A NATURAL VIEW

- Exploring the design of a home, inspired by nature.

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THANKS TO

Lin
Saga, Elke, Christine
Fellow students
Patrick
Friends and family

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CHALMERS

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A home is a place where many people spend a lot of time and is therefore also a place that has great possibilities to impact on their wellbeing. By taking advantage of how different spaces can influence our health, our homes could become a place we can recover, de-stress and receive energy.

The purpose of this thesis is to provide an alternative villa that can help to reduce stress. The aim is to explore villa design in relation to biophilic design approaches. This leads up to the research question: How can nature inspire the design of a home to increase wellbeing?

This study combines literature investigations with reference projects, interviews, model making and sketching in an iterative process with a focus on homes, nature and biophilic design.

The outcome is a residential area with 14 villas that are situated in a nature-context. The design of the villas are inspired by three keywords: *Visual connection to nature, Prospect - Refuge and Rhythms.* The buildings work in harmony with the environment and make the residents feel a closer connection to nature. Spaces in and surrounding the building are inspired by nature in different ways, from approaching the building to the detailing and the materials.

The thesis focuses on the design of homes through biophilic design and does not mainly focus on other health promoting aspects.

This project can be used to inspire others who want to design or live in a home that can help to reduce stress and gives a closer connection to the nature surrounding them.

Keywords:
Villa design
Biophilic design
Nature
Stress reduction

CONTENT

1. STUDENT BACKGROUND

Bachelor

Chalmers Architecture

Internship

Nils Andréasson Arkitektkontor

Master

MPARC, Architecture and urban design. Chalmers
University of Technology.

Sustainable development and the design professions, 7,5 hp

Future visions for healthcare, housing and work 1:
Residential healthcare - housing for seniors, 22.5 hp

Managing design projects , 4.5 hp

History, theory and method 4: Light and colour theory, 3.0 hp

Future visions for healthcare, housing and work 2:
Housing inventions, 22.5 hp

Masters thesis preparation courses, 7,5 hp

Future visions for healthcare, housing and work 3:
Healthcare architecture, 22.5 hp

2. READING INSTRUCTIONS

The thesis is divided into the chapters Introduction, Concept, Context, Design proposal, Conclusion, Process, Inspiration and References.

INTRODUCTION	Introduces the problem statement, Question, Aim, Delimitations and Method.
CONCEPT	Describes the keywords forming the design strategy of the building.
CONTEXT	Introduces the location, Jörlanda, analyses the site and shows the existing proposal.
DESIGN PROPOSAL	Shows the design proposal divided by site, building and construction.
CONCLUSION	Explains how the design relates back to the theory and summarizes the reflection.
PROCESS	Shows some model photos used in the process.
INSPIRATION	Summary of inspiration pictures divided by keywords.
REFERENCES	Lists the references..

3. INTRODUCTION

3.1 PROBLEM STATEMENT

Sarah Williams Goldhagen (2017) argues that the built environment effect how people think and feel and that 90 % of what we think is subconscious. Knowing this, it should be in everyone's interest that we consciously use the knowledge about how humans are affected by spaces when shaping the built environment.

The design of buildings should be adapted to suit the activity and the desired behaviors that will take place in a building. It could be about school environments helping creativity or healthcare buildings speeding up the healing process. Consciously using architecture to expedite healing in hospitals is a research field that has been established within healthcare architecture and is called Evidence Based Design (Ulrich, 2012).

Using evidence when designing buildings to help reduce stress is common in healthcare architecture (Ulrich, 2002) but not as much when designing homes. As the home is a place where we spend a large part our lives and people today feel more and more stressed (folkhalsomyndigheten.se), to design from evidence even in the home could possibly help to promote wellbeing and reduce stress.

A part of the evidence based design in hospital buildings implies that stress recovery is much more effective when having a connection to nature as opposed to not having any connection to nature (Ulrich, 2002). Based on this knowledge this thesis was led in to the concept of Biophilia, which is a term that was popularized by the sociobiologist E.O. Wilson (Beatley & Newman, 2013)

BIOPHILIA

Wilson defines biophilia as "the innately emotional affiliation of human beings to other living organisms" (Beatley & Newman, 2013, p. 2) According to Beatley & Newman (2013) Wilson argues that it is our ancient brains and that we have co-evolved with nature that gives us the need to connect with nature to be happy and healthy.

That nature has positive effects on us is widely researched, studies show that biophilic design can help to reduce stress, improve cognitive function and creativity, improve our well-being, expedite healing and elevate positive feelings. (Browning, Ryan, & Clancy, 2014) (Ulrich, 2002). Studies also shows that time spent in nature can help to reduce the symptoms of ADHD and ADD in children (Sanner, 2018).

In a world that continues to urbanize and where many people spend their days in the city, coming home to a house where nature is highly present could help stress recovery and overall wellbeing.

This thesis will explore how biophilic design can inspire the design of a home with the intention of reducing stress in everyday life.

3.2 QUESTION

How can nature inspire the design of a home to increase wellbeing?

3.3 AIM

The aim of the thesis is to explore villa design in relation to biophilic design approaches.

The outcome is a residential area with 14 villas that are situated in a nature-context. The design of the villas are inspired by three keywords: *Visual connection to nature, Prospect - Refuge and Rhythms.* The buildings work in harmony with the environment and make the residents feel a closer connection to nature. Spaces in and surrounding the building are inspired by nature in different ways, from approaching the building to the detailing and the materials.

3.4 DELIMITATIONS

The thesis focuses on the design of homes through biophilic design and does not mainly focus on other health promoting aspects even though it may occur in the design.

The project is limited to focus on how architecture can benefit from nature and not how nature can benefit from architecture.

The design is based on an overall plan for the chosen area that has been developed by the municipality of Stenungsund. For this project, a part of this plan has been chosen and has been remade in the thesis.

3.5 METHOD

This study combines literature investigations with reference projects, interviews, model making and sketching in an iterative process with a focus on homes, nature and biophilic design.

An interview about residential architecture was made early in the process with Hilda Esping Nordblom, vice VD of Liljewall architects, to get started with the design process.

To understand the background and theory behind why nature influences us and in what ways, studies of the concept of biophilia were made. A text and design strategy that has been inspiring is "14 Patterns of Biophilic Design" (Browning, Ryan, & Clancy, 2014) and these design patterns has been used as a main inspiration of how nature can influence the design.

4. CONCEPT
4.1 KEYWORDS

14 Patterns of Biophilic Design

A reference that has had great influence of finding the concept and keywords in the project is the text 14 Patterns of Biophilic Design (Browning, Ryan, & Clancy, 2014). It describes 14 design patterns that is based upon three categories that biophilic design can be derived into. The categories are listed below and the text describes them as following:

- Nature in the space: addresses the direct, physical and ephemeral presence of nature in a space or place.

Includes the patterns: Visual Connection with Nature, Non-Visual Connection with Nature, Non-Rhythmic Sensory Stimuli, Thermal & Airflow Variability, Presence of Water, Dynamic & Diffuse Light, Connection with Natural Systems.

- Natural analogues: addresses organic, non-living and indirect evocations of nature.
Includes the patterns: Biomorphic Forms & Patterns, Material Connection with Nature, Complexity & Order.

- Nature of the Space: addresses spatial configurations in nature.

Includes the patterns: Prospect, Refuge, Mystery, Risk/ Peril.

(Browning, Ryan, & Clancy, 2014)

Keywords

The keywords that eventually were chosen to influence and shape the project are *Visual connection to nature, Prospect-Refuge* and *Rhythms*. They are interpretations and a merges of patterns from the text "14 Patterns of Biophilic Design" combined with some other aspects important for the design.

Criteria for which words to choose were for example how reasonable they could be to interpret into spatial qualities and how the nature site could be taken advantage of.

VISUAL CONNECTION TO NATURE

The chosen site is located in a beautiful nature context and the opportunities this gives for nature views will be taken advantage of.

The keyword *Visual connection to nature* is based upon the design pattern "Visual connection with nature" from "14 Patterns of Biophilic Design". Browning, Ryan, & Clancy (2014) claims that a visual connection to nature has many positive effects on us, for instance lowered blood pressure and heart rate, reduced sadness and aggression and improved overall happiness. They argue that visual connection to nature should be experienced from places where we spend at least 5-20 minutes a day due to the time it takes for the effects to work.

For the design of the project this has been interpreted by having windows placed in sightlines for an instant view to nature. Windows are also framing nature views from places where you spend much time at once, such as the dining area, the sofa, the bed, the kitchen and the bathtub.

The visual connection to nature is also seen in the choice of materials and this also makes the keyword connect to the pattern "Material connection with nature".

For the residential area the there are several opportunities created to choose to spend time outside rather than inside, such as a running track through the forest, a playground, outdoor gym and natural meeting nodes by water.

PROSPECT-REFUGE

Prospect - Refuge is based upon the patterns "Prospect" and "Refuge". Having spaces that connect to prospect and refuge can according to Browning, Ryan, & Clancy (2014) reduce irritation, fatigue and perceived vulnerability. Spaces connected to prospect can also reduce stress while spaces connected to refuge can lower blood pressure and heart rate and also improve concentration.

Designing spaces for prospect could mean a good overview, having long sightlines, open floor plans, elevated floors and high ceiling.

Spaces connected to refuge could for example be to have spaces for privacy, enclosed spaces, spaces that are not completely shut off but with some visual contact, having climate protection and smaller nooks. (Browning, Ryan, & Clancy, 2014)

In this project the keyword has been interpreted by offering different types of spaces to be in, zoning depending on functions and spatial qualities and creating contrasts in spatial experiences by working with elevations in floors, differences in ceiling height and having nooks and niches.

RHYTHMS

Rhythms is a keyword that does not derive directly from the patterns even though it could be connected to several of them, such as "Visual Connection with Nature", "Non-Visual Connection with Nature", "Dynamic & Diffuse Light" and "Connection with Natural Systems".

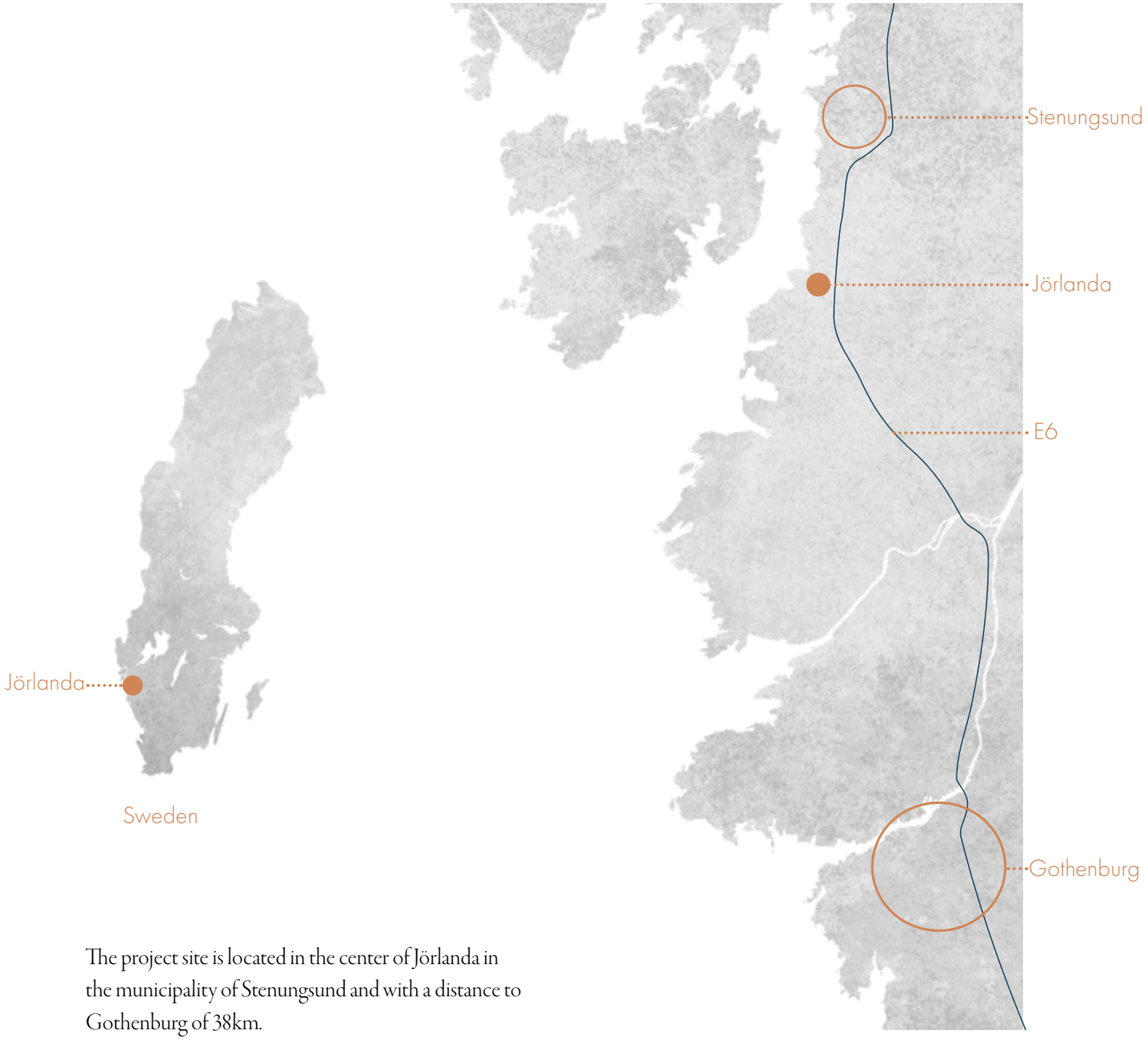
The purpose of the theme is to be able to follow the changes in nature over seasons. Apart from the visual aspect of seeing changes through windows the residents have an opportunity to be outside and the outdoor spaces have different qualities to suit different times of day and year.

As regarding the entire area, this can be seen in the connection with different types of nodes. For example water-ponds that in the summer is used for barbecuing can in the winter be used for ice skating.

The building should also be able to handle some changes in family situation.

5. CONTEXT

5.1 LOCATION



The project site is located in the center of Jörlanda in the municipality of Stenungsund and with a distance to Gothenburg of 38km.

5.2 AREA

Choosing a site

A site that was defined by nature was chosen because of its possibilities to affect wellbeing. By placing the project in a nature context the positive effects that the surrounding nature has will be taken advantage of and help promote a life outdoors. But, since we spend most of our time inside and not outside in nature, the design of the building itself and its interior spaces will be the most important component when effecting our wellbeing.

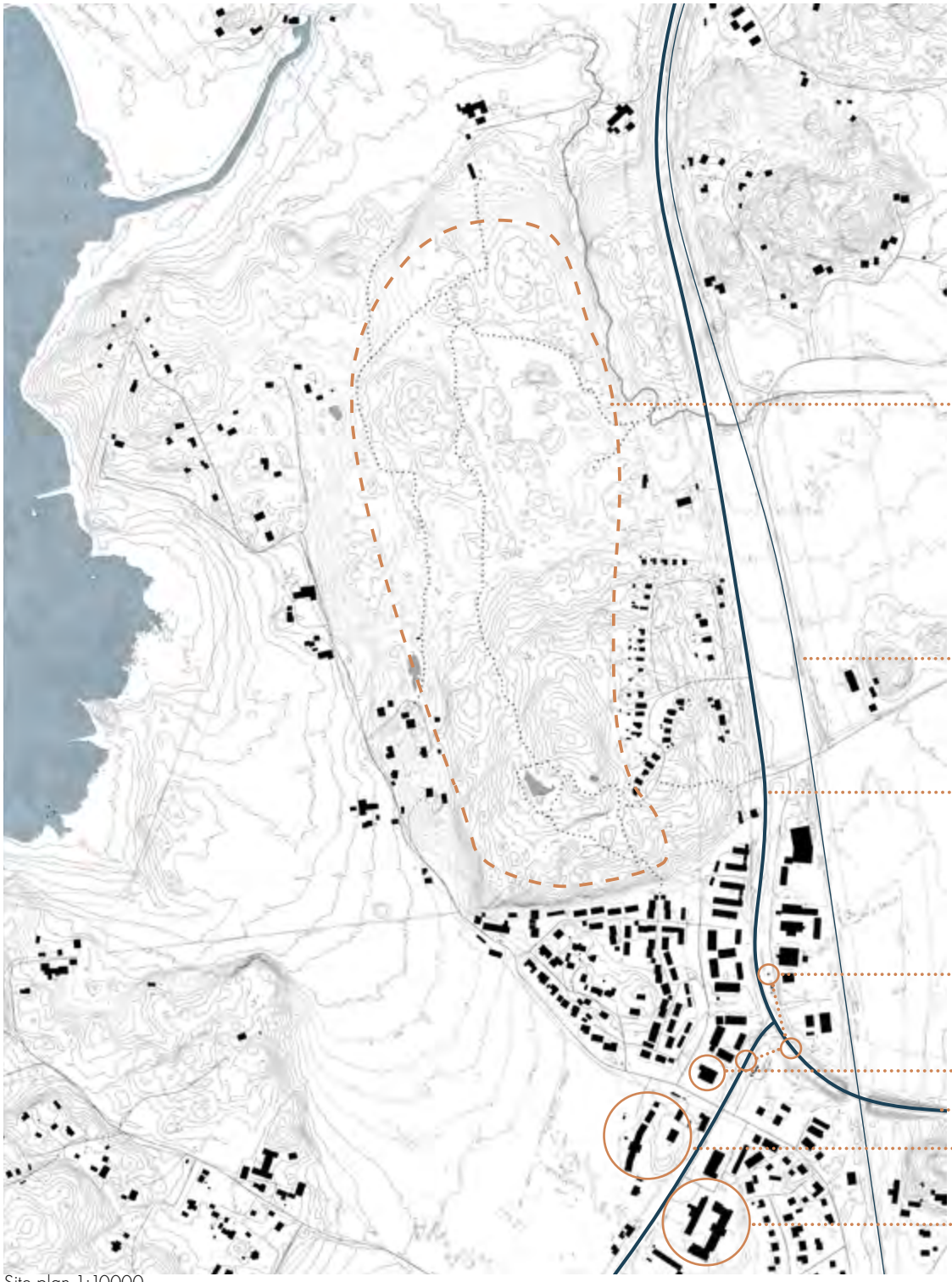
The project was placed in an area outside of a city due to the target group of the project. It is focusing mostly on the family with children where the parents might work in a city but they want to live outside of it to get away from the stress and give their children a closer connection to nature.

The area

The chosen site is today covered by forest and is used as a recreation area for people living in the surroundings. The nature is beautiful and the site is located very close to the sea.

In the area surrounding the forest there is a school (low and middle school), preschool and a small grocery store. The town also got a restaurant, a pizzeria and a bakery (which is known all the way to Gothenburg for their "vörtbröd"). The public transportation to Gothenburg and Stenungsund is very easy from here as there is a bus stop close to the site. The train between Uddevalla and Gothenburg goes from the adjacent town Stora Höga only 12min away by bike and 5min by car.

The area is today used for recreation and walking. In some places, often near water, people have brought out chairs and even hockey goals. Important existing nodes will be kept and new nodes will be added. The existing walking path will be improved and made into a path that connects the entire area.



Site plan 1:10000

5.3 ANALYSIS

1. Water node with hockey goals
30/1-19

2. Water node with chair
5/1-19

3. Forest
11/3-19

4. View over meadows and sea
11/3-19

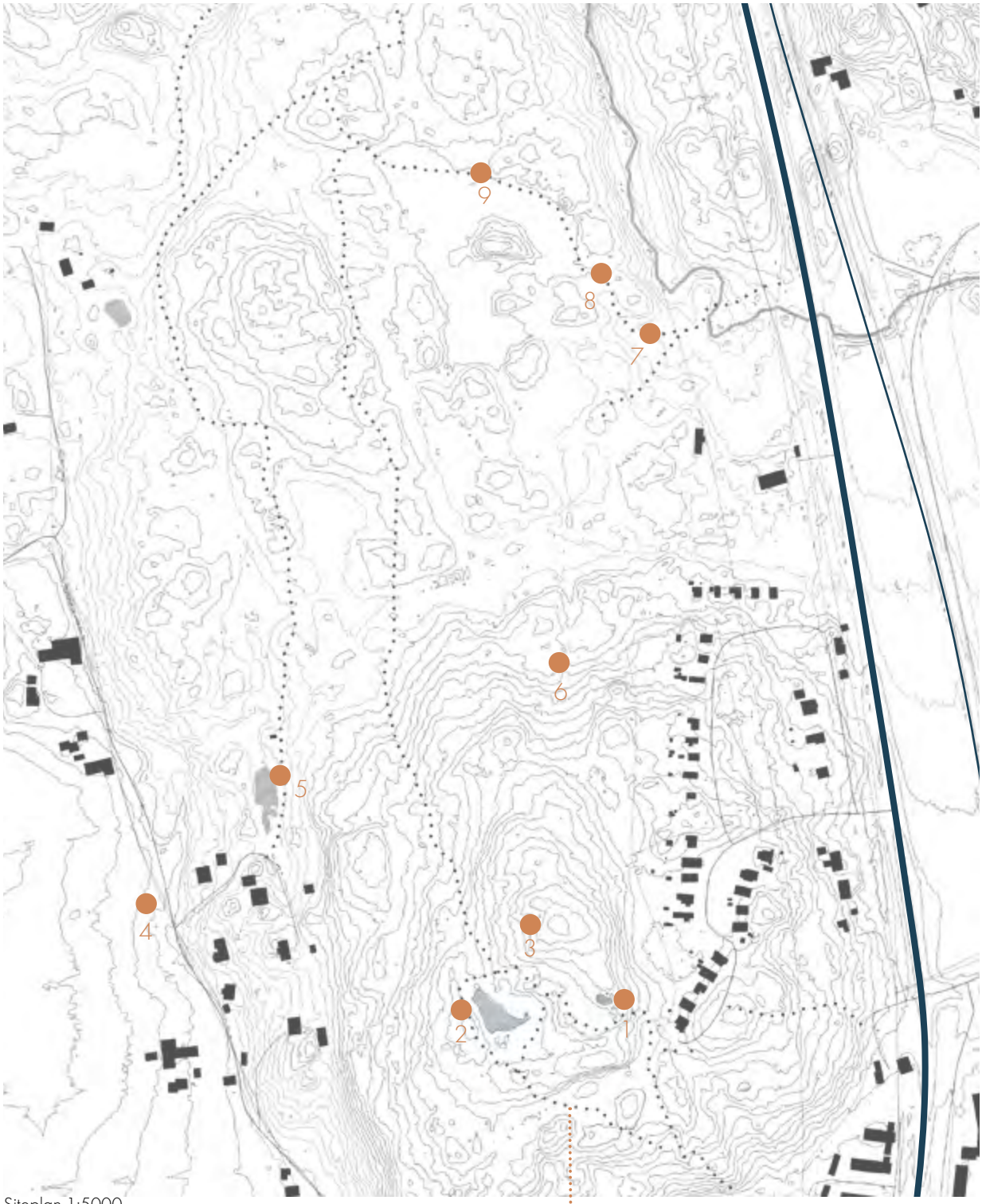
5. Water node
11/3-19

6. Trees in snow
30/1-19

7. Trees in snow
30/1-19

8. Home-made railing
30/1-19

9. Birch and spruce
30/1-19



Siteplan 1:5000

5.4 EXISTING PROPOSAL

Existing proposal for the site

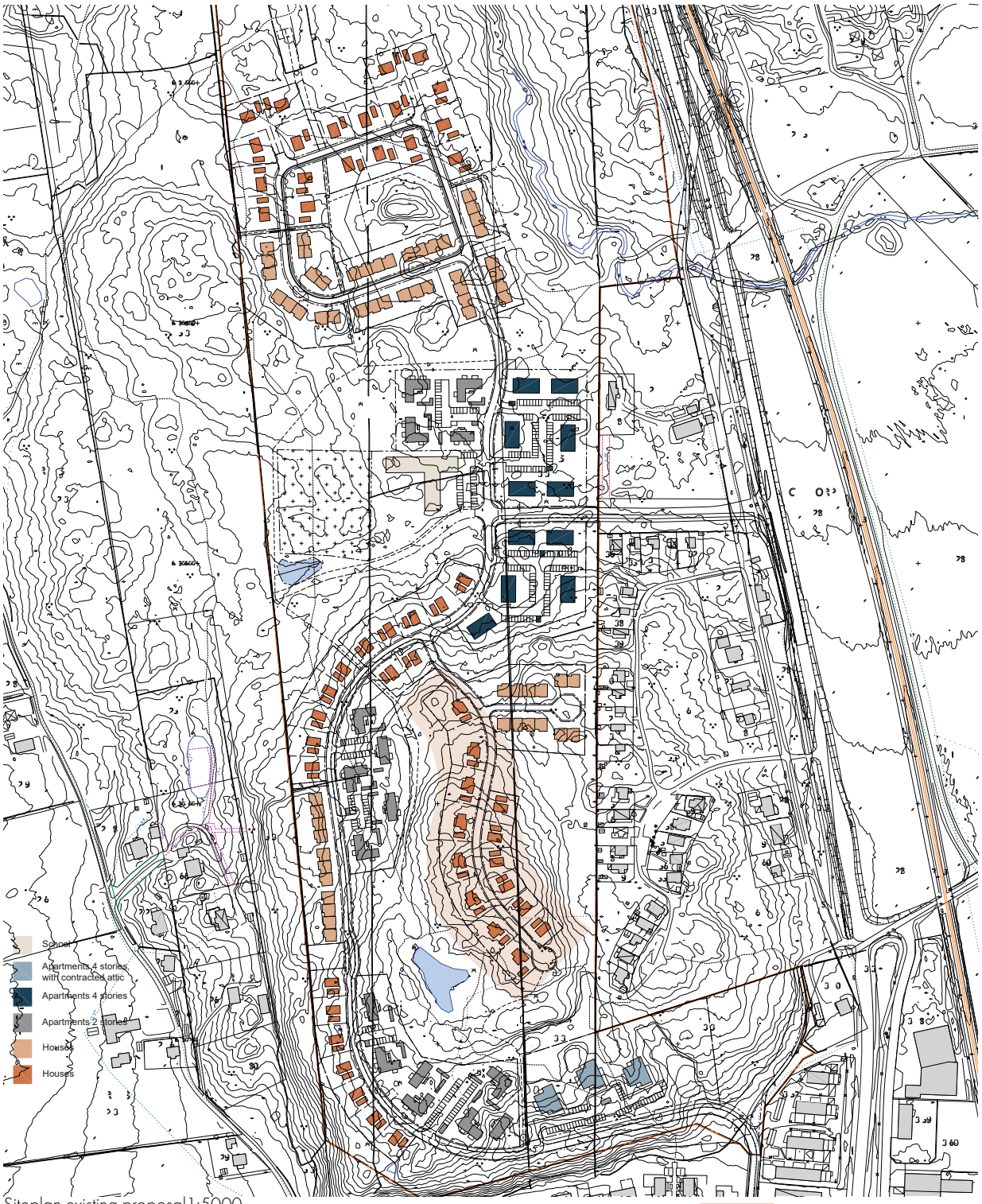
The municipality of Stenungsund has put together a detail plan for the area that is called Kvarnhöjden. According to the plan description they want to build about 300 dwellings of different types in the area. ("Planbeskrivning", 2018)

The proposal suggests that the area is divided into five main parts: the northern, center, south-west, south-east and the south part. The entire area will contain both small scale housing, such as villas and row houses but also apartments. In the middle of the area there is a preschool planned and here the buildings are allowed to be a bit higher, 2-4 stories. This part will work as a center and take advantage of the closeness to the road.

Focus of the thesis

The part that will be developed and worked with in this thesis is the south-east part containing small scale houses. This part was chosen mostly because of its topography, being like a ridge over the area and will offer a nice view and interesting preconditions for the buildings. It has close connections to water-nodes and also to the center part of the area. The road up to these houses will not be a pass-through so the traffic will be relativity low.

The houses from the existing proposal on the chosen plot will not be kept and the focus of the thesis will be to make an alternative proposal for this part of the area. The other parts will be kept as in the existing proposal but with some small adjustments to connect it to the proposal of the thesis.



Siteplan existing proposal1:5000
Illustration based on illustration plan from stenungsund.se

Chosen part to work with

6. DESIGN PROPOSAL

5.5 SITE

The chosen part of the site to work with is located in the south east part of the area and has a close connection to the center part. Since the forest today is used as a recreation area, important nodes will be saved and the walking path will be kept and added to so that it can be used for example as an exercise track. The existing nodes today are close to water and are used all year round, in the summer for barbecuing and in the winter for playing hockey.

The center part of the area connects the other parts and contains a preschool. Here there's also possibilities to add other functions that can be used for everyone, like a gym or car sharing.

Since the area contains different types and sizes of houses it provides an opportunity to stay in the area even if you need to change the type or size of dwelling, allowing for flexibility within the area.

In the site chosen for the thesis, other nodes where the residents can meet and socialize with their neighbors will be added as well. A playground with barbecuing, a flat plot that can be used for e.g. playing football, an outdoor gym and also car sharing for those who sometimes need an extra car. Having a playground in the beginning of the area also encourages to keeping the car speed down.

Existing walking path

Gym & car sharing

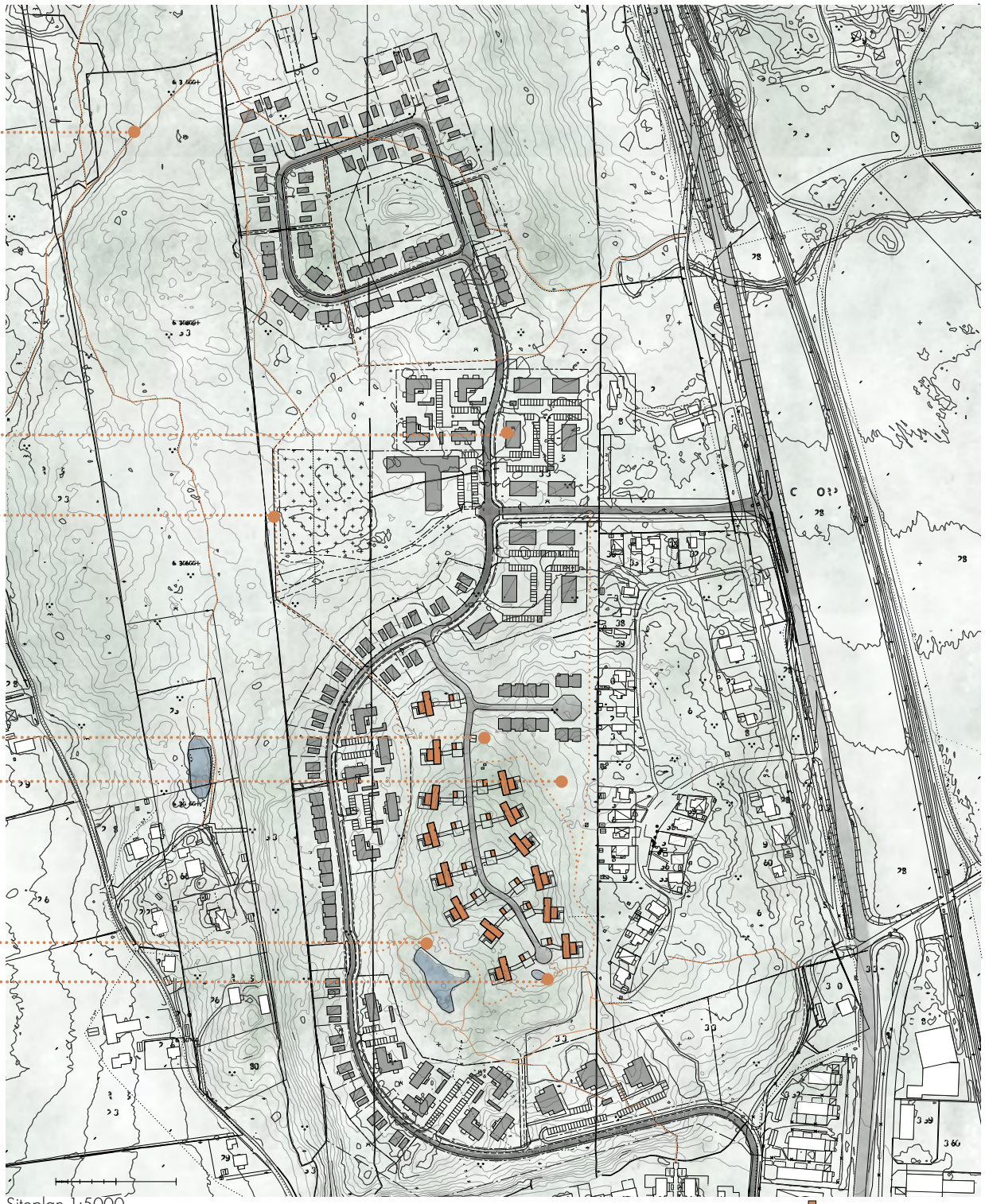
New walking path

Playground, outdoor gym, barbecue, car sharing

Football

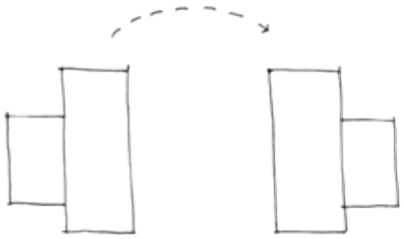
Barbecue

Skating/ hockey



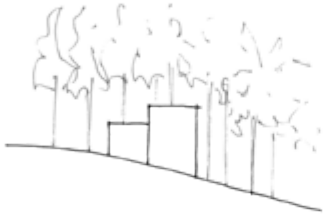
Siteplan 1:5000

Proposed new houses



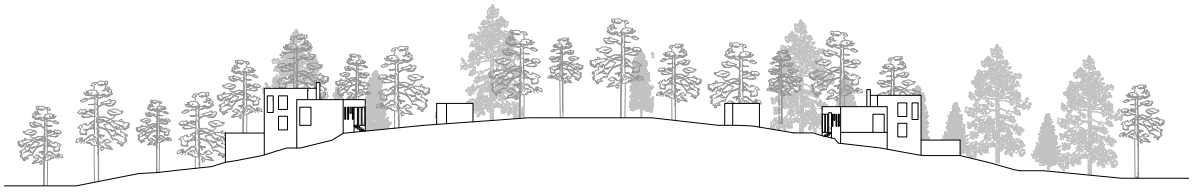
There are in total 14 houses placed on the site. One type house is created which is duplicated and mirrored over the site.

When placing the houses on the site, the aim is to give the houses good prospect and still keep a low profile from the road. The houses are turned after the sun and to face the best view.



By placing the villas a bit away from the opposite house, the aim is to create a feeling of houses surrounded by forest rather than a regular villa area.

Encouraging the residents to spend more time outside is done by having different types of nodes over the area and that can be used during different times of year.



Section 1:1000

Siteplan 1:1000


30
car sharing
35
playground
barbecue
outdoor gym
football
40
path
40
barbecue
35
skating

Existing proposal for the site

The existing proposal consists of 14 type-houses from the company PEAB. The proposal was studied in the thesis but was not held as a rule. Some aspects turned out similar in the proposals but that is more a result of studying the opportunities of the site rather than following the existing proposal.

The road is placed in similar ways to follow the inclination of the height curves, but differs due to the placement of the houses and to make room for common places (playground, gym) and nodes that will be kept in the thesis (water-node).

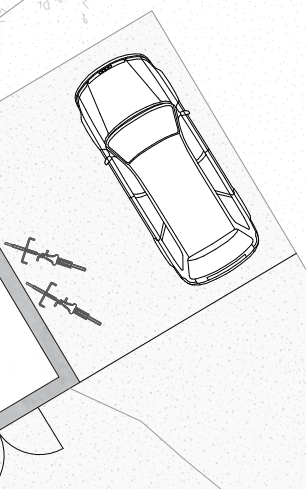
There are the same amount of houses but they are placed to use the opportunities of the topography to suit the keywords of the project. The placement of each building is turned to face a height curve straight on to suit the design. They are also turned to face the view in the best way possible from each location.

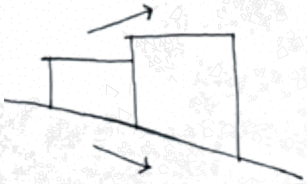
Existing proposal 1:1000


30
35
40
40
35

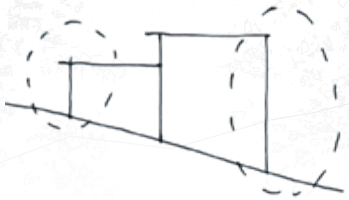
6.1 BUILDING

Total area floor 1 + 2:145m²
Plan, floor 1 1:150



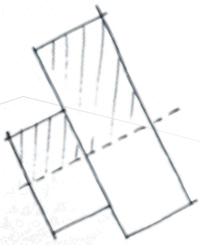


The building is placed to open up with the terrain. The effect is a bit hidden from the road but is experienced when entering.



Common areas are placed on several sides of the building. On one side the effect of the ground sloping upward is experienced and the other with spacious overview.

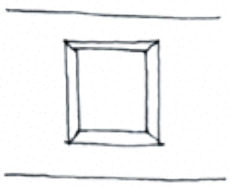
Elevations and differences in ceiling and floor height to create contrasts and different types of spaces to choose from.



Private and public zones are created. The building also has two entrances to facilitate the private and public flow.

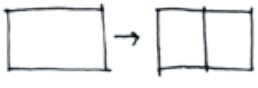
By having windows placed in spaces where much time is spent, the visual connection to nature is experienced during longer periods of time to get good effect.

The terrace is lowered to not block the view from inside.

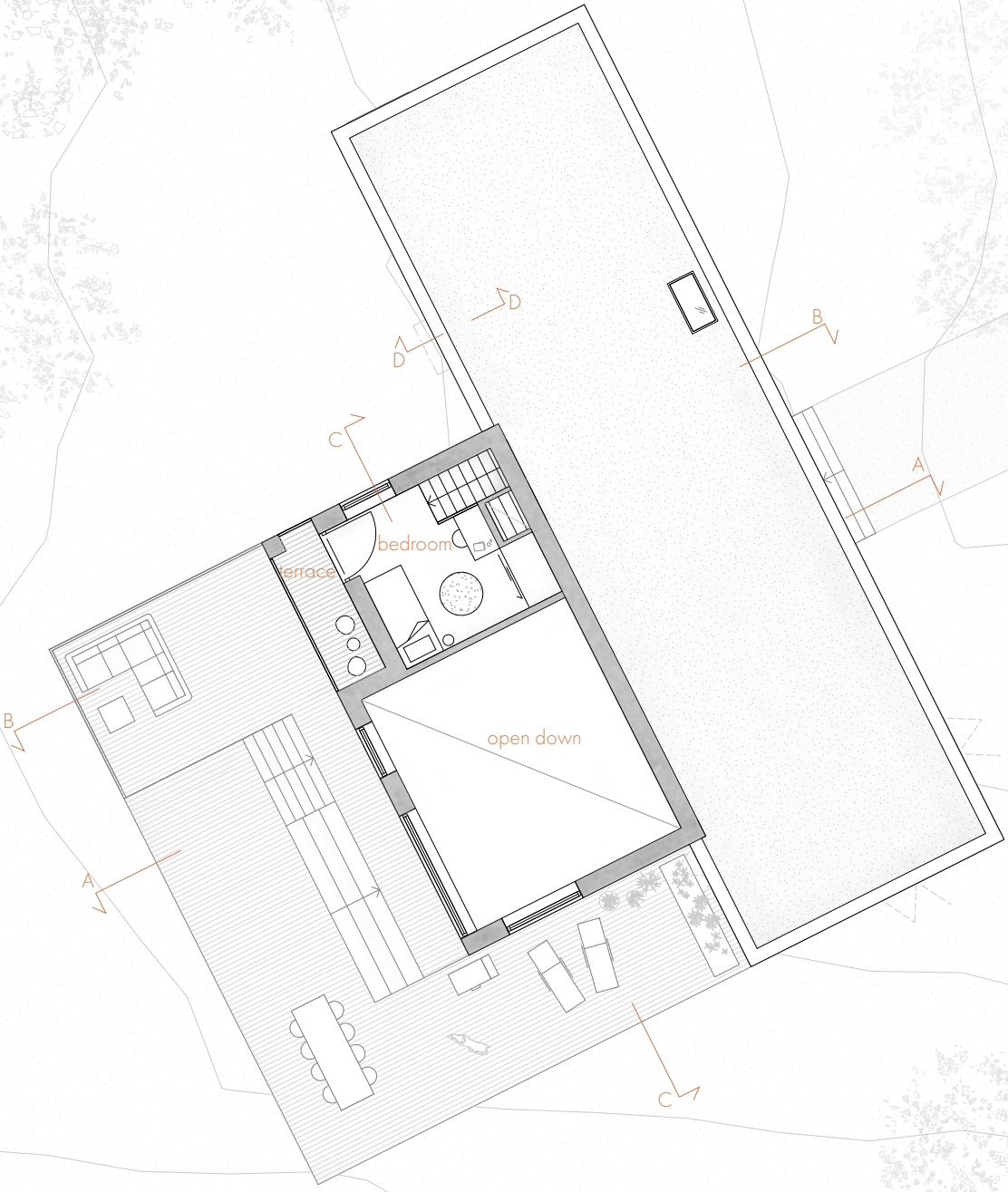


Small nooks gives a feeling of refuge but also view to nature.

Outdoor spaces exist on several sides for different qualities. They can also be glazed for an extended experience of the seasons.

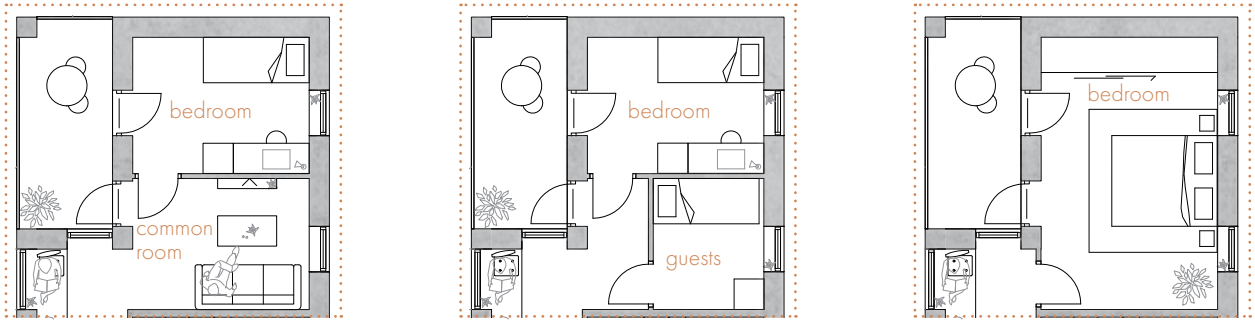


Part of the building can adapt to changes in life and family constellations.



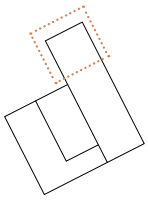
Plan, floor 2 1:150

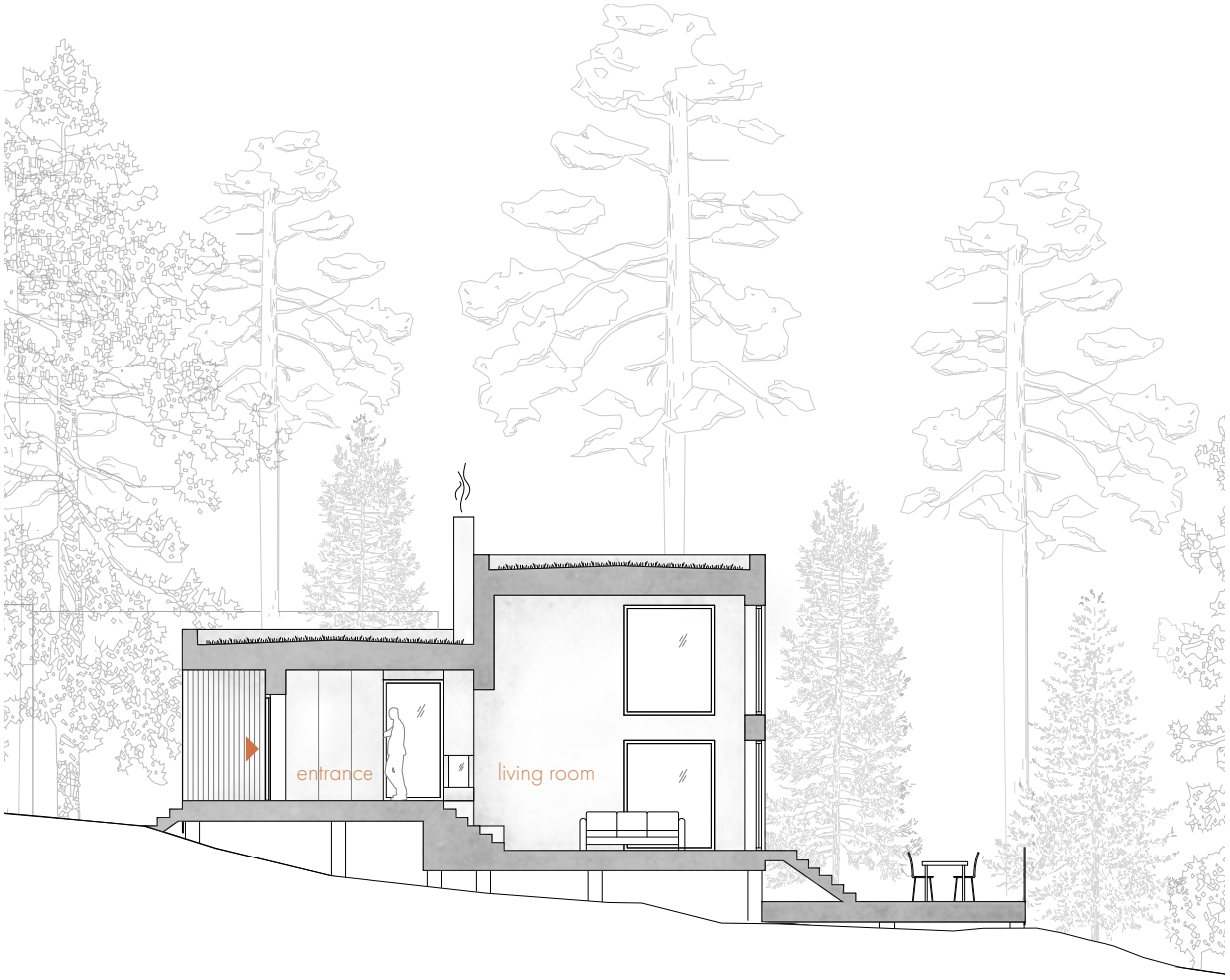
Possibility to change function



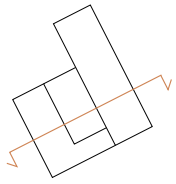
Part of plan, floor 1 1:150

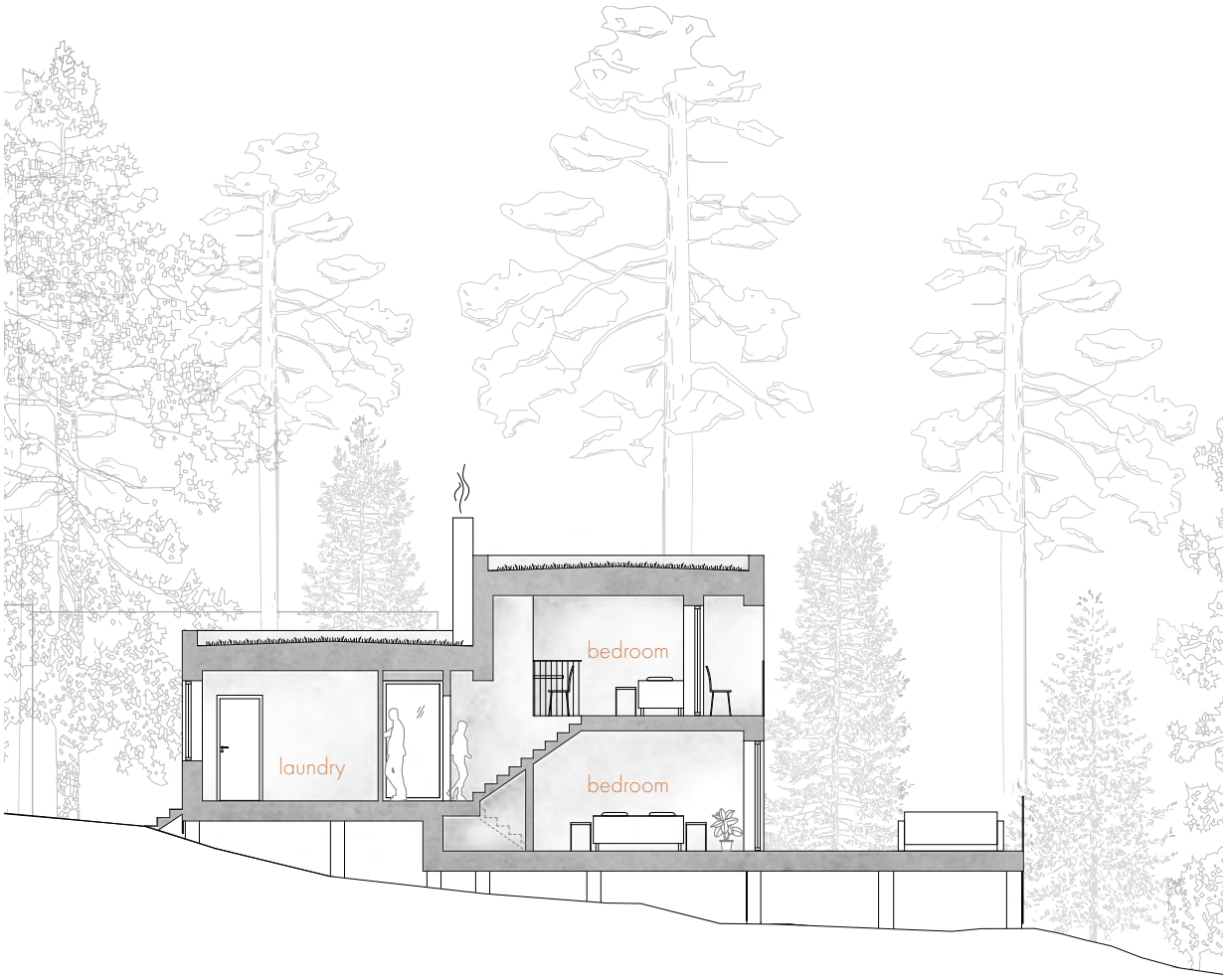
One of the rooms in the building is possible to divide in different ways if it needs to change function over time. This could for example be if the family constellation changes and the building needs to adapt to this.



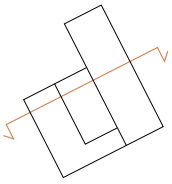


Section A-A 1:150

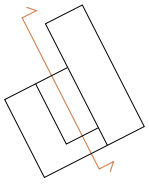


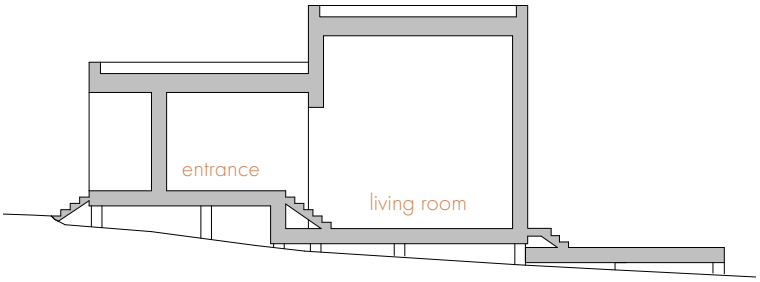


Section B-B 1:150

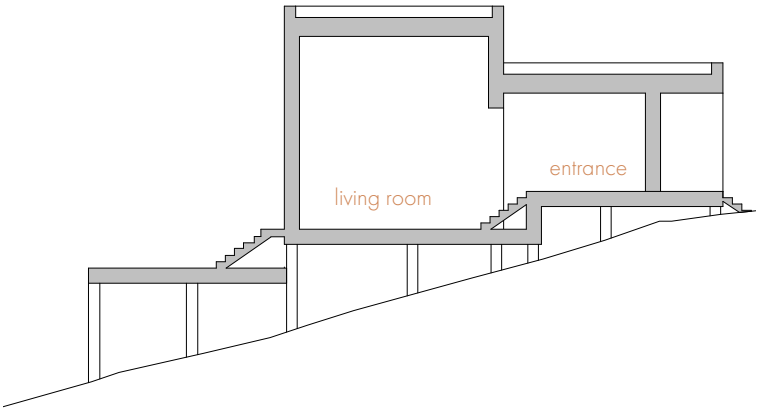


Section C-C 1:150



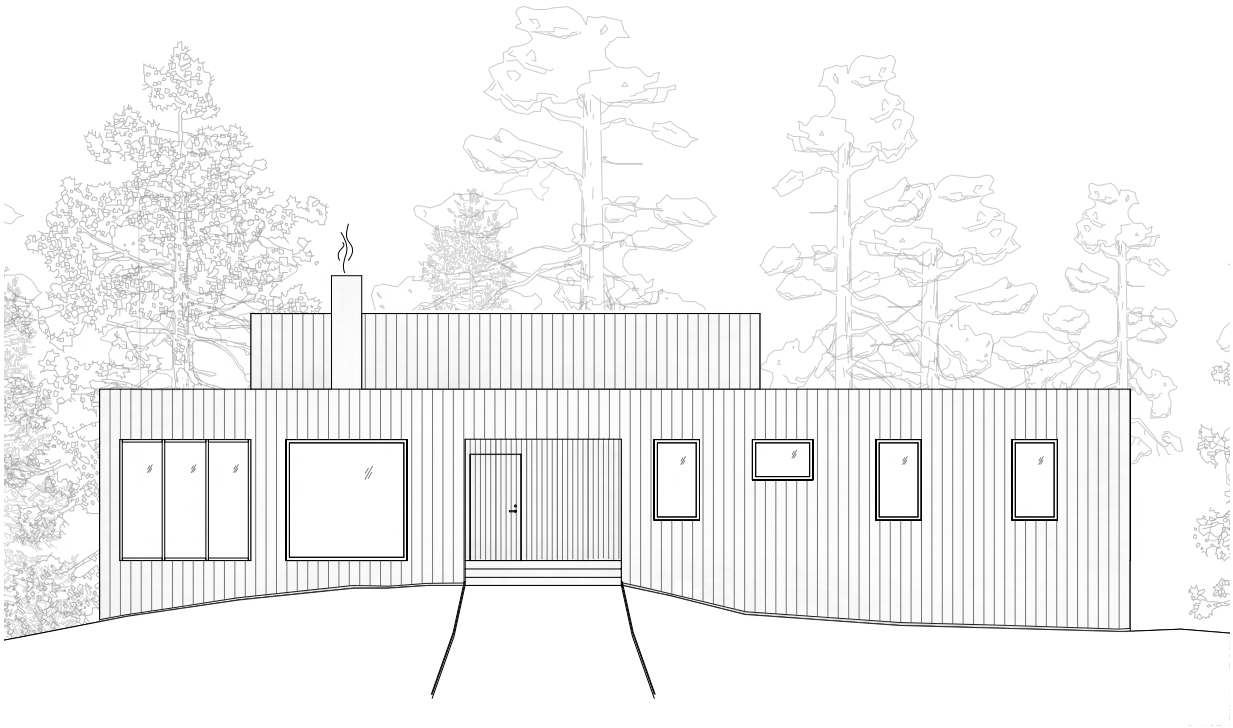


Principle section through flattest plot

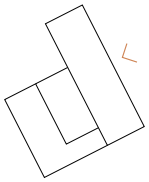


Principle section through steepest plot

Since the topography differs over the site the buildings need to adapt. The diagram above shows the house with the lowest and the highest inclination. The structure of the main building looks the same while the height difference is taken up by the terrace.



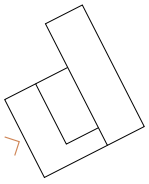
Facade east 1:150



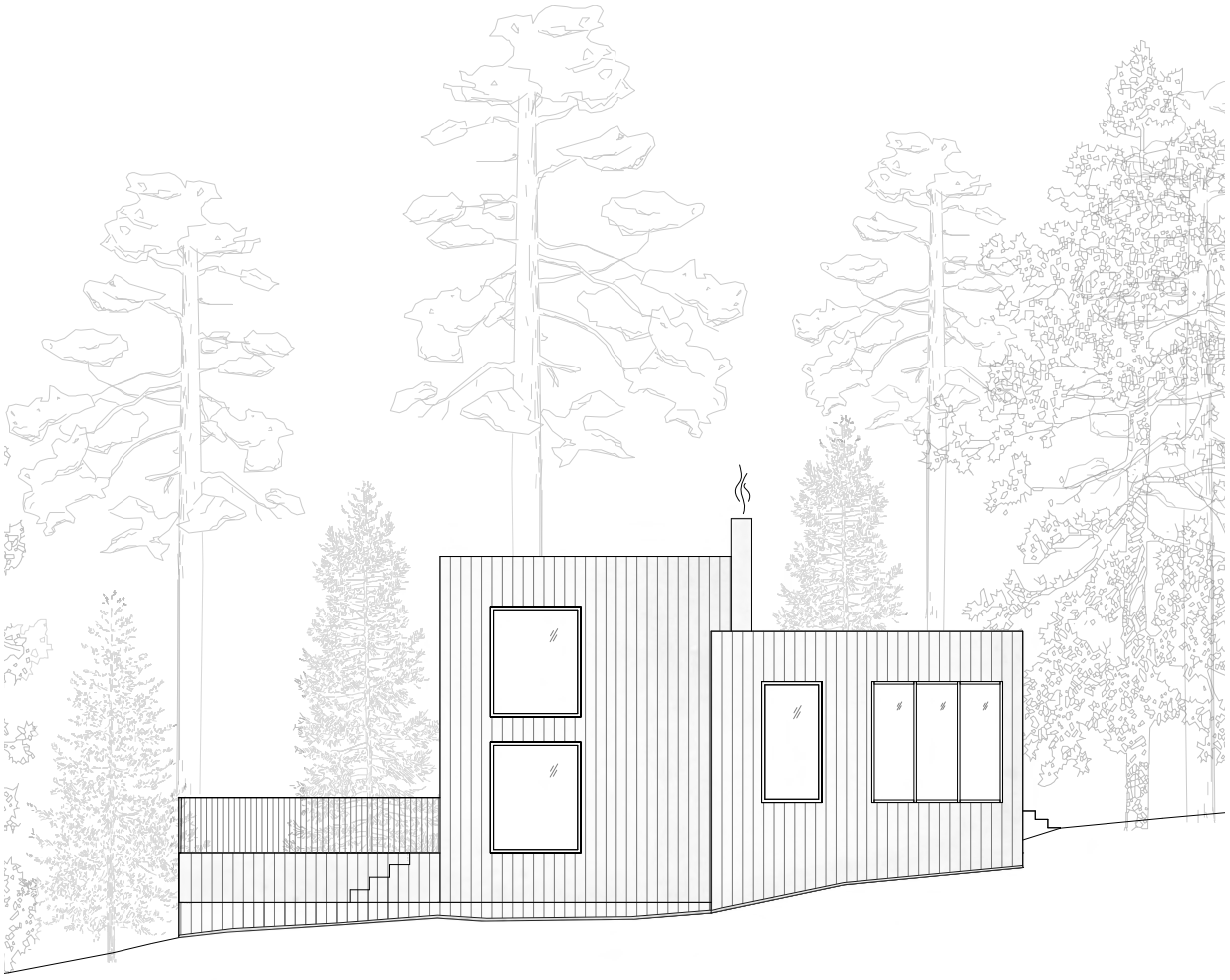
View over the entrance.

The path leading up to the house is made from finely packed gravel to give a feeling of a forest path leading up to the building.

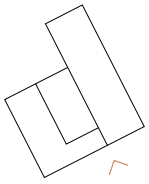
Facade west 1:150

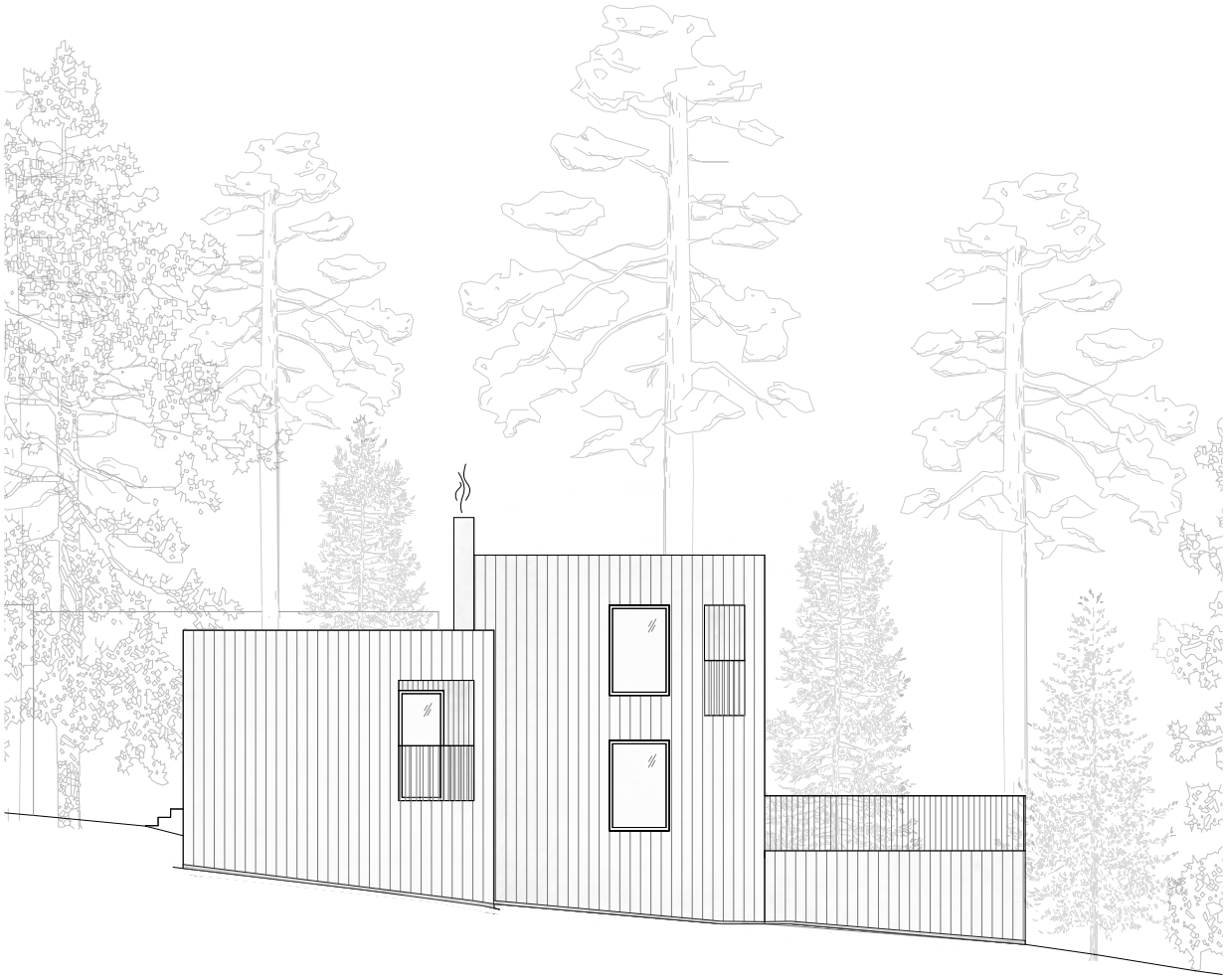


View over the west facade.

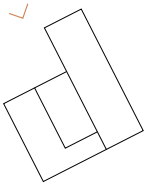


Facade south 1:150





Facade north 1:150



View from living room to dining area.

Window frames are black to contrast against the wooden walls
and create a framing of the view.

View over dining area, glazed room and kitchen.

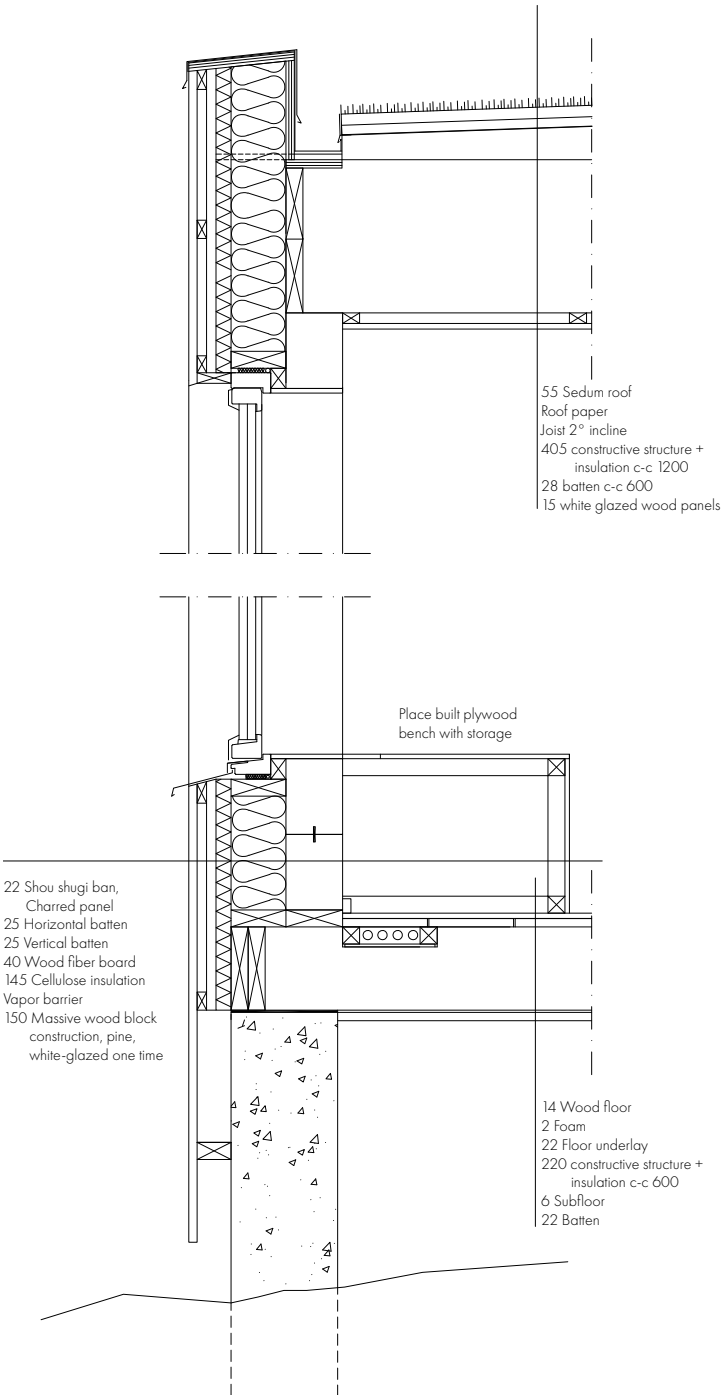
In the kitchen the windows can be opened and you can pick fresh herbs from a planting in the glazed room outside.

The sloping ground outside is used to give a protected feeling while still feeling the nature close to you.

View over reading nook.

View from living room.
Having large windows and lowering the terrace gives this room a feeling of prospect and a close connection to the nature outside.

6.2 CONSTRUCTION



Detail section 1:20

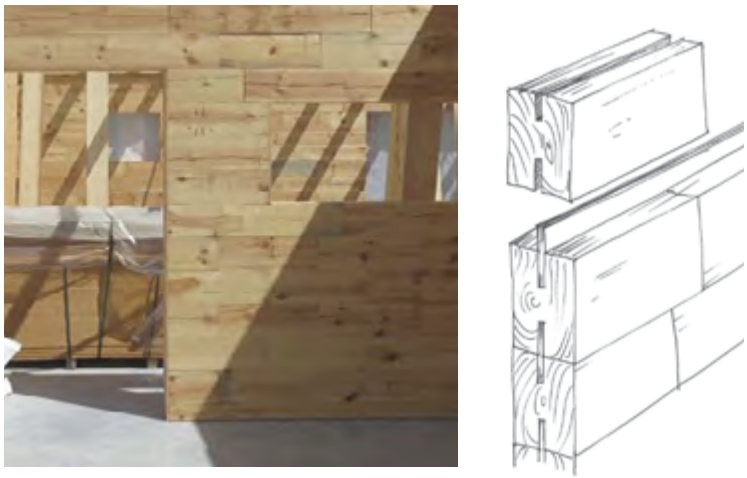
The construction of the building is a type of massive wood construction from a company called "BoSuM building system". It consists of massive wooden blocks that are put together like Lego. The walls are on the interior side left exposed and white-glazed one time to dampen the yellow tint.

Advantages with a system like this, apart from that it is made from wood which is a sustainable material, is the good sound-proofing, better fire resistance than a regular wooden house and a stable indoor climate generated by the massive walls since the blocks collect heat and makes the house warm in the winter and cool in the summer. The method was also chosen because the blocks are small and easy to assemble with the aim to give as little impact to the site during the assembly as possible. This is also the reason for choosing a plinth construction.

The facade is covered with 200mm wide charred pine panel. It is a very old japanese method of treating the facade called Shou Shugi Ban and it is getting more and more popular in Sweden. The parts of the building where the entrance and terraces are located are covered with 100mm heat-treated panels to keep the warm wooden colour. Together the aim is to look as the terraces are "cut out" and is inspired by the cut log with the rough and dark expression on the outside and the light and smooth expression on the inside.

The building has a sedum roof to connect to nature and also to help with storm water treatment.

The section also shows the place built bench with storage that continues in the window embrasure.



Building block system from BoSuM.
Retrieved from bosum.se

Shou shugi ban, charred facade
Retrieved from textures.com

Sketch model of wall system

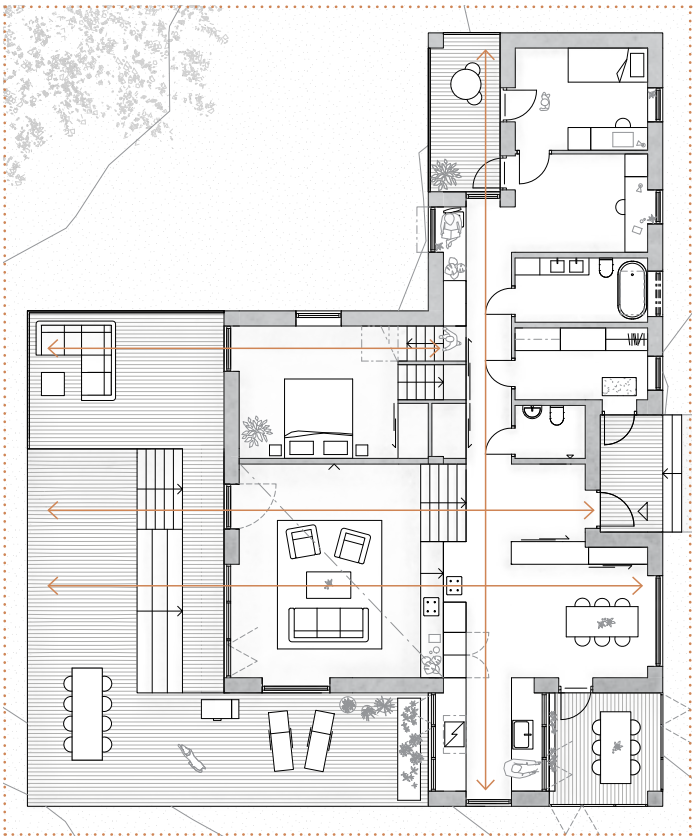
Sketch model of facade material

Model photos

Model photos

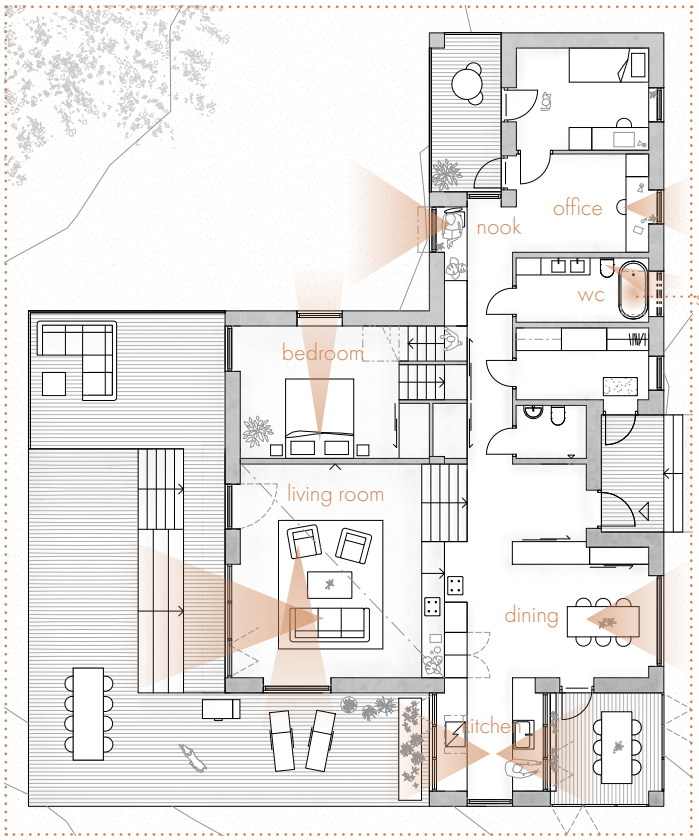
7. CONCLUSION

7.1 VISUAL CONNECTION TO NATURE



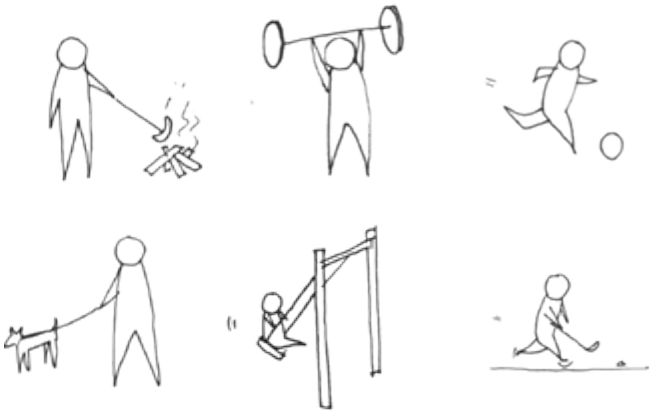
Sightlines

Sightlines are placed to give a view outside even when you move through the building.



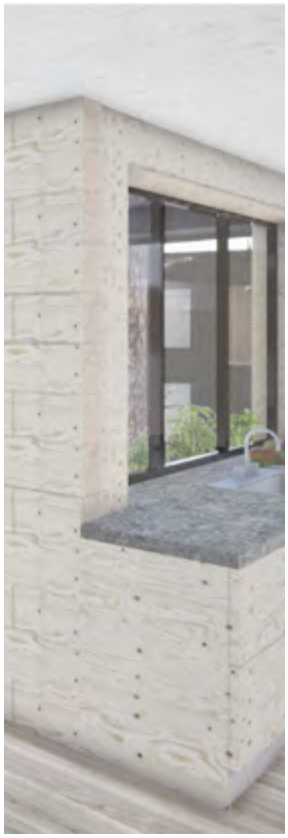
Outlooks

Windows are placed where you spend much time to experience nature during longer periods of time. Black window frames are framing the view.



Outdoor spaces

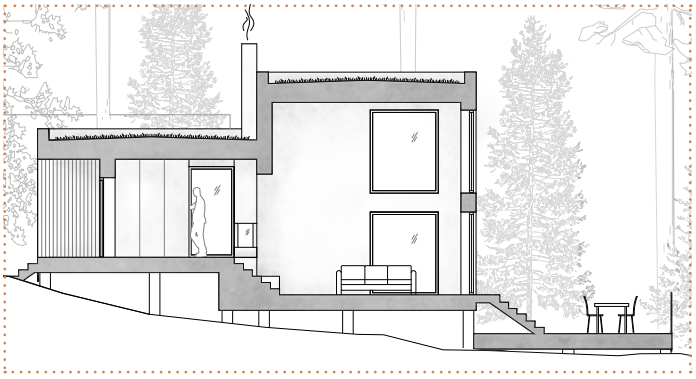
Possibility to spend time and exercise outside in the area to make people spend more time in nature.



Materials

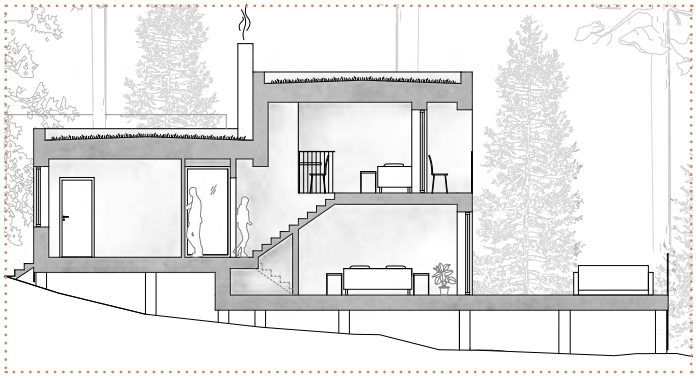
Natural materials such as exposed wood and stone. The building also has a green sedum roof.

7.2 PROSPECT - REFUGE



Height differences

Having differences in floor height combined with differences in ceiling height creates more enclosed spaces (refuge) and more open spaces (prospect). There are also different heights on the terrace to create different experiences.



Hidden rooms

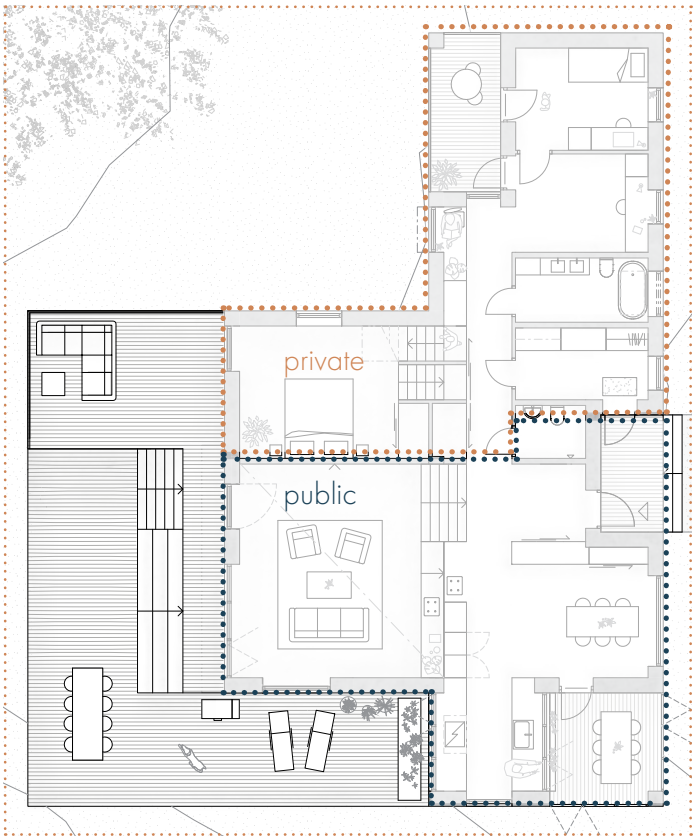
The entrances to the elevated and lowered bedrooms are integrated in a wall with wardrobes making the rooms feel enclosed and private (refuge) while having a nice view (prospect).

Ground is protecting

The sloping ground outside is used to give a more protected feeling (refuge) while still feeling the nature close to you. The dining room is partly divided from the living room (refuge) but still has an overview (prospect).

Open and unobstructed views

Large windows and a high ceiling gives nice outlooks (prospect). That the terrace is lowered gives even more nature view.
For protection from the sun, sunscreens that fold out are integrated in the windows.



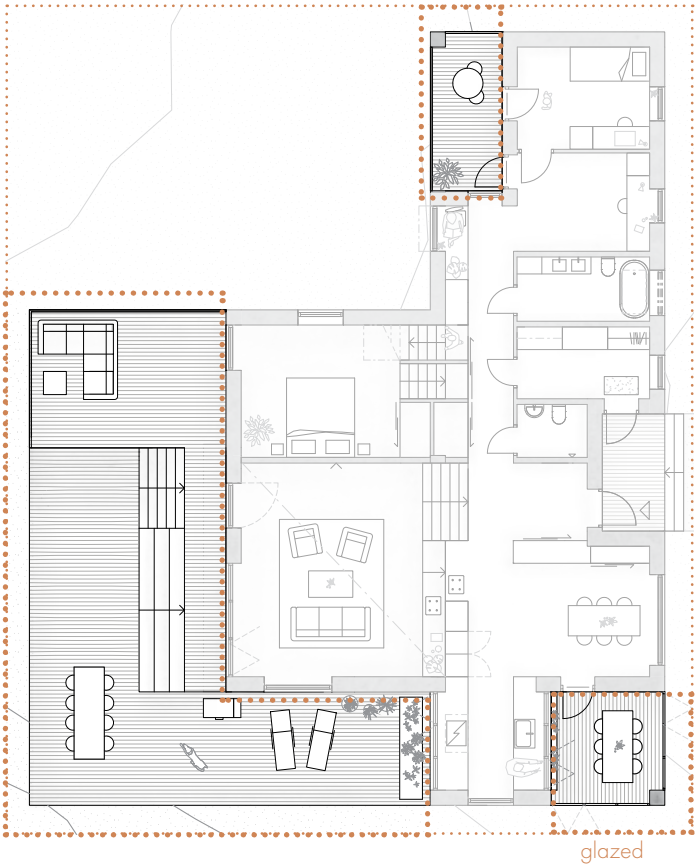
Zoning

The building is divided into a private zone and a public zone to separate the different flows.

Nooks

Small nook where you can be cosy and have a nice outlook gives refuge combined with prospect. This also occurs in the office space.

7.3 RHYTHMS

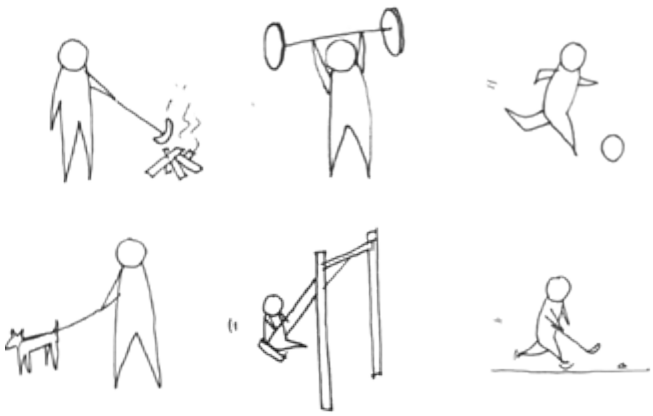


Outdoor spaces

Having outdoor areas on different sides of the building makes it possible to spend time outside during different times of day. The space next to the kitchen is glazed and makes it possible to use the room even during colder days.

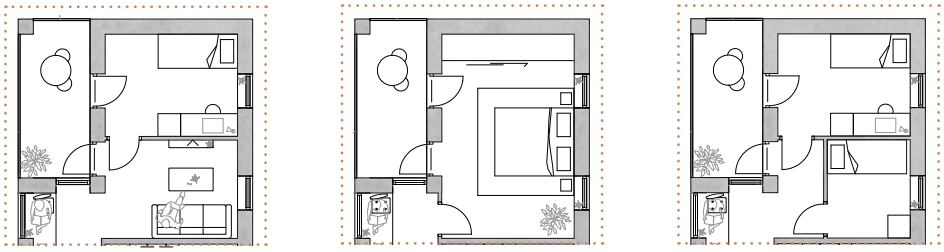
Easy access

The folding doors makes it easy to open up the living room and extend the inside space to the outside space.



Outdoor spaces

The activity nodes placed over the site aims to bring people outside and experience the seasons even during winter.



Adaptability

Making it possible to divide the room in different ways makes the building adaptable to changes in life.

7.4 REFLECTION

The research question for this thesis is "How can nature inspire the design of a home to increase wellbeing?"

The project has investigated in what ways biophilic design approaches can be implemented in a villa design and the result are villas designed after the keywords *Visual connection to nature, Prospect-Refuge* and *Rhythms.* It adds to the discussion how architecture can help to reduce stress in every-day life.

The ways that this thesis investigated the question was influenced by the type of context surrounding the site, in this case forest. By placing the buildings in the forest the connection to actual nature is very strong and therefore the strategies chosen was influenced by this. The nature could be taken advantage of and other qualities could be explored rather than just adding greenery to the building. If the site was in an urban context, the focus could have been more to bring greenery in to the building or the surrounding area. If the project was to be made in a different way, that aspect could be interesting and would give other challenges.

By placing the building in an untouched nature context, the existing nature becomes more inaccessible for the people using it today. The site chosen was not however a site that was going to stay untouched but the municipality have already planned to build here, which is a reason for choosing it, so that this design for the buildings could make the houses being built a more biophilic alternative.

By designing villas and in this location the target group is automatically narrowed down, and since the area is popular the prices are driven up. The buildings itself however is about an average size villa although the building design is probably a more expensive alternative that a regular pre-designed house that is planned for the site today.

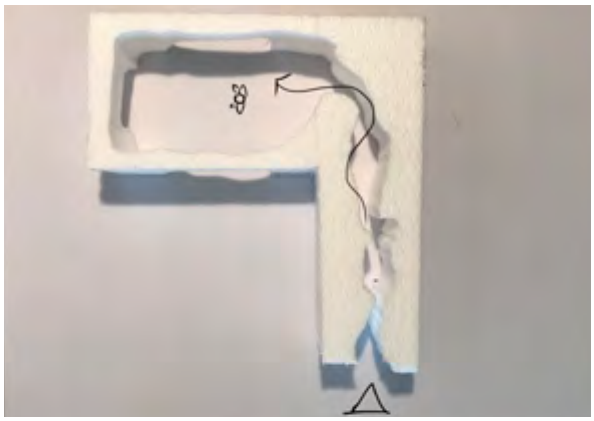
A choice that was made early was to adapt to the topography of the site and therefore design a house with height differences. By doing this the entire buildings will not be completely accessible. The buildings are accessible according to the standard regulations and one floor is accessible. However, in the entire area there is opportunity to make the other buildings completely accessible.

8. PROCESS
8.1 SKETCH MODELS

Contrasts.
Both mystery and prospect-refuge.
Could be an entrance, being lead by the light from a dark space to a light and spacious.

Glass box connecting two buildings. Is pushed in on one side and goes out in the nature on the other side.

Prospect.
Building divided in two stories. Could have connection between the different levels.

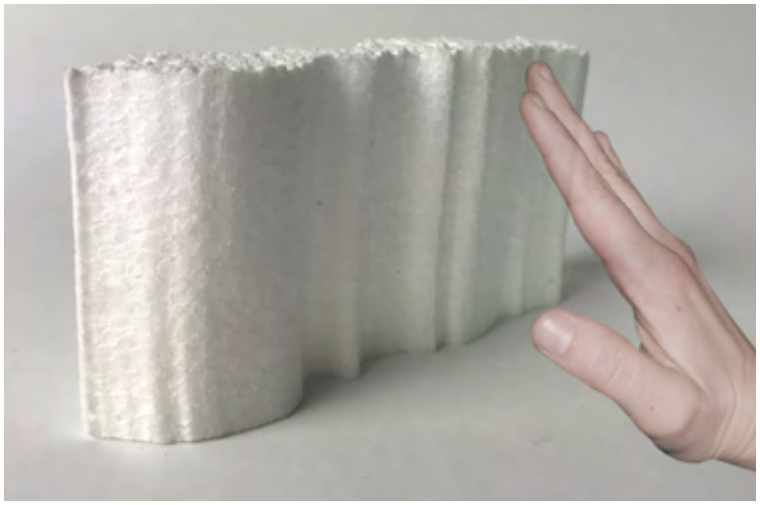


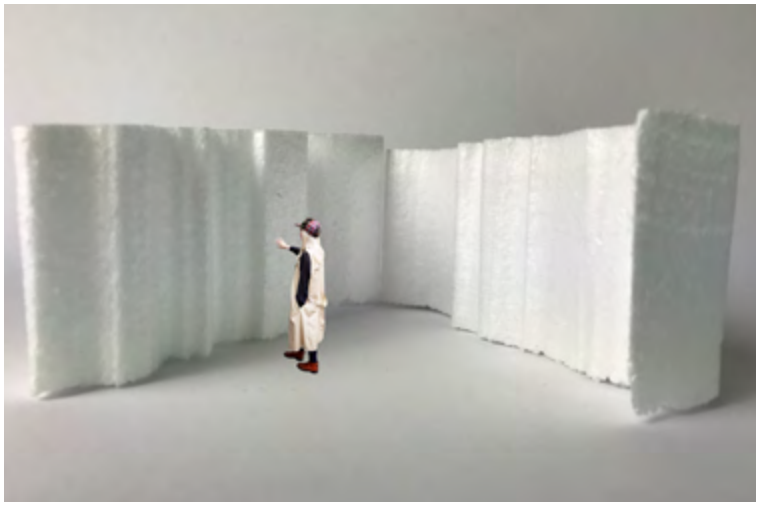
Tight vs. spacious.
Imagine a closed space, this could be stone to get one impression, like a cave. The spacious room is light and brings the nature outside close. Could be compared to a glade.

Connecting to nature.
Bringing the nature inside. Creates nice and interesting rooms within the house. Also acts as a semi-closed room divider.

Going out in the nature. Becomes a space that is inside but could feel like it's outside. Rather bringing the building out in nature.

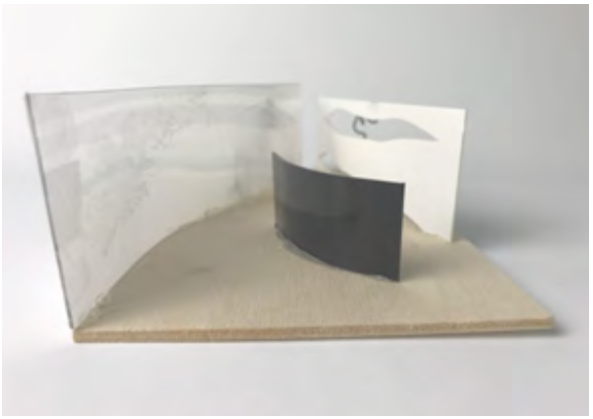
Diffuse and dynamic light.
Inspired by the shadows of the leaves. Can these also move to create another effect?





Diffuse light.
Shadows enhancing the patterns. Can be used in different scales for different effects.

Prospect.
Two perspectives of prospect. The people who are on top will probably have a more pleasant experience than those being looked at.



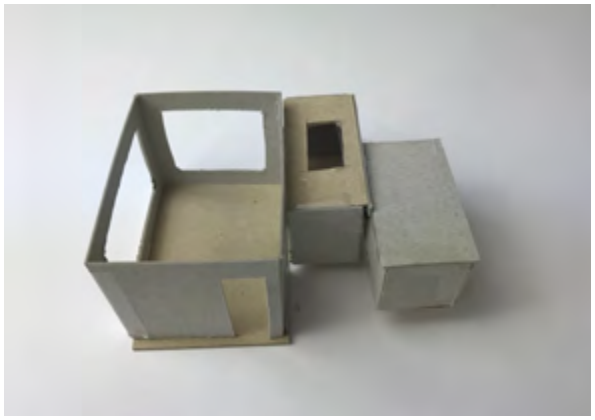
Mystery.
Curved walls leads you forward and revealing something new.

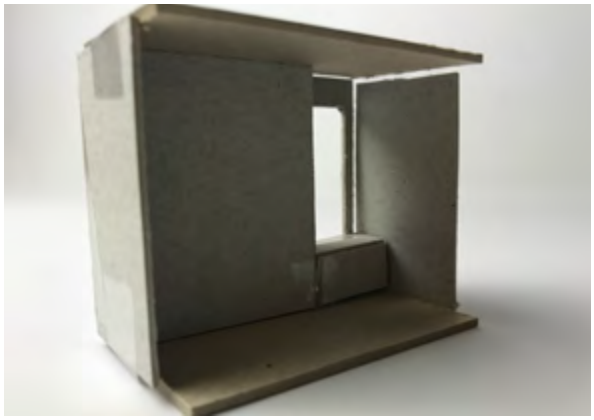
Semi-transparent wall shows shading behind it.

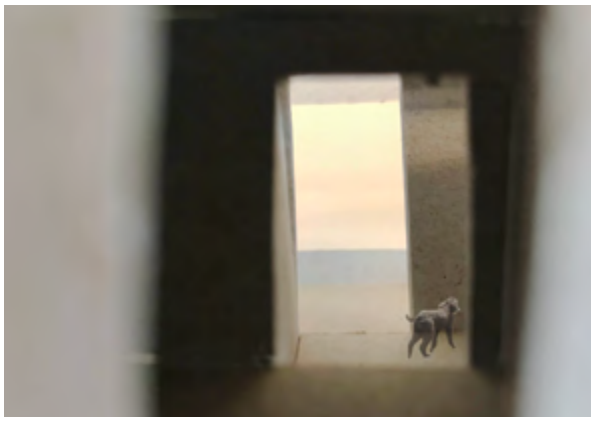
Cut outs to show parts of what is behind the wall.

Walls in half height.

Could be adapted to both the house and the way up to the area.







Contrasts.
Both mystery and prospect-refuge. Rooms extending out in different directions. Different amount of light and increasing with the spaciousness.

Refuge.
Small nooks and niches in the building.

Refuge.
Enclosed space inspired by sheltering branches hanging down from a tree. Not enclosed but still creates a space that shelters and feels protective.

Could be used as a pergola or a room within a room.

9. INSPIRATION
9.1 VISUAL CONNECTION TO NATURE

Views
Skogvaktarstuga & ekonomibyggnad, Retrieved from gipparkitektur.se

Tree tops
Lake house, Retrieved from "Wood - Architecture now vol.2 "

View from where time is spent
Kitchen, Retrieved from dezeen.com

Being close to nature
Snöhetta hospital retreat, Retrieved from archdaily.com

9.2 PROSPECT -REFUGE

Levels
Stupet, Retrieved from gipparkitektur.se

Levels, Povl Ahm house, Retrieved from aneclecticeccentric.wordpress.com

Nooks
Max Holst villa, Retrieved from wrede.se

Ground outside grows and creates sheltering space
Oxford house, Retrieved from kocharchitects.com

Prospect - sightlines, Villa Amundön,
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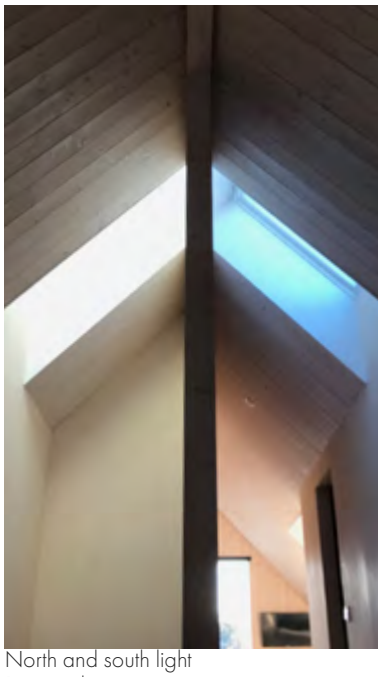
9.3 RHYTHMS

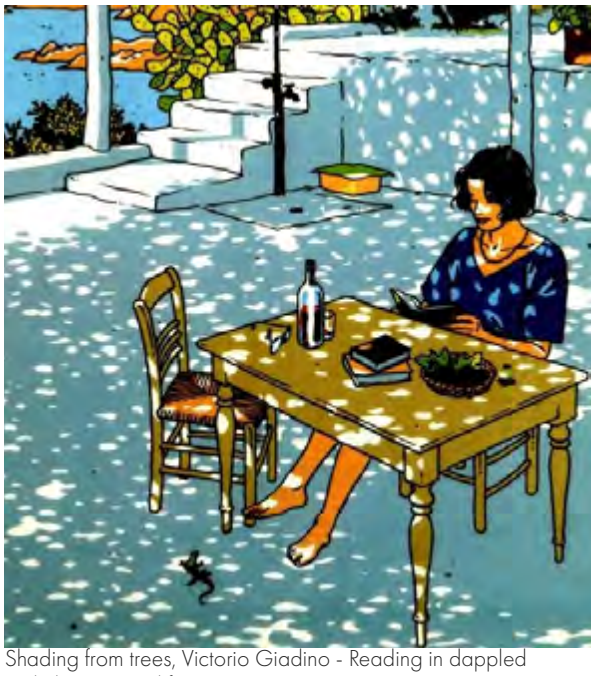


North and south light
Private photo

Folding windows
Retrieved from origin-global.com

Floating connection, Villa Schreiner,
Retrieved from oslobilder.no

Adapting to the seasons
Dragspelshuset, Retrieved from byggahus.se



Shading from trees, Victorio Giadino - Reading in dappled sunlight, Retrieved from pinterest.com

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Petra Gipp Arkitektur AB. (2019)*Skogvaktarstuga och ekonomibyggnad* [Online image Retrieved from http://www.gipparkitektur.se/projects/skogvaktarstuga-och-ekonomibyggnad/

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