

LINNEA LEIJON
ANISIA GORCHKOV
GROUP 10

VÄSTERVIK

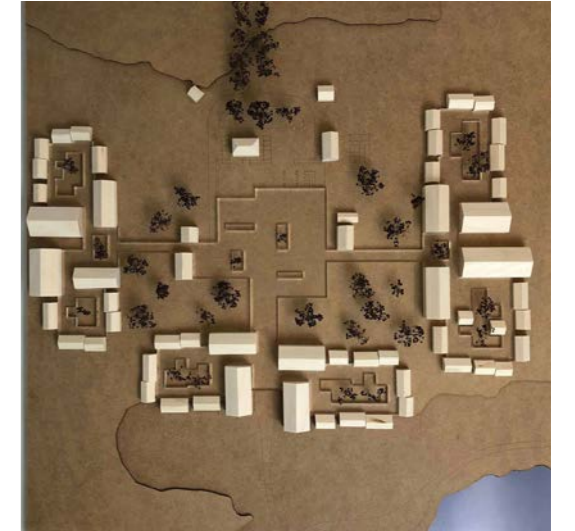
A PLACE TO BE

TEACHING TEAM: ELKE MIEDEMA, CHRISTINE HAMMARLING
EXAMINER: PETER FRÖST

HEALTHCARE ARCHITECTURE STUDIO; FUTURE VISIONS FOR HEALTHCARE,
HOUSING & WORK
ARK 263

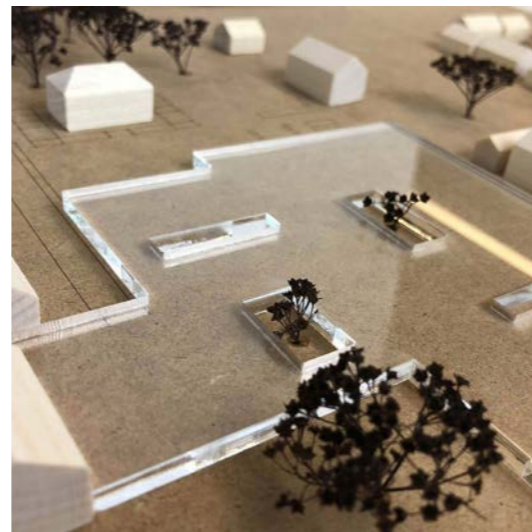
CONTENT

01 INTRODUCTION	13 WARD CONCEPT
02 DESIGN INTENTIONS	14 INPATIENT WARD
03 SITE ANALYSIS	15 VIEW FROM DAYROOM
04 VOLUME CONCEPT	16 VIEW FROM LAKE
05 CONTEXT	17 LEVEL OF INTERACTION
06 SITEPLAN	18 A PLACE TO BE
07 GABLE AS A MOTIF	19 IN & OUT-PATIENT
08 PROGRAMME	20-23 PROCESS
09-10 QUALITIES OF SPACES	24 EVIDENCE BASED DESIGN
11 HEALTH PROMOTION LAYER	25 HEALTH PROMOTION
12 A WALK THROUGH THE ENTRANCE	26 SUSTAINABILITY
	27 FUTURE PROOFING



To design a home in a bigger structure is a challenge. It is more than just a roof, four walls and floors - the subject is deeper than that. A home is a place that reflects the people living in it, their identities, their habits, their story. A home is where one can laugh, be in silence and recharge - a place to be alone but also together. A home is a place where you belong.

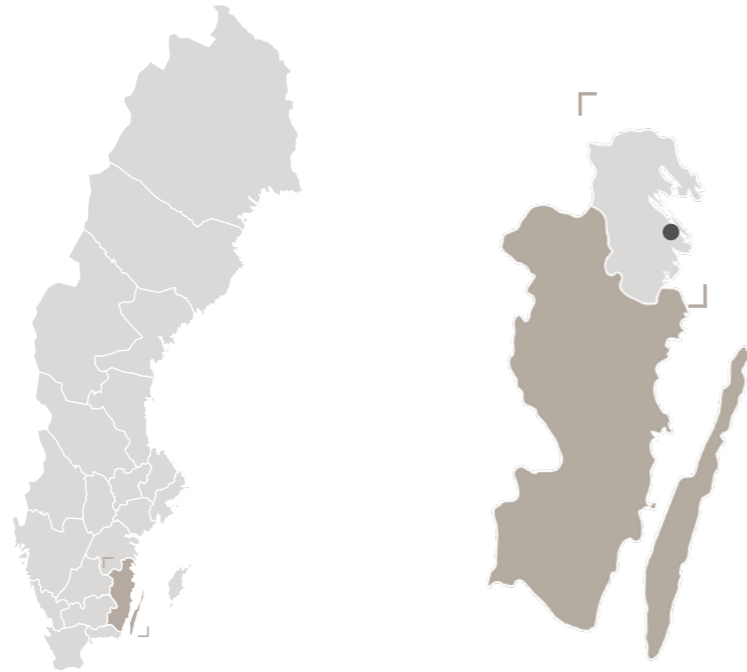
A home is a place to be.



INTRODUCTION

BACKGROUND

This project included planning for a future expansion of the psychiatric facility in the city of Västervik in Sweden. The facility was to include six wards with specific patient needs.



SWEDEN

COUNTY OF KALMAR



PLACEMENT ON THE SITE

The patients needs has been central - being close to nature, feeling at ease and the sense of controlling ones own home environment. We saw a need for the possibility of patients choosing their own level of interaction, both internally but also in a bigger context, at their final steps to recovery. This led us to the conclusion that the patients would have a shorter healing process if their needs were implemented in our project.

Västervik Hospital is located 2 km from our current project site. The lake as a central motif, and the vegetation of the site is an important asset.

Our task began with the choice of two potential sites of expansion for the psychiatric clinic. We chose the rural site because of the typology of the existing low-scale buildings, but also because of the healing effect nature has on the patients.



DESIGN INTENTIONS

VISION



STRATEGIES



DEINSTUTIONALIZE

Our intention is to deinstitutionalize the psychiatric facility by embracing the typology of solitary volumes and integrating it amongst the current buildings on site. The low-scale buildings with their gables, tactile materials and pitched roofs create a less repetitive area with a variety of spatial combinations and outlooks to the lake and the nature.

PATIENT CENTERED CARE

By offering private & public zones, patients get an increased possibility of choosing their own level of interaction in every stage of their journey to wellness. Integrating healing gardens for daylight and visual contact decreases the levels of stress for both patients & staff. This also creates a serene atmosphere.

By giving the facility a local context and making patients feel less like a patient, the goal is to encourage people to use the health promoting activities and take their first step back into the society with ease.

HOME-LIKE

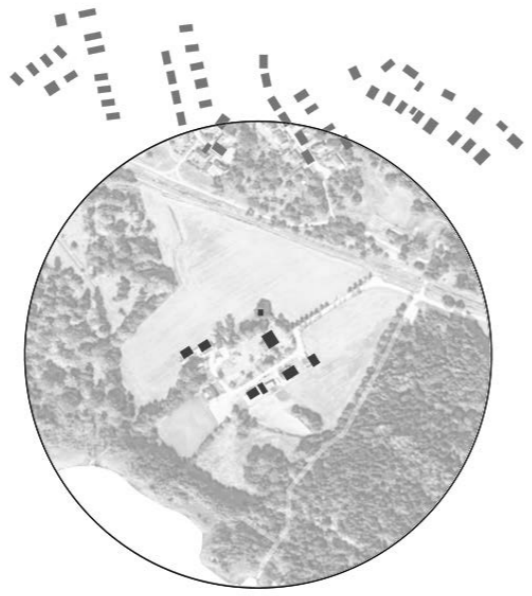
The patient will benefit if, during their stay, the facility feels like a home with home-like qualities and spaces. Since a big number of patients are staying in the facility over a longer period of time, it is important to offer varying atmospheres and rooms. The patients feeling of belonging to a personal context and identity is important for a positive stay.

SITE ANALYSIS

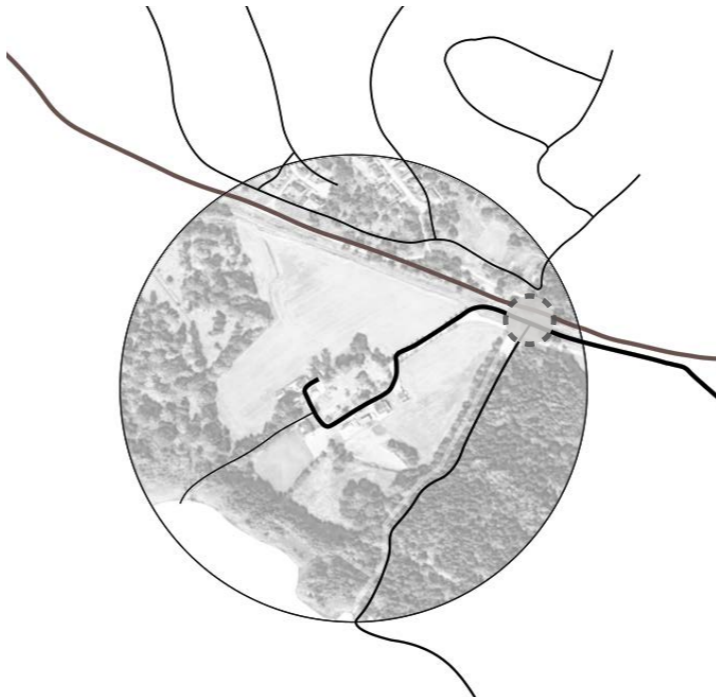
STRUCTURE OF SITE



SITE



EXISTING BUILDING STRUCTURE



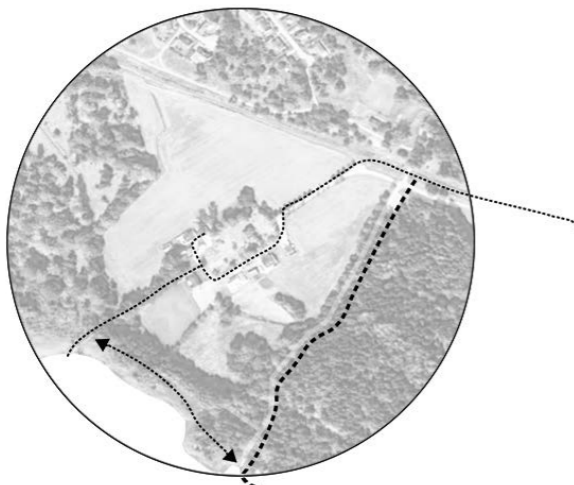
ROADS OF IMPORTANCE + PLANNED NODE

The site is bordered by one of the main roads, leading to the Västervik city core and the current hospital.

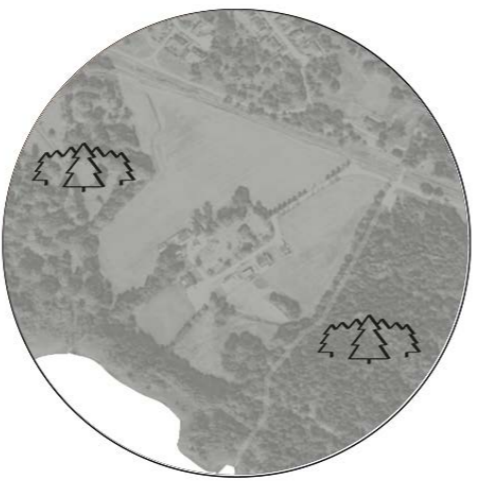
On site there are some low scale buildings with current housing, which we decided to keep, since they play a crucial role in our concept of patient centered care.

Alongside this road is a train track, where slow-going trains currently runs from the city to Linköping only 6 times a day. Our intention is to enhance the possibility of traveling by public transportations and by bike, this by planning for a future traffic node (see diagram).

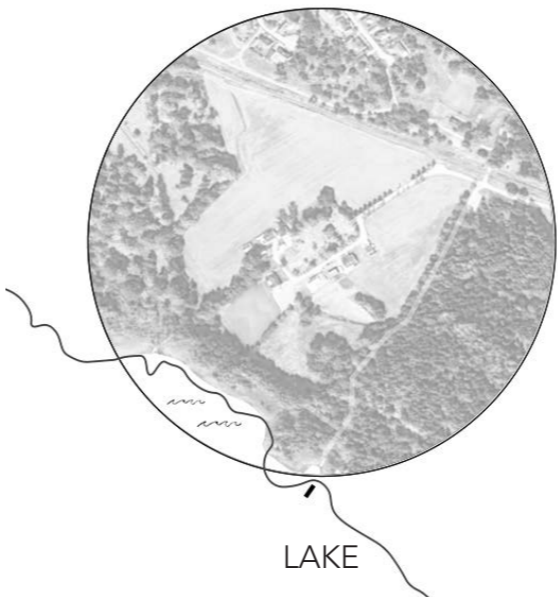
NATURE ASSETS



PATHWAYS + PLANNED CONNECTIONS



GREEN STRUCTURE

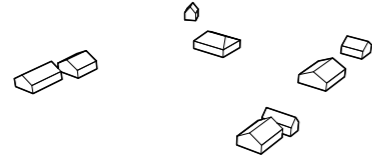


LAKE

Our chosen site is close to nature and to the lake. Our ambition has been to enhance these qualities and make them accessible for more visitors in the future.

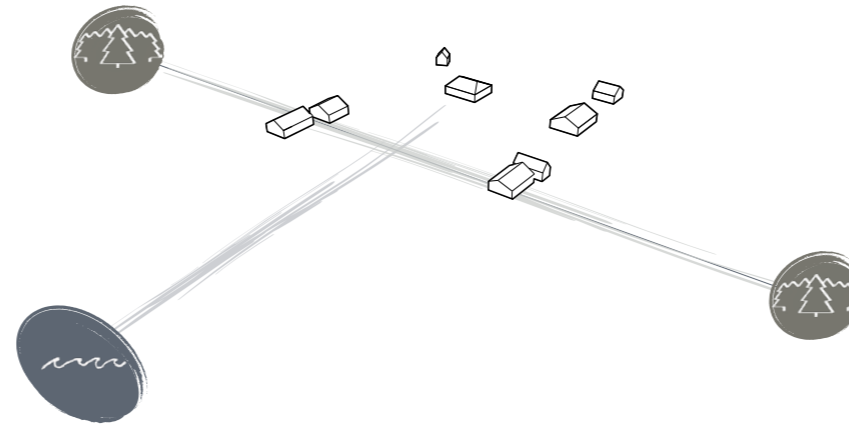
Another point of interest is the lakeside of the lake. Today, there exists a walking road that leads from the main road down to a place by the lake, with clear signs showing the some spots are being used from time to time. We plan to enhance and activate that area with accessible spaces and health promoting activities.

VOLUME CONCEPT



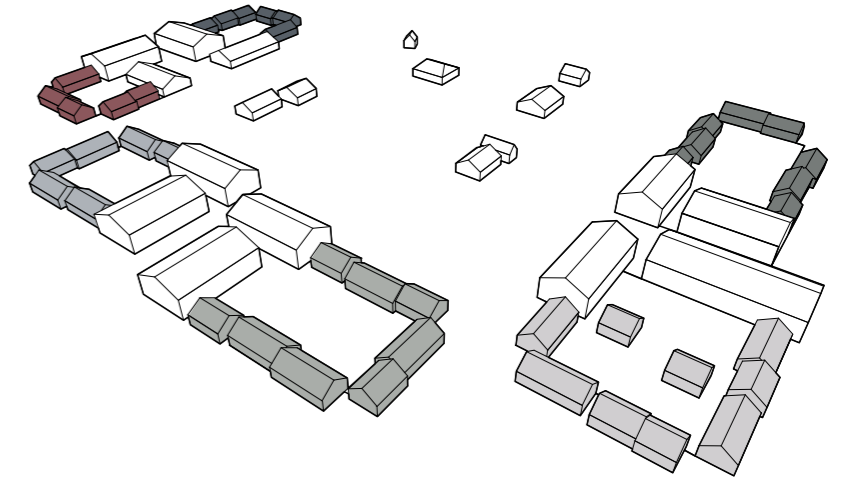
1. EXISTING BUILDINGS

To connect to the local context, we preserve the existing houses and let them be a part of the structure to keep the character of the site.



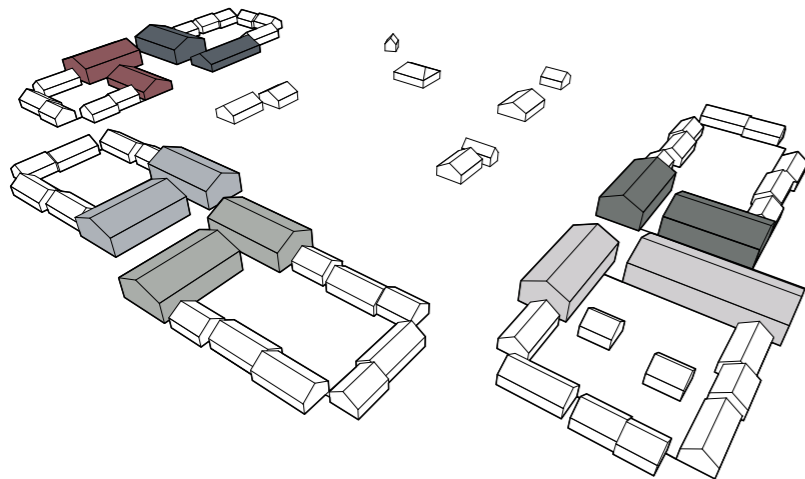
2. VISUAL NODES

To create a facility where patients can be at ease, we enhance the views towards nature. The important visual nodes creates two axes, with the aim to highlight the nature and lake on site and visually bring nature into the facility.



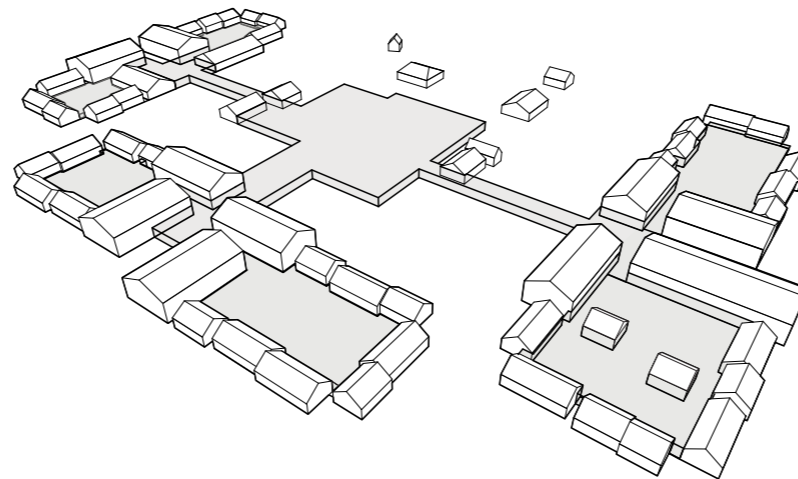
3. HUMAN SCALE

We bring in the small scale dwellings, with pitched roofs and gable motifs into the site and cluster them in small groups which will form the wards.



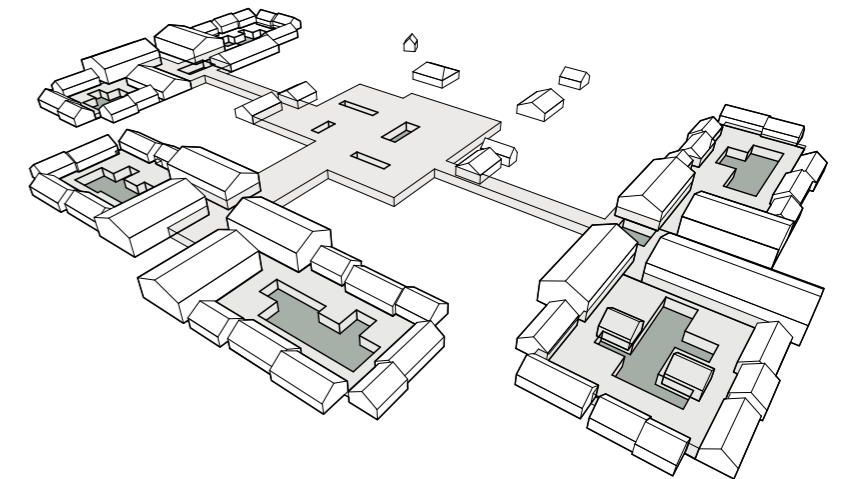
4. FUNCTION STRUCTURE

We add two function buildings in every cluster/ward. These are larger in scale than the dwellings for wayfinding.



5. HEALTH PROMOTION LAYER

We add a communication space as a health promoting layer that stretches to each cluster and integrates the small existing houses.



6. HEALING GARDENS

We bring in nature physically by placing gardens in every cluster/ward and also in the health promotion layer.

FUTURE CONTEXT



FARMERS MARKET

1:1000

The farmers market is a public and mobile space, which is centrally located next to the main entrance of the facility. Here, the annual harvest is being sold at the market and brought to the nearby restaurant and cafe. It is a local point for gatherings amongst staff, visitors from nearby areas, and to some extent, patients.



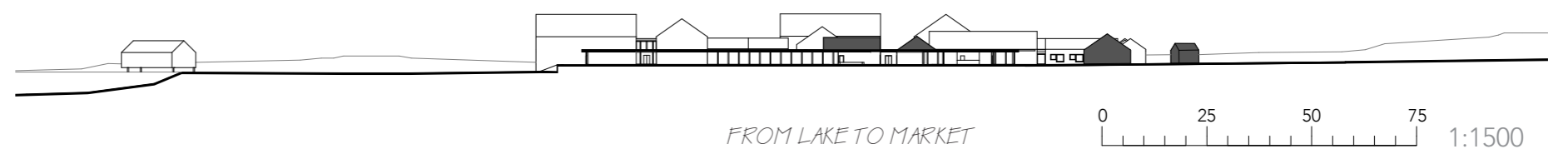
LAKESIDE

1:1000

The lakeside is lined with a running track. Alongside the track there are several health promoting features such as a sauna, summer kitchen, outdoor gym, and docks for meditating or swimming. The insect hotels are also here. They contribute to the preservation of the biodiversity on site.



1:1500

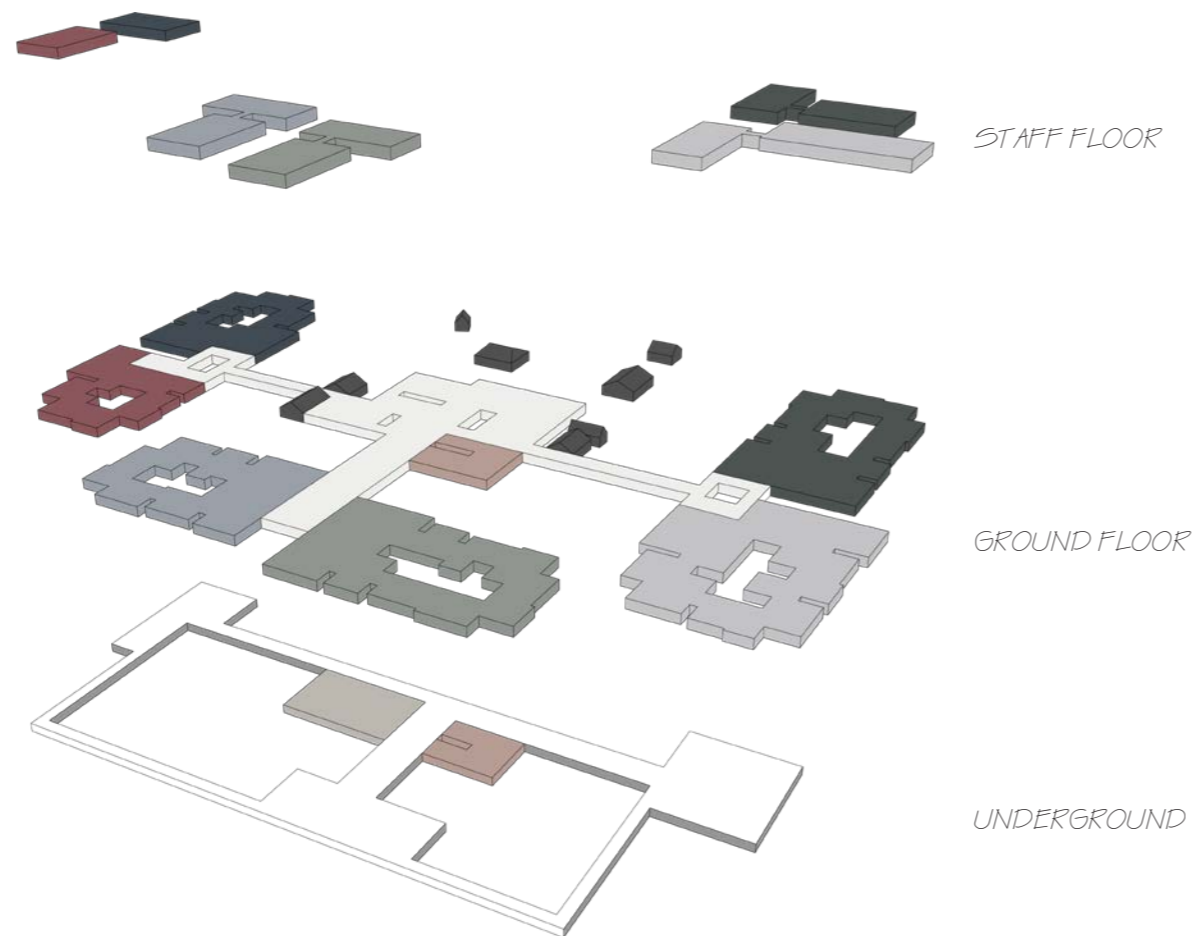






0 5 10 15 20 25 1:500

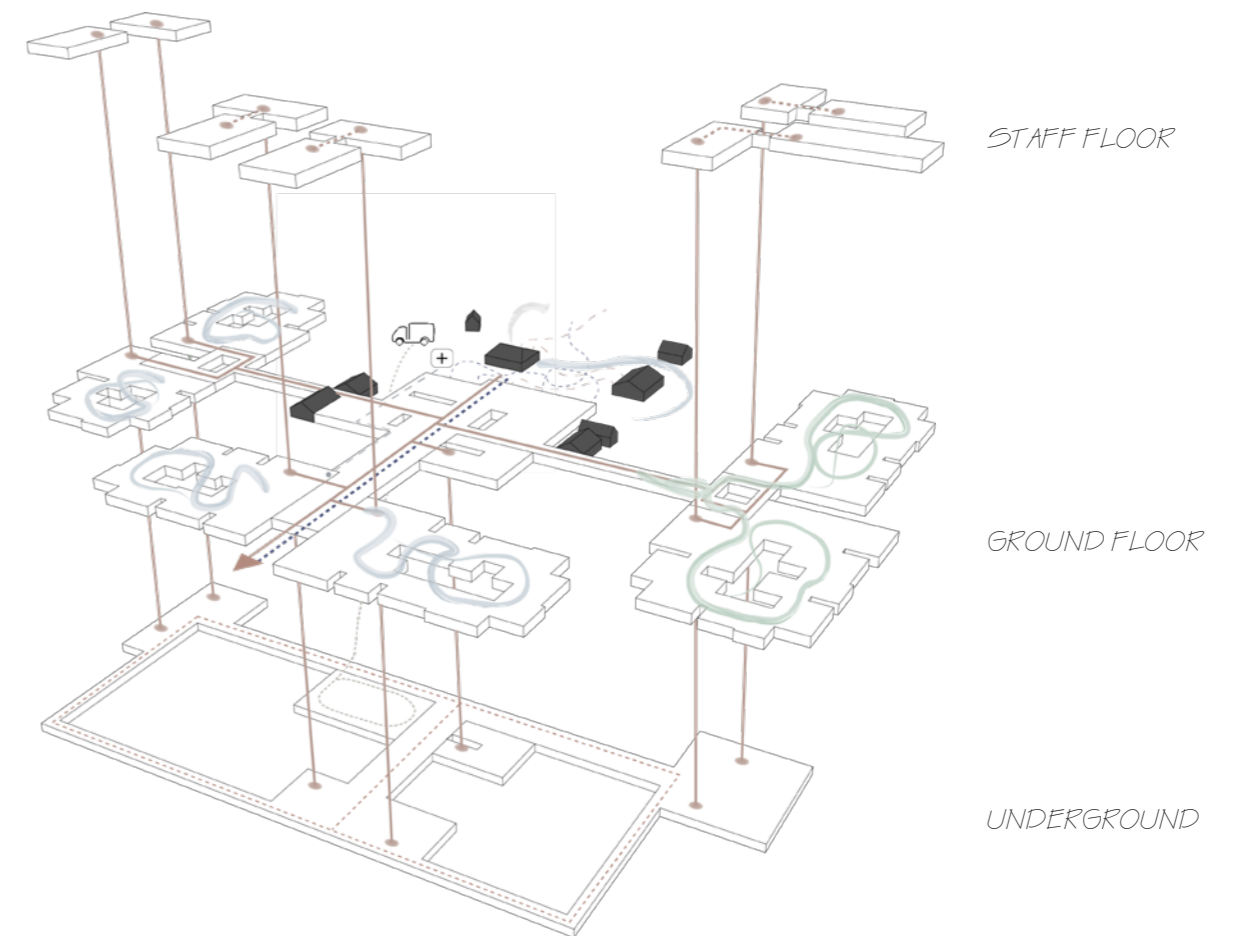
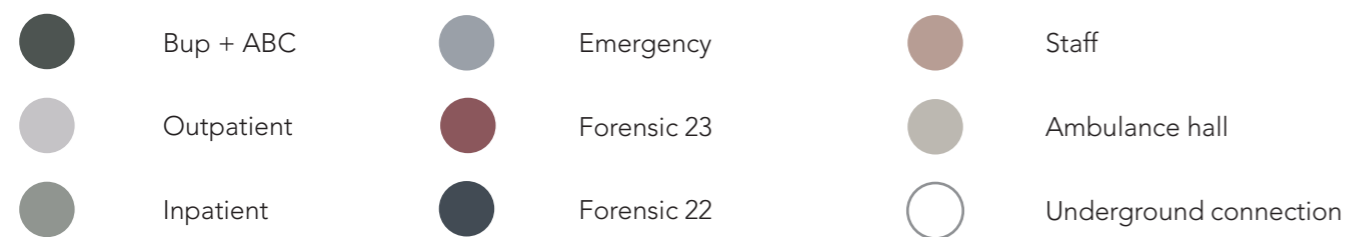
PROGRAMME



PROGRAM & WARDS

We chose the site close to nature with the intent to create a serene and spacious facility of 23.500 sqm, with all the light and nature needed to help patients on their journey towards wellness. Our site allows us to plan for a low scale environment where patients feel at home, with the building volumes spread out, framing the lake and forest for best possible outlooks.

The system of our facility is based upon clustered wards, which are all connected with one another in the basement floor. On the ground floor, wards are connected two and two; Forensic 22 and 23, Inpatient and Emergency, and Outpatient and BUP + ABC. These are connected and placed according to the conditions of the site. All buildings have one floors, except for the function houses.



FLOWS

The structure allows straight flows. The gardens play the role of a roundabout - to create an endless flow with no dead ends. The same principle applies both inside the wards and in the health promotion layer. The flows of people with different agendas is projected above. We have the staff, who enters through the main entrance in the northeast and walks through the health promotion layer to their specific ward, or to the staff spaces.

The inpatients are mostly circulating within their specific ward, and the visitors have the opportunity to walk towards the lake through the building. Emergency and ambulance drive down to the ambulance hall in on the underground floor.



DIFFERENT *QUALITIES* OF SPACES



HEALTH PROMOTION LAYER

The health promotion layer is a multi space, where the overall atmosphere is light and relaxing. Here, there is a possibility to sit in the library and read a good book by the integrated shelves. One can also play chess with their colleague in the reception lounge or take a stroll around the healing gardens.

FARMERS MARKET

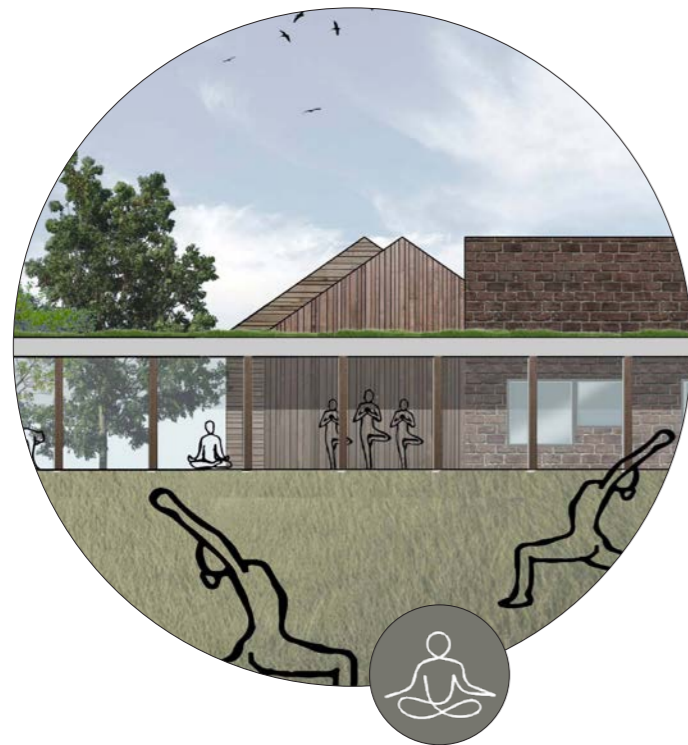
The farmers market is an open space, that occasionally takes place and gathers people together to sell the harvest of locally produced crops. The flow of people is larger than usual, de-stigmatizing the facility and encouraging everybody to participate.

IDENTITY

A home is a place where you have the power of your own environment. This is also where one's identity is represented by the visual influences.

The small dwellings create a visual belonging for the patients by varying facade textures, having their own doormat, room number and their own small place to be.

STRATEGIES



DIFFERENT *QUALITIES* OF SPACES



LAKE VIEW

The view over the lake, both from wards and from the health promotion layer is a soothing element for people at the site. By bringing the lake as a motif into the facility the patients recovery time decreases. This to replace the feeling of an institution with a close-to-nature feeling.

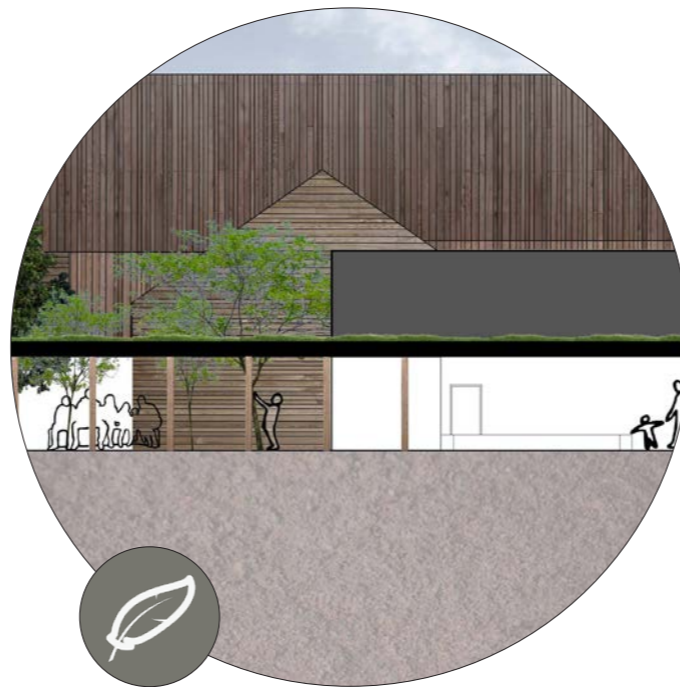
LIGHT STRUCTURE

The health promoting layer is a transparent structure with wooden beams that function as sun shading and as a part of the inside spaces. Common for the structure is that it allows the materials of the solitary dwellings to follow to the interior. This softens the distinct lines between inside and outside.

HUMAN SCALE

The typology of the patient room and consultation room units is addressing the human scale, making it comfortable to approach and befriend the solitaires. The gables and the pitched roofs remind of a home-like shape. Each facade material follows into the interior and gives it a character.

STRATEGIES



0 5 10 15 20 25 1:500

HEALTH PROMOTION LAYER

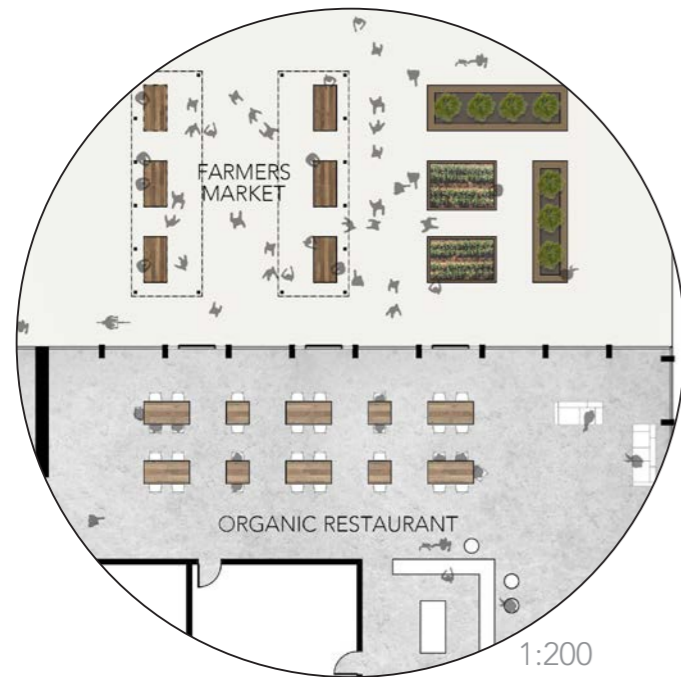
LIGHT STRUCTURE

From a distance the structure appears very light and transparent and highlights the solitary volumes. By bringing in the physical nature with healing gardens, the structure opens up and blurs the line between outside and inside by letting the light flow through the building. By creating direct visual contact with our nodes; the forest and the lake you can easily find your way through the structure when entering.

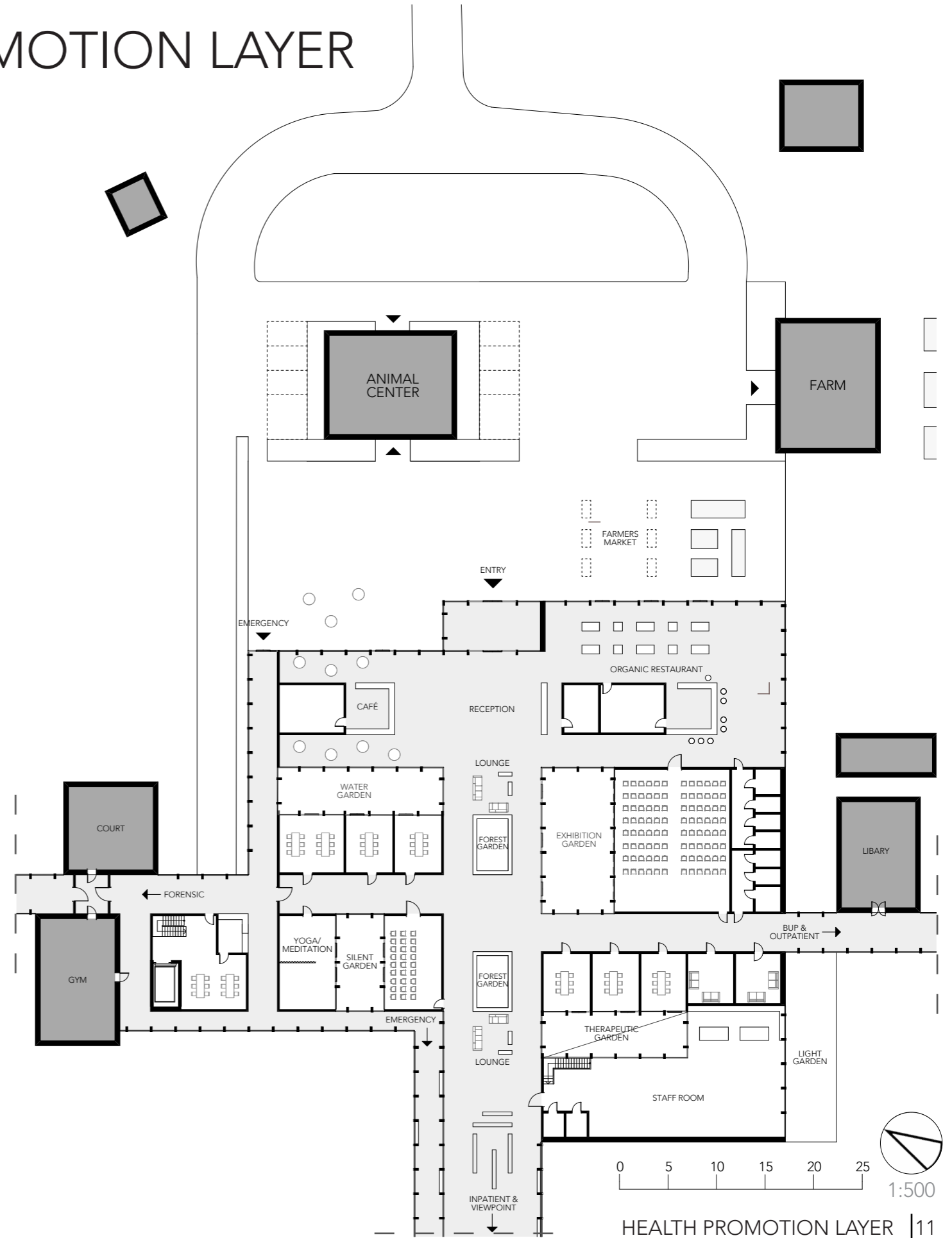
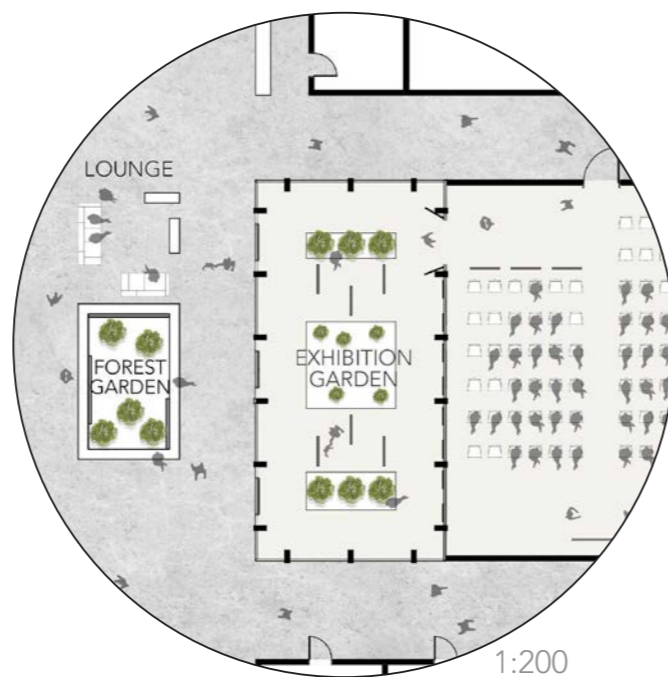
FINAL STEP OF RECOVERY

The public spaces can be used in many different ways, the aim is to create a flexible space that has a soothing effect on everybody that enters it. Here you come as a person, not a sick patient. Among the functions you can find here (conference rooms, lecture halls, meditation space, staff space) there is a restaurant and a café connected to the farm where the patients can participate in their treatment as a final step of their recovery. The existing houses are integrated and directly connected to the layer. They have specific functions depending on their original placement.

FARMERS MARKET



EXHIBITION GARDEN & HALL

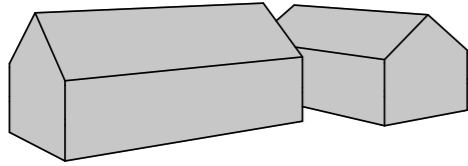




WARD CONCEPT

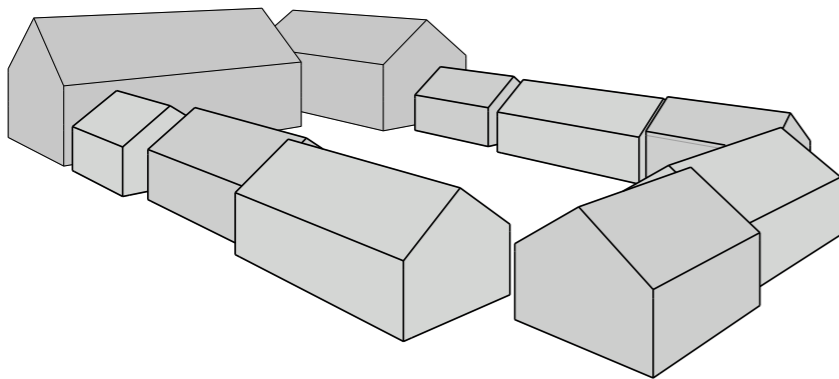
FUNCTION SOLITARIES

Every ward has two bigger solitary buildings, which contain separated staff and patient functions. These houses are one to three stories high. They bring the landscape of structures more variation and stand out for wayfinding.



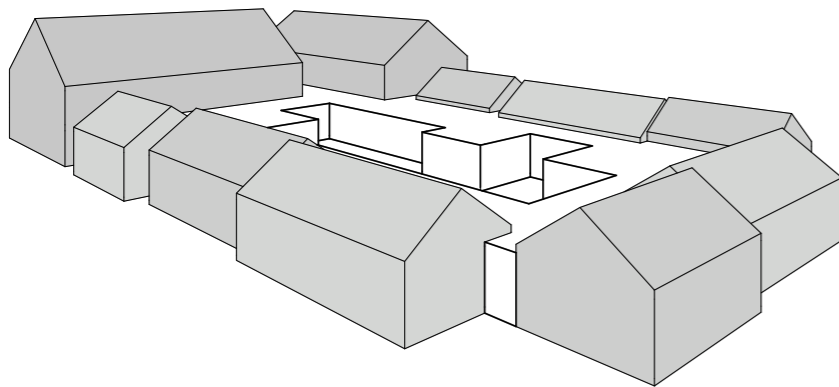
SMALL DWELLINGS

Patient rooms are located in smaller scale dwellings, with 2-4 patient rooms in every house. The dwellings are placed to fit into their specific context on site, creating hubs inbetween with views to nature.

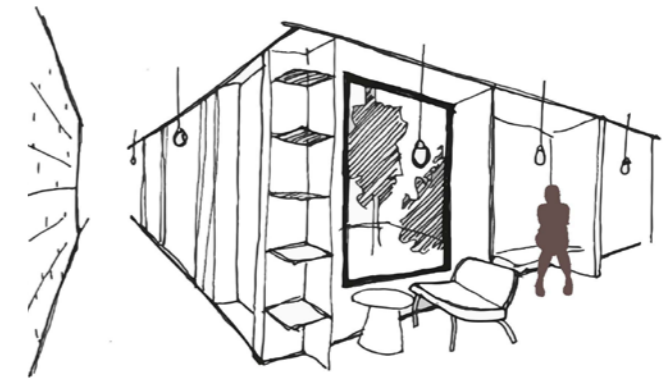


HEALTH PROMOTING LAYER

The public health promotion layer continues into the ward but here it goes from public to semi-private. Here the layer shapes the garden and creates spaces with different atmospheres and functions, and also promotes social well-being.



ATMOSPHERES



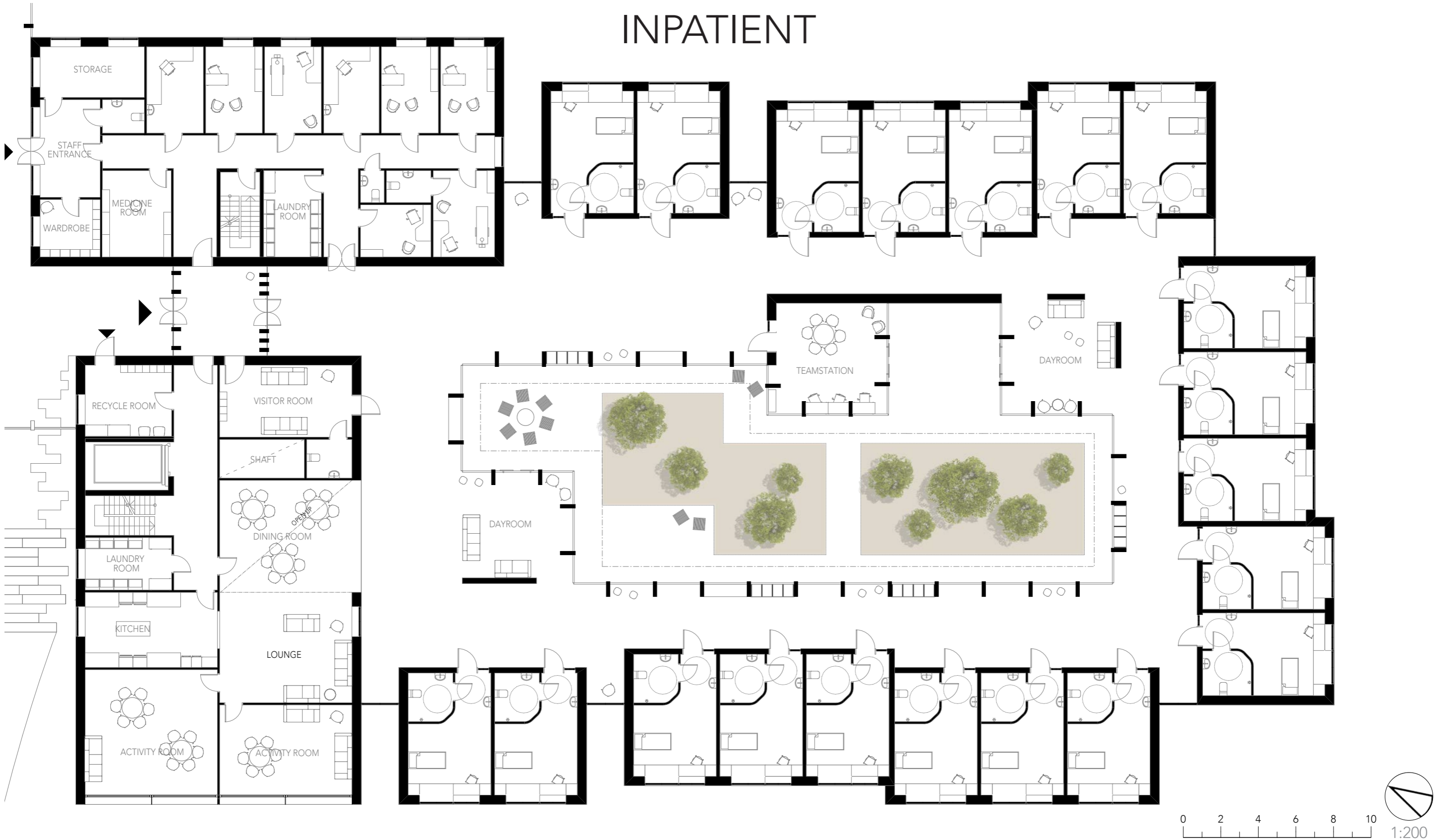
FOCAL POINTS

To create a home-like environment for the patients we create small dwellings for patient rooms, larger houses with staff and patient-functions and a garden in the middle. To enhance the solitary volumes hubs are created around the ward, in order to give several varying outlooks to nature.

The larger volumes adds a dynamic to the scale, when possible the gables opens up and take advantage of the nature with the aim to brings versatility in the choice of spaces within the ward, with a view out to the nature and the lake.

The health promotion layer goes into each ward, to create a communication space for both staff and patients, where there are a broad variety of spatiality's, and different levels of social interaction. These 3 elements create a gradient of different characteristic spaces in each ward, keeping the patients stimulated during their stay at the ward.

INPATIENT



FLOORPLAN FEATURES

The floorplan is designed as a cluster with a circulating flow around the garden. The spaces that are created between the beams towards the garden are used for integrated shelves for a library, benches or armchairs.

The team station is situated in the middle and is integrated into the garden in order to have the best overview for staff. At ground level, one of the function houses opens up towards the communication space and upward, creating a two storey atrium which holds the dining area. The two day rooms for patients are also integrated into the garden, to be as close to nature as possible.



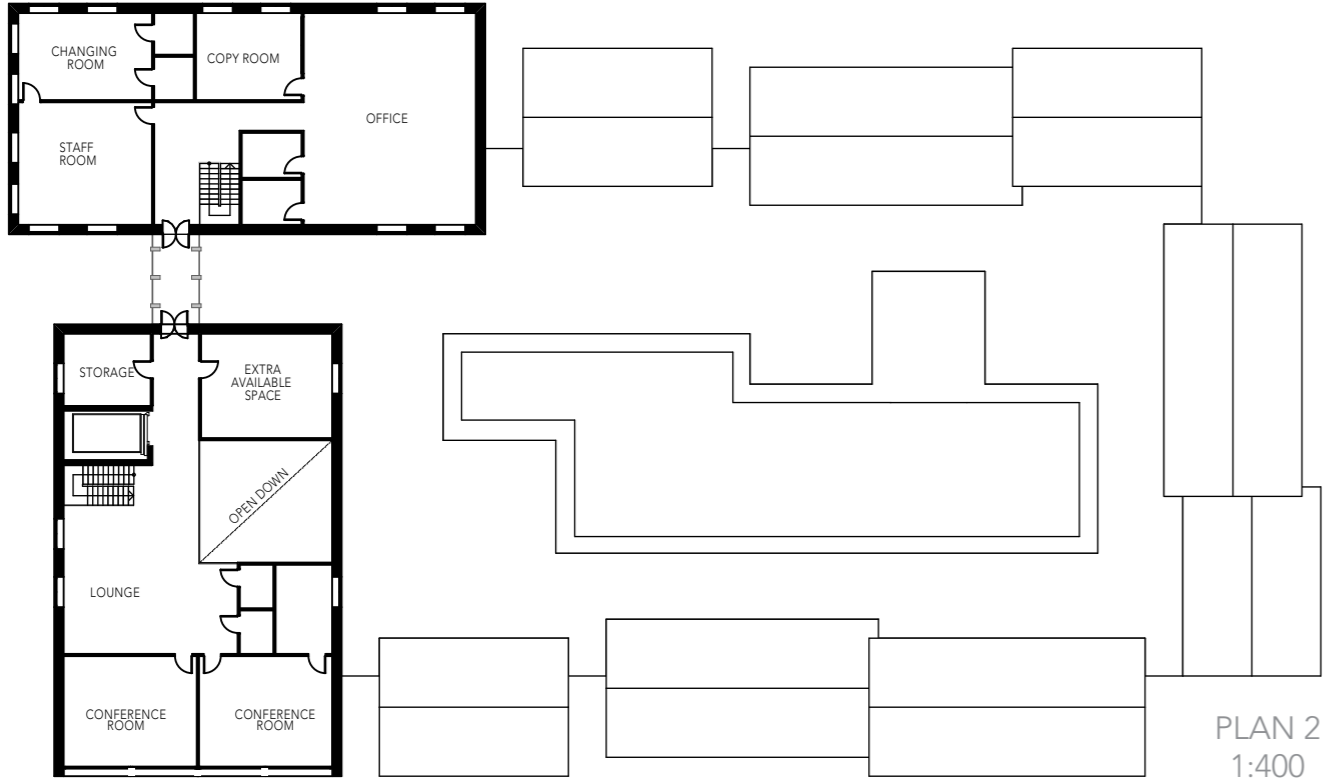
VIEW TO LAKE

MATERIALS

The brick & wooden facades express the firmness and the everlasting nature of the houses. With tactile material it is possible to define different ambience and create different healing atmospheres. The glass structure opens up between the dwellings to enhance the solitary volumes and create views towards the lake. The houses towards the lake are elevated to create some distance between the activated area by the lake and the patients.



TACTILE MATERIALS



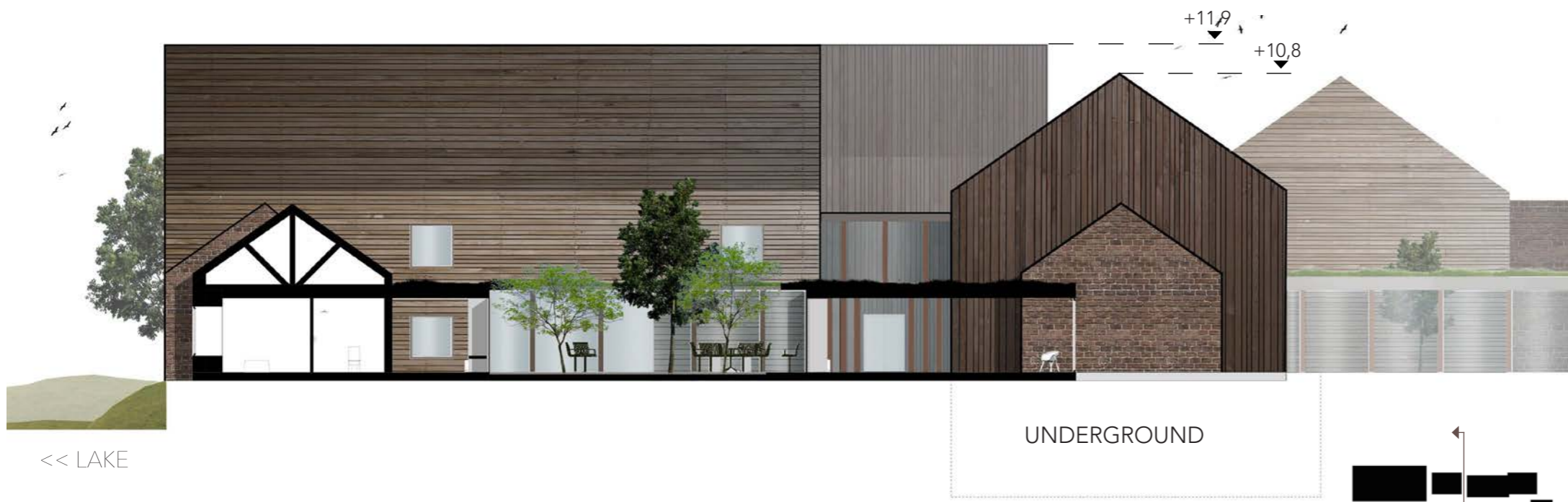
PLAN 2
1:400



1:200 0 2 4 6 8 10

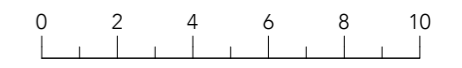
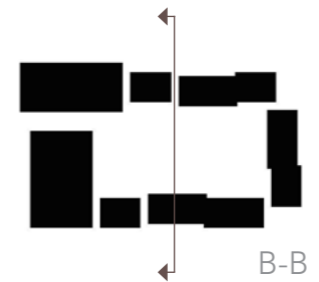
VIEW FROM LAKE | 16

LEVEL OF INTERACTION



GRADIENT

By working in section, we wanted to form a structure that creates a gradient from private to public. The functions are arranged so that the private patient rooms are placed so the qualities of nature enhance the healing process. The spaces from the patient room to the garden has different levels of privacy. It is a place to be alone, but also together. Here you can choose your level of interaction.

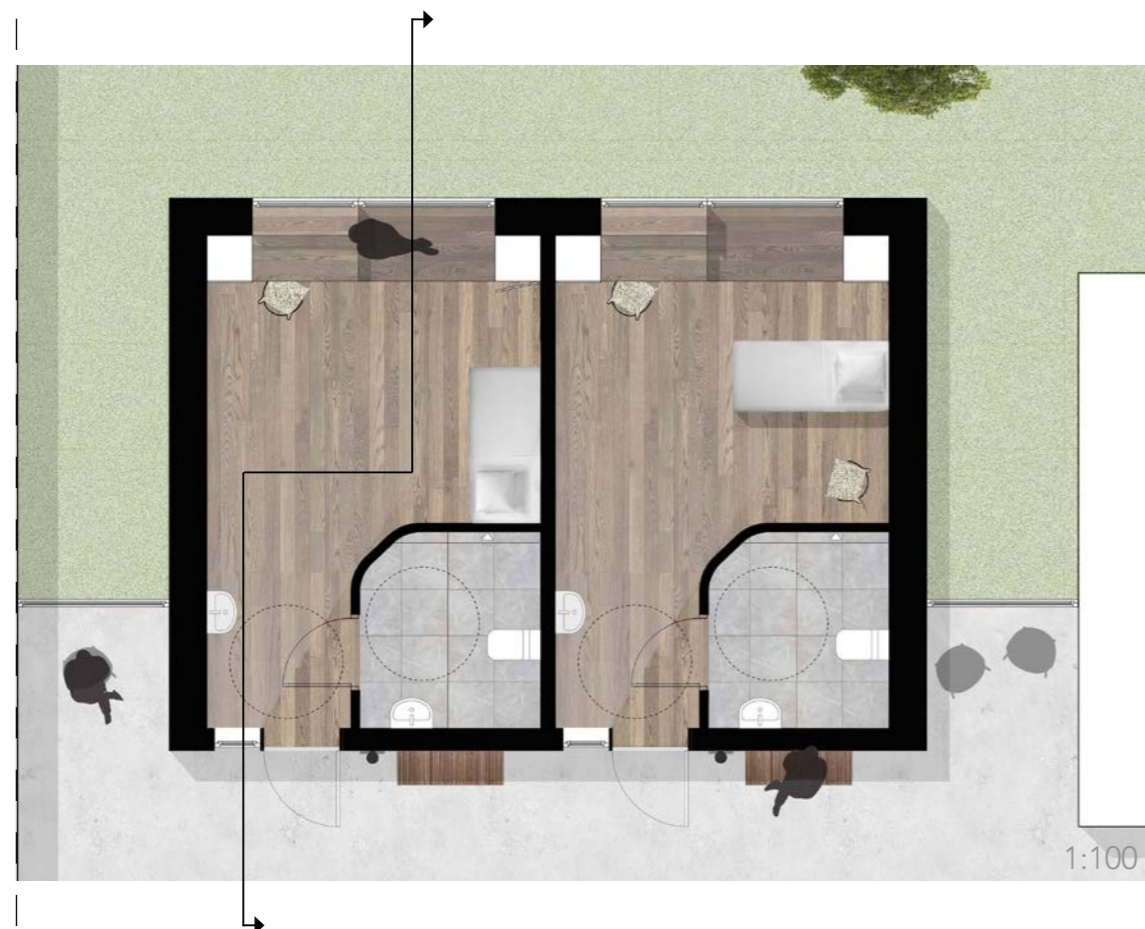


A PLACE TO BE



HOME

It's important for patients to be in a healing environment, especially in an inpatient ward where they spend longer time. Each house contains 2-4 patient rooms with their own front door. Here you should feel enclosed and have your private and safe space. The interior has earthy colors for a homelike feeling. Against the facade patient have the possibility to store their belongings and to sit and have visual contact with nature and ongoing outdoor flows.



CLOSENESS TO NATURE

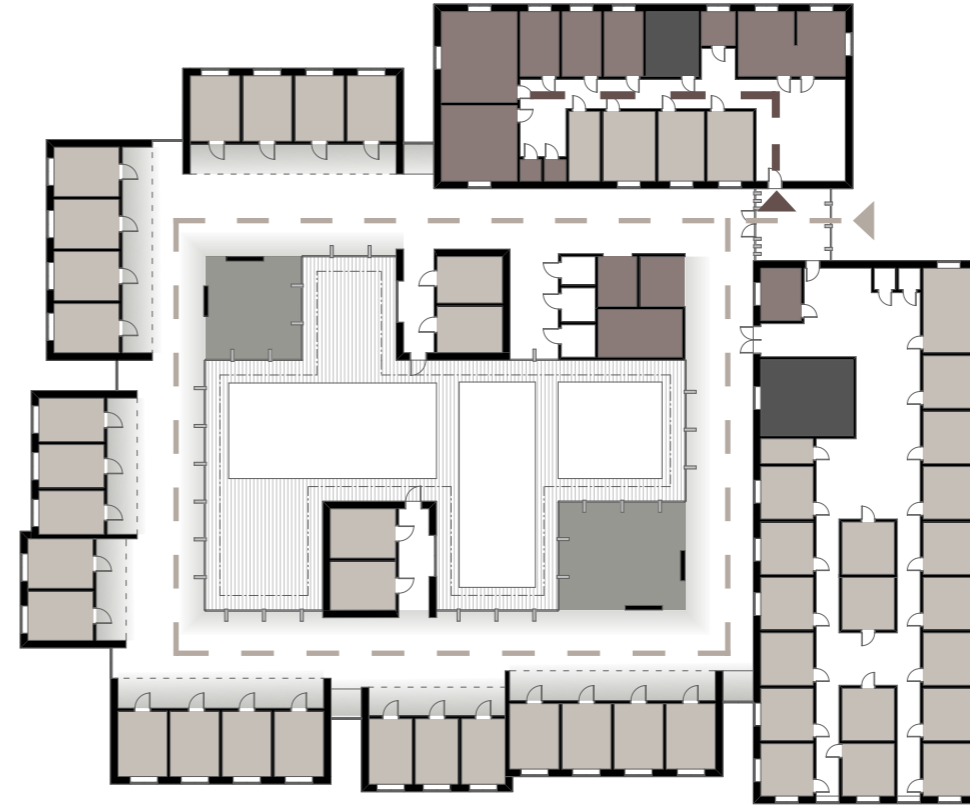


SAME PRINCIPLE - DIFFERENT NEEDS



INPATIENT

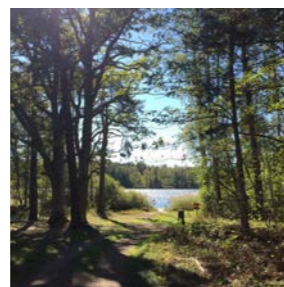
- PATIENT ROOMS
- DAYROOM/ACTIVITY ROOM
- STAFF AREA
- VERTICAL FLOW
- COMMON FLOW
- STAFF FLOW



OUTPATIENT

- CONSULTATION ROOM
- DAYROOM/ACTIVITY ROOM
- STAFF AREA
- VERTICAL FLOW
- COMMON FLOW
- STAFF FLOW

1:500 0 5 10 15 20 25

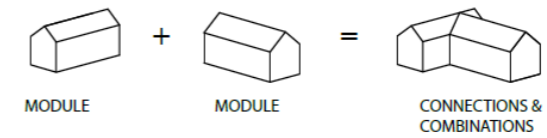
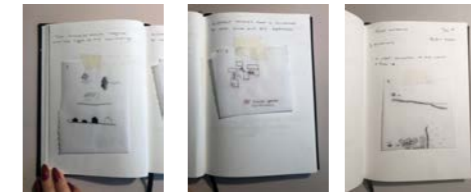
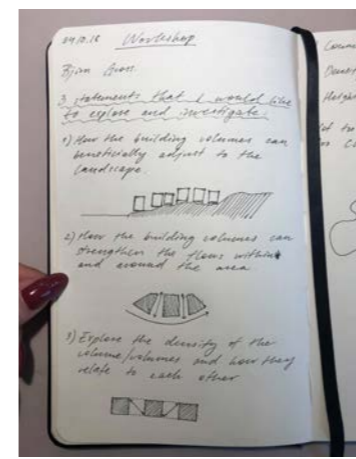


- » Beautiful site with many good resources for a healing environment
- » A site that would give us the best opportunity to search for the best design for patients with psychiatric problems

SITE VISIT



- » Form an idea on a main conceptual challenge
- » What is the sites strengths?
- » We came to the conclusion that the program would benefit of working with small scale dwellings and bring in nature in openings between the volumes.
- » A clear visual connection to the lake



CONCEPTUAL THOUGHTS

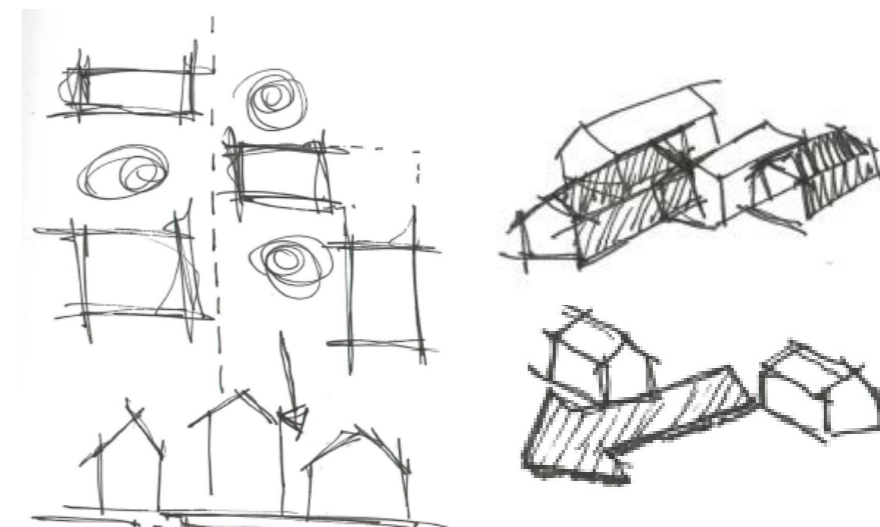
COLLECT INFORMATION & COMPARE REFERENCES



- » How does a psychiatry work?
- » What are the demands?
- » Important notes that we wanted to work with: many green areas for the patients. Atriums give a good overview over wards from staff area.
- » Beginning to understand the meaning of a good designed environment and how that effect the patients recovery.

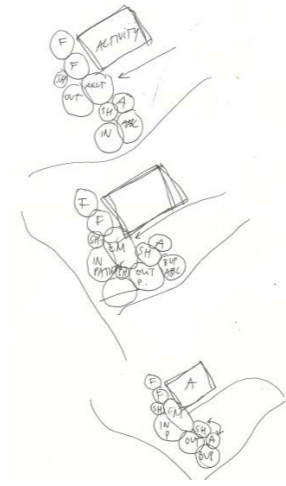
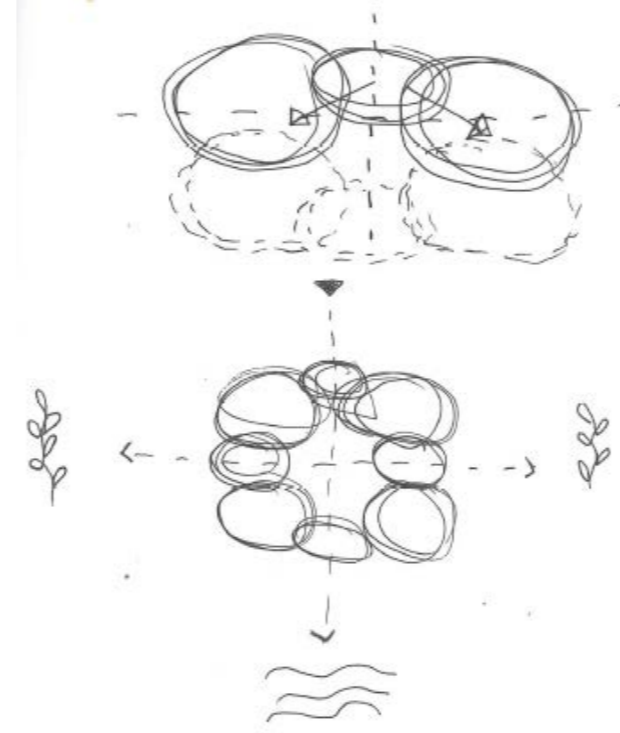
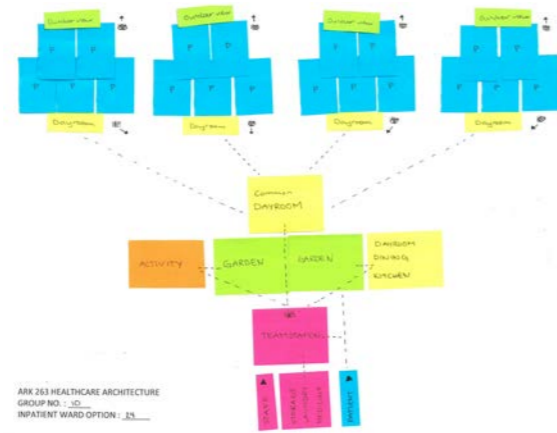


DEVELOP VOLUME IDEÁS



- » Connect to the exciting site by using the common shape of a home with pitched roofs & gables.
- » Work with solitary volumes on a low scale that connects to the local context.





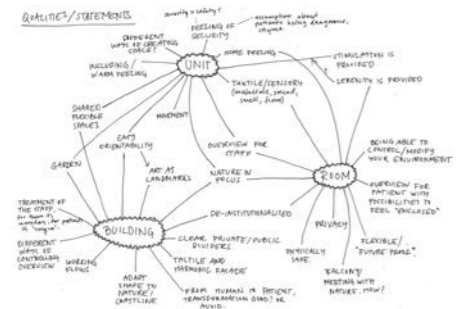
small scale building → qualities of a village in one building

- relaxed atmosphere
- closer to nature
- respect to local context
- human scale
- pitched roofs
- gables
- low dressed dwellings

↓

not institutional appearance

→ Broken up volumes, that brings the nature into the building



- » Flexibility without institution
- » Freedom of privacy - levels of privacy
- » Closeness to nature
- » "clustered identity"
- » HUBS
- » Homeenvironment
- » Different grading of social interaction for the patient during the treatment

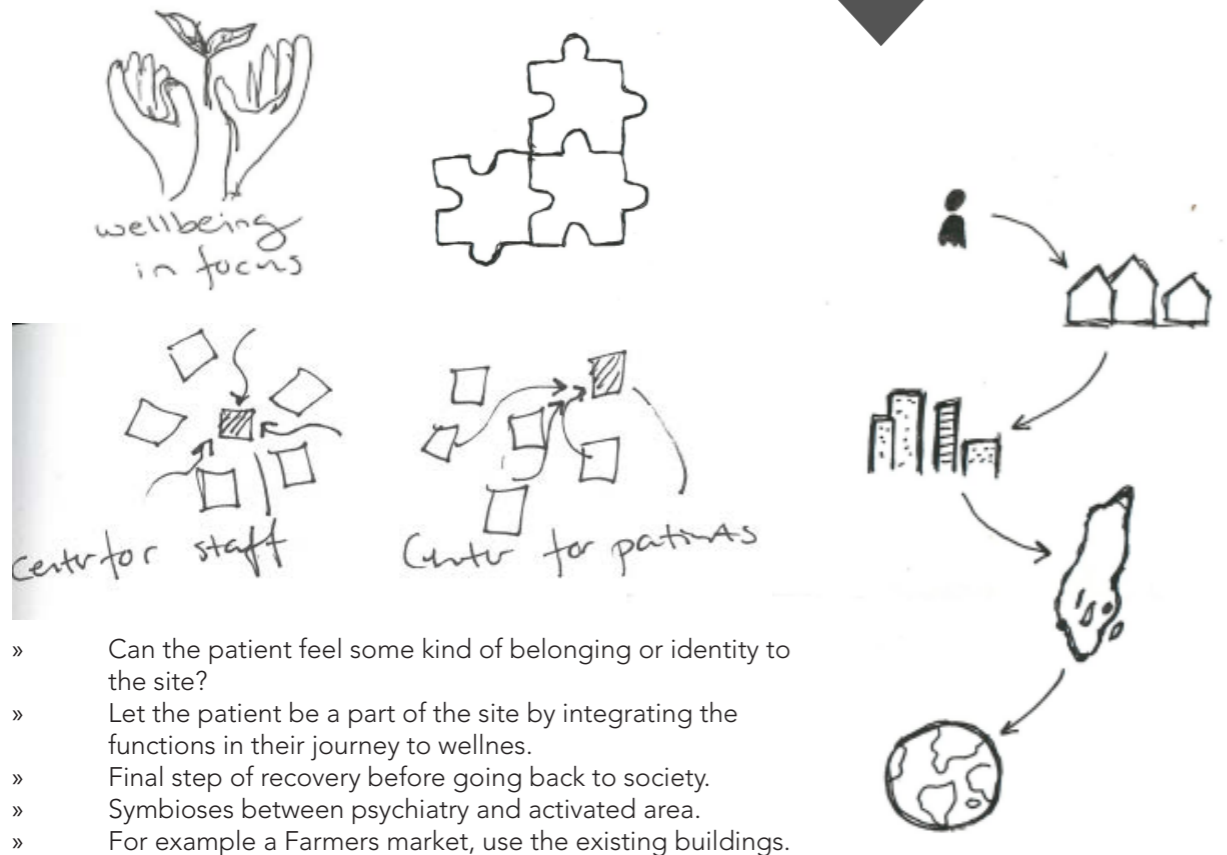
- » Protect nature and take benefit from it.
- » Visual & physical contact.
- » Lake as a reoccurring element.
- » A central core from where you can reach the different wards
- » Each ward should take advantage of the site and have the best view as possible.

WARD PLAN CONCEPT

EMBRACE THE SITE

HOW CAN WE INTEGRATE THE FACILITY ON THE SITE?

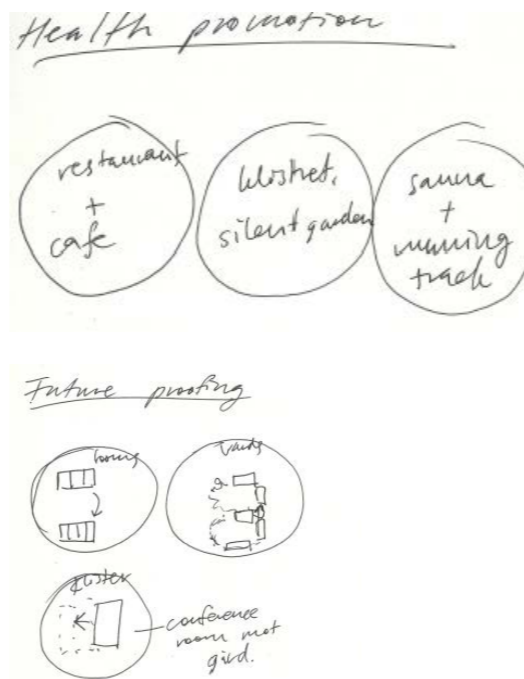
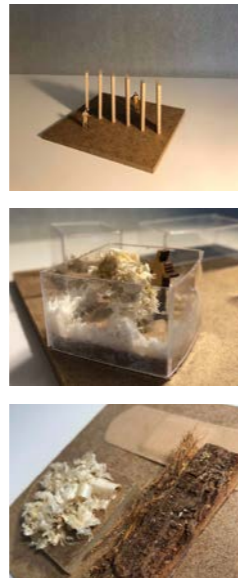
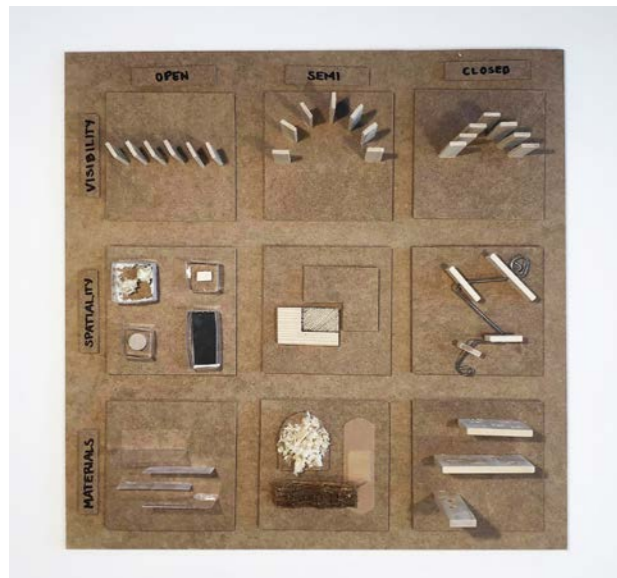
DESIGN INTENTIONS



- » Can the patient feel some kind of belonging or identity to the site?
- » Let the patient be a part of the site by integrating the functions in their journey to wellness.
- » Final step of recovery before going back to society.
- » Symbioses between psychiatry and activated area.
- » For example a Farmers market, use the existing buildings.

- » De-institutionalize: By keeping a human scale and working with solitary volumes the facility feels less like an institution.
- » Patient centered care: By increased possibility of patients choosing their own level of interaction in every stage of their journey, the visit will be seen as positive.
- » Home-like: The patient will benefit if the facility feels like more like a home, with home-like qualities and spaces.





- » Many questions were brought up when referring the volumes of a ward to a typical Swedish farm.
- » The main idea was to build the rooms (small living houses) around two larger "barns" to create a courtyard in the middle (like referens picture).
- » The concept didn't work in a bigger context, how the wards should work together. But we kept working with the same shapes but under different names.

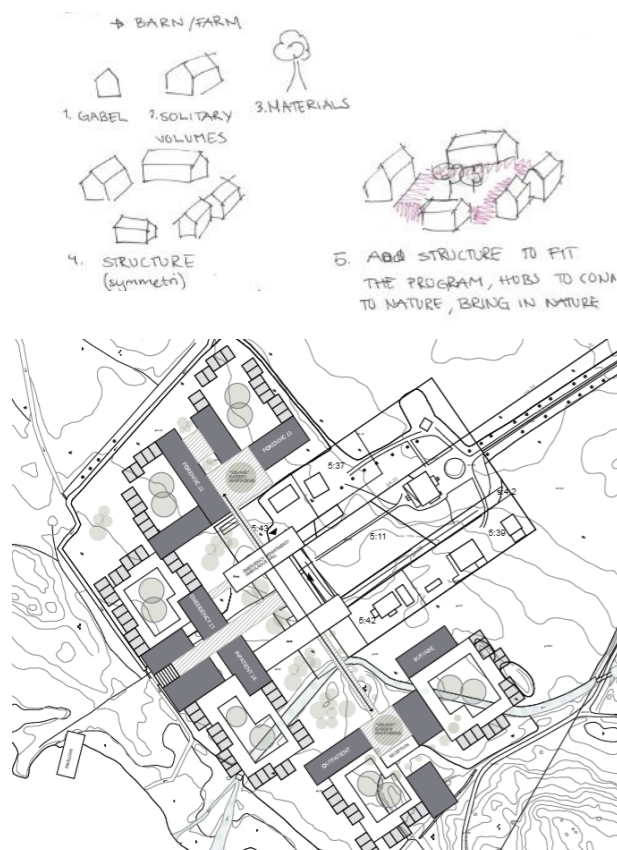


- » Using courtyards with different characteristics and atmospheres for healing and wayfinding.
- » Health promotion which was beneficial for both patients, staff & visitors.
- » Working with solid and static materials in different ways to let in light and create wanted atmosphere

IMPLEMENTING THEMES & ATMOSPHERES

THE BARN

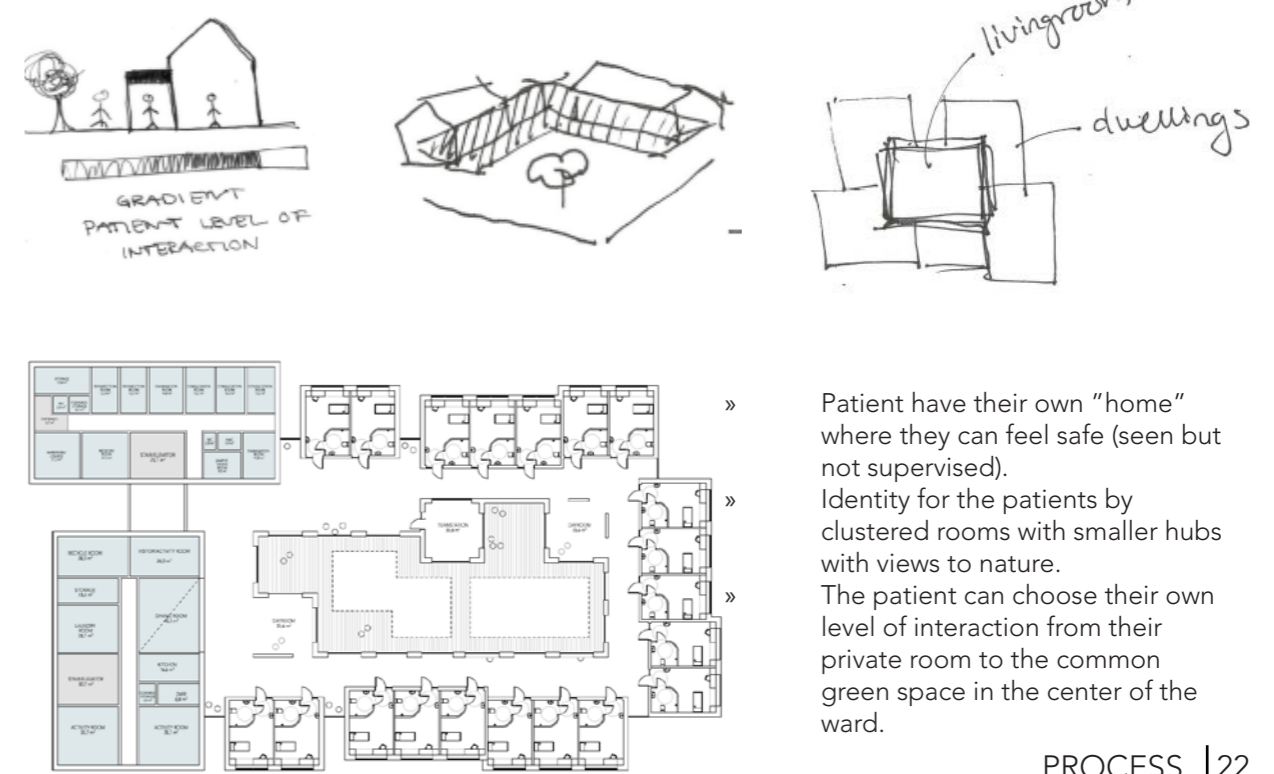
DEVELOPMENT OF THE SITEPLAN



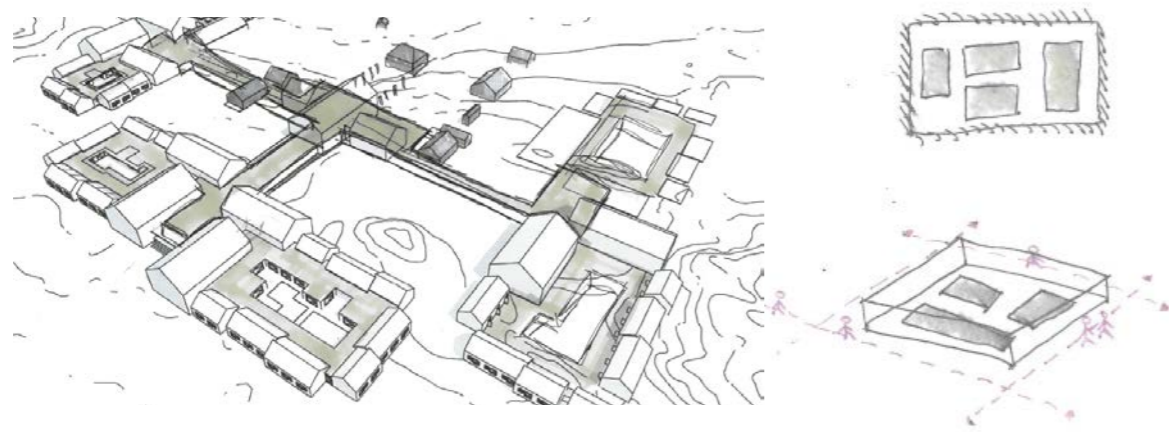
- » Use existing buildings in our facility - local context.
- » Health promotion layer connects the volumes
- » Here we worked a lot with how the volumes could work as solitaries but still be connected to fit the program.
- » We had here a different approach on the entry of the site. Here we worked with one bigger solitary volume that was something different than the other volumes.



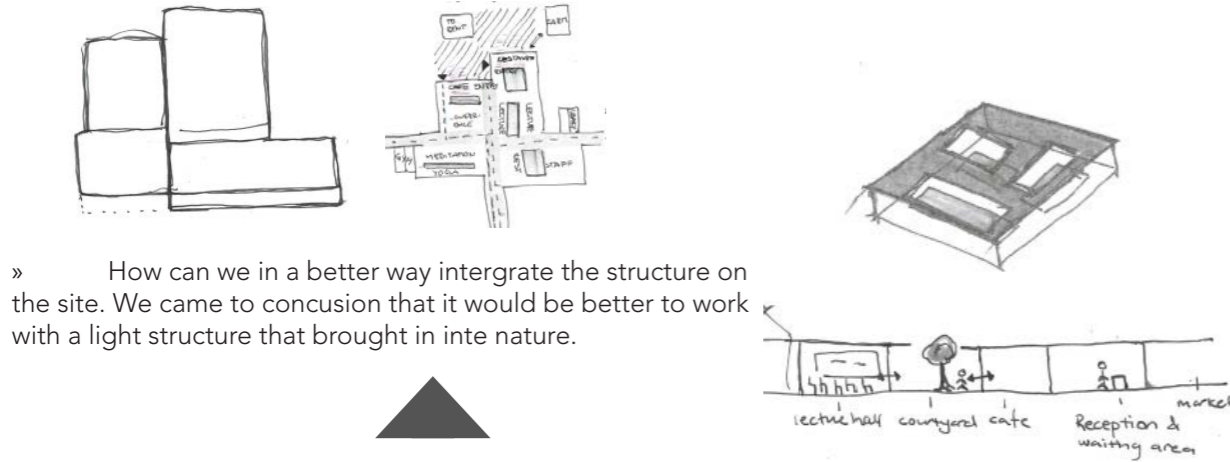
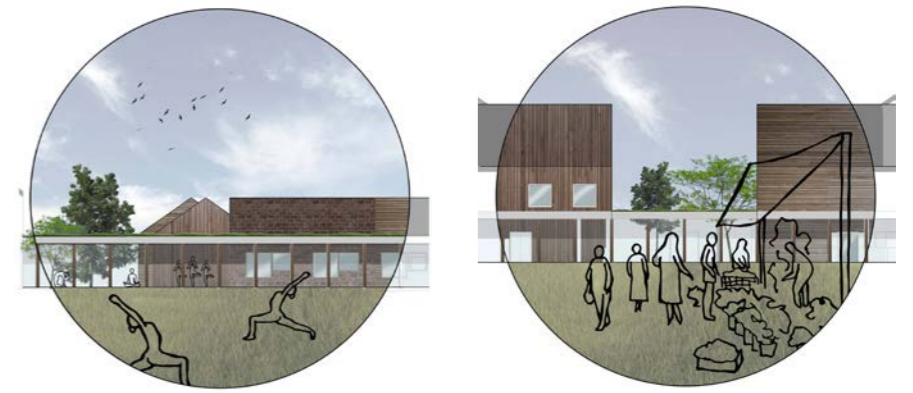
DEVELOPMENT OF A WARD



- » Patient have their own "home" where they can feel safe (seen but not supervised).
- » Identity for the patients by clustered rooms with smaller hubs with views to nature.
- » The patient can choose their own level of interaction from their private room to the common green space in the center of the ward.



» The program is solved & we feel that we have accomplished the qualities & atmospheres we thought the patients should have to get the best possible care.



» How can we in a better way intergrate the structure on the site. We came to conclusion that it would be better to work with a light structure that brought in inte nature.



HEALTH PROMOTION LAYER

CURRENT STATE

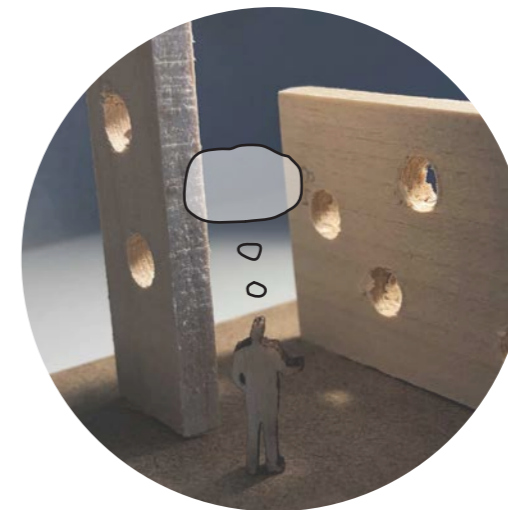
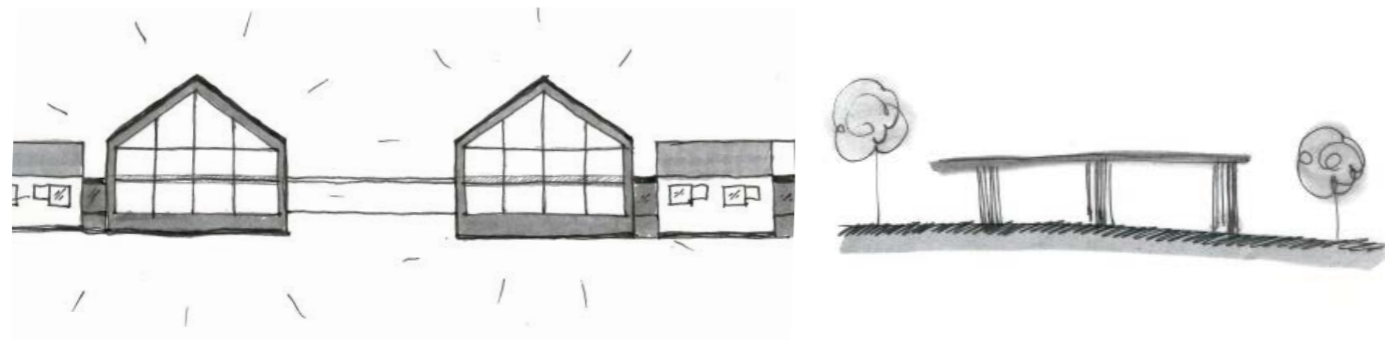


FINALIZING THE DETAILS

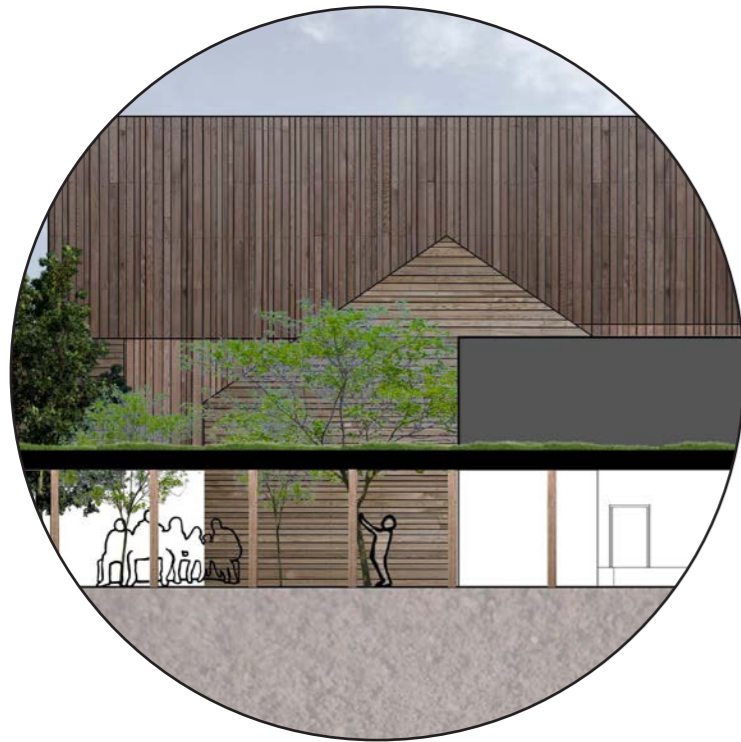
FEEDBACK & REFLECTION

» Now it was time to finalize the project and put the final details that would enhance the qualities & atmospheres of the element that we had brought to the project.

» After the final critique we can together evaluate the feedback we got and see how we could have improved our concept, ideas and results.



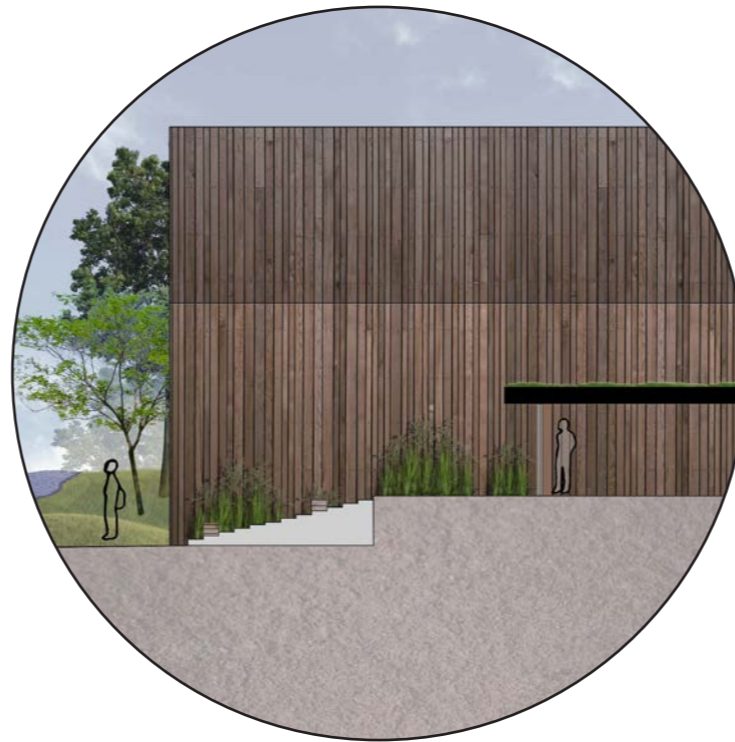
EVIDENCE BASED DESIGN - HEALING ARCHITECTURE



DEFINITION

Evidence based design includes using research results to improve the health and well-being of humans by implementing them in the design of the built environment.

By involving these as a base, our design choices has become more supported and reasoned.



HEALING GARDENS

A key point in our project has been to "provide access to nature and other positive distractions" (R.Ulrich, 2000) for both staff and patients. Together with the idea of patients having the possibility to "actively cooperate with the community" (Hancock, 1999), we have created a project which has a context and allows contact nature the building.

We are implementing evidence based design in our healing gardens, which gives the patients and staff visual and physical connection with nature. Here, a focus point has been to de-stigmatize the stay and visit for patients and their families.

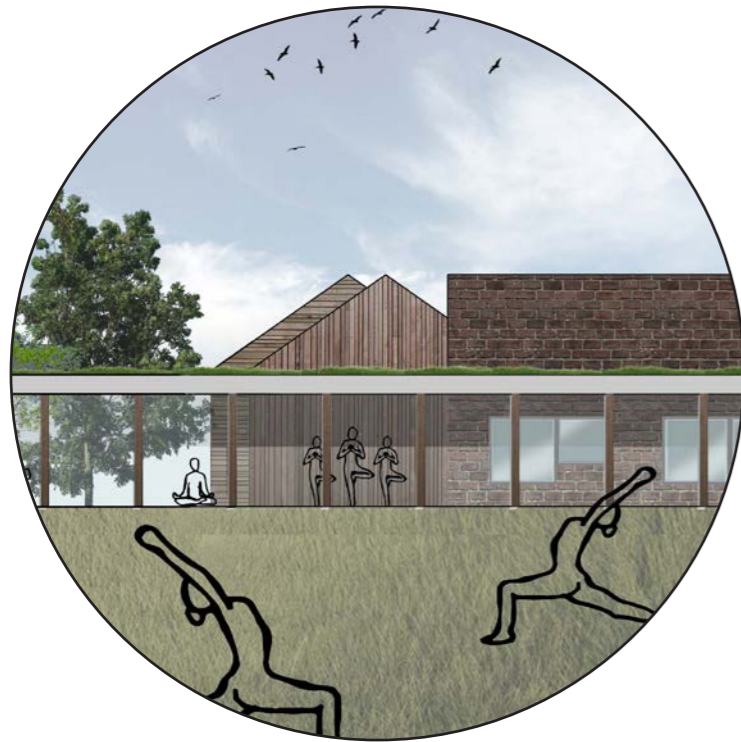


HUBS

"In the case of hospitals and other healthcare facilities, there is mounting evidence that gardens function are especially effective and beneficial settings with respect to fostering restoration for stressed patients, family members, and staff" (R. Ulrich, 1999).

The wards in our project allow a strong visual connection with nature, available for patients both in social and non-social scenarios. By having solitary volumes in the wards, small spaces are created between them. These spaces, which we call "hubs", have a visual connection to the outside. In combination with the courtyard, shaped by the solitaries in each ward, nature is made accessible in our psychiatric facility.

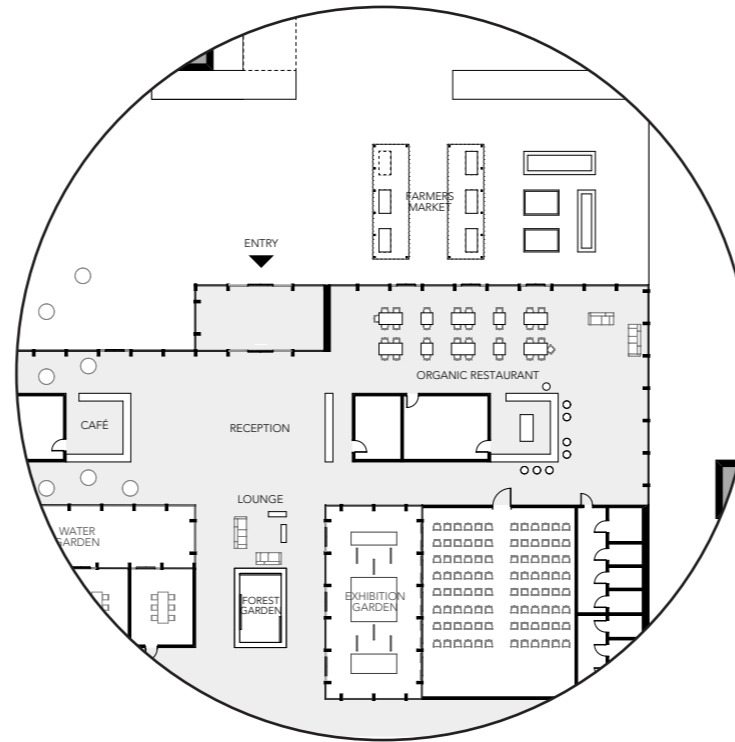
HEALTH PROMOTION



HEALTH PROMOTION LAYER

The first and foremost function of the health promotion layer is to activate patients, staff and visitors in a broad variety of activities.

Throughout the communication space, there is a strong visual connection to the nature and exterior movements in the integrated gardens.



LOCAL CONTEXT

- The restaurant and café live in symbiosis with the exterior urban farming system - they exchange products in order to offer a healthy and locally produced meal to their guests.

- The lecture halls are used both for inspirational talks, and also for gym classes.

- In the gardens, the focus is on mental health. This is a calm and serene place for everyone to take a break and recharge their batteries.



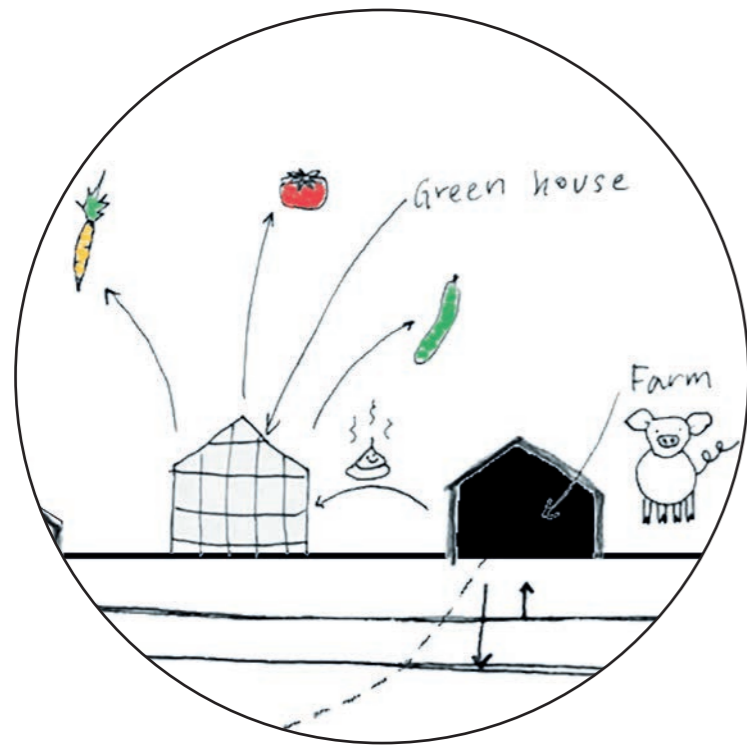
LAKESIDE

The theme of health promotion is also implemented in the meeting between the buildings and the lake, where there are active spaces which could easily be used by all.

. The outdoor gym, which can be used as a compliment to the running track, which stretches its way all around the lake.

- The sauna is bookable by staff and visitors. In combination with a possibility to cook a healthy meal in the summer kitchen, this duo serves as a flexible addition to the health promotion layer.

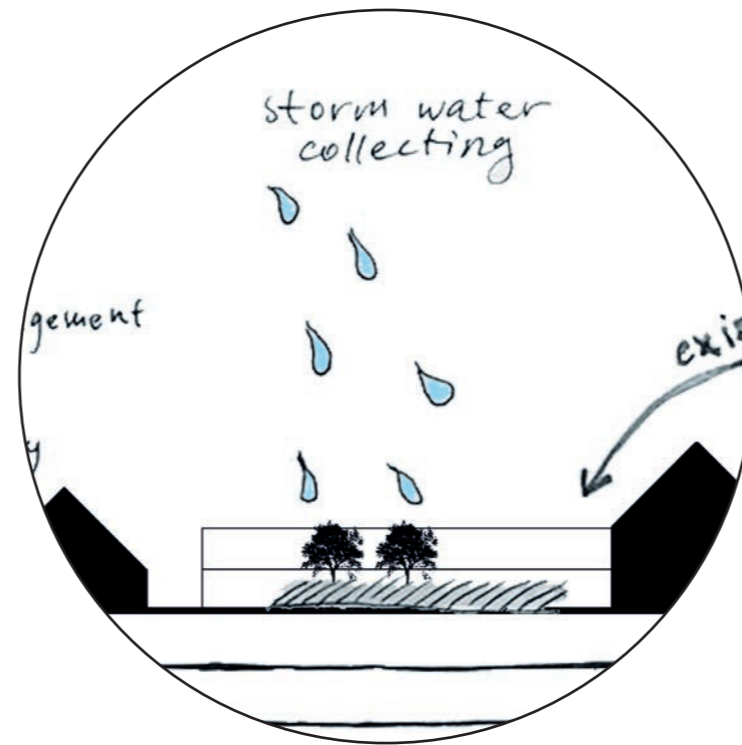
SUSTAINABILITY



LOCALLY PRODUCED FOOD

In a larger scale project, minimizing its ecological footprint is of great importance.

We have implemented sustainability through integrating urban farming in our project. The urban farming will benefit the restaurant and cafe with several locally produced products. Here, and in the farmers market nearby, there is possibilities to conduct workshops and spread the knowledge about sustainable living and thinking of products from a cradle-to-cradle perspective.



RAINWATER WASTE

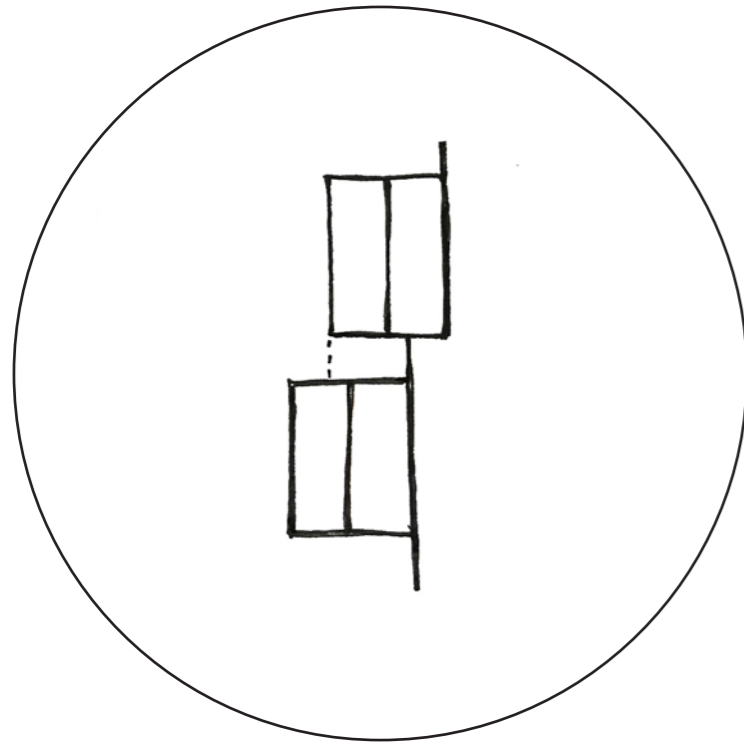
We have also planned for re-usage and collection of rainwater waste, this by having multiple courtyards throughout the facility and in the wards, and also by implementing a green sedum roof for our health-promotive layer. The layer, or communication space, also has beams which serve as sunscreening in the south.



SUSTAINABLE MATERIALS

The materials we have chosen for our facades are larch wood amongst others. Larch wood is sustainable, and has a low maintenance. In comparison to other wooden facade alternatives, larch wood is not impregnated with chemicals which can be dangerous for humans and animals. It is by nature a durable wood that has a high rot resistance and is sustainable.

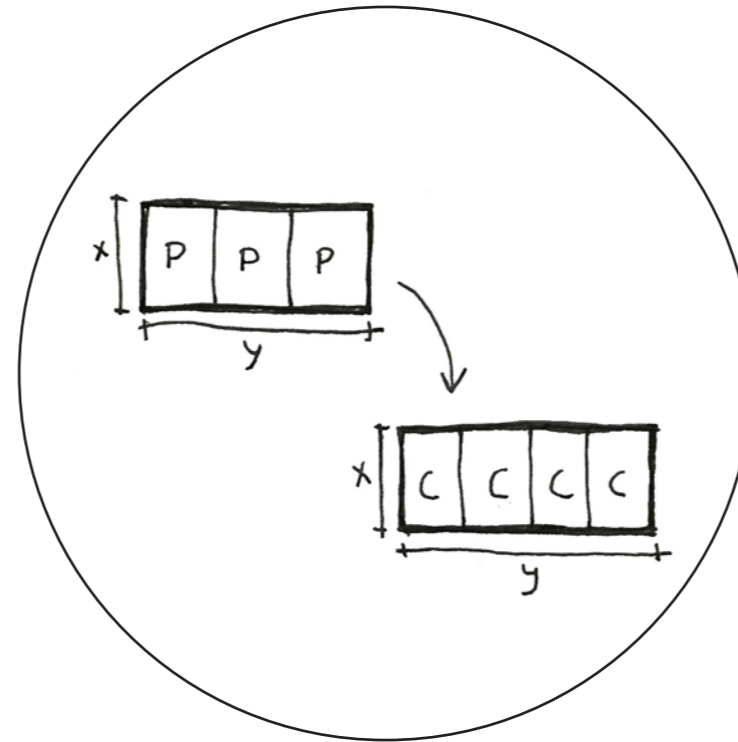
FUTURE PROOFING



SPACE BETWEEN VOLUMES

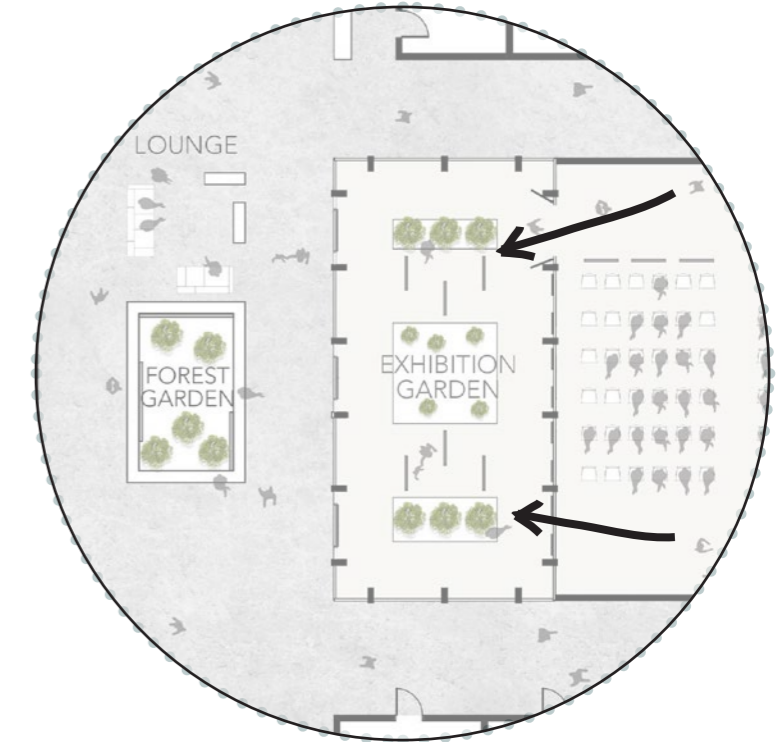
We have implemented this theme in our project with consideration for potential future needs.

The concept of our building volumes being modules has many advantages. When connecting two separate modules, interesting potential spaces form between the walls. These negative spaces could serve as extra addition of rooms in the future. The modules can also be extended and grow as a volume, allowing the building to be flexible with future needs and demands.



MODULAR SYSTEM

The modular solitary volumes that shape the wards that are currently used as patient bedrooms could easily be transformed into for example 3 or 4 consultation rooms, within the shell of the module. The same principle could be used in order to create a bigger space.



FLEXIBLE SPACES

The flexible spaces in the health promotion layer can easily be expanded into bigger spaces with different functions. Here, the conference room can be expanded into a garden to give more space for holding exhibitions etc.