

SERENITY FOR SENIORS

A Small-Scale Housing Community for Pensioners in Sweden





CHALMERS
UNIVERSITY OF TECHNOLOGY

Master's Thesis 2025

Serenity for seniors
Ellinore Olausson

Chalmers School of Architecture
Department of Architecture & Civil Engineering

MPARC: Architecture and Urban Design
Profile: Healthcare and Housing Architecture

Examiner: Marie Strid
Supervisor: Susanne Clase

STUDENT BACKGROUND

2020 - 2023

Bachelor's degree

Architecture and civil engineering
Chalmers University of Technology

2023 - 2025

Master's degree (MSc)

Architecture and Urban Design
Chalmers University of Technology

Architecture in the Anthropocene

Sustainable development and the Design Professions

Building tectonics

Nordic Architecture

Architectural competitions

Healthcare architecture

2024

Architectural internship

Thorbjörnsson+Edgren Arkitekter



When I started my studies at the architectural program, one of the first things my grandmother said to me was:

*'When you're an architect, you can draw
me a little house to live in.'*

This quote has been with me ever since, tucked in securely in the back of my mind. And when the decision-making process for a master project began, I knew what I wanted to do. I wanted to create something for the older generation - for my grandmother.

PERSONAL REFERENCE

For me, the subject of 'good accommodations for seniors' is a relatively new interest, born in the realisation of the lack of accessibility in the current home of my own grandmother. She, an active and peppy soon-to-be 80-year-old lady, lives in an apartment in Gothenburg city on the third floor - with no elevator. This is not something she lets on to be an issue now, more than mentioning having to take several trips up the stairs when buying groceries. But what will happen when it becomes a problem? When the stairs are simply too many to handle?

As I was growing up, some days of the summer was always spent at my grandmother's summer cottage. A small, red house in the forest with a large garden and water from a well. The calmness that the nature provided was something else compared to the busy city, and I know she still misses it now.

When I told her about my plan for this thesis, she lit up and said "Perfect, then I can live in one of those houses!" and later adds with a smile "but no stairs!".

ACKNOWLEDGEMENTS

Special thanks to:

The residents of Brf Bovieran Hönö

for allowing me to meet and talk to you about your beautiful home.

Paula at Hogslätts Vänboende

for inviting me in for lovely conversations and showing me around town.

Susanne Clase

my supervisor, for guiding me through the whole process, providing lots of inspiration and insights.

My classmates

for being there every day bringing both support and laughter to our 'office'.

My grandmother

for being the inspiration for this whole project and also an inspiration to me.

DICTIONARY

Definition of certain words and phrases used throughout this thesis:

<i>Senior housing</i>	-	Normal accommodations that are intended for people over a certain age, designed for the elderly's needs for accessibility, security and community.
<i>Accessible housing</i>	-	Accommodations that are designed to be usable by people with reduced mobility or orientation.
<i>Community</i>	-	"A feeling" or "a sense of" community meaning the feeling of a connection and/or solidarity with something/someone. "Senior housing community" or "the community" meaning the neighbourhood which this thesis presents.
<i>1-bedroom house</i>	-	A house with 'two rooms and a kitchen', a bathroom and a dining area.
<i>2-bedroom house</i>	-	A house with 'three rooms and a kitchen', two bathrooms and a dining area.

ABSTRACT

The population in Sweden is constantly growing older. At the same time, the amount of senior housing is stagnant as “ageing in place” prevails. But for now, this is not a long-term solution. Issues like bad accessibility, movement impairment and loneliness are three examples of why we need to find more answers on how to create a living situation adapted for the seniors in Sweden. Answers regarding the possibility of combining attractive and functional accommodations with the familiar and safe feeling of your old neighbourhood.

This thesis presents a new form of senior living consisting of a small-scale housing community with shared facilities such as gardens, common rooms and activity areas. By providing these innovative, health promotive living solutions as an alternative to the urban apartments, it offers the residents existing connections to nature and community. This way, a social and active lifestyle can be established for people not yet in need of the services of retirement homes.

With the concept of creating a housing community adaptable to multiple sites in Sweden, it can be placed in areas with high senior population where the wish to move away from your hometown is low, bringing the solution to the people.

This project includes drawings, models and diagrams of two different sizes of houses adapted for seniors, along with a programming for shared common areas. It also presents the site, showing the communication between homes and common areas and their connection with surrounding nature and context. Through literature reviews, case studies, interviews and problem investigations, this thesis establishes the theoretical foundation for accommodations that benefits seniors' health.

Presenting two housing models, drawn to fit the accessibility needs of senior citizens but also to fulfil many of the qualities needed to be called 'a good accommodation', this thesis shows that senior housing does not have to look or feel different than any other home. It is important that we see our senior population not just as seniors but people of our society, with the same dreams and wishes as anyone else.

Keywords: Senior housing, community, nature, social, accessible, health promotive

LIST OF FIGURES

Figure 1: Diagram of the proportion of the listed municipalities lack of senior housing (Länsförsäkringar, 2023).

Figure 2: Proportion of people aged 60 years or older in different municipalities compared to the country and county (SCB, 2024).

Figure 3: Map of municipalities around Gothenburg with Orust, Tjörn and Öckerö highlighted.

Figure 4: Entrance to Torslanda Havsbadskoloni.

Figure 5: Axiality is when sightlines is extended through multiple rooms, creating a spacious feeling and more outlooks that is a valuable asset for the home.

Figure 6: Movement around rooms or objects create a feeling of spaciousness in the floor plan, as well does rooms with multiple openings.

Figure 7: Flexibility in the floor plan means a good possibility to use a room or the whole residence for different functions and needs.

Figure 8: Zoning means to place the rooms depending on the use, creating for example one private part and one public part of the home.

Figure 9: Entrance

Figure 10: Exterior door

Figure 11: Bathroom

Figure 12: Kitchen

Figure 13: Dining area

Figure 14: Wardrobe

Figure 15: Bedroom

Figure 16: Living room

Figure 17: Site and floor plan, Källsprångsvägen, Viskafors.

Figure 18: Map of Torslanda Havsbadskoloni, Torslanda.

Figure 19: Apartment division on each floor of Bovieran Hönö (Brf Bovieran Hönö, n.d.).

Figure 20: Apartment division at Bovieran Hönö.

Figure 21: Site plan, Hogslätts Vänboende, Gerlesborg.

Figure 22: Diagrams of answers from interviews.

Figure 23: Quotes and pictures from workshop with residents.

Figure 24: Floor plan sketches of the three different apartment solutions at Bovieran Hönö.

Figure 25: Three different sites with plans for development in the municipalities of Orust, Tjörn and Öckerö.

Figure 26: Photos of Trädgårdsstad i Amhult

Figure 27: Photos in a 360° view of the chosen site and its surroundings in Dalby, Orust.

Figure 28: Photos of the built context around the site in Dalby, Orust.

Figure 29: Symbols downloaded from flaticon.com

Figure 30: Volume sketches of the two houses presented - small and large.

Figure 31: Skech of room divison with focus on proximity, parallell activities and dimensions.

Figure 32: Visualisation of programming of the plot.

TABLE OF CONTENTS

Chapter 1	Introduction	10
1.1	Problem description	11
1.2	Purpose	14
1.3	Objectives	14
1.4	Research questions	15
1.5	Method	16
1.6	Delimitations	17
Chapter 2	Research	18
2.1	Background	19
2.2	Reference projects	22
	2.2.1 Källsprångsvägen	22
	2.2.2 Torslanda Havsbadskoloni	24
	2.2.3 Bovieran	26
	2.2.4 Hogslätts Vänboende	28
2.3	Interviews	30
	2.3.1 Byf Bovieran Hönö	30
	2.3.2. Hogslätts Vänboende (Paula Oksanen)	34
Chapter 3	Process	36
3.1	Site analysis	38
3.2	Site development	44
3.3	Program development	48
Chapter 4	Design proposal	52
4.1	Program	54
4.2	Site plan	58
4.3	Situated floor plans	60
4.4	Floor plan and section (small)	62
4.5	Facades (small)	63
4.6	Floor plan and section (large)	64
4.7	Facades (large)	65
4.8	Floor plan design	66
4.9	Outdoor perspective	74
4.10	Isometric of plot	76
Chapter 5	Epilogue	78
5.1	Result	79
5.2	Discussion	80
5.3	Reflection	80
5.4	Conclusion	81
5.5	Reference list	82
Bibliography		
Appendix A	Interview questions (in Swedish)	
Appendix B	Photographs of models	
B.1.	Site model	
B.2.	House model - size small	
B.3.	House model - size large	

INTRODUCTION

01

The senior population is constantly growing larger, the retirement age rising and the rural population is getting older and older. The work towards creating a good life for the pensioners in Sweden is highly relevant, and this thesis addresses a few of the many reasons why.

LONELINESS AMONG SENIORS

One big issue concerning the health of the older population is the rising feeling of loneliness. In the anthology *Bra bostäder för seniorer* (p. 61, Ahlström et. al., 2023), the reader is informed that loneliness is regarded a public health problem, with consequences such as depression, cognitive impairments and is also related to cardiovascular diseases. In Sweden, about 25% of people over the age of 60 experience loneliness, either occasionally, often or always, and half of the people being 80 years or older says they feel lonely often or always (Nygqvist et. al., 2017). Around 40% of people with home care or in special accommodation reports the feeling of loneliness (Socialstyrelsen, 2020).

ACCESSIBILITY IN CURRENT HOMES

In Sweden we have something called "kvarboendepincipen" (ageing in place) - the principle of being able to stay in your own residence for as long as possible. With contributions such as home care and individually adapted aid from the state, elderly people can live a more self-sufficient life. But this also comes with issues regarding the level of accessibility in many of these people's homes. In a study from 2007 called *Trappan mellan kvarboende och flytt*, K. Larsson writes about a statistic analysis from Socialstyrelsen showing that half of the population over the age of 55 then lived in a home with insufficient accessibility. Looking at the situation today, about 50% of people in the age of 50 years or older lives in single or two-family houses (SCB, 2023). Compiled in a report by Länsförsäkringar

Fastighetsförmedling (2023), 58% of Sweden's pensioners can consider moving, but 81% of the municipalities lack or is completely missing accommodations suitable for seniors.

DISCONNECTED FROM NATURE

There are many studies showing health benefits of an outdoor life. By just being in nature we can improve our cognitive development, stress management and ability to concentrate, while decreasing the risk of depression and mental illness (Folkhälsomyndigheten, 2024). In *Naturen som kraftkälla* (2023), Ottosson summarizes studies made in and about European cities, presenting the correlation between access to nature within one's residency and people's lifespan, which also relates to effects as lower medical costs and lower risk of suffering from cardiovascular diseases. According to the study, elderly should for example have a distance closer than 300 meters to a green area outside of their home. As mentioned earlier, about half of the senior population in Sweden lives in a row house or villa, many having done so for majority of their lives. The transition of moving from a house with a garden to an apartment could be very big for a lot of people, especially among seniors already experiencing other difficulties and changes in their lives. The senior housing built today are almost exclusively in the form of apartments, and in many cases located in urban areas. According to Seniorval.se, there are for example 36 existing housing for seniors in Gothenburg (2025), about 80% of senior housing buildings without views of nature or direct connection to greenery.

"My one advice to people is to consider moving before you don't have the energy to do it anymore"
- Ulla, 85, Bovieran Hönö

PROBLEM DESCRIPTION

AGEING POPULATION

The population is constantly growing older, not only in Sweden but all around the world. In Sweden, around 26% of the population is over 60 years old, and it is only going to get higher. This number is increasing regarding the percentage of elderly living in Västra Götalands County (SCB, 2024). Looking even closer into the municipalities around Gothenburg, the areas with the largest senior population in 2023 are the three island municipalities Orust, Tjörn and Öckerö with 39%, 37% and 35% of citizens over 60 years old (see figure 2).

LACK OF HOUSING

4 out of 5 municipalities in Sweden has a lack of senior adapted housing in some way, and in over 1 out of 4 there is not a single senior accommodation (Länsförsäkringar, 2023). The amount of initiated housing projects overall is decreasing while the latent need is imminent. In Orust, Tjörn and Öckerö municipalities, the proportion of ownership housing is over 70%, showing the correlation between a large senior population and this form of accommodation. In Boverkets housing market analysis from 2024, the municipalities in Västra Götalands län could comment on the current housing situation (quotes are translated from Swedish):

"Currently, there is a perceived lack of housing for young and old. The older target group generally remains in their own villas because they lack the financial incentive to move to other housing, which leads to them living in isolation. On the other hand, the target group wants to live in the central area and have a more social life..."
(p. 56, Regional bostadsmarknadsanalys, 2024)

"The municipality has an aging population that continues to live in rural areas in villas. To enable rotation in the housing market where existing villas become available to families with young children, attractive smaller homes are required in urban areas."
(p. 56, Regional bostadsmarknadsanalys, 2024)

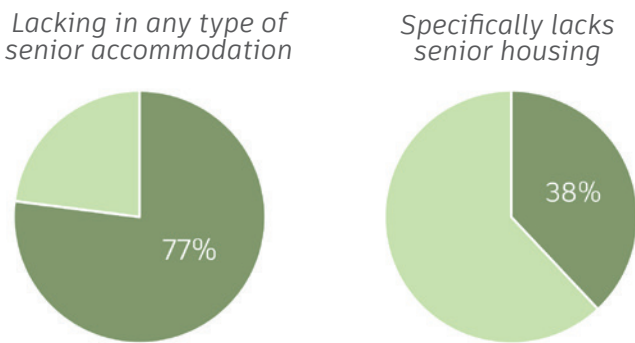


Figure 1: Diagram of the proportion of the listed municipalities lack of senior housing (Länsförsäkringar, 2023).

Proportion of people aged 60 years or older

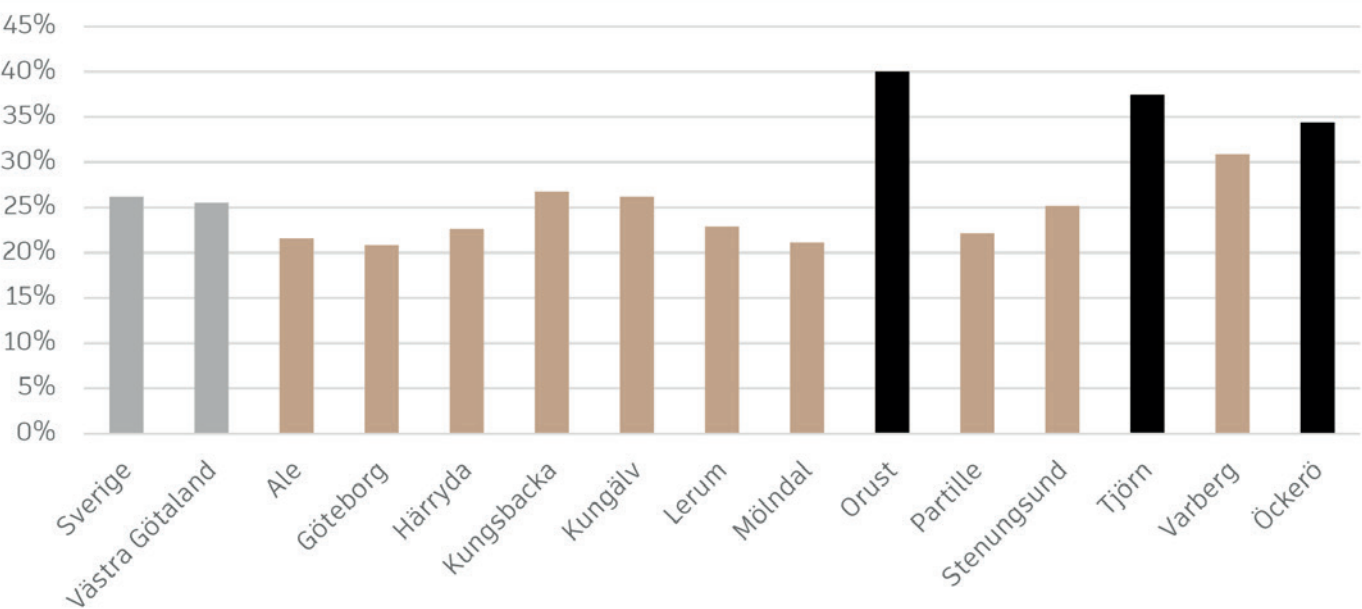


Figure 2: Proportion of people aged 60 years or older in different municipalities compared to the country and county (SCB, 2024).

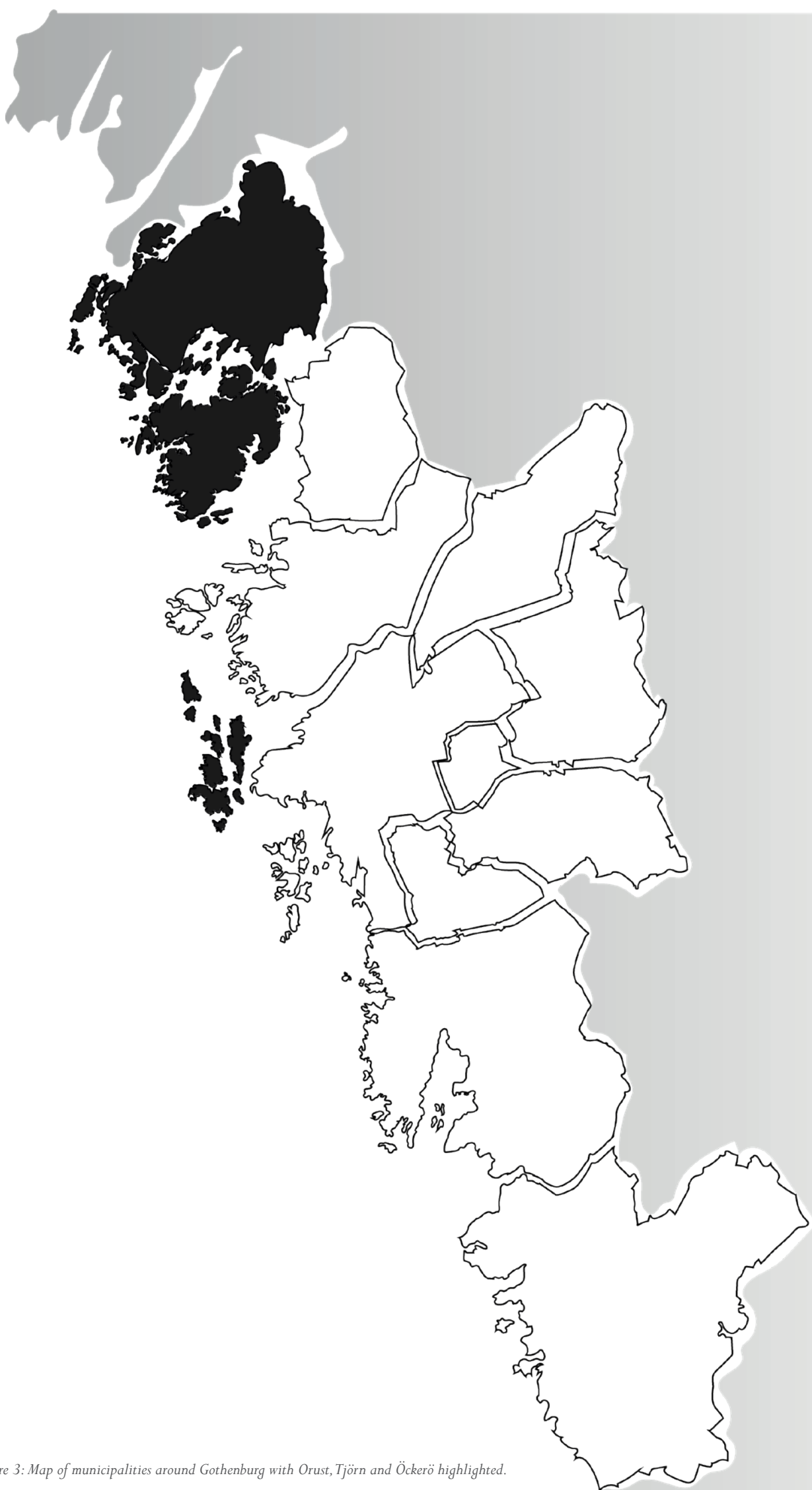


Figure 3: Map of municipalities around Gothenburg with Orust, Tjörn and Öckerö highlighted.

PURPOSE

The purpose of this master thesis is to design a small-scale housing community built specifically for seniors in Sweden. The community will focus on social areas, accessible design and functional floor plans providing a safe and attractive living space embedded in nature.

The residences consist of small single-family houses in two sizes – 1 or 2 bedrooms - and are created to keep the indoor-outdoor connection received when living in a villa. They have high accessibility standards, proximity to services and provide a safe community experience for the resident.

Since social sustainability is a focus for this thesis, shared spaces such as pavilions, gardens and common areas are explored along with the private accommodation's placement on the site. The surrounding context and access to the site are also investigated.

The community is designed as a concept with the flexibility to be placed on several different sites in the country. This allows for a more holistic approach, hoping to inspire the realisation of a new form of senior housing not specifically designed for one place or person. The thesis is presenting one site as an example of placement, roads, pathways and programming essential for the community.

The target group for this project does not adhere to a specific age span but rather addresses those who feel that their current living situation is inadequate, or the accommodations directed to seniors today is not a good alternative. However, when collecting statistics and conducting interviews, the ages have been restricted to 55 years or older since the goal still is to create accommodations suited for the so called 'senior citizens' of this country.

OBJECTIVES

This thesis explores how to build accessible, attractive and safe homes for the older population of Sweden. Its aim is to provide a concept for development of a community consisting of small-scale houses, common areas, gardens and activities located in an already familiar place for the residents, promoting socialising and an active lifestyle close to nature.

With drawings, models, case studies and literature reviews, this thesis goal is to prove it possible to build a neighbourhood immersed in nature that are both social and health promotive where seniors in Sweden can live long and happy lives.

RESEARCH QUESTIONS

Main:

How can we create a small-scale housing community that is accommodating for the senior population by being an attractive, social and functional neighbourhood in areas familiar to the residents?

Sub:

How do we formulate a building concept with the ability to be placed in several places close to small towns, while fulfilling a high standard of accessibility, safety and closeness to nature?

METHOD

A 'research by design' together with a 'research for design' methodology is applied throughout the process, allowing for a more exploratory approach and iterative development.

1. *Research, analyse, reflect*

In the first stage, methods such as literature reviews, case studies, and interviews are made to gather information and gain a broader understanding. By conversations with senior citizens, knowledge about what they expect out of a home and which qualities they find important is collected. By researching other projects for senior housing and their accessibility criteria, a knowledge base for floor- and site plans is established. Creating a program for the community along with criteria for the site allows for a base when choosing the location. Collecting statistics, making site visits, sketches and reflections pushes the project forward into the next stage.

2. *Design and develop*

The creation of diagrams, drawings and models with the information gathered is essential for a strong foundation of the project. When developing plans, sections and facades, the process is constantly going back and forth between design and research. This way, the thesis has the potential of creating a feasible project relevant to the society.

3. *Finalizing*

By making 'finalized' drawings and models early, more elaborate discussions can be held before the presentations, making it possible to work deeper with details and therefore receiving a result that better represents the aim.

Literature study

Reading and gathering information from relevant articles, books and reports has worked as a base for this master thesis. The information has then been analysed and implemented in the project, for example in problem findings and design decisions.

Reference projects

By researching different projects, built structures and outdoor areas, this thesis has gathered insights regarding materiality, shape, location, floor plan configurations, etcetera. This knowledge bank works as an important parameter in the analysis and design phases.

Interviews

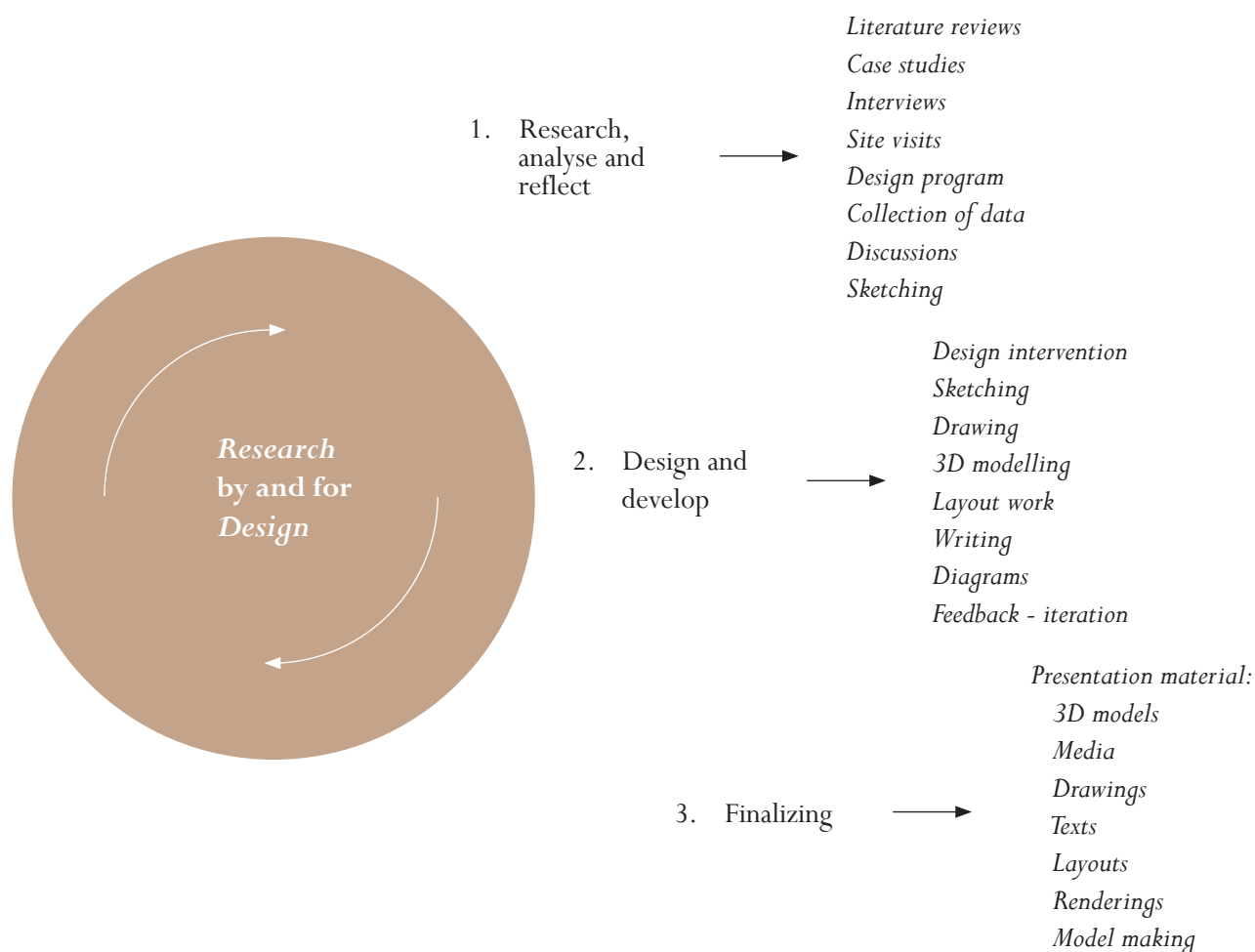
Interviews and conversations were conducted with 12 of the 48 residents living at Brf Bovieran Hönö and 1 one of 12 people living at Hogslätts Vänboende. To get a broader understanding of the people, information such as age, gender, previous accommodations and accessibility was collected. This along with questions about why they moved here, likes and dislikes and different design choices (see appendix A for full list of interview questions).

Sketching

The sketching phase has been an iterative process, producing drawings and designs parallel with the research. By combining analogue with digital sketches, quick design decisions can be made by first trying out the idea by hand and then checking the measurements digitally for example.

Site visit

When the site was chosen, a site visit was conducted to learn about the plot and area around it. Analyses such as built context, traffic and vegetation could be made along with photographs that are important both as reminders but also to visualise the project.



DELIMITATIONS

This thesis main focus is the creation of a small-scale housing community where senior citizens can thrive through beautiful social spaces, accessible accommodation and the relation to nature.

The thesis will focus on designing a housing community that can be placed different areas, and the use of a specific site works as an example of how it could be created. For further development, it would be important to determine who is responsible for the area for it to work as an attractive choice as accommodation for seniors.

The thesis will not cover the form of grant, ownership of land or fundings through investors.

Since it is a senior housing project, the services needed specifically for retirement homes will not be considered. Accessible architecture and social spaces specified for seniors will be included, as well as a program to follow for the community as a whole for it to be functional.

The construction of the buildings is not drawn but rather mentioned and work as a potential possibility for the houses to use local or refurbished materials.

RESEARCH
02

ATTRACTIVE ACCOMMODATIONS FOR SENIORS

In a research report considering three examples of senior housing in the region of Gothenburg, the result concludes that two of the most common reasons for moving among the older population is lack of energy and planning for the future. Further on, important functions in the new home are for example the possibility to be active, having a social context, good conditions for continuous living and closeness to own local area (Lindahl et al., 2019).

Länsförsäkringar Fastighetsförmedling (2023) mentions a study conducted at Lunds University, asking people over the age of 55 how they would want to live. The three top wishes where to have access to a balcony or outdoor space, to have an elevator or no stairs at all, and to have good parking possibilities. Other individual wishes were also found, for example that "younger elders" preferred a small villa or row house.

MOVING CHAINS

The housing develop company OBOS summarizes results from an opinion survey with the following conclusions: half of the people aged 55 years or older want to move, many of them to a smaller home and one of the reasons why they do not is because it is hard to find a housing that meets their expectations (OBOS, 2024). If there could be more good options considering accommodations suited for seniors, the moving chains of our society would benefit through the likely release of larger villas to the housing market for younger families.

SOCIAL SUSTAINABILITY AND SAFETY

Feeling safe in your own home is one of the most important factors when it comes to well-being. But the feeling of safety is something that is experienced and difficult to measure. When speaking to some of the residents at Bovieran Hönö, a senior housing concept outside of Gothenburg, they combine the feeling of security with the great social community they experience. "One morning I had not rolled up my bedroom curtains, and it didn't take long before

someone knocked on my door to see if I was okay." Ulla, 85, says in an interview (translated from Swedish).

The social aspect of a small neighbourhood can be tricky for some but is also a necessity when it comes to curing loneliness among seniors living alone or far from friends or family.

ALLOTMENT GARDENS

"Koloni-områden", or allotment gardens, is a function in Sweden born from an interest to cultivate in urban areas. Today, many seniors use these "cottages" as a summer house, a way to escape the hectic cities and surround yourself by the calm of nature. These areas also often become their own small neighbourhoods where people meet and socialise in a safe and sound space. These houses are not built for permanent living and usually without much thought of accessibility. Today, there are about 70 allotment garden communities in the City of Gothenburg alone (goteborg.se, 2025).



Figure 4: Entrance to Torslanda Havsbadskoloni

BACKGROUND

ACCESSIBLE HOUSING

In Sweden, we have a high accessibility standard when it comes to new constructions, extensions or renovations. "Buildings should be accessible and usable for people with mobility or orientation impairments." (Boverkets byggregler (BBR), 2023). But when looking at accommodations for the senior population, there are often even higher criteria to meet. This to allow for easy movement with mobility aids such as wheelchairs or walkers, and to make the home practical to potential home care and healthcare workers. Below follows a list compiled from the book *Bygga för seniorer* by K. Kärnekull (2011) that mentions some of the things needed when building for seniors:

- Entrance with good storage and room for a chair and wheelchair.
- Generous living room with space for company, relaxing and work.
- Drawers in kitchen and built in oven / microwave in bench height for ergonomics.
- Space in the bedroom next to the bed for wheelchair access or healthcare workers.
- Moveable wardrobes for flexible usage.
- Avoid thresholds when possible for better accessibility and lower risk for falls.
- At least 80 cm wide doorways for easier wheelchair / walker access.

There are measurements criteria for every room in the house that needs to be met if it is to be considered of good accessibility. Examples of this is pictured on the next page (see figure 8-15).

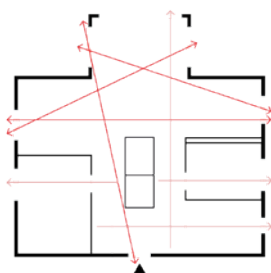


Figure 5: **Axiality** is when sightlines is extended through multiple rooms, creating a spacious feeling and more outlooks that is a valuable asset for the home.



Figure 6: **Movement** around rooms or objects create a feeling of spaciousness in the floor plan, as well does rooms with multiple openings.

ENJOYABLE HOUSING

There are also other factors to consider when creating a home that is pleasant and comfortable for the residents. In the book *Bostäder att trivas i* by Liljewall Architects (2018), they highlight the importance of room organisation by analysing floor plans with four aspects in mind: **axiality**, **movement**, **flexibility** and **zoning** (see figure 4-7). When creating a floor plan suited for elderly people, these aspects become even more important. Having a good axiality can make a big difference for a person that spends a lot of time at home, maybe even mostly in bed or sitting down. This combined with lower windowsills helps the resident's opportunities for good outlooks and views.

By being able to walk around as much as possible in your own home, elderly people have an easy way to bring movement to their daily life even if they do not go outside. "I take some laps around the kitchen island when there's commercials on the tv" says Margareta, resident at Bovieran, Hönö (translated from Swedish).

By making rooms generous with both square meters and openings, they can be furnished and used in different ways in different stages of life. For example, an extra room where two people live can first function as an office and then be turned into an extra bedroom if one of the partners becomes ill or simply wants to sleep apart when older. As an extension to this solution, the rooms placement is also important if the floor plan should be able to be parted into zones. Either a private or social zone, or if one out of two partners fall ill when growing older, they can be taken care of in their own home without necessary disturbing the other person.

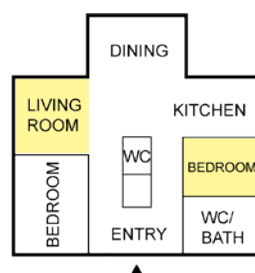


Figure 7: **Flexibility** in the floor plan means a good possibility to use a room or the whole residence for different functions and needs.

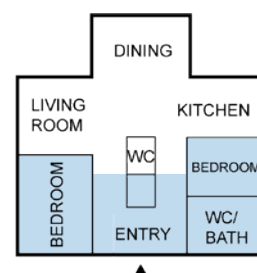


Figure 8: **Zoning** means to place the rooms depending on the use, creating for example one private part and one public part of the home.

Dimensions in different rooms according to a high standard of accessibility (measurements collected from Bygga för seniorer, 2011, and Arkitektens Handbok, 2020):

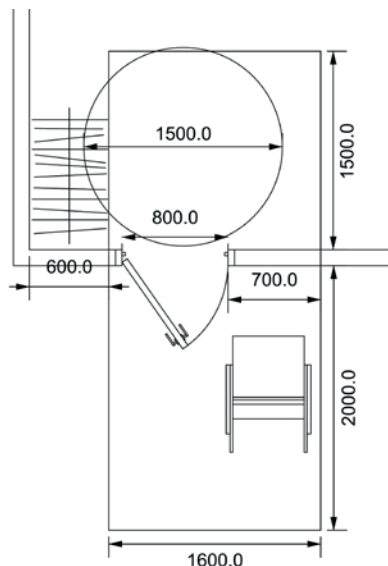


Figure 9: Entrance

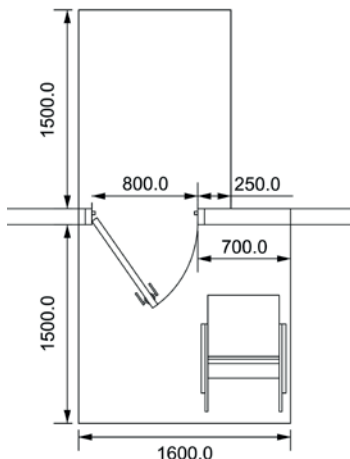


Figure 10: Exterior door

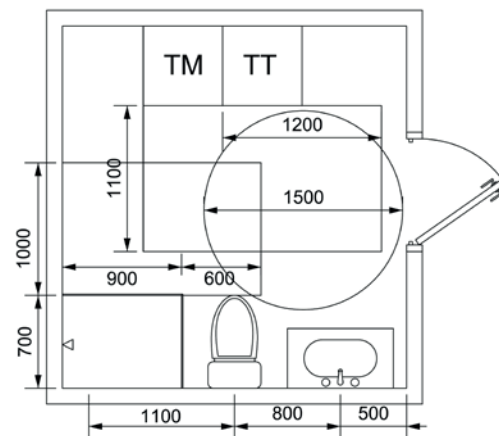


Figure 11: Bathroom

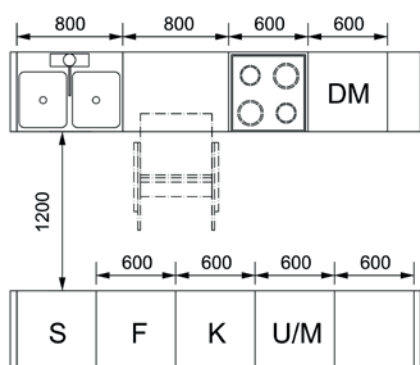


Figure 12: Kitchen

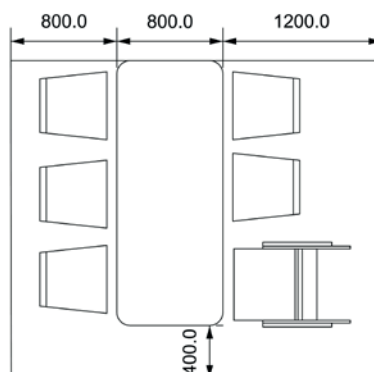


Figure 13: Dining area

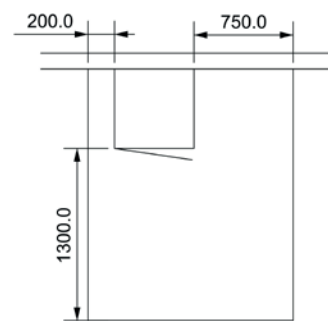


Figure 14: Wardrobe

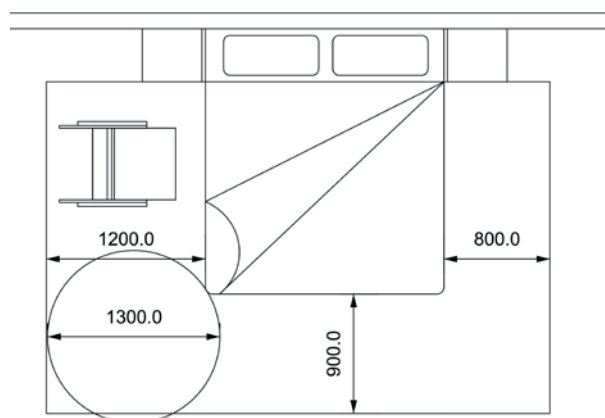


Figure 15: Bedroom

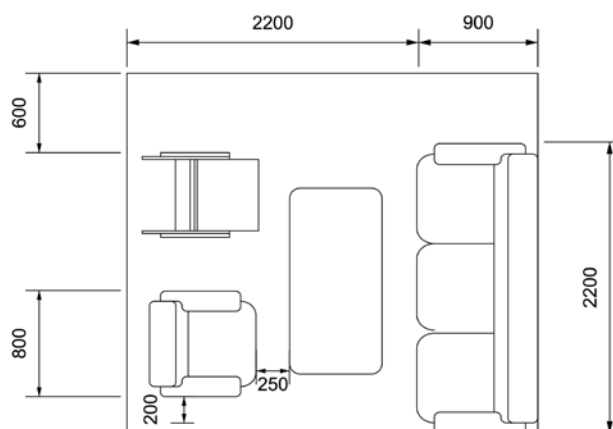


Figure 16: Living room

REFERENCE PROJECTS

KÄLLSPRÅNGSVÄGEN

Architect: Brunnberg och Forshed
Location: Viskafors, Borås, Sweden
Area: Around 80 sqm
Year: 2021
Project: 13 small, ecological wooden houses

The municipal company Viskaforshem wanted to invest in the future of the society by designing beautiful, long-lasting houses in solid wood, placed with caution of the landscape. The choice of high standard exterior materials (zinc plates, cedar shavings and pine panels) adds to the sustainable focus as well as the interaction with nature. (Brunnberg & Forshed, n.d.)

Relevance for project:

- Small house community
- Placement in landscape
- Rental accommodations
- High standard materials

REFLECTION

By creating these small-scale villas in materials that suits the nature around, the houses blend seamless with the landscape. The lack of large gardens and instead leaving the ground as untouched as possible emphasises the feeling of being one with nature. The ecological focus continues with the chosen materials being long-lasting without much maintenance needed. This use of materials and landscape is something that this thesis brings into the design phase, focusing on how the houses connect to the surroundings and the convenience of small gardens for senior citizens.

The paths that connect the houses with larger roads and the surrounding infrastructure are made in a combination of gravel and wood, making them light and neat. This possibility of having accessible walkways without car traffic is explored in the design phase of this thesis.

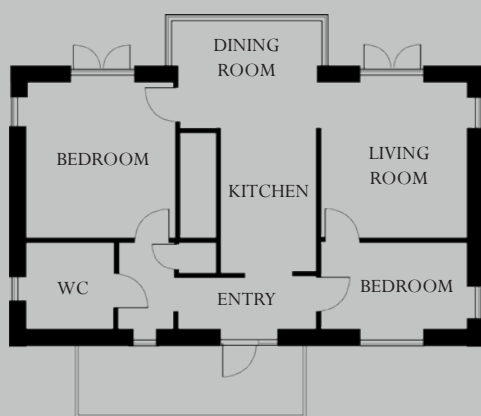


Figure 17: Site and floor plan, Källsprångsvägen, Viskafors



REFERENCE PROJECTS

TORSLANDA HAVSBADSKOLONI

Location: Torslanda, Sweden
Area: Approx. 160 houses
Year: 1924 - Now
Type: Private summer houses

The first houses were built as early as 1924, given permission to use the land left over when Torslanda airport was established. Some of the cottages used demolishing materials from Gothenburg's Jubilee exhibition 1923, proving that the spirit of "using what we have" goes back 100 years. The community is run by the residents and about two thirds of the land is shared space. Each house is private owned - many by senior citizens wanting to be able to garden and get fresh air in the beautiful coastal landscape (Torslanda Havsbadskoloni, 2025)

Relevance for project:

- Placement in the landscape
- Traditional architecture
- Many owned by pensioners
- Community driven



REFLECTION

Torslanda Havsbadskoloni is what we in Sweden call a "kolonimråde" (allotment gardens) - a summer cottage area with cultivating properties. This particular area is very large with most of the houses being quite spacious with their own large garden. This thesis is exploring how to bring the same feeling, but in a smaller and more convenient scale for seniors.

When walking around the area, the only sound heard are the birds in the sky and the waves of the ocean. Compared to most of the other dwellings in this area of Torslanda, these small houses provide a chance to experience the archipelago and its nature without having to pay many millions for a house or apartment.

Though, for this area to be considered senior friendly or work as a reference for a senior village, the accessibility of roads and pathways needs to be updated. Many of the houses are also located on rather steep ground with the need of stairs.





Figure 18: Map of Torslanda Havdsbadskoloni, Torslanda

REFERENCE PROJECTS

BOVIERAN

Architect: Liljewall
Location: 27 places around Sweden
Area: 65-87 sqm
Year: 2006 - Ongoing
Type: 3 storey, U-shaped apartment building

Bovieran is a senior housing concept created to "bring the riviera to Sweden" with its large winter garden as the strong selling point. The building's purpose is to bring a feeling of community and safety to the residents, and the target group is people at the age of 55 years or older. With the heated winter garden, Bovieran allows for an active and social life all year round (Liljewall, 2025).

Relevance for project:

- 1600 sqm wintergarden
- Social floor plans
- Designed for flexible placement
- Built for seniors

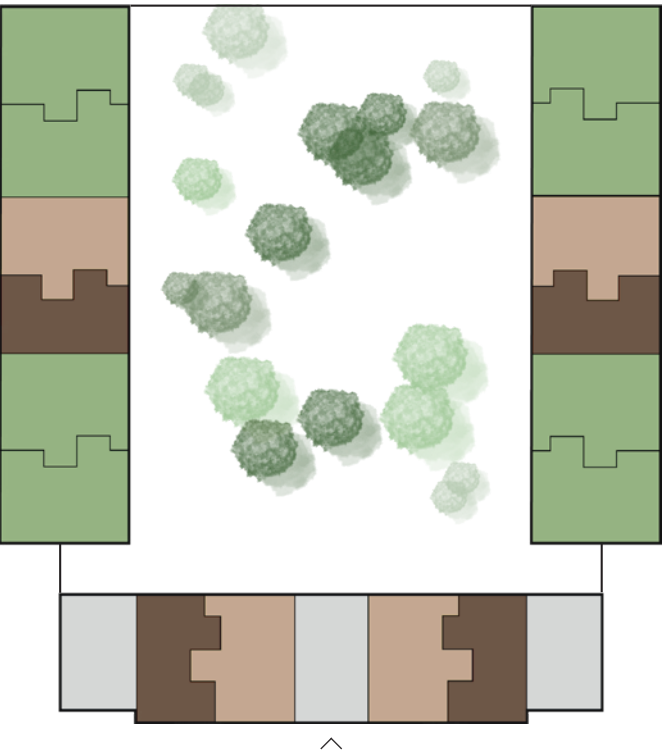


Figure 19: Apartment division on each floor of Bovieran Hönö (Brf Bovieran Hönö, n.d.)

REFLECTION

Bovieran is proven to be a successful concept now placed on 27 different locations around Sweden. The large wintergarden is what catches people's attention, as well as this author, along with it being built for seniors.

But it was not without doubt that this project made it to the research stage of this thesis. At first look, the shape brought a sense of captivity rather than the freedom it promises. This acknowledged structure was just another apartment building meant to gather the elderly in one place with the 'nature' close by (or enclosed) for health benefits. But after a visit and conversations with the residents, these outlooks changed (see page 30-33).

Bovieran was one of the starting points of the idea of a senior housing community - this thesis investigates if the same sense of community be created in a different form of accommodations.

- 87 sqm - 2 bedrooms
- 83 sqm - 2 bedrooms
- 63 sqm - 1 bedroom
- Entry and storage

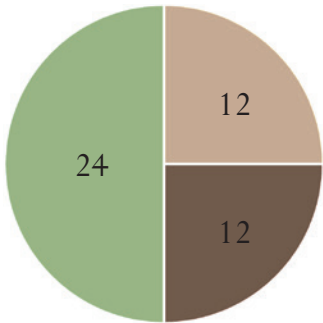
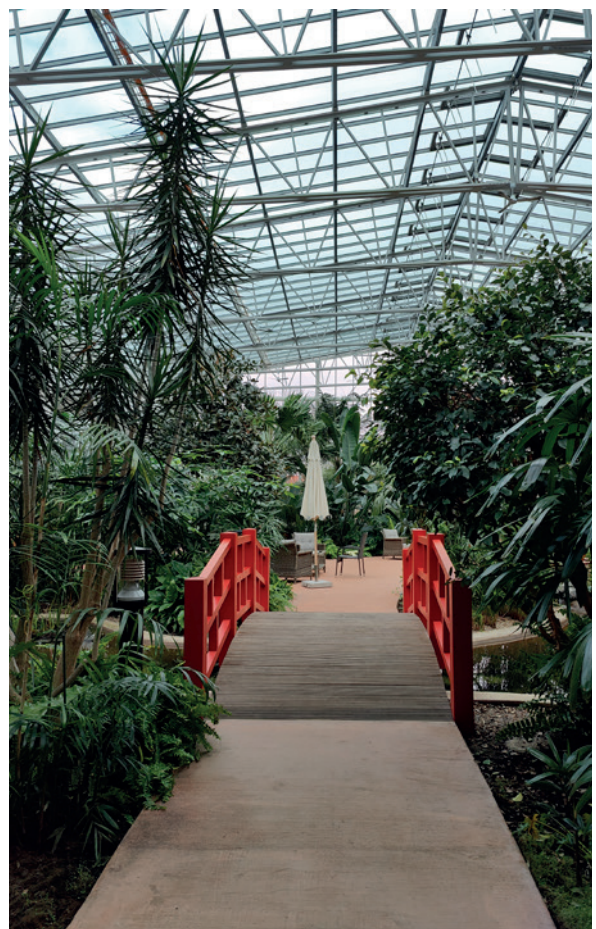
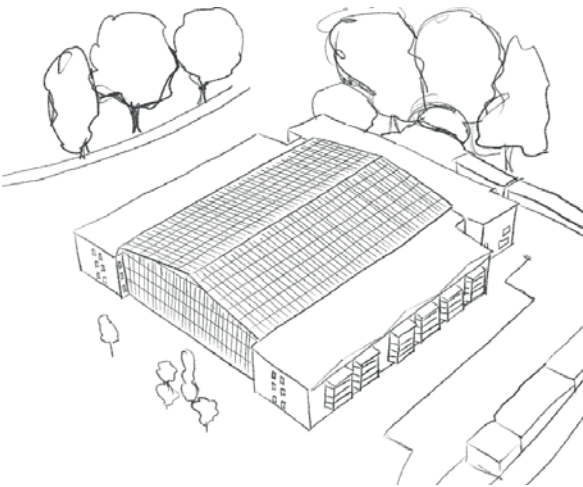


Figure 20: Apartment division at Bovieran Hönö



REFERENCE PROJECTS

HOGSLÄTTS VÄNBOENDE

Architect: Hans Sörgård
Location: Gerlesborg, Sweden
Area: 55 sqm
Year: 2018
Type: 1 storey apartment building

Hogslätts Vänboende literal meaning is "friend-accommodation" and is a cooperative tenancy association where the residents are a part of the association and rents their homes. There are 12 apartments in a row-house like structure, and it is located close to the ocean. The reason for this project was to provide a favourable economic living situation for people wanting to move to a more practical home but not having to leave town. (Hogslätts Vänboende, n.d.)

Relevance for project:

- Economically advantageous
- Close to ocean and nature
- Built by and for seniors
- Small scale residence



REFLECTION

In this small town, consisting more and more of summer residences instead of year-round living, a group of people decided in 2013 that if they wanted to continue living here, they had to build their own future accommodation. This resulted in this red, wooden row of apartments just 5 minutes from the ocean. This shared passion and drive combined with help from local builders is what makes this project so fascinating - and successful. The municipality of Tanum was satisfied with the result, and with a long list of people wanting an apartment, a second, larger project has begun only minutes away.

There is a common room on the edge of the building, open for booking, socialising and with room for bringing overnight guests for the residents. Every apartment has their own patio on the back of the house, continuing the focus of indoor-outdoor design with its nature close location.

Since this is an appreciated project among senior citizens, the programming and scale of these accommodations is taken into consideration in this thesis design process.

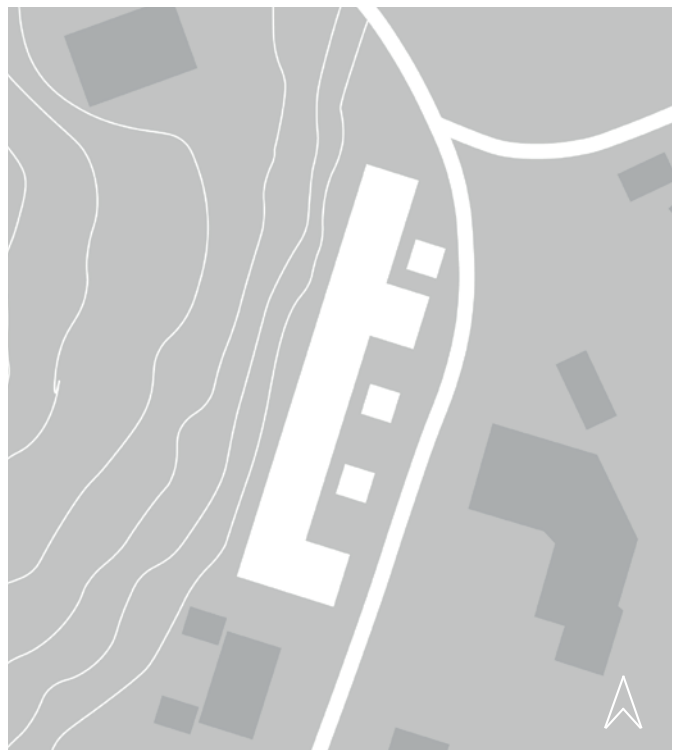


Figure 21: Site plan, Hogslätt Vänboende, Gerlesborg



INTERVIEWS

BRF BOVIERAN HÖNÖ

When visiting Brf Bovieran Hönö, the residents showed much interest and excitement for the project. What should have been one interview became a large workshop over coffee, where 12 of the people living here joined for conversations. They received a form (see appendix A) with questions of their current accommodation, former accommodation, and what they like and dislike with the building. The common denominator was that they all very much enjoy Bovieran and what it provides, especially the socialisation and hobbies they share. Those hobbies spanning from playing boule, bridge, V75 and table tennis to throwing parties. All these activities are driven by the residents themselves, which seems like an important factor of gaining a social and active life in your residency.

Another detail noted was that many of them either lived very close by before moving here or moved here to be close to family. This discovery provides structure to the already existing idea in the thesis of creating housing close to smaller towns where people have created their own context over many years.

There are 48 apartments at Bovieran, a number that they feel to be just right. "Not all of us joins in, but there are enough people engaged to have many weekly activities going on at the same time" says one of the residents. "You can decide if you want to be alone or be with others. You just have to close your front door" says another. This led to the exploration of how many residencies should be included in the housing community of this thesis further on.

Many of the people living here has done so from the start (September 2014) and several of them was also a part of the build. They disclosed that the municipality of Öckerö was not fond of this building at first, but after many discussions the project could finally turn the first sod in 2013. Now, there is a long waiting list to these apartments while other senior housing is being built in the municipality, proving that the demand is high and Öckerö try (and need) to meet it.

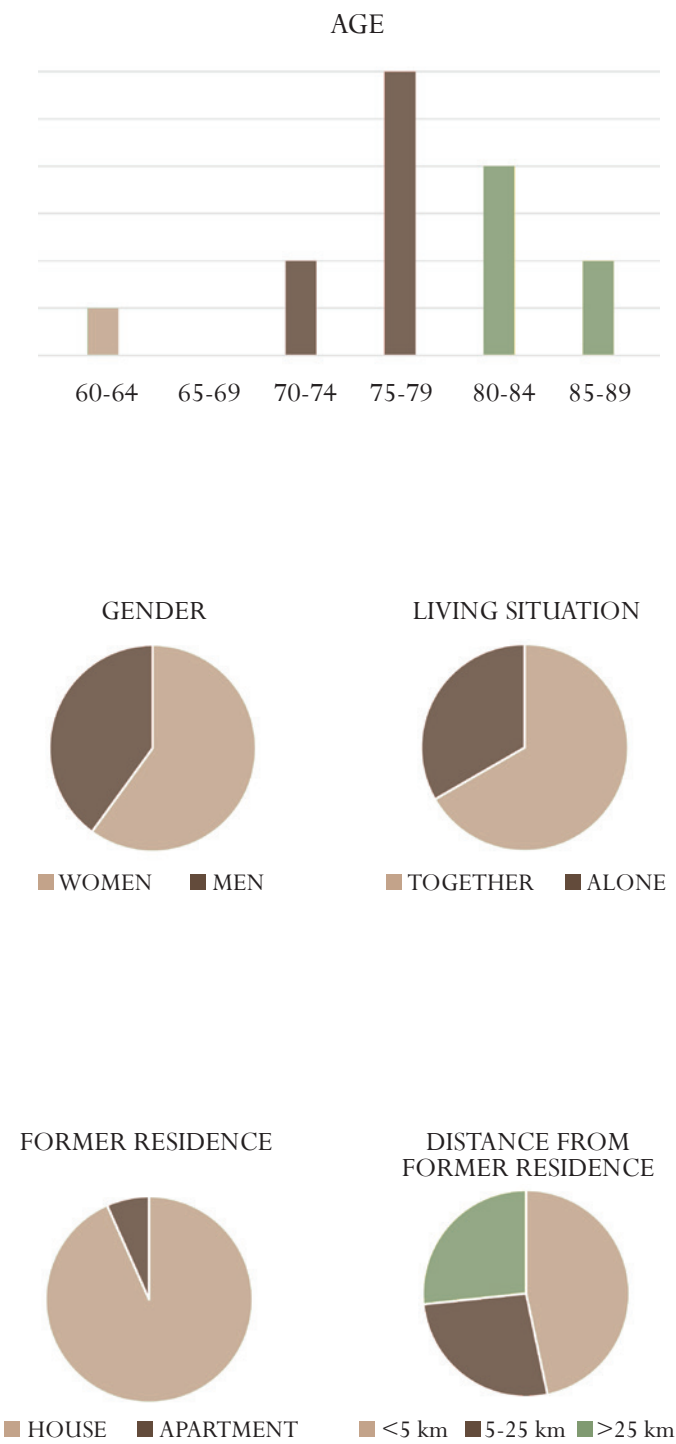


Figure 22: Diagrams of answers from interviews.

"There is always someone around to talk to"

"I will not move until they make me"

"I moved 200m from my old house to live here"



"We play boule every Monday, Wednesday and Friday"

"I couldn't imagine a better place to live"

"We all believe that our own apartment is the best one"

"I FEEL SAFE"

Figure 23: Quotes and pictures from workshop with residents.

INTERVIEWS

Private interviews were also held, and when talking to four of Bovieran's residents, the ladies Grete, Ulla, Marianne and Maggan, one thing became even clearer - they love their home here.

The opportunity of taking tours in apartments of different sizes and floor plans were presented, and taken. They come in three sizes, 63, 83 and 87 sqm (see figure 19, p. 26 and figure 24, p. 33) and according to these residents, the homes provide all that is needed.

Grete, 74, lives alone in a well-planned 1-bedroom apartment of 63 sqm and feels she is in no need of a bigger space. There were only details that she thought could be improved, for example the kitchen being in a corner creating space difficult to reach (see picture 4).

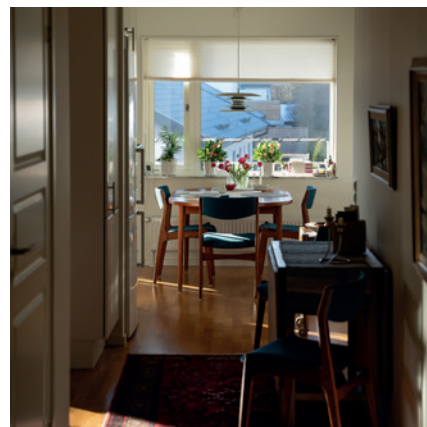
All apartments have spacious balconies, some glazed at the resident's request, and a 'front porch' outside their entrance. These kinds of areas can also function as extra storage space if you have a wheelchair or outdoor walker. Many of the residents have chairs or other furniture here, making it more personal and welcoming, like Ulla's in picture 1.

Ulla, 85, lives in a 2-bedroom apartment of 87 sqm and was supposed to move in with her husband in 2014. But just before, her husband passed away and she had to move in by herself. She explains how the people at Bovieran helped with her grief and made her feel less lonely. What these kinds of social interactions can provide is something you cannot put a price on, something that is implemented and explored further in this thesis.

Both the ladies Marianne and Margareta also lives in 2-bedroom apartments, Margareta alone and Marianne with her husband. They both agree with their apartments being very nice, but one thing that could improve is the size of the extra bedroom. "It is a bit small for an extra bedroom. As an office it works, but if you are a guest or if one of us wants to sleep in an own room, it feels more as a storage space than a bedroom" Marianne says. Looking at the floor plans (see figure 24), the second bedroom is very long and not very wide and the master bedroom almost too big in its proportions. A better balance between these rooms is needed, making them both functional and nice.



Picture 1: Front 'porch' outside the entrance



Picture 2: View from entrance in 87 sqm apartment.



Picture 3: Living room area in 87 sqm apartment.



Picture 4: Kitchen and dining in 63 sqm apartment.



1 bedroom, 63 sqm



2 bedrooms, 83 sqm



2 bedrooms, 87 sqm

Figure 24: Floor plan sketches of the three different apartment solutions at Bovieran Hövö.

INTERVIEWS

Paula Oksanen, 72, is one of the twelve residents at Hogslätts Vänboende, and has been involved in the process from the beginning. Conversations started directly at arrival, and the invitation to come inside her home was instant. While only 55 sqm big, the apartment created a wow-factor with its high ceiling and large windows (see picture 5).

The floor plan is very open, providing social areas that flow together. A loft with a robust ladder (see picture 6) leads up to Paulas bedroom (see picture 7) which she is more than pleased with. Having a loft could potentially create problems for older residents, Paula could not see these issues as for right now. "The ladder is more of a steep staircase and feels very safe to climb up and down" she says, showing how it is done. Looking at the original floor plans by architect Hans Sörqvist, the intention seems to be to have a bed on the first floor and storage in the loft. "Some of us has that solution" says Paula. "For example our eldest lady. She can't climb the stairs but refuses to move because she likes it so much here".

Outside the large windows is a very spacious patio (see picture 8) which looks the same for each apartment, along with room for growing beds.



Picture 5: Paulas apartment as seen from the loft.



Picture 6: Ladder to the loft.



Picture 7: Paulas bedroom.

Since the apartments are built on a strict budget, using local materials and carpenters, Paula was able to make some design choices of herself. For example, the railing of the loft is made from old rebars. "I didn't like the standard wooden ones they were going to put in, so I made my own" she says. Being able to make these kinds of choices of personal preference, the residents are allowed to feel in charge of their own home even though the building is owned by the cooperative.

But this building is not the only thing being owned and run by locals in the area. Since Gerlesborg is a 'summer town', many of its residents live somewhere else in the winter months, leading to placing shops and grocery stores closer to larger towns. The wish and need of a shop closer to Gerlesborg, with sustainable food and products, created a small cooperative association running the shop shown in picture 10 and 11. Here, everything is based on trust and reason, and they order after demand and wish-lists.

This sort of reasoning and ambition is needed for a small community to work in unison, where everybody does something and everything seems possible.



Picture 8: Paula on her patio.



Picture 9: 'Casa Paula'



Picture 10: Goods from the cooperative shop.



Picture 11: Paula writing what she bought from the store today.

PROCESS
03

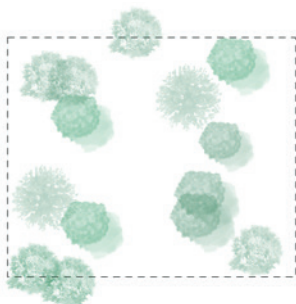


SITE ANALYSIS

This project is a concept that aims for the ability to be placed in different locations throughout Sweden. Therefore, three different sites in three different municipalities have been chosen for further exploration: Dalby in Orust, Myggenäs in Tjörn and Björkö in Öckerö. The process of choosing sites was carried out according to the following criteria:

1. Located in Västra Götaland County, making it possible to implement site visits.
2. Located within municipalities in need of senior housing (see figure 2, p. 12)
3. Similar plans for development on the site as for the thesis project (see page 44-47).

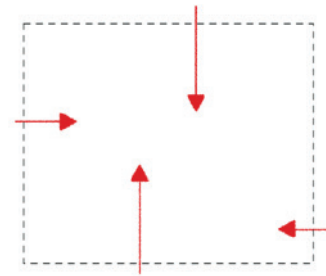
The site analysis has been conducted through the nine parameters listed and visualized below.



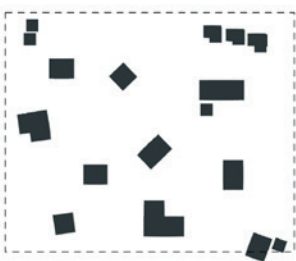
GREEN INFRASTRUCTURE



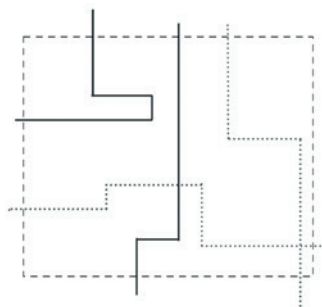
SERVICES



ACCESS



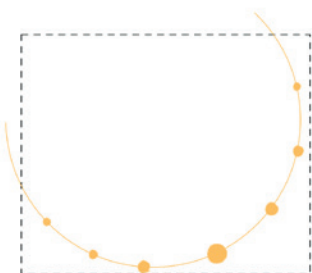
BUILT CONTEXT



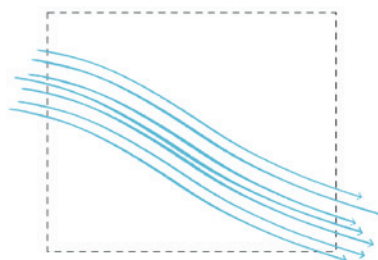
TRAFFIC



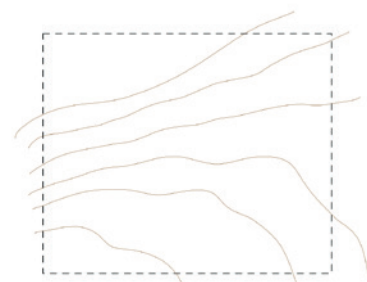
BLUE INFRASTRUCTURE



SUN PATH



WIND DIRECTION



TOPOGRAPHY

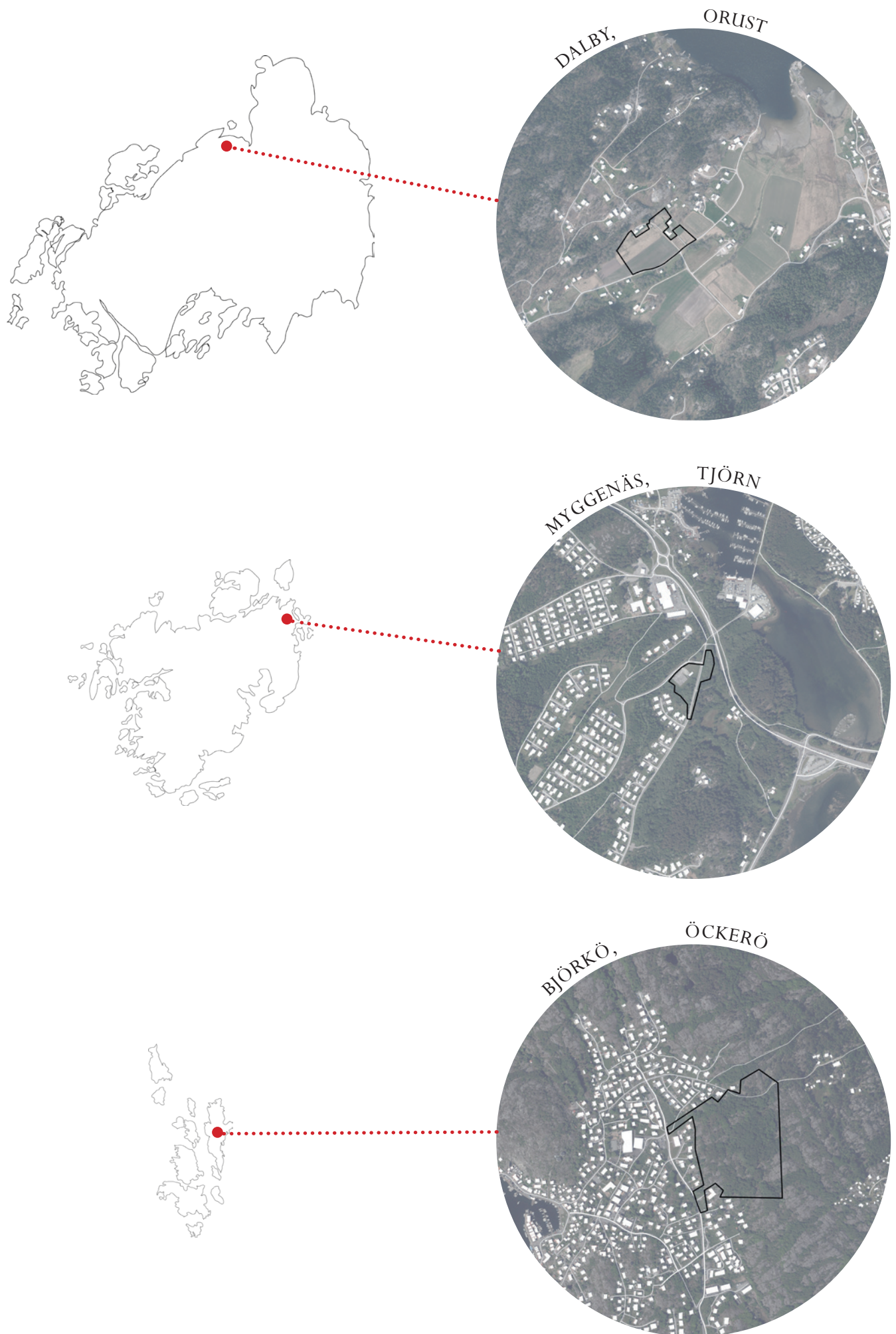
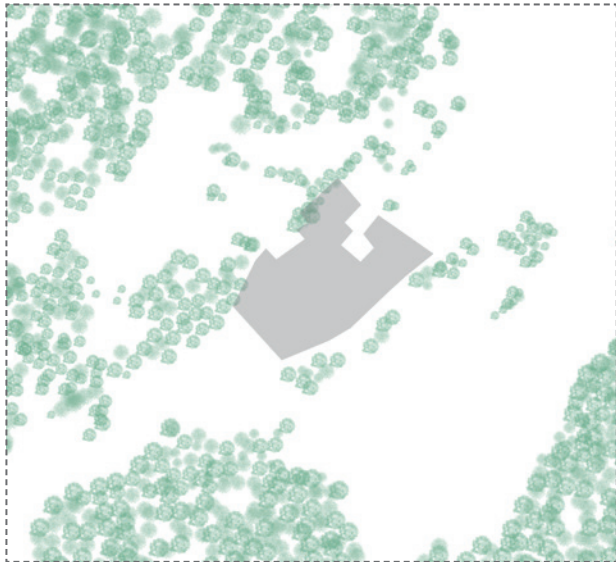


Figure 25: Three different sites with plans for development in the municipalities of Orust, Tjörn and Öckerö.

SITE ANALYSIS

Since the context is similar between these three locations, only one is further analysed and made into the chosen site as an example for the thesis - Dalby, Orust. Following drawings and analyses are therefore made on this location only.

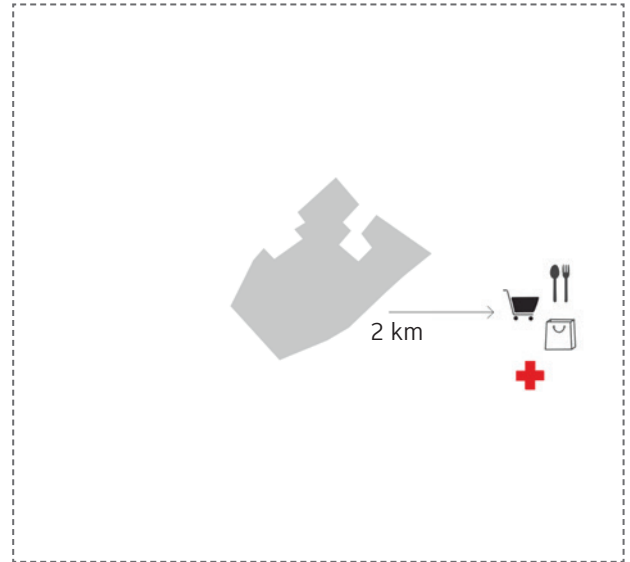


The **green infrastructure** is prominent around this site and the built infrastructure in the proximity is minimal. There are also many fields and flat lands which allows great outlooks toward greenery.



Access to the site is through a main road running next to it on the southeast side. The road intersecting going south is the road leading to the town of Henån.

The four main focuses are green infrastructure, surrounding buildings, distance to services and access to the site. These to allow for closeness to nature, familiar context, closeness to services and easy access to the site by car or taxi/bus.



The closest town to the site is Henån, located approximately 2 km to the east following the roads. Here you can find **services** such as a grocery store, restaurants, shopping and local healthcare.



The **built context** surrounding the site consists of private residences in different sizes and shapes. They are sparsely located with large private areas; some being housed by the farmers of the fields.

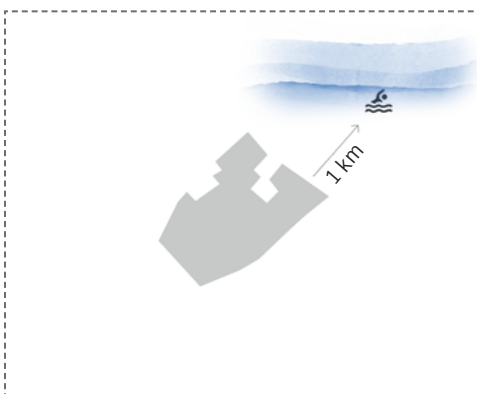
SITE ANALYSIS

The following five analyses are also made for the site, but instead of being decisive when choosing location, they play an important part when developing the community on the site.

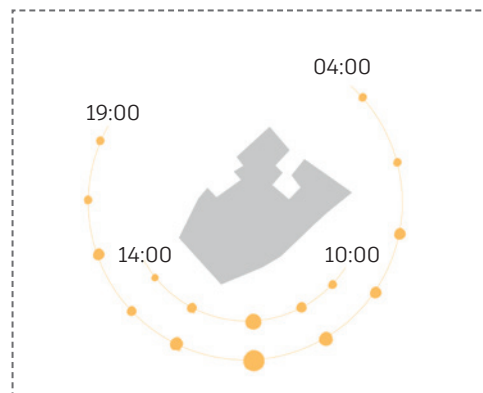
The sun path and wind direction are relevant regarding the rotation and shape of the structures. For example, with embracing outdoor spaces toward the east, the resident can enjoy the morning sun sheltered from the wind coming from west.



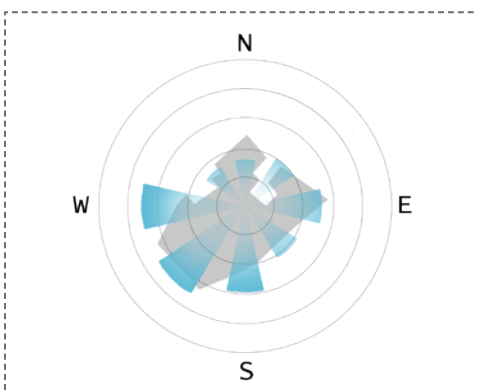
All **traffic** in the area close to the site is light and the roads are narrow. The larger road with a higher speed is located approximately 2 km to the southwest.



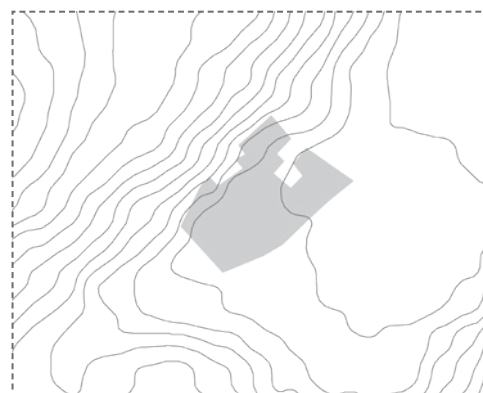
Blue infrastructure does not exist on or in the proximity of the site, but the ocean is located about 1 km to the northeast.



The **sun paths** for the area (January and July) shows many hours of light in the summer months but considerably less in winter due to its location in the valley.



The **wind** rose together with the site's location on the west coast shows that the wind mostly comes from the west or southwest direction (SMHI, 2013).



The **topography** of the site itself is relatively flat, but the area has rising hills directly to the northwest and also beyond the fields in the southeast.



NORRA GÖPEDALEN

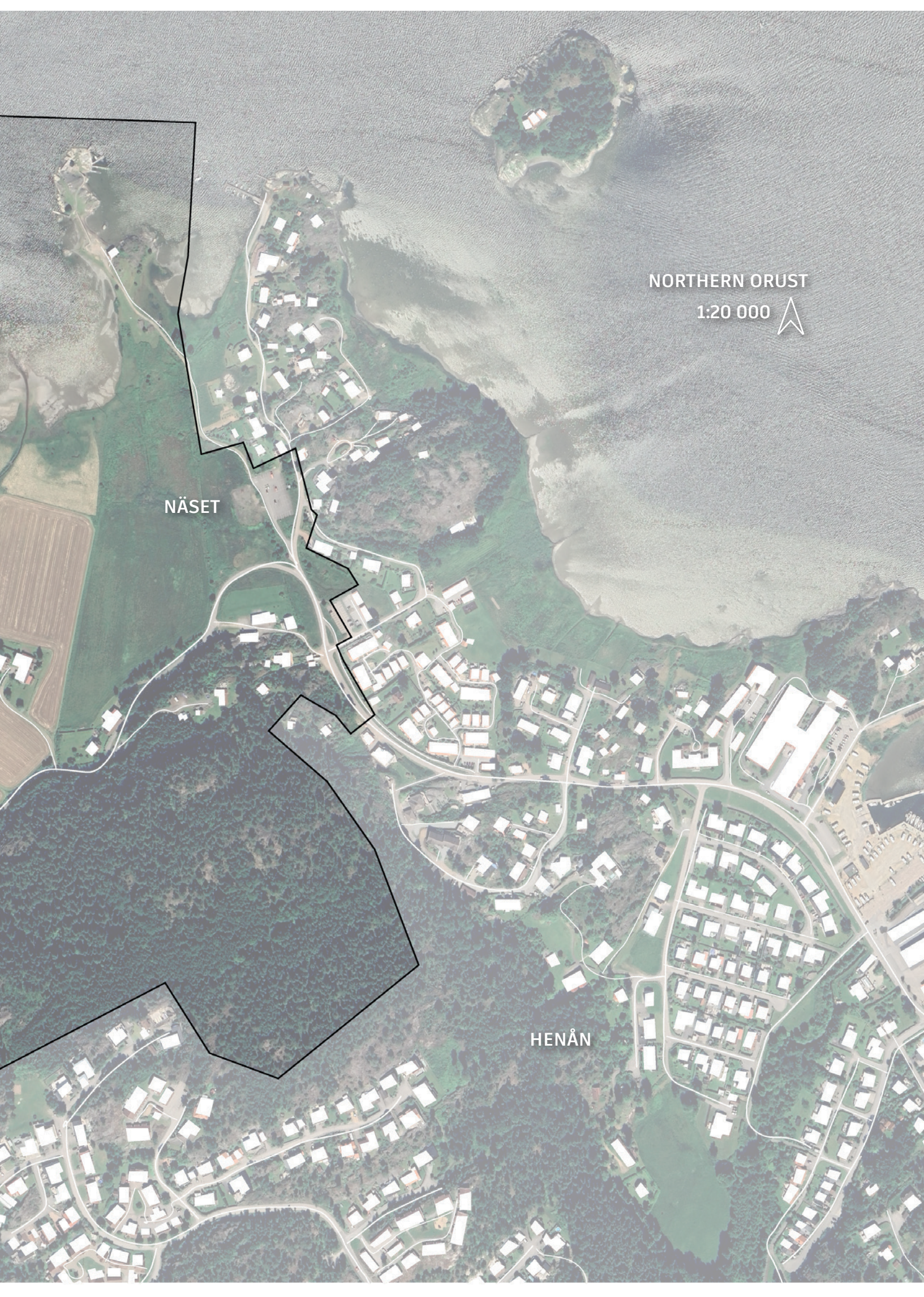
DALBY

B

A

A

B



NORTHERN ORUST

1:20 000



NÄSET

HENÅN

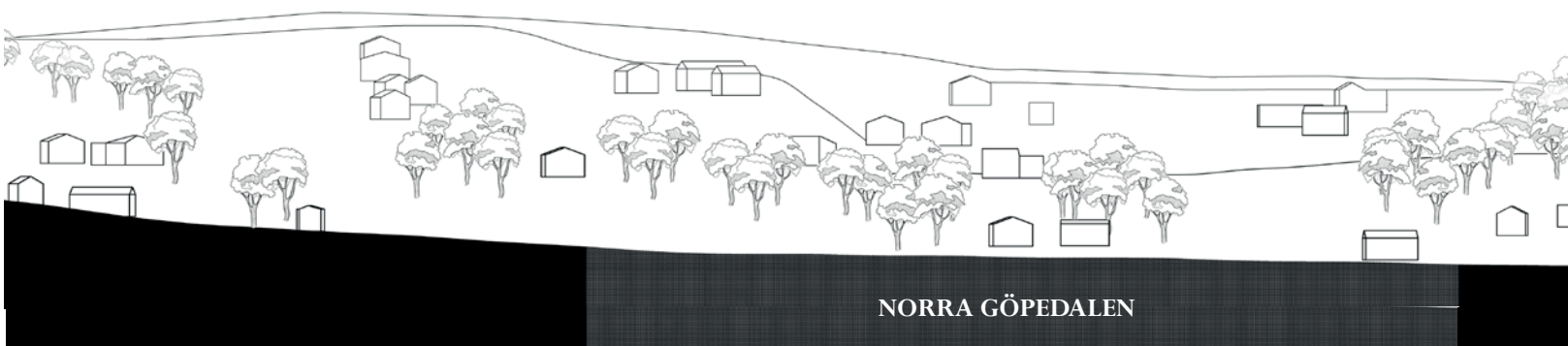
SITE DEVELOPMENT

The plans for development on the site has been understood to have similarities to the thesis project, making it possible to create the community within the future detail plan of the municipality.

In the plan program of the Dalby area on northern Orust, there's around 53 hectares of land that is suggested to be developed (see previous page). The proposal includes 200-250 new accommodations, along with preservation of farming land and nature areas. The area is located west of Henån, Orust's largest town, and is a "natural growth of the community". Arguments for good living qualities such as closeness to the ocean and nature is enhanced along with a vision of construction adapted to the landscape (Planprogram – Dalby, 2021).

The closest bus stop is currently located about 2 km away from the area by car, bike or walking. There are plans on creating many new walking paths and some bike paths in the whole area to make this traffic easier and safer.

The site inside this area that is chosen for the master thesis is called "Norra Göpedalen" and the proposition here is to build around 40-60 new accommodations, both as apartment buildings and single houses. The vision is to create a garden town with the houses placed in smaller groups, creating courtyards and the possibility for cultivation areas. The buildings should also "follow common design principles with variations within a unifying theme". A reference mentioned is *Trädgårdsstad i Amhult* by Wahlström & Steiner Arkitekter (see figure 26).



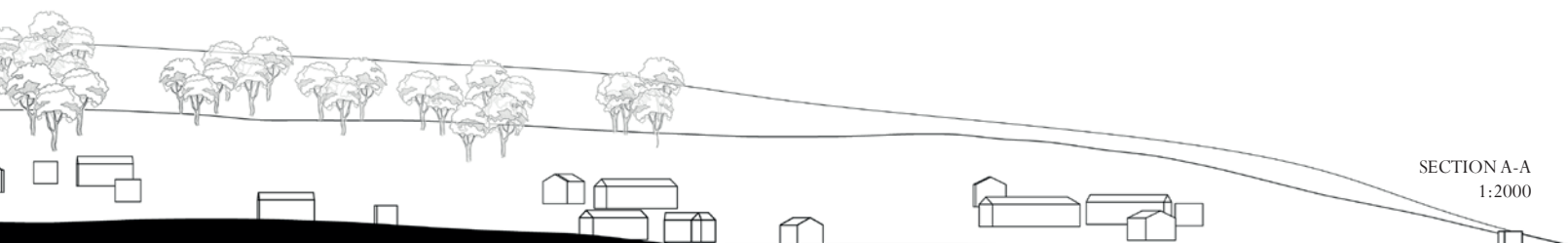
SITE DEVELOPMENT



Figure 26: Photos of Trädgårdsstad i Amhult



Figure 27: Photos in a 360° view of the chosen site and its surroundings in Dalby, Orust



SITE DEVELOPMENT

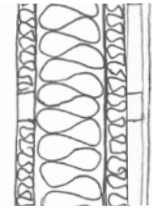
To follow the vision of this new area being a part of the community and adapted to the landscape, materiality and shape plays an important role. By doing analyses of the proposed site and its context, the thesis project can be adapted to suit its chosen site.

The current built context of Dalby mostly consists of residential buildings with a typical “Bohuslänsk” characteristic built many years ago in this agricultural society. But there are also some dwellings from around the 60’s and some brand-new ones. The main recurring features are gable roofs, wooden facades and bright colours along with the red barns prominent on some plots (see figure 28).

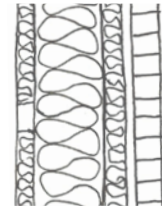
These barns, for example, are not all in use. This thesis suggests a way of connecting new buildings with the existing ones by refurbishing either a whole structure or materials from it for the new houses. A barn could therefore be made into a new common building for the community, connecting the old with the new. Materials such as bricks, stone or wooden panels from older structures could also, if in good shape, be recycled and used as facade cladding, pathways or growing boxes in the new community.



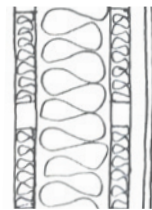
By exploring the materials of the surrounding built context and take it into consideration when creating new neighbourhoods, the new structures can blend in with the old. If the houses of this thesis project is built for example with a lightweight timber structure, the cladding of the facades can be adapted to the context. They can even be made out of reused materials from the area, providing an ecological sustainable approach. This means that the houses can all have the same structure, but different claddings:



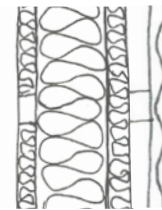
Wooden cladding



Brick cladding



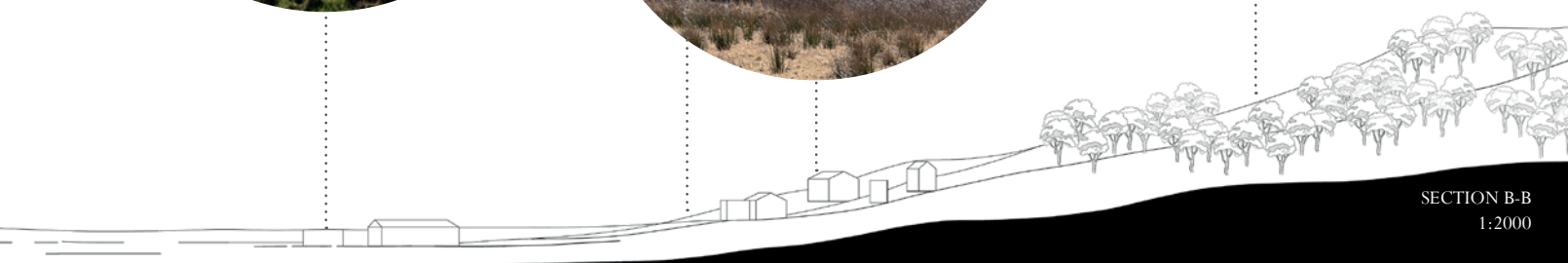
Shingle cladding



Metal cladding



Figure 28: Photos of the built context around the site in Dalby, Orust.



PROGRAM DEVELOPMENT

The senior housing community has four main focuses when designing the area - social space, green space, accessibility and flexibility.

SOCIAL SPACE

To promote social interactions and activities, certain structures and services is provided in the community:

- *A common house in the center*
- *Availability to host guests*
- *Connections between houses*
- *Outdoor activities*



GREEN SPACE

By preserving the landscape and nature in the area, the community gains a 'free' access to green space. This along with new:

- *Greenhouses*
- *Growing boxes*
- *Planted vegetation*
- *Courtyards*

will benefit the residents by always having nature close by.



ACCESSIBILITY

Following aspects is important when designing a community adapted for seniors, and therefore included in this project:

- *Access by car to all buildings*
- *Parking for 'flexlinjen' (taxi)*
- *Parking/access for health care staff*
- *Pathways designed for wheelchairs/walkers*
- *Seating along pathways*



FLEXIBILITY

To adapt the community to different sites, following properties has been included:

- *'Simple' construction for adaptable site plan*
- *Common materials found locally*
- *Small private plots for more flexible constellations*



When shaping the houses, the functionality of the floor plans has been prioritized. The floor plans should accommodate both for the resident in different parts of their older lives, but also as a possible workplace for healthcare staff to allow for 'ageing in place' (kvarboendeprincipen). This means that they should be accessible and attractive both for active and healthy pensioners, but also elderly in need of a more assisted lifestyle, with the ability to live in as long as the person want.

The following list is a summary of design choices that has been made based on literature studies and interviews:

- *Low windowsills*
- *Large doorways*
- *No corners in kitchen*
- *Drawers in kitchen*
- *Much storage space*
- *No thresholds*
- *No stairs*
- *Guest bathroom*
- *Large second bedroom*
- *Parking space*

Different constellations of rooms have been made to investigate how the shape can meet the goals of zoning, sightlines, outdoor areas and form (see page 50-51):

ZONING

Divided areas allowing for parallel activities.

SIGHTLINES

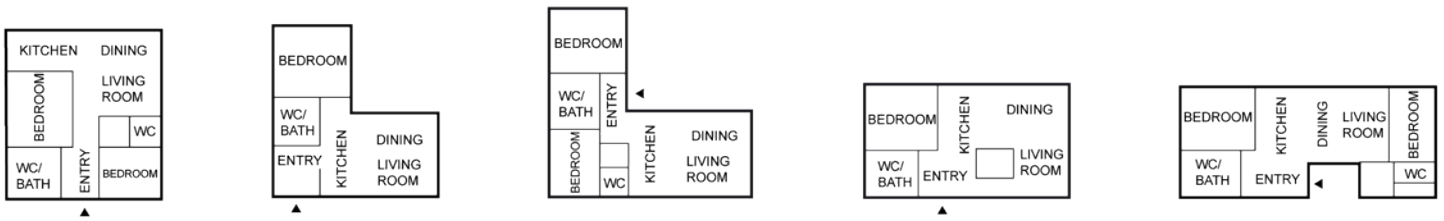
Long sightlines and many outlooks from various parts of the house.

OUTDOOR AREAS

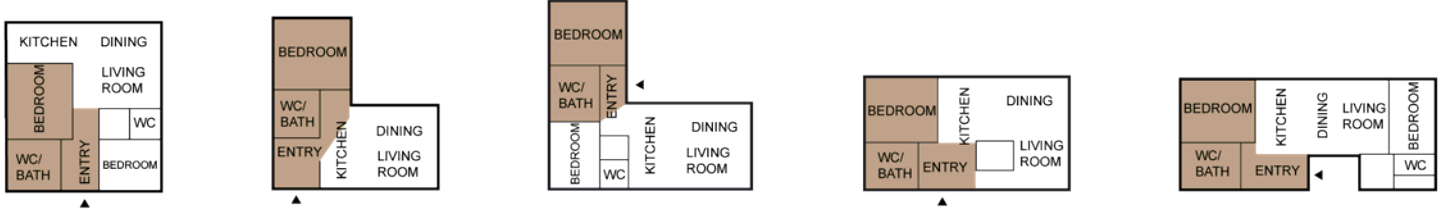
The creation of outdoor areas accessible from different parts of the house.

SHAPE

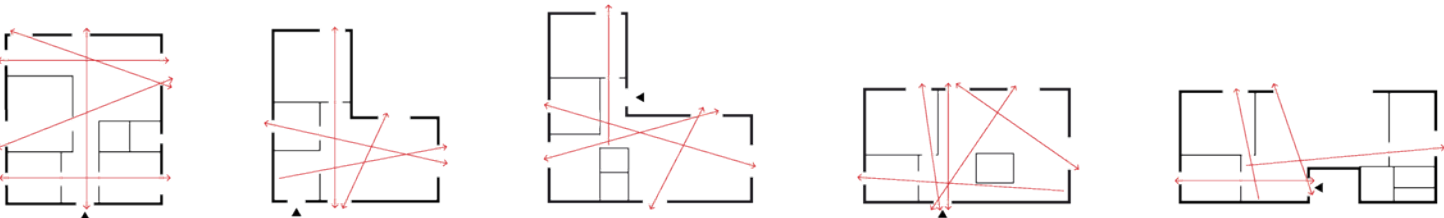
Design suited to fit the surrounding built context based on site analysis.



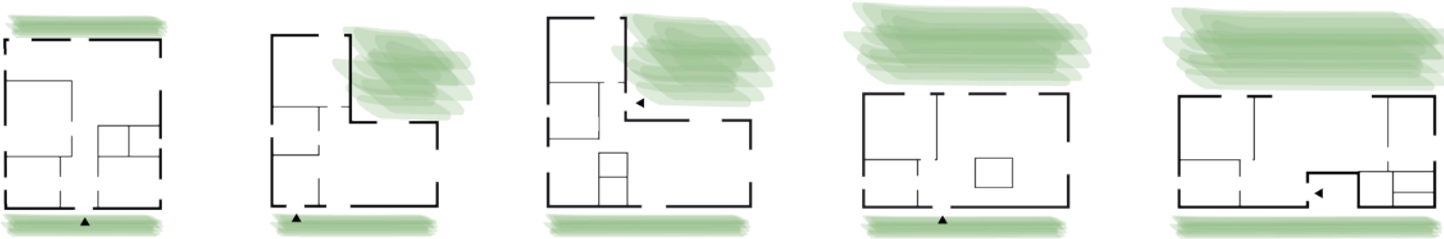
Floor plan variations



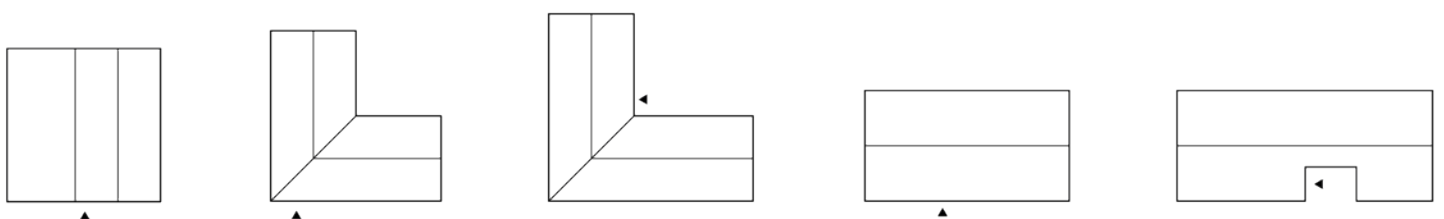
Zoning



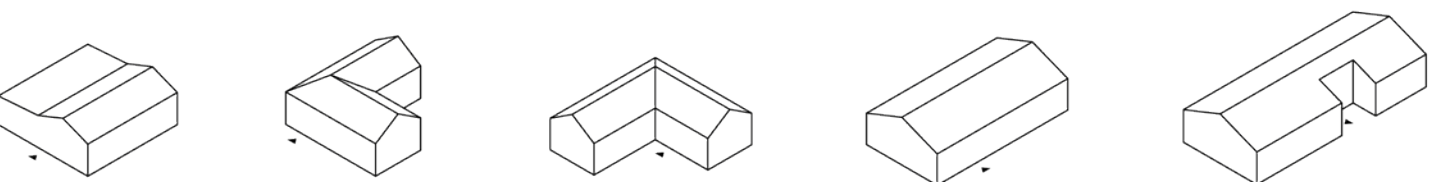
Sightlines



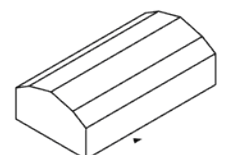
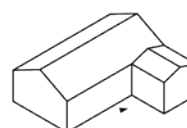
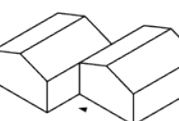
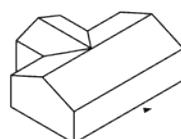
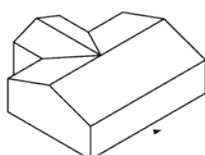
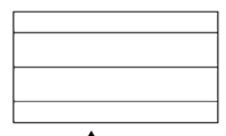
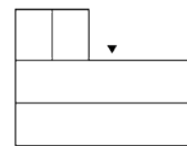
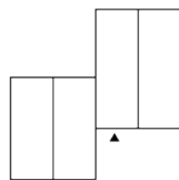
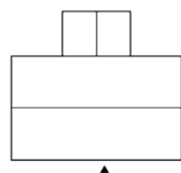
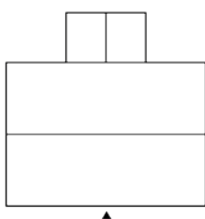
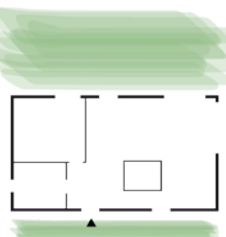
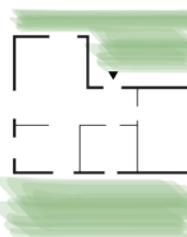
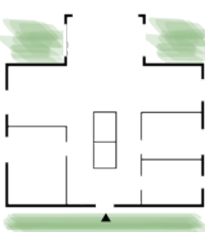
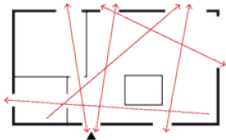
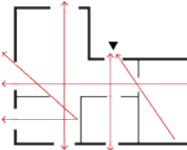
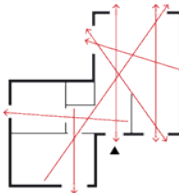
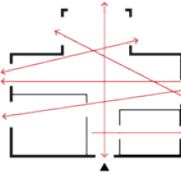
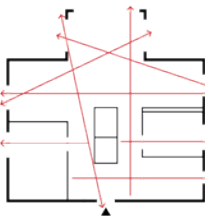
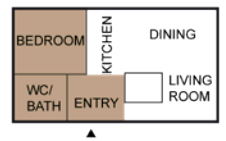
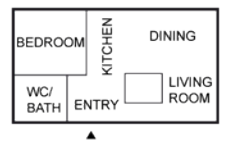
Outdoor areas



Roof design



Volumes



DESIGN PROPOSAL 04

This thesis proposes a senior housing community with small-scale private houses, green spaces and shared services promoting a social and active lifestyle. This place is for you who live in a villa too large for your needs. You in an apartment in the city longing for the nature. You that need a more accessible home but do not want to move away from your friends and family in town. You that spends too much time indoors but want to be active and find new friends. You that want to open your front door, breathe in the fresh morning air, take a step outside and be in your own garden. This is for you, mormor.

PROGRAM

This project is presenting small houses created to fit together in a community. They are designed with a high accessibility standard to be well adapted for seniors while maintaining good living standards considering daylight, spaciousness and indoor-outdoor connections.

Two different sizes of houses are created, one with 1 bedroom and one with 2 bedrooms, and they both have flexible floor plans to accommodate the needs of the resident.

The program for the houses is as follows:

1 bedroom house:

Entry

Bathroom

Master bedroom

Kitchen

Dining room

Living room

2 bedroom house:

Entry

Bathroom

Guest toilet

Master bedroom

Extra bedroom

Kitchen

Dining room

Living room

All (outdoor):

Parking

Garden

Patio

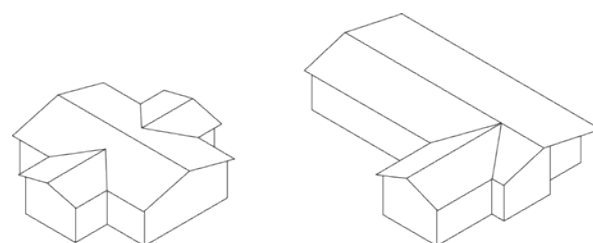
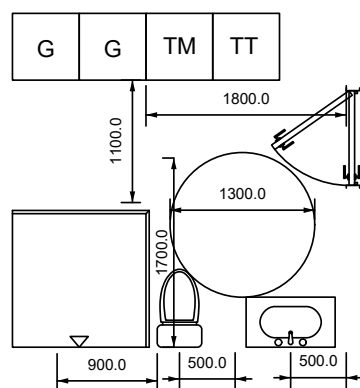
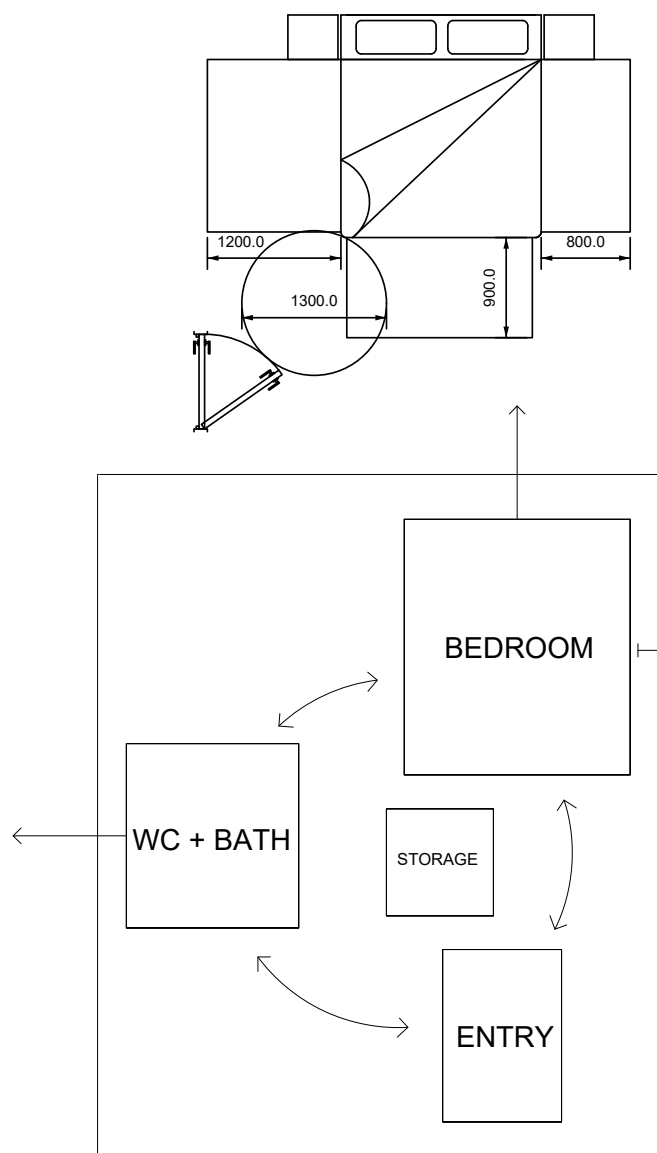


Figure 30: Volume sketches of the two houses presented - small and large.



This program has been created as a result of the literature studies and interviews made in the research phase. Two sizes of houses allow both for people living alone and together, also with the choice of a larger or smaller home depending on preferences.

PROGRAM

All rooms are dimensioned according to the high standard of accessibility (Arkitektens Handbok, 2020) and are drawn to ensure the following criteria:

Large openings
Low windowsills
Minimum thresholds
Circulation
Sightlines
Spatial proximity
Parallel activities

These criteria and the program are a summary created from information collected in the research phase as well. The division and constellation of rooms shown in figure 31 works as the base for creating the floor plans, with focus on creating a spatial proximity between entry, bathroom and bedroom, and also allowing for two different zones in the house.

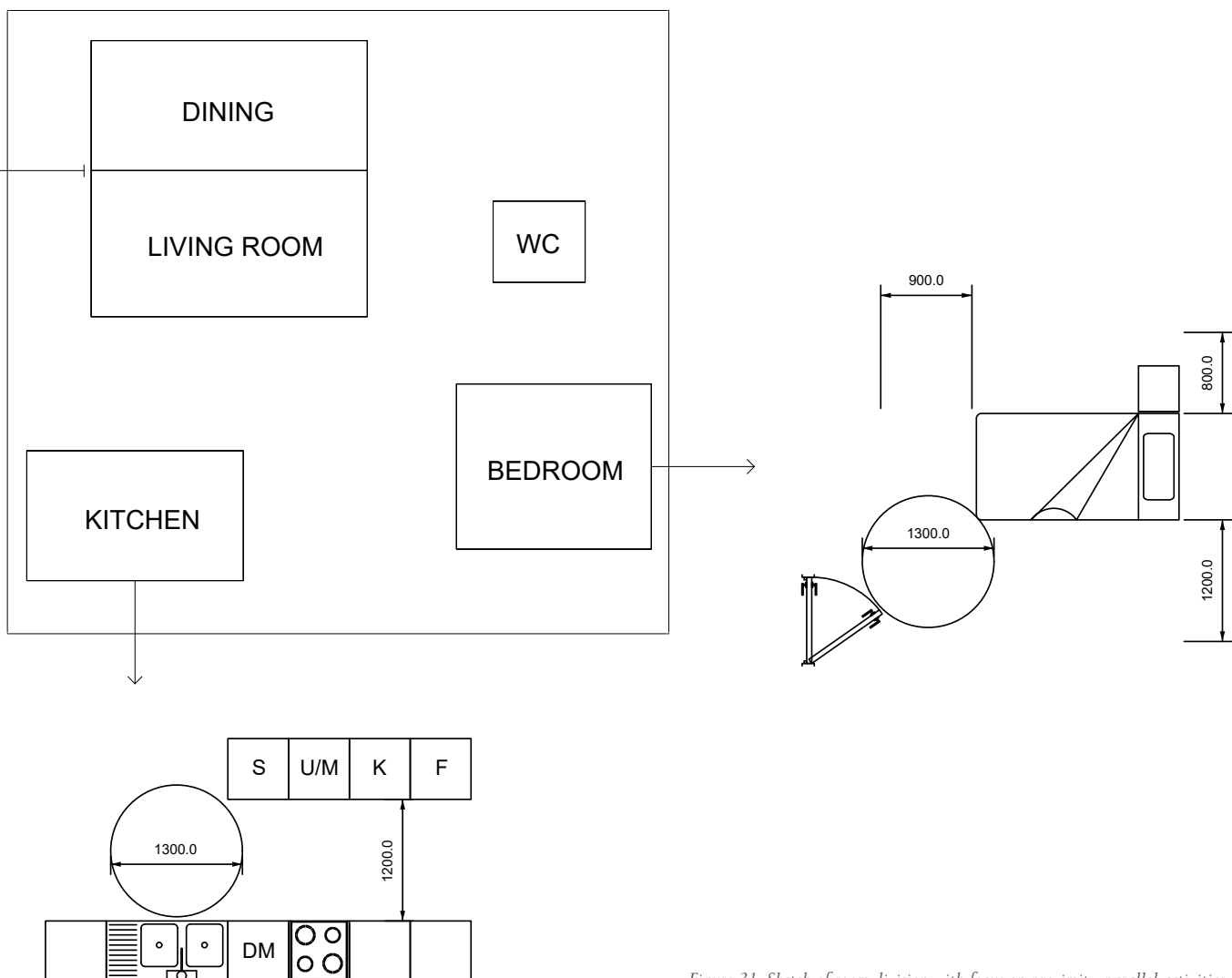


Figure 31: Sketch of room division with focus on proximity, parallel activities and dimensions.

PROGRAM

The plan for the community as a whole consists of different types of structures built for socialising, gardening and services for the neighbourhood along with spaces for parking and accessible pathways.

(These buildings and spaces will not be presented with their own floor plans and design, but shown through text, volumes and in the site plan, making them possible to visualize in the area.)

The community is created to be a calm space where people can easily walk around and be outside in the nature. At the same time, it needs to feel safe and accessible for everyone. Following criteria has been taken into consideration when shaping the area:

Accessible pathways

Access by car to all buildings

Connection to surrounding nature

Attractive outdoor spaces

Connections between dwellings

Privacy through own plot

While the plan program for this area imagines about 40-60 new accommodations, this program will lower that number. This due to a large focus on preserving the landscape and being able to provide more green areas for the residents. Also, the new structures built in this community are one-floor single family houses, which leads to smaller exploitation figures.

The built structures close to the plot will be taken into consideration. The existing roads leading up to these houses will either remain or be redirected, allowing their traffic to move around the site and therefore minimize the new neighbourhoods traffic on the 'private' roads. Vegetation is also placed in areas near the existing houses, creating more greenery but also privacy form the newly built structures.



Figure 32: Visualisation of programming of the plot.

SITE PLAN

There are 29 houses in total - 14 of the smaller size and 15 of the larger. All plots have their own private outdoor space, but the focus is the creation of the shared green spaces of the area. With accessible pathways flowing through the whole neighbourhood, all residents can move freely around and enjoy the nature on site.

All houses are also accessible by car and one of the entry roads as well as the road through the middle of the area are wider to give room for a potential garbage truck, service truck or other large vehicles to meet. There is a guest parking by the common building to minimize the car traffic inside the community. A parking for taxis or "flexlinjen" is put next to the service house close to the main road for easy pick-ups and drop-offs.

The houses are placed to create green courtyards in-between with space for greenhouses, gardening and socialising outdoor. The outdoor space around the common house is generous to make room for a boule court and other activities. A pavilion that can be used as a dining space, meeting place or an outdoor dance floor is placed in the northern part of the site, imbedded in nature.

1. Common house

- Meeting room(s)
- Kitchen
- Guest apartment
- Gym / Activity space
- Toilets
- Laundry (large)
- Storage
- Parking

2. Service house

- Recycling station
- Toilets
- Waiting area
- Parking

Other

- 3. Boule course
- 4. Pavilion
- 5. Greenhouses
- 6. Recycling stations

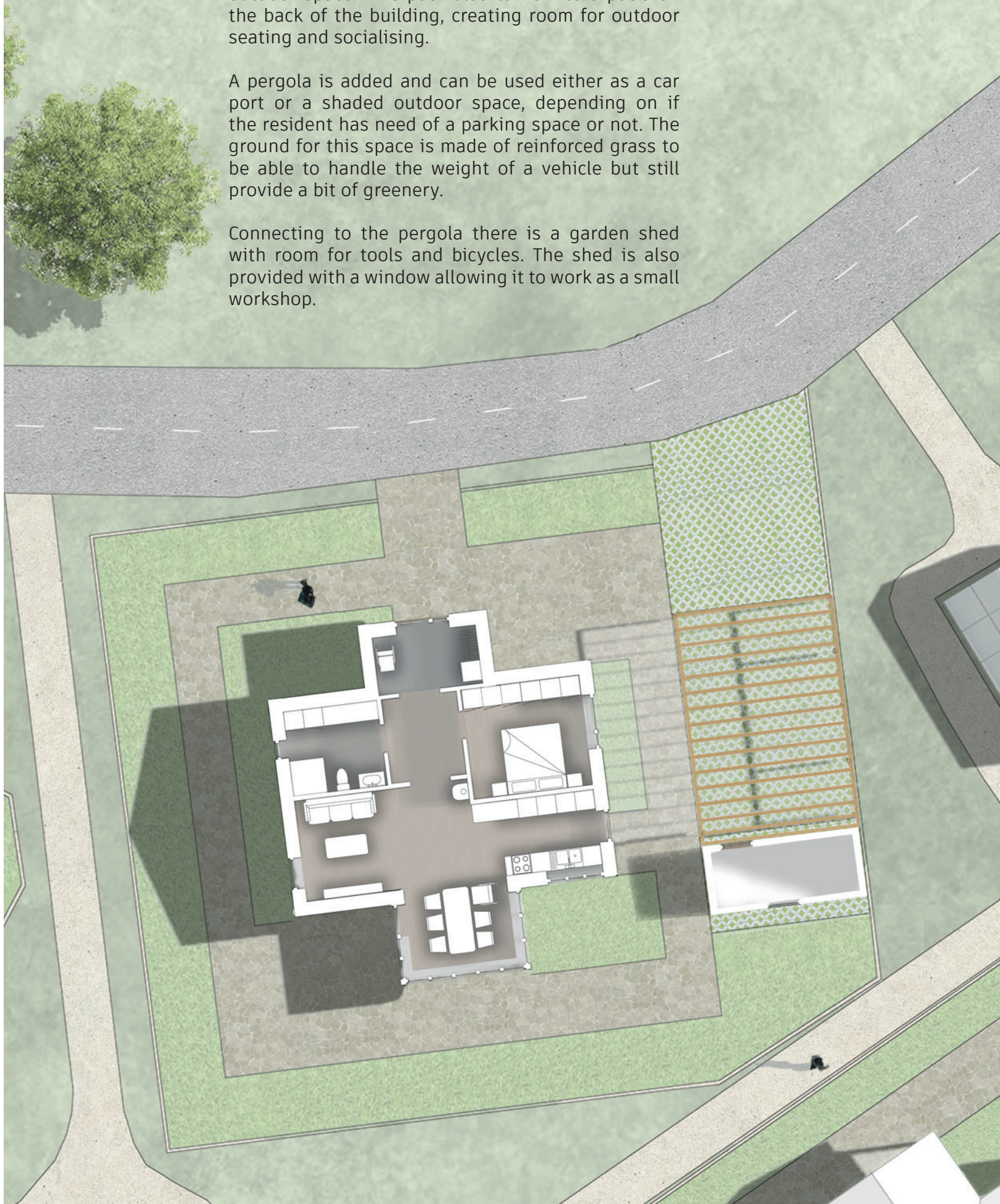




Zooming in, each house has its own green lawn and garden space which is enclosed by either a wooden fence or low hedges. A stone pathway runs around the whole house which allows the resident and their guests to easily move about and reach all areas of the outdoor space. This path also turns into a patio on the back of the building, creating room for outdoor seating and socialising.

A pergola is added and can be used either as a car port or a shaded outdoor space, depending on if the resident has need of a parking space or not. The ground for this space is made of reinforced grass to be able to handle the weight of a vehicle but still provide a bit of greenery.

Connecting to the pergola there is a garden shed with room for tools and bicycles. The shed is also provided with a window allowing it to work as a small workshop.





FLOOR PLAN AND SECTION

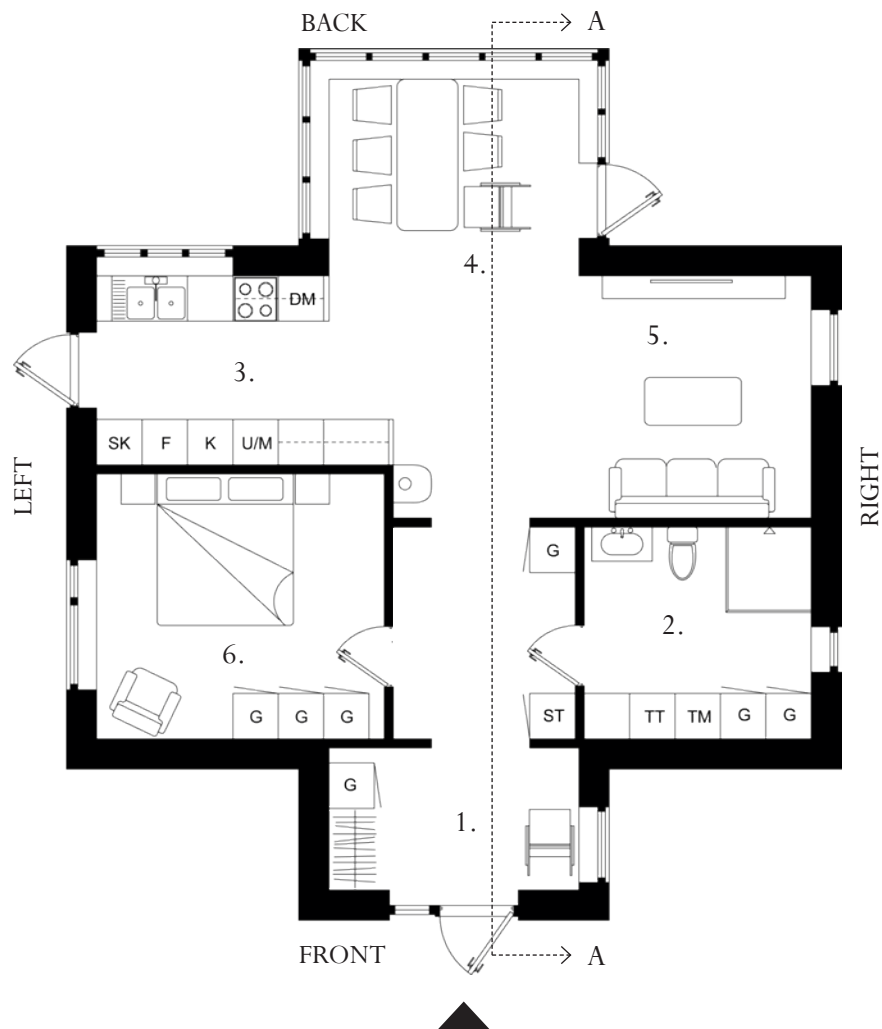
HOUSE SIZE SMALL

65 SQM

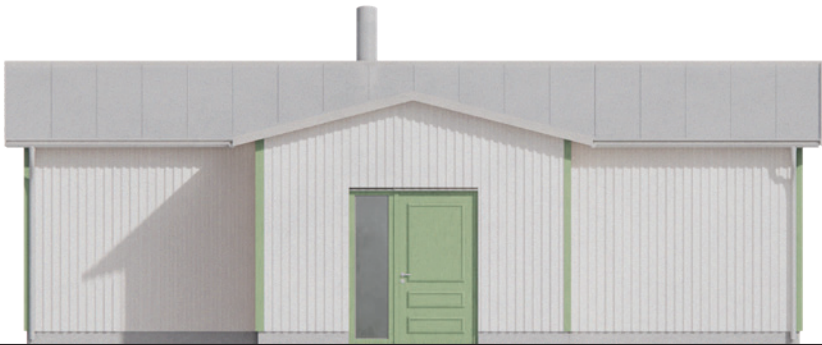
1 bedroom

Rooms

- 1. Entrance
- 2. Bathroom
- 3. Kitchen
- 4. Dining room
- 5. Living room
- 6. Bedroom
- 7. Storage
- 8. WC



SECTION A-A SMALL



FRONT



RIGHT

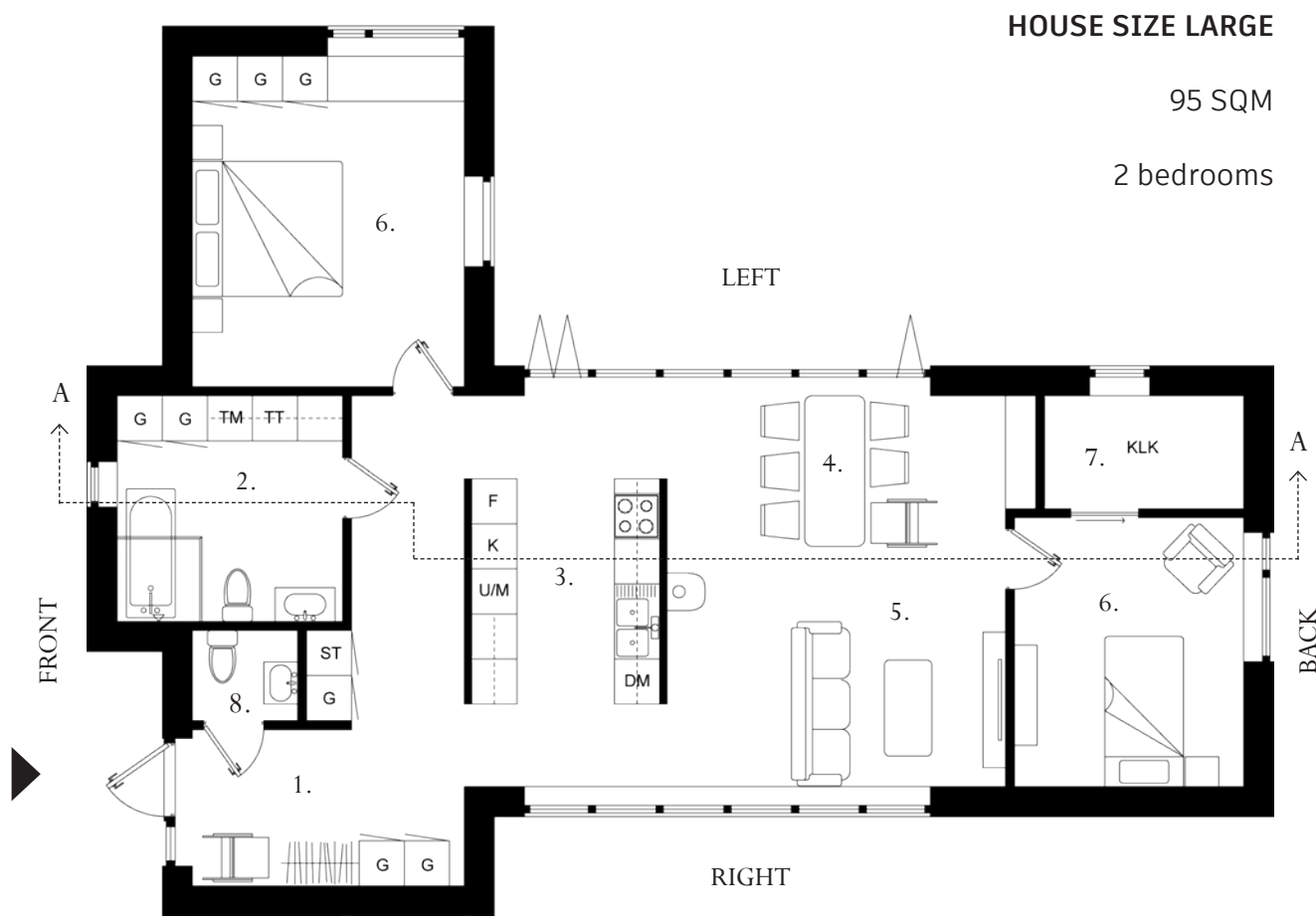


BACK



LEFT

FLOOR PLAN AND SECTION

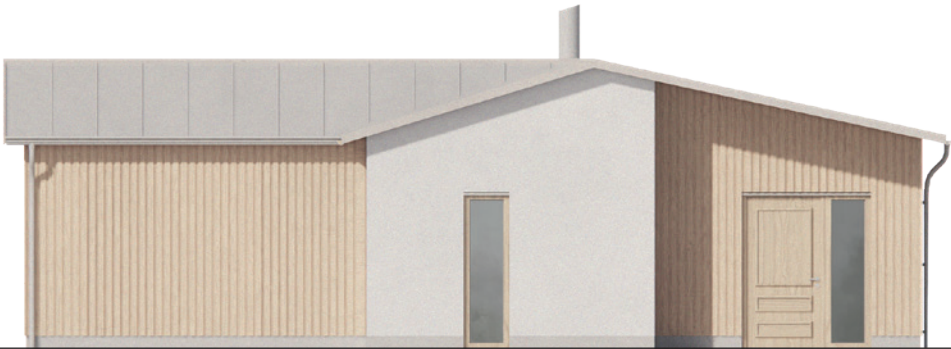


Rooms

- | | | | |
|----|-------------|----|-------------|
| 1. | Entrance | 5. | Living room |
| 2. | Bathroom | 6. | Bedroom |
| 3. | Kitchen | 7. | Storage |
| 4. | Dining room | 8. | WC |



SECTION A-A LARGE



FRONT



RIGHT

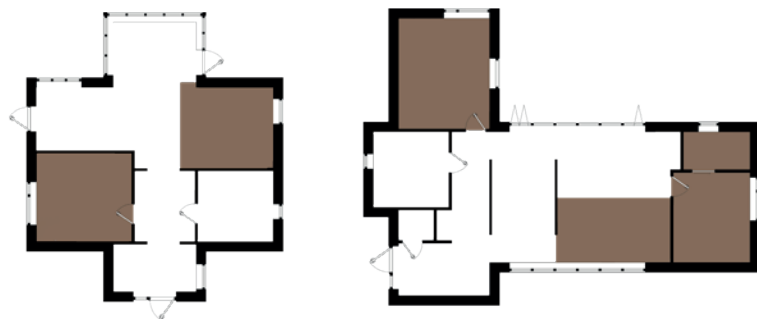


BACK



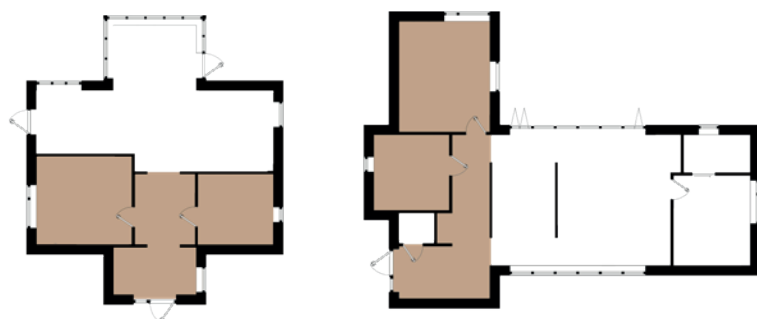
LEFT

FLOOR PLAN DESIGN



FLEXIBLE SPACE

All rooms have been designed with flexibility in mind. The bedrooms and the living room in both houses are for example very spacious and can be furnished in different ways. With rectangular shapes and well-placed openings, the houses can be adapted for the resident's needs.



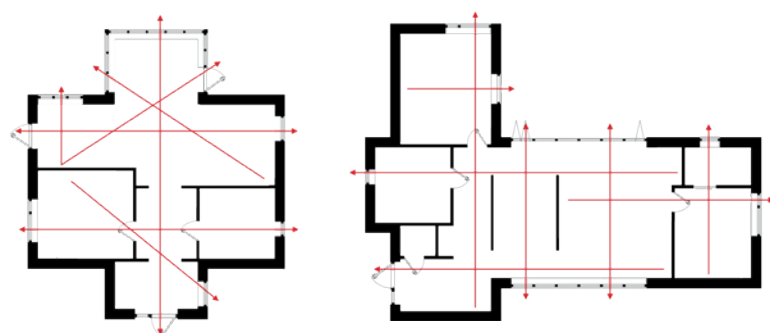
PARALLEL ACTIVITIES

The importance of being able to separate activities has been taken into consideration by placing entrance, bathroom and bedroom close to each other. This allow the social space to be separate, and in the large house the extra bedroom is also separated together with the social areas.



OUTDOOR AREAS

The closest nature to a house is usually the private garden right outside. To make the most of these outdoor spaces, both houses create corners and shielded areas for seating or gardening with their shapes. There is also an overhanging roof for extra protection and shading.

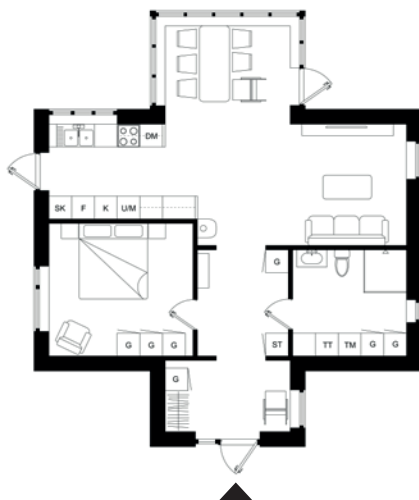


SIGHTLINES

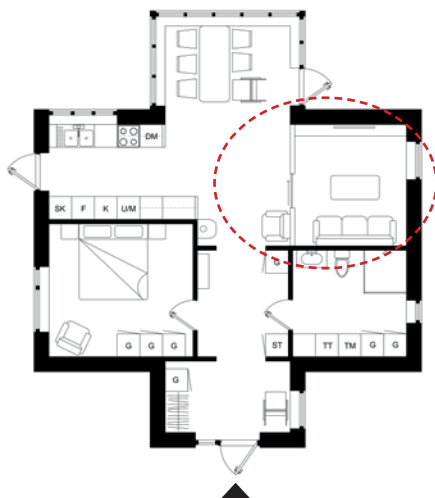
The sightlines most sought after are the ones moving through a building, with an opening in each end. These, along with outlooks from as many places as possible, has been prioritized when placing doors and windows in both houses.

SIZE SMALL

The smaller house has a living area of 65 sqm and one bedroom. Both bedroom and bathroom are dimensioned according to high accessibility standards and will comfortably fit both wheelchair and health care staff if needed. The entry is spacious and so is the hallway leading into the open social area. A parallel kitchen with a window over the sink is fitted, and the dining table sits in the glazed porch leading out to the back yard. The ceiling height is higher in the bedroom and living room, exposing the beams, and a small fireplace works as a heart of the house. A wall can be added by the living room if the residents want to be able to close that room (see SMALL Version 2 below).



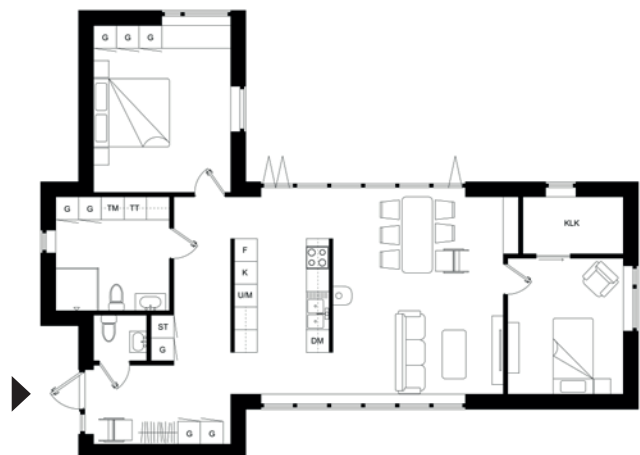
SMALL Version 1



SMALL Version 2

SIZE LARGE

The larger house has a living area of 95 sqm and two bedrooms, both dimensioned with high accessibility as well as the bathroom and entrance. The social space is large and open, with big windows on one wall and folding doors on the other for the possibility to extend the space outdoors. The ceiling beams are exposed in the master bedroom, dining area and living room and the kitchen is placed in the middle to allow movement in the floor plan. There is an extra toilet for guests and a walk-in closet by the small bedroom that also can be used as a small office or workshop. If the residents want a more closed floor plan, walls can be added in the living room (see LARGE Version 2 below).



LARGE Version 1



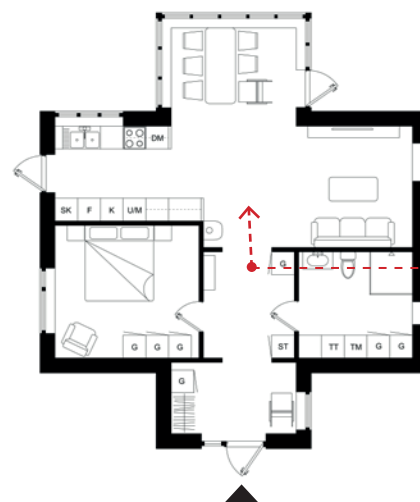
LARGE Version 2

FLOOR PLAN DESIGN

The sightline from the entrance to the dining area in the smaller home creates an axis through the house. With windows in both ends and the view of the dining table from the front door, a good feeling of the space is given from both places and lighting up the hallway in-between.

The entrance is spacious to allow extra storage of for example a wheelchair or other aids, and a window is placed on the right side to bring in extra light in the room.

The dining area sits in what can be described as an indoor porch, glazed to let the light and views in. The green window frames are chosen to ease the transition between the white walls inside and the vegetation outside, framing in the nature. The space has generous dimensions, allowing for wheelchairs to fit, and a door that leads to the patio outside.



The entrance in the larger house is also spacious and fits two wardrobes along with hangers and space for a wheelchair. Extra storage in the hallway is also provided, as well as in the bathroom. The view from the front door takes you all the way to the living room, passed the parallel kitchen, giving the viewer a hint of the exposed beams.

The flooring in both houses is light wood and with as few thresholds as possible, making it easier to move with walkers and wheelchairs.

The walls is white plaster as a standard, allowing the resident to paint or decorate however they like.



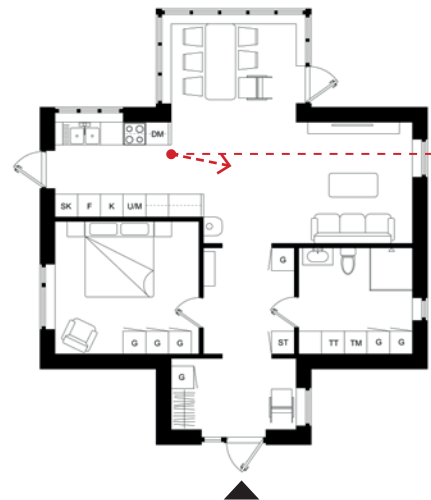


FLOOR PLAN DESIGN

The living room area in the small house has a higher ceiling height and exposed beams, making the room feel more spacious while bringing the construction into view. The flooring here is also of wood, matching the wooden beams, and some walls are fitted with white wooden panels to mix textures. As mentioned before, the windowsills are low in every room, and the windows are placed closer to facade to make space for flowers or the like inside.

A fireplace is installed in the middle of the house, creating a heart and allowing to be experienced from many spaces through the open floor plan.

The openings through the hallway are both vaulted, allowing the path to feel softer and the rooms to flow together.



In the large house, folding glazed doors are placed between the social areas (dining room and kitchen) and the outdoor patio. This gives the possibility to extend the dining area, connecting the indoors with the outdoors seamlessly.

The kitchen is made parallel to avoid corner cabinets and is fitted with a full fridge and freezer, as well as an oven and microwave in a tall cabinet for easy access. All kitchen counters have drawers instead of cabinets to eliminate the issue of bending down to try and reach your pots and pans. The counter between the oven and dishwasher can be removed to make room for a wheelchair.





FLOOR PLAN DESIGN

The outdoor space is an important aspect in both houses. The paving of the patio continues to the pathways around the house, allowing for maximal accessibility and no seams. The patio is also large enough to accommodate for outdoor seating in different forms.

The overhang of the roof has different dimensions on different sides of the building, but stretches mostly around 200-300 mm long. On the front part, it reaches further to provide a bit more shelter to the area outside the living room windows, which also provides more shade to the living room area.

The bathrooms in both houses are extra spacious to accommodate a wheelchair and/or health care staff and fits a washer, dryer, high cabinet storage, shower walls and have space for support handles next to the toilet seat if needed. In the larger house there is also a small guest bathroom near the entrance.

The master bedrooms in both houses have three closets each and seating space. In the larger one, two windows are installed to one; create sightlines through the bedroom door, and two; give a good possibility for outlooks even if the resident is on bed rest.

The ceiling in the bedrooms is opened up in both houses as well, exposing the beams as in the living area and bringing in more textures and rhythm to the rooms.

The smaller bedroom is dimensioned for health care situations, but also to be flexible with the ability to be refurnished after the residents wants and needs. The small window in the closet gives also this room the ability to adapt and work as a small office or workshop.













EPILOGUE
05

Our ageing population is not something that we can prevent, nor something we should want to. Our modern lifestyle allows for a longer and healthier life, where grandchildren can grow up with the older generation of relatives still active and thriving. But this is something that we as a society needs to make sure of - that our elders have the potential to be just that: thriving.

In the field of architecture and housing solutions, the difference that can be made for a senior person's day-to-day life is unmeasurable. Things that the younger generation may think of as a minor inconvenience can be a large obstacle for someone a bit older. Everything from walking the distance from your car to the front door, to getting up from bed in the morning could potentially mean problem for someone of the elderly population. But we must also remember - our senior citizens have also been young, maybe still feel it, and it can be hard knowing what you may need in the future.

'Ageing in place' (kvarboendepincipen) is first and foremost a concept that strives toward making it possible for people to live at home for as long as possible. But if these homes are not designed for elderly people, home care staff or special equipment, the resident could instead feel neglected or unsafe in their own home. Accessibility adaptation of dwellings is usually expensive which could lead to it not being implemented. This together with the rising feeling of loneliness that comes with age shows that the development of new senior housing must continue.

This thesis addresses the issues with the narrow view of senior housing we have today and shows a new form of accommodations that speaks to the health benefits of a social lifestyle close to nature. Presenting two housing models, drawn to fit the accessibility needs of senior citizens but also to fulfil many of the qualities needed to be called 'a good accommodation', this thesis shows that senior housing does not have to look or feel different than any other home. By thorough context analysis, small and flexible plots and a program for the community with services to include, this community forms the theoretical base adaptable for placement where needed in the country.

The result of the methodology 'research for design' is shown mostly through the development of the floor plans, while 'research by design' was mostly explored when creating digital models, allowing the project to develop regarding light, flow and space.

DISCUSSION

Through the research process there are many things I have come to realise, knowledge I had to re-learn and facts I never knew existed. The first thing I knew I wanted to do was talk with possible users of this housing project, and this turned out to be the most interesting and insightful time spent. The number of welcoming and genuinely interested people made me even more motivated to create something specifically designed for them - the seniors. The many inputs and ideas shaped the concept and added important parts of the programming.

These interviews also made me aware of some challenges in the exchange between the architect and user. As a user, it can be hard to discuss and specify your needs and wishes if it is not something that feels within reach. The architect needs to carefully listen and at the same time take into consideration many design aspects for futureproofing that the user may not be aware of yet. If the discussion is not held at all, there is a high possibility that the user is not satisfied with the result. The user *needs* to be a part of the conversation.

The design proposal of this thesis is a concept that can be further developed in many areas. A great challenge with the project has been to narrow it down, which led to subjects as the detailed construction, how to handle the difficult economic situation of many seniors and the realistic possibilities of using recycled materials has not been touched upon. If given the possibility to continue working with this idea, my next step would be to investigate these areas and develop the project into something possible to realize in the future.

REFLECTION

Considering the process of this master thesis, like all projects, it has had its ups and downs. But one thing that always remained was my interest for the subject. The people I have had the chance to talk with only made it bigger, and the best motivator in the end was that I wanted to create something I thought worth showing them.

By being allowed to work for this long with only one project, I was very keen to deep dive and learn all there is to senior housing, creating communities and making this a reality. But then I realised that 5 months is not a long time at all, and sometimes it is better to focus on the one thing that is the most important to you.

So, for future master thesis students, I have compiled a small list of things that could be good to have in mind:

- *Pick a subject that is interesting to you.*
- *Make a time plan, then break it. Then make a new one that is adapted to your new discoveries. Then break that one.*
- *Make notes of your reflections each week.*
- *Make sketches even if you don't have a vision yet. (A lot of sketches).*
- *Try being in school and working with (or next to) your classmates. You will not be the only one struggling, and it is easier to figure out solutions together.*
- *Study consistently, but not all the time.*
- *Enjoy this semester - it is your last one as an architect student!*

Lastly, my hopes for this master thesis are that it can serve as an inspiration for a new type of senior housing, with focus on the well-being and wishes of the resident.

It is important that we see our senior population not just as seniors but people of our society, with the same dreams and wishes as anyone else.



Every one of us, even the oldest, are living our life for the first time. *All should be able to enjoy all parts of it.*

REFERENCES

- Ahlström, P., Bjelke, B., Paulsson, J., Runsteen, S., Sandberg, P. (Ed.). (2023). *Bra bostäder för seniorer : en antologi*. Svensk Byggtjänst.
- Andersson, M., Granath, K. & Nylander, O. (2021). *Potential för kvarboendes : sovrumskapacitet - rumslig närhet - funktionell autonomi*. Chalmers University Press.
- Bodin, A., Hidemark, J., Stintzing, M. & Nyström, S. (2020). *Arkitektens handbok* (12:1 ed.). Studentlitteratur.
- Booli. (2025). *Brf Bovieran Hönö*. Retrieved March 5, 2025, from <https://www.booli.se/bostadsrattsforening/77853>
- Boverket (2024). *Regional bostadsmarknadsanalys 2024:Västra Götalands län*. (17). Länsstyrelsen i Västra Götaland. <https://www.boverket.se/contentassets/56b41b3b67c84d27bcd3245894c535fe/vastra-gotalands-lan-2024.pdf>
- Boverket. (2023). *Tillgänglighet*. Retrieved April 15, 2025, from <https://www.boverket.se/sv/byggande/tillganglighet--bostadsutformning/tillganglighet/>
- Brf Bovieran Hönö. (n.d.). *Beskrivning av fastigheten*. brfbovieranhono.se. Retrieved March 5, 2025, from <https://www.brfbovieranhono.se/?rID=1084&page=bofakta%2Fv%E4gbeskrivning>
- Brunnberg & Forshed. (n.d.). *Källsprångsvägen – Hyresvillor i massivträ i Viskafors*. Retrieved October 02, 2024, from <https://www.brunnbergoforshed.se/kallsprangsvagen/>
- Dzieciatkowska, M. (2022). *Senior Health Park: a health promotive community park for older adults* [Master's thesis, Chalmers University of Technology]. Chalmers Student Theses. <https://hdl.handle.net/20.500.12380/305365>
- Esping Nordblom, H. (Ed.). (2018). *Bostäder att trivas i - analyser för ökad trivsel och ökat välbefinnande*. Liljewall arkitekter.
- Folkhälsomyndigheten. (2024). *Friluftsliv för bättre folkhälsa*. Retrieved April 14, 2025, from <https://www.folkhalsomyndigheten.se/livsvillkor-levnadsvanor/friluftsliv/friluftsliv-for-battre-folkhalsa/>
- Hogslätts Vänboende. (n.d.). *Historik*. Retrieved March 7th, 2025, from <https://xn--hogslttsvnbo-kcbe.se/>
- Johansson, A. et. al. (2021). *Förutsättningar för seniorboenden i Sverige* [Bachelor's thesis, Chalmers University of Technology]. Chalmers Student Theses. <https://hdl.handle.net/20.500.12380/304048>
- Kärnekull, K. & Blomberg, I. (2013). *Bygga senior-boende tillsammans : en handbook*. Svensk Byggtjänst.
- Kärnekull, K. (Ed.). (2013). *Äldres boende : i Tyskland, England, Nederländerna och Danmark*. Svensk Byggtjänst.
- Larsson, K. (2007) *Trappan mellan kvarboende och flytt : Förutsättningar för äldre med rörelsehinder att bo kvar hemma*. Socialstyrelsen. https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/ovrigt/2007-123-20_200712320.pdf
- Liljewall. (2025). *Bovieran*. Retrieved March 5th, 2025, from <https://www.liljewall.se/projekt/boveiran/>

REFERENCES

- Lindahl, L., Ryd, N., Kaan, C. & Isaksson, M. (2019). *Vad tycker seniorer om seniorbostäder och vilka flyttar dit?*. Institutionen för Arkitektur och samhällsbyggnadsteknik. https://research.chalmers.se/publication/513406/file/513406_Fulltext.pdf
- Länsförsäkringar Fastighetsförmedling. (2023). *En flyttkedja är inte starkare än sin svagaste länk*. Retrieved April 14, 2025, from <https://www.lansfast.se/om-oss/hallbarhet/social-hallbarhet/rapport-en-flyttkedja-ar-inte-starkare-an-sin-svagaste-lank/>
- Nyström, J. (2014). *Bara bo bra - ett särskilt boende för äldre* [Master's thesis, Chalmers University of Technology]. Chalmers Student Theses. <https://hdl.handle.net/20.500.12380/202779>
- OBOs. (2024). *Fyra av tio villaägare över 55 upplever att de bor för stort*. Retrieved March 17th, 2025, from <https://obos.mynewsdesk.com/pressreleases/fyra-av-tio-villaaegare-oever-55-upplever-att-de-bor-foer-stort-3331709>
- Ottosson, Å. (2023). *Naturen som kraftkälla : Om hur och varför naturen påverkar hälsan*. Naturvårdsverket. <https://www.naturvardsverket.se/4acf28/globalassets/media/publikationer-pdf/7100/978-91-620-7116-5.pdf>
- Sektor Samhällsutveckling. (2021). *Planprogram - Dalby : Del av Henån*. Orust kommun. https://www.orust.se/download/18.1c4985fe183bfdb97a21a2f/1665408834160/Dalby_planprogram_Programhandling.pdf
- Seniorval. (2025). *Boende för seniorer, Göteborg*. Retrieved April 14, 2025, from https://seniorval.se/boende-for-seniorer?level=All&area%5B266%5D=266&ctype%5Bsenior_housing%5D=senior_housing
- SMHI. (2013). *Vind i Sverige*. Retrieved May 7th, 2025, from <https://www.smhi.se/kunskapsbanken/klimat/sveriges-klimat/vind-i-sverige>
- Socialstyrelsen. (2020). *Vad tycker de äldre om äldreomsorgen, 2020?* Socialstyrelsen. <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/ovrigt/2020-9-6901.pdf>
- Statistikdatabasen. (2023). *Boende i Sverige*. Retrieved April 14, 2025, from <https://www.scb.se/hitta-statistik/sverige-i-siffror/manniskorna-i-sverige/boende-i-sverige/#alder-och-livssituation>
- Statistikdatabasen. (2025). *Folkmängden efter region, civilstånd, ålder och kön. År 1968 - 2024*. Retrieved February 28, 2025, from https://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START__BE__BE0101__BE0101A/BefolkningNy/
- Torslanda Havsbadskoloni. (2025). *Torslanda havsbadskoloni*. Retrieved February 13th, 2025, from <https://torslandahavsbadskoloni.se/>
- Wiklund, G. & Melin, S. (Ed.). (2013). *Bo bra på äldre dar - kunskap, kreativitet, kvalitet*. Svensk Byggtjänst.

APPENDIX A

Full list of interview questions brought to Brf Bovieran Hönö and Hogslätts Vänboende (in Swedish).

- Namn?
- Ålder?
- Bor du ensam eller med någon?
- Hur länge har du bott i Bovieran?
- Hur kommer det sig att du flyttade hit?
- Hur stor är din lägenhet?
 - o Vad är det bästa med ditt nuvarande hem?
 - o Vad hade kunnat fungera bättre i lägenheten?
- Vilka typer av service finns tillgängliga?
 - o Använder du dessa?
- Vilka faciliteter/gemensamhetsytor finns det som du tycker om?
 - o Används dom?
 - o Finns det lokaler/service som du saknar?
- Vart bodde du innan Bovieran?
- Hur stort?
- Hur länge hade du bott där innan flytten?
- Finns det något du saknar speciellt från ditt tidigare hem?
- Vad är specifikt bättre här än där?
- Hade du nära till service (handel, mat, buss, jobb, aktiviteter, frisör, etc.)?
- Finns det något som du brukade göra men inte kan nu pga. avstånd/tillgänglighet etc.?
- Äger du en bil?
- Har du en cykel?
- Är det lätt att ta sig omkring till fots? Behövs ett annat privat transportmedel?
- Var/hur träffar du familj och vänner främst?
- Har du husdjur?
- Vad har du för hobbies/vad gör du helst på fritiden?
- Vad är det bästa med Bovieran?
- Vad saknar du?
- Vad skulle du vilja ta med dig vid eventuell flytt?
- Tycker du om grönskan som vinterträdgården erbjuder?
 - o Tycker du om att vara i naturen?
 - o Odlar?
 - o Är vinterträdgården tillräckligt?
 - o Är det tråkigt att det är så kallt där nu?

- Blir det lätt att man inte lämnar Bovieran?
- Känns det någonsin instängt?
- Hur fungerar det med värmen på sommaren?
- Känner du att vinterträdgården används mycket av de som bor här?
- Vad utöver trädgården gör Bovieran till en bra plats att bo?

Drömbostad:

Om du fick måla upp ditt drömboende, hur skulle det se ut? Exempelvis:

- Plats
- Storlek
- Form
- Färg
- Omgivning

Välj:

- Lägenhet eller hus?
- Stort eller "litet"?
- Hyra eller köpa?
- Landsbygd eller stan?
 - o (Natur eller urbant)
- Privat eller gemensam:
 - o Trädgård
 - o Kök/vardagsrum
 - o Transport (bil/cykel-pool tex.)
- Utomhus eller inomhus?
- Vinter eller sommar?
- Tillsammans eller ensam?

APPENDIX B

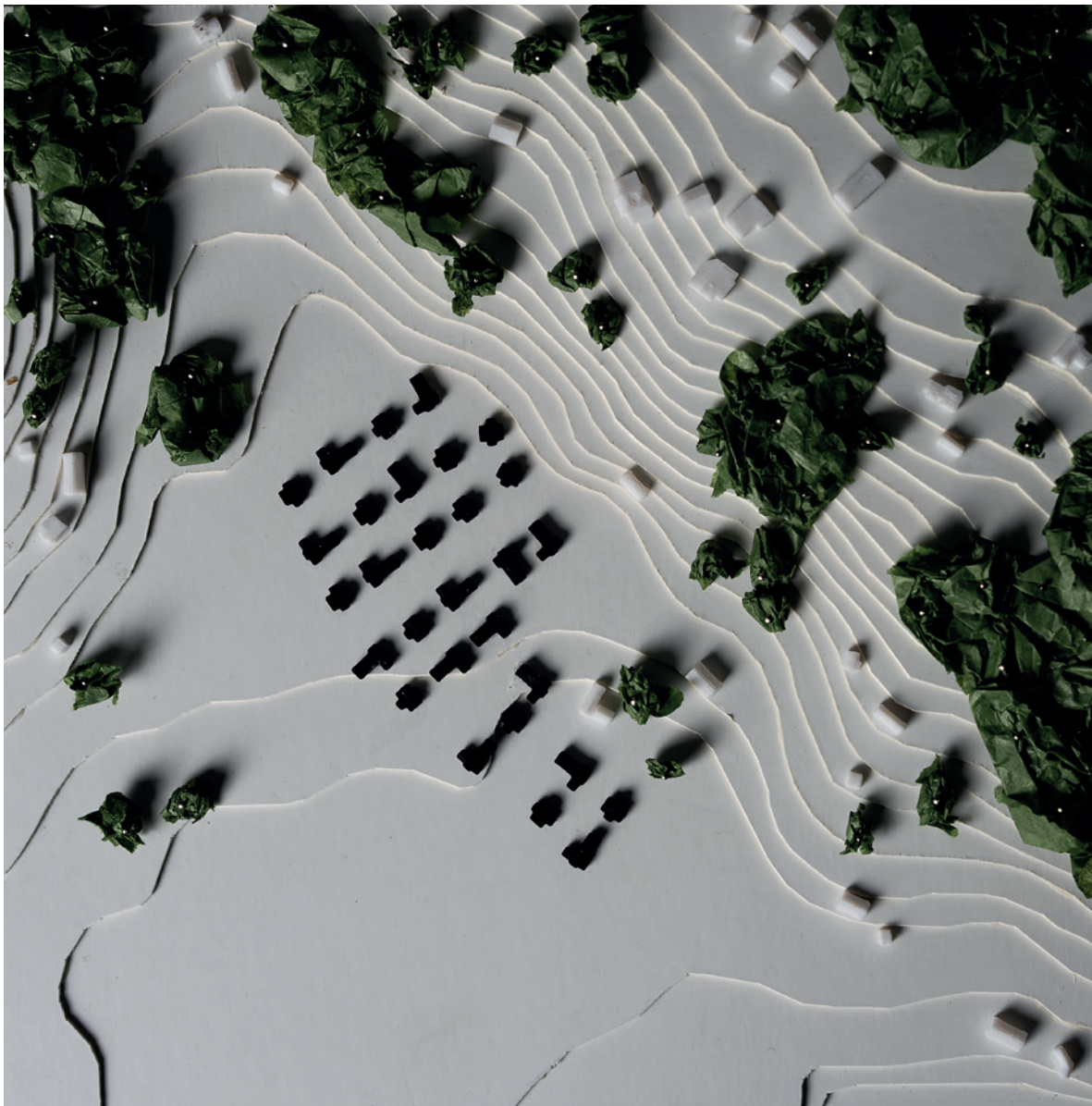
Photographs of models built for the open seminar and exhibition.

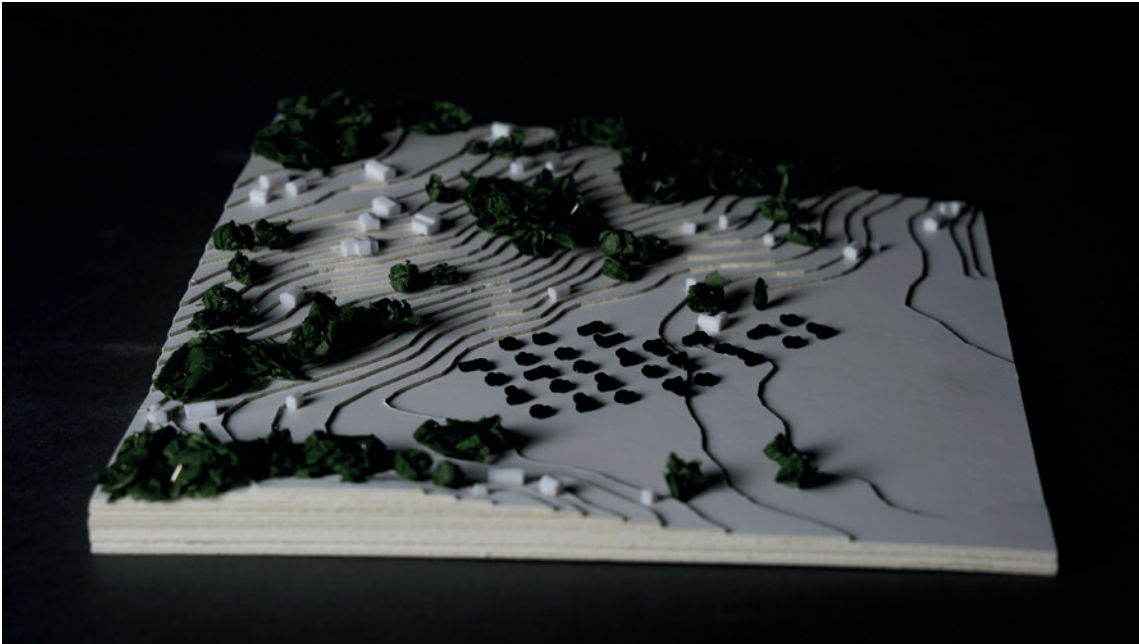
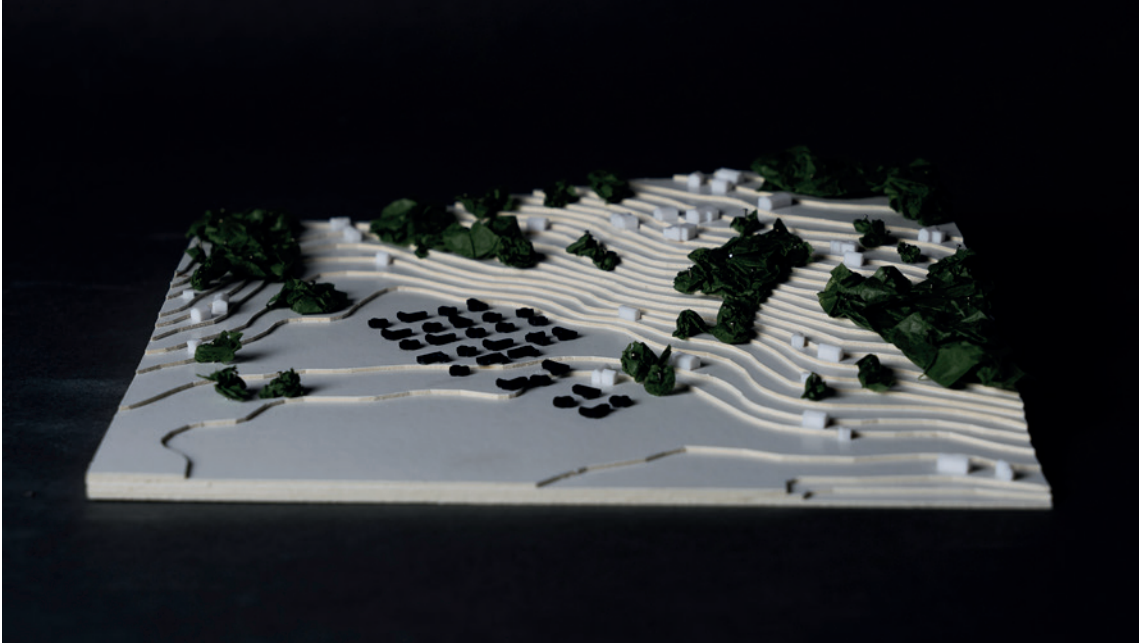
B.1.

SITE MODEL

SCALE 1:2000

MATERIALS: White cardboard, 3D printed buildings (white for existing, black for new structure), green paper and nails for vegetation.





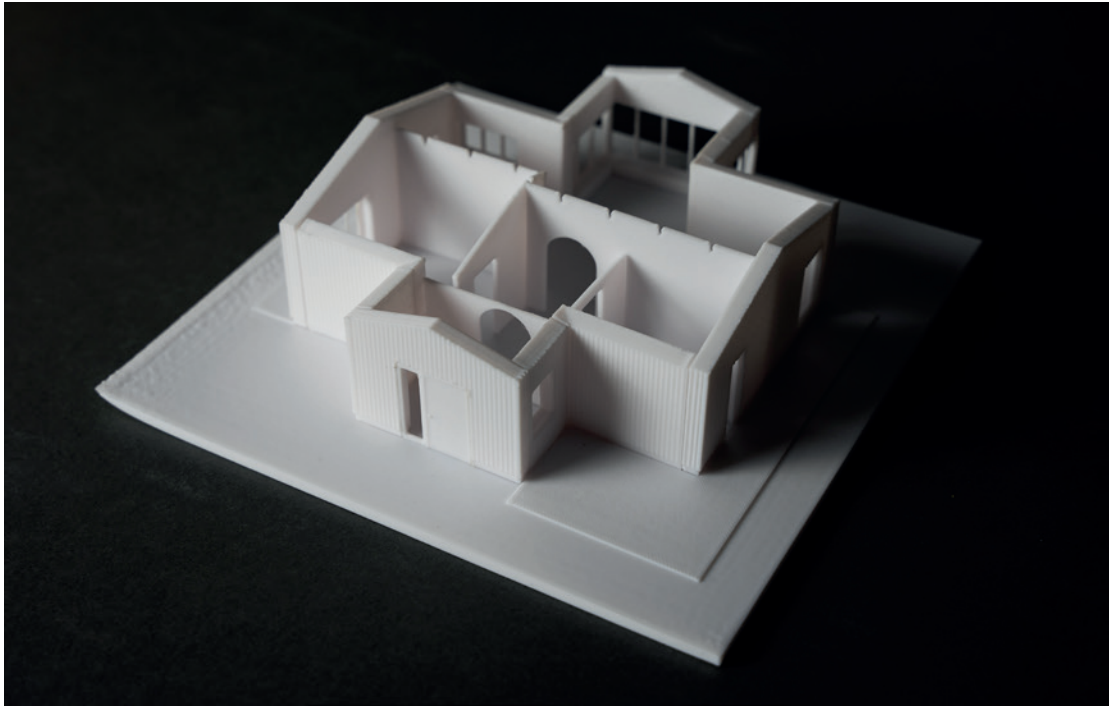
B.2.

HOUSE MODEL - SIZE SMALL

SCALE 1:75

MATERIAL: White PLA plastic, 3D printed.





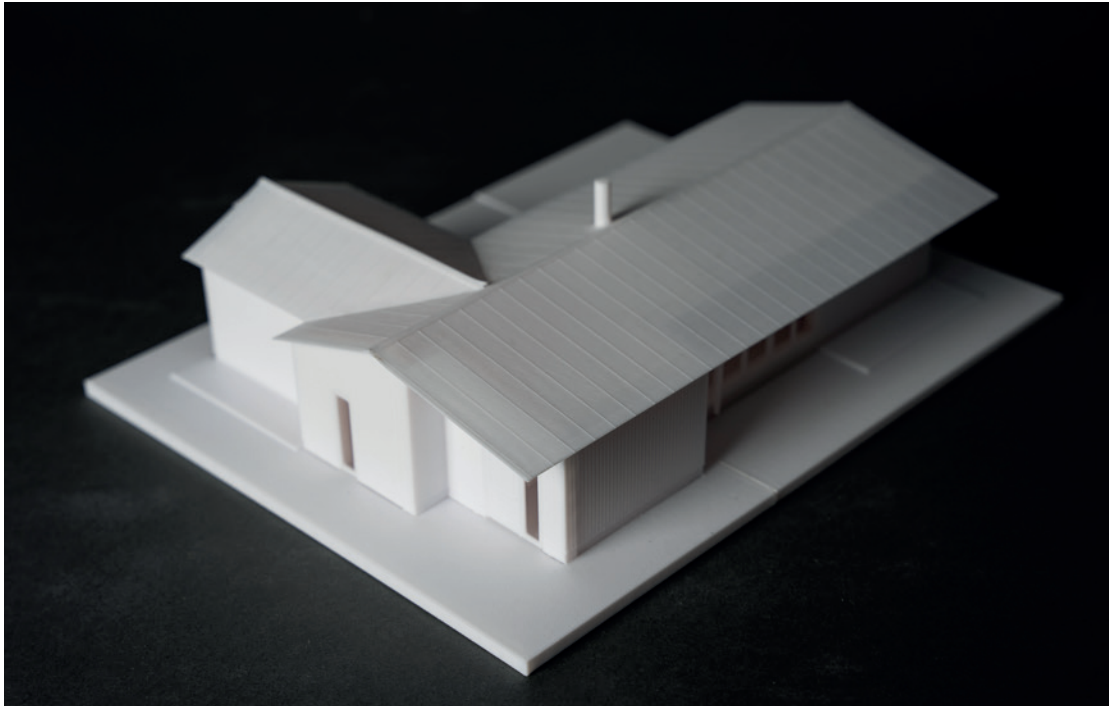
B.3.

HOUSE MODEL - SIZE LARGE

SCALE 1:75

MATERIAL: White PLA plastic, 3D printed.







CHALMERS
UNIVERSITY OF TECHNOLOGY

Master's Thesis 2025

Serenity for seniors
Ellinore Olausson

Chalmers School of Architecture
Department of Architecture & Civil Engineering

MPARC: Architecture and Urban Design
Profile: Healthcare and Housing Architecture

Examiner: Marie Strid
Supervisor: Susanne Clase



CHALMERS
UNIVERSITY OF TECHNOLOGY