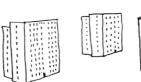
Ageing in the countryside Senior housing

Binder 1 - Diploma project AHO / Spring 2023

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ABSTRACT

In recent decades there have been major demographic changes in the rural parts of Norway. The younger generation are moving towards the cities while the older generation stays. This means that the proportion of elderly people in rural areas of Norway is increasing, while the population overall is declining ⁽¹⁾.

Therefore, the ageing population in the countryside of Norway becomes a challenge worth looking at. At the same time, the elderly live longer and have better functional capacity than before ⁽²⁾. A Norwegian 65-year-old can expect to have at least 15-18 healthy years ahead of them ⁽³⁾, and it is natural that they want to keep their independence and live in their own home as long as possible.

The fact that more elderly people live at home for longer also has its challenges, as both physical and social needs will change throughout life. One of the three most important challenges we face among the elderly today is loneliness, especially among the population over 80 years ⁽⁴⁾. Good neighborliness and social relations becomes extra important, and we have a chance to look into sustainable solutions for the future through new housing concepts for the elderly in the districts of Norway.

The government in Norway wants more elderly people to take responsibility for their own housing situation, and private senior housing can be one way of doing this. Surveys show that most of the elderly population in Norway want to live in familiar surroundings for the rest of their lives, but not necessarily in the same house ⁽⁵⁾. A home is more than just the building, it is a place you feel safe, and could just as well be connected to your furniture, the view, or the neighbors.

By ensuring an age-friendly future development of physical environments, we can ensure that the elderly population can be active members of the society for as long as possible. The design has a lot to say in order to stay independent in their own home for as long as possible. Well-designed housing and local communities can also help to reduce the demand for the municipality's care services ⁽⁶⁾, and research and experience shows that measures

taken for theelderly are good measures for society as a whole ⁽⁷⁾.

Surveys shows that several elderly people in Noway express that they would like to move to more adapted and social forms of living ⁽⁸⁾. In recent years there have been built good examples of housing for the elderly and housing communities in the cities, but there are few alternatives in the rural areas. A Norwegian study from 2021 concluded that housing communities can contribute to an increased quality of life for the elderly ⁽⁹⁾.

The study highlights five aspects for increased quality of life; (1) increased mastery and prolonged independence, (2) easy access to activities and an environment that inspires to participation, (3) the experience of safety, (4) stronger social relationships and (5) homogeneity (10).

Housing communities designed for the elderly can therefore be a good option for those looking for an easier, more organized everyday life with social cohesion, while maintaining a high degree of independence (11). Although the satisfaction is greater when neighbours are more like minded and in the same stage of life (12), it is important to be well connected to the rest of the society. For example, by ensuring closeness to other age groups, usage of shared facilities and the proximity to functions in the local environment that are used by several generations. Nevertheless, it is worth noting that the physical surroundings in themselves do not create a social community but can inspire and facilitate it.

We believe that senior housing with community solutions can help improve the dynamics of the housing market in rural areas, by achieving a better match between housing needs and housing consumption. By providing the elderly with suitable housing, they can stay in the village longer, and their homes can be exempted to allow younger people in the establishment phase to move in. This could contribute to keep the population steady over time.



Program

Housing community for the elderly

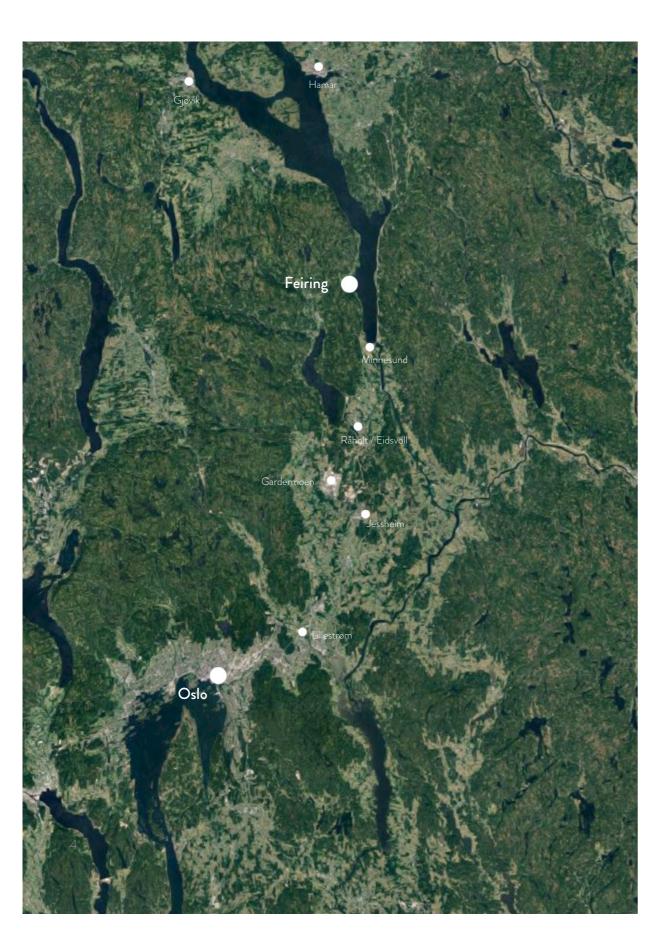
We wanted to explore what an attractive housing community can be in a rural context in Norway. We believe there is a difference in what is attractive for the elderly in the city compared to rural areas.

Our project looks at how we can provide less living space per person, but still give access to what they need through common space. Even though our project is aimed at able-bodied elderly people, it is important for us to make dwellings in a life cycle standard, that is accessible if there is need for a wheelchair a while.

We have investigated what we believe is suitable building sizes for our selected site with surroundings, and how many units this will include.

Among other things we have explored the correct balance between private and public. Many villages in Norway have a well organized social community already, but lack some of the meeting places where casual social activity can occur.

Therefore, we have looked into what common space is necessary, both indoors and outdoors, and the possibility of adding a public café to ensure a good social mix within our project - a meetingplace across generations.



Feiring to ...

Råholt / Eidsvoll	24 min
Gardermoen	33 min
Jessheim	32 min
Lillestrøm	51 min
Oslo	62 min
Gjøvik	48 min
Hamar	48 min
—	
Gardermoen	1 hour 38 min
Oslo	1 hour 43 min
Gjøvik	2 hours 26 min

1 hour 27 min

Case study

We have chosen to draw a project in Feiring as a case study, a small village 1 hour north from the city of Oslo. Feiring can represent similar villages across Norway, which is in the middle tier when it comes to proximity to the city. It also gives us the possibility of being site specific.

We see the master thesis as a last opportunity to learn before starting to work and seeks towards a feasible project, that will look at what a given set of regulations can give in terms of both opportunities and limitations.

Feiring has just below 1000 inhabitants today. Our studies show that there are more adults and elderly than average for the municipality, which corresponds well with our research at national level. The proportion of elderly people is increasing, while the general population is decreasing. In the next 12 years alone, the population projection for Feiring shows an increase of 61 people in the age group 67 and over, while at the same time experiencing a general decline in the population of 113 people.

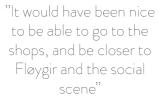
Feiring is located close enough to the surrounding cities to make it attractive for people that want to live more rural but at the same time stay connected. Today the problem is the lack of available housing.

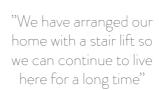
"It would have been nice to be more people doing the maintenance" "I must have my own patio with a view of Mjøsa, and a small flower bed that I can deal with"

"I want to live on my farm, moving is out of the question" "We are a bit disconnected and lonely where we live today, and could well consider moving inside the village if there was a good option"

"Maybe just a common living room to have quiz nights and a nice outdoor area"

"I always visit, she has everything on one level and I'm envious of that. But I can't take the old man with me when moving"





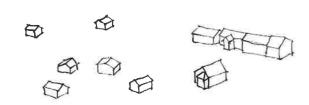
"I don't want any community pushed on me, you have to have the opportunity to retreat"

"If there is an alternative I can move to, my home could be very nice for a family with children"

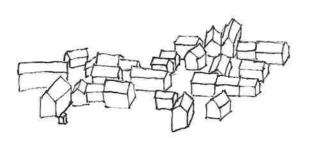


User group

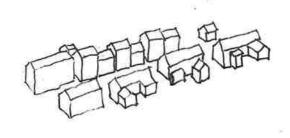
In our work we have had contact with Feiring's local pensioners association and had a workshop with them to consider the needs and wishes of the elderly in the area. This has shaped our thoughts around the project and helped us make qualitative choices in our design process.



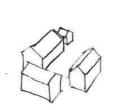
"Irregular settlement"

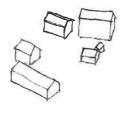


"Clustered settlement"

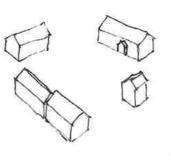


"Row settlement"

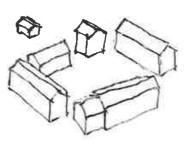




"Double courtyard"



"Square courtyard"



 $"Closed\ square\ courtyard"$

Typology

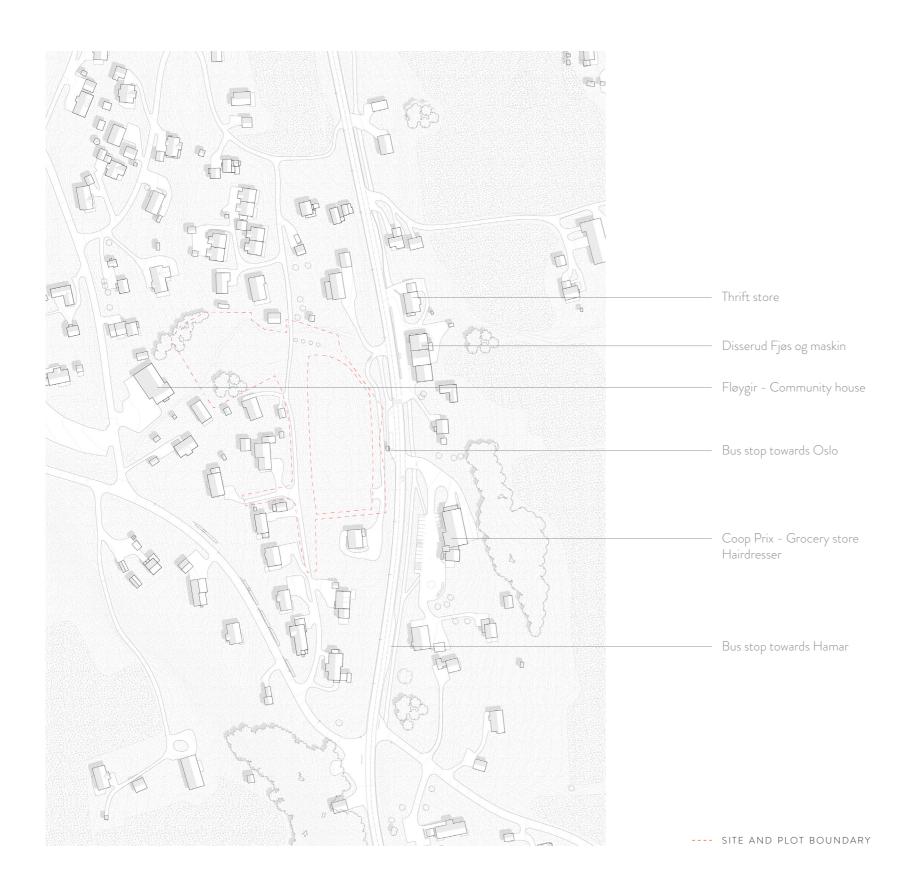
We have chosen to work with "bygdetun" as a typology. A "bygdetun" can be described as a fully or partially enclosed courtyard, often a farm, that consists of the space where the houses stand and the courtyard in between the houses (1).

This is a typology well known in rural parts of Norway, and for our target group. We therefore believe this can be one way of making it attractive for the elderly to move. Since they can relate to the typology and surroundings.

Most of the elderly inhabitants in Feiring has grown up in smaller farms, and even though they may want an easier living situation when it comes to maintenance we want to keep the feeling of something familiar. At the same time, we believe the typology can act as a facilitator for a social community.

We have also explored what distance is necessary across the courtyards when we translate a traditional "bygdetun" to todays regulations, functionality and usage.

¹Tun, 2021 SKETCHES INSPIRED BY THE BOOK "DEN NORSKE BYGGESKIKKEN", PAGE 252-253



SITE

We wanted to look at what activities are already available for the elderly in the village, to be able to connect to these instead of competing with them. Therefore, we searched for a site near the village centre, with Fløygir (the community house) and the shops close by. Other factors we decided were based on descriptions of an age-friendly society, such as access to public transport and the possibility of outdoor areas. We ended up with the only site set aside for residential purposes in the municipal plan so close to the village centre.

The zoning plan gives us some regulations for our project, that we would like to explore. For example we must work with a pitched roof with an angle between 27-40 degrees, maximum utilization rate is set to 40% and there is a limitation of 4 housing units per building.

An important aspect of our project has been the relationship to the terrain. The terrain on the site can be divided in three, a steep slope in the west, more flat in the middle and a slope in the east. After testing some different solutions for the site, we figured out that we wanted to preserve the sites natural landscape as much as possible.

Situation plan 1:1500 — PLOT BOUNDARY

0 10 20 30 40 50

100



Diagram Terrain

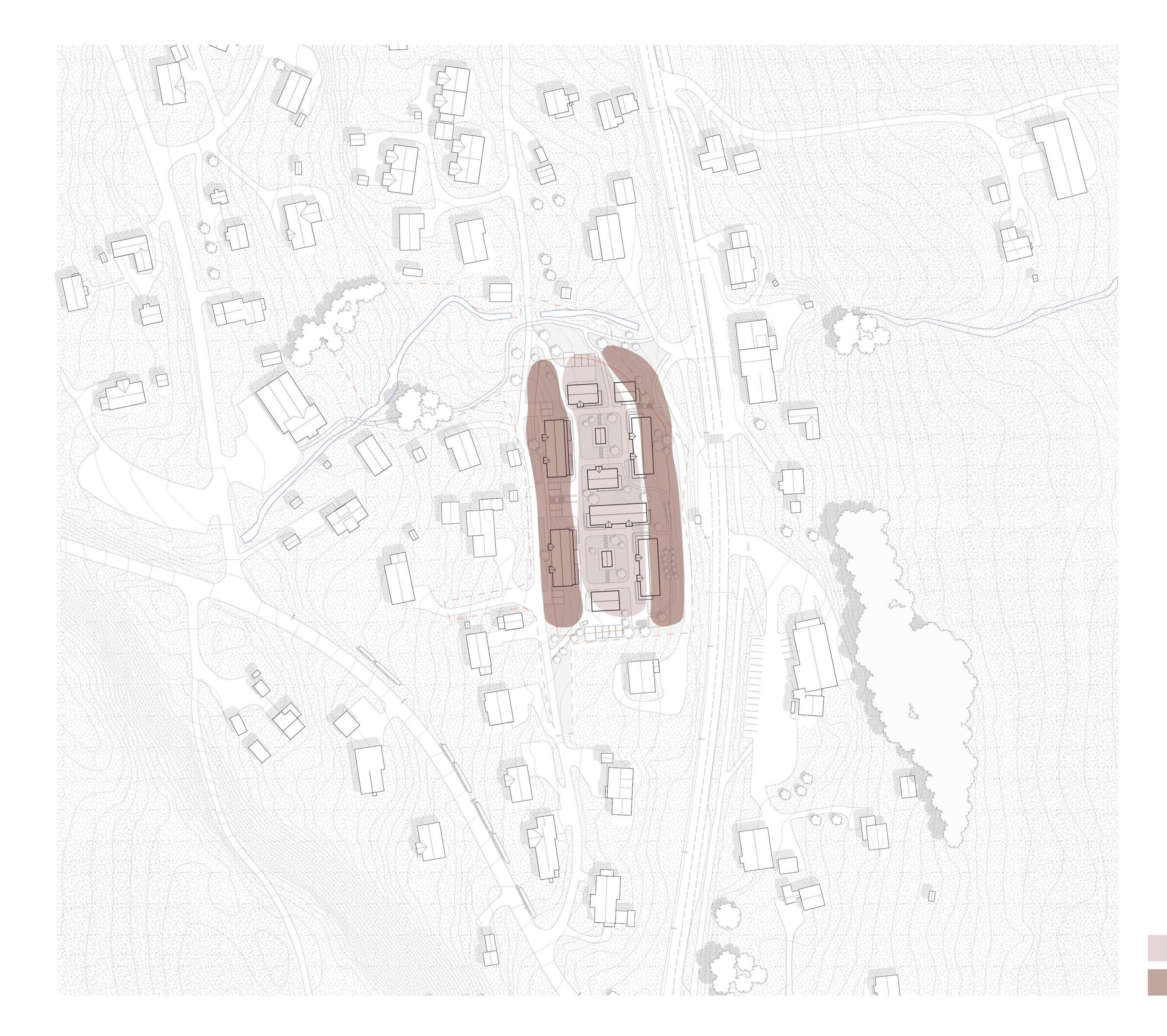




Diagram Walking path

"Fløygir" Community House



Grocery store

Diagram Terrain



PUBLIC

PRIVATE

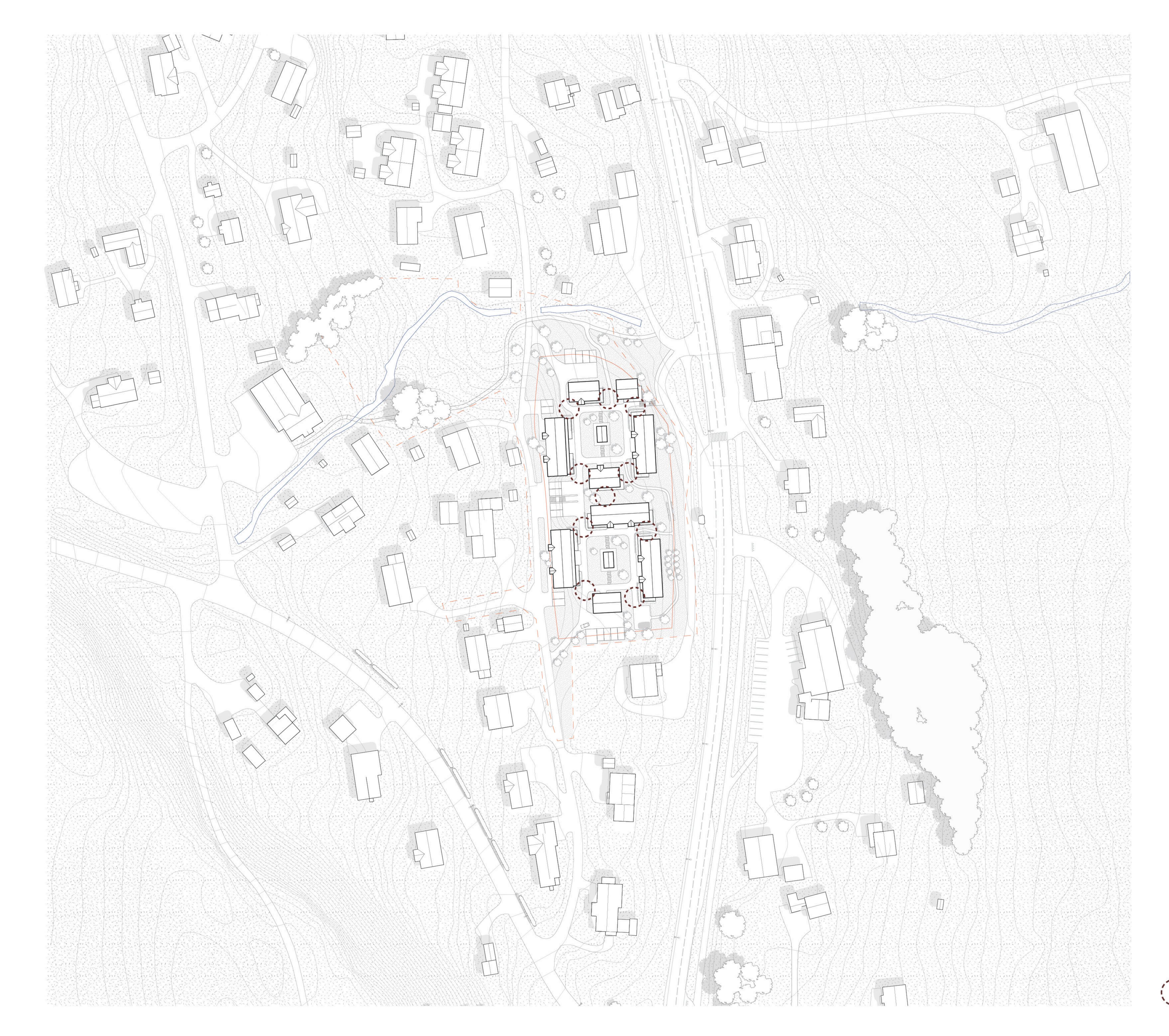



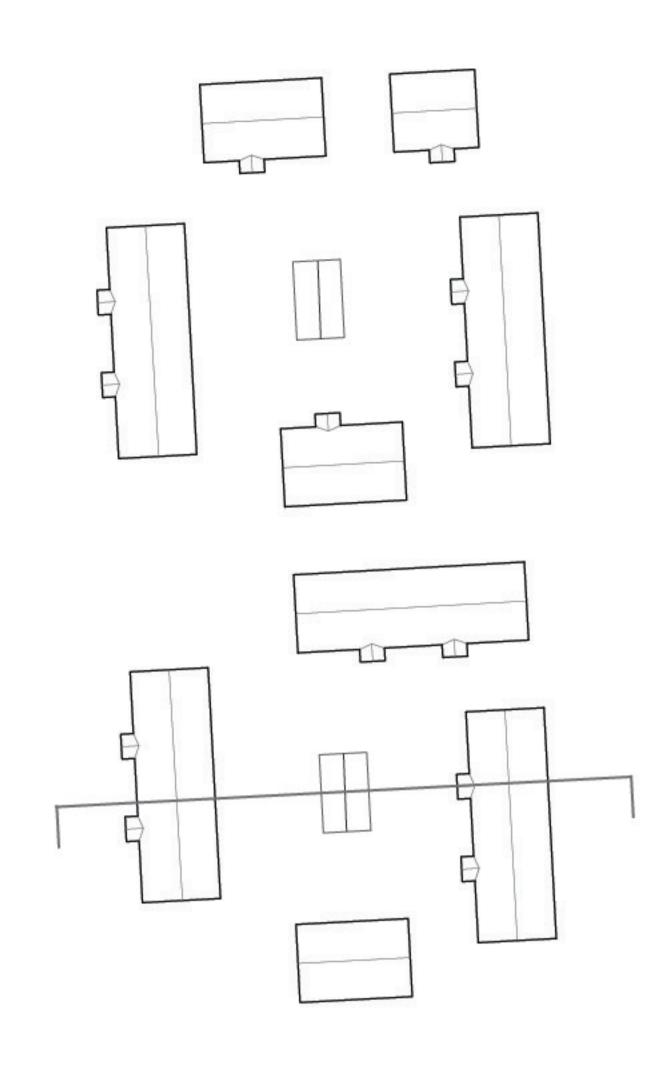


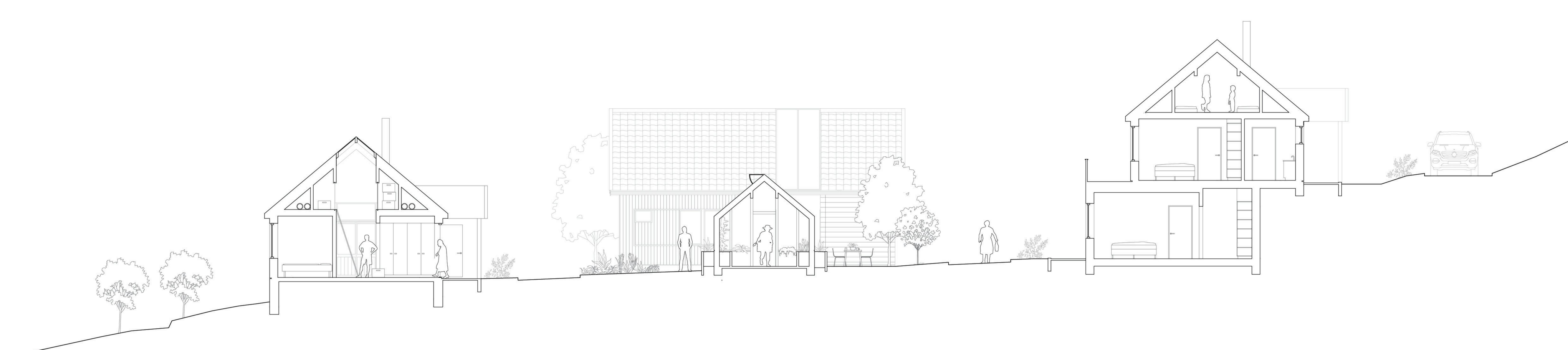
DIAGRAM Sun study 23.06 kl. 9

DIAGRAM Sun study 23.06 kl. 12

DIAGRAM Sun study 23.06 kl. 16







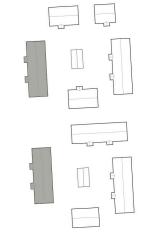


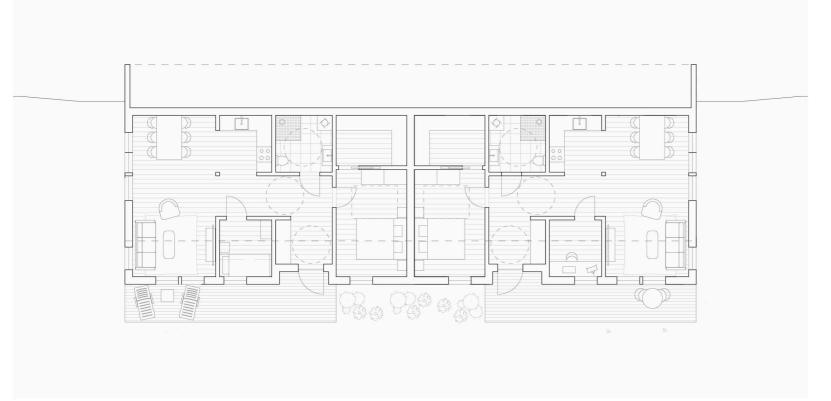


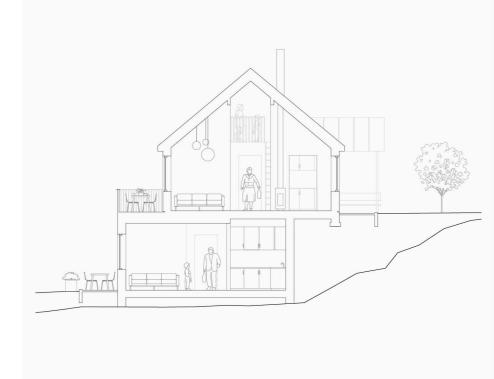




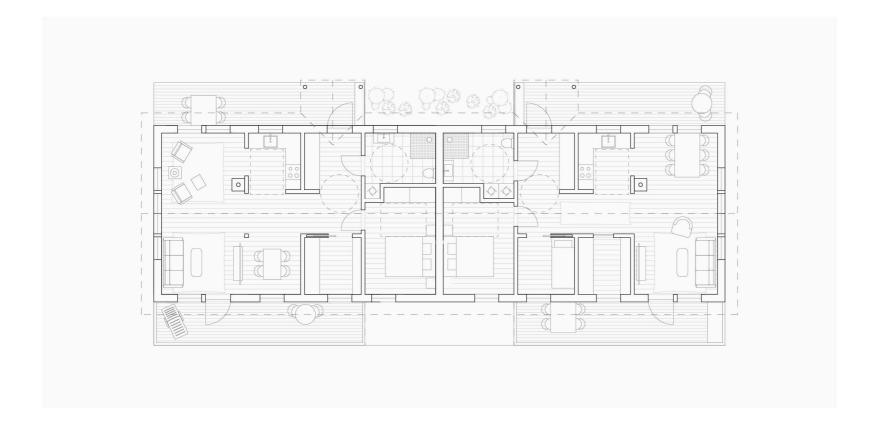






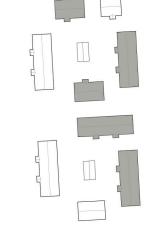


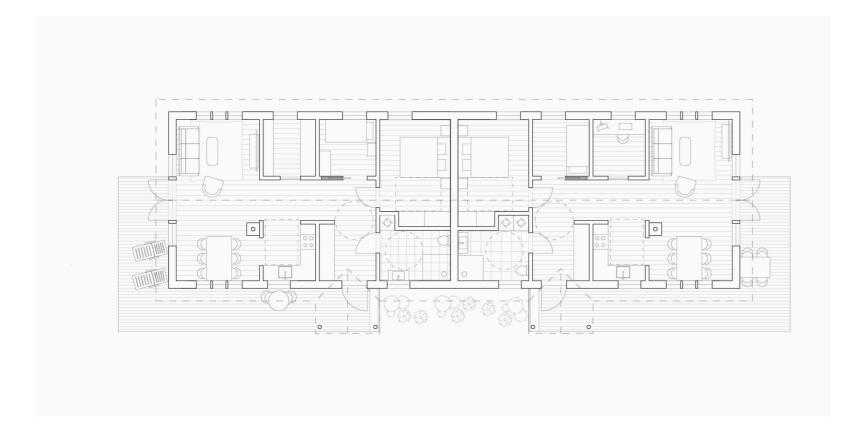












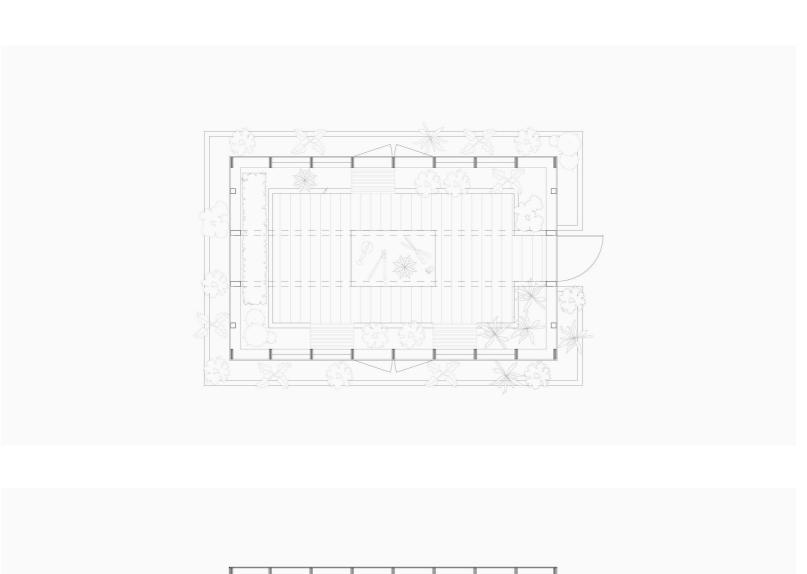


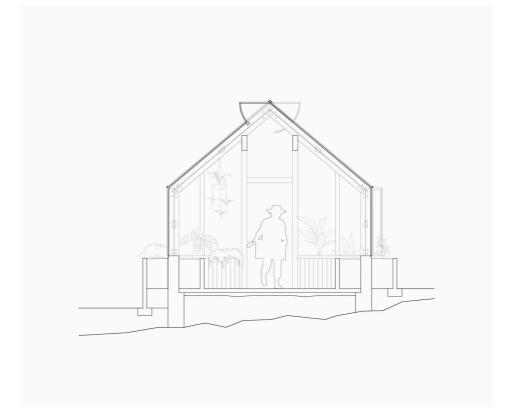




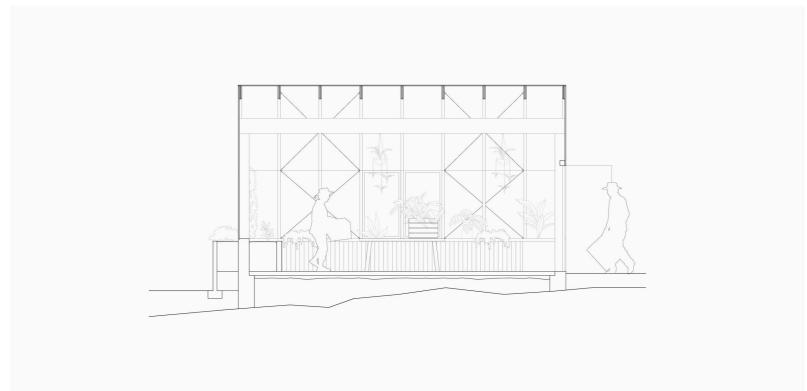










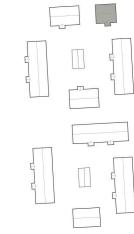




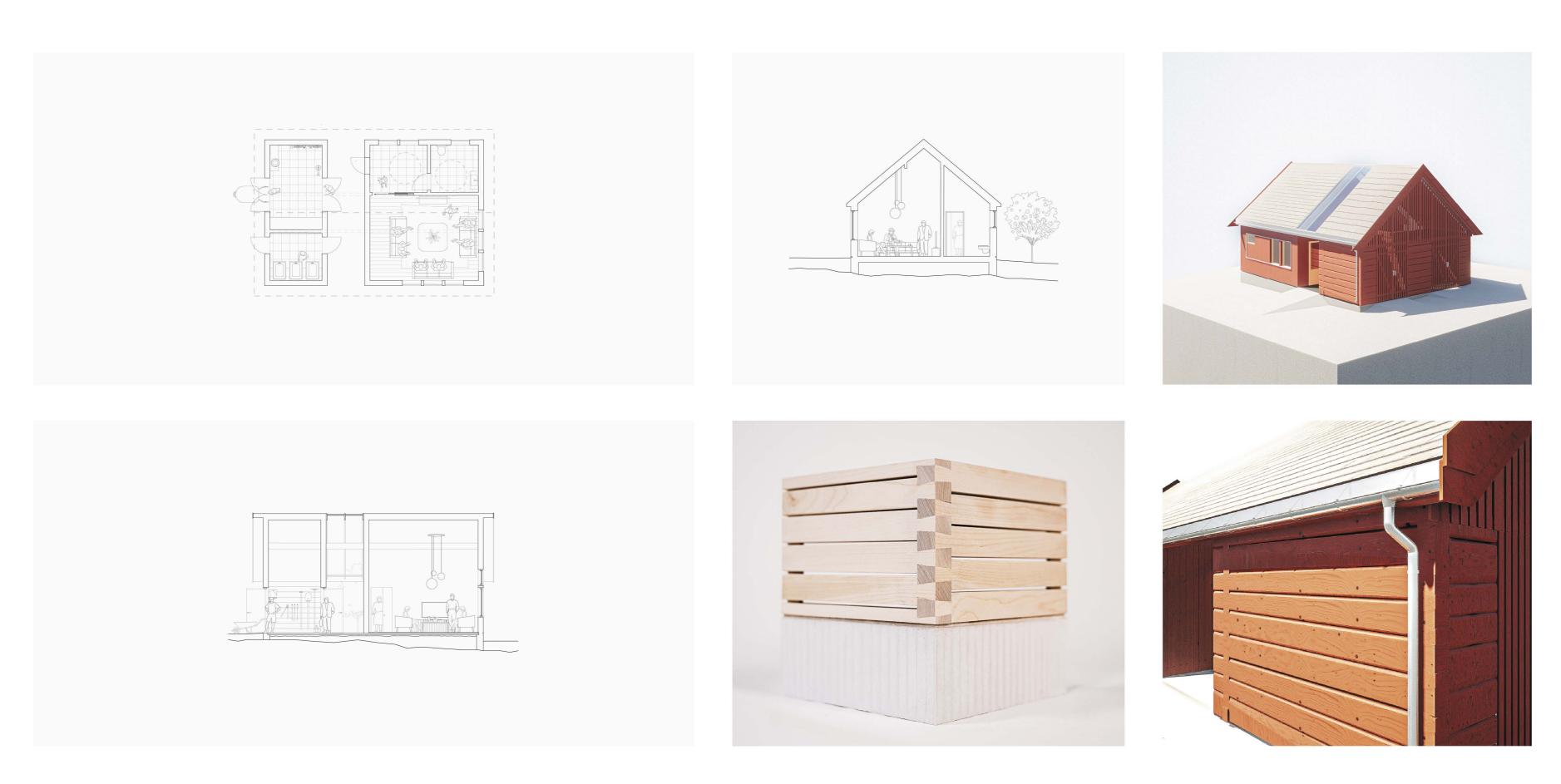


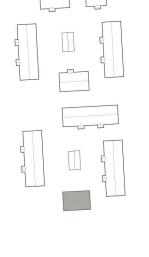
0 1 2 3 4 5 10





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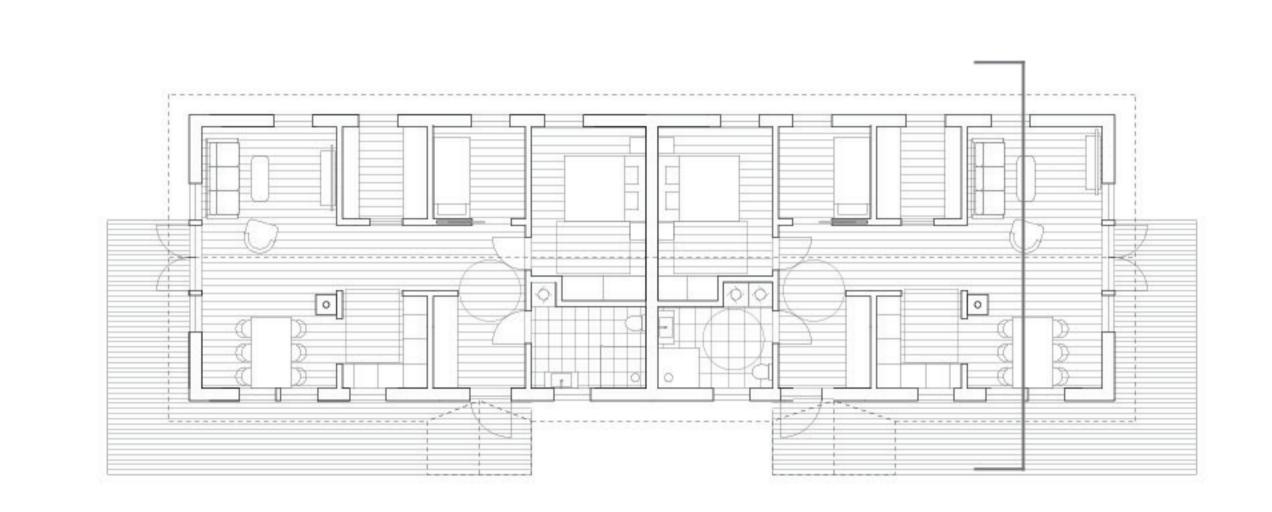


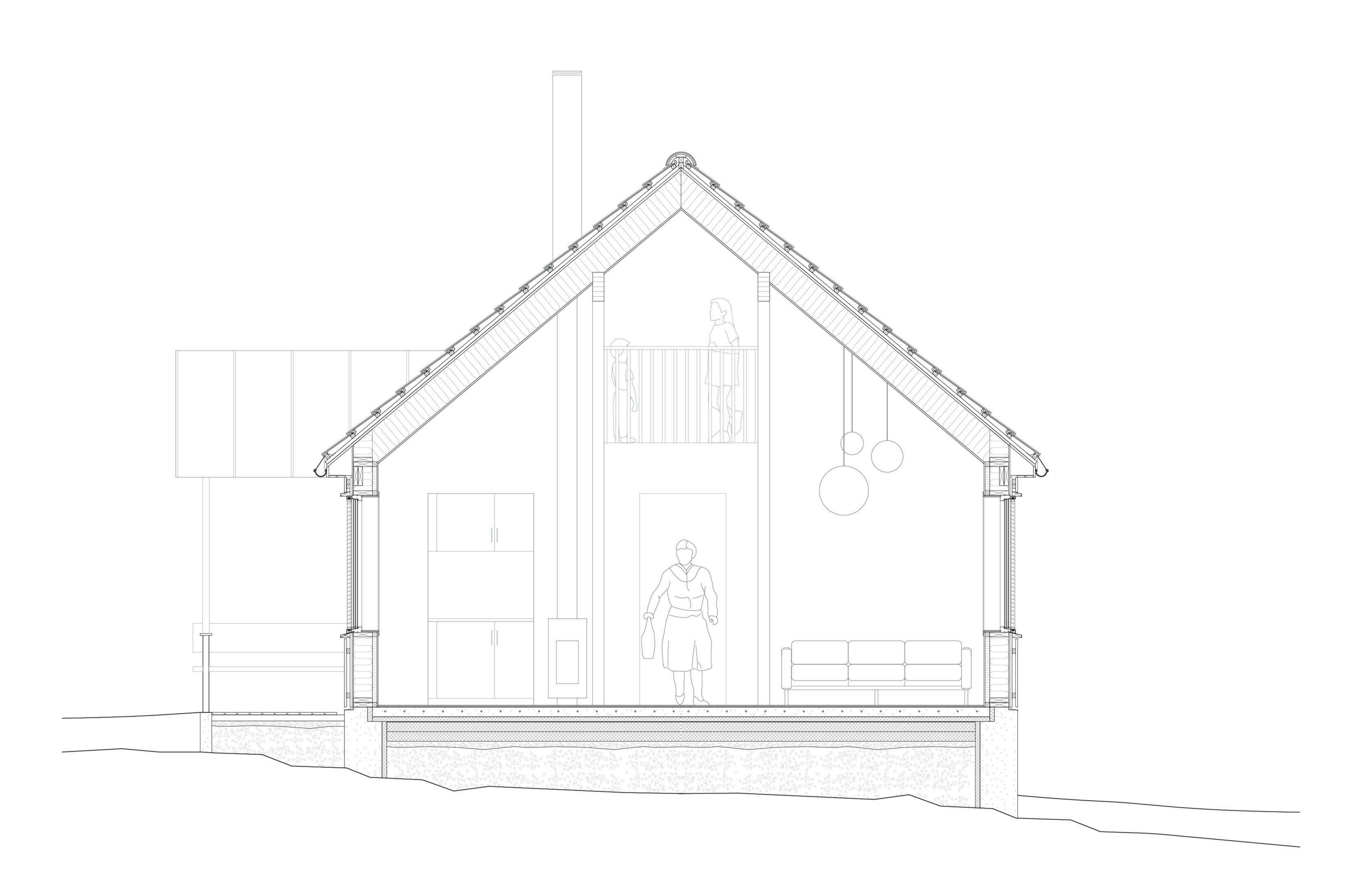
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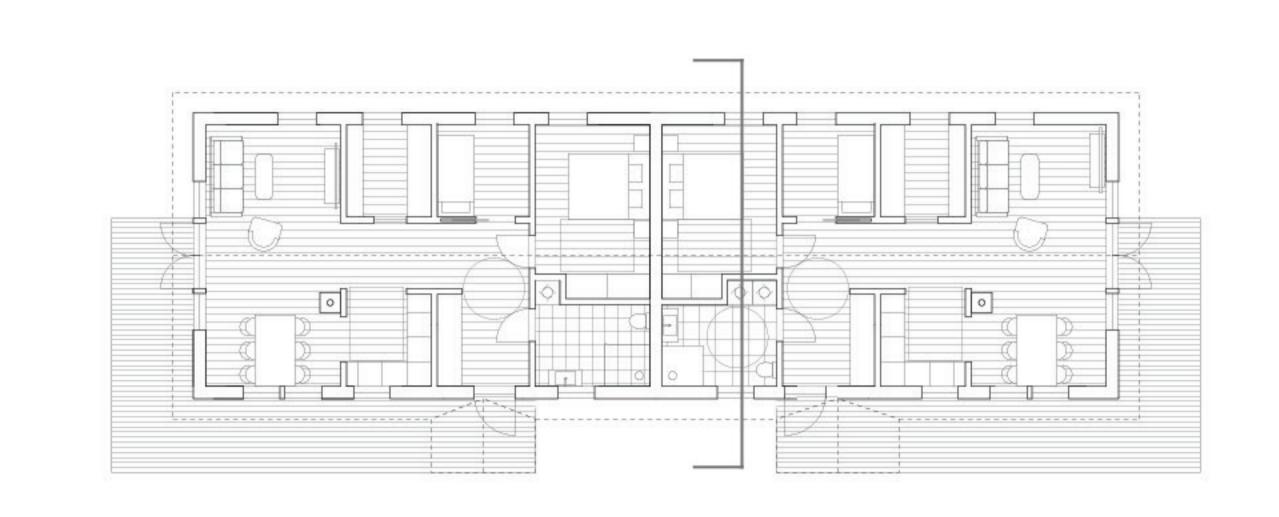


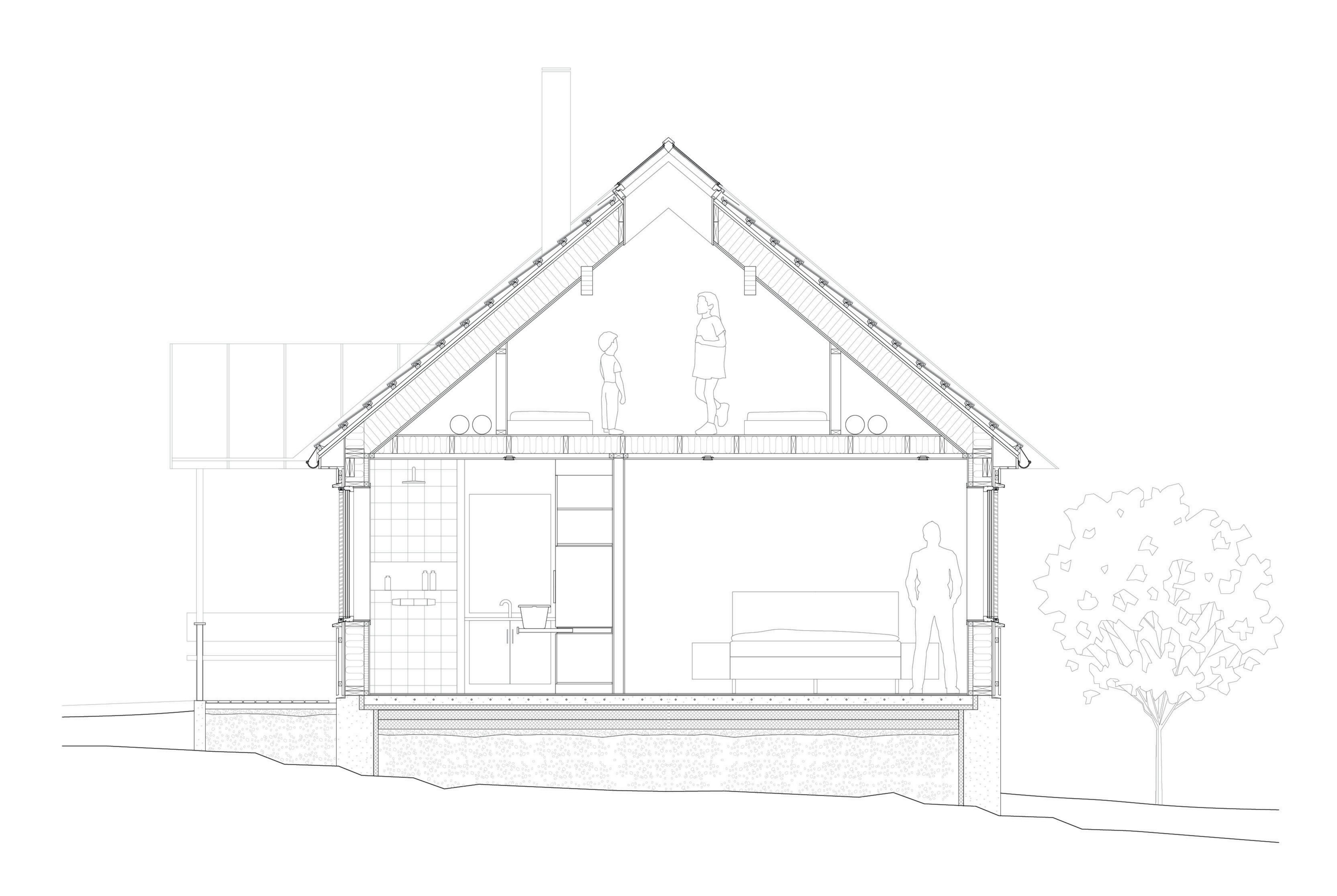


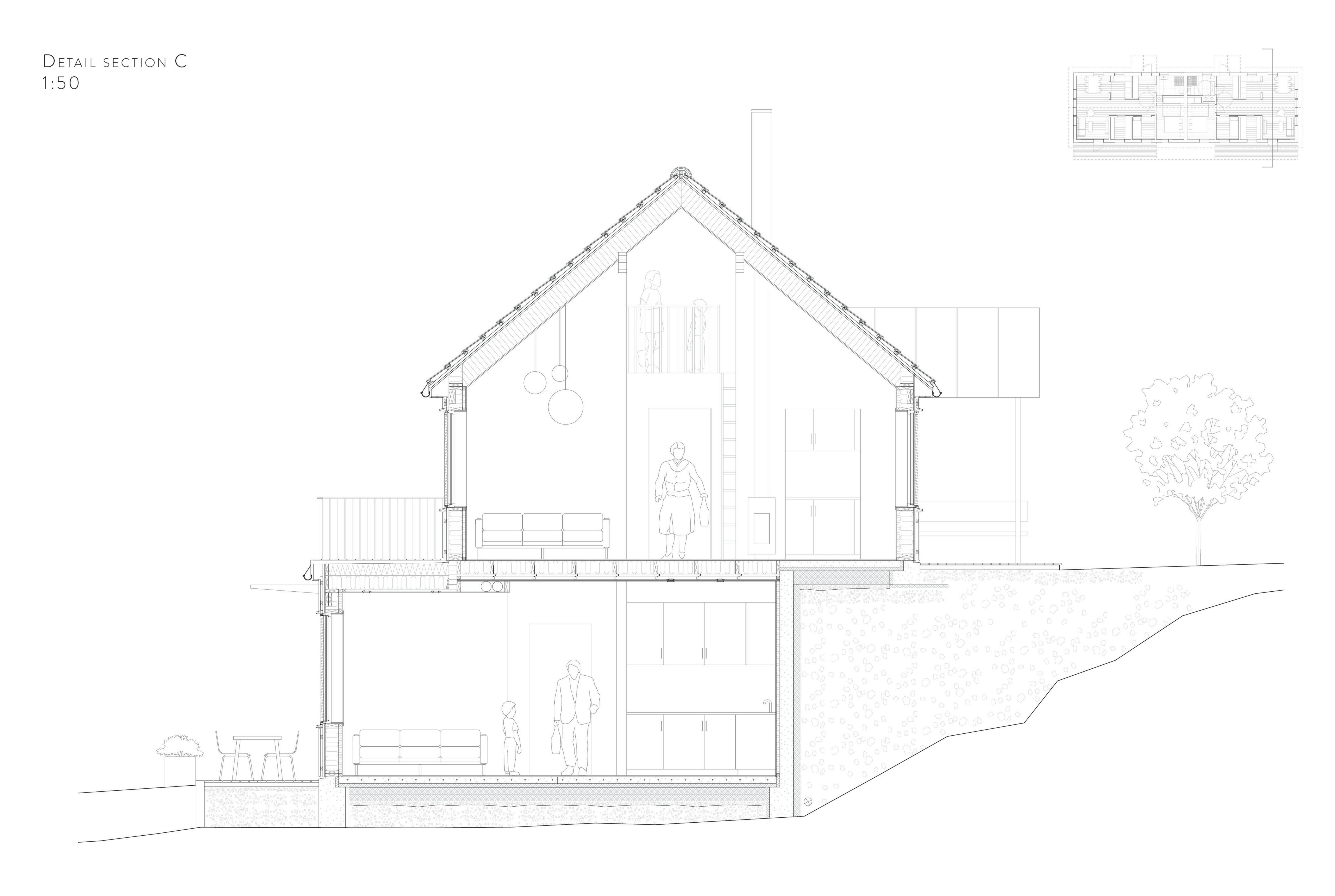


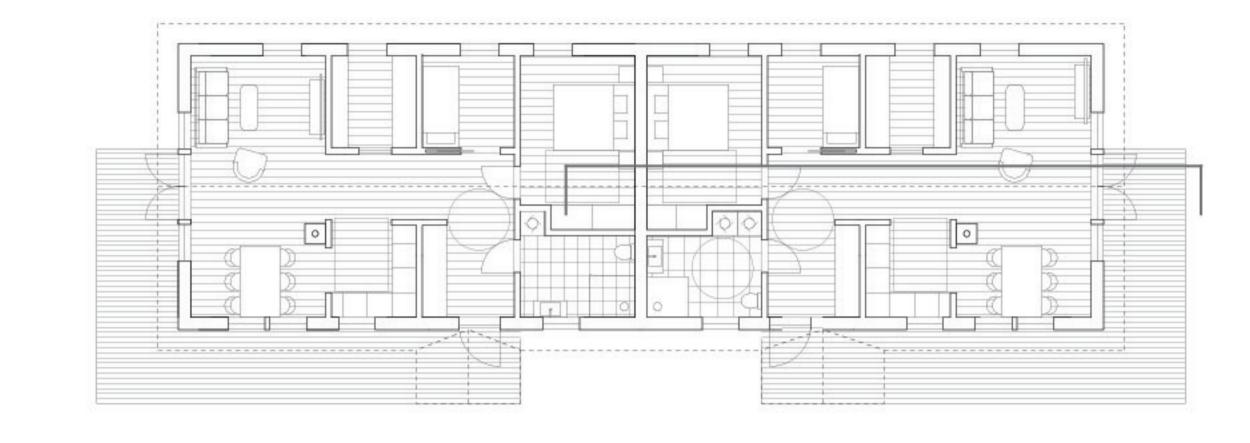


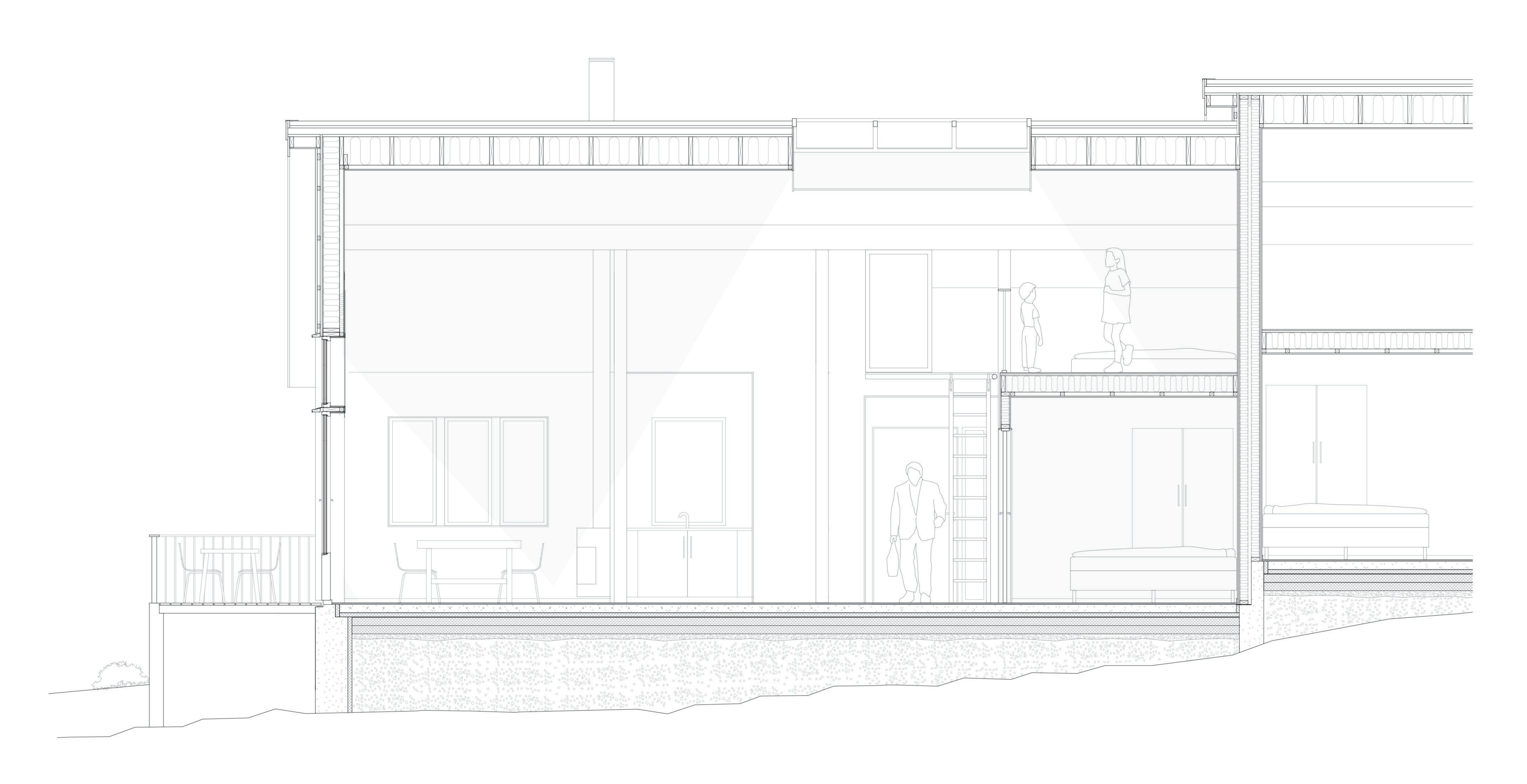


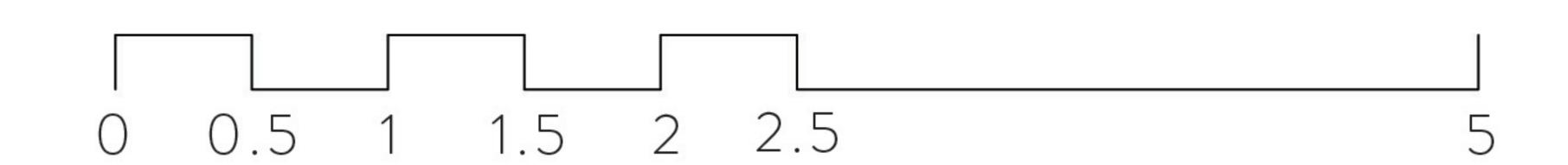














ROOF BUILD UP
25 mm solar roof tiles
36 mm battens
32 mm counter battens
22 mm sheathing
300 mm insulation and rafter
1 mm vapor barrier
15 mm gypsum

WALL BUILD UP

20 mm cladding

36 mm battens

2 mm counter battens

1 mm building paper

12 mm asphalt plate

198 mm insulation and studs

1 mm vapor barrier

48 mm insulation and battens

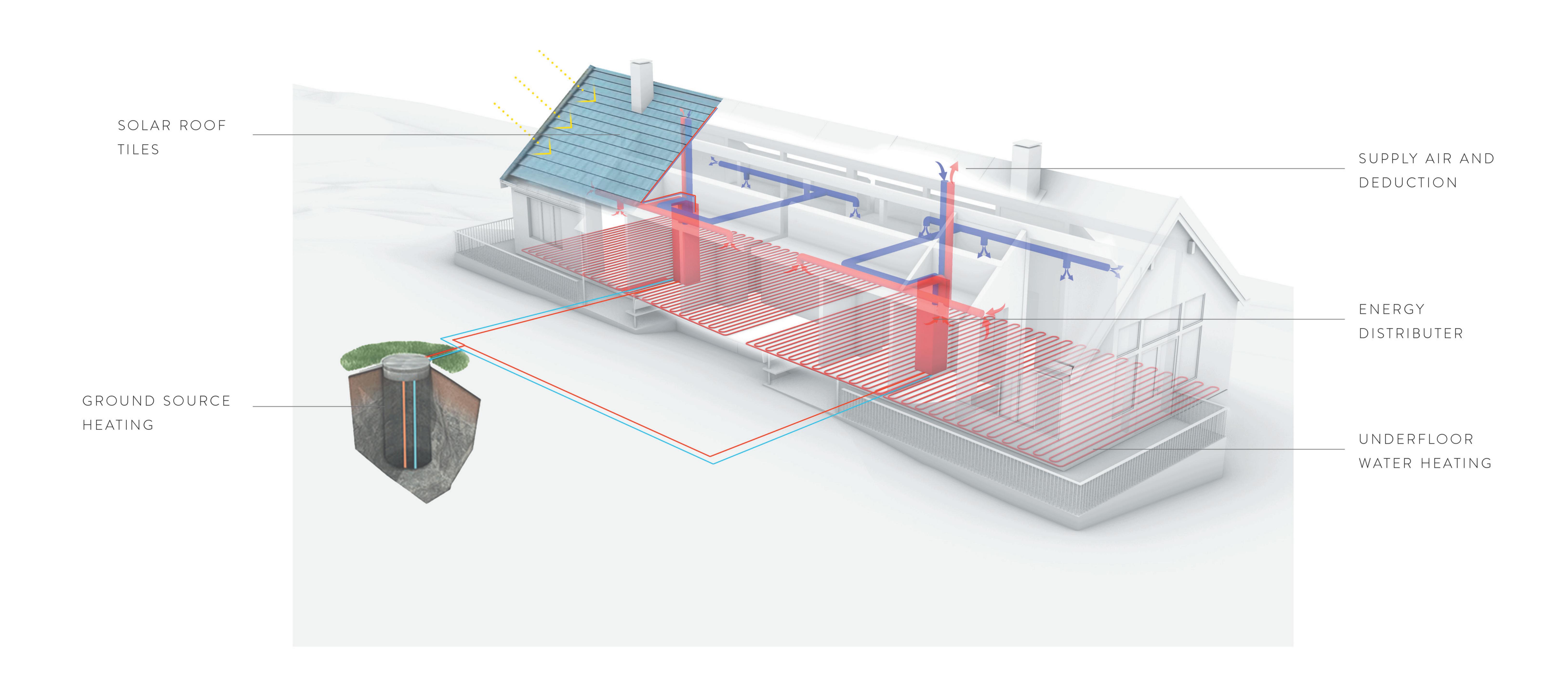
12 mm gypsum

FLOOR BUILD UP
15 mm parquet
3 mm foam layer
100 mm concrete slab with heating
50 mm insulation
1 mm vapor barrier / radon membrane
200 mm insulation
draining masses









Literature:

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