A Productive City is Brewing

Project book

Tsvetina
Petrova

Colophon

This project was developed by Tsvetina Petrova as part of the Urban Architecture graduation studio at TU Delft Faculty of Architecture and the Built Environment, between November 2025 and June 2026.

Tutors: Mikel van Gelderen, Elsbeth Ronner, Sam Stalker, Paul Vermeulen (design), Eireen Scheuers, Leeke Reinders (research)
Supporting tutors: Craig Martin, Rik van Rozendaal

Contents

Abstract 6

1. Brief 8

Harvest 9
1.1. Productive City 17
Malting 23
1.2. Mix 27
Milling 33
1.3. Reuse 39

2. The Project 42

Mashing 43
2.1. City 49
Lautering 61
2.2. Block 65
Boiling 73
2.3. Site 77
Cooling 83
2.4. Courtyard 87
Fermenting 97
2.5. Hall 101
Maturing 121
2.6. Restaurant 125
Bottling 137
2.7. Housing 143

3. Reflection 162

Serving 163
3.1. Looking back 169
Hangover 175
3.2. Looking forward 179

Bibliography 182



Fragment model 1:33

Abstract

What if cities could once again become places of production, not only consumption?

Over the past sixty years productive spaces have been progressively displaced from cities like Brussels, despite its historical role as one of the pioneering centres of the Industrial Revolution in mainland Europe. This shift has increased environmental costs, reduced economic diversity and limited access to employment for lower-qualified or newly arrived populations. These conditions are particularly visible in the Heyvaert district of Brussels- an arrival neighbourhood characterised by migration, informal economies and a shortage of adequate housing.

This project explores how productive activities can be reintegrated into dense urban environments through the transformation of an existing industrial site into a brewery, social restaurant and collective housing complex. It investigates how an urban block can function as an infrastructure for arrival, providing housing, employment opportunities, skill development and spaces for social exchange.

Rooted in Belgium's longstanding brewing heritage and the history of lambic production in the Senne valley, the brewery serves as a form of small-scale urban manufacturing capable of supporting local employment and knowledge transfer. A social restaurant complements this program by creating opportunities for work, skill development and encounter. Together, they challenge the separation of living, working and leisure that has characterised much modern urban development.

Reuse is a key focus of this project. Existing industrial structures are treated not as obstacles but as resources capable of accommodating new forms of inhabitation. Through careful analysis and selective transformation, parts of the existing fabric are preserved, adapted or removed. The demolition of a central hall creates a shared courtyard that improves light, air and spatial connections while becoming the social centre of the project.

The ground floor accommodates production and public functions that activate the street, the future linear park following the traces of the Senne and the courtyard itself, while the upper floors provide a mix of temporary and long-term affordable housing. More broadly, the project proposes a contemporary urban model in which making, living and gathering are once again understood as complementary parts of city life.



Entire group model 1:333 (created by all studio students)

1. Brief

Harvest

Autumn is approaching in the Northern Hemisphere. After a long summer spent gathering sunlight and nutrients from the soil, the barley heads hang heavy on their stalks, quietly waiting to be harvested. Their time has come. They remember years past, when skilled and hurried hands grasped them tightly before the sweep of a sickle freed them from the earth that held them. Now, they hear only the harsh whir of the combine harvester before they are swallowed by its great metal mouth, its sharp teeth cutting them down by the hundreds.



De oogst (The Harvest), Vincent van Gogh, 1888.

Beer is made from four core ingredients- water, cereals, hops, and yeast. Beer production begins with the cultivation and harvesting of cereals, most commonly barley and wheat. Once the grain has matured and dried in the field, it is collected and cleaned for processing. The quality of the harvest- affected by climate, soil, and growing conditions- has a major influence on the final flavor, color, and character of the beer.



De korenoogst (The Harvesters), Pieter Bruegel the Elder, 1565.

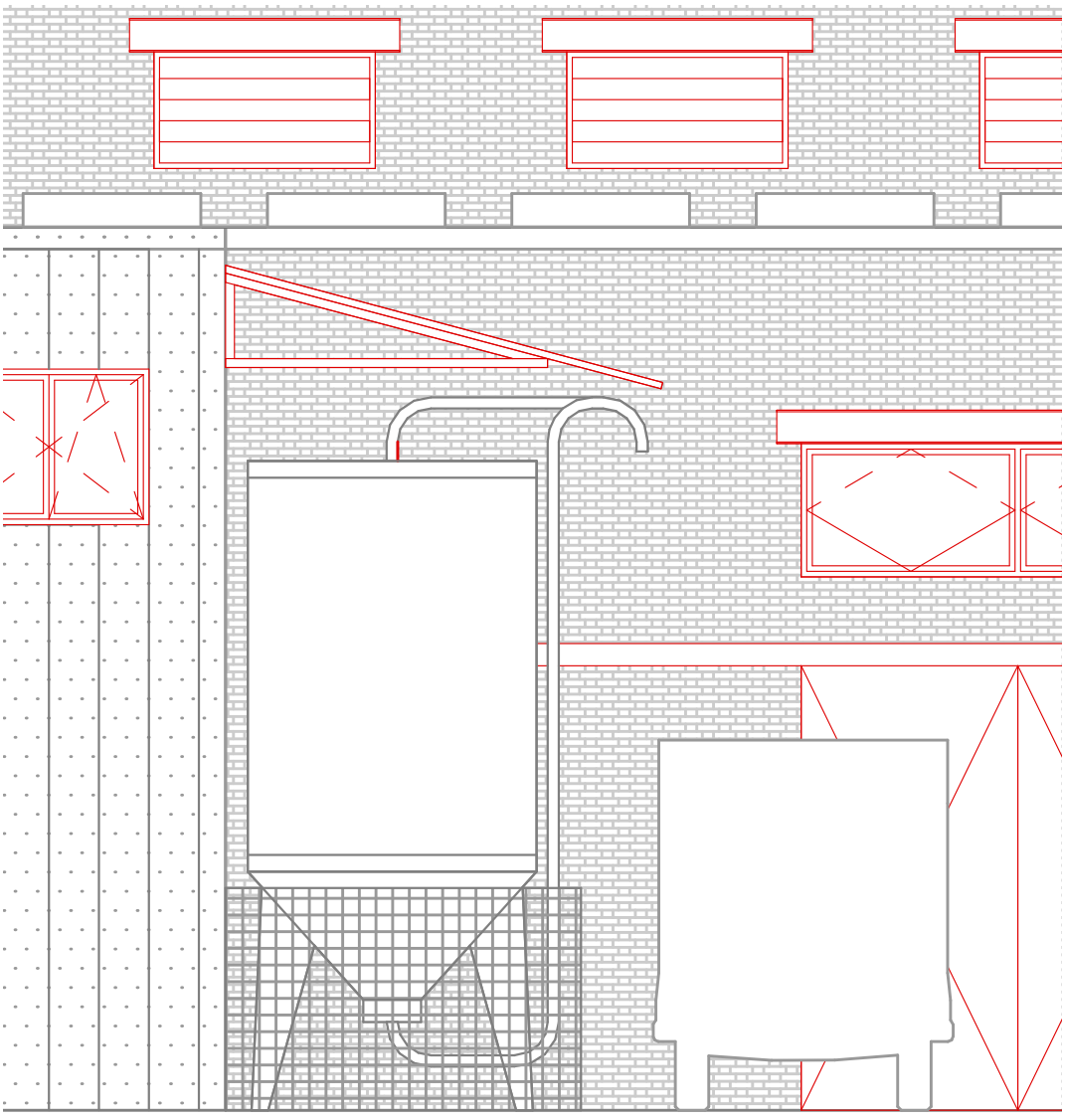


Granary at Cantillon Brewery, Brussels

A traditional granary is used to store the wheat, barley and hops from the middle of October to early April, which is when the brewing season takes place. The space needs to be well ventilated and kept away from heat. Modern storage solutions include cylindrical stainless steel grain silos.



GÉNÉRALE - Assemblée d'Architectes - Brasserie de la Senne



Project Southwest elevation - grain silos

1.1. Productive City



Senne river, canals and Brussels area map



Anderlecht Abattoir postcard, Brussels

The river Senne originates in Wallonia and flows through Brussels before joining the Dyle and Rupel on its way to the North Sea. Like many rivers, it shaped not only the landscape, but also the activities that developed around it. In Brussels, the low-lying areas along the river- particularly Anderlecht- became ideal locations for manufacturing. Among sugar refineries, slaughterhouses and workshops, breweries also found fertile ground for production. The wild yeasts native to the Senne valley created the conditions necessary for geuze brewing, a traditional lambic beer based on spontaneous fermentation, while the concentration of workers employed in nearby industries provided a constant local demand.

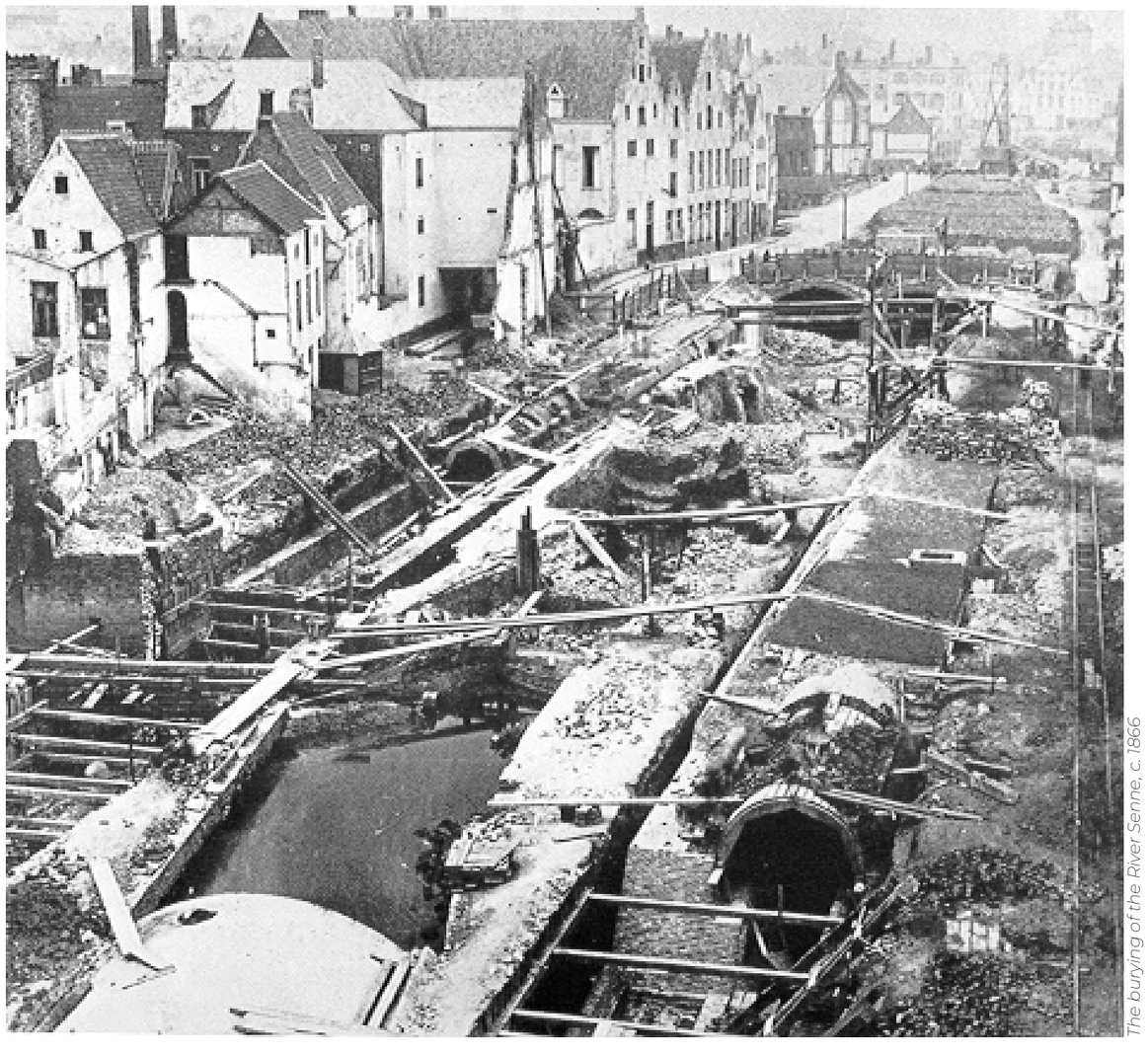


New map of industrial Brussels with its suburbs (Aug. Verwest, F. Xhardez, M. Vanderoost), 1910

In the 1830s, the canals connecting Brussels to the port of Antwerp and to the coal and steel regions of Charleroi were completed. Together with an extensive railway network, they helped transform Brussels into one of the pioneering industrial centres of mainland Europe (Hill et al., 2018). Located between the canal and Brussels South Station, Heyvaert- a neighbourhood in Anderlecht- flourished as a dense landscape of production, trade and storage, where workshops, warehouses and dwellings existed in close proximity.



The Quai de la Voirie from the canal, A. Louvois, 1899



The burying of the River Senne, c. 1866

From 1867 onwards, however, work began on covering the Senne due to recurring flooding, pollution and hygienic concerns, while the new canals gradually replaced the river's logistical role. By the 1930s, the Senne had almost entirely disappeared from the visible city, leaving behind fragmented plots embedded within the urban fabric between workshops, industrial halls and housing. At the same time, breweries- like many industries- struggled through the disruptions of the First World War, only to face occupation, shortages and economic instability again during the Second World War.

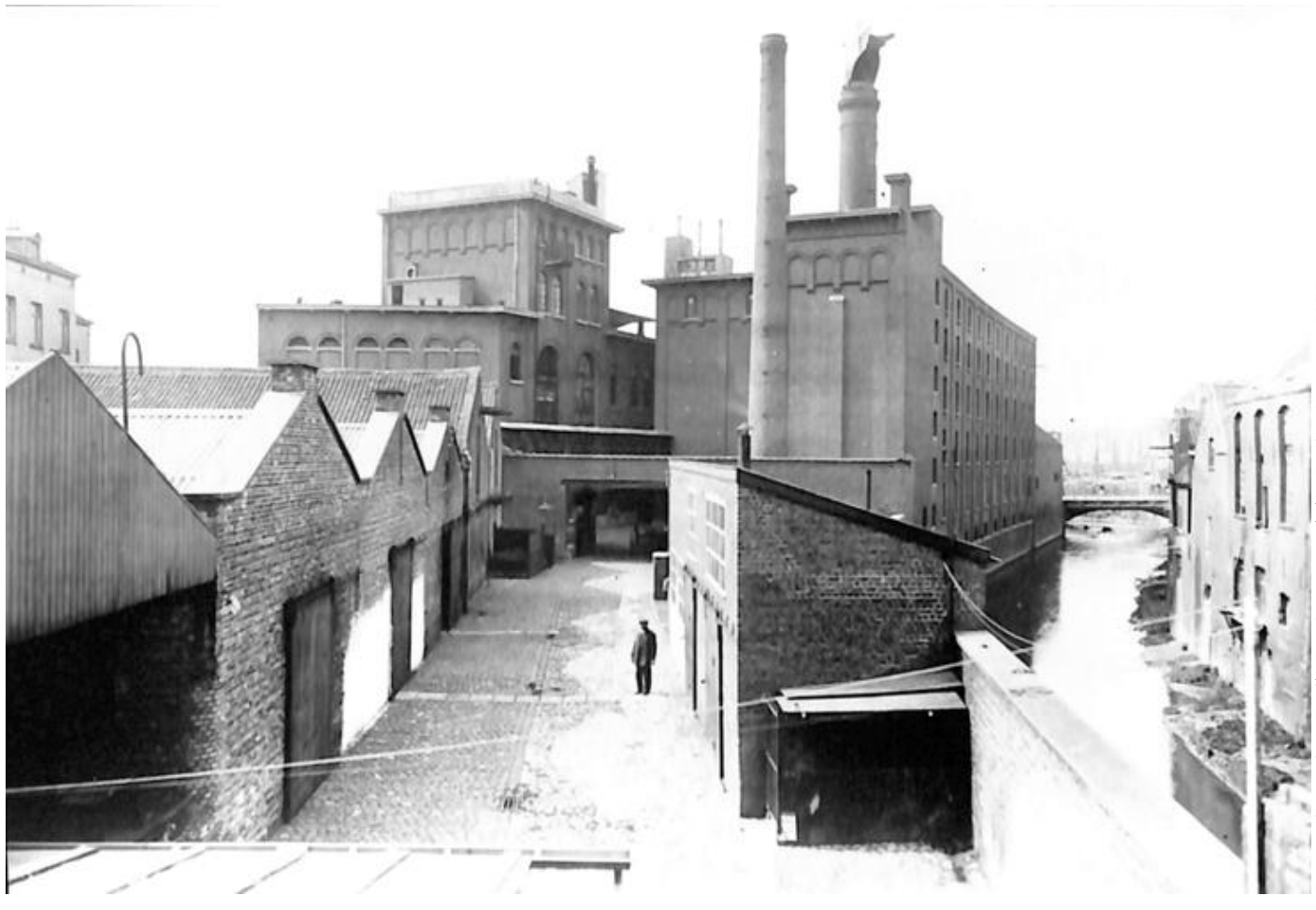
In the decades following the war, industries and middle-class residents increasingly moved towards the suburbs, while the inner city became more dominated by housing, offices and commerce. Many smaller breweries were absorbed by larger companies, while others struggled to survive and adapted their products to mass consumption through sweetened and commercialised lambic blends. In Heyvaert, former factories and warehouses lost their original purpose. Cheap rents, large industrial halls, proximity to the city centre, weak regulations and access to precarious labour gradually transformed the neighbourhood into an international hub for the second-hand car trade and export to West Africa and West Asia.





Second-hand car trade in Heyvaert, 2025

Since the 2010s, Brussels has sought to reintroduce productive activities into the city, particularly along the canal zone and within Heyvaert. The studio explores how production can once again gain spatial presence, visibility and a meaningful role within the neighbourhood. The project takes a lambic brewery as a means to investigate these questions. Brewing is a productive activity historically rooted in Brussels and one that has long proven capable of existing within an urban context. Beyond production itself, it is also a cultural and social practice that can reconnect labour, public life and collective space within the contemporary city.



Brasserie Louis & Emile De Coster and the Petite Senne, c. 1935

Malting

Arriving at the malthouse it's straight to work. Soaking in water on and off for 1-2 days to increase the grains' moisture content and wake them from dormancy. Now moist, they're moved to a garmination bed where they'll wait 4-6 days to sprout roots. Enzymes are formed, starch is mobilized, and the grain is turned regularly to prevent clumping and manage heat. To stop the germination and preserve the sugars, the green malt is moved to a kiln. It is dried, and the temperature is gradually raised to stop growth and develop flavor. After this journey, they're ready to arrive at their new home- the brewery.



Maltery from the brewery Plzeňský Prazdroj in Plzeň, anonymous. c. 1882

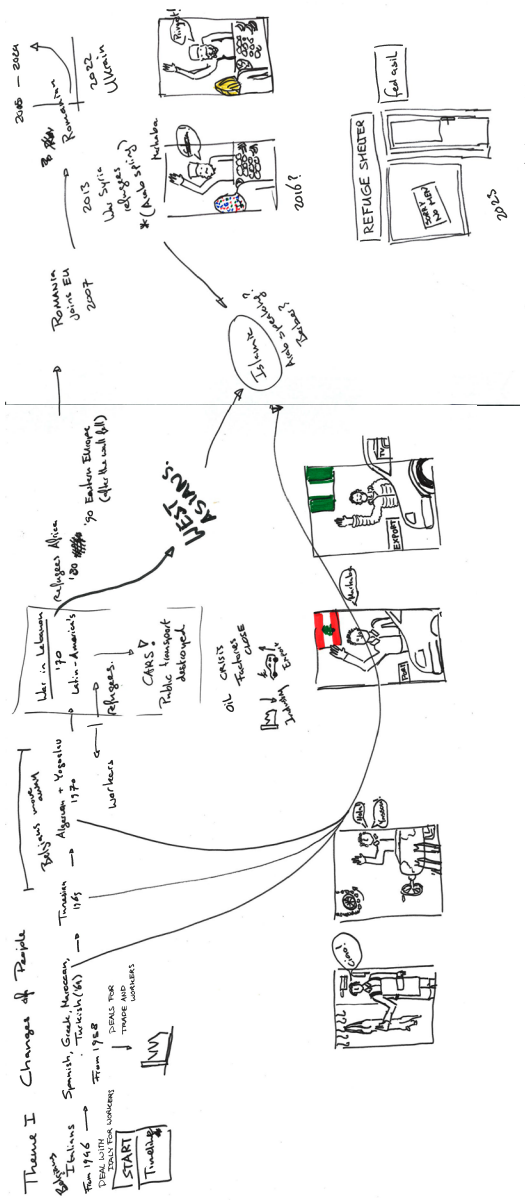
Malting prepares the grain for brewing by activating natural enzymes within the barley. The grains are first soaked in water, then allowed to germinate for several days. During this process, starches inside the grain become accessible for conversion into fermentable sugars. Germination is stopped by drying the grain in a kiln. The temperature and duration of kilning influence the color and flavor of the malt, ranging from light and sweet to dark and roasted.



Three-storey malthouse built in 1875 for Truswell's Brewery Company Ltd in Barnetby le Wold, England



1.2. Mix



Group research into Heyvaert



Workers using shovels and brooms to turn over the malt.



Old bottles of geuze beer from Cantillon brewery, Brussels

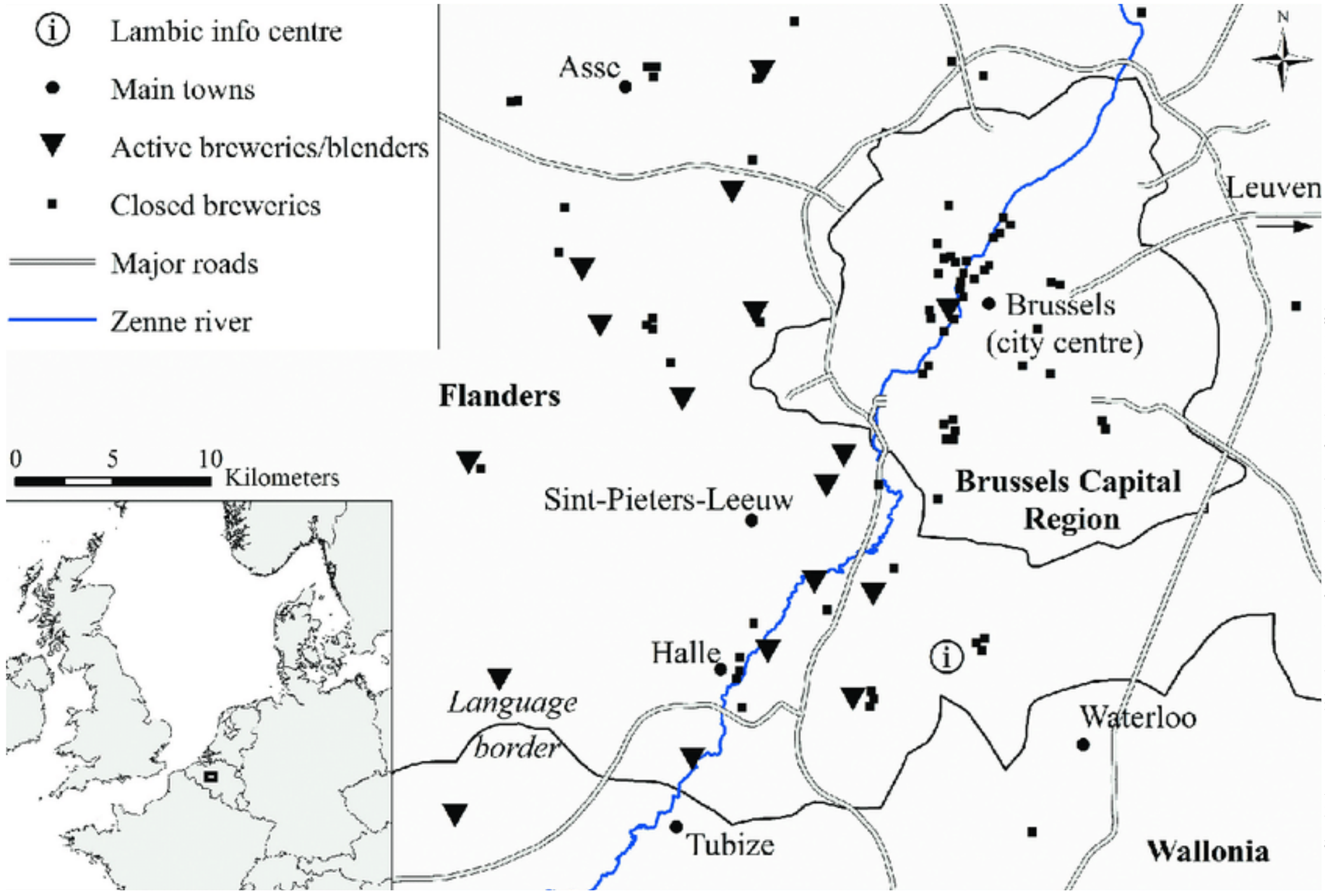
Throughout the twentieth century, modernist planning promoted the separation of urban functions into distinct zones dedicated to housing, work, leisure and infrastructure. Influenced by ideas of efficiency, hygiene and order, the city became increasingly organised through functional division, often separating places of production from places of living. While this model enabled large-scale urban growth, it also produced environments that were frequently rigid, mono-functional environments disconnected from everyday urban life.

Thinkers such as Jane Jacobs criticised this separation for weakening the social complexity of the city. In The Death and Life of Great American Cities, Jacobs

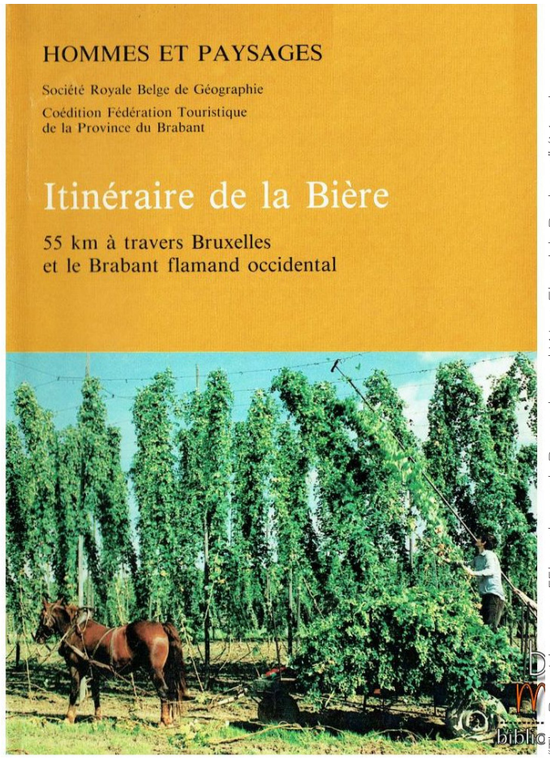
(1961) argued that urban vitality depends on diversity, proximity and the coexistence of different uses and users within shared space. Similarly, Richard Sennett (2018) advocates for open urban systems that can accommodate difference, interaction and unpredictability. For Sennett, mixed forms of use invite mixed users, allowing the city to remain socially and spatially alive.

Much of urban life takes place in the thresholds between private and public space: in courtyards, passages, workshops, kitchens, terraces and streets. The city is therefore shaped not only by buildings themselves, but by subtle dynamics of concealment and exposure, domestic rituals and collective activities. Ouest describes this condition as a porous urbanity- a city open to encounters, exchanges, unexpected synergies and spontaneous forms of occupation (Ouest, 2025). Maintaining this porosity is essential for the city to remain inclusive, adaptable and alive.

The project explores these questions through the introduction of a lambic brewery combined with a social restaurant and spaces for living and gathering. Brewing has historically existed within the urban fabric of Brussels, where production, hospitality and everyday life were closely intertwined. More than an industrial activity, the brewery becomes a social infrastructure capable of reconnecting labour, housing and public life within the contemporary city.



Map of lambic breweries and blenders active after 1945 and closed as of April 2020 (Arie Stoffelen



"The Beer Itinerary: 55km through Brussels and West Flemish Brabant" (Martine Louckx), 1989

Les brasseries artisanales, par contre, sont implantées au front d'urbanisation du début de ce siècle. Ces petites brasseries et malteries ne rayonnaient guère hors du cadre du commerce local et étaient souvent attachées à des fermes où coexistaient activités agricoles et brassicoles.

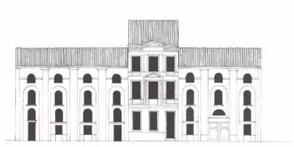
Aujourd'hui, la concentration des brasseries, la récession industrielle et le déclin du transport fluvial au profit du transport routier ont entraîné l'abandon, la démolition ou la réaffectation de nombreuses brasseries.

Brasseries urbaines et brasseries rurales

D'une manière générale, les brasseries de cette époque présentent une morphologie architecturale faiblement spécifique. Les techniques de brassage n'exigent pas de forme particulière des bâtiments. Ainsi les dépôts, les salles de fermentation et de brassage, les magasins, les ateliers du nettoyage des fûts et d'embouteillage ont pu être reconvertis dans de nombreux cas à de nouvelles fonctions.

Relativement nombreuses et selon leur localisation, elles peuvent être classées en trois types principaux :
- la brasserie intégrée à la rue, construite en milieu urbain
- la brasserie du type «usine-îlot», installés dans la frange d'urbanisation
- la brasserie en site rural.

La brasserie intégrée à la rue



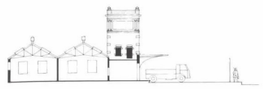
Etoile 1870



Smeraldy 1907

Généralement de dimension plus modeste, sa volumétrie et le traitement de sa façade s'harmonisent avec les habitations voisines tout en gardant cependant un caractère industriel. (Exemples : arrêts 4 - 5 - 6 - 7 - 8 de l'itinéraire.)

La brasserie du type «usine-îlot»



Whitbread 1907

Atlas 1924

Elle occupe une position dominante dans l'îlot et influence directement le parcellaire et le tracé des voiries périphériques. Certaines brasseries de ce type apparaissent ouvertes ou plus généralement semi-ouvertes. Il est possible alors de découvrir au travers des grilles, la disposition des principaux bâtiments et suivre de nombreuses activités qui s'y déroulent. (Exemple : arrêt 1 de l'itinéraire). La majorité opte cependant pour une structure morphologique fermée, caractérisée par des travées répétitives et faiblement ajourées. (Exemple : arrêts 2 - 3 - 9 de l'itinéraire.)

La brasserie en site rural



Goossens 1767



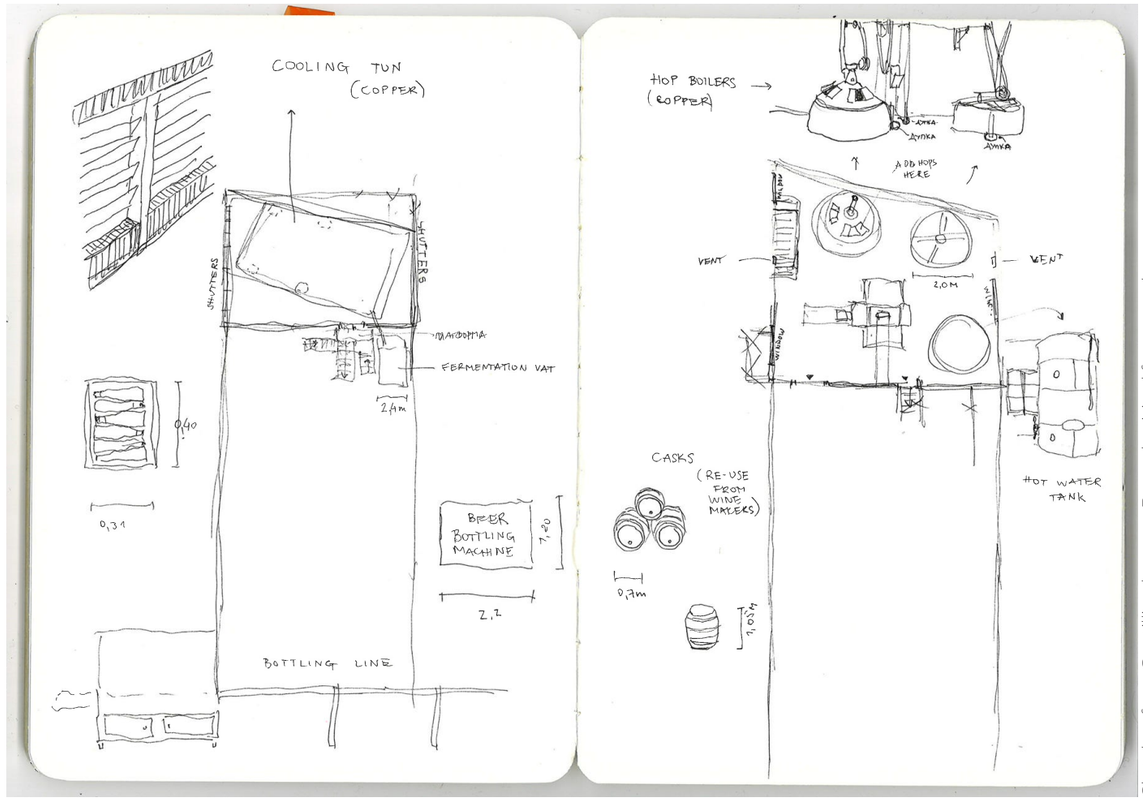
La Couronne 1870

La brasserie en site rural faisait partie des activités traditionnelles villageoises. Elle s'intégrait par l'architecture et par l'implantation aux structures rurales et prenait souvent la forme traditionnelle des fermes locales. (Exemple : arrêt 10 de l'itinéraire). Par ailleurs, les brasseries rurales les plus récentes s'inspirent des formes urbaines. (Exemples : arrêts 11 et 13 de l'itinéraire.)

Pages from "Itinéraire de la Bière:" identifying three broad types of Brussels brewery architecture: the rural brewery; the urban brewery; and the "factory island" brewery.



Booklet from Cantillion brewery, Brussels, visited for research



Sketches from Cantillion brewery, Brussels, visited for research



Cantillon brewery- oldest surviving lambic brewery in Brussels, 2019



Cantillon brewery- oldest surviving lambic brewery in Brussels, 1980

Milling

The mill now stands tall and expects the incoming dried malt. Powered by waterwheels, animal or human labour no more, the machines' rows of steel rollers eagerly take in the kernels and crack them open for the first time. The air fills with the warm scent of bread and dust. The master brewer attentively observes the crushing- done too fine and it will hamper filtering, done too coarse- it will reduce the production yield.





Industrial milling machine

Milling crushes the malted grain to expose the starch-rich interior while preserving much of the outer husk. This creates a coarse mixture called grist. Proper milling is essential for efficient sugar extraction during mashing. If the grain is crushed too finely, it can create filtration problems later in the brewing process; if too coarse, valuable sugars may remain inaccessible.

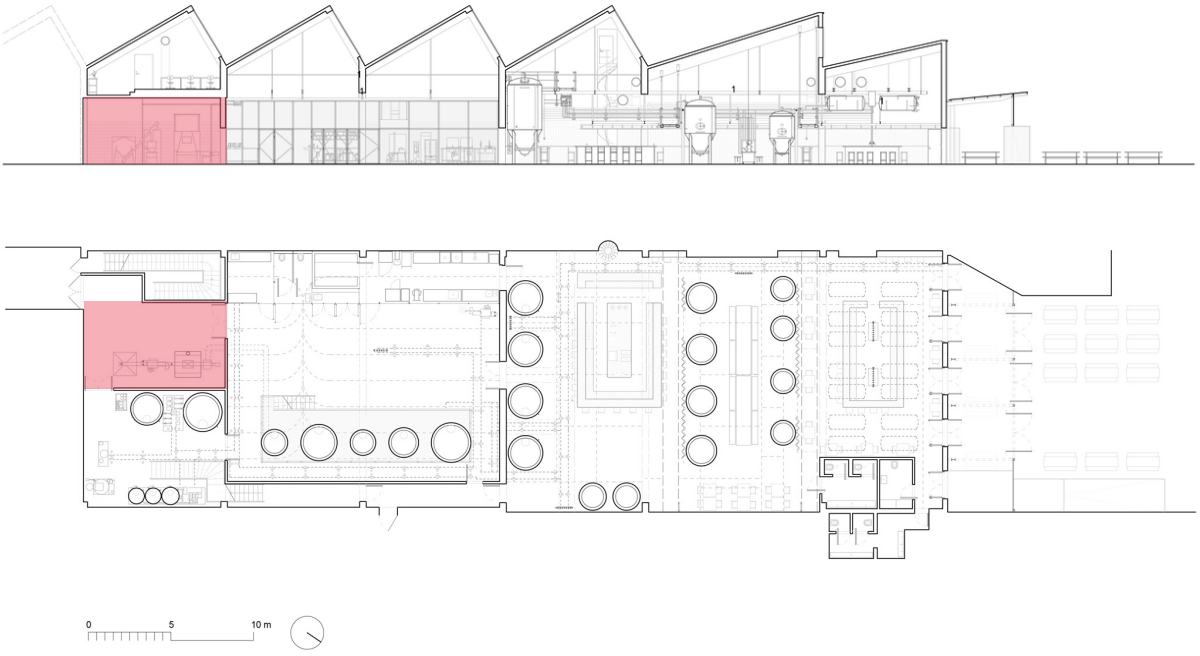


De Molen (The Mill), Rembrandt Harmenszoon van Rijn. 1645-1648

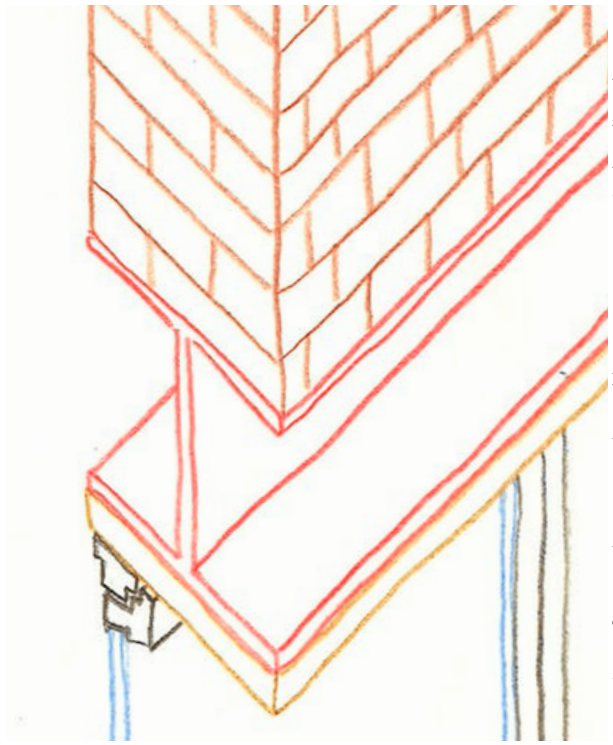


Milling machine (centre of the room) in Cantillon brewery, Brussels

Historically, breweries relied on stone mills housed in dedicated milling rooms isolated from the rest of the building because of dust and fire risks. These spaces required durable floors, ventilation, and mechanical power systems. Modern large-scale breweries use enclosed roller mills connected directly to grain silos and pneumatic transport systems, reducing dust while allowing continuous industrial processing.



Ground floor plan and section of ÅBEN brewery in Copenhagen, Denmark (milling space marked in red)



Drawing of reused structural steel beams as new window lintels

1.3. Reuse

Today, so much is already built. Across cities, large amounts of material, energy and labour are continuously invested in construction, while existing buildings are simultaneously demolished or treated as obsolete. At the same time, available land for new construction becomes increasingly limited, particularly within dense urban environments.

In this context, architecture can no longer rely solely on expansion and replacement, but must learn to work carefully with what is already there.

Existing buildings contain structures, atmospheres, dimensions and forms of occupation that cannot simply be reproduced through new construction. Rather than



Model 1:333 (produced by all students from Urban Architecture Graduation studio) showing existing project plot

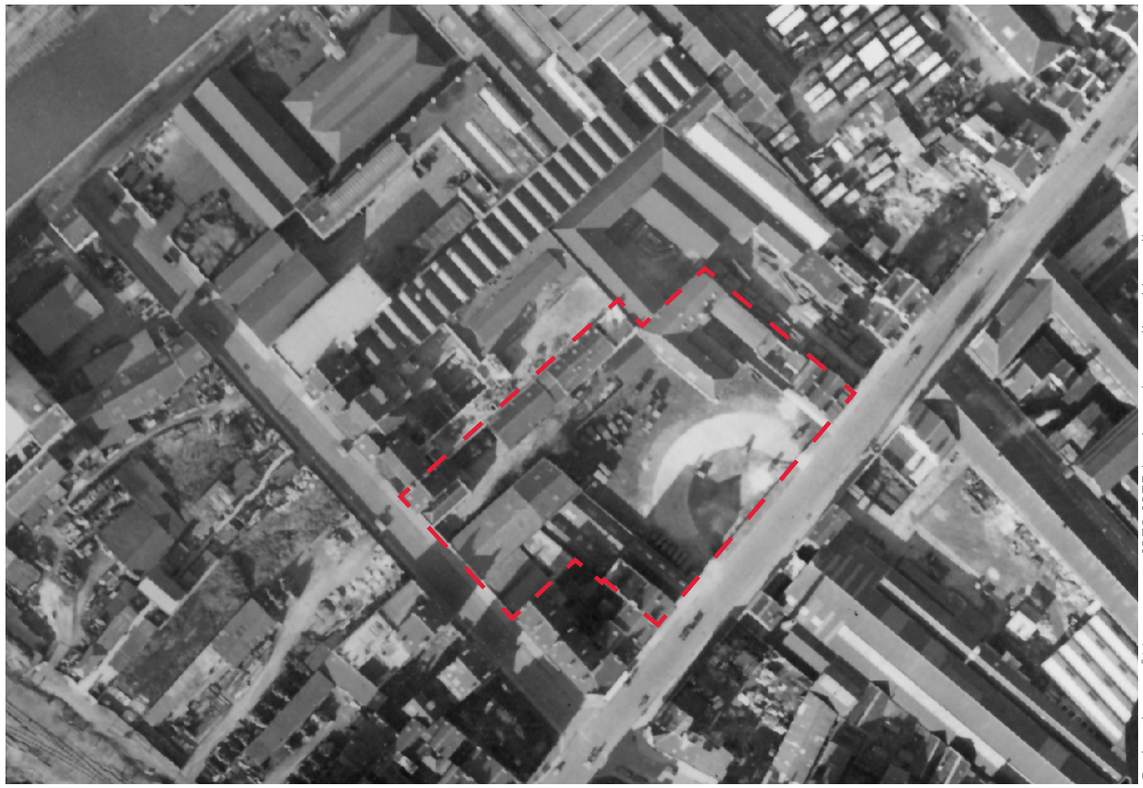
approaching them only as constraints, they can be understood as resources capable of generating new possibilities. As architects Jan De Vylder and Inge Vinck argue, “It felt like everything we needed was already there: the building itself and the spaces within it” (De Vylder Vinck, 2024). The role of the architect is therefore not necessarily to replace, but to observe, reinterpret and reinvent how existing structures can be inhabited.

Working with the existing requires careful analysis. Every building carries both qualities and challenges: robust structures, generous spans and material character, but also limitations, traces of decay and spatial constraints. Re-use is therefore not a process of preservation alone, nor one of complete transformation, but rather a negotiation between continuity and change. It involves deciding what can remain, what must be removed and what should be added.

The project approaches the industrial fabric of Heyvaert through this lens. Existing halls, warehouses and fragmented plots are treated not only as remnants of a lost industrial past, but as a spatial framework that can accomodate new forms of living, production and collective life. Through transformation rather than replacement, the project seeks to continue the layered history of the site while adapting it to contemporary urban conditions.



Orthophoto of Heyvaert, 2024 (project plot outlined in red)



Orthophoto of Heyvaert, c. 1930-1935 (project plot outlined in red)

2. Project

Mashing

The crushed grain is lowered into steaming water inside the mash tun, where heat releases sweetness from the broken kernels. The mixture thickens into a fragrant porridge, filling the brewery with the smell of warm cereal and fresh bread. Once stirred slowly by hand with wooden paddles, the mash is now stirred by methodically rotating steel arms inside polished tanks. What was once grain begins to become beer.



Beer brewer; excavations of Dara, Egypt. Beer brewer, painted limestone, from the excavations of Dara, Egypt, c. 2200 bce.

Mashing mixes milled malt with hot water to activate enzymes that convert starches into fermentable sugars. Different temperature ranges influence the body, sweetness, and alcohol potential of the beer. The resulting liquid mixture, called mash, contains dissolved sugars that will later be separated from the grain solids.

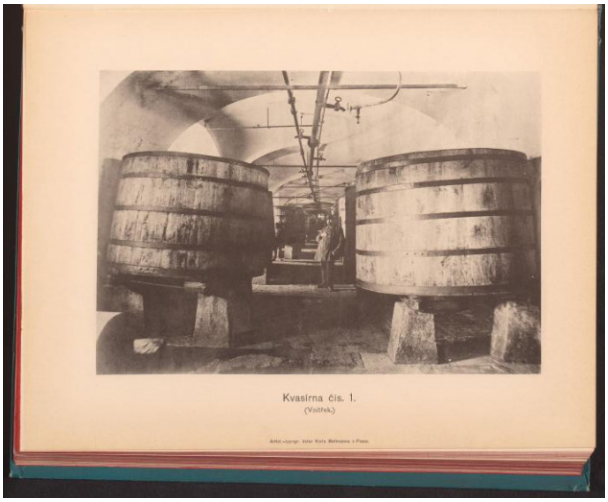


Mash tun (on the right) at MANUFAKTURA Brewery in Riga, Latvia

Mash tuns were traditionally large copper or wooden vessels placed at the center of the brewhouse, often beneath high ceilings that allowed steam to escape. These spaces required strong structural floors to support heavy liquid loads and easy access to heat sources. Contemporary brewhouses use insulated stainless steel tanks equipped with automated temperature controls, pumps, and integrated piping systems.



Modus Brewery (Prevalent architecture) in Newcastle, Australia

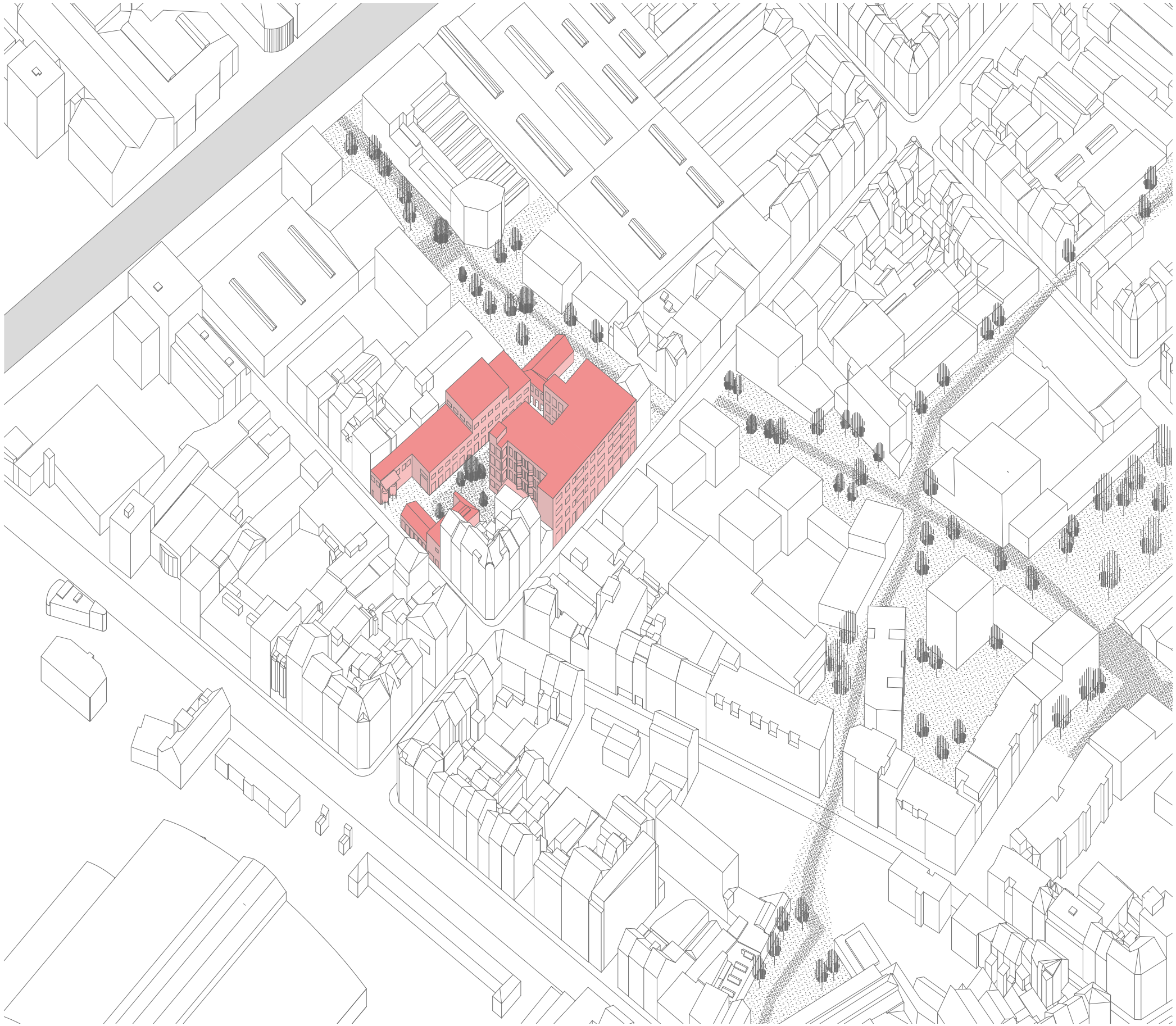


Room with beer barrels from the Plzeňský Prazdroj brewery in Plzeň, anonymous, ca. 1882 - in or before 1892



Process sketch of plot roofs

2.1. City



Urban context axonometry

The project takes a lambic brewery as a means to explore how productive activities can once again become part of everyday urban life. Brewing has a long history in Brussels and developed in close relationship with the Senne valley, making it both a productive and culturally rooted activity. Unlike many contemporary industrial processes, brewing can coexist with housing, public space and hospitality, allowing production to remain visible and accessible within the city. The brewery therefore serves not only as a place of making, but also as a catalyst for social interaction and collective life.

At the urban scale, the project responds to ongoing transformations within Heyvaert. The municipality has initiated plans to reveal the historical traces of the Senne through a linear public park that follows its former course. One of the proposed transversal connections passes directly alongside the project site, establishing an important relationship between the future public landscape and the intervention.

To understand the potential of the site, each existing buildings were analysed through a matrix evaluating its structure, access to daylight, materiality, age, urban position, collective memory and adaptive potential. Together with broader archival and spatial research, this analysis helped identify both the qualities worth preserving and the challenges that would need to be addressed through the project.



Draft masterplan for the development and renovation of the Heyvaert district by perspective.brussels

Heyvaertstraat 175-181, 183-187



Industrial building with active ground floor use, 2026





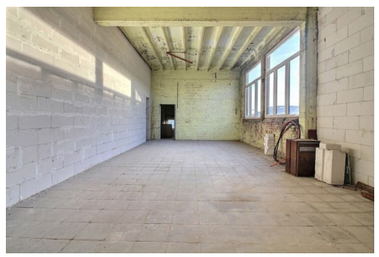


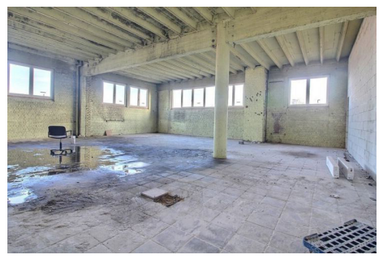
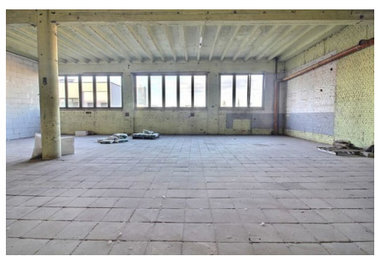
Industrial building with active ground floor use, 2026

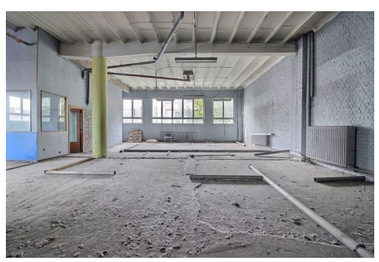
Rue Heyvaert 175-181, 183-187  1959-1960

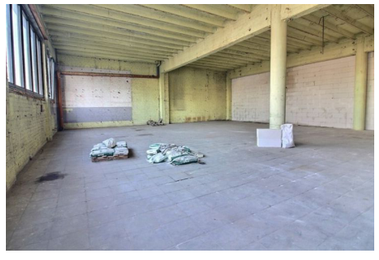
Perspective → Criteria ↓	Urban scale - city/ region/neighbourhood	Ensemble- urban block	Building	Exterior / Envelope	Interior Space	Structure
Urban role/ Environment/ Context	Located on street mid-block; strong/dominant presence due to height (~19m) and width (~50m); multiple entrances	Acts as anchor building within block; larger mass (depth) than neighbors; super densely built ensemble	Stands out from the urban block as the largest part, but also newer than its neighbours	Brick façade contributes to street continuity; entrances visible from street	Ground floor accessible from street; potential active frontage; no connection to courtyards	
Image / identity	Landmark-like presence on street due to mass and height	Acts as anchor building within block; larger mass (depth) than neighbors	Massive industrial building, different from surroundings	Brick façade expresses solid industrial character	High ceilings typical for industrial building	Reinforced concrete frame visible in interior; important for layout building
Collective memory	Part of the neighbourhood's abbatoirs past/story/heritage	Offered work opportunity in Heyvaert; currently a church serves the community	Many different functions throughout history: slaughterhouse/ meat production, a shop for refridgerators, a mosque, a church, second-hand car export	changed ground floor- garage doors- signs of history	First floor interior and layout shows previous mosque function;	Reinforced concrete structure not uncommon in 50s & 60s
Historical value	Example of post-war urban development (1950s Brussels)	Part of mid-century transformation of neighbourhood	Many different functions throughout history: slaughterhouse/ meat production, a shop for refridgerators, a mosque, a church, second-hand car export	Original brick façade likely preserved, except for ground floor (garage doors have overtaken)	No "special" interior spaces connected to the functions, all pretty flexible	Reinforced concrete frame not atypical for the period
Material / technique	Reinforced concrete structure with brick walls not uncommon in the area during the time period	Visual material continuity with surrounding masonry buildings on street	Reinforced concrete structure with brick walls	Brick façade in good condition; almost all windows changed to new, but still same dimensions	Standard industrial building interior; no significant finishes/details	Robust reinforced concrete frame allows heavy loads
Economic history & potential	Located in historically very industrial area of Brussels; close to city centre- increases redevelopment value today	Offered work opportunity in Heyvaert	Open & accessible ground floor- opportunity for economic activity		Flexible spaces attractive for creative industries	Structure reusable, avoiding demolition costs
Environmental performance	Street facade is facing southeast- plenty daylight exposure	No access to courtyards, no open spaces, everything densely built	Possibly no thermal insulation; has water problems	Brick envelope provides thermal mass but possibly limited insulation		Concrete structure stores heat?
POTENTIALS						

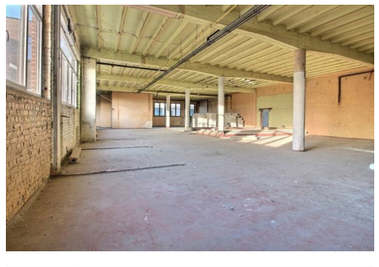
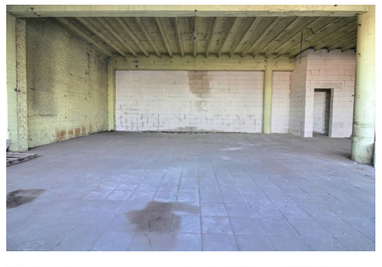
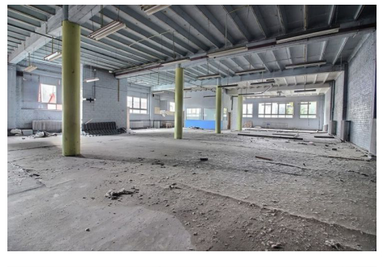
Evaluation of building at Heyvaertstraat 175-187






Interior photos from sale listing

immoweb

HEYVAERT – ENTREPOT DE 569M²

Type de bien : Entrepôt
Adresse du bien : Rue Heyvaert 185 1080 Molenbeek-Saint-Jean
Nombre de chambres : 0
Surface habitable : 569 m²

Prix **439.000 €**



Certificat d'inspection de l'électricité valide : Non
Certificat de performance énergétique



Le certificat de performance énergétique du bâtiment (PEB) informe les acheteurs et locataires potentiels de la qualité énergétique du logement, au moyen d'un indice chiffré représenté sur une échelle qui va de très économe en énergie (vert) à peu économe en énergie (rouge).

Century 21 Azur

Chaussée de Gand 331
1081 Koekelberg
Téléphone : +3225372121
E-mail : ecocity@importfrommedia.be
N° IPI : 502921

Les présentes informations sont données à titre indicatif, sous toutes réserves et sauf vente ou location entre-temps.
Ref IMMOWEB : 21258118 Agence : Century 21 Azur 21/01/2026

immoweb

HEYVAERT – PERMIS POUR 16 LOFTS ET 14 PARKINGS

Type de bien : Immeuble à appartements
Adresse du bien : Rue Heyvaert 185 1080 Molenbeek-Saint-Jean
Nombre de chambres : 33
Surface habitable : 2967 m²
Surface du terrain : 750 m²

Prix **2.400.000 €**



Double vitrage
Certificat d'inspection de l'électricité valide : Non communiqué
Certificat de performance énergétique



Le certificat de performance énergétique du bâtiment (PEB) informe les acheteurs et locataires potentiels de la qualité énergétique du logement, au moyen d'un indice chiffré représenté sur une échelle qui va de très économe en énergie (vert) à peu économe en énergie (rouge).

Century 21 Azur

Chaussée de Gand 331
1081 Koekelberg
Téléphone : +3225372121
E-mail : ecocity@importfrommedia.be
N° IPI : 502921

Les présentes informations sont données à titre indicatif, sous toutes réserves et sauf vente ou location entre-temps.
Ref IMMOWEB : 21258139 Agence : Century 21 Azur 21/01/2026

Online listings for sale of parts of the building



MEURICE/A
ETABLISSEMENTS Dehaes SOCIETE ANONYME
Capital et réserves 32.000.000 frs
FACTURE N° M. 961
DOSSIER N° D. 20883

SPECIALISTES DU FROID DEPUIS 1877

JB Agents Généraux Importateurs
Kelvinator LE MEILLEUR FRIGO DU MONDE
CARPIGIANI LA FAMEUSE TURBINE POUR GLACIERS
THERMO KING LA PERFECTION en REFRIGERATION de CAMIONS
BUREAUX ET USINES FERMES LE SAMEDI

BRUXELLES 7, le 20 avril 1961.
187, RUE HEYVAERT - BRUXELLES 7 - TEL. 22.79.65 (2 L.)

Monsieur SEVERIN, Robert,
45, rue de la Station,
AUVELAIS.

DOIT

POUR VENTE ET LIVRAISON DU SUIVANT :

BON N° DU

Un réfrigérateur électrique KELVINATOR, modèle KF 240 C pour courant alternatif 220 volts, 50 périodes, suivant bon de commande N° 74286 du 1 avril 1961, pour la somme de : Frs 13.950,-

S.E.&.O.

---TREIZE MILLE NEUF CENT CINQUANTE FRANCS---

Paiement : Fr. - 450,- à la commande.
4.500,- à la livraison.
4.500,- fin mai 1961. (par vos virements à notre
4.500,- fin juin 1961. (C.C.P. No 2088.81. Ets. DEHAES, s.a. Bruxelles.

Exonéré du droit de timbre, pour usage personnel. Ainsi déclaré par le client.

Garantie : Un an sur le meuble et cinq ans sur le groupe frigorifique à dater de la mise en marche.

M.C. 12966

TELEGRAMMES : KELVINER-BRUXELLES ● COMPTE CHEQUES POSTAUX : ETABL. DEHAES, S.A. - N° 2088.81
BANQUE : KREDIETBANK S.A., BRUXELLES N° 320/5/3078 ● REG. COM. BRUX. : N° 57.191 ● O.N.S.S. N° 114781.

Document relating to the building found online

Heyvaertstraat 173



Abandoned old factory building with pitched roof, 2026

Rue Heyvaert 167-173  before 1930

Criteria ↓ / Perspective →	Urban scale - city/ region/neighbourhood	Ensemble - urban block	Building	Exterior / Envelope	Interior Space	Structure
Urban role/ Environment/ Context	Located in the middle of the urban block, no street front, barely visible from the street, no visible entrances	Helps define the urban block as one with industrial history	Building doesn't stand out, looks abandoned and deteriorating	Facade almost invisible, only visible part is brick wall towards parking with no openings		
Image / identity	No active presence, old factory presence/vibe	It's different than other buildings on the block	one of few low buildings on the urban block left with pitched roofs	lower than neighbour buildings, no visible distinct facade elements, visible windows on 1st floor	?	if structure is loadbearing brick, then is visible from outside
Collective memory	?	work opportunity in heyvaert	?	?	?	?
Historical value	representative of rapidly growing insudtrial area in Brussels in 19th century	possibly built during great industrial welfare	important as a reminiscent of industrial heritage	roof and structure possibly original; visible additions throughout the years- filled in window openings	- Does interior reflect past use?	if structure is loadbearing brick, then common for this type of architecture at the time
Material / technique	if structure is loadbearing brick, then common for this type of architecture at the time	bricks are consistent with neighbouring buildings materiality	possibly loadbearing brick structure	possibly original roof and walls from brick	?	possibly loadbearing brick structure
Economic history & potential	Located in historically very industrial area of Brussels; close to city centre- increases redevelopment value today	Offered work opportunity in Heyvaert		- Can façade reuse reduce costs?	- Can interior floorplates be adapted?	- Can structure be reused to save demolition costs?
Environmental performance	- How does urban orientation affect daylight/ventilation?	- Can ensemble design support shared environmental strategies (courtyards, roof, energy)?		- Façade thermal mass or insulation?	- Are high ceilings conducive to airflow?	- Does structure provide thermal inertia?
POTENTIALS						

Evaluation of building at Heyvaertstraat 167-173

Rue du Bateau 26



Entrances of industrial halls on Rue du Bateau 26, 2026





Rue du Bateau 26 part 2 & 3  after 1961  and after 1987

Criteria ↓ / Perspective →	Urban scale - city/ region/neighbourhood	Ensemble - urban block	Building	Exterior / Envelope	Interior Space	Structure
Urban role/ Environment/ Context	- Is the building on a corner, mid-block, or interior courtyard? - Does it define the street edge or is it set back? - How visible is it from the street? - Does it create public frontage? - Are there multiple entrances?	- Does it act as an anchor or landmark in the block? - Does it define or contribute to the identity of the cluster?	- Does the façade contribute to street continuity or contrast? - Are entrances visible from street?	- Does the façade contribute to street continuity or contrast? - Are entrances visible from street?	- Is ground floor publicly accessible? - Does it connect to courtyards or secondary spaces?	- Does the column grid align with parcel depth?
Image / identity	- Landmark-like presence in street?	- Does it contribute to ensemble identity? - Is it recognizable as part of the group?		- Does façade express architectural character? - Are windows or details distinctive?	- Is there a monumental or expressive interior space?	- Is the structure visually legible inside or outside?
Collective memory						
Historical value	- Is it representative of a period or typology?	- Is the building important in context of neighboring historic buildings?		- Has the façade preserved original features?	- Does interior reflect past use?	- Is the structural system typical for its era?
Material / technique	- Are materials durable in urban context?	- Are materials consistent with ensemble? - Could material reuse reinforce group identity?		- What materials compose the façade? - Are they original?	- Are interior finishes visible or raw?	- What is structural material? - Condition? - Load capacity?
Economic history & potential	- Location value?	- Could building act as central economic hub for ensemble?		- Can façade reuse reduce costs?	- Can interior floorplates be adapted?	- Can structure be reused to save demolition costs?
Environmental performance	- How does urban orientation affect daylight/ventilation?	- Can ensemble design support shared environmental strategies (courtyards, roof, energy)?		- Façade thermal mass or insulation?	- Are high ceilings conducive to airflow?	- Does structure provide thermal inertia?
POTENTIALS						

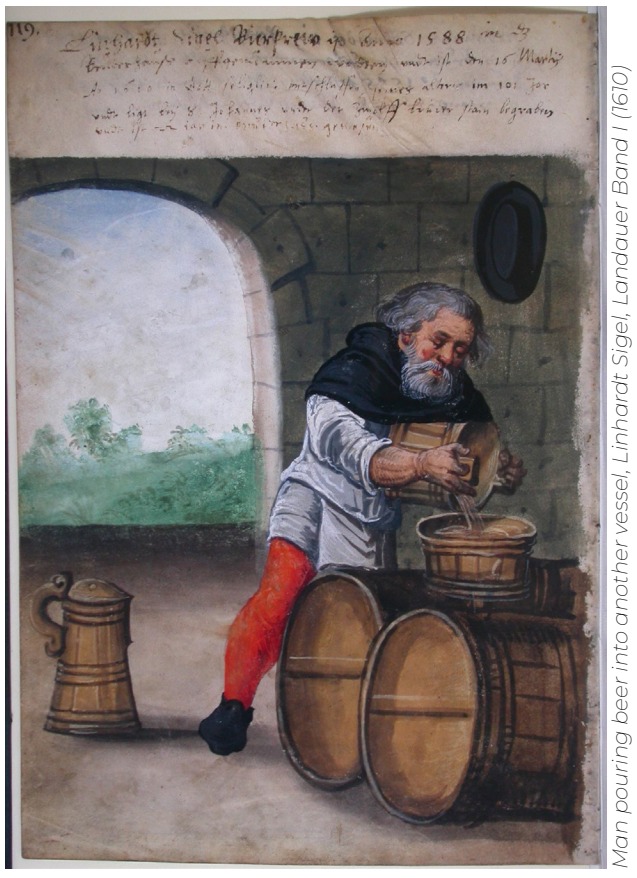
Evaluation of building at Rue du Bateau 26

Lautering



Mash and lauter tun with a grist case on top at Cantillon Brewery, Brussels

The mash is left to rest. Slowly, gravity begins its quiet work. Sweet golden liquid slips downward through a dense bed of grain husks, leaving the heavier solids behind. The brewer watches carefully as the first cloudy streams run out before clearing into amber transparency. The spent grain settles into silence after giving away its sugars, while the liquid wort continues onward toward the boiling kettle.



Man pouring beer into another vessel, Linhardt Sigel, Landauer Band I (1610)

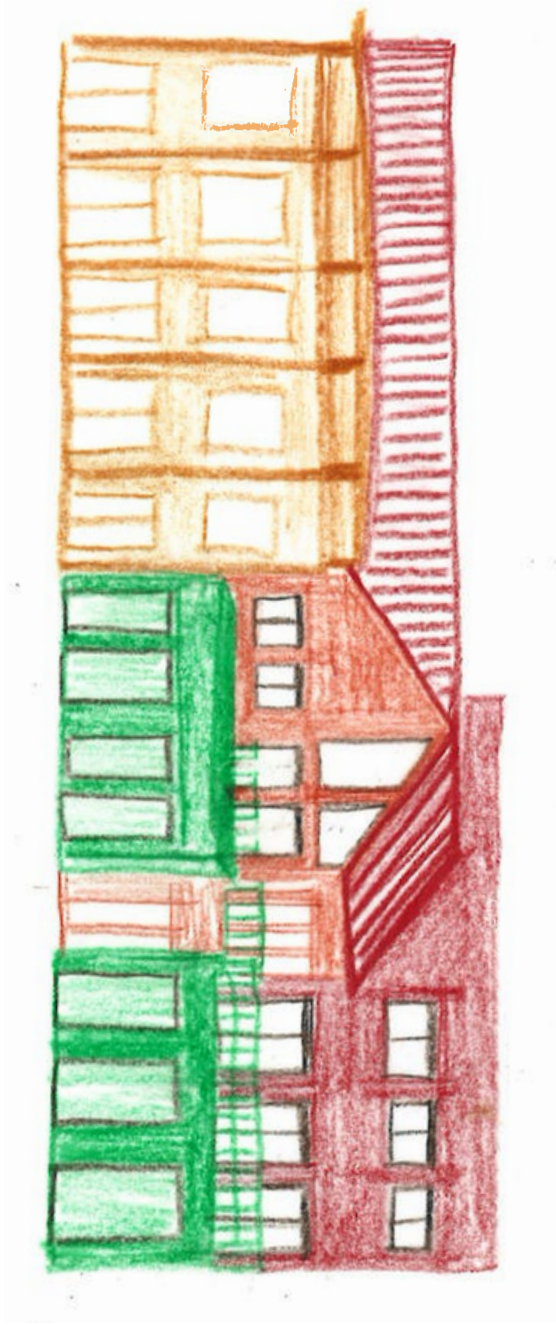
Lautering separates the liquid wort from the solid grain material after mashing. The grain husks form a natural filter bed through which the wort is drained. Additional hot water is often sprayed over the grains in a process called sparging to rinse out remaining sugars and improve extraction efficiency.

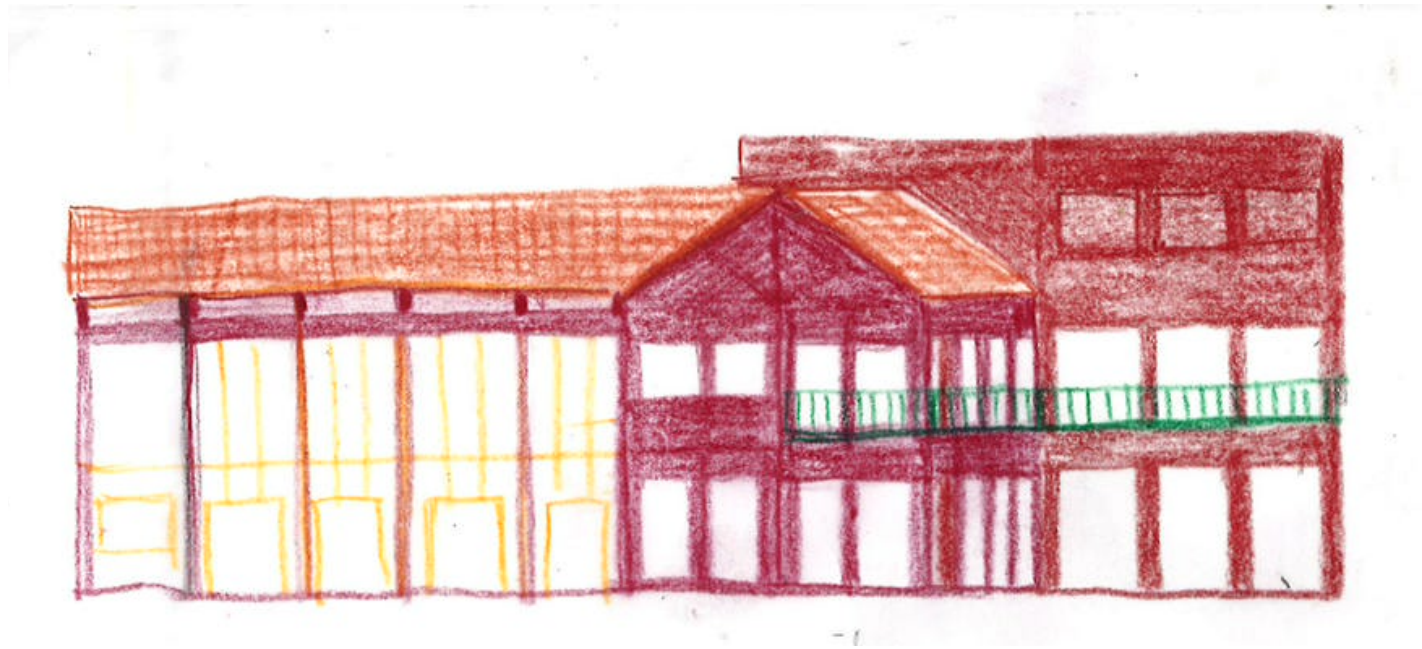
Traditional lauter tuns were broad circular vessels designed to maximize filtration surface area and allow gravity drainage. Breweries often organized production vertically so liquids could flow downward naturally between floors. Modern systems continue to use large stainless steel lauter tuns equipped with rotating rakes, pumps, and automated drainage systems to improve efficiency and consistency.

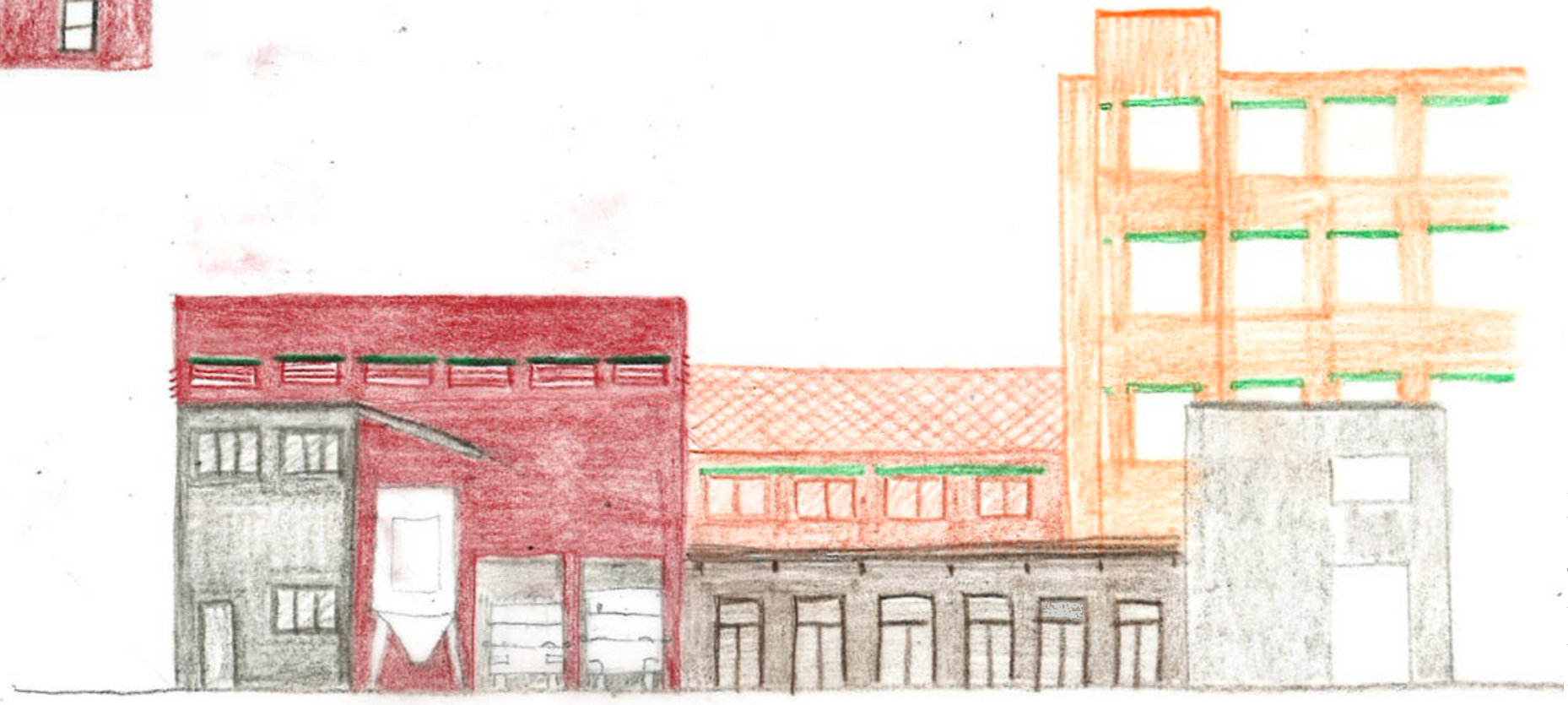


Brewery Müllerbräu (Studio Frick) in Pfaffenhofen, Germany

2.2. Block







Elevation sketches from design process

At the scale of the urban block, the project seeks to make production visible life rather than concealed behind anonymous industrial facades. This relationship is expressed most clearly through two stainless-steel grain silos positioned directly along the street. Functionally, the silos provide sufficient grain storage to reduce delivery frequency and logistical pressure on the site. Architecturally, they act as markers of production within the neighbourhood, announcing the presence of the brewery.

Next to the silos, the brewery workshop is conceived as a low structure. This decision preserves sunlight access to the courtyard while maintaining visual permeability between the interior of the block and the street. Rather than forming a barrier, the workshop allows glimpses of activity beyond and contributes to a more open and connected urban condition.



Southwest elevation

Along the street edge, the existing housing facade is largely retained. While the building is not a listed monument, the brick façade provides a nice clear and rhythmic front to the street, worth keeping. The oversized garage doors left from the former car trade business are selectively adapted: those serving bicycle storage, waste collection and basement car parking access remain, while others are replaced by residential entrances or retail storefronts. This approach preserves the character of the building while adapting it to contemporary forms of inhabitation and public use.



Southeast elevation

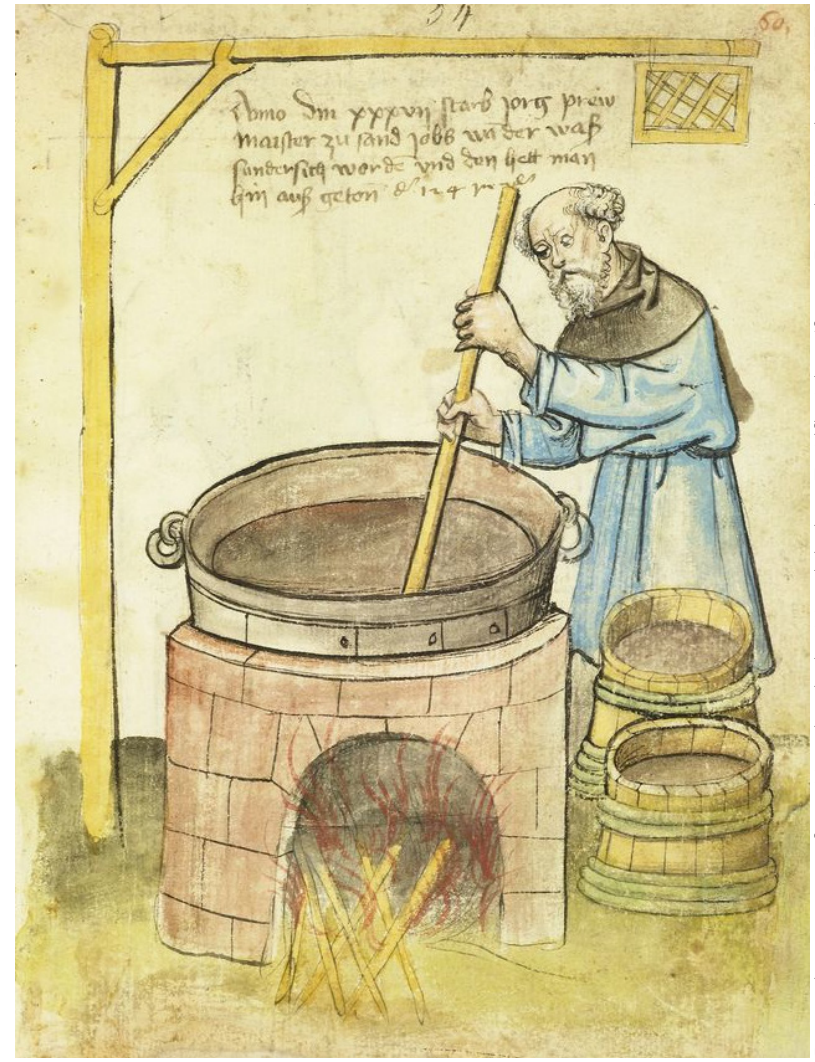
The most public functions of the project- the brewery bar and restaurant- are positioned towards the future linear park. Their orientation strengthens the relationship between the project and the public realm, allowing these spaces to engage directly with everyday movement through the neighbourhood and extending the social life of the park into the block.



Northeast elevation

Boiling

The wort reaches the kettle and erupts into motion as steam billows upward and hops release bitterness and aroma into the air. The brewery fills with sharp herbal scents and damp heat. Copper kettles once glowed over open flames, their surfaces blackened by smoke and fire. Now, sealed steel vessels roar with pressurized steam and controlled energy, yet the boil remains a moment of transformation and intensity.



Jorg, a brewmaster from Hausbuch der Mendelschen Zwölfbrüderstiftung, Band 1, Nürnberg 1437

Boiling sterilizes the wort, stops enzymatic activity, and extracts bitterness and aroma from hops. Different hop additions during the boil influence flavor, aroma, and preservation qualities. Boiling also evaporates unwanted compounds and concentrates the liquid before fermentation.



Portrait of a man in a brewery, Vincent Mentze, ca. 1975 - before 1990

The wort reaches the kettle and erupts into motion. Steam billows upward as the liquid rolls violently beneath the surface. Hops are thrown into the boil, releasing bitterness, aroma, and oils into the air. The brewery fills with sharp herbal scents and damp heat. Copper kettles once glowed over open flames, their surfaces blackened by smoke and fire. Now, sealed steel vessels roar with pressurized steam and controlled energy, yet the boil remains a moment of transformation and intensity.



Hop boilers at Cantillon Brewery, Brussels

2.3. Site

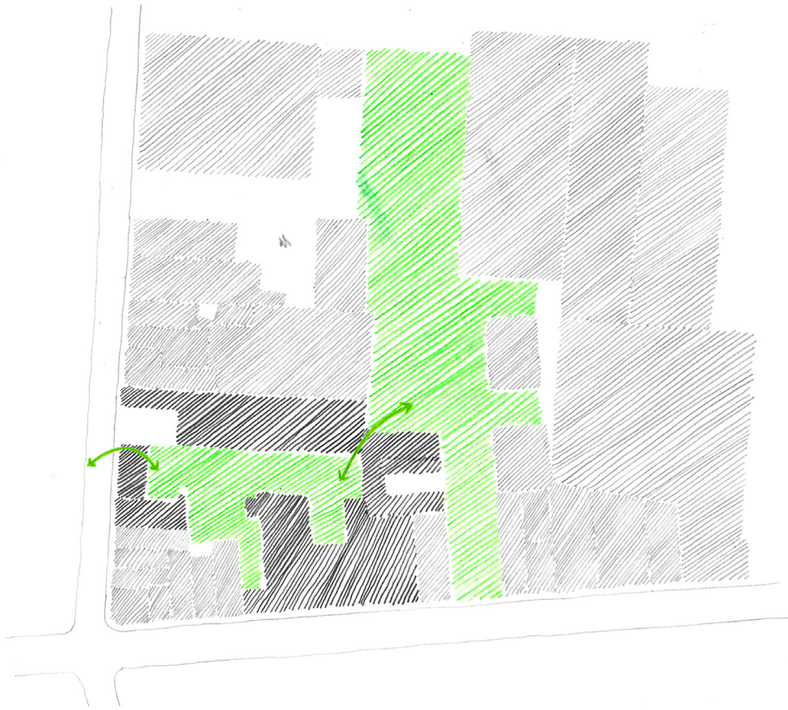
Analysis of the existing buildings (Chapter 1.1. City), together with broader spatial research, helped identify not only the qualities of each building, but also the challenges posed by the site as a whole. One issue quickly became apparent: despite the generous dimensions of the industrial halls, the interior of the block suffered from a lack of light, air and meaningful outdoor space. The analysis therefore informed one of the project's first key design decisions: the selective demolition of two of the central industrial halls. Although the buildings on their own possessed qualities



Model 1:333

worth preserving, their removal created opportunities for the remaining structures to benefit from improved environmental conditions and stronger spatial relationships.

The resulting courtyard became the organising element of the project. It introduces light and air deep into the block, establishes visual connections between living, working and public functions, and provides a shared space around which the different programmes can be arranged. The intervention therefore transforms the site not through extensive demolition, but through a targeted subtraction that unlocks the latent potential of the existing fabric.



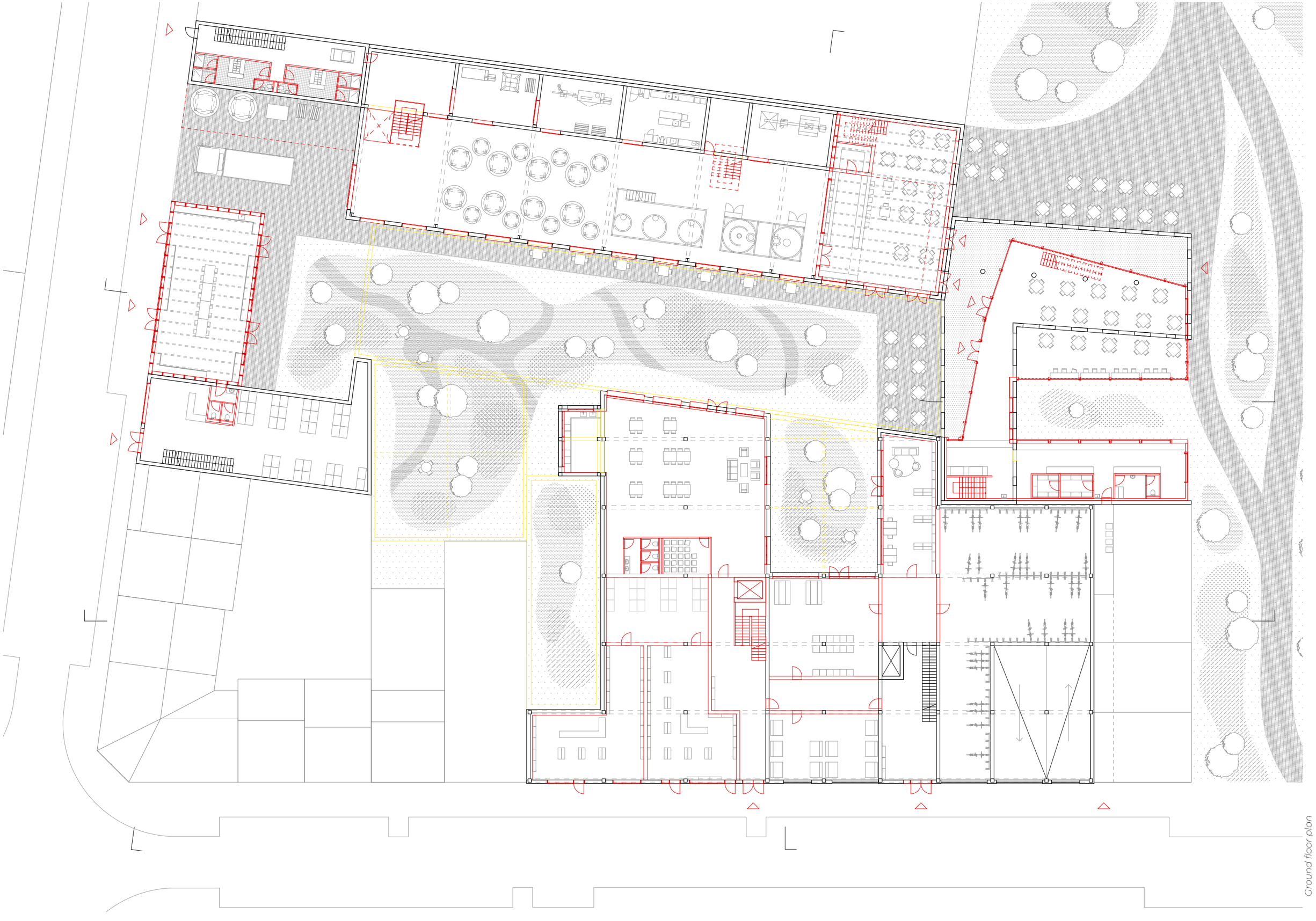
Connections to open space



Demolish (yellow), keep (black), new build (red)



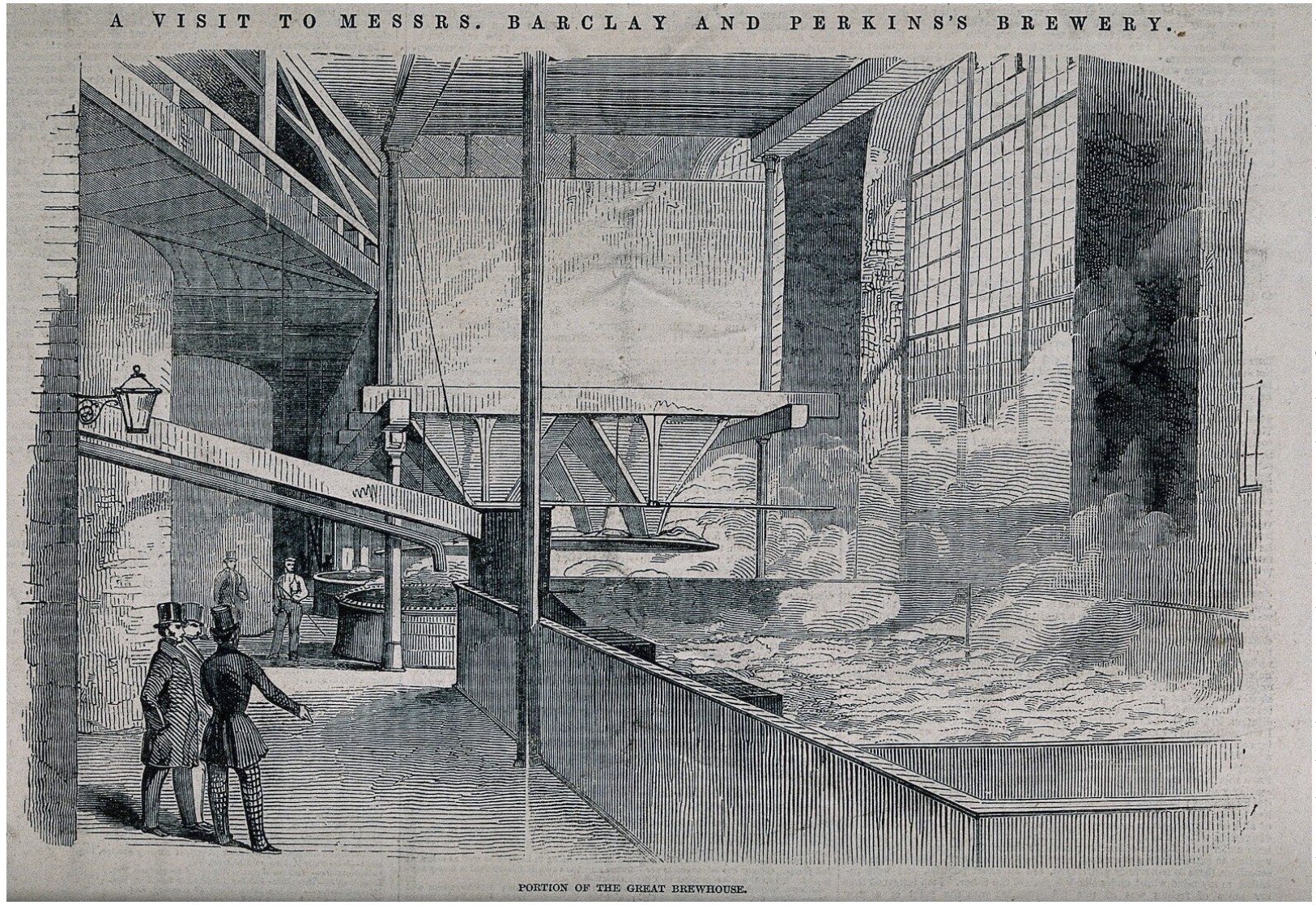
Entrance points into courtyard



Ground floor plan

Cooling

The hot wort arrives in the coolingship. This is where it will spend the cold night- in a shallow but wide copper vessel without a single weld to be found- a true coppersmith's masterpiece. The air will gently blow over the surface, silently bringing natural fermenting agents into the liquid. It feels like a meeting between old friends- comfortable and relaxed.



Barclay and Perkins brewery, Southwark: visitors watching beer fermenting in a large brewhouse. Wood engraving, 1847.



Copper cooling tun in Cantillon Brewery, Brussels

After boiling, the wort is filtered to remove hop and trub particles, then slowly drained into a copper or steel coolship. Located near open windows at the top of the brewery, the coolship exposes the wort to cool night air and naturally occurring microorganisms that begin fermentation. This step is only possible during colder months, when mold growth is limited. After cooling for about 10 hours, the wort is transferred to barrels.

2.4. Courtyard



Project drawing of courtyard

As the design developed, the courtyard evolved from a passive void into the social and spatial centre of the project. Entrances, openings, collective spaces and public programm were reorganised around it, allowing the courtyard to structure relationships between the different uses.

Each function engages with it differently. The brewery opens itself towards it through large perforations in the façade, revealing the stainless-steel brewing equipment and production process. The housing block places collective spaces along this edge, allowing domestic life to overlook the activity below. The restaurant and brewery bar extend into the courtyard through outdoor seating and transitional spaces, while a workshop pavilion further activates the ground level and contributes to the daily life of the site.



Courtyard landscape drawing

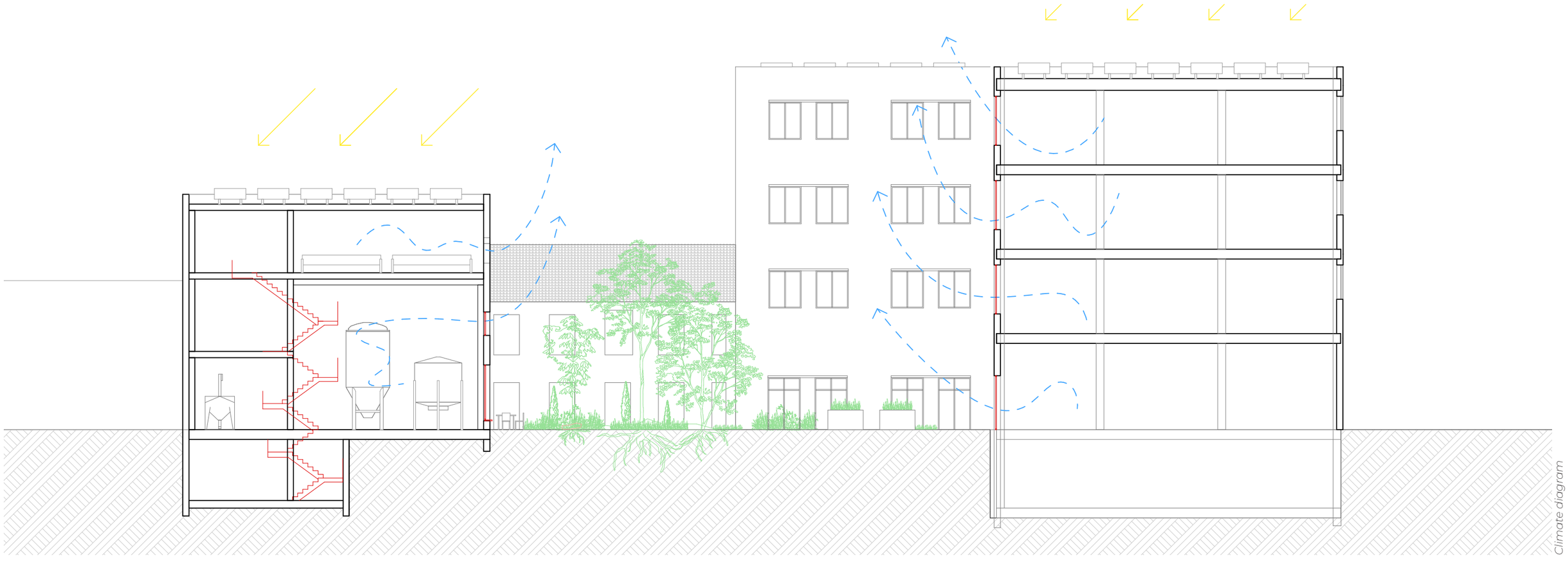
The courtyard is conceived not as a circulation shortcut, but as a place of pause, observation and collective use. Residents can garden, children can play safely after school, brewery workers can take breaks outdoors, and visitors can sit with a drink while observing the productive spaces around them. Vegetation contributes both socially and environmentally, providing shade, improving microclimatic conditions and supporting phytoremediation strategies aimed at gradually improving contaminated soils. Through these relationships, the courtyard evolves into an inhabited urban room that brings together living, making and gathering within a shared space.



Section B-B


MENU

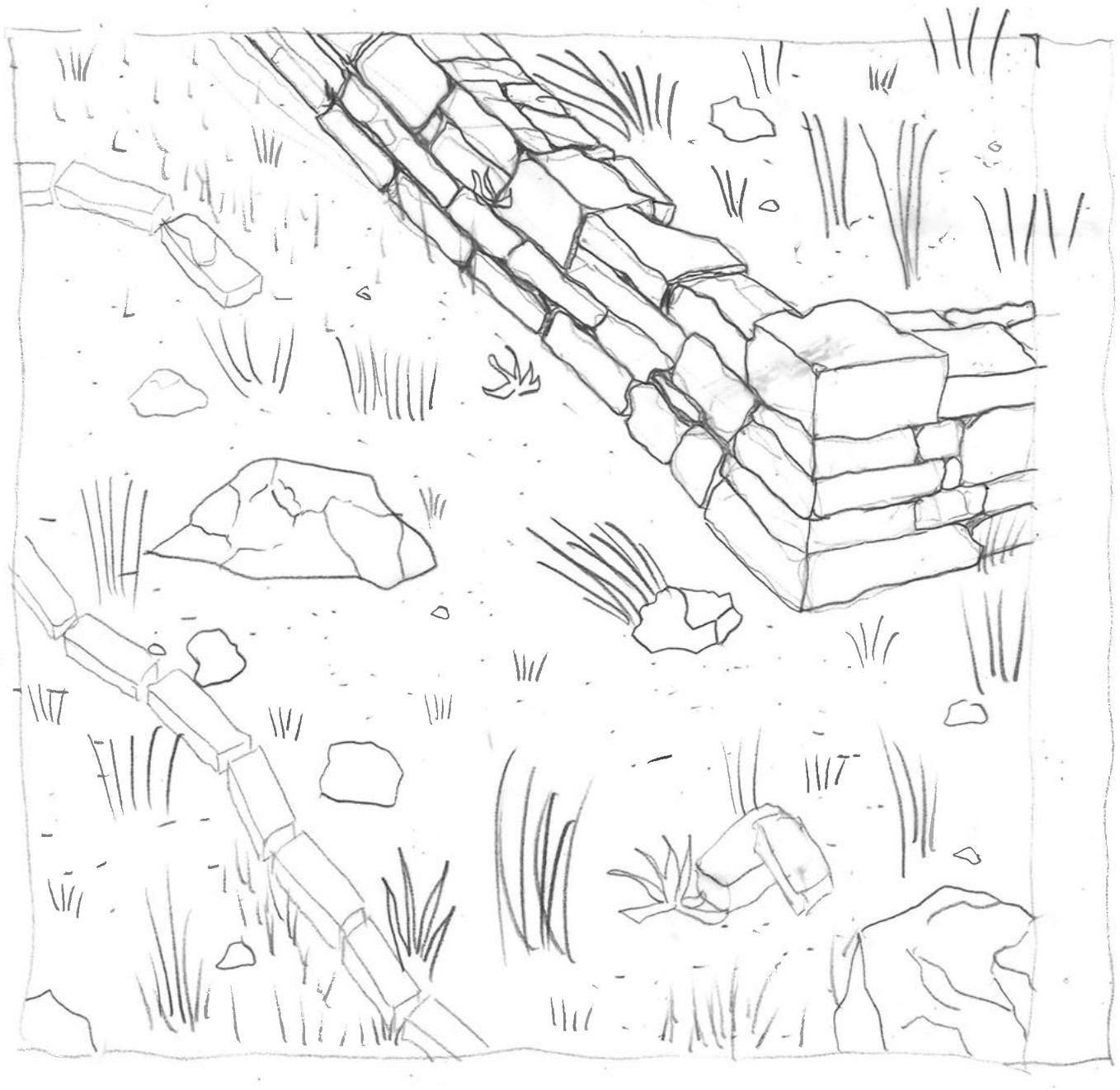




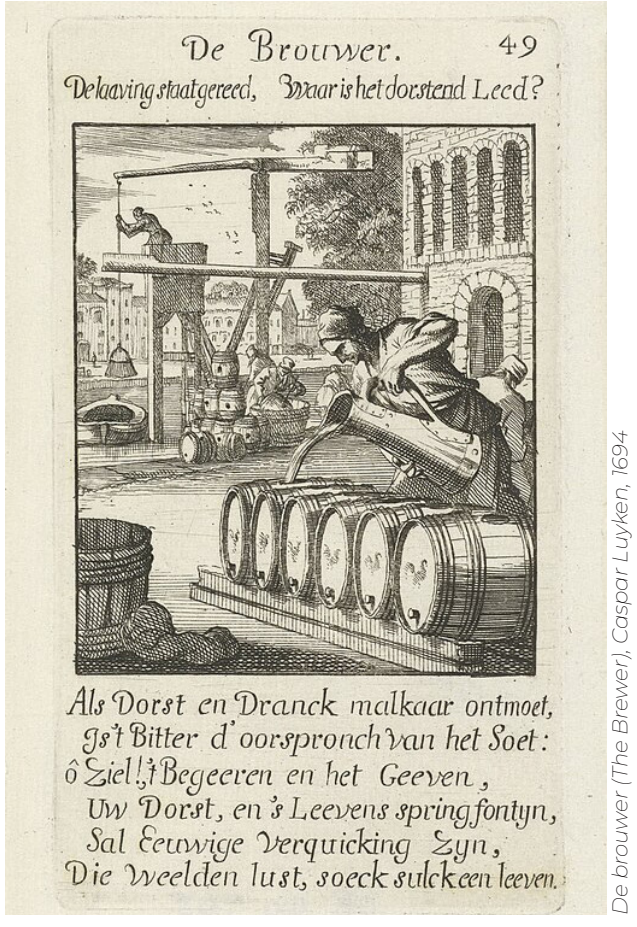
Climate diagram

Fermenting

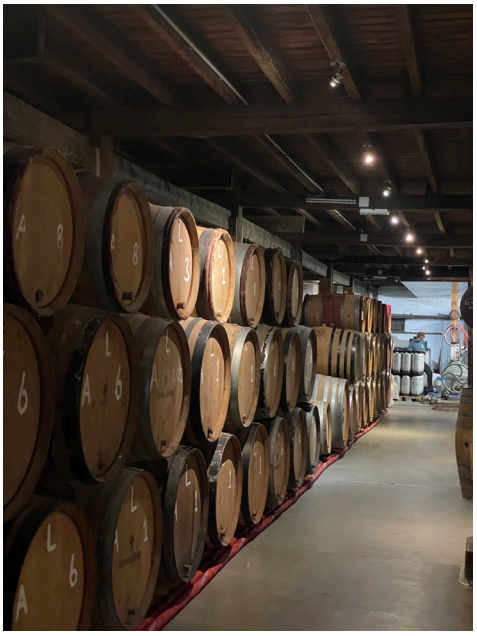
The next morning, the cooled wort- now filled with bacteria and yeast- is pumped into fermentation tanks. Quiet chaos unfolds as sugars are consumed and transformed into alcohol and carbon dioxide. The liquid foams and bubbles with unseen activity. Once, brewers listened closely to the creaking of wooden barrels and the hiss of escaping gas to judge the health of the fermentation. Today, sensors and gauges monitor the process constantly, though the transformation itself remains mysterious and alive.



Rubble from demolition reused in landscape strategy



De brouwer (The Brewer), Caspar Luyken, 1694



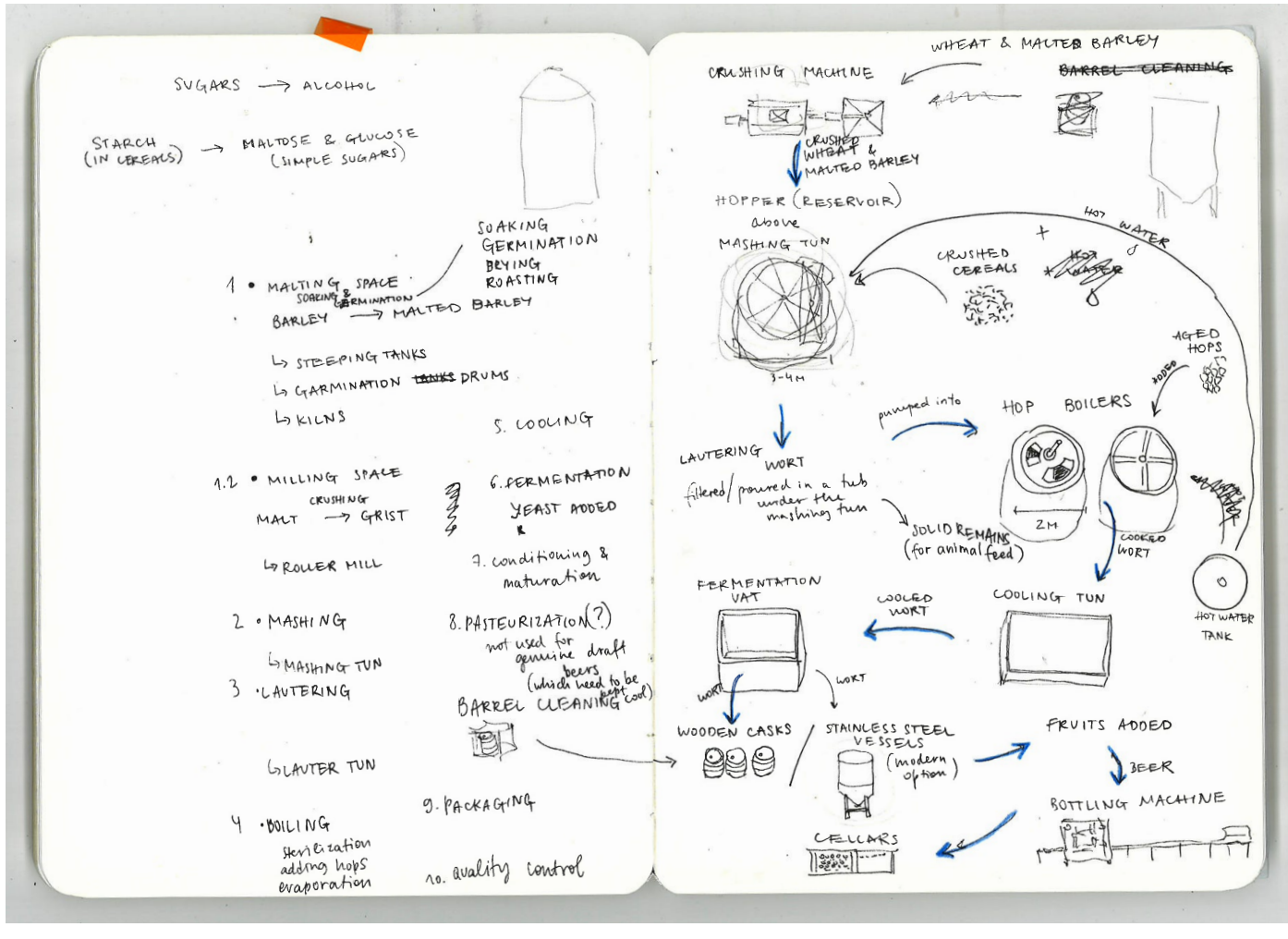
Fermenter reused wooden casks in Cantillon brewery in Brussels, Belgium

After a few days, the wild yeasts reacting with the sugars in the wort results in spontaneous fermentation. At first, the fermentation process is relatively violent and visible. For 3-4 days the production of CO2 is such that the barrels cannot be sealed because there is risk that they might otherwise explode. As part of the process a white foam comes out of the bunghole and this can lead to a loss of 5-10 litres of wort per barrel.



Fermenter tanks in Hopspot brewery (Delmulle Delmulle) in Ertvelde, Belgium

2.5. Hall



Sketch of brewing process research

Research into brewery design became a key driver of the architectural proposal. By studying the movement of grain, hops, water and yeast through the brewing process steps, the project developed an understanding of the spatial, technical and environmental requirements of production. Contemporary urban breweries were analysed to understand how logistics, manufacturing and public accessibility could coexist within a single building.

This research led to a careful distinction between spaces that could remain visible and those requiring controlled conditions. The brewing hall is bright, open and visually connected to the courtyard, allowing production to become part of the everyday experience of the site. In contrast, grain processing, fermentation, bottling and other technical areas are more enclosed due to requirements related to hygiene, temperature and light sensitivity.

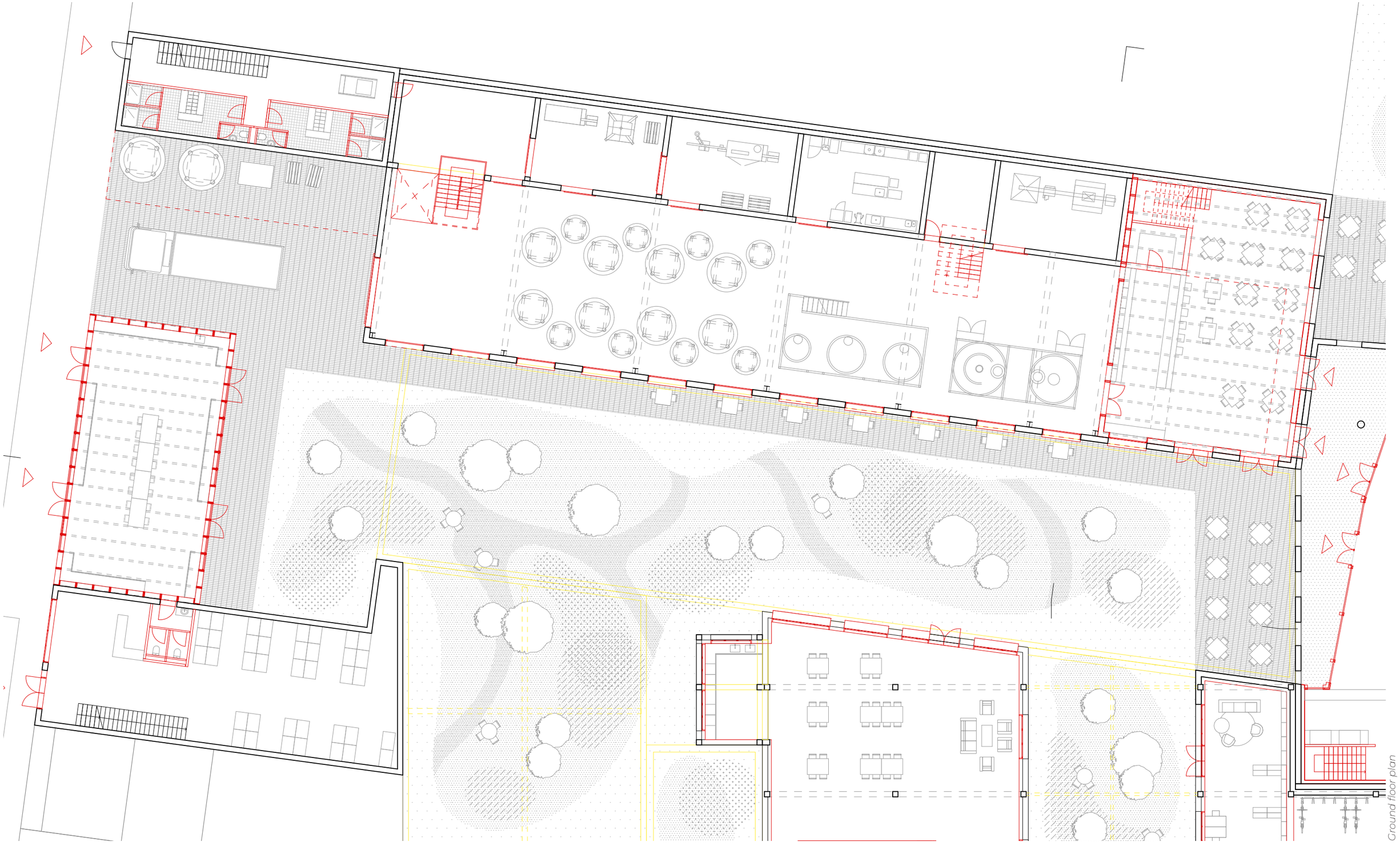
The project therefore choreographs visibility and separation. Residents and visitors can observe the brewing process without disrupting it. In this way, the hall functions both as a productive machine and as a public interface between making and urban life.

Analysing the daily and seasonal rhythms of the working brewery revealed a possibility of a different oragnising of the spaces- based on thermal comfort. The daily use of machinery operating with hot water and steam, mostly during the winter period, combined with the activeness of the labour meant the main brewing hall with its technical spaces could provide the necessary thermal comfort without additionally insulating the existing hall. The bar, located on the northern end of the hall, however, by definition was a space for more passive activities. Therefore, the interior is insulated by a hemp layer, held to the wall by additional timber structure that remains visible. This way of creating different thermal zoning minimises the necessary interventions and reduce energy consumption.

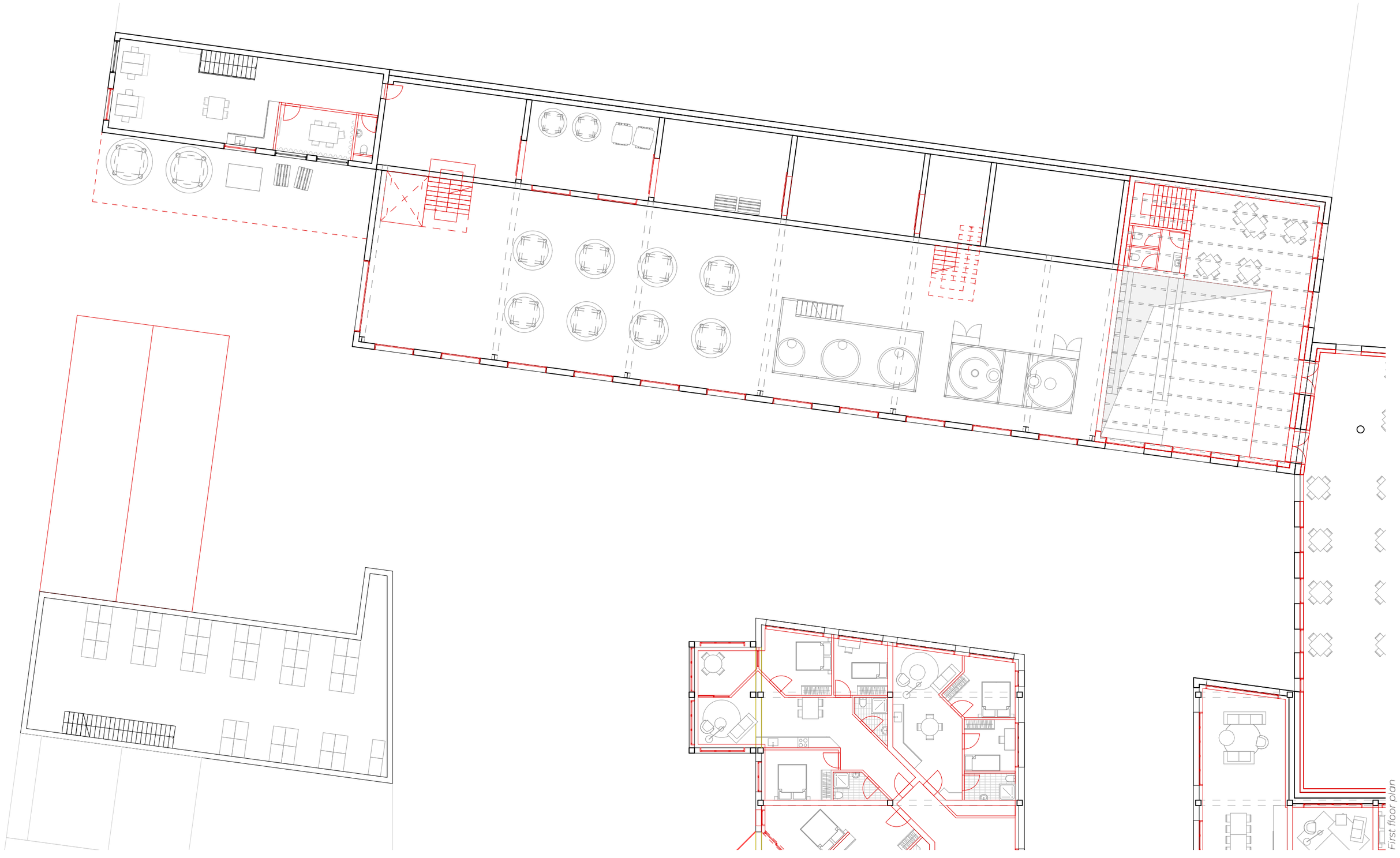
BEER BREWING PROCESS EQUIPMENT REQUIREMENTS

BREWING PROCESS STEP	EQUIPMENT	FUNCTION	COUNT	High transformation	GROUPS
STORAGE SYSTEM / GRANARY	Grain silos			4–6 m × 4–6 m × 15–25 m	
	Grain cleaning machine	Removes stones/dust		2.5 m × 1.5 m × 2.2 m	
MALTING	Steeping tanks	used for soaking barley (24-48h)		3.6 m × 3.6 m × 4.5 m	
	Garmination drums/boxes			10 m × 3.5 m × 3 m	
	Kiln (drying furnace)	hot air drying to stop germination		3.6 m × 3.6 m × 4.5 m	
MILLING / CRUSHING	Roller malt mill	Grinds cereals (wheat and barley)		1.5 m × 1 m × 1.8 m	
	Grist case (malt hopper)	Temporary storage before mash		FLEXIBLE 2.5 m × 2.5 m × 4 m	
MASHING	Mash tun	Heated vessel for enzymatic starch conversion	2	d = 2.6 m h = 5.0 m	
LAUTERING / FILTERING	Lauter tun	seperates/filters wort from grain bed -> wort goes to hop boilers, spent grain (draff) as a waste product	2	d = 3.4 m h = 4.8 m	
BOILING	Hop boiler	Boils wort with hops	4	d = 2.6 m h = 5 m or d = 2.0 m h = 5 m	
CLARIFICATION?					
COOLING	Plate heat exchanger	rapidly cools wort		1.8 m × 0.8 m × 1.6 m	
	Cooling tun (Lambic)	cools wort	2	5-7 m × 3-5 m × 0.3 m	
FERMENTATION	Stainless steel cylindroconical fermenters	Tall vertical tanks for yeast fermentation	16-24	FLEXIBLE d = 3.5 m h = 10-12 m or d = 2.0 m h = 4.6 - 4.95m	
	Wooden wine casks	Reused oak or chestnut casks (225-500L) from winemakers		d = 0.7 m h = 1.05 m	
CONDITIONING?	brite beer tank (or BBT)	after the fermentation process is complete – the beer is ideally conditioned, carbonated and stored to become a mature, well-rounded craft beverage. For this application, a BBT can be employed for this process.		flexible	
FILTRATION	Beer filter	dead yeast particles are removed by means of a mass filter		1.2 m x 0.8 m x 1.0 m or 3 m × 2 m × 2.5 m	
FRUIT BEERS STATION	Fruit washing machine Inspection sorting table Fruit receiving hopper				
	Fruit fermentation tank	Soaking beer (e.g. 2 year old lambic) with fresh fruit to extract the fruit's taste, colour and sugars		FLEXIBLE d = 3.5 m h = 10-12 m	
	Fruit beer filtration			x	
PACKAGING	Bottling line			10-15 m x 1-3 m x 2-3 m	
	Keg washer/filler			3 m × 2 m × 2.5 m	
CLEANING SYSTEM				2.5 m × 2 m × 2.5 m	
SPACE FOR EXPANSION					

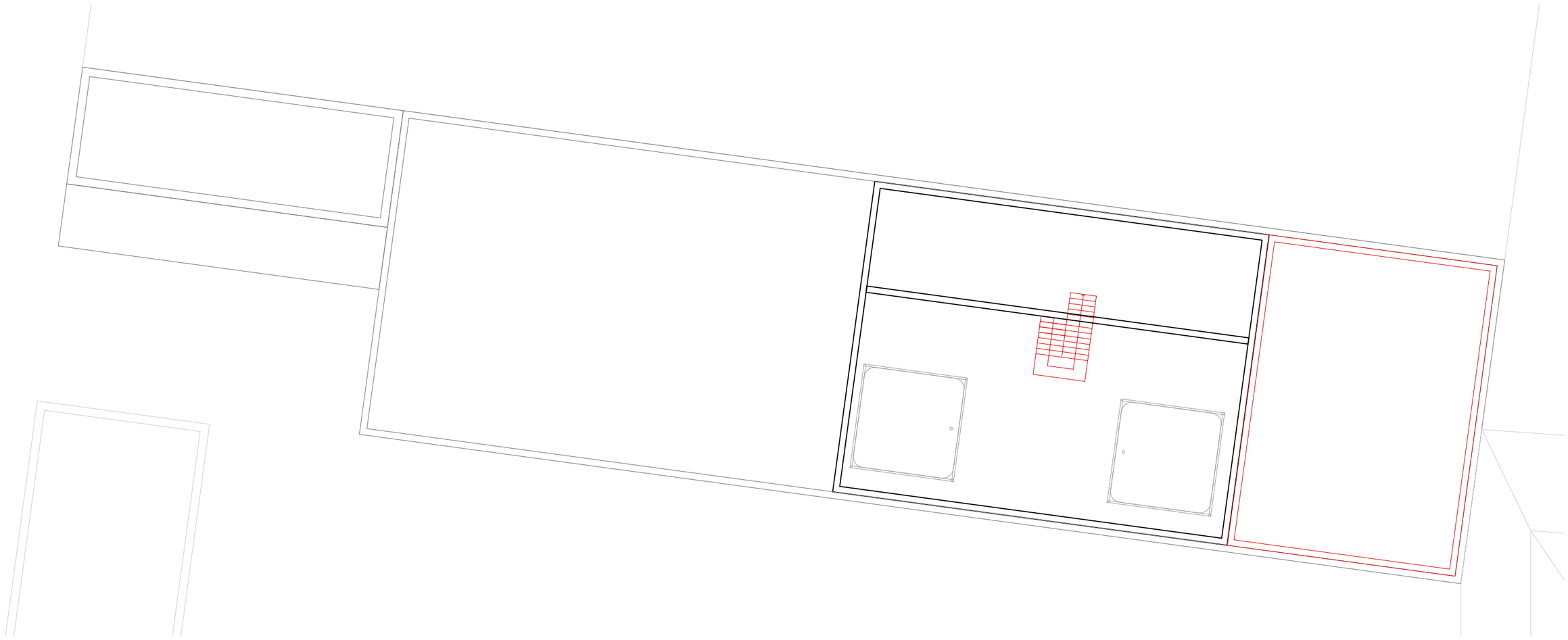
Table from Miro done as research into brewing requirements and equipment



Ground floor plan



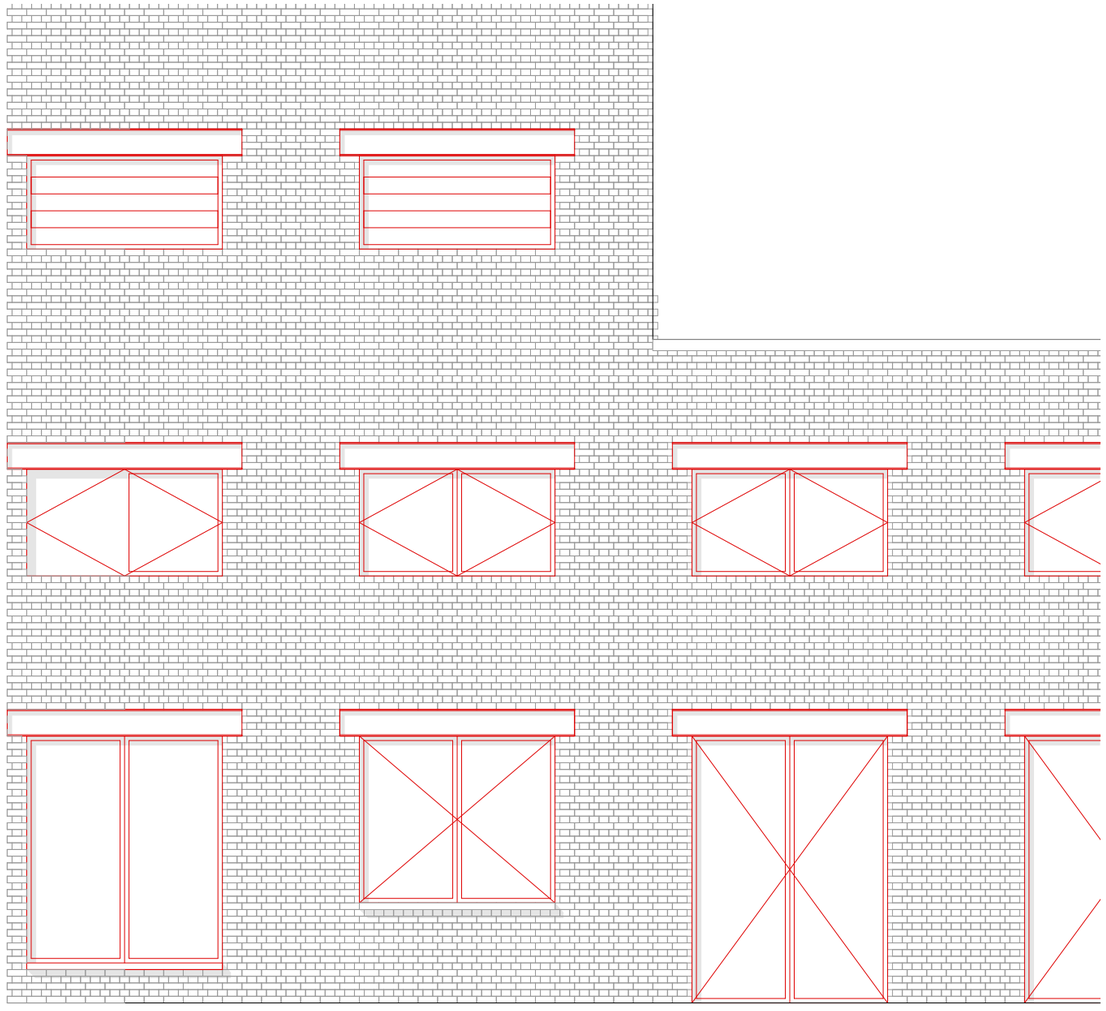
First floor plan

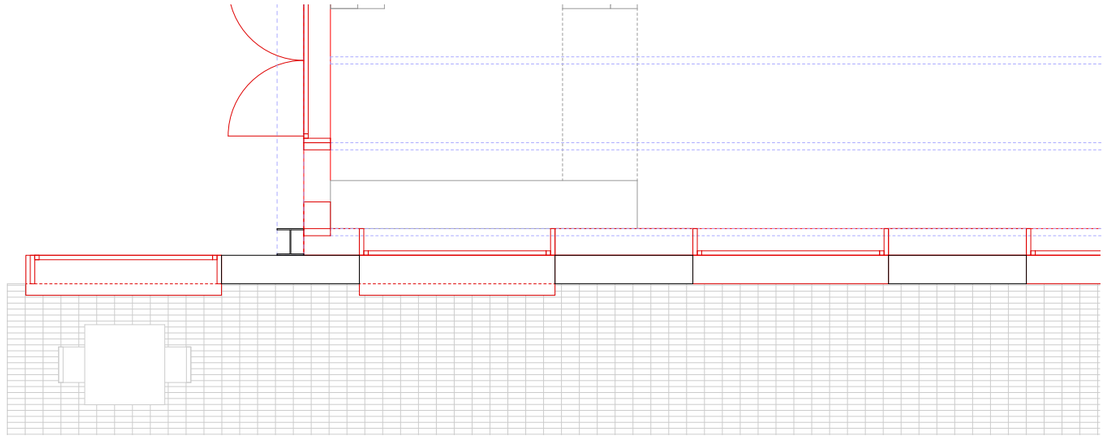


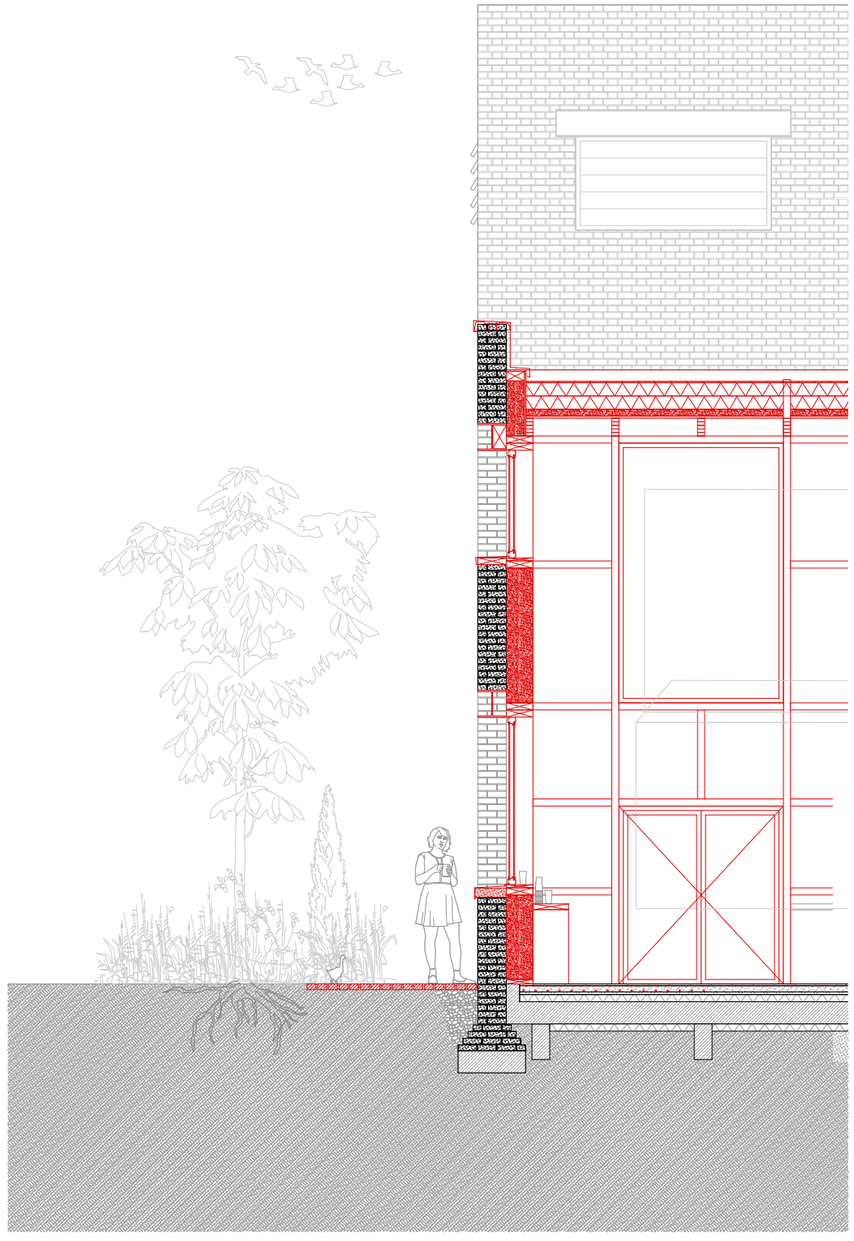
Second floor plan



Brewery interior model photo







window:
HEA steel beam, reused
triple glazing in 78 mm pine frame

wall construction:
210/100/65 mm brick masonry wall, existing
hempcrete wall 300mm with timber structure
PCS natural plaster finish 5mm

ceiling construction:
crushed stone 18mm
silver fir sheating 30mm
hemp thermal insulation 200mm
woodfibre insulation 300mm
waterproofing membrane
gypsum board 12,5mm
plywood board 12mm
timber beams 8/200 mm

floor construction:
floor boards, recycled 18mm
inlaid soft wood fibre panel with underfloor heating 35mm
soft wood fibre impact soundproofing 35mm
crushed stone 18mm
silver fir sheating 30mm
hemp thermal insulation 200mm
waterproofing membrane
concrete slab 250mm
insulation
foundations

Detail plan, section and elevation of brewery 1:20

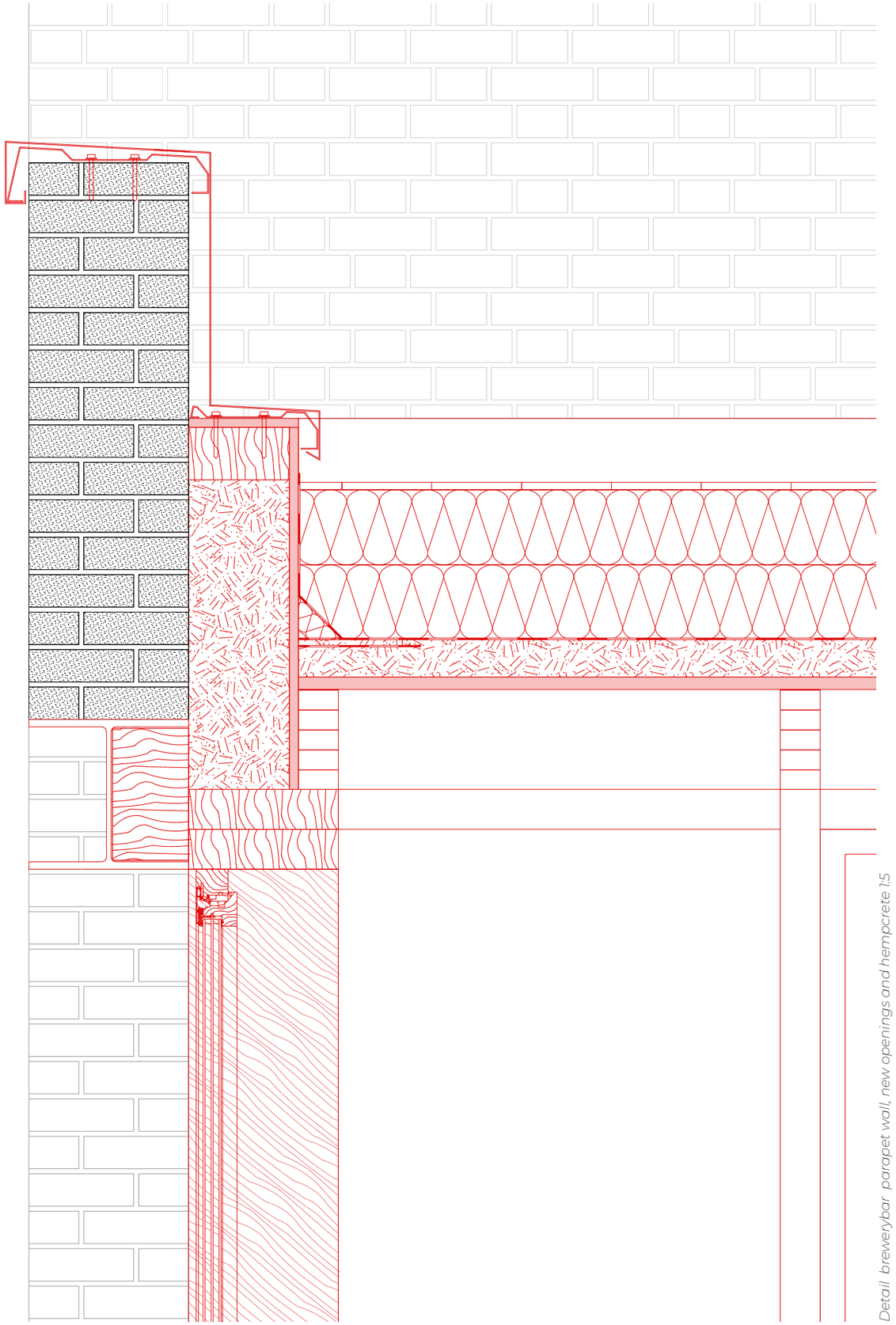
In-situ hempcrete is a cast insulation material made by placing a hemp–lime mixture directly into formwork on site, typically around a structural frame or against existing walls. In renovation projects, it can improve thermal and acoustic performance while maintaining the breathability of older buildings, helping to manage moisture and reduce condensation risks. Its low environmental impact and compatibility with traditional construction materials make it a popular option for upgrading existing buildings.



Hempcrete mix for in situ pouring (BC Architects)



Hempcrete workshop (BC architects), EdegemBelgium.



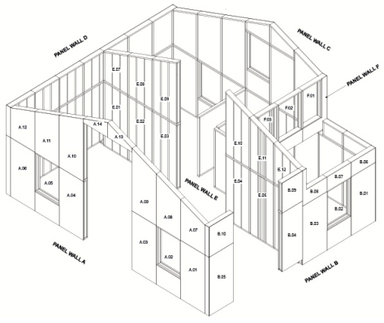
Detail brewerybar parapet wall, new openings and hempcrete 1:5



Section C-C



Flat House (Material Cultures), 2019, Cambridgeshire, England



Flat House (Material Cultures), 2019, Cambridgeshire, England

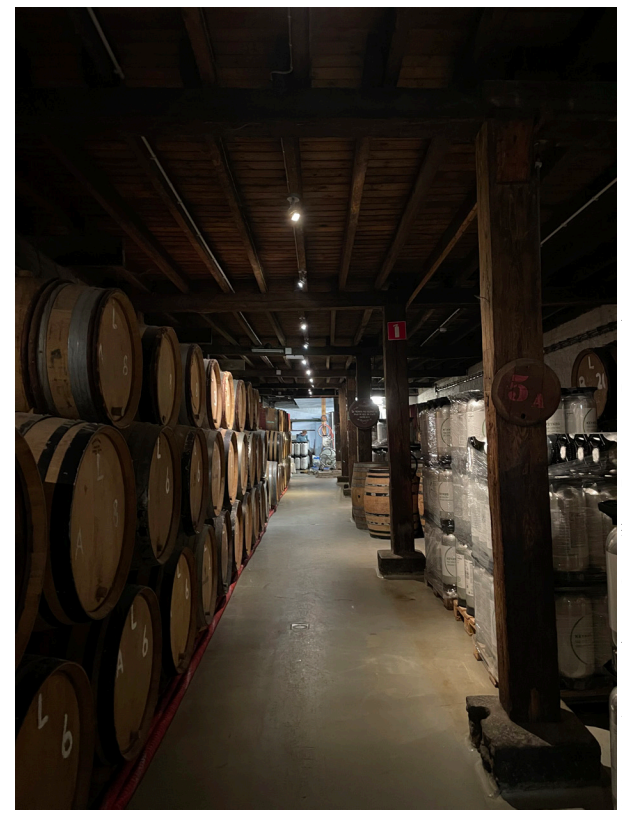


Flat House (Material Cultures), 2019, Cambridgeshire, England

Prefabricated hempcrete panels are factory-manufactured building elements that combine hemp-based insulation with a structural or semi-structural framework. In new construction, they enable faster installation, improved quality control, and reduced on-site labor while providing good thermal and acoustic performance. Their low embodied carbon and renewable material content make them a good option for sustainable, energy-efficient buildings.

Maturing

The young beer is restless at first, cloudy and unfinished. Time slowly softens it. In cool dark cellars, flavors settle into balance while remaining yeast and particles sink quietly to the bottom. Wooden barrels once lined underground vaults where the beer rested in silence for months beneath stone ceilings. Today, insulated tanks hold the beer at carefully controlled temperatures, but maturation still depends on patience more than machinery.



MAturation casks at Cantillon Brewery, Brussels



MAturation tanks at Brasserie de la Senne (GÉNÉRALE Assemblée d'Architectes), Brussels

Maturation, or conditioning, allows the beer's flavors to stabilize and develop after fermentation. During this period, unwanted compounds dissipate while carbonation and clarity improve. The duration varies depending on the beer style, ranging from days to several months.

Traditional lagering cellars were often built underground to maintain naturally cool and stable temperatures. Thick masonry walls and vaulted ceilings helped regulate humidity and thermal conditions. Contemporary breweries use refrigerated maturation tanks housed within insulated industrial environments.



Modus Brewery (Prevalent architecture) in Newcastle, Australia

2.6. Restaurant



Food expands the social role of the brewery. Many of the brewery case studies incorporated kitchens and restaurants, revealing how brewing and eating naturally support one another. In Heyvaert, this became particularly relevant because of the neighbourhood's multicultural character. While beer may not hold the same cultural importance for every resident, food provides a broader point of connection.

Inspired by discussions with local organizations such as Cosmos- a community centre in Cureghem- the restaurant also functions as integration project- a learning and employment space where residents can develop hospitality skills and gain greater independence.

Architecturally, the restaurant occupies an intermediate position between brewery, courtyard, and park.

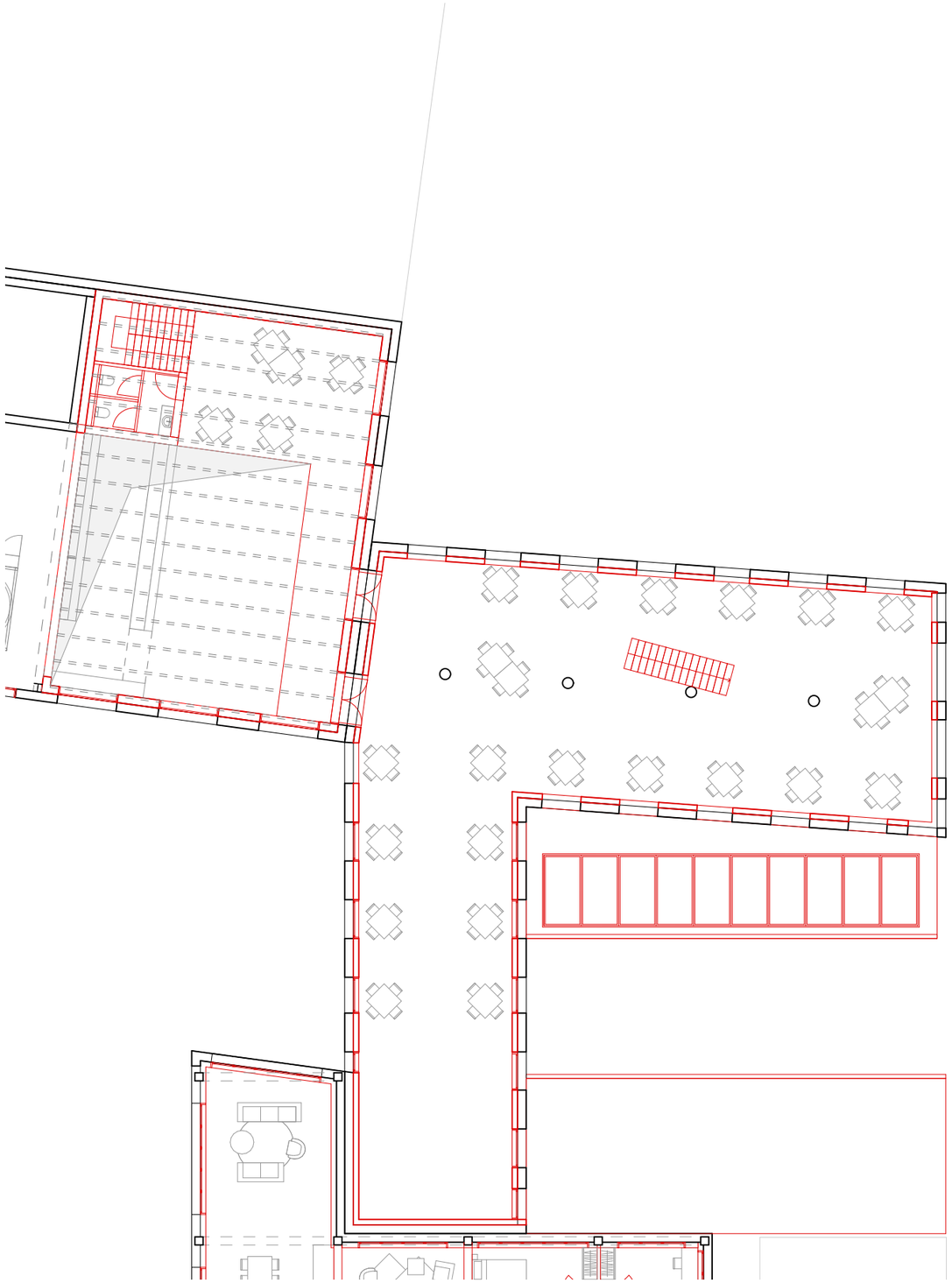




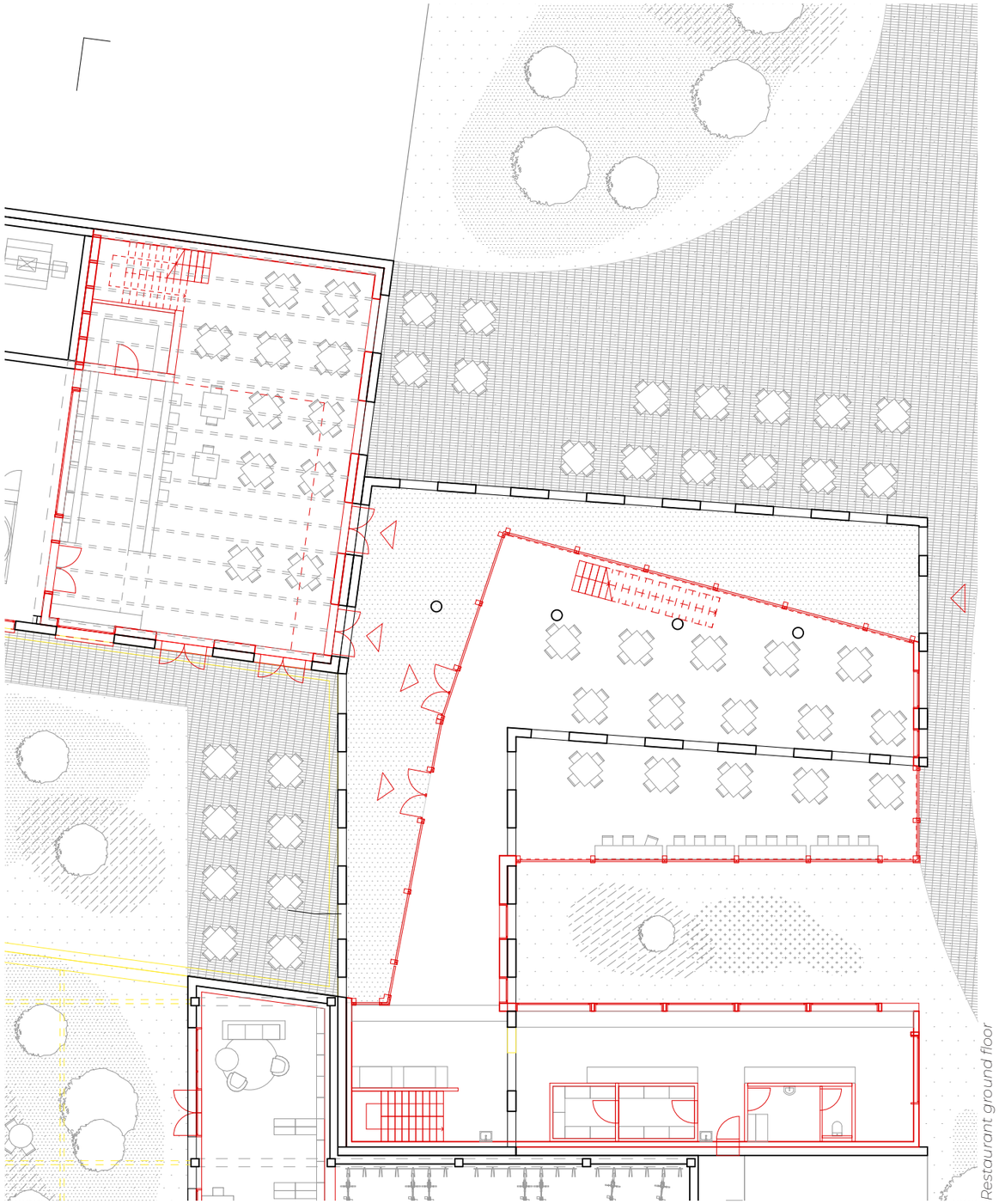
Sketches from community kitchen in Abattoir, Brussels

Rather than simply occupying the existing building envelope, parts of the façade are pulled back to create transitional spaces that mediate between inside and outside. The kitchen itself remains visible, allowing visitors to observe food preparation through a series of windows, while staff can still maintain privacy if necessary through the use of blinds, and have views toward the park and mini-courtyard. These interventions transform the former industrial buildings into spaces of encounter rather than isolated containers.





Restaurant first floor



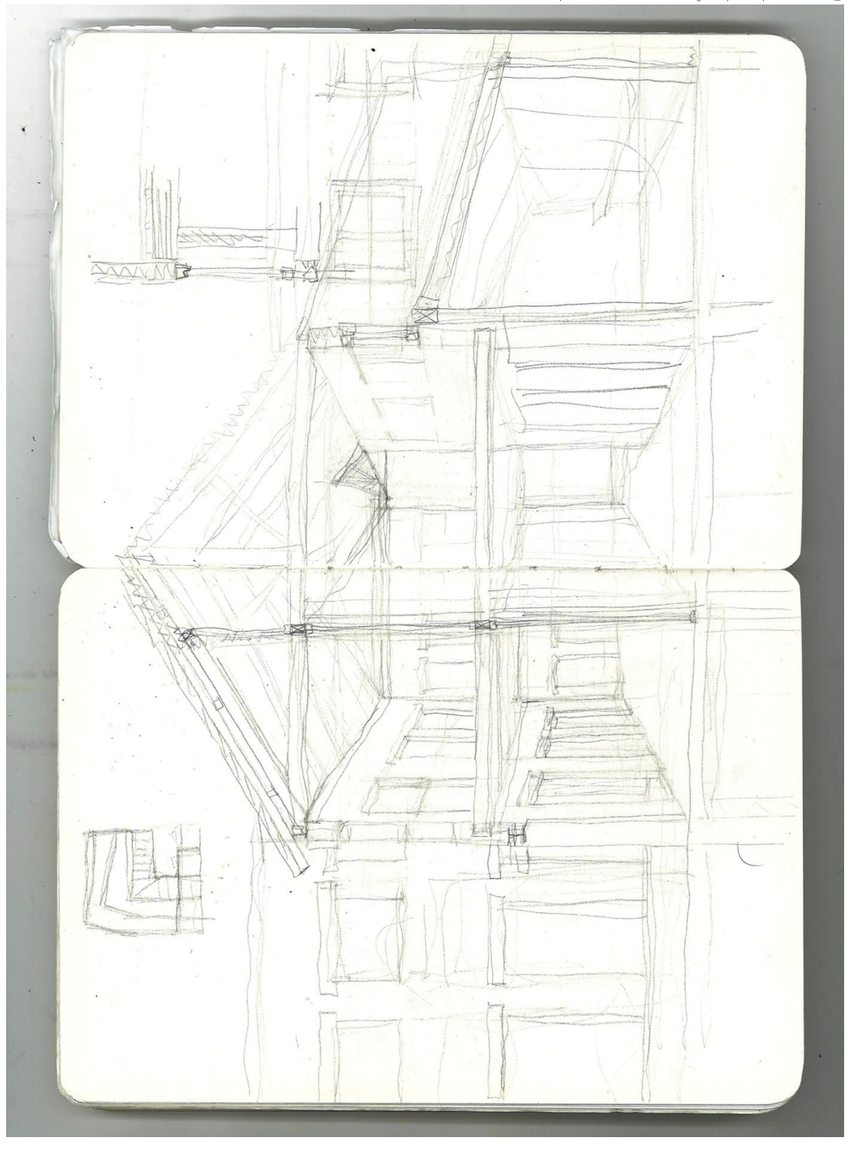
Restaurant ground floor



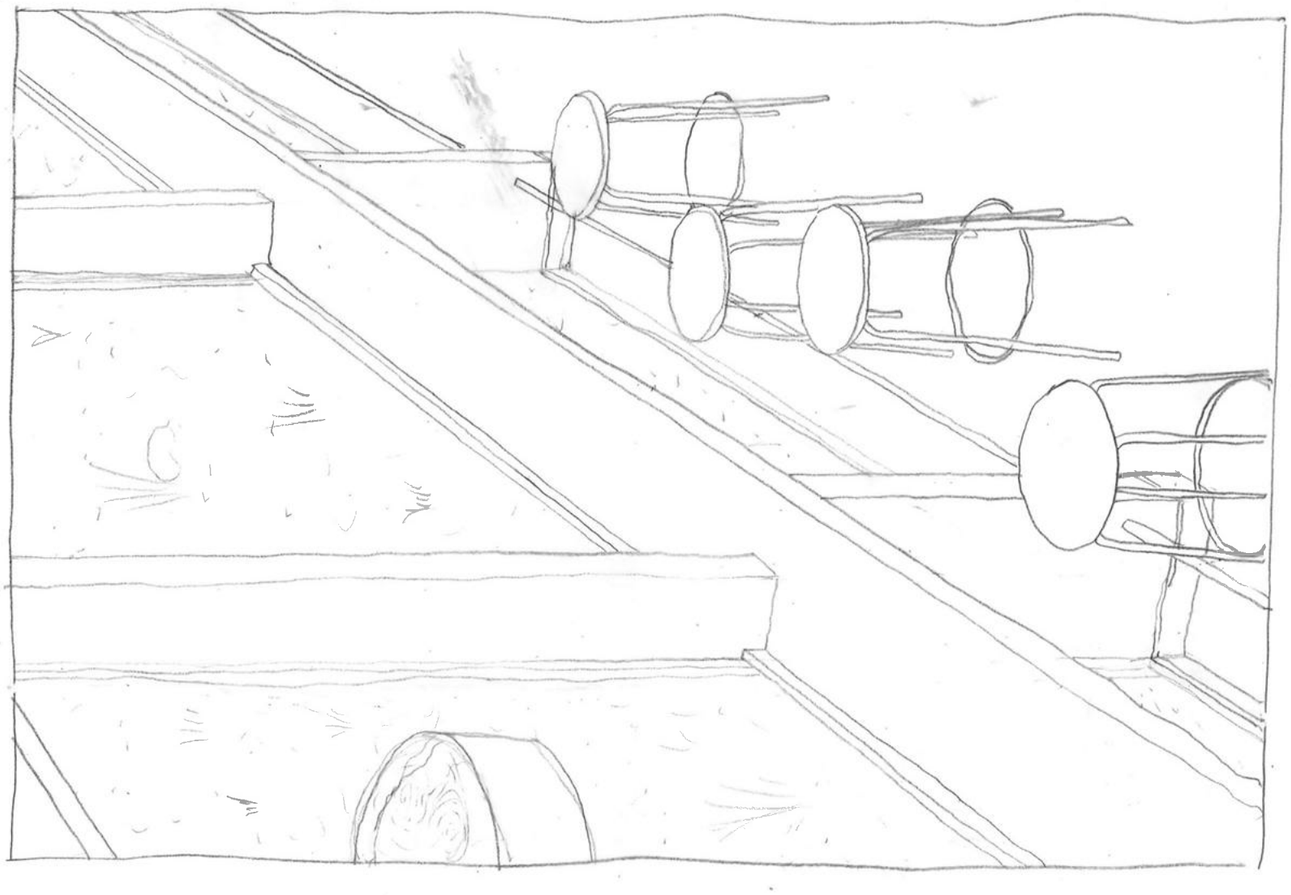
Section E-E



Section B-B



Process sketch of restaurant section



Drawing of restaurant



Bottling & Packaging

The finished beer finally leaves the tanks. Glass bottles glide endlessly along conveyor belts while metal caps snap shut with mechanical rhythm. What was once carried carefully by hand in clay jugs and wooden barrels now moves through bright industrial halls at astonishing speed. Yet each bottle still captures a brief moment of the brewing season, sealed away until opened once more.



Cart for transporting barrels and brewer's sled at a pub, Victor Adam, 1828

Bottling packages the finished beer for storage, transport, and consumption. Before filling, bottles are cleaned and sterilized to prevent contamination. Carbonation levels are carefully controlled, either through natural conditioning or forced carbonation, before the bottles are sealed and labeled.



Beer vessels (from internet)

Historic bottling halls required large open workspaces for manual filling, corking, and storage. Industrialization introduced conveyor systems and mechanized bottling lines that reshaped brewery layouts around continuous production flow. Contemporary facilities emphasize automation, sanitation, and logistical efficiency.



beer bottle storage at Cantillon brewery, Brussels





Bottling machine at Cantillon Brewery, Brussels



Bottling machine (to the left) at MANUFAKTURA Brewery (Sampling Architects) in Riga, Latvia

2.7. Housing

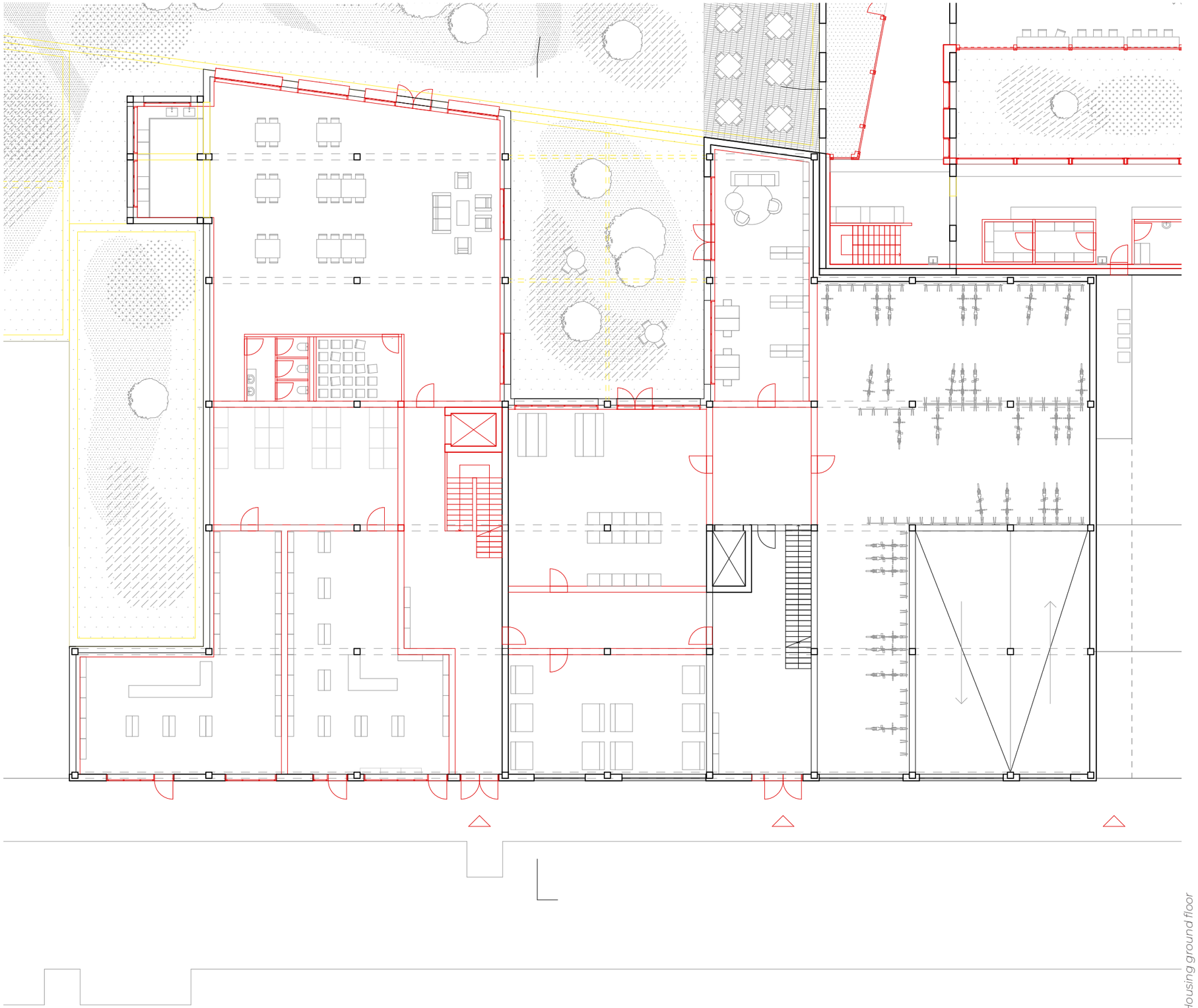


Photo collection of furniture on the streets of Heyvaert, Brussels, made during multiple site visits

Alongside production, the project proposes new forms of housing within the existing industrial structures. The largest building on the site is transformed into a collective housing block combining permanent and temporary living arrangements. Existing circulation and internal divisions are reworked to accommodate new apartment types and shared facilities. A new circulation core with stairs and lift is introduced to serve the other half of the building without an existing central circulation core.
The incisions into the floor plates are made in between the concrete columns to not disrupt the structural integrity of the building. The considerable depth of the existing floor plates required a rethinking of the internal organisation. To improve access and circulation, new routes and divisions are introduced both orthogonally and diagonally. These diagonal geometries became a defining characteristic of the intervention and were later reflected in the layout of apartments and the design of the added balconies.
Rather than maximising the number of private units, the project introduces communal spaces such as shared kitchens, study rooms, laundry areas, and a large collective living room overlooking the courtyard. These spaces encourage interaction between residents

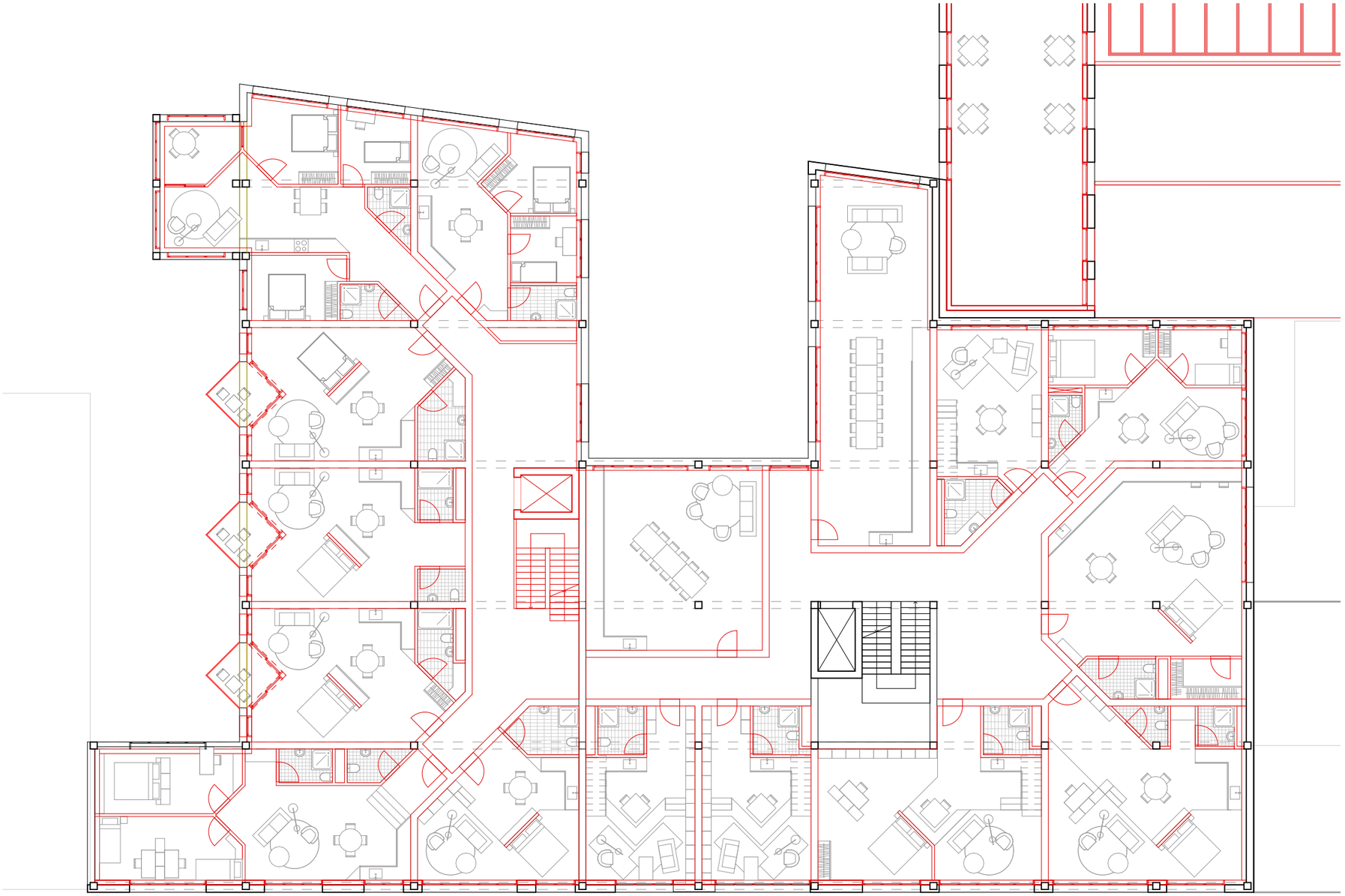
and strengthen the collective dimension of everyday life.
The housing strategy responds directly to the idea of Heyvaert as an arrival city. Approximately one third of the units are designed for temporary residence, providing accommodation for newcomers before they secure more permanent housing. These compact studios contain sleeping, living, and sanitary spaces. Residents are encouraged to use shared kitchens and common rooms, where everyday encounters and social exchange can emerge more naturally.

The existing industrial structure also created unique spatial opportunities. High ceiling heights on one hand required the introduction of platforms to lift up the living area in the units on the street front in order to preserve the rhythm and dimensions of the façade and to provide normal view towards the outside, on the other hand allowed the insertion of mezzanine sleeping platforms within many of the temporary units. These integrated structures combine circulation, storage, furniture, and seating into more permanent domestic elements, reducing the burden on short-term residents to continuously acquire and discard furniture.
In larger apartments intended for long-term occupation, new balconies are introduced to

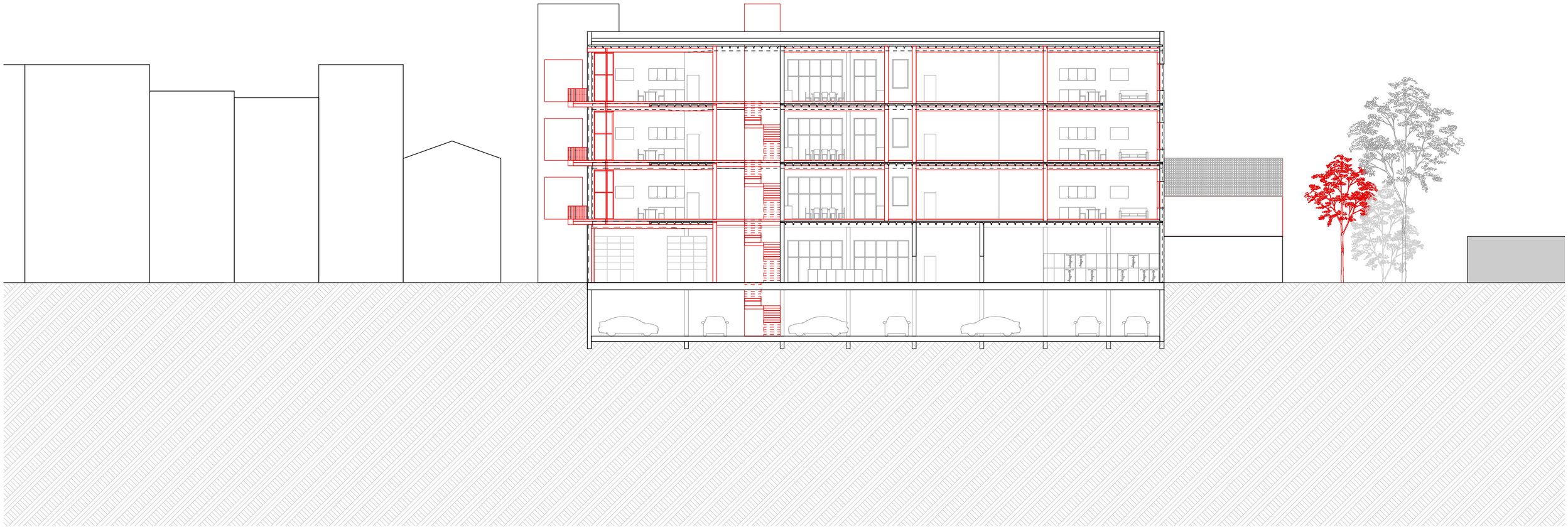


Housing ground floor

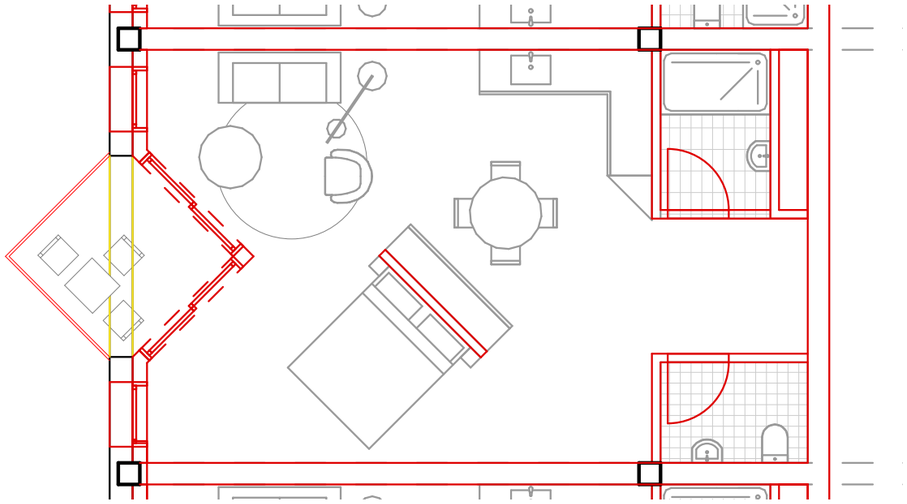
improve daylight and establish a stronger relationship between interior and exterior life. These balconies are put in place as prefabricated concrete slabs. Historic bottling halls required large open workspaces for manual filling, corking, and storage. Industrialization introduced conveyor systems and mechanized bottling lines that reshaped brewery layouts around continuous production flow. Contemporary facilities emphasize automation, sanitation, and logistical efficiency.

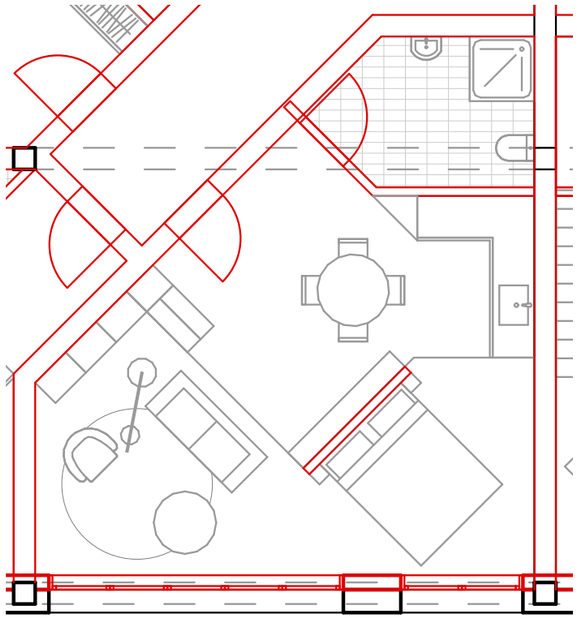


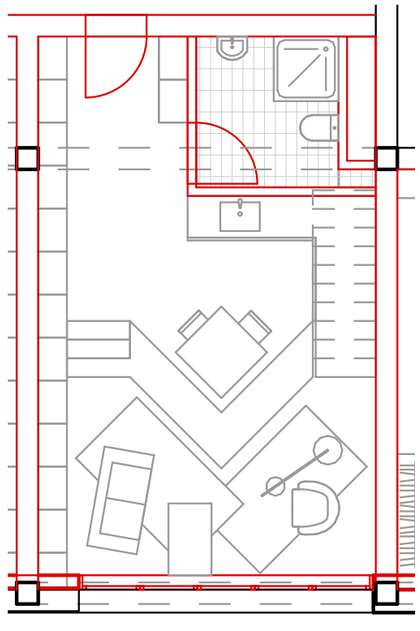
Second floor plan

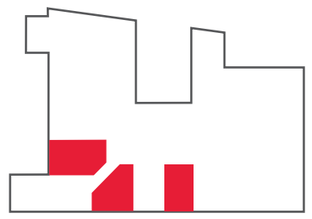


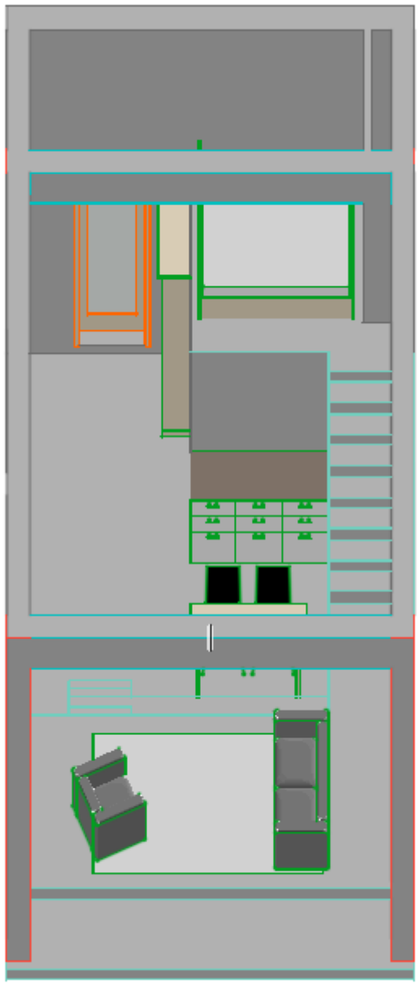
Section A-A

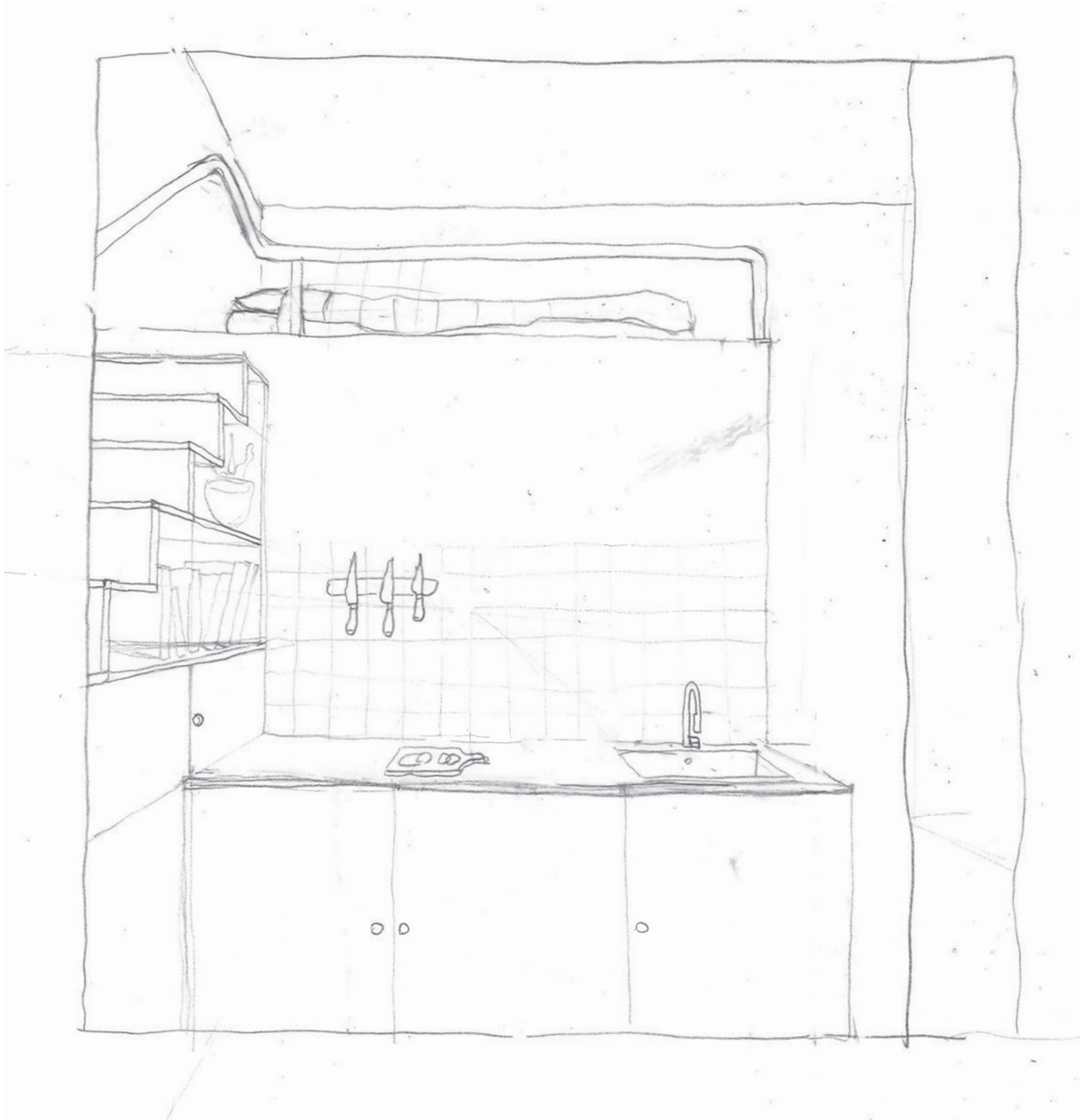


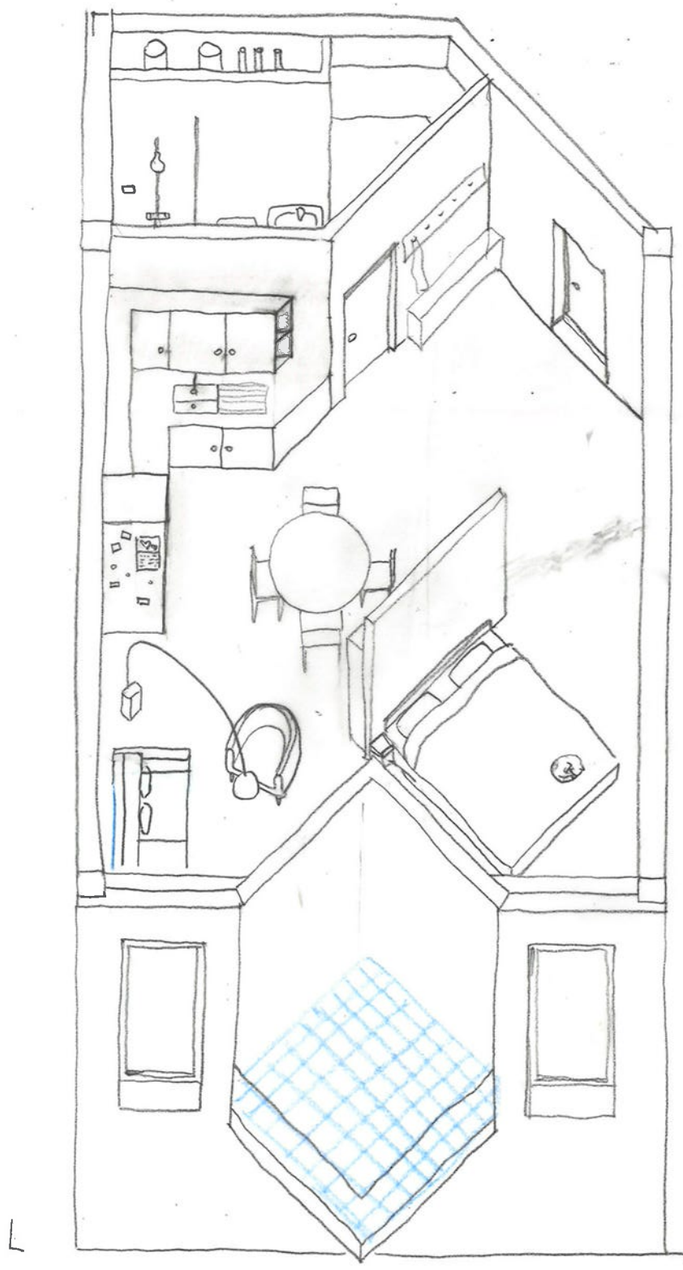


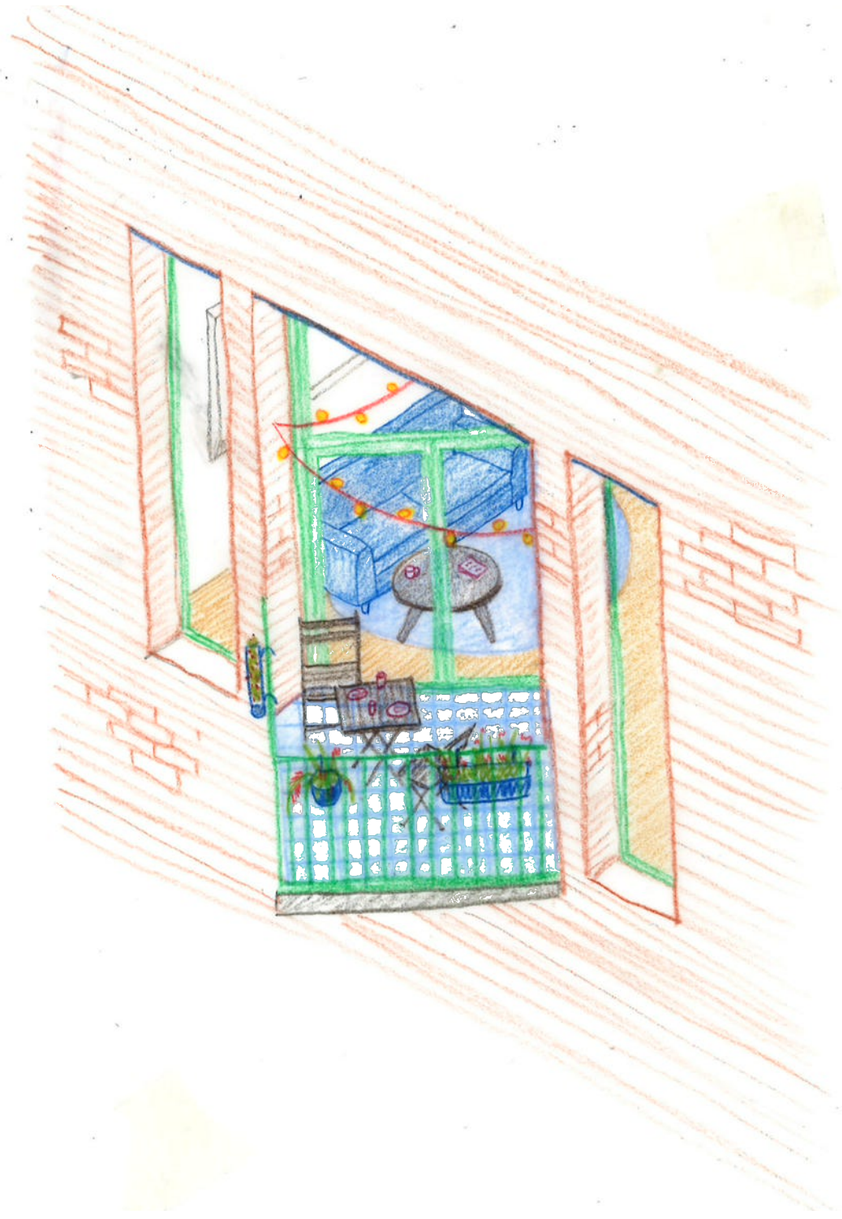




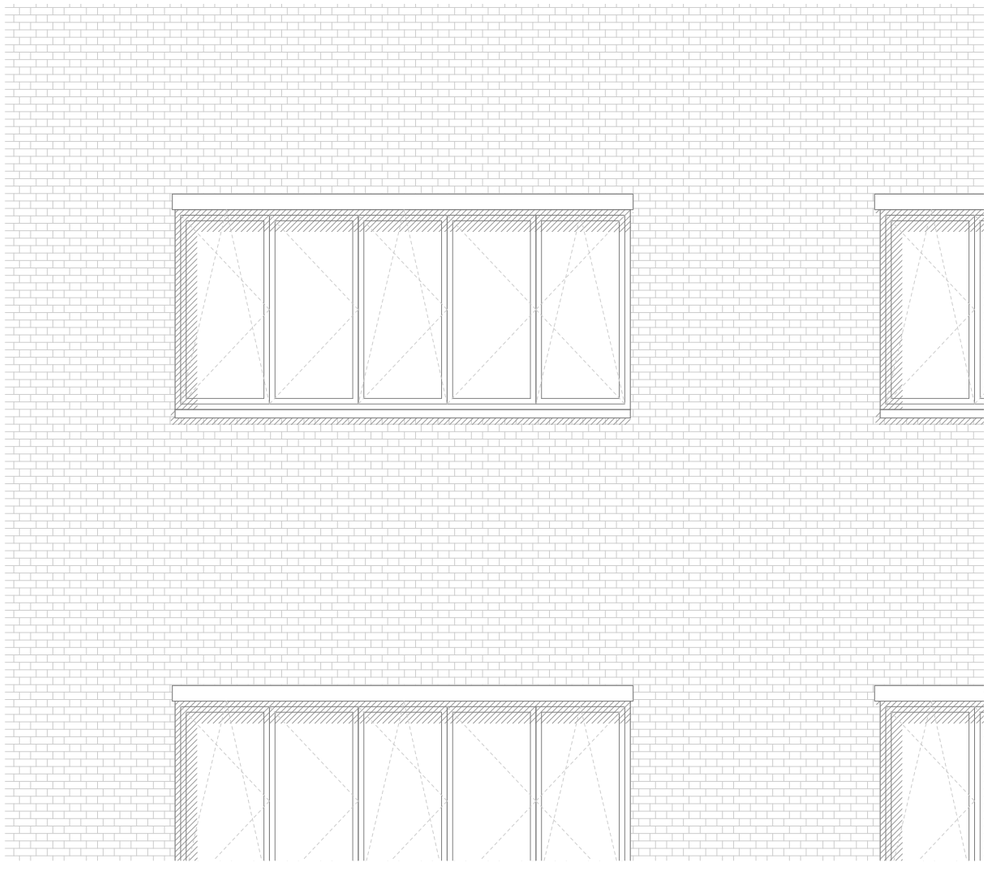








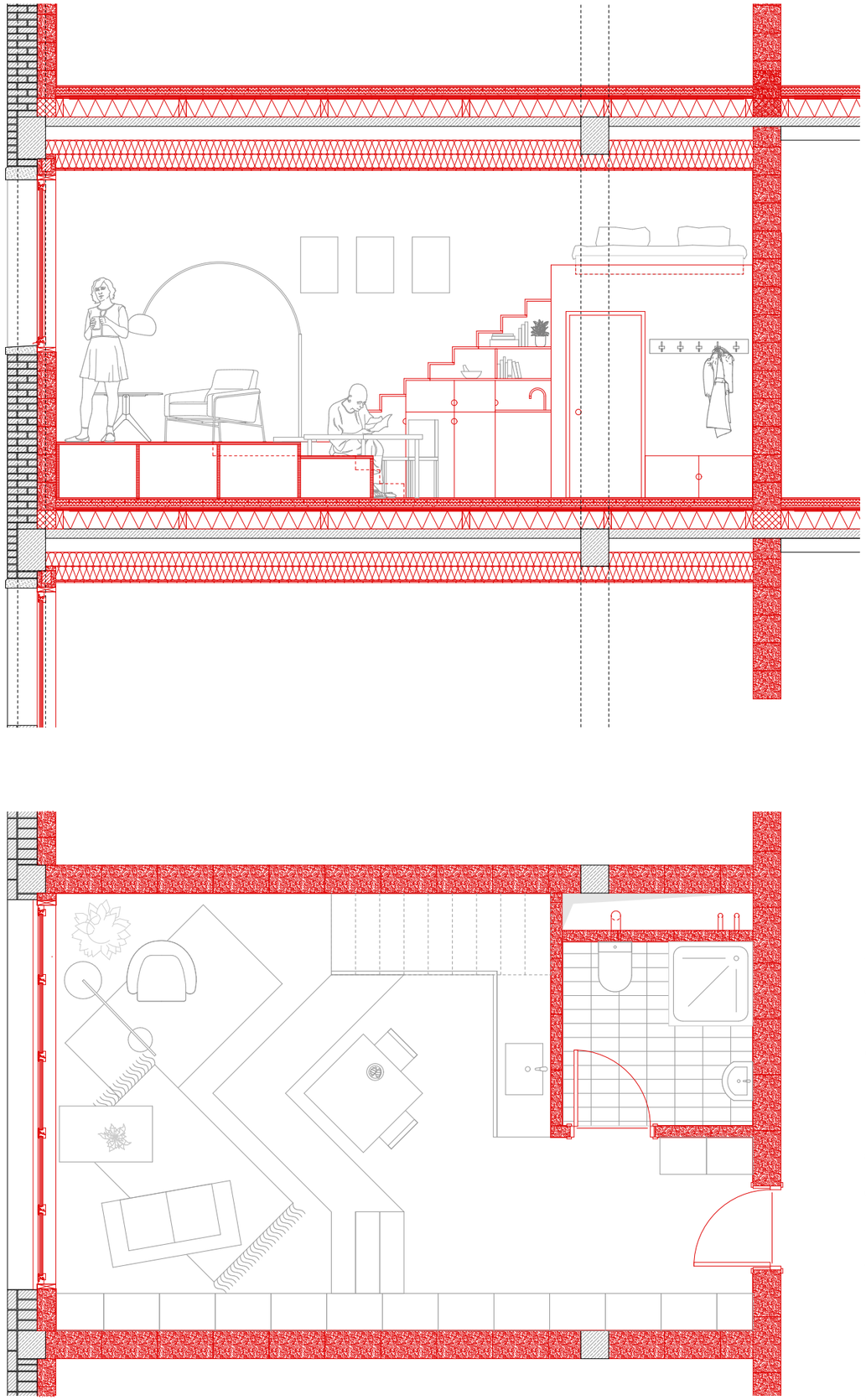
Axonometry and drawing of studio apartment with balcony



window:
IsoHemp lintel with reinforced concrete core
triple glazing in 78 mm pine frame

wall construction:
210/100/65 mm brick masonry infill wall, existing
300/300 mm concrete column, existing
300/450 mm concrete beam, existing
hempcrete masonry blocks 200mm
PCS natural plaster finish 5mm

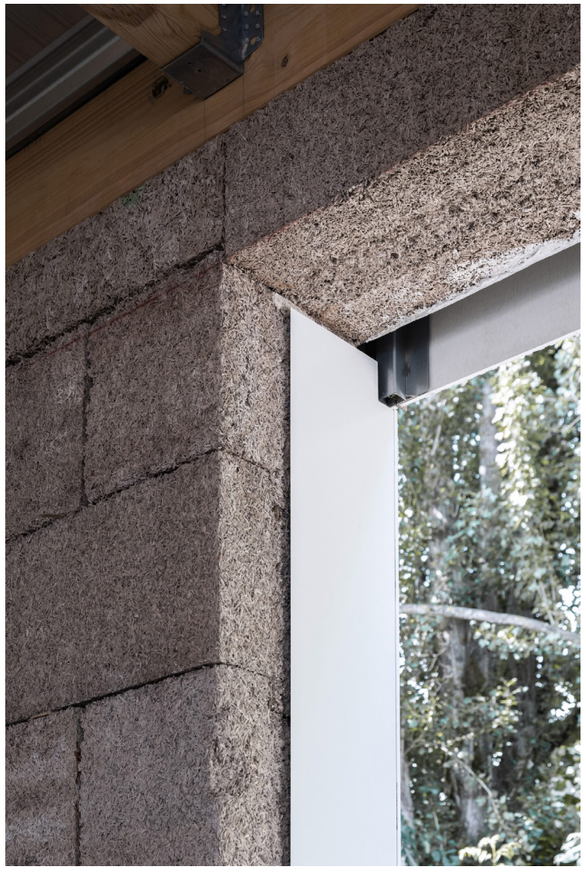
floor and ceiling construction:
wooden floorboard, recycled 18mm
inlaid soft wood fibre panel with underfloor heating 35mm
soft wood fibre impact soundproofing 35mm
crushed stone 18mm
silver fir sheating 30mm
hemp thermal insulation 200mm
waterproofing membrane
one way joist concrete slab 250mm
woodfibre insulation 300mm
gypsum board 12,5mm
plywood board 12mm

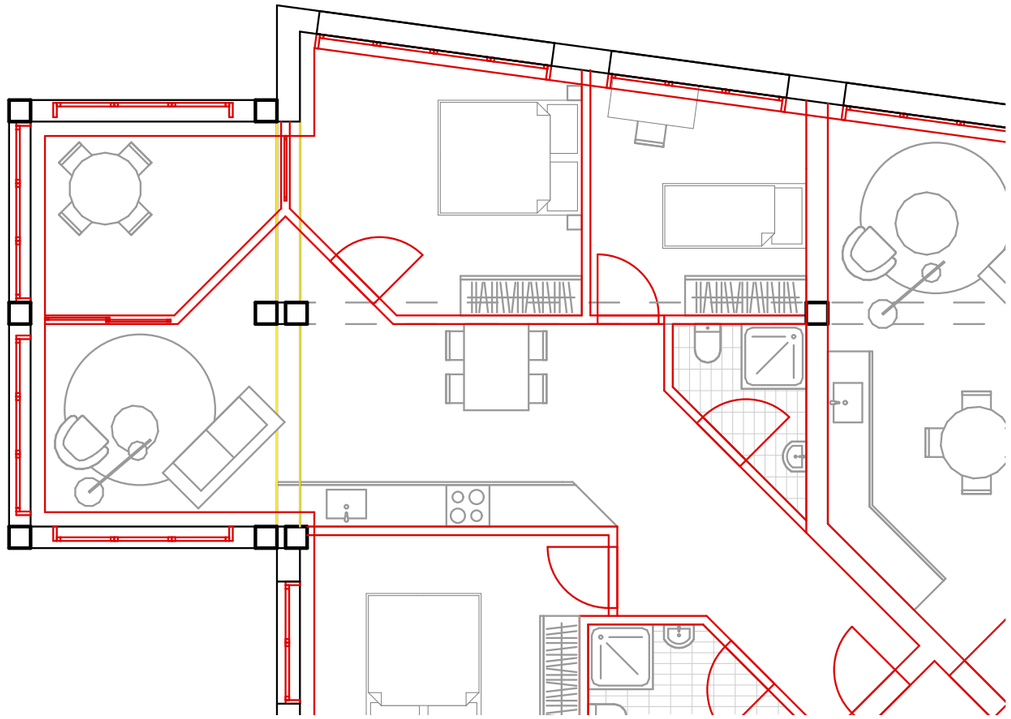


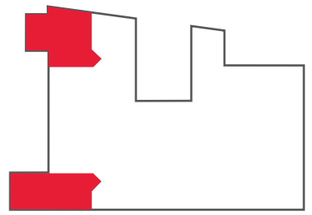
Section, plan and elevation of studio apartment 2 (street front)

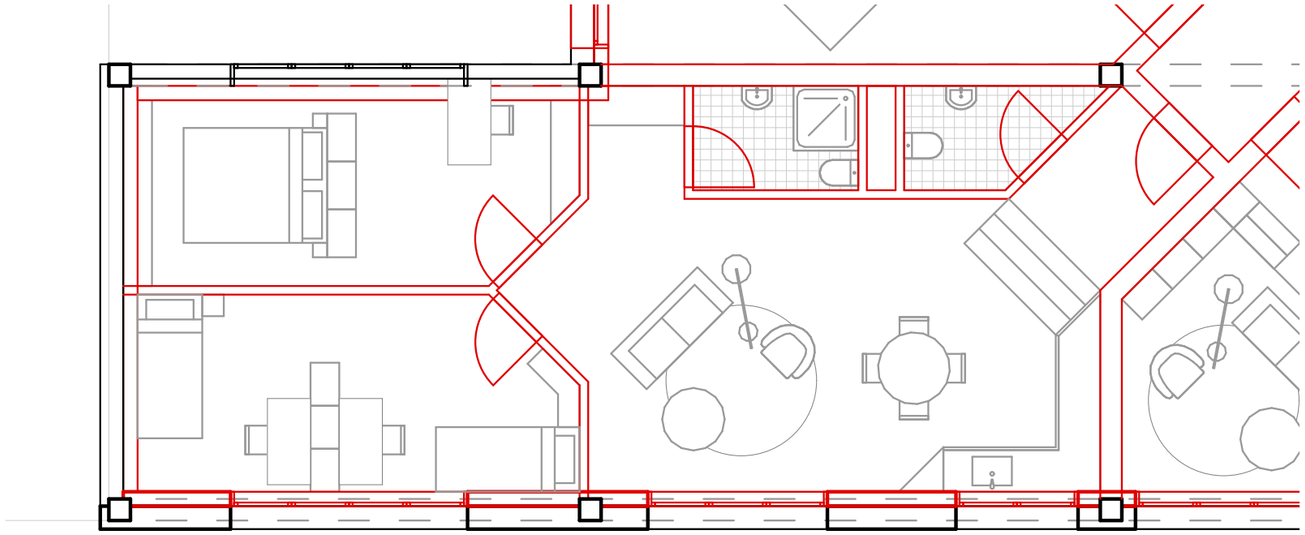


Hempcrete blocks are a lightweight, bio-based building material made from hemp hurd, lime binder, and water. They provide good thermal and acoustic insulation, help regulate indoor humidity, and contribute to a comfortable indoor environment. Hempcrete has a low carbon footprint. It is generally non-structural, however when compressed into block can carry its own load without the need of additional structure.









3. Reflection

Serving

At last, the beer is poured. Foam rises slowly in the glass while aromas escape into the air for the first time since the brewery sealed them away. In crowded taverns, monastery refectories, industrial cafés, and family kitchens, the beer completes its journey. What began months earlier as grain in the field now becomes a social ritual shared between strangers, friends, and generations.



De boerenbruiloft (The Peasant Wedding), Pieter Bruegel the Elder, 1567. (on the left a man pouring beer in pitchers)

Serving is the final stage of the brewing process, where the beer reaches the consumer. Temperature, glassware, carbonation, and pouring technique all influence how the beer's flavors and aromas are experienced. Different beer styles are traditionally served under different conditions to highlight their unique characteristics.

Beer has historically shaped social architecture through taverns, breweries, beer halls, monasteries, and cafés. These spaces are designed around gathering, visibility, acoustics, and ritual consumption. Contemporary brewery architecture often integrates production and public space, allowing visitors to experience brewing and consumption within the same environment.



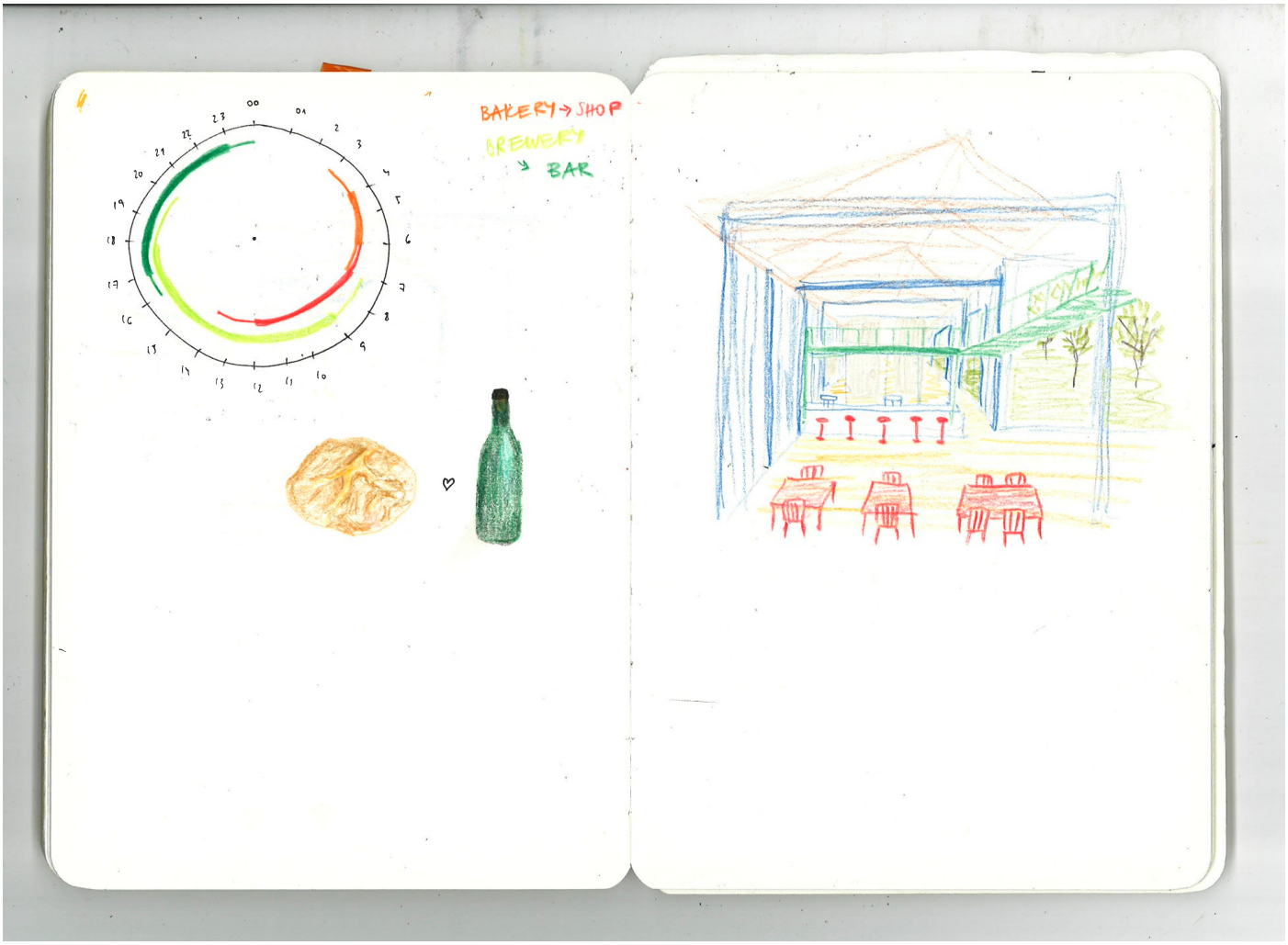
ABEN brewery (Pihlmann Architects) in Copenhagen, Denmark



BRLO Brwhouse, Berlin



Modus Brewery (Prevalent architecture) in Newcastle, Australia



Sketches from design process

3.1. looking back



Photo from first studio meeting with my object that reveals something- an apple

This project started with three interconnected questions: how productive activities can regain a place within today's city, how different forms of living, working and gathering can coexist, and how existing industrial structures can be adapted rather than replaced. Through the transformation of a former industrial site in Heyvaert into a brewery, restaurant and housing complex, the project aimed to address these questions simultaneously.

What this project shows is that production does not have to be a distant hidden economic process. At the same time, the nature of manufacture means that not every aspect can be visible or accessible to the public. Working out how to reveal as much of the brewing process as possible without turning the space into a pure showroom or compromising its operation and efficiency was a challenging balancing act.
The case studies examined each negotiated this relationship differently. For me, it was important that the brewery remained legible at street level and that its public functions actively engaged with the neighbourhood, rather than becoming another industrial building that people simply pass by.

The project also revealed that mixed-use is more the coexistence of different programmes. It depends on the spaces and relationships that connect them. The courtyard started off as just an absence of building. Looking back at early plans and sketches, it often felt like I was designing three separate projects- brewery, restaurant and housing- that just happened to occupy the same site. Gradually, through a series of small interventions- like positioning the collective spaces in the housing towards the courtyard and turning the window sills of the brewery into benches- the courtyard gradually became the element that brought them together. What emerged was a shared environment where residents, workers and visitors could encounter one another. It suggests that urban vitality emerges not only from programmatic diversity but also from the in-between spaces that allow different users to see each other, meet, gather and coexist.

Working with the existing fabric was equally important. A great challenge was the absence of archival plans. The buildings had to be documented from scratch through site visits, observation and careful interpretation. This process of drawing became a form of analysis, revealing both the qualities and limitations of the

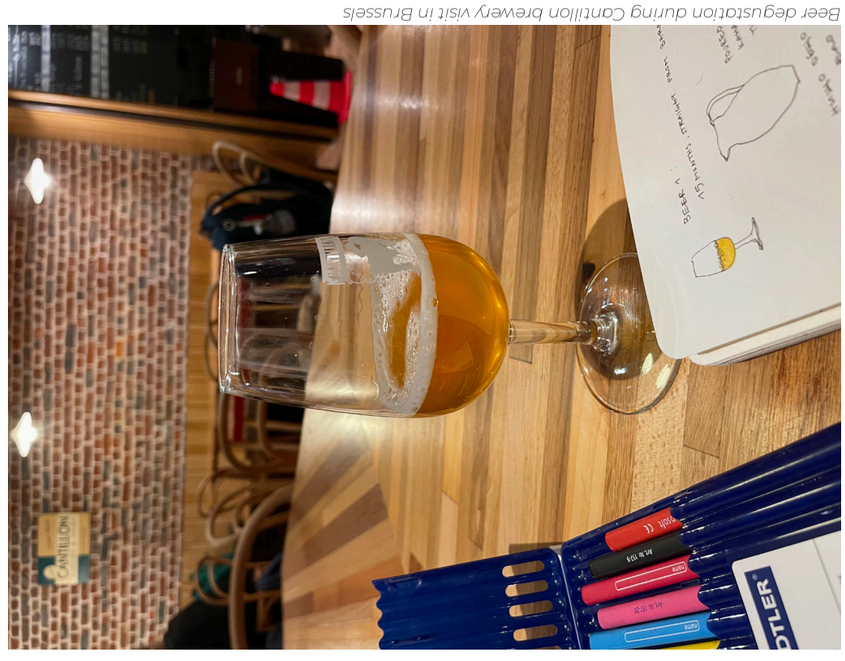
existing structures and informing later design decisions. Rather than preserving everything or starting anew, the intervention relied on selective transformation. The removal of two halls, for example, improved light, air and spatial connections throughout the site. Reuse therefore emerged not only as an environmental strategy, but also as a design method capable of generating new architectural possibilities.

Researching the brewing process also shaped the project in unexpected ways. Brewing requires attentiveness and devotion, patience and care- from picking the raw materials, to carefully processing and mixing them, to letting them rest and develop on their own, to sharing the results with others. Looking at architecture through the lens of fermentation suggests an alternative approach to design- one grounded in care, effort, time and material sensitivity. Rather than being fast, extractive and controlling, architectural processes can become relational, processual and caring of what already exists.

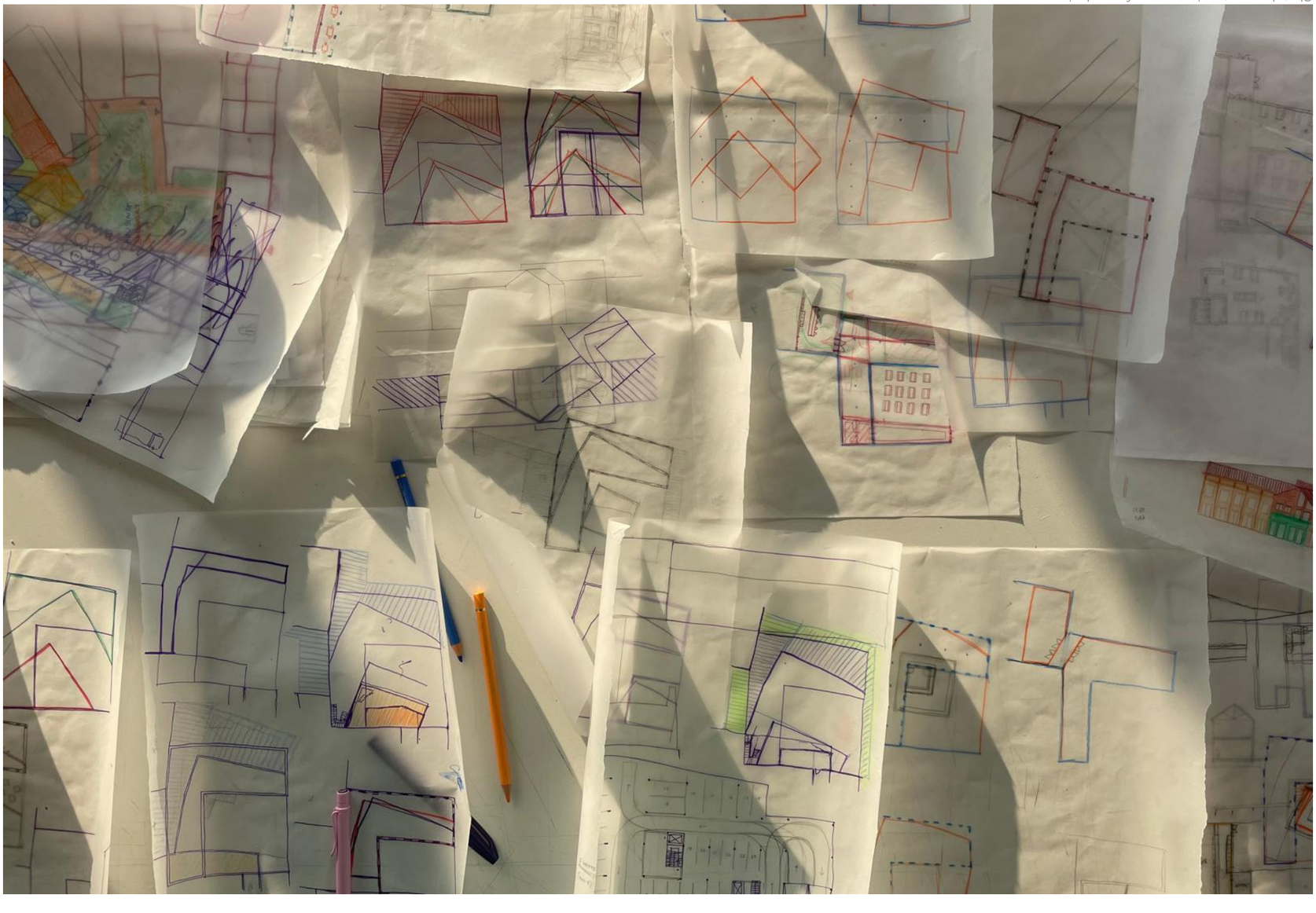
Working through sketching and drawing was the norm these past months. “Making is thinking” as Sennett (2008) argues. The process of drawing and redrawing the plans and trying out different scenarios involved continuous problem solving and helped first develop the project and then continuously adjust and refine it.



Miro board for graduation studio



Beer degustation during Cantillon brewery visit in Brussels



Sketches on tracing paper from design process

Hangover

After enjoying the night follows a chill day. After over-enjoying the night, comes a time of reflection. The body is suspended in misery, leaving the mind to wander and contemplate the past experience, the process, the mistakes, but also the good moments, the joyous toasts. Water and electrolytes for the body, rest and fresh air for the soul cure the hangover. The mind looks towards the future. What it holds in store for us, how can we learn from the past and improve the upcoming experiences.

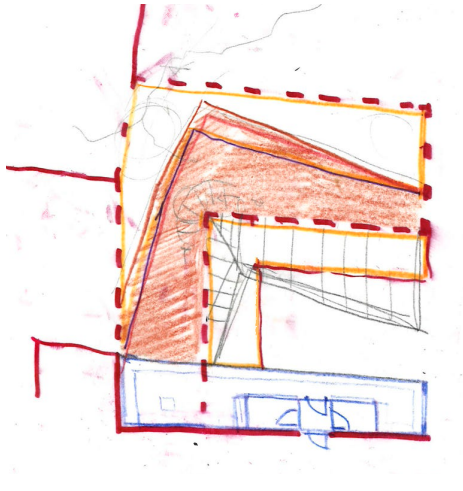


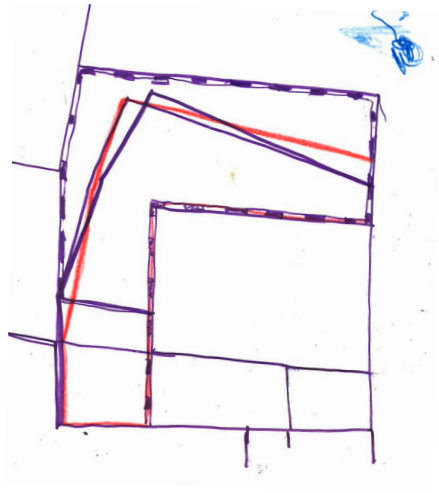
The day after. Edvard Munch. 1894–95.

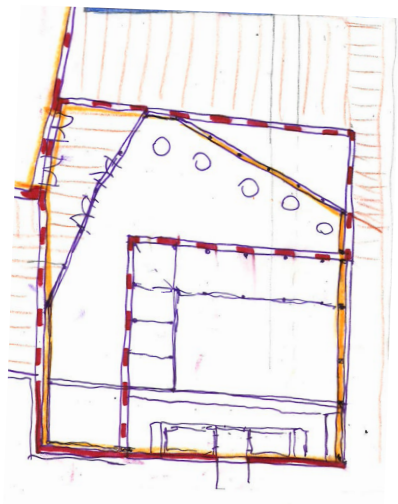
After enjoying the night follows a chill day. After over-enjoying the night, comes a time of reflection. The body is suspended in misery, leaving the mind to wander and contemplate the past experience, the process, the mistakes, but also the good moments, the joyous toasts. Water and electrolytes for the body, rest and fresh air for the soul cure the hangover. The mind looks towards the future. What it holds in store for us, how can we learn from the past and improve the upcoming experiences.



Miracolo di Marco Spagnola. Giorgio Bonola. 1681.





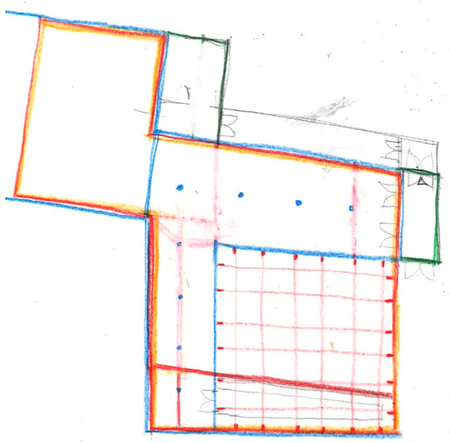
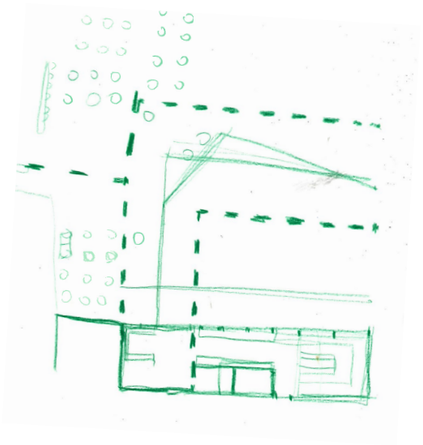
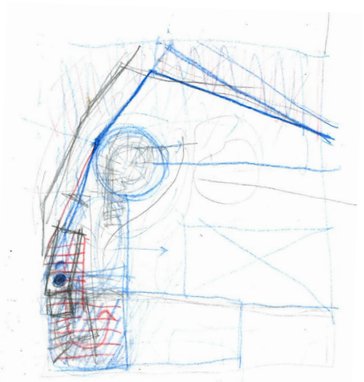
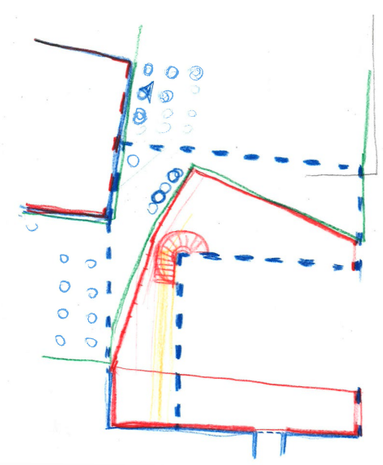
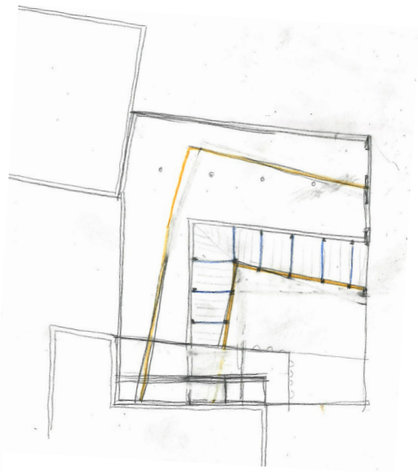


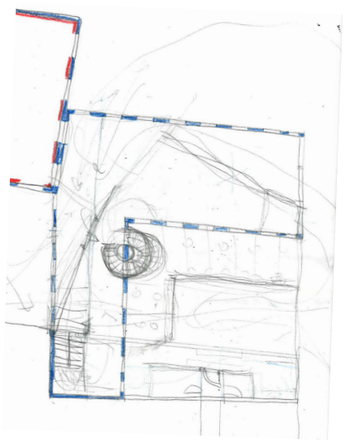
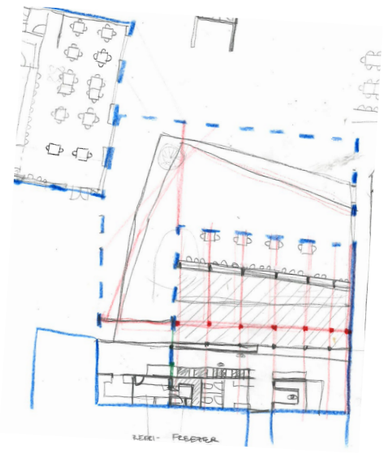


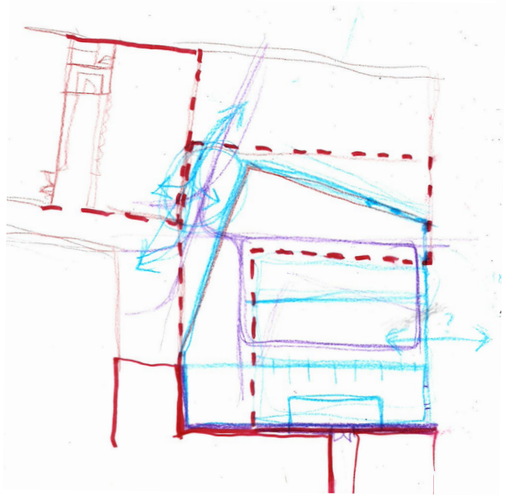
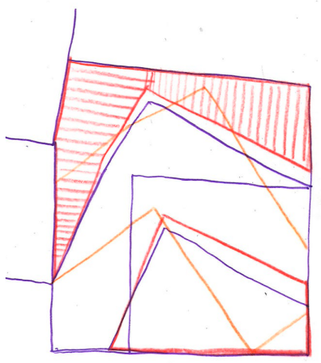
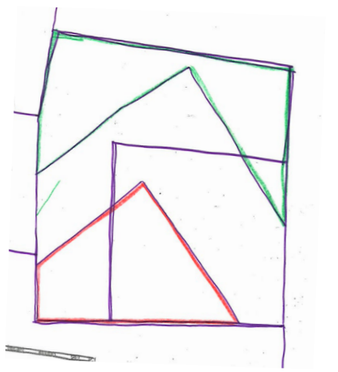
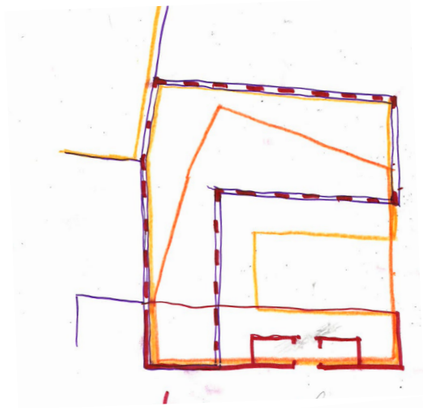
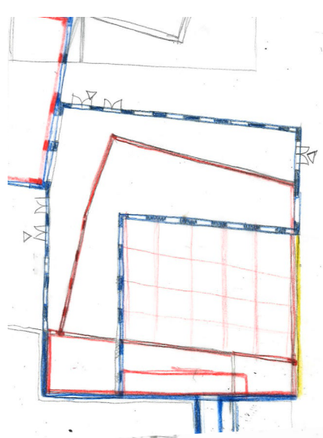
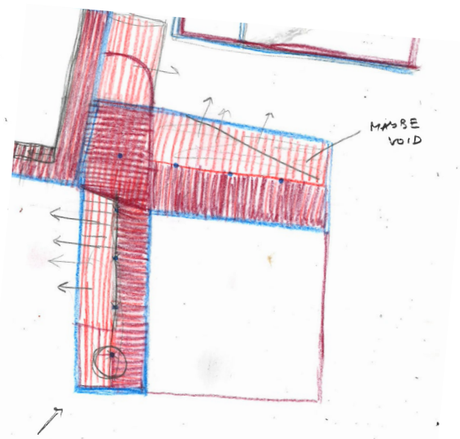
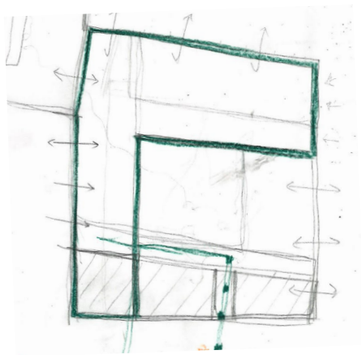
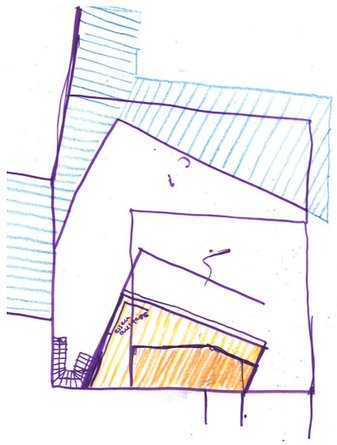
Sketches of restaurant during design process

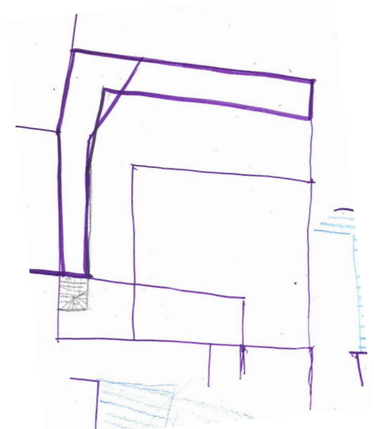
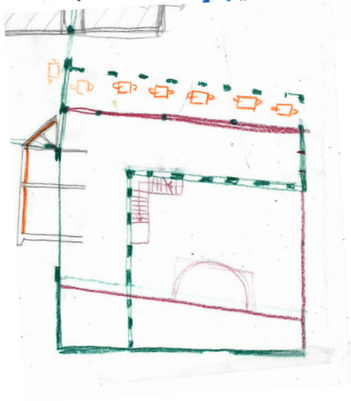
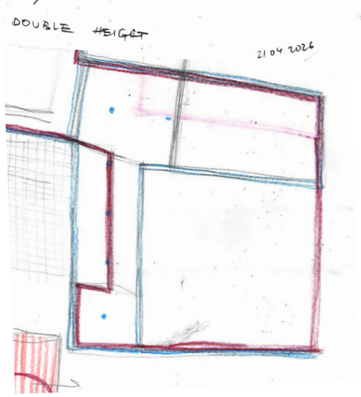
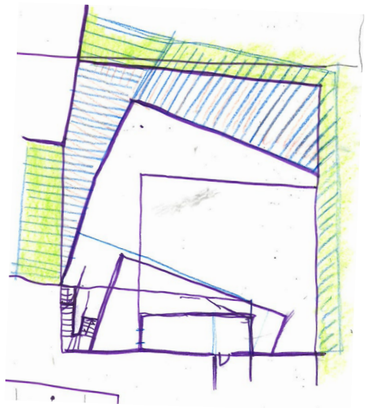
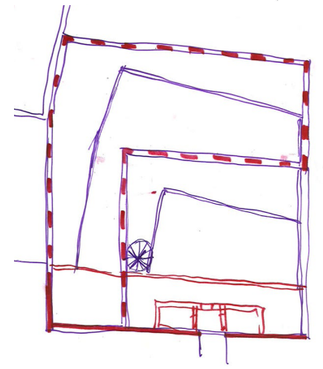
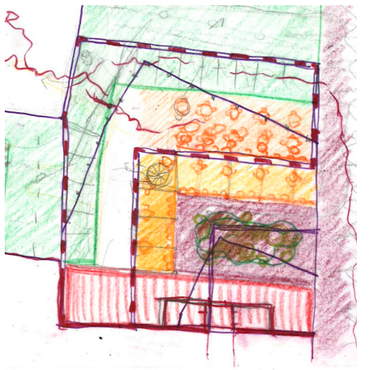
3.2. looking forward

One of the main takes from the project is that reuse is a dialogue. It is a conversation between us architects and buildings, between contemporary needs and existing conditions. It requires us to first step into the role of interpreters- to read the history of the building, to understand its qualities and challenges and to listen to what it might want. What we discover is never entirely objective. Different architects will read the same building differently, based on their own experiences, interests and assumptions. As Herman Hetzberger (1991) suggests, there is never one possible solution for a project. Some solutions however are better suited than others and we should try and listen to the building before intervening.
Yet buildings rarely exist in isolation. The process of understanding and transforming an existing structure inevitably expands towards its wider urban context and the people who inhabit it.
Architecture is not an isolated product; it does not exist on its own in the world. It is a piece of something bigger, entangled in the threads of the city. As Ouest put it, the city is a breeding ground for stories and urban fictions and narratives. In this sense, context is therefore not simply something to respond to; it is something that actively shapes the direction of architectural work. The people who inhabit a place, its histories, conflicts and everyday practices should continue to inform the decisions we make as designers.







MAYBE
VOID






DOUBLE HEIGHT
21.04.2026




Bibliography

Sennett, Richard (2018). Building and Dwelling

Sennett, Richard (2008). The Craftsman.

Ouest. (2025). Urban Legends.

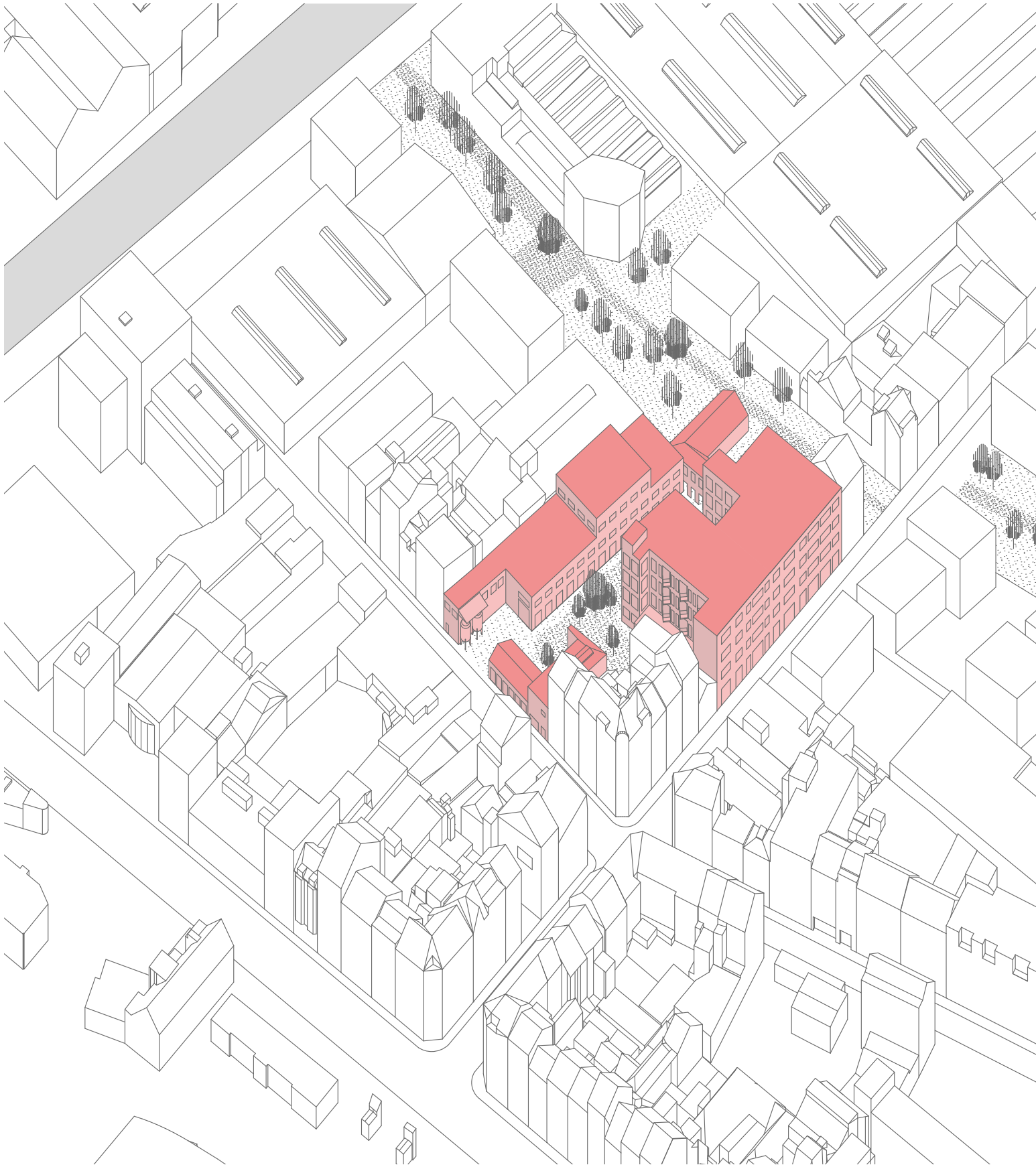
Jacobs, Jane (1961). The Life and Death of Great American Cities.

Vinck, Ingae & De Vylder, Jan (2024). A Dance between Old and New. DETAIL 01-02/2024 Simple + Cost-Efficient

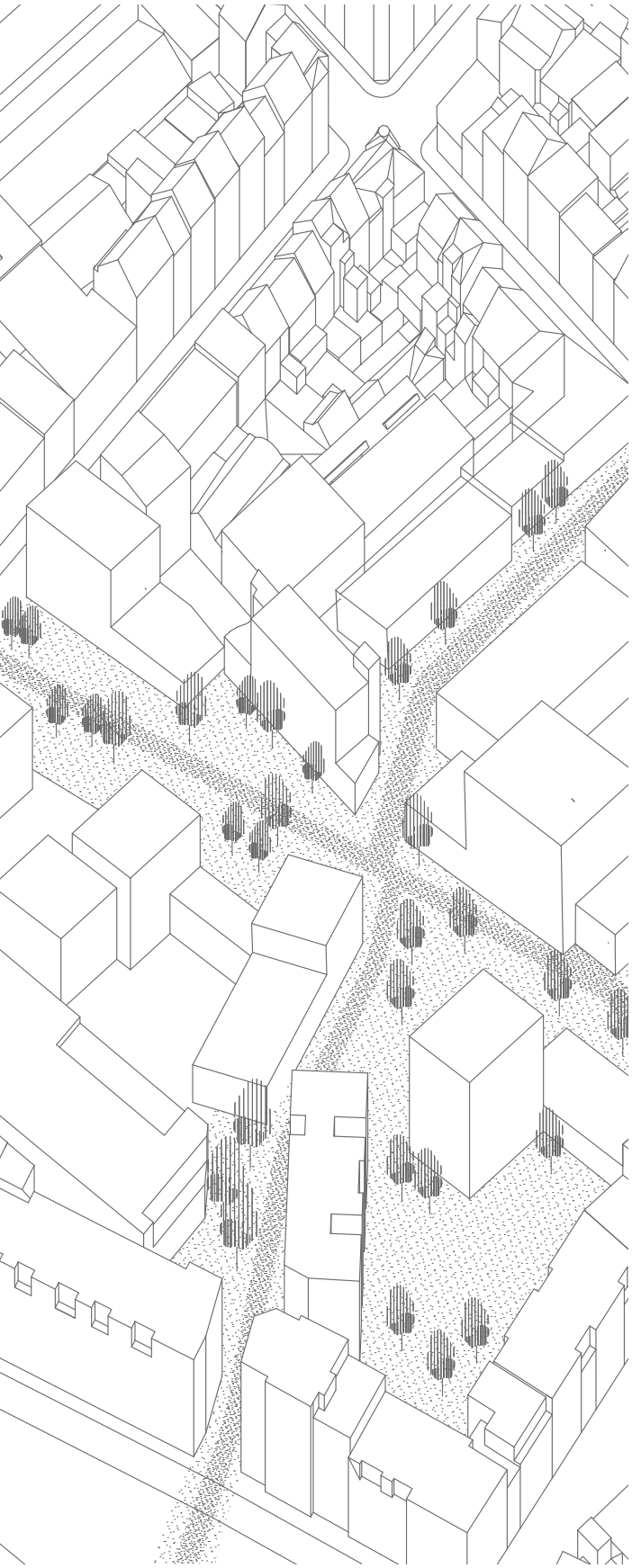
BMA (2021). Plan d'Aménagement Directeur (PAD) Heyvaert. Brussels-Capital Region.

Hetzberger, Herman (1991). Lessons for students in architecture

Adrian Hill et al. (2018) Cities of Making: CityReport.



until next time.



A Productive City is Brewing

19.06.2026
Hall B

Tsvetina Petrova

Contents

Abstract

1. Brief

Harvest
    1.1. Productive City
Malting
    1.2. Mix
Milling
    1.3. Reuse

2. The Project

Mashing
    2.1. City
Lautering
    2.2. Block
Boiling
    2.3. Site
Cooling
    2.4. Courtyard
Fermenting
    2.5. Hall
Maturing
    2.6. Restaurant
Bottling
    2.7. Housing

3. Reflection

Serving
    3.1. Looking back
Hangover
    3.2. Looking forward

Bibliography

