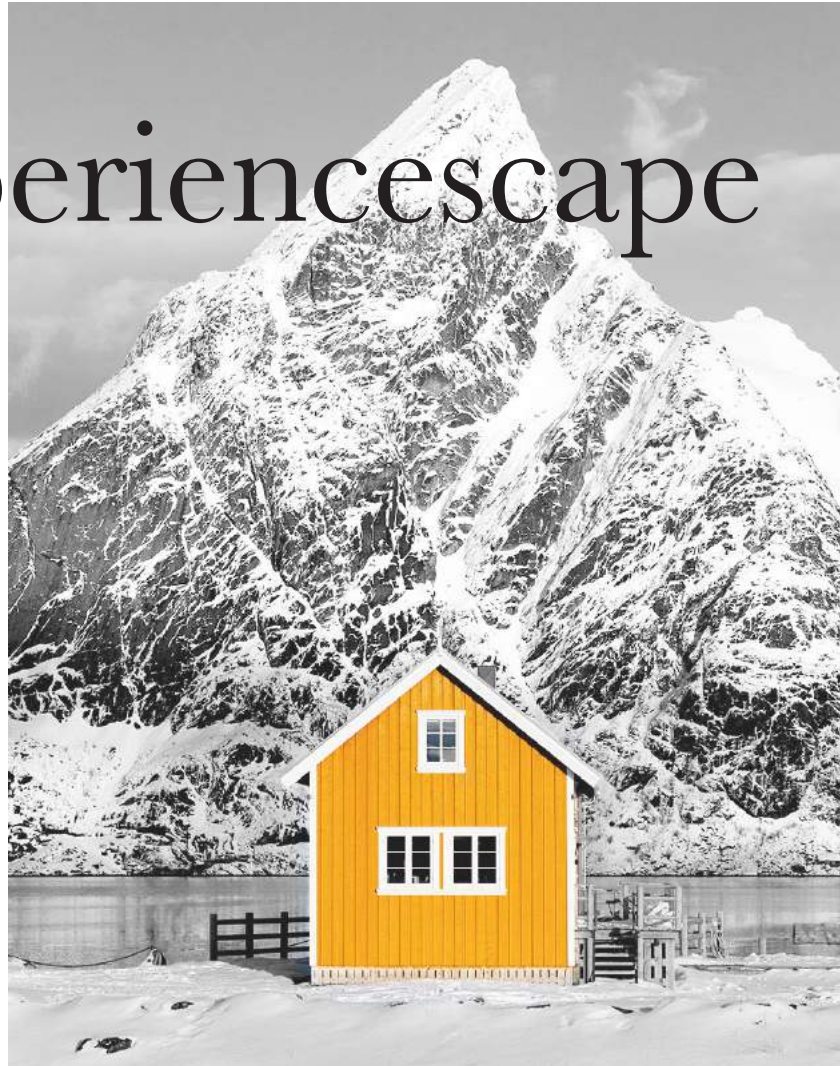


Experiencescape

- A MCC-Centre for people to share their interpretation of Vorfjorden



by Julia Olsson

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Supervisor: Jan Larsson



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MPARC: Housing Studio

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Julia Olsson



*"Nature doesn't come any closer than this... You are in the middle of everything
- or far from everything depending on how you look at it." (Gössling et al. 2006)*

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Academic framework

Chapter 1



Postcard with fisherman bought on Lofoten

Abstract

Tourism has become one of the fastest growing industries in the world and it is strongly valuable in the socio-economic sector. The demand for a more sustainable tourism is therefore crucial. Short time residence for people to rent for a shorter or longer period of time, that support ecotourism and attract visitors during all seasons of the year, could ease the burden tourism put on nature and parts of the local community.

The aim with the thesis is to enhance and increase the understanding of Vorfjorden unique landscape and cultural heritage. The concept of ecotourism will be implemented into a new version of the traditional network of mountain cabins fused together with a culture centre (Mountain Cabin Culture Centre, MCC-Centre). The topologies within the centre will be shaped by the different demands for each programed activity together with interpretations of the landscape. The proposed centre interplay with nature and create space for people to share their interpretations and experiences of the place. On the basis of these conditions, the center will constantly be under development based on the ideas and thoughts that are born when people stay in the Centre. It will hopefully encourage local people to take part in the new development and tourist to explore in a more humble and respectful way.

The method I will use is mapping the identity and limitations of the context through a thorough landscape analysis, site visit, climate research and research on the cultural heritage. I will also map the identity and functions of typical Norwegian mountain cabins through reading and case studying of contemporary Norwegian architecture. Lastly, I will try to get into the mind of the potential users, using myself as a great source of experience, as a hiker, but also through interviews and online sources. The discoveries will then be translated into a design project through sketches both digital and physical.

Keywords: Ecotourism, mountain cabin, experience, interpretations, cultural heritage, ecological limitations, ecoactivities

Student background

I grew up in the woods of Värmland and spent my summer holidays in the family cabin located by the sea in Bohuslän. Wildlife and nature have always played a big part in my life. The inspiration for this thesis comes with a strong interest in hiking and kayaking. For many years I've been a member of Svenska turistföreningen and visited several of their cabins around Sweden. I find it interesting how these spaces in presence of nature encourage people to share - stories, knowledge, experiences and space itself. I truly learned that while hiking Kungsleden, Abisko to Kebnekaise, on my own this autumn. Regarding traveling I think it is important that we take a look around, maybe our next unforgettable adventure is right around the corner, maybe in the neighbouring country and not a long flight away.



Bachelor:

Chalmers University of Technology
2012-2015

Master MPARC:

Chalmers University of Technology
2017-2020
KU Leuven, Faculty of Architecture
Autumn 2018

Most recent educational projects:

Material and detail - Timber raw and refined
Housing inventions - Joint building venture
Från idé till färdig byggnad - Small Cabin

Internship:

Wingårdhs, Göteborg
2015-2018
Klara Arkitekter, Karlstad
Summer 2014

Thesis background

I chose to do my thesis project in connection to the Lofoten islands after my visit 2019. I have a big personal interest in hiking, kayaking and doing activities in nature, so for me it was motivating to contribute with something in connection to that. After doing research among the local inhabitants I understood that rapidly increasing tourism puts a huge burden on nature and the local community. Even if the tourism put great money in the pocket and have been a game changer for local business to thrive, the respect for nature many times are being neglected. The local inhabitants also feel like they get pushed away from enjoying their home environment. During peak season numerous locals choose to rent out their homes on Airbnb and in new developments of the area the focus has often been on the tourist and money making - not the locals.

Tourism has become one of the fastest growing industries in the world and it is strongly valuable in the socio-economic sector. The demand for a more sustainable tourism is therefore crucial. Short time residence for people to rent for a vary period of time, that support ecotourism and attract visitors during all seasons of the year, could ease the burden tourism put on nature.

My project focuses on one of Norway's most beautiful places, the Lofoten Islands. The islands attract millions of tourists each year from all around the world. They are dotted with small fishing villages and towered over by majestic mountains. The climate year-round is temperate by comparison to the rest of the wintry country. White sand beaches stretch along the coasts. In winter, the islands' skies are illuminated by the Northern Lights. In short, they are a magnet for tourists wishing to escape reality for a while. But even if the tourist bring money to the local economy, it also brings stress to the local environment.

According to Norwegian law, nature is a common resource meant to be accessible to everyone, no matter social or economic status. In Norway you can find a network of mountain cabins throughout the country, provided by The Norwegian Trekking Association, that is a great asset when exploring the nature. Also, in several rural places around the country, creative people have the possibility to apply for a short time residence, with opportunity to work in an inspiring setting. This "In residence"-program is a valuable cultural resource for the local community. I could see my proposal becoming a part of the trekking associations and make space for an "In residence"-program. The proposal will discuss the cultural and social aspects regarding traditional mountain cabins fused with a culture centre and short time residence.

Ecotourism

Ecotourism can be summarized as responsible travel to natural areas. The ambition is to conserve the environment and improve the wellbeing of the local inhabitants. It is intended to operate as a low-impact alternative to the standardized commercial mass tourism. Natures best has developed five basic principles of ecotourism that have been of great importance to me in my continued work. They are taken from (Gössling et al. 2006) and are quoted here:

1. *Respect the limitations of the destination – minimize the negative impacts on local nature and culture.*

Ecotourism is about preserving what the visitor has come to experience. The ecological and cultural capacity of each area must be respected. This means tour operators must have a thorough knowledge of the destination, a local presence and work closely with others present in the area.

2. *Support the local economy.*

Ecotourism is about community development. Conservation can easily fail if local people object to it. Tangible benefits from tourism are a positive force. Each visitor contributes economically to the well-being of the destination by renting rooms, hiring local guides and purchasing goods and services. The more the better.

3. *Make all the operators' activities environmentally sustainable.*

Ecotourism operators must set a good example of sound environmental practice. Operators are to have policies which minimize environmental impact by prioritizing, e.g. collective transport, sustainable lodging, waste management, etc.

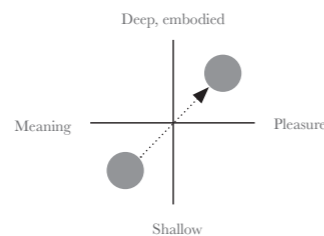
4. *Contribute actively to nature and cultural conservation.*

Ecotourism assumes responsibility for the protection of biodiversity and special cultural values. This means supporting nature preservation in various ways.

5. *Promote knowledge and respect and the joy of discovery.*

Ecotourism is about travelling with curiosity and a respectful mindset. Operators are competent hosts providing visitors with a good introduction to the area. Good advice and guidance are often the keys to a memorable trip."

As mentioned in the chapter "Ecotourism as experience-tourism" "self-fulfilment and experiences seem important travel motives for tourists today". They mean that "the more generally, an increasing number of tourists expect physical and emotional rewards from leisure activities, and self-fulfilment and re-affirmation of identity are increasingly part of the tourist experience". According to this such attributes fit ecotourism products rather well. Ecotourism itself is usually smaller and more intimate projects. "They are more carefully constructed and takes place in natural settings". To be called Ecotourism it demands some basic degree of activity as a walk or similar. Therefore is "ecotourism authentic and shifts in focus from 'nature as materiality' to 'nature as corporeal and sensual experience', and from nature as a place on the map to nature as a globalized locality and 'experiencescape'"



Trekking association

In Norway one can find a network of mountain cabins throughout the country provided by The Norwegian Trekking Association (in short DNT). DNT is Norway's biggest outdoor activities organisation. The mountain cabins placed in sensitive environments but are operated with a low impact on the surrounding nature. This association attracts active and conscious tourists, but of course is everyone welcome to take shelter in the facilities. DNT promotes modern architecture that interplay with nature. I could see my proposal becoming a part of this association.



Mountain cabins

"In Residence"-program

In several rural places around Norway holds the possibility for people, active in a creative field, to apply for a residency program with the opportunity to live and work, for a limited period of time in, a different environment than the usual. It could be another city, another country or just a different type of working environment. Residence programs are initiated to increase knowledge exchange, create collaborations, develop new ideas and products, but also to provide space for reflection, new influences, broadened contact areas, and explore their own creation in a new context. In short, the "In residence"-program is a valuable cultural resource for the local community. Artist-in-residence programs have existed in the international art world since the latter part of the 19th century. Chef-in-residence is a quite new phenomenon. I will make space for an "In residence"-program for both artists and chefs together with an experience centre in my proposal.



Art



Food

Aim

The aim with the thesis is to enhance and increase the understanding of Vorfjorden unique landscape and cultural heritage. The concept of ecotourism will be implemented into a new version of the traditional network of mountain cabins fused together with a culture centre (Mountain Cabin Culture Centre, MCC-Centre). The topologies within the centre will be shaped by the different demands for each programed activity together with interpretations of the landscape. The proposed centre interplay with nature and create space for people to share their interpretations and experiences of the place. On the basis of these conditions, the center will constantly be under development based on the ideas and thoughts that are born when people stay in the Centre. It will hopefully encourage local people to take part in the new development and tourist to explore in a more humble and respectful way.

For who?

Local inhabitants
Active and conscious travellers
Artists and chefs

Research question

How can architecture support tourism in a sensitive environment?

How can architecture support the individual interpretation and experience of a place?

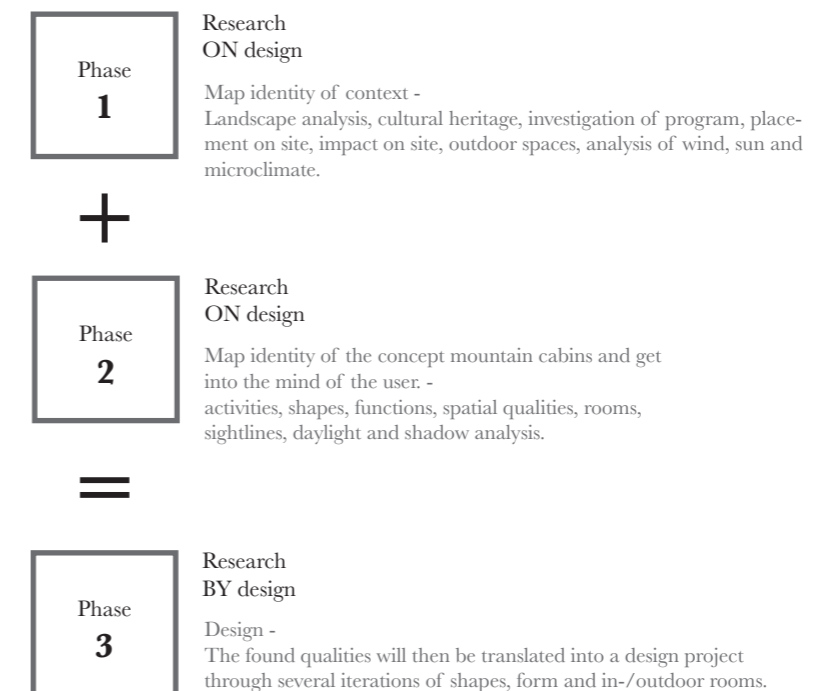
How can architecture create space that encourage people to share and be creative together?

Delimitations

This master thesis focus lies on the spatial design and the users experience of the space. Aspects like regulations, structural calculations and economical constraints will not be developed.

Metod

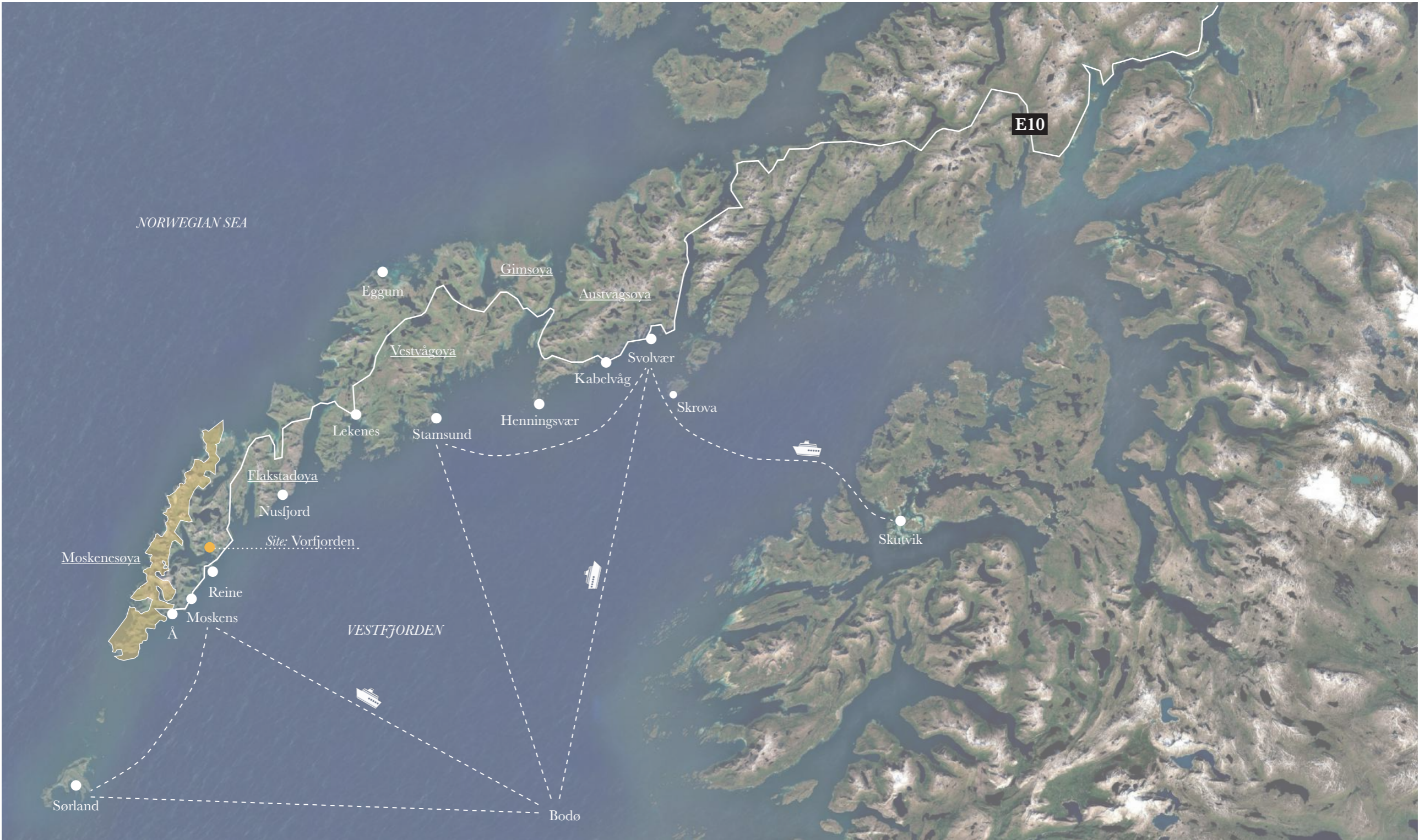
The method I will use is mapping the identity and limitations of the context through a thorough landscape analysis, site visit, climate research and research on the cultural heritage. I will also map the identity and functions of typical Norwegian mountain cabins through reading and case studying of contemporary Norwegian architecture. Lastly, I will try to get into the mind of the potential users, using myself as a great source of experience, as a hiker, but also through interviews and online sources. The discoveries will then be translated into a design project through sketches both digital and physical.





Context

Chapter 2



Lofoten National Park

Lofoten is a group of Islands located in the northwest coast of Norway. The main islands are Austvågøy, Gimsøy, Vestvågøy, Flakstadøy and Moskenesøy. The amount of people living here is somewhere around 25 000 but these popular islands houses around 1 million tourists a year. The islands are characterized by its mountains, calm channels, beaches, and all the fishing villages, so/called “fiskevær”, located around the coast of the islands.

*Drying racks for fish**Nusfjord fisher village**Highest point on Festvågind**Deck with hot tub**Nusfjord reception building**Exterior of rorbu from aprox. 1815**The Haukland beach**Interior of rorbu from aprox. 1815**Kayakcenter Sakrisøya**Railing detail**Street in Henningsvær**Cabin up in the mountains*

Visiting the Lofoten islands

In September 2019 I made a trip to the Lofoten islands to climb peaks and explore the culture. My schedule was tight, so I got around with a van, but the islands were unexpectedly big. Driving all the way from Svolvær to Å was at least a 5h trip. Anyhow I manage to visit many of the bucket list attraction. Enjoy the breath-taking views, white beaches, swim in the ice-cold water and visit the quaint fisher villages. Luckily I was there during low season, so I could enjoy the stay without being crowded with strangers.

*Me enjoying the view over Henningsvær on top of Festvågind*

Cultural heritage

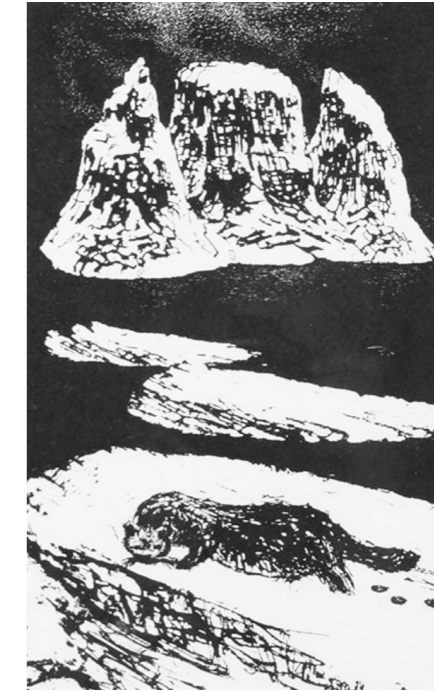
The history and culture of the Lofoten islands is formed by fishing. The population has always fished all year round, but the seasonal fishing of Norwegian Arctic cod named skrei is the most important. Every winter, the islands around Reinefjorden are covered in skrei, getting dried on special racks. The so called stockfish is finished for shipping in the course of spring and is a world class delicacy. The climate on the Lofoten islands are perfect for creating stockfish – with temperatures of around 0°C and just the right balance of wind, sun and rain. The important fisheries between January to April have provided a living for the local people for centuries. Fish are still important in Lofoten today, even if some methods related to fishing have been refined and modernized the strong pride of the craftsmanship is till present. One will find fisherman’s cabins and fish drying racks side by side with modern technology in modern settlements.

Back in the days cabins were built on the seaside to attract visiting fishermen to stay at the fishing station. The cabins called “rorbuer” were made completely out of wood. The simple rectangular volume with pitched roof, 4x12m, contained a fireplace, living space and a small porch area. Today these rorbuer are still used for accommodation and they attract tourists from far who seek to experience the craftsmanship and tradition of the Lofoten islands.

But not only fishermen and tourists have been attracted to these islands, for more than 150 years artists have been portraying Lofoten in a huge variety of mediums and expressions. One of the most known Norwegian artists is Kaare Espolin Johnsen. He spent many of his days in the northern Norway creating representations of the dramatic mountain’s tops of the Lofoten islands and its surrounding, stormy ocean. Nowadays he is being celebrated with a gallery exhibiting his work and history in the town Kabelvåg.



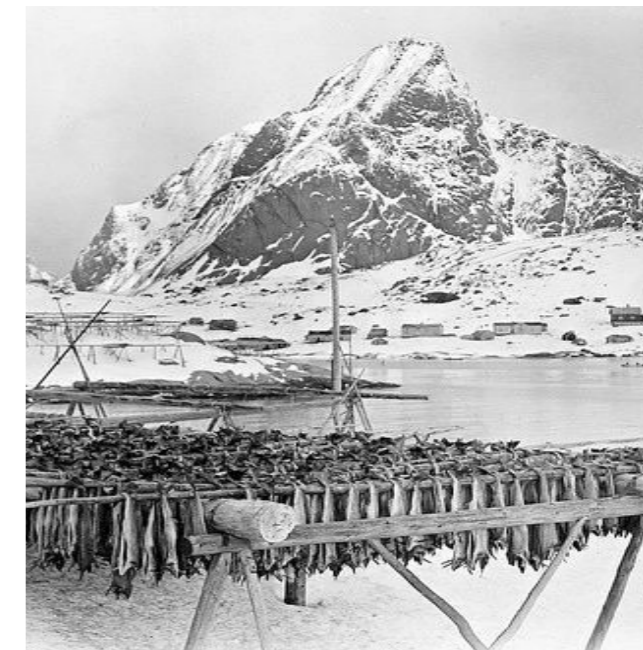
Fishervillage in peak season (Fig. 1)



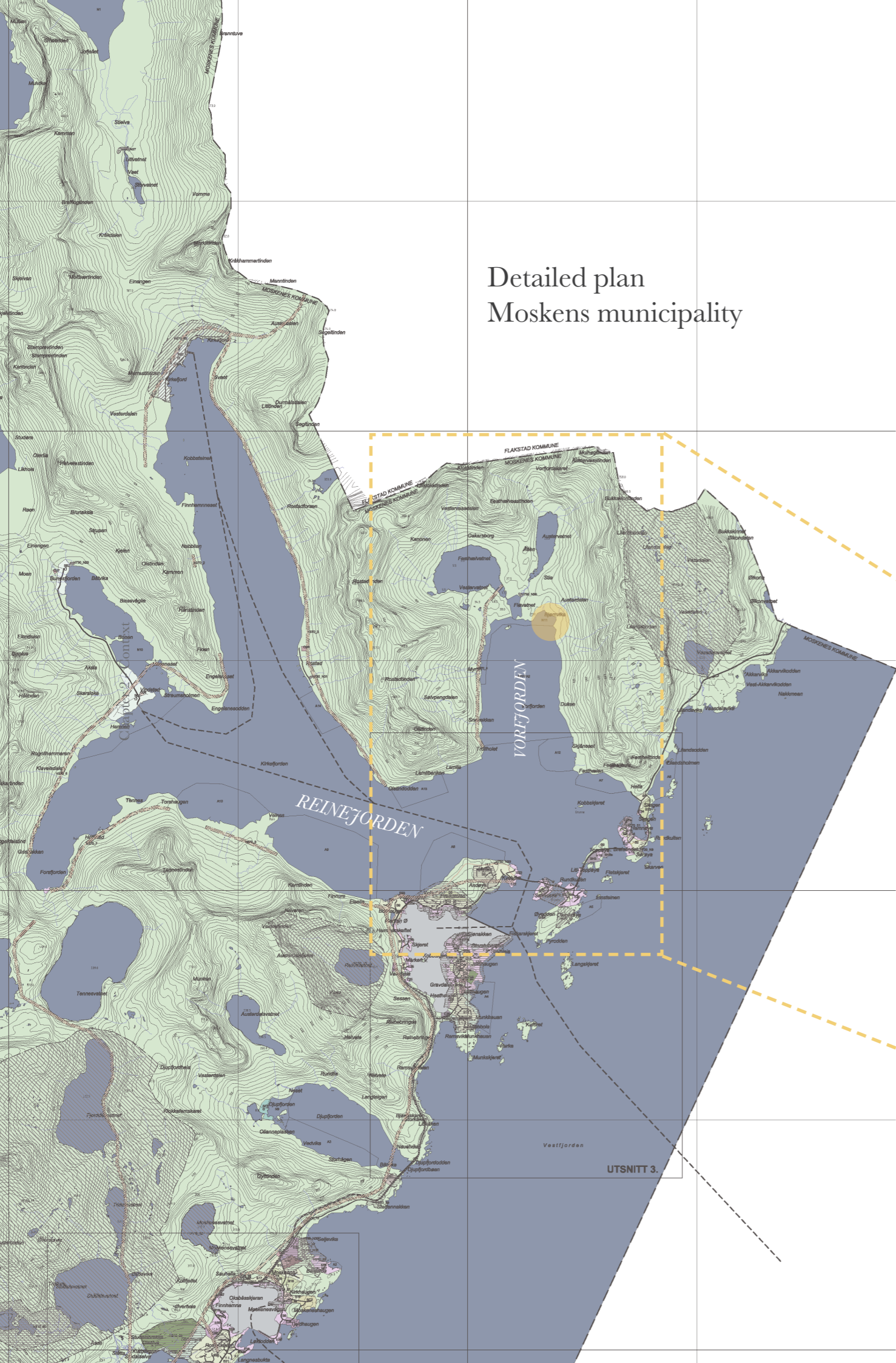
Painting by Kaare Espolin Johnsen (postcard bought at Lofoten)



Rorbu at Sakrisøya (Fig. 2)



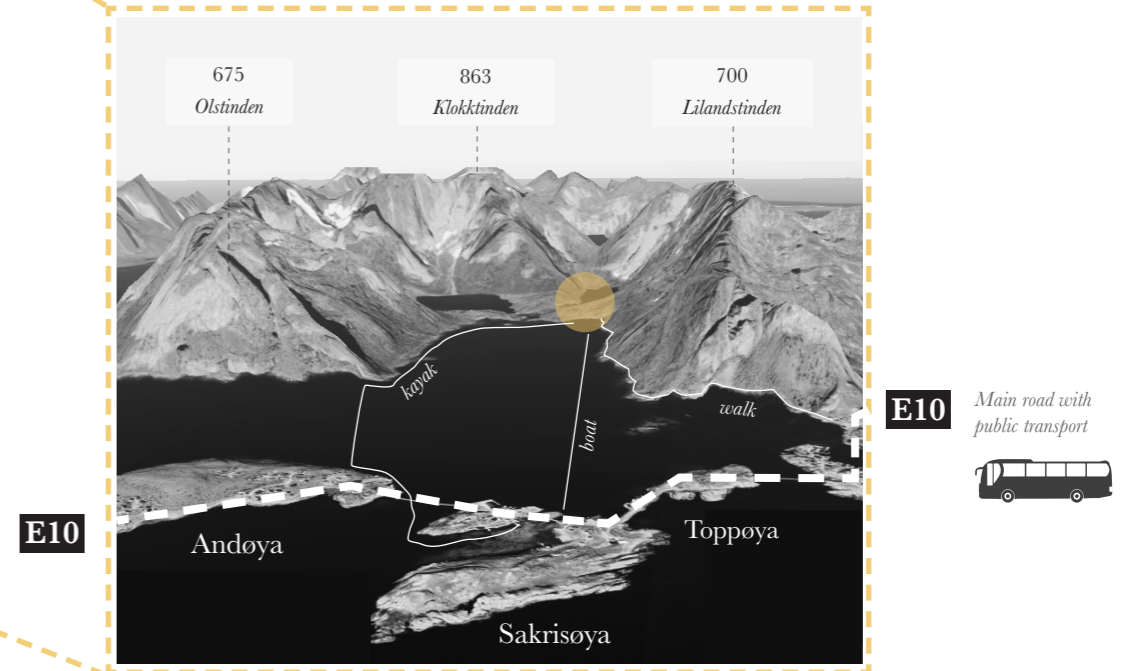
Fish drying on racks (Fig. 3)



Detailed plan Moskens municipality

The site - Vorfjorden

The site is located in the east end of Vorfjorden surrounded by the majestic mountain peaks. The peaks embrace the visitor and gives a big variety of outlooks. You can climb many of the peaks and closeness to both lakes and the ocean makes the site a great starting point for adventures. I have chosen to place the MCC-Centre in this fjord because it is frequently visited, both by local inhabitants, tourists and guided tours. The nearby tourist facilities in Reine and Sakrisøya are experiencing a high pressure from the increasing tourism and therefore is Vorfjorden a good place to exploit with new service facilities and accommodation. The area is also in need for developments that can strengthen the local community and not only focus on the tourist. There are no roads or public communications in the fjord, but it is easily accessible from both the sea and the land side. You can reach the site by foot or boat, in different sizes. Getting there is part of the experience and reinforce the feeling of the of the Centre being placed in the wilderness. The adventure centers at Sakrisøya can provide with gear rentals, courses and tours and in the future a local boat commute could be added from the island.



-  3km - 10 minutes by boat
-  4km - 50 minutes by kayak
-  3km - 30 minutes by foot



Rocky sections of banded gneiss



Low vegetation



Mountain stream



Puffin



Sea eagle



Stoat



Killer whale

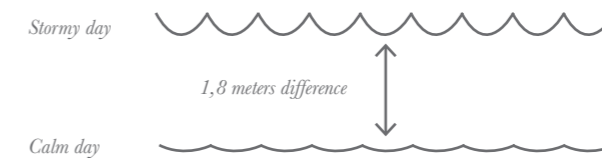
Environment and climate

Due to Lofoten's position north of the arctic circle, two spectacular natural phenomenon can be viewed on site. During wintertime the Nordic lights color the sky, while the midnight sun never let the darkness fall during the summer months. Thanks to the Gulf stream and close connection between the ocean and mountain tops a great biodiversity can be spotted on site. The nature is raw and you have to expect the unexpected, even if you are on land or out on a boat. One may suddenly come across wild animals such as killer whales, puffins, stoats, or see sea eagles flying right over your head. The clear Atlantic water makes also the wildlife under the surface more visible for us people to discover. The combination of the open, salty ocean with its smell of seaweed together with the snowy mountain tops is a rare and unique experience.

In Vorfjorden, the summers are short, cool, windy, and mostly cloudy and the winters are long, very cold, wet, extremely windy, and overcast. Over the course of the year, the temperature typically varies from -0°C to 14°C and is rarely below -4°C or above 19°C . Even though the location is north of the polar circle and on the same latitude as the large ice masses on Greenland, the gulf-stream prevent the temperature to drop drastically during wintertime. The Lofoten islands are actually one of the warmest areas in Norway.

The most popular time for general outdoor tourist activities peaks from mid July to mid August. This period is the most clear and less rainy with temperatures between 18°C to 27°C . Favourably the tourism peak and the energy production are coinciding. During summer, the sun can be a good source of energy. From May to August one can produce above 4,5 kWh energy per square meter and day. On the brightest day it could reach 5,7 kWh energy. This can be put in relation to one 40 W light-bulb using 1 kWh over a 25 hours period. During the darker period of the year other energy sources will be needed.

Regarding water temperature the variations are relatively sparse. Coolest average temperature is below 6°C and the warmest reaching only 12°C . Even if the long white, sandy beaches and Caribbean clear water tempts to a long bath the reality is more of a quick dip, but it sure is a refreshing experience. Thanks to the cool water temperatures and tuff climate the fish thrives and the fishes meat is thick and tasty. The sealevel can change damaticly a stormy day compared to a calm day. (Weather spark, 2020)



Climate summery - Light and shadow

Average figures

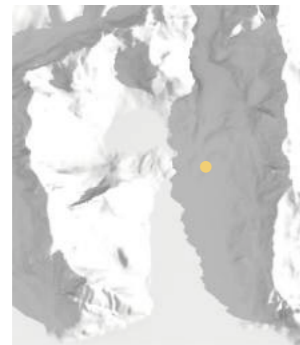
Temp:
13°C

Wind:
4,3 m/s

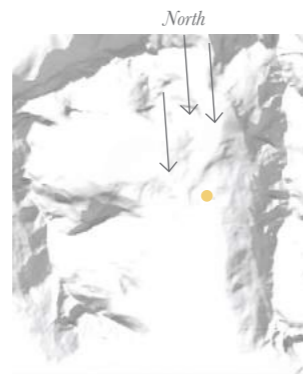
Precipitation:
0-25 mm

Day length:
24h

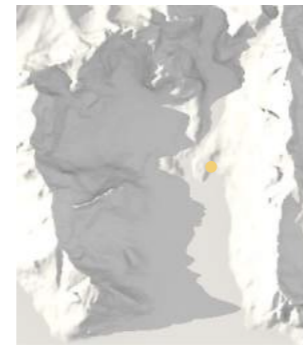
Summer



8:am



12:pm



8:pm

Spring/ Autumn

Temp:
4°C

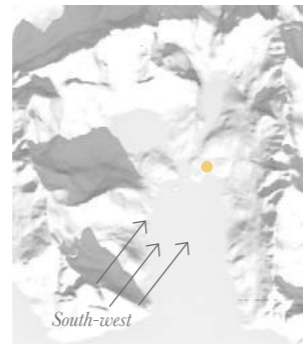
Wind (m/s):
Spring 5,1
Autumn 3,4

Precipitation (mm):
Spring 120-150
Autumn 25-120

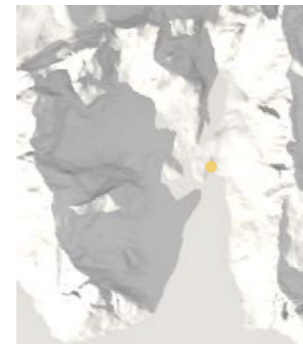
Day length:
14h



11:am



2:pm



5:pm

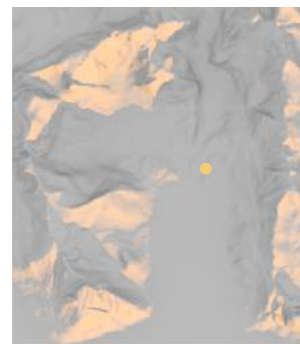
Winter

Temp:
-1°C

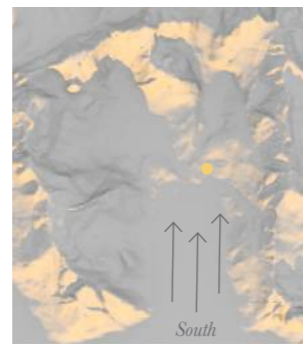
Wind:
4,6-6 m/s

Precipitation:
180-240 mm

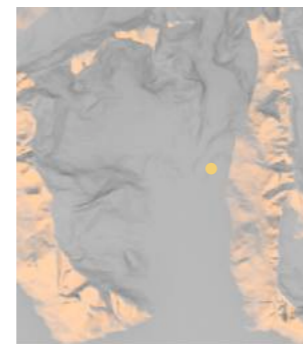
Day length:
4h



12:pm



2:pm

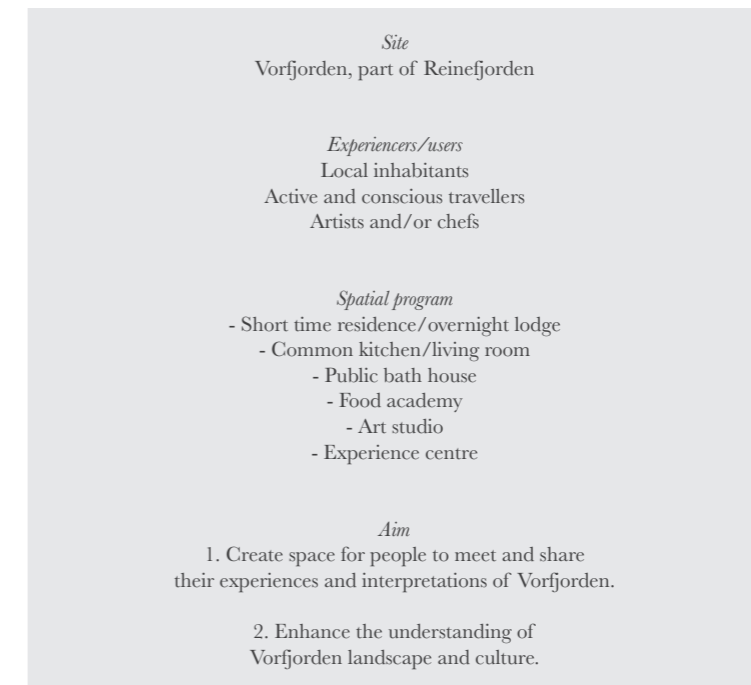


4:pm

● Most favourable placement in the fjord considering light conditions
Graphics - 3D model of the mountains in rhino
Data - Taken from 2019 Lekenes airport observation station

Program summery

The ambition is to form a Mountain Cabin Culture Centre that unite the two interests of tourist and local inhabitants. To be able to achieve this a new version of the traditional network of mountain cabins are combined with a culture centre that holds an “In residence”-program. The MCC-centre becomes more than just a regular overnight lodge in the nature for tourists, it also holds space for artists and chef’s to temporary live and work in collaboration with the local community. It invites local inhabitants to use the facilities for work-shops, lectures or leisure. The local community plays an important role in sharing stories and knowledge about the area. In conclusion, the centre creates a multi-sensorial experience and important encounter both with the landscape and the local community. Vorfjorden is already frequently visited by locals and this Centre will make the fjord accessible for more.





Strategies

Chapter 3

Program related to ecotourism

The five basic principles

1. *Respect the limitations of the destination*

Local energy sources ----- The basic needs



Local adventure supply agency and commute ----- Day visitors



3. *Make all the operators' activities environmentally sustainable*

Local trekking association ----- Overnight stays



4. *Contribute actively to nature and cultural conservation*

Local food producers ----- Chef in Residence



Local art community ----- Artist in Residence



5. *Promote knowledge and respect and the joy of discovery*

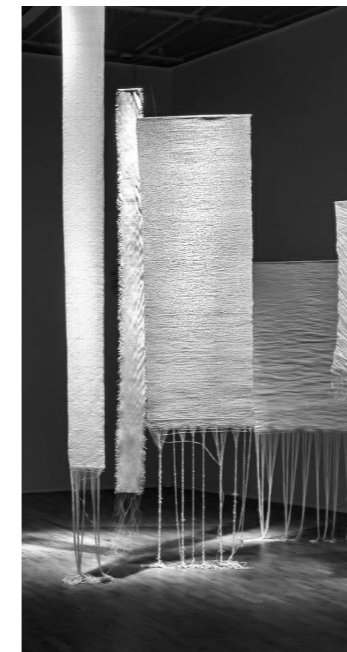
Local inhabitants ----- Meeting point



Graphics - Image traced collage by author

Program related to the landscape

The landscape context that Vorfjorden presents is a non-exploited area created by earth's evolution. The landscape has a strong characteristic and is hard to grasp. It becomes a juxtaposition between the vast and abstract landscape and the individual practices. By dividing the landscape into different smaller interpretations, in the human scale, it will be easier for an individual to be able to grasp the unique landscape. In the proposed centre, the individuals will be able to taste flavours of the landscape, watch the landscape through an artist eye, feel the landscape in the architecture and listen to the stories shared about the landscape. All together being in the landscape that brought them all together in the first place. The centre will encourage the individuals to explore the local specialities, develop skills and share the new concepts with the local community.



Interpretation of the ocean - Art installation



Physical model of Vorfjorden - Illustrating the vast and abstract landscape

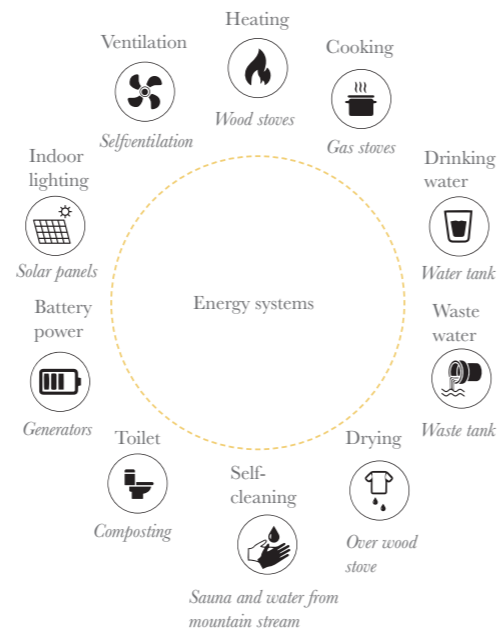
Spatial program

<i>Public facilities</i>	<i>Total 145 m²</i>
Reception + staff facilities	20 m ²
Experience centre	100 m ²
Bath house (shared, 12p)	25 m ²
<i>Workshop facilities</i>	<i>Total 80 m²</i>
Studio	40 m ²
Food Academy	40 m ²
<i>Service facilities</i>	<i>Total 70 m²</i>
Common kitchen/living room	50 m ²
Toilettes (four)	10 m ²
Woodshed	10 m ²
<i>Accommodation</i>	<i>Total 135 m²</i>
Short time residence (Cabin host, Artists, Chefs)	6x15 m ²
Overnight lodge (shared rooms)	45 m ² 16 beds

The location of the centre encourages to a more conscious way of living. The interaction between architecture and nature provides good conditions for exploration of nature and “being in the moment” in life - without electronic tools.

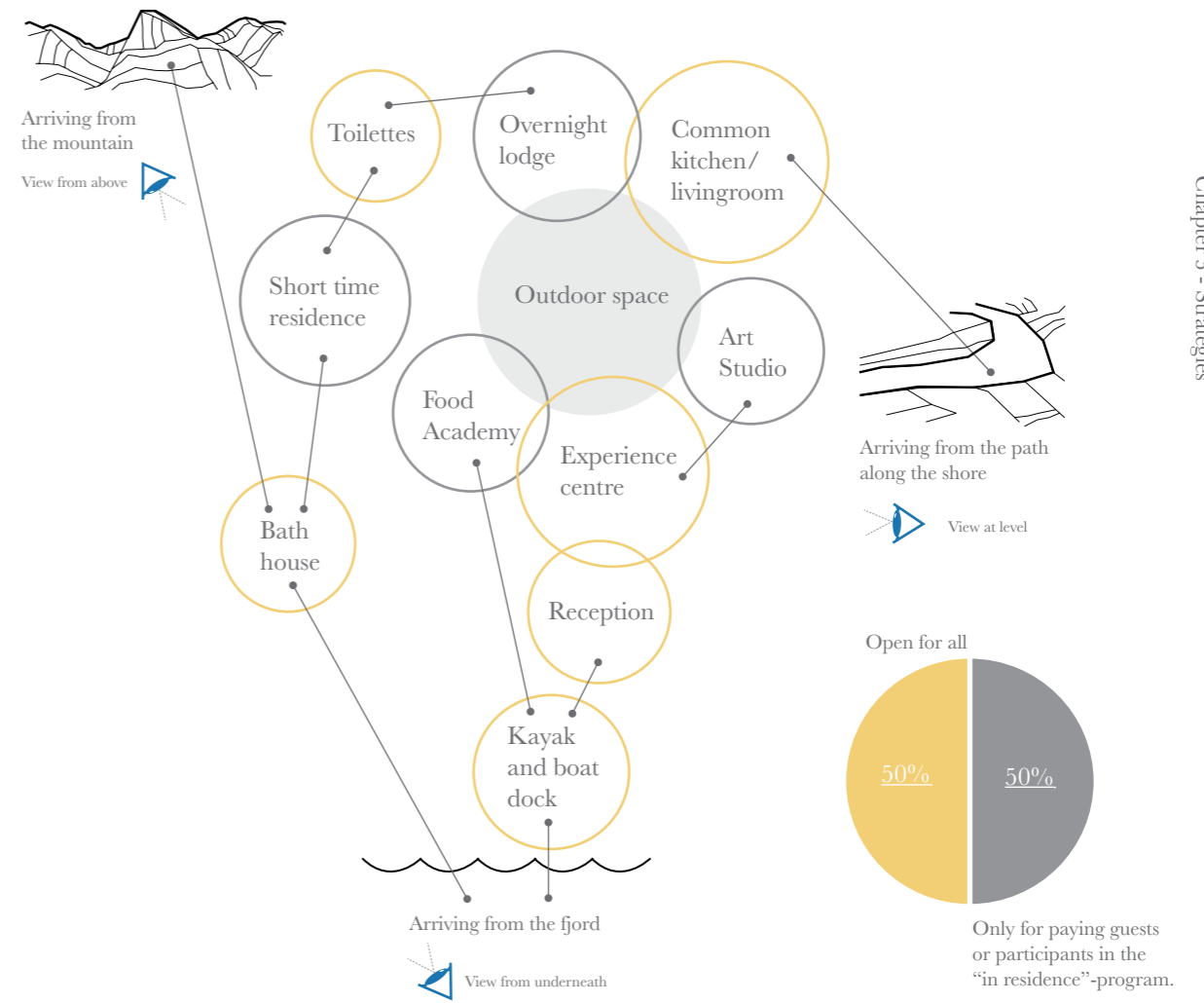
For example, the visitor can wash themselves in the sauna where the washing room is located directly above a mountain stream. The heater will be fuelled by wood, chopped up by the users themselves. The main buildings and sleeping cabins will be heated using wood as well.

Solar panels provide power for indoor lighting, but there will not be any main electricity supply, so no possibility to power electrical devices. Fresh water can be taken from the mountain stream and the food can be cooked on gas stoves in the kitchen. The toilettes are compostable and use no water. This is the common way to operate mountain cabins.



Spatial relationship

The scattered layout reflects the characteristic fisher villages. It also invites nature, creates more outlook possibilities for framing views and encourage the visitor to explore the landscape. The distribution of private and public facilities is equal, this to reduce the feeling of private occupation of the fjord.



















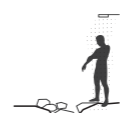












Get into the mind of the user

As a strategy to better understand potential needs and expectations from each user I have tried to get into their mindset. Through own experiences, interviews, online research and imagination I've done a compilation for each possible user. Examples of questions is: What kind of space does the user need? What kind of character should the space have to fit the desired experience? In which cases are the view important? Is the orientation of the space crucial? Is natural lighting need? When is it important to have direct connection with the water? What does the movement pattern look like? Where are they coming from and where are they heading to? Are there any rituals of importance?

<p>The local inhabitant</p> 	<ul style="list-style-type: none"> - Local knowledge - Experience their home through others eyes - Access to nature - Meeting point 	<ul style="list-style-type: none"> - Share knowledge - Feel included
<p>The explorer</p> 	<ul style="list-style-type: none"> - Want to create a great story - Coming from the wilderness - Seeking shelter, A base camp - Reload - Share wildlife adventure stories 	<ul style="list-style-type: none"> - Outdoor cooking spaces - Meet people
<p>The day visitor</p> 	<ul style="list-style-type: none"> - Families, people on guided tours - Exploring a new place - Learn about cultural heritage - Taking part of the exhibition - Rememberable architecture 	<ul style="list-style-type: none"> - Share the experinces with people back home - Meet people
<p>The artist</p> 	<ul style="list-style-type: none"> - Good light conditions - Roof windows towards the north - Work without interruptions - Work from the white canvas - Working together with co-workers - Exhibit the work 	<ul style="list-style-type: none"> - Go on inspirational walks - Meet people - Share knowledge - Reflect
<p>The chef</p> 	<ul style="list-style-type: none"> - Smell the salty water - Closeness to the water - Use fresh raw foods - Good connections to local producers - Go on inspirational study trips - Diving for seafood 	<ul style="list-style-type: none"> - Working together with co-workers - Share the food - Meet people - Share knowledge - Reflect

User scenarios – A day at the centre

In the table below you find examples on how a day in each user's life could look like when visiting the MCC-Centre. Notice that sometimes during the day the user's activities collide and spontaneous meetings will occur.

Day visit	Local inhabitant	 Arrive with own boat or kayak	 Participates in art or food workshop	 Enjoy the sauna	 Coffebreak before heading home	 Leave with own boat or kayak
	Families	 Arrive by foot along the fjord	 Take warm drink in the common kitchen	 Visit the temporary exhibition	 Visit the nearby lakes	 Leave with local boat
	Guided tour	 Arrive with kayak explore the wildlife on the way	 Enjoy lunch in the courtyard	 Explore the lakes and ocean	 Meet up for a coffee on the sun stairs	 Go back in kayaks
1-2 days	Explorers	 Arrive by foot from the mountain	 Get cleaned after the long hike	 Enjoy the sauna	 Chopping wood for the fire place	 Share stories with others in the living room
	1-2 months	Chef	 Visit local fishery	 Uses nature for inspiration	 Prepare food in the kitchen	 Share their work in the experience area
Artist		 Arrive with local boat transport	 Go on inspirational walks	 Exhibit the work in the experience area	 Cook in the common kitchen	 Meet new people in the living room



Case studies

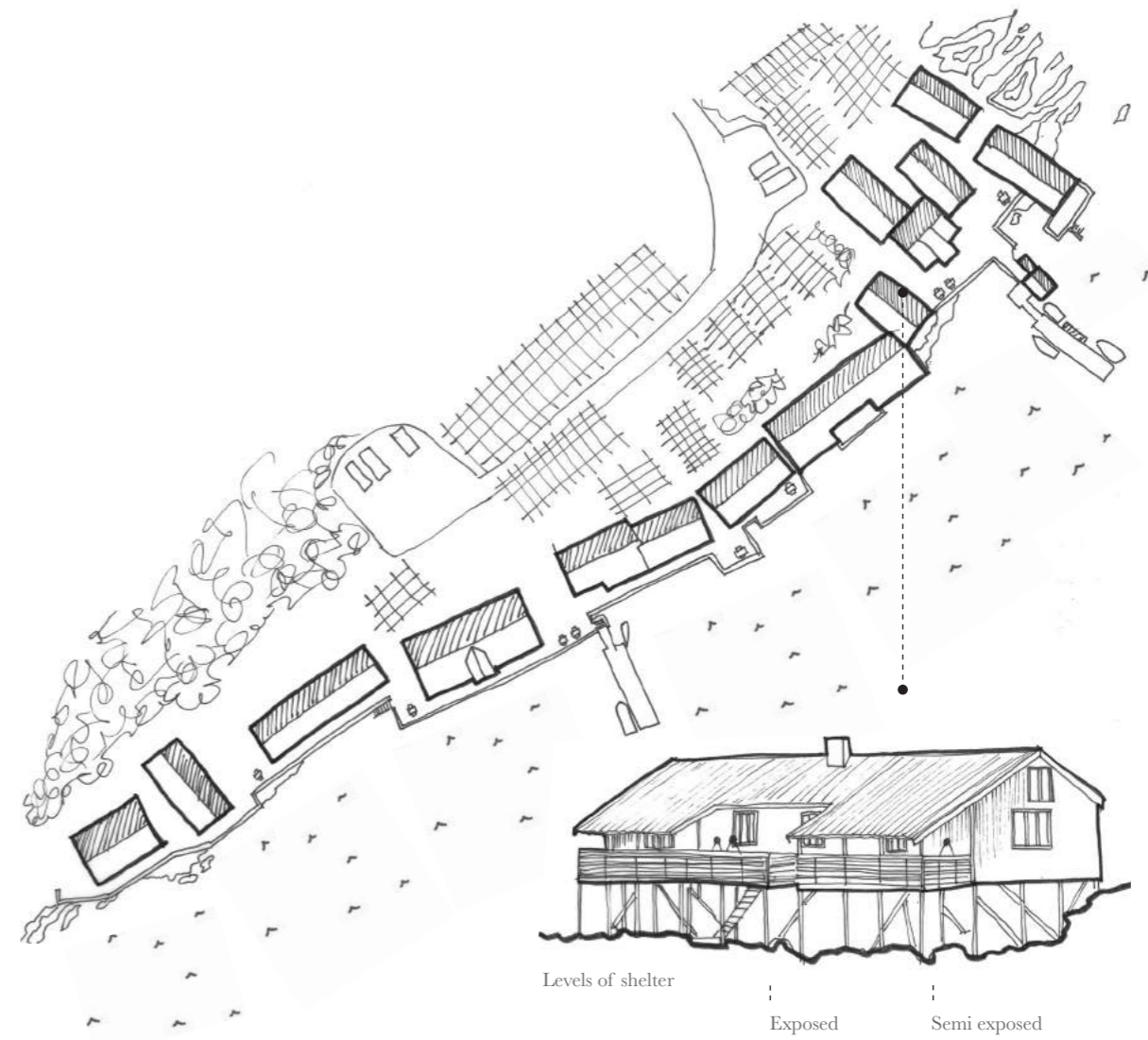
Chapter 4



Local context - Sakrisøya

The old fisher village on Sakrisøya have been transformed into a tourist attraction point with both accommodation, activities and traditional foods. The island is situated opposite Vorfjorden.

One can see how the built structure takes a huge leap out in the water, but the generous distance to the water reveals that stormy weather and high tide is common. The buildings follow the shore and are connected with a long deck on the water side. At some places the roof continues and creates sheltered outdoor spaces. From the deck several gangways meet the water and creates a direct connection to the water.

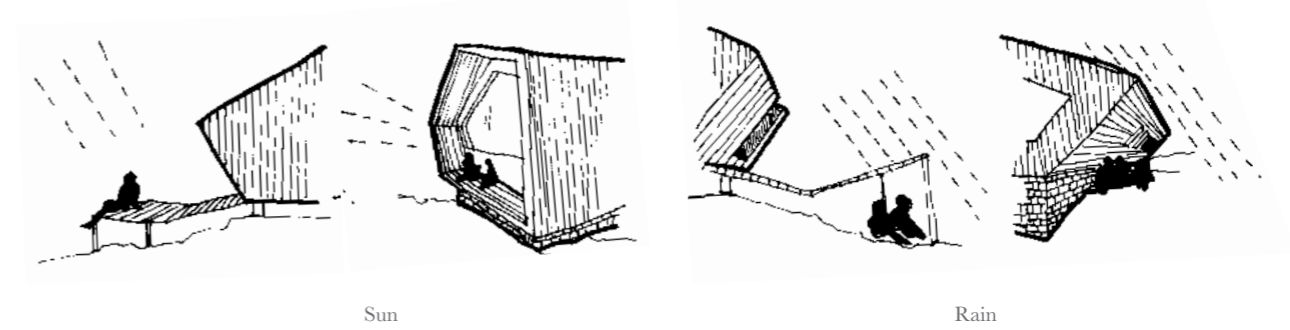
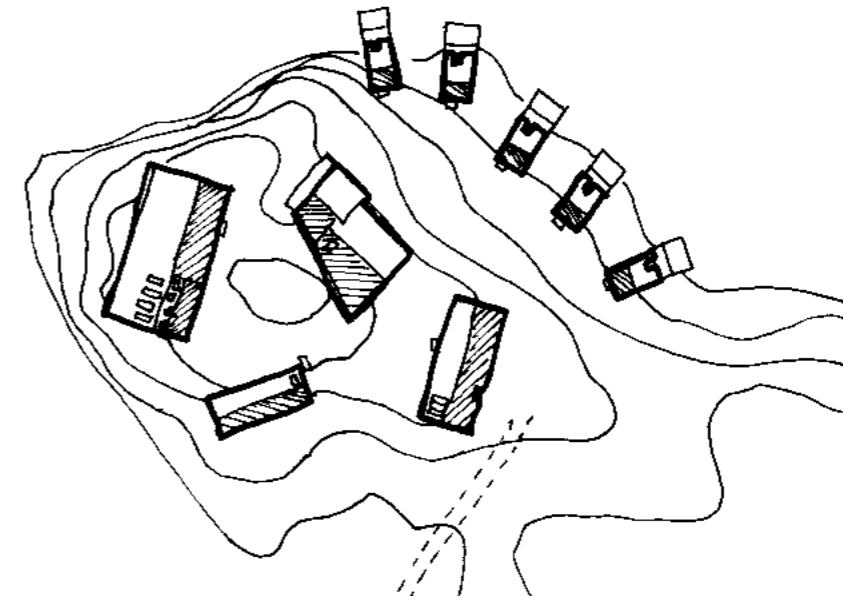




Trekking association - Tungestolen

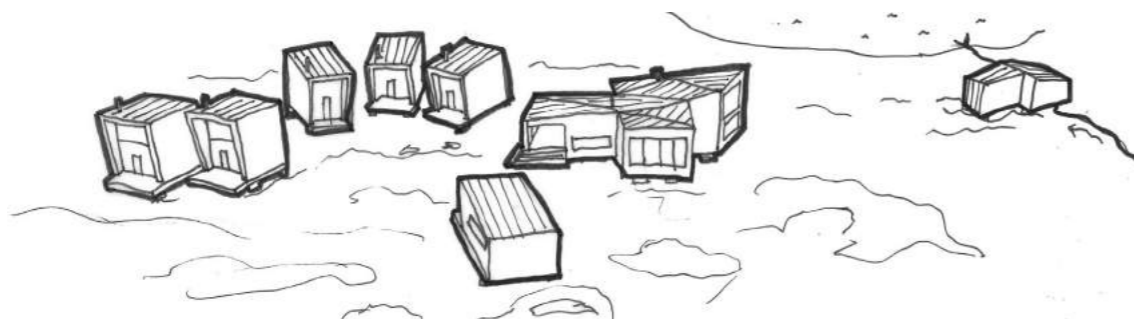
by Snohetta

The courtyard is framed by three buildings, standing closely together to create an intimate space in between them. While the view from the cabins is impressive, the yard is more introverted, encouraging dialogue and interaction. The courtyard is a very important part of the tourist association's cabins, creating an extended living room. The buildings shapes create sheltered outdoor spaces where the visitor can enjoy all the stages of the weather



Sun

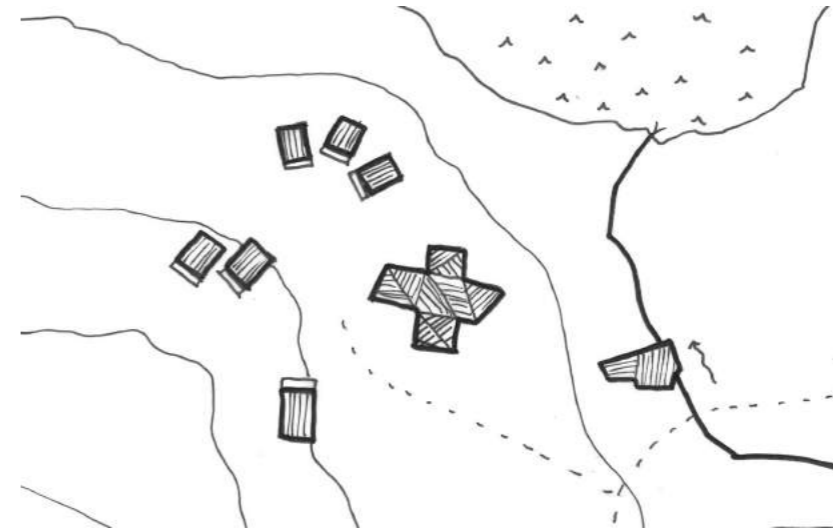
Rain



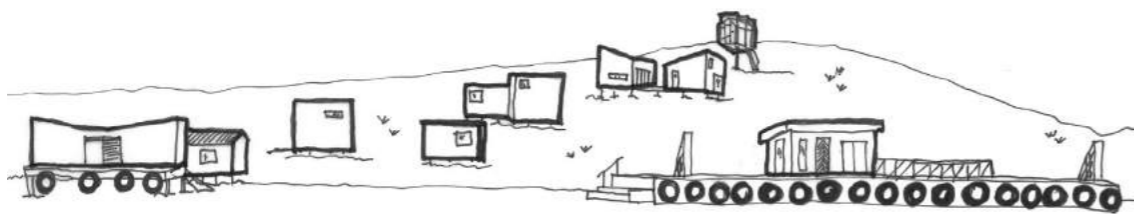
Trekking association - Skåpet

by *KOKO architects*

Self-service mountain lodges. The group of buildings includes a main building, sleeping cabins, a toilet with a storage room and a sauna. All buildings are together framing a yard, except for the sauna that is located on a close by mountain stream. The sauna is oriented with a view over the lake and the outdoor shower is located directly above the mountain stream. The exterior finishes on the lodges are of rolled zinc, which resists the wind and snow and does not require maintenance for decades. All of the buildings have a wall of glass with panoramic views of the surrounding picturesque landscape.



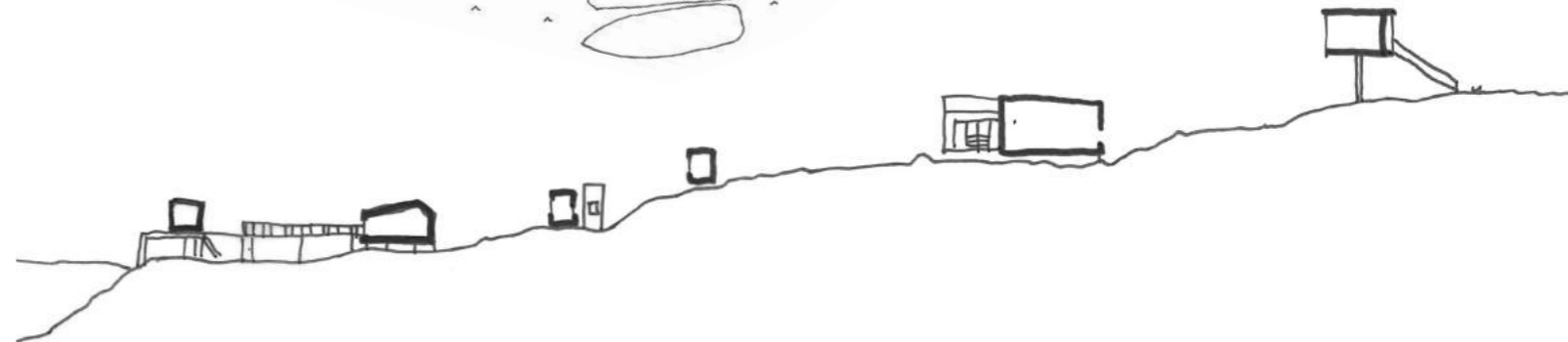
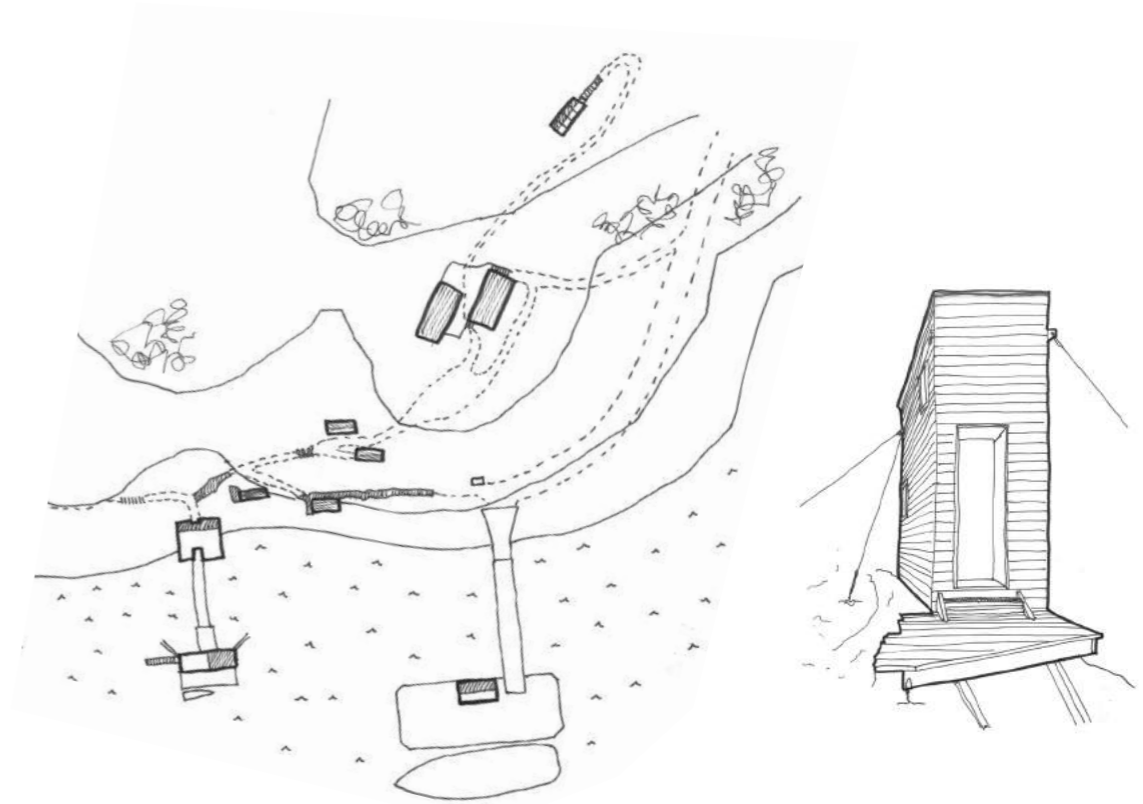
Outdoor shower above
mountain stream



In residence - Fordypningsrommet

by TYIN Tegnestue + Rintala Eggertsson Architects

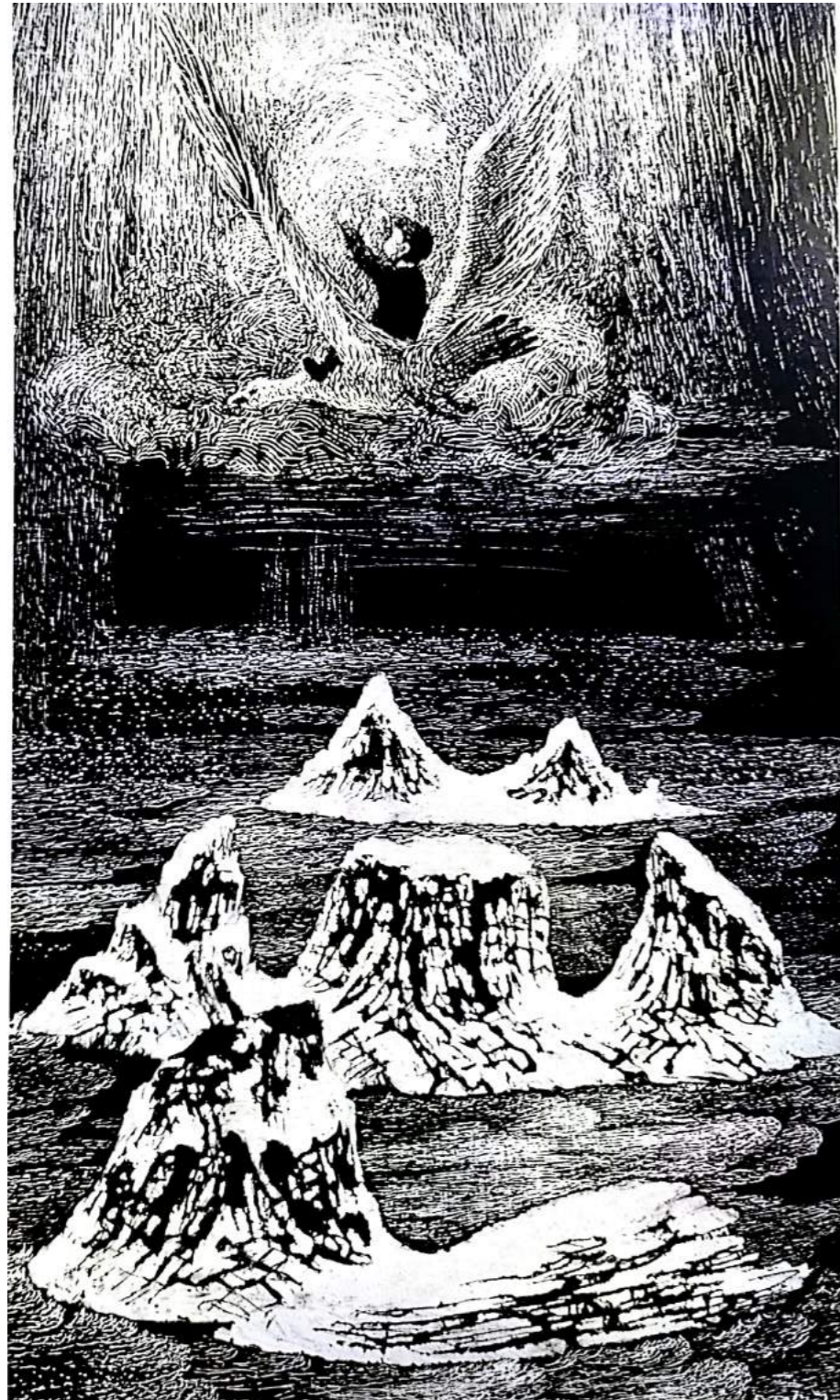
A ten-cabin hideaway retreat on the small island of Fleinvær. The cluster of buildings serves different functions such as sleeping, eating, hangout, sauna and watch tower. This is an artist residency that musicians can rent for limited period of time and work on their next master piece. The layout is scattered and the buildings climb the height contours all the way from the shoreline up to the highest point.





Design process

Chapter 5



Design strategy

To be able to interpret the landscape through architecture I have developed a design strategy that maps the identity of the place. Parameters such as figural motifs, spatial experience, views, its materials and details, its formal language, the specific activities and the sensations it promotes will together form the basis for the final proposal.

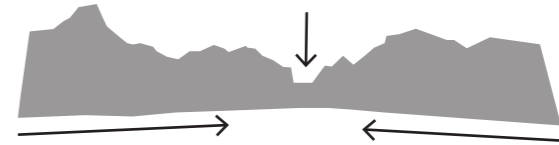
The landscape
- *conceptual inspiration*



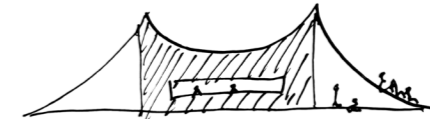
Figural motifs
- *giving an overall shape*



Spatial experience
- *pulled into the distance*



Functional space
- *program with activities*



Inviting the landscape
- *views of the landscape*

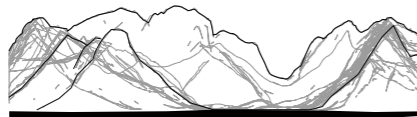


Materiality
- *durable material connected to site*



Mapping the landscape

The landscape has been analysed through different dimensions. Drawings in 2D, digital model in 3D and in a physical model. Besides detecting the most spectacular views I have also discovered spatial sequences within the fjord. The fjord pulls you into the distance, into something narrow. The mountain peaks make walls hovering over you, enclosing you. Your direct sight has only one focal point and the landscape is very directed and determinate in that sense, it totally absorbs your focus. That surge and pull into the vastness is a characteristic I will take in consideration when designing the spatial experience of the proposed architecture. Being directed to a certain point, despite the vast surrounding landscape.



Elevation
- layered mountains adding depth

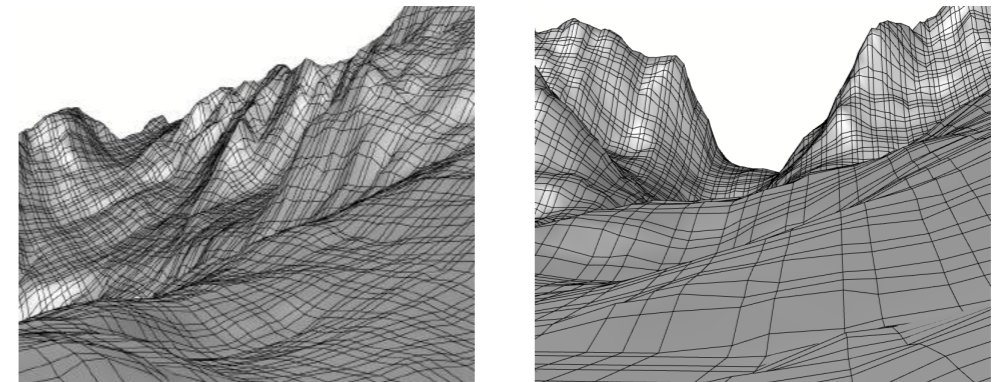
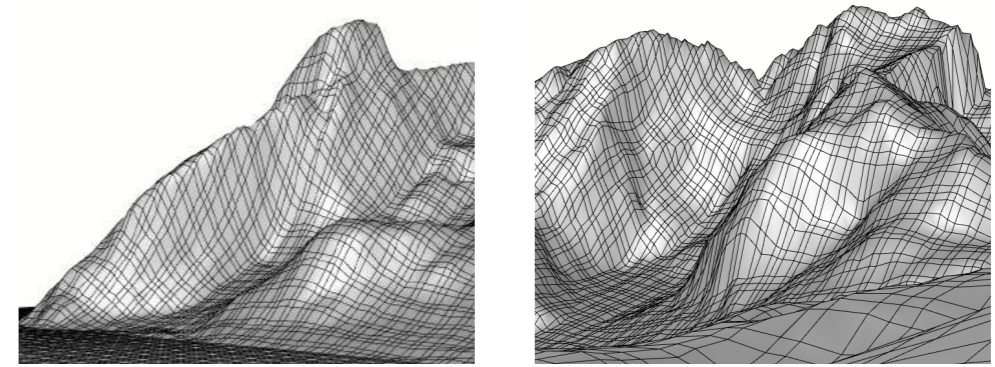


Section
- mountains hovering over and encloses



Plan
- pockets of space formed by the mountain range

2D representation of the fjord



Digital 3D representation of the fjord

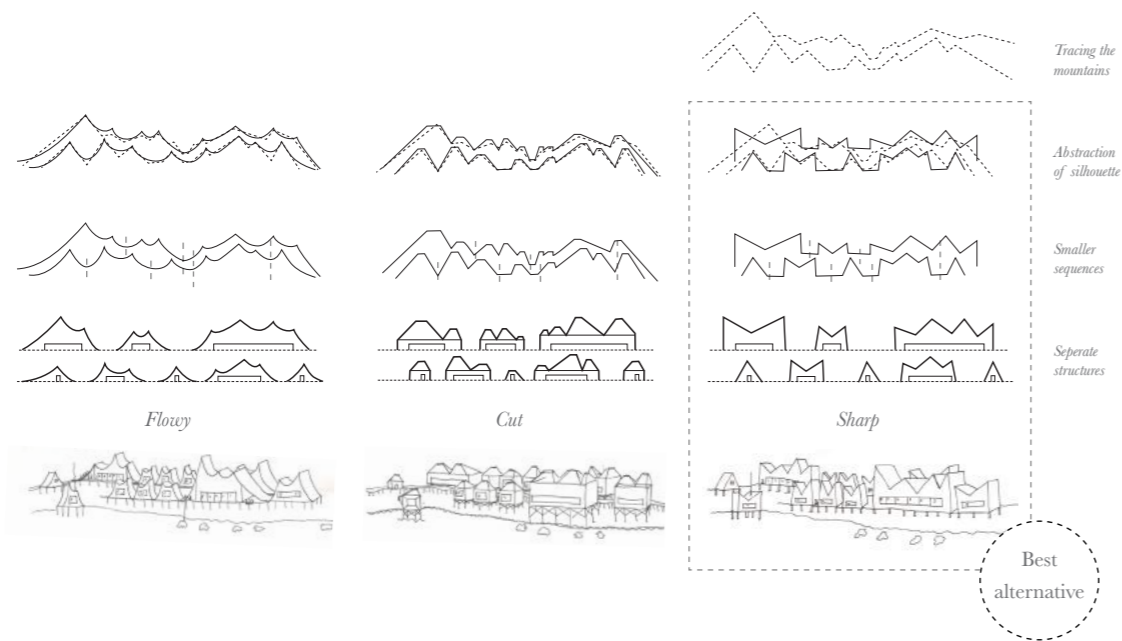


Physical representation of the fjord

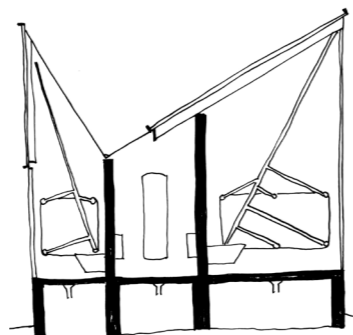
Pulled into the distance

Figural motifs'

Using the mountain silhouette as the base for the overall shape of the MCC-Centre creates a representation or interpretation - in the shape of a building. The aim is to use the mountain contours in a way that transcends being just figurative and enhance the sense of steepness, the sense of raw nature and the feeling of getting pulled towards a center.



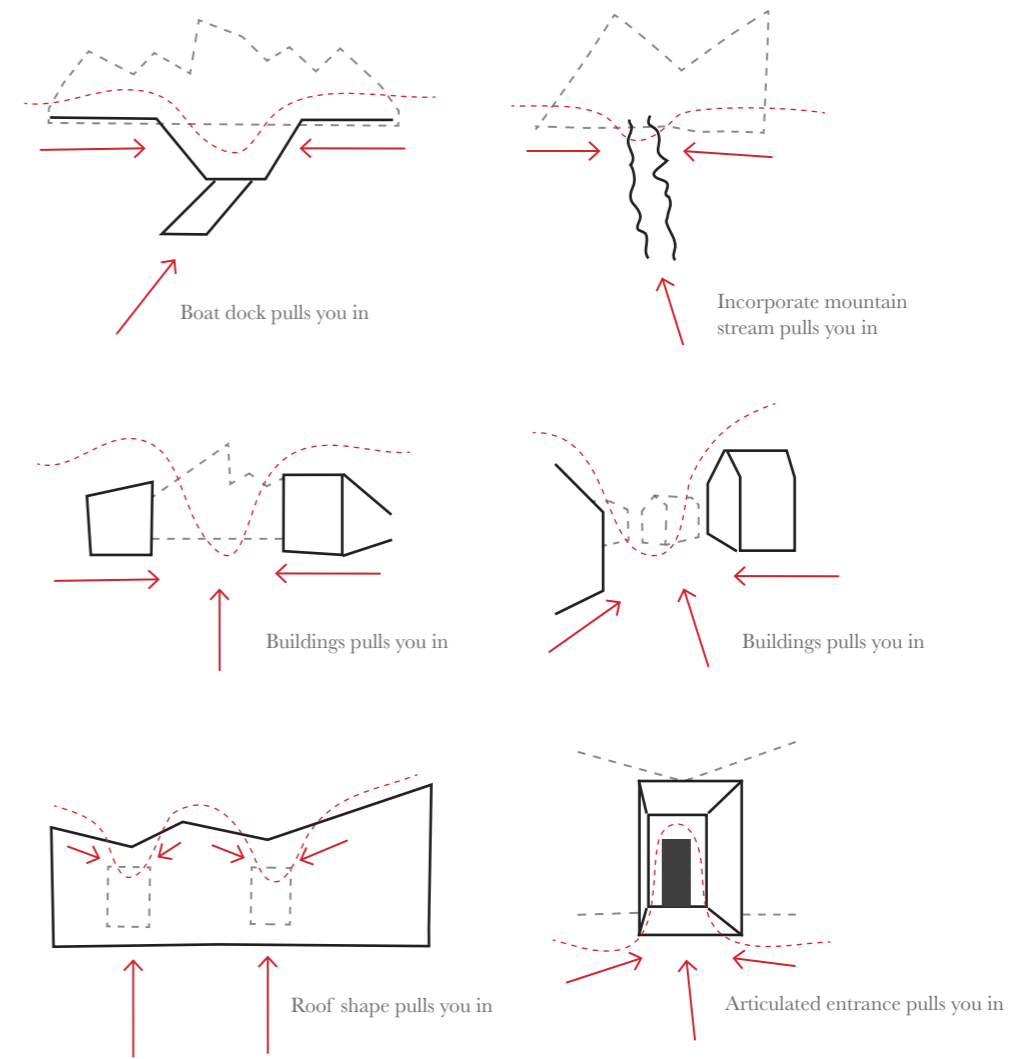
Service building in Akkarvikodden, Reine.
Manthey Kula Architects, 2009
It is one of the points on National Tourist Route Lofoten.



Section showing the thin metal sheet walls and the glass roof. The building relates to the sky, not to the terrain.

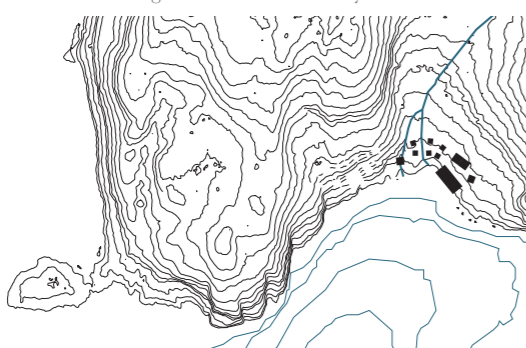
Spatial experience

Like I mentioned in the paragraph "Mapping the landscape", the fjord pulls you into the distance. Being directed to a certain point, despite the vast surrounding landscape, becomes an important design strategy to lead the visitor to the MCC-Centre and also within it. I have designed spatial sequences that use this approach of a directed pull, to help guide and highlight the qualities within the landscape.



Explored placement on site

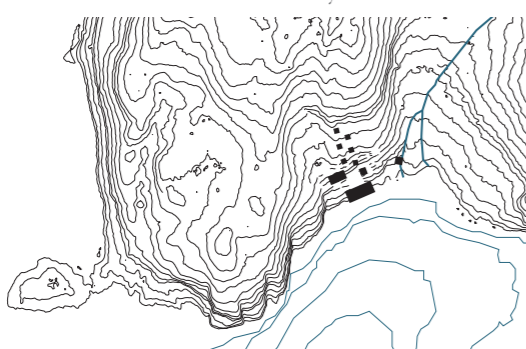
Following the contours in the bay



- + Entrance towards the water
- + Possible to access with boat
- + Great orientation of views
- + Great sun conditions day/evening
- + Direct connection to fresh water
- + Subordinates the fjord
- + Semi sheltered in the bay

- Lack of morning sun because of the mountains in the east

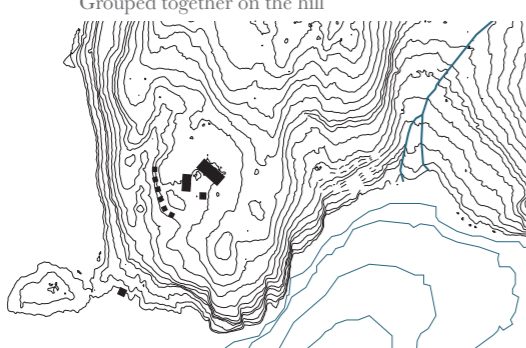
Across the contours in the bay



- + Entrance towards the water
- + Possible to access with boat
- + Close to fresh water
- + Subordinates the fjord
- + Semi sheltered in the bay

- No evening sun
- Lack of good views

Grouped together on the hill



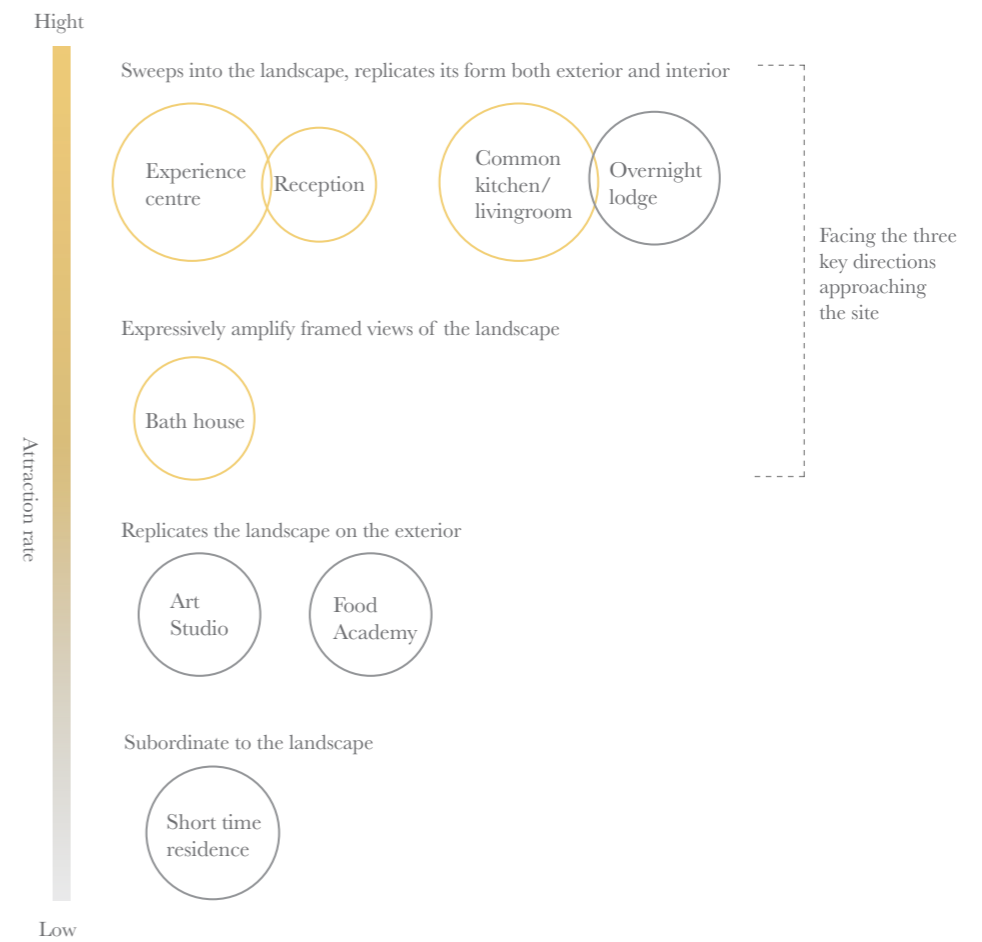
- + Great view of the fjord
- + Great sun conditions all day

- Far from water
- No access with boat (important deliveries)
- Far from fresh water
- Very exposed on the hill
- Occupation of the fjord

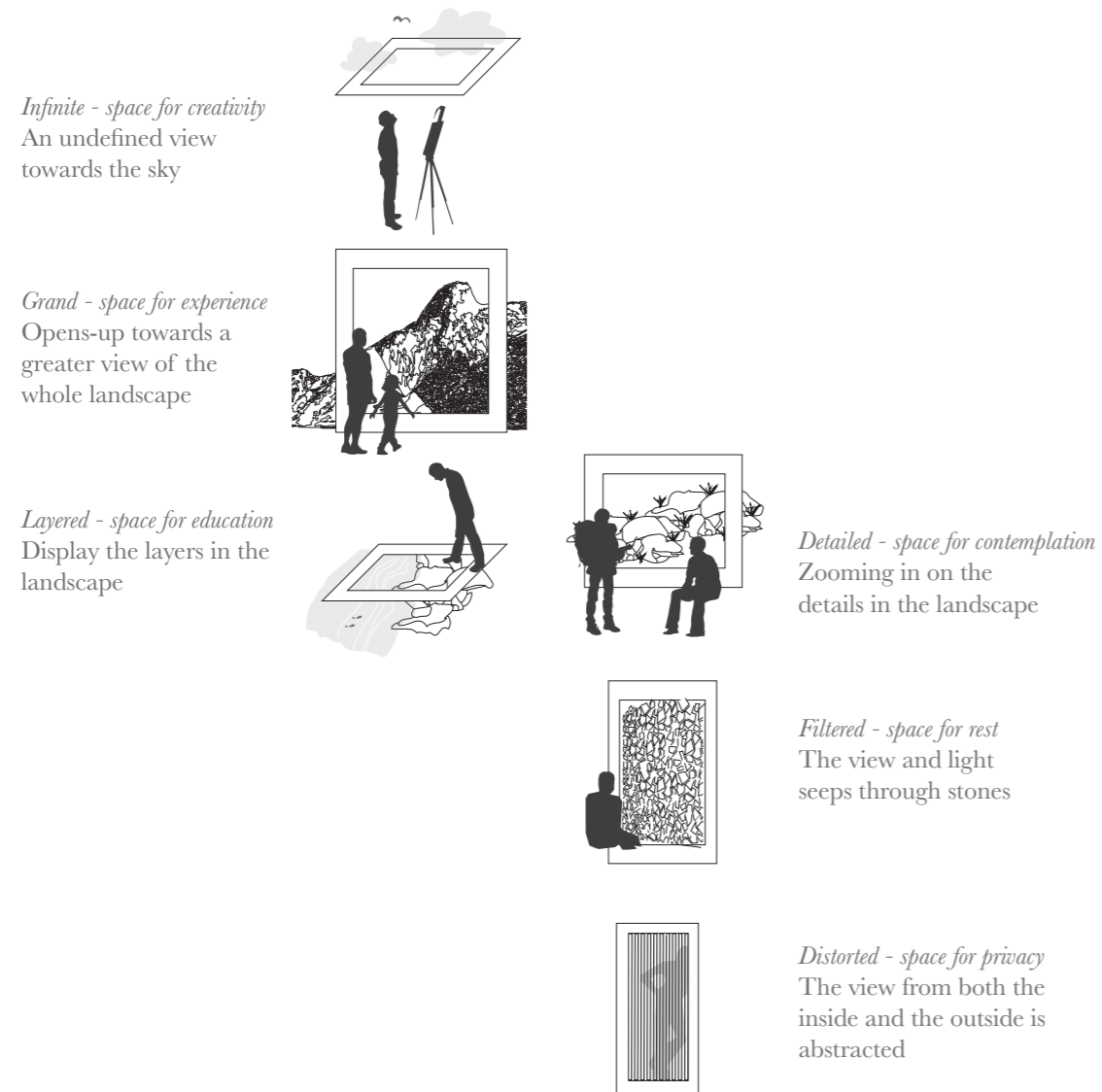
Best alternative

Variation in design expressions

The design is related to the site's context and has a desire to offer an architecture that provides a distinct identity. As well as the landscape that attracts to a varying degree, likewise, will the buildings. The variation in design will help orientation throughout the MCC-Centre. Buildings containing private activities like the sleeping cabins will have a sparse expression and a low attraction rate, compared to the public buildings that wants to be found and explored by people.

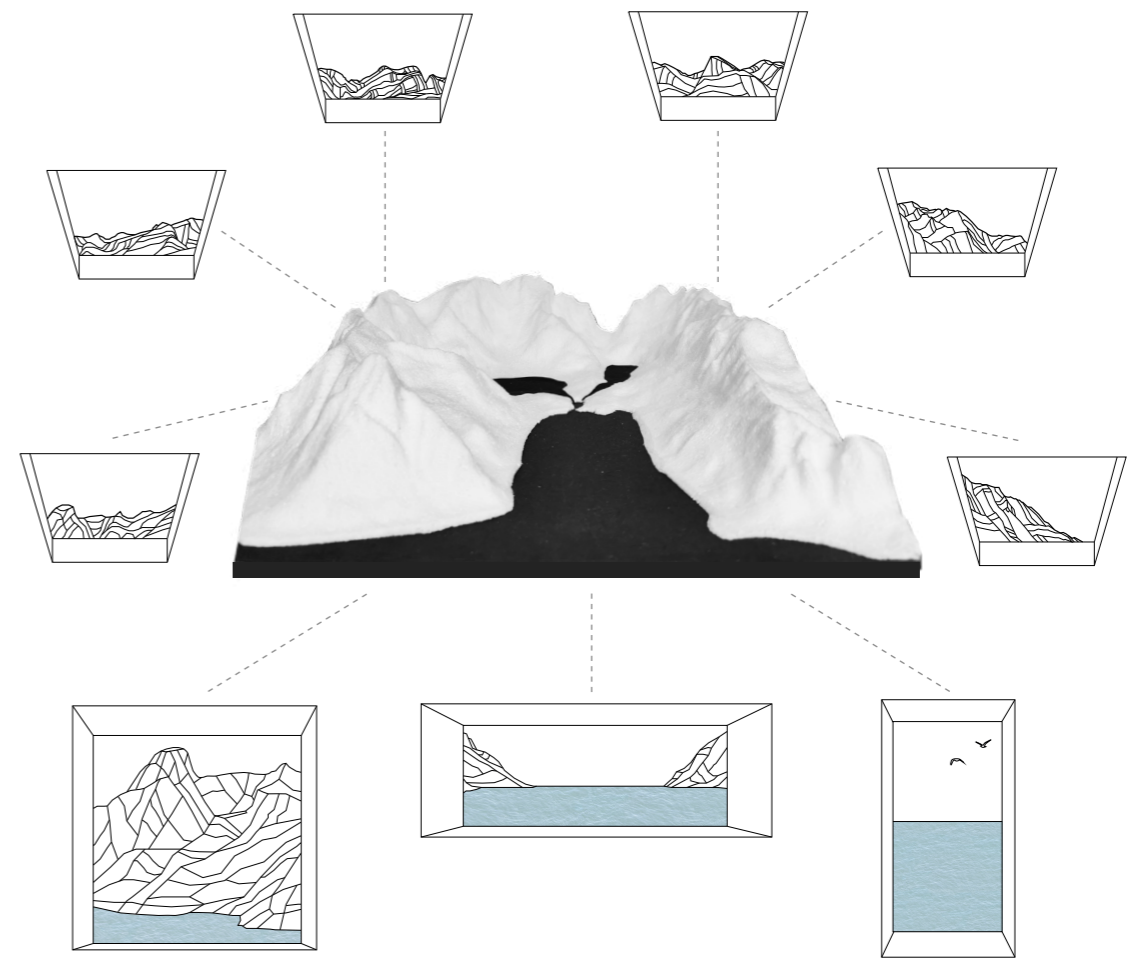


A range of views in relation to activities



Views to frame

The placement and orientation of the MCC-centre depends on which views that are most characteristic for Vorfjorden. Down bellow you find some examples of views that will be framed.

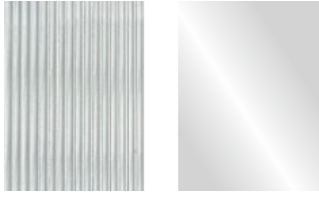


Materiality

Exterior


The material palette for the exterior is based on building material used traditionally in the nearby environment and also what could be found on site. Depending on the activity, the building will get a specific character on the exterior. The overall colour concept is to harmonize with the surrounding colours in nature.

Openings




Corrugated glas *Normal glas*

The building materials are shipped with boats to the construction site.




Details



Tar stained wood *Thick metal sheets* *Stone bench* *Stone steps*

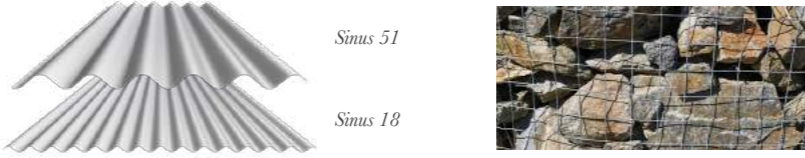
The wood is used on the places closest to the body. Where you can sit like niches, deck and stairs. The metal sheets are used as structural frames for entrances and sit-niches. It is also used for framing and protect window openings. Both coloured dark brown.

Roof



Band-folded sheet - coloured dark brown *Gabion*


Walls



Sinus 51 *Sinus 18* *Gabion*

Sinus corrugated sheet - natural aluzink

Foundation




Plinth-course *Gabion*

1. Reflects the traditional building material like wooden facade and plinth-course foundation but with a contemporary look and more durable materials that do not need as much maintenance

2. Reflects the surrounding environment and uses material found on site. The stones are extracted from blasting of tunnels from road constructions. The stones are put together into a gabion cage and used as facade cladding and foundation.

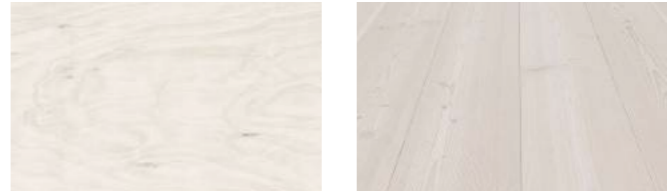
Interior

The materiality is related to the site's context and the desire is to offer an interior that provides a distinct identity - engaging and involving the users.



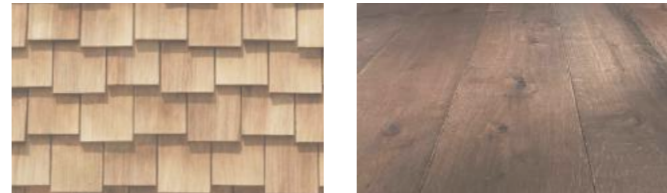
Natural Plywood *Rubber flooring*

Common kitchen/living room
Functional
All-around



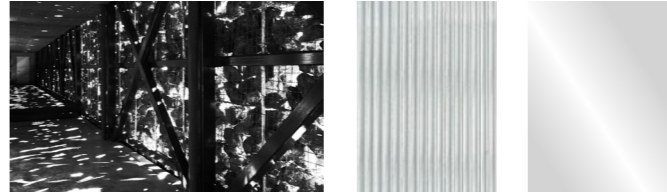
White stained Plywood *White stained Douglas fir*

Exhibition/studio
Sparse
"White canvas"



Wooden shingles *Dark brown stained Douglas fir*

Cabins/lodge/sauna
Tactile
Warm

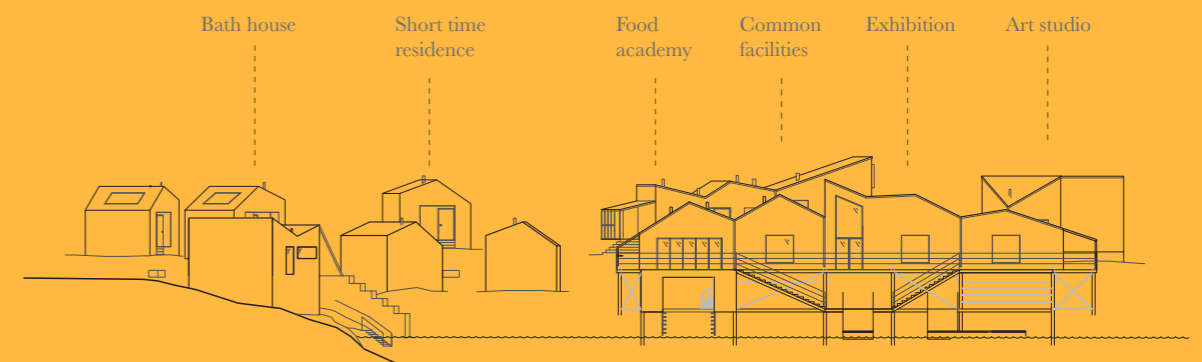


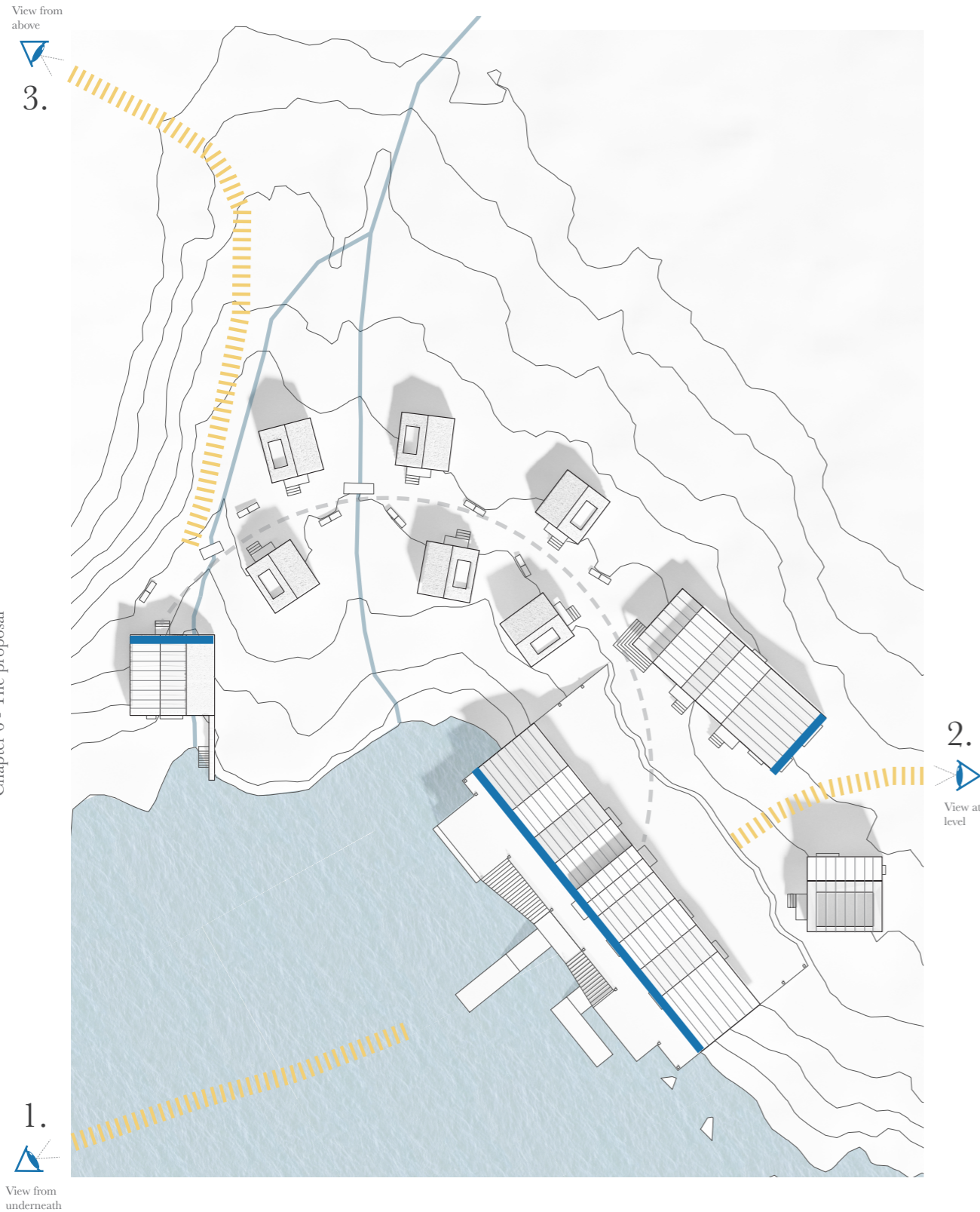
Light and shadow



The proposal

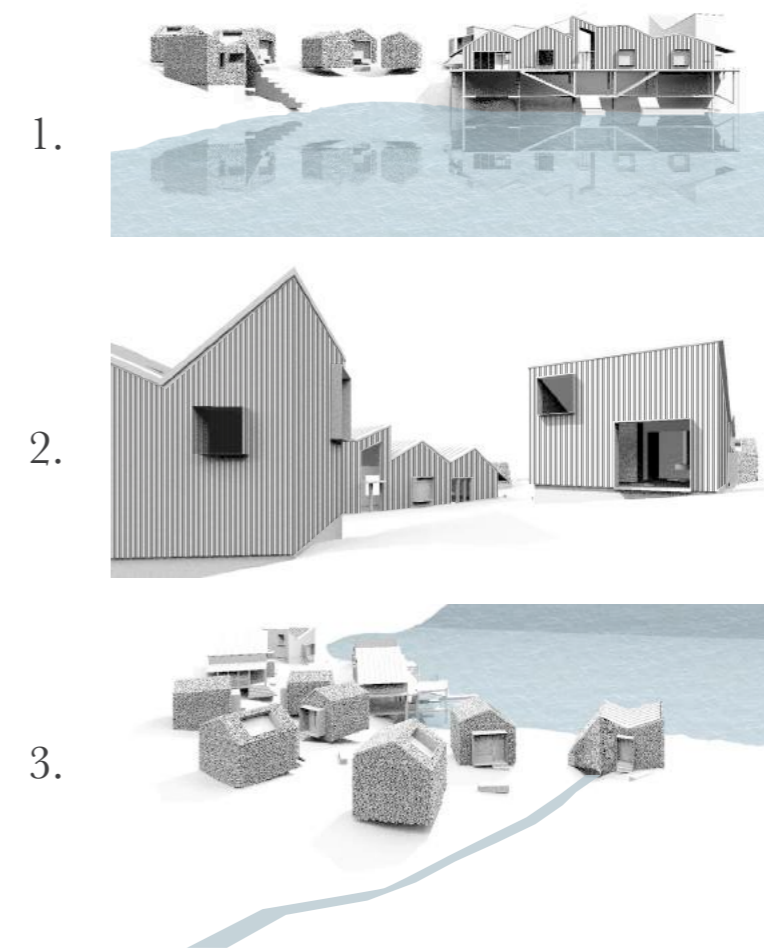
Chapter 6





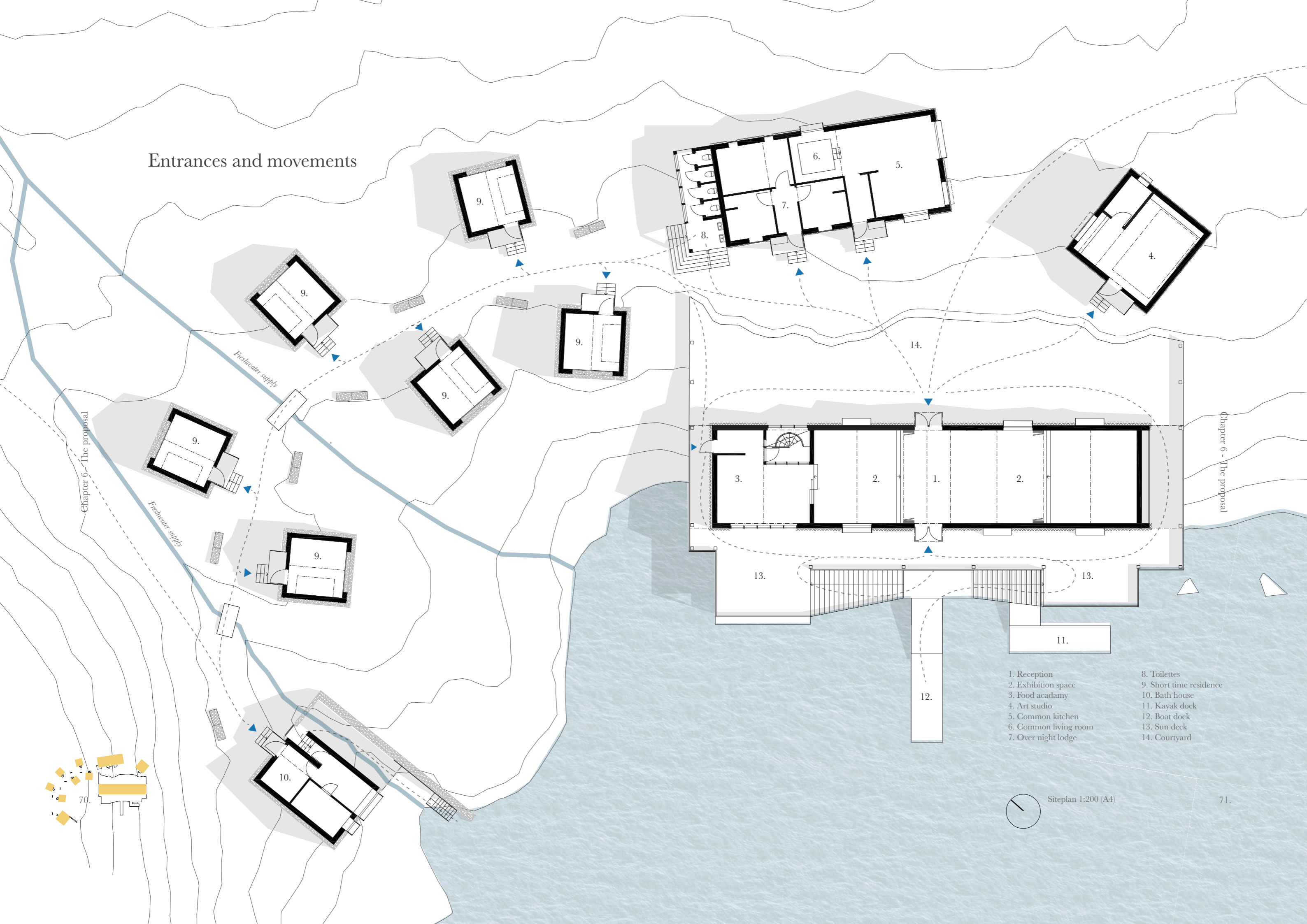
Approaching the site

The MCC-Centre follows the shore of a bay, located in the end of the fjord and cross over two freshwater mountain streams. Two buildings reach out and touches the water. There is no access to roads and getting there is part of the experience. You walk by foot, you kayak, or you take the local boat, so the depth in the bay is crucial to make it possible for deliveries. The visitor approaches the complex from three key directions. One from a path along the shore, one from the ocean and lastly one coming from the mountains.





Entrances and movements



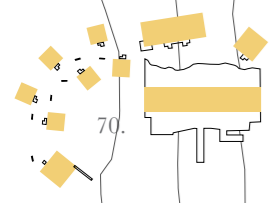
Chapter 6 - The proposal

Chapter 6 - The proposal

Freshwater supply

Freshwater supply

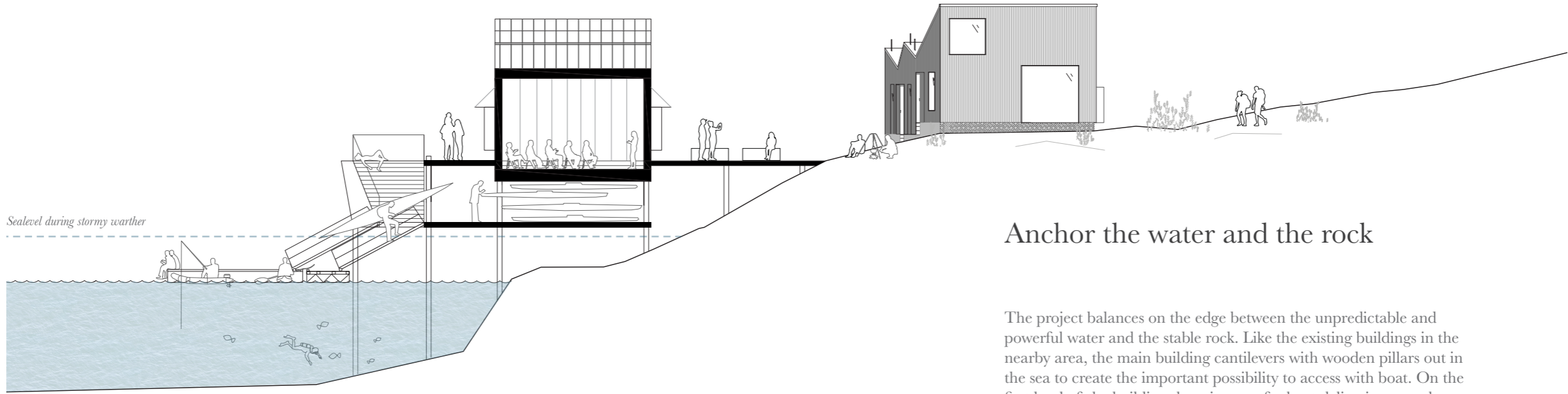
- 1. Reception
- 2. Exhibition space
- 3. Food acadamy
- 4. Art studio
- 5. Common kitchen
- 6. Common living room
- 7. Over night lodge
- 8. Toiletes
- 9. Short time residence
- 10. Bath house
- 11. Kayak dock
- 12. Boat dock
- 13. Sun deck
- 14. Courtyard



70.

Siteplan 1:200 (A4)

71.



Anchor the water and the rock

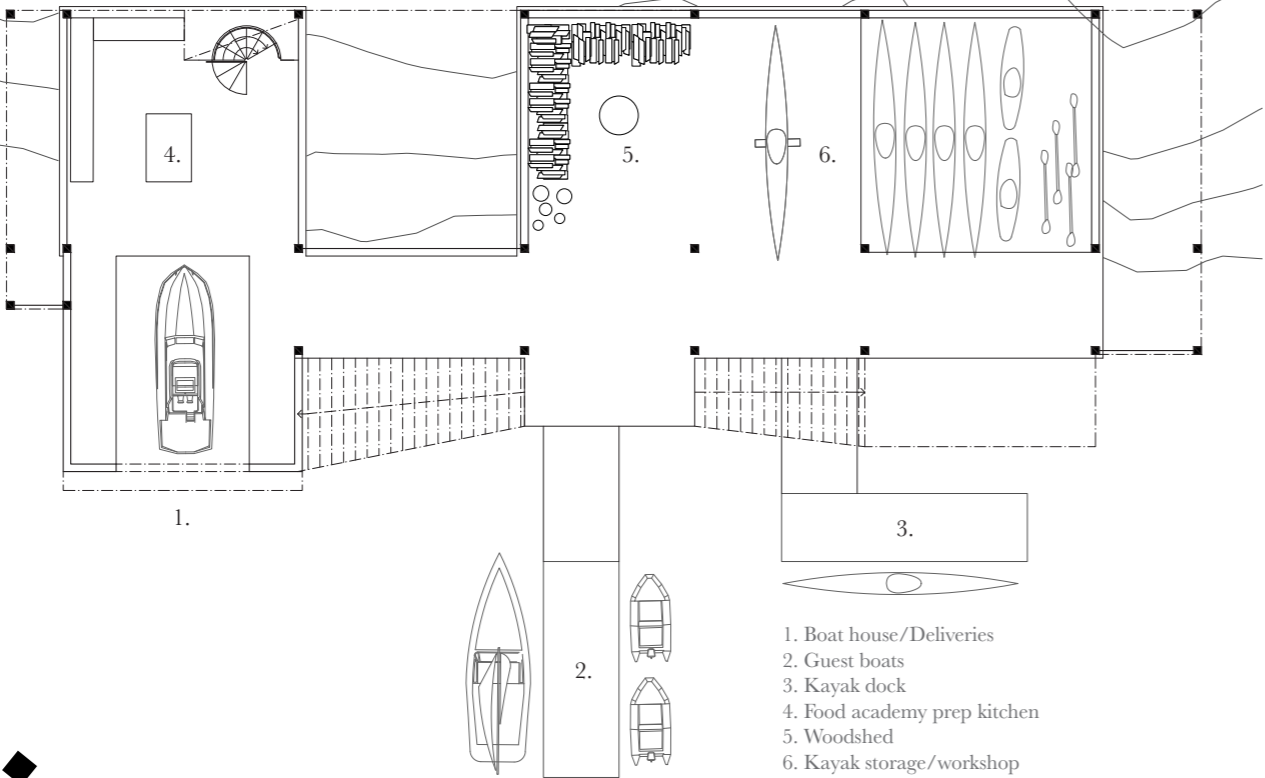
The project balances on the edge between the unpredictable and powerful water and the stable rock. Like the existing buildings in the nearby area, the main building cantilevers with wooden pillars out in the sea to create the important possibility to access with boat. On the first level of the building there is room for boat deliveries, guest boats, kayak storage with associated workshop and a great woodshed. The food academy's outdoor kitchen, where one can gut freshly caught fish and clean seafood, is also found on this level. Generous stairs with seating in the sun lead the visitor up to the second level and the reception. The wooden deck in the courtyard is jig sawed to match the contours of the rock.



Wooden deck meets rock

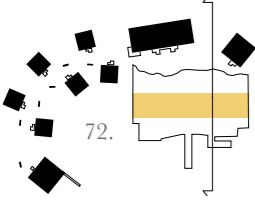


Wooden dock meets the water continues into staircase with seating



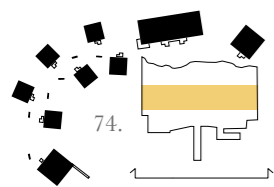
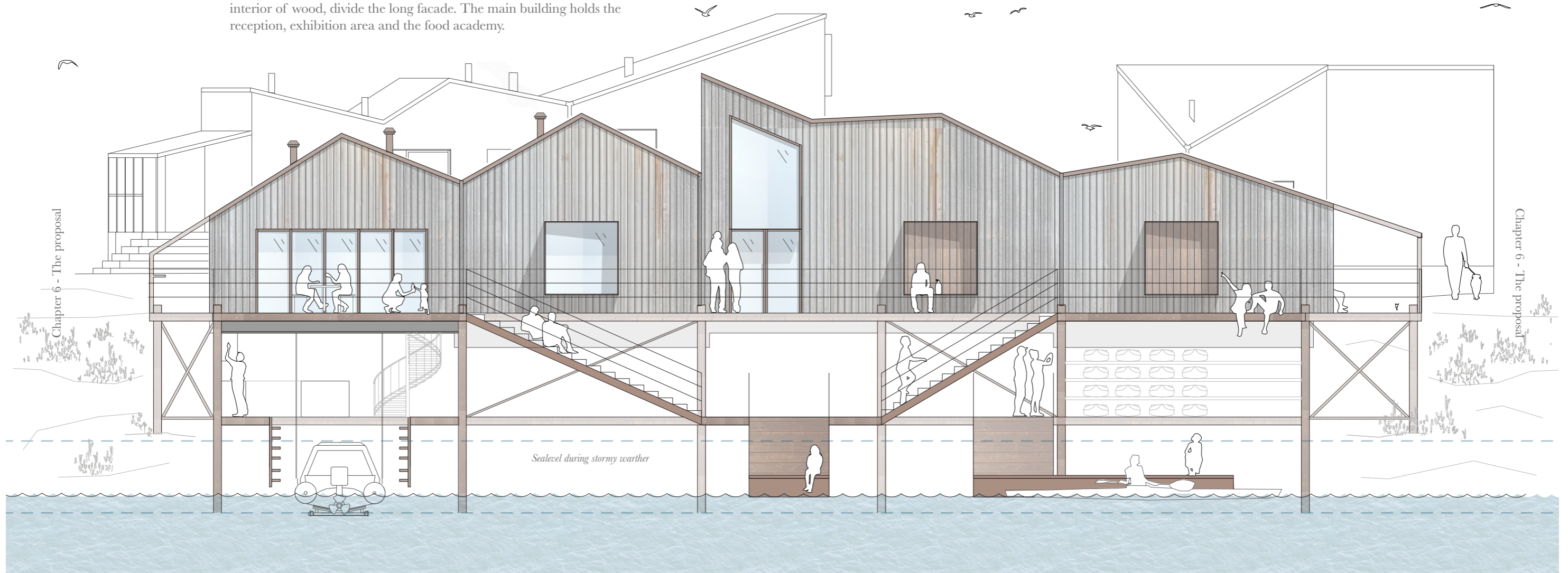
- 1. Boat house/Deliveries
- 2. Guest boats
- 3. Kayak dock
- 4. Food academy prep kitchen
- 5. Woodshed
- 6. Kayak storage/workshop

Section A-A 1:200 (A4)
Plan 0 1:200 (A4)

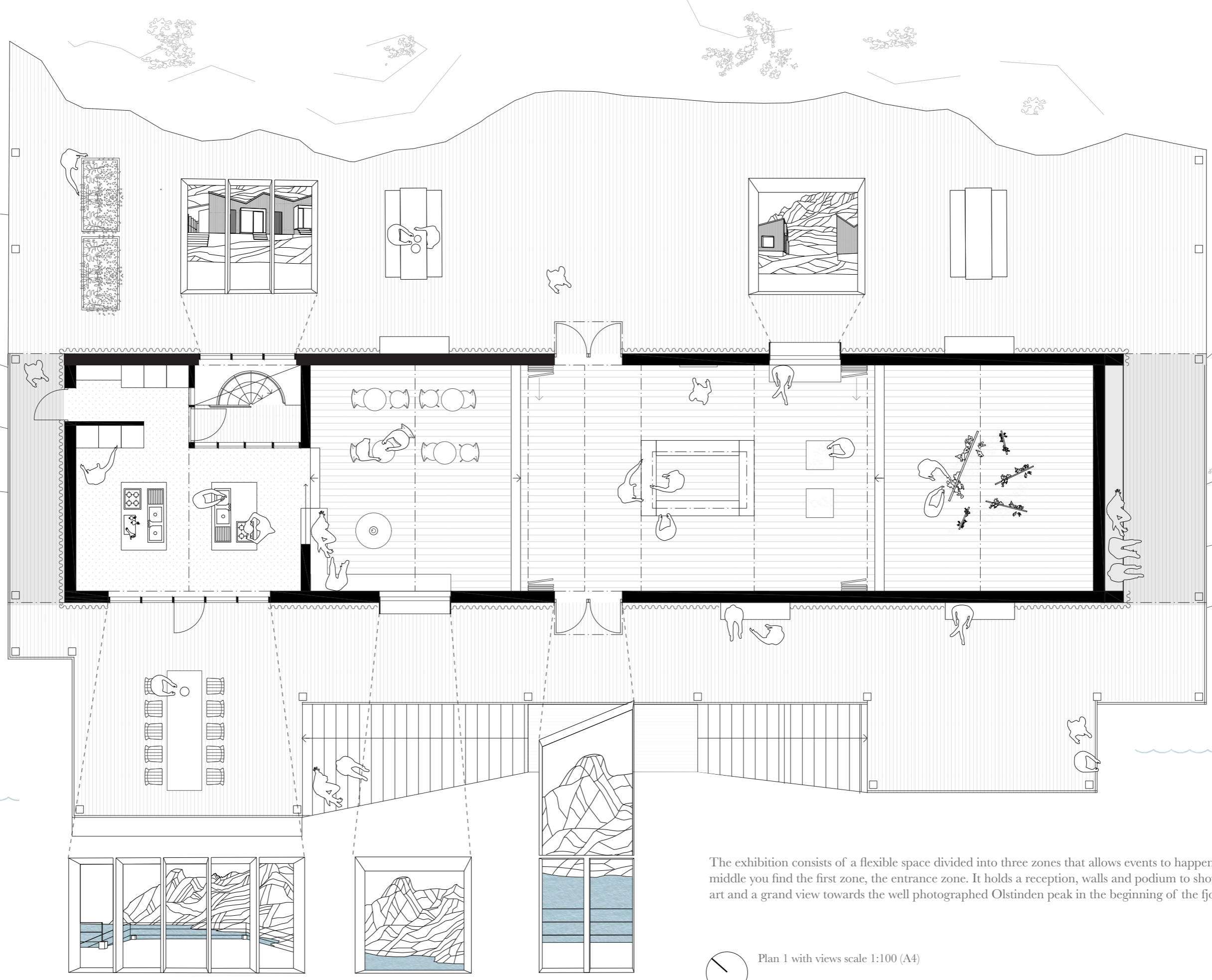


The main building

This is the first building you meet coming from the water. Two big stairs connected to the deck frames the entrance situation and leads you in to the complex. In the middle of the facade the reception entrance is articulated with a big window all the way to the ridge. Niches for sheltered seating, constructed of thick metal sheets with an interior of wood, divide the long facade. The main building holds the reception, exhibition area and the food academy.

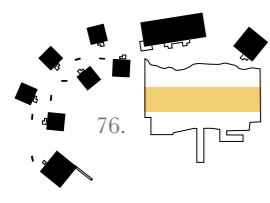


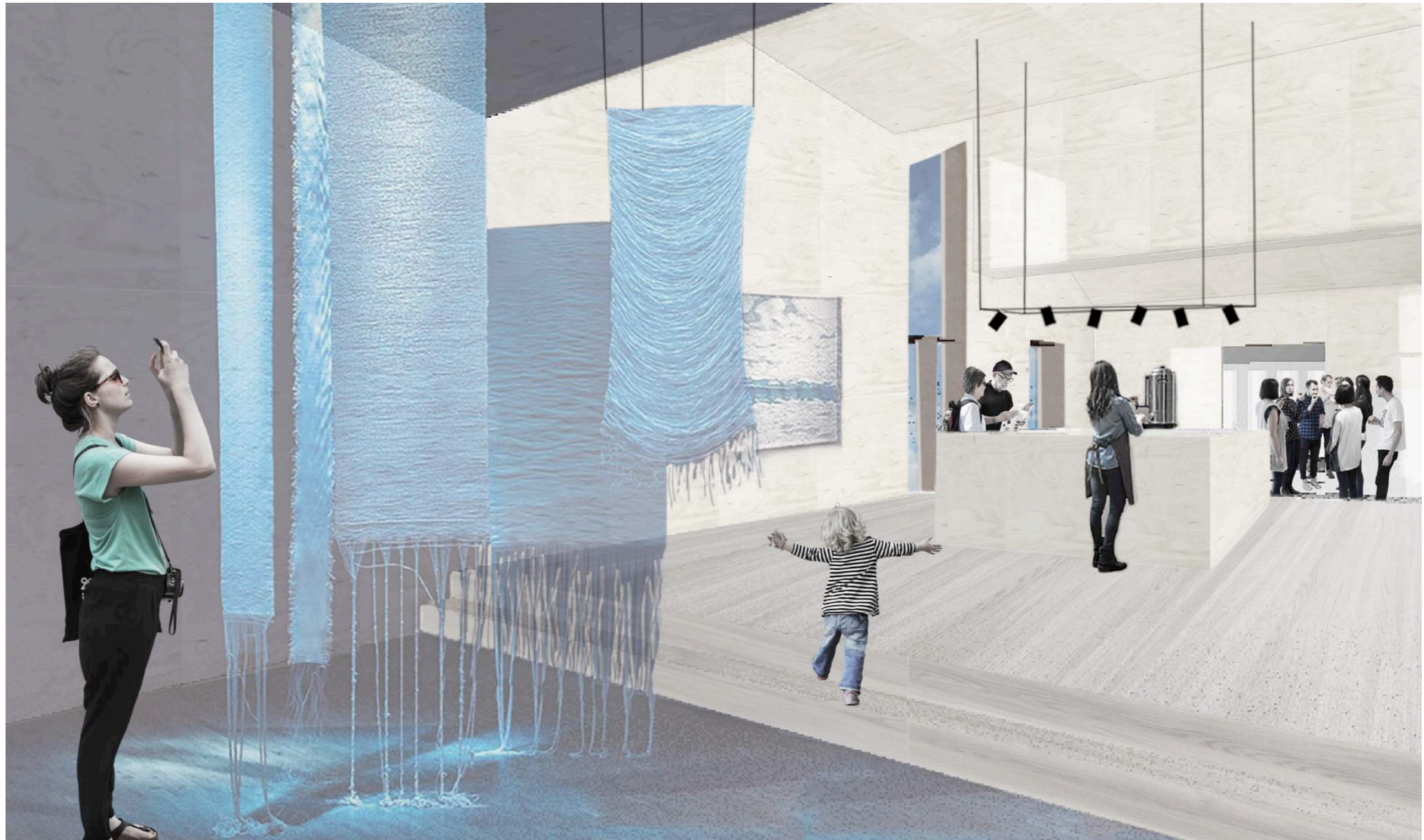
Fasacde South 1:100 (A4)



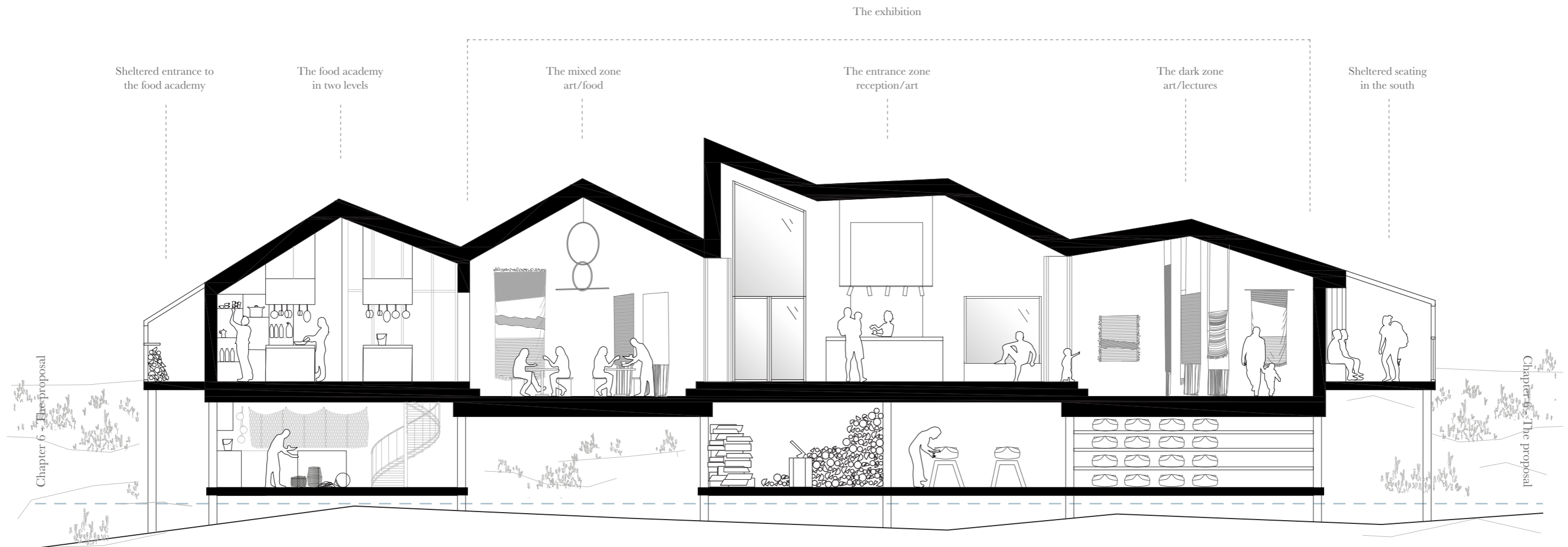
The exhibition consists of a flexible space divided into three zones that allows events to happen. In the middle you find the first zone, the entrance zone. It holds a reception, walls and podium to showcase art and a grand view towards the well photographed Olstinden peak in the beginning of the fjord.

Plan 1 with views scale 1:100 (A4)



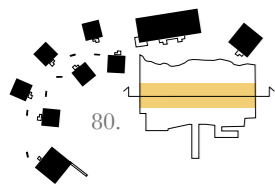


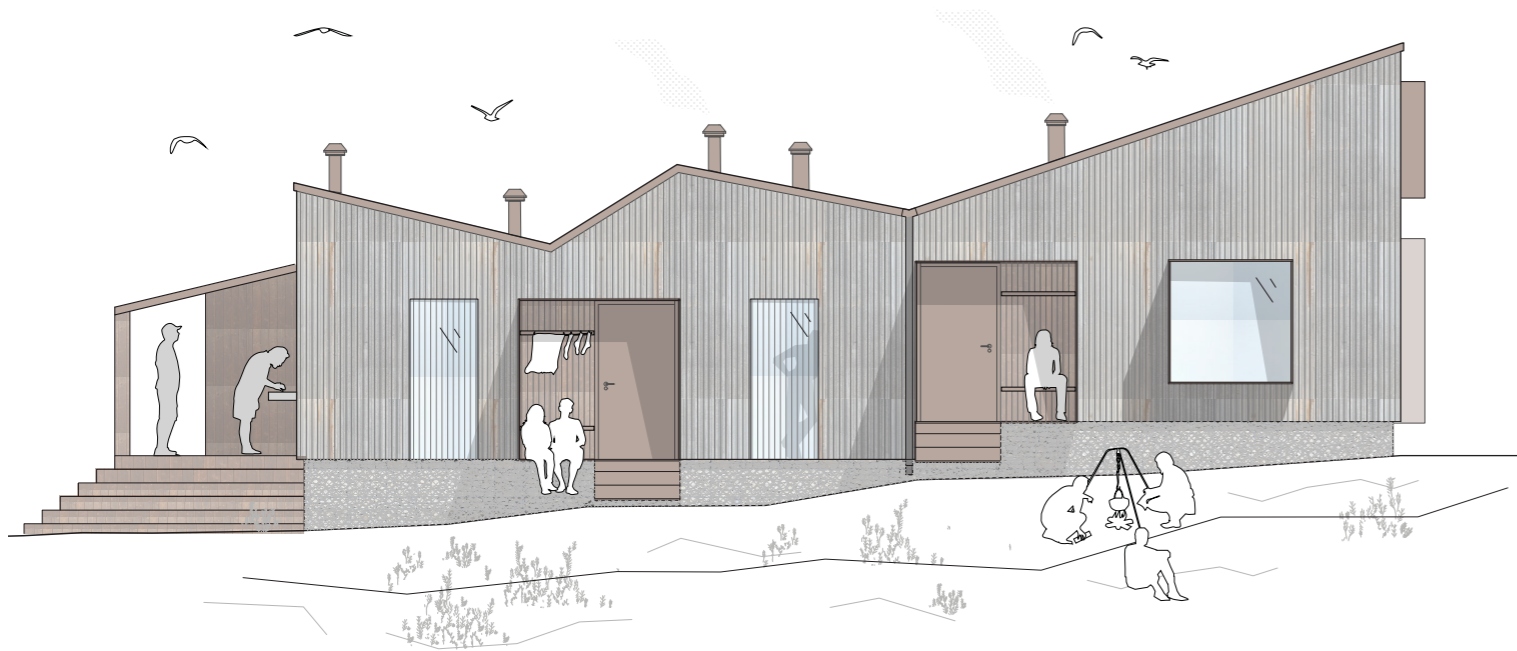
The other two zones you enter when stepping down one step and these spaces can be shut off with folding doors. One of the spaces has no windows and can hold talks, lectures or installations that needs a darker space for projection or in need to be shield of from interruptions.



In the other end of the exhibitions space you find the last zone. This zone is a mix between exhibition and catering. The chefs from the food academy, next door, can invite people to get a taste of their new culinary innovations. The food academy is divided into two levels with an internal staircase and has strong vertical connections. On the floor closest to the water you find the outdoor kitchen and the boat house for deliveries from local producers. Here is where the freshly caught fish and seafood is prepared. A direct connection with the ocean works as a great inspiration. On the upper floor, two big workstations are located towards a glass facade with a grand view of the fjord. The food academy also has horizontal connections with both wooden decks. The one in the southwest is possible to use as an outdoor dining area and on the opposite side a small-scale farming can take place.

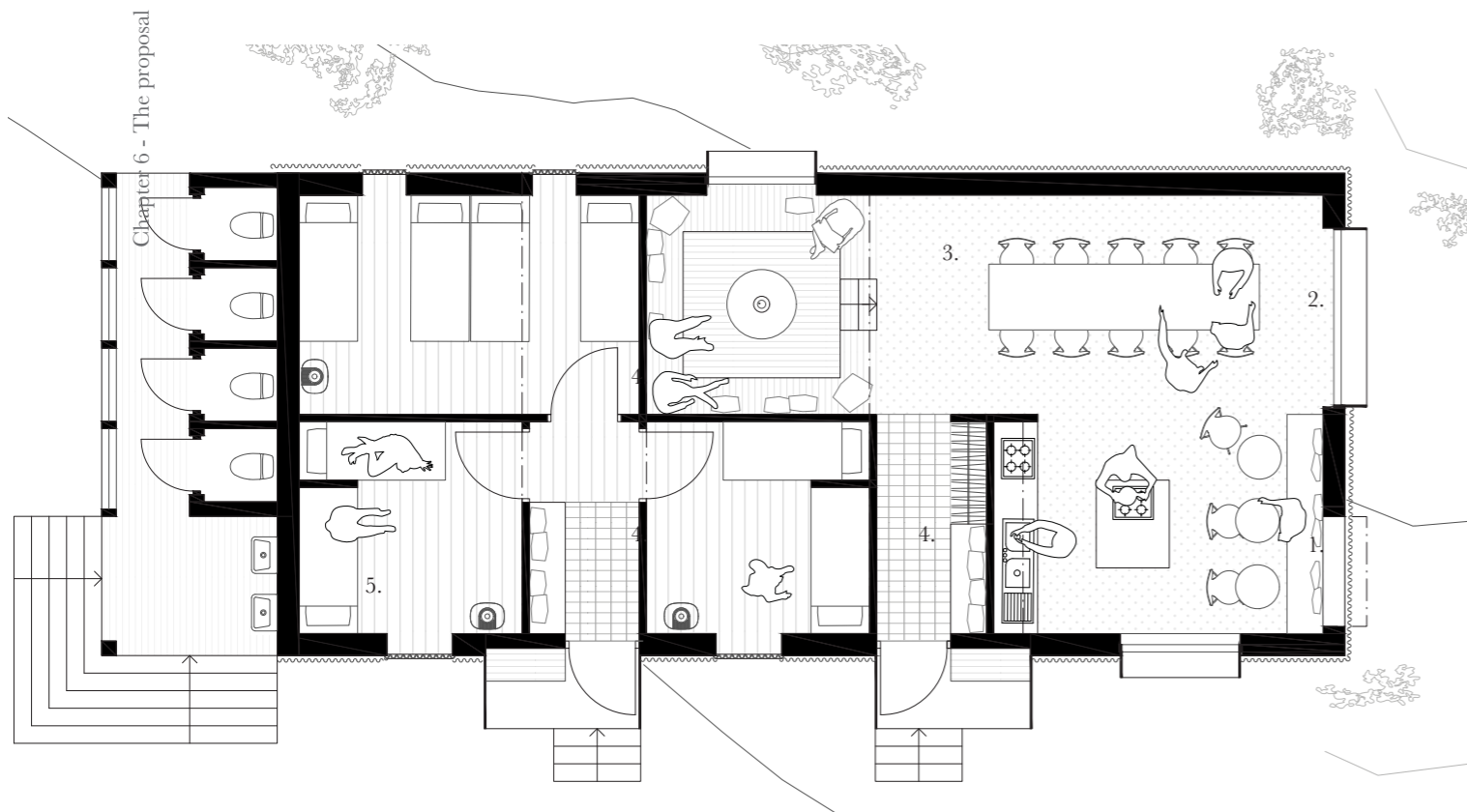
The inner roof moves in sync with the outside mountains and the interior material palette is stripped and simple to accentuate the shape of the room and to allow the art to emerge. The food tasting, with the grand view of the fjord, the art exhibition and the architecture it selves gives a unique and rememberable experience of the site and it's nature.



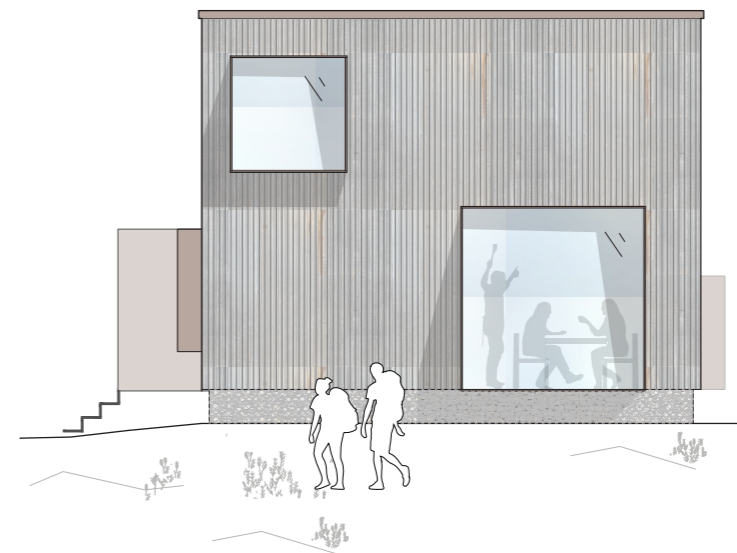


The common facilities

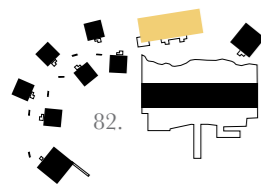
The common facilities building is serving the guests with a kitchen, living room and compostable toilettes. It's designed to be a meeting point for all - day visitors, overnight guest and people taking part of the In-residence program. In short for anyone who would like to take a break during their exploration. The building also holds the rooms in the overnight lodge, 16 beds distributed over three rooms with bunkbeds. The big window on the short end of the building expose the common kitchen and invites for a lunch-break or signals protection on a stormy day. It is the first facade you meet when you approach the complex from the path along the shore. In front of the entrances to the building you find the big common courtyard. The courtyard is sheltered from strong winds from west- south/west and is a great place to enjoy lunch or dinner outside and explore the outside exhibition.

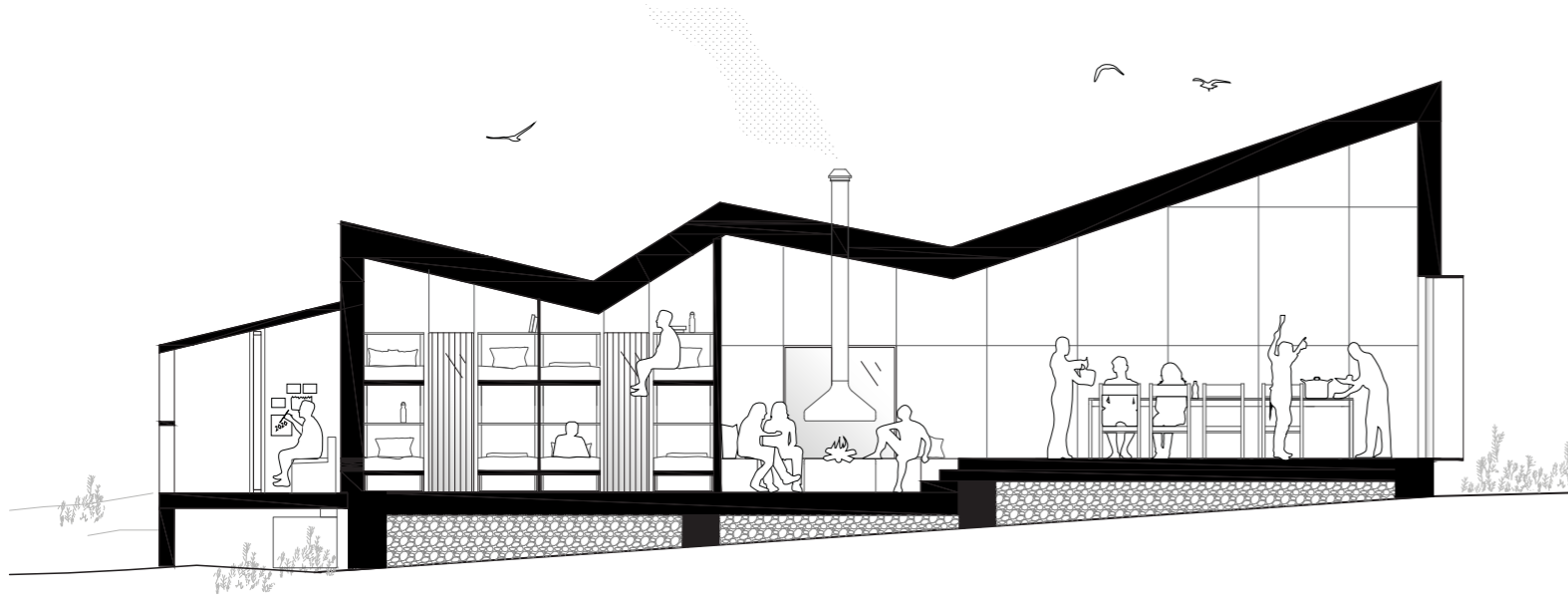


1. Kitchen
2. Dining room
3. Living room with open fireplace
4. Room with bunkbeds
5. Toilets



Fasad south and east scale 1:100 (A4)
Plan scale 1:100 (A4)





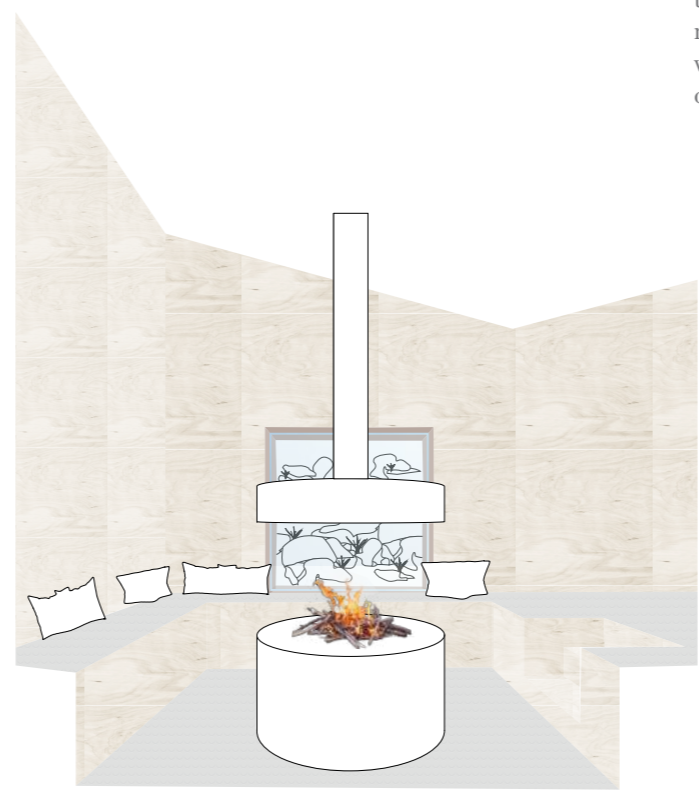
The views and atmosphere in each part of the common facility building differ a lot depending on activity. In the kitchen and dining room the roof height is high. The big windows in different directions give an airy and spacious feel and the room can handle a lot of people cooking and socializing. One window connects the kitchen to the courtyard and outdoor dining area. Another window is placed up in the corner to enhance the roof height. In the dining area a big window all the way down to the floor are facing the path along the shore and invites people passing by.

In the living room the roof height is low. The whole area is lowered, and the seating is oriented around the heat source. This area has one opening towards the mountain. Focusing on a detail view of the rocks and vegetation. This is a space where you can cosy-up and share stories from the day.

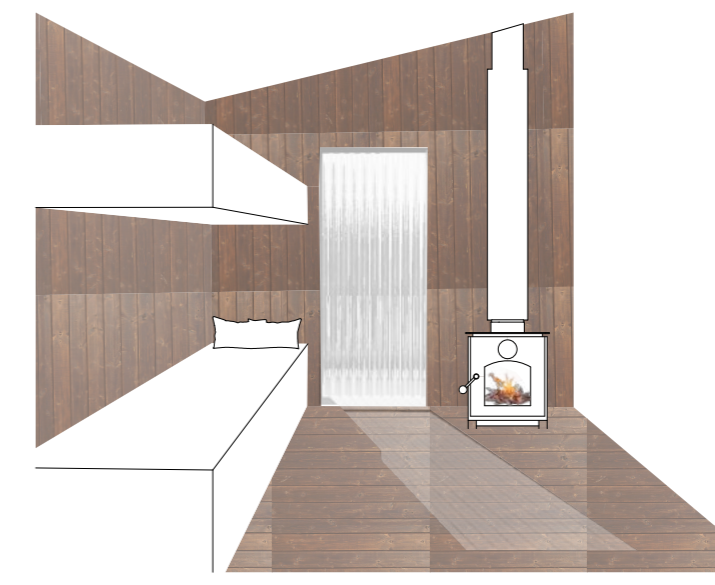
The overnight lodge rooms are small and only used for sleep or rest. The views from the rooms are almost non-existent. The windows are made out of corrugated glass that follows the facade material on the exterior. The glass makes the view distorted and only provides light to the indoor environment. This to enhance the experience of the mountains moving from inside to outside. The rooms are clad in warm wood and each room is equipped with a heating source, which only is used depending on occupation.



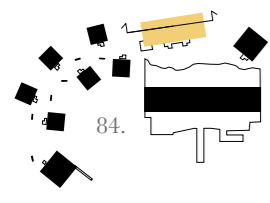
Kitchen and dining room



Living room



Overnight lodge

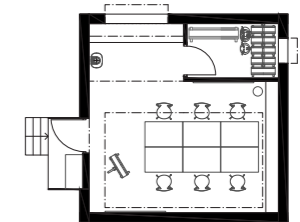
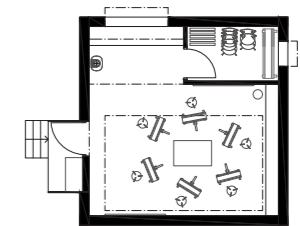
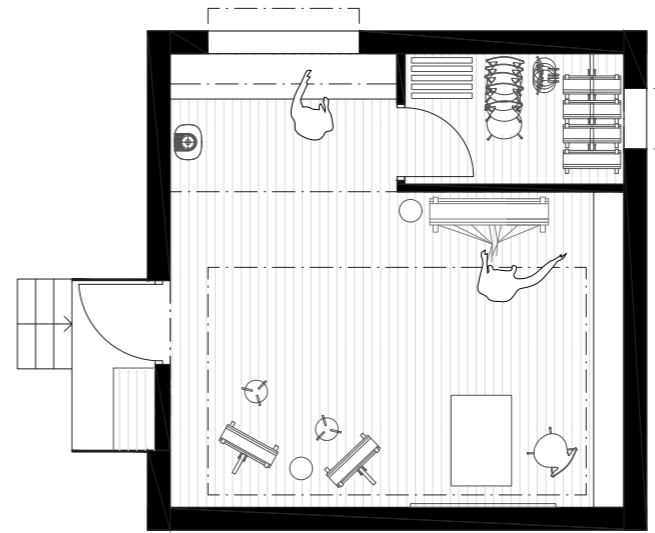
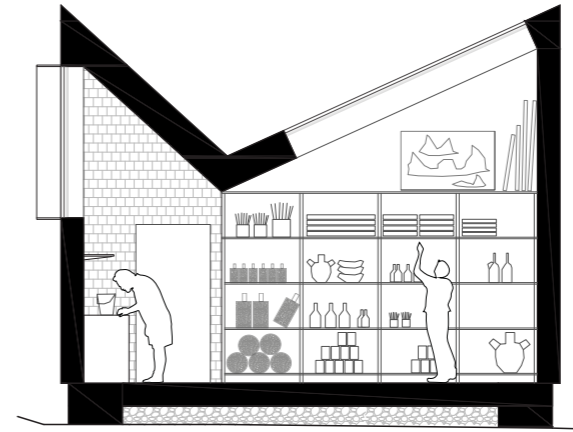


The art studio

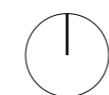
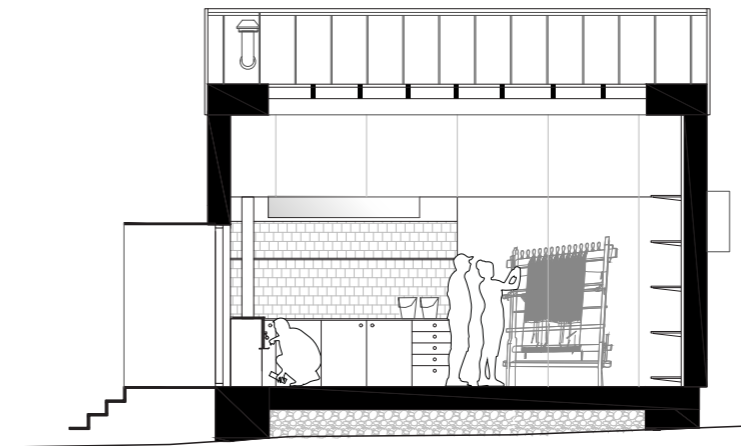
The art studio building takes part in framing the courtyard and also the entrance situation from the path along the shore. The courtyard could be used as an extra space for outdoor exhibitions, but in the main building is where the work from the artists mainly will be exhibited. In the art studio the view towards the outside is not in focus. In this space creativity can flow undisturbed without distractions. Big windows towards the north gives good lighting conditions and the interior is clad in white stained plywood and contributes to the “starting with a white canvas”-feel. Good storage makes it possible to hold a variation in furniture set-ups. The art studio can be used for workshops in different fields of art, with participants up to six people.



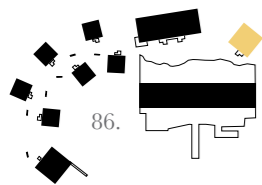
Interior perspective - Light and shadow play from roof window.
Facade west scale 1:100 (A4)



Workshop set-ups
for six participants



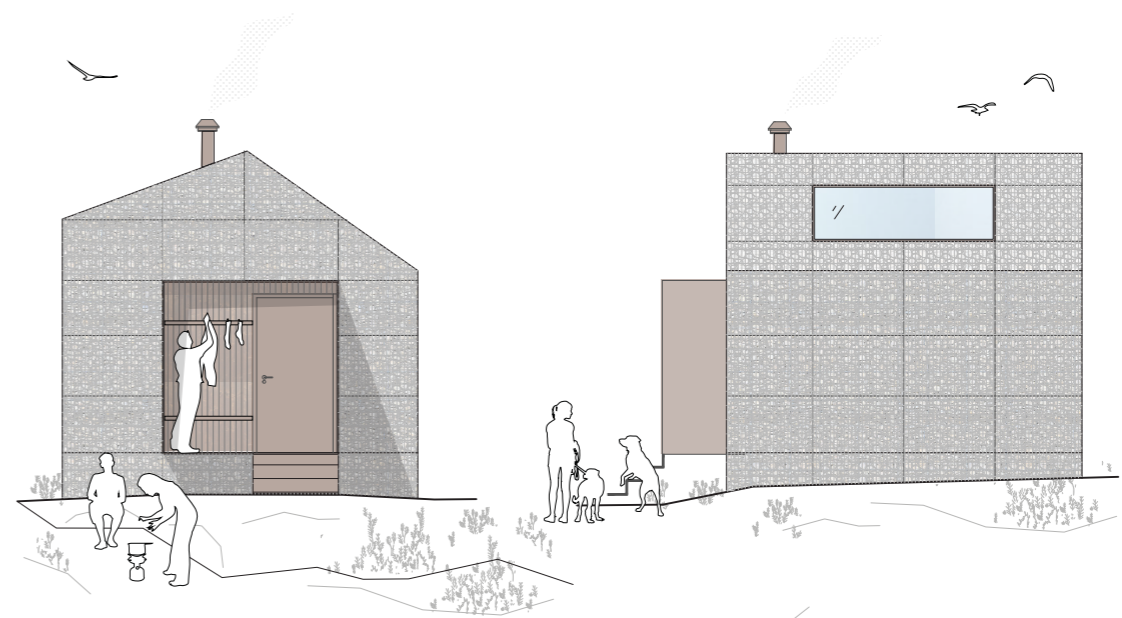
Plan and section scale 1:100 (A4)



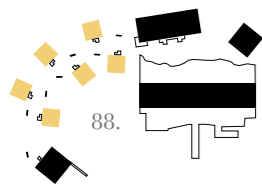


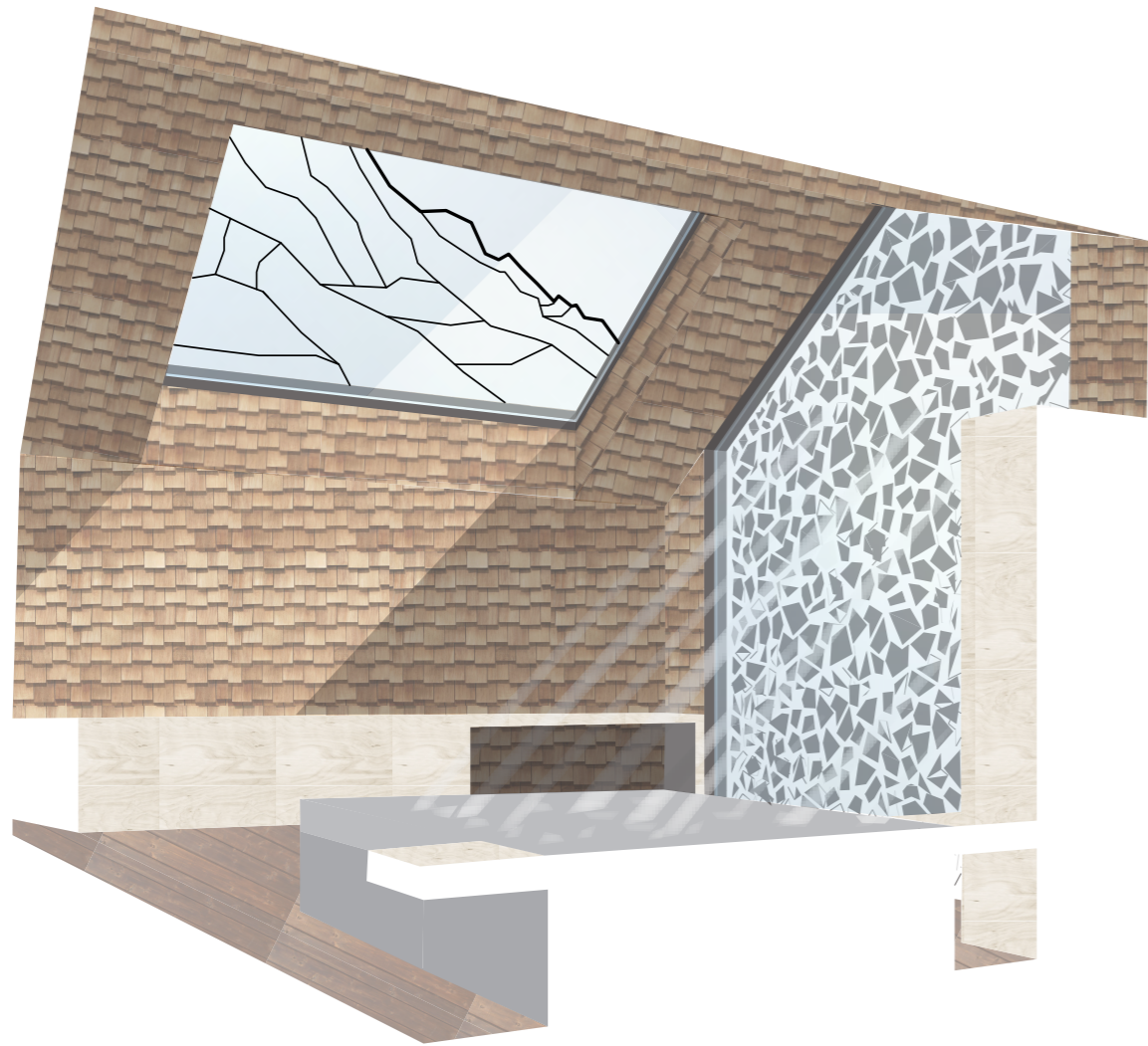
The cabins

The short time residence cabins are placed freely in the landscape and are perceived as solitary rock caves for protection from nature's forces. The gabion-clad buildings together with additional gabion benches create a half-circle shaped path down to the Bath house, on the way you walk in the rocky landscape and over two freshwater mountain streams. The articulated metal entrances enhance the feeling of entering a cave and give sheltered outdoor seating/storage. The walls are thick and heavy and communicate to be a safe place for rest. The cabin has one large window towards the sky to frame the stunning mountain silhouette when lying in the bed. In each cabin you wake up with a unique view. On the opposite side of the entrance, a big glass wall lets light seep through the gabion wall creating a light and shadow play on the bed. The interior walls and roof are clad in wooden shingles which give a warm and homy feeling, even when the resident isn't able to bring a lot of personal belongings.



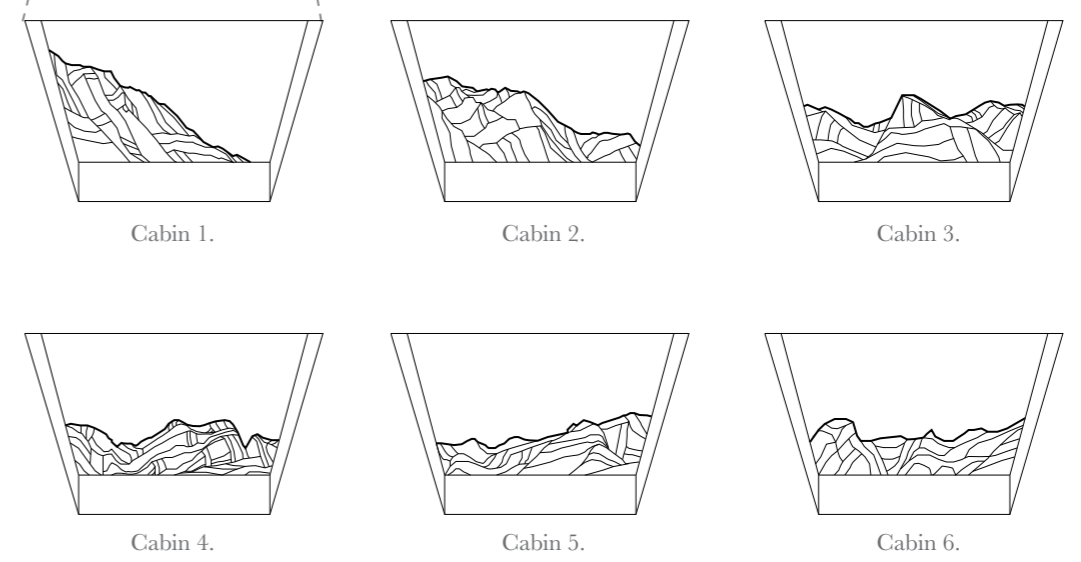
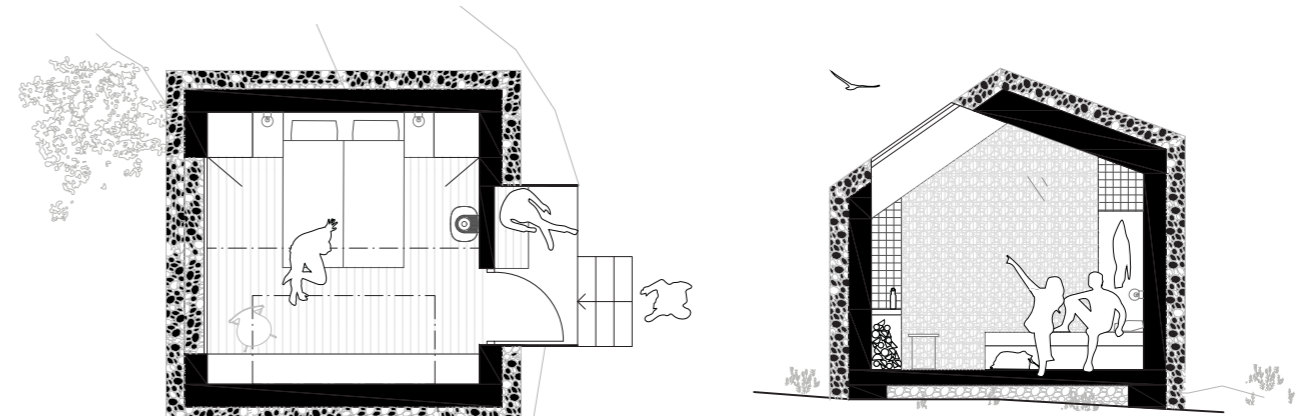
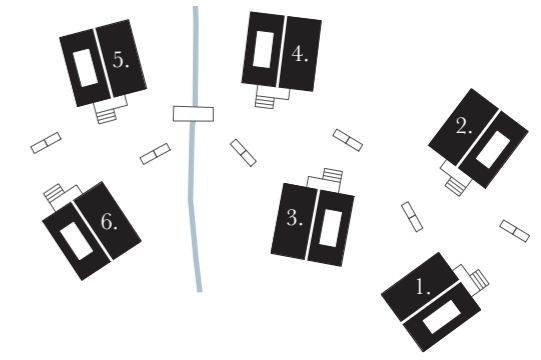
Facade scale 1:100 (A4)



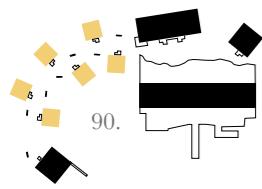


Interior perspective - Showing the material palette together with the exposed gabion wall.

The orientation of the cabins in the landscape gives a directed and clear path to the bath house, optimal views from the interior and also adaption to the terrain.

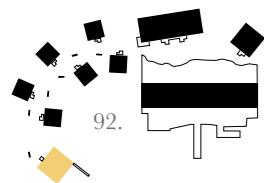


Plan and section scale 1:100 (A4)



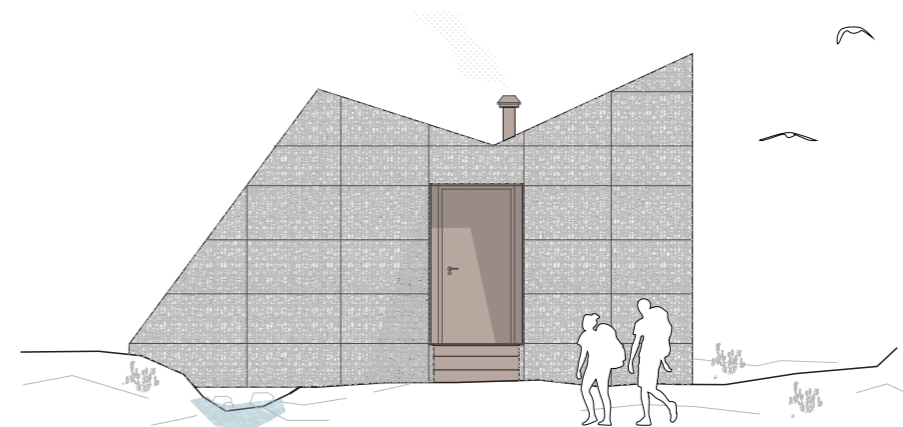


Perspective - Outdoor shower and mountain stream

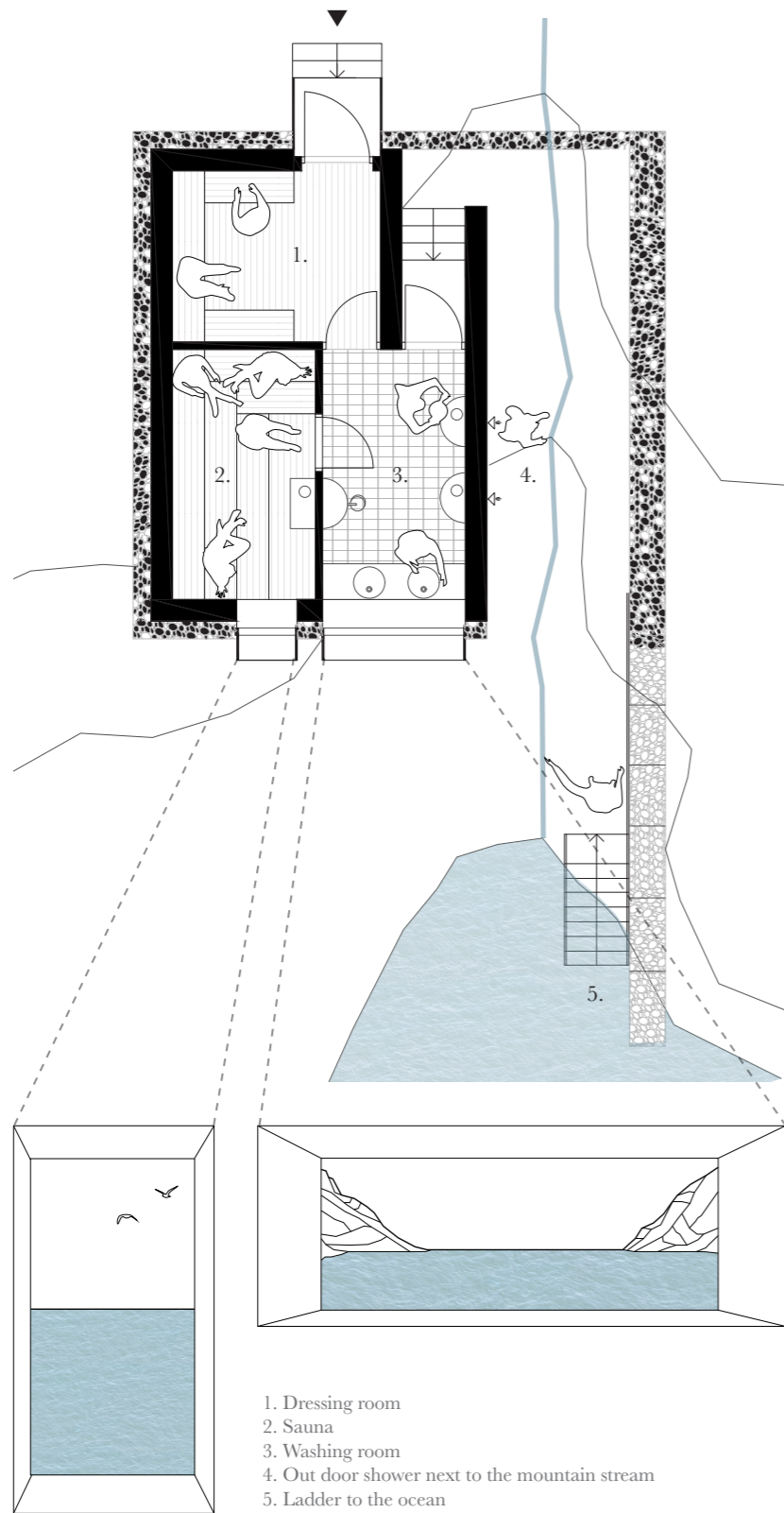


The bath house

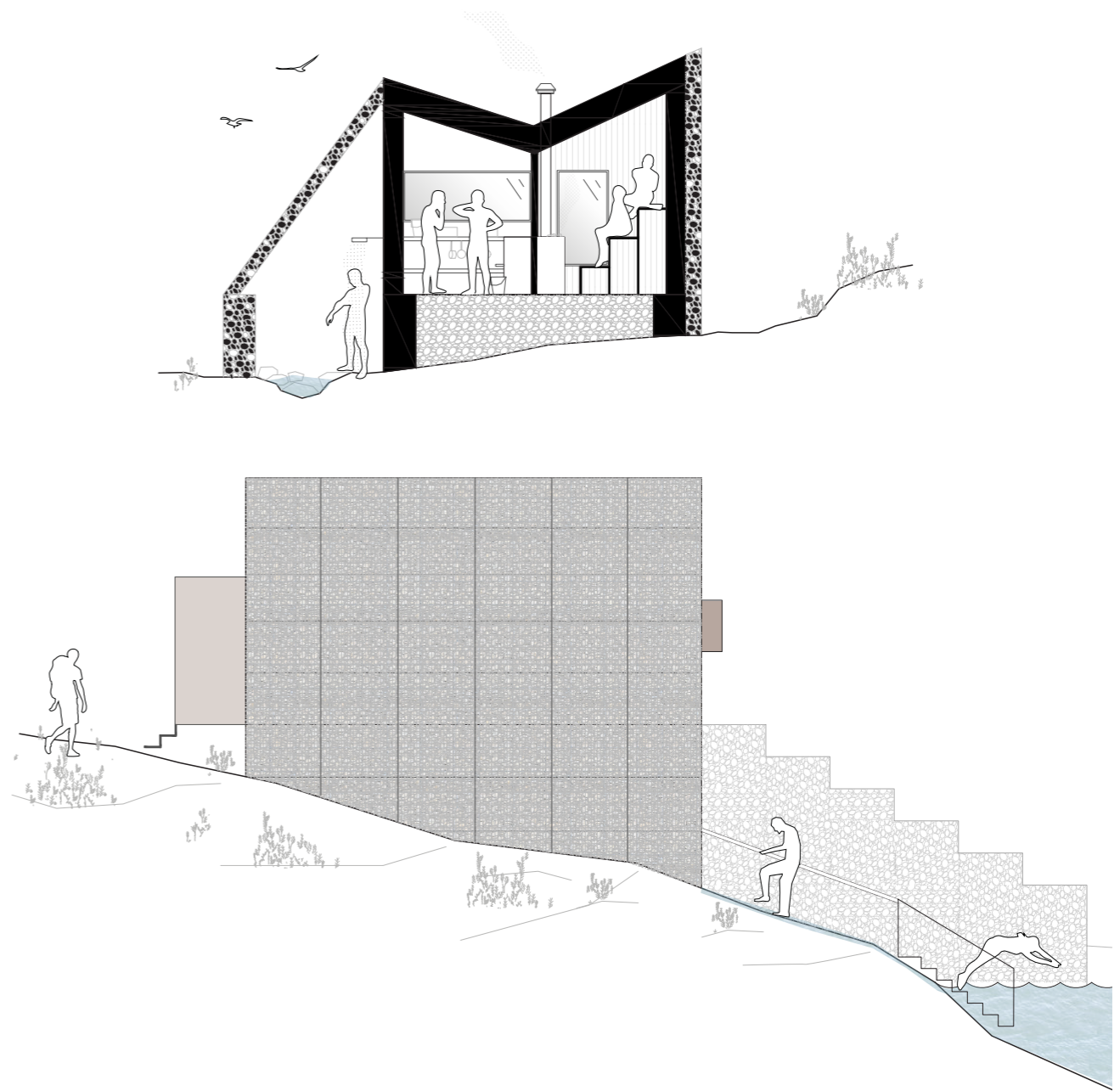
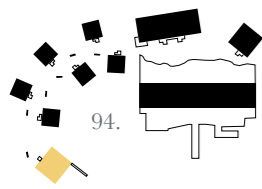
In the other end of the complex you find the bath house. Either you approach it walking pass the cabins from the courtyard or you come from the mountains, sweaty and longing for a warm sauna and shower. This building works as a gate from the wilderness into the less primitive area. The mountain stream guides you to the entrance. The water continues through the building and inside it becomes part of the cleaning ritual. The first room is a changing room without windows. When you enter the washing room you are struck by the incredible view over the opening of the fjord. On the right-hand side you find the sauna. The more detailed view focusing on the Atlantic blue ocean gives the space a calming effect. The mountain stream supplies the facility with water that can be heated in the sauna and used for washing. If you need to pick up water, long for a refreshing swim in the ocean or a hot shower outdoor, you take the door from the washing room. You take some steps down and the light leads you around the corner where the view opens up again. The gabion walls let light seep through and helps with orientation. A handle in the wall support the transportation down the ocean. The wall also break the sightlines from the main building and makes it comfortable to be naked in the open.



Facade north scale 1:100 (A4)



- 1. Dressing room
- 2. Sauna
- 3. Washing room
- 4. Out door shower next to the mountain stream
- 5. Ladder to the ocean



Plan and section scale 1:100 (A4)
 Facade west scale 1:100 (A4)



Summery

Chapter 7

Conclusion

To design architecture that enhance the understanding of Vorfjorden landscape and culture has been the biggest challenge in this project. I believe that the strategy to combine the local inhabitant's interest together with the important nourishing tourism is a strength. The purpose of the centre is to interplay with nature, through figural motifs', spatial experience, views, its materials and details and all together create space for people to share their interpretations and experiences. The architecture support tourism in a sensitive environment making the visitor aware of the landscape limitations, like being fragile and at the same time very powerful. It contributes to spreading knowledge and generates more conscious traveling.

The result ended in several small-scale buildings enclosing the bay in the fjord and variously framing the surrounding landscape. I think that the proposal has been adapted well to the sharp and raw landscape, both visually and materially. The MCC-Centre generates a cultural and active starting point for human encounter with the landscape and a multi-sensorial experience.

One could question if it would be manageable to operate in this way. Who would be in charge of maintenance? Another question could be the placement in the untouched nature in the fjord. One could argue that the already manmade scars in the landscape tissue should be used for these kinds of developments, but in that case I think one of the main reasons of the placement get missed. Because the centre is located in the wild, the journey reaching the centre is part of the experience. It deepens the understanding and respect for the landscape.

An ambition this spring was to revisit the Lofoten islands and make a more vivid research on Vorfjorden, specifically on the chosen site. Sadly, I could not manage to make the trip, due to Covid-19. I feel that some pictures from the journey to the chosen site is missing in the booklet.

References

Bibliography:

Gössling S. & Hultman J. (2006). *Ecotourism in Scandinavia: Lessons in Theory and Practice*. Wallingford: CABI.

Digital sources:

Lofoten Info. *The history of Lofoten*. Retrived from <https://lofoten.info/Art-and-culture/?Article=670> in April 2020

Sakrisoy. *Culture and heritage*. Retrived from <https://sakrisoy.no/> in April 2020

Weather spark. *Average Weather in Reine*. Retrived from <https://weather-spark.com/y/76223/Average-Weather-in-Reine-Norway-Year-Round> in April 2020

Visit norway. *En ny era för norsk arkitektur*. Retrived from <https://www.visit-norway.se/aktiviteter/konst-kultur/arkitektur/i-norska-fjallen/> in April 2020

Thesis works:

Larsson, L. (2018). *Naturum Lofoten - Subordinating Nature*. Master's thesis, Chalmers Univeristy of Technology, Göteborg.

Virén A. (2019). *In between - A staycation destination on the island Rörö*. Master's thesis, Chalmers Univeristy of Technology, Göteborg.

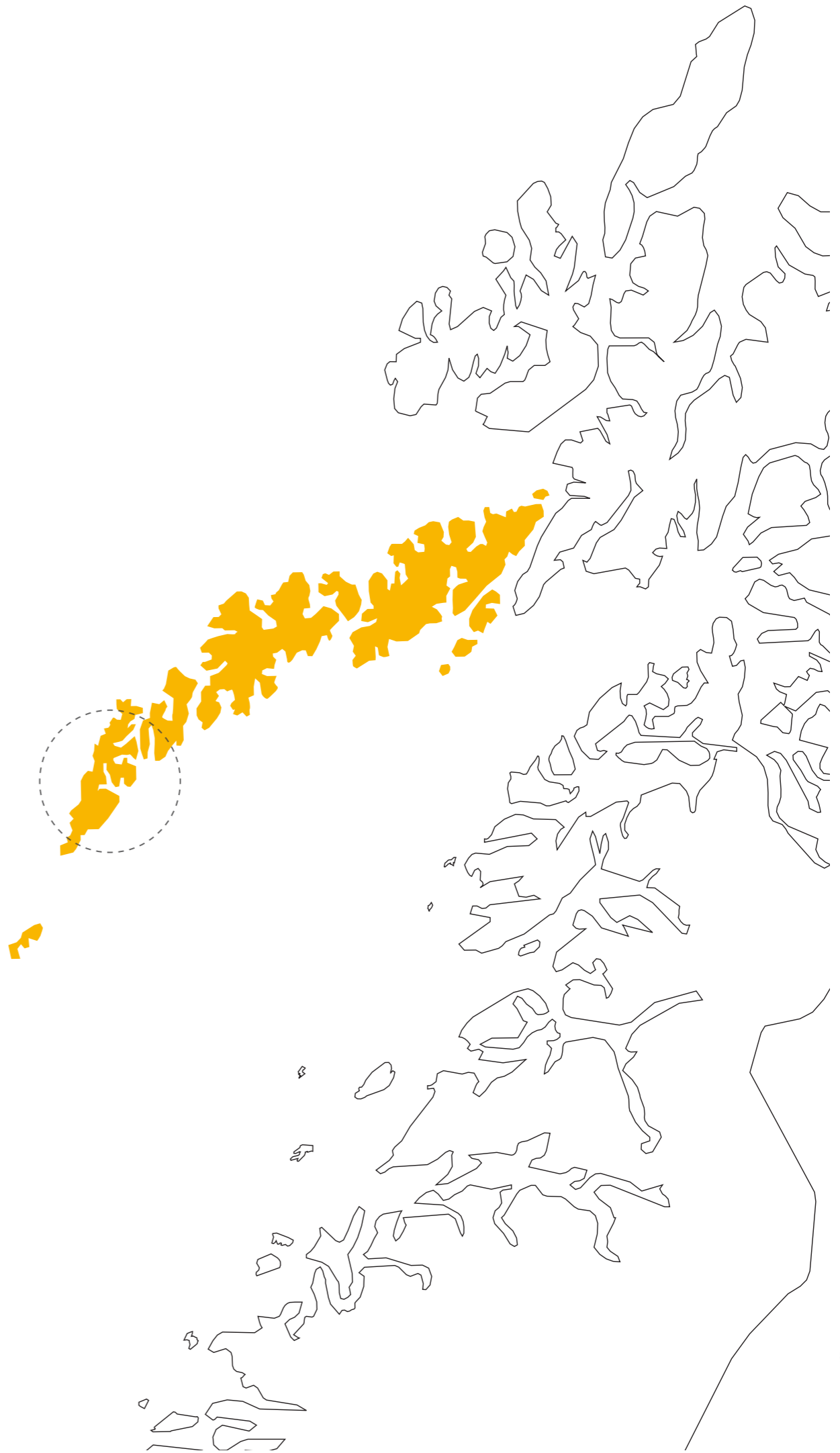
Figures

1. Unkown. Bilde fra hesselberg [photo]. Available from <https://www.henningsvar-rorbuer.no/en/info/lofoten-history-lofotens-rorbuer>

2. Fornarotto J. Sakrisoya Yellow Cabin Available from <https://www.jerryfotography.com/2019/03/29/norway/>

3. Beer Wilse A. Fisken tørkes på hjeller. <https://digitaltmuseum.no/021018573767/fisken-torke-pa-hjeller-roine-lofoten>

Pictures and illustrations in the booklet is taken or made by the auther, if nothing else is noted.



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