



**BOOKLET**

"SEA BATH"

HEALING  
ARCHITECTURE  
IN A SMALL SCALE

EMBLA NILSSON



# SEA BATH

HEALING  
ARCHITECTURE  
IN A SMALL SCALE



**CHALMERS**  
UNIVERSITY OF TECHNOLOGY

EMBLA NILSSON

CHALMERS UNIVERSITY OF TECHNOLOGY  
Department of Architecture & Urban Design

Building Tectonics  
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Examiner: Mikael Ekegren  
Supervisor: Björn Gross

## ABSTRACT

Every time you surround yourself with nature, instant relaxation occur. When you approach a coast line, a warm and calm feeling extends throughout your whole body. You feel the salty winds in your hair and listening to the waves explode on the rocks.

The health benefits of being around the ocean are many. Minerals, algae, light, sound and smell, acts as stress relief to our mind and body. The benefits from being around the sea, have been used for centuries. In Sweden it used to be essential and people pilgrimed to the west coast during summer time. Today we "import" treatments from Asia into our indoor spa facilities. Instead of use what we have in our nearest bay.

This thesis is about a place where architecture meets the ocean. A place to inhale the costal benefits and mending a damaged place. Making it a useful and a beautiful place to stay, relax and swim.

*'How can Architecture benefit from  
the Swedish western archipelago  
with the human healing in mind?'*

## KEYWORDS

Bath facility   Spa Architecture   Healing Architecture   Bath Resort

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# STUDENT BACKGROUND

## EDUCATION

Architecture and Urban design, MPARC 2019 - ongoing  
Chalmers University of Technology

*Master thesis preparation course 2*  
*Master thesis preparation course 1*

*Matter, Space, Structure 2*  
*Architectural competitions*  
*History, theory and method 1*

*Future vision for Healthcare, housing and Work 1: Residential healthcare -  
Housing for seniors*  
*Sustainable development and the design professions*

*Från ide till färdig byggnad*

Architecture (B. arch) 2016 - 2019  
Chalmers University of Technology

Byggnadsutformning med Arkitektur 2015 - 2016  
Jönköping University

Tekiskt Basår 2014 - 2015  
Högskolan Borås

Natural science & Marinebiology program 2009 - 2012  
Öckerö High school

Embla Nilsson  
Born in Sundsvall 1993  
Home town Gothenburg

## AIM & PURPOSE

Stress is an everyday problem in our lives today. The need for nature and relaxing places to stay are essential for our health. Most of us have a special place where you go to reduce stress and reload. Nature plays a big part if we are to reduce our stress levels. The ocean and the cost line have many relaxing factors and used to be a place for healing in the 20-th century.

The aim for this thesis is to investigate how architecture can be a part of the healing effect from the ocean. At the same time investigate how a public building can feel familiar and small scaled in the archipelago topography. Creating a semi outdoor space for bathing and relaxation where the materiality and form is of importance.

## METHOD

Research by design: The main focus in this thesis will be to investigate form and shape of a construction by drawings and models.

Together with studying the local identity and mapping experiences and analysing the surroundings.

# STUDIES & THEME

## BOAT HOUSES (SJÖBODAR)

The building traditions on the west coast of Sweden are very typical. White houses with orange roofs, are standing close together with the cliffs in the back and a small boathouse in the front.

Every house are similar but in details differs in shades and woodworks. The most distinctive buildings on the coast lines, are perhaps the small boathouse ("sjöboden") (Bohusläns Museum, n.d.)

The oldest boathouses were very small and timbered houses. When the fishing tools became larger, the houses expanded and in the 19th century many were built with laiches and

panels. It wasn't until the 20th century that the boathouses where added one level. The top floor/loft were then storage for larger fishing gear. This floor or loft were called "rännet" and it often has its own door out towards the sea (Bohusläns Museum).

These boathouses are often in connection to the houses where the fishermen lived. Problems with rats and mice, became huge when it was time to store, dry and prepare the fish. Even smaller houses were then build on the outer islands where there were no rats and mice. These buildings are called "vadbodar" and were also used for summer storage of the gear (Bohusläns Museum).

## THALASSOTHERAPY

Thalassotherapy origins from the Mediterranean as early as from the Roman empire. "Thalassa" is Greek and means ocean. The ocean has great benefits for human health. Both physical and psychological. The practise takes form in many ways. Including seawater baths, algae products, heated pools, exercise and climate treatments (M. Vinall, 2021, february).

The seawater acts by increasing blood cell production and therefor it can boost the immune system. Together with temperature, seawater can improve blood circulation. This then helps to relive muscle spasms and ease joint pain. Minerals from warm seawater and tiny particles from of salt that are contained in the air. are also absorbed through the skin, strengthening the natural defences (M. Vinall).



PHOTO GULLHOLMEN COSTAL HOUSES

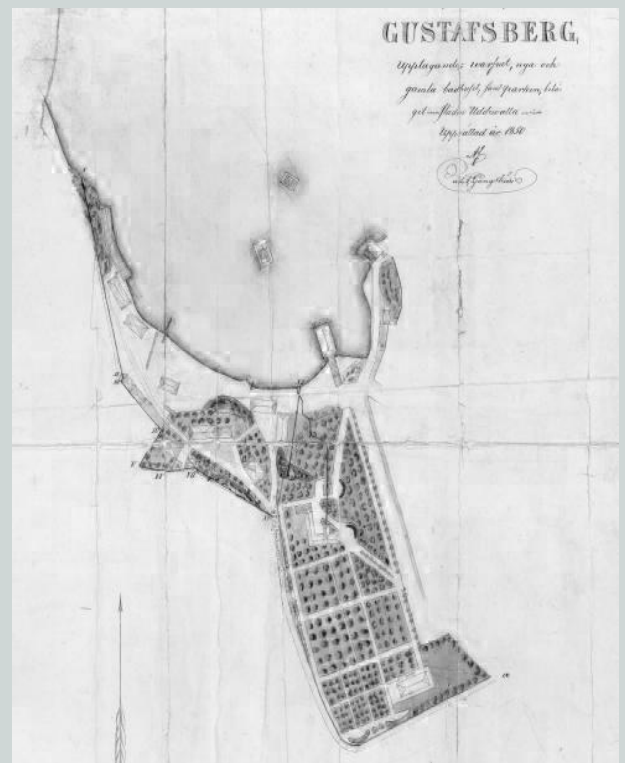
## HISTORY BATH RESORT

On the west coast of Sweden the history of the sea resort has its roots from old European traditions. People travelled to places where they could take healthy baths and drink from healthy wells while being close to the sea. At the time of WW1 many doctors started to recommend bathing as a health cure. This then changed the way people bathed. Swimming together with family and directly into the ocean became a new health trend (Bohusläns Museum).

Bridges and water front walk paths were needed for the health. Walking along the sea and breathing the healthy air was important for the health. Sailing could be prescribed by the doctor, just to get even closer to the healing ocean. Parks and pavilions were often used for music and dance (Bohusläns Museum).

## ACCOMMODATION

People used to stay at these resorts for 4-6 weeks, in the beginning people rented parts of houses from the locals. After a while they started to develop hotels and hostels as small houses or apartments. Most of the dinners were consumed at the resort restaurants but breakfast and dinner were usually prepared and enjoyed in the apartments. The simple living was thought to be a big part of the sea resort (Bohusläns Museum).



MAP OF GUSTAFSBERG BATH RESORT 19th  
PHOTO 1: GUSTAFSBERG

## WARM BATH HOUSE

Perhaps the most important building where the warm bath house. This was a house with many small rooms all containing bathtubs. Ocean water where pumped up, heated and distributed to the individual rooms. You could have baths with algae, minerals, pine needles or even mud baths. The cold baths where taken outside in the sea at a cold bath house. Even a variety of showers where available. The resort bath doctor prescribed different combinations of baths and activities to improve and cure health issues (Bohusläns Museum).

In the beginning it was all very primitive. Baderskor (the women who where in charge of the bathing) blew a whistle and then children (often boys) dropped a bucket of warm water in pipes that was used as showers. Algae baths were popular, in the morning they had to row out and collect algae that was then cleaned and washed in hot water (Gustafsberg, n.d).

## COLD BATH HOUSE

The cold bath house where in the beginning simple floating rafts with houses placed in the water. They were often destroyed by wind and waves. It was later that they started to build the iconic houses on piers that where held up by pillars. These baths were divided into men and women and was usually a naked activity (Bohusläns Museum). Many are still used and functions as bath houses today.

## WATER SALON

According to the "Bath doctors" at this time you were supposed to drink a lot of water. Not just any water, it was preferred to be from special health wells in a salon made for just this activity. This was at the begining the main reason to visit the resorts. They had to be placed where these mineral waters could be found and drank. This then became less important over time and many of these salons was demolished (Bohusläns Museum).



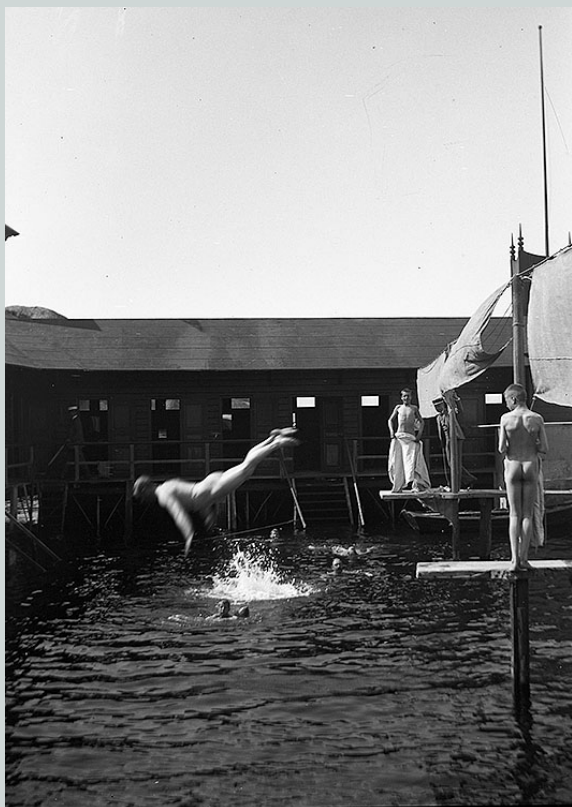
GUSTAFSBERG WARM AND BATH HOUSE  
PHOTO 2: BOHUSLÄN MUSEUM

## SOCIAL LIFE

The resort where a great place to socialise with new people and reunite with old friends. Time at the resort where spent in group activities and social gatherings. Competitions and tournaments where important for the health. Sailing, tennis, bowling and swimming competitions where popular (Bohusläns Museum).

## RESTAURANT

There was often one or more restaurant and cafés at the resort. They had large glassed facades overlooking the sea. This was an important meeting spot for the resort visitors (Bohusläns Museum).



MARSTAND COLD BATH HOUSE 1900  
PHOTO 3: BOHUSLÄN MUSEUM

## SOCIETY HOUSE

This was a house with a large ballroom where you had music, dance and performances. Smaller rooms for reading and billiards was also a big part of the house. Some had special rooms for men where they often were reading or socialising. (Bohusläns Museum).

## DOCTOR'S FACILITY

Most bath resort had its own specialised bath doctor. He was often officed in one of the other building, but some doctors had their own villa (Bohusläns Museum).



ALGEA BATH GUSTAFSBERG 1940  
PHOTO 4: BOHUSLÄN MUSEUM

## REFERENCE PROJECTS



PHOTO 5: ÅKE LINDMAN



PHOTO 6: WHITE ARKITEKTER

### KOSTER NATURRUM

It's clear to see that White have been inspired by the classic silhouette of the west coast boathouses. Even though they have made an interpretation of the small houses and designed something that will stand out in the typology. The inside of the building, with its large window towards the water front, its warm feeling with exposed wooden panels that is following the form of the roof. This is my main inspiration for my projects main building.



PHOTO 7: KOLMAN BOYE ARCHITECTS



PHOTO 8: KOLMAN BOYE ARCHITECTS

### WRITERS HOUSE VEGA

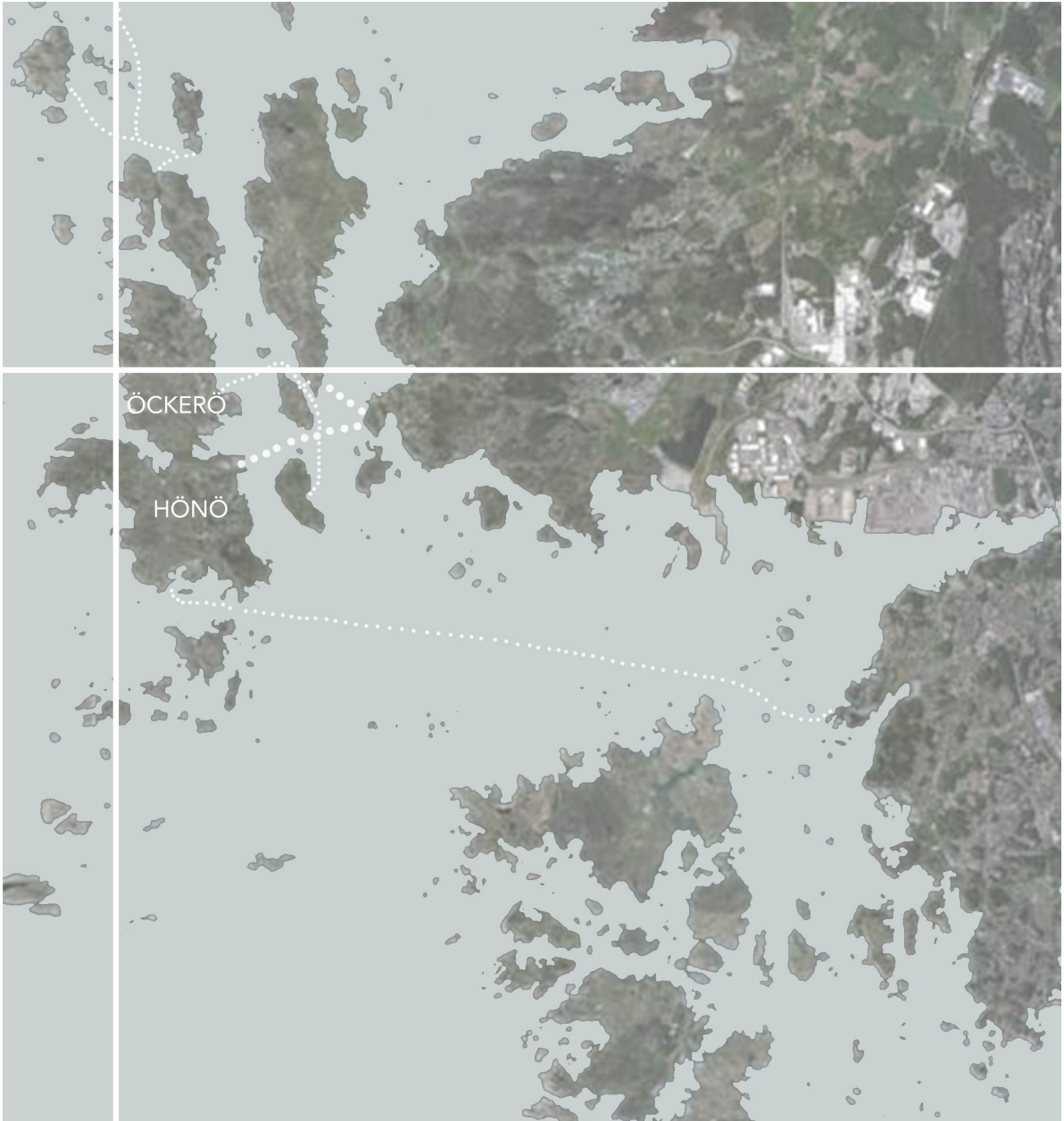
Close to the polar circle in Norway stand this small cottage seemingly growing from the landscape. The house is sitting on the rocks and do not disturb the dominant terrain. The shape and form of the house is inspired by the nearby boathouses. Taking a modern yet robust approach. The materiality, form and interpretation makes this my main reference to the projects over night cabins.

# THE SITE

ÖCKERÖ  
KÄRRSVIK



SWEDEN  
ÖCKERÖ



ÖCKERÖ  
KÄRRSVIK

## THE IDENTITY

Just outside of Gothenburg, there are a group of islands that are accessible by car, bus and boat. Roughly 13 000 people are living on these islands all year around, and even more during summer. Öckerö is a popular island to visit on warm summer days. There is several bathing spots along the outer shorelines. Most with both a beach and cliffs. But if you know where to go you can have your very own bathing spot, away from the tourist crowded beaches.

The nature here is stripped from vegetation, making the rocky granite cliffs exposed to the rough sea. On windy days you find yourself watching the waves explode on the cliffs, creating a dramatic scene. Shelter from wind is essential. Therefore most older buildings are found in the middle of the islands, quite far away from the rough sea.

The 10 islands around Öckerö are more or less combined with bridges and ferries. Each island has its own character. Öckerö is the island where the more "rough" functions are. Such as, recycling centre, marina and other industries. Here most houses were built around 1970-90. Öckerö church is the main building on the island. This is both a landmark and pride on the island. The tall tower can be seen from far out on the sea.

Many locals have moved from main land out to these islands. But most people have been living here for generations. There is a distinct difference of these people and the islanders are very proud of their heritage. Many are old fishermen and women and they know everything and everyone on the islands. Change and new ideas are often shut down, making it very difficult to build something in a larger scale.



KÄRRSVIK  
RECYCLING CENTRE

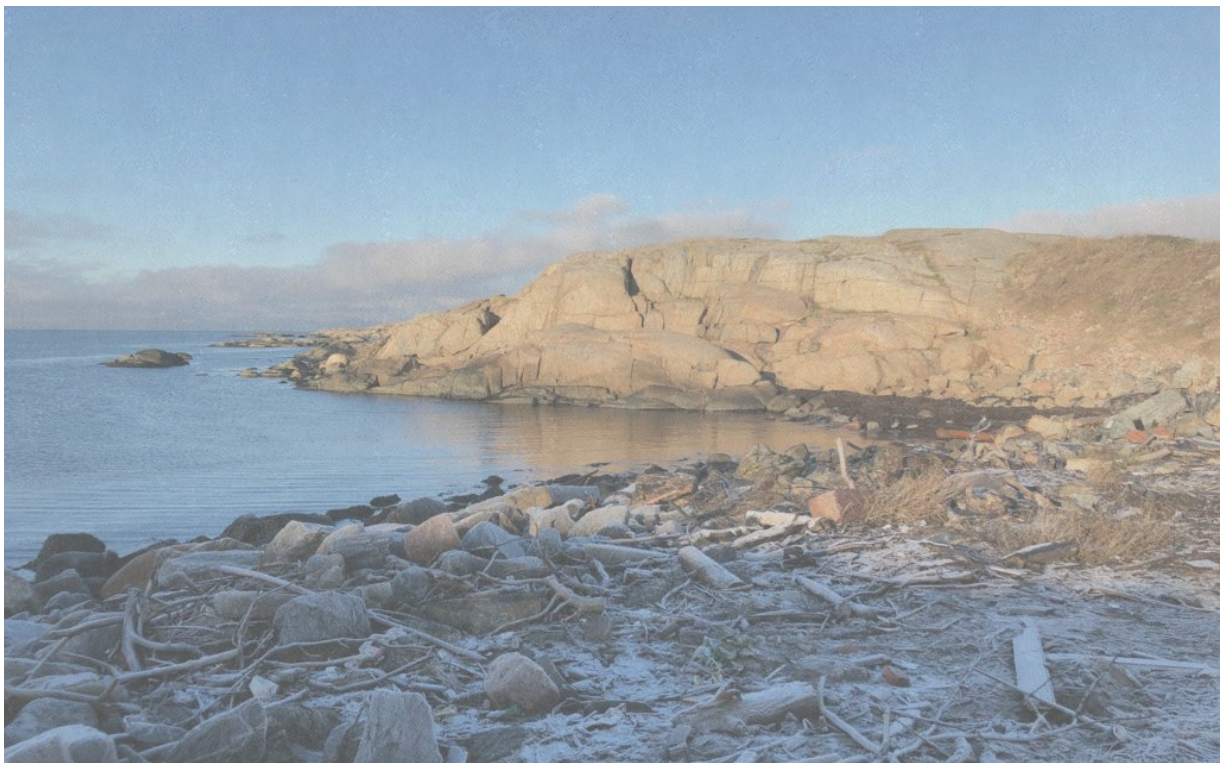
## KÄRRSVIK

The site is currently the islands recycling centre. This must be Sweden's most beautiful recycling centre! Öckerö has a plan to relocate this centre to Hönö and make it more environmental friendly. The site today is therefor in need of a massive sanitation. Even so this place is never going to be "natural". My plan is to use this site and therefore not damage a natural place in the archipelago.

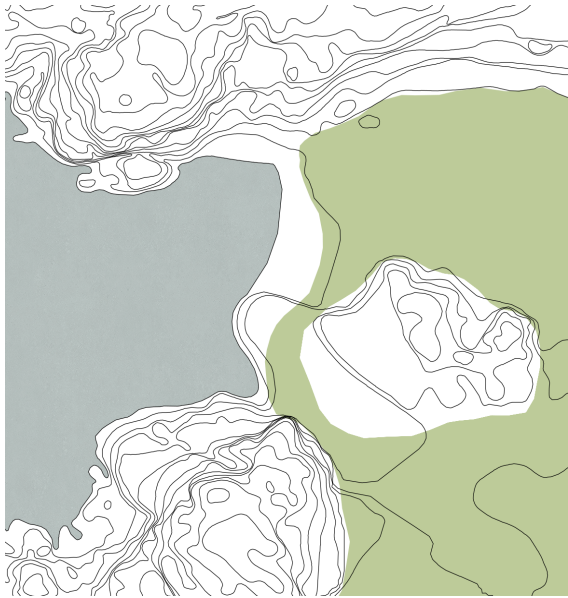
Kärsvik lays between the two most popular bathing sites on the island. The northern are often used by tourists from main land. Here are some beach

volleyball plans, kiosk during summer and a larger parking place. The one on the south is an old harbour that the locals have turned into a simple bathing spot. Both have views over the horizon in west making it a beautiful place to be during sunset. Here the water is clear and less polluted than on the east side.

In both south and north of the site there are some nature walks along the more vegetative places on the island. Here is also a popular place to go bird watching as well as surf along the shoreline.



SITE PHOTO IN DECEMBER 2020



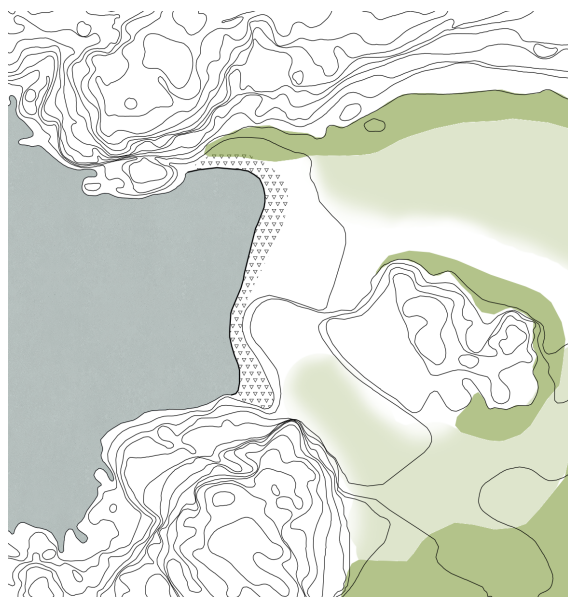
## BEFORE THE RECYCLING CENTER

Before the recycling centre was placed here on Kärrsvik, it used to be a large field of vegetation and cliffs. The water line was more round and two distinct bays within the large bay. Steep cliffs are framing the bay and a small hill in the middle.



## RECYCLING CENTER TODAY

The recycling centre is placed here strategically. Waves pulled the waste out to sea where it's no longer seen and therefore gone. Of course this way is not practised today! Today they have flattened the surface with asphalt in two levels. The small hill in the middle acts as the high drop of point. Where you put your waste in containers that are placed along a concrete wall (marked in red). Boulders and stone are shaping the current waterline.

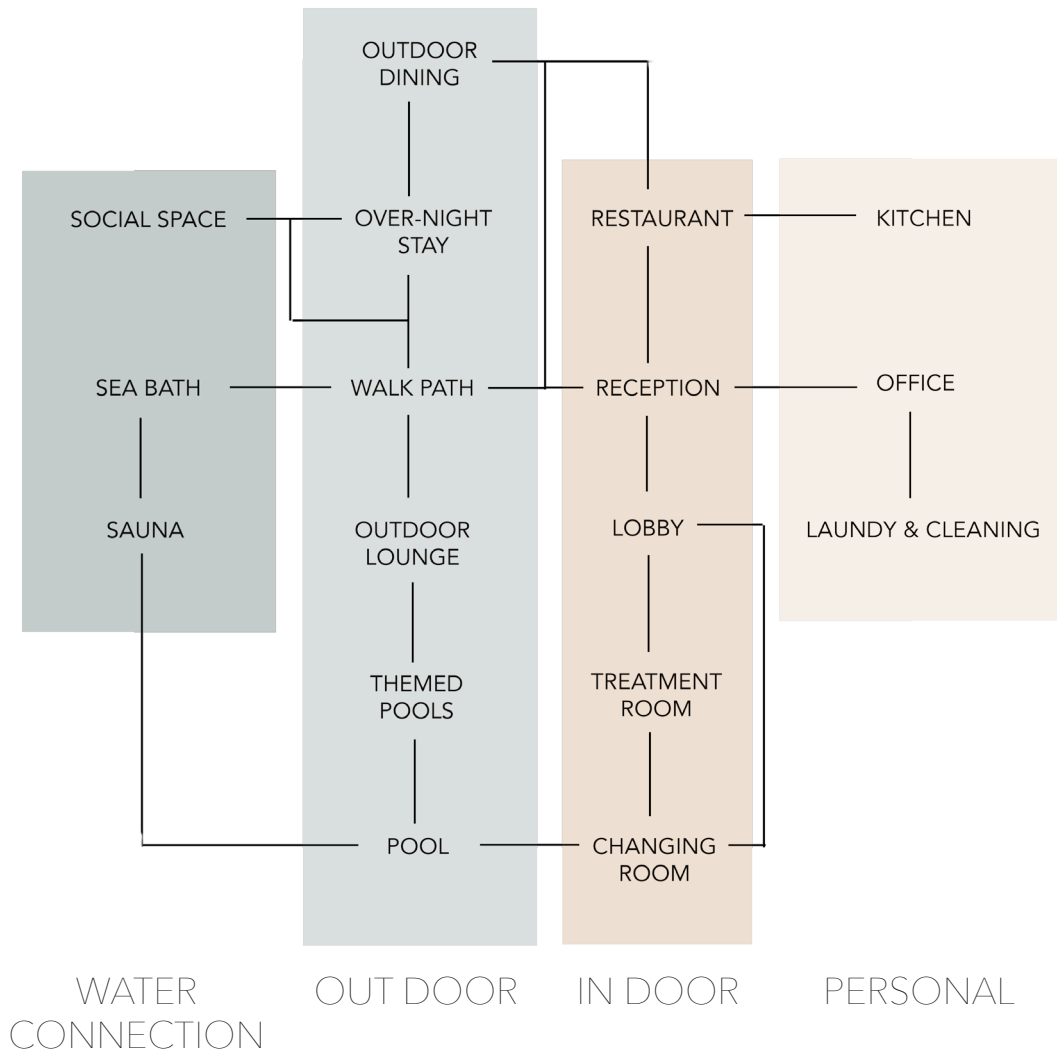


## NEW TOPOGRAPHY

I want to straighten up the waterline and remove the asphalt. Expose the granite underneath and have nature have it's way. Taking time to recover and be natural. Hopefully the green areas will spread and cover the large flat areas over time and be a playground for birds and insects.

Instead of asphalt, a small gravel road will lead you towards the new bathing facility. Over time the road will be surrounded with tall grass and bushes.

# PROJECT PROGRAM



# REFLECTION

One main issue I felt like I had to solve was that the project had to feel small scale. I wanted it to feel natural but with a modern twist. The simplicity have been of essence, in both material and shape. This project have a strong connection to the shape of the typical west coast boathouses. It has been a guide throughout the whole project. I felt like I might have been to strict with this shape and therefor it's been difficult to find references and to fit in the functions sometimes. Perhaps It would have been easier to be more abstract about the shape.

A further development of the project would be to create a more inviting entrance façade. Most of the effort was placed at the waterfront and I felt like the entrance façade would benefit if the lobby and reception had taken more space at this side.

At the same, most boathouses are less inviting at the land side and therefore my project might feel more small scaled and familiar this way.

Although I think the project is fitted in the typology and nature nicely. It's blended in with nature and does not dominate. The orientation and flow between space and functions are easy to follow. Overall I'm happy about the way my project turned out and I think the locals would approve to have this small scaled bathing facility. After all, there's now a place for relaxation where it otherwise would be a scar in nature.



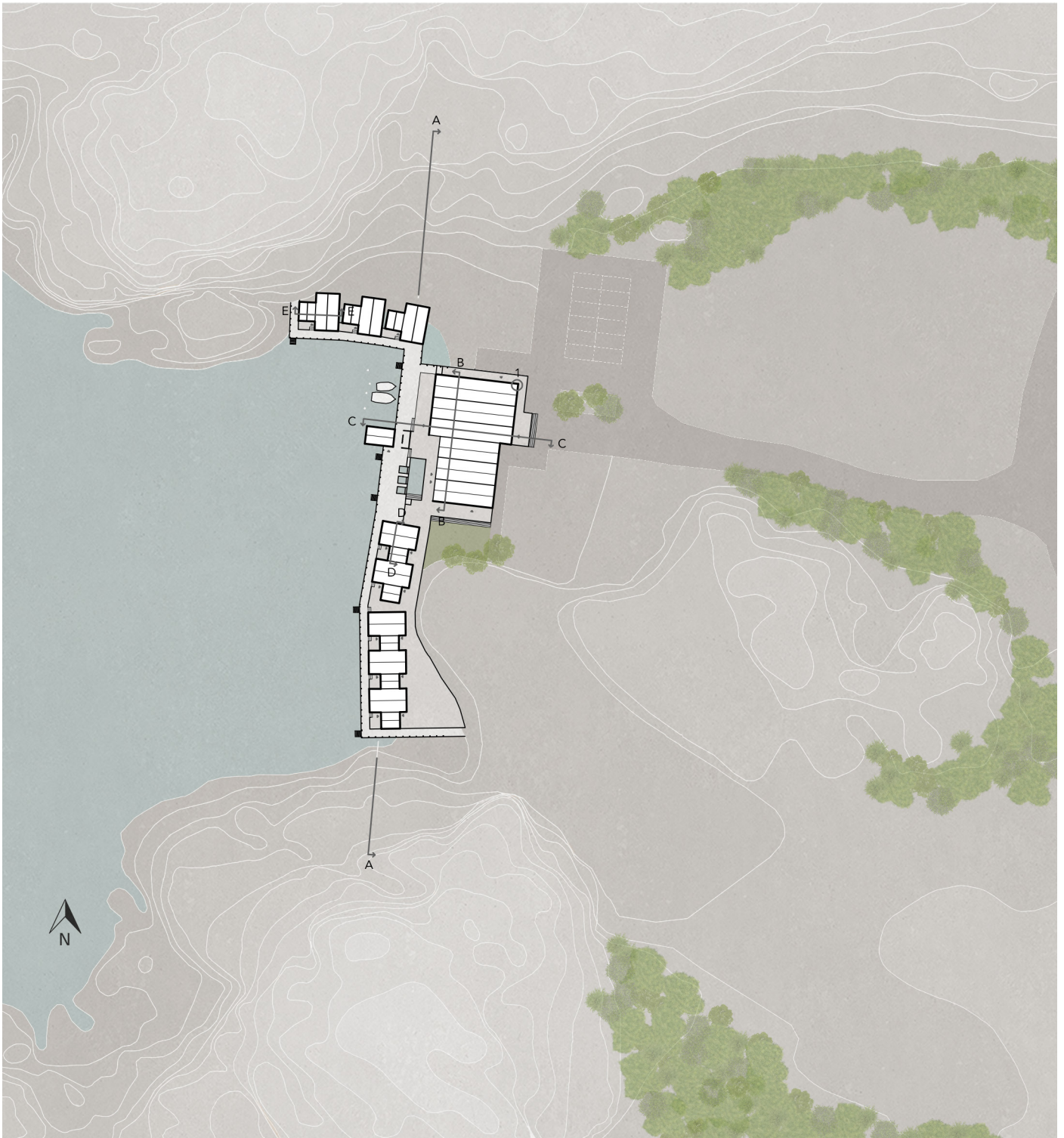


# **APPENDIX**

## PROJECT

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SITUATION PLAN  
1:1000

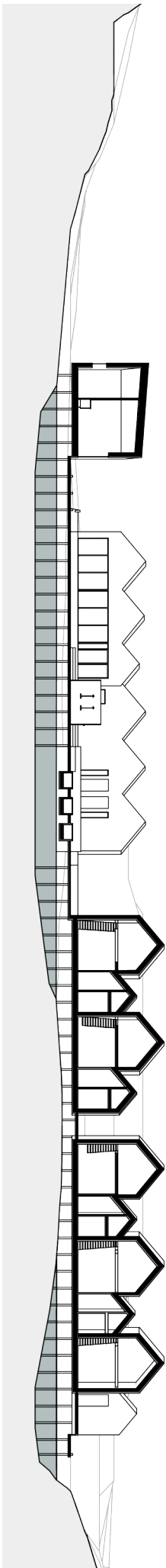
## SEA BATH

After arriving to the nearby island with the yellow ferry, you move through the islands most trafficked roads, glimpsing the ocean between typical white houses with red tiled roofs. As you get closer the road changes from silent asphalt into cracking gravel. The Sea Bath lays at the very end of Kärsvik bay. Taking the steps up to the wooden deck and you can once again glimpse the ocean through the glassed doors. The ocean is present as soon as you go through.

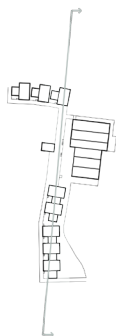
The wooden deck embraces and connects the buildings with each other. Creating a walk path that constantly makes you focus on the waves. Even if you arrive with friends, family or a loved one there is room for you to relax and inhale the ocean and be removed from a stressful everyday life.



FLOOR PLAN FUNCTIONS  
1:400



1. RESTAURANT
2. KITCHEN
3. LOBBY & RECEPTION
4. OFFICE
5. LAUNDRY & CLEANING
6. TREATMENT ROOMS
7. CHANGING ROOMS
8. BOD A
9. BOD B
10. SAUNA
11. LOUNGE
12. OUTDOOR DINNER
13. POOL HEATED SEAWATER
14. THEMED BATHS
15. SHOWER
16. SOCIAL AREA
17. BARBEQUE



SECTION A-A  
1:400

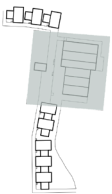
## MAIN BUILDING

Arriving through the glassed doors you instantly connect towards the ocean. The restaurant with large windows though the façade invites for beautiful dinners in the sunset. The shape of the roof is mirrored on the inside with a warm feeling from the wooden panels.

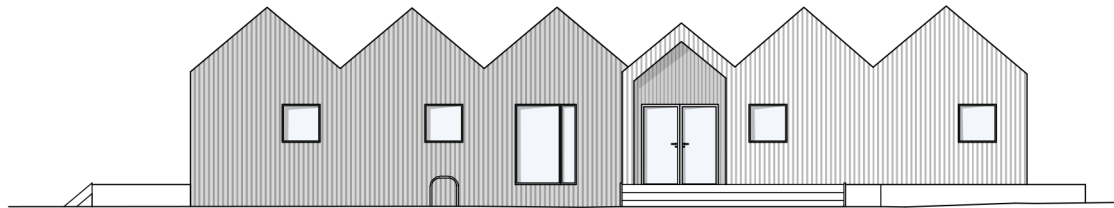
The lobby and reception is small and easy to find. Through the corridor lays two treatment rooms and two changing rooms. Entering the changing room, there is a place to take off the shoes and move towards the lockers and showers. After showering you are ready for the healing bath.

A larger pool with heated seawater, stretches along the main building. One step down there is smaller pools with treatments like algae, mud and minerals from the sea. Cold baths is taken in the sea and the sauna is the perfect place to warm up and boost the circulatory system.

There is plenty of places to socialise just like we used to at the bath resorts along the west coast. In the south there is a place for barbeque and group activities on the wooden deck. As well as a grassed field that's perfect for a game of kubb. The stair down to the grassed field can be used as seating for outdoor concerts.



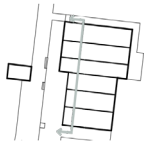
FLOOR PLAN MAIN BUILDING  
1:200



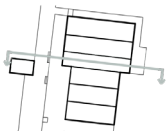
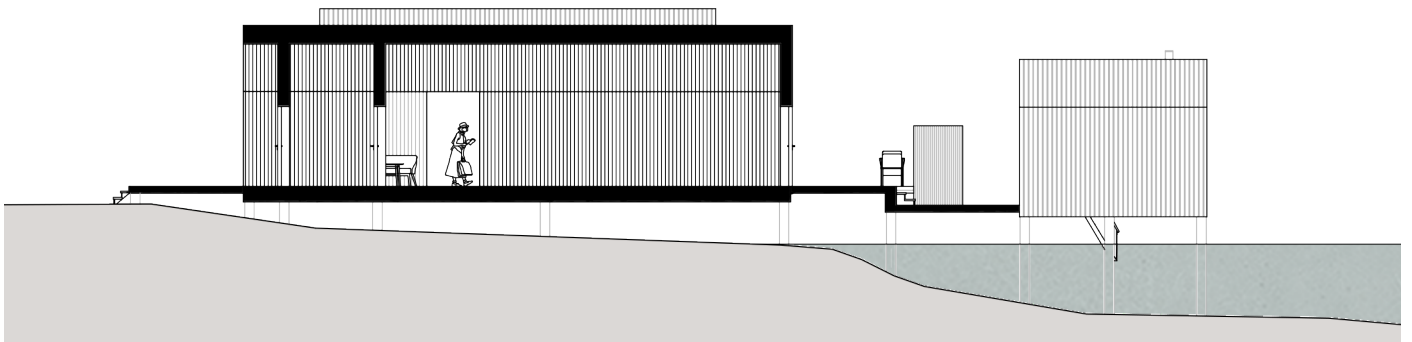
FACADE ENTRANCE  
1:200



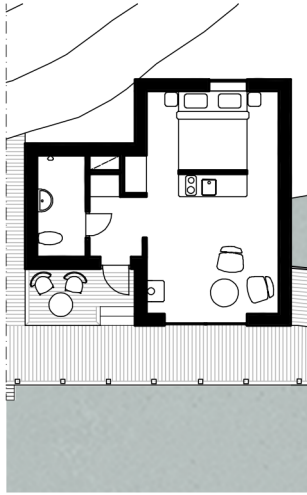
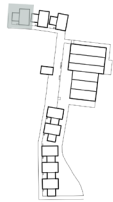
FACADE SEA  
1:200



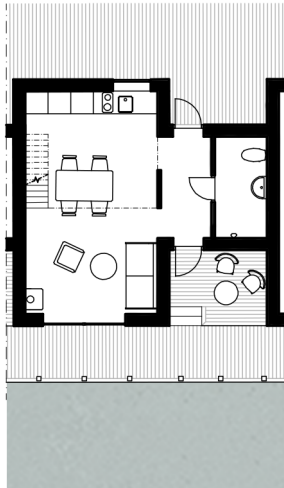
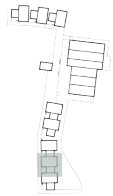
SECTION B-B  
1:200



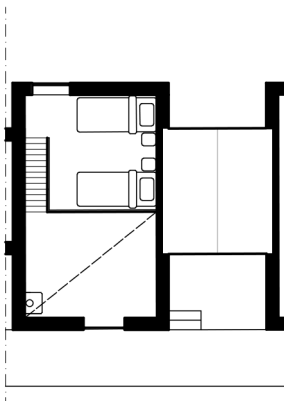
SECTION C-C  
1:200



BOD B  
1:200



BOD A LEVEL 1  
1:200



BOD A LOFT  
1:200

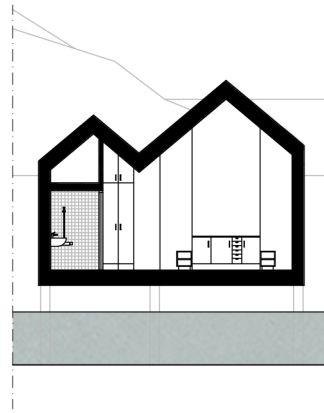
## BOD

To really get away from the stress you can stay at the bath for a few nights, even weeks. The two types of living that are simple but has all the essentials you need. Bod A in the south are connected with each other making it suitable for groups. You enter from the back deck and have a hallway where you can hang a jacket on the hooks and put your shoes. A larger living area with a kitchen, dining table, sofa and of course a fire place for the feeling of warmth during the evenings. Two separate beds are on the loft that can also easily be moved into a couples bed.

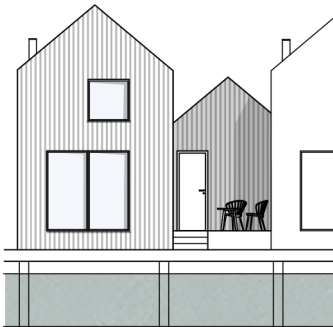
Bod B in the north are split from each other but has the same shape and size as the others. These are more suitable for couples as they are placed further away from the activities. They too have a private deck, kitchen and a cosy fire-place. The couples might use the restaurant more often and therefor the kitchen is smaller and there is only a smaller lounge group.



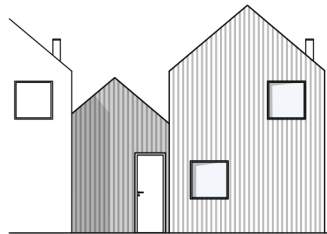
SECTION E-E  
1:200



SECTION D-D  
1:200



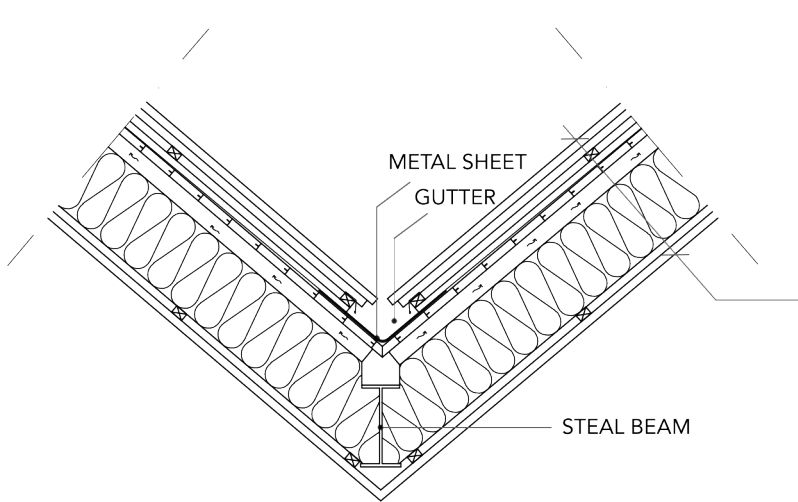
FACADE BOD A SEA  
1:200



FACADE BOD A ENTRANCE  
1:200

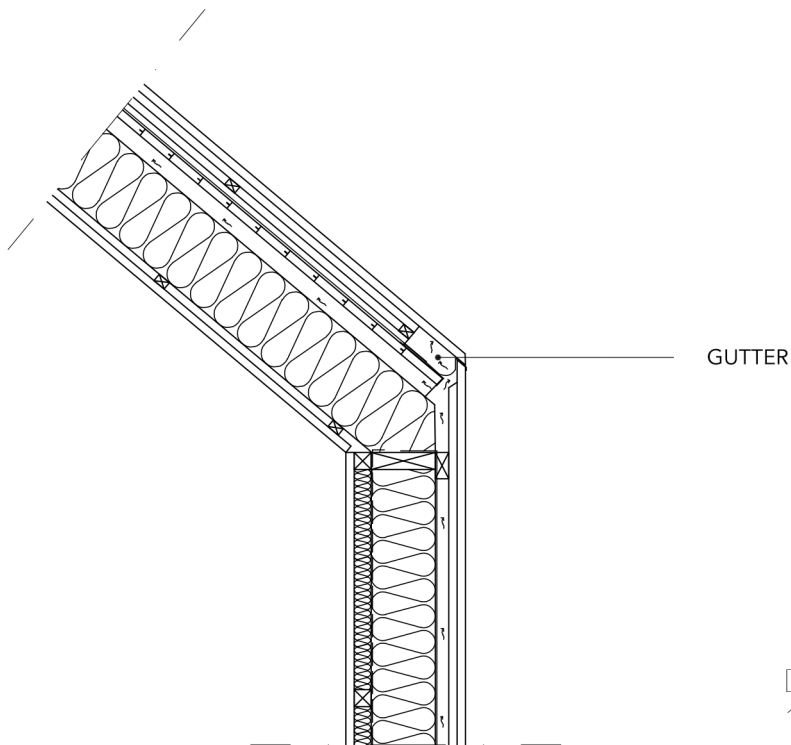


FACADE BOD B SEA  
1:200

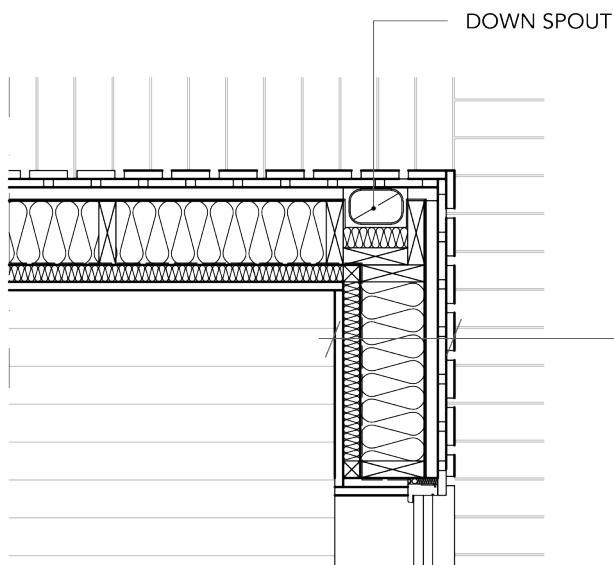


- 22x100 COVER BOARDNING (FALTAK)
- 22x100 PANEL (FALTAK)
- 22 BATTEN
- 22 BATTEN
- 2 PAPP
- 22 TONGUED BOARD
- 45 LATCHES & AIR FLOW
- 200 GLULAM BEAM
- 22 BATTEN
- 22 PANEL

DETAIL 2  
1:20

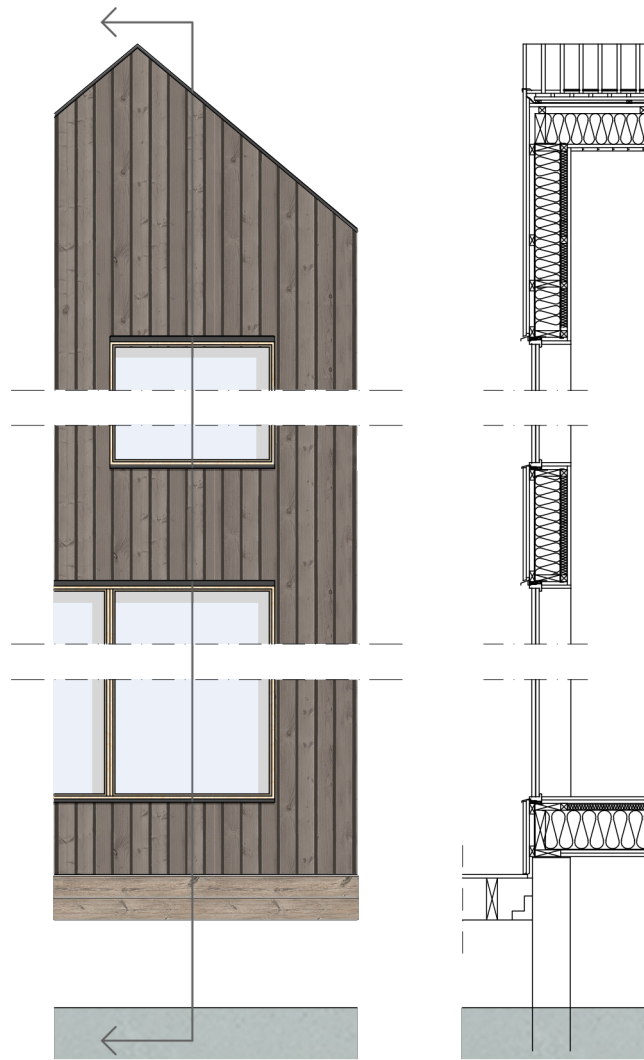


DETAIL 3  
1:20



- 22x100 COVER BOARDNING
- 22x100 PANEL
- 35 BATTEN
- 1 PAPP
- 170 LATCHES & MINERAL WOOL
- 1 PLASTIC
- 45 LATCHES & MINERAL WOOL
- 22 PANEL

DETAIL 1  
1:20



ELEVATION BOD A  
1:50

## MATERIAL

A seamless meeting between the roof and wall, creates a simplicity and calmness in the other rough environment. Woodens panels on both roof and wall blends in with nature with it's dark grey apperance from the linseed oil.

Inside fells warm with a contrast from the dark exteriors. Wooden panels and plywood follows the form of the roof. Also creates a calm and simple feeling.



ENTRANCE



BATH



RESTAURANT  
DINING AREA



SAUNA



BOD  
LIVING AREA



PIER VIEW

# REFERENCE LIST

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PHOTO 2: Bohusläns Museum. (u.d)  
<https://www.bohuslansmuseum.se/samling-ar-och-historia/hur-sag-vastkustens-badorter-ut/>

PHOTO 3: Bohusläns Museum. (u.d)  
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PHOTO 4: Bohusläns Museum. (u.d)  
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PHOTO 5: Åke Lindman. (n.d)  
<https://whitearkitekter.com/se/projekt/naturum-kosterhavet/>

PHOTO 6: Åke Lindman. (n.d)  
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PHOTO 7: Kolman Boye. (2014).  
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PHOTO 8: Kolman Boye. (2014).  
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EMBLA NILSSON

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