From exhaustion

To resilience

Research by Design Journal

Miguel Borst | Public Graduation Studio 2024

Project Design tutor: Henk Bultstra
Theory Delineation tutor: Sien van Dam
Technical Buidling Design Tutor: Florian Eckardt

The following research journal includes a part of the work done during Q1, Q2, Q3 and Q4 that was relevant for my P5 presentation
In principle all the work and images are my own, except if stated otherwise.
The group work was done in collaboration with Ina Ilieva, Ferrari Huang and Bas Jonker.

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01. Graduation plan

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Miguel Borst
Student number	4886356

Studio		
Name / Theme	Public Building Graduation Studio	
Main mentor	Henk Bultstra	Project Design
Second mentor	Florian Eckardt	Technical Building Design
Third Mentor	Sien van Dam	Theory & Delineation
Argumentation of choice of the studio	The interaction between human social life and our build environment has always fascinated me. The public design studio focuses on the most complex form of social spaces, namely spaces that are open to the public. The assignment to design a public condenser is exactly the type of assignment that attempts innovate and experiment with this relation between the social and building.	

Graduation project	
Title of the graduation project	**From Exhaustion to Resilience: Re-Imagining the Possible.**
Goal	
Location:	Denmark, Copenhagen, Sonderbro
The posed problem	The central problem of my research emerges from a specific theoretical framework: the idea that how we live and shape our everyday social lives - ranging from large-scale politics to the smallest street-level interactions - is deeply intertwined with the way our built environment is shaped. This stance is developed in depth on a theoretical level in the works of Henri Lefebvre, Richard Sennet, Edward Soja or Walter Benjamin but can also be found in far more practical applications in the works and designs of Jan Gehl and Aldo van Eyck. It is through this specific lens and with this understanding of architecture in relation to our social and political interactions that I approach the design context of my graduation studio. The neighbourhood of Sonderbro and Sundholm is an often overlooked and isolated island within Copenhagen. It is an area characterized by a unique and complex identity that struggles with multiple challenges on both urban and social levels. Data shows that residents report the area as having harsh physical borders and boundaries, a lack of meeting places and lacking social connection among other problems. In addition to this the area is characterized by an extreme variety in population, which leads to friction within the community.
	While the neighbourhood faces many struggles an overarching sensation became apparent when talking to residents. A deeper underlying sense of exhaustion, especially regarding the social interactions. Captured in the following quote of one of the residents: “we are doomed”. The different groups surrounding Sønderbro live in isolation of each other, unable to change. I want to argue that the politics of the everyday, the large range of social interactions, patterns and rhythms of the residents in Sønderbro seem exhausted. It is this sentiment found among Sønderbro’s residents that is problematic. A complete lack of imagination of what could be possible, a sense of absolute predicament, of exhaustion regarding the social interactions. It has become impossible to imagine any other ways of being together, the potential to form new relationships and to be together in different ways is completely depleted. However, while the narrative surrounding Sønderbro and Sundholm might seem very negative at times, the neighborhood at the same time holds a lot of potential. The presence of an extremely diverse community holds a potential for new unexpected social interactions. The many boundaries between the different groups and within the area could instead become vibrant borders full of exchange. The central question is how to design the public condenser in a way that disrupts the community’s sense of exhaustion
research questions and	***Main question*** - **“How can a public condenser disrupt an exhausted urban and social context?”** Subquestions - How can the exhausted community of Sonderbro be revitalized? - How to establish a resilient framework while at the same time allowing for (social) change? - How can the public condenser contribute to constantly new un-imagined possibilities for social interactions?
design assignment in which these result.	Forming a resilient framework while at the same time allowing for change. A building that constantly produces new configurations as well as being re-configured itself. The goal of the research is therefore to come to a design strategy and physical interpretation in the form of public condenser that can be convincingly presented as a model that is able to disrupt the exhausted social context of Sonderbro, re-imagine it in ways that were deemed un-imaginable. The building has the goal of generating and integrating new flows across different scales and different times, addressing both everyday rhythms

	patterns and interactions, as well as facilitating spectacular and extraordinary events and configurations. It should promote the idea of the social as something that is actively produced rather than something that is overcome. Radiating the idea that the building is shaped through the interactions with and of the users.

Process

Method description

Literature studies form the backbone of the theoretical framework within which this research is positioned. By conducting this I aim to create a better understanding of the existing theory on the relevant topics. By doing this I expect to be able to come up with relevant strategies, concepts for the design of the condenser.

Diagrams and mappings are utilized to further analyse both the existing context and theoretical framework, serving as a tool to uncover both what is there and to generate new understandings and insights.

Research by design is used throughout the different sub-questions to investigate how theoretical knowledge can be transformed into actual design practices for the public condenser in the given context. In addition to this appropriate references and case-studies are researched to support the research by design process.

In order to better understand the social context of Sonderbro, I plan to conduct semistructured qualitative interviews with both local institutions and potentially with local residents, in addition to the interviews and insights already conducted and gathered during the site-excursion.

Literature and general practical references

The politics of everyday

Charlotte L. “A Bond Between People (2019) - Alex Hoegh Andersen,” February 1, 2020. https://www.youtube.com/watch?v=6LVt4u0jVfg.

Deleuze, Gilles, and Anthony Uhlmann. “The Exhausted.” *SubStance* 24, no. 78 (1995): 3–28. https://www.jstor.org/stable/3685005.

Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia.* Bloomsbury USA Academic, 2013.

Feinberg, Arthur, Amineh Ghorbani, and Paulien Herder. “Diversity and Challenges of the Urban Commons: A Comprehensive Review.” *International Journal of the Commons* 15, no. 1 (April 1, 2021): 1. https://doi.org/10.5334/ijc.1033.

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The social & public space

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Foucault, Michel, and Jay Miskowiec. “Of Other Spaces.” *Diacritics* 16, no. 1 (January 1, 1986): 22. https://doi.org/10.2307/464648.

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Soja, Edward W. *Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places.* Wiley-Black well, 1996.

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Vidler, Anthony. “Troubles in Heterotopia.” February 12, 2014. https://www.youtube.com/watch?v=Q_o7oPFAxeg&t=4421s.

Radical Change

Cuboniks, Laboria. *The Xenofeminist Manifesto: A Politics for Alienation*. Verso Books, 2018.

Haraway, Donna. *A Cyborg Manifesto : Science, Technology, and Socialist-feminism in the Late Twentieth Century*, 2017.

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Koleth, Elsa, Linda Peake, Nasya S. Razavi, and Grace Adeniyi-Ogunyankin. “Decolonising Feminist Explora tions of Urban Futures.” *Urban Geography* 44, no. 9 (October 21, 2023): 1843–52. https://doi.org/10.1080/02723638.2023.2257473.

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Massumi, Brian. *Architectures of the unforeseen: Essays in the Occurrent Arts*, 2019.

Woods, Lebbeus. “Experimental Space and Architecture.” 2006. https://www.youtube.com/watch?v=HA1QJGkNz4E&list=PLEF124C087851B1F6.

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Sennett, R., & Sendra, P. (2022). *Designing disorder: Experiments and Disruptions in the City*. Verso Books.

Selection of case-studies & references

The nourish hub, RCKa, London, 2021

Lacaton & Vassal

- Nantes School of architecture, Nice, 2009
- Polyvalent Theater, Lille, 2013

Muoto Architects

- Magasin 4, Belgium brussels, 2021
- Public condenser, France - Clichy-Montfermeil, 2016
- Ateliers medicis, France - Clichy-Montfermeil, 2022

Substrate Factory Ayase, Aki Hamada Architects, Japan, 2017

Self managed Social Centres

- ACU, Utrecht, 1976- now
- Bluestockings, ny city- 1999- now
- Centre International de Recherches sur l'Anarchisme, Lausanne 1957- now
- CSOA Forte prenestino, Rome, 1986- now
- Ungdomhuset, Copenhagen, 1982- now

<u>Design that radically re-imagines society</u>

Archigram: The Plug in city, Peter Cook

The Fun Palace, Cedric Price, 1964

The works of Paolo Soleri

Nieuw Babylon, Constant Nieuwenhuys

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

Architecture is undeniably intertwined with human life and, by extension, the social realm. After all, nearly all buildings are designed with people in mind. This relationship between physical design and human experience is especially relevant for public buildings, which is home to inherently diverse groups. Because social interactions are most varied in these spaces, understanding how architecture disrupts, shapes, and facilitates them becomes especially important for the design of public buildings. Even so, these insights and questions can ultimately be applied across the field of architecture as a whole.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

The research done through my graduation project tries to contribute on the actual practical application between theory and practice. Focussing on the interplay between architecture, sociology and philosophy. By combining the different theoretical notions and applying them to a specific Danish context, these theories are further explored and tested.
On a broader social and professional level, the project addresses a phenomenon and sensation that seem. Our society seems to become tired, signs of so-called "exhaustion" can be found around the world. Everyday, newspapers are filled with groups and individuals who are no longer able to imagine alternative social realities. Issues like polarization and segregation dominate the public discourse. This project serves as an example that it is possible to shape these alternative possibilities. By reimagining what some consider unimaginable, it seeks to refresh the discussion and inspire new approaches to living together.

01.2 **Quantitative program**

Foodcorner	
commercial kitchen	80
dining area	200
storage	20
toilet	10
Food & convenience/bookstore	40
office	20
subtotal	370
Garden shed (extension of foodcorner)	
teaching kitchen	60
small eventroom/dining space	50
storage & toolshed	10
allotments	-
subtotal	120
The eventfull	
large hall	500
toilets	20
foyer	250
offices	50
meeting room's	50
backstage	50
storage	50
subtotal	970
library 2.0	
children-adult section open stacks	500
study spaces/silent area	200
mediatheque	75
project/group rooms	200
workshopspace	100
flex workspaces	100
toilets	30
storage & archive	50
reception/infopoint	20
Shared kitchen	20
exposition space	25
subtotal	1320
Extra	
service area	150
Bike parking	200
roofterrace	-
subtotal determined area	3130
Undetermined circulation space (30%)	939

Total area indoor = 4069

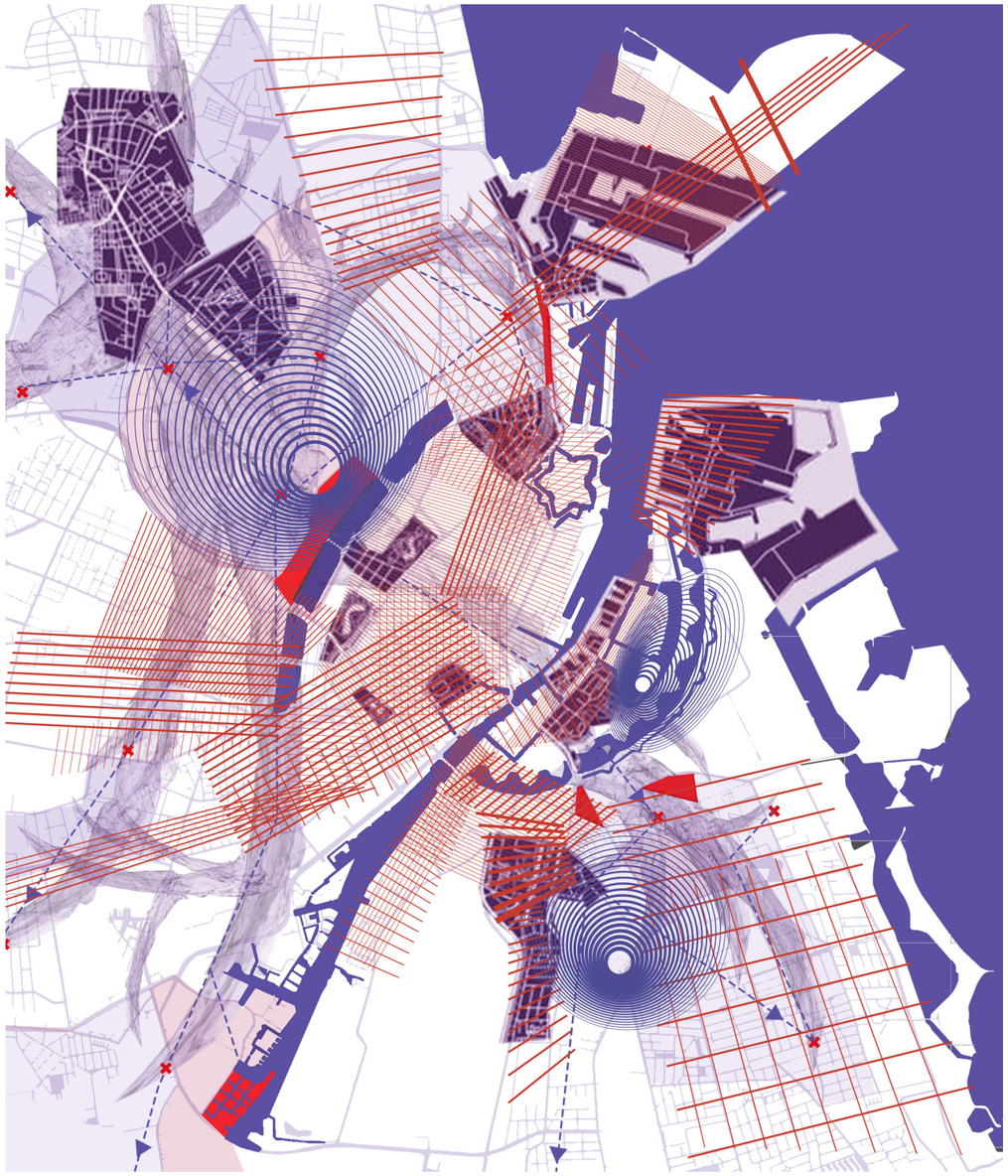
02. **Q1 Research**

02.1 **T&D Assignments**

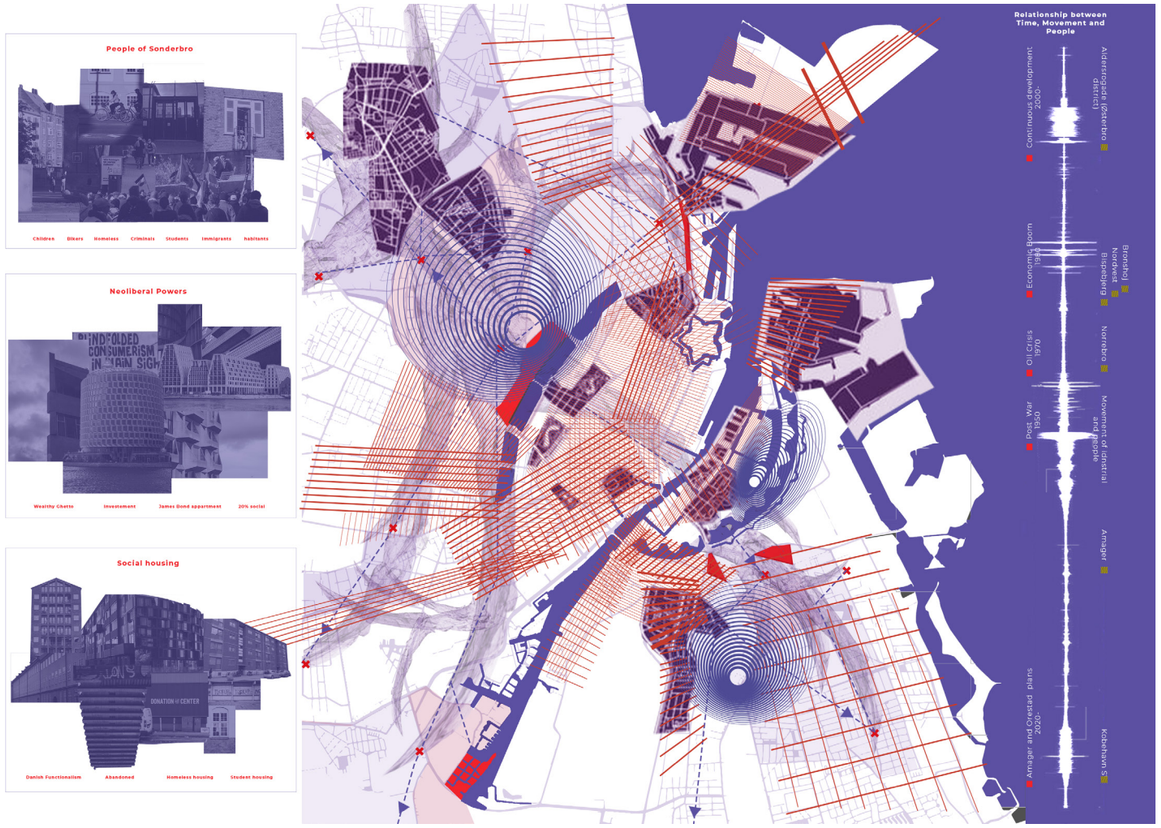


Collage showing the co-existence of the welfare and neo-liberal version of Copenhagen and Denmark

This collage incorporates the different versions of the same coin. Showing the elements that we knew of Copenhagen before hand. The city being the most green, sustainable, liveable city and typical examples of the welfare state. However, references to more controversial parts of Denmark are also added, confrontations and demolitions as a result of the ghetto policy, ByHavn developemnt, capitalist development.



Psychogeographic map for power, control, migrant displacement
Group work



Full psychogreographic map. - Group work



Collage Neoliberal Power. - (own images)

Attempting to visualize the shift towards a more neo-liberal welfare model through contemporary architecture and physical expressions.

The wealthy ghetto of Nordhavn
Investment driven development
James Bond appartment
20% Social Housing



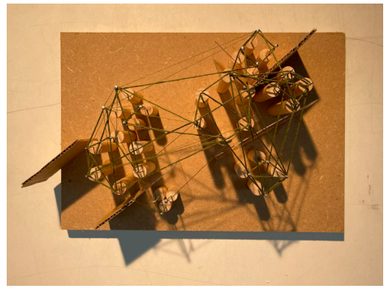
Collage People of Sonderbro. - (own images)

Children
Bikers
Homeless
Immigrants
Criminals
Students
Habitants



Collage Social housing.

Children
Bikers
Homeless
Immigrants
Criminals
Students
Habitants





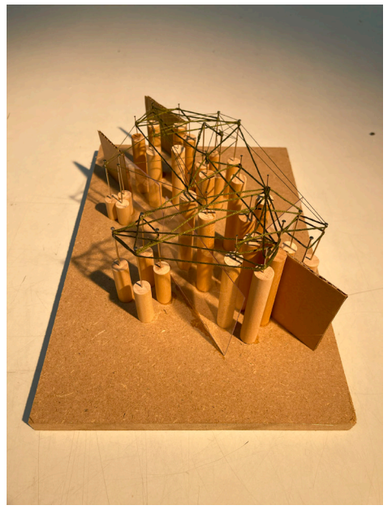
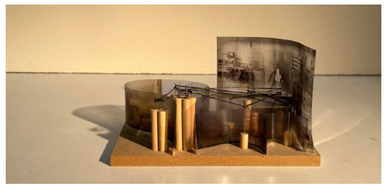


Diagram for building scale - Group work





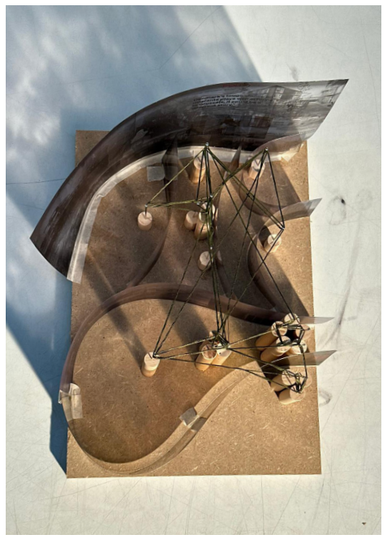
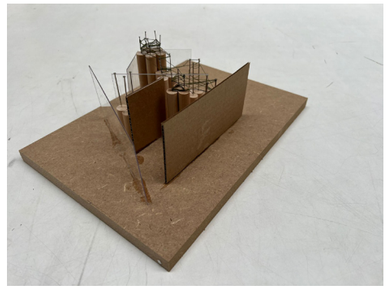


Diagram for amager scale - Group work



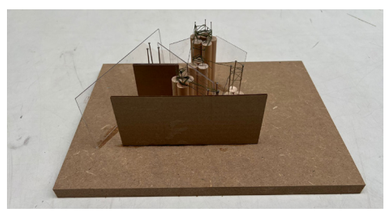




Diagram for Sundholm scale - Group work

Both Holl and Terzidis focus primarily on the concept of hybridity as a formal typological concept. A concept that allows us to discover new potentials that were hidden before. For example, by morphing shapes, what was once perceived as rectangular, can now be turned into a triangle.
However, as I addressed in my research plan, the challenge of designing a public condenser to me is not merely a morphological, spatial issue. It does not limit itself to a mere question of reconfiguring functions or shapes to achieve this new hybrid entity. Instead, the public condenser is needed to imagine a completely new narrative of being together. To achieve this, hybridity and morphing are surely tools that need to be used. Because of the social problems at the core of my research, I don't envision hybridity as a tool that is limited to only to shape or typology but aim to research how this can extend beyond this.

Hybridity & the unfamiliar

The potential of Hybridity lies in the freedom of concepts as mentioned by Steven Holl. In not being limited by a specific narrative or interpretation, instead being open to that which is weird and perhaps even unrecognizable. To me this is a powerful aspect of the hybrid in general and in line with the Xenofeminist manifesto. They embrace a contemporary sense of alienation within society not as bad thing, but instead as a tool. The unfamiliar, the alien, allows us to explore and imagine completely different potential. I envision hybridity in this regard as the tool that enables the design to combine both the familiar and unfamiliar, the canny and uncanny. By creating a hybrid in this sense coming to a stronger whole.

Beyond morphing

In my view, for a public condenser to imagine new futures that address the striated, stuck, and exhausted social spaces of Sundholm, I wonder whether morphing alone is sufficient as a tool to generate the new and re-capture potential. The problem with morphing being that it still inherits the systems and values of that which is morphed. The triangle that is the result of the morphed square still has an invisible point hidden inside the shape. A lot of the hybrid buildings used by Holl, equally are morphed results of the maximization of profits on valuable pieces of land. This is reflected into the megalomaniac scale of almost all those projects. While revolutionary new shapes and typologies, the capitalist system it represents keeps its form.
The public condenser will thus not only attempt to address hybridity in a functional or morphological sense but also one the level of social space. Trying to bring together elements in ways that weren't imaginable before with and by focussing on hybridity achieving completely re-imagined social spaces. It is not the type of hybrid building that aims to generate a middle ground, an interpolation. Rather, the hybridity that I strive for is an extension of extrapolation. Extrapolation, morphing and changing what is given into the extreme. It is this type of hybridity that is needed to address the stuckness of Sundholm.
Moving beyond morphing of what is given into cutting, shattering, re-glueing pieces and parts. Like the Japanese art of Kintsugi, the rebuilding of broke porcelain while emphasizes the imperfect repaired identity. But instead of rebuilding the old social space, this type of hybrid aims to imagine something completely new out of the old parts. Using the concept of hybridity to create this new building.

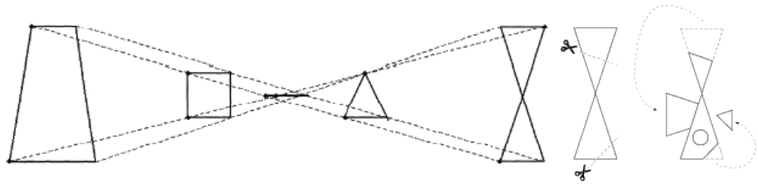
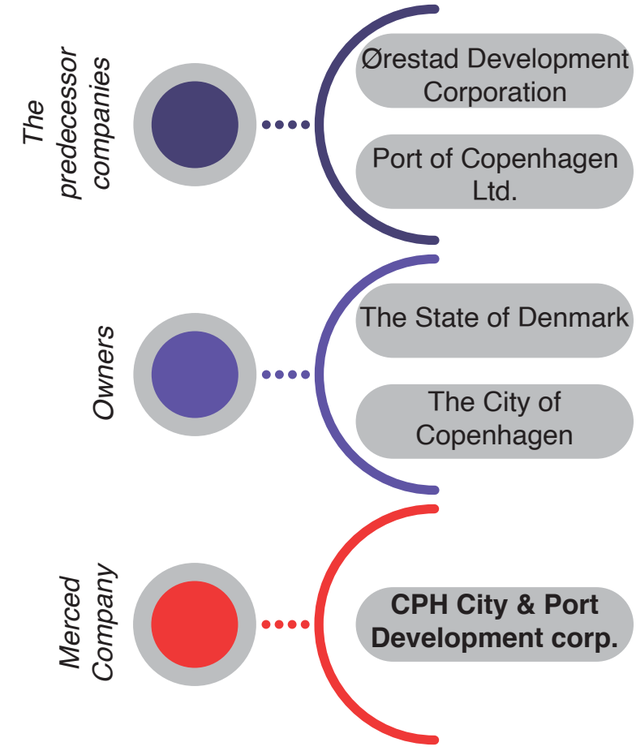


Diagram extending the act of extrapolation further

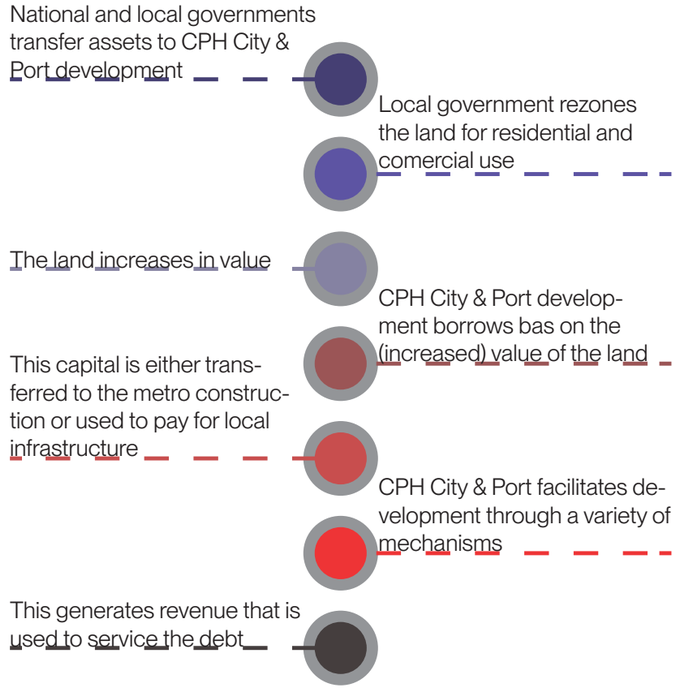
02.2 **Power Research**







DEVELOPMENT MECHANISM BY&HAVN









Places of power (left row own images



















Christiania images from archive collection





REGERINGEN

Ét Danmark uden parallelsamfund

Ingen ghettoer i 2030

An area is labelled a 'Parallel Society'...

- if more than **50% of its residents are immigrants** or descendants of **non-western immigrants**
- if more than **40% of residents aged 18-64 are unemployed** or not enrolled in any education
- if over 60% of residents between 18-64 **only have a basic education**
- if the average gross income of residents is **below 55% of the regional average**
- If an area has a crime rate where **more than 2.7% of residents are convicted** for violations of penal code, drug laws or weaponw laws

Actions & measures to adress these area's

- Physically transform housing areas through **demolition and redevelopment**, including reducing the percentage of social housing etc.
- Special penalty zones where committed crimes result in **harsher sentences**
- Criminalization of so-called re-education trips
- **Mandatory daycare or preschool attendance from the age of 1**, to increase exposure to Danish language and
- Language proficiency test for all children starting 1st grade
- Incentives for flexible leasing and **introduction of higher income residents**
- Economic incentives for municipalities to improve vulnerable area's
- **reduced benefits** for those who choose to move to a vulnerable area

Conversations with Artists at Fabrikken Building, Sundholm

Interview Context: The interview was conducted with two young, female artists working in the Fabrikken building, located on the edge of Sundholm. The discussion focused on their views regarding the area, their sense of safety, the local community, and potential improvements through architectural or spatial interventions.

Community and Social Dynamics:

The artists expressed a strong sense of belonging to the local community, describing the area as lively and diverse. They characterized the people in the area as a mix of different groups: “the crazy,” children, and fellow artists.
Despite the variety of residents, there is a feeling of community. The artists appreciate the vibrancy and uniqueness of the space, highlighting it as an important aspect of the area’s identity.

Safety Perception:
Although the artists mentioned occasionally feeling unsafe, they did not view it as a significant or recurring issue. The sense of unsafety seemed more circumstantial and did not detract from their overall appreciation of the space.

Area Usage and Activity:
The area around the Fabrikken building is a shortcut for people passing through, leading to a lot of activity. The constant movement of people adds to the energy of the area but also contributes to the occasional feelings of unease.

Community Interaction:
The artists felt that the different social groups in the area could benefit from more interaction. They suggested that the groups—such as the artists, children, and others—tend to operate within their own social circles and could be encouraged to engage more with one another.

External Involvement and Spatial Interventions:
The interviewees were resistant to the idea of outside involvement in the area. They felt that improvements or spatial interventions, such as new buildings or public spaces, should not involve people from outside the community. Their preference was for local, community-driven initiatives, emphasizing the need to maintain the unique character of Sundholm.

Conclusion: The artists’ views reflect a deep appreciation for the sense of community in Sundholm, despite occasional feelings of unsafety. While they see potential in fostering more interaction among the area’s diverse groups, they strongly believe that any interventions should emerge from within the community itself, rather than being imposed by external forces. The area’s vibrancy and local identity are key values they wish to preserve.

To understand not only Sonderbro but also the larger city of Copenhagen myself and the other students conducted multiple interviews and attended various lectures. The following chapter is dedicated to create both an overview of all the talks we had with stakeholders inside the area. These interactions range from an exchange as little as two sentence’s to a full hour prepared call. Nonetheless, I feel that all these interactions are equally as important. In addition to our own interviews,

Interaction: (Old man smoking, non western background) We tried to talk to a smoking older man. When we approached we weren’t sure if he was homeless or not. However when asked if he spoke English

Small talk with men next to school (taking cover for rain)
Didn’t live in the area but was only passing through. Did know it, describe it as being an isolated island in the middle. One of the problems that he described was the two roads on either side. Amager is defined by roads going from north to south, to get as efficiently in or out of the city centre as possible. However, there aren’t many roads going east to west. This was in his eyes one of the reason for these isolated communities. When asked about his own neighborhood described different vibe.

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Community Interaction:
The artists felt that the different social groups in the area could benefit from more interaction. They suggested that the groups—such as the artists, children, and others—tend to operate within their own social circles and could be encouraged to engage more with one another.

External Involvement and Spatial Interventions:
The interviewees were resistant to the idea of outside involvement in the area. They felt that improvements or spatial interventions, such as new buildings or public spaces, should not involve people from outside the community. Their preference was for local, community-driven initiatives, emphasizing the need to maintain the unique character of Sundholm.

Conclusion: The artists’ views reflect a deep appreciation for the sense of community in Sundholm, despite occasional feelings of unsafety. While they see potential in fostering more interaction among the area’s diverse groups, they strongly believe that any interventions should emerge from within the community itself, rather than being imposed by external forces. The area’s vibrancy and local identity are key values they wish to preserve.

02.3 **Interviews & conversations**

Interviews around Gullandsgarden
(residential area - south of the plot)
First interview: older lady (lived here for a year)
not a nice area
does not want to live here
the alcoholics should stay at their area and not mix around the neighborhood
“if there is a park close to them, they can just stay there and not come to the other parks”
at the park at night people go to drink
a car goes around the neighborhood playing loud music and selling drugs
there are a lot of students living in that area and when it’s warm they go to the park a lot

Second interview: young guy, student
likes the area
everything is within reach, don’t need to travel a lot
airport is close

Third interview: young boy (primary school)
likes it
all his friends live here, they play out a lot
lived here for always, parents like it
doesn’t go to school in this area (20 min biking)
maybe a library would be nice in the area

Interviews around the University Campus, School north of the site and around the site

#1_3 guys at the university
There has been an accident a year aga - a guy with an axe. This is a very varied area - families also live there. People don’t know sundholm, they know amager.
Bad reputation, some places where you wouldn’t go. There are some good pubs there as well. A lot of young people living there as well - some are more open minded (similar developments were done to the norrebro community houses with long table dinners). Going to the uni here - not worried AT ALL. Criminals operate at night and you just don’t go there. Sundholm - get your drugs in a safe space (when you need help). Maybe some place could be interesting for university students.

#2_3 girls at the university - rethorics
Personally never been but heard about it, seen the documentaries. Never felt in danger in the area. People who live there suffer from mental health, addictions. If you study here you don’t really know the sundholm - they don’t mix. During the exam periods they saw homeless people take lockers at the uni and chill there - weird as they would require the id car. If there was some cultural events there they’d consider going there - depends how you wanna mix with difference culture. Young adults are more openminded compared to the older generations. The university „we study at” is quite left wind open minded, try the law department. They don’t really mix with the ghetto communities, wish to be talked more about and less distant, there’s a stigma from the politicians about people living in the ghetto. They are already excluded.

#3_law students
Can be criminal can be normal, it’s never really really really bad - in comparison to other zones it is. Never felt unsafe. Lights done in a way so you can’t see your veins, also in the libraries - public spaces where you have to pay to be in eg cafe, bar. „It only works if it a bit exclusive”/„id try to be in the library as short as I would have to” look up vesterbro. Probably wouldn’t go there.

#4_teacher at a nearby school
What activities? Sports, IT, in 5th grade kids have swimming lessons instead of PE
CPH commune initiative. Some kids from the south of Sundholm go to the school as well. Some parents are grateful there’s a school, some feel discriminated based on the religion (e.g Muslims) - changed the perception based on ISIS & 9/11, some tensions between Christians. Ghetto based on language as well, eg arabic and feels more like home. Different zones in the buksinfs for the youngsters and older - coexist. Include people from the area eg the university - they might behave according to the relation they have to the people - kind of a role model. People would be like „what is this (building) what can it offer?” - kids roam on the streets in their free time - 6-7th grade and further on - SPORTS, football is the national sport (also handball, badminton, volleyball) lack of skating areas. Coxistance based on the mutual respect between the sundholm and the school - plans of building a wall inbetween. „If you don’t understand something, you’re scared of something”
Gang-prospects-8/9th grade relations (gangs come from outside of the area), having a specific activity to make them focus on something, workshops

5#_mom with a little child
Kid goes to the kindergarten (red) homeless people are not scary, they say hi. What functions: indoor playgrounds

#6_35ish guy walking to pick up his kid from school
This place is doomed - drugs and alcohol. They already tried doing something w the site (schools, gardens - not used by anyone, no impact) sport centre would be nice. South of the side there’s places for kids 6-13 & 13-18. Until 18 kids have a place to go, over 18 there’s nowhere to go.

02.4 **Details**







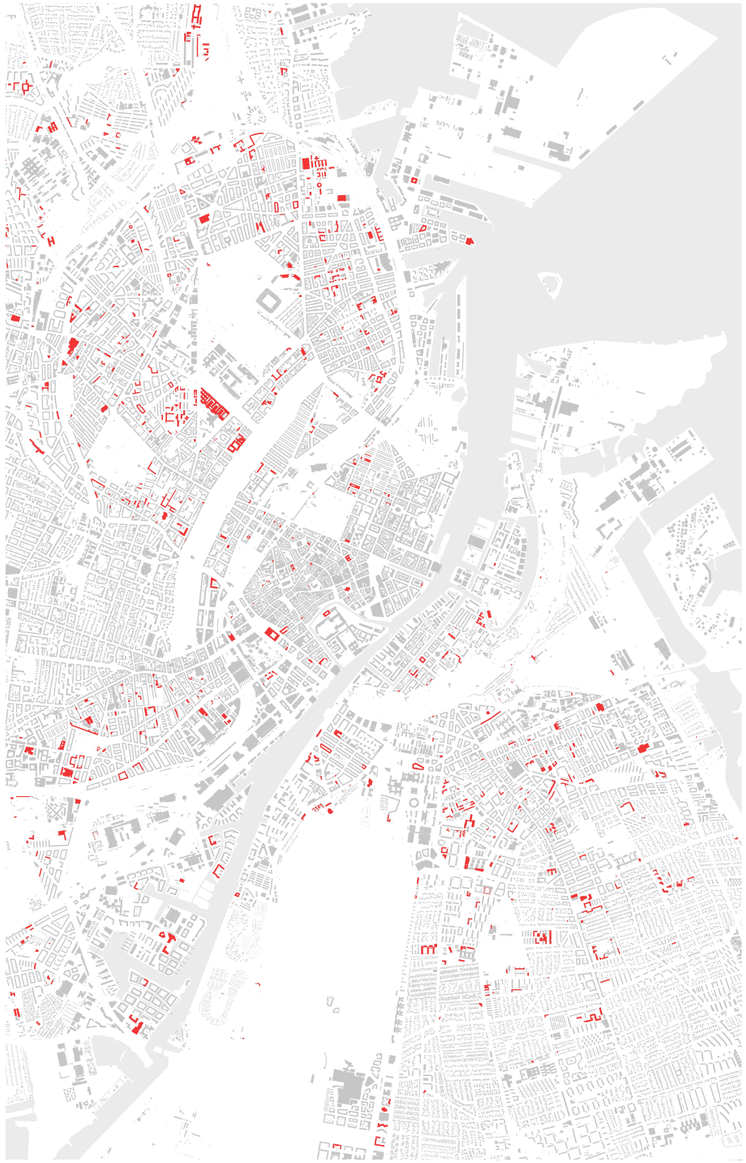




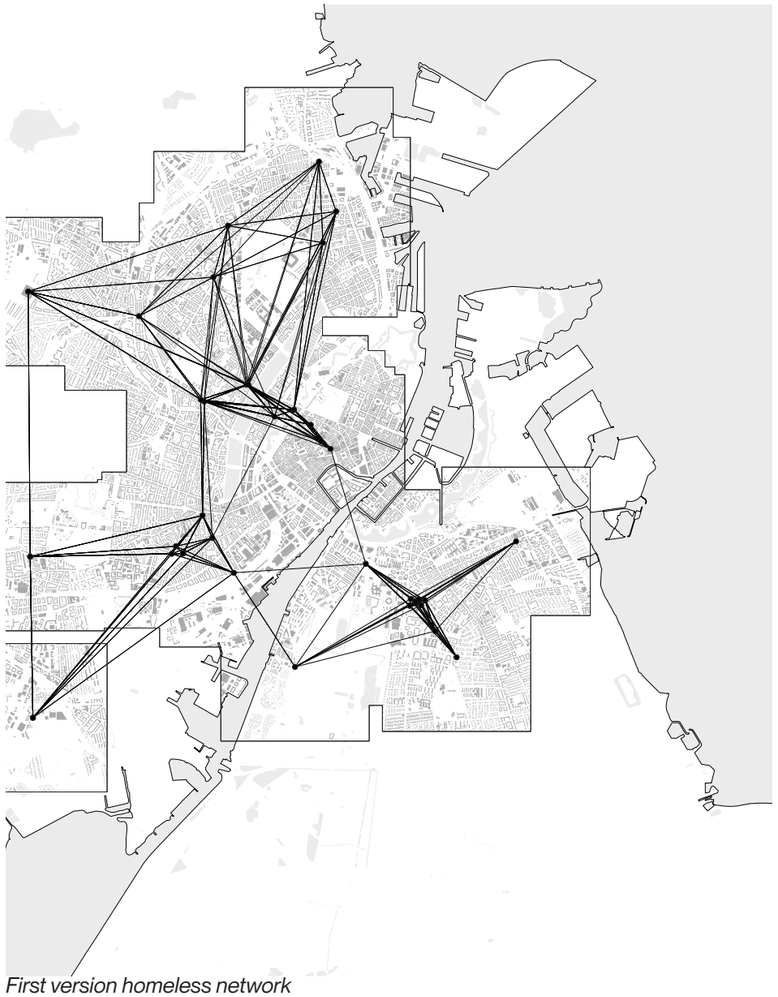




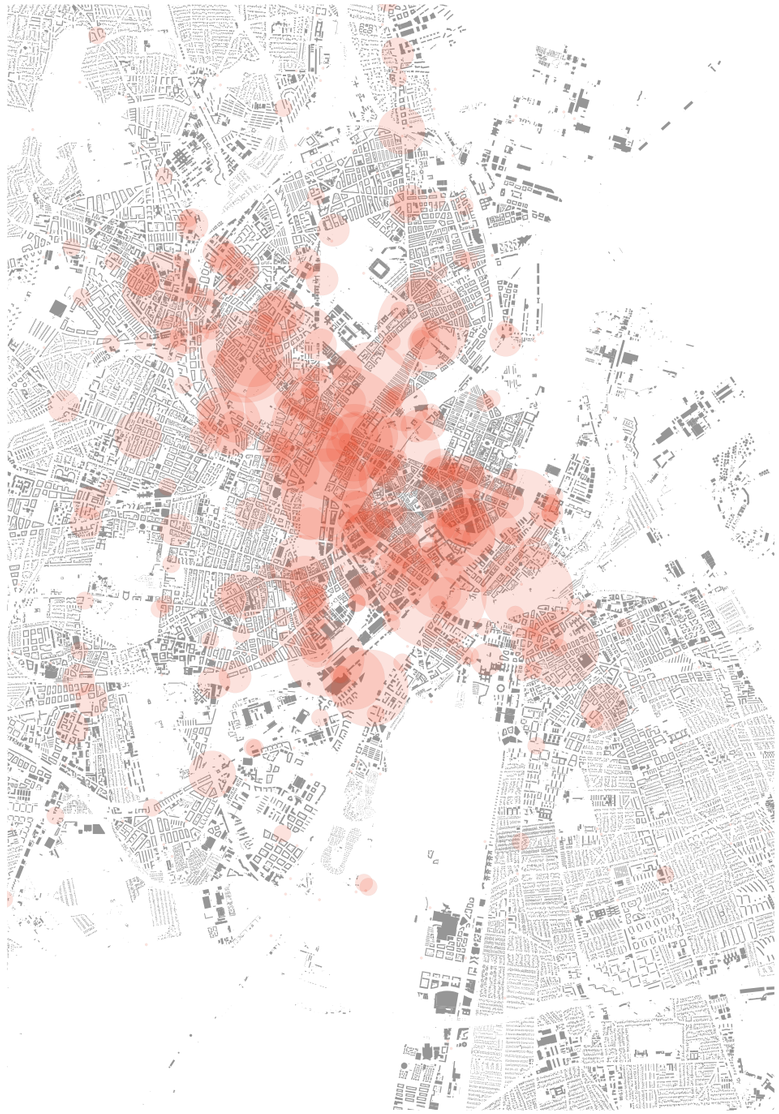
02.5 **Mapping Copenhagen & Sundholm**



Buildings owned by Municipality

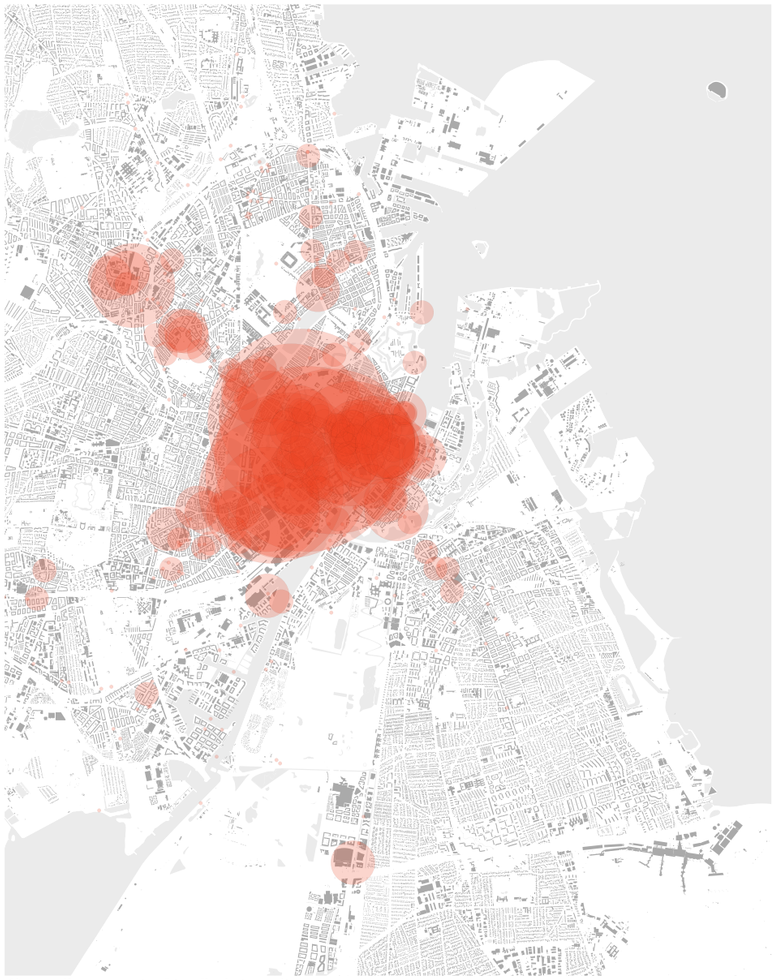


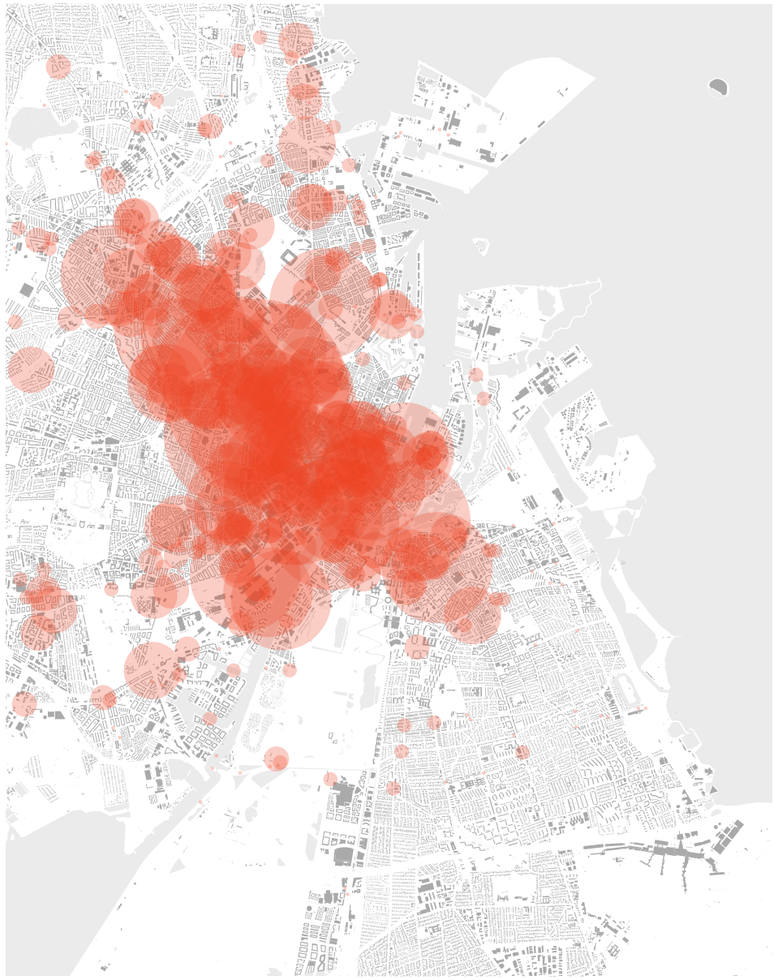
First version homeless network



Amount of bicycles intensity

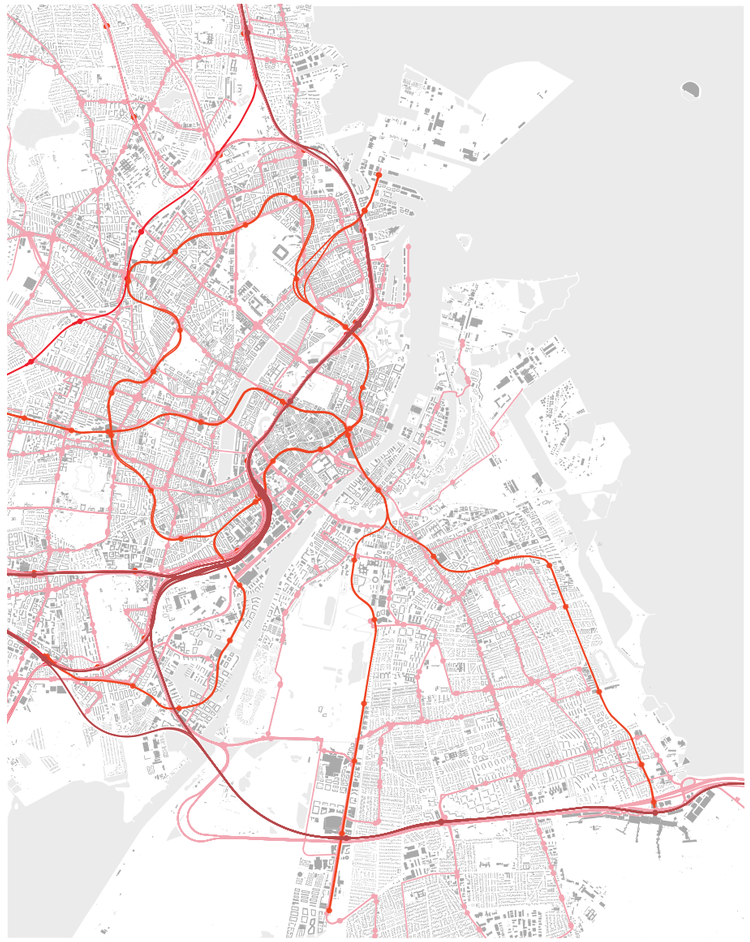
Map shows a high concentration of activity in the city centre.





Overall amount of trafic intensity

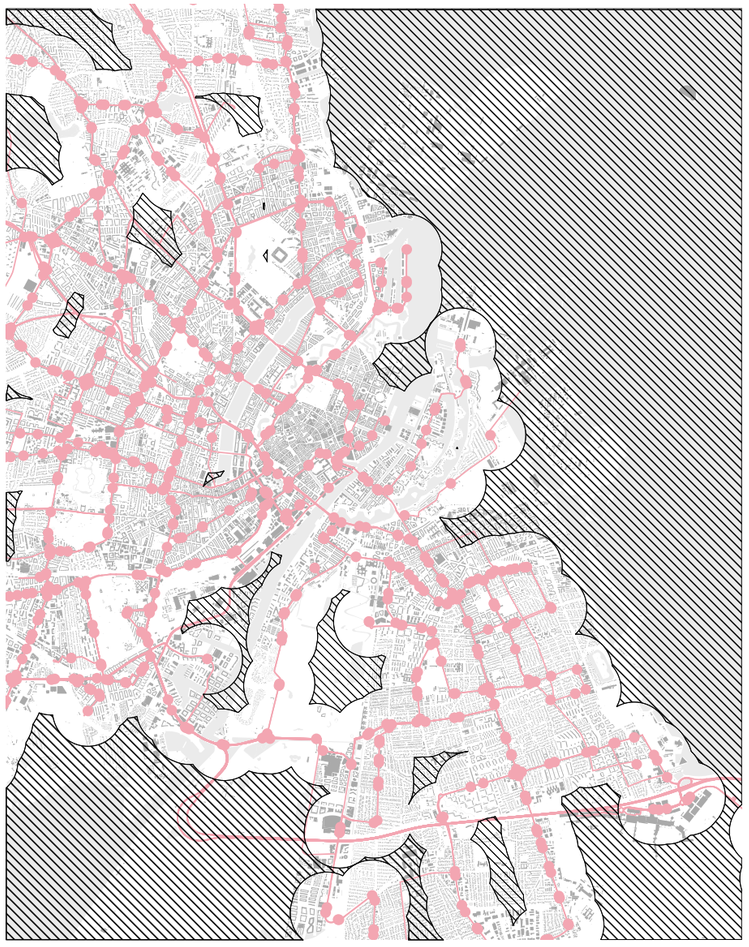
Map shows a high concentration of activity in the city centre.



Public transport network

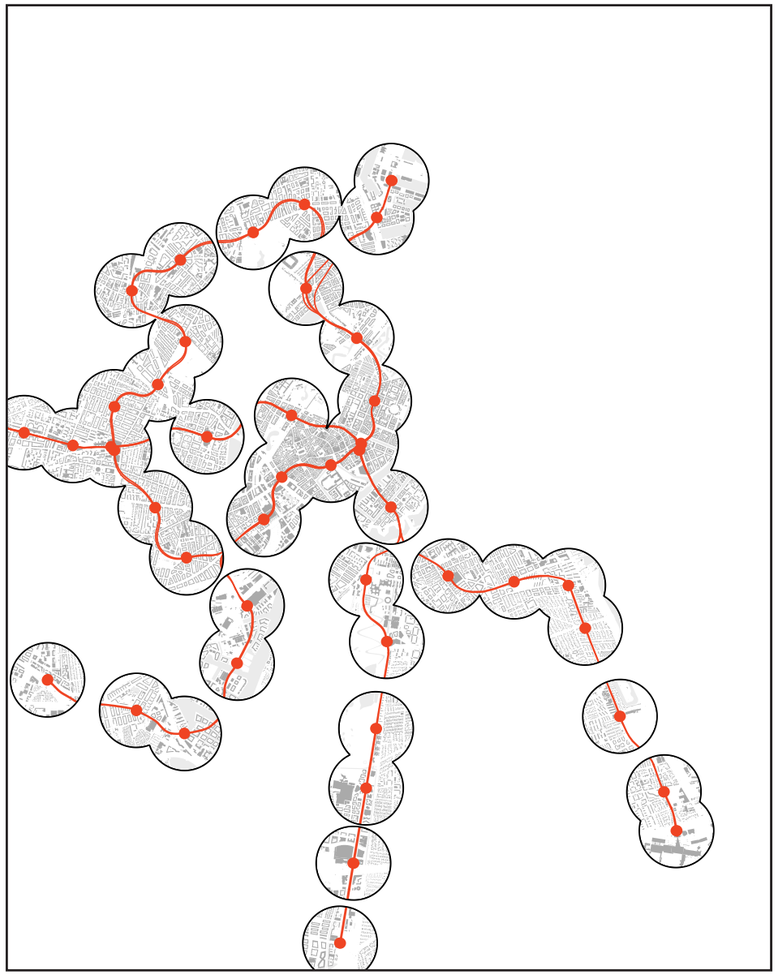
- Train
- Railway
- Metro
- Bus
- Lightway

The city of Copenhagen has a broad network of public transport, ensuring a good connectivity to the whole city.

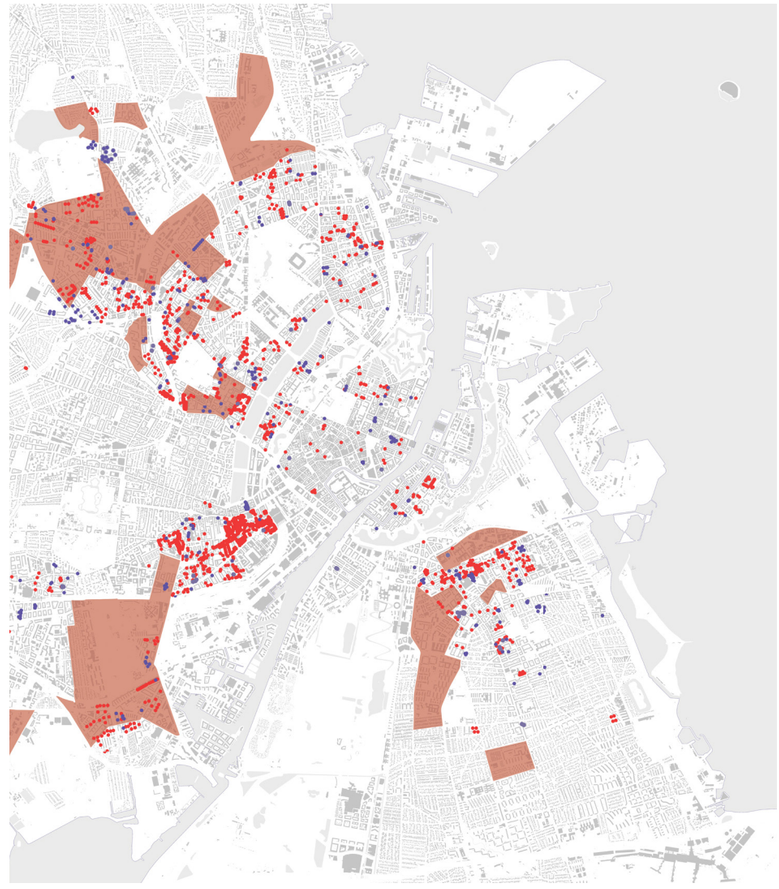


Public bus network & 5 minute walking distance to stop

buslines



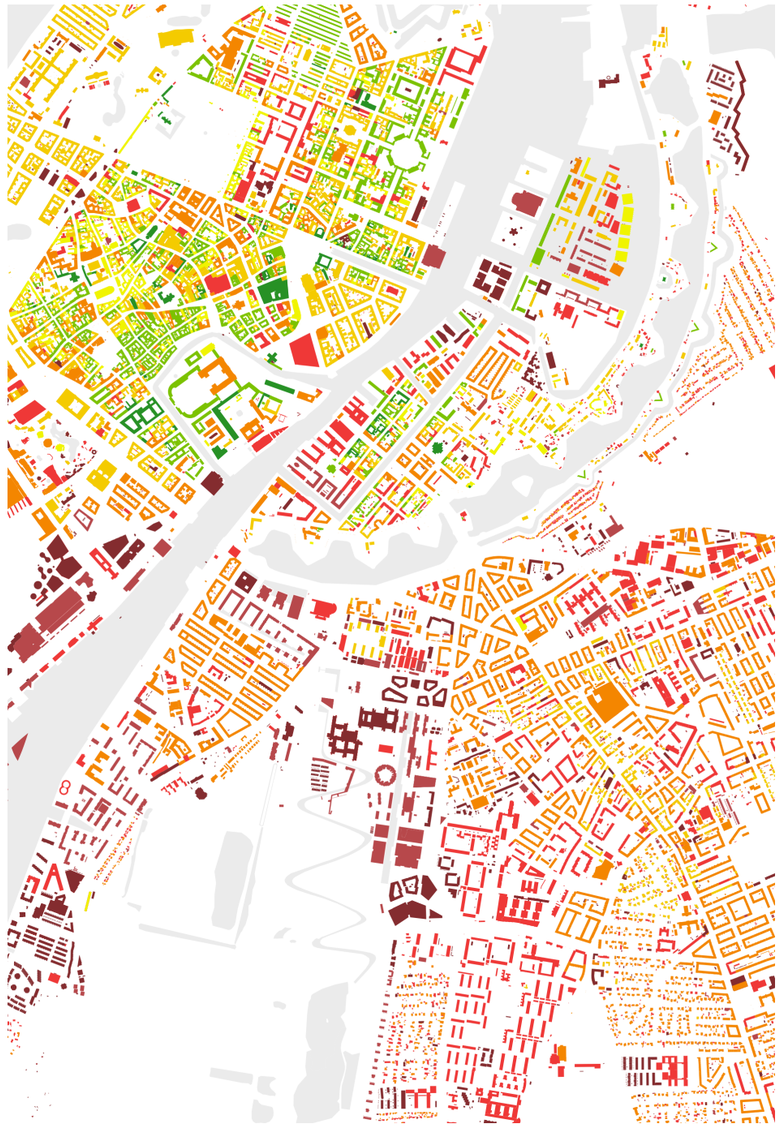
Metro network & 5 minute walking distance to stop



Urban renewal project in Copenhagen (Made for power-research)

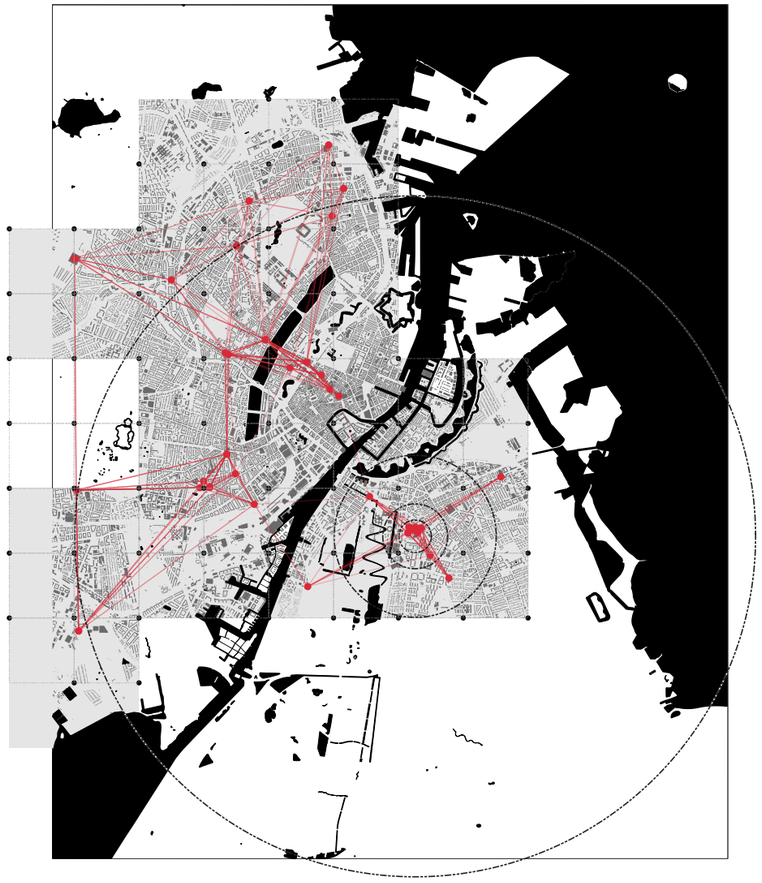
1 Urban renewal area
2 Completed urban renewal
3 Ongoing urban renewal
4 Requested urban renewal

This map shows the impact of the policies of the Municipality and the Sundholm area as being appointed for new urban renewal projects.



Building constructed year

larger then 2010
2010-2000
1950-2000
1900-1950
1900-1950
1850-1900
1850-1800
1800-1700
smaller then 1700



Night heating
Individuele stijlen
Café Klare - Natcafé For Kvin...
Hillerødgade Bad and Hal
Sundholmsvej 36

Hostels
Individuele stijlen
Kofoeds Kælder
Kofoeds Skoles Ungdomsbol...
Ved Sporsløjfen 2
Hellebro
Frelsens Hærs Institution "H...
KFUMs Kollegium
Ungetilbuddet i Brøndbyhuset
Røde Kors Herberg for Kvinder
Nøjsomhedsvej 12B
Kollegiet Gl. Køge Landevej
Terndrupvej 2
Kærskiftevej 197
Forsorgshjemmet Absalon
Bocentret Sundholm
Hjemløseenheden København
Plejekollektivet

Crisis center
Individuele stijlen
Krisecentret Garvergården
Enghavevej 32C
Egmontgården
Kvindehjemmet i Københavns...
Købmagergade 9
Kvindehjemmet i Københavns...
Ung Krisecenter

activities
Individuele stijlen
Kofoeds School
Fountain House
Settlementet in Vesterbro
Herbergscentret Sundholm
Foreningen FISKEN
Hellebro

activities
Individuele stijlen
Kofoeds School
Fountain House
Settlementet in Vesterbro
Herbergscentret Sundholm
Foreningen FISKEN
Hellebro

shelters for mentally vulnerable lo...
Individuele stijlen
Transmogriffen
Plexus København
Baglandet København
Ventilen København
SIND Ungdom
Det Grønlandske Hus
Sundholms Plejetilbud

SHELTERS FOR YOUNG PEOPLE ...
Individuele stijlen
Kapelvej 47
The Short Leash

Relationships & social co-operation
Individuele stijlen
SKCung, Center city, Socialfo...
Pigegruppen
Haderslevgade 19
Exit

sporst
Individuele stijlen
Julius Andersens Vej 7
Sundholmsvej 42
IF Kæmperne af 1998



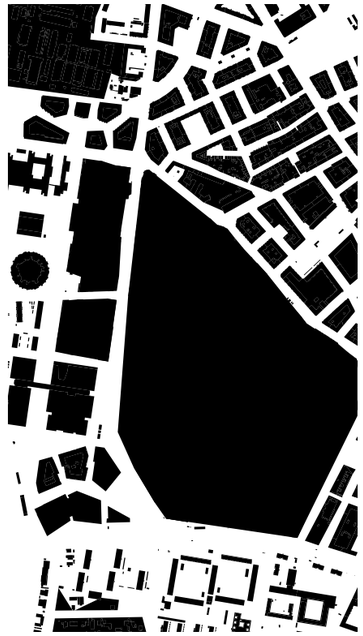
Social housing
Institutions

Homeless and vulnerable network

Mapping of network for homeless and (mentally) vulnerable people in copenhagen. Consisting of homeless hostels, heating rooms, shelters for mentally vulnerable, places for activities, crisis centres, shelters for young people, places for social relations and places for sport.
The network shows the importance of sundholm because of the large concentration of institutions to this vulnerable group.

Source for list:
http://fuckinghjemlos.dk/et-sted-at-sove/







Nolli map

The Nolli map shows that in contrast to the perceived public and private division Sundholm actually has some of the most open, porous fabric of the area.

1. The perceived disconnection as experienced from the university.
2. Picture taken from university facing towards Sundholm

Sundholm feels like an isolated, closed off island. This is especially the case as you walk along the main boulevard on the university campus. The big road inbetween the two area's forms a first blockade. Secondly, horizontal routes don't allign with horizontal routes within Sundholm, further increasing the unaccessiblityt of the area.

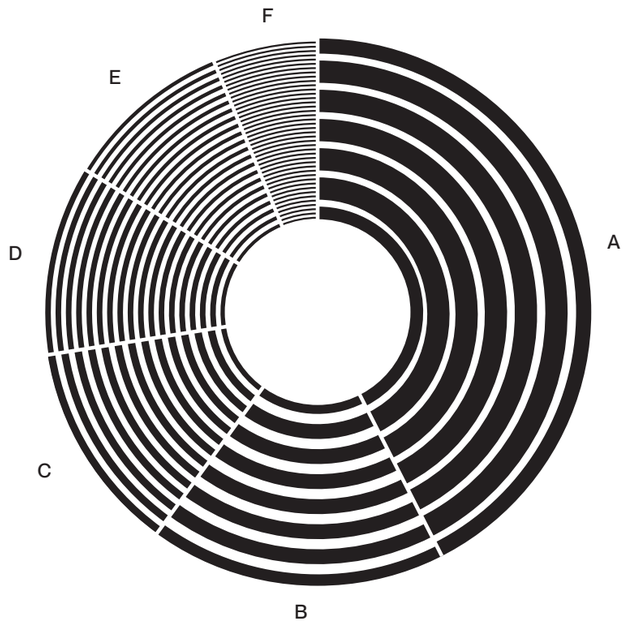
03. **P1 SLIDES**

Re-Imagining social space

Miguel Borst 4886356
P1 Presentation 7-11-2024
PD: Henk Bultstra
TD: Sien van Dam



“We are doomed...”



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











“How might we **imagine a hybrid public condenser** *for* **an exhausted and heterogeneous community** *in order to improve* **the social spaces and relations** *in* **Sundholm** *?”*

Perceived

Conceived

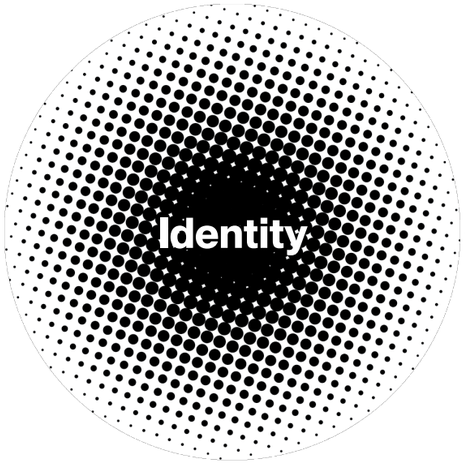
Lived

Social Space

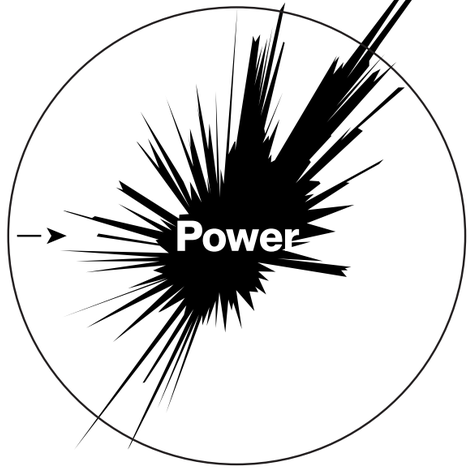
“The public condenser”

Emphasizing relation between design and how we relate, how we produce social space

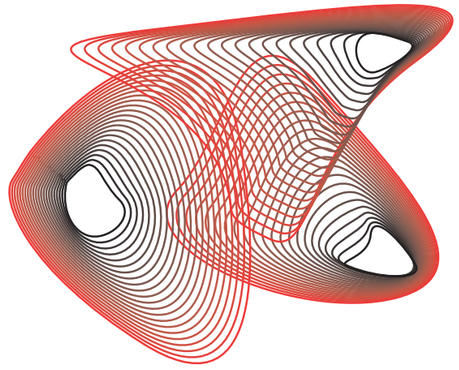
Capacity to Re-imagine the social

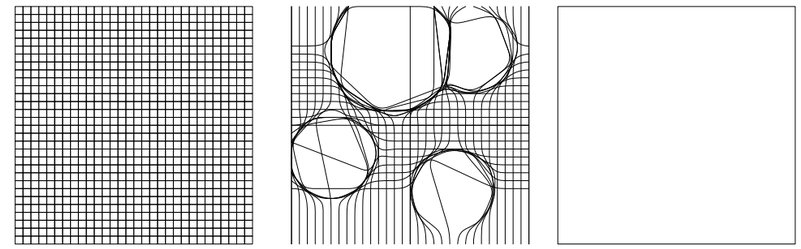


Perception
Representation
Expression
Acknowledgment

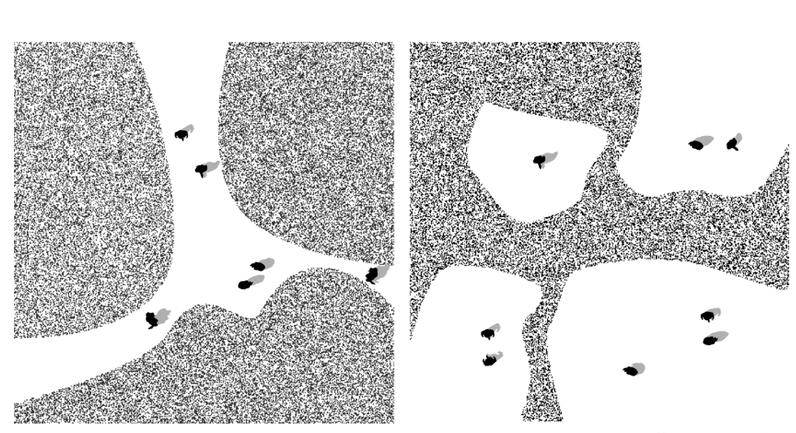


Exchange
Dynamic
The Powerless
Empowering





Striated Hybrid Smooth



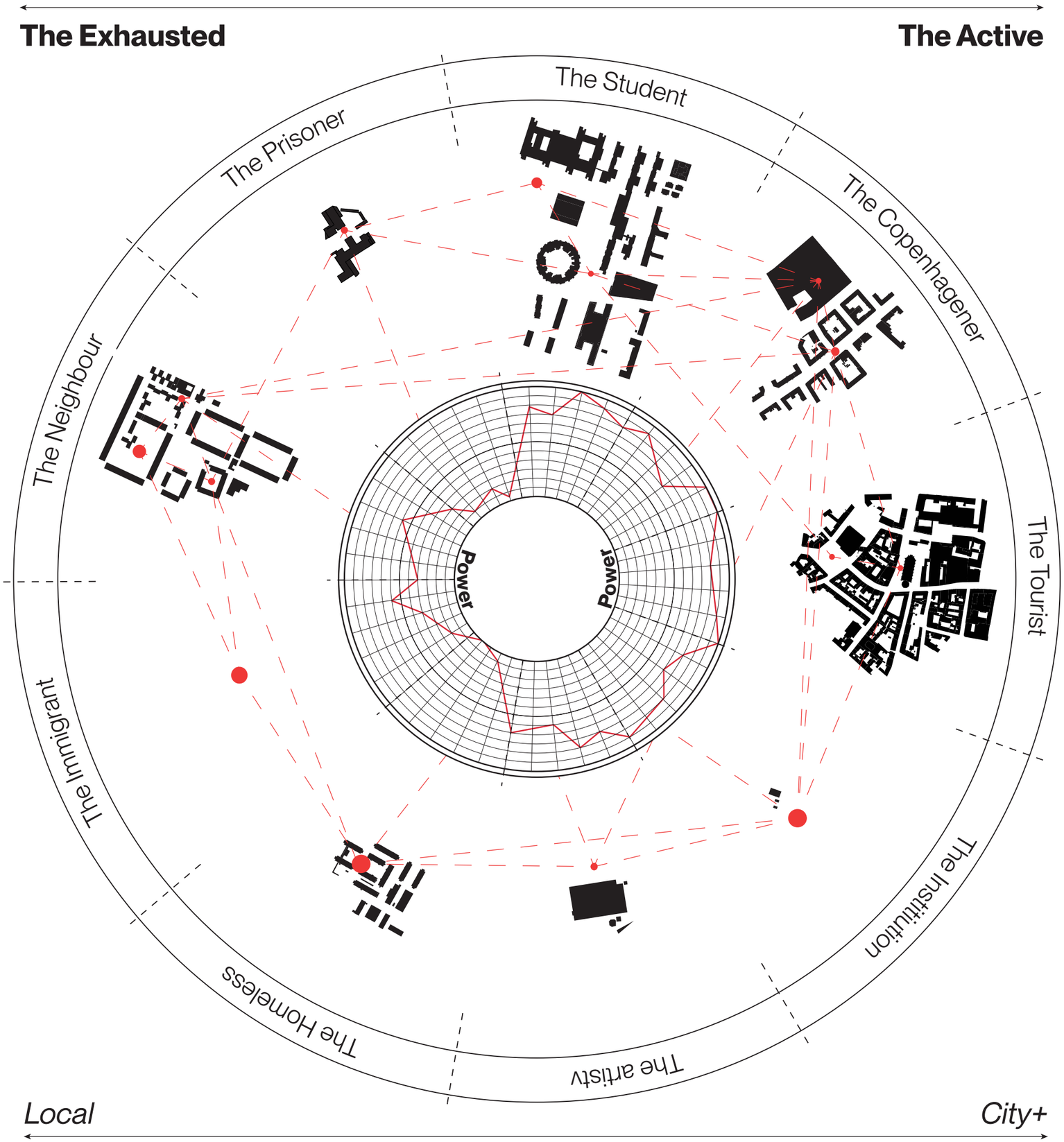
Integration Segregration



Hybrid Social Space

“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)

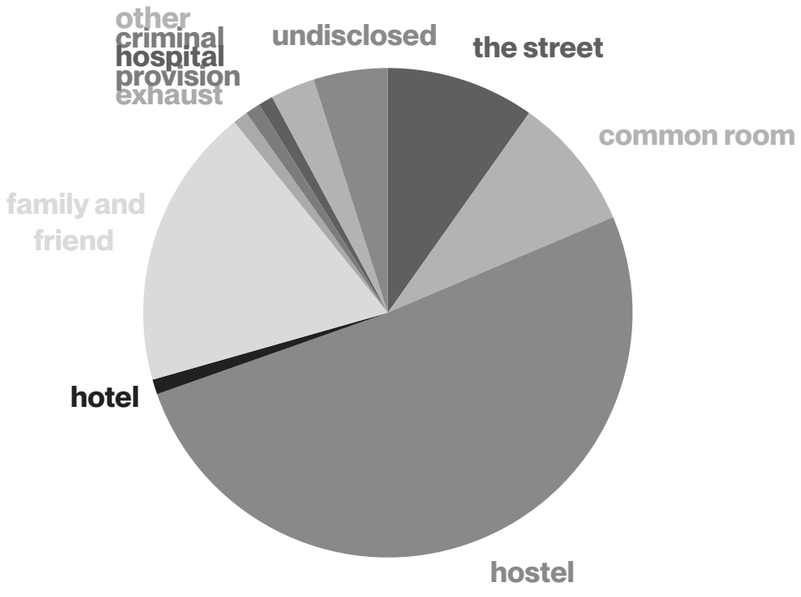


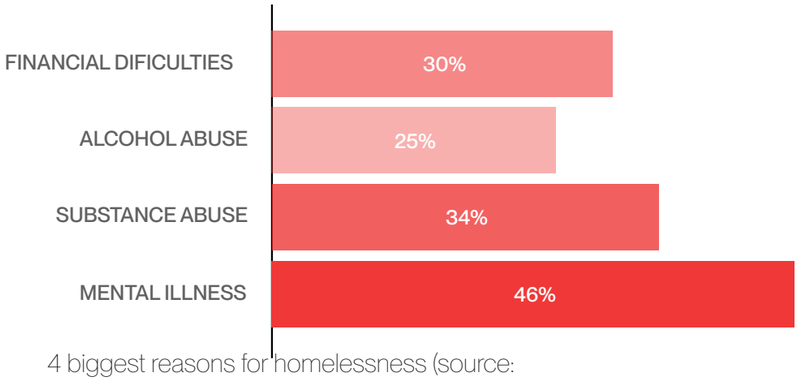
The Homeless

After a two year period of decline, the number of homeless people in Denmark is once again growing.

4998 homeless people in 2009
to
5789 homeless people in 2024

There are **2776** homeless in the capital area
This is **46%** of all homeless people in Denmark
41% of them has been **homeless longer then 2 years**

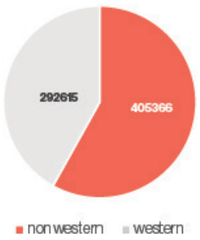


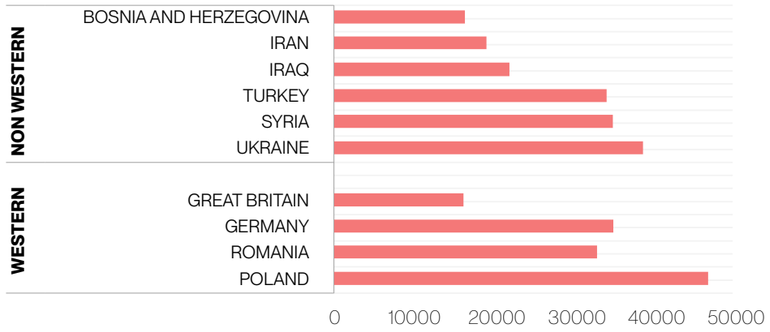


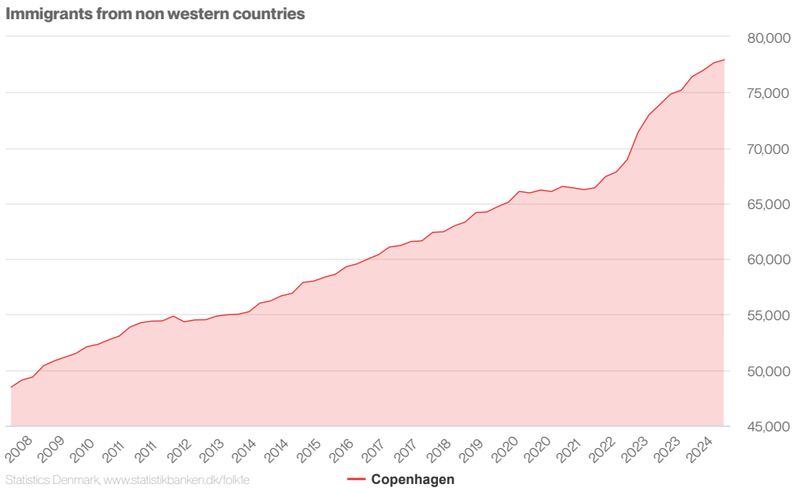
4 biggest reasons for homelessness (source:

The Immigrant

9,8% of the whole of danish society
14,4% people from non-western countries in capital region
25,9% of people in Copenhagen have a non-western background







Ghetto policy targeting Non-Western immigrants by de-fining an area to be a ghetto when it has more then 50% non-western immigrants.

Hørgården 52.1% non-western immigrant
Expansion of the package passed in 2021 to have not more then 30% of non-western immigrants in any Danish “housing estate”..

The Neighbour



Social housing
Institutions

the area constist mainly out of **social housing** from the mid 1960’s, the Urban Planen

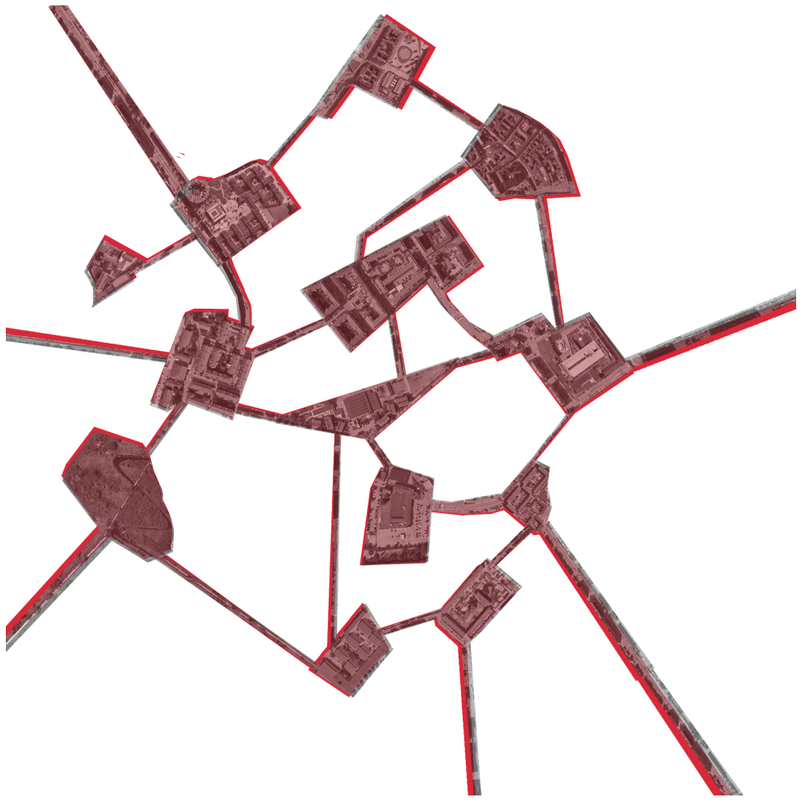
In 2018 & 2019 Hørgården defined as Ghetto, now called **a Parallel Society**

2,23% convicted of crime in 2019

From Island



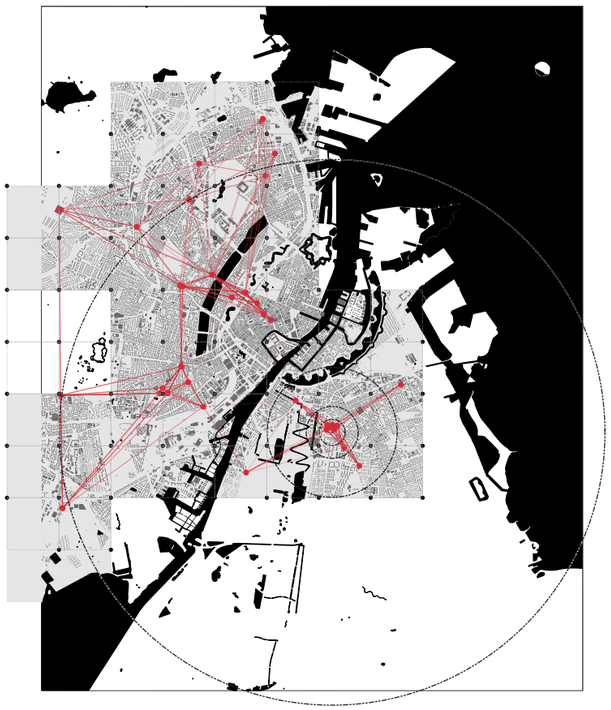
to



Archipelago



Sundholm completely isolated from walking or running routes



Fostering and enhancing the position within existing social networks
e.g. homeless and mentally vulnerable people

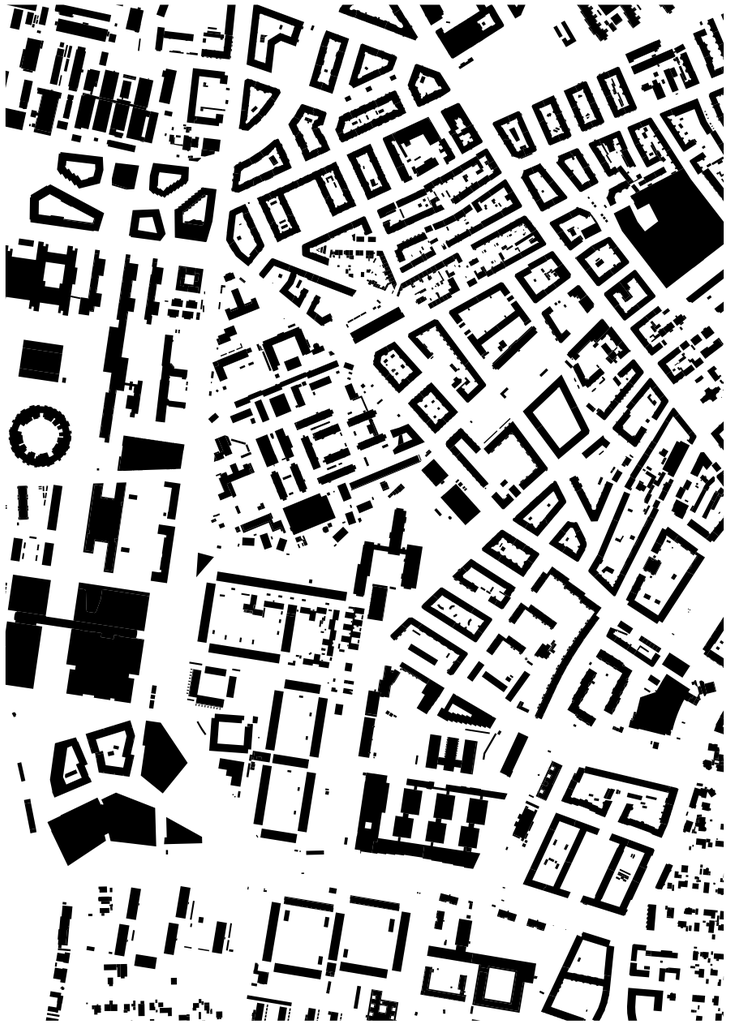
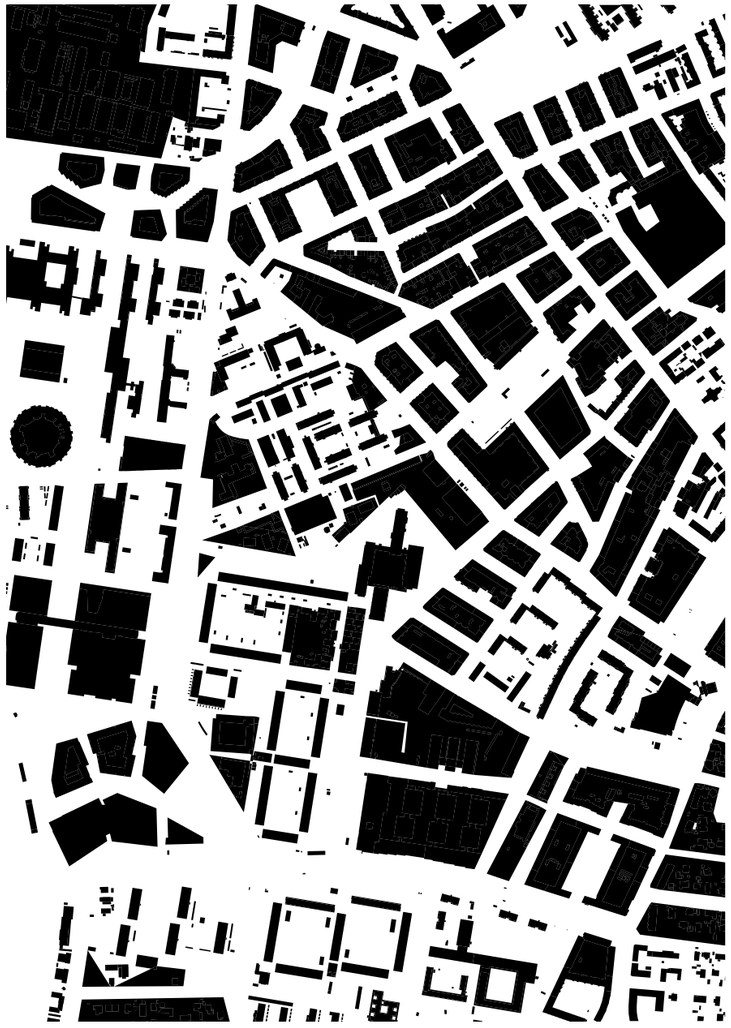
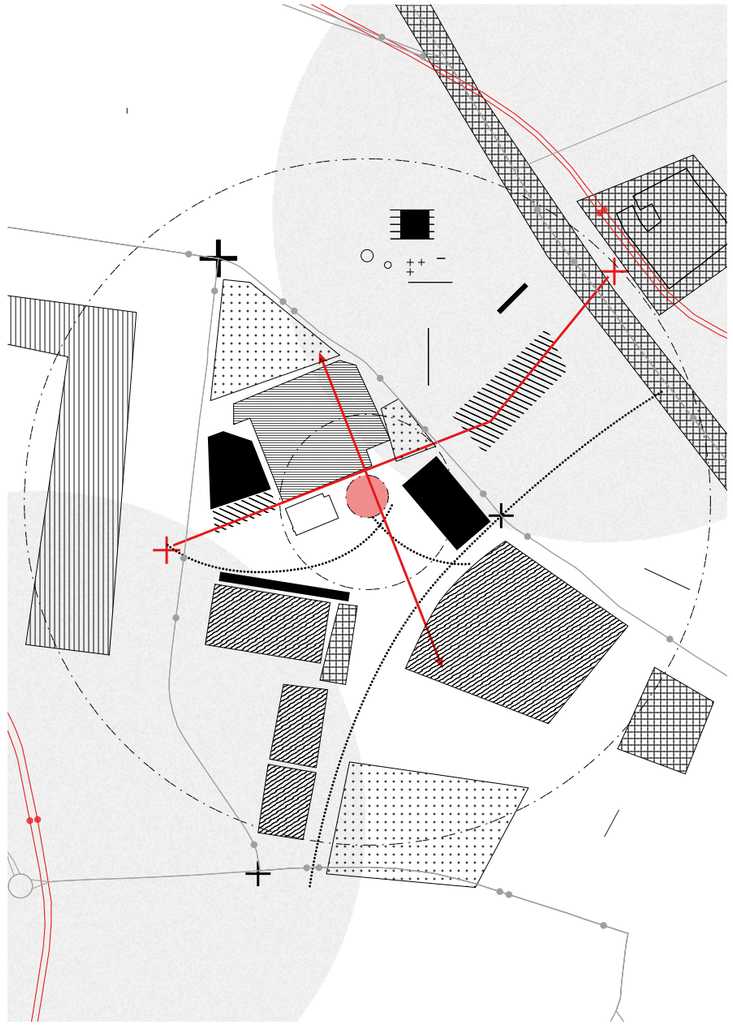


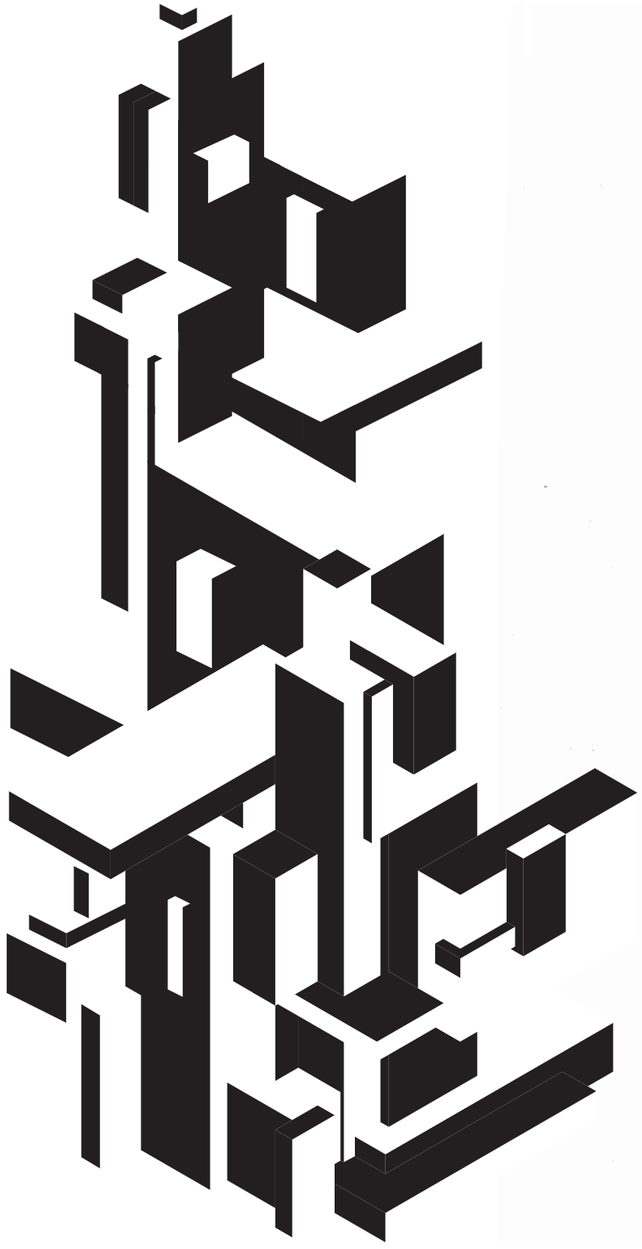
Figure Ground Map



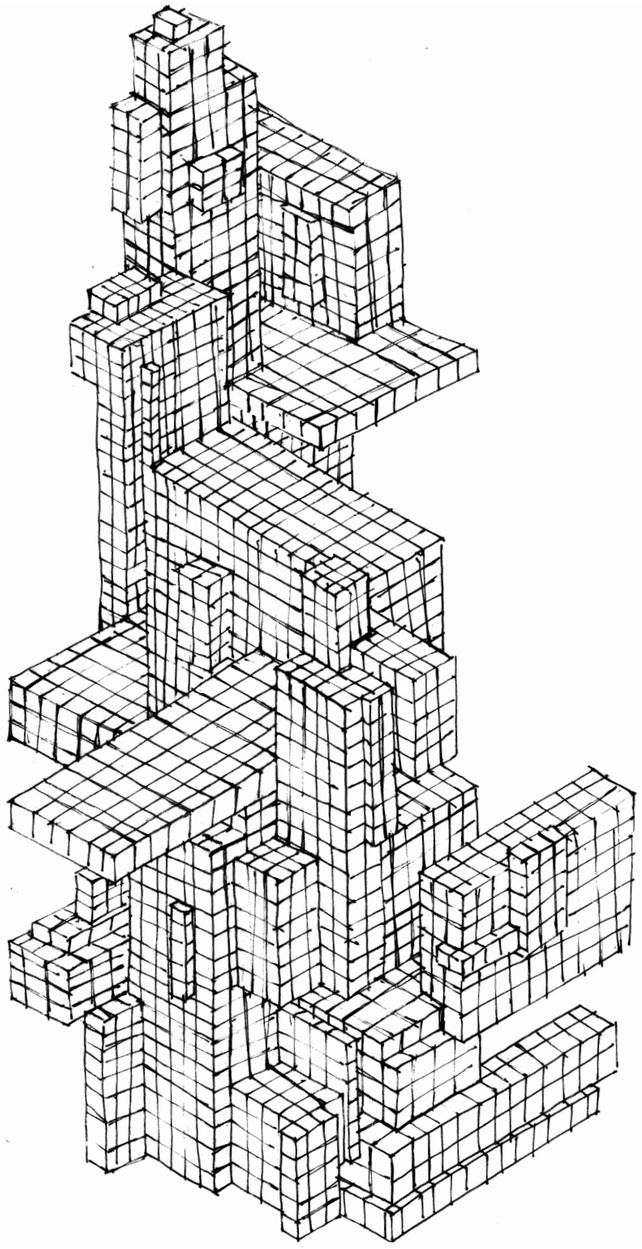
Nolli Map



Site



The public condenser re-imagining how we relate through a composition of social spaces



The condenser as **a framework** ensuring through re-imagination:
social sustainability
environmental sustainabillity
sustainable future
overall healthiness

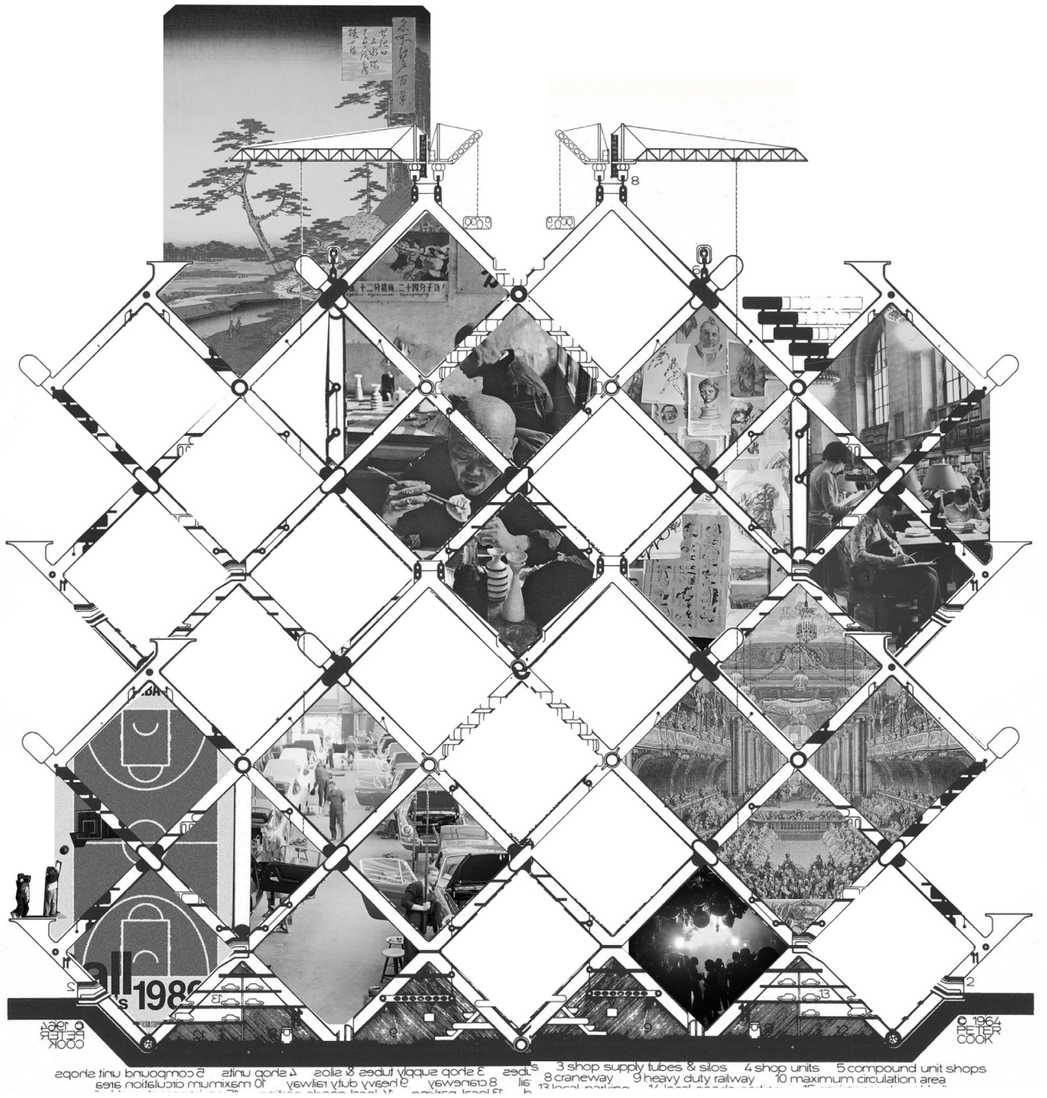
Green & Blue spaces
the everyday
garden, waterretention

Food
the everyday
dining area, shared kitchen, cafe

sport
the everyday
multifunctional playcourt

The workshop
the everyday
workplaces, community, recycling

The free space
the everyday
indeterminate space,



The library
the everyday
studyplace, reading spots

Art
the event
exposition spaces

The stage
the event
multifunctional space, public space as a stage

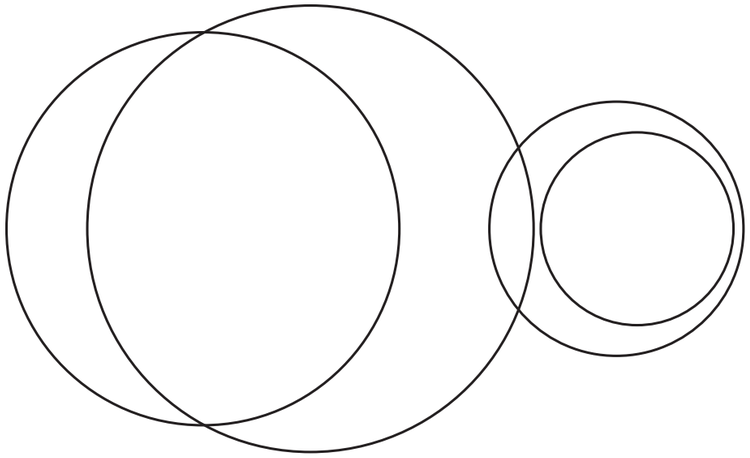
The musicvenue
the event

Outdoor



Potential qualitative program of the condenser
that fuels both the everyday and the event
a program that reshaping power & identity

04. Q2 Research



04.1 **Sustainability research**

left to right: Durability, Sustainability, Conservation and Optimization

Focus

The focus of my project lays on the spheres of durability and sustainability. A special care is taken to design for the lifespan and multiple use-cycle. This sphere to me, is closely connected to the social, the social is also always in movement. Depending on the changing of the community the ability should be able to adapt to this. To design for the changing of society is therefor designing with an awareness to the possible life-cycles and how the process is constantly changing.

This to me is closely related to the concept of the exhausted. Something is exhausted as when all posibility is lost, when it has reaches the end of it's lifecycle.

The sphere's of optimization and conservation in my eyes are closely tied together and enhance each other. Through optimization the overal use of materials, energy and so on is limited.

Elements of Sustainability

Secondly the focus is on the aspect of Lifestyle & ethics and use and consumption. The idea behind it is that in the end to become truly sustainable our lifestyle has to change. A building can play a role in this, challenging our norms and beliefs. Offering alternative lifestyles, more sustainable approaches.

In line with the overarching thought of Lefebvre, to change society, you need first a different space. This thought can also be extended into the realm of sustainability. To change our lifestyle and ethics, we need a building, spaces that provoke and challenge our lifestyle and ethics, our modes of production and use.

The exhausted social & sustainability

For my project a radical approach to social as leading for sustainability is used. The main departure point being that a public building is in the first and foremost place a building for our human society.
It is a building for humans, so if it doesn't fit those humans it can never be sustainable. No matter how sustainable the materials, the ammount of green energy or added biodiversity. If a building does not serve society, humans, it will eventually be destroyed. The first step towards designing a sustainable building is therefor a humanist approach to designing.
The exhausted is a way to indicate the complete lack of possibility. This is something that the public condenser can adress.

The social = change

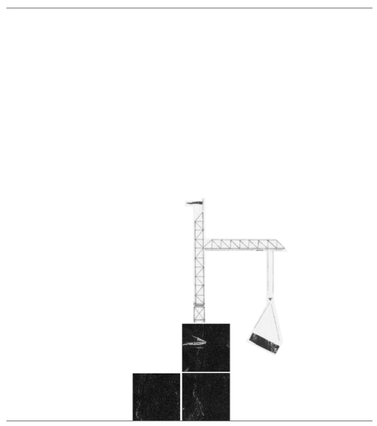
One of the most important aspects of the social is that it is not static, but rather ever changing. This raises the question of how to guide this movement. How to facillitate change through something that is somewhat permanent itself.

A resilient structure for change

An important part of both the sustainability question and the social is thus how
In my eyes there are two opposites of how to approach the design of the structure which allows the development of change over time. Either the bunker approach or the

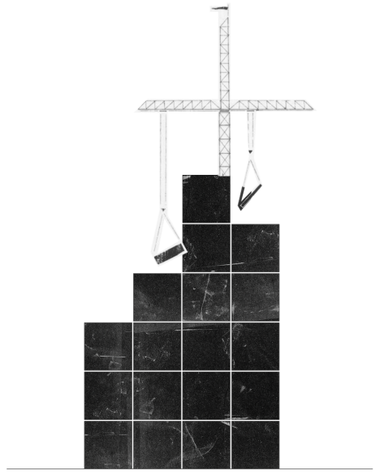
A structure for possibility

The exhausted is defined by a lack of possibility. To prevent becoming exhausted in itself the building must attempt to facilitate possibility to the best of its ability. In this sense, to design for potential is the most sustainable way of designing. Because this prevents the building itself from being exhausted and therefor having to be demolished.



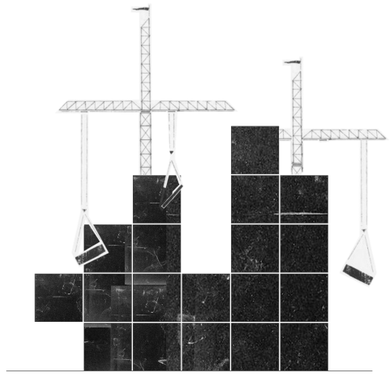
Birth of a building

For me, the lifespan of the building should reflect the lifespan of society. If, as Lefebvre suggests, every society produces it's own space, it's own cities, its own buildings. When society change's a building has to change with it, or make place for new buildings.



Growth

As the demand changes the building grows with its community. Expanding and attracting new people, new groups. Becoming home to different social communities.



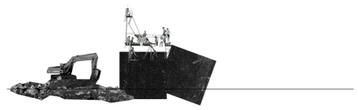
Change

The ability for a building to change is vital to keep in touch with the ever changing social dynamics of its environment. The building should have elements that can be reconfigured as the needs and the social changes.

This change should be possible on different scales, from the addition personal touches to an office, to the expansion and shrinking of the building

Important aspects to consider are in that sense:
- Interactive design
- Flexible structure
- Multiple use

DESIGN FOR POSSIBILITY



Death of the condenser

Perhaps the most overlooked part when considering the sustainability of a building. If there is any guarantee with any building, or life for that matter, is that it will eventually die.

I want to look into how this building dies, what part remains and what rots away. How can the building perhaps even be completely dismantled.

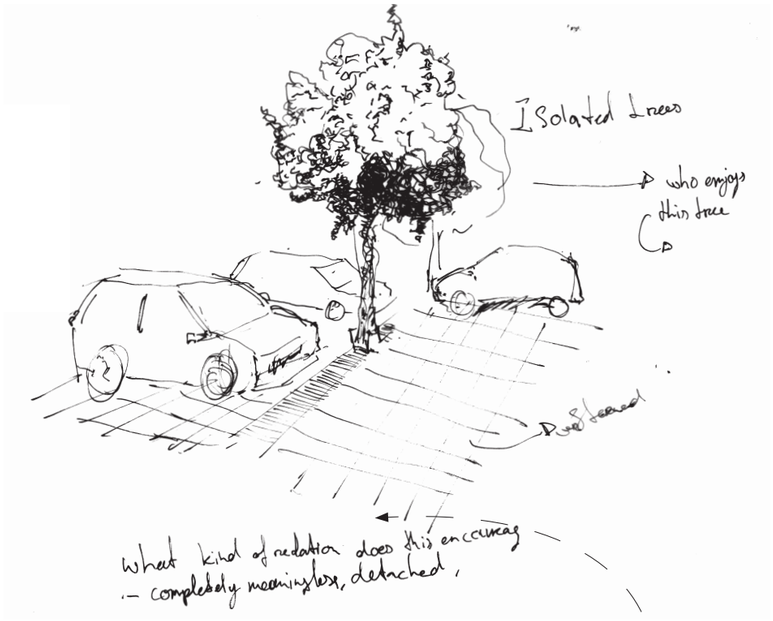
Important aspects to consider are in that sense:
- biobased design, biodegradable design
- Architecture of dismantling
- Circular desing
- Architectural ruin

Reshaping relations with fragmented nature

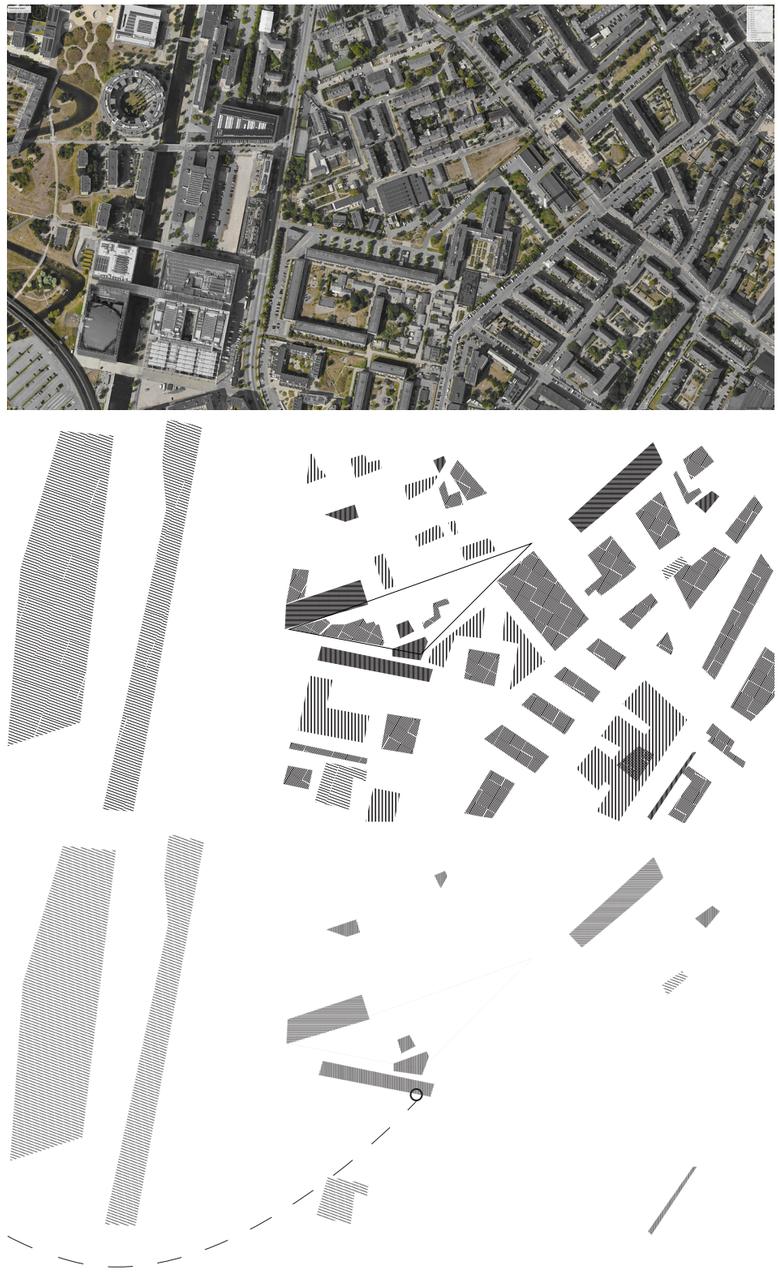
While the area of Sundholm doesn't necessarily feel like it is lacking in greenery there are quiet a few problems with the type and quality of greenery. The sattelite image highlights the greenery in the area. It gives an impression of an area with greenery in abundance.

The second analysis carried out however already points out a different image. Defining the different types of greenery. As becomes apparent through doing this analysis a lot of the greenery is actually private, only accessible for residents. The public or semi-public greenery is quit fragmented. Because of the fragmentation and lack of truly public greenery the relations that people can form to greenery is one-sided. Exhausted and needs to be addressed in the public condenser.

The last drawing shows the actual truly public greenery. However, most of the green spaces are degraded and in bad shape.

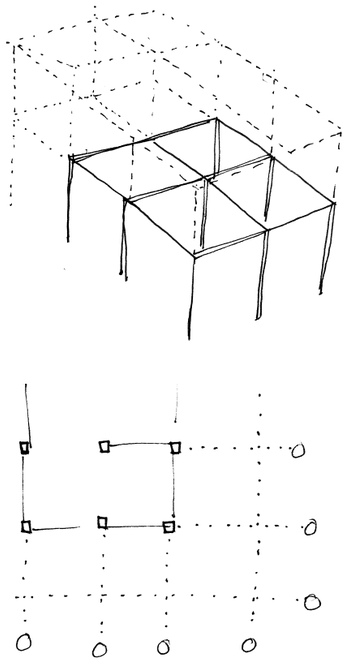


example of isolated, meaningless and fragmented greenery. Trees used to decorate a large parking area. While they do add a touch of green, the quality, level of isolation and lack of coherence to the area still make it feel out of place and useless.

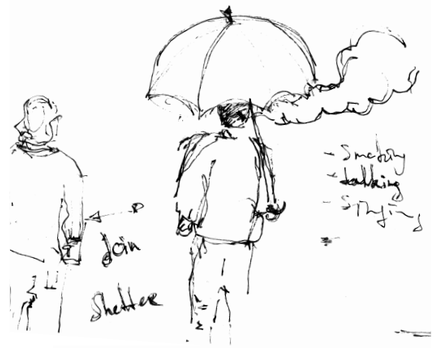


04.2 **Sustainable structure**

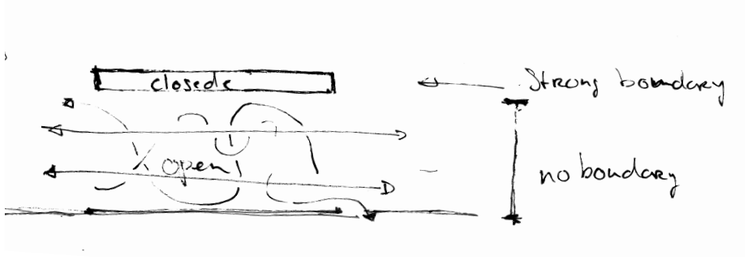












The bunker approach

The bunker approach can be seen as a way to facilitate change. In the sense that it is so rigid that you can do with it what you want. You can add to the side, build on top of it and the structure maintains. It is sustainable because it is so long lasting.

It is flexible in it's inflexibility. Because of it's solidity allowing for change. Its solidity could also be seen as a way to make sure that

Typical materials for such a strategy would be concrete, masonry or other stone materials. However, there are better sustainable biobased alternatives like rammed earth or hempcrete.

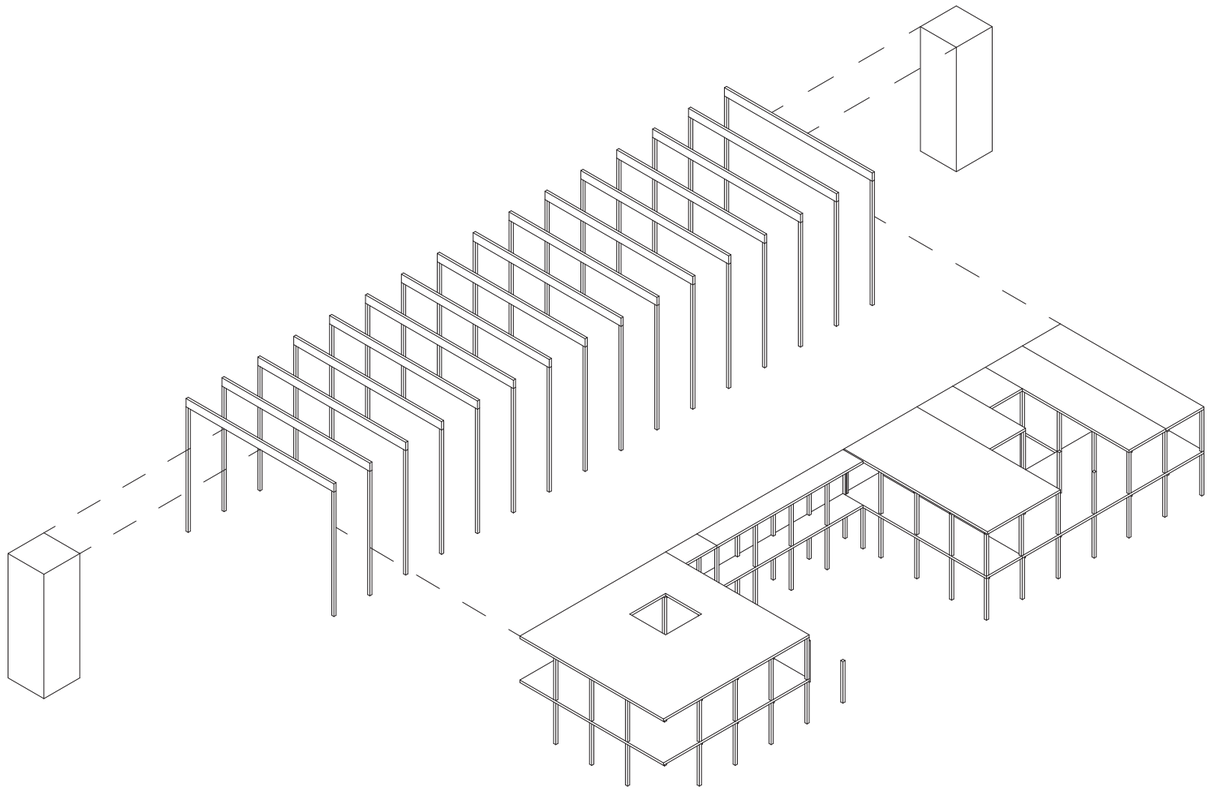
The grid approach

A grid structure also allows for a high degree of flexibility and adaptibility. Because of the repetitive grid, additions or changes are in such cases easily made.

The grid structure at the same time allows for a lot of change between the walls. An approach that has already been implemented by various architects and in various forms.

The umbrella approach

The umbrella could be another alternative for change. Giving unity while undeneath keeping the element of change. allowing for the possible to develop over time and space without any limitations.



resilience & sustainable structure

The public condenser as a structure that is resilient. Creating a new type of community while at the same time allowing for change, manupulation over time.

04.3 **Programmatic research**

Public data

Data showing when different functions are active and when they are in use.



Haveforeningen Vennelyst, ge-meenschappelijke moestuinen



Cobe library



Dagli supermarket



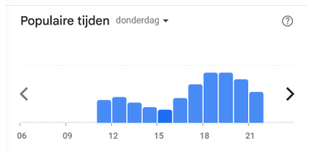
Kvyckli supermar-ket



Mad koffee, ama-gerbro



Pure gym amager ost



Cavalino, Restau-rant amager ost



Træningspavillon amager faelled, buiten gym



Busstation< Sønderbro Hos-pital



Byhaven på Sundholm, public garden



Legeplads Sund-holmskvarteret playground



Pizzeria sardena, restaurant



Amager centret, shopping mall



Amagerbro, Metro



GJK volleybal court



Musik torvet



Club mambo, mu-sic venue centre



Universitet bib-lioteket, closes early! and closed in the weekend



Amagerbro, Metro



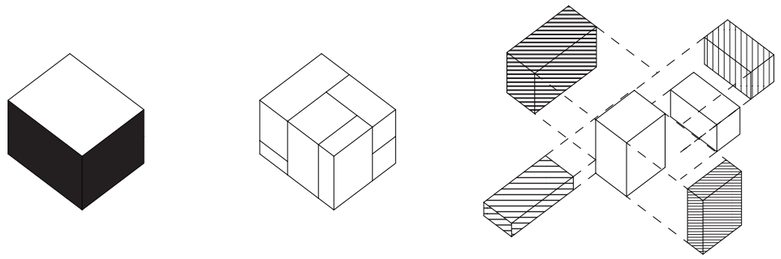
Awesome play-ground



Awesome play-ground

Summary of social interaction generated by program

For different categories of functions



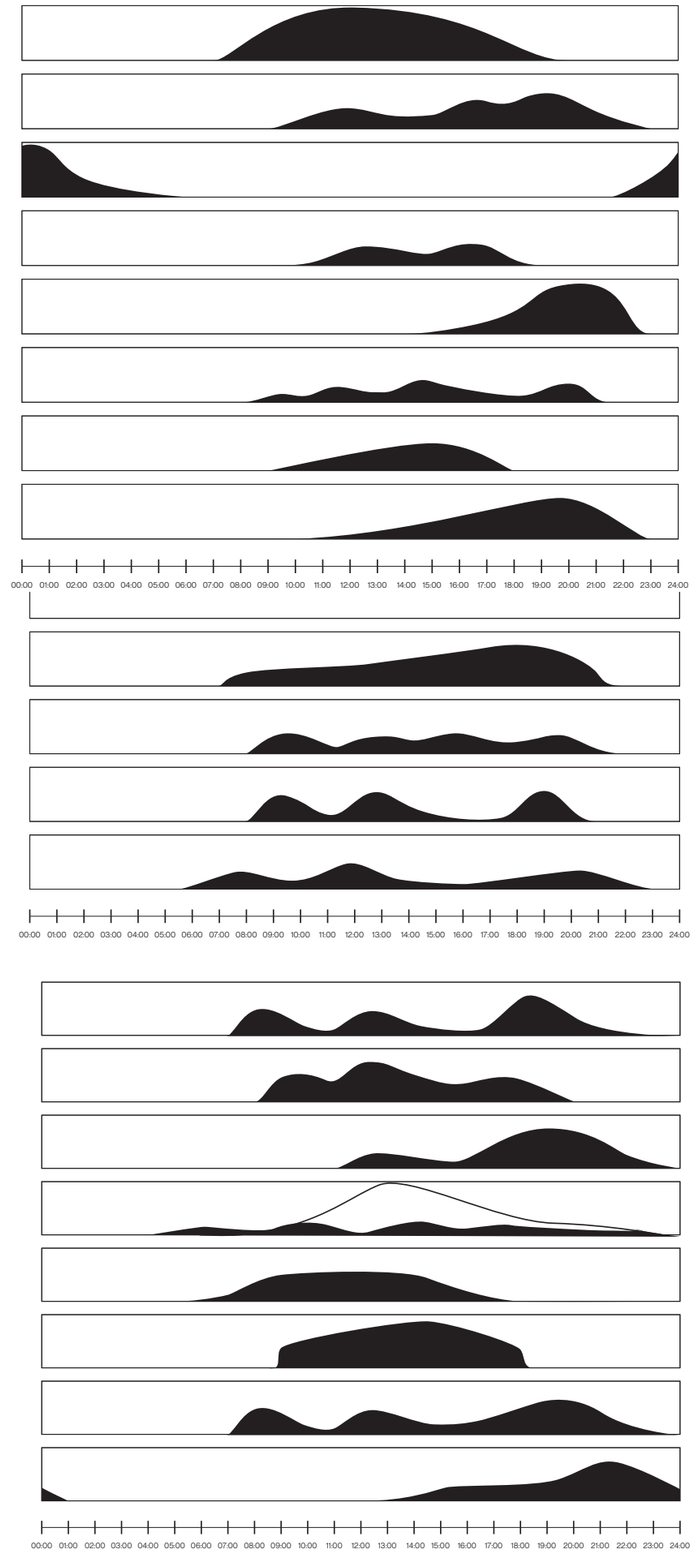
Hybridity

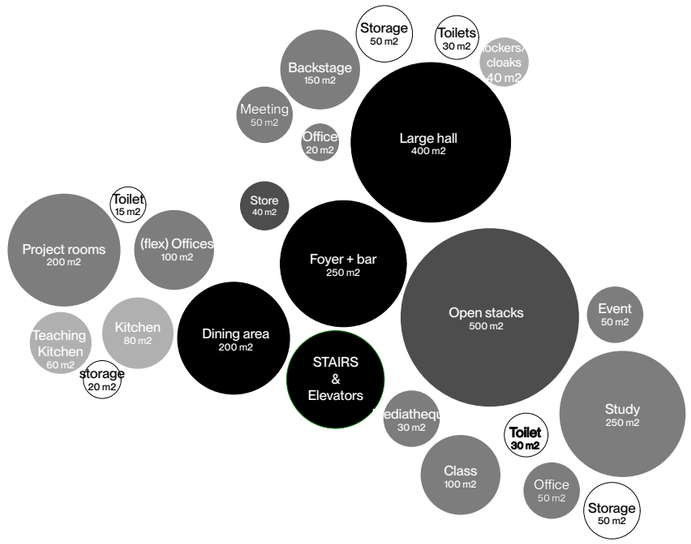
Creating a hybrid program, that consists of determined versus undetermined spaces.

Frequency	exchange	Diversity	Size	**Culture**
The everyday	High	High		Library
Event	Low	Medium		Theatre
Occasional	High	Medium		Nightclub
event	Medium	Medium		Exhibition space
event	Medium	High		Music venue
Everyday	Medium	medium		Studio's & workshop
Occasional	Low	medium		Bookstore
Occasional	Low	High		Cinema

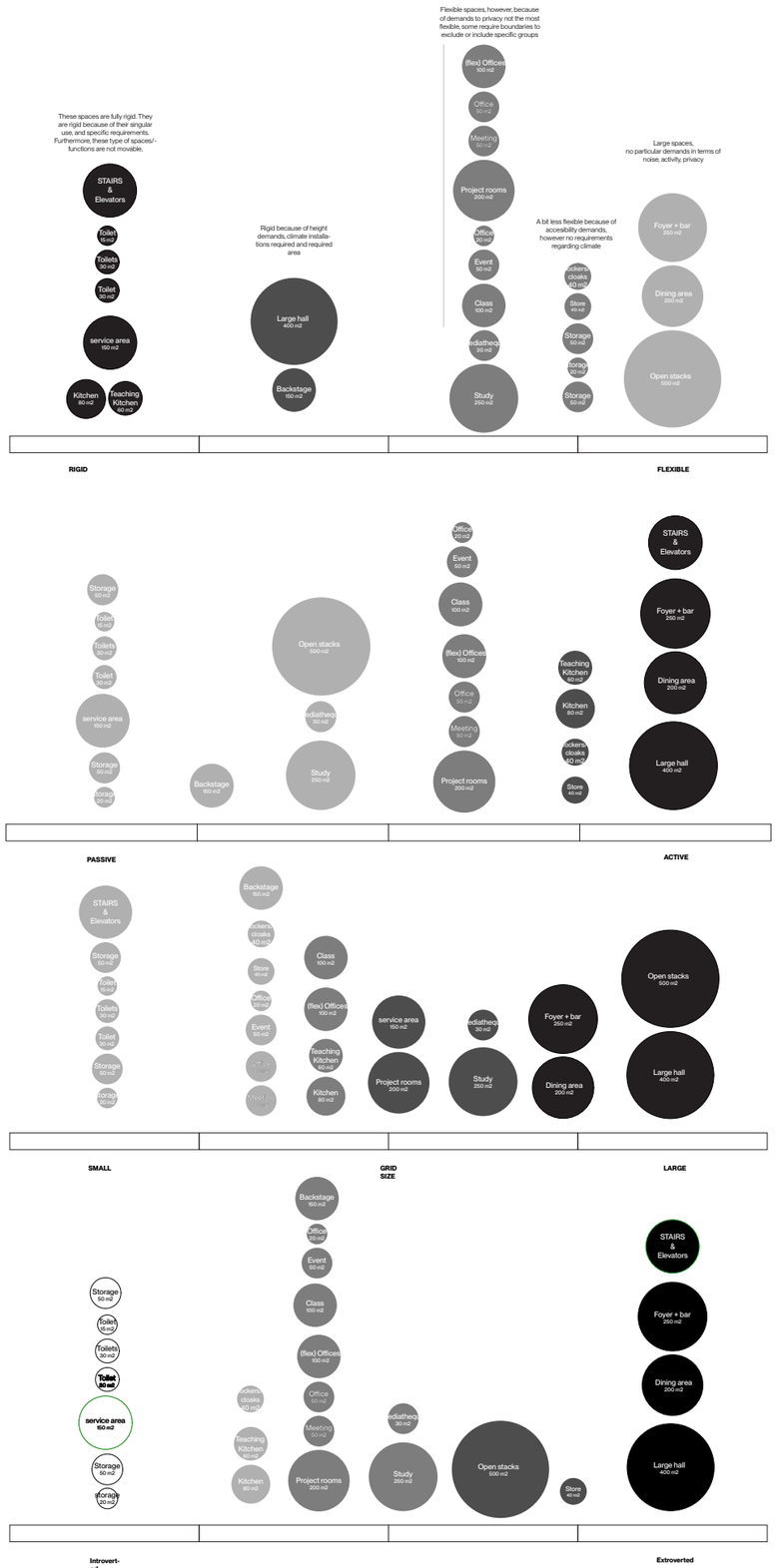
Frequency	exchange	Diversity	Size	**Sports**
Occasional	Low	Low		Gym
Occasional	High	Low		Playground
Occasional	High	High		Sportsfield
Occasional	Medium	Medium		outdoor gym

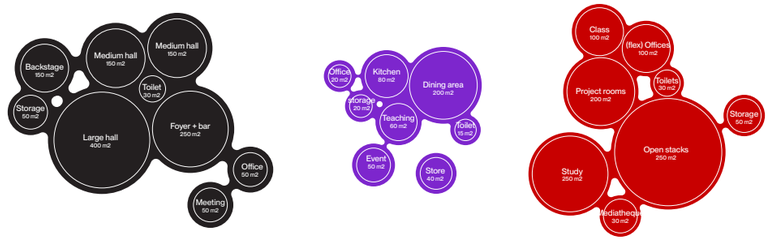
exchange	Diversity	Size	**FOOD**
High	High		Communal kitchen
Medium	Medium		Coffee shop
low	low		Restaurant
High	medium		Kitchen Garden
low	Medium		Baker
medium	High		Market Shop
medium	High		Dining area
High	High		Bar

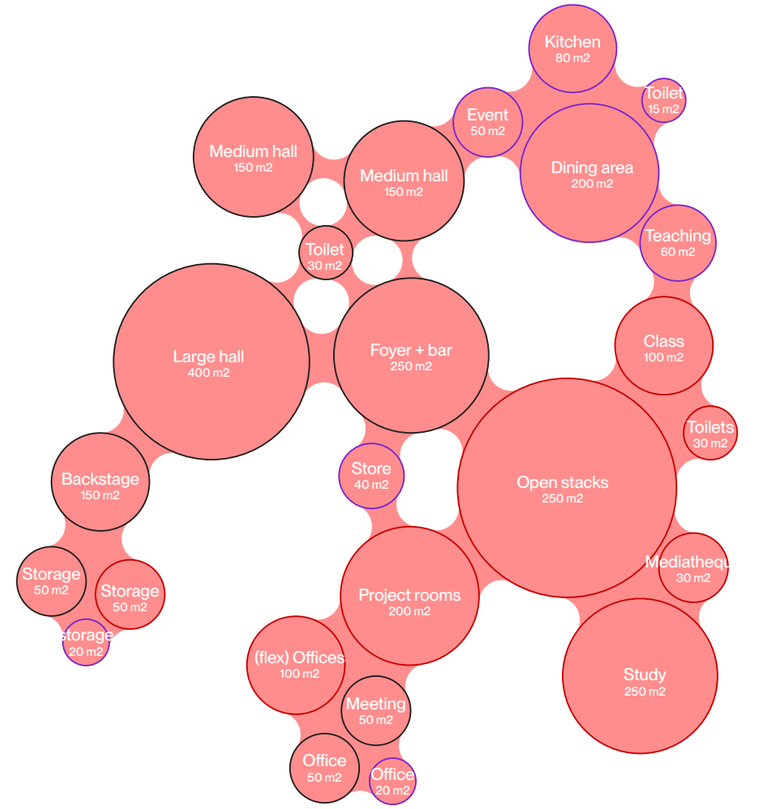


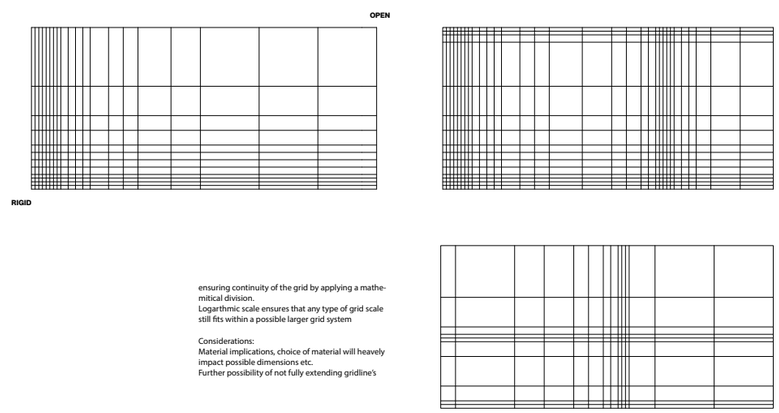

Storage 50 m2
Toilets 30 m2
Backstage 150 m2
Meeting 50 m2
Office 20 m2
Large hall 400 m2
Store 40 m2
Toilet 15 m2
Project rooms 200 m2
(flex) Offices 100 m2
Foyer + bar 250 m2
Open stacks 500 m2
Event 50 m2
Teaching Kitchen 60 m2
Kitchen 80 m2
Dining area 200 m2
STAIRS & Elevators
Study 250 m2
Class 100 m2
Office 50 m2
Storage 50 m2
storage 20 m2
Toilet 30 m2


service area
150 m2


These spaces are fully rigid. They are rigid because of their singular use, and specific requirements. Furthermore, these type of spaces/-functions are not movable,
Rigid because of height demands, climate installations required and required area
Flexible spaces, however, because of demands to privacy not the most flexible, some require boundaries to exclude or include specific groups
A bit less flexible because of accessibility demands, however no requirements regarding climate
Large spaces, no particular demands in terms of noise, activity, privacy
RIGID
FLEXIBLE
PASSIVE
ACTIVE
SMALL
GRID SIZE
LARGE
Introvert-ed
Extroverted


Backstage 150 m2
Medium hall 150 m2
Toilet 30 m2
Storage 50 m2
Large hall 400 m2
Foyer + bar 250 m2
Office 50 m2
Meeting 50 m2
Kitchen 80 m2
Dining area 200 m2
Office 20 m2
Storage 20 m2
Teaching 60 m2
Toilet 15 m2
Event 50 m2
Store 40 m2
Class 100 m2
(flex) Offices 100 m2
Project rooms 200 m2
Open stacks 250 m2
Study 250 m2
Mediatheq 30 m2


Kitchen 80 m2
Event 50 m2
Toilet 15 m2
Medium hall 150 m2
Medium hall 150 m2
Dining area 200 m2
Toilet 30 m2
Teaching 60 m2
Large hall 400 m2
Foyer + bar 250 m2
Class 100 m2
Backstage 150 m2
Store 40 m2
Toilets 30 m2
Open stacks 250 m2
Storage 50 m2
Storage 50 m2
Mediatheq 30 m2
Project rooms 200 m2
storage 20 m2
(flex) Offices 100 m2
Meeting 50 m2
Office 50 m2
Office 20 m2
Study 250 m2


OPEN
RIGID
ensuring continuity of the grid by applying a mathe-mitical division.
Logarthmic scale ensures that any type of grid scale still fits within a possible larger grid system
Considerations:
Material implications, choice of material will heavely impact possible dimensions etc.
Further possibility of not fully extending gridline's



The Eventfull

Watching
Expressing
Organizing
Meeting
Gathering

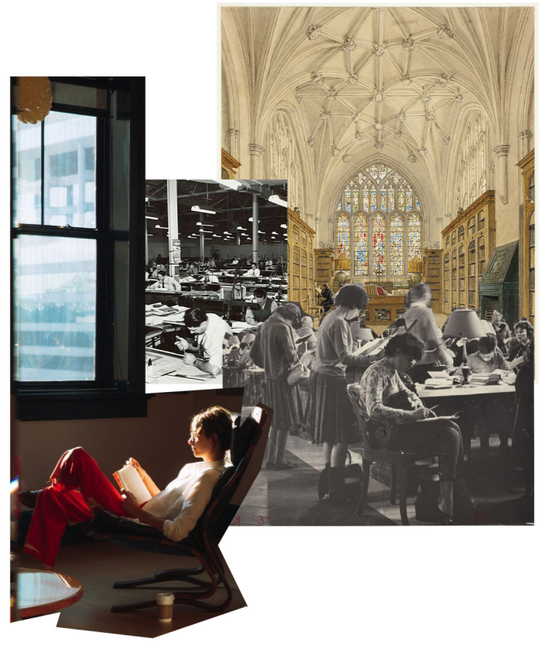
The event



The Foodhub

Meeting
Teaching
Cooking
Eating

Everyday



The Library 2.0

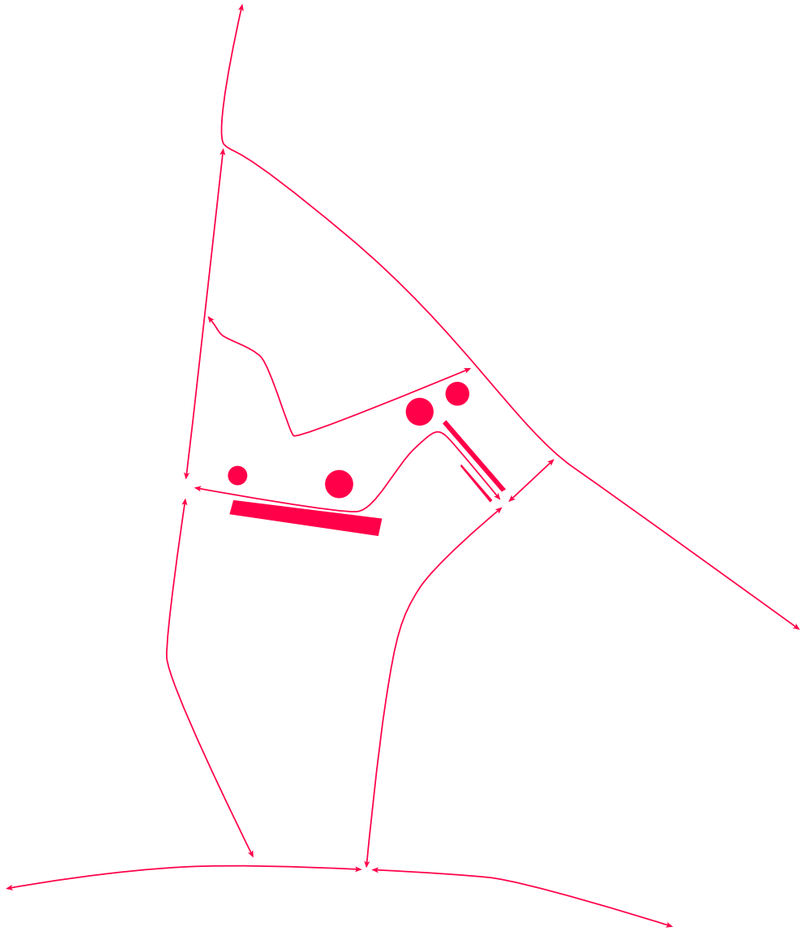
Working
Learning
Studying
Reading
Meeting

Everyday

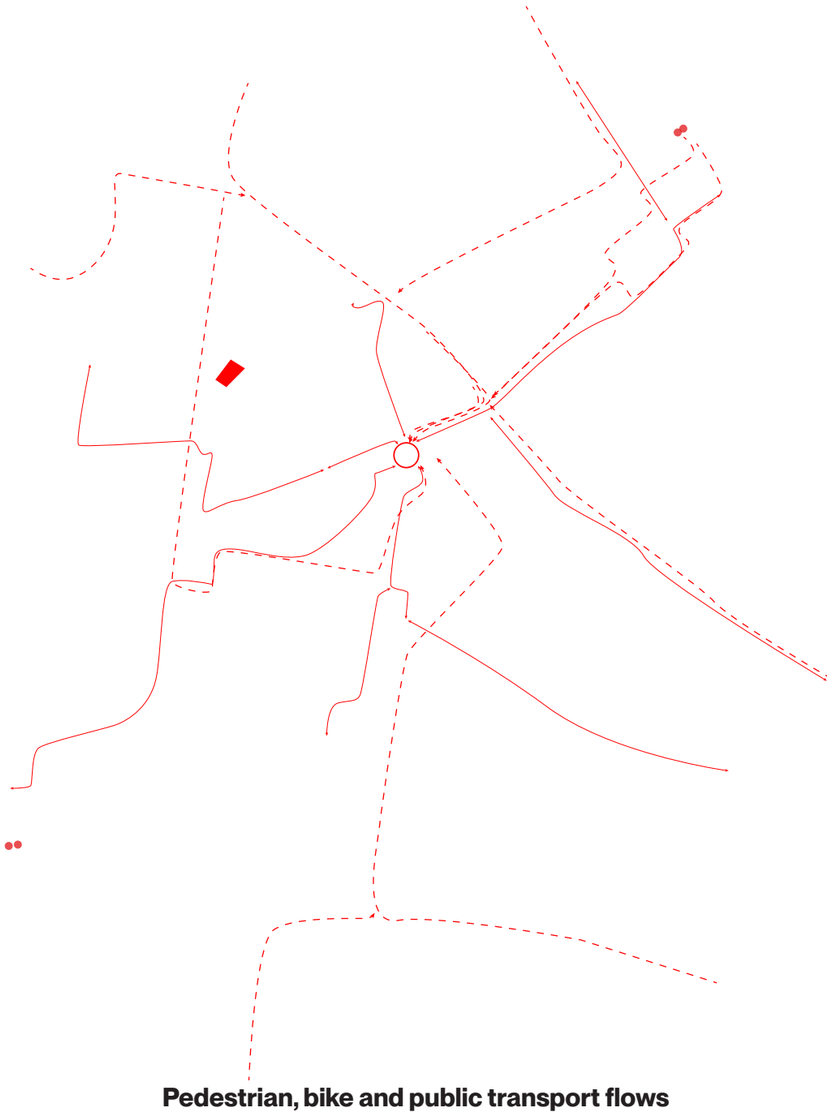
04.4 **Further site analysis**



Borders & boundaries in sundholm



Car flows

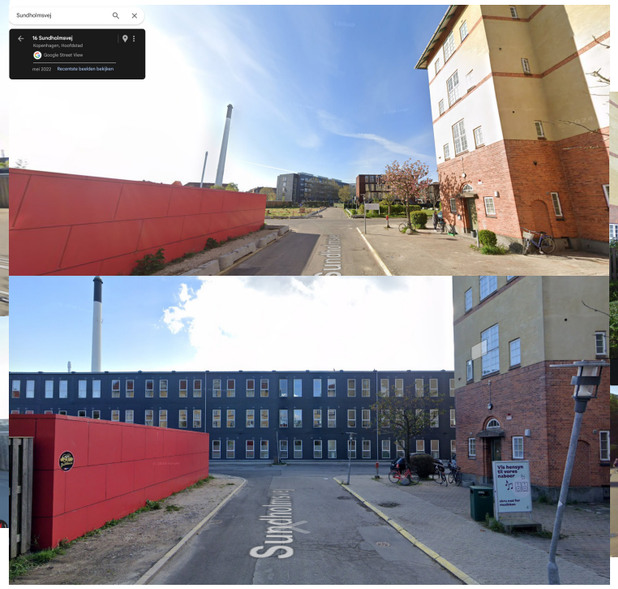


Pedestrian, bike and public transport flows

Everyday flows in sundholm









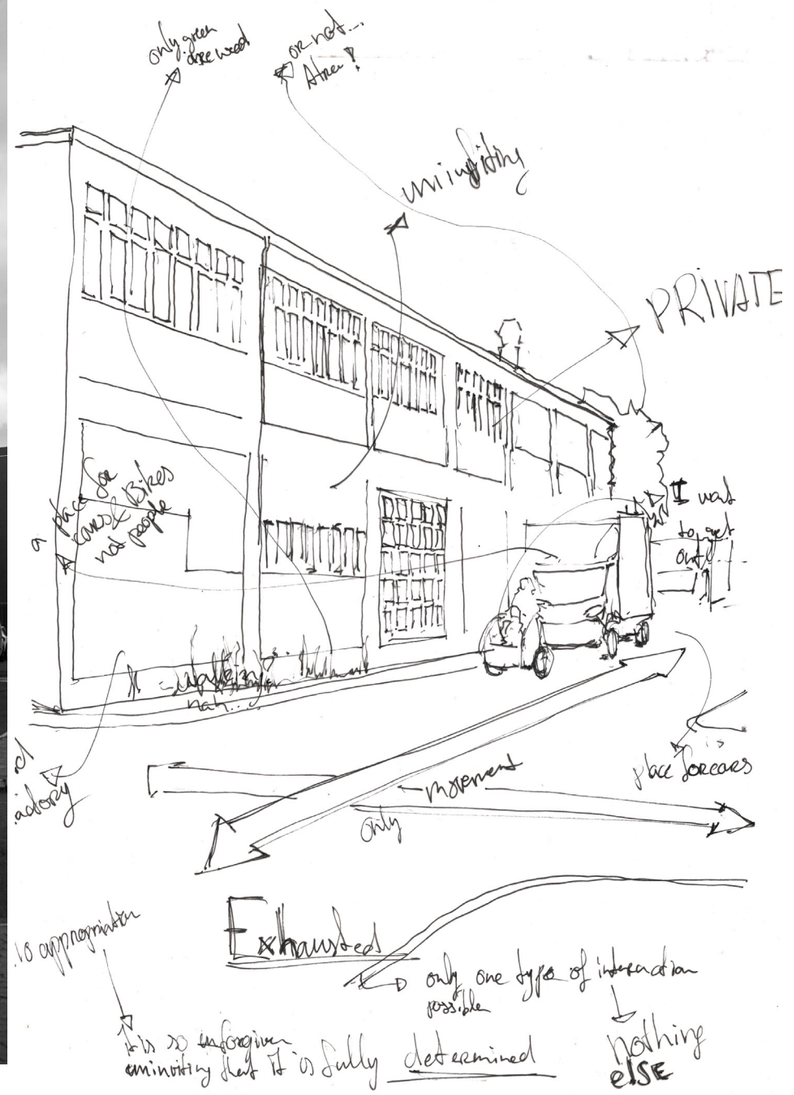
Comparison of how the public space has become more exhausted

The following screenshots show old connections that used to exist in sundholm and green spaces that have disappeared in the last ten years. The boundaries that have been created between Sundholm and the rest Sonderbro.

The exhausted urban spaces of Sonderbro

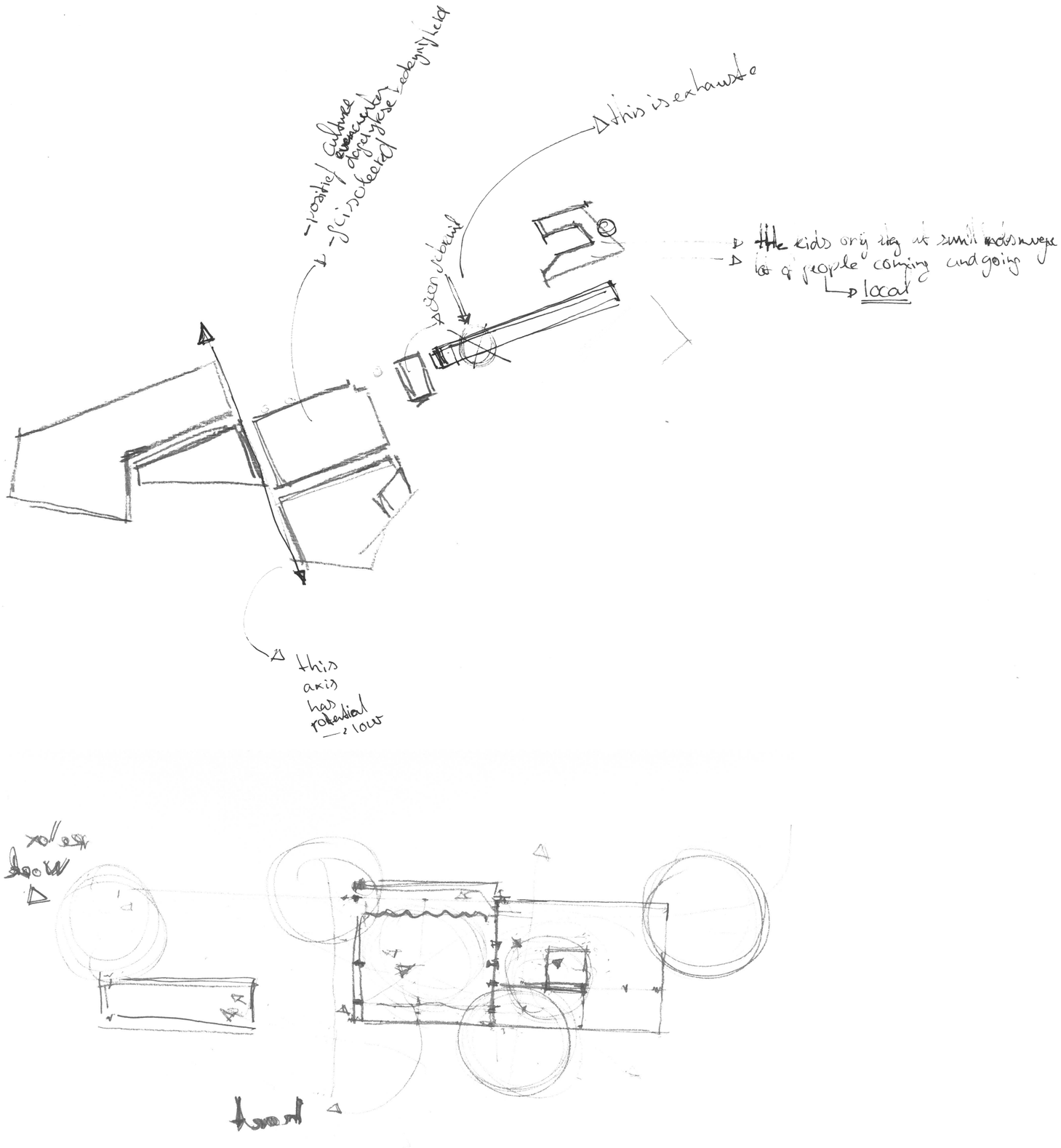
Using pictures of the fieldtrip, further analyzing and tryinig to understand why these places feel and are exhausted. Pinpointing the one-dimensionality of many of these public spaces.





Researching the hierarchy of disruptions needed

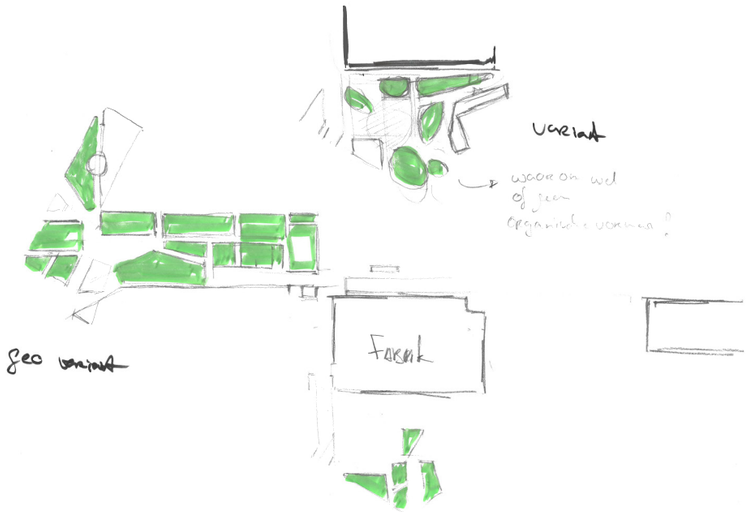
The floorplan is a part near the larger sundholmsvej, the circles indicating critical points that can or should be treated differently and to consider when trying to activate the surrounding context.

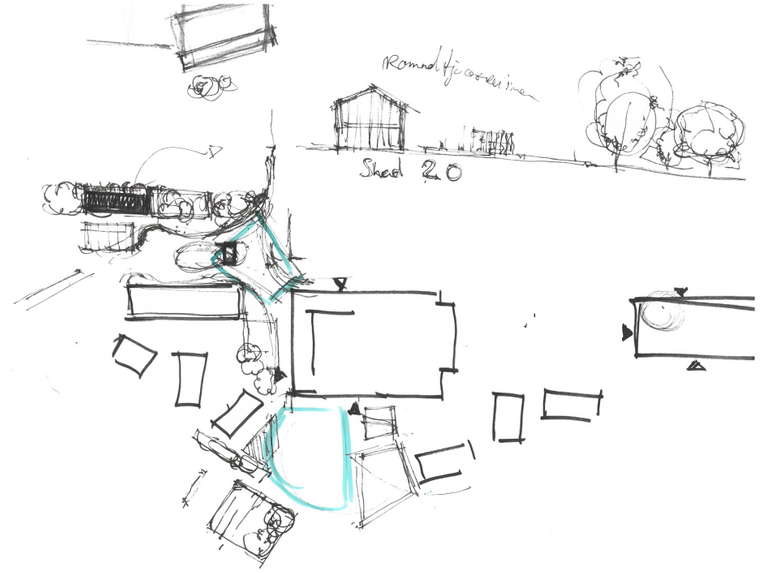


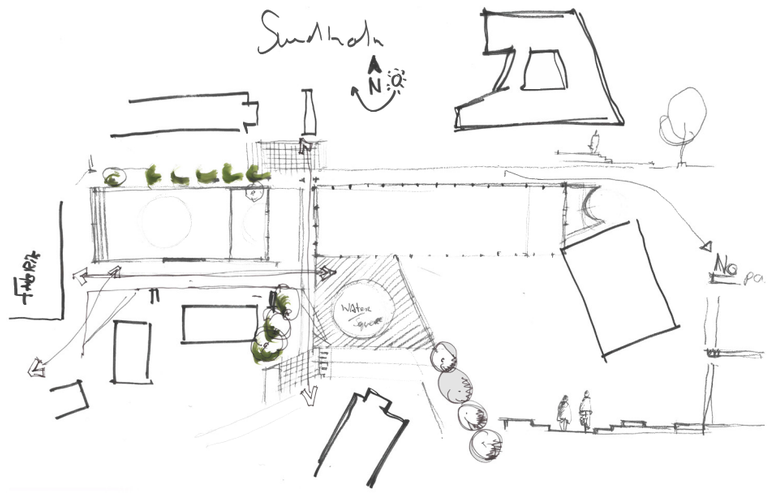
Iterations designing the masterplan

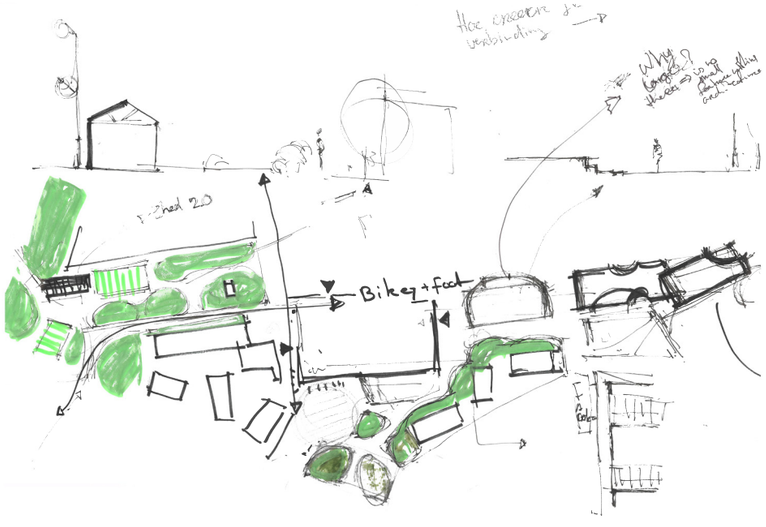
The drawings show the different designs that I evaluated while coming up with a route through the area that would connect the different exhausted public spaces and form a part of the different routings.

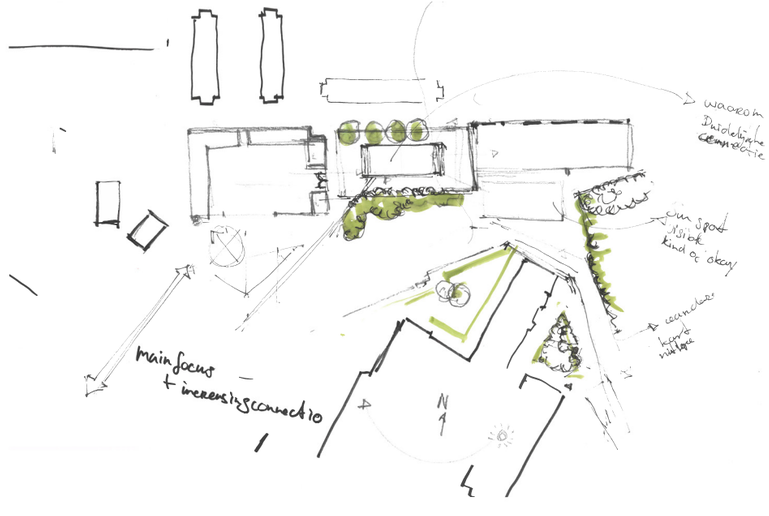
Looking at the larger interactions between the different area's but also considering how th

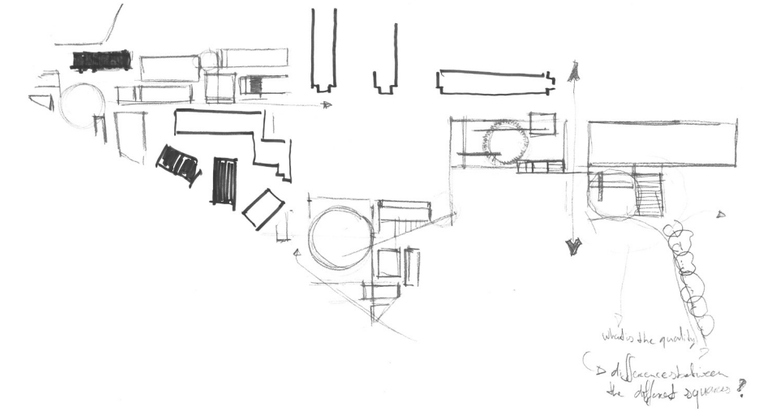




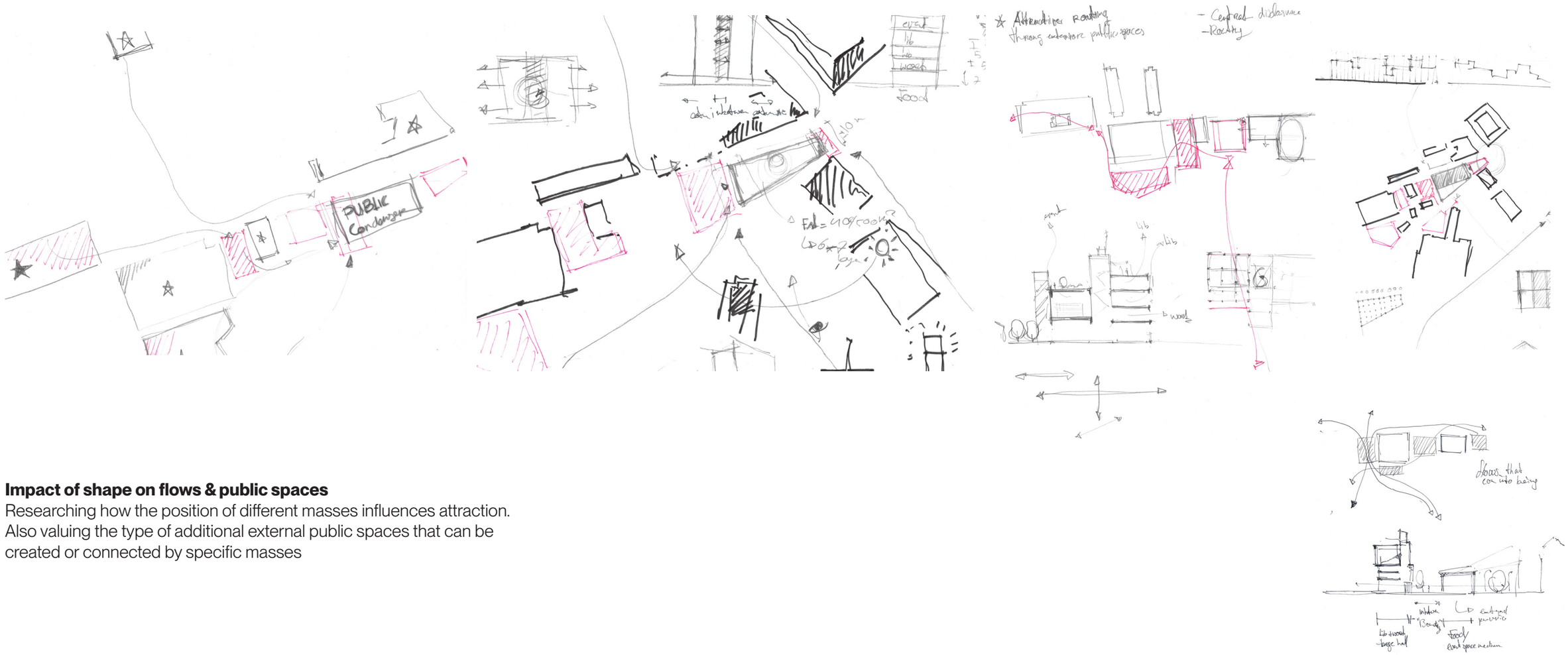




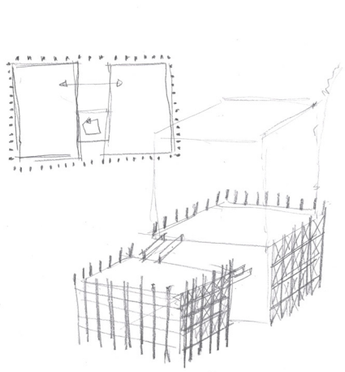


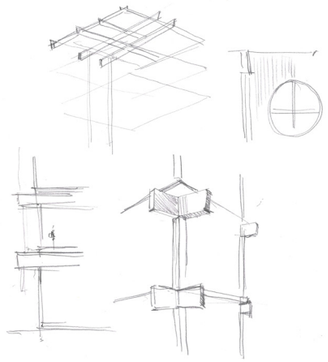


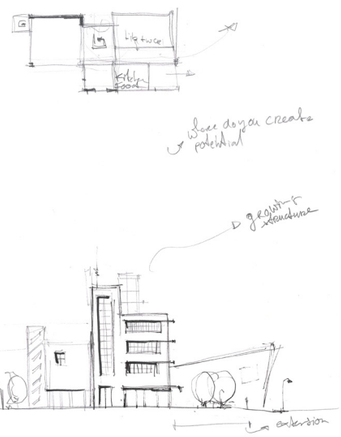
04.5 **Form & mass studies**

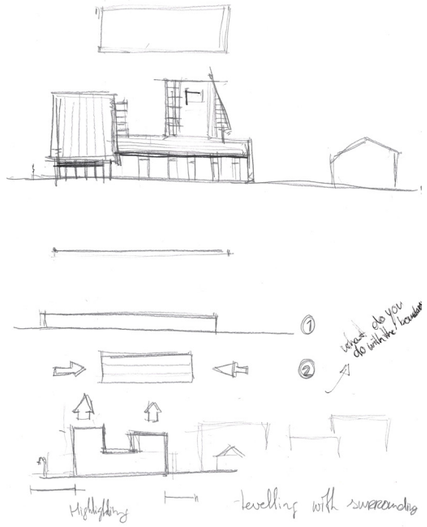


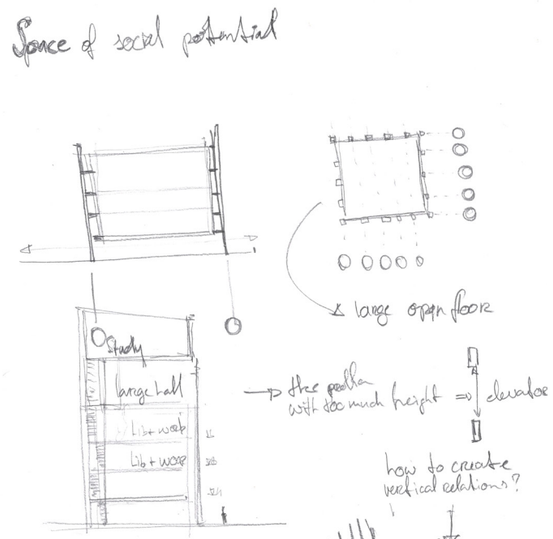
Impact of shape on flows & public spaces
Researching how the position of different masses influences attraction.
Also valuing the type of additional external public spaces that can be created or connected by specific masses



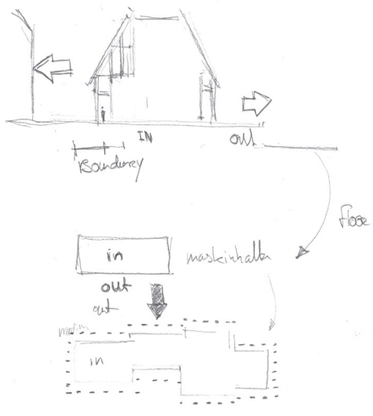


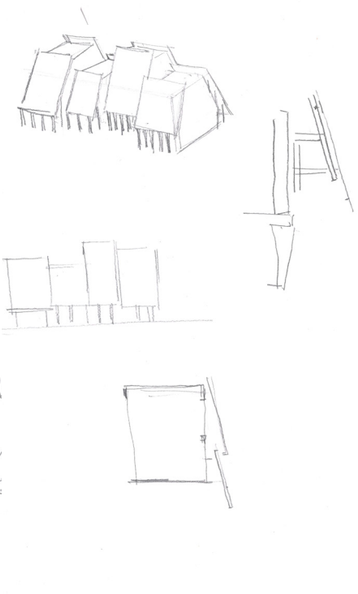


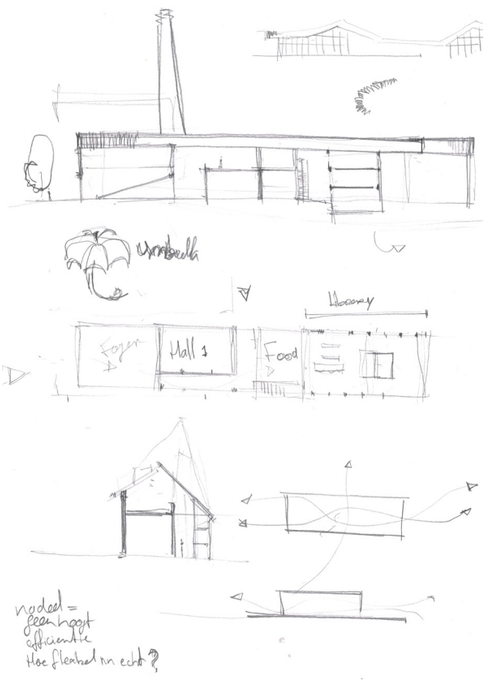


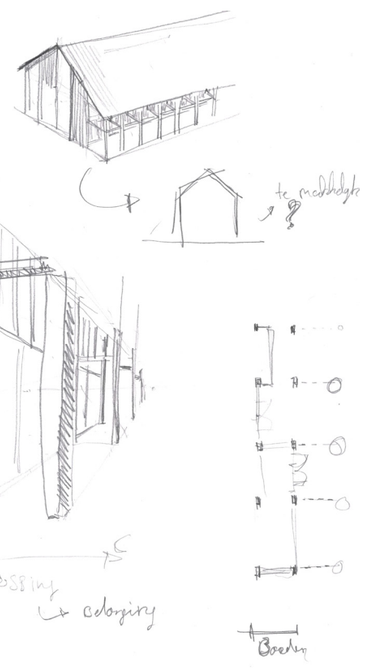


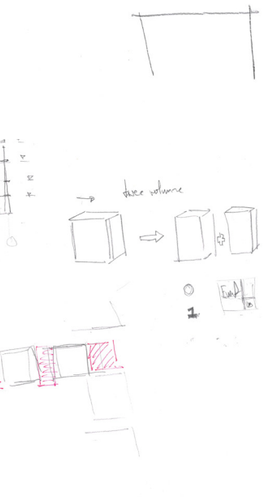












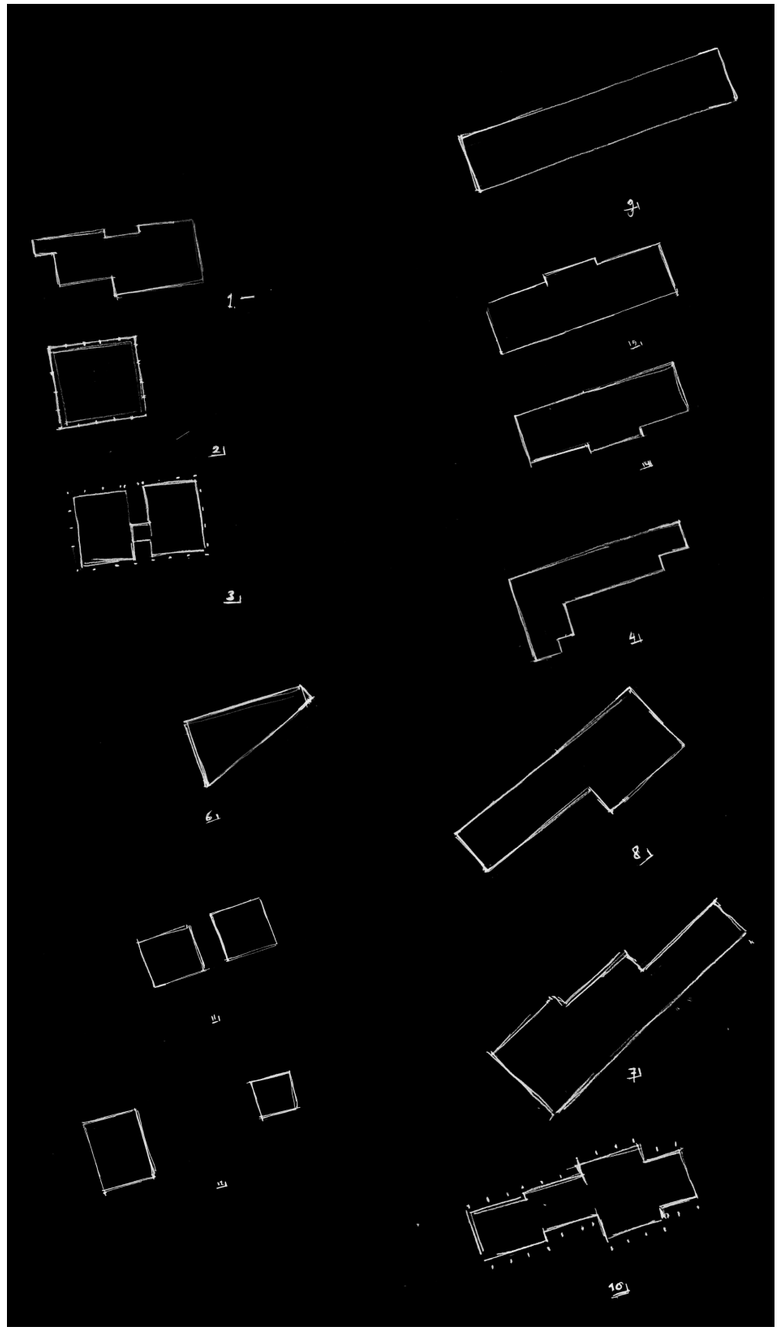
First sketches testing different idea's
Evaluating what kind of shape's could work within the chosen site. What kind of shapes allow for different forms of interaction within the actual building.



Idea: A more organic flowing horizontal connection.
Variety in height indicating different functions/different parts. Organic form creating different zone's and outdoor area's

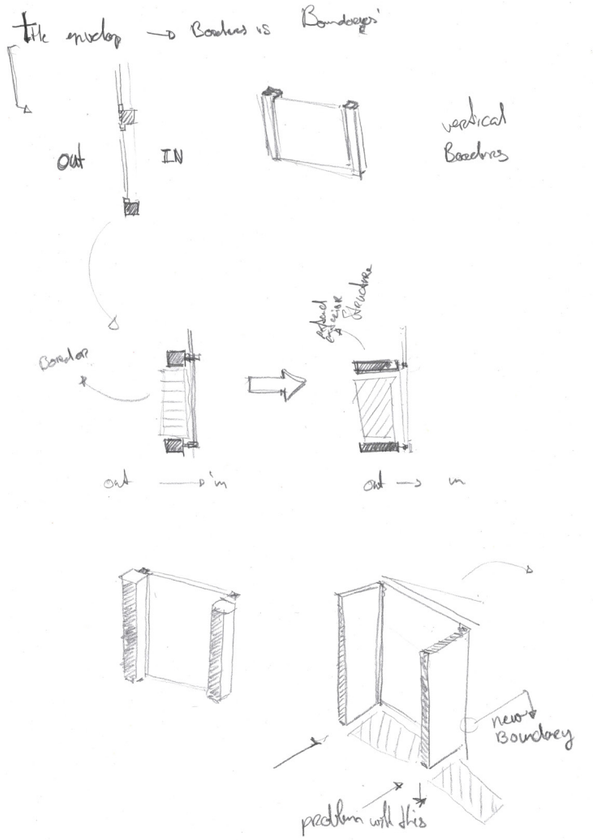
Problem: organic shape is harder to expand/grow or shrink, doesn't fit the context as much as ortoganal shapes/





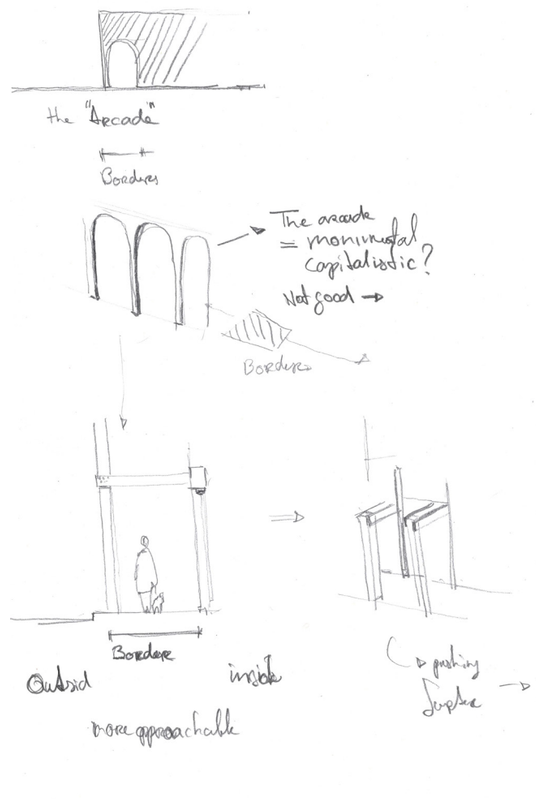
Summary of masses explored

04.6 **Boundaries & borders**



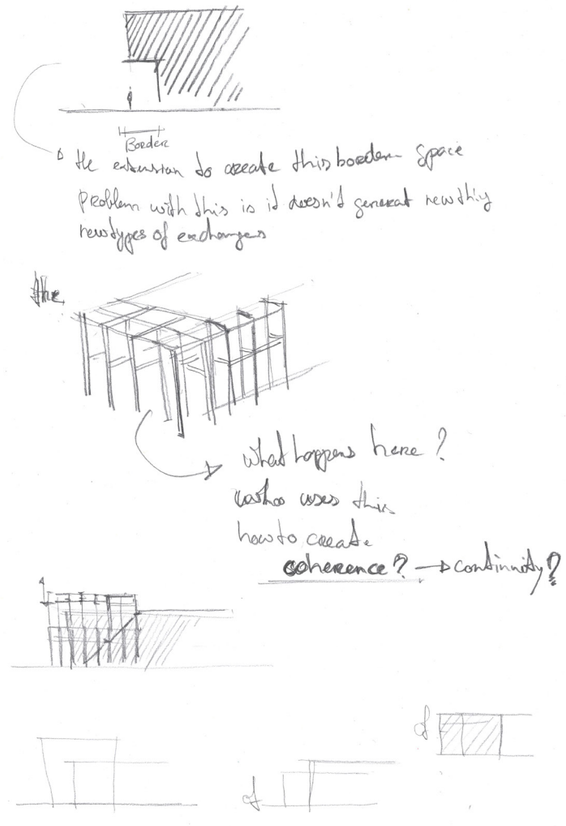
Small - mid scale boundary

Creating layered depth with construction with the goal of stretching the boundary.
Creating an ‘inbetween’ space.



Large scale

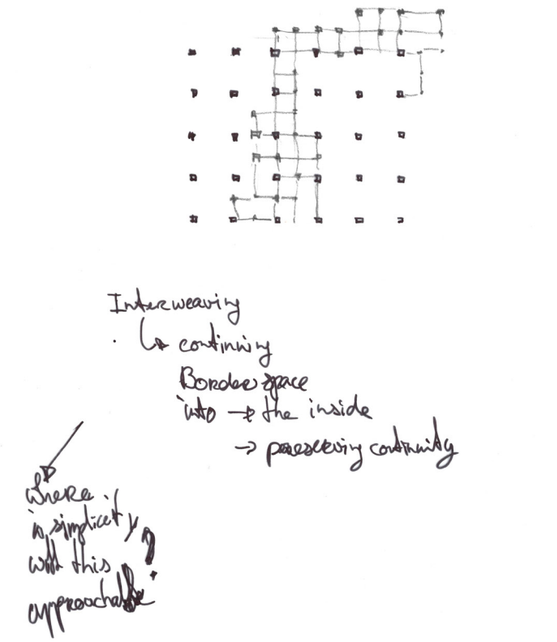
ARCADE--> more monolithic option, smoothening transition.
problem, is assumption, inflexibility monumentality



Large scale

ARCADE--> more monolithic option, smoothening transition.
problem, is assumption, inflexibility monumentality

External grid structure --> how do you make it that it does not seem out of place --> weird/ugly/



Interweaving

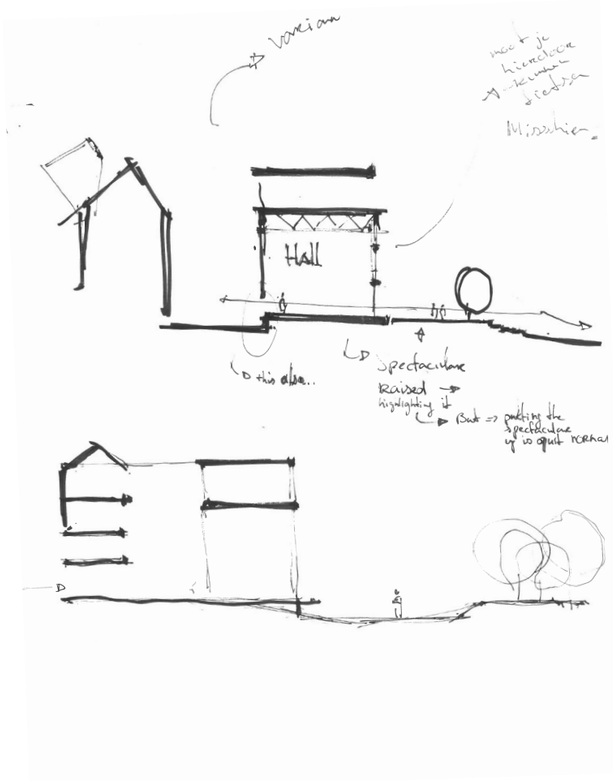
Hierarchy between structure’s allowing for some kind of expansion inside outside, blurring the boundary between interior/exterior.

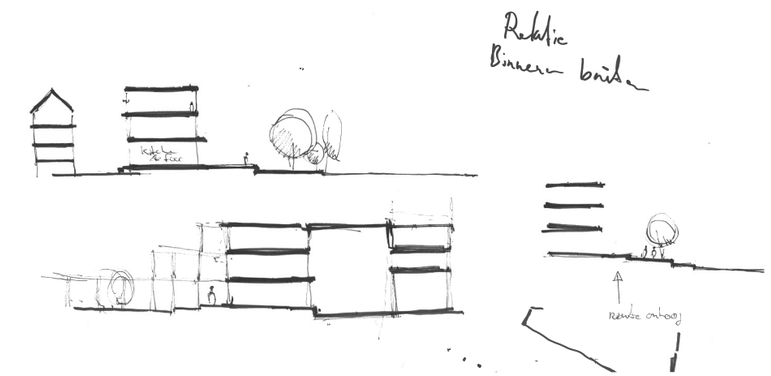
horizontal border territories

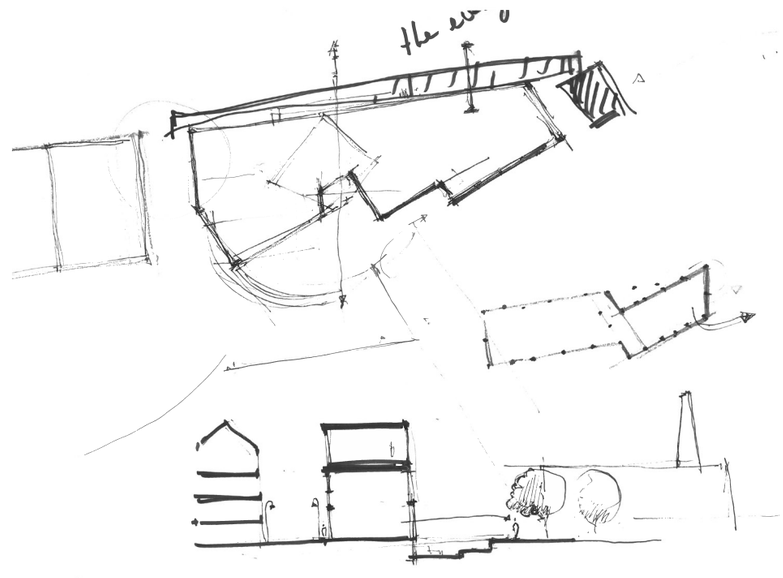
Not only vertical elements are important when turning boundaries are being turned into borders. This selection of sections showcases the research done into how slight height difference and the connections with public space can be used to create borders instead of boundaries.

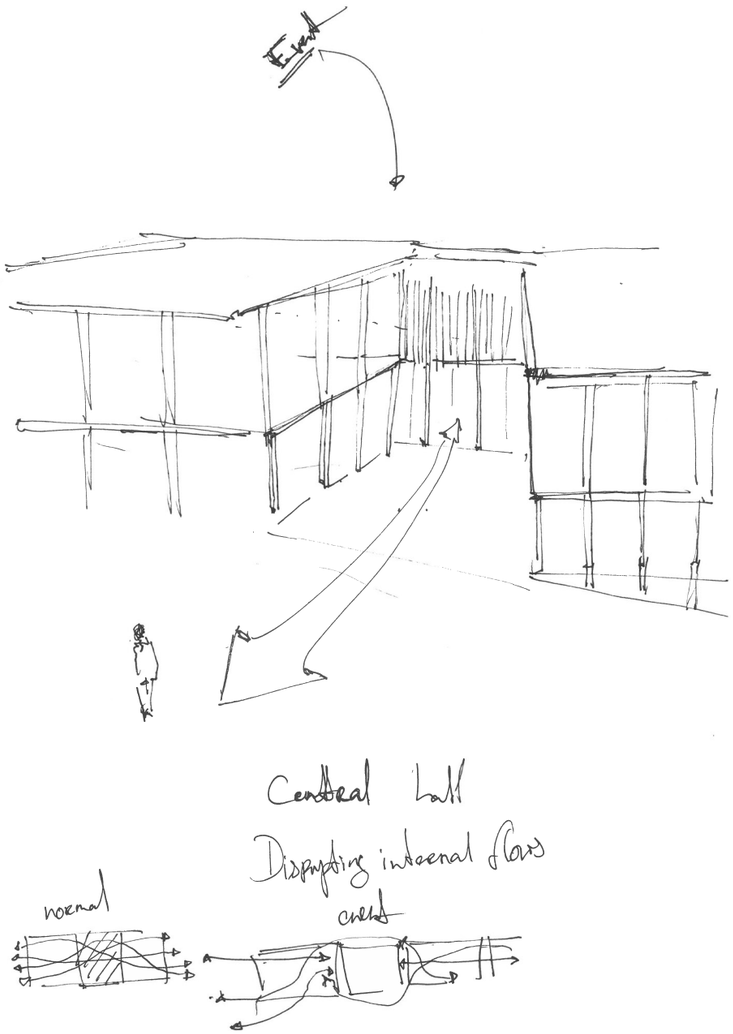
By slightly increasing or lowering the floor a different sense of belonging or exclusion can be created. By stepping onto the platform or descending into a deeper part one can already become of a buidling.

Week 7



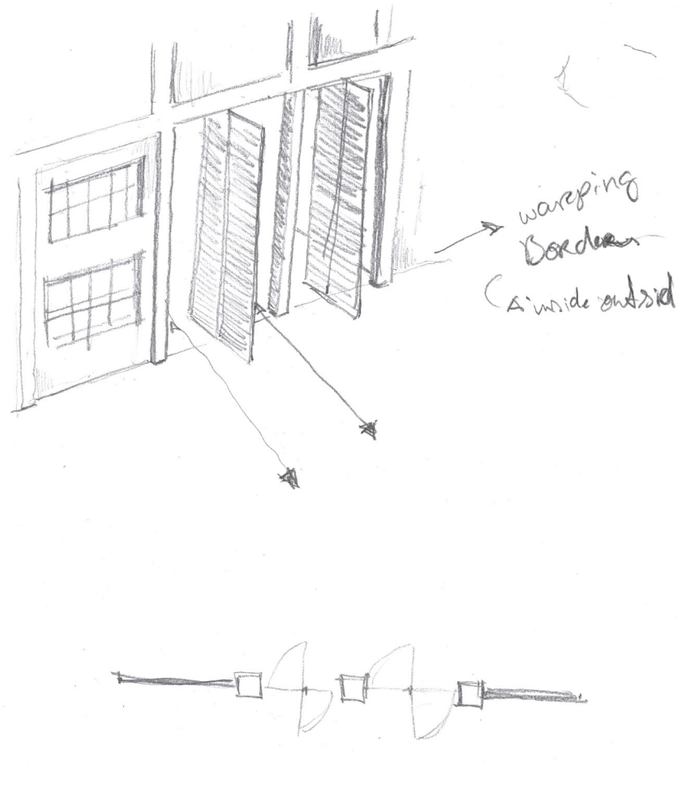


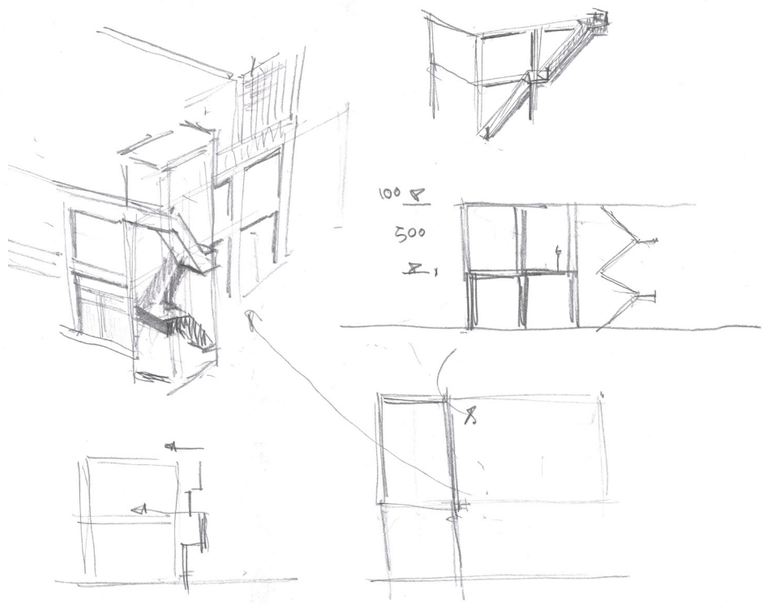




Opening up of hall

interior become semi exterior, the spectacle is used to disrupt traditional boundaries, Changing everyday patterns



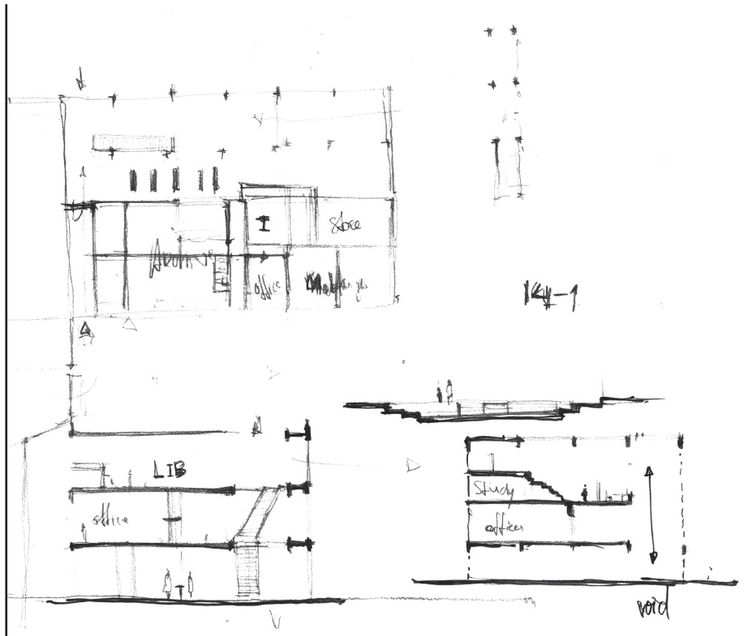


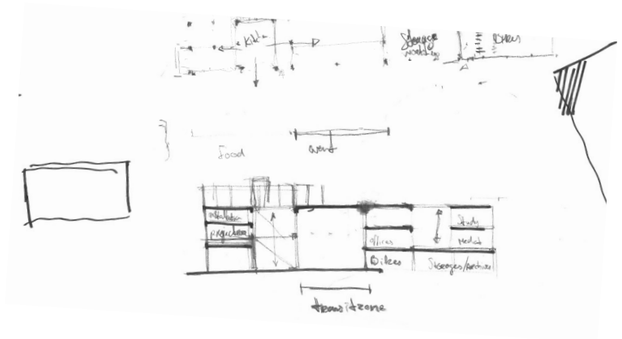
Exterior stairs as an attractor to the spectacle

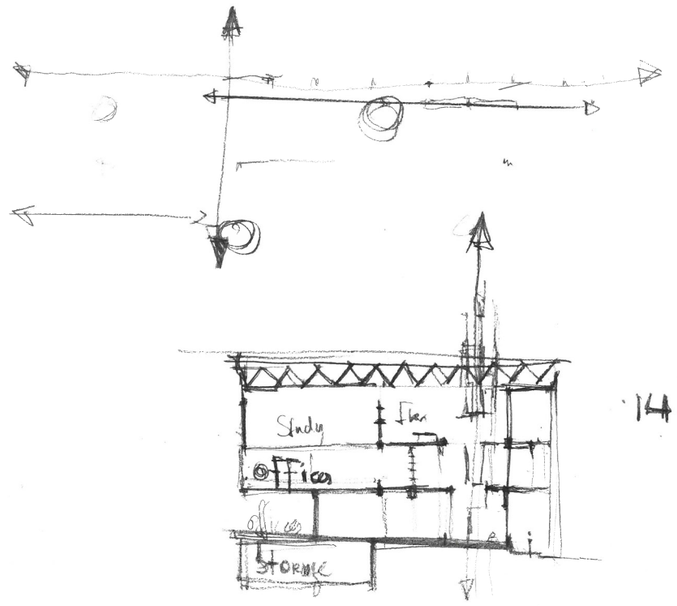
Researching how to stimulate interaction in section
Internal borders & boundaries

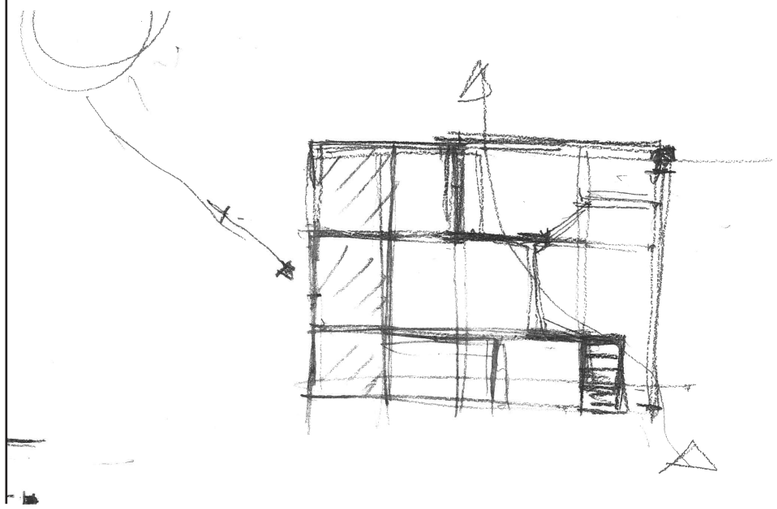
Experiment with how routes can be used to shape and stimulate interaction between different functions and between different layers. Continuing in line with the theme of borders and boundaries but now on an internal level. Also researching how voids can be positioned to create internal border territory, disrupting the traditional separation of layers.

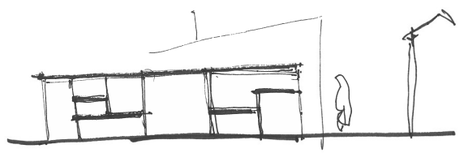
(Week 6, 7, 8)

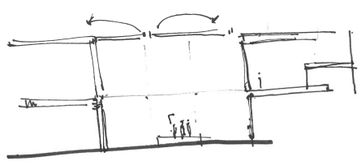












04.7 **The Spectacular everyday**





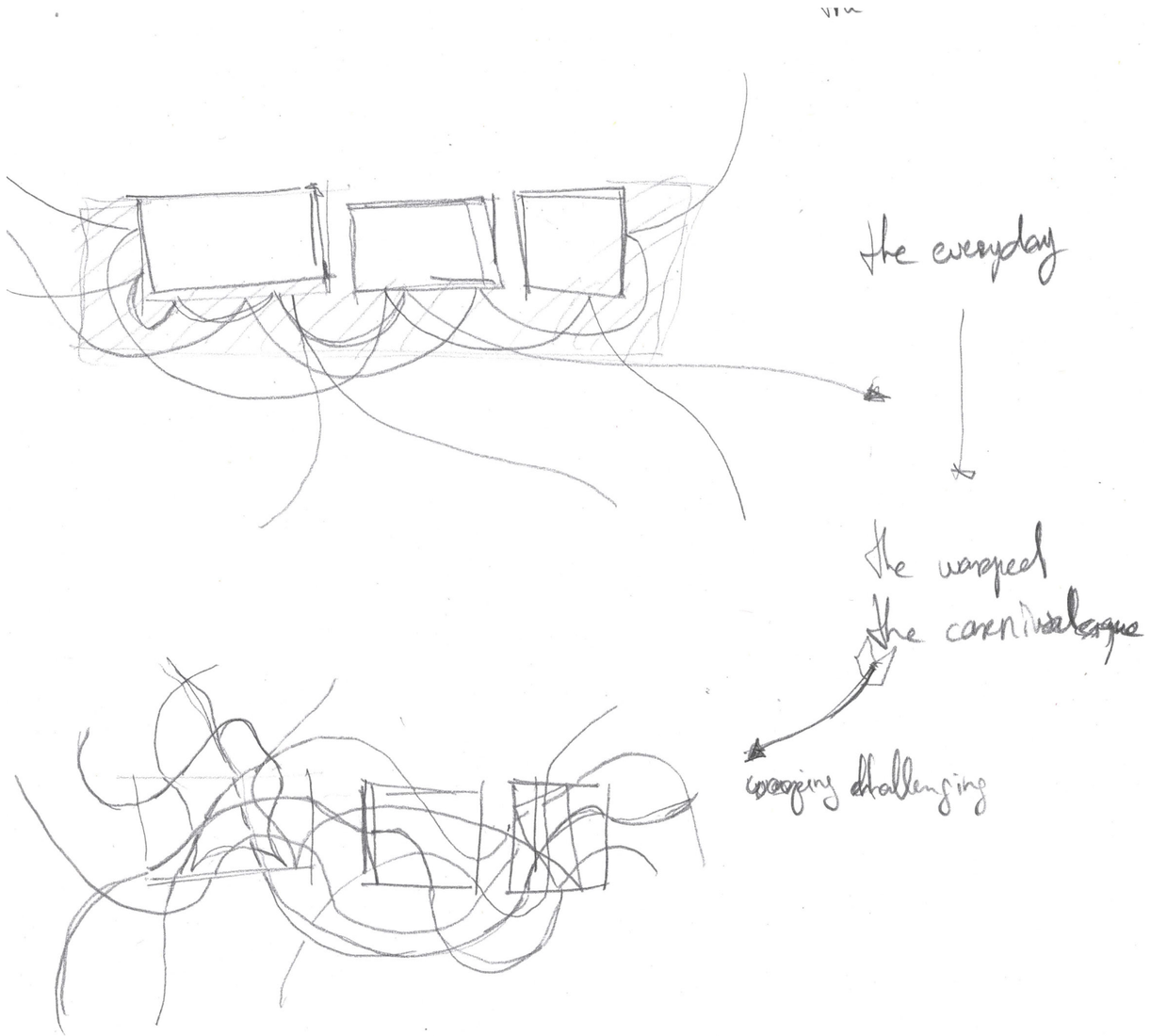
The importance of small everyday activites that bring a place to life









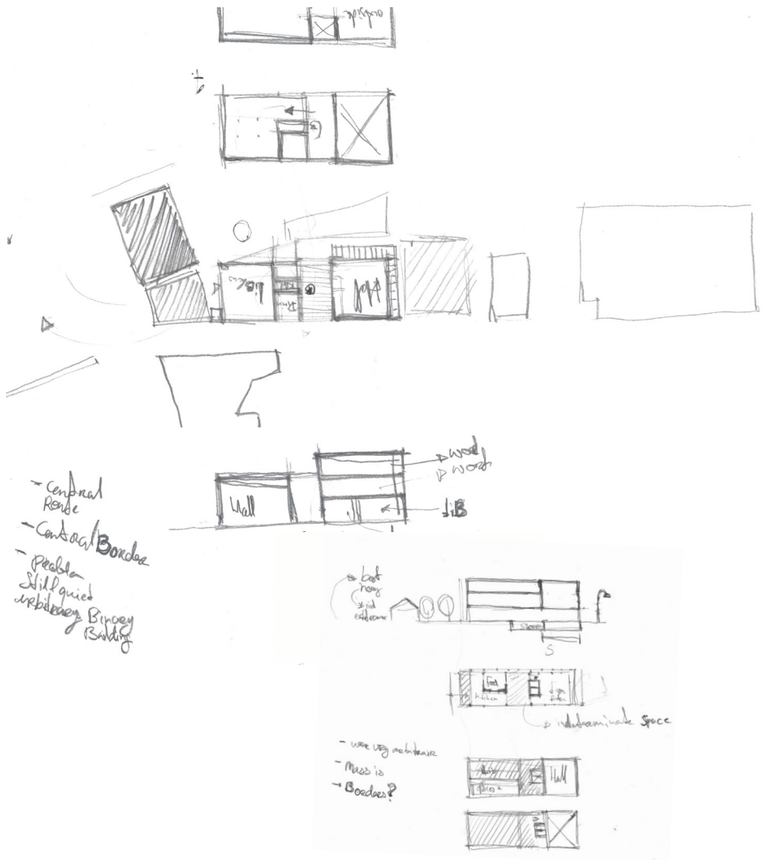


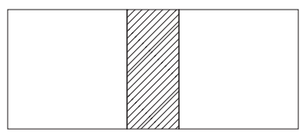
Large scale

What are the rhytms that occur frequently, everyday
How to they move, what are the patterns,
how can they be turned spectacular, How can the building turn into something else, what is the spectacular mode

04.8 **Borders & the spectacular everyday**

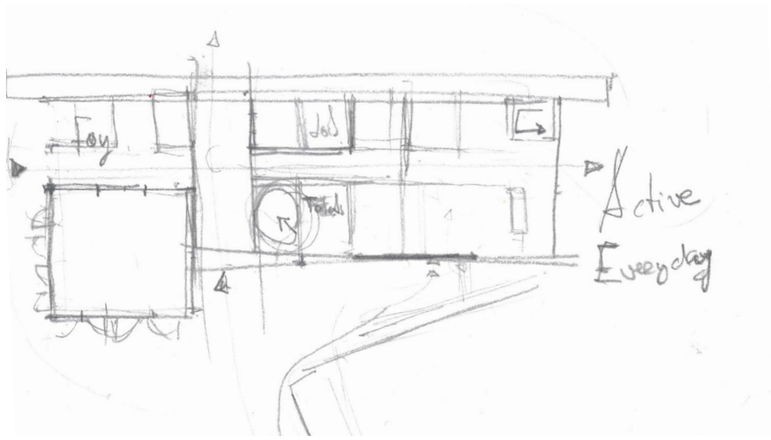
Researching different organizations and what kind of borders, flows and opportunities for disruption and interaction emerge.

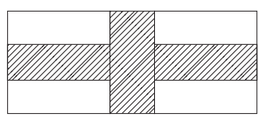




Central hall vertical circulation

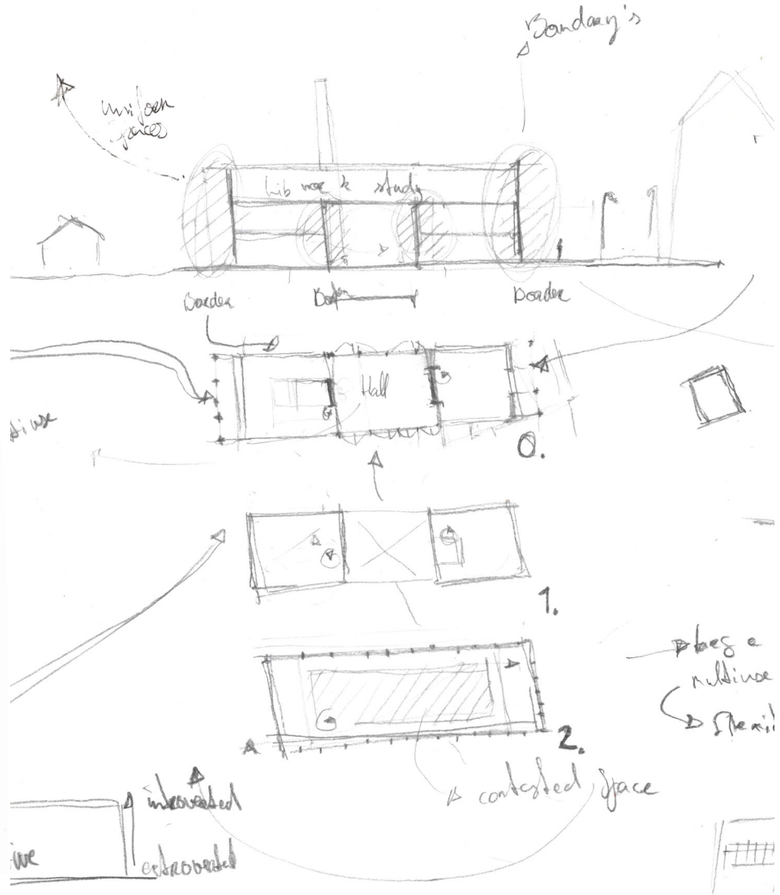
splitting the building in two sections, creating a central border area in the middle of the two area's

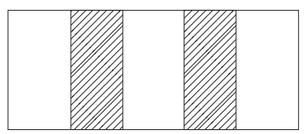




Creating a crossection of border area's

Using internal routing to divide the building into 4 area's joined in a central border area

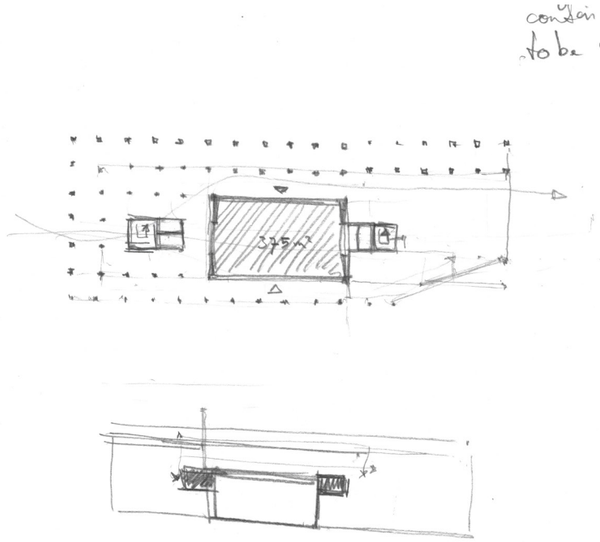


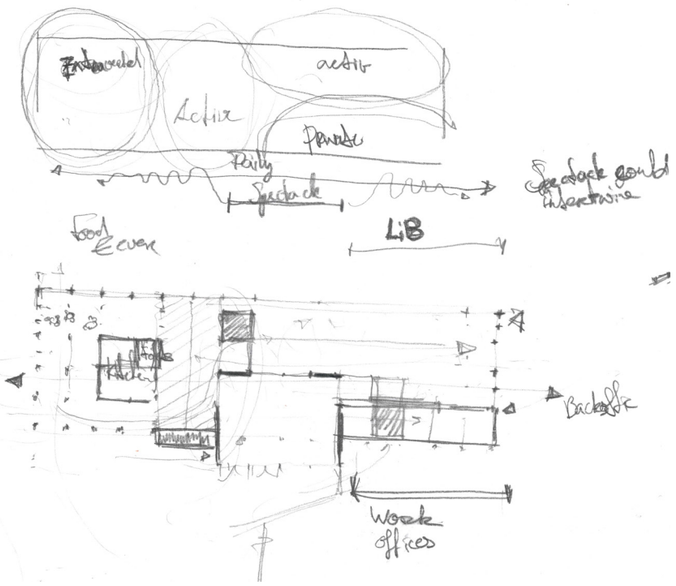


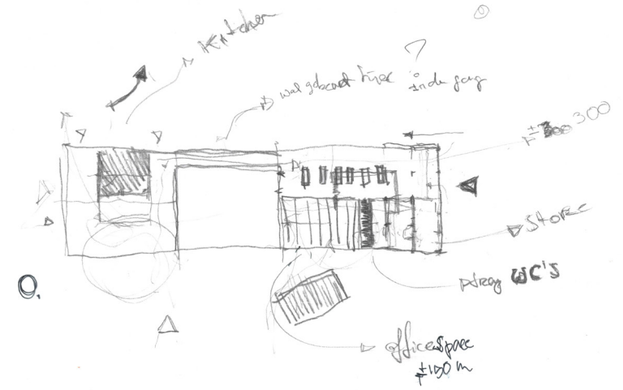
Central hall over the whole depth

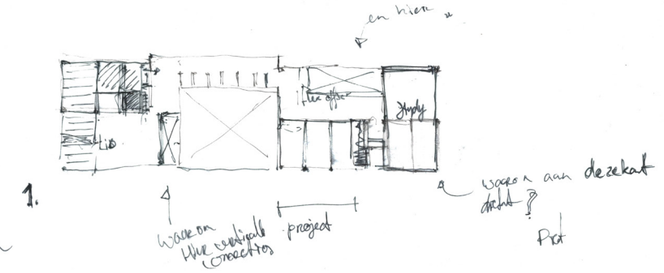
The hall splits the middle, splitting the volume in two, creating two internal border area's on the side's of the hall.

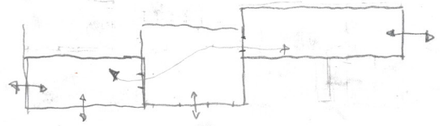
Third floor functions as a way to connect and create a connected circulation

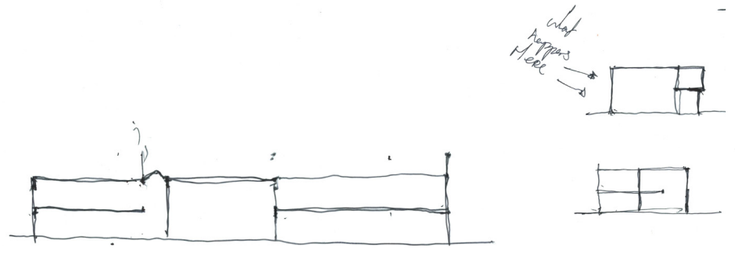


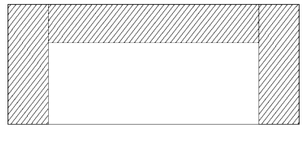


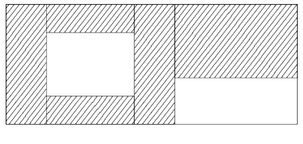


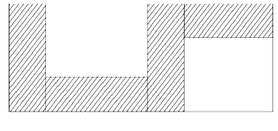












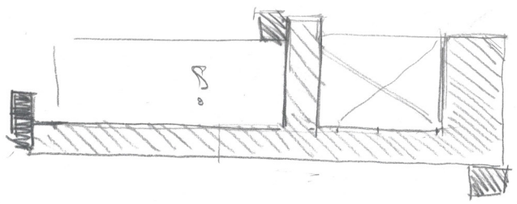
Positioning rigid core's central in the building

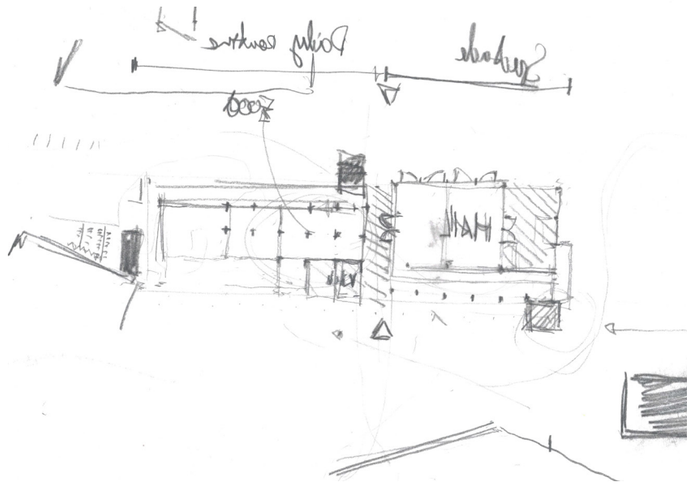
The core's are positioned in a way to kind of create different types of circulation. flexible open floorplans.

Circular routing

Single routing, expanding spaces

creating a single routing throughout the building.
Sequencing of large flexible space to be able to turn the everyday spectacular.

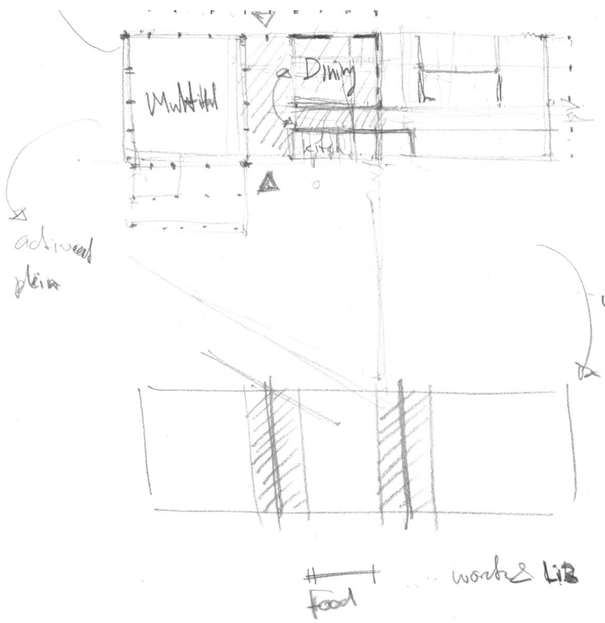


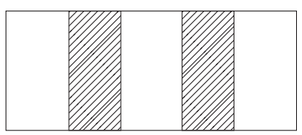


Fully externalizing vertical circulation

Improving the flexibility of the floorplans by pushing the vertical rigid cores fully outside of the building

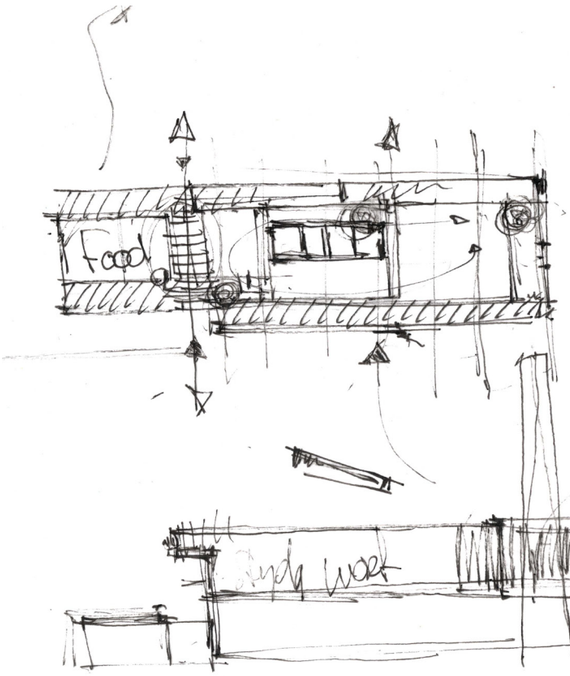
a la centre pompidou

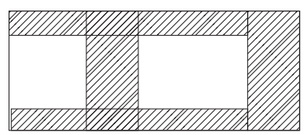




Splitting the building in three

Creating two internal border area's
Allowing for urban routes to continue through the building

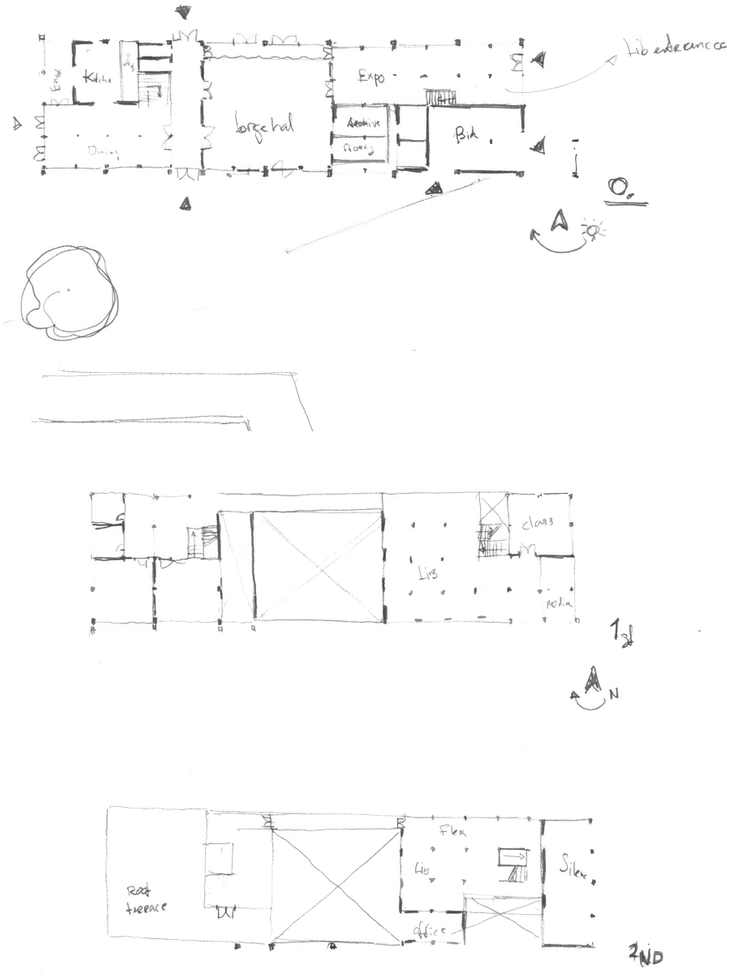




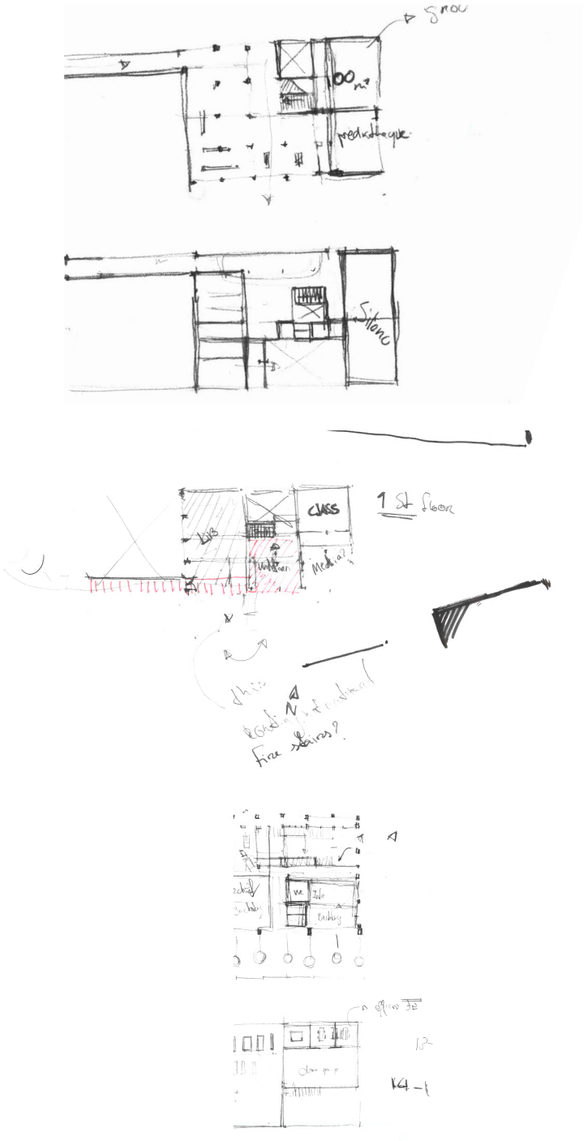
Pushing the border area to the outside

Routing around the internal area's
Active internal circulation bordering to the outside.
Two floorplans

04.9 **Floorplan itterations**



Week 7 version of floorplans



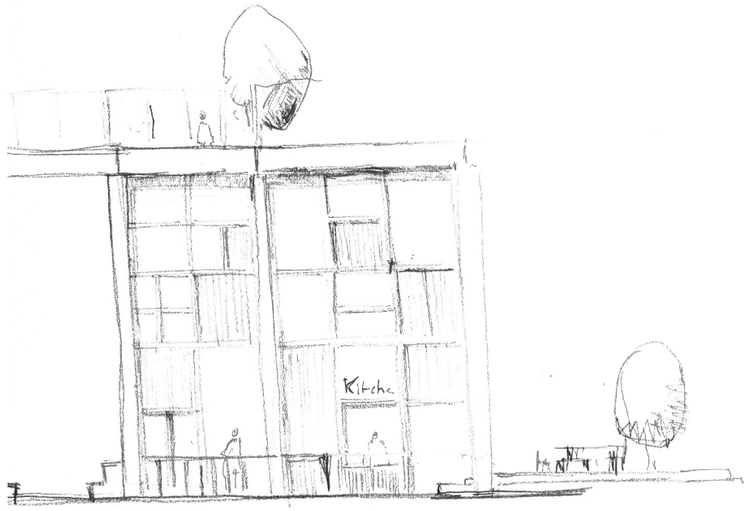
vrar

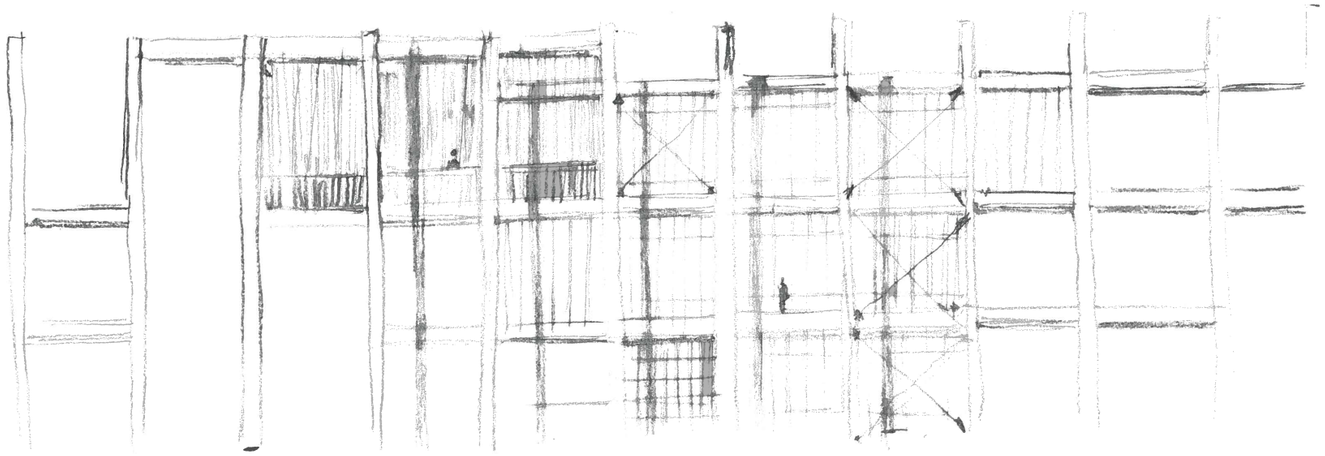
ganizing the foodcorner in combination with the large eventspace
flecting how the foodcorner might expand into the outside, with
oles and what kind of position would make sense to sit outside.

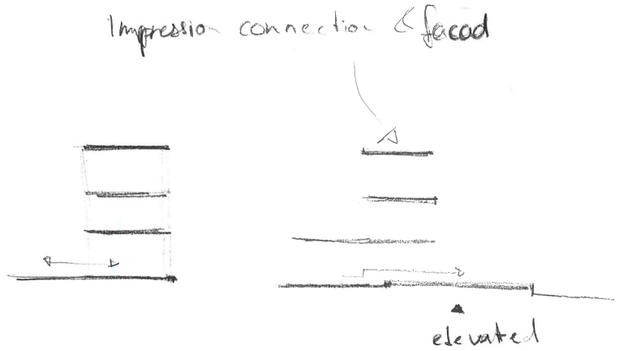
Researching the foodcorner organization

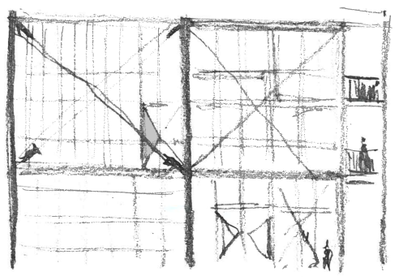
Organizing the foodcorner in combination with the large eventspace
Reflecting how the foodcorner might expand into the outside, with
tables and what kind of position would make sense to sit outside.

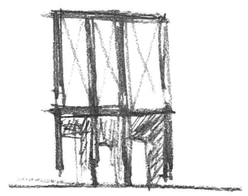
04.10 **Facade speculations**

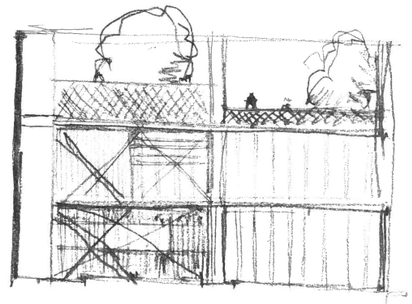












Speculations for facade

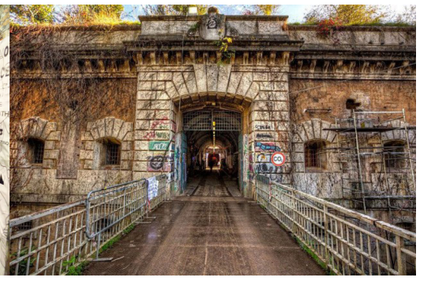
04.11 **Programmatic references**











Social centers

ACU hosts various activities: café, vegan restaurant, DIY concerts, disco nights, political events, punk and hardcore gigs, jam sessions, benefit events, parties, movies, a library, and a meeting place for political and cultural initiatives.

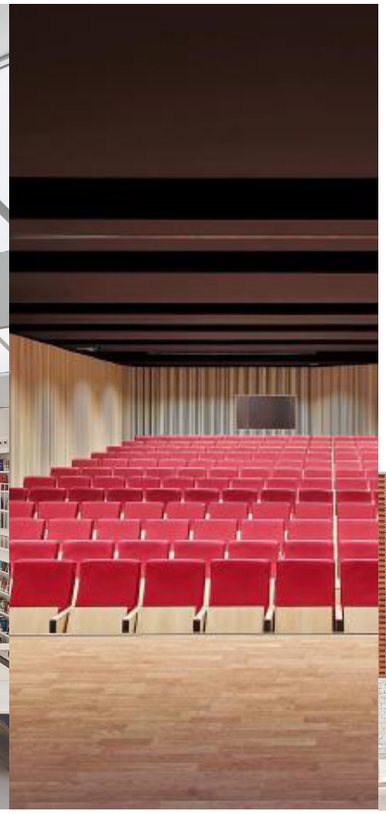
Bluestockings seeks to empower all people to challenge oppression and participate in creating a society which is equitable, cooperative, and free by:

Distributing literature and resources about oppression, intersectionality, community organizing, and activism, and by sharing the stories of marginalized people
Maintaining a space in New York City for dialogue, education, and reflection where all people are respected; and
Building connections, knowledge, and skills in our communities Bluestockings Cooperative seeks to embody and share the principles of intersectional, abolitionist, trans-affirming, gender nonconforming, and sex-worker affirming feminisms and support liberatory social movements.

Centre International de Recherches sur l'Anarchisme
The CIRA is mainly a library, but it also possesses archival fonds and documentations.

CSOA Forte Prenestino
an Enoteca, a place to drink wines made form local organic producers who also exhibit their products in an annual feast in the castle that hosts thousands of people visitors, a vegan food place, a tea room, a cinema lab, an information lab, a radio station, a gym, places for music bands rehearsing, a theater, a cinema and a bicycle repair lab
https://forteprenestino.net







Project: Municipal library and theater
Location: Spain - Boadilla del Monte
Designers: Matos Castillo Arquitectos

Program: Library & theater
the building is split into two different parts.
Kids library
Juvenile library
Project rooms
Study hall
Consultation hall
Theater

Extra information: The brick design to blend in with the surrounding context, while at the same time giving it an innovative twist







Project: Pinghe Bibliotheater
Location: Japan - Okayama
Designers: KENGO KUMA AND ASSOCIATES
Program (est.)
Library
- central reading area
- rooftop terrace
- terraced reading area
- multimedia room/open stack
- library reception & book retrieval

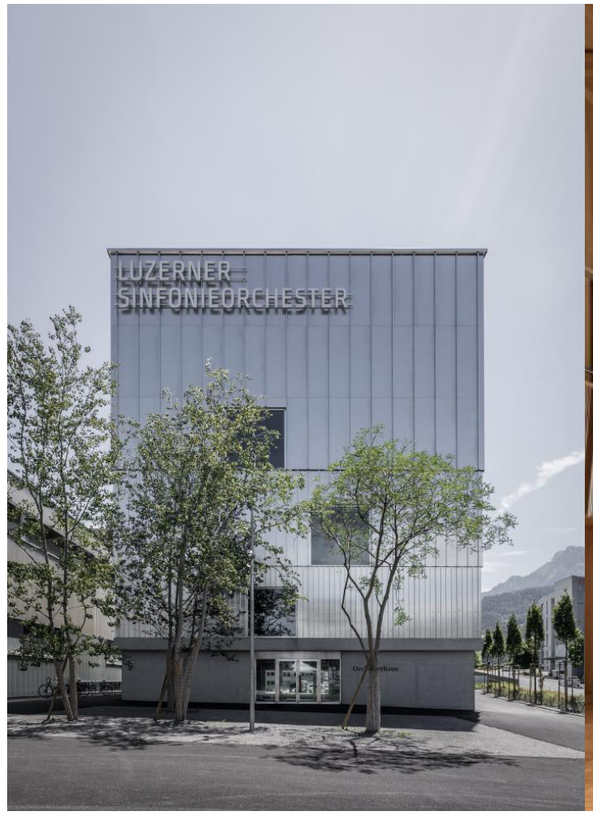
Theater

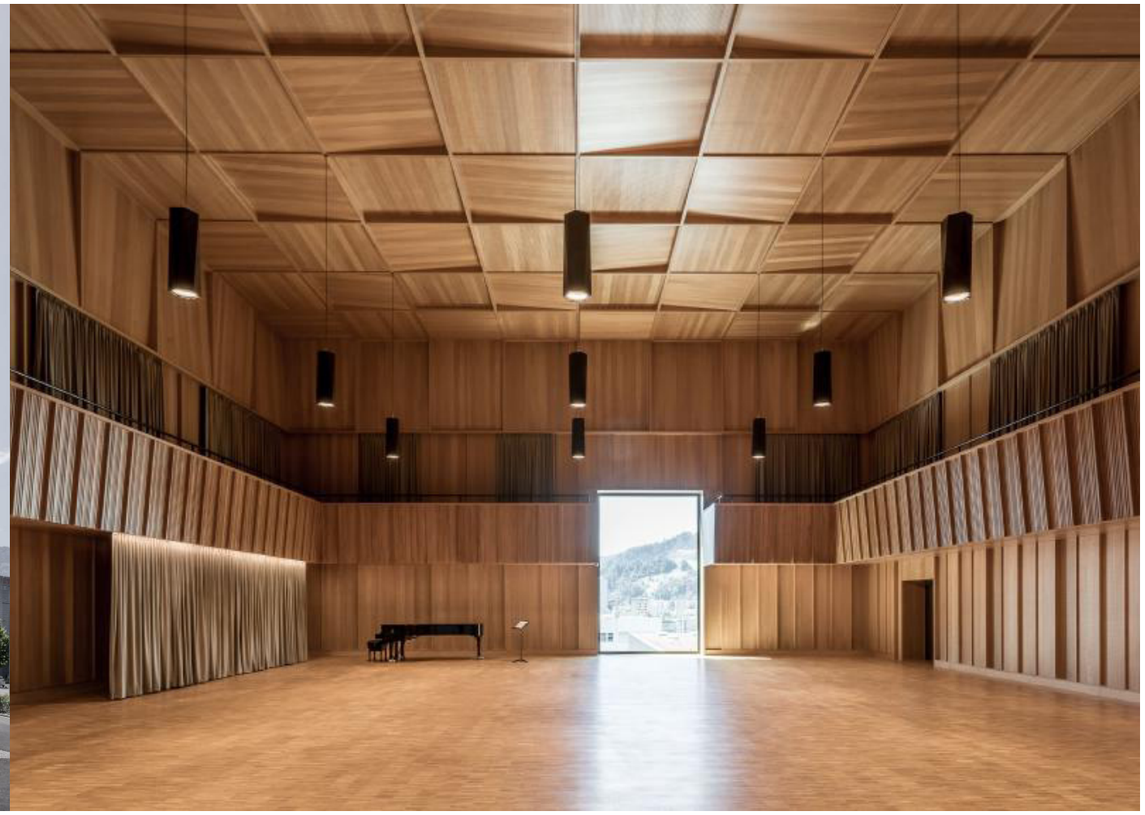
Theater	500 seats
Stage & Stage wing	300 m2?
Black Box theater	150 seat

10m high estimate
Lobby& auxiliary space
- Theater lobby
- Cafe
- convenience store (public)

total: 5,372m2

Extra information: Interesting motivation between the introverted and extroverted. The theater being a very expressive and outroverted program, while the library is space for contemplation and introversion. Building is fully not public.



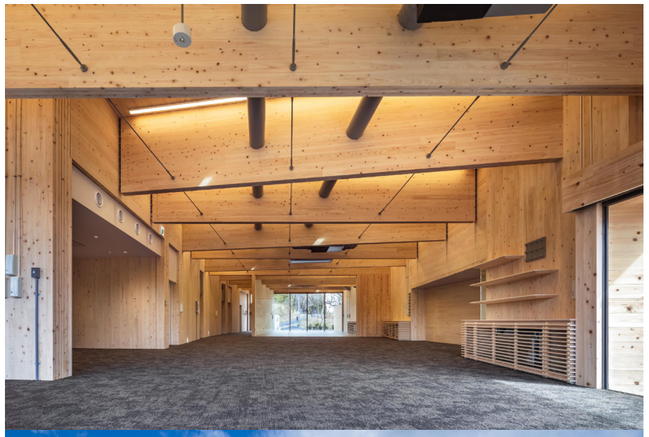


Project: Luzerner Sinfonieorchester
Location: Switzerland - Kriens
Designers: Enzmann Fischer Partner AG

Program: Orchestra house
Individual rehearsal rooms
Larger rehearsal rooms
Meeting rooms
Storage space
Large rehearsal room 357 m2
9,5 m high
orchestra seating: approx. 90 musicians
concert seating: max 250 people

total: 2.160 m²

Extra information: The plan is very open, allowing for different functions to happen and configurations.



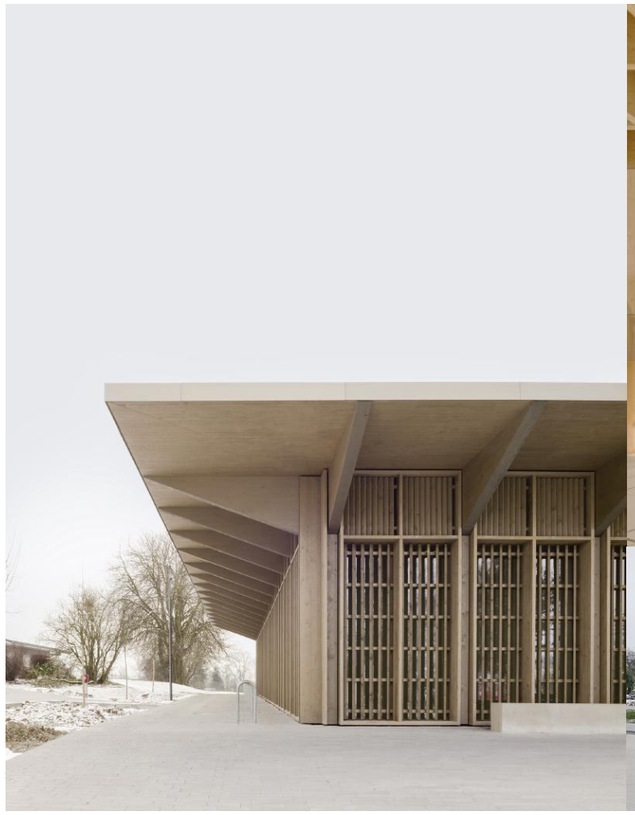


Project: Kibi Kogen N Square
Location: Japan - Okayama
Designers: KENGO KUMA AND ASSOCIATES

Program (est.)

Co-working space	54	m2
Serviced office	90	m2
Cafe	108	m2
Kitchen	27	m2
total:		

Extra information: The plan is very open, allowing for different functions to happen and configurations.







Project: Markolfhalle Markelfingen
Location: Germany - Radolfzell - Markelfingen
Designers: Steimle Architekten

Program (est.)

Gym fields	1,5	400+ m2 7+m high

total: 2.160 m²

Extra information: The plan is very open, allowing for different functions to happen and configurations.





Project: Ludo médiathèque
Location: France - Herblay sur Seine
Designers: atelier WOA

Program (est.)

Multifunctional open space	
Auditorium	120 places

total: 2200 m²

Extra information: “L’échappée’ (or the ‘escapade’) stands for a place of meetings and exchanges, and a call to culture. A contemporary forum where both younger and older generations should feel at home

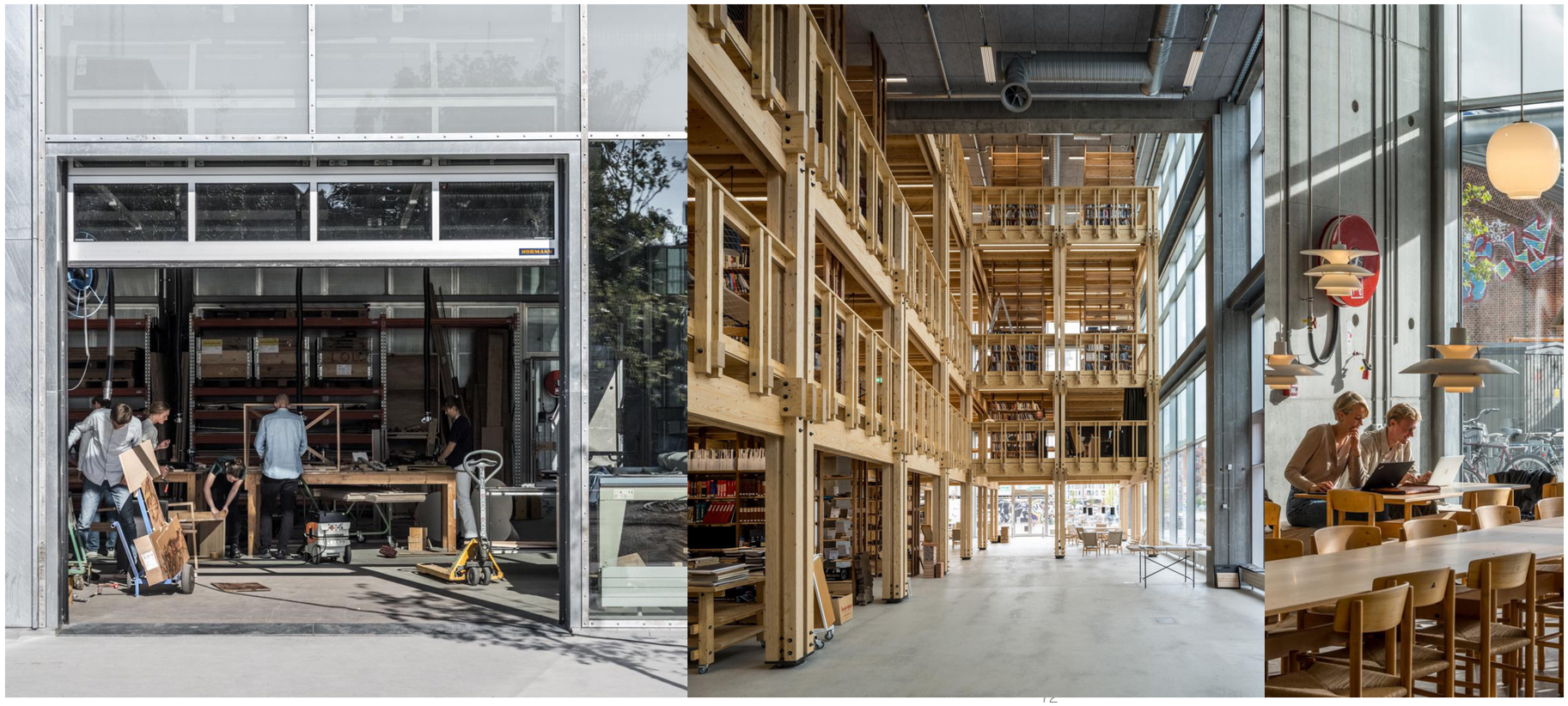


Project: Nantes School of Architecture
Location: Nantes France
Designers: Lacaton & Vassalk

Program (est.)

total: 15150 m²

Extra information: Interesting aspect is the large application of undetermined spaces, spaces that can be appropriated in a variety of ways, flexible open spaces.



Project: New AARCH
Location: Denmark - Aarhus
Designers: ADEPT

Program (est.)

Extra information: Structure inside of structure, simplistic design allowing for a wide variety of spaces which in turn allows for multiple uses, forms of appropriation and so on.

04.2 **Architectural references**



Project: Klong Toey Community Lantern
Location: Thailand - Bangkok
Designers: TYIN tegnestue Architects
Program (est.)

Extra information: Structure in front of actual building, creating a border territory that can be appropriated, interpreted by different users.



Project: Magasin 4
Location: Belgium- Brussels
Designers: Muoto Architects

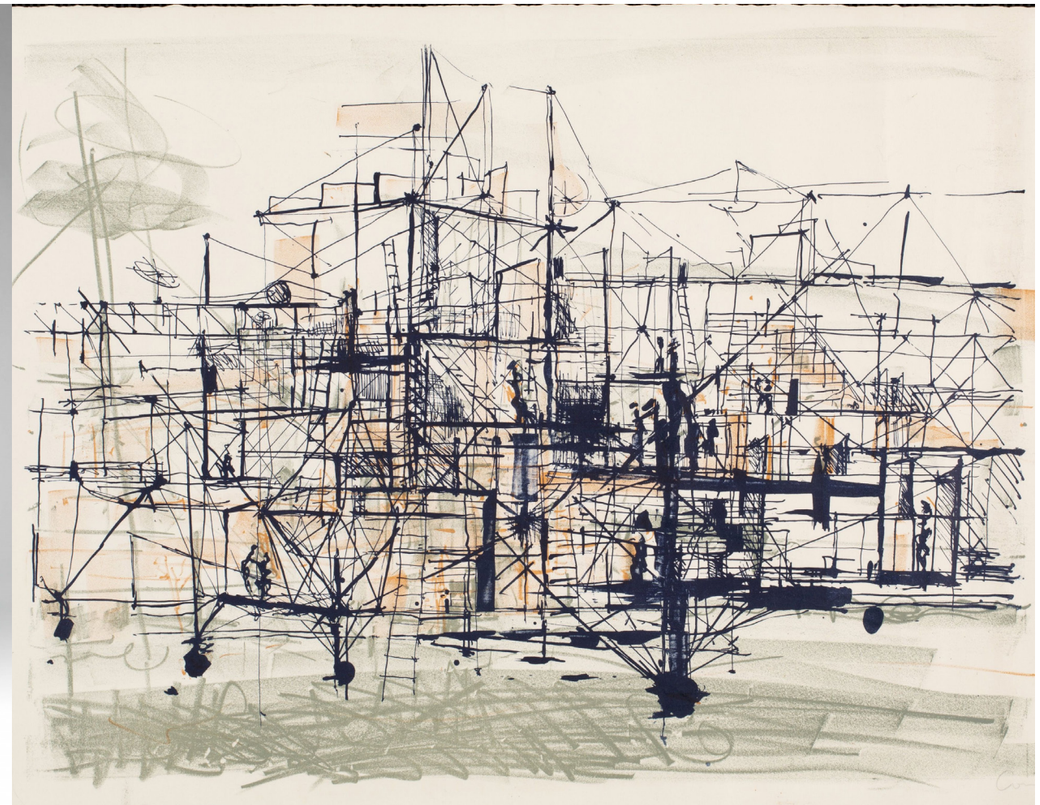
Program (est.)

total: 15150 m²

Extra information: Blurring interior exterior large central hall that opens up to the exterior,

Industrial, visual positioning of ventilation shafts.





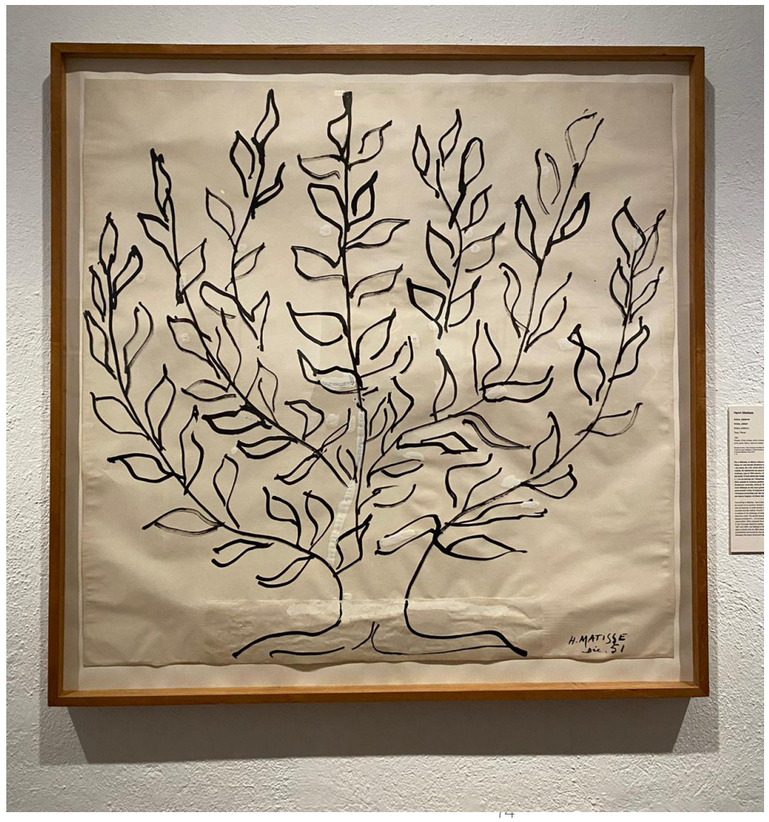
Project: Nieuw Babylon
Location: -
Designers: Constant Nieuwenhuys

Program (est.)

Extra information:

A city without borders,

Rethinking a social, envisioning a fully different society.



Project: The plane tree
Location: -
Designers: Henri Matisse

Program (est.)

Extra information:

Decorative drawing based on a dynamic tension between empty and full spaces, in other words, between the invisible and visible.

“you have to draw the voids. The empty space between the leaves of a branch... is not perceived in direct observation.”

Exploring the rhytmical possibilities produced by the relationships between the black lines and the white paper.





Project: Buono (Thailand) Factory
Location: Thailand - Nakhon Pathom
Designers: Henri Matisse

Program (est.)

Extra information:

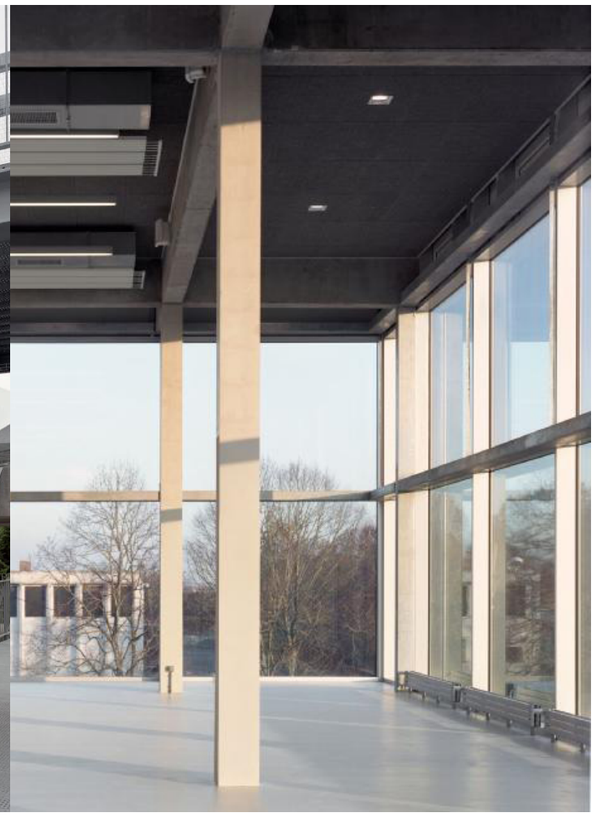
Decorative drawing based on a dynamic tension between empty and full spaces, in other words, between the invisible and visible.

“you have to draw the voids. The empty space between the leaves of a branch... is not perceived in direct observation.”

Exploring the rhytmical possibilities produced by the relationships between the black lines and the white paper.







Project: Public condenser
Location: France - Paris-Saclay University Campus
Designers: Muoto Architects

Program (est.)

Extra information:
The design of the building like a large public open staircase. the internal routing, large spacing,

Extending public space and the role of infrastructure.





Project: Substrate Factory Ayase
Location: Japan
Designers: Aki Hamada Architects
Program (est.)

Extra information:
Fully flexible floorplan that can be changed along the different users etc. allowing for endless configurations.







Project: Nourish Hub
Location: Great-Brittain - London
Designers: RCKa

Program (est.)
Commercial Kitchen
main dining space
teaching kitchen
rental unit
store
hall
office
wc

total: 420 m²

Extra information: The combination of kitchen etc is very interesting, adaptable teaching kitchen Inclusivity is promoted. 35000 people connected.





Project: Multi service centre
Location: France, LAGUIOLE - LE FOIRAIL
Designers: Bétillon & Freyermuth, crypto architectes

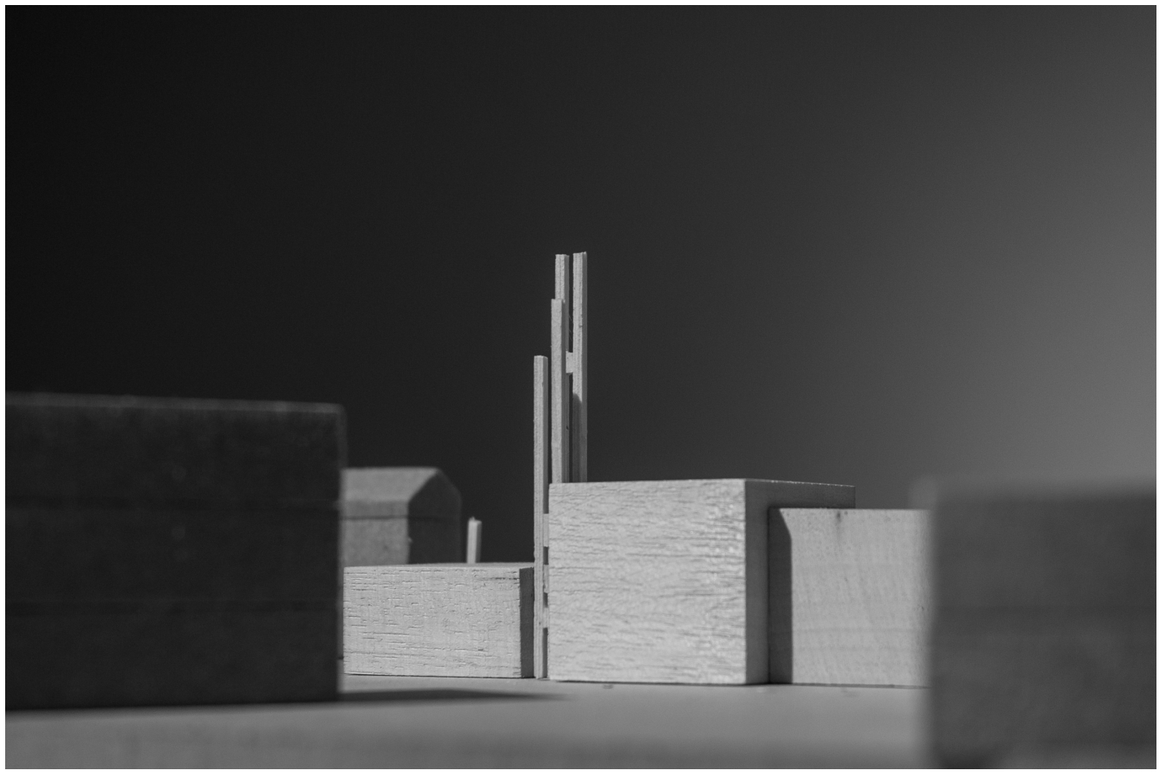
Program:

offices -	200	m2
Micro-Nursery	150	m2
Media-liberary	200	m2
patio	450	m2

total: 1000m2

Extra information: The project is heavely focussed on addaptability, utilizing a 5m x 5m wooden post and beam structure. Allowing for flexibility, self regulating machine.

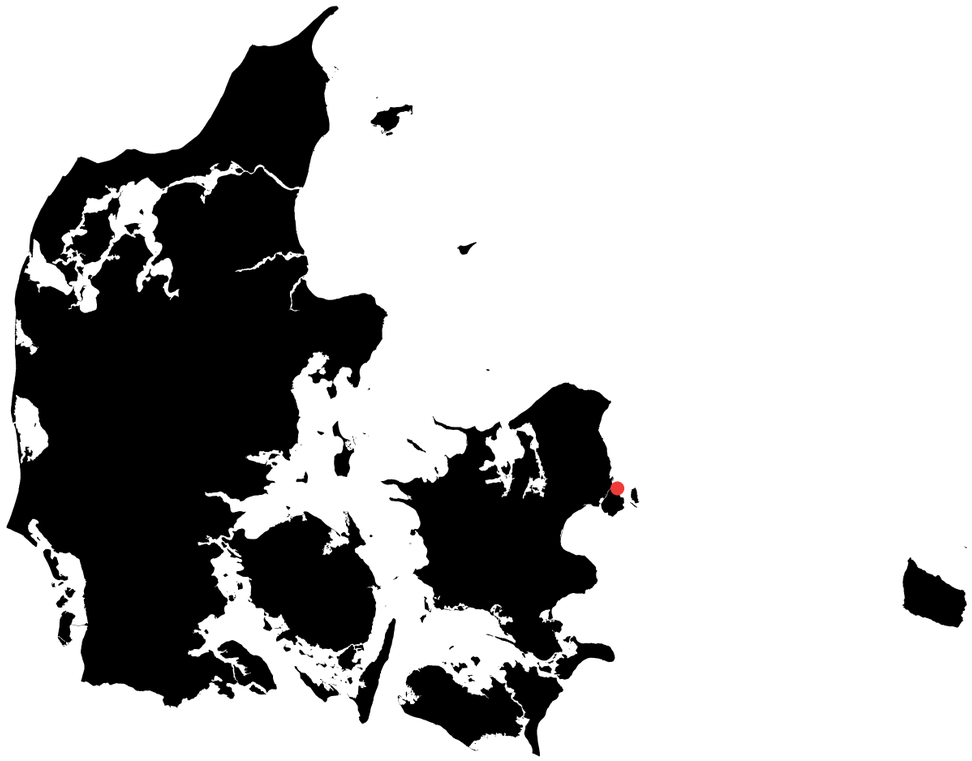
05. **P2 Slides**



From exhaustion to resilience

Re-imagining the possible

Miguel Borst | 4886356 | 23-1-2025
Public building graduation studio P2
Tutors: Sien van Dam (TD), Henk Bultstra (PD) & Florian Echkart (TBD)



The map of Denmark

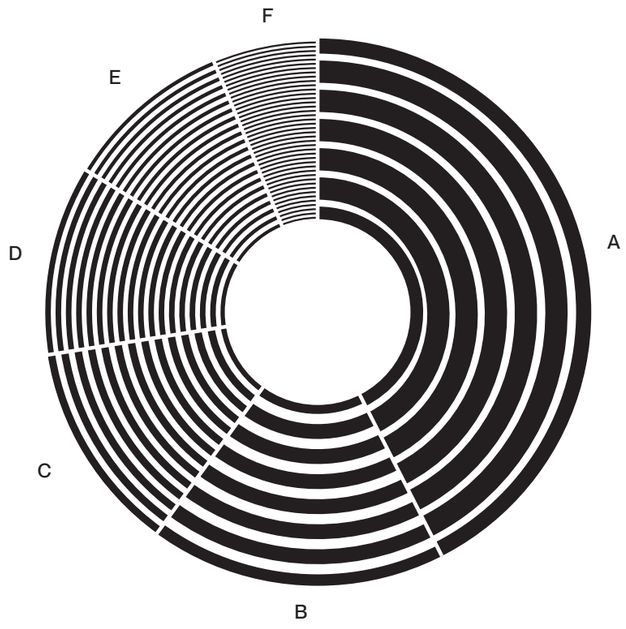


The neighborhood Sonderbro located on the island of Amager

Danish context

“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





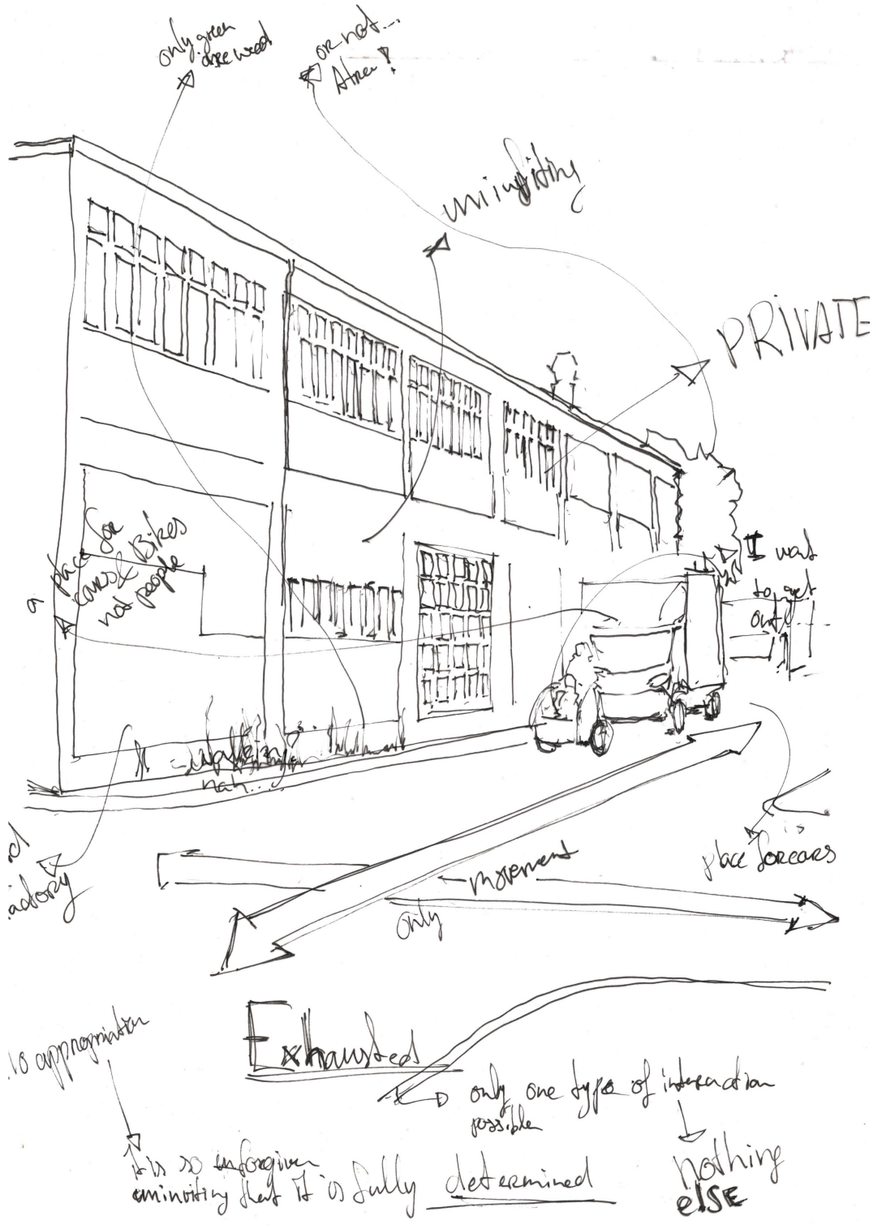






“Exhausted is a whole lot more than tired (...)
The tired has only exhausted realization, while the exhausted exhausts all of the possible. The tired can no longer realize, but the exhausted can no longer possibilitate.”

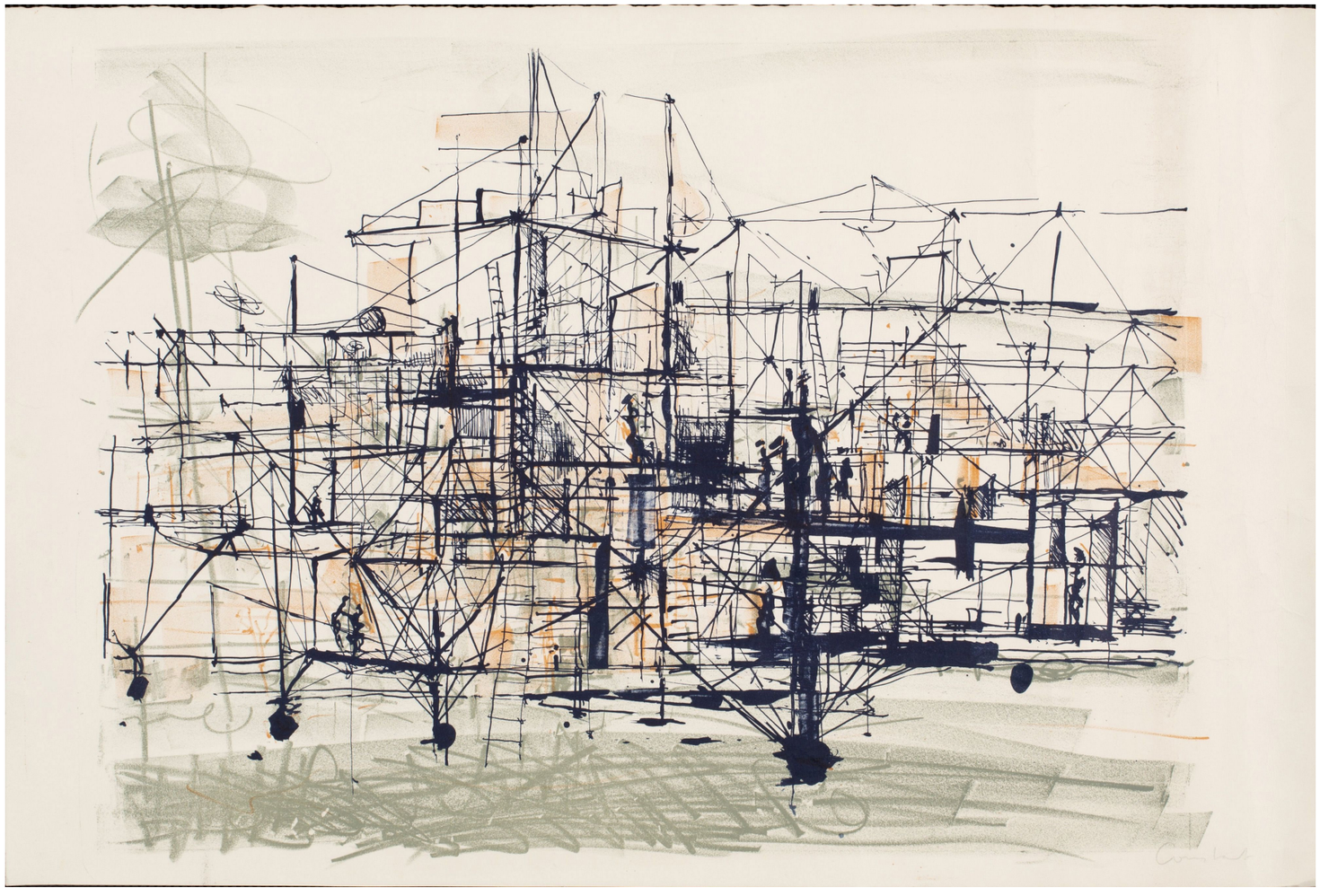
- Deleuze and Uhlmann, “The Exhausted.” (1995)



Analysis of an exhausted corner near the Fabrikken.

“That the impossible should be asked of me, good, what else could be asked of me?”
- Deleuze and Uhlmann, “The Exhausted.”

(1995)



Sketch for Nieuw Babylon, Constant Nieuwenhuis
Idea for a radically new society and a city without boundaries

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

To generate and re-imagine the possible

- How can the exhausted community of Sonderbro be revitalized?
- How to establish a resilient framework while at the same time allowing for (social) change?
- How can the public condenser contribute to constantly new un-imagined possibilities for social interactions?



The spectacle

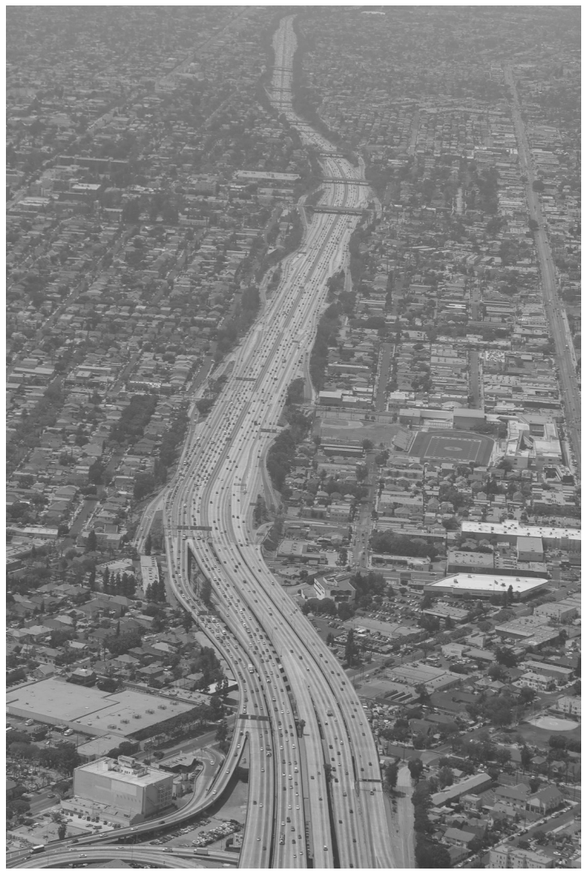
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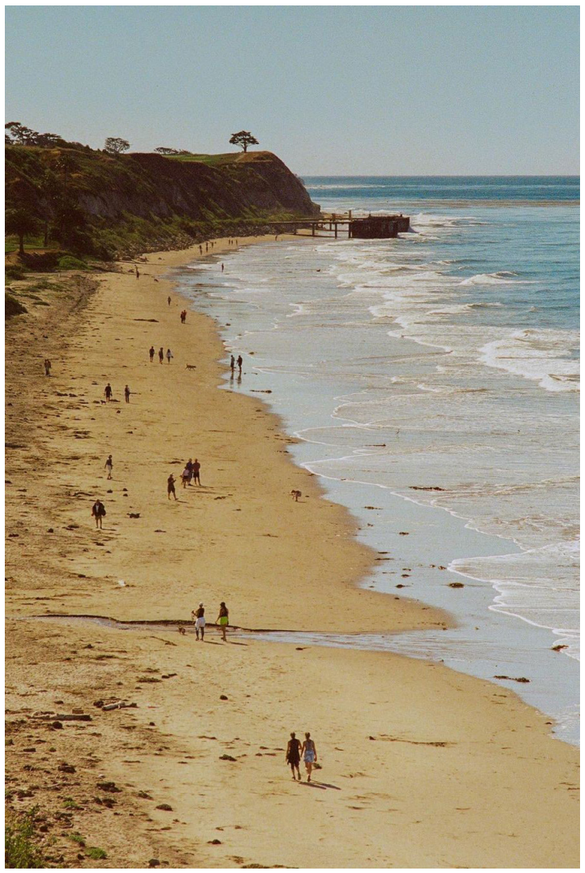


The everyday

=

The spectacular everyday



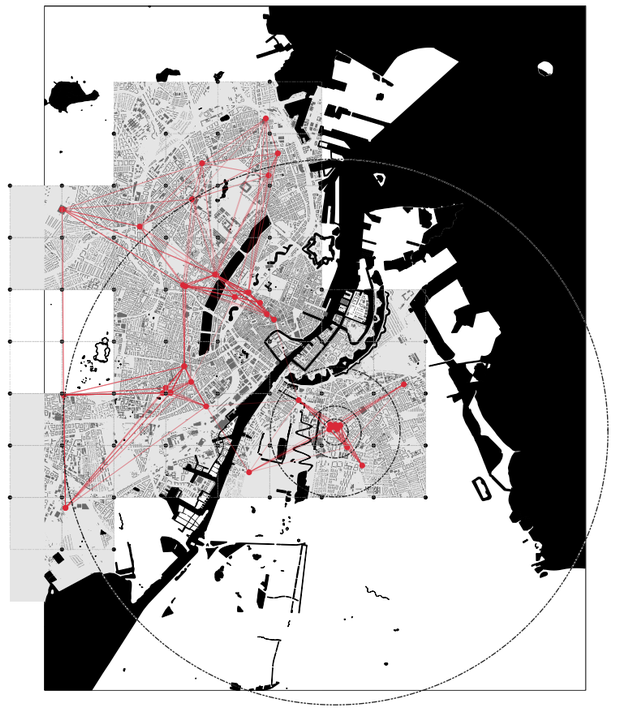


Turning boundaries into borders

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



Runing & Hiking route data from strava in Copenhagen. All go around Sonderbro.

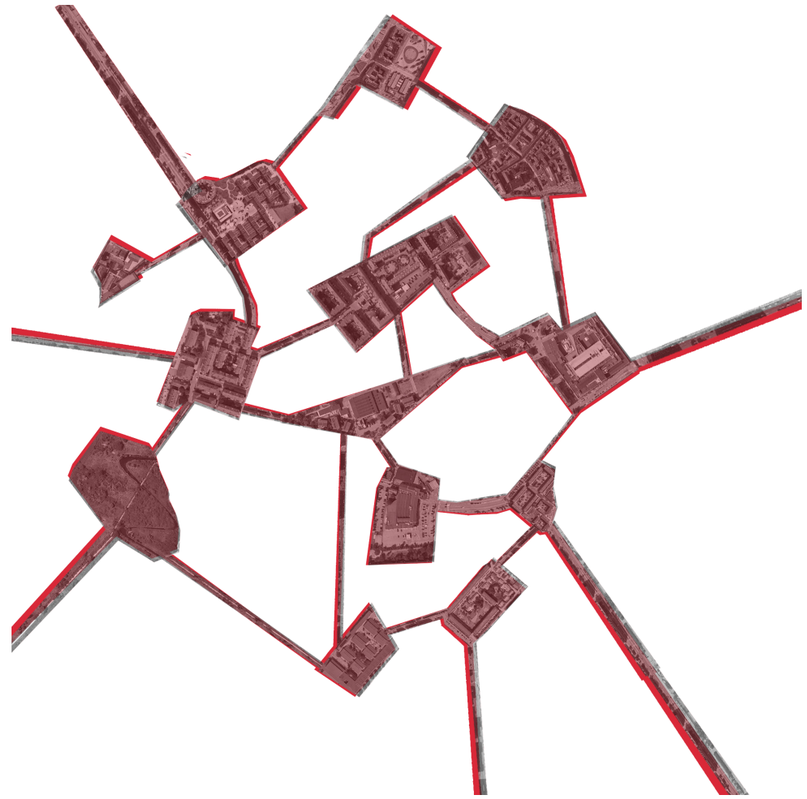


Points of interest for homeless and mentally vulnerable people. Sonderbro as part of larger network.

From Island

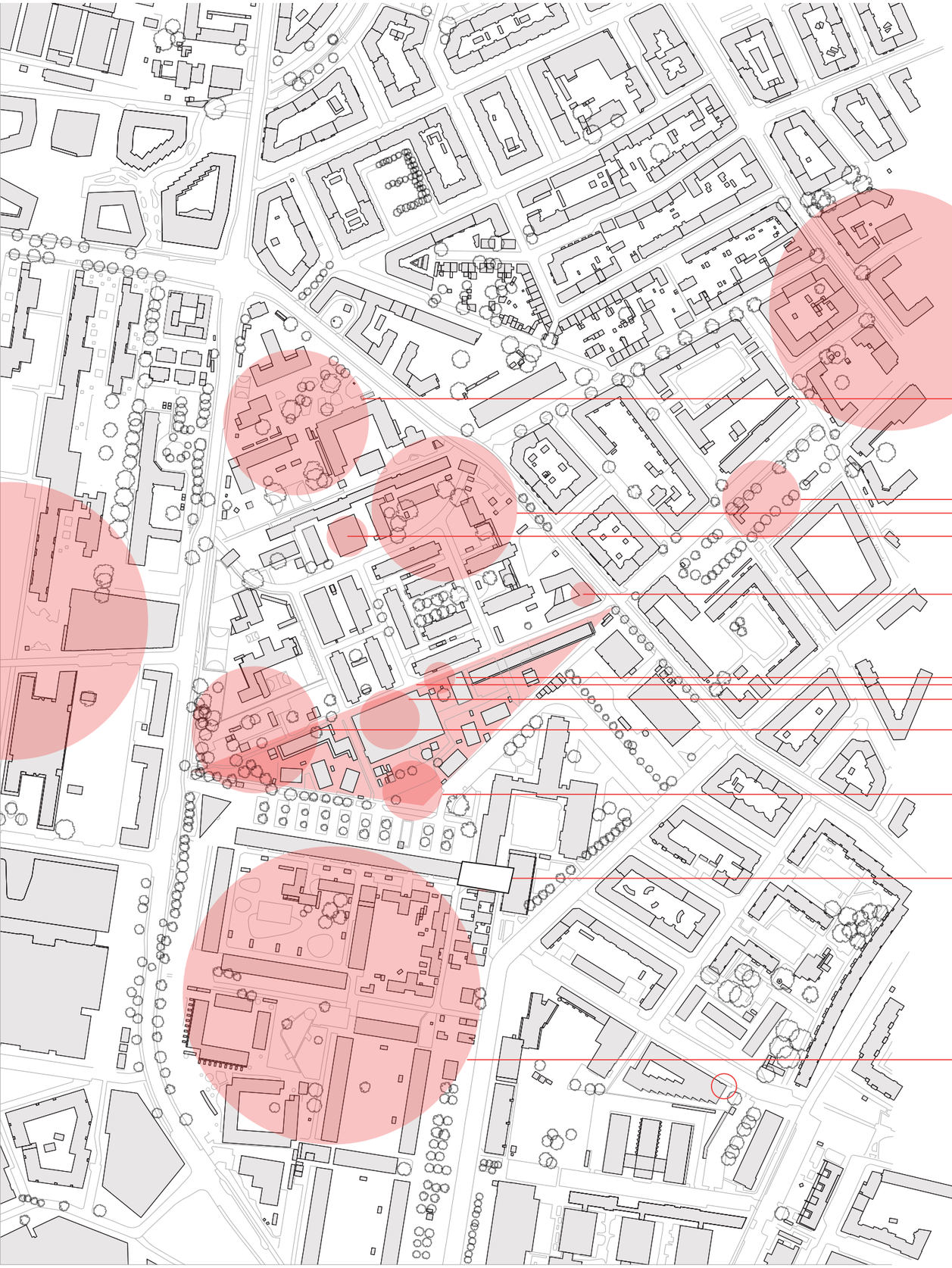


to



Archipelago

Disrupting cityscale boundaries



Amagerbrogade & Amager Centret
- Everyday, all types of activity
- main artery & shopping centre of Amager

People: Everybody.

Amager Faelled Skole
- Every weekday attracting a lot of people from the neighborhood
- outdoor playing area, publicly accesible

Exhausted: Not passing the treshhold between sundholm, relation with sundholm residents
People: local, Parents & Children

Børnehuset Det Røde Hjørne
- daily rhyth`m attracting a lot of people from the neighborhood
- outdoor playing area, publicly accesible

Exhausted: routing through sundholm, no possibility, unattractiven
People: local, Parents & Children

Fabrikken for Kunst og Design i Kobenhavn
- daily buzziness
- Culture & craftsmansship
- eventspace

Exhausted: Isolation within sundholm, invisible
People: CPH, artists & visitors incidental

Dagli'Brugsen Supermarket
- daily rhythm attracting a lot of people from the neighborhood

People: local, Everybody

Byhaven på Sundholm
- Largest public green space in sundholm
- Initiative for public garden & greenhouse

Exhausted: Hidden, depleted state, no ownership, no connection, no clear routing
People: sundholm residents, dog walkers

Hörgarden
- Large social housing porject
- Very diverse group of residents

Exhausted: Lot of additional social and economical problems, the
People: Danish & Danish with immigration background.

Den Bemandede Legeplads i Øselsgade
Potential: green space, public gathering
Exhausted: bad state, bad reputation, depleted an monofunctional
People: Local, Dogwalkers, children, drugdealers?

Sundholm
Potential: diversity, learning, reflection.
People: homeless

Maskinhallen
Potential, Event space, different groups
People: Sundholm residents, volunteers, artists, copenhageners

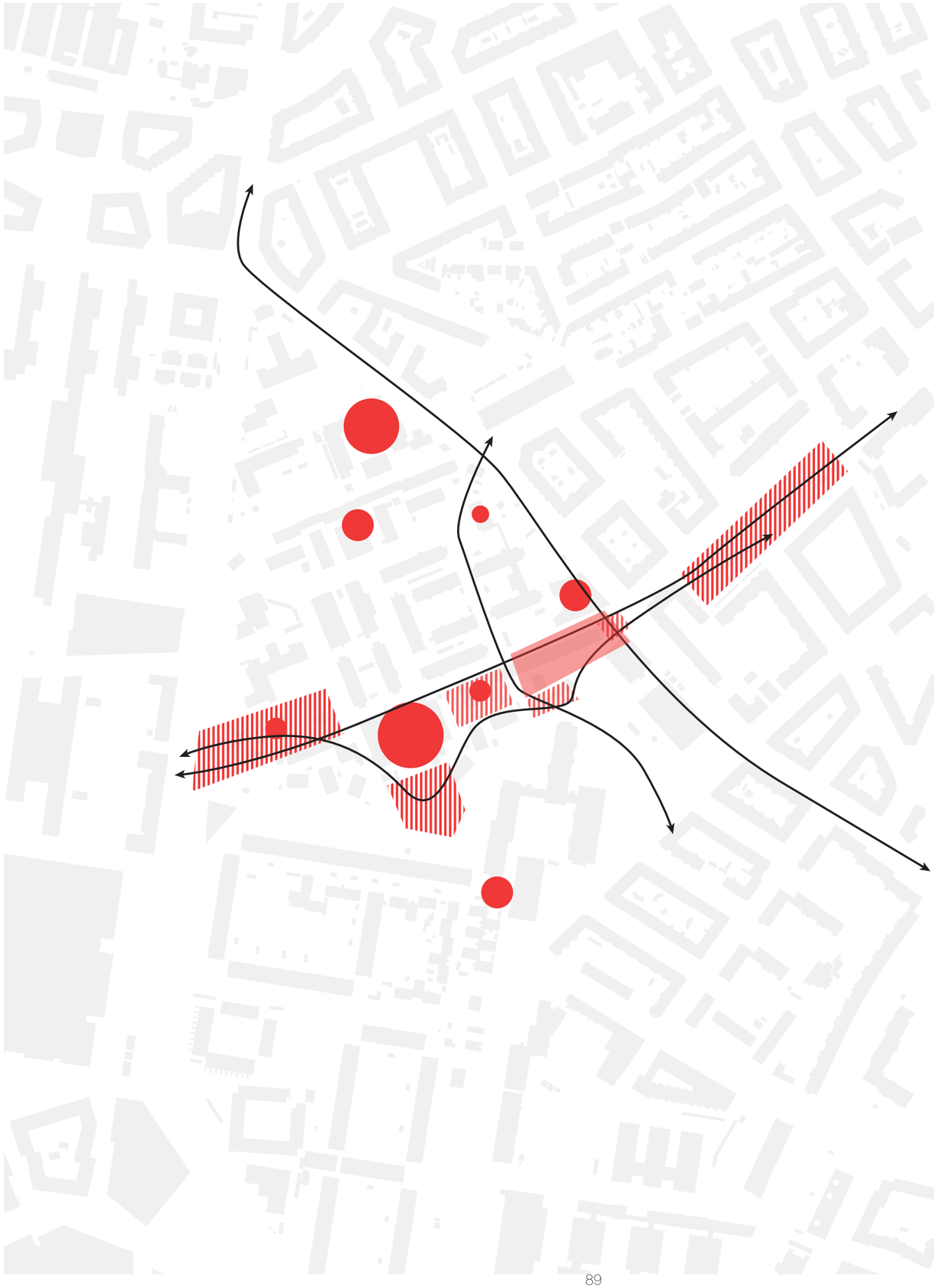
Old Shed
Exhausted: no function, no connection
People: no one

Exhausted horizontal and vertical routing
- small, uninviting narrow, etc
- doesn't connect to amagerfaelledvej

Green space
Exhausted: no ownership, no routing, depleted

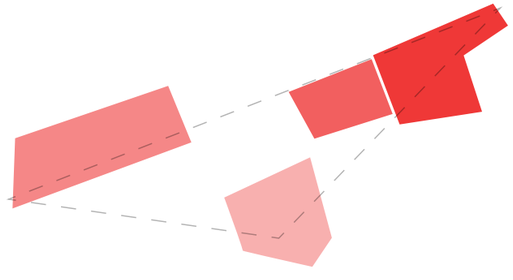


Mental and physical boundaries



Urban strategy

Creating a horizontal and vertical conection
Morphing boundary into border
Clarifying structure and use of public space
Creating different qualities
Amplifying green and blue qualities



Hierarchy of disruption needed

Masterplan



Three different qualities
2 horizontal routes & 1 vertical restored
Amplified green & blue & public spaces

Turning the whole triangle into a border territory
Connection through textures. qualities
Attractive for everyday routes

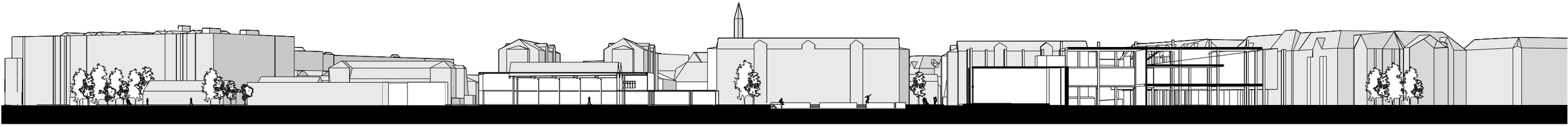
Parque with qualitative green space, community gardens. Containing the Shed, an extension of the food-corner program.

Fabrikken out of isolation, part of larger border territory and connection with the public condensers

Open square
& water retention system

Positioning on the boundaries of the area.

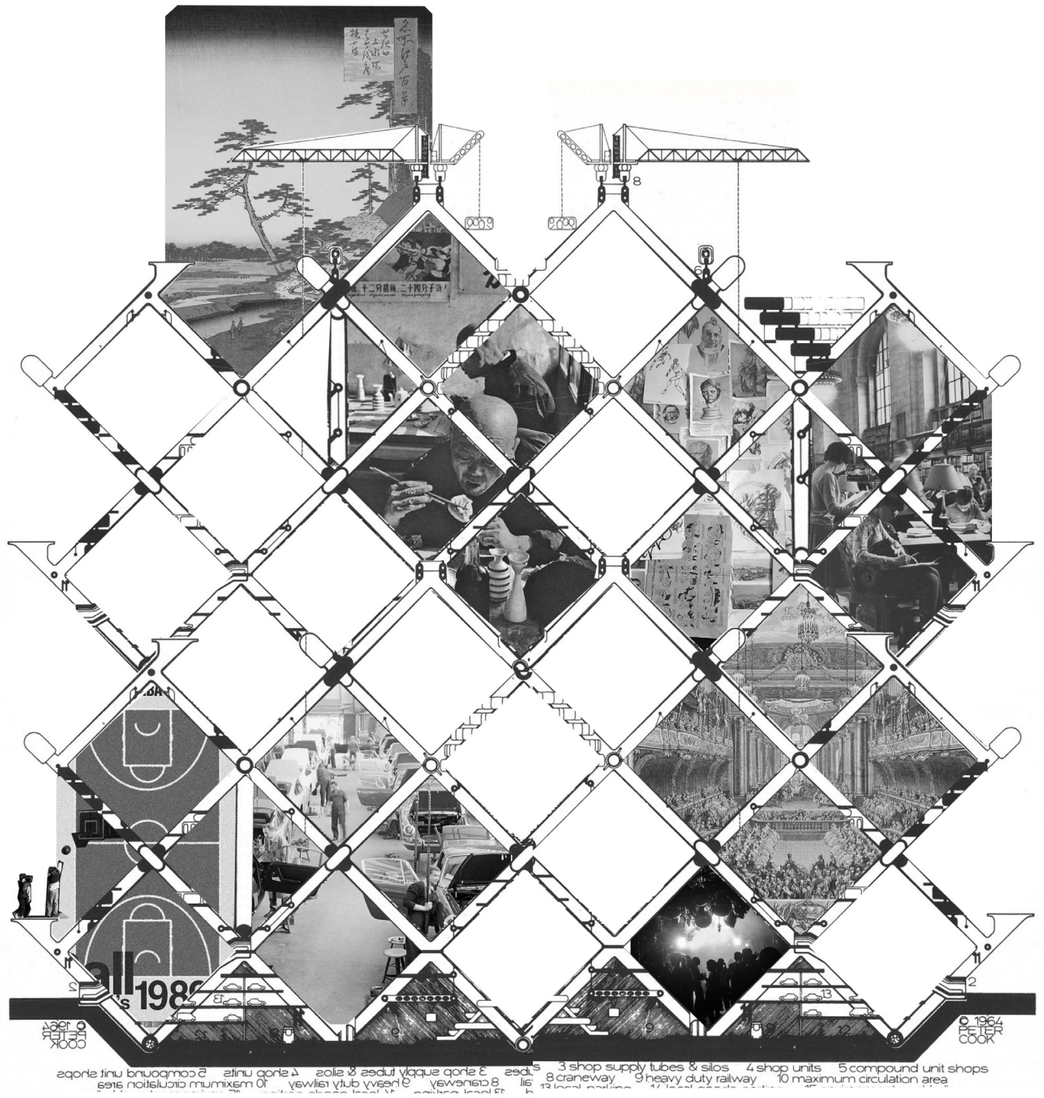
green route extending
towards
Amagerbrogade



Shed 2.0

Dissassembly shed

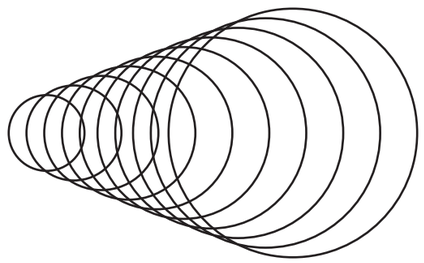
Removal of temporary school building



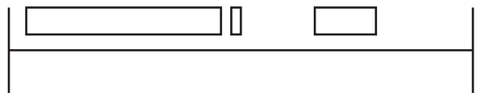


Hybrid program

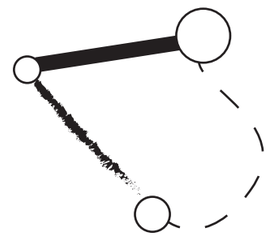
Free space's & defined functions to maximize possibility and deal with the exhausted



Range of social



Time, duration and frequency



Type of social interaction

Programmatic research

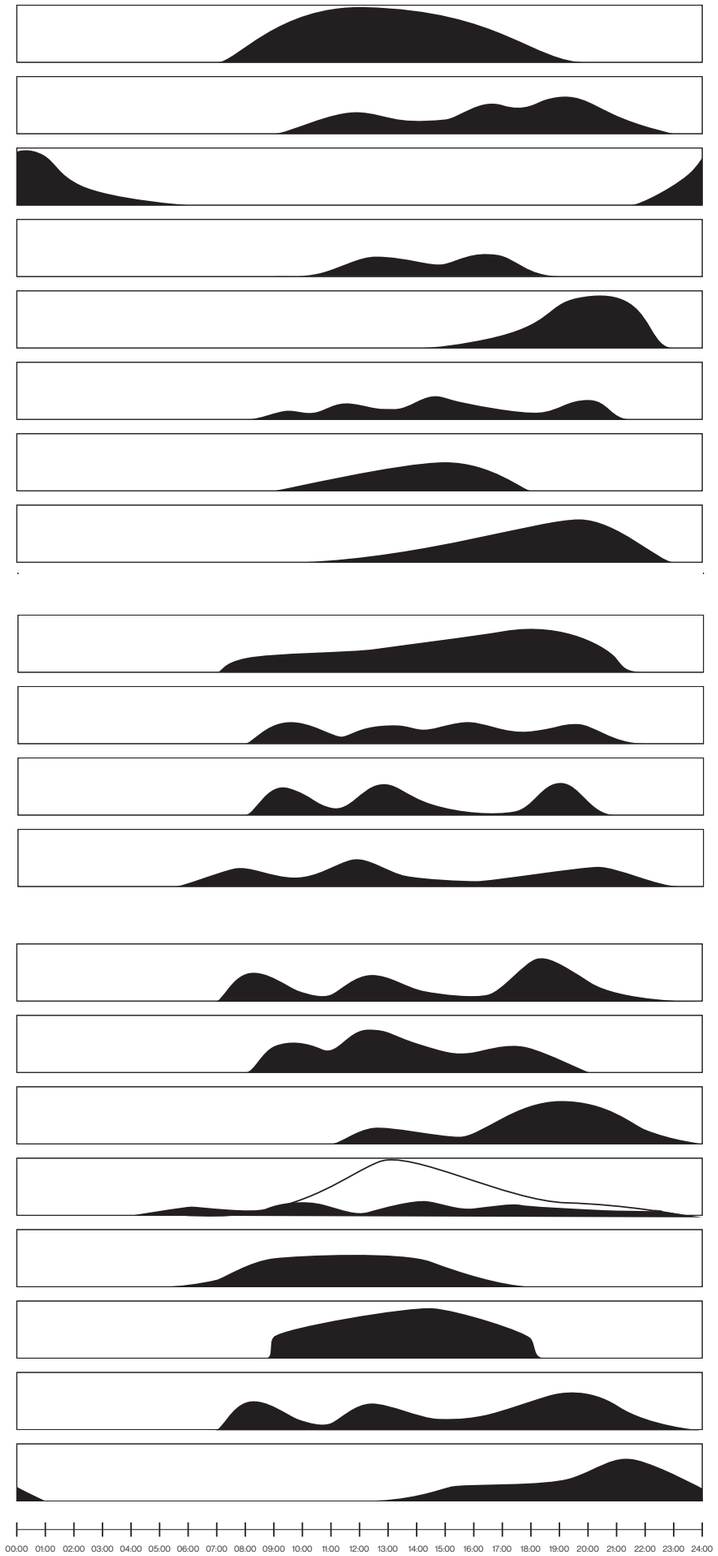
The exhausted context of sundholm is defined by a lack of possibility for social interaction. Principles to approach the design of the program to generate possibility for social interaction.

Program analysis

Frequency	exchange	Diversity	Size	**Culture**
The everyday	High	High		Library
Event	Low	Medium		Theatre
Occasional	High	Medium		Nightclub
event	Medium	Medium		Exhibition space
event	Medium	High		Music venue
Everyday	Medium	medium		Studio's & workshop
Occasional	Low	medium		Bookstore
Occasional	Low	High		Cinema

Frequency	exchange	Diversity	Size	**Sports**
Occasional	Low	Low		Gym
Occasional	High	Low		Playground
Occasional	High	High		Sportsfield
Occasional	Medium	Medium		outdoor gym

exchange	Diversity	Size	**FOOD**
High	High		Communal kitchen
Medium	Medium		Coffee shop
low	low		Restaurant
High	medium		Kitchen Garden
low	Medium		Baker
medium	High		Market Shop
medium	High		Dining area
High	High		Bar





The Eventfull

Watching
Expressing
Organizing
Meeting
Gathering

The event

Small to largescale

The whole of Copenhagen



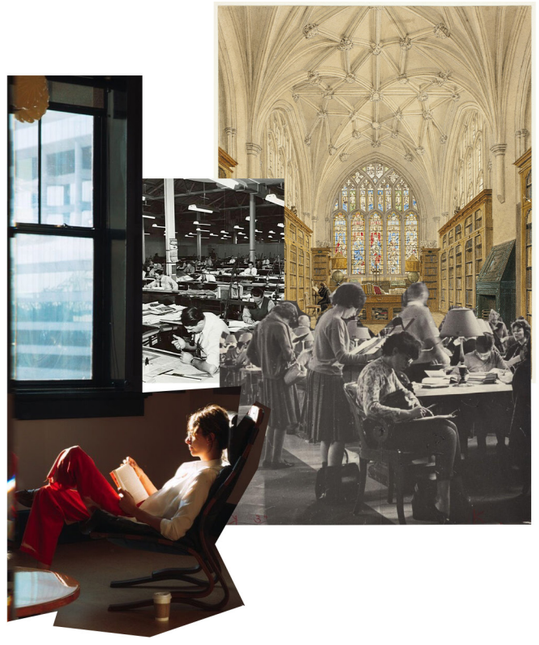
The Foodcorner

Meeting
Teaching
Cooking
Eating

Everyday

Small to medium scale

The local



The Library 2.0

Working
Learning
Studying
Reading
Meeting

Everyday

small to large scale

The Local and beyond

Foodcorner

commercial kitchen	80
dining area	200
storage	20
toilet	10
Food & convenience/bookstore	40
office	20
subtotal	370

Garden shed (extension of foodcorner)

teaching kitchen	60
small eventroom/dining space	50
storage & toolshed	10
allotments	-
subtotal	120

The eventfull

large hall	500
toilets	20
foyer	250
offices	50
meeting room's	50
backstage	50
storage	50
subtotal	970

library 2.0

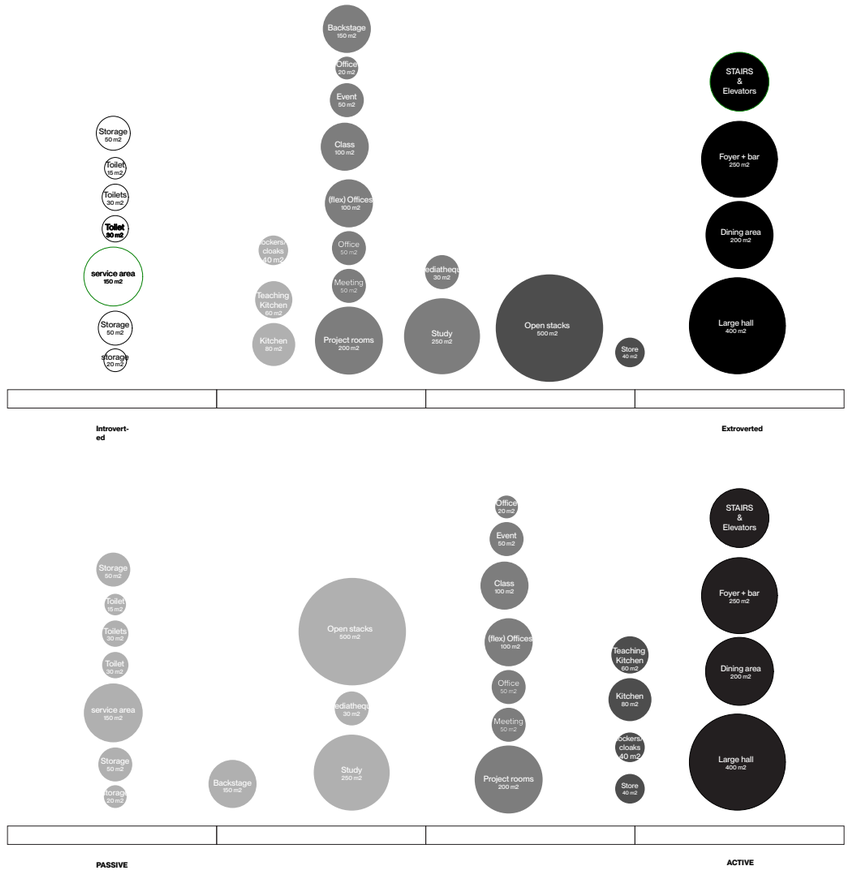
children-adult section open stacks	500
study spaces/silent area	200
mediatheque	75
project/group rooms	200
workshopspace	100
flex workspaces	100
toilets	30
storage & archive	50
reception/infopoint	20
Shared kitchen	20
exposition space	25
subtotal	1320

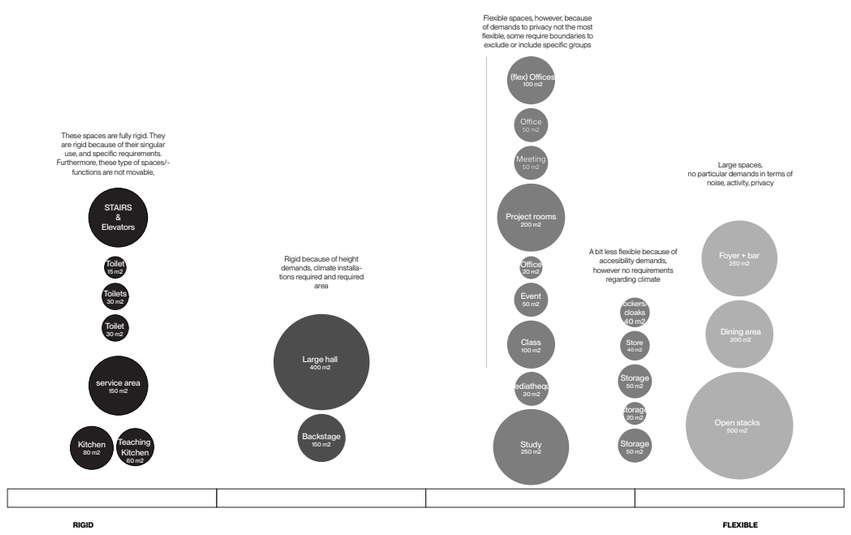
Extra

service area	150
Bike parking	200
roofterrace	-

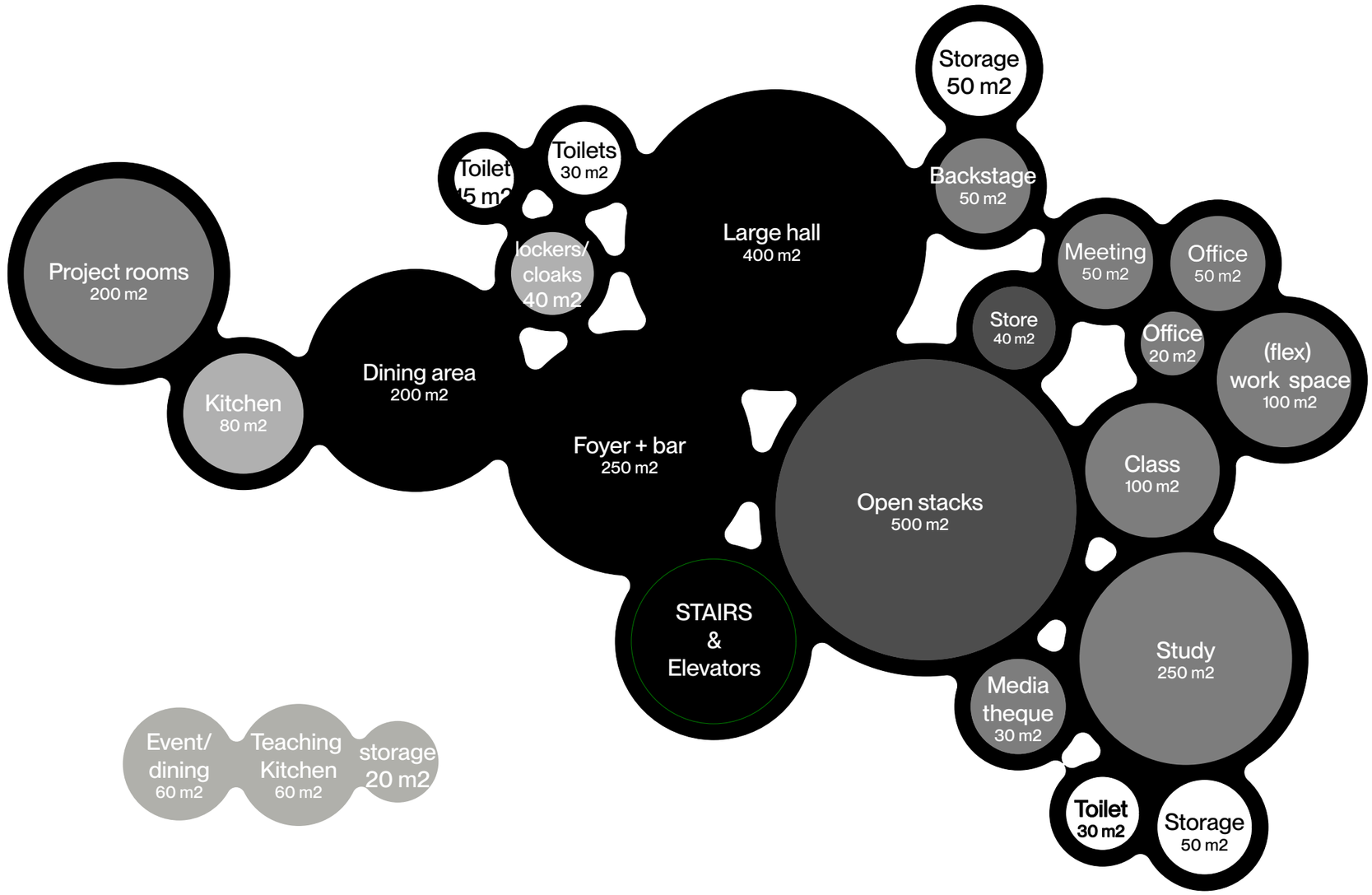
subtotal determined area	3130
Undetermined circulation space (30%)	939

Total area indoor = 4069

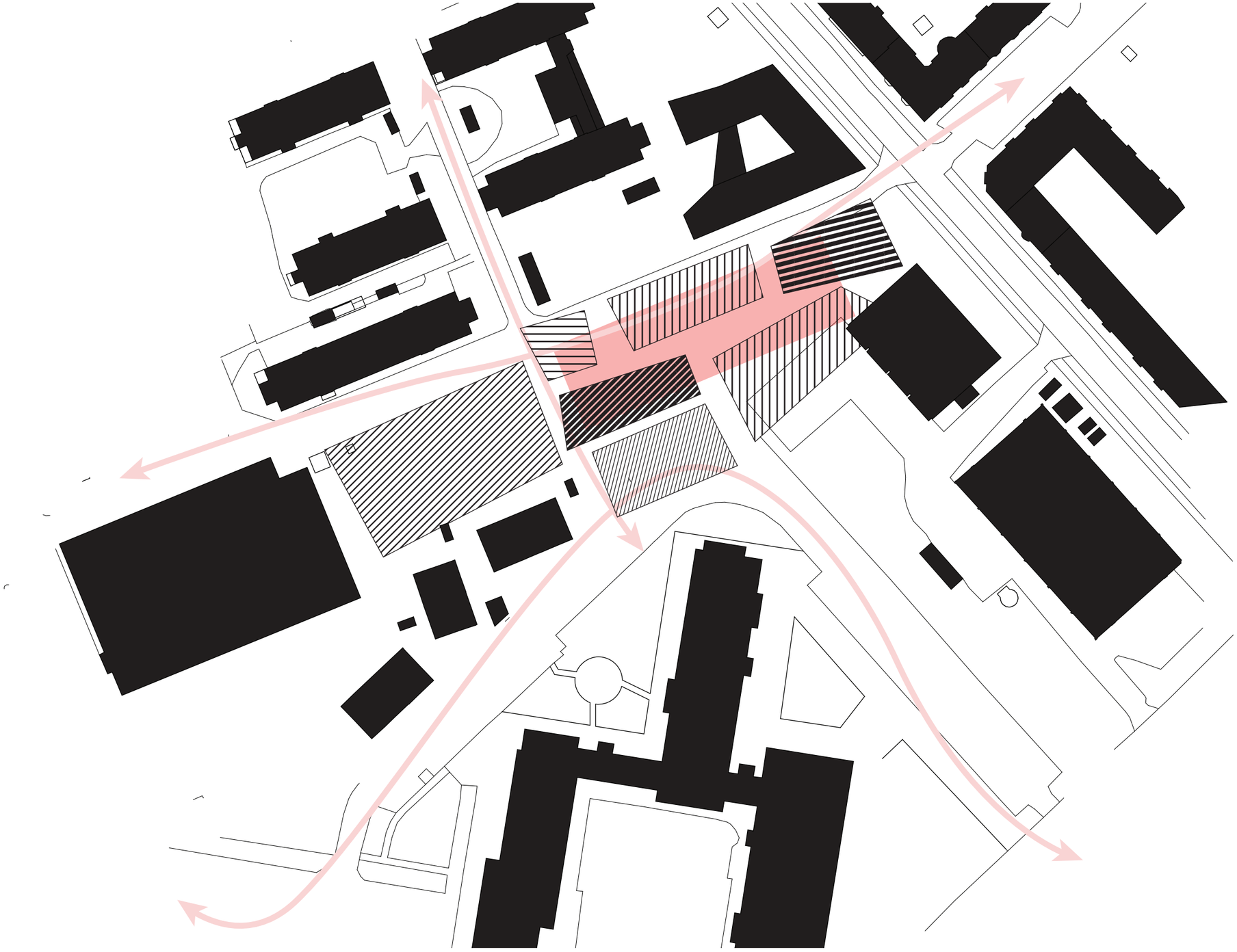




Quantitative brief



Organizational diagram



No specific attention required

Potential point to connect to sundholm residents

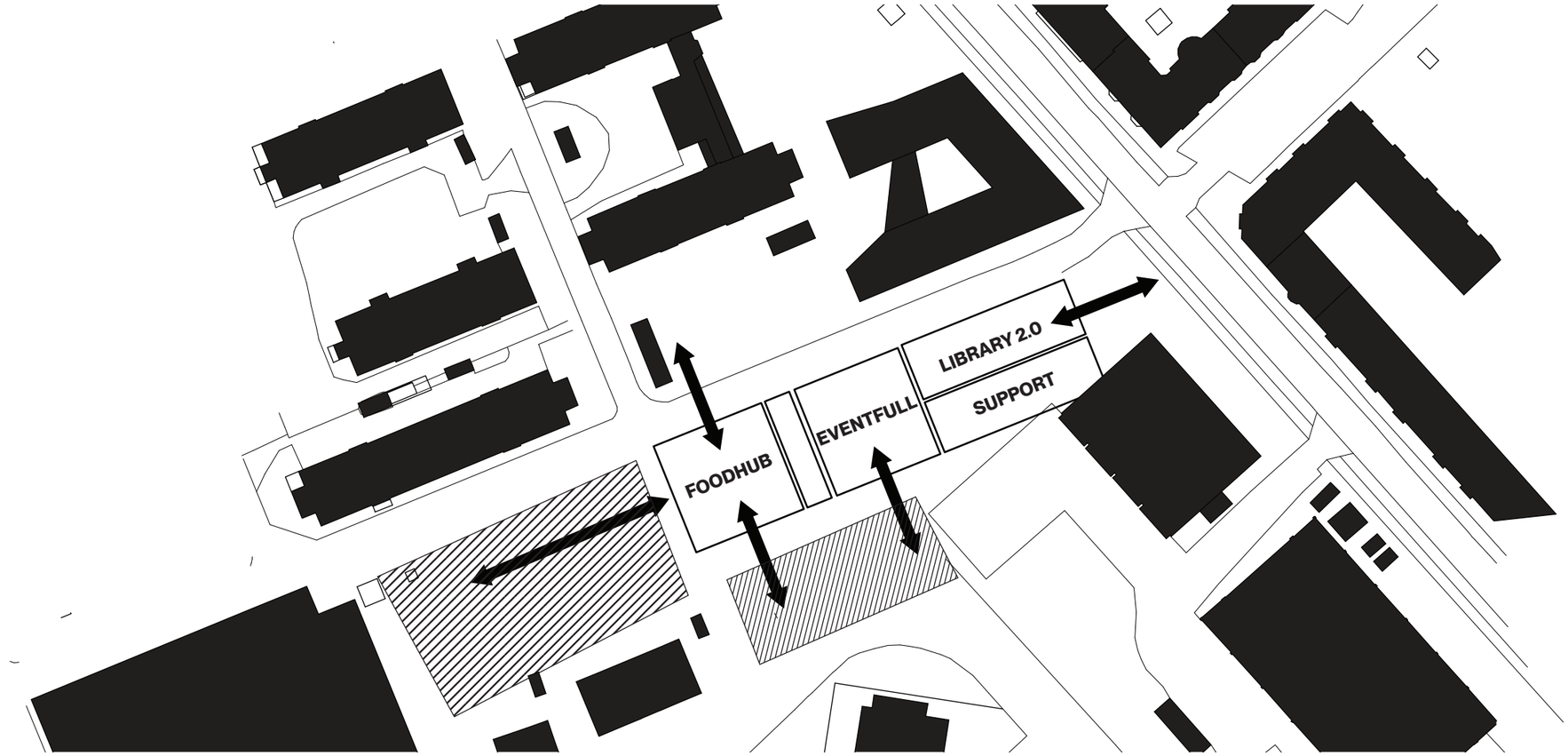
attract everyday flow of people at Sundholsvej, connect inside and outside

Most extroverted area and facade, attract everyday and must be able function as spectacle, connect to the two squares, important point of convergence of routes

the square' needs to connect both fabrikken and Condenser, function as a border instead of boundary. become part of everyday routes and part of spectacle

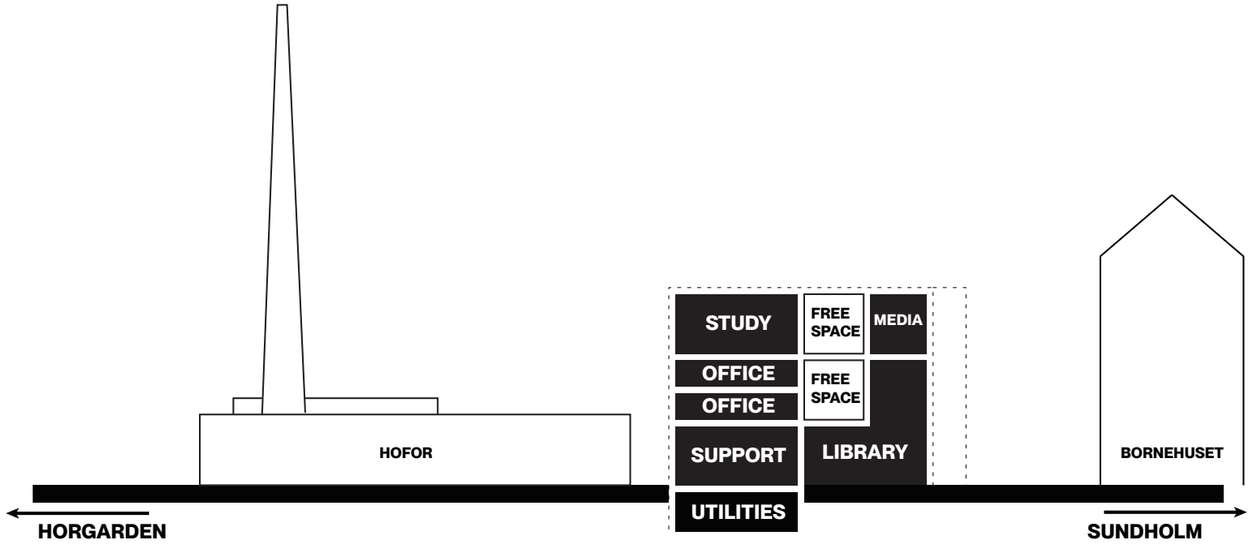
the area could serve as an extension of the border of condenser, part of both the everyday rhythms and spectacle

Different boundaries, different necessities



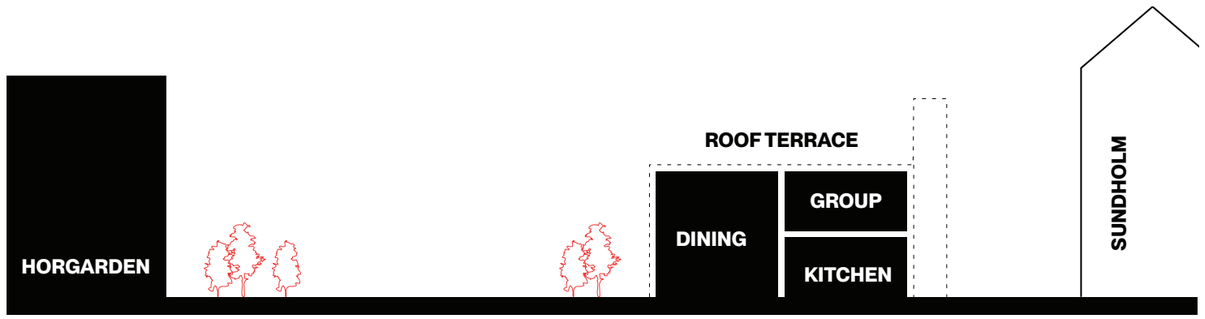
Programm that activates

Sections in context



Section CC

Distribution introverted versus extroverted activities.
Free spaces



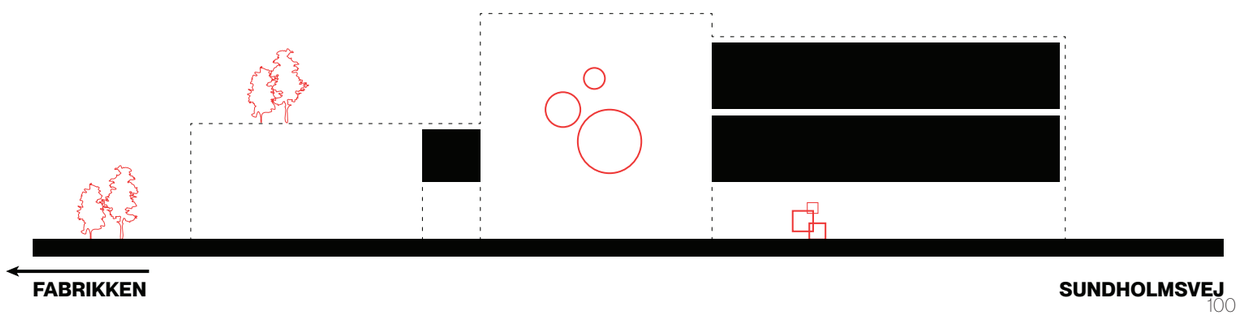
Section BB

Distribution introverted versus extroverted activities



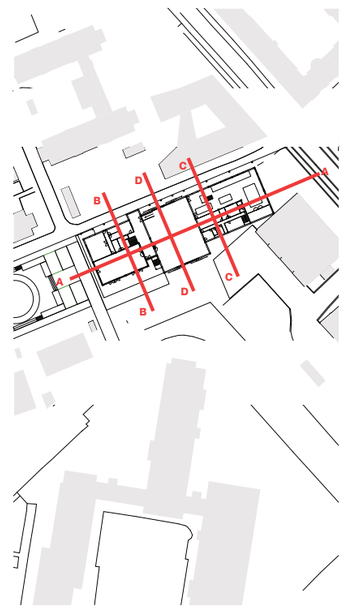
Section AA

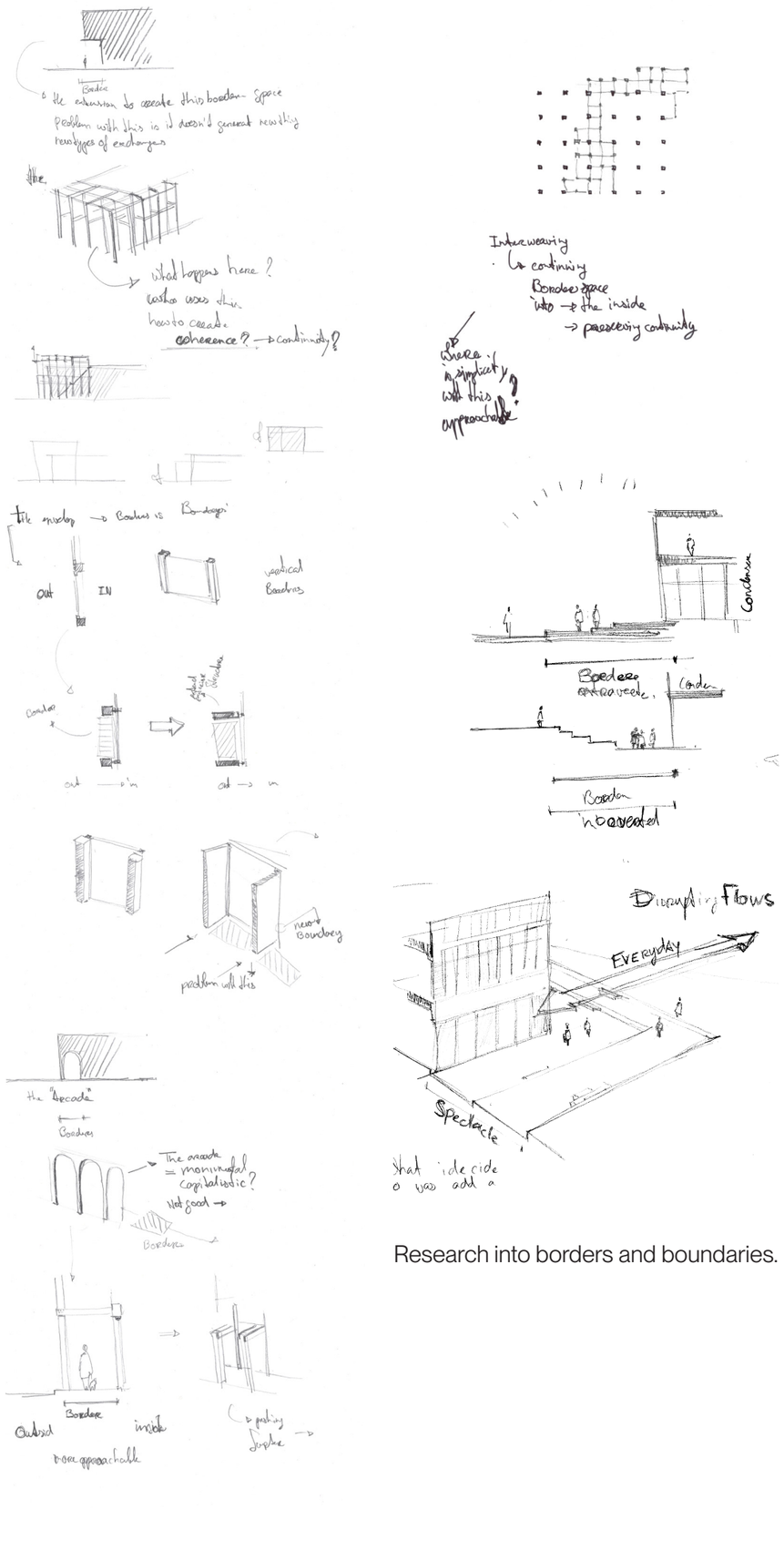
Encapsulating the spectacle with the everyday



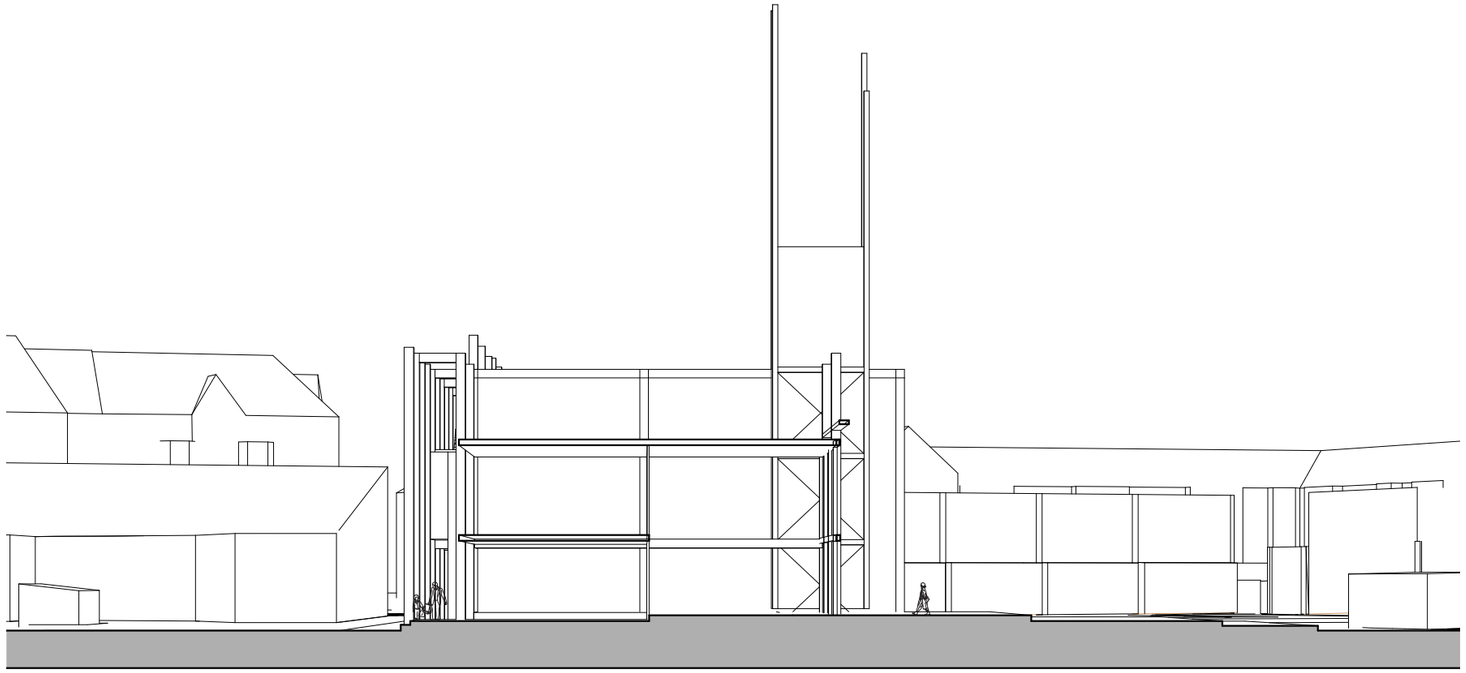
Section AA

Diffusing the border between inside and outside by creating a connected public ground floor

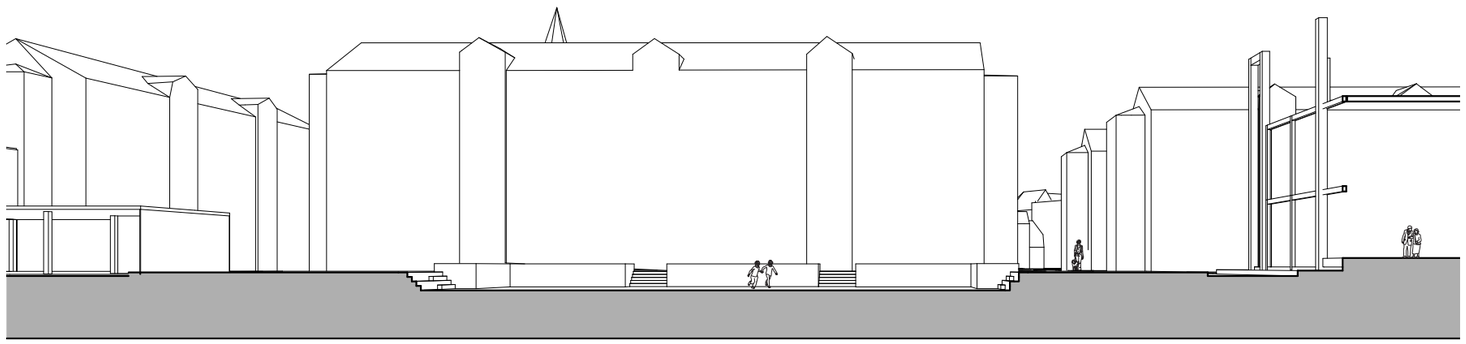




Research into borders and boundaries.

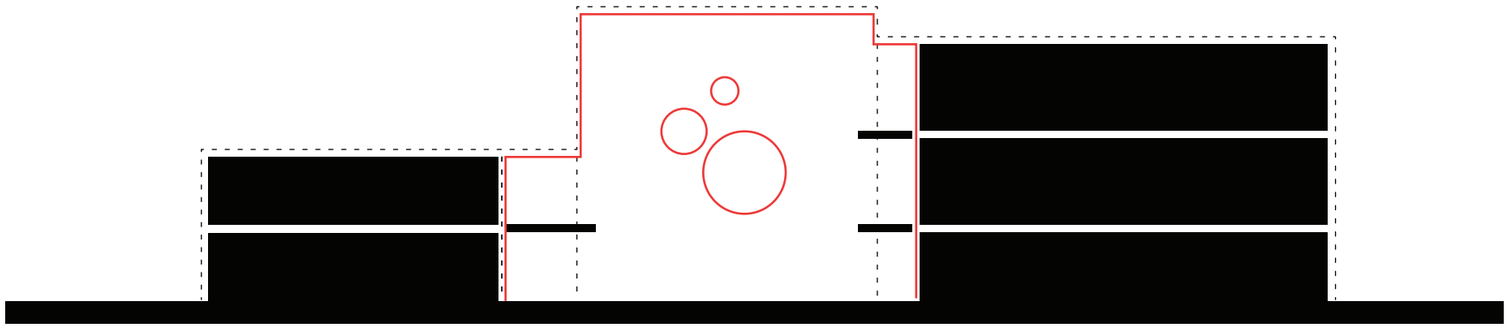


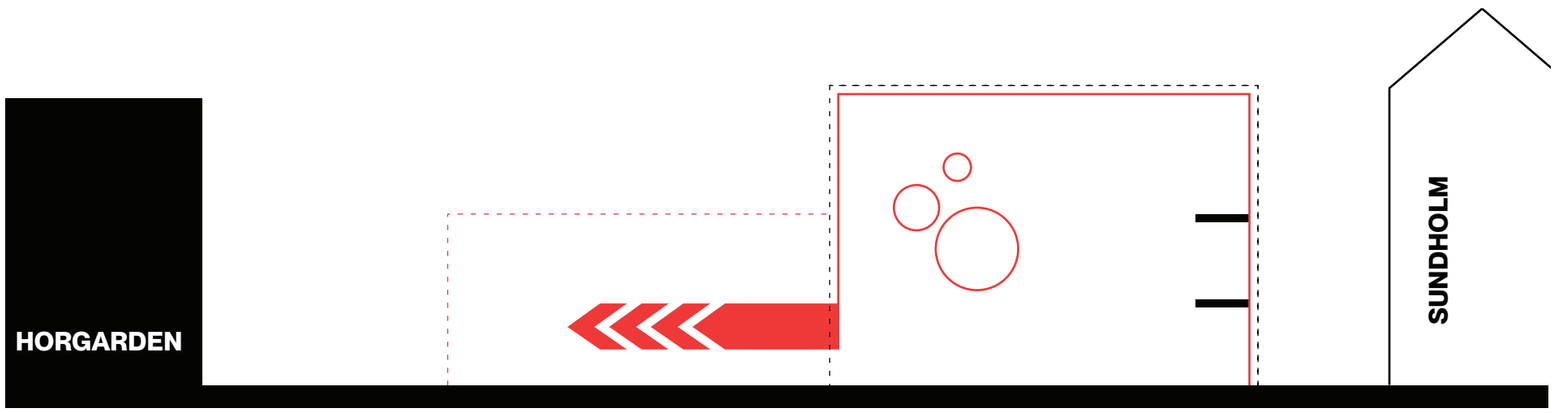
Elevating the condenser and lifting the surrounding slightly to stretch the borders of the condenser. Arcade stretching the borders o



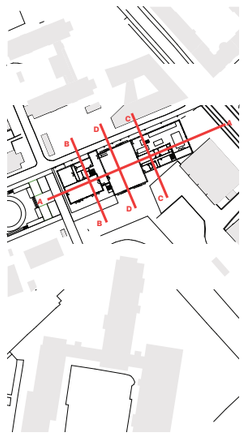
Lowering the square between the Fabrikken & Condenser. Creating a border that demarcates the square while not obstructing visual connection.

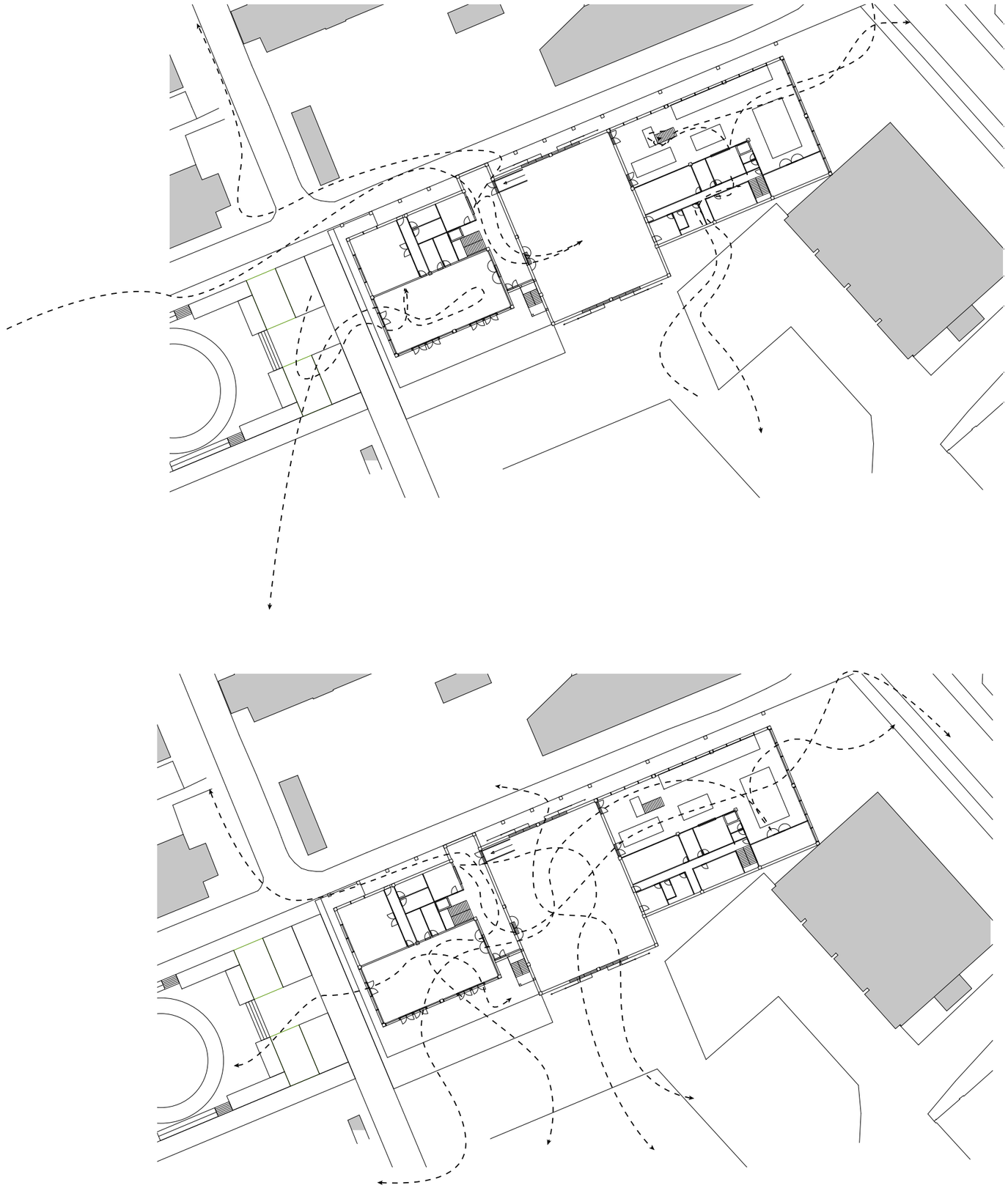
Diffusing borders & boundaries

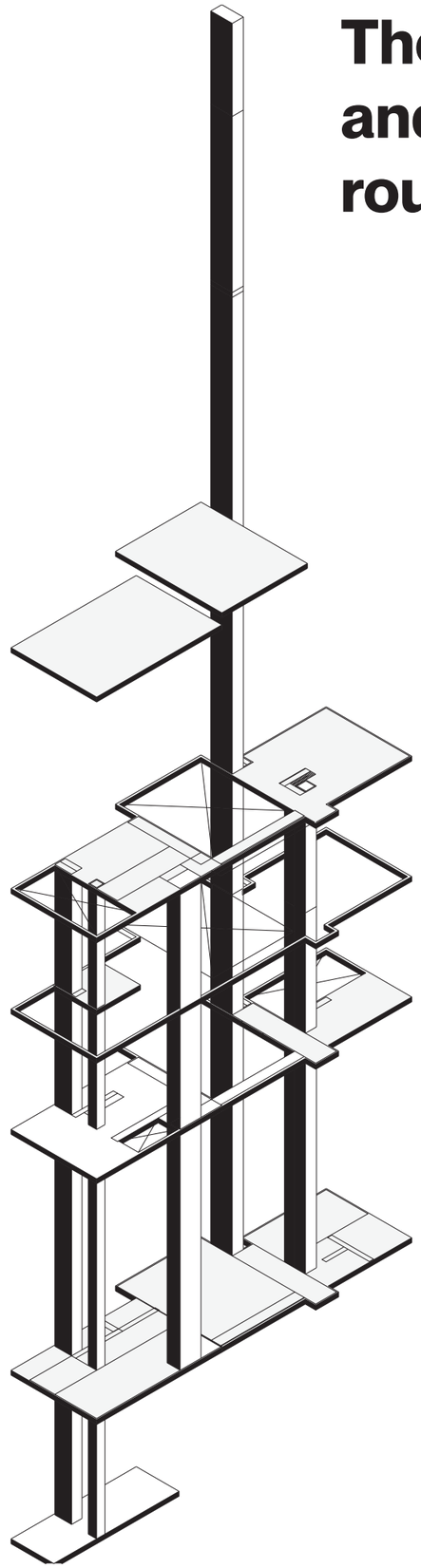




The spectacle to disrupt boundaries

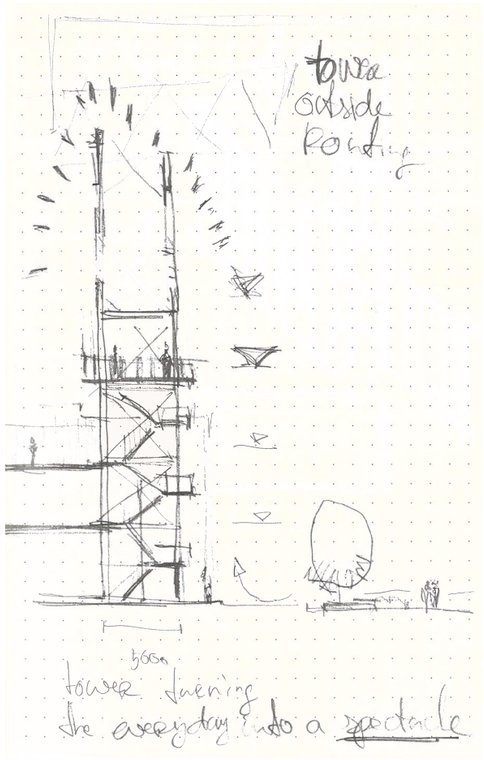


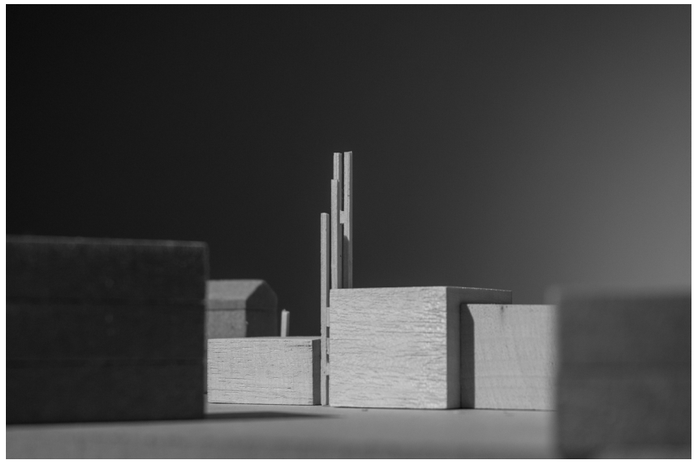


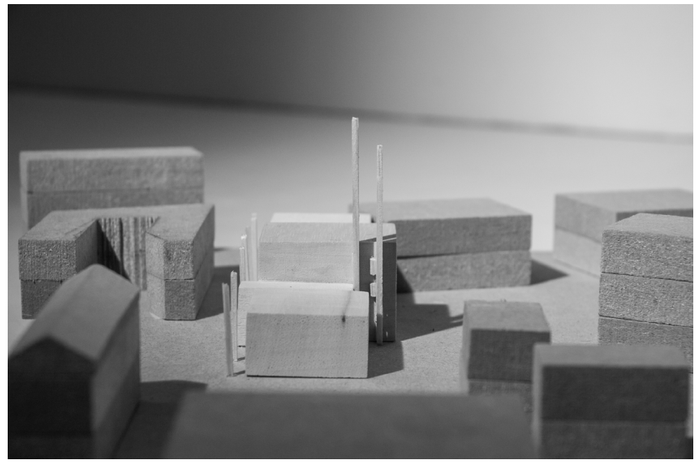


The everyday and spectacular route

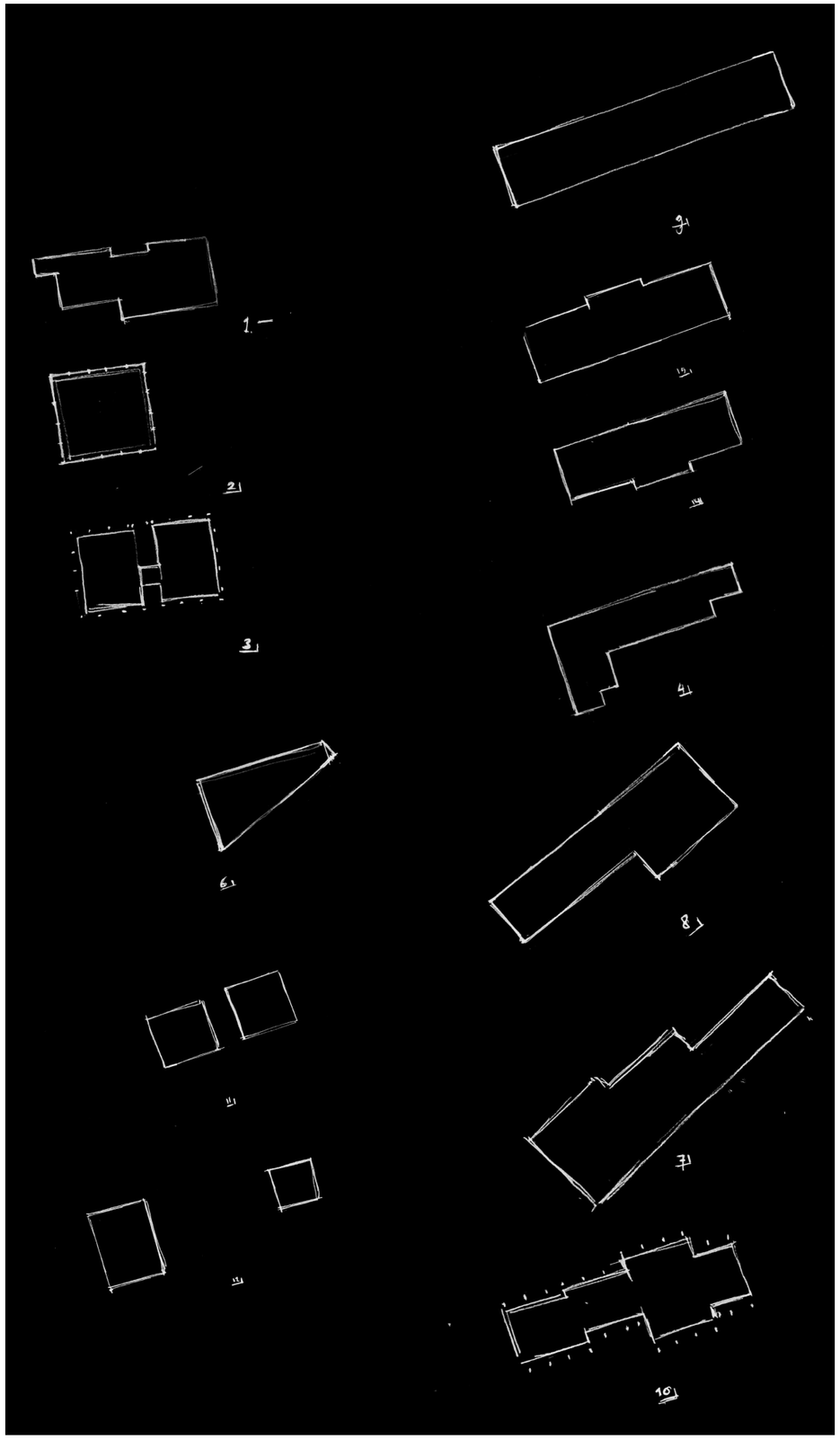


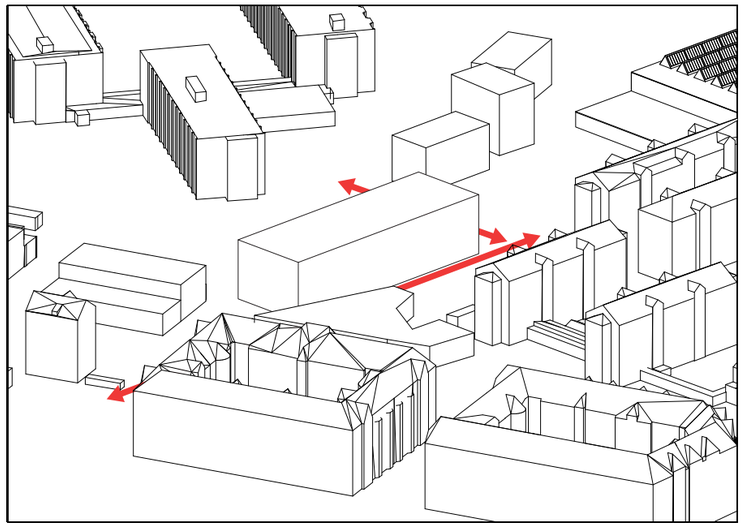


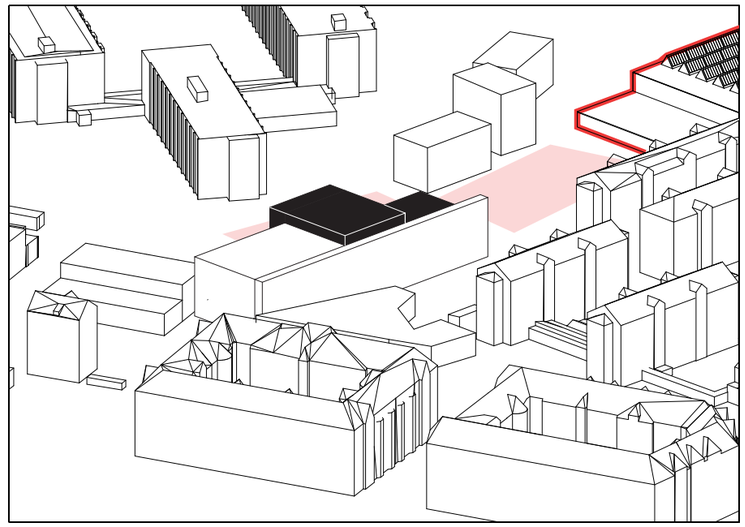


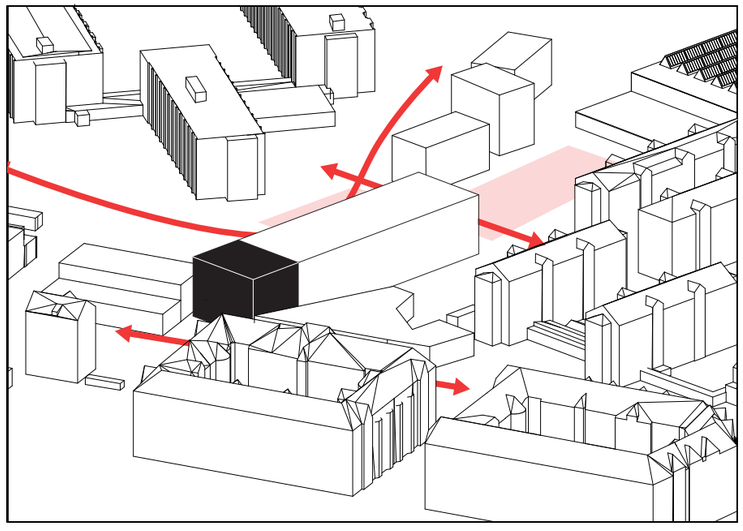


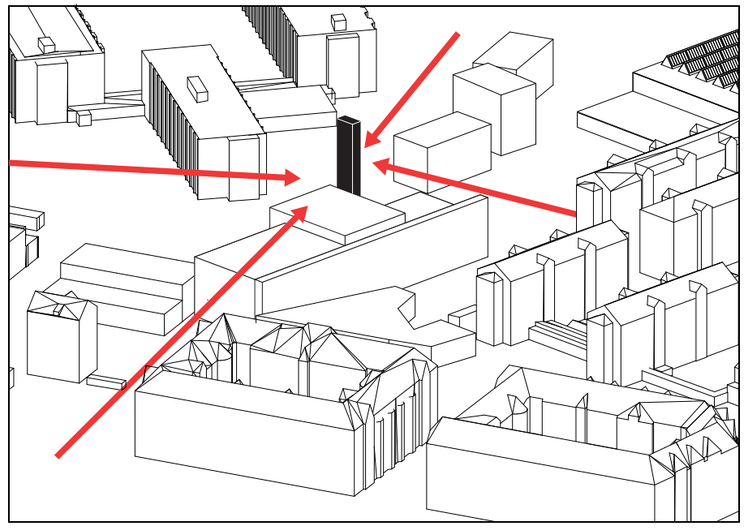
Spectacular route & roof terrace

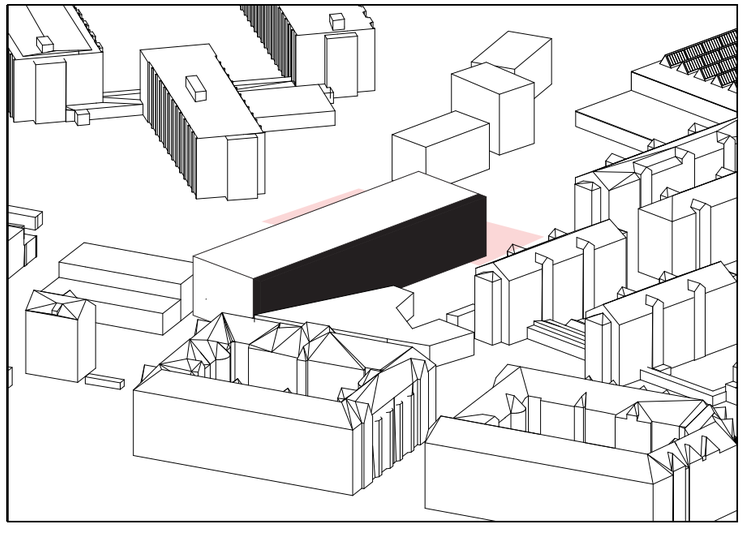






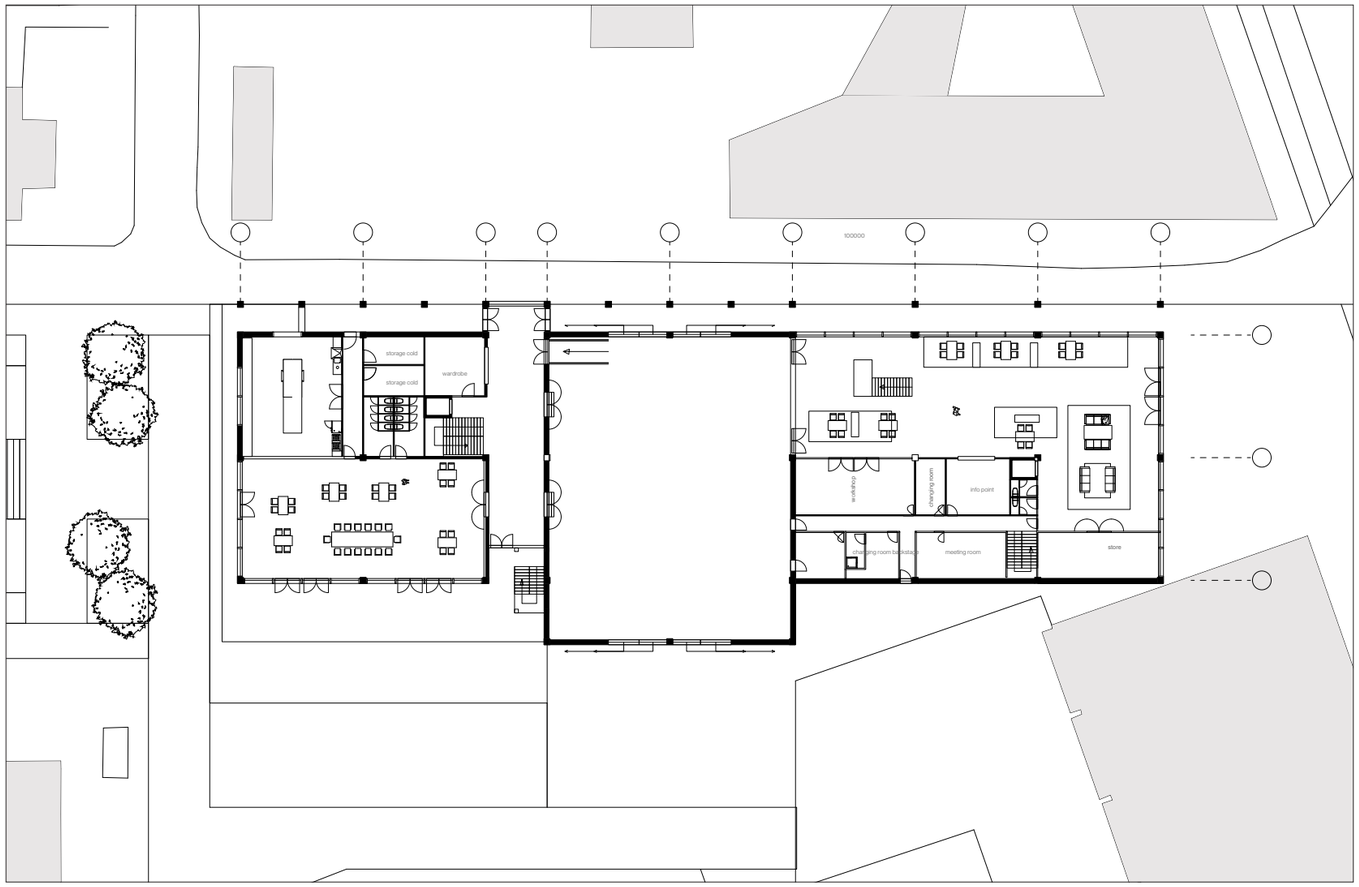




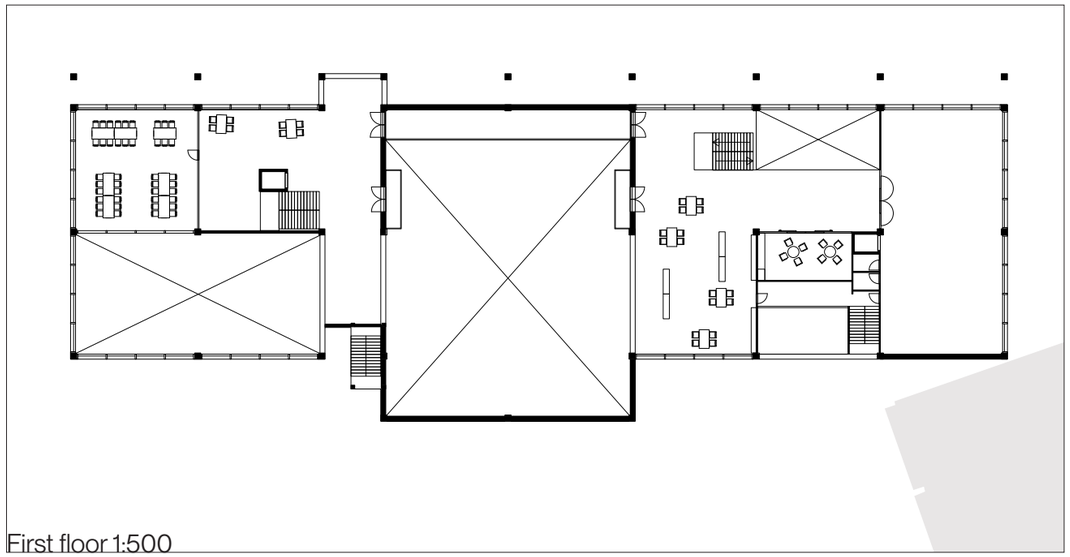


1) positioning to accentuate flows
2) extending the shape to connect different borders
3) Diffusing borders
4) Accentuating spectacle and
5) Exterior route

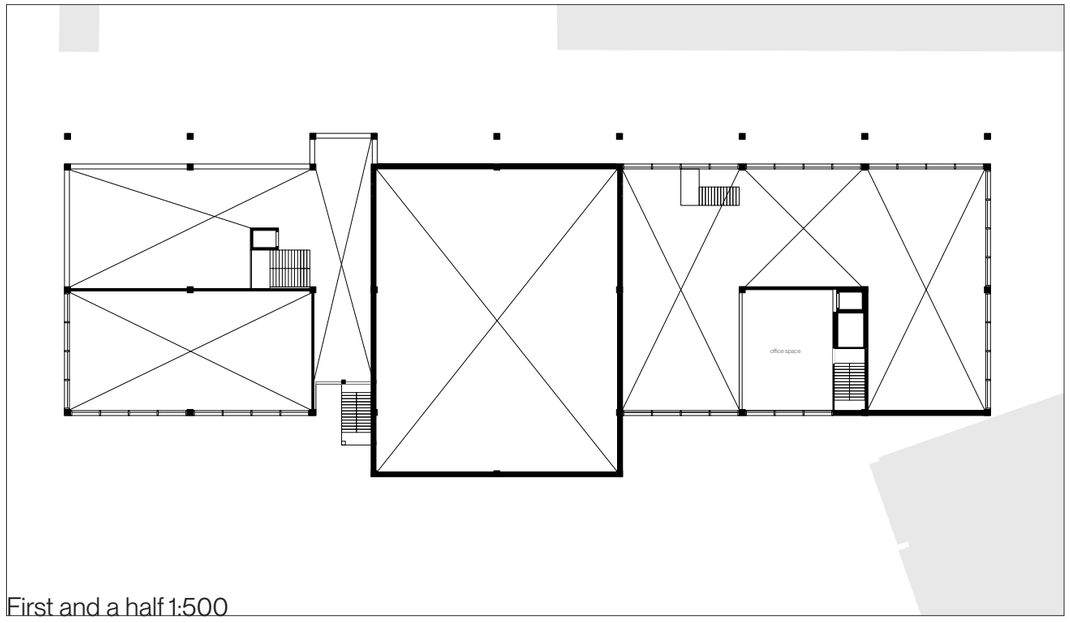
Mass development



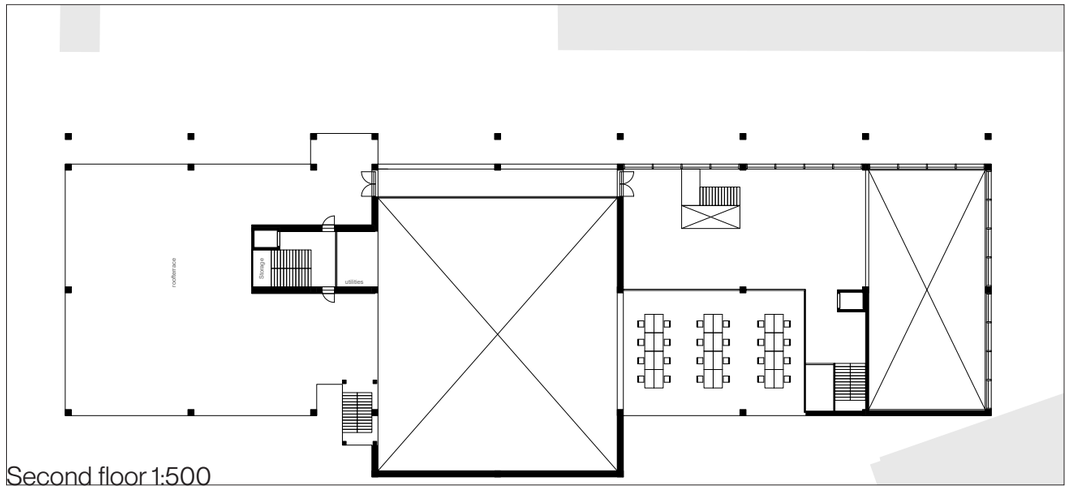
Ground floor 1:500



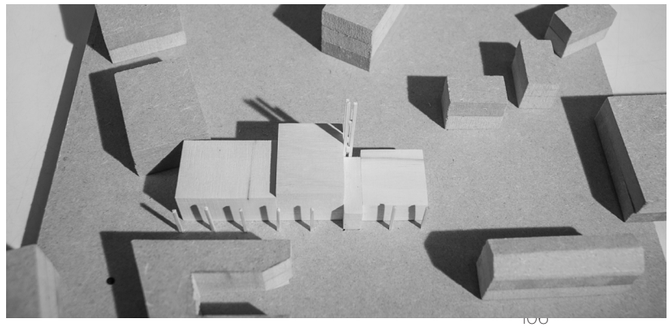
First floor 1:500



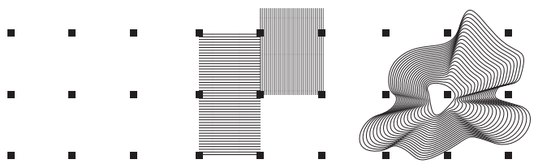
First and a half 1:500



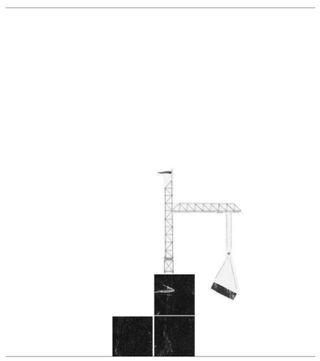
Second floor 1:500



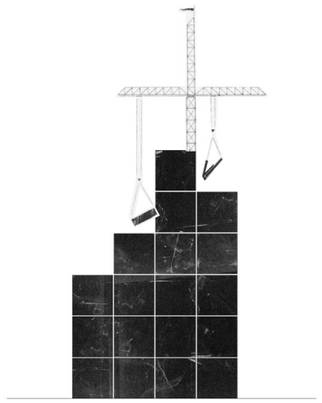
Floorplans



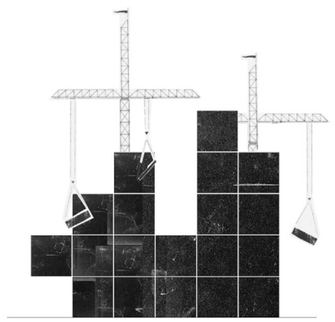
Flexibility to generate possibility



Birth of a building



Growth

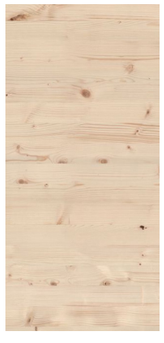


Change

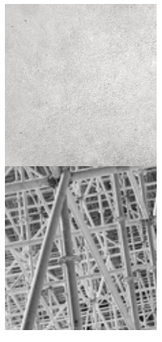


Death of the condenser

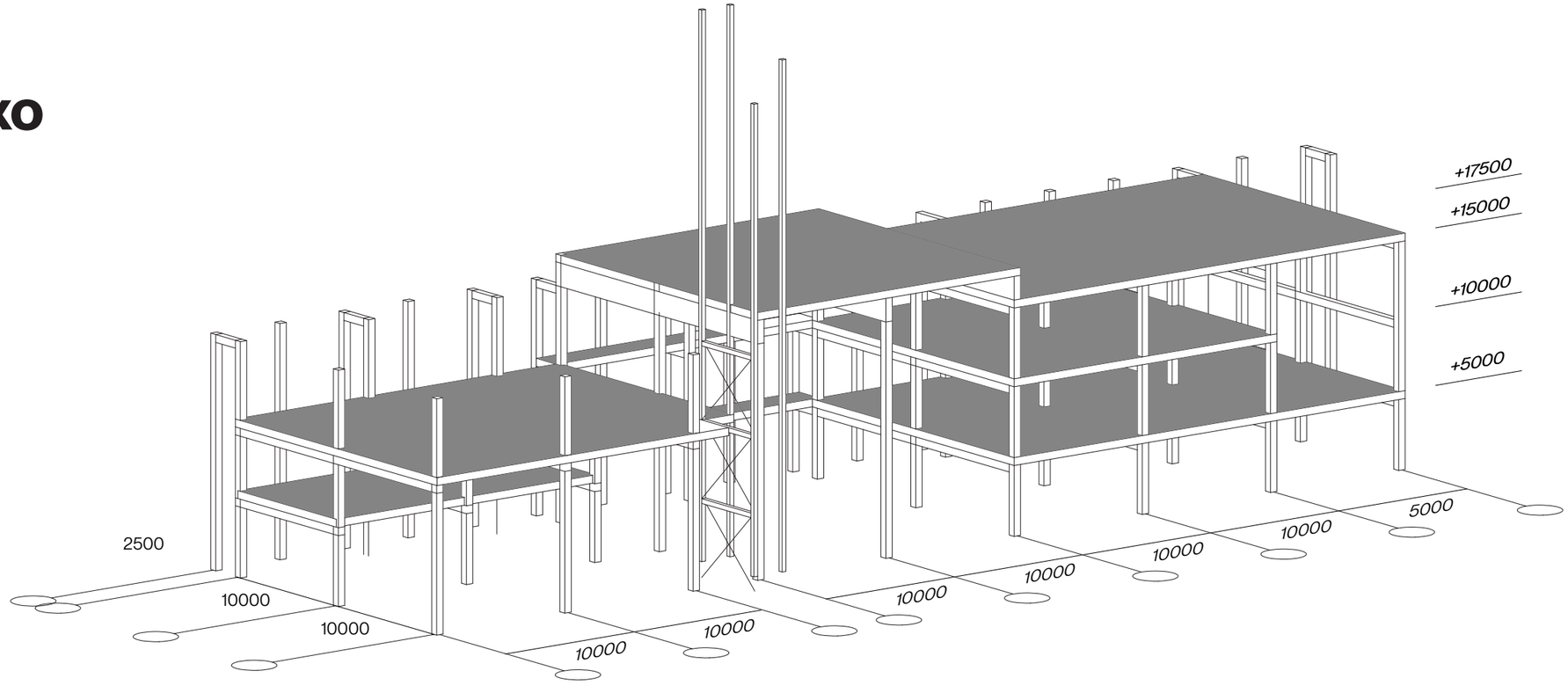
Spatial Structure Axo



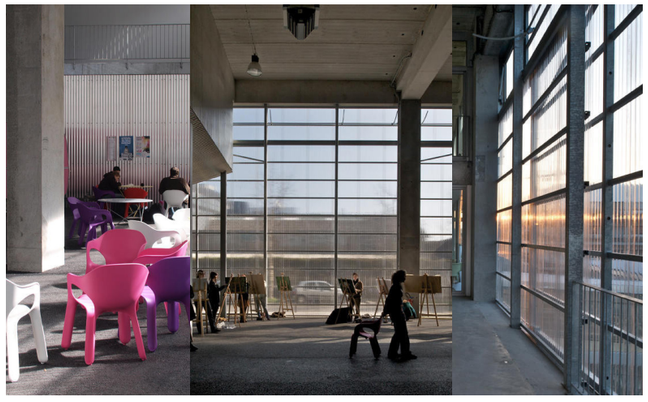
Glulam column
Lignatur floor



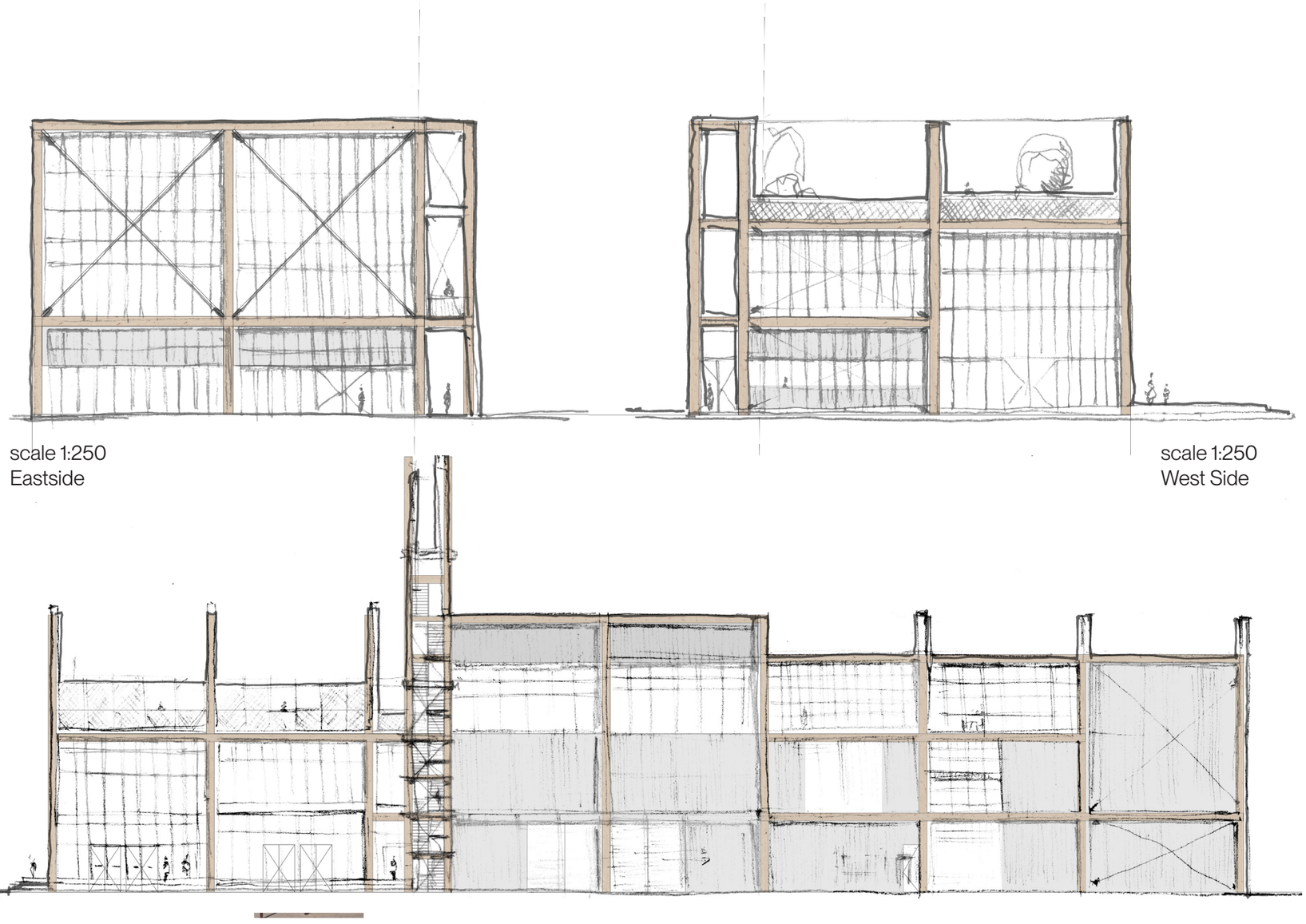
Concrete/steel beams











scale 1:250
Eastside

scale 1:250
West Side

scale 1:250
southside

Facade speculations

Thank you for listening

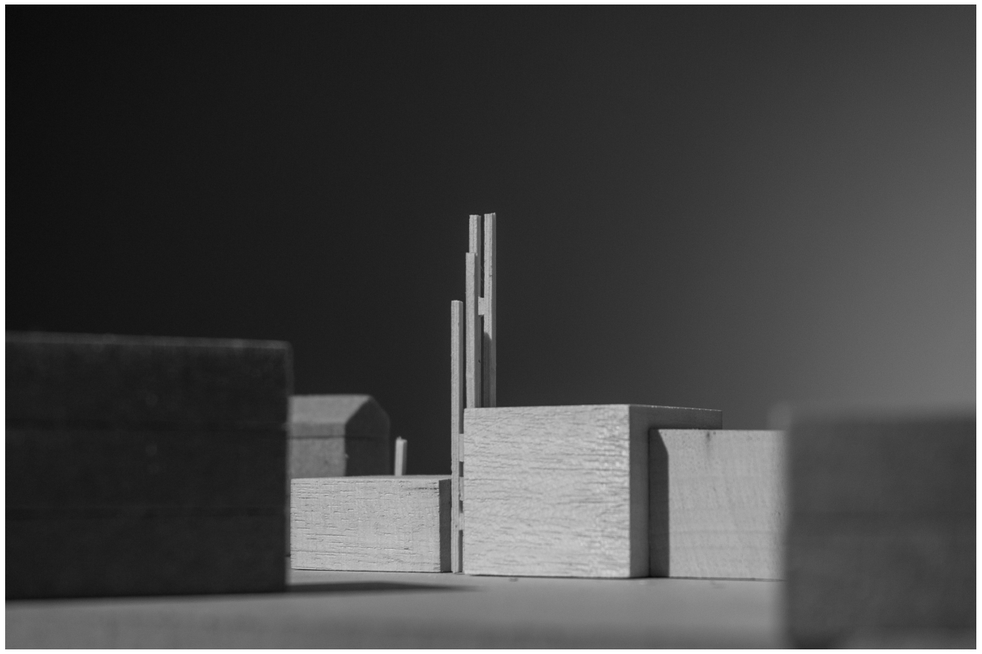
From exhaustion to resilience

Re-imagining the possible

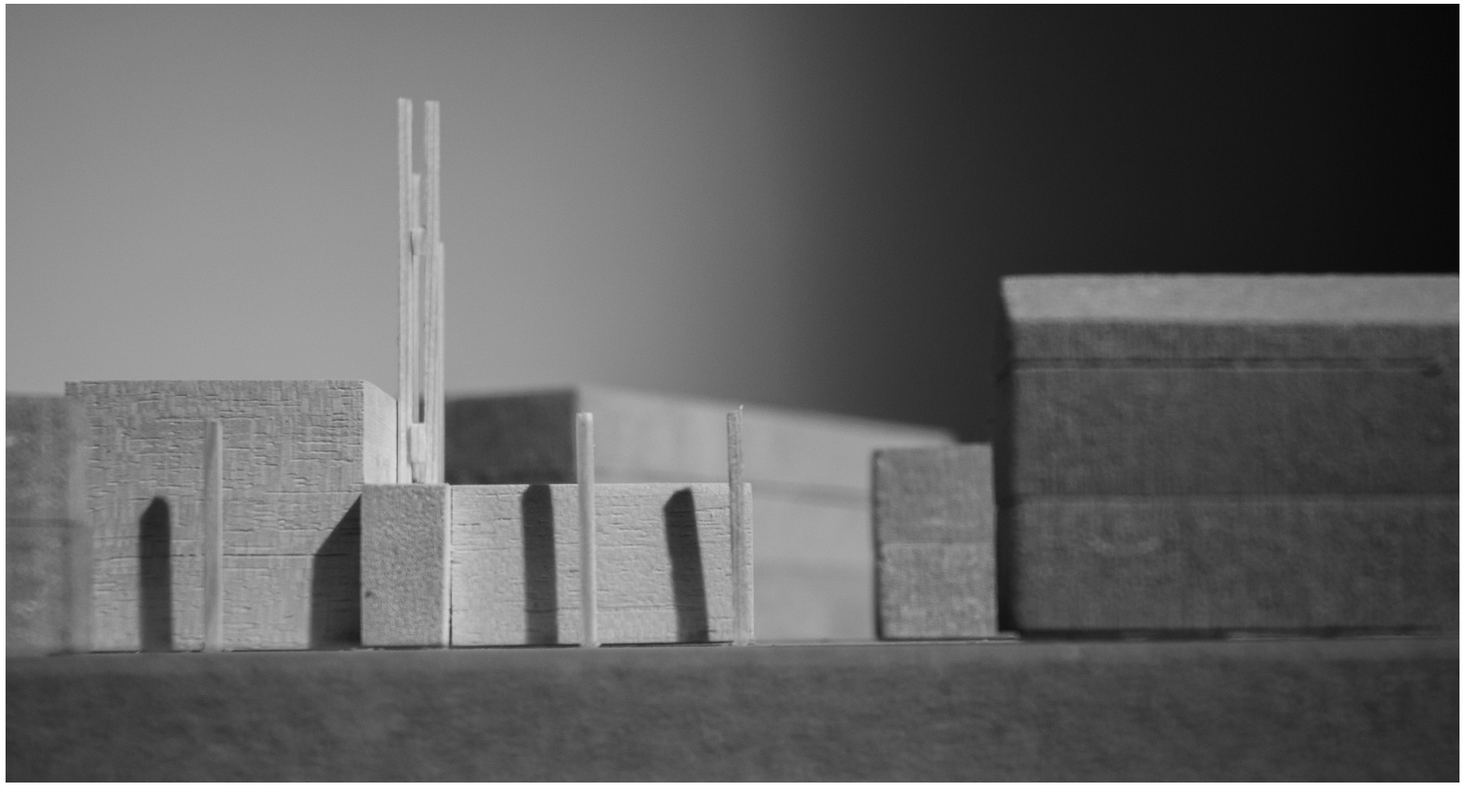
Miguel Borst | 4886356 | 23-1-2025
Public building graduation studio P2
Tutors: Sien van Dam (TD), Henk Bultstra (PD) & Florian Echkart (TBD)

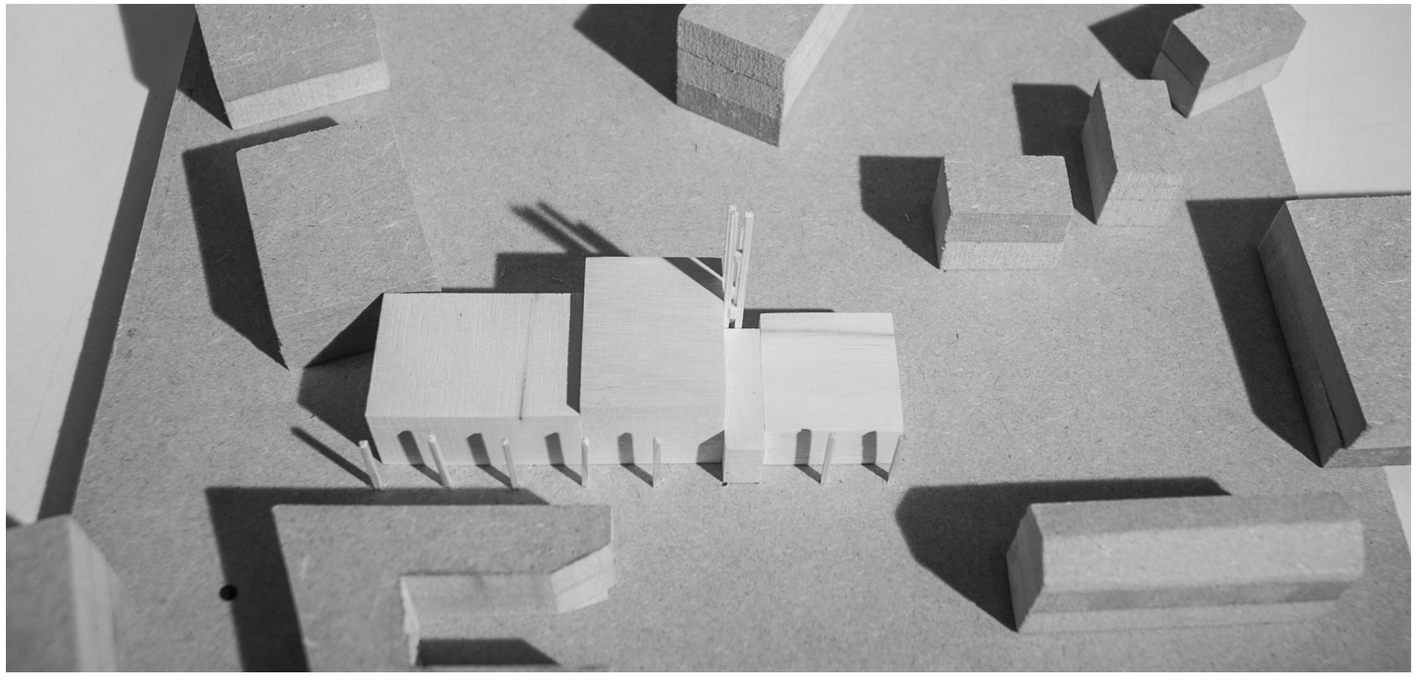
06. **Site Model 1:500**

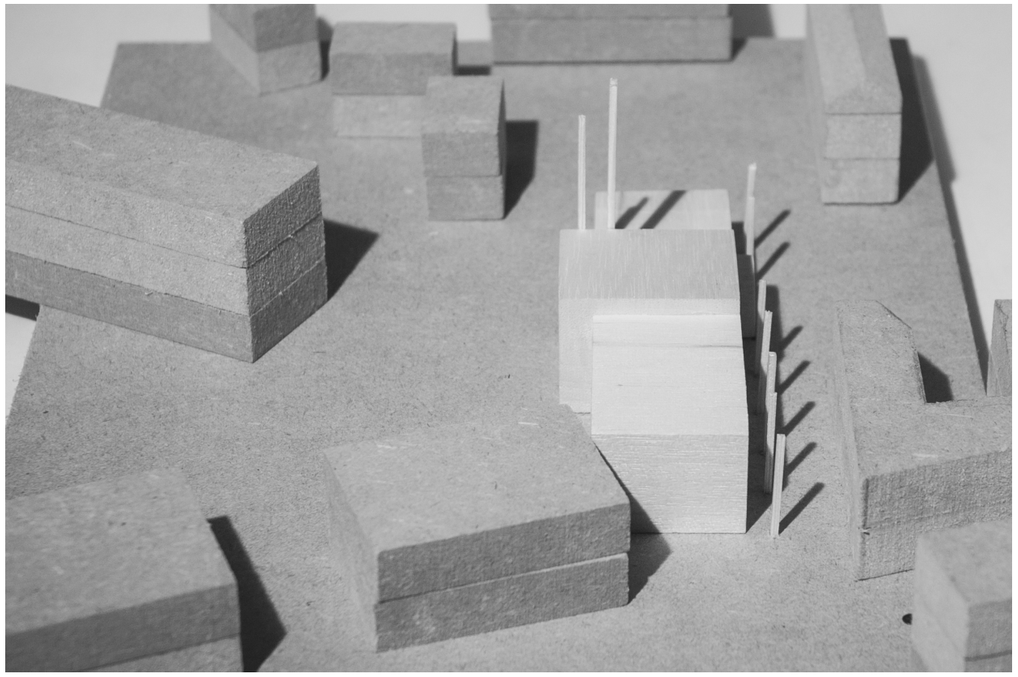


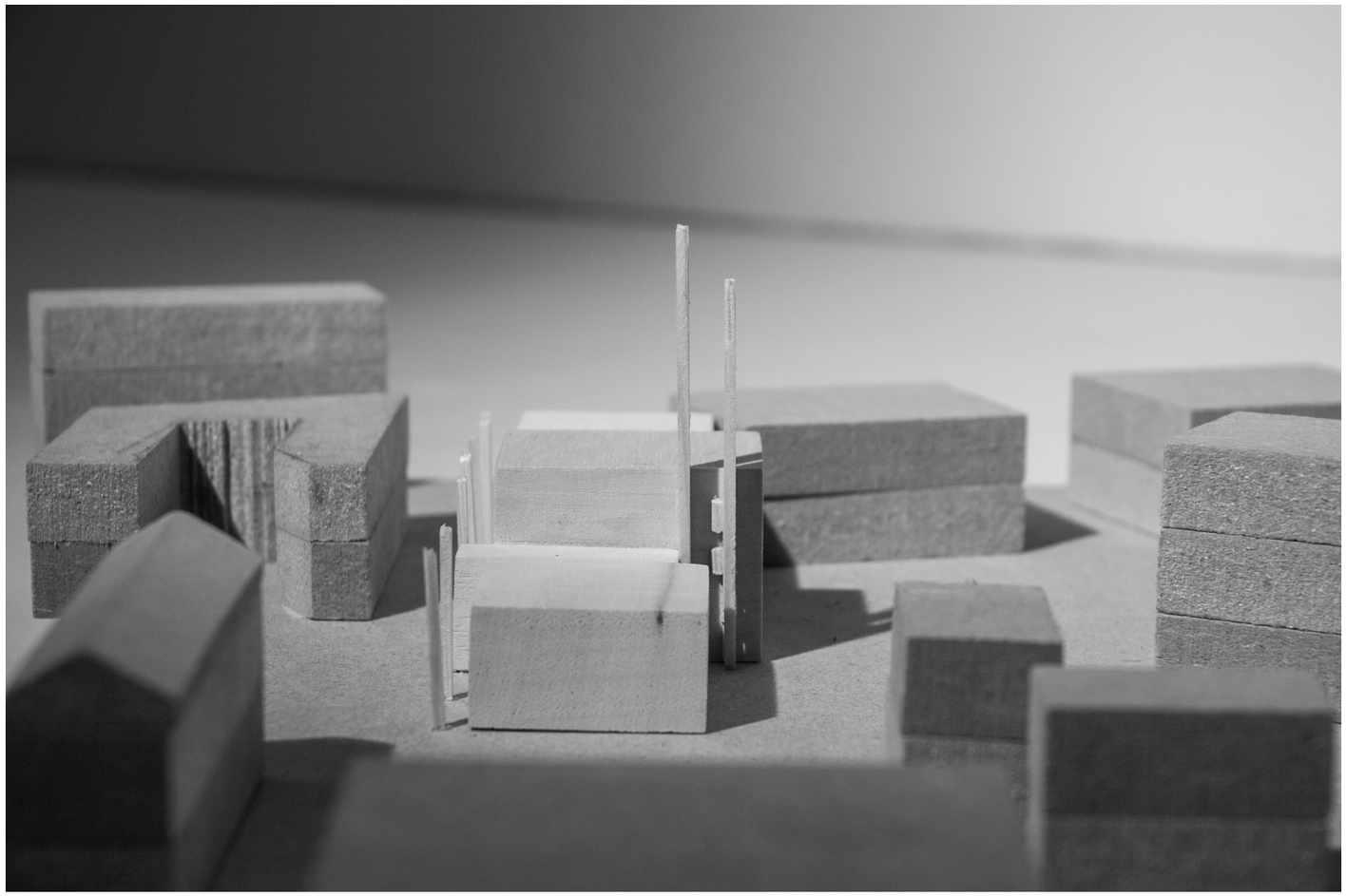


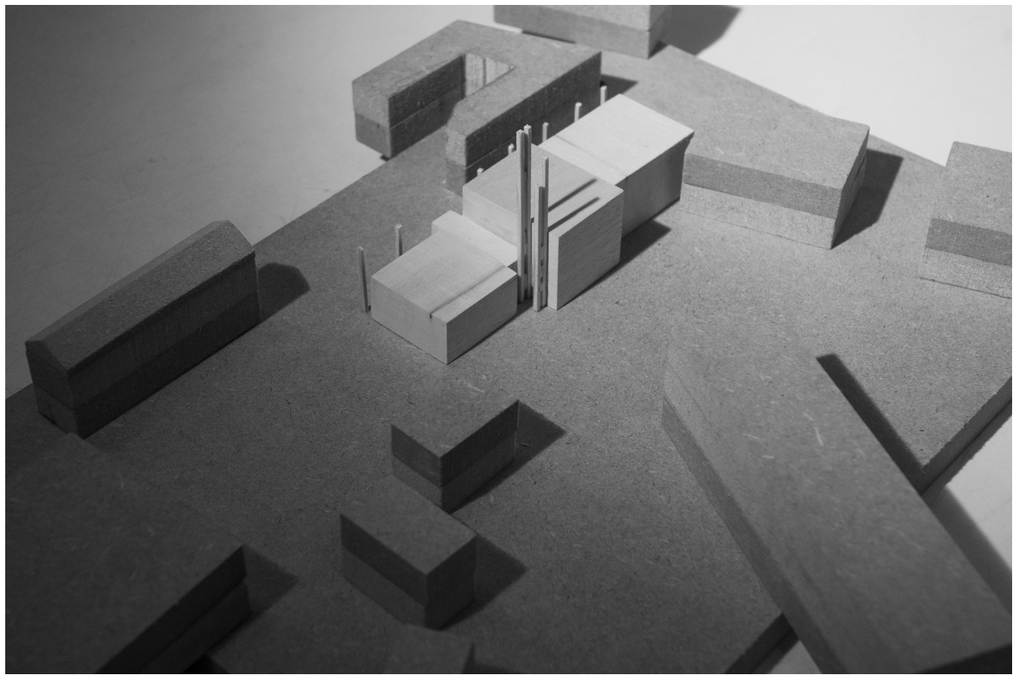


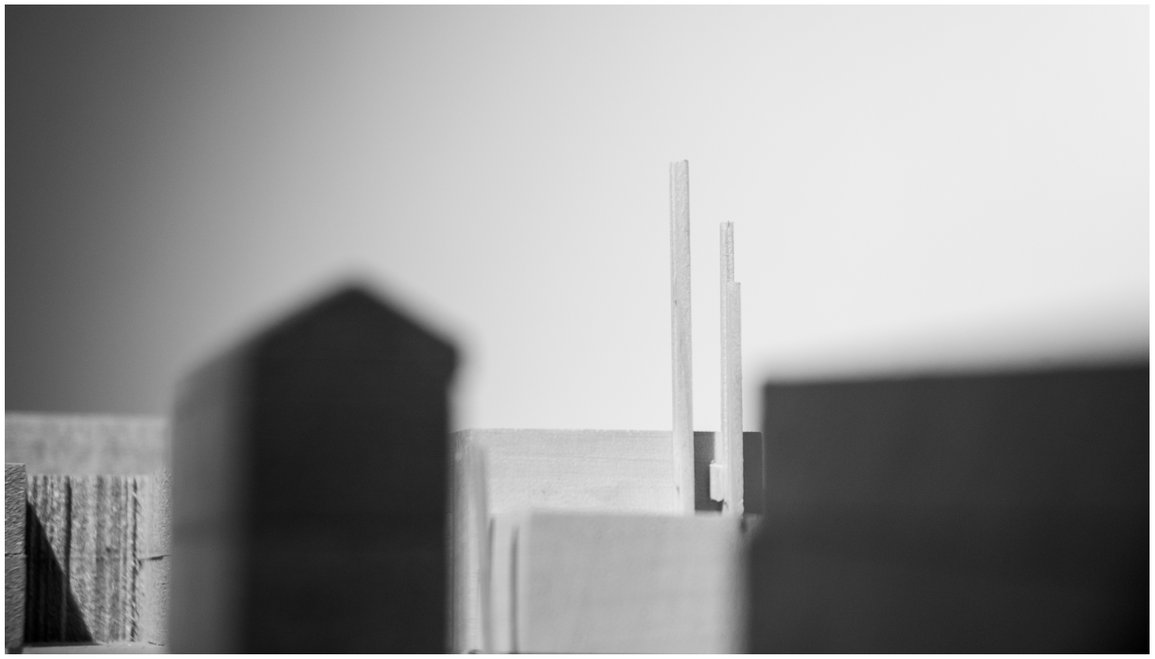




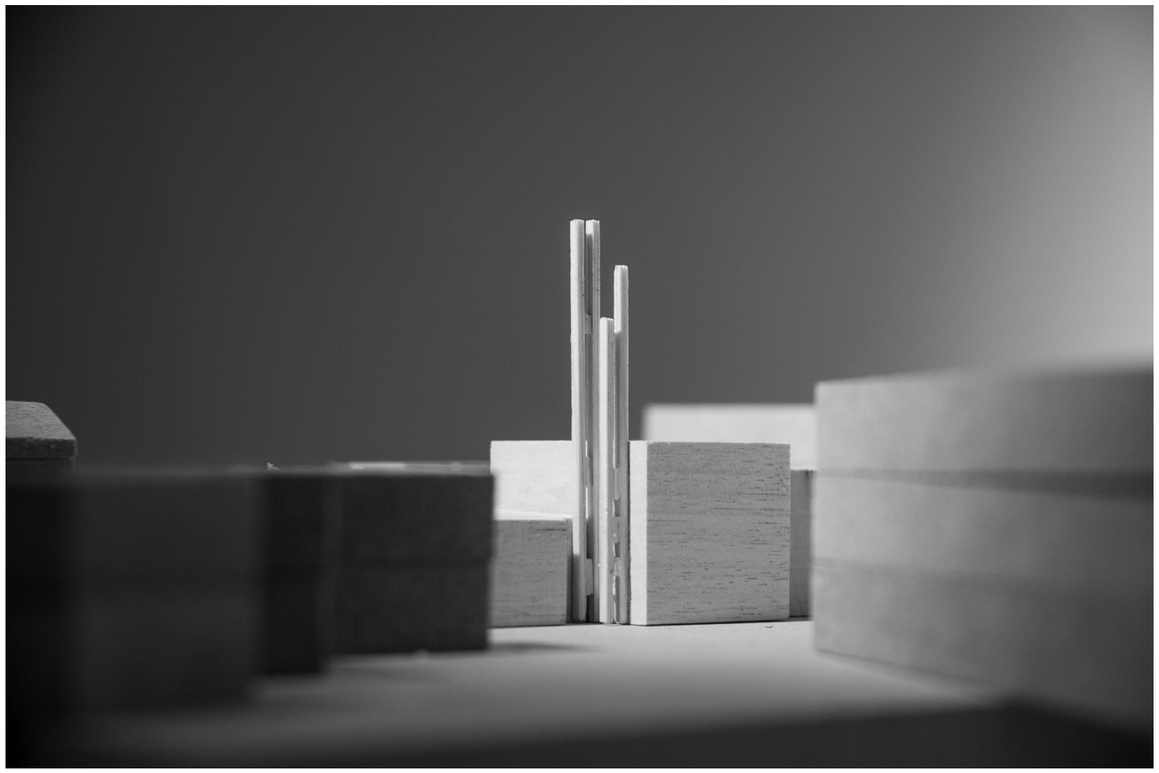










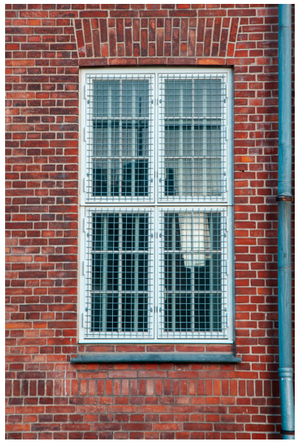


07. **Q3 Research**

Q3.1 **REFLECTING ON P2**













Possibility remains











Exhausted

Exhausted material

Are the materials in Sundholm also exhaustsed?

Yes & No
Parts of the horgarden development are severly depleted, outdated materials and don't fit the modern day construction.

Lots of the older architecture still has a lot of potential, timeless character with architectural and material qualities! Sundholm is a good example and surrounding neighborhoods are also beautifull.

However, new materials could be introduced to further generate new possibilities. Abandoning the traditional brick architecture that is also embedded with so much history and instead focussing on new materials that can tell new stories.

Position on the spectacular everyday

the spectacle is often seen as that thing that disrupts the everyday, the ordinary, the norm.
Challenges our beliefs and creates new un-imagined possibilities

what I want to argue however is that to achieve significant change, allow for true new potential to develop, we have to look at the everydayness of daily life. At those moments, rhythms, patterns and actions that we perform on a daily basis.

To change and generate new possibilities, therefor not only the spectacle but the everyday is just as important

- this leads to the spectacular everyday.
- intertwining both spectacle and everyday to generate new possibilities and meaningfull change
    - elevating the everyday to a spectacle setting.
        - what does this mean? that the everyday patterns and dynamics are treated with special care, not discarded as unimportant or inferior to the spectacle in its potential to disrupt, generate new possibilities
        - using spectacle and spectacular elements and settings to disrupt the everyday patterns and flows





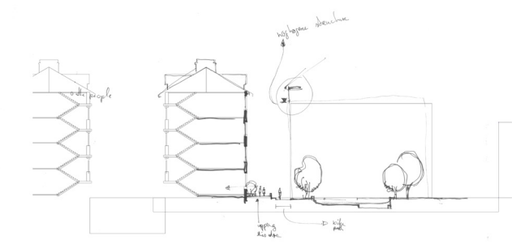

References
Structure Material

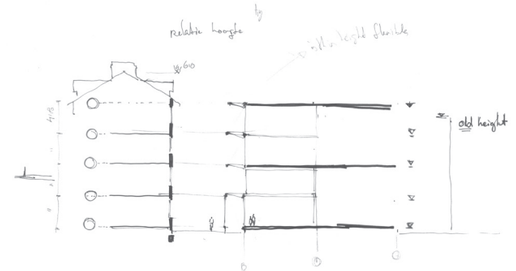
Wood & steel

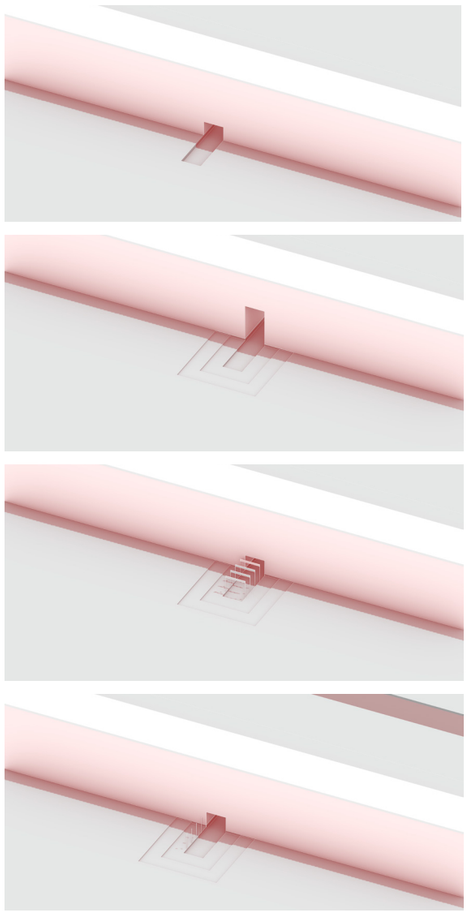
Carbon storage for wood
Steel to allow for larger dimension's when needed. A structure that is easily adaptable

Q3.1 **Relation with context & the spectacular everyday**

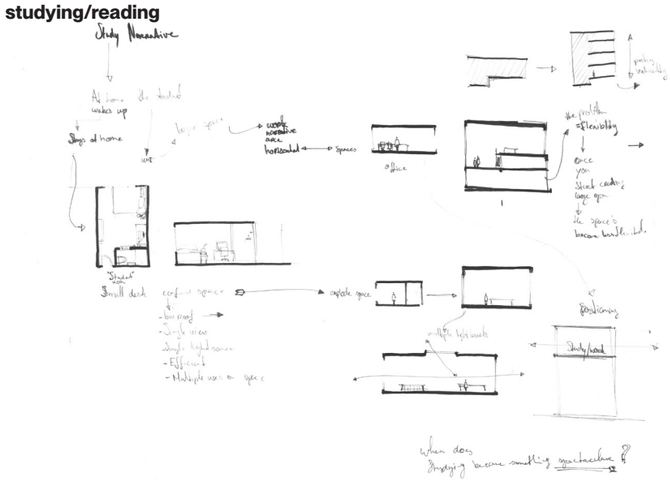
Researching how to establish relationships with different boundaries surrounding the area, how they need to be disrupted and how to tie it to the public condenser,
Additionally researching how to integrate the everyday and spectacle and intertwining, researching different everyday kind of activities and how and what shapes them



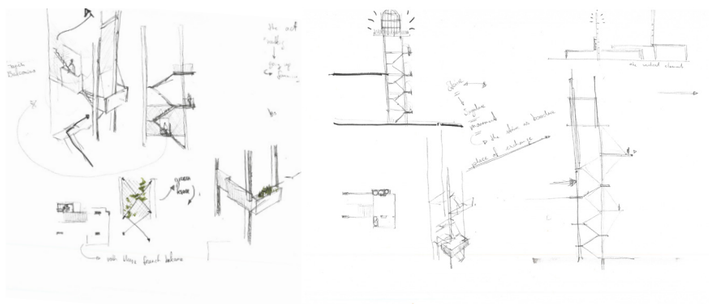




The everyday of studying/reading



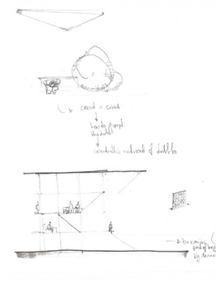
How to vertical tower something spectacu-



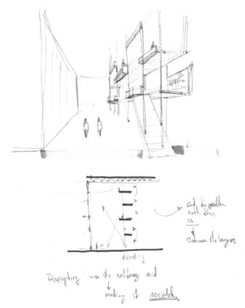
Places where we read everyday



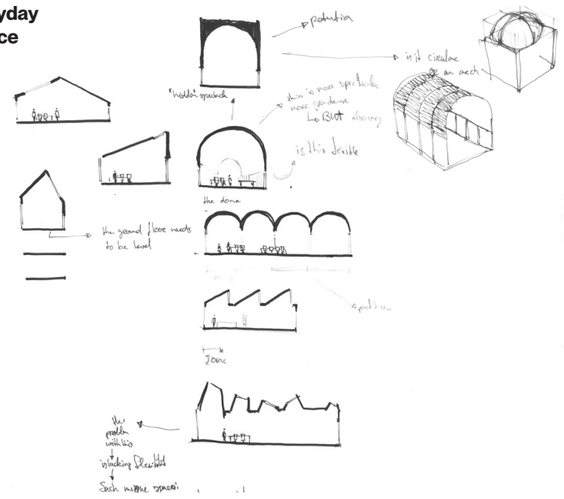
Quality of outside reading, belonging to a larger



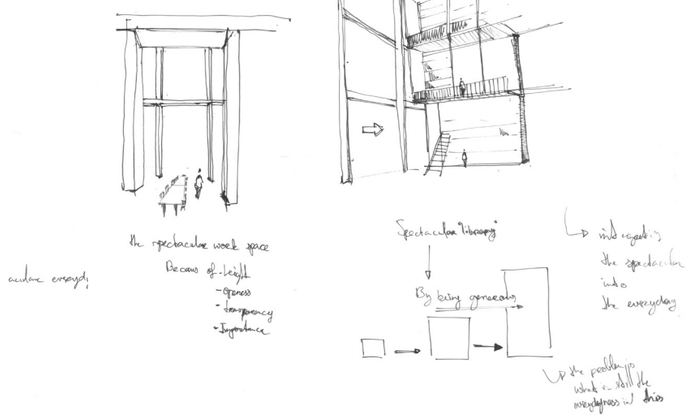
Elevating the everyday to a more spectacular variant

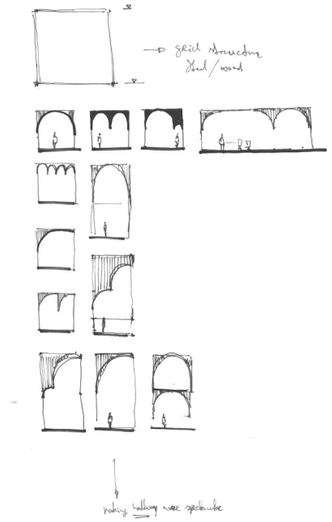


Disrupting everyday study/work space volume

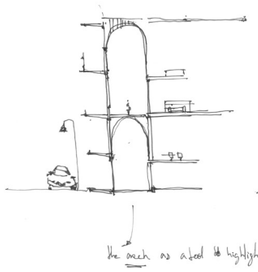


How to make something spectacular?



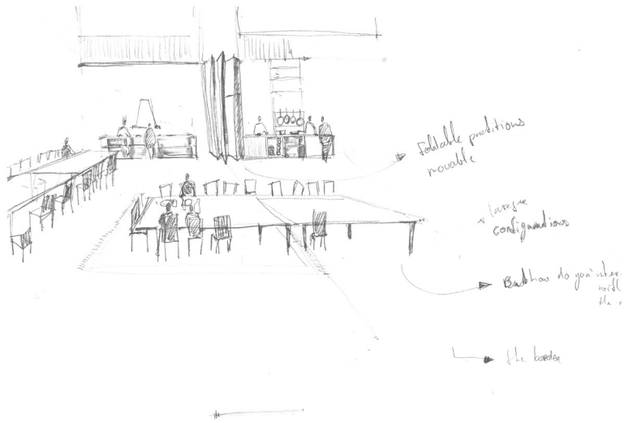


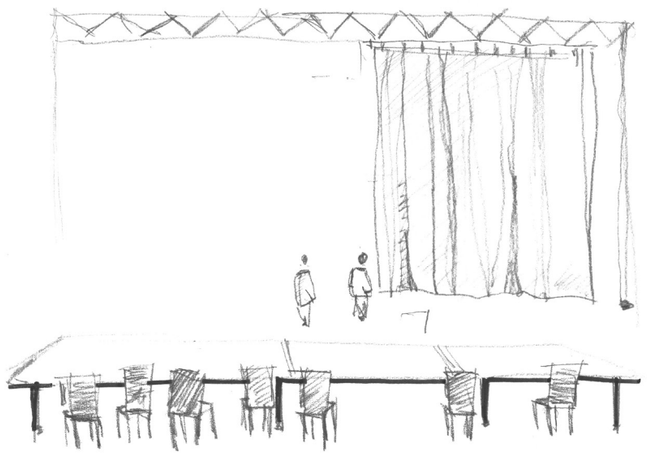
The arch to make the everyday spectacular



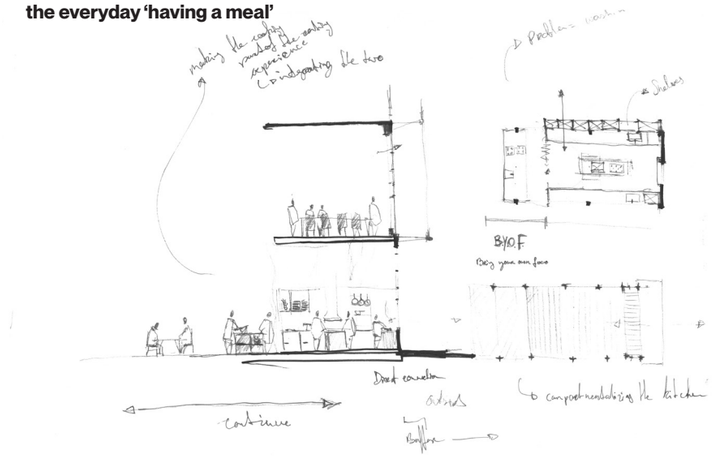
Food and eating as a part of our everyday life's. Everyone has to eat. Taking this basic flow, analyzing what components make up the rhythm and how it is shaped by the everyday environment. Then redesigning it into something that can be part of the public condenser. That turns this everyday activity into something more spectacular.

Impression of open kitchen part of the everyday

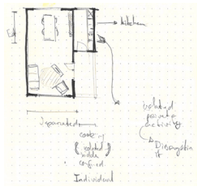




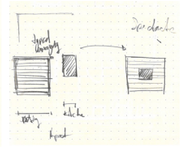
Kitchen & cooking as part of the everyday 'having a meal'



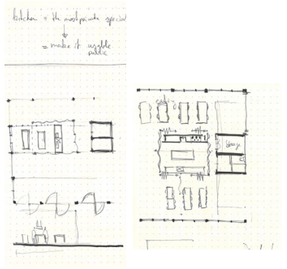
The everyday of eating & cooking



The everyday apparment
Seperation of cooking and eating



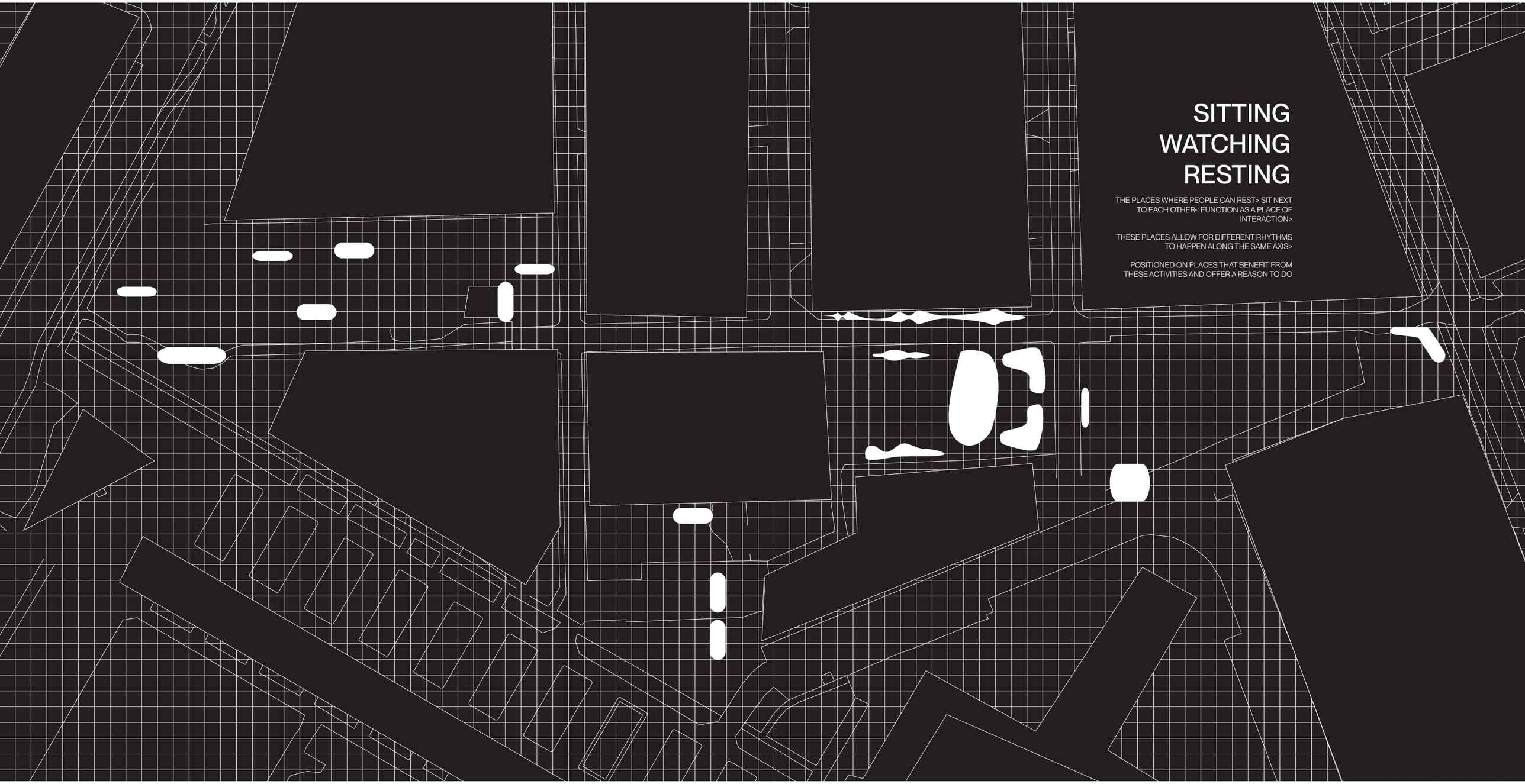
Repositioning kitchen and the act of cooking



Positioning kitchen cooking as part of the dining
Removing isolation, becoming part of the everyday

Q3.1 **EVERYDAY PATTERNS & FRAMEWORK**

Researching and mapping how the whole area and not only the condenser can become apart of the everyday and does currently play a role within those patterns. Analyzing what exists and what needs to be reconfigured

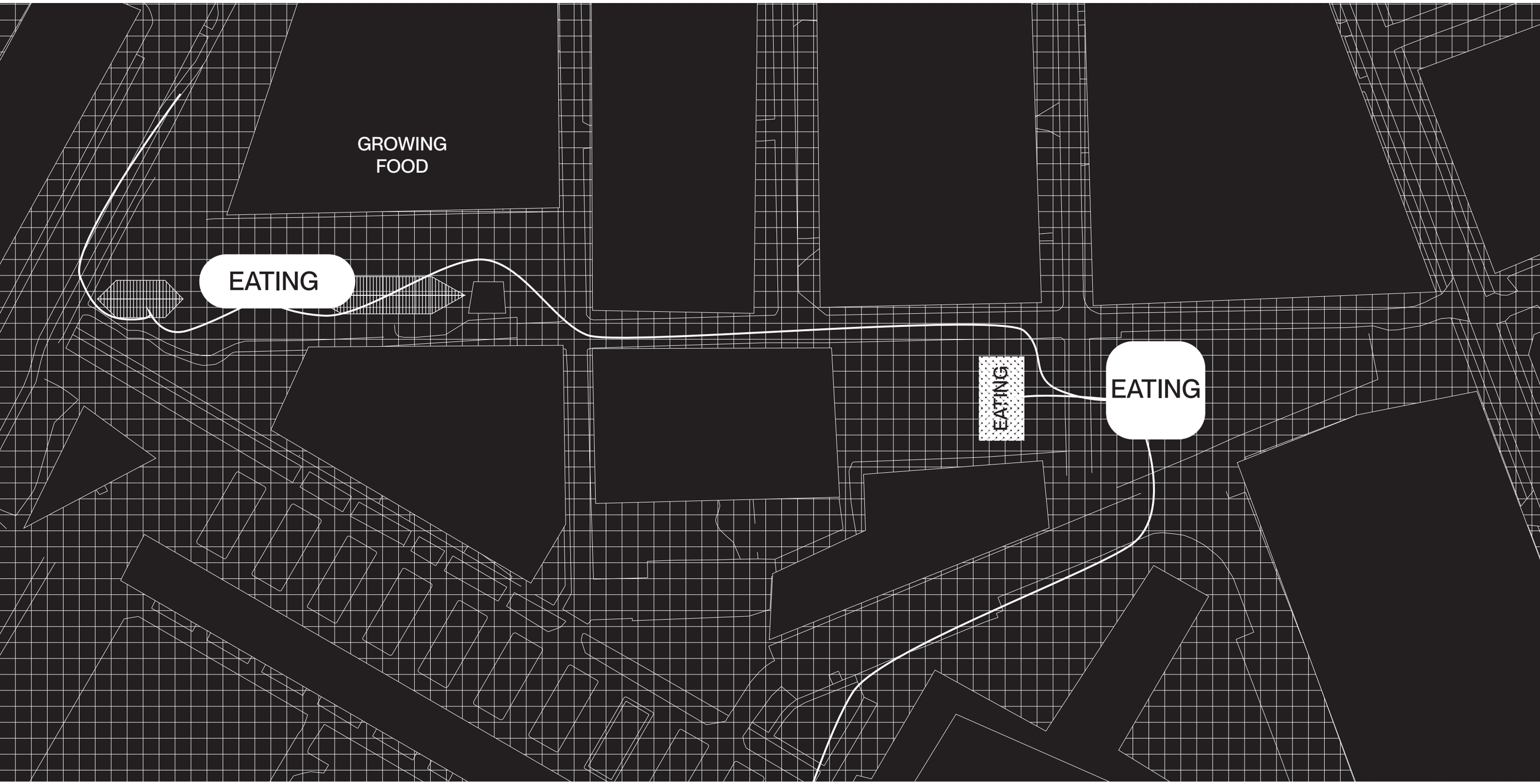


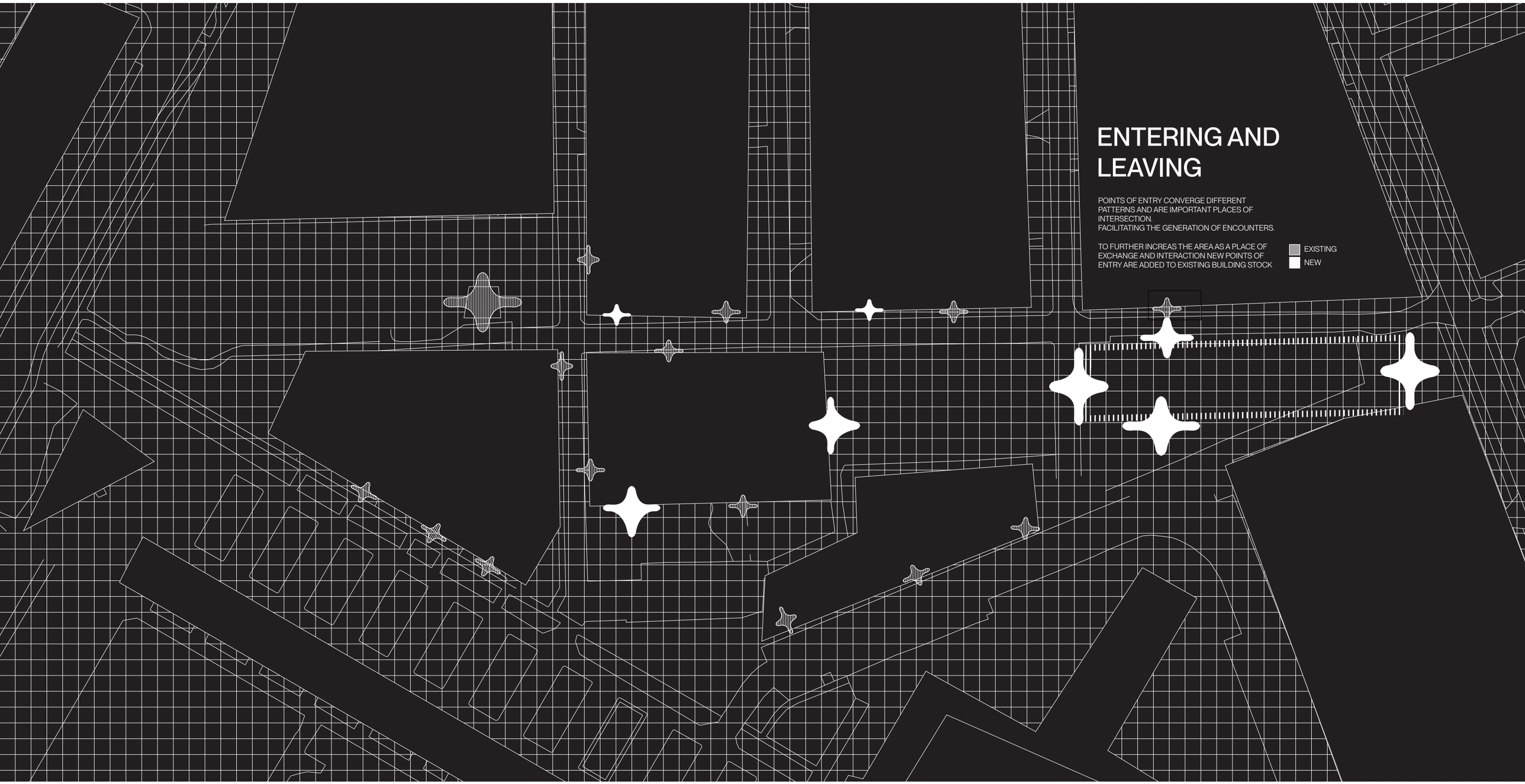
SITTING
WATCHING
RESTING

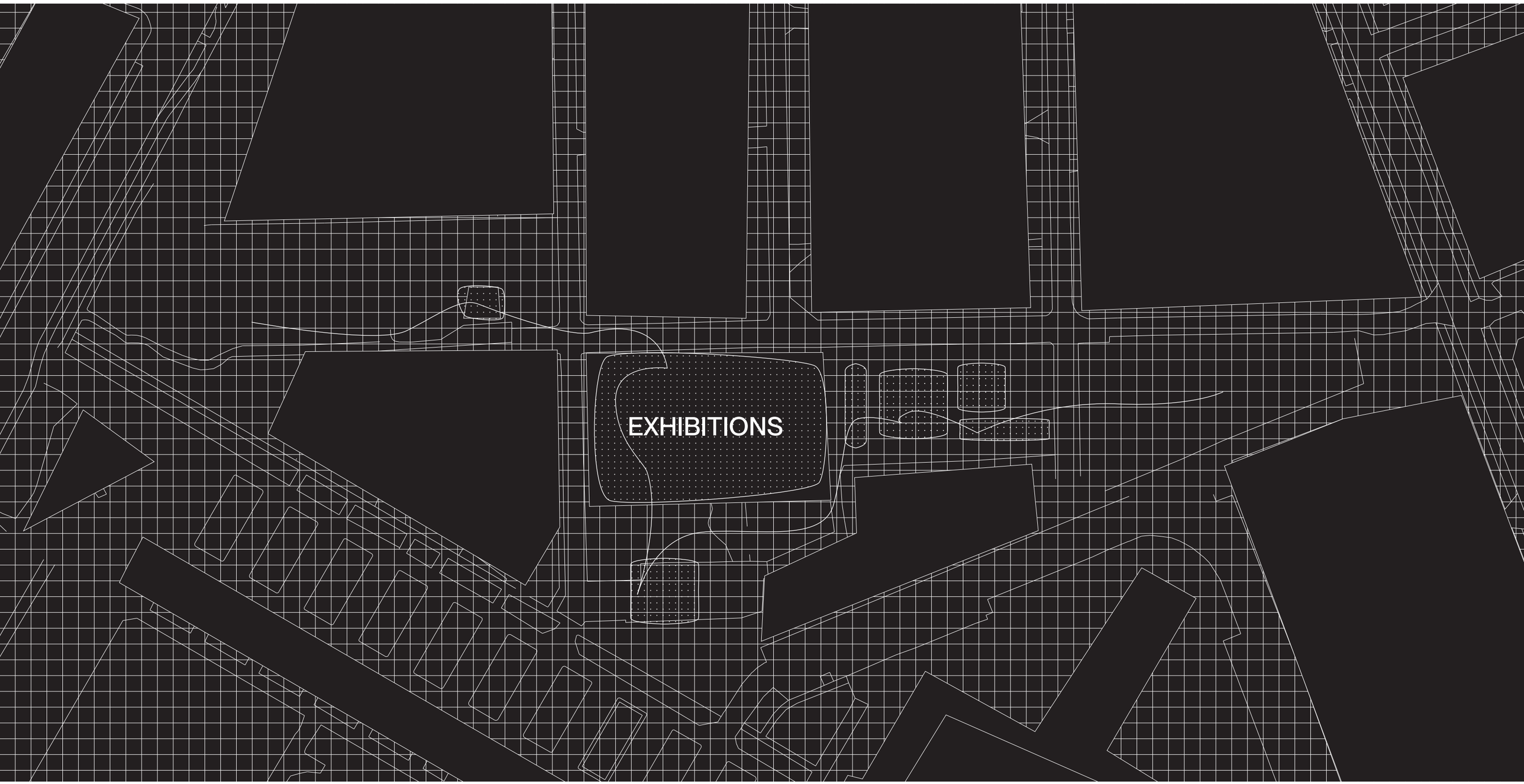
THE PLACES WHERE PEOPLE CAN REST> SIT NEXT TO EACH OTHER< FUNCTION AS A PLACE OF INTERACTION>

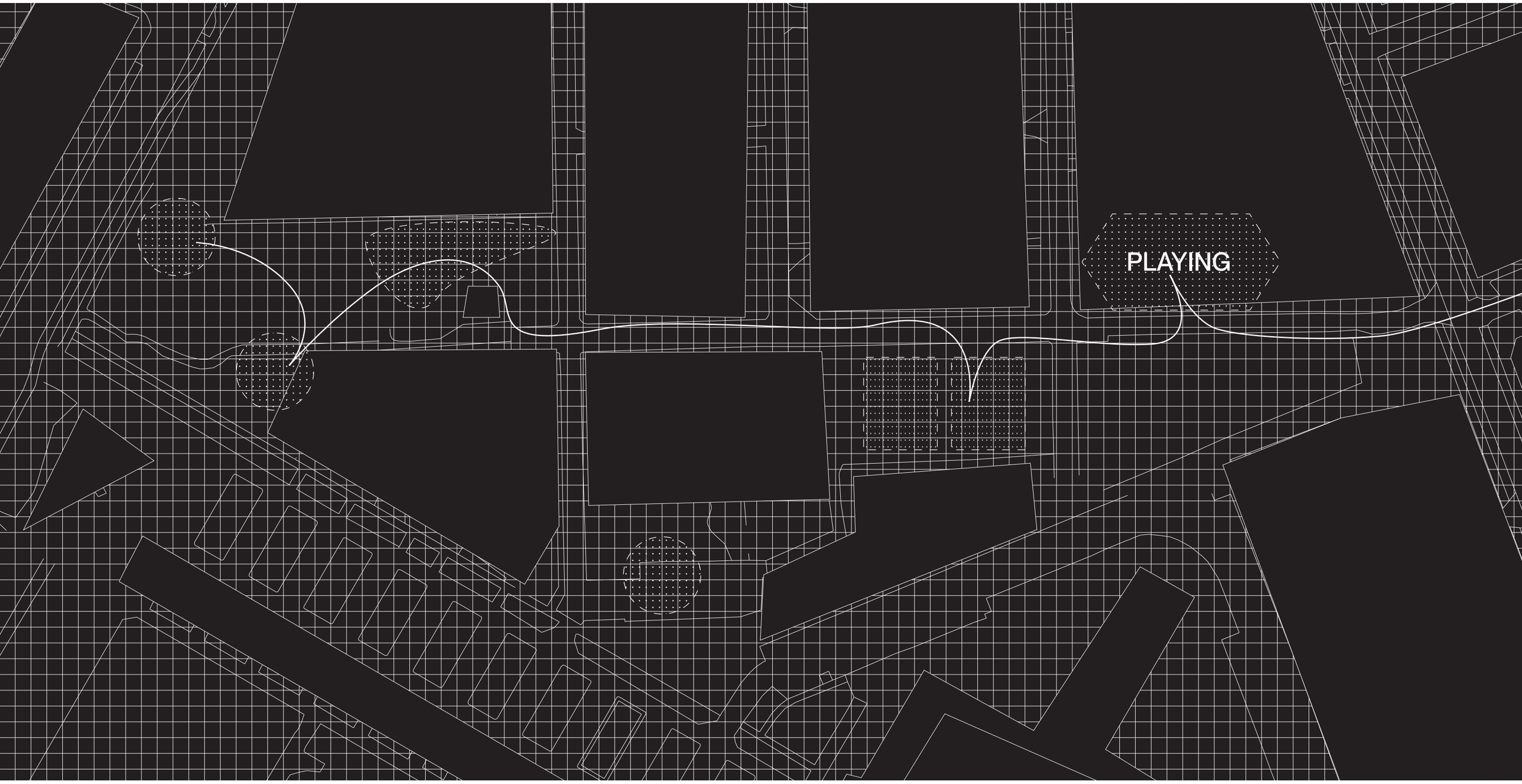
THESE PLACES ALLOW FOR DIFFERENT RHYTHMS TO HAPPEN ALONG THE SAME AXIS>

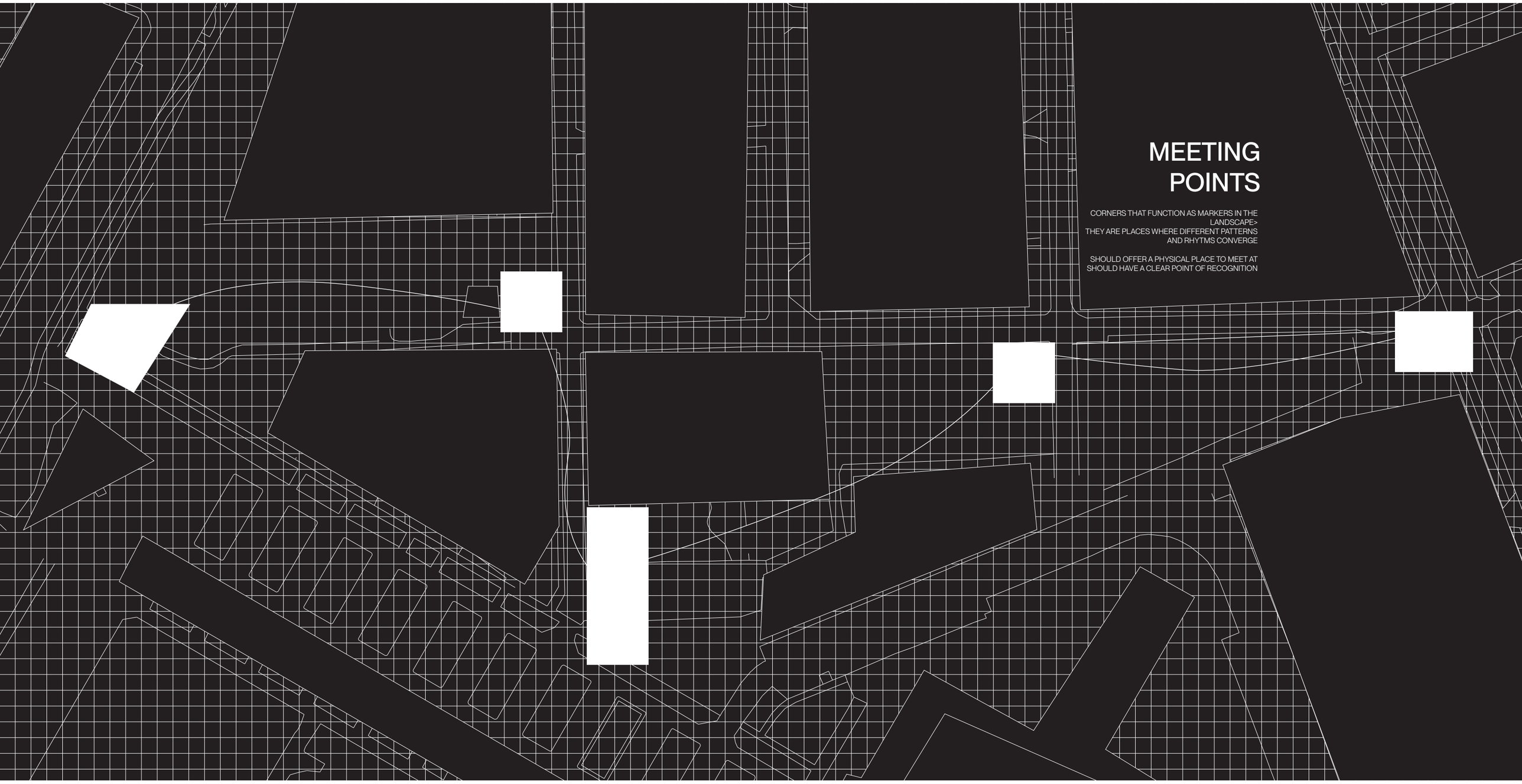
POSITIONED ON PLACES THAT BENEFIT FROM THESE ACTIVITIES AND OFFER A REASON TO DO


GROWING
FOOD
EATING
EATING
EATING


ENTERING AND LEAVING
POINTS OF ENTRY CONVERGE DIFFERENT PATTERNS AND ARE IMPORTANT PLACES OF INTERSECTION.
FACILITATING THE GENERATION OF ENCOUNTERS.
TO FURTHER INCREAS THE AREA AS A PLACE OF EXCHANGE AND INTERACTION NEW POINTS OF ENTRY ARE ADDED TO EXISTING BUILDING STOCK
EXISTING
NEW


EXHIBITIONS

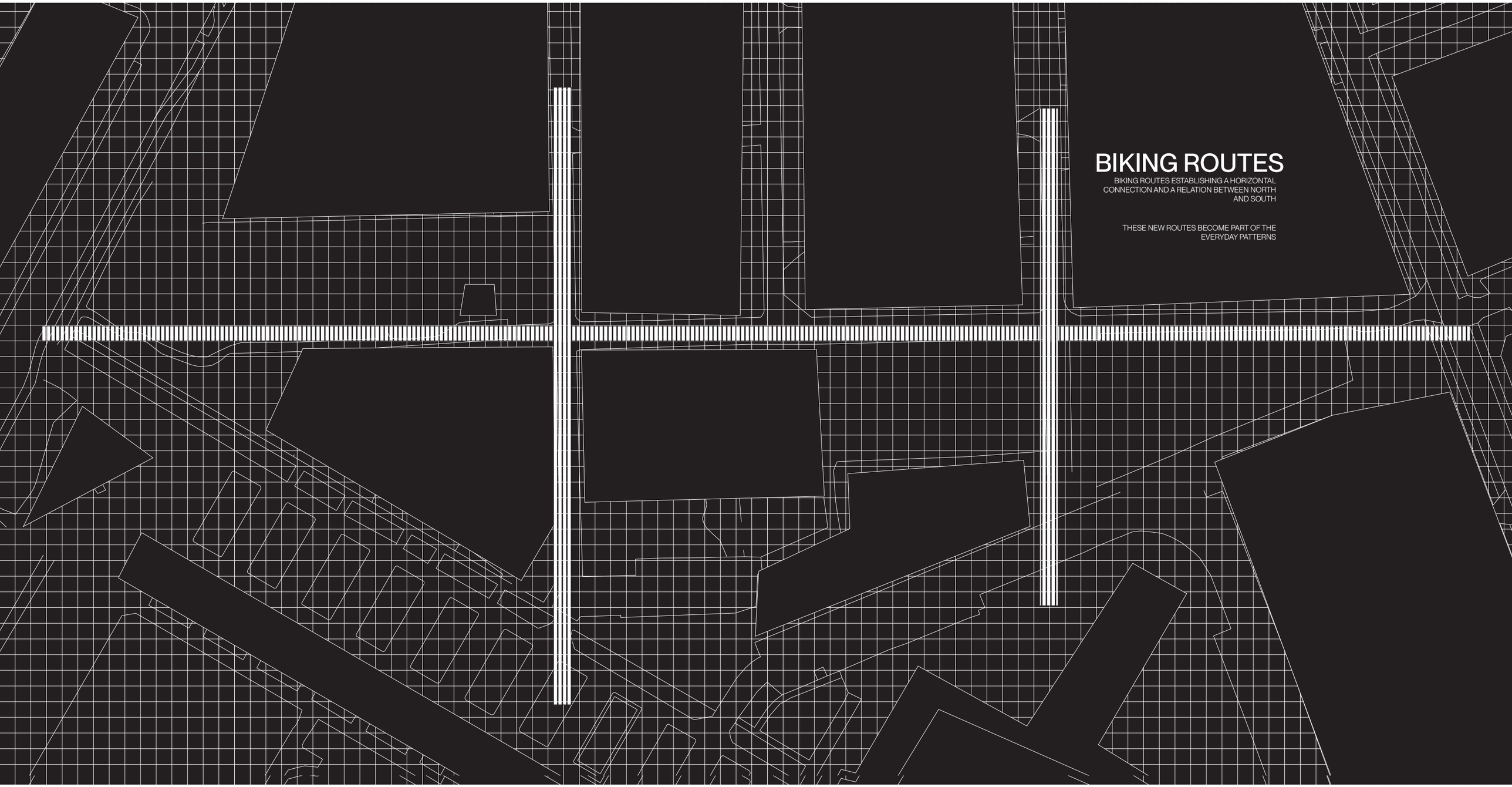

PLAYING



MEETING POINTS

CORNERS THAT FUNCTION AS MARKERS IN THE LANDSCAPE>
THEY ARE PLACES WHERE DIFFERENT PATTERNS AND RHYTMS CONVERGE

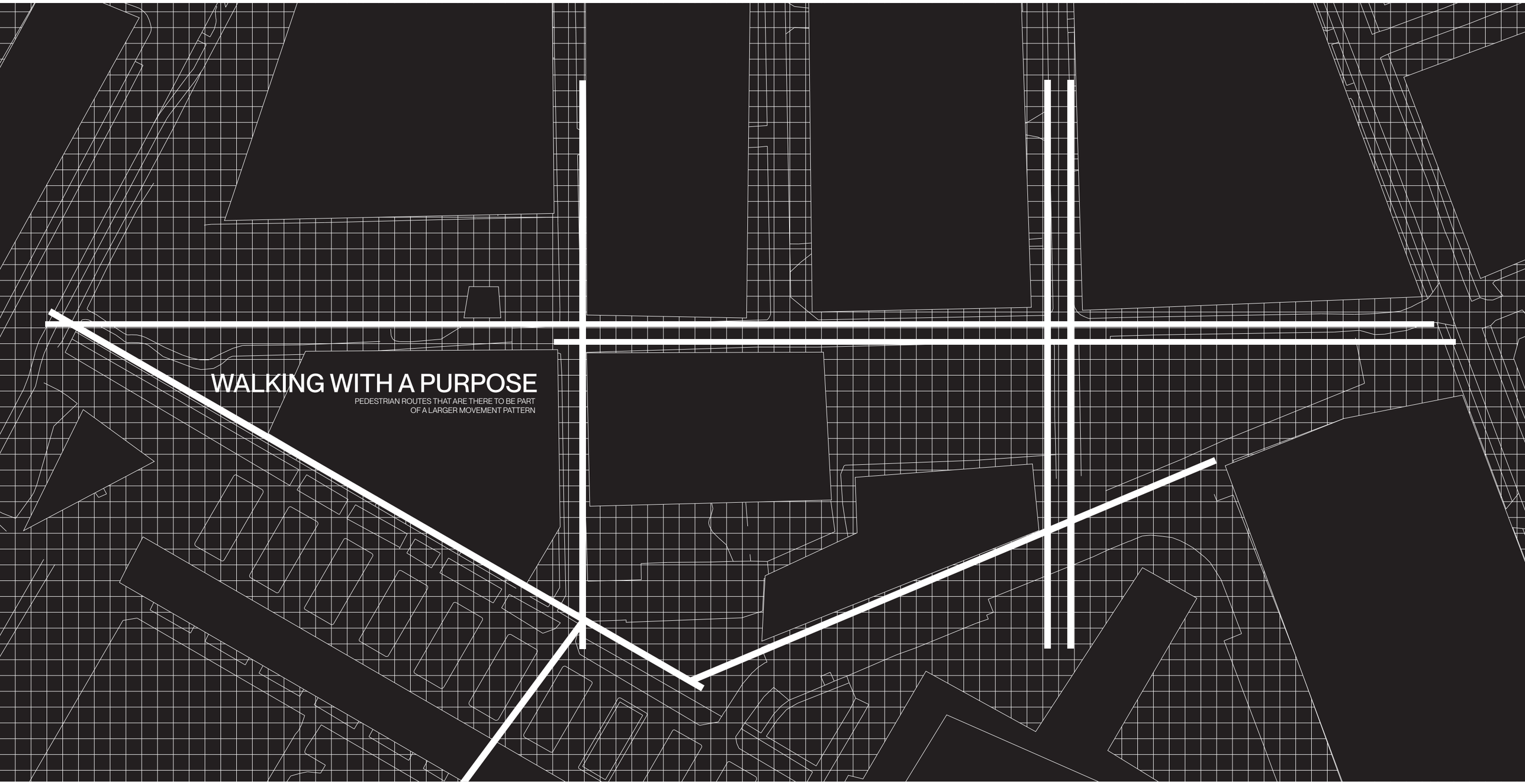
SHOULD OFFER A PHYSICAL PLACE TO MEET AT
SHOULD HAVE A CLEAR POINT OF RECOGNITION

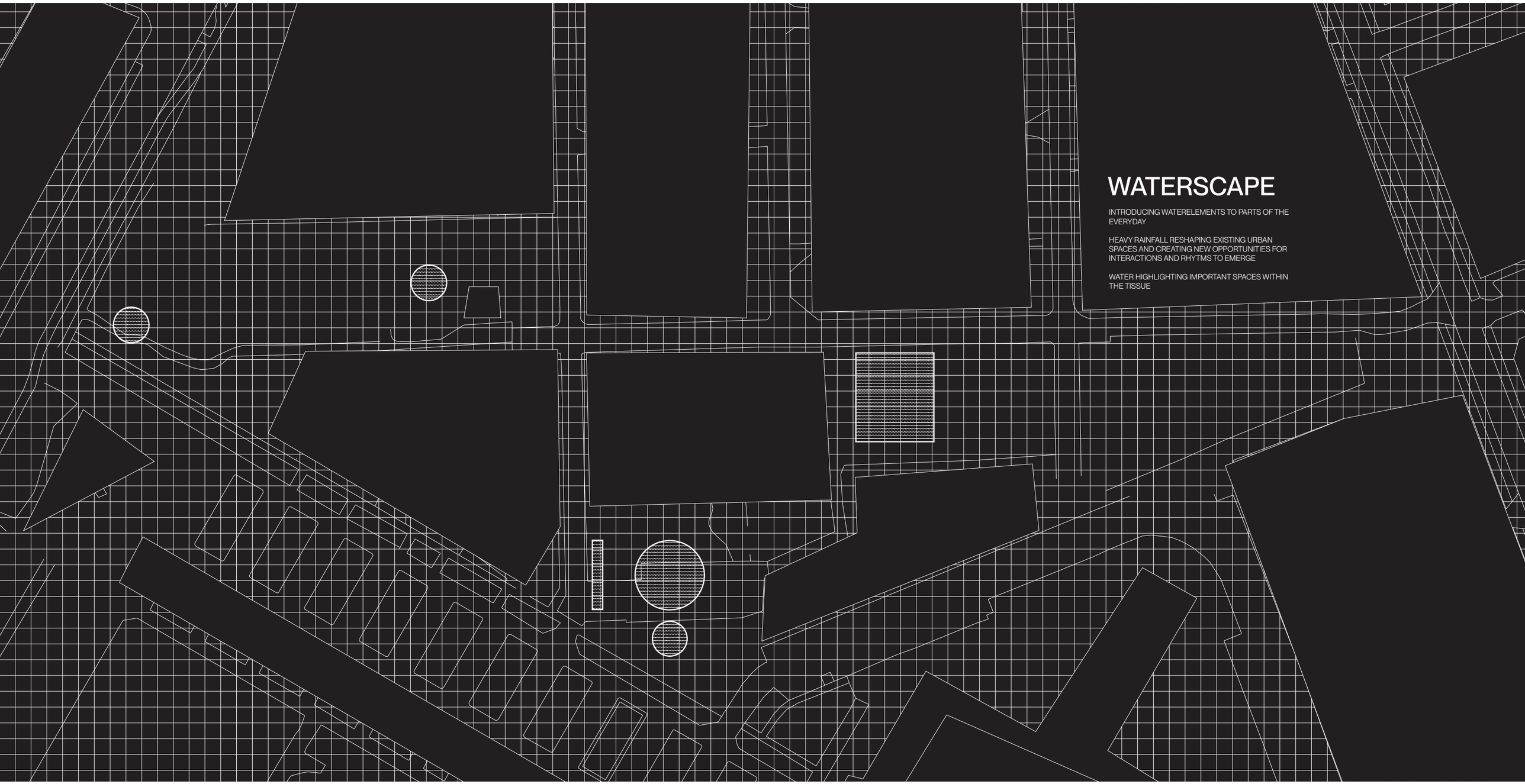


BIKING ROUTES

BIKING ROUTES ESTABLISHING A HORIZONTAL CONNECTION AND A RELATION BETWEEN NORTH AND SOUTH

THESE NEW ROUTES BECOME PART OF THE EVERYDAY PATTERNS


WALKING WITH A PURPOSE
PEDESTRIAN ROUTES THAT ARE THERE TO BE PART
OF A LARGER MOVEMENT PATTERN



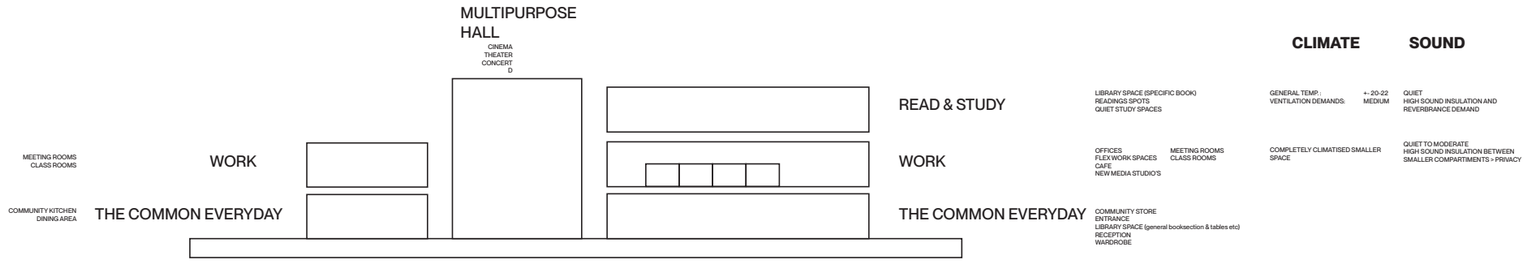
WATERSCAPE

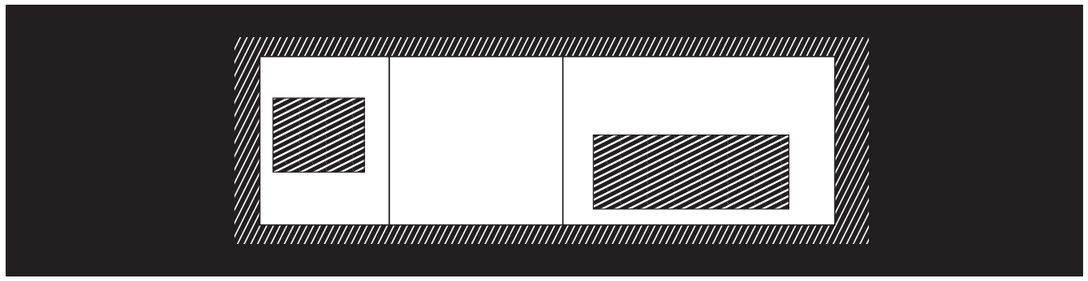
INTRODUCING WATERELEMENTS TO PARTS OF THE EVERYDAY

HEAVY RAINFALL RESHAPING EXISTING URBAN SPACES AND CREATING NEW OPPORTUNITIES FOR INTERACTIONS AND RHYTMS TO EMERGE

WATER HIGHLIGHTING IMPORTANT SPACES WITHIN THE TISSUE

First principles and idea's for climate design.



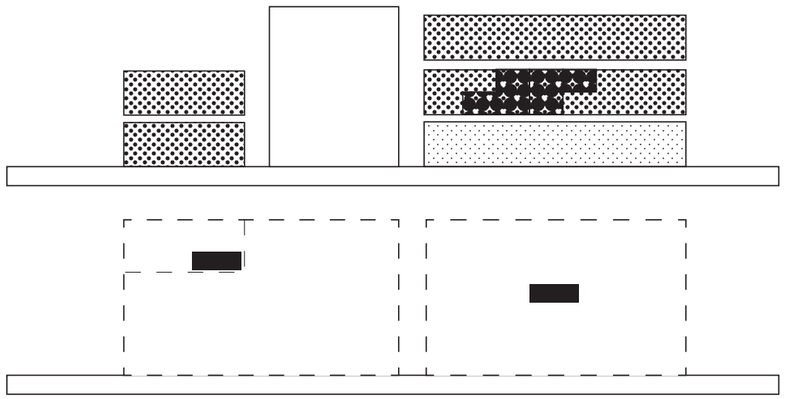


THERMAL COMFORT PRINCIPLE

OUTER LAYER FORMING FIRST BARRIER

INNER AREA'S MEDIUM CLIMATE

SPECIFIC AREA'S COMPLETELY CLIMATIZED

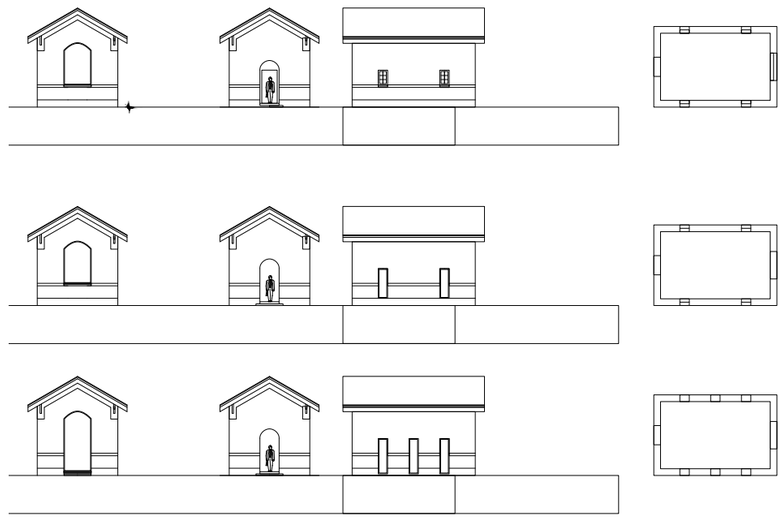


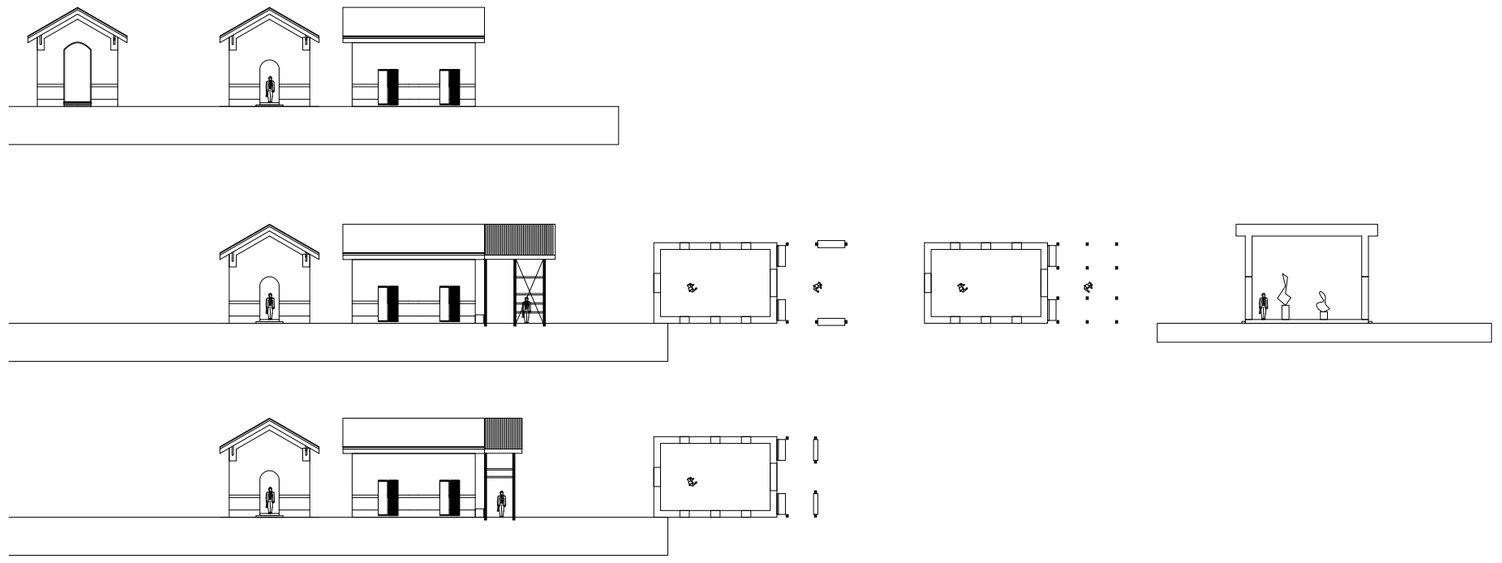
GROUND FLOOR FUNCTIONING AS A COVERED PUBLIC SPACE> MINIMAL HEATING

2 CLIMATE ZONES

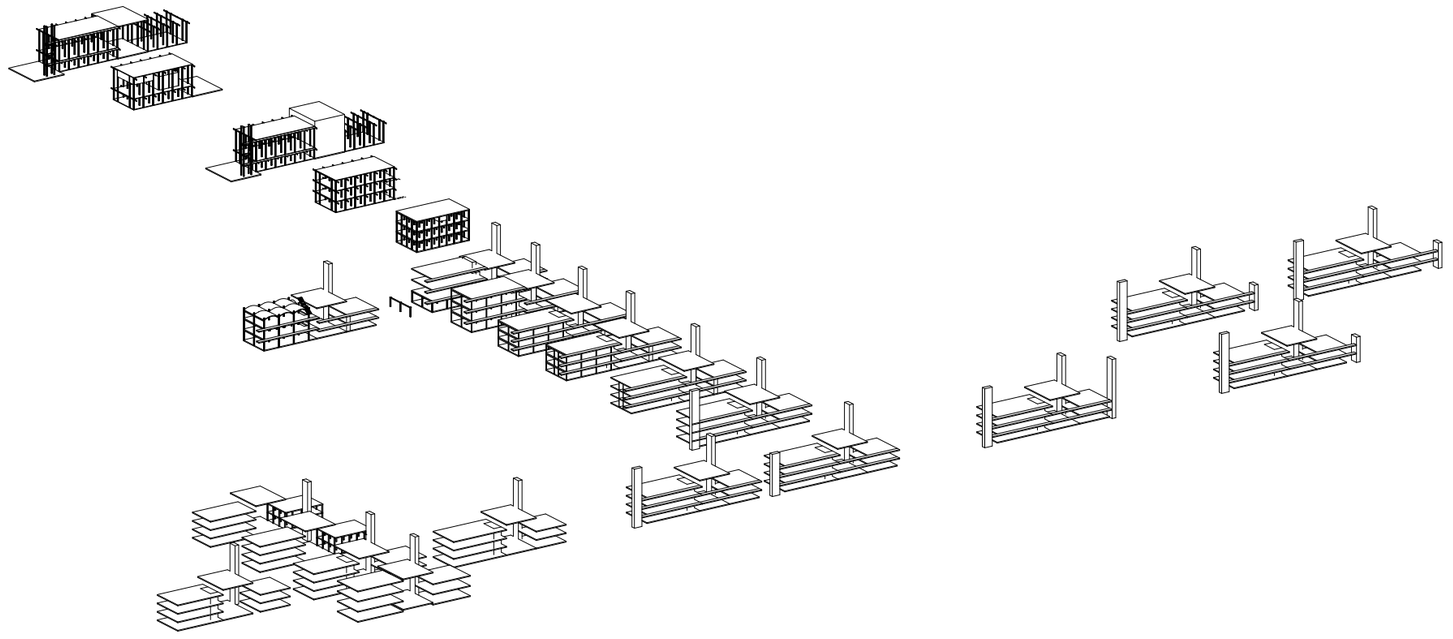
COVERING PART OF THE BUILDING> ENSURING NOT TO LONG VENTILATION DUCTS ETC.

Different designs for a small intervention on a currently exhausted shed, This could be turned into a place that functions as an exhibition space, an extension of the fabrikken. By disrupting this building and doing those small interventions activating the surroundings.



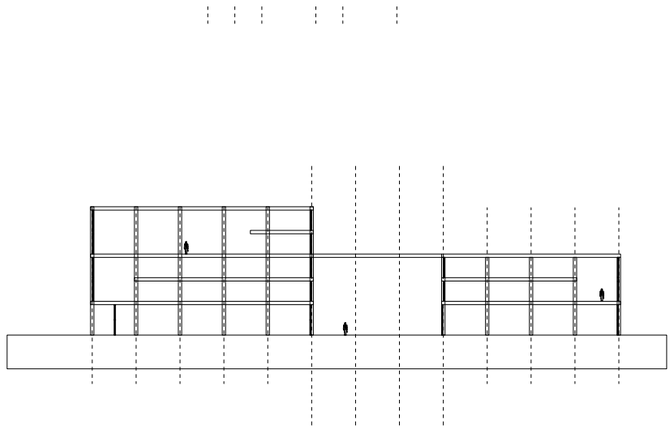


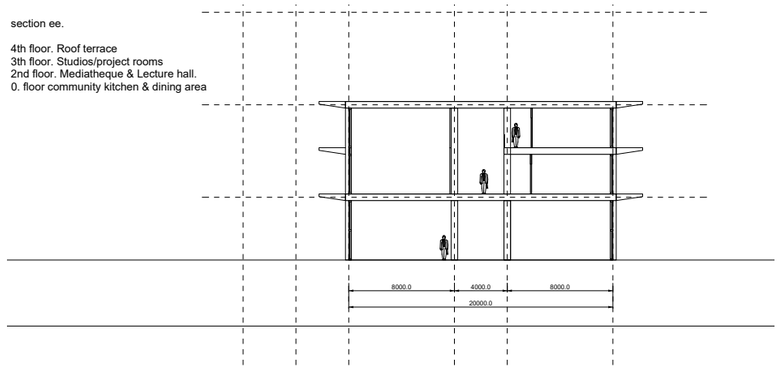
Iterations researching the intertwining of internal and external infrastructure. also researching the potential of adding multiple towers, diversifying the external infrastructure. and the relation with

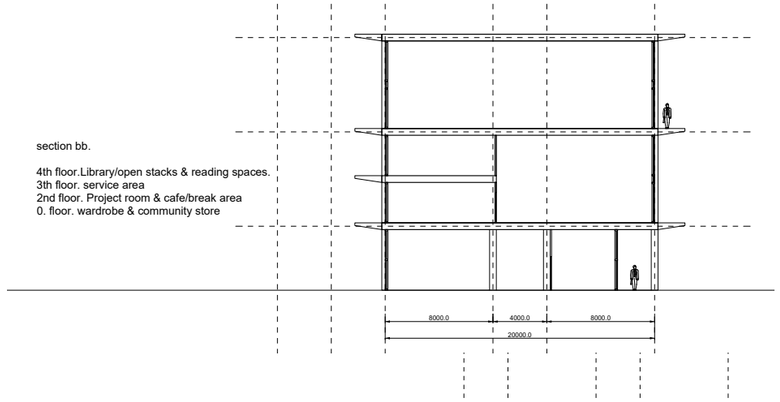


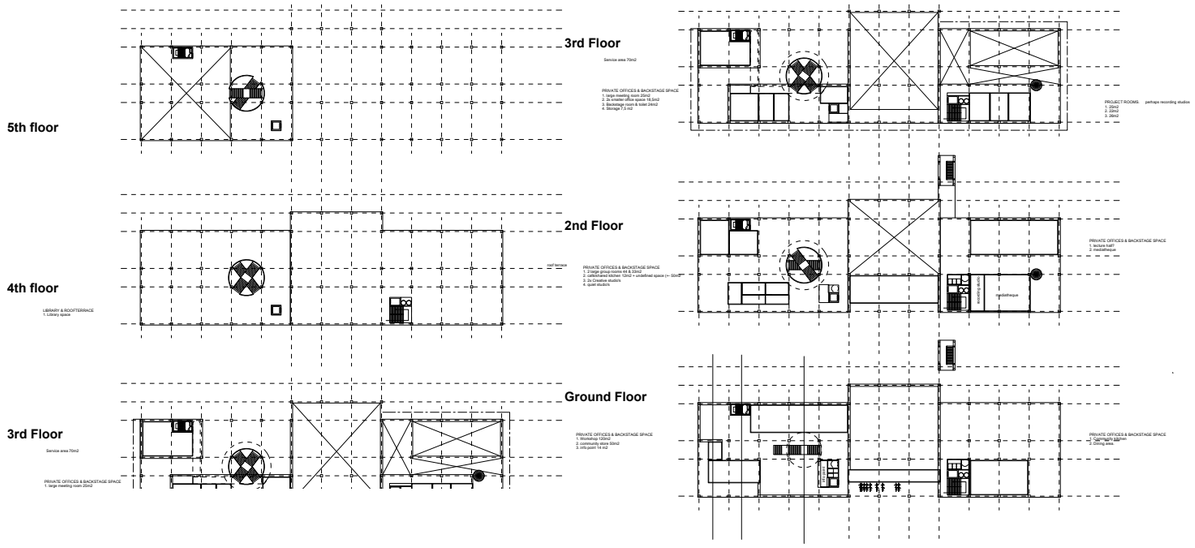
Q3.4 **Re evaluating the frame-work**

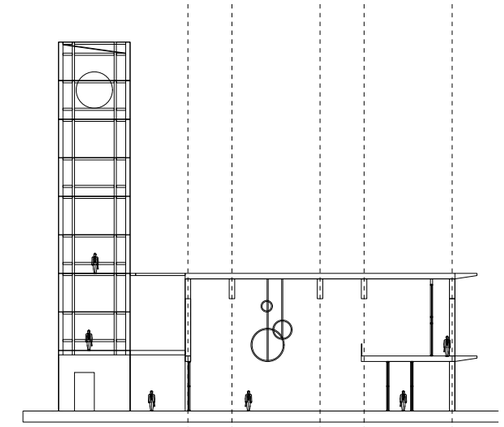
Redesigning the section, looking at how the framework could enable different volume's.

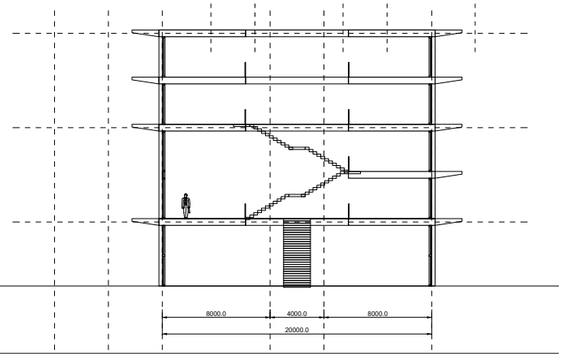


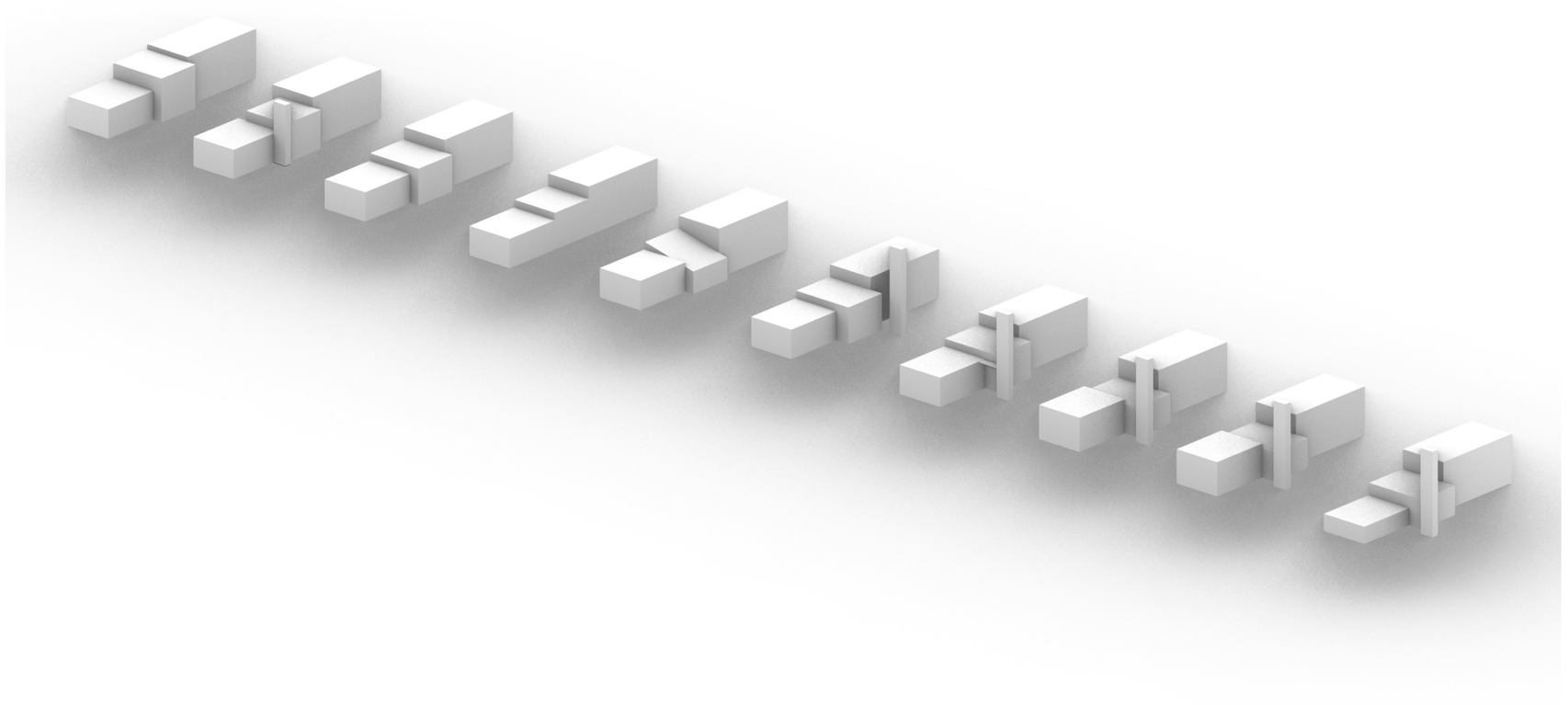








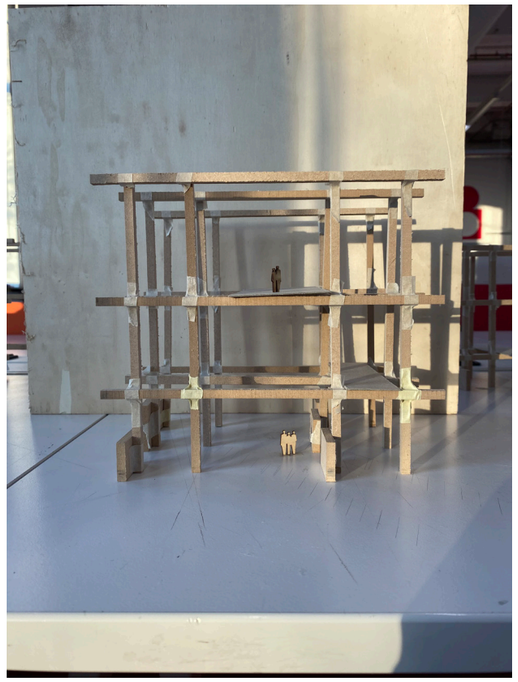


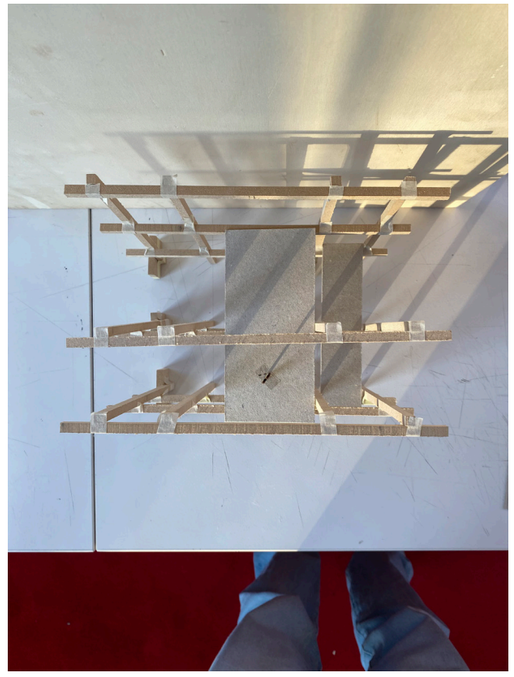


After building the physical model i realised that within my current design the central hall was way out of proportion. This ment that the volume composition would have to change with a smaller hall. This sequence explores different options to deal with this.

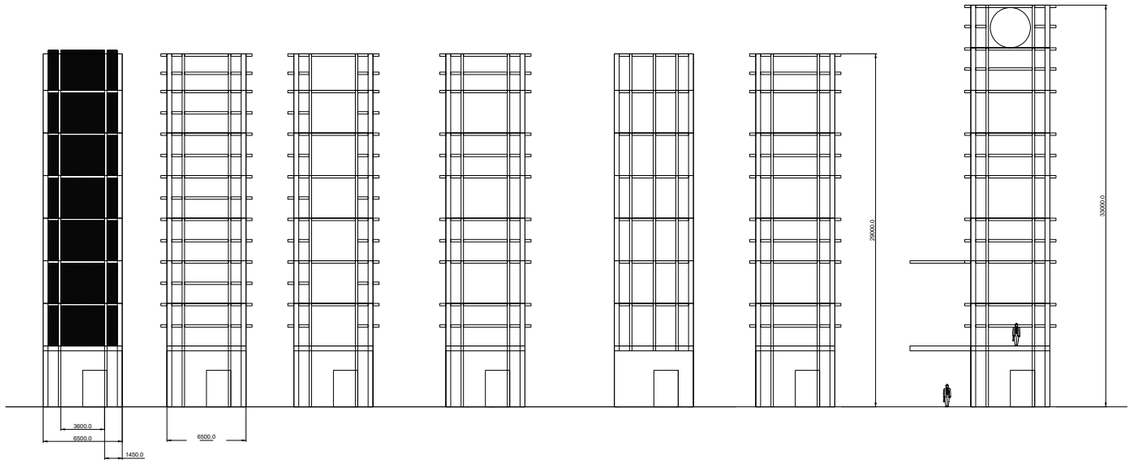
Sketchmodel to understand the potential and dimensions of the framework

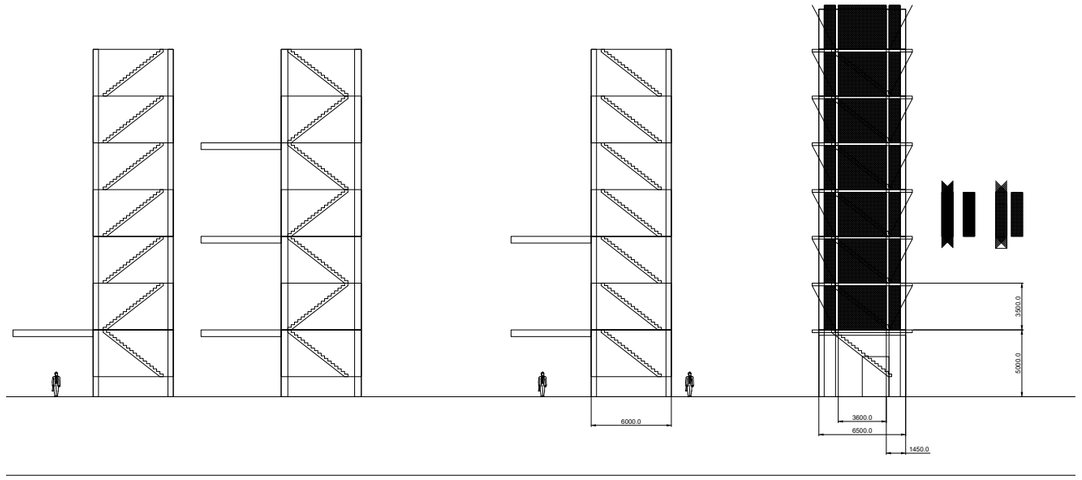
I build this model because I felt that I lost the understanding of what I was building and what kind of quality I was creating, the pictures are a small fraction of the different configuration that the sketch model allowed me to make as well as understand and see the potential and benefits that different configurations would have.

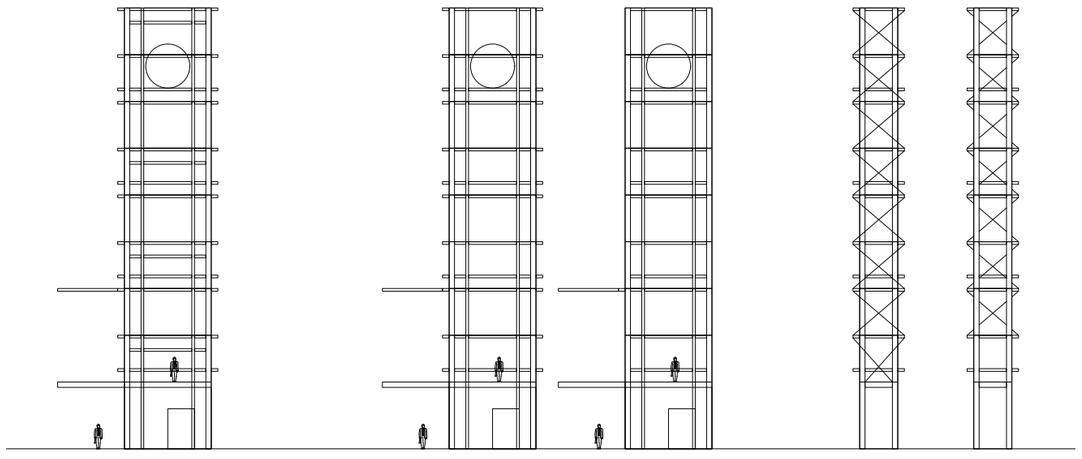




External routing form and appareance studies, as well as researching how the stairs would integrate within the tower.



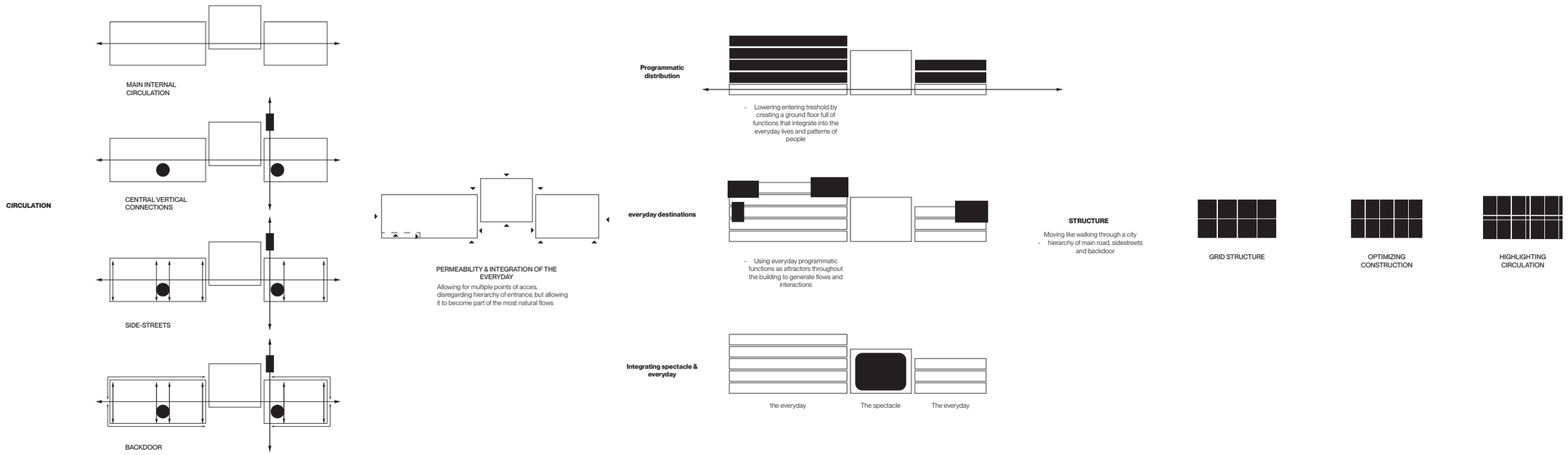




removing extrusions of beams

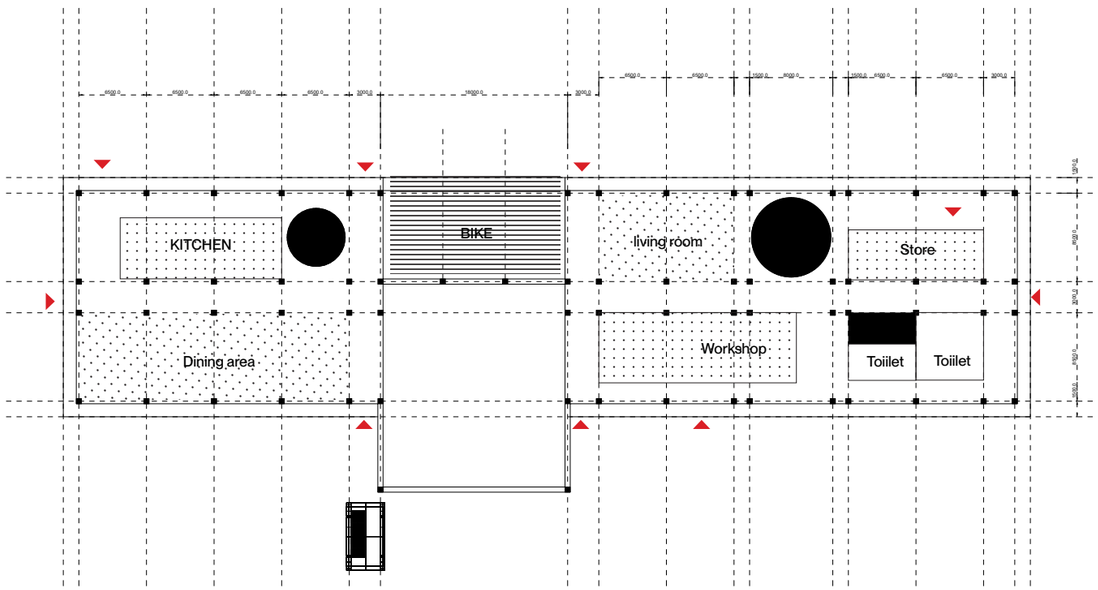
added long beams for extra stability possibility

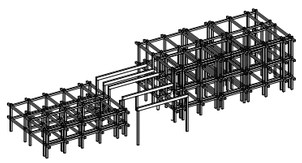
Q3.5 **Redesigning the framework & Section**

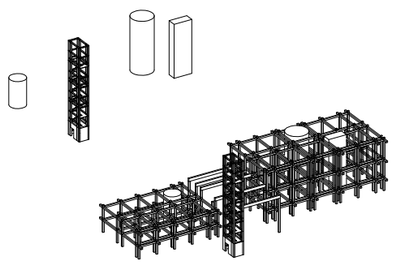


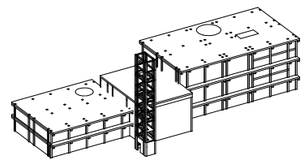
Rethinking & redefining the principles of the triangle, structure, space & routing, how those three components work together to come to one coherent design.

Defining the rules of the game.


KITCHEN
BIKE
living room
Store
Dining area
Workshop
Toiilet
Toiilet





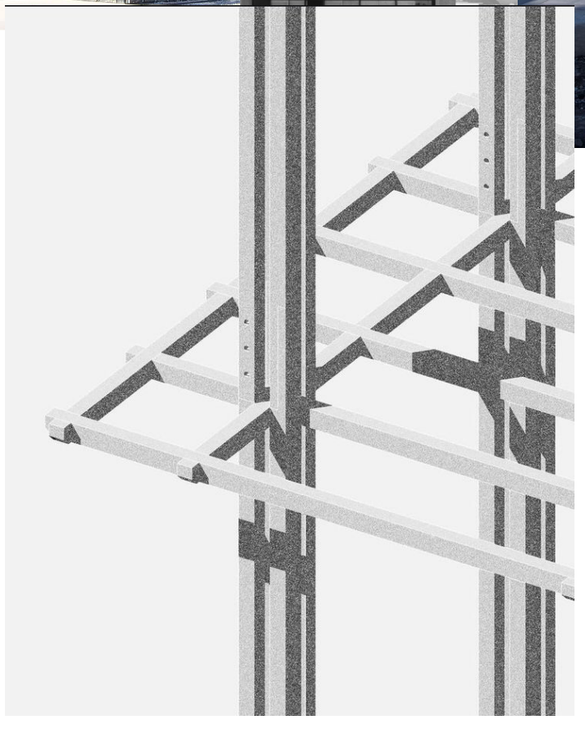






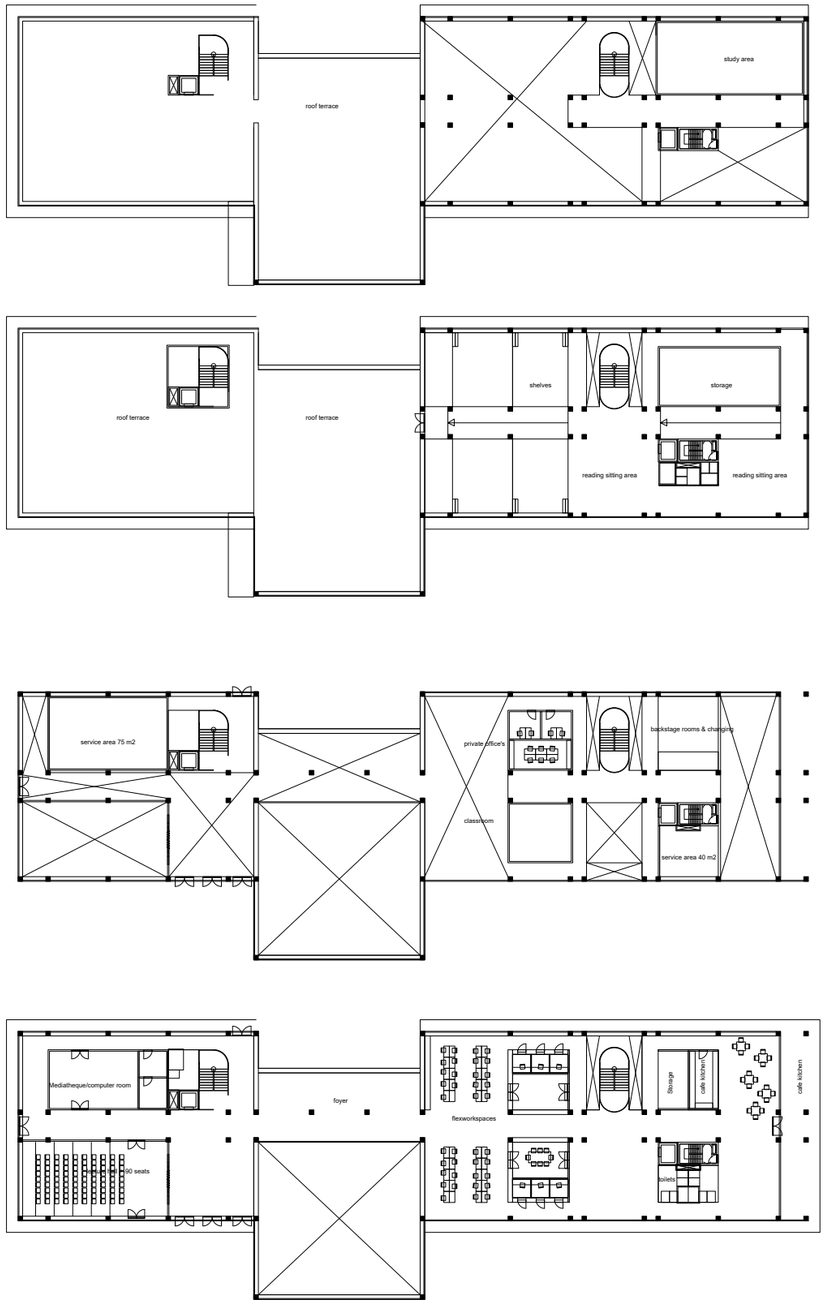


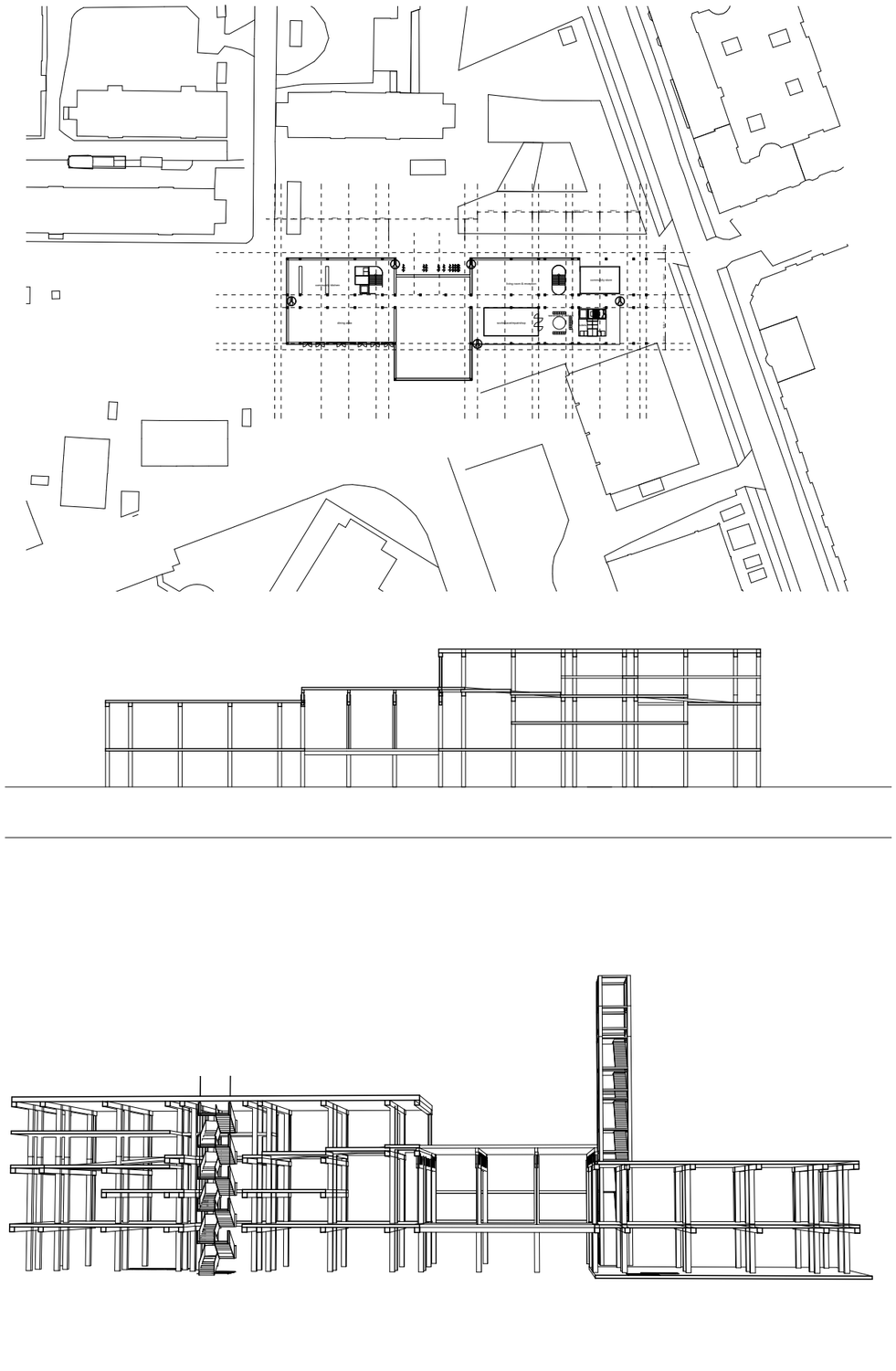


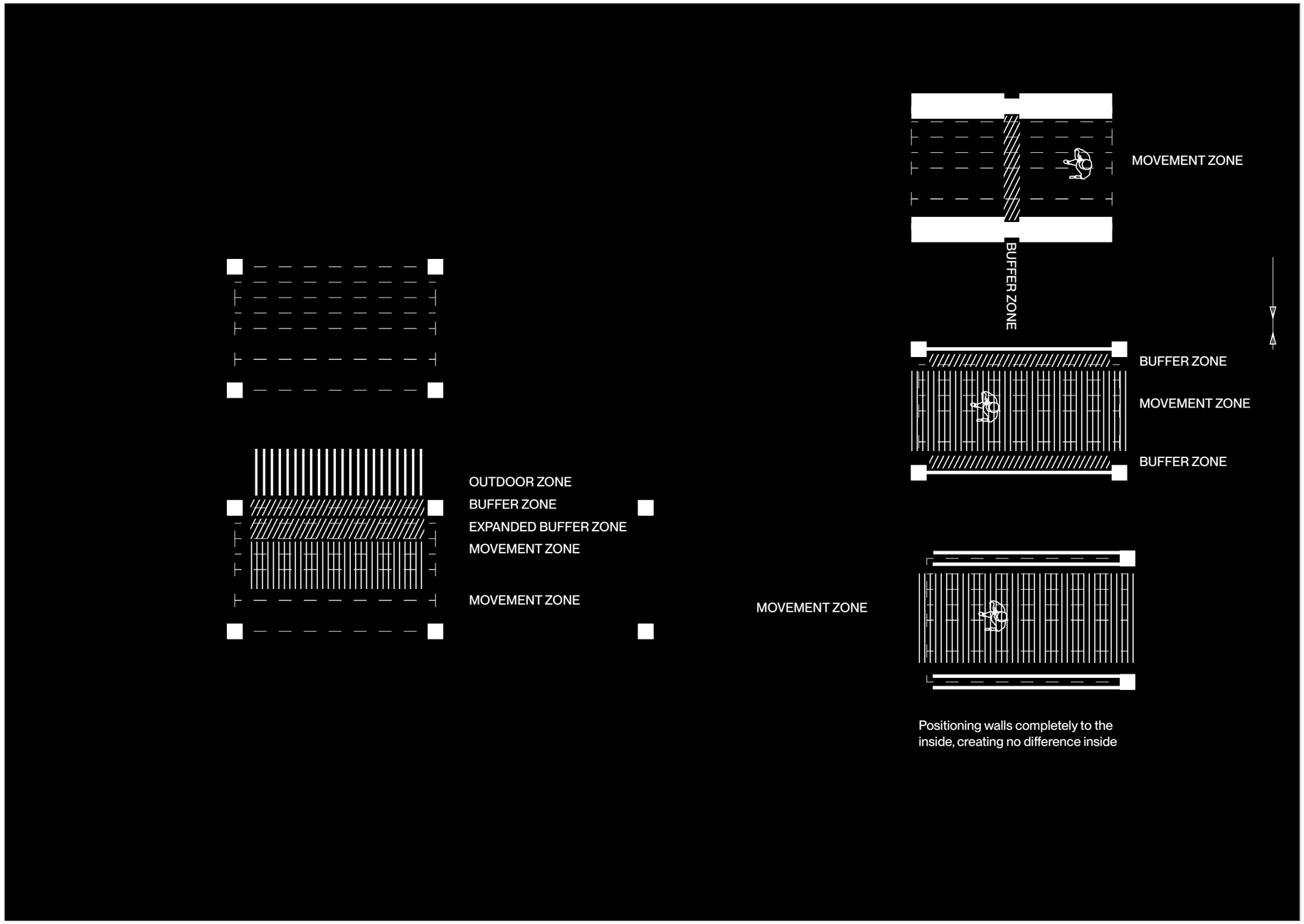



Reference for this week

Q3.4 **RE-iterating floorplans**

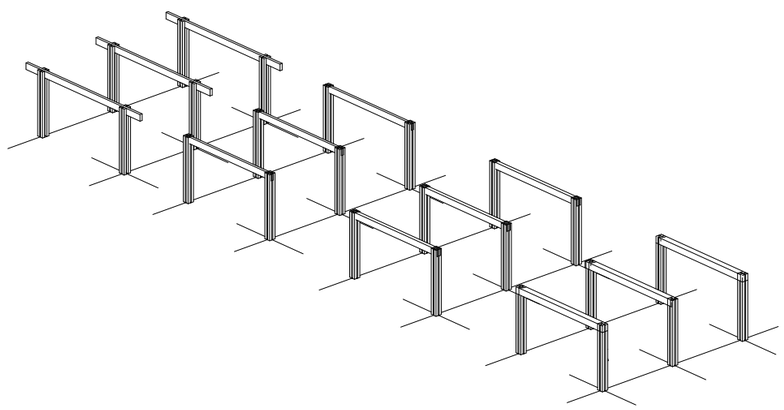


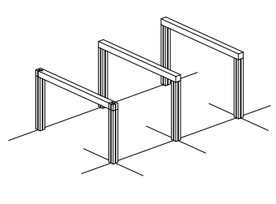


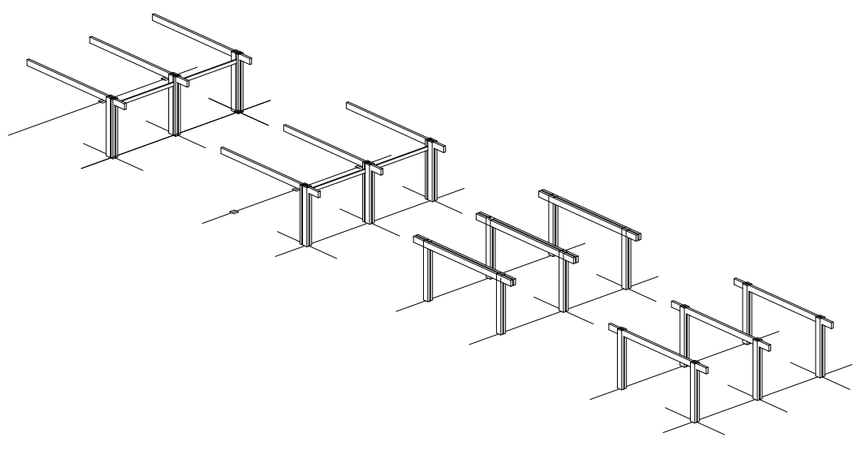


Study width and traffic, infrastructure and framework impact

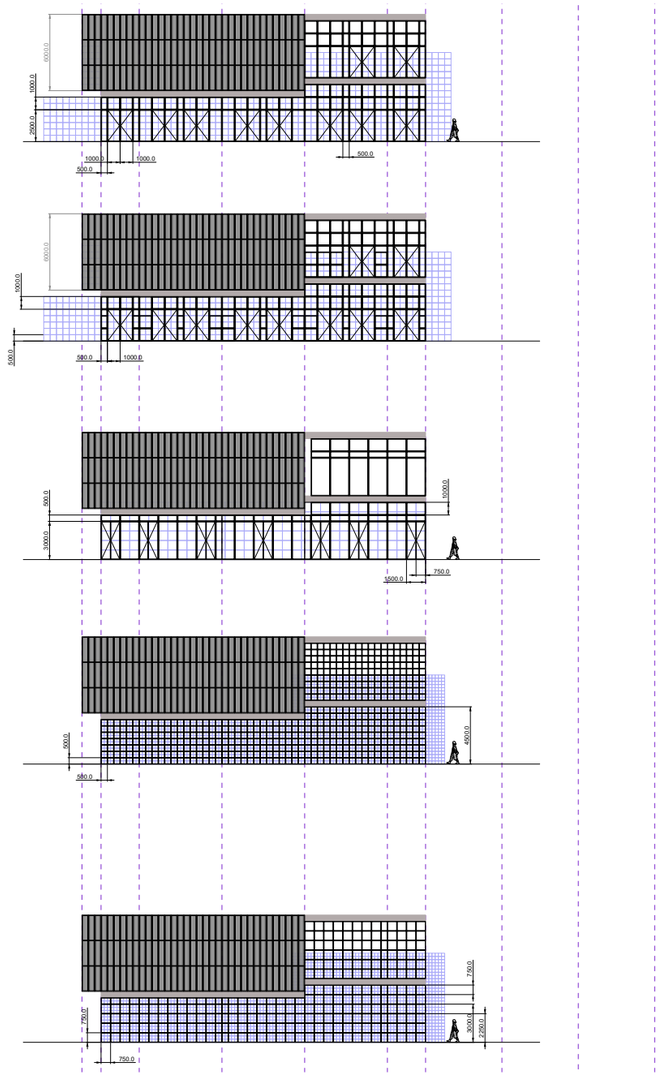
Q3.4 **Week 6**

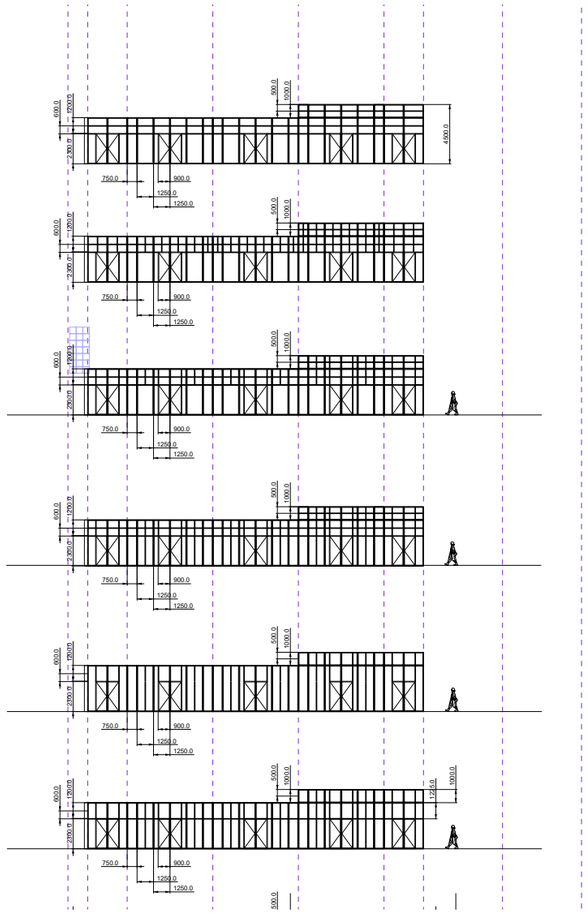


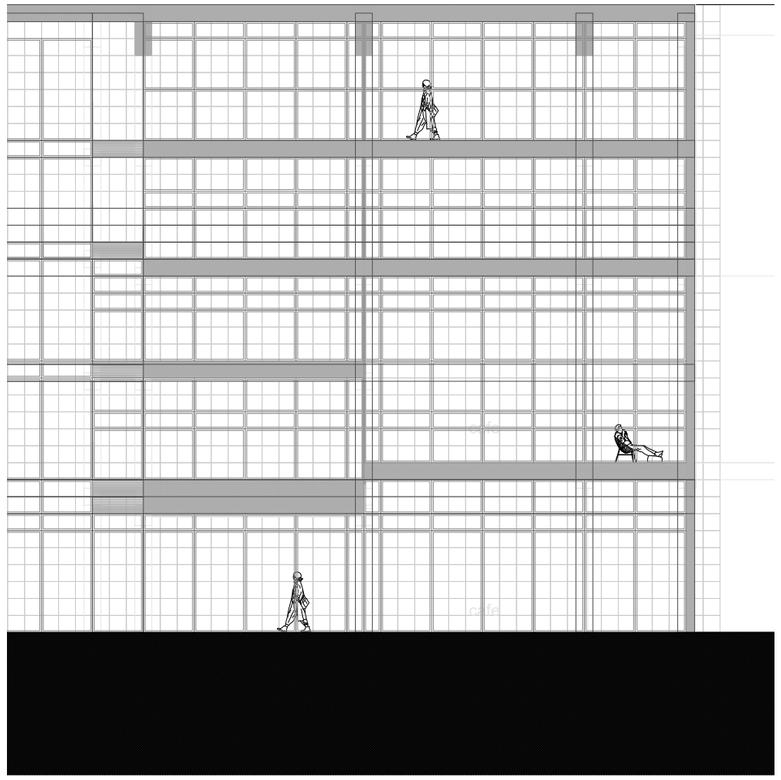




Testing different options of turning the framework more spectacular, varying doubling, trippling the collumns, beams and differntiating the combination,

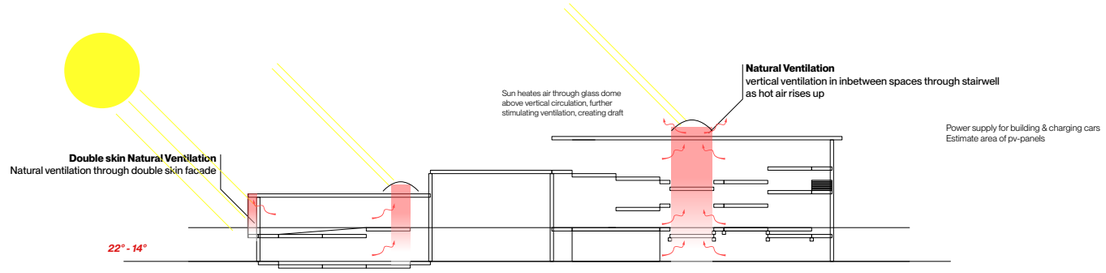




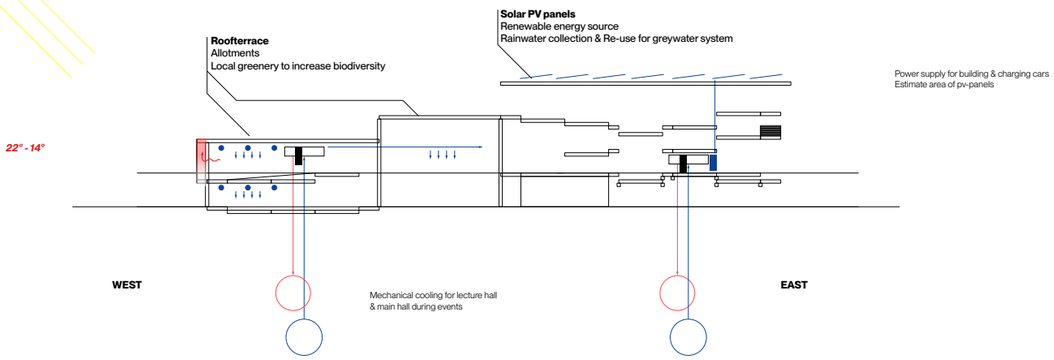


Testing different options for facade

SUMMER



SUMMER



Geothermal heatpump

Geothermal heatpump in combination, in combination with a water to air heat transfer unit is used to cool the air during summer, this kind of ventilation is needed to be able to provide the lecture hall and the large main hall with cool air during peak loads

SUMMMER

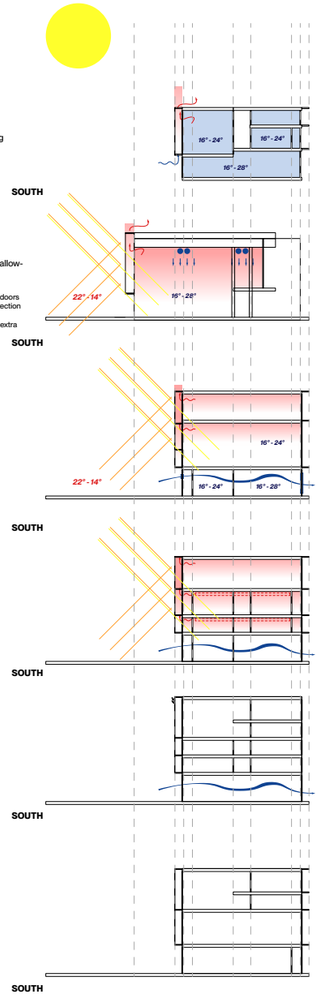
Twin-face double facade
Polycarbonate outer layer
Buffer preventing heatloss & allowing natural light

Shading inside the double facade

Twin-face double facade
Polycarbonate outer layer
Buffer preventing overheating while allowing sunligh entering

Cross ventilation --> opening windows and doors on ground level & foyer + dominant wind direction

Ventilation through double facade creating extra draft



TEMPERATURE

Summerperiod average 17 celsiu
july average high 21,1

because of this average temperature, cooling doesn't seem to be a priority. with natural ventilation and airflows

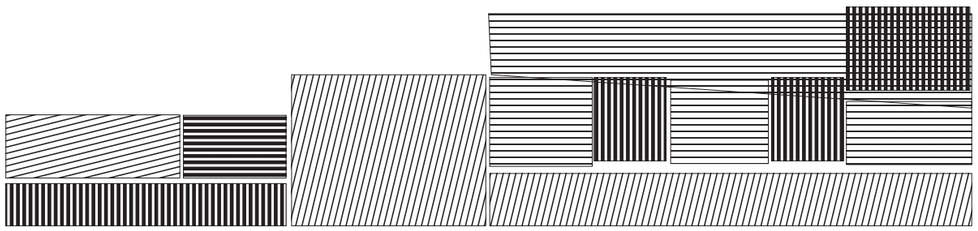
High maximum temperature, because of highly adaptive space & natural ventilation possible

Extra cooling through mechanical ventilation for peak loads in combination with geothermal heat transfer system. sed to cool incoming air

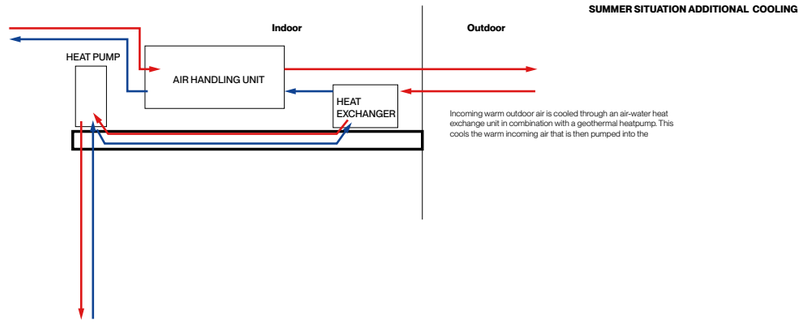
ground floor cooled throuhg passive ventilation, utilizing

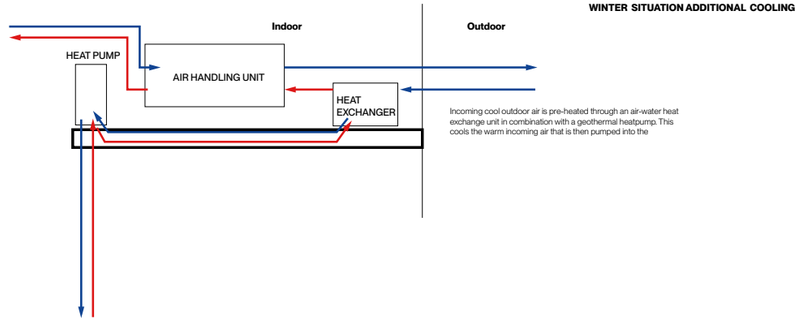
heb je hier dan ventilatiekanalen nodig?

Compartmentalizing the climate system

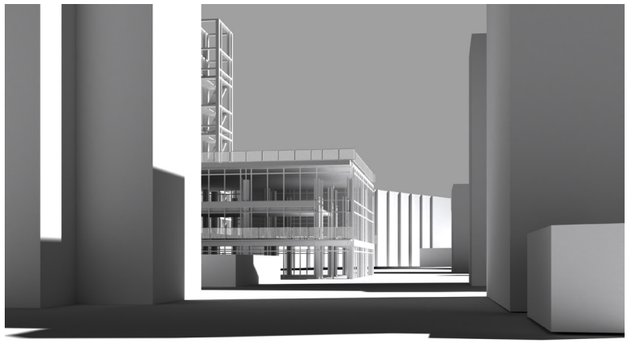


Kitchen & Dining area	**zone 1,** mechanical ventilation + natural ventilation Temp 19°/24°, space heated in winter
Lecture Hall	**zone 2,** mechanical ventilation + natural ventilation Temp 18°/24°, place heated in winter
Mediatheque	**zone 2,** mechanical ventilation + natural ventilation Temp 18°/24°
Large Hall & public floor	**zone 3,** mechanical ventilation + natural ventilation Temp 16°/28°, unheated & uncooled, local place heated
Flex workplace, cafe & library	**zone 4,** mechanical ventilation + natural ventilation Temp 19°/26°
Office's, Studio's, meeting rooms	**zone 5,** mechanical ventilation + natural ventilation Temp 20°/24° - mechanical + natural, heated

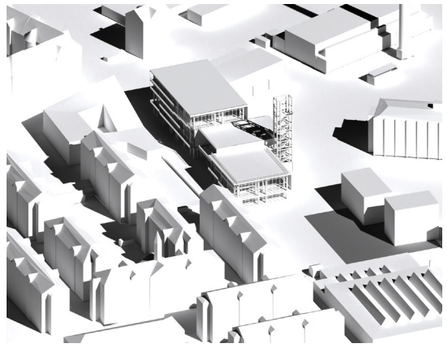




08. **P3 Posters & products**



Perspective arriving from sundholm



Bird perspective position in urban context

FROM EXHAUSTION TO RESILIENCE

P3 Public Building, Miguel Borst 4886356 3-4-2000



Turning Boundaries into Borders



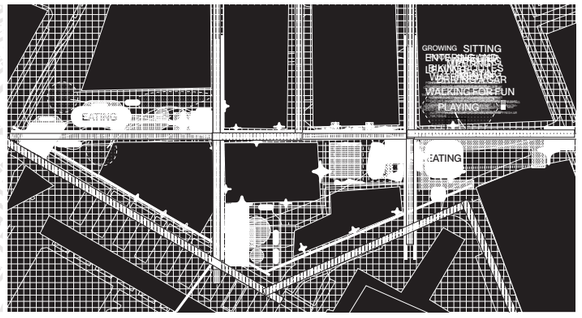
The Spectacular Everyday



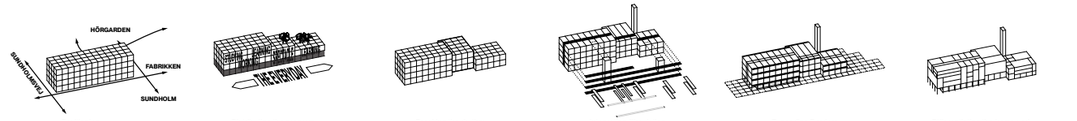
Figure ground 1:2000



Strategy 1:2000



Reconfiguring & overlaying the everyday urban patterns



Positioning

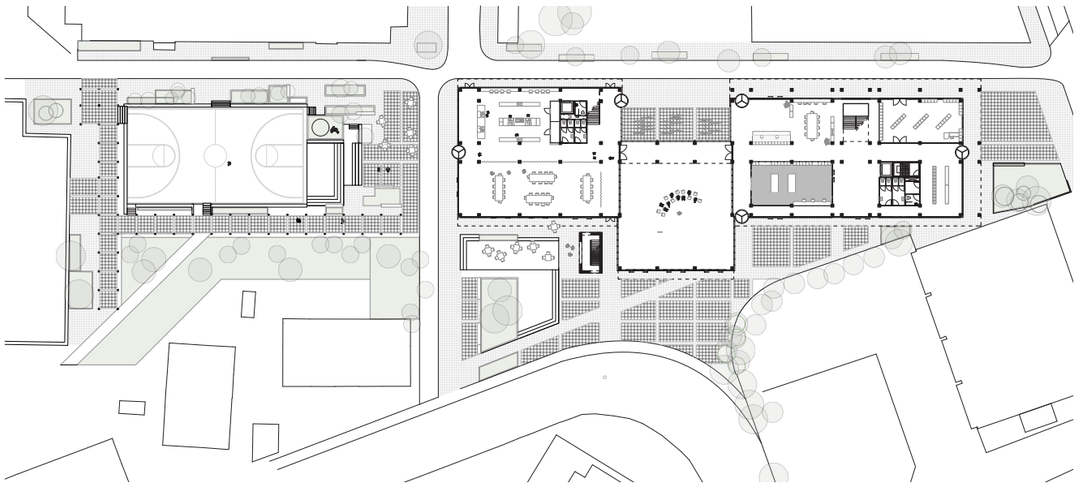
Distributing the program

Breaking the rhythm

Integrating Circulation

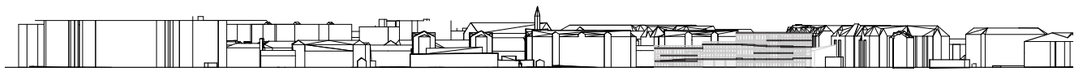
Expanding Borders

Differentiating the framework

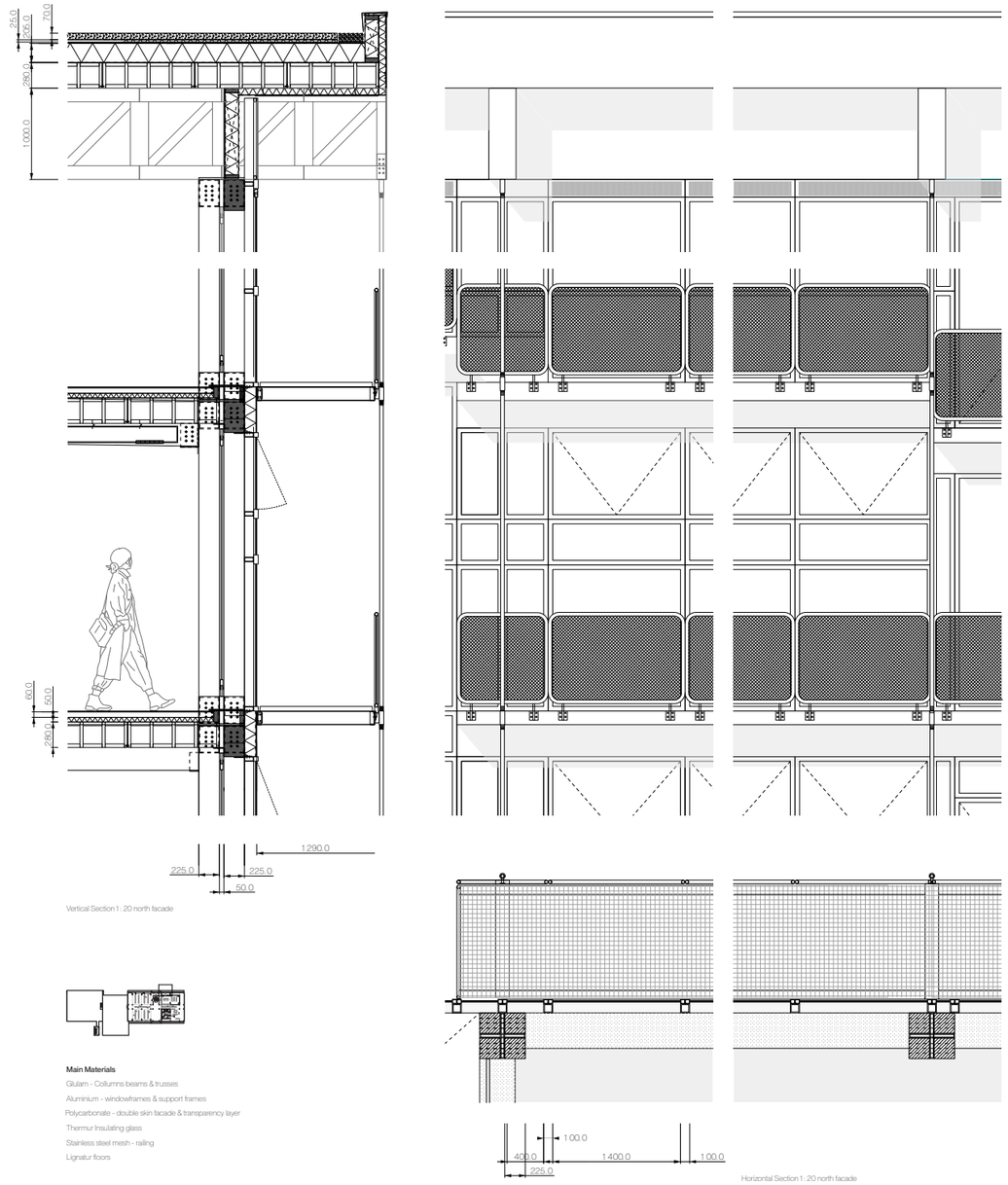


Scale 1:300 the urban site as a framework

Figure ground 1:2000



Scale 1:1000 Urban section public condenser



Vertical Section 1 : 20 north facade

Main Materials

Glulam - Collumns beams & trusses

Aluminium - windowframes & support frames

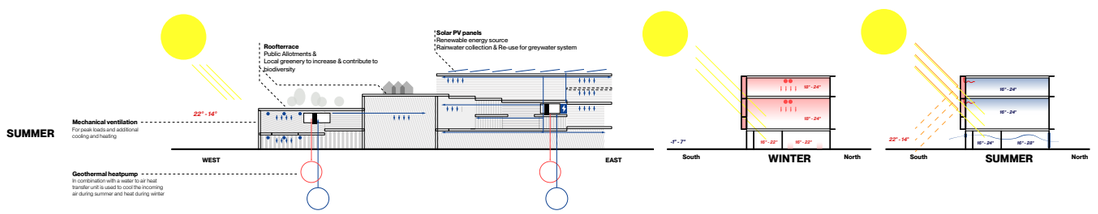
Polycarbonate - double skin facade & transparency layer

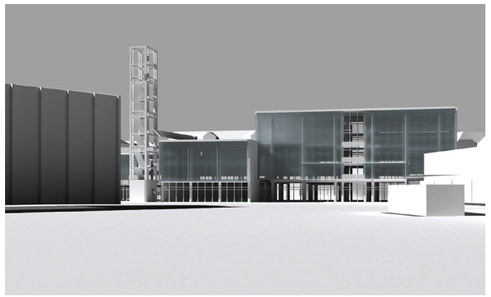
Thermur Insulating glass

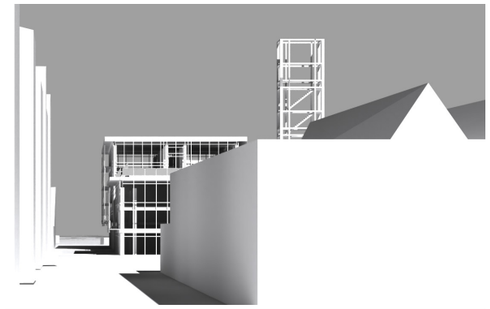
Stainless steel mesh - railing

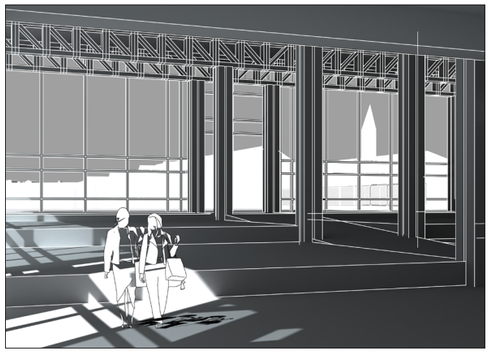
Lignatur floors

Horizontal Section 1 : 20 north facade

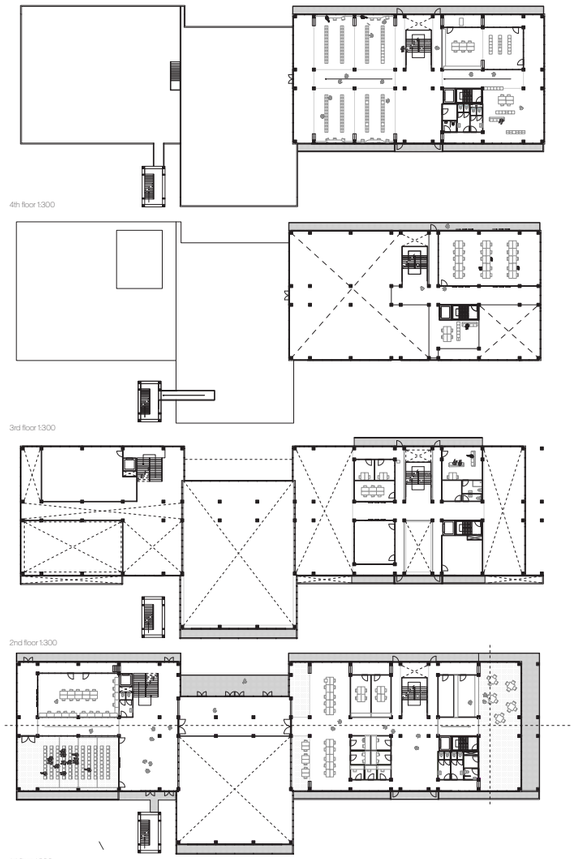








Perspective arriving from Horgarden
Perspective from Fabrikken
Impression of the interior of the library



4th floor 1:300

3rd floor 1:300

2nd floor 1:300

1st floor 1:300

Ground Floor

Community kitchen	67
Dining area	200
Cornerstore	78
Living room/kiosk	9
circulation	226
Large hall	374
Repair & workshop	81
reception	9
wardrobe & lockers	48
Toilet	16
bike parking	61
Circulation	83
Undetermined	56

First Floor

Lecture hall	136
Mediatheque	91
Foyer	111
Balcony north	57
undetermined area	143
Coffee area + undetermined space	137
cafe	26
office utilities storage	16
balcony east	67
Single person work booths	3* 4.5
Double person booth	4* 6.5
Open fleworkspace	110 + 2* 24
meeting room 4-6 person	2x 20.9
toilets	25
circulation area	36
circulation with inclination	56

2nd floor

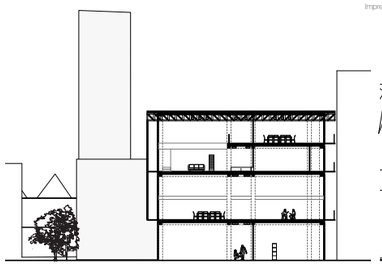
service area	104+40
Circulation area	119
Backstage room	33
toilet	66
office support & storage	10
large room	44

3rd floor

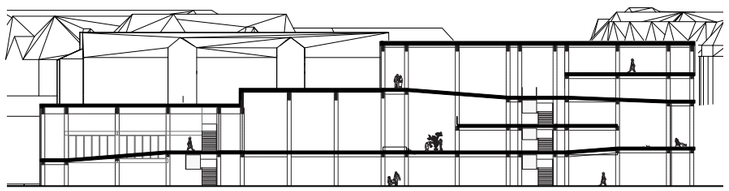
roof terrace	1000
library	445
archive/ closable library area	87
reading area	63
circulation	60
undetermined area	67

4 th floor

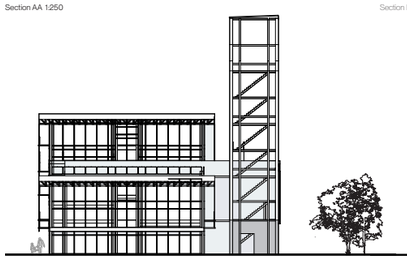
study room	135
undetermined space	30
circulation	94



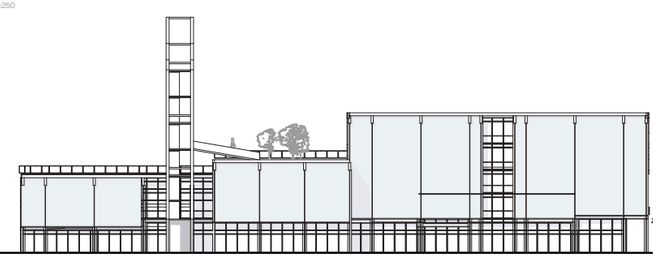
Section AA 1:250



Section BB 1:250



East Facade 1:250

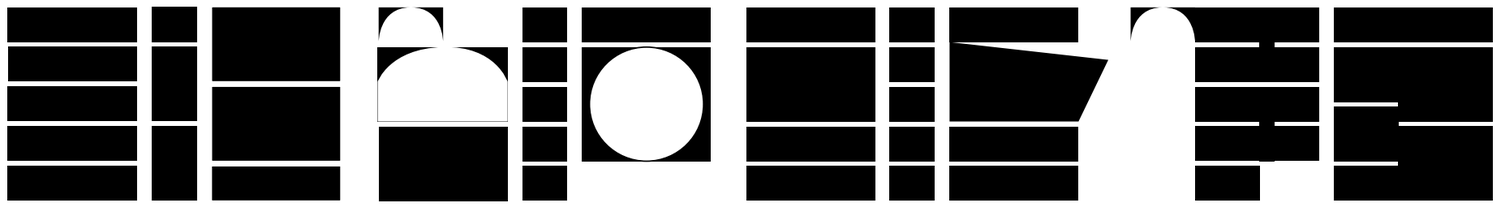


South facade 1:250

09. **Q4 Research**

Q4.1

Reflecting on the section, framework & the spectac-ular



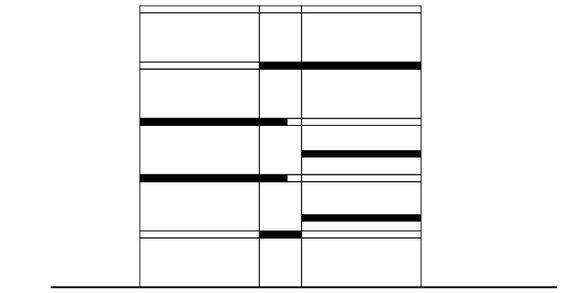
1. Contrasting double versus single heihgts

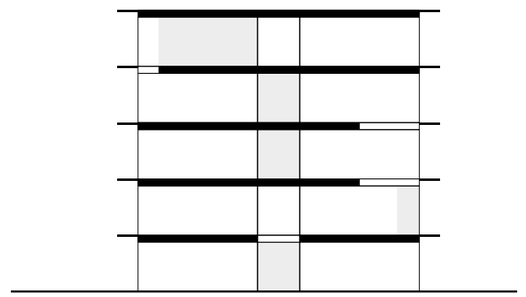
2. Introducing new shape's within the framework

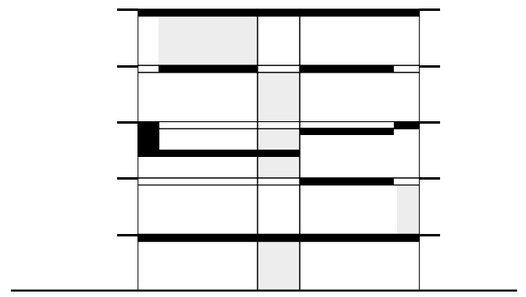
3. mixing new shape's and differ-ent heights

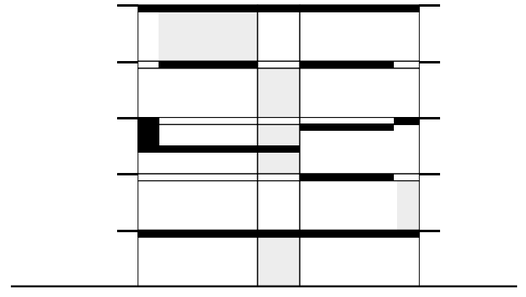
Diversifying the section

Recalibrating after P3
How to make the section more spectacular? How can the framework be used to it's full potential? A selection of first attempts at further improving and pushing the the longitudinal sectional organization of the condens-er.



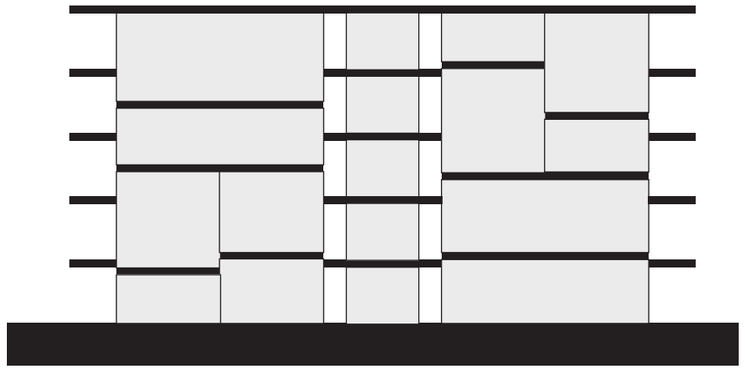




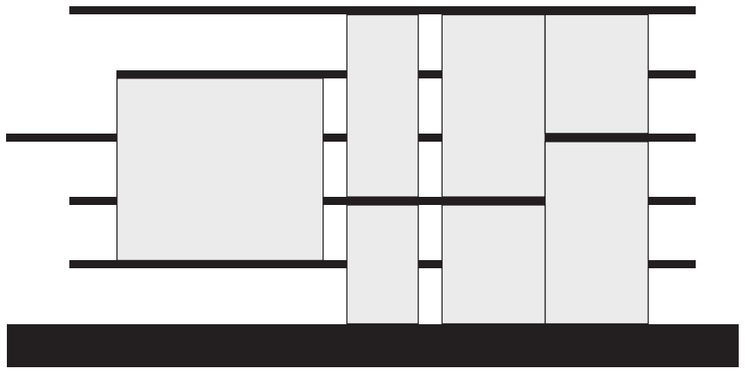


Section studies impact of smaller voids
Partially removing floor elements to create vertical connection. Voids in this way can also be used to create different spaces within the same floorplan without the need for walls

What makes the section spectacular
How can the section be made spectacular? What are the aspects that need to be adressed to be able to state that the framework is used to the maximum of its potential. After experimenting with different sections and alternating design I realized that there are in total four aspects that can be adressed within the framework and that the framework allows for.

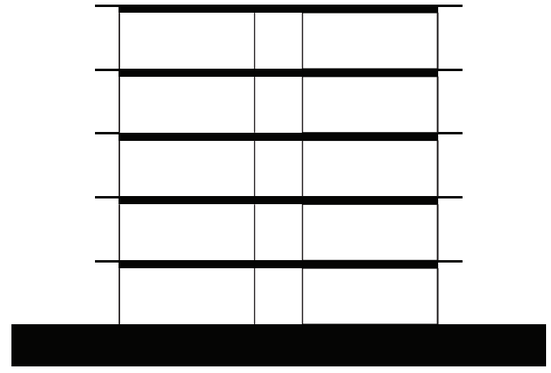


1. Spectacular = offseting floorheights
Offsetting the floors to create different space's within single floorplan, using the floorheights to create different type's of interactions between floor and thereby maximizing possibility for interaction.

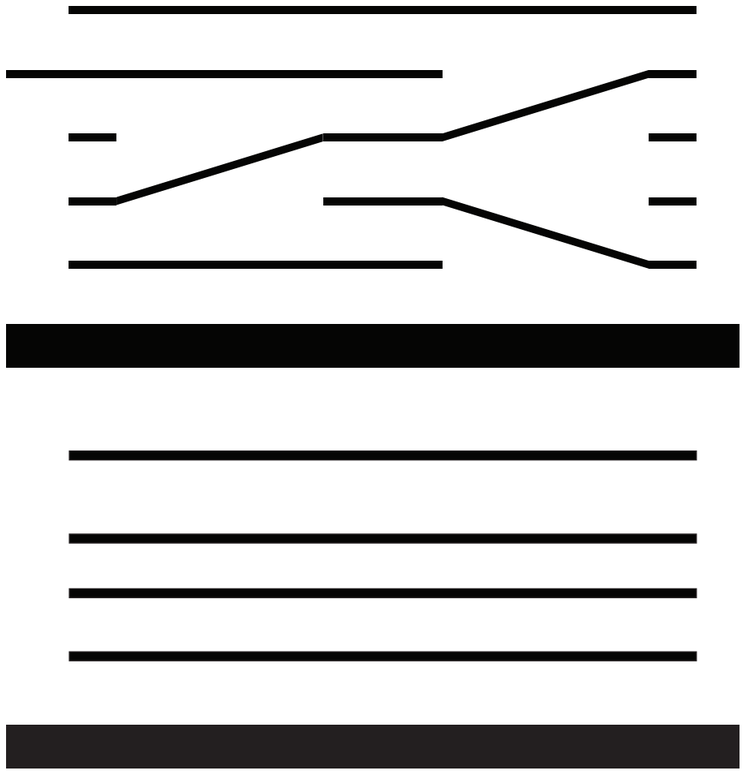


2. Spectacular = extreme heights
Utilizing the framework to remove floorparts and creating extreme heights, highlighting different space's and uses within the framework as well as further diversifying what is already there

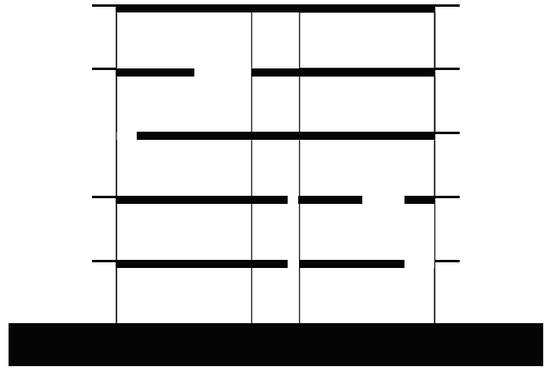
3. Spectacular =
Offsetting the floors to create different space's within single floorplan, using the floorheights to create different type's of interactions between floor and thereby maximizing possibility for interaction



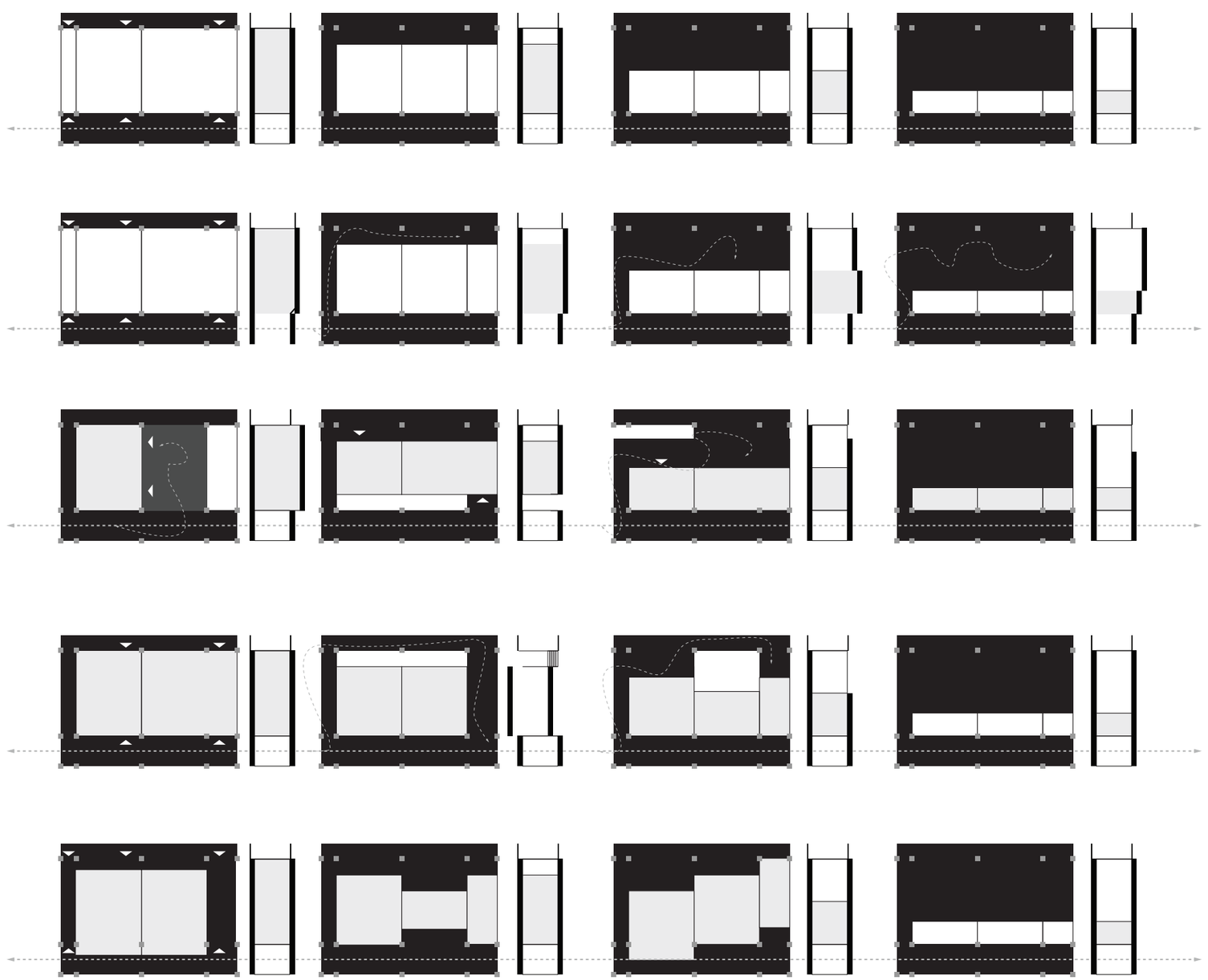
4. Spectacular = Differentiating floorheights
Utilizing the freedom of the framework to create alternating floorheights. By doing so generating a maximum of possibility, as the different floors have different qualities that allow for different forms of activities simply by



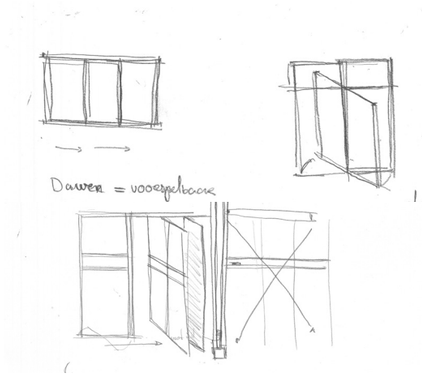
5. Spectacular = Voids
The strategic use of voids allows the section and experience te become more spectacular, creating new vertical interactions between different horizontal layers. Hereby also facilitating new interactions and new possibilities to emerge.

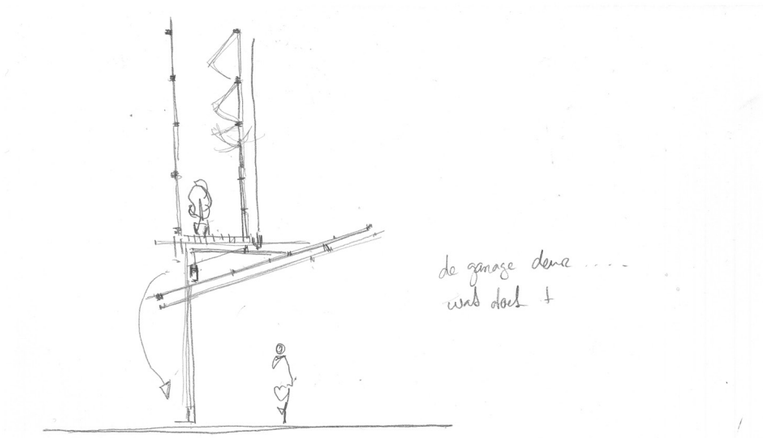


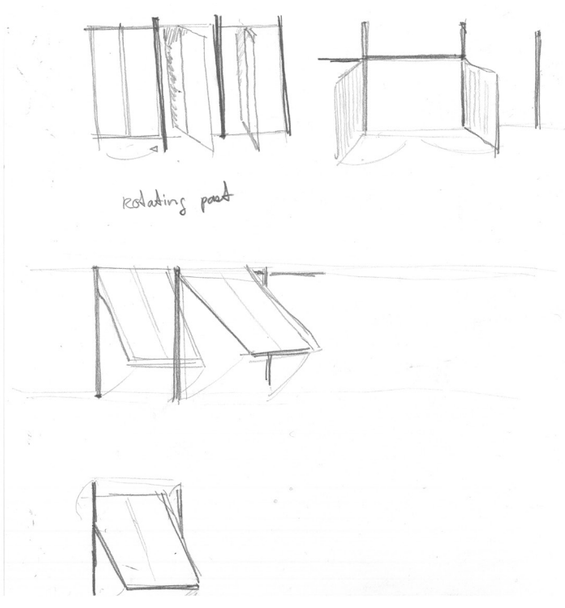
Studies on:
Section & principal and secondary circulation, organization.
researching how the framework, section and secondary circulation can work to together more coherently, creating a secondary route that is more adventurous and breaking the organizational monotomy. An important part of this research was also how finding ways how to legitimize the existence of a secondary route. Looking at design solutions that would require the existence of the secondary route in addition to the main circulation.



Blurring the boundary between inside and outside
An important part in making sure that the

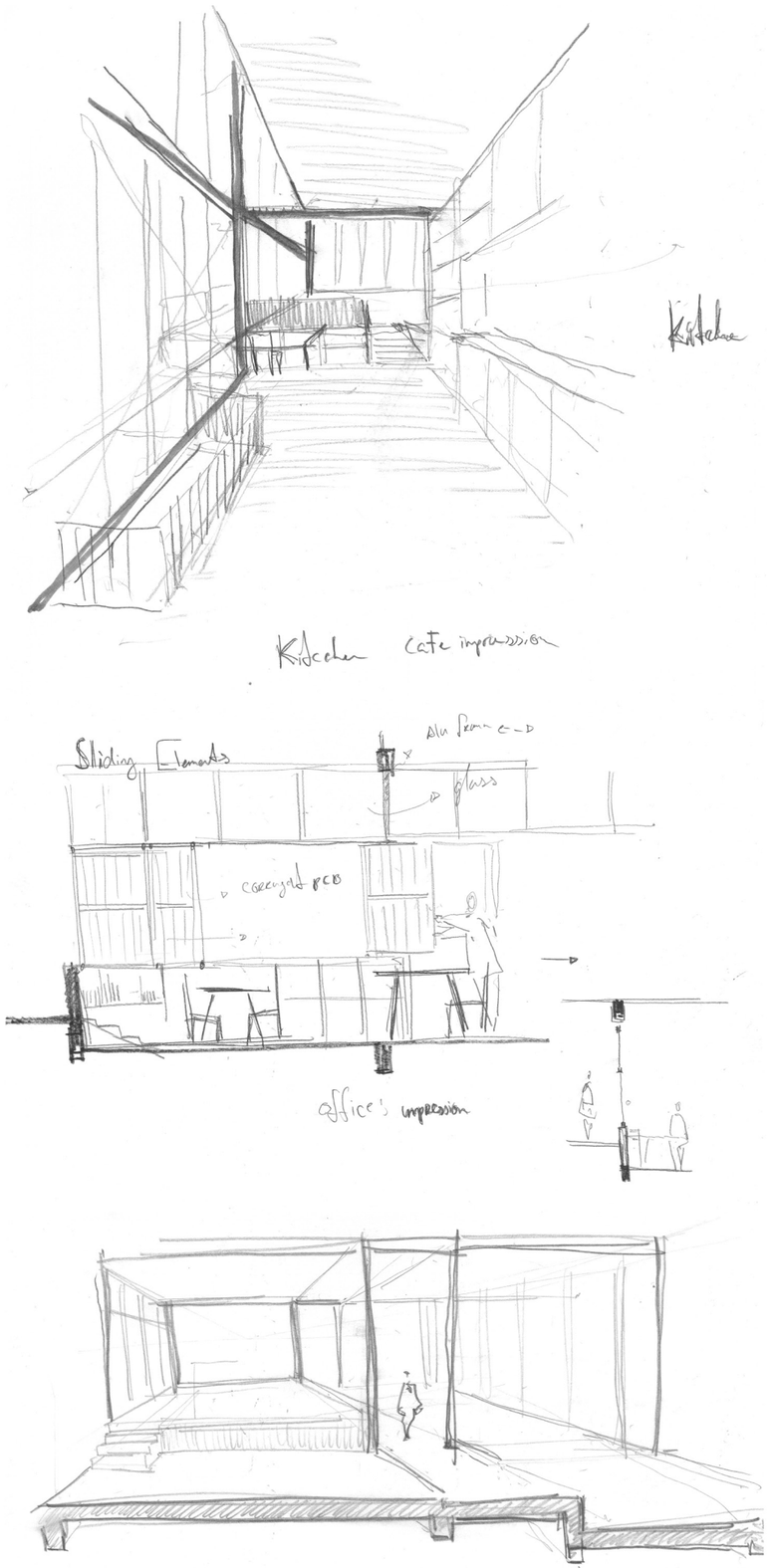


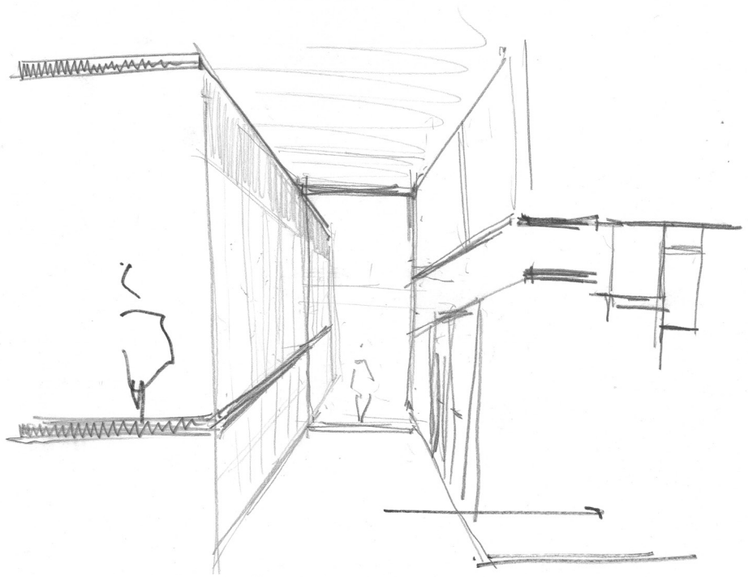




Tools for turning the framework spectacular
This selection of sketches show the research done into how the framework can be turned spectacular. Utilizing and maximizing the possibilities that the framework allows for and thereby turning what happens inside spectacular. The use of voids, alternating floorheights and offsetting floors opposed to each other

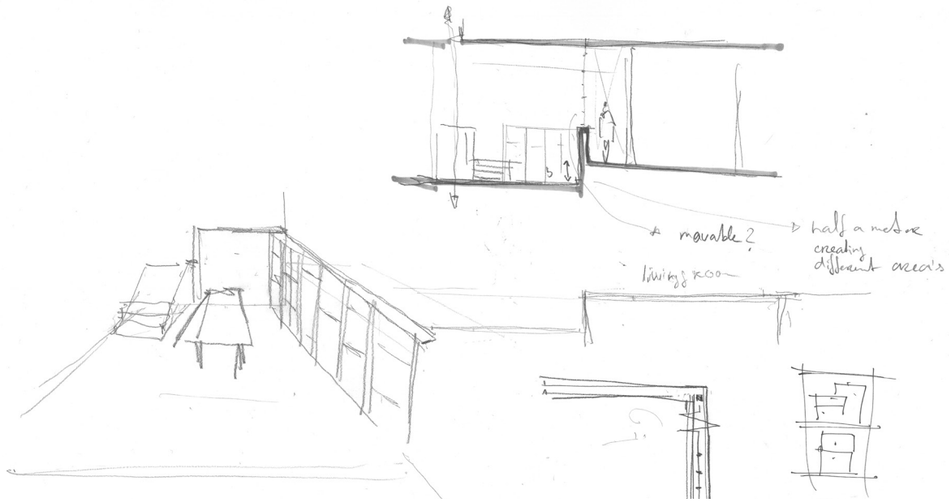


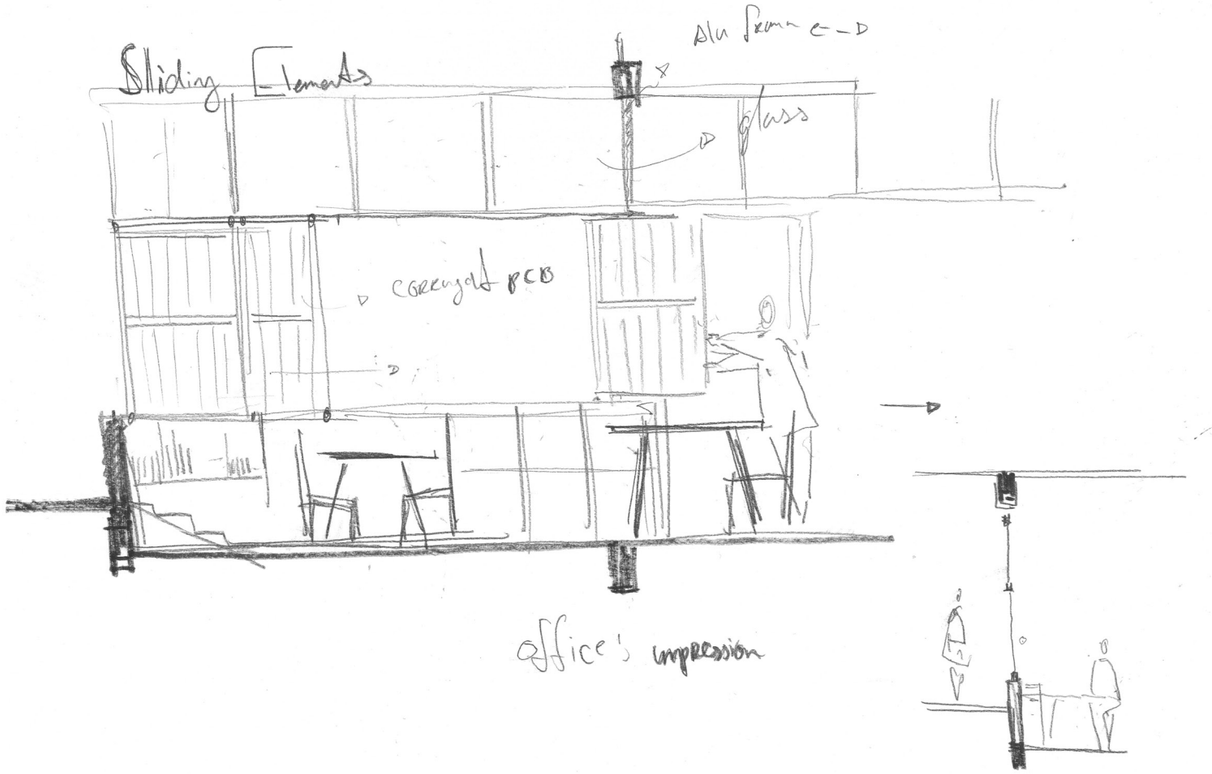




Researching impact of Differentiating floorheights

Utilzing the framework to create different floorheights that allow for different area's spaces to emerge without having to place walls.

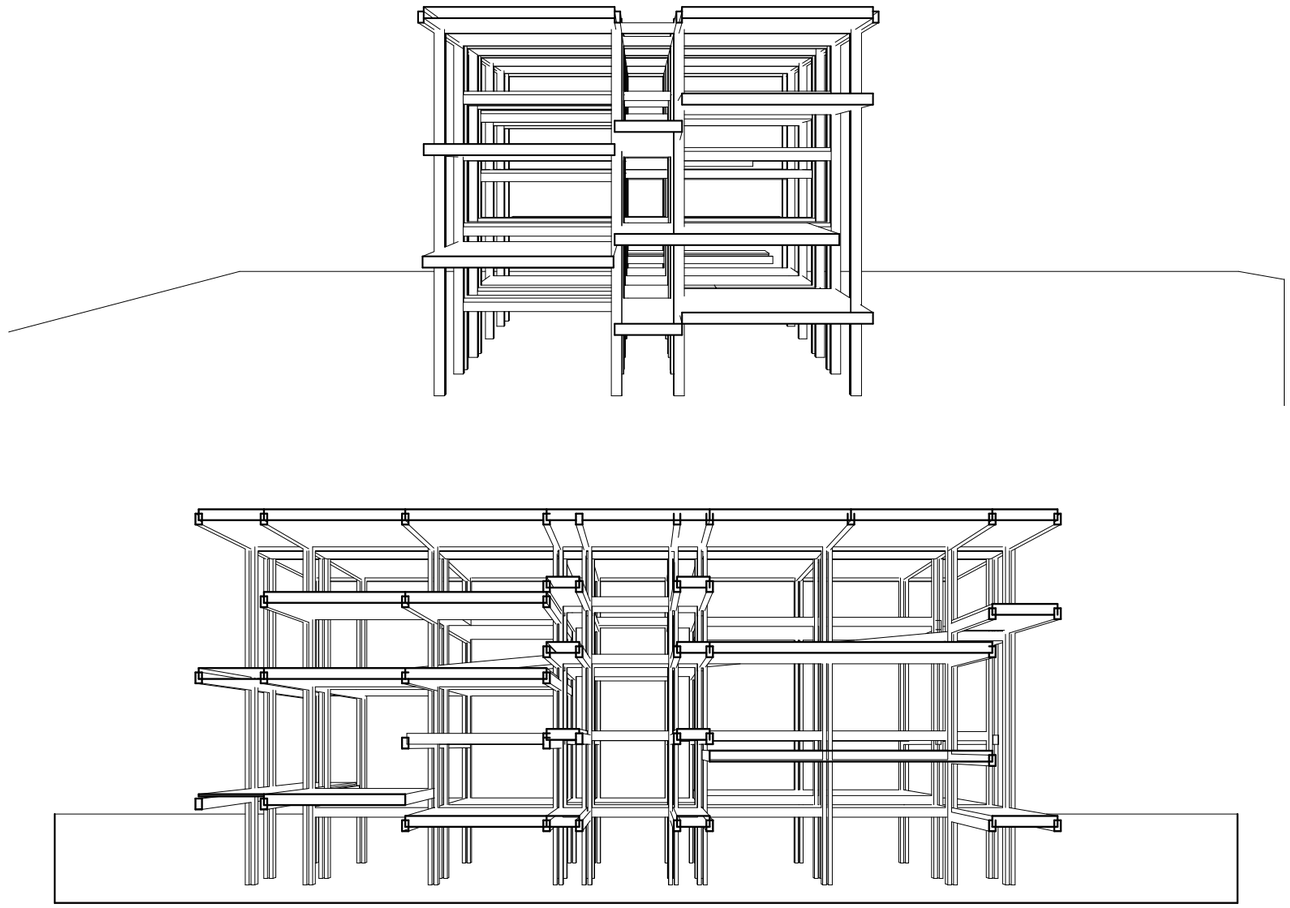




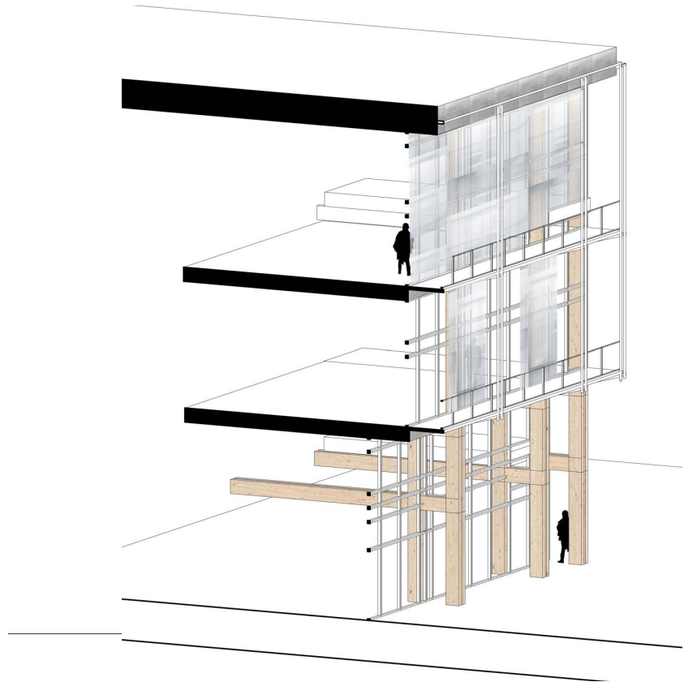
Impression of office/work spaces

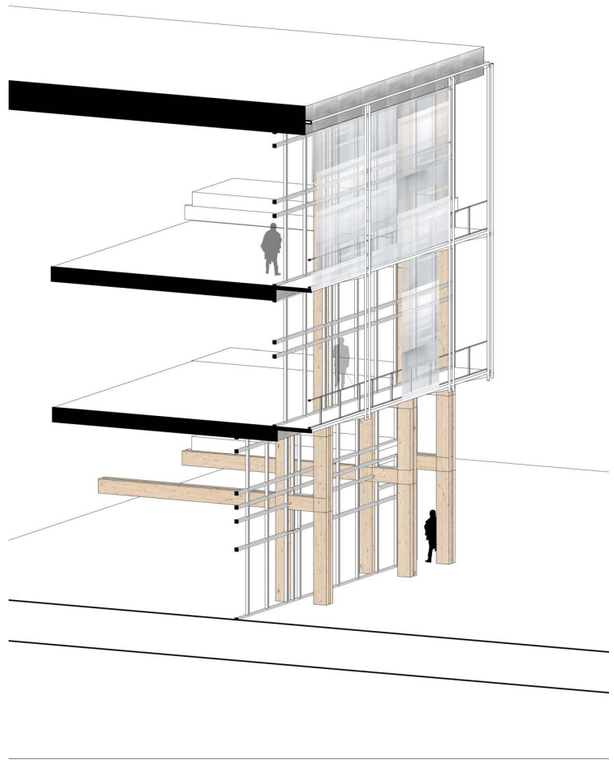
Small height differences in combination with medium high walls allow for privacy while maintaining a degree of connection

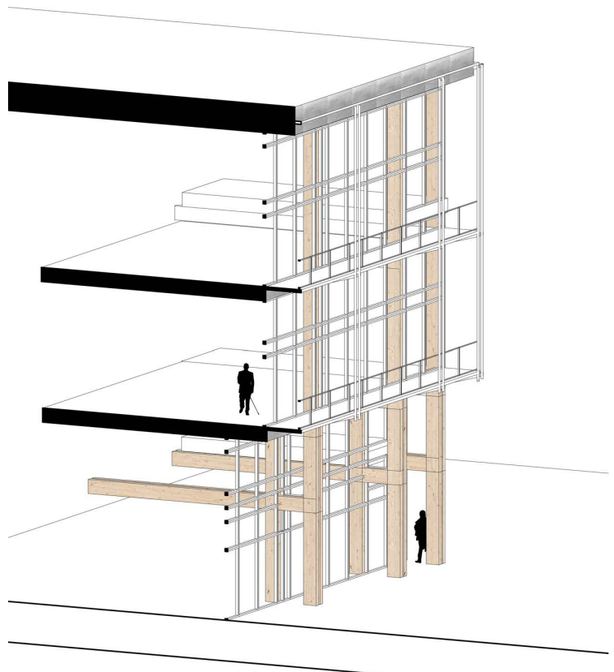
New sections
First impression of the new sections where the potential of the frame-work is already more maximalized, making the whole more spectacular.



Week 4.2 **The facade, inside and outside, context, detailing**





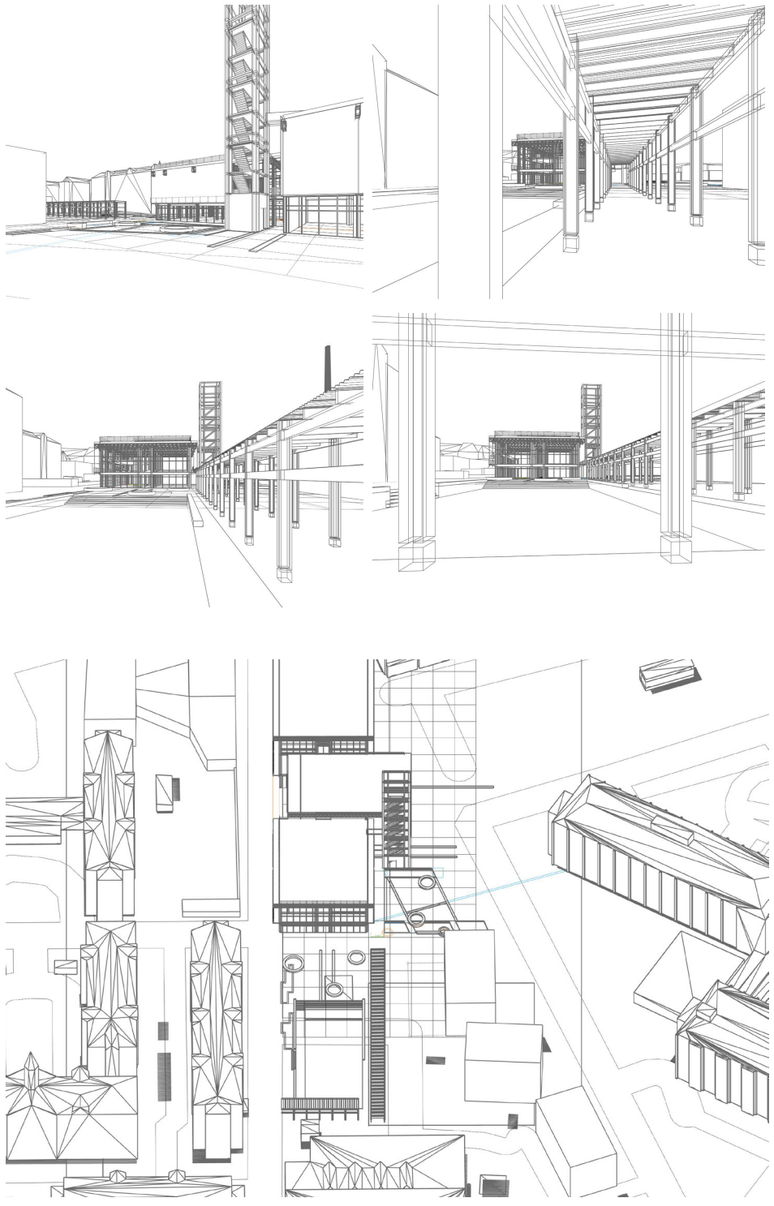


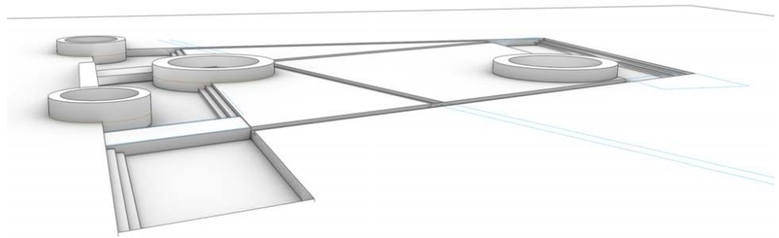
Researching Materiality facade and impact of difusse boundary

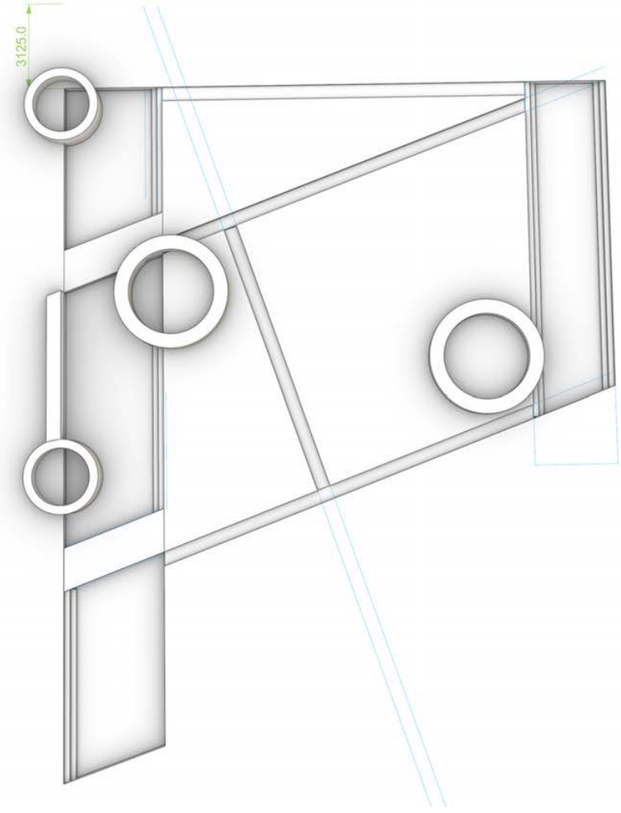
Redesigning the surrounding context
A lot of time this week was spent redesigning the public spaces and landscaoe surrounding the public condenser. The main design intention regarding these different public spaces was that these space would also function as an urban extension of the public condenser. Where the building itself is a framework for the different spectacular and everyday activities the public spaces and their design would also function as a framework for the different kinds of

The difficulty is that the tools and elements that are used within the public condenser can't always be directly translated or used in the design of the surroundings. Therefor I introduced new elements into this design.

Elements that



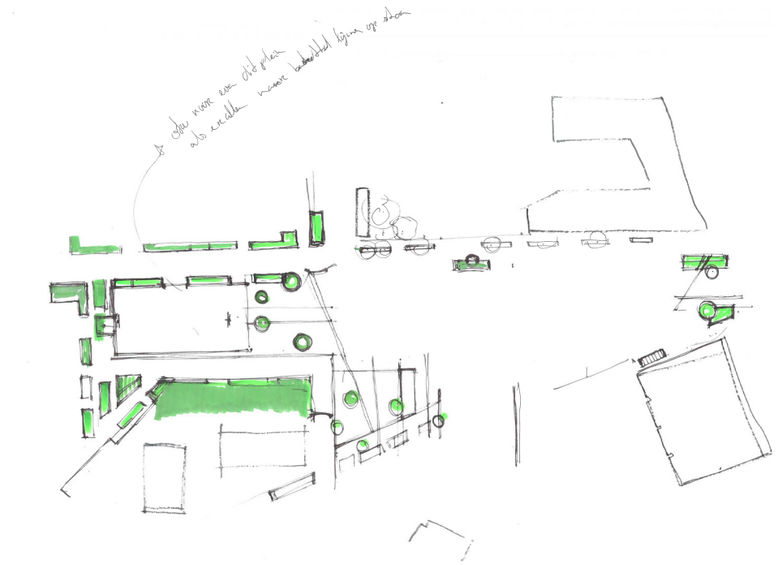


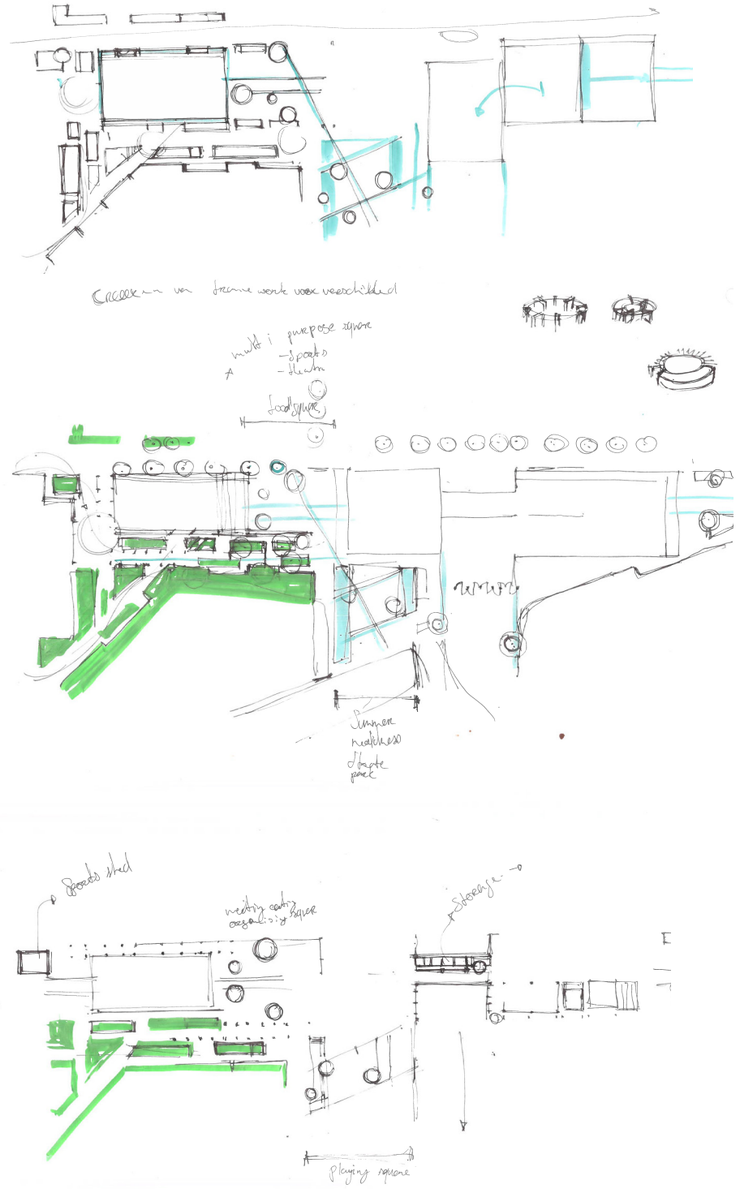


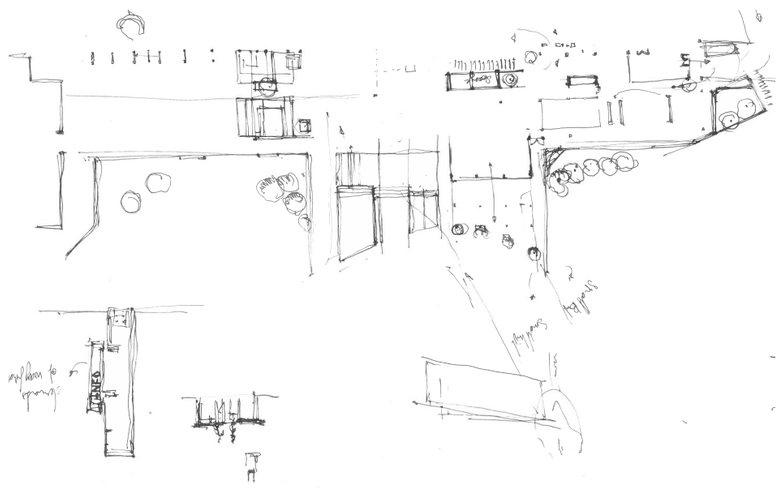
Iterations for urban and lanscape design
This selection of sketches shows different iterations
The aim of these designs was a continuation of the earlier urban design, in which similar urban elements were used to create different spaces that allow for diffferent kinds of activities to emerge. The elements being, sunlight, greenery, movement spaces, water scapes.

In these designs the earlier stages of utilizing water to create both a coherent public design while allowing for differentation are already visible. Where in some of these designs the actual water can form a physical connection between the squares surrounding the public condenser.

The sketches also show attempts at using greenery as an element that buffers, and along



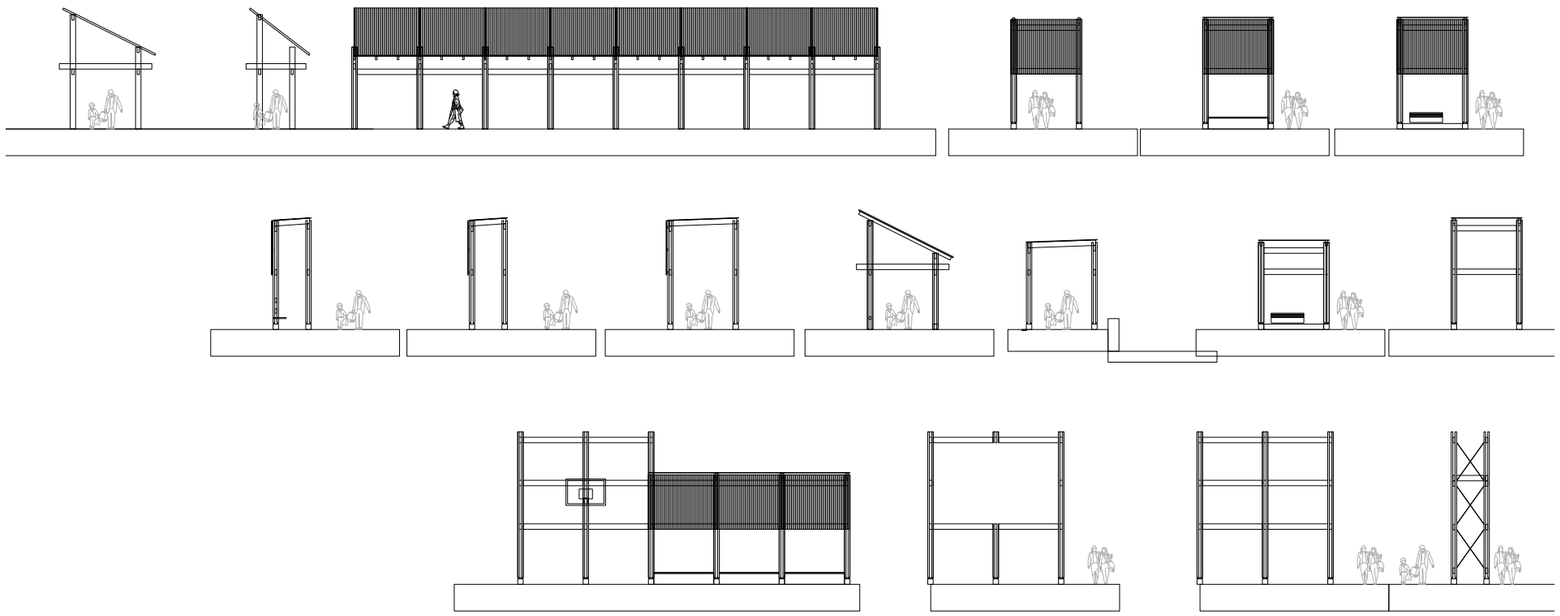




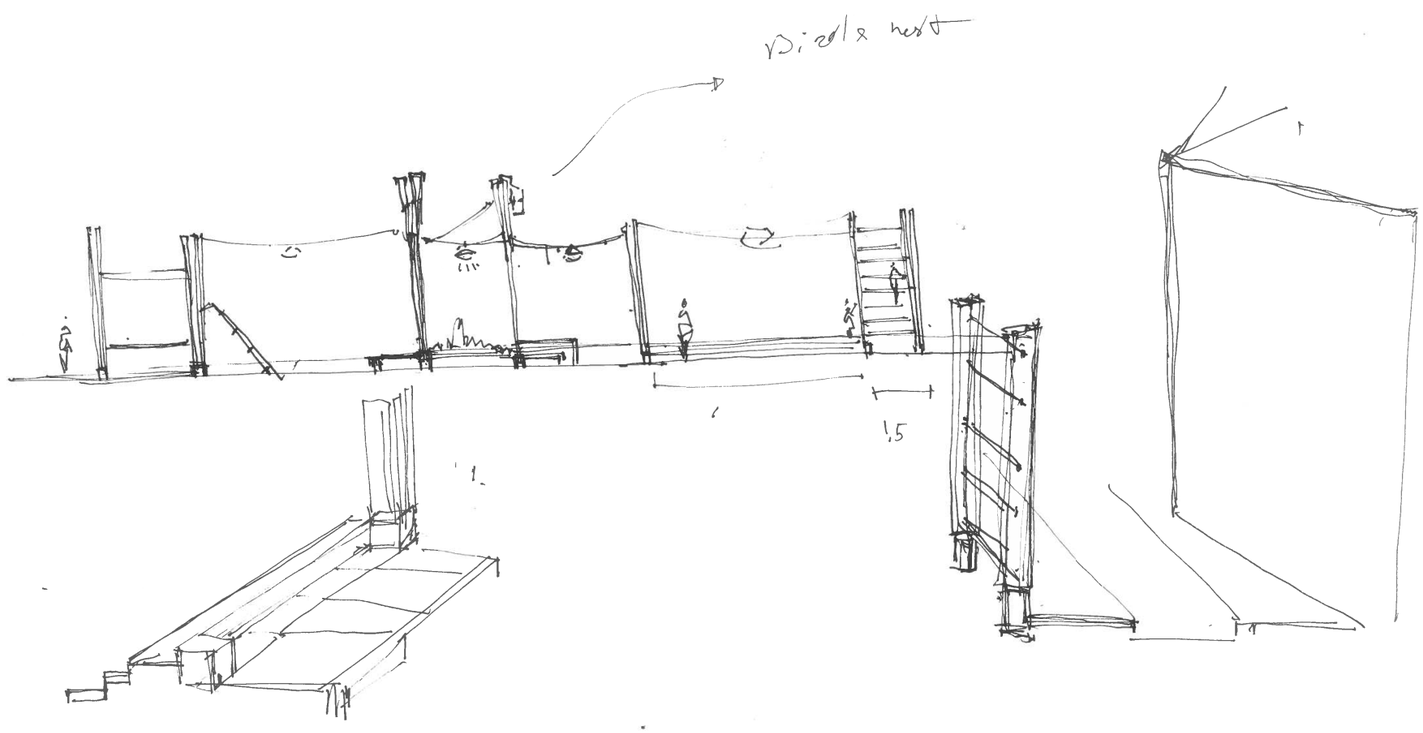
A corridor for the urban everyday & spectacular.
The idea being that this would be also an extension of the framework, allowing for different kind of activities to happen underneath and around it. The design would be a continuation of the public condenser in terms of materiality as it would feature both polycarbonate as well as a wooden construction with similarities to the framework of the actual public condenser.

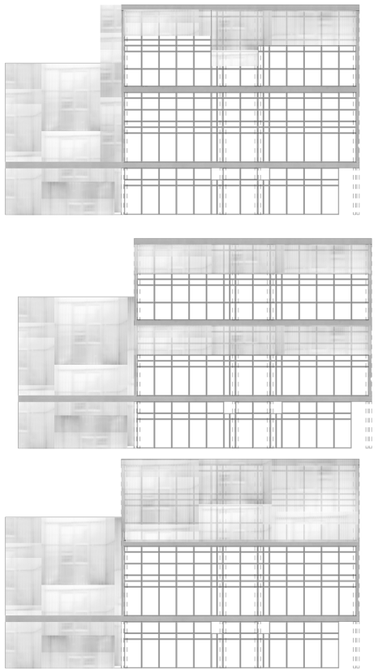
The corridor's main function would be to offer a covered movement route between different area's within the larger site area. By differentiating the width and heights it could allow for different activities to unfold under and around it.

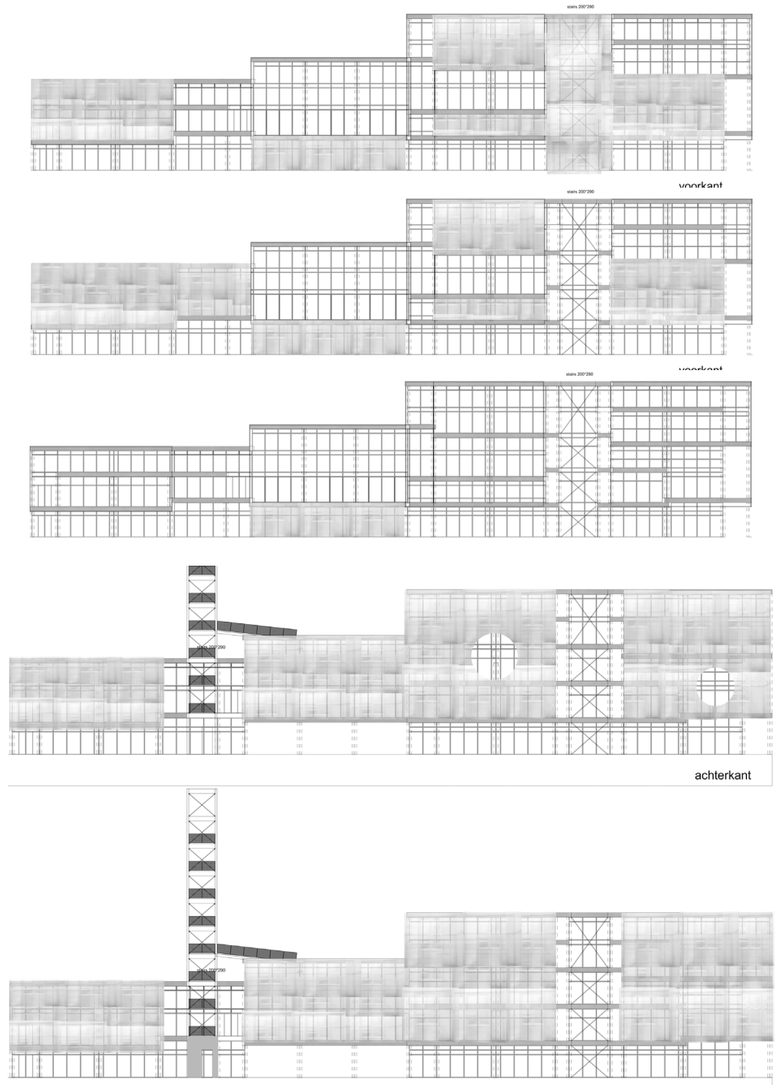
It was deisgned especially with for example expositions by the Fabriken in mind, that could be scatterd allong and underneath the covered pathway. In addition to this i envisioned this to have spaces for the placement of market stalls. The lower row shows alterations that would be possible to place a basketball hoop or add a screen for an outdoor cinema.



New idea for a urban structure
Taking the initial idea for the structure but simplifying it. Creating a continuation of the columns and turning it into something that supports different kinds of activities. Still this solution felt too forced and unnecessary.



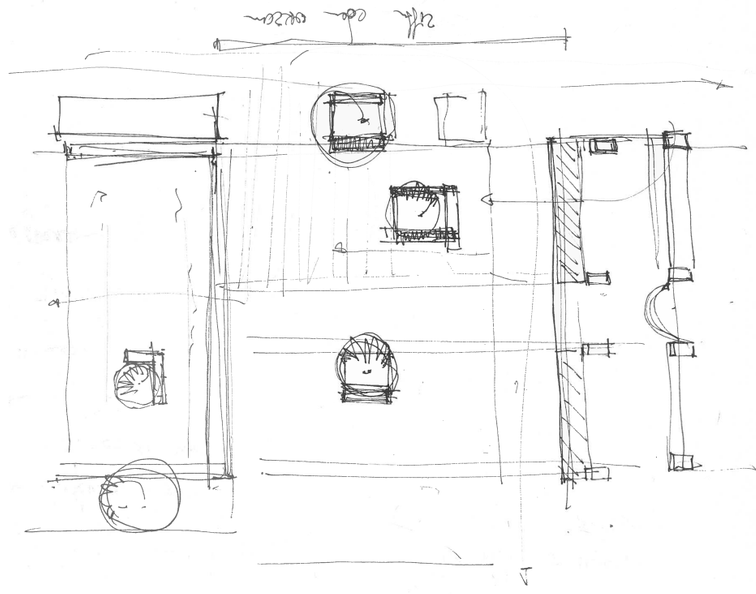


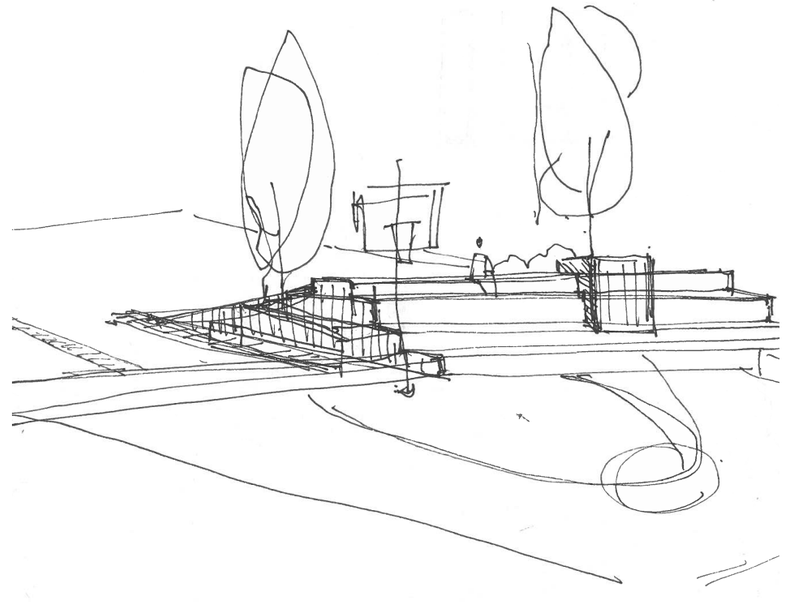


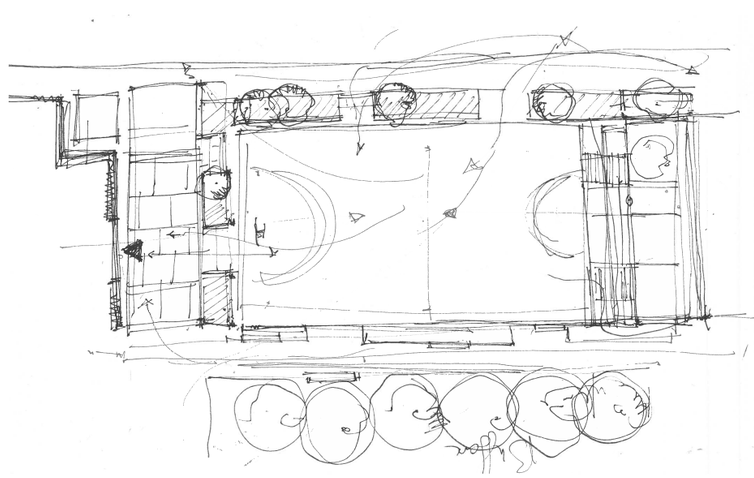
Different configurations for transparency

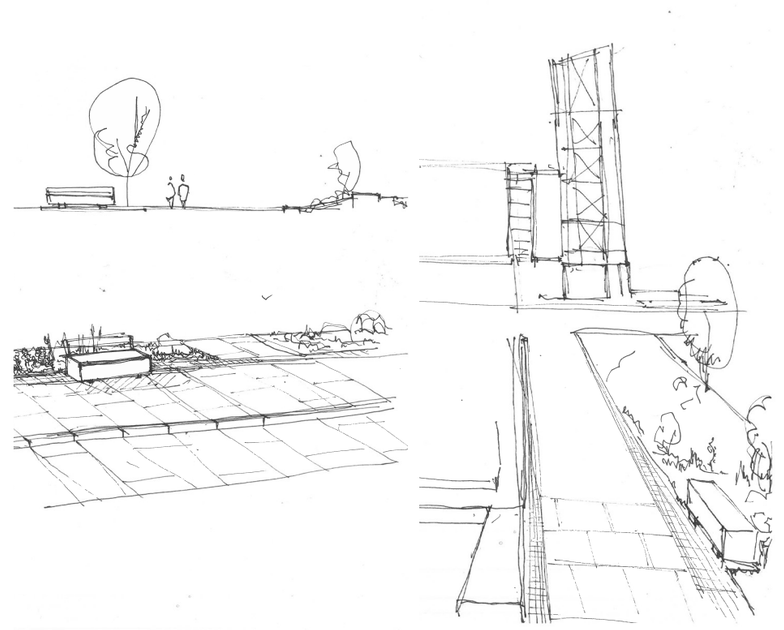
Researching how to potentially increase coherence between different facade's by extending polycarbonate also to other parts. The placement of corrucated polycarbonate sheets allows for different mode's of interaction between inside and outside. Because of this different

Sketches for urban design that led to final design

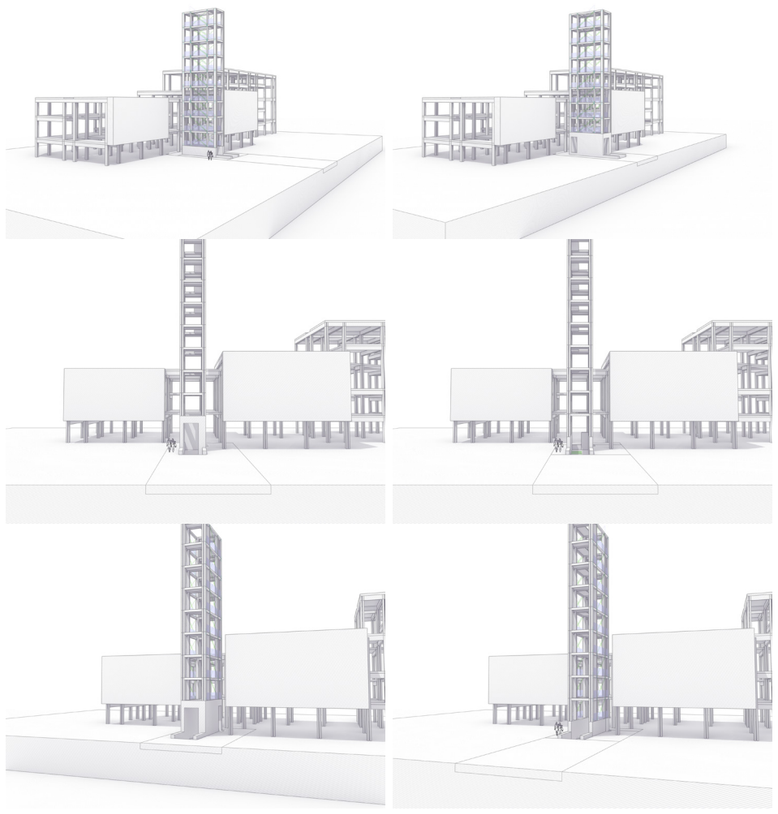


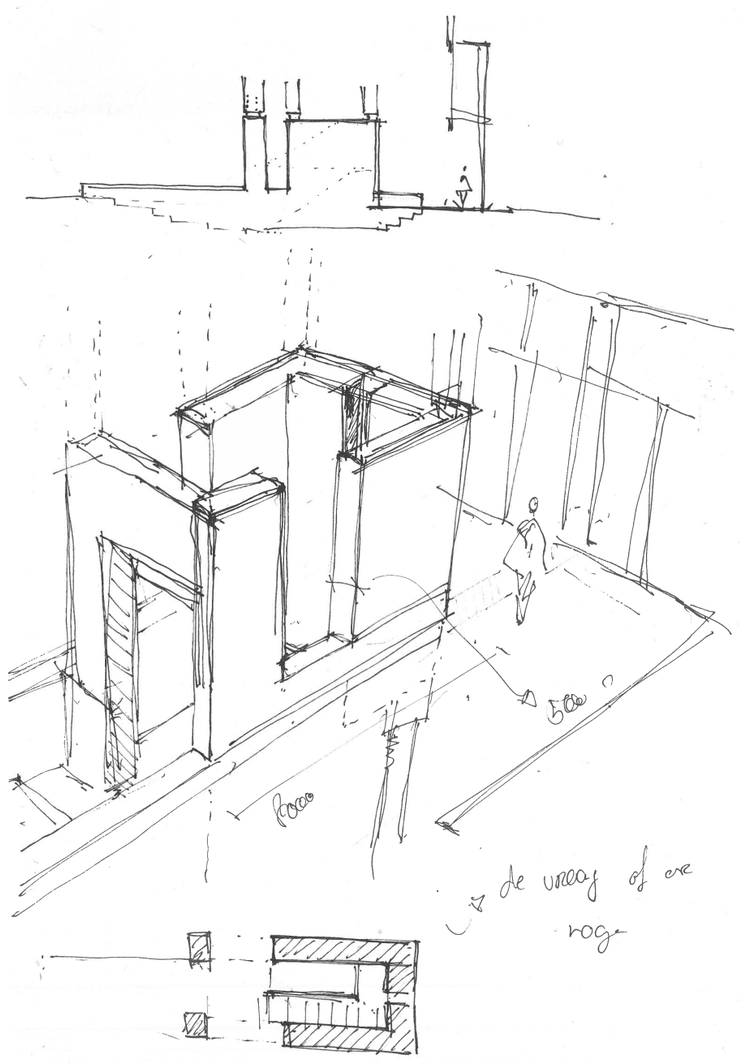






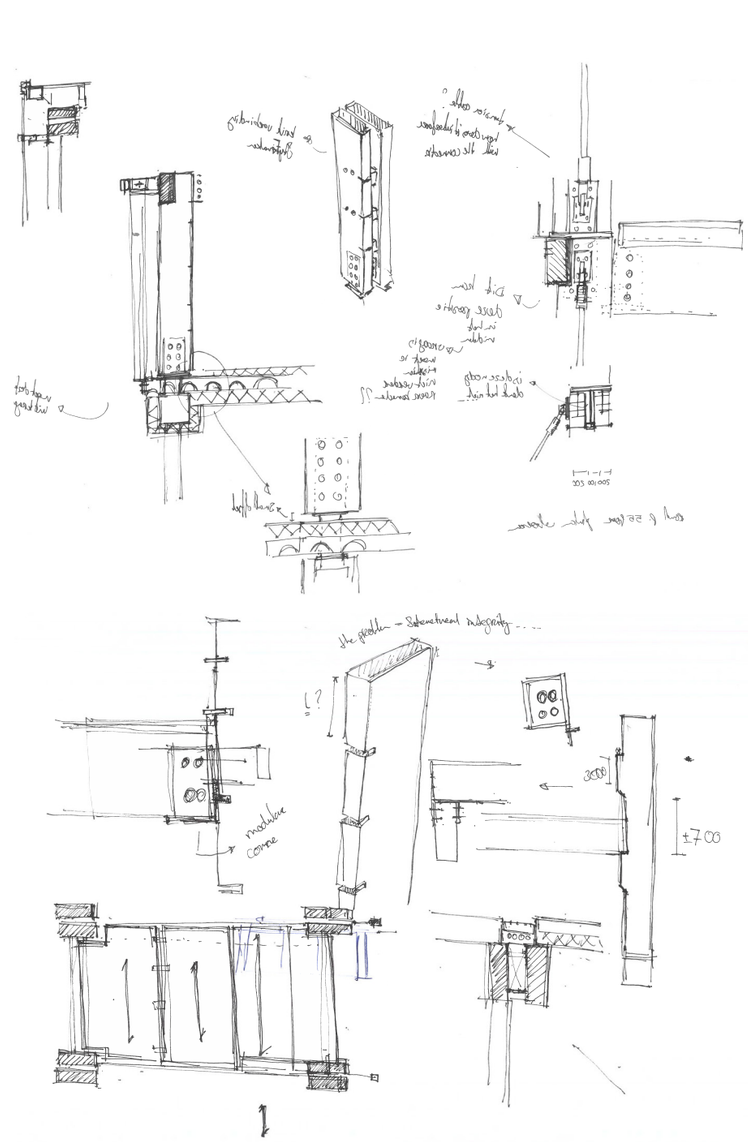
Finalizing the tower design, rethinking the connection and integration on the ground floor

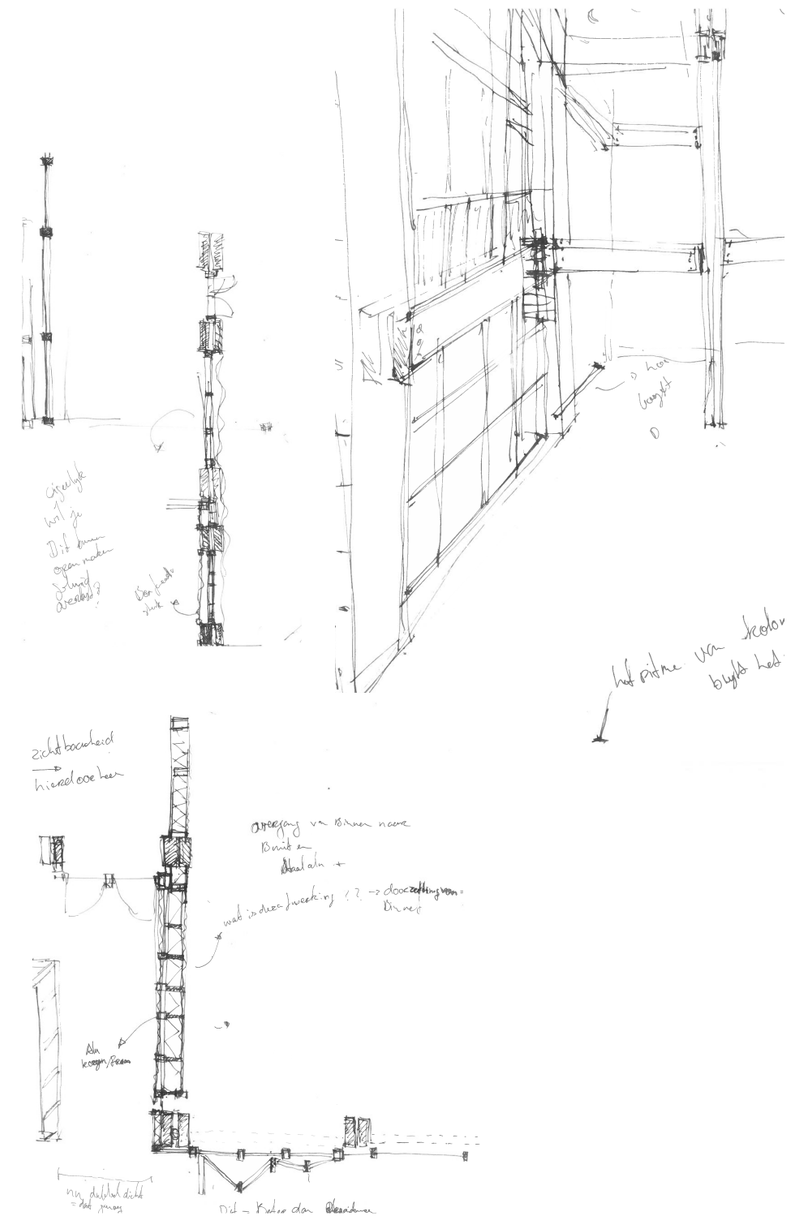




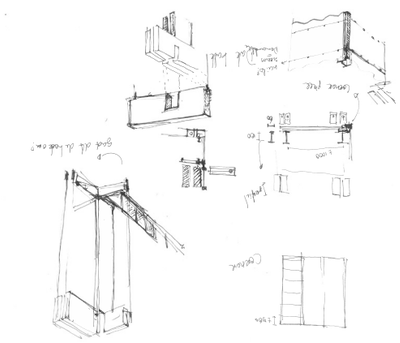
Different options for a structure that can change over time

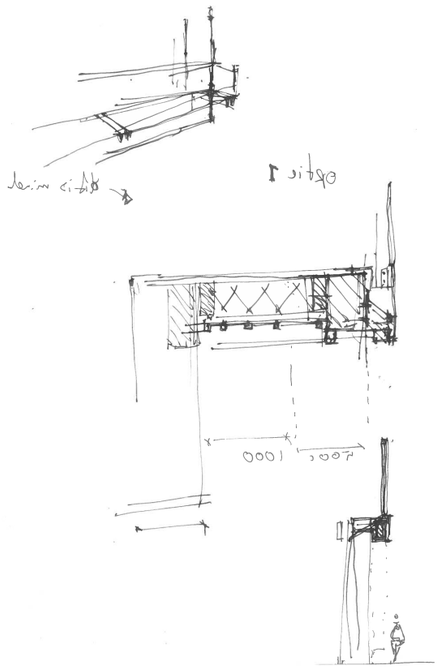
initial sketches interior implications of detailing and positioning of facade within the large hall

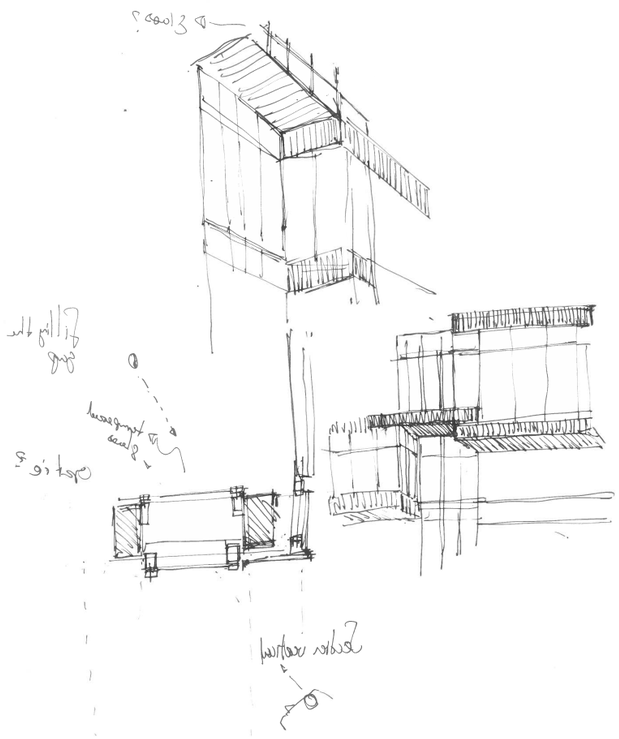




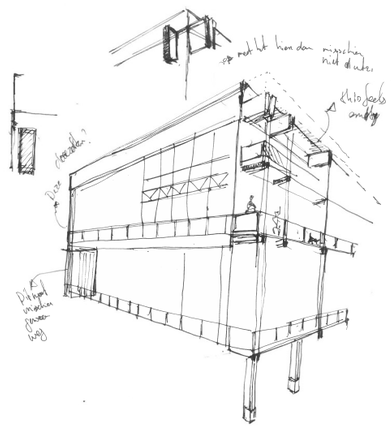
Research into different options for the rooftop edge

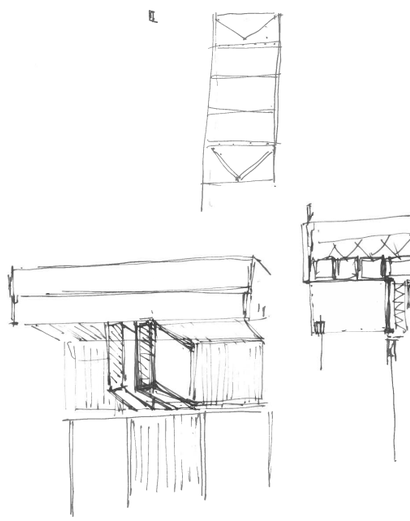


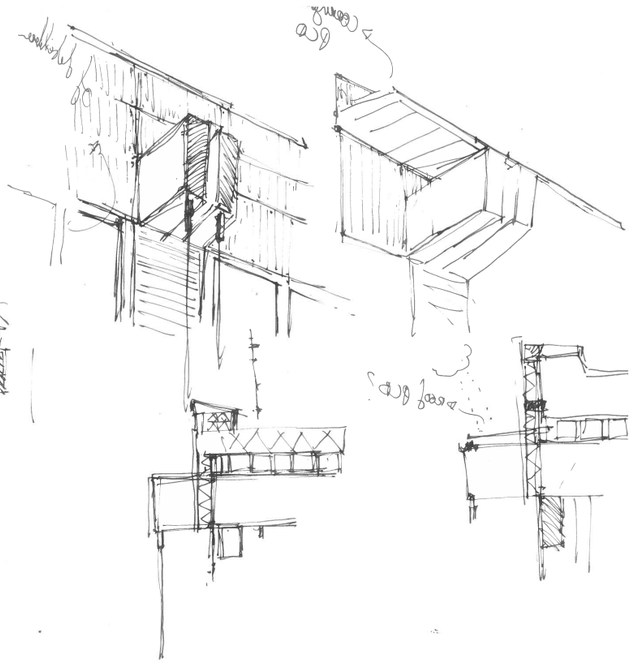


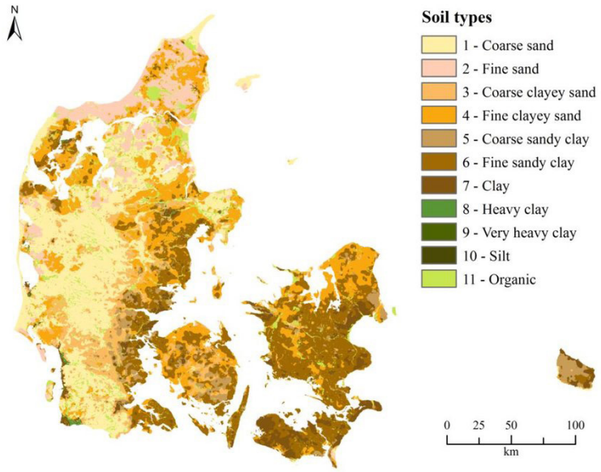


Research into different options for the rooftop edge detail and implication for massing/aesthetic

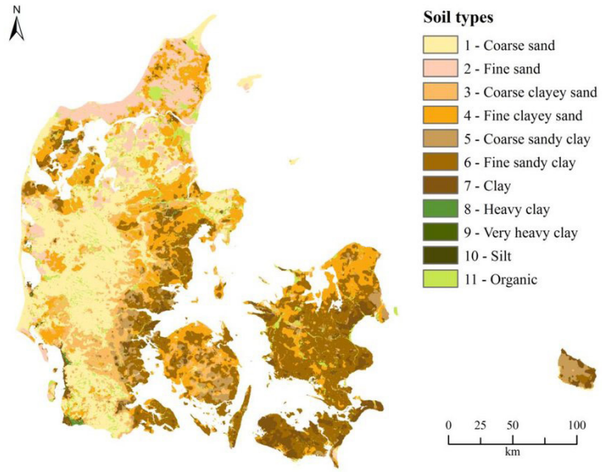








Soil types of Denmark according to the Danish Soil Classification (Madsen and Jensen, 1992).



Soil types of Denmark according to the Danish Soil Classification (Madsen and Jensen, 1992).

Danish & Copenhagen soil

The map shows that the dominant soil type in copenhagen is "course sandy clay". For this kind of soil two types of foundation are recommended. Pile or raft foundation.

Because of the load and the goal of wanting to be able to expand, i've chosen to go with overdimensiond pile foundation, this allows for expansion upwards.

https://iconsurveyors.co.uk/the-best-type-of-foundation-for-clay-soil-key-considerations-and-risks-involved/

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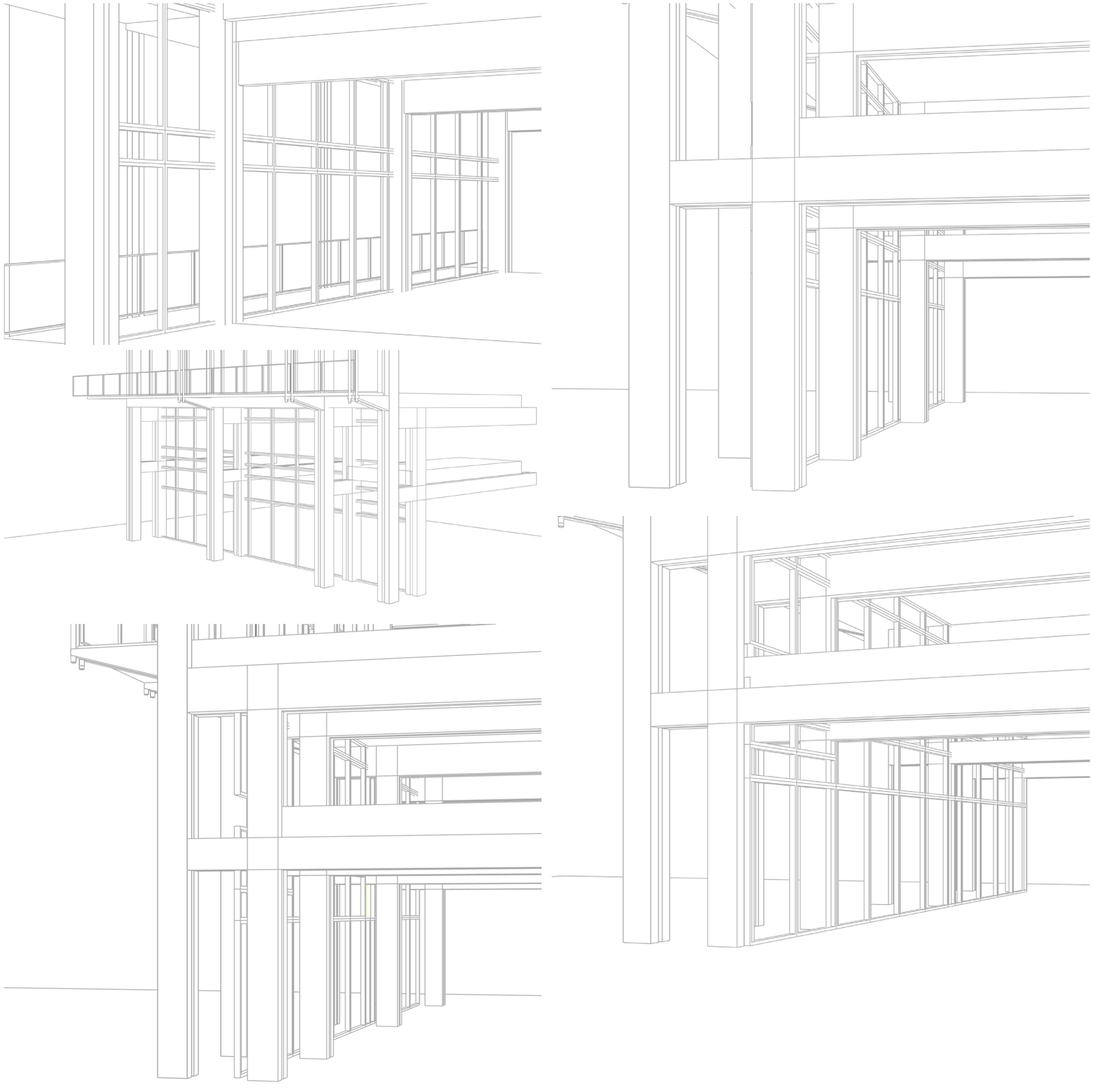
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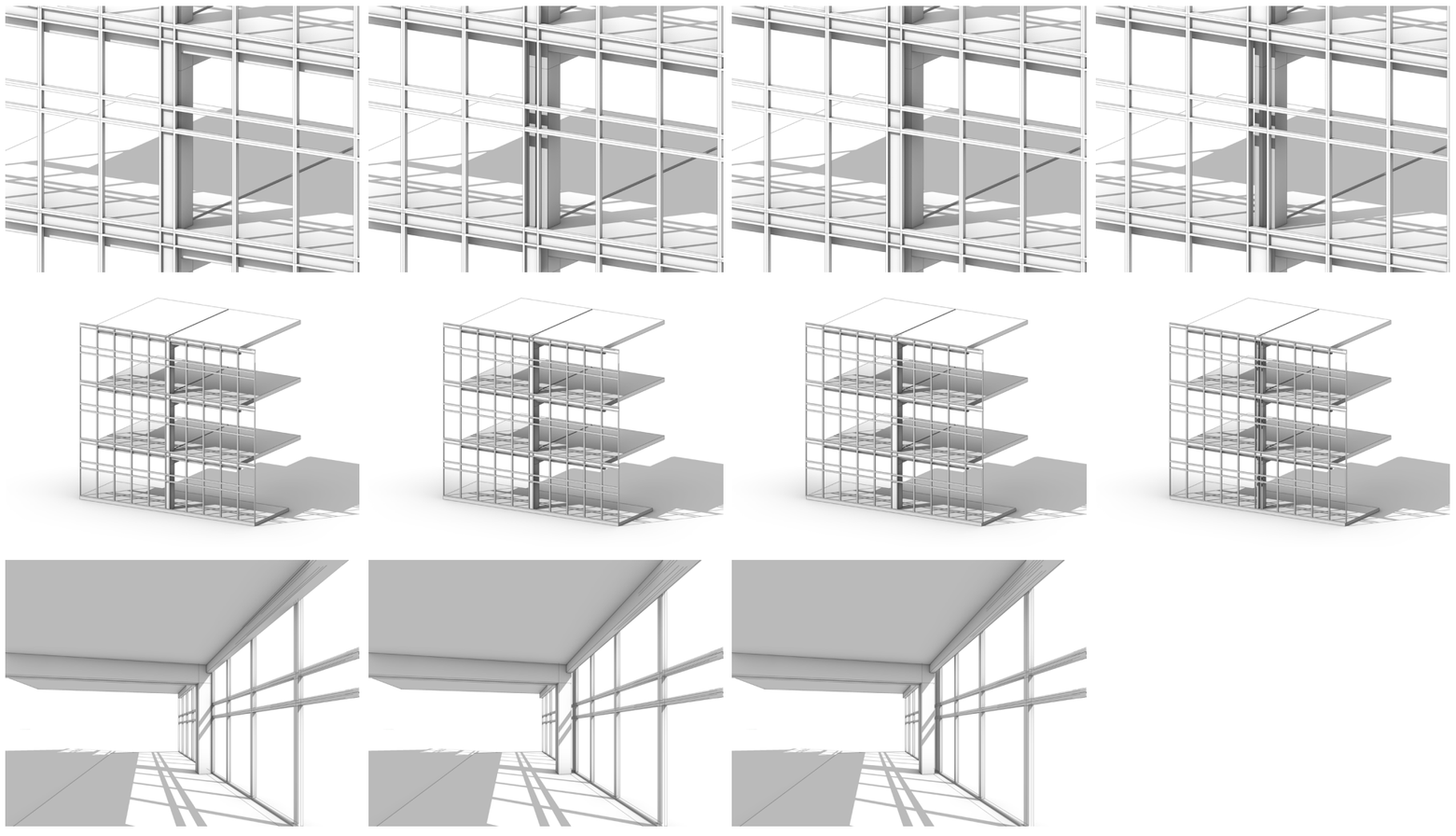
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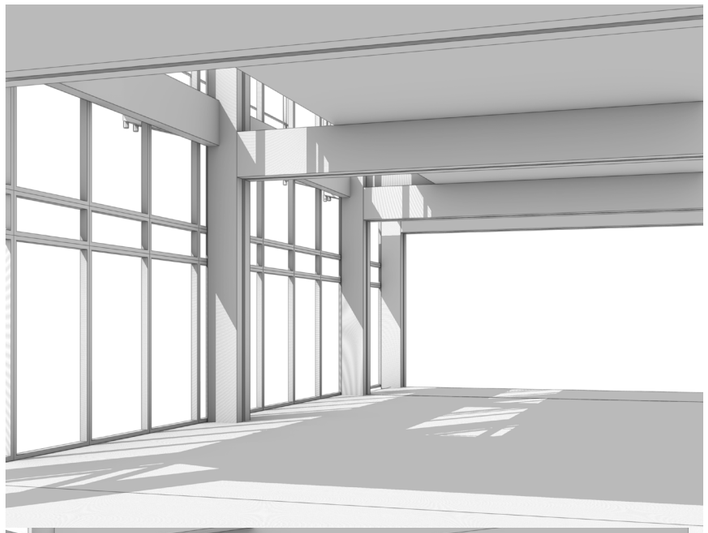
Facade positioning, rules of the framework

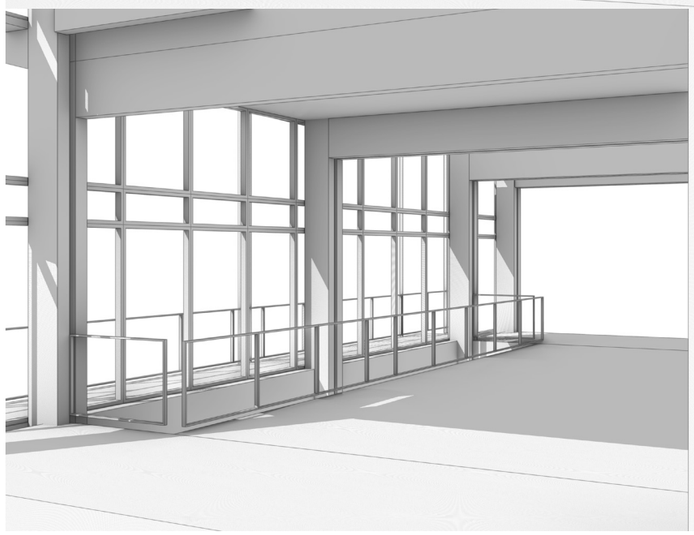
studies for positioning of facade

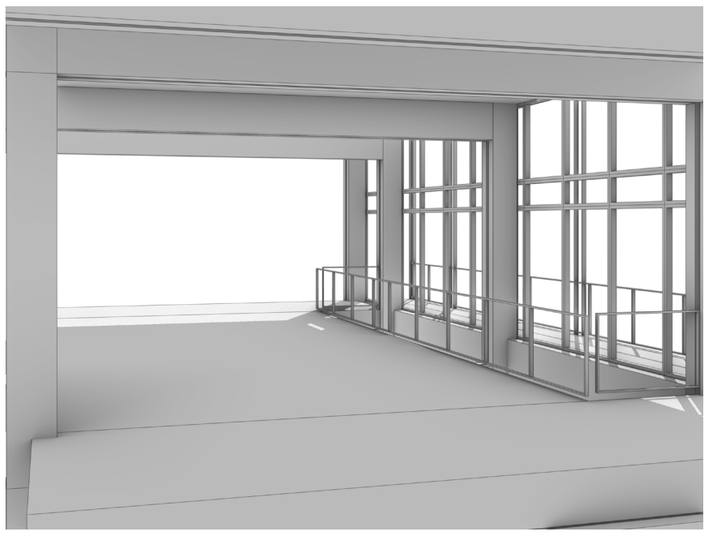


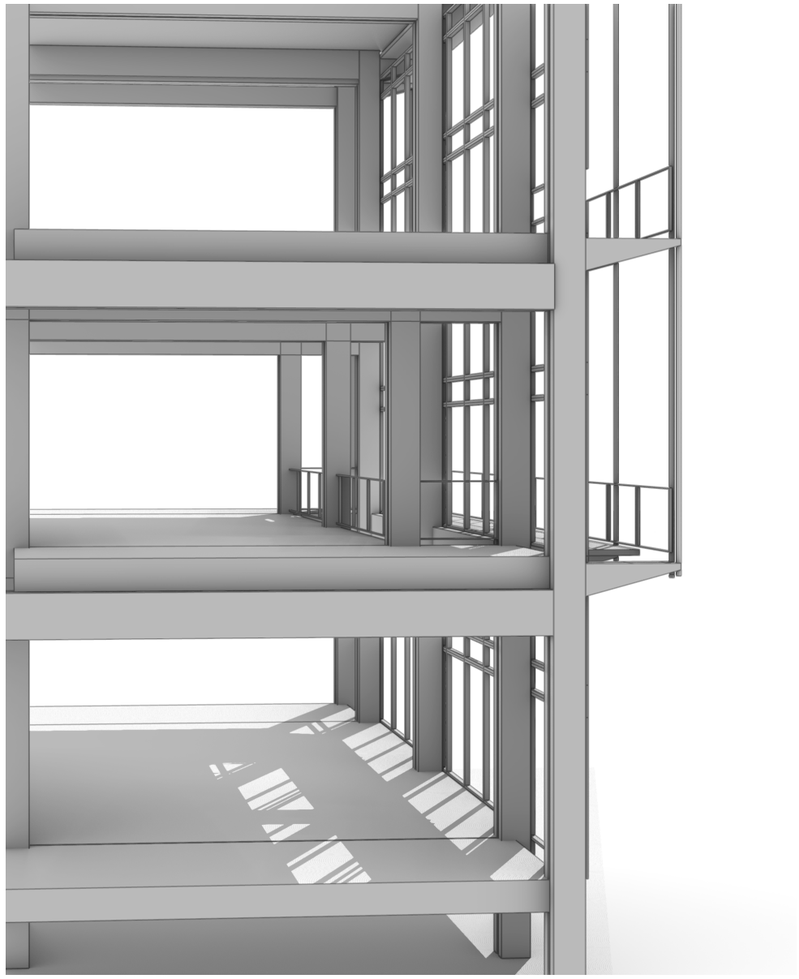
studies for positioning of facade

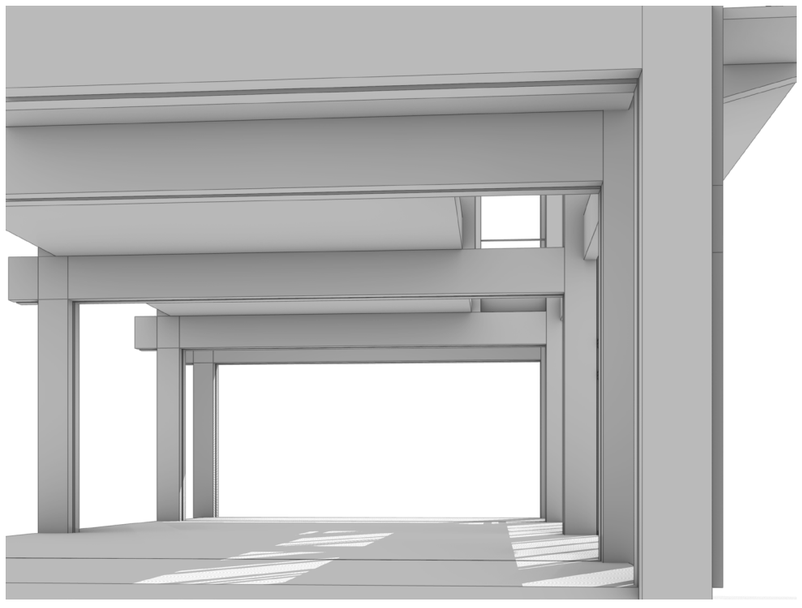


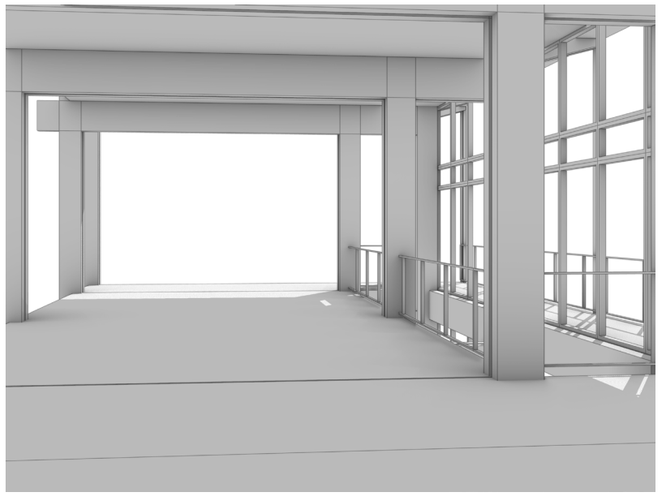


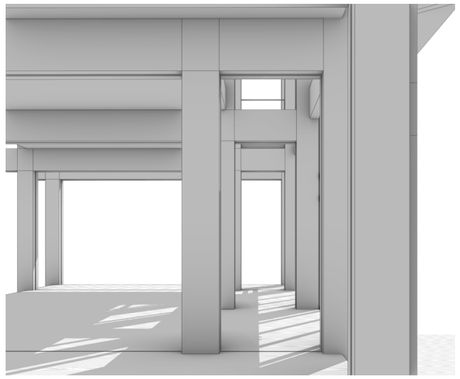


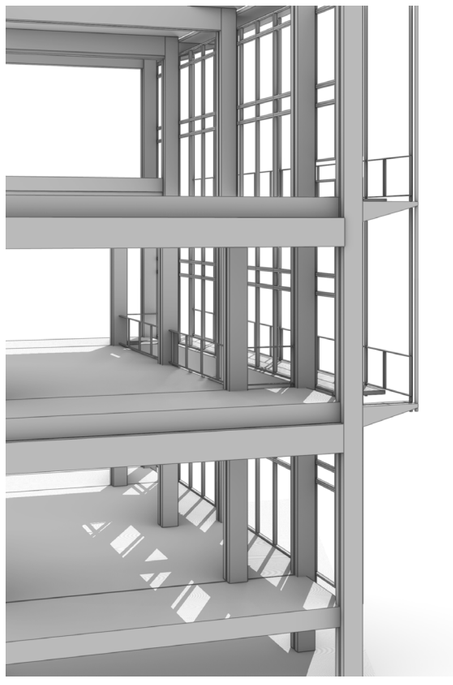


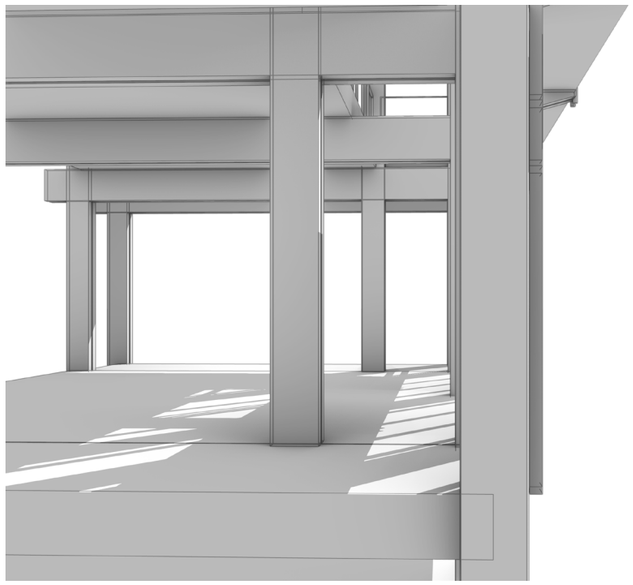












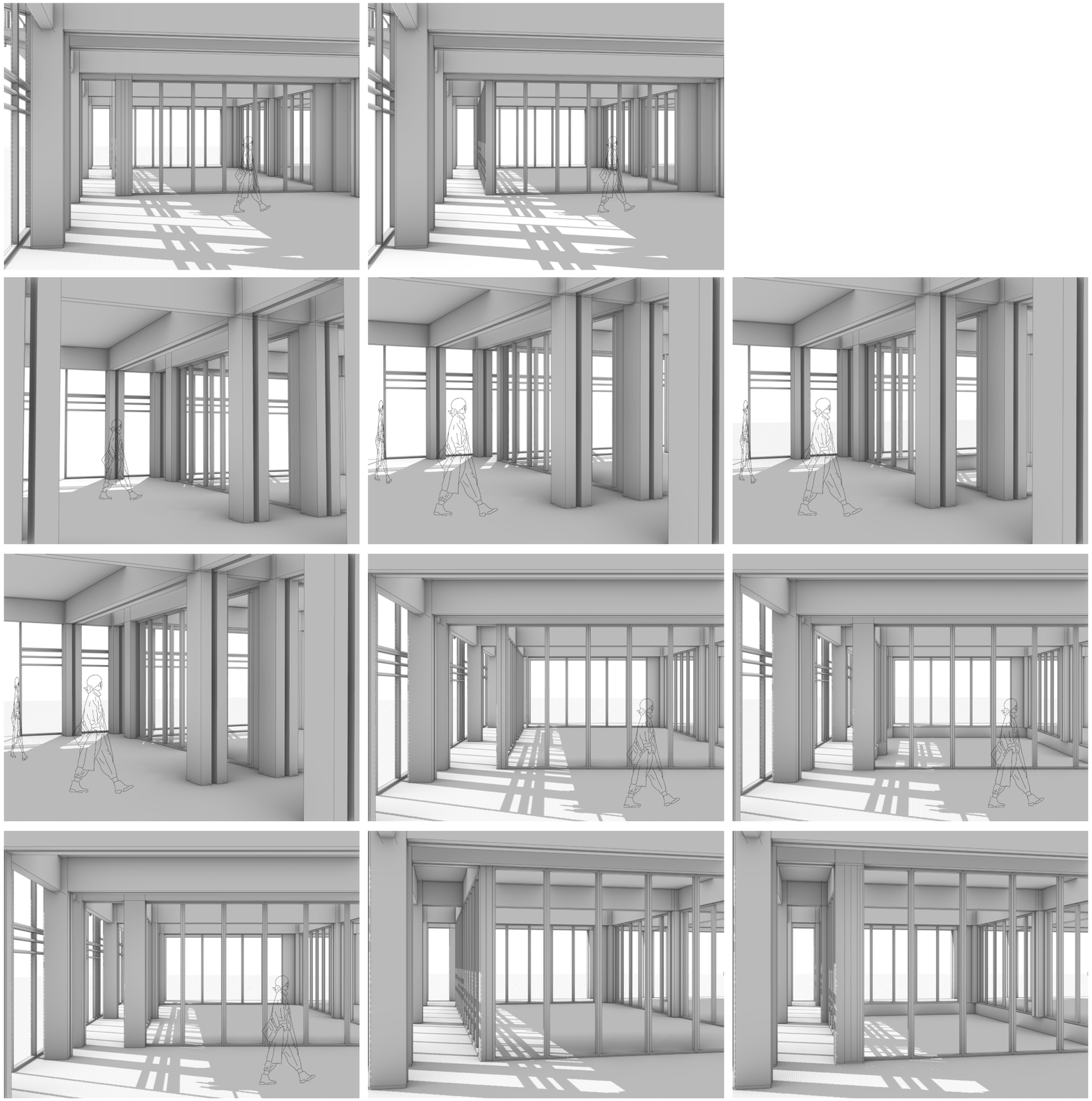


Researching and defining the rules of the framework.
Case: internal spaces & walls

An important aspect of the framework was establishing the rules of the system. If the framework would function as a way to create different zone's to what extent would those zone's be solely defined by using the structural elements of the framework, namely the collumns, beams and floors.

The studies on the right are done to research the necessity and impact of columns to define smaller spaces within the structure. By placing columns on the corner of the room the framework can be utilized to highlight the space within the larger structure. In the middle the same room is created but this time without the placement of additional collumns.

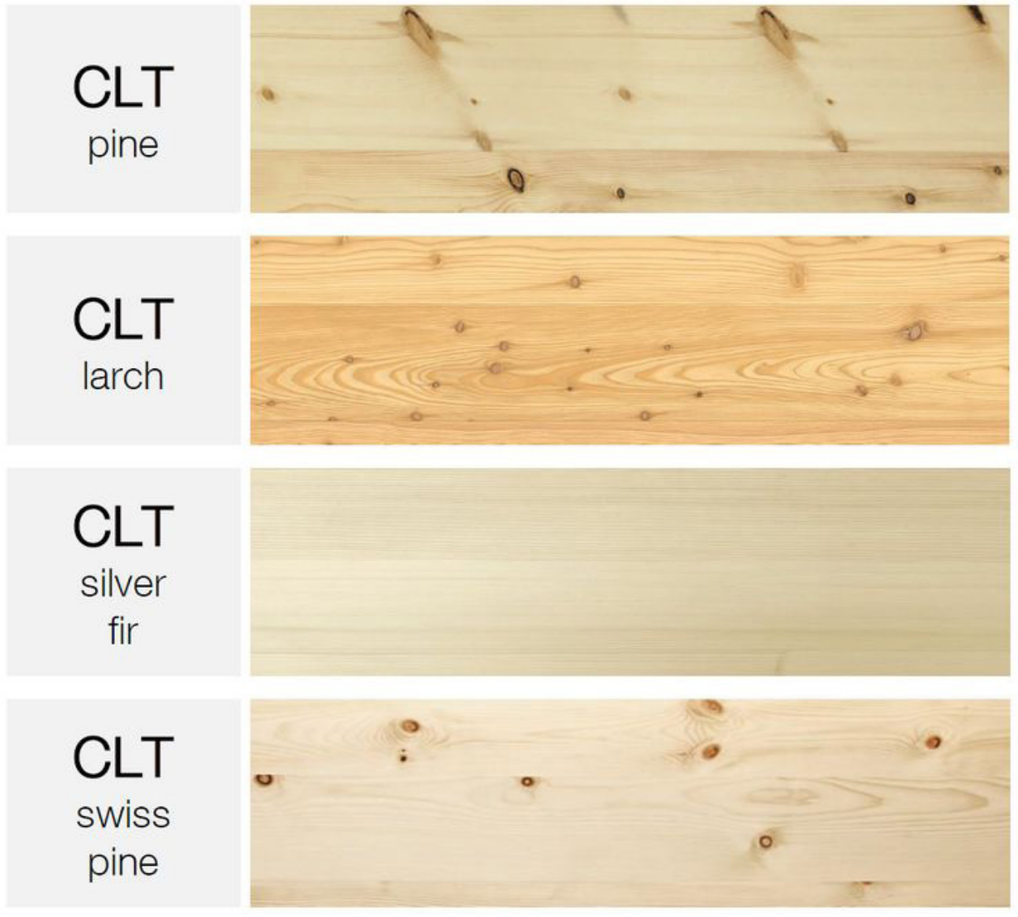
I concluded that the creation of an internal room like this doesn't warrant the placement of additional collumns. As these collumns do not fulfill any additional function besides defining the space.





Indoor wood type - Fir

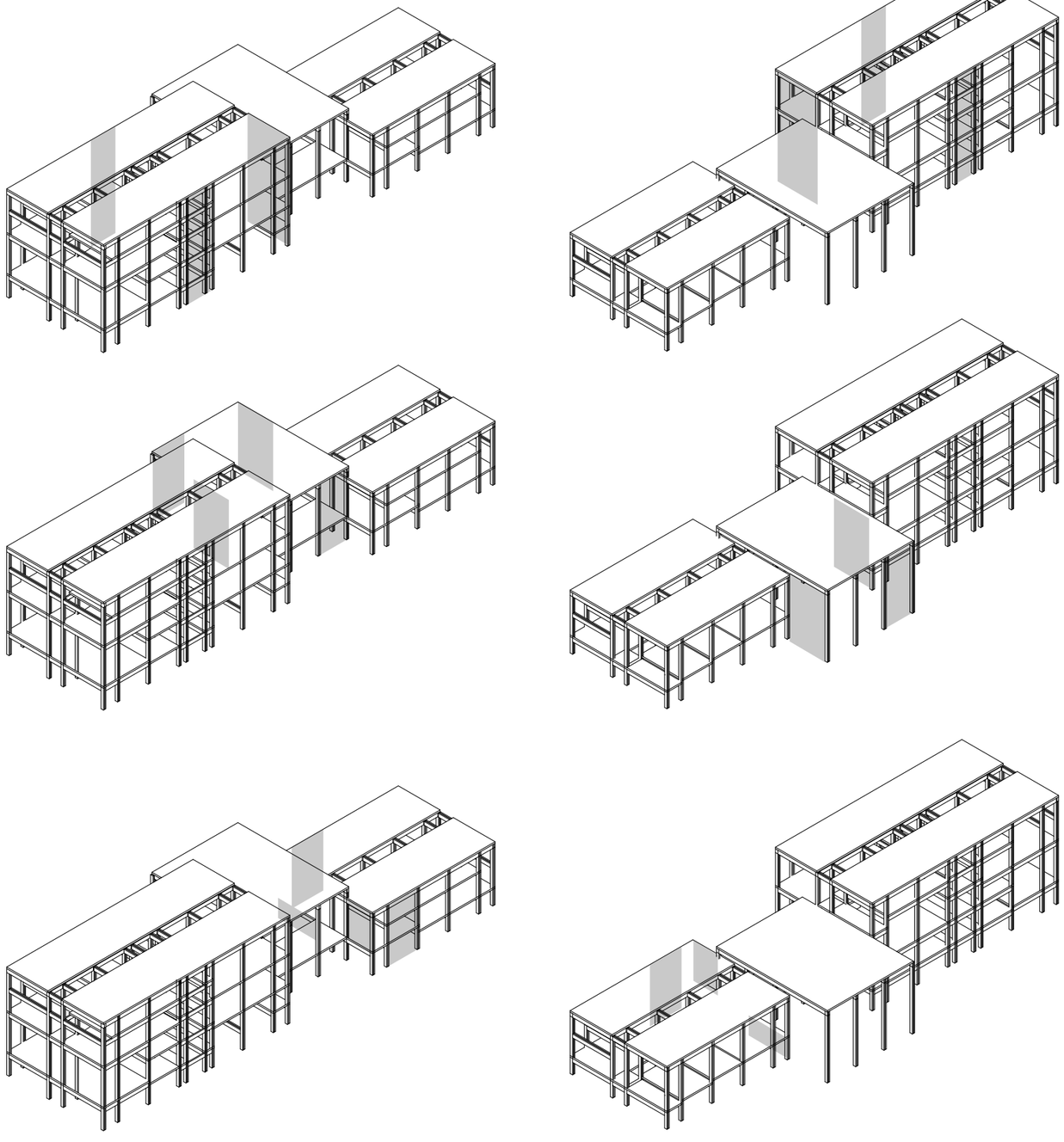
cheapest material and suitable quality for indoor



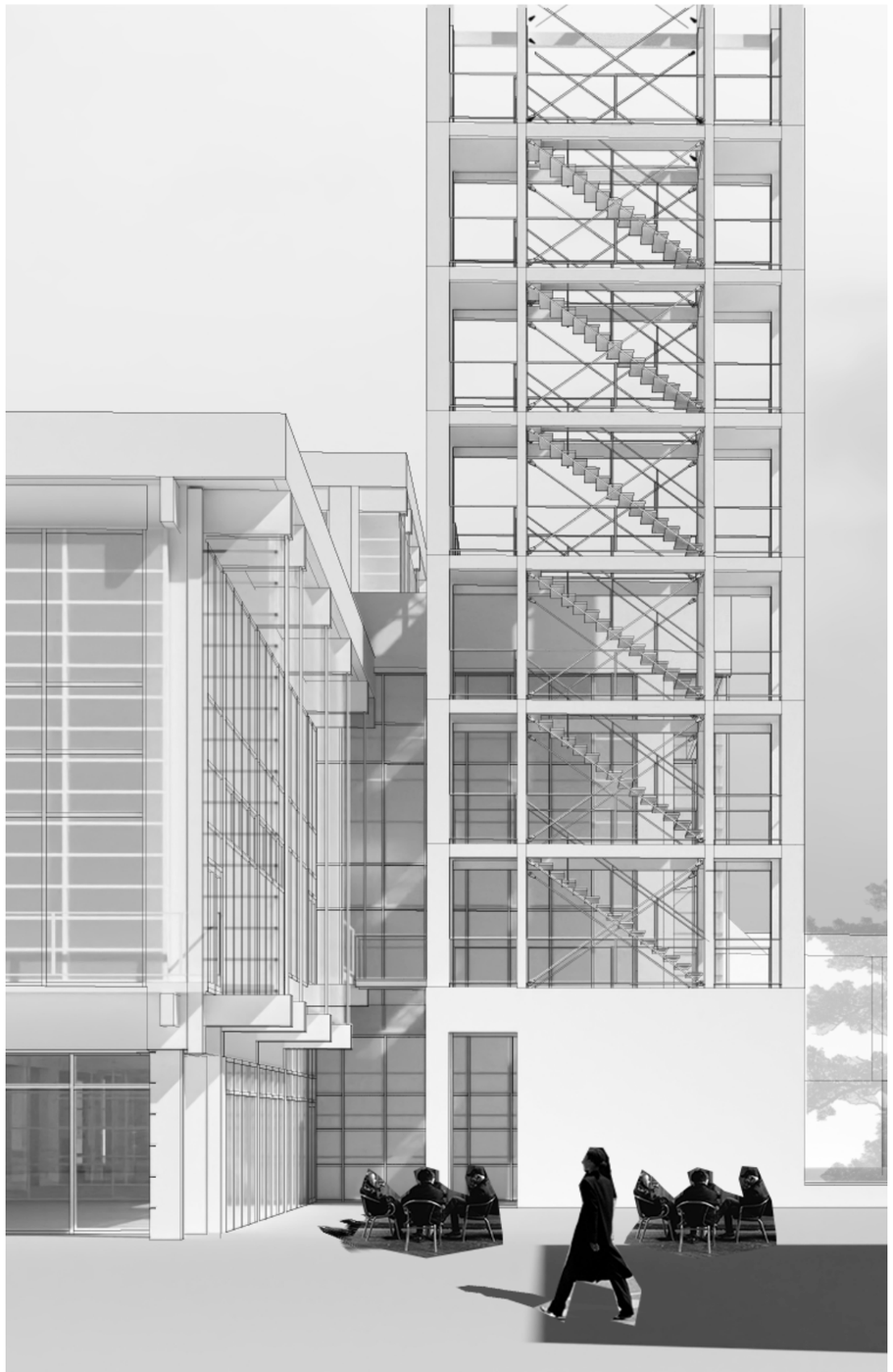
outdoor woodtype: larch or douglas
Has a more durable qualilty,
larch is durable and more waterproof, and resistant to rot source: buck-landtimber
douglas is more redish --> perhaps not prefereced

however, outdoor glulam still has to be treaded as to protect it and increase durability -->

Structural stable design
The drawings on the right show an earlier version of the stability within the design, as this design



10. **SLIDES P4**



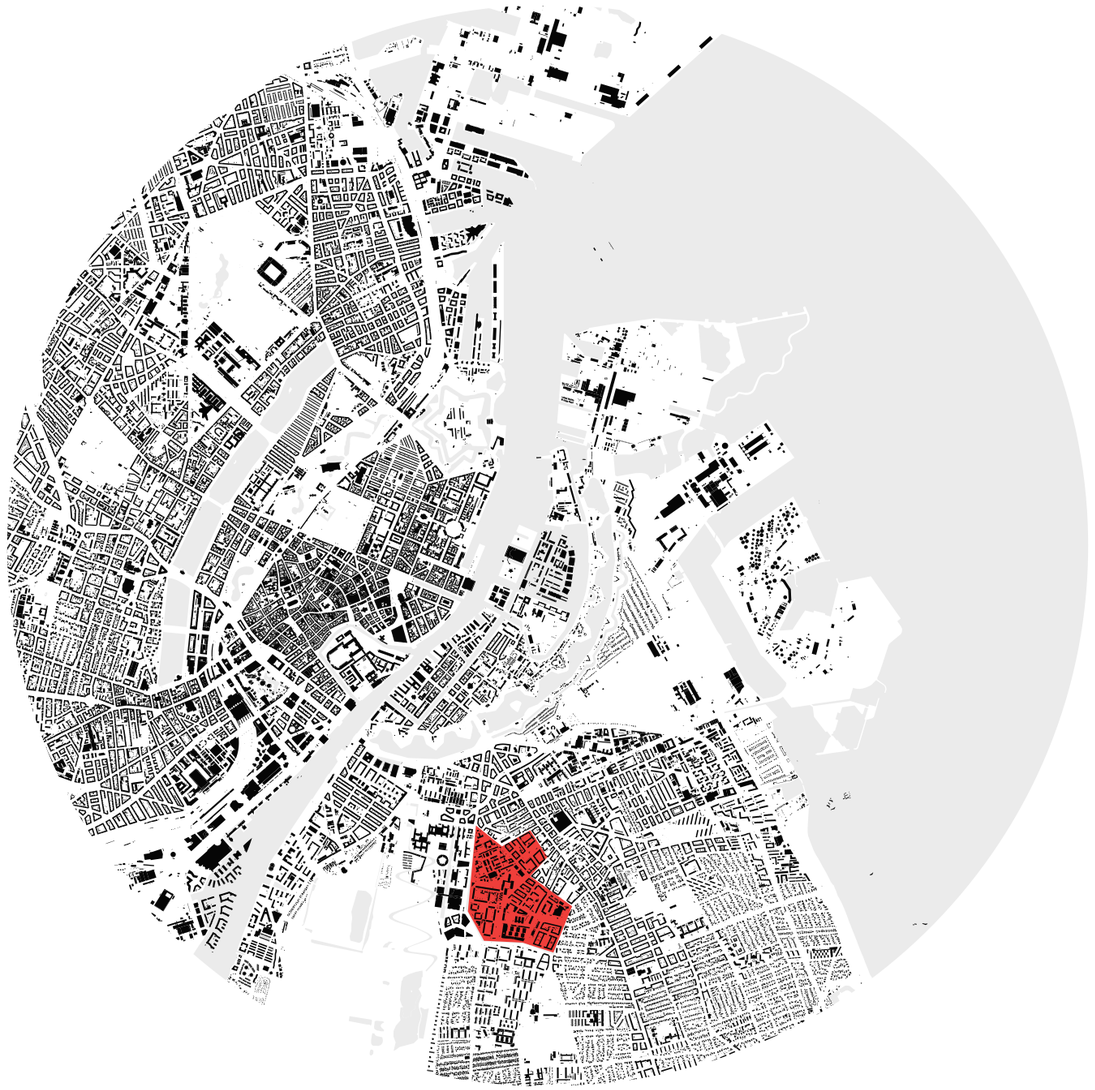
From exhaustion to resilience

Re-imagining the possible

Miguel Borst | 4886356 | 23-1-2025
Public building graduation studio P4
Tutors: Sien van Dam (TD), Henk Bultstra (PD) & Florian Echkart (TBD)



The map of Denmark

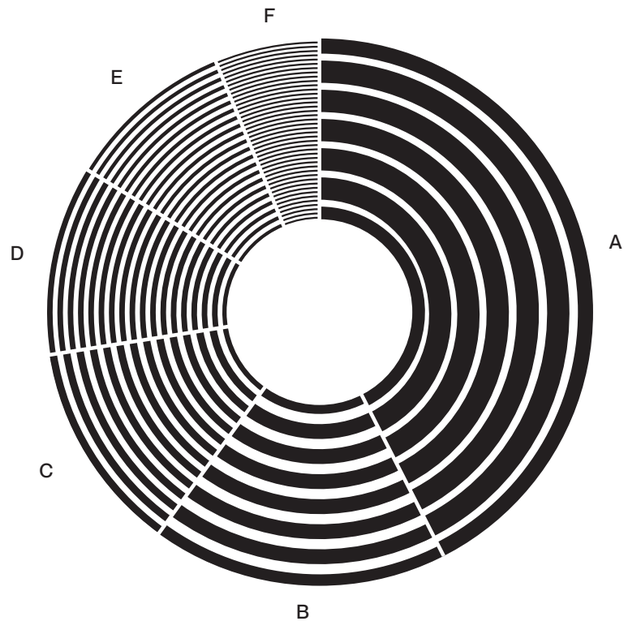


The neighborhood Sonderbro located on the island of Amager

A Public condenser in Sonderbrø

“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





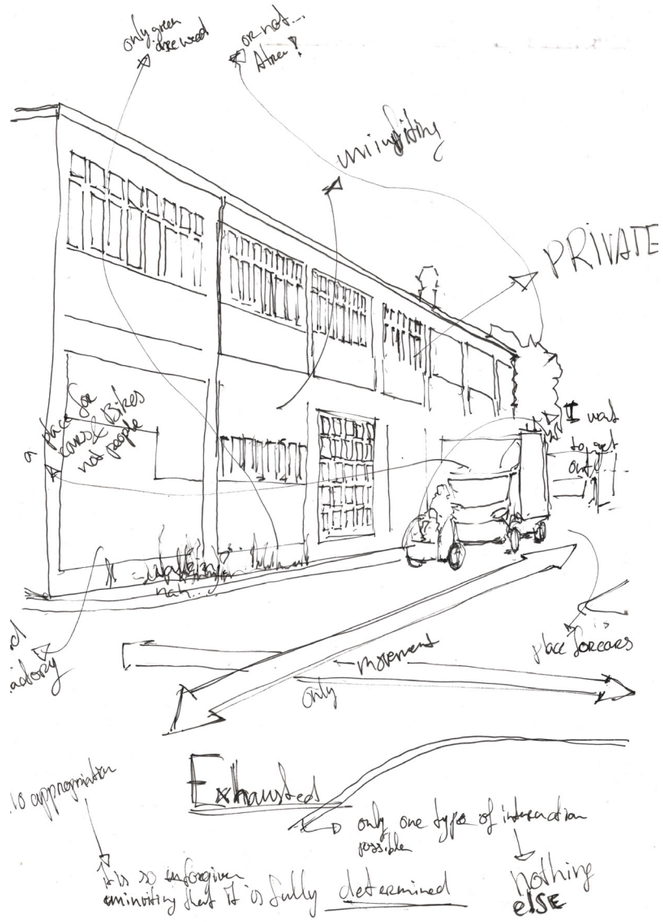






“Exhausted is a whole lot more than tired (...)
The tired has only exhausted realization, while the exhausted exhausts all of the possible. The tired can no longer realize, but the exhausted can no longer possibilitate.”

- 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

- How can the exhausted community of Sonderbro be revitalized?
- How to establish a resilient framework while at the same time allowing for (social) change?
- How can the public condenser contribute to constantly new un-imagined possibilities for social interactions?



The spectacle

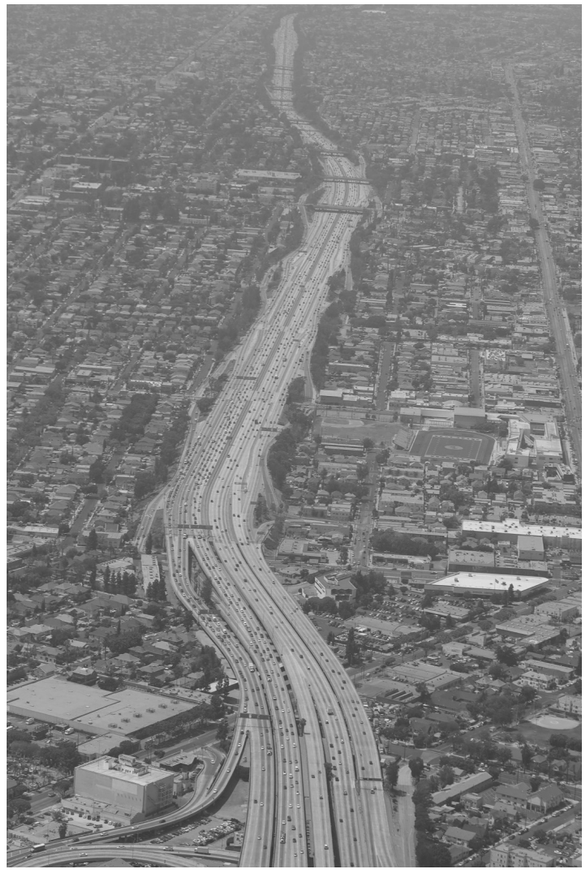
+

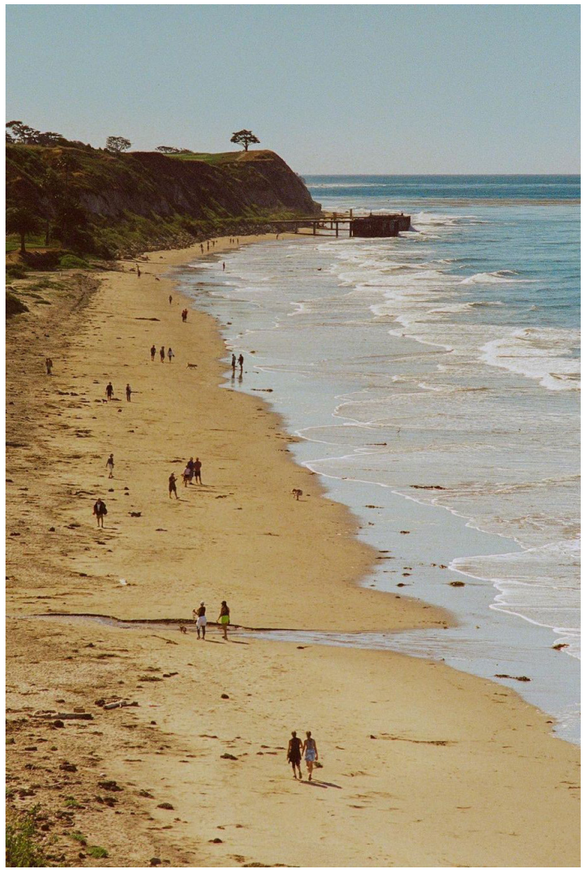


The everyday

=

The spectacular everyday

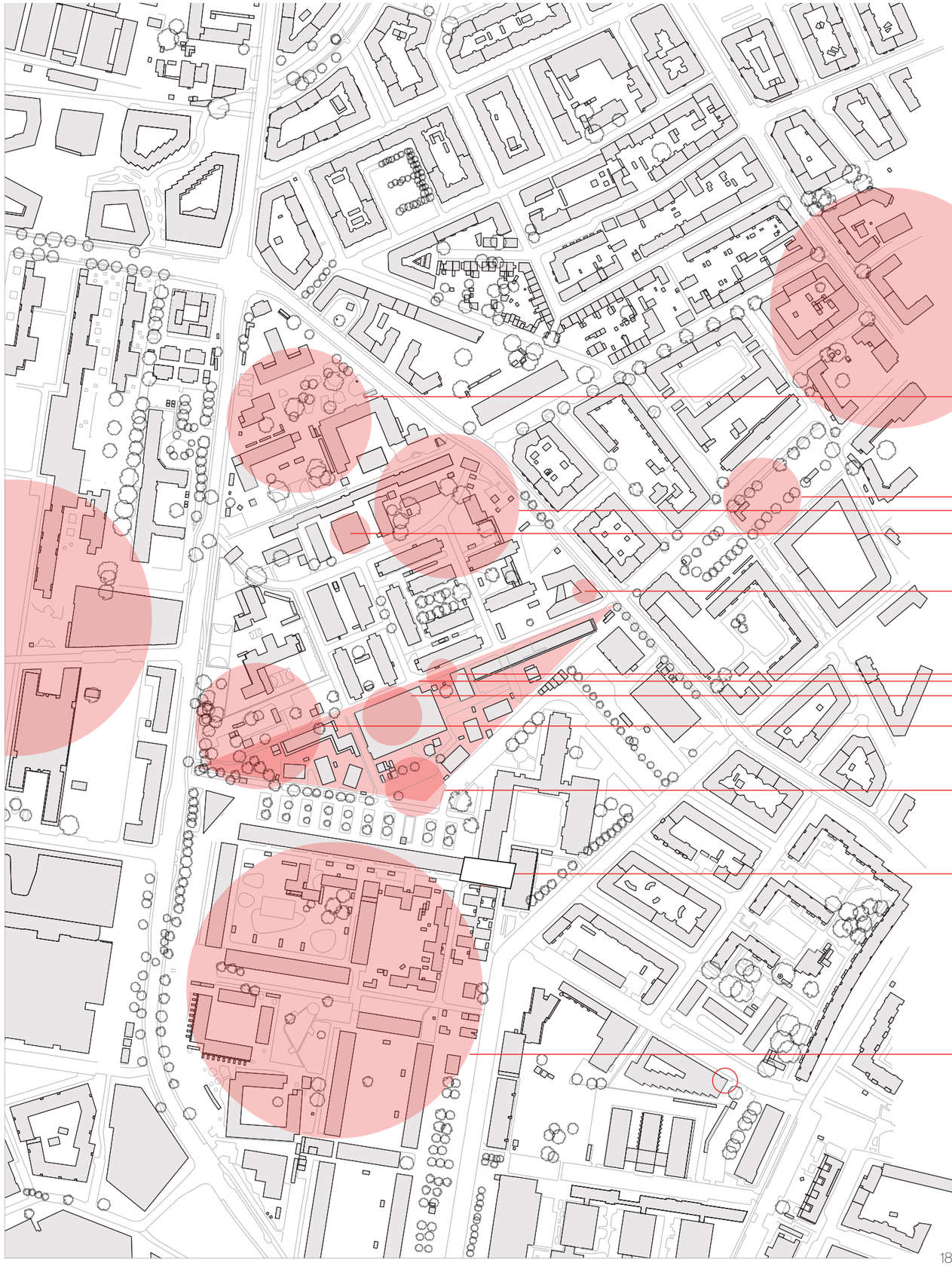




Turning boundaries into borders

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





Amagerbrogade & Amager Centret
- Everyday, all types of activity
- main artery & shopping centre of Amager

People: Everybody.

Amager Faelled Skole
- Every weekday attracting a lot of people from the neighborhood
- outdoor playing area, publicly accesible

Exhausted: Not passing the treshhold between sundholm, relation with sundholm residents
People: local, Parents & Children

Børnehuset Det Røde Hjørne
- daily rhyth`m attracting a lot of people from the neighborhood
- outdoor playing area, publicly accesible

Exhausted: routing through sundholm, no possibility, unattractiven
People: local, Parents & Children

Fabrikken for Kunst og Design i Kobenhavn
- daily buzziness
- Culture & craftsmansship
- eventspace

Exhausted: Isolation within sundholm, invisible
People: CPH, artists & visitors incidental

Dagli'Brugsen Supermarket
- daily rhythm attracting a lot of people from the neighborhood

People: local, Everybody

Byhaven på Sundholm
- Largest public green space in sundholm
- Initiative for public garden & greenhouse

Exhausted: Hidden, depleted state, no ownership, no connection, no clear routing
People: sundholm residents, dog walkers

Hörgarden
- Large social housing porject
- Very diverse group of residents

Exhausted: Lot of additional social and economical problems, the
People: Danish & Danish with immigration background.

Den Bemandede Legeplads i Øselsgade
Potential: green space, public gathering
Exhausted: bad state, bad reputation, depleted an monofunctional
People: Local, Dogwalkers, children, drugdealers?

Sundholm
Potential: diversity, learning, reflection.
People: homeless

Maskinhallen
Potential, Event space, different groups
People: Sundholm residents, volunteers, artists, copenhageners

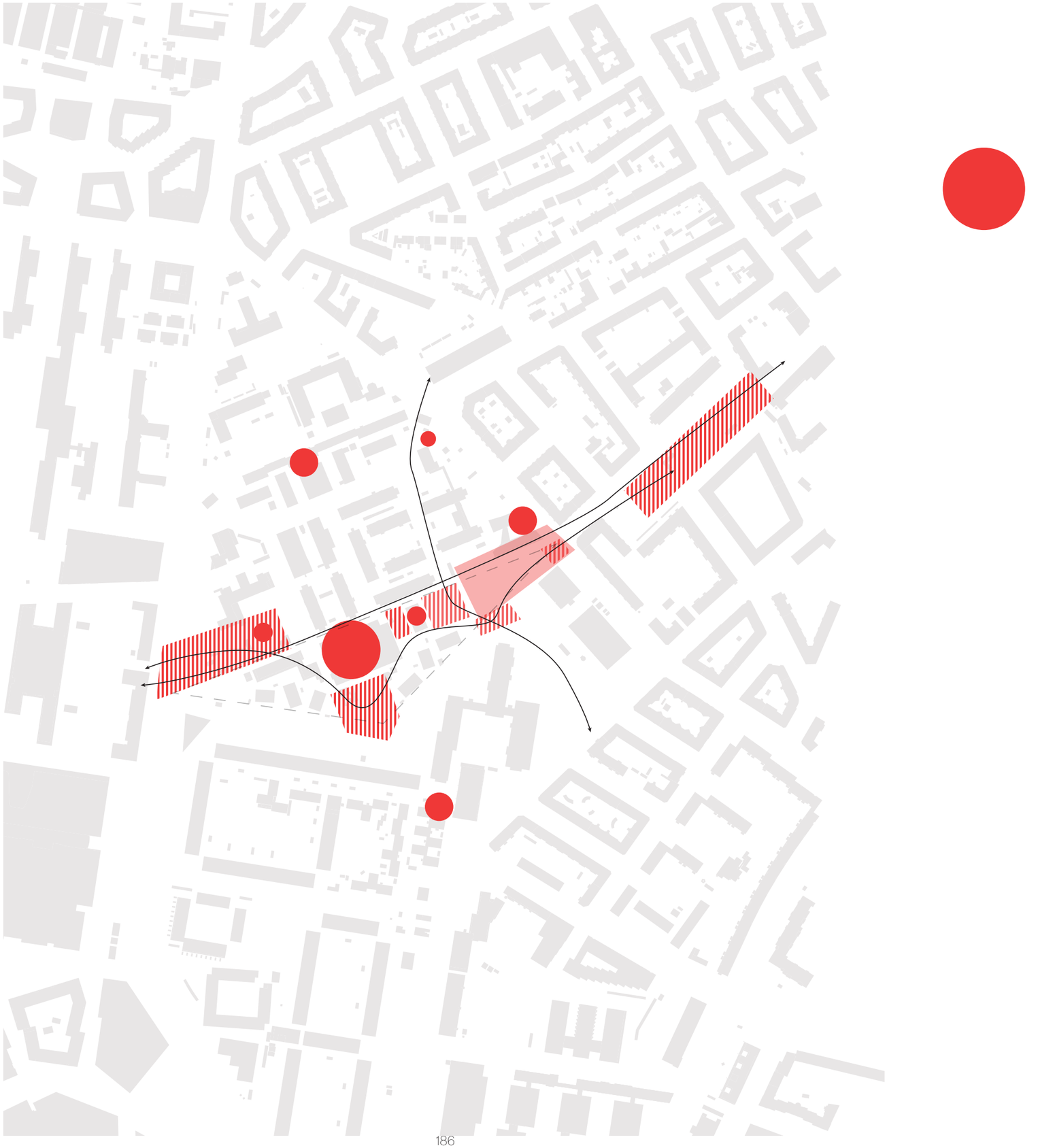
Old Shed
Exhausted: no function, no connection
People: no one

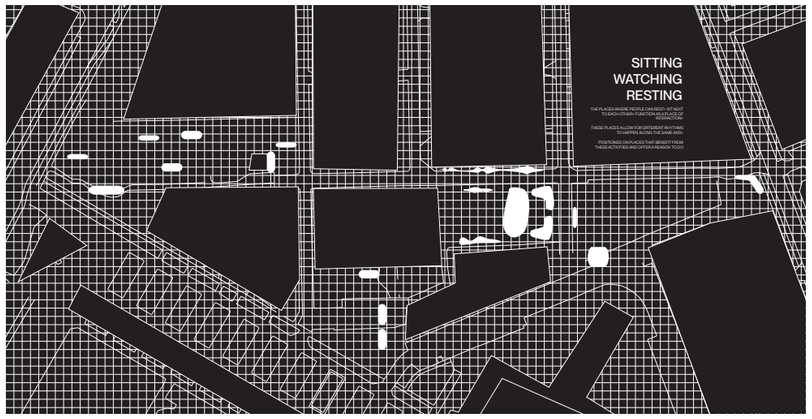
Exhausted horizontal and vertical routing
- small, uninviting narrow, etc
- doesn't connect to amagerfaelledvej

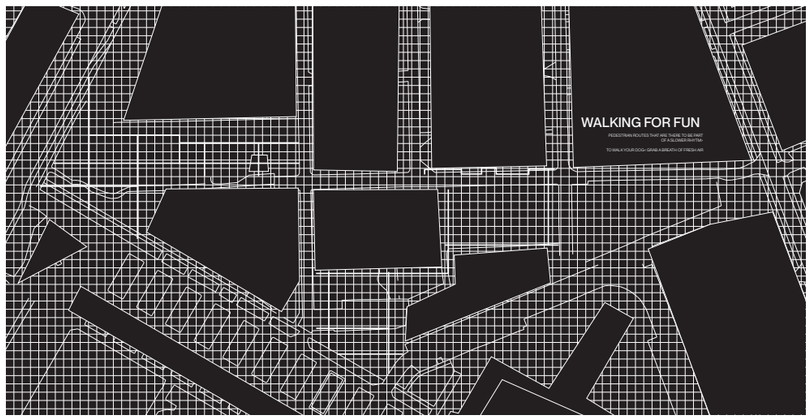
Green space
Exhausted: no ownership, no routing, depleted

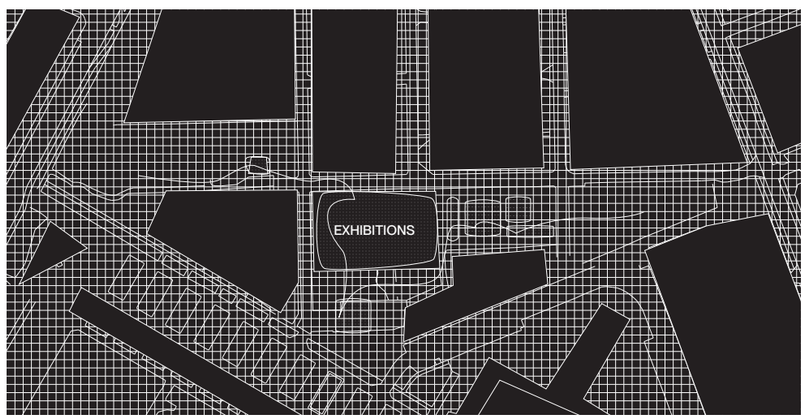


Mental and physical boundaries

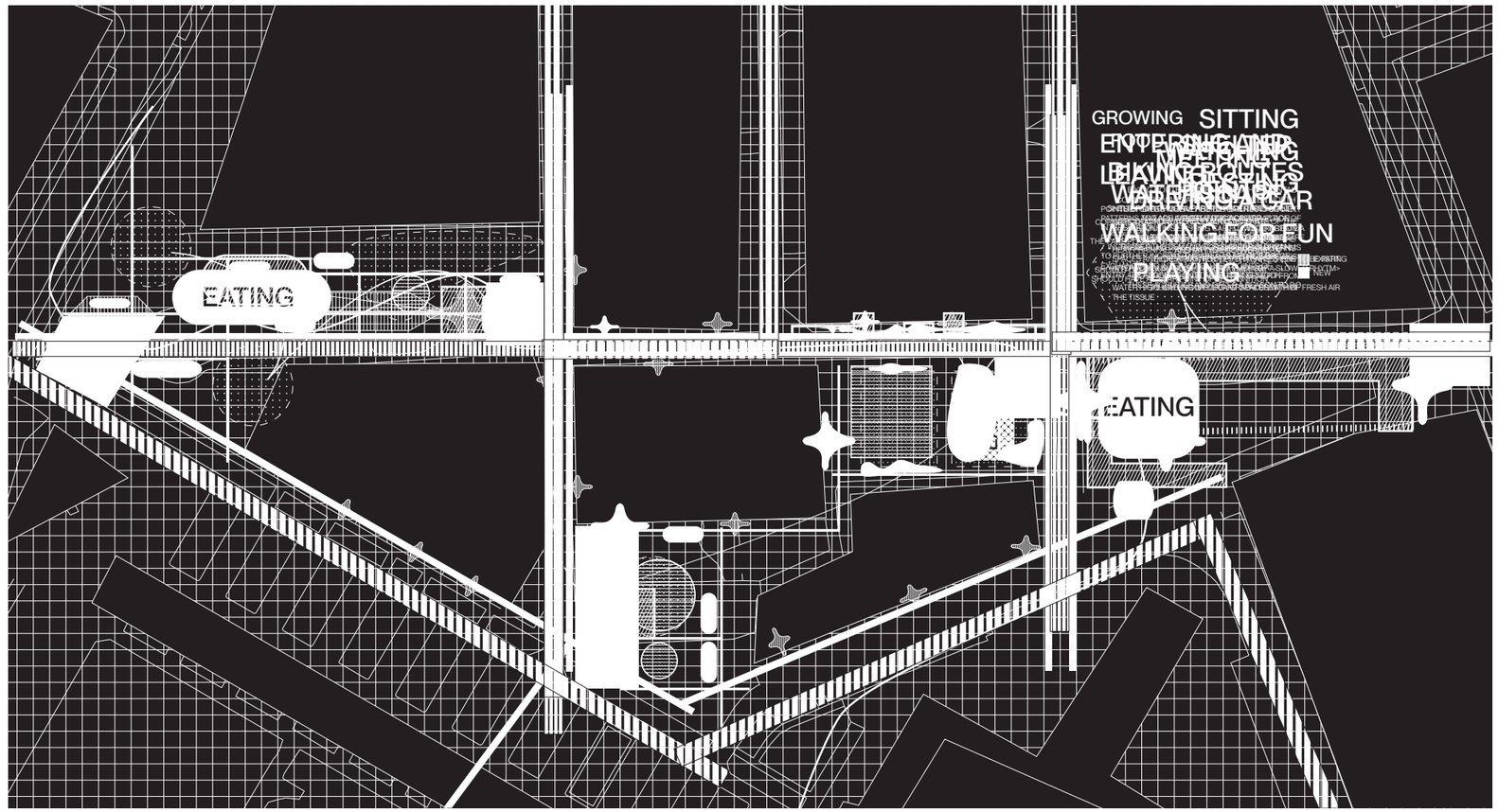




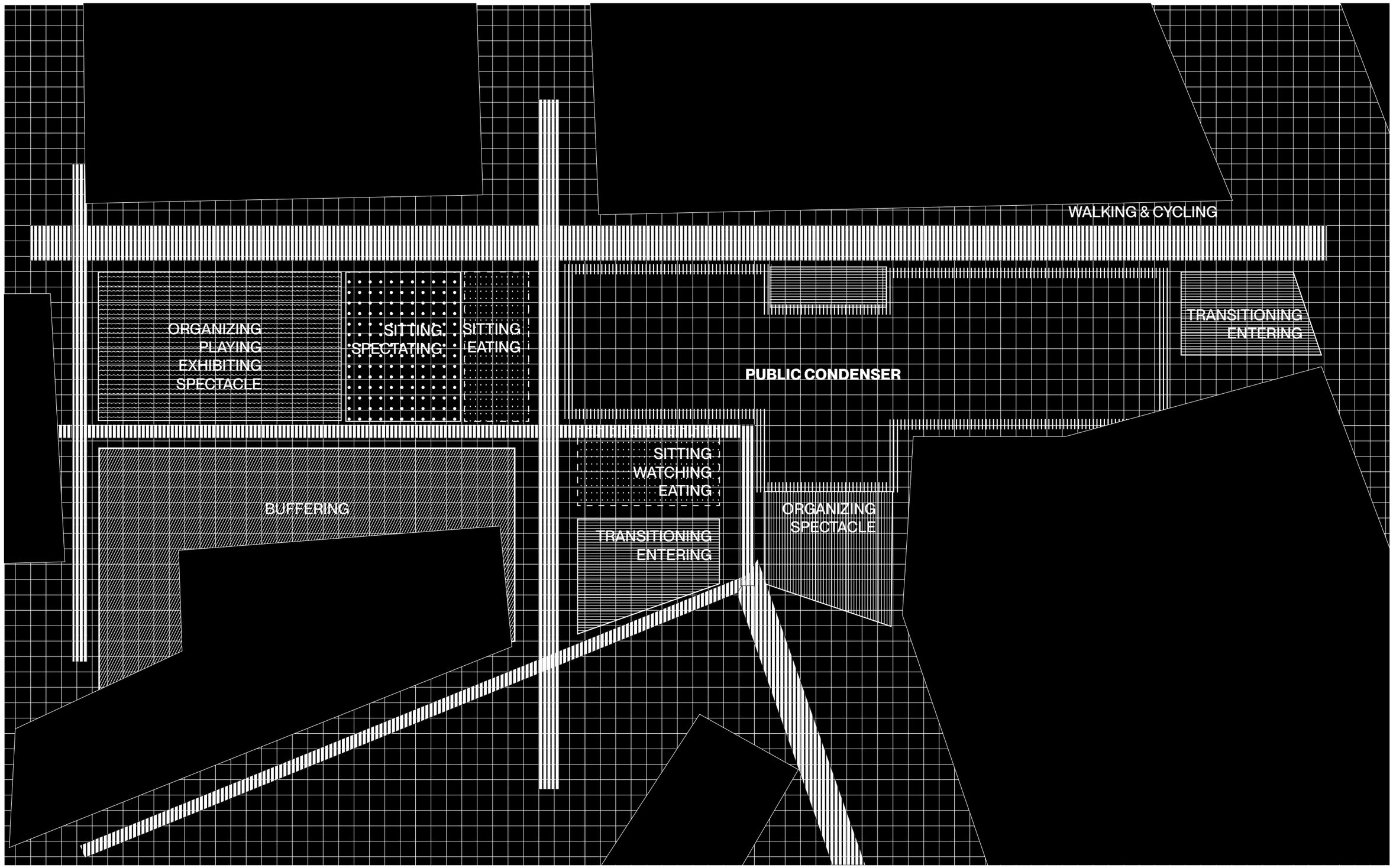




Selection (potential) everyday patterns and flows



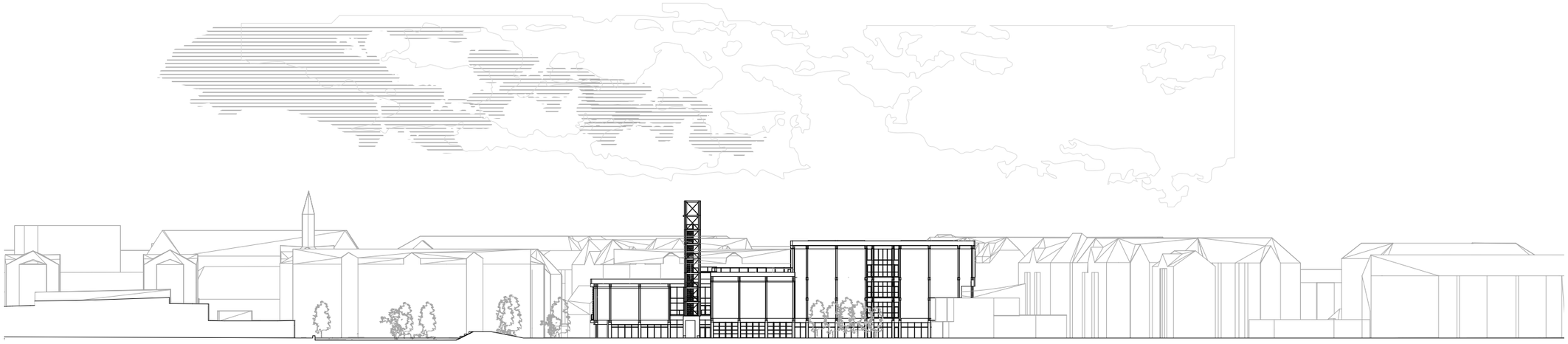
Reconfiguring re-imagining the everyday

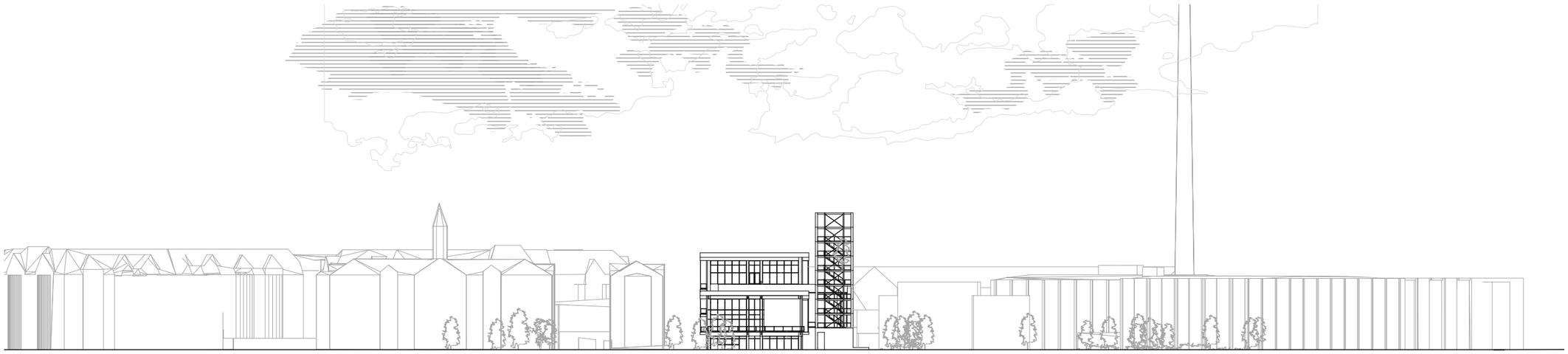


Selection (potential) everyday patterns and flows

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

1 : 300 Ground floor & context

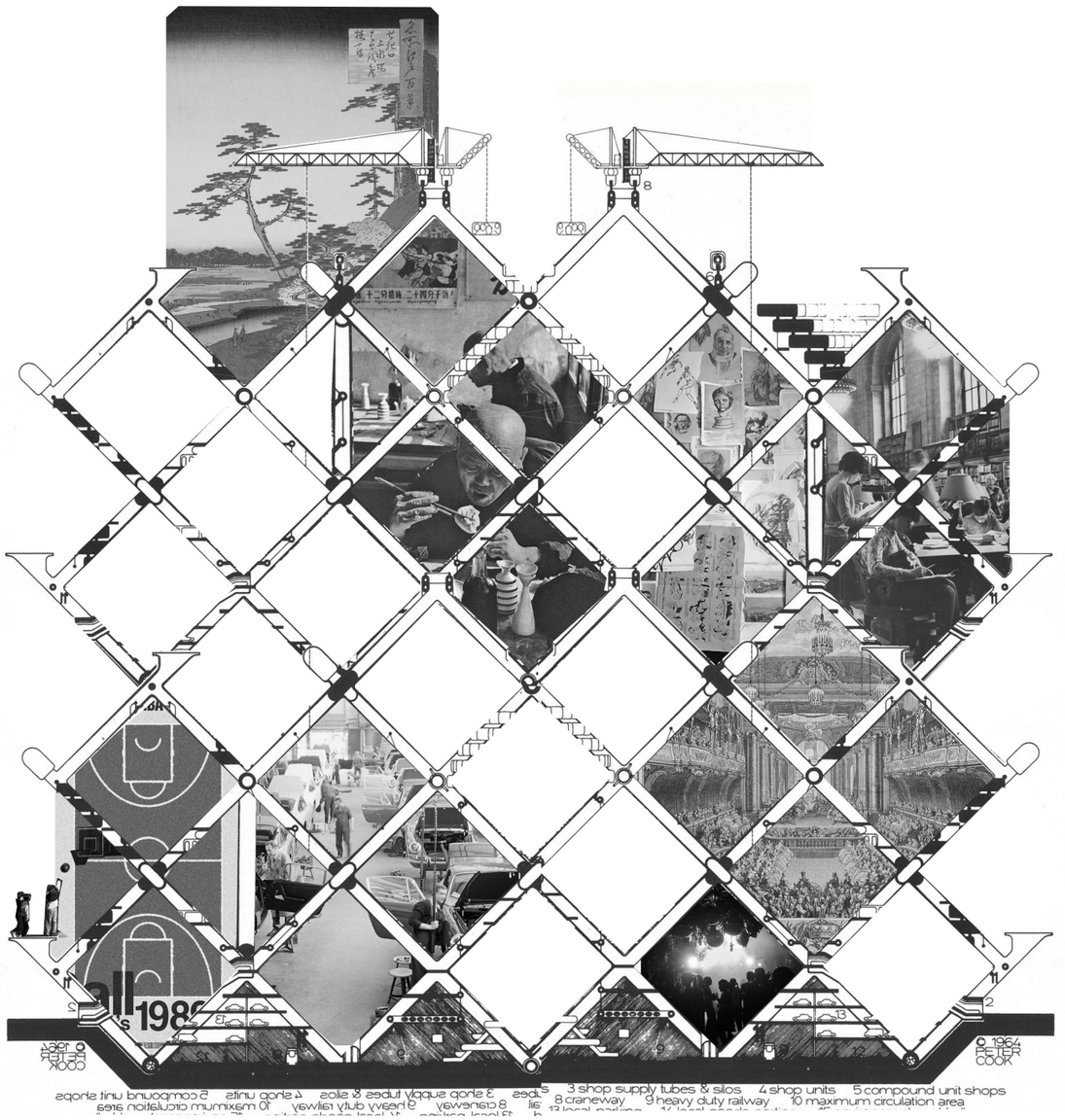




1:500 Urban section's



Restored vertical connection between Hörgarden and Sundholm



A hybrid program

Free space's & defined functions to maximize possibility and deal with the exhausted



The Eventfull

Performing
Watching
Expressing
Organizing
Meeting
Exhibiting

The Spectacular

Small to largescale

The whole of Copenhagen



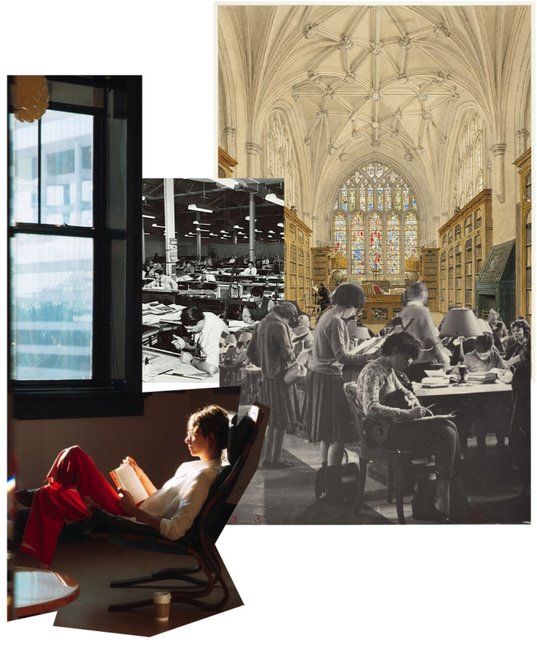
The Foodcorner

Meeting
Teaching
Cooking
Eating
Learning

Everyday

Small to medium scale

The Local



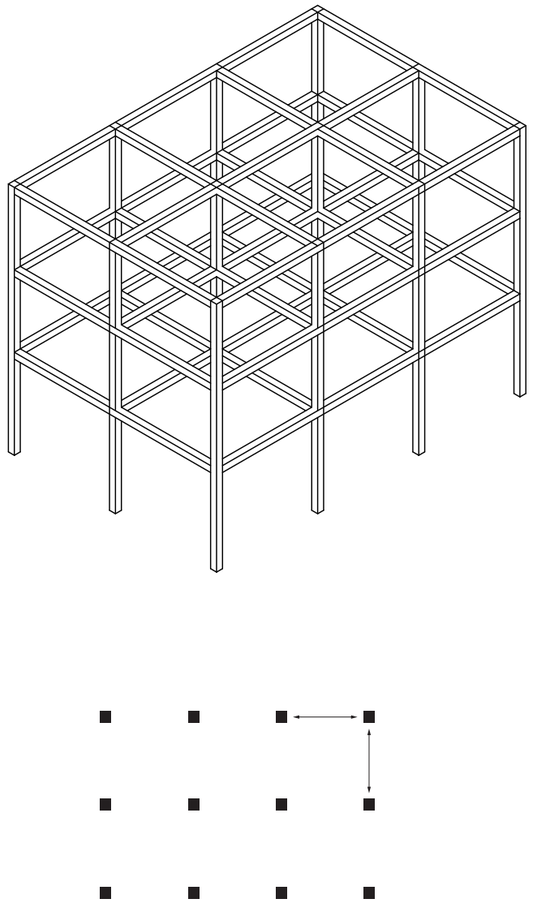
The Library 2.0

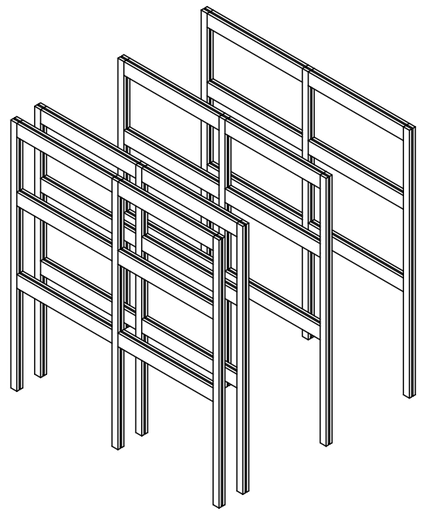
Working
Learning
Studying
Reading
Meeting
Creating

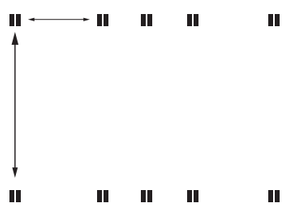
Everyday

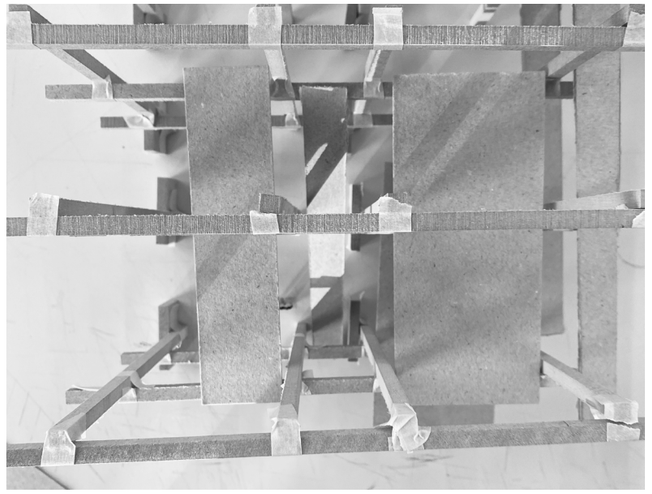
small to large scale

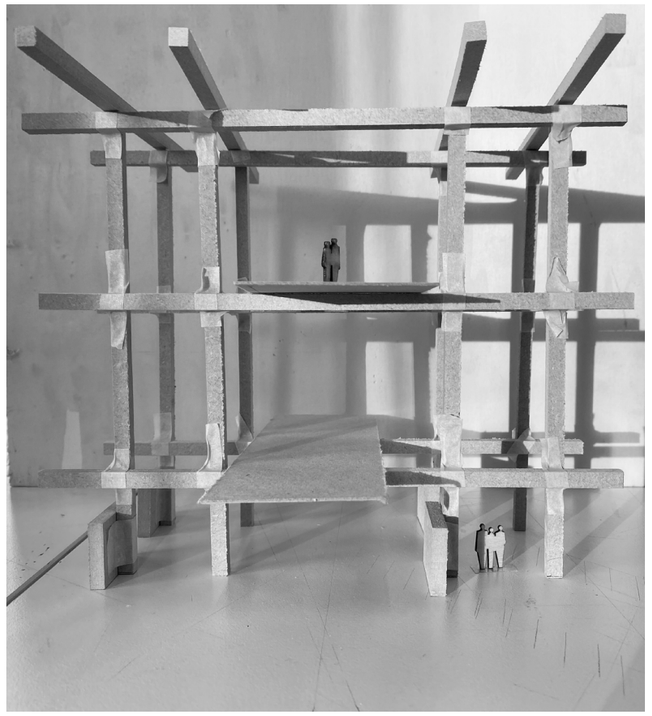
The Local and beyond





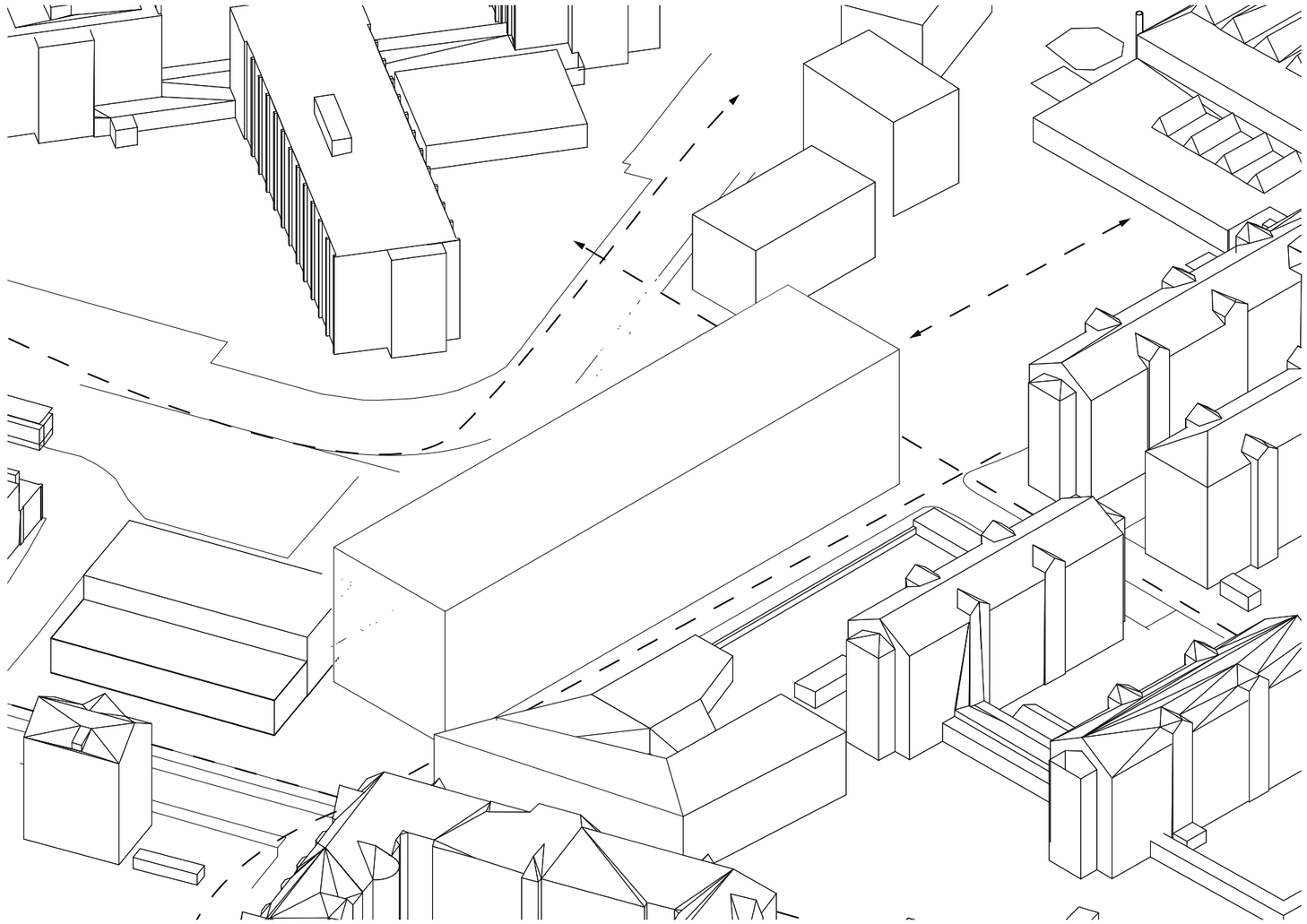




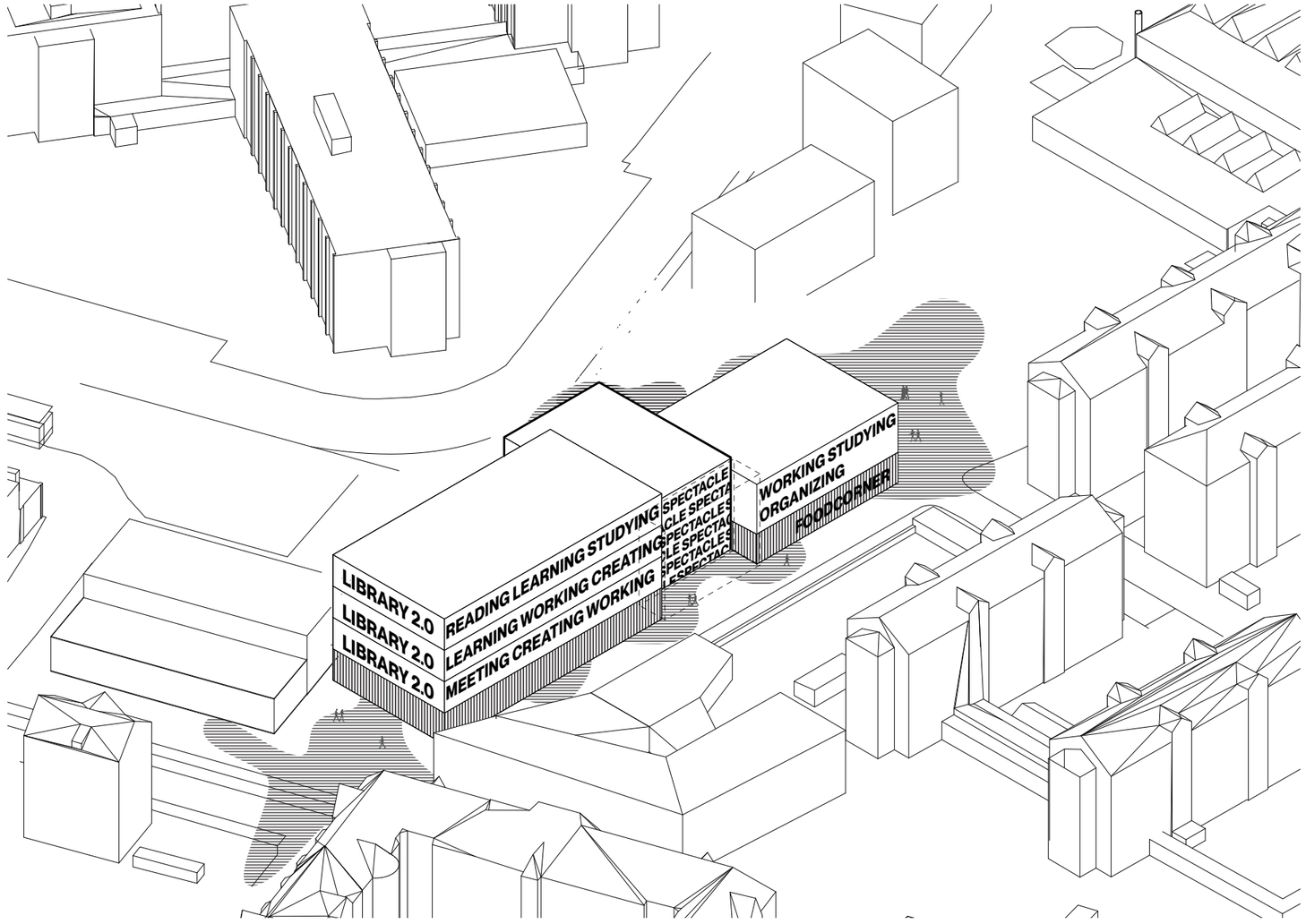


A new framework for the everyday

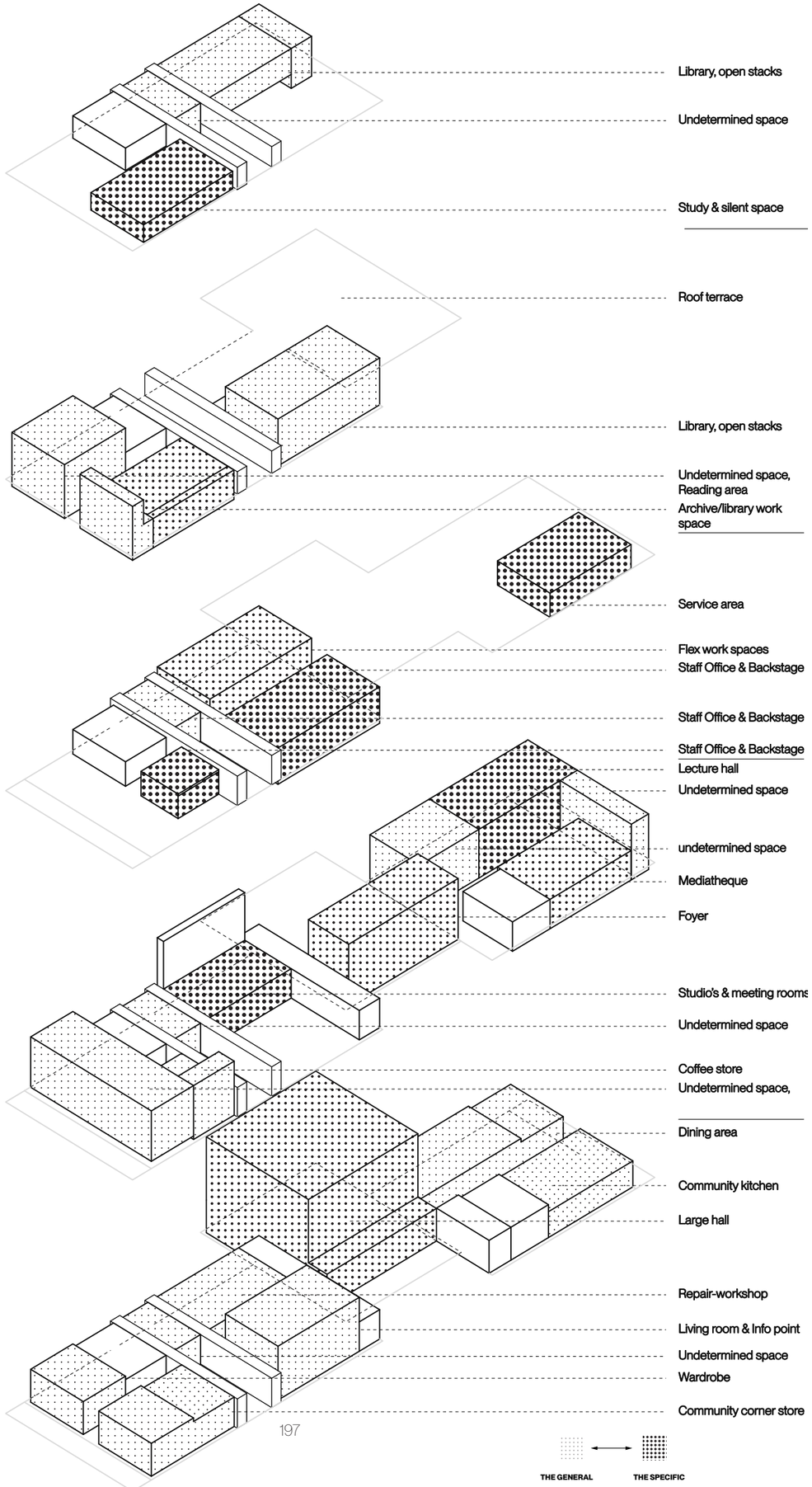
A spectacular framework?
voids, double -tripple height, offsetting floors, differentiating heights



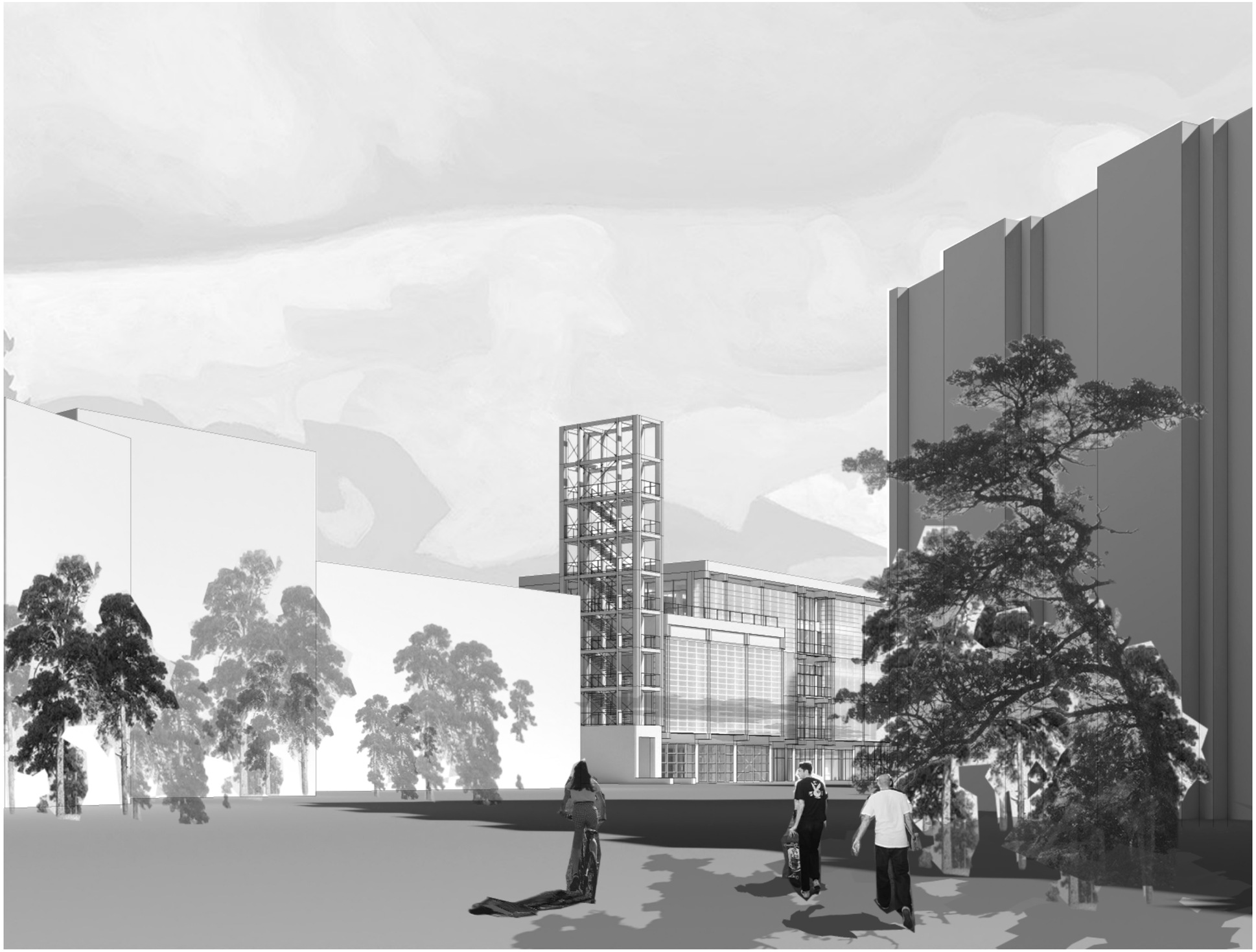
1. Positioning the framework



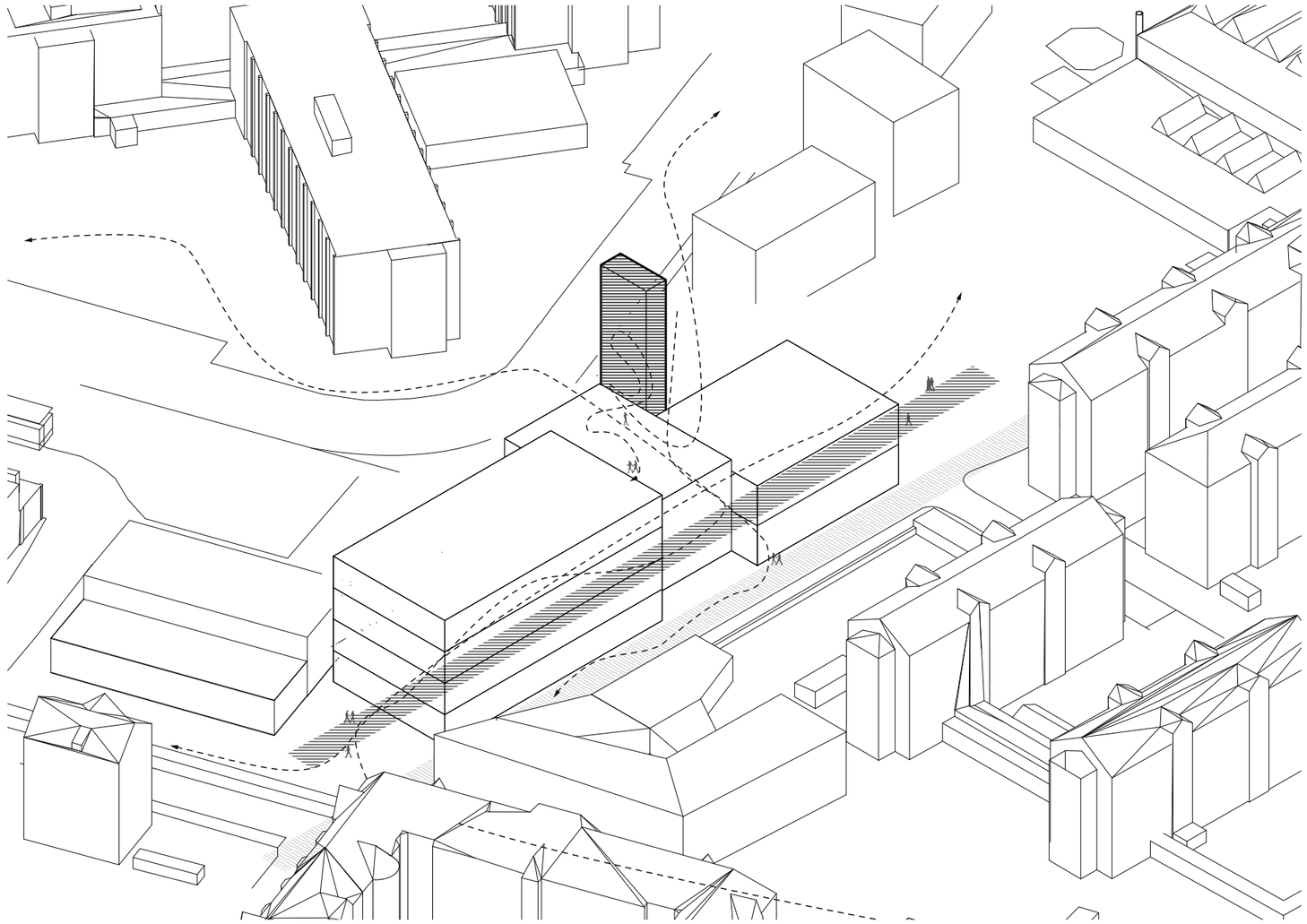
2. Integrating the programm & highlighting the spectacle



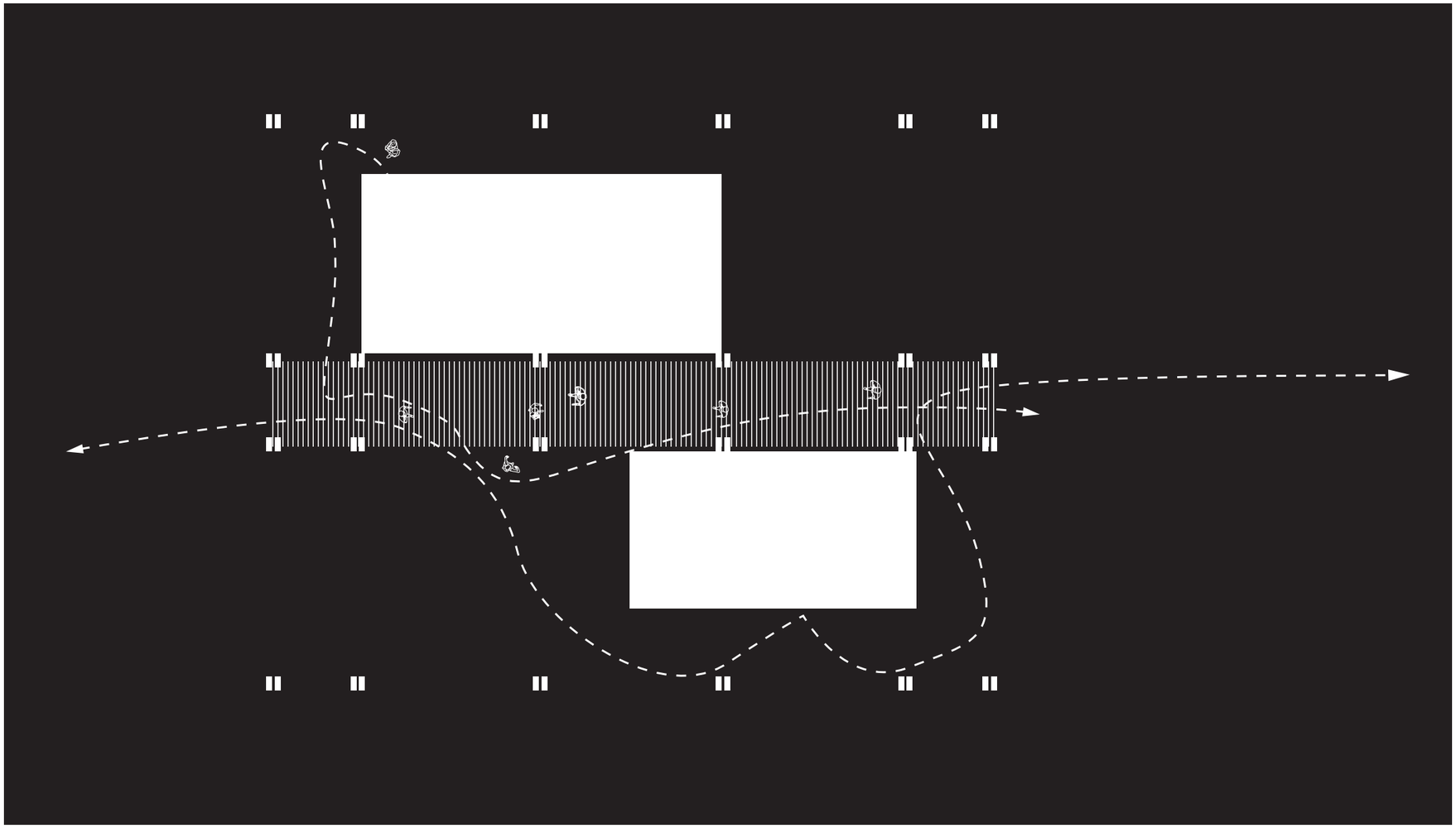
Programmatic Placement



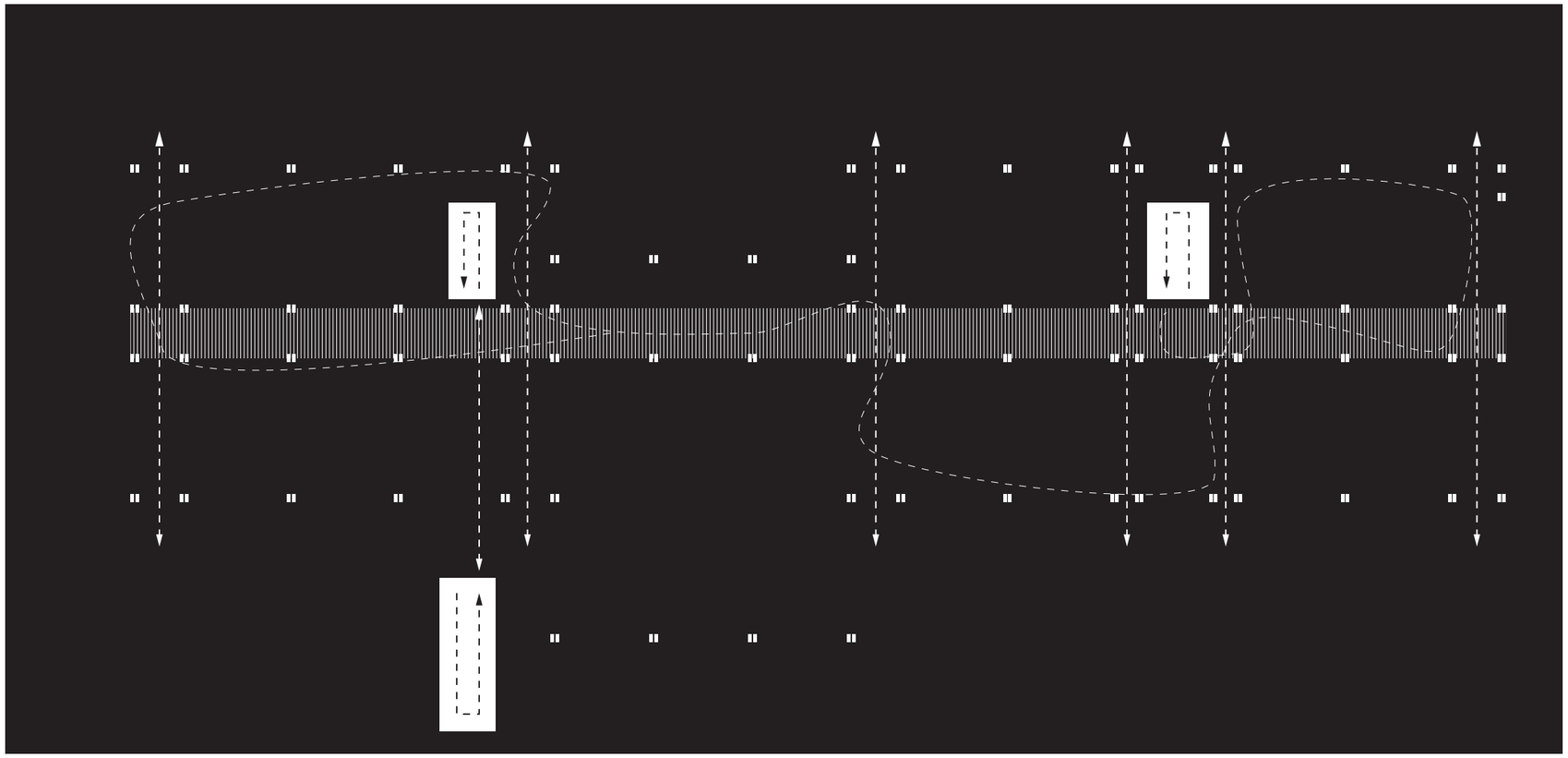
Highlighting the spectacle within the rectangular volume



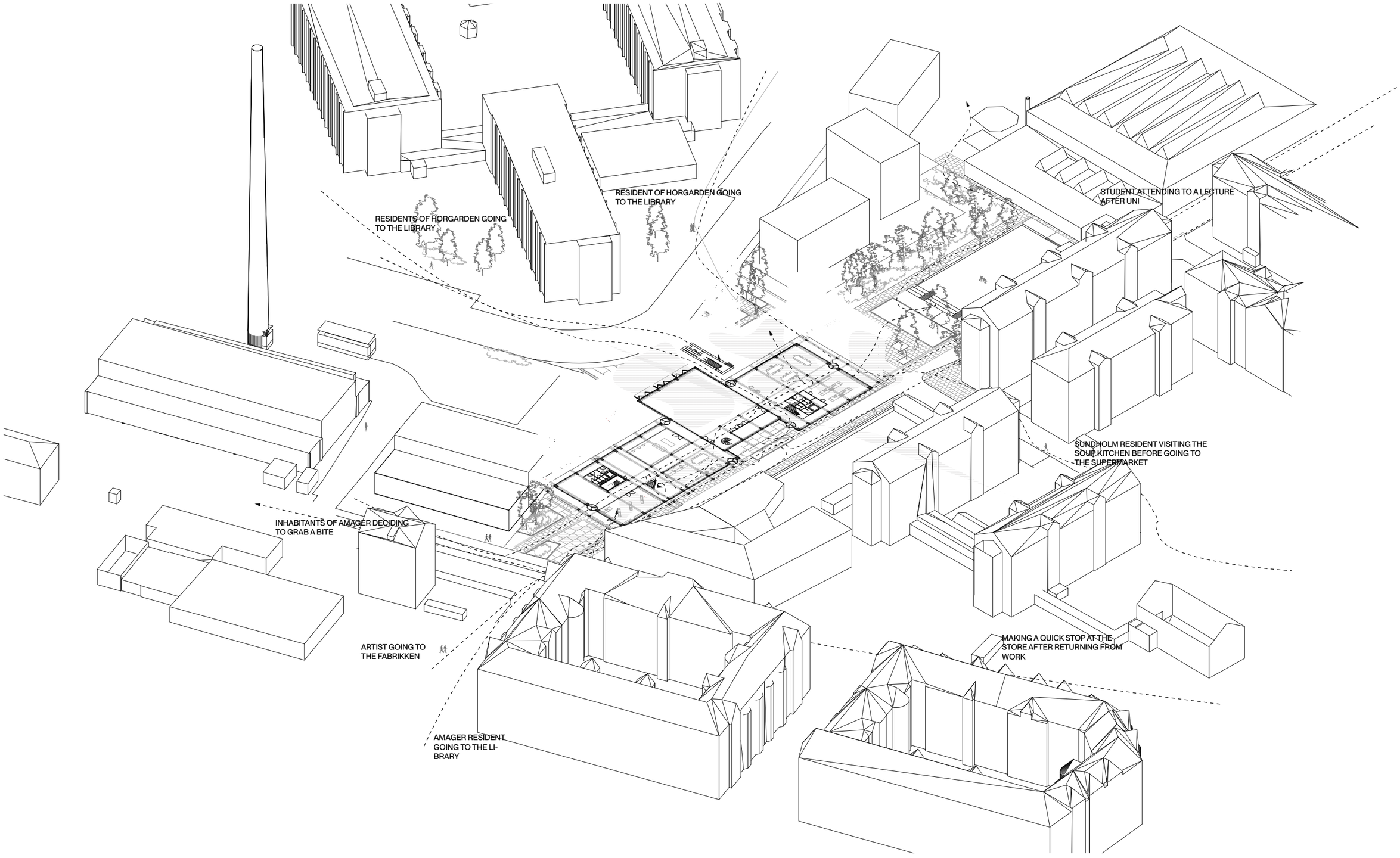
3.Adding Internal and external infrastructure to the framework

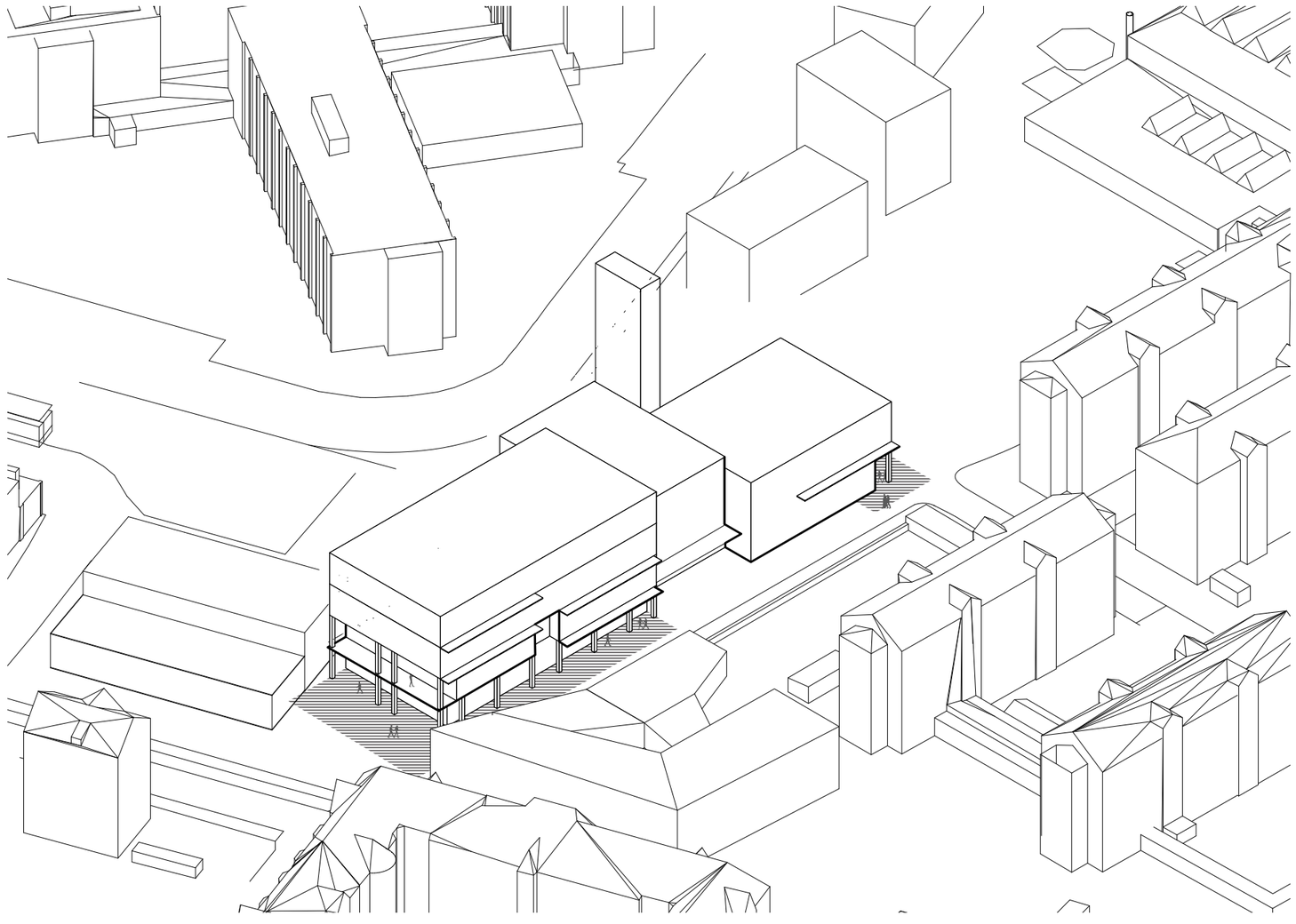


Internal main “street” and secondary routes



A framework and infrastructure for the spectacular everyday

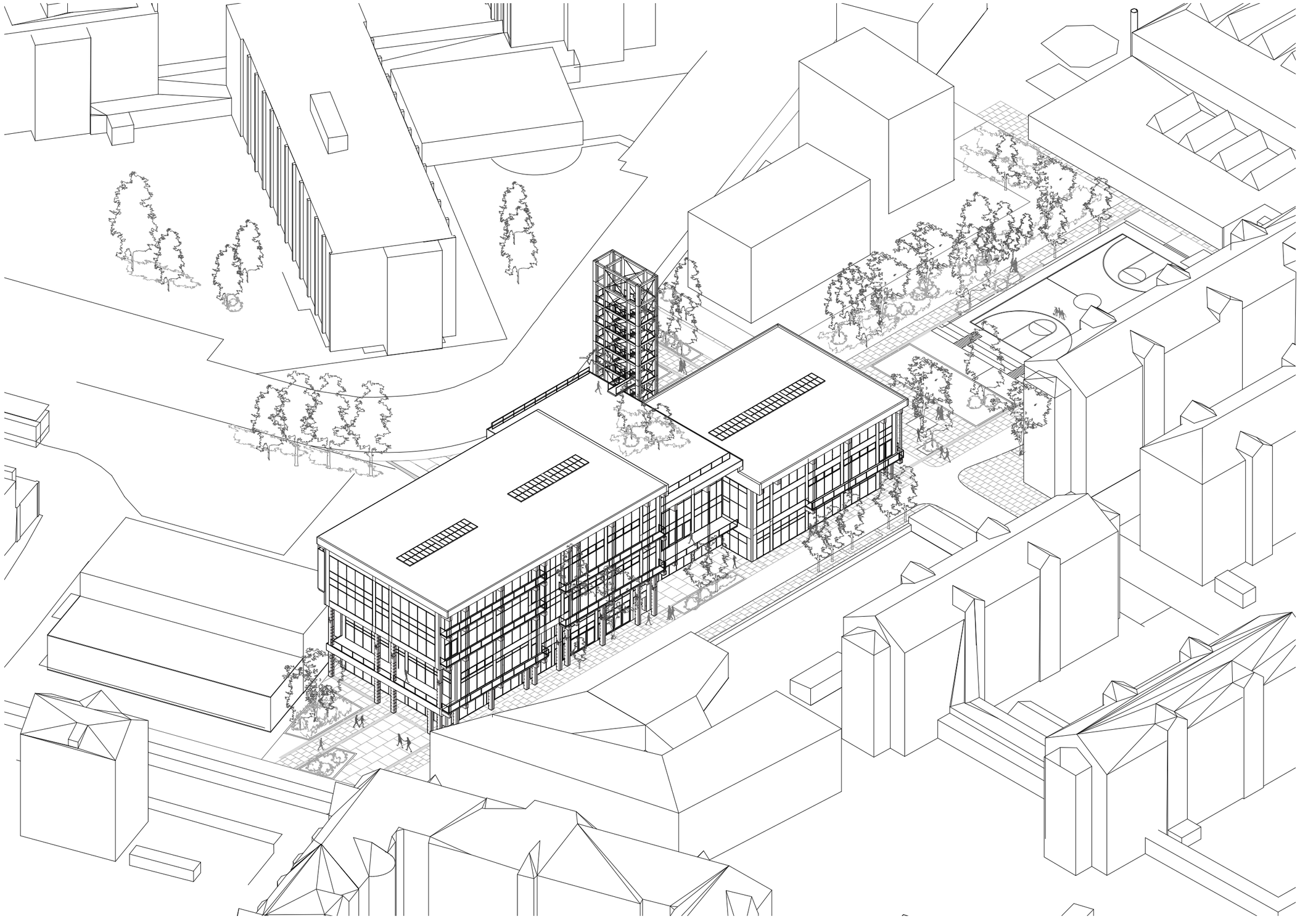

RESIDENTS OF HORGARDEN GOING TO THE LIBRARY
RESIDENT OF HORGARDEN GOING TO THE LIBRARY
STUDENT ATTENDING TO A LECTURE AFTER UNI
SUNDHOLM RESIDENT VISITING THE SOUP KITCHEN BEFORE GOING TO THE SUPERMARKET
INHABITANTS OF AMAGER DECIDING TO GRAB A BITE
ARTIST GOING TO THE FABRIKKEN
AMAGER RESIDENT GOING TO THE LI-BRARY
MAKING A QUICK STOP AT THE STORE AFTER RETURNING FROM WORK

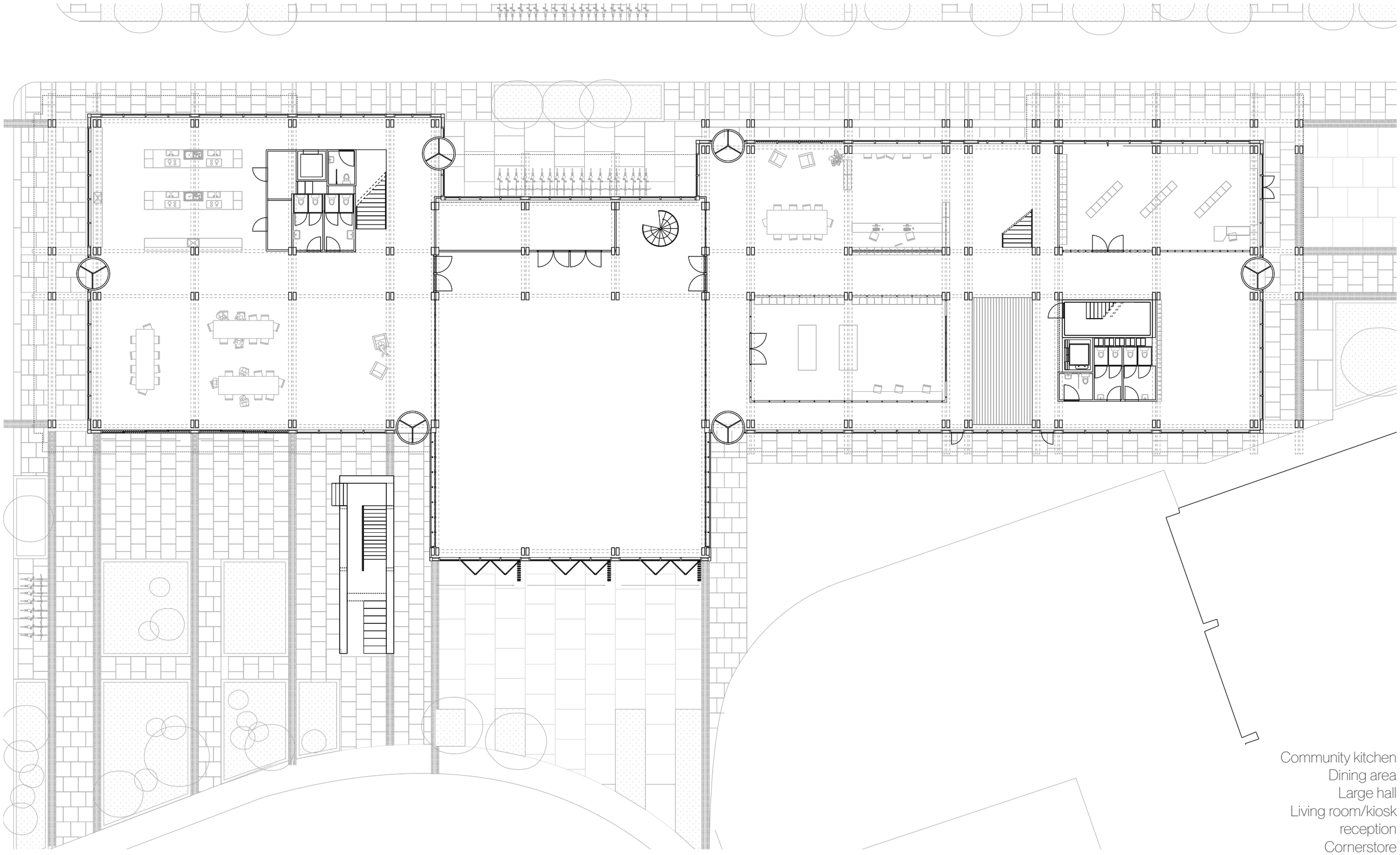


4. Blurring the boundary



Approach from Sundholmsvej

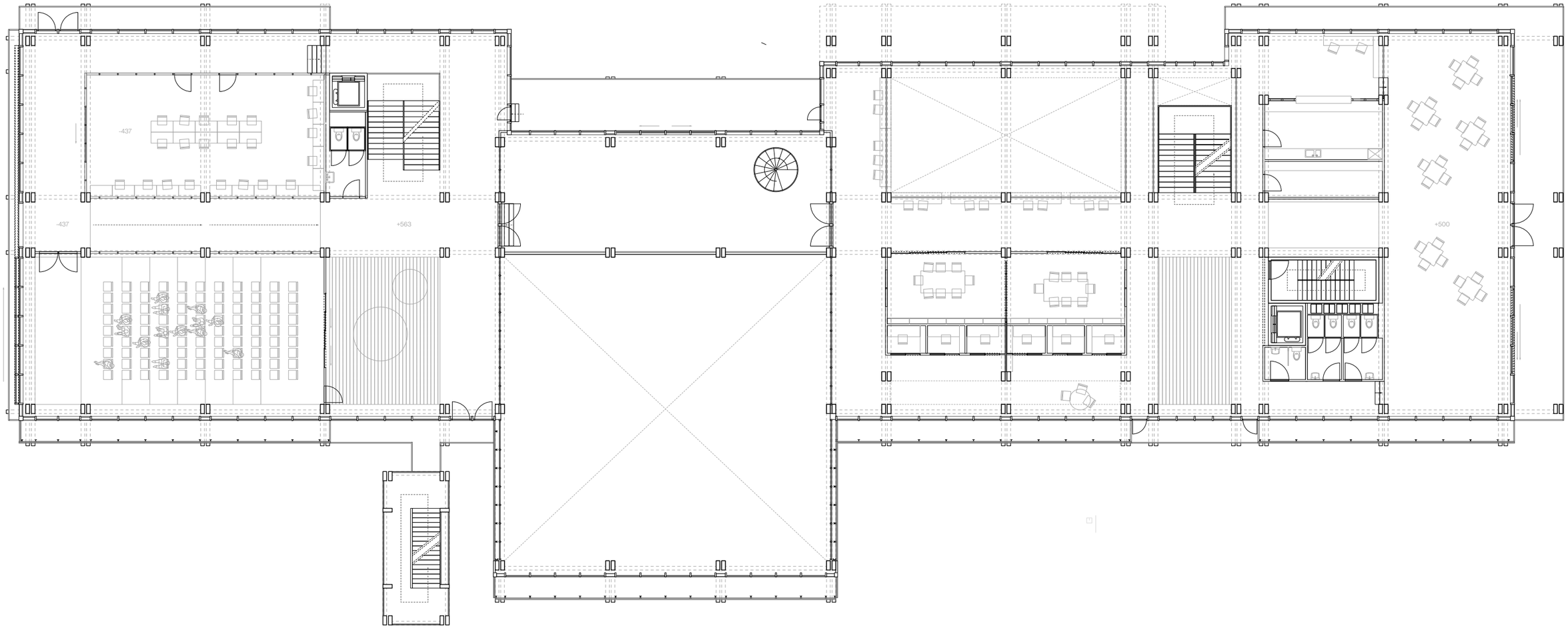




Community kitchen
Dining area
Large hall
Living room/kiosk
reception
Cornerstore
Repair & workshop
wardrobe & lockers

1:200

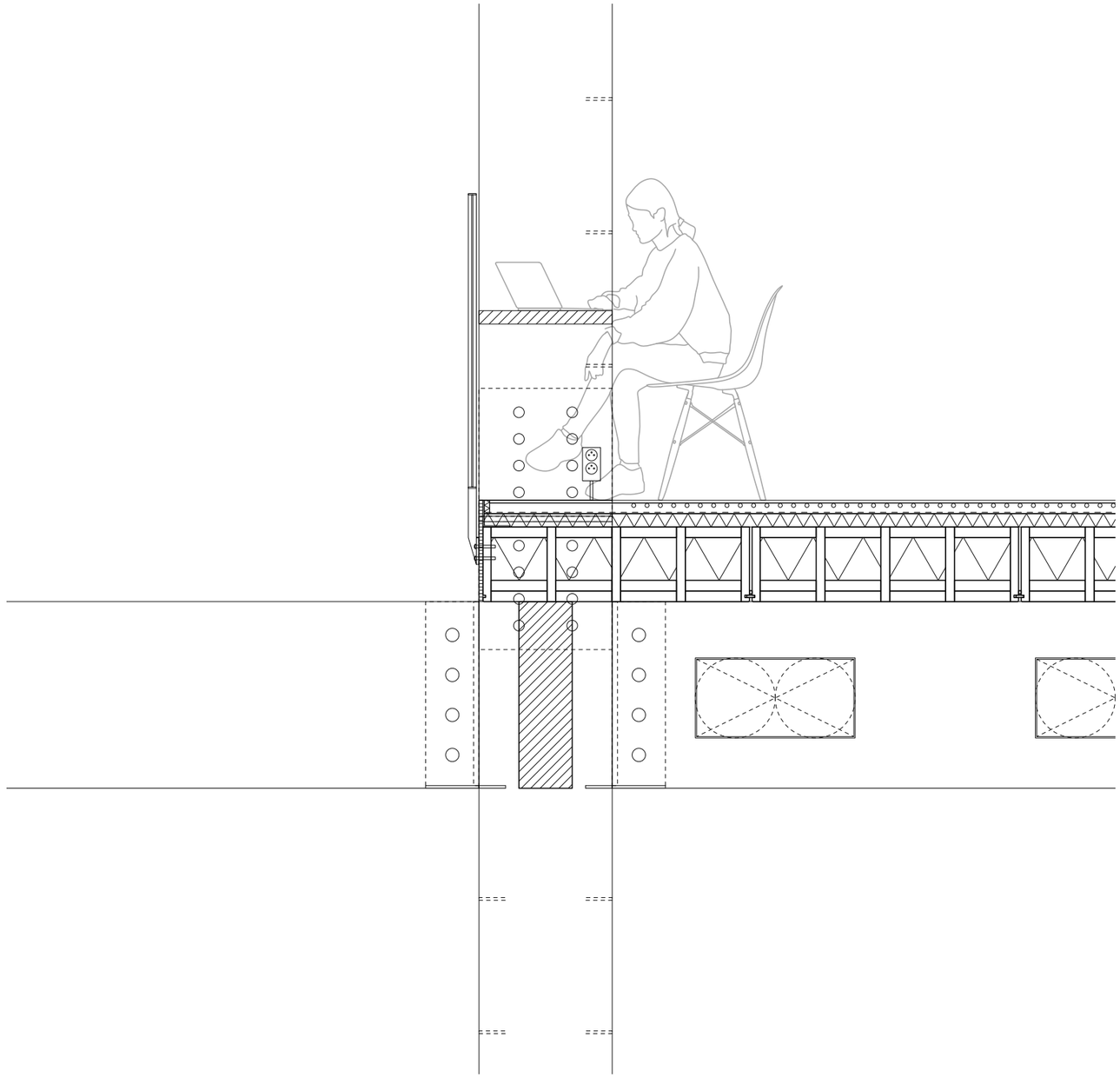
Ground floor



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

1:200

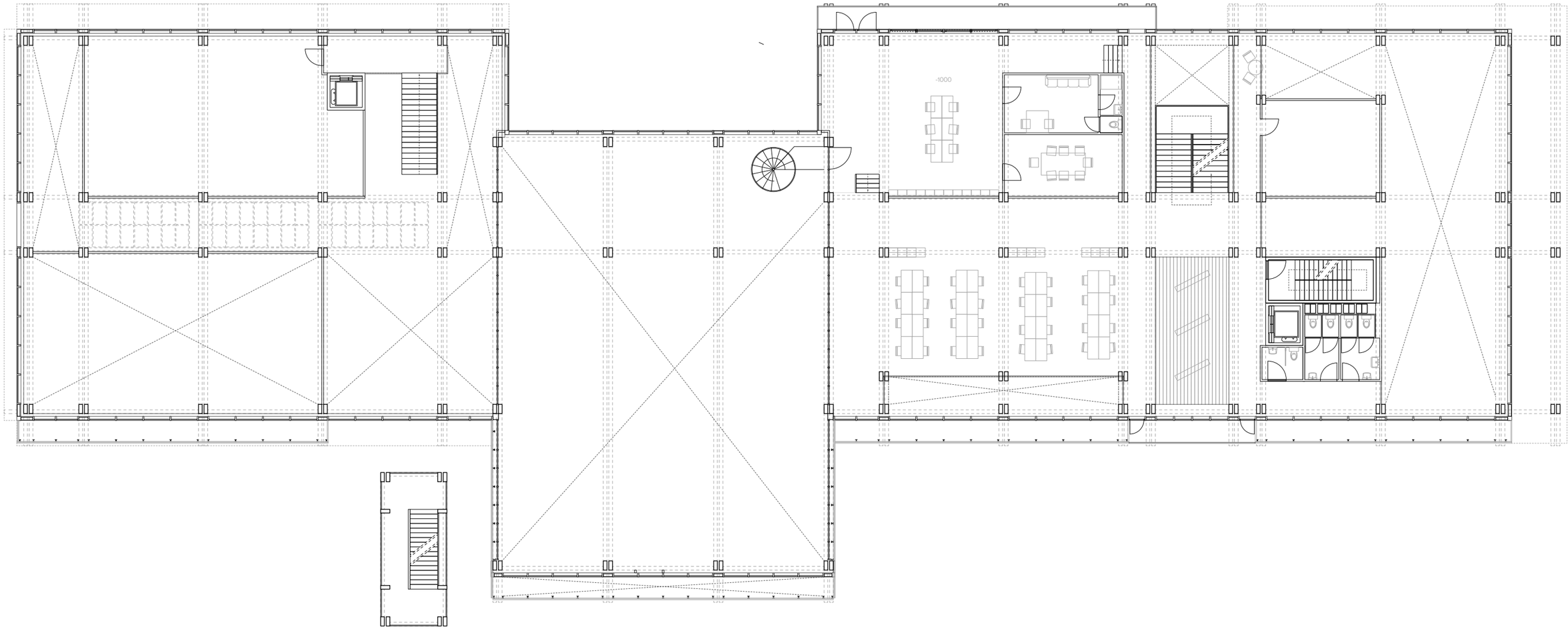
1st floor



The Framework creating a border

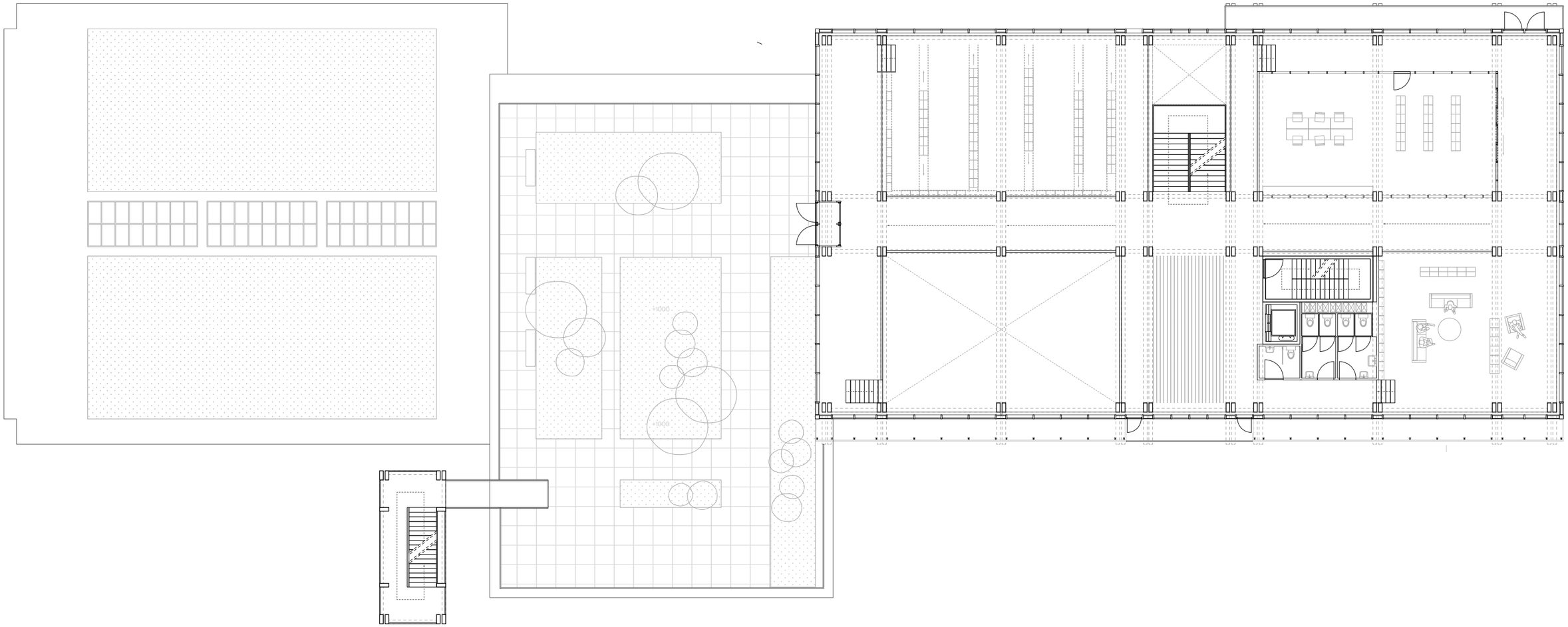


Becoming a part of the spectacle



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

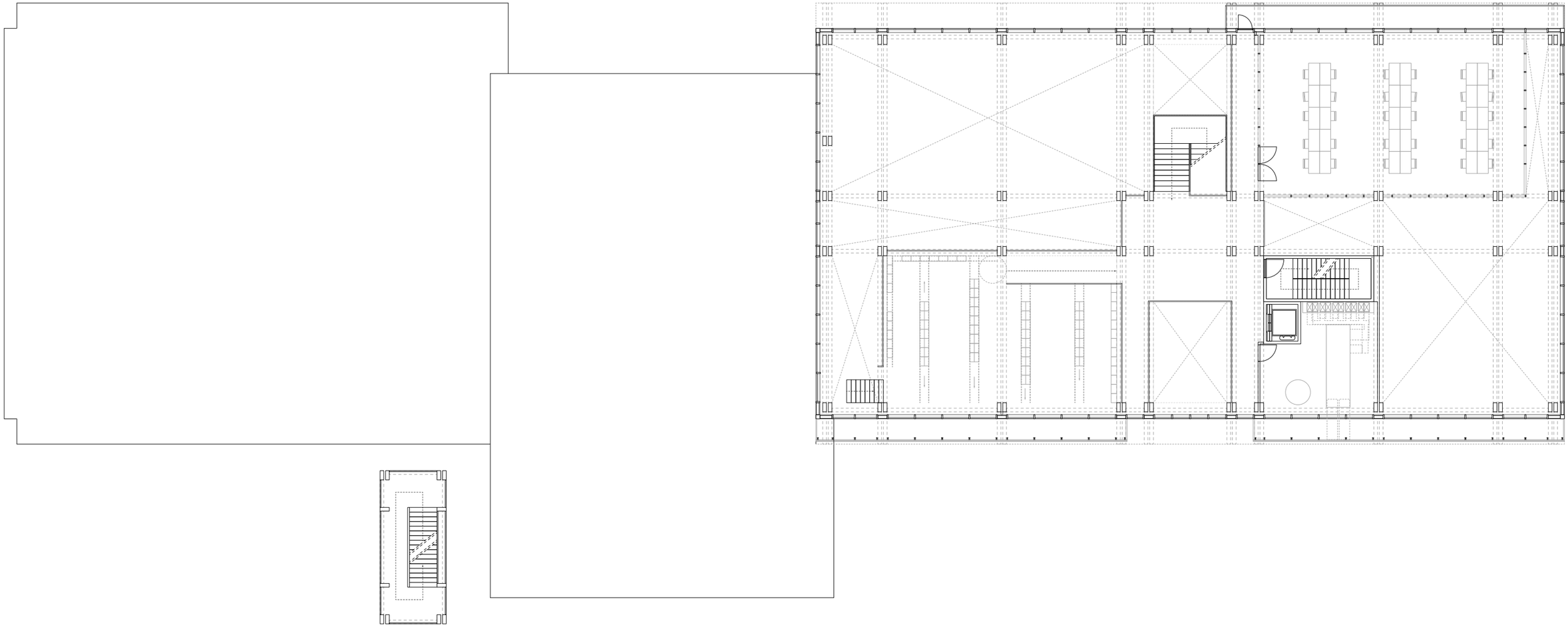
2nd floor



Library
Archive / closable library area
reading area
undetermined area

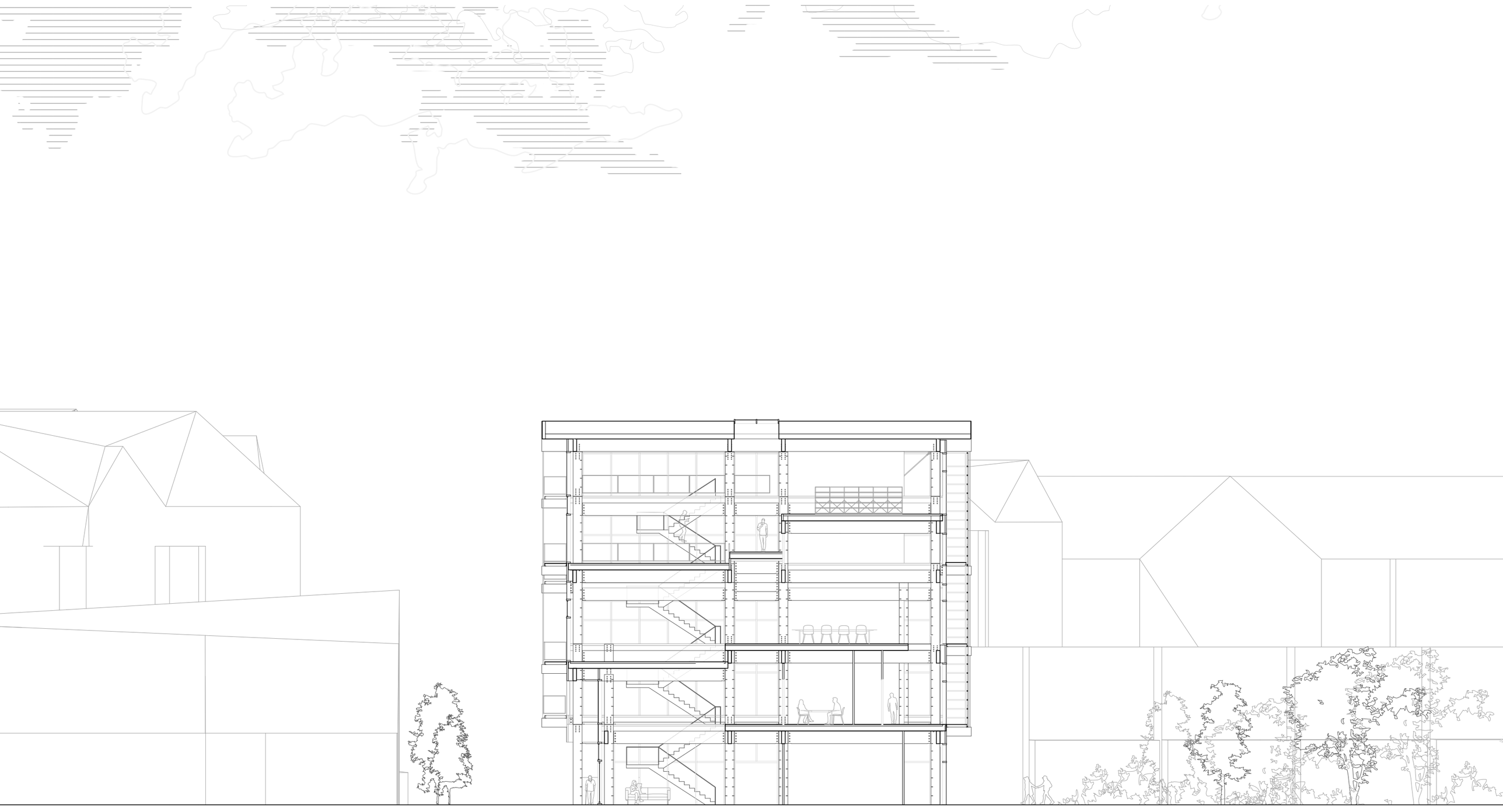
3rd floor

2.11



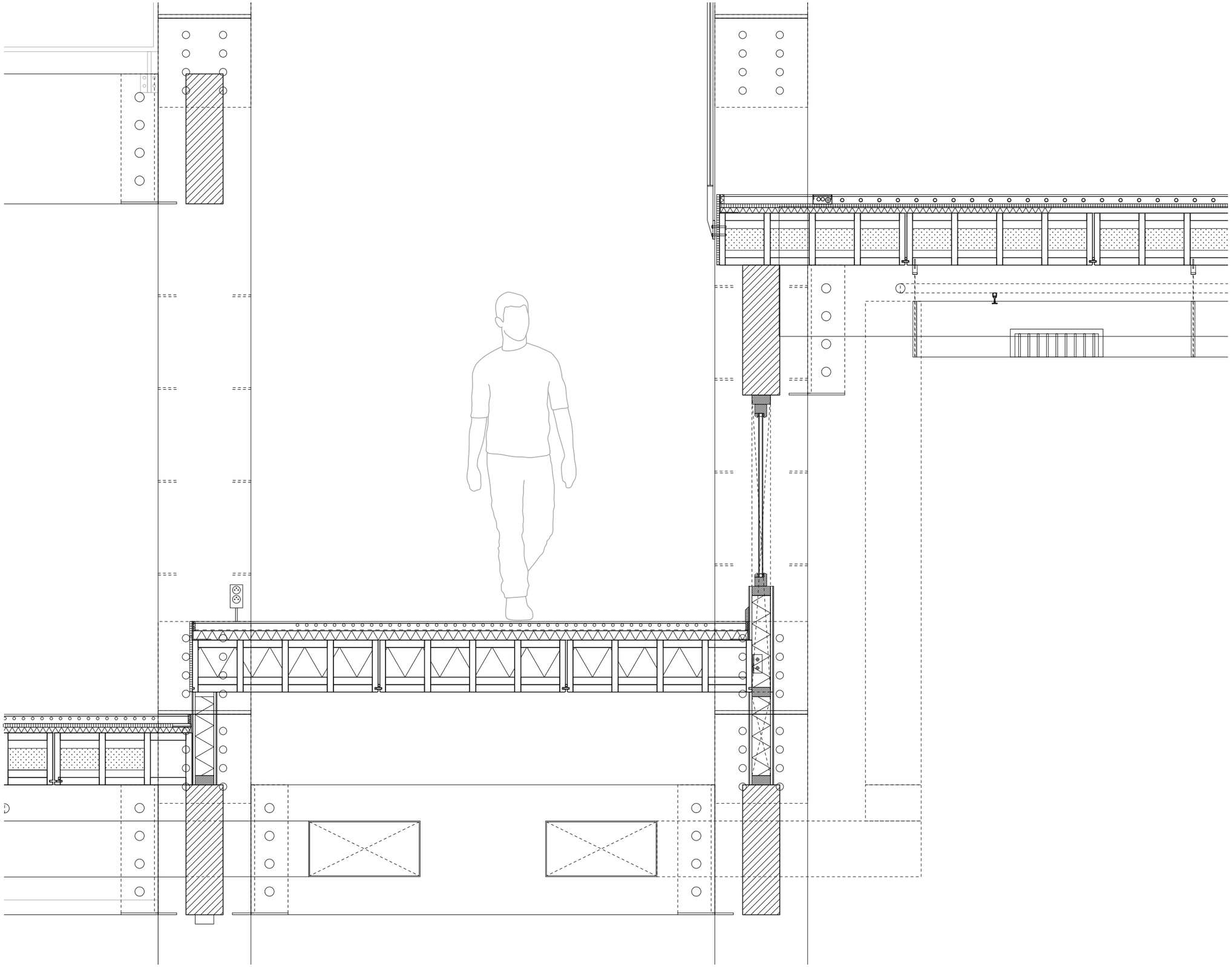
Library
Study/silent area
Service area

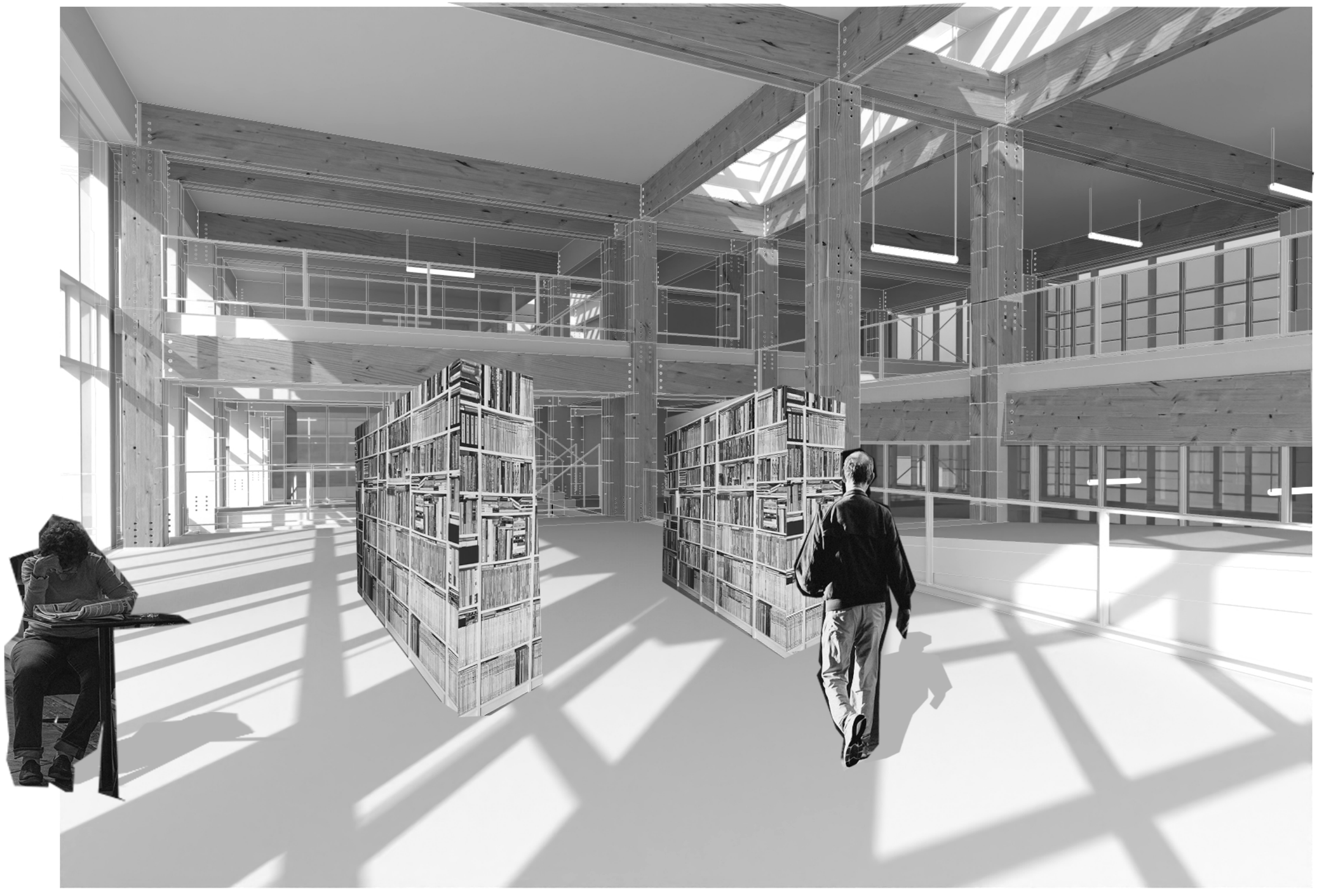
4th floor



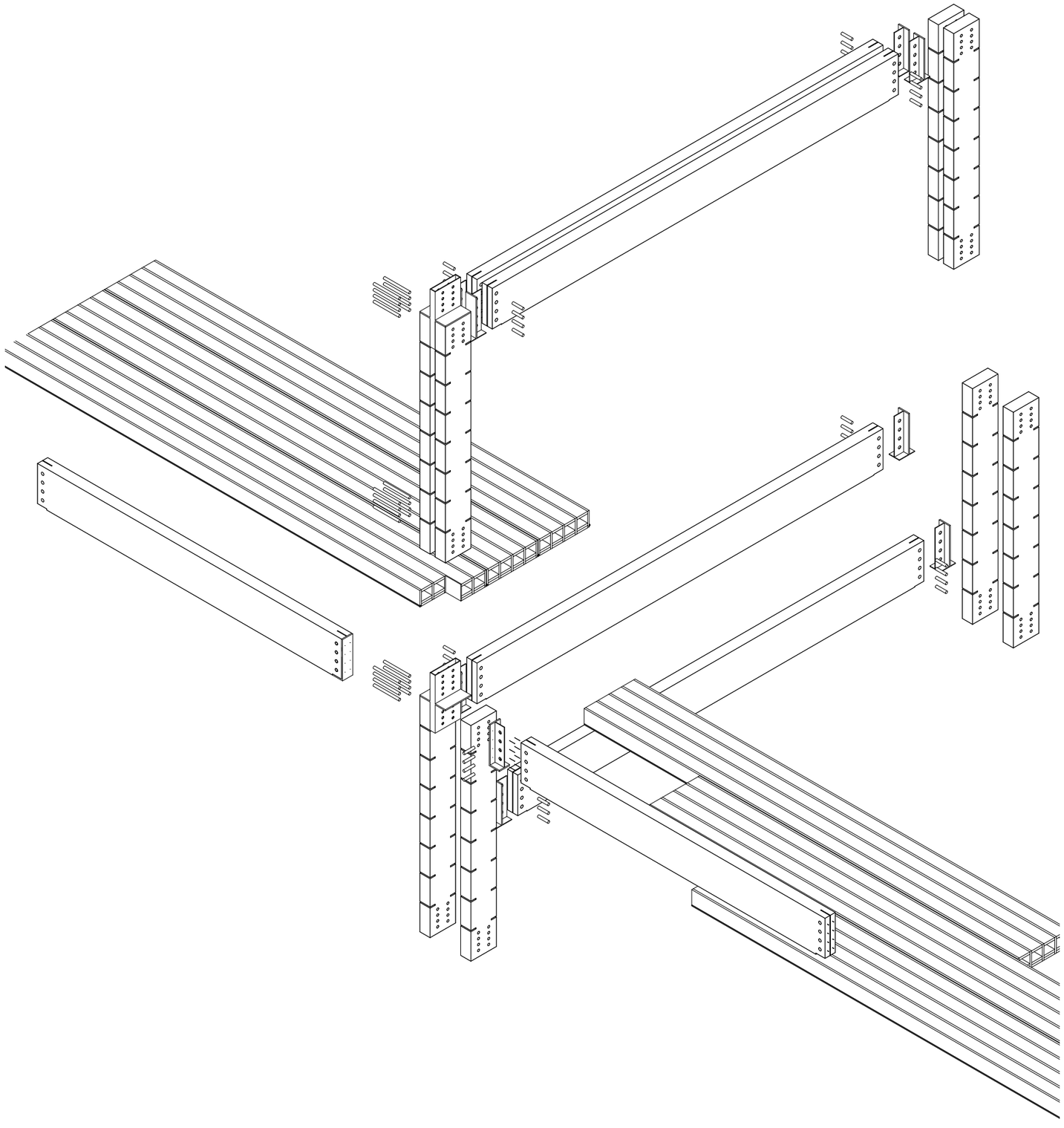
4 Library
3 Library
2 Staff work space, Flex workspaces
1 Meeting rooms & work booth's
0 living room & workshop

Section AA 1:200

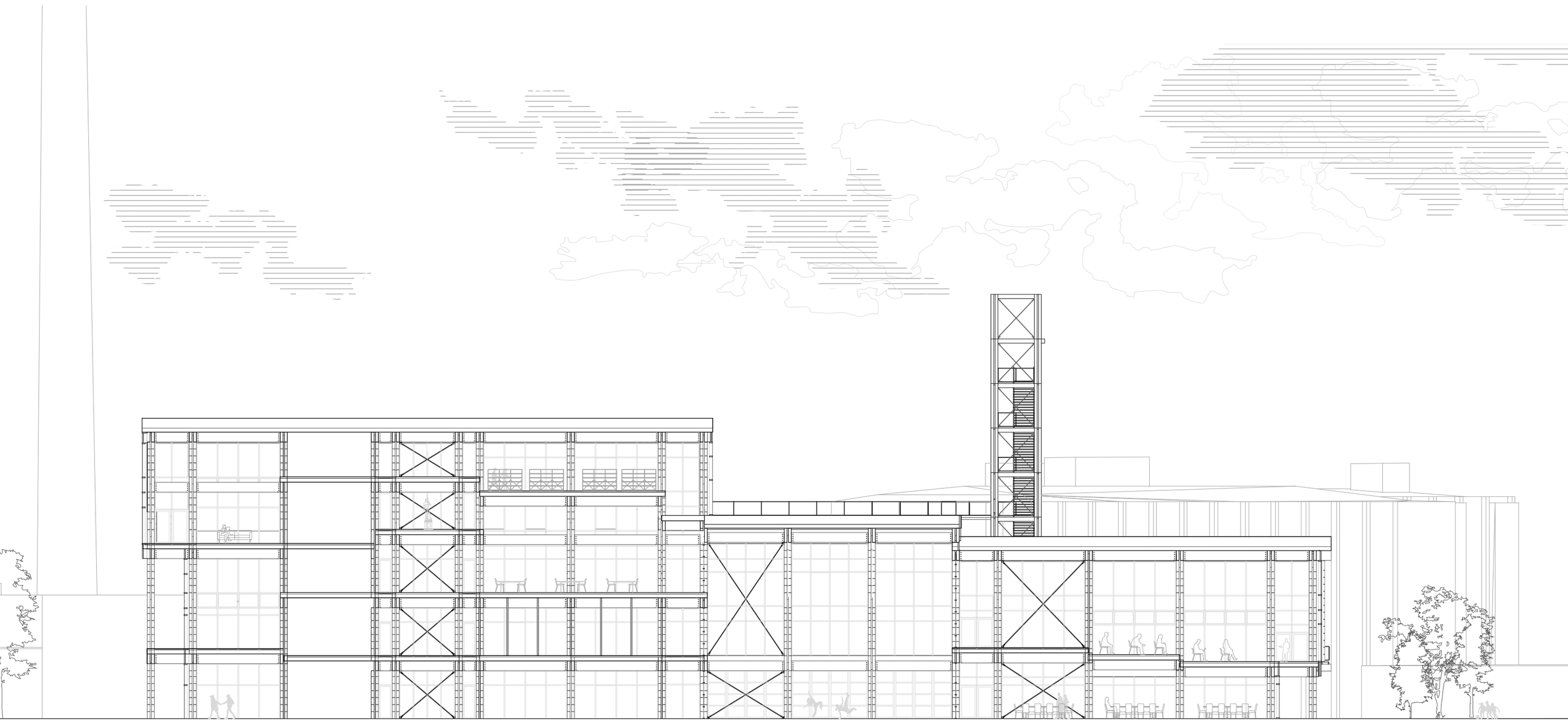




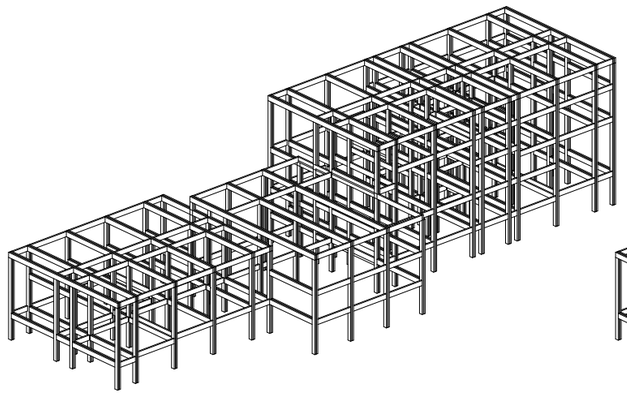
Impression of the library



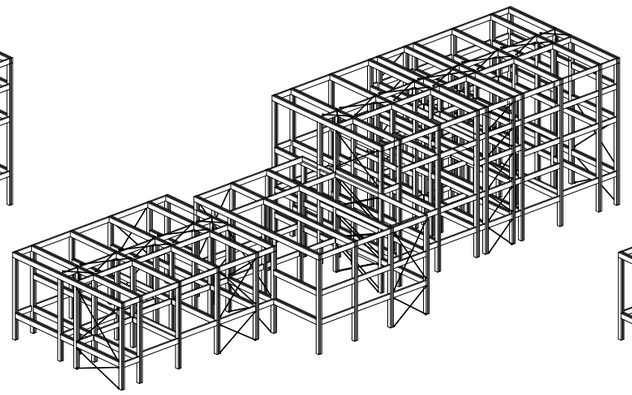
From everyday to spectacular modes of adaptability



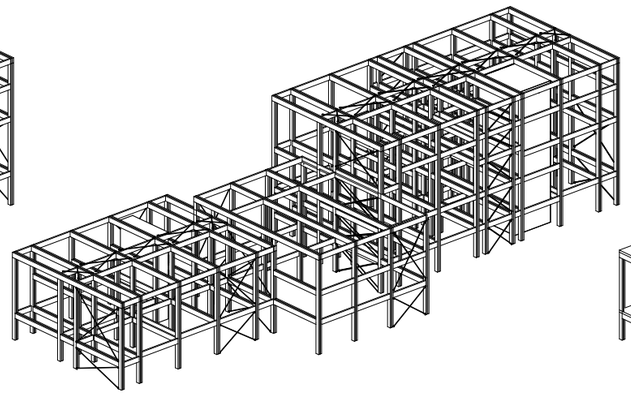
Section BB 1:200



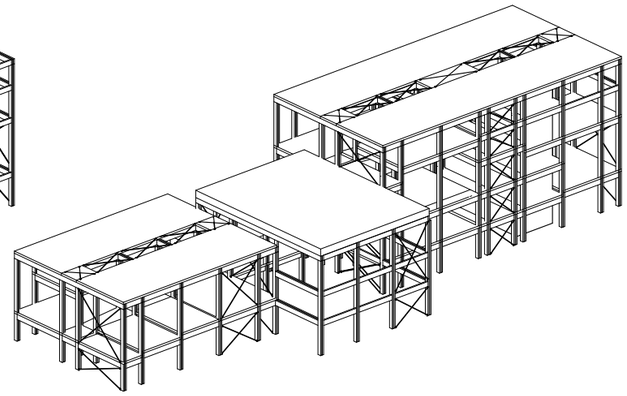
1. glulamn framework



2. Tension cables

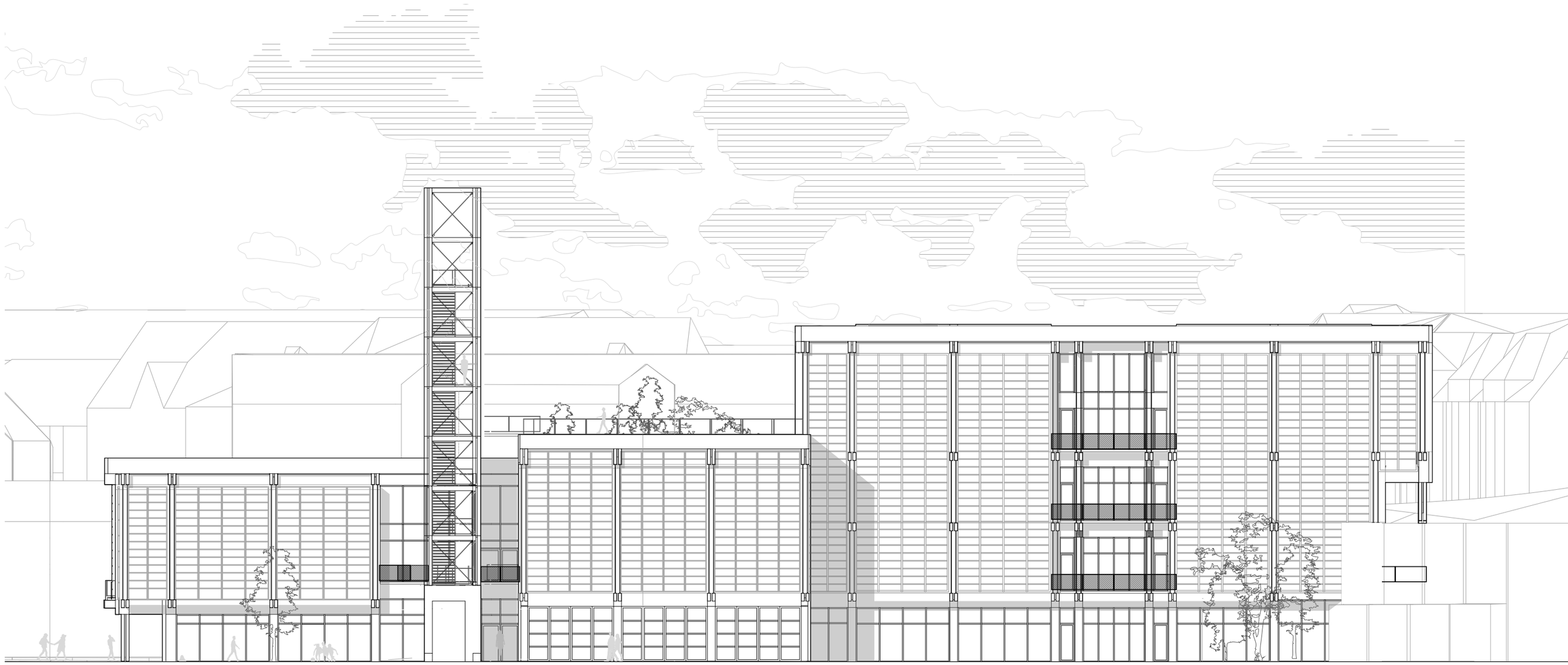


3. Tension cables



4 Dimensionally stable lignatur floors

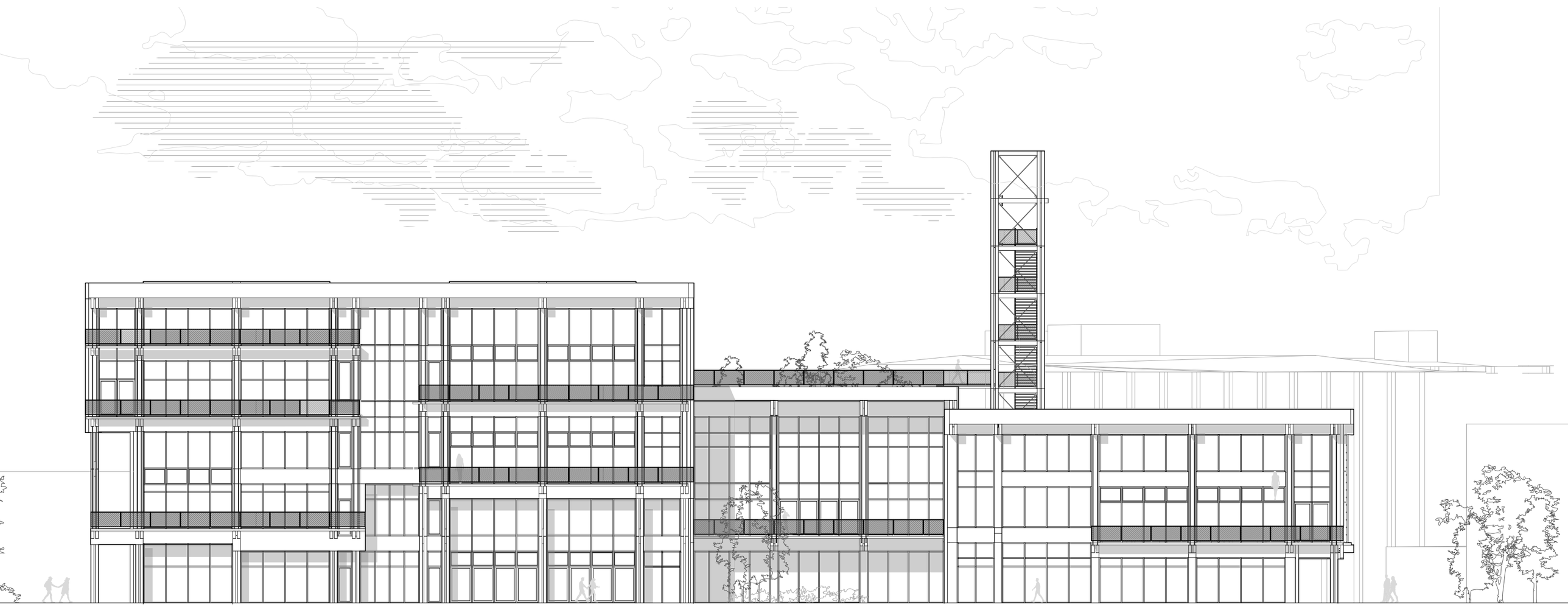
Structural integrity



South Facade

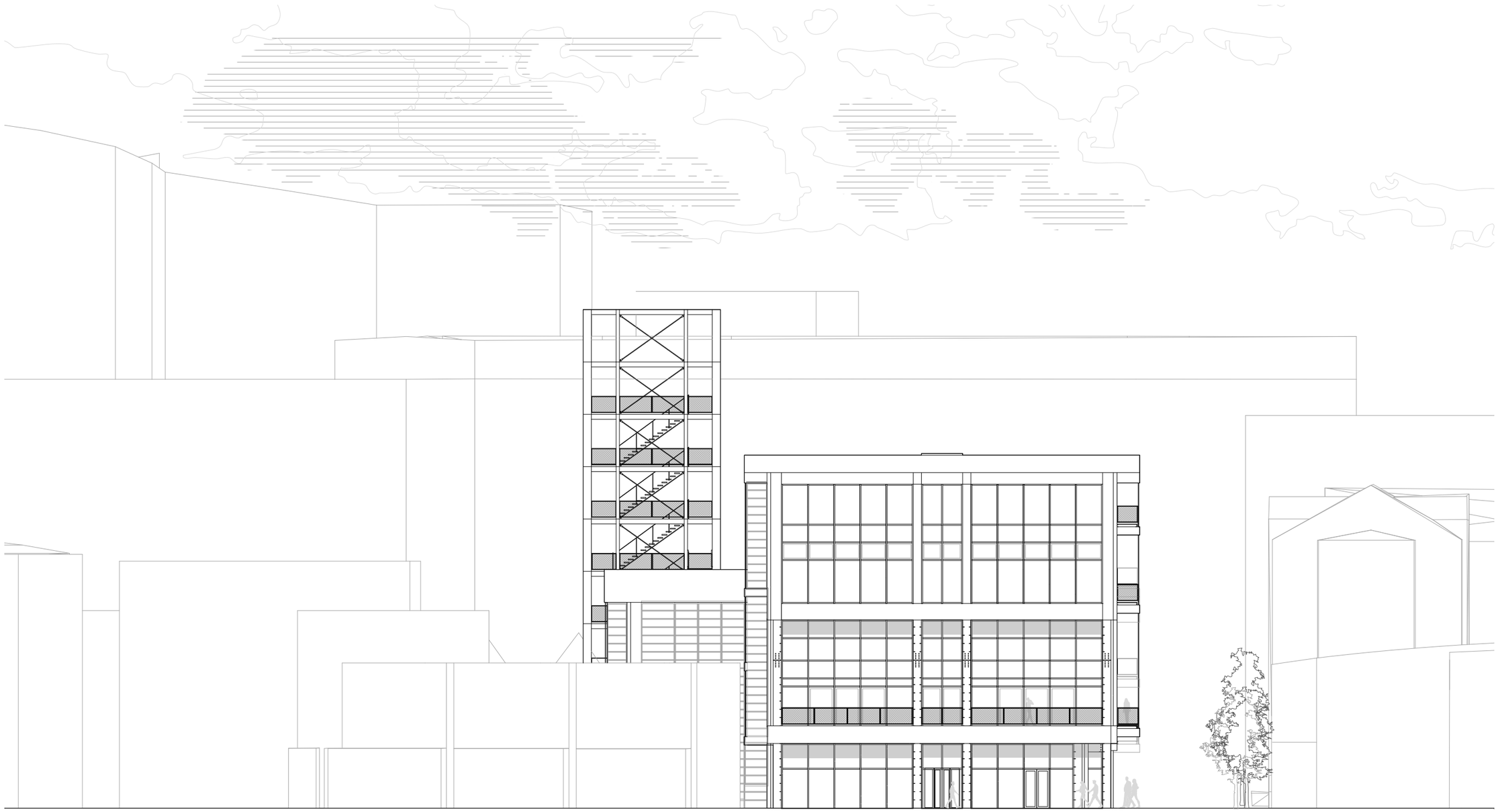
Approaching from Horgaden





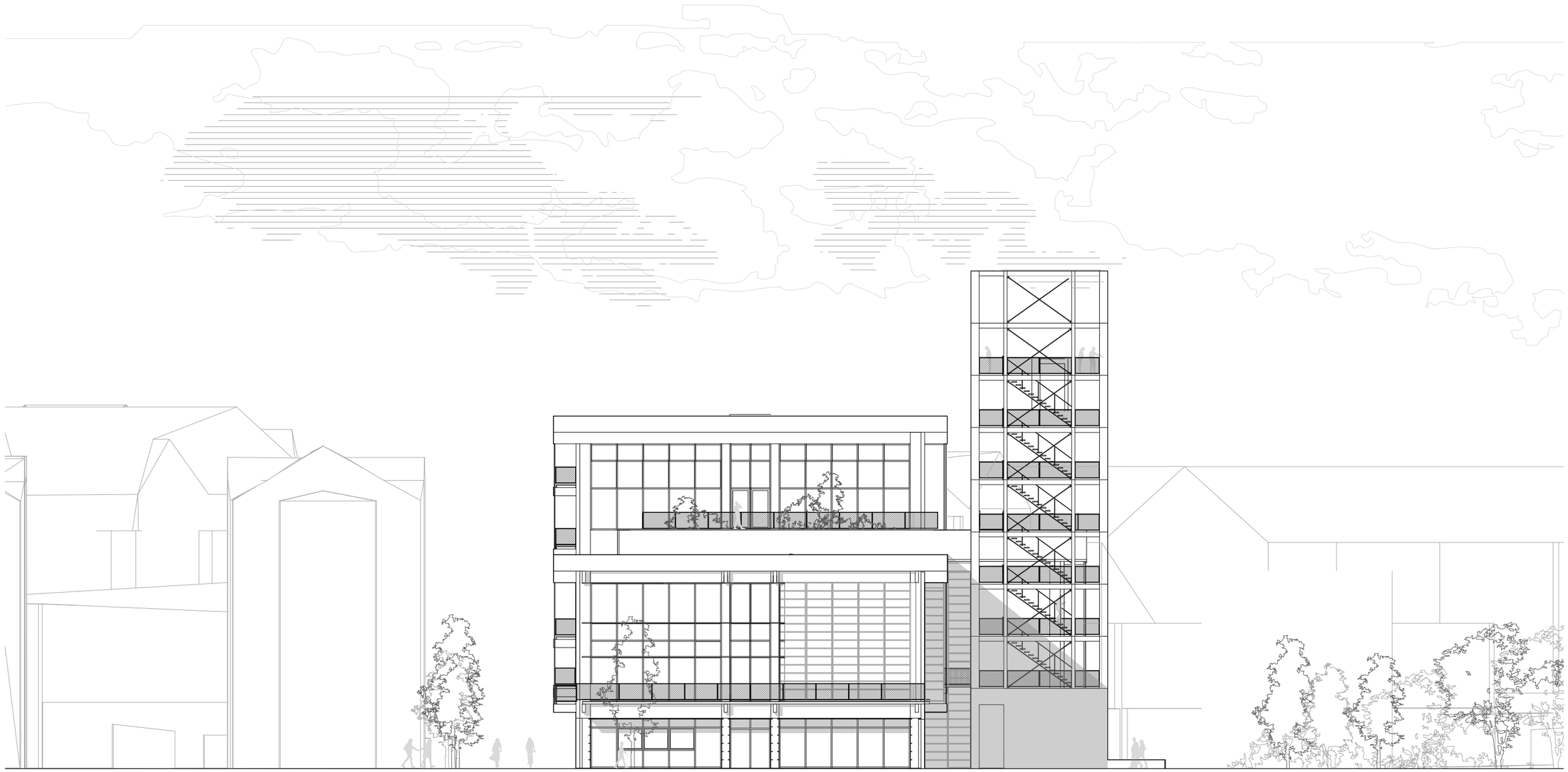
North Facade

Approaching from Sundholm



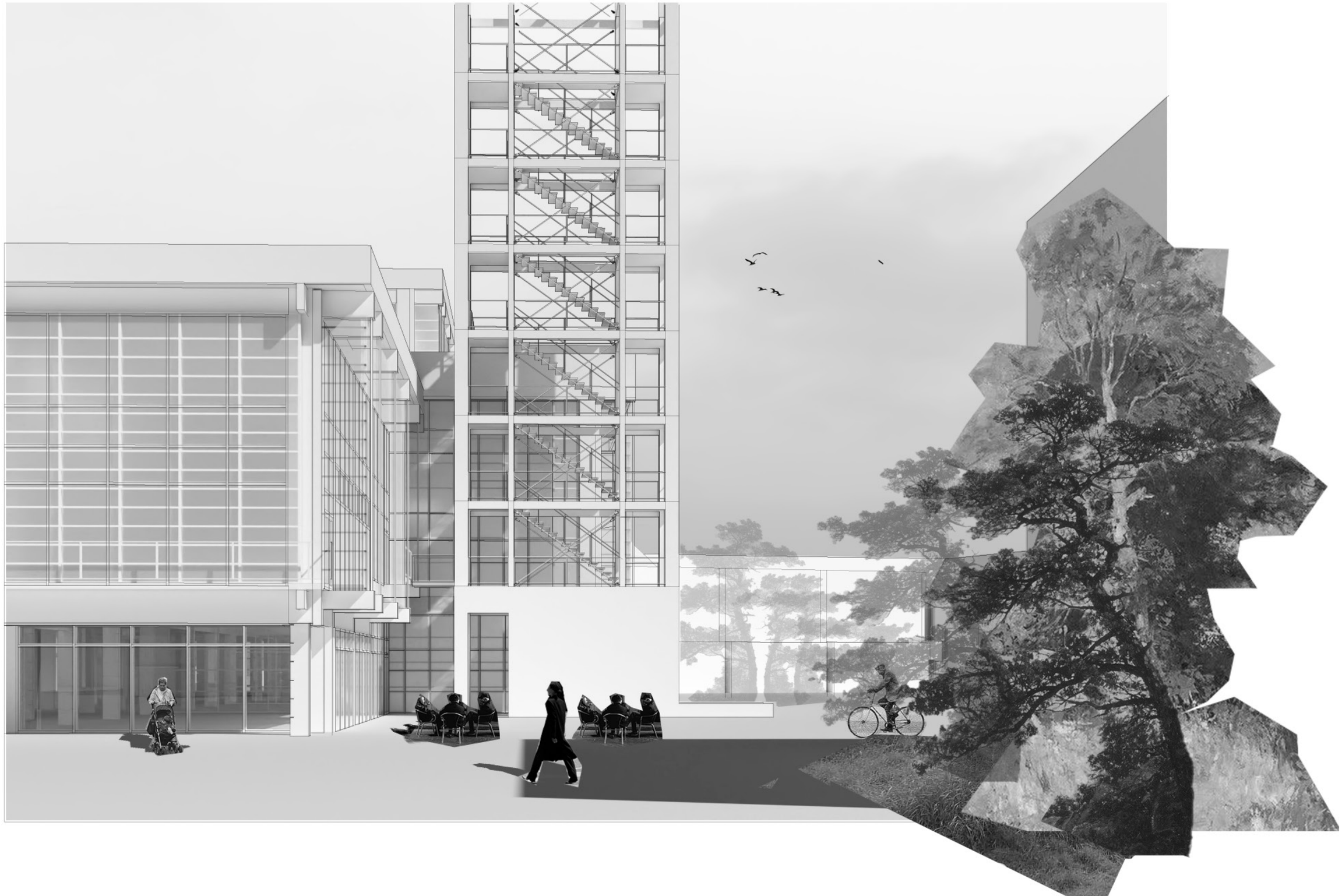
East Facade

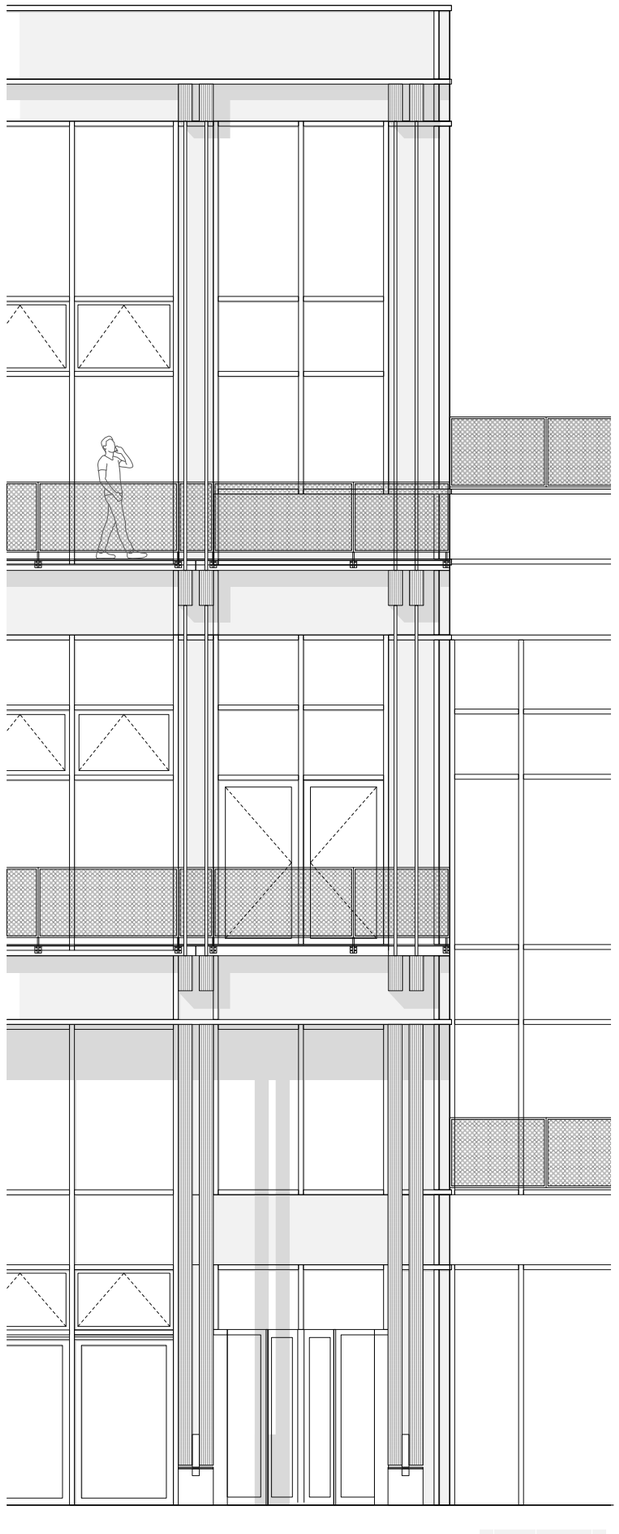
Approaching from Sundholmsvej

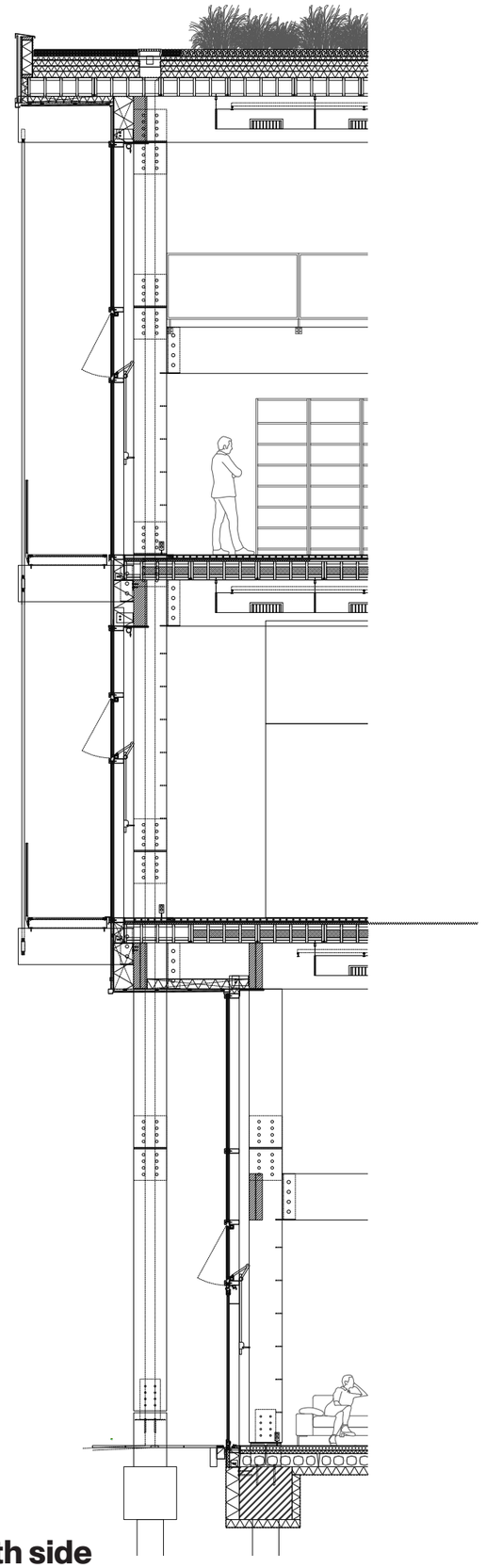


West Facade

Approaching from Fabrikken & square







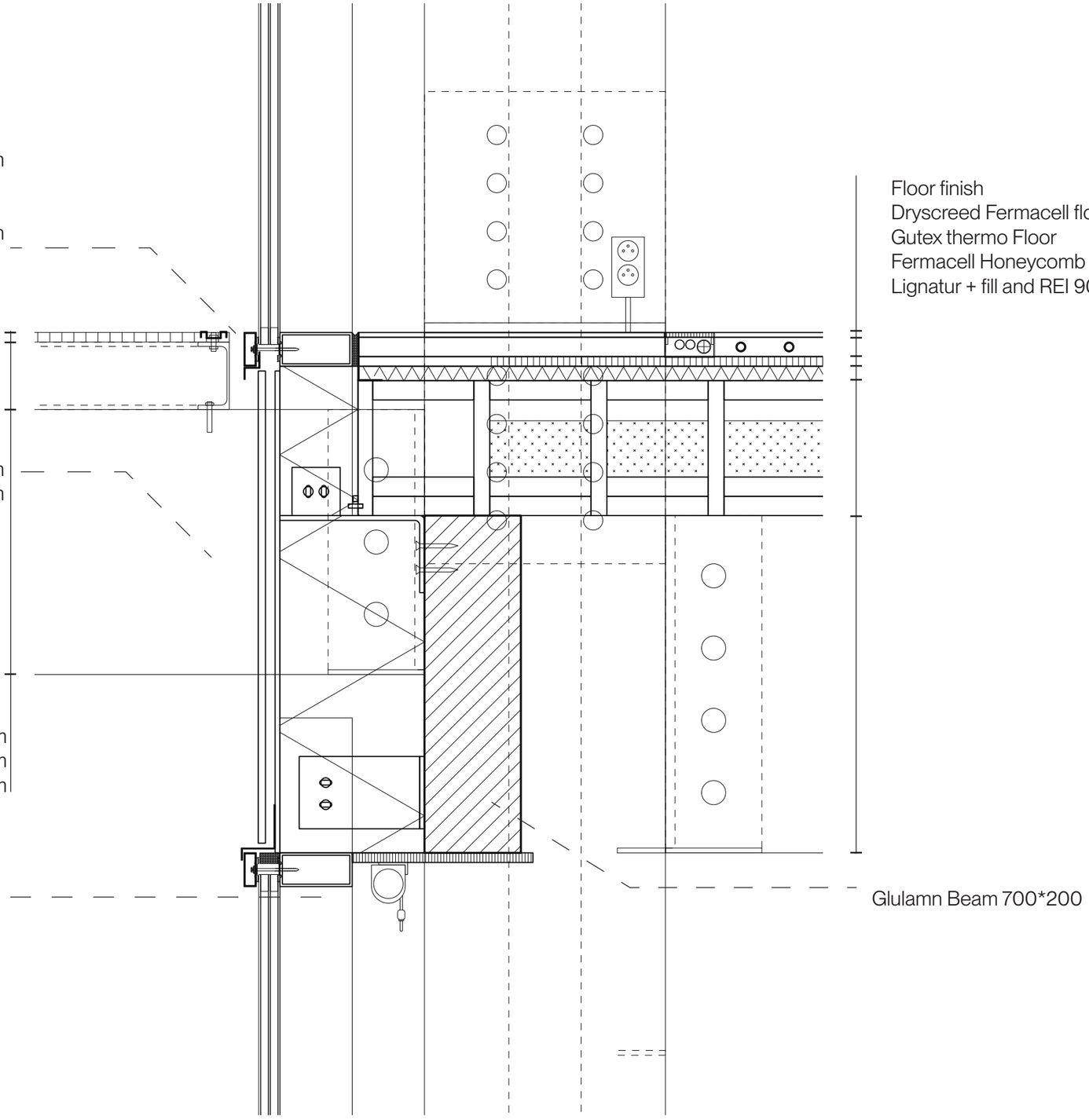
Facade fragment & sectionsundholm/north side

Stabalux Aluminium Window frame 70 * 150mm
Thermur tripple insulating glass
UG 0,3
4,16,4,16,4mm

Metal panel ventilated 15mm
Wooden battens 20*50mm
woodboard
rockwool insulation

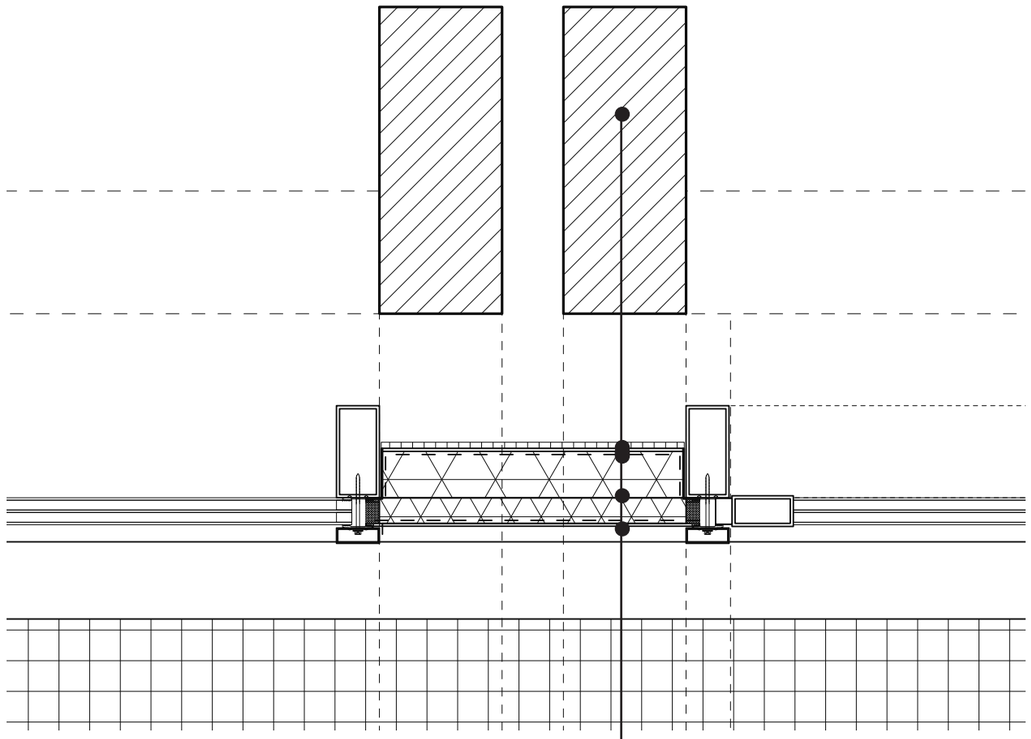
Balcony
Steel grating 20 mm
UPE 140 mm
Glulam beam 500*200 mm

Sun shade



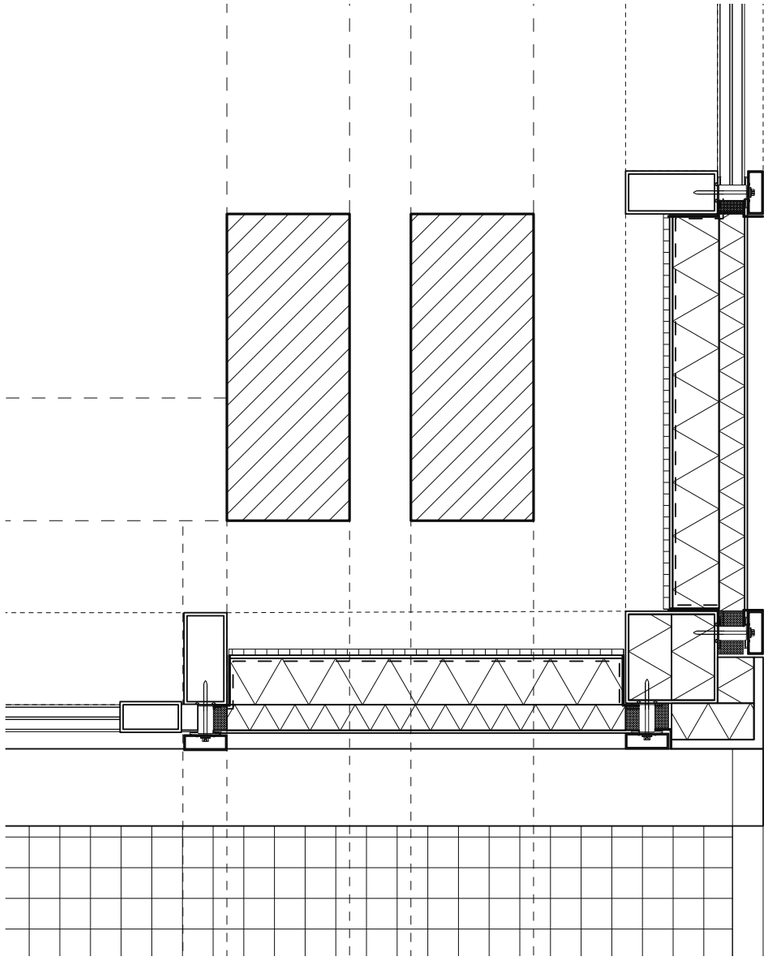
Floor finish 10 mm
Dryscreed Fermacell floor heating 40 mm
Gutex thermo Floor 20mm
Fermacell Honeycomb infill 30mm
Lignatur + fill and REI 90 280mm

Standard vertical detail section 1:10 facade & balcony

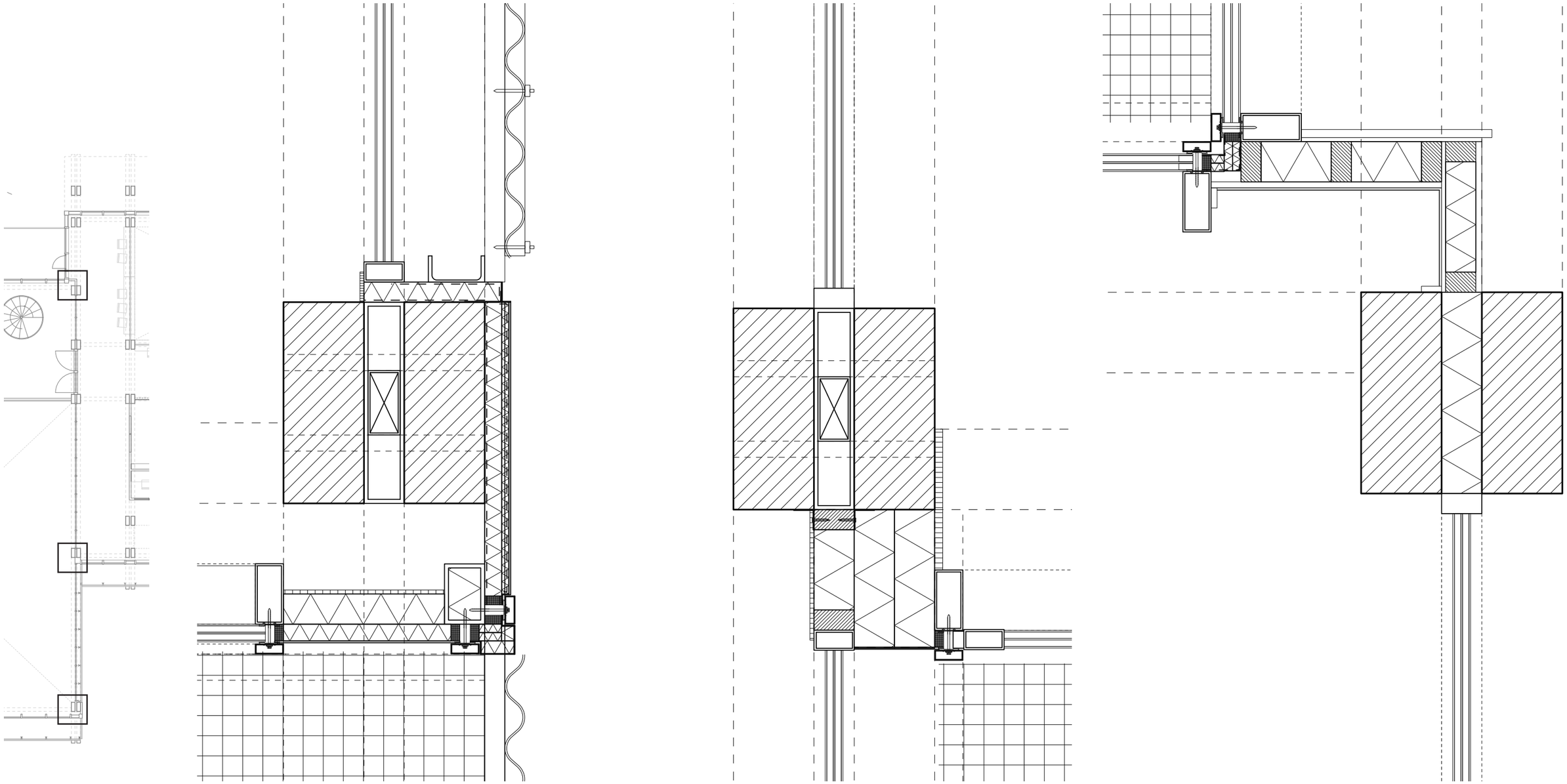


Glulamn column	2*200*500mm
Wood finish	10mm
Vapour barier	20 mm
Rockwool insulation	120 mm
Water retention layer	
Metal plate	4,5 mm

Standard horizontal facade detail 1:10

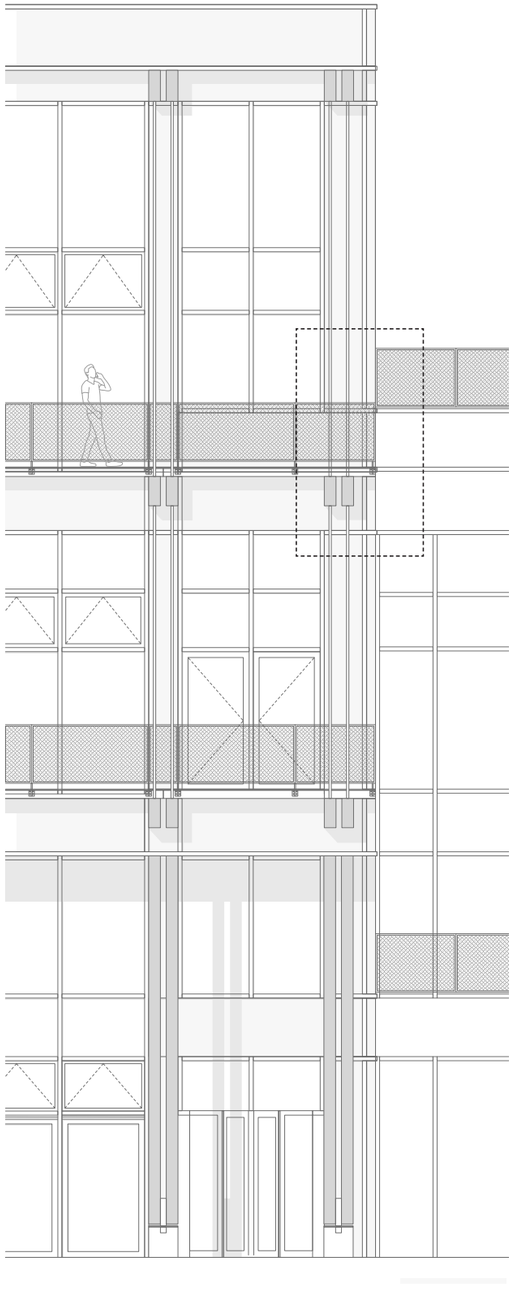


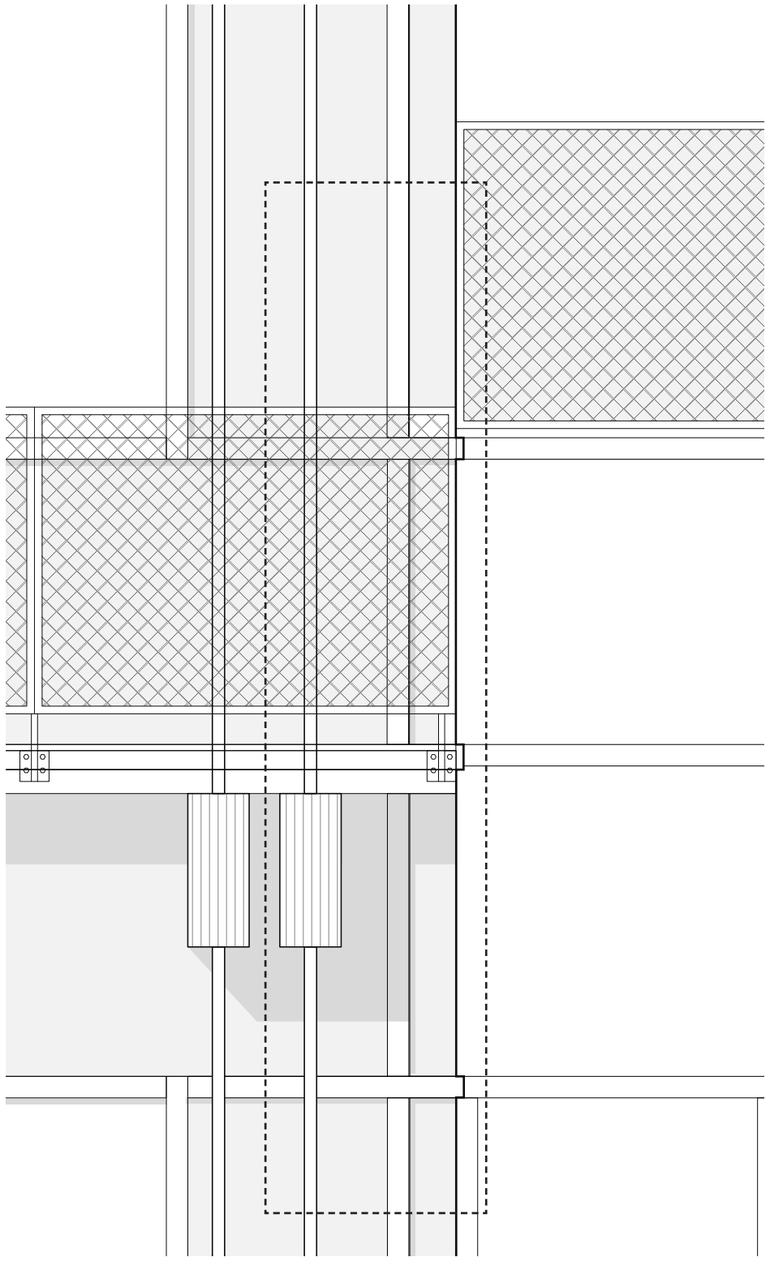
Standard horizontal corner detail 1:10

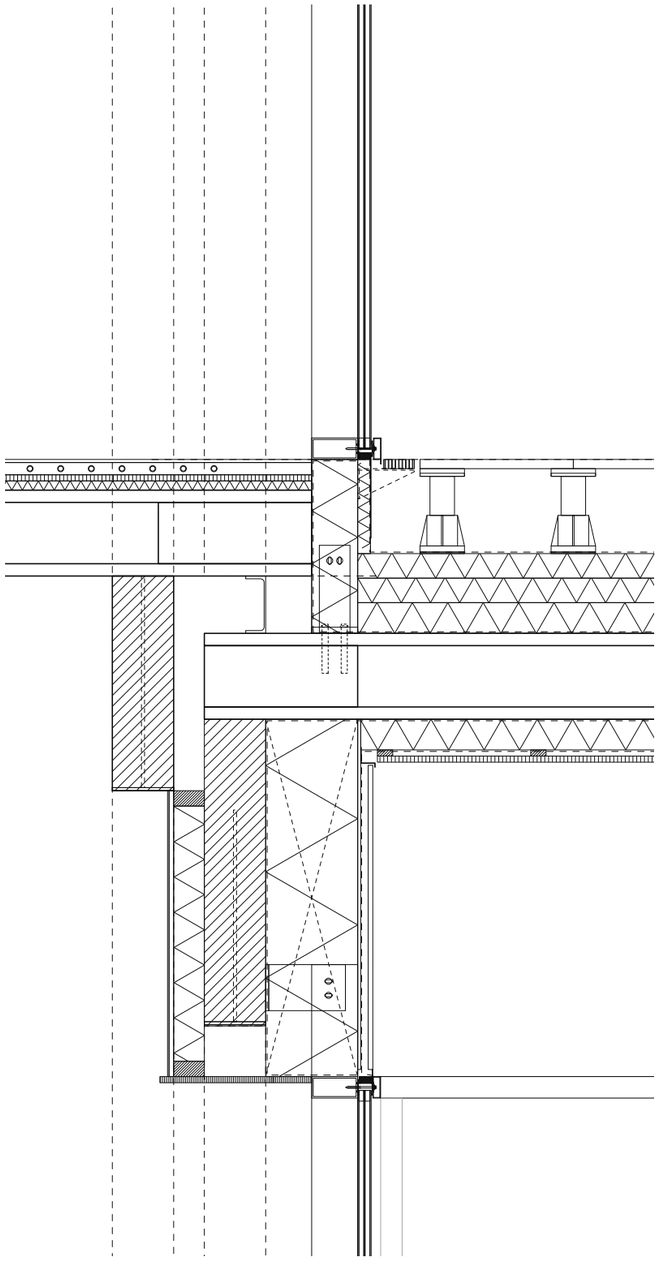


Large hall sequence

Continuation of the system throughout the building







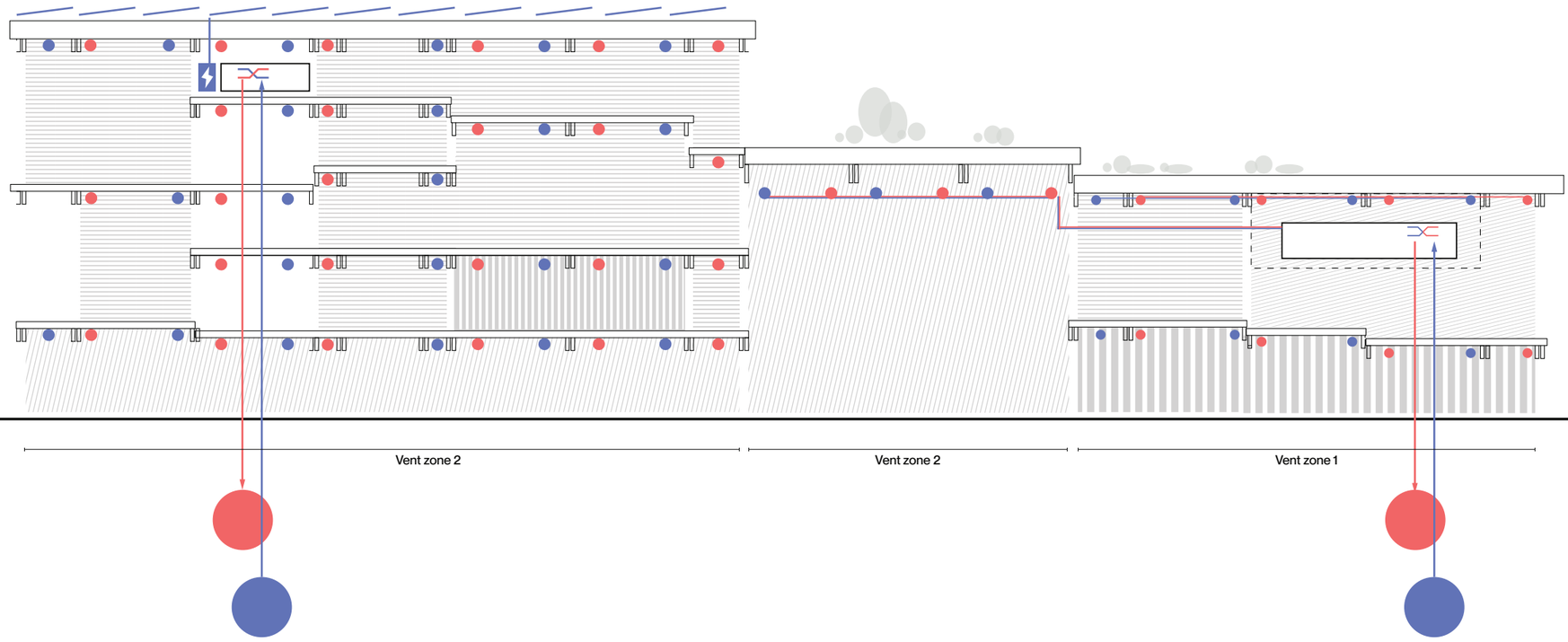
Maintaining facade continuity with differing floorheights

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

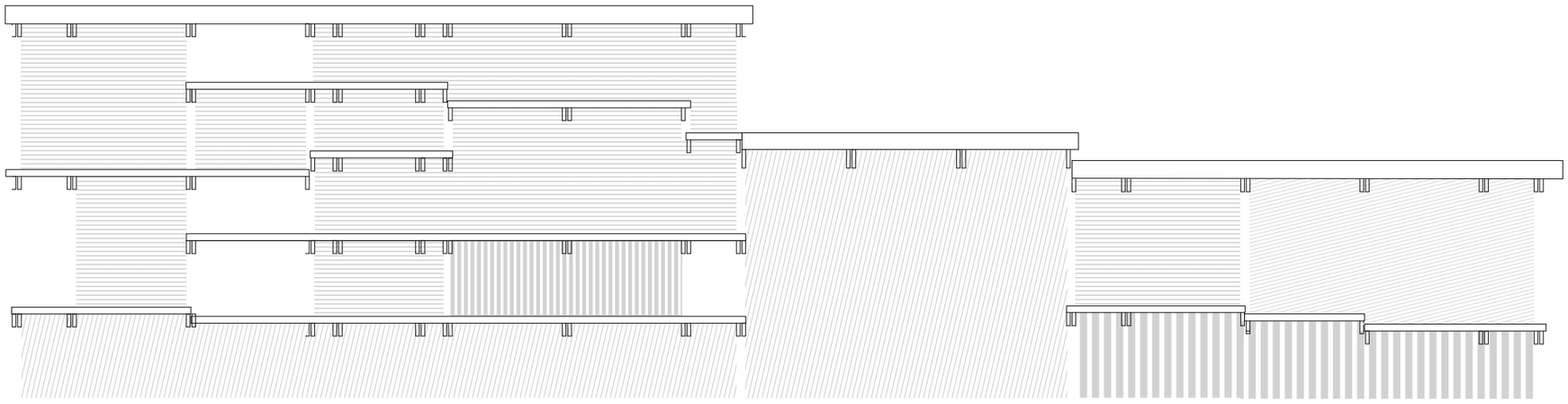
Green roof
Sedum & fixed plants

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

WEST

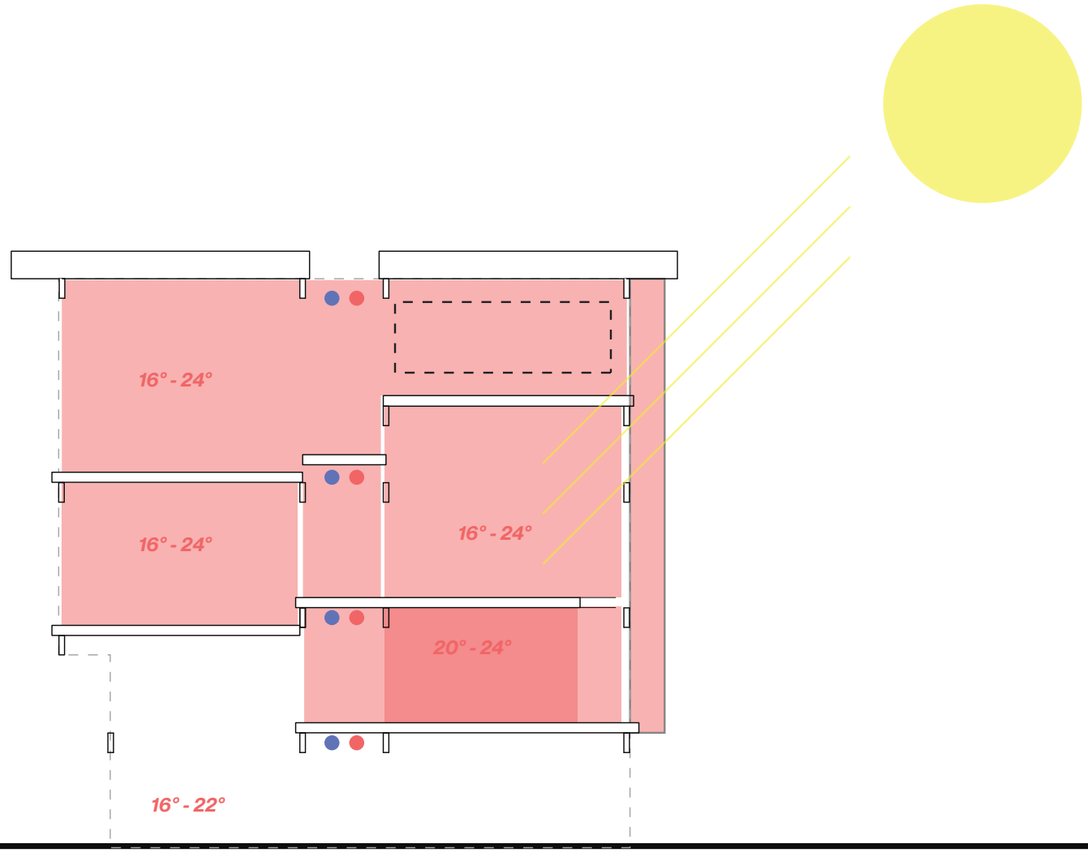
SUMMER

General Climate components



Community Kitchen & Dining area	**zone 1,** mechanical ventilation + natural ventilation Temp 19°/24°, heated in winter
Lecture Hall	**zone 2,** mechanical ventilation + natural ventilation Temp 18°/24°, heated in winter when in use
Mediatheque, studyspaces, meeting rooms	**zone 3,** mechanical ventilation + natural ventilation Temp 20°/24° - mechanical + natural, heated, fully climatizable
Large Hall & the ground floor	**zone 4,** mechanical ventilation + natural ventilation Temp 16°/28°, unheated & uncooled, local place heated
Flex workplaces, cafe & library, undetermined spaces	**zone 5,** mechanical ventilation + natural ventilation Temp 19°/26°, minimally heated and cooled

Compartmentalizing the indoor climate



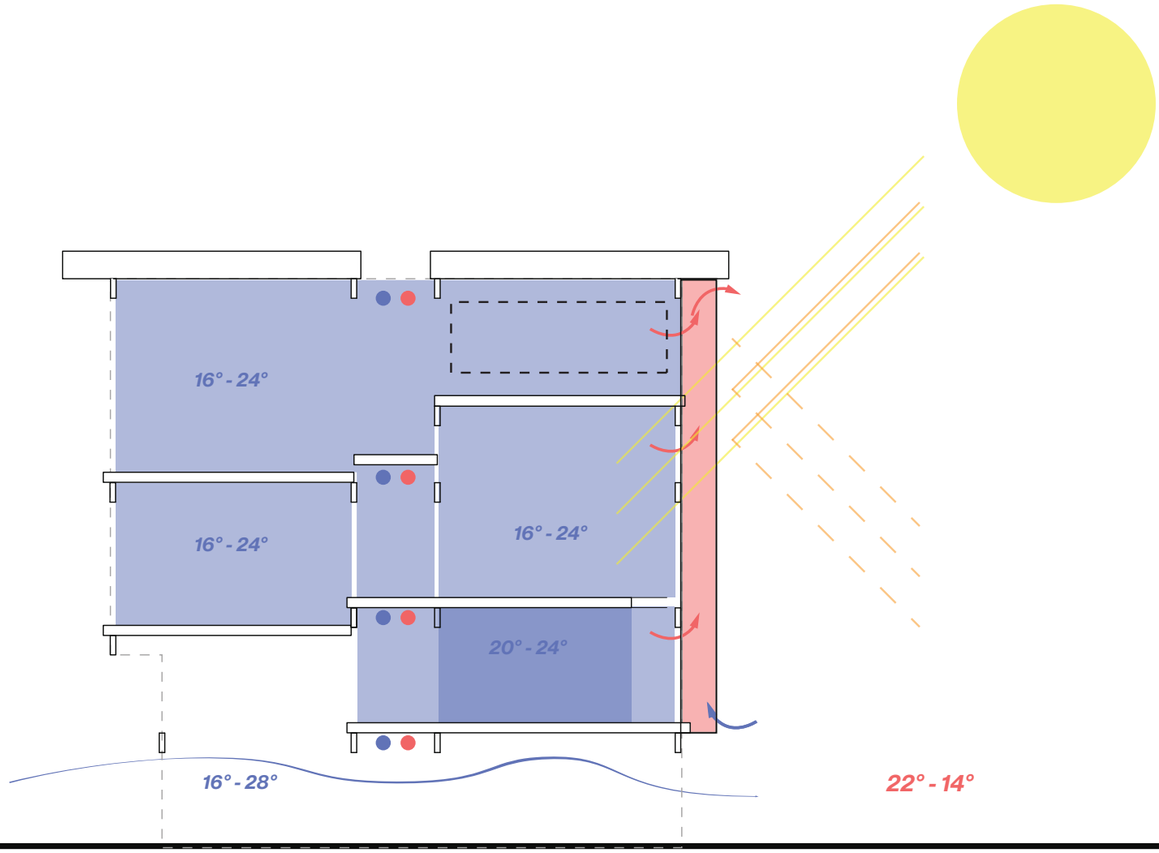
North South

WINTER

Double skin facade for ventilation

Aditional heating through floor heating

Heat exchange unit in



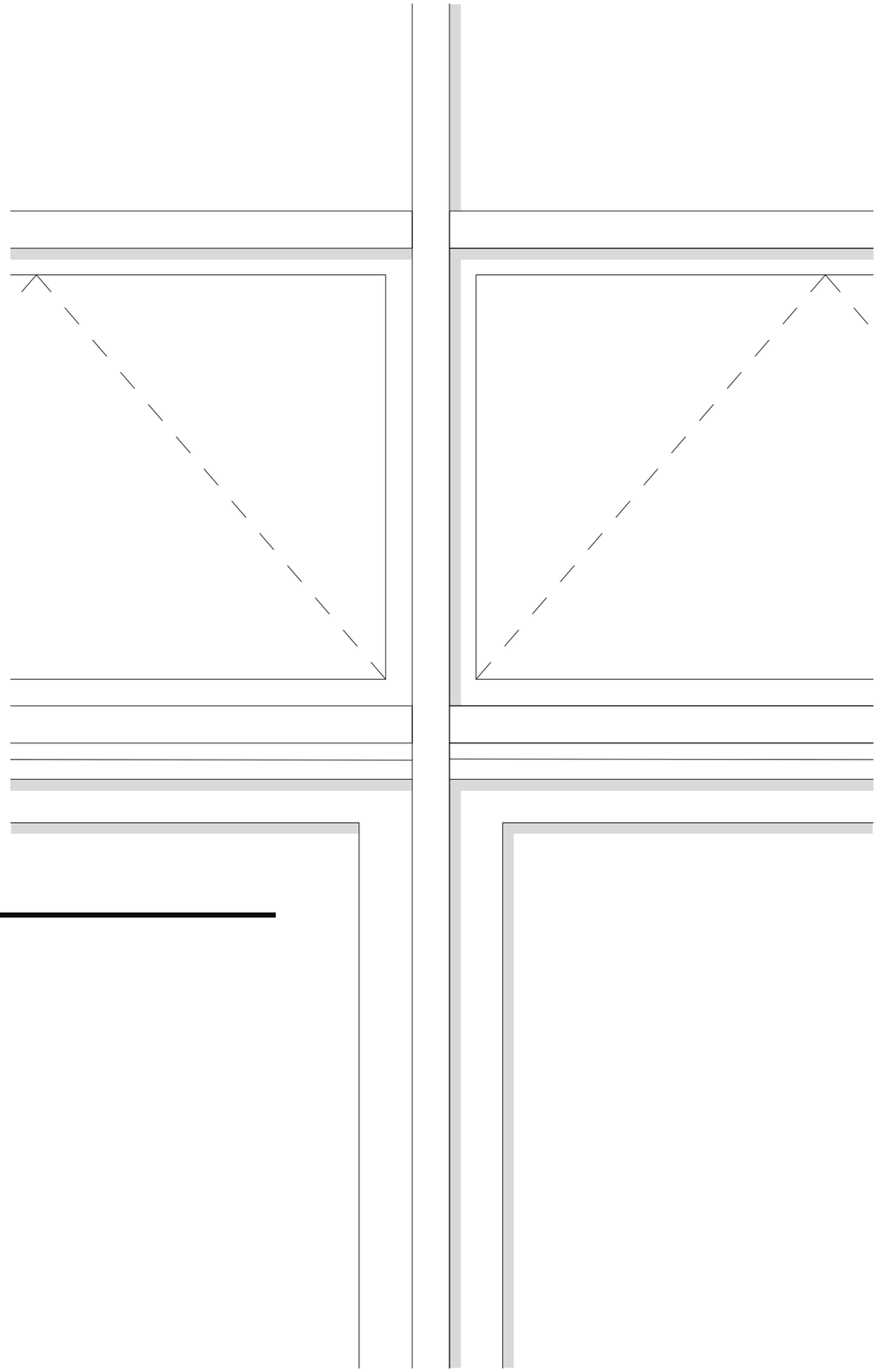
North South

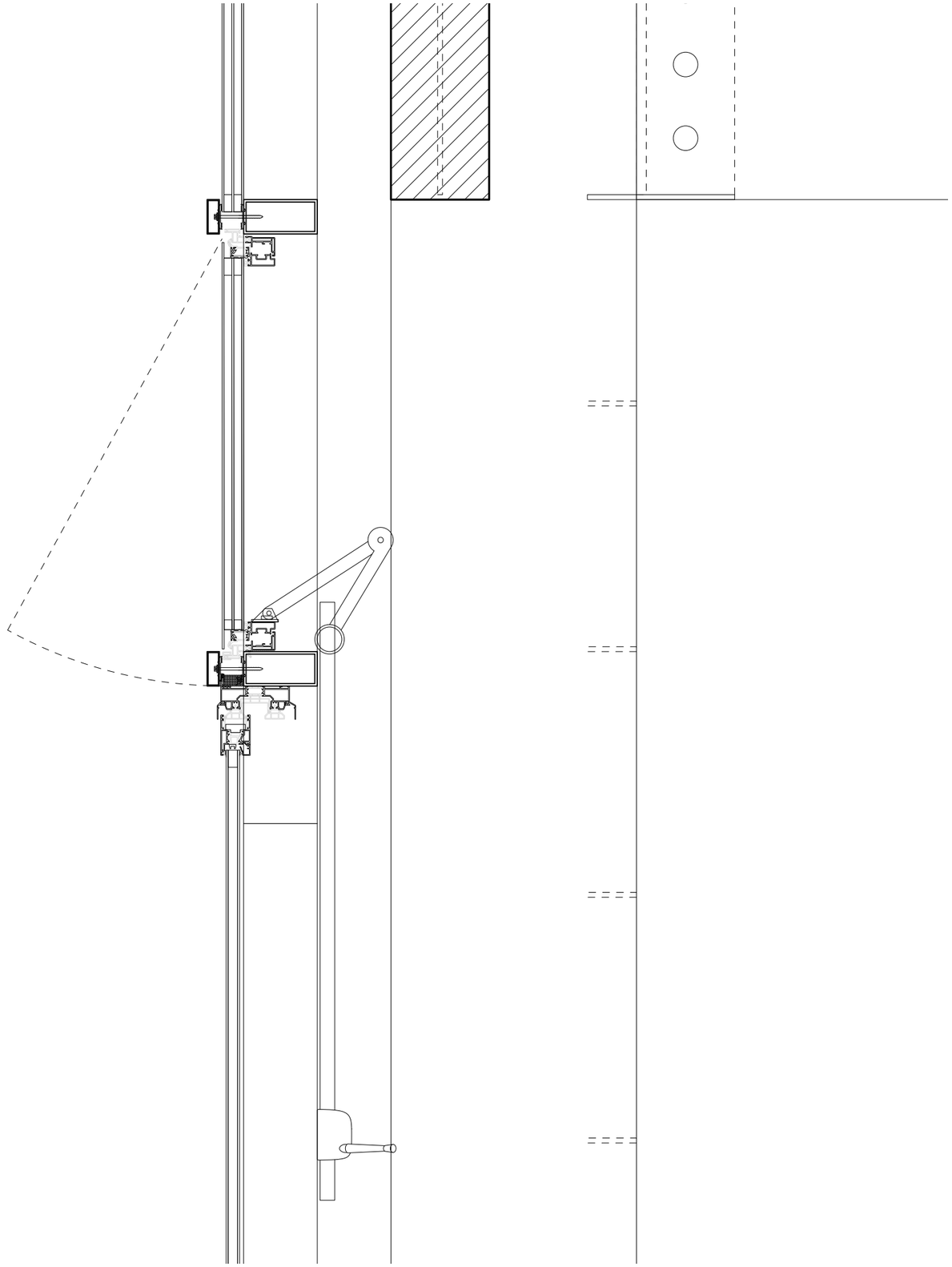
SUMMER

Double skin facade for ventilation

Openable windows for natural ventilation

Aditional cooling through ventilation

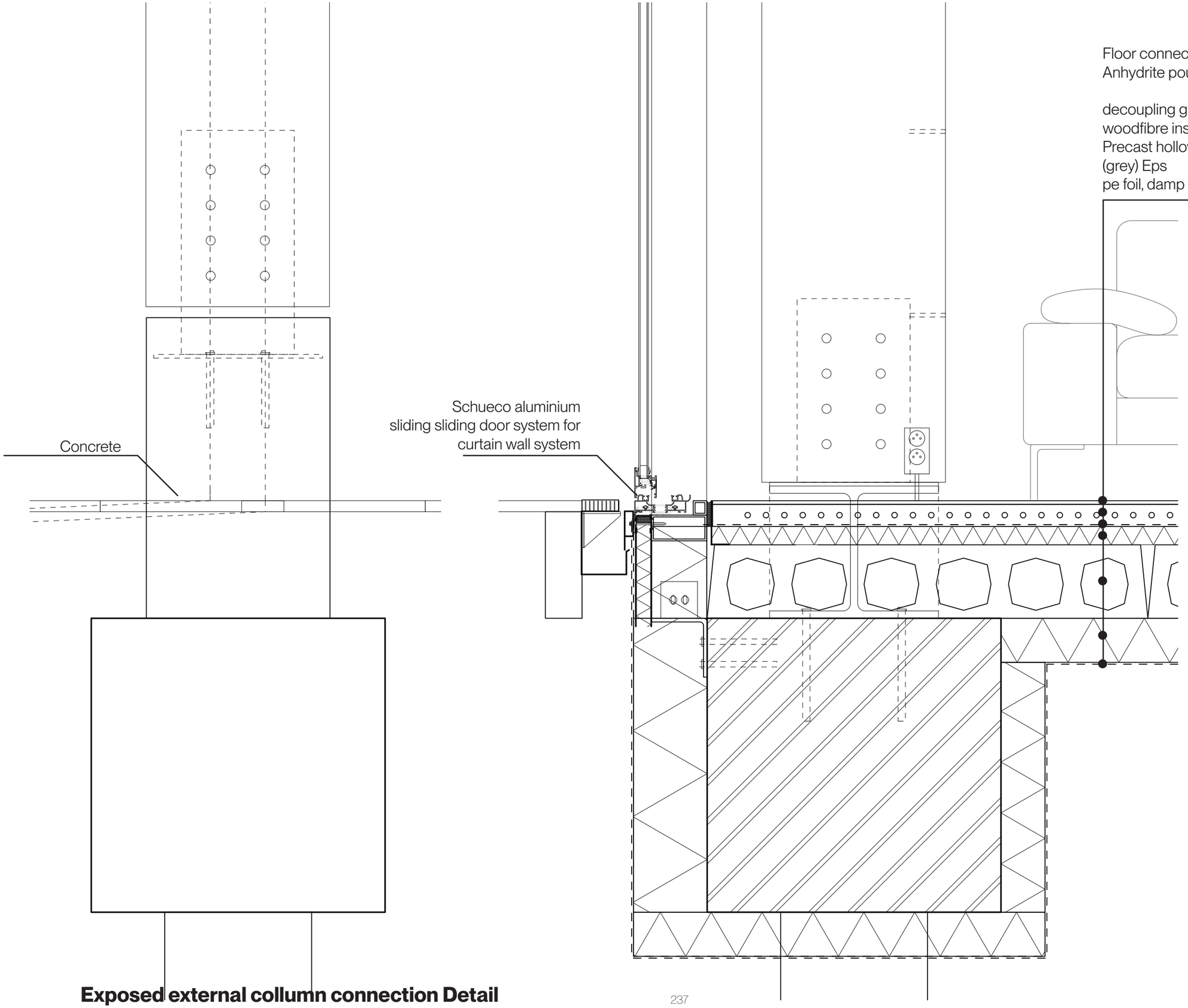






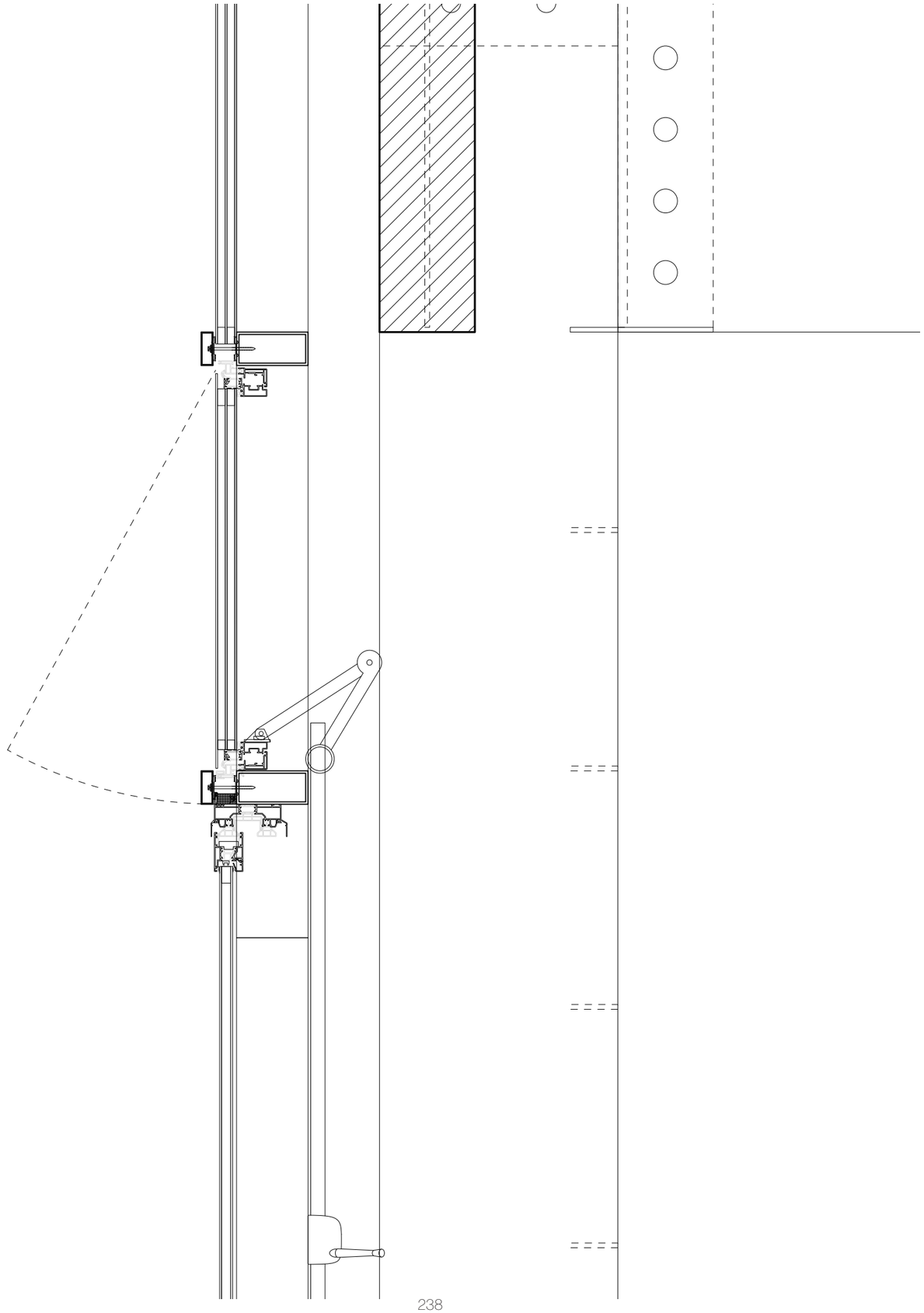
11. ADDITIONAL DETAILS P4

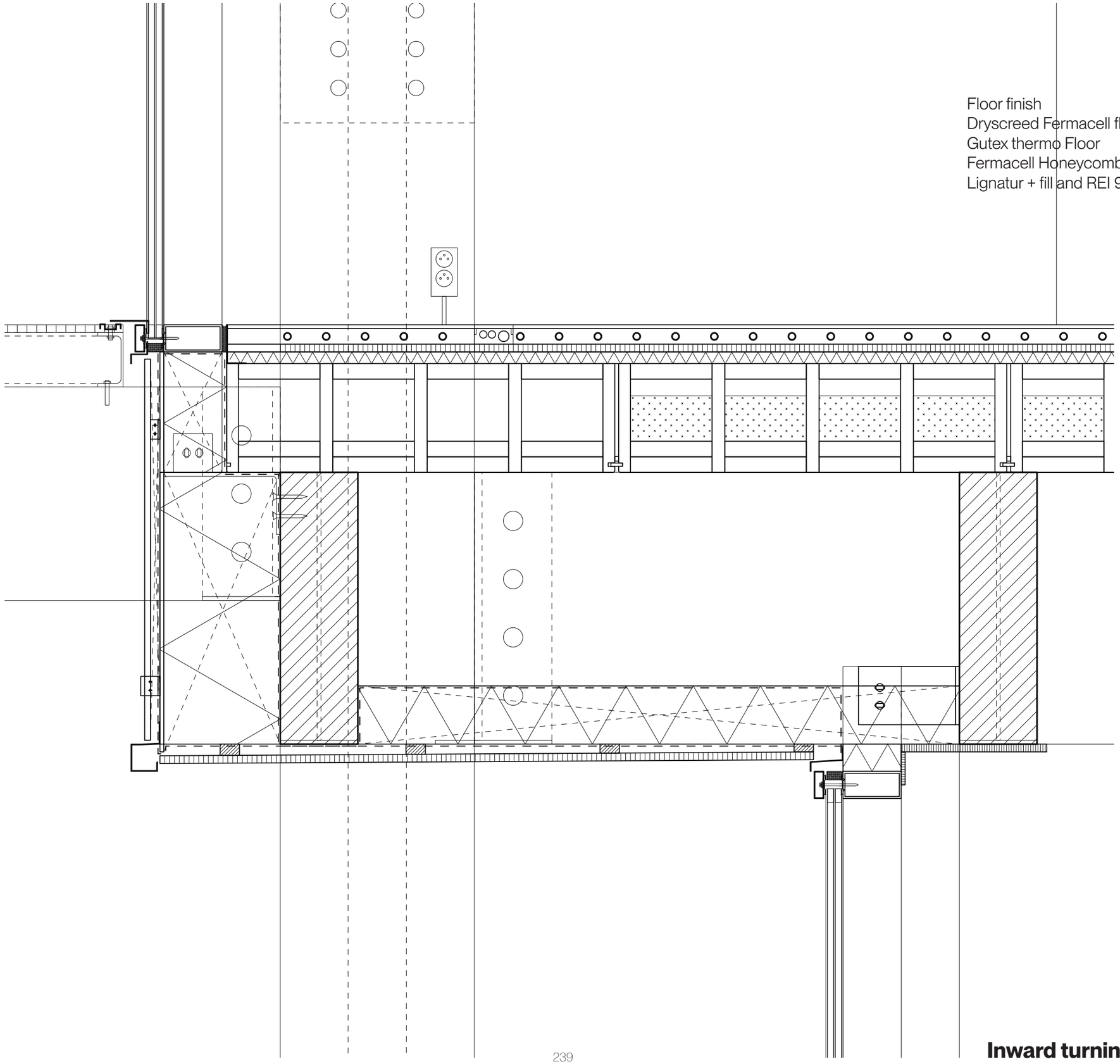
DETAIL BOOKLET



Exposed external collumn connection Detail

Ground Connection





Floor finish	10 mm
Dryscreed Fermacell floor heating	40 mm
Gutex thermo Floor	20mm
Fermacell Honeycomb infill	30mm
Lignatur + fill and REI 90	280mm

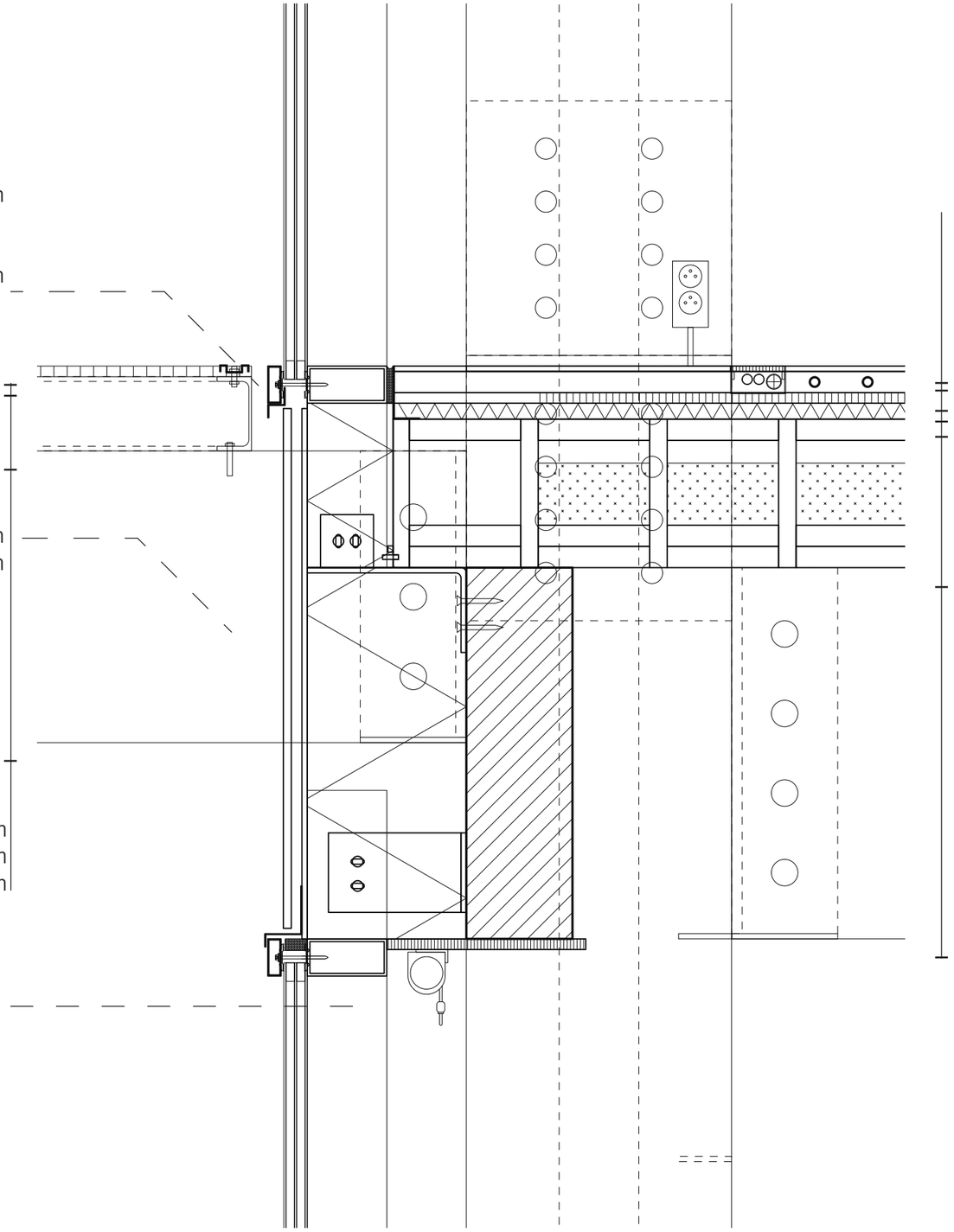
Inward turning corner vertical 1:10

Stabalux Aluminium Window frame 70 * 150mm
Thermur tripple insulating glass
UG 0,3
4,16,4,16,4mm

Metal panel ventilated 15mm
Wooden battens 20*50mm
woodboard
rockwool insulation

Balcony
Steel grating 20 mm
UPE 140 mm
Glulam beam 500*200 mm

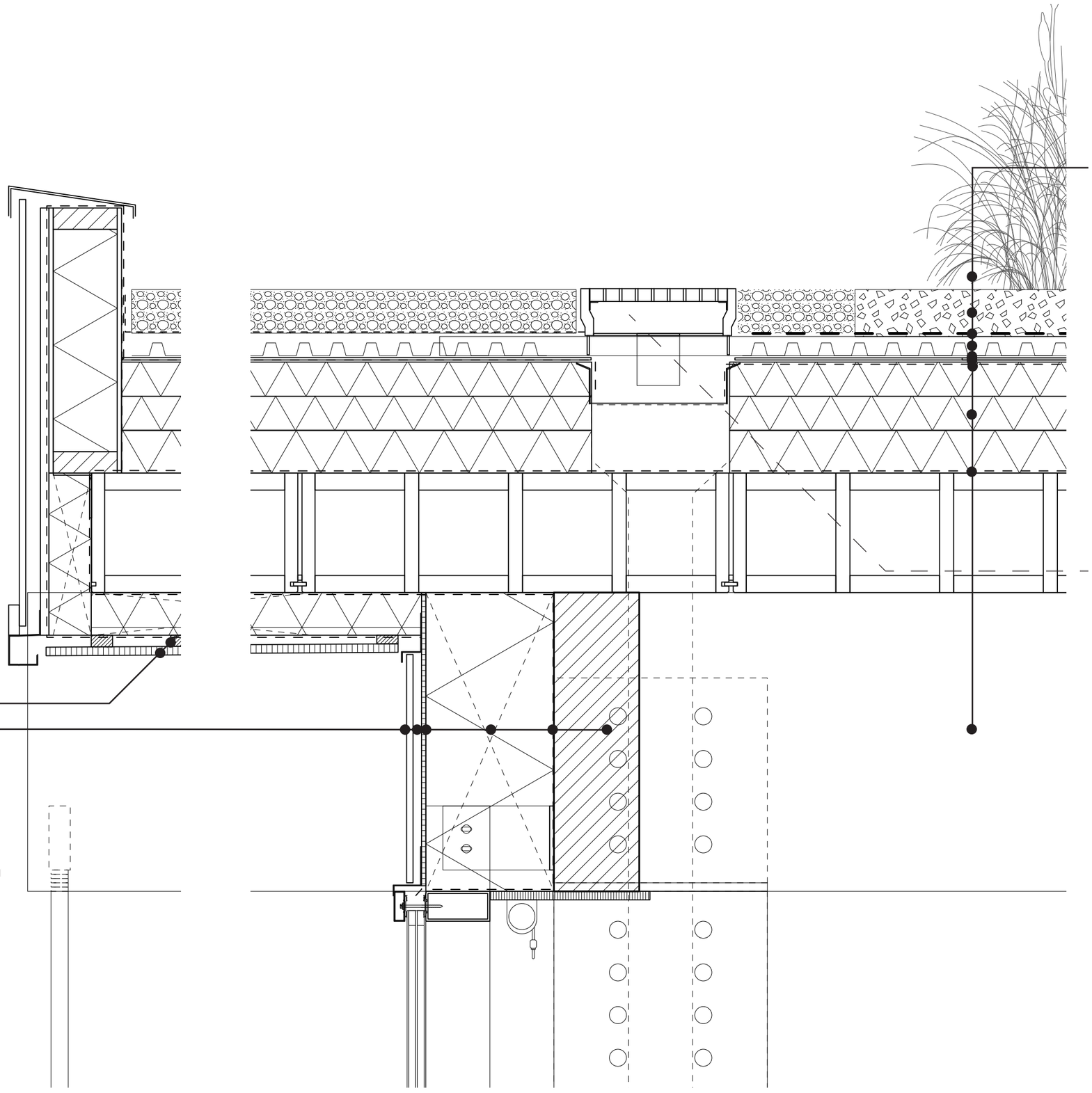
Sun shade



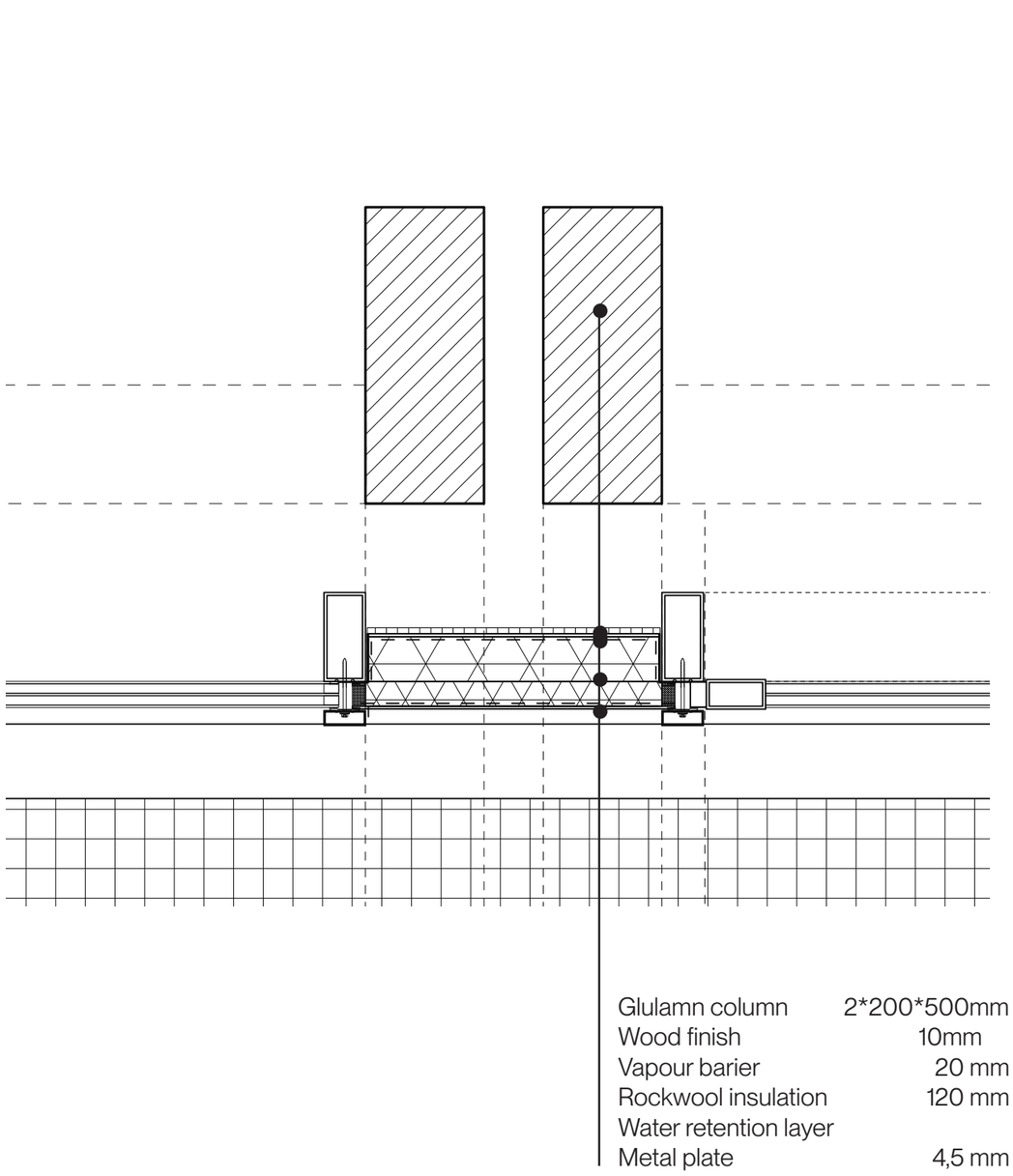
Floor finish 10 mm
Dryscreed Fermacell floor heating 40 mm
Gutex thermo Floor 20mm
Fermacell Honeycomb infill 30mm
Lignatur + fill and REI 90 280mm

Glulamn Beam 700*200

Standard floor with balcony detail

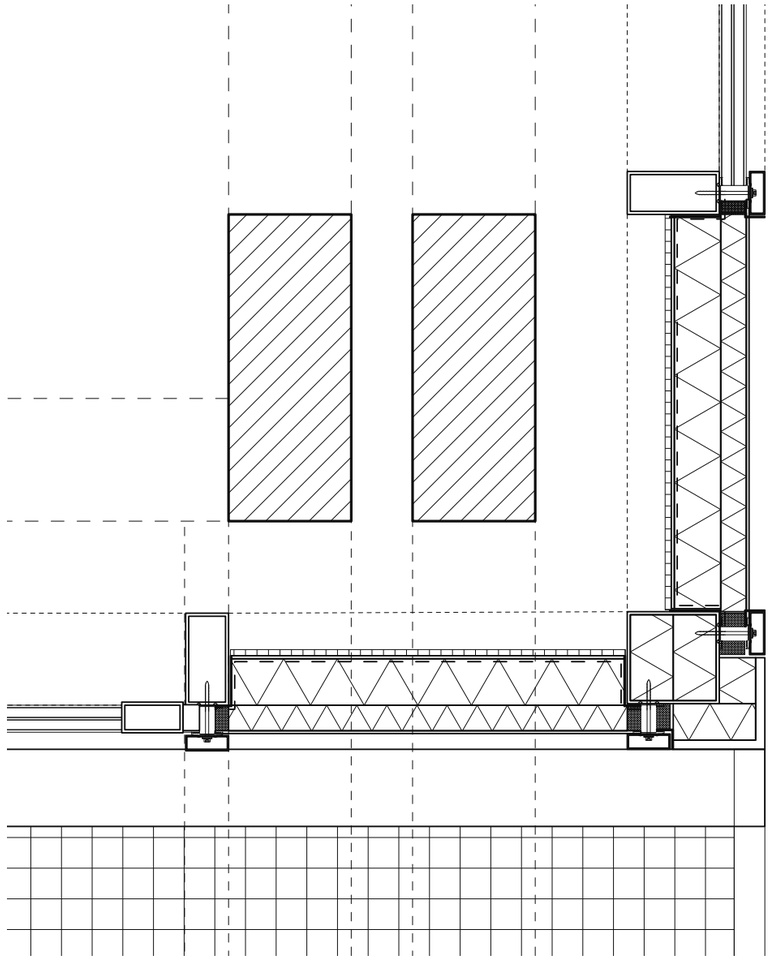


Roof detail 1:10 vertical

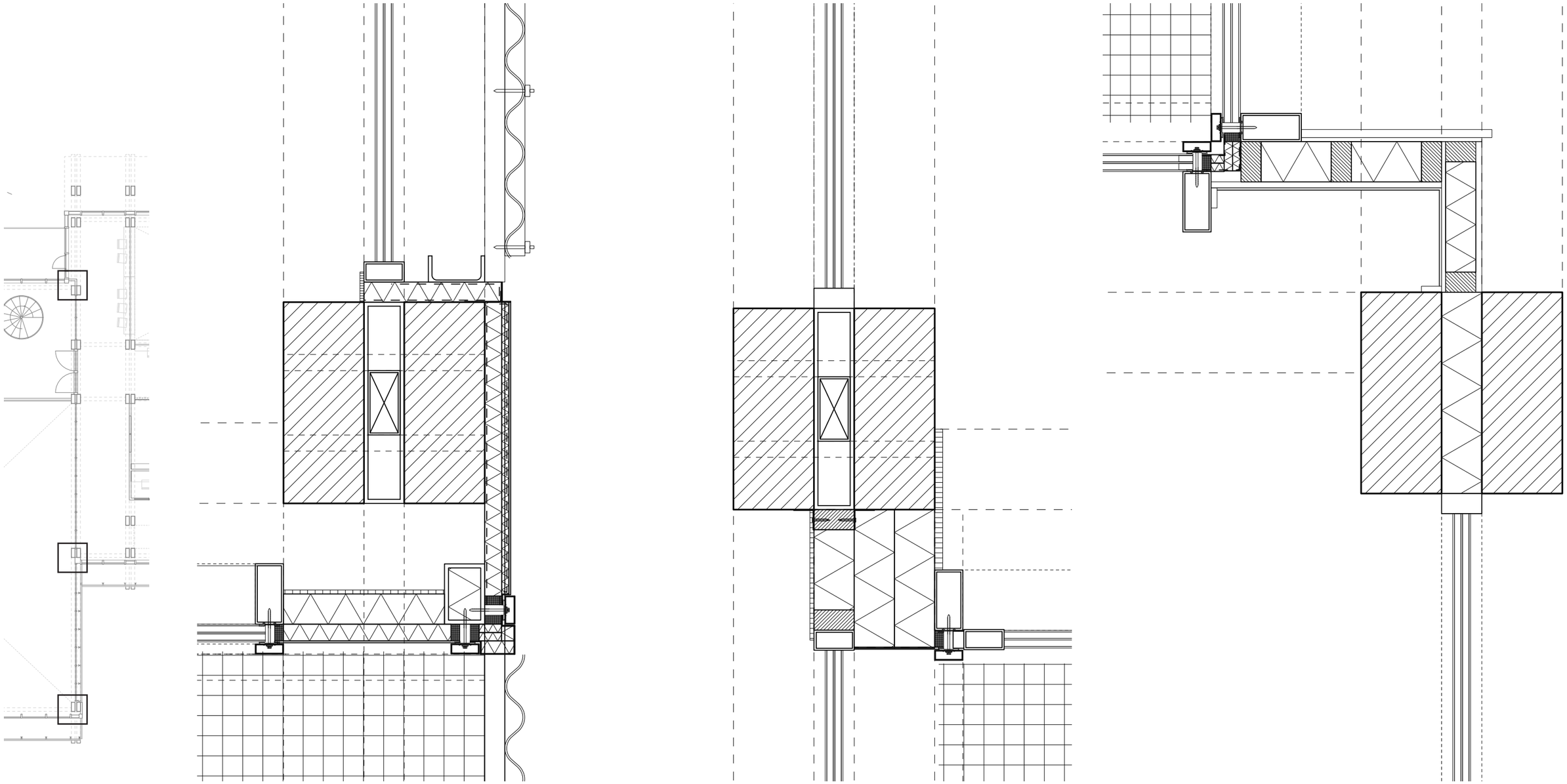


Glulamn column	2*200*500mm
Wood finish	10mm
Vapour barier	20 mm
Rockwool insulation	120 mm
Water retention layer	
Metal plate	4,5 mm

Standard Solutions for facade



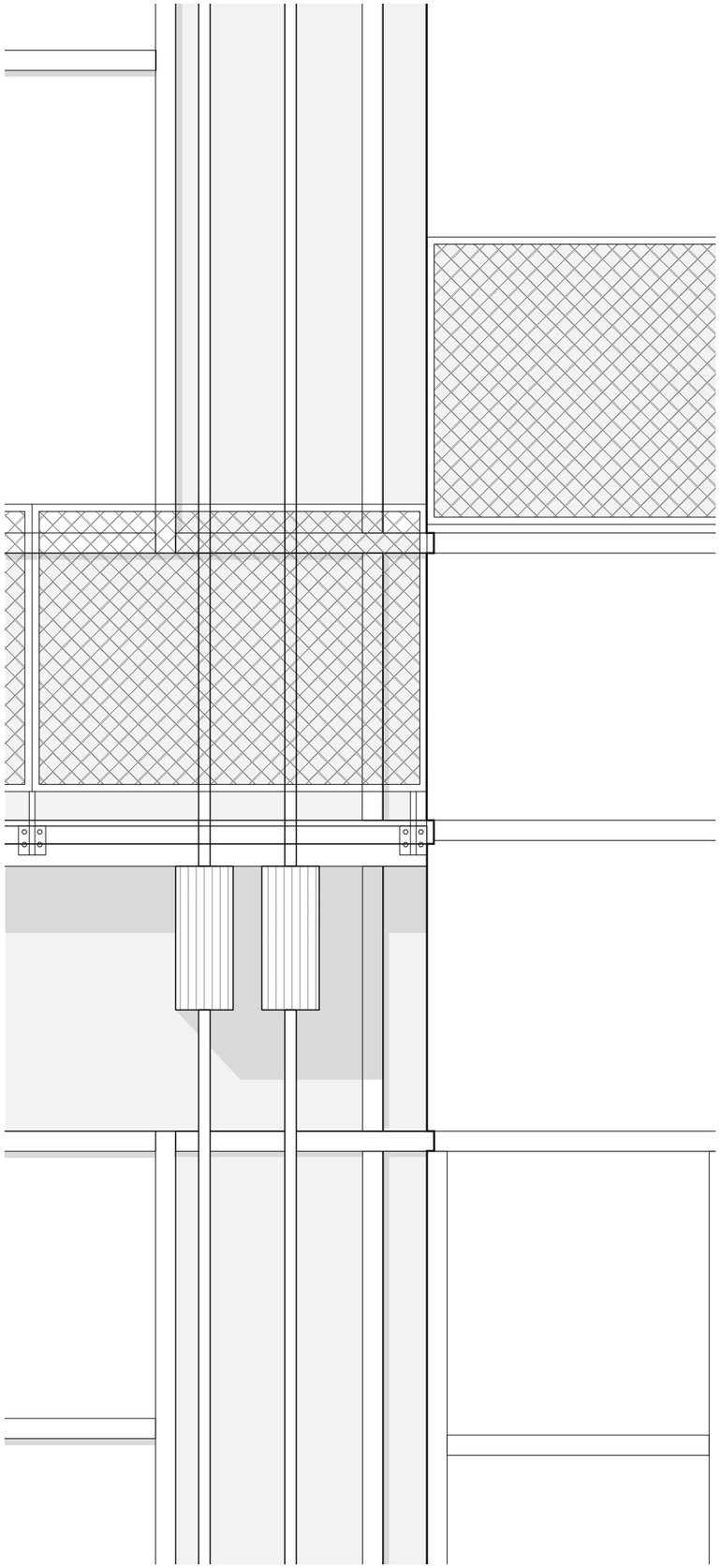
Standard corner solution

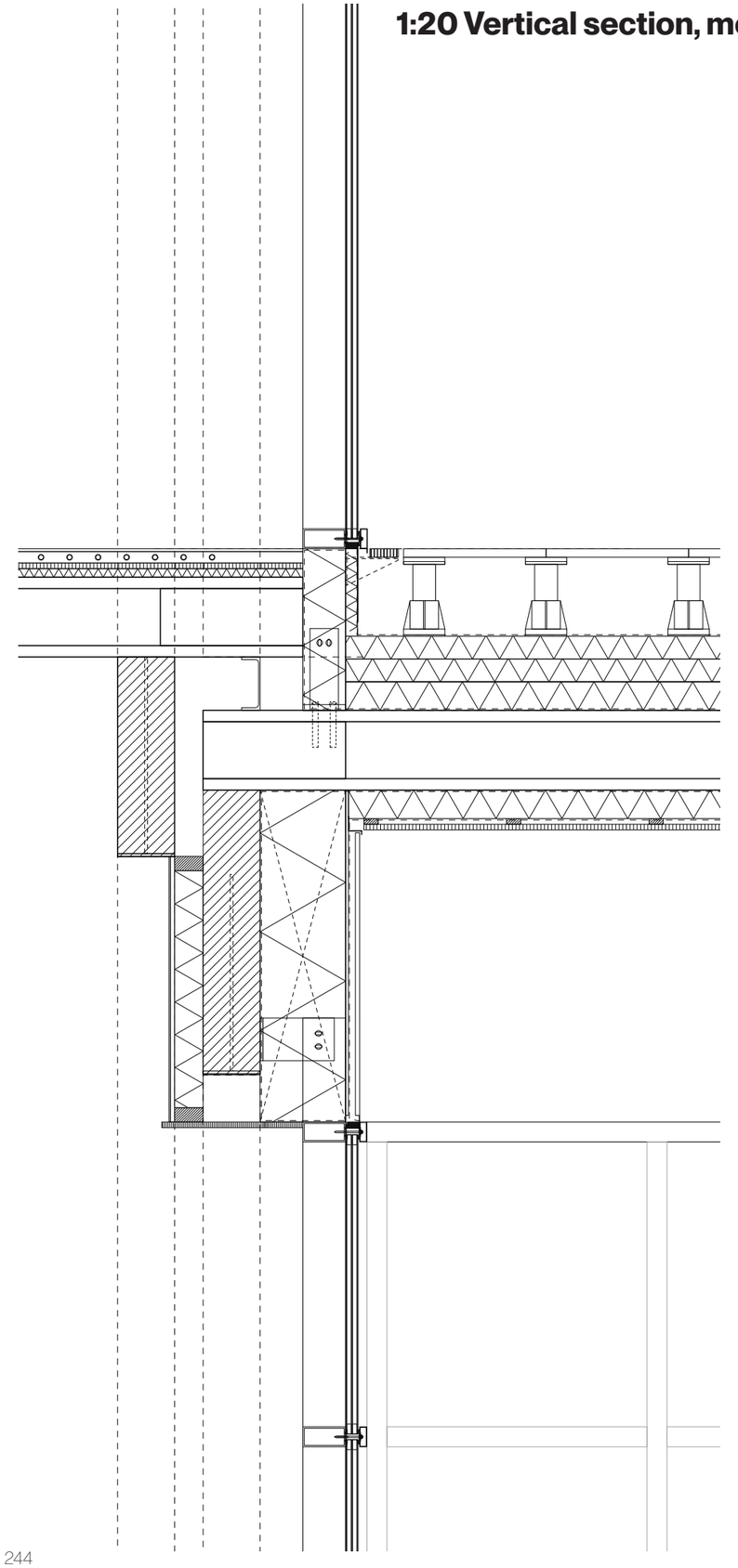


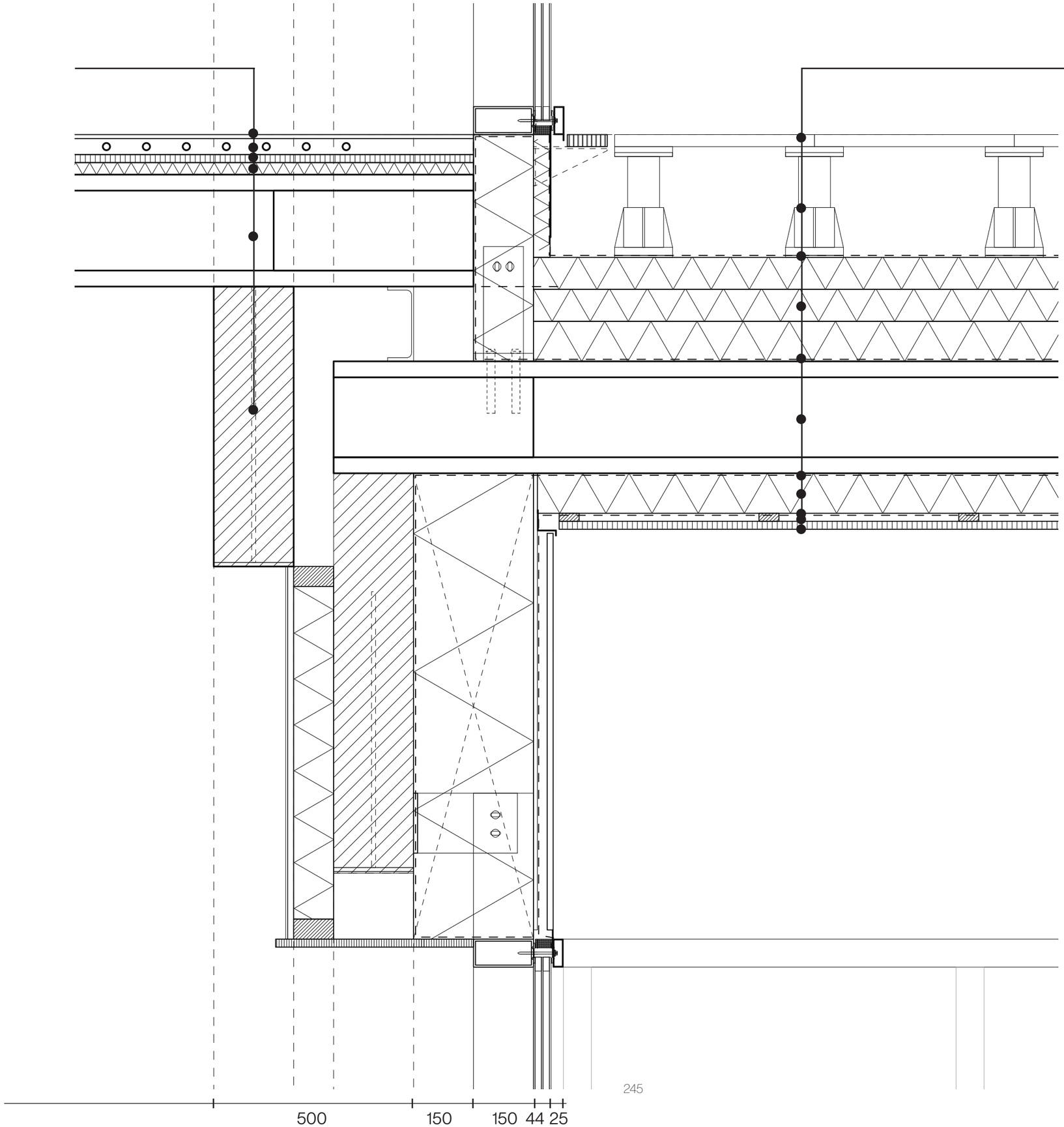
Large hall sequence

Continuation of the system through

1:20 Vertical section, meeting point large hall & rest of building

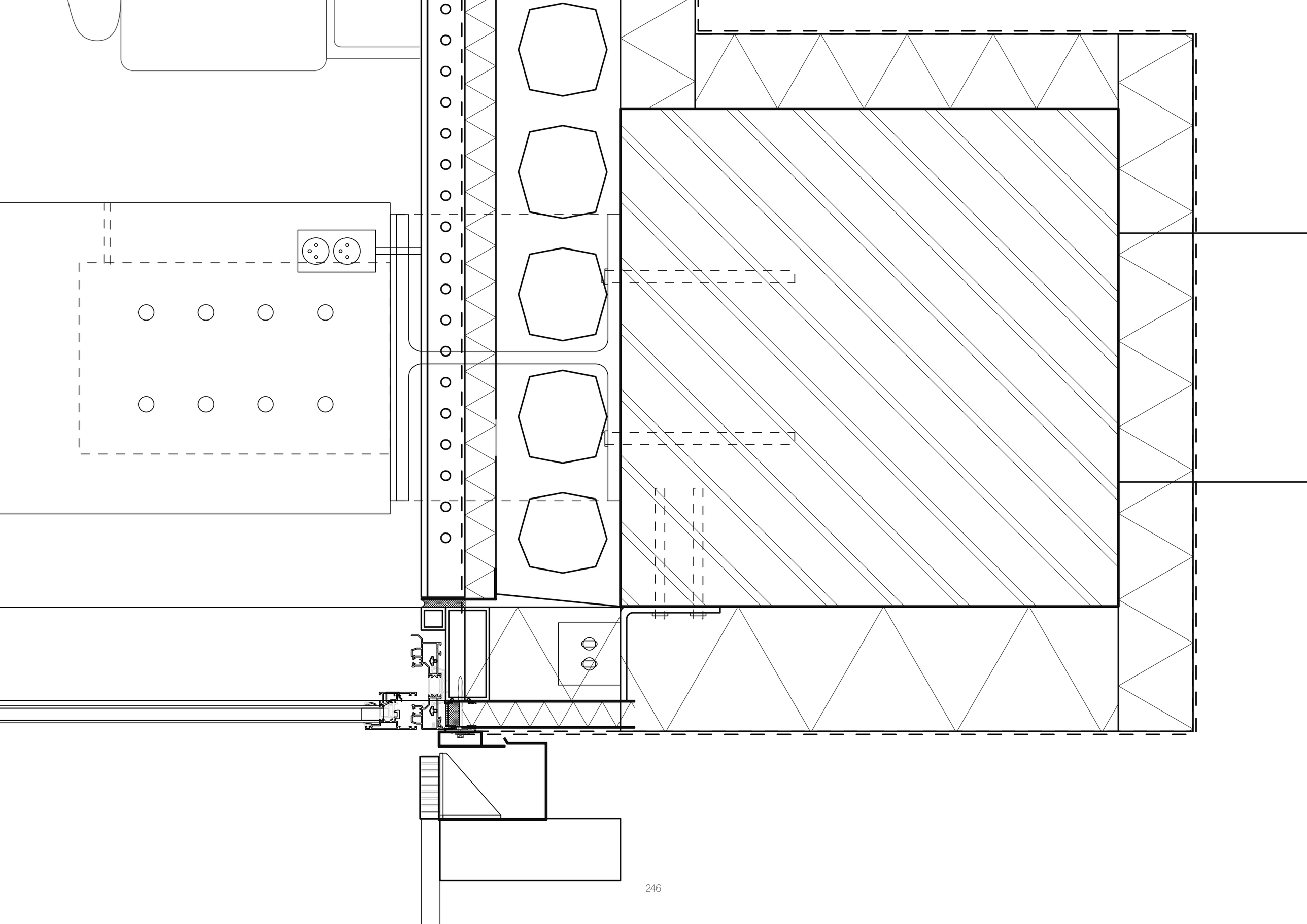


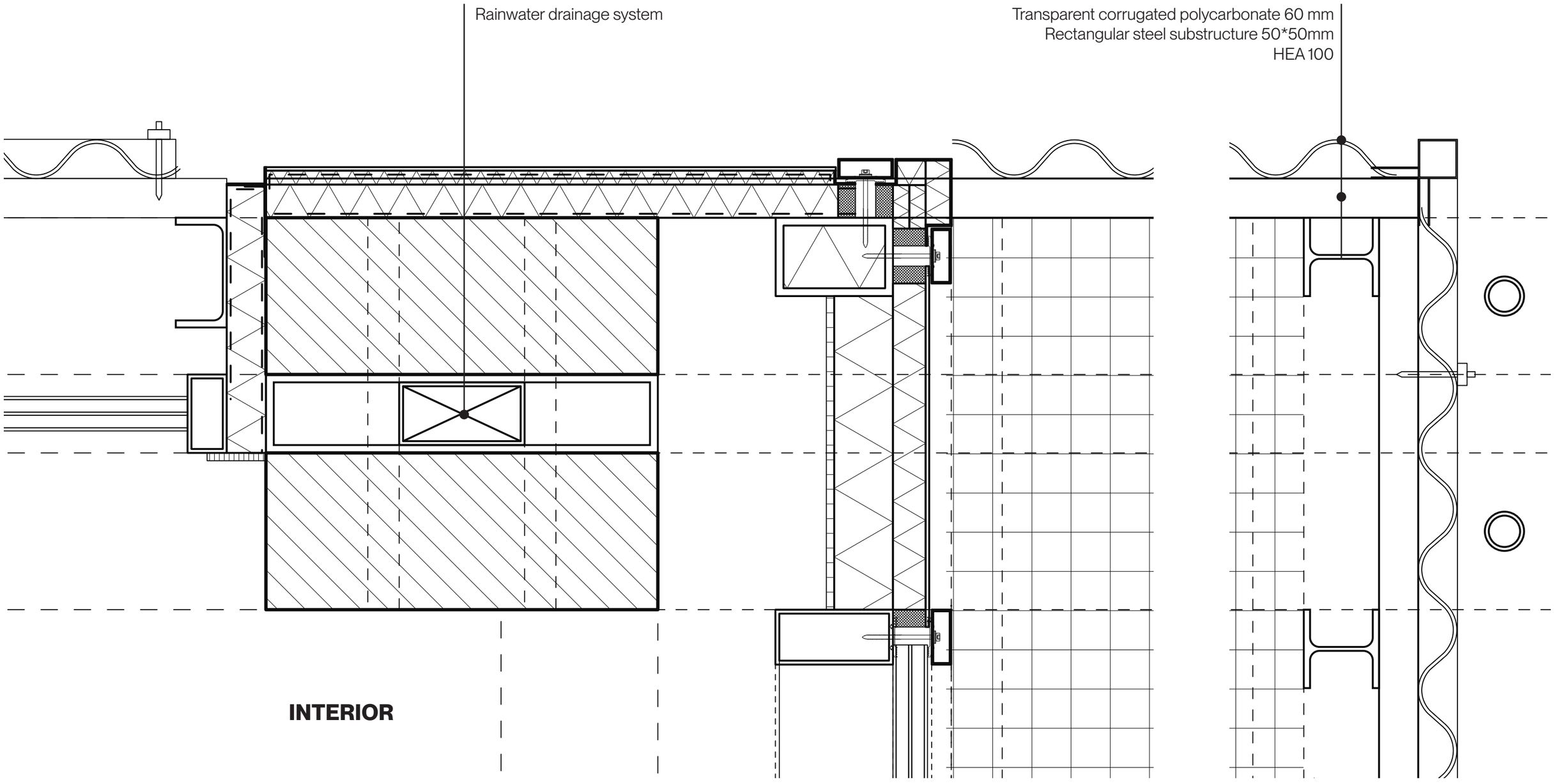




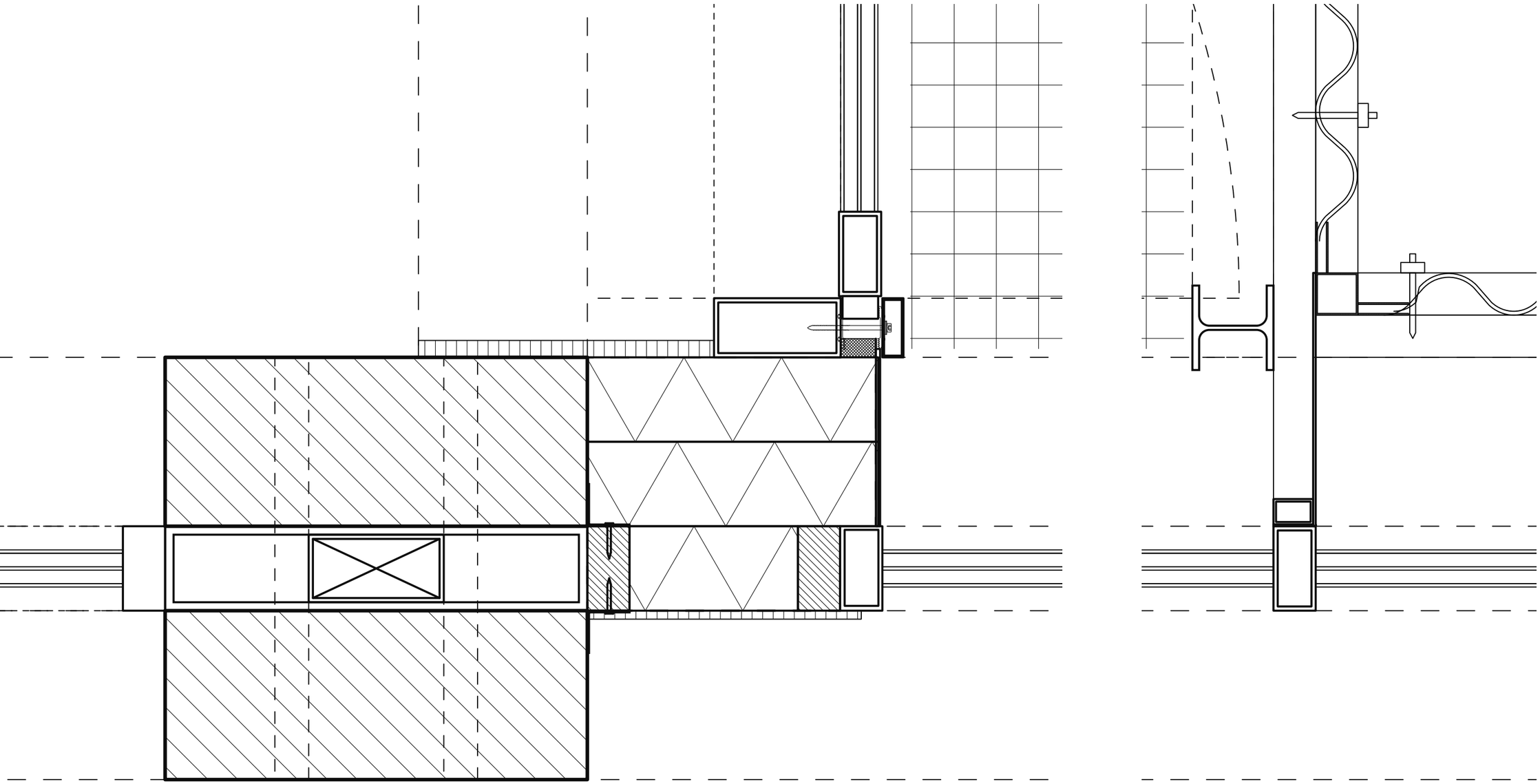
Stone tiles	30m
Fiberplast circular Tilesuport 45-950mm	
Waterproof	
vapor-permeable membrane	
Rhinoxx D tripple layer	100,80,80 mm
Vapor barrier	
Lignatur	280mm
Vapor barrier	
rockwool insulation	100mm
waterproof vapor permeable membrane	
wooden battons	20*50
Woodplate finish, treated	20 mm

Roof slope 2% for intensive use: 20 mm/m
Total height difference = 9 × 20 mm = 180

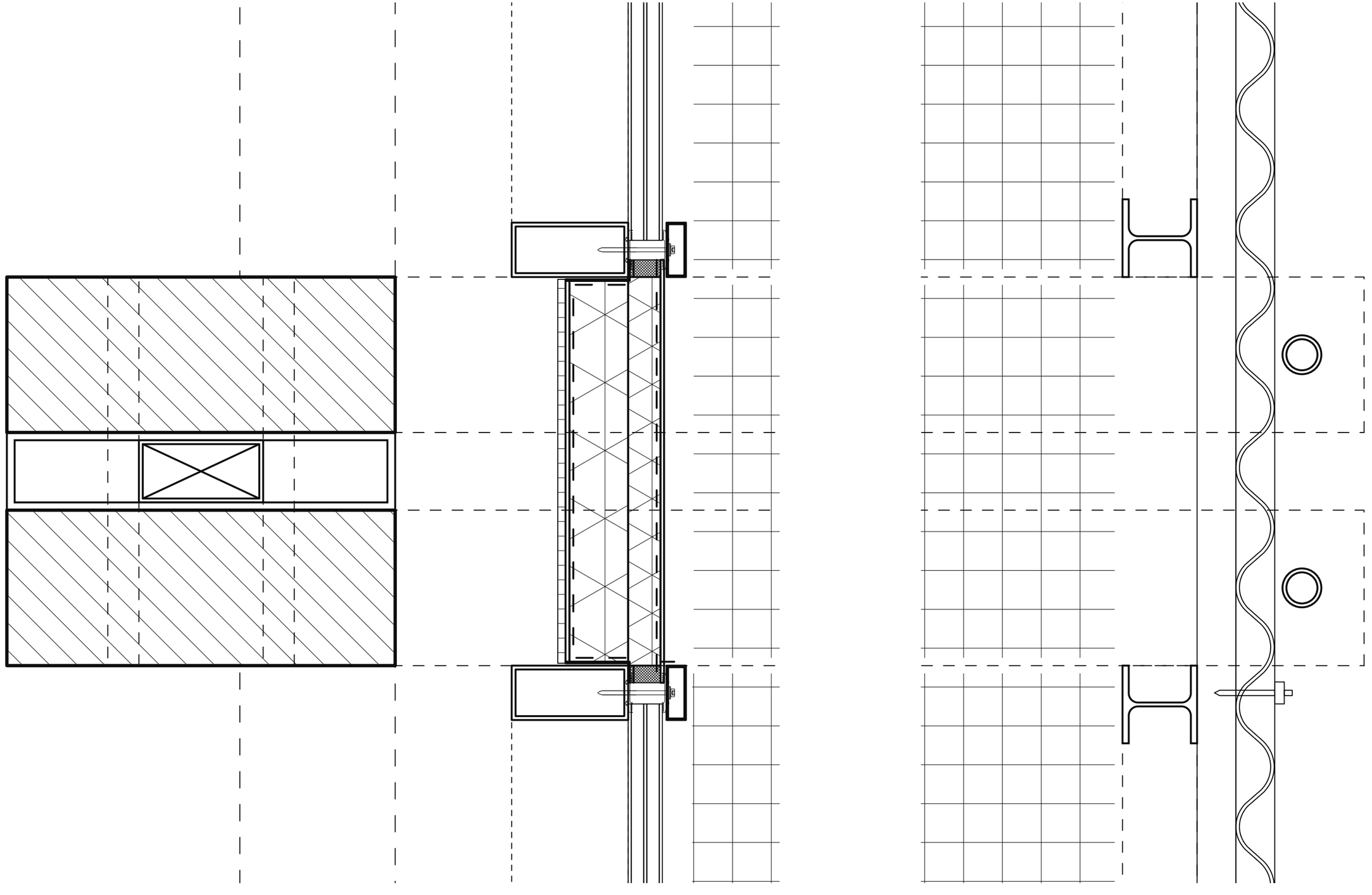




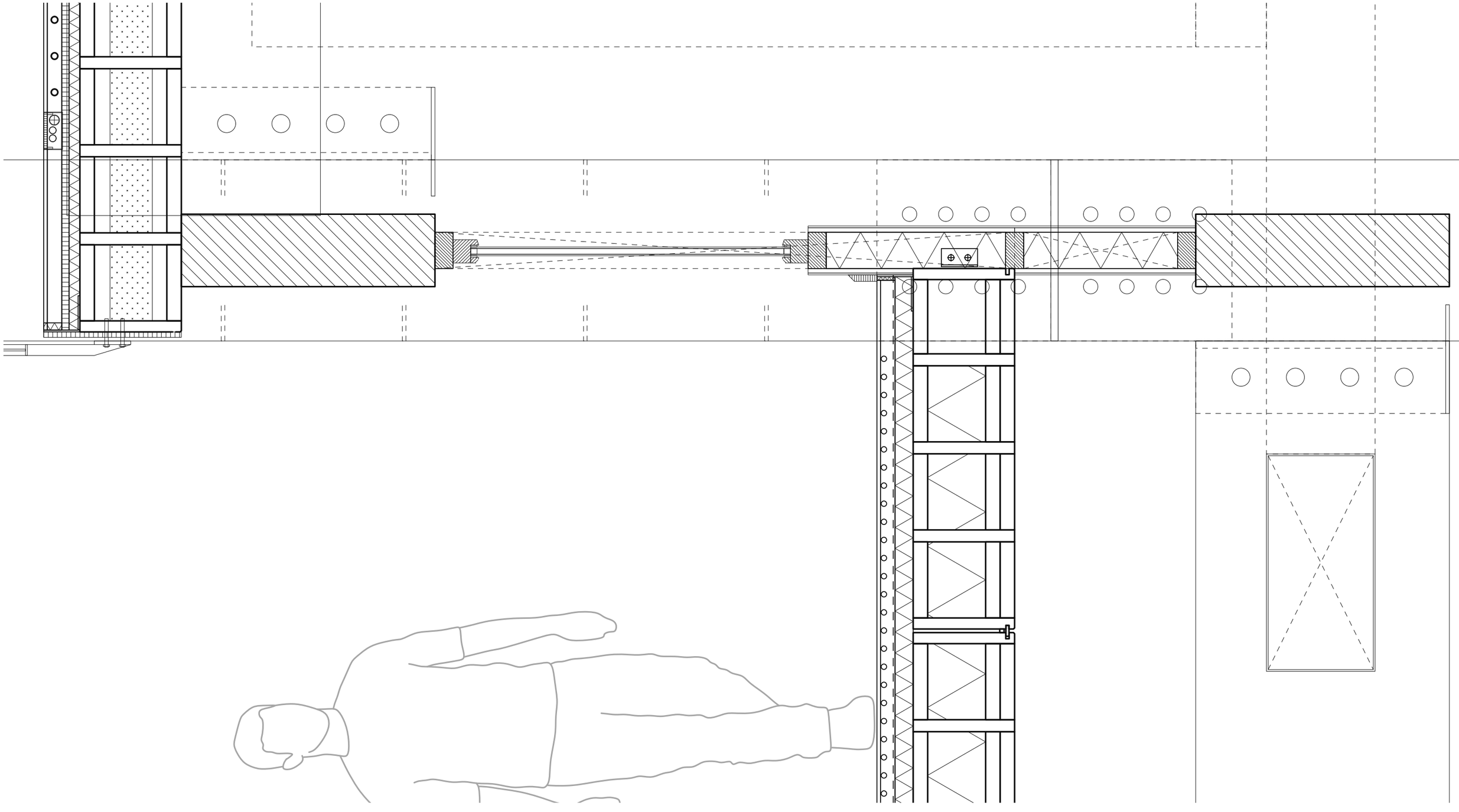
Horizontal detail 1:5 Large hall transition to climate facade



INTERIOR LARGE HALL



Climate facade Horizontal section 1:5



Different floorheights 1:10

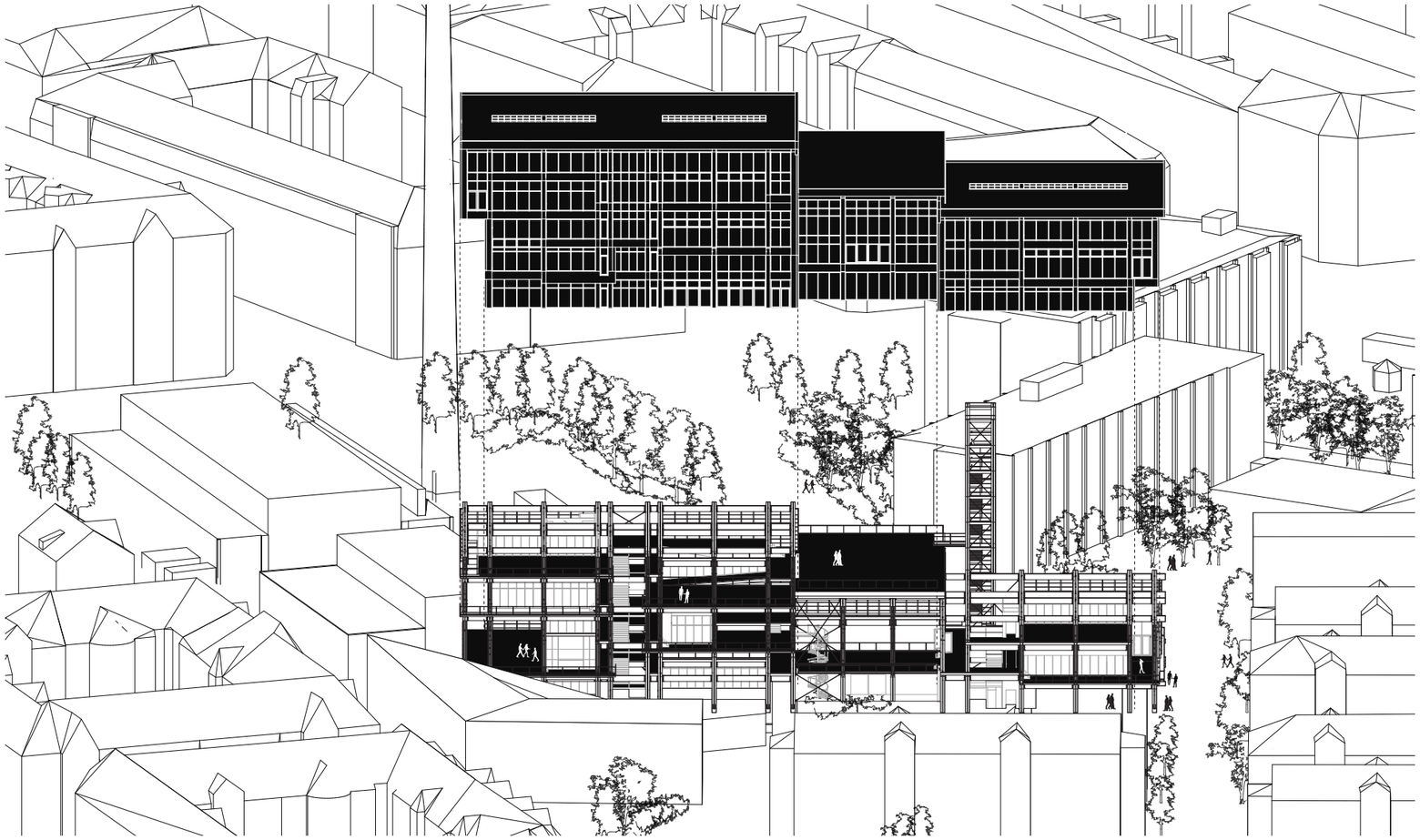
12. ADDITIONAL PRODUCTS & RESEARCH P5

Alternative scenario's

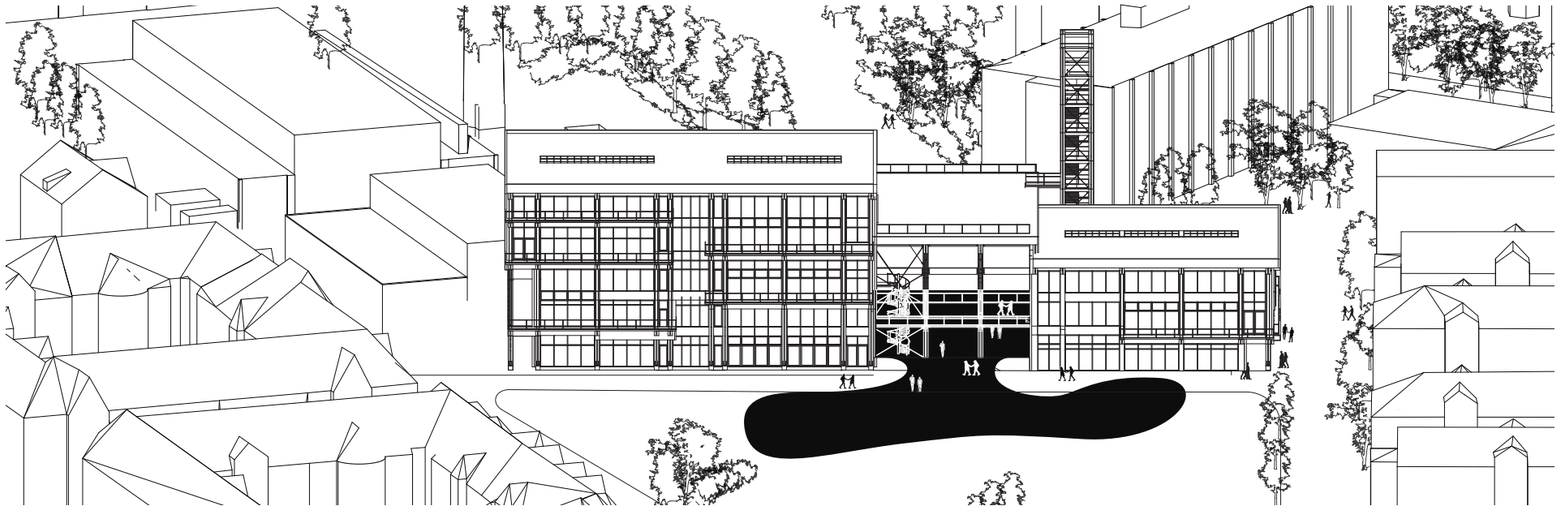
After p4 the question was raised if the building was not too much finished. if not exacty the structure consisting of the framework, climateconcept and facade design would allow for alternative configurations of the facade.

In the following diagrams different scenario's are researched.

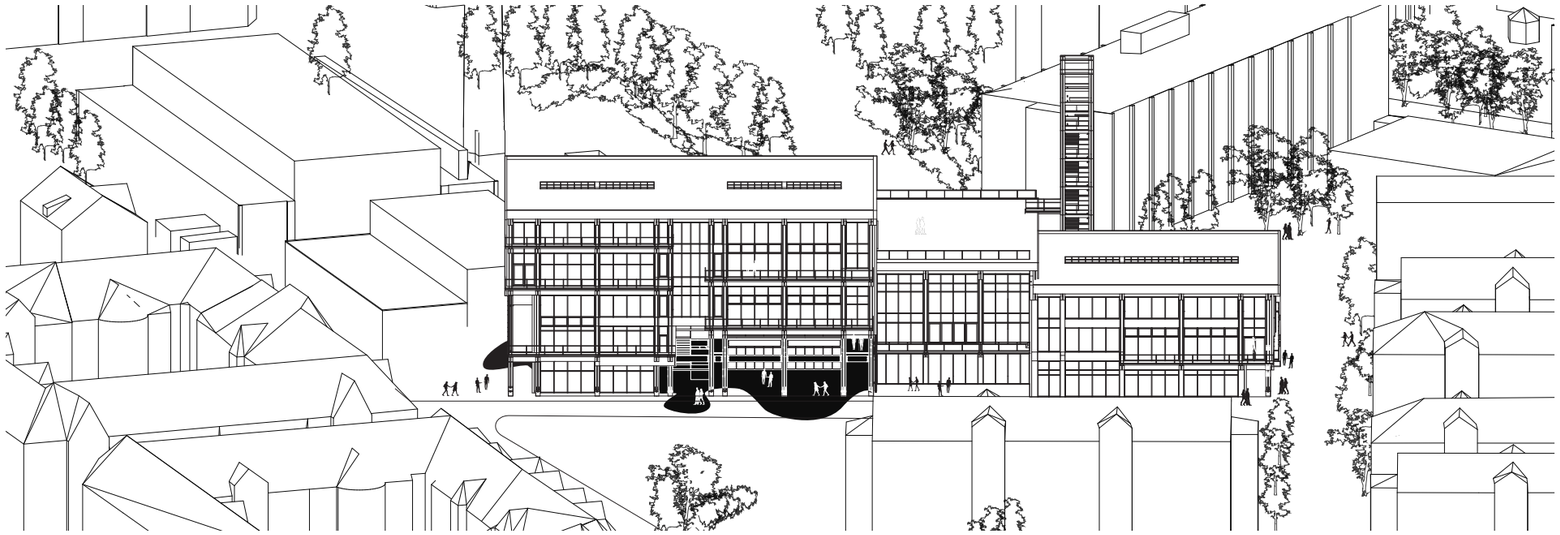
The diagram on the right shows the basic principle in which the boundaries between inside and outside are lifted revealing the underlaying structure.



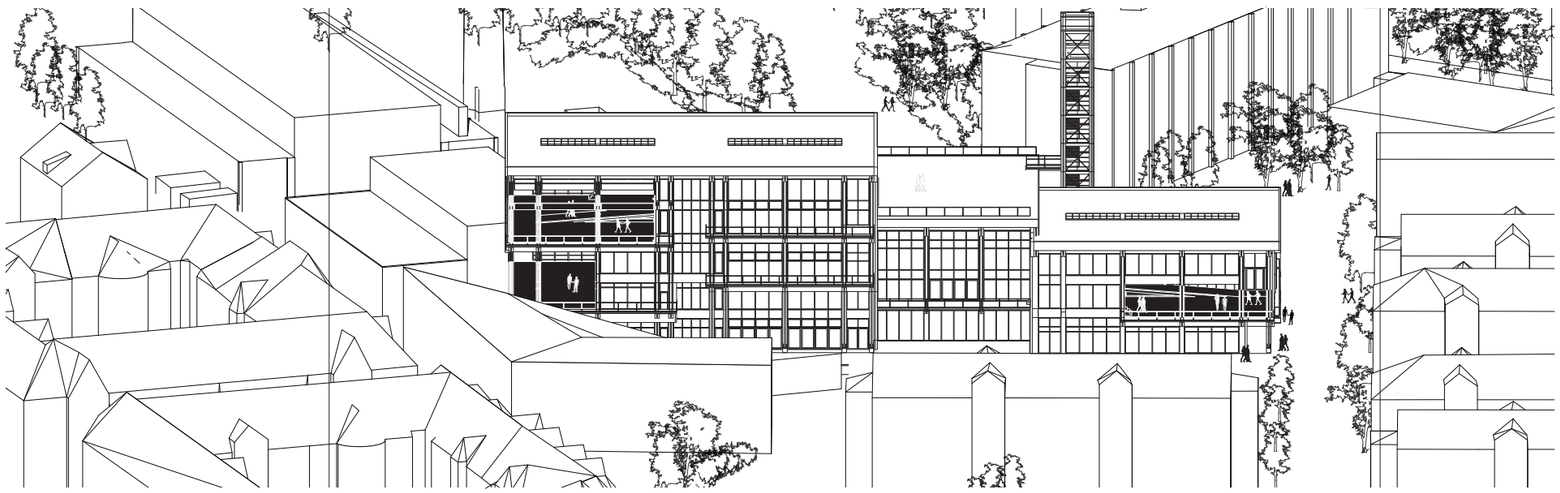
Opening up of large hall



Opening up of ground floor



Unfinished upper floors



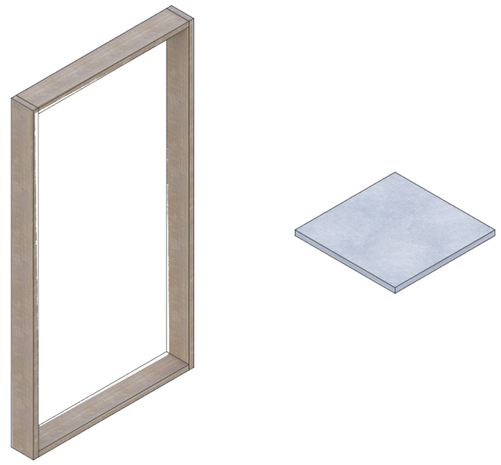
Material research

Final choices are made in terms of materiality. A combination of simple materials that are therefor easy to understand. Materials where what you see is what you get and that can withstand the more rough character as well as allow for appropriation.

Utilizing the different materials to also create a connection between interior and exterior.

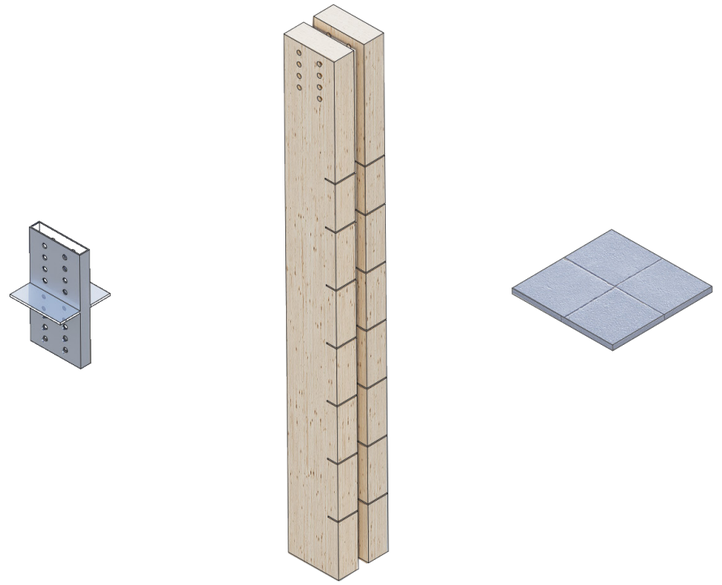
Internal

Wooden window frames	50x100
Glass	
Poured concrete floor	



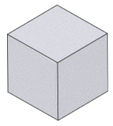
Internal & external

Steel construction elements	
Exposed untreated Glulam construction	200x500x2
Concrete tiles	500x500

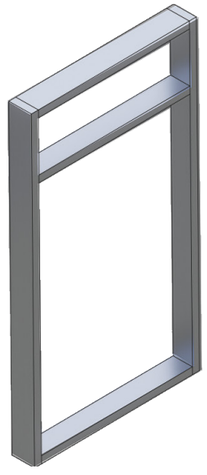


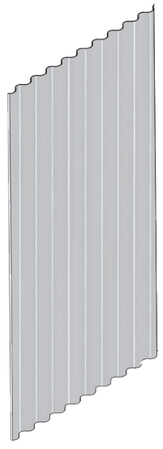
External

Concrete	
Metal Panels cladding	
Alluminium window frame	70
Thermur insulation glas	ug 0,3







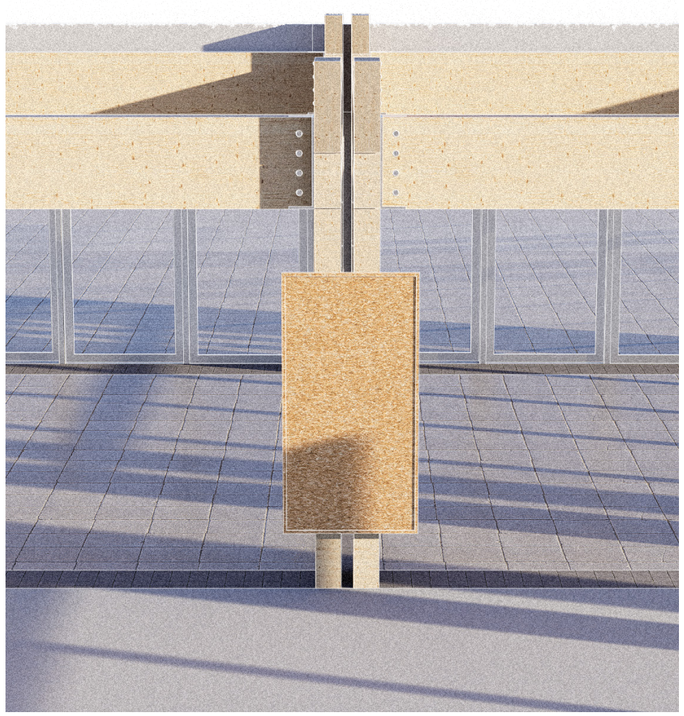




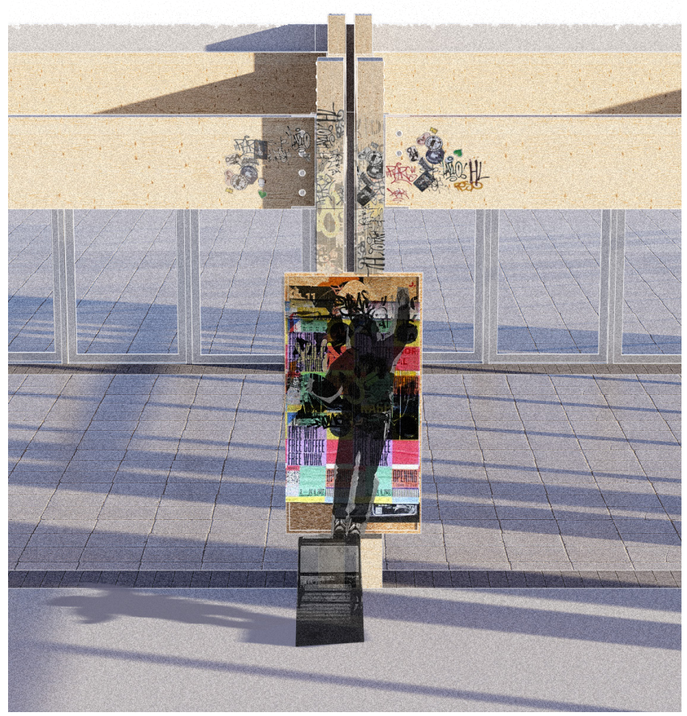
Delivery of building
'Douglas fir'

1 year past

Materialization allowing for appropriation



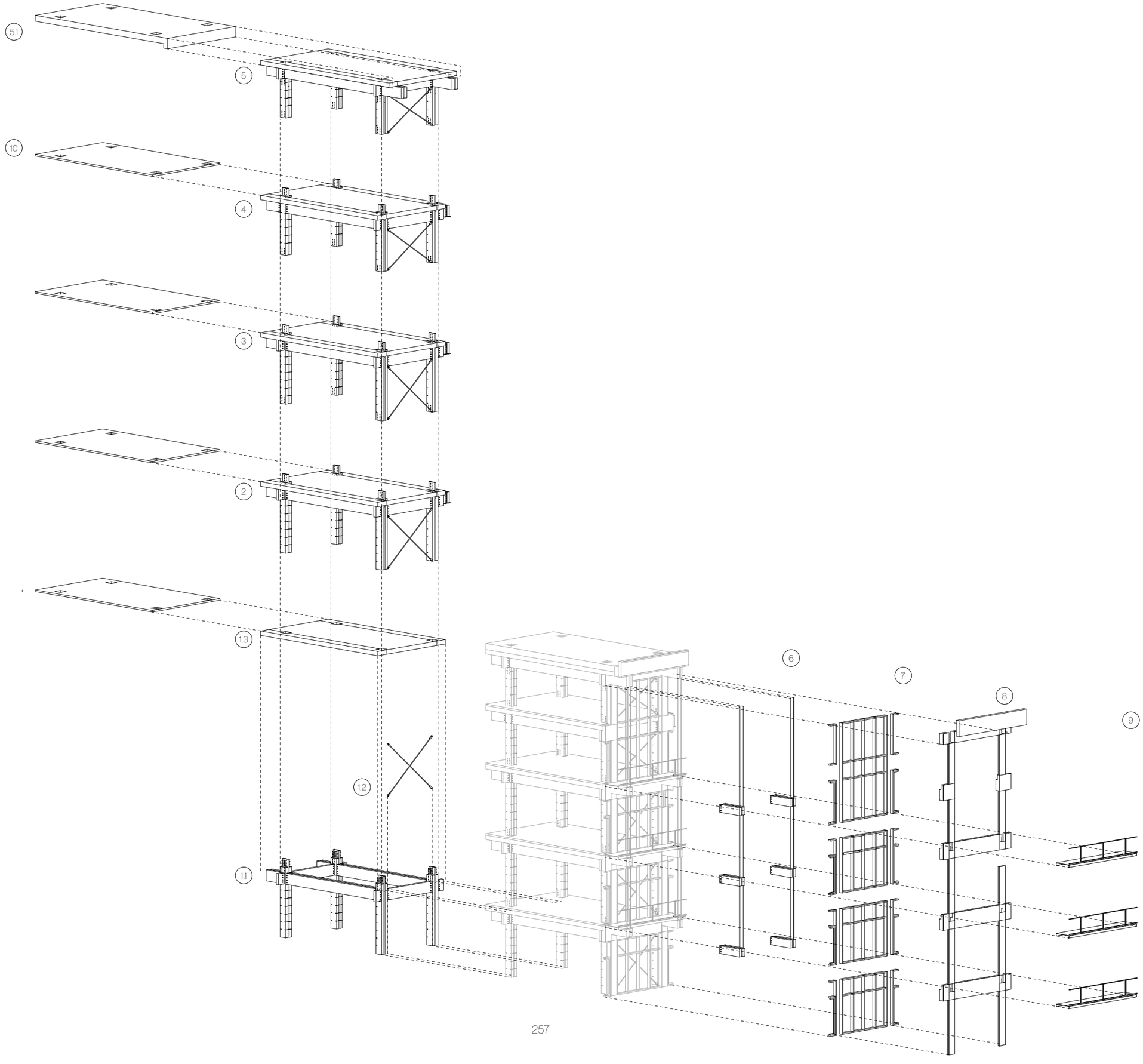




Delivery

1 year

Appropriation of ground floor


5.1
5
10
4
3
2
1.3
1.2
1.1
6
7
8
9


BØRN AF
KESK2F ASFALTF


BLINDFOLDED
CONSUMERISM












HOJE REFEIÇÕES
FEIJOADA 7.50
FRANGO c/SALADA 3.70
FIGADO c/BATATAS 3.70
LAGARTO c/ESPARGUETE 3.70
FILÉ DE PEIXE c/SALADA 4.30
CARNE À MINEIRA 5.30
MILANESA c/LEGUMES 5.30
BIFE c/FRITAS 7.20
CHURRASCO MISTO 11.50
SOPAS
ERVILHAS 3.00
LEGUMES 2.50
CALDO VERDE
POWARD

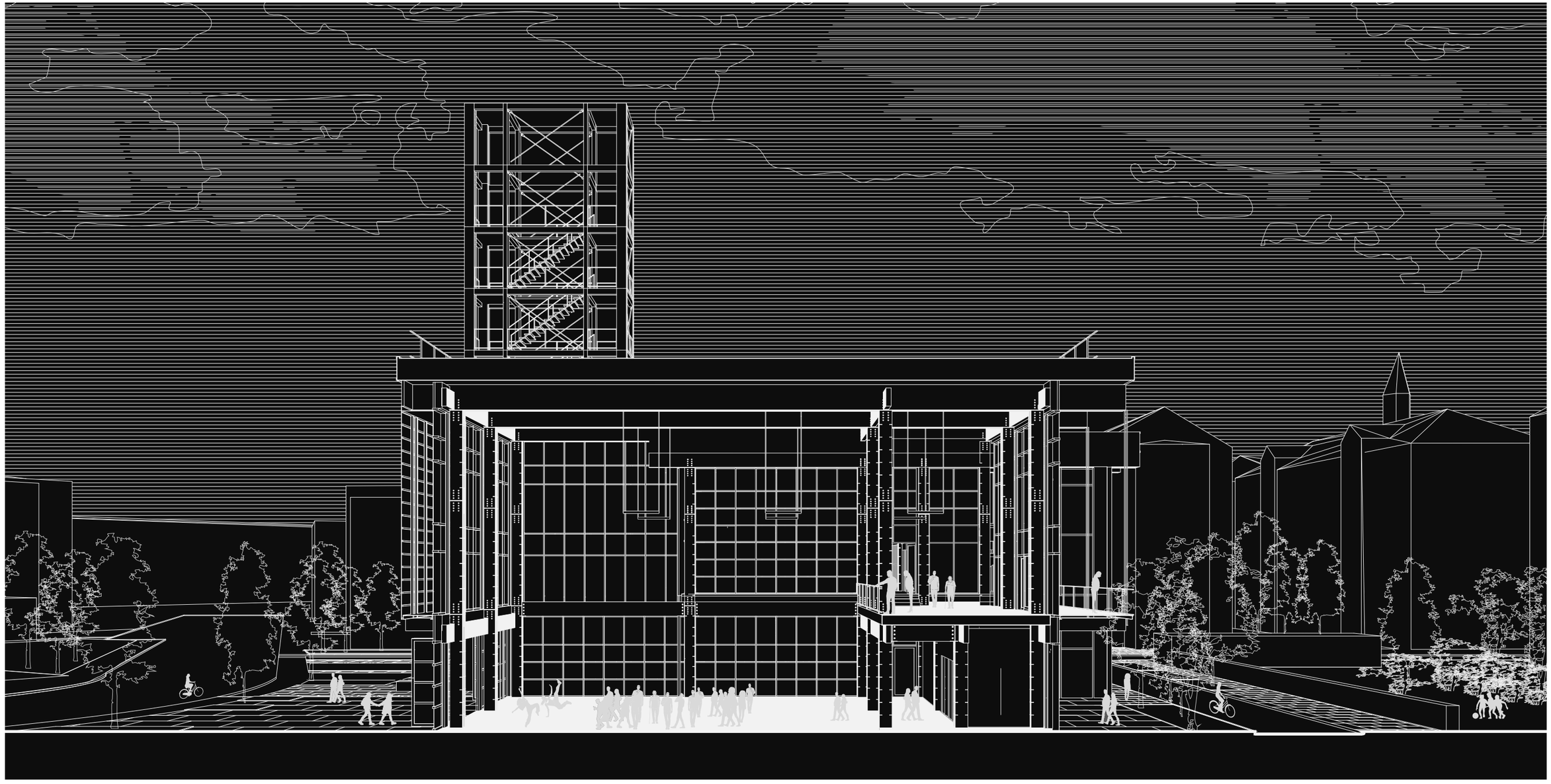


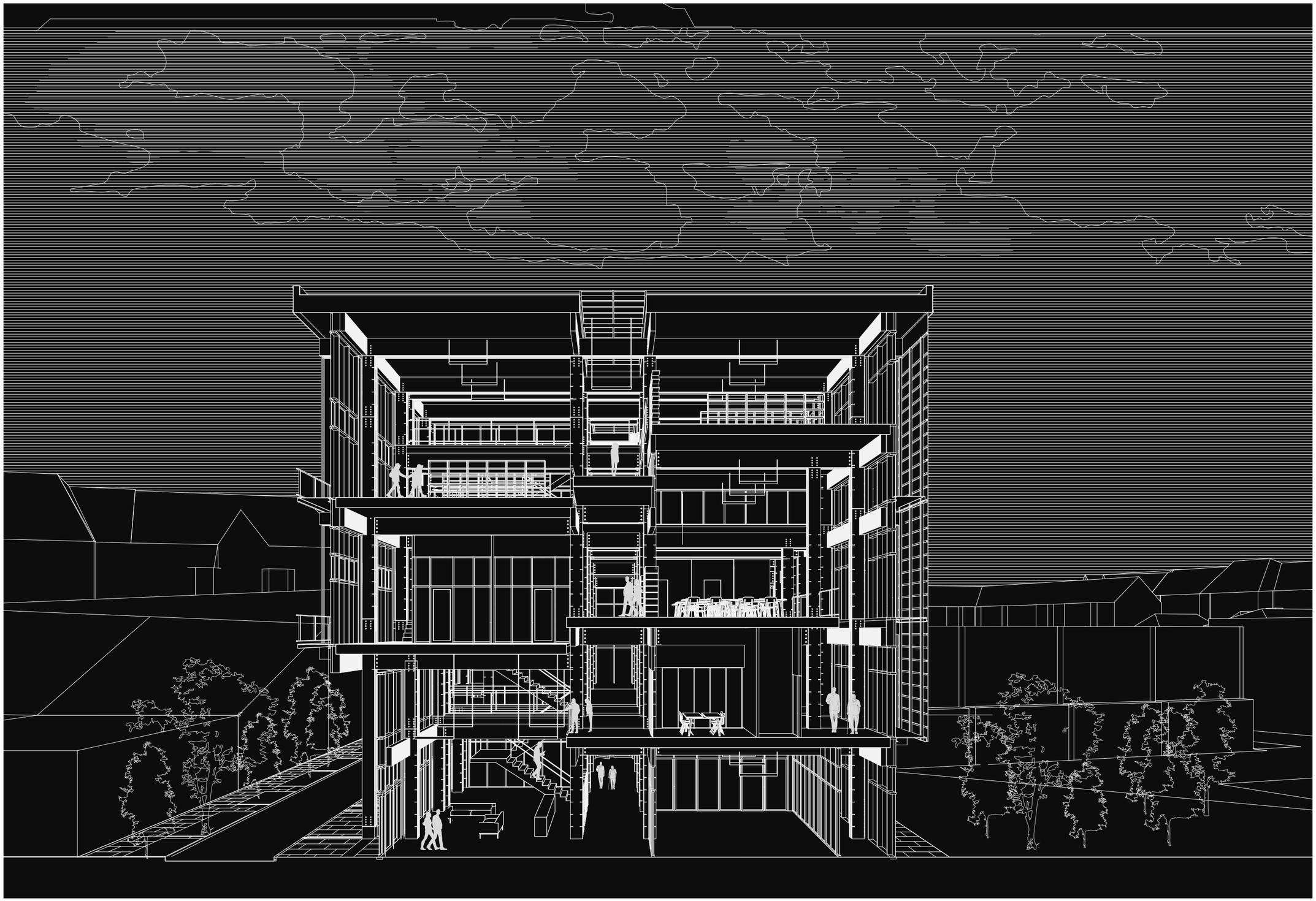


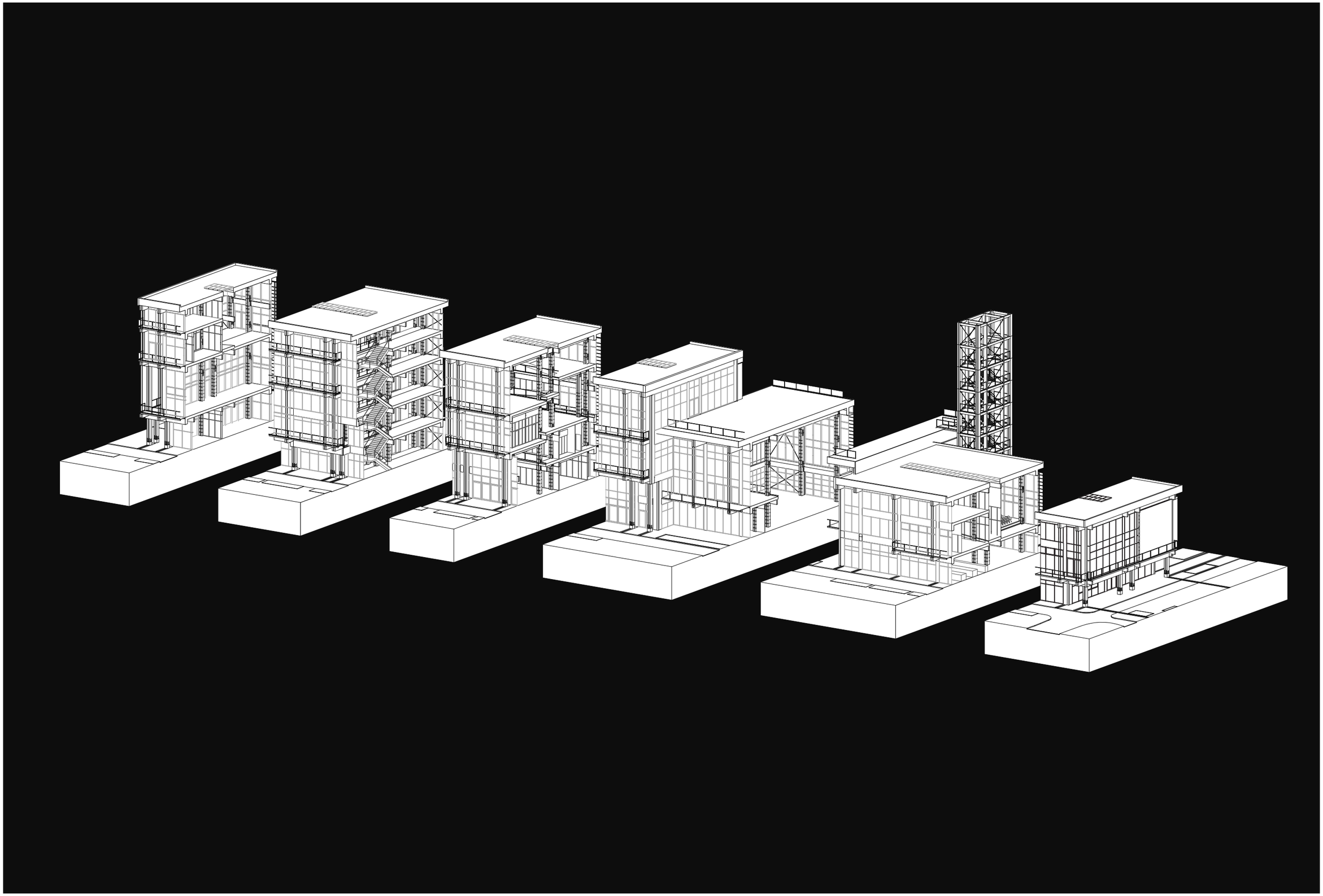



GTRAND









12. PHYSICAL MODEL

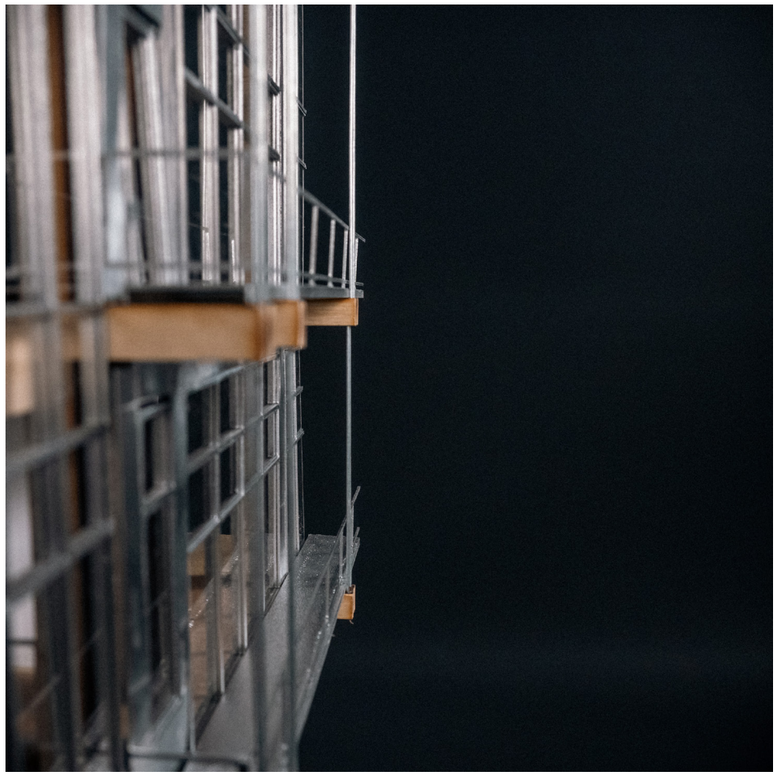


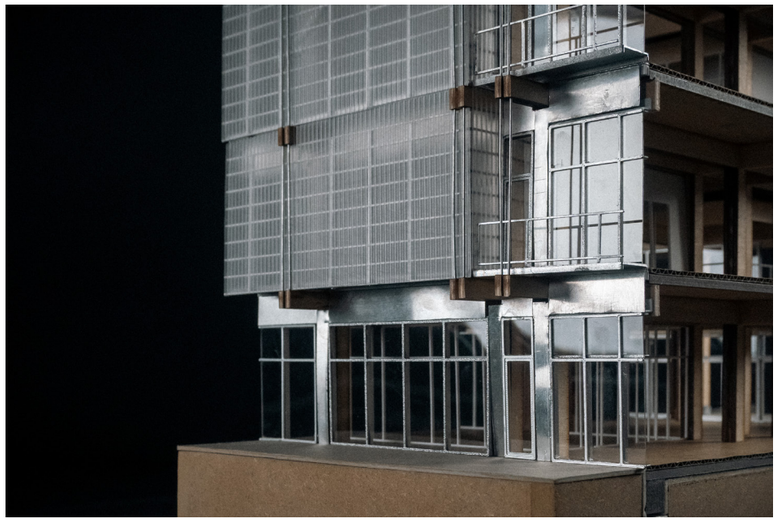






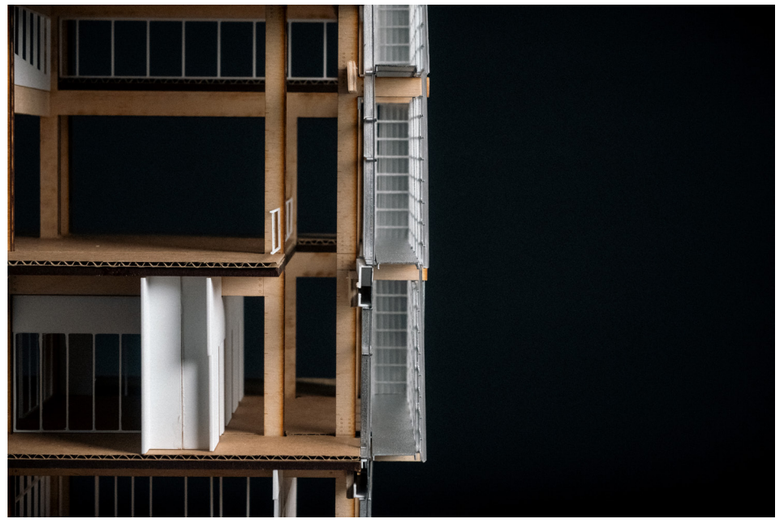






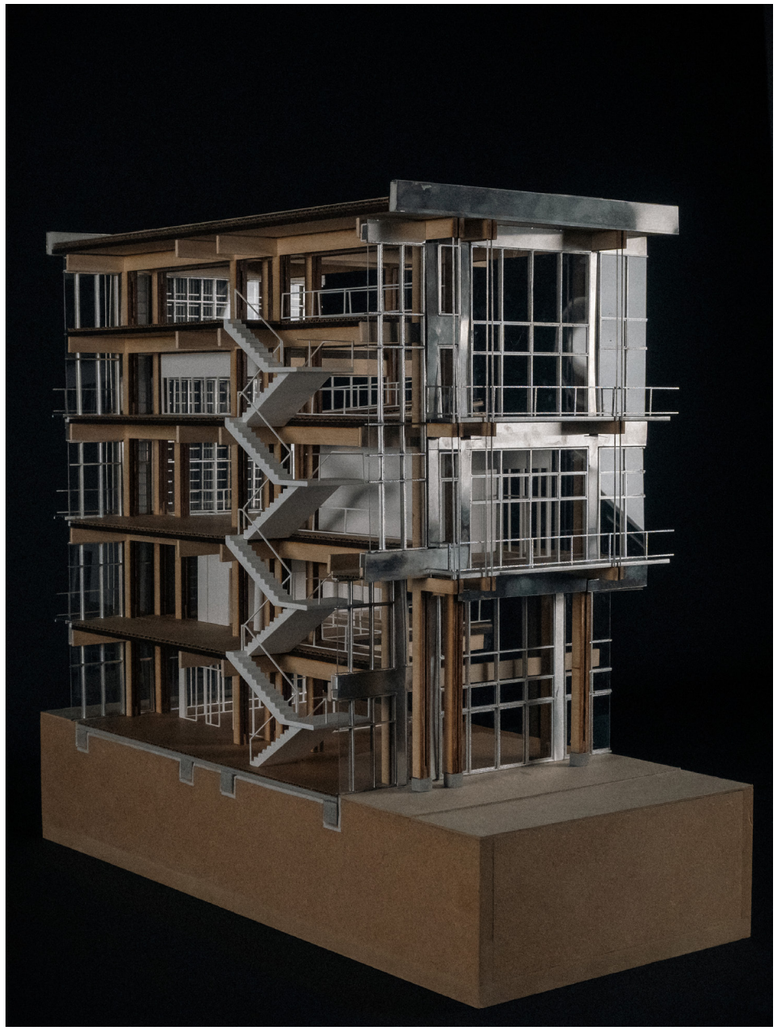










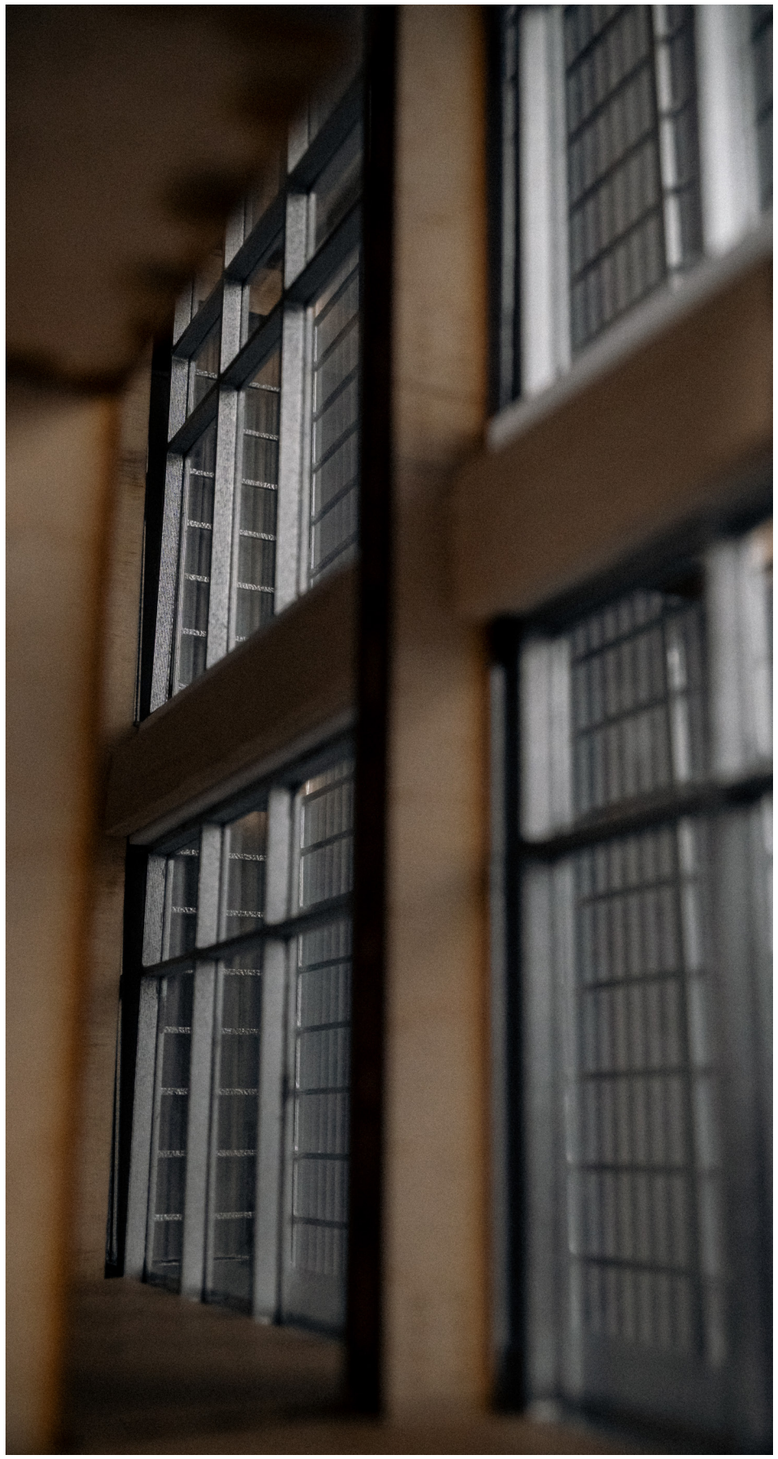
















12. **FINAL REFLECTION**

What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?
For me, architecture is fundamentally intertwined with human experience and social life. Buildings, especially public buildings, intend to be inherently designed with people in mind, accommodating diverse groups and facilitating varied social interactions. Understanding how architecture shapes, disrupts, and facilitates these interactions is therefore central in my interest, not only within public buildings but also across architectural practice more broadly. My graduation project intends to integrate themes (.....) from the Public Building studio and draws extensively on knowledge and methods acquired throughout my master's track and the broader MSc AUBS programme. Moreover, it reflects an interdisciplinary approach, applying insights gained from courses ranging from urban-scale interventions to detailed architectural solutions by taking inspiration from more theoretical courses going beyond the scope of architecture, as well as the more classical design courses. Ultimately, my project represents a synthesis of my academic interests and skills developed across various scales and disciplines within architecture.

How do you assess the value of your way of working (your approach, your used methods, used methodology)?
My project has fulfilled my initial ambitions to a certain extent. It has allowed me to explore the core themes I set out with - especially the notion of exhaustion and how it manifests spatially, addressing in unique ways how the design of the public condenser could serve as tool to generate new possibilities. Still, I believe there is some potential left to uncover different angles and push the investigation further, exploring more speculative or unconventional design approaches than currently my design proposal taps into. For the moment, my project turns out to be quite grounded and realistic. This has been part of an ongoing dialogue with my tutors, where we often reflected on when the design might shift toward something more unexpected. Given my theme and initial literature research, this could have potentially led to a more utopian proposal. At the start of my research, I had imagined doing more literature studies and writing. In practice, my process shifted, and I found myself relying more heavily on research by design - a method that is strongly encouraged within the Public Building graduation studio. By using this method, designing itself become a way of discovering: by drawing, modelling, iterating, and exploring alternatives. This enabled me to research the spatial implications of my design solutions to let the design process generate new insights. My tutors encouraged me to move beyond the conventional, to be more radical in the design. And while I did see the value in that direction, I also struggled with letting go of a certain realism. This tension - between staying grounded and imagining something more speculative – has been a core part of my design process. Looking back, I think embracing that friction has been productive but also where I see room for further development.

Academic and societal value, scope and implication of your graduation project, including ethical aspects?
Despite the challenges I've faced, the early phase of my theoretical research has proved to be essential, as it enabled me to formulate a clear and specific problem statement and to come up with two core conceptual frameworks. Translating these frameworks into spatial strategies and concrete architectural interventions remains a challenge - and is arguably the most complex part of the work - but I perceive this project as a first step in researching how this can be established. My graduation project explores the intersection of architecture, sociology, and philosophy, bridging the gap between theoretical notions and their practical applications. By situating these ideas within a specific Danish context, the project tests and expands upon existing theories, contributing to a deeper understanding of the relationship between social structures and urban and public design.

How do you assess the value of the transferability of your project results?
A central concept in my research is Deleuze's notion of "the exhausted." Applying this idea to architectural and urban contexts offers a valuable insight and approach that could also be beneficial to more generic contemporary social issues, particularly the widespread sense of stagnation, polarization, and loss of imaginative capacity seen across the globe. Today's society shows clear signs of exhaustion: the lack of creativity, an inability to imagine alternative social realities, and a growing sense of division are dominating public discourse. My project addresses this challenges by demonstrating that new forms of collective living can be still possible. Through concepts like the "spectacular everyday" and the reconsideration of "borders and boundaries," I propose strategies that encourage reimagining everyday life and social interactions. Although rooted in the specific conditions of Sundholm in Copenhagen, the issues my design proposal address are widely recognizable also elsewhere. While my design proposal is not intended as a immediate prototype, it could act as a guide for designers, communities, and policymakers facing similar challenges. By offering innovative ways to think about public spaces and social life, the project contributes both to the academic discourse and the professional practice of architecture.