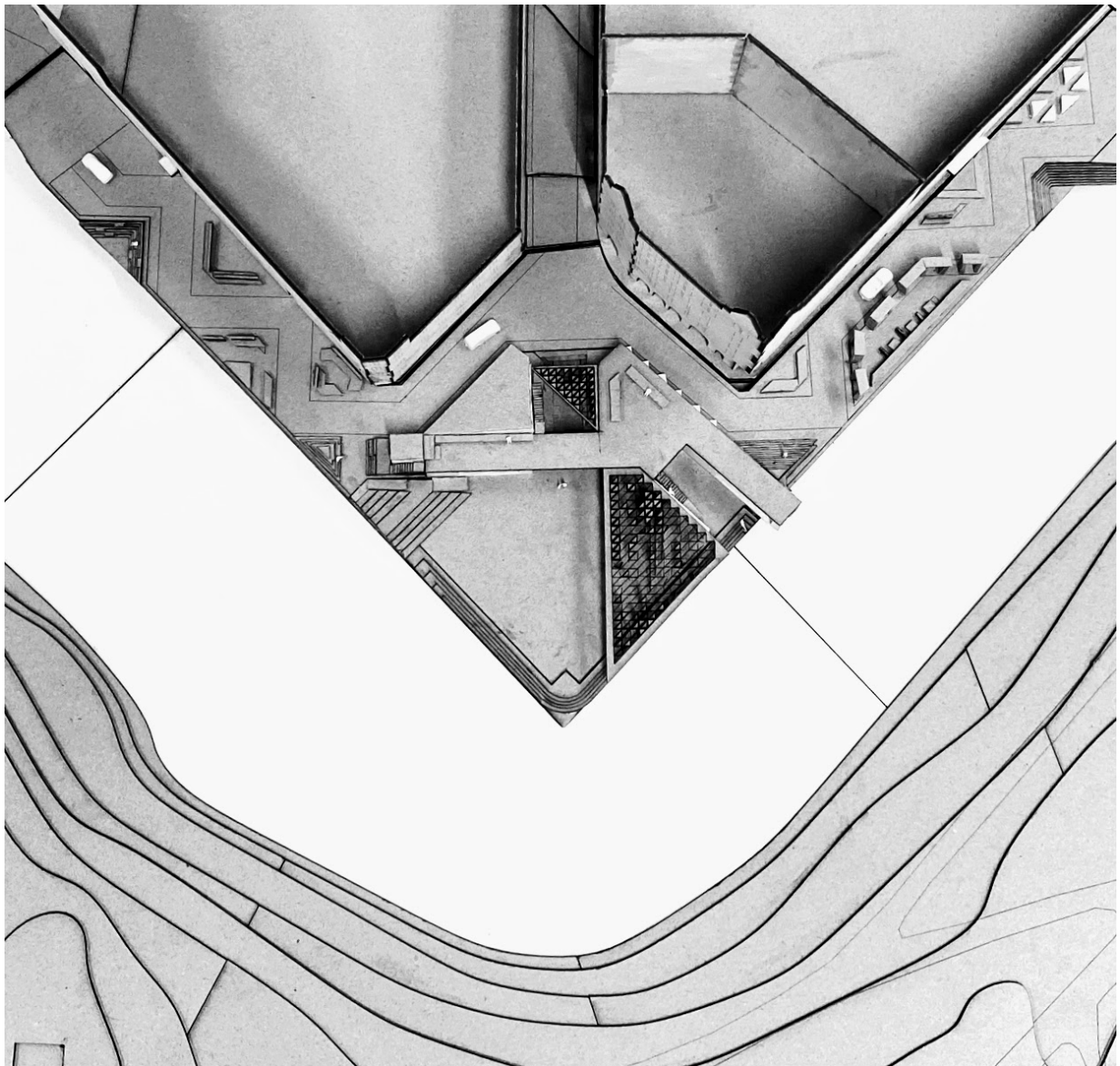


# CITY CAMPUS

Study environments exploring urban connection through place identity features in central Gothenburg



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## Abstract

Higher education students are traditionally in a transition between late adolescent and young adult. This is a time in life of big changes; students move to new towns, get their first own apartment and the campus often becomes their main dwelling area. Many campuses are complexes focused to a certain part of the town they are located and all aspects of the education are done there. This means students risk getting isolated from the rest of the town, in many cases the city centres, resulting in a lack of sense of belonging to the community the university is supposed to support. Other campuses are serving smaller faculties and lack a varied study environment suitable for different learning styles.

The purpose of this thesis is to investigate how the design of a small scale, deconstructed, city campus can create a meaningful relationship between students and their location by exploring concepts of identity and awareness of an urban place; and provide sustainable and varied study spaces that function as a support to existing campuses in the local context.

To gain a comprehensive understanding for the design this study will explore the theory of the concept of place identity, the contemporary discourse on educational environment, learning styles and different types of learning spaces. It will also explore how the concept of phenomena can be used to merge the educational environment and the identity of place to create meaningful encounters for students.

A city campus concept is formed by first analyzing a site's different qualities in its surrounding urban context; and its place identity features. Secondly by exploring spatial qualities of learning spaces, the way they relate to different learning styles, in model studies. The site qualities, the place identity features and learning spaces are then merged and analyzed in explorative model studies.

The city campus design is formed by designing both indoor and outdoor spaces. The design is developed in a public space in Gothenburg, from Bastionsplatsen along the moat to Drottningtorget. However, the goal with the design concept is to explore ideas with a generic application regarding educational spaces and how they can relate to place identity.

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Student Background

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## 1. Introduction

Thesis Question

Thesis Structure

Stakeholders

Discourse



# 1.1 Thesis Question

## Main Research Question

How can architecture use the identity of an urban place to provide a diverse educational enviromnent, that creates a meaningful relationship between student and location?

## Secondary question

How can it support existing faculties?  
How can it be an asset to student unions?

# 1.2 Thesis Structure

## Thesis Purpose & Aim

The purpose of this master thesis is to explore how architecture can be used to create a study environment that increase awareness of the identity of an urban place, and contribute to a meaningful relationship between human and the location; in this thesis Vallgraven in Gothenburg along Stora Nygatan. The aim is to design a small scale city campus concept, a number of study spaces, that diversifies the educational environment for students and provides a qualitative and inspiring study space integrated with the identity of the site. While also providing support and a sustainable alternative to the large scale campuses for faculties and be an asset to student unions.

## Delimitation

Design will not take existing future development plans into consideration for the site; just current conditions. Nor will it follow the existing regulations of preservation in either built or other environmental structures; but rather focus on qualities of learning and how it connects to identity features of the site. The design will adhere to the standard of the surrounding urban environment in terms of accessibility.

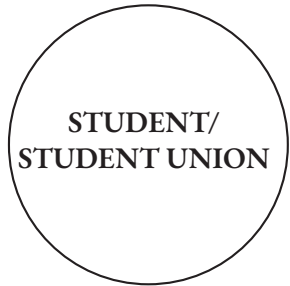
## Method

I will use a qualitative research for design method to create a comprehensive framework for the design concept, and a research by design method for the architectural and spatial explorations of the project. I will be doing literature studies and case studies resulting in a framework for the thesis and provide a decision basis for the design concept. I will be exploring phenomena and spatial qualities in the design project by making explorative modules and making perspective, axonometric, section and plan drawings as my main design tool.

## Reading Instructions

The booklet is structured in four parts; introduction, investigation, implementation and conclusion. Introduction: Theory on place identity, the educational environment and learning styles, and ways to merge them through the concept of phenomena. Investigation: Reference projects, site analysis and model studies exploring study spaces and urban context creating a design toolbox. Implementation: Design project, merging a variation of study spaces, suitable to all learning styles, and services desired by student unions with the context emphasizing on place identity features. Conclusion: Discussion about outcome of the implementation and thesis.

1.3 Stakeholders



**Completion Rate In Sweden:**  
Candidate 38%  
Master 45%  
Some programs as low as 20%

**Traditionally people start studying when life is changing**  
From late adolescent to young adult  
Move away from home; new town

**Disconnected from location**  
Lack of sense of belonging (community)

**Lack of diversity in study space**  
Not compatible with their specific learning style



**Competing for students**  
Regional competition  
Global Competition  
Campus and city the attraction  
Place features/qualities

**Bound to their facilities**  
Limited ability to offer diverse study spaces

**The purpose of Universities**  
Generate, perserve and transmit knowledge to the students  
Serve, or give back, to the communities that support them



**Contribution to Sustainable development**  
Economic  
Environmental  
Social

**Sense of belonging**  
Meaningful encounter with location  
Care about what happens to location in the future

The approach to this thesis comes from three different perspectives, or stakeholders.

The student and student union perspective, the university and faculty perspective, and the community perspective.

Higher education students are traditionally in a transition between late adolescent and young adulthood. This is a time in life of big changes; students move to new towns, get their first own apartment and the campus often becomes their main dwelling area.

Many campuses are complexes focused to a certain part of the town - where they are located and all aspects of the education are done there.

This means students risk getting isolated from the rest of the town, and often the case the actual city centres, resulting in a lack of sense of belonging to the community the university is supposed to support.

Other campus facilities are serving smaller faculties and therefore lack varied and diverse study environments suitable for different learning styles.

These are all contributing factors to educational failure for students, and diminishes the faculties ability to attract new students.



## 1.4 Discourse

### 1.4.1 The Identity of Place

#### 1.4.1.1 The meaning of dwelling

In *Mellom himmel og jord*, norwegian architect and architectural theorist Christian Norberg-Schulz (1978) discusses what is required to care for a place. He means that there must be a meaningful relationship between the way you dwell and the location where you do; dwelling being how you do your daily activities and live your life.

Norberg-Schulz further states dwelling is part of an architectural totality, but that we often fail to take notice of our surrounding environment in our everyday activities. A reason for this being that we take our living environment for granted the more "normal" it looks. It is first when something uncommon disturbs the normal that people tend to react to it and take notice.

Norberg-schulz states that place experience is the common experience of a place shared with others; uniting groups of people and giving them a common identity. He argues that this is a basis for a community or society.

Dwelling is essential for humans; being the meaningful relationship between man and a particular environment. Norberg-Schulz states that this relationship requires something from both our places and from us. Humans must have an open mind to their surrounding environment, and the places must

offer a wide variation of identity features. He writes in *Mellom himmel og jord* "Today many places offer poor qualities for identification and many souls are not open for the surroundings".

He continues arguing that this is the main cause for, what he calls, an environmental crisis where there is a loss of relationship between human identity and place identity. (Norberg-Schulz, 1978)

#### 1.4.1.2 Features of place

The concepts skogbotnen (the forest ground), himmelen (the sky), and synsrande (the optic array) are, according to Norberg-Schulz, the canvases on which you apply concrete place identity features. Every *Place* has a ground or a floor, a ceiling, roof or sky, and walls, a scenery or background that makes the optic array. These three concepts provides a way to an understanding on how places are built up and how they are experienced. In this way it becomes possible to describe the character of settlements in the landscape, urban space, streetscapes, buildings and interiors from various cultures and what they mean for human beings. (Akkelies van Nes, 2008.)



Another perspective on, or an addition to, the concept of place identity is presented by Morrill, Snow and White in *Together Alone : Personal Relationships in Public Places*. They argue that place identity is not only defined by physical attributes in the natural or designed landscape; but also by the qualities of people-to-people and people-to-place interactions such as ways people meet, talk, move, or in other ways use the place. (Morrill, Snow, & White, 2005, p. 232).

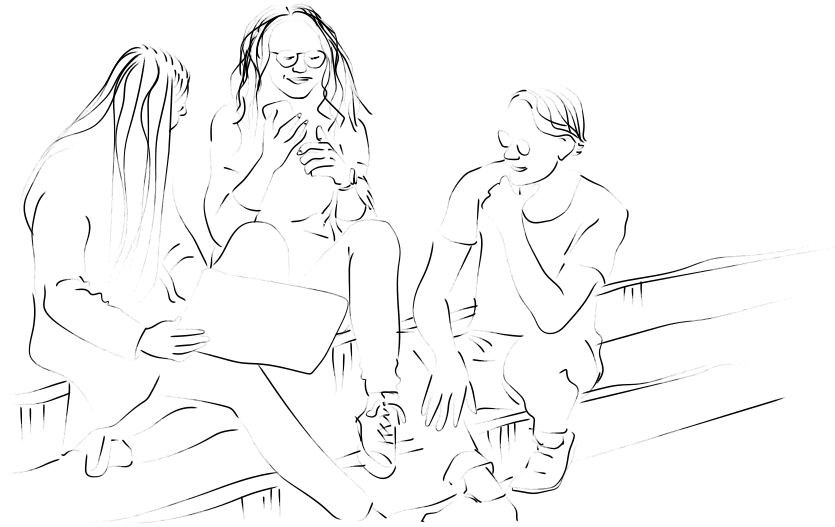
#### 1.4.1.3 Phenomenology: Meaningful encounters

Phenomenology is the manipulation of space, material, light and shadow to create memorable encounters with the identity features of a place or in the architecture itself. (Holl, Pallasmaa & Perz-Gomez, 2006.)

In *Architecture and the phenomena of transition : the three space conceptions in architecture*, Sigfried Giedion (1971) presents three concepts of space for different stages of architecture.

The first concept as volume in space and the interrelation between volumes. The second concept as the sculpture of interior space. The third space concept, being a fusion of the first two which combines the ability of volumes to create space and the sculptural form of interior and exterior space. (Giedion, 1971.)

On architectural style, Norberg-Schulz argues that in ability to enhance place identity by architectural means one must balance the identity features of the existing context with the idea of, as he states it, that it is only when something disturbing or uncommon changes occur that people first tend to react to it . (Akkelies van Nes, 2008.)



### 1.4.2 The Educational Environment

In *Designing for Learning : Creating Campus Environments for Student Success*, C. Carney Strange and James H. Banning (2015), both professors in the fields of higher education, student psychology and educational environments, define a university as an institution of purpose and place. In terms of purpose they mean that universities should generate, preserve and transmit knowledge to the students, while also serve the community that supports them.

In terms of place; it should be memorable and functional to the people using them.

The connection between purpose and place has been essential throughout the history of campus designs, where designers have strived towards creating environments for advanced human achievement; which when successful results in the experience of community. (Strange & Banning, 2015)

#### 1.4.2.1 Student, faculty & location

University or other higher education studies often mark a huge change in life for students moving to a new city to start their studies. In many cases students move to cities from across the world and often have to settle for a small room either in the outskirts of the town they study in or in large student housing complexes next to their campus. Other students do distance-studies without access to all types of study environments a large scale campus offers. Traditionally this occurs in a period when the student transitions from being a late adolescent to a young adult. (Strange & Banning, 2015)

This is also a time when people seem to be susceptible to new impressions which often results in a change of career interests and relationships. This

time of life is important in people's way to "find themselves", and the educational environment is important as a place to shape the student's future identity. (Strange & Banning, 2015)

Not every student is successful though. In Sweden, only 38% of students studying a candidate program, and 45% studying a master program complete their degree. Some programs have as low as 20% completion rate. (Universitetskanslersämbetet, 2018)

A potential reason for students not completing their degree could be the lack of proper, or functional, study spaces for the education in question. (Strange & Banning, 2015)

At the same time faculties compete for students on a national and global stage, and providing a diversified educational environment increases their attraction. (Årsredovisning Akademiska Hus, 2018) Faculties are however often bound to their facilities and lack the chance to offer a change of setting in the educational environment they're able to provide to their students. This could result in a scenario where they're only able to provide a supportive educational setting for the kind of student that happens to be "compatible" with that setting; leading to the inability to retain students "incompatible" with the setting. (Strange & Banning, 2015)

#### 1.4.2.2 Ways of Learning (and Learning Space Attributes)

In Kolb & Kolb's *Experimental Learning Theory* (2012) four modes of learning is presented that can be placed on two axes. One from Passive to Active learning and another from Abstract to Concrete learning. In this system Kolb & Kolb defines nine different learning styles.

Each of these learning styles have been analyzed by Strange and Banning in *Designing for Learning : Creating Campus Environments for Student Success* and has been given certain conditions and spatial attributes to benefit each learning style.

Experiencing: Concrete learning while balanced between an active/passive learning. Learn by involving themselves in challenging situations and feel comfortable with outer impressions. Learn both by hands on activities or passive observation of the world around them. Informal settings, working in group and field work is preferable.

Reflecting: Passive learning while balanced between Abstract and Concrete learning. Enjoys study environments with rich discussions and interactions; and environments for reading to create a foundation for understanding. Struggles to test ideas in action.

Thinking: Abstract learning, balancing Passive and Active learning. Can develop concepts and validate them both by reflecting and trying them out in the real world. Prefers a structured learning environment without outside interference. Works best alone.

Acting: Active learning while balancing Abstract and Concrete learning. Solution-driven with ability to analyze needs of people and other sources in concrete situations. Can become over-committed to an idea without reflection; prefers hands on projects in the real world.

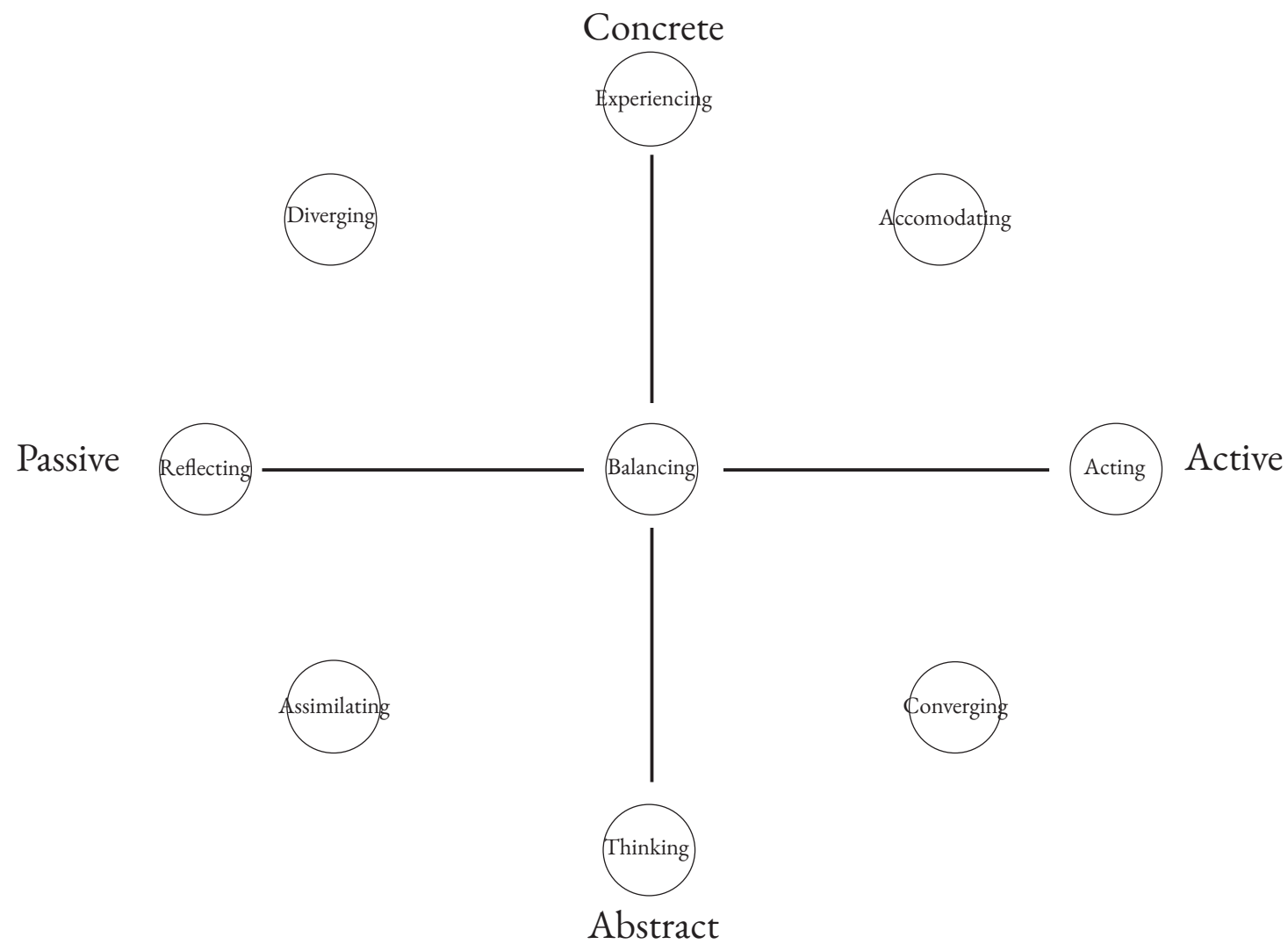
Diverging: Learn through Passive and Concrete learning. Observing situations rather than taking action, and then exploring them from different angles. Imaginative and likes to gather information. Prefers much feedback and likes to work in groups from their study environment.

Assimilating: Learn by Abstract and Passive learning. Good at understanding large amounts of information and putting it into a logical form. Less interested in hands on work; but more interested in concepts and abstract ideas. Prefers lectures, reading and analytical models from their learning environment.

Converging: Abstract and Active learning. Finds practical uses for abstract ideas and theories. In formal study environments laboratory assignments, technical simulations and putting theories to practical use is preferred.

Accommodating: Learn mainly by Experience and Active learning. Learn by doing, hands on, and enjoy achieving goals. Act on "gut feeling" rather than logical analysis. Relies on people for information rather than theory. Works best in groups and in field work.

Balancing: A middle ground between the 4 learning modes. Creative but often struggles with making decisions. Able to change learning style to meet the demand they face, which also goes for the learning environment. (Strange & Banning, 2015)



**KOLB’S 9 WAYS OF LEARNING WITH STRANGE AND BANNING’S ANALYSIS:**  
**Spatial features and qualities of each learning style**

Experiencing	Accomodating	Acting	Converging	Thinking	Assimilating	Reflecting	Diverging	Balancing
Informal setting Field work Collaborative Hands on and observation	Informal setting Gut-feeling rather than theory Collaborative, information from people More hands on, want to achieve goals	Both theory and analyzing real life situation Hands on work in real life Over-commit to first idea Solution driven	Finds practical uses for abstract ideas and theories. Formal study environments Laboratory assignments, technical simulations Works best alone	Can develop concepts and validate them both by reflecting and trying them out in the real world  Formal study environments No outside interference Works best alone	Good at understanding large amounts of information and putting it into a logical form.  Less interested in hands on work; but more interested in concepts and abstract ideas.  Formal study environments  Lesser outside interference. Prefers lectures, reading and analytical models from their learning environment.	Enjoys study environments with rich discussions and interactions; and environments for reading to create a foundation for understanding  Struggles to test ideas in action  Needs quiet study splace for reading and group rooms for discussions	Learn through Passive and Concrete learning.  Observing situations rather than taking action, and then exploring them from different angles.  Imaginative and likes to gather information.  Prefers much feedback and likes to work in groups from their study environment.	A middle ground between the 4 learning modes  Creative but often struggles with making decisions. Able to change learning style to meet the demand they face, which also goes for the learning environment

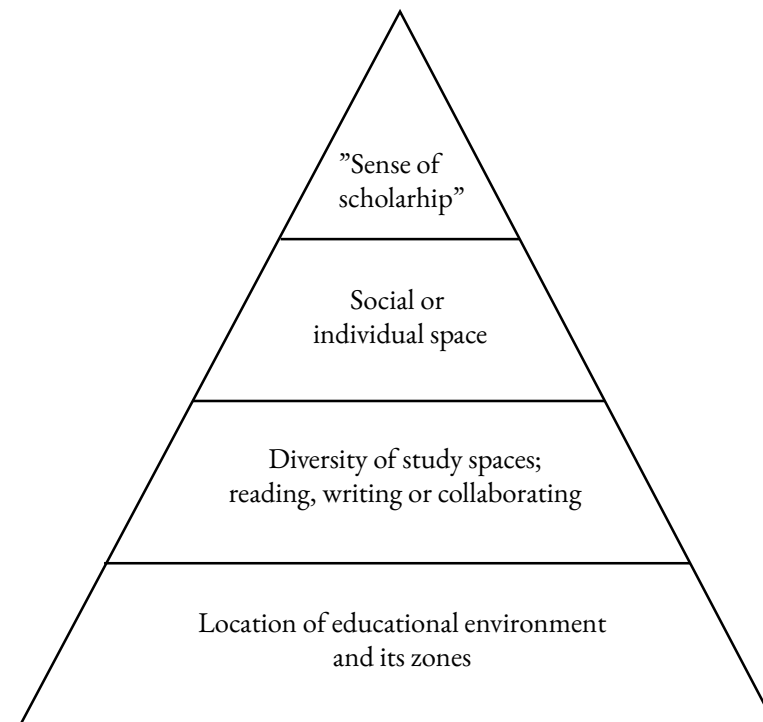


Diagram based on Cunningham & Tabur's hierarchy of student preferences when rating educational environments (Cunningham & Tabur, 2012)

#### 1.4.2.3 Learnings Spaces & Their Design Principles

In *Impact of learning spaces* (2011) Brooks explores in the study how different formal learning spaces affects student learning outcome.

Brooks conducts an experiment where groups of students are given an identical education in different learning spaces to isolate the effect of the learning space. The result of the study shows that different learning spaces has an impact on the final outcome of student learning. In the experiment Brooks conducted an active learning space was compared to a more traditional lecture hall. The experiment showed that the students achieved better results in the active learning space for the specific course they were studying.

An empirical research was also conducted by Wannarka and Ruhl (2008) where spatial features of the learning space was compared to different types of learning. The study showed that the result from individual work was increased when students were

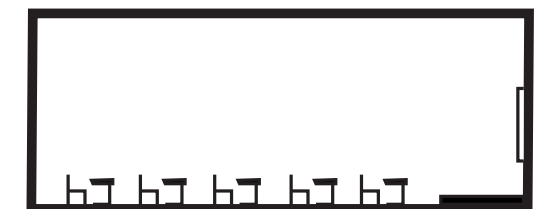
seated in rows directed in one direction. However, interactive, collaborative work and brainstorming benefitted from students seated in circular arrangements.

In *Learning space attributes: Reflections on academic library design and its use*, Cunningham & Tabur (2012) explores the hierarchy attributes in learning spaces that is important for students when determining if an educational environment is attracting them to apply for certain universities. The fundamental attribute is location and zones, followed by spaces for reading, writing, collaborating. Another important attribute is whether the learning spaces are communal and social or individual and quiet. The final attribute considered is "sense of scholarship" in the environment.

In Brooks' experiment different formal study spaces were compared given the same course. Formal study spaces are traditional, with well defined spatial qualities, indoor learning spaces such as:

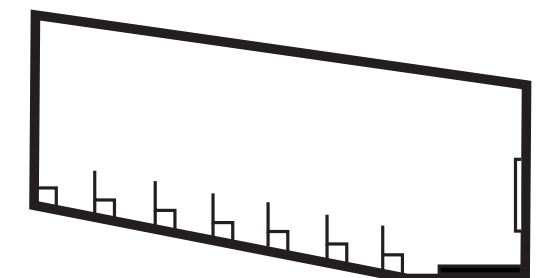
##### **Traditional Classroom**

Flat floorplan with desks directed towards a podium in the front of the room.  
Semi-passive, abstract learning  
Clear back and front of the room.



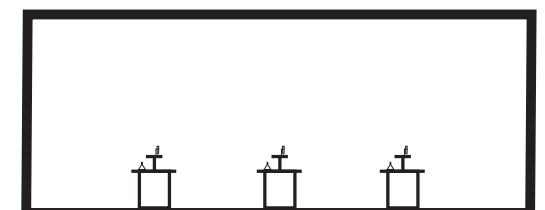
##### **Lecture hall**

Tiered floor towards a podium in the front of the room.  
Semi-passive, abstract learning  
Clear back and front of the room.



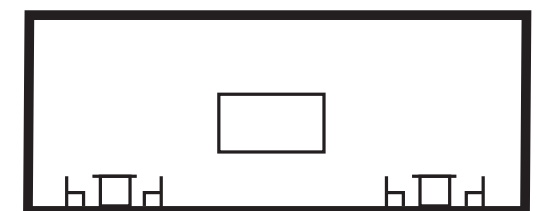
##### **Laboratory:**

Flat floorplan  
Active, concrete learning  
Equipment specific to education



##### **Flexible space/Active Learning Space:**

Multiple groups  
Active, semi-abstract learning  
Teacher/instructor in center of room  
Smaller group arrangements in the periphery  
Open to exterior impressions





The alternative to formal learning spaces are informal study spaces, which are often located outdoor, or with outdoor qualities integrated in the interior space. They often have access other services like places to eat or taking a break, and can be both for individual or collaborative work. Informal study spaces can also function to strengthen the experience of community. (Strange & Banning, 2015)

#### **The informal individual study space**

This type of study space often has some form of shelter from outside noise or expressions. The spatial qualities avoid semi-circular seating arrangements that invites collaborative work. (Strange & Banning, 2015)

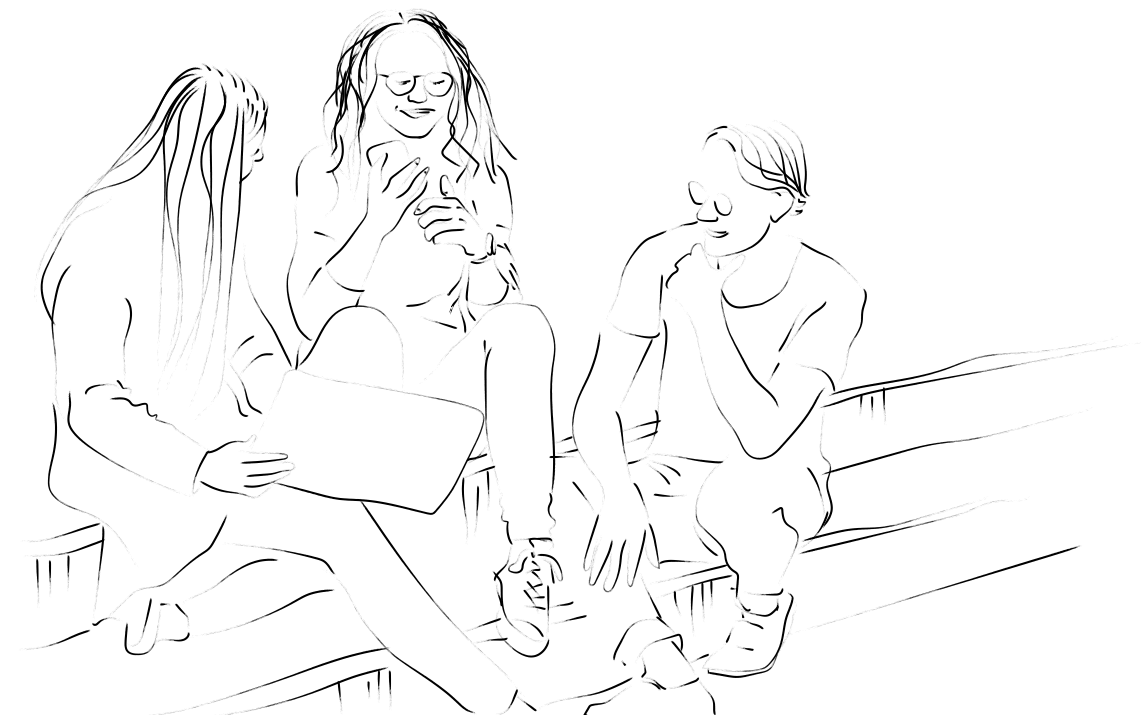
#### **The informal collaborative study space**

This type of study space is often student led. It is normally not sensitive to outside impressions. Spatial qualities associated with this type of space is semi-Circular or Circular seating arrangements and can both be outdoor or indoor. (Strange & Banning, 2015)

Informal study spaces can provide an opportunity to merge higher education study spaces with everyday city life, and give universities a chance to fulfil their purpose of giving back something to the community that supports them. (Strange & Banning, 2015)

The student unions of Gothenburg lists important aspects of informal study spaces in their declaration of a sustainable study environment. The study environment should be diverse and provide spaces for students with different qualifications for learning. It should provide a variation of social contact and cooperation, a connection between study task and space and highlights the importance of everyday exercise and physical activity. Areas with stairs in Gothenburg are recommended for short exercise breaks. (GU Tips för bra studiemiljö, 2022)

Student's study environment is in many ways equal to that of the work environment laws in Sweden. A study environment should be satisfactory to the nature of the studies. The study environment should be adapted to the individual physical and psychological conditions of the human and not the other way around. (Studenters arbetsmiljö, 2022)



#### **1.4.2.4 The Campus as a concept of Place**

The concept of Place in relation to Campus is important considering how the educational environment impacts student's lives both in terms of educational success, but also in shaping their personal identity. (Strange & Banning, 2015)

Rituals like "Homecoming" has shown that if the educational environment by design are memorable places, then students develop a strong place attachment to them. The students' sense of belonging is connected the place identity. (Giuliani & Feldman, 1993)

The campus as Place is an important part of what attracts students to different faculties. When college applicants in the U.S. were asked about what attracts them about certain campuses the physical features of place of the campus was by far the most important factor. (Strange & Banning, 2015)

These place features of the campus should also be taken into account when trying to understand behaviour of students. Whether the behaviour is changed directly because of the surrounding environment, or made more likely of it.

Different configurations of features in educational environment affects the way students and staff give them symbolic value. If the study space is placed in a dark basement for example, the perceived value of such space is not seen as high. If its manifested as a central function the symbolic value of it is higher. (Strange & Banning, 2015)



**Terminology/Vocabulary**

Educational Environment -	Combination of study spaces, outdoor environment and all functions connected to the place or campus you study at.
Formal Study Space -	Lecture halls, reading rooms, group rooms, laboratories, active learning spaces or similar.
Informal Study Space -	Spaces connected to educational environment that functions as study space but doesnt have a formal study occasion. Often outdoor.
To Dwell -	The environment where you spend most or a part of your time of the day.
Urban Fabric -	The surrounding urban context.
Place identity -	Combination of features concrete/abstract that gives a place its identity.
Place identity features: The ground -	Concrete features of the ground. Stones/asphalt/water/reflective, soft, hard etc.
The optic array -	The scenery; Buildings, trees, open space. The background of your visual perspective.
Phenomenology -	The manipulation of space, volume, light and shadows to create meaningful encounters with the environment.



Pavement of Bastionsplatsen

May 2022

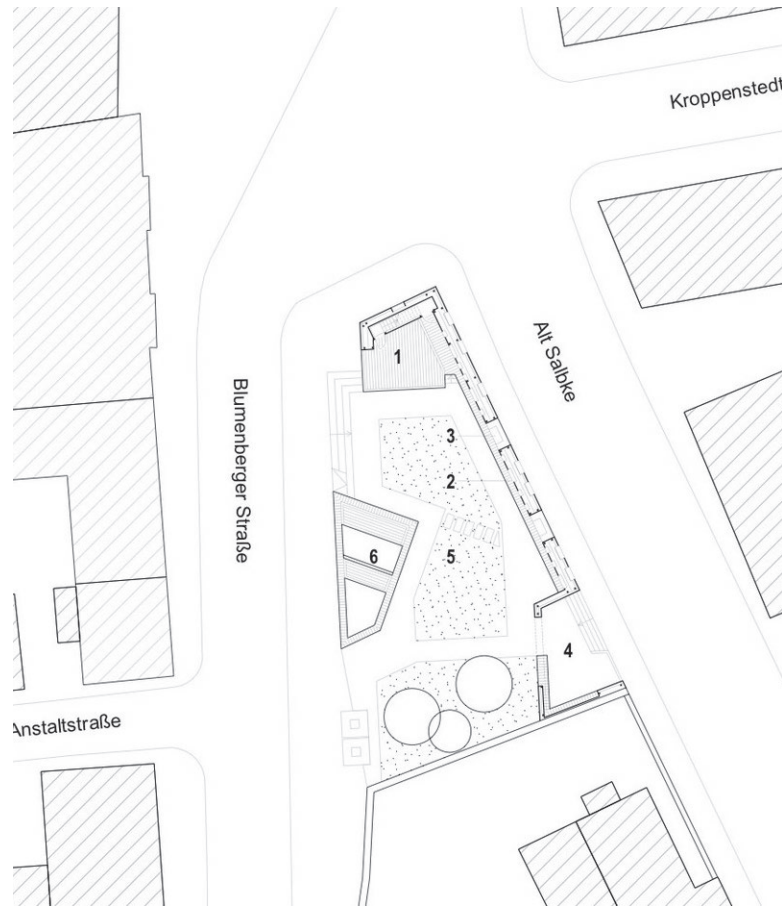
## 2. Investigation

Reference Project: Open Air Library

Site Analysis

Design Toolbox





### 2.1.1 Reference Project: Open Air Library

The open air library was completed in 2009 in Magdeburg, Germany. It is designed by KARO architekten.

It utilizes a narrow footprint in an urban setting to create a series of informal study spaces and at the same time uses its structure to create spatial zones. It was a project designed and built together with the local community and is being sustained through the efforts of the community.

The project is an example of a way architecture can create informal study spaces with small means and uses the narrow/slender footprint to create a diverse environment.

The concept itself, of being a non supervised library; relying on citizens to make it work, is interesting and could provide solution for sustainable public study spaces.

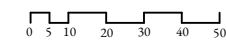
The project also connects levels in the streetscape with stair formations in combination with creating informal study spaces.



Figure 1: Photograph by Anja Schlaman



Figure 2: Photograph by Anja Schlaman



1:2000  
Site plan





## 2.2 SITE ANALYSIS

### 2.2.1 Get to know the site

The area along Stora Nygatan from Bastionsplatsen to Drottningtorget is a unique place in Gothenburg. The area is shaped from Gothenburg's historic past as a fortified town from the 17th century. It also an accessible place when it comes to water in the city. Gothenburg is a city on the west coast of Sweden and a city very much built around the features of water. However, the seaside archipelago is located in the far west parts of town and not easily accessible from the central parts of Gothenburg. The waterfront towards Göta älv is very much being redeveloped from its industrial past to a public space, but large parts of it still is dedicated to ferry docking and being blocked by heavy traffic.

In 1621 Gothenburg was founded, and the purpose was to create a fortified town that function as a "thorn in the side" to Denmark. To prevent the town from being attacked by land from the south about ten fortified bastions were created in polygon shapes, surrounded by a moat, Vallgraven. Many unsuccessful attempts of shaping the walls were

made during the 17th century due to the ground conditions, and the soil made the mound walls made of dirt crumble. (Wedel, 2021.)

In the late 17th century a decision to fortify the walls with stone was made and four larger bastions were made. The whole area closest to Vallgraven functioned as a military ground. And on the other side of Vallgraven no buildings were allowed to be raised for potential attackers to take cover behind. (Wedel, 2021.)

These structures are very much still evident in the city today. When the industrialization started in the early 19th century and the increased urbanisation Gothenburg experienced an overcrowding inside of Vallgraven. So the city architect at the time, Carl Wilhelm Carlberg, asked the king if the military area closest to Vallgraven could be built to help out with the overcrowding. The demolition of the Bastions was a slow process and the construction in the area



wasnt commenced until the 1850's. The ideal of the time was the neoclassical style; and due to the many city fires Gothenburg had suffered from its founding to the early 19th century, a decision was made that all new buildings inside Vallgraven had to be made of stone. (Wedel, 2021.) The neoclassical stone buildings has a very strict, symmetrical facade and are pretty closed.

Along Stora Nygatan Gothenburg's synagogue was constructed in the 1850s, and many of the towns rich merchants built their private residences in the area. (Fredberg, 1977)

On Bastionsplatsen one of the big four bastions called Gustavus Magnus was located, named after the founder of the city king Gustav II Adolf. The demolition of this Bastion was slow and it wasnt until the early 20th century the houses in this area was built.

At this time the influences of the Arts & Crafts-movement had worked as a hotbed for new architectural styles, the Art nouveau or Jugend style

had become popular in Europe. (Fredberg, 1977)

Architect Hans Hedlund designed Kontoristföreningens house that frames the square to the north and is made in Jugend style. The house was constructed between 1905-1908 and is true to its architectural style in terms of being asymmetrical in itself as well as to the surrounding buildings. It's three stories higher than the buildings next to it and breaks from the industrialised construction methods evident in the neoclassical buildings along Stora Nygatan in that it aims to display craftsmanship in its construction. The ground level has large arches all the way down to the ground which is unique for the buildings along Stora Nygatan. (Lönnroth & Westergren, 2003)

A senior high school and a restaurant is using Kontoristföreningens house today and the upper floors are used as hotel rooms. Along Stora nygatan there is a mix of offices, restaurants and residential houses, along with the synagogue that still is located there.





Much of the movement flow is focused from Kungsporsplatsen and along Kungsporsavenyn to the south, along Larmgatorna and Kungsgatan to the east and west, and by Östra Hamngatan to the north.

The connection to the central station from this area is quite unclear but most people move to the next node in Brunnsparken, or along Östra Larmgatan, to reach the station.

Heden is an area which is likely to be developed in the near future. Heden and the areas surrounding Kungsporsavenyn is only connected to the area north of Vallgraven and the central Station by the heavy trafficked roads along Trädgårdsföreningen and Kungspors. A potential strengthened movement flow along Stora Nygatan, and additional bridges over Vallgraven, for pedestrians could create a clearer connection between these parts of town.



Existing green structures are mainly located south of Vallgraven and has a resilient function on the water flows from that side. Tädgårdsföreningen is particularly exposed to flooding though due to its low height above the sea level compared to the surrounding areas.

Trädgårdsföreningen is a popular place for recreational walks for the citizens of Gothenburg. It has a playground for kids to play. It also has cafés and restaurants and an event hall.





Communication:  
Pedestrians

Shopping  
Restaurants



Harry Hjörnes Plats is the hub/node for two major shopping streets and also ties together with Kungsporsplatsen. One of the busiest places in Gothenburg where a lot of flows pass through.

Restaurants  
"Fika"  
Leisure activities



Trädgårdsgatan connects Bastionsplatsen to Harry Hjörnes plats which is one of the busiest places in Gothenburg with three major flows from Kungsporsplatsen, Fredsgatan and Kungsgatan connecting. The busy city life is present at the end of Trädgårdsgatan that has hotels and restaurants.

Food court  
Restaurants  
Shopping



Saluhallen food court, restaurants on the outside

Communication:  
Busses  
Trams

Restaurants



Kungsporsplatsen, main communication hub for travel by tram or bus. The busses connecting Chalmers Lindholmen and Johanneberg stop here.

Cafés



Lilla Kungsgatan connecting Östra Larmgatan to Stora Nygatan.

Children  
Playground

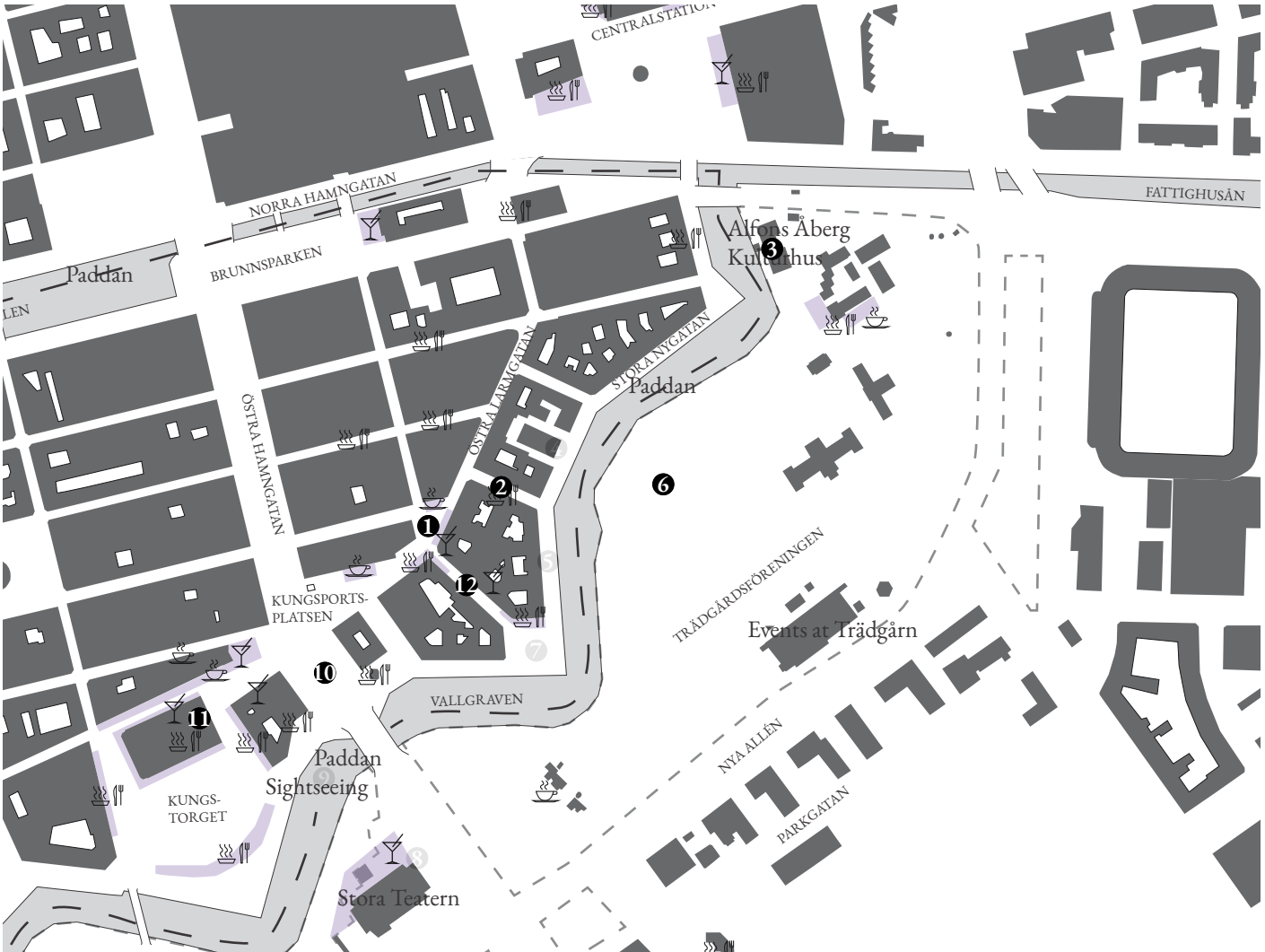


Alfons Åberg Kulturhus; culture house for children.

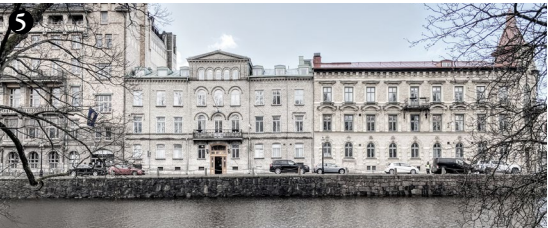
Religious center



Synagogue from 1850. Narrow entrance, gated.



Offices  
Few restaurants  
Residential



Neoclassical buildings along Stora Nygatan. Strict symmetry and closed ground level towards streetscape. Central entré.

Exercise  
Leisure activities  
Playground  
Café  
Restaurant



Trädgårdsföreningen, the beach and walk along Vallgraven. Trädgårdsföreningen has cafés and one of the best preserved 19th century gardens/parks in Sweden. Could provide a recreational break for the site.

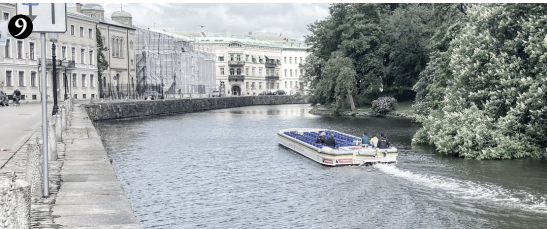
Parking  
Seatings  
Restaurants



Bastionsplatsen, public square. Mostly parking today.



Stora Teatern with the outdoor serving area during summers.



Paddan is a popular sightseeing tour with guides running through Vallgraven every 15 minutes during the summer. A potential stop at the site possible.



2.2.2 Student Unions in Gothenburg

By studying the opinion protocols of study environments by the different student unions in Gothenburg a summary of qualities they think are important in study environments is defined. Chalmers Studentkår, Göta Studentkår, Konstkåren, Sahlgrenska Akedemiens Studentkår and Sveriges Förenade Studentkårer’s opinion programs has been studied.

An important attribute in educational environment for Student Unions is that there are streamlined ways for students to adress problems in their environment; them being physical, spatial or psychosocial.

Another fundamental wish is that students should have the same preconditions to a good study environment as employees has in job sectors.

Facilities should meet requirements for ergonomy, indoor climate, ventilation, lighting, acoustics and management/cleaning. These are highlighted as important for attracting students to faculties.

The faculty should be aware of travel costs with a separated campus. Not more than 15 minutes travel time between formal and scheduled study occasions on the same day is desirable.

Outdoor study environments areimportant, and should be further developed.

There shouldn be plenty of space for individual work

or for two persons or more, like a table and secluded areas for group work aswell as secluded areas for reading.

Good diversity of study spaces accessible all hours of the day. Diversity is important to provide a good variation for different learning styles.

Facilities should have spaces for multiple/ flexible use; technology section specific meetings, studying or even partying. Spaces for different student associations and commités is desireable and the possibility too cook or prepare food.

Relevant services connected to study environmen is access to study material, food, ”fika”, entertainment, facilities, leisure activites, easy accessible exercise and transport.

All students should have accessibility to all formal study spaces (except course specific study spaces).

Facilities:

- ❶ Chalmers Lindholmen Campus
- ❷ Pedagogen
- ❸ Dragonen Sappören
- ❹ School of Economics
- ❺ University Library
- ❻ Gothenburg University Headquarters and Service
- ❼ HDK and Valand School of Arts
- ❽ Studenternas Hus (The students’ house)
- ❾ Artisten
- ❿ Humanisten
- ⓫ Chalmers Johanneberg Campus
- ⓬ Geovetarcentrum
- ⓭ Medicinarberget
- ⓮ Campus Linné Psykologen

--○-- Public Transportation

||||| Historic city centre

Faculty or student union:

- Chalmers University/Chalmers Student Union/GU
- Gothenburg University: The Faculty of Education
- Gothenburg University: The Faculty of Social Science
- Gothenburg University: School of Economics
- Gothenburg University
- Gothenburg University
- Gothenburg University: School of Arts/Arts Student Union
- Göta Student Union
- Gothenburg University: School of Arts
- Gothenburg University: The Faculty of Humanities
- Chalmers University/Chalmers Student Union/GU
- Gothenburg University: The Faculty of Science
- Gothenburg University: Sahlgrenska Academy
- Gothenburg University: The Faculty of Social Science
- Insitution of Psychology



1:20000

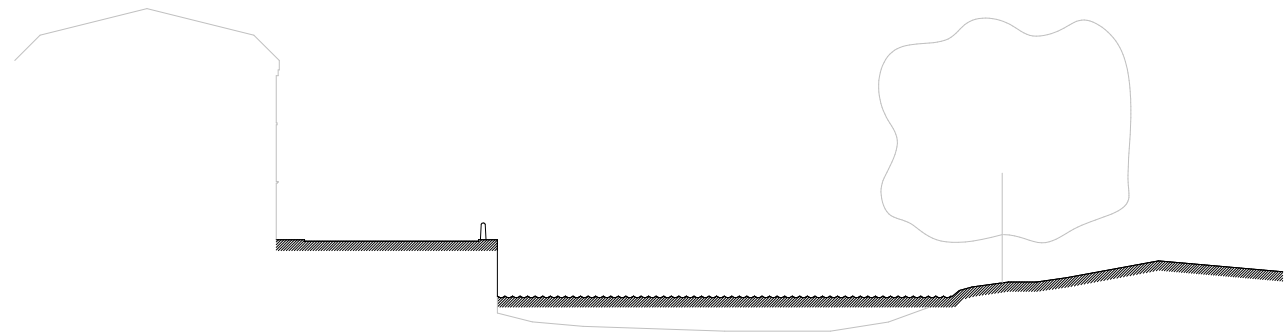
City map showing facilities managed by Gothenburg Universty, Chalmers and different student unions.

The two large scale Chalmers campuses are disconnected from eachother on each side of Göta Älv. The many different sattelite faculties of Gotheburg University are scattered around

town, but very few are actually in the historic city center of Gothenburg.

The chosen site is therefore placed within the historic city center in a place where the identity features are strongly connected to Gothenburgs history from a fortified town to the city it is today.





The different levels of the site around the moat (Vallgraven).

### 2.2.2 Site Place Identity Features

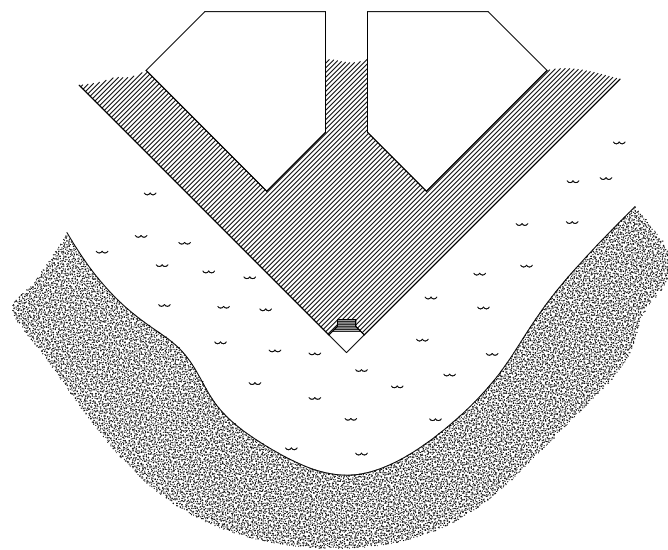
#### The ground

The shape of the site and the remnants of the bastion's pylons surrounded by water. The narrow ground space between strict, symmetric buildings and the retaining walls.

Vallgraven, the moat and its water. Integral part of Gothenburg's identity as a city. The reflections of its surroundings in Trädgårdsföreningen or the urban side. The urban wildlife of Trädgårdsföreningen is also important.

Trädgårdsföreningen's gardens; a lush park, one of the best preserved 1800's gardening projects.

Trädgårdsgatan, the narrow alleys connecting Larmgatan and Stora Nygatan

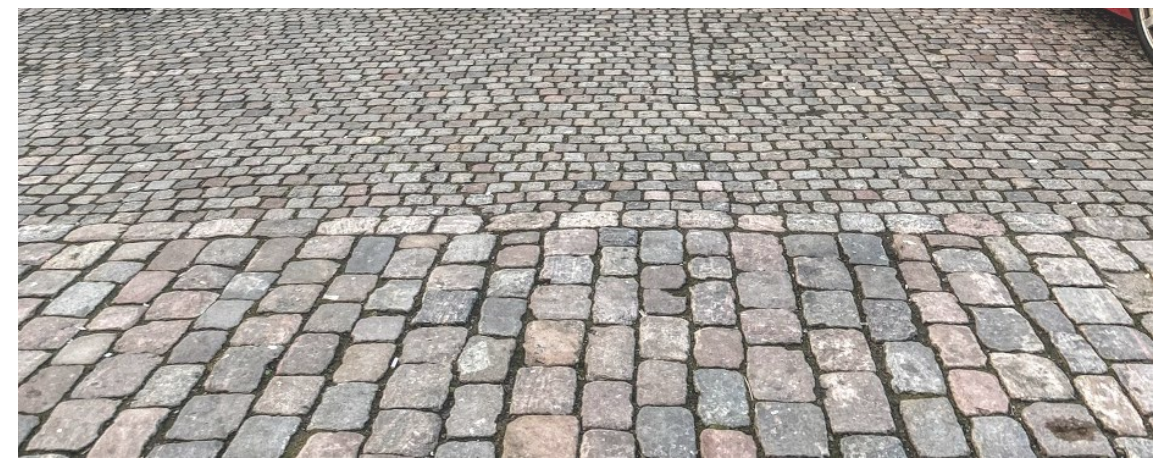


The shape of the site with its characteristic bastions and the soft shapes of the waterfront towards Trädgårdsföreningen is essential in the identity of the place.



Vallgraven and the connecting stairs sometimes submerged when the water levels are high. The shape of the site making pylons surrounded by water, subtly telling the story of the bastion and Gothenburg as a fortification.

The ebb and flow of the water, or the rise of the water levels due to surges of rainwater, on the site are an important identity feature for the ground.



The paving stones connecting the streetscape to the quay and retention walls. Different patterns that enhances the site's shape.



The grass connecting Trädgårdsföreningen to Vallgraven with the rich animal life.





### The Optic Array

Trädgårdsföreningen, the trees, vegetation and the buildings in Trädgårdsföreningen create a solid facade along the whole site to the south that transforms with the seasons.

Buildings along Stora Nygatan, almost all buildings neoclassical with strict symmetric facades and central entrances in a closed ground floor. Kontoristföreningen's house was built later and in jugend style and has a more open ground floor towards the street with huge valves. Synagogue is the oldest synagogue in Gothenburg still standing, 3rd overall.

Trädgårdsgatan, at the end of trädgårdsgatan you can see up to Harry Hjörnes plats and the commotion going on there.

West towards Kungälv, one can see the bridge and Stora Teatern from Bastionsplatsen. The movement of people over the bridge. The people on leisure walks in Bältesspännarparken.

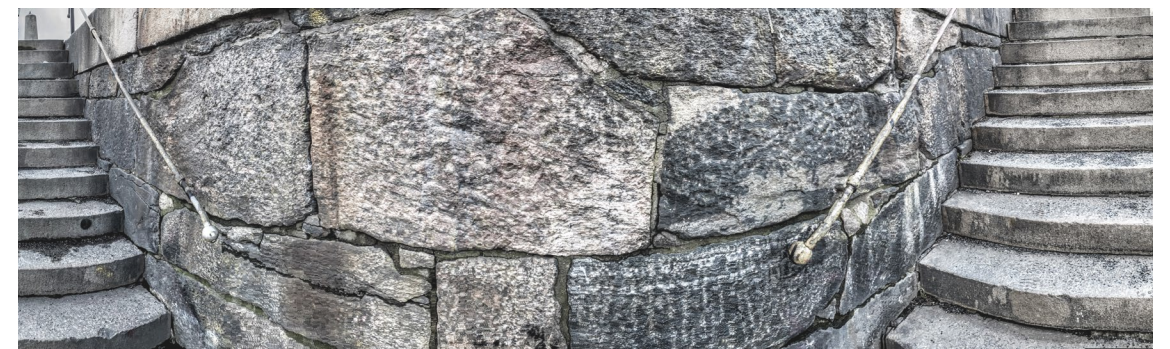
North towards Drottningtorget, one can see the central station and Hotel Post and the more urban characteristics of the important communication node.



Neoclassical built structures along Stora Nygatan with symmetric facades.



Synagogue of Gothenburg from 1850s. Narrow area in front of entrance towards Stora Nygatan.



The retention walls along the tiered connections between levels.





### The Sky

The Gothenburgian sky, foggy days and cloudy skies. Gothenburg is known for its rain, but also the long summer days with the sun slowly setting in the west.

The tree tops of Trädgårdsföreningen creates a ceiling during the summer months, but offer little shelter during the colder periods of the year.



The tree tops of Trädgårdsföreningen following the seasons.



The sun setting over the buildings in the west.



The daylight conditions and effects of rain.

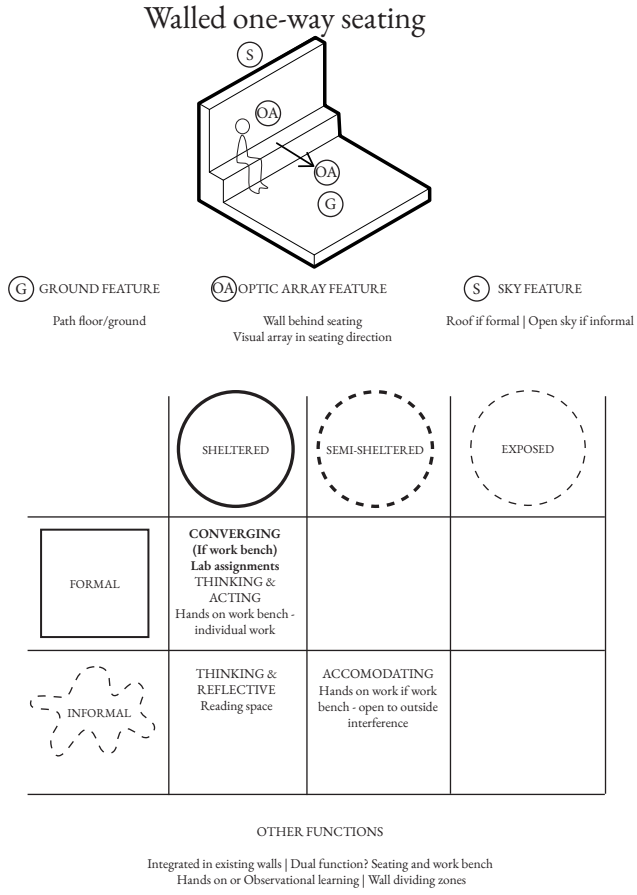
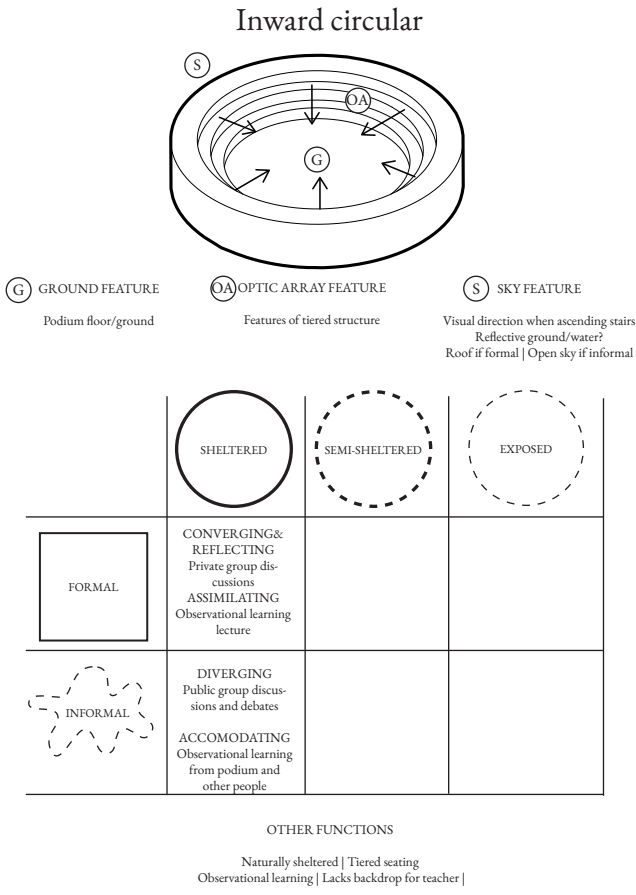
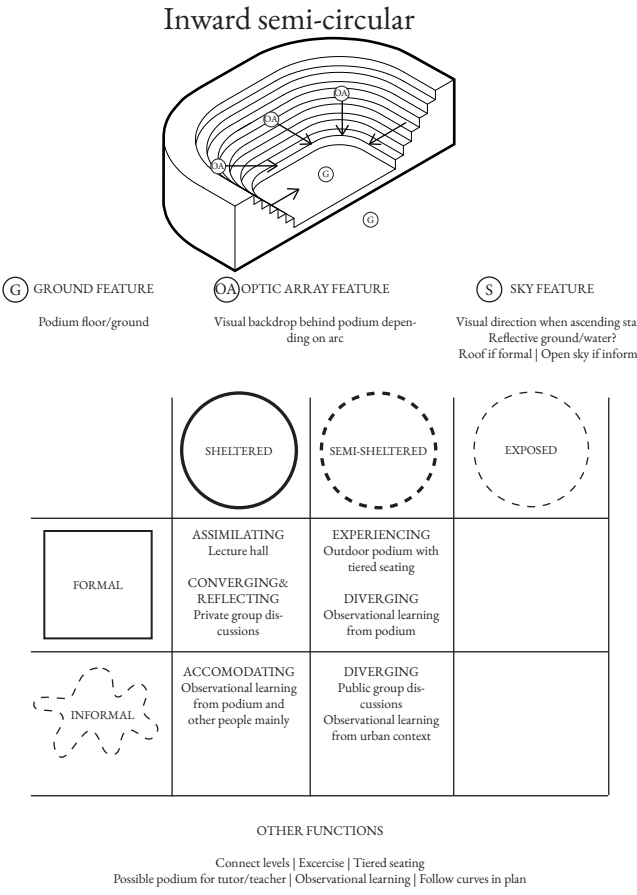
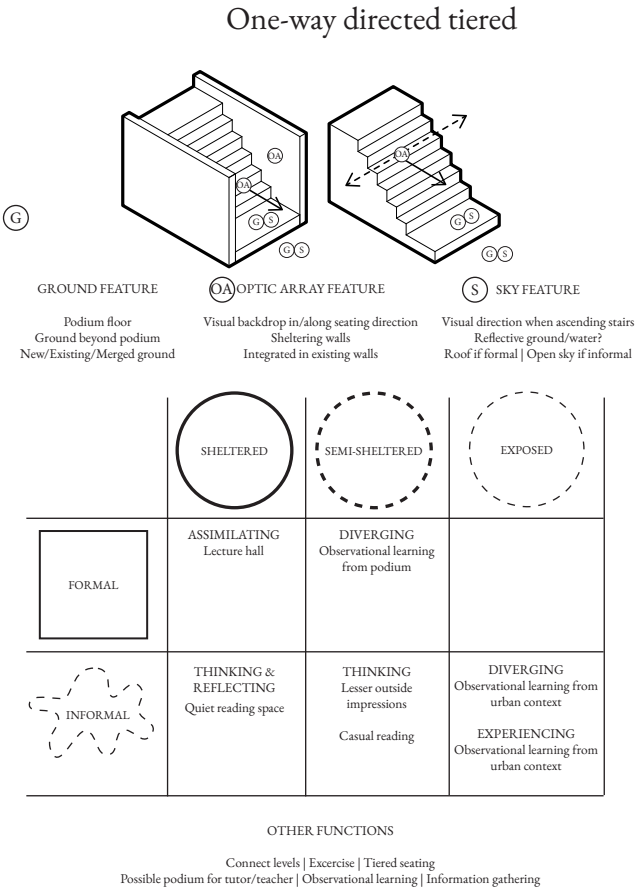


2.3 Design Toolbox

By using Strange and Banning’s qualities connected to Kolb’s learning styles a design toolbox is defined through a series of spatial experiments.

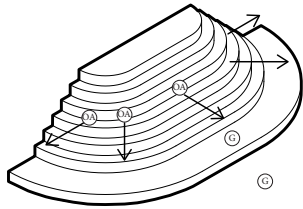
The configurations are analyzed through the aspects of learning styles, degree of outside exposure and other potential functions. Each configuration is then analyzed in how it could relate to different place identity features from the concept of ground, optic array and sky features.

2.3.1 Explorative modules





Outward semi-circular



**G** GROUND FEATURE  
Path floor/ground

**OA** OPTIC ARRAY FEATURE  
Panoramic visual backdrop depending on arc (weaker connection with specific identity feature?)

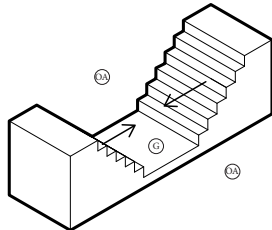
**S** SKY FEATURE  
Visual direction when ascending stairs  
Reflective ground/water?  
Roof if formal | Open sky if informal

	REFLECTING Quiet reading	DIVERGING Observational learning from urban context	ACTING & DIVERGING Inspiration from outside impressions, real life situations  DIVERGING Observational learning

OTHER FUNCTIONS

Connect levels | Exercise | Tiered seating  
Observational learning | Follow curves in plan

Inward tiered



**G** GROUND FEATURE  
Podium floor/ground

**OA** OPTIC ARRAY FEATURE  
Openings/walls along tiered seating

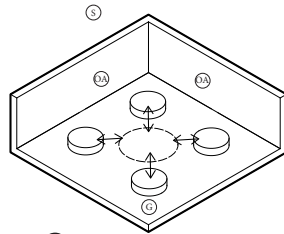
**S** SKY FEATURE  
Visual direction when ascending stairs  
Reflective ground/water?  
Roof if formal | Open sky if informal

	CONVERGING& REFLECTING Private group discussions		
	REFLECTING Quiet reading	DIVERGING Public group discussions and debates  Observational learning from podium	

OTHER FUNCTIONS

Connect levels | Exercise | Tiered seating  
Observational learning | Lacks backdrop for teacher | Bilateral

Multiple circular seating



**G** GROUND FEATURE  
Path floor/ground

**OA** OPTIC ARRAY FEATURE  
Wall behind seating/work bench  
Framing walls

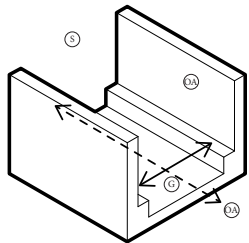
**S** SKY FEATURE  
Roof if formal | Open sky if informal

	CONVERGING& REFLECTING Private group discussions	ACTING Hands on work based on real life situation DIVERGING Public group discussions and hands on group work	
		EXPERIENCING & ACCOMODATING Hands on work open to outside interference DIVERGING Public group discussions and hands on group work	EXPERIENCING & ACCOMODATING Hands on work open to outside interference DIVERGING Public group discussions and hands on group work

OTHER FUNCTIONS

Active Learning Space - formal study space with tutor  
Hands on learning with tutor | Wall as presentation backdrop

Inward walled faced seating



**G** GROUND FEATURE  
Path floor/ground

**OA** OPTIC ARRAY FEATURE  
Wall behind seating/work bench  
Framing walls  
End of path visual backdrop

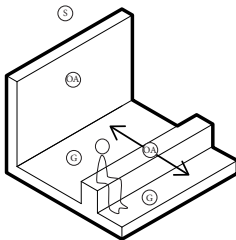
**S** SKY FEATURE  
Roof if formal | Open sky if informal

		DIVERGING Public group discussions  THINKING & REFLECTIVE Reading space (if not too busy path)	

OTHER FUNCTIONS

Learning space between walls/volumes - Path between volumes  
Wall as bookshelf | Wall as presentation backdrop

Two way seating



**G** GROUND FEATURE  
Path floor/ground

**OA** OPTIC ARRAY FEATURE  
Wall behind seating  
Visual array in seating direction (two directions)

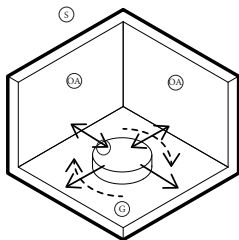
**S** SKY FEATURE  
Roof if formal | Open sky if informal

	CONVERGING (If work bench) Lab assignments THINKING & ACTING Hands on work bench - individual work (Based on theory)	ACTING (If work bench) Hands on work based on real life situation	
		EXPERIENCING & ACCOMODATING Hands on work if work bench - open to outside interference	EXPERIENCING & ACCOMODATING Hands on work if work bench - open to outside interference

OTHER FUNCTIONS

Integrated in existing walls | Dual function? Seating and work bench  
Hands on or observational learning | Wall dividing zones | Wall as presentation backdrop

Walled circular seating



**G** GROUND FEATURE  
Path floor/ground

**OA** OPTIC ARRAY FEATURE  
Wall behind seating/work bench  
Framing walls

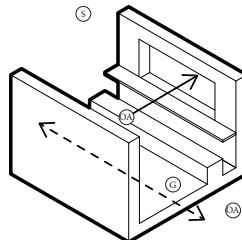
**S** SKY FEATURE  
Roof if formal | Open sky if informal

	CONVERGING& REFLECTING Private group discussions	ACTING (If work bench) Hands on work based on real life situation	
		EXPERIENCING & ACCOMODATING Hands on work if work bench - open to outside interference DIVERGING Public group discussions and hands on group work	

OTHER FUNCTIONS

Invites circular movement| Dual function? Seating and work bench  
Hands on learning | Wall dividing zones | Wall as presentation backdrop

One way seating with window



**G** GROUND FEATURE  
Path floor/ground

**OA** OPTIC ARRAY FEATURE  
Wall behind seating/work bench  
Framing walls  
End of path visual backdrop  
Window visual backdrop

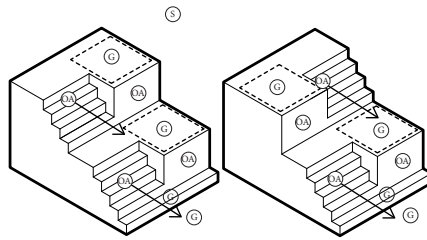
**S** SKY FEATURE  
Roof

	CONVERGING (If work bench) Lab assignments Individual work	ACTING Hands on work based on real life situation Individual work	
	THINKING & REFLECTIVE Quiet Reading space	THINKING & REFLECTIVE Casual Reading space  EXPERIENCING & ACCOMODATING Hands on work open to outside interference	

OTHER FUNCTIONS

Learning space between walls/volumes - Path between volumes - Individual learning  
Sheltered space with connection to outside features

Tiered seating with connected zone



**G** GROUND FEATURE  
Path or podium floor/ground

**OA** OPTIC ARRAY FEATURE  
Wall forming zones  
Direction of tiered seating/stairs

**S** SKY FEATURE  
Roof if formal | Open sky if informal

	ASSIMILATING Lecture hall	CONVERGING Hands on work individual work	
		ACCOMODATING & EXPERIENCING Public group discussions and hands on group work	

OTHER FUNCTIONS

Combination of areas for group work and tiered seating - Connecting levels - Group learning  
Active Learning Space - Exercise

### 3. Implementation

Design Narrative

Typology 1 - The Bastion of Learning

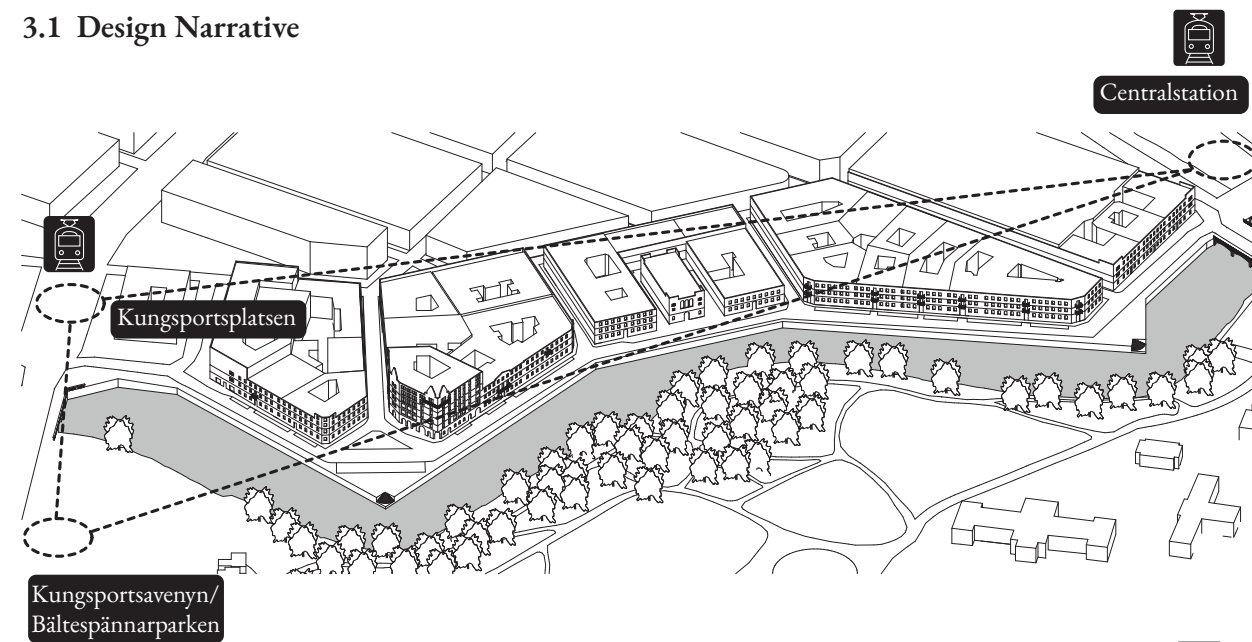
Typology 2 - The Forest Amphitheatre

Typology 3 - The Active Learning Space

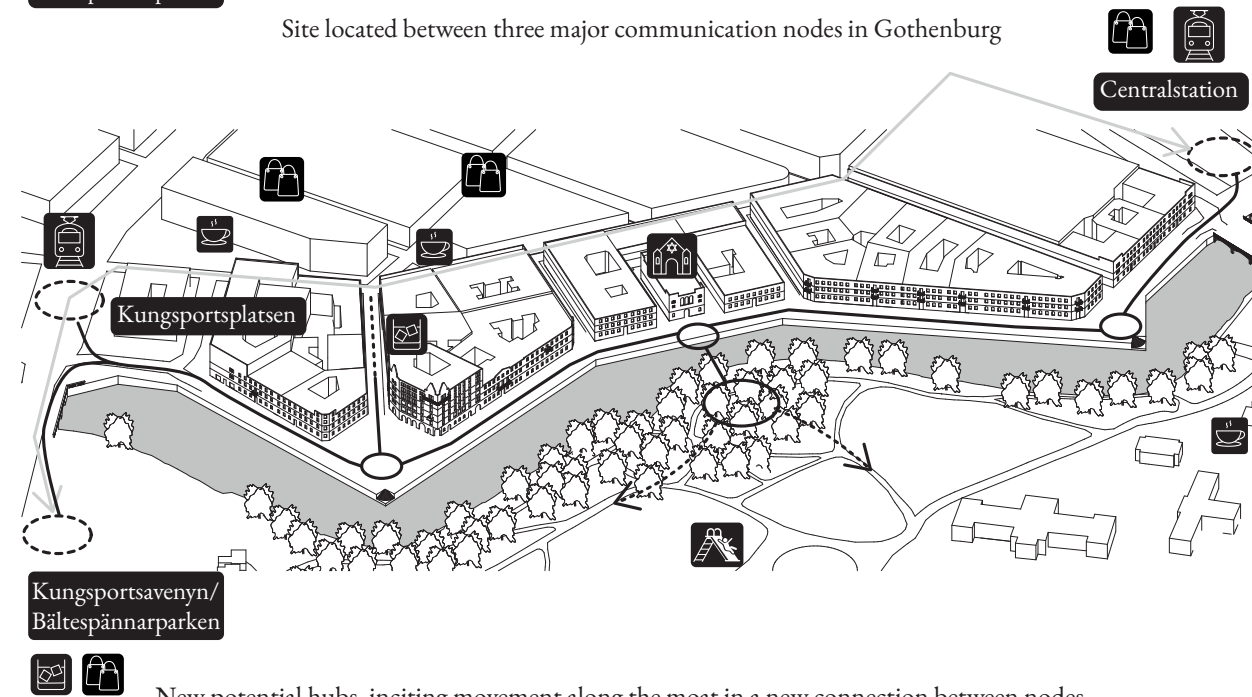
Typology 4 - The Bookshelf



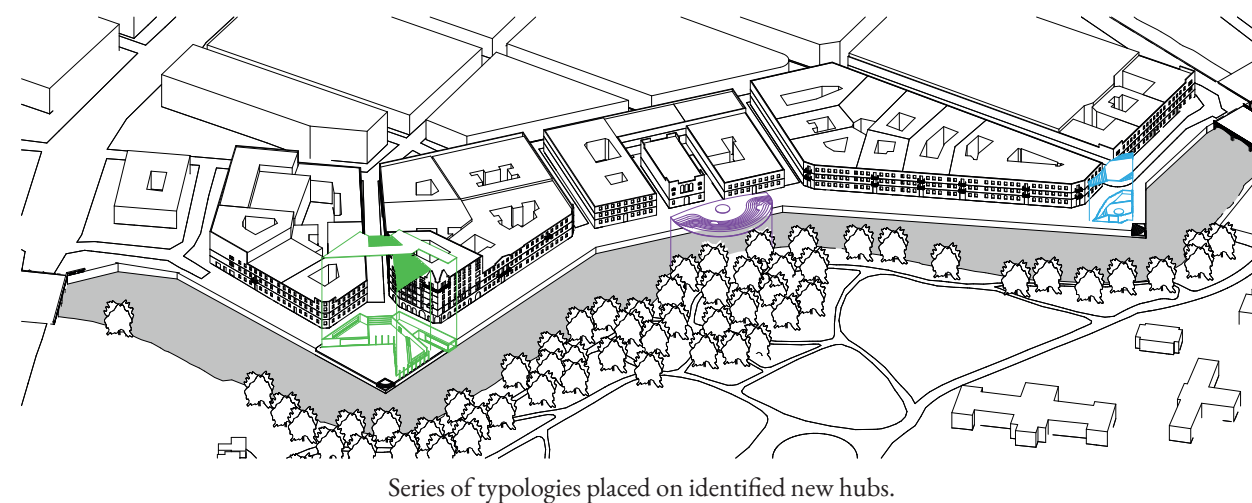
### 3.1 Design Narrative



Site located between three major communication nodes in Gothenburg



New potential hubs, inciting movement along the moat in a new connection between nodes.  
Local functions and services near the site.



Typology with concept for movement flows, space-making and connecting the new hubs.

#### Design goal

The design goal is to provide a variety of types of formal, indoor, study spaces along Stora Nygatan in a series of typologies. (1) The lecture hall; a small scale lecture hall for small scale lectures and seminars with a tiered seating and podium for presentations.

(2) The active learning space with a central podium for a leader and flexible seating in a circular formation around the space. A space able to provide course specific equipment for hands on learning.

(3) Both individual and group indoor study spaces.

The outdoor, informal, study environment should provide (4) movement along the moat, (5) areas for different types of breaks; the exercise break, everyday exercise, and the recreational break. It should provide a (6) differentiated study environment for different types of learning styles.

Public functions included should be (7) a stronger connection between Kungssport and Drottningtorget along Stora Nygatan and making Trädgårdsföreningen more accessible from the site.

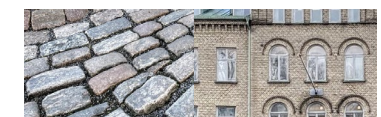
(8) Each learning style should have a learning space with suitable attributes on the site.

#### Design framework

The Site is the foundation. The design carefully considers existing features of the site with the aim to explain the site itself. Emphasis is put on the use of spatial qualities and how they frame, or interact with, a wide variation of place identity features on the site.

The material palette for the design uses Stone and masonry, Wood and concrete. The site is one of the earliest areas where Gothenburg transitioned from a wooden town to a stone town due to the many city fires in the 1700's.

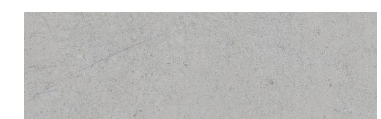
Stone and masonry



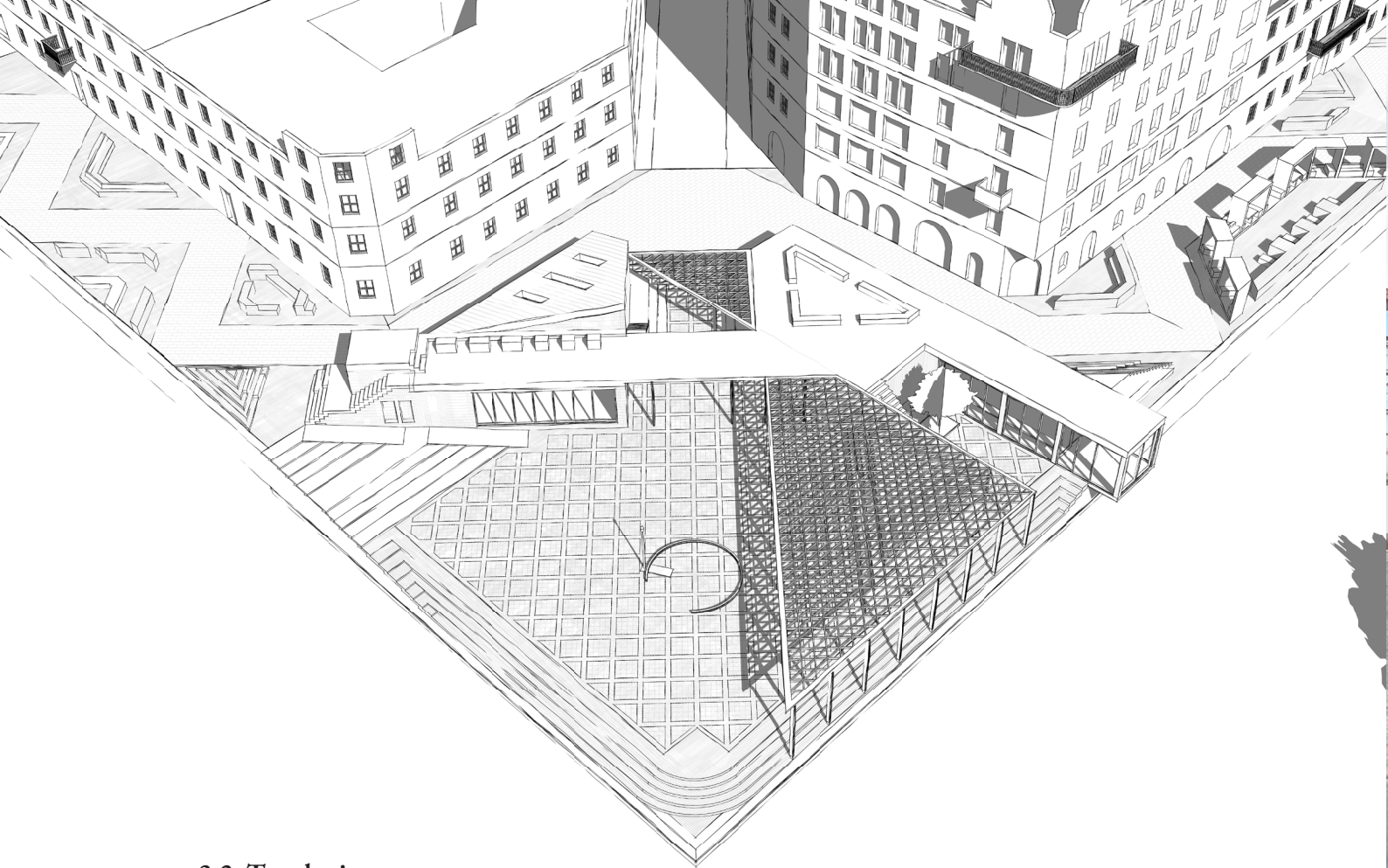
Wood



Concrete







## 3.2 Typologies

### 3.2.1 Typology 1 - The Bastion of Learning

A multifunctional learning space combining formal and informal study spaces. Located on Bastionsplatsen where one of the former historical Bastions were located when the area around the moat was still used as a fortification.

The material palett for the design uses Stone and masonry, Wood and concrete. The site is one of the earliest areas where Gothenburg transitioned from a wooden town to a stone town due to the many city fires in the 1700's.

The typology's site design goal is to maintain the axis along Trädgårdsgatan, open up towards Kungssport and enhance connection to the moat - by lowering the newly formed square in tiers towards the moat. Another site design goal is to invite movement in different paths over the square and its volumes.

The tiers between levels creates a natural opportunity for everyday exercise, a student union preference in educational environments.

The space opens up towards the point of the bastion and provides informal study areas directed towards landmarks such as Stora Teatern and the vegetation of Trädgårdsföreningen.

The design allows movement in 3 flows over the site, along the moat, over the roof or along the buildings in the urban context for pedestrians, bicycles and cars.



#### TPOLOGY IDENTITY FEATURES:

##### GROUND:

Site shape (bastion remnants)  
The moat, Vallgraven  
Pavement and masonry

##### OPTIC ARRAY:

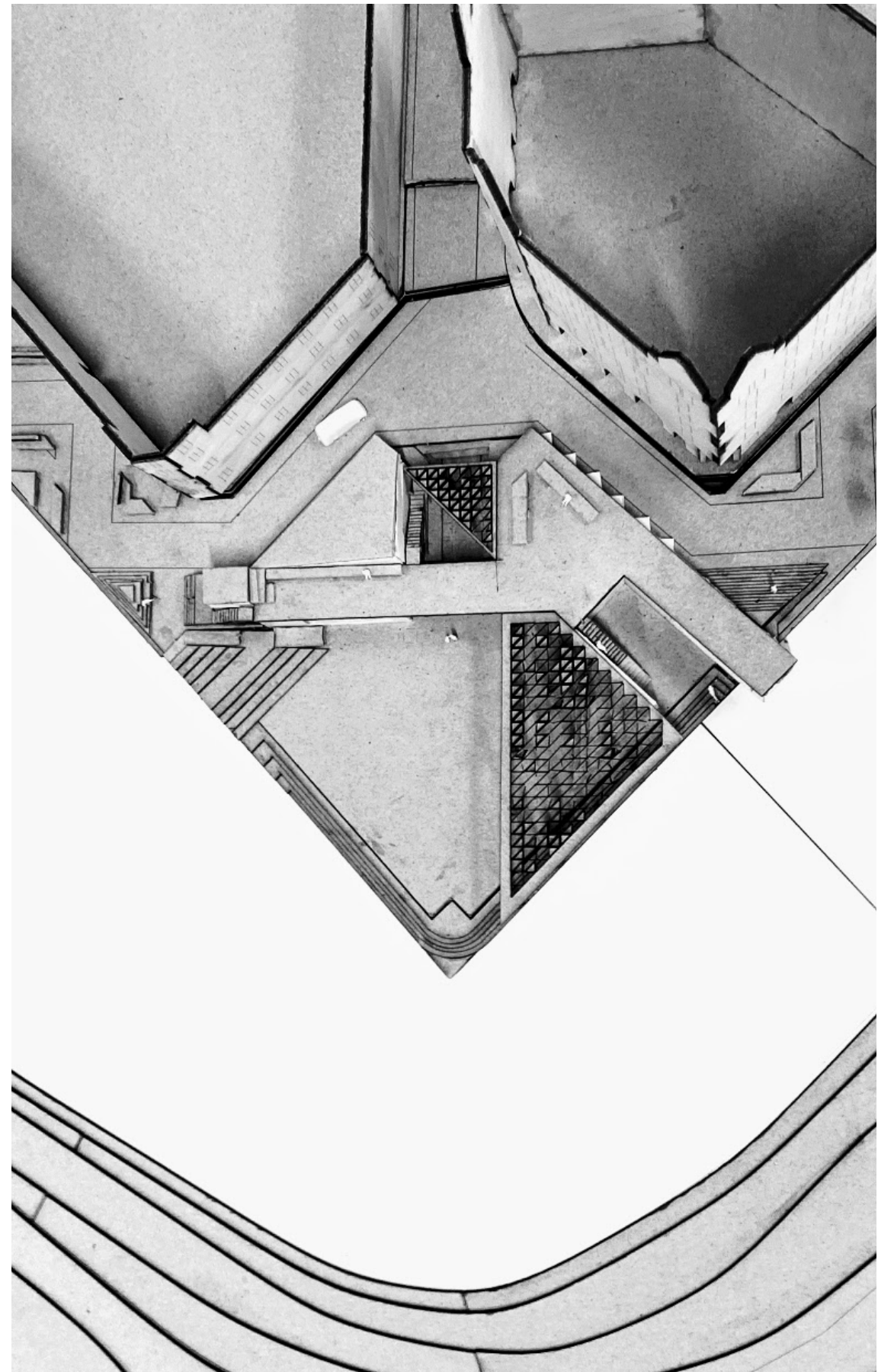
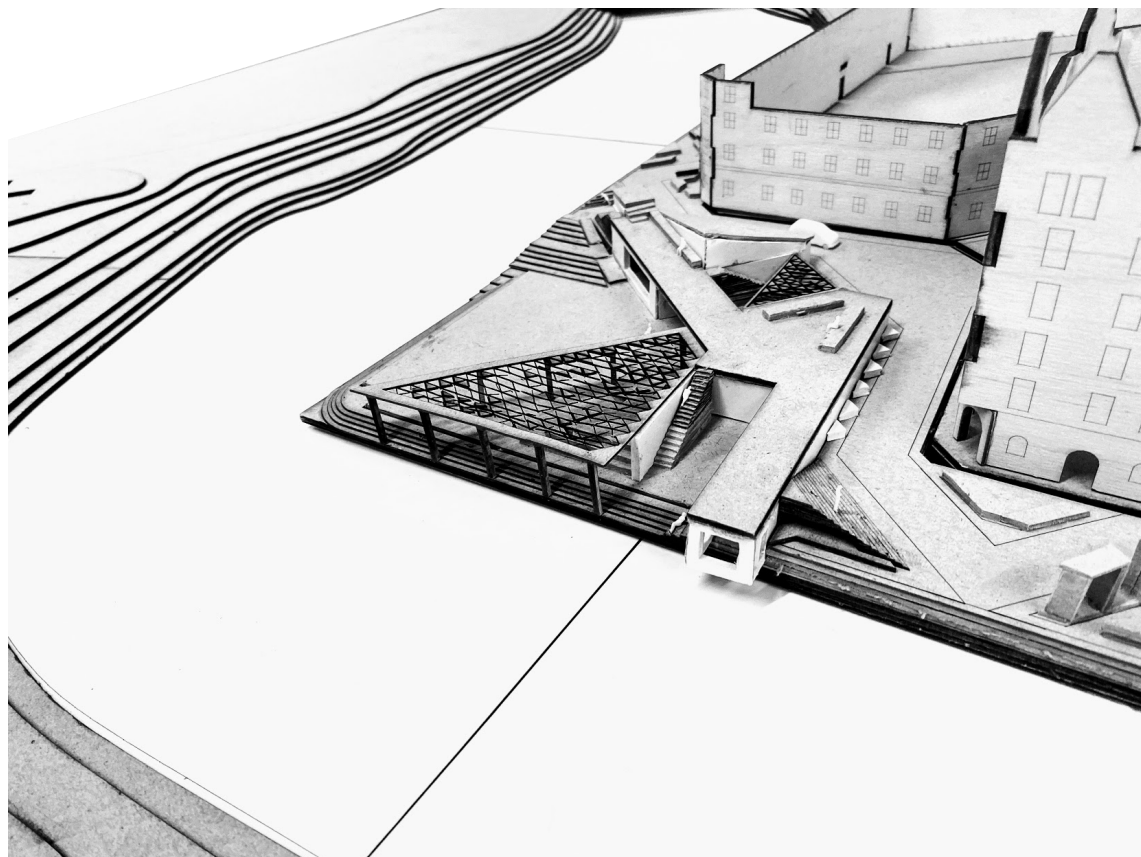
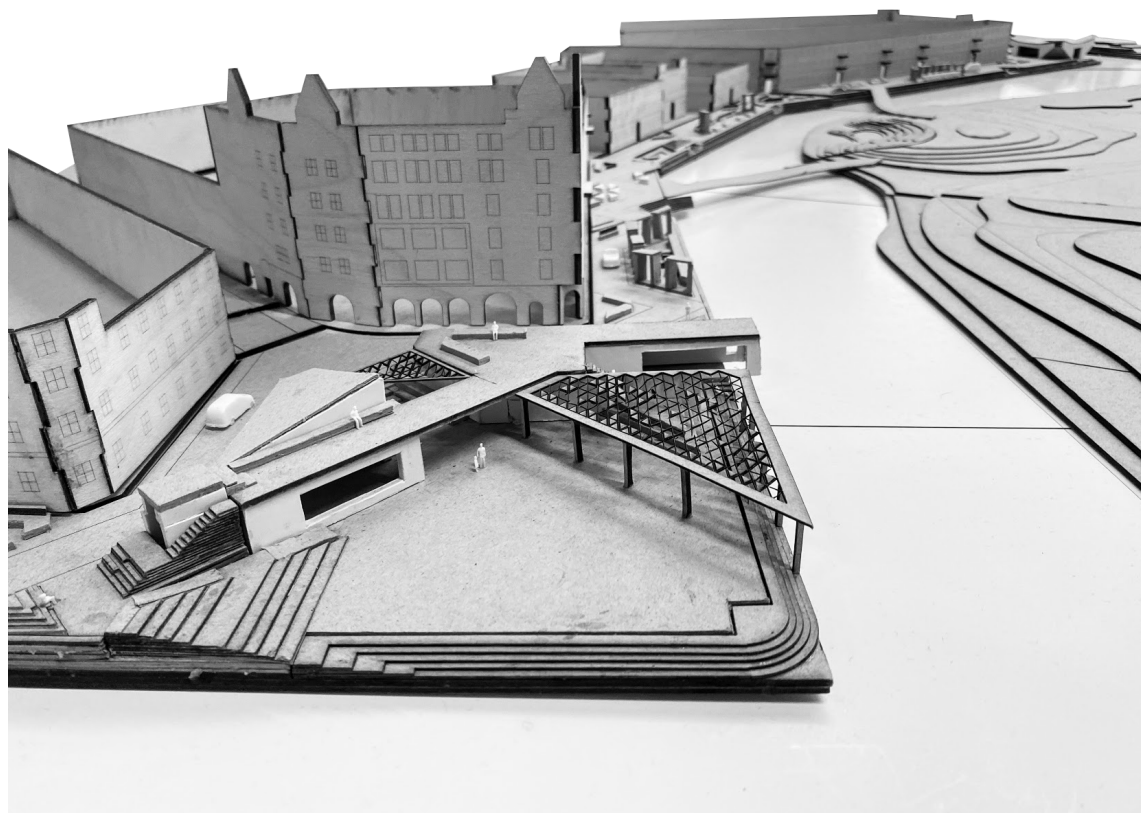
Trädgårdsföreningen  
Kontoristföreningen's house  
Stora Teatern and Kungssport  
Retaining walls

##### SKY:

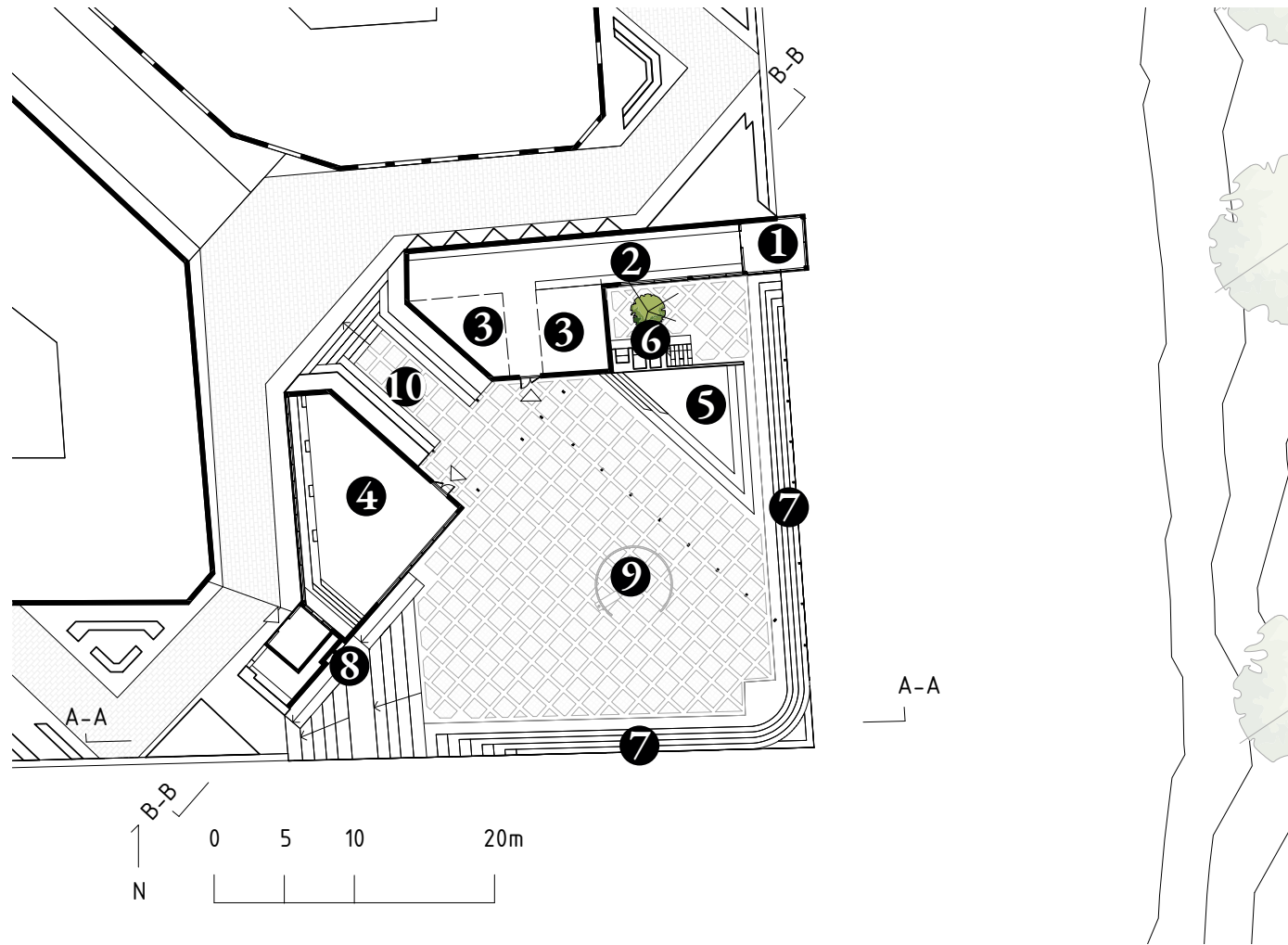
Sun setting in west  
Evening sun



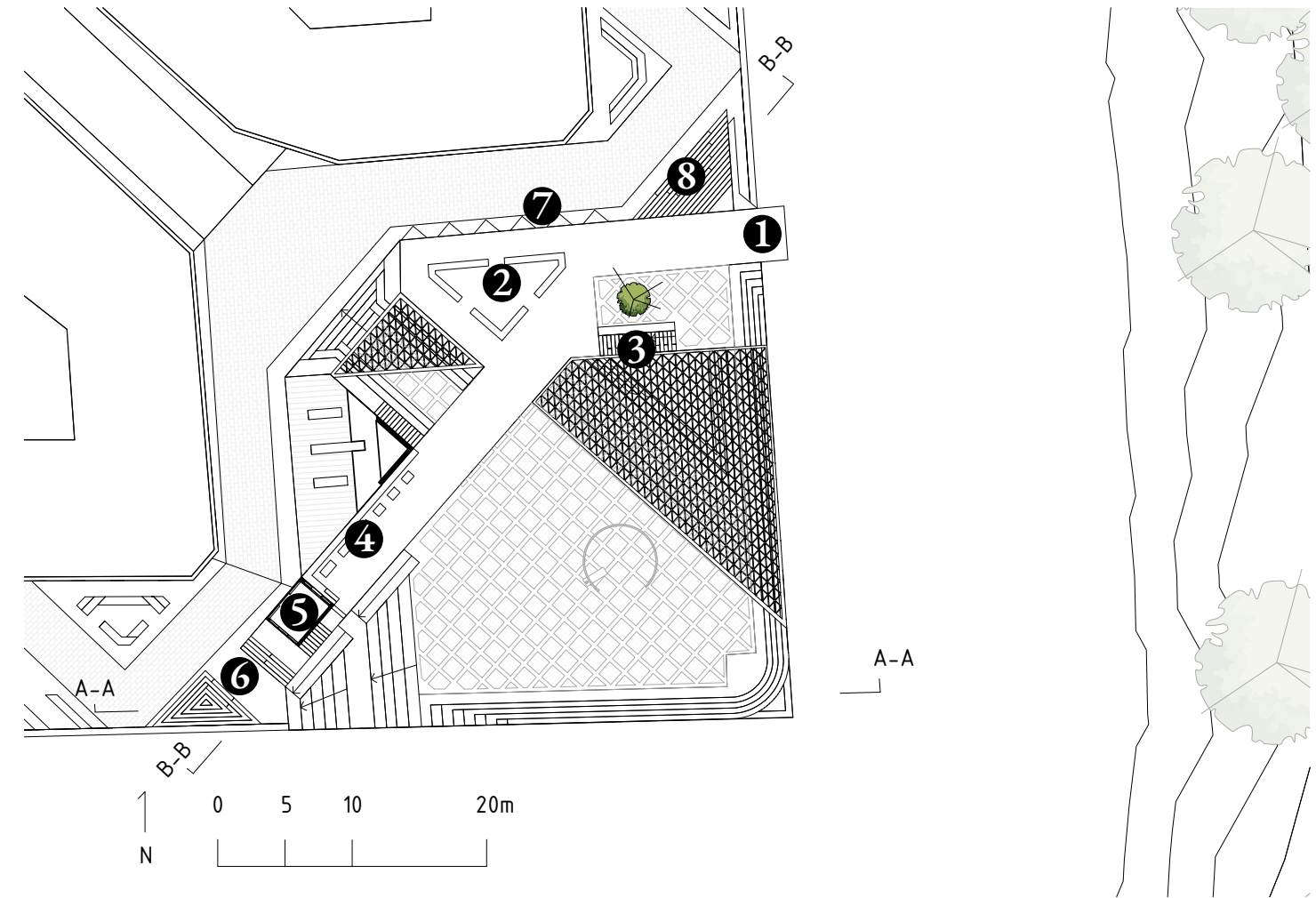
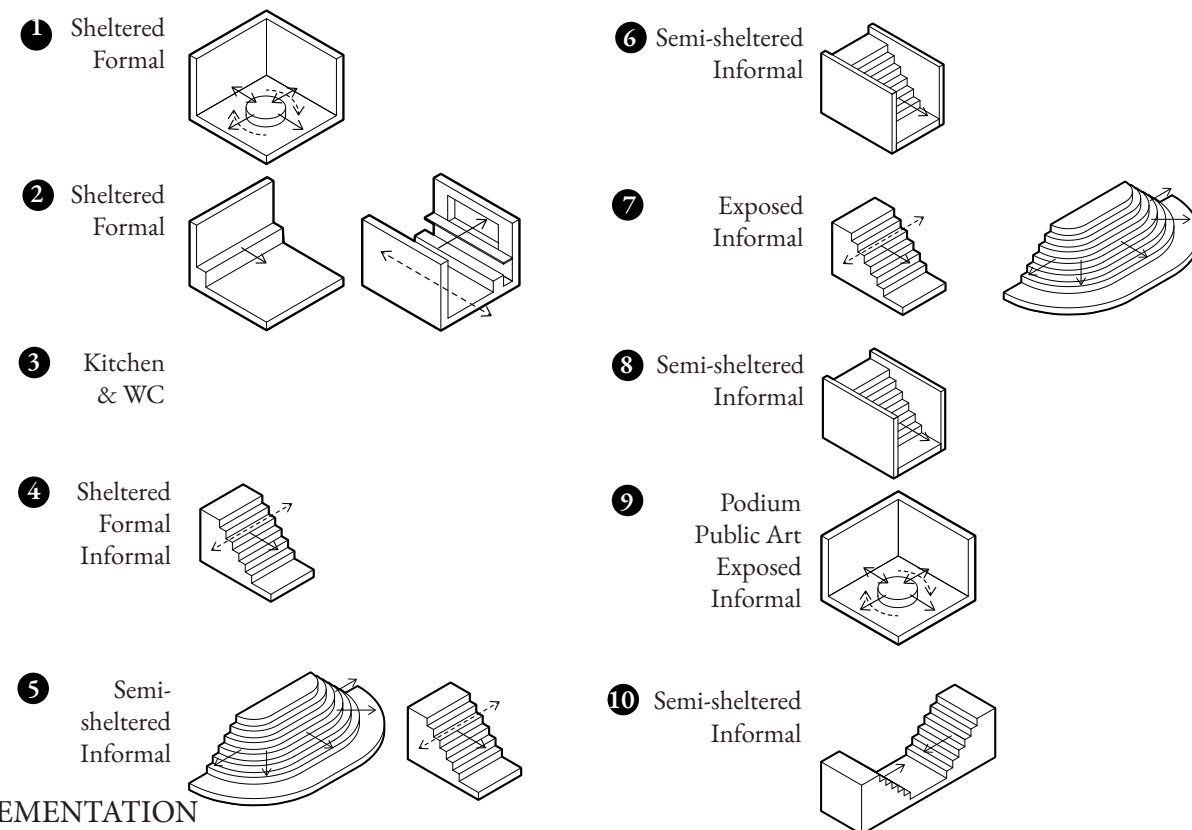




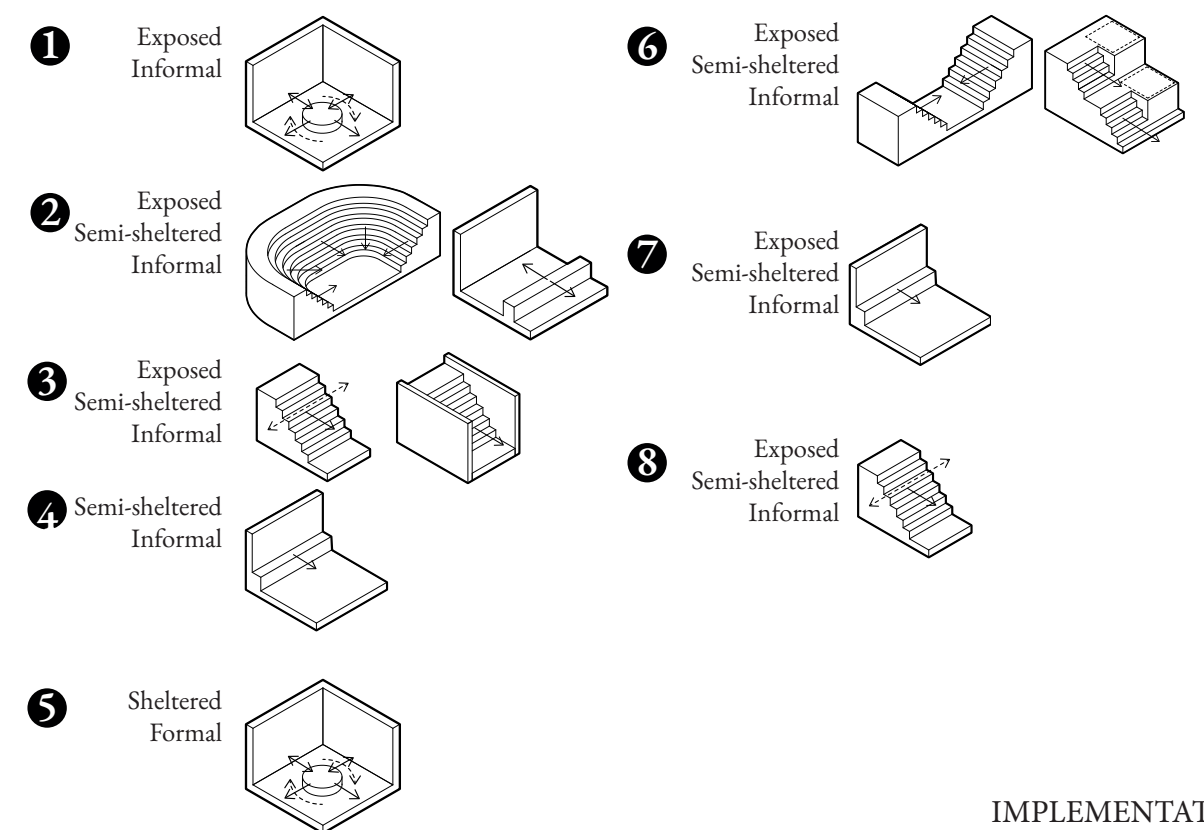




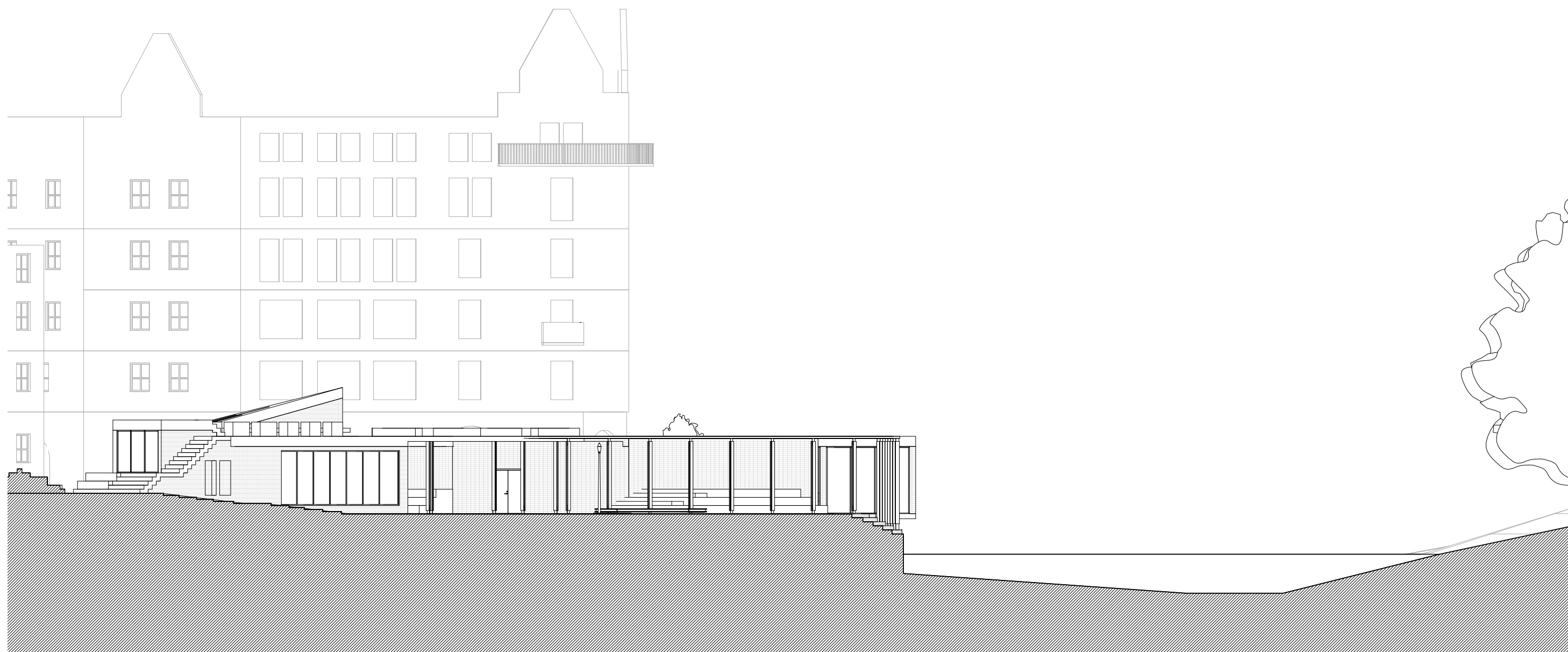
1:500 Plan - Level 2 m above current water level



1:500 Plan - Street Level (3m above water level)





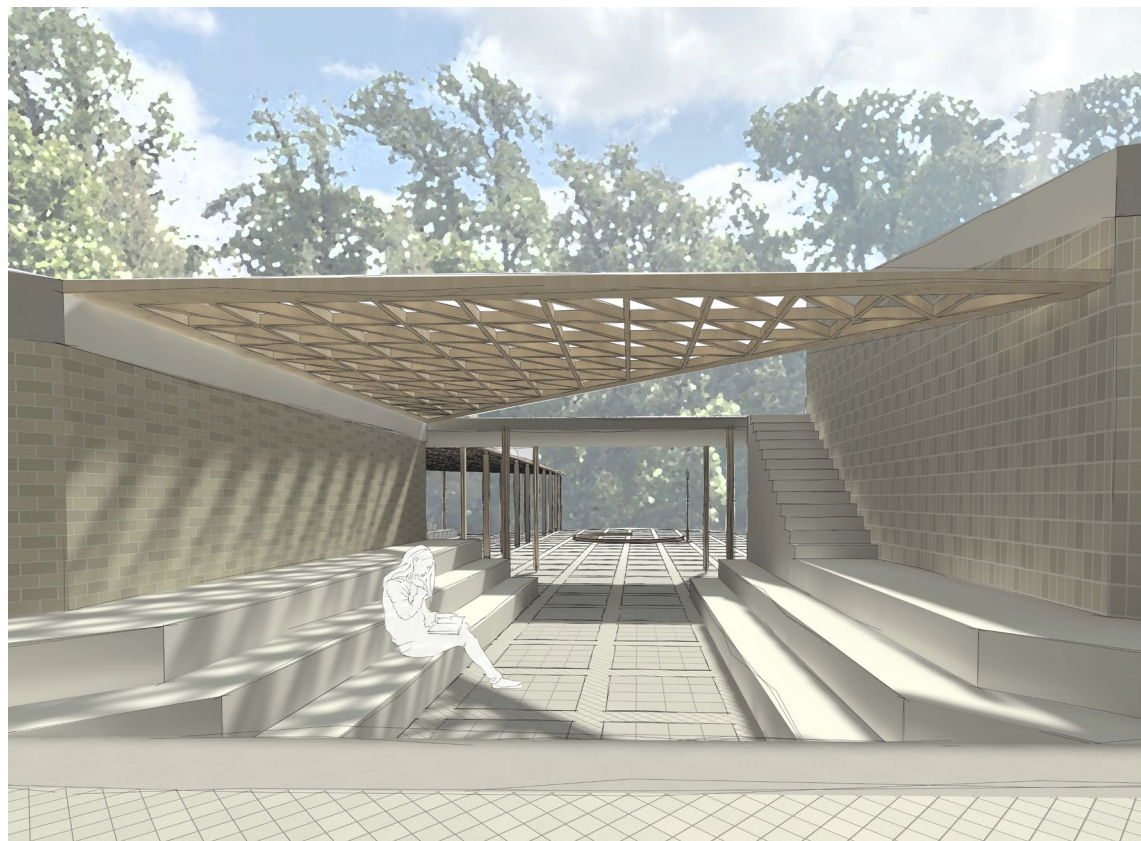


Section A-A 1:200



Section B-B 1:200

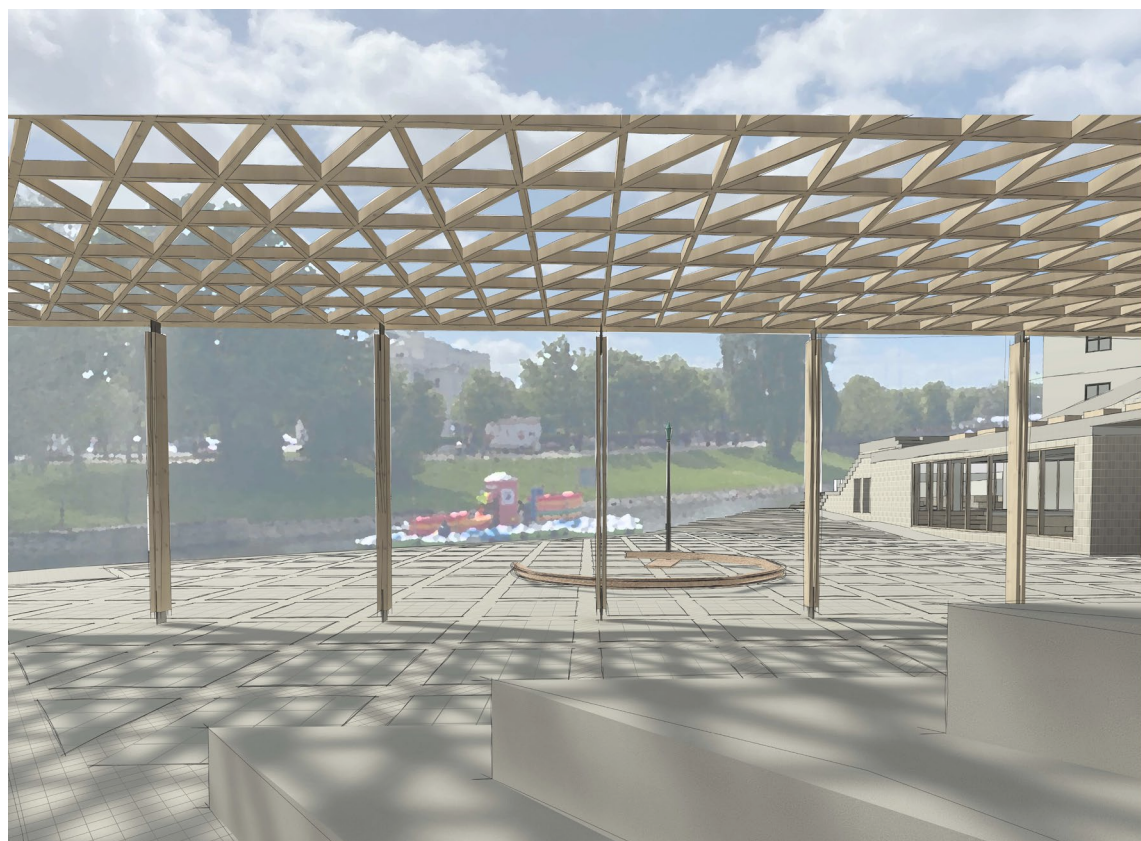




View along Trädgårdsgatan towards Trädgårdsföreningen.



View towards Trädgårdsföreningen at west entrance to the Bastion of Learning.

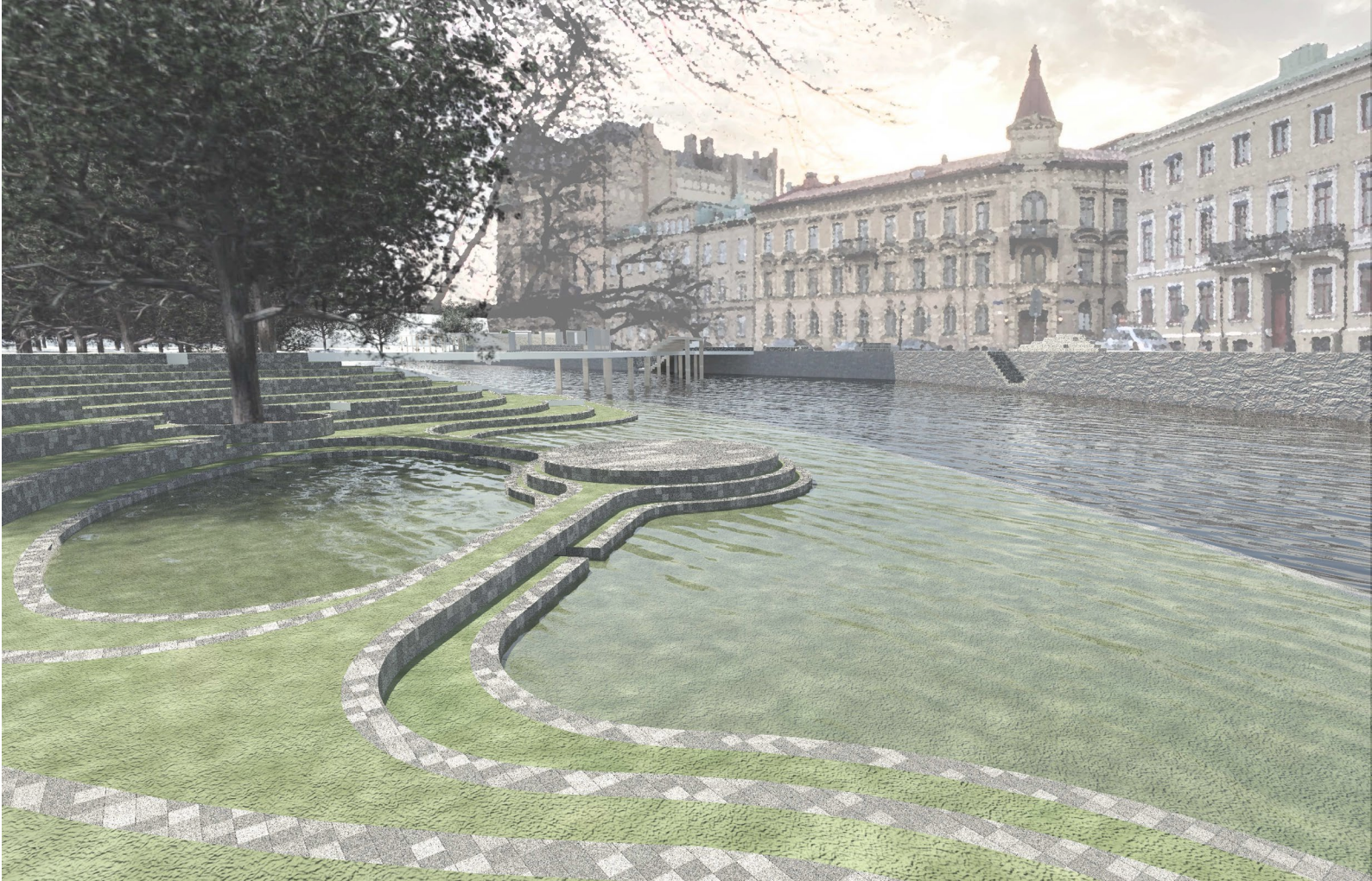


View from informal study space at square towards Stora Teatern and Kungspport.



View of individual study spaces and group room towards Kontoristföreningens hus.





### 3.2.2 Typology 2 - The Forest Amphitheatre

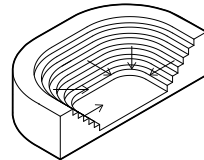
An informal version of the lecture hall outdoor making space in tiered levels along the topography.

The lowest level of the ground is on a level that frequently gets flooded during water flow to highlight the place's ground identity of the waters rising and falling.

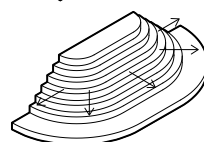
It is located right across the moat from the synagogue which creates a backdrop for the podium along with the retention walls on the other side.

It is a part of Trädgårdsföreningen that is lesser planned and an addition of tiers through bricked edges of the tiers creates an amphitheatre with as little intrusion as possible.

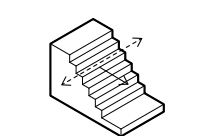
① Exposed  
Semi-sheltered  
Informal



② Exposed  
Informal  
Podium



③ Exposed  
Informal



GROUND:

The rising sinking water of the moat  
The unplanned park ground  
Urban wildlife

OPTIC ARRAY:

The synagogue and the retention walls  
as backdrop  
The tiered/undulated landscape

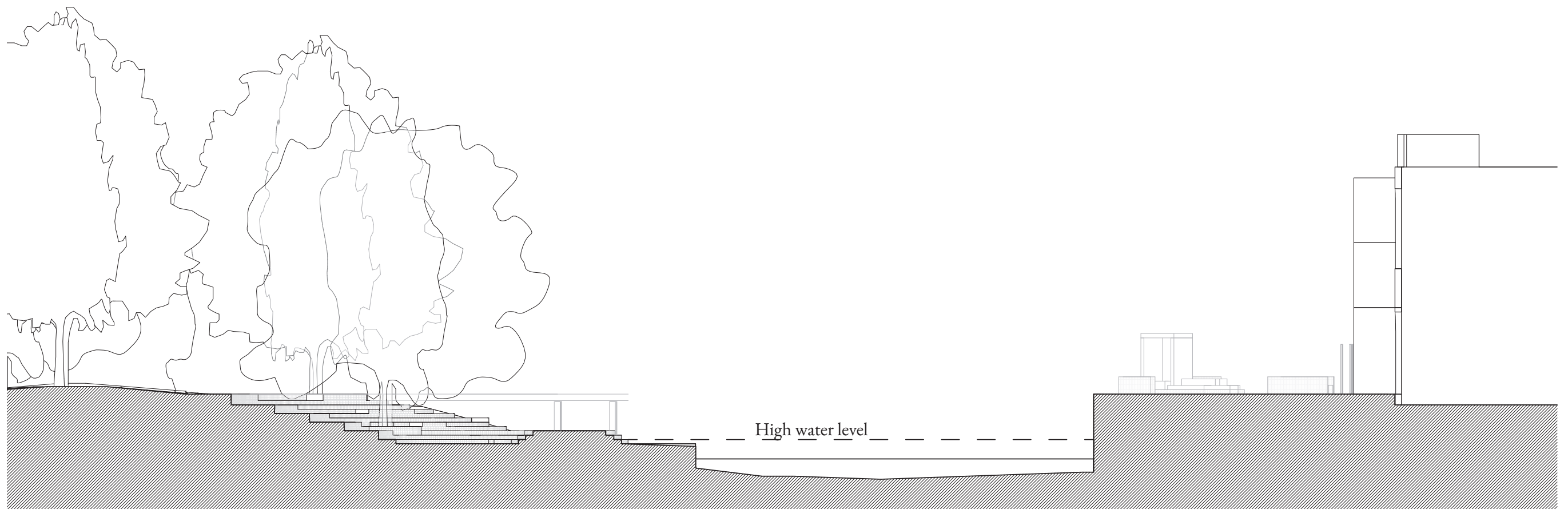
SKY:

Tree Crown ceiling



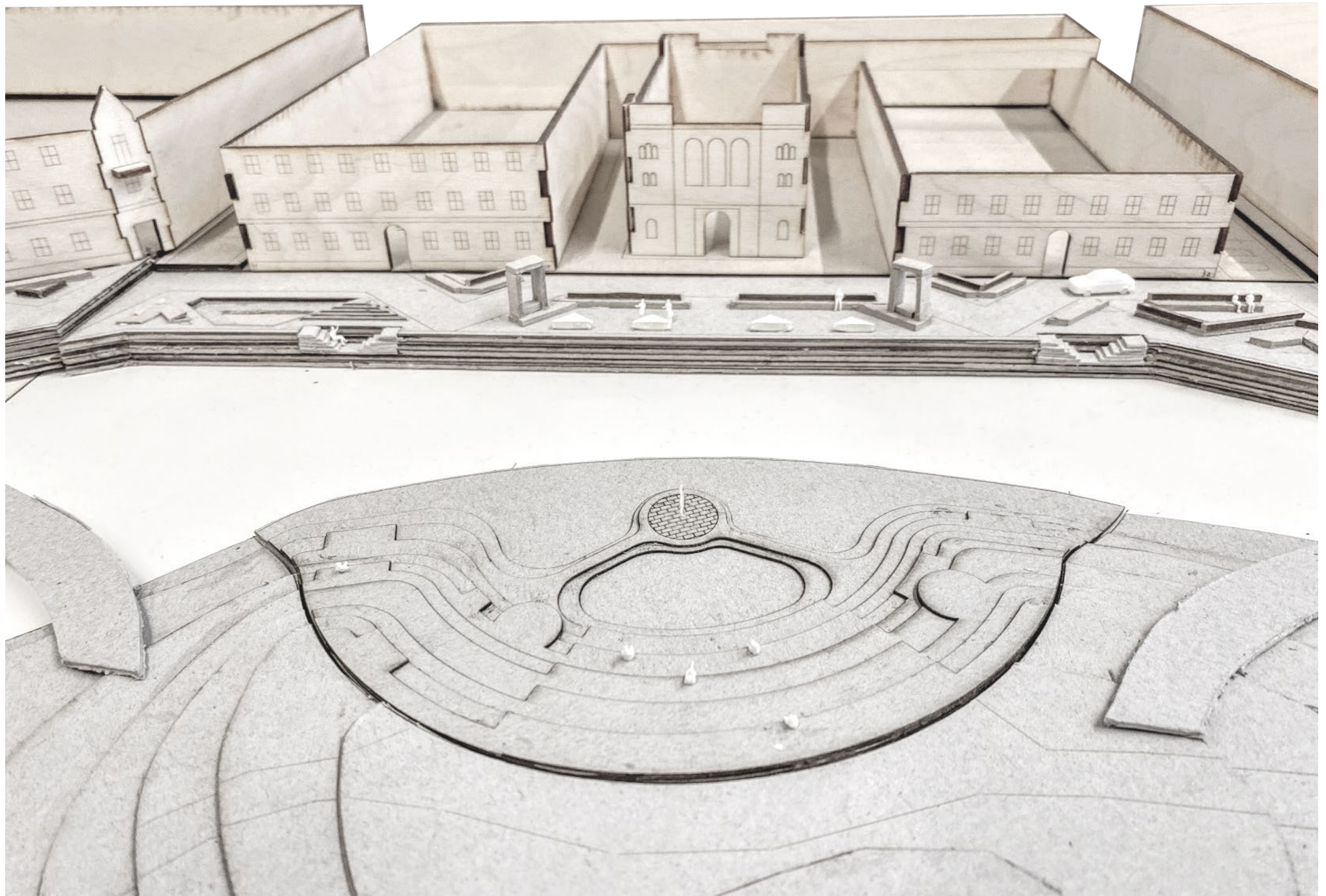
1:500 Plan





Section C-C 1:200

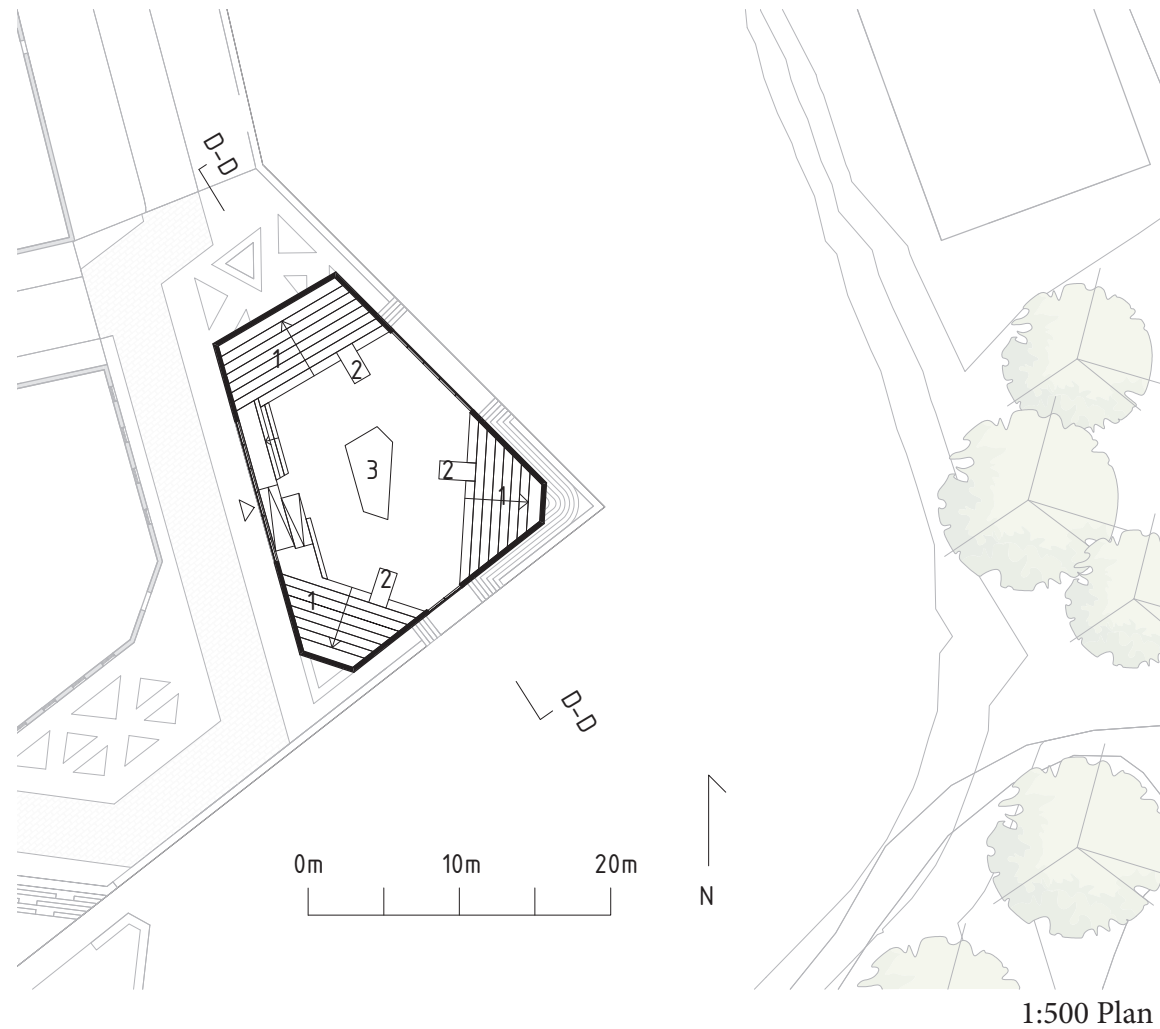








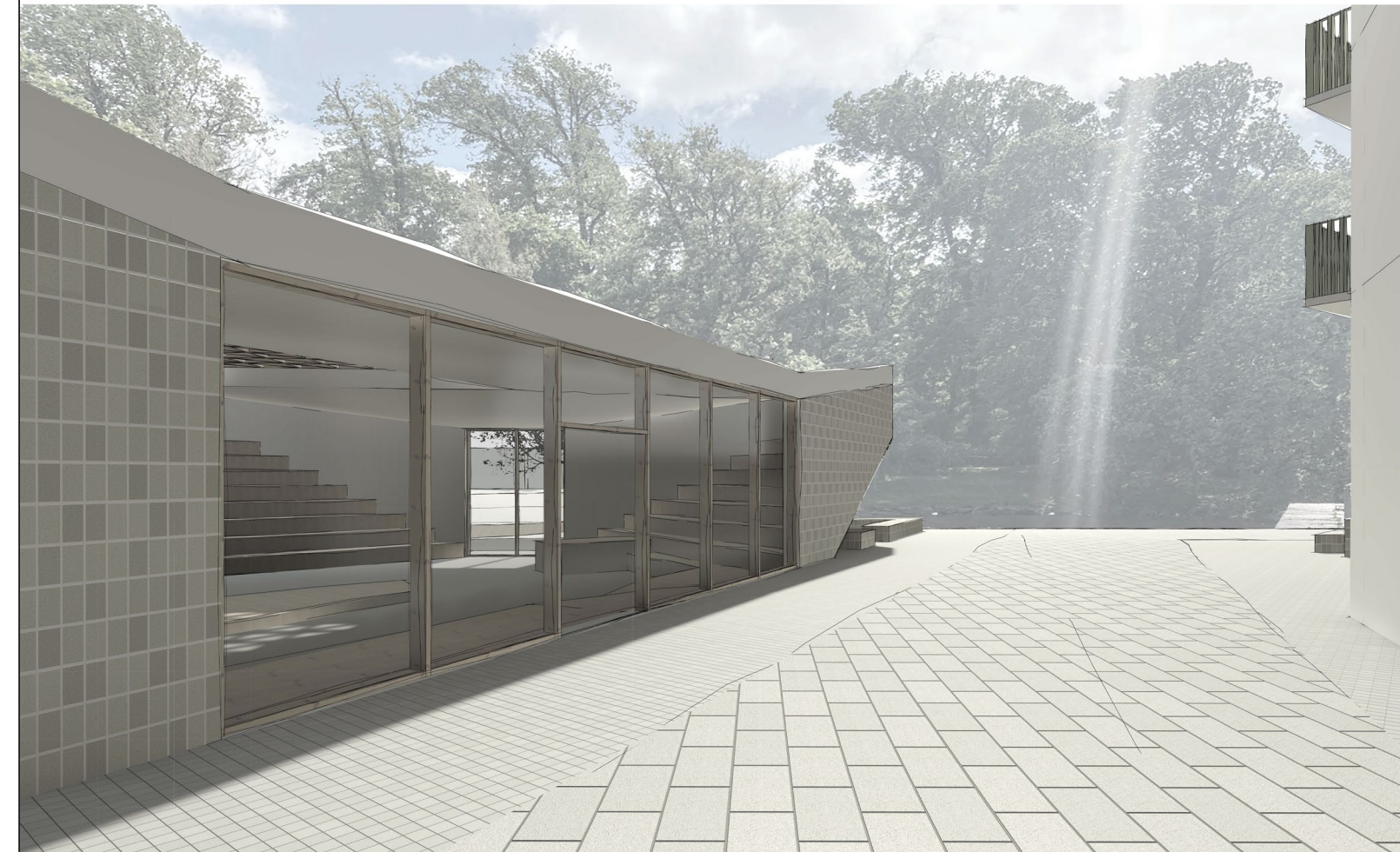
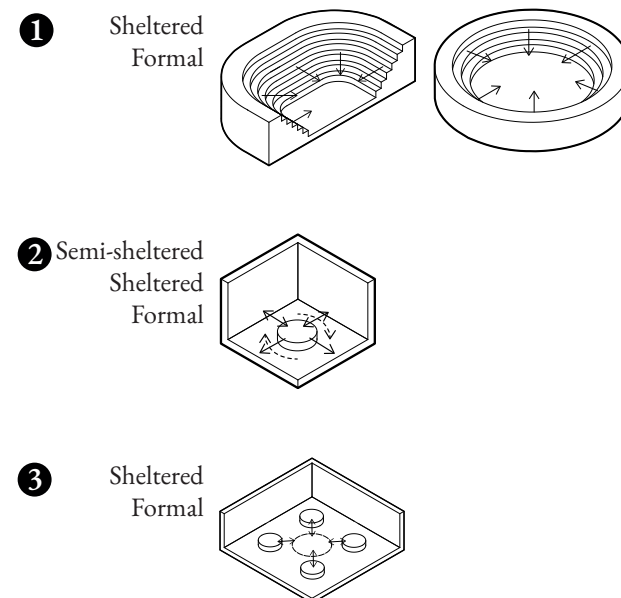




### 3.2.3 Typology 3 - The Active Learning Space

The Active Learning Space located on the bastion closest to Centralstation and a more urban context. Its a formal learning space focused on interaction between a central tutor or instructor and groups of students placed around a podium.

The Site design goal for this typology is to create another destination on the site and a volume to break the line of sight along Stora Nygatan and Drottninggatan. The building functions as an iconic building with the goal to represent the concept of the site.



#### TYPOLOGY IDENTITY FEATURES:

##### GROUND:

Pavement  
Shape of site

##### OPTIC ARRAY:

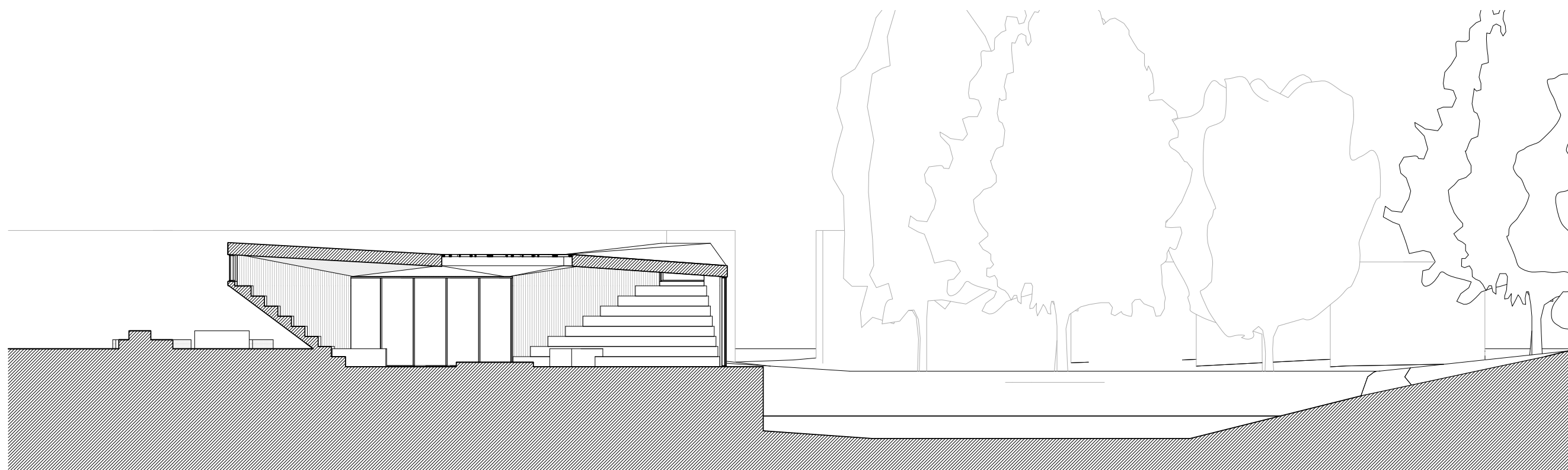
Drottningtorget/Hotel Post/Culture house  
Trädgårdsföreningen  
Stora Nygatan's buildings

##### SKY:

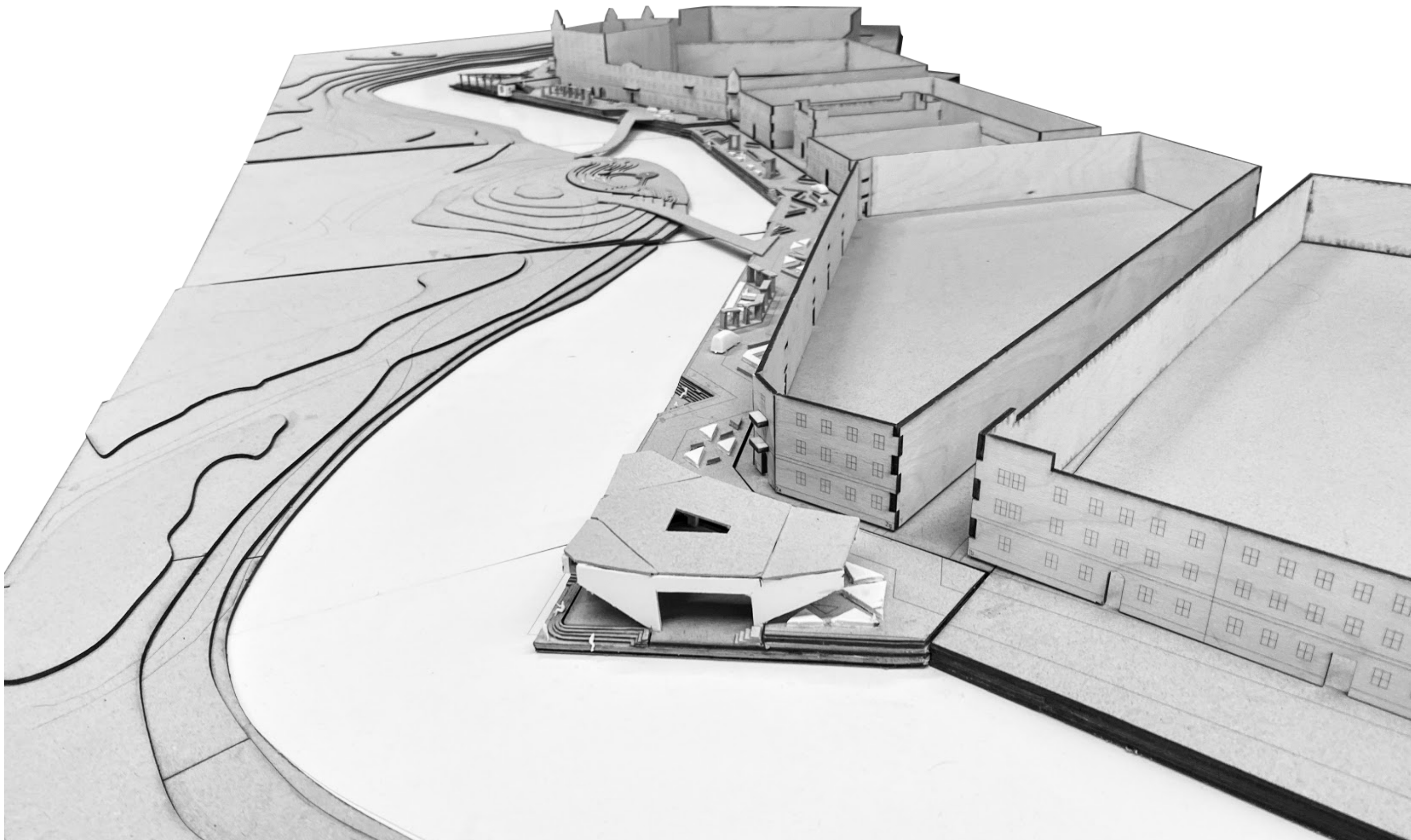
Rain/Weather







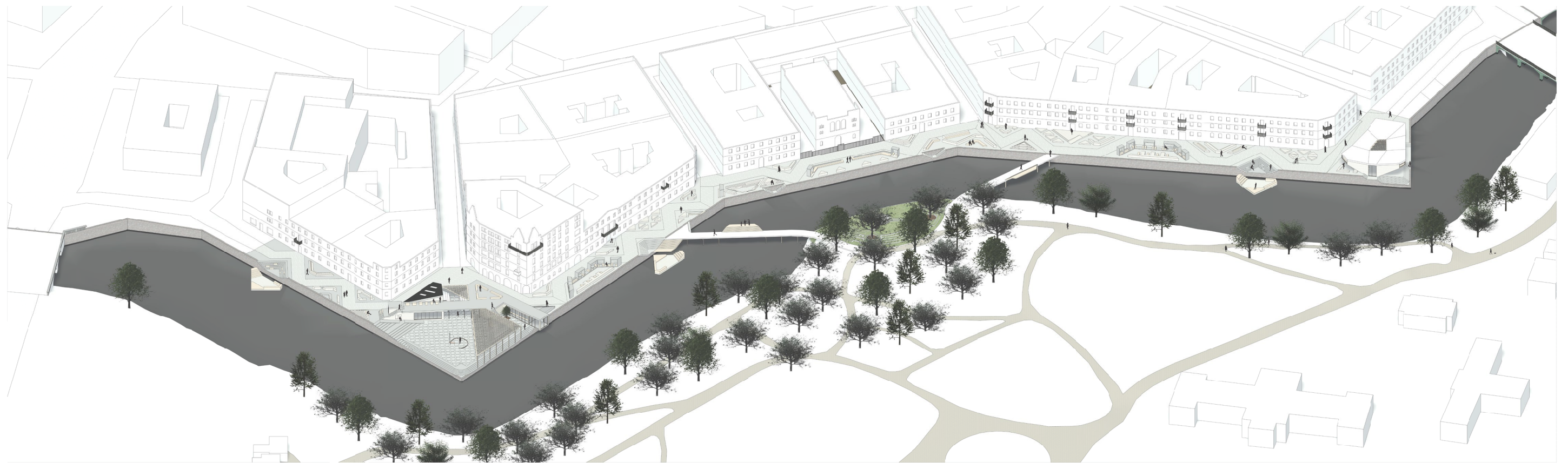












### 3.2.4 Typology 4 - The Bookshelf

#### DESIGN GOALS SITE:

Connect new typologies on the site, invite movement along Vallgraven and connecting both sides of Vallgraven.

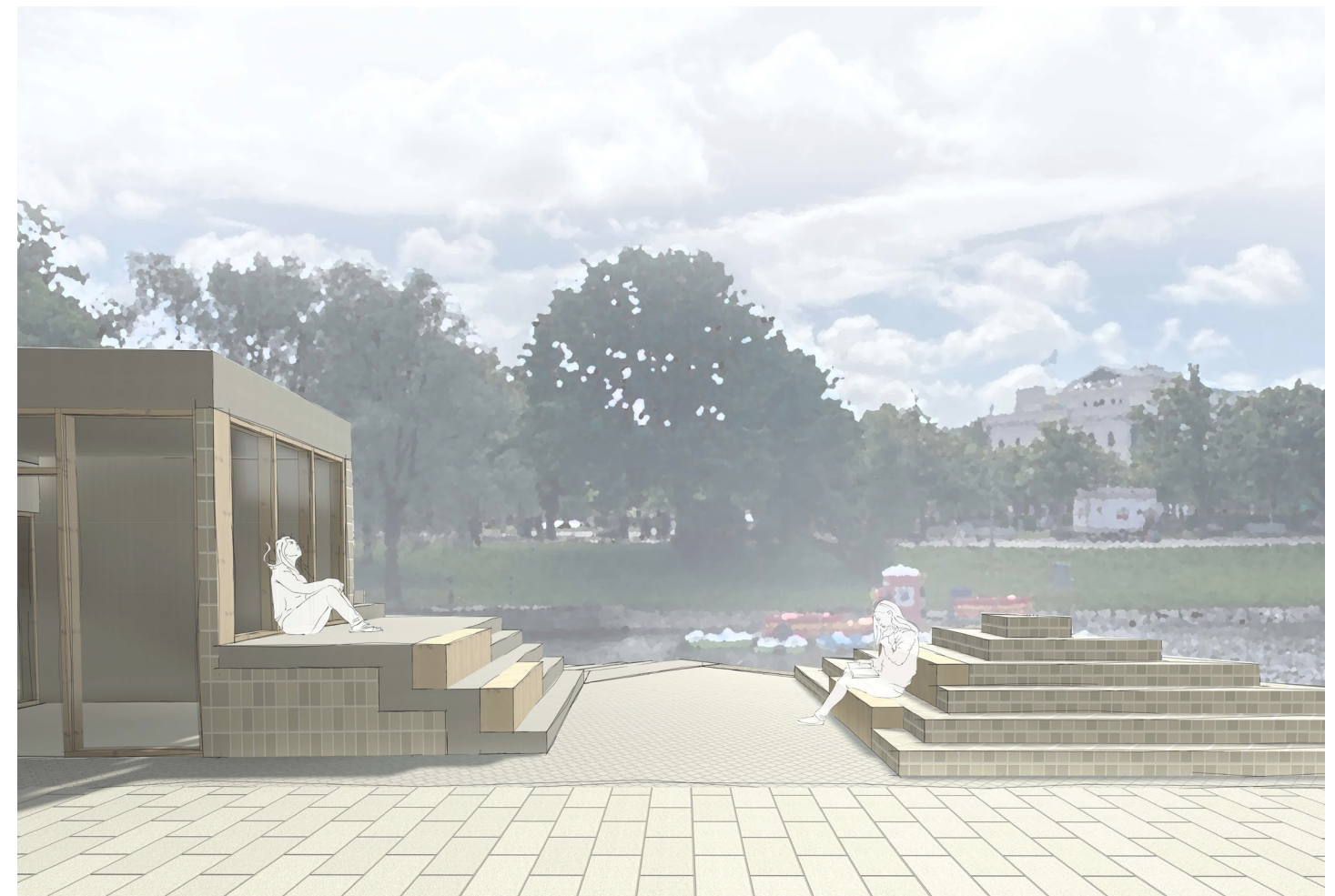
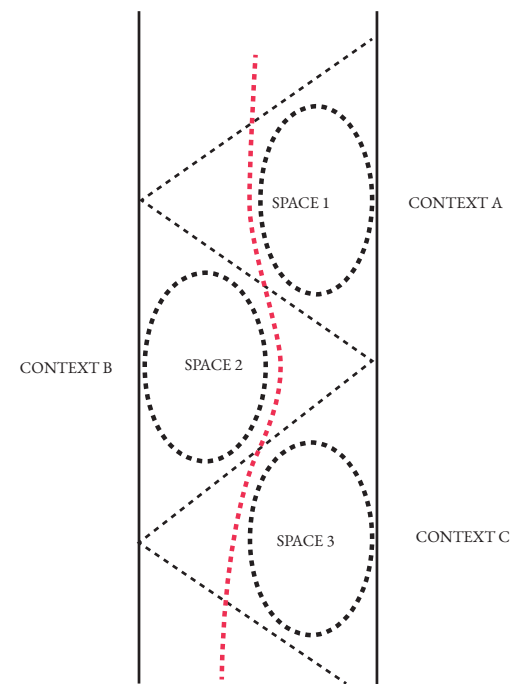
#### DESIGN GOALS TYPOLOGY:

Balance flows and functional informal study spaces, each small study space connected to its direct urban context. Provide a large variety of identity features along the site.

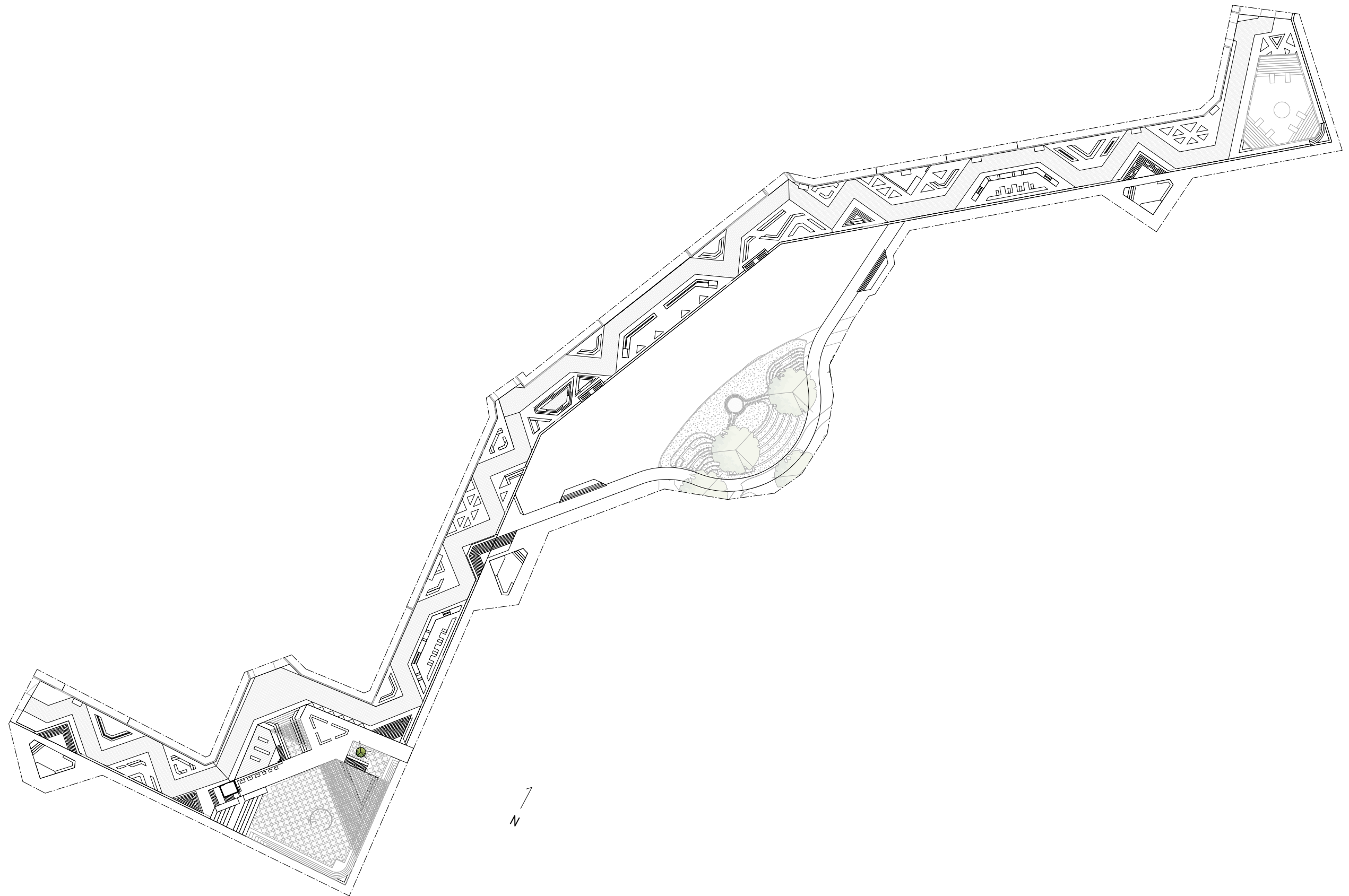
Explore Entrance situations and allow everyday exercise.

#### TPOLOGY IDENTITY FEATURES:

A wide variety of identity features across whole site.

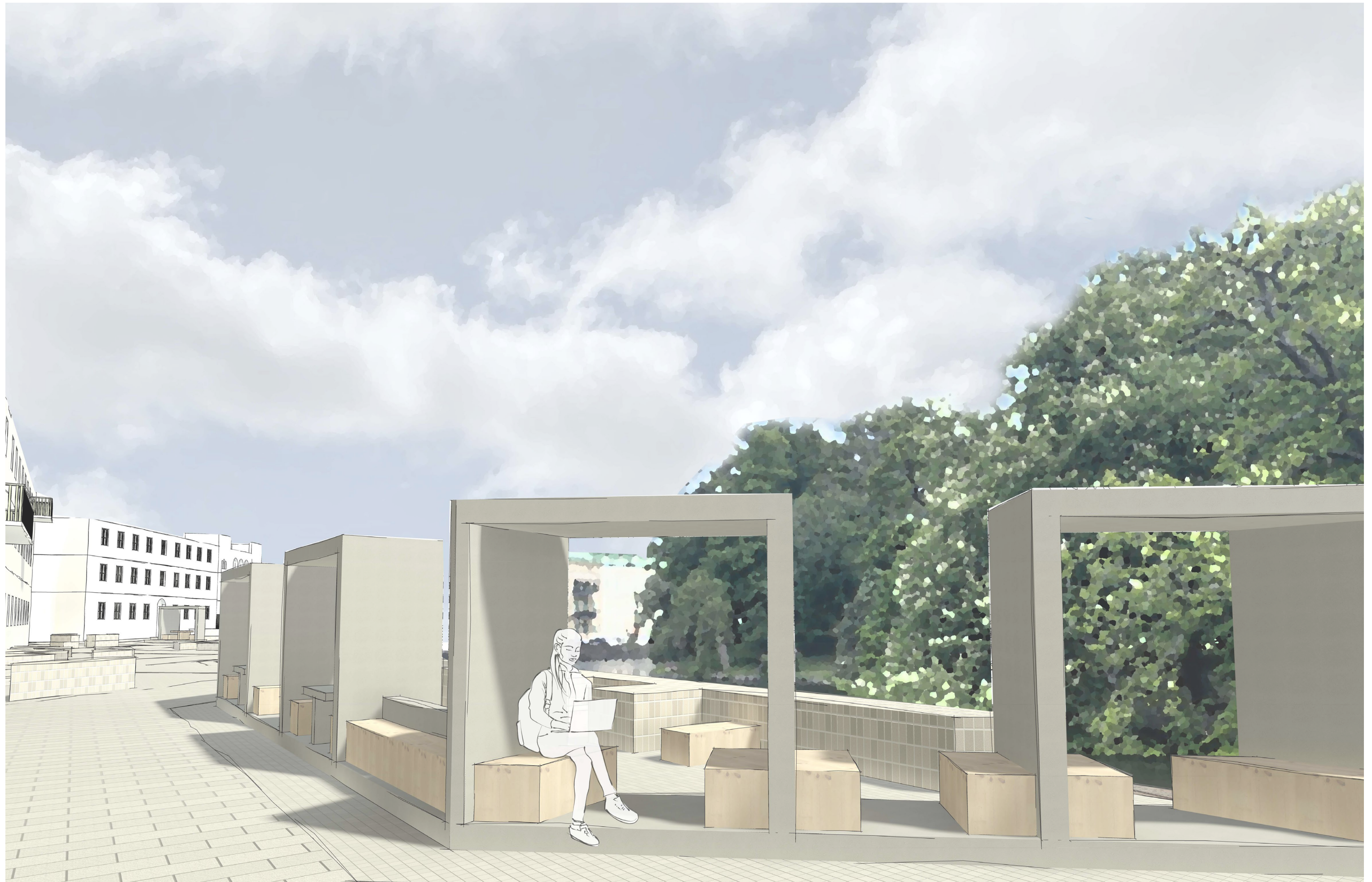






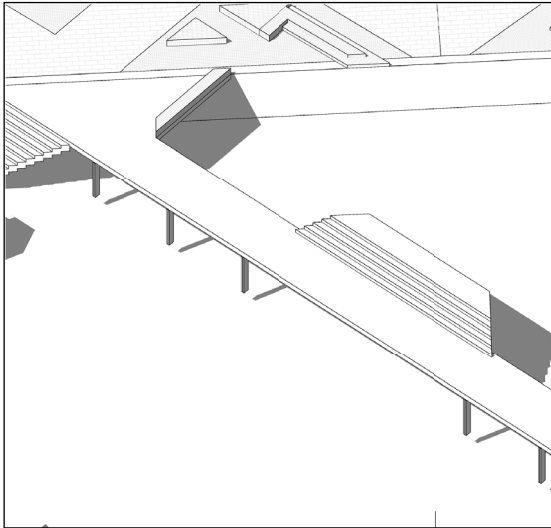
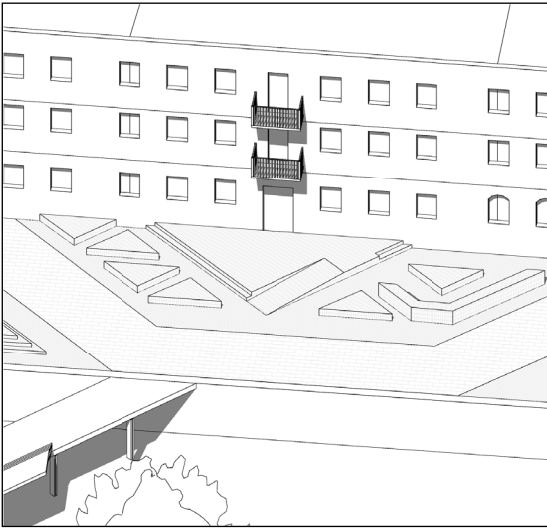
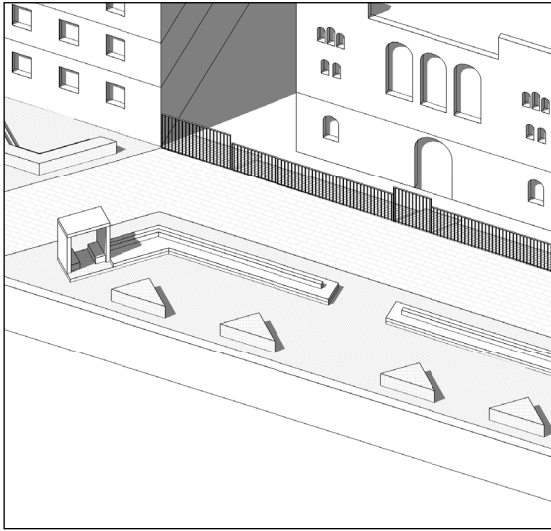
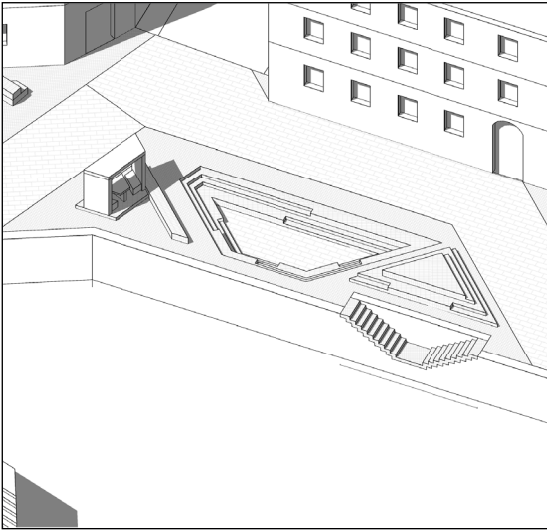
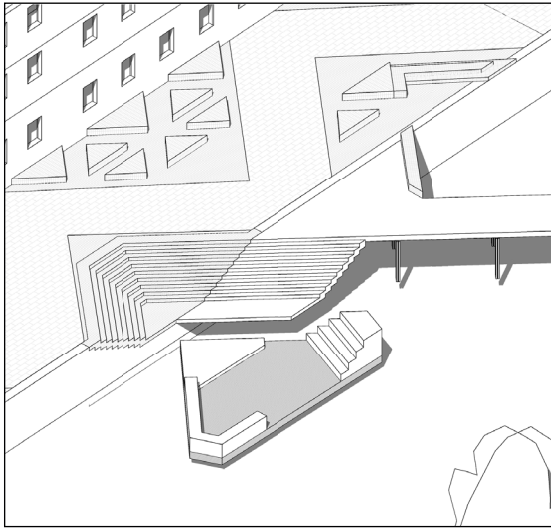
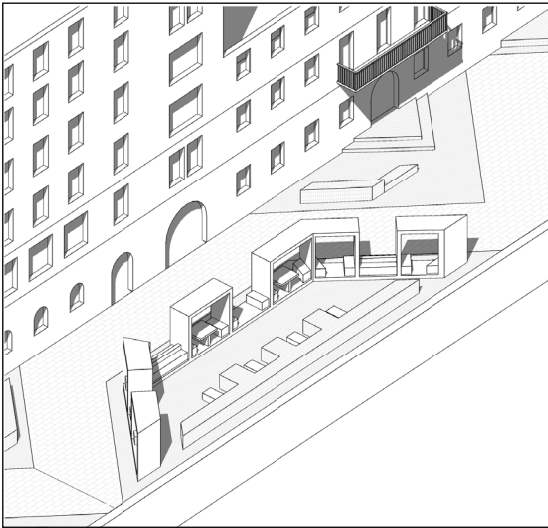
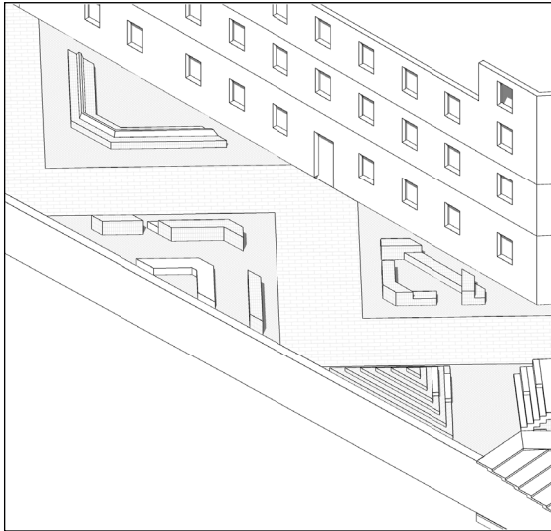
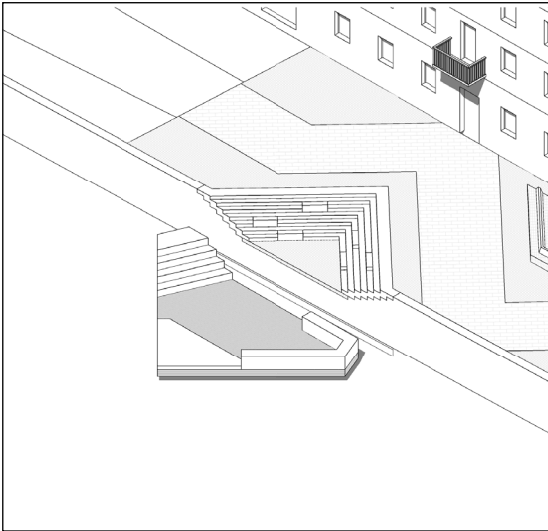
1:1000 Plan







Example of smaller spatial configurations across the site working with different identity features and attributes for different learning styles.





## 4. Conclusion

### 4.1 Discussion

The aim of this thesis has been to investigate how architecture can use the identity of an urban place to create learning spaces that makes meaningful relationships between the students and the location where they are studying.

The tool of photographic mapping of the site has been useful in defining place identity features - especially considering the size of the site. The size of the site was something that affected the outcome of the design project and the level of detail of the different typologies. It made sense to connect the site between both bastions along Stora Nygatan, but it also limited the amount of thought being put into each learning space all the way along the site. A smaller site might have provided a more in depth analysis of a certain place identity feature and its relation to the chosen learning space.

The design toolbox formulated has provided a possibility for a wide range of study spaces integrated with place identity features; with the goal being to create meaningful encounters between students and their study environment and location.

The decision to include parts of Trädgårdsföreningen is a balance of how extensive your impact on the site is; to build always has some degree of impact and there are always pros and cons. I chose to adhere to the ideas of Norberg-Schulz in his idea of ”something has to happen for people to take notice” in this regard but aimed to make as little impact as possible while still achieving this effect.

In relation to the different stakeholders; The concept of a deconstructed campus being an asset for student unions and faculties seem to be possible, not least the ability to integrate everyday

exercise in the educational environment which is a specific wish of student unions.

I also think its important that students and student unions are given space in central parts of cities to communicate a, sort of, symbolic value of importance. This connects to Strange and Bannings ideas of educational environments as a concept of purpose and place; if the community allows high demand and quality space to students, those students will obtain a better sense of belonging to that community.

As for universities and faculties; recent large scale campus projects in Gothenburg seem to have put a real strain and burden on the faculties economies as a whole, and low maintenance outdoor informal learning spaces should provide a sustainable alternative.

The discourse on campus and place states that the connection between place identity and educational environments are essential to students forming a relationship to the location they’re studying; and this thesis presents a concept in accordance with that idea.

And hopefully a concept like this will be as much of an asset to normal citizens having a place to do casual work, or do their every day exercise, while transforming a part of their city into something less for cars and more for humans.



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### IMAGES:

All illustrations and photographs by the author, Patrik Svanberg, unless otherwise stated.

Figure 1: Schlamann, Anna. (2009) *Open Air Library* [Photograph]. KARO Architekten [https://www.archdaily.com/39417/open-air-library-karo-architekten/5011dde328ba0d5f4c000043-open-air-library-karo-architekten-photo?next\\_project=no](https://www.archdaily.com/39417/open-air-library-karo-architekten/5011dde328ba0d5f4c000043-open-air-library-karo-architekten-photo?next_project=no)

Figure 2: Schlamann, Anna. (2009) *Open Air Library* [Photograph]. KARO Architekten [https://www.archdaily.com/39417/open-air-library-karo-architekten/5011ddeb28ba0d5f4c000047-open-air-library-karo-architekten-photo?next\\_project=no](https://www.archdaily.com/39417/open-air-library-karo-architekten/5011ddeb28ba0d5f4c000047-open-air-library-karo-architekten-photo?next_project=no)





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