

ÅLDERNS HÖST (OCH VINTER, VÅR OCH SOMMAR!)

-An Assisted Living Facility With Strengthened
Connection To Nature For The Well-Being Of The
Elderly Residents



Karolina Wäli, 2025

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Master's Thesis 2025

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ACKNOWLEDGEMENTS

- thanks to -

Thank you to my supervisor Susanne for creating a peaceful environment for me to do my work in.

Thank you to Maude on Bräcke Diakoni for material and information when using your site.

Thank you to Madeleine for taking your time and letting me interview you.

Thank you to the people who answered questions and let me look around on study visits.

Thank you Gunnar for your never ending help and support, I couldn't have done this without you <3



Tack älskade William
<3



Tack älskade Sebastian
<3

ABSTRACT

A resident at an assisted living facility in Sweden today spends almost all of their time inside, which affects them negatively. The residents often depend on the staff to get outside, and the units are quite confined and does not encourage the residents to leave the unit. The residents are not supposed to wander off. This leads to them being almost trapped inside, cut off from the outside world, the society and nature. Since there is a lot of research showing the positive impacts on the well-being for human beings with contact to nature and daylight, this thesis investigated the possibilities to create an assisted living facility with a closer contact between inside and outside. Through literature studies and case studies, a series of design strategies are presented, and from that, a design for a residential healthcare facility is proposed in Bräckeiparken in Gothenburg. Based on the salutogenic approach, the residents are encouraged to do as much as they can themselves to maintain abilities and therefor a close and easy connection to nature is preferable in a home for

people with different kinds of disabilities. If the climate in Sweden is added to this, the connection also needs to remain in all kinds of weather. The contact with nature starts already in bed with large french balconies and windows over a corner, allowing even a bedbound resident to keep in contact with nature. The apartments also visually connect to the bright corridors and social areas, encouraging the residents to move outside their apartment. Outside the apartments is daylight, gardening opportunities, social spaces and views towards the garden. The doors to the units can stay open, leading the residents to a wintergarden which provides a safe and nice place to be and leads further on to the garden. The garden itself provides a series of spaces accessible for the needs of the residents and different weather conditions. In zones, from completely inside to completely outside, the residents should be able to experience nature according to their own abilities, every day, all year around.

Keywords: healthcare architecture, residential healthcare, health promotion, nature, elderly, dementia, biophilic design

HOW CAN A RESIDENTIAL HEALTHCARE FACILITY BE DESIGNED SO THAT THE ELDERLY RESIDENTS CAN GET IN CONTACT WITH NATURE EVERY DAY FOR THE SAKE OF THEIR WELL-BEING?

-thesis question

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Assistant nurse both in home care and assisted living facilities for elderly (2013-present)



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1. INTRODUCTION

This chapter contains the framework for the thesis. It presents the reason for the choice of subject along with the applied approach, such as purpose, methodology, delimitations etc.

MY RELATION TO THIS TOPIC

- why this thesis -

Before I started this education, I spent a few years in the field of elderly care, mostly at the own homes of the elderly, but a short time also at a residential care home. I got to see for myself how isolated elderly became and how limited resources we as staff had to help them maintain a social life and get outside. Every need or wish that the elderly had, was brought through the bureaucracy and transformed into (almost always too few) minutes. I got to see the joy of a frail lady in a wheelchair who got out to see the spring flowers for the first time that year, but I had to say no to wishes of taking someone for a walk outside of the assigned help so many times, because I simply didn't have the time.

For many elderly, it becomes a

reality to just sit inside and wait for someone to come and visit for a short while and they become cut off from the outside world. The apartment becomes prison like when they depend on others to be able to go outside.

From this experience, I developed an interest to design buildings within the healthcare field, specifically with a close connection to the outdoors. To create spaces that offers the resident a contact with the outdoor environment regardless of their own ability, so that everyone can enjoy the benefits of nature independently.

This thesis is my attempt to create a proposed building that can enable the residents to get out to their maximal ability, and when that is not enough, for the staff to be able to help them with as little effort as possible so that it can be done frequently.

METHODS

- my process -

-Literature studies created a base to stand on when moving forward in the work. It provided information on what the current research says in the subject, and that was used in the design.

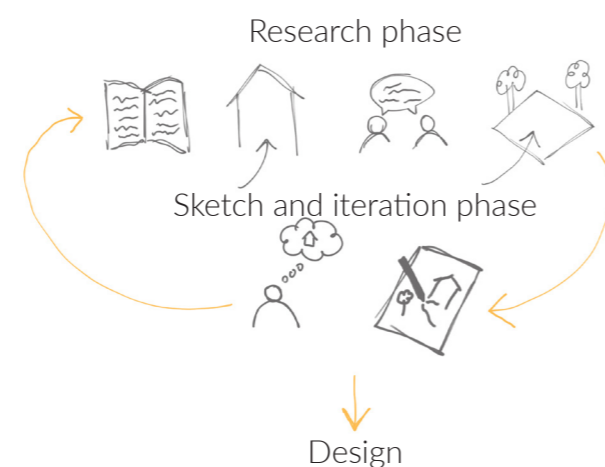
-Study visits and studying reference projects are ways to see how the connection with nature works in reality, what different buildings has and how it is used. What works and what doesn't work? Talking to people on study visits also helped to get a deeper understanding.

-The site visits were really important. To be able to connect the residents to nature, it is important to really understand the place.

-An interview with an expert was conducted to gain site- and task specific knowledge and to broaden the collected information.

-Much researching by sketching was done to see what can work on the site and what doesn't work. Hand sketching and digital sketching was mixed.

-I've also spent a lot of time just thinking about this and visualizing different scenarios and designs, which I think has been very helpful.



PURPOSE

- why this thesis -

Research establishes that the well-being of human beings benefits from contact with nature and day light. We need to get out every day, all year around and we need physical activity. According to the Swedish law, the municipalities are obliged to provide special accommodations for elderly in need of assistance and care. The social services act, chapter 5, § 4 states that "[...] care for the elderly must be focused on enabling elderly people to live a dignified life and feel well-being" (freely translated from Swedish by me). The Agenda 2030 states in its third goal that "good health and well-being" should be provided for everyone on the planet (UNDP, 2024). In 1948, WHO defined that "Health is a state of complete physical, mental and social well-being and not merely the absence of

disease or infirmity." This implies that assisted living facilities in fact should provide the residents with a stimulating, enjoyable and accessible environment, both indoors and outdoors. With understanding the conditions, both the weather conditions and the abilities and wants of the residents, this master thesis presents a way to make it possible for the residents to have the important need of nature fulfilled. By making the connection starting strongly already inside and continue outwards, the aim is to make every resident connect according to their own capacity, at all times of the year. With a design that allows and encourages the residents to get closer to nature on their own, I hope that it can be a way to make it possible even in a reality where assisted living facilities has quite limited staff resources.

SUSTAINABILITY

- how the project is sustainable -

-The project uses natural materials (wooden frame, wooden surfaces inside and outside), both for it being more sustainable, but also for the feeling natural materials create.

-By proposing a project with a strong presence of nature on the spot, it will contribute to the biodiversity and to the benefits greenery contributes with in an urban context, such as cooling in heatwaves and help with water handling in heavy rains.

-By using the shape of the old building, not much new hard ground is added and under ten trees needs to be removed.

-The elderly population is a vulnerable group and by proposing a project with their well-being in mind, I hope to contribute to the discussion on social justice and the right to nature for that group as well.

DELIMITATIONS

- what I didn't go into -

-In my work, I am assuming that the residents have lived in Sweden for at least some years before moving in and therefore recognizes the local climate the most. I am aware that people with all sorts of geographical backgrounds could live there, but I made the decision to focus on the local climate and plants.

-The thesis will not focus on the constructure parts of a project. It is drawn with such proportions that it allows for a wooden framed construction.

-The economy is not be a major focus, however, I have strived to make it reasonable.

-The details about the plants in the garden will be of the character "perennial flowers" or "fruit trees" rather than specific sorts.

2. BACKGROUND & THEORETICAL FRAMEWORK

This chapter contains an overview of the current state of assisted living facilities and information about the residents who live there as a group. It also explains the connection between nature and well-being.

ASSISTED LIVING FACILITIES TODAY & IN THE FUTURE

An assisted living facility is a place for a person to live when they need care around the clock. There are assisting nurses around to help the resident whenever they need. The resident has their own small apartment through a rental contract. Besides that, there are common areas inside and outside for the resident to use. All meals are served and, for example, nurses, doctors, footcare and hairdresser can come to the resident. The resident pays rent and fees for the care and for the food. There is no limit to what age the resident must have, but in order to get a place, an aid assessor (biståndshandläggare) must make a decision about it. The assisted living facilities are under the municipal responsibility. They can provide the service themselves or buy it from a private actor or a foundation. 20-25% of the costs of running an assisted living facility is related to the building itself (Holm Bodin, 2012). The rest is for running it, where the cost for staff makes up the biggest part.

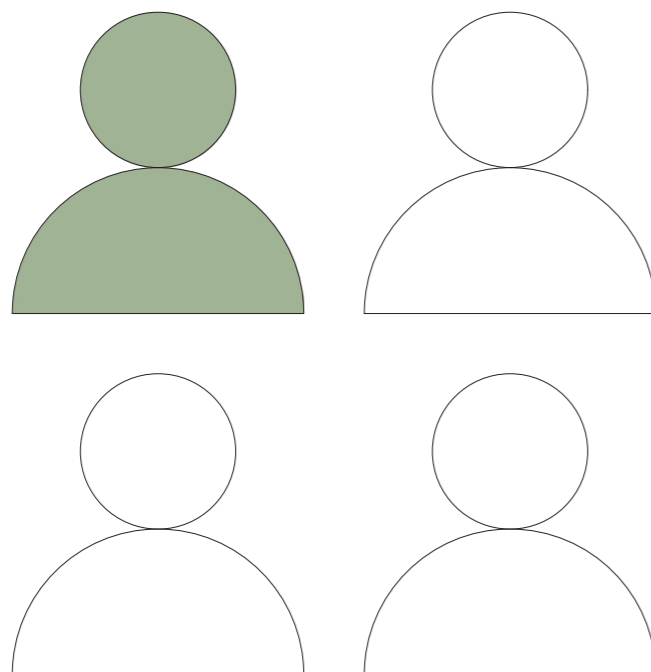
Today, more than one in five

people in Sweden belongs to the group 65 years or older (SCB, 2024). In 2070, that number is calculated to be over one in four. The share of people with dementia increases almost exponentially with higher age (Frisell et, al., 2023).

One can therefor assume that there will be an increasing need for capacity within the field of assisted living facilities. But with an aging population, the already difficult task of filling all the spots as staff in the field of elderly care will be even harder.

With this, one can assume that it will be even more crucial to be perceived as a good employer with nice work conditions. An attractive environment can therefor benefit the residents both in their own surroundings and by attracting staff and keep them content.

One can also assume that in a world where there is a lack of workers, the task of fulfilling life qualities can land on the residents themselves. By making the facility as easy as possible to use on one's own, it creates the most possibility for solo use. Many residents today depend on staff to make it outside, but it would be desirable for them to reach there on their own.



In 2070, 1 in 4 people will be over 65 years old.

THE APARTMENT

An apartment for one person in a residential healthcare facility today is usually between 30 and 35 sqm. It has a windowless door to the corridor and space for clothes just inside the door. There are two different ways that the bathroom is designed, one with the door to the hallway and one with the door to the room. The small kitchenette is often an elongation of the storage in the hallway. The rest of the apartment is usually an open space with a window on the outer wall.

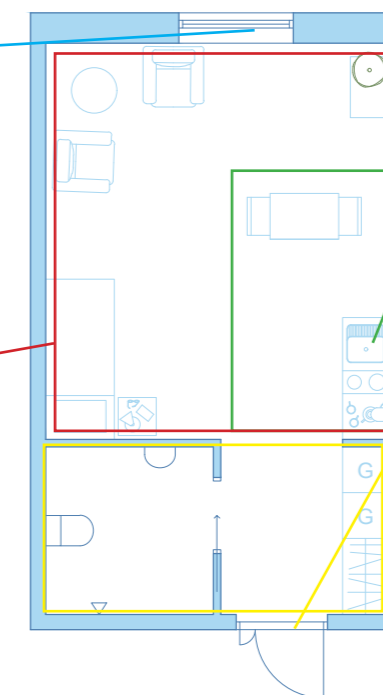
I want to argue that something a bit more home-like and interesting could be done with those square meters. Below here, is a sketch of how a classical apartment in a Swedish residential healthcare building can look like today. Based on that, I will make an analysis and then propose some things that could improve:

-Making the world three dimensional. By putting a window over a corner, the outside world and the living space becomes more interactive and living.

-Open up to the nature. By having a balcony or a french balcony, the nature becomes more accessible from the living space. This is important if the resident is bedridden, or for some other reason don't spend so much time in the common areas.
 -Divide the space. By making more rooms (as in divided spaces, not necessarily actual rooms) in the apartment, the space feels larger and more varied. The resident has a way to differentiate between sleep/rest in bed and other activities.
 -Make the kitchen more inspiring. By making the kitchen more of its own space, it could make the resident feel more encouraged to use it. It can be nice to get away from the bedroom for a while.
 -Connect the corridor. Since the care home is built on the assumption that the common spaces are there to complement the own apartment, as much as possible must be made to encourage the resident to actually get there. By being able to see common spaces, movement or sunshine from that direction, the resident can be motivated to approach it. Residents with dementia is even more likely to not remember the possibilities that aren't visible from where they are.

There is only one window towards one side. Since it's in the middle and one-way, it becomes more of a nice painting, than an interaction with the world outside.

The room doesn't have any rooms in the room. It's just an open space and the residents doesn't have the choice to change environment within their own space.



33,5 sqm

The kitchen space is not articulated at all. It's very small and doesn't encourage usage. It feels very much like it is there because it has to be.

There is no connection to the corridor, from which the common areas and the outside world is reached. A visual connection could help motivate the resident to get out. The bathroom and the hallway creates a blockage between the living space and the corridor.

DEMENTIA

There are two main reasons for people to live in an assisted living facility: somatic illness and dementia. Usually, both groups are represented in the facilities divided into units specializing in one or the other. In this project, both groups would be residents, however the group with somatic illness is easier to understand from an outside point of view. It is easy to understand why a wheelchair user benefits from low windows or struggles with a threshold. The challenges for an individual suffering from dementia can be more abstract. Therefore, a small dive into dementia was made, to gain more knowledge about that user group.

Dementia is often caused when nerve cells withers away faster than usual, but it can also occur after a stroke (Svenskt demenscentrum, 2021). Depending on where in the brain the damages are,

different abilities are affected. The difficulties can be struggles with memory, communication, orientation in time and space, concentration, judgement and impulse control. It can be harder to learn new things and to plan and execute tasks. Along with the affected abilities, the individual can suffer from irritation, depression, anxiety and changes to the personality. The individual can lose interest in things they used to like, struggle to take initiatives and pull away from social contexts. (Johansson, 2023) Shame and anxiety about the realisation of the own fading abilities are occurring.

When the cause is withering nerve cells, the course of the illness is often slow, with increasing difficulties (Johansson, 2023). The dementia is often quite progressed when the individual moves into an assisted living facility.

Stress is a factor that can make the symptoms worse (Svenskt demenscentrum, 2022), but nature helps reducing the stress (Cooper & Sachs, 2014).



GARDEN FOR RESIDENTS WITH DEMENTIA

Therefore, the garden and the connection to the natural environment plays an important part for elderly with dementia. When spending only ten to fifteen minutes of unprogrammed activity in the garden each day, the residents of a dementia facility showed improvements in behaviour, physician-ordered medications, heart rate and blood pressure (Cooper & Sachs, 2014). Studies show that plants indoors help as well. When the residents help care for the plants, their abilities are maintained, and the resident gets their senses stimulated.

Spending time outdoors also helps the resident with their sleep pattern. Both the daylight, the physical activity and the gardening were found to be helpful. Improved sleeping pattern is not only beneficial for the resident, but it also eases the workload on the staff at night. And with the increasing pressure on assisted living facilities that comes with a higher share of elderly in the population, that is also an important factor when planning the building and its surroundings. Cooper & Sachs also states that a high number of residents in assisted living facilities relies on the staff to come outside, either because it is not open and possible for the resident to go outside (due to doors with passcodes) or because the task of realizing they want to go outside and then do the steps that it takes to come outside (put on weather appropriate clothes, find the door etc).

For a resident with dementia, it can be important to connect to deep lying memories or rather feelings of how they once learned about the world (Feddersen & Lüdtkke, 2014). To be able to decide where they want to spend time in the moment is important and gives the feeling of control and ease. Both indoors and outdoors needs to stimulate senses and be easy to access. The residents favour mostly from elements in the garden that has local

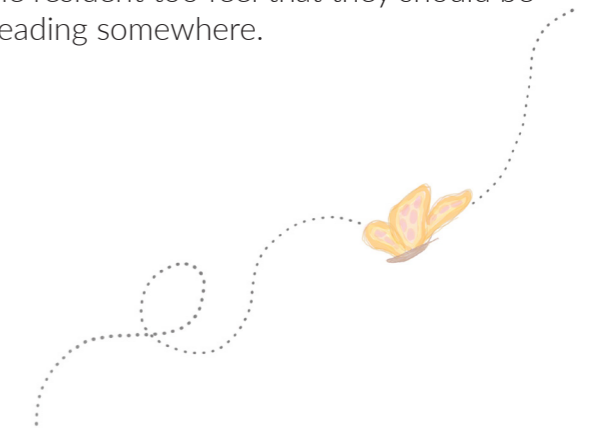
and cultural connections (Cooper & Sachs, 2014). The nature can easily be recognized, invite to interaction and the activities can awake memories.

It is also important for the residents with dementia to be able to see the garden from inside. It helps them orientate both in time and space, but it is also important so that they remember that it is there and that they can use it. Visibility is important from a staff point of view as well. If the garden is easily overlooked from the indoor areas, they can let those residents that needs it, wonder around safely.

In opposition to how gardens are planned mostly, people with dementia prefers a garden that is over viewable with no spaces invisible. The pathways can benefit from a simple design, such as a figure eight, in a loop. There should be few doors leading inside and they should be marked clearly. The resident should be able to open the door easily and see through it.

Cooper & Sachs also mentions how to optimally place the volumes of the building to get the most suitable sun conditions for the group. Sun during the morning hours is the most important. Opportunities for shade is extra important for a resident that doesn't understand to seek shadow when it is hot. To avoid anxiety, a monolithic shadow on the garden during the afternoon is preferable over the shadows that trees can create.

It is optimal to create a garden that is as enclosed as possible without feeling trapped. Where there is view outside the garden, it should face nature rather than a road or a parking lot, since that can attract the resident too feel that they should be heading somewhere.



PERCIEVED SENSORY DIMENSIONS

We need eight different basic qualities in an outdoor environment (Grahn & Stigsdotter, 2010). The more of these qualities that fits in a space, the more liked it will be. Different qualities can be more or less important for specific user groups.

Diverse:
The nature allows the visitor to find all kinds of life in it, flowers, bugs, birds etc.



Social:
The environment contains features allowing people to meet and be social. They also provide places to sit and watch others.



Cultural:
The greenery is clearly affected by the human hand. It can be ornamental and can contain things such as fountains.



Open:
Nature is open and allows the visitor to have an overview of the space. This helps the visitor feel in control.



Cohesive:
The nature is experienced as spacious and seems to belong to a larger whole. The visitor gets a feeling of stepping into another world.



Serene:
The nature offers the visitor the possibility to find tranquillity and be undisturbed. This space acts like a retreat for the visitor.



Natural:
The greenery is natural and unspoiled. It can be described as wild and includes experiencing the forces of nature.

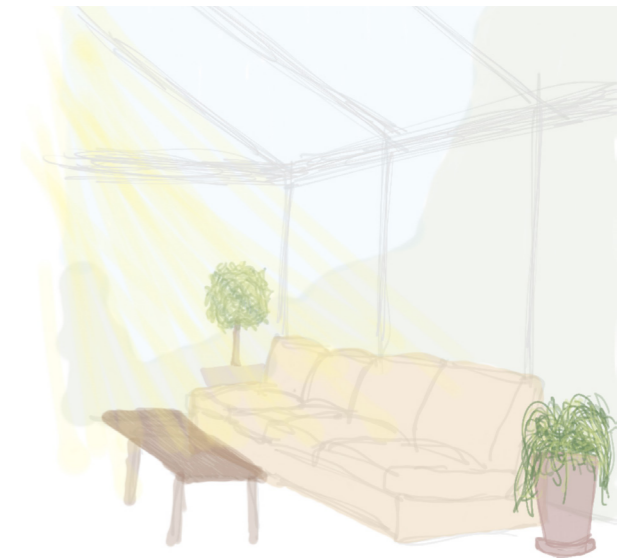


Shelter:
The nature allows the visitor to find places of shelter where they can spend time or observe the surroundings.



FOUR ZONES OF CONTACT WITH THE OUTDOORS

There is one zone inside a building, not at all in contact with nature (A. Bengtsson, 2015). The first zone in contact is still inside, but one can see outside and get daylight. The second zone is the transition zone. This space is more easily accessed and can provide shelter. It can be a balcony or a wintergarden. It is more easily accessed than the real outdoors. The third zone is the space just outside the door, the immediate surroundings. Here, it can be easy to move around, and the greenery is adapted to the residents. The human touch is apparent, nature is furnished, and the pavement is made to easily get around. In zone four, the wider neighbourhood, the nature is more wild. Bengtsson states that this zone is more natural but also not as easy to access for everyone. For some people, the fourth zone will just be enjoyed from a distance.



Zone 2 with qualities such as being able to move around in nature



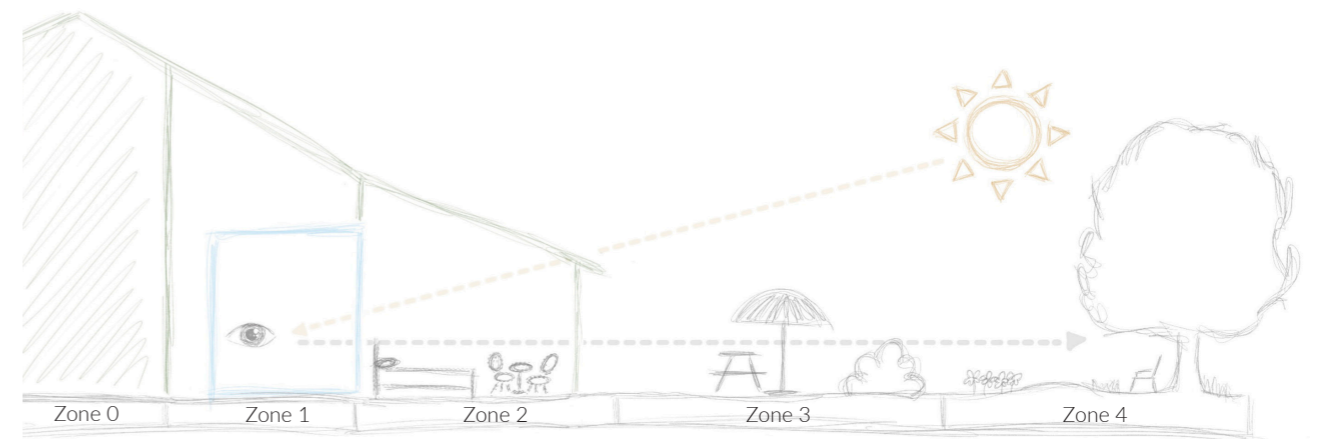
Zone 3 with qualities such as being able to feel the weather



Zone 4 with qualities such as being able to feel natural elements



Zone 1 with qualities such as views and daylight



HEALTH FOR ELDERLY

WHO stated in 1948 that *"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"* (WHO, 2025). With this definition, it can however feel a bit contradictory to strive for health in an assisted living facility where the residents lack at least one of the aspects. So, are there other ways to describe health? There are two main views on health in literature: the biomedical view and the humanistic view (Myhr, 2007). The biomedical view focuses on the absence of diseases, if there is disease there can be no health. The humanistic view, however, allows for health even if there is disease. It can be defined, for example, as the ability to realize things that are important for the individual (holistic view) or feeling meaning in life (teleological view). With this way of looking at health, it is absolutely reachable even for the residents of an assisted living facility.

The humanistic view can feel more abstract or difficult to measure than the biomedical view. Instinct tells us that being outside and physically active is good for us. I myself love nature. I enjoy the sound of the rain on a roof, or the smell just before it comes. I enjoy birds singing and get happy if I hear a woodpecker. To crack a thin layer of ice on the ground or step on dry leaves and hear the crunch. To pull weeds and smell lilac flowers. To sit inside and watch for lightnings and listen to the thunder. I feel more energized right now just because the sun shines in through my window and warms my back. I feel more alive when I can feel the nature close to me. Here follows my attempt to translate that gut feeling into theory.

Ever since Roger Ulrich's study on the impact of a green view for patients recovering from gall bladder surgery (Ulrich, 1984), there has been an increasing amount of studies showing how nature has a good impact on human beings.

One critical condition for human health is stress. It is a normal human response to challenging scenarios, but when we are stressed for too long, it starts to affect us badly (1177.se, 2023). When we feel stress, the brain tells the body to prepare for a physical challenge, such as a fight or a flight. This is because situations that the historical human being faced often required that. Our bodies still react the same way, the muscles get more tensed and the heart beats faster. Functions such as food digestion slows down. That is also why we are meant to only be stressed for a little while and then rest again. If we are exposed to stress for a long time, it can result in heart problems, high blood pressure, decreased memory functions, constipation or diarrhea and muscle pain. It can also develop into depression and exhaustion.

Physical activity in a green environment helps boost the immune system and the stress resistance (Cooper & Sachs, 2014). While walking, people doing it in a green setting showed a lower amount of cortisol and were in a better mood than people walking in an urban setting. Living in an aesthetically pleasing environment, both indoor and outdoor helps relieve stress. It is also health beneficial because when someone is experiencing the space around them being well looked after, they subconsciously think that they will also be well looked after. They then rank their own experience better.

Cooper & Sachs also reports that when the facilities garden is viewed from the common areas indoors, the residents spend on average four more hours outside per week. In order to create a good visual connection with the garden, the windows and their placement needs to be taken into consideration. The windows should have a sill height of 50-60 centimetres so that also a person in a wheelchair, sitting down or lying in bed can see out (Bodin, 2012). The view should contain something near to watch and something in the distance to rest the eyes on.

PRINCIPLES FOR BIOPHILIC DESIGN

Through evolution, people are developed to thrive in a natural environment (Kellert, 2018). Since the contact with nature benefits our health and we spend about 90% of our time inside, there is a challenge to bring nature closer to us. Biophilic design is the attempt to bring nature closer to our built environments.

Since the need for connection to nature lies so deep within us, maybe it then is an extra important feature for persons with dementia who slowly loses touch with things they have learned through life.

There are six principles for biophilic design (Mackie, 2024).

Environmental features:

Direct integration of natural elements to built environments, such as colours, water, air, sunlight, plants, natural materials, views, facade greenery, landscape and fire.

Natural shapes and forms:

Letting nature be represented by forms and motifs such as ornaments or drawings. Building parts can be shaped as plants, tiles can be shaped as leaves, a sofa can have a floral print.

Natural patterns and processes:

This element is about inviting the senses to experience the surroundings. Striving to feel the presence of nature in the built environment. Making it feel living.

Light and space:

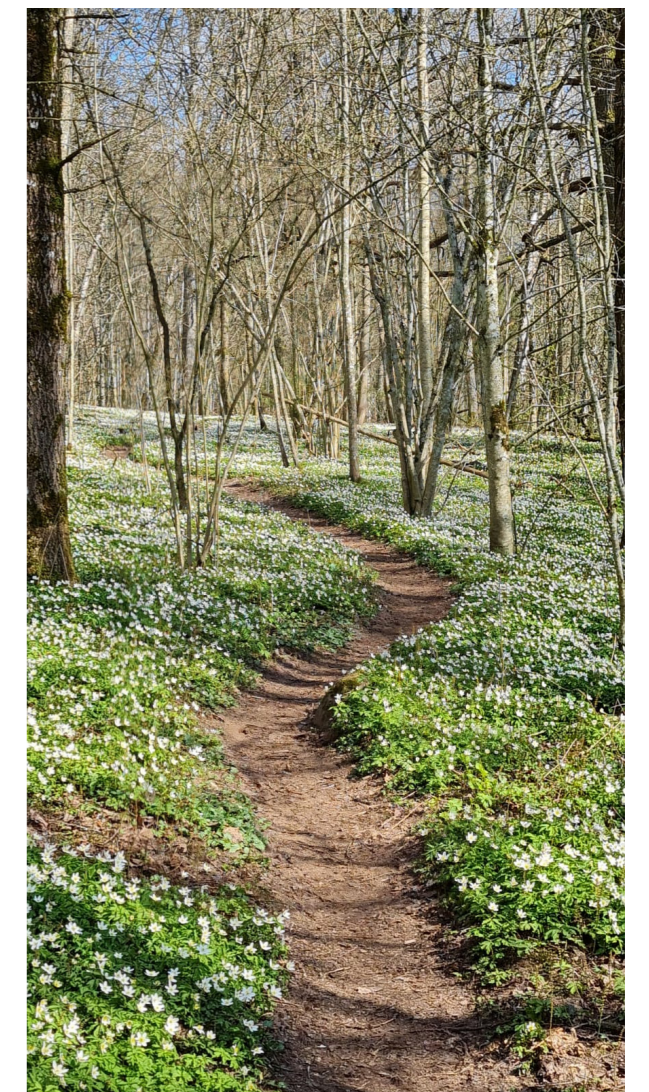
Creating free and open spaces that at the same time are comfortable. The light, in different forms, are important; direct sunlight, sunlight filtered through a curtain, reflecting of a surface, shadows or the absence of light.

Place-based relationships:

The design of the buildings is geographically and culturally anchored. It is ecologically and historically connected. It is built with consideration of the landscape and spirit of the surroundings and from indigenous materials. It needs to avoid placelessness.

Evolved human-nature relationships:

The design should try to speak to the deeper level of us, with elements such as security, comfort, adventure, excitement and spirituality. By taking a step back, we can see what needs the natural world offers us.



INTERVIEW WITH MADELEINE LILJEGREN

Madeleine is a physiotherapist with a master's degree in landscape architecture. Her doctoral dissertation is in the field of qualities in the physical outdoor environment that is health beneficial for elderly living in assisted living facilities. Madeleine was kind enough to let me interview her about my master's thesis. The interview was in Swedish, and I have translated it to English. To shorten it, I have adjusted my questions to be a part of the answers. I am not quoting directly but have worked the answers into a running text.

My background is that I have worked as a physiotherapist at assisted living facilities, and I have the same realisation that you have. There are not always outdoor spaces, and the staff is not used to work outside and therefore does not think to use the outdoor environment. To ask oneself how the outdoor areas are used will not give us the answers that we want, but we need to talk about what opportunities we want the elderly to have and how the elderly themselves want to use the outdoor environments. Thankfully, we know that to some extent. In the OUT-FIT project, that I am a part of, we have interviewed a lot of elderly. In practice, it is about making sure that the zones 1-4 (according to the theory of the 4 zones of contact with the outdoors) is available from all units. That means that all the units need to have access to at least one zone 2, which is often where there is a shortage. In another study we mapped the access to all these zones on all 2000 assisted living facilities in Sweden. We saw that zone 2 and 3 lacks a lot and that is something we as a society need to work on fulfilling.

The elderly that we interviewed said that they would like balconies both facing south and north to be able to adjust according to the weather. Both glazed and open balconies would increase the options. This must be accessible from each unit, it is

not enough with for example a roof terrace. It is not easy enough to use, the elderly cannot get there themselves and the staff has no time. And we will never see more staff in elderly care unfortunately.

The gardens can preferably be usable from eight or nine in the morning to ten in the evening. The elderly want to rest, be social, eat meals, take part in activities or withdraw with visiting relatives. They want to use the outdoor environments all year around, preferably daily.

One way of making the yard more user friendly is the opportunity to visit a toilet from the garden. The elderly can avoid going out if they end up too far from the nearest toilet. A simple outdoor kitchen with benches and running water is also a good feature.

To be able to choose between different kinds of environments outdoor is crucial. There needs to be spaces that can hold big groups as well as small rooms in the garden to withdraw to. Persons with dementia can easily get overstimulated and needs to be able to get away from the backdrop of impressions that goes on in the garden.

When it comes to fencing it is good to have a fence, but to cover it with greenery from the inside and have a gate. The design of the fence can preferably be lower and with a nice style than higher and more institution-like. The fence is not only for the residents, but also to make the space readable for people passing by.

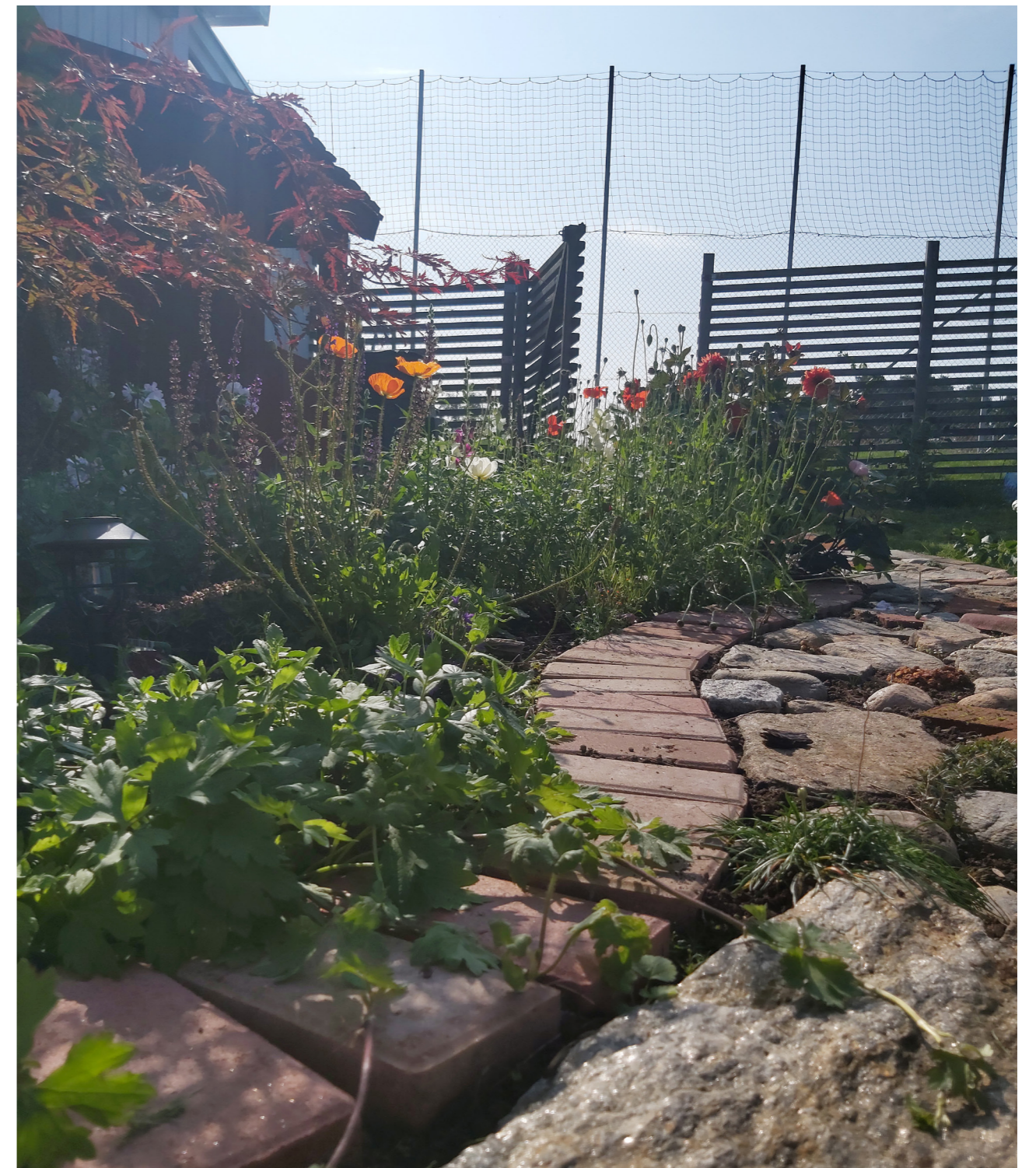
Regarding own balconies, many of the elderly says that they would like to have that, but those who had it did not feel that it worked in the reality with accessibility and other things.

Generally, the connection to the ground is lost from the third floor and up, but tall nature in the area around eases the effect. The elderly need to have views to greenery both from their own apartments and from the common areas so that they can see what they want to get out to. The facility also needs to be placed in society in a way that the elderly have access to some service. Many elderly states that they miss

the possibility to go to a store and the autonomy in that. Just a simple thing as going to the store and buy an ice cream on a hot day. They need to have the choice of going out and participate in and feel like a part of the society. The outdoor environments act like a bridge to life before moving and they recognize the world with the help of nature.

For persons with dementia, visual clues are important to orientate. By making

the design clear it is easier to dare to leave the apartment. It is an advantage if the doors open automatically for example. It is common with self-opening doors by the entrance, but as soon as one gets in, they disappear. With that kind of features, it can be easier for the elderly to move around in their environments. We say, a bit jokingly, that it is hard to get a place at an assisted living facility. But once you get in, you will never get out.

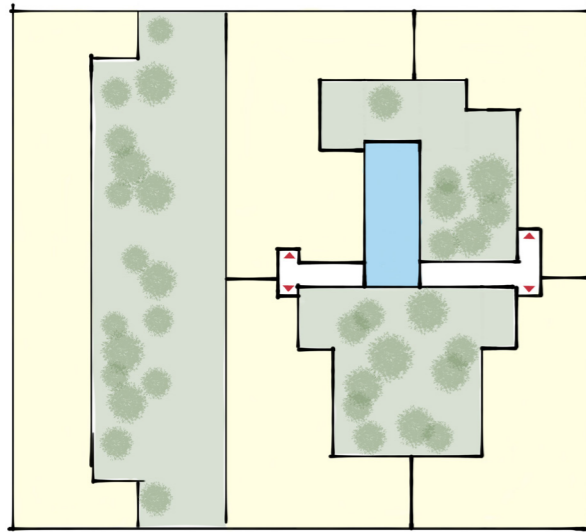


3. STUDY VISITS & REFERENCE PROJECTS

This chapter contains knowledge gained through visiting projects or reading about them. They are analysed and gained insights is brought along further to the design phase.

STUDY VISIT TRÄDGÅRDARNA, ÖREBRO

Trädgårdarna is an assisted living facility drawn by Marge architects that opened in 2016. There are 56 apartments over around 6400 sqm in two floors.



Plan second floor. Yellow=units. Blue=wintergarden. White=corridor

One of the big selling points is the large winter garden located on the second floor. It is a really airy and bright space with some plants. The residents can go there and spend time on a daily basis. They sometimes have activities there for the residents and it can also be rented. One major problem, however, it seems too far away. We saw no one there during our hours of visiting, and the residents that we talked to seemed to have almost forgotten that it existed. It is no place that they just happen to pass, and if they were to, they would pass through the short way.



Common on the unit is a large open kitchen with dining area and living room. Outside of that is a glazed balcony. When we visited, the door to the balconies were locked. There were a few residents sitting in the living room, just looking in front of them. When we came in, one of the residents were very social and I think that he could have benefitted from moving into a larger context with a higher probability of meeting someone more chatty. He seemed to not really have the ability to reach there by himself, though. It was too far away physically or mentally.



The entrance to all of the units are places more or less behind a corner. This creates a boundary between the units and the common areas. The residents inside the unit cannot see if anything is going on in the hallway outside and the residents that are out in the hallway cannot clearly see the way back.



The outdoor environment is divided into three yards. It was not always very clear how to get out. The units on the ground floor have their own doors, but to visit another yard, or if the resident lives upstairs it is not very clear. The yards, however, it quite nice. They have wheel friendly surfaces in natural shapes and different kinds of greenery. There is raised garden beds and a greenhouse to use during the warmer part of the year. One of the residents told us that the yards can be too warm in the summer since they are covered on all sides. The wind does not reach, and it becomes like a heat island. Apart from some seating areas outside the restaurant, there is not much focus on the outdoor environment outside.



- The winter garden would have been a much larger asset if it was used more. That could maybe be achieved if it is closer to the residents, either visually or physically.
- The entrance to the units were too hidden. It feels like the residents are discouraged from leaving the units.
- It is too hard to get outside. Even if it is cold outside, the residents should have an easier choice to get out.
- The main entrance was hard to find. One had to go under a bridge and into a small yard, and from there take one of the many doors.
- I like the natural shapes of the yard, even if it is quite a small space, it has some walking paths, greenery and outdoor gym.



STUDY VISIT BOVIERAN, VÄNERSBORG

Bovieran is a concept with apartments for people over 55 years old, inspired by the Riviera (Fastighets AB Balder, 2024). Qualities such as community and safety are central for the concept. There are 28 Bovieras around Sweden, and they all share the same design with a U-shaped building of three floors with a large winter garden of around 1600 sqm central in the building. One enters through a main entrance which leads into the winter garden and from there all the apartments are accessed. Every Boviera has around 50 apartments and they are in the form of "bostadsrätt" (the residents buy the right to use the apartment and is also a part of an association which then runs the facility).

I visited the Boviera in Vänersborg on a crisp, sunny Friday in February. There, I met with the chairperson, Erna, who showed me around. She put a lot of emphasis on the community in the compound and during my hour-long visit there, we ran into several other residents and Erna waved, said hello or chatted for a bit. She asked them how they enjoyed living there, and everyone was really positive. They said that they really enjoyed meeting people easily, it is just to go out into the winter garden, and they will meet someone. It seemed like the community was more important than the winter garden itself, however it is a strong enabling factor especially during the colder months.



Erna told me that the plants in the winter garden are kept by a gardener, they are not even allowed to have their own plants outside their door due to the risk of spreading pests or diseases. Every apartment has a balcony on which they can keep plants if they want. They also have a garden outside where some of the residents do some gardening during the summer.

During my visit, the sun was shining, heating up the winter garden and it was a really pleasant feeling there. We walked around in indoor-clothes and passed a resident reading in a lounge chair. Erna told me that they heat up the winter garden to around 12-14 degrees when necessary, so that the tropical plants can survive. She also said that during the summer, it can be quite hot there.

We met a woman in an electric wheelchair, who told me how important the pavement was for her to get around and how she struggles to get around in many places in the society due to ground materials and edges. In the Boviera however, she can get around due to the flat concrete plates.

I asked Erna if she felt that the comfort of the winter garden could sometimes stop the residents from moving out into the "real" outside. She said that it could be the case sometimes, but she didn't see it as a problem. And for the residents with mobility issues, it helps come out to at least the winter garden, which is better than to be inside an apartment.



Apart from the seating areas placed around the winter garden, there are some common areas that the residents share. There is a really small gym that is basically just a room with a few machines. Erna said that it is appreciated to have, but that they would have wanted a larger one. In the basement they have set up a workshop so that they can both do hobbies and mend stuff that is broken. There is also a big kitchen with a dining area suitable for bigger parties. It opens up both into the winter garden and the garden outside. Close to that is a frequently used boules court, and a sauna.

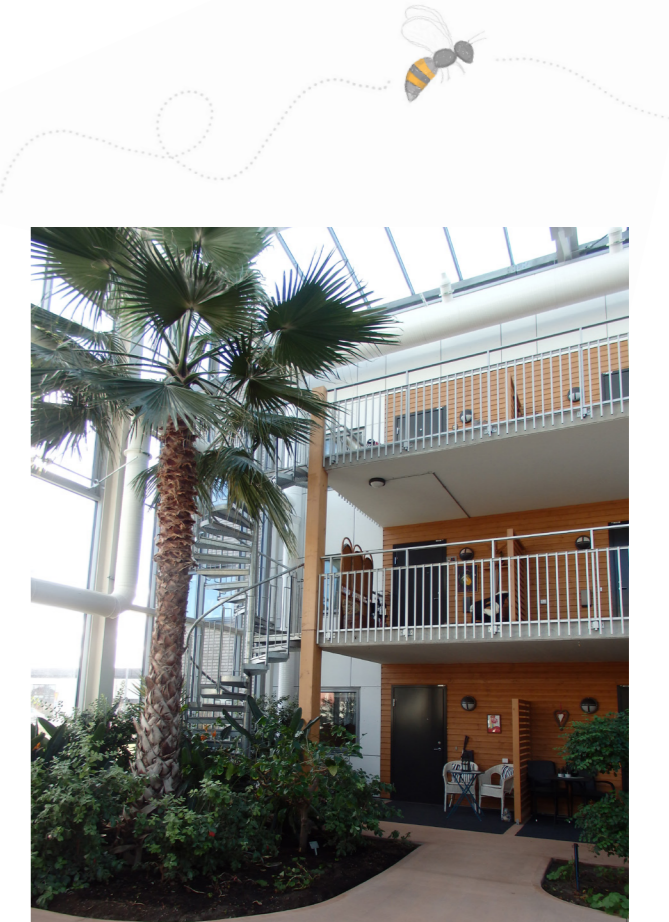
There are a lot of both planned and spontaneous activities in the Boviera, with everything from maintenance to parties, and Erna made it clear that this is regular apartments for 55+, and not a care home. There are people living there who have moved in before that now need home care, but they are not there to help each other out too much. They need people to be able to help out in the association, so they need renewal. That might sound harsh, but it is the reality for them to be able to run the association and be active.

After our tour, I walked around a bit on my own. It hit me that though the space is big, it feels even bigger. There are paths winding around and it is lush enough that it creates many rooms inside. It is possible to sit or walk separated from other companies. The high ceiling, the airiness and the high plants also contribute to the



large feeling. Before I visited, I thought that it would be a really big advantage to live on the ground floor, since the connection to nature is bigger there. However, there was a really nice feeling on the floors above as well, with the airiness and views over the winter garden. Although, the space just outside each apartment was far better on the ground floor with plant beds and lush surroundings. On the other floors, the space outside the doors were more empty and not as cozy and secluded. It would be nice if there was greenery there as well. There were also some windows from the apartments facing into the winter garden and they are more secluded due to plants on the ground floor than the other floors.

The Boviera concept is to mimic the Riviera, and that is very successful, and they are very happy with it. If I were to adapt this to a more dementia-friendly space for my project, I think that a more familiar nature would be more appropriate as it can talk more to the individuals who grew up here and recognize the local climate.



STUDY VISIT MÅNSTORPS ÄNGAR

Månstorps ängar is an assisted living facility in the countryside of Skåne, focusing on residents with dementia. (Förenade care, 2020) There are 56 apartments divided into four units. The concept for the facility is "Dementia Village". The residents are supposed to have everything they need in a closed environment so that they can be encouraged to move around freely within the facility (Rundgren, 2023). They have functions such as a bar, a shop, a winter garden and a fenced yard with a looped walking path of 500 meters. During the summer months, they keep chickens and spend a lot of time outside.

Based on the study visit and on their own instagram page, they use the outdoor areas a lot and the staff seem very motivated to make the residents feel good and experience things and the building and its surroundings allows for it. However, the winter garden is quite small and during the colder part of the year they seem to have less outdoor contact. The winter garden simply does not host everyone.

Despite being very flat and accessible, the yard offers many different things such as apple trees and a bridge over a small stream. It could be even more diverse and offer different kinds of spaces though. It is a lot of lawns that the residents do not really use.

The ability to stroll free around the premises is really nice and they have done it without a trapped feeling. The house itself embraces a big part of the yard.



REFERENCE PROJECTS

Alnarps Therapeutic Gardens

SLU (Swedish University of Agricultural Sciences) has, together with other universities and the region, conducted studies of nature's impact on humans in the gardens between 2002 and 2019 (Gyllin,

2023). Study groups such as people with stress related illnesses, dementia and stroke has been a part of the research. The garden is designed to meet the needs of humans in different aspects according to several theories (Grahn, et al., 2010). It contains many different kinds of nature with many different features such as calm meadows, ponds and more agricultural areas.

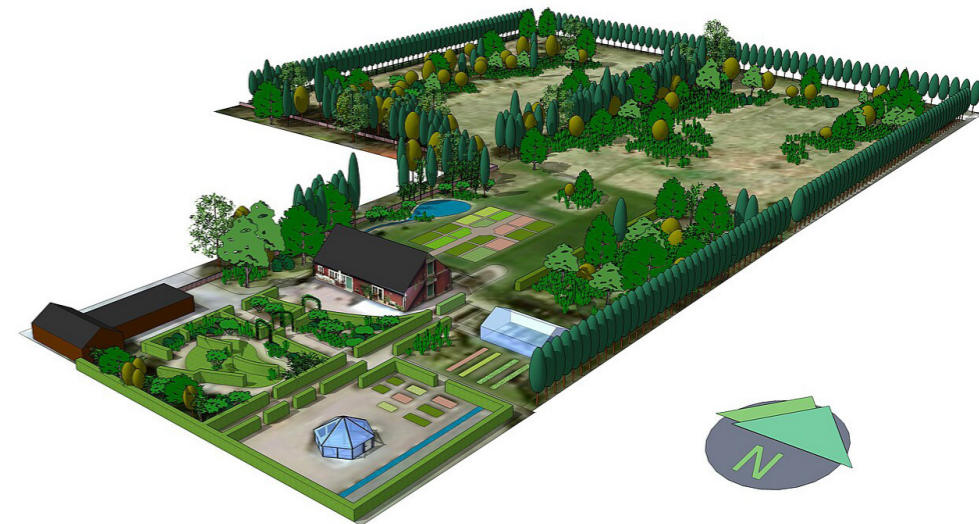


Fig. 1. View of Alnarps Gardens. CC-BY

Pilhamns Gårdar, Värmdö

Bräcke diakoni just finished their care home in Stockholm together with Marge architects. It follows their vision to a large extent, but they told me that if they were to build on their own plot, the common spaces would be a bit more generous. There is a lot of wood and airiness and a focus on nature.

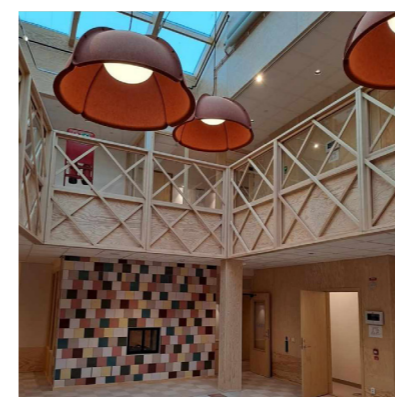
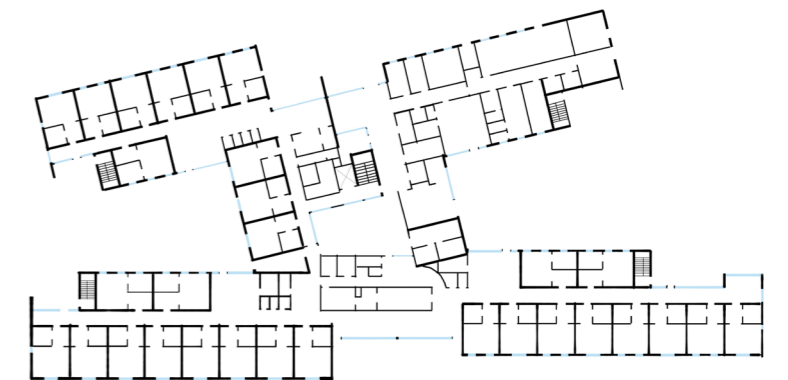


Fig. 2. Lobby. (Bräcke diakoni, 2024)



Fig. 3. Window details. (Bräcke diakoni, 2024)

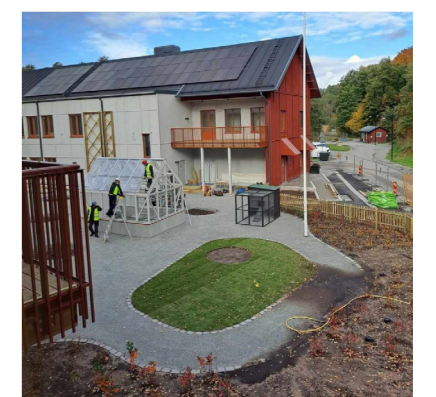


Fig. 4. Yard and facades. (Bräcke diakoni, 2024)

4. SITE & CONTEXT

This chapter contains an introduction to the site and why it is chosen. The site was analyzed in different ways to understand how to use it in the design phase.

SITE INFORMATION

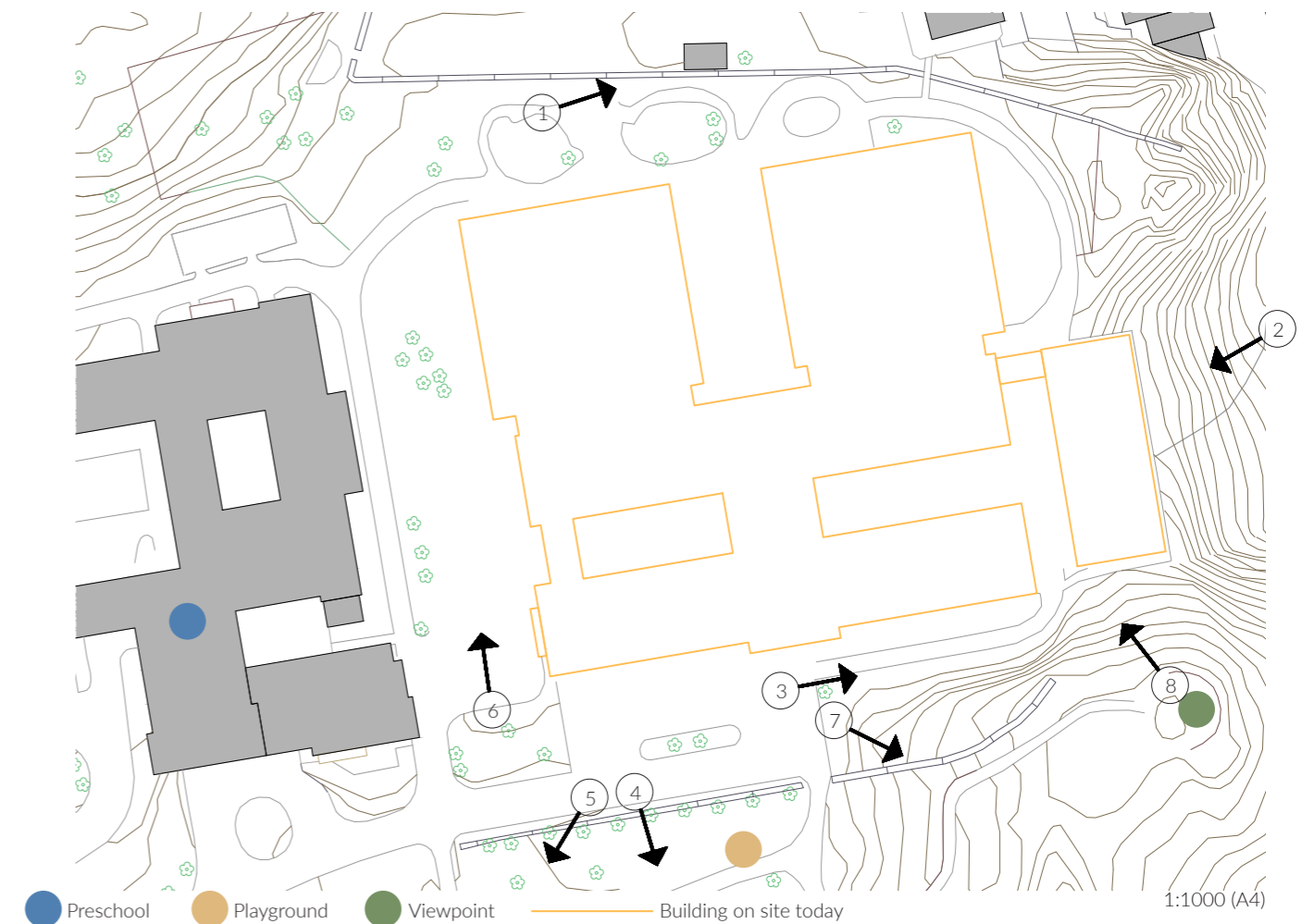
Centrally located in Gothenburg, the plot is situated in Bräcke park. It is a part of a larger plot belonging to Bräcke Diakoni, a non-profit foundation focusing on people centred care. In the park today, they run operations such as hospice, preschool for children with disabilities and LSS-housing. On a part of the plot with an old building in bad condition, they plan to initiate the process of replacing the old building with a new residential healthcare facility for elderly. That plot is the one I use for this Master Thesis work.

Bräcke park is situated on a small mountain with lush terrain, which Bräcke Diakoni takes measures to keep and improve with projects for biodiversity. Neighbouring the park is single family housing towards south, west and northwest. To the east, an industrial park is located on the other side of a large road system. To the northeast, at the other side of a large road, the million program housing area, Biskopsgården is located.

Although the plot feels very secluded, one is reminded by the centrality of it when views to Älvsborgsbron, Eriksbergskranen and Karlatornet can be seen.

The closest tram stop is Sälöfjordsgatan a short walk away, and the closest bus stop is Bräcke Östergård, just outside the main entrance to the park.

The first time I visited the site was a sunny day in february. I had been in the park before, but this was the first time that I also knew which plot I was going to use. I really enjoy the surroundings and think it would be a great place to locate a care home. The plot was one of a few vacant parts of the park where they plan to build, but this one felt most suited and most surrounded by nature. It is also where they plan to build a new care home in the future, making the plot even more relevant. It also provides me with the opportunity to maybe influence their design a little bit.



SITE ANALYSIS



1:2500 (A4)

SITE ANALYSIS SWOT

Strengths:

- Very lush surroundings.
- Much animal life in area, birds singing, squirrels and rabbits passing occasionally.
- Centrally located, easy to access with public transport if able to walk a bit.
- Corner plot, so not much traffic passing by.
- Elevated location, which allows for good views and sun conditions.
- Calm area, feels really natural and secluded. An oasis in central Gothenburg.

Opportunities:

- Nature works as "invisible" boundaries for the plot with the slopes around.
- Possible to connect paths on plot to the existing paths in the area.
- Possible to connect outdoor area to existing park and playground just south of plot.
- Nice tree row between existing building and west neighbour.

The site in numbers

Height: 28 meters over sea level
Coordinates: 57°42'32"N 11°54'00"E

Lindholmen: 2 km east
Gothenburg central station: 4 km east
Göta river: 1,3 km southeast

- - - - - Pedestrian flows
- - - - - Vehicle flows
- Sun path summer
- Sun path winter

- Access point pedestrian
- Access point vehicles
- Bus stop

Weaknesses:

- All communications must take place in the southwest corner of the plot.
- Corner plot, so possibly hard to attract people walking by.
- Not very nice views to the west (overlooking roofs closest).
- Difficult to fit in parking.
- Plot in the corner of the park, furthest from bus stop.

Threats:

- Possible that people can see in from the hill in southeast.
- Heavy flows in the southwest corner, possibly crossing if not carefully thought through.
- Since the entering point to the plot and the wanted connections to the surrounding takes place at the same place, it is hard to make the common part of the building centrally located.



5. ADAPTING THE THEORIES FOR THE SITE

Combining the knowledge gained in the theory phase and the site analysis, a series of more site and topic specific design strategies are formed to guide the concept taking form.

DESIGN STRATEGIES

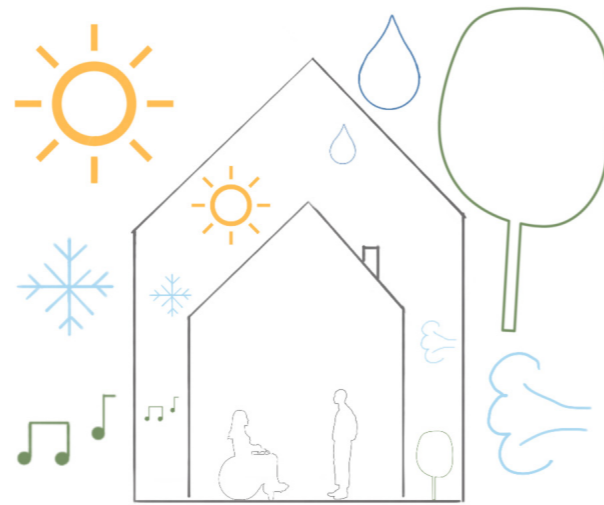
Create spaces in between in and out

By offering the residents a variety of spaces that are between completely inside and completely outside, they can choose according to weather and ability. They can come as close to nature as they wish for, the weather allows for, and they have ability to.



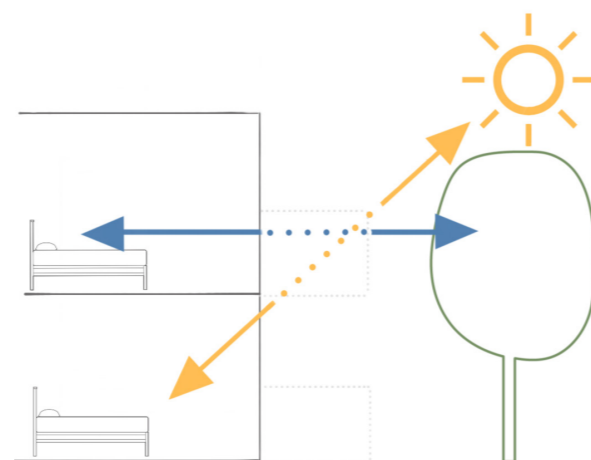
Wintergarden

For residents that struggles to get outside during some forms of weather, a wintergarden can help ease the impressions. It can be a space with greenery and daylight, but with a milder climate. It can be accessible on wheels even when snowing, the rain can be heard without getting wet, the sun can be felt, without being cold or exposed to wind.



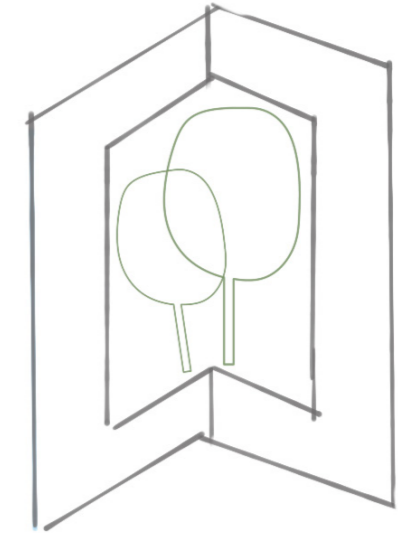
French balcony

In order for a person who spends a majority of time in bed, nature needs to come closer to them. By having an openable wall of windows, the room itself can transform into a balcony, giving the person the opportunity to enjoy nature from bed. Where a regular balcony both blocks daylight and visual connection for a person still inside, the french balcony lets nature come closer to the room. It also saves the resident the potential struggle to cross a threshold or risk being locked out.



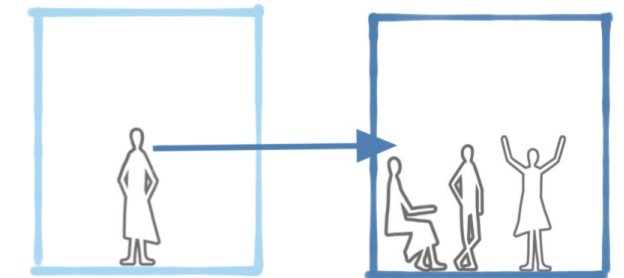
Window over a corner

By introducing a window over a corner, the view of the outdoors is more three dimensional. Nature feels more interactive than a regular window which can feel more like a painting on the wall.



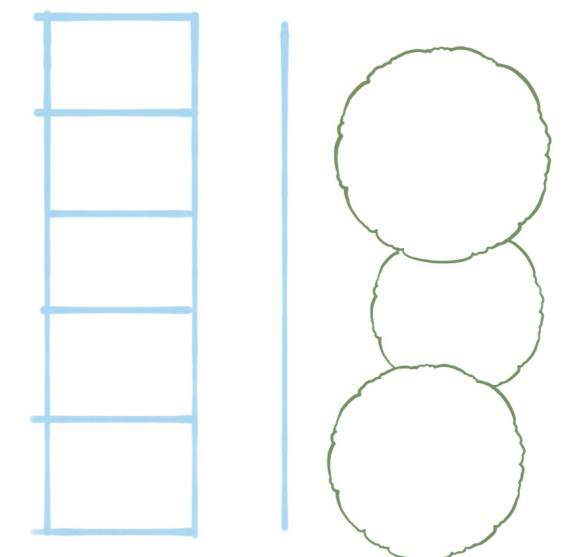
Visual connection to common areas

For many residents, a visual contact with the rest of the facility can be important. By seeing the light and movement in the corridors or the common areas, the residents get reminded that it is there. It also helps the resident prepare for what they will meet outside of their door, making it easier to face. By introducing a visual connection both to the nature outside and the common areas, the resident can connect to nature from their room and also be encouraged to move further out.



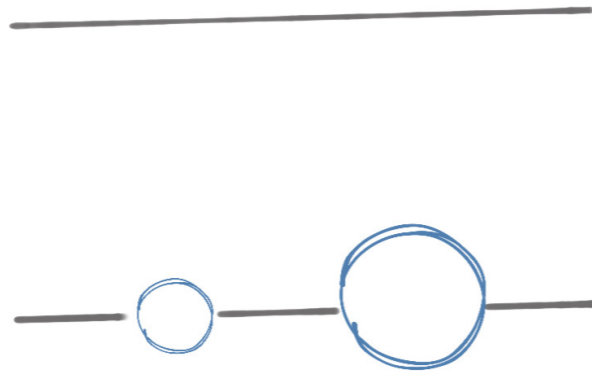
Single sided corridors

By having the corridors single sided with a glazed wall to the garden, a more homelike feeling where the resident meet nature when stepping out of their home is reached. They also have a more encouraging view when stepping out.



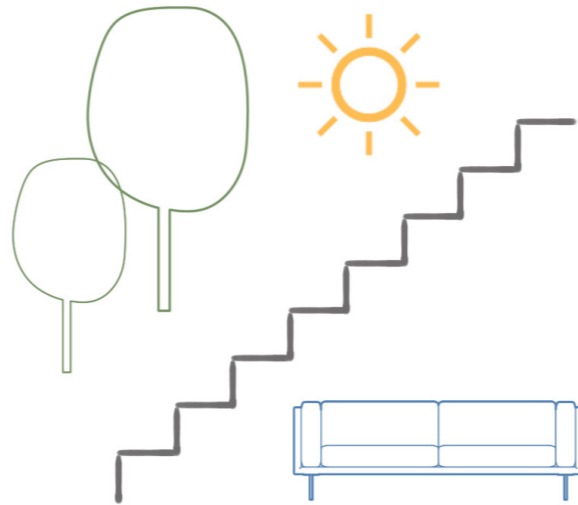
Activity in the corridors

By bringing in "stops" along the corridor, it feels shorter and more interesting. Introducing small gardening hubs, the residents can garden, or sit and enjoy the view, just outside their door. It reminds of a row house with small gardens outside the doors. The corridor becomes almost like a small street outside the homes.



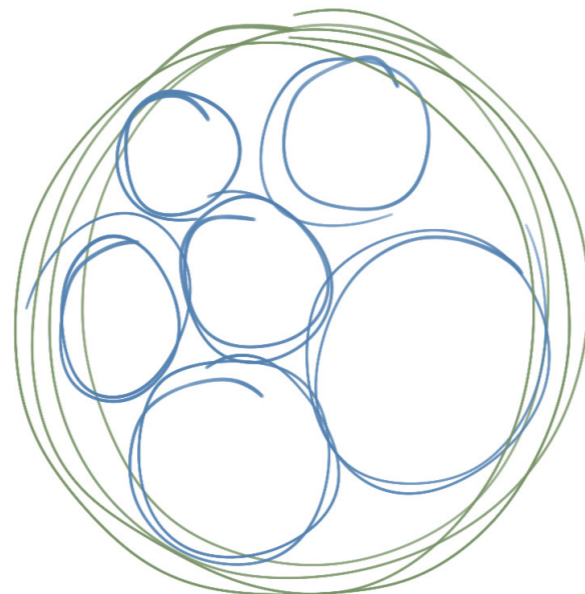
Combine communication with pleasant features

By placing the communications in the best spaces, chances of it being used and not forgotten increases. The whole way from apartment to outside also feels pleasant and encouraging, nature is a part of that whole stroll.



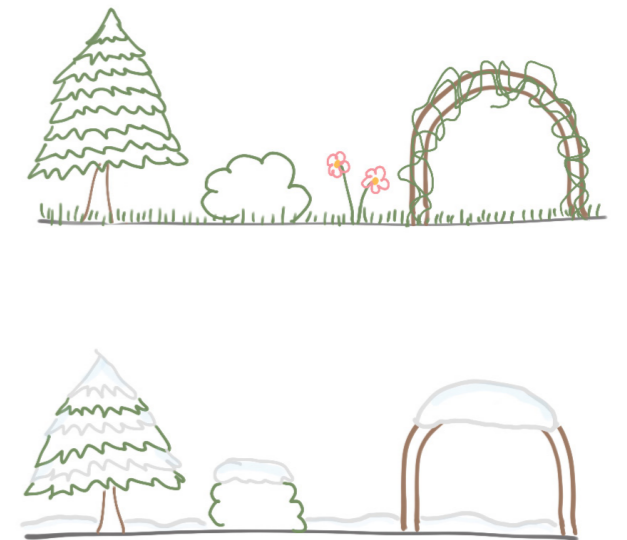
Small rooms in garden

By making different rooms in the garden, it can be enjoyed by different people at the same time. It can hold people with different preferences and can be used in different weather conditions. It can hold as many of the "perceived sensory dimensions" as possible.



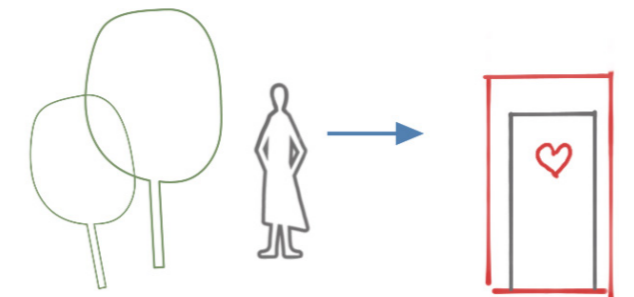
A three-dimensional landscape

Since the aim is to have the garden remind the residents of nature all year around, it is important not to just rely on pretty flowers in garden beds. Trees, bushes, wintergreen plants and built elements keeps their shapes during winter, helping the residents feel nature then as well.



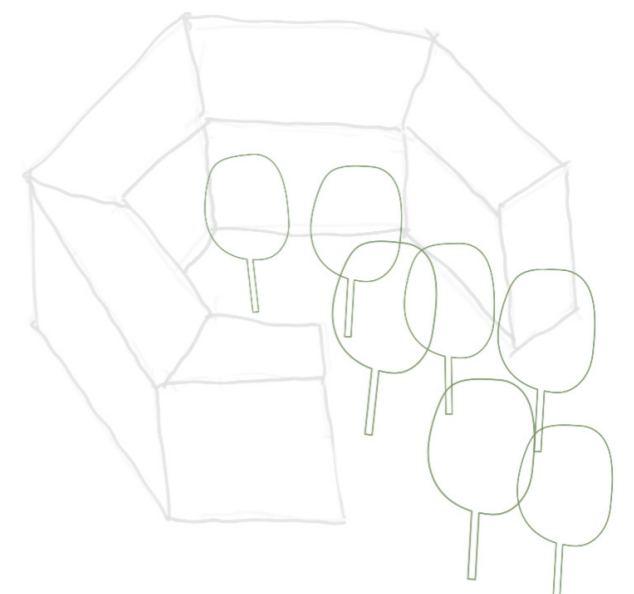
Vital functions close

By proposing functions in the garden, such as toilet and kitchen, the residents can spend time in the garden more easily. It also makes it easier for the staff to serve the residents with for example food or water outside.



Hugging volume

By surrounding the garden on more than one side it feels secure. A microclimate is created that can provide sun, shadow and breezes. The garden feels naturally secluded without having too many fences. The volume opens up to the calm and green hill in the south, connecting nature in the garden with nature around.



6. FRAMEWORK

Presented in this chapter is the boundaries set for the design, such as what functions the building should hold, how many residents should live there etc.

"CLIENT" AND PROGRAM

Bräcke Diakoni is an "idea-based" foundation founded by "the bishop of the poor", Edvard Herman Rodhe in Gothenburg in 1923 (Brackediakoni.se, 2025). The purpose was to train deaconesses to provide care and healthcare in assemblies or care institutions of different kinds. This was in a time before the public healthcare systems in Sweden. During the 1950's, the county councils started to take over the responsibilities, however, Bräcke Diakoni has stayed within the field, actively pointing out flaws and trying to influence the care provided to the Swedish residents. They have started up children rehabilitation centres in a time where most disabled children were put in institutions, and they opened Sweden's first hospice in Gothenburg.

To be an idea-based foundation means that there are no owners. The goal is not to make profit, and any excess money is re-invested in the operation.

Although founded in christianity, the foundation today is politically unbound. There are around 1100 employees in ca 45 operations spread across Sweden, focusing on different forms of care for children, elderly, people with functional varieties and others in need.

In Bräckeiparken today, they run a series of operations including hospice, dementia homes, preschool for children with disabilities, "daglig verksamhet" (occupation for individuals with functional variations) and LSS-housing (housing for the same group).

Details from Bräckes own program:

-Assisted living facilities operated by Bräcke Diakoni gets their food delivered. They therefore don't need a big kitchen, but a place to unload the food.

-Bräcke Diakoni wants to have a public function, such as a café linked to their operation. This is a place both for the residents and staff, but also for relatives and the community around.

-Bräcke Diakoni strives for having six units à ten apartments each, with two units sharing functions and working closer together. They also want the opportunity to join two apartments together to make an apartment for couples.

-The buildings should be 2-4 floors high.

-The apartments should be 30-35 squaremeters.

-The common dining and living room should be at least 60 squaremeters per unit. The kitchen should invite the residents to participate and have the possibility for circular movements.

Functions/rooms in an assisted living facility:

-Entrance area. This is the first thing that meets the resident the first time they come to visit. It is the space where relatives come when they come to visit. It is probably also a space that a potential staff member meets first. This needs to be a nice, spacious place to sit and wait or spend a little time.

-Administrational areas for staff. Both for administrative staff, but also for the care staff. They need spaces to have meetings for example when the night shift hands over to the day shift. There also needs to be a place where staff can meet relatives. To make work easier for staff, there can be a small office in connection to the unit.

-Staff areas, such as lunchroom, calm room, changing rooms, spaces for laundry and clean work clothes and storage related to the operation both on unit and centrally located.

-Nurse area where the nurses have office space and drug storage.

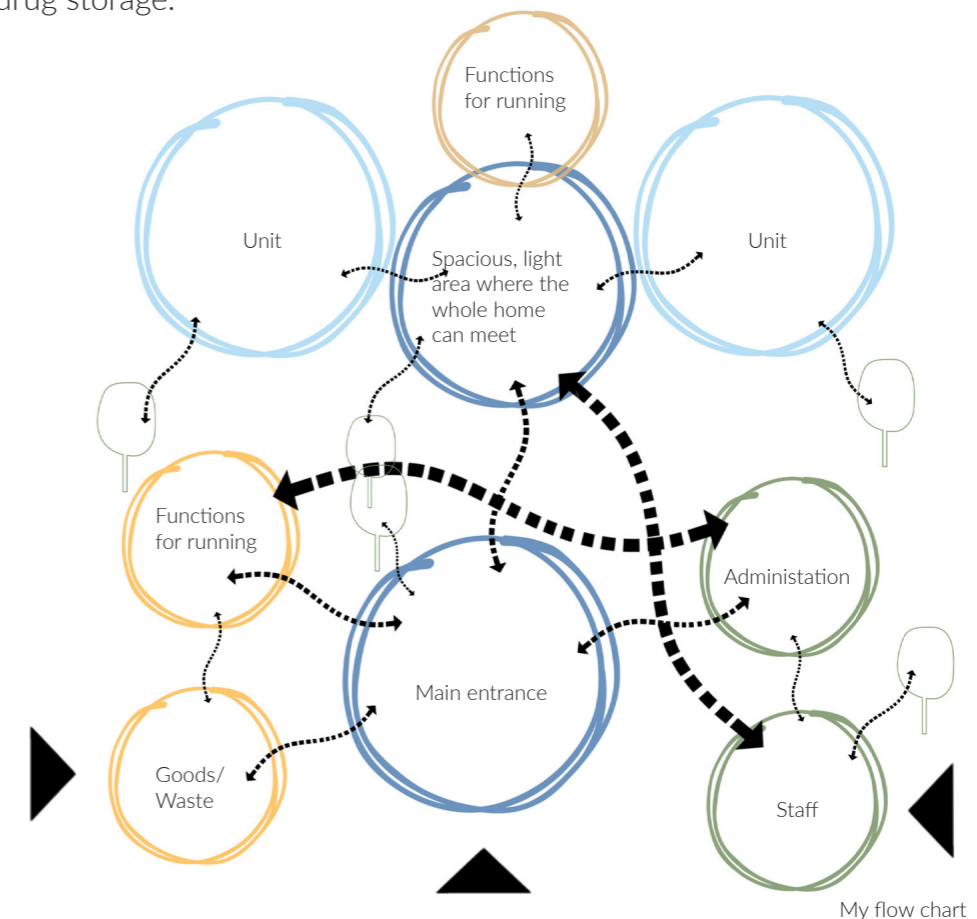
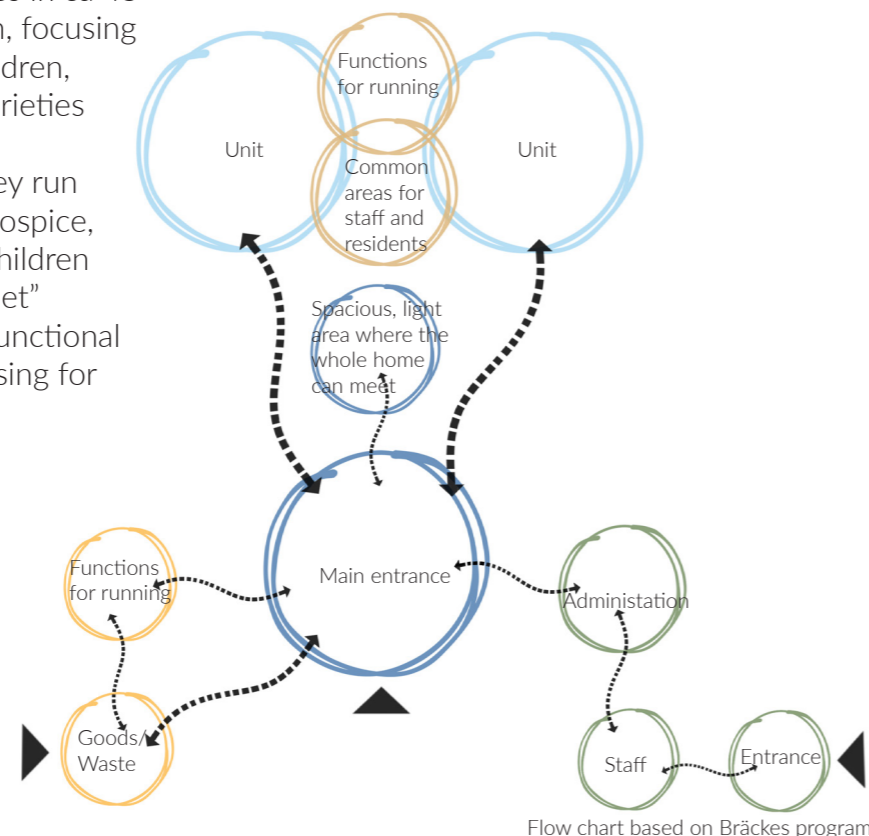
Added functions:

-Store where the residents can get the feeling of going shopping. They get in from outside, mimicking how a real store would work. The store is located along the "town street", which holds the functions gym, store and "primary care centre".

-Gym (is in Bräckes program, but not always present in care homes) where the residents can do their physiotherapy or just come to do some work out.

-"Primary care centre" where the residents can come if they want to see a nurse for something.

-Daycenter for seniors, where the elderly of the community can come and spend time and maybe have the opportunity to spend time with friends or neighbours that has moved into the care home. By creating a place that the elderly can get to know before they are at the stage where they need to move into a care home, they can get to know it before it is time to move in. The move can then be eased.

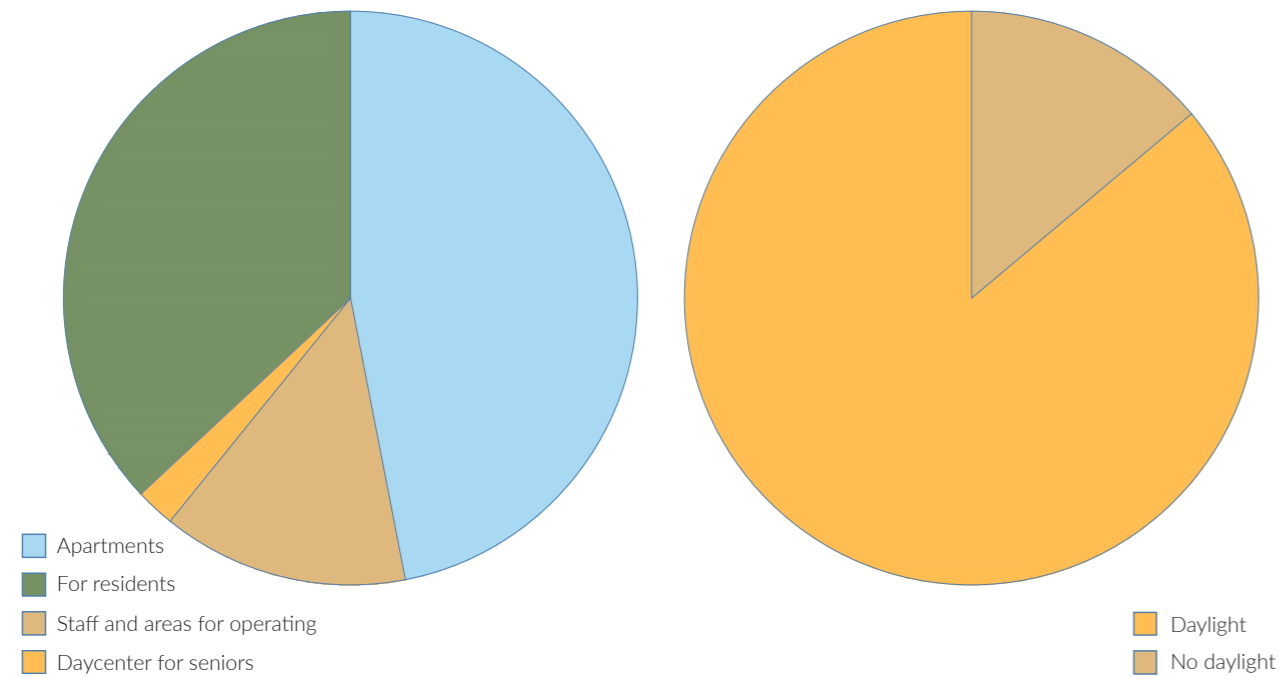


7. PROPOSED DESIGN

This chapter contains the concept for the project as well as the finished proposal and all the material that goes with it.

BRIEF

Based on the programme from Bräcke, my own adaptations and some common sizes of functions, this is what the project looks like in numbers. The aim has been to make as much as possible of the areas with nice qualities and contact to nature.



Function	Area (m ²)	Number	Total area (m ²)
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FOR TENNANTS, UNIT

Single apartment	34	62	2108
Double apartment	50,5	4	202
Kitchen	49,5/59	3+4	384,5
Living room	29/28	3+4	199
Gardening/social hubs	14/8	25+10	430
Storage	1,5	66	99

FOR STAFF, UNIT

Office	8,5	4	34
Storage	10	4	40
Laundry	11	4	44
Waste/Desinfection	11/5	3+1	38
Wc	1,5	4	6

ADMINISTRATION

Office, 2 people	14,5	1	14,5
Office, 1 person	11	1	11
Office, shared	41	1	41
Staff, meeting	20,5	1	20,5
Staff, lunch	42,5	1	42,5
Staff, calm room	10	1	10
Staff, dressing room (incl. wc)	36,5	2	73
Hwc	5	1	5
Wc	1,5	2	3
Staff, laundry	14,5	1	14,5
Staff, clean work clothes	14,5	1	14,5
Meeting room, entry hall	12	1	12
Nurse, office	21	1	21
Nurse, desinfection	14	1	14
Drug storage	18	1	18
Nurse, patient room	14	1	14
Nurse, waiting room	10	1	10

FOR OPERATING

Food delivery room	27,5	1	27,5
Goods delivery room	14	1	14
Waste/recycling room	20,5	1	20,5
Storage	33,5	1	33,5
Technical	4,5/3/42	1+4+3	142,5

PUBLIC AREAS

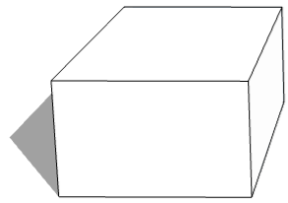
Entry hall	84	1	84
Daycentre	83	1	83
Café	110	1	110

COMMON WHOLE HOUSE

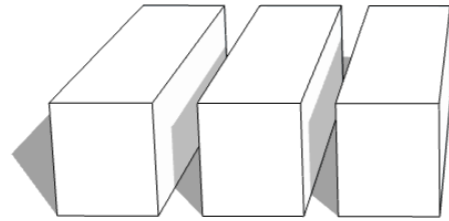
Store	45,5	1	45,5
Gym	45,5	1	45,5
Wintergarden (Incl. hwc and kitchen)	172,5/146	1+3	610,5

TOTAL are functions			5139,5
TOTAL area building (including inner walls and corridors)			6279

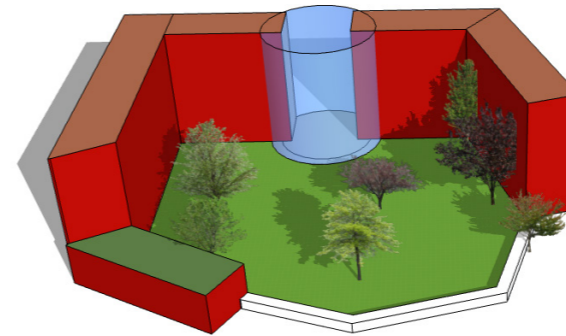
VOLUME MANAGEMENT



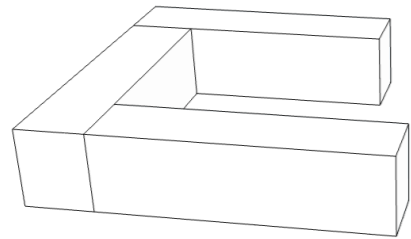
To start off, an estimation over the needed square meters was done. This was then placed on the site to see how the volume could develop further.



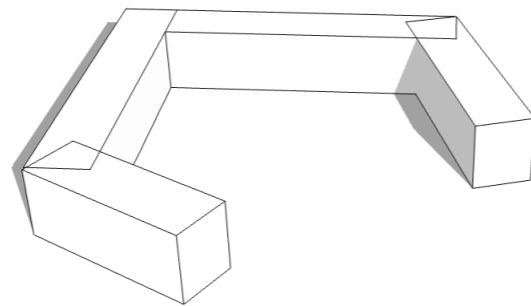
In order to bring in daylight, the volume is split up into more volumes that can be placed around the plot.



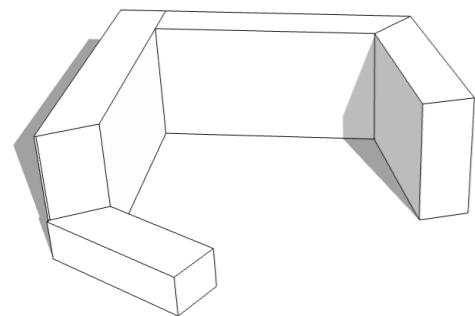
Lastly, a low fence and a plant row creates a clear boundary to the outside without cutting the visual lines. A lush and diverse garden is introduced in the middle and the buildings gets colours, green roofs on flat roofs and solar panels on tilting roofs.



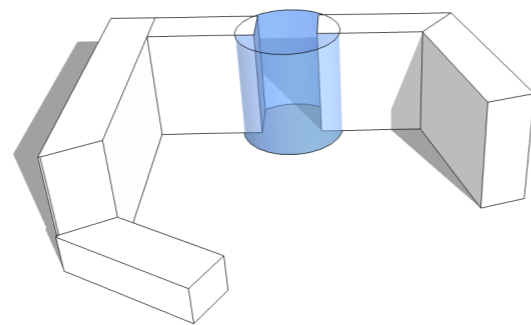
To create a safe garden for the residents without too much fencing, the volume hugs the garden, creating natural boundaries.



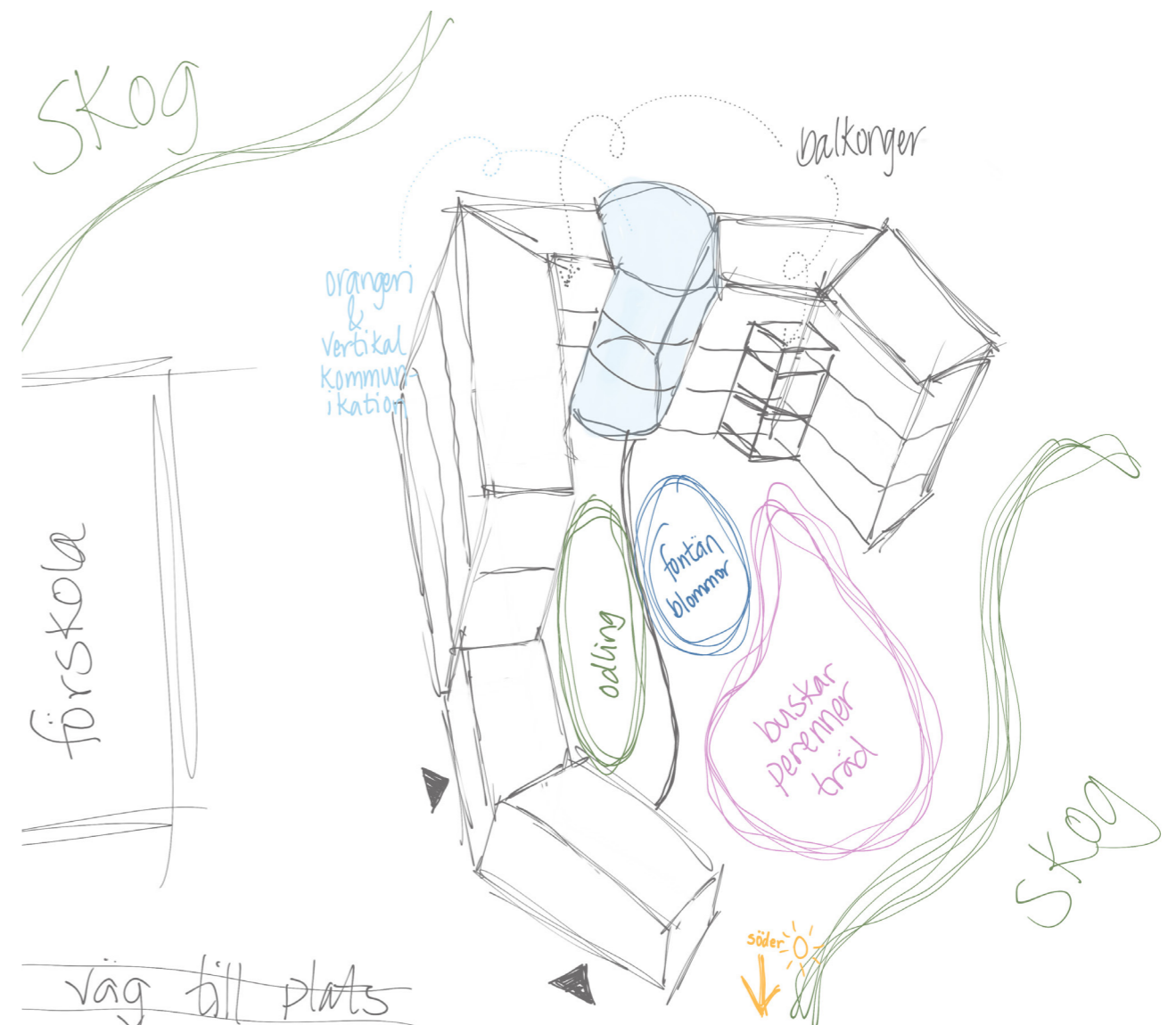
The volume is turned to face south and the trees on the hill next to the plot. The southwest corner is meeting up the only access point for vehicles.



To reach the needed square meters without compromising on the big garden, the volume is raised in the north and lowered in the south. The main entrance is placed in the low part, which is easy to see because of the different form. The low volume will also create a sharp shadow in the evening, rather than tree shadows, which residents with dementia prefer late on the day.



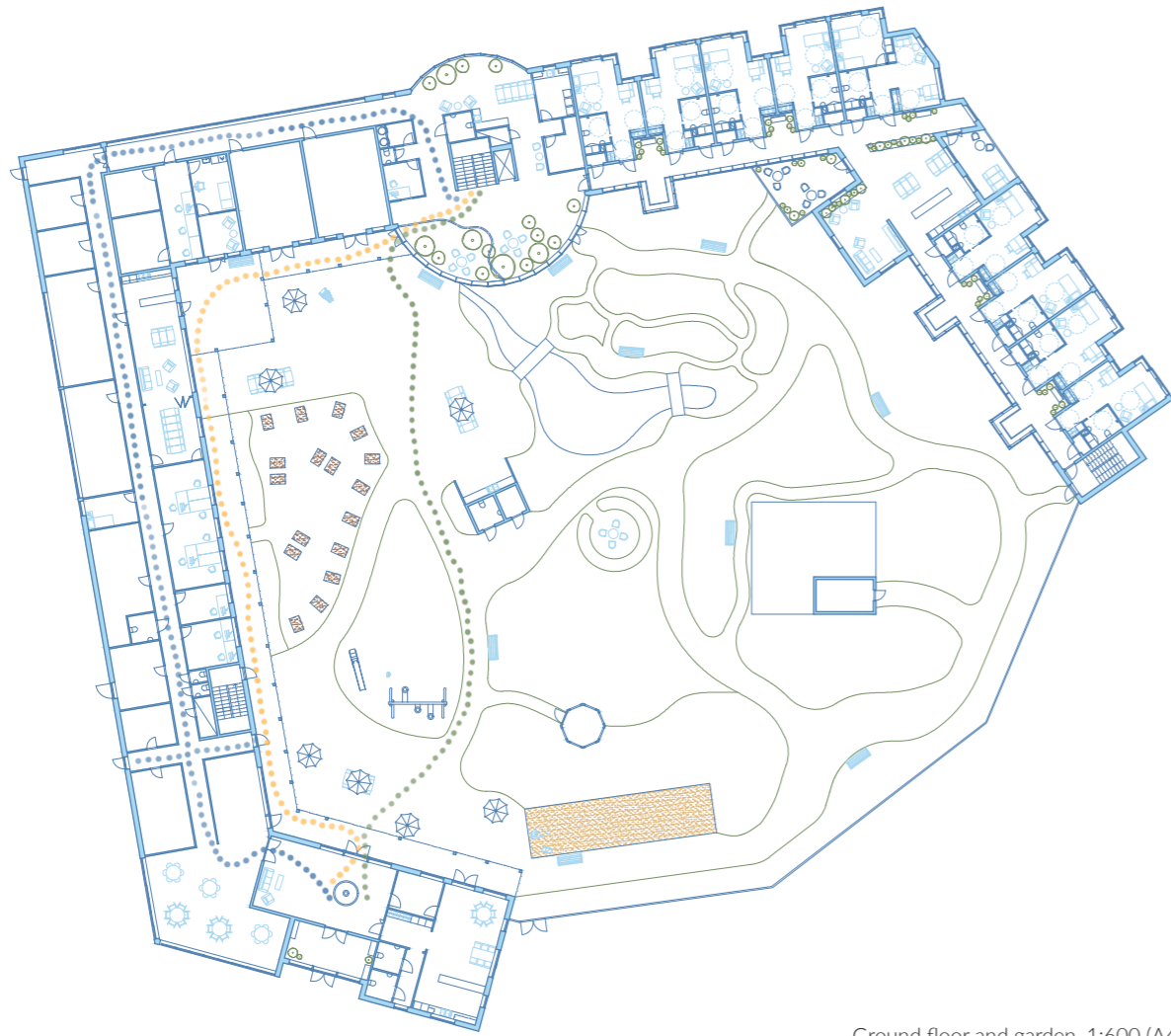
To break up the volumes and create a place for vertical communication, a wintergarden is introduced. This is also easy to find the way back to from the garden, because of the difference in appearance. The wintergarden becomes a backbone for the garden in front of it.



FLows OUTSIDE THE FACILITY

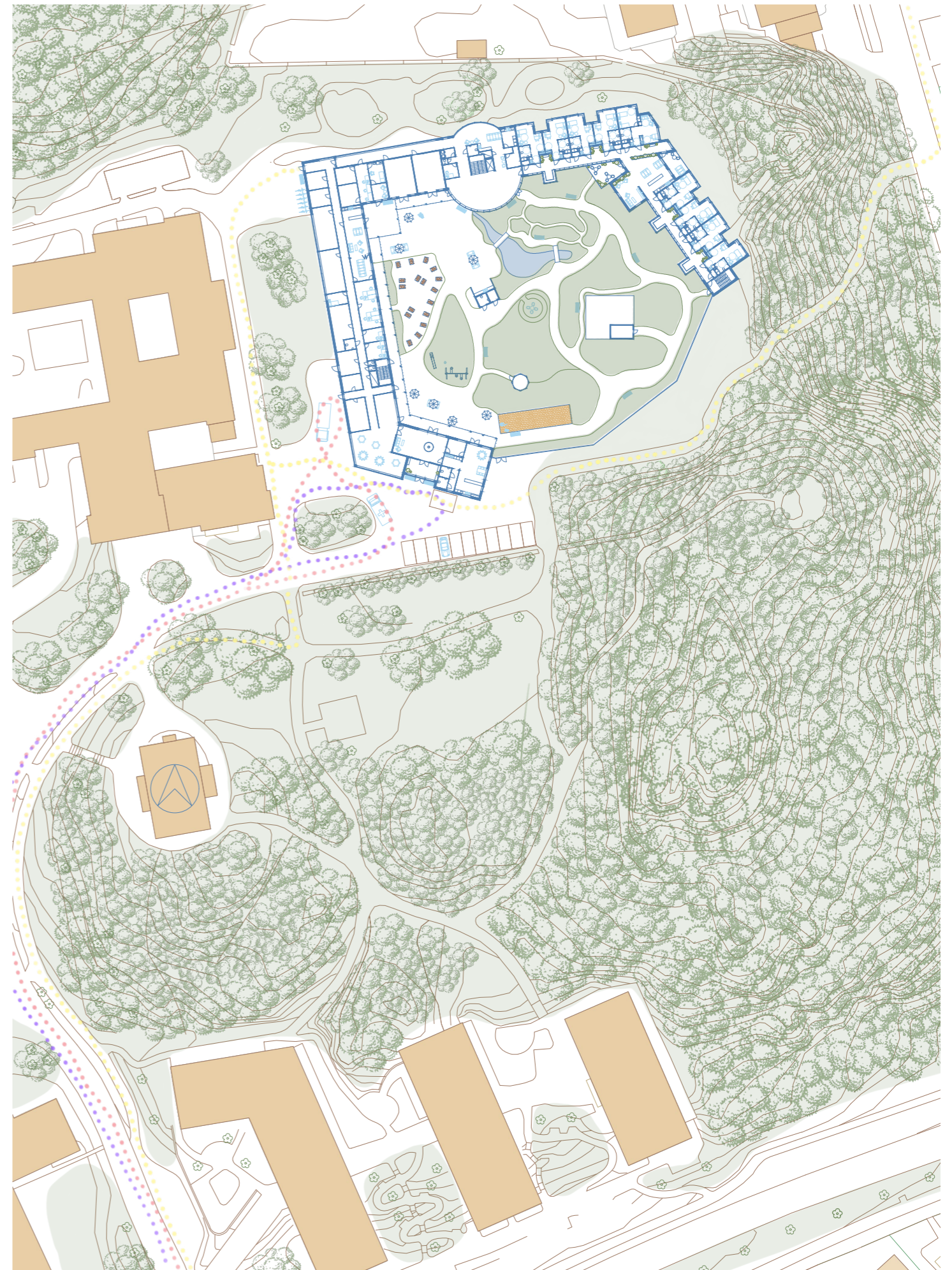
To access the building with a truck, the driver circles around the trees and backs up close to the doors for delivery and waste. The circulation allows moving around with a larger vehicle without having to drive backwards close to the main entrance. With the obtuse corner of the building, a backside is created for less attractive functions even if the access point to the plot is very limited. A taxi or an ambulance can also come close to the entrance. A staff member walking from the closest

tram stop would enter the area from east and a staff member walking from the closest bus stop would come from south. When moving within the premises, the closest way from delivery areas and main entrance is outside. Bräcke Diakoni is open to test out new ways of thinking, and moving outdoors is health beneficial for the staff. It is possible to walk outside under a roof or across the garden, but there is also an internal corridor that the staff can move in if necessary.



Ground floor and garden, 1:600 (A4)

- Indoor way from main entrance to vertical communication
- Way under roof from main entrance to vertical communication
- Closest way from main entrance to vertical communication
- Delivery flow
- Taxi/flexlinjen flow
- Walking to work from public transport



Situation plan, 1:1000 (A4)

FLOWS WITHIN THE FACILITY



Aino moved into the facility a couple of weeks ago after spending some time in hospital for a hip fracture. She is now getting used to life in a wheelchair and is still rather dependent on staff to move around. She feels quite insecure about the wheelchair and prefers to stay close to the building. She joins happenings on the sun patio, spends time in the winter garden and sits on the common balcony. She enjoys the social company and feeling the nature come closer.

A while ago, Bengts dementia got too severe for his wife Cecilia to manage at home, and he moved here. Cecilia comes to visit almost every day and they like spending time together in the garden. Previously, they lived in a villa in the area and Bengt feels the most like himself when he can shovel snow, pull weeds or water plants. Cecilia, who moved to an apartment when Bengt had to move, can grow some of her plants in the garden here now instead. After the gardening work, they often visit the café. Sometimes, especially during the colder months, their friend group since many years joins them in the wintergarden. They see it almost like a little tropical vacation.



Daniel often starts his days with a bike ride to work. When he arrives, he takes the route by the clothes storage and the changing room before putting his lunch box in the fridge and joining the morning meeting next to the kitchen. He and his colleagues then move to their units to wake the residents up. When it is time to eat, Daniel walks across the garden to the food delivery and picks up the trollies for the two units on his floor. He mainly spends his working day in his unit, in the winter garden and the functions located there and outside when he joins the residents there. He spends his lunch break in the sunny corner outside the staff room.

Emily works as an administrator. Her work is to plan schedules and take care of some running aspects. When she is not in her office, she mainly moves around on the ground floor for example she brings in deliveries. It is also her job to plan the weekly activities, common for the whole building. There is bingo on tuesdays, boule on wednesdays, open bar on fridays and a local musician playing on Saturdays.



Florence is far along in her dementia, but her body is healthy, and she has a big need to move. She is curious and she easily gets restless, so she never stays long anywhere. She spends a lot of her time walking the loops around the garden, which provides her a safe space to walk in without getting lost. The wintergarden is visible from the whole plot, and she knows that's where she can get in. Florence has a hard time joining the activities and prefers to just look what's going on for a bit and then continue her exploration.



ENTRANCE AND PUBLIC AREAS

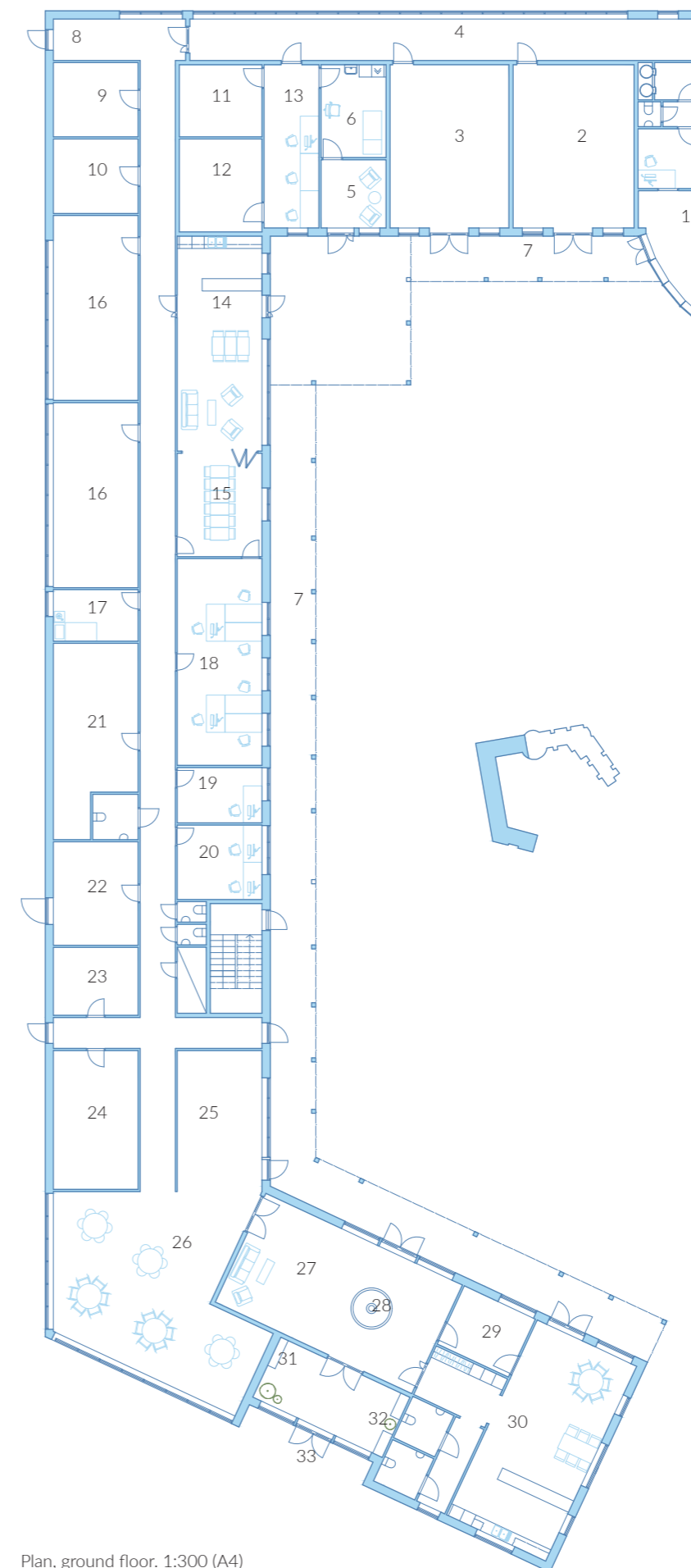
When arriving to the building, the visitor enters through the main door protected under a roof. Just inside is an airy, light space with benches to wait for Flexlinjen, plants and mailboxes. Further in is a waiting hall, either for a resident who wants to spend some time there to see who is coming or for the visitor to wait for a staff member to show them the way if it is their first visit. To the right is a daycentre for seniors and to the left is a café open for both residents and the public. The daycentre provides a series of positive things. It invites the local seniors that are maybe old friends or neighbours for the residents. The local seniors are in some cases a bit healthier, inviting the more alert residents to join in. It also creates a familiarity for the local seniors, so that if they one day move in, the move can be more smooth. The café invites the community to the area. There are many nice walks around so many people move around the area, and a calm playground just outside the main entrance of the care

home attracts young families. When the residents have a hard time to go out into the society, a small part of it can be invited in to make the residents feel like a part of their community.

Further in from the café is the administrative areas for staff with first offices and service areas and then areas for the care staff. It is possible to move within the whole building inside, but one is encouraged to move outside because it is closer and a more beautiful way. Along the walkway under roof the residents can visit a gym, a small shop and a "primary care centre" (nurse office). This creates a sense of freedom when imitating a town. Since many of the residents cannot really move alone to the real town center, a small version of it is offered in the building. It is accessible for the residents with a roof and flat ground, but it is still the feeling of taking the elevator down and go outside to get to the store, a feeling that is familiar for the residents.



View over the main entrance.



Plan, ground floor. 1:300 (A4)

Public functions for the residents

1. Wintergarden
2. Gym
3. Store
4. Light corridor to practice walking
5. Nurse, waiting area
6. Nurse, patient room
7. Walkway under roof

Administration and staff corridor

8. Staff entrance
9. Laundry room, work clothes
10. Storage, work clothes
11. Nurse, disinfection
12. Nurse, drug storage
13. Nurse, office
14. Kitchen area
15. Dining/meeting area
16. Dressing room
17. Calm room
18. Shared office
19. Single office
20. Double office
21. Storage
22. Recycling/waste
23. Goods, delivery room
24. Food, delivery room
25. Café kitchen

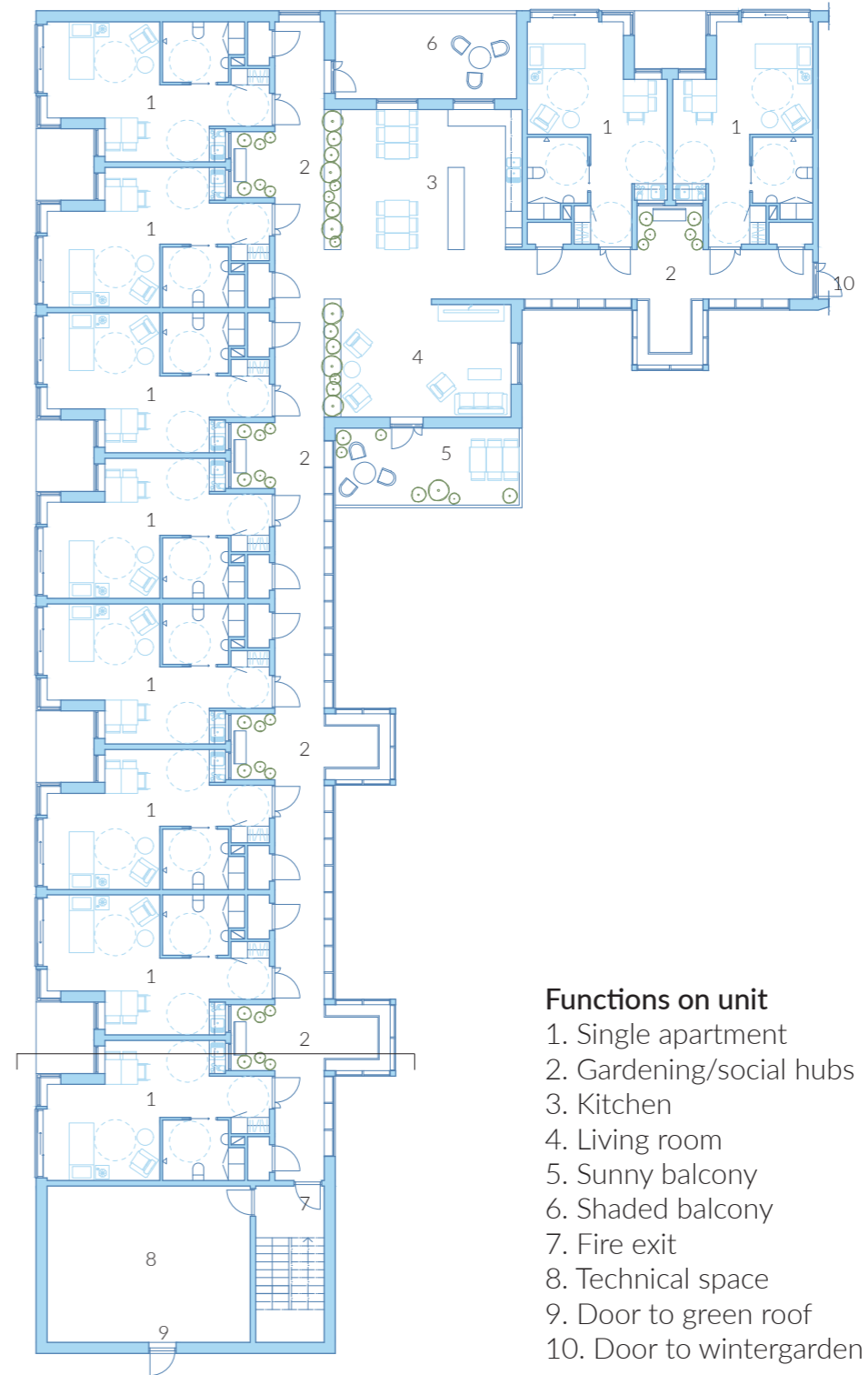
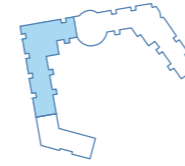
Main entrance and daycentre for seniors

26. Café
27. Entry hall
28. Fountain
29. Flex-room, meeting room and daycentre
30. Daycentre
31. Mailboxes
32. Bench to sit and wait for taxi or relatives
33. Main entry door

UNIT 1



Section - Apartment, social niche, corridor, garden hub. 1:200 (A4)



- Functions on unit**
- 1. Single apartment
 - 2. Gardening/social hubs
 - 3. Kitchen
 - 4. Living room
 - 5. Sunny balcony
 - 6. Shaded balcony
 - 7. Fire exit
 - 8. Technical space
 - 9. Door to green roof
 - 10. Door to wintergarden



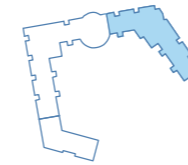
View over garden hub and light corridor with space for plants and meetings.

Plan, unit 1. 1:250 (A4)

UNIT 2



View over the garden from one of the balconies on unit 2.



- Functions on unit**
- 1. Single apartment
 - 2. Couples apartment
 - 3. Gardening/social hubs
 - 4. Kitchen
 - 5. Living room
 - 6. Balcony, morning sun
 - 7. Balcony, afternoon sun
 - 8. Fire exit
 - 9. Door to wintergarden

Plan, unit 2. 1:250 (A4)



Section - Balcony, living room, kitchen, balcony. 1:200 (A4)

THE APARTMENT TYPES

The single apartment has two main furnishings. For a bedbound resident, the bed can be placed close to the french balcony so that the resident can come as close as possible, while still being in bed. The sitting area then becomes more for visitors further into the room. For a more alert resident, the bed can be placed towards the wall, leaving the space near the french balcony to be more of a living room. To make use of the corner with the obtuse angle, a couple's apartment is

fitted. The common approach to have the possibility to link two apartments together is hard in reality because the likelihood of two apartments next to each other being vacant at the same time is low. Here, the couple has a large bedroom to still be able to sleep in the same room, even if one or both need a lot of help. They have a small sitting area to relax away from the bedroom or relaxing in the apartment if one needs to take a nap.



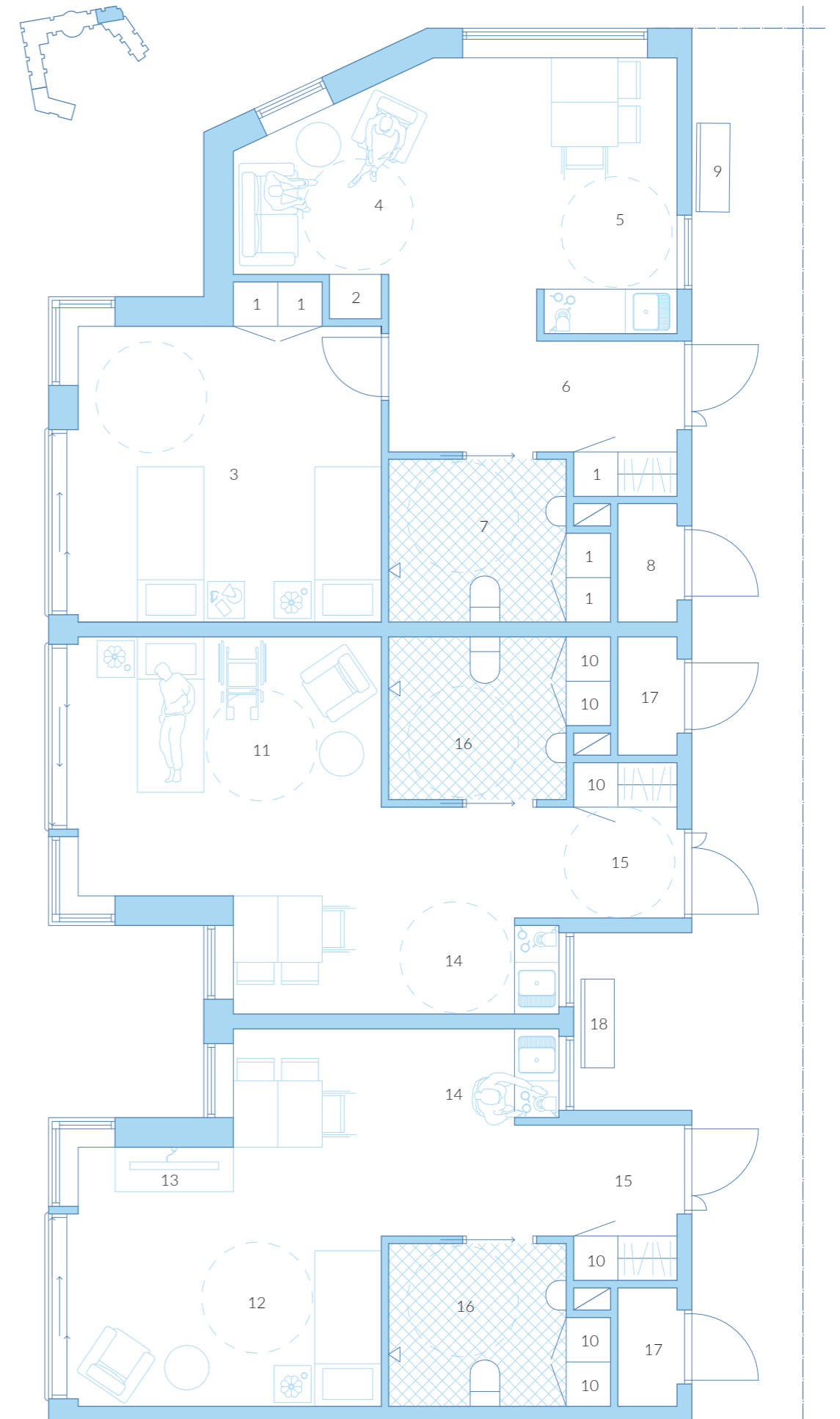
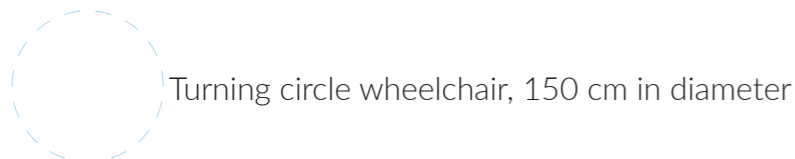
View from the bed in an apartment. The resident can see their whole apartment and both the corridor and nature.

Couples apartment, 50,5 m²

1. Wardrobe
2. Built in shelf
3. Bedroom
4. Living room
5. Kitchen
6. Hallway
7. Bathroom
8. Storage
9. Bench

Single apartment, 34 m²

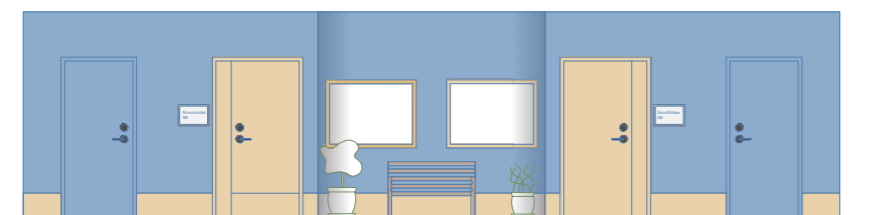
10. Wardrobe
11. Furnished for a bed bound patient
12. Furnished for a walking patient
13. Place for TV
14. Kitchen
15. Hallway
16. Bathroom
17. Storage
18. Bench



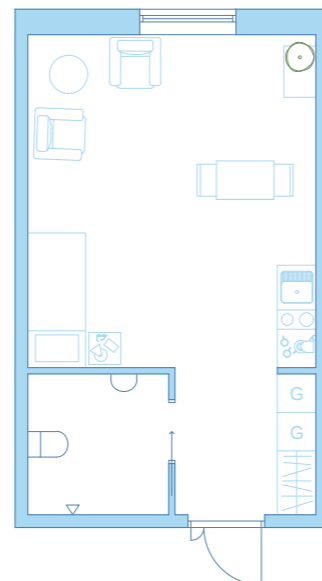
THE APARTMENTS CONTACT TO NATURE

The single apartment is 34 m², which is a common size for apartments at care homes today. However, there are a lot more qualities than in the classical apartment. It is possible for a bedridden resident to furnish the apartment so that they can have a nice view of nature over a corner with a generous light admission. With the french balcony, the whole wall opens up and the resident can enjoy nature closer in a semi-outdoor environment. It is also possible to have a visual connection to the corridor to see movement and light. The kitchen is its own space, but at the same time a part of the room. It becomes the most social space in the apartment with the visual link to the corridor, common areas and nature. With the window to the corridor, the resident can see movement and become motivated to go out and join the activities in the common areas or get a clue to where to go to get outside. Outside

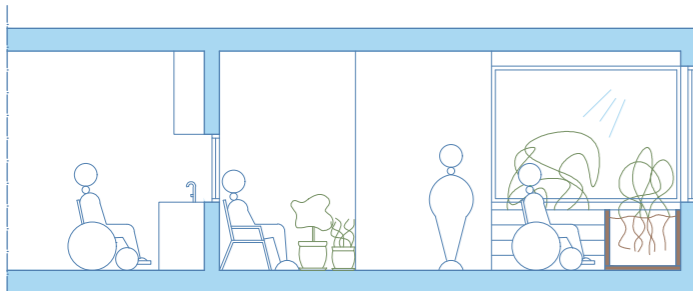
the door is a light and green space. The corridors are glazed with niches for gardening and social interactions with neighbours. Just like outside the door in a row house, the residents can plant seasonal flowers and decorate with what makes them feel like home. The corridors and gardening hubs overlook the common garden outside and the nature beyond it, motivating the resident to get outside, while still providing a meeting with nature for those who chooses to stay inside.



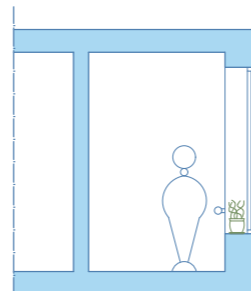
View towards apartment door and sitting area, 1:100 (A4)



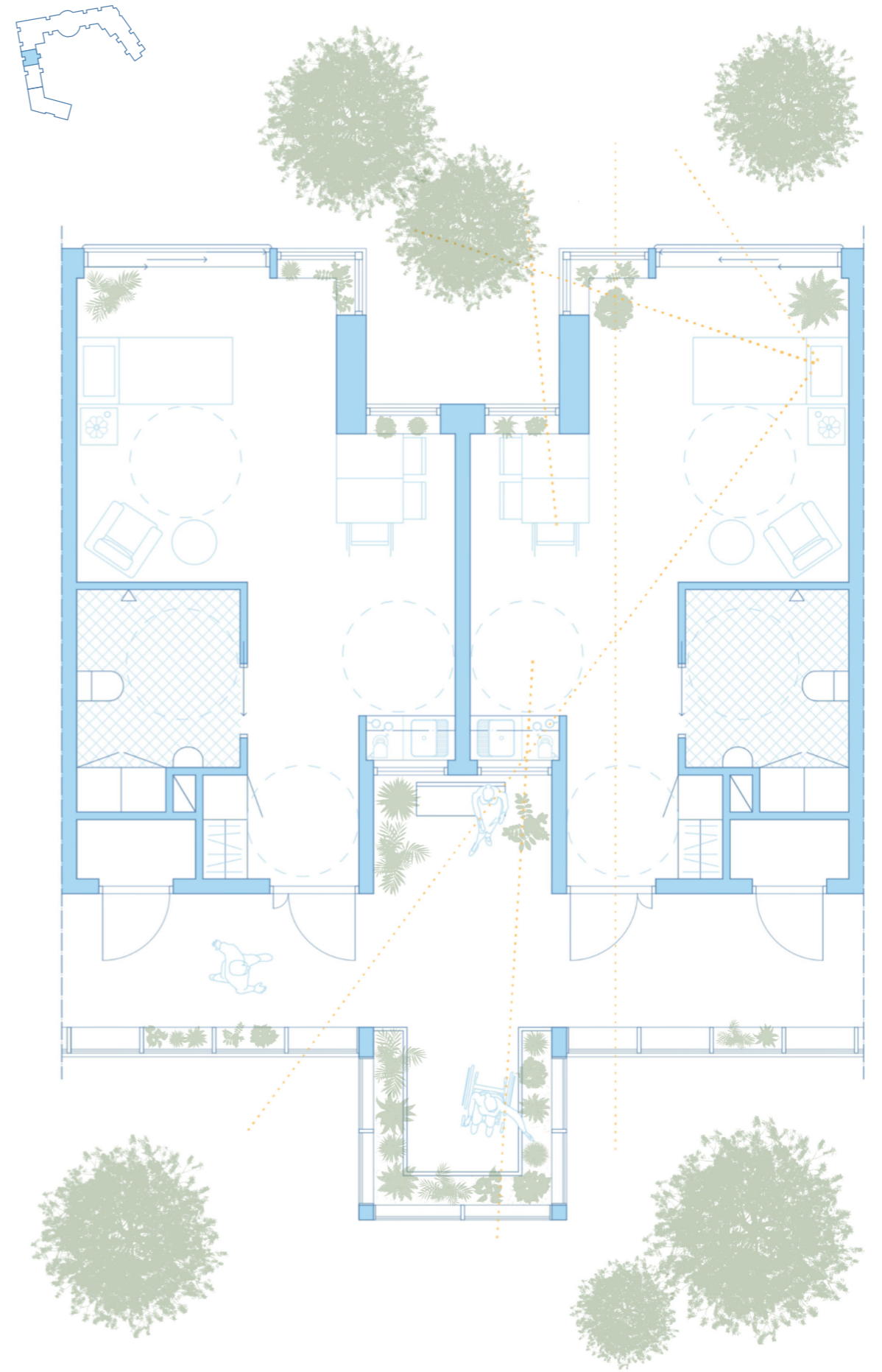
Classic apartment care home, 1:100(A4)



Conceptual section, apartment kitchen, social niche, corridor, gardening hub, 1:100 (A4)



Conceptual section, corridor, 1:100 (A4)



--- Sight line/daylight

Plan apartments, 1:75 (A4)

WINTERGARDEN

To offer the residents a light and airy space in good contact to nature all year around, a wintergarden is introduced. Here, the residents can hear the rain tap on the roof, see the trees blow in a storm or watch the lightnings from a safe place. They can experience a space with height and see plants climbing meters above their heads. The space is comfortably warm during winter and allows for gardening all year around. To keep the temperature down

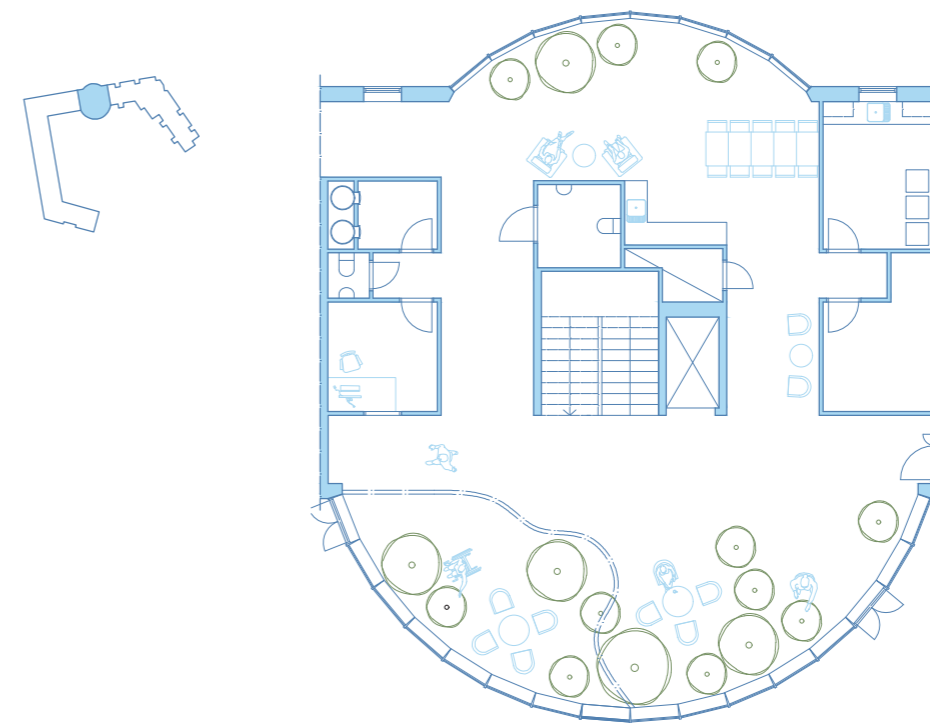
during summer days, some things are done. The roof is not made of glass, which makes the wintergarden shaded during summer days. In the winter, the sun comes from a lower point, giving heat to it. It is possible to open windows on the top floor, creating a chimney effect that leads the hottest air out. The window frames are quite deep, creating shadow both for temperature reasons and experience.

This is also where all vertical communication besides fire exits take place. When making this a communication space, it is harder for the residents to forget and easier to just "end up in". Many people move around here, making it feel safe if someone is afraid that they might need help. This makes the residents dare to step outside their unit and getting closer to nature. From the secure wintergarden, it is only one step to get outside to the garden.

The supporting functions (small office, staff wc, waste/recycling, storage and laundry) for the units is located connected to the wintergarden. This both makes two units being able to share and creating movement in the wintergarden. For the two units to have gatherings together, there is a long table, a small kitchen and a hwc. There is double ceiling height in the winter garden, but they change sides so that no frightening heights are created.



View over the wintergarden towards the garden. The double ceiling height can be seen both up and down.



Plan, wintergarden. 1:200 (A4)



Section through wintergarden. 1:500 (A4)

GARDEN



1. Sedum roof

The green roof is good for the biodiversity and pollinators. It also provides a nice view from higher floors.



2. Outside café

Closest to the main entrance, the café and the senior centre is an area with hard surfaces furnished to welcome visitors.



3. Boule court (CC-0)

To offer the residents and the senior centre an activity, there is a boule court. It can also attract local seniors, making the garden more living.



4. Meadow

The meadow is good for biodiversity and pollinators. It is low in maintenance and offers flowers to pick all summer.



5. Gazebo (CC-0)

Tucked away in the nature, a gazebo is placed. The residents can get a peaceful place to sit or invite visitors to spend some time together.



6. Lawn with activities

The only part of the garden that has a plain lawn. To offer the residents and the visitors activity, some easy "parkour"-features are installed.



7. Raised Garden Beds

Garden beds that the residents can grow plants in. Raised for access by wheelchair. Hard ground material for easy access.



8. Party area + sun patio

The closest parts from the wintergarden has hard surface ground for easy accessibility. Here, the whole home can gather.

The garden offers a little bit of everything to serve the residents with different needs and abilities. There are long loops to stroll around in, with different types of nature along the way. There are walkways under roof, under a pergola and out in the open. The garden feels safe and easy to overlook

for the residents. At the same time, it has a lot of small rooms to draw back in. The wintergarden is visible from the whole plot, helping the residents find their way back inside. Here, everyone can find something that they like, and even during the colder months, nature will look like nature.



Plan over the garden



9. Outdoor kitchen and toilet

To have the opportunity to always be close to a toilet, there is one in the garden. It also has a kitchen so that the staff can easily host events.



10. Pond

The water offers cold breezes on hot days. It also attracts wildlife such as frogs and birds. The residents can see when the pond freezes in winter.



11. Butterfly garden

Next to the pond is a butterfly garden filled with flowers and buzzing with life. There are benches to sit and some small pathways in it.



12. Syrnberså (CC-0)

Planted in a circle, the lilac bushes creates a calm hide-away. In the early summer, the bushes fills with flowers, spreading a scent in the whole garden.



13. Orchard

In the orchard, the residents can pick blueberries, strawberries, apples, plums and a bunch of other tasty fruits and berries.



14. Chicken coop and yard

By having chickens in the facility, the residents gets to meet and care for animals and pick eggs. They also work as a "slow-TV".



15. Forrest

To meet the nature outside, the furthest part of the garden is more wild. The trees are higher, the ground contains sticks and stones.



16. Walkway under pergola

After the walkway under roof, a walkway under a pergola continues. It offers shadow and privacy.



17. Stone wall

To create a soft boundary to the outside, a stone wall is used. It blends in with nature and offers small animals a place to live.



18. Perennial garden beds

Trees and bushes creates height in the beds and perennial flowers blooms through out the spring, summer and autumn.



ÅLDERNS HÖST, VINTER,
VÅR OCH SOMMAR



8. SUMMARY

This chapter contains a reflection of both the process of the thesis and the outcome of it. Finally, the references used in the thesis are listed.

DISCUSSION AND CONCLUSIONS

This thesis aimed to investigate how an assisted living facility could be designed in order to maximize the contact to nature for the residents. Based on the own feeling that nature makes much for my well-being, I started out by finding evidence to strengthen that statement. Through a literature study, I found a lot of research indicating that nature really does have a vast positive impact on our well-being. I also found more concrete examples of how the contact to nature can be achieved. This then guided my work forward.

By studying references, both by visits and digitally, I found inspiration in how connections can be made and what not to do. I struggled to find really good examples, and I think that is a really big problem. There are no great sources of inspiration, which leads to slow progress. There are examples that have small features that one can take inspiration from, but I have yet to find anything that is inspirational as a whole. I hope that this thesis can help speed up the process of implementing nature as a more important and natural part of the life at residential healthcare facilities in Sweden.

I understand that this partly is a factor of economy. But I am also of the opinion that we spend too little on publicly funded functions, such as healthcare and schools. I believe that money invested in such functions do come back. Not to mention that one of the most expensive things that we can do with tax money is build something cheap and then having to renovate, change or even tear down prematurely because it wasn't good enough. And even if the money doesn't come back, what better to invest in than well-being for the members of society. We were all young, and we will all hopefully get old.

Good conditions favour our health and makes us live longer, and therefore I think that the economic view of elderly

care automatically disqualifies itself as the most important question, since the cheapest thing would be to lock everyone in a box as soon as they turn 65. But that is of course inhuman, and we shouldn't do that. But I don't think we should do something close to that either. We should of course do everything we can to make every member of our society be as healthy as possible, and to do that, economy must be secondary.

I further believe that good connections to nature cannot go out of time. Good connections out and good daylight conditions will always be experienced as nice, even if the facade material or something like that is out of style.

With that said, I still think that there should be additional attention put to the appearance of the building. When the focus was on the connection with nature, time was taken away from designing other things. There could, for example, have been windows in the fire staircases, climbing plants on that wall and a natural mural painting on the on the large gable.

There is also the factor of the volume. This project really grew from within and outwards. One can argue however the scale fits in the surroundings. Bräcke Diakoni has plans on building in a more compact and large scale in the park in the future, but for now, it is quite large in its surroundings. At the same time, an important value in Bräckeparken today is the nature and biodiversity, and by using a minimized footprint, it can be preserved. There is no correct answer, only different views that one has to decide between.

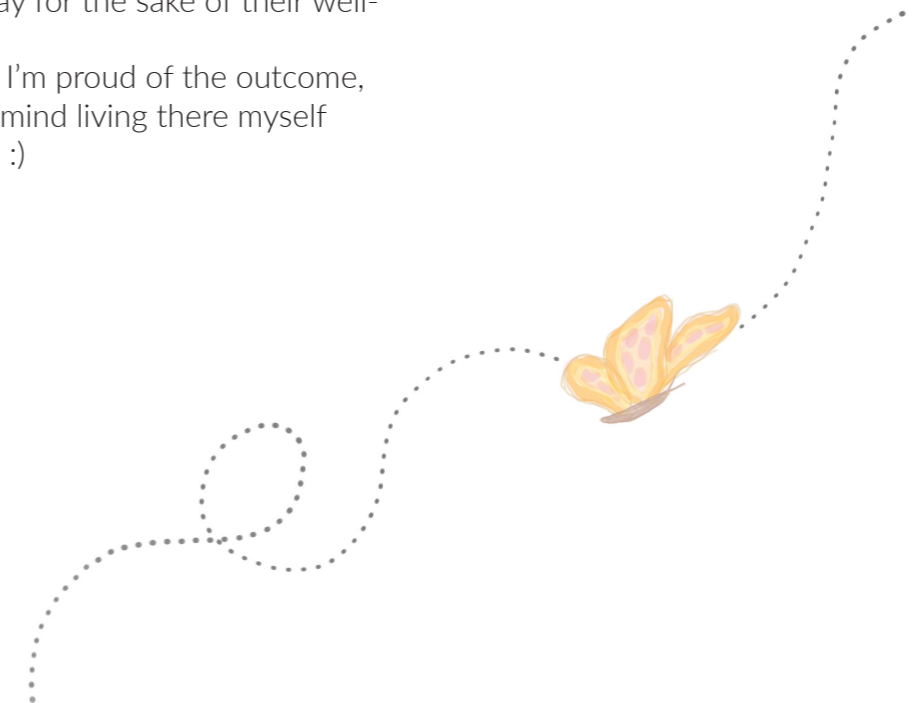
Regarding the contact to nature from higher up in the building, research shows that it gets harder the higher up one gets. However, around the plot is a landscape with hills and the trees grow high, connecting the residents on the fourth floor to nature as well.

The focus was to create an environment where the residents could do as much as possible on their own, both since that is health-beneficial and since the availability on staff is low. By creating the contact already in bed, I feel like the

residents would really have a strong connection to nature. When reflecting on the project, I feel that is achieved both since the contact starts in bed and because the step from one zone to the next is so small. There is instant reward by taking only one small step several times through the building. When visiting Trädgårdarna in Örebro and seeing their nice, but empty wintergarden, it became clear that it is not enough to have the spaces, they need to be very easily accessible and close. Therefore, the wintergarden in my proposal is the main attraction in the facility. The backbone of everything. This is a place where the residents should "just end up in". It should be safe and populated all the time, hence the staff functions being placed there. Nature should be really easy to access, so that regardless of the own capacity, the residents can meet nature every day, all year around.

So to answer the thesis question: This proposal is an example of how a residential healthcare facility can be designed in Bräckeparken, so that the elderly residents can get in contact with nature every day for the sake of their well-being.

Overall, I'm proud of the outcome, and I wouldn't mind living there myself when I get old. :)



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Fig 1. Cerwén, G., "View of Alnarps Gardens", Hämtad: 2025-05-01. [3D-model] <https://sv.wikipedia.org/wiki/Fil:3D-sketch-depicting-the-Alnarp-rehabilitation-garden.jpg>

Fig. 2. Bräcke Diakoni, "Lobby", Hämtad: 2025-05-01. [Photography] <https://www.instagram.com/brackediakoni/>

Fig. 3. Bräcke Diakoni, "Window details", Hämtad: 2025-05-01. [Photography] <https://www.instagram.com/brackediakoni/>

Fig. 4. Bräcke Diakoni, "Yard and facades", Hämtad: 2025-05-01. [Photography] <https://www.instagram.com/brackediakoni/>

NATURE CONNECTION

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