

# Project Book.



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Interiors Buildings Cities  
MSc 3/4 2023-2024



## **MEET ME AT THE HILL**

Expanding the Stockholm City Library





## INTRODUCTION

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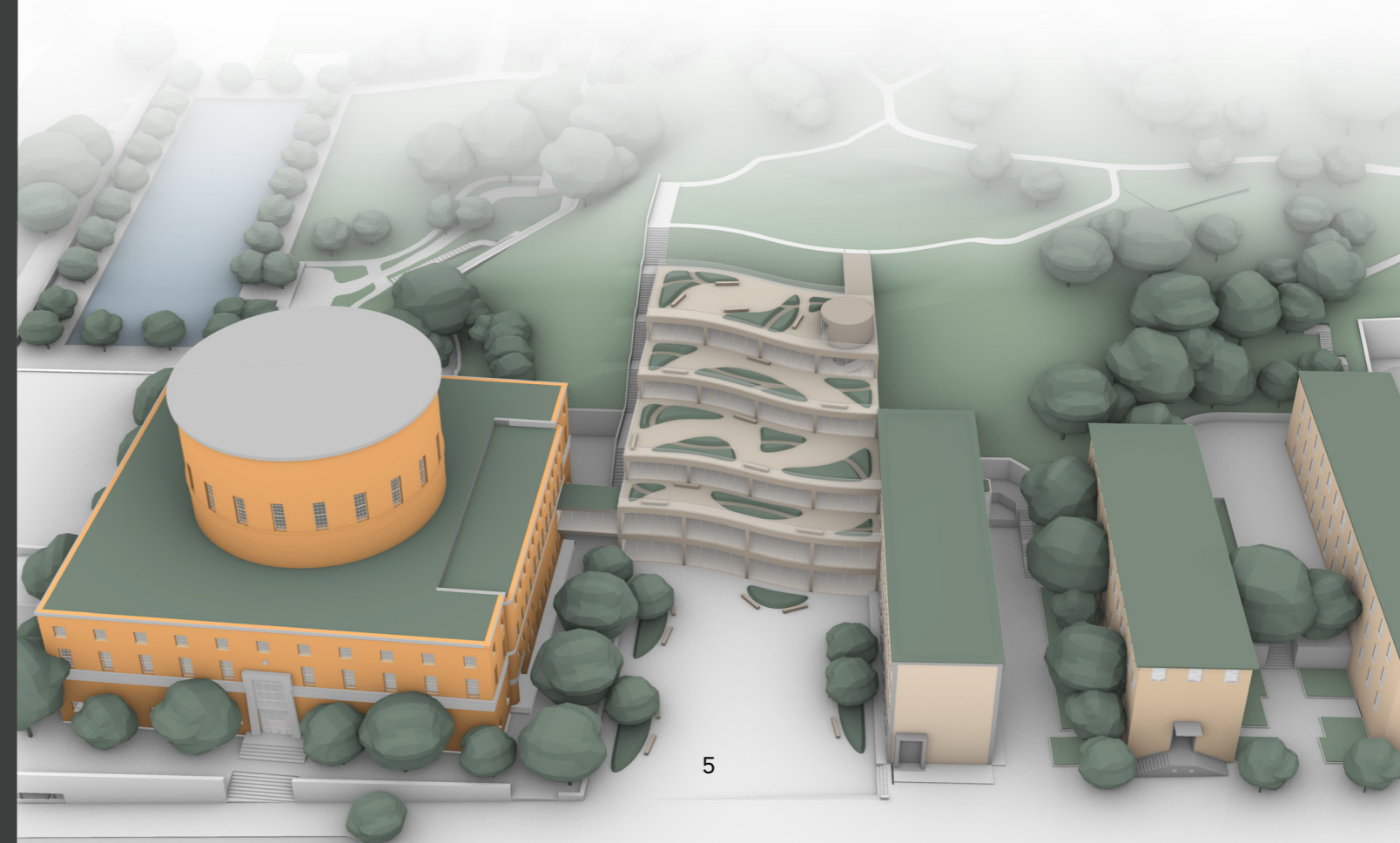
Over the past year, we have been working on a proposal for the expansion of the Stockholm City Library.

The Library was designed by Gunnar Asplund and inaugurated in the spring of 1928. The design of the Library is based on the geometric shape of a cylinder within a cube. The Library is seen as the "climax and finale" of a neo-classical architectural era.

The Library is located at a central location in Stockholm, close to Odenplan, which is one of the main public transport knots of the city.

The library is also located next to the Observatory Hill, a historic park that was once home to the old Stockholm Observatory, and is still a popular destination among locals and tourists.

Over the last twenty years, several briefs have been launched for the expansion of the Library. However, after a failed competition and a halted project, last year a call was launched to simply restore the building as it was. Taking this as a starting point, we have been working on proposals for expansion.





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## RESEARCH AND DESIGN BRIEFS

## 1:25 SCALE MODEL

We started the year with a careful study of the Library by making a 1:25 scale model. This model was based on archival photographs, allowing us to explore the building as Asplund had originally designed it. This was the first of several design briefs, guiding us through our design process. The photographs on these pages show the model of the South Hall.









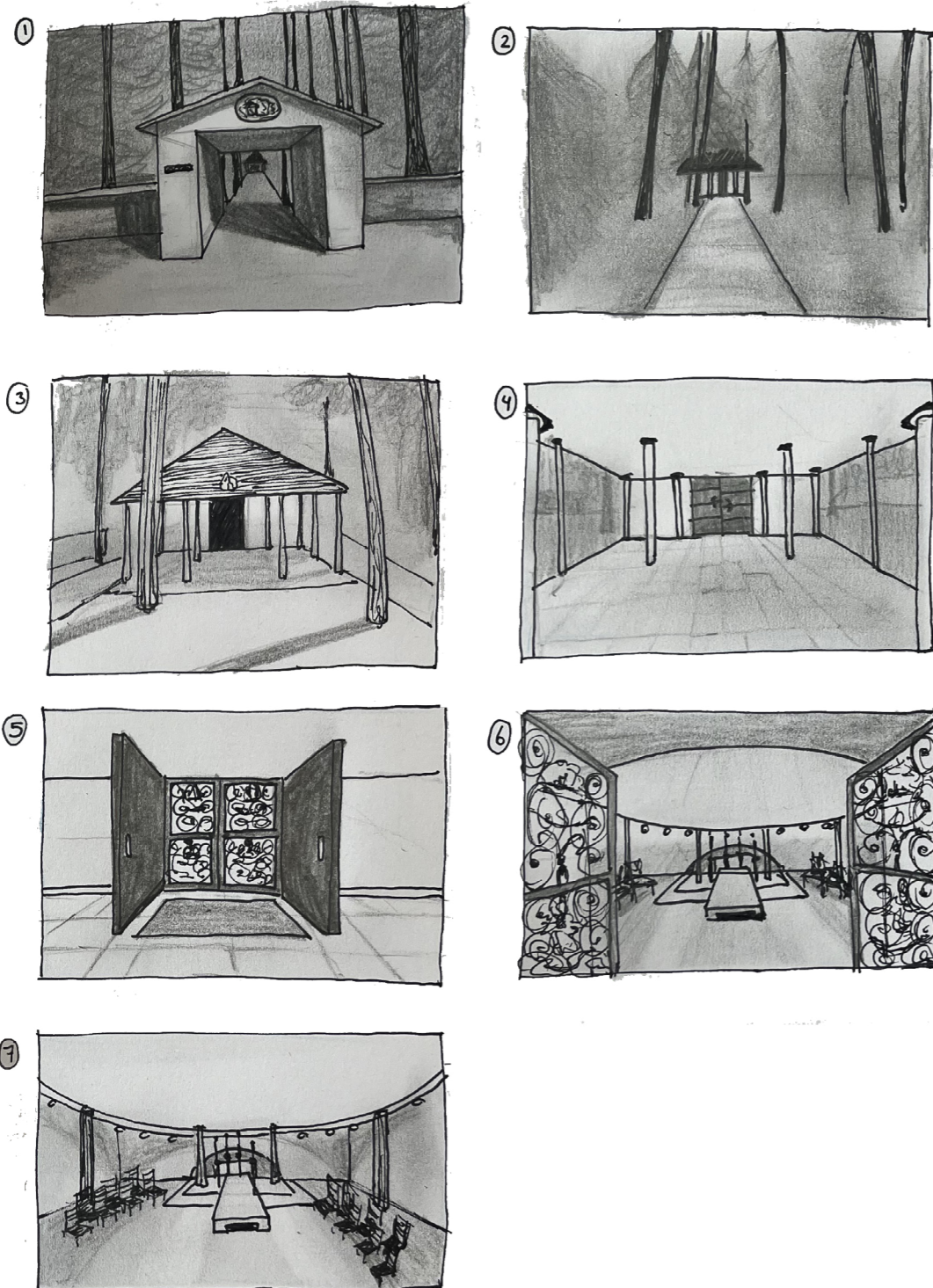
## ASPLUND PRECEDENTS

In parallel to these design briefs, we researched precedent projects in the Research Seminar.

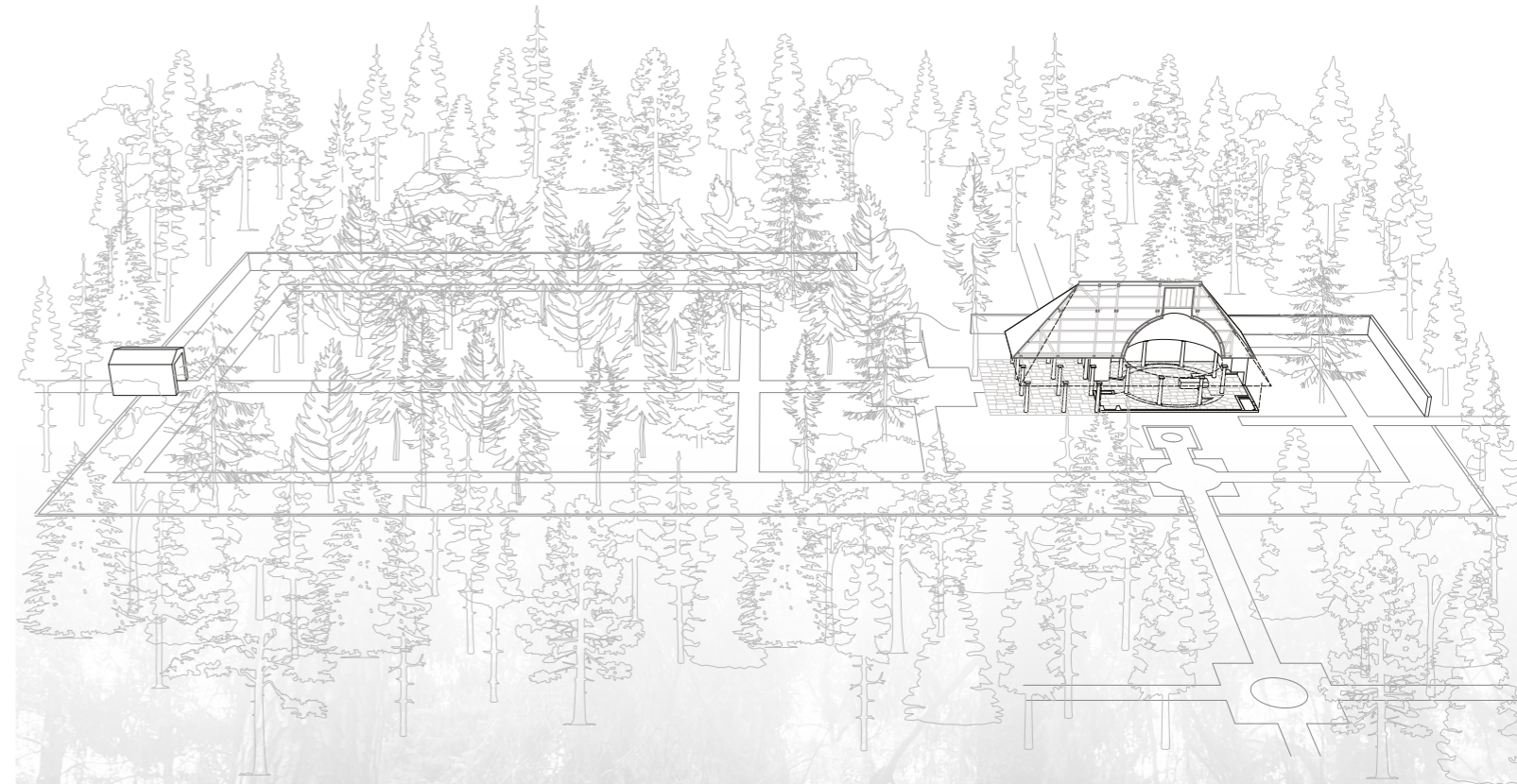
Researching Asplund's buildings from different periods led to useful insights into the way he designed the Stockholm Public Library: with careful attention to factors that work on the human senses: daylight and darkness, acoustics, changes in perspectives, materials, and finishes.

My group analyzed the Woodland Chapel. The sketches shown below, show the views that one has when approaching the chapel. The chapel provides an example of a recurring element in Asplund's designs: an almost photographic sequence, interchanging between low, enclosed spaces and high, open spaces.

### APPROACHING THE WOODLAND CHAPEL



Approaching the Woodland Chapel.



The Woodland Chapel (Group Work).



The Woodland Chapel.



# TRIP TO STOCKHOLM

In September we had the chance to physically visit the Library, on our trip to Stockholm.

Something that stood out to me about this trip was how inward-focused the Library is. The Library has a very closed character. For example, in the Rotonda, the main library floor, one can look up to the sky, but not look outside to the surroundings.

This is especially interesting, as the library is surrounded by this beautiful park. It made me think of what a possible extension could offer to the library. A more open character, looking out to this park and the City of Stockholm, rather than looking inwards.



The Library visit also allowed us to compare the model we made of the original building from 1928 to the building as it stands nowadays.

Here you see the archival photograph of the South Hall next to our model and the picture we took in September. The reading rooms still have the same feel to them, but there have been changes in furniture and lighting. But there are also bigger changes noticeable in the Library.

When analyzing prior briefs, it became clear that the top floor of the building was originally used for adult education. This function seems to have completely disappeared as these floors are now used as office spaces.



Archival Photograph of the South Hall.  
Source: www.alamy.com



1:25 Scale Model of the South Hall.



The South Hall, September 2023. (Picture by Pelle Kuipers)

When we were in Stockholm, we also observed the users of the Library. Noticeable is that many people still use the library to read books or newspapers, and quite some people seem to use the library to meet up with others.

A more interesting question perhaps, is: who could become a user of the library? Why are so many people working in cafes with laptops? And why do we see teenagers hanging around in Espresso House without even buying anything? All they want is a warm place to pass the time and a comfortable place to sit. With the Library just across the street, it seems that the Library should be the place to offer this.

**USES OF THE LIBRARY**

**THE ENTRANCE HALL**

IN THE ENTRANCE AREA, WE FIND A WALL COVERED WITH SHELVES WITH NEWSPAPERS. AROUND TWO TABLES. I COUNT 9 ELDERLY PEOPLE, READING, EACH IN THEIR OWN BUBBLE. THE WOMAN IN THE DRAWING IS HIDDEN BEHIND A NEWS PAPER FOLDED OPEN.

BEHIND HER, A MAN MADE HIMSELF COMFORTABLE IN A CHAIR, ALSO DEEPLY INVESTED IN HIS NEWS PAPER.

ON THE OTHER END OF THE TABLE, I SPOT A PERSON INVESTED IN THEIR MOBILE PHONE.

AND SO THEY SIT, BUT THEN IN PEACE, UNTIL A MAN AT THE OTHER TABLE SNEEZES. I HEAR, WHAT I ASSUME TO BE "GESS YOLL" IN SWEDISH - FROM ONE TABLE TO ANOTHER.

**THE CHILDREN'S LIBRARY**

IN THE CHILDREN'S LIBRARY, I SEE A MOM READING TO HER TWO CHILDREN

A LITTLE BOY IS LOOKING UP WHICH BOOK TO READ ON A BIG COMPUTER SCREEN

AND AT A TABLE, A LITTLE GIRL IS LEARNING HOW TO PLAY CHESS.

TWO GIRLS, ELEMENTARY SCHOOL-AGED, BORROWING BOOKS TO TAKE HOME. THE DESK IS ADJUSTABLE IN HEIGHT.

AT THE TABLE I ALSO SEE TWO BOYS, MIDDLE SCHOOL-AGED, MAKING THEIR HOMEWORK TOGETHER.

THE AMBIENCE IN THE CHILDREN'S WING IS CALM & UNCONSTRAINED, WITH LOW NOISE LEVELS ALLOWING FOR QUIET CONVERSATION.

I CAN IMAGINE FOR THIS WING, IT DEPENDS STRONGLY ON THE TIME OF THE WEEK, WHETHER THE NOISE LEVEL IS ACCEPTABLE FOR STUDY PURPOSES

**THE ROTONDA**

THE BENCHES IN THE ROTONDA SEEM TO SERVE THEIR PURPOSE WITH PEOPLE QUIETLY READING (WITH MUSIC IN THEIR EARS)

ON THE BENCHES I ALSO SPOT TWO ELDERLY WOMEN SITTING IN SILENCE, OBSERVING WHAT IS HAPPENING AROUND THEM. ONCE IN A WHILE THEY WHISPER SOMETHING TO ONE ANOTHER. THE ROTONDA ECHOES THE SOUNDS OF THE SURROUNDING PERIMETER WALLS, OCCASIONAL WHISPERS AND SQUEAKING OF CHAIRS. FOOTSTEPS PASS BY, ON THE SEATS AND FLOORS, WALKING AWAY. I CAN FEEL THE LINOLEUM UNDER MY SHOES.

**EROTICA ROOM**

THE EROTICA ROOM, WITH IT'S NOW MORE INFORMAL SETTING, SEEMS TO HAVE BECOME A PLACE FOR INFORMAL GATHERING

**THE CAFE**

WALKING A BIT FURTHER, AT THE CAFE, I ENCOUNTER ANOTHER WOMAN READING NEWSPAPERS.

IT IS QUITE BUSY, AND PEOPLE SEEM TO USE THE LIBRARY AS A PLACE TO CATCH UP.

I'VE NOTICED IT TO BE VERY COMMON IN STOCKHOLM TO WORK ON YOUR LAPTOP IN A CAFE. THE SAME GOES FOR THE LIBRARY CAFE, EVEN THOUGH THERE ARE PLENTY OF DESKS.

**SCENE FROM THE PARK**





Rotonda of the Stockholm City Library.

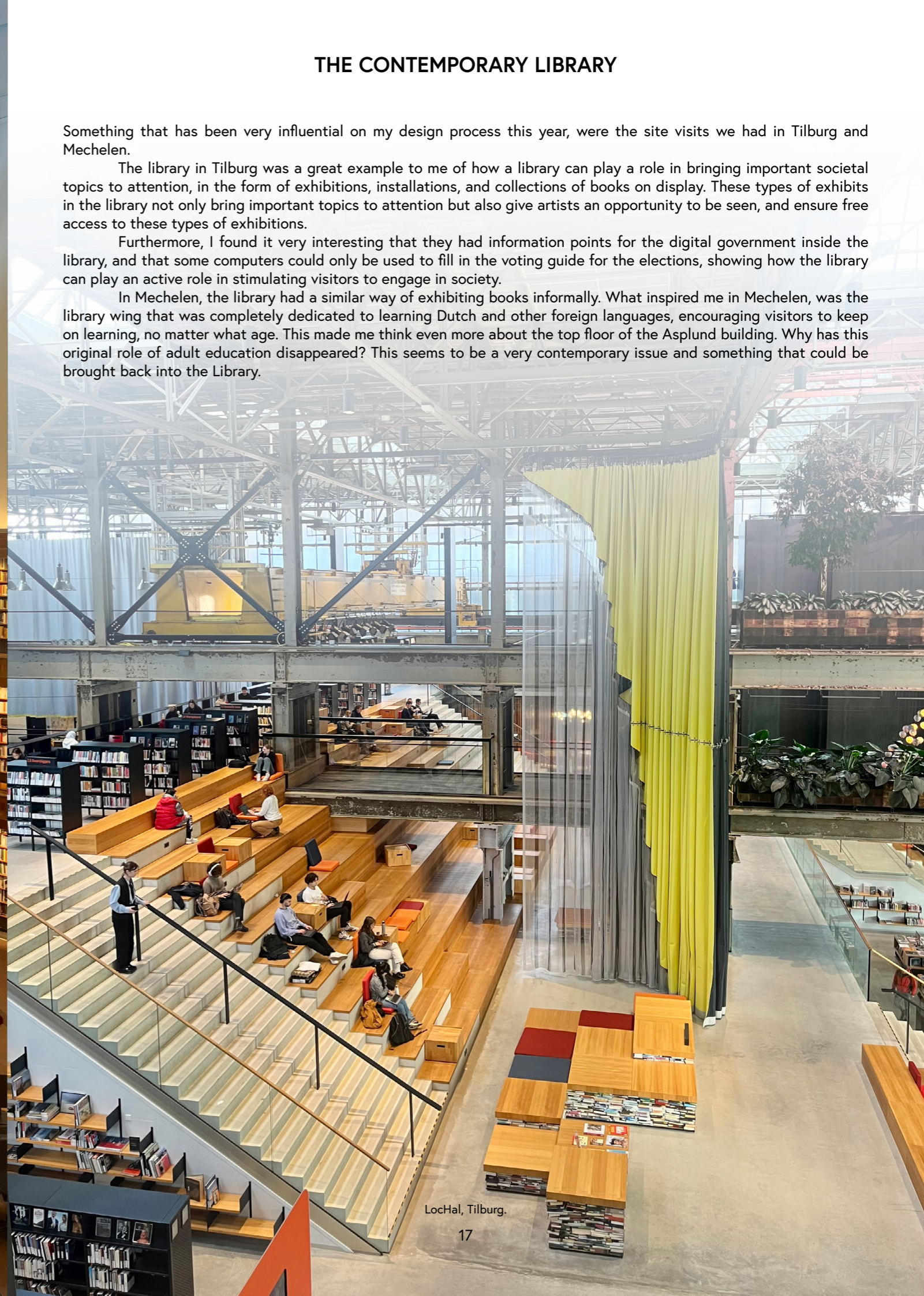
## THE CONTEMPORARY LIBRARY

Something that has been very influential on my design process this year, were the site visits we had in Tilburg and Mechelen.

The library in Tilburg was a great example to me of how a library can play a role in bringing important societal topics to attention, in the form of exhibitions, installations, and collections of books on display. These types of exhibits in the library not only bring important topics to attention but also give artists an opportunity to be seen, and ensure free access to these types of exhibitions.

Furthermore, I found it very interesting that they had information points for the digital government inside the library, and that some computers could only be used to fill in the voting guide for the elections, showing how the library can play an active role in stimulating visitors to engage in society.

In Mechelen, the library had a similar way of exhibiting books informally. What inspired me in Mechelen, was the library wing that was completely dedicated to learning Dutch and other foreign languages, encouraging visitors to keep on learning, no matter what age. This made me think even more about the top floor of the Asplund building. Why has this original role of adult education disappeared? This seems to be a very contemporary issue and something that could be brought back into the Library.



LocHal, Tilburg.





Predikherenklooster, Mechelen.



Exhibition space, LocHal, Tilburg.



## A ROOM FOR A LIBRARY

During the Research Seminar, we also researched contemporary library precedents. This allowed us to start thinking about the role of the contemporary library, and the spaces that are needed to facilitate this.

The Seattle Central Library, for example, combines a so-called "stable" and "unstable" program. The "stable" program, consists of the library's headquarters, the main book storage, meeting rooms, spaces for staff, and a parking garage. The "unstable" program, consists of the more public, social spaces of the library, including a mixing chamber where the public and librarians can meet. This combination of meeting rooms and more public meeting places is something I took with me in my design for the extension.

Something else that inspired me were the activities organized by the community center in my neighborhood in Rotterdam. There are moments scheduled where you can just walk in for "a coffee and a talk". There are also days on which you can bring in damaged textiles or electronics, which also stimulates interaction between people in the neighborhood. I realized that these events were very similar to my thoughts about the contemporary library and led me to realize that perhaps the contemporary library is indeed more of a community center than a place focused solely on literature.

Something that I also found rather interesting was the studio debate we had about the role of the central library. My team had to explain why the central library is not an outdated concept and still has advantages over local or community libraries. I found that the most important conclusions were that central library has the space and the resources to host cultural events and exhibitions, and also that the central library plays a role in bringing different communities together.

Perhaps we can take these ideas about what the library can offer as a community center and implement them at the central library, with its space and resources.

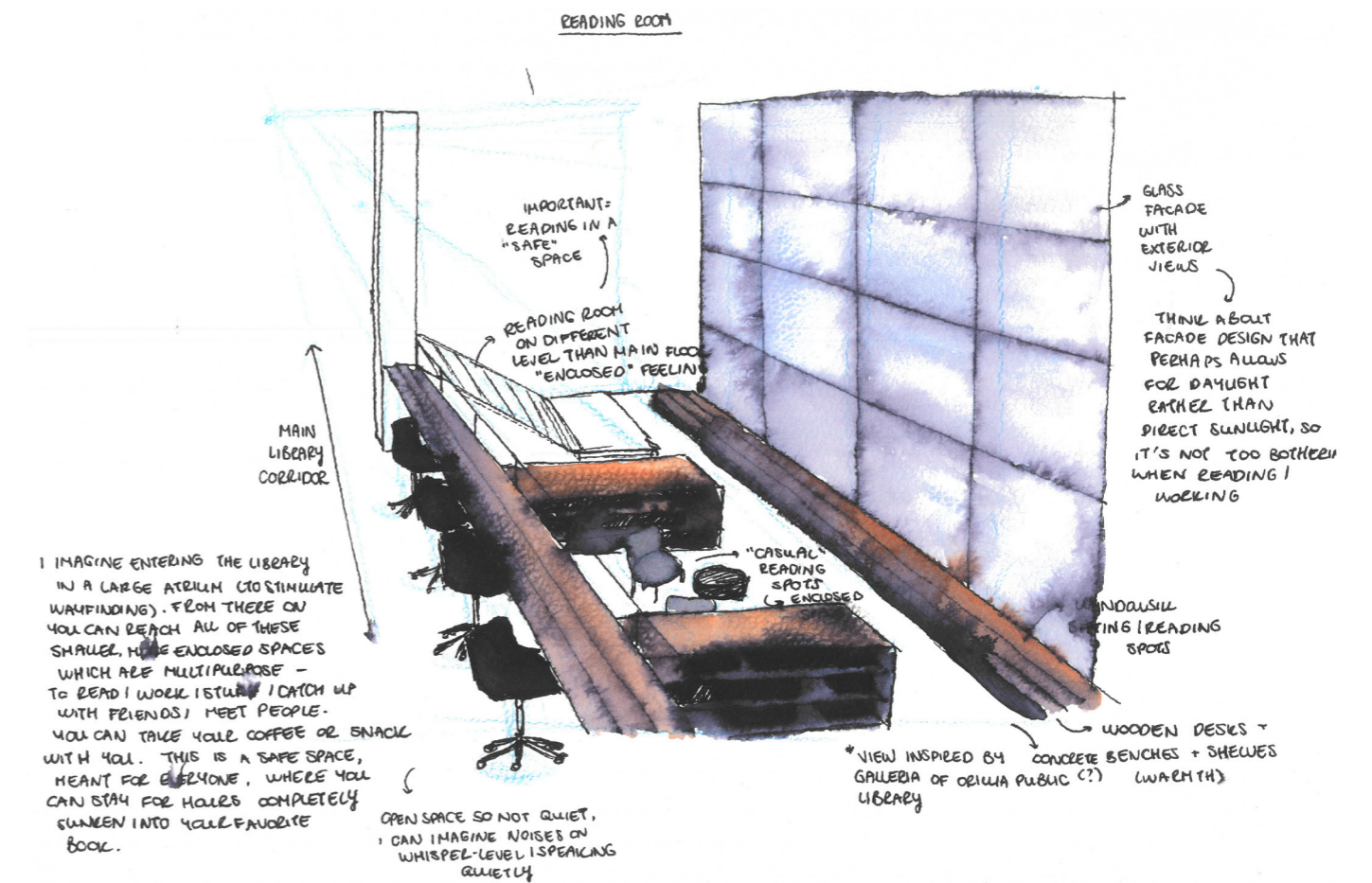
In summary, I believe the contemporary library should provide a platform for contemporary initiatives, by organizing events and providing a safe space to learn, exhibit, and share ideas. But above all, the library is a place where inclusivity and accessibility are the main concerns. A safe place where anyone can go, at any time.



Library wing dedicated to learning Dutch, Predikherenklooster, Mechelen.

As mentioned earlier, we worked on several design briefs throughout the year. We started our design process by designing a room for a library, which was not necessarily connected to Asplund's building. This image shows the first sketch I made. I was intrigued by the idea of one space looking out onto another space, while also being able to look outside through the windows. Finally, I made a design for a room that could be used for meetings and workshops.

These two aspects, the different levels looking out over each other, and the library offering spaces for all different kinds of meetings, are the things I took with me when starting my design for the Asplund Library.

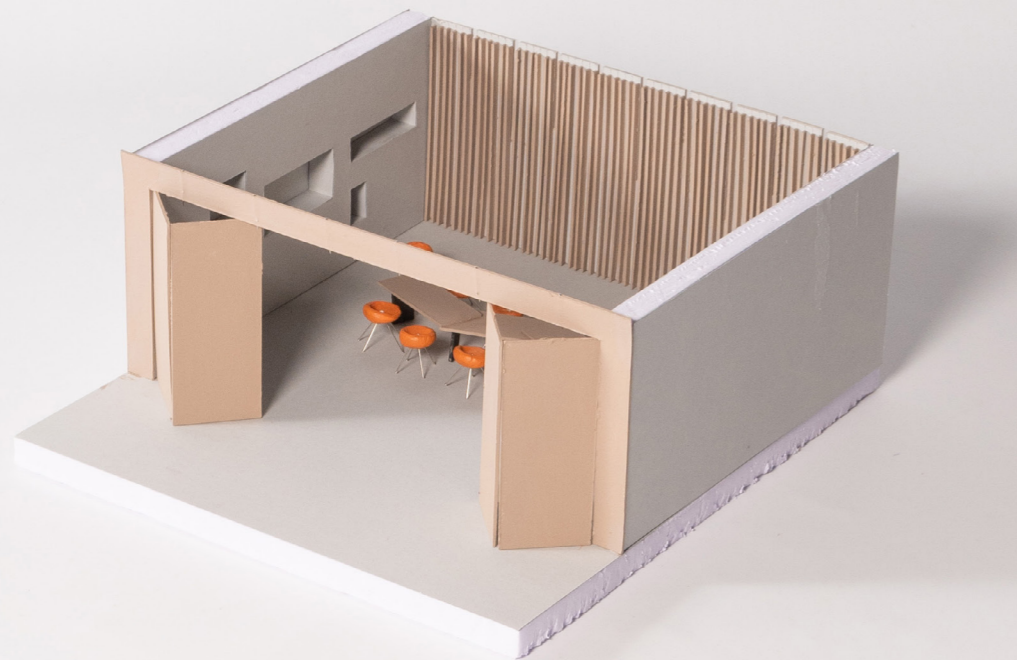
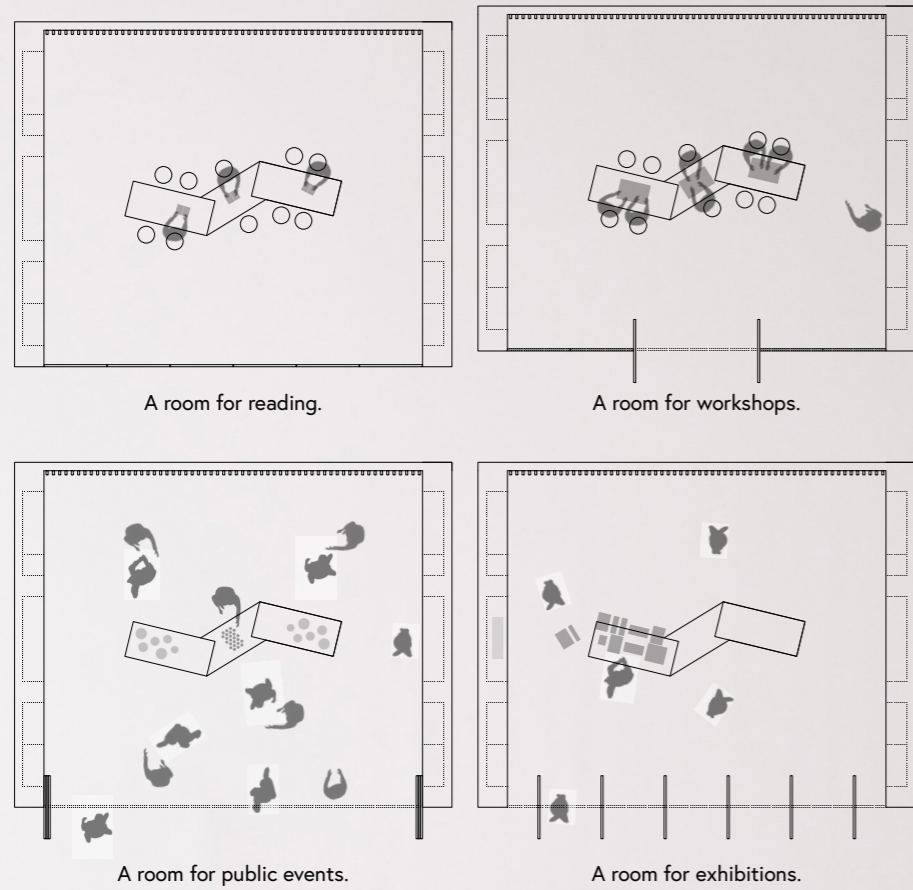


I IMAGINE ENTERING THE LIBRARY IN A LARGE ATRIUM (TO STIMULATE WAYFINDING). FROM THERE ON YOU CAN REACH ALL OF THESE SPACES, WHICH ARE MULTIPURPOSE - TO READ / WORK / STUDY / CATCH UP WITH FRIENDS / MEET PEOPLE. YOU CAN TAKE YOUR COFFEE OR SNACK WITH YOU. THIS IS A SAFE SPACE, MEANT FOR EVERYONE, WHERE YOU CAN STAY FOR HOURS COMPLETELY SUNKEN INTO YOUR FAVORITE BOOK.

OPEN SPACE SO NOT QUIET, I CAN IMAGINE NOISES ON WHISPER-LEVEL / SPEAKING QUIETLY

\*VIEW INSPIRED BY CONCRETE BENCHES + SHELVES GALLERIA OF ORLUA PUBLIC (?) (WARMTH) LIBRARY





Final P1 model and plans showing different ways to use the room.

## PRIOR BRIEFS

In the next design brief that we received, we were asked to make an architectural proposition for the Stockholm City Library, relating to the 2006 and 2014 briefs.

Comparing previous briefs, on the one hand, we have a brief that wants to build a more or less autonomous new building, and on the other hand, we have a brief that wants to densify the existing building.

Although both briefs have very different strategies, a recurring theme is the need for public space. Although I believe the envisioned scale of the extension building in 2006 is way too big, I do believe, especially after researching the Library by making the 1:25 scale model, that the Library is part of Sweden's architectural heritage, and that the original building, with its books, plays an important role in the education of literature and should therefore be maintained.

### 2006

More or less autonomous new building, reinforcing monumental status Asplund building.

- Asplund Library as icon
  - Addition of new functions
  - Area available to the public quadrupled
  - Library open for all round-the-clock
  - Stimulation of meetings, discussions and study
  - Shift from books to new forms of media
  - Different subject areas in different zones
- Total space: increase from 14.000 m<sup>2</sup> to 24.000 m<sup>2</sup>
  - Public space: increase from 3.700 m<sup>2</sup> to 16.600 m<sup>2</sup>

### 2014

Densifying and optimizing Asplund building

- Local library as well as public library
- Space efficiency and space maximization
- Rotonda remains venue, supplemented with additional rooms
- Maximum flexibility and co-utilization
- Different subject areas in shared zones
- Seating and reading places increased
- "Air" around media: 20 percent of media space should be display area
- Functional, semi-public, and individual workplaces



## RESEARCH QUESTIONS




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There have been two main questions guiding our thought process throughout the year. The first is, "Why should the Stockholm City Library be expanded?" And second, "Having chosen to expand the Stockholm City Library, how does this expansion add to the existing Library?"





So, why should the Library be expanded? As mentioned earlier, it is clear when analyzing the prior briefs, that there is a need for more public space. On top of that, there is a need for a more contemporary library, with a focus on pleasant seating places for all, and space for contemporary initiatives and events. Finally, expanding the Library offers possibilities to bring back adult education. Currently, these spaces are used as office spaces. By expanding the Library, and moving these offices, these spaces can be freed up again.

When it comes to the qualities that the extension building can bring to the Library, there are possibilities in creating a building that looks out instead of looks in, as the Asplund building has an inward-focussed character. The exterior of the building can have an open, inviting character, rather than closed. The extension building can also create this connection between the Asplund building, the interior, and the exterior. Last, the location of the Library offers possibilities to create an extension that is part of the actual landscape.

### Why should the Stockholm City Library be expanded?

-  Need for public space (2006 & 2014 brief)
-  Need for a more contemporary library, with focus on pleasant seating places for all, and space for contemporary initiatives and events
-  Bringing back adult education

### Having chosen to expand the Stockholm City Library, how does this expansion add to the existing Library?

-  Looks out instead of looks in
-  Open character instead of closed
-  Connection between Asplund building, interior and exterior
-  Part of actual landscape

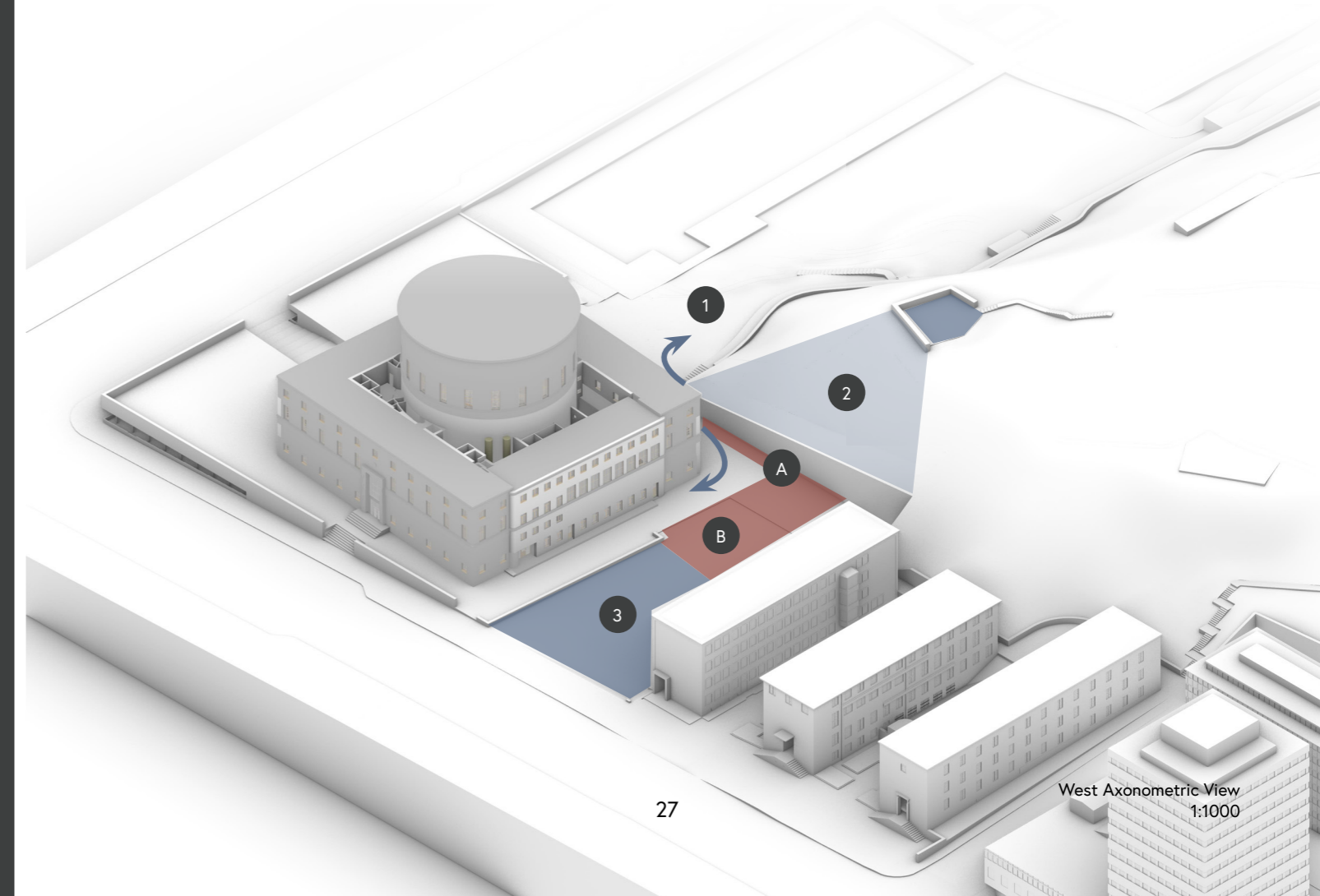
## SITE ANALYSIS

Analyzing the site of the Library led to three important starting points for this design. I found that currently, the corner of the Library has quite an awkward-shaped exterior space, creating an illogical passageway (1). On the hill, there is a viewing platform with a view over the Library and the city of Stockholm, which I believe should be maintained (2). Finally, next to the library is a market square, which used to be very vibrant, but after the first annex building was built, is not used to its full potential anymore (3).

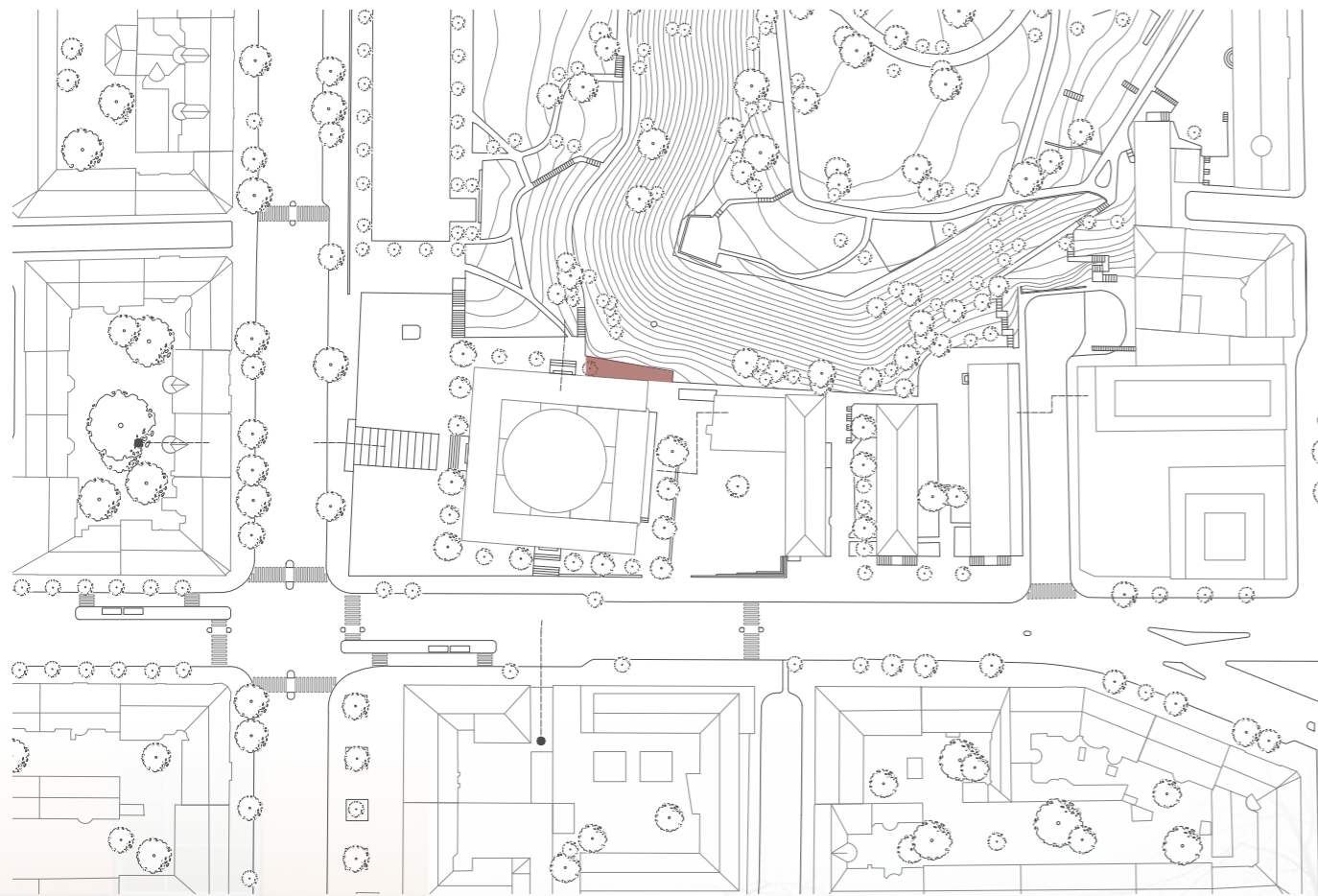
In summary, the starting point for my design was opening up the passage at the corner by partly removing the hill (A), opening up the square by partly removing the annex building (B), and maintaining the view from the viewing platform.



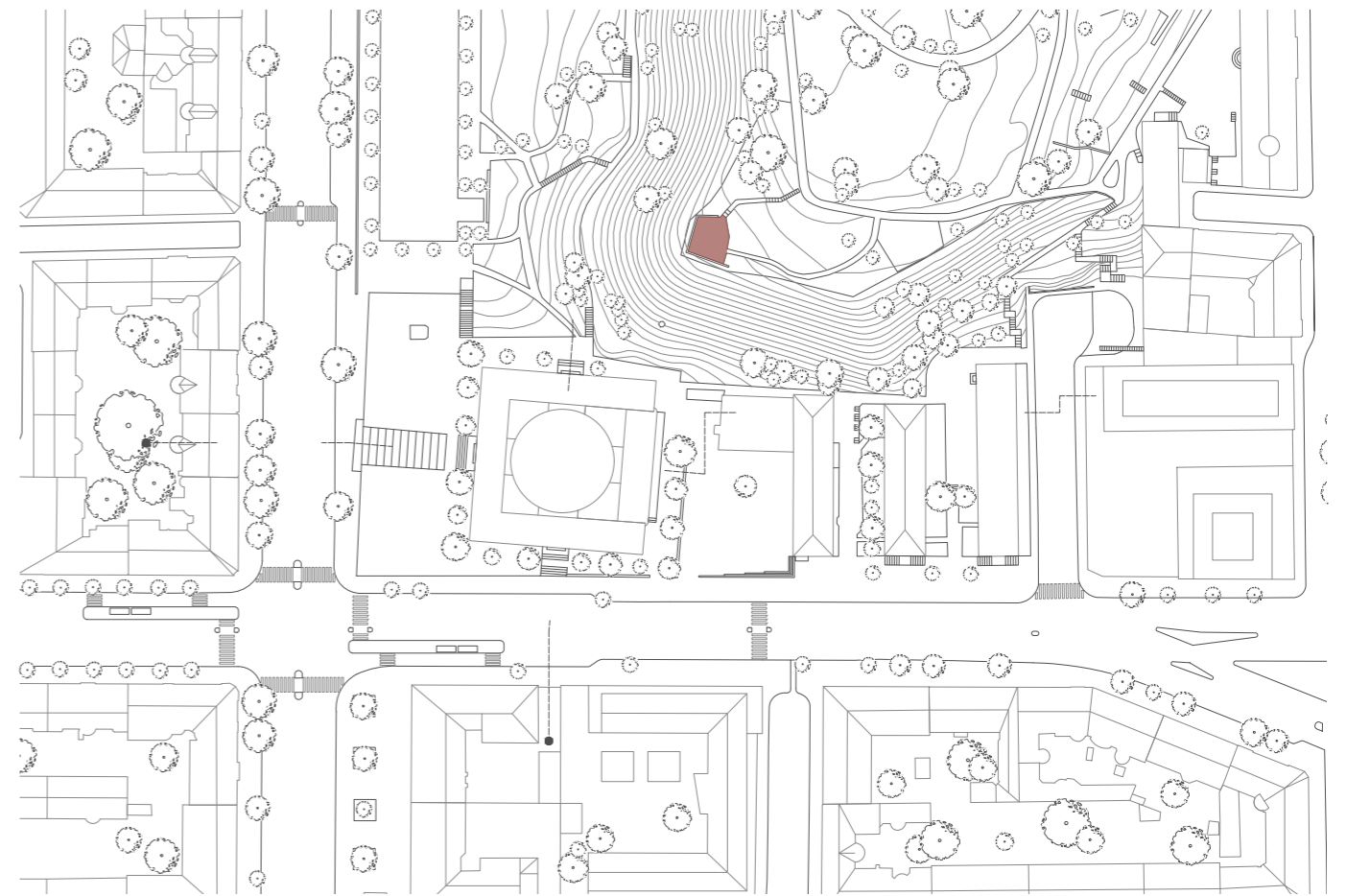
## SITE ANALYSIS







1:2000



1:2000

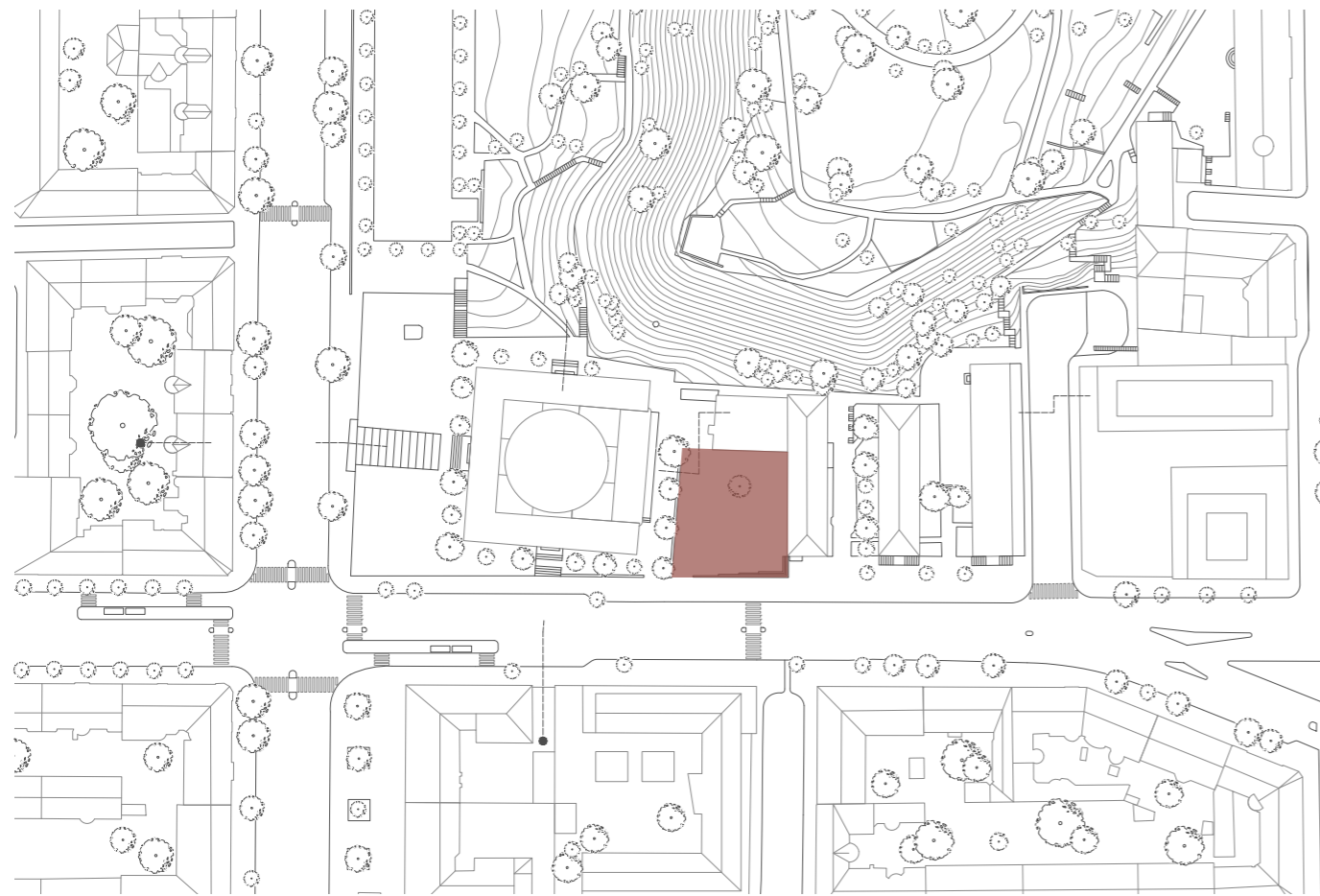


Passage. Picture by David Grandorge, 2015.



View. Picture by David Grandorge, 2015.





1:2000

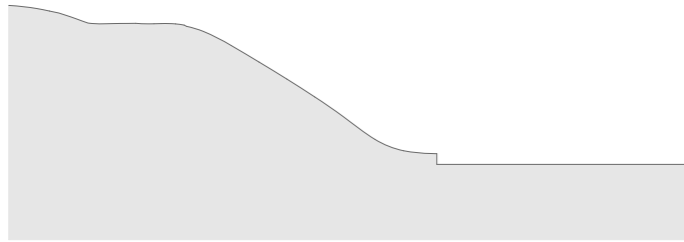


## DESIGN PROCESS

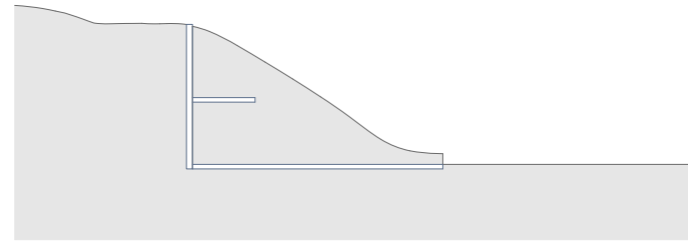


Market Square in 1929, courtesy of Stockholms Stadsmuseum.

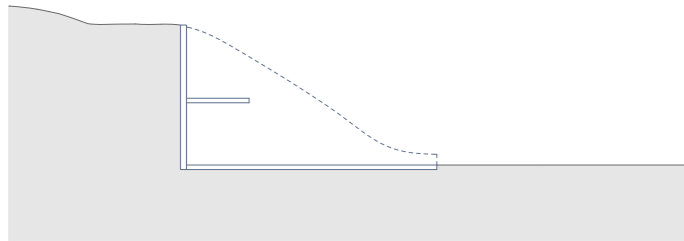
## DESIGN PROCESS



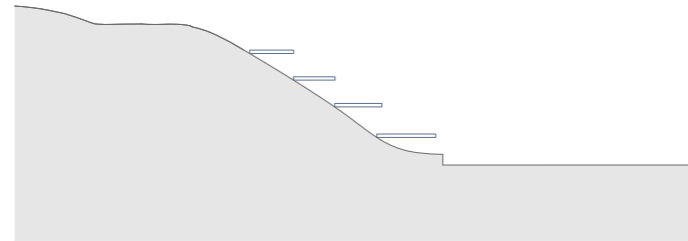
1. In this diagram, the slope of the Observatory Hill is shown, leading up to the viewing platform.



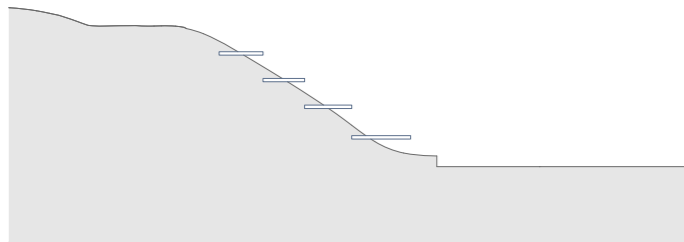
2. Initially, I made designs for the library that were completely pushed back into the hill, as this would preserve the sight lines from the viewing platform.



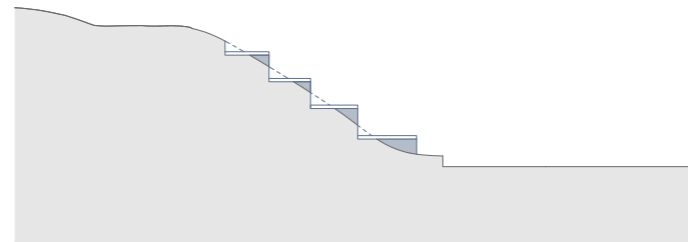
3. However, this led to different challenges, mainly concerning the enormous retaining wall in the back of the building. On top of that, I was looking for a more sustainable way of building onto the hill, without the enormous amount of excess material removed.



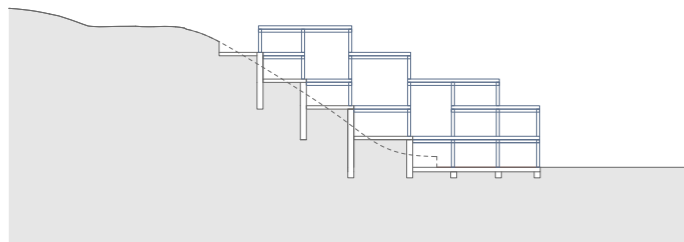
4. I started by placing the floors on top of the natural slope.



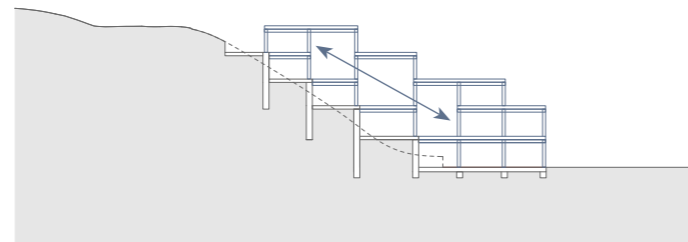
5. Eventually I pushed the floors further back, allowing me to bring the profile of my building closer to the slope of the hill.



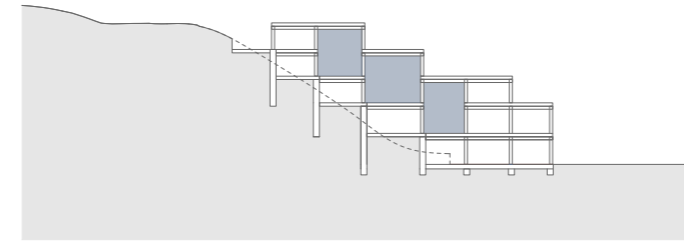
6. This would also allow me to use the cut-and-fill method.



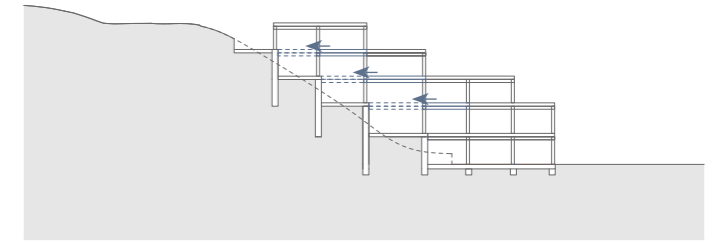
7. Here you can see how the building structure would be placed on top of these floors.



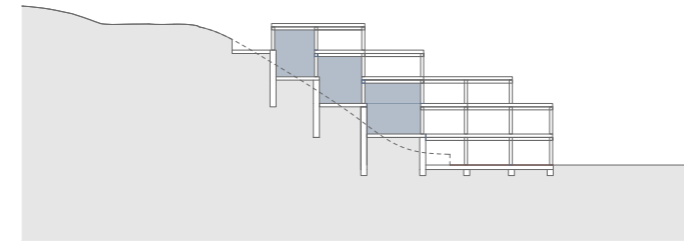
8. I previously mentioned, that during the design briefs, I was fascinated by the idea of different spaces looking out on one another. This was also the main idea behind this design, with voids allowing one to look out over the different floors of the building.



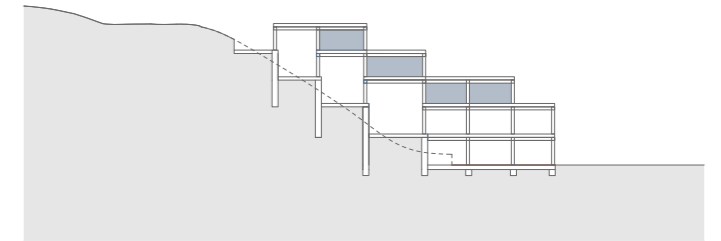
9. Initially the floors of the building were all situated on the slope of the hill and the roofs further to the front. This would allow all the floors to look out over one another, but it was not possible to sit close to the front facade, as the voids were placed on this side of the building.



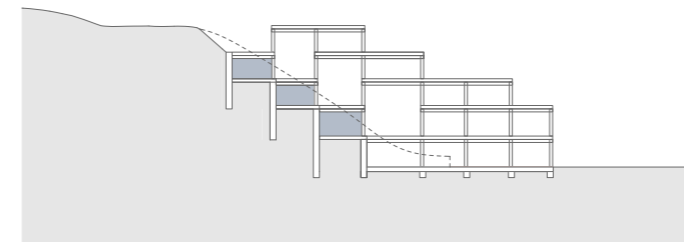
10. The design was therefore adjusted.



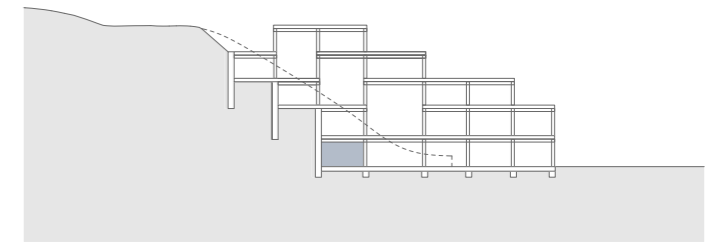
11. In this new design, the voids were located more towards the back of the building.



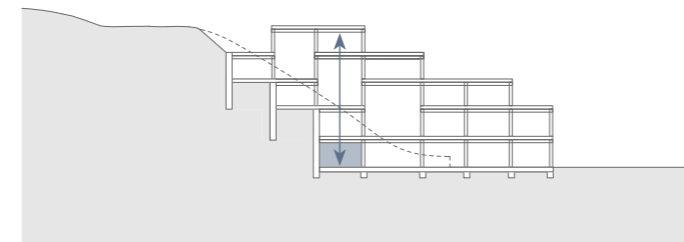
12. Because of this, the floors could be located more towards the front of the building, making it possible to sit next to the front facade.



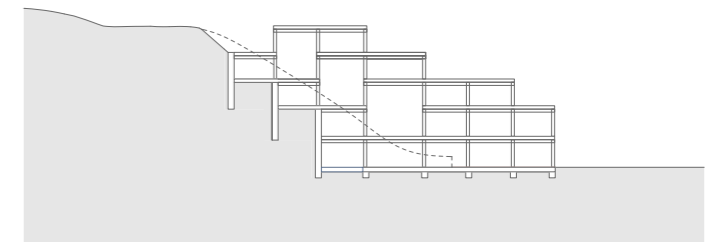
13. Eventually, more spaces were added deeper in the hill, as this would allow service spaces to be placed in the "backbone" of the building, to allow the plan of the building to remain as clear as possible.



14. Finally, I decided to push the ground floor even further back.



15. This makes it possible to have one elevator that can reach all floors.



16. Here you see the final construction on the slope of the hill.



## FLOORS

The floors would have a curved shape, explored in the sketch model shown below, as this is most true to the natural slope of the hill. This is also visible in the diagrams on the right, showing the different floors and the voids through which you can see the other floors. Finally, three different circulation areas were added: the elevator mentioned earlier, with stairs spiraling around it, separate sets of stairs that reach the different floors, and finally, exterior stairs, that not only give access to the different floors, but also to the viewing platform on top of the hill.



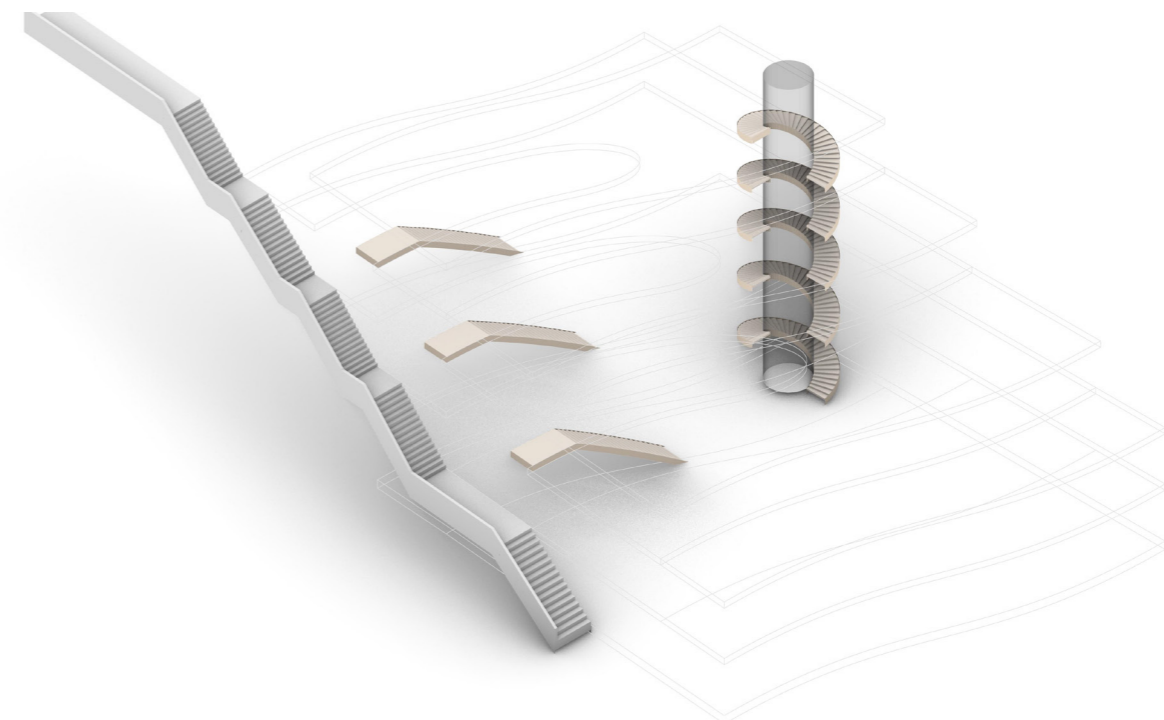
Sketch model exploring floor shape.



Floors.



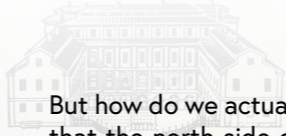
Voids.



Vertical circulation points.



THE OBSERVATORY HILL



But how do we actually build this structure on the slope of the Observatory Hill? In these archival photographs, it is visible that the north side of the hill has previously been reconstructed, and is now made up of gravel and sand. This makes it possible to remove parts of the hill.



BUILDING ON THE SLOPE OF THE OBSERVATORY HILL



NEG.NR: *E 32606* REPRONR: \_\_\_\_\_ DUP.NR: \_\_\_\_\_

DIANR: \_\_\_\_\_ ANNAT NR: \_\_\_\_\_

FOTOGRAF: \_\_\_\_\_ DATUM: *omkr. 1930* F.R.Ö: \_\_\_\_\_

MOTIV: *Observatorielunden, gammal bebyggelse.*

ÖVRIGT: Archival photograph. Source: [https://digitalastadmuseet.stockholm.se/fotoweb/archives/5013-S%C3%A4rskilda-samlingar-\(Gr%C3%A5ark-mm\)?q=observatorielunden](https://digitalastadmuseet.stockholm.se/fotoweb/archives/5013-S%C3%A4rskilda-samlingar-(Gr%C3%A5ark-mm)?q=observatorielunden)

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Foto 1919 A. Malmström

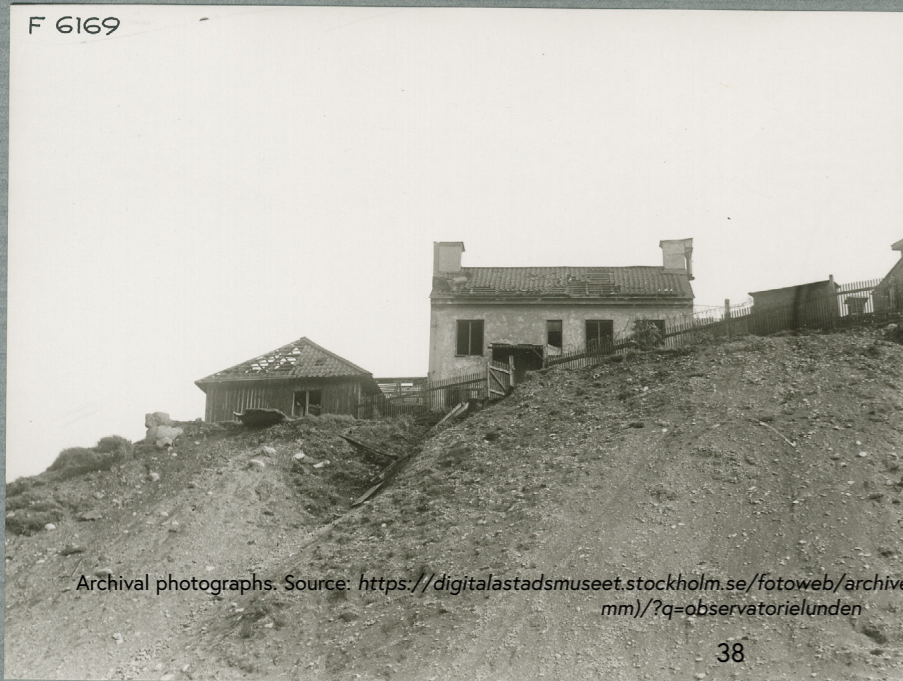
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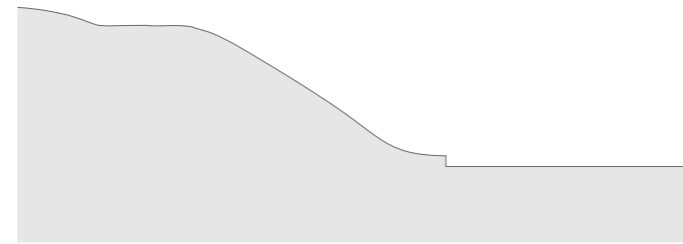
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Foto 1931 Sv. Dagbladet

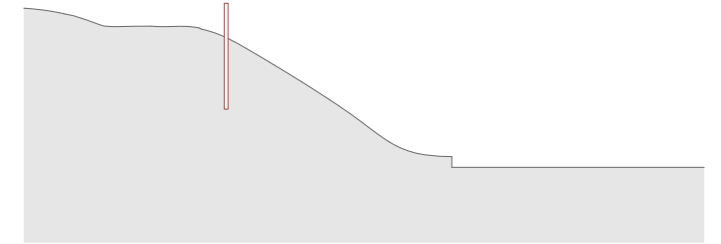


Archival photographs. Source: [https://digitalastadmuseet.stockholm.se/fotoweb/archives/5013-5%C3%A4rskilda-samlingar-\(Gr%C3%A5ark-mm\)?q=observatorielunden](https://digitalastadmuseet.stockholm.se/fotoweb/archives/5013-5%C3%A4rskilda-samlingar-(Gr%C3%A5ark-mm)?q=observatorielunden)

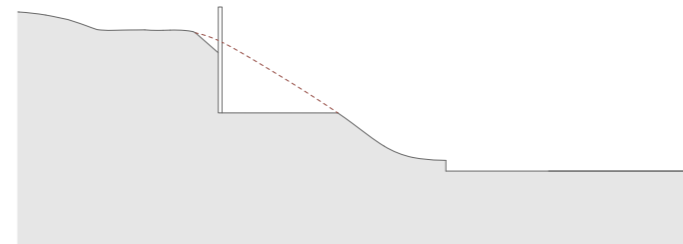
### BUILDING ON THE SLOPE OF THE OBSERVATORY HILL



1. In this diagram, the slope of the Observatory Hill is shown once again.



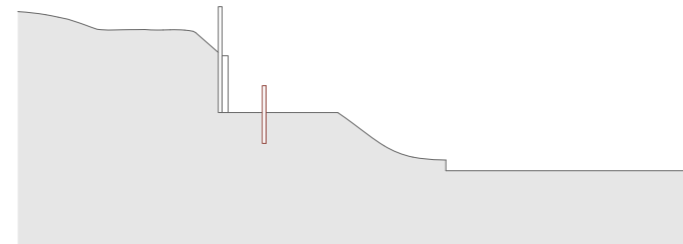
2. We start off by placing sheet piling in the hill.



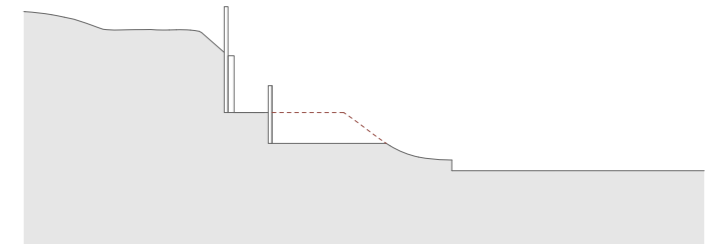
3. This makes it possible to dig out part of the hill.



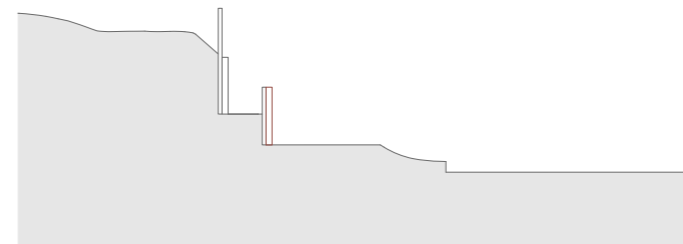
4. In front of this sheet piling, a concrete retaining wall is placed.



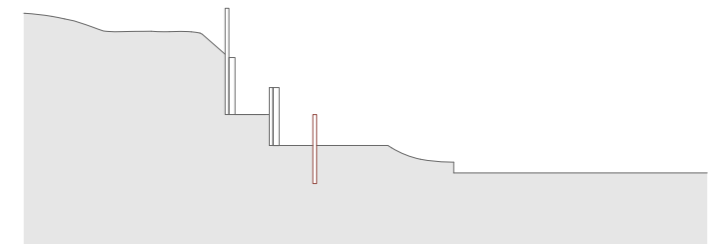
5. This process is then repeated several times. Placing sheetpiling.



6. Digging out part of the hill.



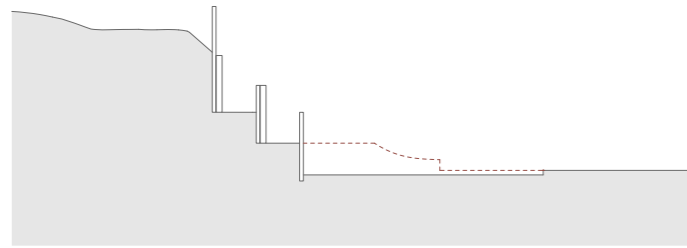
7. Placing a concrete retaining wall.



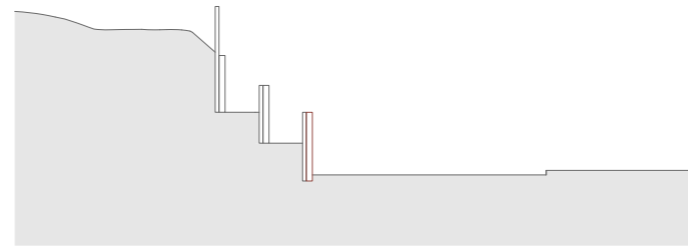
8. Placing sheetpiling.



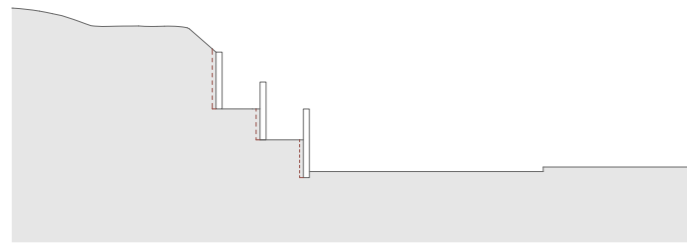
# CITY SECTION



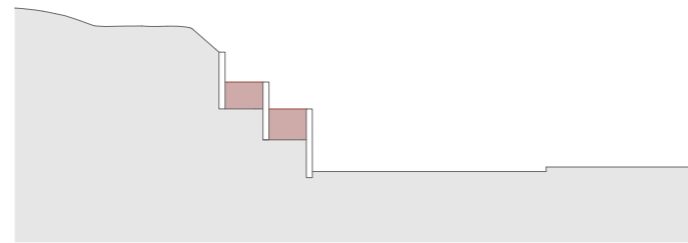
9. Digging out part of the hill.



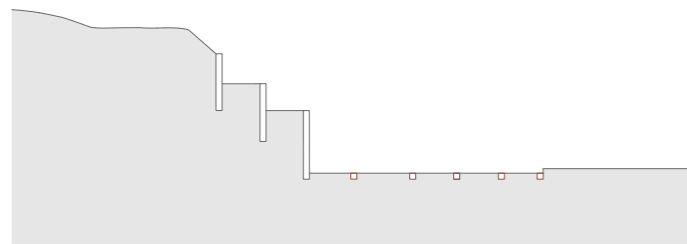
10. Placing a concrete retaining wall.



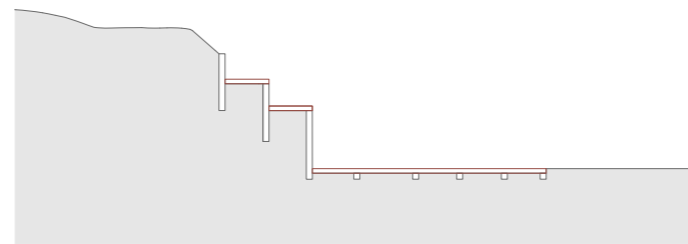
11. After that, the sheet piling is removed. It is also possible to leave it in the hill, but in this case, a lower retaining wall is needed.



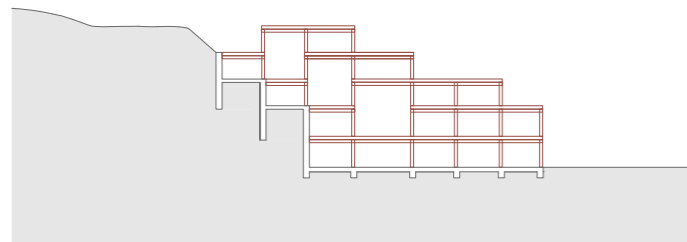
12. The spaces in between the retaining walls are then filled with gravel and sand again.



13. A foundation is laid.

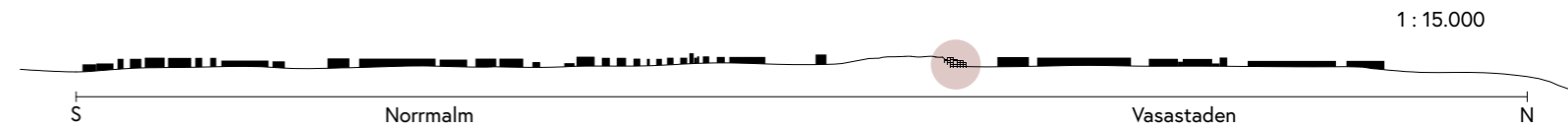


14. Concrete floors are poured on top.



15. Finally, the rest of the structure can be placed on top.

As you can see in this section through the northern part of Stockholm, the building becomes part of the landscape, following the curve of the Observatory Hill.

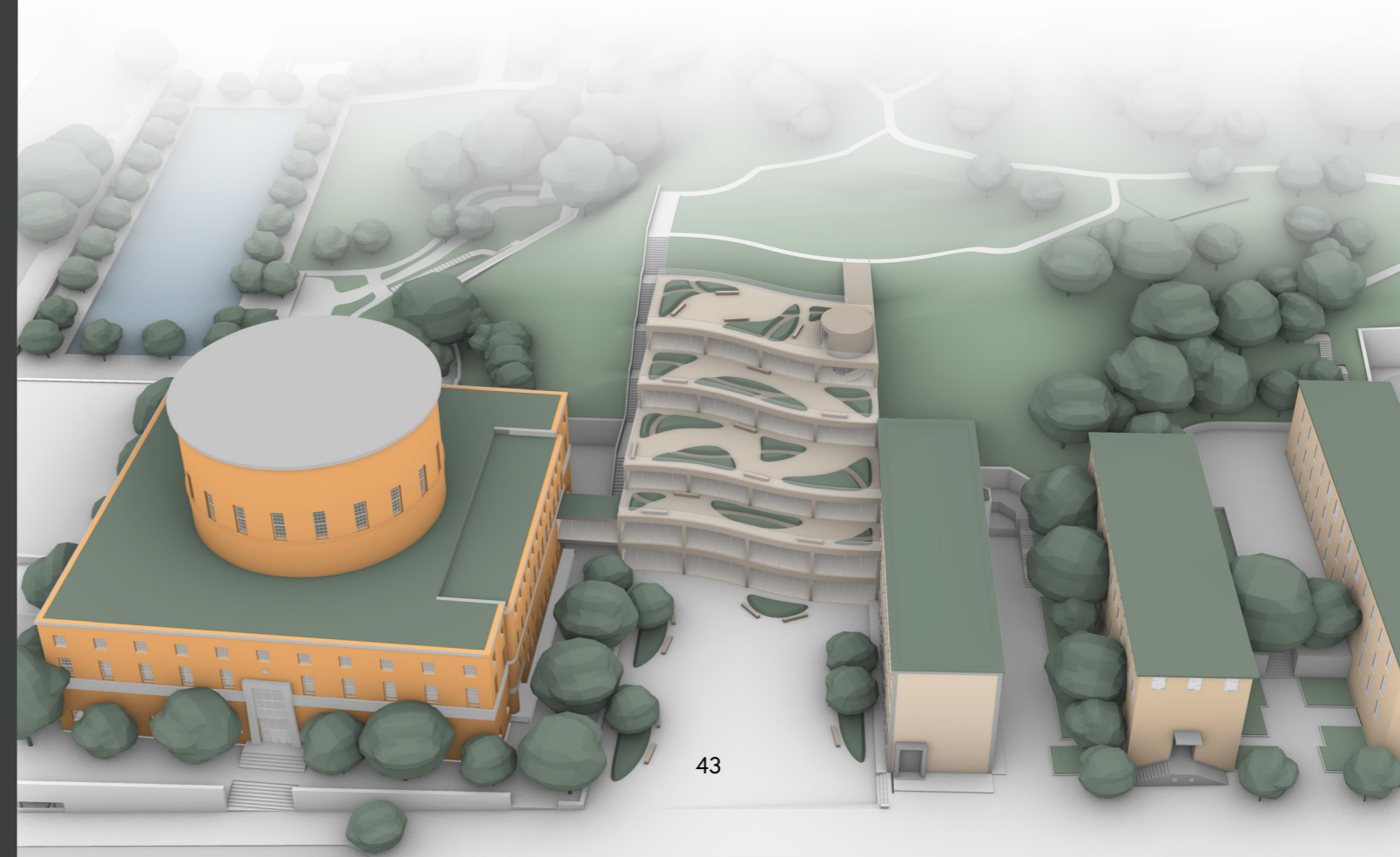


## FINAL DESIGN

The final design: an extension building connecting the Stockholm City Library and the first annex building, allowing access up the Observatory Hill, by foot and by elevator. The extension building has accessible roof terraces with small vegetated hills and seating spots on each level. The roof of the Asplund building as well as its annexes will also become vegetated to increase biodiversity and decrease cooling load. However, these roofs will not be accessible.

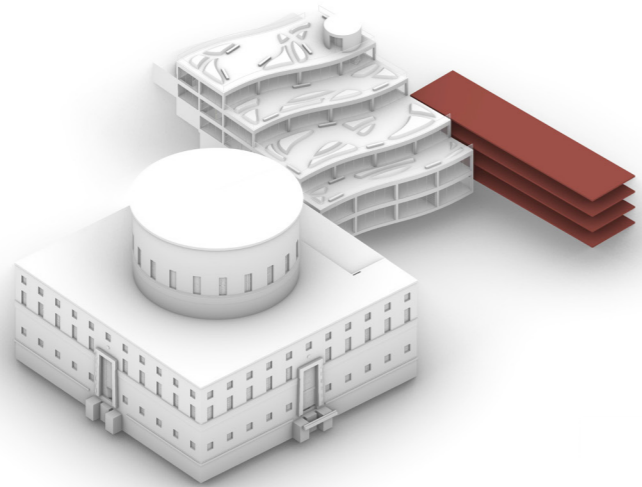
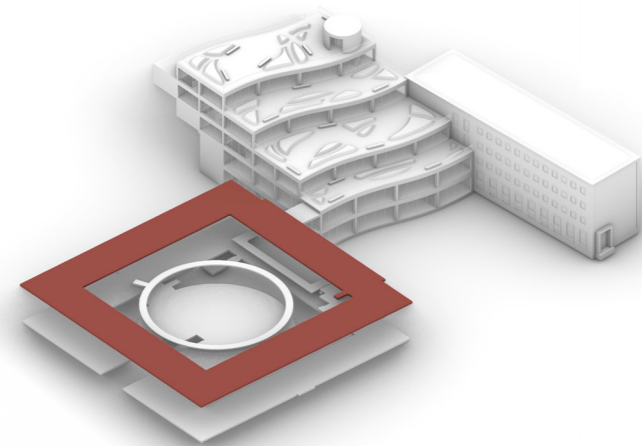
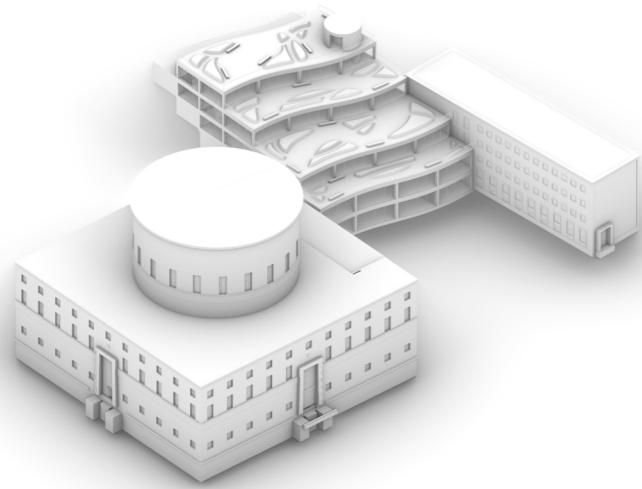


## FINAL DESIGN



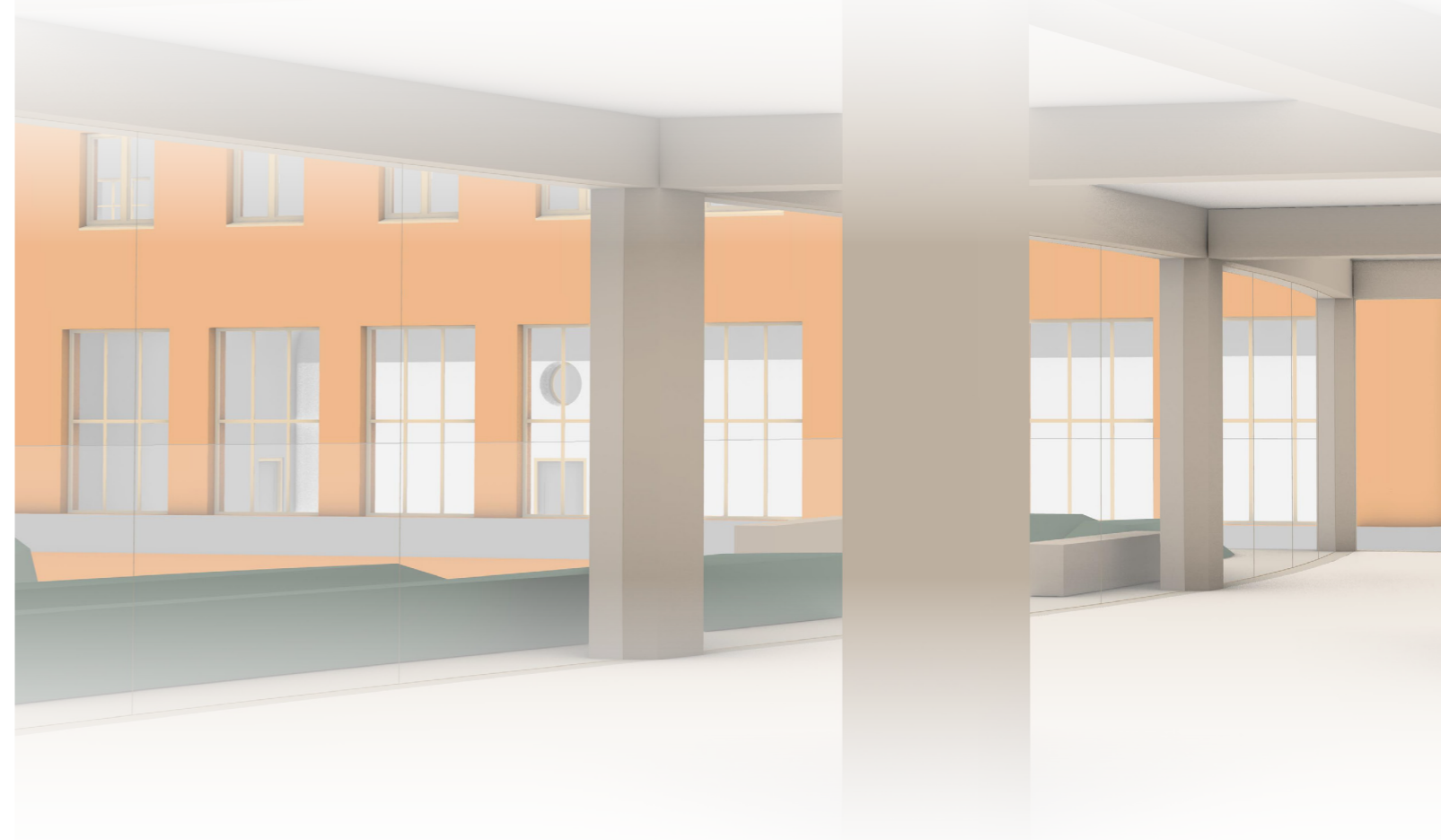
## ADULT EDUCATION

The connection to both the Asplund Library and the annex building, allows for offices to be moved from the library to the annex building. In this way, the top floor of the Asplund Library can be used for adult education again, as it was originally intended.

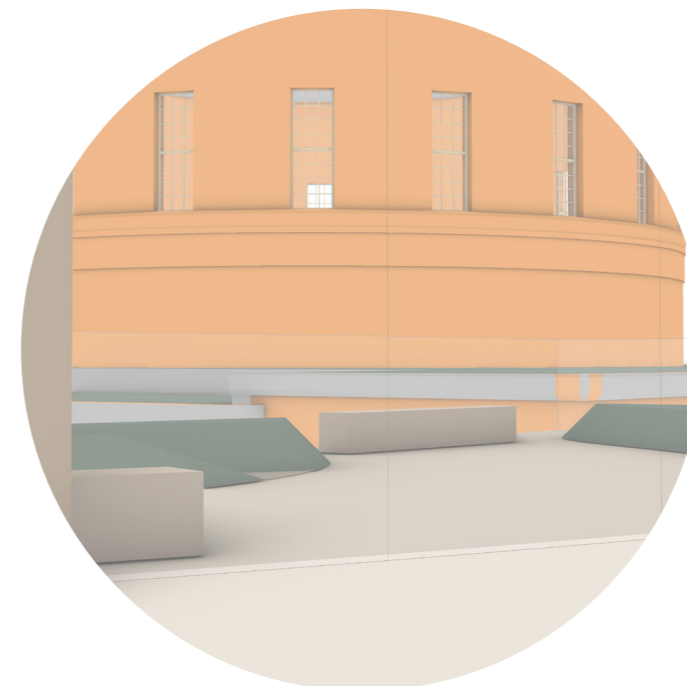


## EXPERIENCE

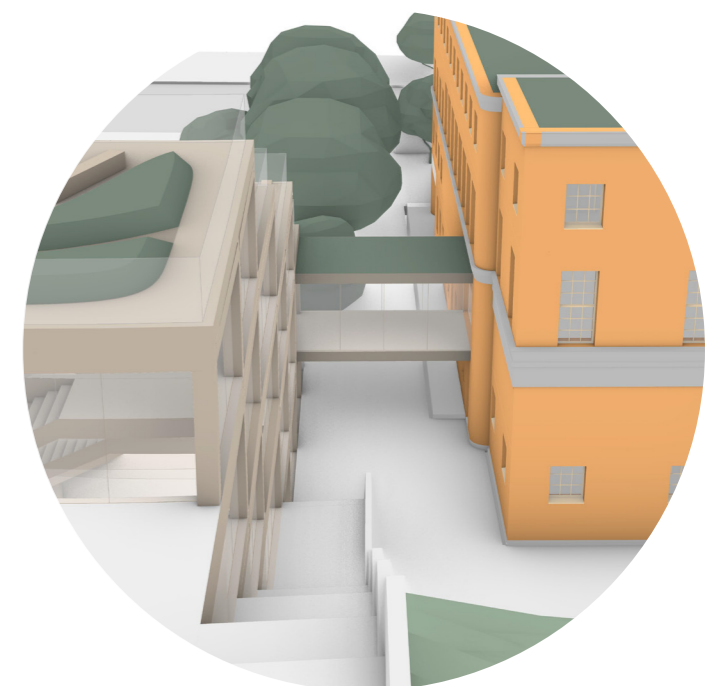
From the different floor levels, we look out on the Asplund building. In these images, you can see how you can look into the West Wing and into the Rotonda. The exterior stairs also allow us to experience the Library from different levels, and also give access to the different floors of the extension building during summer.



Interior perspective, West Wing view.



Interior perspective, Rotonda view.



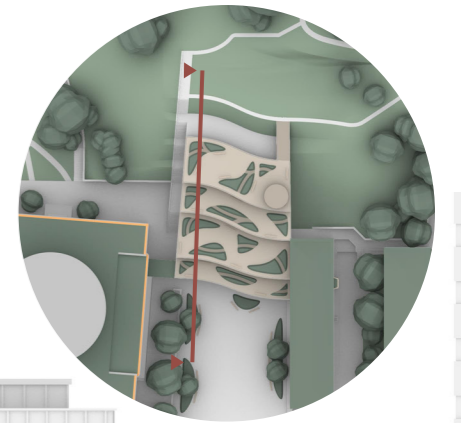
Exterior perspective, view from top of stairs.



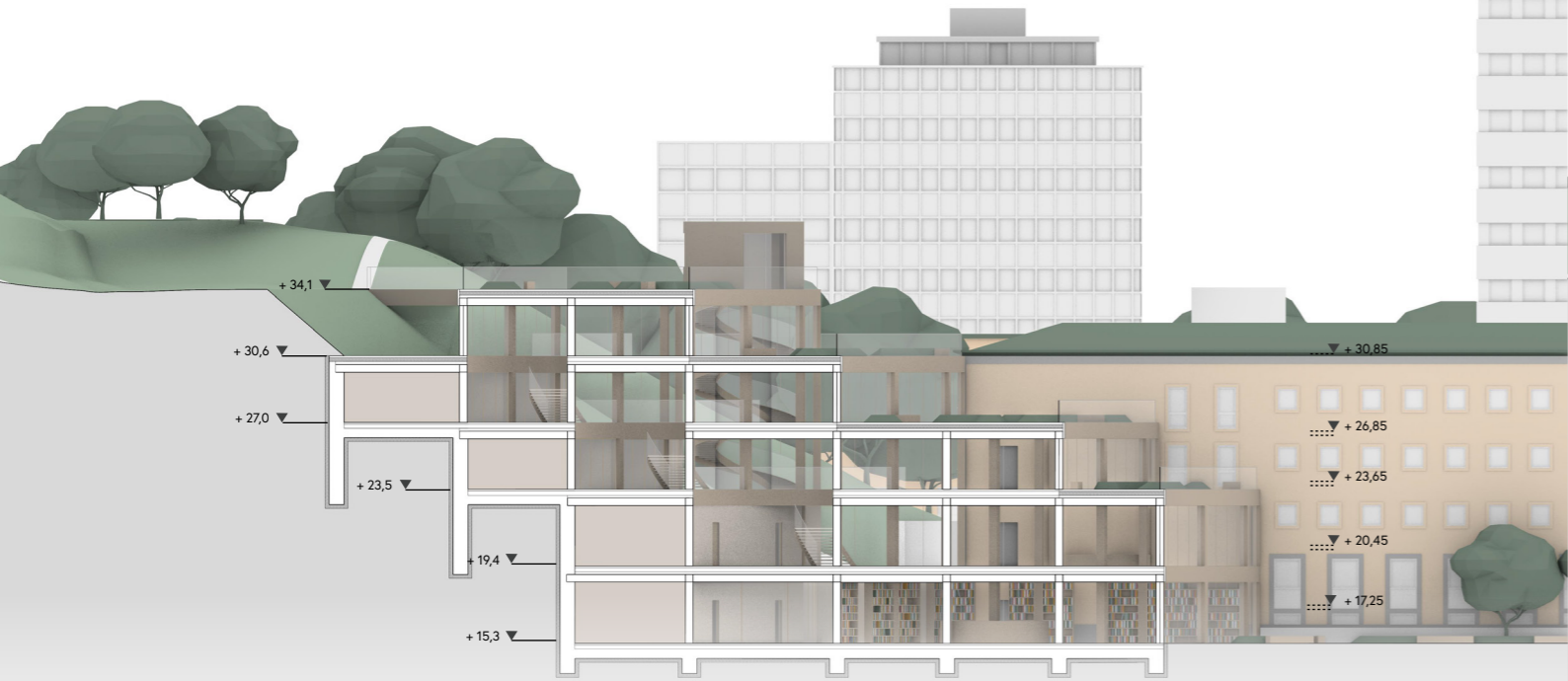
# SECTION

As you can see, there is a viewline through the whole building, with the exception of the ground floor. This ground floor serves as an entrance area with a cafe connected to the outside square. The floors above form the actual library.

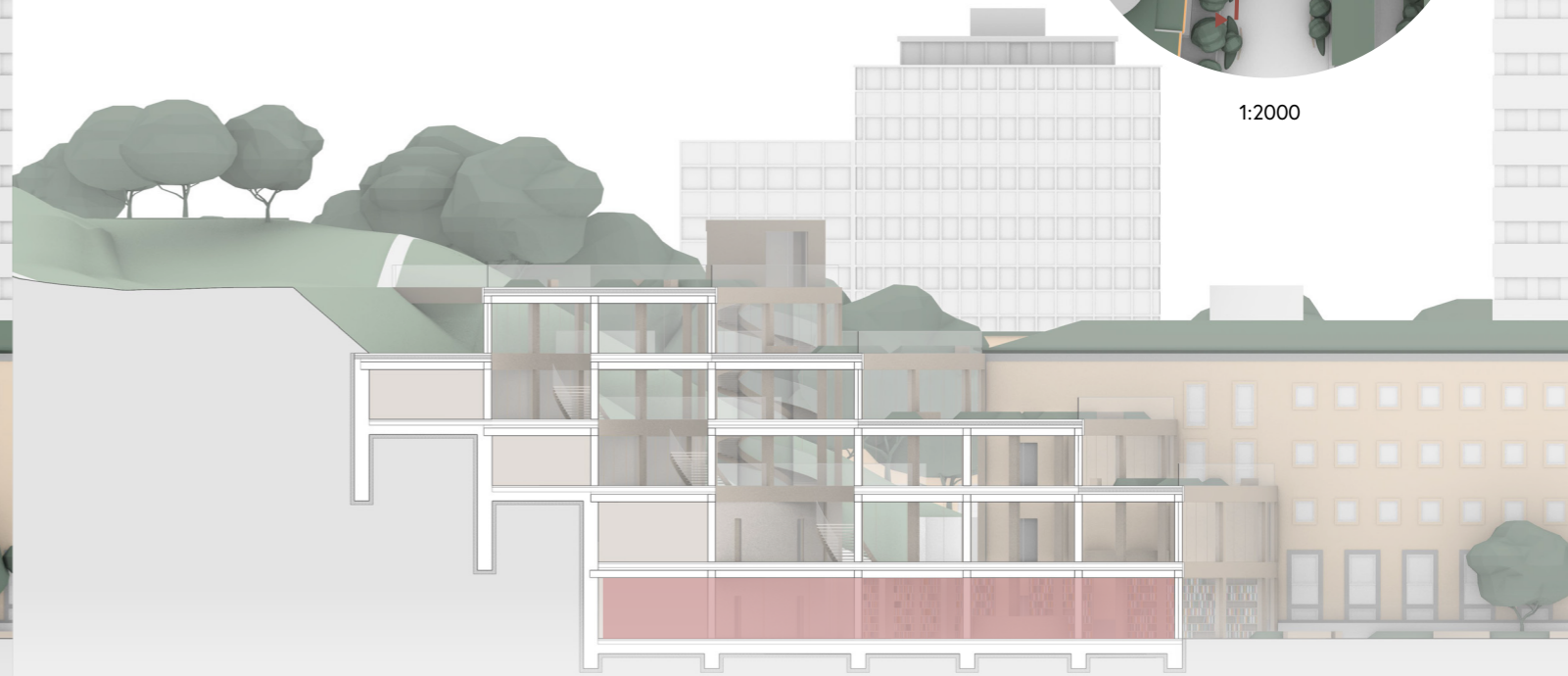
In these diagrams, you can see how these spaces are placed in front of the voids, as mentioned earlier. In the backbone of the building, facilities like technical rooms, restrooms, and storage spaces are located, as well as more private group rooms. Furthermore, the main elevator gives access to all floors.



1:2000



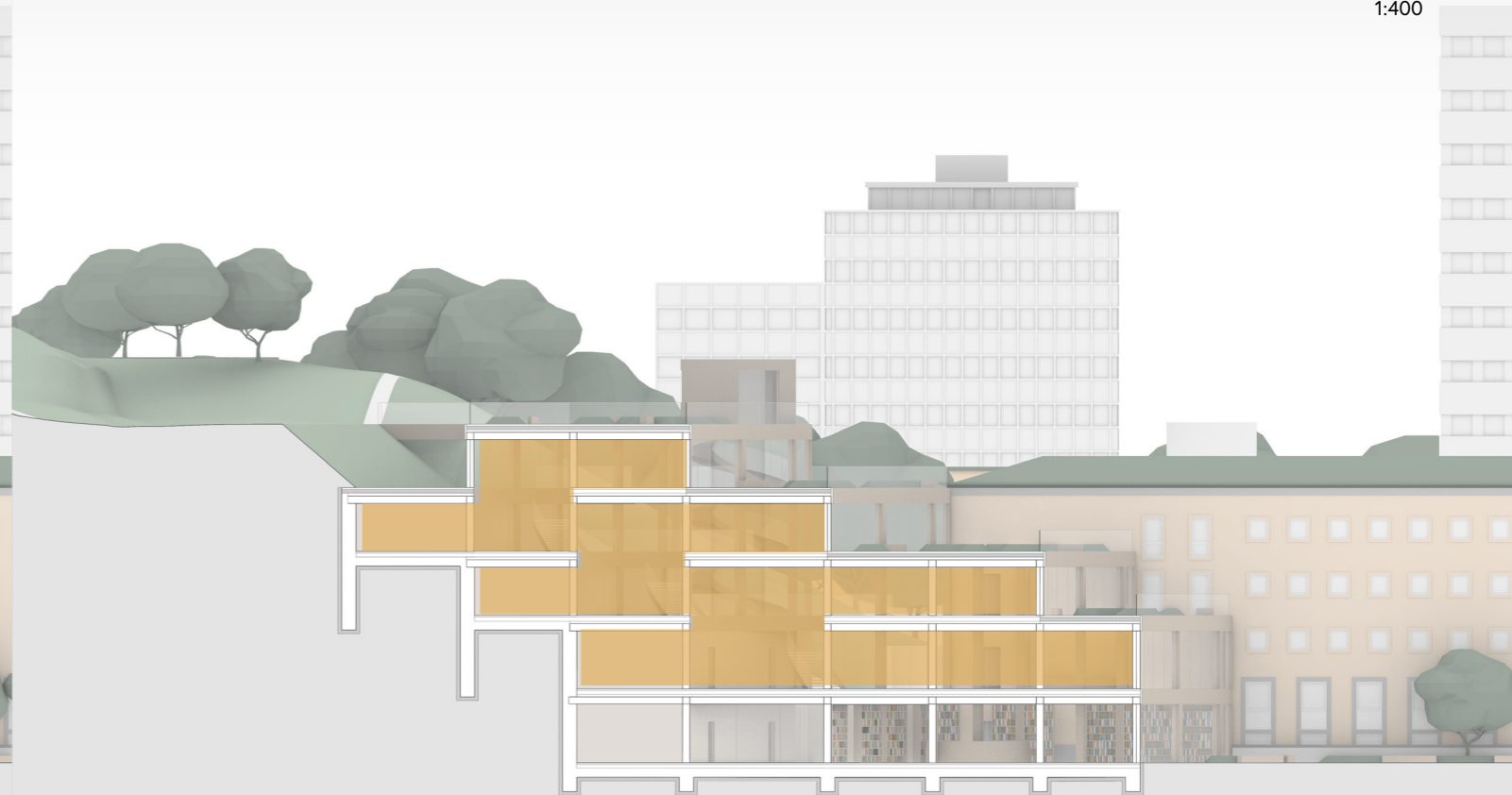
South-North Section  
1:400



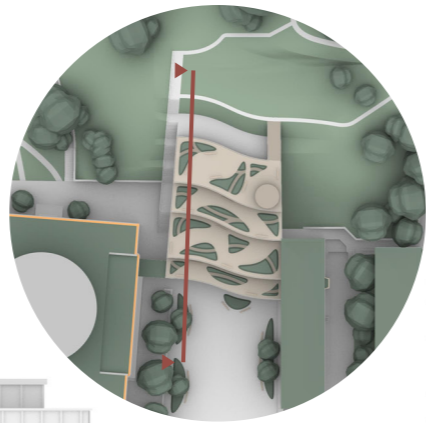
Ground Floor  
South-North Section  
1:400



Viewline  
South-North Section  
1:400

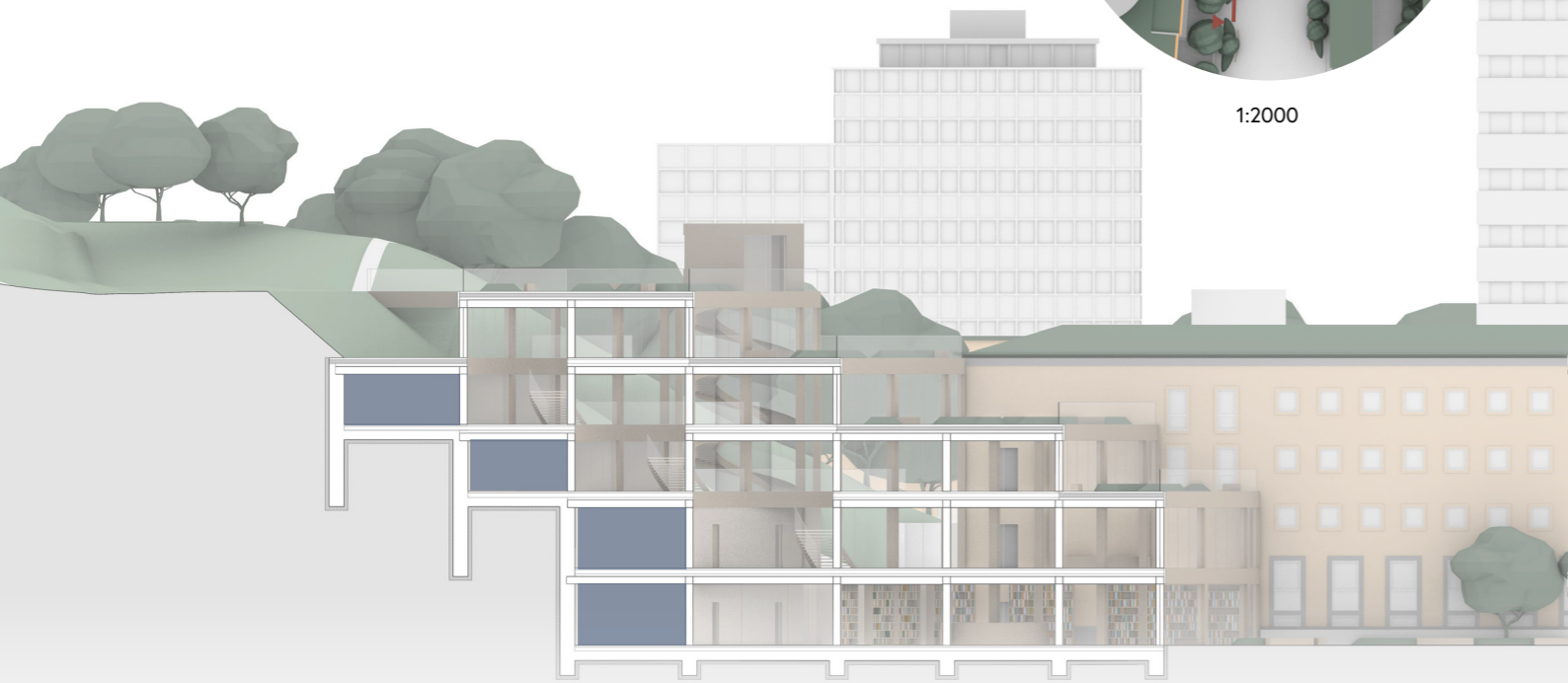


Library  
South-North Section  
1:400

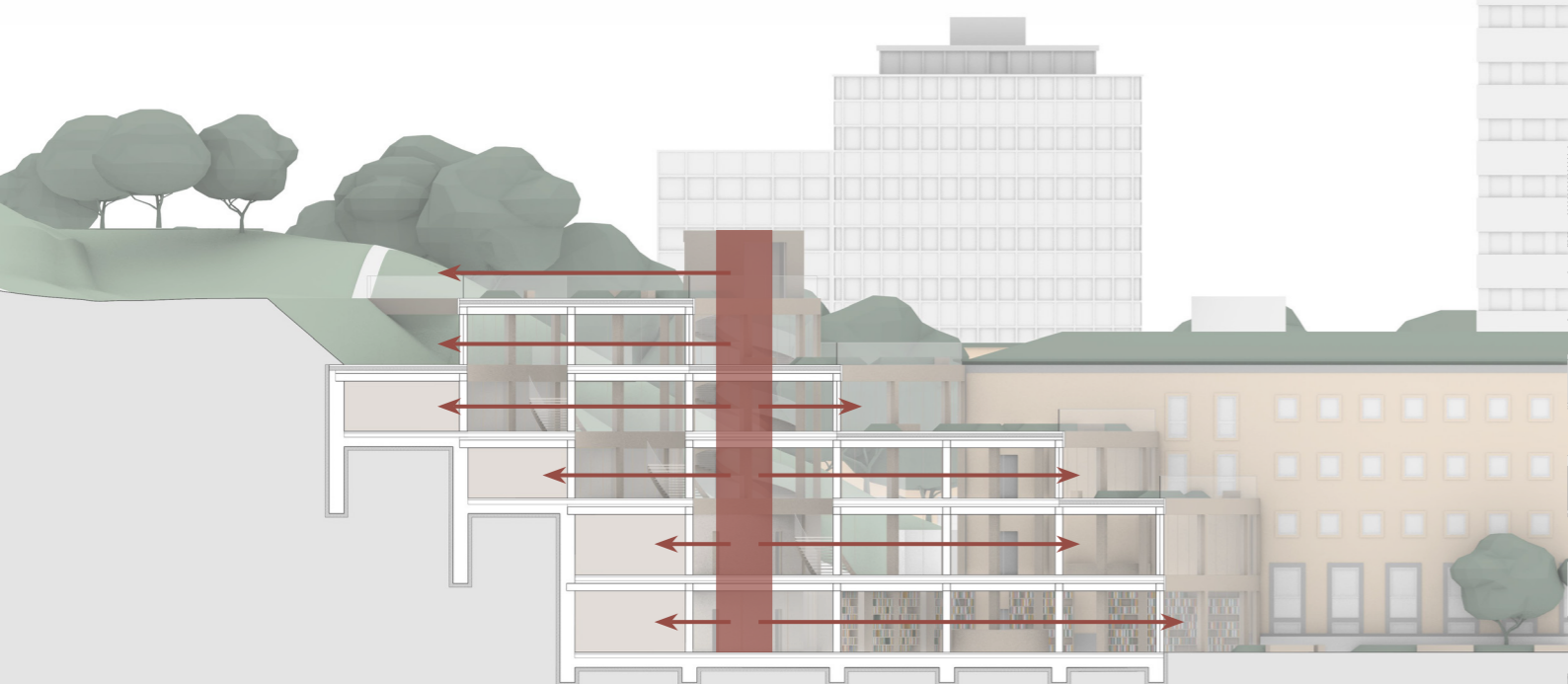


1:2000

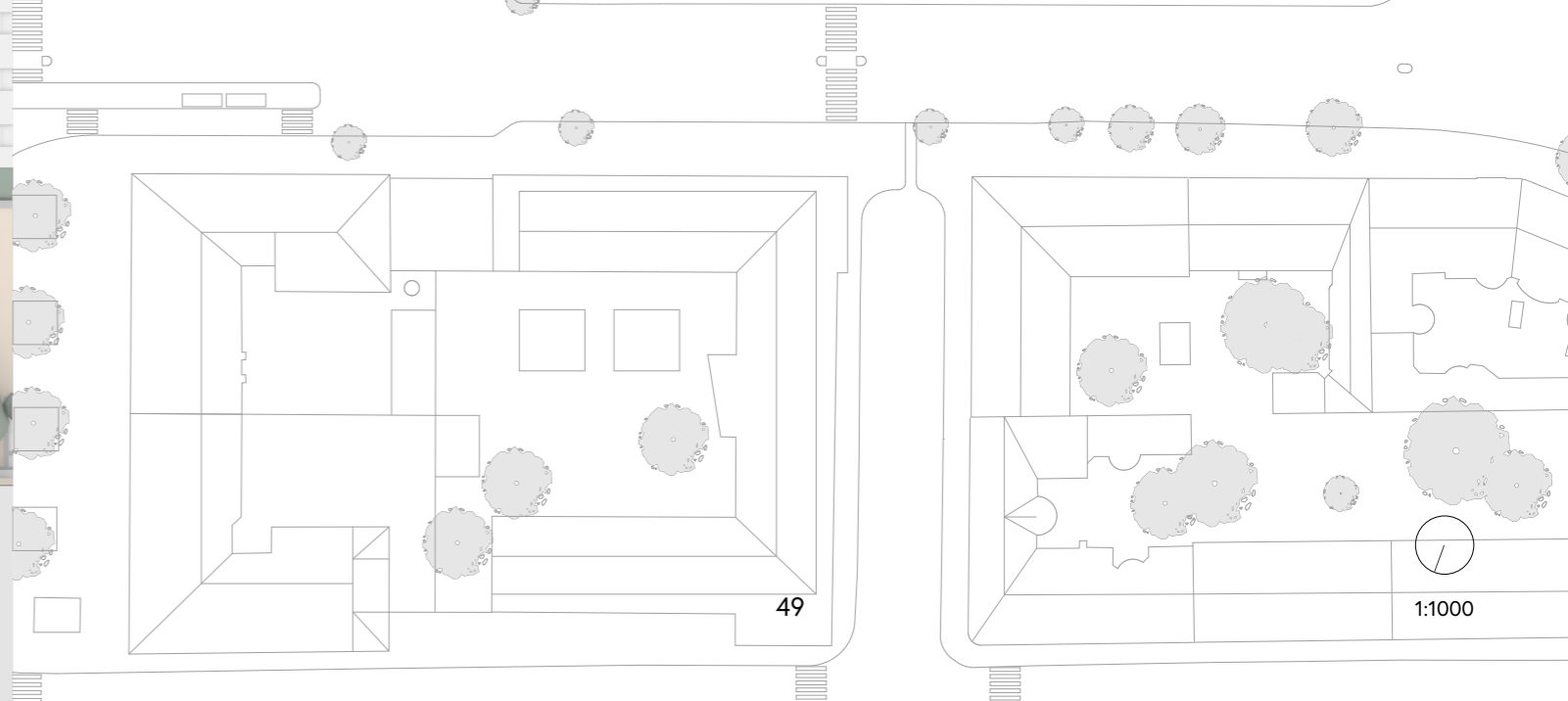
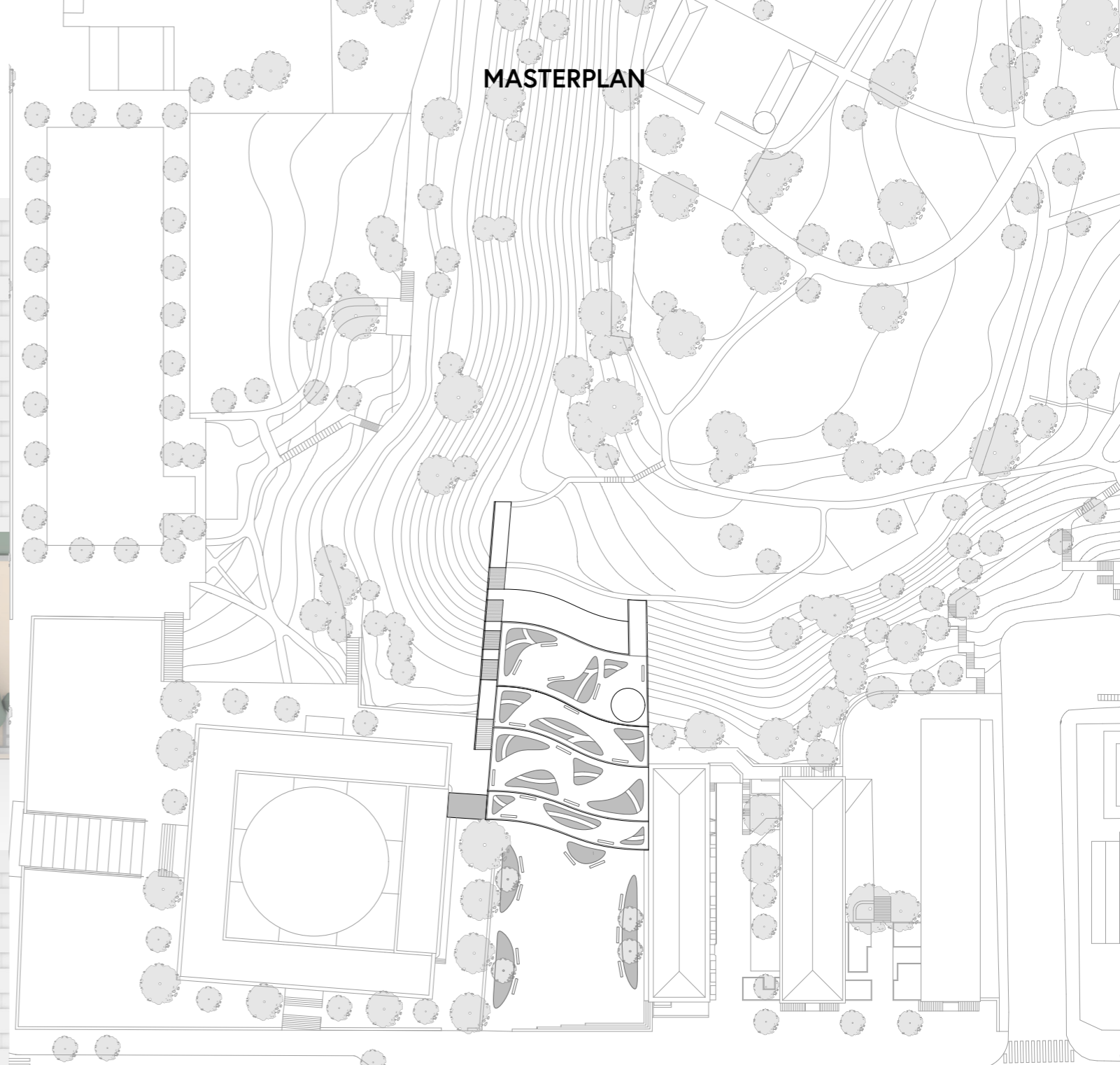
# MASTERPLAN



Service Spaces  
South-North Section  
1:400



Circulation  
South-North Section  
1:400



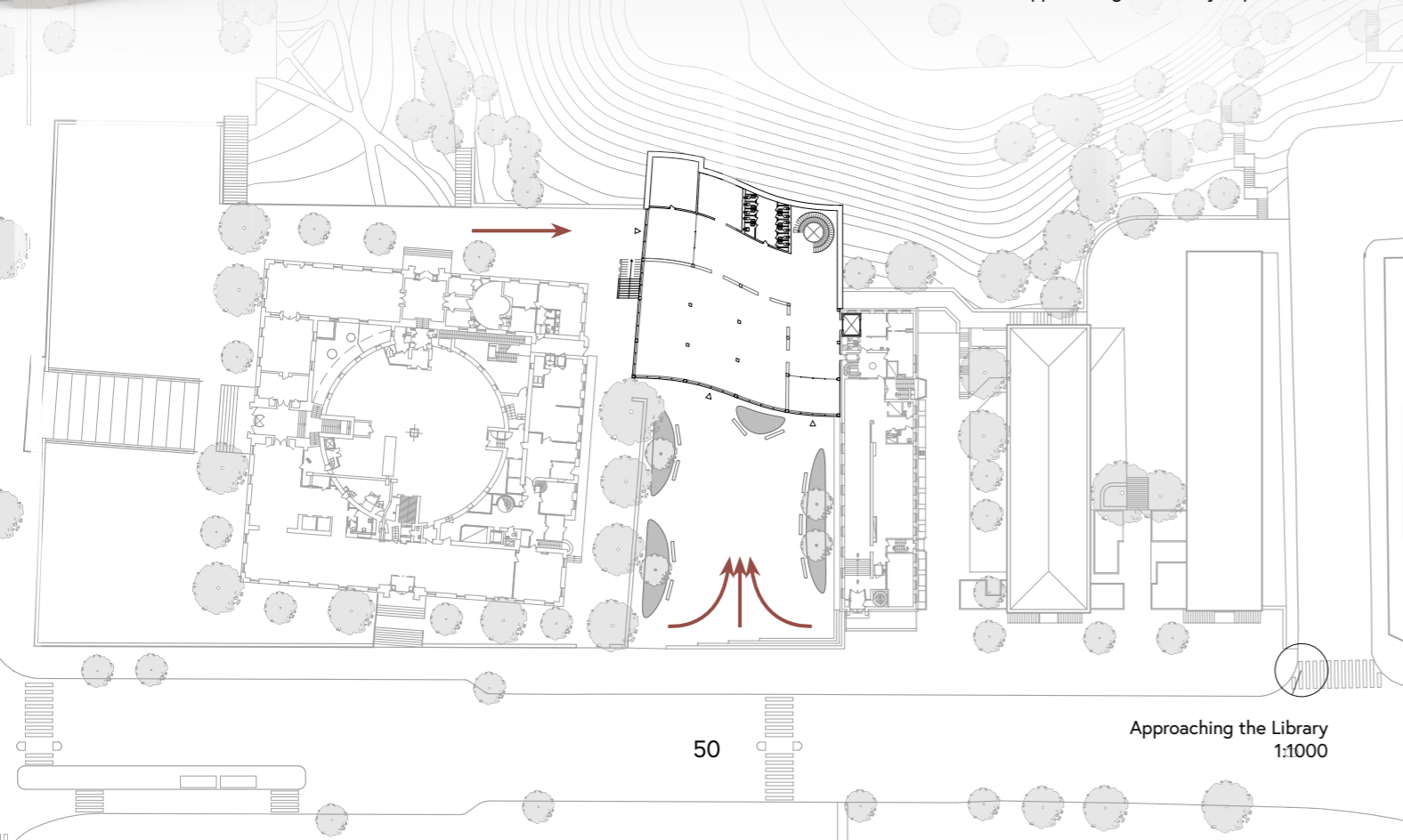


## APPROACHING THE LIBRARY

The extension building can be approached either from the side of the park or from the side of the square, which includes visitors arriving by public transport from Odenplan. The vegetation on the square is placed in a way that allows visitors to easily pass towards their destinations.

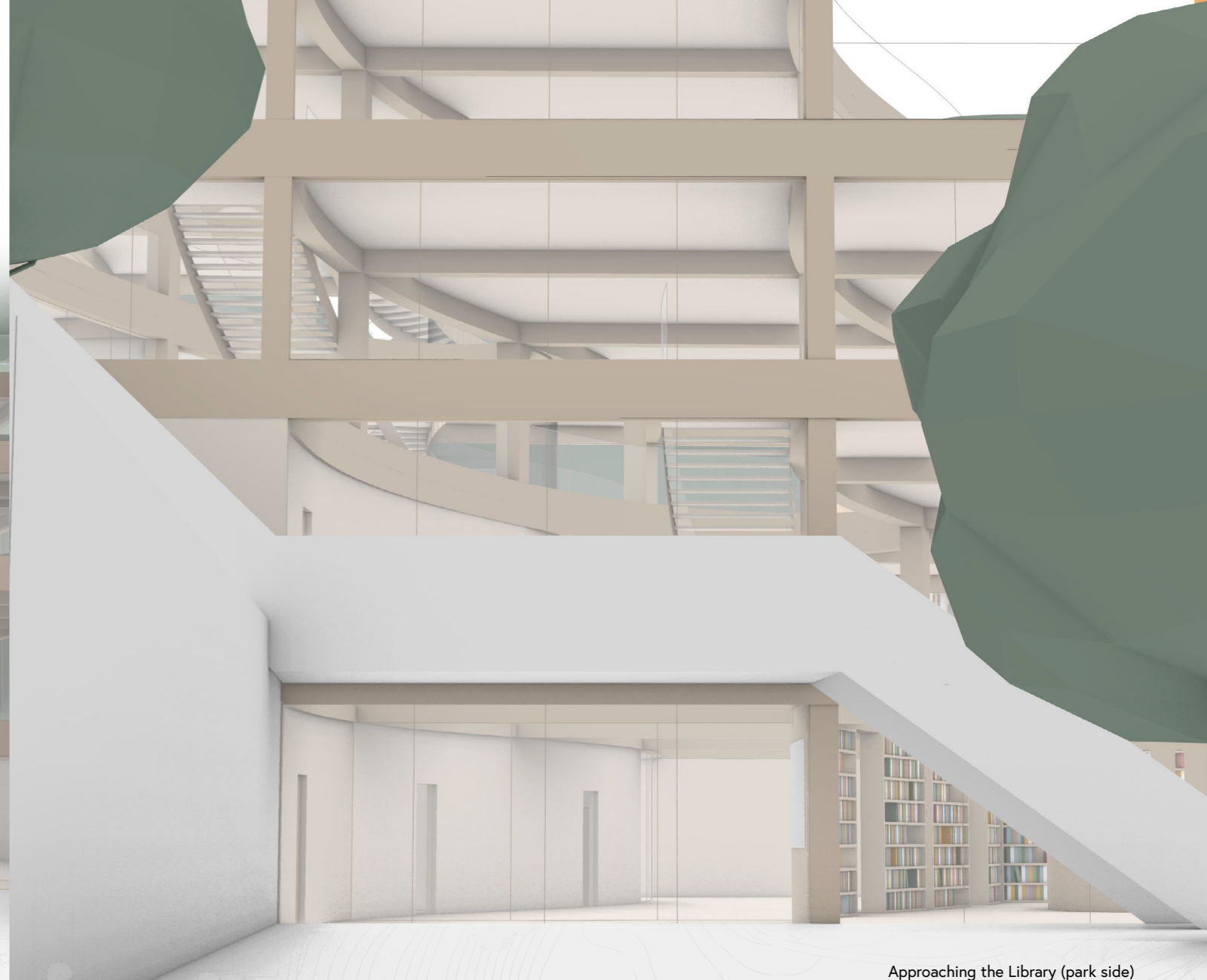


Approaching the Library (square side)

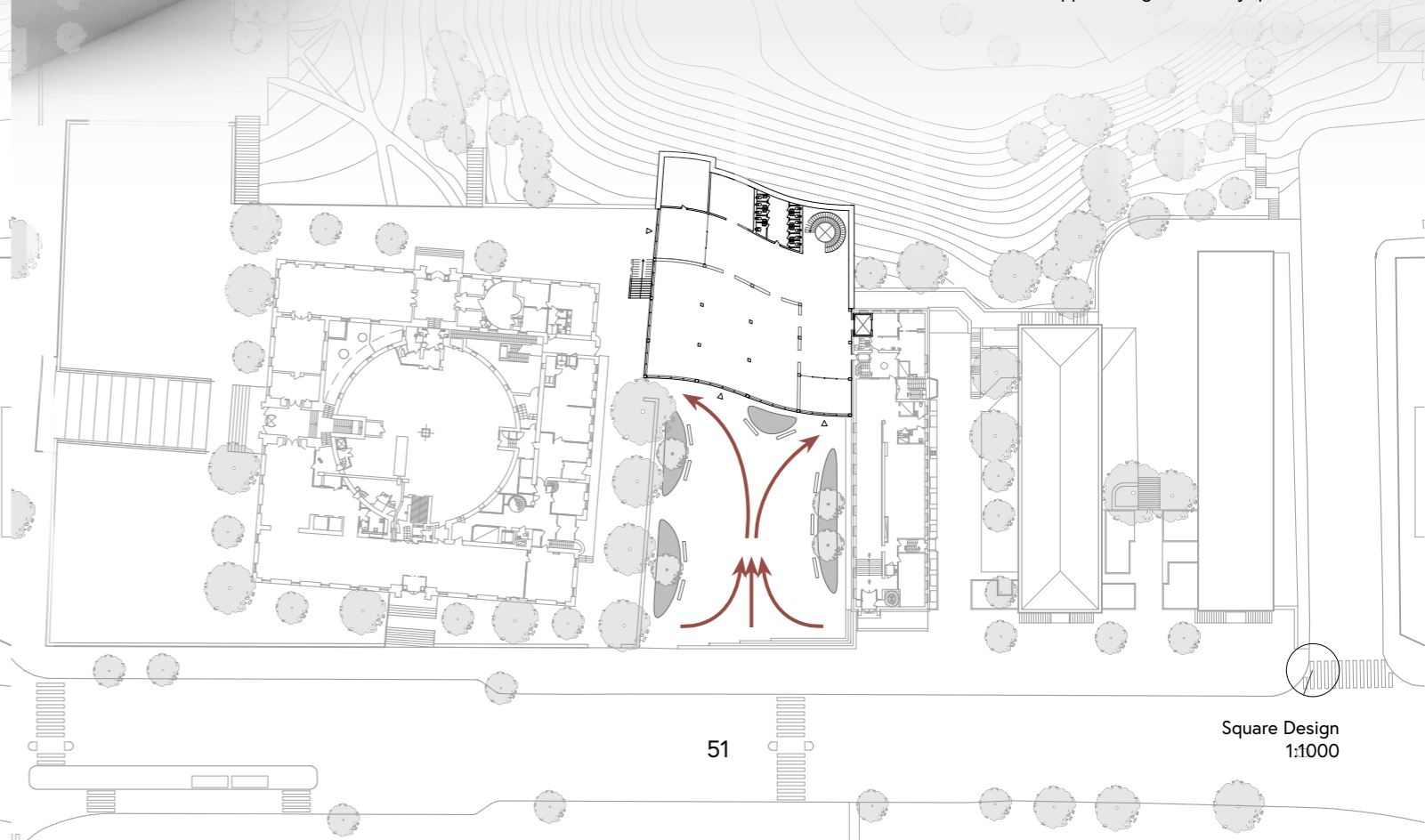


50

Approaching the Library  
1:1000



Approaching the Library (park side)



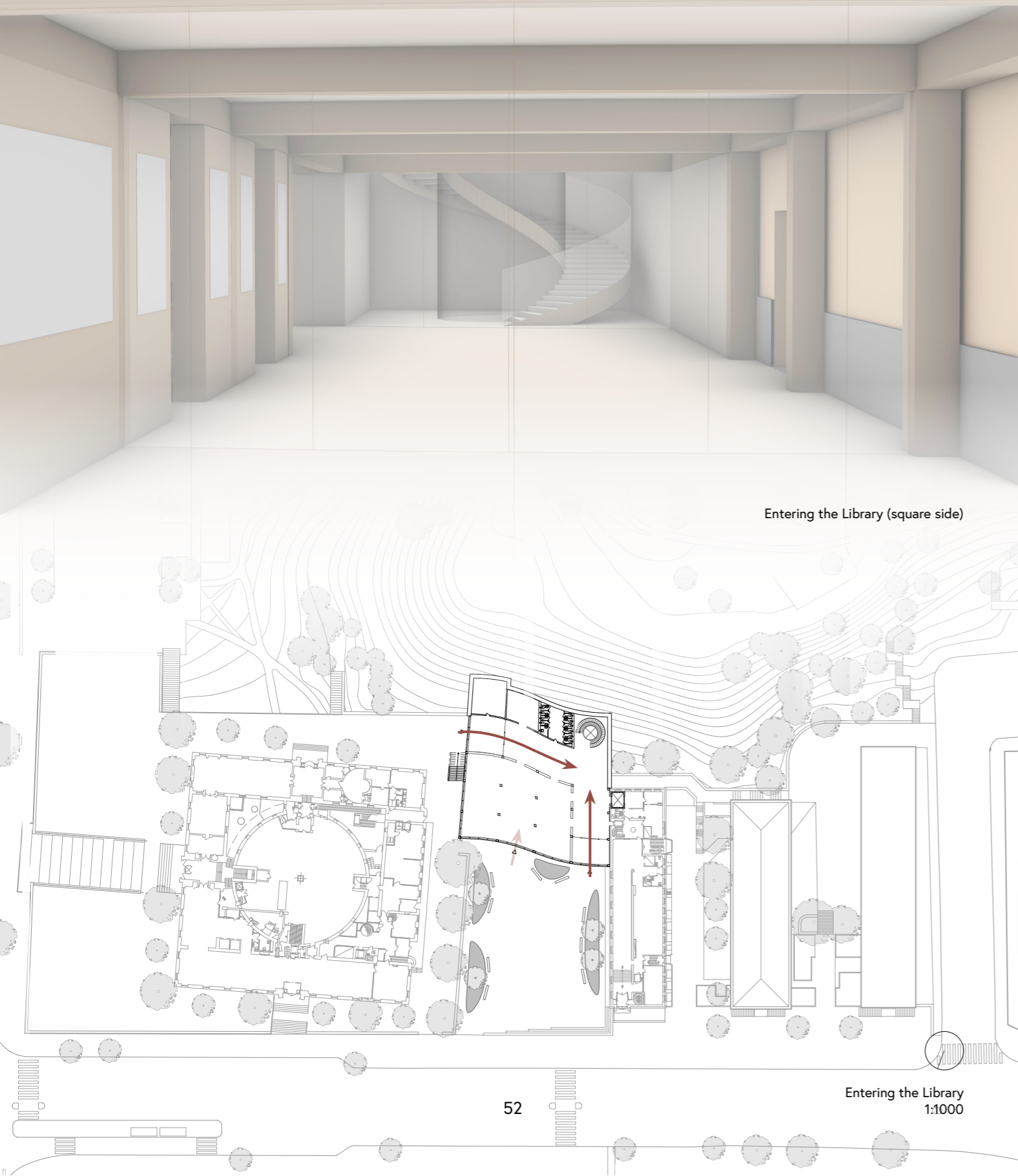
51

Square Design  
1:1000



## ENTERING THE LIBRARY

The ground floor has been designed in a way that allows both these streams of visitors to pass directly to the circulation point. During summer, an extra entry point leads directly into the cafe.



## GROUND FLOOR

On the ground floor, we find the cafe, which is closely connected with the exterior square. This so-called "Share and Repair Cafe" is the place that allows for community activities to unfold. The shelves of the cafe are filled with second-hand books or other goods that one can leave behind to share with or donate to others, and in this space events can be held similar to the events in the community center in Rotterdam: a coffee with a chat, a textile repair session, you name it.



## LEVEL 1

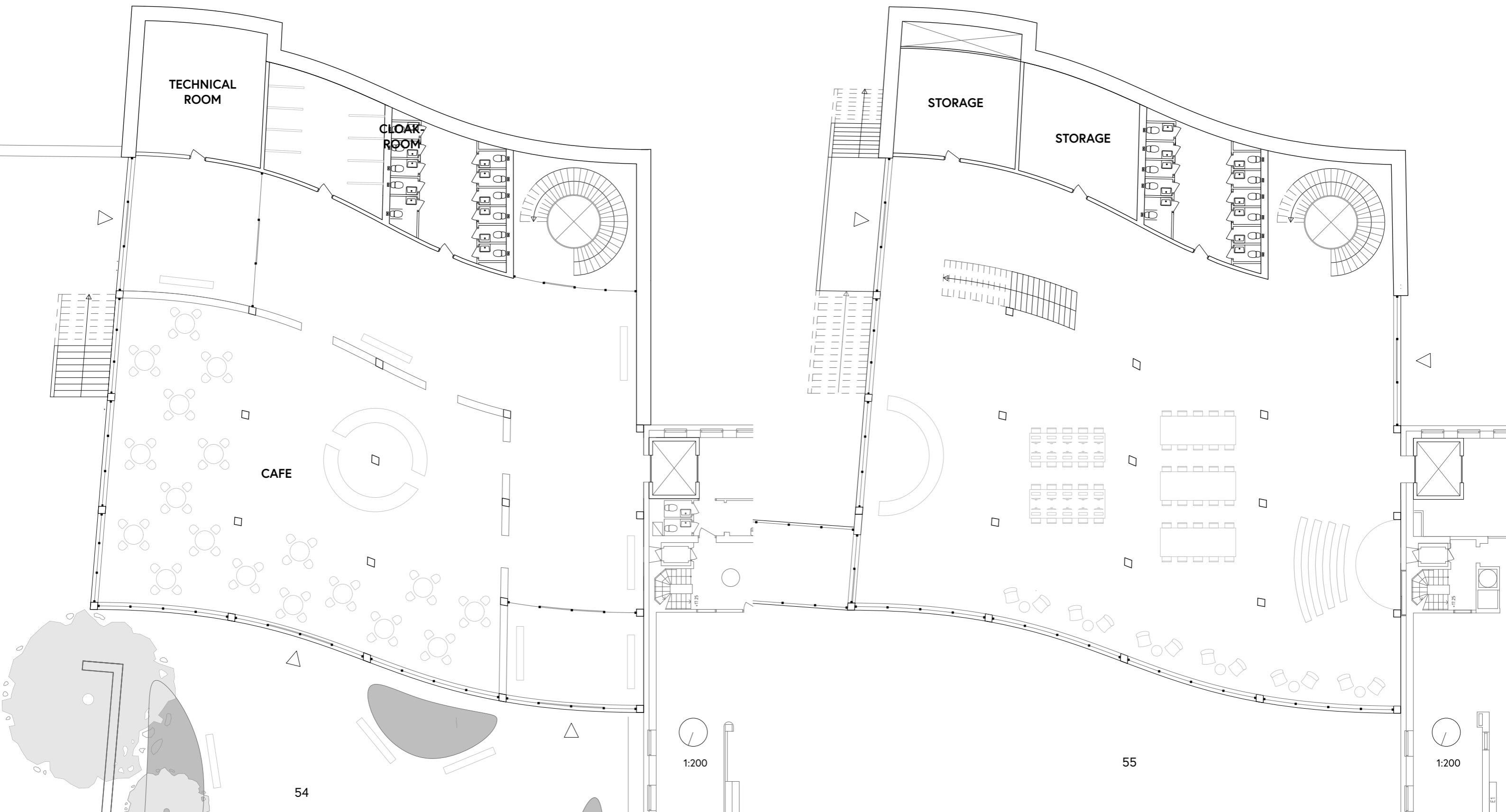
Vestibules are added on the ground floor, for the extreme weather conditions in Stockholm. The doors towards the terraces on the floors above don't have these vestibules and will therefore only be accessible during summer. The same goes for the entrances along the exterior staircase. However, these can still be used as fire escapes.

A double-sided elevator connects the extension floors with the annex floors and is also used to transport goods into the extension building.

The first floor is the main library floor, which gives access to all different parts of the library, with the main staircases, the elevator connecting towards the annex, and a back entrance, which is accessible with a small ramp behind the first annex building. This is shown on the next page.

The first floor is also the floor that connects back to the Asplund building, by creating an opening in the West Wing. With this, a connection is created between Asplunds Rotonda and the main library floor of the extension building. The furniture of the extension building also hints to Asplunds building. For example, a similar podium is created in the extension building.

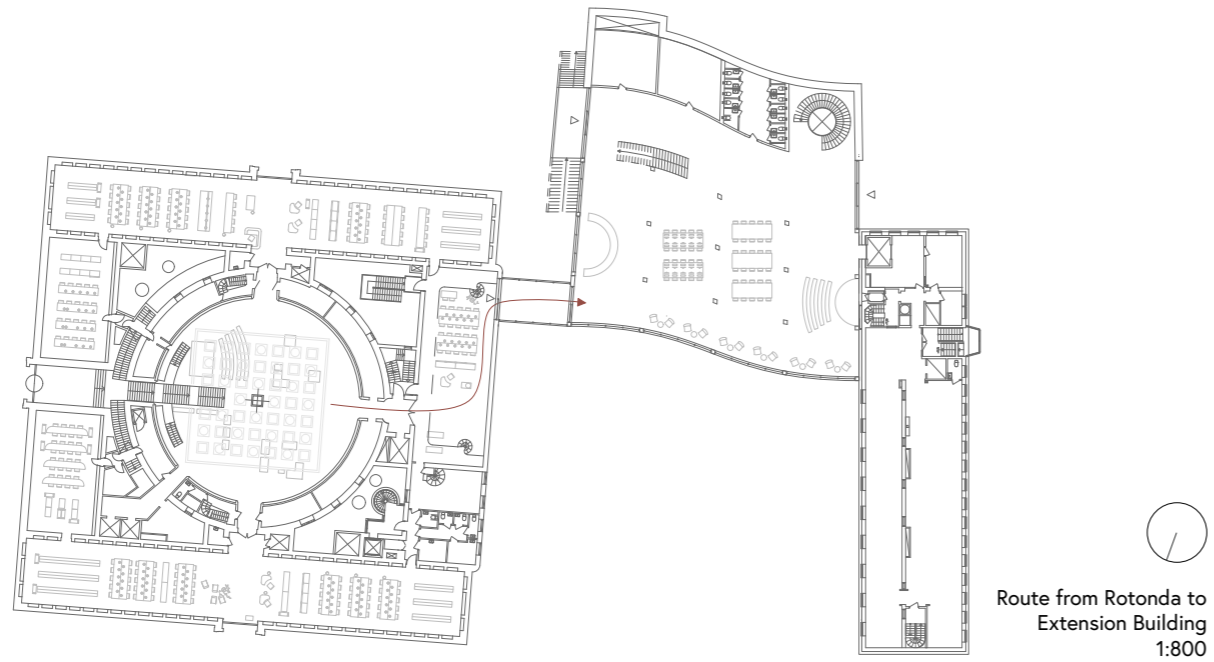
The first floor has a reception desk and storage facilities, where tables and chairs can be stored when there are events to be held. This space is also used for exhibitions, as this is where most visitors will pass.



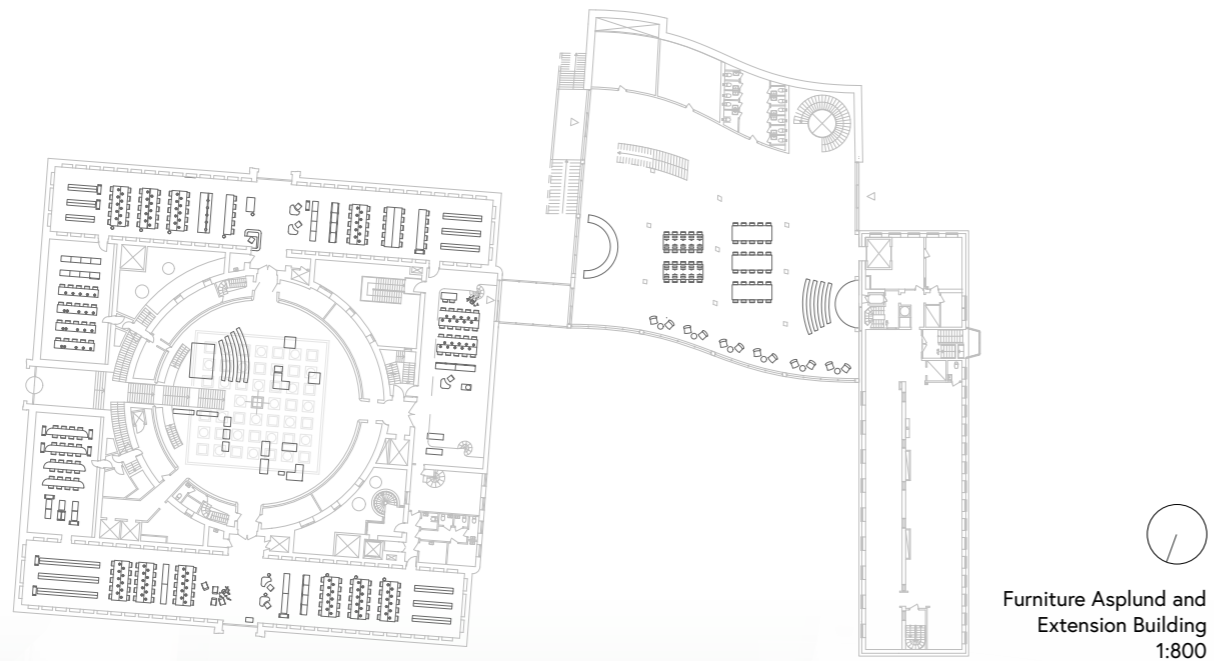


# LEVEL 2

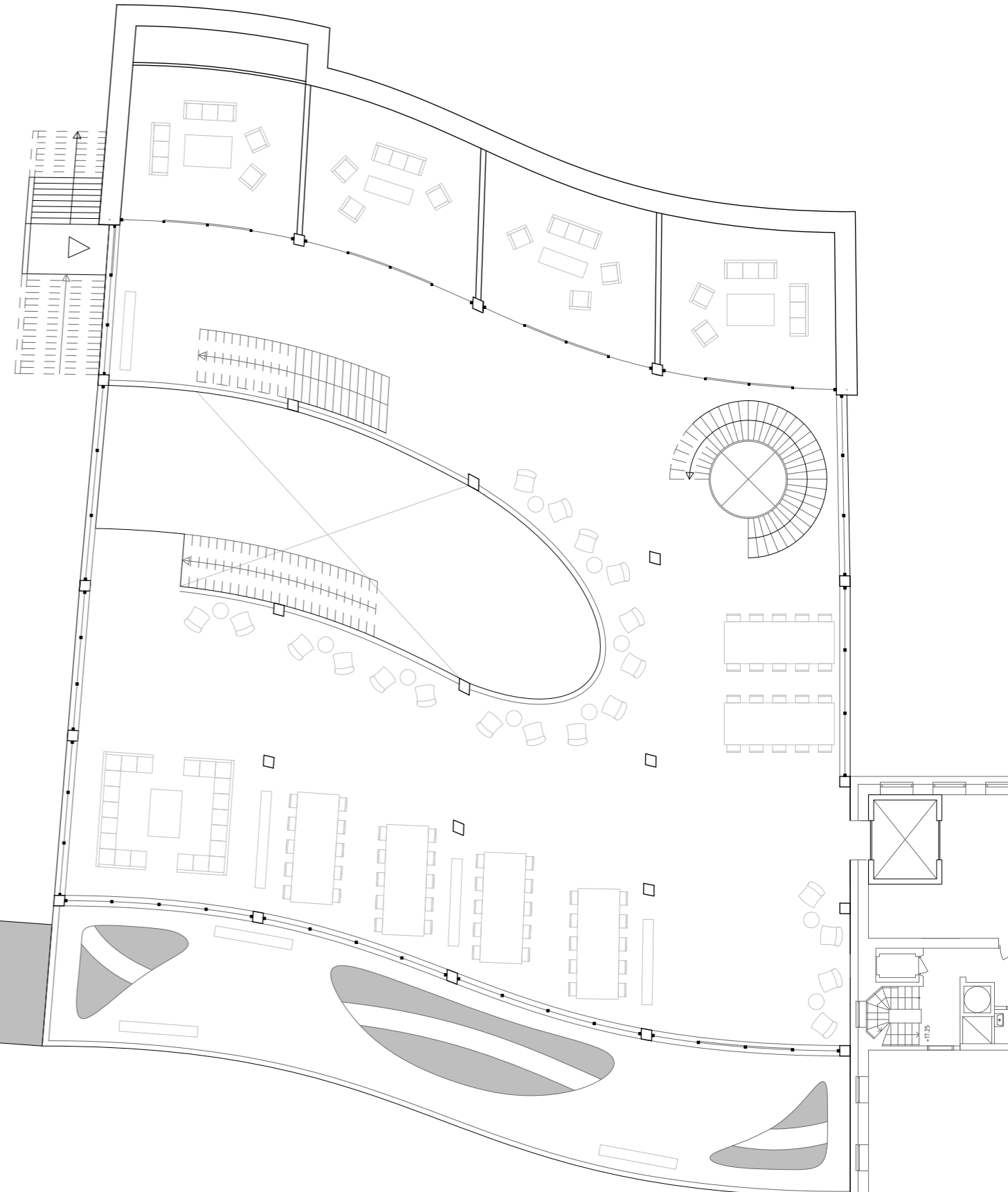
On the second level, we find different types of seating spots and more private living rooms.



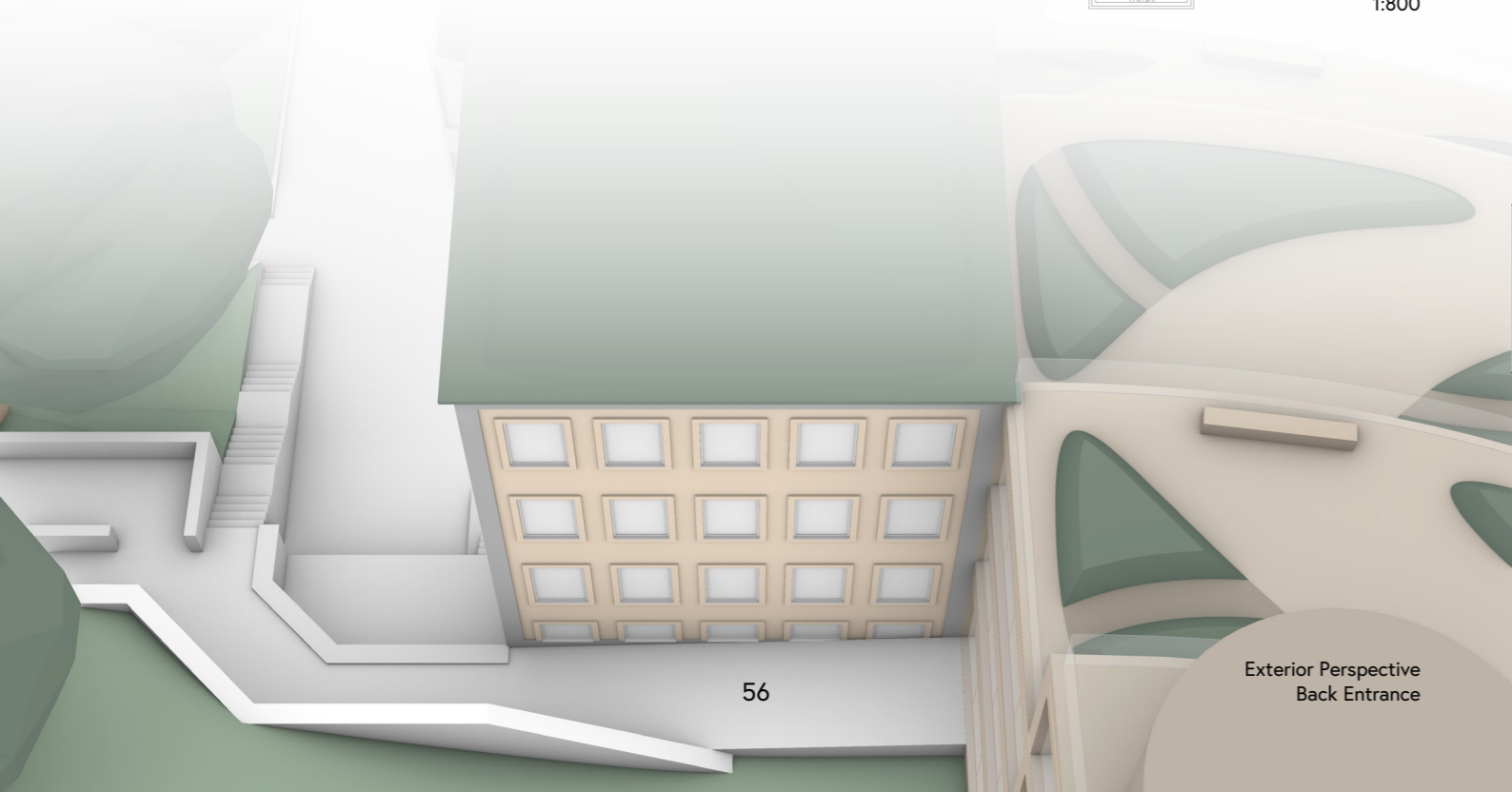
Route from Rotonda to  
Extension Building  
1:800



Furniture Asplund and  
Extension Building  
1:800

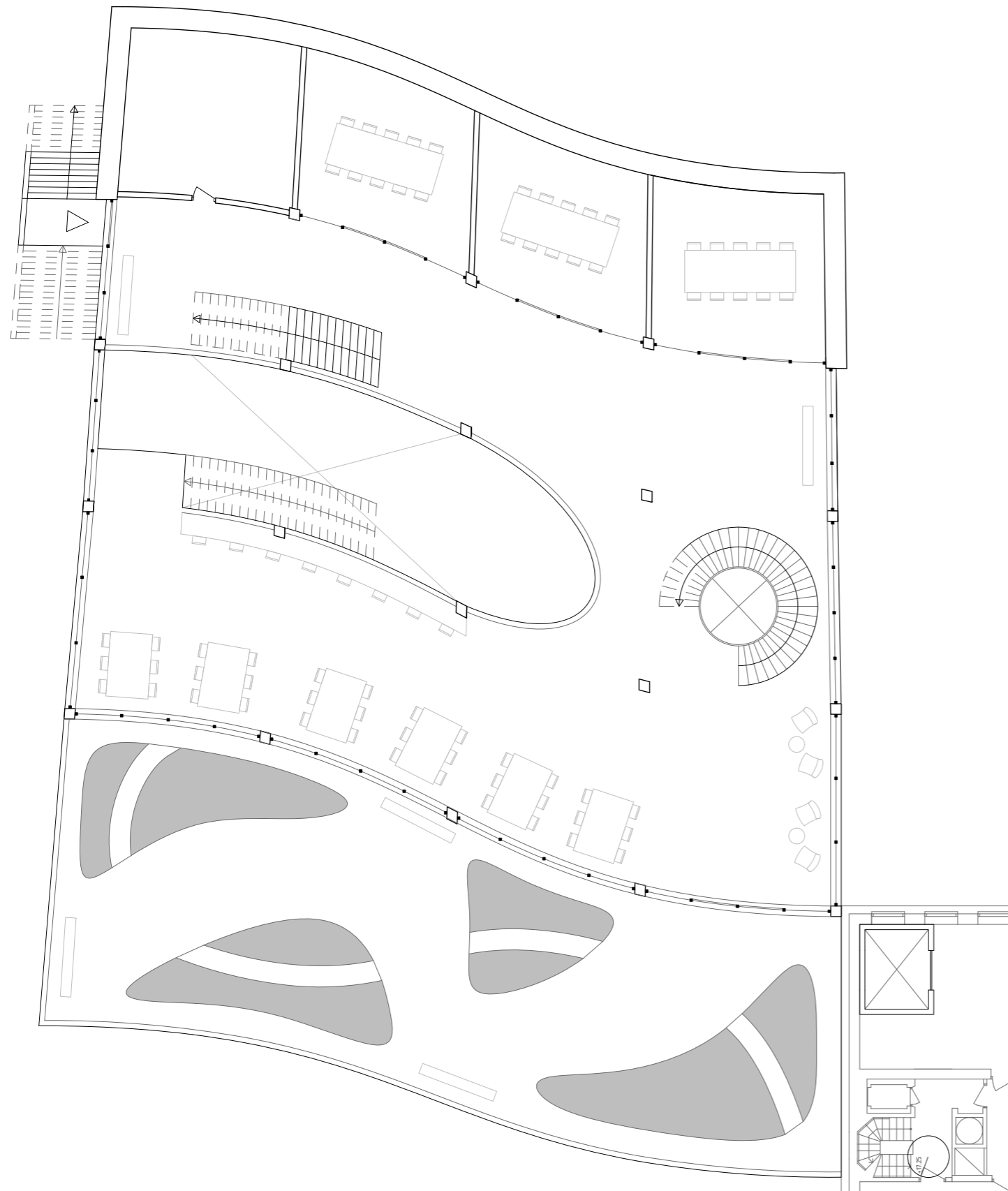


1:200



### LEVEL 3

The third floor is a bit more formal and designed more as working environment. In the back of this floor, study rooms can be found that are closed off by a glass wall.



58

1:200

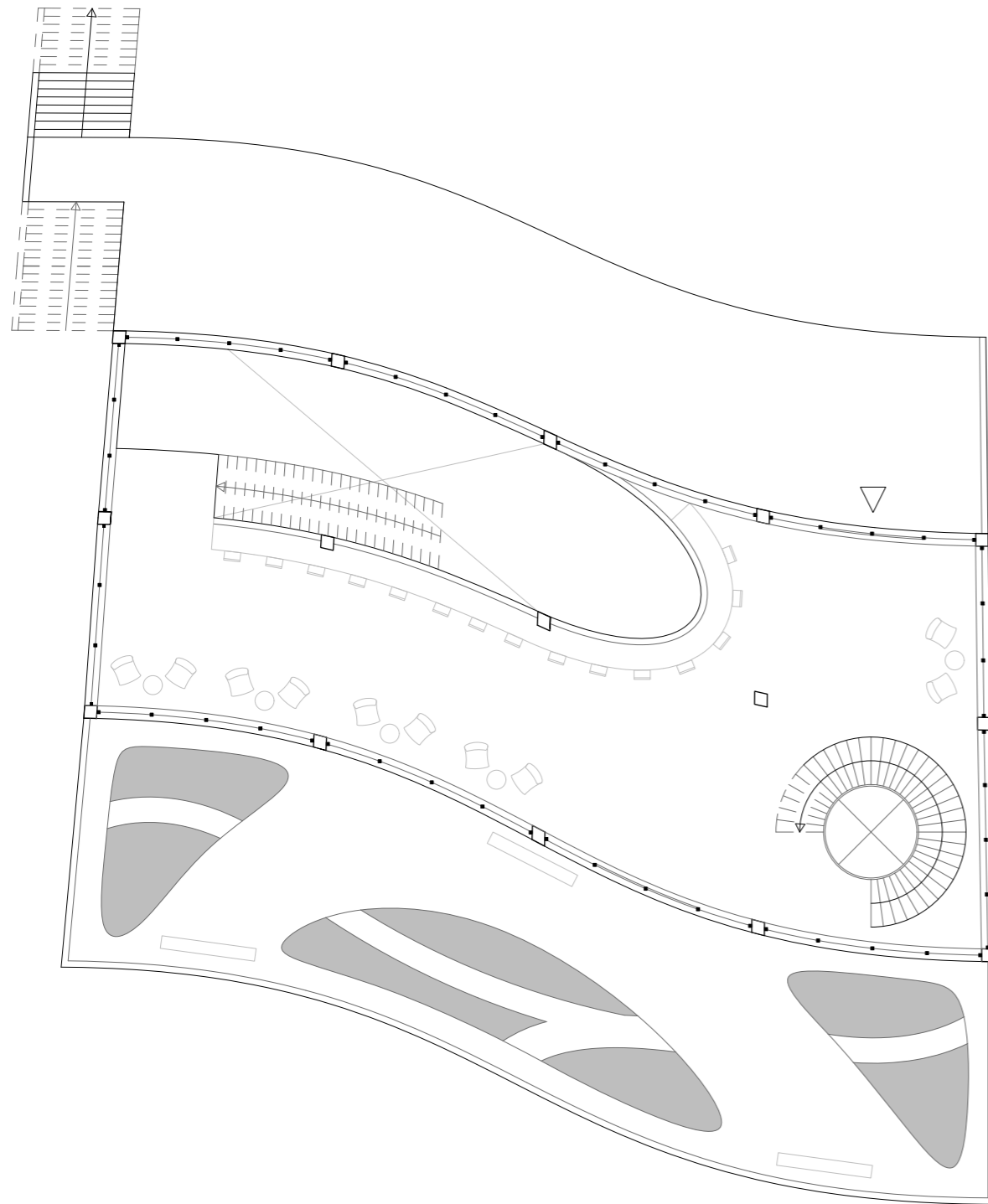


59

Interior Perspective  
Study Rooms

## LEVEL 4

The top floor serves as an entrance area for people arriving from the park.



60

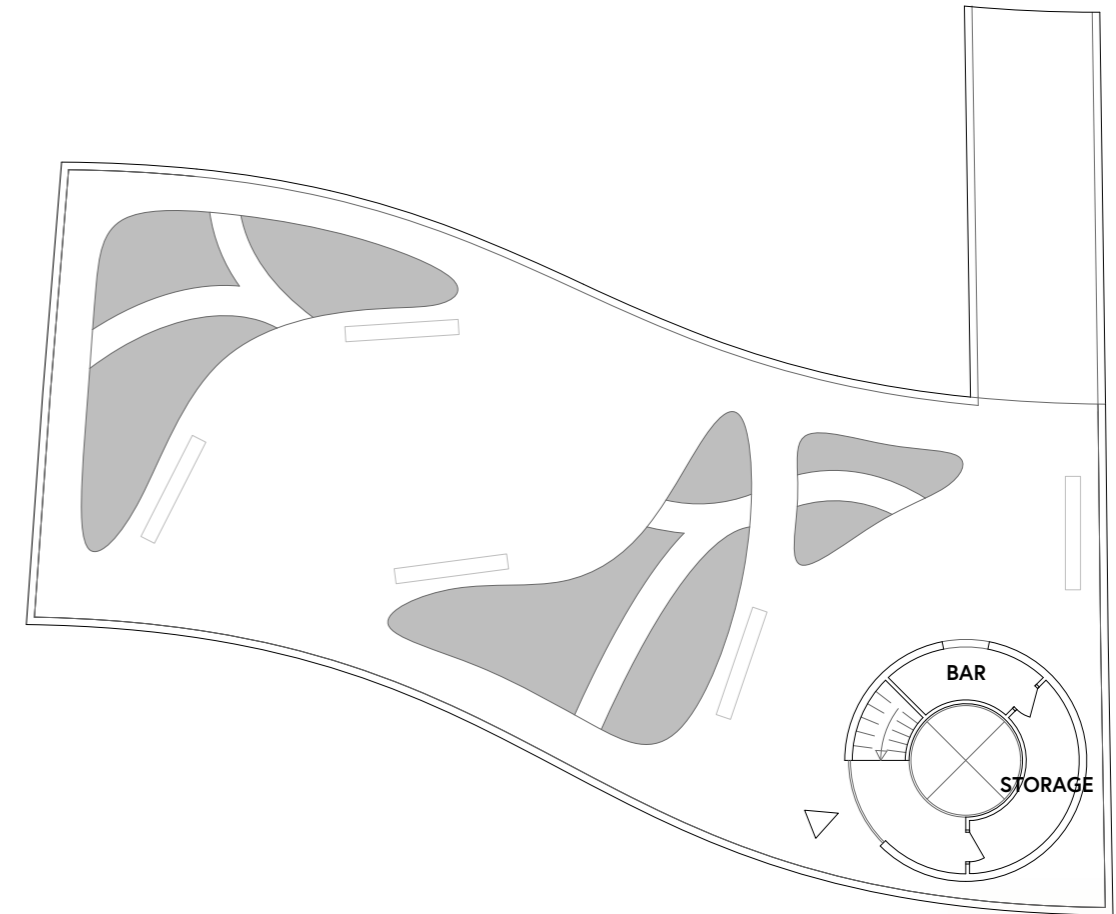


1:200

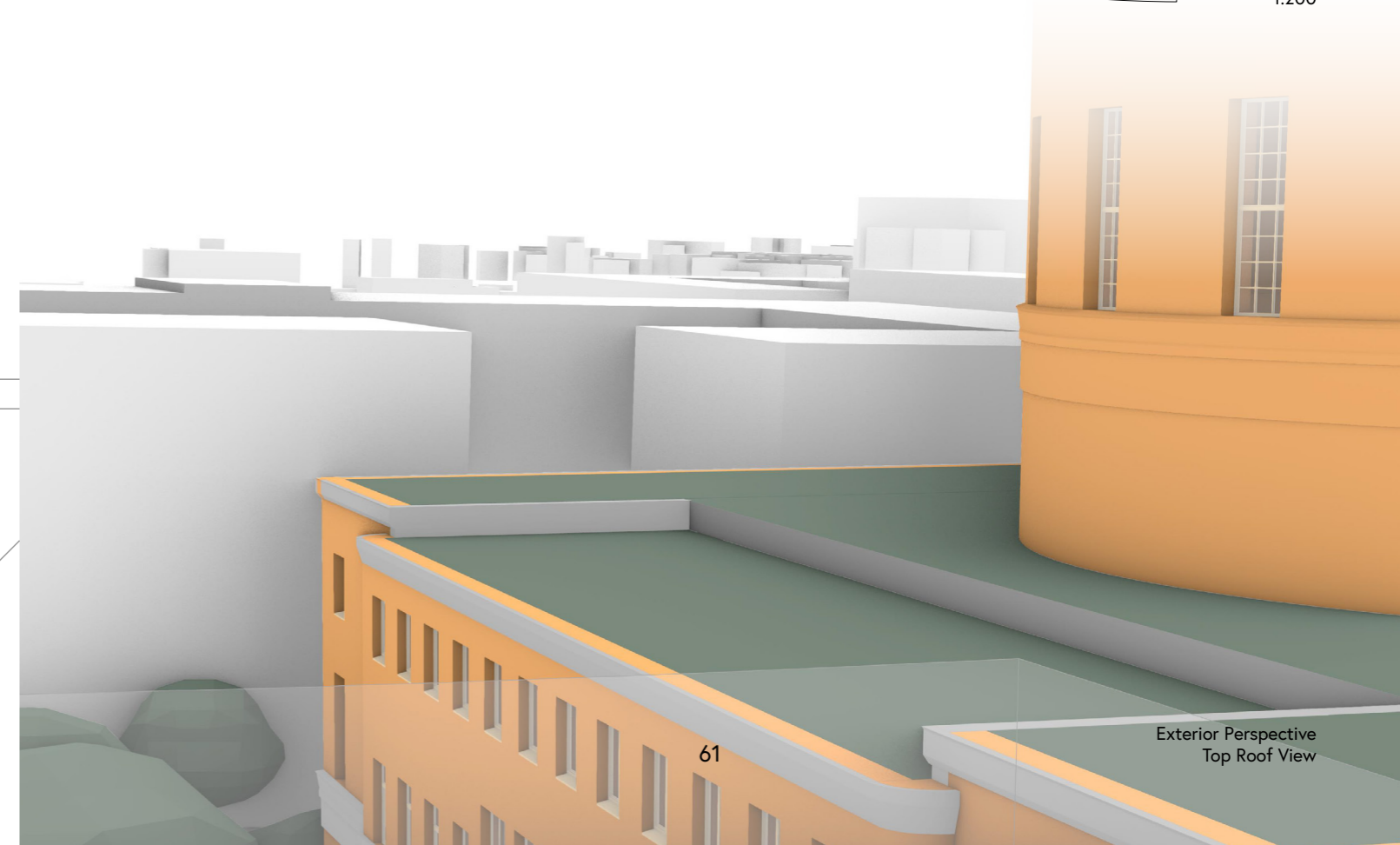
## LEVEL 5

On the top roof, there is a bar, as this roof is also accessible directly from the park. The bar is located with the elevator and stairs in a wooden pavilion on the roof hinting to Asplunds Rotonda.

The roof offers views over the Library and the city, and it also looks out over the other roofs and over the market square. When we look down on the other side of the roof, we can see the other side of the park.



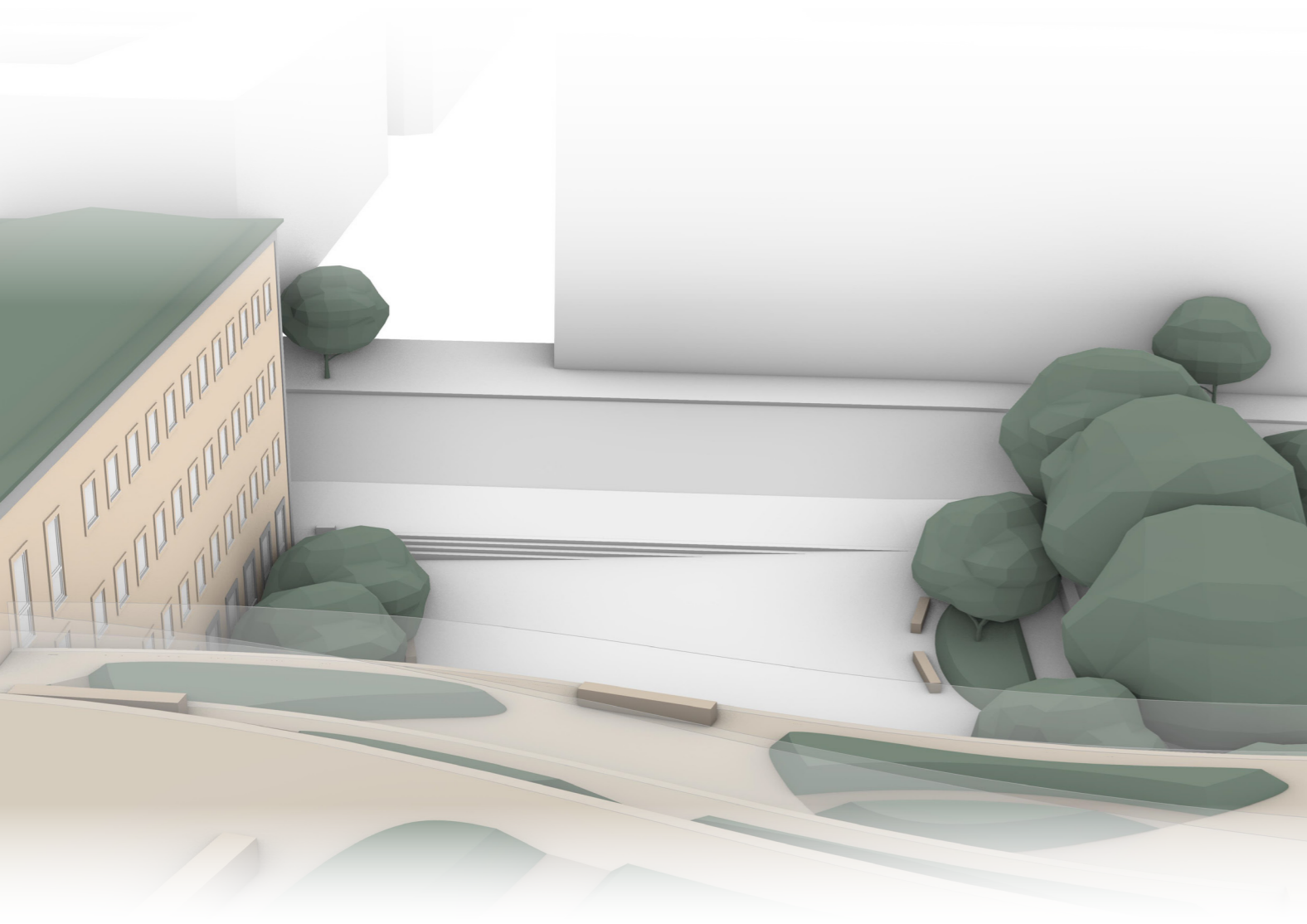
1:200



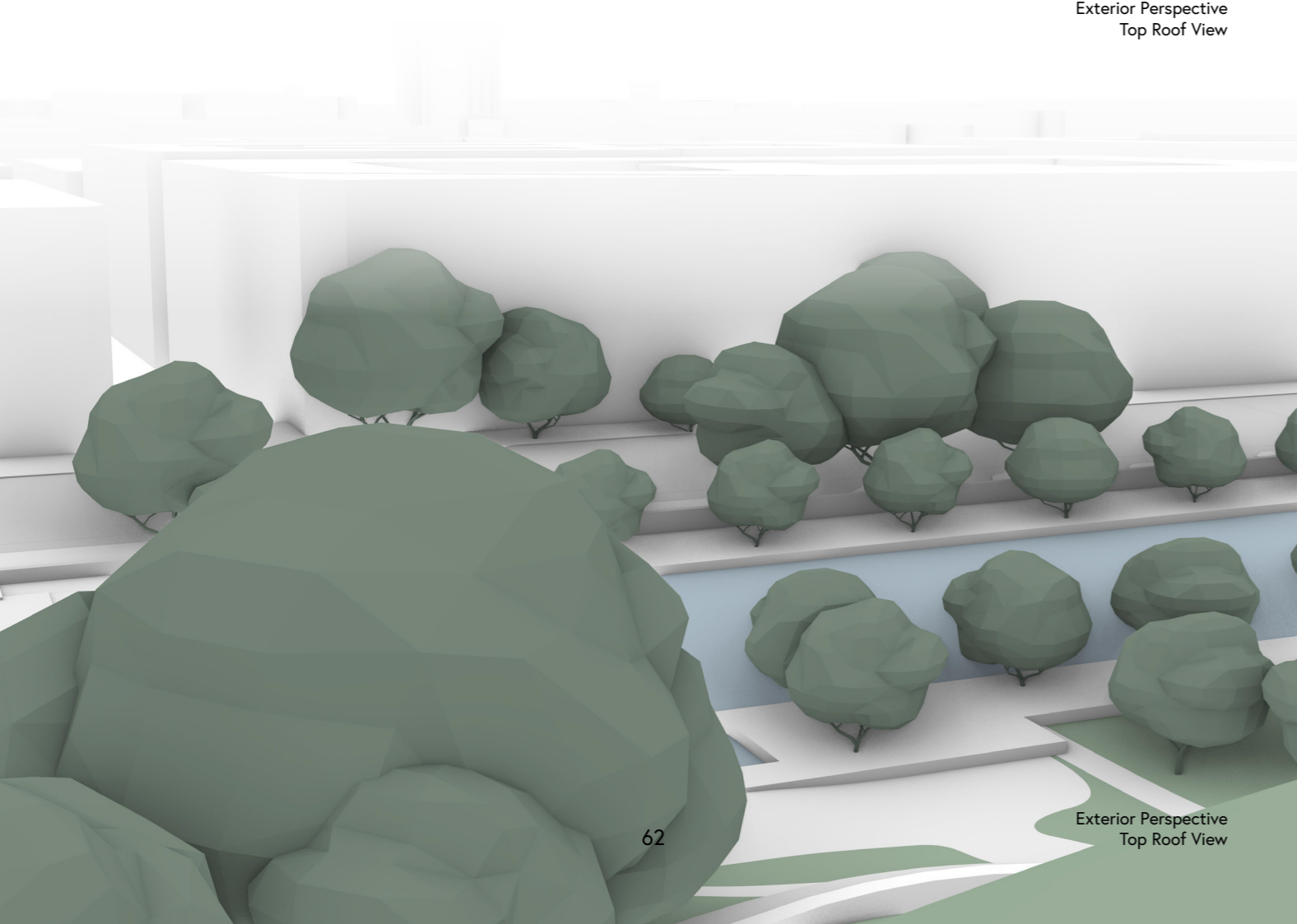
61

Exterior Perspective  
Top Roof View



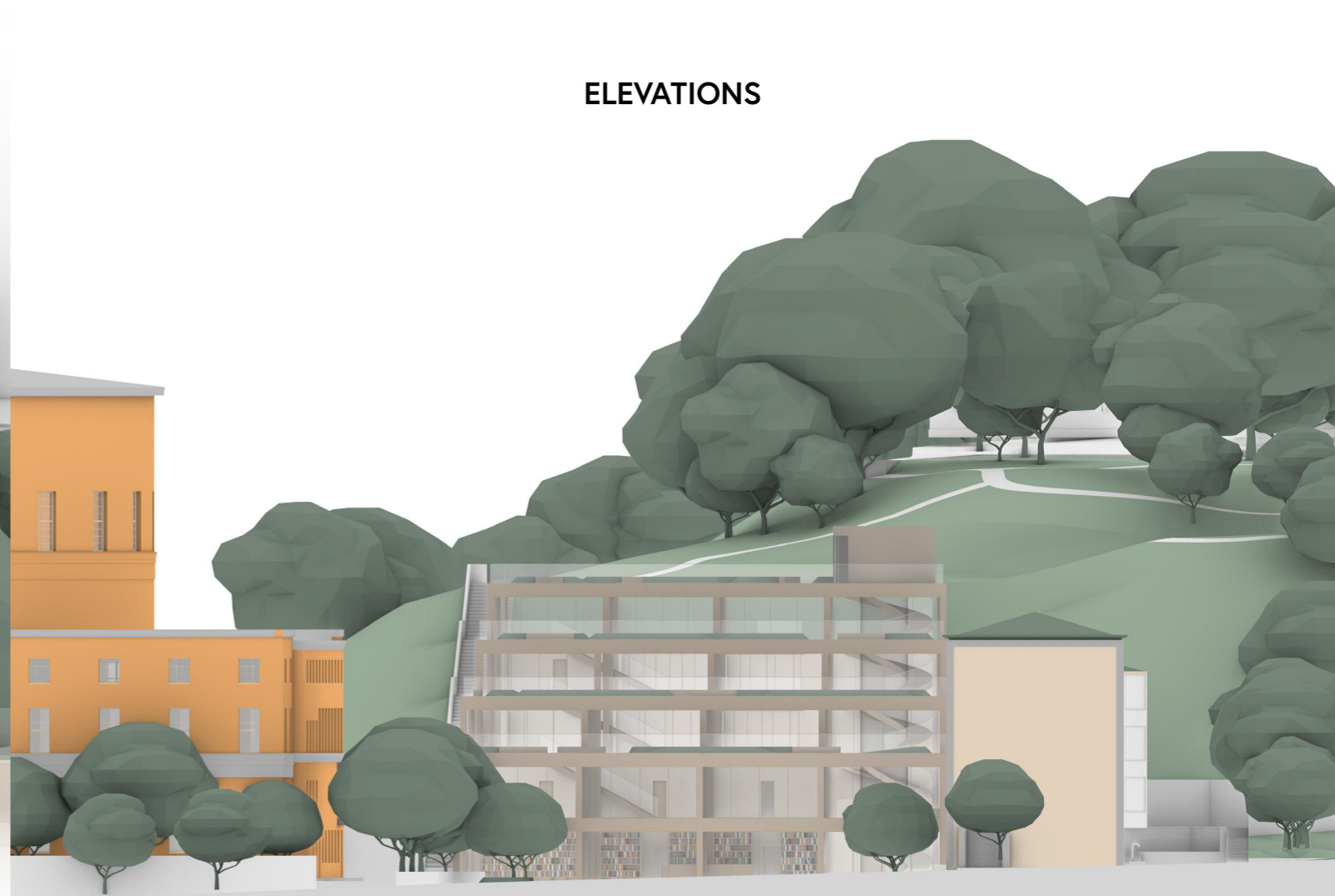


Exterior Perspective  
Top Roof View



Exterior Perspective  
Top Roof View

# ELEVATIONS



North West Elevation  
1:400



North East Elevation  
1:400



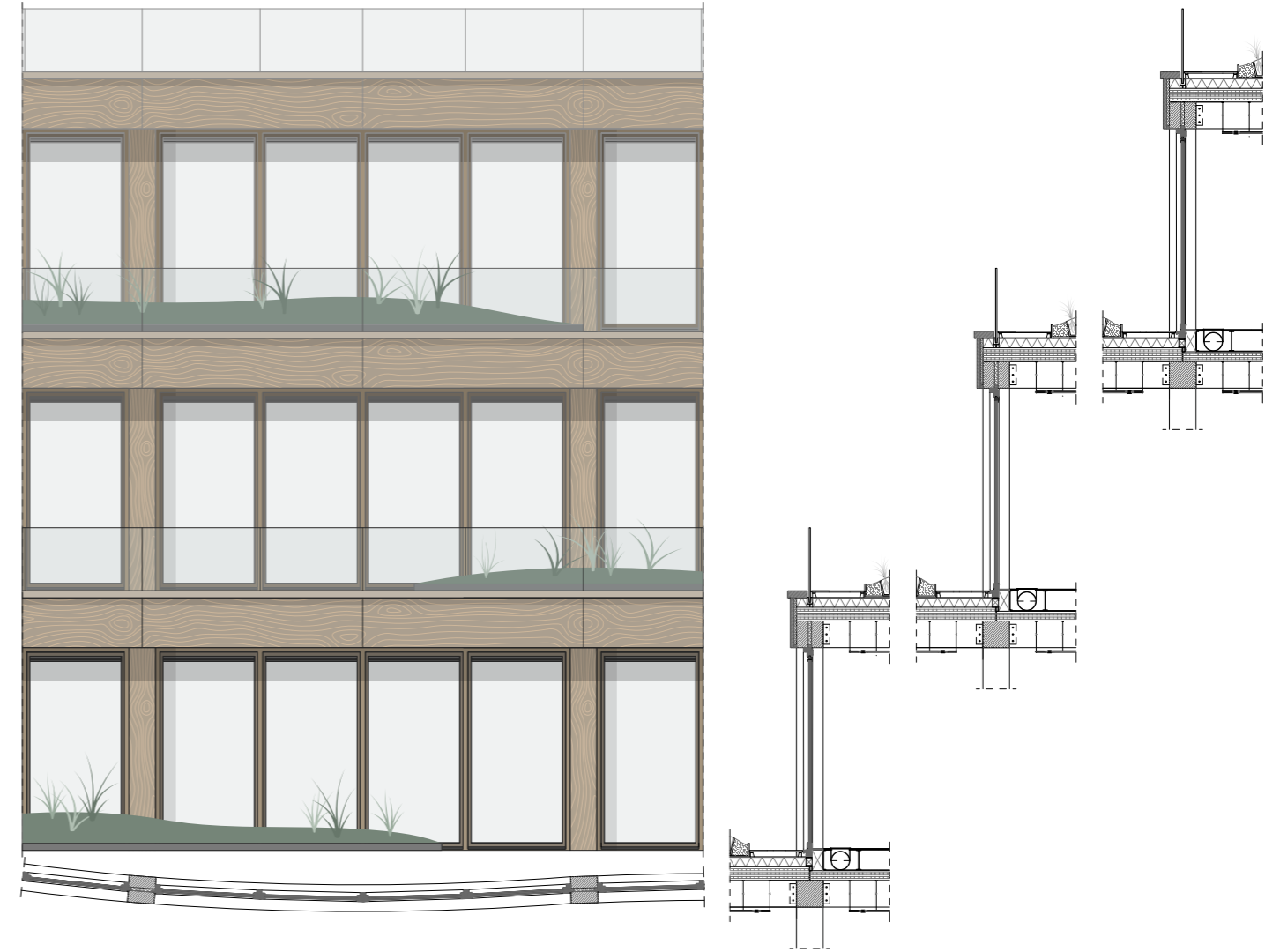
## BUILDING STRUCTURE

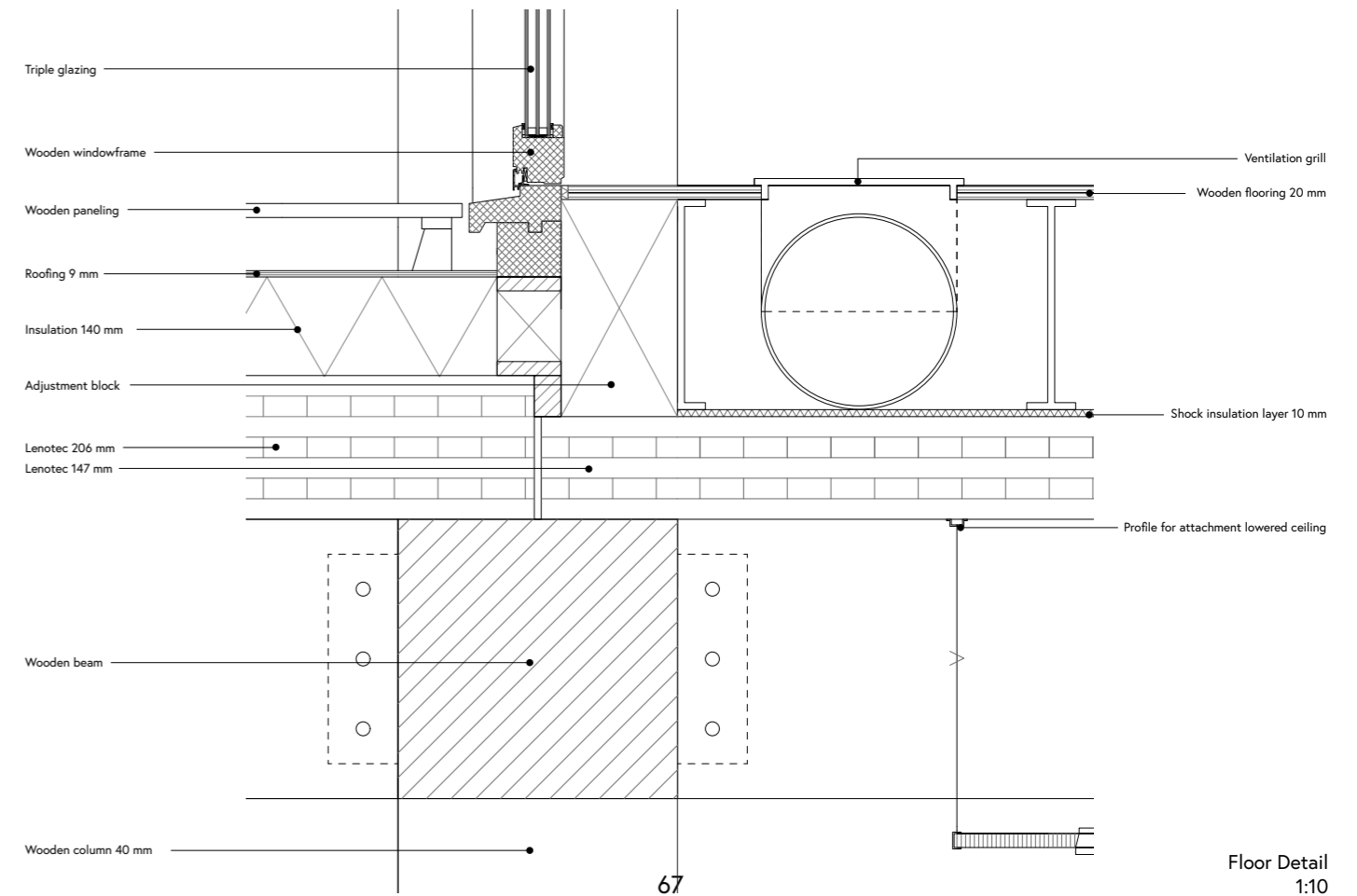
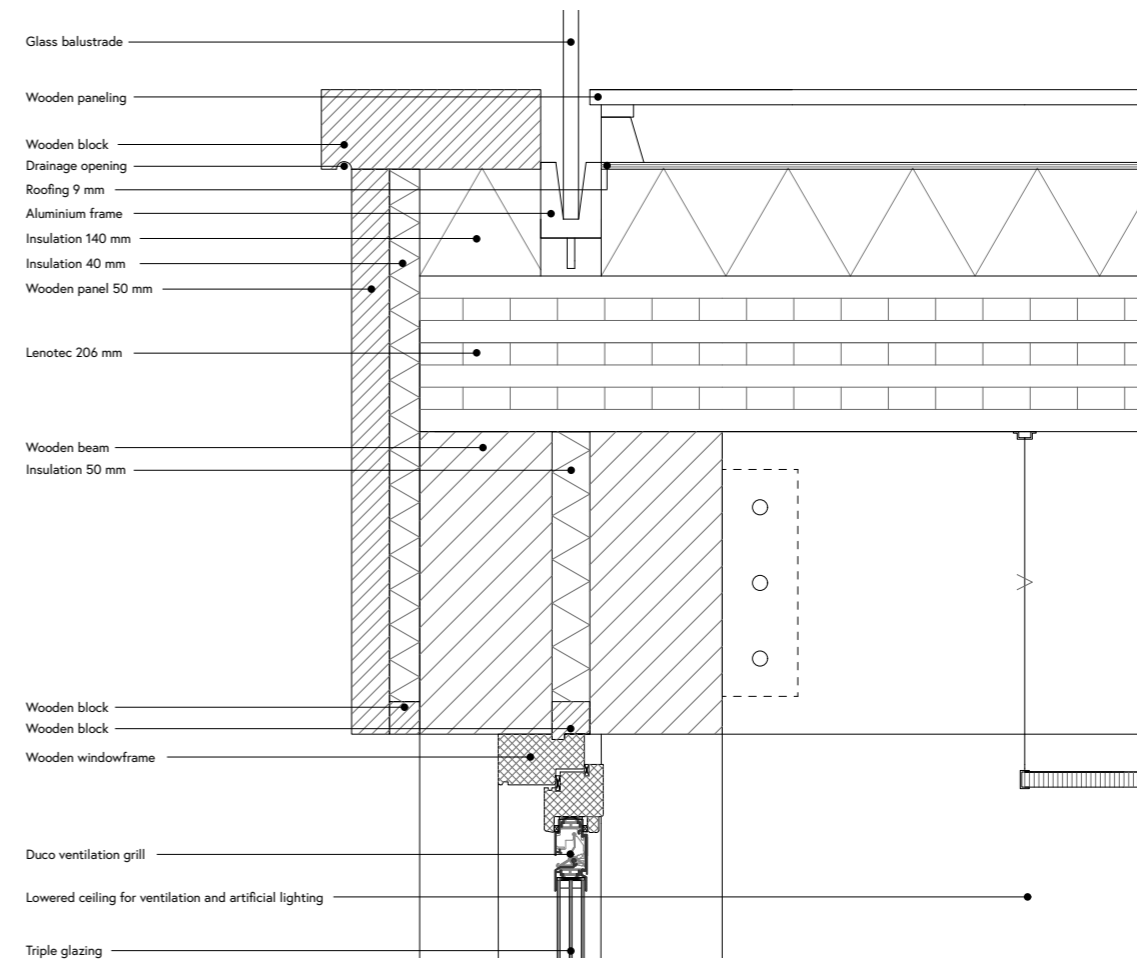
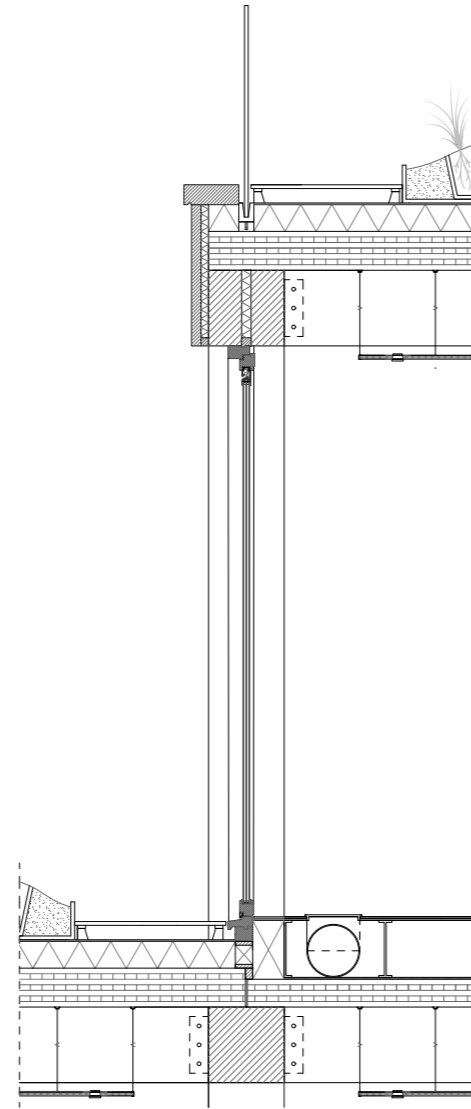
The curved facades are in reality straight windows, placed at a slight angle in relation to each other. This is visible in the facade fragment, as well as the vegetated hills on the roofs. The railing of the terraces is made of glass so that the view from the building to the exterior is maintained. The window frame is placed halfway up the wooden columns, to leave the wooden structure clearly visible, both on the outside and inside of the facade, and to create depth. To make this possible, the columns on the facade were interrupted halfway with insulation. For the purpose of natural ventilation, a DuCo vent has been applied. Furthermore, triple glazing has been applied to the entire facade in connection with the cold weather conditions. In the floor, there are vents for mechanical ventilation.

Local wood will be used: Swedish Spruce as a construction material and Swedish Pine for furnishing and outdoor decking. However, the exterior materials will be stained, to make them look a bit darker and warmer. The use of materials has also been explored in the P3 model. I have however decided to make the interior railings from glass, like the railings on the terraces, once again to maintain this view towards the exterior.



P3 Presentation Model exploring materiality.



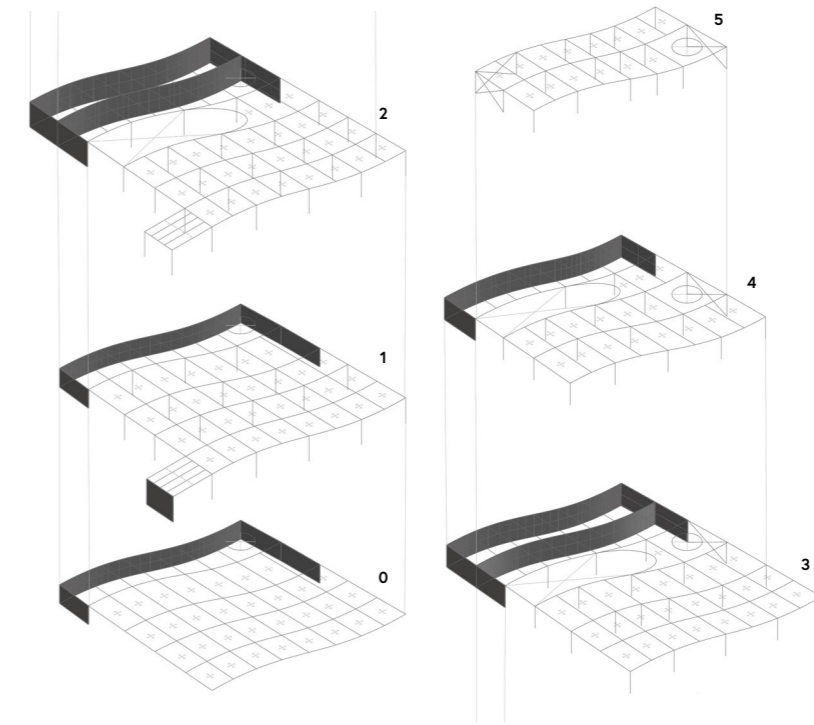
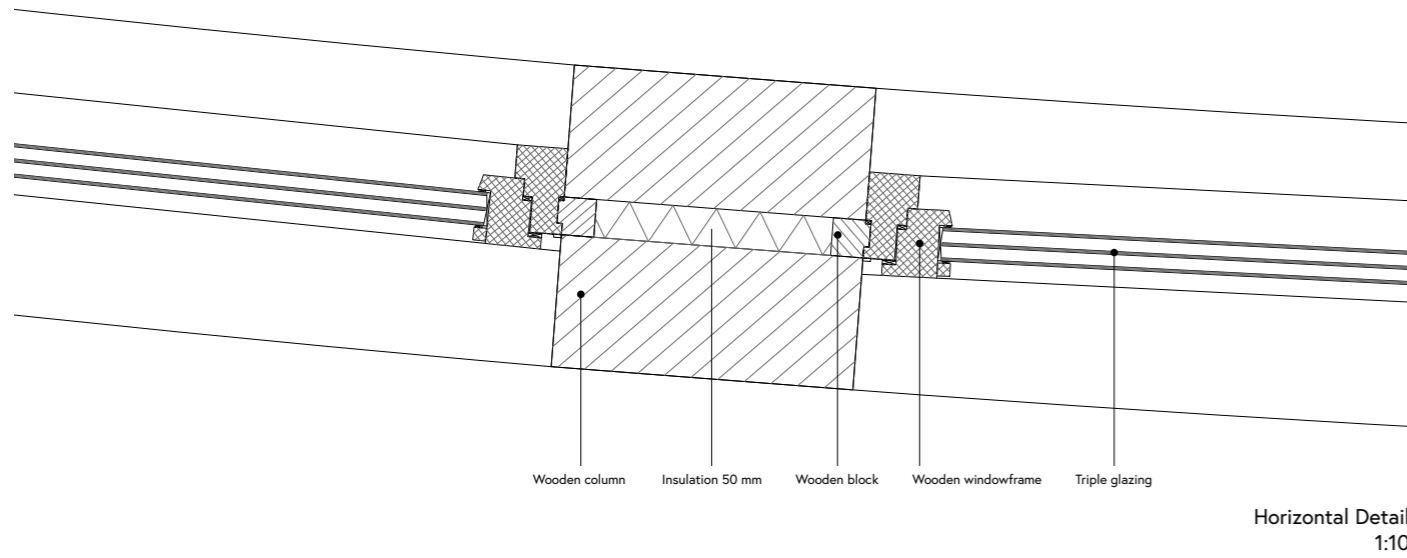




## LOAD-BEARING STRUCTURE

In the back of the building, the construction is made of concrete retaining walls and concrete floors. The rest of the construction is made of timber and CLT panels.

The biggest challenge for the construction, was the bridge to the West Wing, as it had to float optically above the ground. To make this possible, a steel structure was placed in the new opening in the facade, on the masonry wall, with beams of the walkway resting in steel H-profiles. In between these steel profiles, sliding doors are placed.

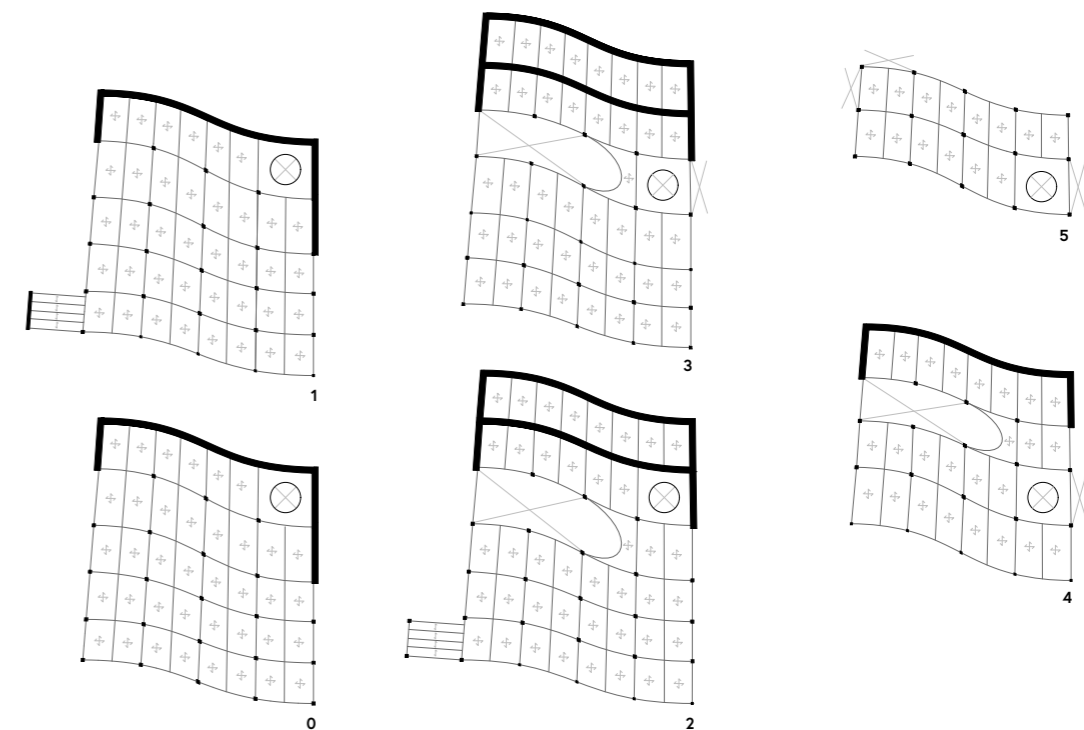


Swedish spruce (*Picea abies*)

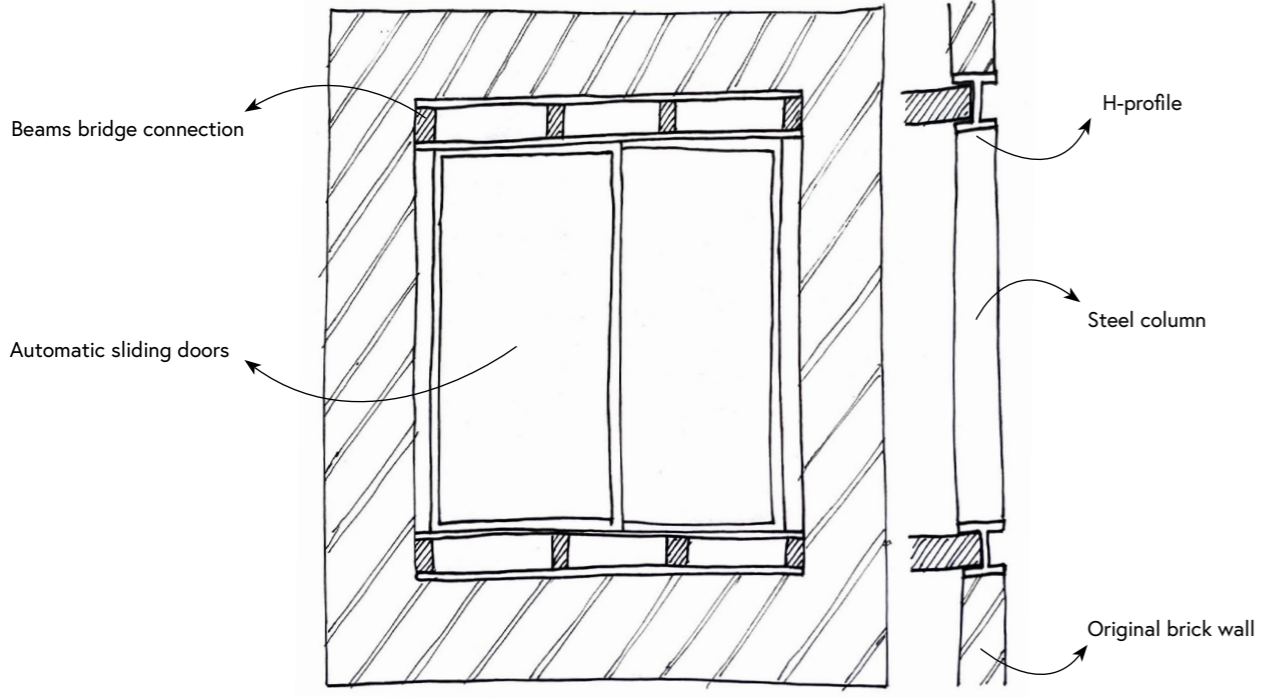
Mainly used as construction material.

Swedish pine (*Pinus sylvestris*)

Mainly used for furniture, floors, wall panels, mouldings windows, doors and outdoor decking.



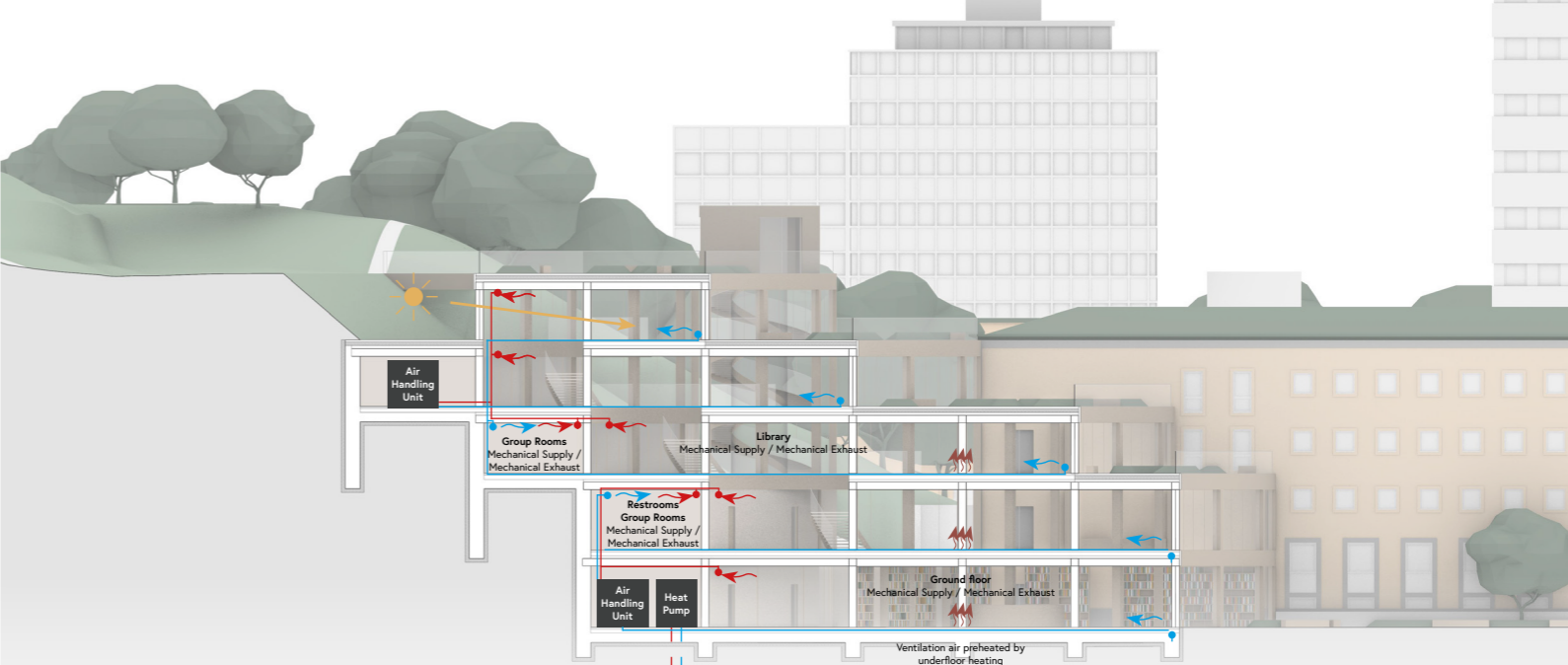
# CLIMATE



The building is divided into different climatic zones. The rooms in the backbone of the building each have their own mechanical supply and exhaust. The ground floor of the library is also a separate zone as it is closed off from the rest of the library. The rest of the library forms one open space.

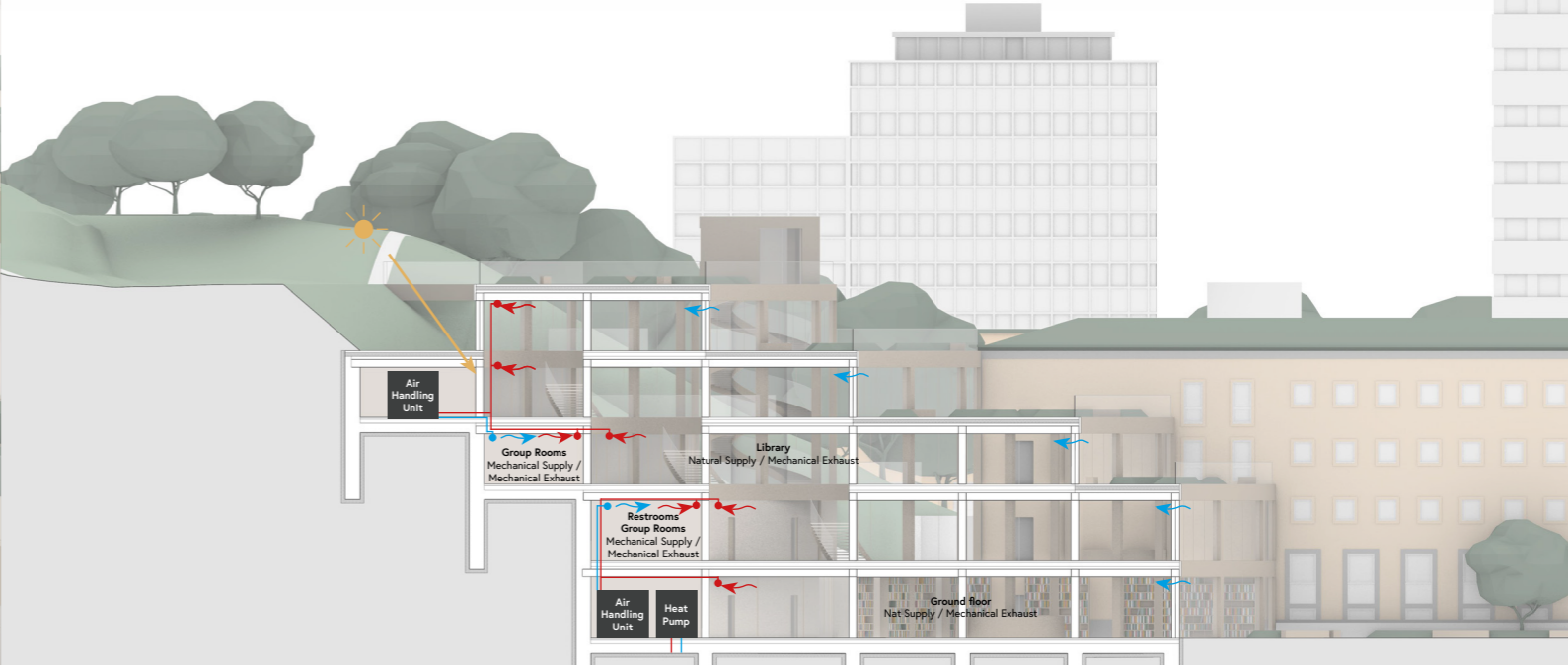
During winter, warm air is mechanically supplied through vents in the floor. Heat from the extracted air is collected and reused. There are two technical rooms: one providing ventilation for the bottom floors, and the other one for the top floors.

During summer, there is a natural air supply through DuCo vents in the facade.



Average Temperature - 4 °C to 2 °C  
Minimum Temperature - 11 °C  
Sun Height 7.2 °

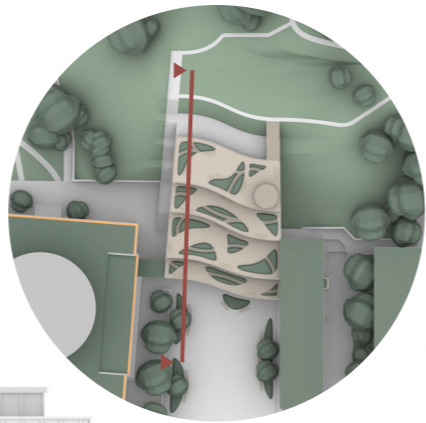
Winter Climate  
South-North Section  
1:400



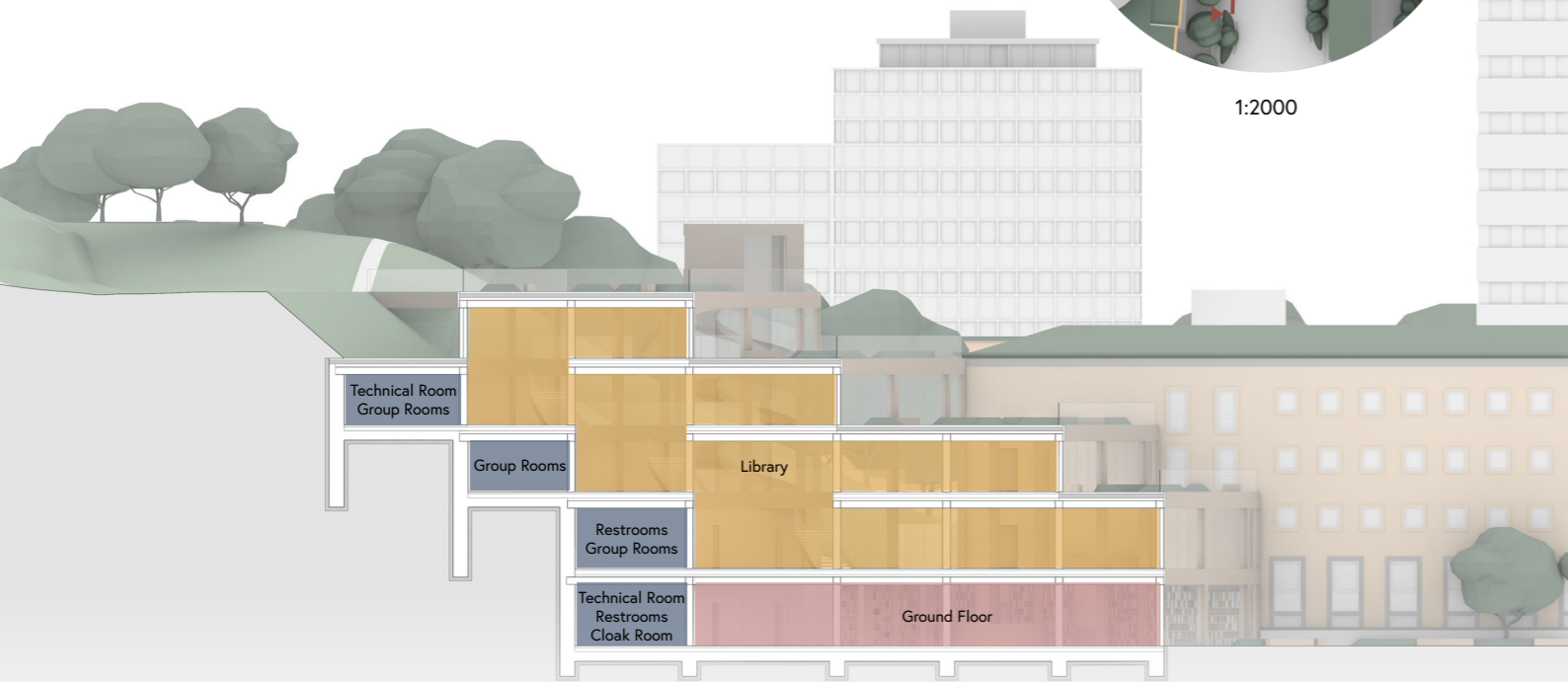
Average Temperature 10 °C - 15 °C  
Normal Summer Day 23 °C  
Maximum Temperature 29 °C  
Sun Height 54.1 °

Summer Climate  
South-North Section  
1:400





1:2000



Technical Room  
Group Rooms

Group Rooms

Library

Restrooms  
Group Rooms

Technical Room  
Restrooms  
Cloak Room

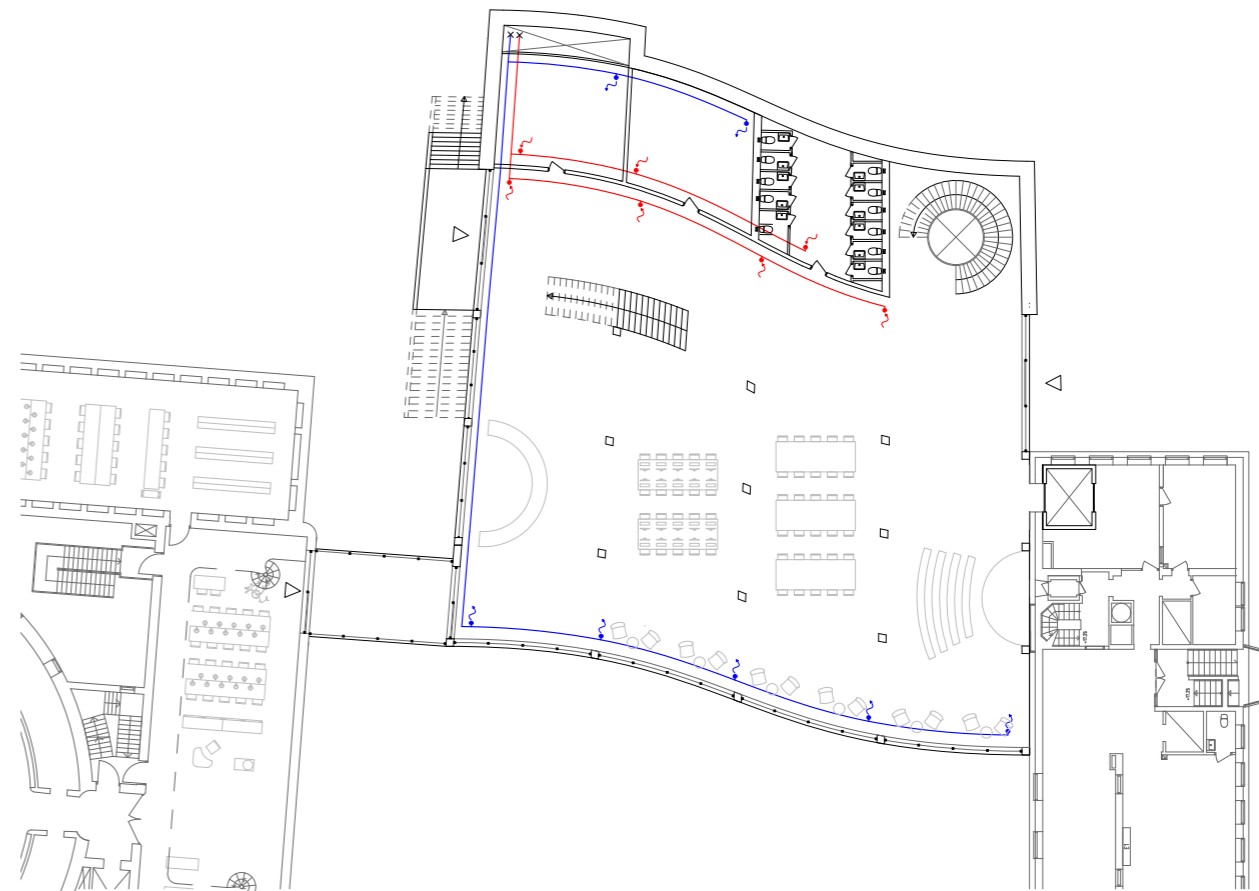
Ground Floor

Climate Zones  
South-North Section  
1:400

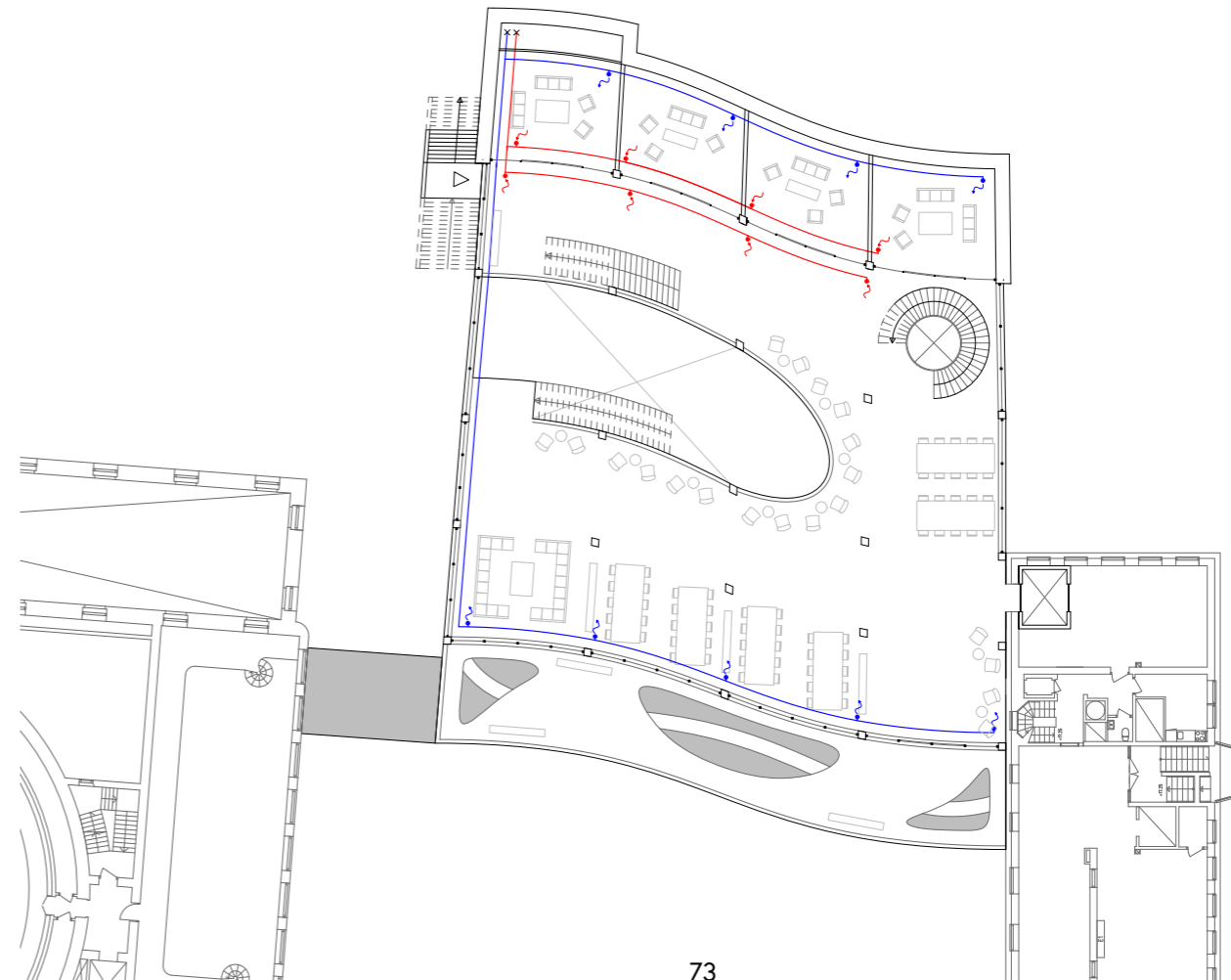


72

Ground Floor  
1:400



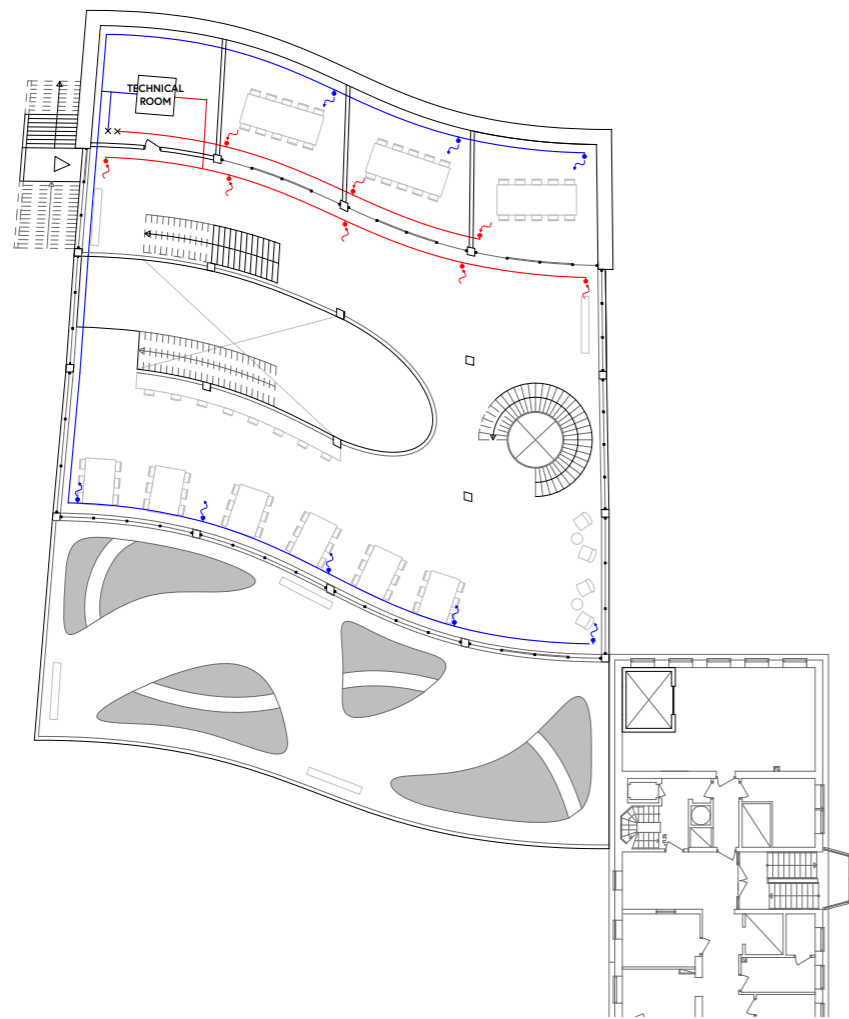
First Floor  
1:400



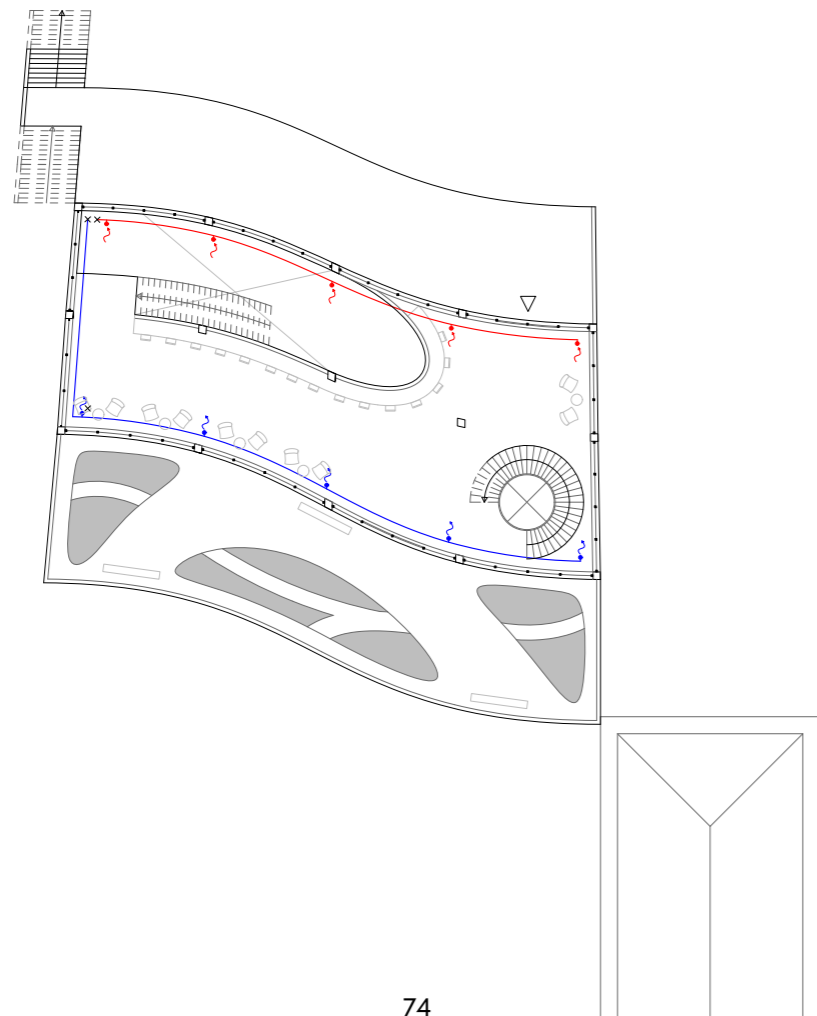
73

Second Floor  
1:400





Third Floor  
1:400



Fourth Floor  
1:400



## CONCLUSION



## CONCLUSION

The main questions were: *"Why should the Stockholm City Library be expanded?"*, and: *"Having chosen to expand the Stockholm City Library, how does this expansion add to the existing library?"*

We have seen that there is a need for more public space, and that there is need for contemporary libraries, with focus on pleasant seating places for all, providing a platform for contemporary initiatives, by organizing events and providing a safe space to learn, exhibit, and share ideas. On top of that, there is an opportunity in bringing back adult education, by freeing up the top floor of the Asplund building, that is currently used for offices spaces.

The expansion adds qualities to the existing building, by creating spaces that look out instead of looking in, with an open and inviting character. On top of that, the new extension building creates a connection between the Asplund building, the first annex building, the market square and the Observatory Hill, while also creating a connection between the interior and exterior of the Asplund building. Finally, the extension building is part of the actual landscape as it follows the structure of the City and the Observatory Hill, while creating accessible roof terraces.

