

Park The Stress

How a stress recovery center can be designed to support
stress reduction in an urban setting

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Chalmers University of Technology

Architecture and Urban design

Examiner: Peter Fröst

Supervisor: Lin Tan

Thank you!

Axel	- for reminding me of life beyond the thesis
Lin	- for cheerful and patient support
Elke	- for sharp insights
Friends and family	- for infinite support
Horsefox	- for years (and many to come) of friendship
Fellow graduates	- this would have been impossible without you
Photo voice-participants	- for sharing your thoughts



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Examiner: Peter Fröst
Supervisor: Lin Tan
Master of Architecture and Urban design
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Background

Research question:

How can a stress recovery center be designed to support stress reduction in an urban setting?

Aim:

To investigate new possibilities to deal with mental illness related to stress and how a building can function in a stress decreasing way through it's design and use.

Problem statement:

With the high level and long duration of stress within society today, we need to consider new solutions for how we can care for people experiencing issues related to stress and how the built environment can cater spaces that supports recovery from stress. There are knowledge in about how to design buildings that supports well being. I would like to implement that in the design of a building with the purpose to support stress recovery.

Background

Bachelor

Architecture and engineering *Chalmers University of technology*

Civil engineering *Chalmers university of technology*

Internship

Liljewall arkitekter, Gothenburg - Housing studio

Master

Politecnico di Milano, Milan - Erasmus semester

Urban design studio

Preservation studio

History of modern architecture

Urban sociology

Chalmers University of technology

Urban planning and design theory

Matter space structure studio 2

Residential Healthcare studio

Master thesis preparation course 1 & 2

Introduction

Reading instructions

This thesis is divided into the following chapters

Background

Communicates what has been learned and brought further into the thesis from the literature study. Also holds the photo voice, which lies as foundation for this thesis, and what was learned from it.

The site

This chapter describes the site, Fogelbergsparken and it's location within Gothenburg. Shows photos and mapping of the terrain and aims to communicate the context in which the project has been placed.

Design work

Holds parts of the process and important workshops and investigations performed along the design process. This chapters aims to build up understanding of decisions made during the process and to give insight in how the project took shape.

Design proposal

This is where the design proposal is communicated through drawings and perspectives. It also communicates decisions made and ideas with the design and chosen materials

Methods

Research for design

- Literature study
- Photo voice

Research by design

- Model workshops
- Sketching
- Sketch model making

Delimitations

Through this thesis it is assumed that this kind of stress recovery center could be started in collaboration with, and as a complement to, the healthcare system in Gothenburg. I will not investigate whether that is really possible. It is not developed in collaboration, this means the functions and activities of the building may not fully correspond to what would be preferred in a building of this function. This thesis does not look into the aspects of therapy or medication, which might also be part of the treatment of stress-related issues.

The thesis does not include an economical perspective. Nor does it consider the possibilities adding a building in a centrally located park within Gothenburg.

The thesis does not consider the source of the stress or attack the core of the issue, it is rather considered part of a treatment where stress related mental illness has already occurred.

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Abstract

In Sweden today every fifth young adult consider themselves stressed or very stressed and it is more common than before to experience longer duration and increased frequency of stress, which makes it harder to recover from it. Experiencing stress is not dangerous, but being stressed often, without enough chance to recover can lead to issues such as anxiety, insomnia and fatigue syndrome. The current situation of high levels of stress has developed a need to consider how our surroundings can help us to recover from stress and develop spaces for it, in order to support people to brake the negative spiral stress can lead to.

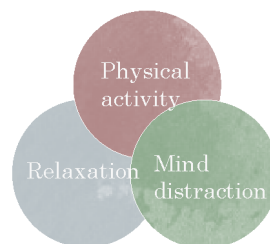
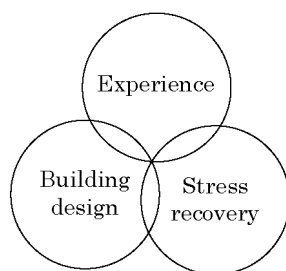
This thesis aims to investigate how the built environment can support stress-recovery through its use and design, for people experiencing stress-related illness and support their recovery from stress, in an urban setting. This to answer the question: *How can a stress recovery center be designed to support stress reduction in an urban setting?*

As a starting point a survey was made amongst women dealing with stress, to investigate what they do to recover from stress and where they

are then. This informed the functions, activities and spaces within the project with focus on three categories: physical activity, relaxation and mind distracting activities, which has shown to be stress reducing. Design-strategies shown to reduce stress has been chosen to implement in the design, linked to positive distractions; contact with nature, soothing experiences and situations of varying degree of social interaction. The design and the buildings atmospheres have been investigated through making sketches, physical and digital models.

The thesis has resulted in a design proposal of a stress recovery center, located in Fogelbergsparken within the city center of Gothenburg. Aiming to function as a complement to and in collaboration with the healthcare system, for people experiencing stress related issues. This could be a step towards a suggestion about how to deal with issues regarding stress. Further investigations could be made regarding how this kind of building could be used in preventive care rather than cure of the symptoms related to stress.

Key-words: Stress recovery, positive distractions, soothing experiences, contact with nature, social interaction



My experience about stress

The subject of this thesis has a basis in personal experiences. For me the stress had its source in the combination from a high workload in school, responsibilities in the private field and constantly having a fully booked calendar. I relied on the knowledge that I could manage everything if I pushed myself just a little bit harder. Eventually I reached a point where when the well longed days off finally arrived - it was impossible for me to relax. Even if I had nothing scheduled I could not find the feeling of presence and time off, instead there were this feeling of echoing restlessness. I had no chance to recover, and when there is no chance to recover the energy level decreases and so did the efficiency. As the efficiency went away I had to work more, and there I found myself in the bad spiral of stress. The inefficiency became a stressor itself, I started to wake up stressed and that eventually also became a source of stress.

My reaction of stress would become disproportional large compared to the stressor. Things that would not have stressed me before now did. A simple appointment made the stress level race. Activities

and meetings that were earlier linked to joy then felt like another appointment, another must. I went to Akademihälsan and received help. I learned the basics of stress, what it is, what happens in the body and most important, ways to deal with it. I learned ways to think and exercises to trick the body to calm down.

What I missed was a routine to do these exercises and a calm place to do them. I was in search of a ritual for it and little did I know I had just set the foundation for what would be the foundation for my thesis. To create a stress-recovery center for people battling with stress issues, where they could practice to calm down and shut out the disturbances from the outer world in a building that supports their well-being.

Background

Stress

Functions and effects

The function of stress

Hjärnfonden (2017) describes that when the brain identifies a risk of danger it alarms the Sympathical nervous system, which controls autonomous functions of the body, such as breathing and pulse. Institutet för stressmedicin (p.4 2017) further explains that stress-hormones are released to sharpen the senses and prepares for a fast reaction. The pulse and blood-pressure increases, more blood is pumped to the muscles and the level of energy rises - one gets alert and ready to handle the threatening situation. (Institutet för stressmedicin, p.4, 2017). According to Hjärnfonden (2017) the stress reaction enables fast acting when danger allures and is crucial for us in order to be able to instantly react and move in a dangerous situation. The body is prepared to physically react, to fight or flight, regardless if the source of stress requires it or not.

When the stress becomes an issue

Hjärnfonden (2017) further describes that the stress reaction itself is not dangerous, when it is

activated for a short while and followed by rest and recovery. Institutet för stressmedicin (2018) describes that exposure of stress over a long time, without enough chance to recover, can lead to illness with both physical, cognitive and mental symptoms. During a long term stress load it is common to experience a decreased quality of sleep and less physical activity, and in that way the time for recovery is decreased. That decreases the ability to handle any further increase of stress load which contributes to a risk of developing fatigue syndrome.

Effects of long-term stress

Ingvar (2018) explains that there are several diagnoses linked to a too high stress-load over time, amongst others fatigue syndrome, burnout, depression and anxiety. Studies have shown that someone that is impaired by long term stress has a weaker response of the bodies own protection system towards stress, which makes them less resistant towards stress.

Symptoms

Long term stress

Long term stress · · · · ·	· Physical symptoms	Insomnia
	·	Headache
	·	Racing heart
	·	
	· Cognitive symptoms	Decreased ability to plan and remember
	·	Decreased ability to concentrate
	·	Decreased ability to understand instructions in several steps
	·	
	· Mental symptoms	Depression
		Anxiety
		Panic attacks

[Institutionen för stressmedicin, p.5, 2017]

Increased level of stress

More stress in society

Ingvar (2018) explains that fatigue syndrome, which is linked to long term stress, is the most common reason for sick-leave from work in Sweden today. The amounts of stressors within society has increased. Amongst others, technology that allows us to always be connected and makes the border between working time and spare time more diffuse.

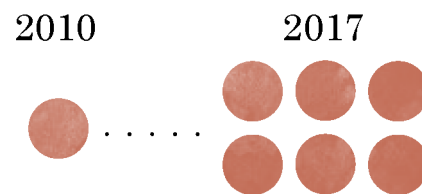
The dignity of stress

A study by the Public health authority (Folkhälsomyndigheten 2017) has shown that 18% of women in Sweden between the ages of 16 and 84 years, experience quite much or much stress. The study also showed that the same number for men is 11%. The same study revealed that the most stress affected age group are 16-29 year olds where 21% experience quite much or much stress. The study also showed these numbers has increased since the study was made last time, two years prior.

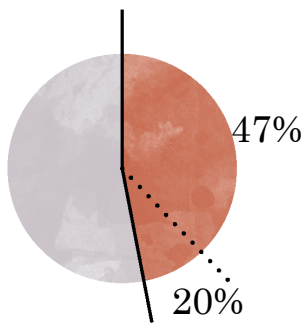
Stress in numbers



1 out of 5 people in Sweden, between the ages of 16 and 29 years old consider themselves stressed or very stressed. [Folkhälsomyndigheten (2017)]



Since 2010 the amount of sickleaves due to burnouts in Sweden has been sixfold [Försäkringskassan (2017:1)]



47% of all sickleaves in Sweden is due to mental illness, 20% is due to reaction of severe stress [Försäkringskassan (2017:1)]

74 200
.....
56 400

During 2016 74200 people in Sweden were on sick-leave from work during due to stress related mental illness. 76% of these were women. [Hjärnfonden p.6, 2017]

Stress recovery

Methods recommended by the health care system

Institutet för stressmedicin (2018) explains that a lack of recovery has an equal part of the reason to stress related issues, as the high stress load itself. Therefore it is important to increase the time for recovery. Following is descriptions of some of the methods of stress recovery that is recommended by the health care system.

Physical activity

Institutet för stressmedicin (2018) describes that physical activity increases both the level of energy and the quality of sleep and simultaneously decreases feelings of depression. Physical activity is therefore considered an important part of the treatment of stress related issues. According to Institutet för stressmedicin (2019) physical activity also decreases our physical and mental reaction towards stress and increases our durability towards it.

Rest

Hjärnfonden (2017) explains that the stress reaction is meant to be activated for a short while, and then be followed by rest in order for allowing other functions of the body to take place, which has been down prioritized during the stress reaction. Therefore it is important to rest after being stressed in order to regain balance. Institutet för stressmedicin (2018) describes that sleep is an important source of recovery of stress

Interests as energy increaser

According to Institutet för stressmedicin (2018) activities linked to personal interests, such as meeting friends, looking out over the ocean or forest promenades also contribute to an increased level of energy. The institute also describes that it is common to down-prioritized or totally skip that kind of activities in a stressful period or lifestyle. One part of the recommended treatment of stress related issues is to rediscover and take time for those activities.

Research for design

Design strategies for stress recovery

In order to let the design of the building support stress reduction, design strategies that has shown to have stress reductive effects has been searched for and investigated. What many of them seem to have in common is to have an effect of positive distraction, as something that leads the mind away from negative thoughts.

Visual contact with nature

Ulrich et al. (1999) describes that viewing nature has shown to have a measurable stress reducing effect on people. Through clinical and laboratory investigations it has been found that a visual contact with nature can contribute to decreased blood pressure and muscle tension within five minutes. It is further described that a visual contact with scenes of greenery, containing elements as plants, flowers and calm water is more effective in restoring from stress, compared to built scenes lacking of greenery.

It is explained by Terrapin (2014) that visual preference research has indicated that a preferred view of nature is looking down a slope, with trees, flowering plants and clean water. Orians & Heerwagen, 1992).

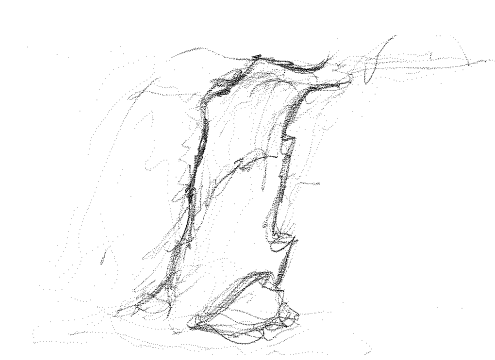


Watching natural elements have a greater stress reducing effect than watching built landscapes [Ulrich, 2002]

Soothing distractions

Ulrich (2002) describes that pleasant soothing distractions has shown to have a stress reducing effect and argues that it therefore should be considered and planned for while designing healthcare facilities. Distractive elements and experiences are described to be effective in attracting attention and simultaneously diverting, possibly decreasing the amount of stressful thoughts. Ulrich describes elements such as vegetation or garden-like features to be examples of this kind of distractions.

Backlund et. al (2009) argues that a positive diversion increases the amount of positive thoughts as it catches ones attention and thereby can deflect and ease worried thoughts.



Pouring water as a soothing distraction

Refuge

Terrapin (2014) describes a space of refuge as a sheltered area, contributing to a feeling of retreat and withdrawal and that this is suitable for both working, rest and healing. It is described that refuge spaces should provide shelter over head and behind back, but does not have to be entirely enclosed as it can be beneficial to have visual or auditorial contact with the surrounding area. It is described as a space for being alone or in small groups.

Further is described that the space of refuge should feel safe from it's surroundings and might be experienced embracing and protective. The refuge condition is described to have a stress reductive effect, realized through lowered blood pressure and heart rate.

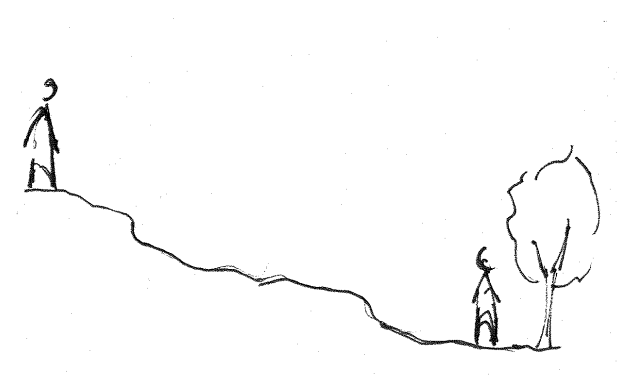


Sketch of a small refuge space - sheltering overhead and behind back

Prospect

Prospect is explained by Terrapin (2014) as an unhindered view over a distance, which contributes to a possibility of overlooking and planning. Further is it described that this is shown to reduce stress, irritation, fatigue and perceived vulnerability. Being in a prospect situation has shown to contribute to a feeling of being in control and improved comfort.

It is also described that a longer distance of prospect is preferred over a shorter, but also that an elevated seating indoor can work as a situation of prospect.



Sketch of an elevated view as a prospect situation

Photo voice

Defining activities and use

As a starting point for the project an intention was to see what people that are dealing with stress are doing to recover from it. For this a facebook-group, *Stressgäris*, was turned to. The group has about 4300 female members dealing with stress related issues and is used by the members to support each other, sharing experiences and information about how to deal with the stress issues amongst each other.

To investigate what functions and activities that could take place within the project the method Photo voice, was used. For this the group was asked to answer the following question:

What do you do to recover from stress and where are you then?

Along with the question was an instruction that the question should be answered through sending a photo they had taken themselves, showing what activity they engage in to recover from stress, and where they are then, according to the question. They were also asked for a short description of the photo.

From this 32 photos were received, which were used during the process to define and evolve the program of the project. Permission has been given to show all the photos except from one. The descriptions of the photos have been translated from Swedish to English.

Matrix of obtained photos

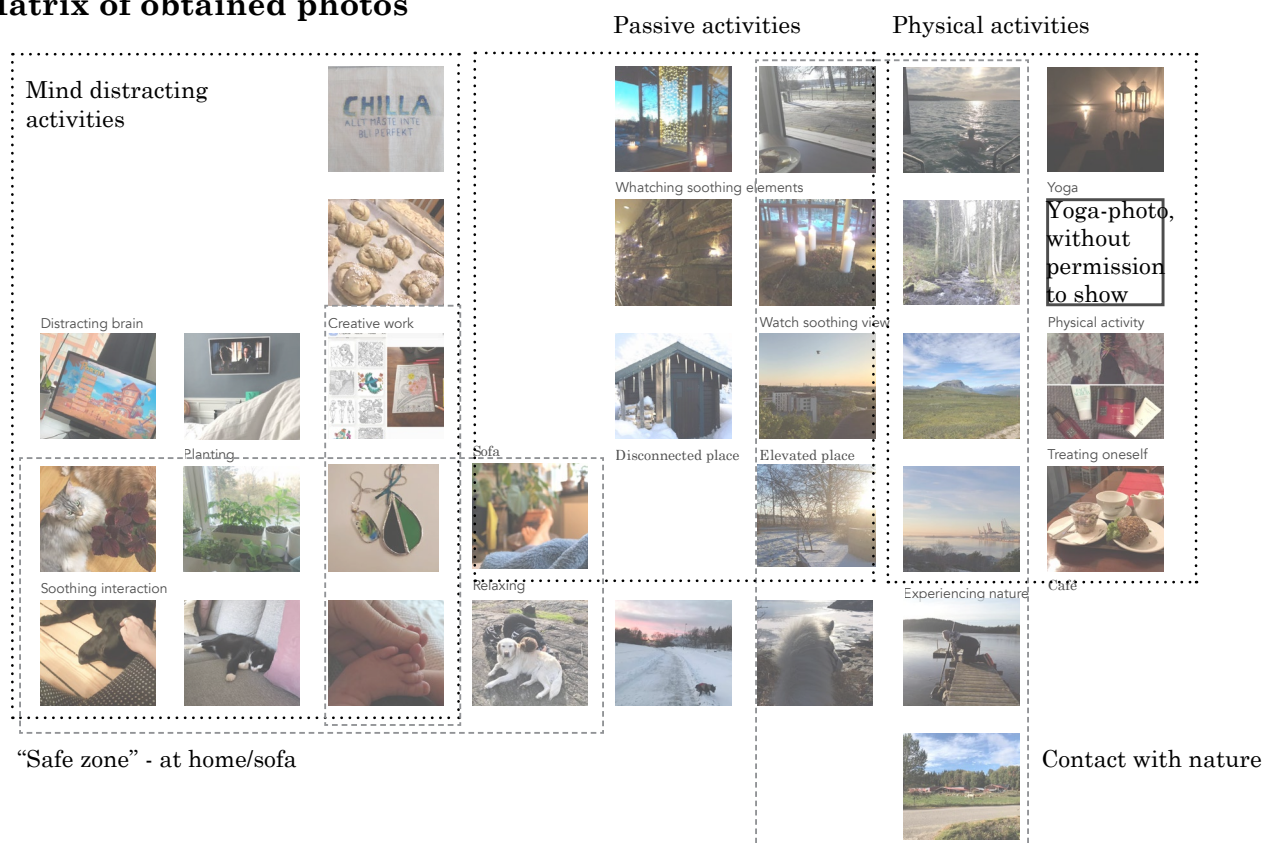


Photo voice

Analysis

The obtained photos were grouped and sorted into matrices to investigate what they have in common and to see what kind of activities takes place where. The activities were grouped into three categories:

Passive activities

As in the need to be. Relaxing, disconnecting, meditating, looking at soothing views.

A need of spaces for meditation and other calm and passive activities. These activities were often described to take place in spaces in contact with nature, especially among water at ocean cliffs and jettys.

Physical activities

The need to physically move. Yoga, hiking, promenades, running. Described to be either in direct contact with nature, or in very introvert spaces.

Mind distractive activities

As something you engage in to distract the mind, both with an introvert character, as something one would do on one's own and extrovert activities as activities relating to social interaction. Reading, drawing, baking, watching tv-shows, planting, cuddling with animals.

Introvert spaces for reading or drawing alone. This kind of activities were often linked to places that feel safe, like at home in the sofa, and places with elevated soothing views: overlooking the city or nature.

Extrovert spaces

There were also activities with a creative link, which seemed to relate more to social interaction than their surroundings.

Showed & described activities

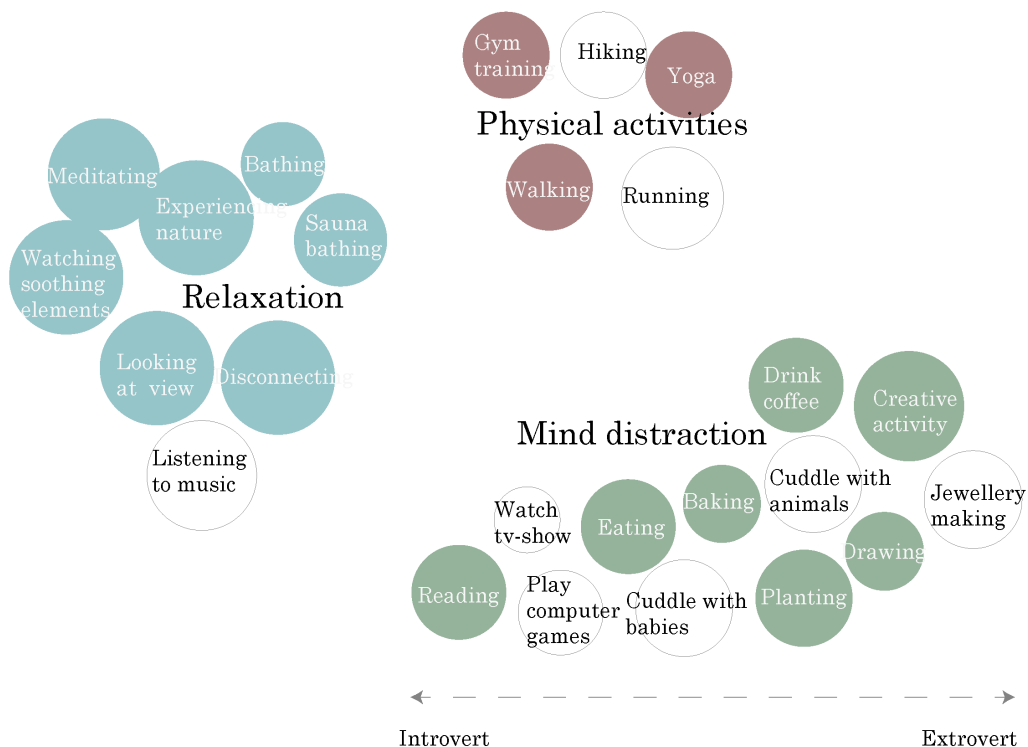
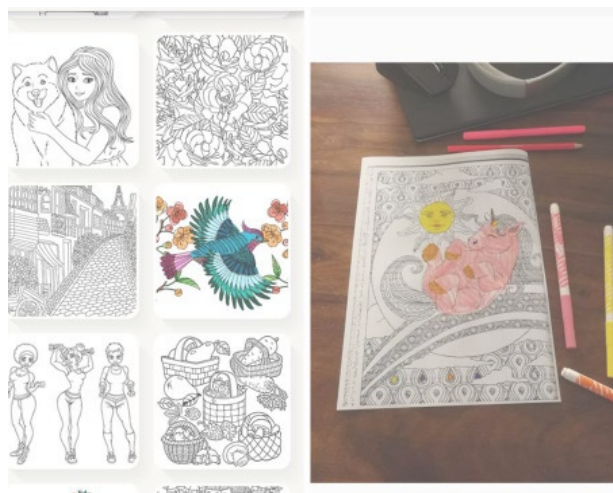


Photo voice

Selection of obtained photos



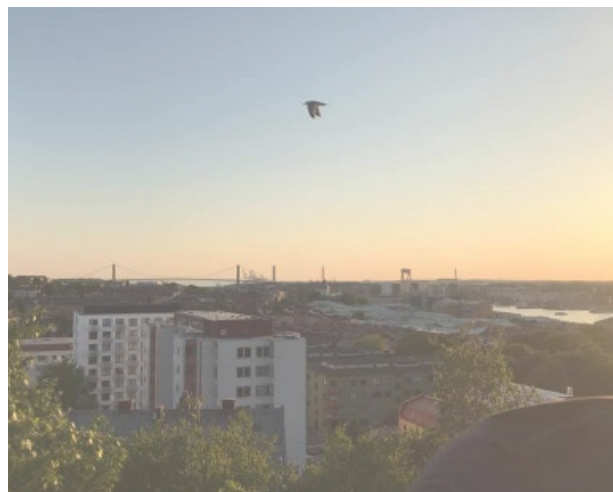
"I am attending an evening-course in Glass-arts regarding fusing and tiffany-technic. But it might as well have been Ceramics, crochet or whatever. The point is to be creative in a free but still organized way, in combination with being a little bit social without the purpose itself is to socialize. Almost like organized playing."



"I like to colour both in my phone, at the Ipad and with pen on paper together with my daughter"



*"I do this once a week. Preferably in the middle of the week when one needs a little extra self-treating, care and energy recovery.
1. First I make myself physically tired, Either through a class at the gym or a run in the woods.
2. After that I treat myself with a longer shower and uses some lovely products. For example I might exfoliate my face and put on a moisturizing mask or do a hair mask. This has become a weekly ritual where I care a little bit extra for myself, that I don't want to be without."*



"My calm place, by Masthuggskyrkan in Gothenburg. I usually just sit there and look out over the city, but sometimes I read or listen to music. I get calm of the open view and that I can loose myself in the traffic far away at Alvsborgsbron, the humming sound from the traffic, trams and birds."



“With my dog on “our” cliff after a loooong walk in the woods. That is my happy place. I usually sit there 1-2 hours every day as often as I can and when the weather is good enough. Just breathing, meditate, listen to music or podcast while the dog is noses around. That is gold.”



“To be with animals is the best when I am stressed. One instantly returns to the present, they are so good to be in the present :) To be able to be out in nature in silence restores my energy, while outer impressions get silent for a while.”



“Yoga is a fast and important way for me to find my way back to a calm state.”



“Winter baths with sauna. Good for everything. Love it”



Winter time - in the sofa, in bath robe, with a blanket, looking out the window, on a screen with something fun or in a book preferably an entire Sunday - like today! During summer - on an ocean cliff, looking out over the sea with a book.



Cuddle with cats and take care of plants!



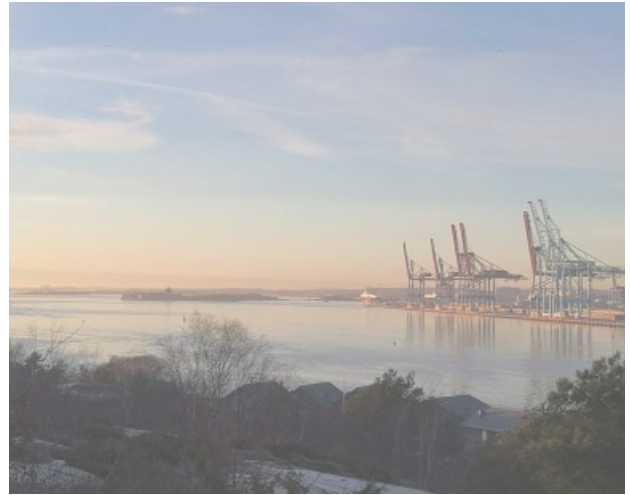
In bed with coffee!



So seeds, plant and see vegetables and herbs grow.



Baking buns



To be outside and exercise close to the nature. To see water, greenery and preferably blue sky makes me calm. Preferrably in combination with running, when the body gets tired it is like the mind is forced to calm down.



To disconnect from the outer world in my mountain cabin, to just be and roll in the snow outside the sauna



Breakfast at a café

The site

Fogelbergsparken

Fogelbergsparken is a hidden gem in the city of Gothenburg. The central location, only minutes away from Hagakyrkan and Vasaplatsen, makes the site easily reachable from the public transport system and for many of the residents of the city.

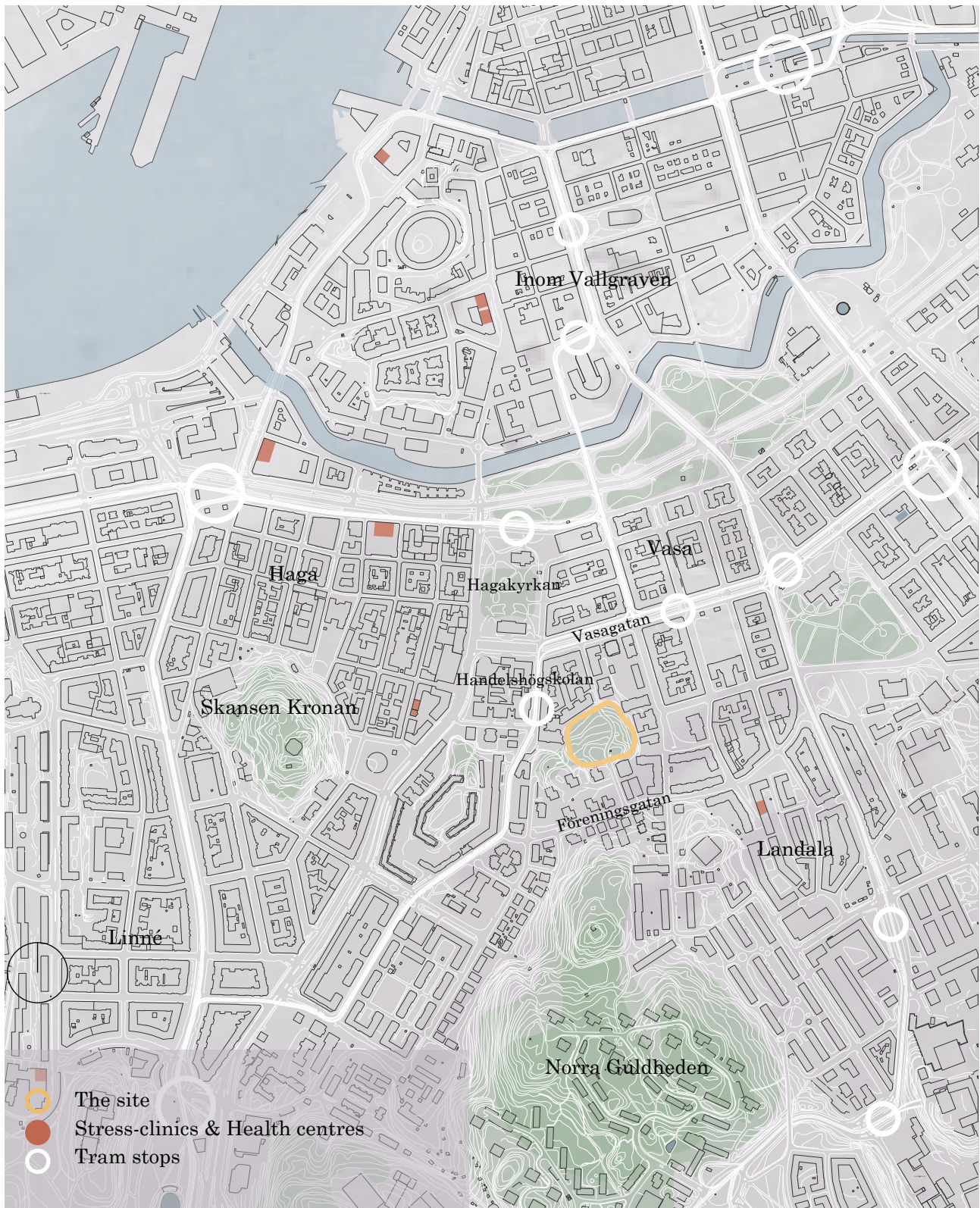
Despite the parks central location it has a calm and silent atmosphere, offering a contrast from the city life on Vasagatan and a quick escape from the everyday stress. Fogelbergsparken has an elevated position which offers views of both greenery and the surrounding city and situations of prospect, which has shown to have stress reducing effects. In comparison to other parks of the city, Fogelbergsparken is not very well used today and this based the decision to use the park as site for the project.

Gothenburg



Location within the city

1:10000

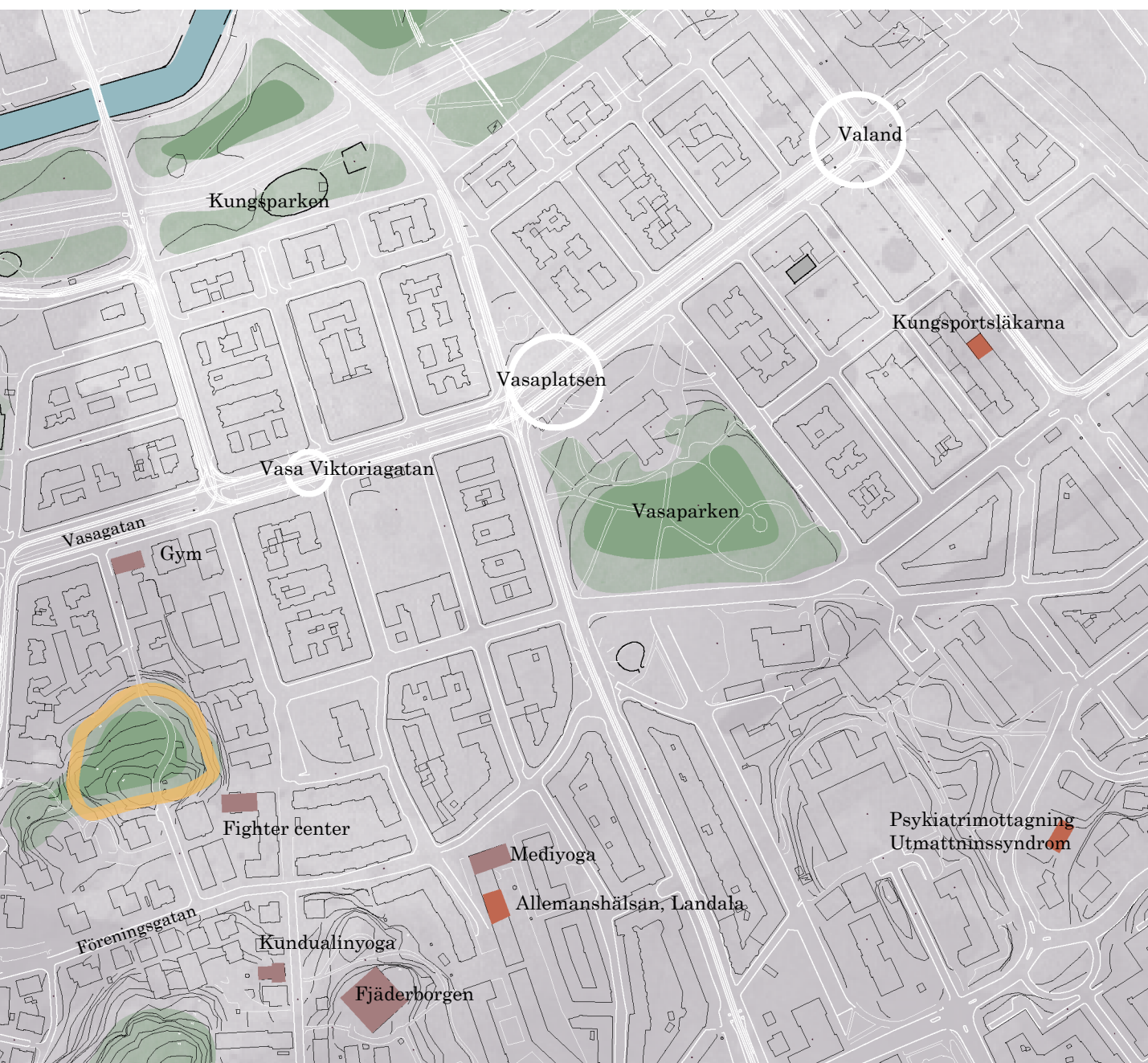


Surroundings of the site

1:5000

Close to the site several health centers and stress-clinics, as well as facilities for physical activity, is located. This makes Fogelbergsparken a good position within the city for a stress recovery center. The closeness to the surrounding facilities opens up the possibility of a collaboration between the stress recovery center and these facilities.





Arrival to the site

1:2000



Mainly used as passage

The park is situated a couple of stairs up from Nedre Fogelbergsgatan, which is connected to Vasagatan. Fogelbergsparken is currently reachable from four different directions as shown on the map to left. Today the park is mainly used as a passage between Föreningsgatan in Landala and Vasagatan in Vasa and the main movement is directed by the fenced pathway through the park.

Accessibility into the park

There are two possibilities for car accessibility into the park, both from south. One is along the existing pathway, interfering with the pedestrian flow, and the other is to elongate the road to the

building south of the site into the western edge of the park, which was considered a more reasonable solution as it would make less impact on the nature and privatization of the park.

1. The stairs leading from Nedre Fogelbergsgatan to the park contributes to a poetic walk of contemplation, as a mark of leaving the city behind. They add to the contrast between the city life on Vasagatan and the calm atmosphere in the park.

2. South is the only direction from which it is possible to arrive by car.

3. Stair leading from Handelshögskolan towards Fogelbergsparken through the vegetation.

4. Road between the buildings leading to the park.



Landscape

The site spans approximately 120*130 meters and has a hilly landscape, which marks a distance to the buildings located around the park.

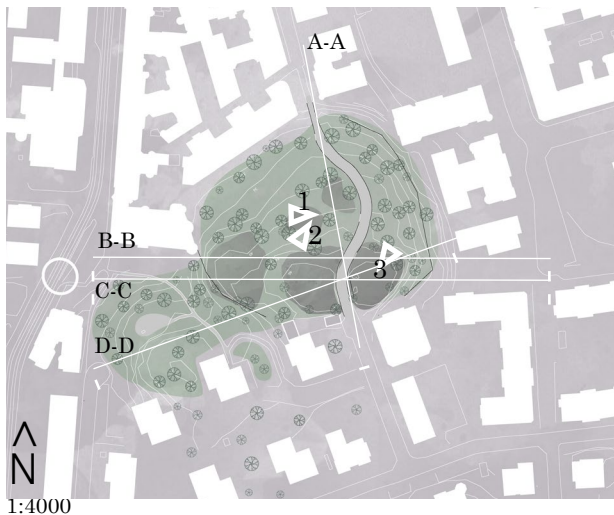
The slopes also provides possibilities of prospect, which has shown to have a stress reductive effect and contribute to a feeling of being in control and improved comfort (see p.13). This creates good opportunities to create spaces for refuge, protective spaces also shown to have positive effects on stress reduction. This overlooking, yet central location would be positive for a stress reduction center, as it is a location easy to reach, but also a location that makes it easy to disconnect the surrounding city.

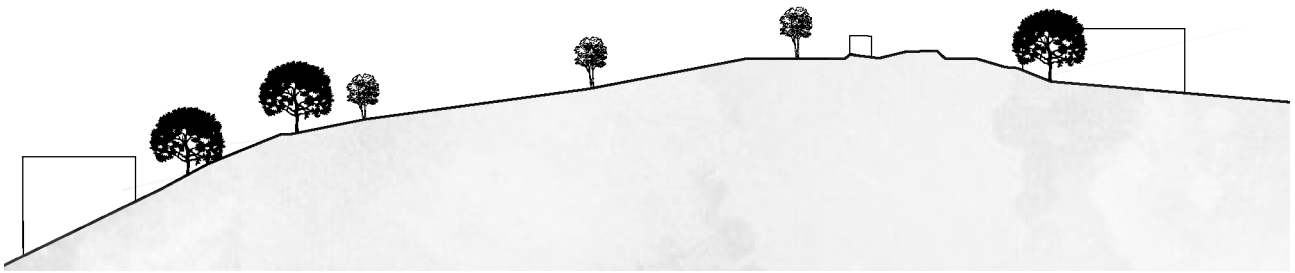
Although the terrain is sloping, there are parts that are more flat, as marked on the sections on the next page.

1.The ground in the central parts of the park is quite flat. Today there is a sandbox located here and the area seems to be mainly used by kids.

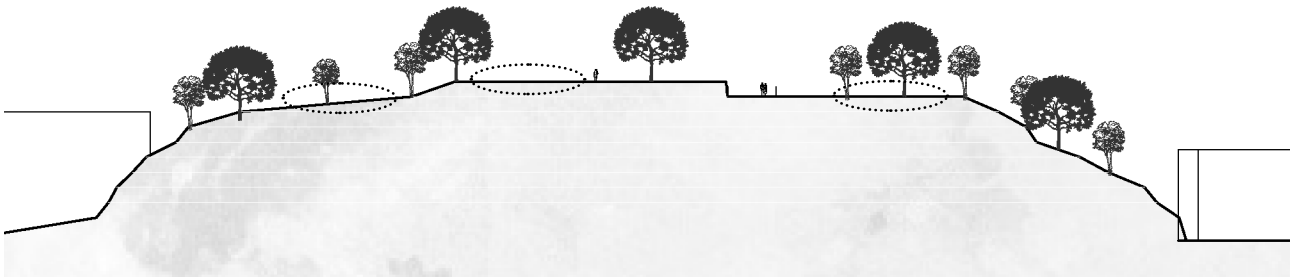
2.Photo of the sloping areas in the western parts of the park.

3.Photo towards the top of the hill and the tall buildings south of the park

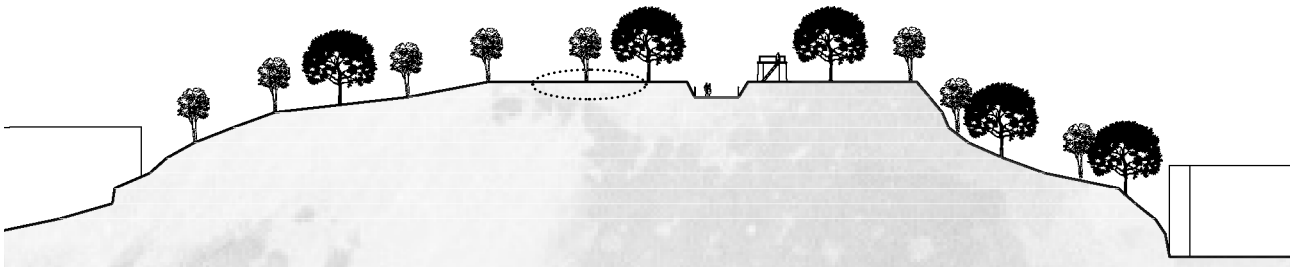




A-A 1:1000



B-B 1:1000



C-C 1:1000



D-D 1:1000

Plateau

Nature and views

1 :1000

The ground is covered with mud and grass, and some areas reveals the bare mountain. Trees of species as maple, ash, birch and rowan can be found in the park. The approximate location of the trees shows below.

Views over the city

The park is overlooking the city from its elevated position, sheltered by greenery in all directions. This makes the site a good position to both watch the seasons change but it also has contact with the city. On the highest point, in south, a viewpoint is found (photo 6).

Chosen location for the building

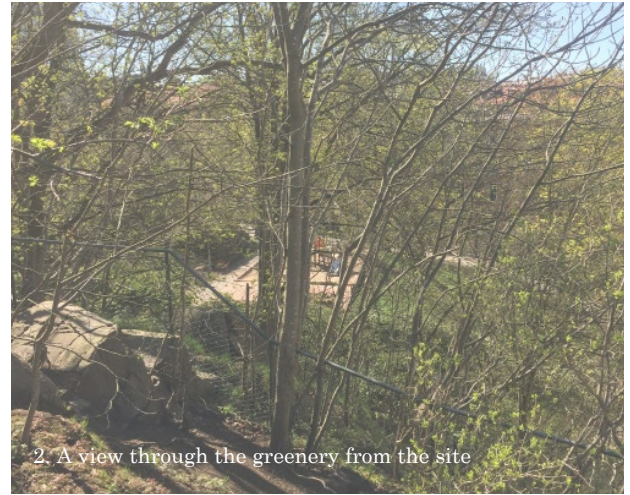
The western part, on the edge of the park was chosen for the building. It is a location that would minimize the privatization of the park and is in a good position for receiving sunlight during the entire day. The location is also surrounded by greenery and the ground is flattening out in two plateaus, making it a suitable location of a building. It is also the location that is more suitable for placing a road towards the center, as earlier found.

1. The most frequently used part of the park. The ground here is more flat. This space is kept public, for anyone to use.

2. The view points from the top of the park is kept public.

3. At the eastern part of the park the possible locations are very close to the pathway and there are less views over nature





Design work

Design strategies

Positive distractions

Design strategies that has shown to have a stress reducing effects have been chosen and implemented in the project. They are all linked to positive distractions, as ways to divert the mind away from stressful thoughts.

Soothing experiences

Materials and tactility

Soothing views

Contact with water



Contact with nature

Possibilities to be in nature

Visual contact with nature



Different levels of social interaction

Total refuge

Enabling interaction with others



Users

The aim of this thesis has been to design a building that supports recovery from stress through its use and design, for people suffering from stress related issues to visit and use, to help them in their recovery. The aim with limiting the user group to people suffering from stress related illness has been to create a respectful atmosphere as everyone has the same kind of issues as a common ground.

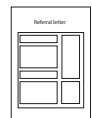
People experiencing stress needs routines and practice in taking care of themselves. Therefore it is important to be able to make an appointment, a weekly or even daily routine. But it should also be able to visit the center when needed.

Gaining access to the center:

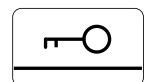
1. Patient meets doctor at health center or stress-clinic



2. Gets a referral



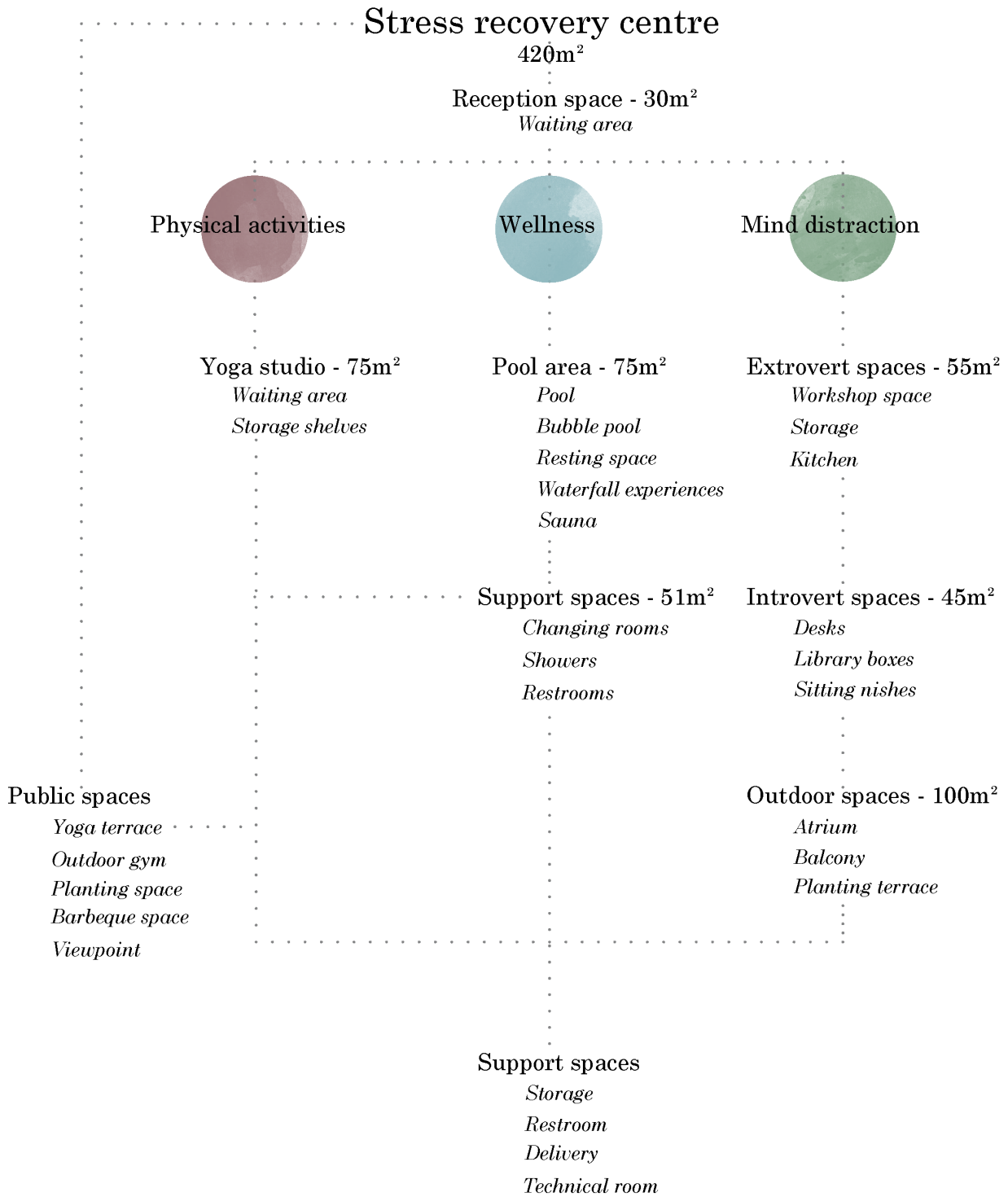
3. Gets access to the center



+ Public spaces:

For anyone to use

Program



Inspiration

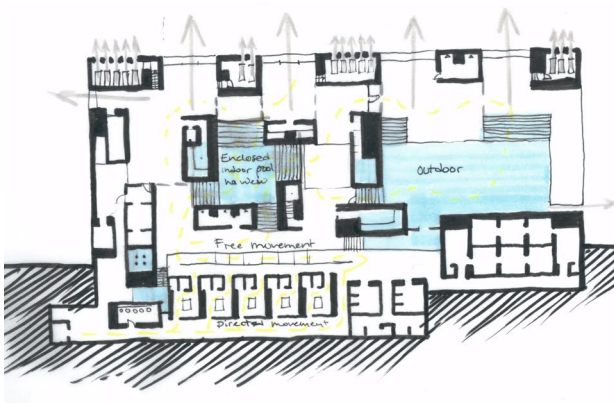
Reference projects

Therme Vals - Peter Zumthor

Zumthor (2006) describes architecture as a spatial, but temporal, art and points out the importance of thinking of the way of moving through a building.

"Something would be drawing me round the corner – it was the way light falls, over here, over there : and so I saunter on. The feeling that I am not directed, but can stroll the way I want to. It's kind of a voyage of discovery." (Zumthor, p.43)

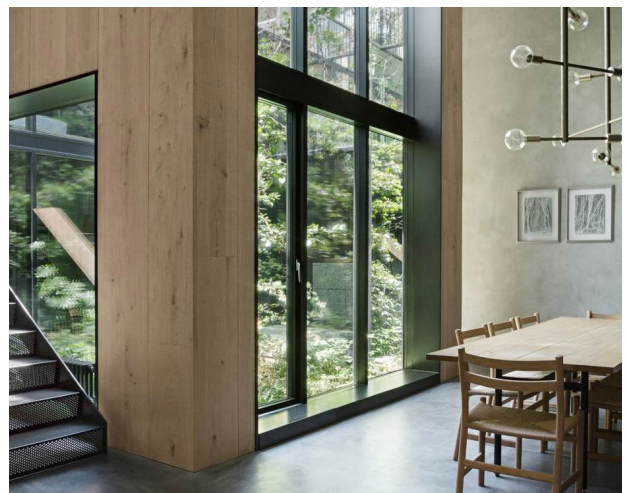
1. The floor plan of Therme Vals. The composition of boxes shapes spaces and directs the movement within the building. Inspired to the workshop investigating how boxes can create shelter, shape space and frame and block views.
2. The boxes blocks and frames views, contributing to a varying connection to the outside. Resting spaces placed in a framed view towards nature. [Ref:Therme Vals]



Peter's house, Studio David Thulstrup

The buildings wooden facade is consisting of a raster that shapes translucent parts, allowing the light to shine through. This inspired the design of the facade, shaping the railings on the building as part of the facade rather than separate elements. Also the material composition of the building has been used as a reference with it's contrast between the gray concrete floor, the wall panels in warm oak wood and the black window mullions, creating an interesting material pallet.

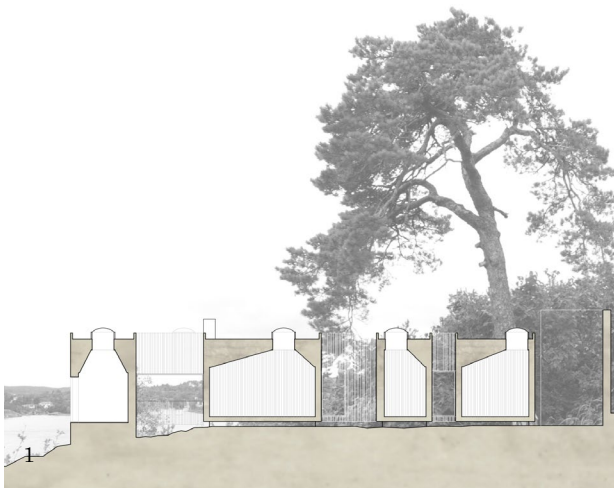
[Ref: Peter house]



Petra Gipp

1. Örnberget - This project is chosen as a reference due to its interesting play of light and heavy. It consists of a sequence of volumes that is standing light on thin plinths. But the one closest to the view, containing the bathroom of the building is meeting the ground with in situ cast concrete as a heavy contrast. [Ref:Örnberget]

2.Forester's house and service building, Petra Gipp. The building has an almost hovering appearance. The heavy concrete element gives the impression to carry the entire building. [Ref: Foresters house]



3-4.Tree house, Atelier Victoria Migliore
The building has a light, almost levitating impression and several atriums, dramatically cutting into the building.
[Ref: Tree house]



Massing

Relating to the terrain

The sloping terrain on the site demanded investigation about how to relate to it and to work with the section of the building. On the site the ground evens out in two plateaus, which makes it suitable to let the building land on two different levels and possibly breaking up the building in two volumes.

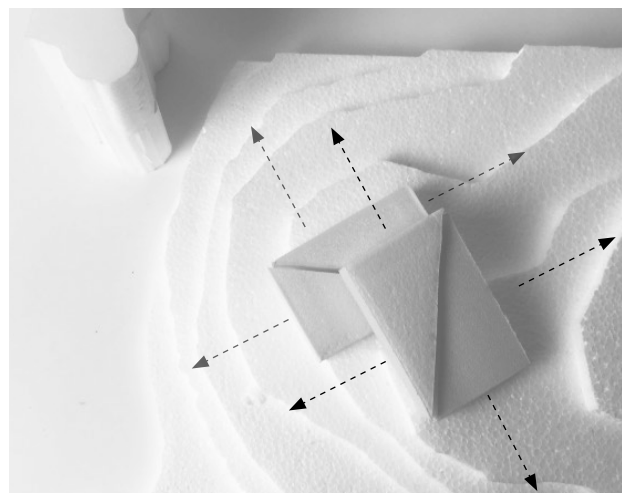
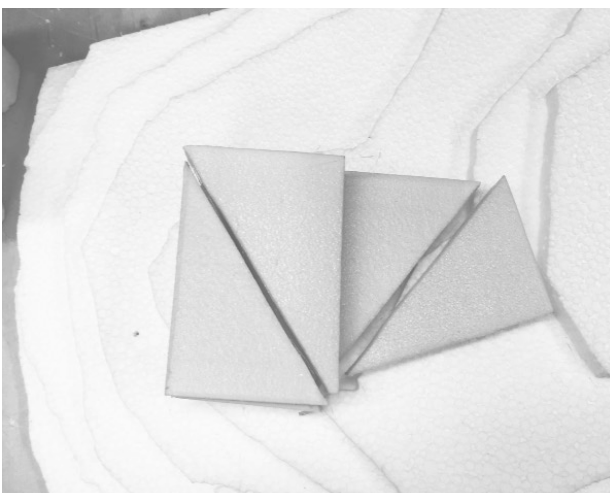
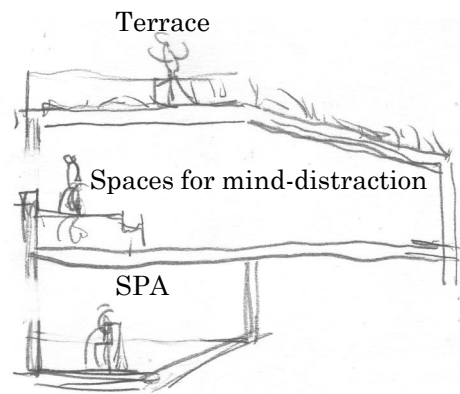
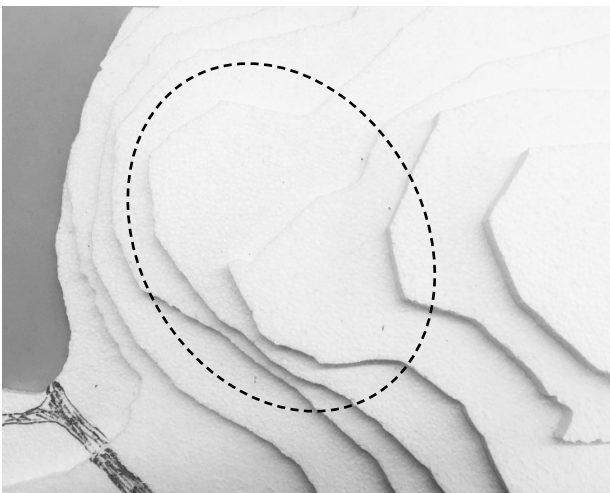
The concept of contact with nature made it suitable to break up the volume and section of the building to increase the number of views, rather than keeping it a solid volume. Following is some tries

1. Model of the ground at the chosen location, where the ground evens out in two plateaus.

2. Sketch of a section, disposition of the different functions.

3. One volume following the terrain, one level towards east where the ground is higher and two towards west where the ground is lower.

4. The volume is divided and rotated to increase the number of views, although this configuration takes up quite a lot of space.



Minimizing privatization

In order to increase the contact with nature from the building it was tested to scatter the building more. But this was also in contrast with the wish to minimize the privatization of the park, which was an argument to keep the footprint, or scattering of the building to a minimum.

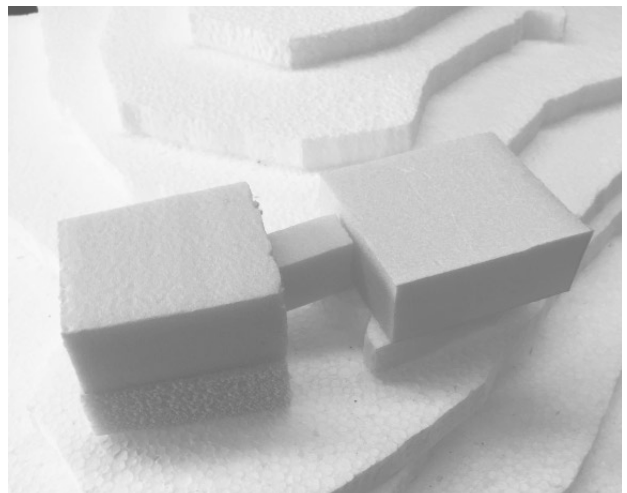
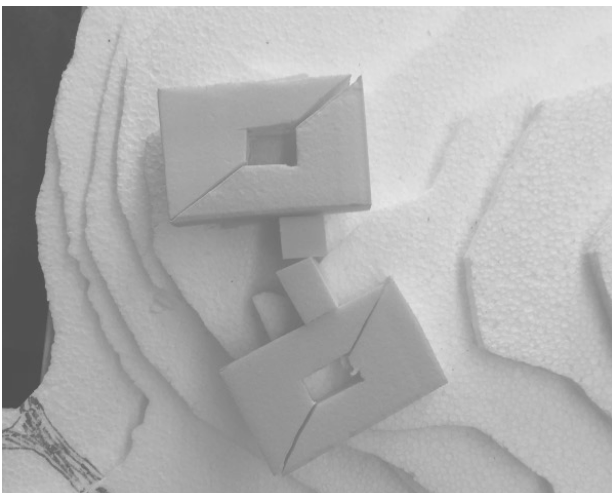
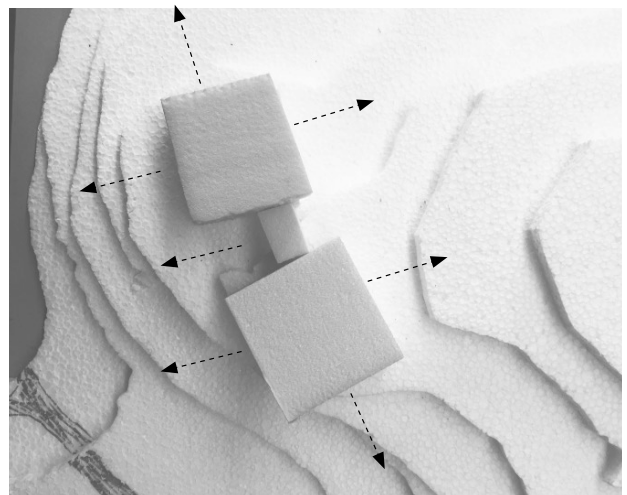
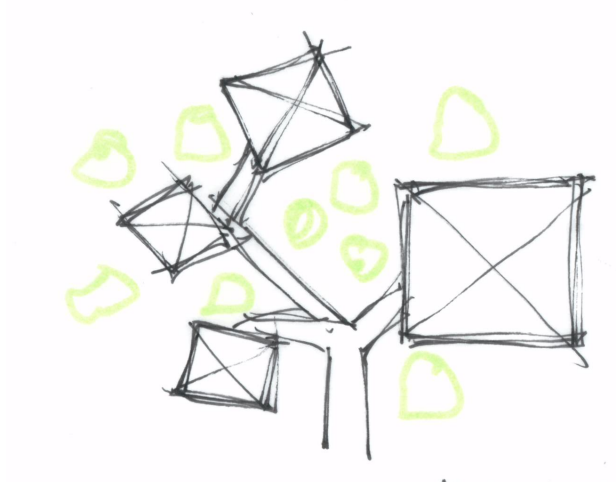
This led to investigations with other ways of integrating nature into the building, such as using atriums

1. Scattered composition of buildings. Contributes to a lot of views towards nature, but contributes to that the center would claim much space within the park.

2. The building is divided into two volumes to separate the functions and increase the contact with nature. The volumes are landing on different levels in order to follow the terrain.

3. Atrium as a center pieces in the volumes as tools to integrate nature. This was further investigated and brought into the project.

4. The volumes are standing at different levels, to follow the terrain. The photo shows that one of the volumes are on level and the other is two. This was start off point to finding the shape of the building.



Refuge situations

Model workshop

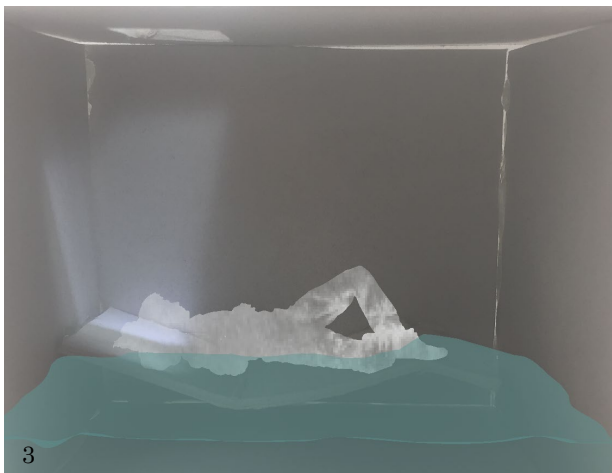
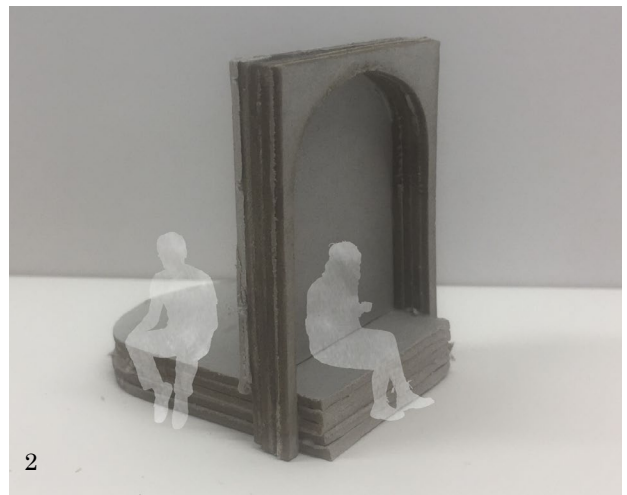
Investigating how different refuge situations could be designed.

1. A small vault that builds up a casual refuge situation within the room. For reading in front of a view, but still being in contact with the rest of the room. This could also be a seating niche in a window, to get close to the view.

2. Seatings shaped behind the vault, as if the mass inside the vault has tipped over and shapes seatings on both sides of it. This shapes several informal seating areas where people can sense each others presence but does not force interaction.

3. Laying in water, looking up towards the sky in a more secluded and private refuge situation.

4. A room within a room as small protective spaces. Although this was not investigated further.



Positive distractions

Sketches

Investigations in what elements could be used as positive distractions to create elements and experiences that diverts the mind away from stressful thoughts.

1. A tactile wall as a distraction

A corridor of strong materiality. Encouraging to drag the hand along a tactile wall as distraction while following a leading light.

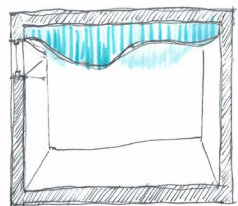
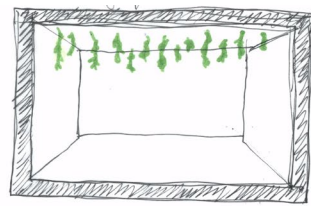
2-3. Different elements in the ceiling of the yoga studio. Wooden beams, plants or hanging fringes could be something to look up at during class. It could hang down low, to be possible to touch and interact with.

3-4. Reflections in the ceiling

A try to recreate glimmering reflections from water in the ceiling, as a hint of what is waiting ahead, by the end of the promenade and on the other side of the wall.

5. Sketch of a waterfall shower. Recreating the liberating experience of standing still in heavy rain.

6. Sketch of a waterfall experience where one sits and lets the water pour across the body. The sound and feel of pouring water distracts and calms the visitor.

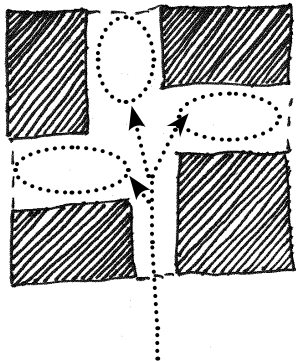


The box

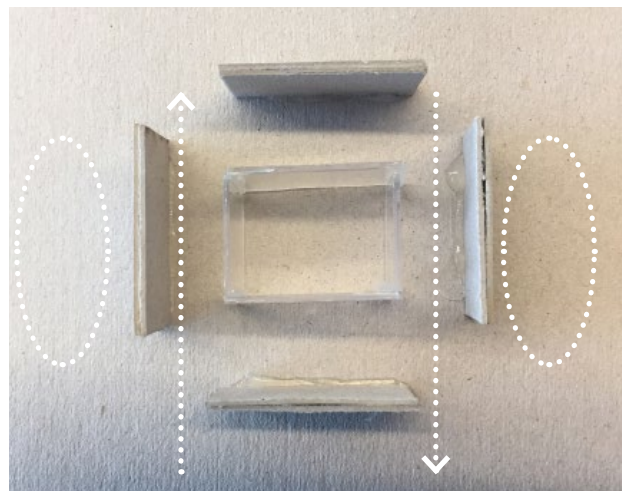
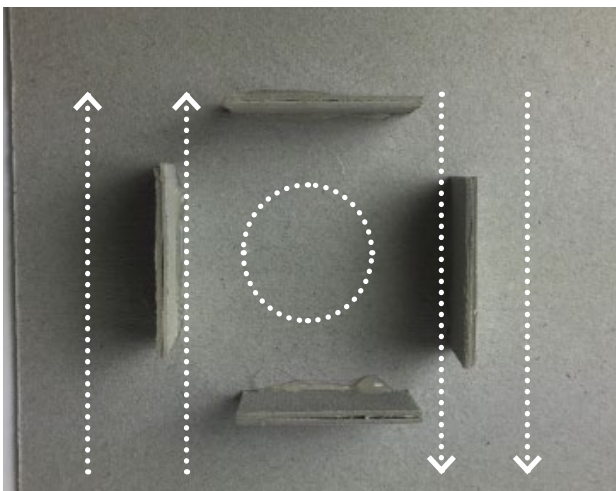
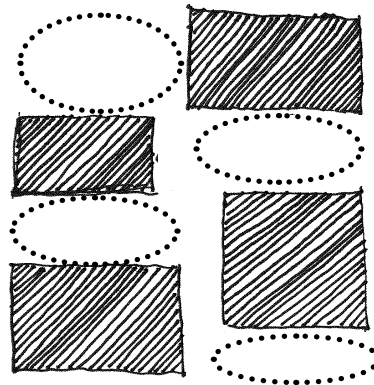
Spaces between and movement

Investigation in using boxes to direct flows and create spaces between them, with the inspiration of the floor plan of Therme Vals. The boxes were considered as elements placed inside a building. What was clear later on is that this way of shaping space demands much space, more than available in this project.

1. A narrow passage marks space for movement and three spaces with exterior contact.
2. Directed flow through, branching out to spaces to stay with exterior contact.
3. Box with cut off corners. Directing movement along the walls and shapes a space in the middle.



4. An atrium placed in the middle. the atrium lures the movement along it and more clear spaces are shaped outside of the walls.

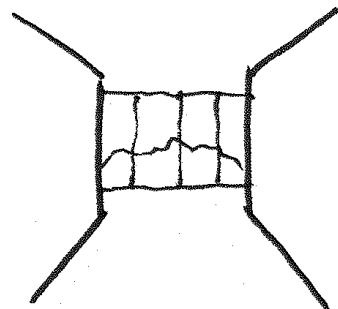
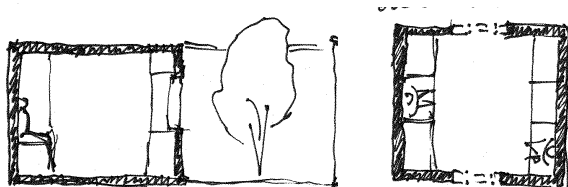
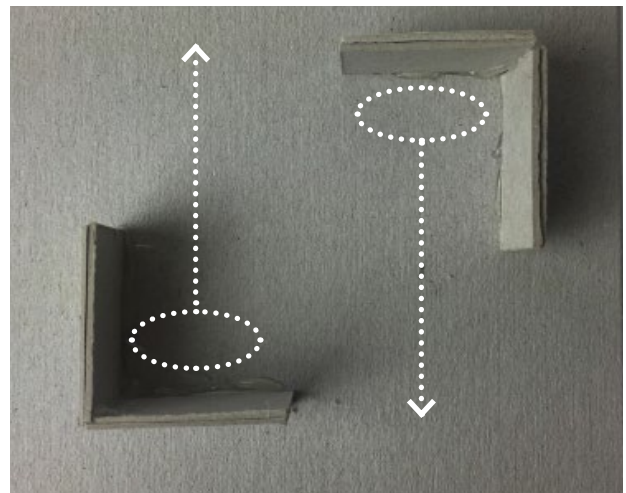
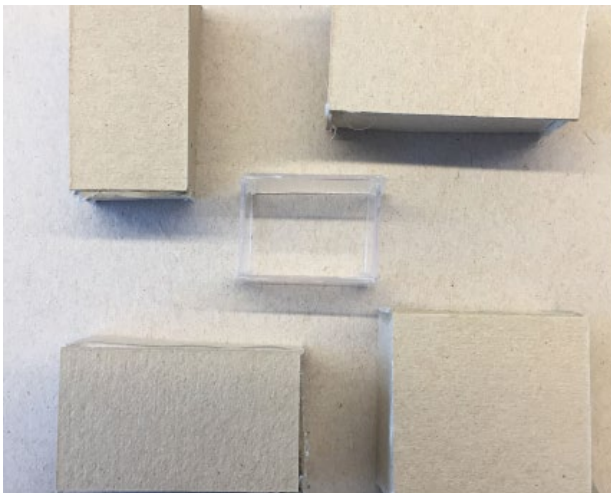


Rethink the box

More than introvert rooms

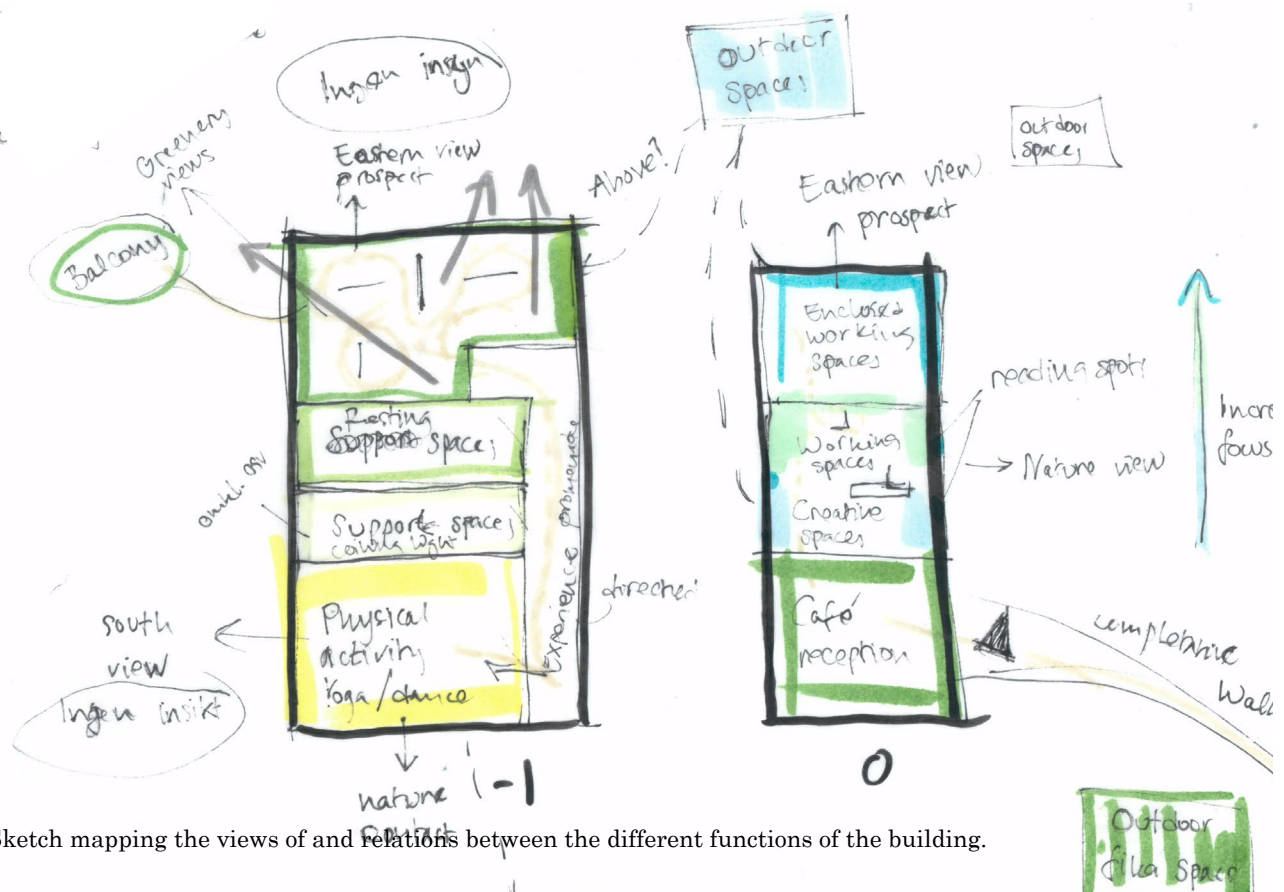
Investigating how the box can be something else than a introvert room.

1. One of the boxes are as an atrium, dividing the central space let in light and nature. Used in the project as an atrium dividing one of the volumes.
2. Box cut in two parts, shaping semi-private spaces with possible seatings, not facing each other.
3. Boxes creates an possibilities to be alone with the view.
4. Boxes to enhance views.



Process

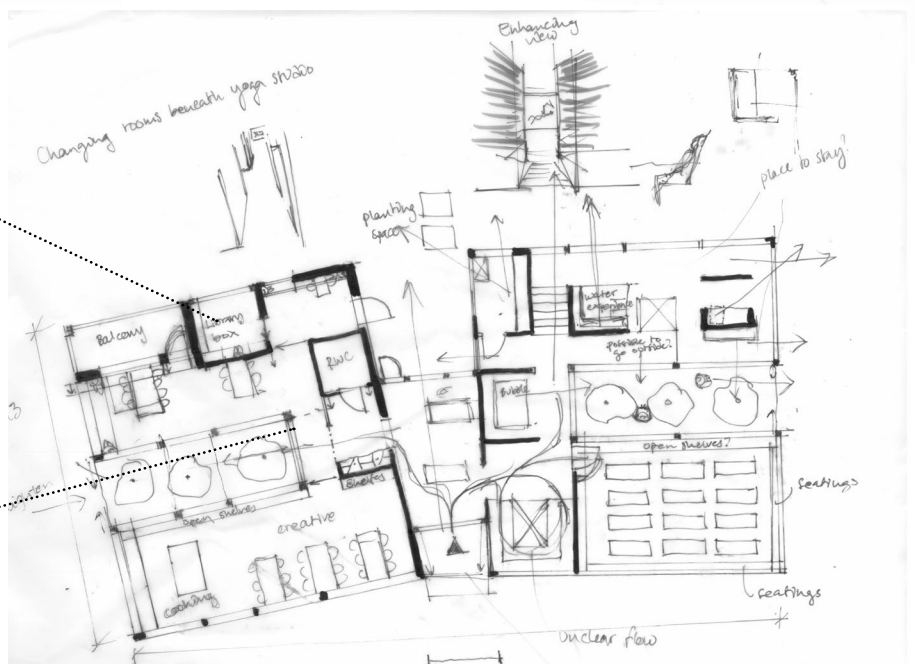
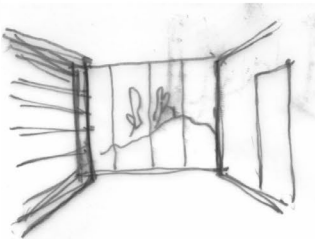
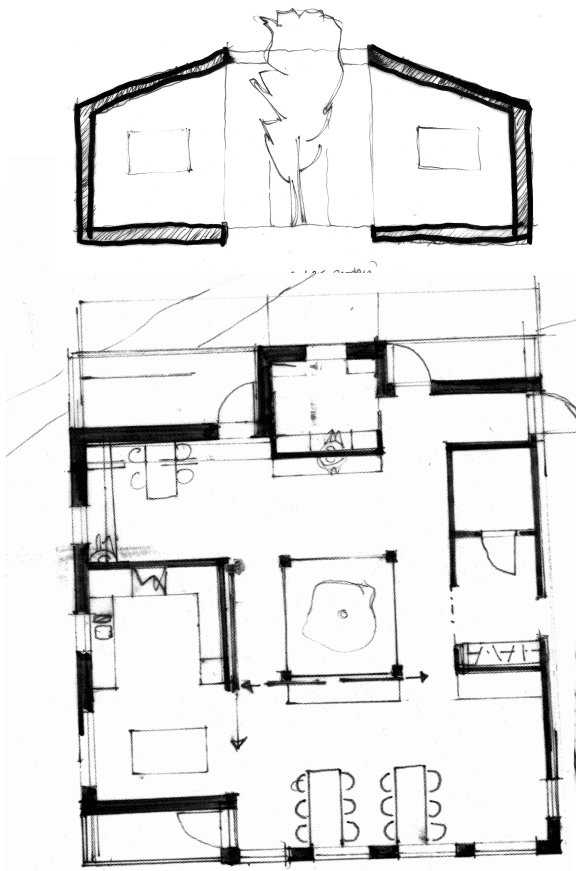
Developing the program



Sketch mapping the views of and relations between the different functions of the building.



Sketch of plan and section of the wellness center



Design proposal

Placement and views of the center

1:1000

The building is placed in the sunny western part of the park. The location has green views in all directions and the elevated position contributes to a private atmosphere to the building. It is also an area that is not well used today, at the edge of the park, which minimizes the privatization of Fogelbergsparken.

The building consists of two volumes, slightly angled apart and directed towards the surrounding views of nature and open spaces. Each volume has been placed at a plateau at different levels, in order to let the building adjust to the terrain. It has been placed close to the slope to create a private atmosphere as it is surrounded by the nature of the park.

Encouraging use of the park

To minimize the privatization of and encourage use of the park some public places has been suggested to be created within in. Places to sit down and be present in the moment. These public places have all been placed on locations identified to have good views towards Skansen kronan and nature.



1. View towards west, Skansen Kronan is visible through the surrounding greenery.

2. View towards north, The building north of the park is visible through the vegetation.

3. View towards east, showing the highest part of the park

4. View towards south, the buildings south of the site shows through the vegetation



New access to the park

1:500

New access to the park

A new access point, from south, has been added to the park in order to allow accessible arrival to it and a parking space in direct contact to the entrance of the building. A new stair has also been placed to shorten the way from the stair west of the site up to the location, showing on the photos of the terrain model, shown below.

Respecting the trees of the park

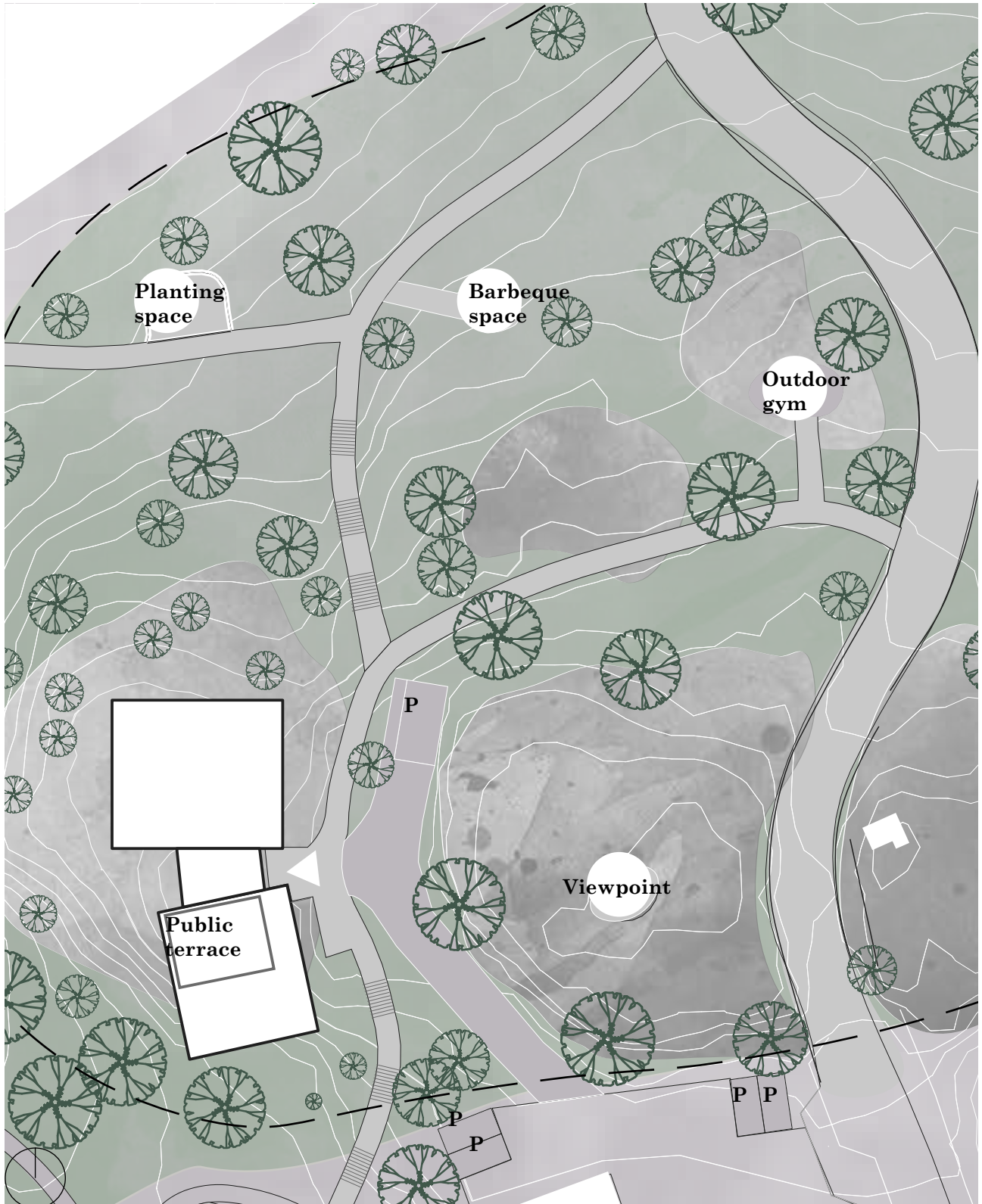
An aim has been to keep the impact on the park to a minimum and the atmosphere nature-like rather than man-made. To support the existing movement pattern, the new pathways stretches from the existing gates, passing by the location of the suggested public places and leading towards the center. They all stretch along or straight across the slopes of the park. The pathways winds between the trees, respecting the location of them and guides the visitor between them in order to strengthen the experience of being in nature. This to ease the mindset and prepare the visitors of the center and users of the park.



The stair from west leads towards the building



The new stair stretches up the slope



The surroundings of the center

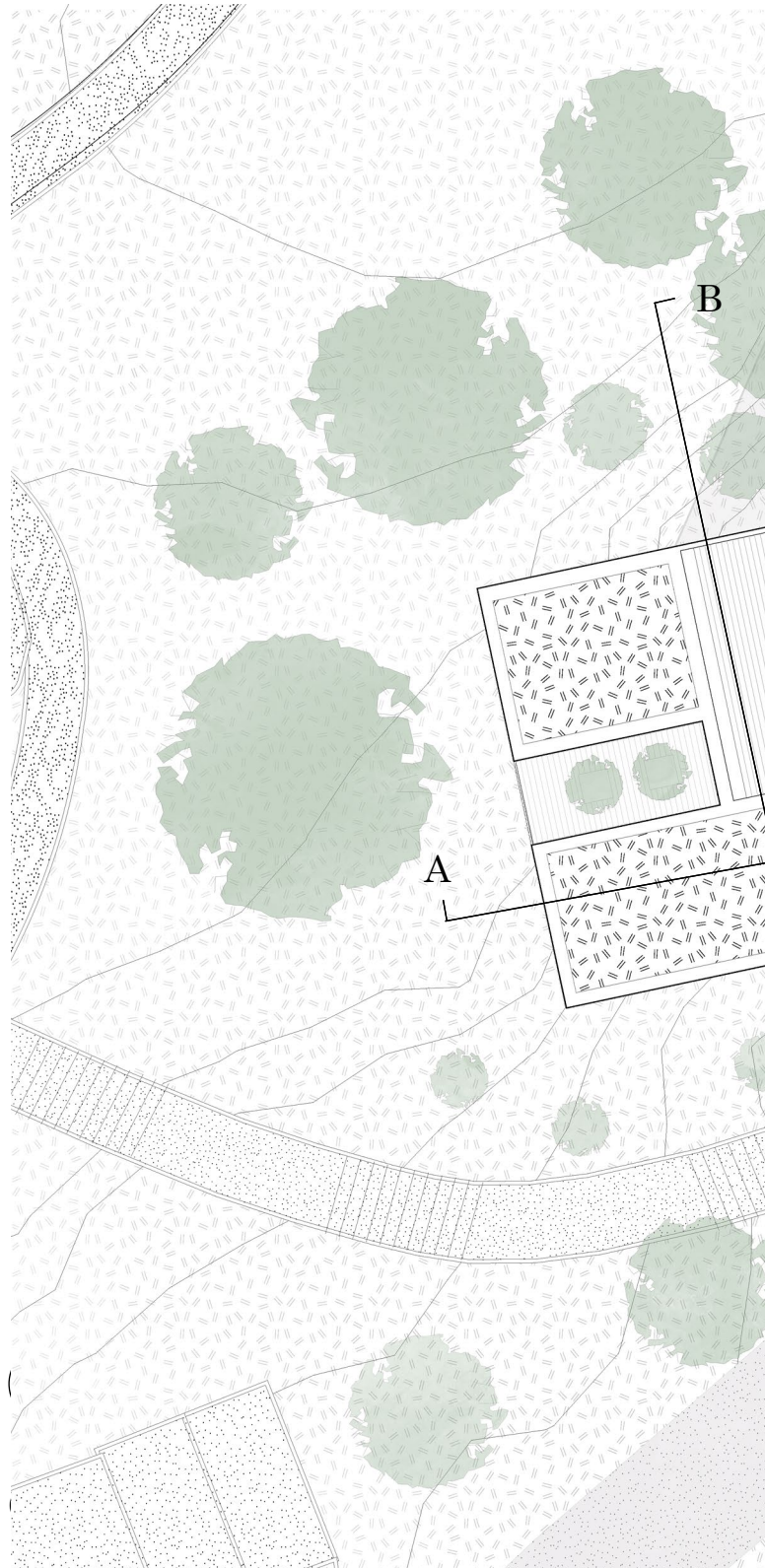
1:200

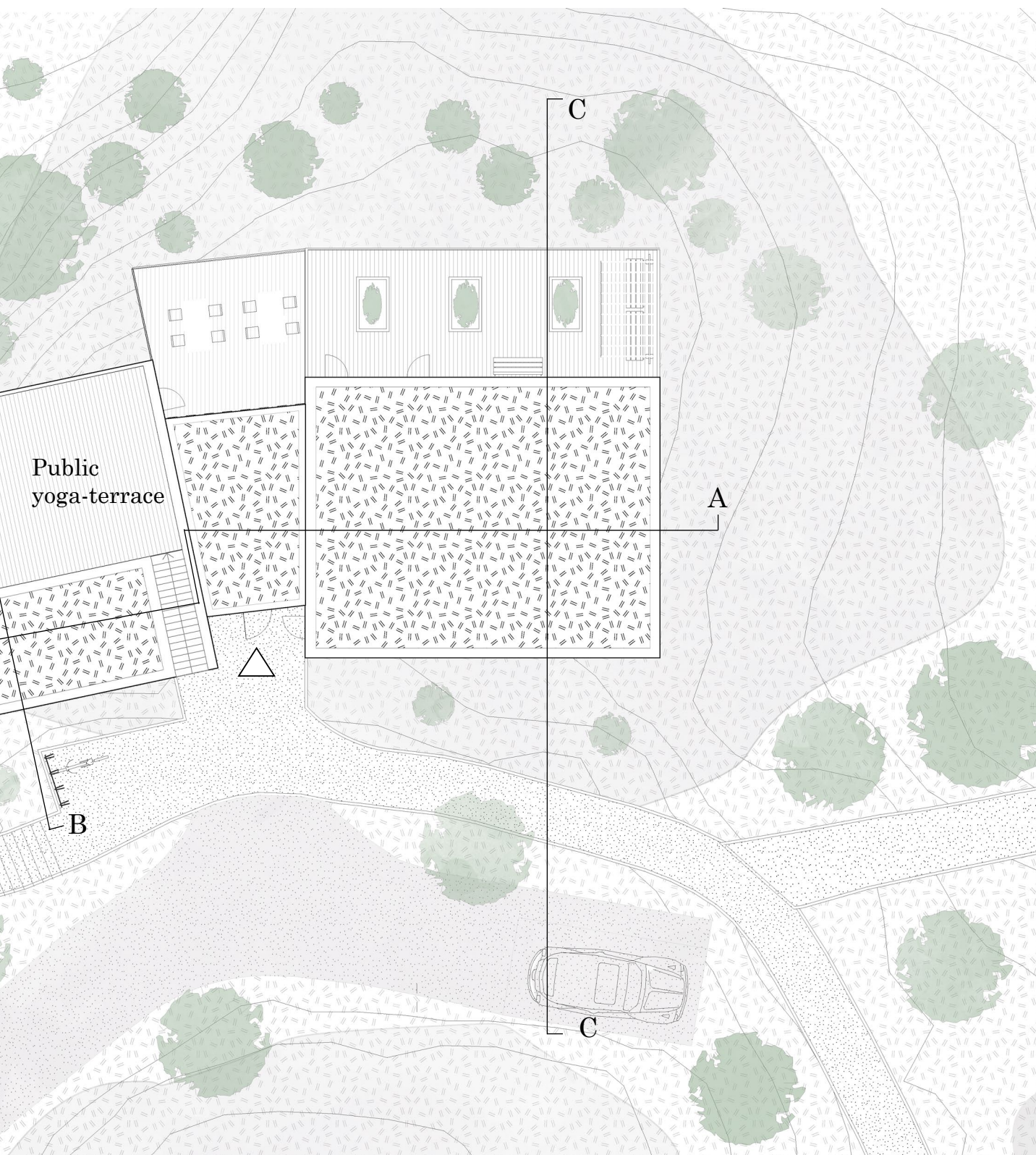
Approaching the center is possible from three directions. The existing asphalt road, south of the park, has been elongated to outside the entrance of the center and the ground evened out, in order to allow traffic and wheelchair accessibility to the center. An accessible parking lot as well as parking for bicycles has been placed just outside of the center.

For pedestrians a new access point, creating a shortcut from the nearest tram stop, has been added via a stair. The pathway of accessible rock flour leads further into the park and branches out into two, leading towards the gates of the existing pathway dividing the park into two.

A stair leading to a public terrace

Next to the entrance of the building a stair is located, which leads to the yoga-terrace at the roof on the southern and lower building. When the terrace is not occupied for classes linked to the building, it is open for anyone to use for yoga or just enjoying the view among the tree tops.





Materials

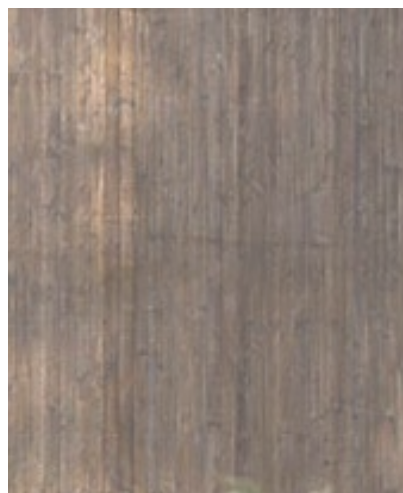
Facades

Light and heavy

Both the volumes are dressed in a wooden facade. In order to relate to the volumes different landings on the ground, the hue on their wooden panels gives a hint of the difference in weight. The northern volume has been given a heavier expression as it is landing on the ground with a foundation dressed in smooth light gray granite, relating to the mountain the building is standing on. The volume has been dressed in a darker tarred pine wood facade, to emphasize the weight of the building but still relate to the trees in the park. The southern volume is contrasting with a light expression, seemingly hovering over the terrain and vegetation, dressed in a lighter wooden panel of untreated larch.

Different but coherent

The facades of both volumes have a coherent panel of the same dimension, but in different shades. They will both turn gray with time - blending in with the nature among the treetops. They are connected with a glass-volume consisting of the reception, emphasizing the two separated volumes.



Elevations

1:200



West elevation



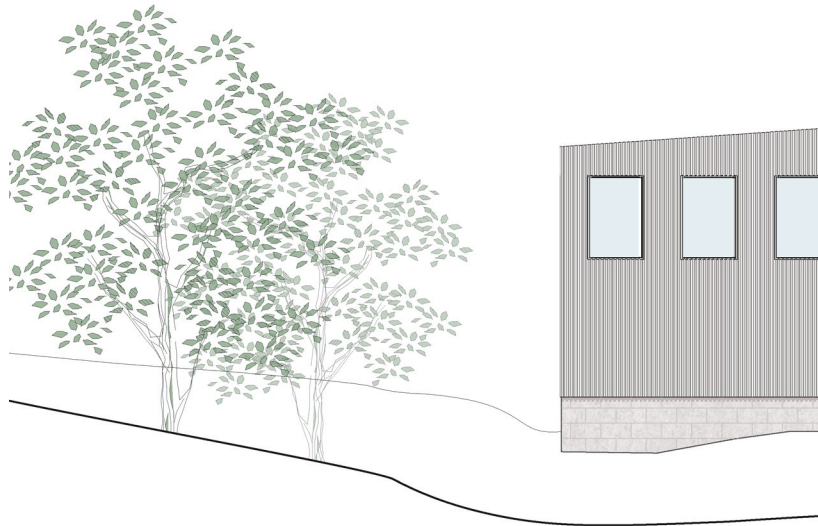
South elevation

Elevations

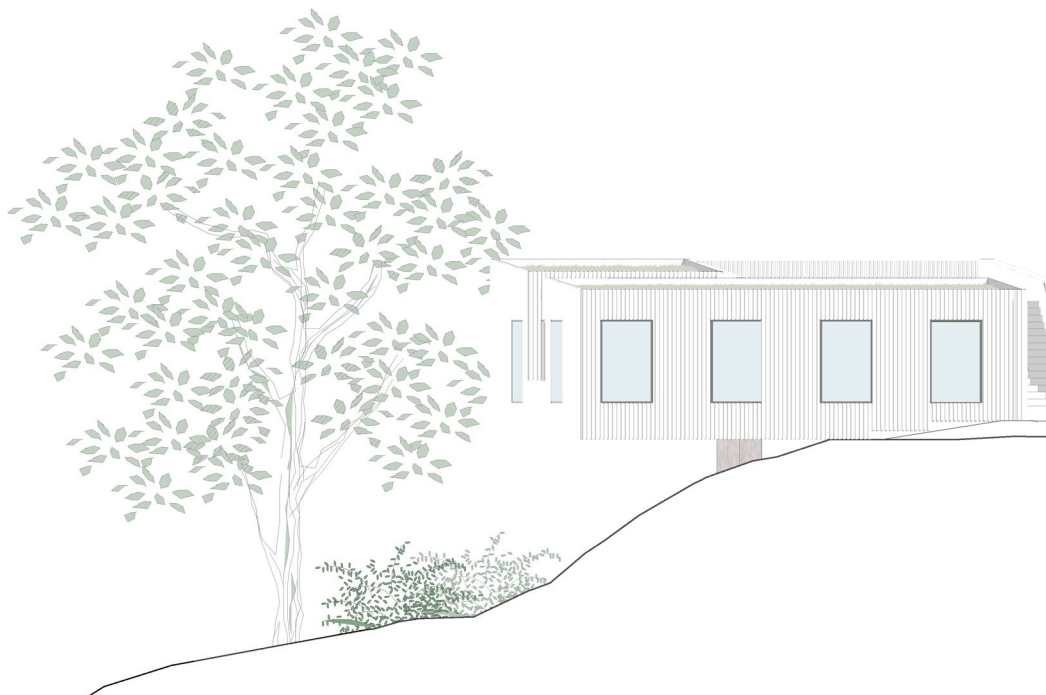
1:200

Pointing towards greenery

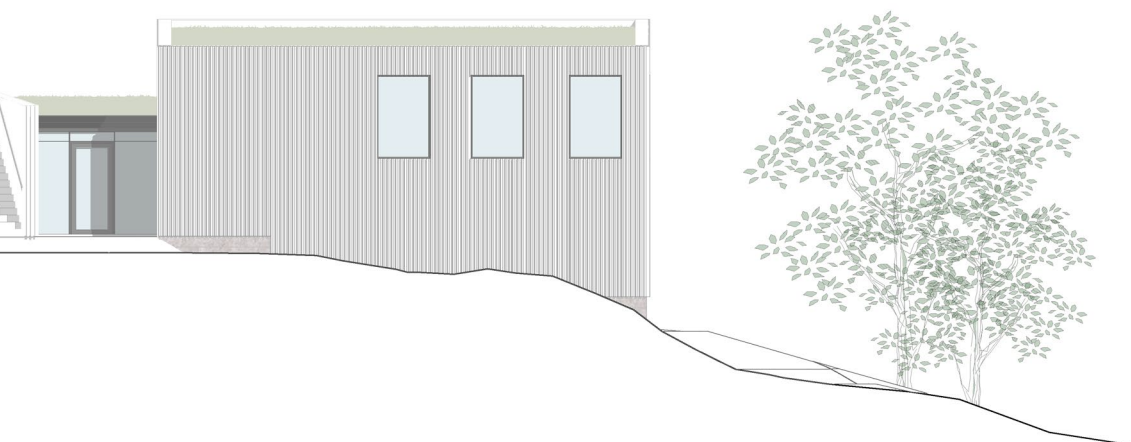
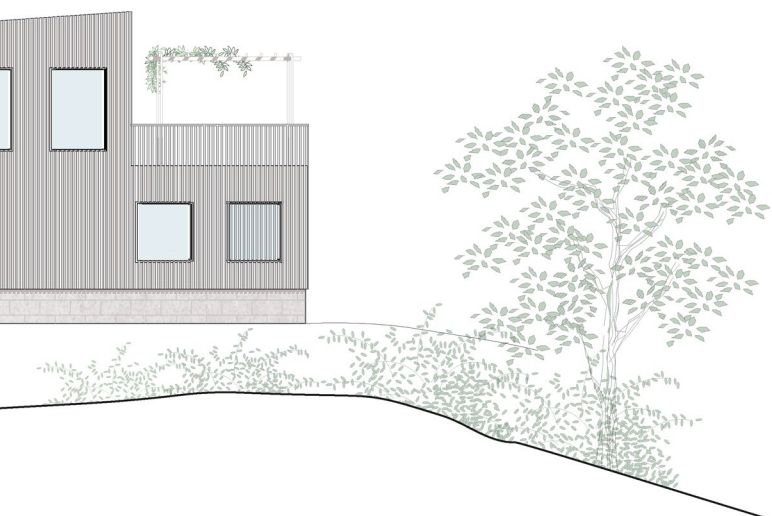
As the north elevation shows the roof has been given a slight angle to give the building a direction, pointing towards the greenery of the main view west of the building and revealing the green roof for those standing at the view point at the hill east of the building.



North elevation



East elevation



A building among nature

The building is surrounded by greenery in all directions. As shown on the photo towards the site (photo 1, p.27) the greenery in front of the building is in reality sheltering the building even more, during the green period of the year, and the amount of trees has been minimized in the perspectives in order to let the building show.





Entrance view

Reception with a view

The both volumes are connected with the glazed-volume consisting of the reception. Immediately while entering the building the visitor is greeted by a view of nature. The glass volume is emphasizing the separation of the two main volumes of the building.

Stair to the public terrace

Next to the entrance a stair is pointing towards the sky, leading to the public yoga terrace at the roof.

Railing filtering the light

The lid-panel of the facade continues past the terrace level and shapes the railing of the terrace, as part of the facade, rather than a separate element, giving the facade translucent parts. The railing filters the light and lets through views towards the surrounding nature during yoga.

The terrace is mainly meant to be used by the center, but it is also available for the surrounding gyms and yoga-centers, or anyone visiting the park to enjoy the view, surrounded by the sedum covered roofs of the building. A bench has been placed along the side of the terrace for taking a pause or place water bottles during class.



Yoga terrace among the tree tops



Entrance floor

1:200

Different levels to follow the terrain

The building is disposed over split-levels to follow the terrain. The reception and waiting area are meeting the visitors entering the building. The south volume, consisting of the mind-distractive activities is located at the same level as the entrance. From the reception a yoga studio and planting terrace is located one stair up and wellness department and support functions one stair below.

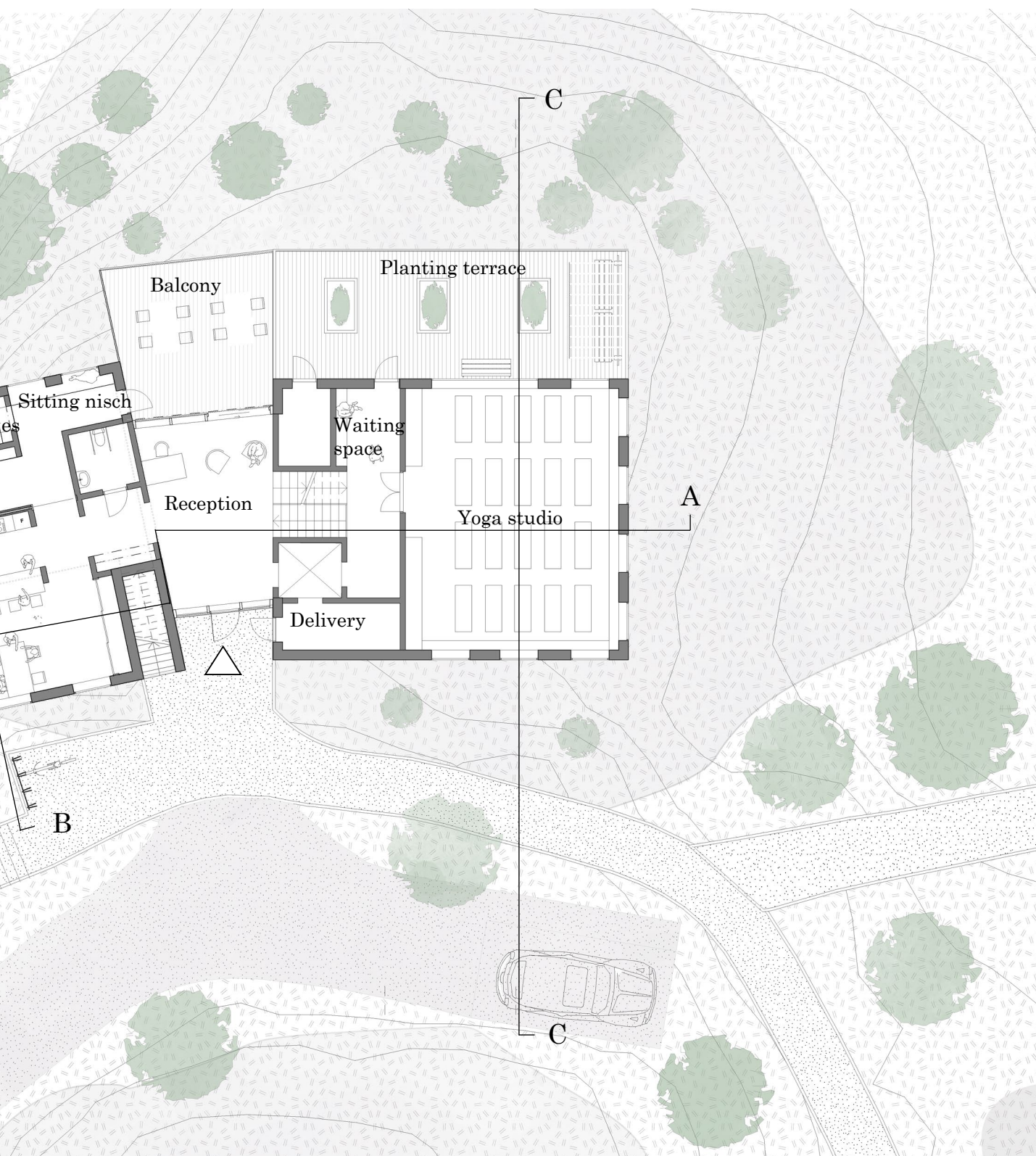
Always moving towards the view

From inside the building the contact with nature is evident, one is always walking towards an exterior view and the view of nature is greeting the visitors immediately when entering the building.

Outside access from all spaces

On the entrance floor and first floor several outdoor possibilities are available. Providing outdoor spaces receiving sun several hours of the day.



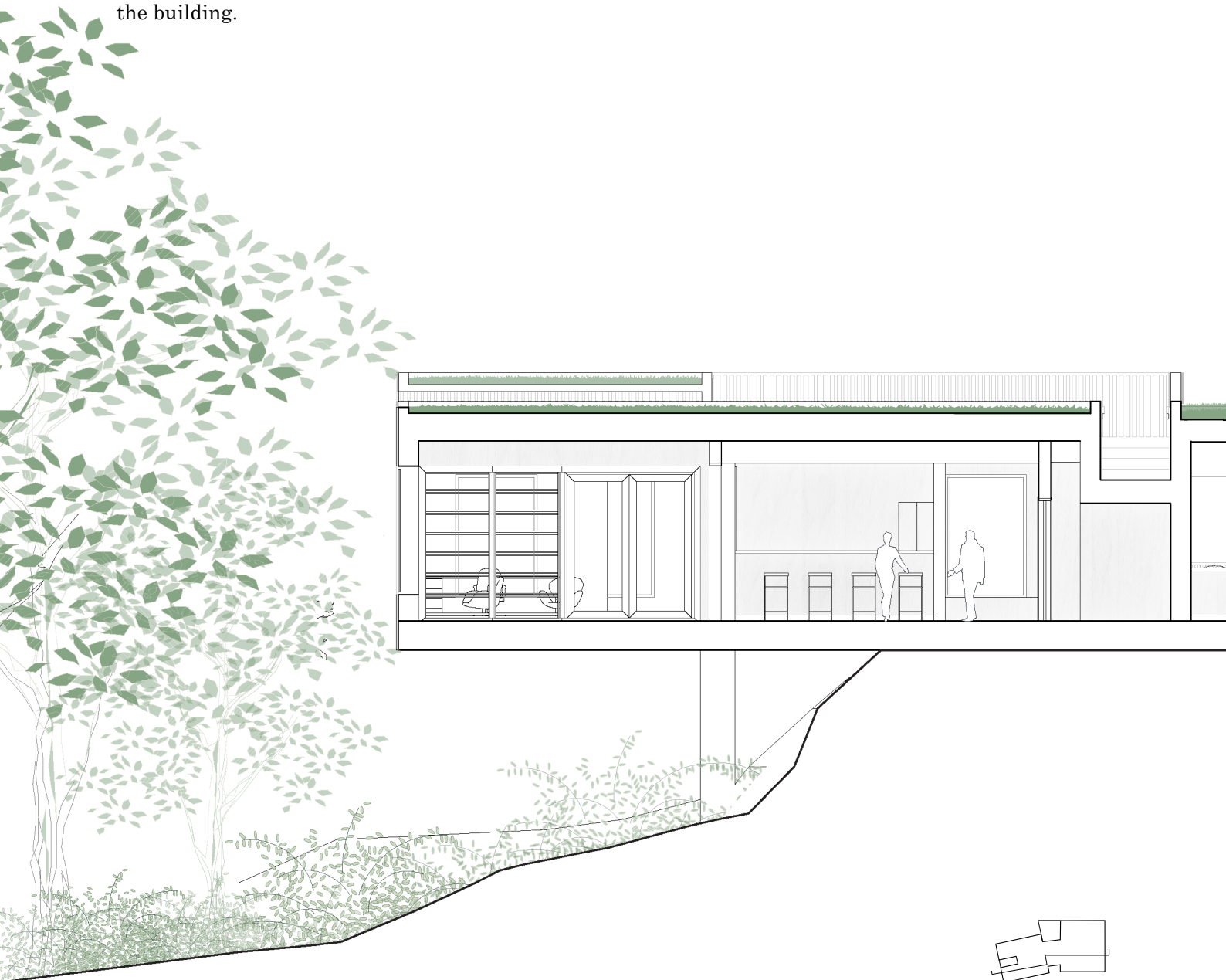


Section A-A

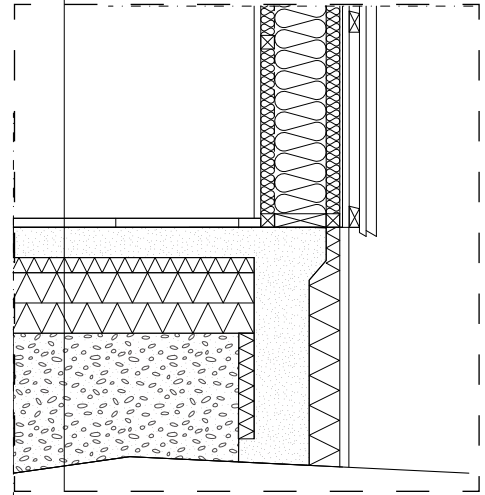
1:100

Following the terrain and hovering

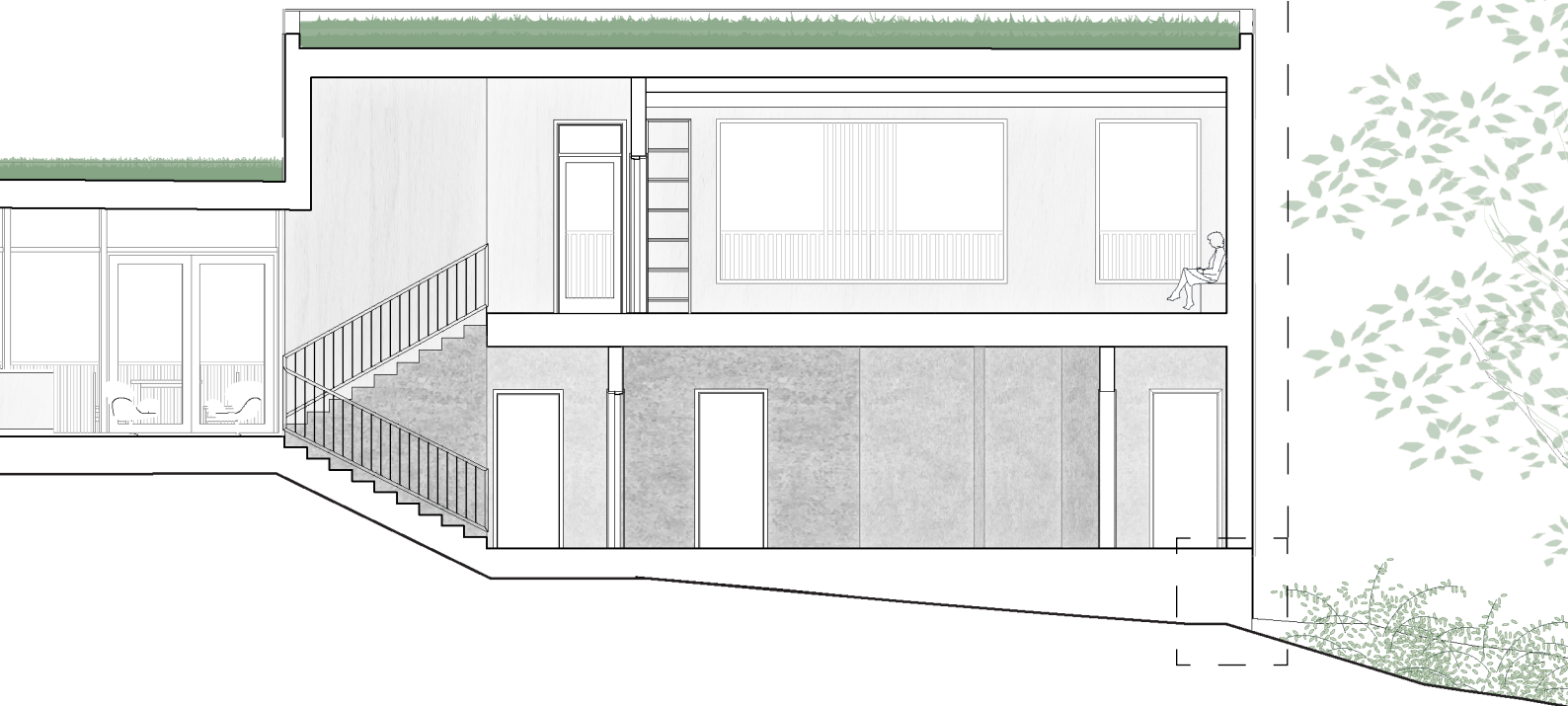
The northern volume has been lowered in order to follow the sloping terrain and the foundation of the volume consists of in situ cast concrete slab on the mountain to minimize the impact on it. The terrain is sloping even more steep at the other end of the building, where the light southern volume is supported by a concrete column, lifting the building and giving it a hovering expression as it stretches out towards the greenery surrounding the building.



Stone - floor material
In situ cast concrete
Insulation
Macadam - draining
Geotextile



Detail - foundation 1:50



South volume

Mind distractive activities

The south volume is containing the spaces for activities aiming to distract the mind. A division between introvert and extrovert activities where found, the same can also be found in the spaces of the volume. An atrium, splitting the volume, and providing outdoor access is dividing the space. In order to create a warm and welcoming atmosphere the walls has been dressed in oak panels, and to contrast this the material of the floor is concrete - revealing the concrete slab that is lifting the building.

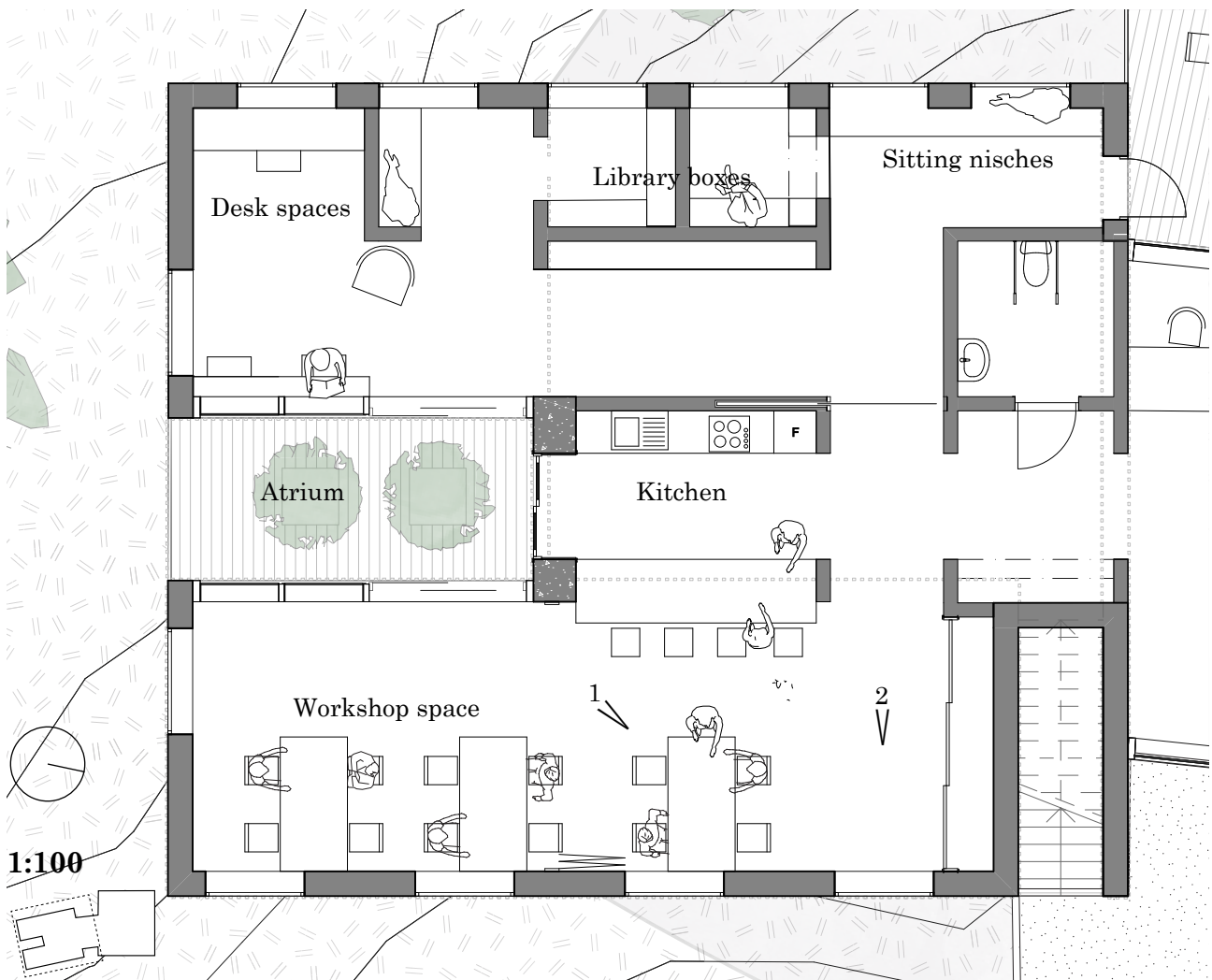
Introvert spaces facing nature

Activities of a more introvert character, as something one would do on ones own, seemed to have a stronger link to views towards nature.

Those spaces, for reading, drawing on ones own or just being has been placed towards the main view in west, overlooking greenery and viewing Skansen Kronan at a distance. The space is disposed in boxes of refuge, for the feeling of being alone with the view, niches for sitting close to the view and desks turned towards nature.

Extrovert creative spaces

Creative activities seemed to have a stronger link to social settings. Flexible space for creative workshops, with storage space below the stair and in shelves by the window to the atrium. Allowing different workshops to be held. The kitchen allows for cooking and baking workshops and is also available for anyone visiting the center.





1.View towards the atrium

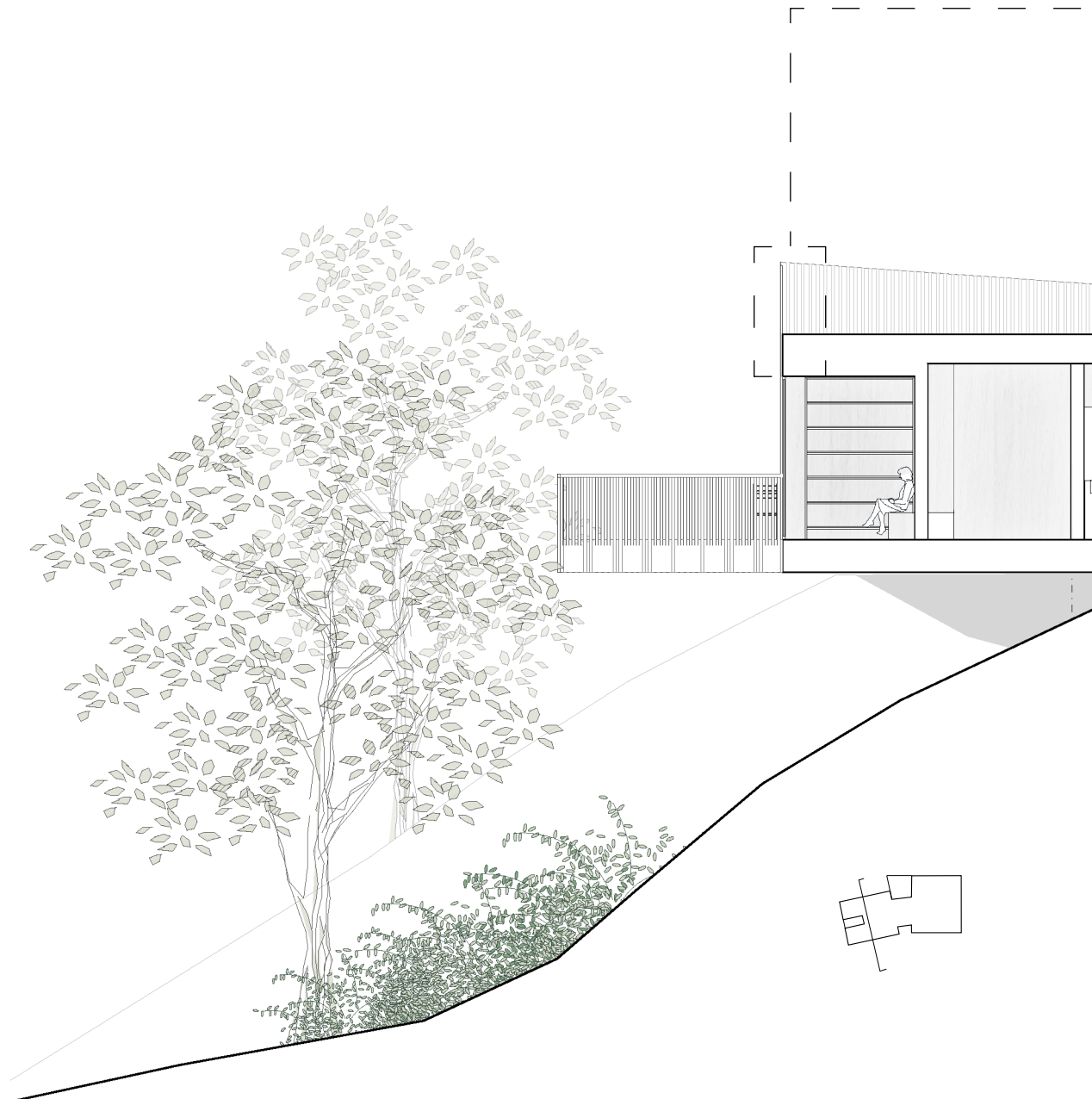


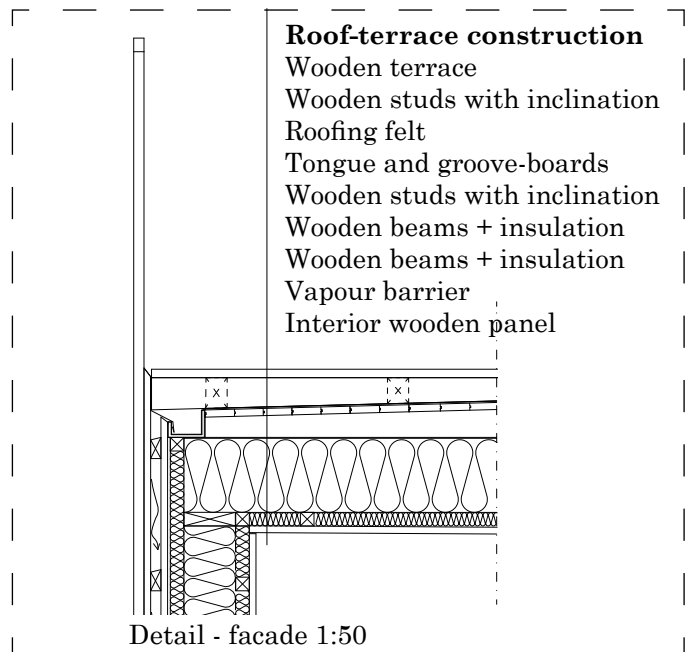
2.View showing a sightline towards nature and Skansen Kronan at a far distance

Section B-B

1:100

The section shows both a refuge situation, within the library box, closest to the view, as well as a social cooking workshop setting in the kitchen. On top of the building the Yoga terrace shows, pointing towards the greenery.





First floor

Yoga studio and planting terrace

A yoga studio surrounded by nature

The yoga studio is surrounded of nature in three directions. The high windows allows views towards the tree tops. A bench is placed along two of the walls, allowing for sitting in the window or just taking an informal pause during the yoga-session, close to the surrounded nature.

Light and airy atmosphere

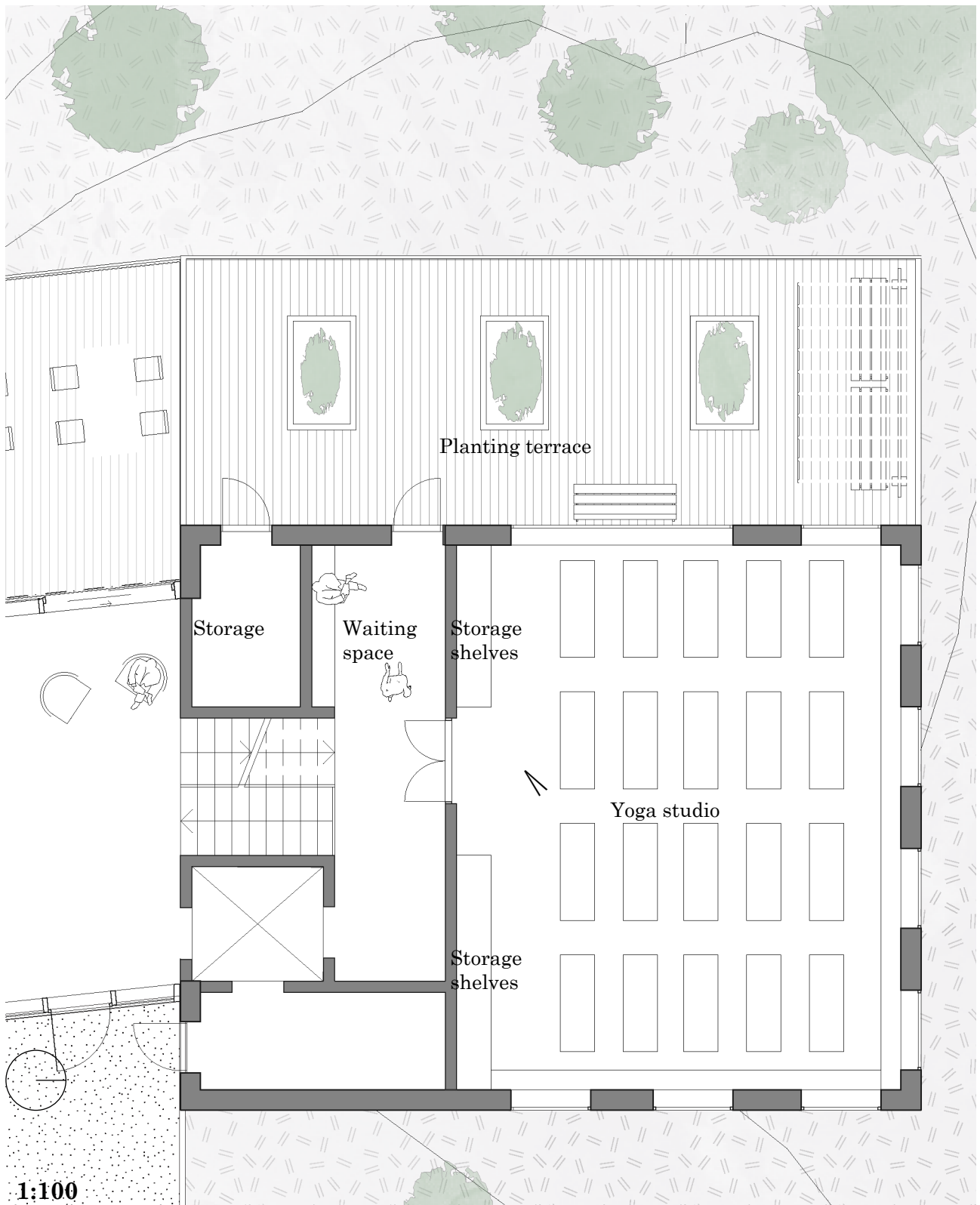
The floor of the studio is covered with oak parquet to make it comfortable to be barefoot on the floor of the studio. To contrast to the warm floor the walls has been dressed in light birch panels to create a light and airy atmosphere in the studio directing focus on the greenery outside the window. From

the ceiling textiles are hanging, as elements to look at while doing yoga, strengthening the light impression within the studio and diverting the thoughts - encouraging the mind to stay in the present.

Shelves for flexibility

Along one of the walls within the studio shelves has been placed. These works as storage for yoga mats, but there is also plenty of room for storing other training equipment, allowing for the studio to be used for other types as training, as circle training or kettle-bell classes.



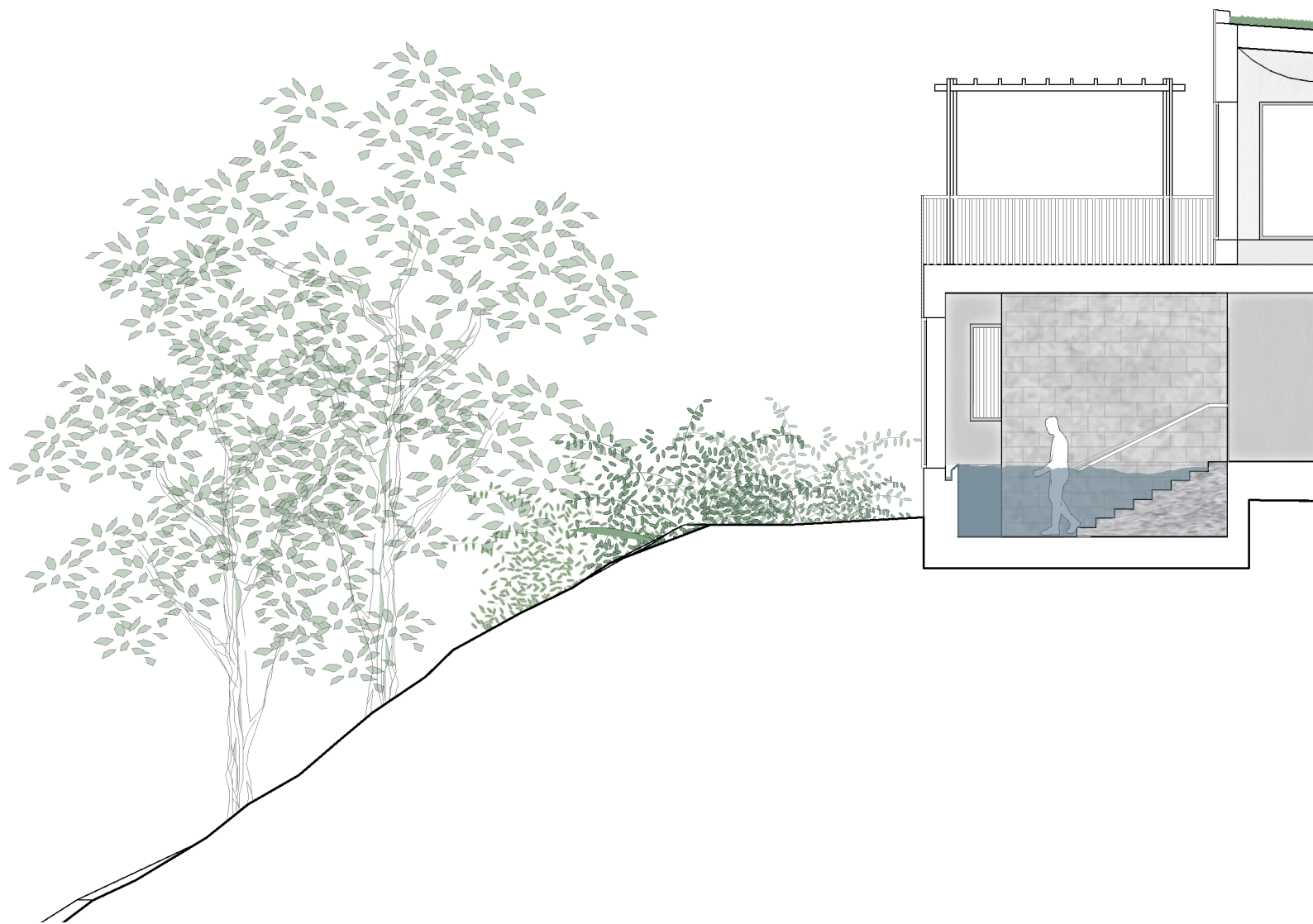


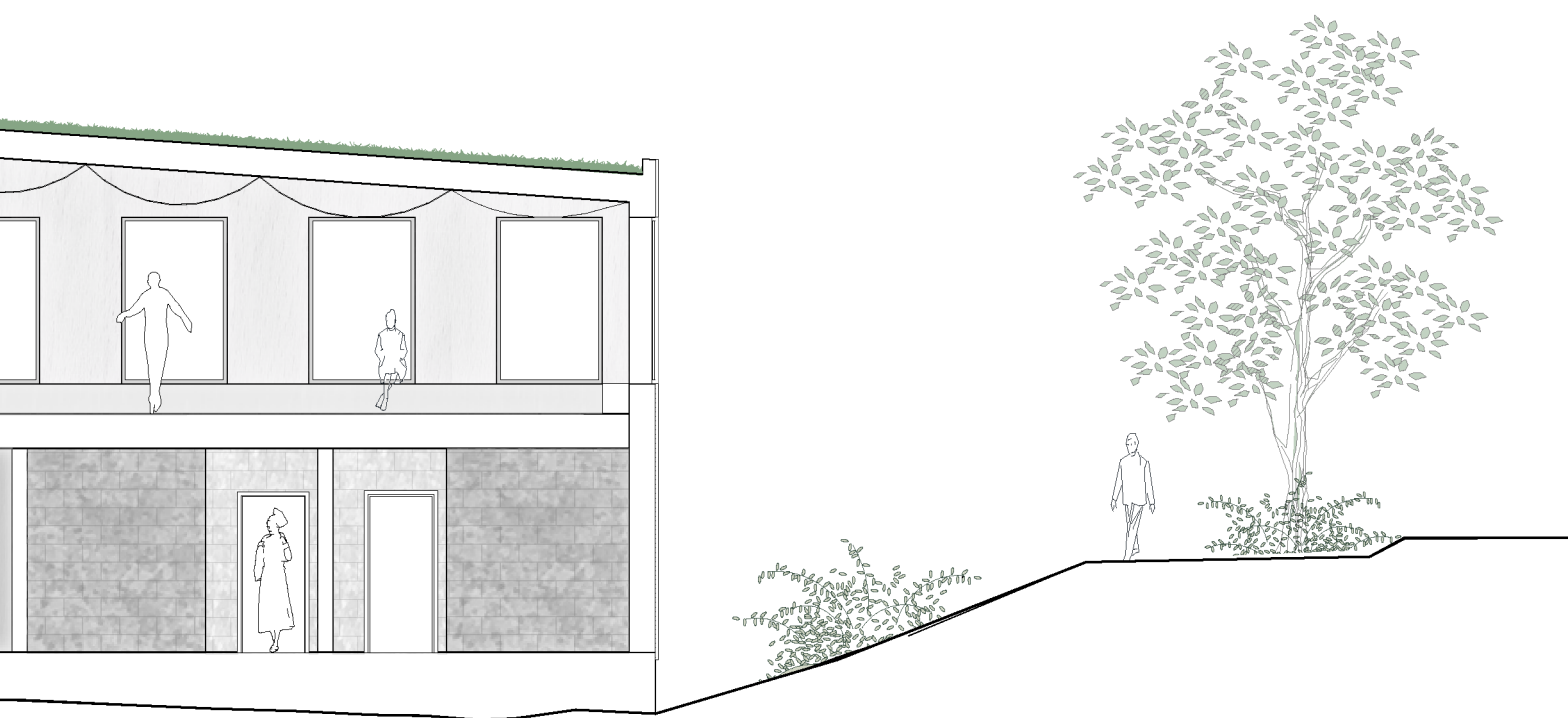
Section C-C

1:100

Relaxation below Yoga above

The elevated position of the yoga studio, gives it a private atmosphere. The light and airy atmosphere contrasts to the heavy materials in the relaxation spaces that are situated one level below, as if it was dug down inside the mountain.





Ground floor

Relaxation department

A spring within the mountain

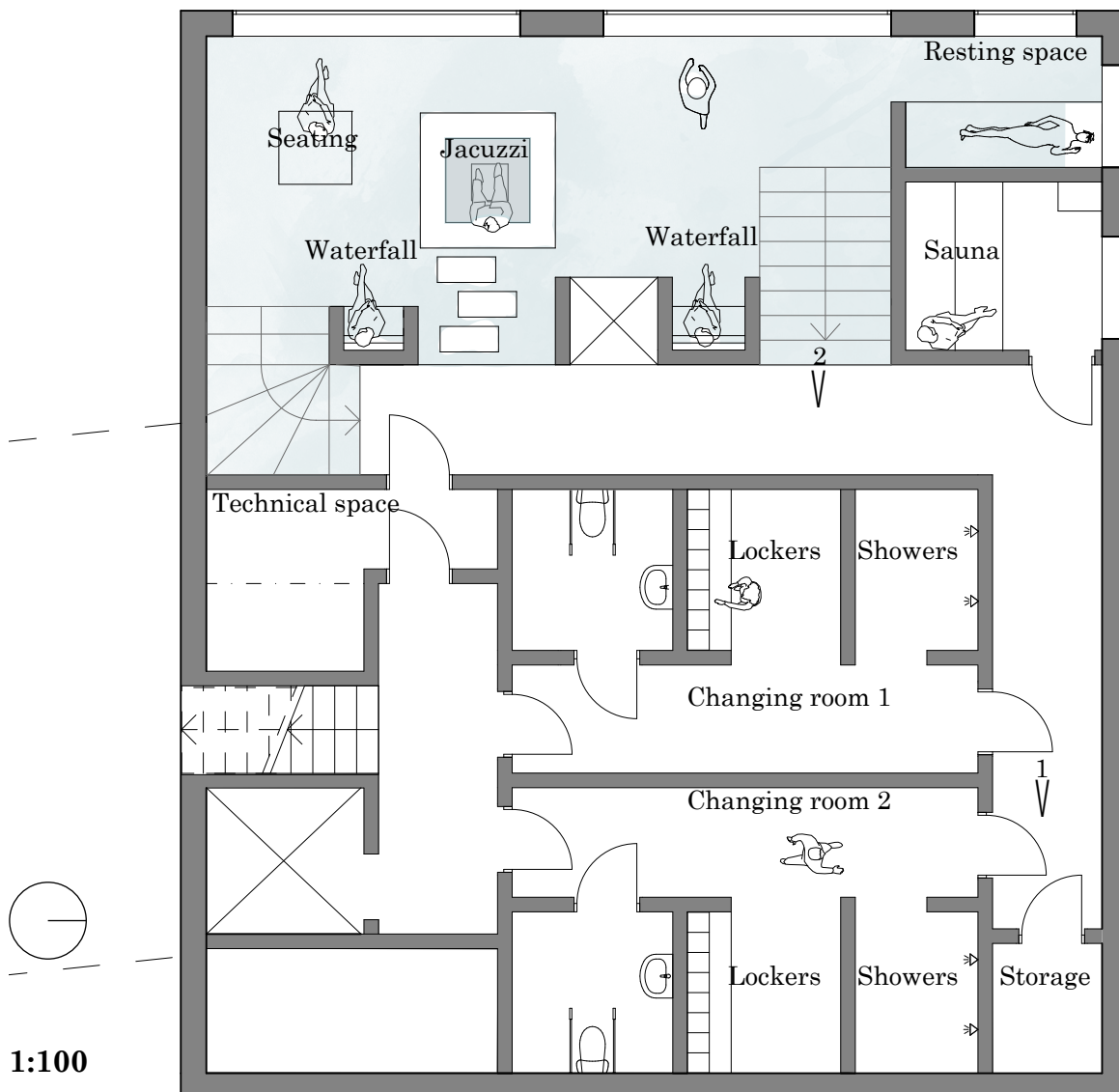
When entering the ground floor one first reaches the support spaces, locker rooms and showers. There are two changing rooms, which one has to pass through to reach the wellness department.

Within the pool area several small refuge spaces has been placed for the visitor to sit and reflect as seatings, jacuzzi, sauna, resting space and small boxes for a waterfall experience.

Smooth and rough granite

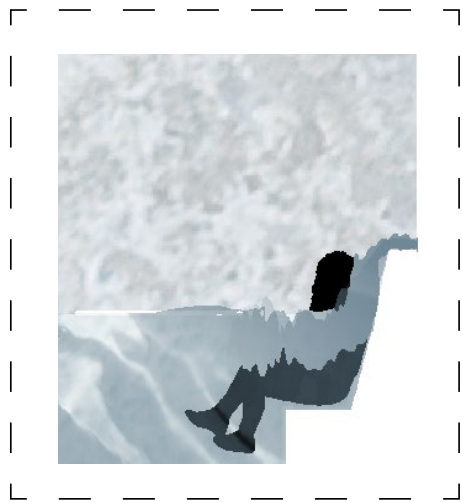
At the level the internal walls are dressed in the same granite as the base of the building, but with a tactile finish as if the stone has been split by forces of nature. The inside of the facade on the level has been dressed in smooth granite as the foundation of the building.

While walking towards the pool area one is led by a light shining from the ceiling, captured by the tactile granite wall.



Waterfall distraction

Niches for sitting are implemented in the pool. While sitting water pours along the body and distracts the mind.



Resting in the water

A space of refuge is hidden behind the sauna, a resting space in the water. For experiencing the lifting effect of water. Floating around in the water while having a view outside.



1. Perspective showing the tactile wall leading to the pool area

Views

Approaching the pool

A framed view towards nature

When arriving at the pool area the view outside is framed between two walls, enhancing the sight line towards nature outside.



2. Perspective showing a framed view in the wellness department

Presentation boards

Thank you for your time!



Discussion

Several times have I been asked: if anyone are that stressed, why would he or she then take the time to visit this kind of facility? I mean that this thesis aims for those that must take time for themselves, where the stress has started to decrease their ability to work and function, starting to limit who they are. Those that have ended up in the situation they are in because of their pattern in life and simply have to start prioritize their health.

An intention has been to design a building it is easy to go, since the arguments are many to go there, but the hinders are few. Because I think that is what someone that has ended up in the situation where they are suffering from stress-related issues needs, to make it a habit to prioritize themselves. It has been an idea that the center is made more accessible through the combination of activities, which allows for a run or yoga first and afterwards relaxation in the pool. Or to go there for the creative work and company combined with it, or for reading with a nice view.

It has been a deliberate move to put the center within the city center, as a symbol of putting the mental illness, often stigmatized, in the center and to honor this kind of building with a central position. I also mean that there is a greater chance that people would visit the center if it has a central location, it makes it easier to create a habit if it is easily reachable. And the nature outside of the city is already there, free for anyone to visit.

What is lack is this kind of facility within the city. Something that is easy to access and there to use for those who need it. Of course there might be a downside in claiming central space. But by placing the building on the edge of the park, it might not disturb it, but rather encourage use of it adding to a feeling of safety and pedestrian flow to it

I have learned along this process that activities can be stress reducing and that it has been shown that so can buildings, through their design - both by connecting to nature, but also through providing possibilities to divert the mind from negativity and stressful thoughts. As the level and frequency of stress increases among us so does our need to take those aspects into consideration while designing our surroundings. This thesis has been aiming towards a user group of those already experiencing stress related issues, but with arising level of stress within society, question is if and how this kind of building could be of use in preventive care rather than when issues has already occurred - and that is something that could be further investigated.

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Panelbild 1
Panelbild 2

