

Project booklet

PROJECT BOOKLET
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CHALMERS ARCHITECTURE MPARC

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ABSTRACT

The island of Orust is located on the west coast of Sweden, 12 miles north of the city of Gothenburg. The island's reputation of beautiful nature, picturesque harbour towns and strong reputation in the boat community makes Orust an attractive site for summer guests and visitors. However, Orust is so much more than sailboats and rocky summer baths. It is a place of great craftsmanship, local production with lots of local knowledge. The island has historically adapted its primary business models, creating a vast variety of knowledge and innovation. Although the tourism is currently the island's greatest source of income, the island has historically held a great identity of local production.

With the old dairy factory in Vräländ as site, the intention of this project has been to introduce a place where the local production of Orust is highlighted and showcased. Locally produced foods, products and objects are used in the design of the program. While designing the interventions the focus was to create a place for visitors and workers to enjoy a vast range of what Orust has to offer.

The old dairy factory, Mejeriet, is transformed into a hub for the taste of Orust. The local brewery, Orust Ölfabrik, and the bakery, Herr bröd, who are both in need of new locations are moved into the building as its primary producers. Mejeriet also holds a workshop for the current actor in the building Återbrukket, for courses and retail of repaired furniture, doors and

windows. For the visitors there are two bars, three kiosks where local food producers sell their products, a café on two floors and open spaces for anything from afterworks and knitting parties to focused reading and client meetings.

The local production is at the essence of Mejeriet, and through that the people of Orust. Enjoying an in-house beer with an in-house bread, spread with island produced butter and a piece of makrill from the local fishermen on a plate thrown by a local ceramicist, set on a tabletop of local ceramic tiles, comfortably seated in a chair crafted by a local carpenter, that is the vision of our project, Mejeriet.



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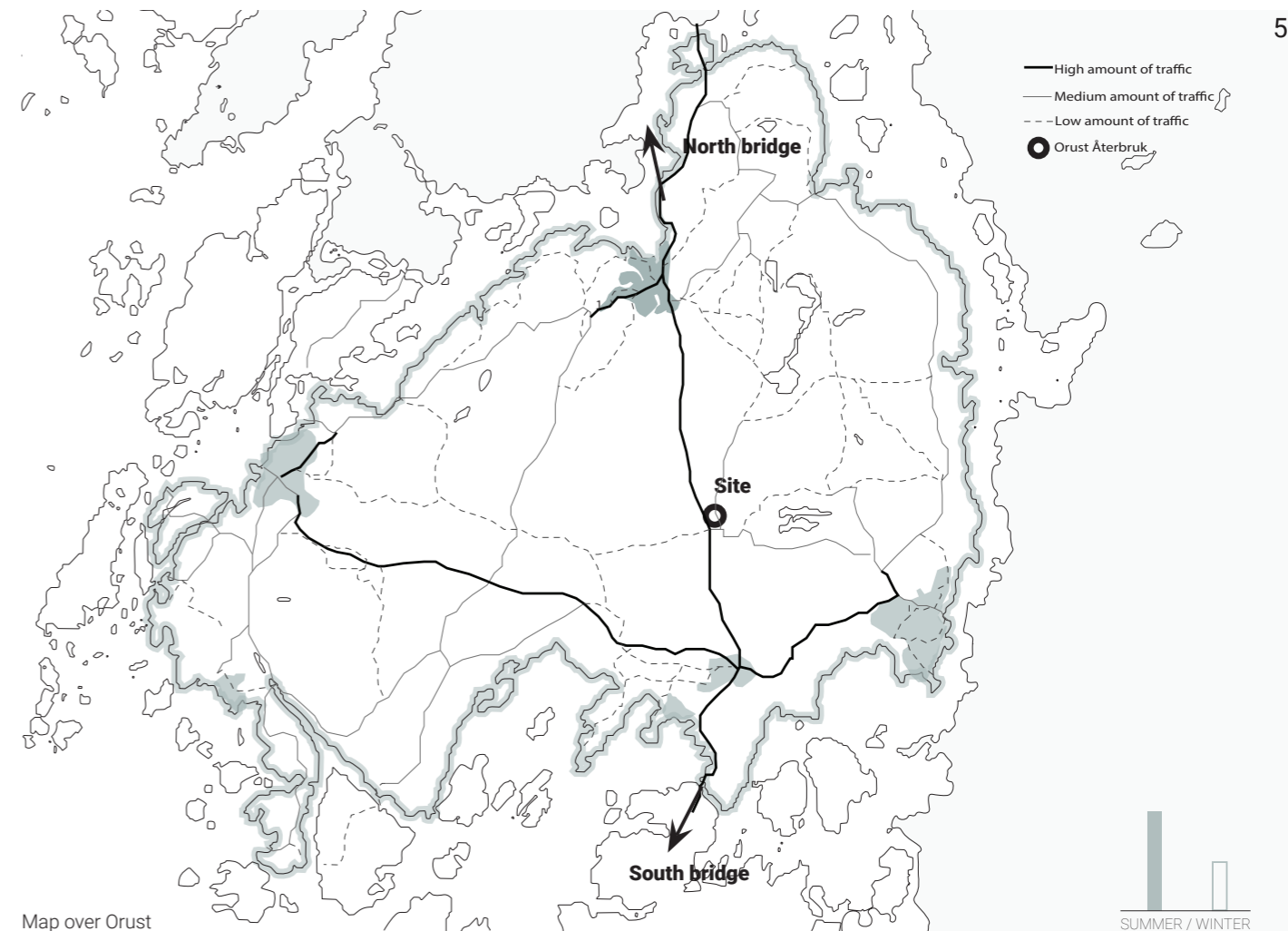
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INVENTORY

- » History
- » Site analyse
 - SWOT
 - Orust
 - Sorrounding
- » Building inventory
- » Photos of the site



From the dairy factory

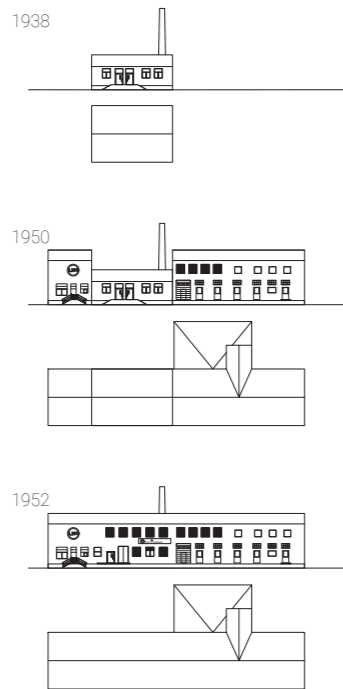


Map over Orust
Illustrating the largest towns as well as attractive coastline during the summer months

History

The dairy factory opened in 1938 on a rather small scale, this due to the founder's doubt in its success. The dairy however turned out to generate a great interest, mainly due to the large number of milk farmers on the island. The premises of the small factory was not enough and was therefore rebuilt twice since then. The dairy increased its production and processed 70 000 litres of local milk each day. However the glory days did not last long. In 1962, Tetra-Pack revolutionised the milk market, in the 70's many local milk producers reached retirement age due to dry milk production having a lesser demand. The factory closed in 1977 but is still a living place in the memory of local citizens.

(Årsbok, 2021)



Sequence of the building extention



Ombyggnaden klar 1952.



Building transformation
Images from Årsbok, 2021

Orust throughout the year - Orust during the seasons

The residency and number of visitors on Orust vary significantly throughout the year, increasing with more than 6,000 families during summer. Most of the increase occurs in the coastal cities, as they are the primary locations for summer houses. These coastal towns are also the main attraction for the island's tourists. Two bridges connect Orust to the mainland, one in the north and one to the south, connected by road 160, the main road. In the middle of this road is the location for the old dairy factory. Due to this, the location of the old dairy factory is not in the midst of the tourist attractions, nor is it in direct connection with any of the larger towns. Due to this, the location has the perfect conditions to become a place for the inhabitants of all of Orust and not the pride of one town alone.

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Strengths</p> <ul style="list-style-type: none"> Location on the island Close to the main road History of producion Structure and flexiable space Local craftsmanship | <p>Weaknesses</p> <ul style="list-style-type: none"> Damage Economic issues during winter seasons duw to the low amount of visitors Car dependency Lack of greenery at the site |
| <p>Opportunities</p> <ul style="list-style-type: none"> Open floor plan Collaboration with local producers and craftsmanship Increased interest in local produces material and food Atraction | <p>Threaths</p> <ul style="list-style-type: none"> Damaged climate shell Poor condition of structure Damage in south facade |

SWOT analyse

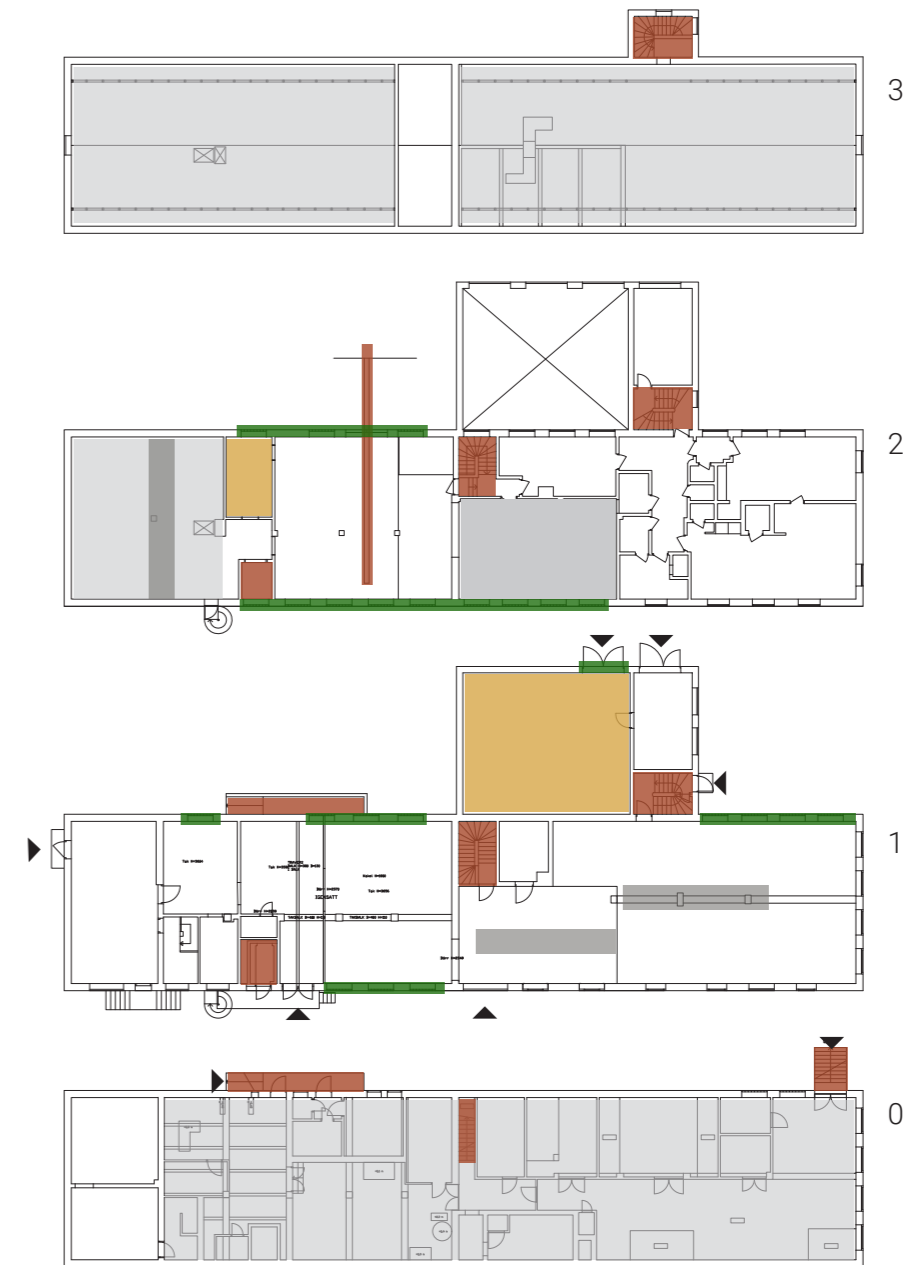


Photos of the site, the building in its current condition and context

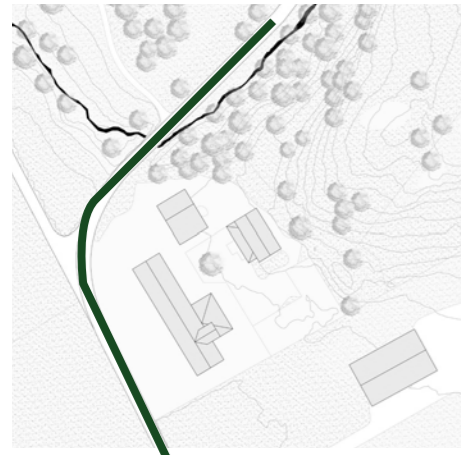
Current condition

The current condition of the building is not in a ready to use state. Parts of the facade are cracked in various places and many of the glass brick windows are damaged. There is an overall need for maintenance and repair in various areas both in the interior and exterior. Image 2 and 3 show the poor condition of the walls, where image 5 and 6 show the damage to the brick wall and the conditions of the surroundings. It is however currently in use as a workshop and secondhand

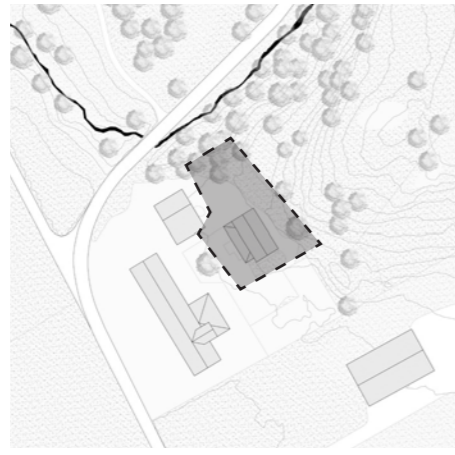
store, holding a great potential. Brick detailing remaining from the production is found throughout the building along with traces of machinery and logistics. Large glass brick openings allowed daylight into the factory and the sloped window ledges were probably a necessity for cleaning, both providing great atmospheric qualities back in the days and today. The materials are generally red brick, white tiles, plaster walls and metal doors and retails in red, blue and white.



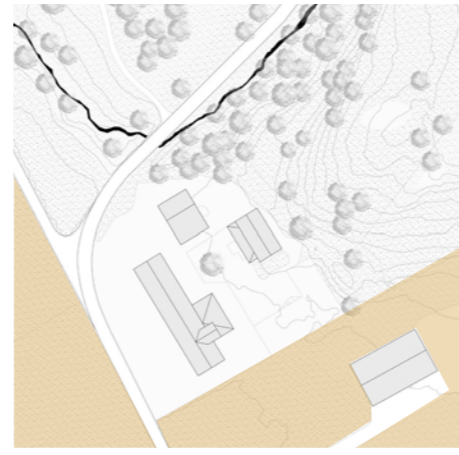
- Vertical communication
- Brick glass windows
- Spatial quality (generous ceiling height in relation to the layout)
- Damage
- Extensive cracks
- ▲ Entrance



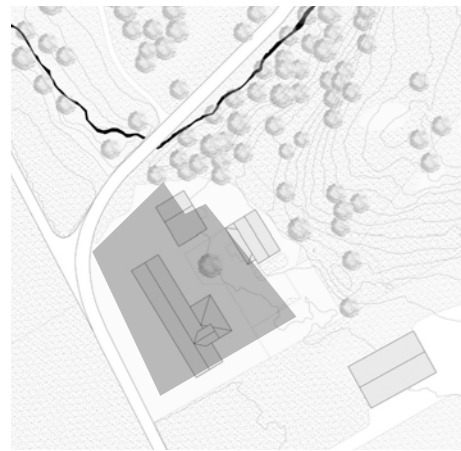
Communication to the main road



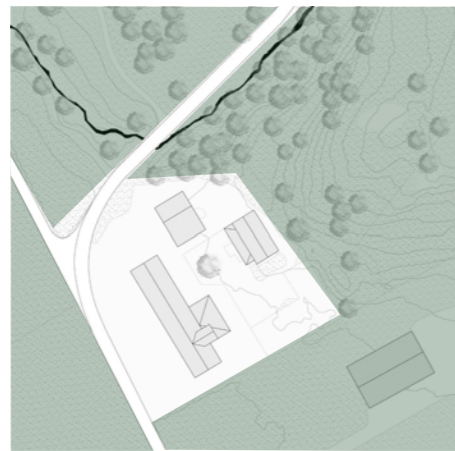
Adjacent plot



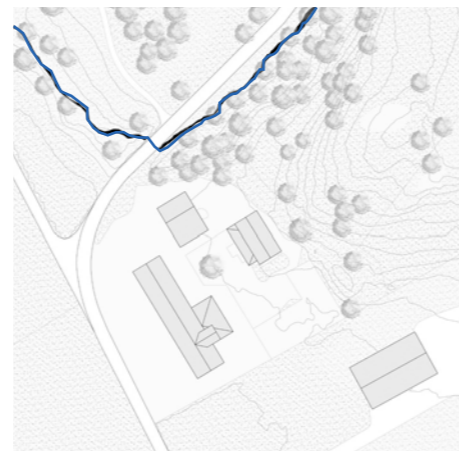
Active farmland



Surface covered with asphalt



Greenery

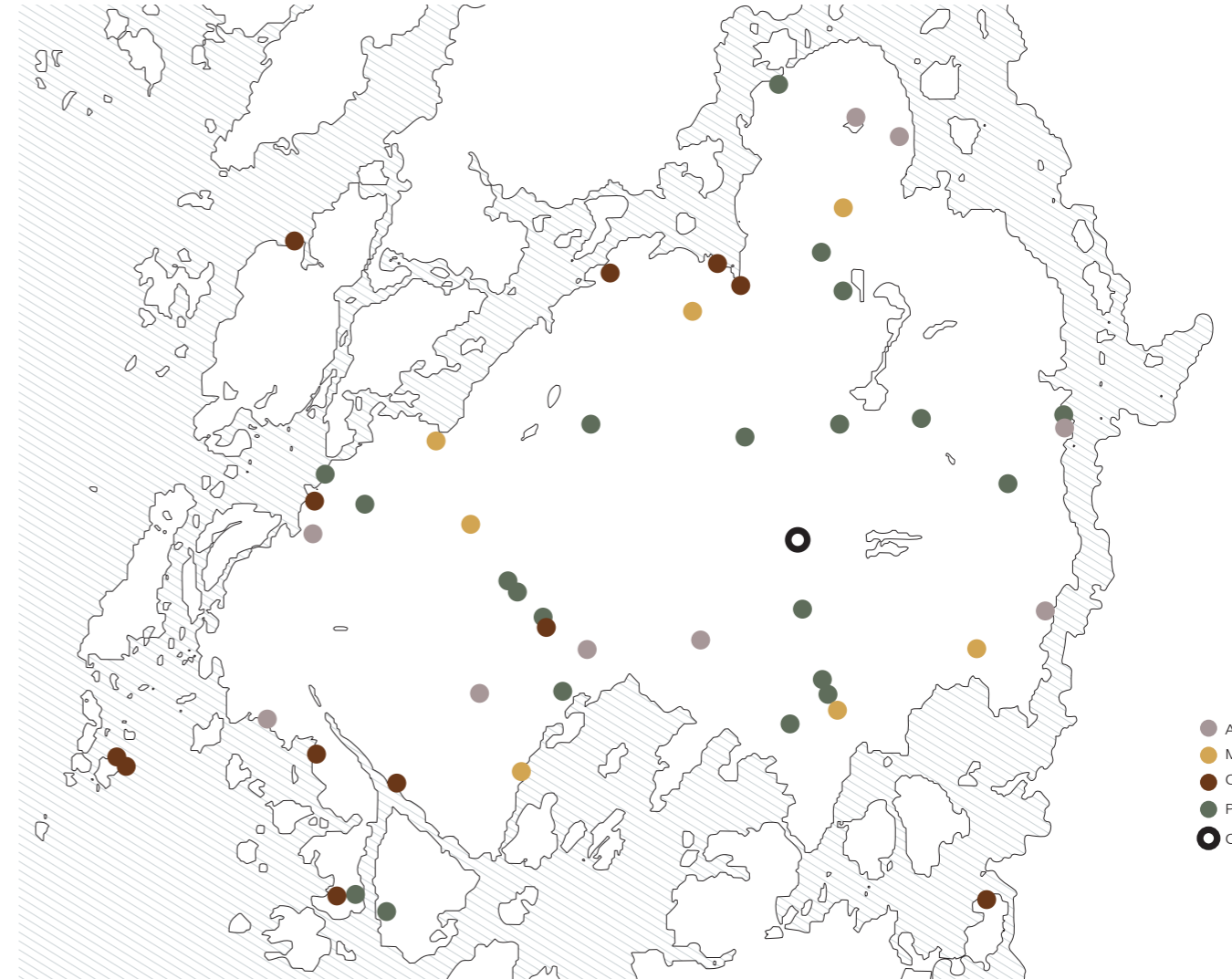


The creek

Site and materiality

The location and the direct surroundings of the building is closely linked to its original purpose, as a factory. Close to the main road, connecting the island to the mainland, and hence closely intertwined in the overall road network of the island. The area in direct connection to the building is primarily asphalt, a convenient material for the logistics of the trucks. Other factors of interest to the site is the neighbouring plot, currently an apartment building and

the surrounding active farmland. The farmland together with the hill of trees, the creek and overall natural landscape enhances the impression of nature despite the large area of asphalt.



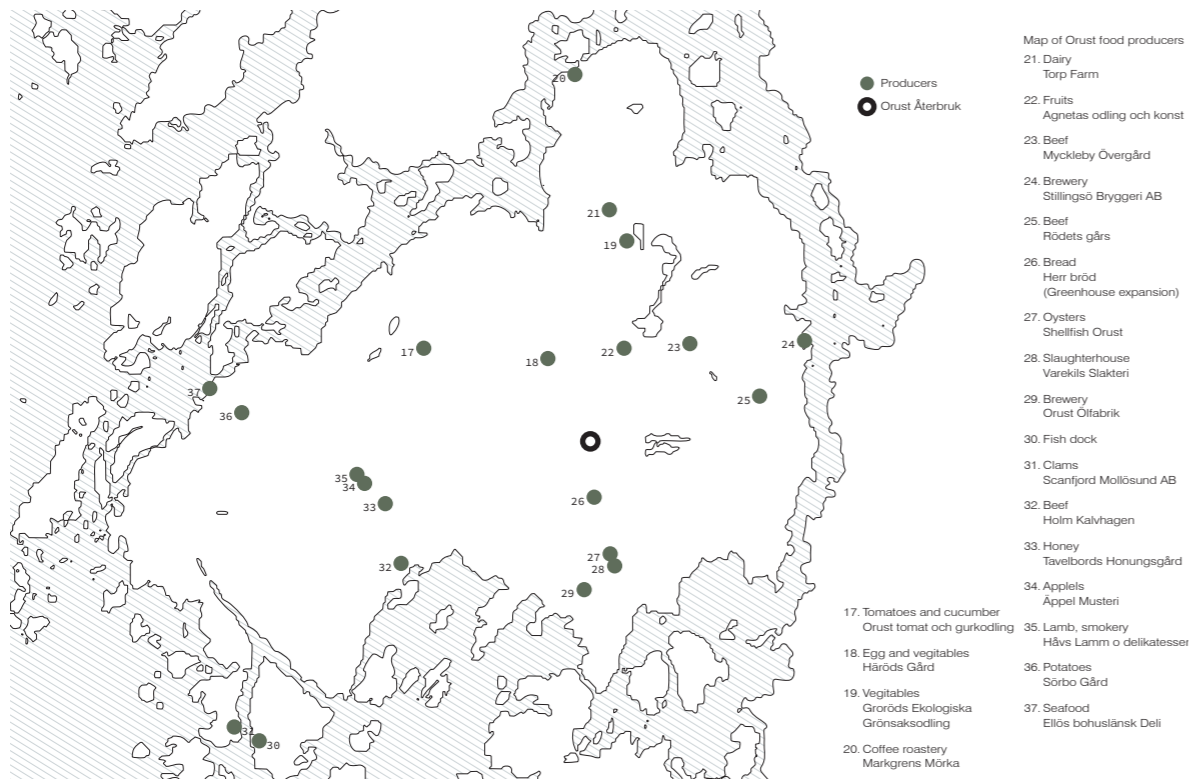
Map of local producers, manufacturers, overnight stay, arts and crafts, site
Reference list: Local producers

Definition of local

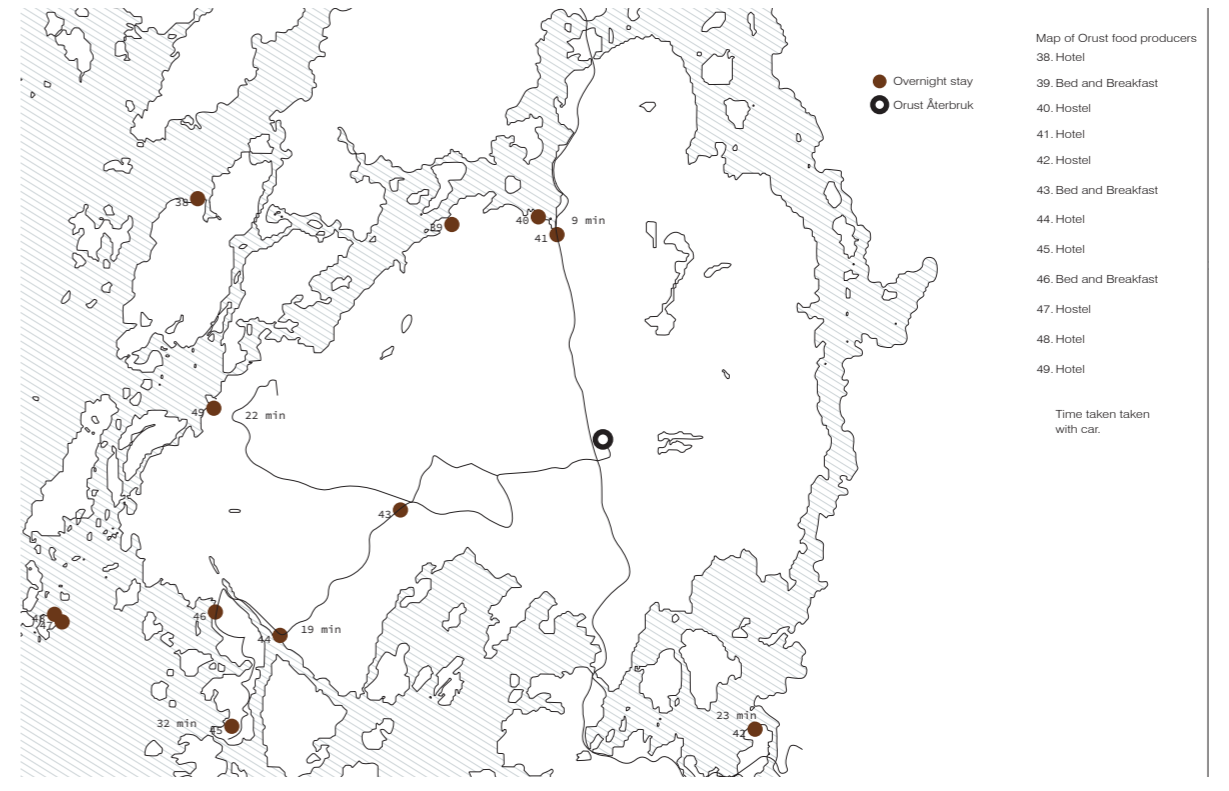
Local production is not to be narrowed to food producers, but rather to the vast spectra of producers, manufacturers and providers of any kind from the smallest candle to building elements. Local production in this investigation has been defined as items or products that are created and/or refined within the boundaries of Orust and its directly adjacent islands. In this definition it is hence possible for a woodworker or ceramicist to

refine the work on the island although the raw material may be sourced elsewhere. Although locally sourced materials are of course desirable, the focus has been to connect to the locality of people and their knowledge rather than the full circle of the material life cycle.

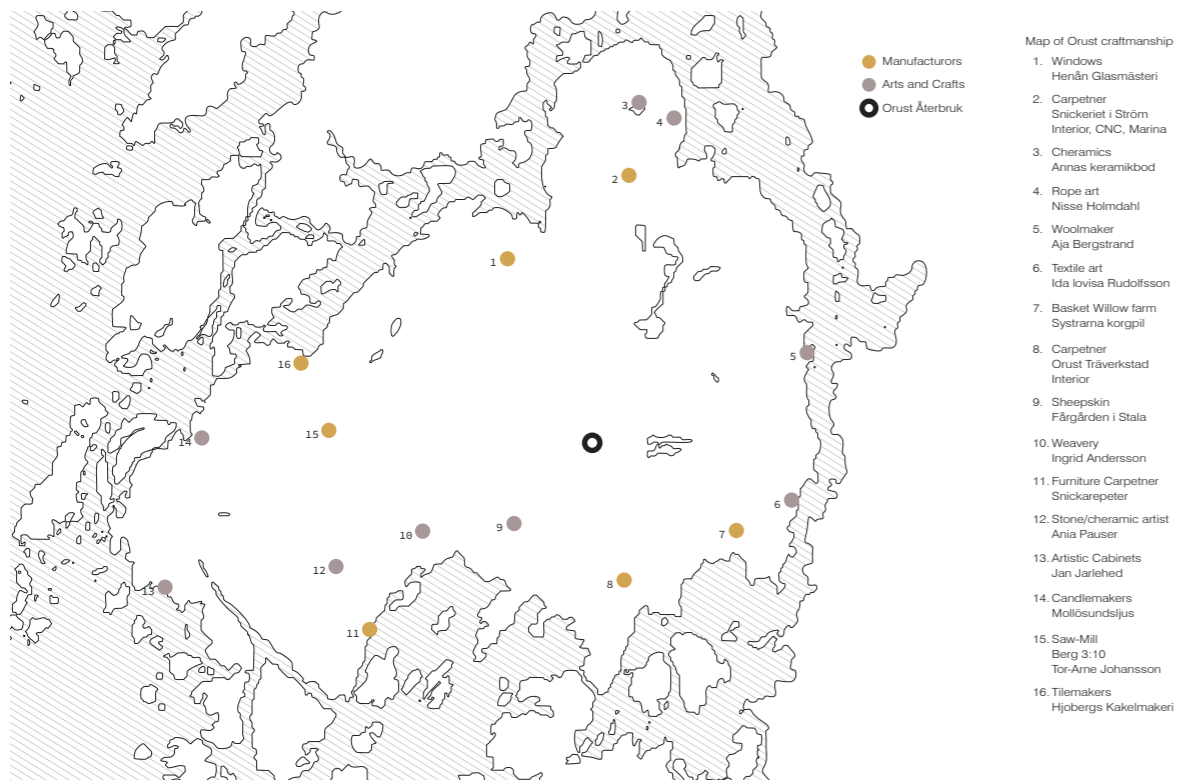
Map of local producers
Further explained on following page



Producers



Overnight stay



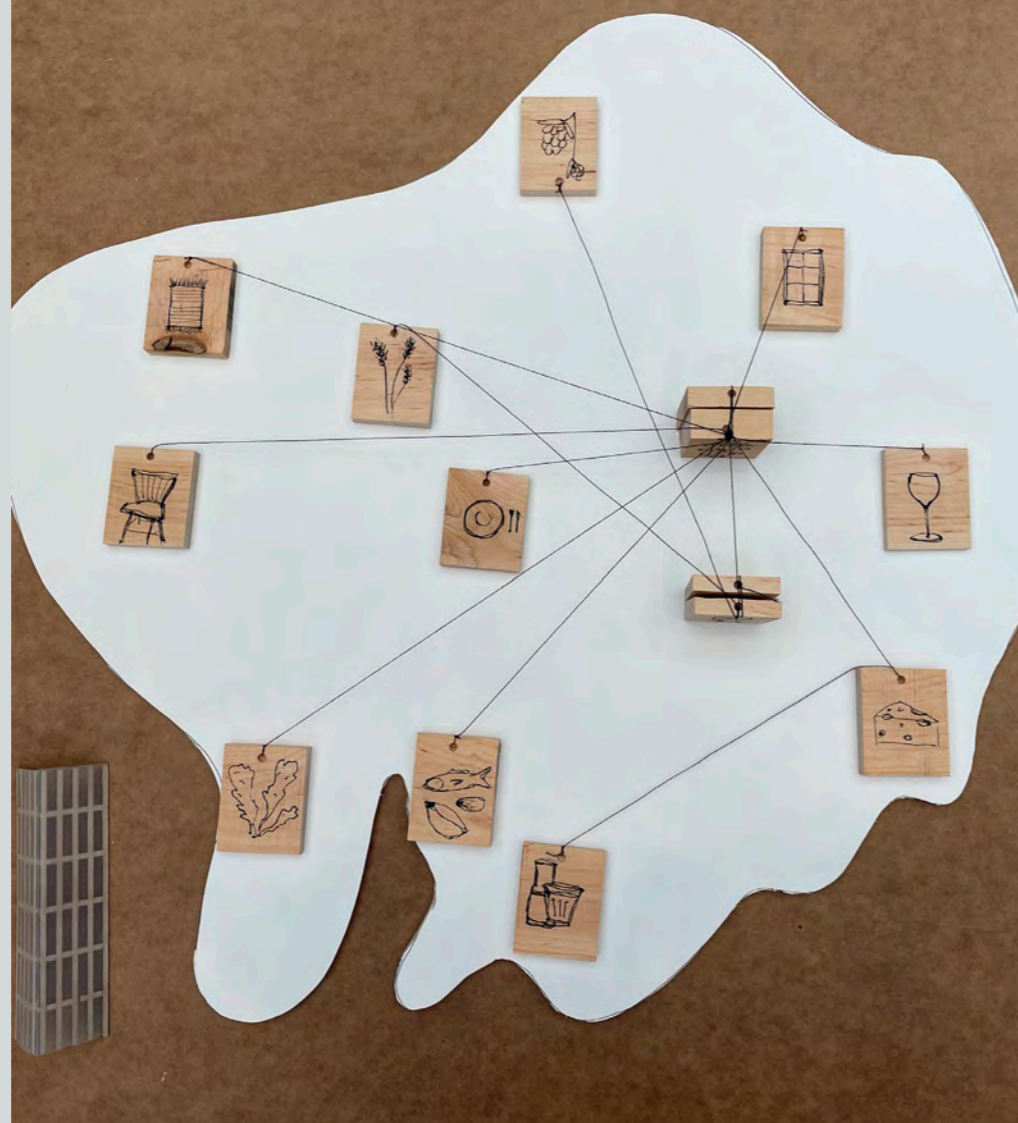
Manufacturers / Arts and Crafts

Important collaboration

The inventory, in the form of a mapping of local assets, gave an understanding of Orust's range and its variety. The maps became the basis for the design, enabling the project to use local assets as much as possible. Analyses were then made in order to investigate which actors could be relevant for the final proposal.

CONCEPT

- » Production
- » Consumption
- » Target group
 - Personas
 - Needs
- » Reference project



Model, result from concept workshop

The project aims to a celebration of local production

The concept is based on generating a place for showcasing all the knowledge, products and crafts that the island has to offer. It is not only a market hall or a factory or a showroom, it's all of those things combined. A place for production, selling, refining, showcasing and using. So in contrast to a showroom, the visitor is shown the products by interacting with them. Seeing, tasting, hearing, smelling and touching the local products. By engaging the local community of producers, the site becomes a collective hub for both producers and visitors. With a production focus on beer and bread the current initiative of Smaka på Orust (taste Orust) is embraced along with the history of the site as a factory.



Finding a target group

In aiming to produce a place for celebrating of local production, the people are the most important factor. To understand our target group personas were made, some based on interviews and research whilst others fictional. It became important to include the possible workers into the target group, not only the visitors, as they are essential for the entire operation to function. In designing the program and layout of the building, these personas' needs were kept in mind in order to create an inclusive place for everyone. A finding that was made along the way is that designing for everyone, from our perspective, is more about allowing

for different zones and atmospheres rather than making a generic room for everyone. This can be seen in the zoning of busy and calm, night and day activity and needs for space and light. In doing the chart above, several overlaps were found for personas that are initially found very different, providing a stronger argument for their importance. The aspect of various price ranges have not been implemented architecturally but rather as a program concept.

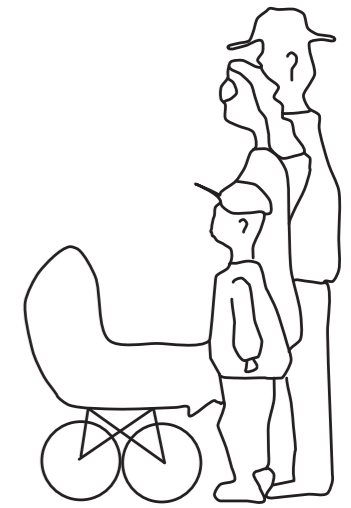
The following pages hold detailed descriptions of each person.

Personas Summary of needs



■ Visitors
■ Staff

- Visitors
- Staff



Senior, 60 - 85 y/o woman
From Orust

She used to be engaged in the arts and crafts movement but is now happy to enjoy the works of others. She visits the building to admire her friend Ann's ceramics and have a coffee.

Once a week she has discussions with her book group and to enjoy a beer.

Price range: \$
Needs: Semilarge (quiet) area for groups.
Appreciates table service.

Hipster, 40 - 55 y/o man
From Stockholm and visits Orust together with his friend

He is all into beer, local food and microbreweries.

He visits the brewery and its production. Beer tasting and a course in production.

He visits the building for one weekend in the autumn and are staying in a hotel near by.

Price range: \$\$\$
Needs: Knowledgeable staff

Hipster, 18 - 22 y/o guy
From Orust and working in Varekil

Hi and his friends of the same age lack a hip place to go to drink beer and hang out in the evenings.

They come to the building to hang out, talk, eat good food and drink beer. At least one in the group has a car but they would appreciate public transport.

Price range: \$
Needs: Semilarge (loud) area for groups

Pre-retired chef, 40 - 45 y/o
Visiting together with friends or family.

Large interest in food and taste experiences. They come for the food and drinks and has a large interest in interacting with the chefs in the food-kiosks. Will want to get the experience of the food market without being limited using a wheelchair.

Price range: \$\$\$
Needs: Accessibility adaptations (WC, elevator and space).
Appreciates table service.

Hiker, 20 - 30 y/o
Tourist from Portugal

Hiking and discovering the Swedish west coast and is currently on the hiking trail of Orust from coast to coast. She and her party stop by the building as a stop on the way to replenish energy and taste the food.

They will stay in tents over the night and would enjoy both the evening event and the morning café.

Price range: \$
Needs: Lockers for bags. Information in English. Public transport.

Family
Kids and adults
From Orust

This family visit the building for a Saturday lunch and to buy bread for their Sunday's activity and are happy to enjoy an accessible place as one family member has a sight disorder.

The family is also looking at the decor as they are looking for new chairs for the dining table.

Price range: \$\$
Needs: Kids inclusive area. Room to maneuver a trolley.

- Visitors
- Staff



Craftsman, 30 - 60 y/o
From Orust

Producer, 20 - 25 y/o
woman
From Orust
Scanfjord Mollösund

Producer, 30 - 65 y/o
From outside of Europe,
has lived a few years at
Orust

Craftsman, 30 - 60 y/o
woman
From Orust
Orust Återbruk

Beer producer, 30-50 y/o
From Orust
Orust Ölfabrik

Baker, 20-50 y/o
From Orust
Herr Bröd

During the development of the Mejeri, their products were bought to be on display in the various functions. Now they come to the Mejeri to enjoy the food and beverages but also as a venue site for displaying their products and showcasing it to potential clients.

She works at her parents' clams company and has great visions for the future by expanding the business with a food truck. However due to lack of economic resources that is a big step. So she starts out testing the concept and menu at the building's food kiosks.

Moving to Sweden was a big step and moving to a small island was an even bigger. Tried opening a restaurant serving non-Swedish food but the rent was too high for the price they needed to keep. Now they will instead try renting a food kiosk instead.

Working with restoration and retrofitting of windows, doors and furniture. Holds courses for enthusiasts and professionals during the weekends and evenings.

She often buys coffee and lunch at the café and during the evenings she stays for an AW with the staff and dinner.

Since the startup the product has grown to be spread on a variety of local hotels and restaurants. Now it's time for the company and production to grow and with the development of the Mejeri, a brewery in the old production building feels just right!

The beloved bakery was just looking for a new site when the development of the Mejeri was starting to be developed. Herr Bröd quickly became involved and was the first to move into the new facility. As the brewery will be the neighbouring producer the new product, maltbröd, came naturally!

Price range: \$\$
Needs: Product visibility

Product/Service price range: \$-\$
Needs: Workspace and staff facility

Product/Service price range: \$-\$
Needs: Staff facility.
Information in English.

Product/Service price range: \$\$-\$\$\$
Needs: Workshop area for woodwork and courses

Product/Service price range: \$-\$
Needs: Loading dock, brewing facility and packaging

Product/Service price range: \$-\$
Needs: Loading dock, baking facility and selling point.

REFERENCE PROJECTS

- » Activity and program
Market halls
Foodhallen in Amsterdam

- Lindholmen street food market
in Gothenburg, Sweden

- Poppels Brewery in Gothenburg
Sweden

- » Architecture and presentation
Sala Beckett, Flores & Prats in
Barcelona, Spain

- » Construction
Gallery of Granby, Winter
Garden, in Liverpool, UK

Referece project:
Activity and program
Brewery
Poppels brewery, Jonsered



Poppels Brewery, located in a small town outside of Gothenburg, is a restaurant and beer brewery where the visitors are invited to visually experience the process of beermaking.

When developing the project it was important to look at projects with similar programs. By analysing a number of market halls, a program was developed that suited the context of the building. The result became a combination of Lindholmen Street Food, a large open space for seating where to enjoy cooked food and buy crafts, and Foodhallen in Amsterdam where you can buy both food products and dishes. From Poppel's brewery came the idea of letting visitors get a visual connection to the production.

Sala Beckett was an important reference when discussing the transformation approach as well as how to graphically represent interventions and atmosphere. The project by Gallery of Granby was a reference for estetical technical solutions.

Referece project:
Activity and program
Lindholmen street food
market, Gothenburg



An urban foodcourt often combined with a local crafts market. Combining food, drinks and crafts.

Referece project:
Activity and program
Foodhallen, Amsterdam



An urban foodcourt combining food and drinks.

Referece project:
Architecture and presentation
Sala Beckett / Flores & Prats
Barcelona, Spain



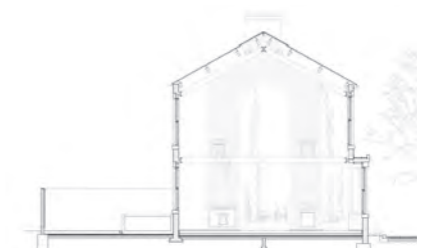
Section showing the interior atmosphere with material, colors, shadows etc. A contrast between the new polished surfaces and original surfaces



Referece project:
Construction
Gallery of Granby, Winter
Garden, Liverpool, United Kingdom



Construction
Glassed roof and iron beams framing the indoor square.



FINAL PROPOSAL

- » Scales of locality
 - Orust
 - Mejeriet
 - Visitors
- » Site
 - Overview 1:500
 - Zoning and functions
- » Facades 1:200
 - » South
 - » West
 - » North
 - » East
- » Plans 1:200
 - Interventions
 - Program
- » Section 1:200
 - Program
- » Details
 - Skylight window 1:5
 - South Facade 1:20
 - Addition 1:20
- » Perspective Exterior
 - Addition
- » Interior views 1:50
 - Floor 1 brewery and bakery
 - Floor 2 Food kiosks
 - Floor 2 Food kiosks and bar
- » Colours and tiles
- » Production
 - Flow and system of the production
- » Consumption
 - Flow of visitors and staff
- » Perspective Interior
 - Bar, floor 2
 - Square
 - Café



Entrance



Interior square, main staircase

Physical model

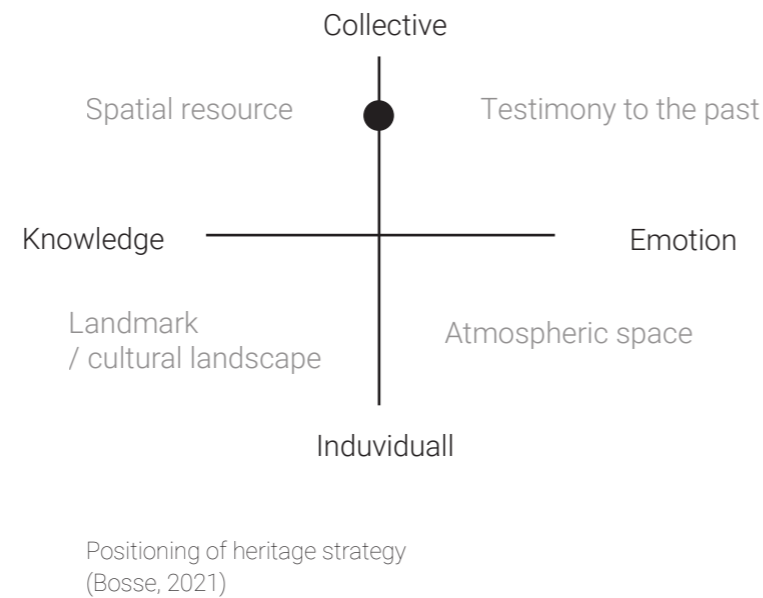
The square hall is the centrepiece of the building, where the organic staircase is the main attraction. In a model of 1:50 we were able to understand the scale of the square as volume and the impact of our colour choice. All interior interventions have the green colour, which in the model enhances the contrast between old and new. The model also showcases the openness of the room inviting visitors to get an overview of the production and ongoing events. From the square one has an overview of the tanks from the beer production, the bakery and the workshop. When looking up you also get a glimpse of the upper floors kiosks and bar, visible through the concrete glass.



The interior square

DESIGN STRATEGIES

- » Interventions
- » Construction
- » Interior architectural strategies
- » Exterior architectural strategies
- » Sustainability
 - Kept
 - Reused
 - Concrete
 - Tiles



Transformation approach

The heritage and transformational strategy used in this project is collectively oriented, and deals with both emotion and knowledge creation. Hence it is treated as a spatial resource that is modified to suit the needs of the new functions and use. Still, it is a testimony to the past due to the selective conservation approach in which the surfaces and finishes of materials are to be kept, along with the aim to reintroduce the program of production. There are four major interventions. A new roof section, a glass atrium, allows for the flow of daylight and enhances the open feeling of a town square. The removal of floor slabs produces a vertical spatial connection throughout the building, increasing visibility of the spaces. The south facade has been deemed beyond repair and replaced. The new windows references the old but do not copy the old execution. Lastly the most obvious intervention is the entrance addition in a contrasting material, highlighting the main entrance to the building.

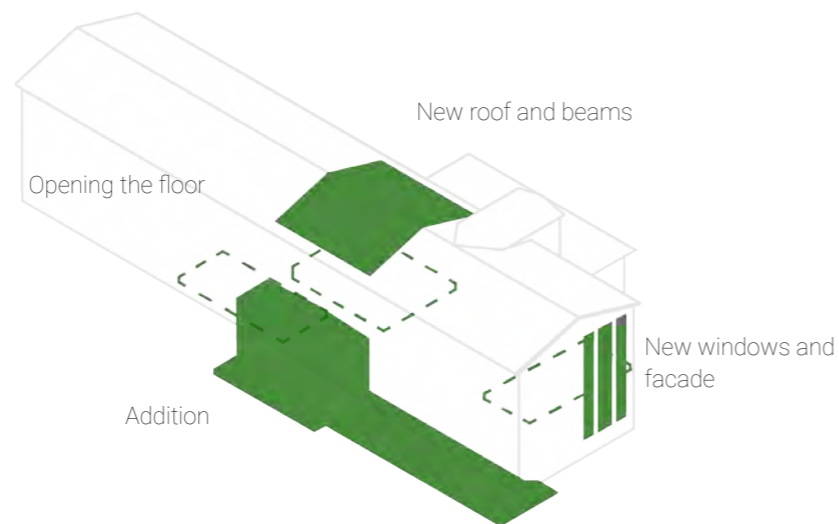
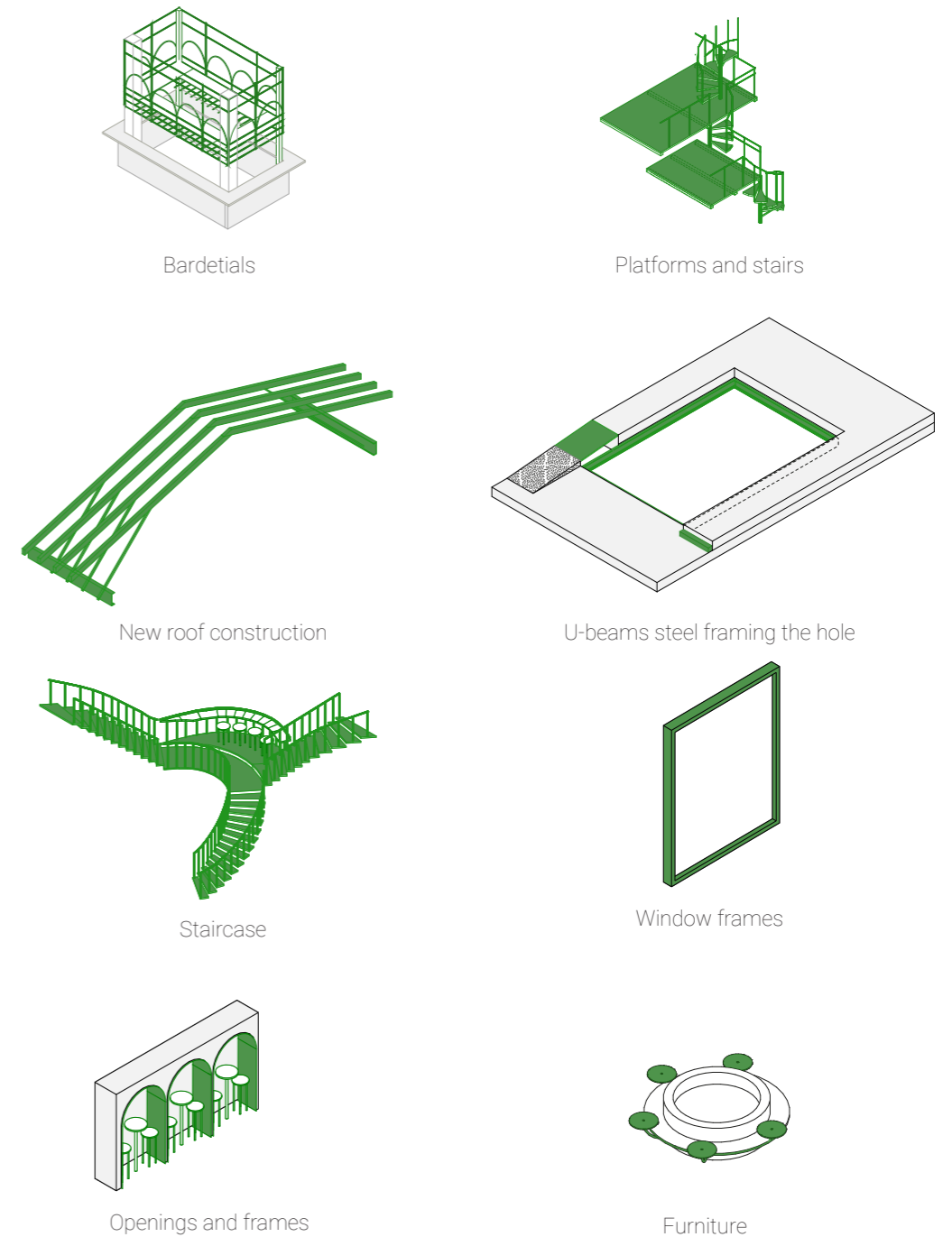


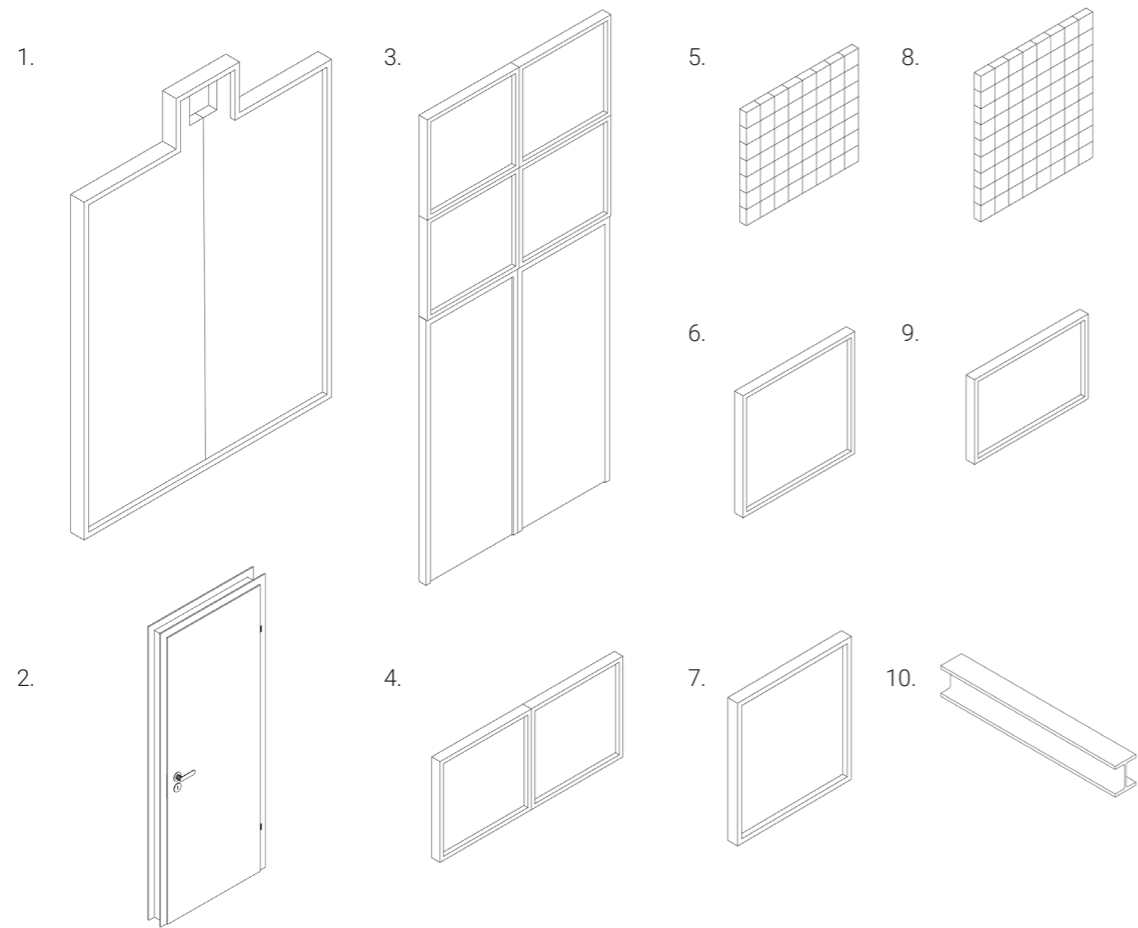
Diagram illustrating four main interventions

Design strategies
Architectural concept
Interior

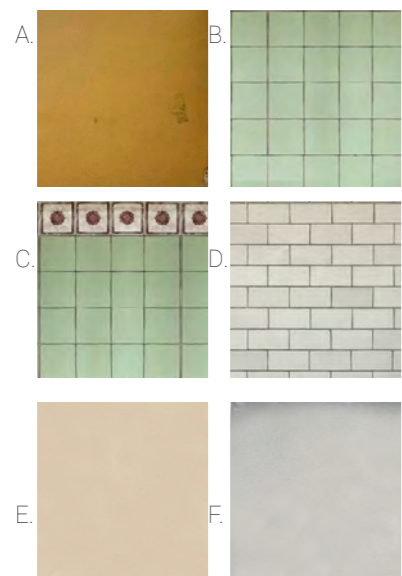


Interior shapes, material and colour is used to communicate the interventions to the viewer. The green colour is not present in the old execution and is therefore a suitable contrasting colour. Where possible, the interior elements and materials are kept in its current execution, and where that is not possible elements and materials are reused.

Elements



Materials

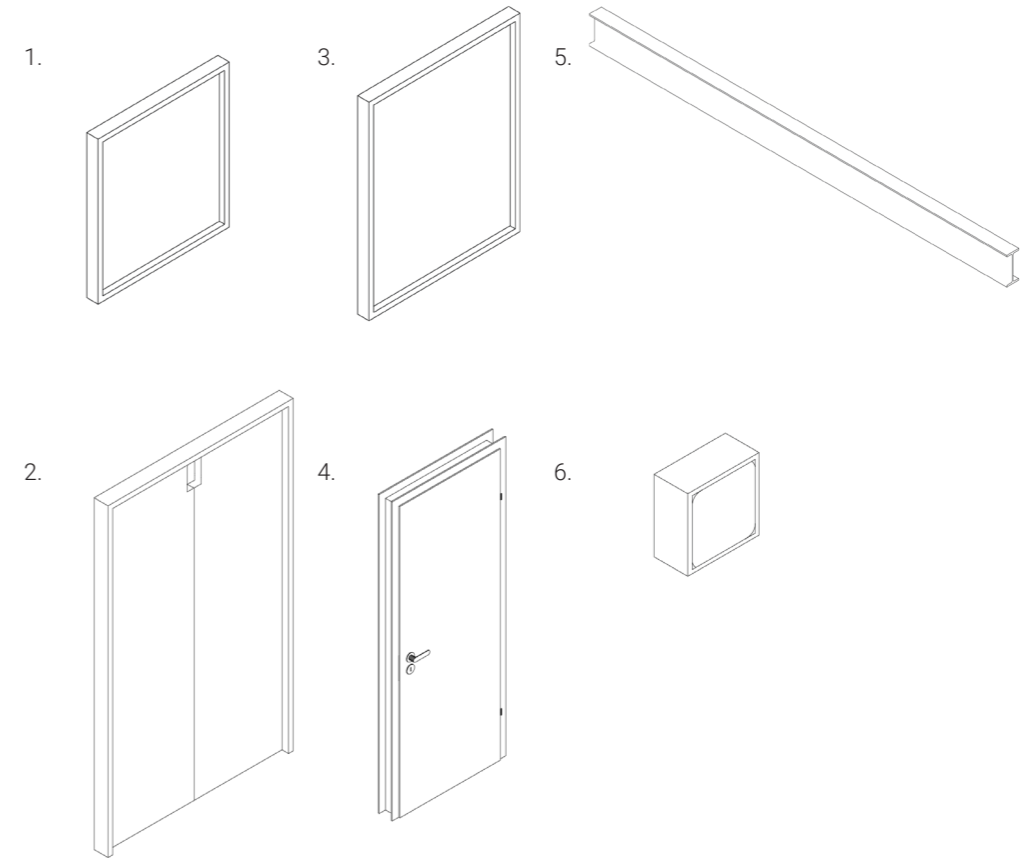


Label

- 1. Gate: East facade, floor 2
- 2. Doors: General
- 3. Door: East facade, floor 1
- 4. Windows: East facade, floor 1
- 5. Glass block window: East facade, floor 1
- 6. Windows: East facade, floor 2
- 7. Windows: West facade, floor 2
- 8. Glass block window: East facade, floor 1 & 2, West facade, floor 1 & 2
- 9. Windows: East facade, floor 2
- 10. Beam: Floor 2

- A. Wall surface, yellow
- B. Green tiles, square
- C. Green tiles with pattern, square
- D. White tiles, rectangular
- E. Wall surface, apricot
- F. Wall surface, gray

Elements



Materials

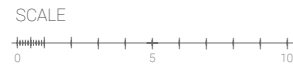


Label

- 1. Windows (x2)
Previous position: South facade
New location: North facade
- 2. Gate door (x1)
Previous position: West facade, Store
New location: East facade, Loading
- 3. Windows (x4)
Previous position: South facade
New location: North facade
- 4. Interior doors
Previous position: Removed walls
New location: New walls
- 5. Beam (x1)
Previous position: Floor 1, Store
New location: Floor 1, Loading
- 6. Intact glass blocks
Previous position: West facade
New location: Windows in need

- A. White tiles, rectangular in a new setting

Section
Surface layer/Atmosphere



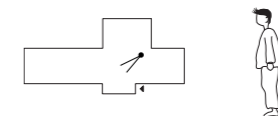
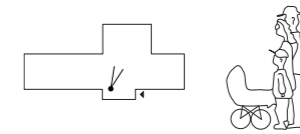
Atmosphere of transformation

The transformation approach of this project could be described as a selective conservation combined with some new interventions, where the new are clearly distinguished from the old. In working with the existing colour and material palette, the surfaces of the building were analysed in a section drawing to understand their connection to the added interventions. Where surfaces and materials were deemed to hold

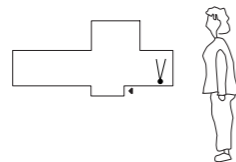
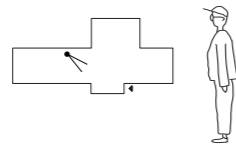
a historical connection, such as the tiles being a reference to the building's history of production, they were kept. New materials and finishes were only used in areas in which the program of the building demanded it. Such being in the production areas where health and sanitation were of greater importance than the atmospheric quality. Where new walls or objects were added, we wanted them to have a distinctly different

finish from the old. Therefore, when a wall is added it is clad in white as in the area for production and when an object is added it is in bright green lacquer. The result is a patchwork of selective conservation, renovation and transformation. Later, views of the space were produced to understand the atmospheric qualities which the surfaces have on the space.

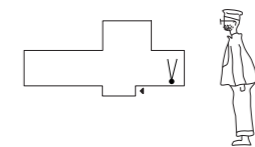
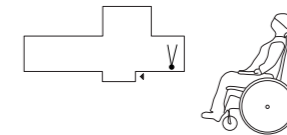
Perspective
Interior
Square

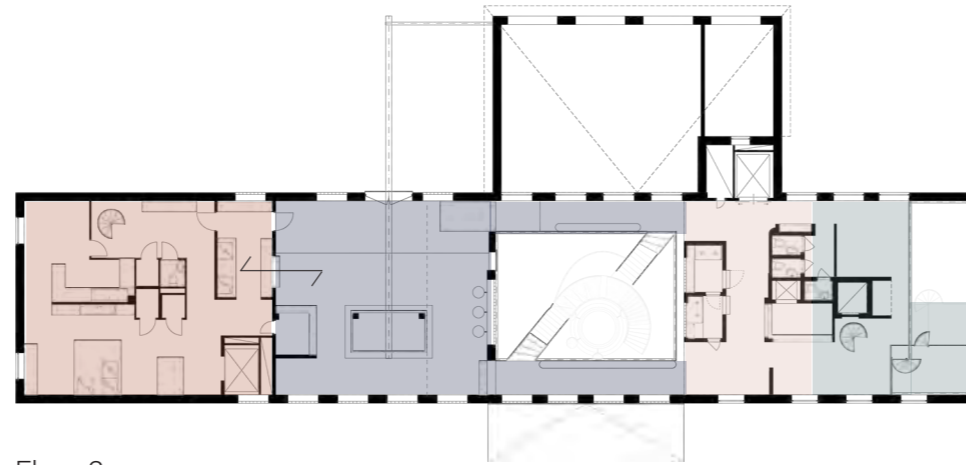


Perspective
Interior
Bar, floor 2

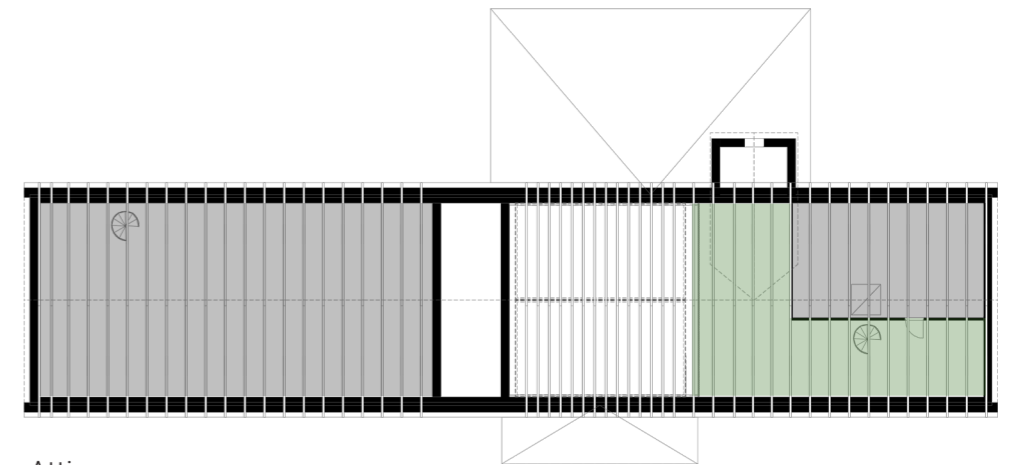


Perspective
Interior
Café

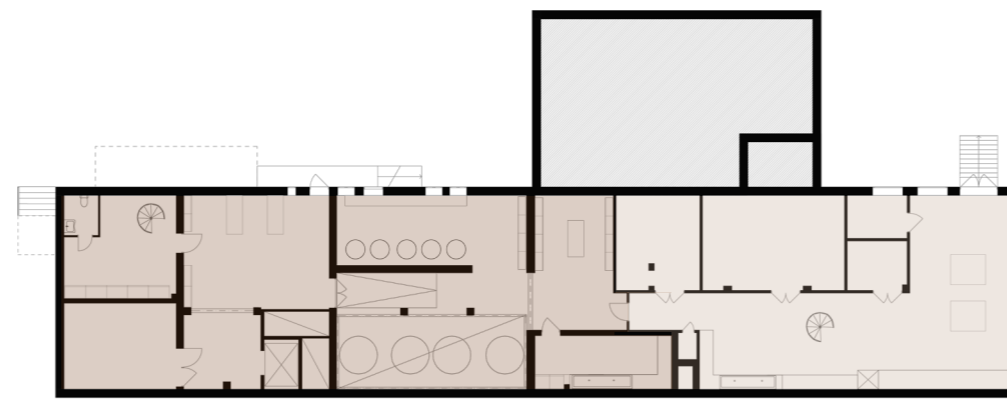




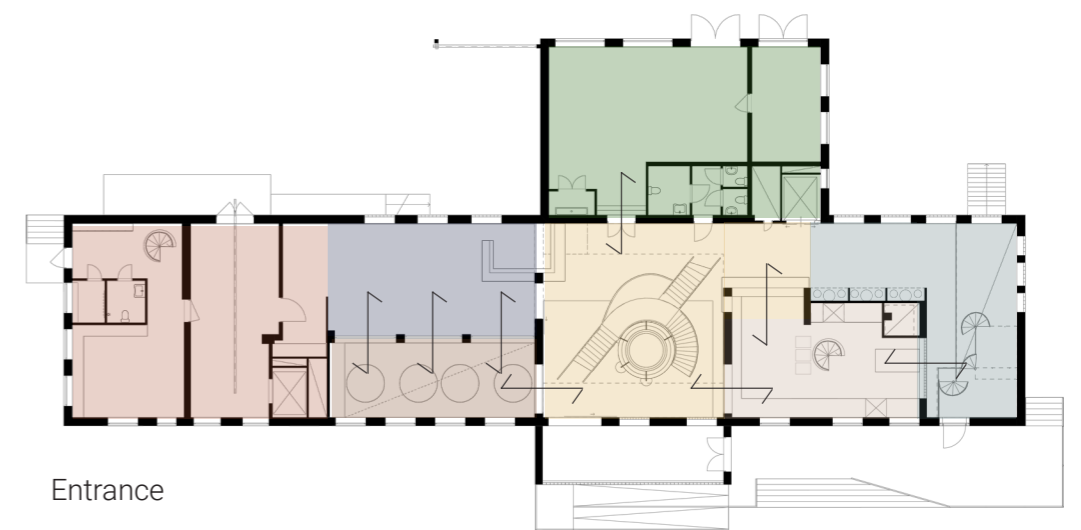
Floor 2



Attic

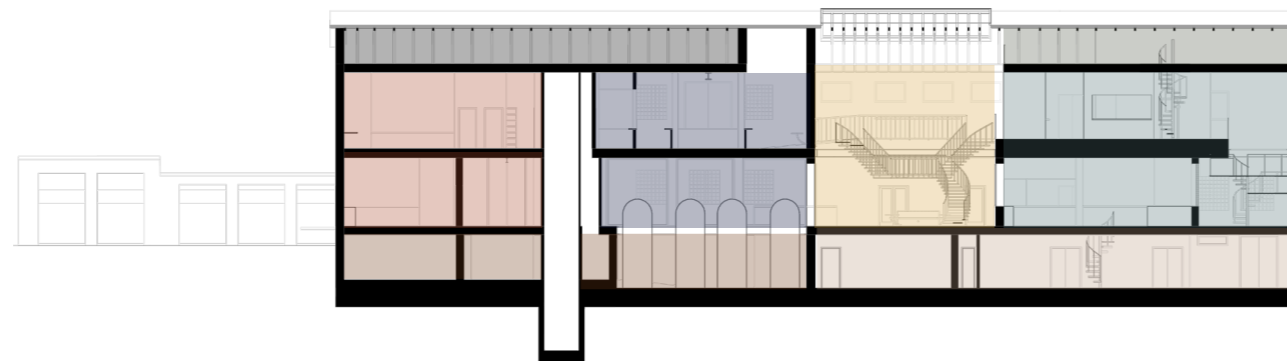
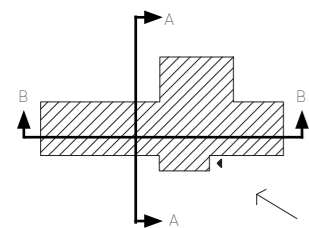


Basement

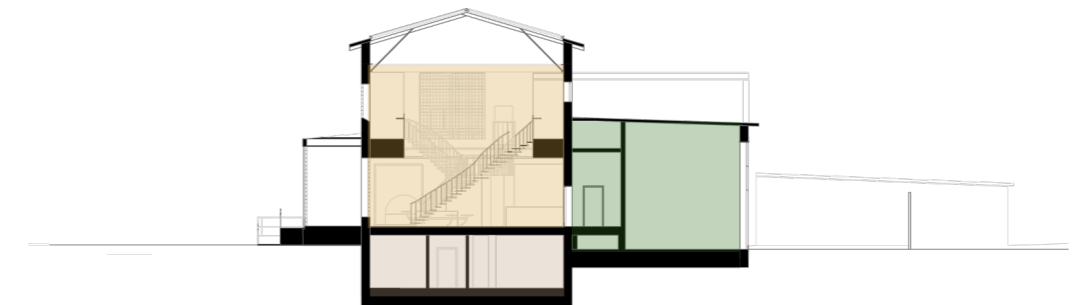


Entrance

- Visual connection to production
- Brewery
- Bakery
- Staff/restaurant kitchen
- Square
- Bar / restaurant area
- Cafe / restaurant area
- Workshop
- Technique / storage space



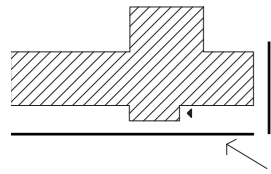
Section B-B



Aection A-A



Facade
1:200
South
West



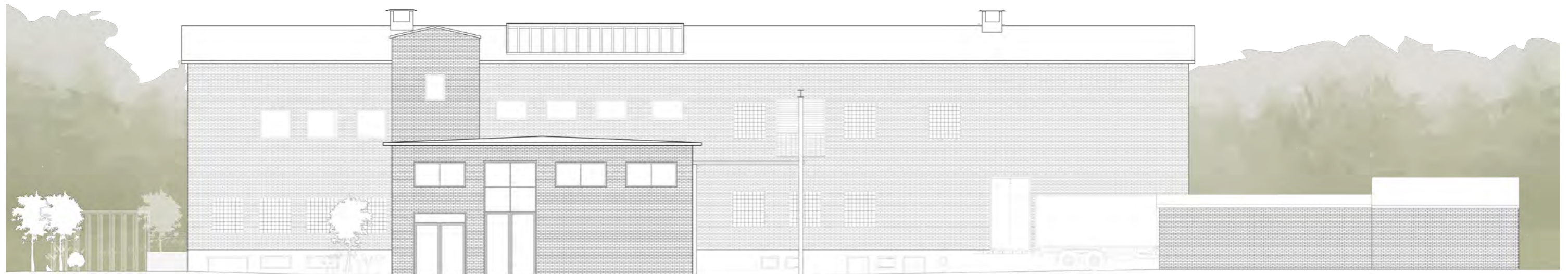
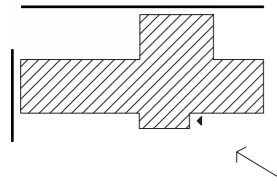
On the exterior, as much as possible of the original building is kept intact. The exception being the renovated south facade and the new exterior addition providing a new entrance.



SCALE 1:200



Facade
1:200
North
East



SCALE 1:200



Site
1:500

LABLE

-  Entrance staff
-  Entrance visitors
-  Loading
-  Asphalt
-  Gravel
-  Granite block
-  Surrounding buildings
-  Surrounding greenery
-  Grass

- 1. Parking
- 2. Parking staff
- 3. Workshop storage
- 4. Neighboring building
- 5. Loading area
- 6. Trash
- 7. Shuttle transport
- 8. Bicycle parking
- 9. Area for food truck
- 10. Pergola
- 11. Seating area
- 12. Workshop area
- 13. Neighboring building



SCALE 1:500



The asphalt surrounding the building is partly removed and replaced with a combination of granite stone, gravel and wild grass to generate a warm and humane atmosphere to the surroundings. In the northern part, much of the asphalt is kept as it is a suitable material for the movement of trucks dealing with logistics. Large trucks of a turning radius of 16m must be provided for, in addition to visitor and workers parking spaces.



AREA FOR VISITORS

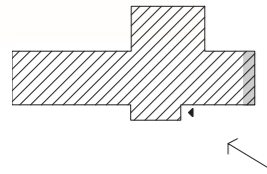


PARKING, LOGISTICS AND LOADING



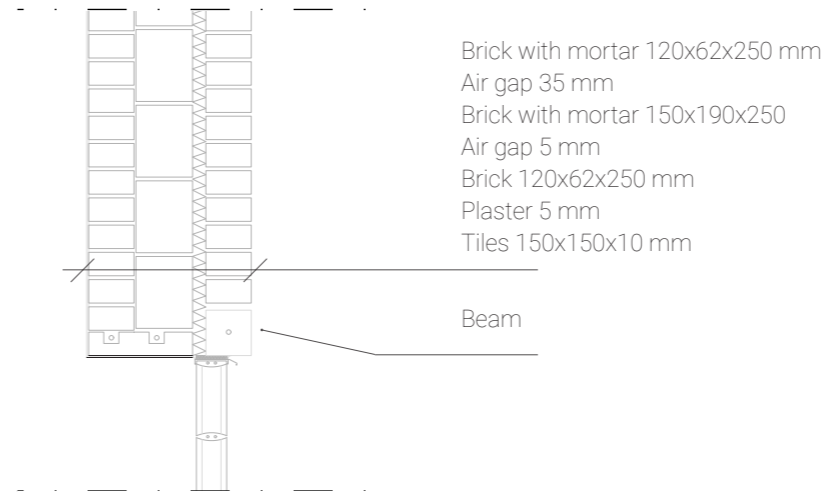
Exterior perspective showing from the main road.

Detail
1:20
South Facade



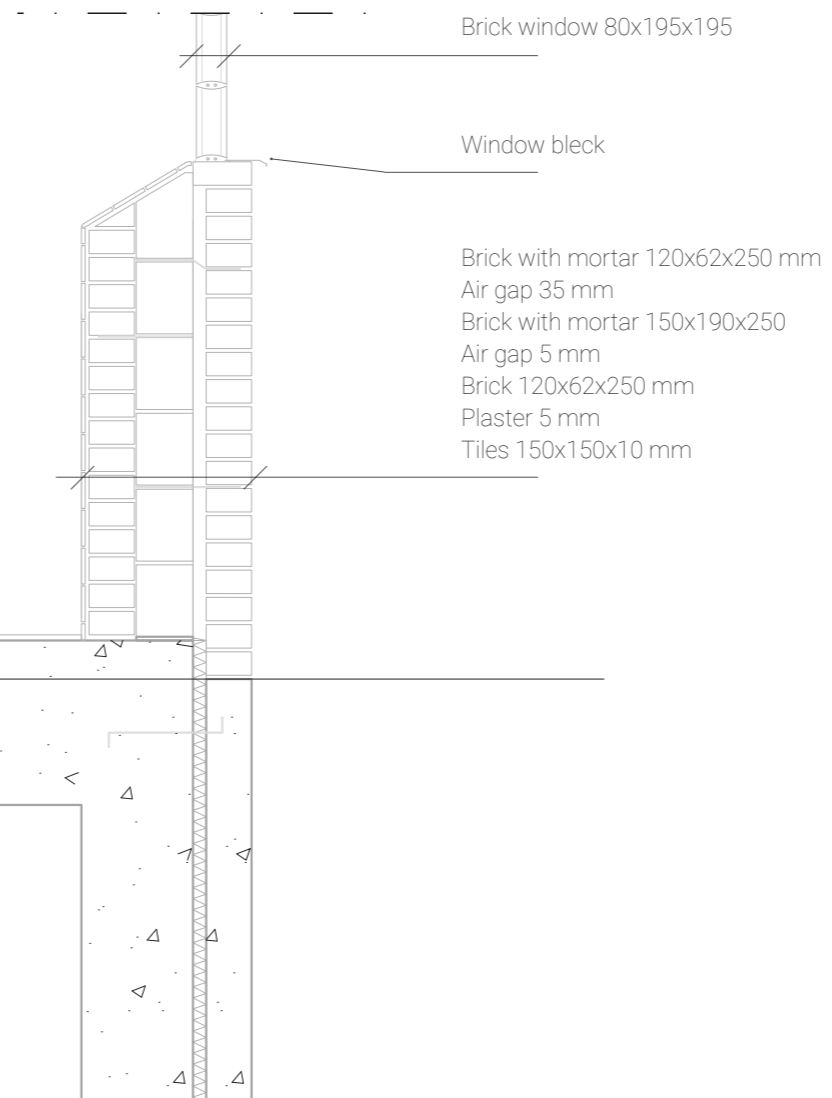
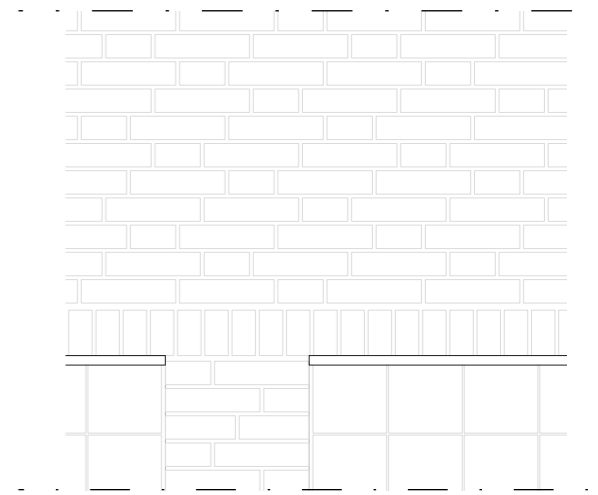
Referencing history

Due to the poor condition of the south facade, it is demolished and rebuilt. The brickwork is made in a similar red brick execution and a reference to the old logo of the building is incorporated into the design. The glass bricks are also used as a reference to history, although in a different composition to distinguish from the original design.



Brick with mortar 120x62x250 mm
Air gap 35 mm
Brick with mortar 150x190x250
Air gap 5 mm
Brick 120x62x250 mm
Plaster 5 mm
Tiles 150x150x10 mm

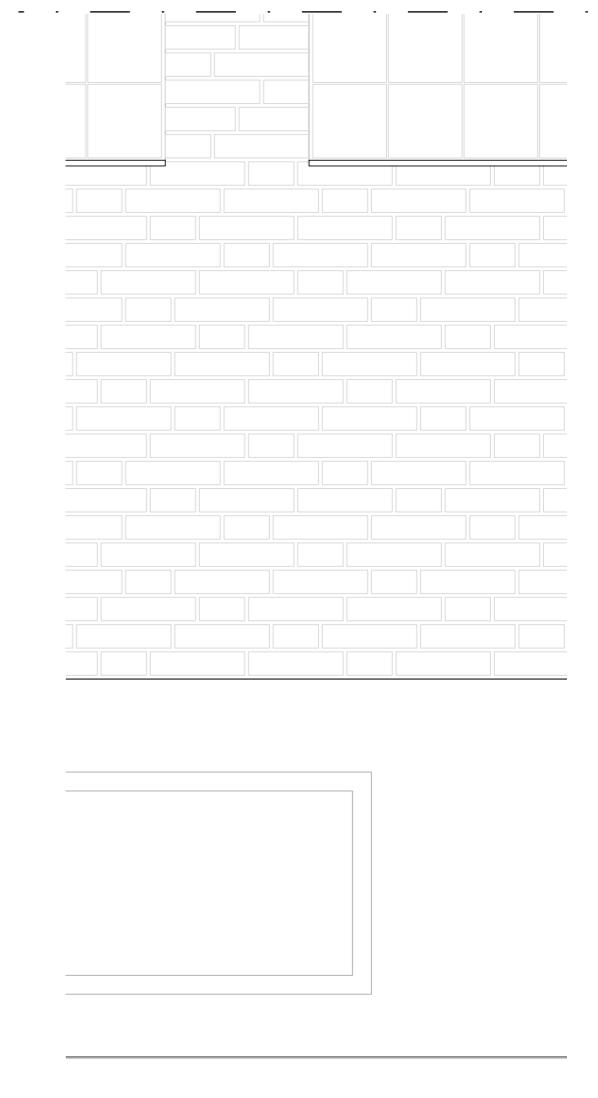
Beam



Brick window 80x195x195

Window block

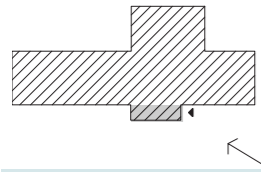
Brick with mortar 120x62x250 mm
Air gap 35 mm
Brick with mortar 150x190x250
Air gap 5 mm
Brick 120x62x250 mm
Plaster 5 mm
Tiles 150x150x10 mm



Detail section 1:20

Detail facade 1:20

Perspective
Addition
Entrance situation



Exterior perspective
The addition in relation to the existing building

Design strategies
Architectural concept
Exterior

Similar to the rebuilt facade, the entrance addition has a modest approach to transformation, creating a respectful compliment to the existing building. The material honesty of the red brick is referenced in the raw materials of concrete, stone and steel whereas the glass brick is a direct reference to the existing building, again in a new composition, following the same concept of large glazed areas as that of the south facade.

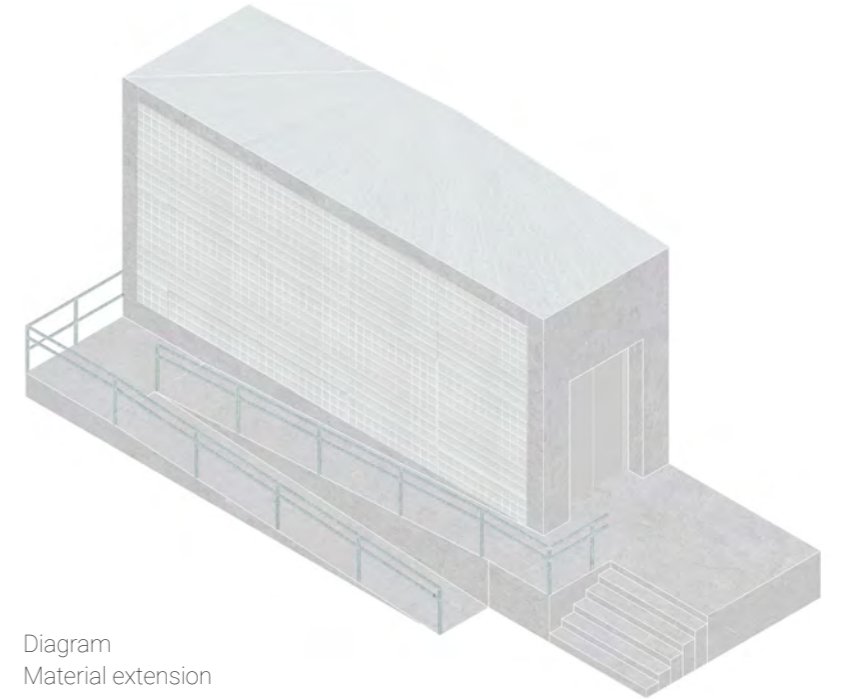
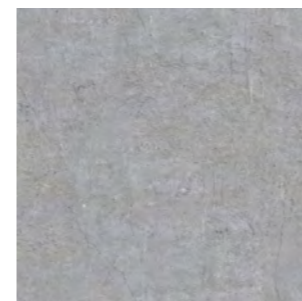
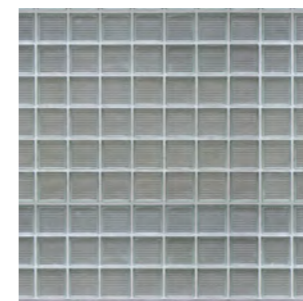


Diagram
Material extension

Material palette



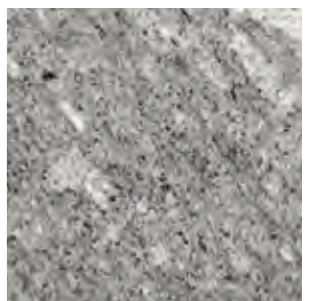
Concrete



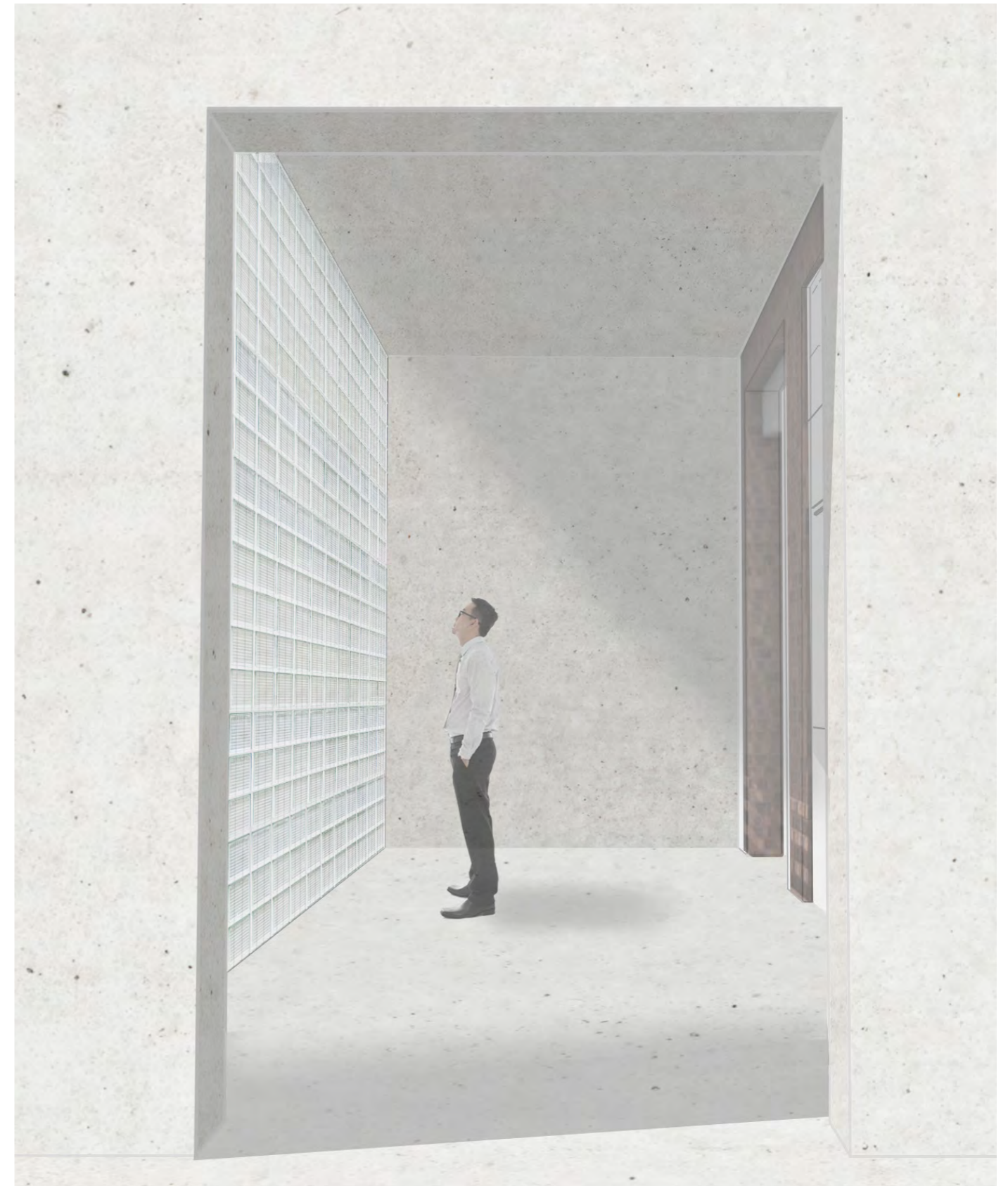
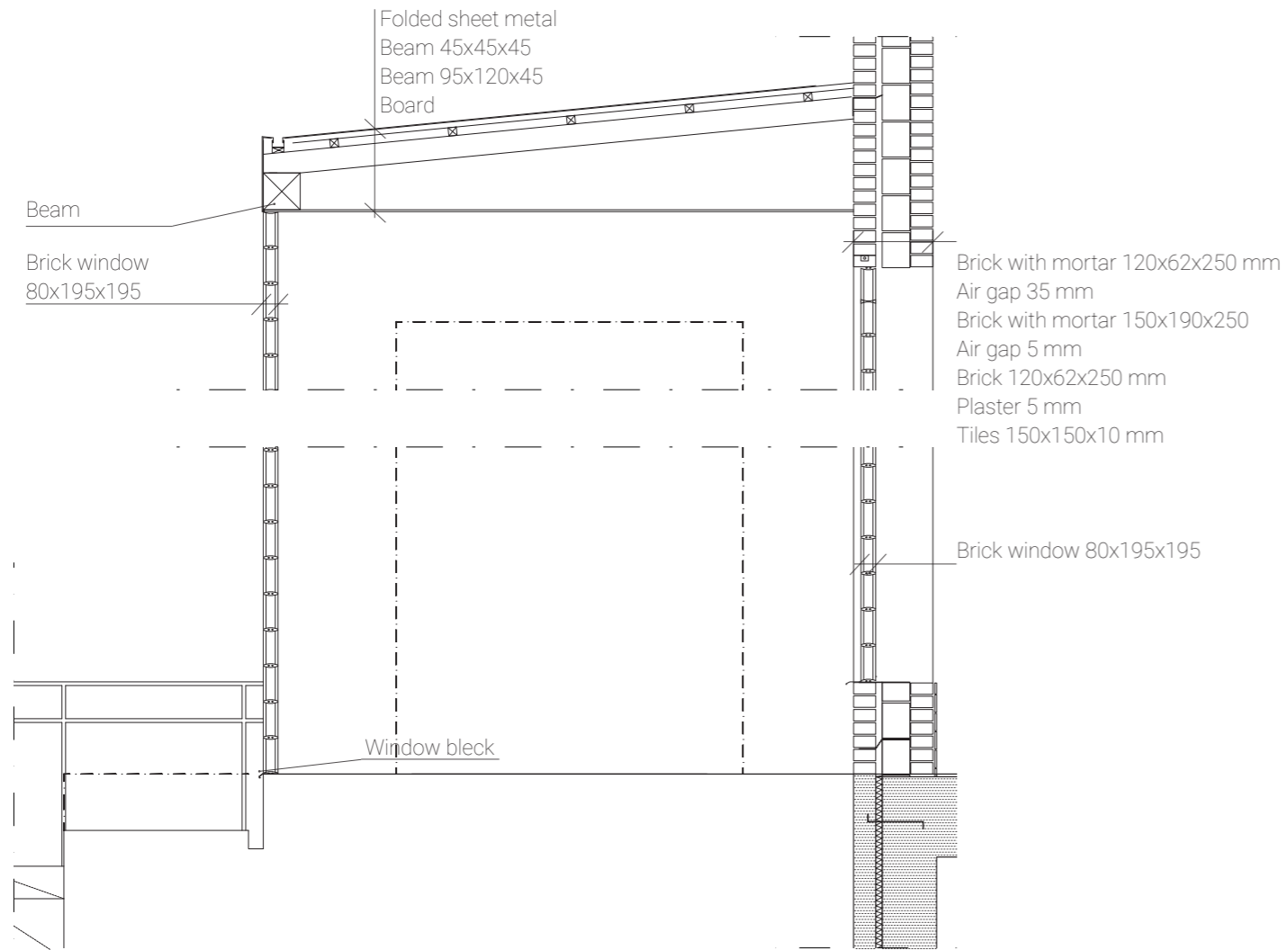
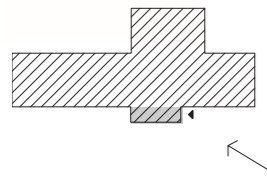
Glass block window



Galvanized sheet metal



Granite block from Ströms
Stenhuggeri at Orust




Calm and monumental entrance guiding the visitor into the large interior square.

Fitting of new use

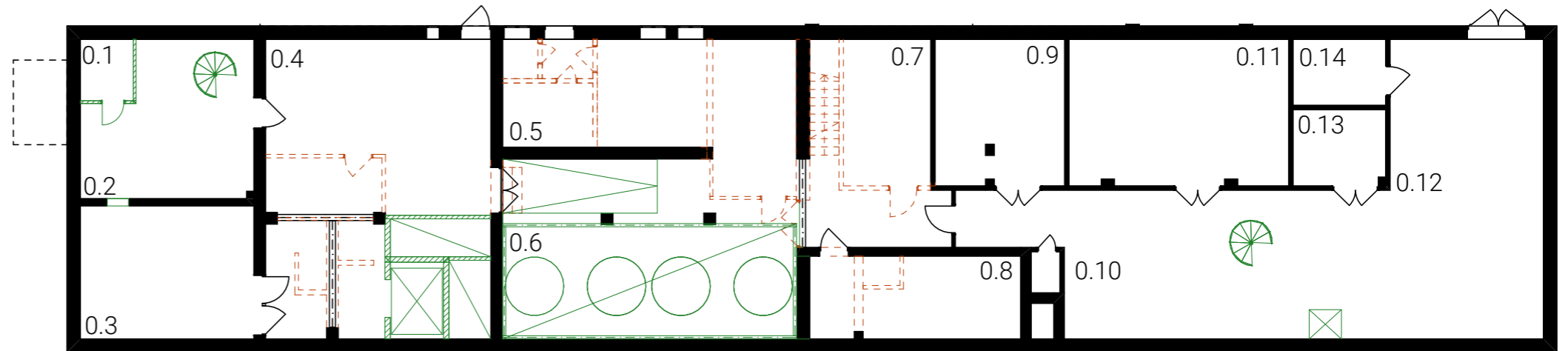
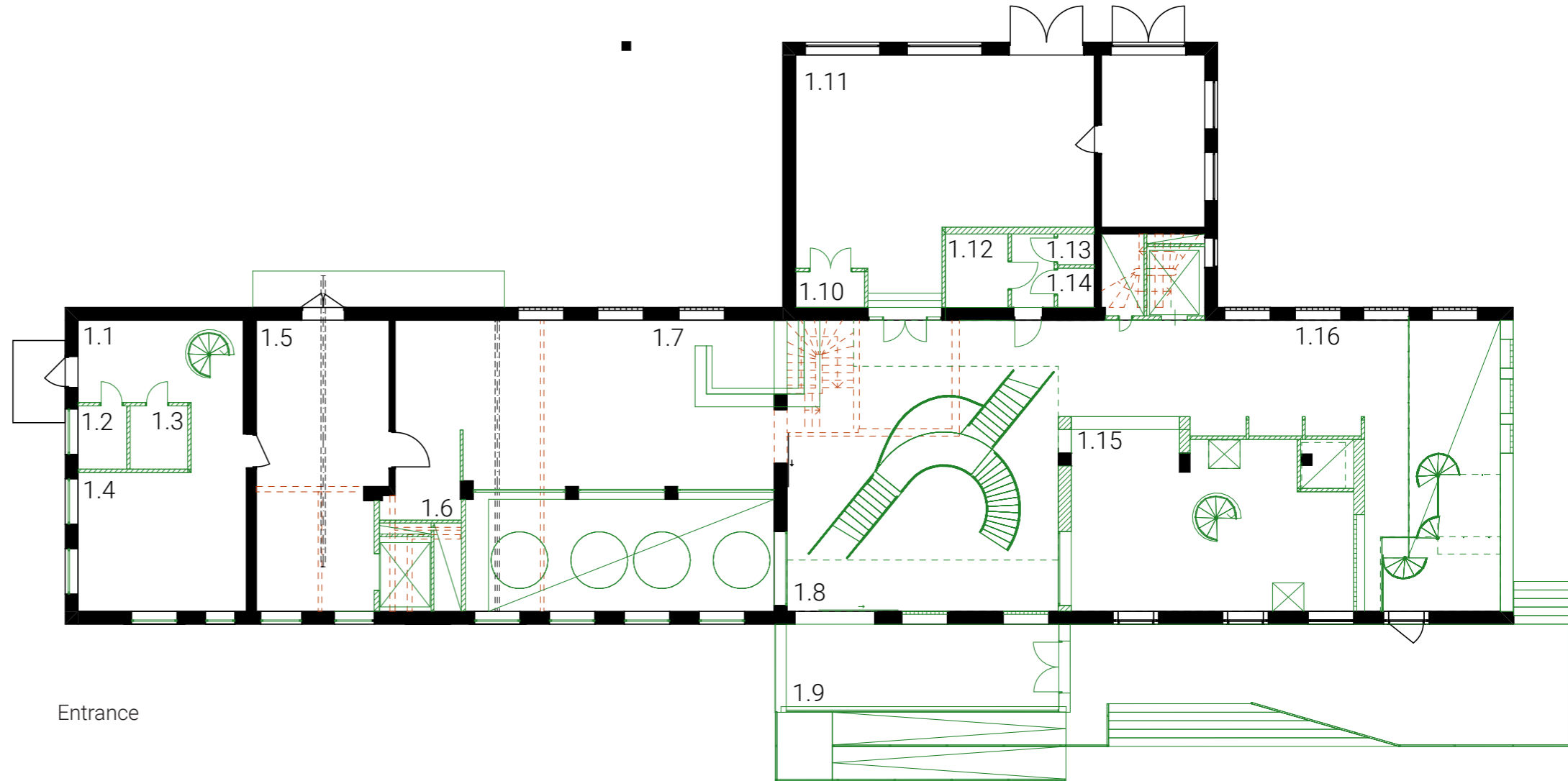
Dealing with the floorplans, removal of walls were found essential in order to provide a functioning layout for the program. Where possible, however, the original layout is kept and rather complemented with new wall structures. Existing stair shafts and elevator shaft is fitted with two elevators, one for logistics of the products and one for visitors.

- 0.0 Basement**
- 0.1 Toilet
- 0.2 Storage (Brewery)
- 0.3 Storage (Staff)
- 0.4 Tap room (Brewery)
- 0.5 Processes (Brewery)
- 0.6 Fermentation (Brewery)
- 0.7 Preperation (Brewery)
- 0.8 Washing (Brewery)
- 0.9 Storage (Bakery)
- 0.10 Wahsing (Bakery)
- 0.11 Technology
- 0.12 Preperation (Bekery)
- 0.13 Cold room
- 0.14 Storage (Bakery)

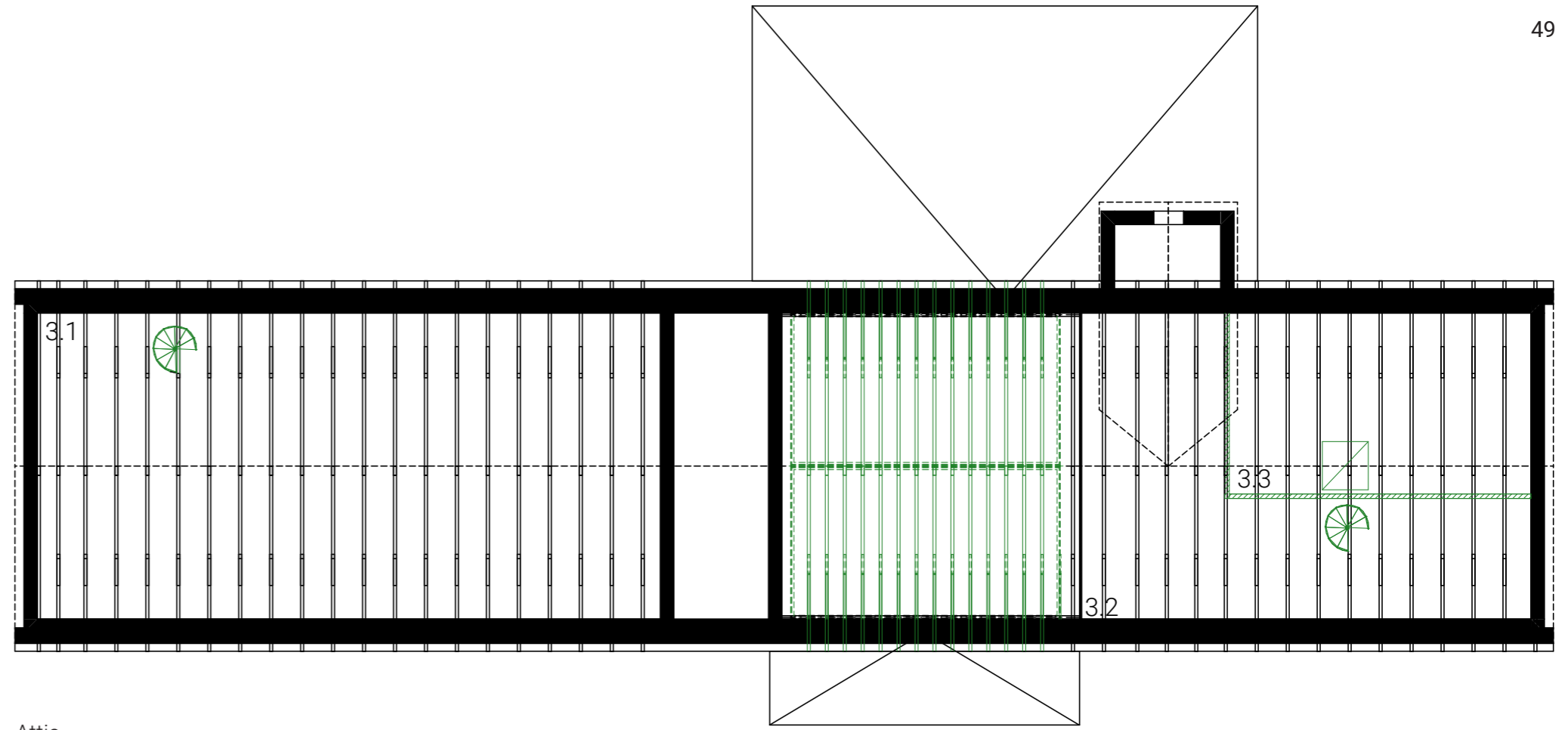
- 1.0 Entrance floor**
- 1.1 Entrance (Staff)
- 1.2 Changing room (Staff)
- 1.3 Toilet with shower (Staff)
- 1.4 Break room (Staff)
- 1.5 Loading
- 1.6 Preperation
- 1.7 Bar / seating
- 1.8 Square
- 1.9 Entrance
- 1.10 Cleaning (Workshop)
- 1.11 Workshop
- 1.12 Accessible toilet
- 1.13 Toilet
- 1.14 Toilet
- 1.15 Bakery
- 1.16 Café

-  Removed walls
-  Added walls
-  Existing walls
-  Existing doors
-  New doors

SCALE 1:200



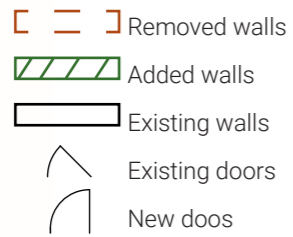
Basement



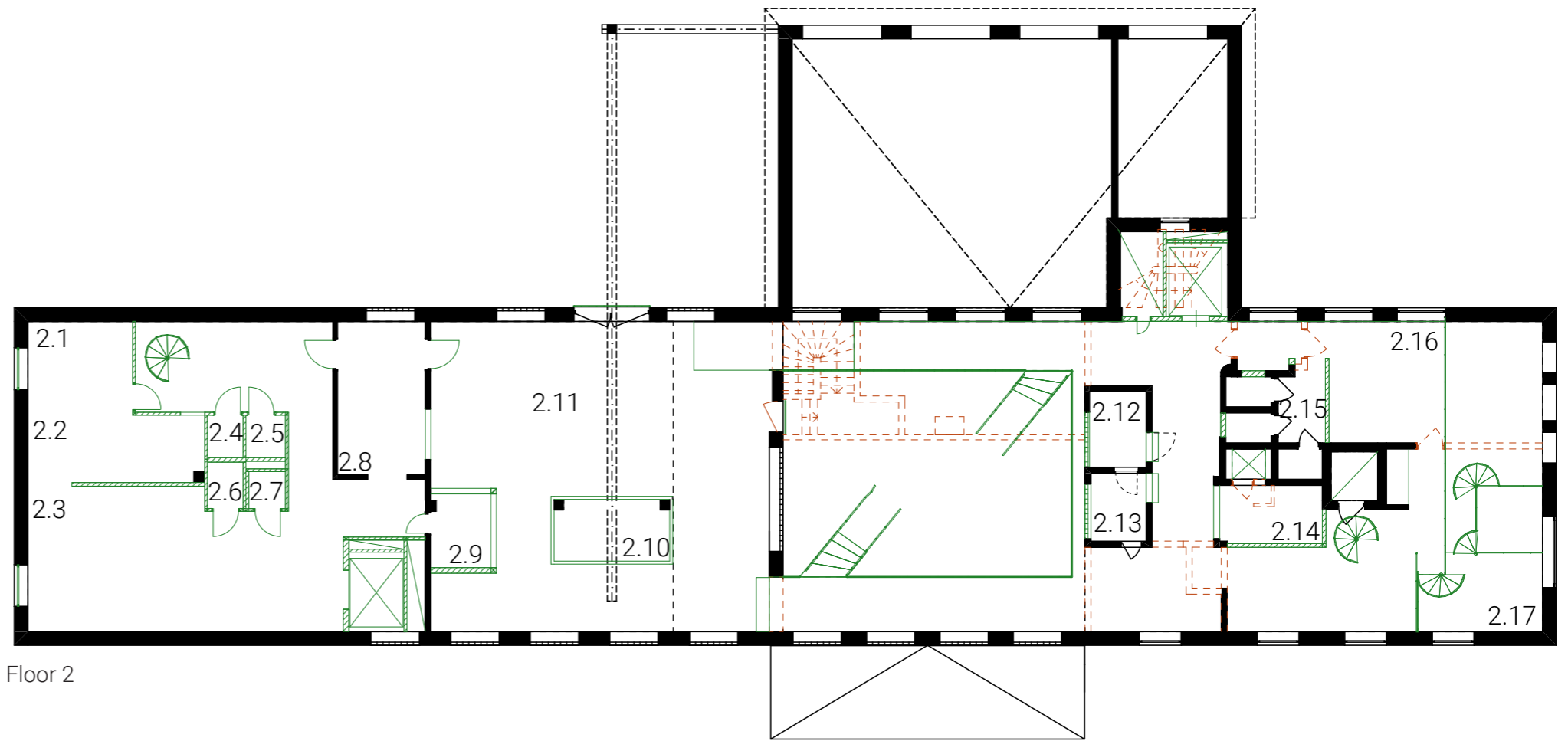
Attic

- 2.0 **Floor 2**
- 2.1 Storage (dishes)
- 2.2 Washing
- 2.3 Kitchen
- 2.4 Cleaning
- 2.5 Toilet (Staff)
- 2.6 Refrigerator
- 2.7 Freezer
- 2.8 Kiosk (Food) + prep-kitchen
- 2.9 Kiosk (Food)
- 2.10 Bar
- 2.11 Seating area
- 2.12 Kiosk (Products)
- 2.13 Kiosk (Products)
- 2.14 Kiosk (Products)
+ food transport
- 2.15 Toilets (Visitors)
- 2.16 Café
- 2.17 Café (Platforms)

- 3.0 **Attic**
- 3.1 Technology
- 3.2 Seating area
- 3.3 Technology

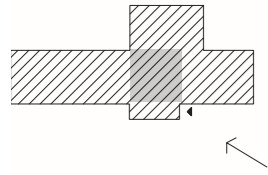


SCALE 1:200

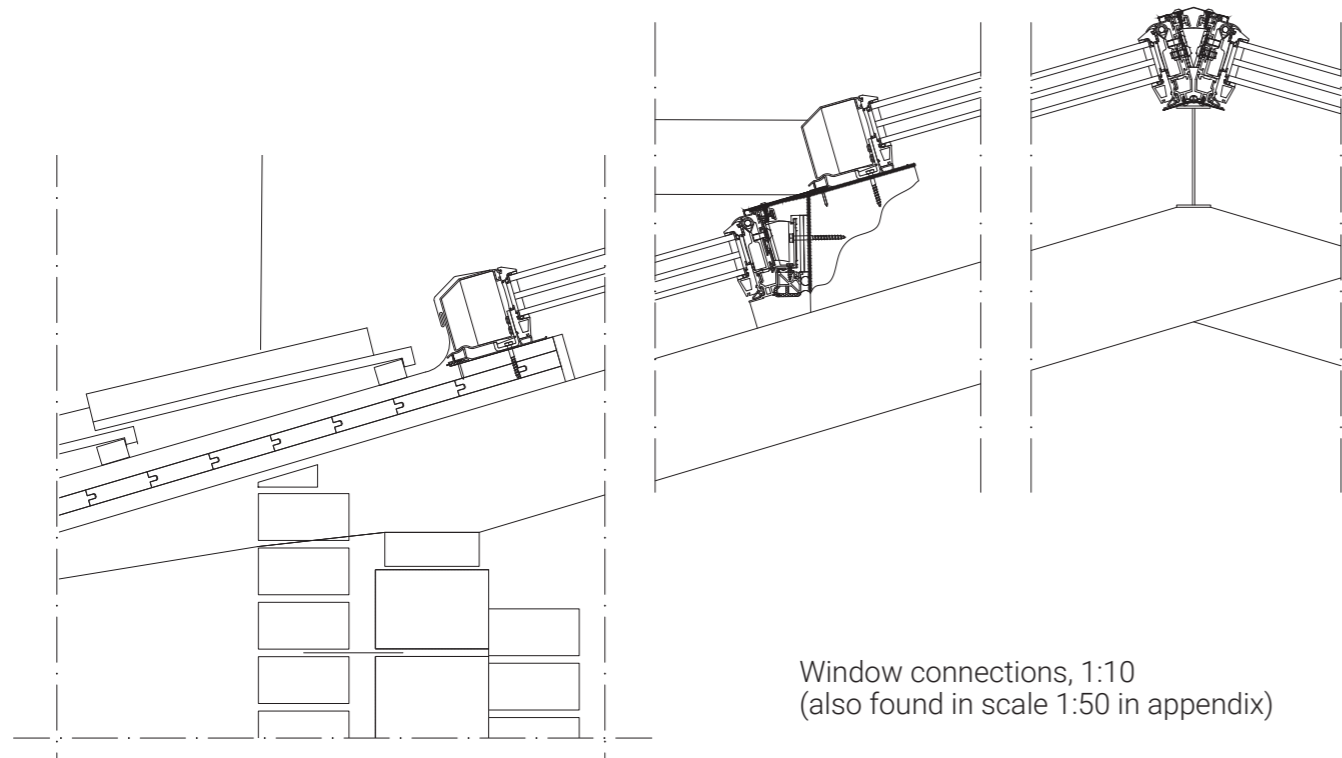
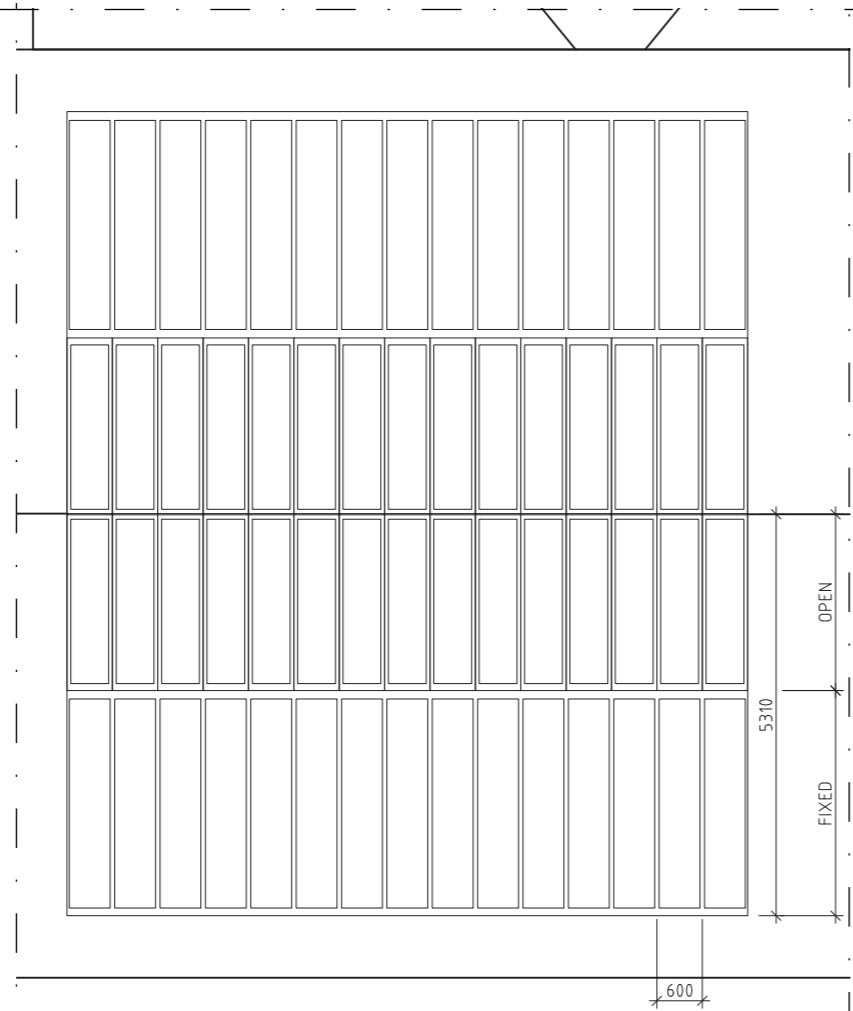


Floor 2

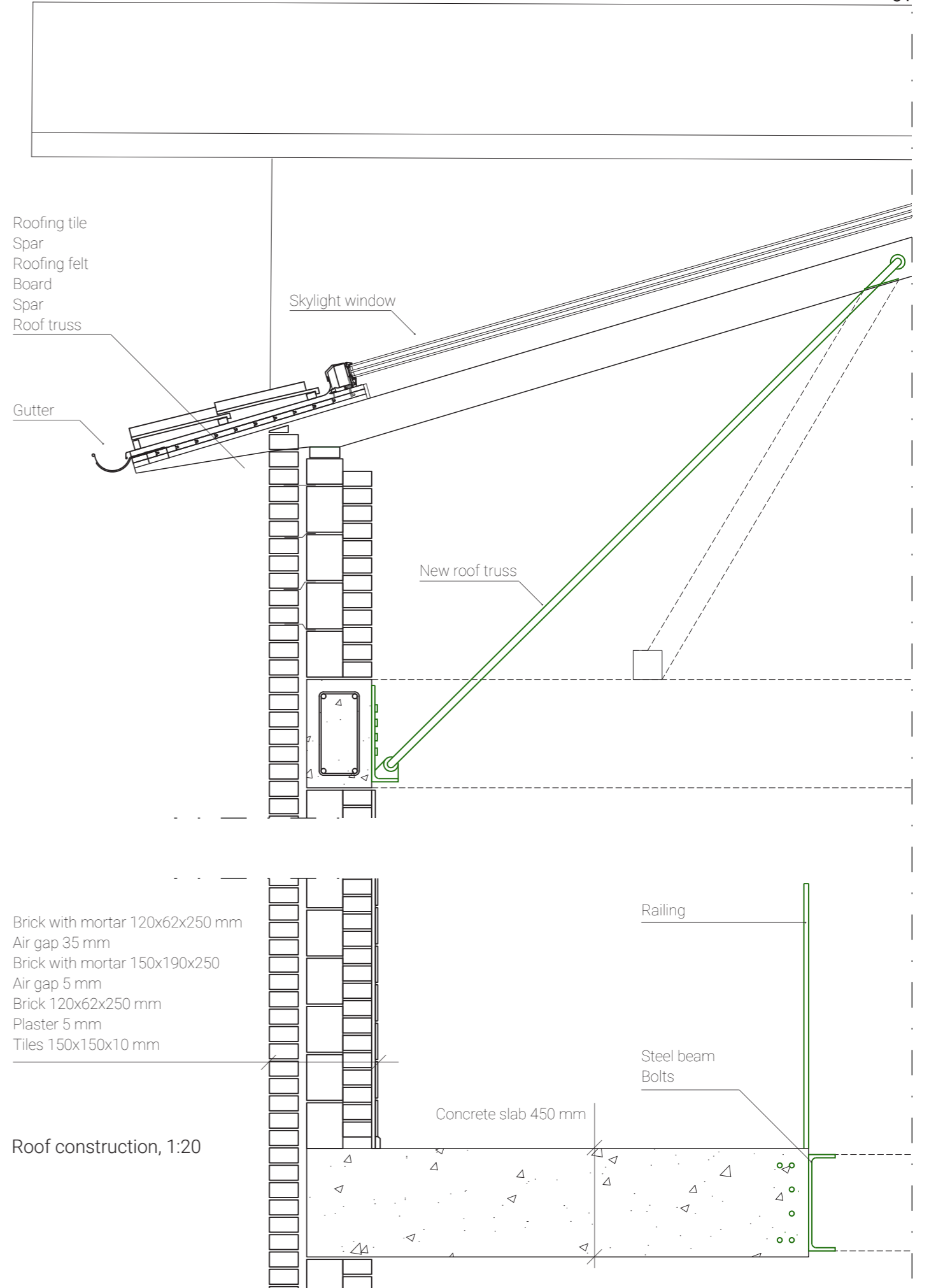
Detail of skylight window over the square, providing the light of an open town square.



Division in plan, 1:100



Window connections, 1:10 (also found in scale 1:50 in appendix)



Roofing tile
Spar
Roofing felt
Board
Spar
Roof truss

Skylight window

Gutter

New roof truss

Brick with mortar 120x62x250 mm
Air gap 35 mm
Brick with mortar 150x190x250
Air gap 5 mm
Brick 120x62x250 mm
Plaster 5 mm
Tiles 150x150x10 mm

Roof construction, 1:20

Railing

Steel beam
Bolts

Concrete slab 450 mm

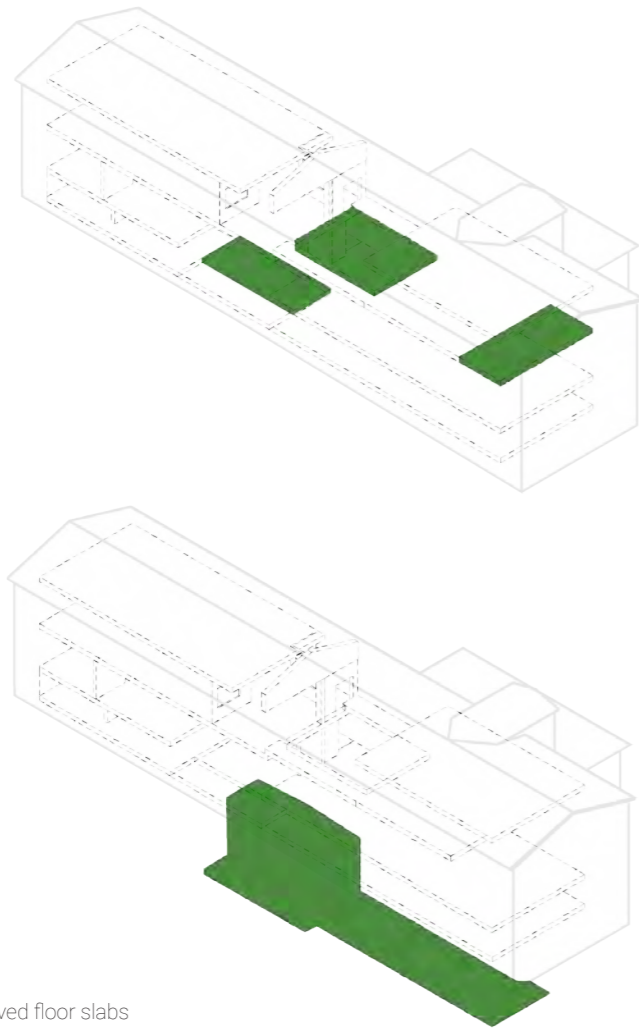
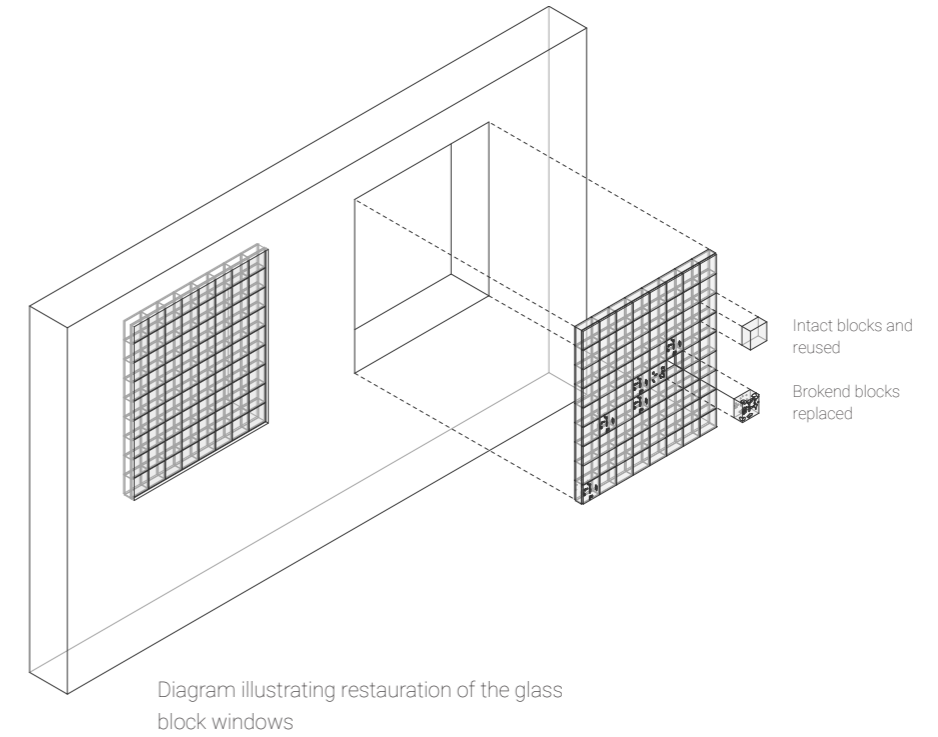


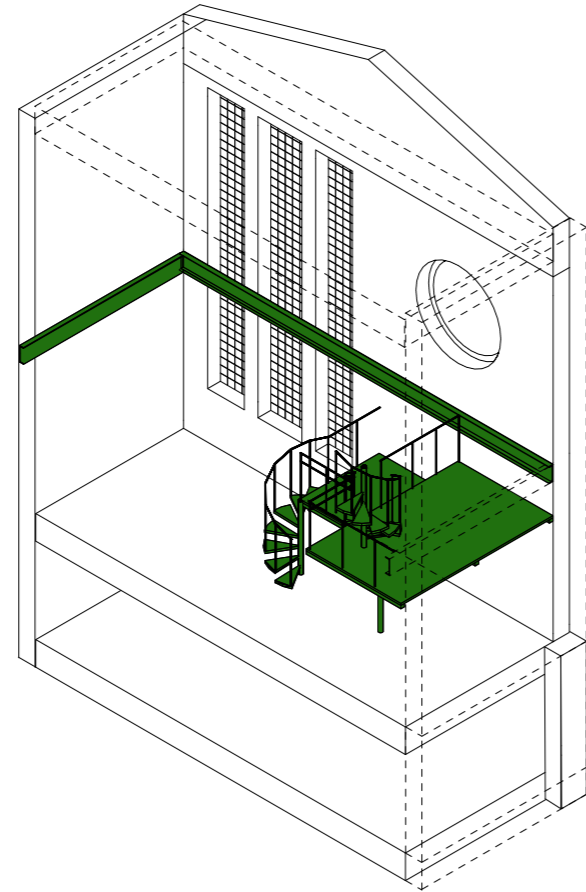
Diagram illustrating how to reuse removed floor slabs

Building and sustainability

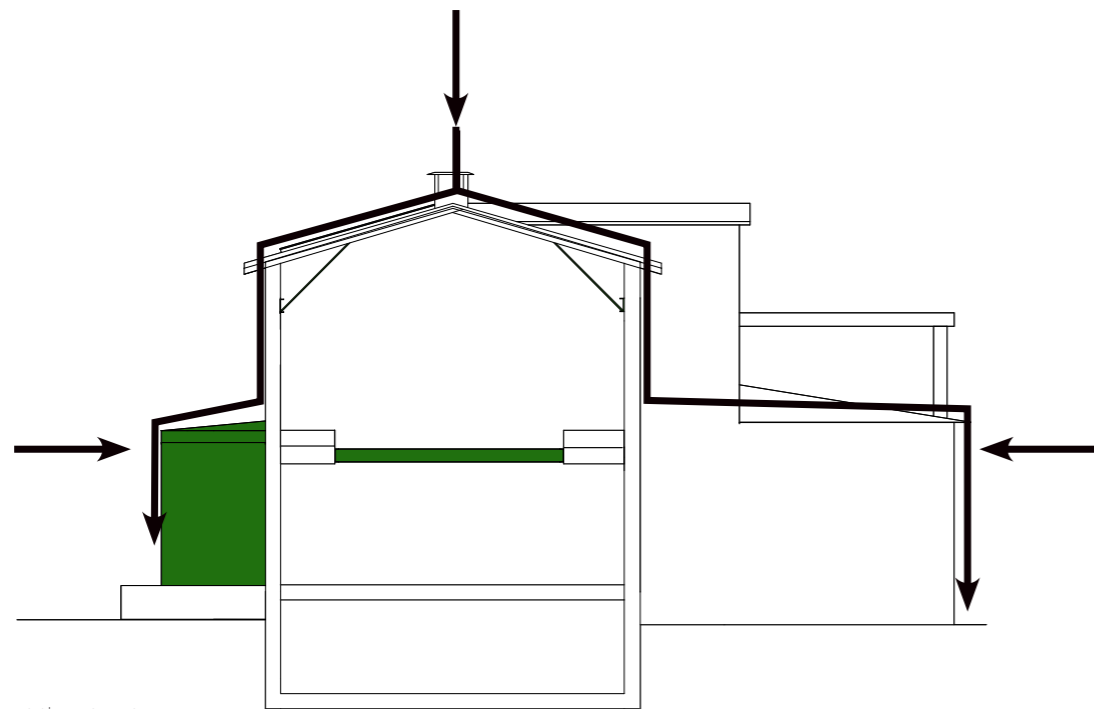
Efforts are taken to reduce the material consumption in the transformation, largely focused on reuse of materials within the building itself. The concrete removed from the floor slabs are reused as building material for the entrance addition, either as entire sections or as filling material. Furthermore, when glass brick windows are removed, the functioning bricks are

used to restore those with broken parts. In that way, the finish of all bricks in the same windows are kept the same, hence an instance of restoration.





Beams and platforms stabilising the new facade and the removed floor slab. The same reinforcement method is used for all floor slab openings.



The addition helps to support the structure and stabilising the exterior wall.

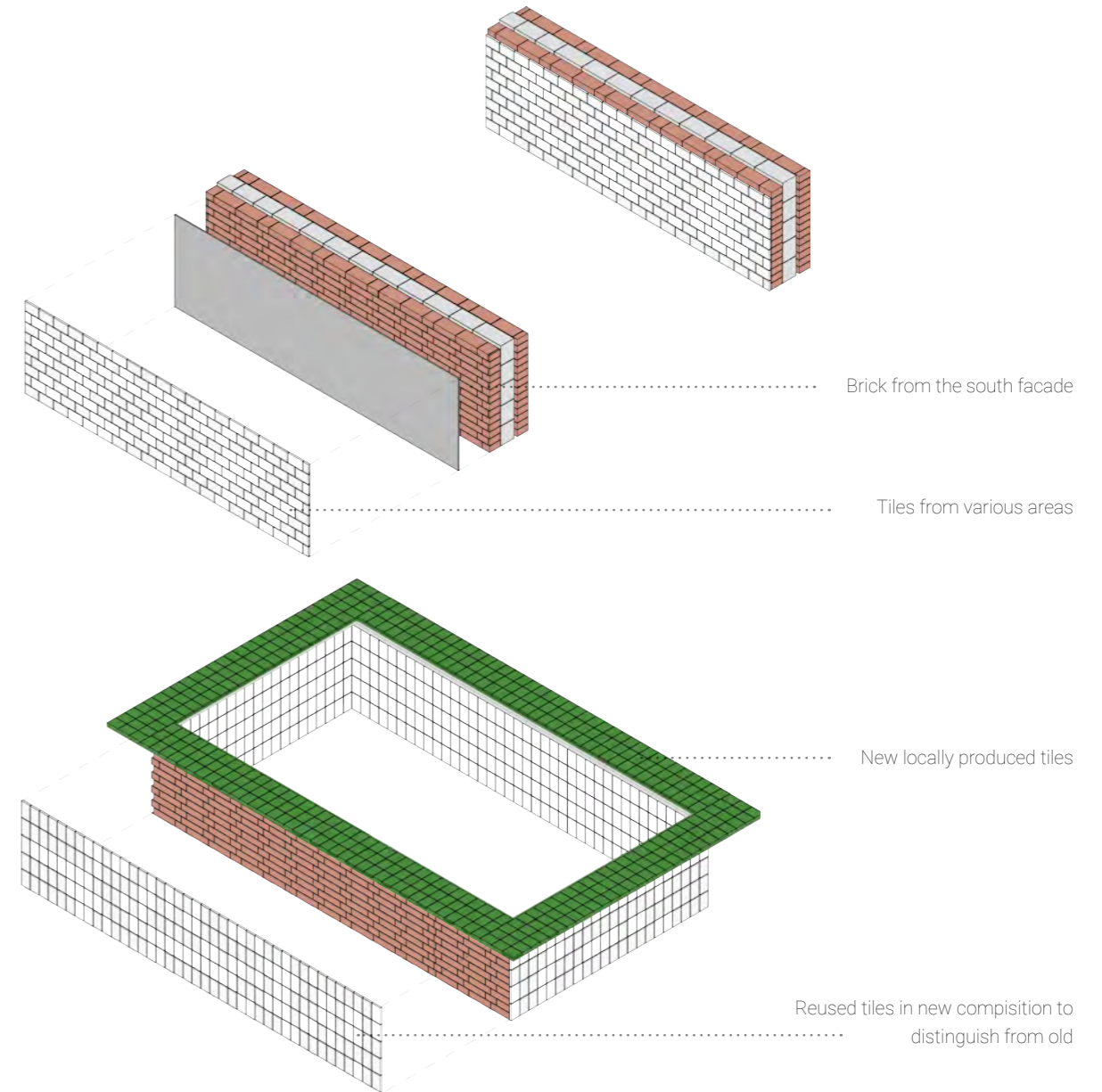
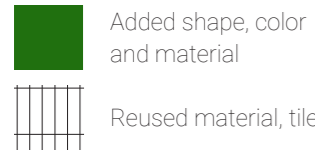


Diagram illustrating tiles and brick in new use

Bars and counters

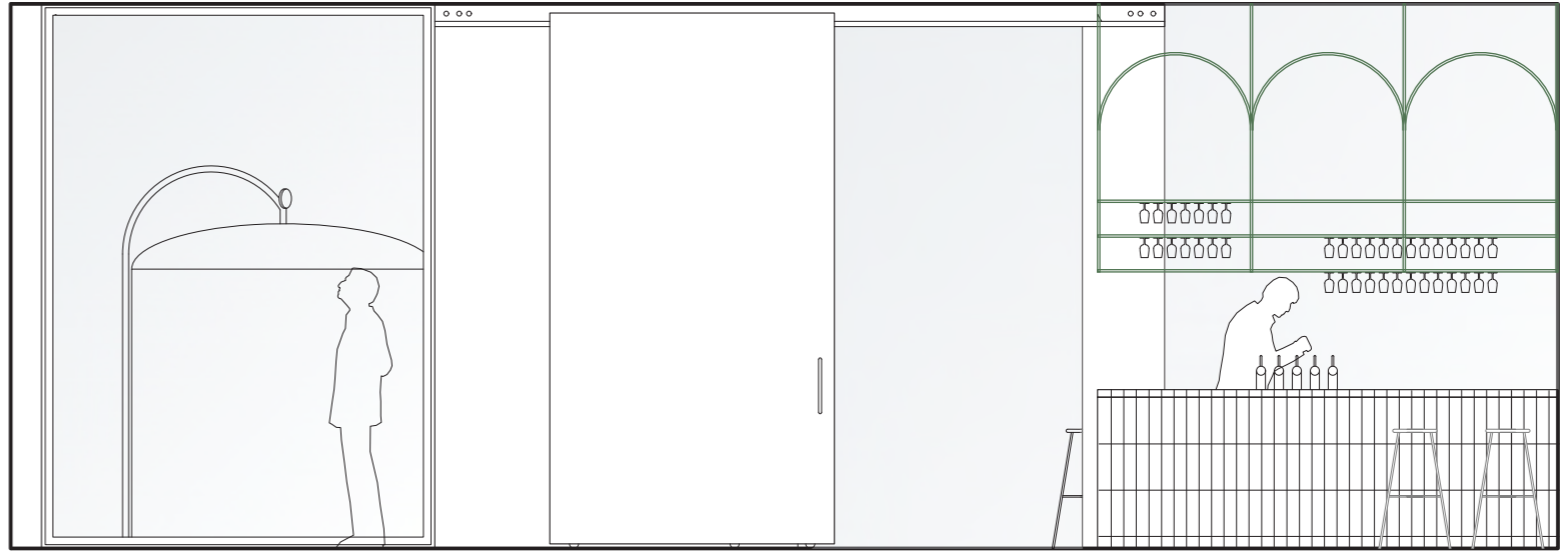
From the interior walls removed, the tiles are to be taken down and reused, however in a new execution to make the reuse process visible to the public. The tiles are used in bars and counters, although oriented in a vertical grid contrasting the original brick formation. The construction material of the bars themselves is the bricks taken down from the south facade. To

the largest extent possible, local materials and local contractors are to be used as it is the essence of the project concept, but it is also a way to minimise transportations. Therefore, where new materials are needed and suitable for product display, such as the table tops of the bars, local tiles from Hjobergs Kakelmakeri are used.

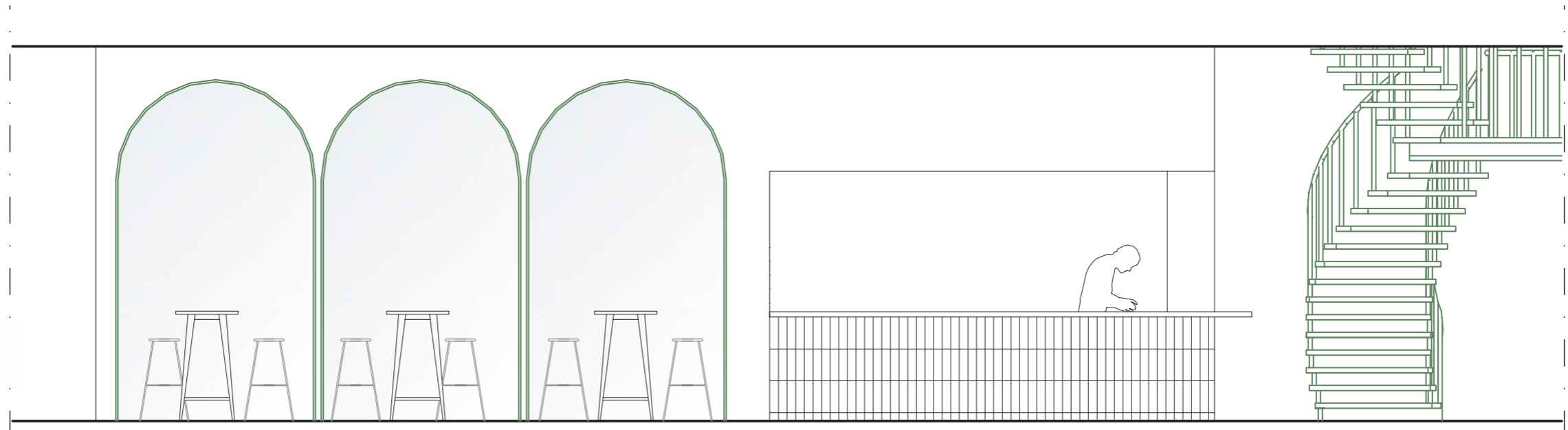
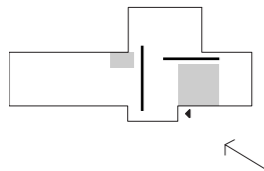


The character of the bars



All the bars and counters keep the same general design. The bars are classed with the reused tiles oriented in a vertical grid and fitted with a new table top of tiles from Hjobergs tilemakers. Other structural elements needed in or in proximity to the bars are designed using the design strategies of a coherent soft and organic shape, a green colour indicating it as an addition to the building and the same steel found around all similar additions. This creates a cohesive experience for the visitor where the familiarity of the shape, colour and material is found throughout the building's interior.



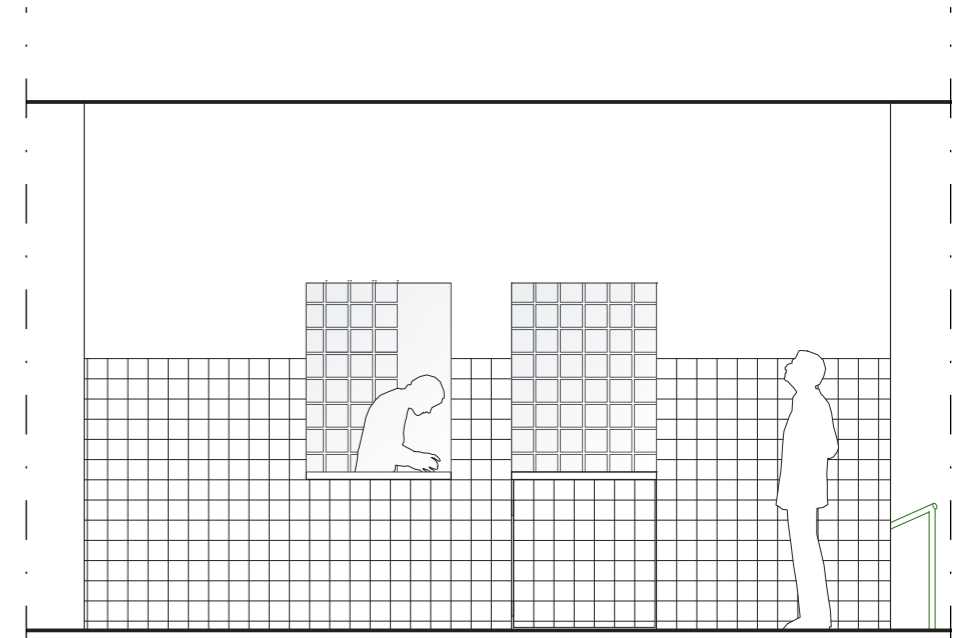
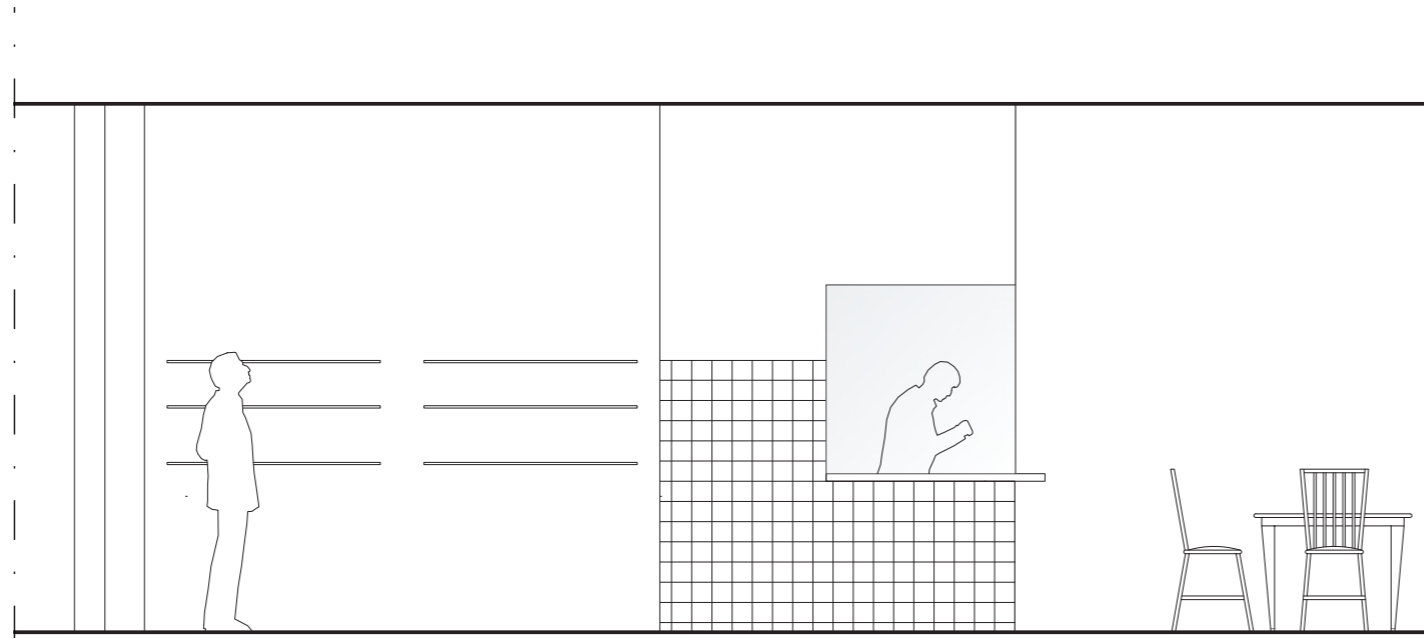
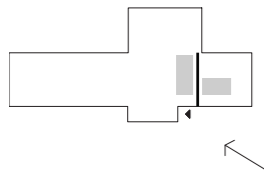
Interior views
1:50
Floor 1 brewery and bakery



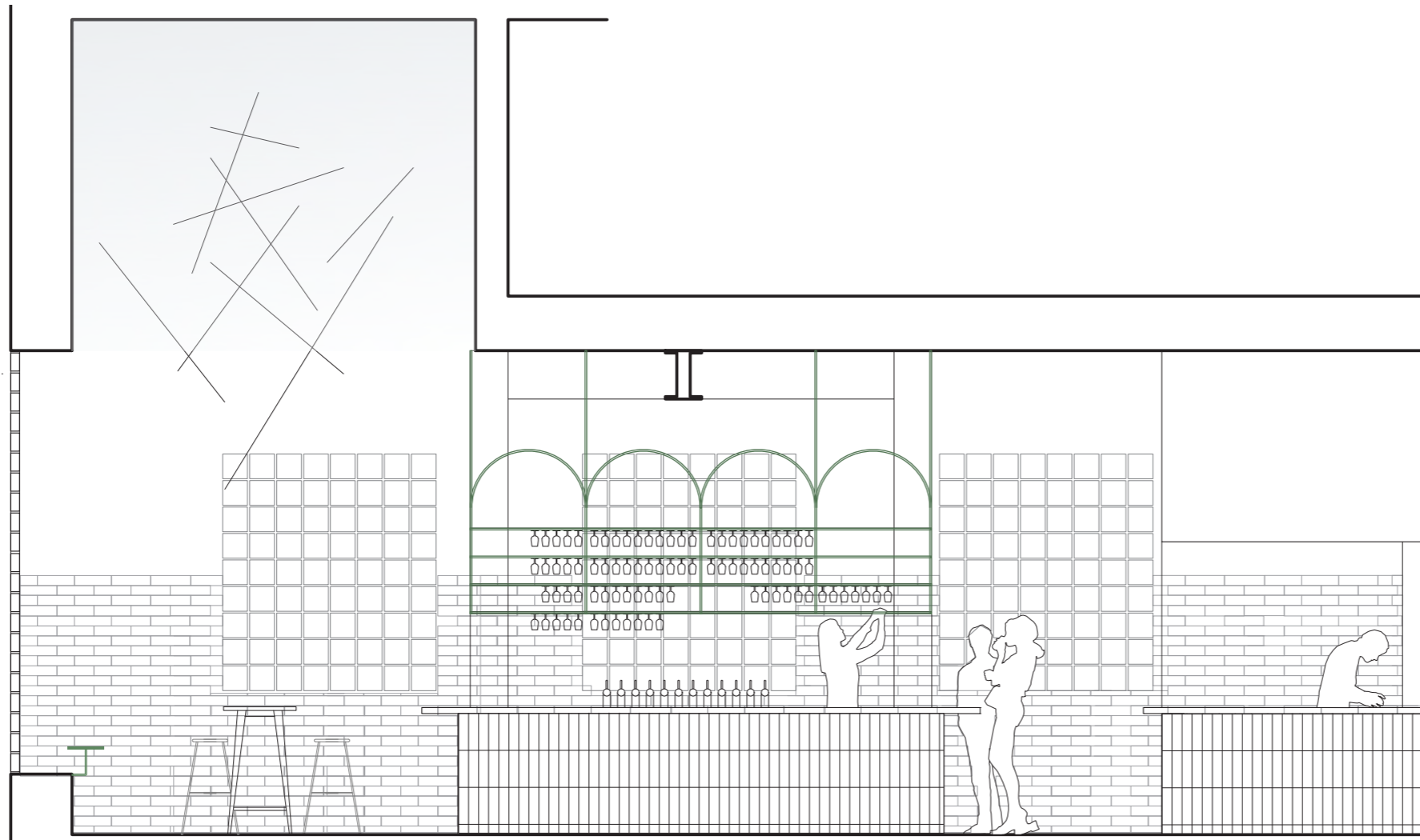
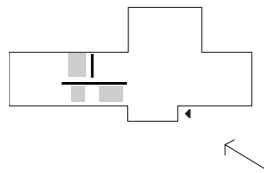
Architectural concept

-  Added shape, color and material
-  Reused material, tiles

Interior views
1:50
Floor 2 Food kiosks

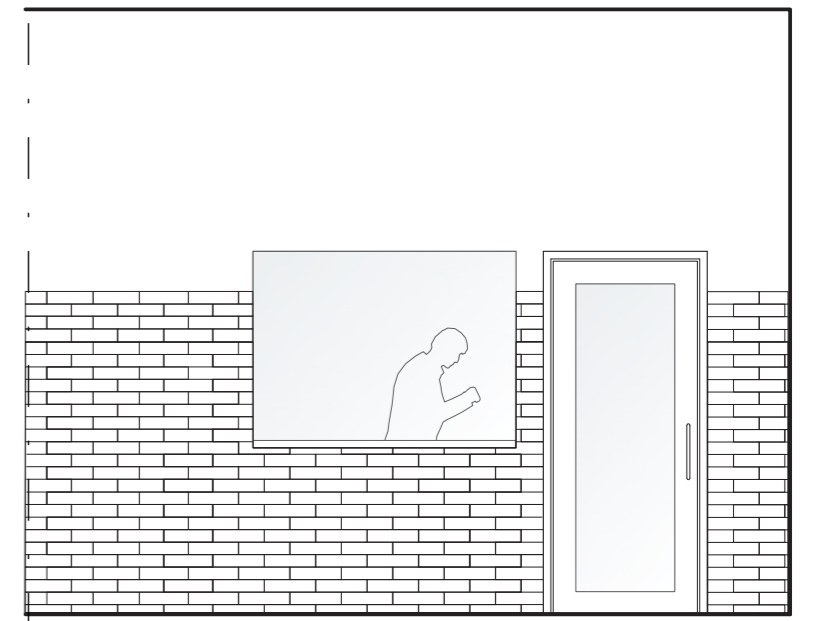


Interior views
1:50
Floor 2 Food kiosks and bar

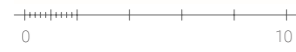


The kiosks

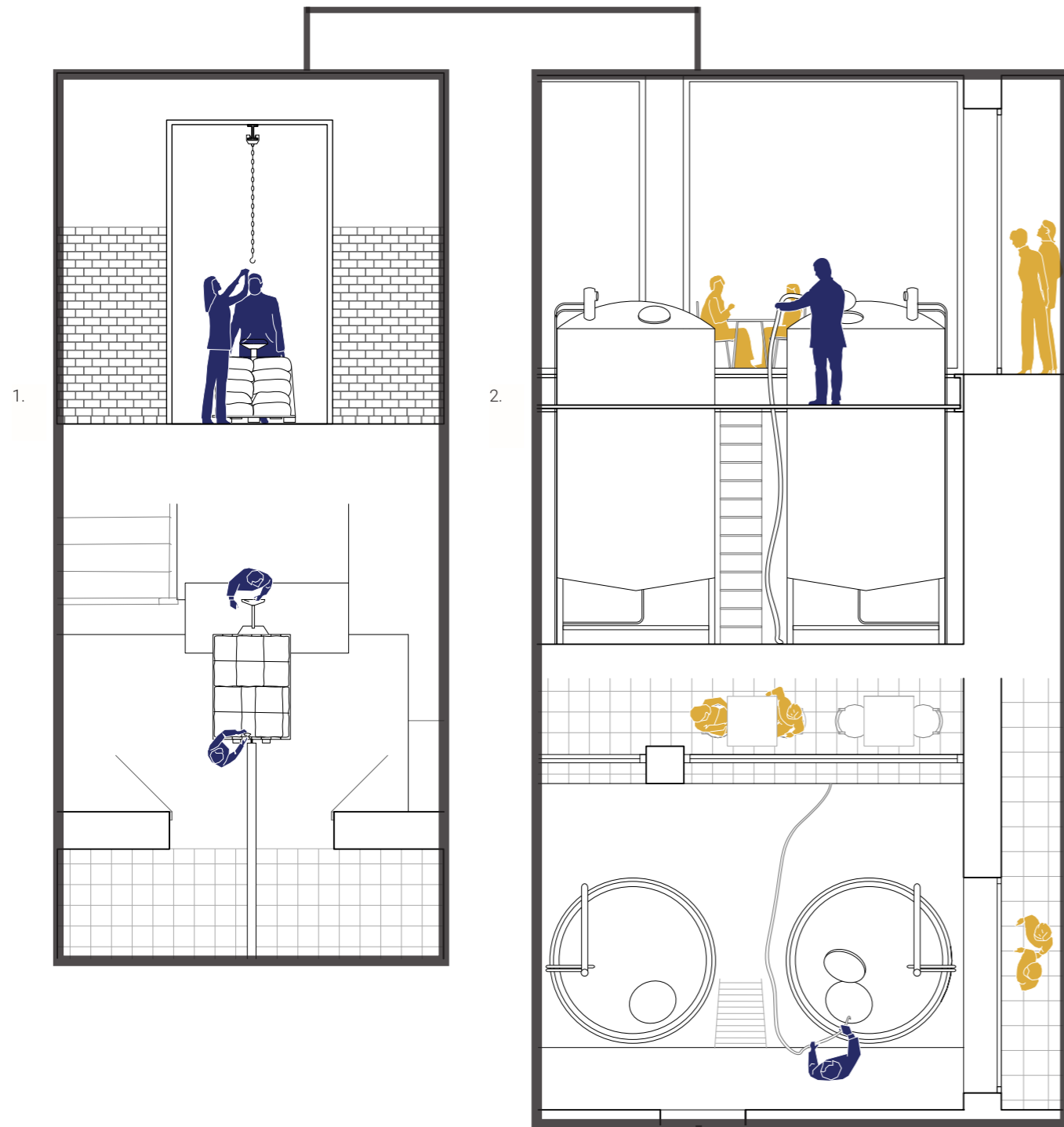
The producers' kiosks are created by either making holes in existing walls or by using pre-existing door openings, and hence they don't need the new counters. The small kiosks are to be universally used by various producers and are therefore not designed for one permanent vendor.



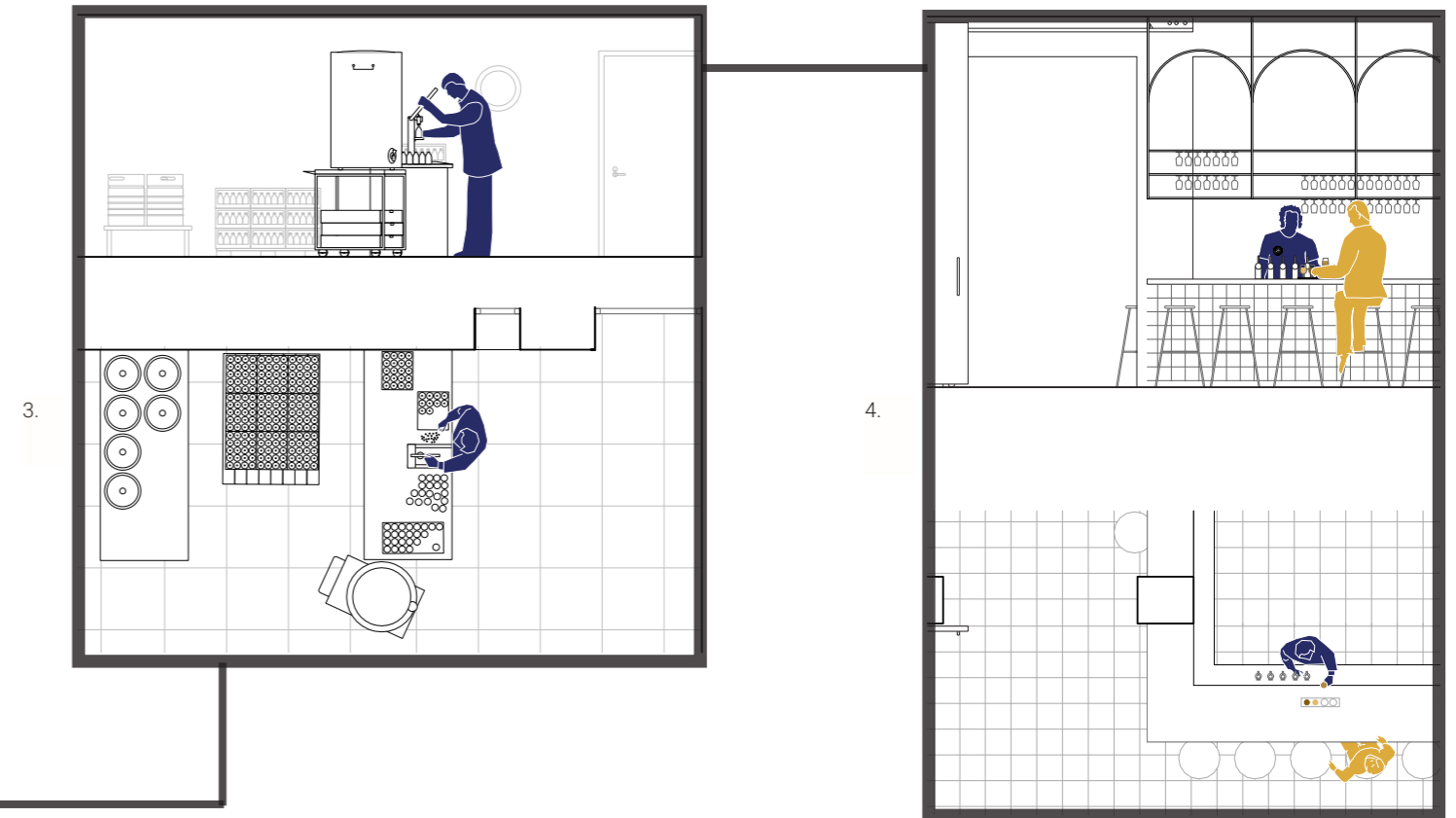
Production System of the brewery



- Visitors
- Staff



Design of bottle, coaster and glas

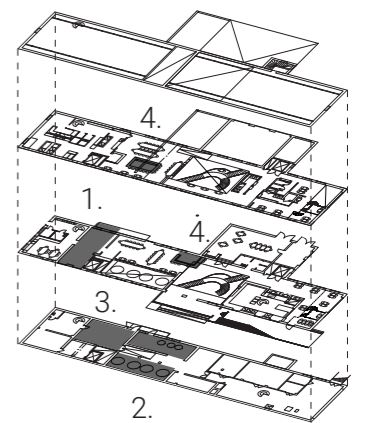


The production - Beer

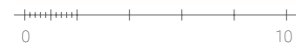
Production is at the heart of the building's permanent program. Throughout the process, visitors are invited to visually interact with the producers along the line of production.

Below the scenes of the production process is illustrated:

1. The loading of wheat and hops into the building
2. Brewing, fermentation and processing is done in the basement, the opening of the floor slabs provides visibility for visitors.
3. The beer is tapped onto bottles and kegs for distribution within the building (and to external interestants).
4. The finished product is served to visitors.



Production System of the bakery



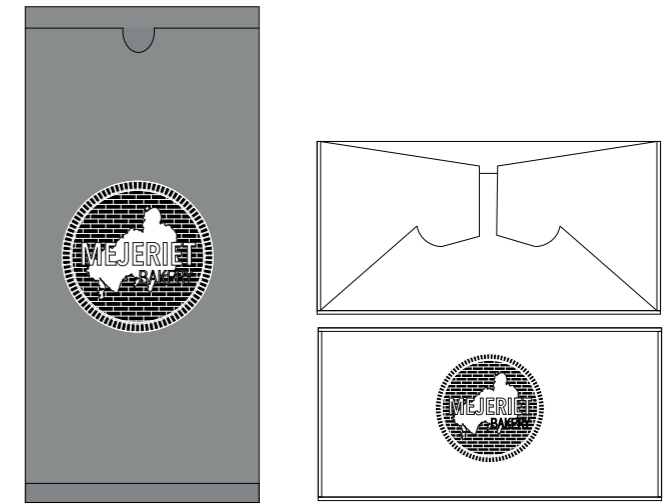
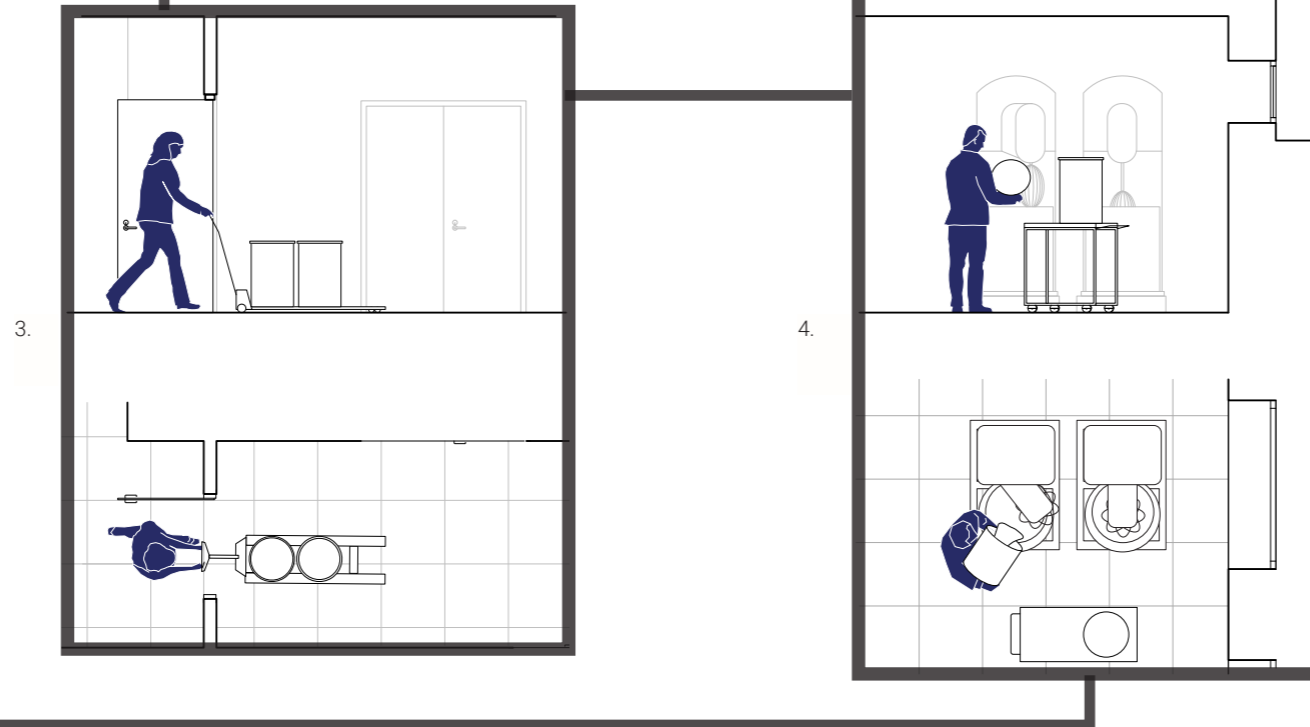
- Visitors
- Staff

The production - Bread

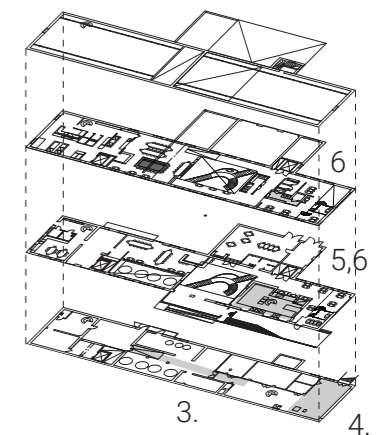
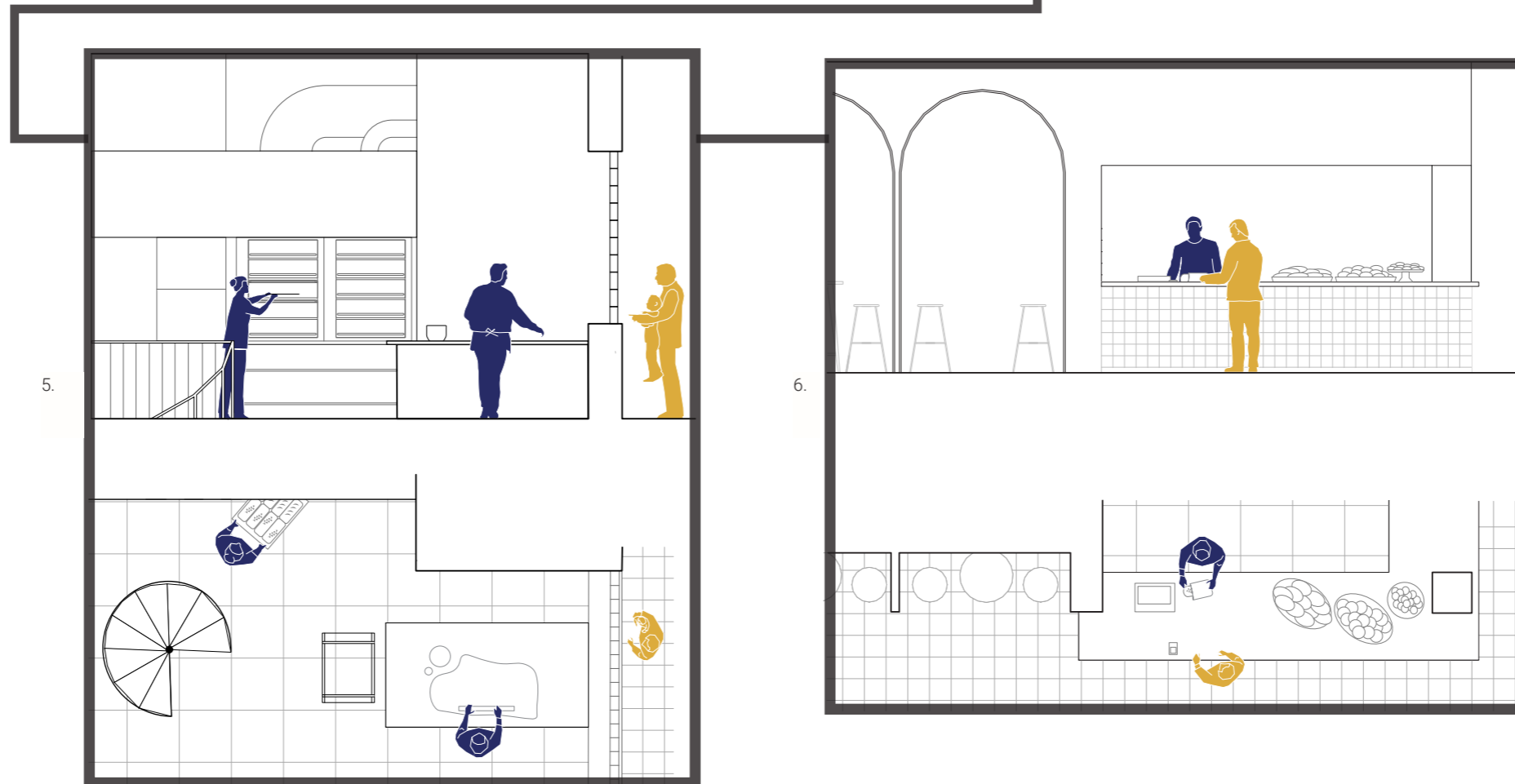
Using the leftovers from the beer making, the bread production is a continuation of the beer production. It is also later possible for left overs from bread production to reenter the chain of beer production.

Continuing on the bread chain of production:

3. Leftovers from beer production are transported to the bakery.
4. Large scale preparation taking place in the basement. Transported to the entrance floor through a food elevator.
5. Shaping and baking of the bread occurs in visibility of the visitor.
6. The finished product is served to visitors.



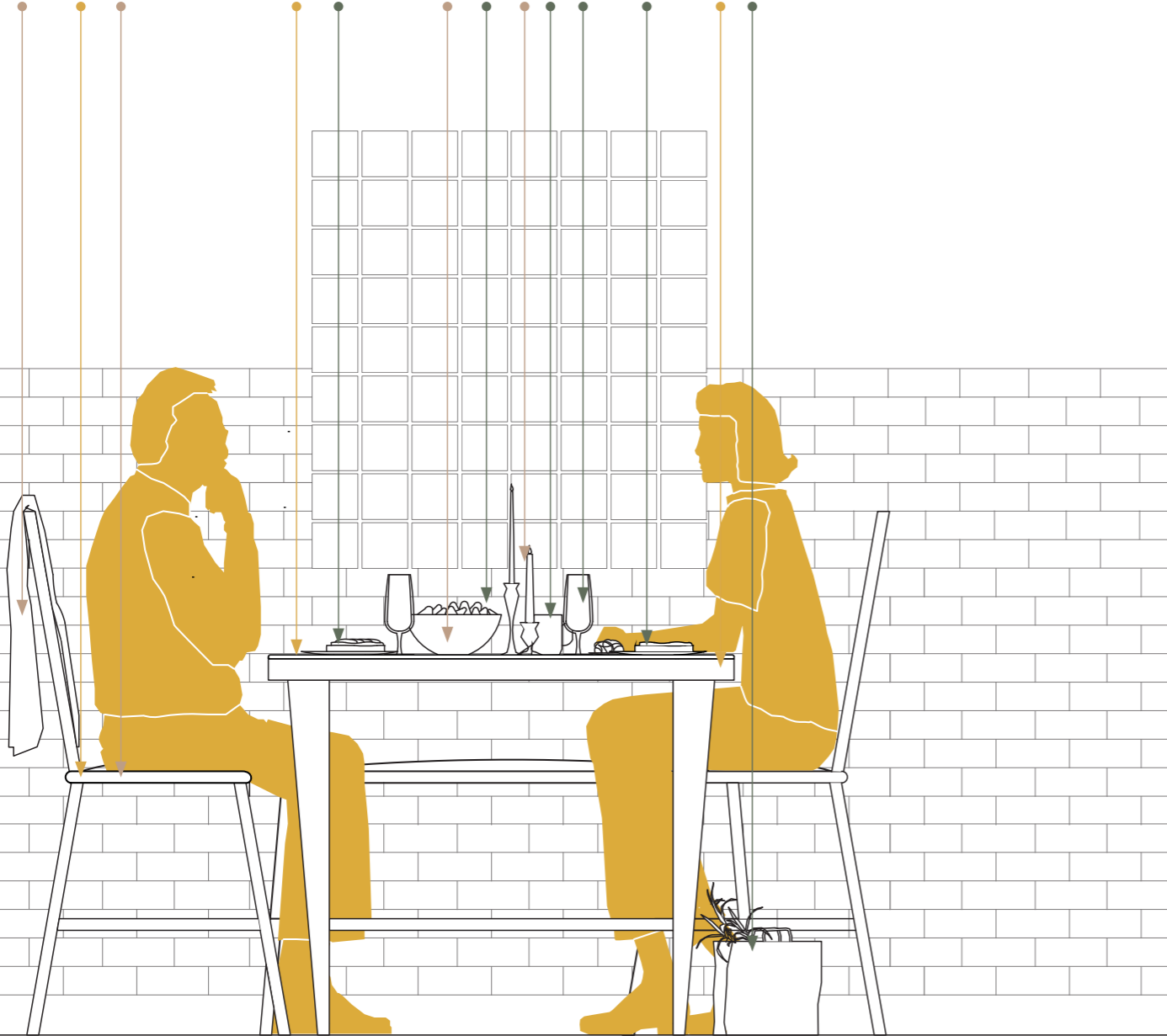
Design of paper bag and cartong



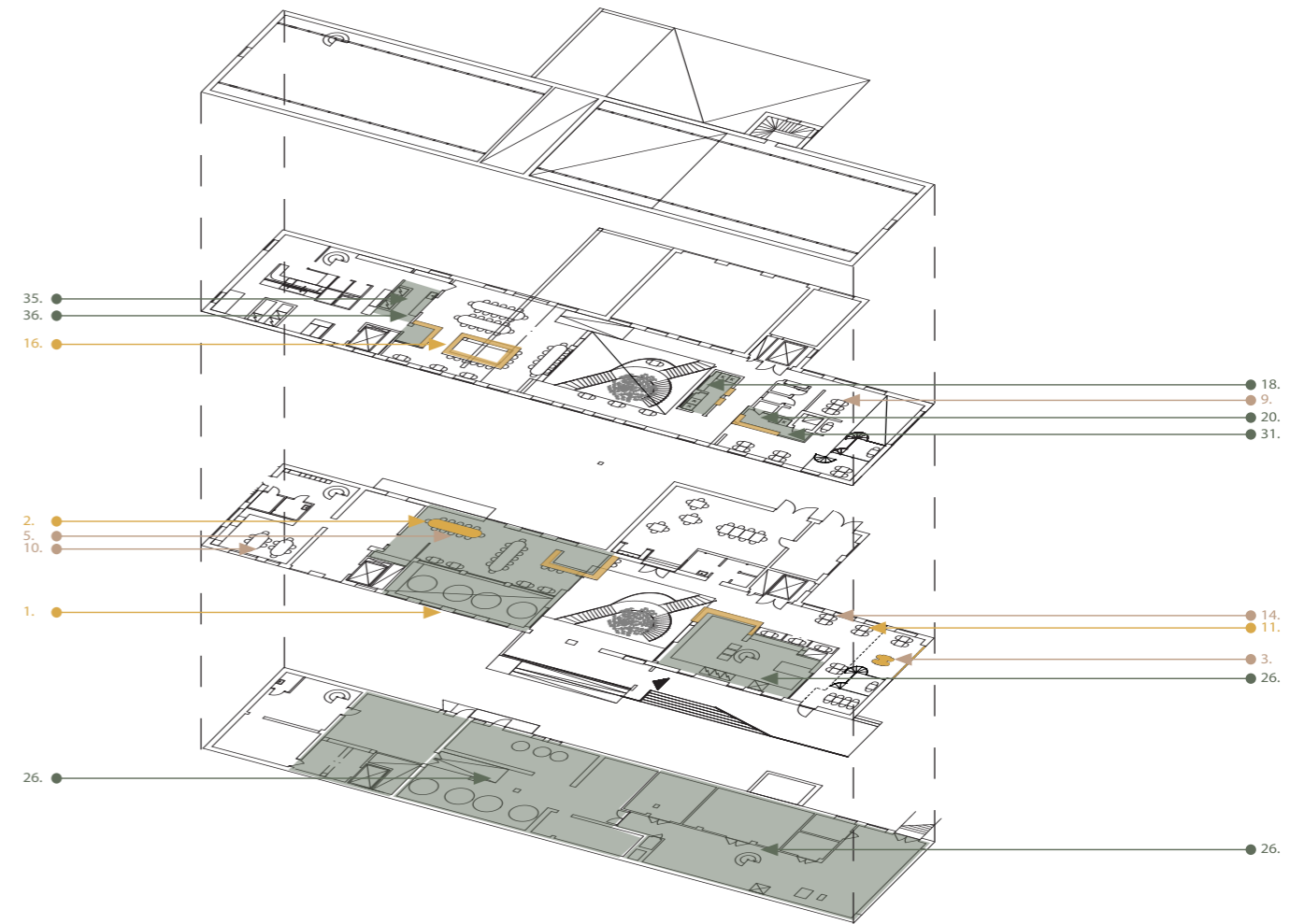
Scales of locality
Visitors

- Manufacturers — Hardworks
- Arts and crafts — Detailing and utilities
- Producers — Food and beverages

5. 2. 9. 16. 35. 3. 31. 14. 20. 29. 26. 11. 21.

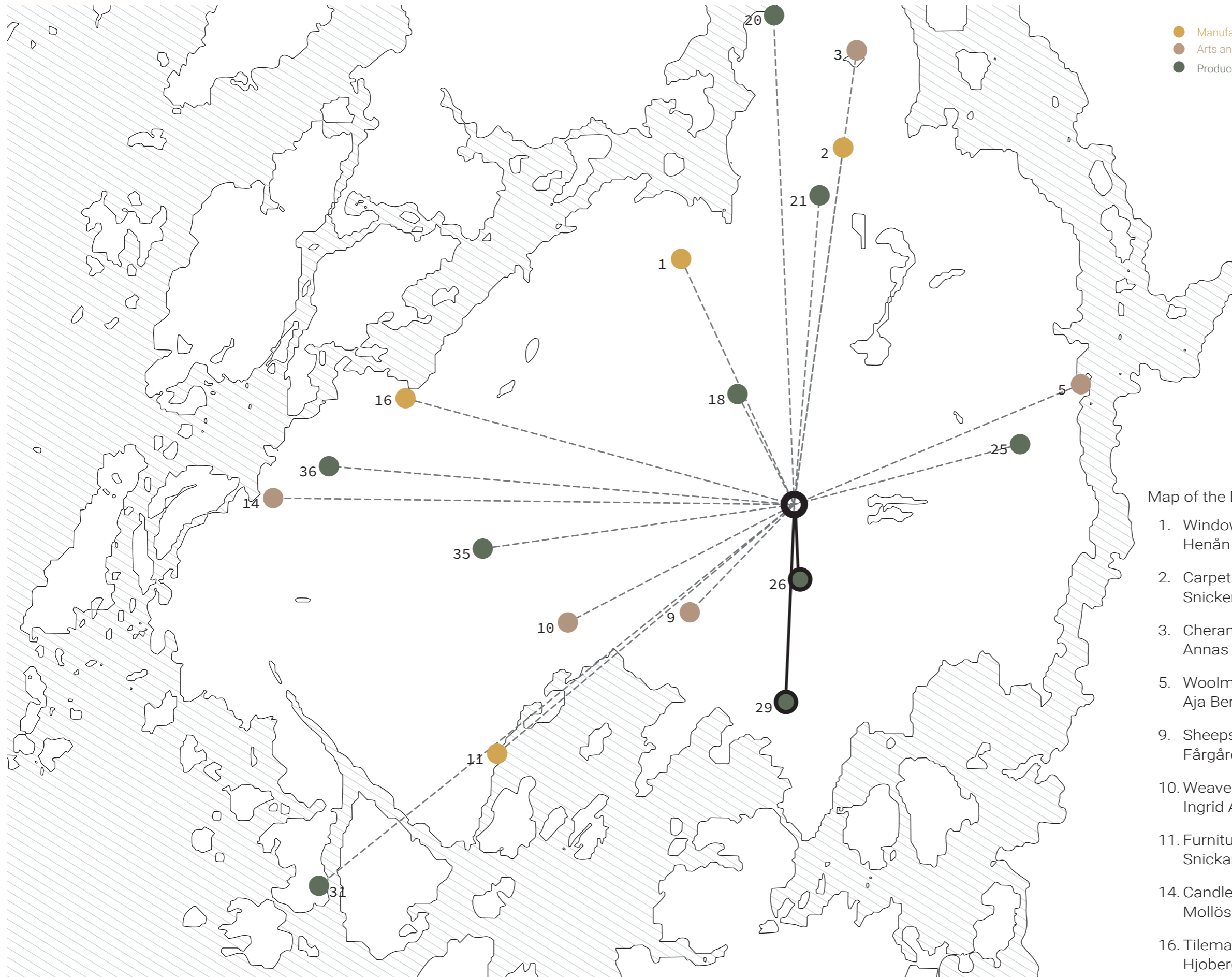


Scales of locality
Mejeriet



Building and sustainability

- | | | |
|------------------------------------|------------------------------------------|-------------------------------------|
| 1. Windows Henån Glasmästeri | 11. Furniture Carpetner Snickarepeter | 25. Beef Rödets gårs |
| 2. Carpetner Snickeriet i Ström | 14. Candlemakers Möllösundsljus | 26. Bread Herr bröd |
| 3. Ceramics Annas keramikbod | 16. Tilemakers Hjobergs Kakelmakeri | 29. Brewery Orust Ölfabrik |
| 5. Woolmaker Aja Bergstrand | 18. Egg and vegetables Häröds Gård | 31. Clams Scanfjord Möllösund AB |
| 9. Sheepskin Fårgården i Stala | 20. Coffee roastery Markgrens Mörka | 35. Lamb, smokery Håvs Lamm |
| 10. Weavery Ingrid Andersson | 21. Dairy Torp Farm | 36. Potatoes Sörbo Gård |



- Manufacturers
- Arts and crafts
- Producers
- Hardworks
- Detailing and utilities
- Food and beverages

Map of the Dairy factory content.

- | | |
|------------------------------------------|----------------------------------------|
| 1. Windows Henån Glasmästeri | 18. Egg and vegetables Häröds Gård |
| 2. Carpetner Snickeriet i Ström | 20. Coffee roastery Markgrens Mörka |
| 3. Cheramics Annas keramikbod | 21. Dairy Torp Farm |
| 5. Woolmaker Aja Bergstrand | 25. Beef Rödets gårs |
| 9. Sheepskin Fårgården i Stala | 26. Bread Herr bröd |
| 10. Weavery Ingrid Andersson | 29. Brewery Orust Ölfabrik |
| 11. Furniture Carpetner Snickarepeter | 31. Clams Scanfjord Mollösund AB |
| 14. Candlemakers Mollösundsljus | 35. Lamb, smokery Håvs Lamm |
| 16. Tilemakers Hjobergs Kakelmakeri | 36. Potatoes Sörbo Gård |

REFERENCES

General references

Bloszies, C. (2011). *Old buildings, new designs : Architectural transformations*. Princeton Architectural Press.

Bosse Lagerqvist, B.L (2021, October 4). Conservation approaches. Seminar Chalmers.

Muñoz Viñas, M.V. (2005) *Conservation Theory: Contemporary theory of Conservation*. Oxford.

Dokter, G., Thuvander, L., & Rahe, U. (2021). How circular is current design practice? Investigating perspectives across industrial design and architecture in the transition towards a circular economy. *Sustainable Production and Consumption*, 26, p. 692-708

Gilliam Dokter, G.D (2021, October 25). Environmental Perspectives - Economies. Seminar Chalmers.

Kooperativet. Kooperativet Lindholmen Street Food. Retrieved November 20, 2021, from <https://www.kooperativet.se/streetfood-market/>

Orust Municipality (2021, October 7). About Orust. Presentation Chalmers.

Ola Wettenberg, O.W (2021, September 27). Heritage and transformation. Seminar Chalmers.

Orust Municipality. (n.d.). Orust Municipality. Orust. Retrieved October 4, 2021, from <https://www.orust.se>

Orust Municipality. (n.d.). Orust Maps. Retrieved October 20, 2021, from <https://orust.maps.arcgis.com/home/index.html>

Pintos, P. P. (2021, March 28). Granby Winter Garden. ArchDaily. Retrieved October 17, 2021, from <https://www.archdaily.com/956891/granby-winter-garden-assemble>

Poppels Brewery. Poppels. Retrieved November 20, 2021, from <http://www.poppels.se>

Santibañez, D. S. (2019, July 19). Sala Beckett. ArchDaily. Retrieved November 8, 2021, from https://www.archdaily.com/799128/sala-beckett-flores-and-prats?ad_medium=gallery

Tekniska detaljlösningar - Fasadtegel med bakmur av tegel eller andra stenmaterial Tomas Gustavsson, Föreläsningen bygger till. (2021, October 20). [Slides]. Tekniska Detaljlösningar. https://docplayer.se/5610800-Tekniska-detaljlösningar.html?fbclid=IwAR-0vP6by-J-tNwHrZU0CxTH3rnvUy1xs1hXXgVqH8TIszBVwkB0Ky_xnmJ0

Årsbok. (2021). *Mjölkens historia på Orust (Vol. 1)*. Orusts Släktforskare.

Local Production

Annas Keramikbod. (n.d.). Annas Keramikbod. Retrieved October 20, 2021, from <http://www.annskeramikbod.se>

Gårdsbutiker. Gårdsbutiker. Retrieved October 20, 2021, from https://www.vastsverige.com/sodrabohuslan/listning-mat/gardsbutiker/?fbclid=IwAR1W4buDQf_5wsLZAYgH9csMZ_Ok3tjpmv0wejA-9EN0h3nQVfRBOeE07p64&u=1233

Herr bröd. (2021, October 20). Herr Bröd [Facebook page]. Facebook account. <https://www.facebook.com/herrbrod/>

Hjobergs Kakelmakeri. (n.d.). Hjobergs Kakelmakeri. Retrieved October 20, 2021, from <https://hjobergskakelmakeri.se>

Häröds Gård. (n.d.). Häröds Gård. Retrieved October 20, 2021, from <https://lokalproducerativast.se/producer/harods-gard/>

Mollösundsljus. (2021, October 20). Mollösundsljus och lite till [Facebook page]. Facebook account. <https://www.facebook.com/Mollösundsljus-och-lite-till-111260933586732/>

Orust. (2021, October, 20) Det här händer på Orust [Facebook page]. Facebook account. <https://www.facebook.com/groups/1994299320807266/>

Orust Ölfabrik. (2021, October 20). Orust Ölfabrik [Facebook page]. Facebook account. <https://www.facebook.com/orustoel/>

Reko-ringen Tjörn. (2021, October, 20) Reko-ringen Tjörn [Facebook page]. Facebook account. <https://www.facebook.com/groups/387282255182906/>

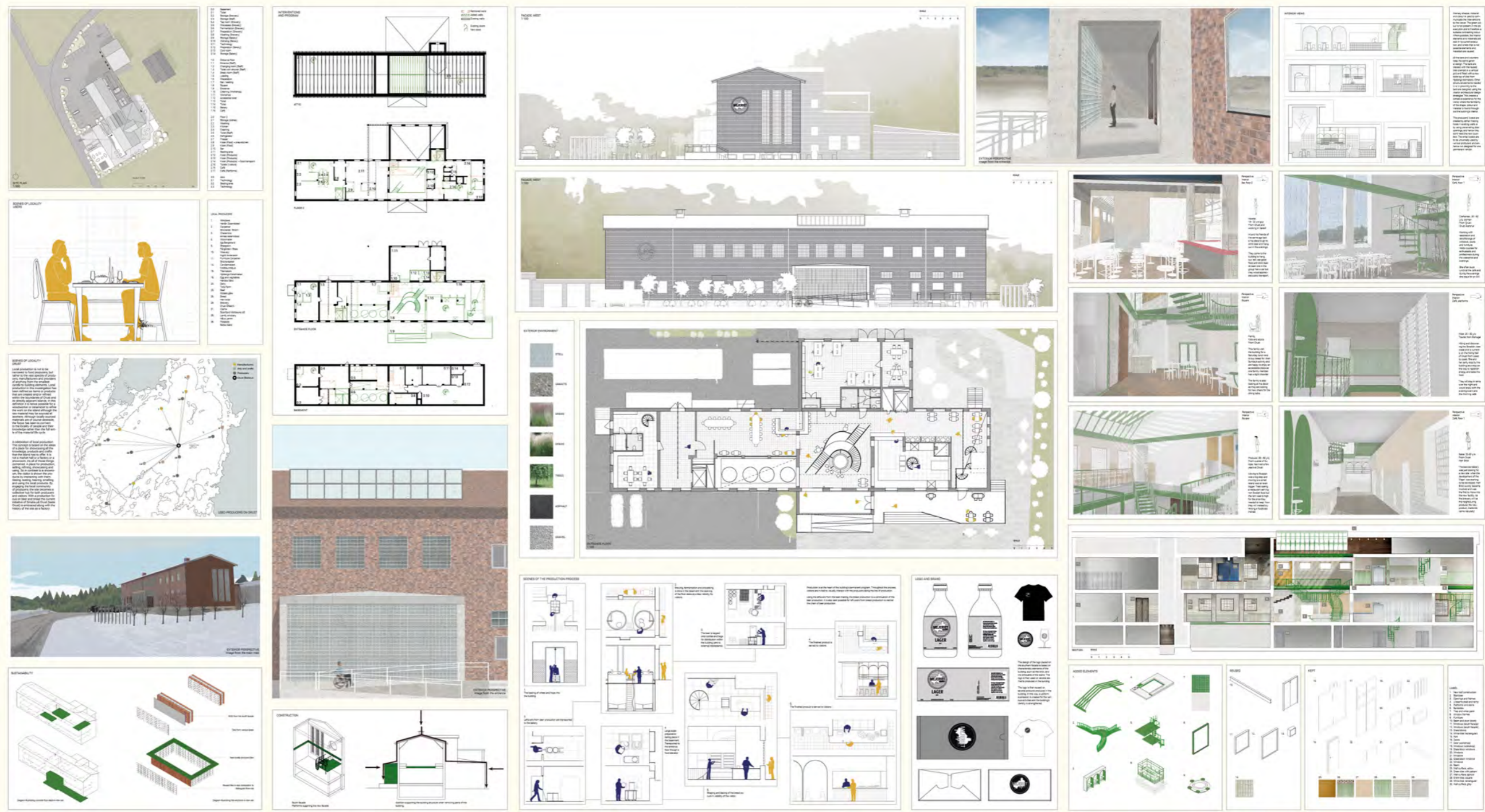
Scanfjord. (n.d.). Scanfjord. Retrieved October 20, 2021, from <https://www.scanfjord.se>

Snickeriet i Strom. (n.d.). Snickeriet i Strom. Retrieved October 20, 2021, from <https://www.snickerietistrom.se>

Torp Farm. (2021, October, 20) Torp Farm [Facebook page]. Facebook account. <https://www.facebook.com/torpfarm/>

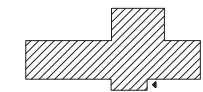
APPENDIX

- » Presentaiton layout
- » Drawings in scale 1:100
 - » Plans
 - » Facade
 - » West
 - » South
 - » East
 - » North
- » Section
- » Details in scale 1:20
(if not else stated)



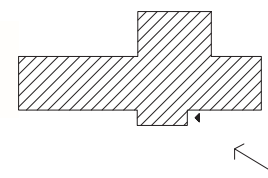
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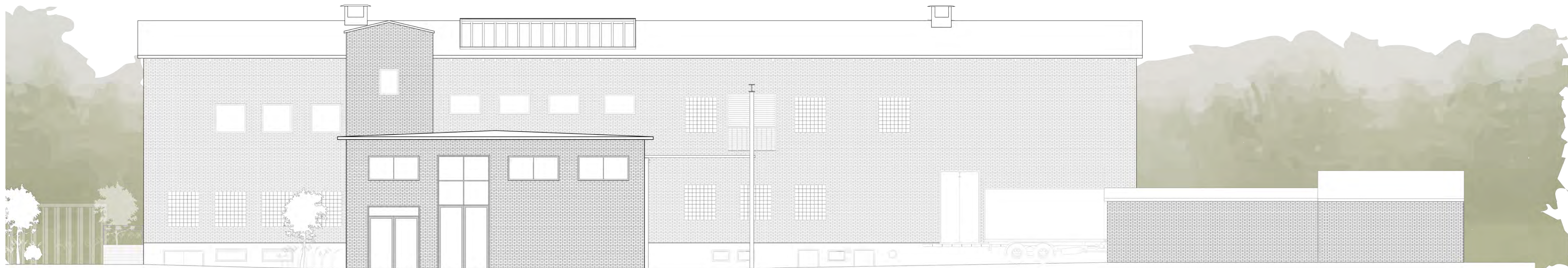
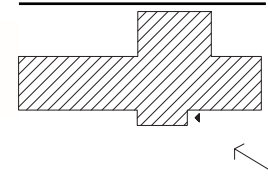
Facade
1:100
West

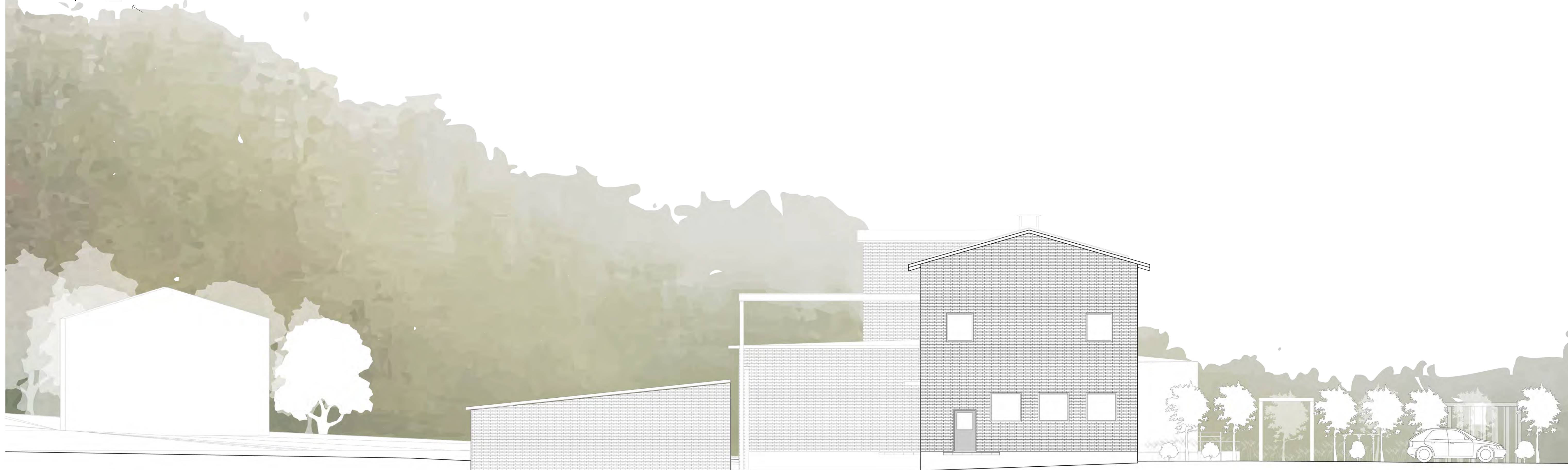
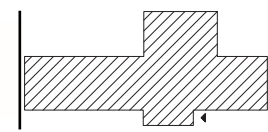


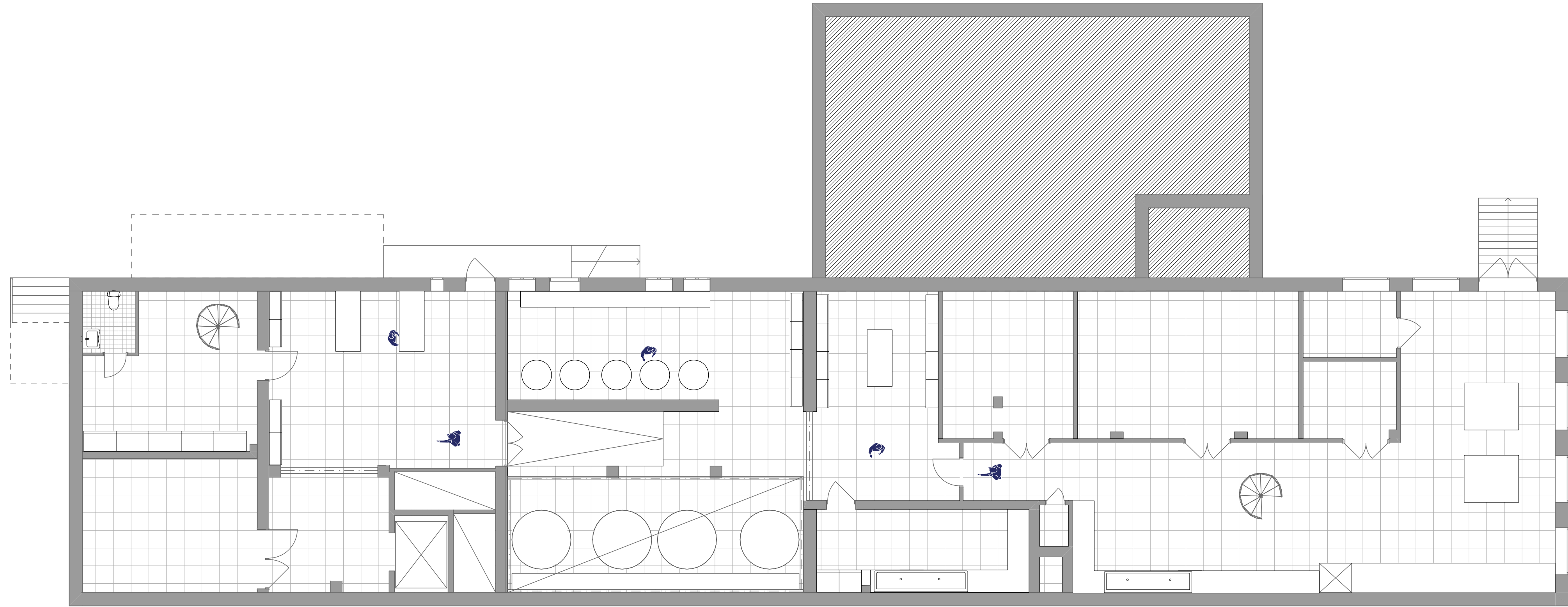
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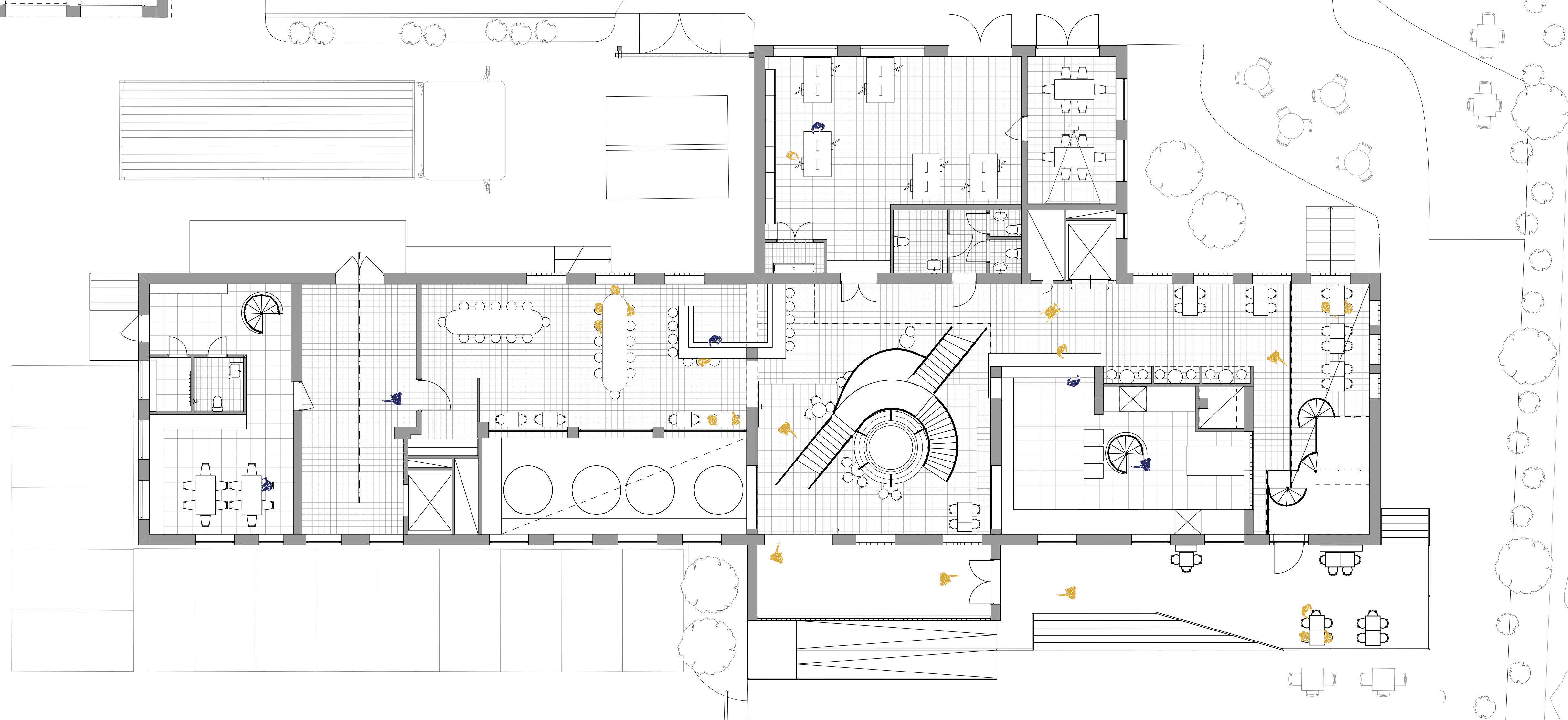


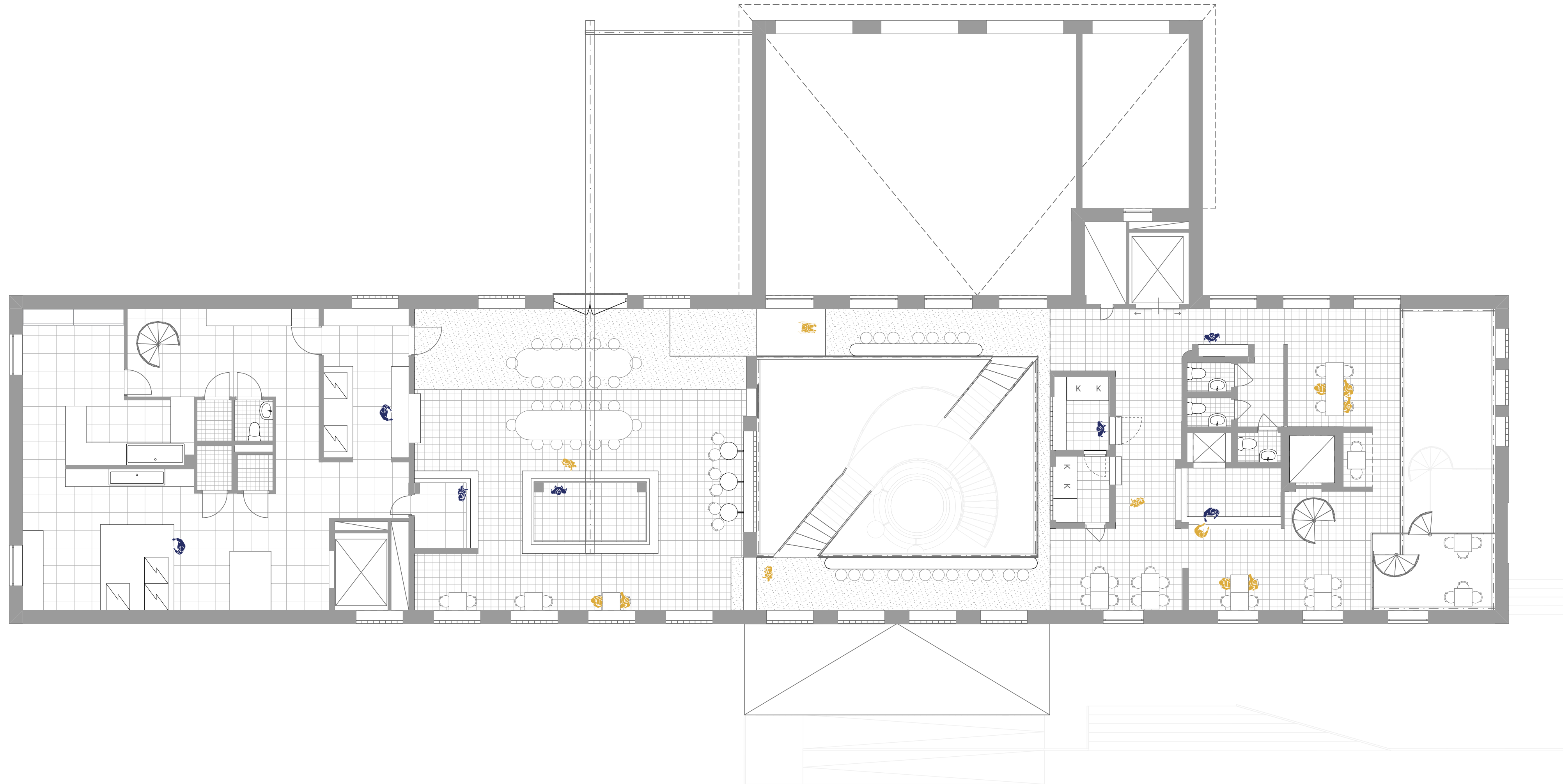


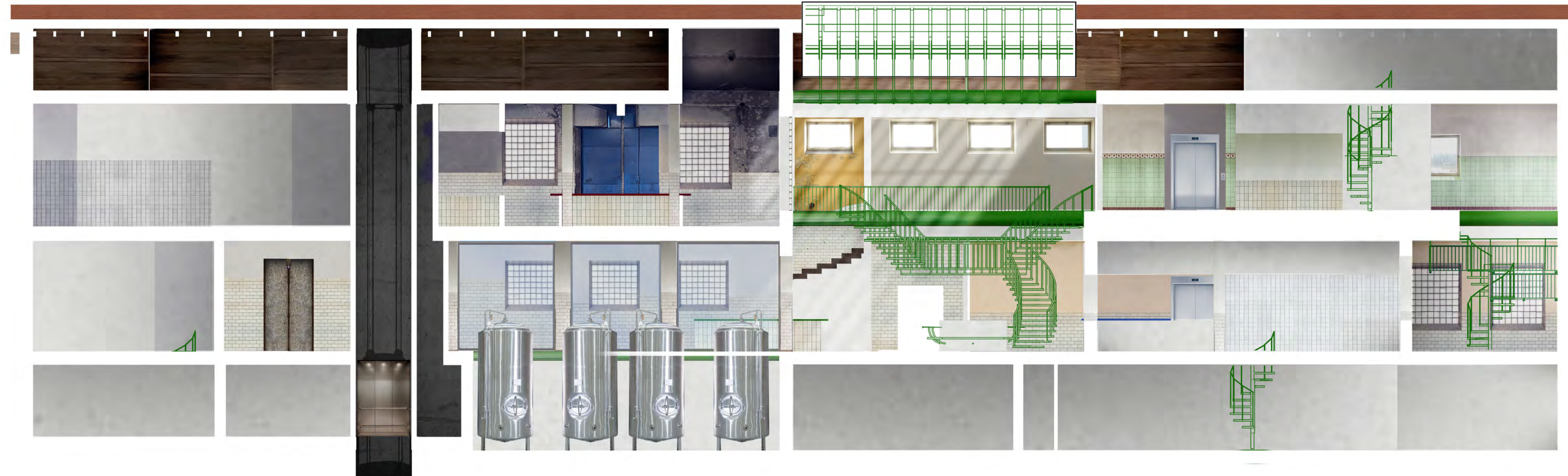
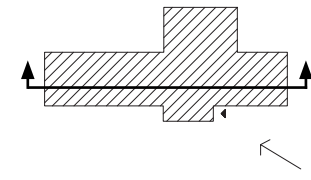


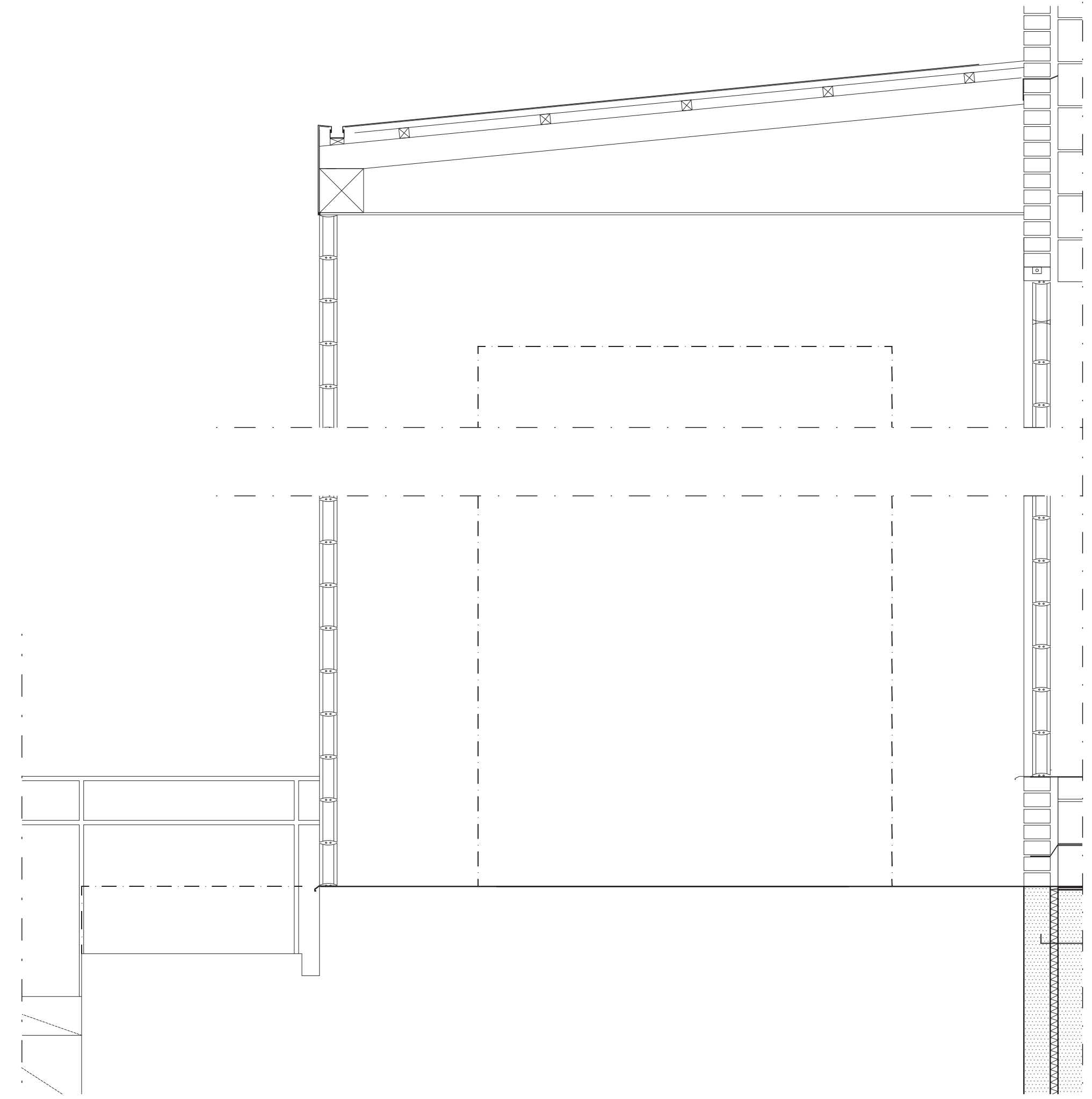
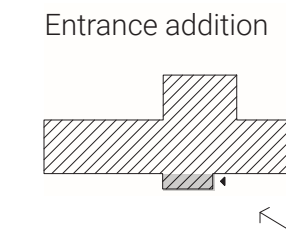
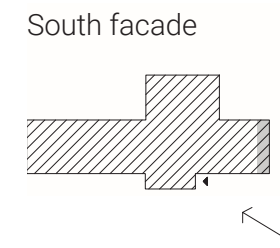
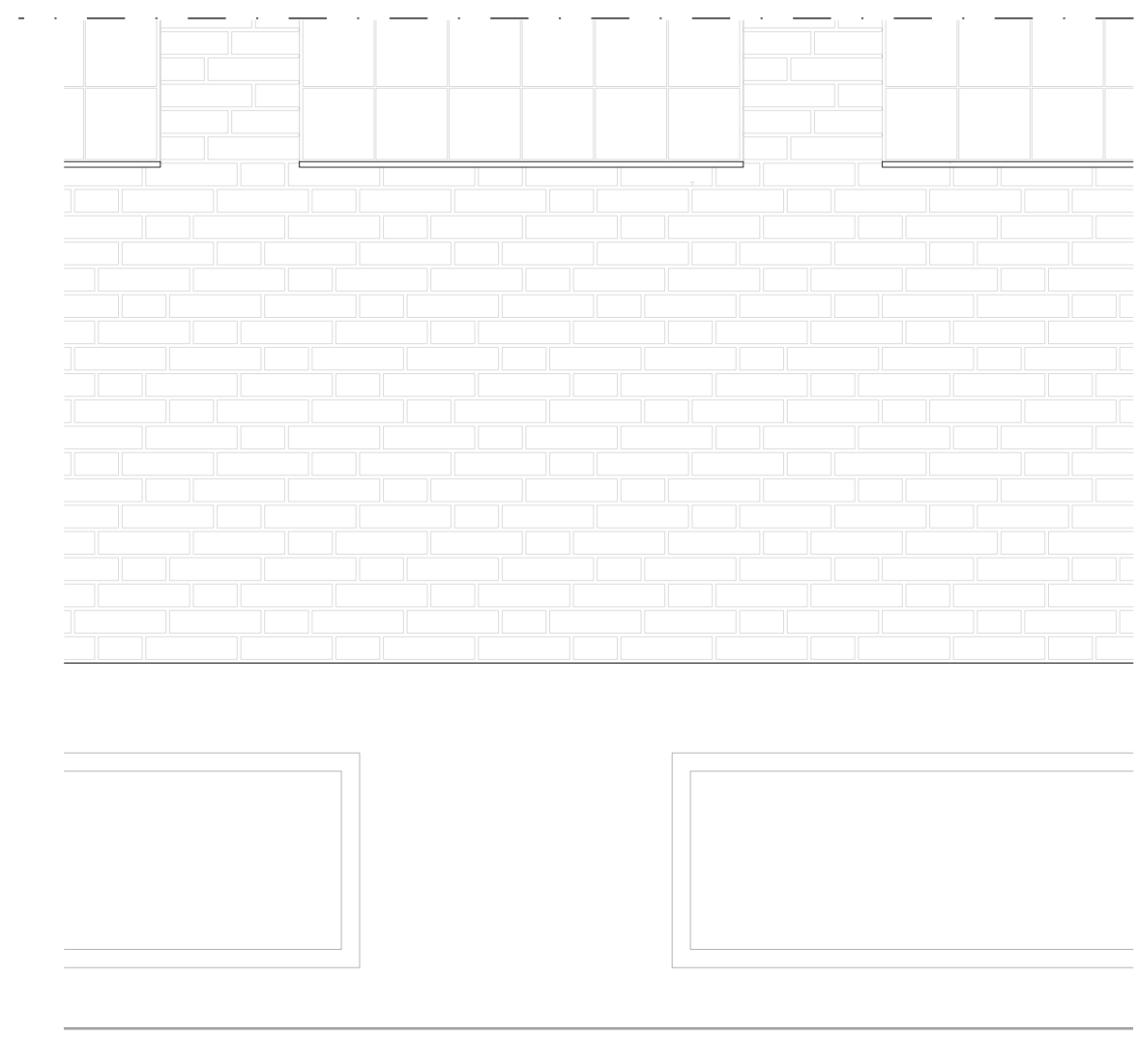
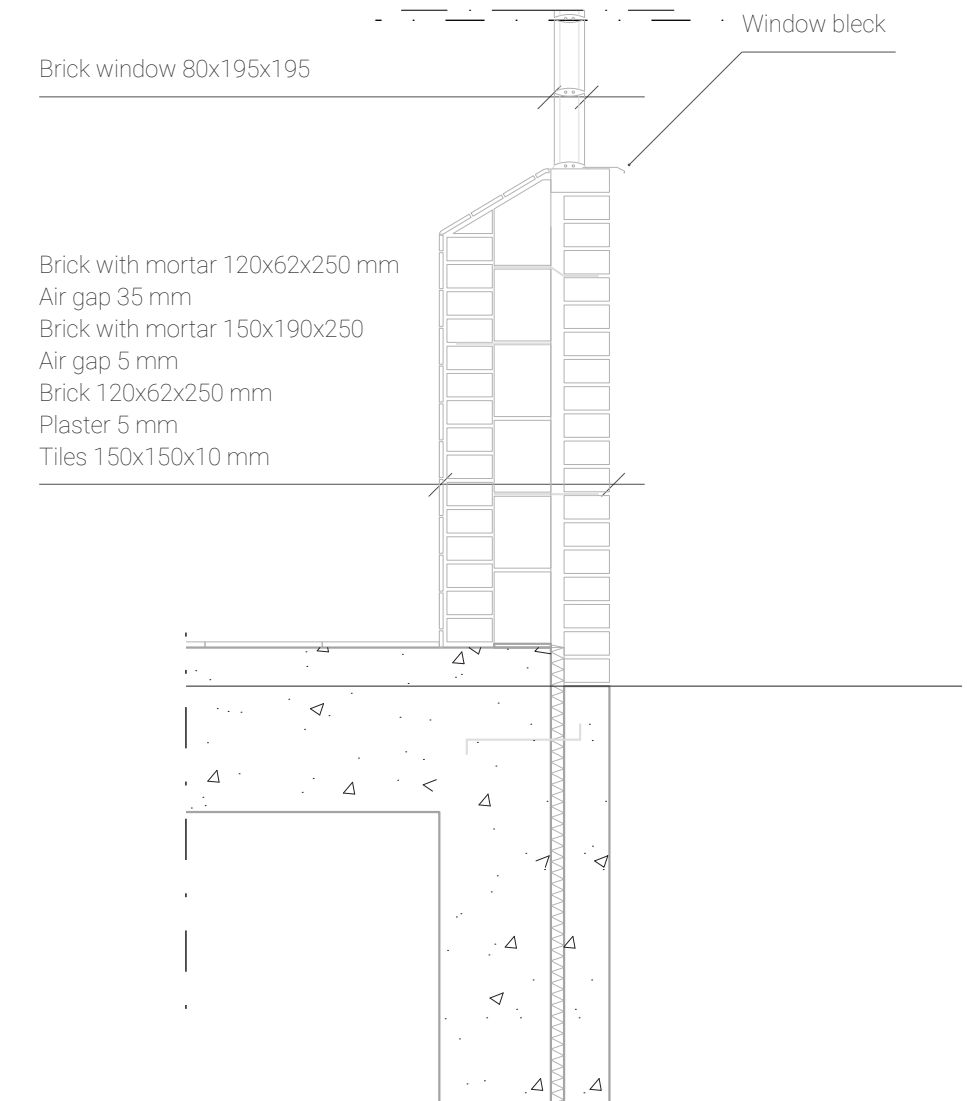
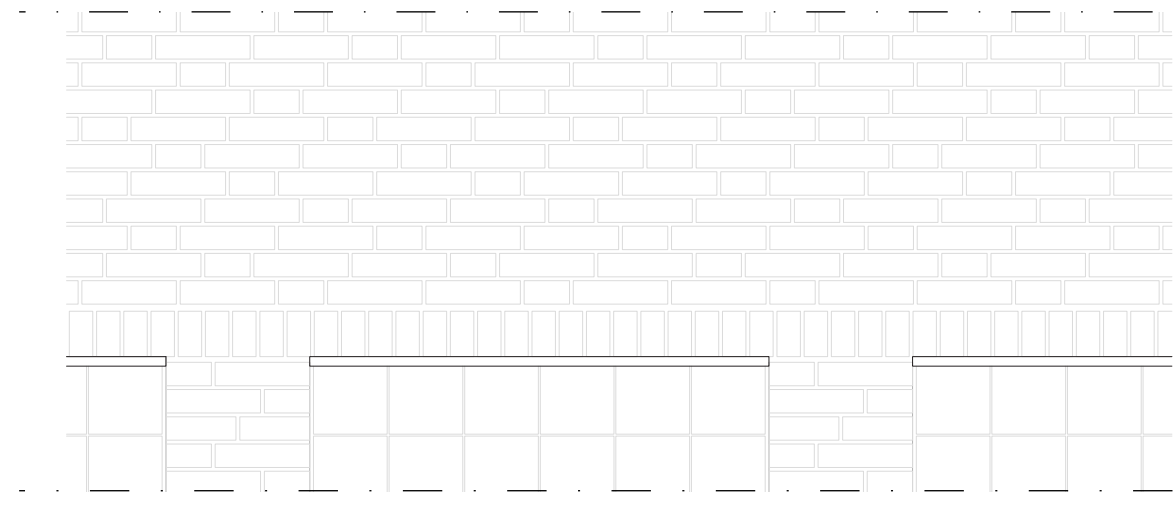
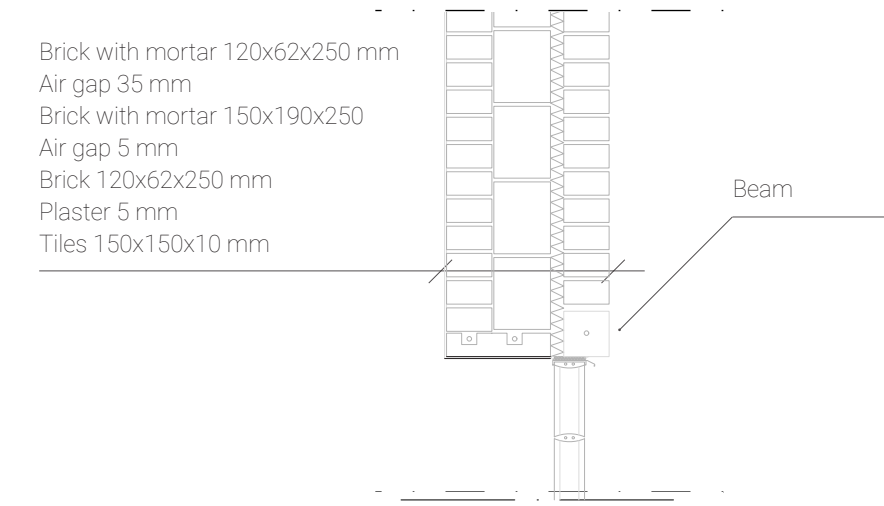


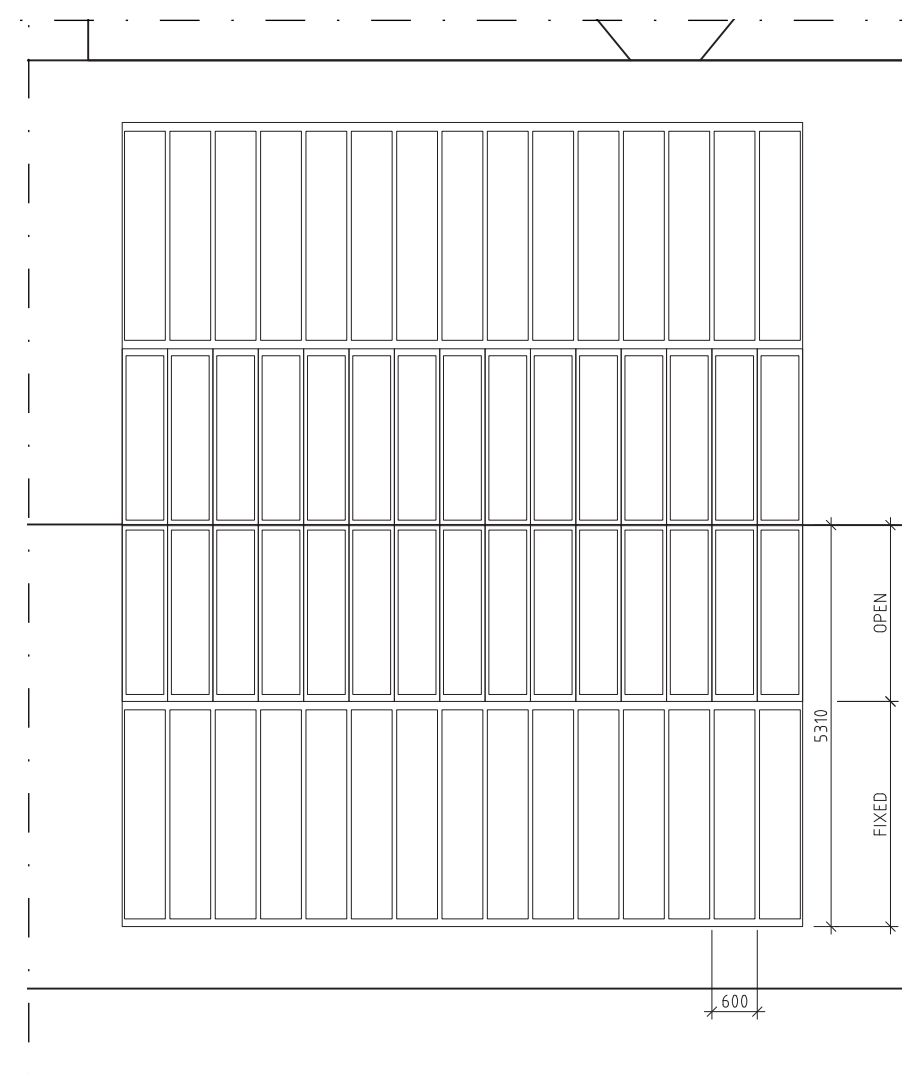
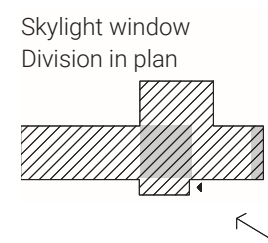




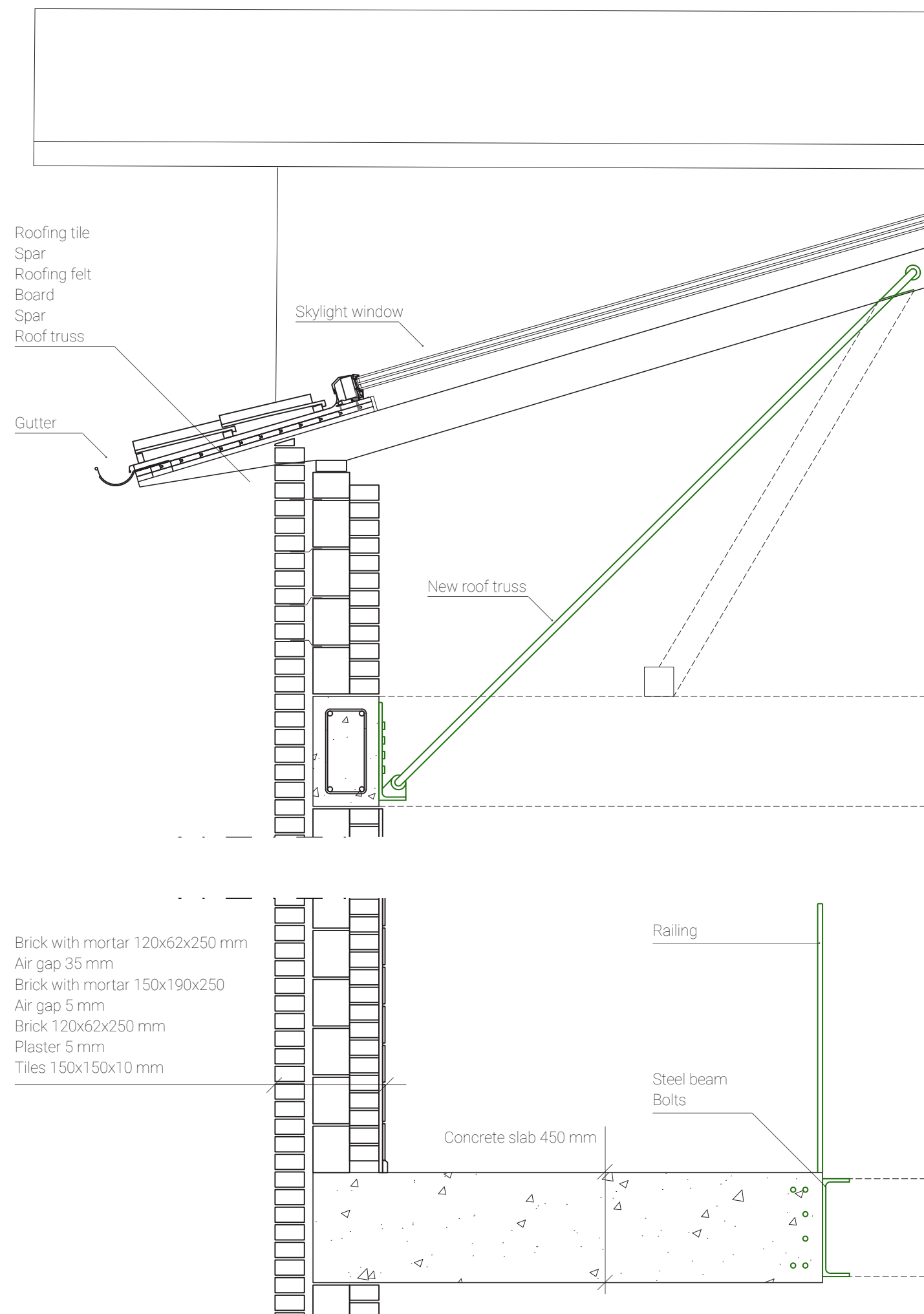








Plan 1:100



Roofing tile
Spar
Roofing felt
Board
Spar
Roof truss

Skylight window

Gutter

New roof truss

Brick with mortar 120x62x250 mm
Air gap 35 mm
Brick with mortar 150x190x250
Air gap 5 mm
Brick 120x62x250 mm
Plaster 5 mm
Tiles 150x150x10 mm

Railing

Steel beam
Bolts

Concrete slab 450 mm

