



# From exhaustion To resilience

*"Re-imagining the possible"*

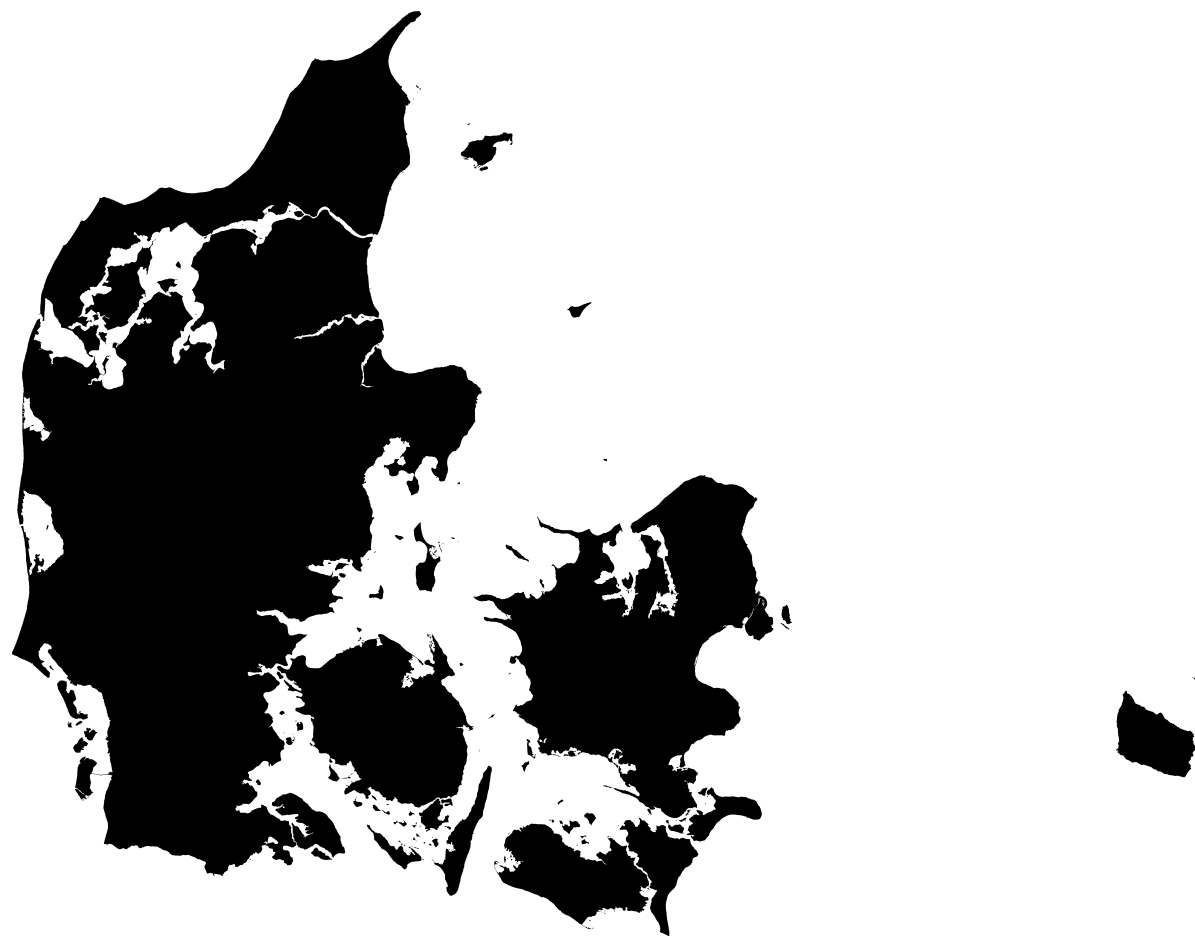
**Miguel Borst | 4886356 | 19-6-2025**

Public building graduation studio P5

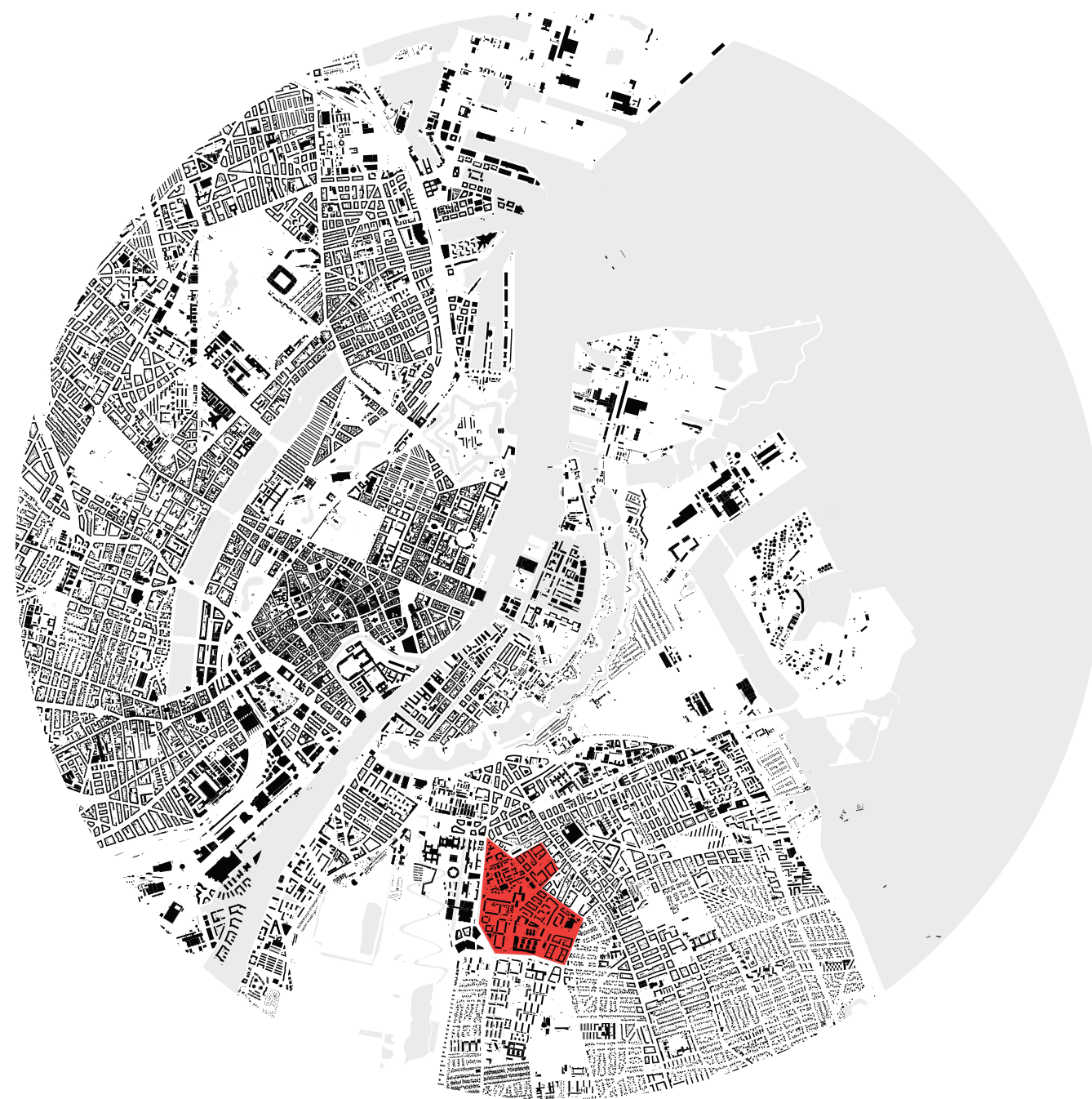
Tutors: Sien van Dam (TD), Henk Bultstra (PD) & Florian Eckhart (TBD)

Delegate: Luca Luorio





The map of Denmark



The neighborhood Sønderbro located on the island of Amager

## A Public condenser in Sønderbro

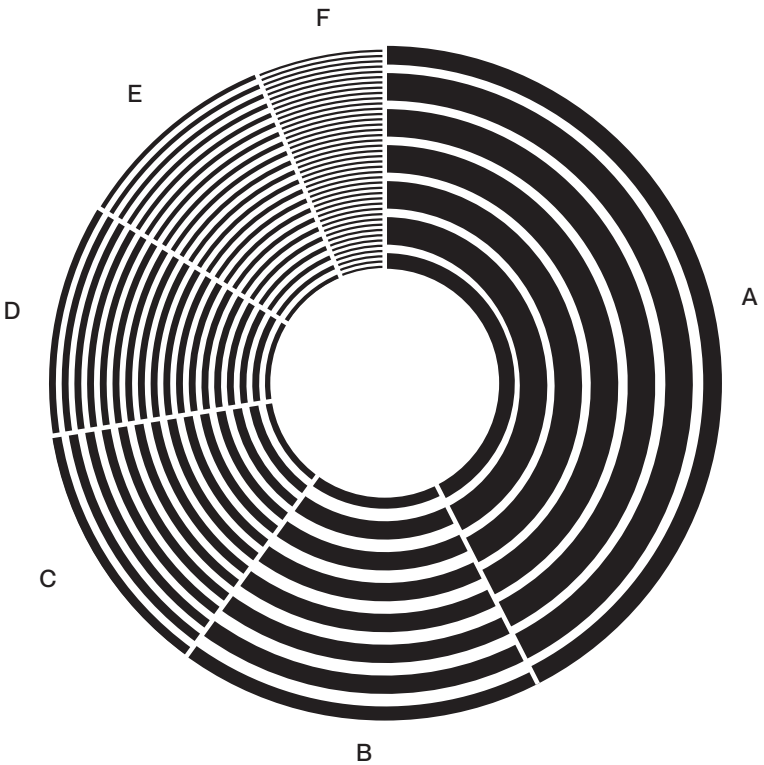






# “We are doomed...”

- Sonderbro resident



Sundholm challenges  
Source: Rasmus Andersen

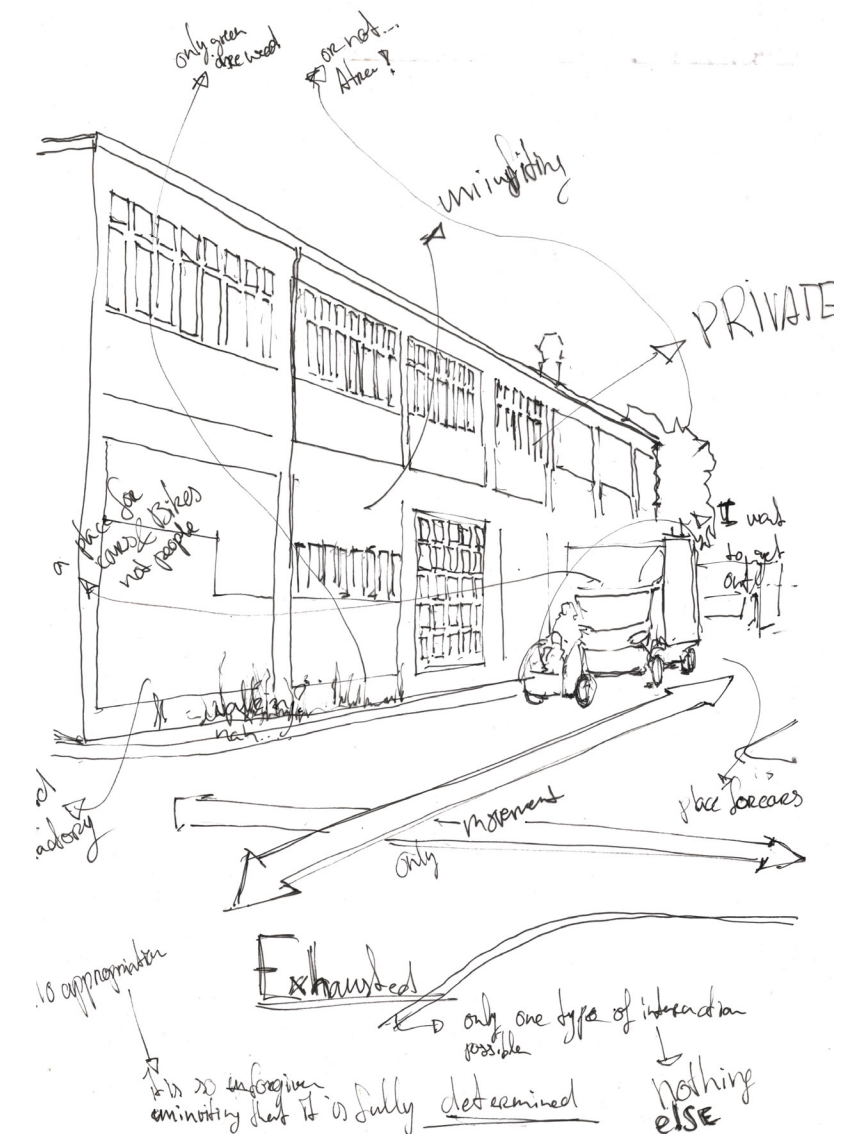
A Lack of meeting places	34
B Physical barriers	14
C Lack of connection	10
D No gatherings	9
E Lack of Hygge	8
F Bad reputation	5





“Exhausted is a whole lot more than tired (...)  
 The tired has only exhausted realization, while the  
 exhausted exhausts all of the possible. The tired can  
 no longer realize, but the exhausted can no longer  
 possibilitate.”

- Deleuze and Uhlmann, “The Exhausted.” (1995)



Sketch analysis of an exhausted corner near the Fabrikken.



**“How can a public condenser disrupt  
an exhausted urban and social context?”**

To generate and re-imagine the possible





**The spectacle**

+

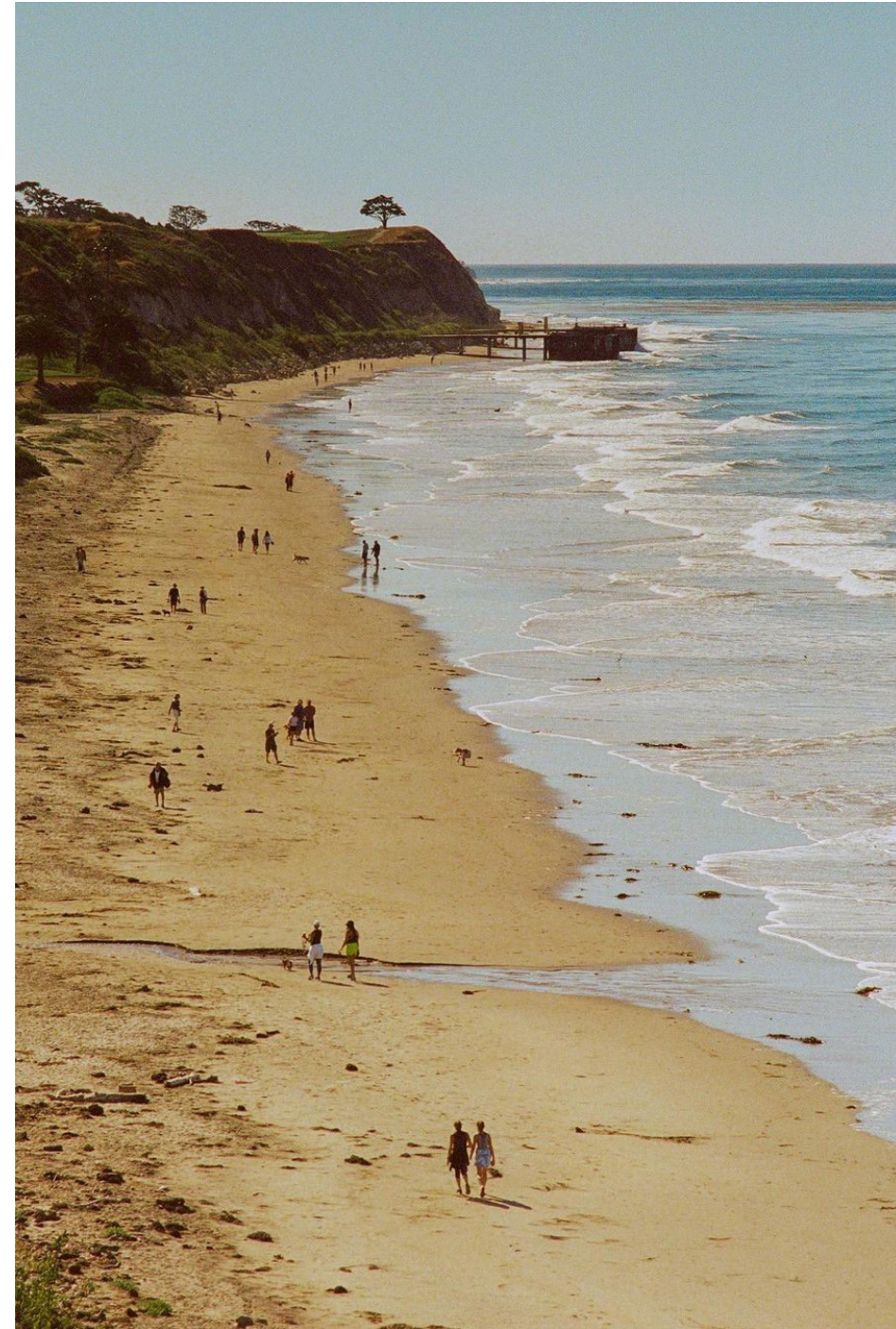
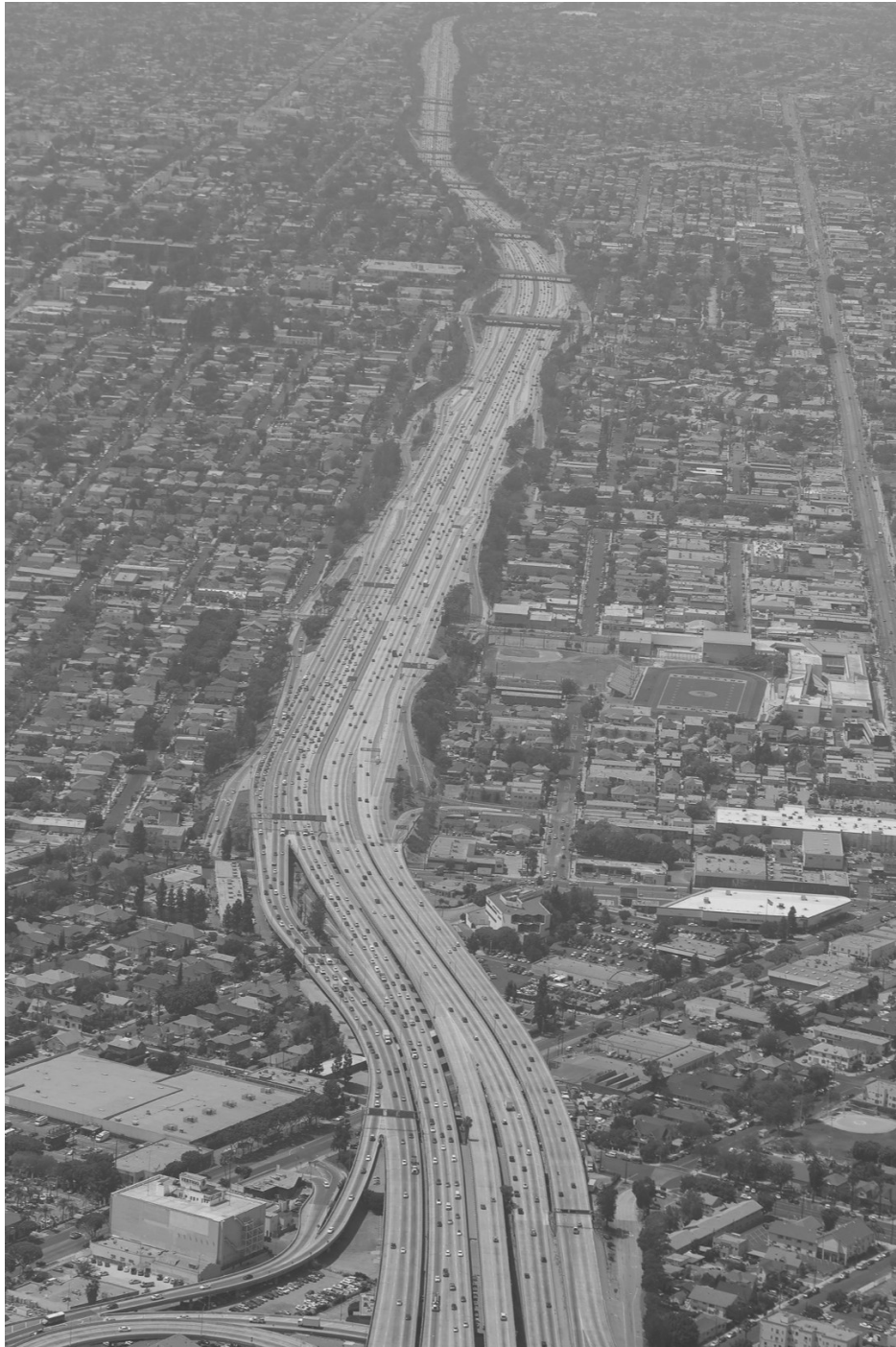


**The everyday**

=

**The spectacular everyday**





## Turning boundaries into borders

“The boundary is an edge where things end; the border is an edge where different groups interact.”  
- Richard Sennet &



**The urban scale**

**Developing the building**

**The building elements**

**A walk through the building**





# **The urban scale**

**Developing the building**

**The building elements**

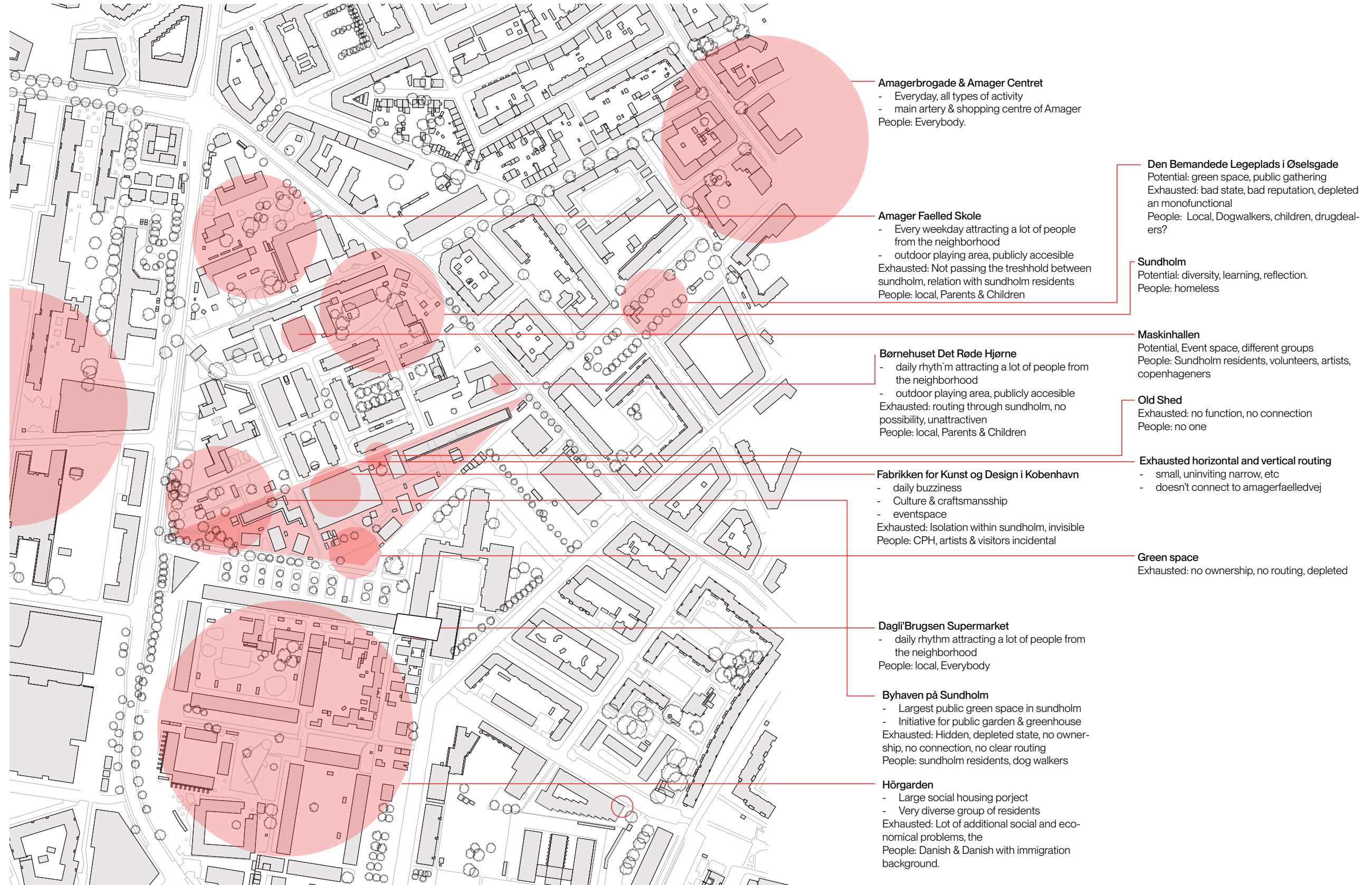
**A walk through the building**





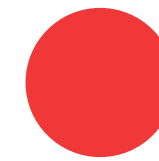
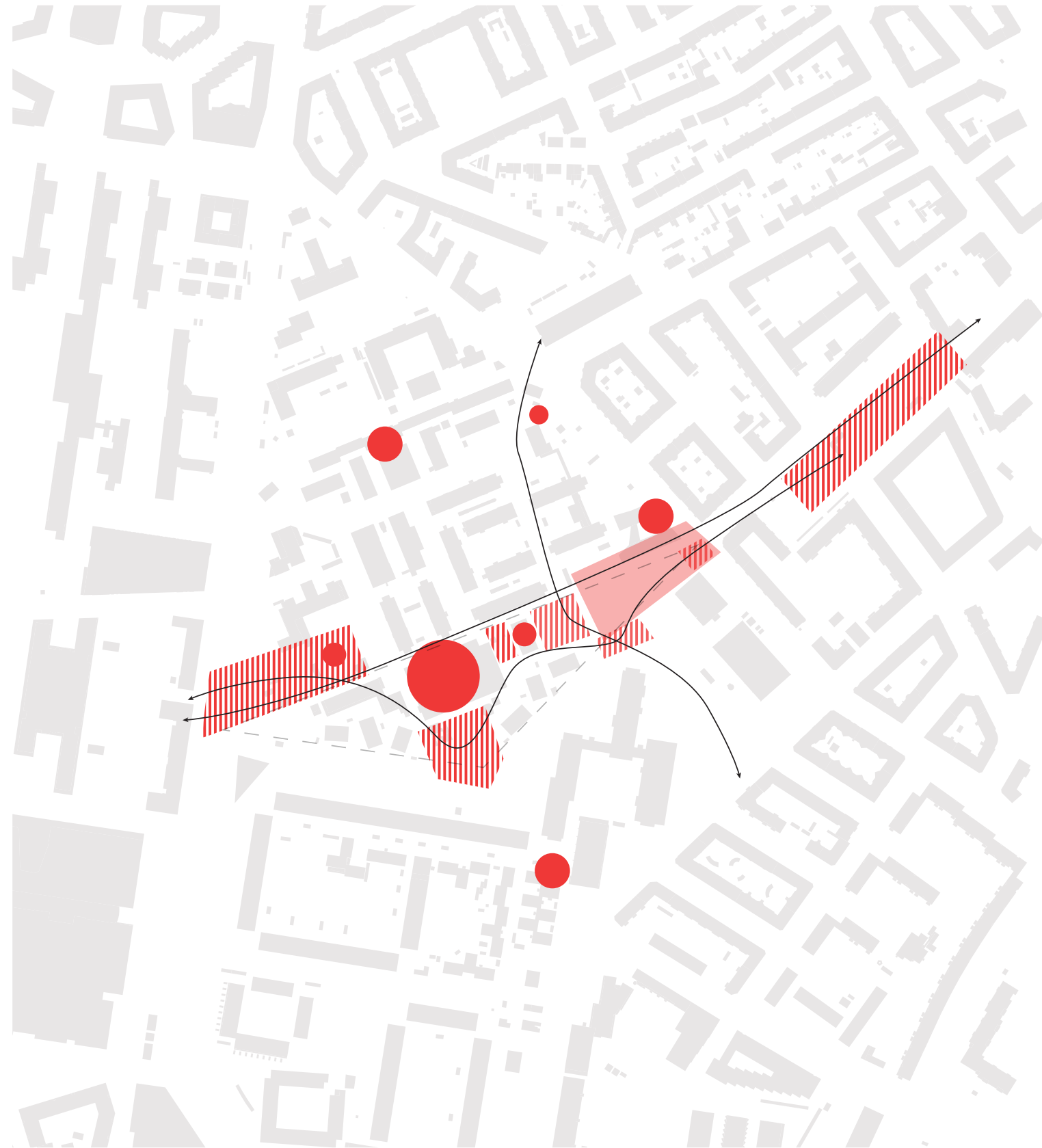
**Turning boundaries into borders**





**Locating boundaries, exhaustion and potential**





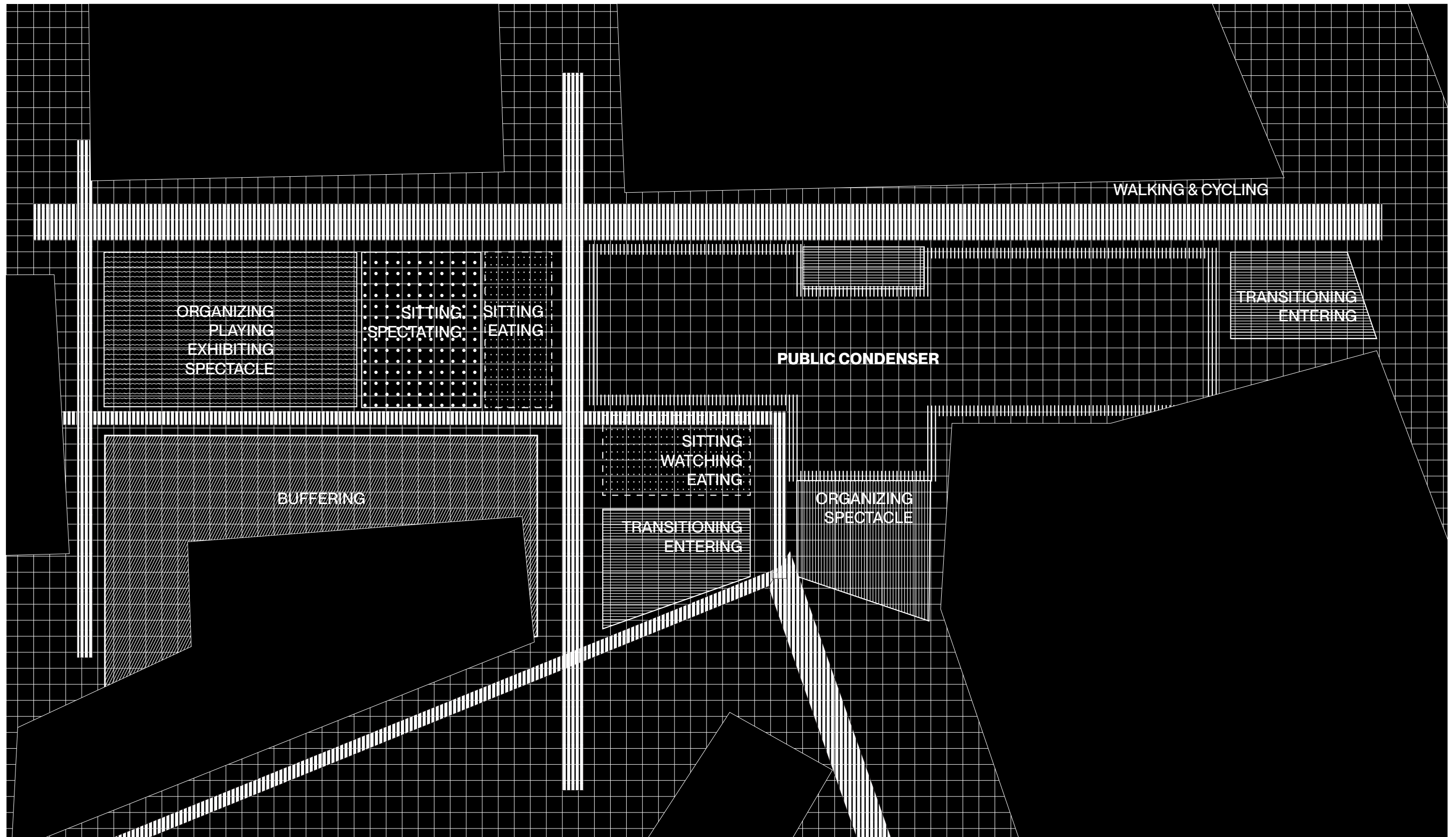
-  Improved outdoor area's
-  Position of public condenser
-  Place's of interest and potential
-  New connections

**Urban masterplan**





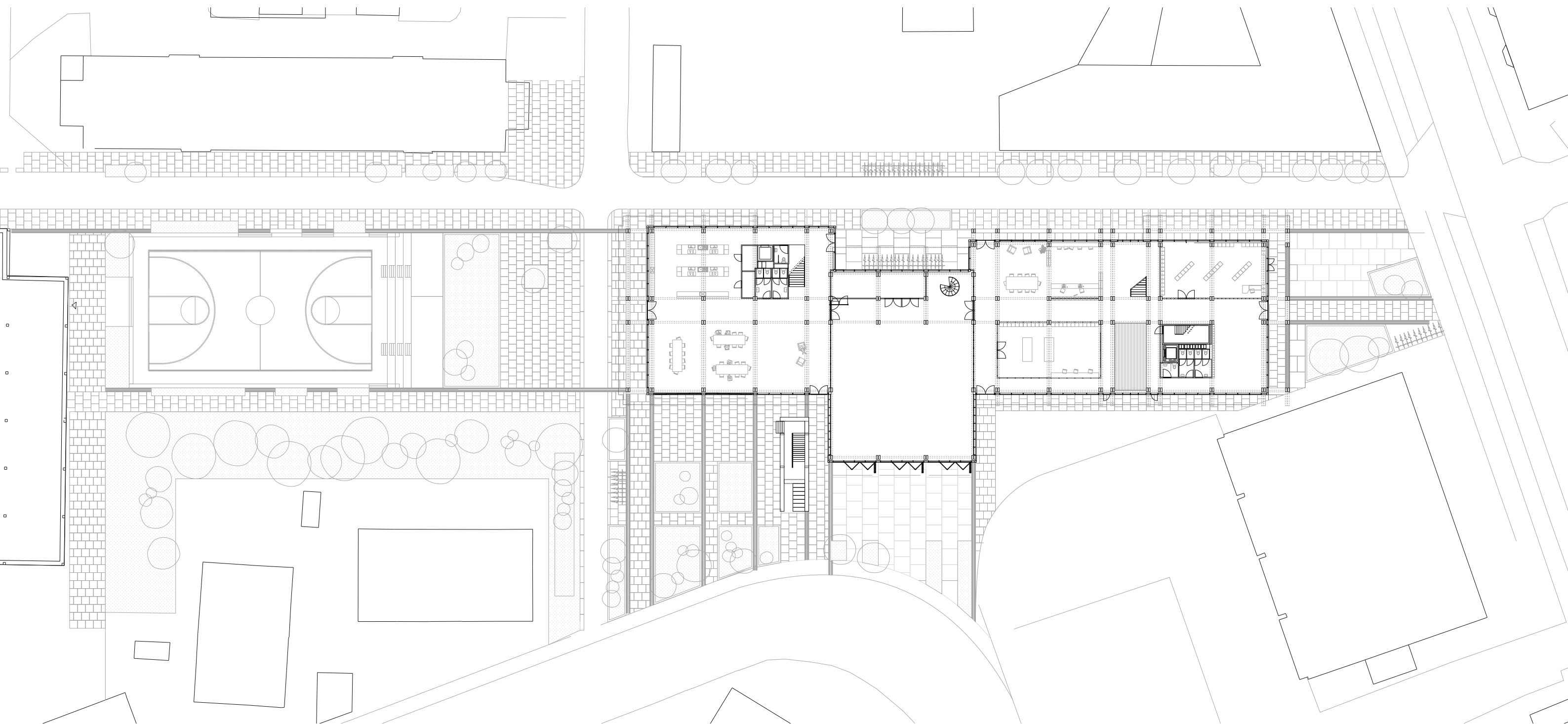




## The public space as a framework for the everyday

redesign of the surroundings of the public condenser





Elements: greenery, sunligh, waterflow, paving, infra, height difference's

## Design of the context

1 : 300 Ground floor & context





Impression of large open space inbetween fabrikken and condenser!



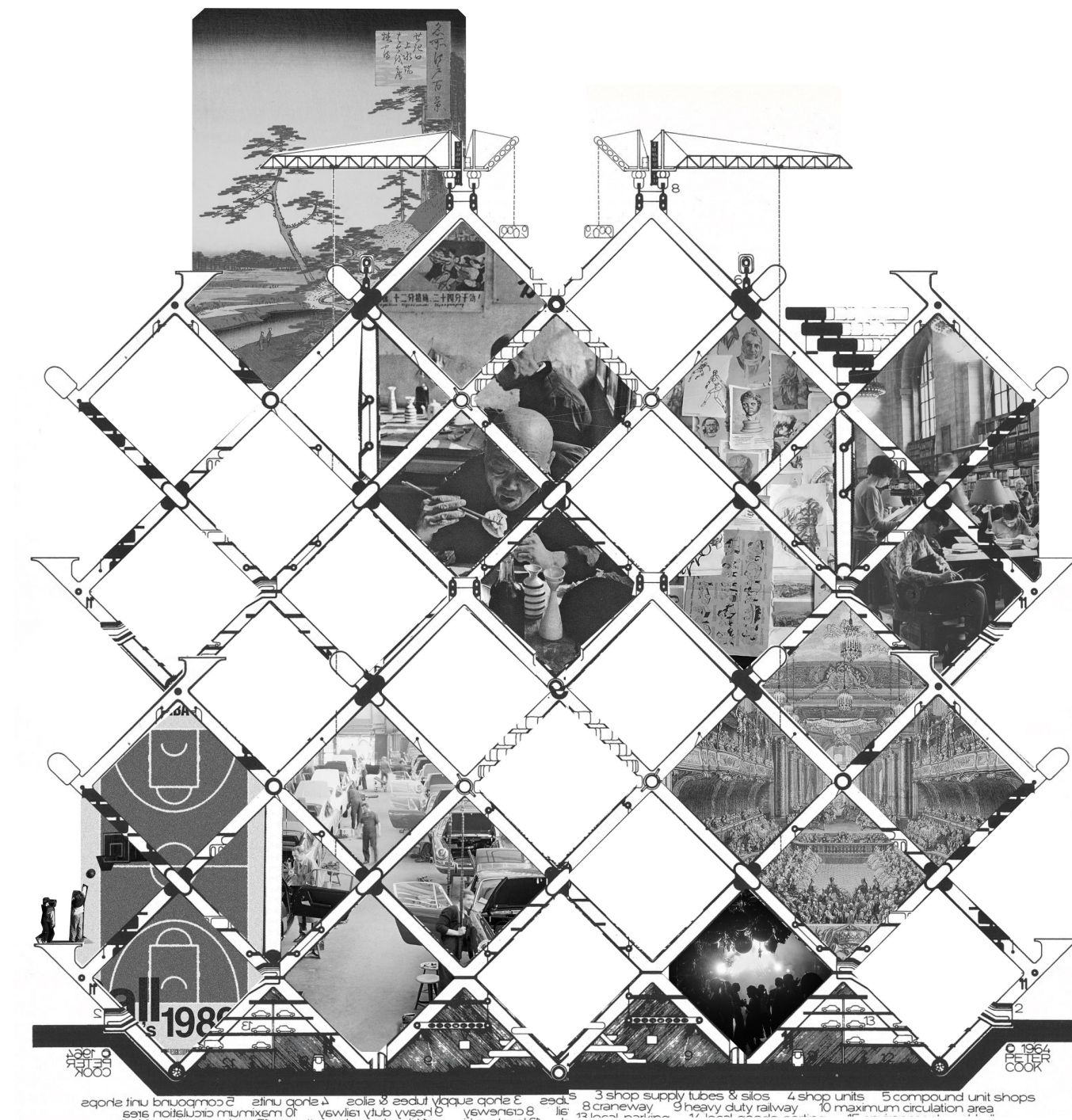
The urban scale

**Developing the building**

The building elements

A walk through the building









## The Eventful

Performing  
Watching  
Expressing  
Organizing  
Meeting  
Exhibiting

*The Spectacular*

*Small to largescale*

*The whole of Copenhagen*



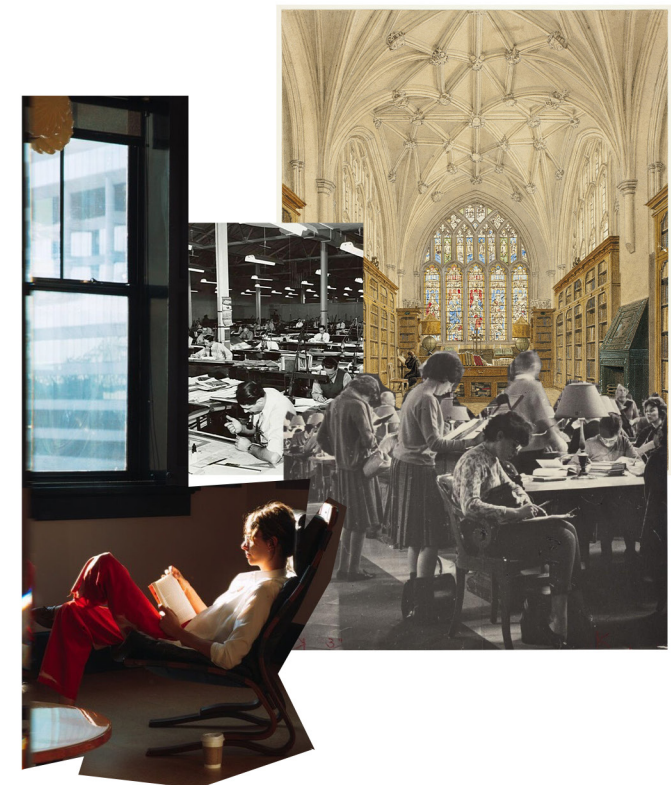
## The Foodcorner

Meeting  
Teaching  
Cooking  
Eating  
Learning

*Everyday*

*Small to medium scale*

*The Local*



## The Library 2.0

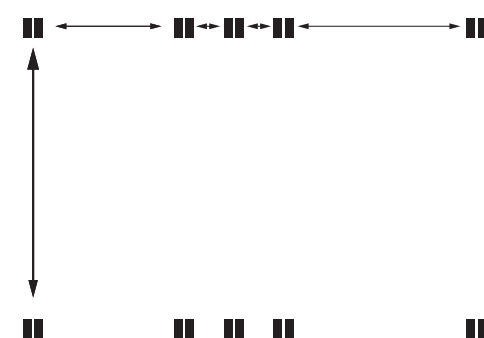
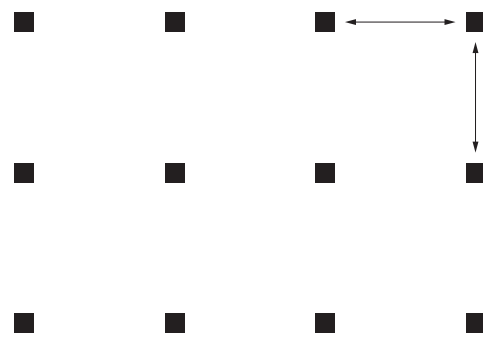
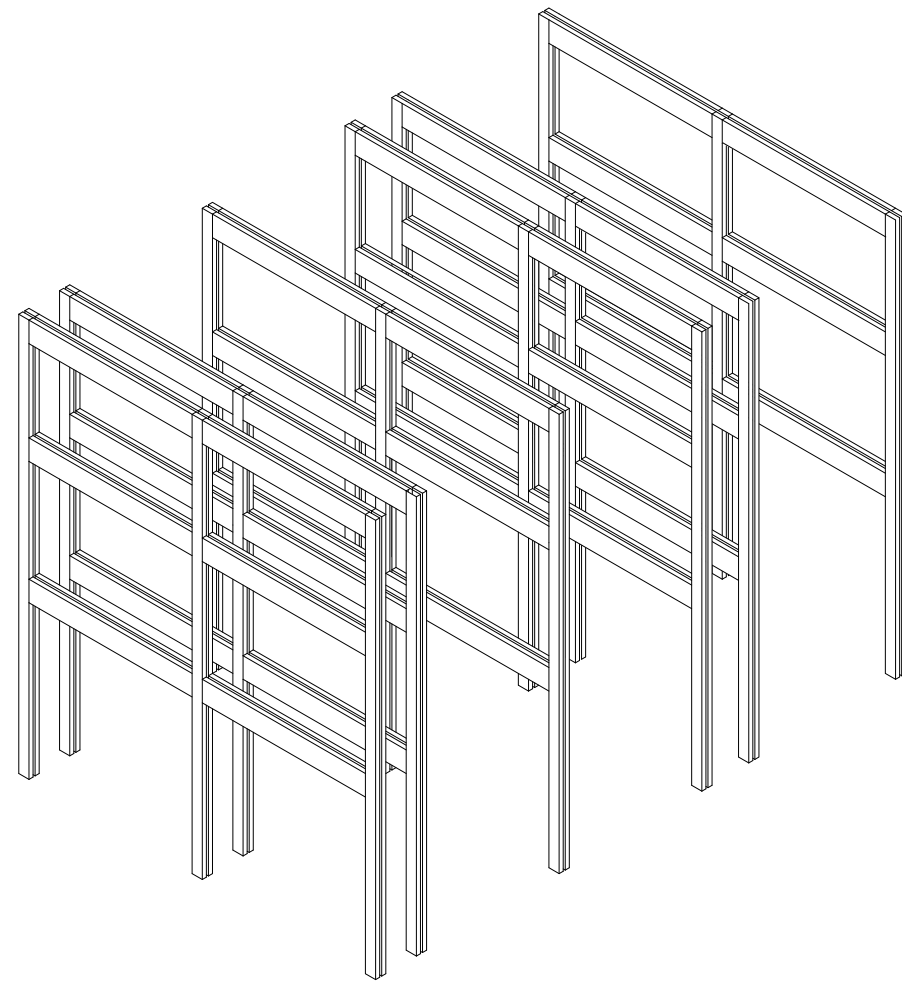
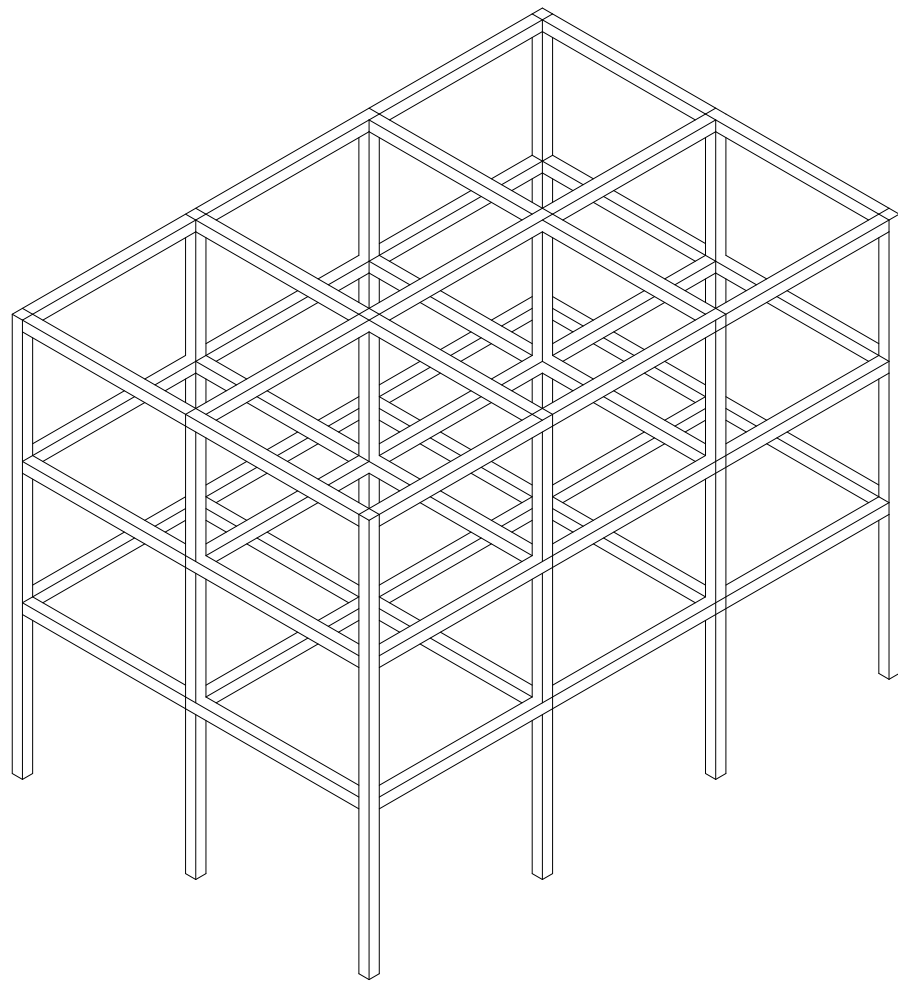
Working  
Learning  
Studying  
Reading  
Meeting  
Creating

*Everyday*

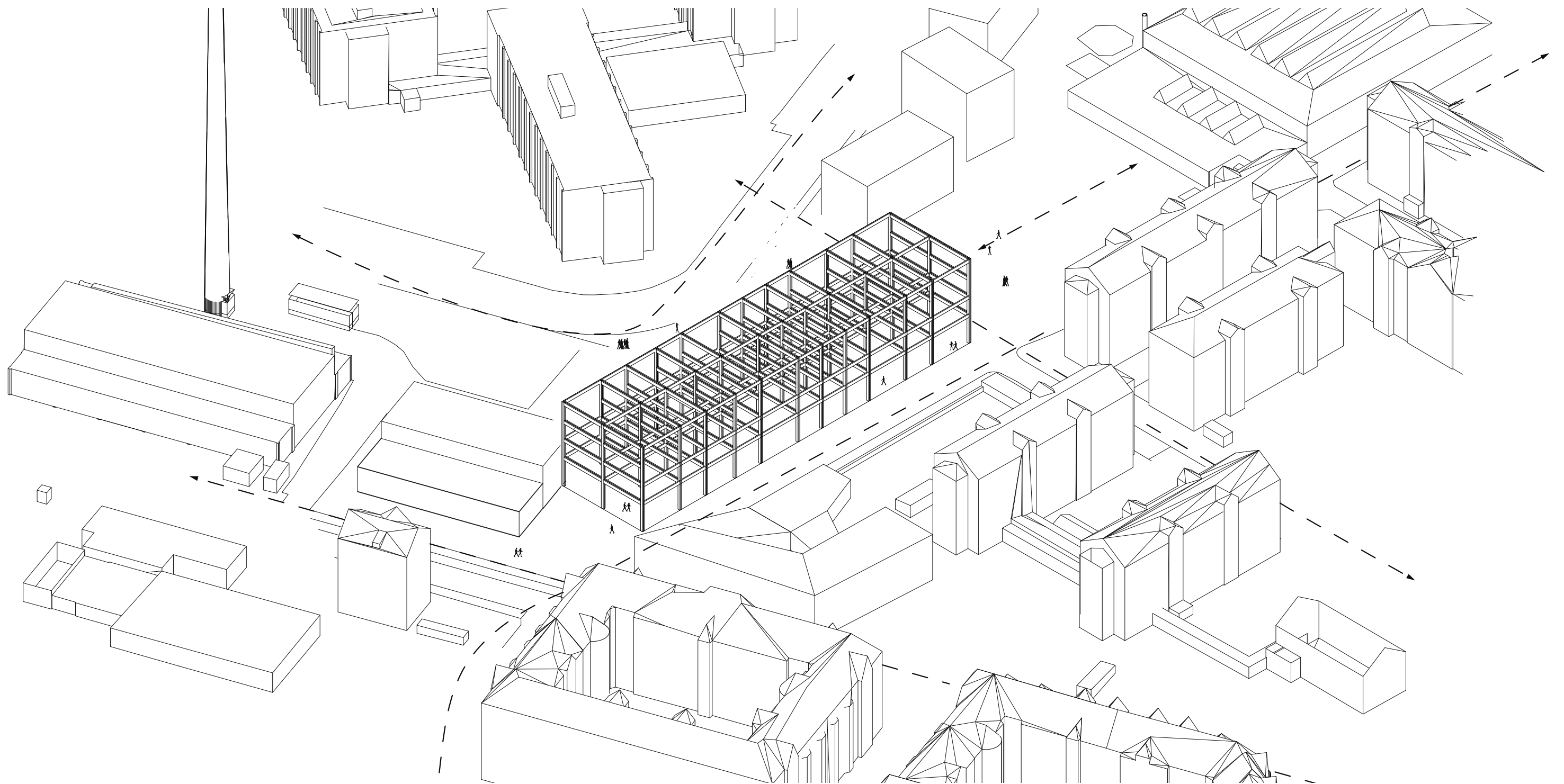
*small to large scale*

*The Local and beyond*





**A new framework for the everyday**



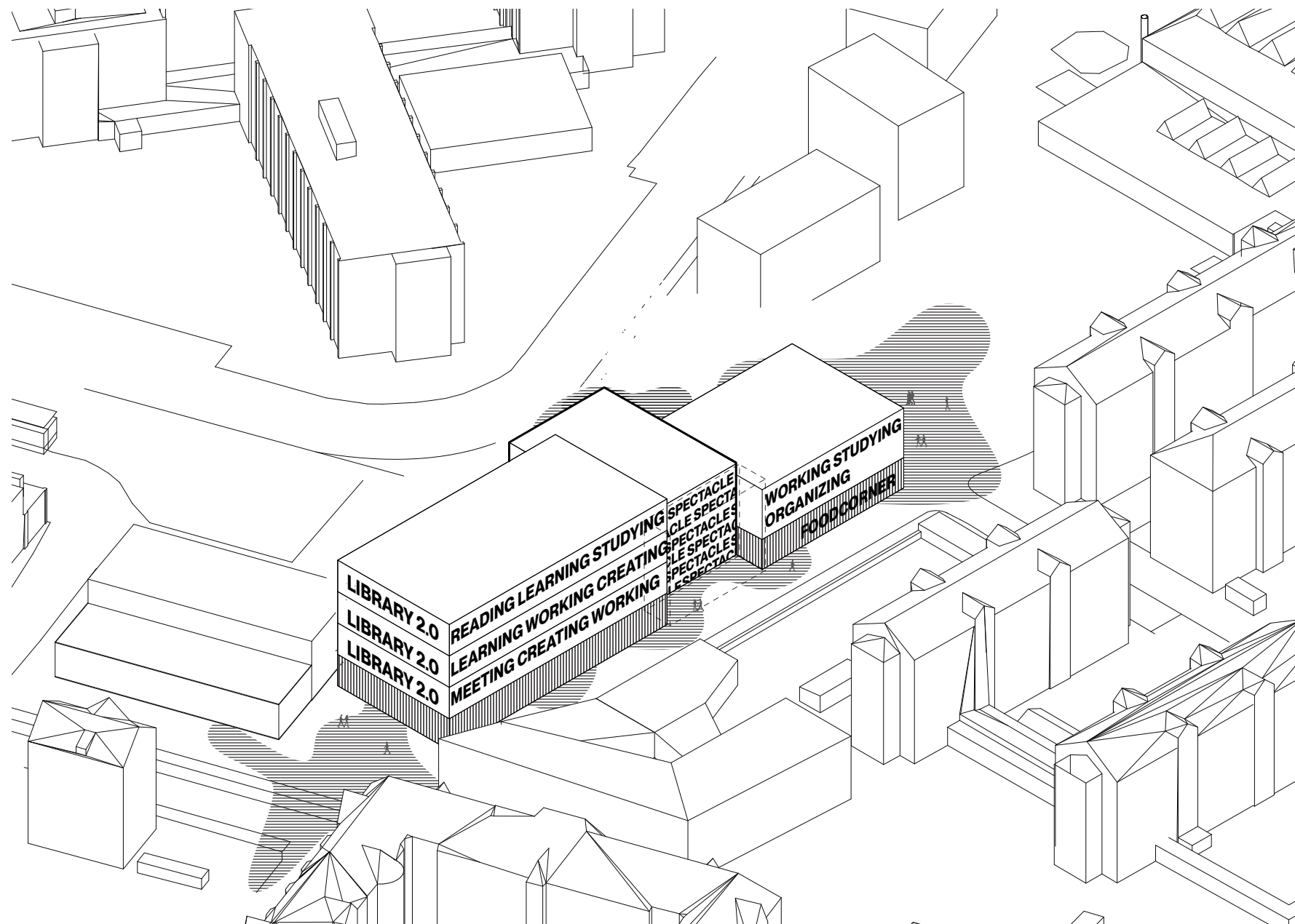
**Step 1. Positioning the framework within the neighborhood**





Restored vertical connection between Hörgården and Sundholm

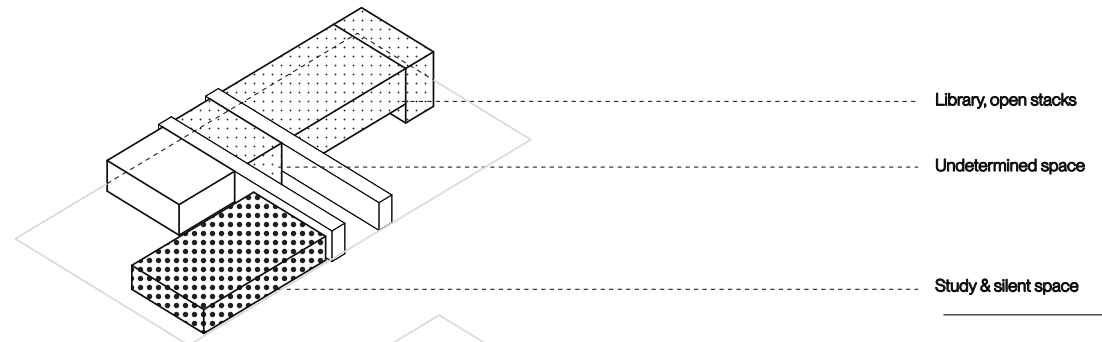




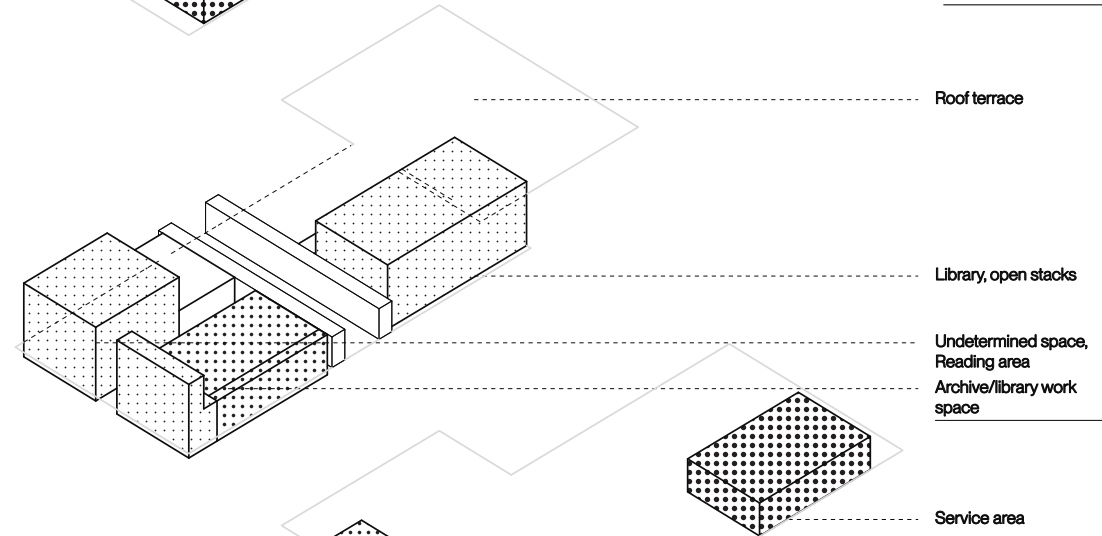
**Step 2. Integrating the programm & highlighting the spectacle**



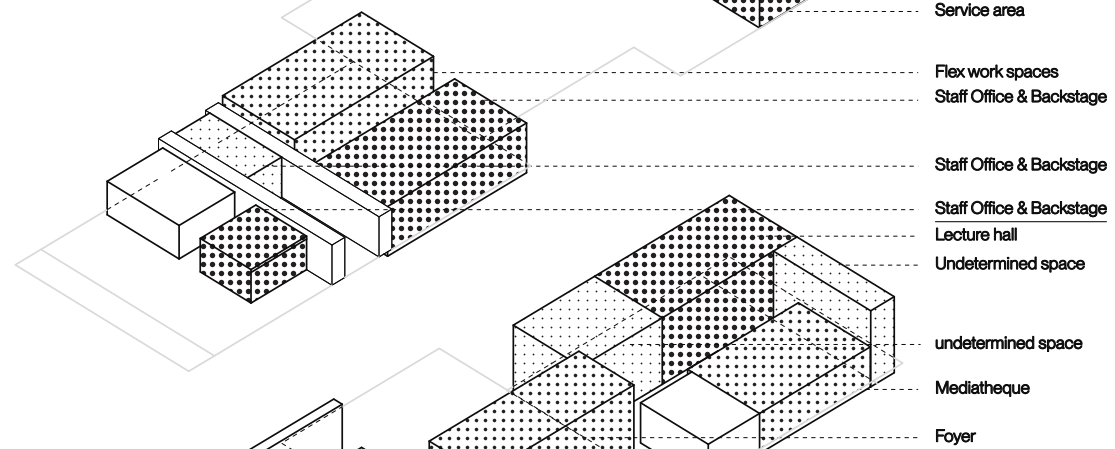
#### 4. LEARNING READING



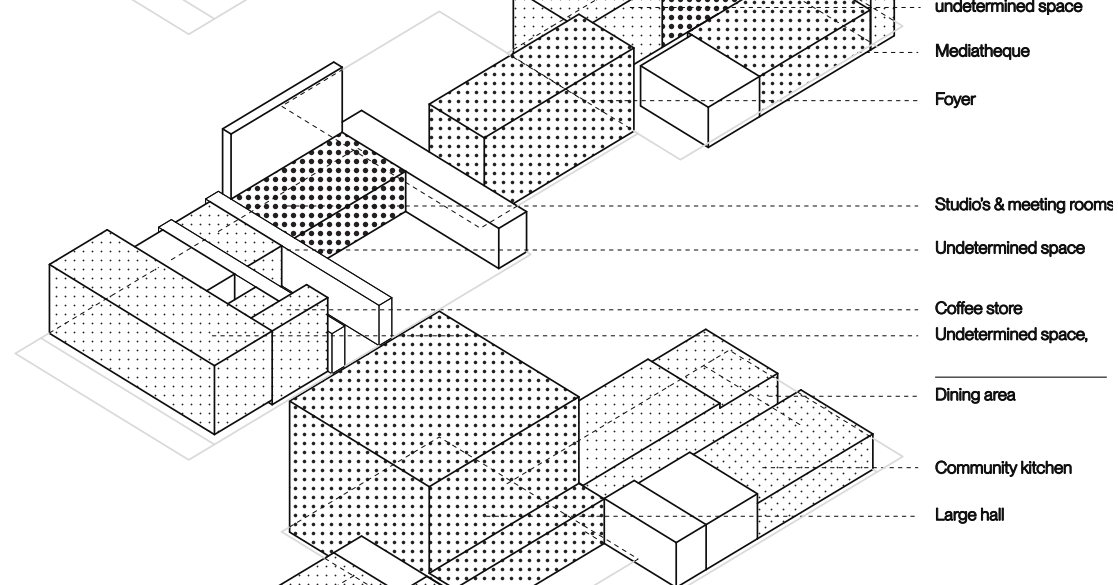
#### 3. LEARNING READING



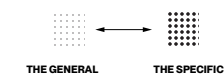
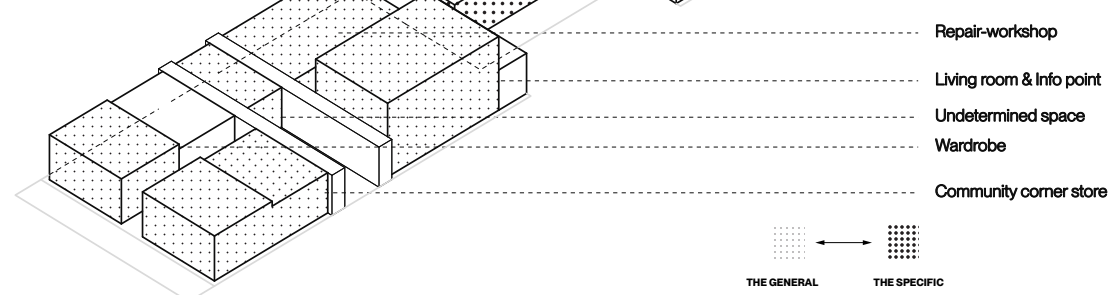
#### 2. WORKING AND LEARNING

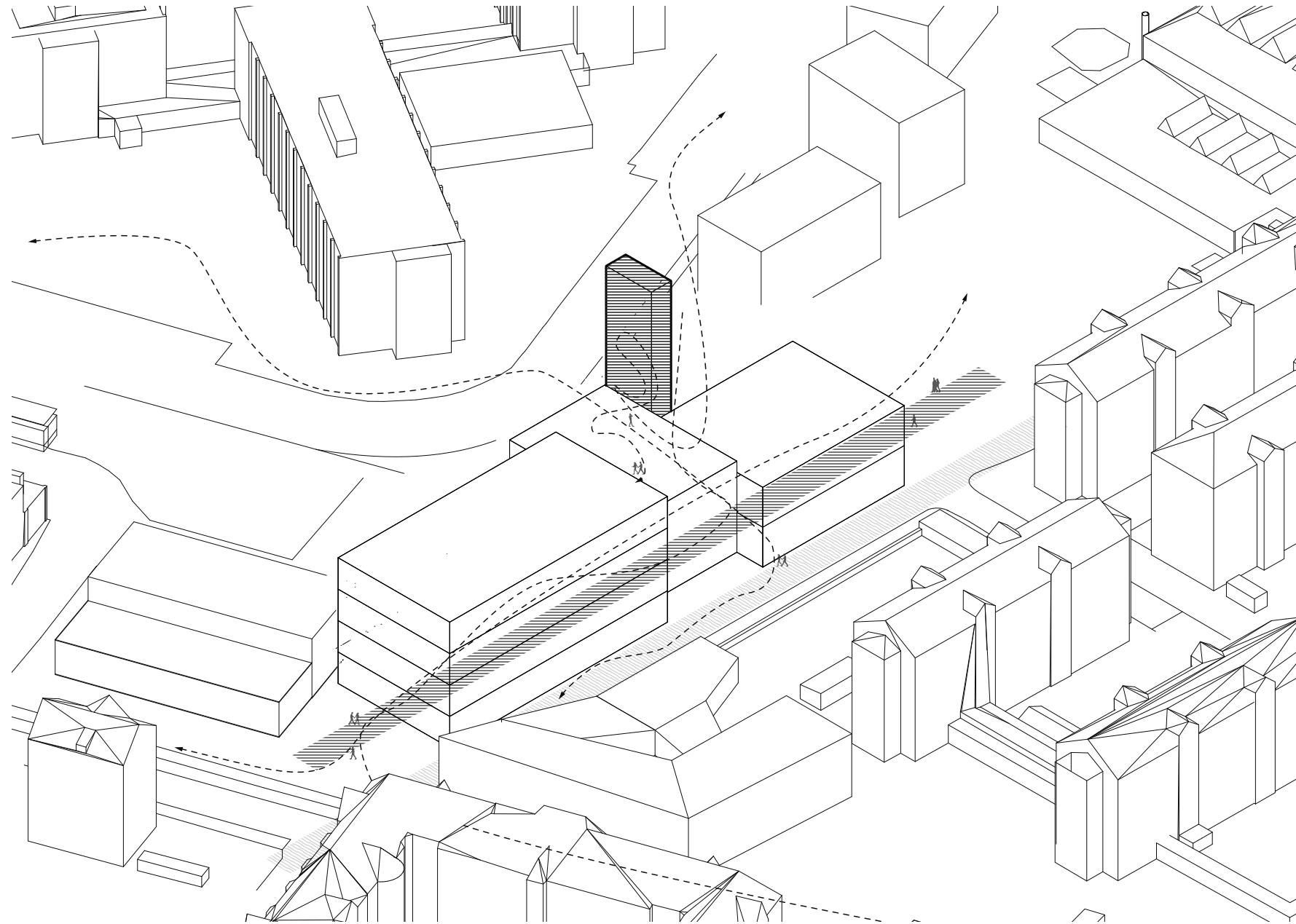


#### 1. WORKING LEARN- MEETING



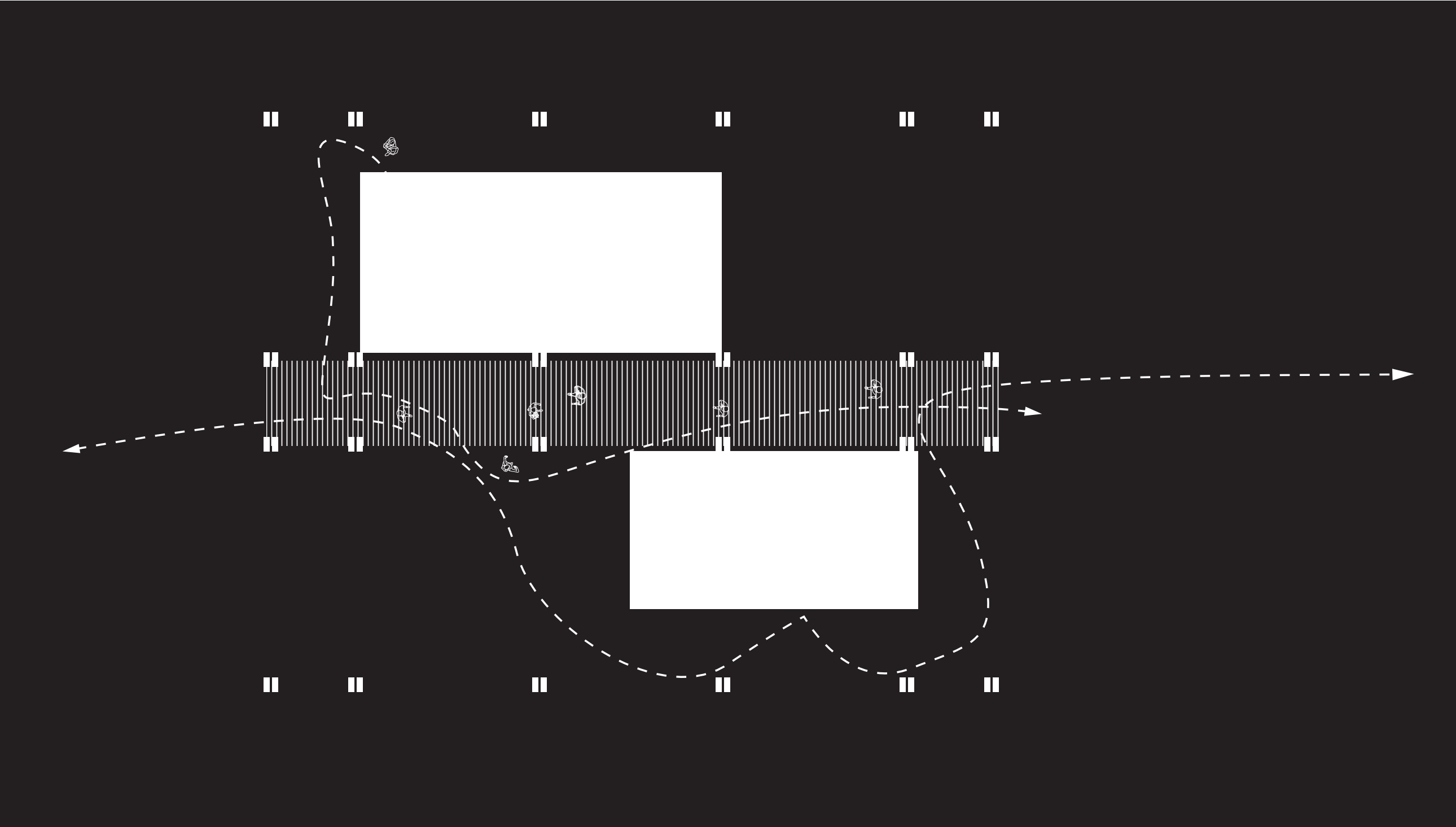
#### 0. THE GENERAL EVERYDAY



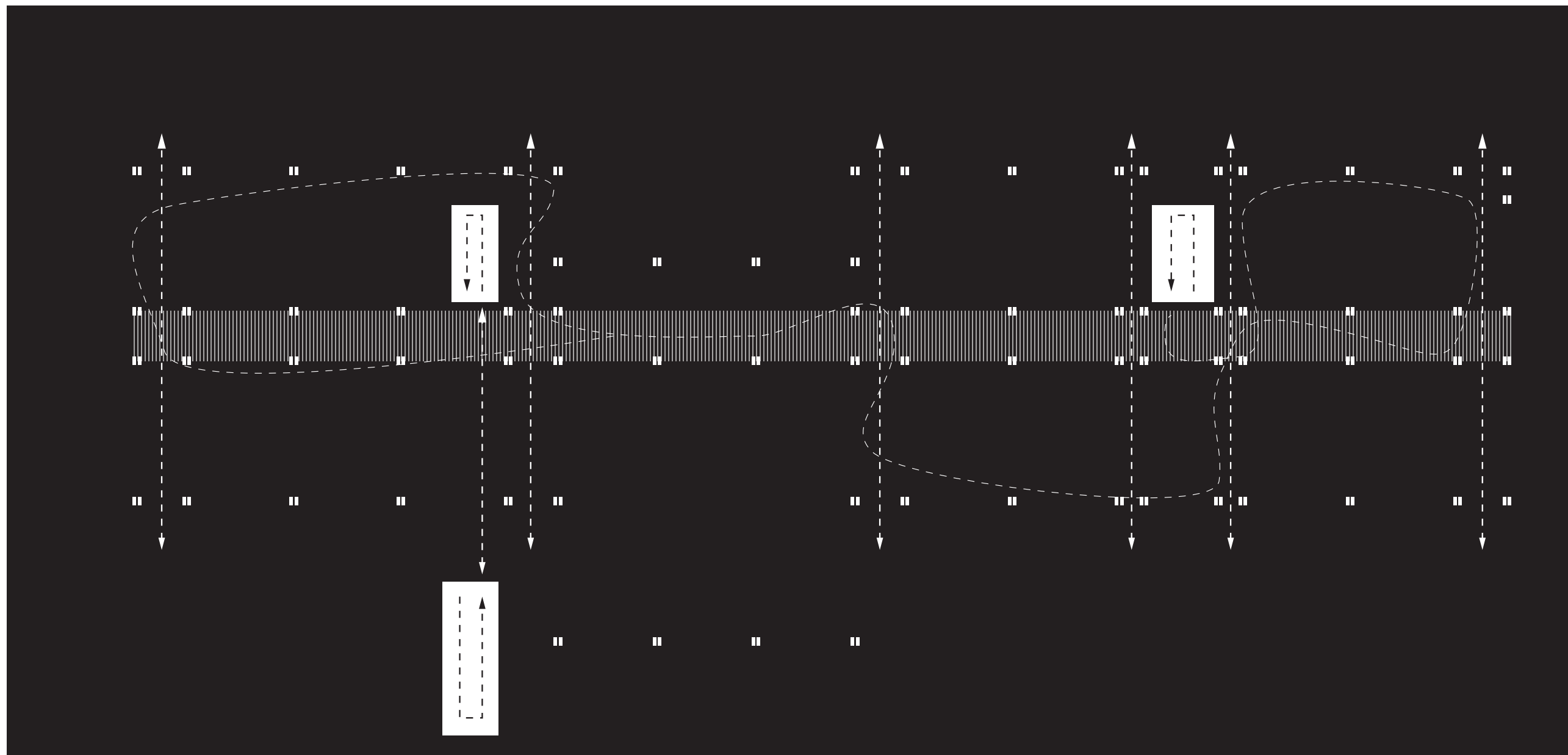


**Step 3. Adding Internal and external infrastructure to the framework**



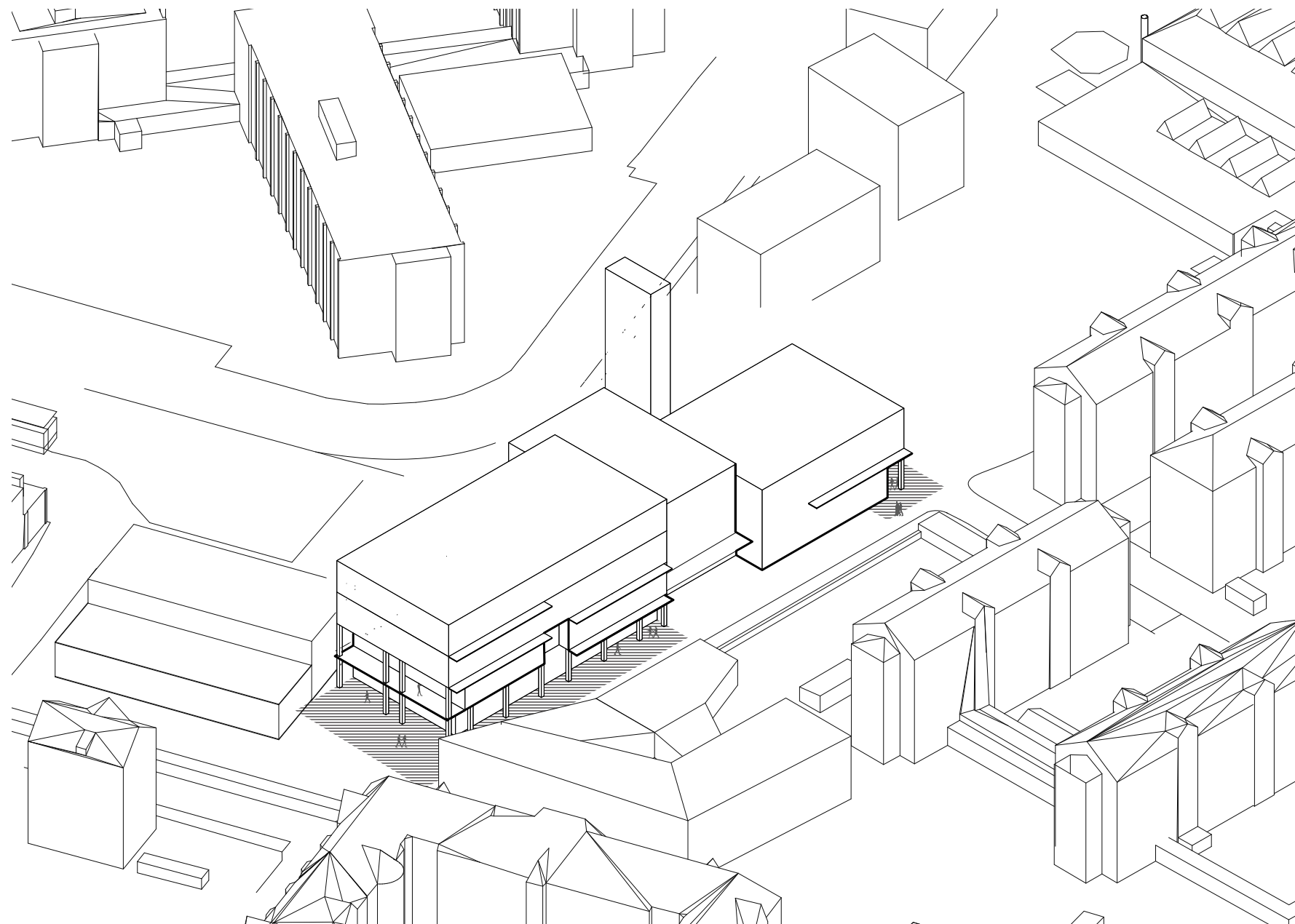


Internal main “street” and secondary route



**A framework and infrastructure for the spectacular everyday**





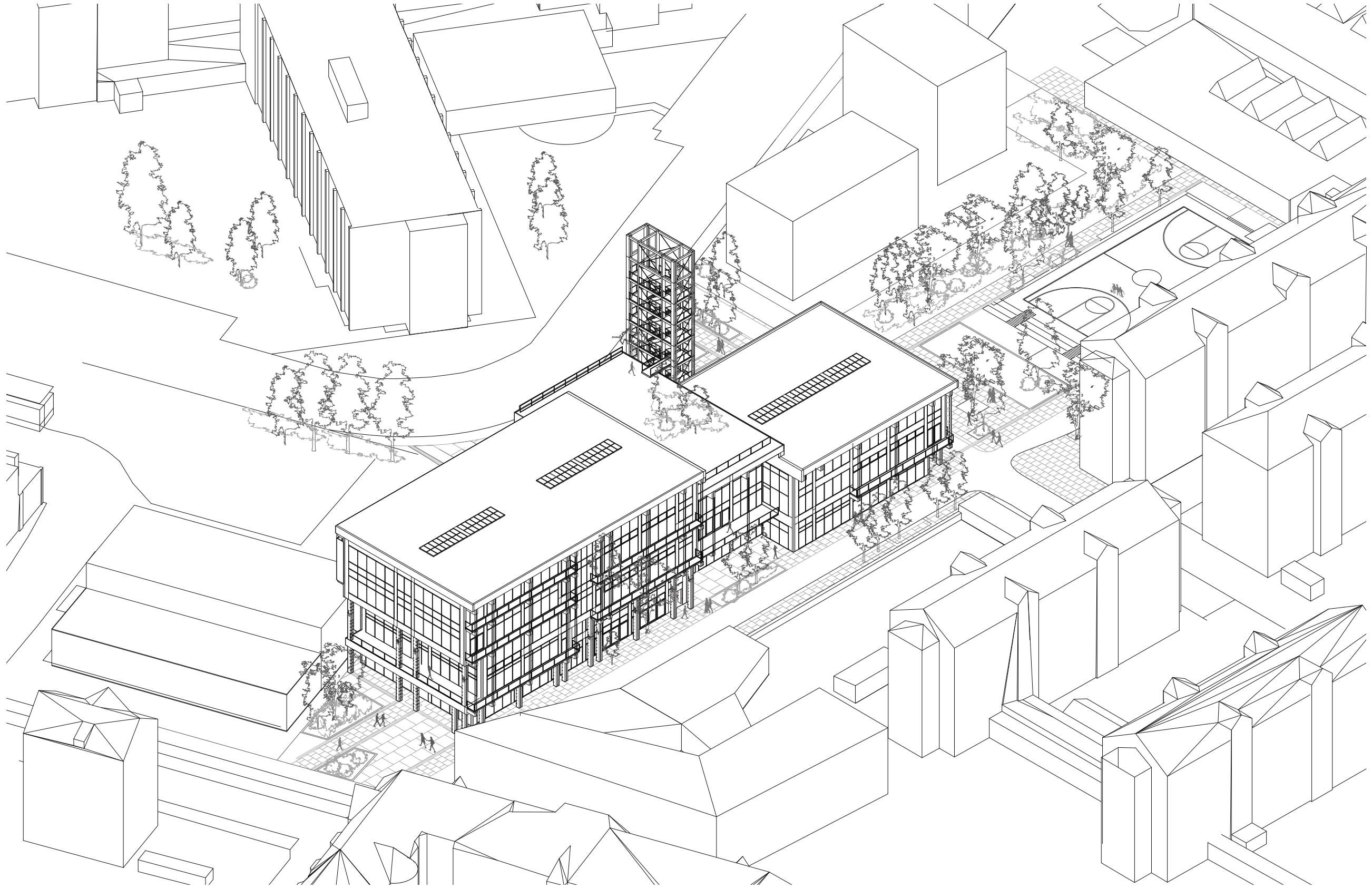
**Step 4. Blurring the boundaries**



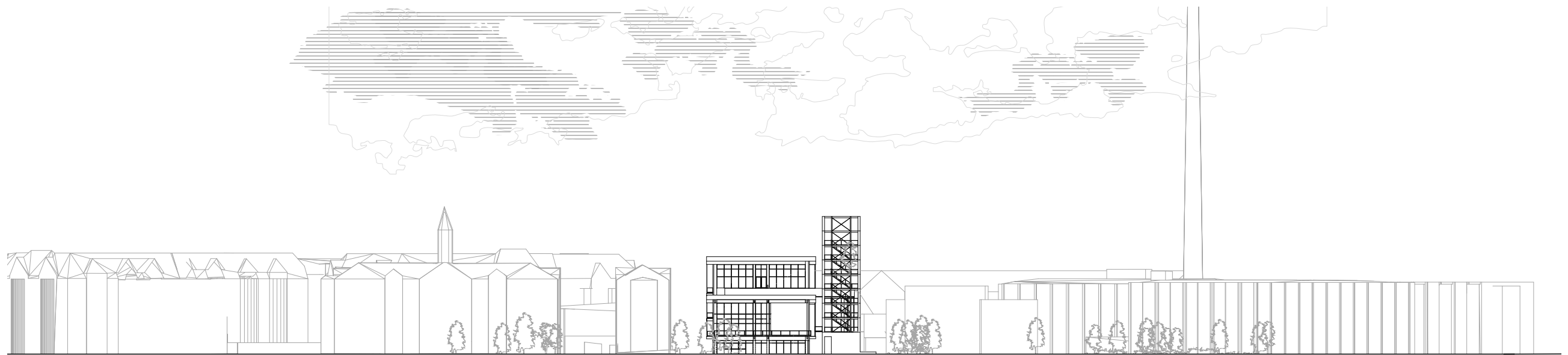
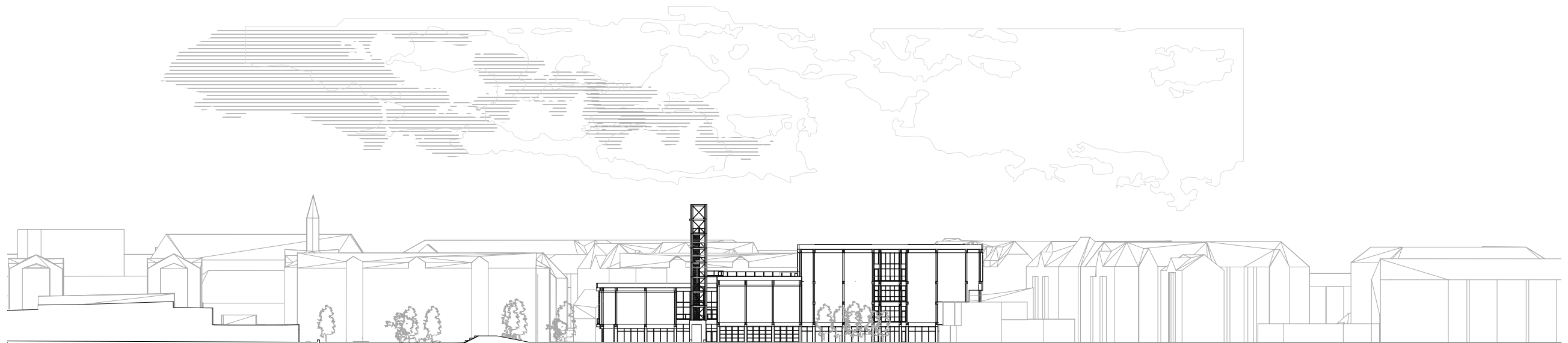


Approach from Sundholmsvej





**The final design**



## Embedded in the context

1:500 Urban section's

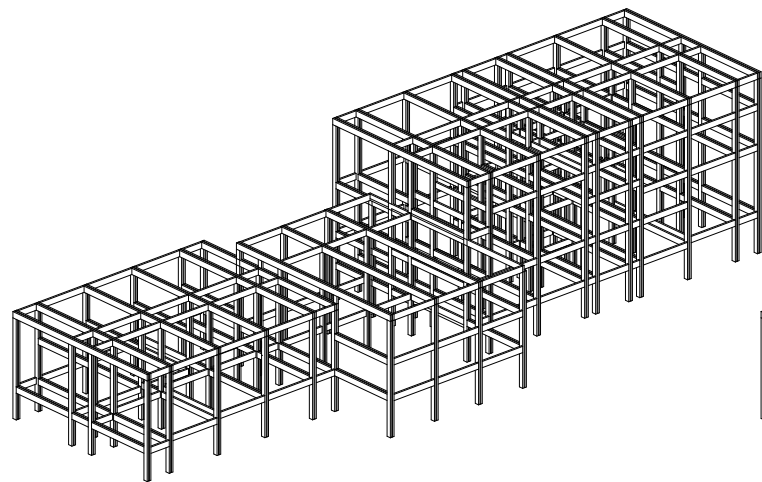


**The urban scale**

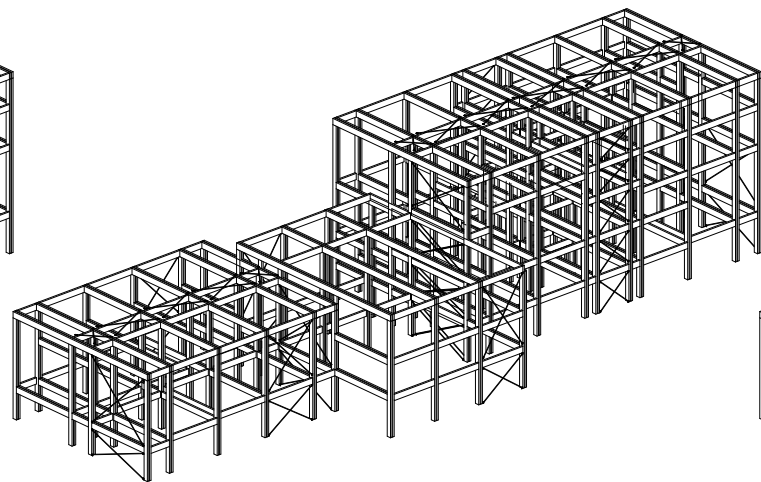
**Developing the building**

**The building parts**

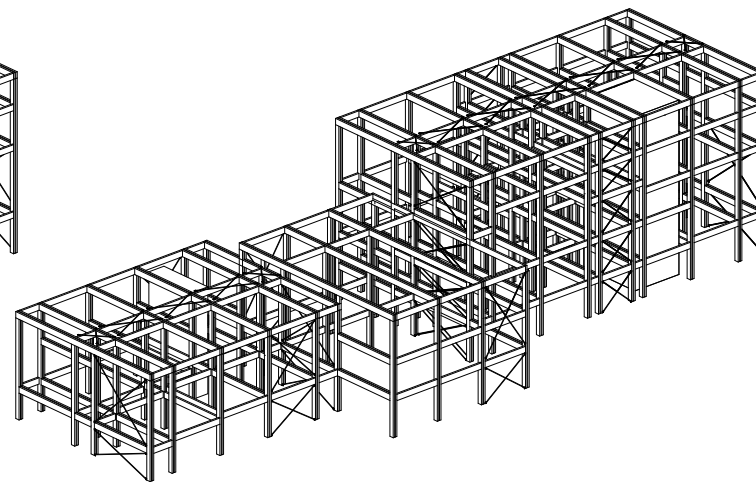
**A walk through the building**



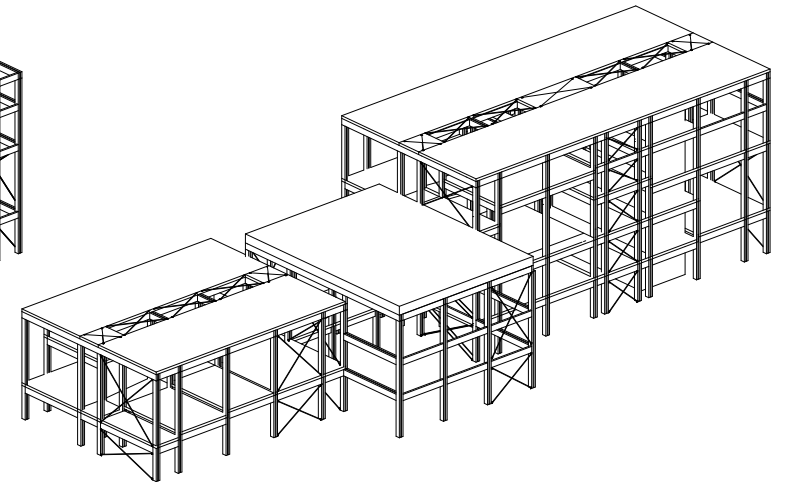
1. Wooden glulam framework



2. Tension cables



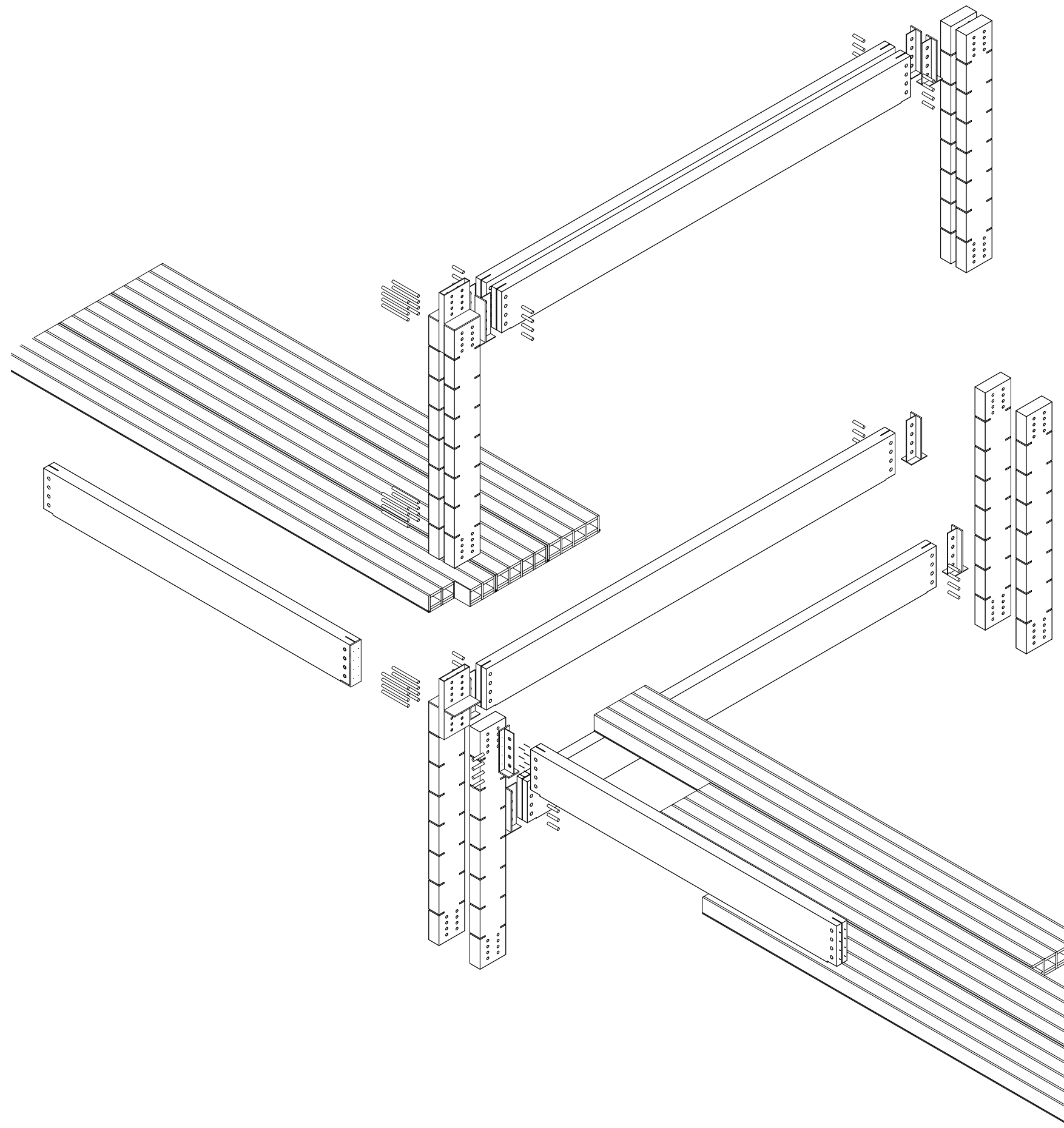
3. Stable cores



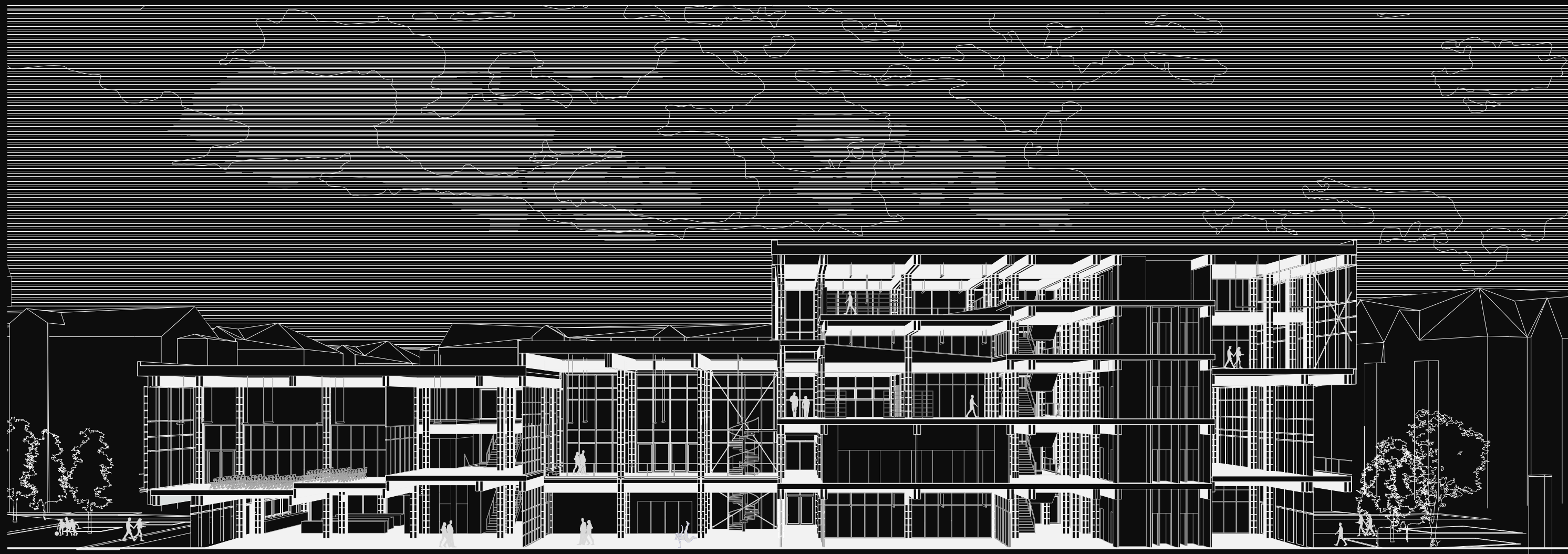
4. Dimensionally stable lignatur floors

## Structural Elements





**From everyday to spectacular modes of adaptability**



4th	Library
3rd	reading area, undetermined
2nd	undetermined, Flex workspaces
1st	balcony, Meeting rooms & work booth's, lecture hall
0	wardrobe,, undetermined & workshop, large hall, dining & cooking area

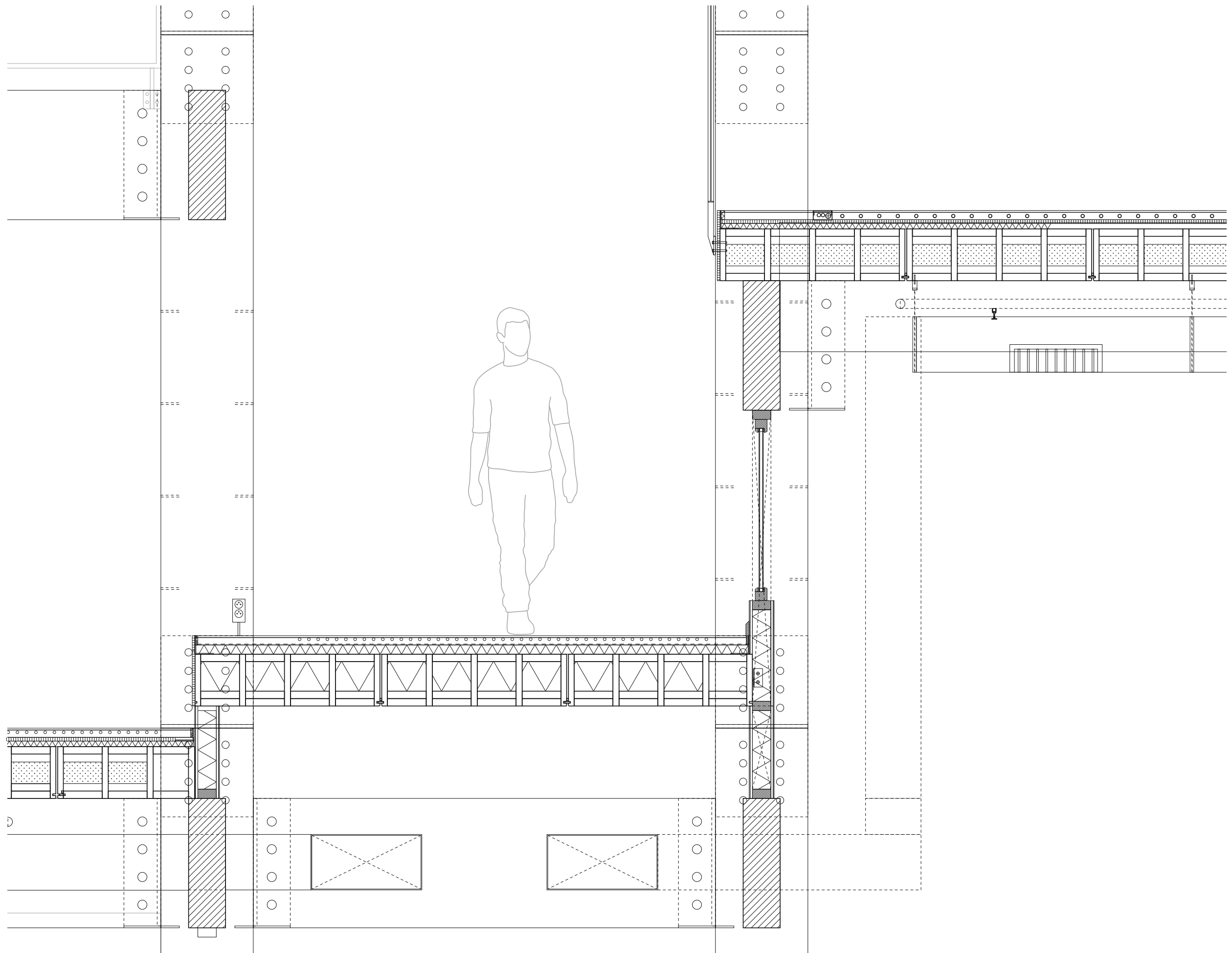
## Section BB





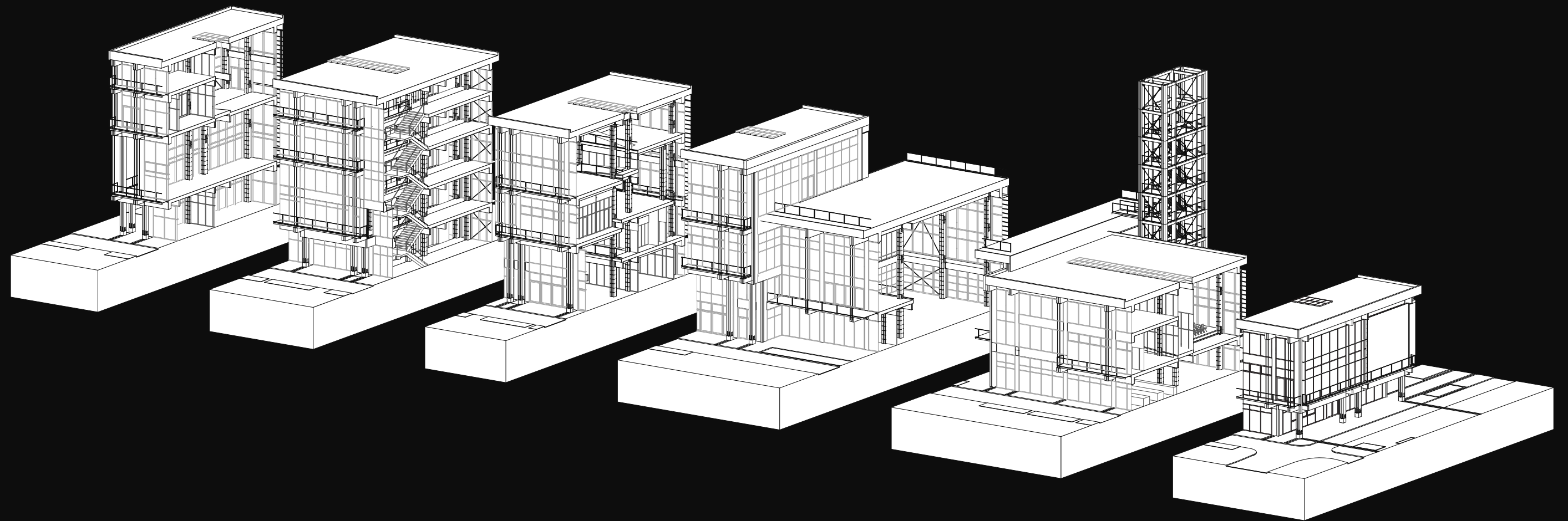
4 Library  
3 Library  
2 Staff work space, Flex workspaces  
1 Meeting rooms & work booth's  
0 living room & workshop

**Cross Section through library**



**Section main infrastructure library**





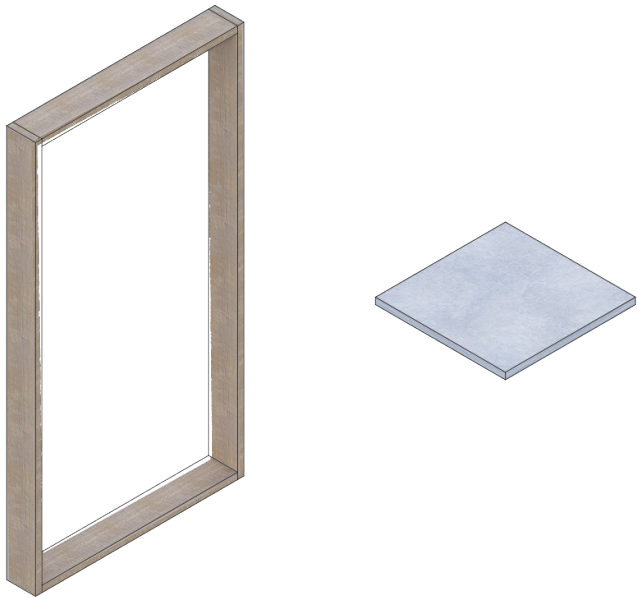
**Maximizing the potential of the framework**

Material pallet

Internal

Wooden window frames  
Glass  
Poured concrete floor

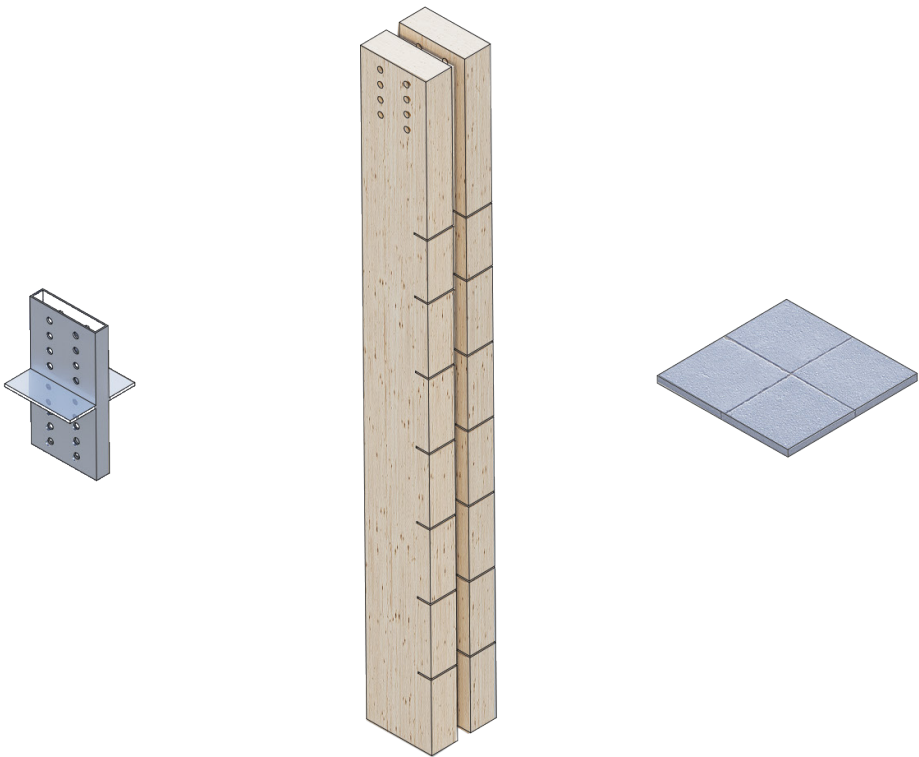
50x100



Internal & external

Steel construction elements  
Untreated Glulam construction  
Concrete tiles

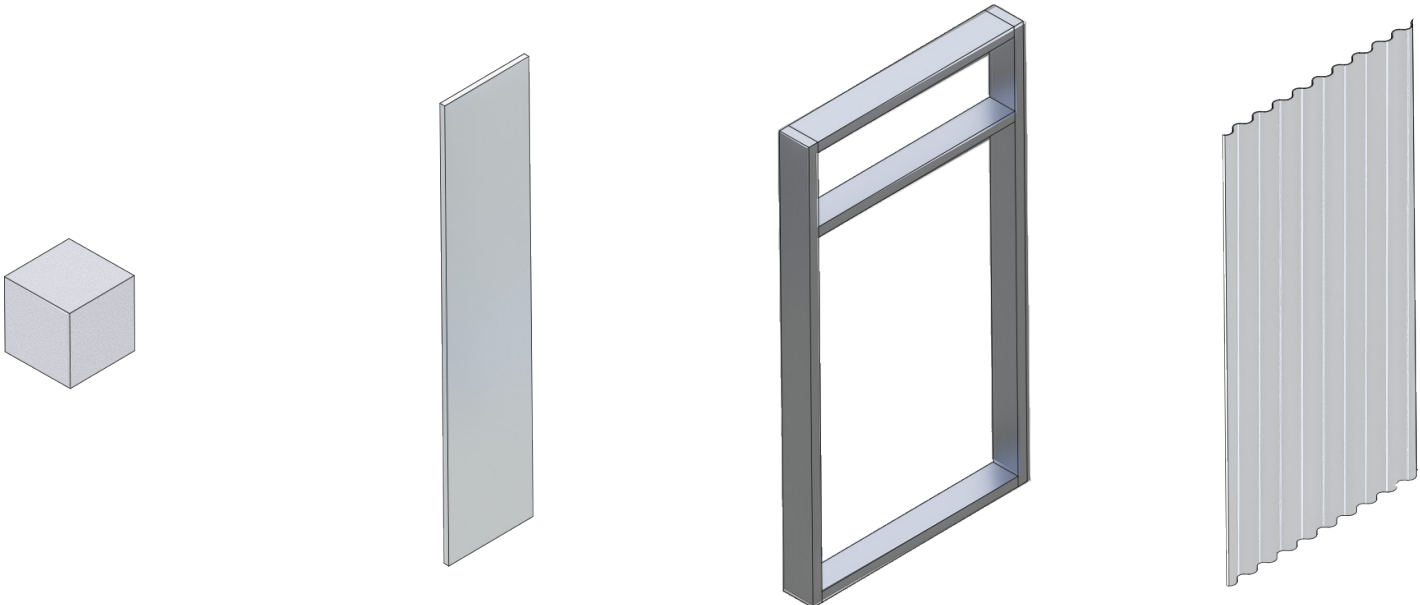
200x500x2  
500x500



External

Concrete  
Metal Panels cladding  
Alluminium window frame  
Thermur insulation glas

70  
ug 0,3





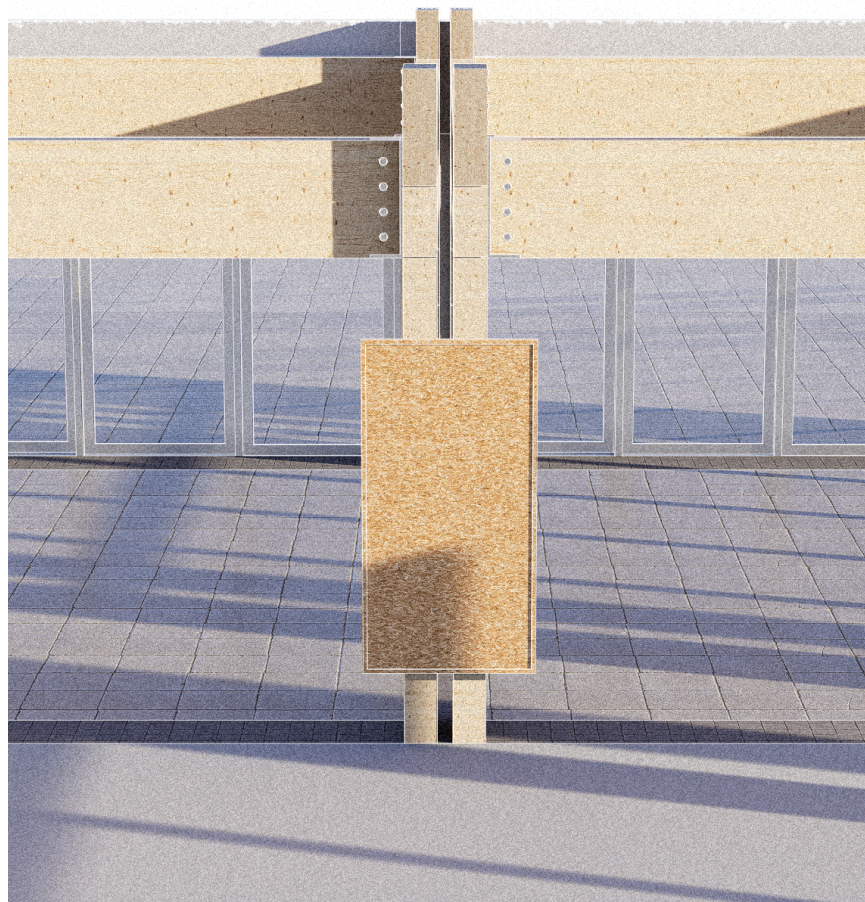


Delivery of building  
'Douglas fir'

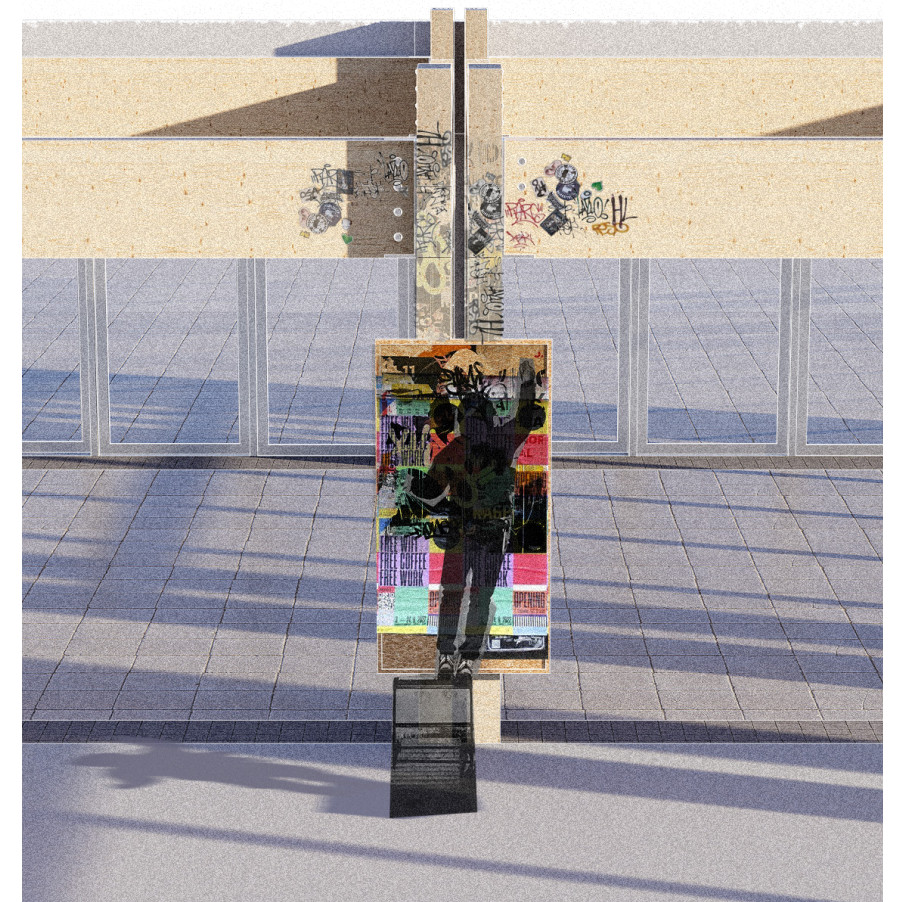
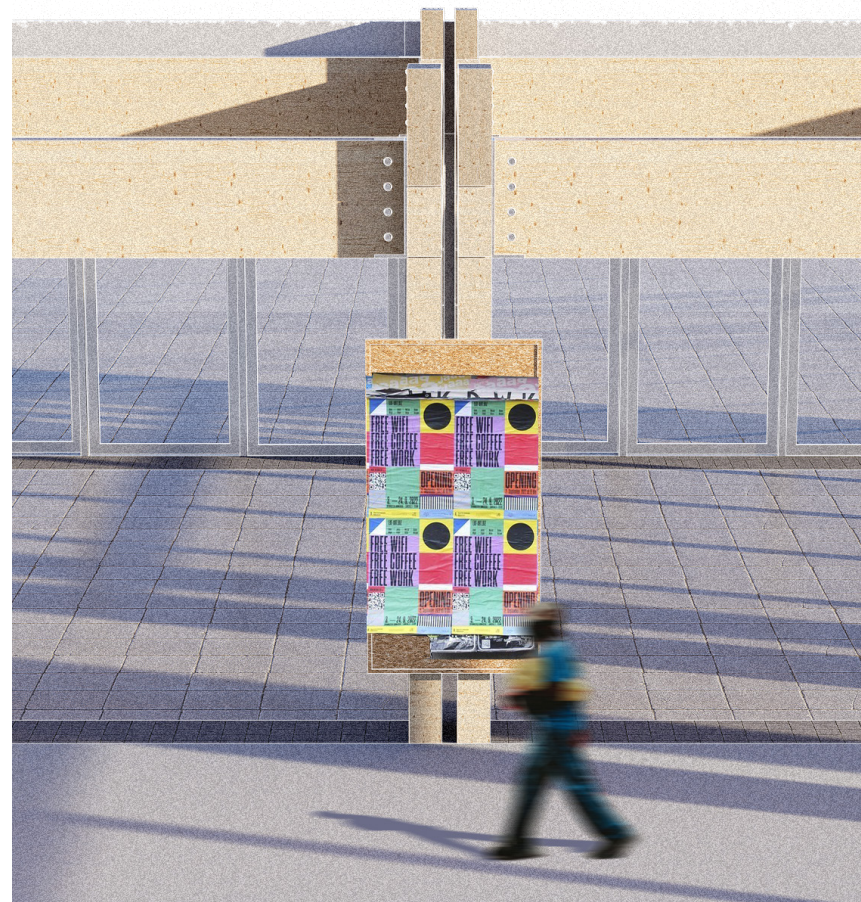
1 year past

**Materials that allow for appropriation**





Delivery



1 year

**Appropriation of ground floor**  
 Further enabling appropriation through materialization





North facade

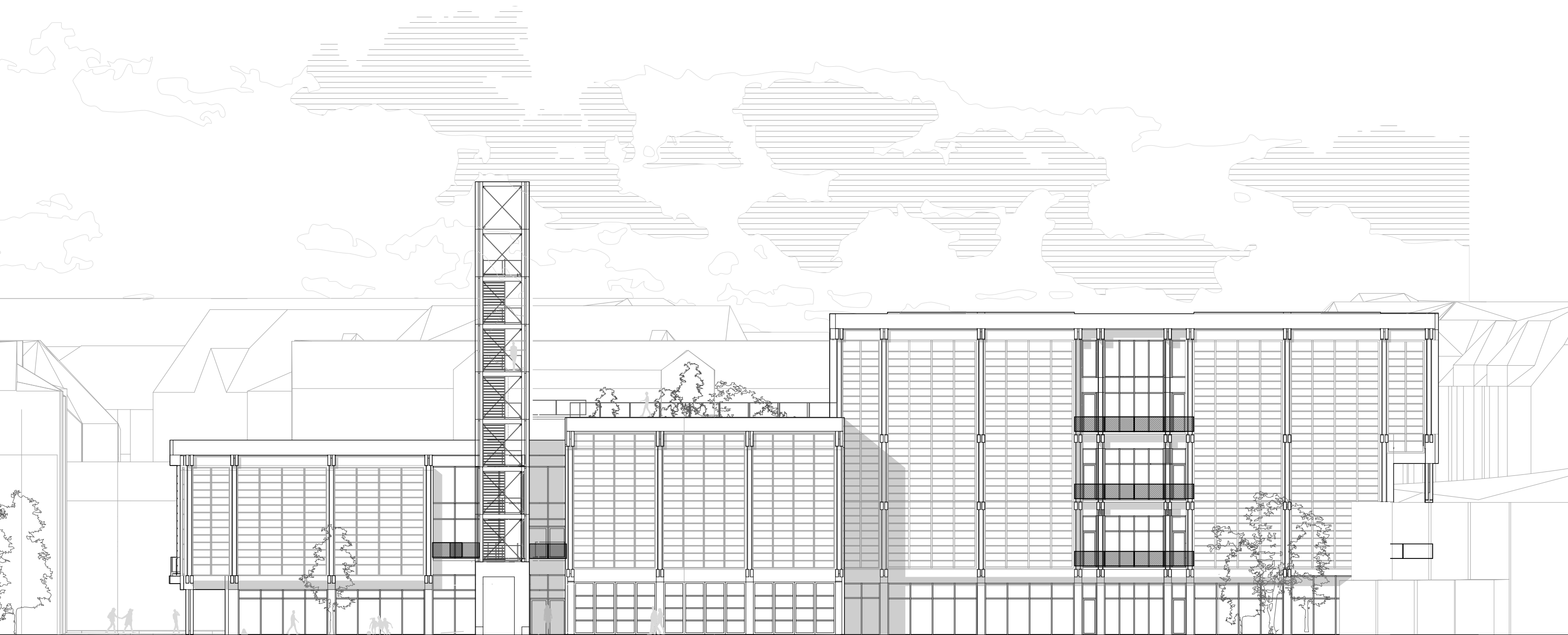


South facade

## Modes of transparency

Impact of materialization on interaction between inside and outside



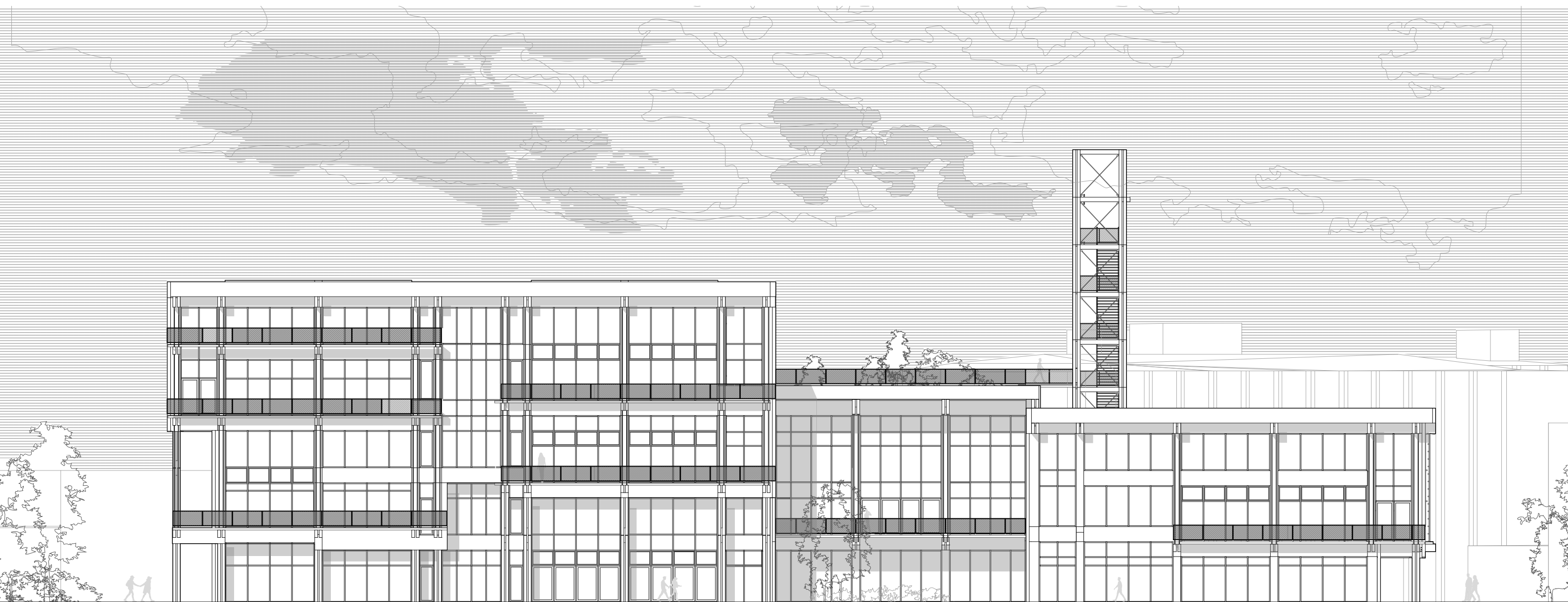


**South Facade**  
Approaching from Horgaden









**North Facade**  
Approaching from Sundholm



North

## WINTER

South

North

## SUMMER

South

Double skin facade for ventilation

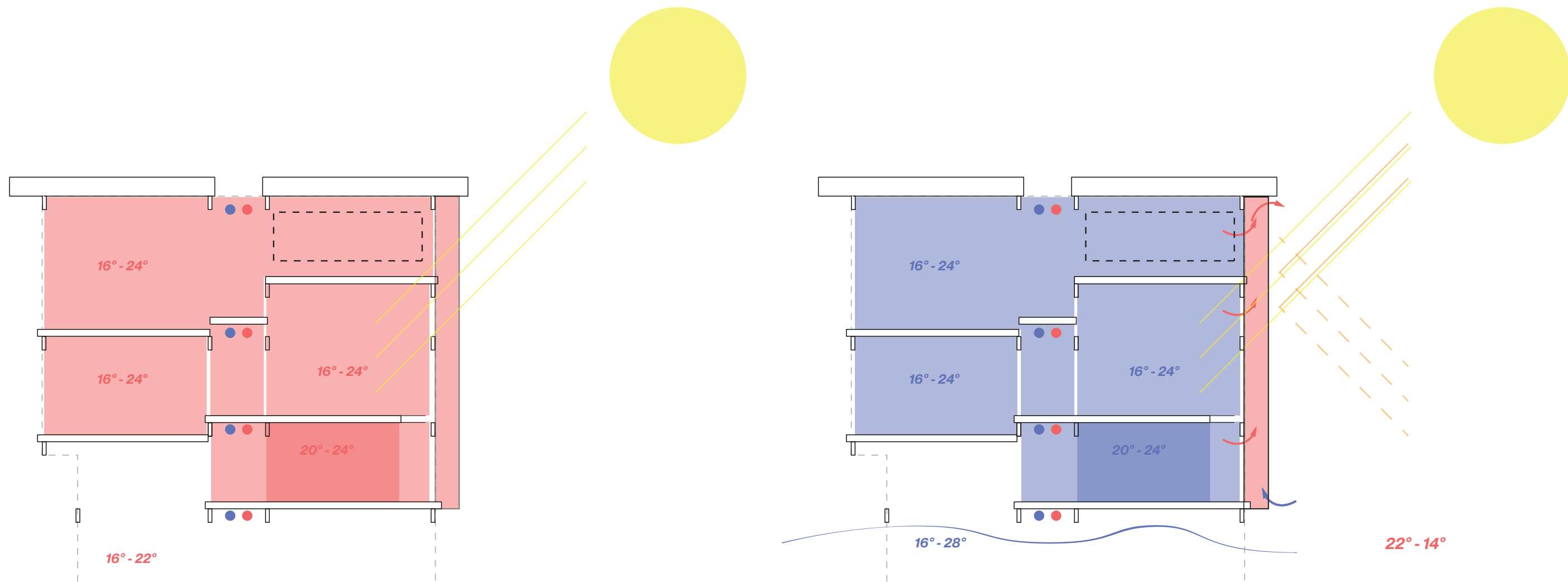
Additional heating through floor heating

Heat exchange unit in

Double skin facade for ventilation

Openable windows for natural ventilation

Additional cooling through ventilation



**Solar PV panels**  
Renewable energy source

**Natural ventilatio**  
Standard mode of ventilation, open-  
able windows + climate facade

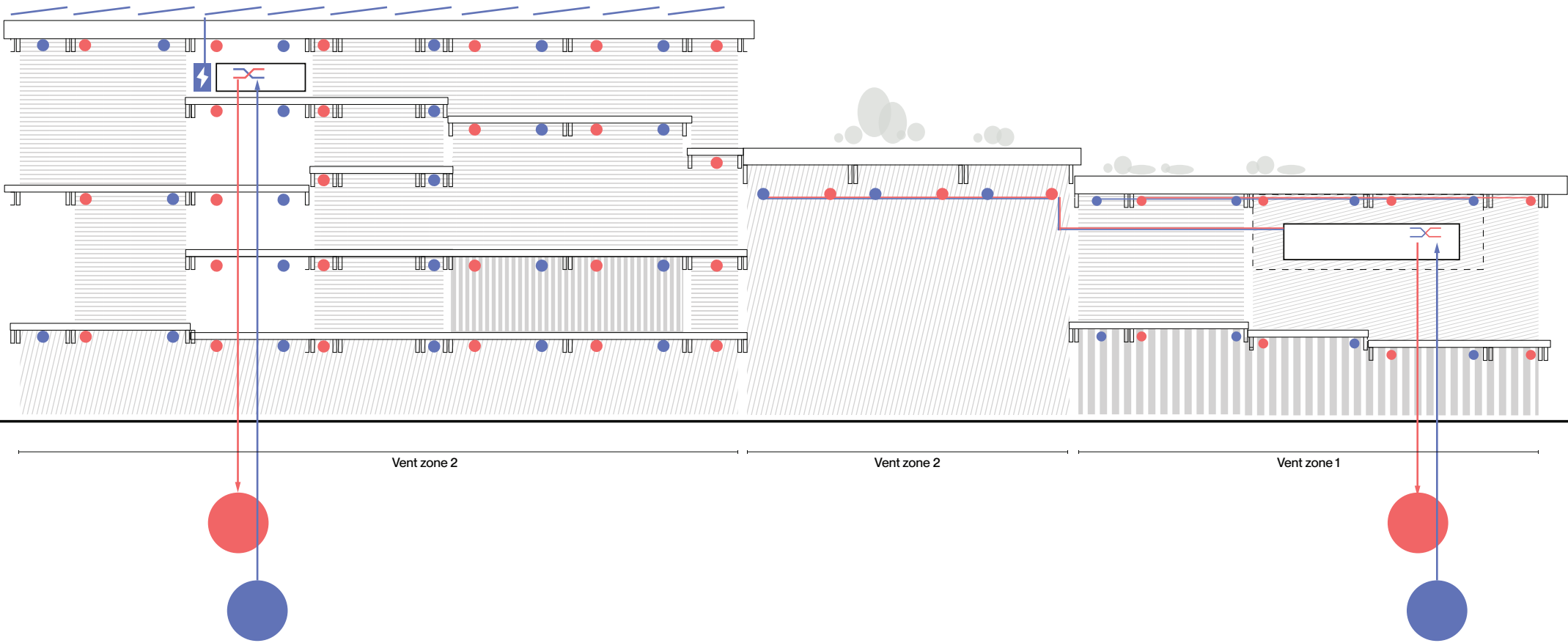
**Mechanical ventilation**  
For peak loads and additional cooling.  
Heat exchange unit between incoming  
and outgoing air during winter

**Geothermal heatpump**  
In combination with a water to air  
heat transfer unit is used to cool the  
incoming air during summer and heat  
during winter

**Roofterrace**  
Public Allotments  
Local greenery to increase &  
contribute to biodiversity

**Green roof**  
Sedum & fixed plants

**3x hvac unit & Heat exchange**  
Vent. zone 1. Lecture  
Vent. zone 2. Large hall

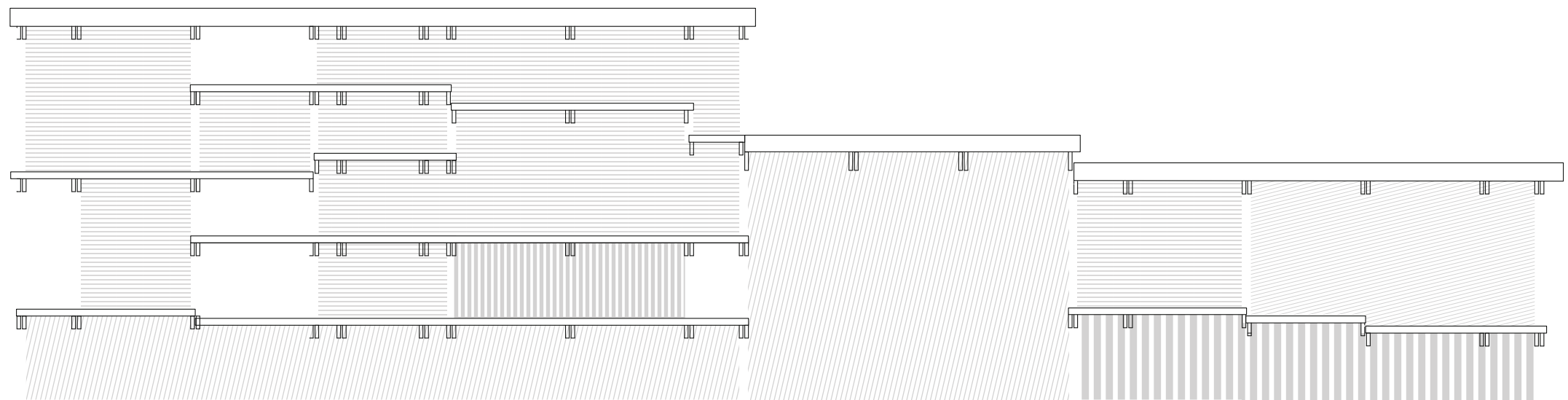


**SUMMER**

**WEST**

**General Climate components**





Community Kitchen & Dining area

Lecture Hall

Mediatheque, studyspaces, meeting rooms

Large Hall & the ground floor

Flex workplaces, cafe & library, undetermined spaces

zone 1, mechanical ventilation + natural ventilation Temp 19°/24°, heated in winter

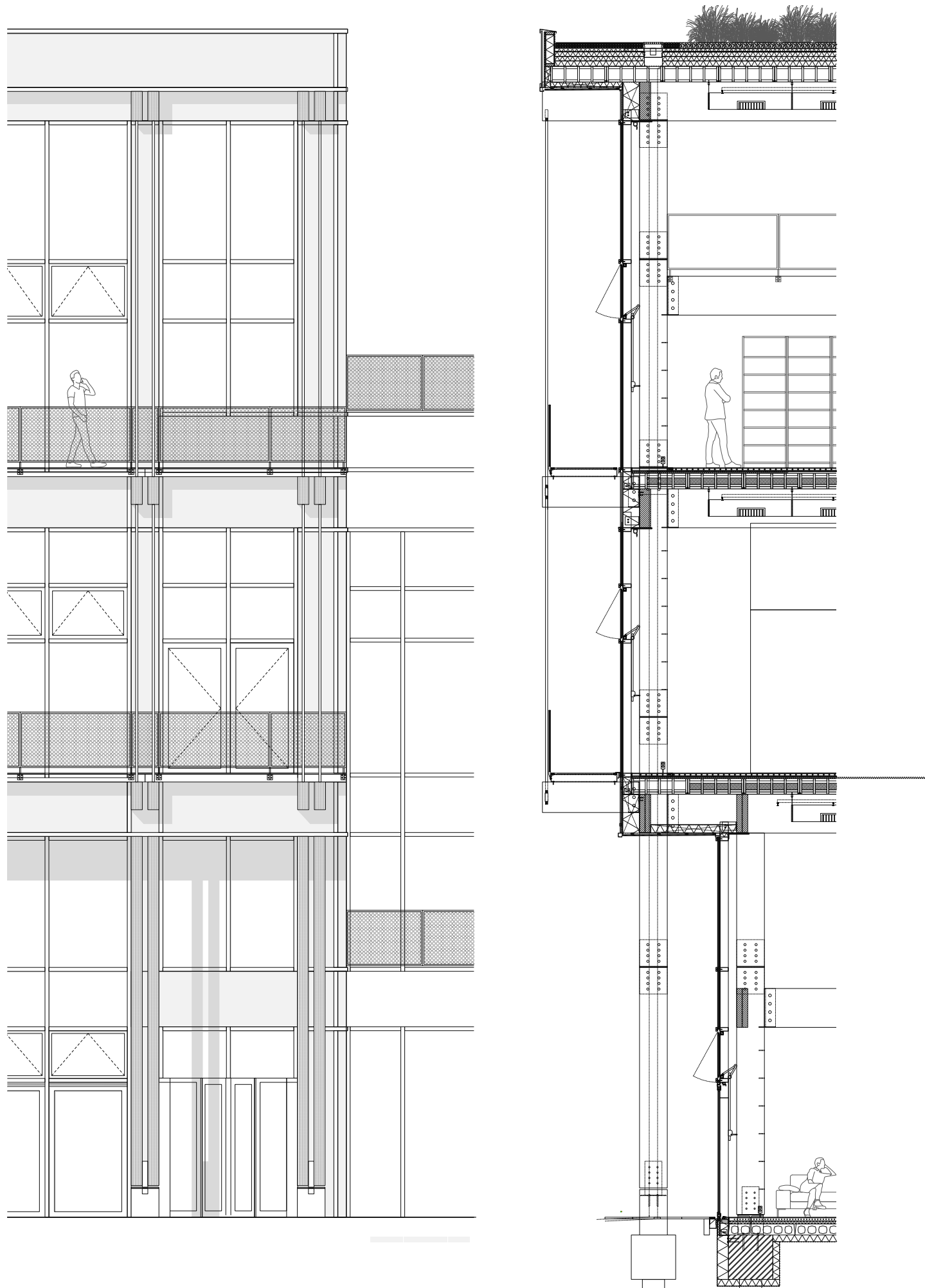
zone 2, mechanical ventilation + natural ventilation Temp 18°/24°, heated in winter when in use

zone 3, mechanical ventilation + natural ventilation Temp 20°/24° - mechanical + natural, heated, fully climatizable

zone 4, mechanical ventilation + natural ventilation Temp 16°/28°, unheated & uncooled, local place heated

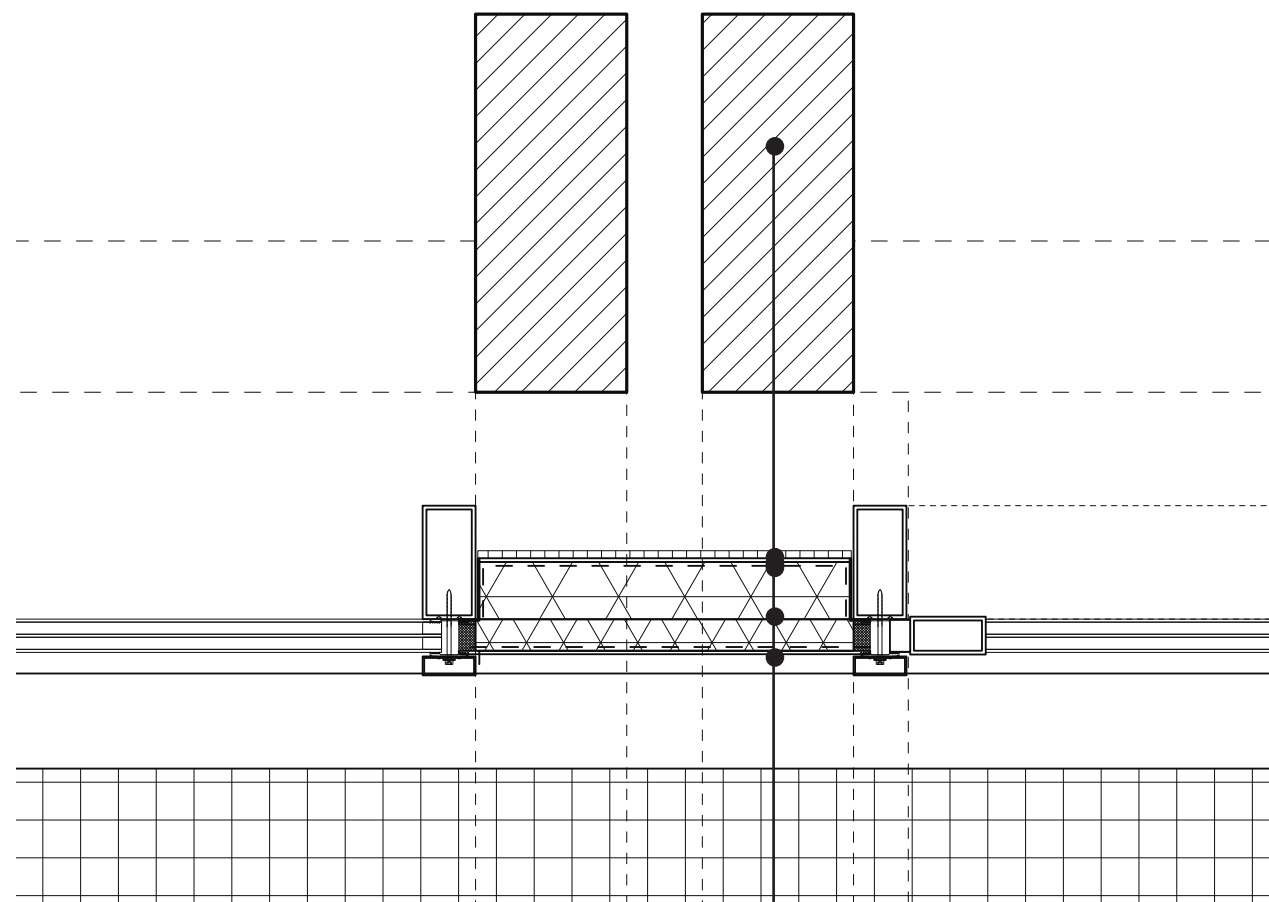
zone 5, mechanical ventilation + natural ventilation Temp 19°/26°, minimally heated and cooled

## Compartmentalizing the indoor climate



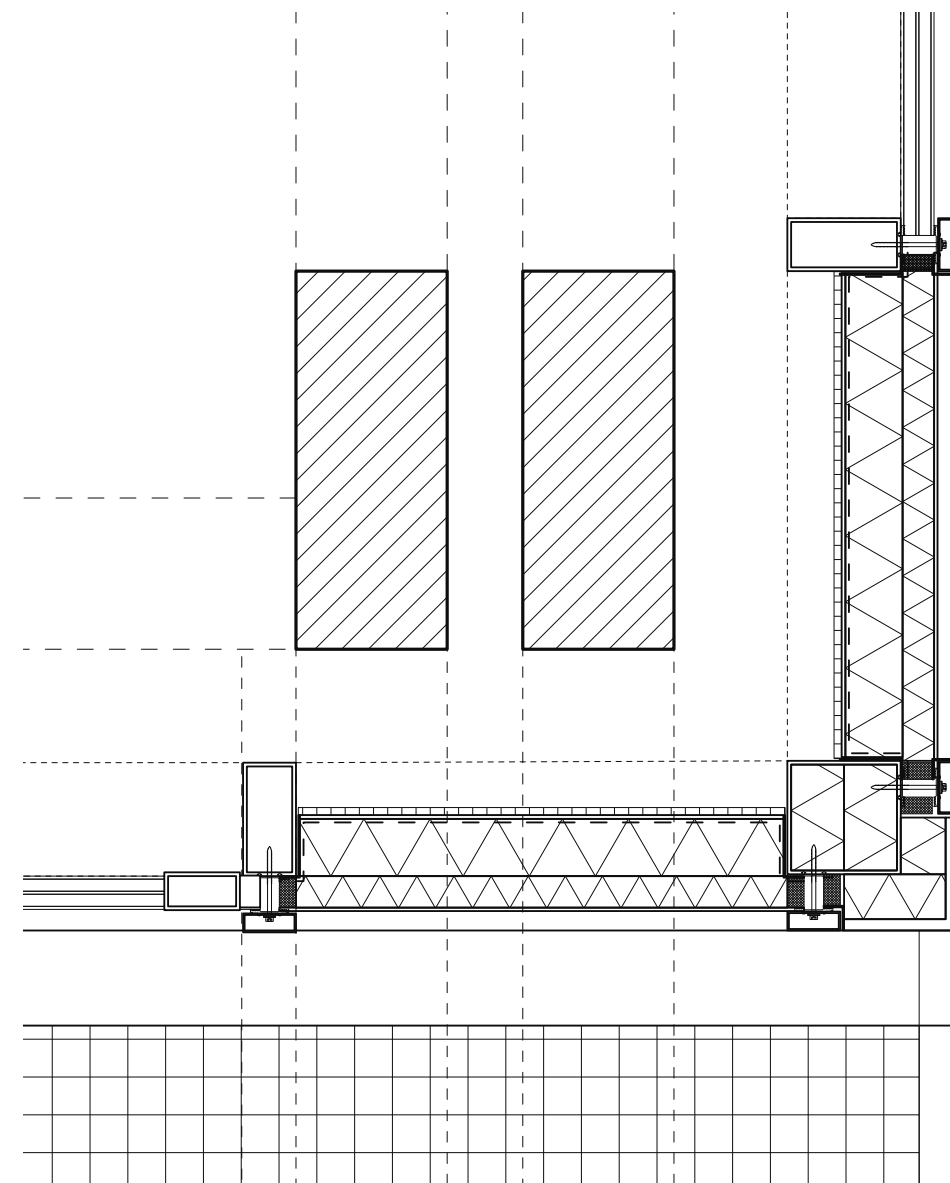
**Facade fragment & sectionsundholm/north side**



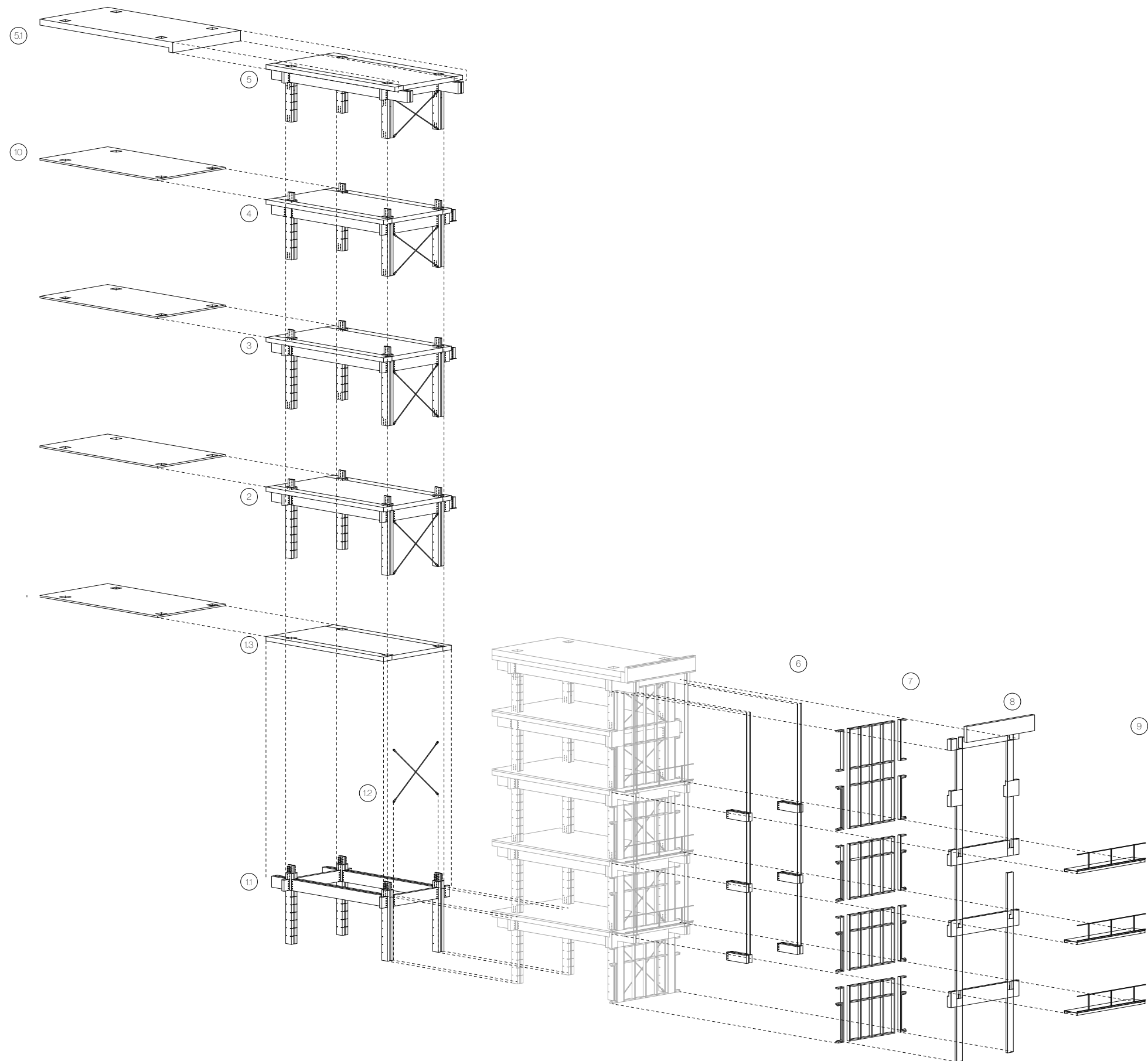


Glulam column	2*200*500mm
Wood finish	10mm
Vapour barrier	20 mm
Rockwool insulation	120 mm
Water retention layer	
Metal plate	4,5 mm

**Standard horizontal facade detail 1:10**



**Standard horizontal corner detail 1:10**



**Assembling the framework and facade**



The urban scale

Developing the building

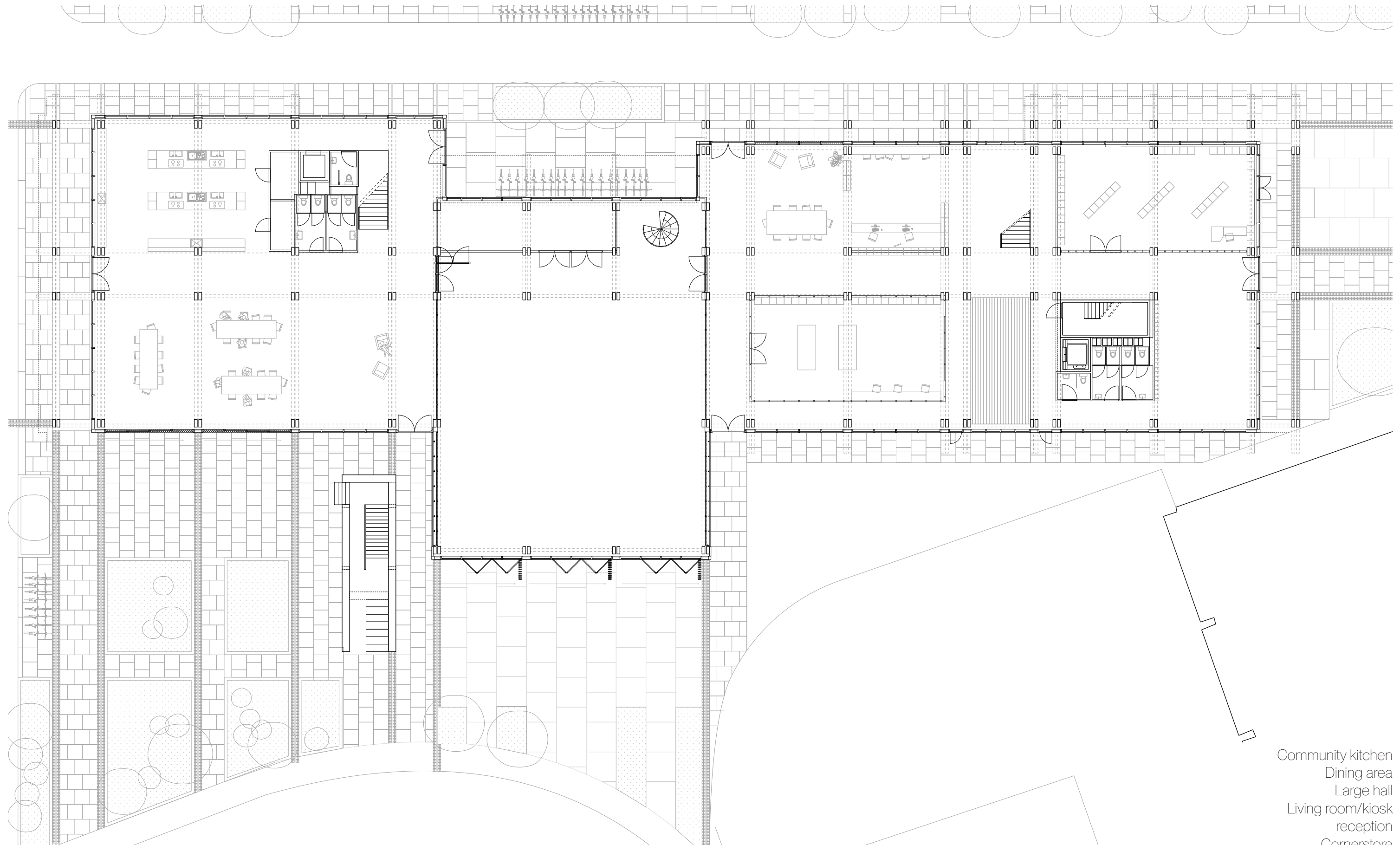
The building elements

**A walk through the building**









**Ground floor**

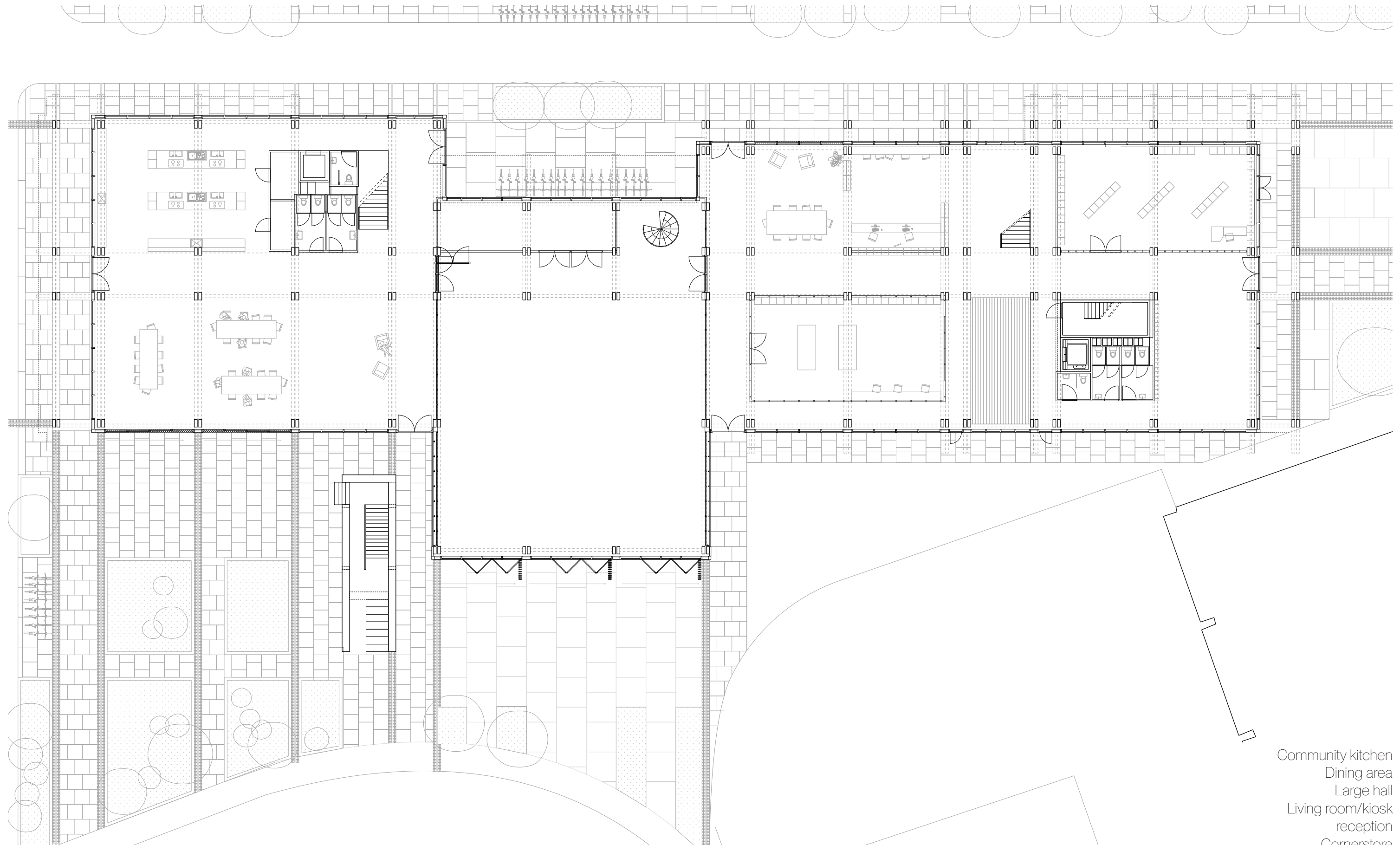
- Community kitchen
- Dining area
- Large hall
- Living room/kiosk
- reception
- Cornerstore
- Repair & workshop
- wardrobe & lockers









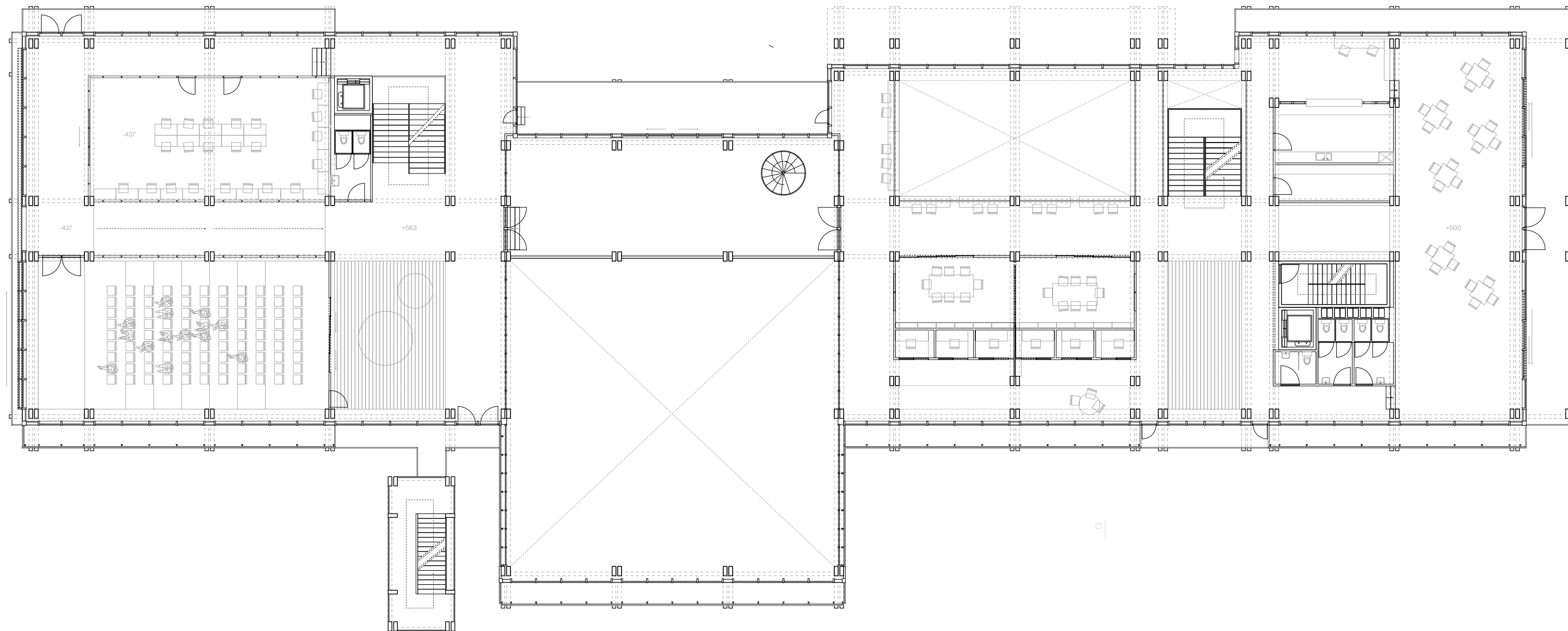


**Ground floor**









1:200



**1st floor**

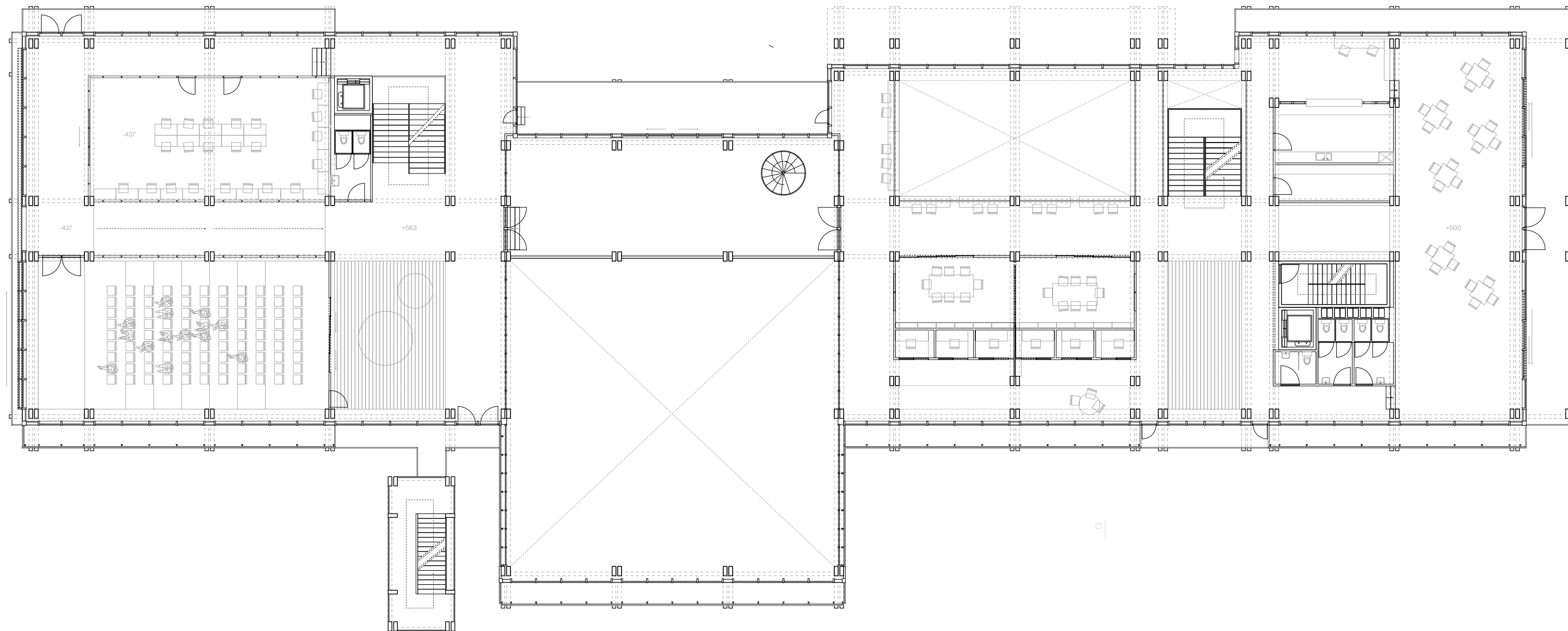
- Lecture hall
- Mediatheque
- Foyer
- Coffee area
- Cafe
- Undetermined space
- Storage
- meeting room
- Workbooth





**A place for lecture's or  
your children's theatre performance?**





1:200



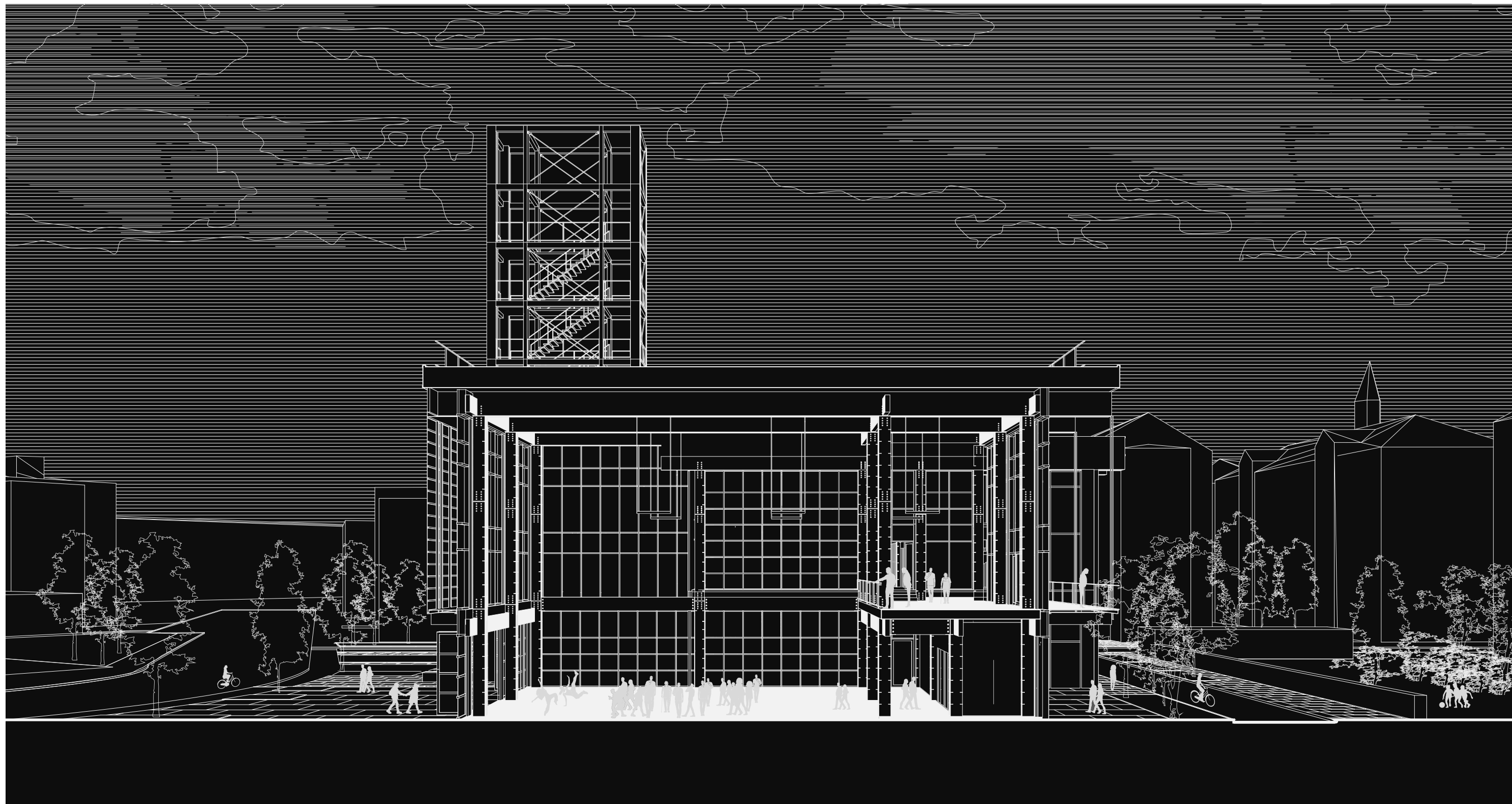
**1st floor**

- Lecture hall
- Mediatheque
- Foyer
- Coffee area
- Cafe
- Undetermined space
- Storage
- meeting room
- Workbooth

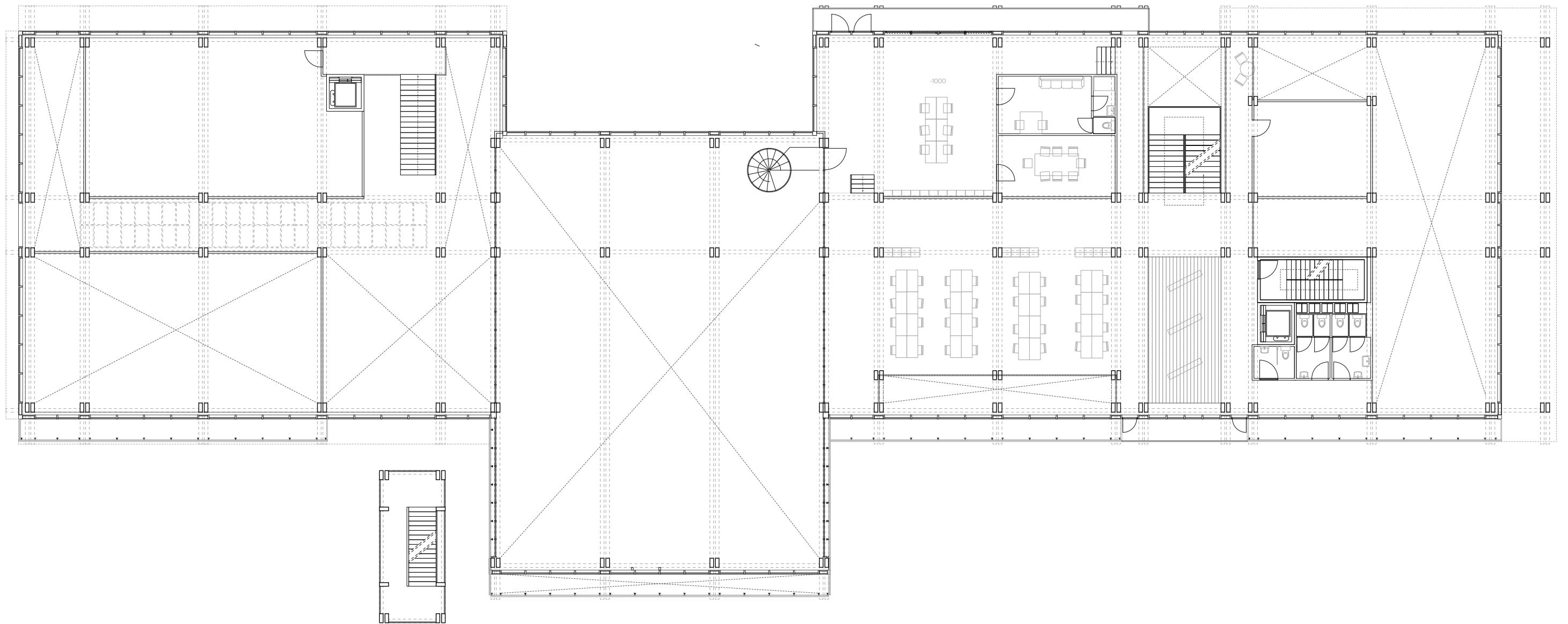
**The main street connecting the different parts**







**Becoming a part of the spectacle**  
The main street connecting the everyday and the spectacular



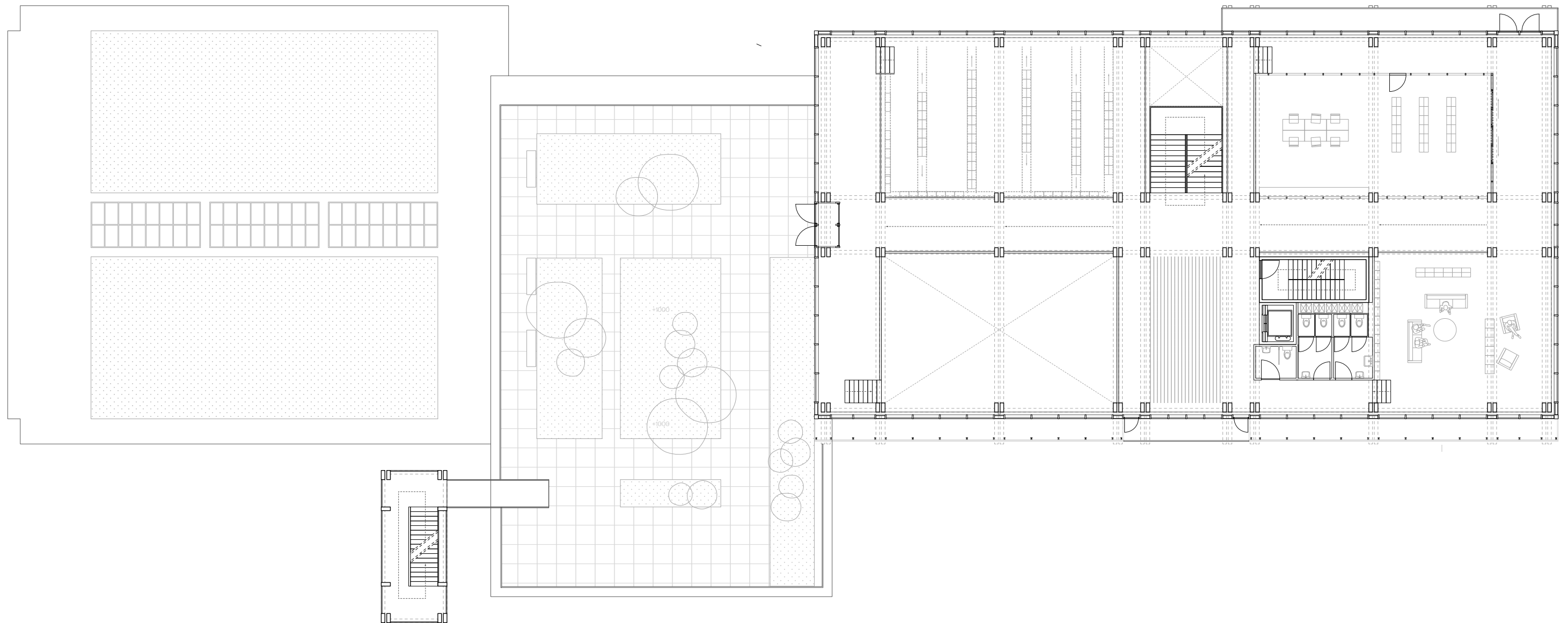
**2nd floor**

- Flex workspace
- Staff office's & meeting room
- Backstage
- Workshopspace
- Undetermined space









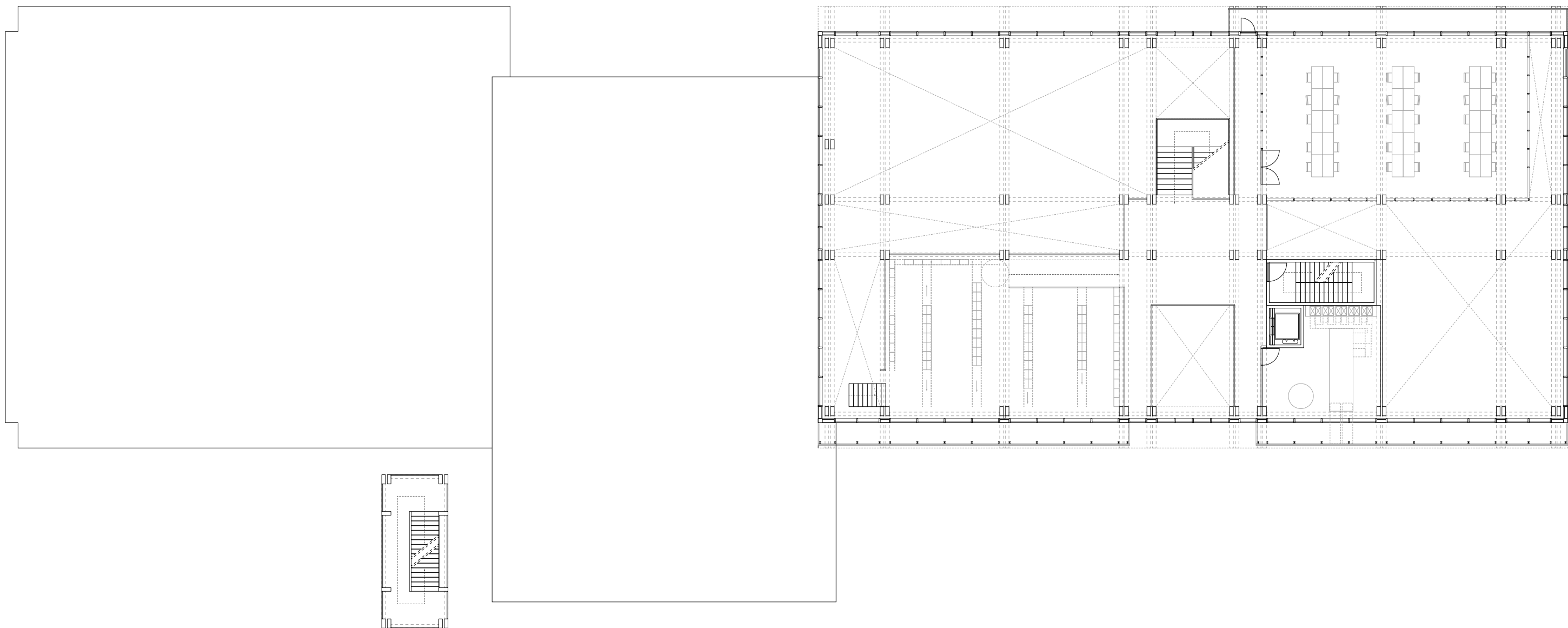
**3rd floor**

- Library
- Archive / closable library area
- reading area
- undetermined area









4th floor

Library  
Study/silent area  
Service area





Impression of the library



**“How can a public condenser disrupt  
an exhausted urban and social context?”**

To generate and re-imagine the possible





**A framework**



**A framework**



**Infrastructure**





**A framework**



**Infrastructure**



**The everyday**





**A framework**



**Infrastructure**



**The everyday**



**The spectacular**





**A framework**



**Infrastructure**



**The everyday**



**The spectacular**



**Borders**





# Thank you for listening!

**From exhaustion  
To resilience**

***"Re-imagining the possible"***

Miguel Borst | 4886356 | 19-6-2025

Public building graduation studio P5

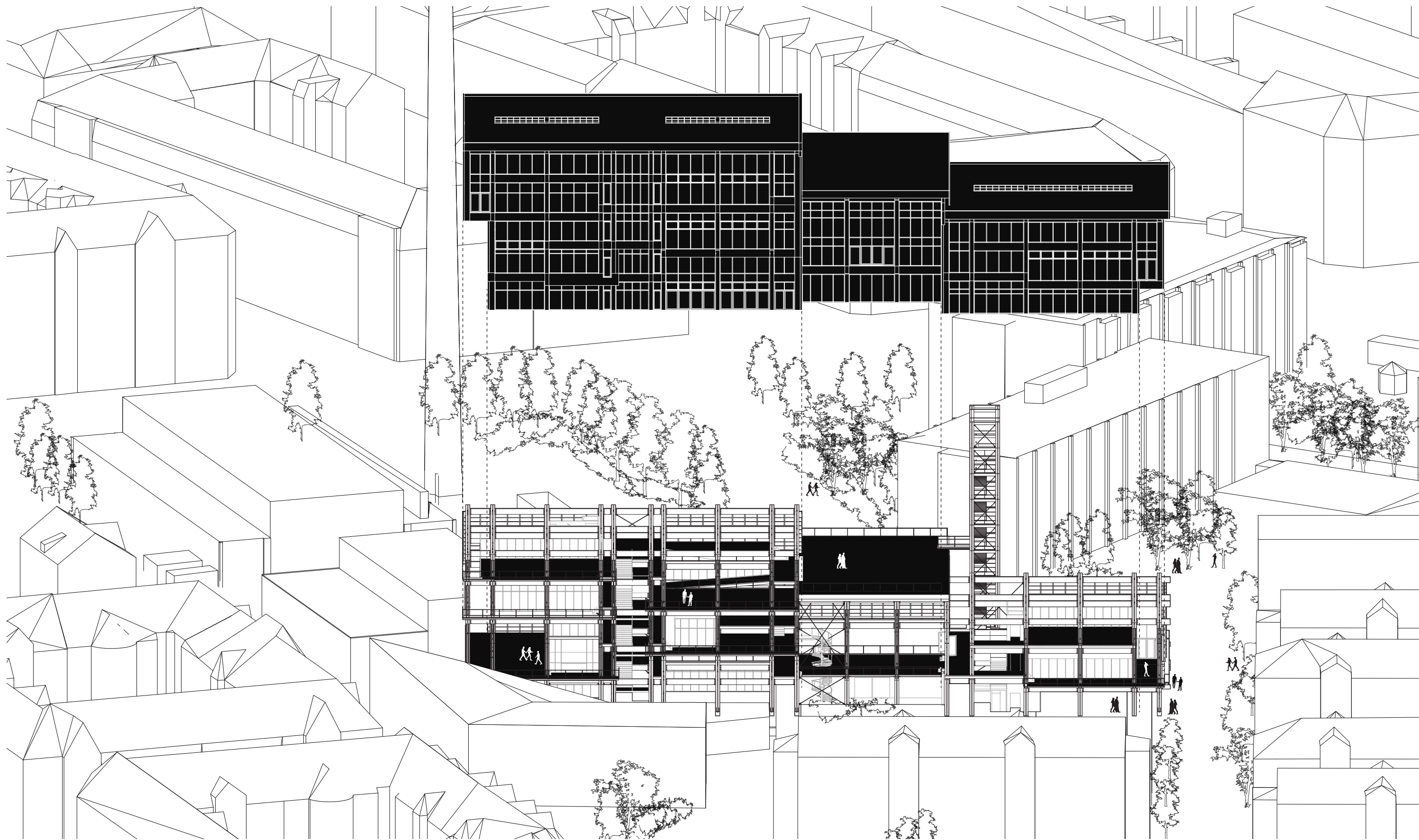
Tutors: Sien van Dam (TD), Henk Bultstra (PD) & Florian Eckhart (TBD)

Delegate: Luca Iuiro



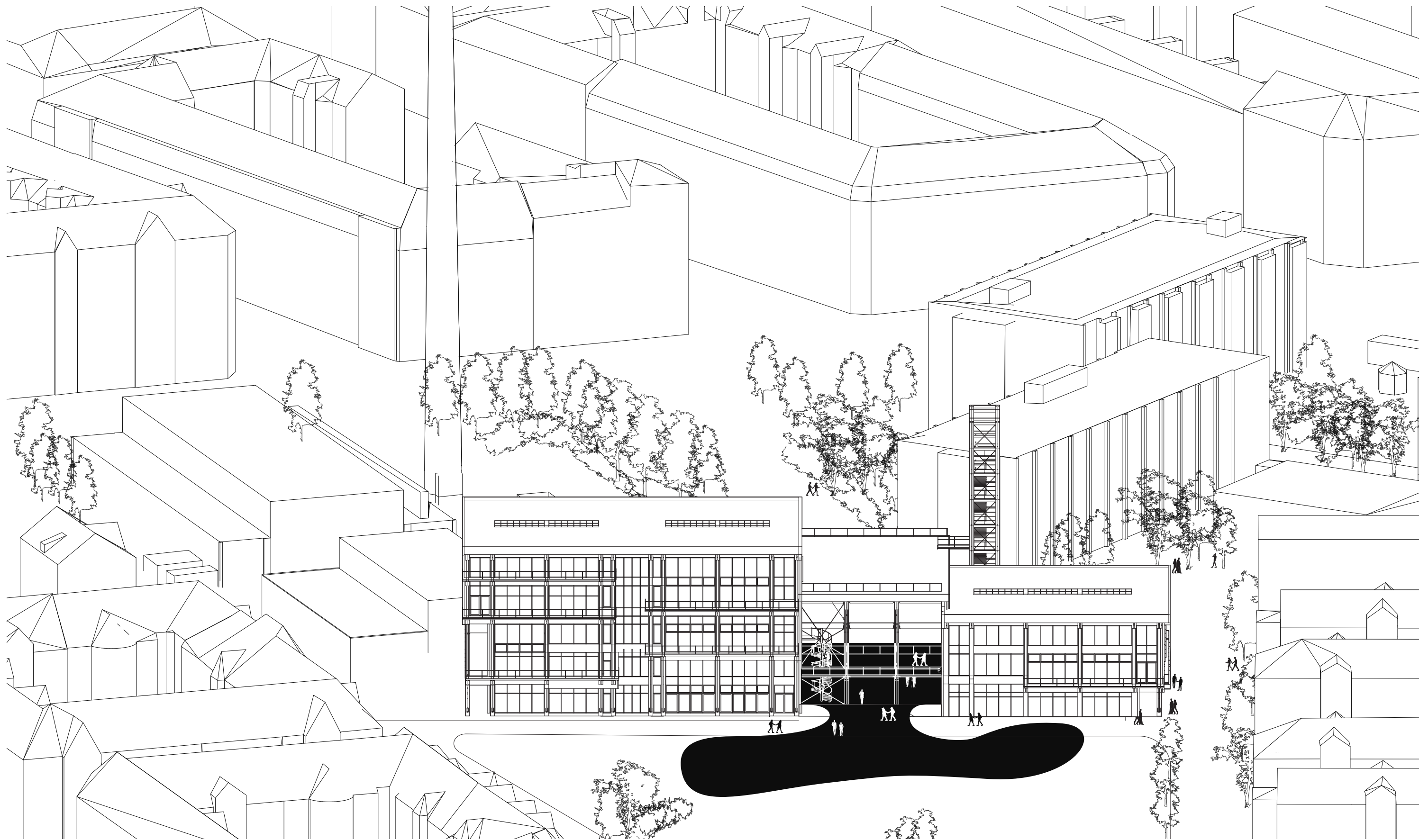
**Additional slides**





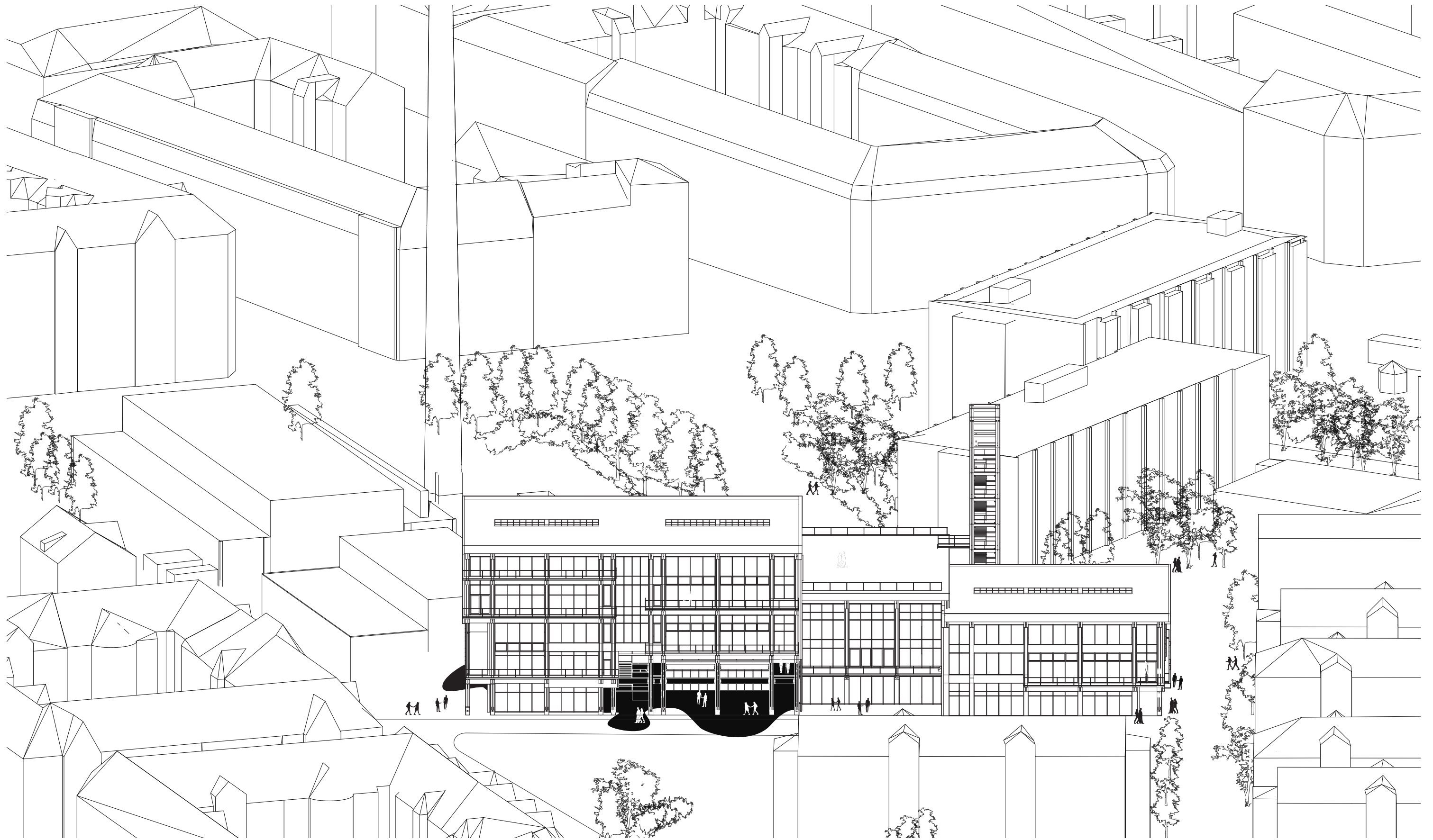
Redrawing the borders





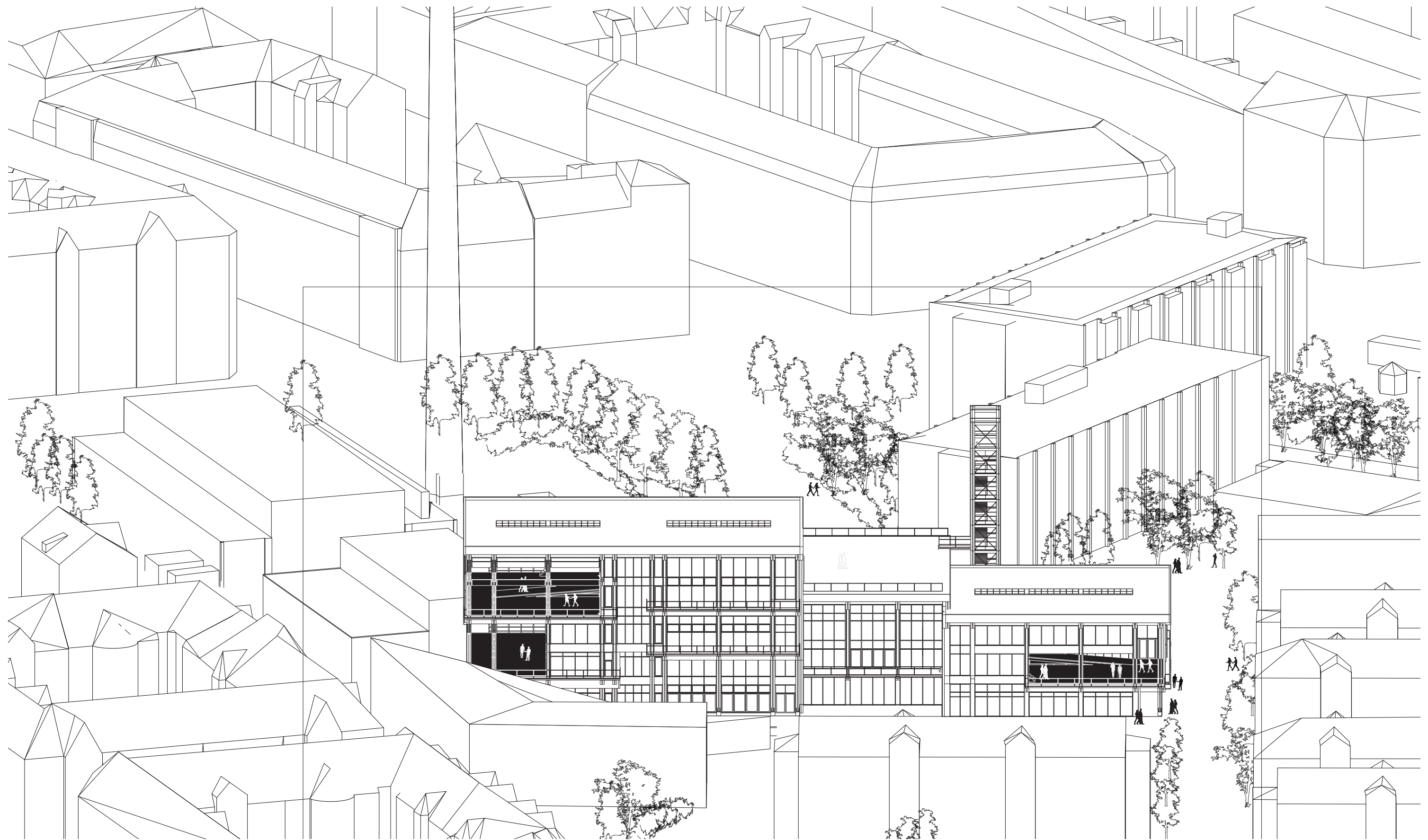
**Alternative possibilities: removing boundaries of large hall**



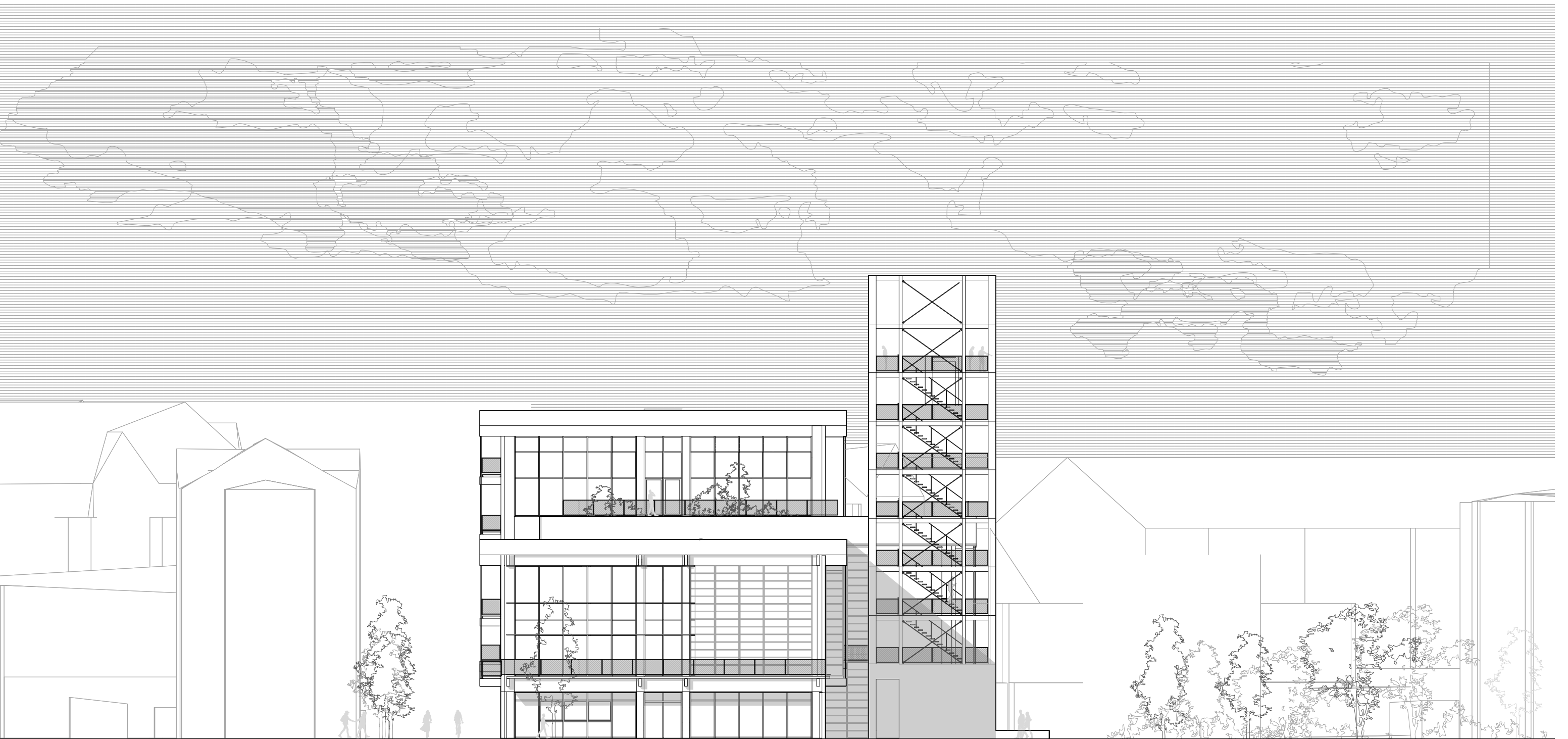


**Alternative possibilities: Removing boundaries ground floor**



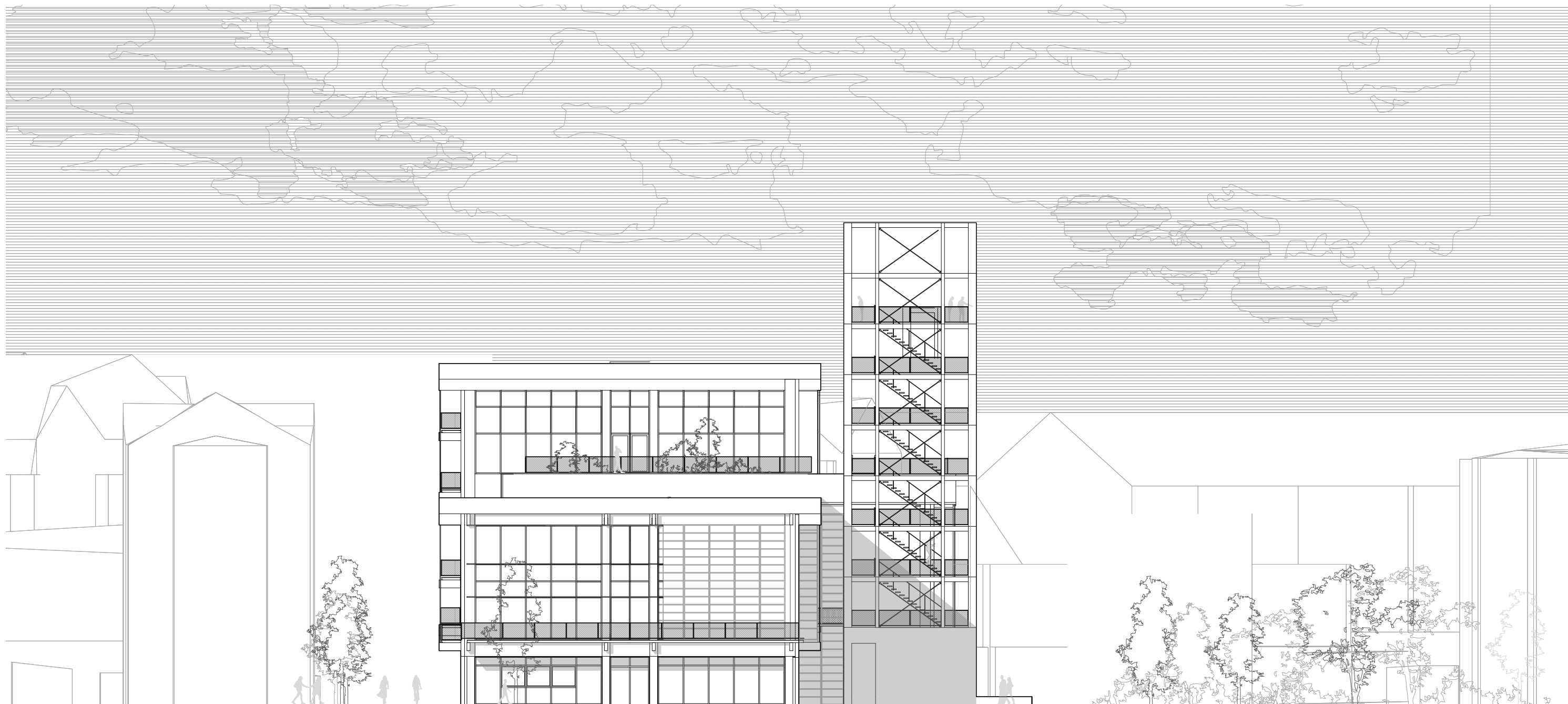






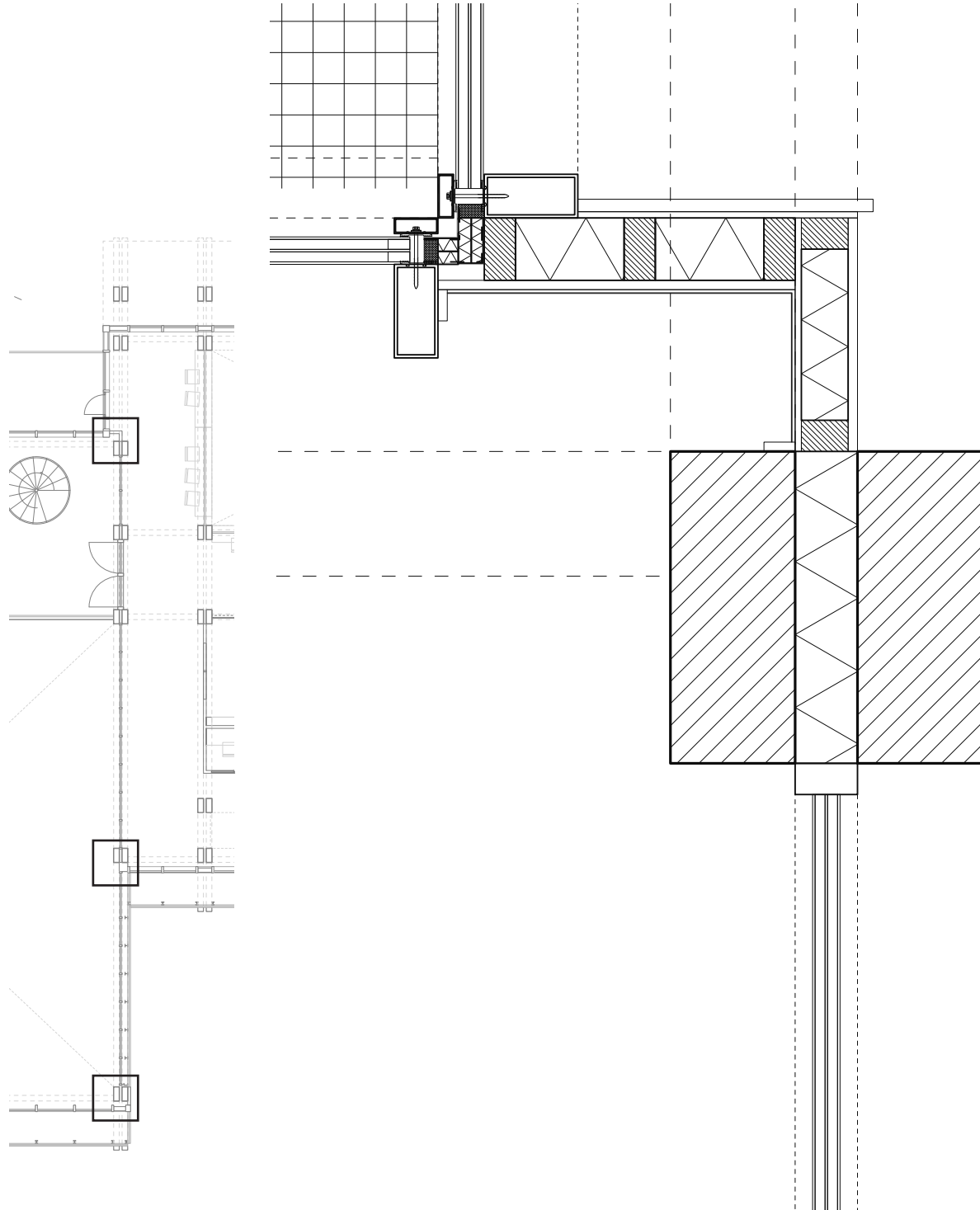
**East Facade**  
Approaching from Sundholmsvej



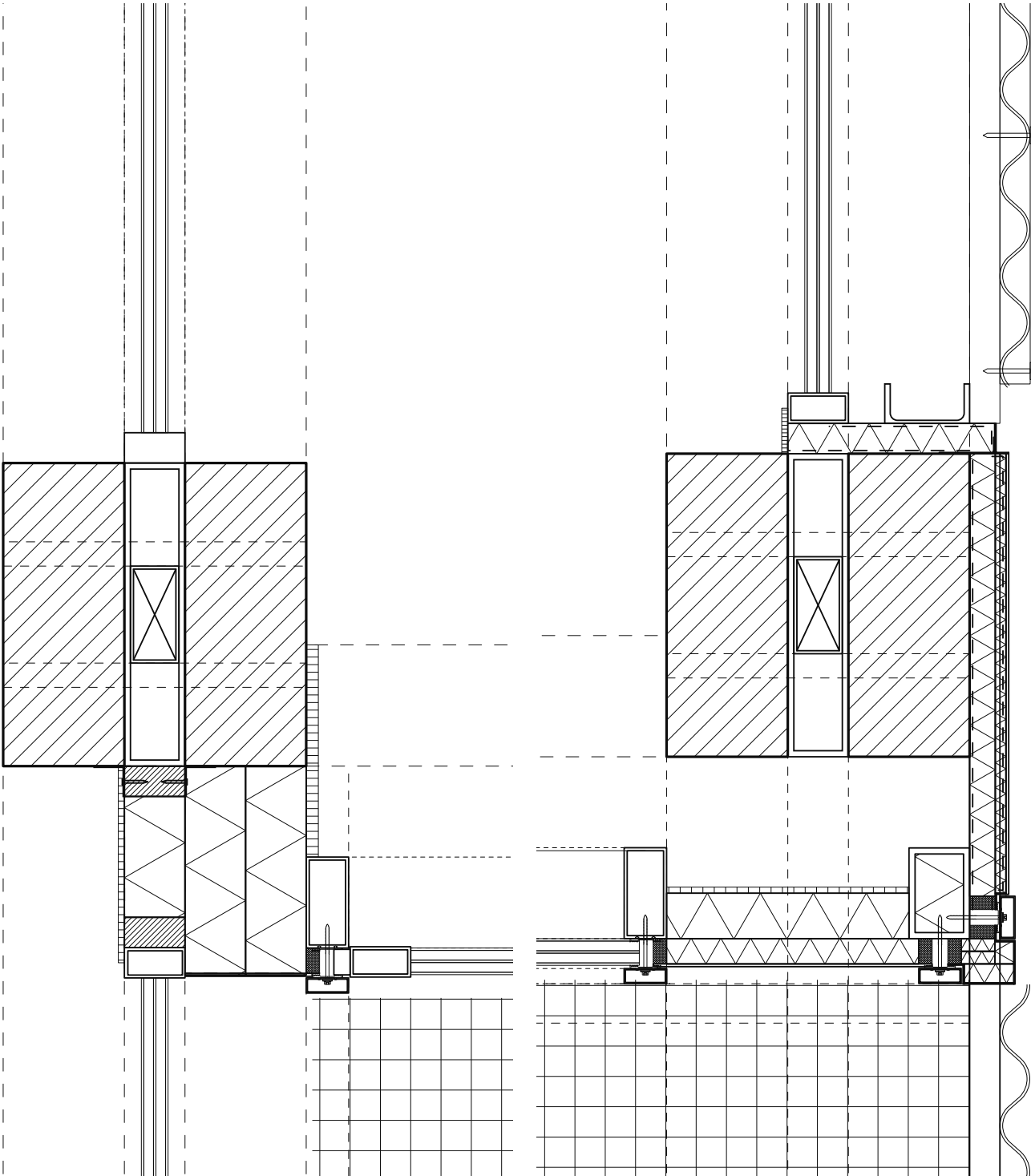


**West Facade**  
Approaching from Fabrikken & square



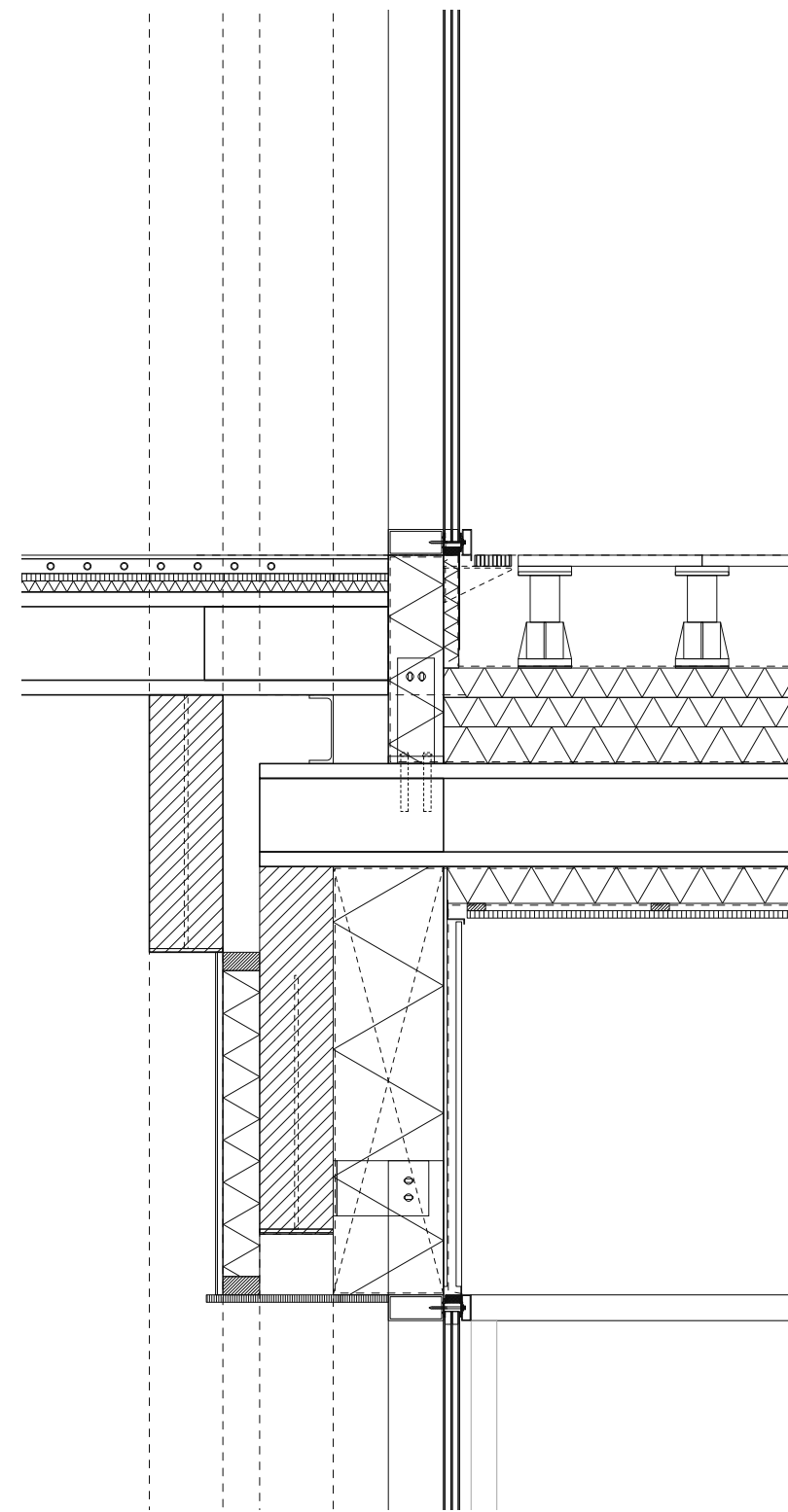
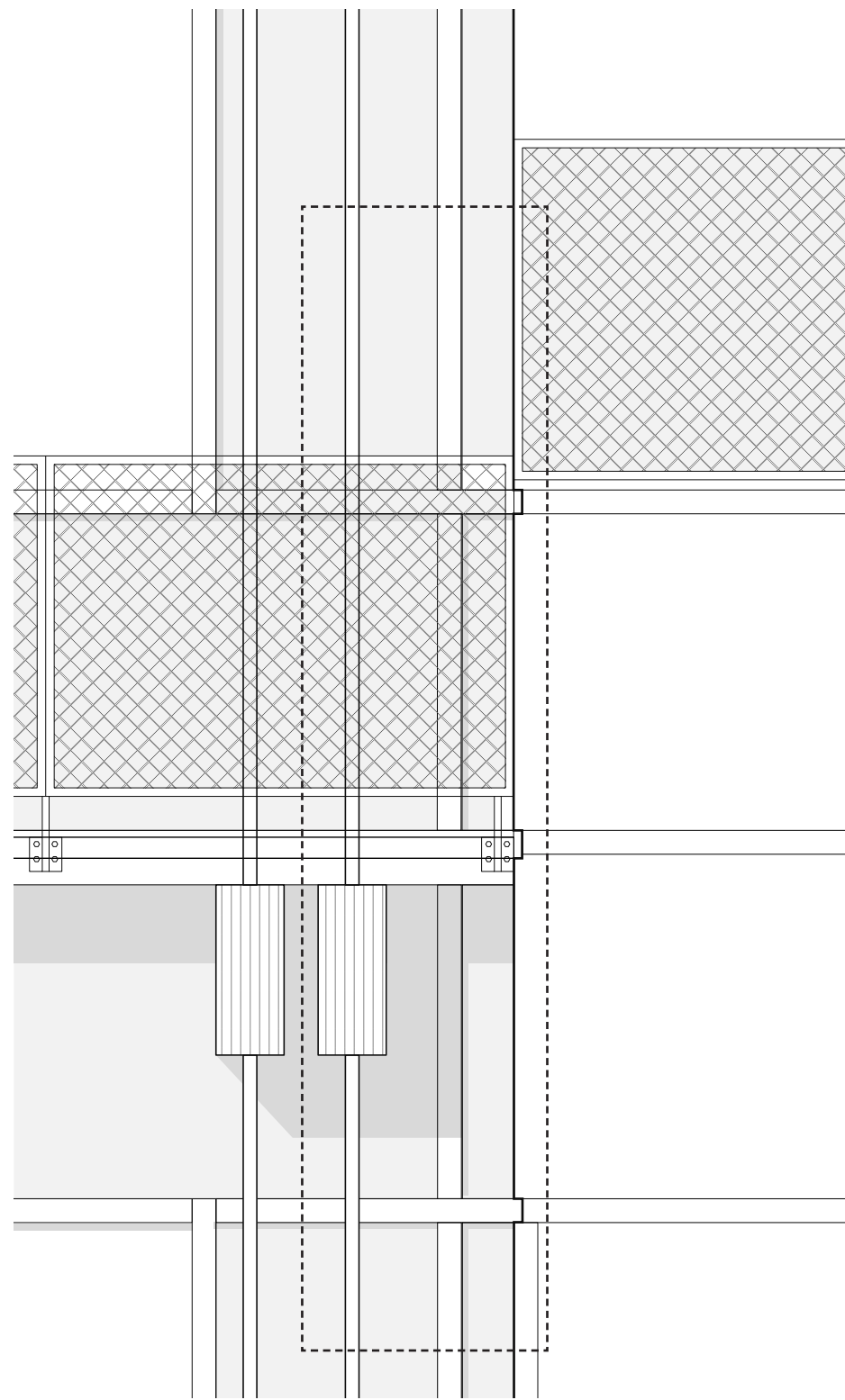
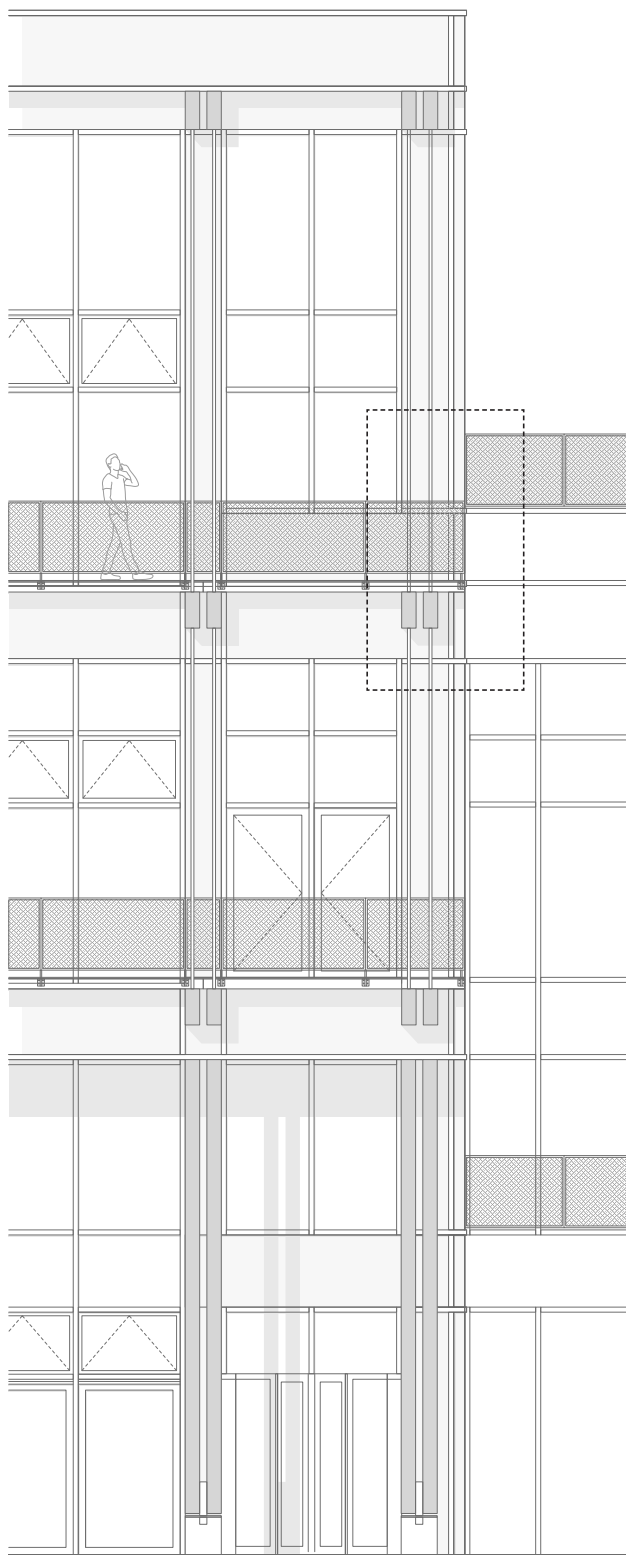


Large hall sequence



Continuation of the system throughout the building





**Maintaining facade continuity with differing floorheights**