

TOGETHER IN ÅLGÅRD

A sustainable way of living in the countryside

ARK147 Planning and Design for Sustainable Development in a Local Context
Autumn 2017, Chalmers Architecture
Carin Edlund | Felicia Karlsson | Xueli Ma



INTRODUCTION

Project summary

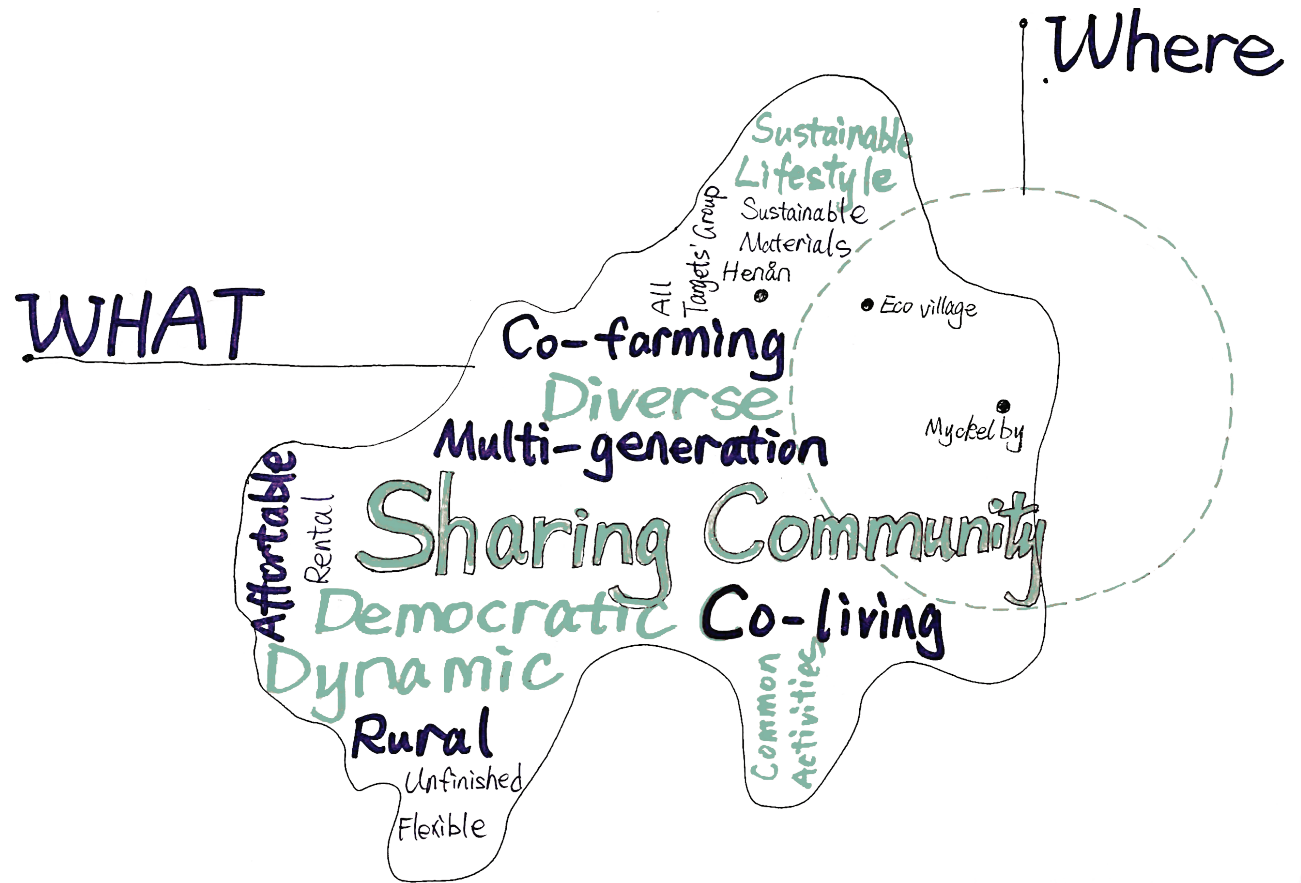
This project explores a sustainable way of living in the countryside with focus on sharing and collaboration between different generations. It also aims at providing affordable housing on Orust to make it possible for more people to live close to nature.

We are three architect students from Chalmers master program Architecture and Planning Beyond Sustainability. This project is a part of the studio Planning and Design for Sustainable Development in a Local Context during the autumn term 2017.

From the course description:

"...understanding and analysing a local situation, also in a larger geographical and functional context, identifying local development objectives and work on comprehensive planning and design strategies in support of a sustainable development."

"...work on planning and design projects that can support the objectives and strategies developed in part A. These projects may be carried out at different spatial levels and are developed individually or in smaller groups."



The local situation

Sustainable urban/
rural development

Planning and
design strategies

Exhibition and
presentation

The broader context

Common SWOT- analysis
and local objectives

In- depth project

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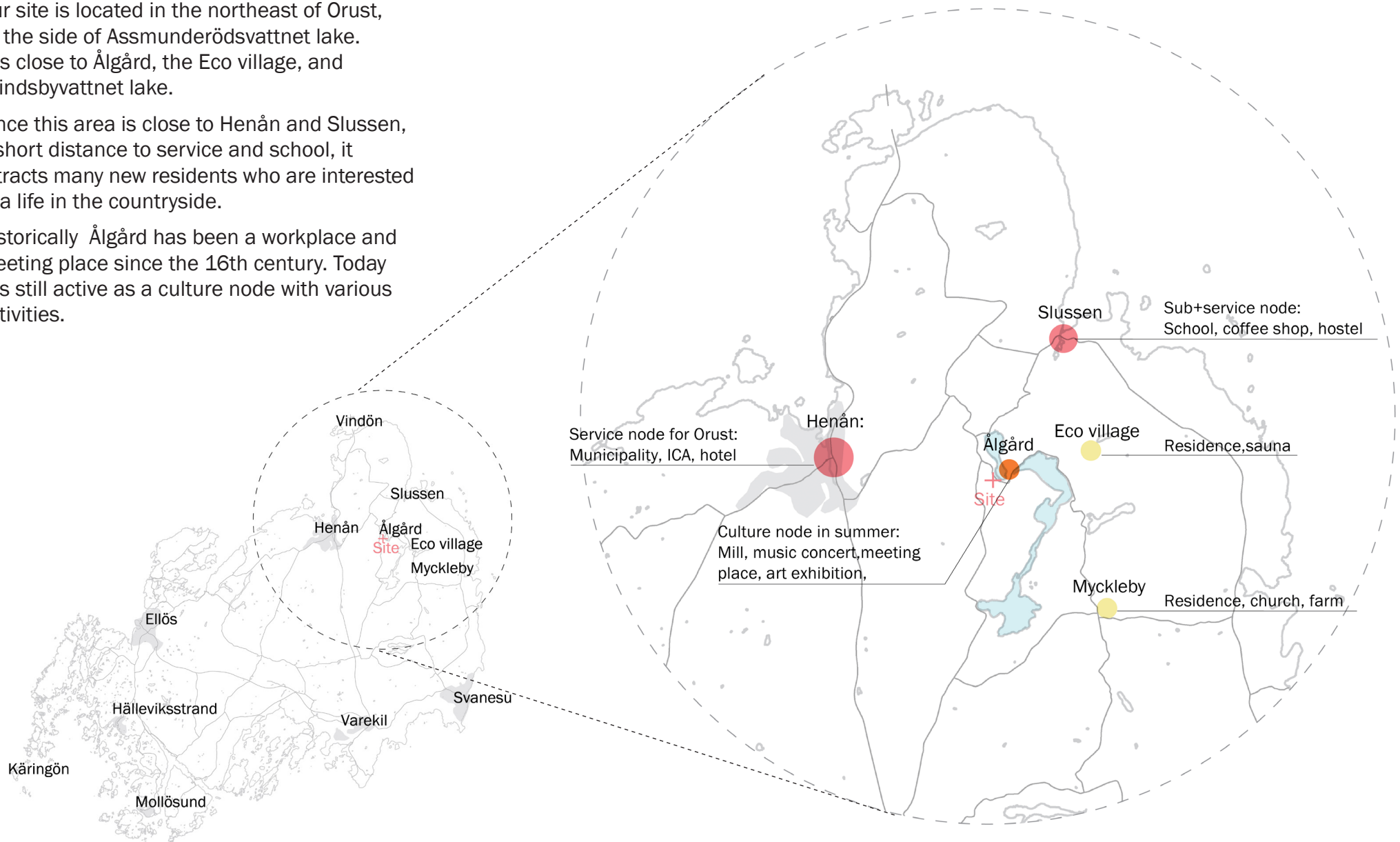
BACKGROUND

SITE LOCATION

Our site is located in the northeast of Orust, by the side of Assmunderösvattnet lake. It is close to Ålgård, the Eco village, and Grindsbyvattnet lake.

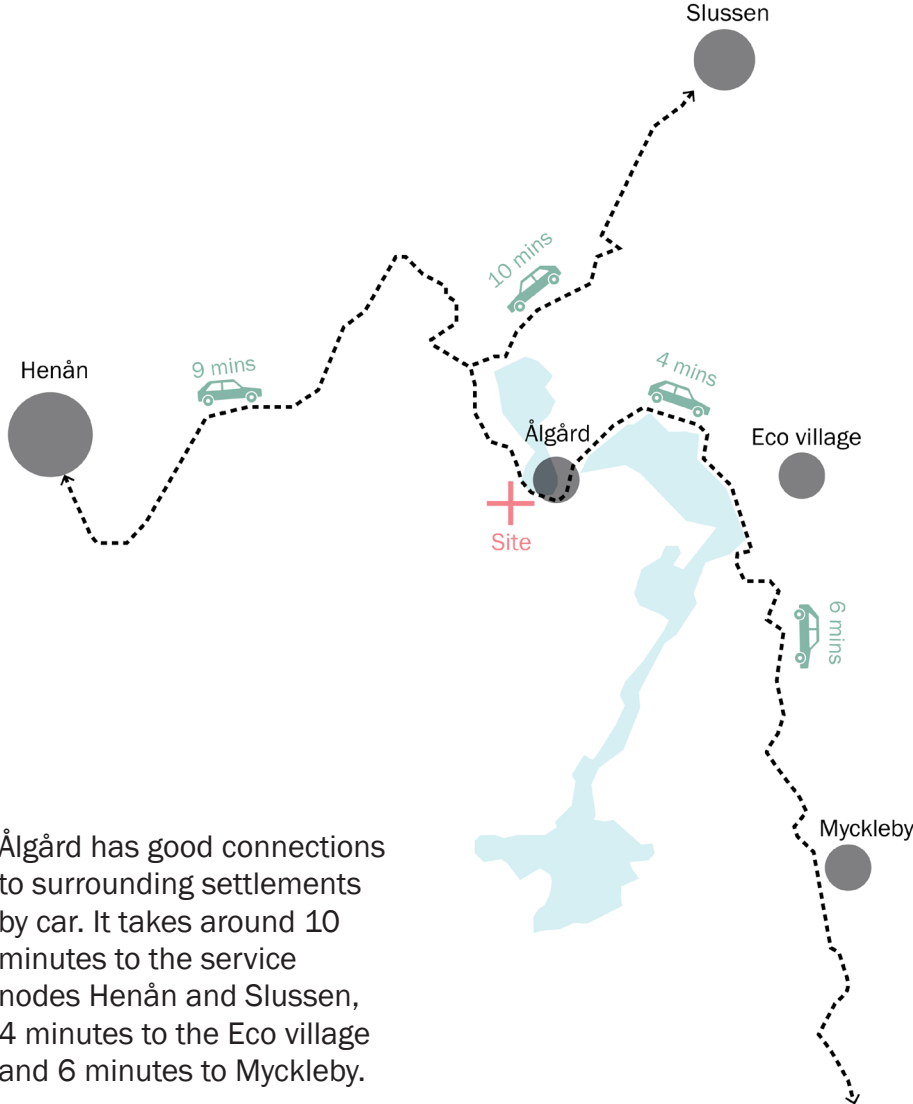
Since this area is close to Henån and Slussen, a short distance to service and school, it attracts many new residents who are interested in a life in the countryside.

Historically Ålgård has been a workplace and meeting place since the 16th century. Today it is still active as a culture node with various activities.



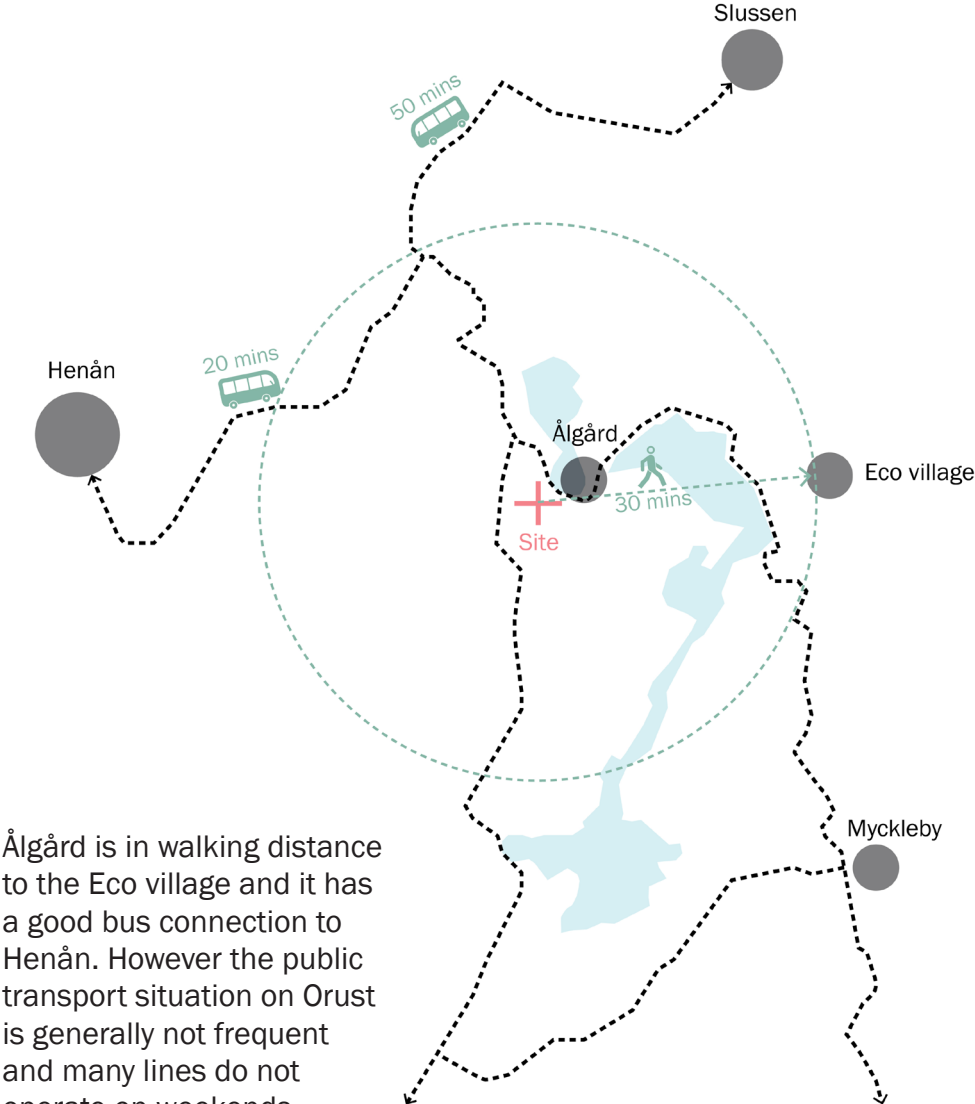
TRANSPORT & CONNECTIONS

COMMUTING BY CAR



Ålgård has good connections to surrounding settlements by car. It takes around 10 minutes to the service nodes Henån and Slussen, 4 minutes to the Eco village and 6 minutes to Myckleby.

COMMUTING BY BUS



Ålgård is in walking distance to the Eco village and it has a good bus connection to Henån. However the public transport situation on Orust is generally not frequent and many lines do not operate on weekends.

ÅLGÅRD

Orust's oldest mill

HISTORY

Ålgård has a documented history since the 16th century. The saw and mill were in use until 2003.

In the nineties some renovations were made by the wood and construction education in the upper secondary school. Around the same time there was a proposal about making Ålgård into a craft community with an environmental profile (Föreningen Ålgård, u.å.).

LOCAL ASSOCIATION

Ålgård association is a non-profit association which was created with the intention to preserve and develop Ålgårds mill and saw. The cultural heritage and rich nature are important for the local community. The association also see a need for meeting places, cultural activities, workplaces and a way to reach out with crafts, art and food production in the northeast part of Orust.

Meanwhile, Utsikten Ecovillage economic association are interested in cooperating with Ålgård concerning ecologic sustainability and local production etc (Föreningen Ålgård, u.å.).

According to our interview with the chairman of Ålgård association they have received a fund from EU to develop the site.

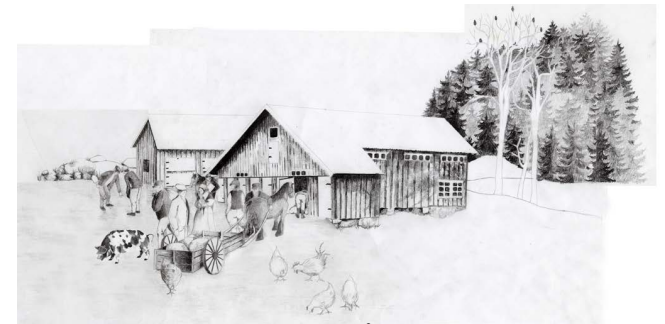


Figure 1. Drawing (Föreningen Ålgård, u.å.).



Figure 2. Photo taken before 1939 (Mathiasson & Olsson 2017).



Figure 3. Land survey map from 1883 (Föreningen Ålgård, u.å.).



Figure 4,5,6. Saw mill (Föreningen Ålgård, u.å.).

ÅLGÅRD

Orust's oldest mill

ACTIVITIES IN SUMMER

Today Ålgård is an important cultural spot in the summer with various activities including café, gallery, food market, workshops, concerts, second-hand markets, canoe stop, fireplace and so on... They also plan to renovate the mill to strengthen Ålgård as a cultural attraction.

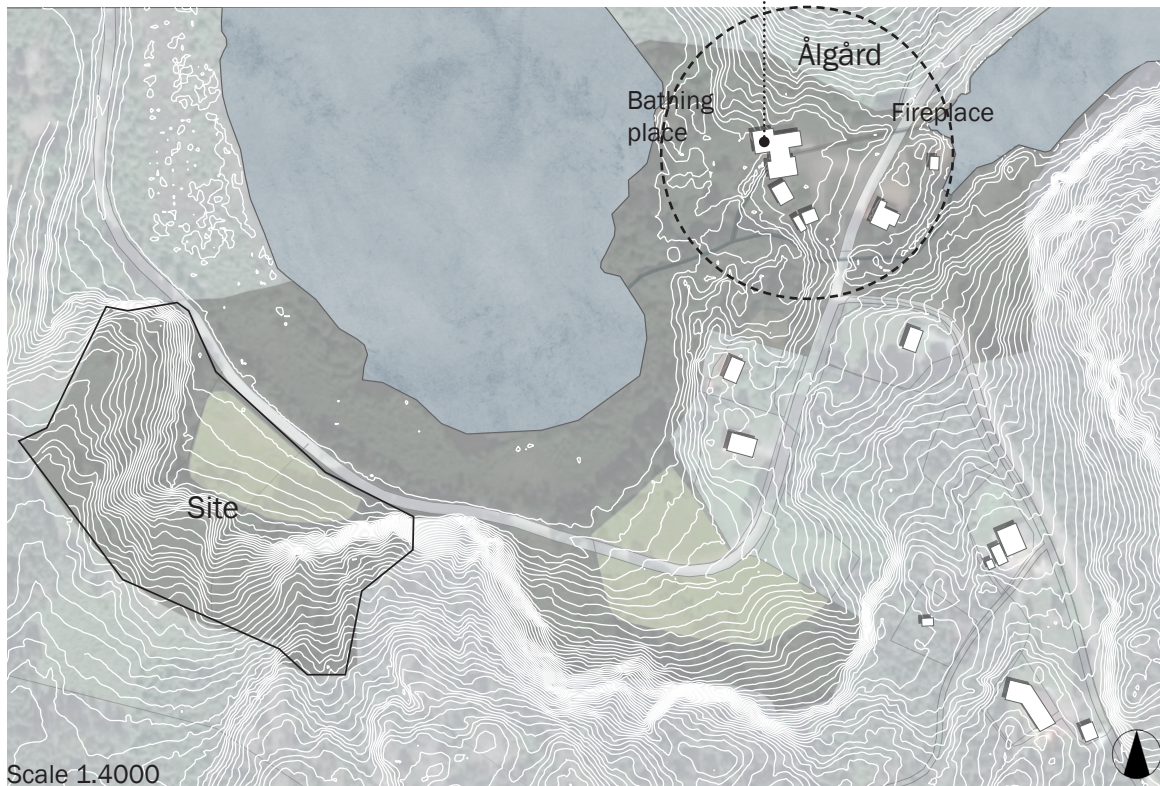
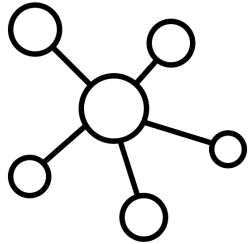


Figure 7-14. Activities at Ålgård (Föreningen Ålgård, u.å.).

SUMMARY

Why we choose Ålgård



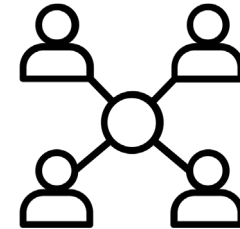
CONVENIENT CONNECTIONS

Even though Ålgård is situated in the rural area it has good connections to other places such as Slussen with the Waldorf school and Café Tillsammans, Henån which offers different kinds of services and the ecovillage Utsikten. We see possibilities to connect these places even more, both physically and mentally.



CULTURAL NODE AND MEETING PLACE

Ålgård is a cultural node and meeting place both historically and today, thanks to people who work to preserve the place. The area has been developed and restored in recent years and is an accessible rest stop with fireplace. One of the paintings from the art project MUMA is also placed here. The project highlights historic women from Orust. Ålgård has become something of a cultural node where workshops, art exhibitions, markets and concerts take place. There is a café open in the summertime when most of the activities happen and we see a desire to make the place more alive all year around.



ÅLGÅRD ASSOCIATION

The association is one of the aspects that made us choose Ålgård to work with. Studies have been done about Ålgård and its potential and there are people engaged to preserve and develop the site. The activities arranged there also mean that people know about the place.

Another important aspect is that we would like to show a way of living in a small community in the rural area, rather than the central nodes of Orust. By choosing Ålgård we can contribute to an existing place full of possibilities.

ORUST SWOT ANALYSIS

In the beginning of this course the studio did a SWOT- analysis that describes local strengths and weaknesses as well as opportunities and threats from the outside. This analysis concerns the entire Orust.



STRENGTHS

- Closeness to a diverse landscape and rich biodiversity in terms of both leisure and resource qualities
- A rich cultural heritage, identity and history
- A large local engagement and many local associations in active local networks
- Suitable land and sea for local food and energy production- an asset for both local economy and self sufficiency
- Local craftsmanship
- A municipality engaged in sustainability
- Many local small businesses
- Attractive school facilities
- A high-quality care for the elderly
- Alternative rural living possibilities in f ex Ekobyn Utsikten

OPPORTUNITIES

- Increased environmental awareness
- Rural/ Slow/ Sustainable lifestyle
- Circular economy in local networks
- Renewable energy production
- Digitalisation and connectivity
- Eco tourism
- Plans for new bridge
- Aquaculture
- Migrants and cultural diversity

WEAKNESSES

- Homogenous housing market
- Lack of apartments and affordable housing
- Ageing population
- Unsustainable transportation/ Car dependency
- Big differences between summer and winter
- Lack of meeting places, public facilities and public space
- Lack of culture and activity in winter
- Gap between the east and west/permanent and temporary inhabitants of Orust
- Lack of higher education possibilities
- Few jobs for highly educated people
- Fresh water shortage during summer
- Centralisation to Henån
- Inadequate communication/collaboration between the municipality and the population

THREATS

- Rising sea level and flooding
- Individualization
- Ageing population
- Urbanisation Automatisation- less demand for blue-collar jobs
- Tourism
- Mainland dependency
- Cultural gaps
- Us-them/ East-west
- Summer-winter/ Temporary- permanent

ORUST OBJECTIVES

From the SWOT- analysis we came up with 13 common objectives. In our in-depth project we have continued to work with the highlighted ones.

- **Orust is an interesting and active place to live in for people in all different stages in life.**
- **All the new built development is climate safe, built and run with local resources. Materials are produced, used and reused locally.**
- **Regardless of economic preconditions, everyone can find suitable place to live permanently everywhere on Orust.**
- **Orust is an island with several centres. Each containing public spaces, services and meeting places for everybody all year round. Activities build social networks and relationships which leads to the strong community feeling.**
- **Local residents have a sustainable lifestyle and are aware and well informed about environmental and local issues.**
- On Orust all actors (tourism, local businesses, energy and food production) contribute to a sustainable local economy.
- The coastal villages of Orust are functioning

human habitats, where humans live in line with the environment now and in the future. Floods and storms do not create permanent destruction.

- Fresh water shortage in the summer is no longer a problem since Orust retains, collects and recycles its water.
- Everyone on Orust have easy access to functional sustainable transportation.
- Orust uses only and is self-sufficient regarding renewable energy
- **As much as possible of food consumed is locally and organically produced**
- Orust offers local job opportunities connected to the sustainable redevelopment of traditional local industries (e.g. fishing, agri culture and craftsmanship)
- Eco-tourism and developed eco-village movement makes Orust a model within sustainability.



STUDY FINDINGS

Throughout our work we have read several reports to get more information to strengthen our project and concept. Here we present some of the things we have learned.

43% women and 36% men in the age 20-24 years old would like to move to the countryside or live in a smaller community in the future due to an investigation Jordbruksverket commissioned. If this becomes true we have a completely different situation in the future than the one Boverket has predicted (Gustafsson, 2013).

An interview investigation made by Glesbygdsverket with the purpose to understand why people choose to move to the countryside show some common answers, for example: Tired of bustle and stress, want life quality, peacefulness, and a changed living situation (Glesbygdsverket, 2001).

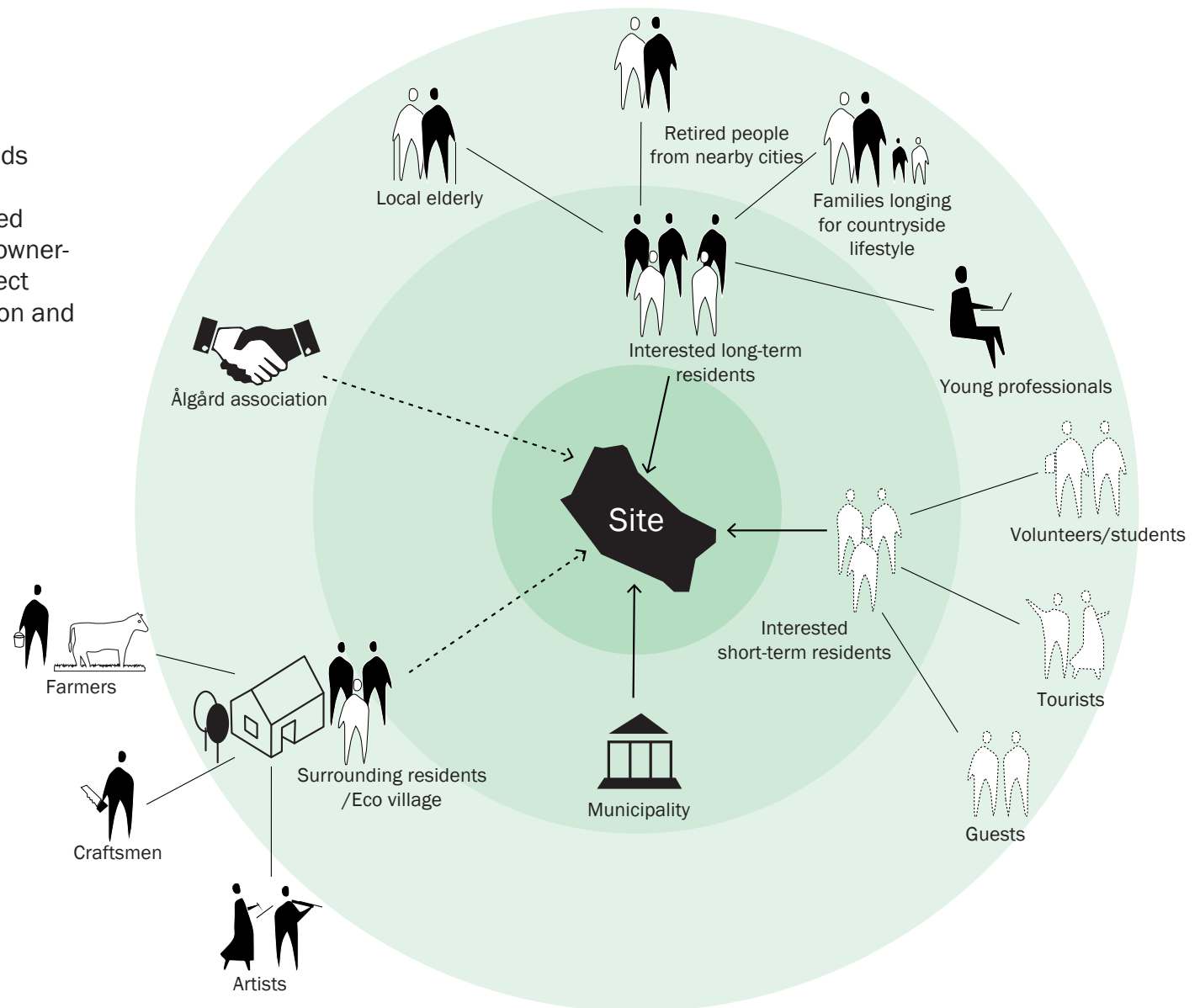
Even if the prices of the houses often are lower in the countryside than in the city the total cost of the lifestyle is similar, because of extra expenditures for commuting for example. This shows that the low cost is not what attracts people but rather the change of lifestyle and qualities (Glesbygdsverket, 2001).

Enthusiasts often have a large effect on smaller communities and their development but also help to retain the historical context and identity. Whether a community is seen as an active place or not can depend on only one or a few persons (Glesbygdsverket, 2001). Ålgård has the benefit to have enthusiasts that really care about the place. This is one of the reasons why we choose the area. We agree that it is a place worth preserving and developing.

STAKEHOLDERS

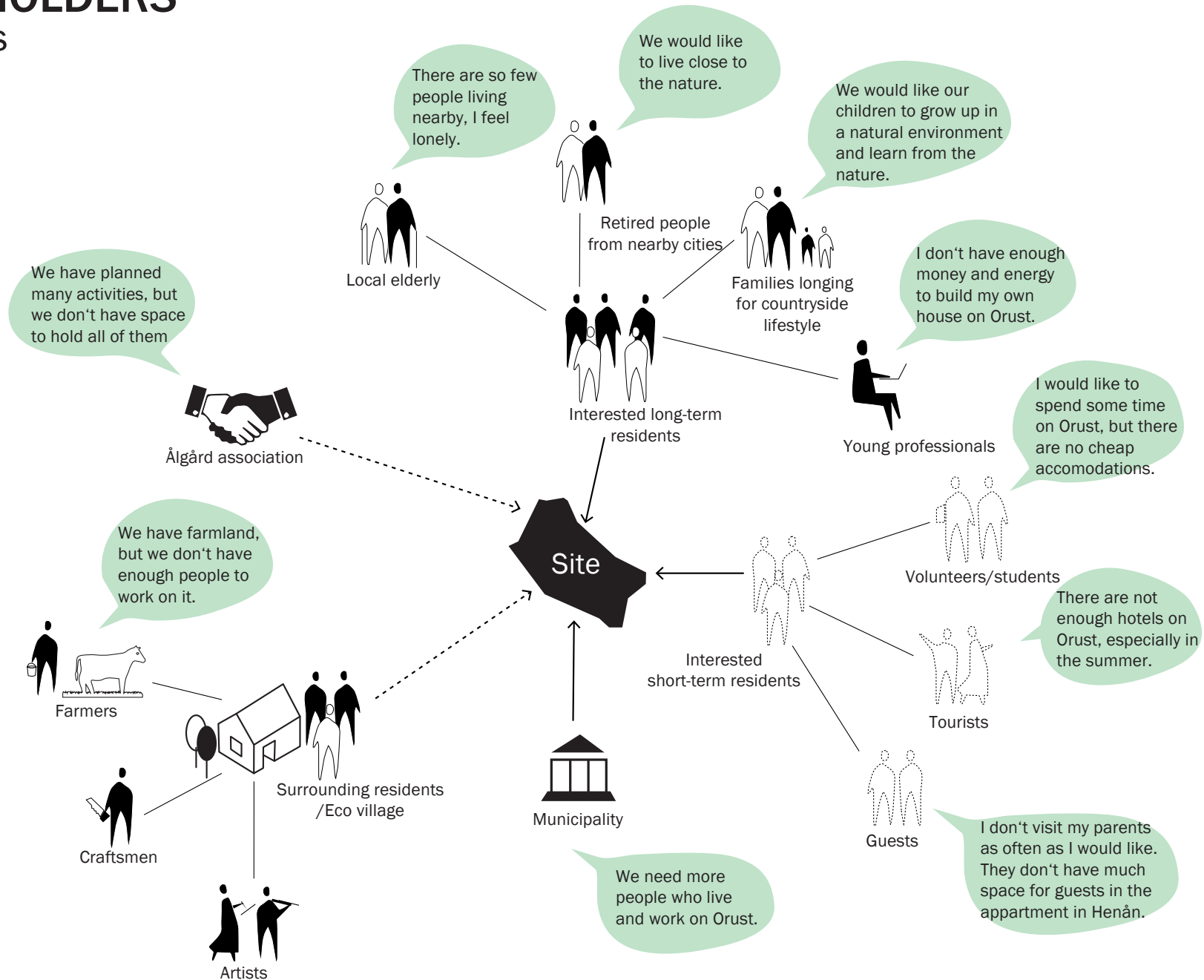
Target groups

Related to this project there are two kinds of stakeholders. One is direct including interested long-term residents, interested short-term residents, and the property owner - the municipality. The other one is indirect stakeholders including Ålgård association and surrounding residents.



STAKEHOLDERS

Demands



2

VISION

PROJECT DESCRIPTION

AIM

- Designing a new community and neighbourhood where new living possibilities are offered through sharing, activities, co-living and rentable housing using sustainable materials. This should be in connection to an existing village.
- Provide space for common activities and for learning new skills.
- Provide possibilities to exchange skills between the residents. The key point is that all the equipment and the space should be shared.
- Promote integration by attracting different target groups to encourage an interchange between generations.
- Offer a housing possibility for the youth who might otherwise move out of Orust
- Offer a housing option for the elderly. An alternative to living on your own in a large villa on the countryside or in an elderly home.

TO CONSIDER

How does this new community affect the existing inhabitants and the built environment? What can this offer to the existing inhabitants?

How can this neighbourhood evolve in the future and grow sustainably?

WHY

- We want to show what a sustainable living situation can look like in the countryside
- We want to integrate different target groups to encourage social contact
- We want to build up a sense of neighbourhood
- We want to increase diversity
- We want to provide an affordable living alternative

Ålgård is a place where there is quite a lot of activities in the summer but not so much during the winter. To make the area vivid all year around there needs to be people living there. One way to encourage this is to build rentals.

PROBLEM AREAS

- Homogenous housing
- Ageing population
- Individualization
- Centralization

METHOD

We have read reports to get background information and also looked at references, for example Hogslätts vänboende. After we chose the site we went back to Orust to visit and analyse it. Other methods we have used are interviews, sketching and graphical 3D- models.

SCALE

Community scale with zoomed in examples of typologies. We show two typologies more in detail with suggested plans.

WHOM

Our project is planned on land owned by the municipality. We imagine that the community is developed by an association, similar to Hogslätts Vänboende, where the association builds, manages and owns the buildings.

CASE STUDY

HOGSLÄTTS VÄNBOENDE

Hogslätts vänboende is built and managed by a cooperative tenant association (kooperativ hyresrättsförening) according to the ownership model- a kind of economic association. The association owns and manages the property and rents out to its members.

When you get an apartment you pay a deposit (3200 kr/square meter of the apartment) and when you leave you get the money back and the new inhabitant pay the deposit. It is not possible to sell the apartment to a higher price.

Twelve rentals are currently being built and the goal is to create an ecological, social and economic sustainable permanent residence for both old and young. They have an idea about sharing spaces and tools and want to keep the housing affordable (Hogslätts vänboende, u.å.).

SEGERSÄNG

This is a good example of how you can plan a community with care for the land and its preconditions. The houses are placed on sunny slopes and the farmland in colder and more moist areas where it is harder to build. The contact and dependence of nature is something they wanted to strengthen.

The houses are planned so that it is possible to make an extension. Every plot has room for three buildings with different uses. This is due to the tradition but also makes the housing more flexible and creates possibilities for small businesses to develop. Three separate buildings are also easier to adapt to the topography than one large (Balgård & Ödling, 2008).



Figure 15. Sketchmap over Segersäng (Segersängs samfällighetsförening, 2010).

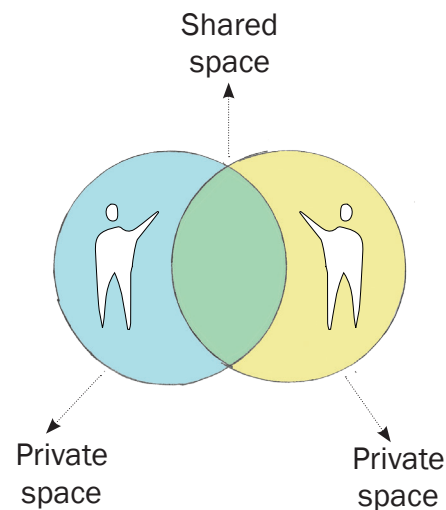
DESIGN STRATEGIES

CO-LIVING

Sharing space in the home with others - not necessarily your friends or family members - is a good way to save resources, money and time. It also brings social values and creates collaboration. In co-living households it is important to have a clear distinction between private and shared space and the quality of the private space is also important.

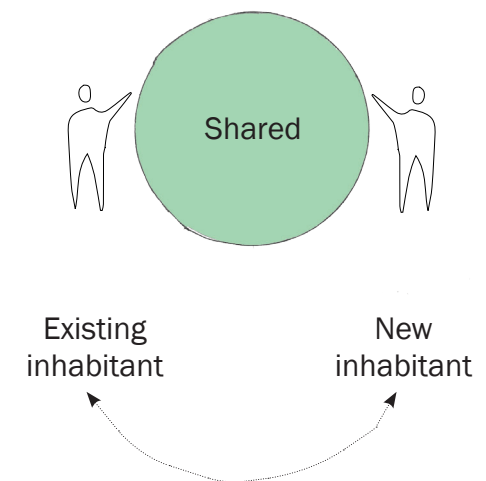
We believe that the concept of co-living is beneficial for the residents since it can bring different members of the society together. We focus on the exchange between generations where old and young live together and strengthen each other. Today the elderly and the young on Orust have few options when it comes to housing. The elderly either stay in their villa or move to an elderly home when they get too sick and the young stay at home with their parents or move to an apartment in a bigger city.

We see possibilities for different target groups to exchange knowledge and help each other. The most common way to plan housing for elderly and students are to separate them, but we think it might be much more beneficial to place them close together and in that way promote social understanding towards each other. Co-living can be applied to many target groups - friends who want to live together, families or single households.



SHARING

By sharing it is possible to use less resources per person and gain much more. It could be sharing a bike, a washing machine, a car or even a house. It benefits those who have economic difficulties, the environment and those involved socially by creating collaboration and engagement within the community. This offers possibilities for a new way to live and share with each other on Orust. A more sustainable way that reaches a wide spectrum of people.



DESIGN STRATEGIES

CULTIVATION INTEGRATED IN THE COMMUNITY

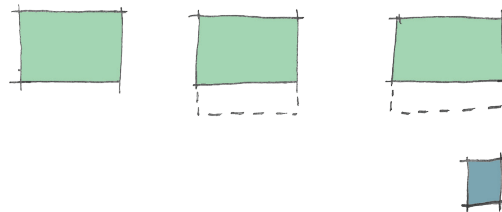
To educate and make people aware of the importance of local food production, in a strive for a sustainable future, is vital. We want to make it possible for people to grow their own vegetables and fruit and teach the coming generation about where our food comes from.

Using the fertile land for growing and not building is crucial. As much of the cultivation as possible should be shared within the community. We also imagine that some of the vegetables and fruit can be sold to the rest of the inhabitants on Orust, for example at Ålgårds saw and mill during the eco days or other events. In the common kitchen the inhabitants can process the fruit and vegetables together.



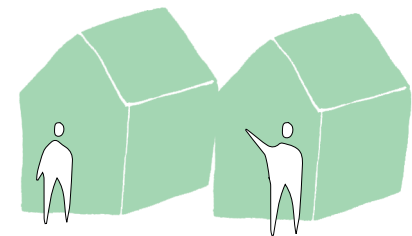
FLEXIBILITY

Flexibility and adaptability are important factors to secure a sustainable development. The community and the houses need to be designed in a way that they can be build up on and changed. Families might have more kids, split up, or develop new needs and wishes for their home. New people should be welcome to move into the community and therefore the plan of the community and the typologies should be flexible and able to grow.



SMALL SCALE

In a rural area like Orust it is important to adapt new buildings to the nature and topography. This is achieved by small scale buildings, which also means that the people living there will have a closer connection to nature. If the buildings are quite small it is easier to design them according to the specific location and in respect to the landscape of the site.



DESIGN STRATEGIES

BRIDGE BETWEEN CURRENT AND NEW

It is important that new additions to the built environment correlate with the existing. We do not want to create new private communities where new residents live disconnected from current inhabitants. By offering facilities that can be used by the bigger community and emphasize the importance of Ålgårds Saw and Mill we believe that it is possible to strengthen the relationship between new and old residents on Oust.



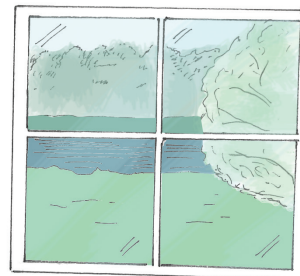
LOW COST

Affordable living opportunities in the rural area makes it both easier and more attractive for people to move. Alternatives to the villa norm such as co-living, rentals and the opportunity to share spaces and things, can be one way to achieve low cost housing. To be able to grow your own food also contributes to a low-cost living.



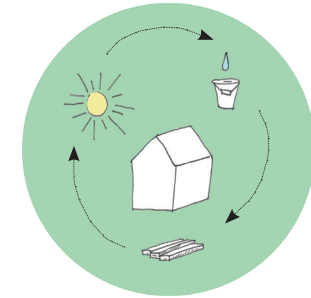
PRESENCE OF NATURE

Being close to nature is one of the main reasons for people to move to Orust. The planning and building design should be in harmony with the nature. Therefore outdoor space and activities is one of our main concerns.



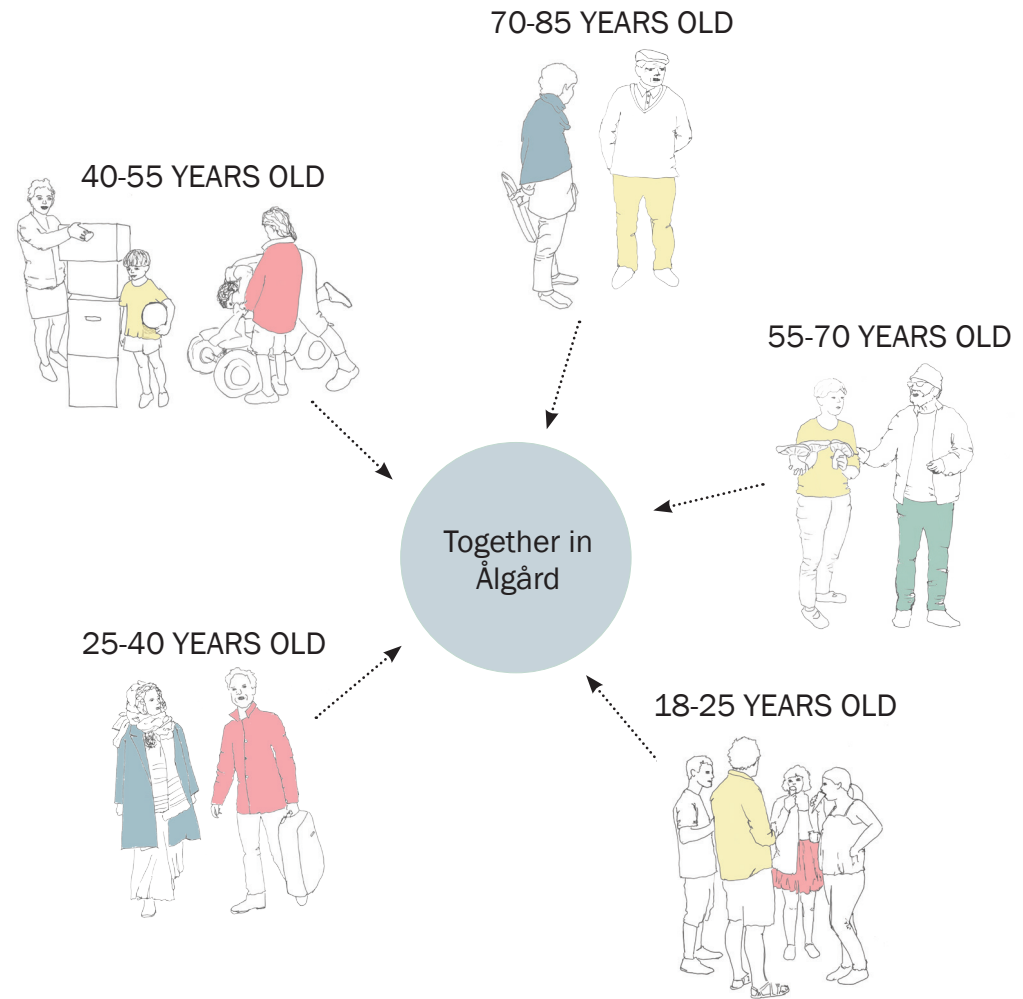
SUSTAINABLE & LOCAL ENERGY & MATERIALS

We suggest a small-scale solar energy production system and to collect and reuse grey water and rainwater. Human and animal excreta can be used as fertilizer for cultivation. The material should be sustainable and as much as possible local.



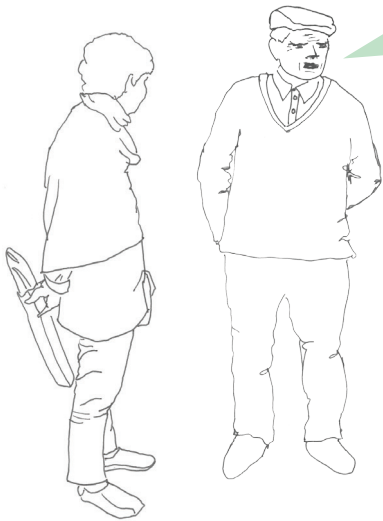
TARGET GROUP

To get a better picture of whom we are planning for we have imagined our 16 residents for the community. In that way we can plan for their different needs. We want the project to attract all ages and encourage meetings over generations. Even though the target groups are of a wide range, we want to emphasize that the community is flexible and meant to be adapted to any inhabitant's needs. We design the first physical boundaries but the idea is that the inhabitants living there will continue to form and develop the place.



TARGET GROUP

We would like to live in a community where we can collaborate and live close to other people. Viola is also a painter and is interested in working with the Ålgård association that is close by.



STEN & VIOLA

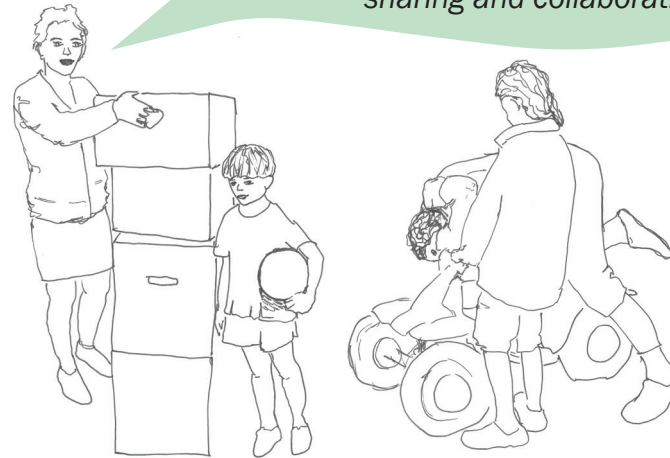
Age: 70's

Move from: Mollösund

Work: Retired, had a farm that their children has taken over

Interests: Painting & knitting

We want to move to Orust because we want our kids to attend to the Waldorf school in Slussen. John grew up on Tjörn and had been wanting to move out of the city for quite some time. I am interested in the Ålgård association and have visited their different activities the last two years. I am looking forward to collaborating with them and work to get some ideas realized. We want our kids to learn about sharing and collaborating.



JOHN, MARIA & KIDS

Age: 4, 7 and 40

Move from: Gothenburg

Work: Entrepreneurs

Interests: Motorcross, football and bird watching

BEN & ELIN

Age: 30 and 29 years old

Move from: London

Work: Environmental advisor and freelance musician

Interests: Music & the nature



We met during a concert when Elin went on a tour in England. Now we want to settle down on Orust and have our future here. I have never lived on the countryside and really look forward to be able to grow my own vegetables and be in the forest to pick mushrooms. Closeness to the nature is important for us and we want to live as sustainable as possible.

TARGET GROUP

I just divorced and want to move from Ellös where we have our house. Our 13 year old daughter Jenny will live with both me and her mum. I work as a carpenter and like to build furniture and work outdoors. I also believe that it would be good for me to live close to other people and start a new chapter in my life.

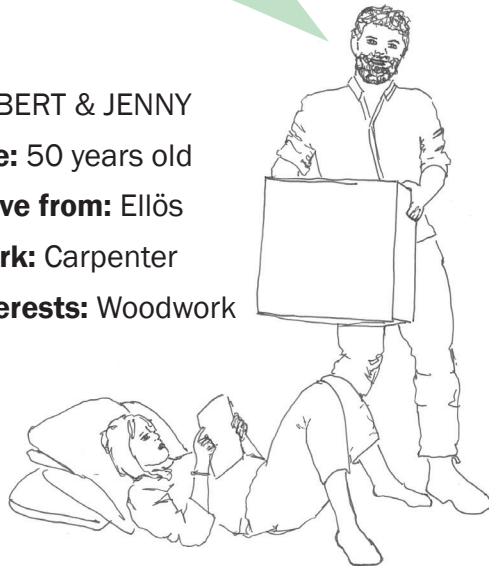
ROBERT & JENNY

Age: 50 years old

Move from: Ellös

Work: Carpenter

Interests: Woodwork



We both work in Henån and want to stay on Orust. We have applied for several apartments on Orustbostäder but have not had any offer yet. Being outdoor, baking and cooking is something we enjoy a lot. We wish to get an apartment together where we can cook meals and spend time with each other and also meet new people.

EMMA & JULIA

Age: 20's

Move from: Varekil

Work: Café & Ica

Interests: Bake & cook



STINA

Age: 80 years old

Move from: Myckleby

Work: Retired

Interests: Gardening



I feel quite lonely and I worry about the house and the garden since my husband passed away. How will I manage it all by myself? I have always loved being out in the garden to grow vegetables and flowers and would like to continue with that even when I move from the house.

TARGET GROUP

VOLUNTEERS & STUDENTS

Age: Varies

Move from: Everywhere

Work: Students/ work in the community/ tourist

Interests: Beneficial if they are interested in sustainability



ALEX

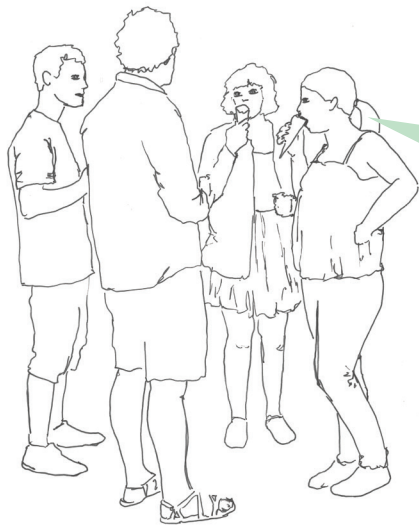
Age: 25 years old

Move from: Stockholm

Work: Newly graduated journalist

Interests: Read & bake

I used to live on Orust with my family as a child and wish to move back for a few years. I enjoy reading and also spend a lot of time baking and think it would be fun to share my interest with others. I don't have the possibility to buy a villa on Orust and would prefer to rent a home before I decide where to settle down.



I am an architect student and would like to learn more about how to build with sustainable materials. I've heard that Orust already has one eco village.



BERIT & KARL

Age: 65 years old

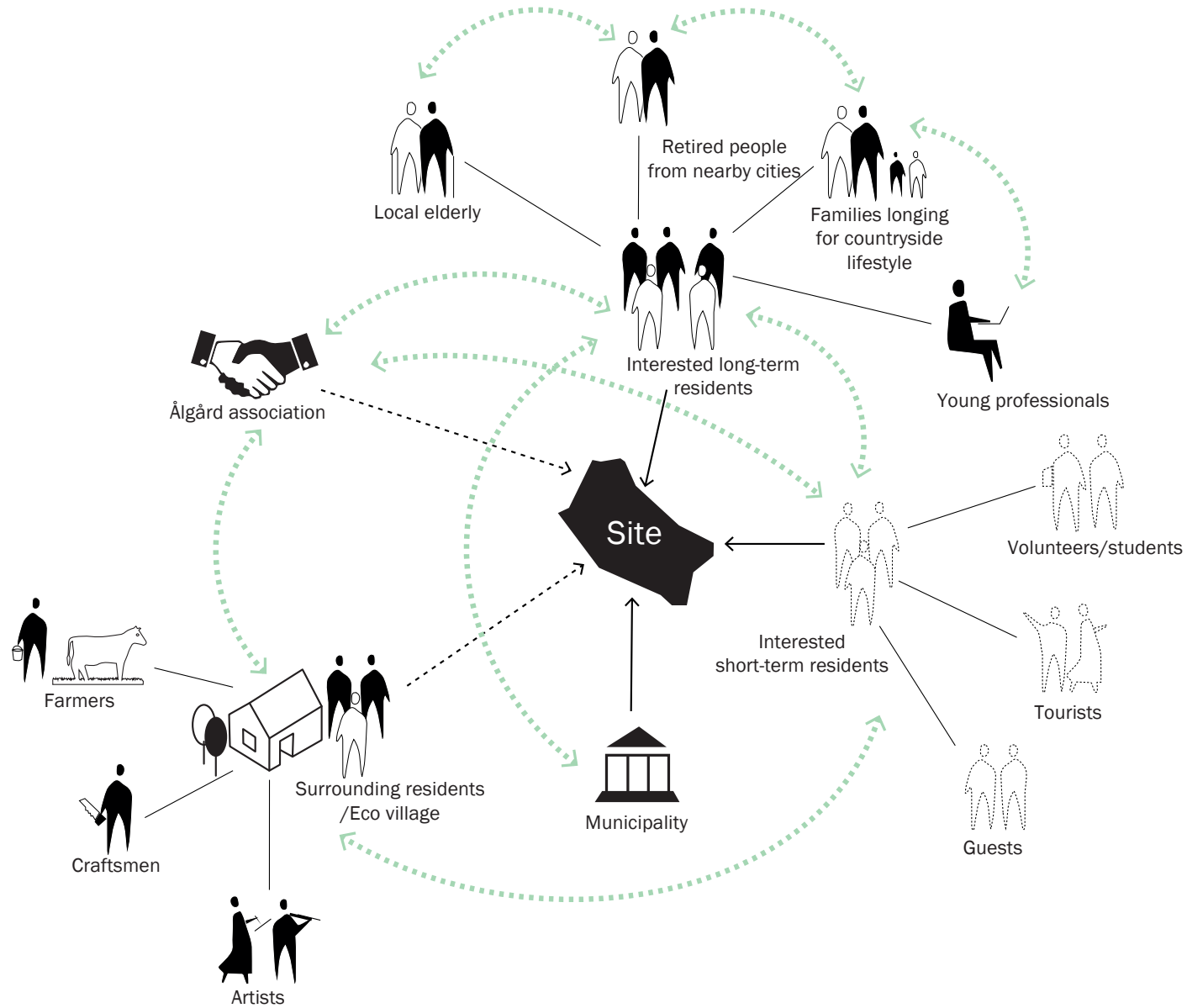
Move from: Gothenburg

Work: Retired, former architects

Interests: Gardening & crafts

We would love to move out to the countryside to spend our retiring years in a calm environment. We have lived in an apartment in the city for 30 years working as architects. Now we are really looking forward to have nature just outside the door, being able to work in the garden. However we can't afford to buy a house and would like to get the same opportunity to experience the countryside in a rental home.

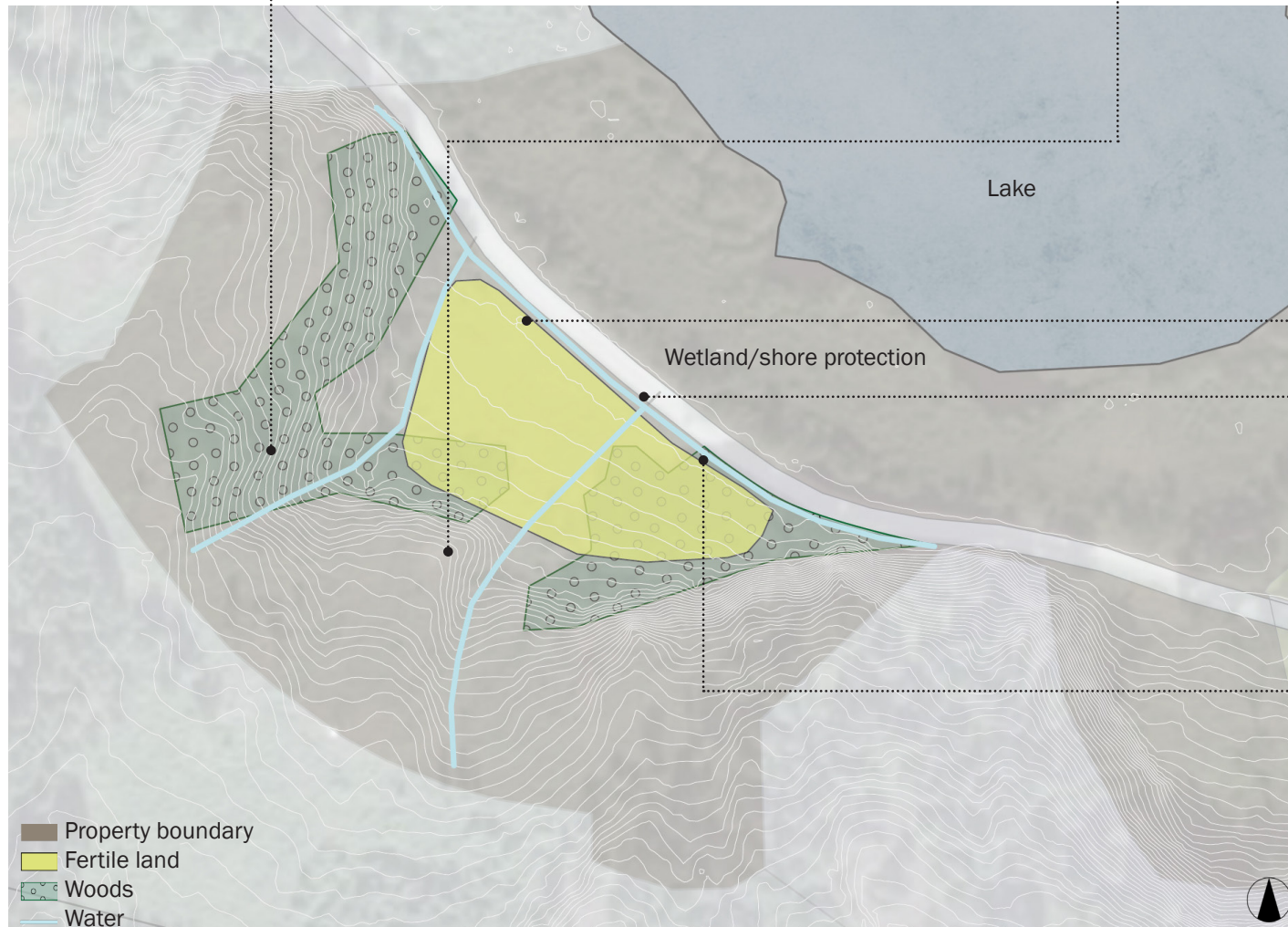
COLLABORATION



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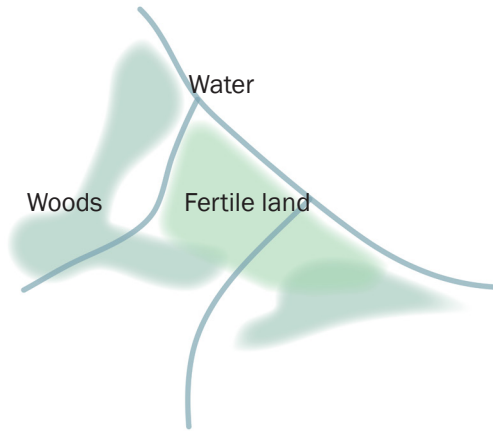
PROPOSAL

SITE ANALYSIS

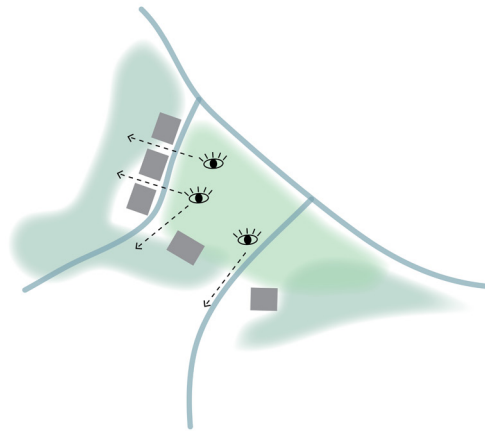


PLANNING STRATEGIES

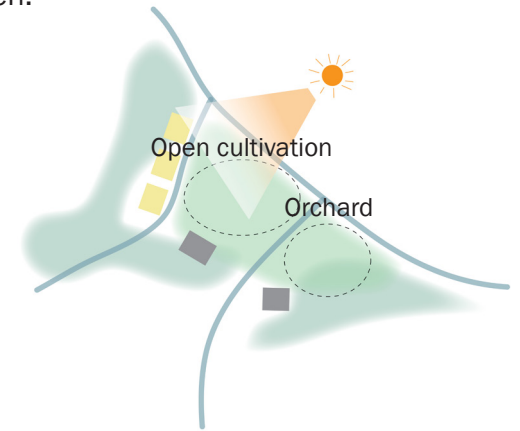
1. Keep the existing structure of the landscape.



2. Keep the sightlines to the nature.



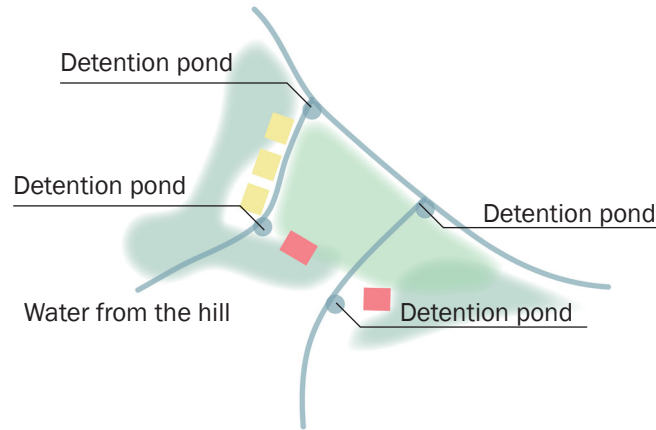
3. Place dwellings in the northwest part of the site where the sunlight is best, and keep cultivation in front of it as an open vegetable garden.



4. Common facilities are placed in the middle to serve for later expansion as well.



5. Place detention ponds at the feet of the hill to help manage intense storms.

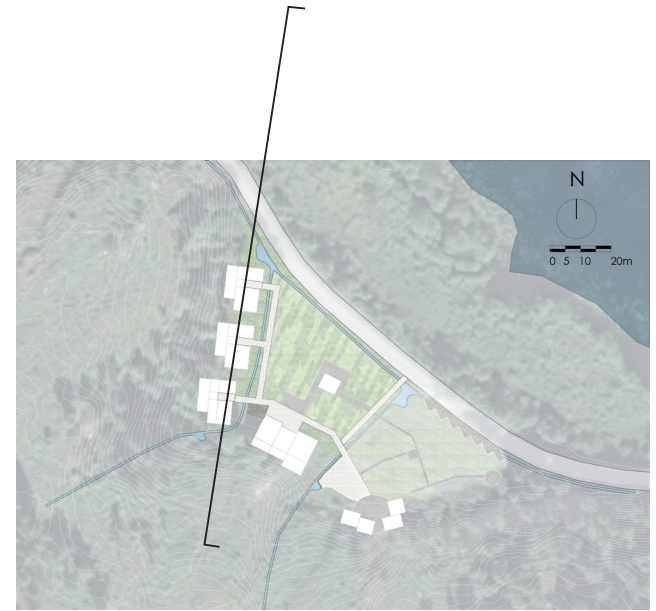


SITE PLAN



Scale 1:600

SECTION



Lake

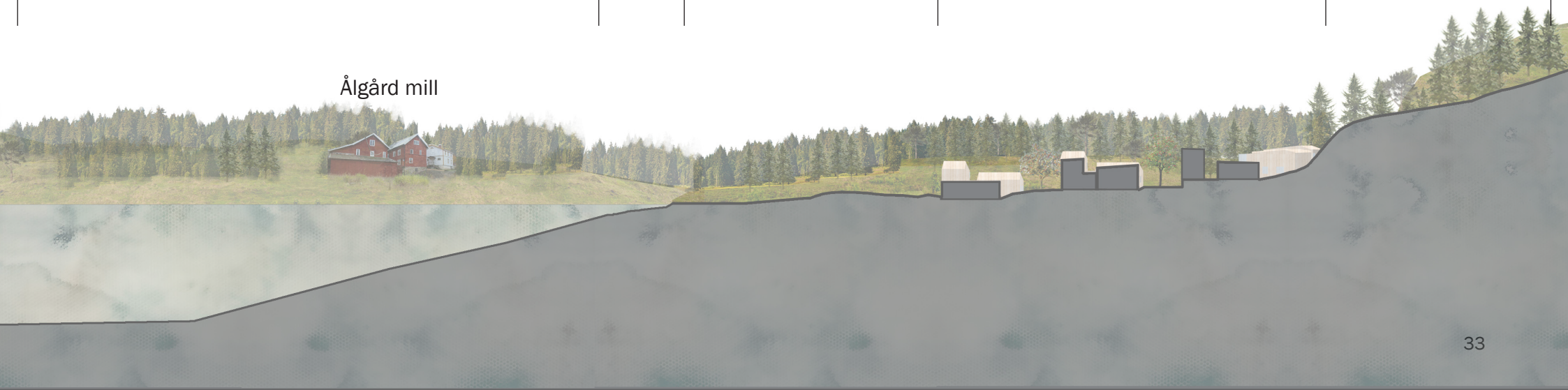
Wetland

Cultivation

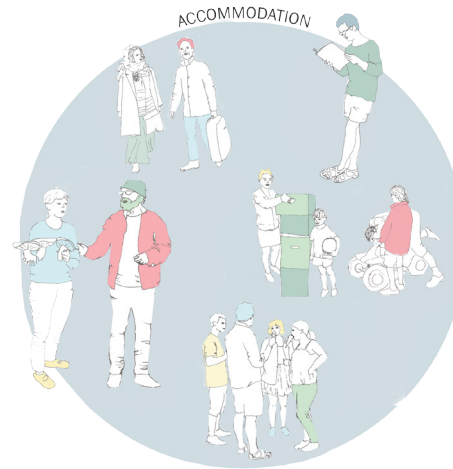
Community

Woods and hill

Ålgård mill



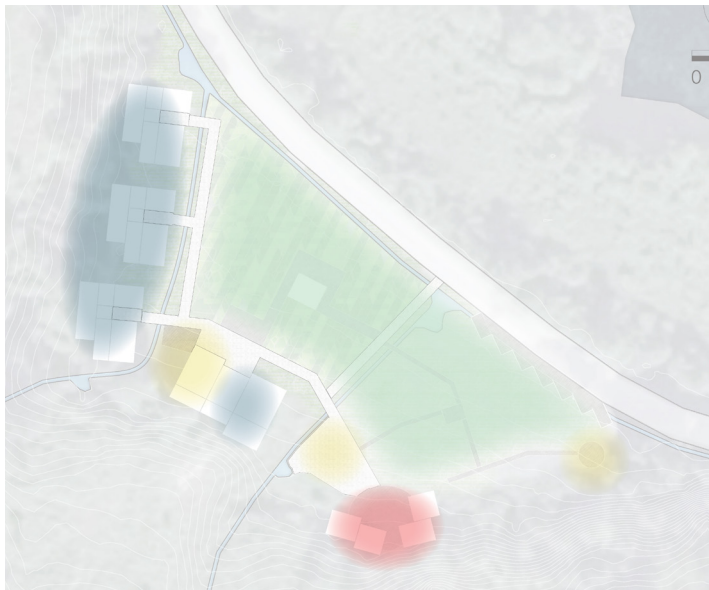
FUNCTIONS



Accommodation

- Long term living:
 - 3 mixed dwellings for 5-6 households (433 sq.m)
 - Elderly and young people co-living (101 sq.m)
- Short-term living:
 - 3 flexible rooms for volunteers/ visitors/ tourists (48 sq.m)

- Accommodation
- Common cultivation
- Common hobby space
- Common meeting place

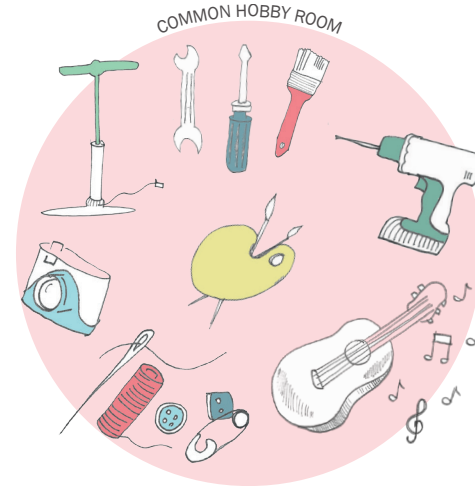


Common cultivation

- Herb garden
- Vegetable garden
- Community green house (30m²):
 - Sharing cultivation tools
 - Cultivation related education(courses, experiences)
- Compost pile
- Orchard
 - Fruit and nut trees
 - Bee house
- Green house in community living room
- Shared cultivation near houses

FUNCTIONS

- Accommodation
- Common cultivation
- Common hobby space
- Common meeting place

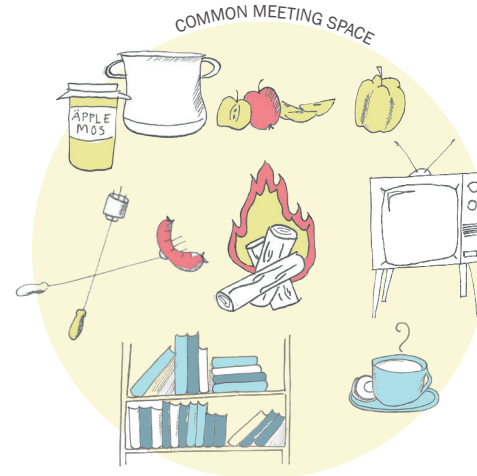


Common hobby space

- Indoor (119 sq.m)
 - Interest room (painting, music, dancing, yoga, meditation)
 - Workshop room (knowledge sharing)
 - Playroom (for children)
- Outdoor
 - Outdoor stage

Common meeting space

- Indoor (119 sq.m)
 - Community kitchen (food sharing, cookery exchange)
 - Community living room (TV, film, coffee)
 - Community library
 - Laundry room
- Outdoor
 - Outdoor yoga/picnic
 - Childrens' playground
 - Outdoor gym
 - Fireplace



" We are from Gothenburg and moved here since we retired. we enjoy the nature and that you can meet different people and have activities here, it's not boring at all!"
/Berit & Karl

"I am a musician from London. It's good that I can escape from city life for some time. Here I feel calm and it gives me more inspirations for my artistic creation." /Elin



" I was a farmer before but now I don't have energy to keep a big farm anymore. Here I can teach people about cultivation and I feel active living with young people!" /Sten

"I feel healthy eating fruits I've growned by myself. And it is always joyful to spend some time with children and young people"/Stina

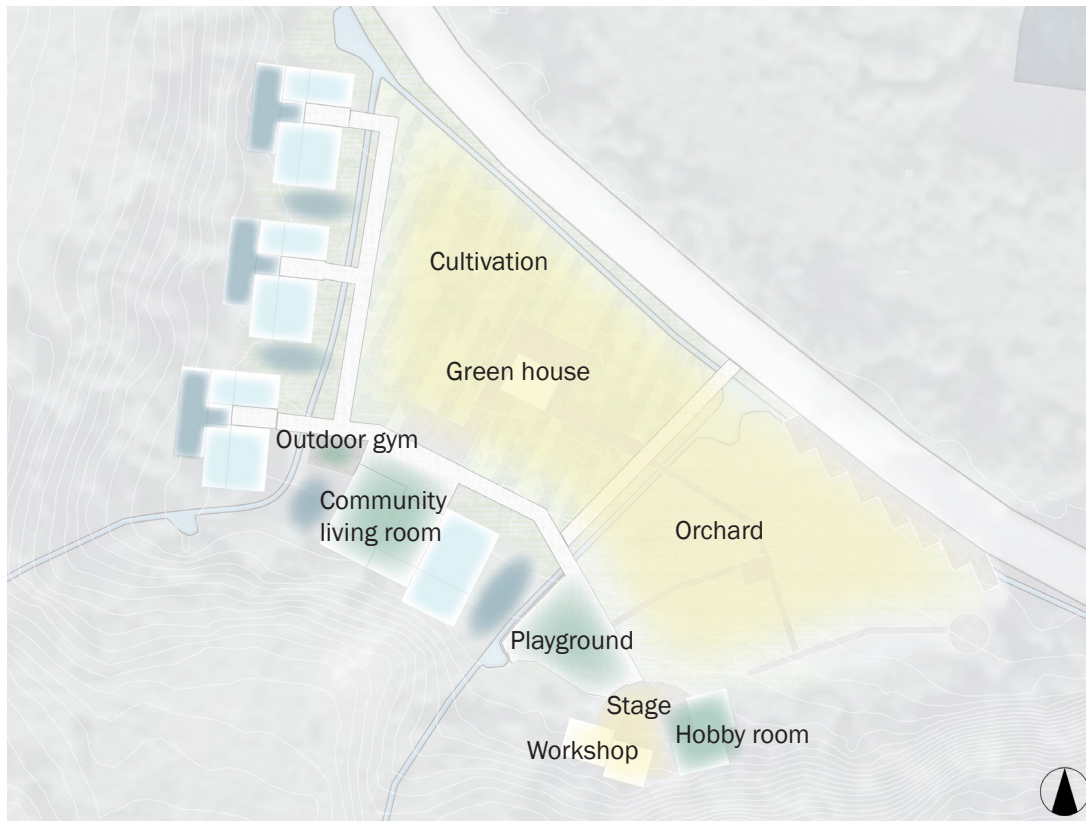
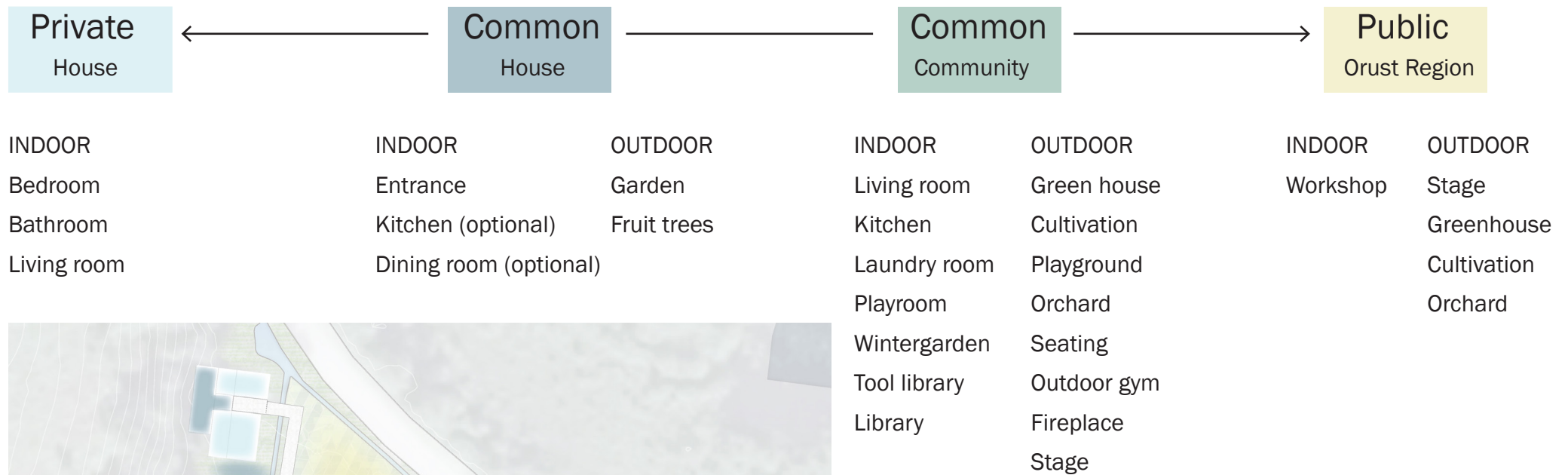
"I am an architect student and a volunteer here. I joined the summer school so I can spend some time in the beautiful nature and also practice my knowledge and skills."/Volunteer



" It's so fun here, we can play with small animals and pick fruits and flowers!"/Children

SHARING AND PRIVACY

Private- Common- Public



We define sharing and privacy in four different levels, both indoor and outdoor.

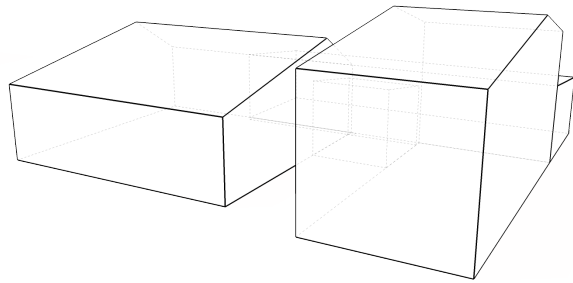
In the building scale we defined forced common space (entrance and garden close to the houses) to create meeting opportunities. At the same time we also provide optional sharing choices (kitchen and dining room).

We suggest that some spaces can be shared both within the community and in the wider Orust regional area. It helps to strengthen the connections and these spaces can also be rented out to keep financial stability of the community.

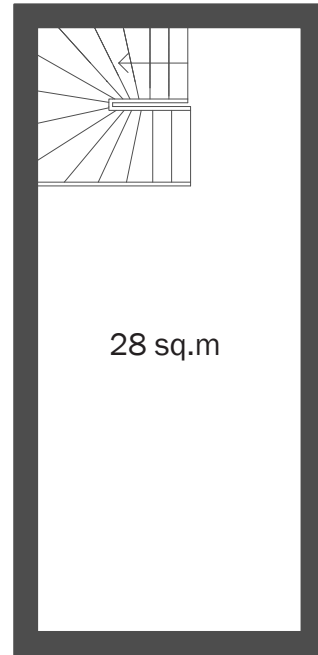
- Private
- Common: in the house
- Common: in the community
- Public: wider area in the region of Orust

TYOLOGY

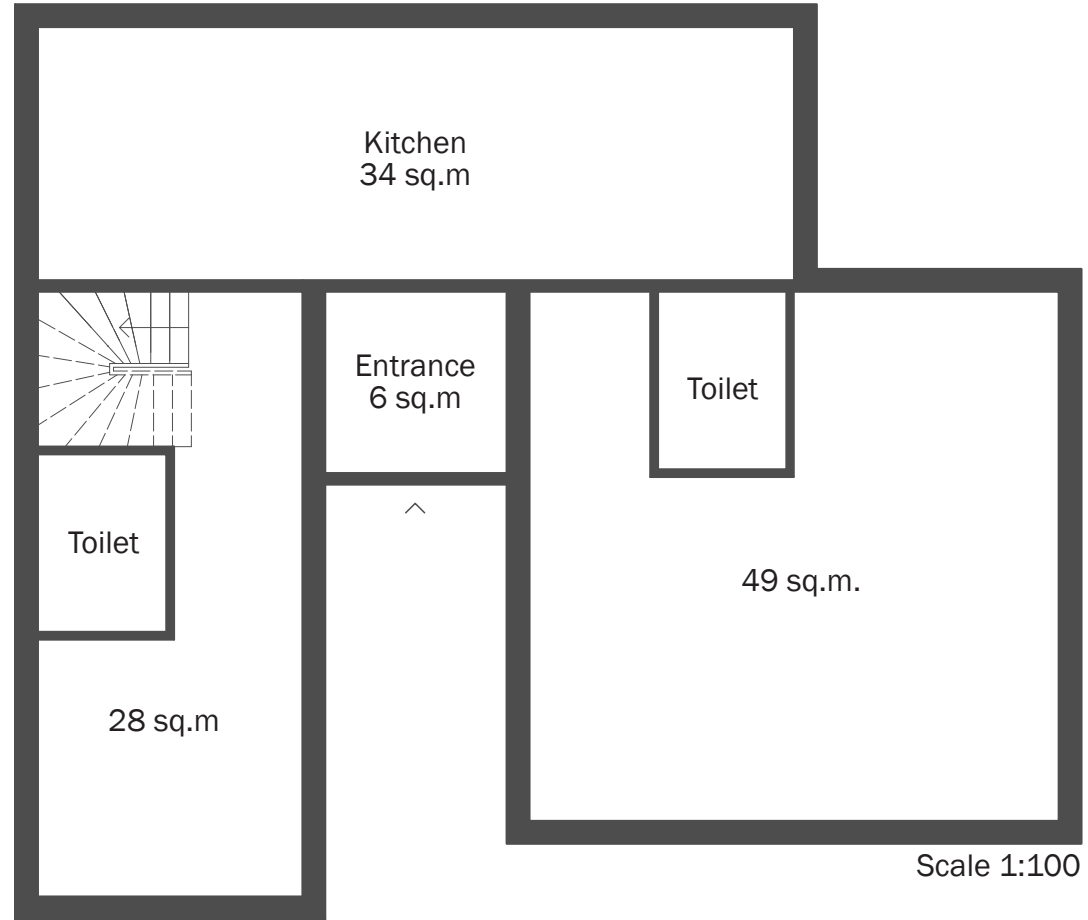
Housing, schematic plans



Total area: 145 sq.m
Private space: 105 sq.m
Kitchen and Entrance: 40 sq.m
Inhabitants: 4 people



Floor 2



Floor 1

SHARED AND FLEXIBLE HOUSING

We have designed a house typology that is suitable for several target groups; a young or old couple, two friends or a family of three to four people. The design is meant to be flexible, creating possibility for one or two households or a larger collective. If there are two separate households the entrance is shared. We also suggest that the kitchen area is shared but we

have designed it to be possible to divide in two separated kitchens.

In a sharing community where many of the facilities are shared between the residents the private spaces are very important. We are working with quite compact private spaces but at the same time we offer enough room for privacy. We have kept the communication

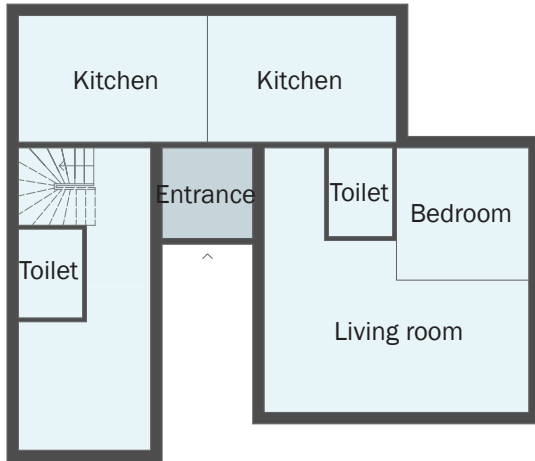
areas and the bathrooms fixed but left the rest of the plan rather open to be arranged depending on the residents. By limiting the private space we want to encourage usage of the common areas which are generally more generous.



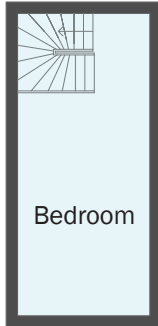
TYOLOGY

Housing, schematic plans

Two couples



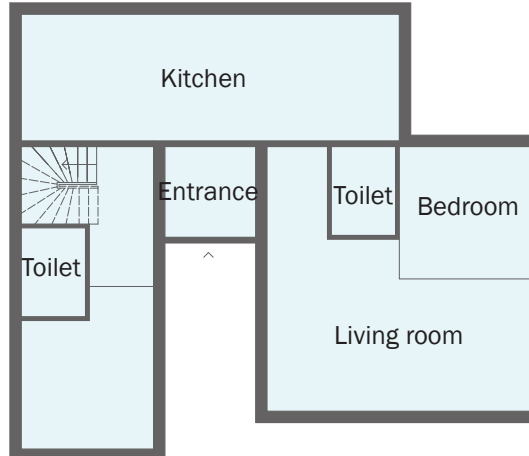
Floor 1



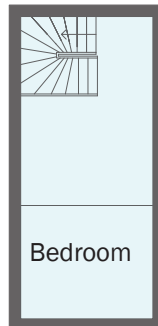
Floor 2

This plan shows how two couples that do not share the kitchen can use the house. The entrance is still shared.

Family



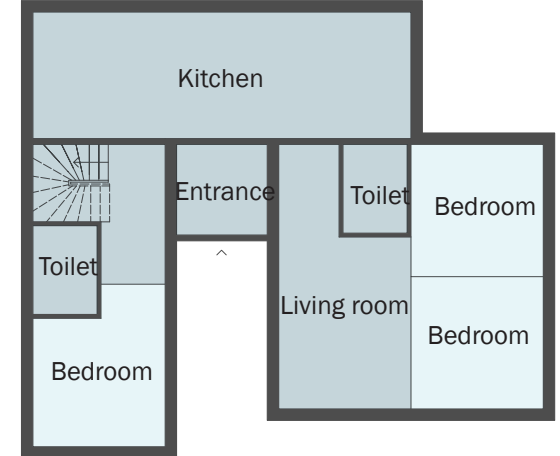
Floor 1



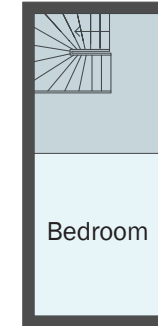
Floor 2

If a family wants to live in the house more bedrooms can be provided. The house can be adapted to the needs of the family.

Collective



Floor 1



Floor 2

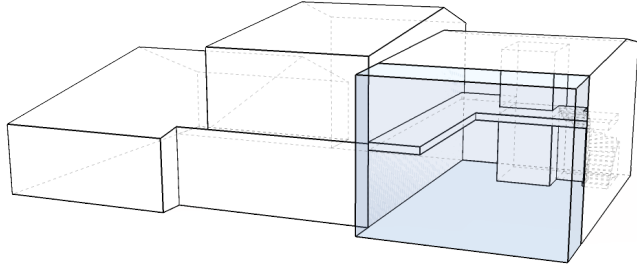
The house can also be used as a collective accommodation. Then it is only the bedrooms that are private and the rest of the spaces are shared. As maximum there can be four bedrooms in the house.

Private
Common: in the house

Scale: 1:200
0 1 2 3 4 5m

TYOLOGY

Common house, schematic plans



Total area: 268 sq.m

Private space: 101 sq.m

Common living room and kitchen: 119 sq.m

Flexible rooms for visitor/volunteers: 48 sq.m

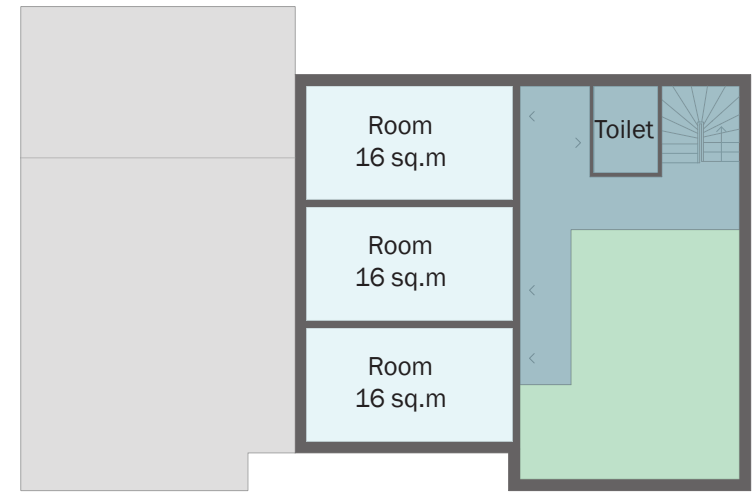
Inhabitants: 4-14 people

The common house contains three apartments for people living there permanently, three rooms for volunteers and other visitors, a big common kitchen, a shared living room and a wintergarden. All the apartments are placed on the bottom floor to make it easier for the elderly. On the second floor the rooms for the volunteers are placed together with a shared bathroom. Parts of the common living room has double ceiling height which connect the space for the volunteers with the common space and creates a more generous feeling with much daylight.

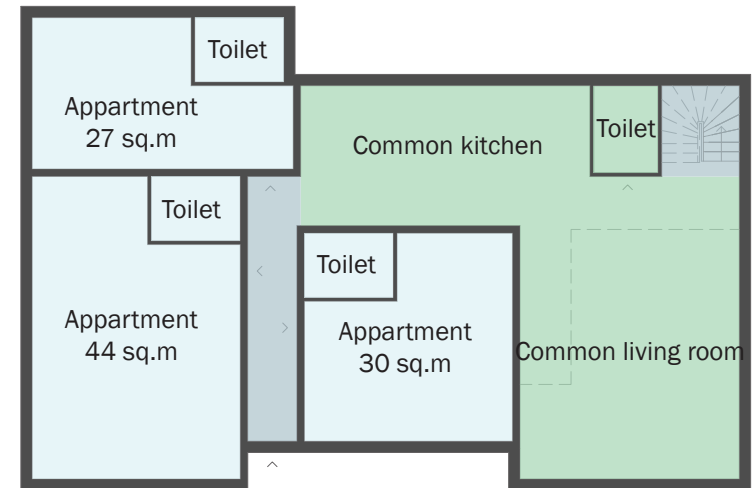
The large kitchen is used by the permanent residents in the common house but the rest of the community is also free to use it. We imagine harvest parties where fruit from the orchard and vegetables from the greenhouse and garden can be collected and cooked in the kitchen. These can be enjoyed by the community but also sold at the Eco-days at Ålgård together with the Eco-village Utsikten.

The living room is connected to the large kitchen in the common house. Here there will be tables to enjoy dinners together and comfortable seating with a view overlooking the lake of Assmunderödvattnet.

The community will offer three rooms for volunteers studying relevant subjects related to sustainable lifestyles. They can work in the community and stay in one of the rooms for free, for example during a summer helping out in the garden or in the spring building a new extension of a house. When the rooms are empty they can be used as guestrooms for relatives and friends of the inhabitants in the community.



Floor 2



Floor 1

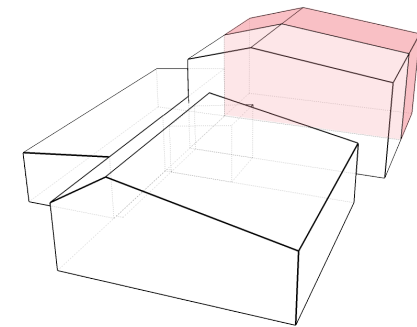
- Private
- Common: in the house
- Common: in the community

Scale: 1:200
0 1 2 3 4 5m

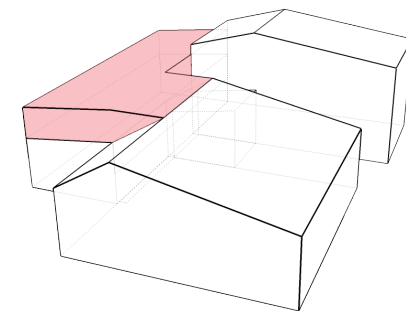
EXPAND WITH NEEDS

We see possibilities for further development in the area both around Ålgård and in connection to the ecovillage. In a rural area we think it is better to expand small scale on several different sites. In that way it is easier to adapt the buildings to the specific site and develop communities in a sustainable way.

We want to create the opportunity to expand the buildings for future needs both horizontally and vertically. These diagrams show examples of how it can be done.



Housing: Expand horizontally



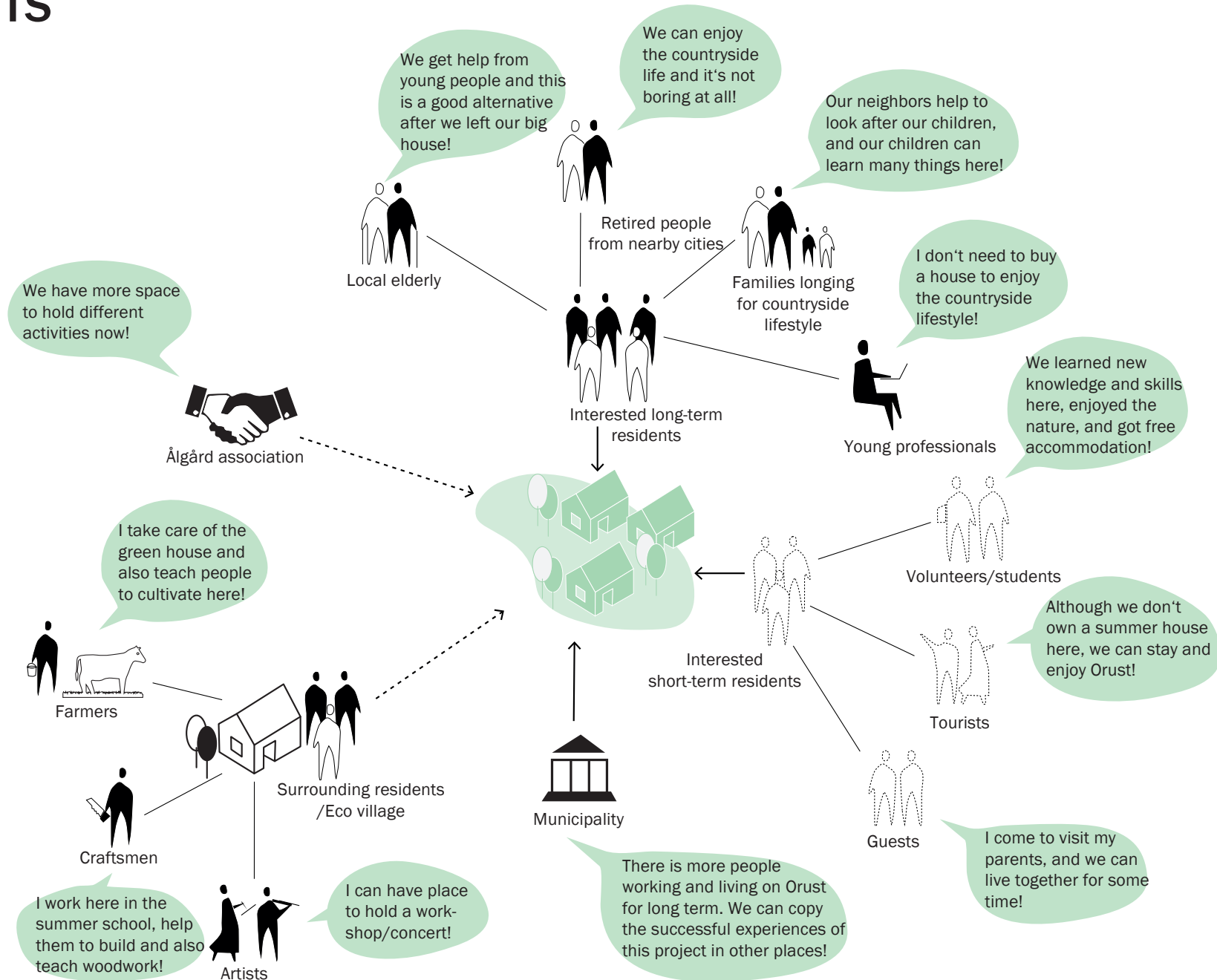
Housing: Expand vertically

I really appreciate to share the kitchen. We cook together quite often and it is nice to live in a place where you really get to know your neighbours. /Emma



I often bake bread in the common kitchen. It is good to have much space when you bake and in the same time socialize. Sometimes I bake for the whole community as thanks for helping me out with different tasks. /Alex

BENEFITS



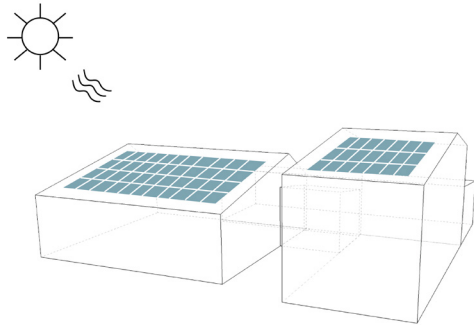
WATER MANAGEMENT

The water from the mountain goes through a filtration canal and detention pond first, then it can be used in irrigation. After that, the water is filtered again through a canal by the road and through the wetland. Finally the clean water enters the lake.



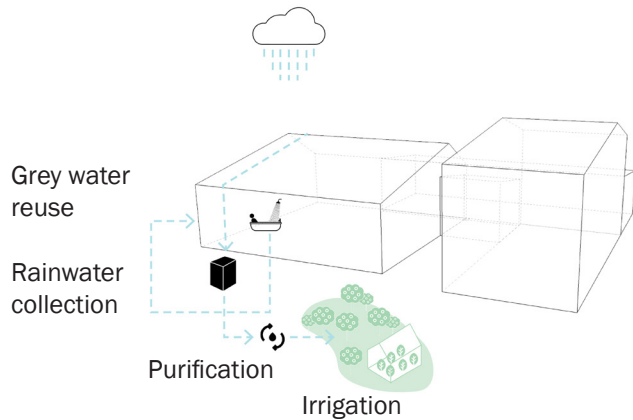
ENERGY & MATERIALS

SOLAR ENERGY



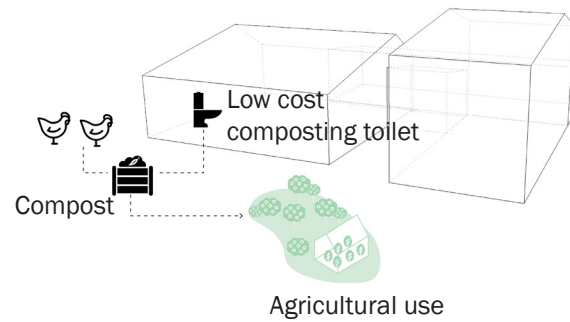
Solar panels can be installed on the roof to provide local energy.

WATER COLLECTION



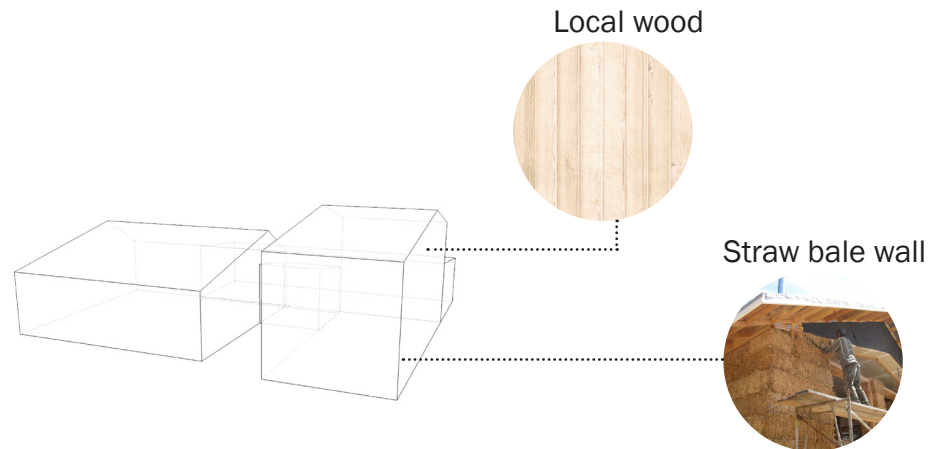
Part of the grey water is reused in the household. The other part, and rainwater, is purified and used in irrigation.

WASTE



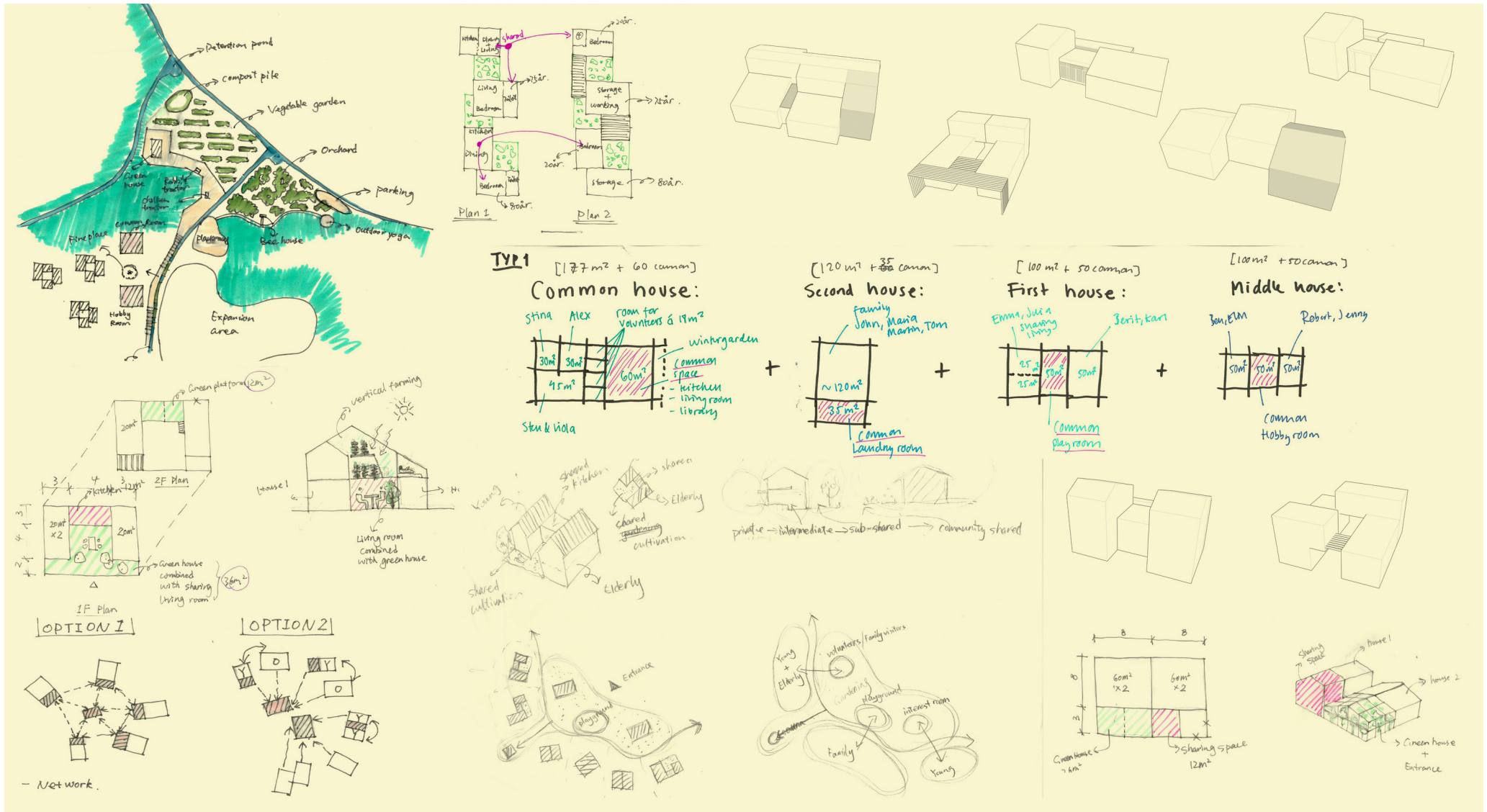
Compost human and animal excreta can be used as fertilizer for cultivation.

MATERIAL



We recommend to use local wood as facade material. The inner wall can be of local straw bale.

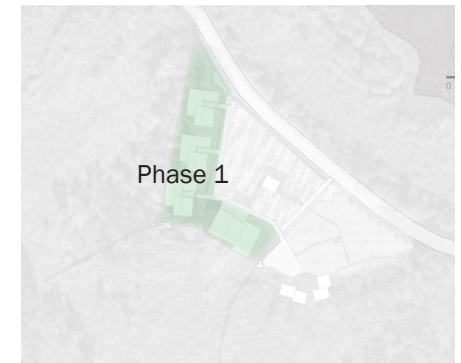
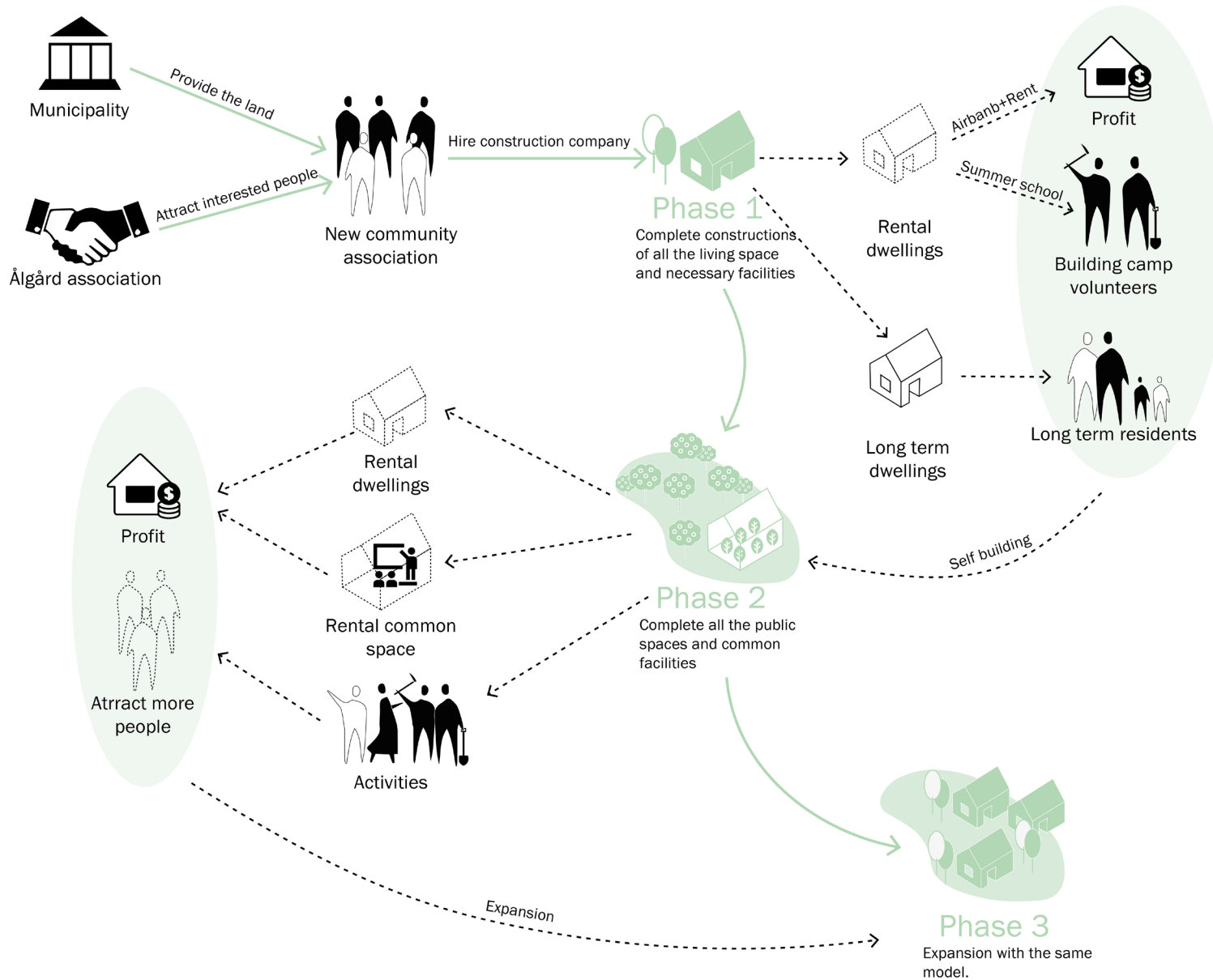
PROCESS



4

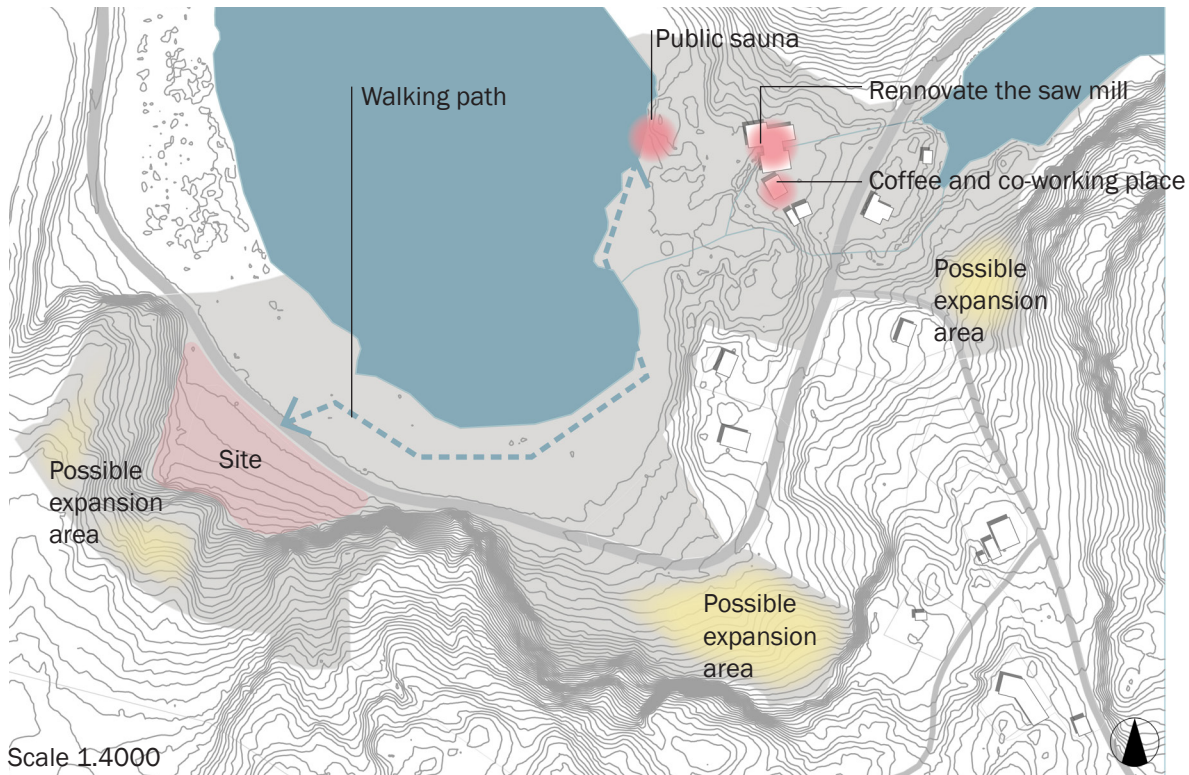
DEVELOPMENT

PHASES & BUILDING PROCESS



FUTURE VISION FOR ÅLGÅRD

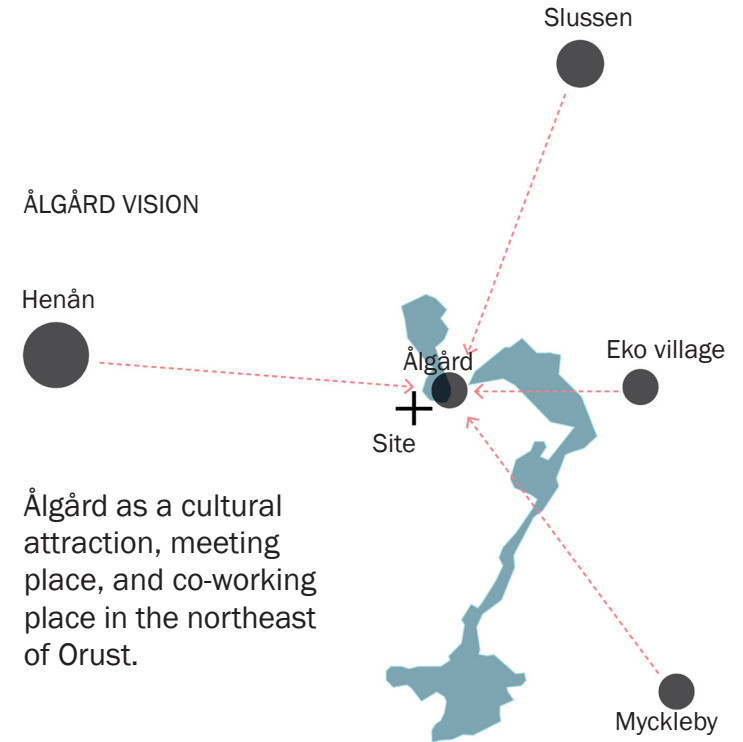
SUGGESTED PROPOSAL IN ÅLGÅRD



We think Ålgård can be developed as a cultural attraction, meeting place and co-working place in the wider region of the northeast of Orust. The project site and Ålgård can be connected through a walking path in the wetland.

Our project is suggested to work as a start-up project. Once it succeeds, the project can be replicated on other sites that belongs to the municipality. With more people living permanently in the area Ålgård can be an active place all year around.

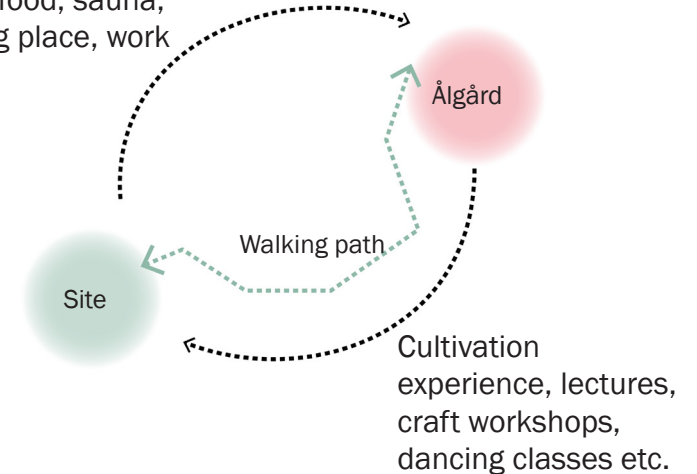
ÅLGÅRD VISION



Ålgård as a cultural attraction, meeting place, and co-working place in the northeast of Orust.

CONNECTION TO ÅLGÅRD

Selling food, sauna, meeting place, work



Cultivation experience, lectures, craft workshops, dancing classes etc.

5

REFLECTION

REFLECTION

When we began this project we had a clear vision of what we wanted to explore and design. We wanted to work close to Ålgård, but which site we should use for the project was not as clear. We chose our site because it is one that the municipality owns. However this project is a model that should be able to be developed for different locations.

If we would have had more time we would liked to go more into detail with the buildings. The concept and typologies are the strongest part of the project while the details of the buildings are not fully developed.

The reports and references we took part of in the beginning were helpful and gave us a good basis to develop our project.

This course has given us a good insight on how it is to work in a smaller municipality in a rural context. The first part of the studio was very usefull for developing our concept and main theme.

Even though the project is quite visionary it has been interesting to work in contact with the municipality. This has given the project a more realistic dimension. It has been rewarding for us to work with a place such as Ålgård where studies and projects are already suggested. We believe that Ålgård has much potential and is a place worth developing.

Finally we would like to thank everyone who has been involved in this project, all the professors in Chalmers, especially our tutor Lena Falkheden, Orust municipality and people we interviewed on Orust.



Carin Edlund, Felicia Karlsson, Xueli Ma

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Masterprogram - Arkitektur och planering för hållbar utveckling 2017/2018
Designstudio Planering och gestaltning för hållbar utveckling i lokalsamhället:
ORUST - Den rurbara ön
Designstudio del B / Fördjupningsprojekt
Carin Edlund|Felicia Karlsson|Xueli Ma