The tailored, project hackney

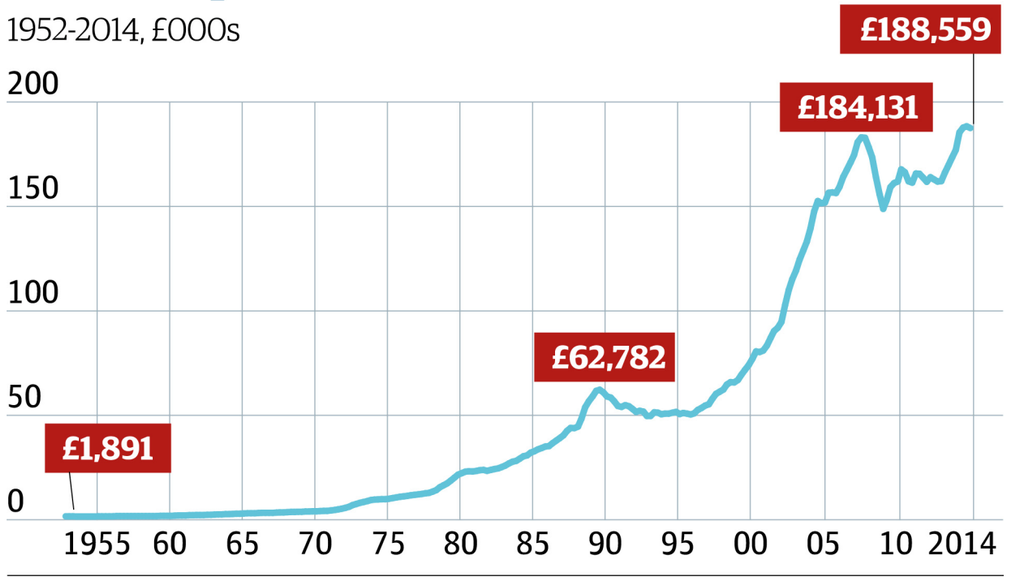
Making living in cities attainable again

Architectural design crossovers | Heterogeneous City – London
MSc3-4 Graduation Studio
2020-2021

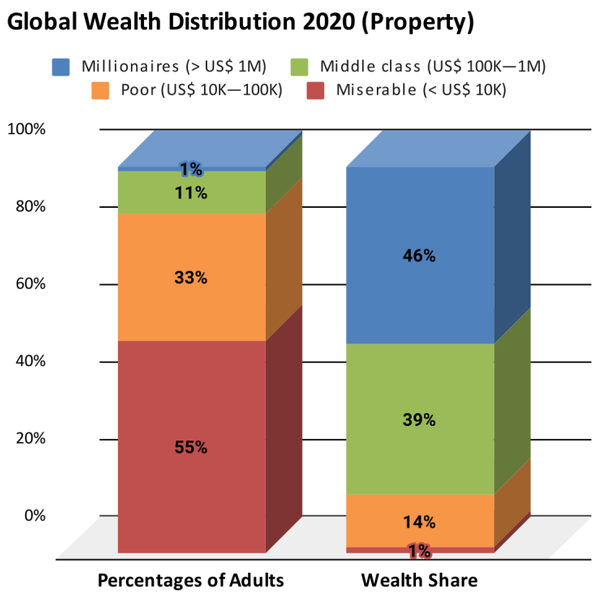
Amanda van den Burg

UK house prices

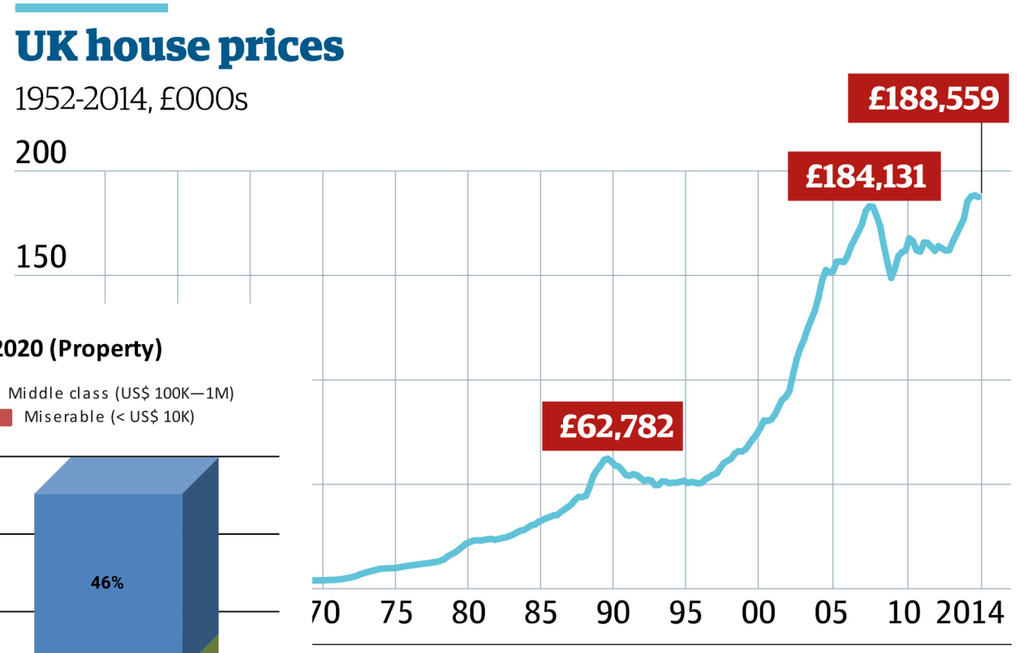
1952-2014, £000s



Source: The housing crisis in charts, The Guardian, 2015.



Source: Global share of wealth by wealth group, Credit Suisse, 2021.



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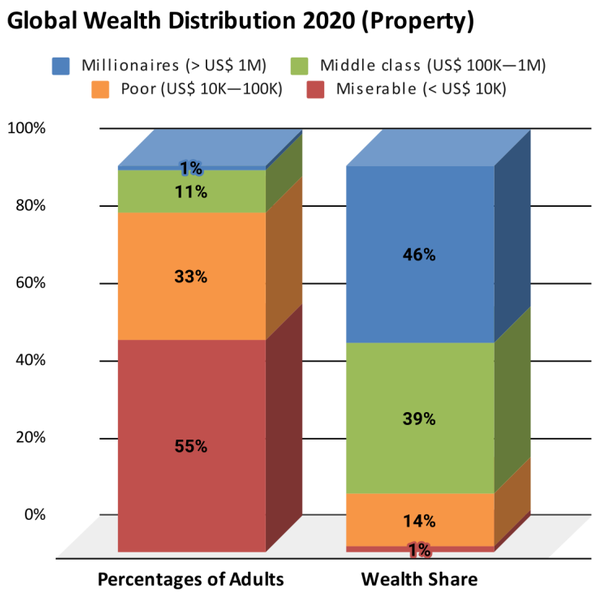

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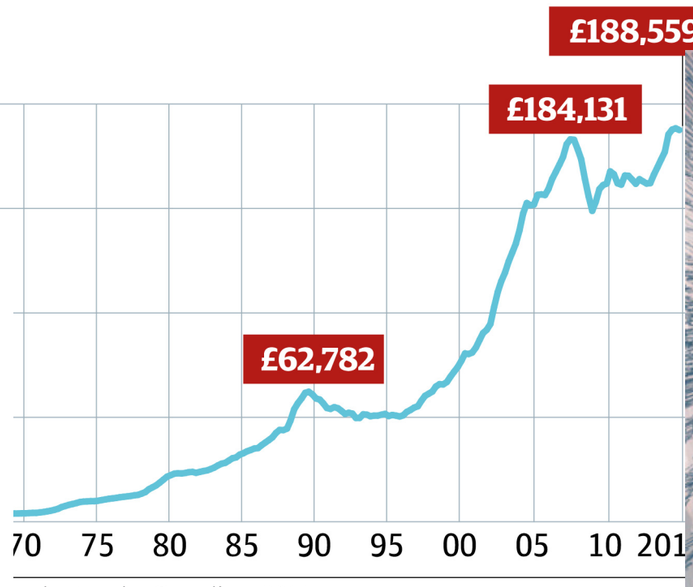

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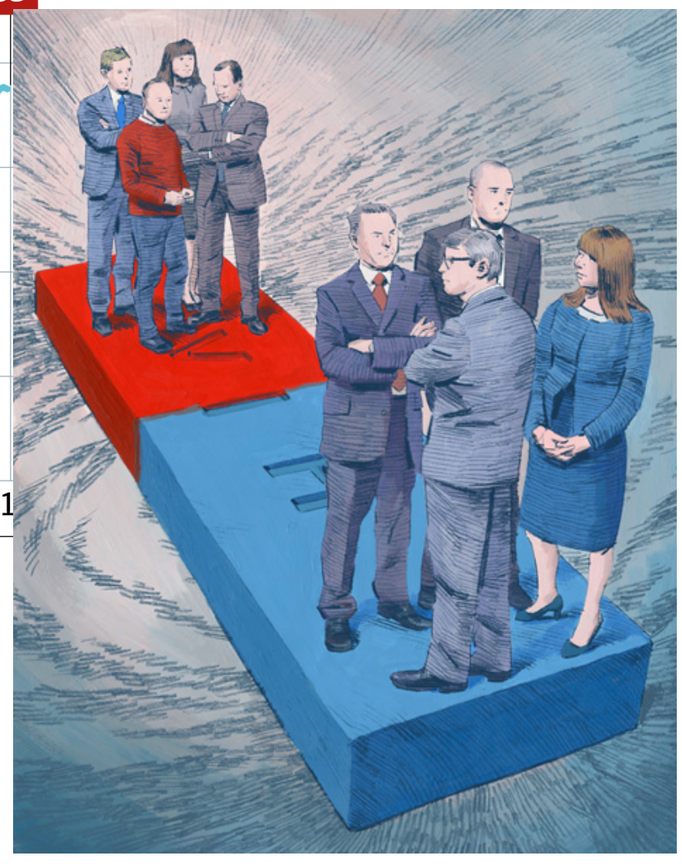
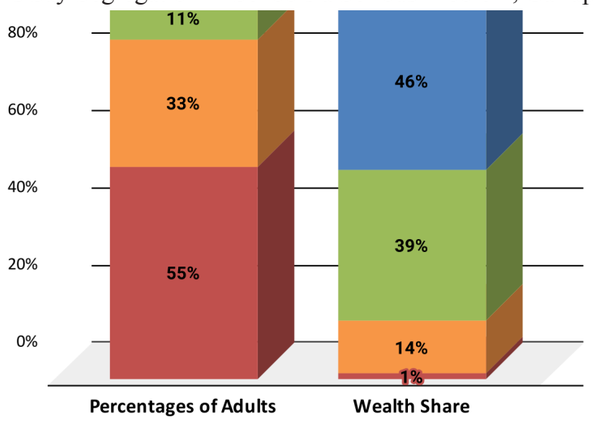


Source: Illustration for an article on the increasing polarization of the Swedish political parties for Vi magazine, Sweden.

Source: Most Americans Say Segregation in Schools a Serious Problem, Gallup, 2019.



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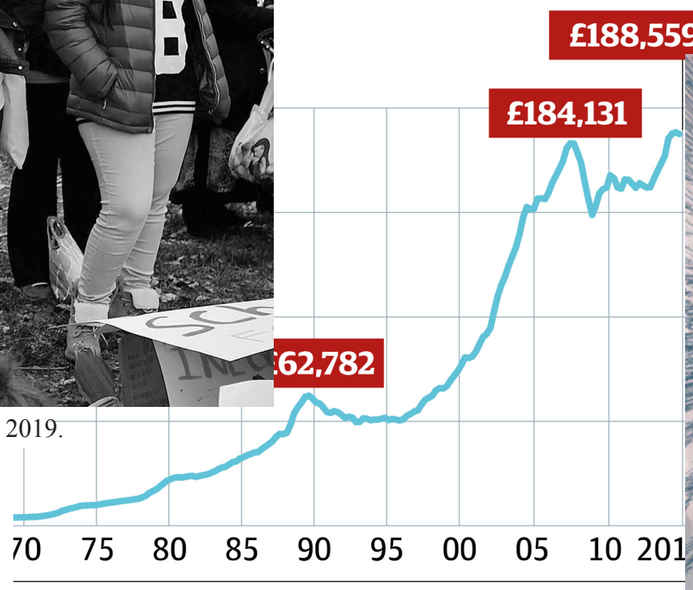

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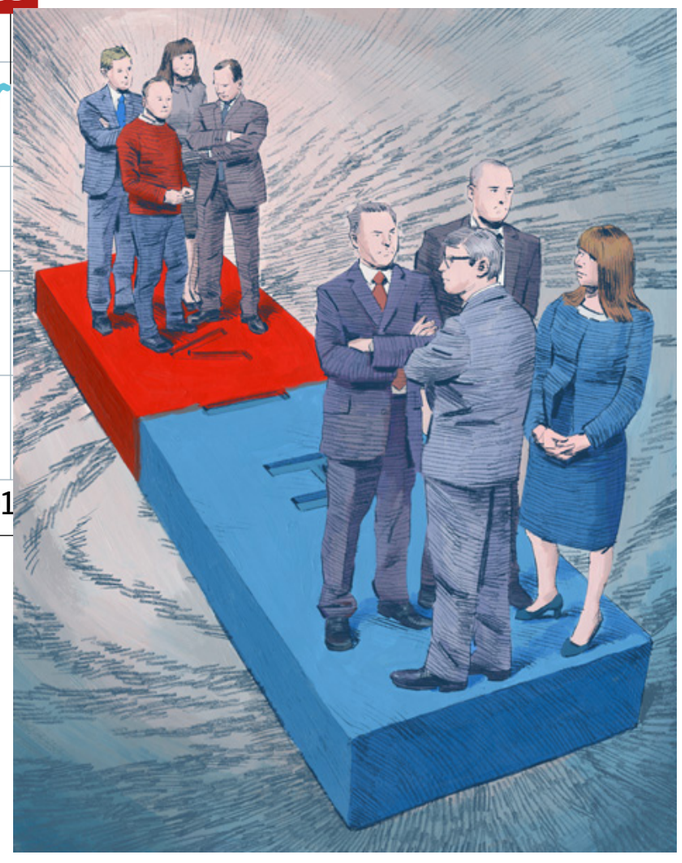

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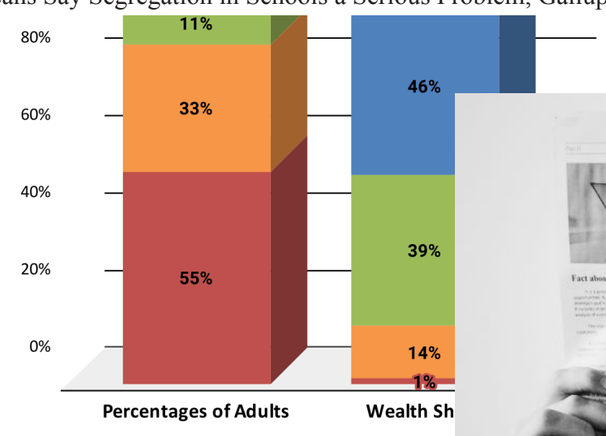

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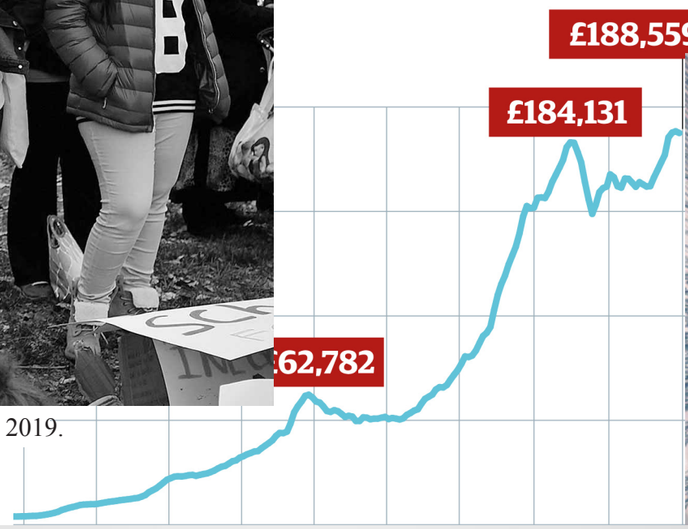

Source: Onderzoek: Nederlanders denken dat fake news zal toenemen, Marketingtribune, 2019.

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political parties for Vi magazine, Sweden.

RESEARCH

DESIGN ASSIGNMENT

DESIGN PROPOSAL

RESEARCH

how to make living in cities attainable again

What does the social imbalance in London look like and how can we create opportunities for those communities that are now being left behind?

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1. Which communities are being left behind in the economic growth?

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2. What are the possible ways for creating upward mobility, and what are the pros and cons of those?

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1. Which communities are being left behind in the economic growth?
2. What are the possible ways for creating upward mobility, and what are the pros and cons of those?
3. How can architecture attribute to a solution?

Which communities are being left behind in the economic growth?

	Average top 10 most deprived wards	**Average top 10 least deprived wards**
% All children aged 0 - 15	21,5	18,5
% All working-age (16 - 64)	71	62,5
% All older people aged 65+	7,5	19
% BAME	56,5	13
% English is first language of no one in household	18	4
Rate of new registrations of migrant workers	64	12
% children in reception year who are obese	15	6
% children in year 6 who are obese	28	11,5
Employment rate (16 - 64)	59	77
% with no qualifications	24,5	13
Crime rate	104,5	44,5
Median house price	£ 340.395	£ 575.920
Median households income estimate	£ 30.556	£ 48.773
% of households owned	20,5	79,5

A comparison between the 10 most and least deprived wards on a few key subjects (Greater London Authority (GLA), 2001–2031).

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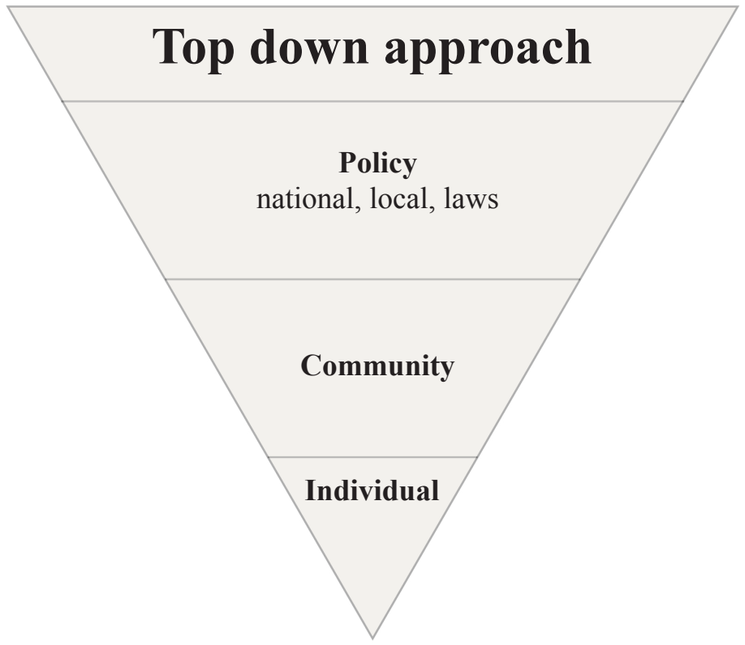
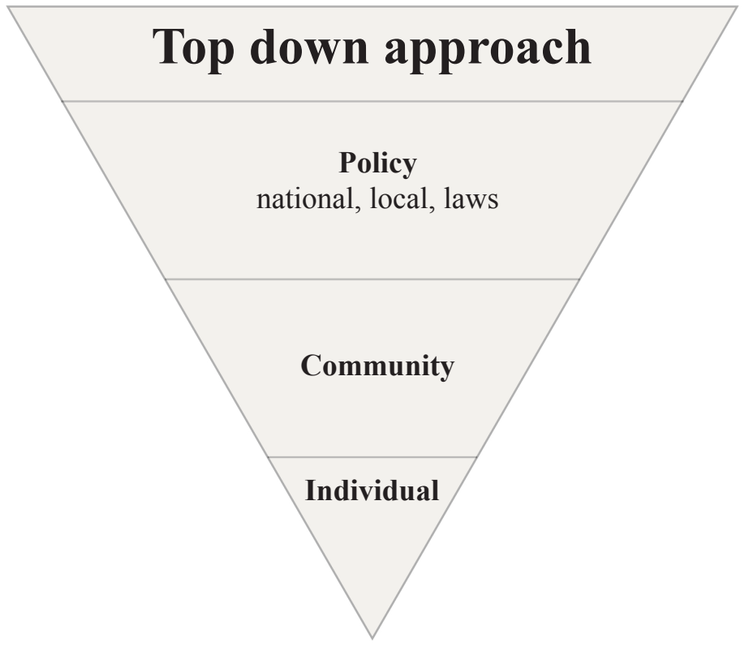
What are the possible ways for creating upward mobility, and what are the pros and cons of those?


Top down approach
Policy
national, local, laws
Community
Individual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Policy
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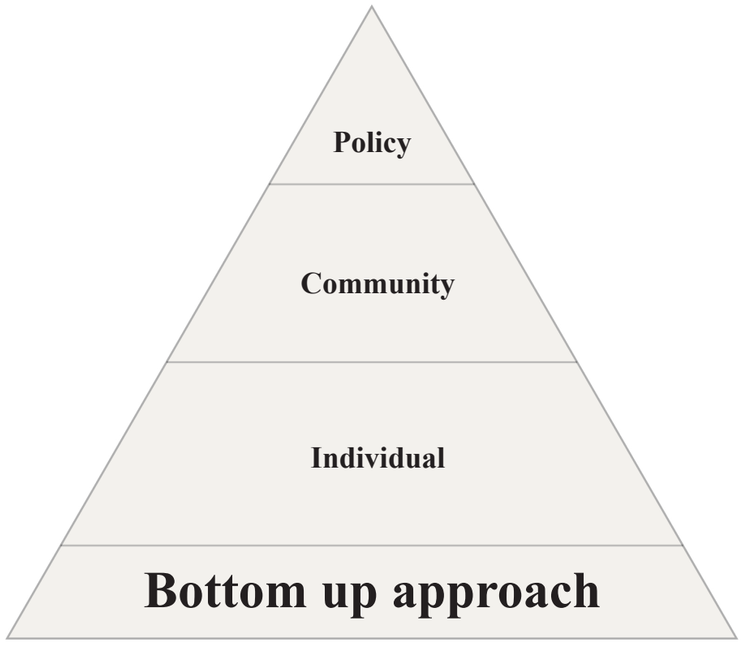
Community
Individual


Policy
Community
Individual
Bottom up approach

How can architecture attribute to a solution?

Conclusion

What does the social imbalance in London look like and how can we create opportunities for those communities that are now being left behind?

formulation of the DESIGN ASSIGNMENT

Research conclusion:

- Create opportunities for upward mobility
- Create the physical conditions that will facilitate interactions

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- Create the physical conditions that will facilitate interactions

Aims design assignment:

- Creating jobs
- Creating opportunities for education
- Be part of the social infrastructure of the neighbourhood

Creating a community based approach to improve the social balance in a neighbourhood through fashion

Research conclusion:

- Create opportunities for upward mobility
- Create the physical conditions that will facilitate interactions

Aims design assignment:

- Creating jobs
- Creating opportunities for education
- Be part of the social infrastructure of the neighbourhood

Program elements:

- Clothing manufacturing company
- Education in clothing manufacturing
- Cafeteria

The production of clothing

Community Clothing, founded by Patric Grant

Education in manufacturing

i-did, founded by Mireille Geijsen

The cafeteria

Palaces for the people by Eric Klinenberg

“People usually do not volunteer in a community garden, teach children to read, attend a church picnic, or participate in a rally for better local air quality because they’re trying to generate social cohesion. But, inevitably, the process of doing these activities creates or strengthens social bonds.”

Urban anchoring

Formulation of the design framework

- Location

Urban anchoring

Formulation of the design framework

- Location
- Heritage

Urban anchoring

Formulation of the design framework

- Location
- Heritage
- Flexibility, adaptability and reversibility

Urban anchoring

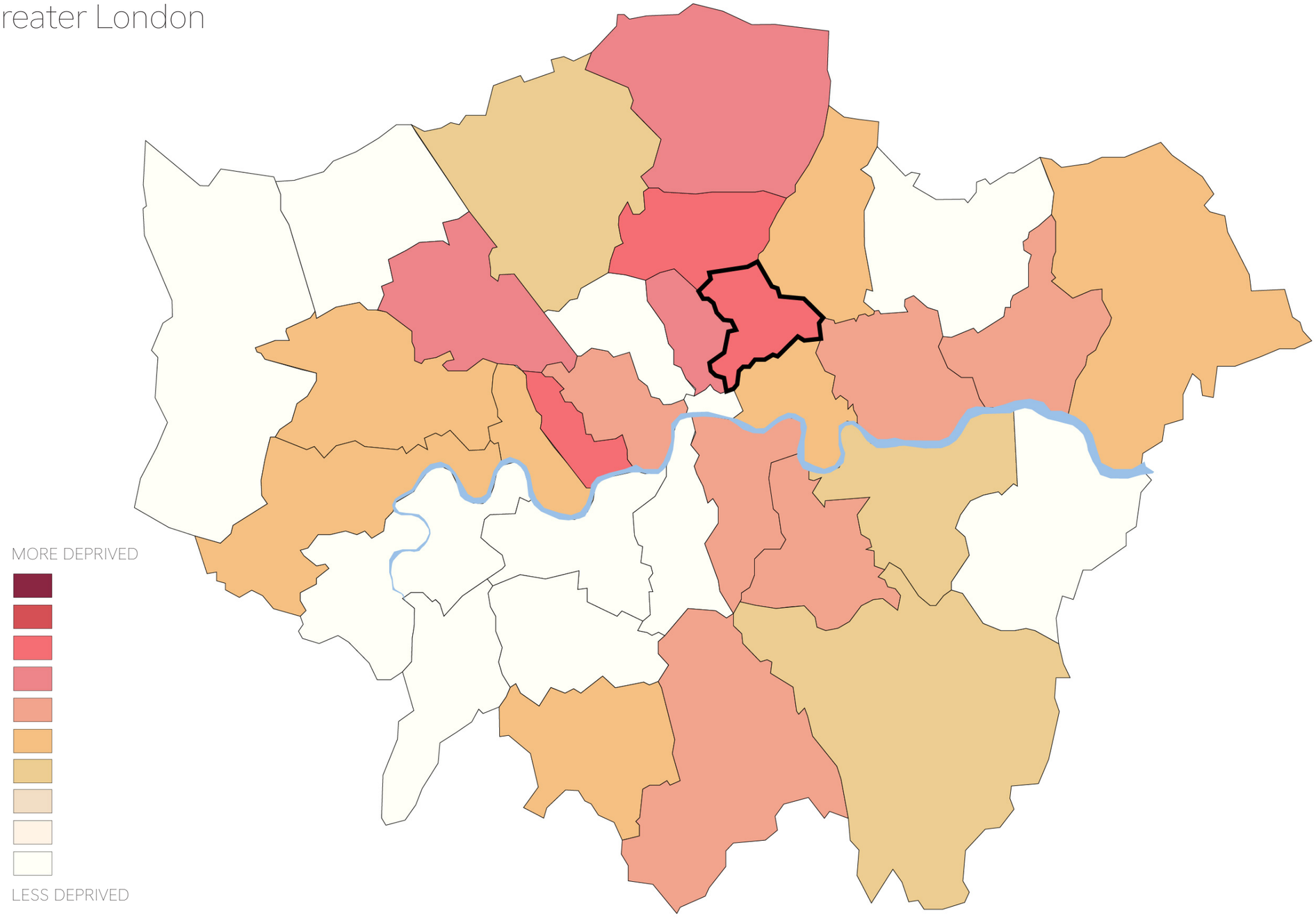
Formulation of the design framework

- Location
- Heritage
- Flexibility, adaptability and reversibility
- Claiming a place in the city

DESIGN PROPOSAL

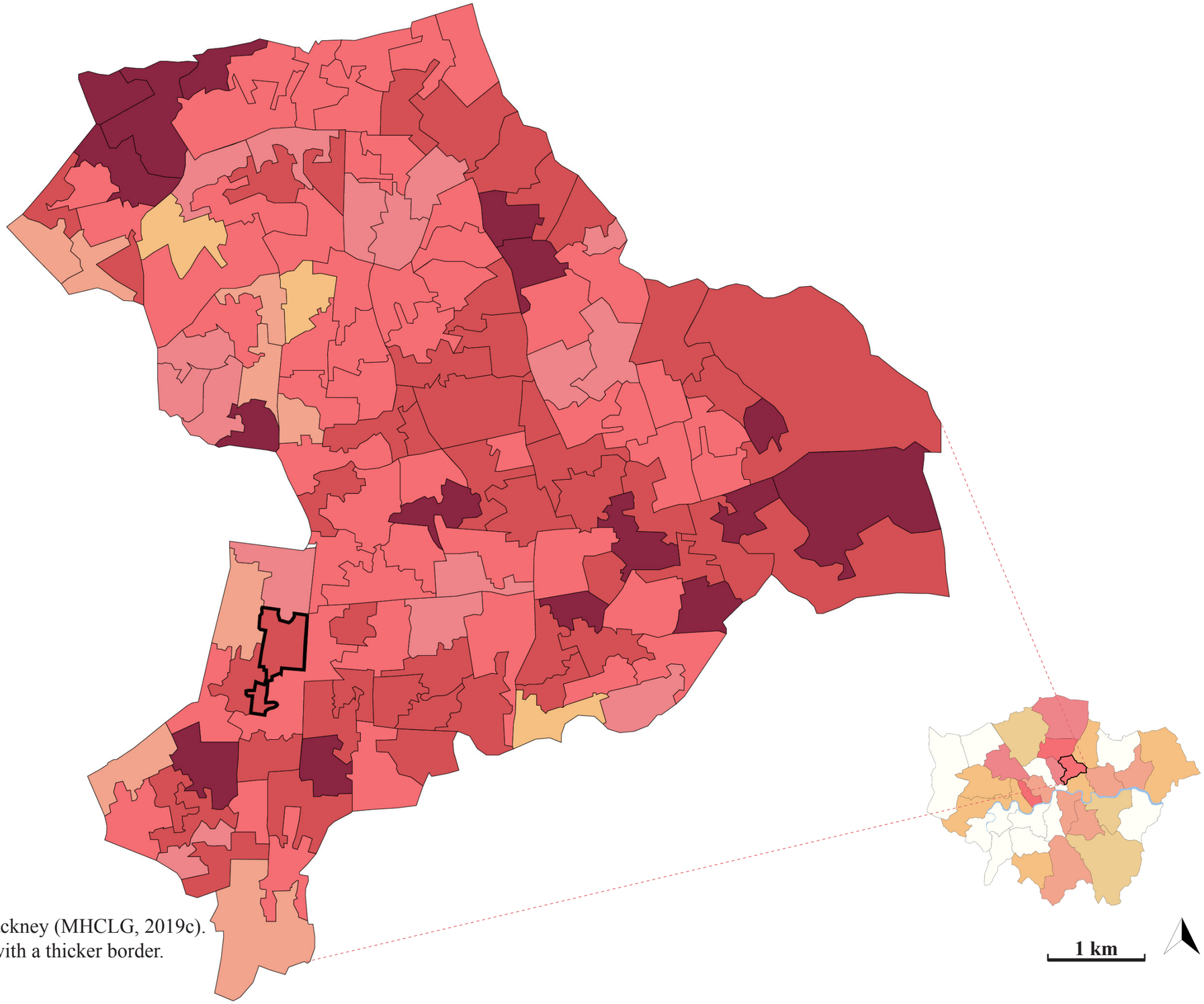
proof of concept

Greater London



Distribution of the Index of Multiple Deprivation (IMD) 2019 by local authority based on the proportion of their neighbourhoods in the most deprived decile nationally (MHCLG, 2019b).

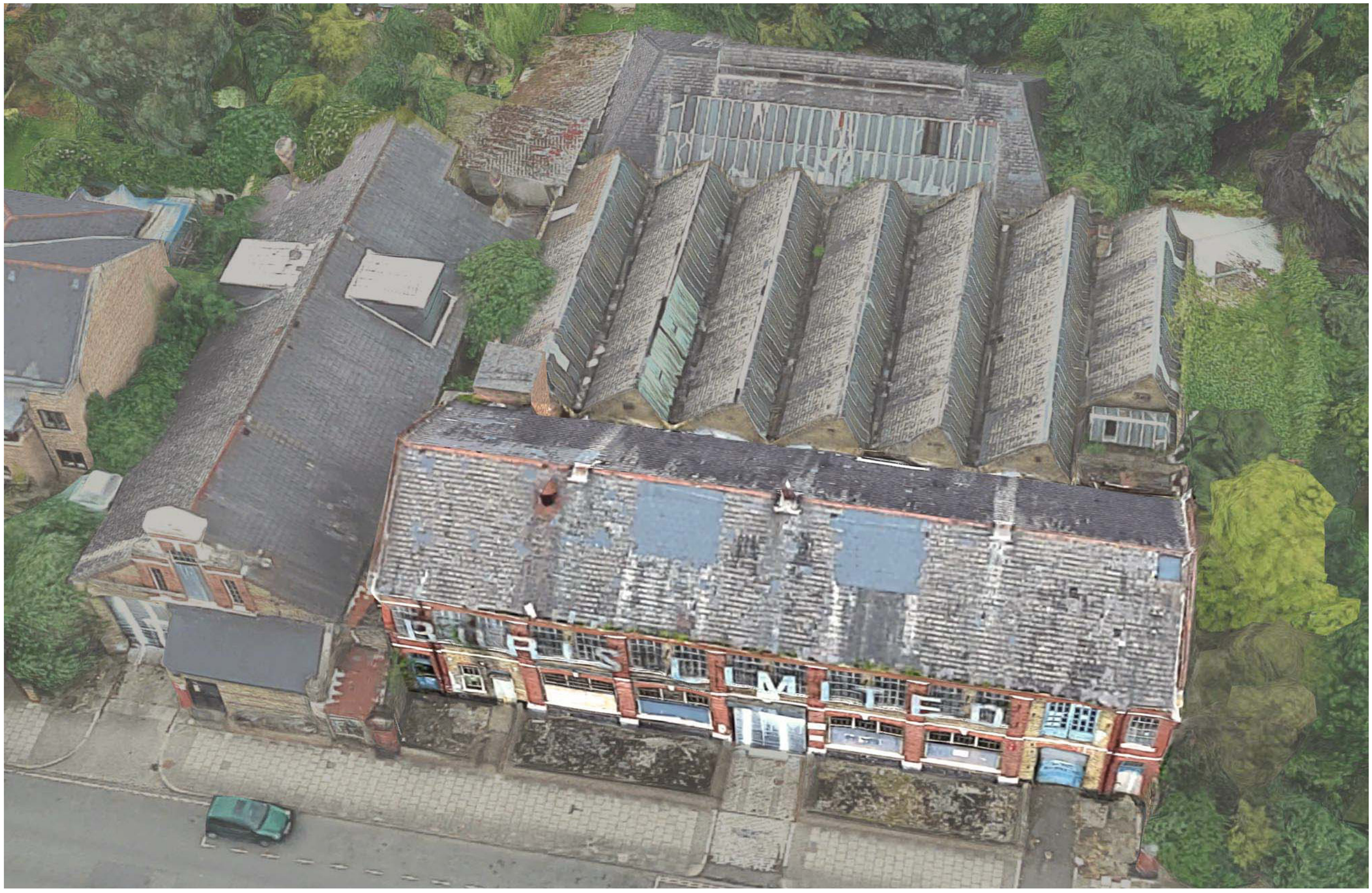
Hackney



Local deprication profile, Hackney (MHCLG, 2019c).
De Beauvoir is highlighted with a thicker border.

Source: The Boris building (Bolding, 2019).

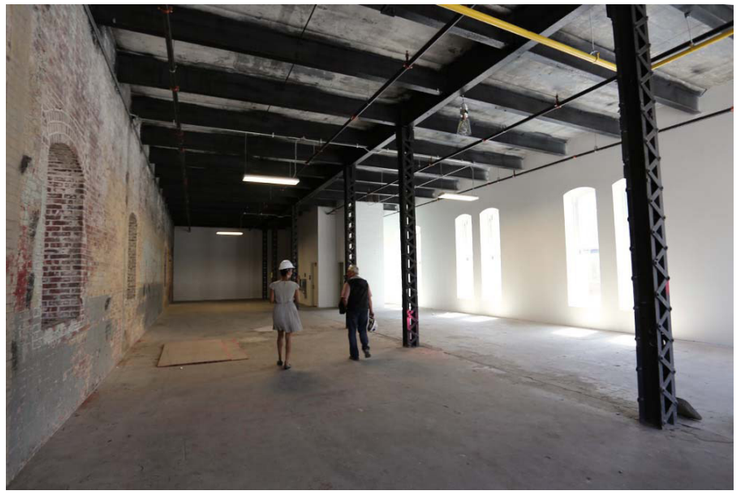
BRASS LIMITED


LIMITED

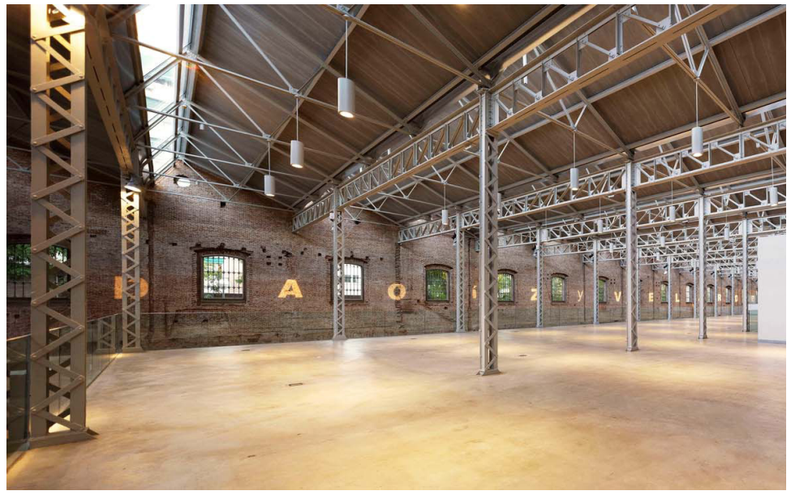
BRISTOL LIMITED

BRISTOL METEO

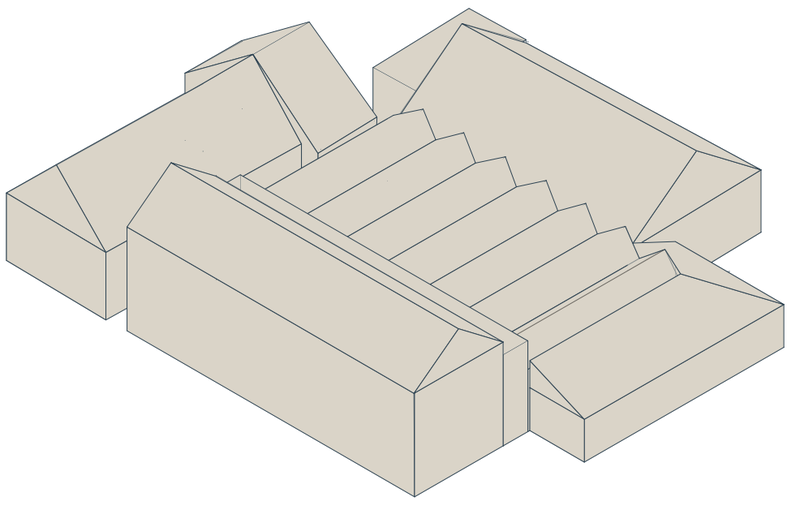
Source: Inside one of the buildings (Patru, 2020).



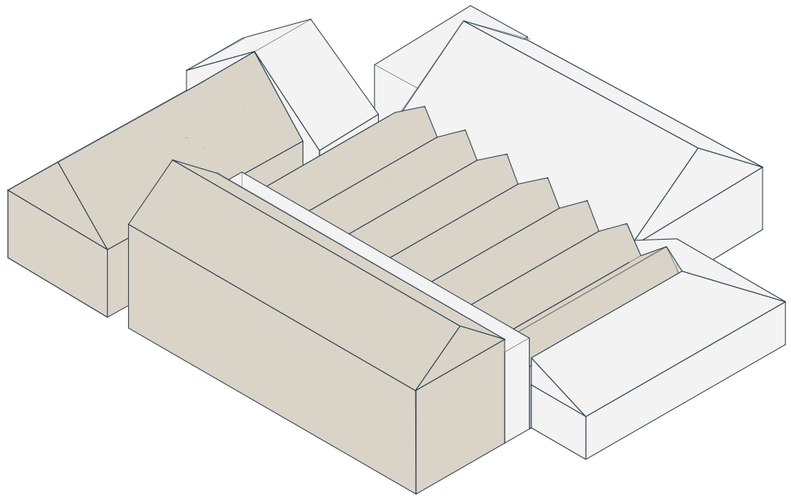
Building 123, Brooklyn

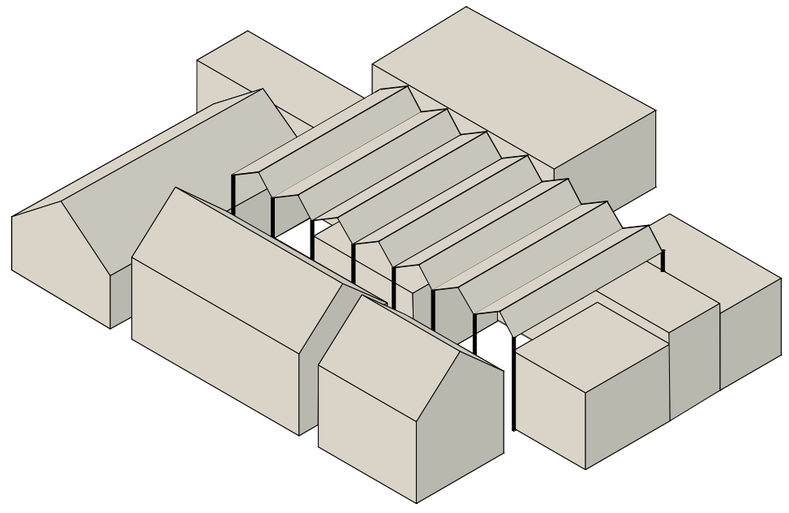


Daoiz y velarde Cultural Centre, Madrid



The Boris Building now





The Boris Building after transformation

Aims design assignment:

- Creating jobs

The program:

- Manufacturing company
  - patternmaking
  - cut
  - make
  - trim

Aims design assignment:

- Creating jobs
- Creating opportunities for education

The program:

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  - patternamking
  - cut
  - make
  - trim
- Education facilities

Aims design assignment:

- Creating jobs
- Creating opportunities for education
- Be part of the social infrastructure of the neighbourhood

The program:

- Manufacturing company
  - patternamking
  - cut
  - make
  - trim
- Education facilities
- Community space
  - cafeteria
  - vegetable garden and shop
  - library
  - meditaion / prayer rooms
  - daycare

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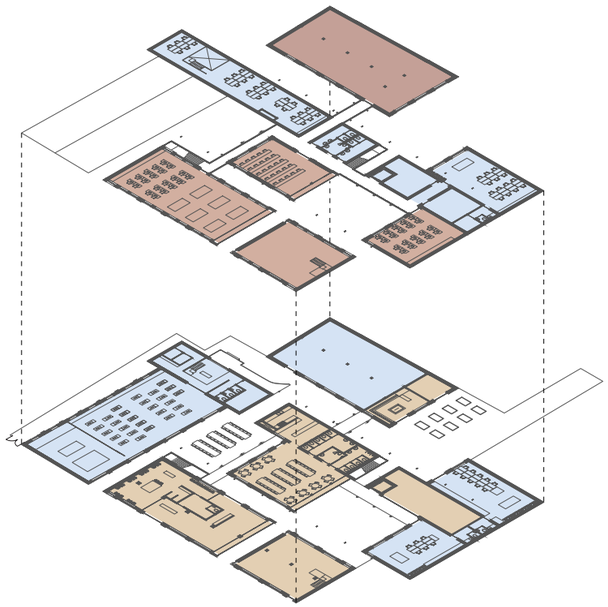
  - library
  - meditaion / prayer rooms
  - daycare
- Reception area
- Clothing labels
- Shop

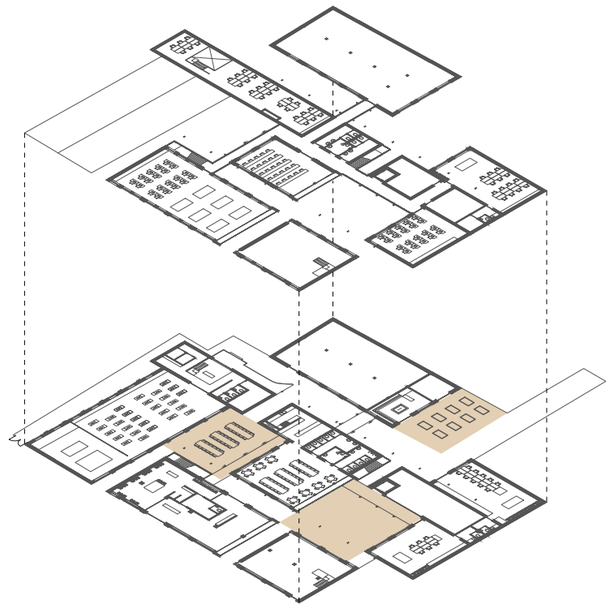
Site layout
Scale 1:500

Site layout
Scale 1:500

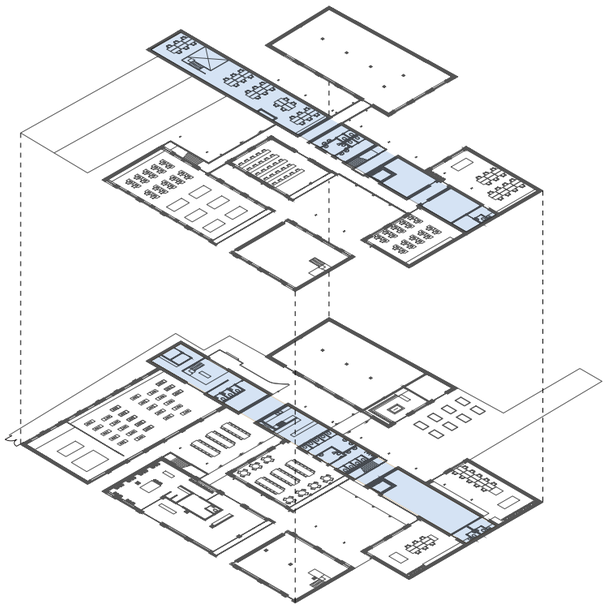
Site layout
Scale 1:500



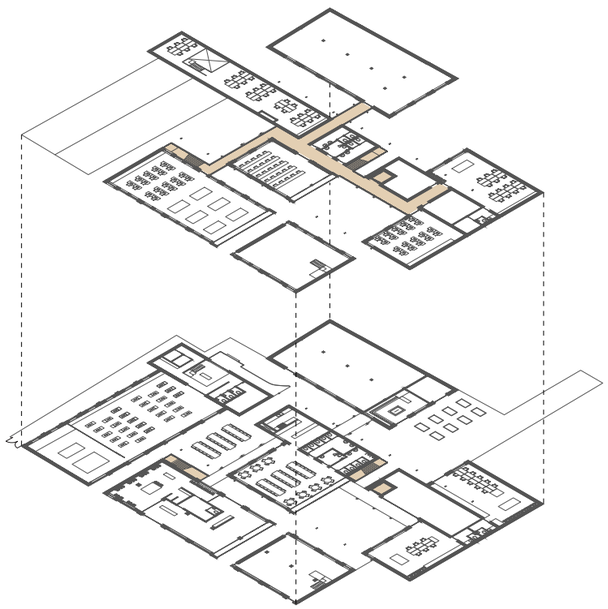
ACTIVITIES



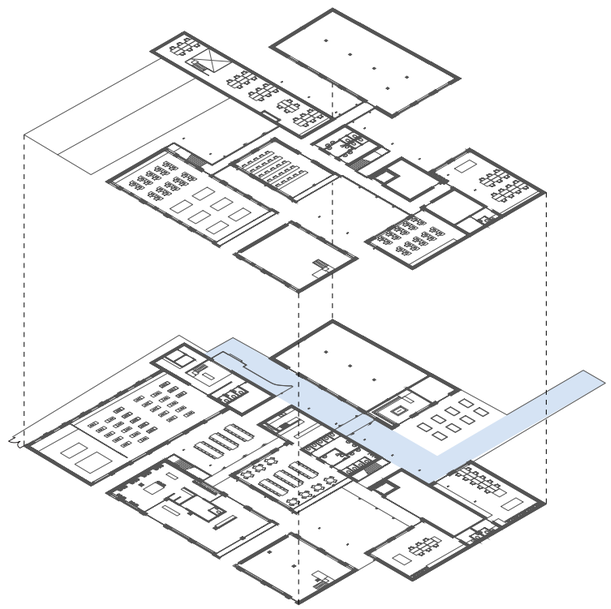
SQUARES



SERVICE STRIP

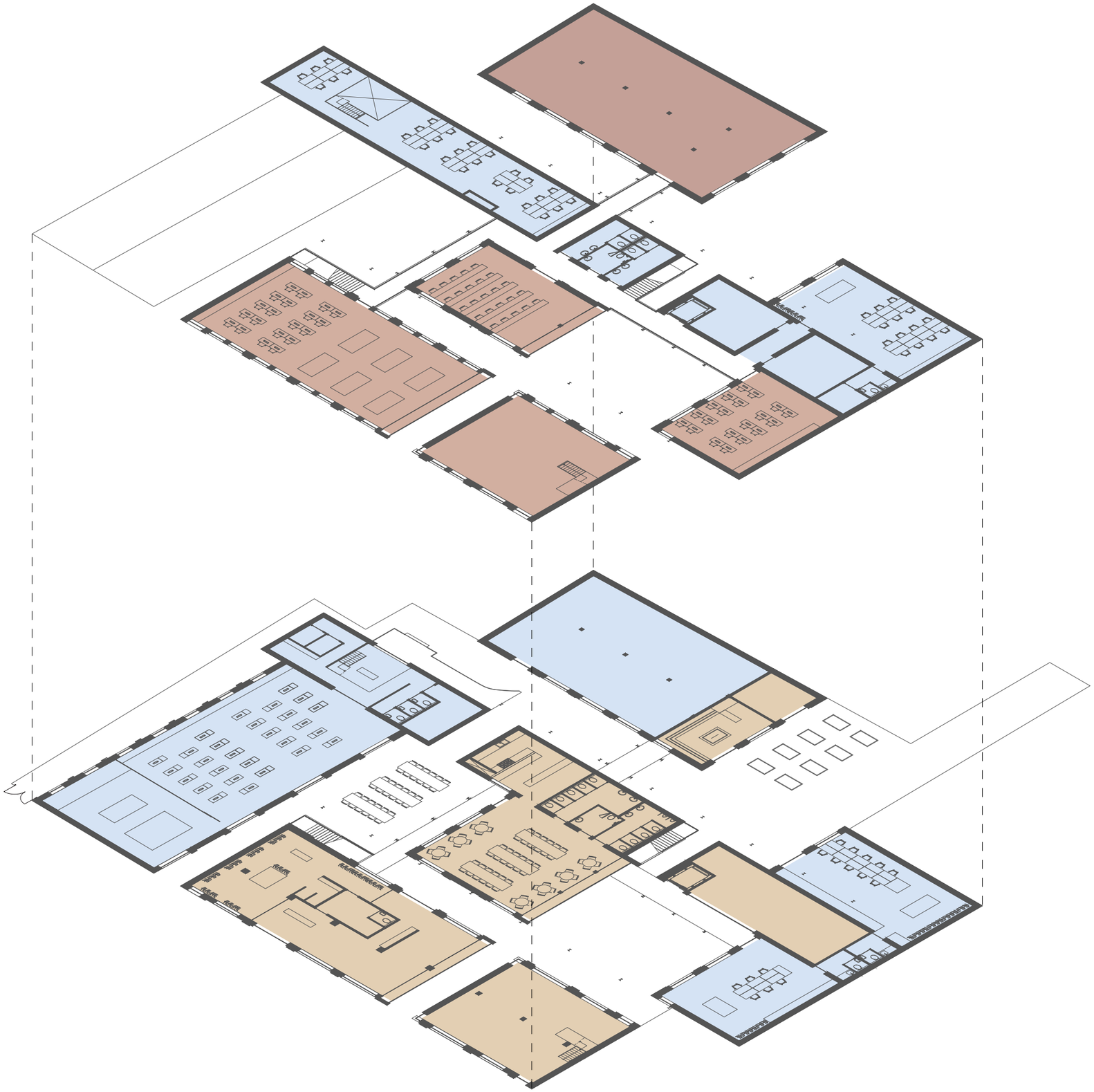


TUNNELS



TRANSPORT

GATES

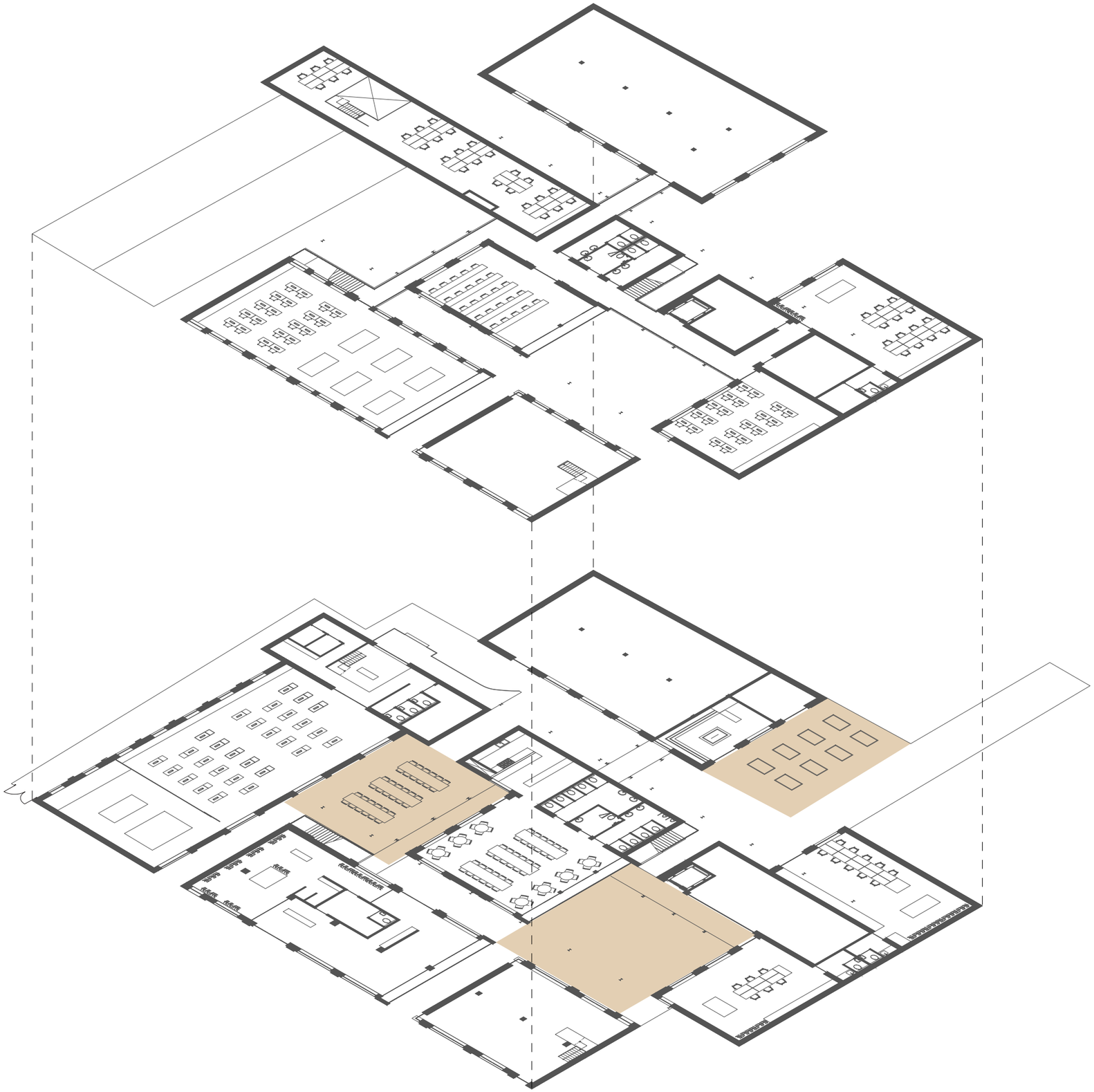


Business

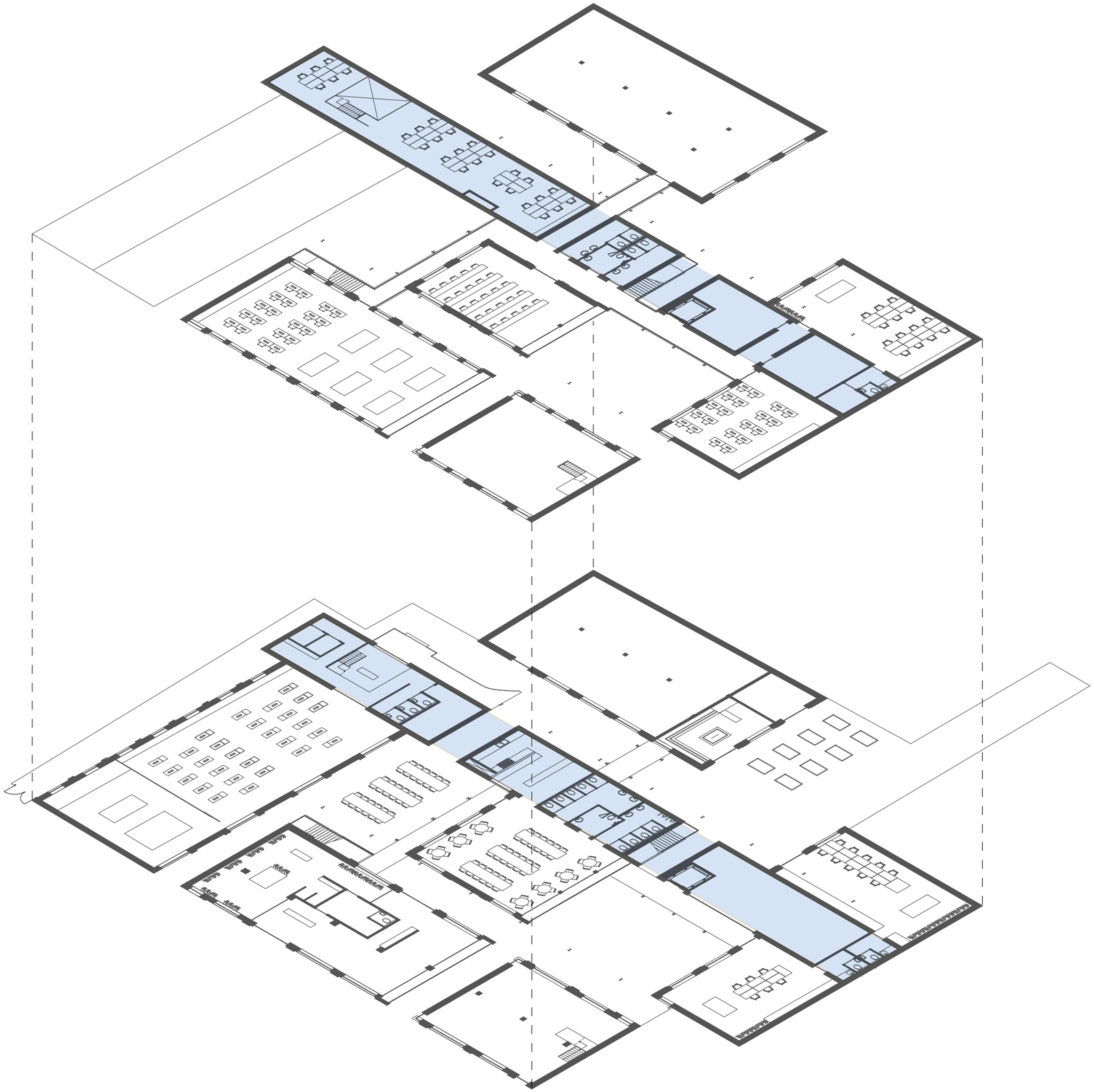
Education

Community

Activities

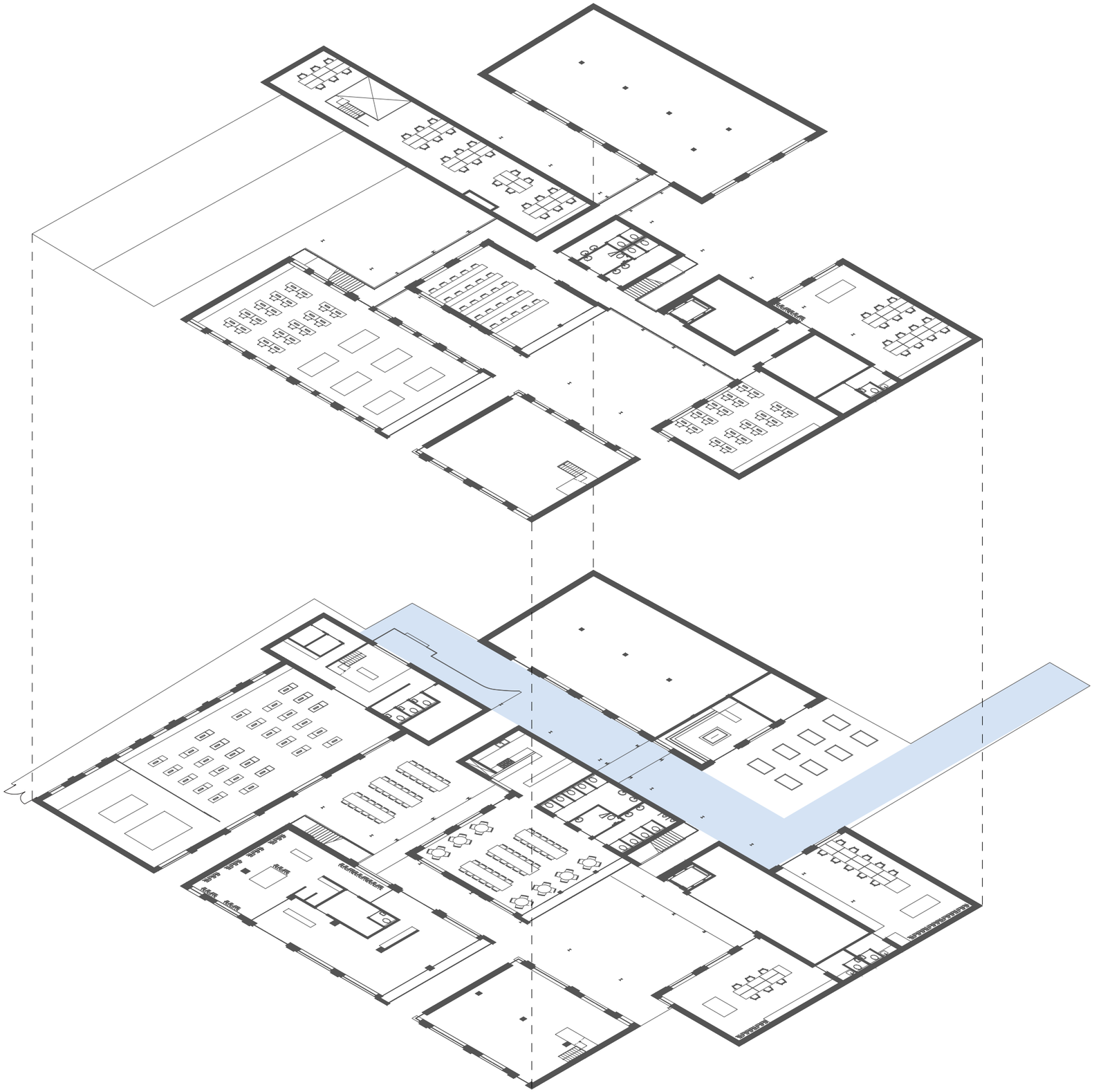


Squares



Service strip

Tunnels



Transport

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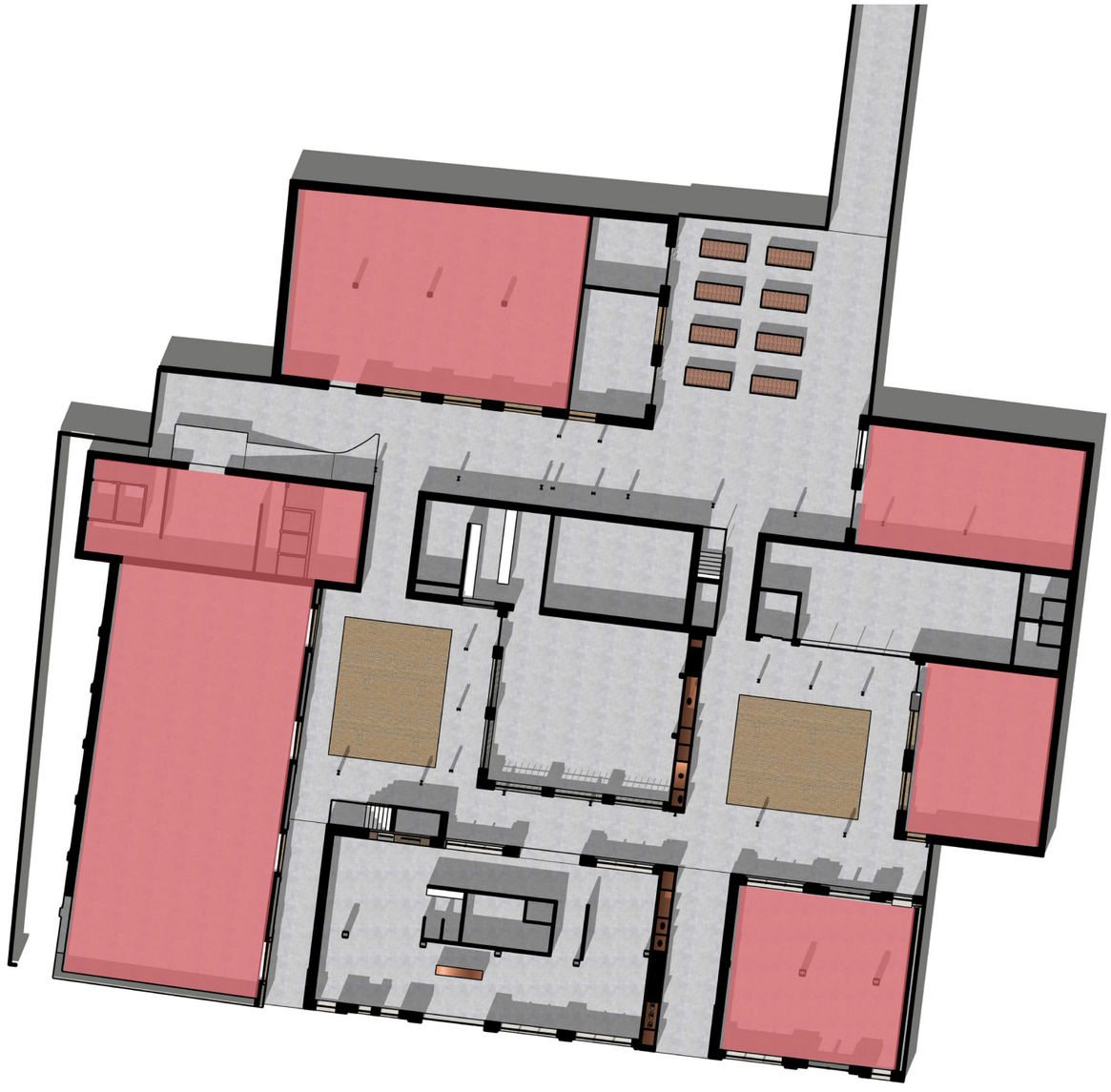


Week day

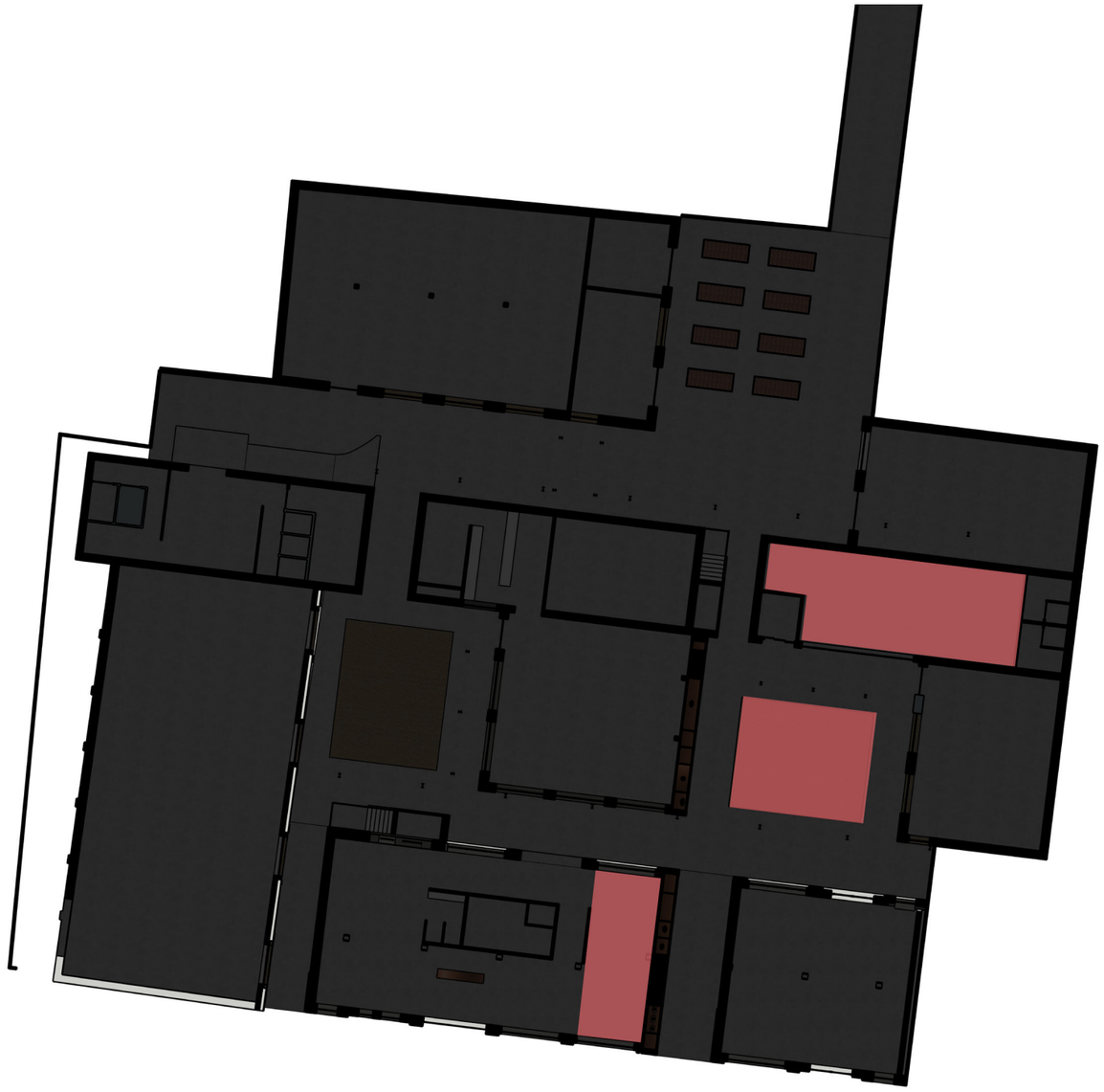
9.00 AM

Week day

1 PM

Week day

5 PM

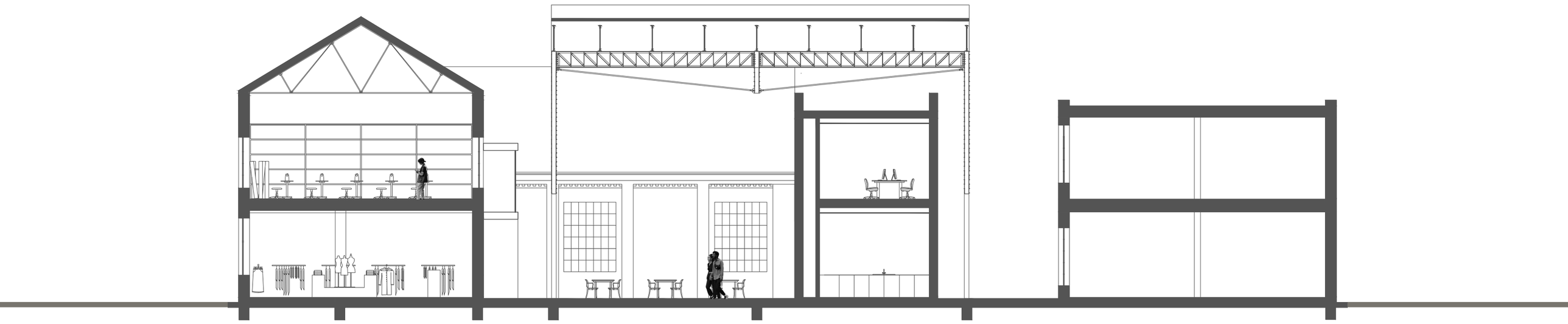


Week day

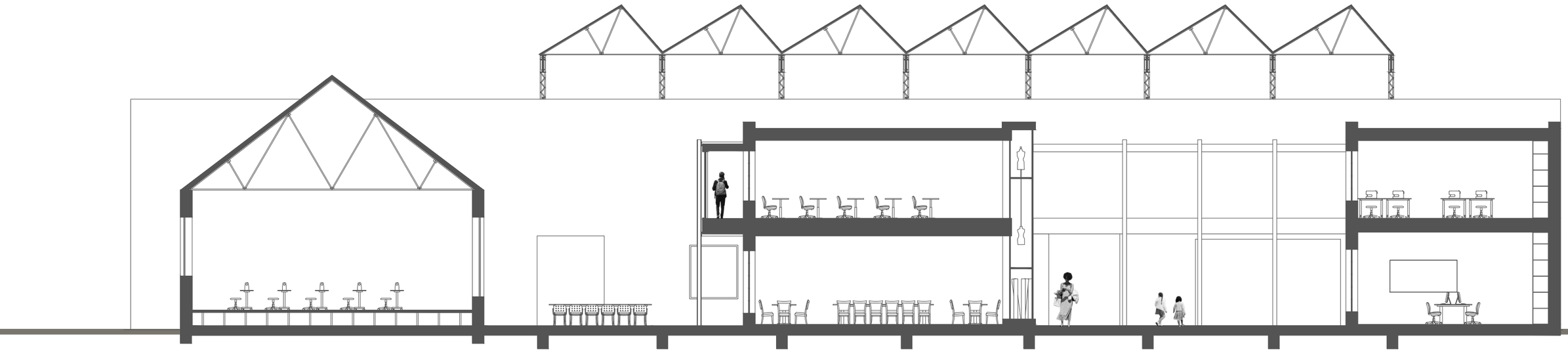
9 PM

Weekend

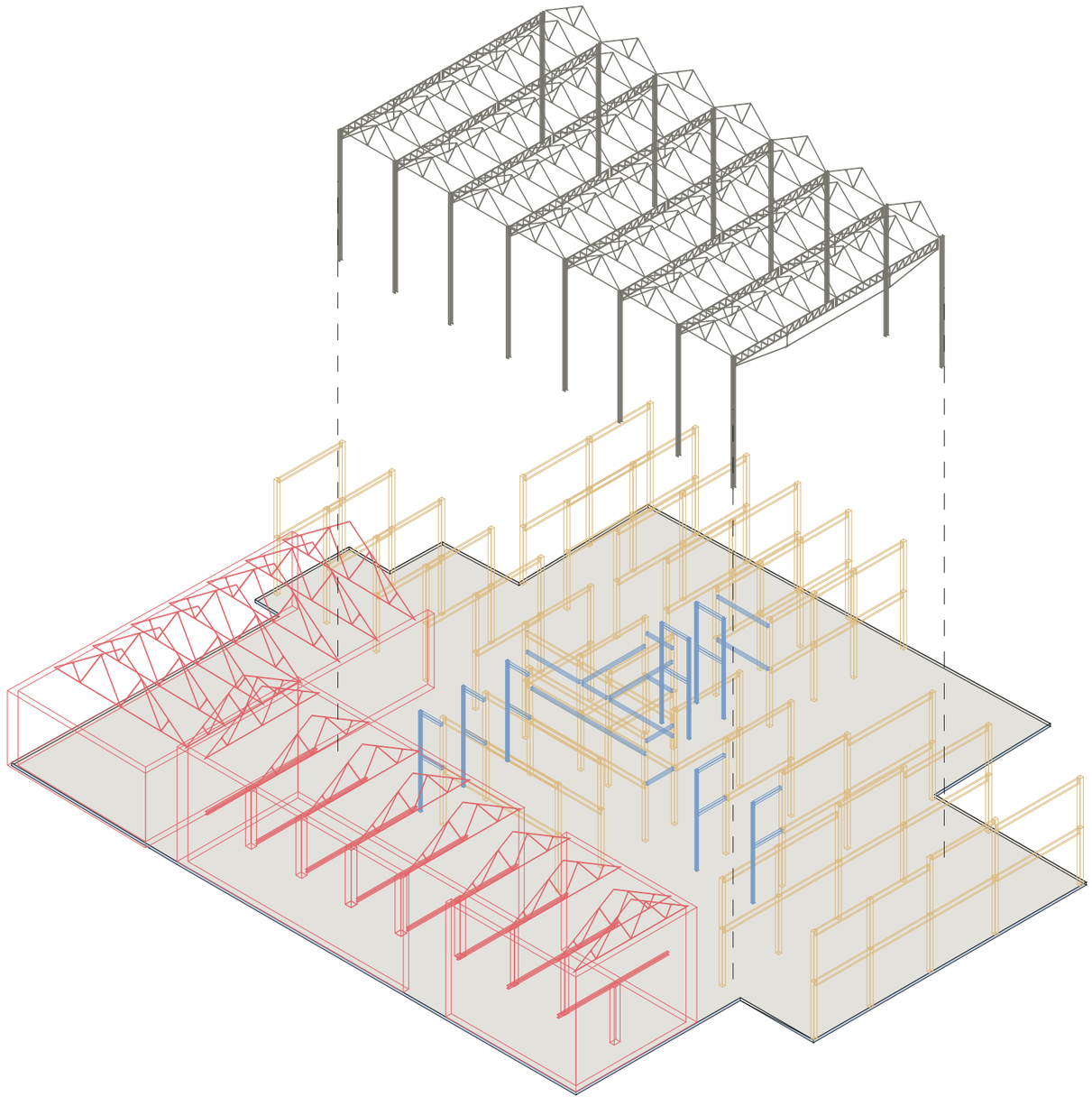
1 PM



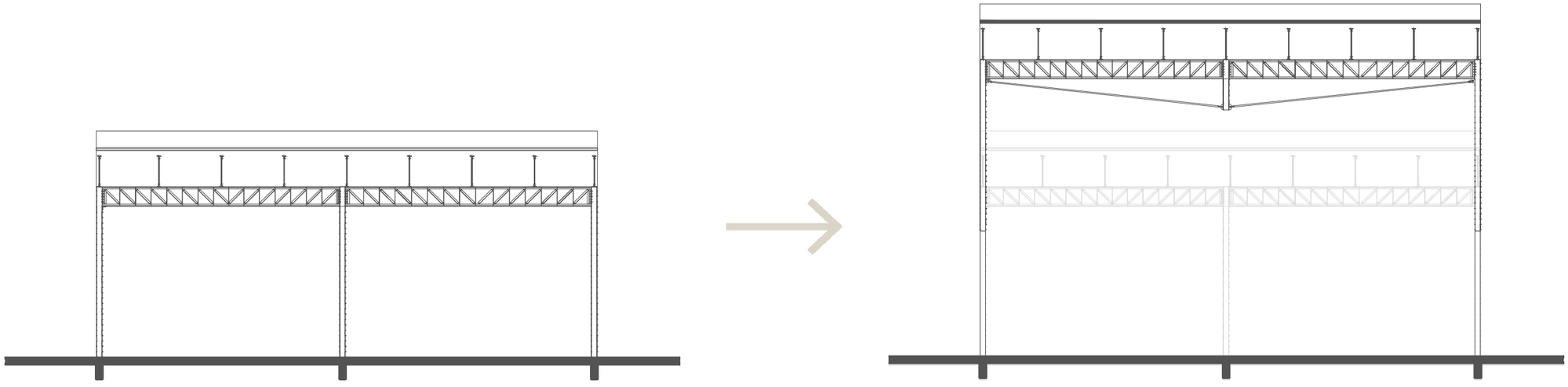
Section A
Scale 1:150



Section B
Scale 1:150

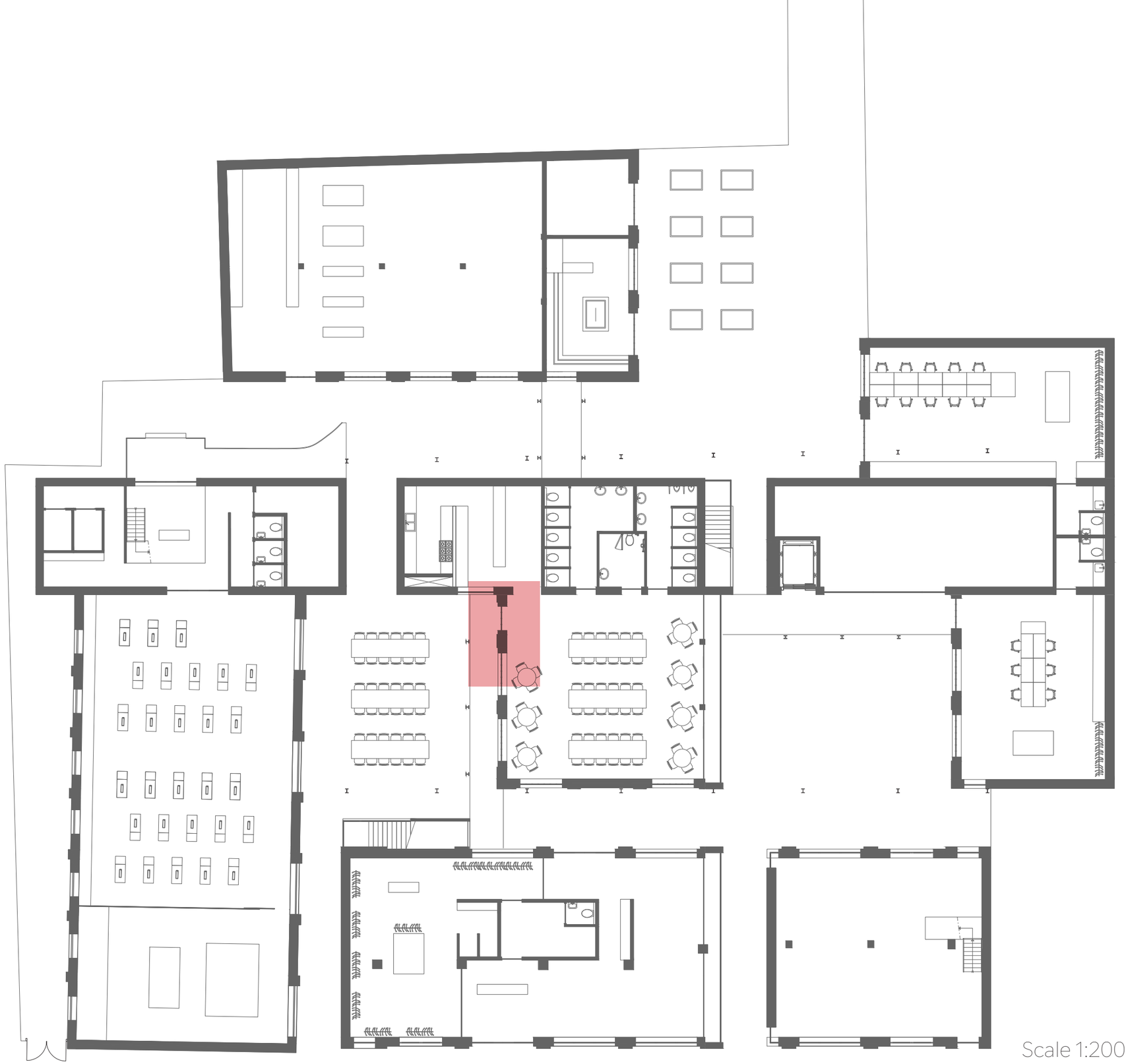


- Original concrete floor
- Mission hall and main building
- New building blocks
- Tunnels
- Sawtooth roof structure

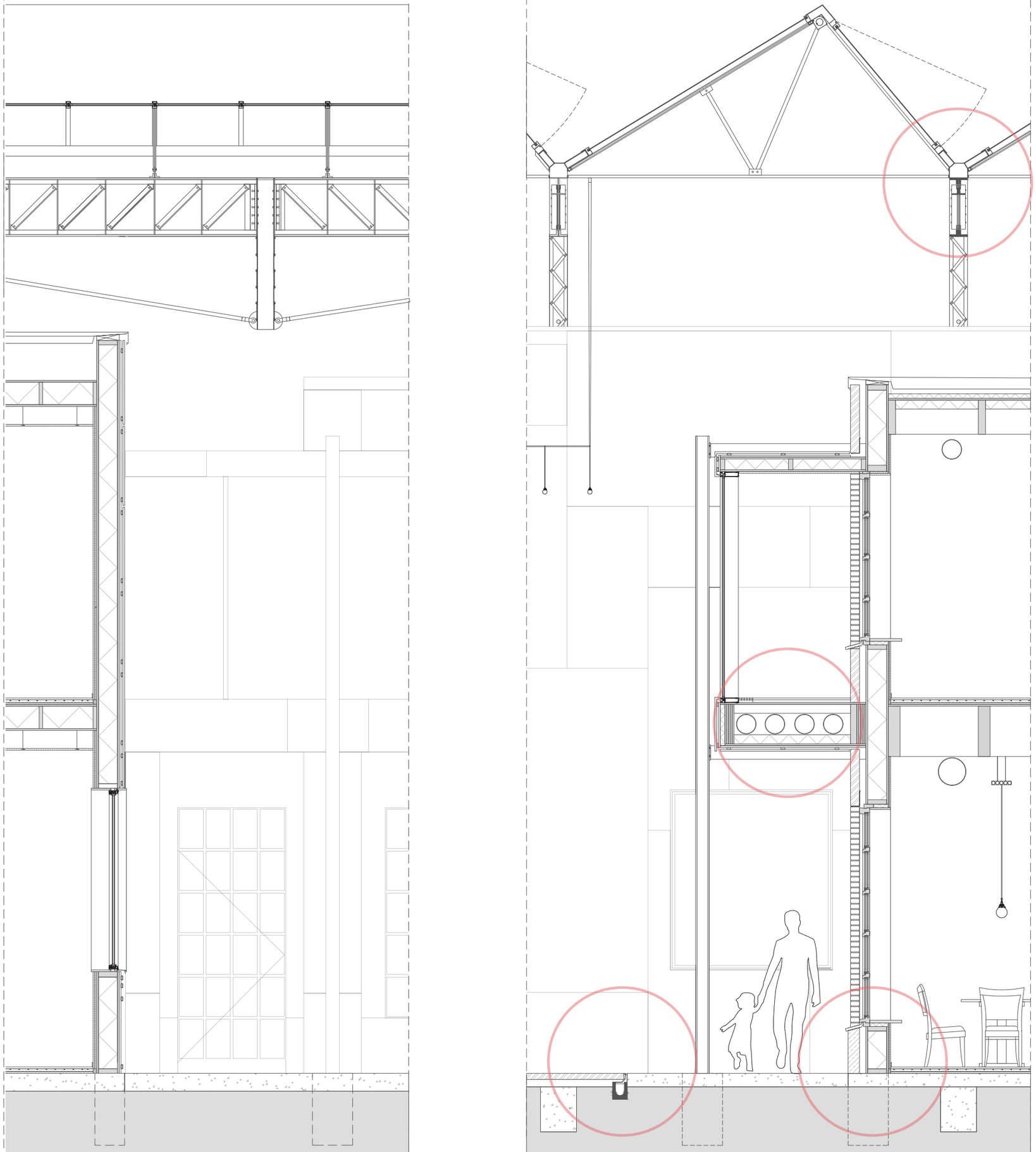


Original sawtooth roof structure

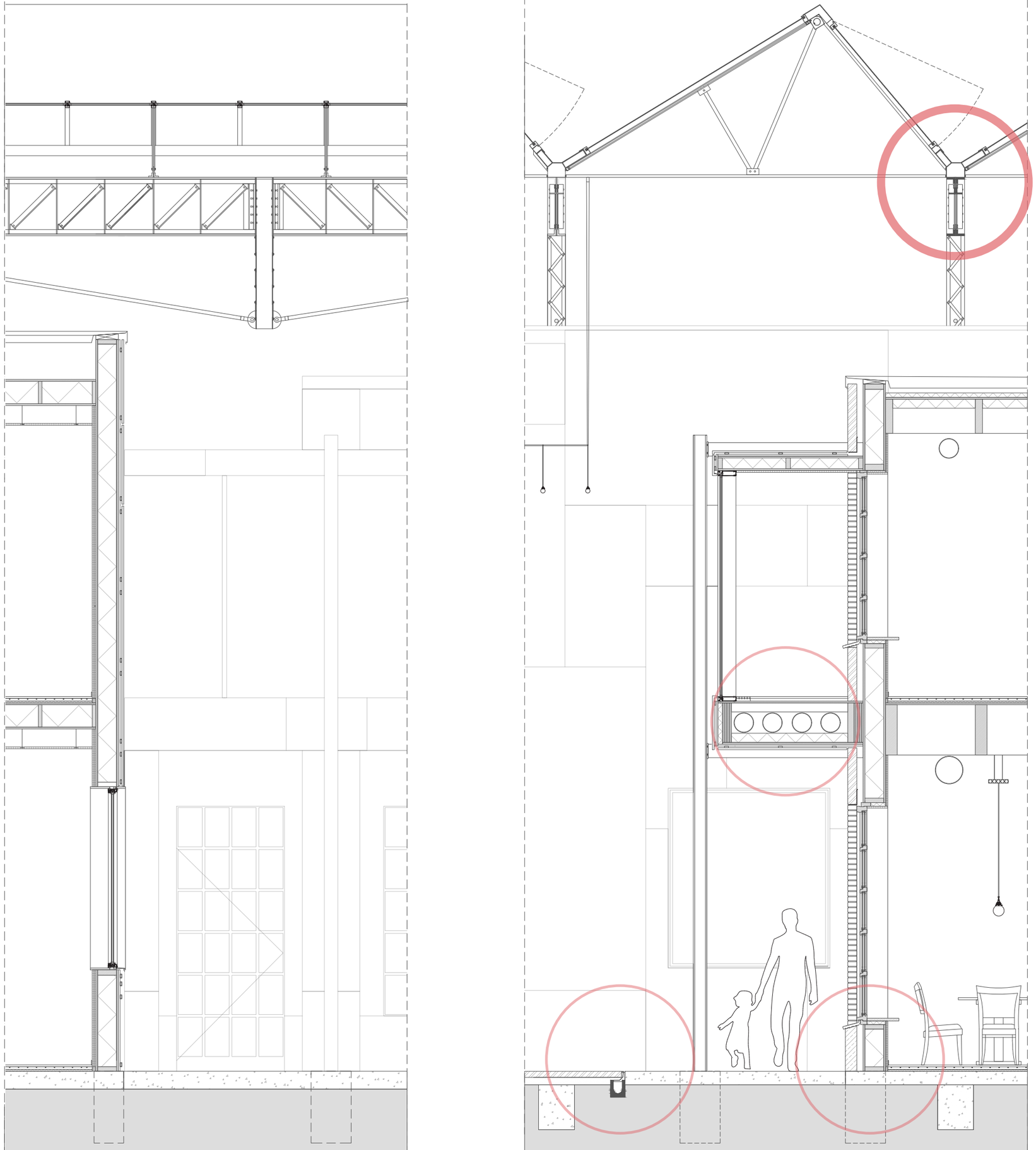
Heightened sawtooth roof structure



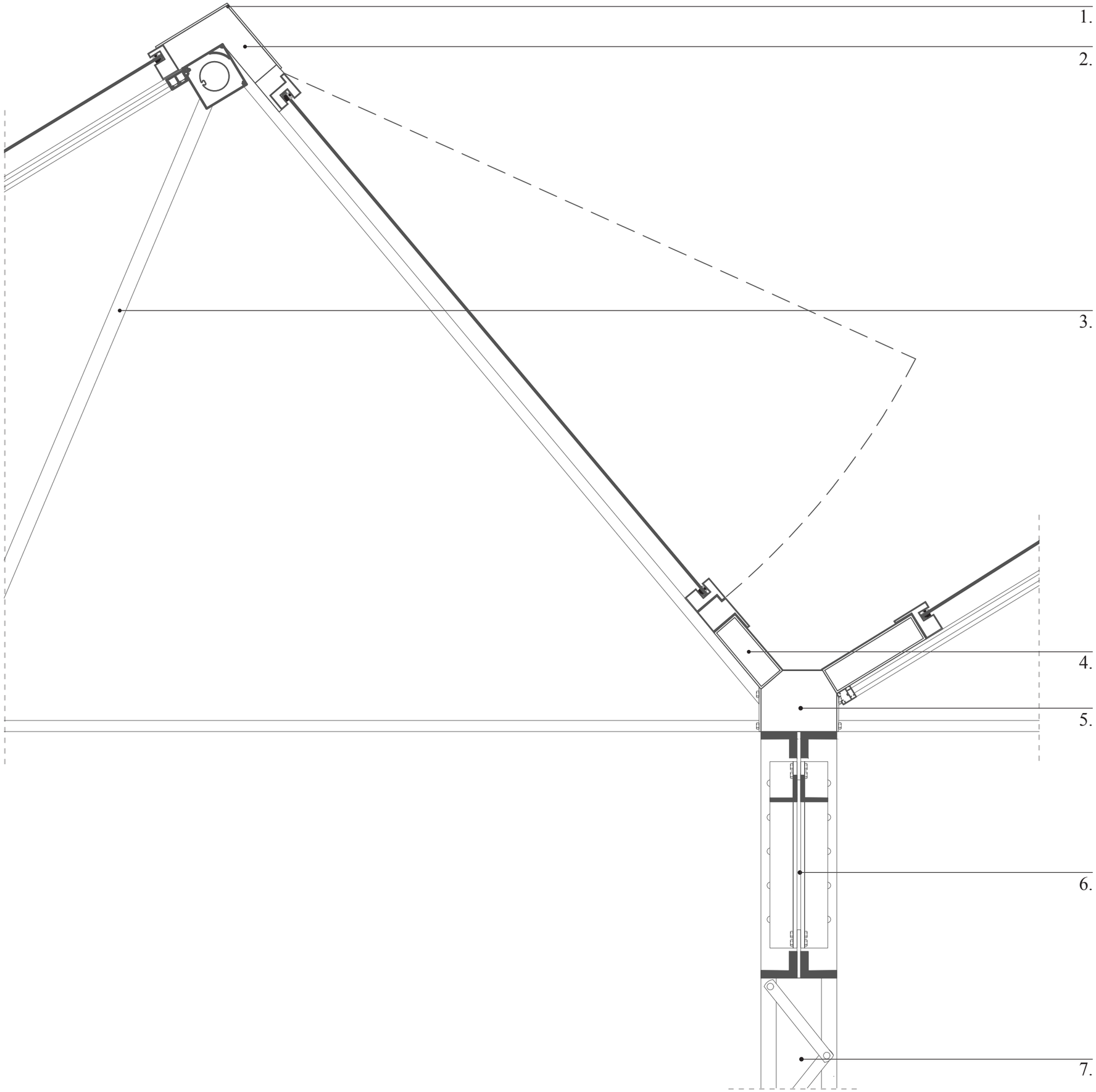
Scale 1:200



Building fragment
Scale 1:40



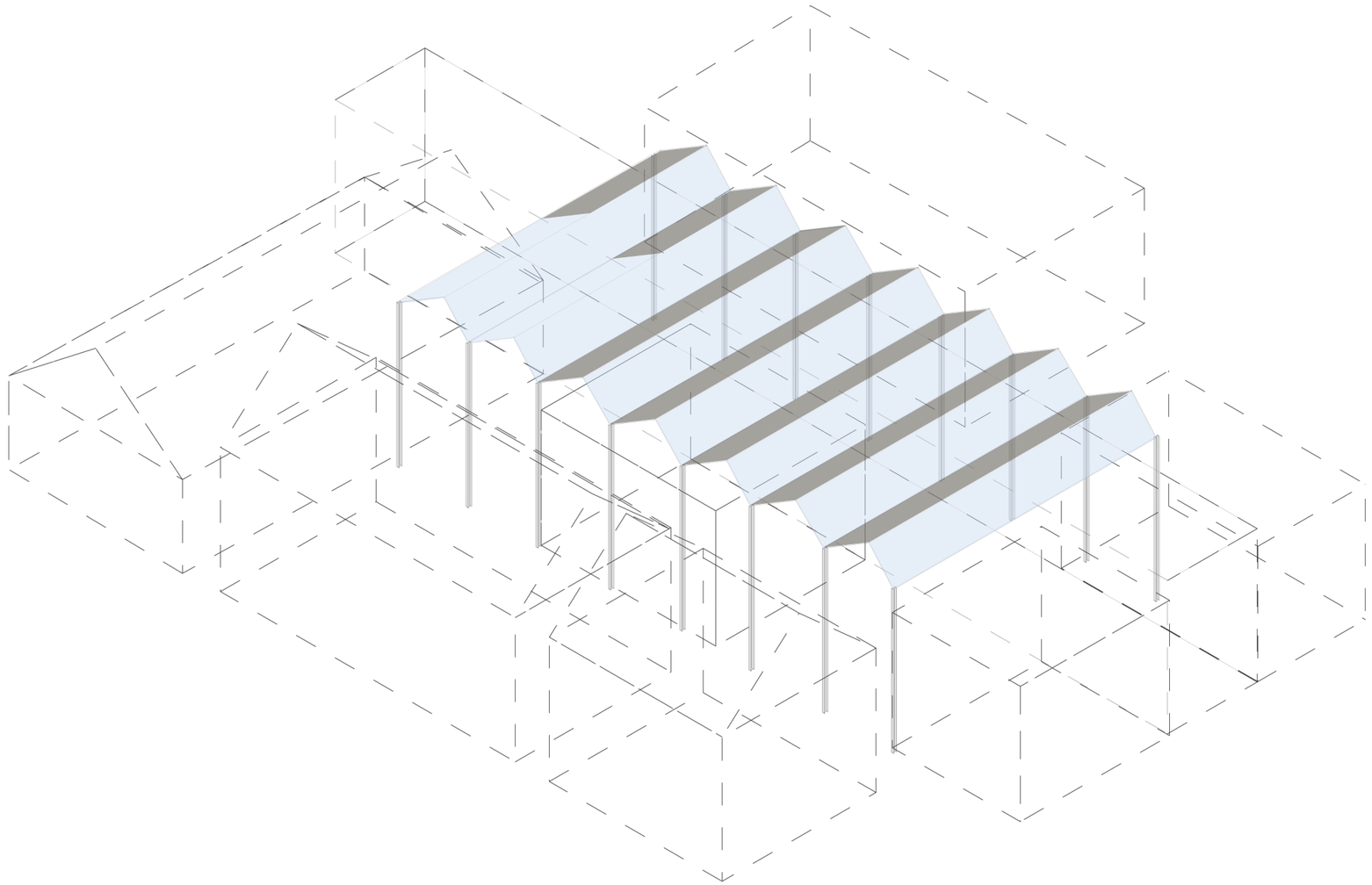
Building fragment
Scale 1:40



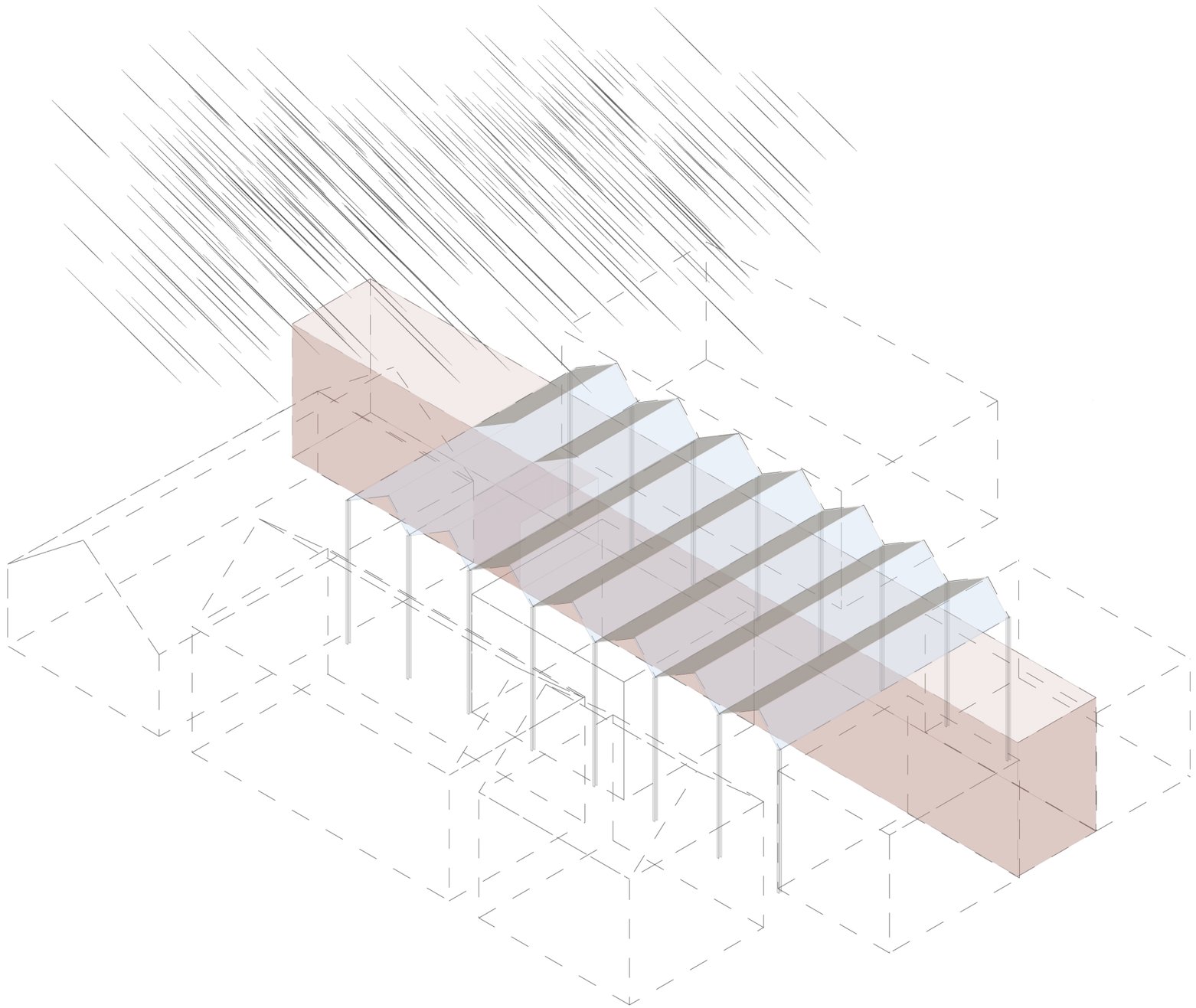
Detail 1:
the sawtooth roof

1. Finishing hood
2. Steel frame structure
3. Sawtooth roof structure
4. Steel frame structure
5. Steel frame, supporting gutter
6. Truss
7. Truss column

Scale 1:10

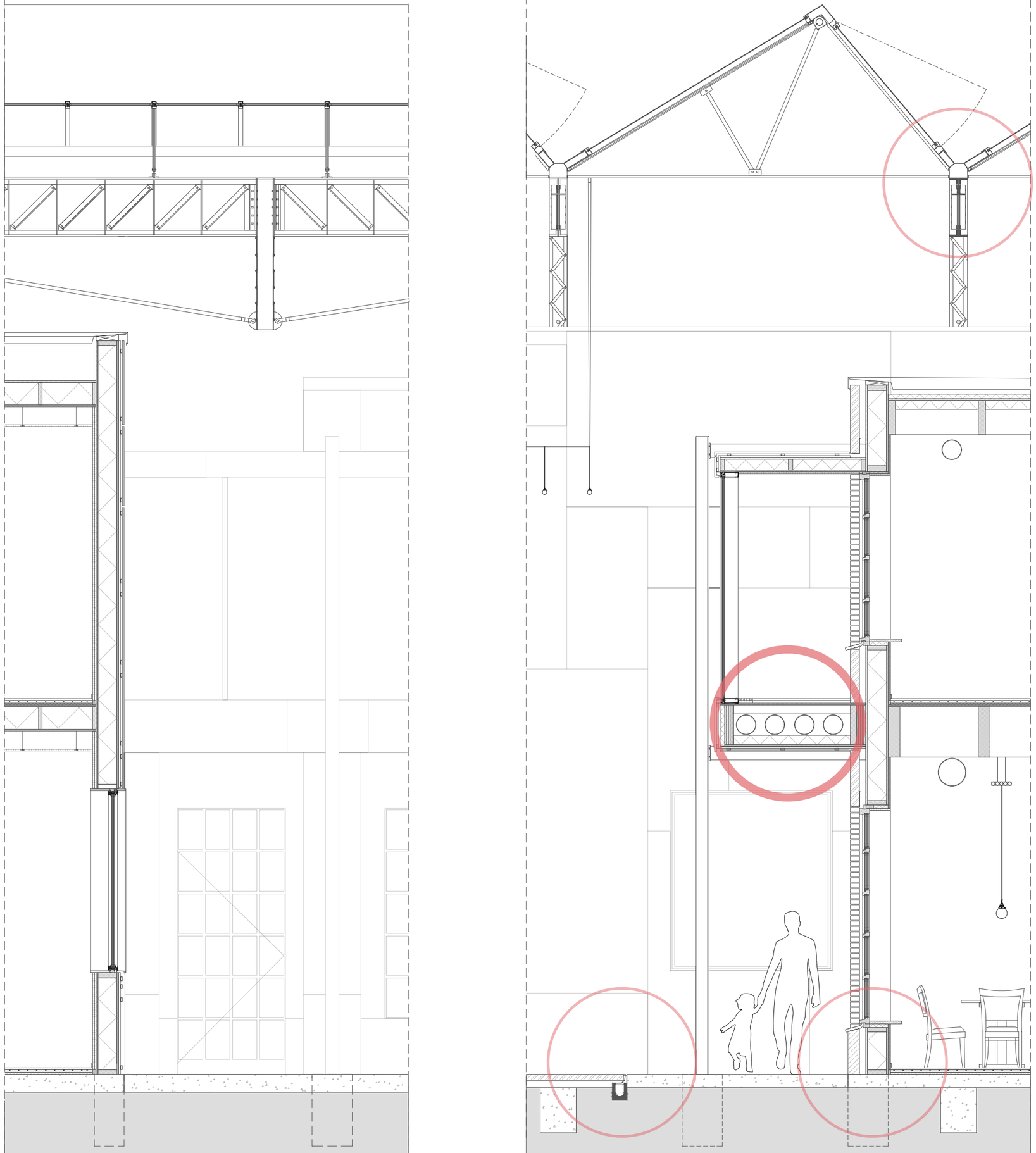


Solar panels
The majority of the south facing side of the sawtooth roof is covered in solar panels. The panels generate approximately 3,638 kWh/Year.

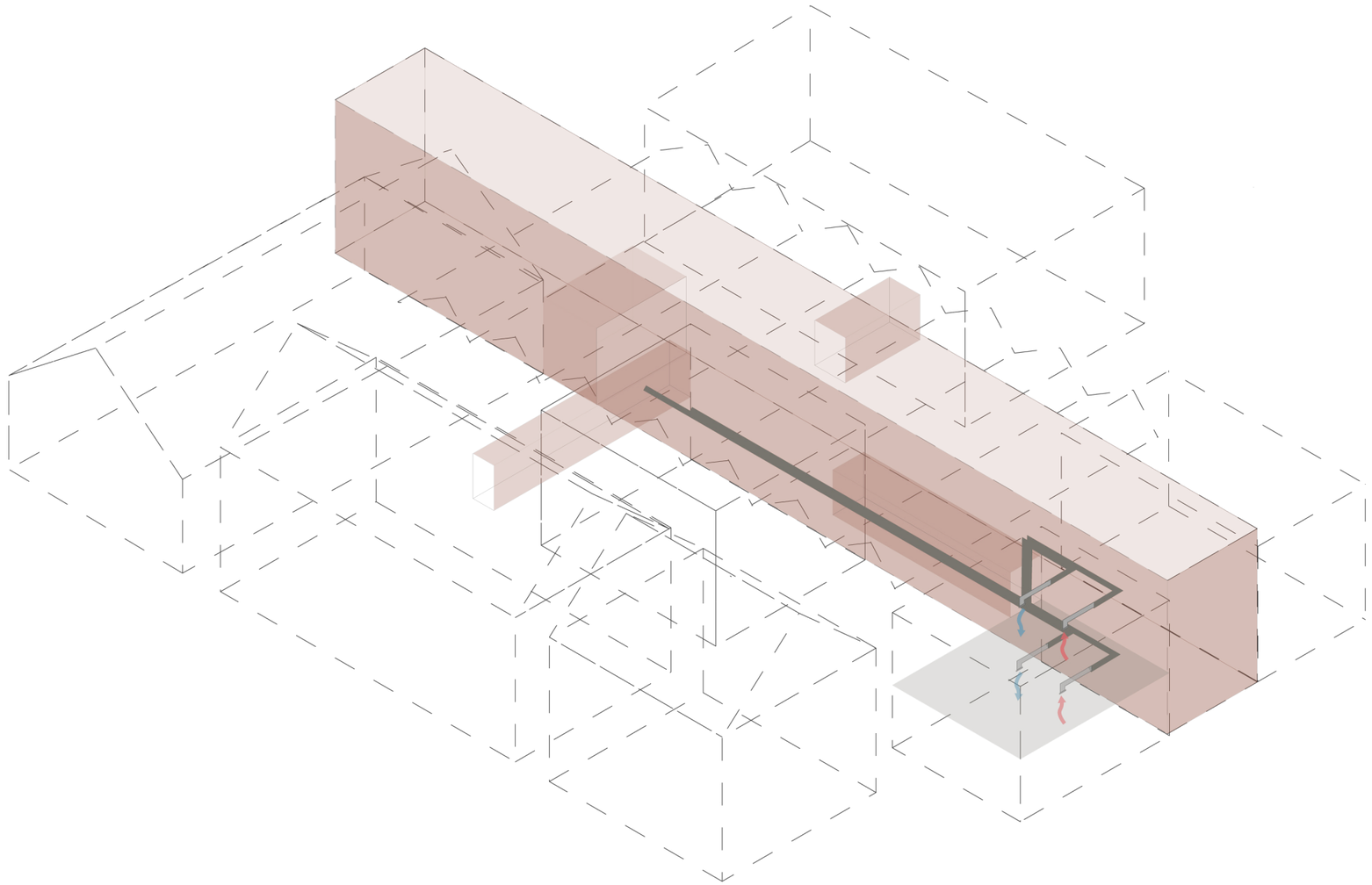


Rainwater collection

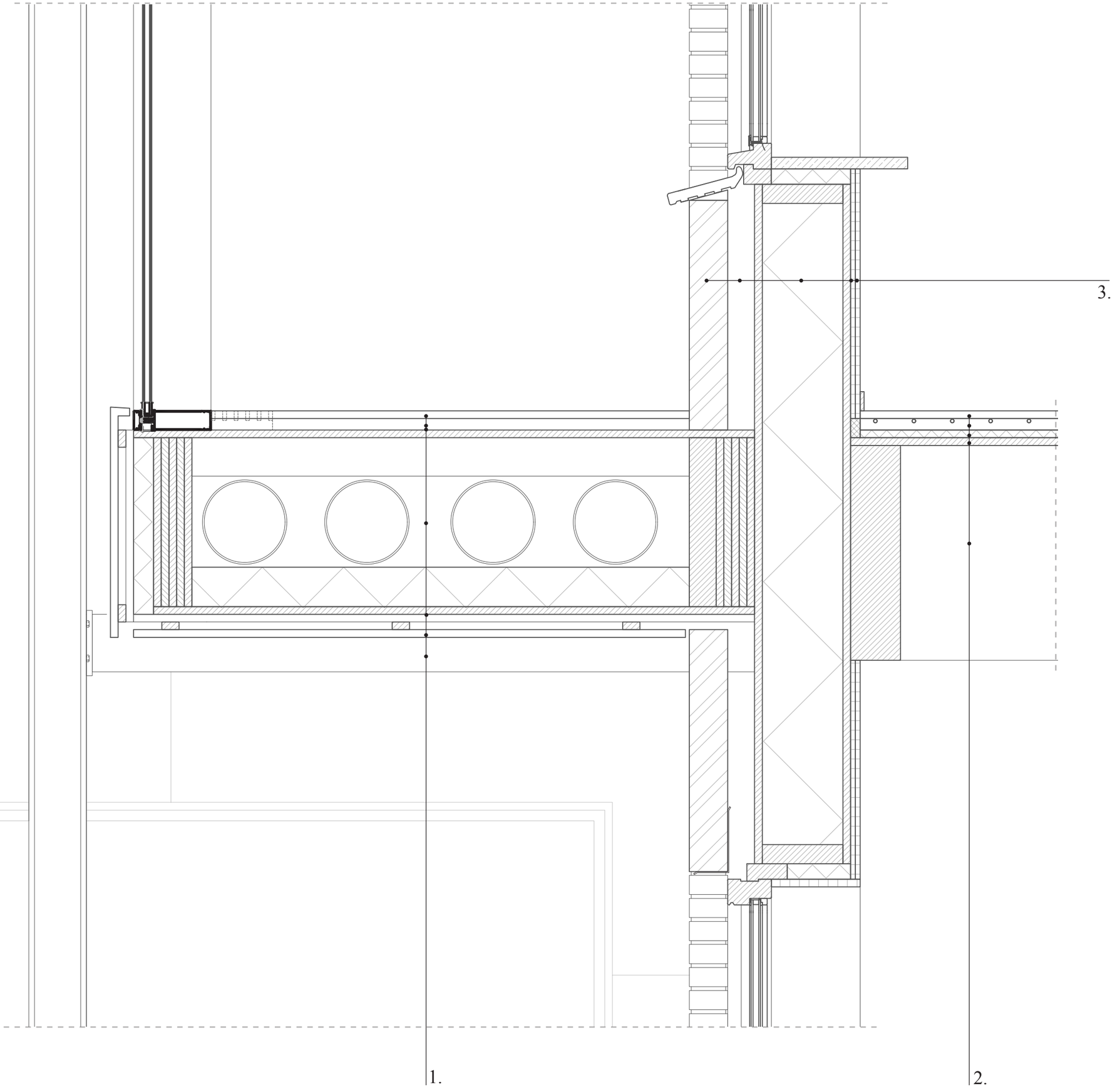
The rainwater that falls on the sawtooth roof is collected. In London there is an average of 690mm/m2 rainfall per year. This mean that 367.080 mm rainwater can be collected per year, which is equal to 367.080L per year. This water can be used to flush the toilets around 91.770 times.



Building fragment
Scale 1:40



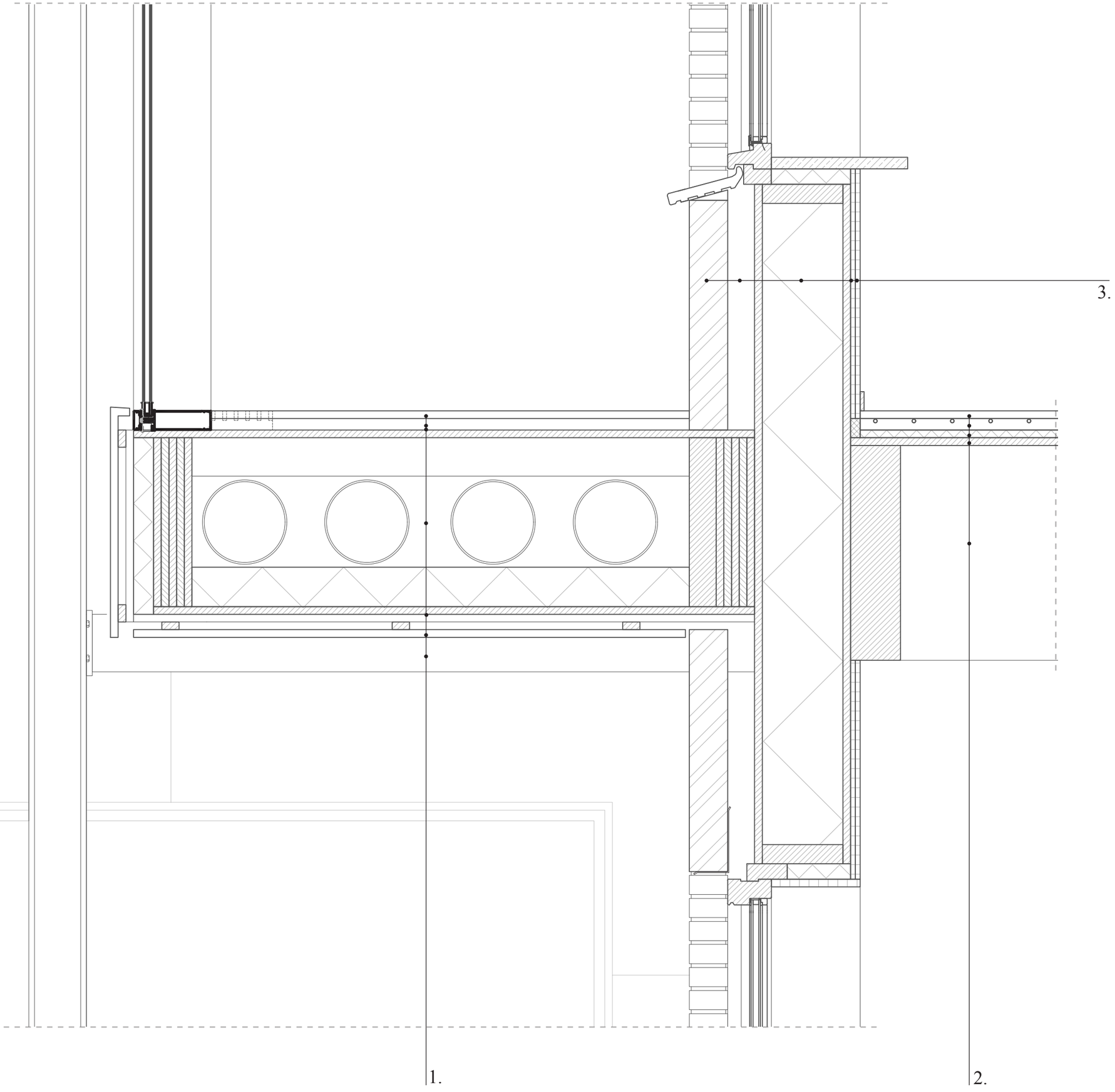
Ventilation
The rooms are all mechanically ventilated. The ventilation ducts are carried from the main technical room to the different building blocks through the tunnels. In the technical room there is a heat recovery installation.



Detail 2:
the tunnel

1.	
Floor finishing	20 mm
Underfloor	30 mm
Vapor barrier	
Timber frame structure	460 mm
with insulation	
Waterretaining foil	
Trespa cladding	20 mm
attached to a 20 x 20 mm timber frame	
Rectangular structural tube	150 mm
2.	
Floor finishing	20 mm
Underfloor with heating / cooling	30 mm
Insulation	20 mm
Timber frame structure	580 mm
Glulam beam	560 mm
3.	
Brickwork	100 mm
Cavity for ventilation	70 mm
Timber frame structure	250 mm
with mineral wool insulation	
Gypsum	12,5 mm
Plaster finish	12,5 mm

Scale 1:10



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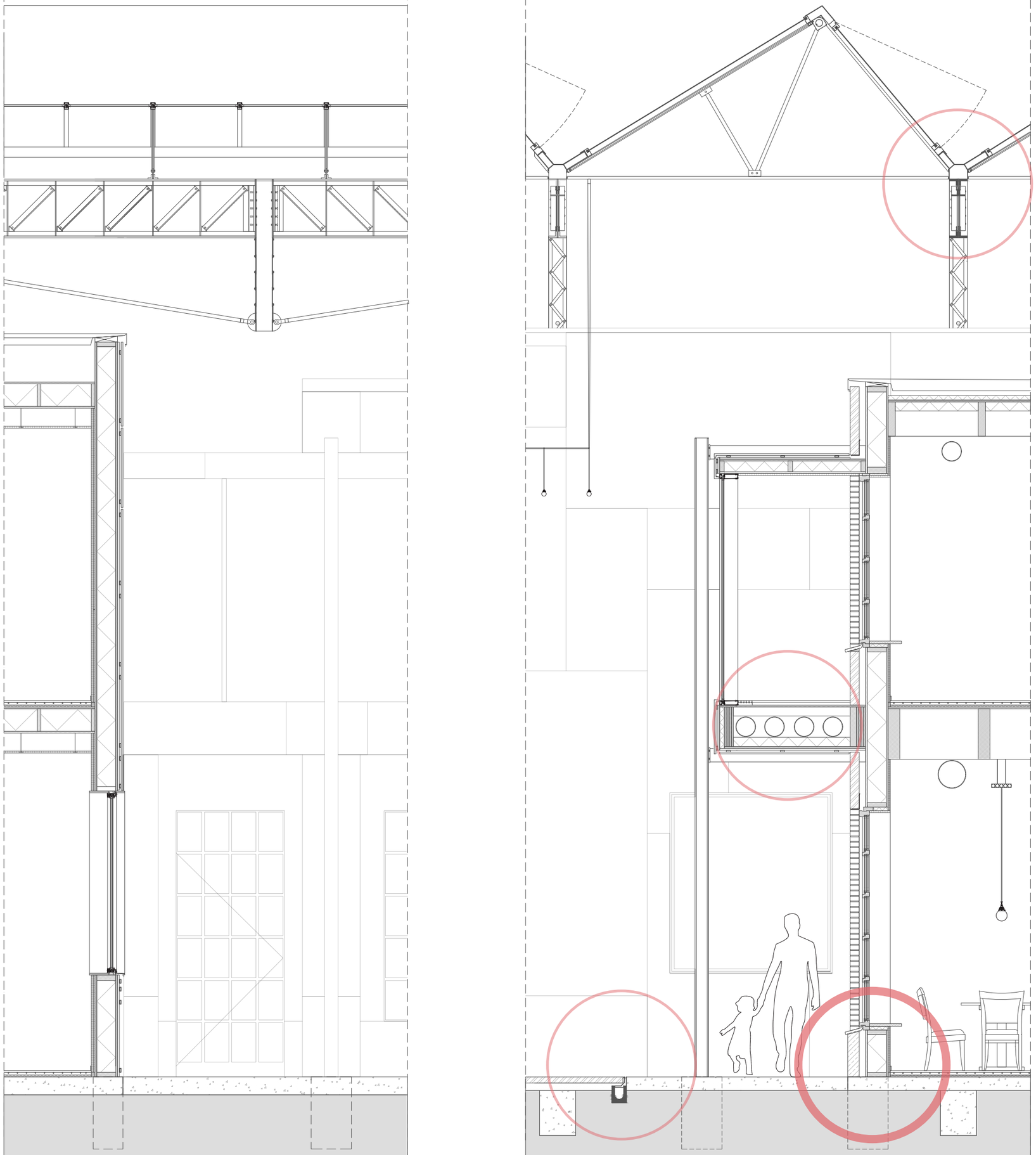
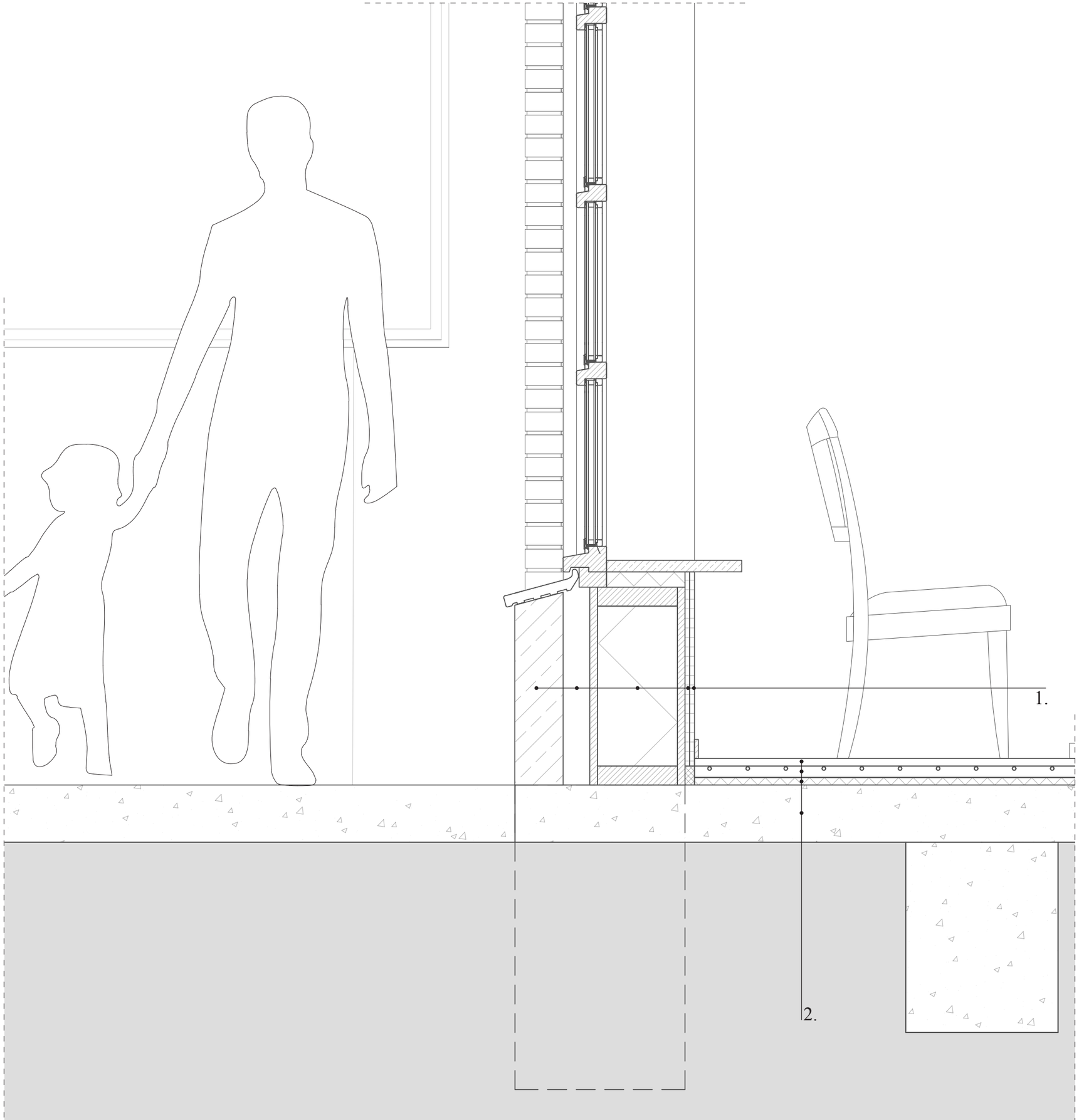
Timber frame structure	250 mm
with mineral wool insulation	
Gypsum	12,5 mm
Plaster finish	12,5 mm

Scale 1:10



Building fragment
Scale 1:40



Detail 3:
the foundation

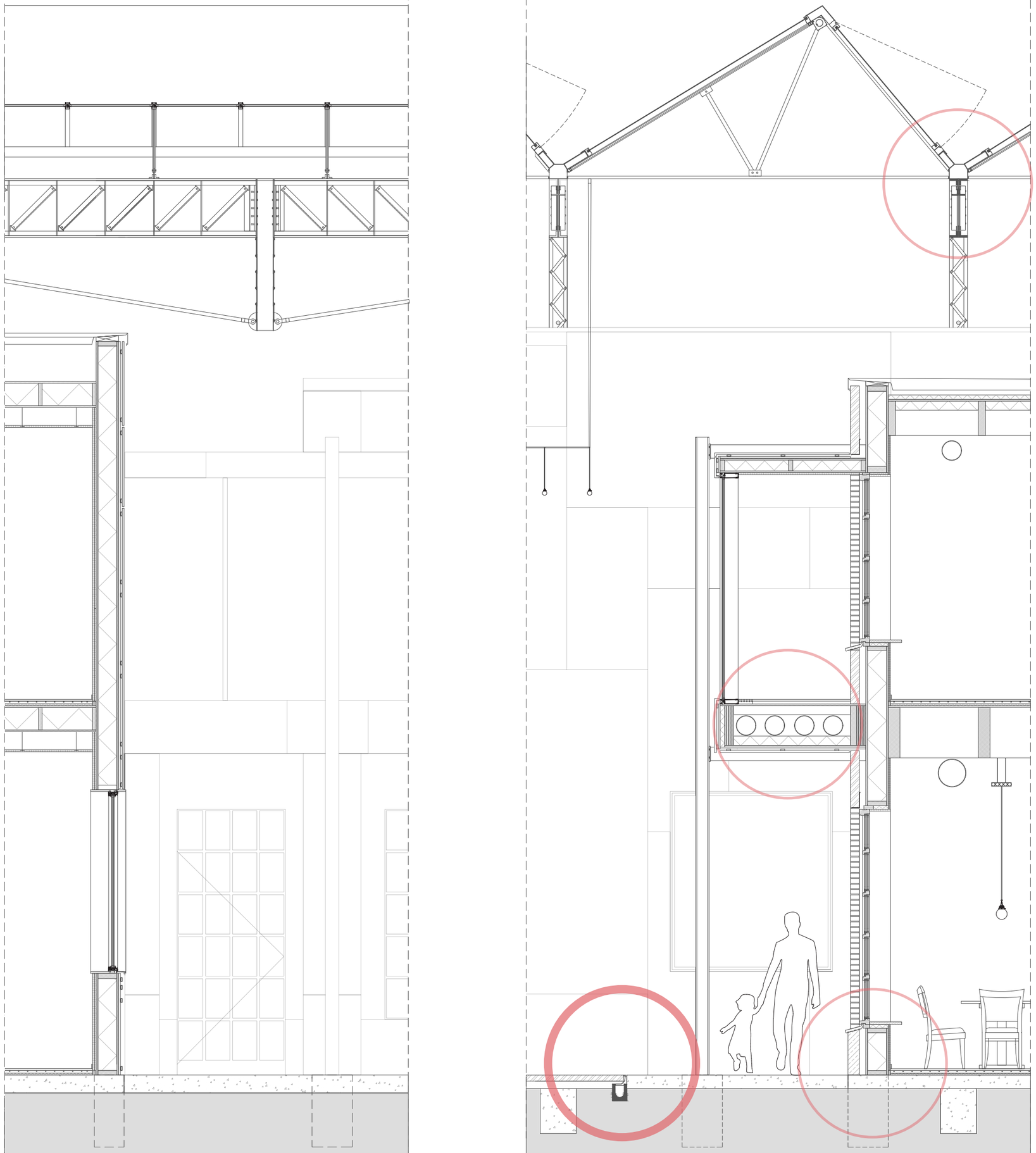
1.

Natural stone	130 mm
Cavity for ventilation	70 mm
Waterretaining foil	
Timber frame structure	250 mm
with mineral wool insulation	
Vapor barrier	
Gypsum	12,5 mm
Plaster finish	12,5 mm

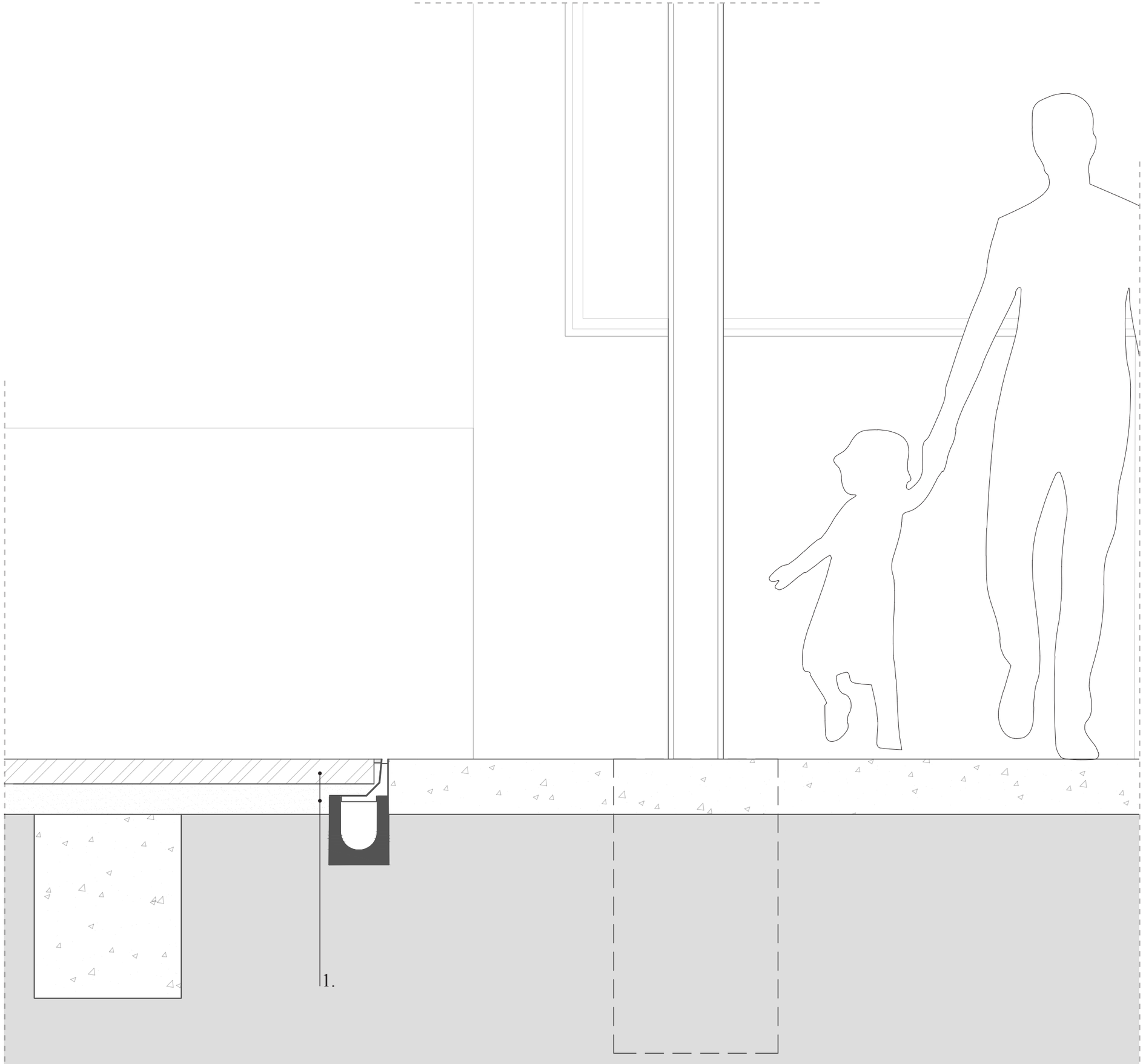
2.

Floor finishing	20 mm
Underfloor with heating / cooling	30 mm
Acoustic insulation	20 mm
Concrete floor	200 mm

Scale 1:10



Building fragment
Scale 1:40

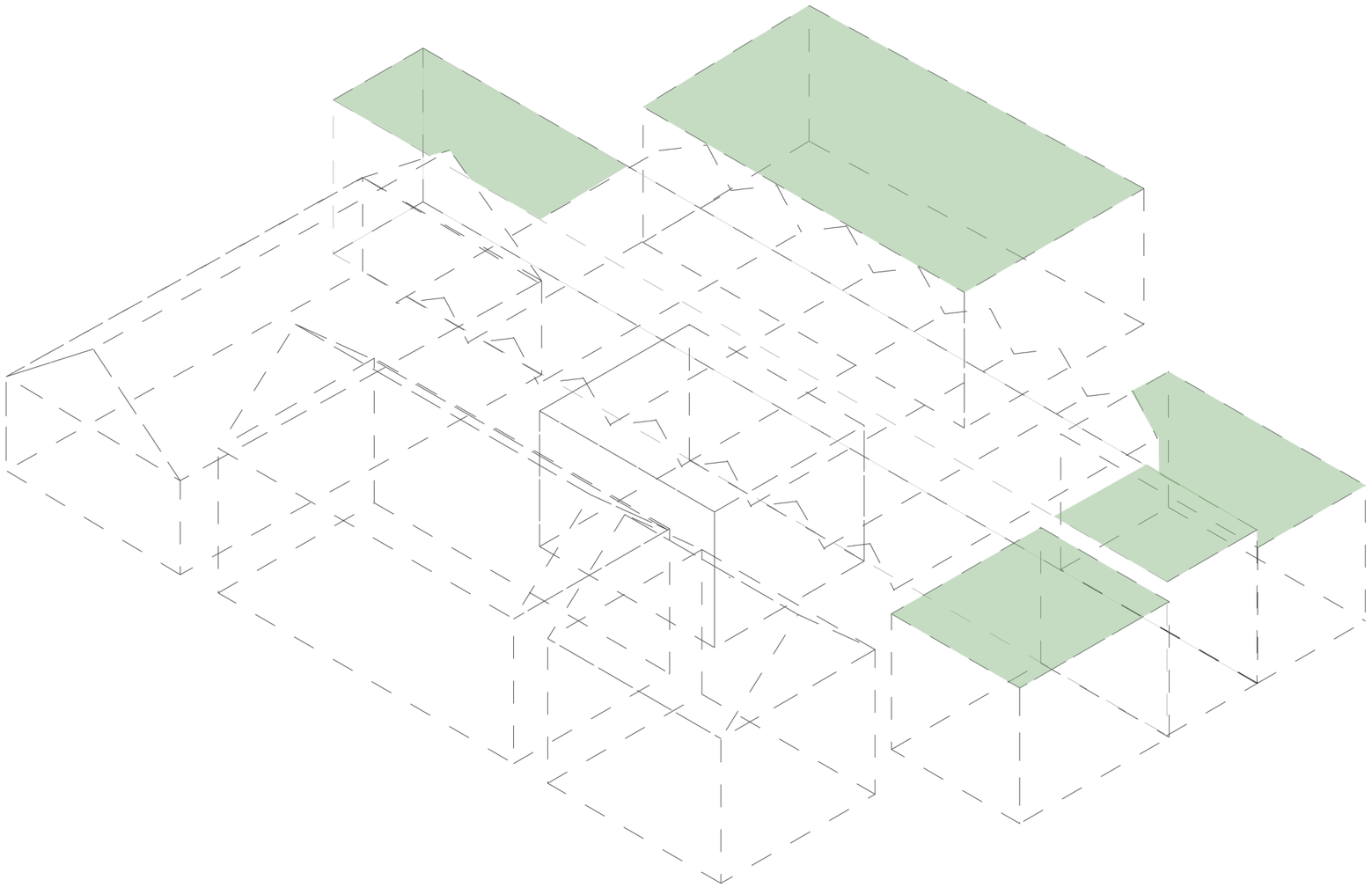


Detail 4:
the square

1.

Dik format clinkers	67 mm
herringbone bandage	
Sand	133 mm

Scale 1:10

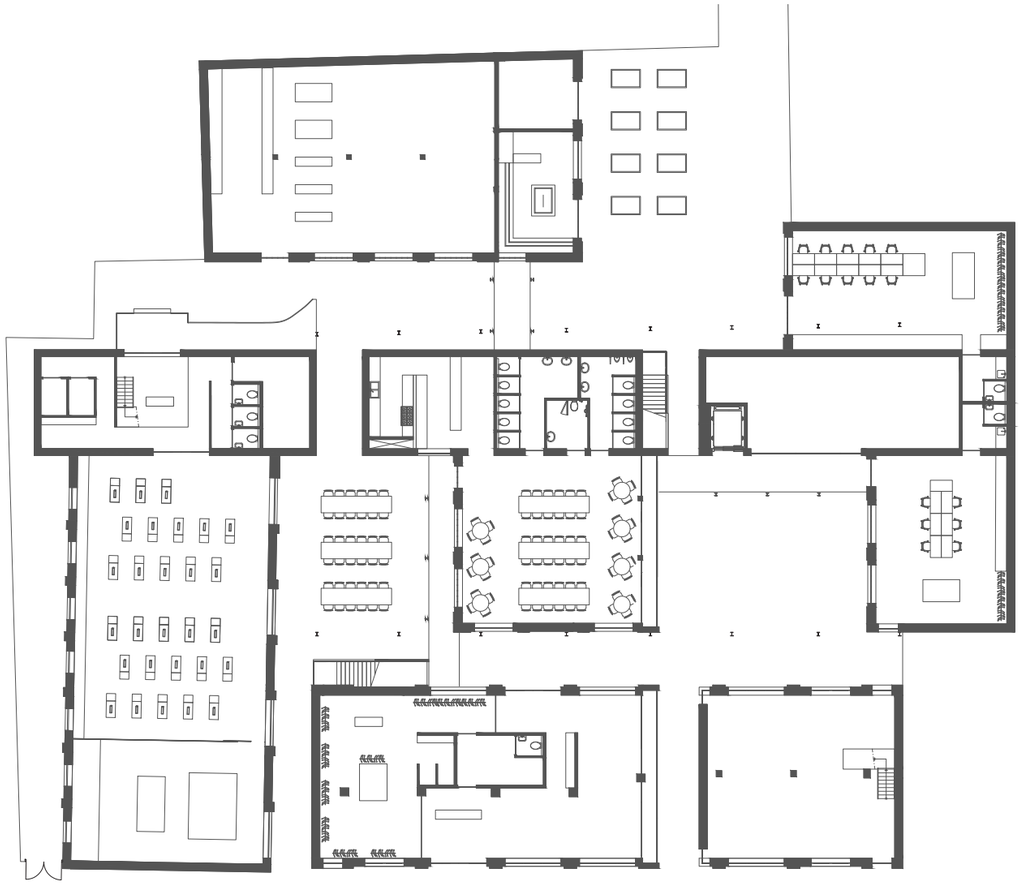


Green rooftops

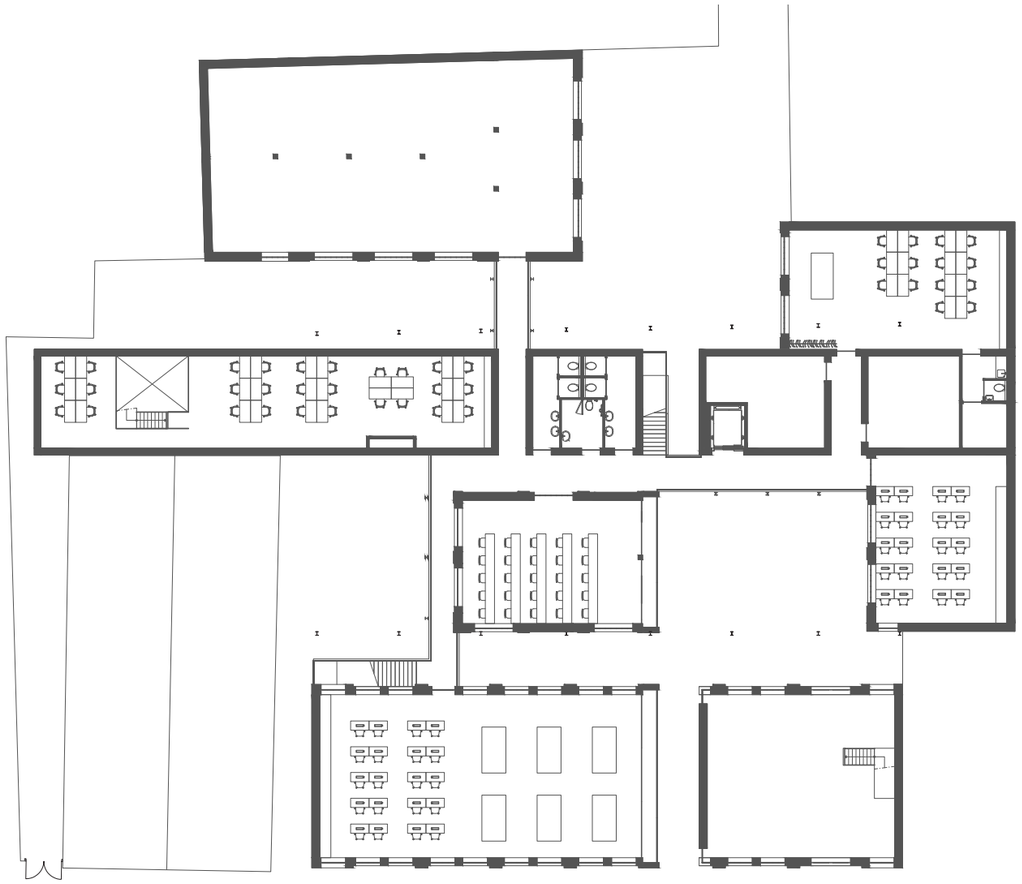
reversibility | flexibility | adaptability

reversibility | flexibility | adaptability

reversibility | flexibility | adaptability



Ground floor plan



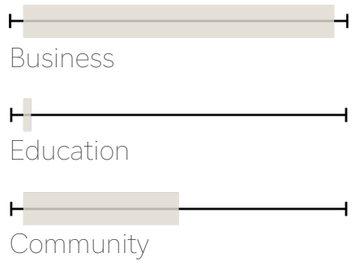
First floor plan

Scenario 1
The program as it was described in the design assignment, with a more or less even distribution between business, education and community.

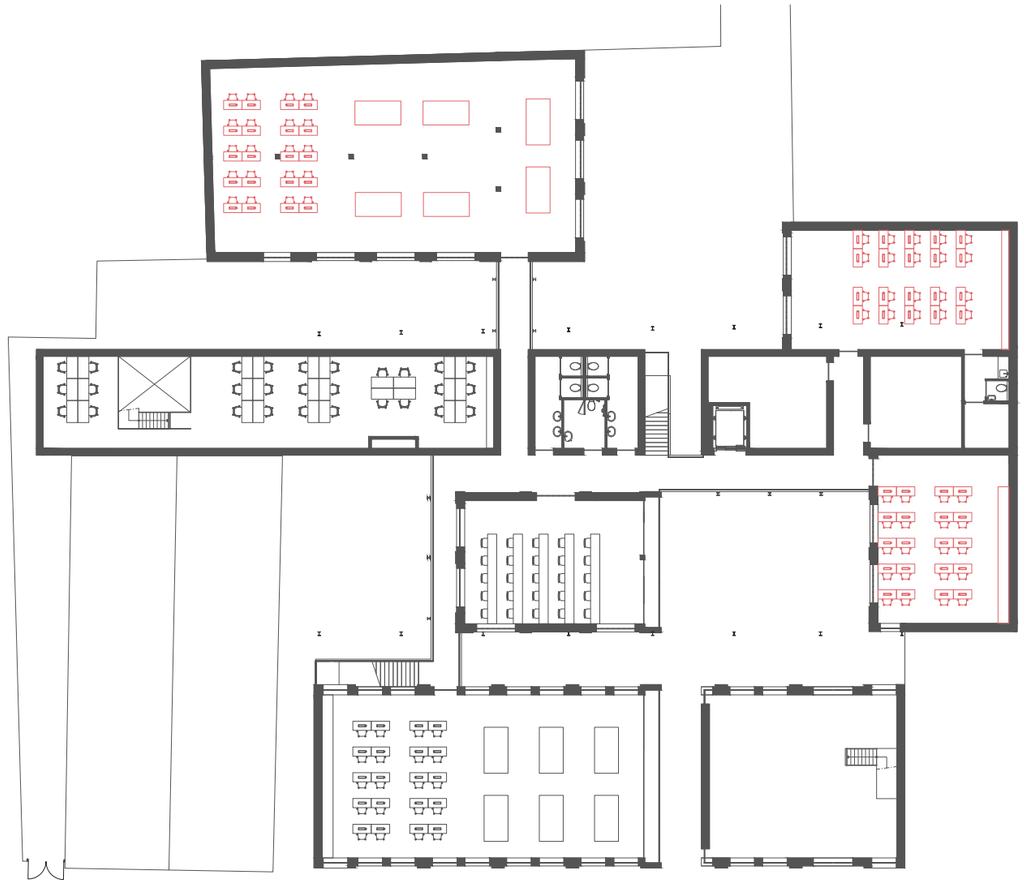
Ground floor plan

First floor plan

Scenario 2
The design assignment fails, clothing manufacturing and education makes place for (flexible) work spaces.



Ground floor plan



First floor plan

Scenario 3
The project thrives and the manufacturing company moves to another location. Now there is more space for education.

Business

Education

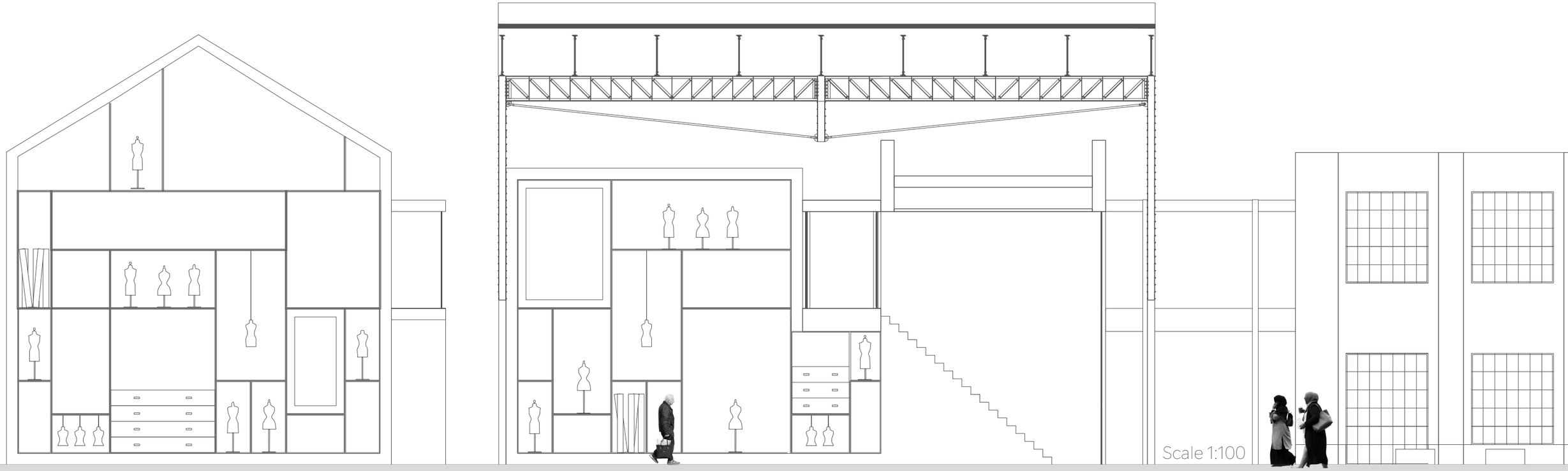
Community

Original facade Hertford Road

Scale 1:200

New facade Hertford Road

Scale 1:200


Scale 1:100

Thank you for your attention

QUESTIONS?