Biography of a House

Silje Dæhli / Maris Mänd

Abstract

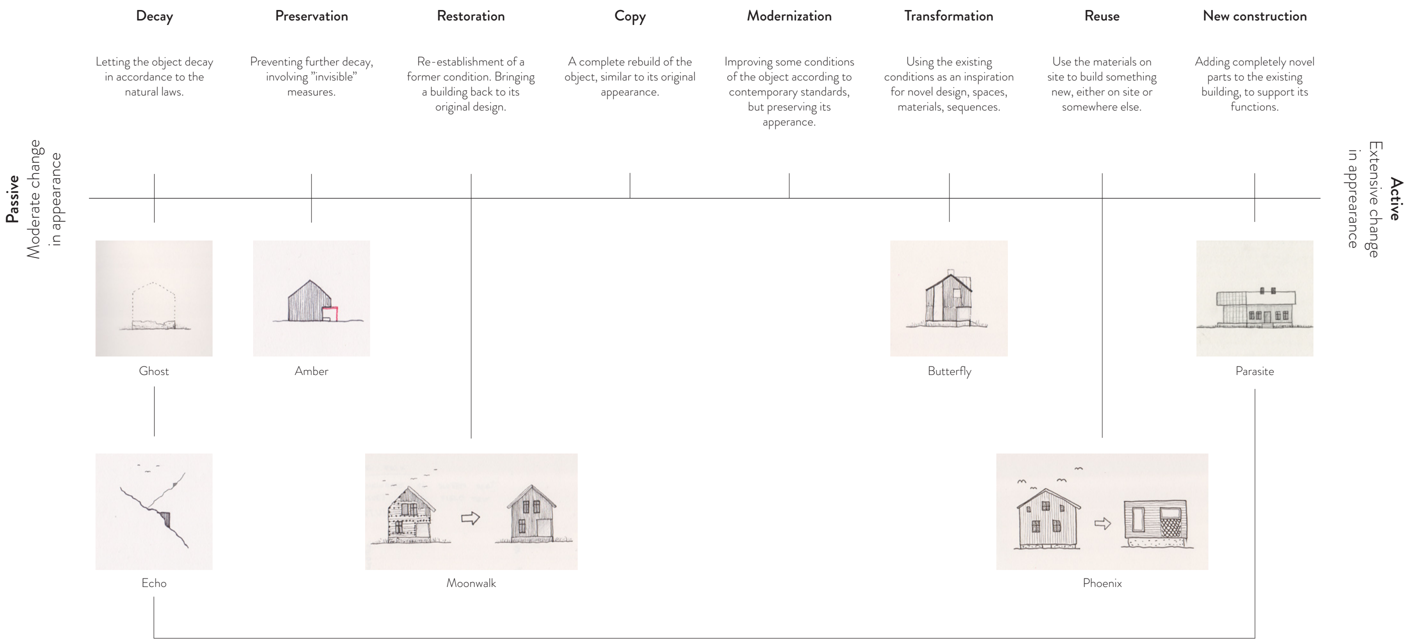
The ruin is a phenomenon that fascinates and awakens a naive curiosity. These structures make your mind wander: Who lived there? Where are they now? Why isn't anyone taking care of the building? It is intriguing to continue reflecting about both the past and potential future of these buildings. We see the ruin as a dormant resource that can provide a deeper understanding of a place and its history.

Such a house is Toralfhuset. The house itself - its structure and architectural DNA - is not exceptional. It is a prefabricated log house in the Swiss style, quite common for the area. It was built in the late 19th century, and is quite a large house, with six bedrooms, a kitchen, a hall, a dining room, two living rooms and a basement with a full floor-height. Throughout the century, it was inhabited by several people, up until the 18th of May 1973, when its last inhabitant - Toralf Mikalsen - passed away. Since then, the house has been without any maintenance, and it has deteriorated to a ruinous state. This is also helped along by locals, who have gathered and reused materials from the house.

Toralfhuset is situated at Røst – an island community of 500 inhabitants – around 100km off the coast from the nearest big city. The archipelago has been settled for many centuries, thanks to the abundance of natural resources from the sea. Here, the people, fish and birds live together in symbiosis.

How can these buildings become resources for their local communities? And is it possible to save a ruin without ruining it?

Our process started with exploring different *approaches* for how to deal with the house, ranging from letting it deteriorate, to a full transformation. This resulted in seven strategies, along an axis of different levels of visual manipulation. To know which strategy would be the correct one to proceed with, we wanted to pinpoint Toralfhuset's *values*.



Decay

Letting the object decay in accordance to the natural laws.

Preservation

Preventing further decay, involving "invisible" measures.

Restoration

Re-establishment of a former condition. Bringing a building back to its original design.

Copy

A complete rebuild of the object, similar to its original appearance.

Modernization

Improving some conditions of the object according to contemporary standards, but preserving its apperance.

Transformation

Using the existing conditions as an inspiration for novel design, spaces, materials, sequences.

Reuse

Use the materials on site to build something new, either on site or somewhere else.

New construction

Adding completely novel parts to the existing building, to support its functions.

Passive
Moderate change
in appearance

Active
Extensive change
in apprearance

Ghost

Amber

Butterfly

Parasite

Echo

Moonwalk

Phoenix

The value assessment is made on the basis of field search, archival research and interviews with locals. We identified seven categories of values, which relate to both the physical and non-physical aspects of the house: cultural, historical, iconic, anecdotal, resource, ecological and age.

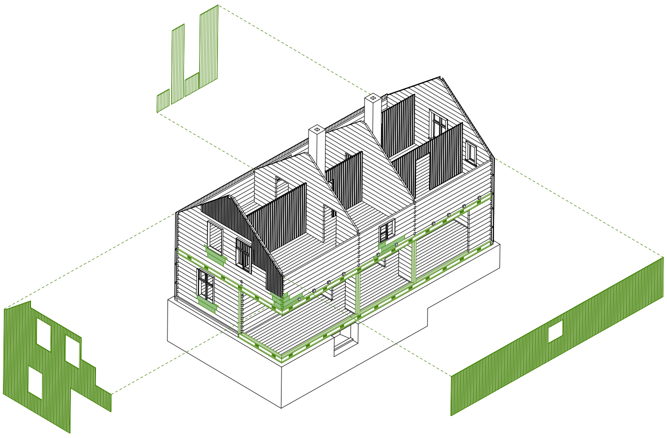
By combining the different *approaches* with the identified *values*, we discovered that sticking to only one of the strategies would not be able to capture the range of values of the house. We discovered that the best solution would be a combination of different approaches in different parts of the house.

We decided to split our interventions into two phases. In this way, we could stop the project after the first phase, and say that our intervention is complete.

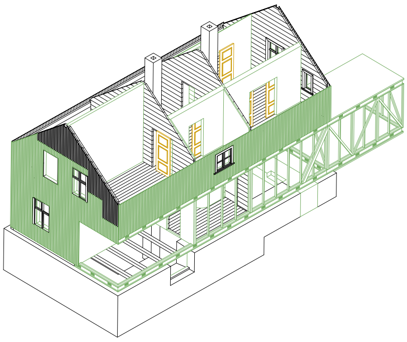
The main goal of the first phase is to prevent the house from further deterioration. In this phase, we are utilizing the approaches that are on the left end of the axis, with visually more subtle interventions. The interventions include switching out the rotten logs with new, fresh wood, supporting the cantilevering south-west corner with a steel construction, and cladding it with similar panel to the original, to protect the exposed log walls.

The second phase is about making the house inhabitable again. Here, we are acting mostly on the right end of the axis, allowing ourselves to become present co-authors of its expression. First, we need to fix the windows, doors, add insulation and bring in infrastructure like water and electricity. Then, we are reintroducing the "missing room" from the south-west corner, and adding it to the opposite, south-east corner. This new, cantilevering space will function as a dining-room in conjunction with the kitchen. This intervention will be hidden from the line of sight from Toralfhuset's most photographed angle, so the house will keep its iconic expression. The rest of the house is kept quite similar to its original plan.

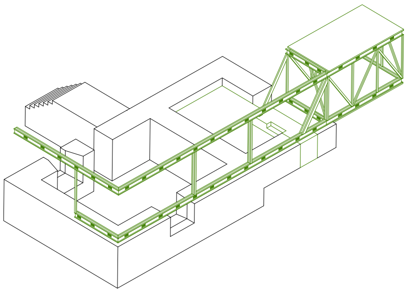
We know that sea-levels are rising, and that Toralfhuset will be in the 200-year storm surge zone by 2090. Knowing that building materials are of great resource value for the locals at Røst, we invite them to help themselves with materials from this point on. To make it easier for them to do so, we imagine a catalogue with an overview of all the materials that are in the building. This way, the house acts as a material-bank for future use. The steel construction, however, will become a part of the new ruin, as a hint of the house that was once there.



Phase one: Preventing further collapse



Phase two: Making the house inhabitable



Epilogue: Allow locals to gather materials

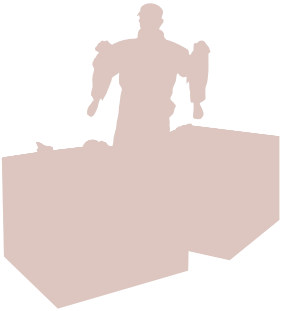
Birds

Program

Functional program:
Røst has been a destination for a wide range of visitors for centuries. Each winter, the cod comes to Røst to spawn, which in turn attracts thousands of fishers and birds, ready to harvest from the sea. This has led to a blooming fishing-industry, which is the back-bone of Røst. As of the last decades, tourism has increased. Other visiting groups are researchers, ornithologists and artists.

We started out with not defining the program, but after doing research on Røst, we quickly discovered that it would be a good opportunity to cater to the many visitors that stop by annually. Facilities that everyone needs, regardless of the reason for visiting, is a roof over their head, heat, fresh water and the possibility to make food. Since Toralfhuset has performed as a dwelling before, we think that a similar functional program could be fitting.

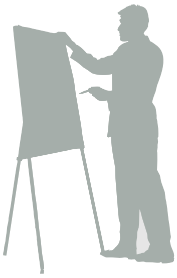
Architectural program:
Since we are dealing with a small-scale, existing building, we are in a position to work quite detailed with the building. This will add to the complexity of the project. At the same time, it is important for us that the project relates to Røst at a larger scale.

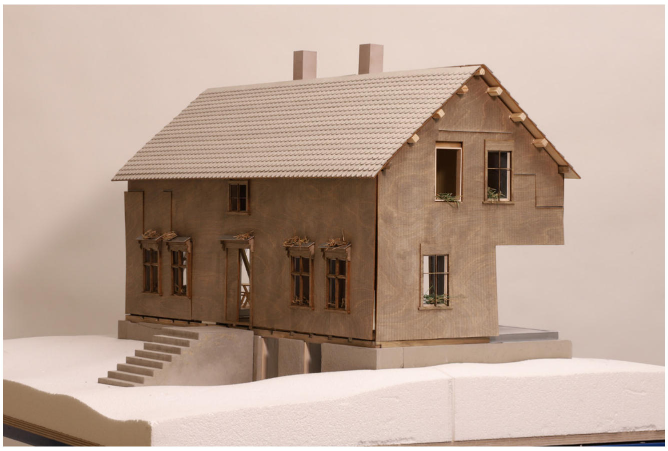

Proffessional fishers

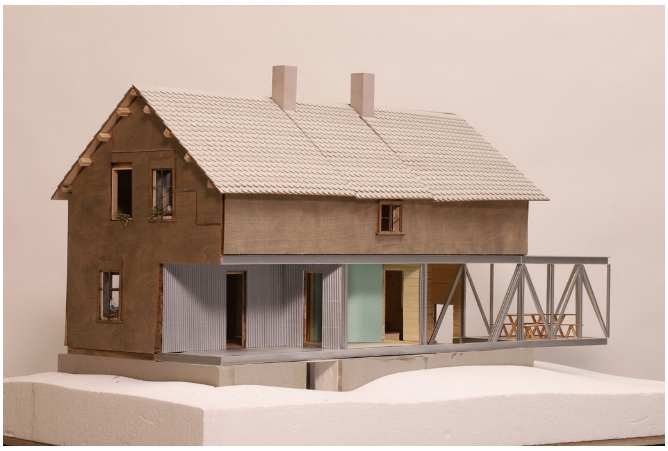
Tourists

Researchers

Locals


Artists

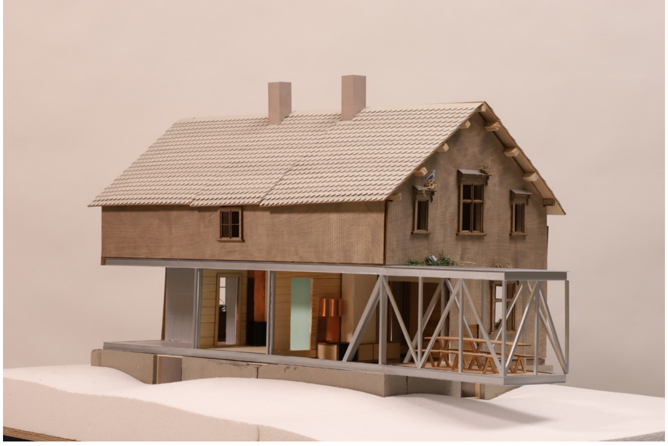




Strategy/working method:
Our project started already in the pre-diploma, with an intuitive exploration of approaches for the house. The goal was to have some initial ideas prior to visiting the site.

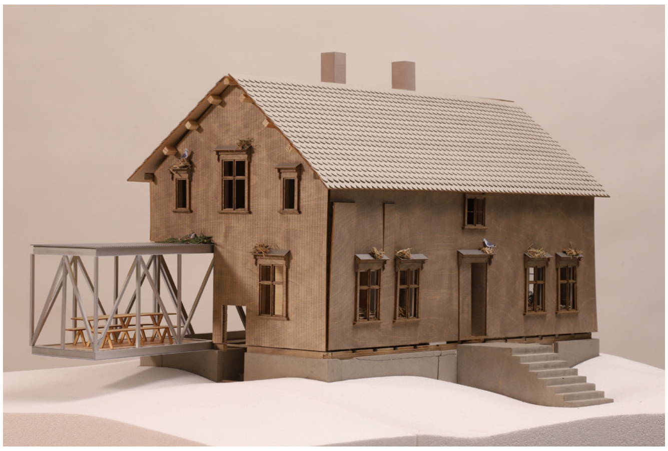
In August, we went to Røst to measure, draw, document and 3D-scan the building. We got to talk to locals and hear about their thoughts of the house, and in general got to know Røst better.

Upon returning to Oslo, we started with building a 1:20 model of the house, in the correct materials and building-techniques. This was so we could experience and better understand its structure.

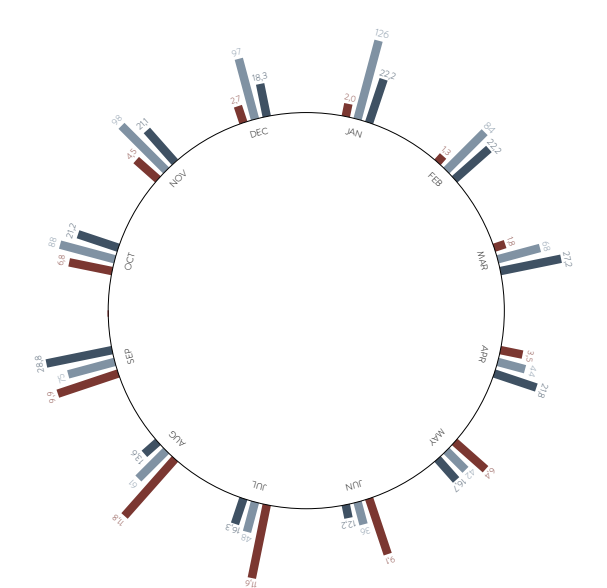


In parallell, we were creating an intuitive value assessment, before we read up on existing theories on valueing heritage objects. The house is not listed, but we see ourselves utilizing tools from the field of preservation.

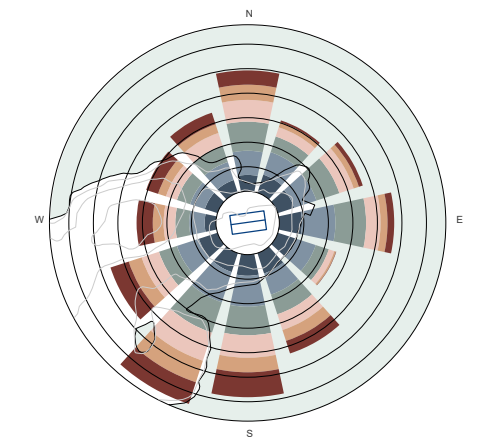
Through mostly sketching, conventional architectural drawing and model building, we explored different potentials for interventions. An important part for the development was the conversations we had with engineers, that was paramount for understanding the needs for support that the house demands. These conversations inspired us for our largest intervention, which is the steel add-on on the south-east corner.



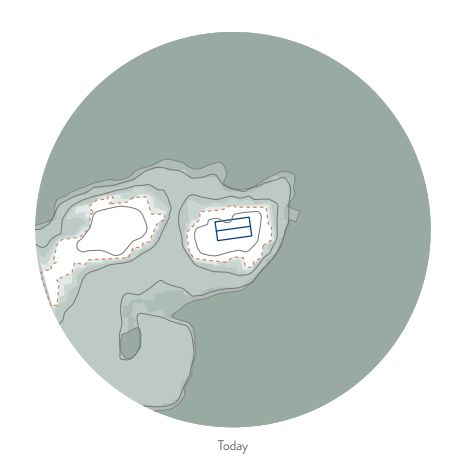
Delivered material:
- Drawings 1:50: plan, section, elevation of Toralfhuset, today
- Drawings 1:50: plan, section, elevation of Toralfhuset, our intervention
- Drawing 1:500: siteplan
- Drawings 1:20: details
- Model 1:20: Toralfhuset, our intervention
- Model 1:200: 3D-print of 3D-scan
- Model 1:1000: site
- Model photos
- Diagrams
- Pre-diploma booklet with research and background information
- Catalogue



- Temperature (°C) normal
- Rain (mm) normal
- Strongest wind (m/s) 2020-2021

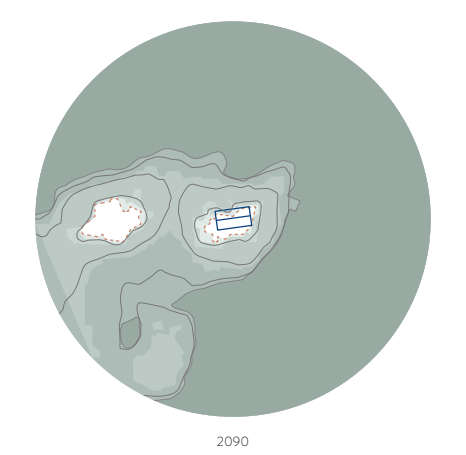


- 1-4 m/s
- 4-6 m/s
- 6-8 m/s
- 8-10 m/s
- 10-12 m/s
- 12+ m/s

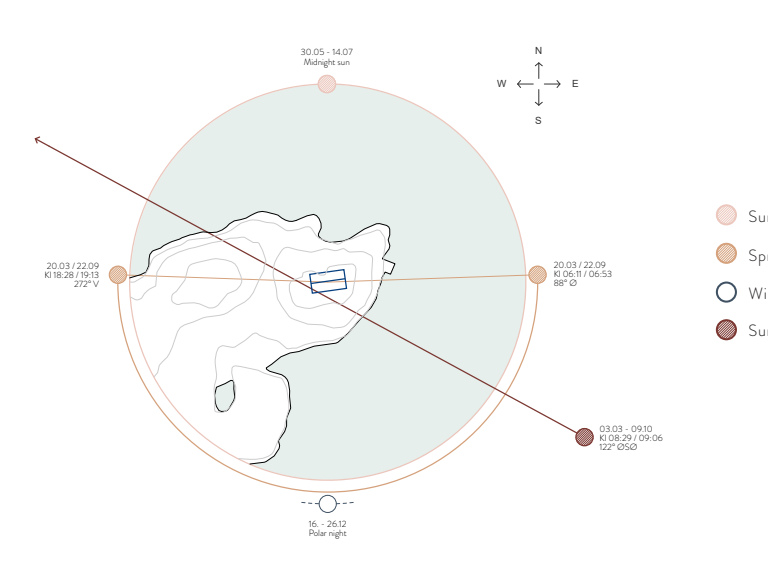


Today

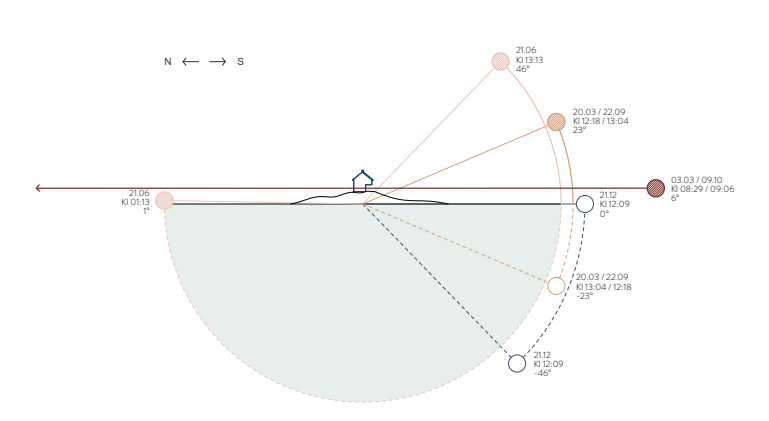
- 1000 year storm surge
- 200 year storm surge
- 20 year storm surge
- Average high tide
- Nautical chart zero



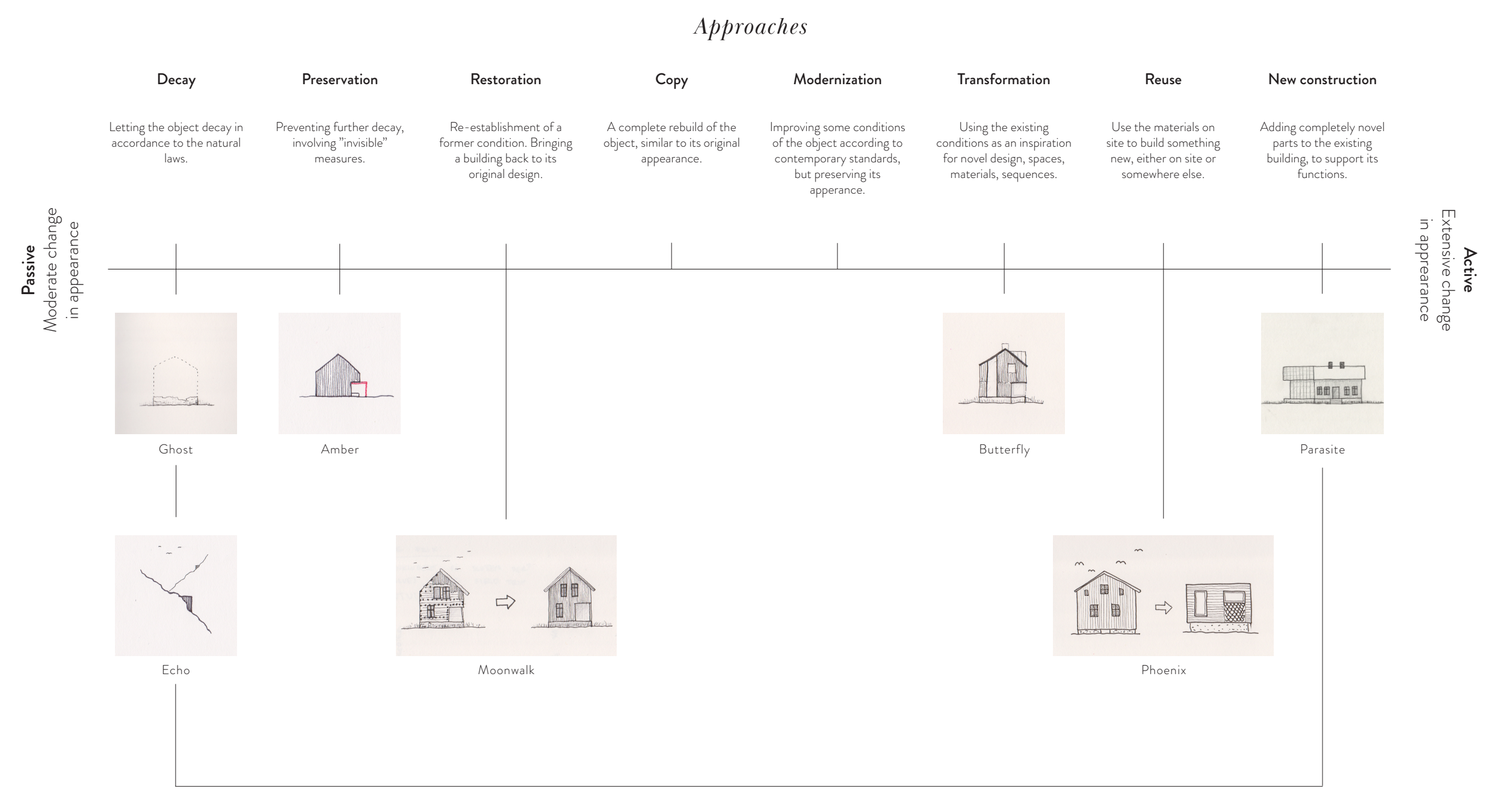
2090


30.05 - 14.07
Midnight sun
N
W
E
S
20.03 / 22.09
Kl 18:28 / 19:13
272° V
20.03 / 22.09
Kl 06:11 / 06:53
88° Ø
03.03 - 09.10
Kl 08:29 / 09:06
122° ØSØ
16. - 26.12
Polar night

- Summer solstice
- Spring and fall equinox
- Winter solstice
- Sun is caught in the corner of the house


N
S
21.06
Kl 13:13
46°
20.03 / 22.09
Kl 12:18 / 13:04
23°
03.03 / 09.10
Kl 08:29 / 09:06
6°
21.06
Kl 01:13
1°
21.12
Kl 12:09
0°
20.03 / 22.09
Kl 13:04 / 12:18
-23°
21.12
Kl 12:09
-46°

Approaches


Passive
Moderate change in appearance
Active
Extensive change in appearance
Ghost
Amber
Butterfly
Parasite
Echo
Moonwalk
Phoenix

Decay	Preservation	Restoration	Copy	Modernization	Transformation	Reuse	New construction
Letting the object decay in accordance to the natural laws.	Preventing further decay, involving "invisible" measures.	Re-establishment of a former condition. Bringing a building back to its original design.	A complete rebuild of the object, similar to its original appearance.	Improving some conditions of the object according to contemporary standards, but preserving its apperance.	Using the existing conditions as an inspiration for novel design, spaces, materials, sequences.	Use the materials on site to build something new, either on site or somewhere else.	Adding completely novel parts to the existing building, to support its functions.

Non-physical

Cultural

Habits, actions and behaviour that are relevant today, and that have been present over a longer time period.

Hospitality. The house has been a place for gatherings, eating, sleeping, reading, conversing. The whole vibe of Røst at large is also oriented towards hospitality, receiving workers and visitors on a large scale throughout the year.

Cultural

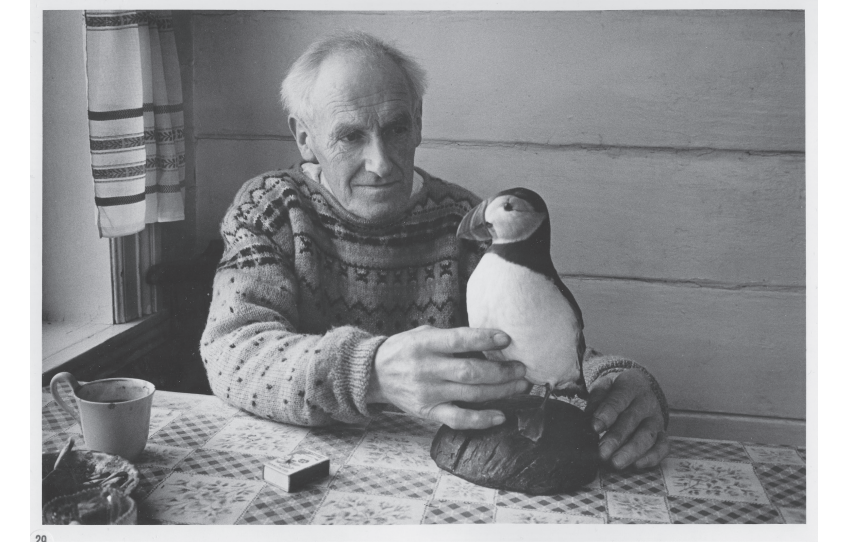
Habits, actions and behaviour that are relevant today, and that have been present over a longer time period.

Local industries. Through decades, Toralfhuset has been home for fishers, down-collectors, sheep-farmers and so on. This is the basis for settlement at Røst, and without its local resources, there would most likely not be settlement there.

Historical

Referring to important events, people or points associated with the site from the past that have had cultural significance.

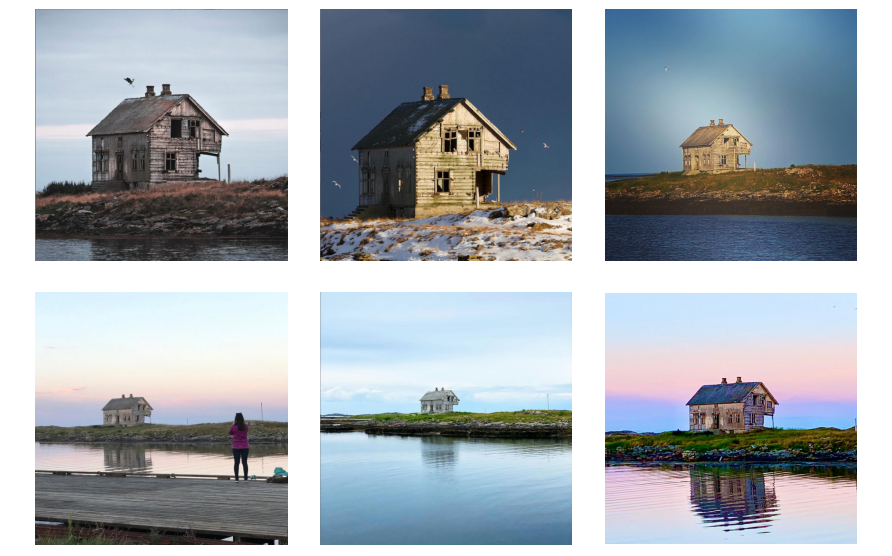
The island that Toralfhuset sits on - *Kårøya* - was one of the main islands at Røst in the mid 19th century, and had several dwellings and buildings connected to the fishing industry on it. Toralfhuset is one of two remaining dwellings on the island and represents a time when Kårøya was settled year-round.



Anecdotal

The ability the building has to create a personal relationship to a specific historical or cultural event or person.

Toralf Mikalsen is an unusually well documented person. He lived in Toralfhuset his entire life, and made a lasting impression on many people whom he met. His story is written down by a journalist, and we have talked to people who have very fond memories of him and his kindness.



Iconic

Something unique and irreplaceable associated to a specific site.

Line of sight from Røstlandet. The spectacular demise of the building has become a value in itself, having earned it the un-official status as "the most photographed house in Lofoten". Since the building is mainly viewed from the dock at Røstlandet, the north and west facades are valuable as they are, and the line of sight from Bryggehotellet – where it is most often photographed from, is important.

Physical

Ecological

The capacity of an existing building to facilitate for unique ecological conditions.

The birds are an important part of the life at Røst, with a returning Kittiwake colony who is residing at Kårøya. The bird population has had a drastic decrease in the recent decades, and any place for them to stay is valuable.

Resource

The actual matter on site is already imbued with economic value through its materials. The higher quality of material, the higher economic value.

Since Røst is situated far out in the sea, with no trees that could grow to a size where it could be used as adequate building material, all *materials* at Røst are brought there by boat, which makes it automatically more valuable here than on the mainland.

Age

The fact that a viewer can see through an outdated style, but also patina, corrosion and weathering that a long time has gone since the completion of the building. This is often associated with positive emotion, since it makes the idea of time visible, which can hold a proof of strength and resilience.

Ruin. Having been without maintenance for five decades, the mere fact of it being desolated has also become an important part of its history. The house's main appeal is exactly this ruinous state, which has gained it its popular reputation. It draws attention and serves as a local attraction. At the same time, it invites for reflection and interest.

Biography of a House

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The ruin is a phenomenon that fascinates and awakens a naive curiosity. These structures make your mind wander: Who lived there? Where are they now? Why isn't anyone taking care of the building? It is intriguing to continue reflecting about both the past and potential future of these buildings. Each has a unique story, and has through time absorbed into it the spirit of its particular environment. We see the ruin as a dormant resource that can provide a deeper understanding of a place and its history.

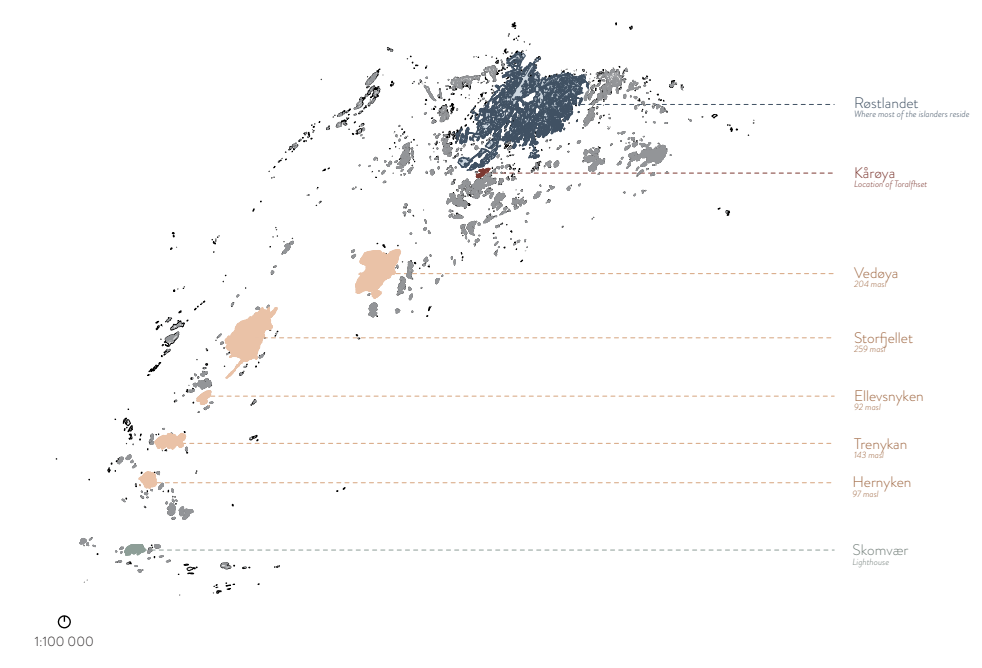
Such a building is Toralfhuset. The house itself - its structure and architectural DNA - is not exceptional. It is a prefabricated log house in the Swiss style, quite common for the area. However, what makes Toralfhuset special is the story of the man who lived there, and what has become of the house since he left.

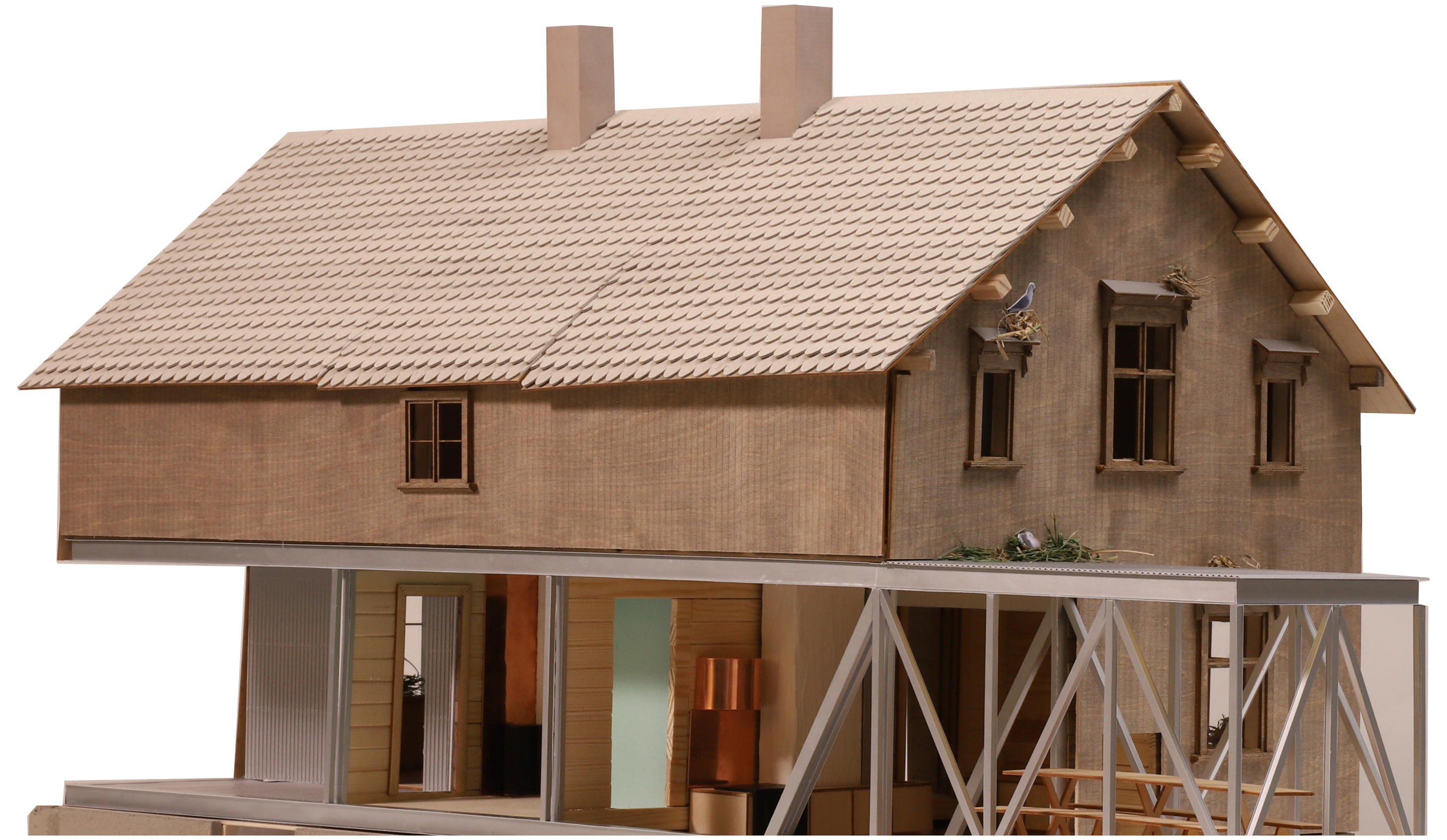
Toralf became an important figure in the lives of many people at Røst, an island community far out in Vestfjorden. He had a unique way of connecting with both the animals and people he met, which is important because life at Røst is highly dependent on living in symbiosis with nature.

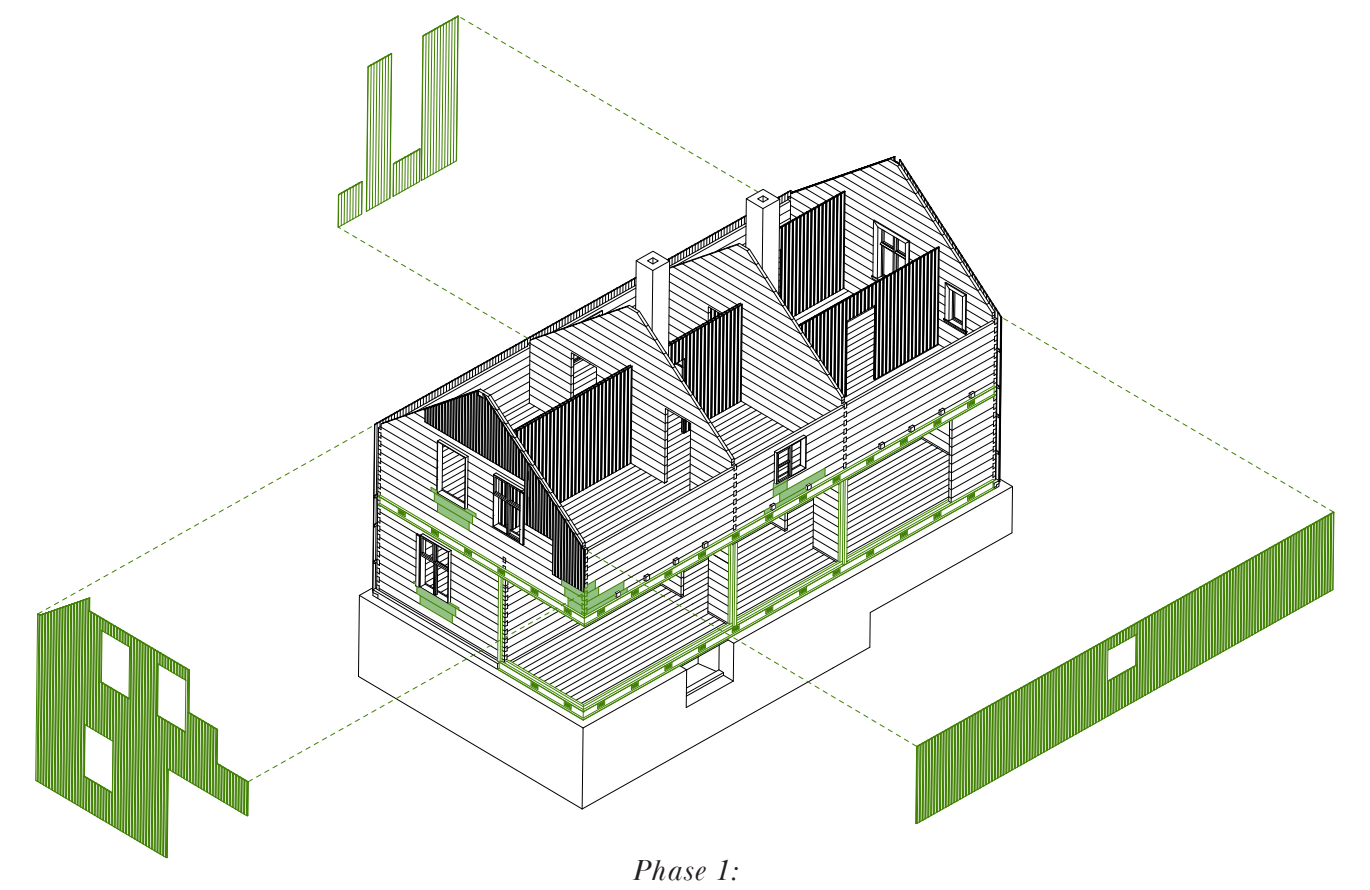
After he passed away fifty years ago, the house has been overtaken by birds and it has deteriorated to a ruinous state. This has led to its iconic status, popularly called the most photographed house in Lofoten. Today, the house is standing on the brink of collapse.

What interests us is that the house is an anonymous structure but becomes special due to the stories that it tells us. We want to see what we can do to prevent the house from complete disintegration, without removing its qualities. **Is it possible to save a ruin without ruining it?**

We want to investigate how different qualities of an existing building can be amplified through interventions. We believe that by using a combination of different approaches, the building will have a wider vocabulary to convey its inherent values.


Røstlandet
Where most of the islanders reside
Kårøya
Location of Toralfhuset



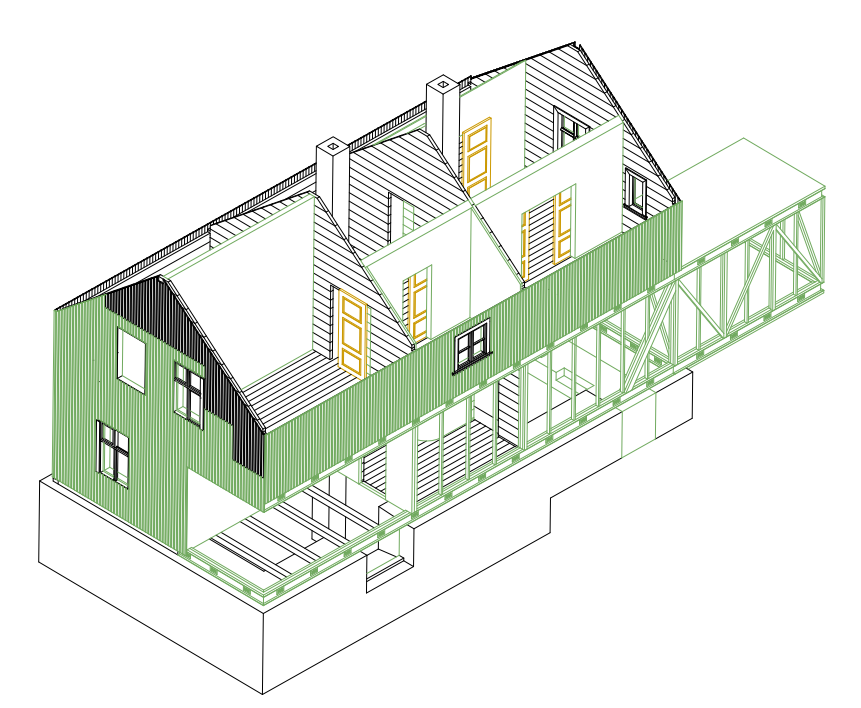


Phase 1:
Preventing further collapse

In the first phase, we are concerned with preventing the house from disappearing all together. To achieve this we will have to switch out the rotten wood, and replace it with fresh, healthy wood, support the cantilevering corner, to preserve its iconic appearance, and give it new cladding, to protect the exposed log walls from future wear.

VALUES:
Iconic: By supporting the corner so that it can cantilever, the house will continue to have its iconic expression.

Historical: Keeping the building on Kårøya helps tell the story of a time when the island was one of the main islands at Røst.



Phase 2:
Making the house inhabitable

By making the house inhabitable again, we are reintroducing the ability for it to perform as a space for hospitality. By opening up the house for visitors like fishers in the winter, and tourists in the summer, Toralfhuset can again function as a place for gatherings.

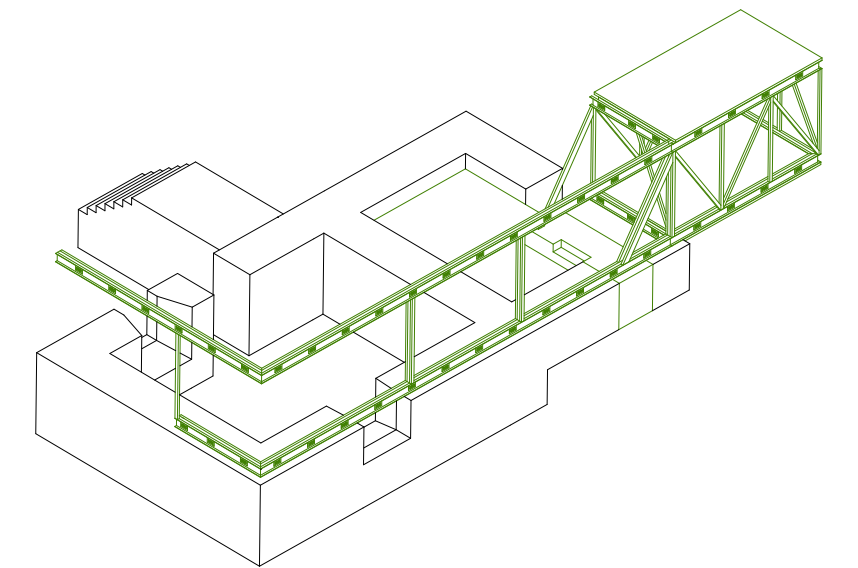
The fact that people can experience Kårøya, and imagine themselves in surroundings that historically were very important for Røst and its fishing industry will hopefully contribute to a deeper understanding of the place.

VALUES:
Cultural: The cultural values of hospitality and local industries is made possible through making the house inhabitable, and facilitating for spaces for gutting fish and cleaning eider down.

Anecdotal: Toralf is remembered through making a sitting area in the corner of the kitchen, where he has been photographed a lot.

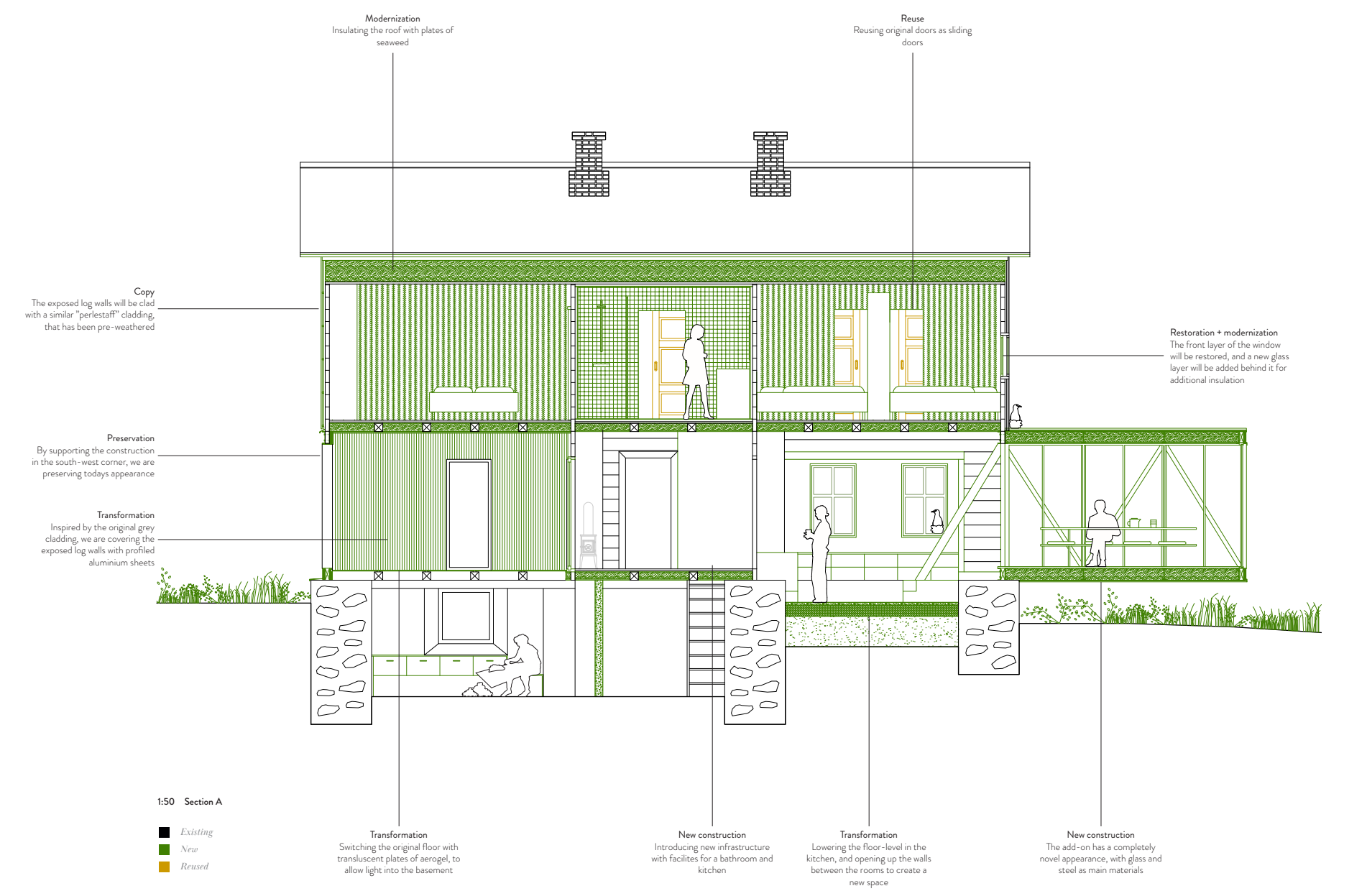
Ecological: We are making it possible for the birds to stay in the windows by pulling in the glass-layer in the north and west facades, and protecting the water-boards above the windows. This is so that the birds can live there, without damaging the building.

Age: By using copper as an accent-metal in different places in the building, we want to introduce a new timeline in the future decay, by making the idea of time passing visually readable. The original logs will be exposed in all rooms.



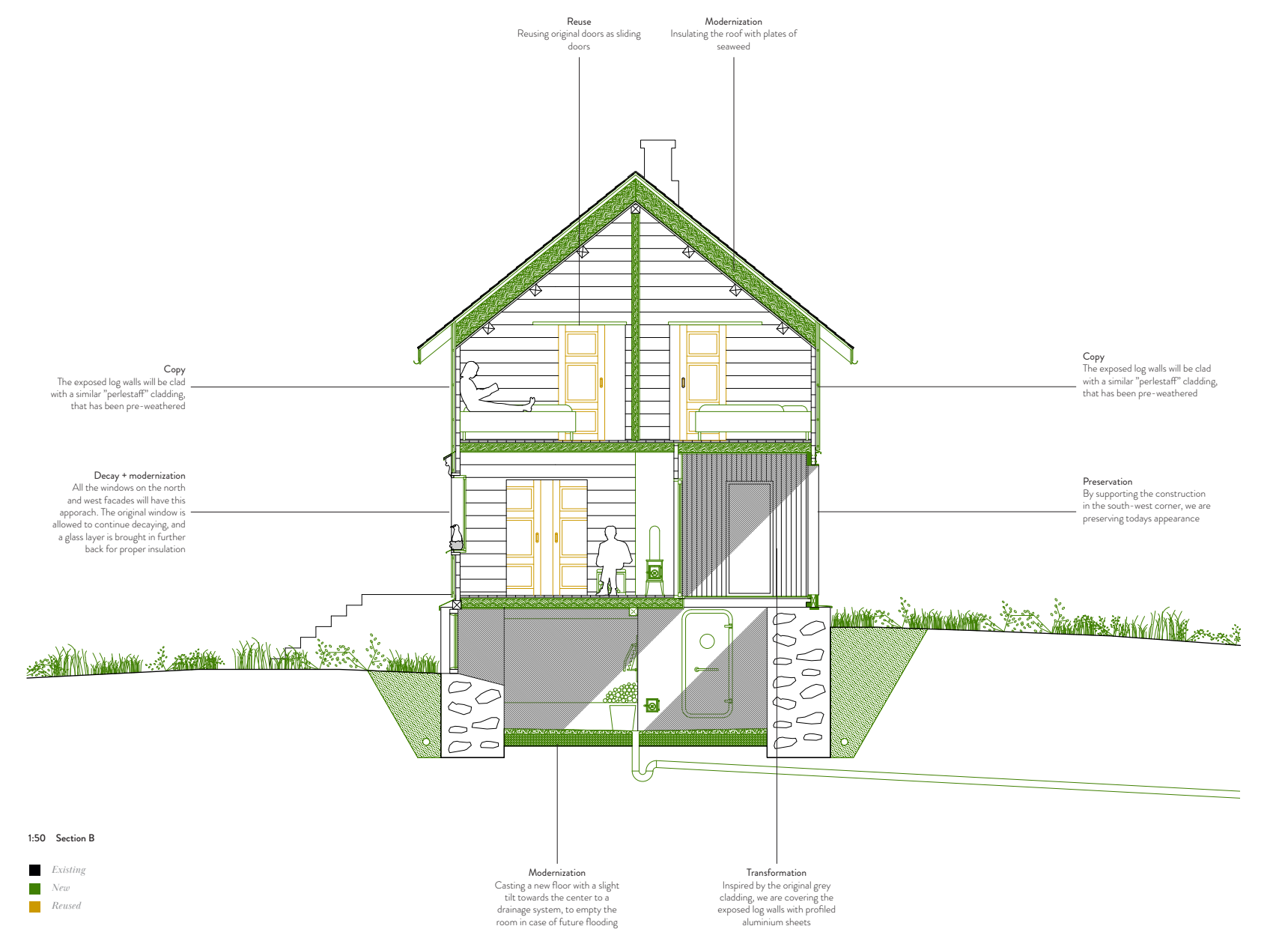
Epilogue:
Allow locals to gather materials

We know that sea-levels are rising, and that Toralfhuset will be in the 200 year storm surge zone by 2090. Knowing that building materials are of great resource value for the locals at Røst, we invite them to help themselves with materials from the house from this point on. To make it easier for them to do so, we imagine a catalogue with an overview of all the materials that are in the building. This way, the house acts as a material-bank for future use. The steel construction, however, will become a part of the new ruin, as a hint of the house that was once there.


Modernization
Insulating the roof with plates of seaweed
Reuse
Reusing original doors as sliding doors
Copy
The exposed log walls will be clad with a similar "perlestaff" cladding, that has been pre-weathered
Restoration + modernization
The front layer of the window will be restored, and a new glass layer will be added behind it for additional insulation
Preservation
By supporting the construction in the south-west corner, we are preserving todays appearance
Transformation
Inspired by the original grey cladding, we are covering the exposed log walls with profiled aluminium sheets
Transformation
Switching the original floor with transluscent plates of aerogel, to allow light into the basement
New construction
Introducing new infrastructure with facilites for a bathroom and kitchen
Transformation
Lowering the floor-level in the kitchen, and opening up the walls between the rooms to create a new space
New construction
The add-on has a completely novel appearance, with glass and steel as main materials

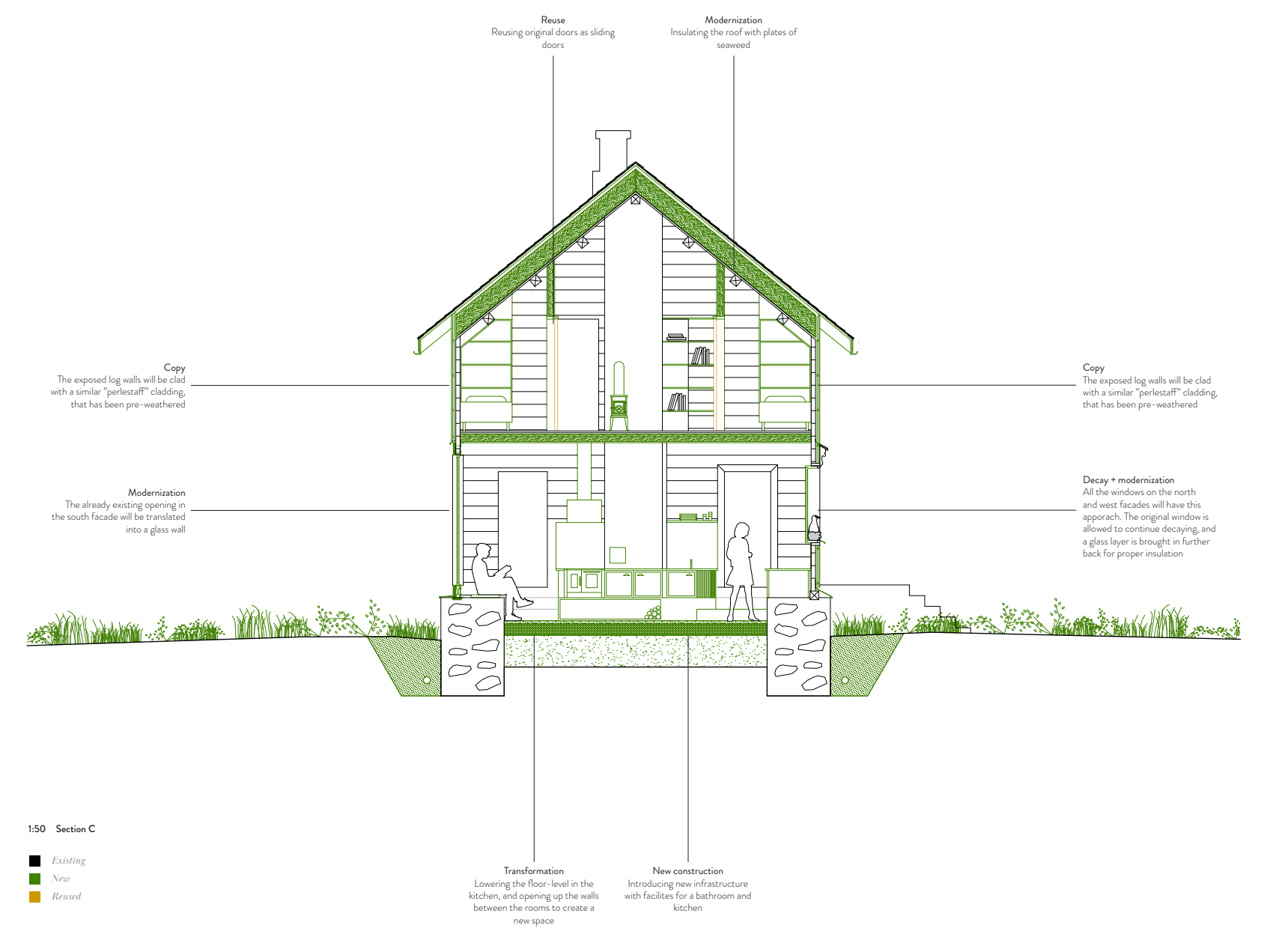
1:50 Section A

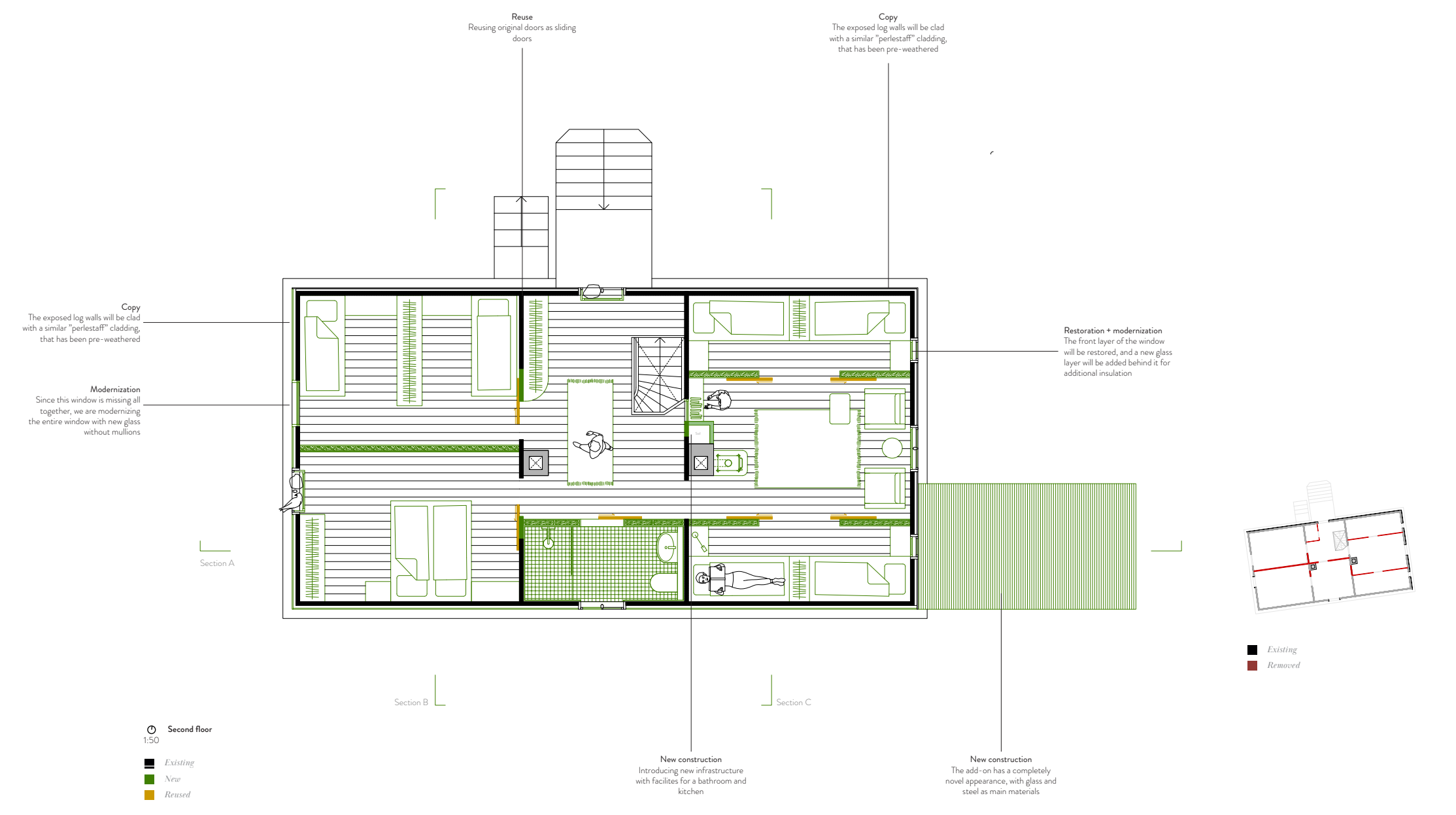
- ■ *Existing*
- 🟩 *New*
- 🟨 *Reused*


Reuse
Reusing original doors as sliding doors
Modernization
Insulating the roof with plates of seaweed
Copy
The exposed log walls will be clad with a similar "perlestaff" cladding, that has been pre-weathered
Decay + modernization
All the windows on the north and west facades will have this aporach. The original window is allowed to continue decaying, and a glass layer is brought in further back for proper insulation
Copy
The exposed log walls will be clad with a similar "perlestaff" cladding, that has been pre-weathered
Preservation
By supporting the construction in the south-west corner, we are preserving todays appearance
Modernization
Casting a new floor with a slight tilt towards the center to a drainage system, to empty the room in case of future flooding
Transformation
Inspired by the original grey cladding, we are covering the exposed log walls with profiled aluminium sheets

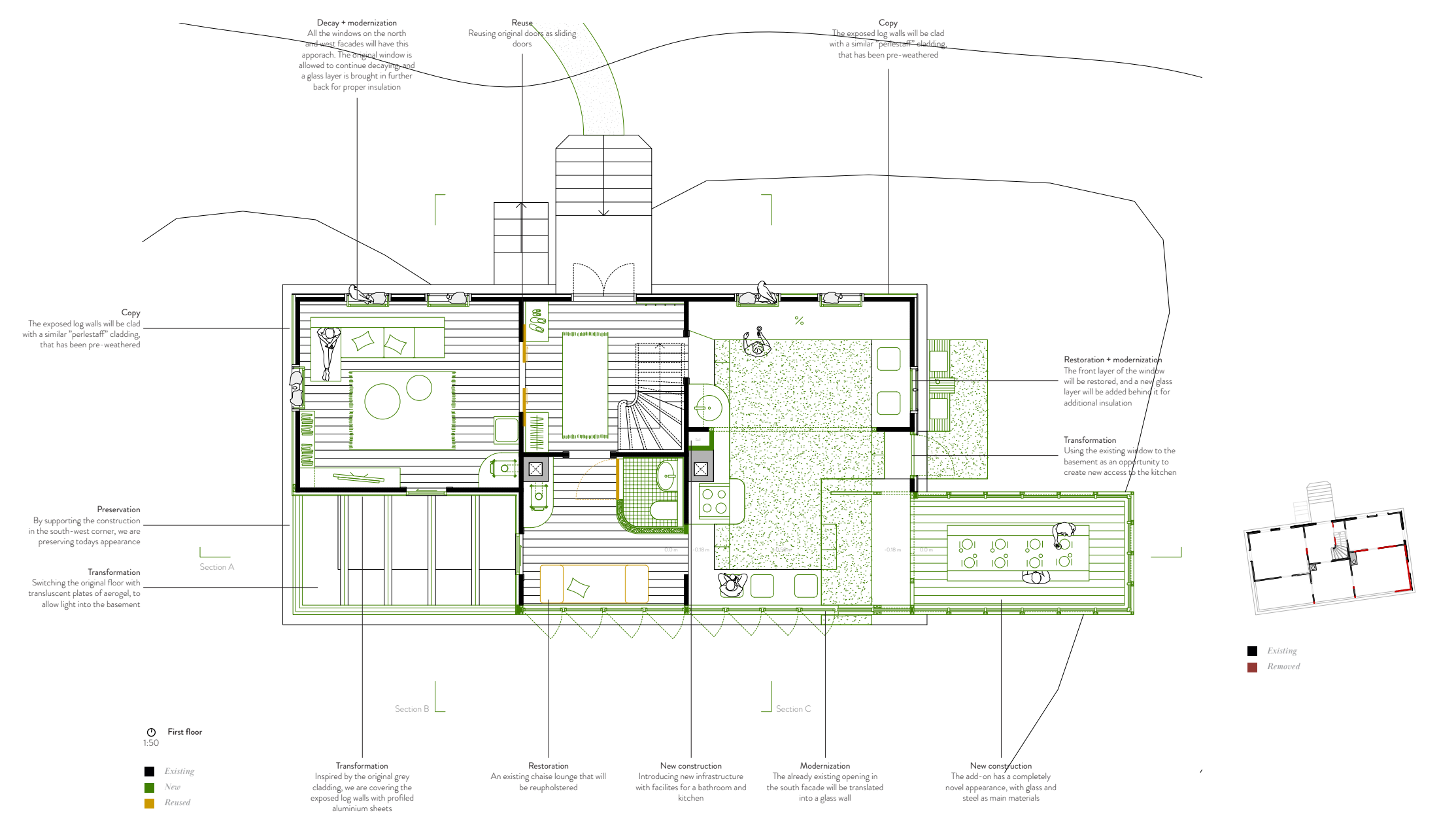
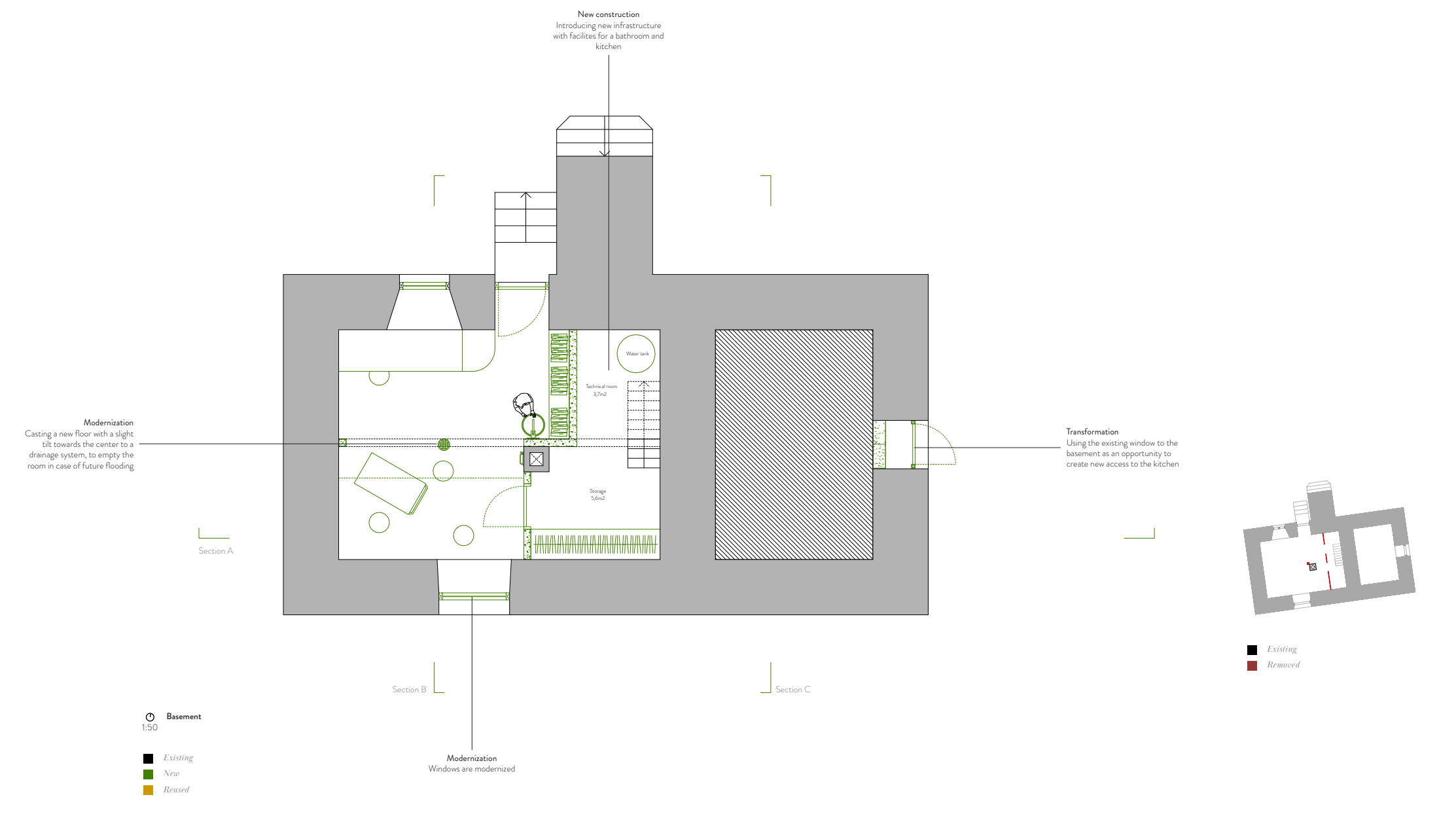
1:50 Section B

- ■ *Existing*
- 🟩 *New*
- 🟨 *Reused*




Reuse
Reusing original doors as sliding doors
Copy
The exposed log walls will be clad with a similar "perlestaff" cladding, that has been pre-weathered
Copy
The exposed log walls will be clad with a similar "perlestaff" cladding, that has been pre-weathered
Modernization
Since this window is missing all together, we are modernizing the entire window with new glass without mullions
Restoration + modernization
The front layer of the window will be restored, and a new glass layer will be added behind it for additional insulation
Section A
Section B
Section C
New construction
Introducing new infrastructure with facilites for a bathroom and kitchen
New construction
The add-on has a completely novel appearance, with glass and steel as main materials
Existing
Removed

Second floor
1:50

- ■ *Existing*
- 🟩 *New*
- 🟨 *Reused*