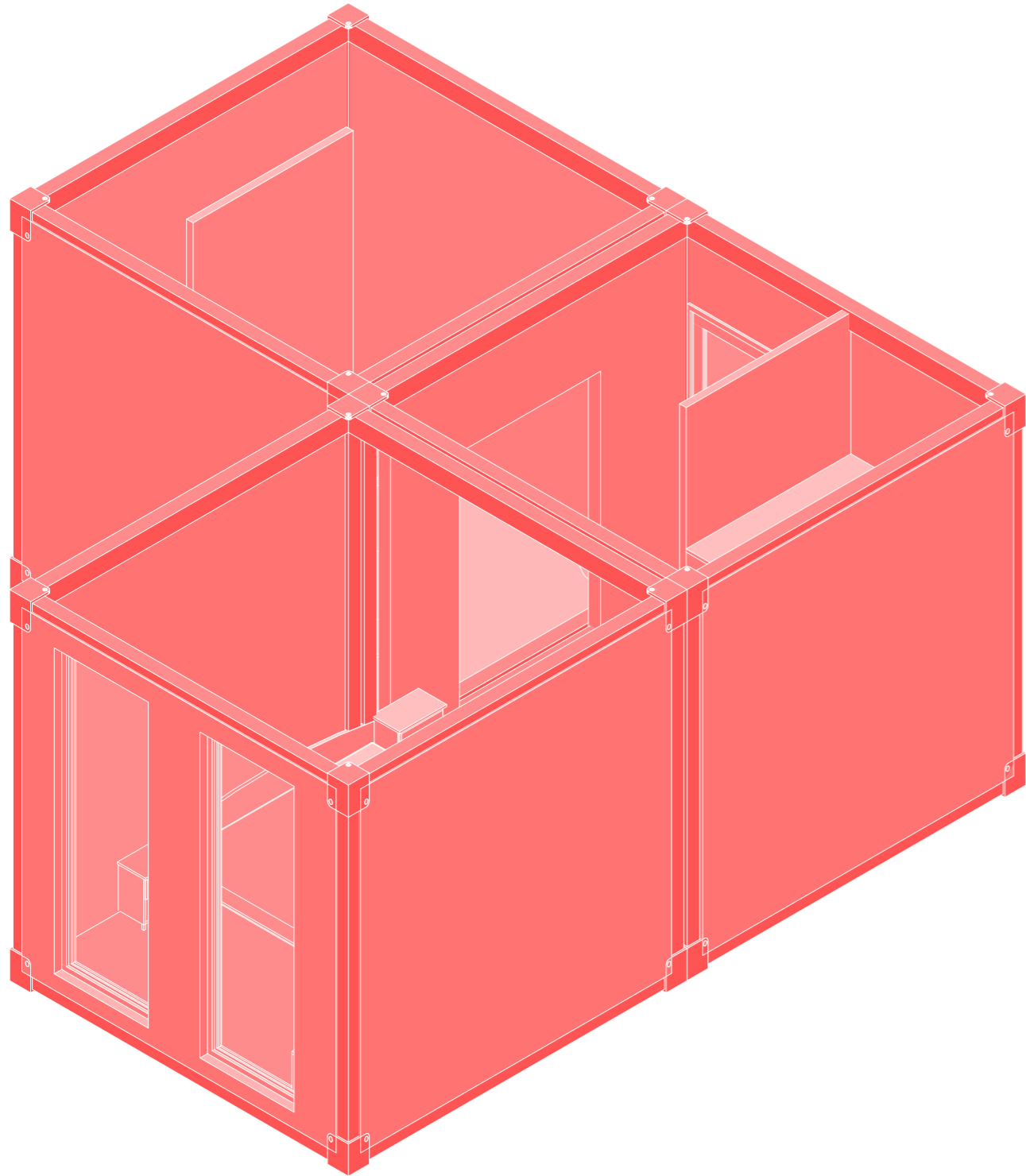








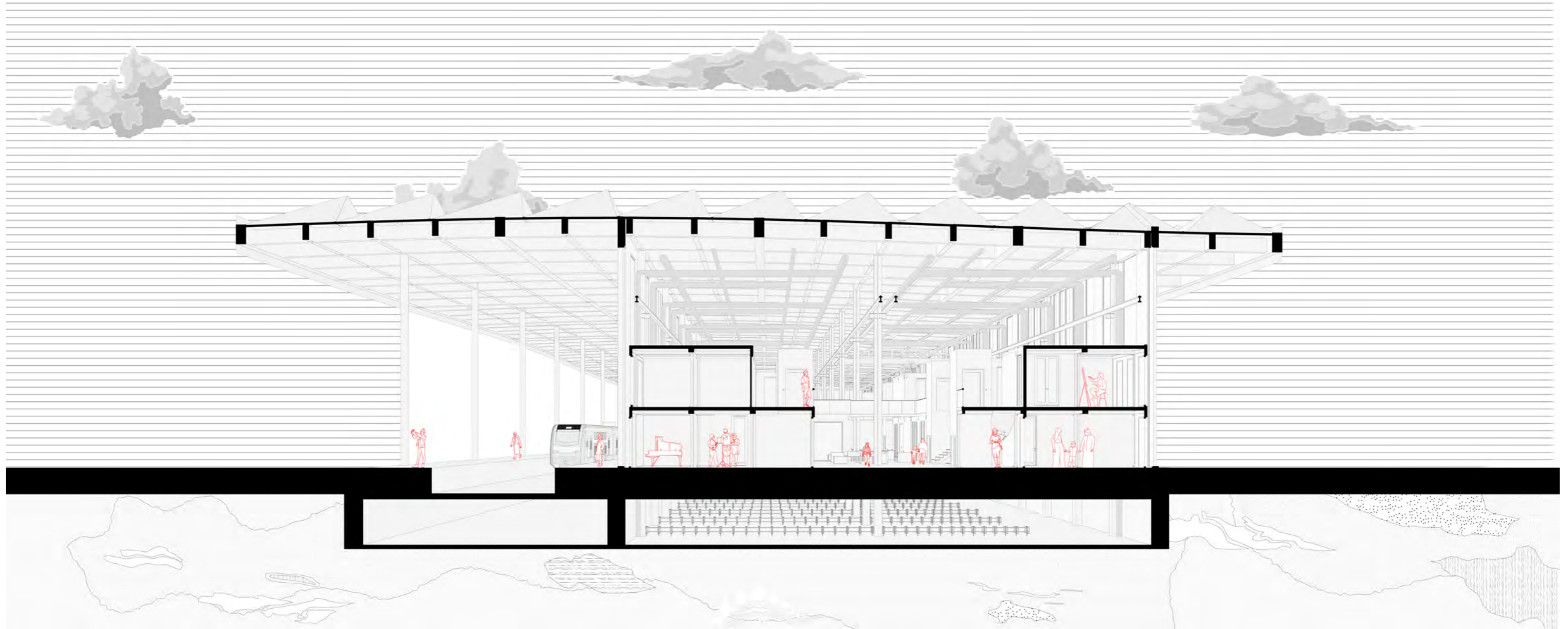






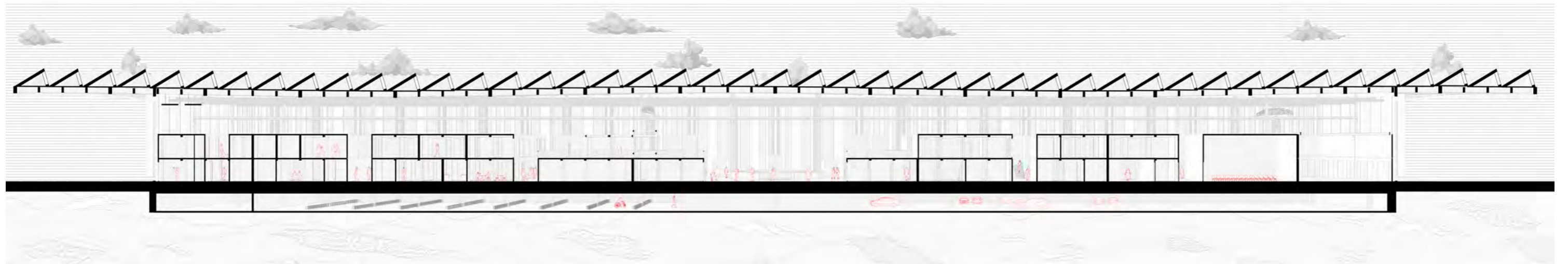


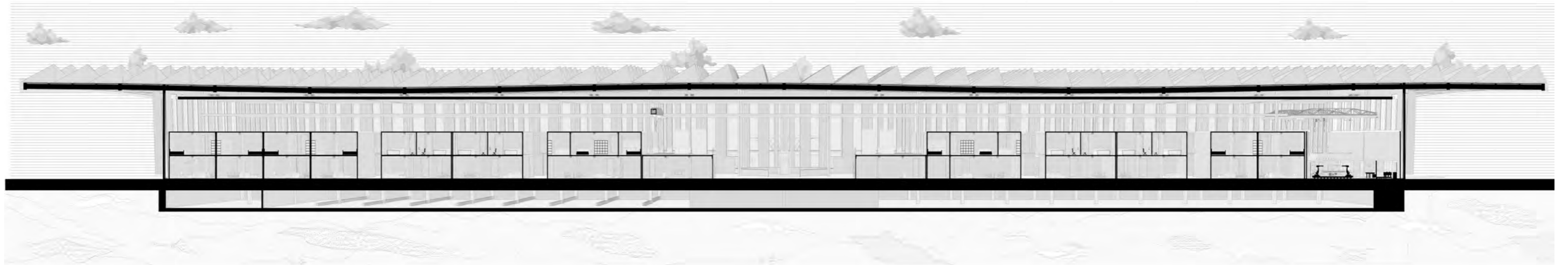




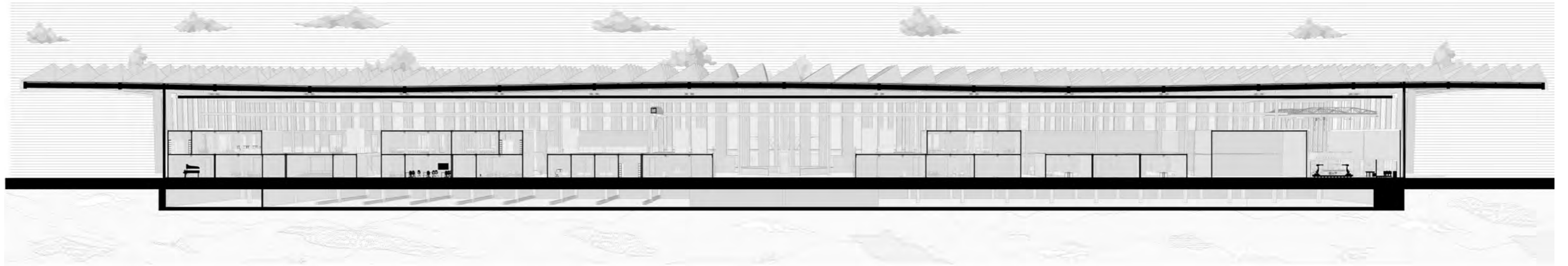


How can a **strategic** architectural **intervention** in Ter Apel support the **transformation** of local **identity** from a landscape of **crisis** to a place of dignified reception and community **function**, by spatially **mediating** the conflicting flows of locals, refugees, and tourists through **data-driven** design and agile **architecture** with flexible programming?

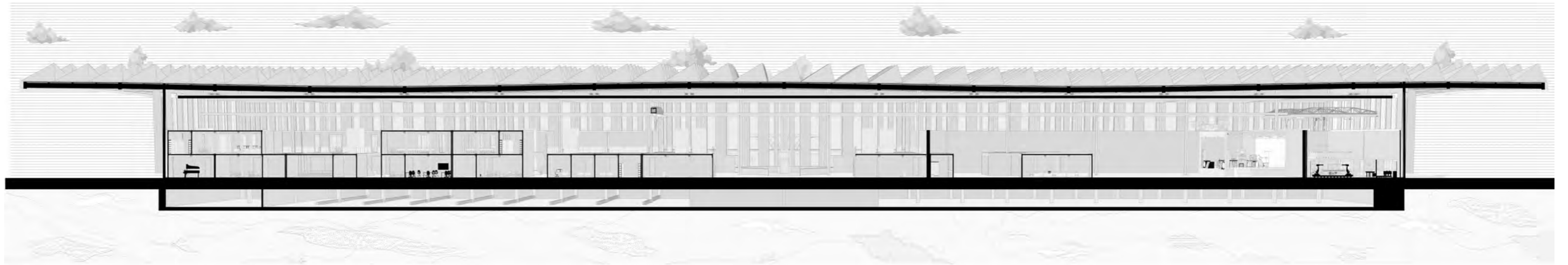














But how can **users** shape this **building**?