

Summary

“(Re)discover Mark” is one of thirteen in depth projects for the course “Planning and design for sustainable development in a local context”. The course for 2022 is a collaboration with Mark municipality in the Västra Götaland region. After half a semester of workshops analysing the whole of the municipality, the other half consisted of creating an in depth project that focused on a specific subject, theme or area.

The main objective is to highlight and strengthen Mark’s identity by adding different architectural interventions to a selected number of locations with high cultural and natural values. The resulting experiences are as diverse and colourful as the municipality itself and have a primary focus on recreational and educational activities.

After analysing the landscape, transport, highly valuable nature areas, and destinations, reading theory, interviewing the cultural department at the municipality, ten locations were picked for interventions. The locations are chosen based on site visits, interviews with different people from the municipality and research. They are places where an architectural intervention can help to highlight the context of the area.

Out of these ten areas, four are picked to create key projects where the architectural interventions is developed in a more detailed way. The result of this is:

- An education center by Storån, close to Sätilla, that highlights the values and qualities of Storån valley that has a large biodiversity and a historical urban structure. The center also acts as a meeting place.
- A community space by the ruins of “Solänge kvarn” in Fritsla. The structure highlights the mill ruins from the late 1870’s and act as a meeting spot for people passing by and for facilitating events.
- A watch tower at “Öresten fästning”, which highlights the burned down castle that existed there in the 13th and 14th century. The tower act as an information space for the area and resting spot for visitors.
- A pavilion by “Sju strömmar”, and a water installation highlights the surrounding environment and traditional methods of grinding wheat, which connects to the history of an old mill building in the area.

To connect the interventions to the existing structural landscape of the municipality, stories have been written to show different ways of accessing the locations.

On the remaining six locations we’ve worked with a collage method where we suggest different suitable interventions - e.g. an art exhibition, a sauna, or an information point. All of the projects are connected to our developed design strategies: Accessibility, All year round, Inclusive design for the local community Highlighting the context, Sustainability, and Respect the surroundings.

The project tackles different aspects of sustainability and there’s been continuing discussions regarding connecting to the local context, connecting the projects to each other and sustainability regarding the scale of intervention. When working with built structures in nature and on historical sites it’s important to be considerate to the location and see what will increase the value and which places might be better off left untouched.

Chalmers University of Technology
ARK174 Planning and design for sustainable development in a local context

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Course introduction

This booklet presents the project “(Re)discover Mark” which is part of the master course ARK174 Planning and design for sustainable development in a local context, at Chalmers University of Technology. The course is divided in two parts, this being the second half where a project is made based on various workshops made in the first half of the course.

The location for the course is a municipality in the Västra Götaland region. This year it is Mark municipality. The workshops in the first half of the course consisted of mapping the different areas of the municipality geographically, but also thematically regarding for example history and transport. There were also workshops on a bigger scale, looking at how for example the EU affects Mark, but also workshops on different possible futures for Mark.

Mark municipality

Mark which name comes from an old documented district called Mark Härad during the 13th century and means ‘border’, is one of the 49 municipalities of Västra Götaland. It was situated at the border of the “Kingdom of Denmark” and is characterized today by a special dynamic between local and regional scales and actors.

Today it’s located in the middle of the country’s most expansive regions, close to Borås and Varberg and includes several small and medium sized towns and minor localities. In Kinna, Skene and Örby as the main ‘city’ live nearly 17.200 inhabitants, in the municipality of Mark 35.200 with



Background

From a common SWOT-analysis of the municipality with the whole studio, we've picked out and specified themes. The analysis has helped us to form the frame of our project.

Strengths to build upon

Strong social bonds on village scale

Each village has its own history. Many small local businesses and associations create a strong community feeling.

Natural, ecological qualities

Mark is one of the most biodiverse regions in southwest Sweden. The municipality contains a large variety of topography and landscape types.

Rich cultural history

Mark has a long history of textile production, which put it on the map as an important national area.

Opportunities to use

Increasing environmental awareness, efforts to preserve nature and biodiversity

This trend can work as a catalyst for projects with a focus on sustainability which in turn generate more awareness.

Shifting values towards a more social, ecological perspective in planning

Re-evaluation and new approaches to land use, reusing existing structures

Weaknesses to improve

Spatial segregation, lack of communal spaces, activities for all ages

Lack of knowledge and awareness about existing sights/activities/characteristics

There is a need of more awareness, both within and outside of Mark to highlight what it offers.

Unsustainable caring of nature in decision making

Biodiversity and resilience are often overseen by decision makers and are therefore at risk of being lost.

Threats to overcome

Human impact on ecology

Risk of losing important ecological values and services.

Increasing segregation among the population - age, background

Increasing isolation and mental health issues

Negative effects of digitalisation result in fewer social interactions and physical connections between people.



Aim

The main objective of this project is to highlight and strengthen Mark's identity by adding different architectural interventions to a selected number of locations with high cultural and natural values. These interventions can then be linked and accessed in various ways, based on the visitor's interests and starting point. The resulting experiences are as diverse and colourful as the municipality itself and have a primary focus on recreational and educational activities. They are meant to attract both local and external tourists who would like to explore Mark. By using existing and newly added structures, acknowledging present qualities, and carefully reacting to local needs, the vision is to create something that showcases the exciting environment that already exists in Mark and to make it more accessible to the public.



Mapping

We have studied different material and maps from the municipality and online sources, like for example the nature care program (2010) and the General plan (2022), to find areas of interest regarding our project.

These areas have later on been discussed in interviews and tutoring.



Interviews

To get a better understanding of the local needs of Mark, interviews with people from the municipality have been made.

Through an interview with the cultural department at the municipality and supervision from representatives, e.g. the city architect, we have managed to narrow down the focus of the project and find areas to develop.

The interview with the cultural department is especially linked to the focus projects "Solänge mill" (page 30) and "Öresten fortress" (page 34).



Theory

To ground our ideas we have found different theory on the subject of health and nature, eco-tourism, and transformational design. This theory have later on been used to develop the design strategies, pick the locations, and develop the focus projects. The theory is presented on page 6-7.



Limitations

Participatory design - To find the local needs it would have been valuable to talk to a variety of people in specific locations and have workshops, but because of the limitations in time we have only talked to different parts of the municipality.

Scale - To be able to go deeper into specific built structures, we have decided to focus more on a few focus projects and the structures itself rather than looking at creating new paths to these locations on an urban design scale. To connect these locations can be developed further on, which is discussed in the "Discussion" chapter.

Method



Figure 1: National Scenic Routes, Norway. A collection of built structures all over Norway to highlight different areas using architecture, art and design.

Transformational design

“The design and implementation of meaningful and iconic activities and facilities in naturebased tourism are potential contributors to fostering deeper connections with nature and important attributes to enhancing and/or strengthening transformative experiences.” (Wielenga, 2020)

Within the last few years a shift has been happening from consumer-based tourism to a transformative travel. This kind of travel is written about in the article “New experiences in nature areas: architecture as a tool to stimulate transformative experiences among visitors in nature areas” (2020) by Ben Wielenga, researcher at European Tourism Futures Institute. He describes it as a kind of travel that has the intention to gather “unique, memorable, personal, multi-sensory, and emotional experiences” that affect one-self and can add new perspectives on life. (Wielenga, 2020)

Wielenga continues that a combination of this kind of transformational effect combined with nature-activities can lead to benefits such as increased attraction of visitors but also health benefits - such as increased community cohesion. Using carefully designed architecture in these places can give another or highlight a meaning to the location, adding to the transformational experience. The built structures can also help and guide people through the landscape. (Wielenga, 2020)

Nature tourism

Nature tourism is becoming more and more popular, whether it being visiting cabins in the forest or viewing points. In the article “Architecture and Nature: A Framework for Building in Landscapes” (2020) by Andrea Cutieru, architect and writer for ArchDaily, she points out important aspects to take into considerations when building for nature tourism. (Cutieru, 2020)

Learn the landscape

Use materials that age well and simple typologies. Make sure that the added structure enriches the landscape.

Re-discover the wisdom of vernacular design

Draw inspiration from existing buildings and their characteristics.

Shape a novel experience of nature

Use the built structures to tell a story and guide the person through the landscape.

Minimize interventions

To not harm the landscape that is meant to be highlighted it is important to create structures that minimize the interventions and at best can be removed with minimal impact to the nature.

Work with the local climate

Work with the existing topology to create structures that are long lasting against stresses from the local climate.



Figure 2: The Guggenheim Museum in Bilbao. Not only the exhibitions draw people to the site, but also the architecture of the building itself.

Nature and its impact on mental health

Throughout the last generations, both the quantity and quality of contact between humans and the natural environment have decreased rapidly. Several studies estimate that the average urban dweller spends 80 - 90% of her or his life within buildings. Simultaneously, communities that previously had strong traditional ties to nature and are now facing environmental degradation and modernisation, increasingly experience feelings of isolation and depression (Bratman, Hamilton & Daily, 2012).

While a large body of research stresses the significance of nature for physical health, highlighting food, water, climate resilience and other crucial ecosystem services, growing attention is also directed toward the impact on mental health and well-being. For instance, experiences with natural environments have been linked to decreasing stress levels, a higher speed of recovery from stress and an overall enhancement of the individual’s mood. Other studies have measured significant improvements in memory and directed attention activities and concluded that “exposure to nature can have a restorative effect on the brain’s ability to focus” (Bratman, Hamilton & Daily, 2012).

These findings establish a strong basis and reasoning for more nature-inclusive interventions within our built environment, benefitting both the declining natural environment and our own physical and mental well-being.

Architecture and tourism

The built environment and its spatial and cultural qualities play an essential role in the tourism sector. Architecture, whether it is ancient or modern, can draw immense attention to a place, influence its image and act as a magnet for tourism on all scales. Maitland and Newman (2008) argue that visitors are mainly attracted to “qualities of place and culture – architecture, people, food, culture and diversity”. Especially buildings characterise a place by their “physical obtrusiveness demonstrating unambiguously to visitors and residents that something serious is happening” here (Ashworth, 2008). As a cultural artefact, architecture therefore has the potential to support and strengthen the qualities of a physical location and its context.

It is these qualities which then attracts visitors who link the respective site with the architectural intervention. Even though it is not always the primary concern of an architectural design, it can quickly become an iconic object of interest in itself and appeal to many people. “As a commodity of touristic consumption, it represents objectified cultural capital” and can therefore also contribute substantially to the economic growth of an area (Scerri, 2019). This is demonstrated by numerous examples of internationally known buildings, such as the Guggenheim Museum in Bilbao or the Sydney Opera House.

Analysis

To be able to find our location for the key projects and interventions, we did a lot of analysis - both on a larger scale e.g. looking at high value areas for nature, and smaller scale e.g. mapping different services that can be used in combination with the interventions.

During our process we have done a lot of research, much from municipal documents, to be able to narrow down the project areas and ground our ideas in the local context.

Analysis

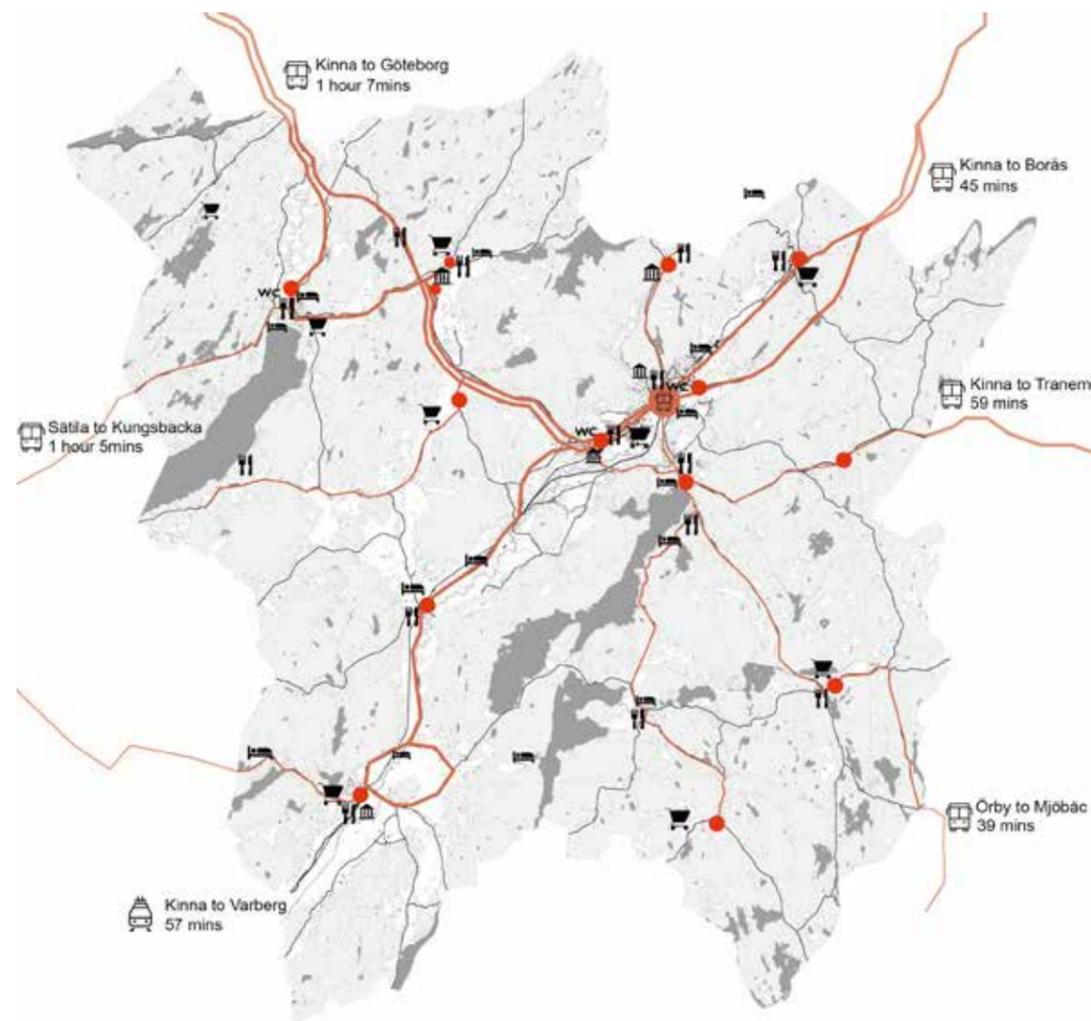


Location of Mark municipality in the Västra Götaland region.

Services

The services are spread out over the municipality, but also more concentrated to the larger villages. By mapping the various places for getting food and accommodation, we can see how the intervention can be linked together with the services in “visit-routes”.

Almost all of the services are closely linked to the existing public transport network, and therefore are more easily accessible.



- public transport
- accommodation
- toilet
- museum
- restaurant/café
- supermarket

Overview plan
Scale 1:75000



Transport

Hiking paths

There are a few hiking paths in the area. Most of them are in the beautiful landscape, and some have historical connections - e.g. Kurirleden which was the travel route for tradesmen in the 13-1400's.

Biking paths

Some longer routes are marked by the municipality as biking paths. These are interpreted as being for recreational purposes, more than everyday transport.

Public transport

The municipality have both buses and a train track running through the larger villages. The frequency of the buses are on the lower side.

-
-
-
-
- Local bus service stops

National interest

Around 12% of the municipality have national interest, meaning that these areas have a value for preservation on a national level. The green areas show a national interest for nature, the red national interest for cultural history, and the yellow is national interest for recreation. These areas have to be taken in consideration when planning on a local scale, and can also contribute to marketing for tourism.

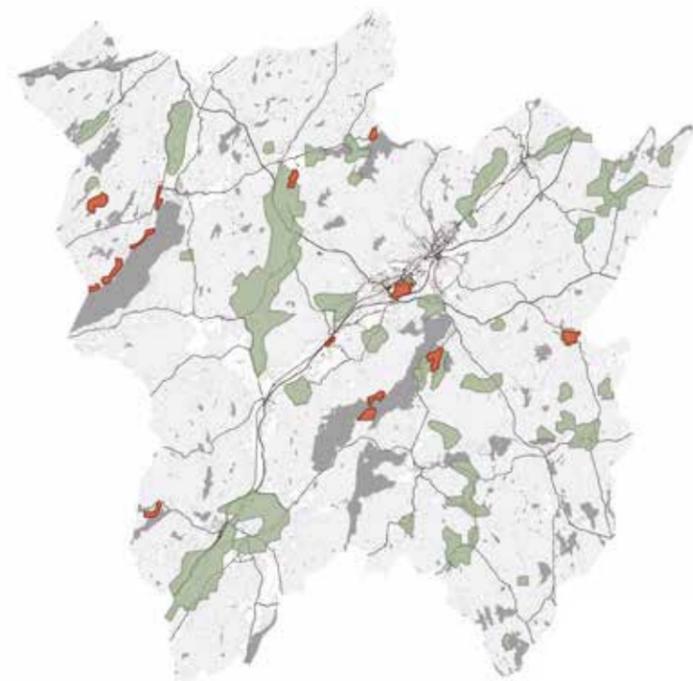
- nature area
- culture reserve
- culture historical area
- recreational area



Landscape

Mark is an area whose industry is based historically on forest and textile industry but also on agriculture, which has been shaped by various types of landscape. Its landscape is defined by large areas of forest, small spots of arable land, stretched valleys of open land and countless lakes in different sizes. The biggest water areas in Mark municipality are Västra Öresjön, Tolken and Lygnern.

-  arable land
-  open land
-  deciduous forest
-  lakes
-  wetlands
-  coniferous forest



High value landscape

In the nature care program, created by the municipality in 2010, they write about the nature and the areas large nature qualities. In this map, the areas appointed by the municipality with high nature value are marked with green. This means that these areas i.a. have a large biodiversity and are in need of special nature care.

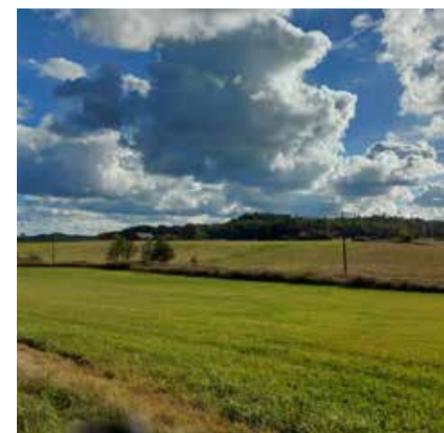
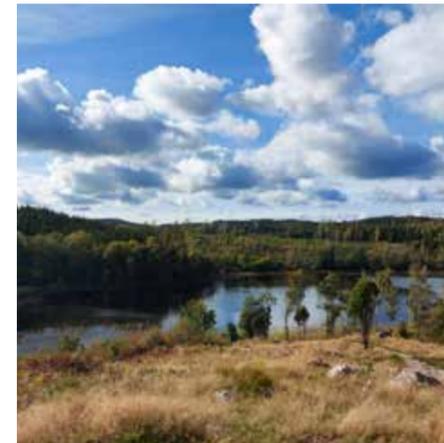
The nature reserves in the municipality are marked with red, and are protected by the municipality and the environmental code.

-  high-value landscape
-  nature reserve



Forest

In 2022 nearly 75% of Sweden's forests are used in a productive way, only 9% are protected and even 79% are owned privately. Today, due to the forest management descisions, biodiversity struggles and the natural forests are under serious threat. That's why it's really important to focus on the preservation of biodiversity by creating appropriate zones.



Field

The landscape has changed a lot over the years, but much of the rational small scale agricultural landscape still exists in Mark. The highest nature values are connected to the unfertilized fields with large trees. These environemnts can be seen in e.g. Nockakulla, Vallsås, Assberg and Öresten.



Lakes and streams

There's a rich variety in lakes, streams and creeks. Through the municipality flows Viskan, one of Västra Götalands largest watercourses. The waters are filled with rich flora and fauna, for example the rare and endangered fresh water pearl mussel.



Wetland

The wetlands have a rich biodiversity and many birds gather in these areas, e.g. Veselången, Ramslätt and Tyngsryd. The shallow waters are important for frogs and salamanders, who are often endangered species. These wetlands can be experiences in for example Uttermossen and Nycklamossen.

Destinations

Spread out in the municipality are both unknown and highlighted spots that show the large variety of history, culture and nature that exists. To be able to narrow down the selection that we look at, since there are so many destinations in the municipality, we have chosen to look at some of the places that have both interesting nature and culture historical landscape.

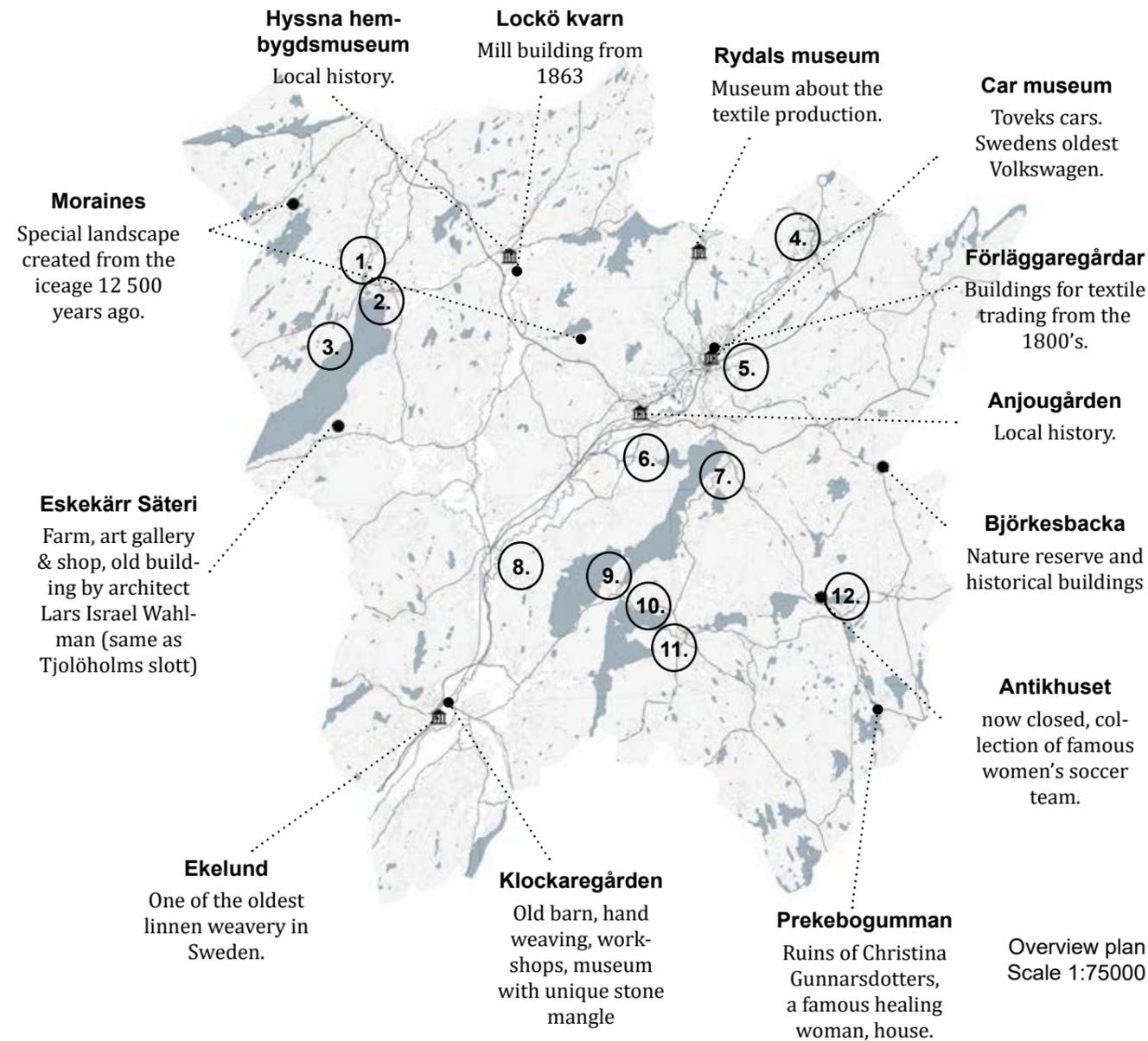
Definition

Since the term culture include so many different aspects, we want to explain what we mean by culture.

Culture as...

- ... historical relics
- ... local historical community spaces
- ... art, craft and design
- ... historical landscape and form

All of our projects highlight different aspects of culture history, and what kind is specified with each project.



1. Storåns valley

A bridge from 1876 and area with high nature and historical value.



2. Sätilla badplats

Rare nature and port for the boat ISA - history since late 1800's.



3. Ramhultafallet

Nature reserve with trees dating back to the 1800's.



4. Solänge kvarn

Ruins of an old mill close to Fritsla. Commonly used by locals.



5. Mariebergsparken

A recreation area in Kinna with rebuilt historical buildings.



6. Öresten fästning

A burned down castle on the old border to Denmark.



7. Ramsholmens kulturresevat

Landscape with history from the stone age to today.



8. Kattunga kapell

Ruins of an old chapel that has traces back to the 1200's.



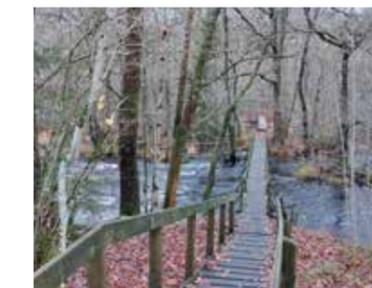
9. Hyltenäs kulle

The ruins of an old hunting castle on top of a mountain.



10. Hjortnäs festplats

An event space with stage, built in the 1920s.



11. Sju strömmar

Natura 2000 area, with close connection to an old mill.



12. Brokvarn

Running mill, bridge from the middle ages and another from 1830s.

Overview plan
Scale 1:75000

Proposal

Based on the analysis, we collected numerous places of cultural and natural interest which are suitable for architectural interventions with the goal of highlighting the local context. We focus on four sites and develop these key projects further using our design principals. Short stories of both local and external tourists show the existing connections on foot and by public transport. Furthermore, six more smaller interventions are shown as an outlook for various options of development by adding small structures.

Key references

Buildings



Figure 3: Allmannajuvet by Atelier Peter Zumthor. *The wooden structure is carefully placed in the terrain, and offer shelter and view points for the visitors.*



Figure 7: Naturum, eg. Fjärås Bräcka, Sweden. *A visitors centre with activities and exhibitions, placed in carefully decided location with outstanding beauty or scientific interest. Here you can learn about the surrounding nature, cultural history, geology, and peoples relation to nature.*

Art projects

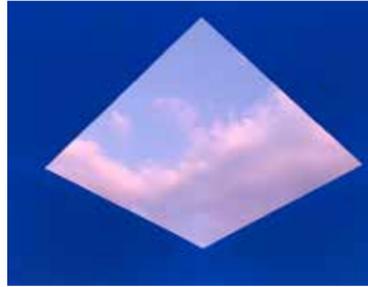


Figure 4: James Turrell - House of Light, Japan. *The art piece frames the sky and removes the surrounding focuses which creates a more intense experience.*



Figure 8: Part of Capability Brown 300 festival, England. *Exhibition that highlights some of the Englands historical landscape architects. Frames the landscape and educates about it.*

Structures



Figure 5: Store Mosse, national park, Sweden. *Wooden paths make the nature more accessible and guide the visitor through the landscape.*



Figure 9: Walk Over the Quarry by henkai architekti + Zahradka-Park-Krajina, Czech Republic. *Lookouts on an abandoned quarry hill. The walk paths to each shelter make the area more accessible.*

Landscape



Figure 6: National Scenic Routes, Norway. *Eighteen highways were appointed by the Norwegian Public Roads Administration as National Scenic Routes as a result of their meaningful sceneries and tourism infrastructure (e.g. rest stops and viewing points) along the road.*

Natural wonders are displayed and strengthened by art, design and architecture together with accommodation, dining, resting spots and cultural facilities.

The overall aim is to increase tourism in the rural areas that are crossed by the highways. In addition, architecture should facilitate visitors in experiencing nature, astonish them and establish a (re) connection with nature.



Where?

Accessibility

The picked areas should be accessible from and connected to the existing road network. Transport such as bus, train, biking and walking should be encouraged.

All year round

The location should be picked so that the location can be visited all year round. The interventions and their function can adapt over the different seasons depending on the visitors needs.

What?

Inclusive design for the local community

The design should be inclusive and invite people of all ages to come and visit. It should encourage to act as meeting places for first and foremost the local community, but also invites people from outside of the municipality to experience the areas.

Highlighting the context

The design should act as a medium to experience the existing cultural historical or nature aspects of the area. The architecture is used to highlight the different aspects and adds another value to the space.

Design strategies

From our analysis, we created design strategies to connect all of our key projects together. The answers to “where”, “what”, and “how” speak to different aspects of the design and placement.



How?

Respect the surroundings

The design should respect the surrounding building structures and nature. The impact on the climate and the local landscape should be carefully decided.

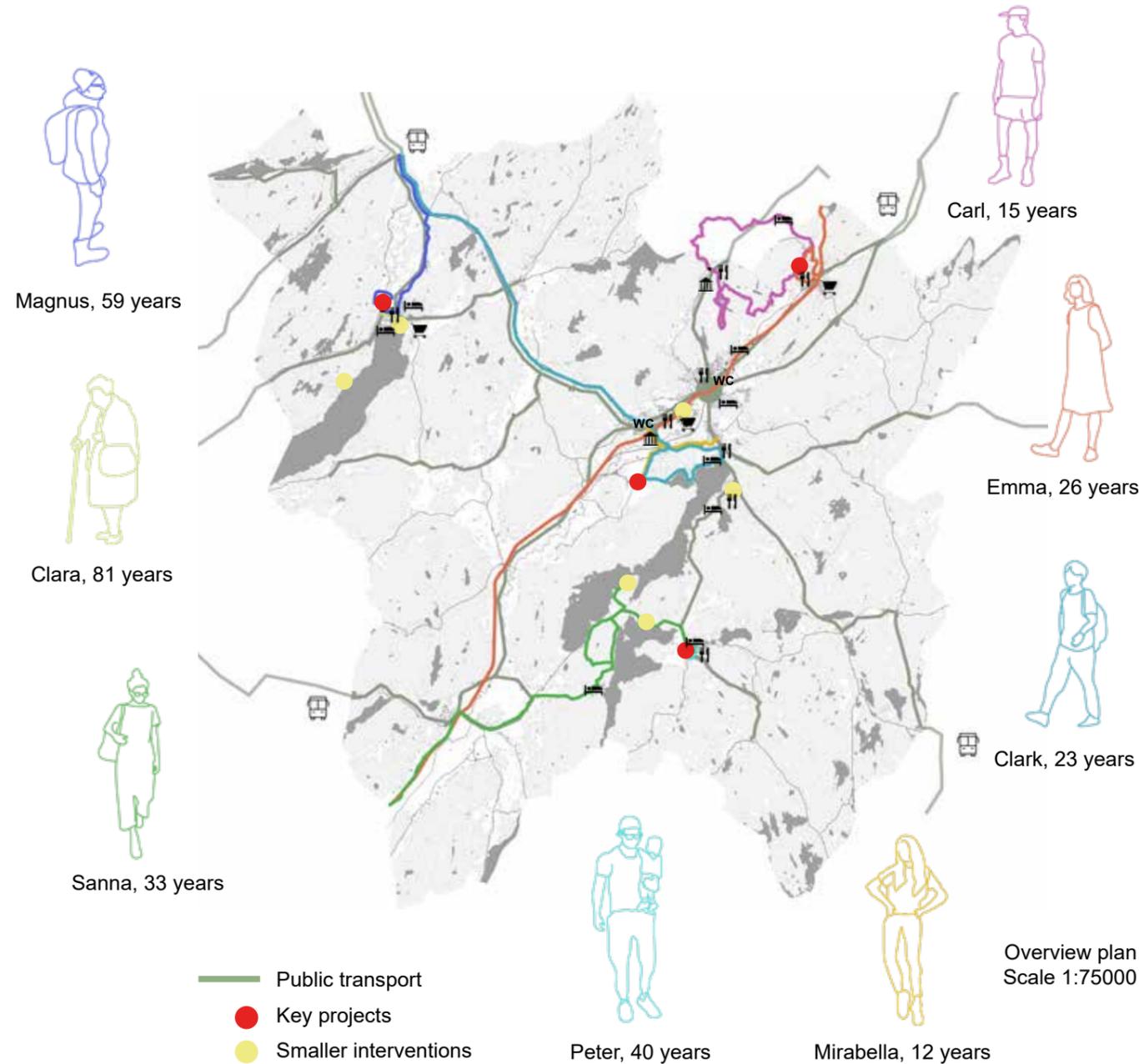
Sustainability

The design decisions should have all aspects of sustainability in mind. This is for example regarding to material use and maintenance.

Mapping and stories

All of our interventions have a connection to the existing road and public transport network. By looking at the existing services, shown in the analysis, we have matched different services that can be combined when visiting the spaces. This can for example be places where to get food, go to the bathroom, and other destinations.

To show how you can use and access the interventions we have created stories for eight people (see page 20-21) that visit the focus project locations. The stories show a general introduction to the location, which will be furthermore explained on the coming pages.



Locations for key projects



Storån

The area of Storåns Valley has both a long cultural and natural history. The valley close to Sätilla is of national interest for naturecare and recreation. In the Håkankila-area are some of the best examples of oxbow lakes. Besides that a few structures from the stone age are located along the stream. Håkankila, the village close by, was created in 1836. The old existing Smälteryds bro was built in 1876.

Solänge kvarn

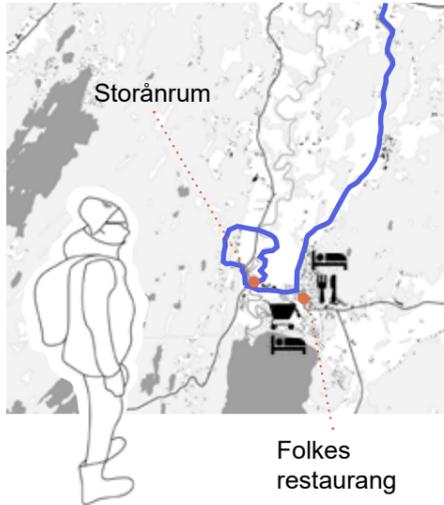
Close to Fritsla and nestled between the river Häggån and a hill covered by a lush oak forest, one can find the remains of "Solänge Kvarn", an old mill that was built during the late 1870's. This place was and, after the mill's destruction by a flood in 1927, still is an important part of the local community in Fritsla. Today, it is a beloved place for school trips to nature, family picnics and local events.

Öresten fästning

Öresten fortress was a medieval fortress built to defend Sweden's western border in the 13th and 14th centuries. It has been burnt down three times and rebuilt twice, so there is not much left of the medieval castle. Today, the ruins form a beautiful point and a pleasant destination for excursions.

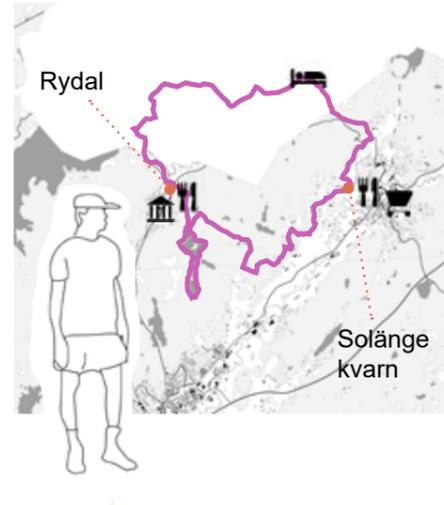
Sju strömmar

Seven streams is a Natura 2000 area and located in Torestorp. The area consists of a beautiful forest and seven creeks that branches out from Torestorpsån. At the end of the area is an old mill area, with buildings from around 1900. Walking through the area is an almost magical experience because of the beautiful nature.



Clara, 81 years

Tjena! I was born 1937 in Sätila and have spent my whole life here with my family. Since two decades I am member of the local 'Childrens-wear Association' where I can help other members by showing my knowledge in weaving and learn also new techniques in creating knitting pattern. I really enjoy being with other people. Finally the association found a rentable room at the new built Storånrum where we can meet every Tuesday and Thursday afternoon. I only have to enter the bus in Sätila centre and get off one stop later at Smälteryds vägskäl.



Emma, 26 years

Hey, I'm Emma, 26, and I'm doing my Master's in fashion design in Borås. I planned to take a train down to Varberg to visit a friend. Since I knew about an exciting old textile factory in Fritsla, I stopped by and went for a little walk. As I continued a trail starting at the factory and leading down the river, I stumbled upon this hidden gem. It's a small place with the remains of an old mill, framed by two structures. There are kids playing in the forest and local families having a picnic. It's a beautiful spot and I will stay a little longer here before I'll continue my journey. How about an afternoon nap in one of the comfortable hammocks?



Clark, 23 years

Hi! I'm doing my master in Conservation of Cultural Heritage Objects in University of Gothenburg. I'm very intereted in history and have heard of an interesting historical landmark in Mark. So one Saturday after lunch I took a bus to Skene and then took a 40-minute walk to Öresten. Climbing up the hill I saw a watching tower and four viewing platforms. In the tower there was even more detailed information and photos about the history. Then I climbed down the hill and walked along the Kurirleden hiking path for an hour, experiencing the path where the messengers delivered the letters in the old days. Eventually I walked to a restaurant by the lake for dinner.



Sanna, 33 years

Hejsan! I live in Varberg and I'm staying at the retreat at "Sju sjöar". On the sunday I took my rented bike and made my way to "Hyltenäs kulle". The view was amazing, but I'm lucky the bike's electric. Afterwards I continued to Torestorp where I parked the bike and had some lunch at the local pizzeria. I took a stroll in the area and found a pavilion by "Sju strömmar". It was so calm sit and watch the beautiful surroundings there. On my way back I passed by "Hjortnäs festplats" where "Sju sjöar" hade organized a music event. It's really nice that they have revived this place where so many memories have been made.

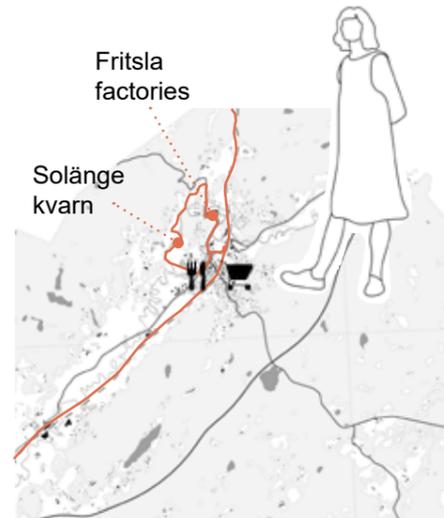
Magnus, 59 years

Hej! I'm a mechanical engineer and live in Gothenburg, working at Volvo. Sometimes I need a day off from my busy surrounding, so I really enjoy discovering new areas close by. The upcoming weekend I will take a bus to Sätila to go for a short 6 km hike along Storån. I really love to be in nature and to learn something about my new surrounding, so I'm looking forward to check out the new built Storånrum, get some information about both the existing geography and biodiversity and grab a coffee. If I get tired after half a way I can also take the bus back and get off again at the bus station right behind the Storånrum or walk 12min to Sätila centre to get a proper dinner at Folkes Restaurang.



Carl, 15 years

Tja! I'm Carl, I'm 15 and live in Fritsla. Most weekends I play soccer with my friends, but this one is different. It's mid June and this weekend there is the annual textile festival that Kinna, Rydal and Fritsla organize to honour their local history. There are always fun events and free fika in and around the towns, so my friends and I decided for a 22km hiking route which connects Fritsla and Rydal. We love the outdoors, especially fishing. That's why we will do the trail counter clock-wise and finish at our favourite place - the new community place at Solänge Kvarn. At dawn there is great fishing here and we can roast our catch over the bonfire which is organized as part of the festival.



Mirabella, 12 years

Hey! I live in Skene with my grandparents. I really enjoy spending time with nature. Every weekend I cycle in nature with my friend who lives in Örby. Usually we take a 15-minute ride to the viewpoint at Örestens fästning, which is our favourite spot. We park our bikes at the bottom of the hill and take the hiking path up the hill which is less than 1km. There is a new observation tower on the hill and we like to climb to the top of it, where we can have a great view of the municipality. Also, we sit inside the tower to rest, chat and enjoy the view.



Peter, 40 years

Hello! I live in Torestorp with my kid. In the weekends we like to be in the nature, so a walk along "Sju strömmar" is always a good choice. My kid loves to balance on the rocks over the streams. We start in the south part and end up by the old mill and the new pavilion. Here we eat some fika that we brought from home. We listen to the water-stream and play with the wheels that transport the water. After the break we continue back and head home along the path parallell to Älvseredsvägen.





Storånrum Education center
Site analysis

Storånsvälley
 The area of Storån's Valley, where the Storånrum is located, has both a long cultural and natural history. The valley close to Sätilla is of national interest for naturecare and recreation, mentioned as one of the action plan areas for Marks nature care program and the country boards caring plan for agricultural land. Besides that the valley is one of the 22 pointed out highly value forest areas in the region of Västra Götaland.

The existing strategy/action plan describes the idea of creating a hiking trail, a conference center and a museum, which have been already carried out as potential future projects in the area by the municipality. Based on the proposed vision of a "Viskanrum" as a gate to the municipality, a "Storånrum" is visualized, located in this rich historical environment.



Figure 10:
 Aerial View Storånvalley, 1970
 Scale 1:10.000

Håkankila
 Håkankila, the village close to the Storånrum, was created in 1836 and since then the buildings have barely moved. Along the stream are a few structures from the stone age. Many of the locations of the buildings and plots are today marked as relics of antiquity because of their long continuity as places of residence. Historically, the valley is a part of a large rift valley in the primeval rock area. In the Håkankila-area are some of the best examples of oxbow lakes, which are very important areas for wildlife and biodiversity. The area is characterized by meadows with old trees, wetlands and a rich biodiversity. Storån river itself reaches from Lygnern in Mark to Rävlanda in Härryda.

Intervention

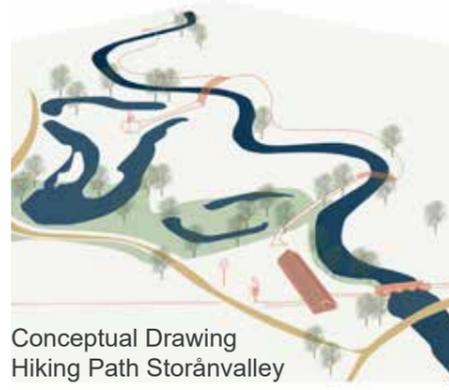
Based on the concept of a Naturum, the new designed building acts as an entrance to the area of Storån's Valley and contains a museum/information area, a classroom for workshops/rentable space for conferences/local associations and a small café during high season. Besides that it's connected to a new created walk by the stream of Storån up towards the more nature valuable areas by using wooden walkpaths, that doesn't harm the nature. The area has a lot of cultural history and important nature values, but it's still suitable for a building intervention. The Storånrum is located close to Sätilla, in a walking distance of 15 min, close to a new planned housing area and also easily reachable by public transport. The material of an old existing barn can be reused. As a building of national interest the responsibility and financial support are incumbent upon the country of Sweden.



Smälterydsbro, 1942
 Figure 11: Vänersborgsmuseum



Smälterydsbro, 2022
 View of Site

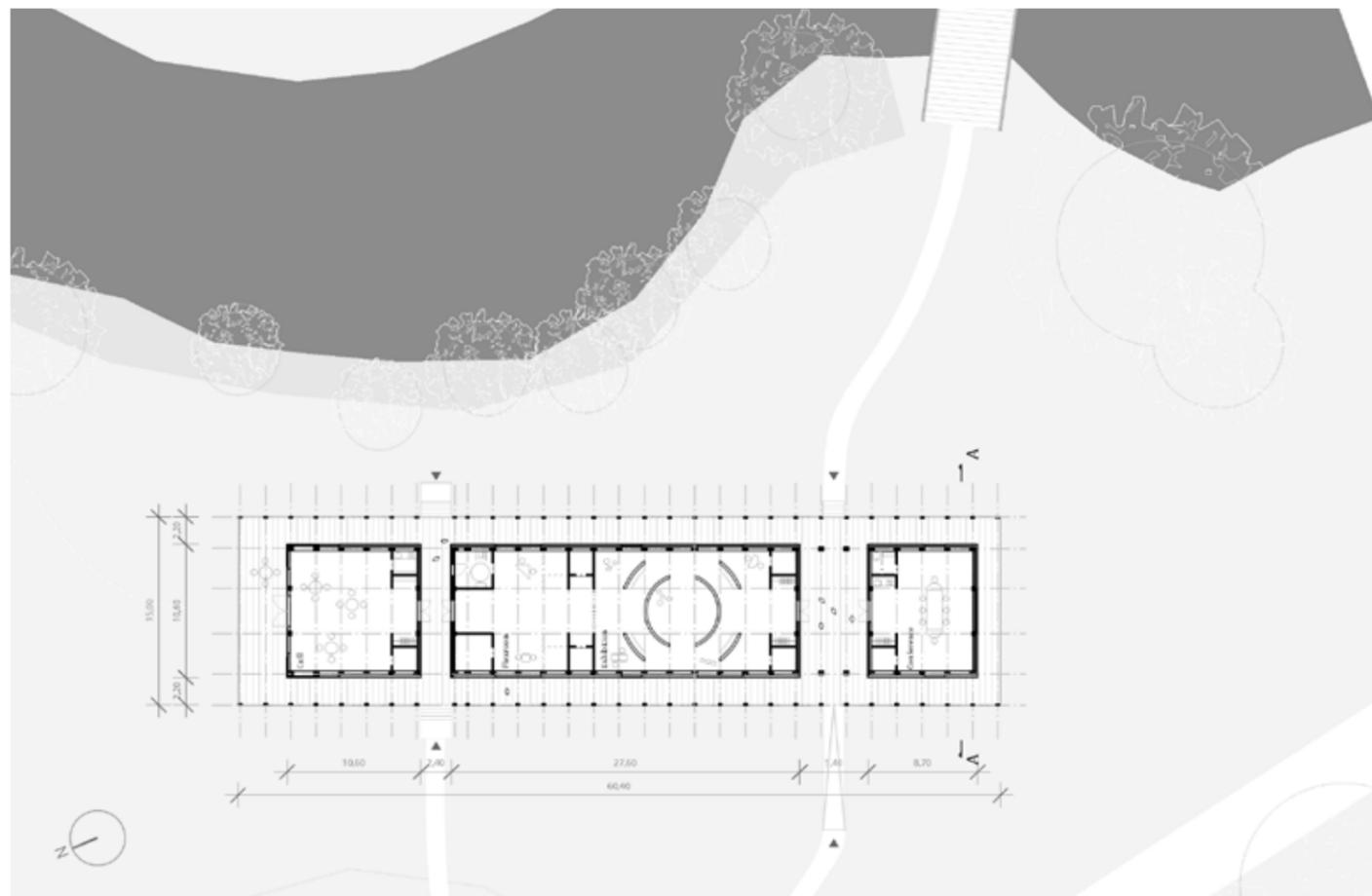
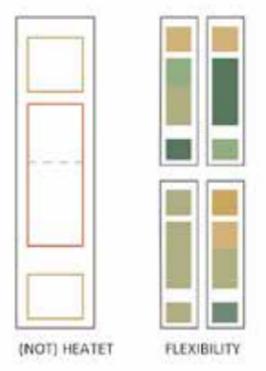
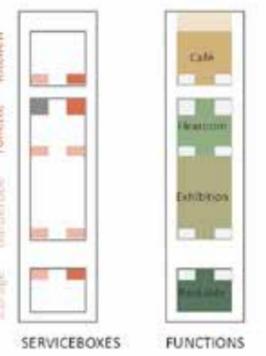
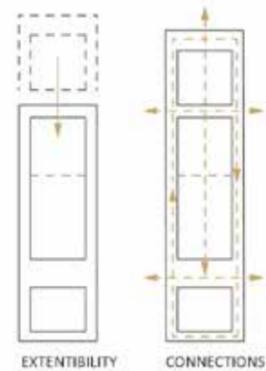


Conceptual Drawing
 Hiking Path Storånvalley



Siteplan and
 Section A-A
 Storånvalley
 Scale 1:5000





Floorplan



The old existing Smälteryds bro behind, was built in 1876 and haven't been used since decades because of an new built bridge nearby. Through the connection it comes to the fore again.

Elevation West



The large roof protects against bad weather conditions and bundels the functions. Stairs and ramps enable the visitors to enter the building also barrierfree. Through the elevation the base plate is protected agaist moisture.



Perspective View

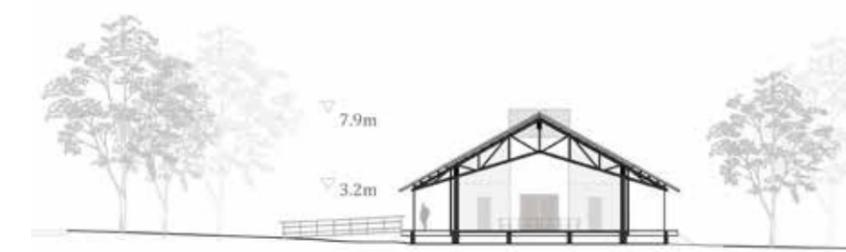


Construction Scheme



Explosion Scheme

- Roof Light
- Corrugated Iron Roof
- Insulation
- Wooden Counter Battens
- Wooden Trusses, cc 2000 110x150; 75x100
- Gluelam pillars (pairs), cc2000 115x270
- Insulation
- Wooden Cladding
- Wooden Pillars (pairs), cc 2000
- Wooden Beams with CLT Slab
- Concrete Pins



Section A-A

Diagrams

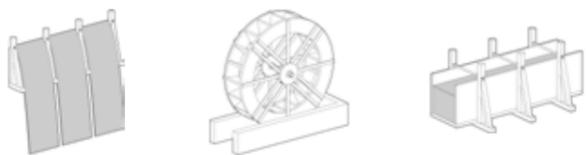


Solänge Community Mill

A homage to Fritsla's old Solänge Kvarn

Nestled between the river Häggån and a hill covered by a lush forest of oaks and birches, one can find the remains of the old "Solänge Kvarn", an old mill that was built during the late 1870's. This place was and, after the mill's destruction by a flood in 1927, still is an important part of the local community in Fritsla.

Architecturally, the intervention is inspired by three main elements of the former mill: the wooden construction of the water-channels that led from the dam all the way to the mill; the actual water wheel which had an astonishing diameter of 6 meters; as well as the waterfalls of excess water that were a distinctive feature (photo taken from the opposite riverbank).



Key elements that inspired the project's architectural qualities

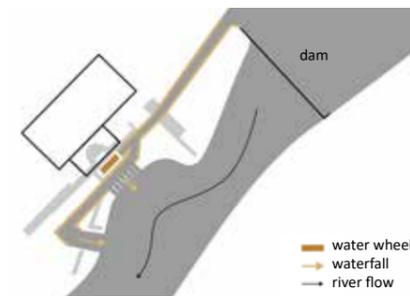


Figure 12: Photograph of the old mill
Below: a reconstructed plan based on today's remains

Fritsla's old mill

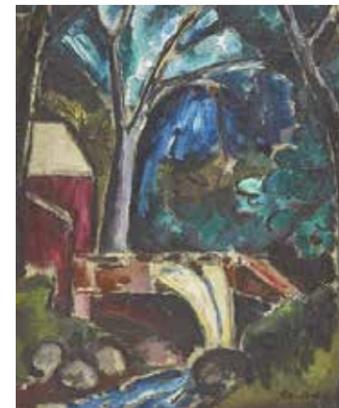
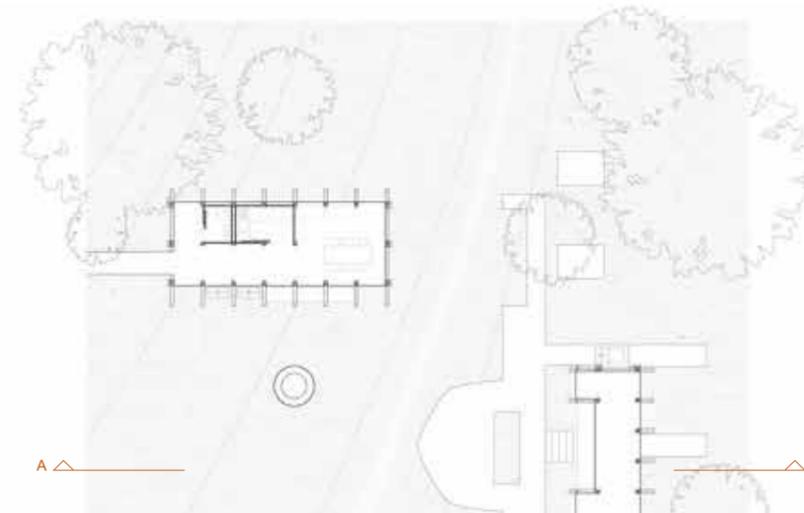


Figure 13: This oil painting by the local artist Sixten Lundbohm (1895 - 1982) captures the beauty of the former mill surrounded by nature.



Floor plan and section A 1:200

Textile heritage in Fritsla

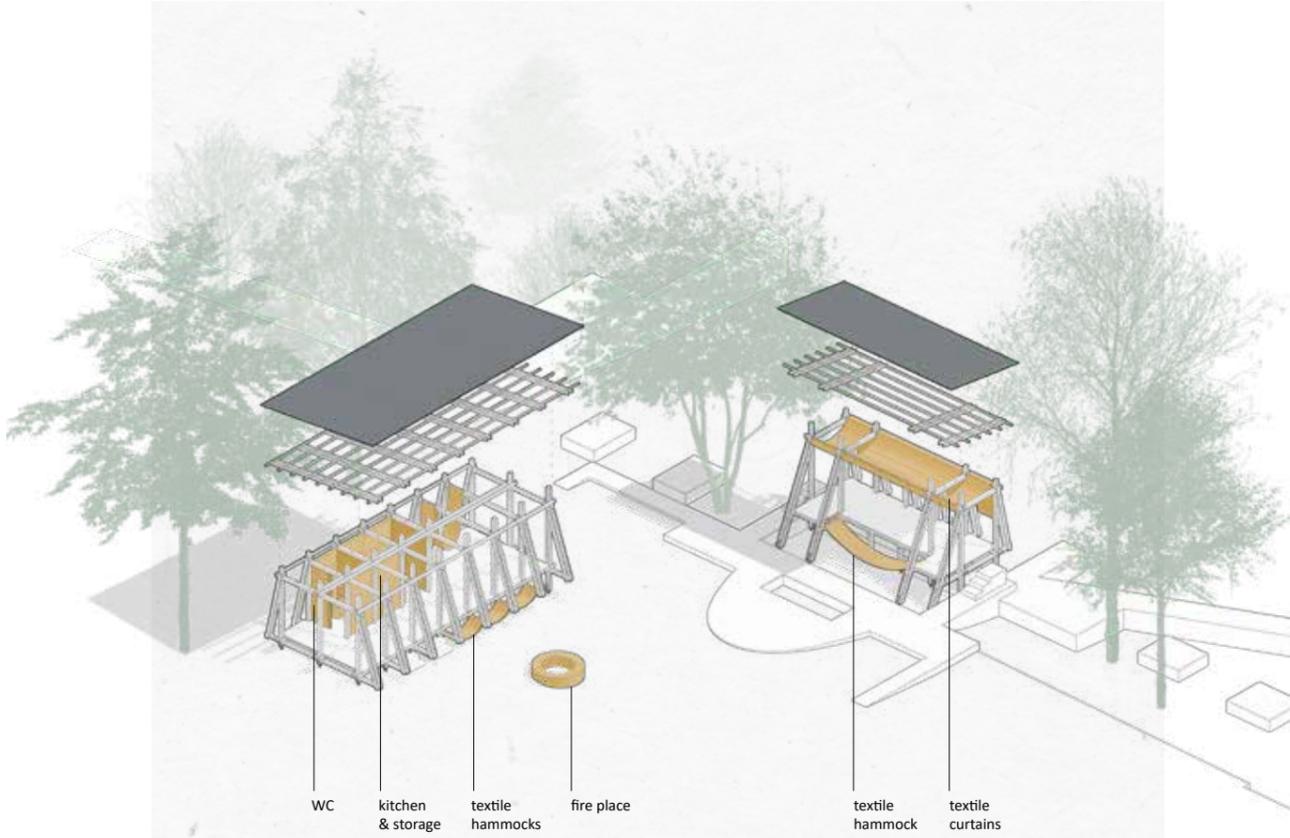


Figure 14: The intervention also aims to celebrate other cultural heritage that characterises Fritsla. Textile elements of the structures remind visitors of the important role with in the textile industry.

Nature and biodiversity



Located in a rich biodiversity hotspot, the intervention offers a comfortable place to admire local species, as the kingfisher (figure 15) and the wood anemones (figure 16).



Celebrating local community life

The intervention respects and supports the activities that are already taking place in this beloved area: school trips to nature, family picnics and community events. One of the two structures offers a toilet, a kitchen facility and storage space for foldable furniture, while both of them feature playful textile elements that allow different ways of using and interacting with the structures. A central fireplace invites for cozy evenings with friends and family.



Textile curtains can be pulled up on both sides to create maximum connection with the river



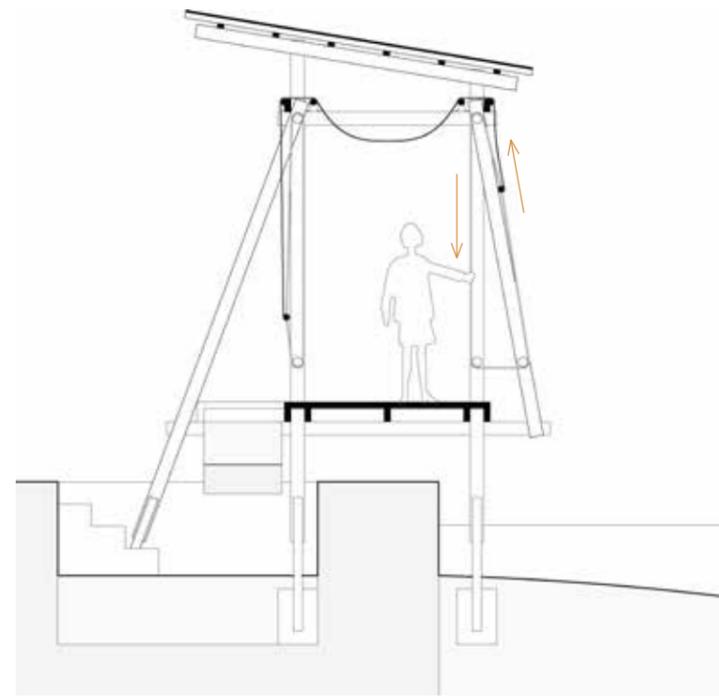
Pulling the curtains down on one side opens up the structure to the other



The big textile curtain can also function as a screen for movie nights in warm summer months

Playful textile elements

The weather proof textile elements that are applied throughout the design of the two structures fulfill two purposes. They remind the visitor of Fritsla's industrial roots and offer playful moments of interaction between the structure and its users. Some elements serve as hammocks, while others can be adjusted like curtains to frame different views or alter the structure's orientation.



A simple mechanical rope system allows people, regardless of their height, to adjust the textile curtains on both sides



Along the southeast elevation of the structure closest to the river, the curtains also refer to the mill-waterfall that once characterised this place



Site analysis

Öresten is located next to Slottsån, about 2.5 km south of Skene and a little over 2 km east of Berghem. Free parking is available here. From the car park it is less than one kilometer up the castle hill on the “Viskastigen” hiking path.

The ground in the car park is muddy after the rain, and the hiking path is original. From the top you have a good view of the surrounding terrain: the Viskan valley, tributaries, large fields. The views are very open in winter. In other seasons, however, the oak trees are so thick that there may be obstruction of the view.



Site plan 1:5000

Örestens Fortress Revival

History

Öresten fortress was a medieval fortress built to defend Sweden’s western border in the 13th and 14th centuries. It has been burnt down three times and rebuilt twice, so there is not much left of the medieval castle. Some stones marked with numbers in the grounds indicate the remains of previous excavations. Today, the ruins form a beautiful point and a pleasant destination for excursions.



Figure 17: Drawing made by a German mercenary, Paul Doinstein, at the siege of the Danes in 1502



Figure 18: View of the mountains from the farm



Parking lot

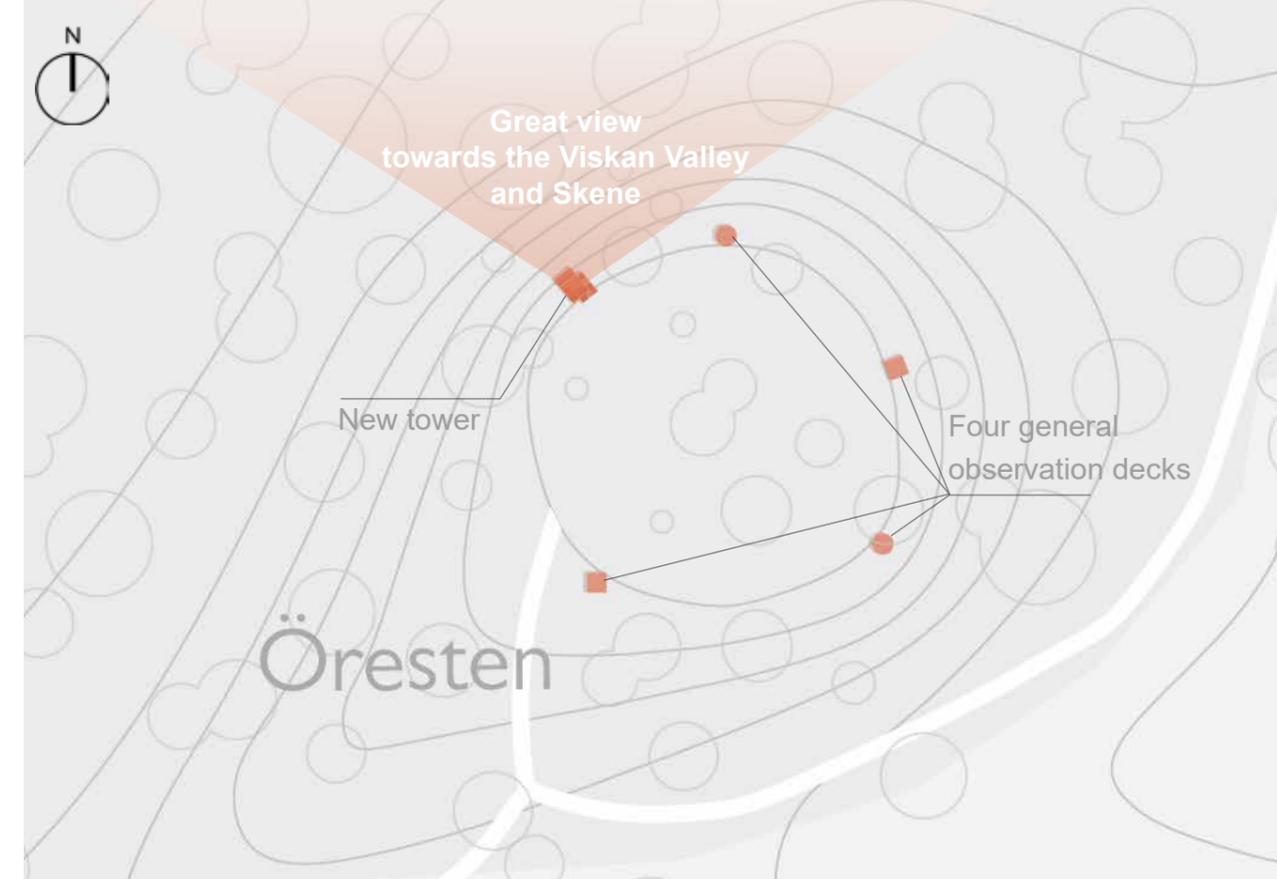


Figure 19: The entrance to Öresten



Figure 20: View from Slottsberget towards the Viskan Valley at Skene.

Site plan 1:1250



Map of the 1949 excavations

On the right is a map of the 1949 excavations. The Roman numerals (I-VIII) mark the test shafts where the remains of the building were found, and they are marked within the site by small stones inscribed with Roman numerals. The numbers (1-7) mark other finds.

- I Part of the foundation of a brick house
- II Remains of a tower with a possible assumed foundation
- III Foundations and floor
- IV A waste pile
- V The floor and foundations of a granary with a mill
- VI A small brick foundation, said to belong to the rear tower of the main castle
- VII, VIII A wooden house
- 1 Old Lilac Gazebo
- 2 Stones
- 3 Spring
- 4 Test pit
- 5 Grass bench
- 6 Gazebo
- 7 Newer stone foundation for dance floor or gazebo

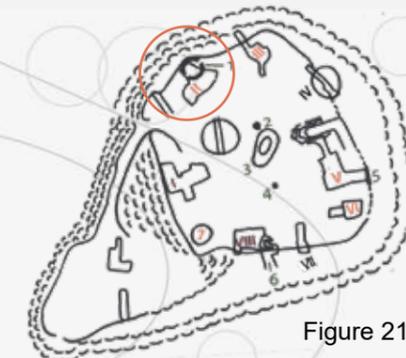


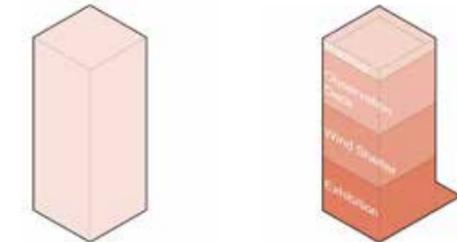
Figure 21

Intervention

Today it’s hard to see and relate the history because no remains of the castle are left on the site. In order to highlight the history of the site, I want to insert a viewing tower that resembled the watchtower of the old castle, marking the nature and culture of the site in the language of architecture.

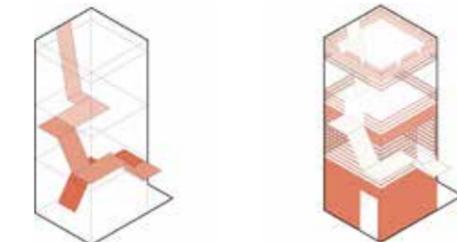
The location and form of the tower was determined on the basis of the excavation map in 1949 and the drawing of the castle in 1502. And four additional general observation decks were created, whose locations also relate to the remains of parts of the historic building. Although the medieval castle was burned down, the new tower and viewpoint perpetuate history in a different way.

Diagrams



1. Generation
Mimicking the old tower form

2. Divide
The different functions are divided according to the height.



3. Streamline
Set up different staircases according to the different functions. A progressively more exciting ascent from bottom to top

4. Facade
Depending on the function, the façade is designed from the bottom to the top, from real to imaginary.



Elevation 1:200

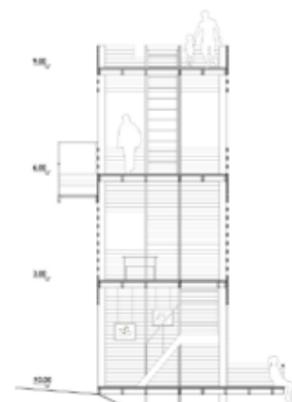
Function

Exhibition - The ground floor is an exhibition area. It brings together information about the history of Örestens fortress and allows people to learn more about it.

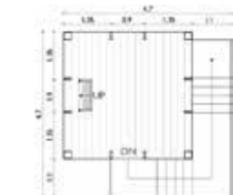
Wind Shelter- On the first floor, tables and chairs are provided for resting and sheltering from the wind.

Observation Deck - The staircase outside the building leads to a more conventional viewing space, where some people can also choose to stop.

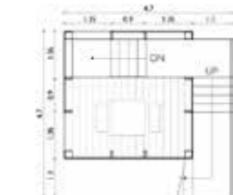
Rooftop - The roof offers a more exciting viewing experience, allowing people to climb to more than 9m from the summit to get a panoramic view of the Mark.



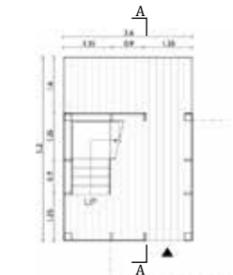
Section A-A 1:200



Third floor plan 1:200



Second floor plan 1:200



Ground floor plan 1:200



Material and sustainability

The material will be maintenance-free wood. Like the wood developed by the norwegian company Kebony. They created an environmentally friendly way to make softwood as hard and as durable as tropical wood. The patented process is called Kebonization. After the process the kebonized wood becomes harder, more durable and more resistant to weathering. It requires no maintenance and its golden brown color naturally turns silver-grey on outdoor exposure.



Third floor - Overlook



Ground floor - Exhibition



Sju strömmar Pavilion

Natura 2000

The area of seven streams is part of the Natura 2000, which is a network of protected areas all over EU. The network consists of valuable nature areas with species or nature types which, from an European perspective, are considered especially important to protect. The goal is to protect biodiversity and endangered species and habitats. The county board is the licensing authority for the Natura 2000 areas.

There are no general stops on continued work and development of the land in a Natura 2000 area, but you need permission from the country board if your intervention is at risk of having a considerable impact on the area. This can be for example interventions regarding forestry or affecting the water environment.

Background

The "Sju strömmar" is located where the creek of Torestorp is divided into seven parallel branches. Both the water and natural environment surrounding these creeks are of high nature value. There are plenty of trees and plants in the deciduous forest, and a variation of fishes in water.

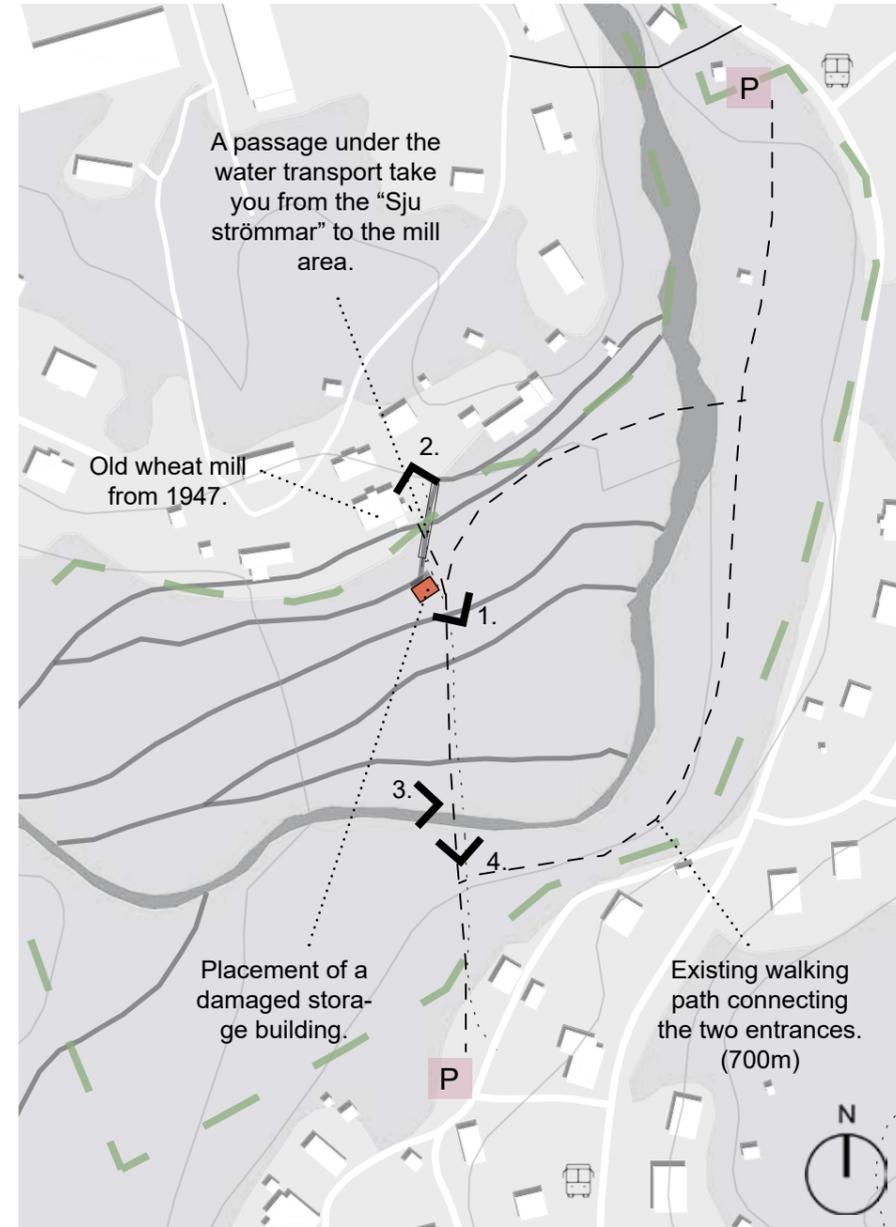
The land is owned by the church and private landowners. Some of the area is also a church reserve, meaning that the church protects the area because of its cultural and/or nature significance.

To protect the area, the care plan for "Sju strömmar" suggest to minimise the exploitation in the area regarding new digging for e.g. plumbing or cables. This is to not risk polluting the water.

Site analysis

In the area is an existing walking loop of 700 meters which takes you through the forest and across the creeks. The path has been made more accessible by different bridges and boardwalks, created by private initiatives and Skogsstyrelsen. The sound of the streams and ambiance of the forest, creating a fairytale kind of feeling.

Right next to the site for the intervention is an old mill from 1947, that hasn't been in use for a long time. The machinery on the plot seems to have been run by water power coming from the streams. On the site are various water basins and wooden transportation constructions. Many of the buildings and structures are beautiful, but in rough shape.



— Natura 2000-area
 - - - Hiking path
 Situationplan
 Scale 1:2500



1.

2.

3.

4.



Intervention

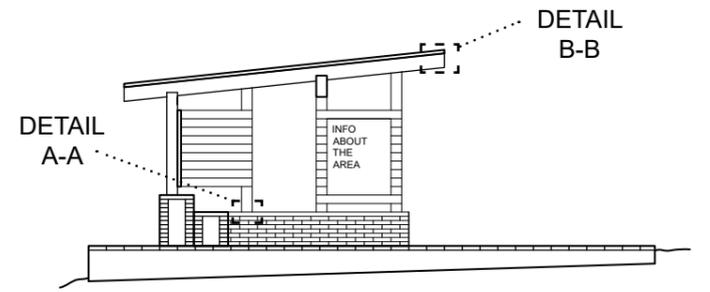
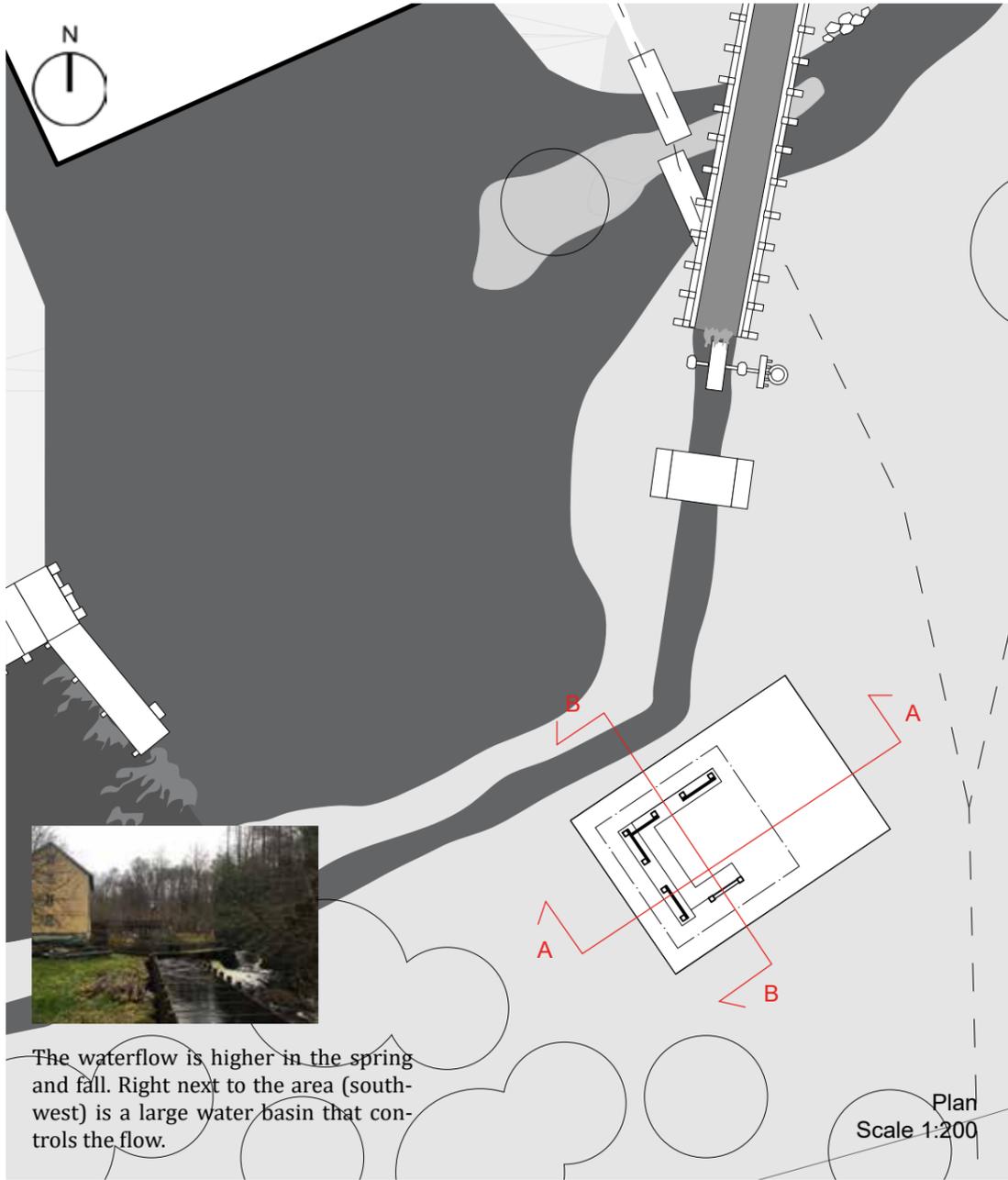
On the existing spot of an old fallen down storage building for the mill (left on photo 1) is now a pavilion where you can sit, listen to the streams and take in the beautiful surroundings. The design for the structure is inspired by the form language of the water transportation (photo 2).

Next to the pavilion is a bridge that takes you closer to the water, and a playful element of highlighting the history of the area by showcasing the traditional mechanics of grinding seed.

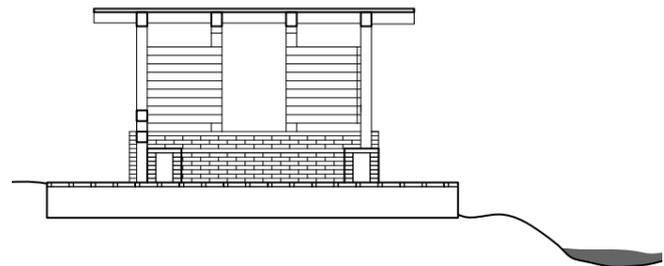
Materials

The bricks and still functioning wood are salvaged from the destroyed old storage building. The bricks form the base, the surrounding wall and bench for the pavilion. A mix of new and old wood will be used to form the pillars and beam construction for the shelter roof. The existing base for the storage building sets the shape for the new structure to highlight what has existed earlier on, and is also marked by a larger platform made of bricks. Some of the old wheels stored in the storage space are used in a water installation.

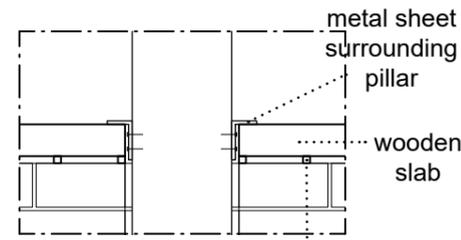
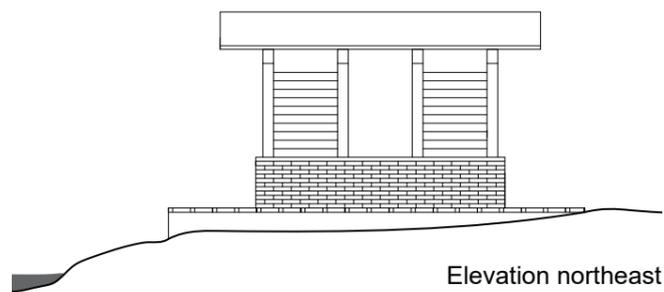




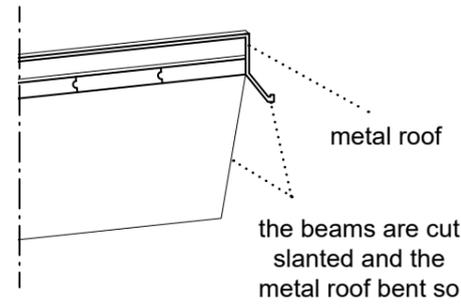
The northwest opening highlights the old mill building. Section A-A Scale 1:100



The southwest opening highlights the forest where the streams continue. Section B-B Scale 1:100



Detail A-A Vertical cut Scale 1:10
metal staff that creates a small gap between the bricks and the wood



Detail B-B Vertical cut Scale 1:10

Design

The new constructions at the site are about taking care of the existing materials and context. By using somewhat simple methods, a place for reflection on your surroundings is created. The different seating places show different focus areas of the area - the forest, the water, the history and historical buildings.



Discussion

To sum up, we try to reflect about finding a suitable structure for the project, deciding which spots we want to work with, collecting background information to justify the choice of the focus projects, designing several structures with an adequate language of architecture related to the chosen spots, how the key projects are connected, the identity of Mark, and finally the sustainability of the project.

Discussion

Process

Trying to find an answer to a need in a place that you recently visited, and maybe even a country that you recently moved to, is a tricky task. Our way as a group of tackling this was to look at what the representatives from the municipality and people that we met brought up during our first site visit. We noticed how many people talked about the history, nature, but also how the municipality is struggling with its identity since the textile industry isn't as strong anymore.

We started big, trying to gather as much information as possible about the municipality and its "golden nuggets", and then later on narrowed down the scope to match our conditions. Each person in the group got a site to work with, which created both interesting similarities and differences in the final product. This variety also speaks to the variety we see in the municipality as a whole.

Function

The functions of the interventions do not only highlight the nature and historical context, but also fill other needs like the need for more meeting spaces in Sätilla. A space like Solänge mill that is already commonly used by the people in Fritsla, but now they have a structure that more easily facilitates the existing events like "tipspromenad" or midsummer eve celebrations.

By working with this variety of interventions, based on our design strategies, we have tried to create a type of toolbox or handbook with examples on how you can work with this theme. One of the aims for this project was to help the municipality in creating spaces for the local community and in turn make them feel seen, but also places that might attract external attention which increase the economical incomes - either by tourism, or by people moving to the municipality.

Network

There are many potentials in developing and growing this project. Similar to the Scenic national routes in Norway, this project aims to highlight interesting places but on a smaller scale. This project has focused on the local context of various sites and created structures that have a strong connection to their respective context. A continuation of this project might be to see how these interventions, in combination with possible new ones, can be connected in different themes. During the process we have e.g. discussed:

- On my way to...(Gothenburg, Varberg, Kungsbacka, Borås)
- Make a daytrip (not focus related) --> Residents (Northeast/Southeast,...)/Tourists circle
- Make a daytrip (focus related) --> Activity is the reason (Hiking, Swimming, Museum,...)
- Focus Related/Thematic: Culture (Textil, Historical Ruin, Mill,), Nature
- Transport: Public Transport, only by car, by foot --> mention time and distance

The phases in which all the built structures are built can also adapt the routes and how the locations are connected. The possibility of connecting them are endless, which is why we in this project put the limitation on creating the stories.

The functions of the interventions are formed to adapt both to the more local visitors who might go there regularly, the local tourist who wants to explore their surroundings, and the more "external tourist" that visits Mark on a trip.



Sketch of routes connecting different interventions.

Identity

Mark municipality today struggles with their identity and the question if they are in need of a new one when the textile industry is declining. One marketing strategy was for example to market the municipality as "Little Tuscany", but that ended up with smaller successes. Maybe Mark isn't in need of a new identity, but more highlighting the already strong characteristics that exist all over the area - the nature, the history, the community.

Working with identity is something that can be developed in different ways. It can be as a package, similar to "Little Tuscany", but it can also be a longer process that grows one step at a time. Our project tries to work with the second option, and encourage people to maybe create their own way of highlighting what is around them.

The municipality has a wish to grow in population to be able to offer better and more services to the inhabitants. In the introduction by the municipality, we saw a focus on the more central villages - Skene, Kinna and Örby, and that the development feels unequal in regards to all of the villages. One part of the project became the goal of not only focusing on these central parts, but also showing the importance of the other smaller villages and their context.

Mark has a long history, where all villages have their own characteristic and community. That is what we wanted to show.

Connecting with nature

By connecting to nature you are more inclined to do good for the nature. In the report "Meeting Environmental Challenges: The Role of Human Identity" (2009) by Crompton and Kasser, they write that if you value power and money, the risk of doing damage to the nature is higher. Our interventions try to bring people out in nature and offer a new way of experiencing it. This can encourage people that earlier on aren't as inclined to spend time outdoors, into doing so.

Connecting to history

Connecting to the history of a place can help you to be grounded in where you are today. It can also answer questions on why things are like they are today. But history can be abstract, and that is why the interventions try to create spaces or more direct architectural associations to the history of the locations. For example, the size of the watch tower at Öresten fästning, facilitates the pedagogy of the site - telling a story of another time and living situation.

Sustainability

We have worked with many different aspects of sustainability. We tried to create our architectural interventions in a scale which is adequate and appropriate for the chosen places, take care of the surroundings by adapting the shape to the specific places, offer different experiences by creating flexible spaces for various uses that can be used during all the seasons of the year. We also tried to use local and/or sustainable materials that doesn't harm the nature.

Social

We didn't want to create architectural structures without any connection to the municipality and the people living there, but instead structures that the locals should accept and see the new added value - otherwise nobody will use them. Because of our limitations in time and our scope, we could use participation design as much as we would like to, but we see the possibilities of working with interviews, co-design methods and workshops creating this kind of structures.

By being part of the process of finding new places for small interventions and ideas for these, the people in Mark can help with their knowledge, enjoy the design process balancing the different scales, respect and appreciate the places. The help and participation create a stronger connection and bond to the designs.

To still connect with the people of Mark without designing together, we listened to the needs gathered from the first workshops, e.g. need for meeting places, but also made an interview with the cultural department to get their input.

Economy

One drawback of every type of intervention is who should finance, build, and maintain it for a longer amount of time. The different projects show different scales of financial support, where the Storån could be paid partly by state fundings, and the pavilion can be focused more on private funding from the "bygdelag" similar as the wooden walking paths in the Natura 2000 area.

Ecological

Doing these types of interventions needs to be carefully thought through. There needs to be a discussion on where a built structure is needed. Some places might increase the value of a place, like Bratman, Hamilton and Dailywrote, and some places might be best to be left untouched. This type of discussion was held for example with the intervention of Storånrum, where we chose to place the building in the beginning of the Storån valley, which had smaller natural values regarding to the "Natur och kulturmiljöinventering av Storåns Dalgång" (2007) report by Mark municipality, and therefore makes less harm to the important biodiversity. The placement was also made because of accessibility to the site.

Similarly, the design of the structures try to be formed in a humble way regarding to their respective sites. The community buildings at Solänge mill have a light construction which doesn't harm the old ruins, and the pavilion at "Sju strömmar" is built on the same spot as an already built structure with reused materials.

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Mapping

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Figure 21: Naturcentrum AB.(2020) □photo taken from the information board on site

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