BUILDINGS FOR A PARK

Transforming the Urban Block through Opening, Connecting, and Grounding

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Abstract

When you walk through a city or a building, you're often not aware of it, but architecture has a direct impact on people's well-being. You don't have to do anything at all, you just have to be. It is precisely this that means architecture carries a responsibility: how do you, as a designer, deal with that influence? At the same time, the built environment is never a blank canvas, but always the result of a layered process over time.

In the current urban context, this layering is under pressure. The growing demand for space and housing often leads to demolition as a solution, with the risk that history, and with it the identity of the neighbourhood or city, will disappear. This project, therefore, stems from the conviction that architecture should not be based on demolition, but can instead build upon what is already there.

This project focuses on the transformation of a plot with two existing buildings in the Heyvaert neighbourhood in Brussels. A neighbourhood with a dense urban fabric where living and working are intertwined. In this neighbourhood quality of life is under pressure, whilst at the same time a new linear park is being introduced along the route of the former Petit Zenne. This park calls for openness and accessibility, whilst closed and inward-facing blocks characterise the existing urban structure.

Through research into Deep Space, the historical layering of the building block and fieldwork conducted on site, the spatial and social structures are made clear. These insights demonstrate that Deep Space possesses both risks and qualities, that historical layers can guide new interventions, and that existing social structures are valuable to preserve and strengthen.

This research has led to the following question:

How can a closed urban block be transformed through architectural strategies of opening, connecting, and grounding to create a safe public park?

These findings are translated into a architectural design centred on strategies of opening, connecting and grounding. By transforming two existing buildings and adding two new volumes, an ensemble is created that opens up to the park and makes the previously closed block accessible through the introduction of new public entrances. The design demonstrates that existing spatial and social structures can not only be preserved but actually strengthened.

In doing so, the project reinforces the belief that architecture, by working with what already exists, can have a direct, positive and tangible effect on human well-being.

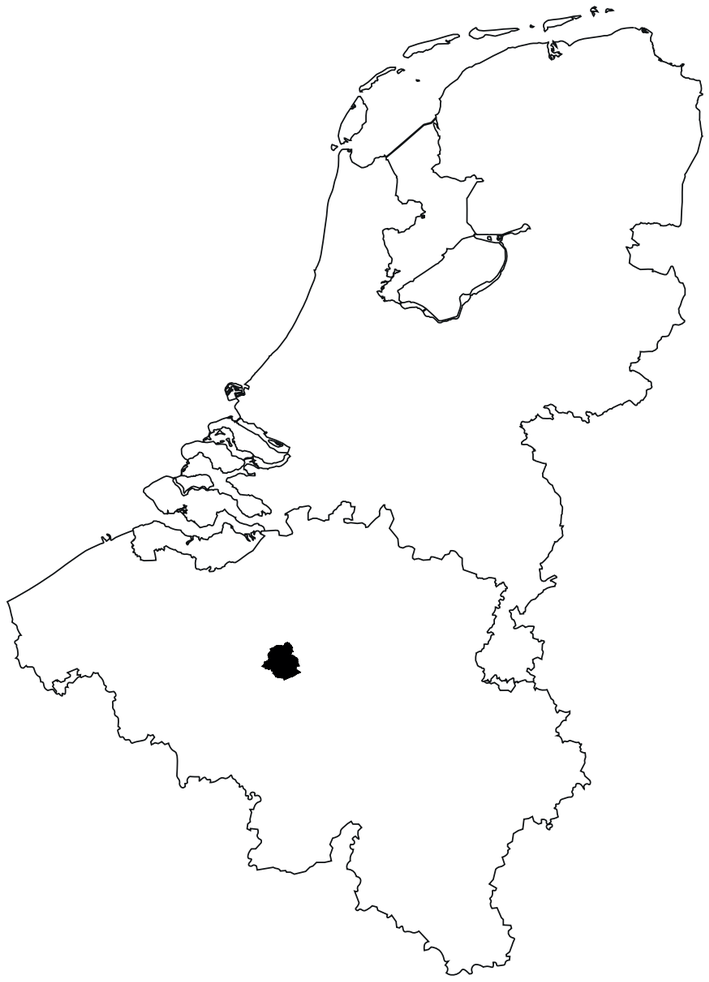
INTRODUCTION

We live in a time when cities are becoming increasingly densely built up. We are looking for where there are still possibilities: where can we build more homes? How can we provide space for a growing population? In many cases, demolition is seen as a solution. But with demolition, there is this risk of losing valuable spatial, social and historical layers and structures. The existing city is not a blank canvas to be filled only with the new, but a layered situation that must first be understood before it is transformed. This raises a question: how can architecture respond to the pressure on the city without taking demolition as a given starting point?

This question is not only spatial, but also social. Buildings are not only used by people; they can also have a positive impact on people's lives. Buildings shape people's lives, and thereby they shape people. The built environment influences how people move, behave, meet one another and form social connections. Within a dense urban fabric, architecture has a dual responsibility: to treat what already exists with care while simultaneously creating an environment that supports people's social well-being.

These two themes: building within a dense urban context and designing for human and social well-being, form the starting point for this project. The design explores how architectural interventions within an existing urban context can respond to site-specific problems and opportunities, without erasing the history and with that the identity of the existing situation. Rather than starting with a fixed design outcome, the focus lies on understanding what is already present, what can be learned from it, and how that knowledge can shape spatial interventions.

Women in conversation, Bergensesteenweg Heyvaert



Brussels
Belgium

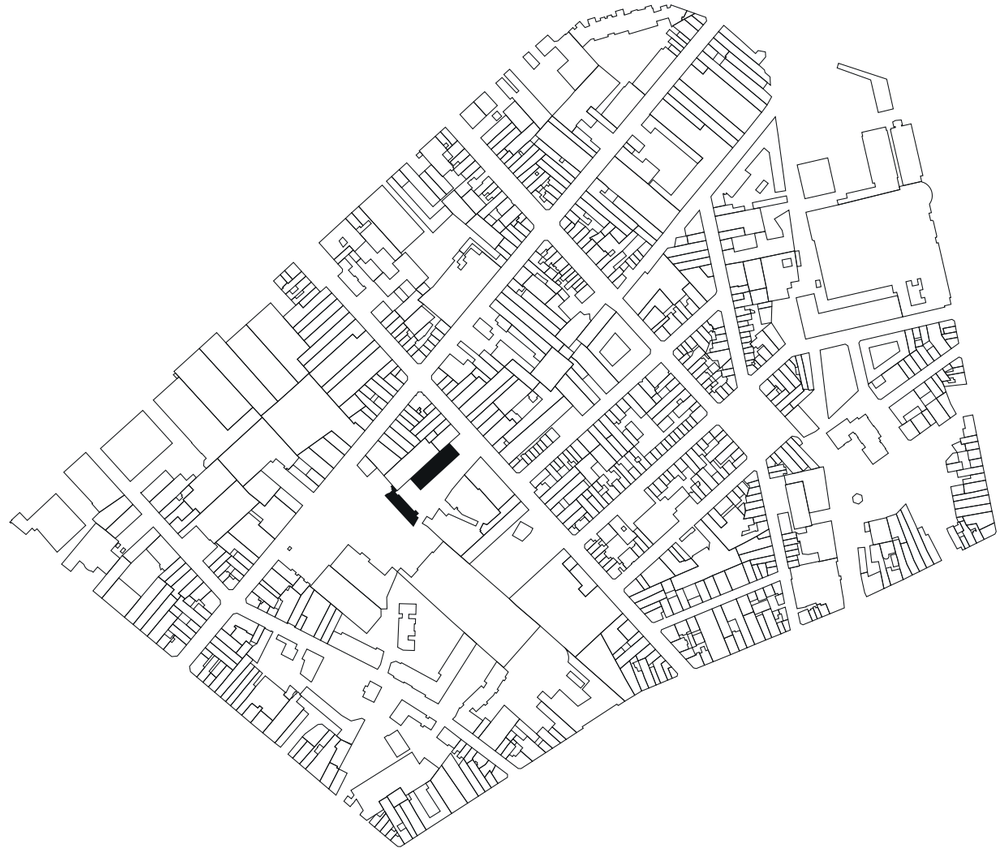
Heyvaert Neighbourhood
Brussels

HEYVAERT

Located in the centre of Brussels, Belgium, the Heyvaert neighbourhood forms the focus of the graduation studio: Urban, River Ghost Park – Back as Front. The studio values the existing built environment in its current situation. This existing situation is not something that needs to be replaced, but as a source of information, identity and potential for new interventions to solve existing problems.

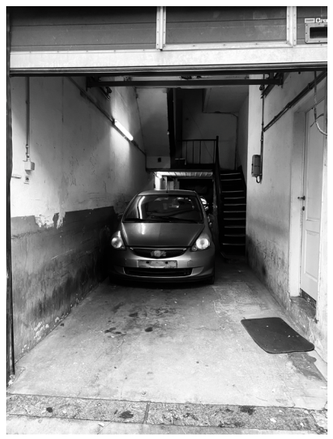
The Heyvaert neighbourhood has a dense urban fabric in which there is a combination of residential and commercial uses. Whereas the neighbourhood used to revolve around the slaughterhouse industry, it is now primarily dominated by the export of cars to Africa. The former abattoir buildings had heavy floors and load-bearing structures, and after the slaughterhouse industry moved from the neighbourhood, these buildings proved suitable for storing heavy cars. Over the years, the car export industry has had a major influence on the built environment in the Heyvaert neighbourhood. Building after building has been gradually taken over for car storage, putting pressure on the neighbourhood's quality of life.

Within this context, the project focuses on a specific site in the Heyveart neighbourhood. This plot occupies a strategic position alongside the planned Petit Zenne Park and serves as a link between the street, the urban block, and future public green spaces. It is precisely because of this position that the site has the potential to play a key role in the neighbourhood's transformation. If this site is not developed with care, there is a risk that existing problems, such as isolation, inaccessibility, and social insecurity, will worsen.



Project location

Heyvaert Neighbourhood



First impressions

A walk through the Heyvaert neighbourhood

A FIRST IMPRESSION

During my first visit to the Heyvaert neighbourhood, the area's rough character immediately stood out to me. Piles of rubbish around trees, former residential buildings now completely filled with cars, and trucks manoeuvring through streets too narrow dominate the streetscape. At the same time, signs of vulnerability are also visible: people sleeping in tents on the street, men hanging around in the streets waiting for a chance at work, and public spaces feeling under pressure in many places.

Walking through the neighbourhood, it becomes clear how the state of the built environment influences the quality of life. In a neighbourhood increasingly taken over by cars and their logistics, the question arises: where are the people in this neighbourhood? And what role can architecture play here to make it a pleasant living environment for people once again? This initial impression makes it clear that the neighbourhood needs social and safe public spaces, and they highlight the project's urgency.

A COLLECTION OF TYPOLOGIES

To better understand the Heyvaert neighbourhood and go beyond first impressions on site, the studio mapped the entire neighbourhood using a 1.333 urban model. This scale enabled the whole neighbourhood to be visible and tangible in a single model. Every street, every building and every home thus became legible as part of a larger urban whole.

While creating the model, it became clear that the Heyvaert consists of a collection of different buildings. There are large buildings full of cars, but there are also still smaller residential buildings where people live together in apartments. Over the years, the large building blocks have become increasingly built up. In the centre of a block, where the courtyard used to be, a series of small and large buildings has now emerged, in varying states of disrepair. This makes it clear that the neighbourhood does not consist of a single type of building, but rather of a complex, layered urban fabric.

1.333 model

Getting to know the Heyvaert neighbourhood

CITY
BAR

A PEEK INSIDE

Deep Space

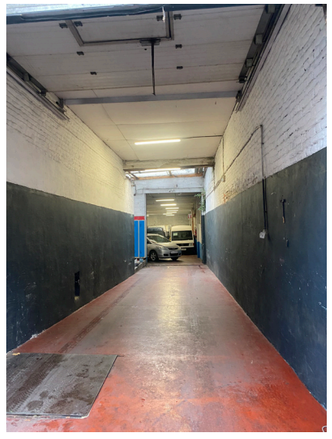
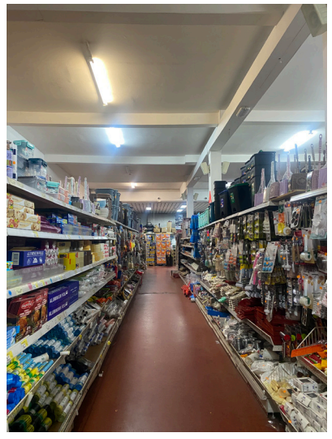
Within this densely urban fabric, the Heyvaet neighbourhood has an interesting spatial phenomenon: Deep Space. This phenomenon has emerged because spaces have gradually expanded over time, been built onto one another or connected to one another. In Heyvaert, for example, this has happened because car dealers have gradually expanded their business and with that their car storage.

Deep Space manifests in spaces that are exceptionally deep or that form a sequence of connected spaces. Moving through these spatial configurations can be experienced as a spatial journey. Due to the complex sequence of spaces, it is often unclear where a route leads or what is happening in the next space. As a result, Deep Space evokes feelings of discovery, surprise and uncertainty. The phenomenon of Deep Space and its influence on the urban morphology of the building block inspired fellow students: Nienke Hofte, Cinde Gool and me to investigate this spatial phenomenon further. This research resulted in the following definition:

"A spatial condition characterized by a complex and layered sequence of urban spaces that have often evolved incrementally over time. Moving through its dense and hybrid urban morphology creates an experiential journey that evokes senses of depth, discovery, surprise, and uncertainty."

Going deep, deeper and deeper into the space

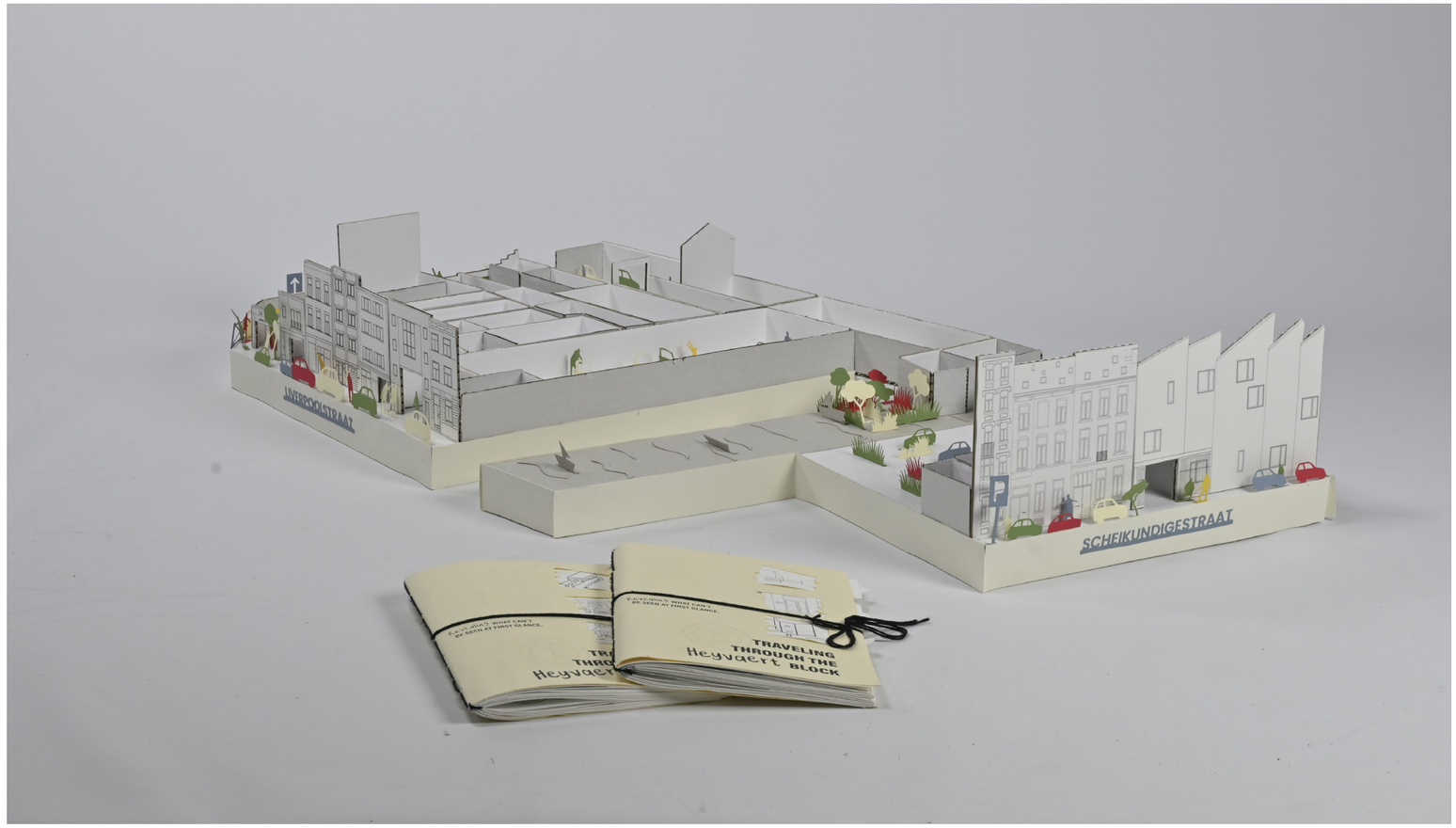
Examples of moments in the Heyvaert neighbourhood when feelings of Deep Space may arise.

RESEARCHING DEEP SPACE BY MODEL MAKING AND MAPPING

To better understand the condition of Deep Space, a block in the Heyvaert neighbourhood has been researched through model-making and mapping. This involved mapping the spatial configuration of various buildings. The research focused on the relationships between spaces, the way in which they are or aren't connected, and the impact this has on the density of the urban block.

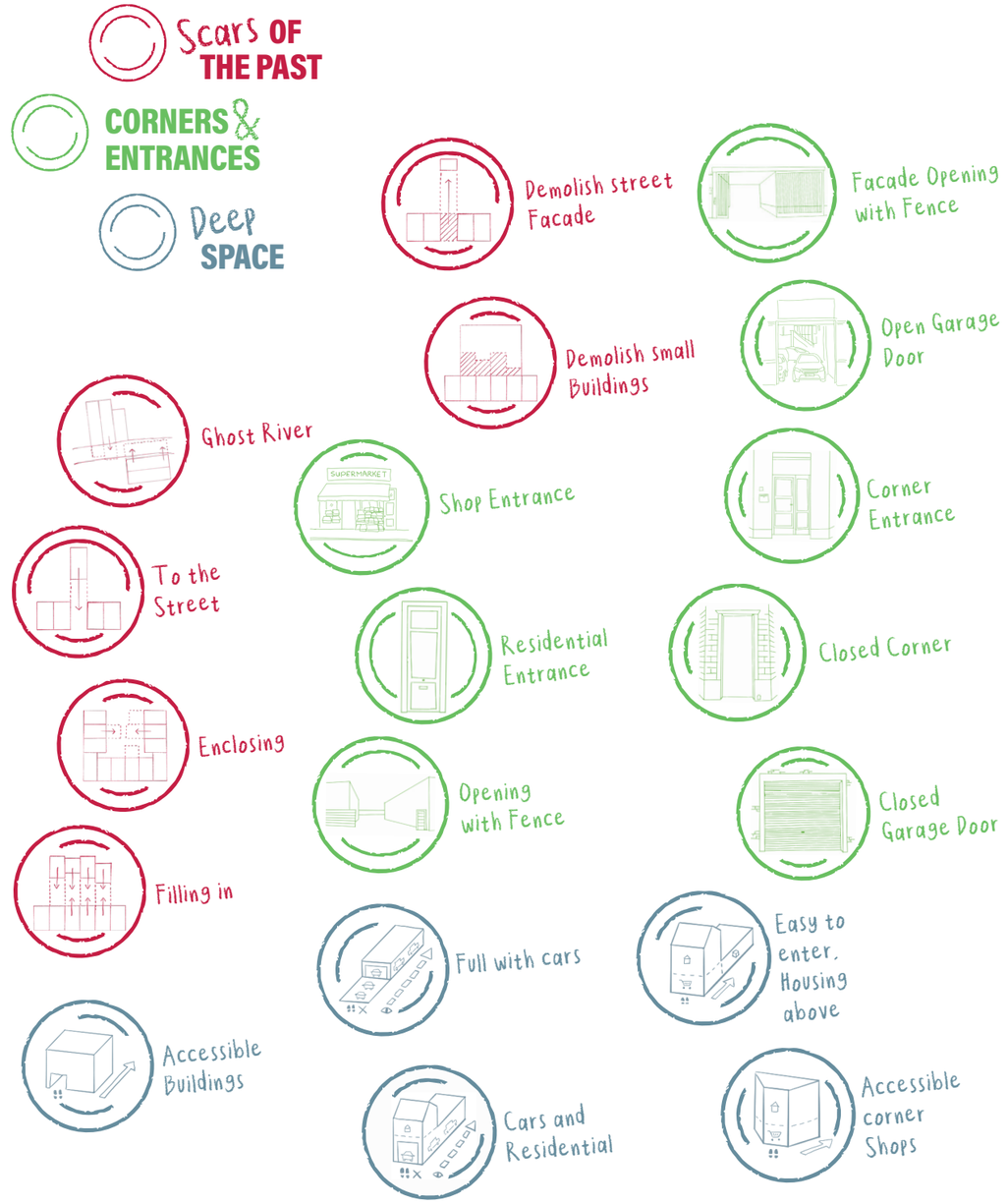
In addition, the research provided insights into Deep Space's experiences. By looking into the block through the street façades, a deep spatial sequence of connected spaces becomes visible, just as in reality. As a result, the urban block could be read not only as a floor plan but as a layered spatial inner world that has evolved over time.



Group research Deep Space

Booklets

Finding patterns



Collection of patterns

Scars of the past, corners & entrances, Deep space

Patterns

During the mapping of the block's spatial organisation, various patterns became clear to us. In the booklets, Travelling through the Heyvaert Block, these patterns are explained using examples from both the block we research and the wider Heyvaert neighbourhood. The patterns are divided into three themes: Scars of the past, corners & entrances and Deep Space. Together, they form an important part of the built environment's identity in the Heyvaert neighbourhood and provide insight into the spatial characteristics that give the area its character.

Understanding a complex urban morphology

Risks of Deep Space

The research shows that Deep Space can have various risks. Depending on the situation and form, Deep Space can negatively impact the quality of life in the neighbourhood. Densely built-up urban blocks can become difficult for the general public to access and remain primarily accessible to the owners of adjacent buildings. Furthermore, deep spatial configurations can block out daylight and restrict views of activities within the block. Furthermore, there is often little public outdoor space left because many areas have been built up over time.

Furthermore, long, deep or interconnected spaces can be disorienting. In some cases, this also leads to monofunctional use, pushing other functions aside. Together, these factors can contribute to an unsafe or inhumane spatial situation. At the same time, this analysis shows that it is not Deep Space itself that is the problem, but the way in which this spatial condition manifests itself.

House or car storage?

Qualities of Deep Space

However, Deep Space not only has risks but also offers qualities and opportunities. The spatial organisation can bring together different functions and activities, thereby facilitating encounters between different user groups. Furthermore, moving through long, deep or connected spaces can be experienced as a journey. This experience evokes feelings of discovery, surprise and exploration. It is precisely this sequence of spaces that forms an important spatial quality of Deep Space.

For the design project, this means that Deep Space should not only be seen as a problem, but also as a condition from which lessons could be learned. The question is how the qualities of Deep Space can be applied whilst simultaneously reducing the risks of exclusion, inaccessibility and insecurity.

Shop in Heyvaert

Scars of the past

THE HISTORY IS LAYERD

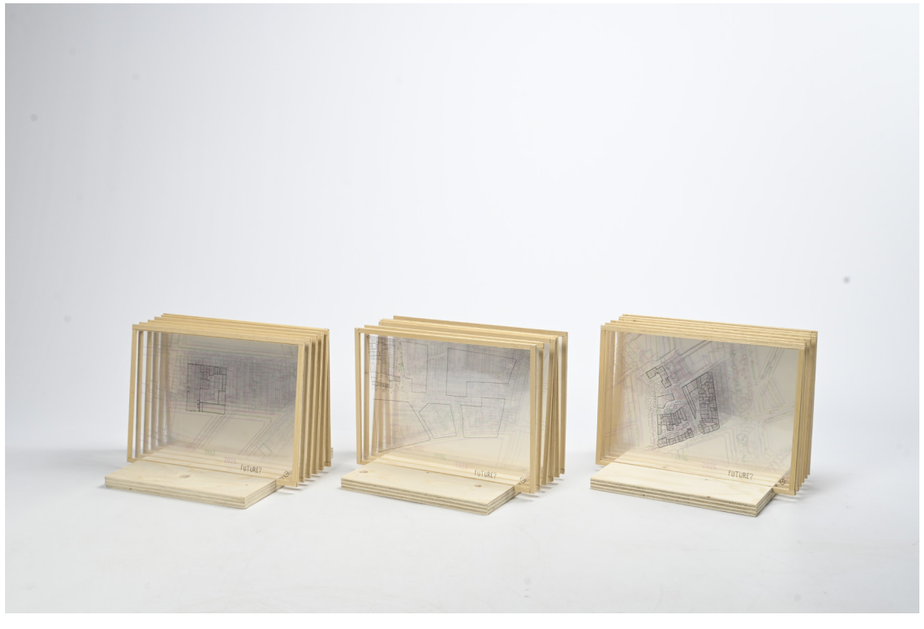
Layeredness

In addition to the layering of connected spaces that emerged within the Deep Space research, a second form of layering is evident in the Heyvaert neighbourhood, the layering of history. Buildings contain traces of what once existed but has since disappeared. These physical remnants function as ghosts from the past, making earlier spatial situations still partially visible in the present.

Digging in the past, understanding the present

The layering and the visible ghosts from the past inspired further exploration of the Deep Space research. The research, therefore, focused on the historical layering of the Heyvaert neighbourhood and its influence on the development of the urban blocks. Three building blocks were historically mapped out layer by layer. This analysis revealed why the building blocks look the way they do today.

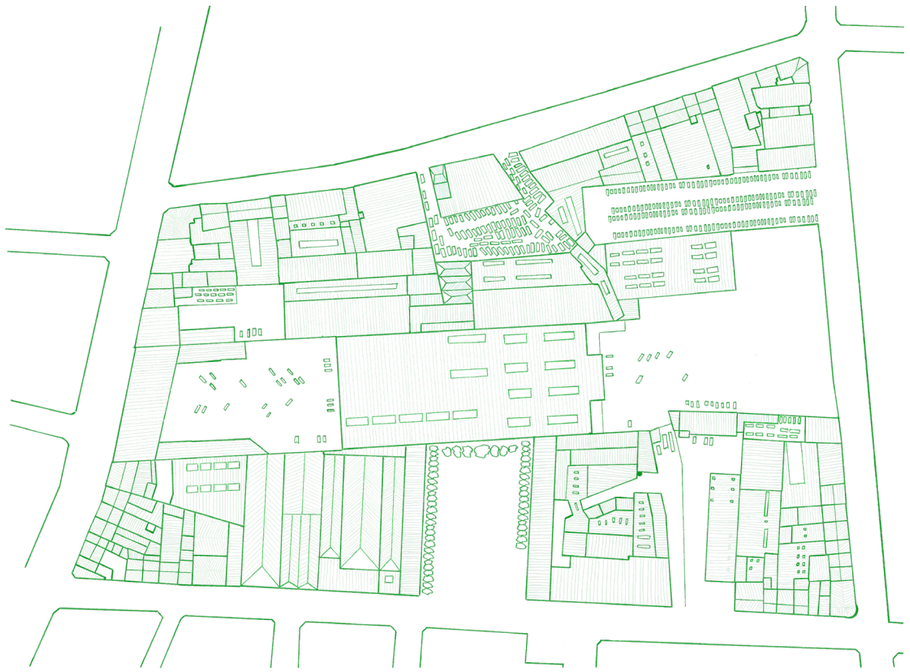
Understanding these historical layers was not only a way to uncover the past, but also to identify which structures have formed over time, which have disappeared, and where new interventions could build upon existing traces.



Diorama's historical layers Heyvaert

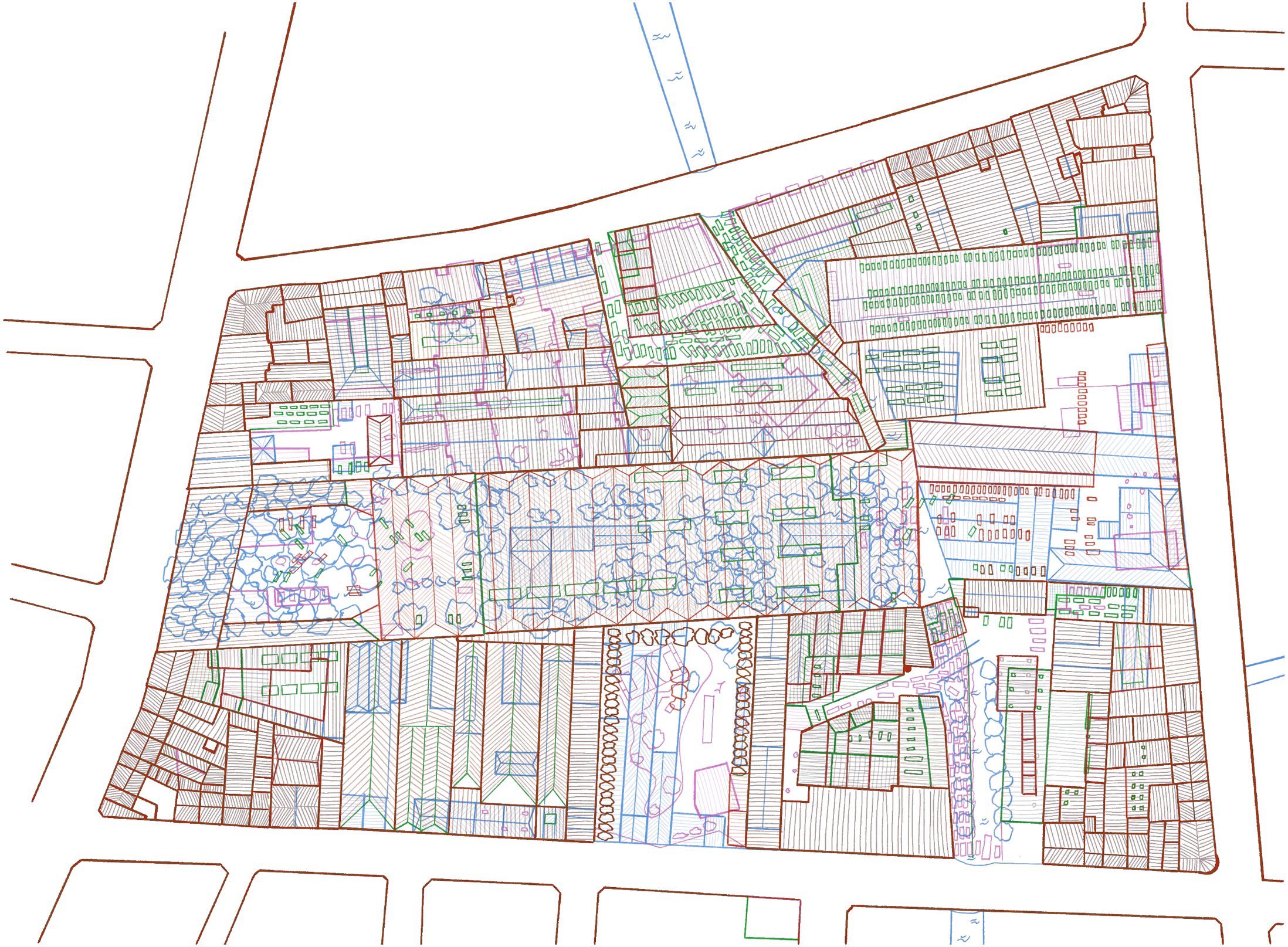
1930

1971



1996

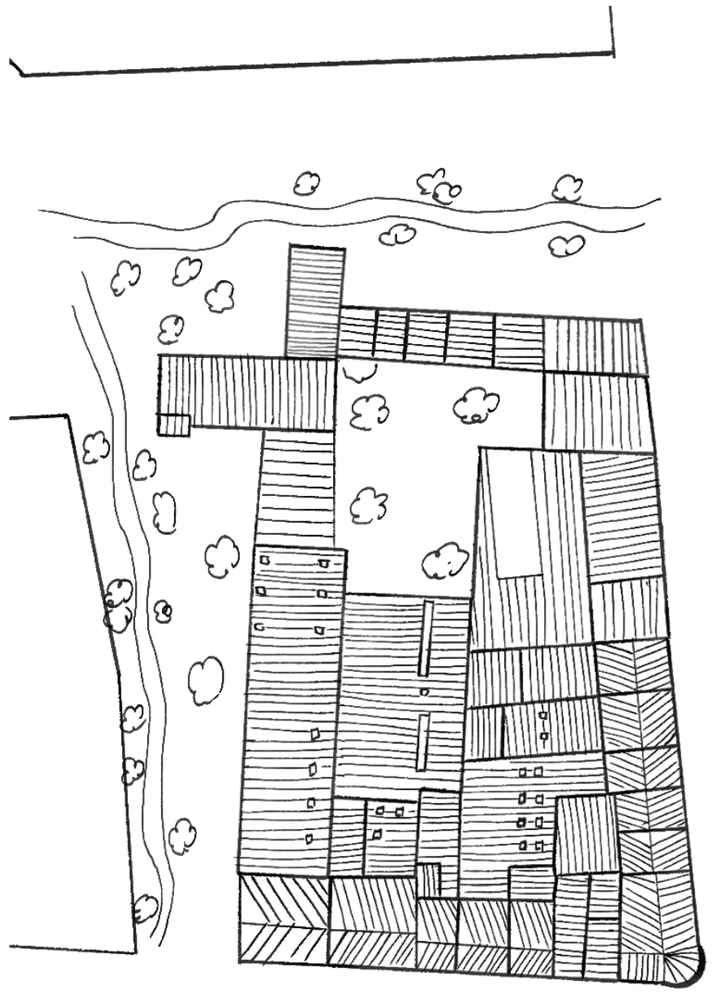
2024



A first hint of a future

For the research, each group member analysed one building block. After mapping the historical development of that block, the findings were shared within the research group. We swapped building blocks and then asked each other the following question: given the historical development of the building block, what could the next layer be for its future?

Understanding the past, after all, provides insight into possible directions for the future.

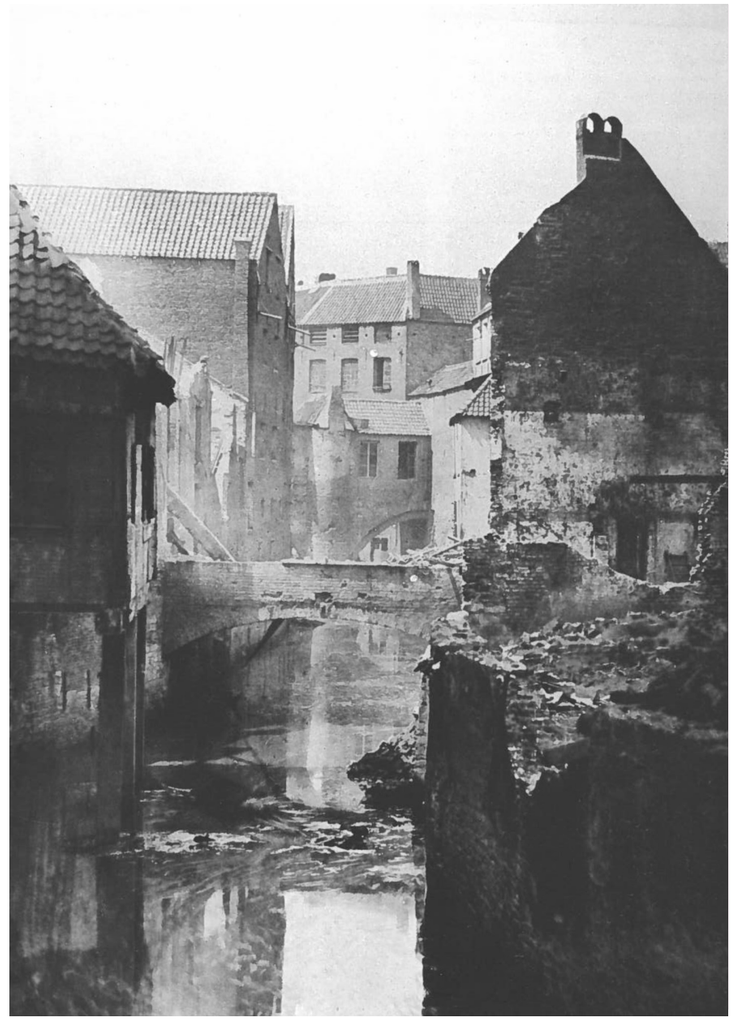


Sketch group research
A first hint of a possible future

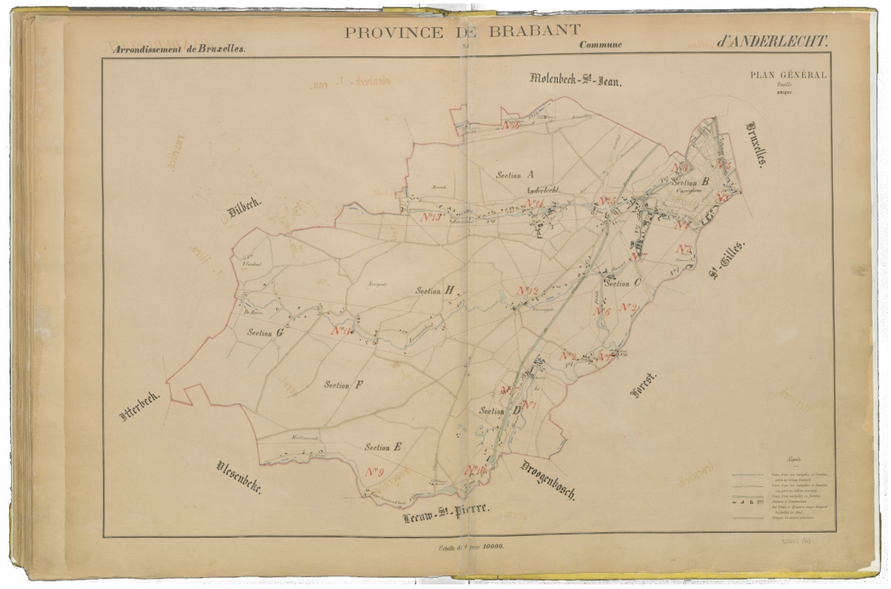
THE PETITE ZENNE

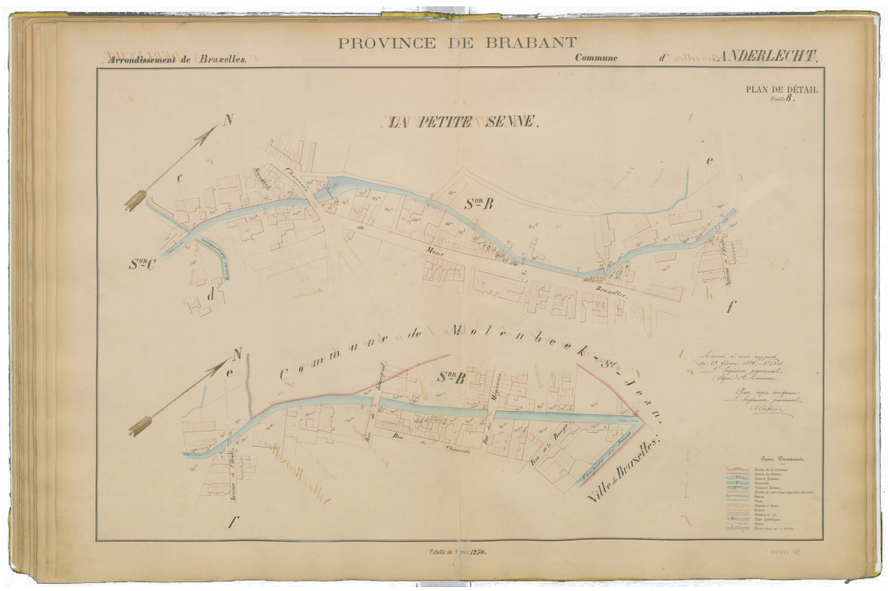
An old layer becomes a new layer

In the building block I researched, the influence of a former branch of the Zenne is visible: The Petite Zenne. This small river crossed the Heyvaert neighbourhood and ran through this particular building block, as shown on the 1930 drawing. Later, the river was filled in and gradually built over. In various places, the original course of the Petite Zenne is still subtly visible in the block's structure.



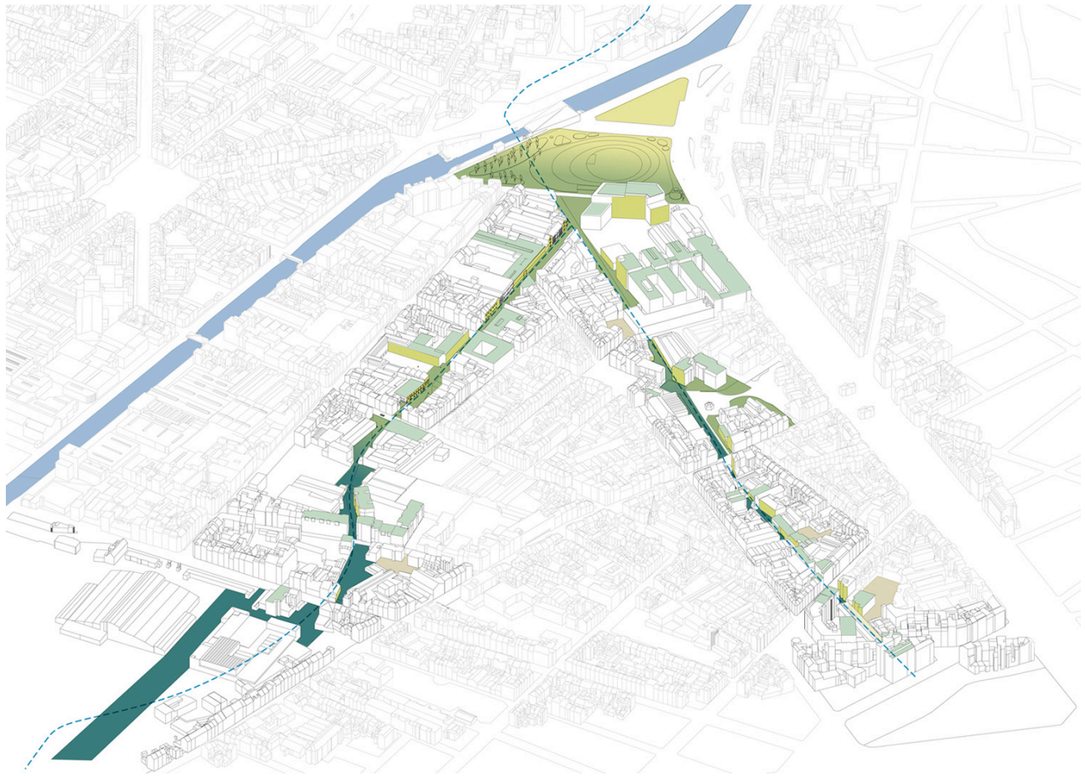
The Zenne, view from the Ververstraat





Historical maps of the Petite Zenne

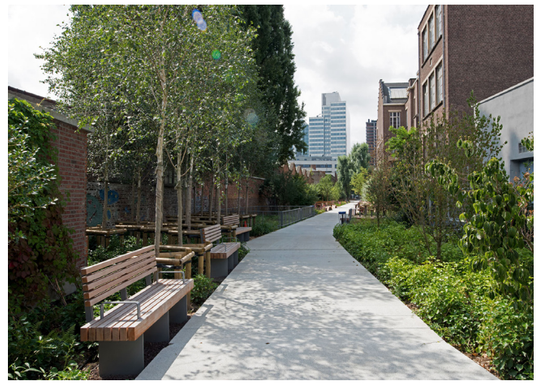
The Zenne and the the dredging of the river

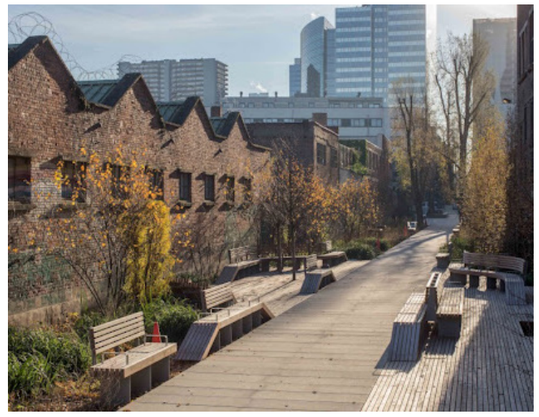


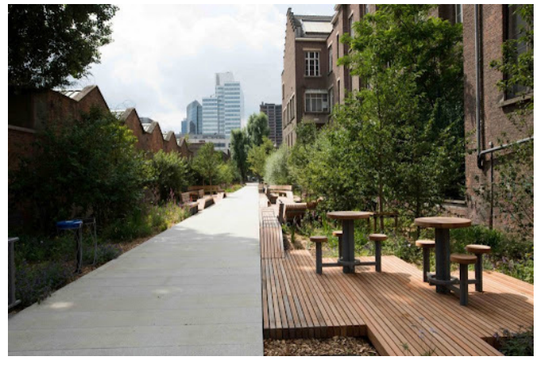
Blue becomes Green

Although the Petite Zenne no longer exists, the City of Brussels has developed plans to create a linear park along its former route. The first section of this park opened in 2016. There are now plans to extend the park further through the Heyvaert neighbourhood, which will involve opening up parts of existing building blocks.

However, the building blocks have become increasingly dense over the last few years. This raises the question of what impact the future park will have on the existing built environment and what spatial interventions are needed to establish a good relationship between the park and the buildings, ensuring the park won't be an isolated intervention. This question becomes particularly urgent in places where new public space directly borders on currently closed, inward-facing spaces.







Zennpark, 2016

Image 'Een groene kronkelende promenade op de Zennebedding'

ALONG THE NEW PETITE ZENNE PARK

Introduction project location

Within the urban block that I am researching, two existing buildings directly border the future Petite Zenne Park. The arrival of the park will influence the accessibility and use of these buildings. At the same time, the buildings will help determine how the future park is experienced and used. It is precisely for this reason that this plot forms a key link between existing buildings and future public space.

Google maps, Liverpoolstreet & Heyvaertstreet

LIVERPOOLSTREET 43A

Project location

The first building at the project site is not situated directly on the street, but is slightly further back on the plot. This gives the building a strategic position, as it aligns with the new entrance to the park, leading into the urban block. Together with the park, this building will therefore serve as a transitional area further into the plot. Many people will pass by as they move along the street and through the park, making this a place that can draw people in, deeper into the urban block. The building originally served for car storage for the car export industry and now functions as a church. However, apart from the church logo, the building's function is barely recognisable from the exterior.

Google Maps, Liverpoolstreet 43A

The found space

The building is low and elongated, consisting mainly of brick and concrete. The site feels inaccessible due to the presence of fences. The front façade is situated a few meters from the street, whilst the side façade is completely enclosed. As a result, this façade, currently closed off and unreadable, will come to lie directly adjacent to the public park.

A Suprise is found

There are unexpected patches of green along the building. The organisation Gilbard, in collaboration with The Dallas Collective, has made a first start on the future park here. By sawing away sections of the concrete paving, space was created for new plants to grow. This intervention shows that the arrival of the new park is also being awaited and encouraged within the local community.

Gilbard and the Dallas Collective

From concrete slab into a community garden

LIVERPOOLSTREET 43B

Project location

The second building on the project location is situated much further back on the plot and has a distinctive industrial-looking façade. On closer inspection, it becomes clear how the building has adapted over time: parts of the façade have been opened up, whilst other sections have been closed off. From the street, it is easy to walk past the plot. Although it is visible and recognisable, it is not clear what is happening there, and so it does not invite people to walk into the deep plot and make use of the open space and the building.

Google maps, Liverpoolstreet 43A, 2017
Former car export point

The found space

A striking tranquillity can be found on the deep plot, a rarity elsewhere in the Heyvaert neighbourhood. As the distance from the street increases, the sounds of traffic, people, and the car export industry fade into the background. Instead, silence and the sound of birdsong take centre stage. At the same time, the place also evokes a sense of seclusion. The site is used by very few people, only those who work in the building.

FIELDWORK

Real people, real emotions

During fieldwork, conversations took place with various users of the site. For instance, conversations with churchgoers revealed that the church belongs to a branch of Evangelical Christianity. It also became clear that in the second building, further back on the site, spaces are being transformed through an informal initiative. For instance, the building houses a free bike repair point, a neighbourhood bakery and workshop spaces. Users are concerned that these initiatives may come under pressure due to future developments around the Petit Zenne Park.

Research by fellow students of the studio: Max, Andeol and Anisa also revealed that the site can be perceived as unsafe. A user of the building told about an incident in which a young man fled into the dead-end plot following a conflict, was attacked there, and subsequently died from his injuries. This incident illustrates how a place that can feel quiet and pleasant during the day can, in the evening, evoke a sense of insecurity due to its isolated and enclosed layout.

On the building's ground floor is LISA, a municipal support service where residents can go for administrative questions. Fieldwork revealed that this facility is barely visible. As a result, many local residents are unaware that this support is available, and the risk is that this location will be closed. These findings made it clear that the location already serves socially valuable functions, but that the current spatial organisation does not sufficiently support their accessibility, visibility, and position within the neighbourhood. This, in particular, became a key starting point for the project, to strengthen existing initiatives and social networks rather than replace them with new programmes.

Notes, Logbook 3 december 2025

My group members encourage me to go inside the building. I feel a little hesitant and ask if they could join me. Looking back, I'm glad they went inside with me.

We walk towards the door where we had seen two women enter the building a moment earlier. When we enter, we arrive in a small white hallway. There is no signage to guide us, the only way forward is up the stairs. After walking up a few floors, we reach a level that feels more open. We see two people wearing work clothes. A woman (I estimate she is around 30 years old) walks towards us. I explain that we are students and that we are very interested in learning what they are doing with the building. She recognizes my story. Apparently, someone from our Urban Architecture studio had already called before.

The tone of her voice is not very warm. She is critical of us. With some reluctance, she tells us the following things:

- She does not like projects like those of ours.
- Any initiative for change should come from the residents of the neighbourhood, not from higher authorities.
- She and the other volunteer organizations do not have to pay rent, but they do have to pay for the transformations they make in the building themselves.
- There are multiple volunteer organi
including a free bike repair space ar
one of the upper floors. She herself w
in the future, provide free care for
whether this is specifically for peopl
explains that it is for anyone who is
- She is very clear that she is agair
tone, it sounds as if she sees us as
- She starts talking on her own initi
that took place a few days earlier, s
have happened and that its impact on
- She tells us that the municipality
she thinks this is neither a good ide
should stay. In her view, they are pa
the community.
- She is very frustrated about the fa
any funding from the municipality fo
building.
The conversation leaves me a bit shal
speaks make me feel as though I shou
part of the problem. I do not explair
design bottom-up. Instead, I keep my
want to provoke her any further.

43b rue de Liverpool

MIND THE CORNER

At 43b rue de Liverpool , set back from the street, is a five-story industrial building connected to a pavilion that extends to the road and inhabits a small church.

A man enters the driveway, and we approach him.
He's a carpenter, and his workshop is in the building. He also lives in the neighborhood, directly across the road. He finds the proximity between his workplace and home too short, but he likes the area. He tells us about crime, including a knife murder that took place in his yard three years ago in broad daylight. Contrary to what the newspapers say, he tells us that the nights are rather quiet here.
He mentions the group of Guinean men who spend their days on his street. They don't live in the neighborhood but come here because it used to be a collection point for undocumented day laborers. Now there's no more work, he says, but they still come back every day.
He's heard about the future Sennette Park, which will run alongside his workshop in a few years. He won't be there anymore, he assures us. He explains that the city has decided to terminate the operating contract with the car dealerships starting next year and that in 8 to 10 years it will have raised the necessary funds to buy back the land for the future park.
According to his information, the city tried to relocate the used car sales to the north of Brussels a few years ago, but only two dealerships moved.

He's also already seen some architect's proposals for converting the premises he rents, and the current plan is to set up offices there by keeping the concrete structure and replace all the brickwork by glass facades.

© Crime scene of the Baker office building

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Fieldwork conducted by Chiara (left) and by Max, Anisa and Andeol (right)

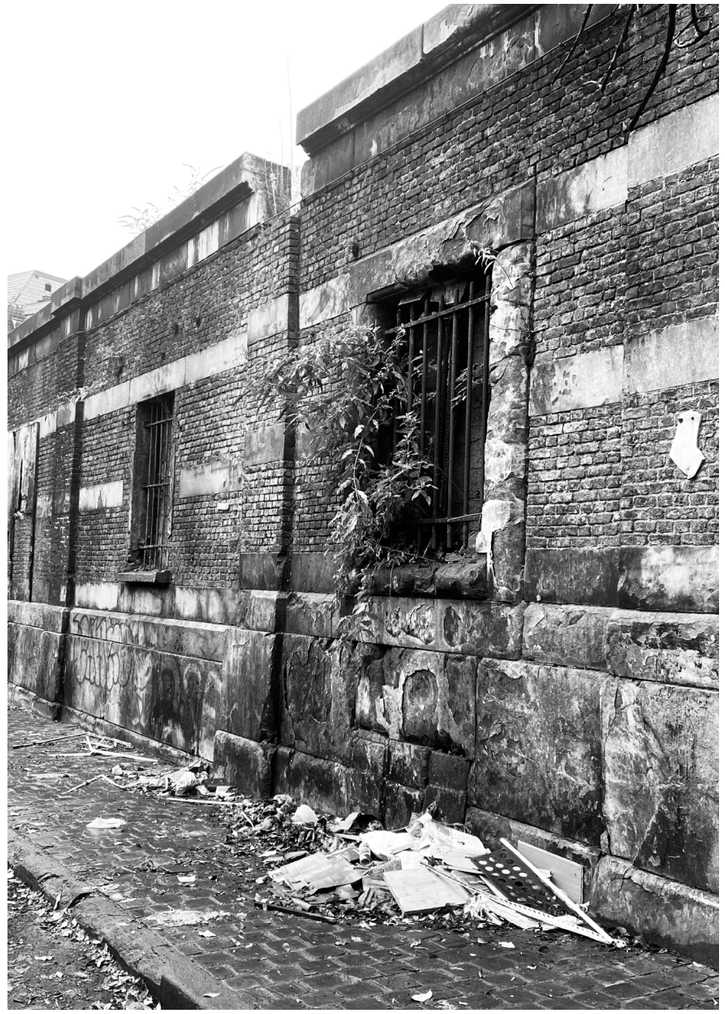
Social problems in the Heyvaert Neighbourhood

The SAAMO research report also confirms the social challenges within the Heyvaert neighbourhood. For the development of a new neighbourhood facility, SAAMO drew up a comprehensive environmental analysis that described the challenges residents face.

A few findings that, in my view, align with the experiences of the fieldwork research are:

- *'Several people point to issues of loneliness and social isolation in the neighbourhood.'*
- *'Many residents say they have few anchor points in the area. They have little or no contact with their neighbours and do not take part in activities in the neighbourhood. For some, this contributes to a lack of belonging and a negative overall feeling about the area.'*
- *'Others fear that new development projects will create small islands of wealth (petites pochettes de richesse) within the neighbourhood and further reinforce segregation.'*
- *'Apart from drug-related nuisance, several female residents say they feel uncomfortable in the neighbourhood because the streets are largely dominated by men. A number of women mention that they avoid going outside in the evening out of fear of being harassed.'*
- *'Safety is a particularly important issue in the neighbourhood. Many residents say they do not feel safe in the area. This feeling of unsafety is mainly associated with the presence of drug dealers and people under the influence of (hard) drugs.'*

These observations underscore the importance of preserving and strengthening the site's existing social functions. If the neighbourhood already lacks places that offer support, social interaction, and a sense of belonging, then the transformation of this plot should not displace these functions but rather give them a clearer, more sustainable spatial position.



DEEP PLOT,
DEEP SPACE?

Although the plot, like Deep Space, has deep sightlines, it still feels inaccessible. The two buildings function separately and share no spatial, functional or social relationship. Furthermore, the façades do not indicate the activities taking place inside, giving the buildings a closed rather than an inviting character.

The spatial configuration reinforces this sense of isolation. The long, deep and narrow layout of the plot restricts accessibility and contributes to feelings of insecurity. At the same time, the large outdoor space remains underused. The space offers little amenity, has hardly any greenery and lacks a clear user or owner who takes responsibility for its maintenance, social safety and use.

This analysis shows that the current situation is insufficiently aligned with the future development of the Petite Zenne Park. For the park to function as an attractive, safe and green public space, the adjacent buildings must reorient themselves towards their surroundings. At present, there is no clear relationship between the buildings, the outdoor space and the future park, whilst existing users are concerned about their position in future developments. These findings form the core of the design principles.

Research into the Heyvaert Neighbourhood, the Deep Space phenomenon, the historical layering of the building block, and on-site fieldwork has led to the following research question:

How can a closed urban block be transformed through architectural strategies of opening, connecting, and grounding to create a safe public park?

Analysis of Perceived Safety and Unsafety

TO OPEN UP

What does this urban block need?

BACKS TURNING INTO FRONTS

The research shows that the current mega-block is barely accessible to pedestrians and offers few options for pedestrian movement. Residents and visitors can mainly move along the perimeter of the block, but can barely move through it. As a result, the inner area remains closed off and disconnected from the surrounding neighbourhood.

This finding prompted an initial key design decision: introducing two new passageways through the mega-block. This intervention divides the large block into smaller urban blocks and creates a new network of routes. Consequently, people can move not only along the block but also through it.

This intervention does more than improve accessibility. By creating new routes and new public street-facing façades, former rear and side façades are transformed into new front façades. This not only creates a safer urban environment but also a richer spatial experience with a mix of residential, working and public spaces. At the same time, this intervention aligns with a quality of Deep Space: the experience of moving through a layered sequence of spaces.

The inaccessible back of Liverpool Street 43 B

Diagrams, accessibility urban block

From mega block to smaller urban block

Diagrams, impact linear park on entrances in the urban block

Backs turning into fronts

DESIGN PRINCIPLES

The design is based on several research findings. The current public space is not accessible to the public, existing functions are barely visible, the buildings appear closed off and uninviting, and the various functions at the site operate largely independently of one another. At the same time, there is a shortage of housing in the neighbourhood and a need for a stronger relationship between the site and the future park.

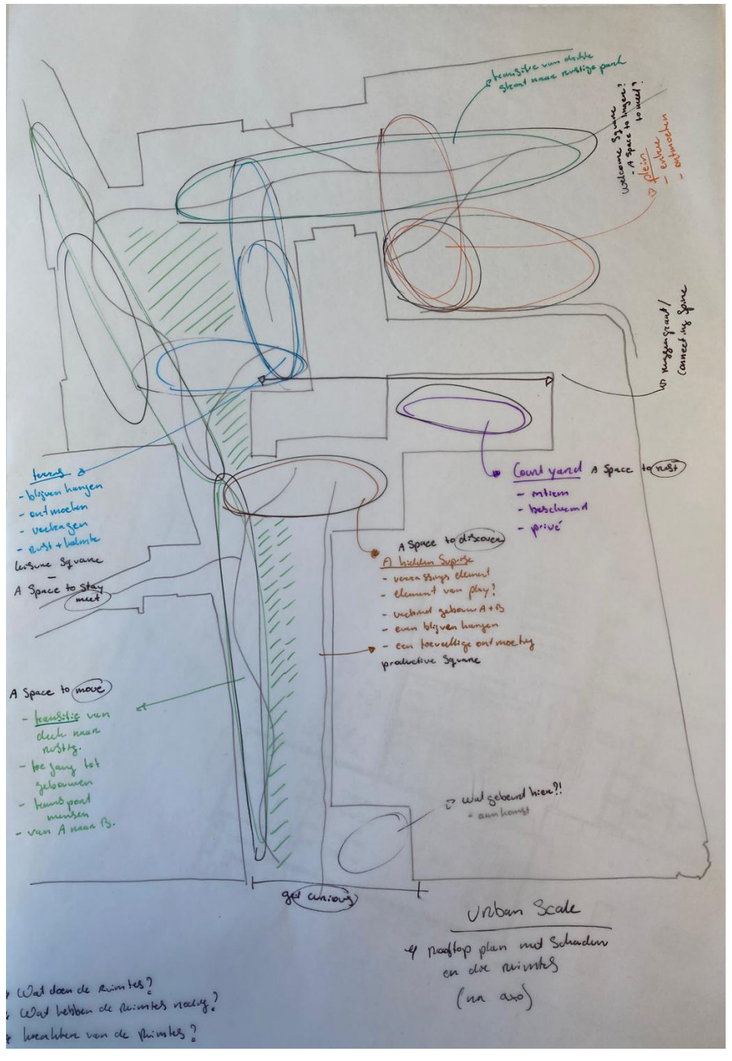
These findings translate into a series of design decisions. New volumes are added to transform closed rear and side elevations into active façades facing the park. Exiting functions are relocated or made more visible so that they van participate more directly in public life. The church is given a more recognisable and accessible position, whilst new and existing programmes are connected through shared spaces and routes.

The positioning and orientation of the volume create angles, sightlines and shifts in perspective within the urban space. This is significant because it builds on a positive quality of Deep Space: the experience of moving through a series of spaces that gradually unfold. Here, however, that experience is no longer linked to seclusion and exclusion, but rather to openness, recognisability and public use.

Finally, the programme is expanded to include housing. This addition not only responds to the housing shortage in the neighbourhood but also ensures a permanent presence on the site. Through this combination of social functions, public accessibility and housing, the previously fragmented and unsafe situation is transformed into a more social, safe and established urban park space.

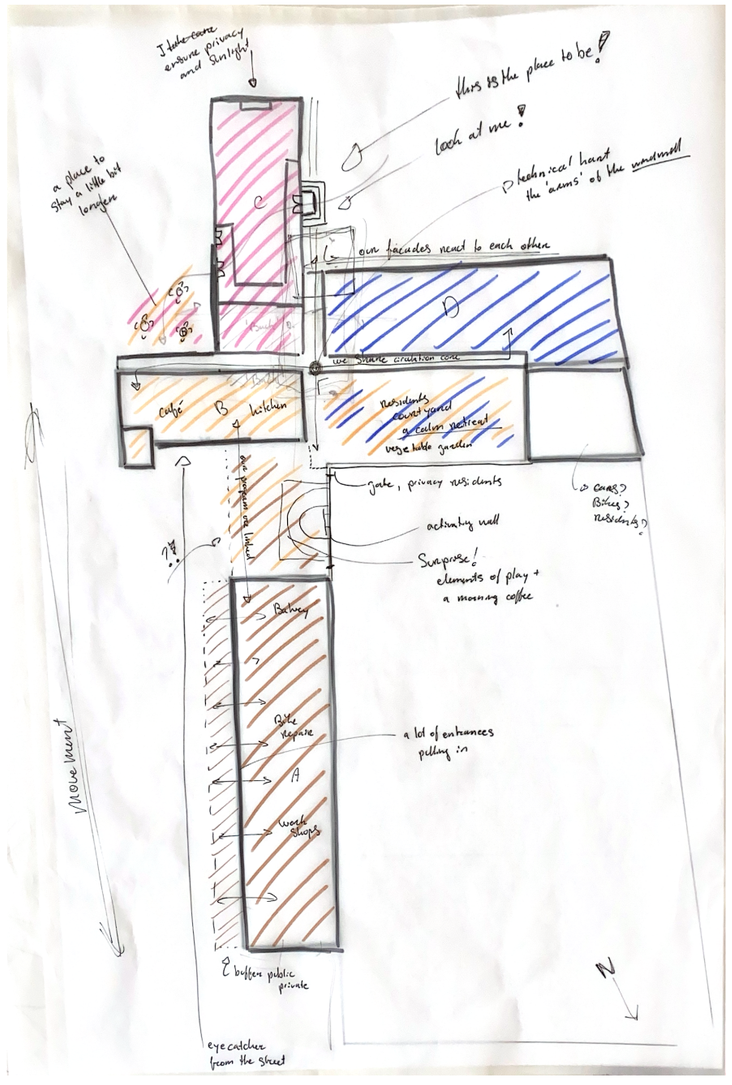
Concept diagrams

How to open up the urban block



Sketches by author

Searching for new public corners



Sketches by author

A new building organisation

Turning point in the design process

The introduction of the new public façades marked a significant moment within the design process. An initial exploration examined the architectural expression of both the residential building and the church through a façade study based on a scale of 1.33. This study began with architectural form but gradually led to a broader reflection on the building's role within the Heyvaert neighbourhood.

Rather than merely investigating how a church building should take shape, the question arose of how this building, and thus its architecture, could create an inviting and accessible space for the neighbourhood. Consequently, the ambition shifted from building a space for a single community to a space that could also serve a broader group of residents and users. This is consistent with the fieldwork, which revealed that the church already plays a social role, but that the current building does not yet sufficiently support that broader potential in spatial terms.

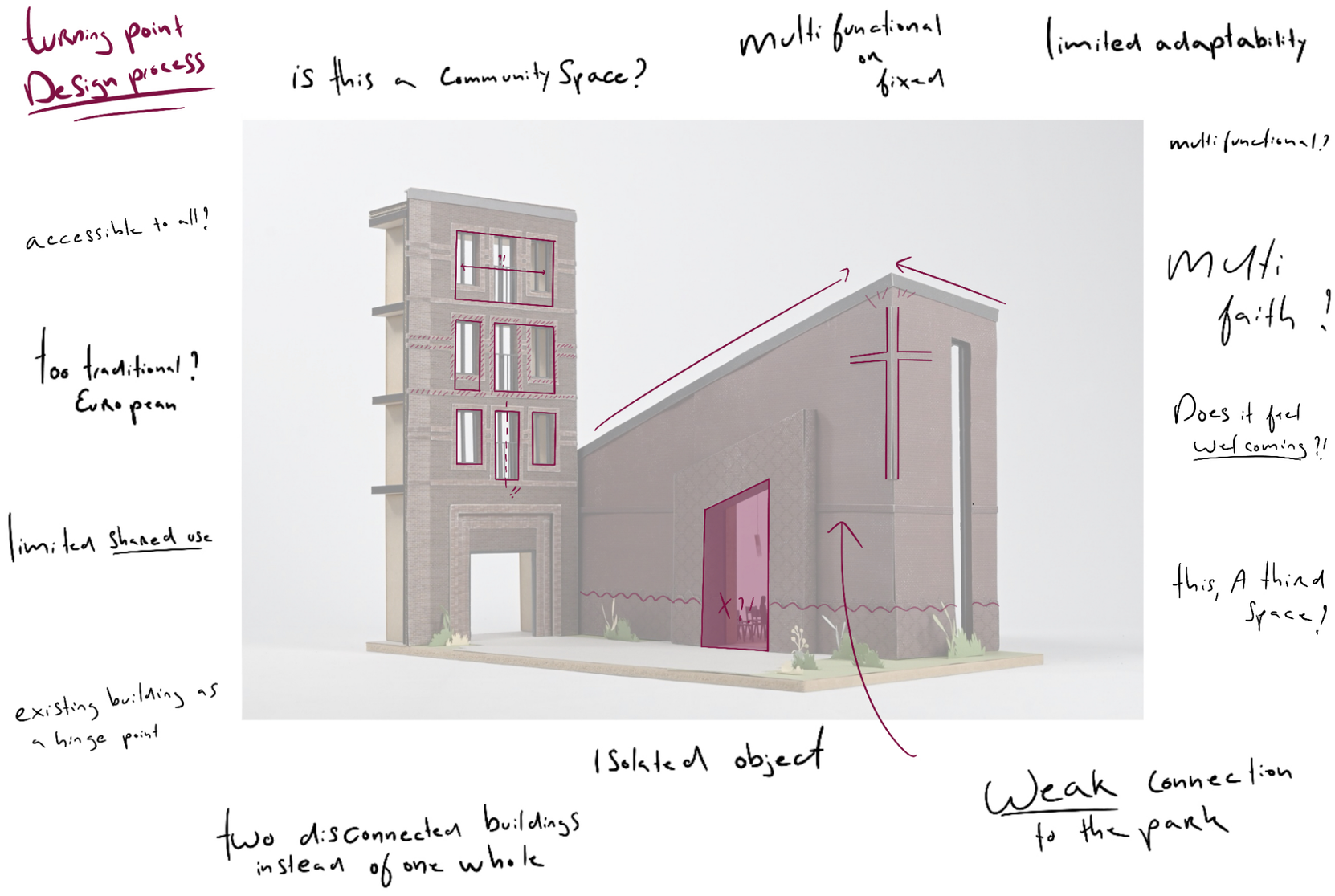


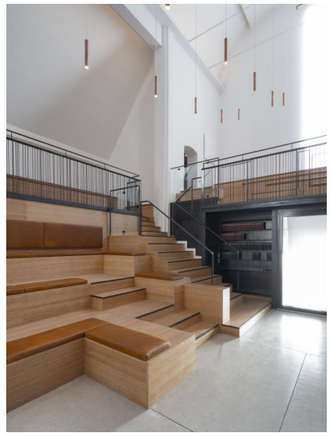
figure
tekst

A new perspective

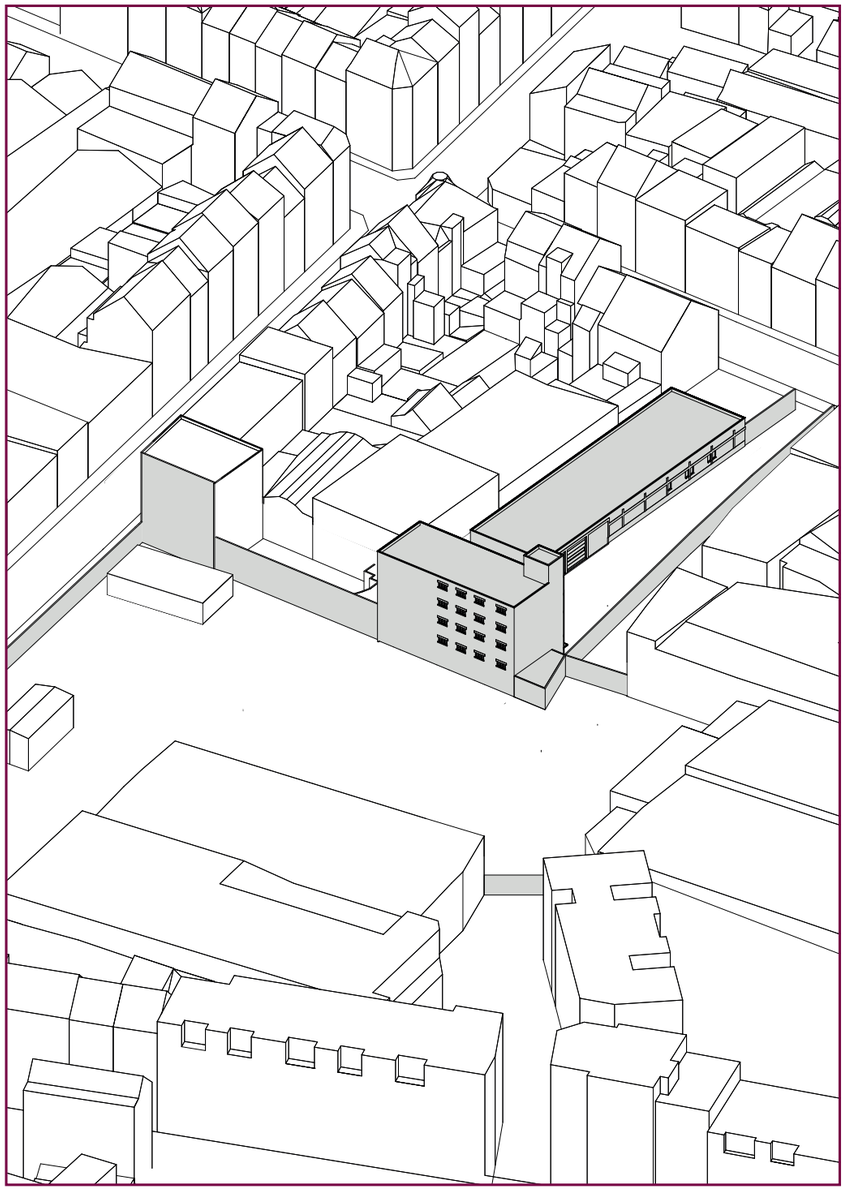
During the design process, studies of reference projects served as an important source of inspiration. This analysis focused not only on the functional organisation of churches, but also on their social role, spatial character and relationship with the surrounding area. The examples examined show that religious buildings are often more than just places for services. They can function as meeting places, community facilities or social anchors within the neighbourhood.

These insights have guided the development of a building that not only fulfils a religious function but also contributes to the social life of the neighbourhood. In this sense, references in this project are not used as examples to be copied, but as a means to rethink what kind of institution the church can become within this specific urban context.

The specific analysis of the reference project is available in the logbook.



Reference Churches Included in the Analysis



Existing

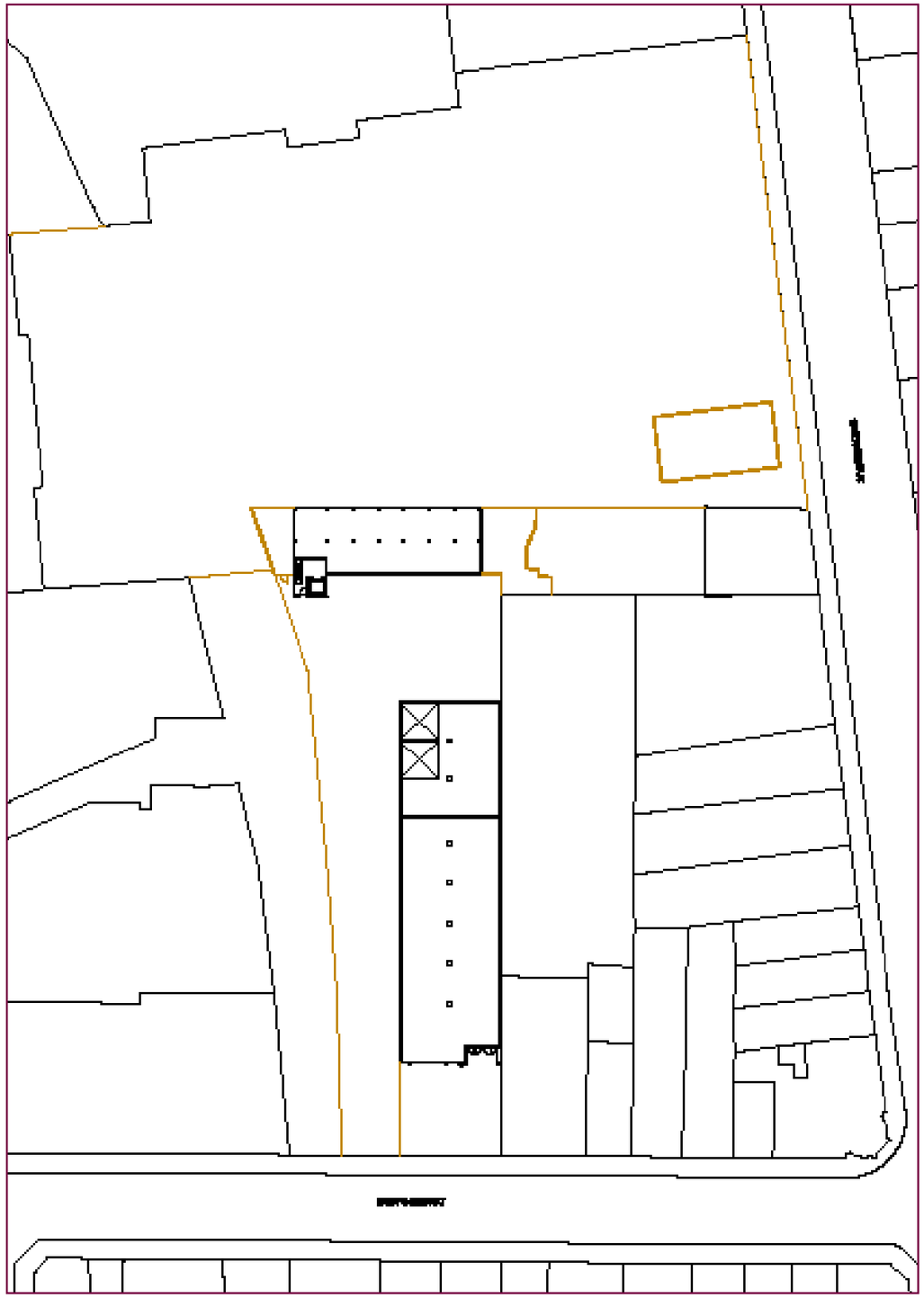
A closed off back facade

Proposal

A new face for the new park

TO CONNECT

How to connect the old and the new?



Floor plan

Existing situation + Demolition

Floor plan

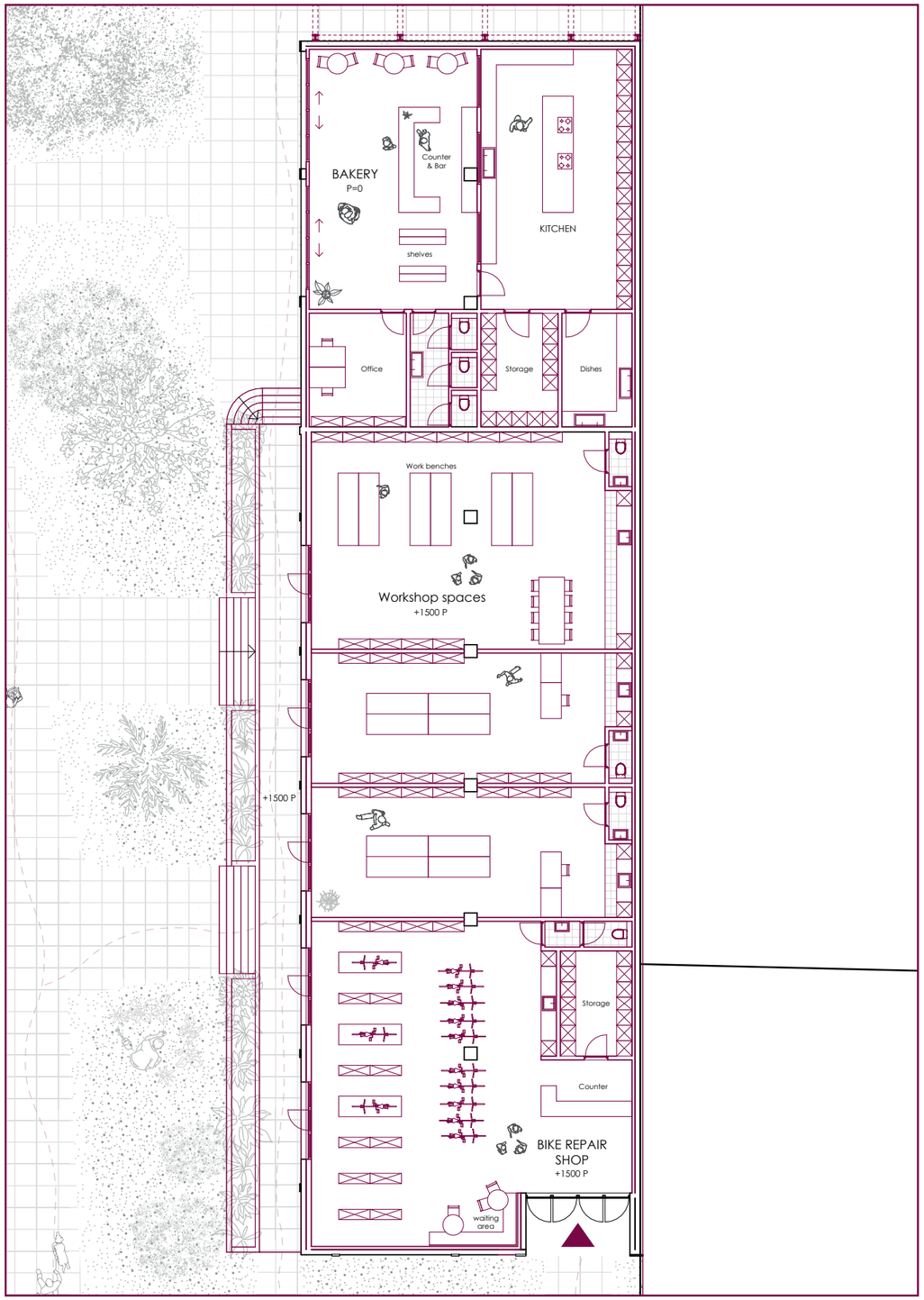
Architectural proposal

An accessible workshop

The research shows that existing functions, such as the bike repair shop, workshops, and bakery, are difficult to access and barely visible to visitors. Hidden deeper within the site and elevated above ground level, they are detached from daily public life and difficult for new users to find.

Therefore, these functions will be repositioned in the first building, closer to the street and directly adjacent to the park. The side façade of the building will be opened up, and several entrances added, making it clear to passers-by that the building is accessible from more than one side and that they are welcome.

This transformation has a dual effect. On the one hand, it improves the accessibility and visibility of the existing programmes; on the other, it activates the park. A building that was previously closed now contributes to a safer public environment through visible occupancy and daily use: an architectural form of 'eyes on the street'.



Floor plan

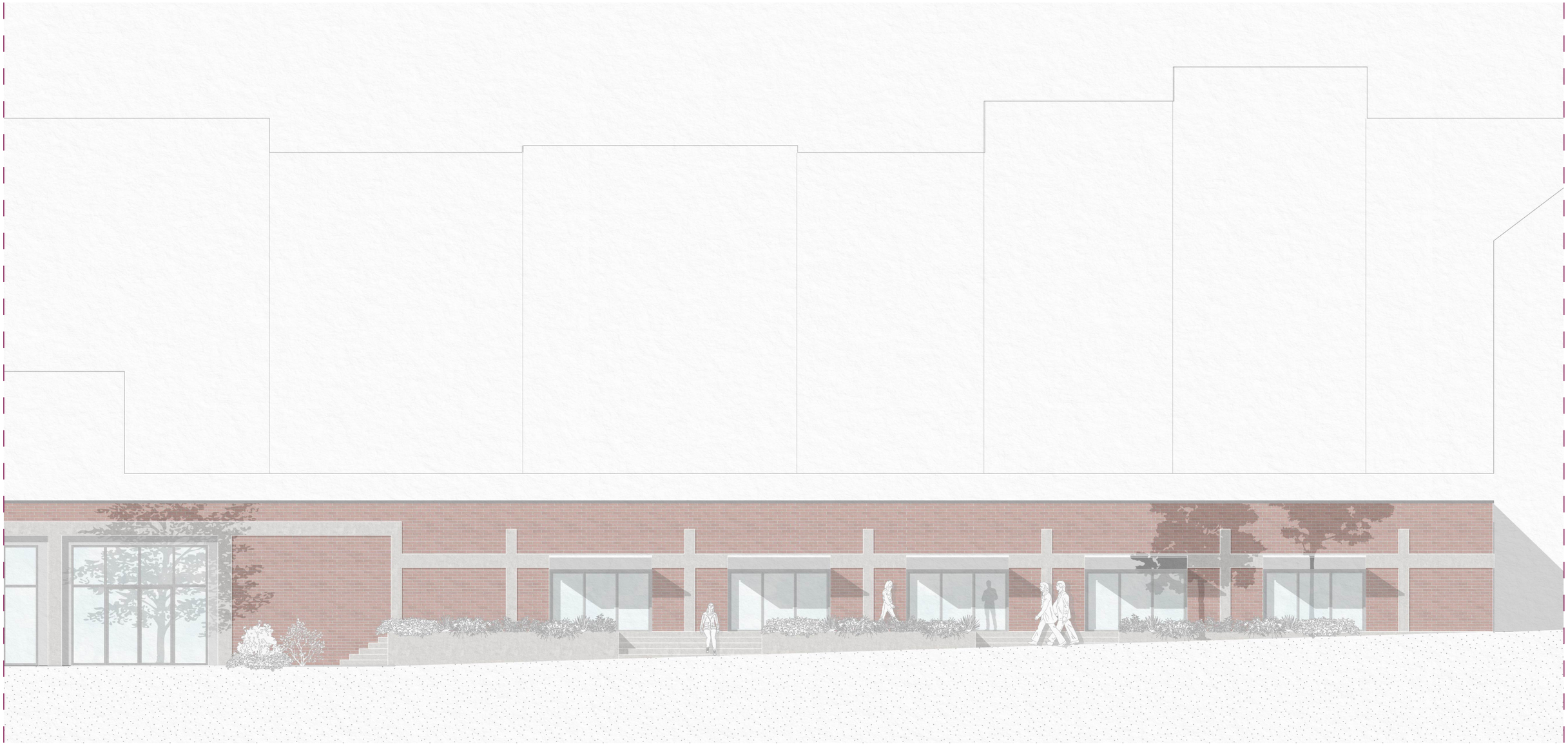
Productive spaces

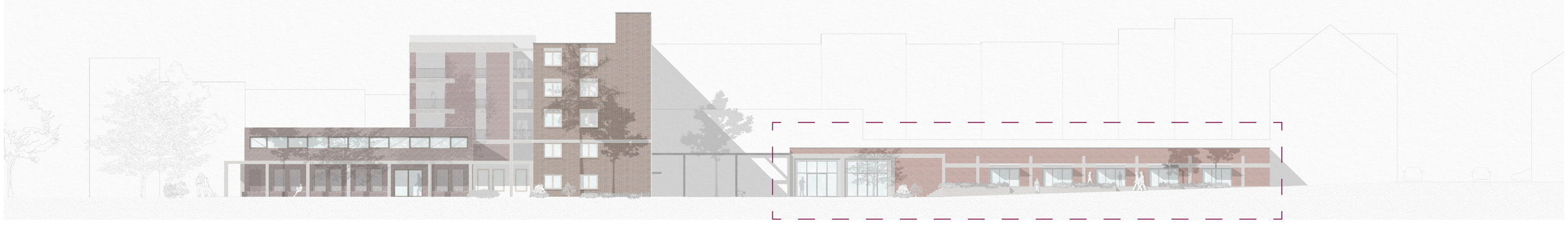
A new public entrance

Through small but specific interventions, this building is being transformed into a more accessible public structure. Several entrances are created in the side façades, which are highlighted by a steel canopy to make them recognisable in the public space. The difference in height between the ground floor and street level is resolved by a new raised walkway with integrated planters and steps, creating a direct connection between the building and the park.

This walkway also makes the building accessible to people with reduced mobility. From the street, users can enter the building at ground level via the walkway and access all its facilities.

A welcome entrance to the park



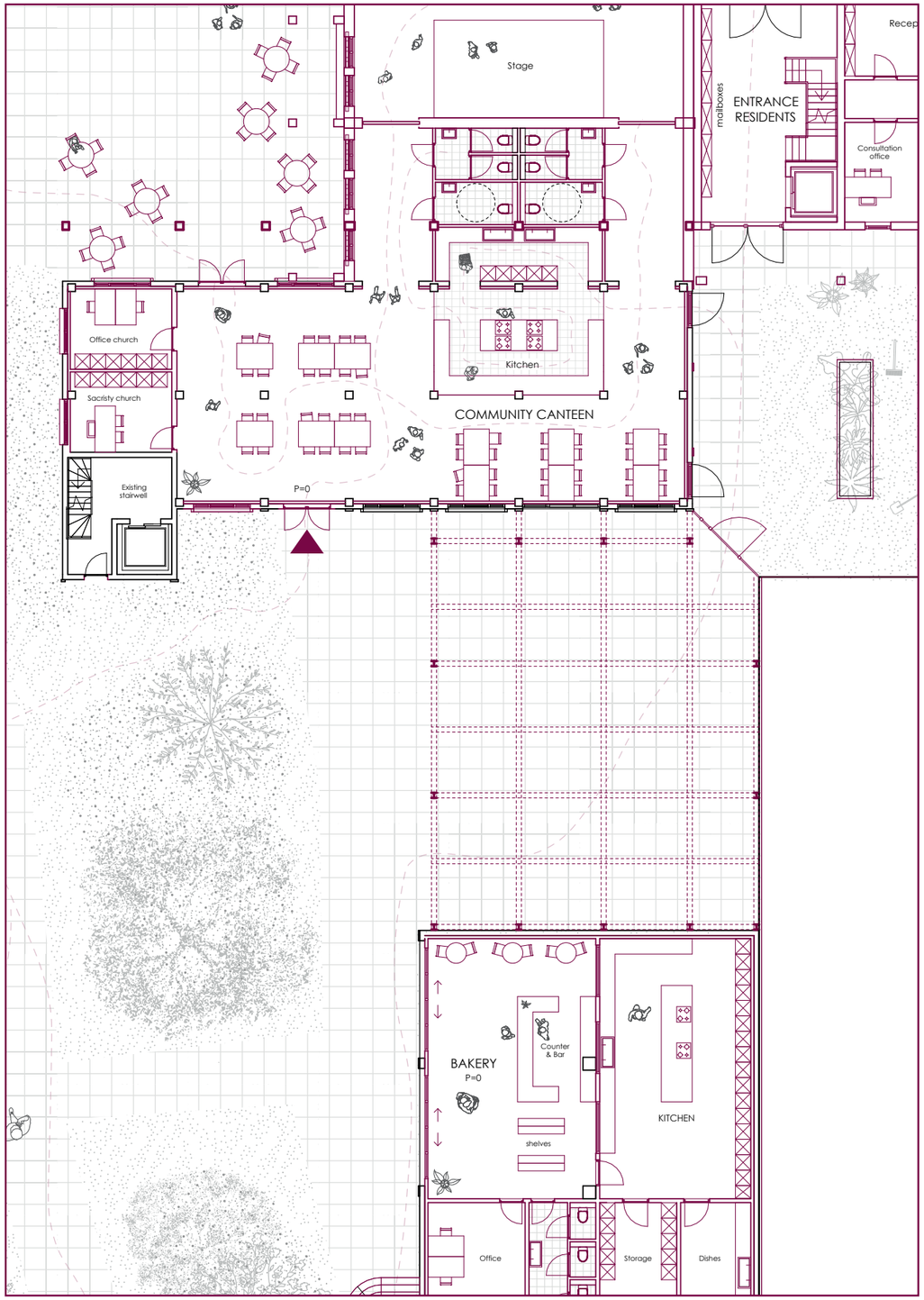


Community Canteen

Fieldwork and analysis revealed that the site's various functions currently operate in isolation from one another and lack a shared space where users can meet. Although they are situated on the same plot, there is no spatial element to connect the different user groups.

In response to this, the design introduces a new program: the community canteen. This space forms the social heart of the project. Its central location between the buildings and its direct connection to the park create an accessible meeting place where different users can gather throughout the day to eat, socialise and spend time.

The canteen is directly connected to the new volume behind the building, allowing both spaces to function as a single entity during events. In this way, the canteen not only connects buildings physically, but also people socially. It strengthens the site's social network by offering a shared everyday space with a low threshold, rather than a specialised or exclusive one.



Ground floor

Community Canteen

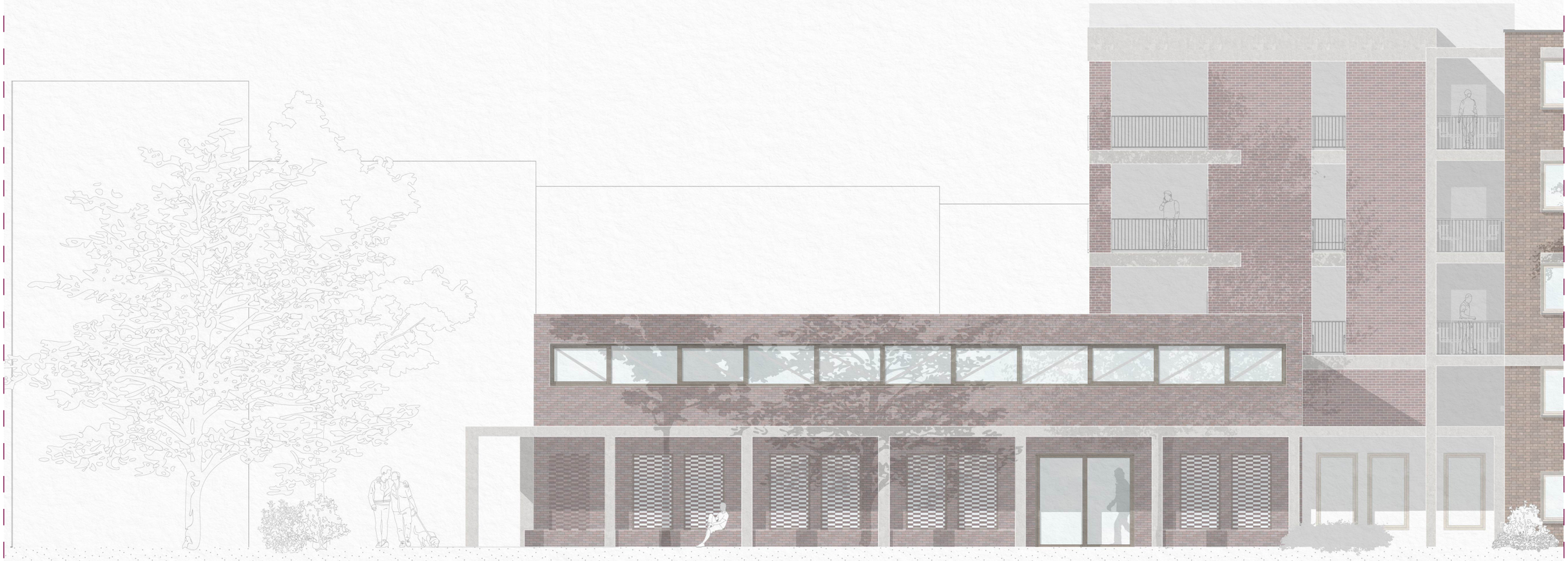
A NEW CHURCH

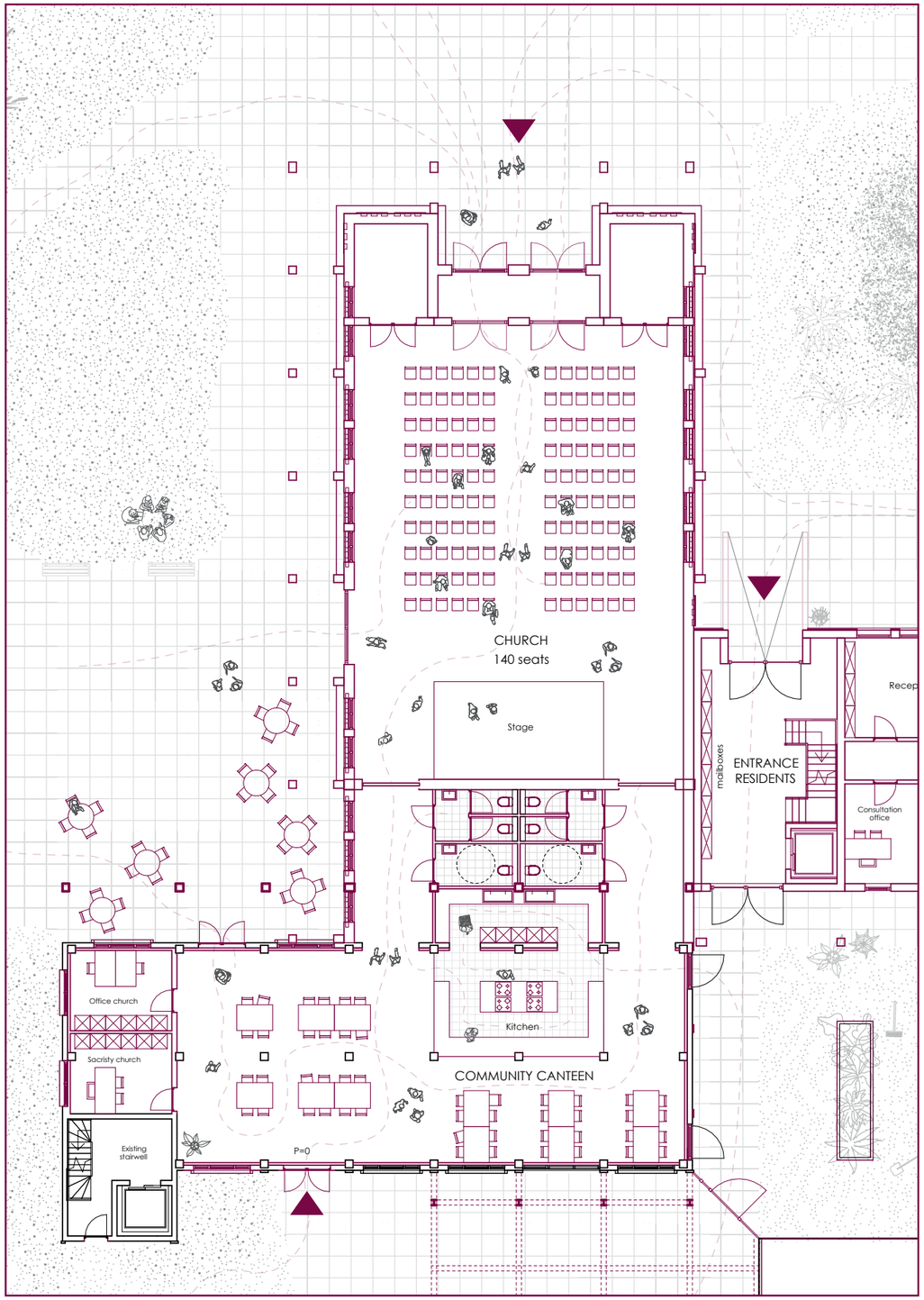
After the community canteen, we reach the new church building via the new public terrace. This volume sits low within its surroundings, but has an inviting character thanks to the canopy and benches in the façade.

The design takes into account the privacy wishes of churchgoers by fitting the façade openings with perforated brick, allowing daylight to enter without a direct view of those inside. The church will have a permanent stage for musical services. This is in keeping with the current church, in which evangelical Christianity does not place great value on rituals and images, but instead focuses on music and coming together.

At the same time, the church will no longer be a closed-off building accessible only to churchgoers. Thanks to its new position, its spatial openness and its relationship with the rest of the project, it can function as a broader community anchor within the neighbourhood. In this way, the design aligns with the project's ambition not to displace existing informal social structures, but rather to protect and strengthen them.

A place to linger





Ground floor

Church

A Place for belonging

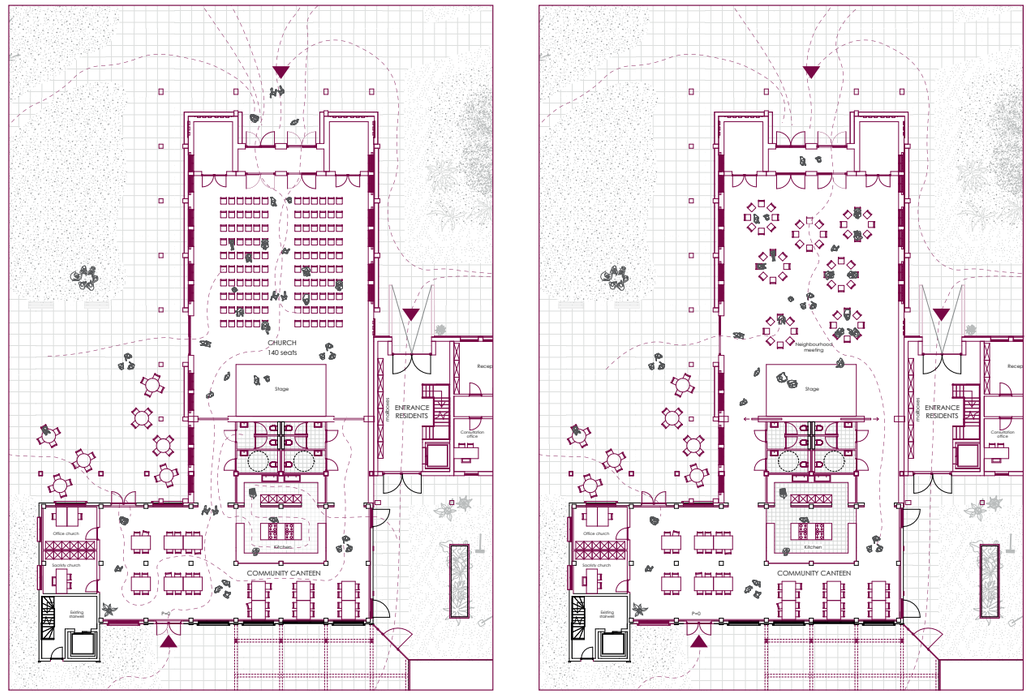
A new face

Two elements stand out in the church's façade: first, the roof's shape, a sawtooth roof. This form was chosen as a reference to the neighbourhood's industrial character. Several large halls in the neighbourhood have sawtooth roofs. This makes the building recognisable to existing local residents and connects it to the site's long industrial history.
In addition, the concrete band with a canopy stands out. This concrete band is also repeated in a grid in the building's gallery behind it. This grid is inspired by the front façade of the existing building and is translated to the rear, where it now functions as a gallery. The concrete elements recur in various ways throughout the ensemble of buildings, ensuring that the buildings remain recognisable as separate units while also being perceived as a single coherent whole.

More than a church

Although the main user of this building is the church, its flexible floor plan allows it to be used for other purposes as well. For example, a local neighbourhood organisation can hold meetings here, the art initiative can be expanded to include an exhibition, or a local primary school can use the space for a party. Combined with the big storage areas, the stage and the proximity of the community canteen, this creates scope for a wide range of potential uses.

It is precisely this flexibility that is important, as it enables the building to become more firmly rooted in the neighbourhood. Rather than remaining a single-purpose building, it can evolve into a shared facility for diverse collective uses. In this way, the church contributes not only symbolically but also functionally to the wider life of the location.



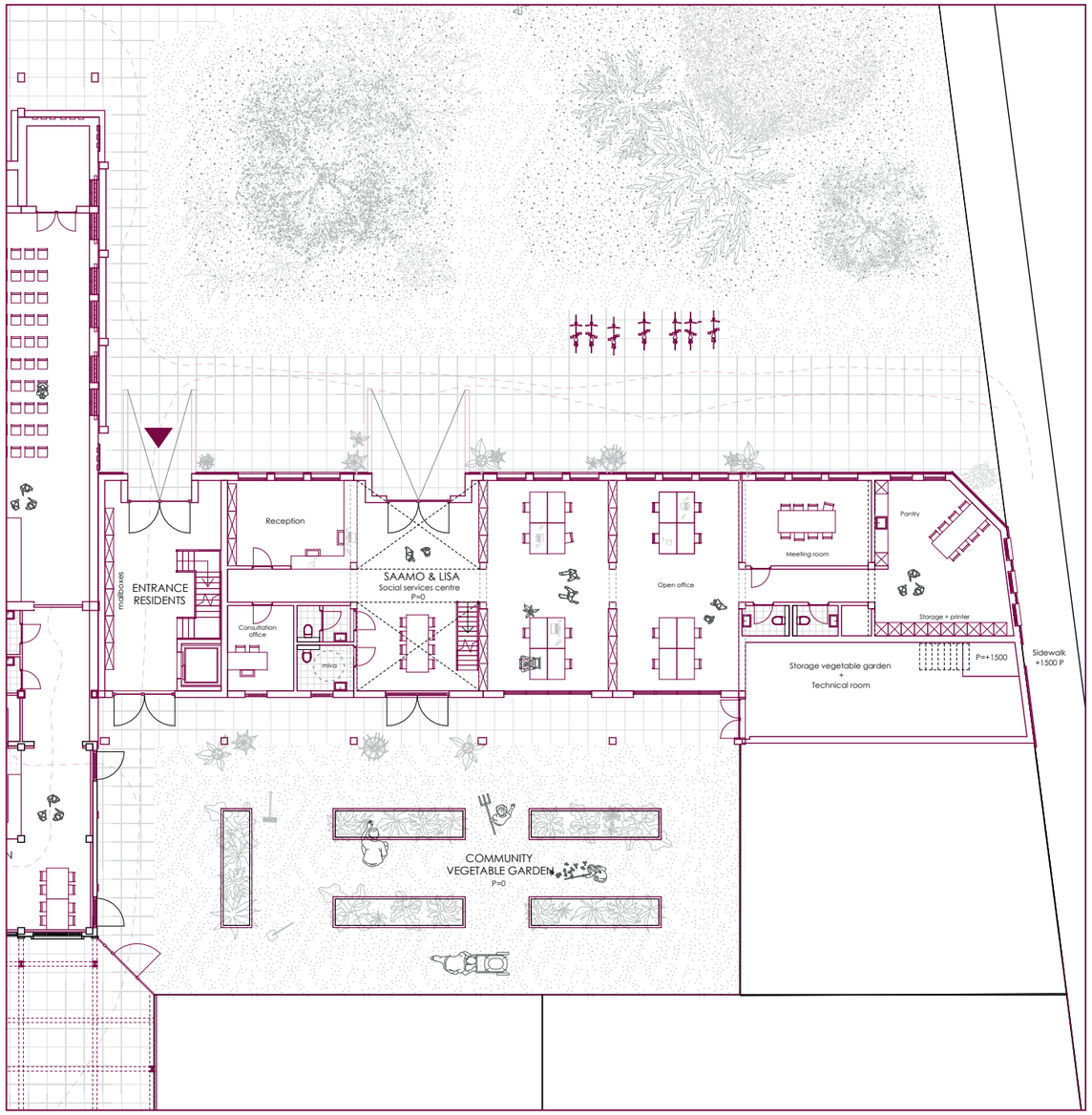
Multifuntional floor plan

More than just a church: a space for community gatherings, exhibitions, and parties

A place to go

The previously inaccessible offices of LISA and SAAMO are being relocated to a new building. This building is situated close to Heyvaert Street and, as it were, extends the street into the park: the clear entrance and the proximity to the street signal that people are welcome here.

This decision is directly linked to the fieldwork, which revealed that LISA is currently barely visible in the neighbourhood and is therefore not widely known among residents. By relocating these support functions to a more visible and public position, the design reinforces their role as local anchor points. Privacy-sensitive discussions can then take place on the first floor around the courtyard, where the setting is quieter and more sheltered.



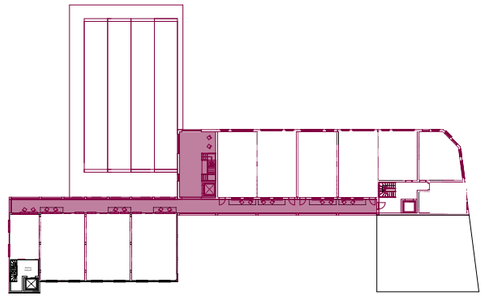
Ground floor

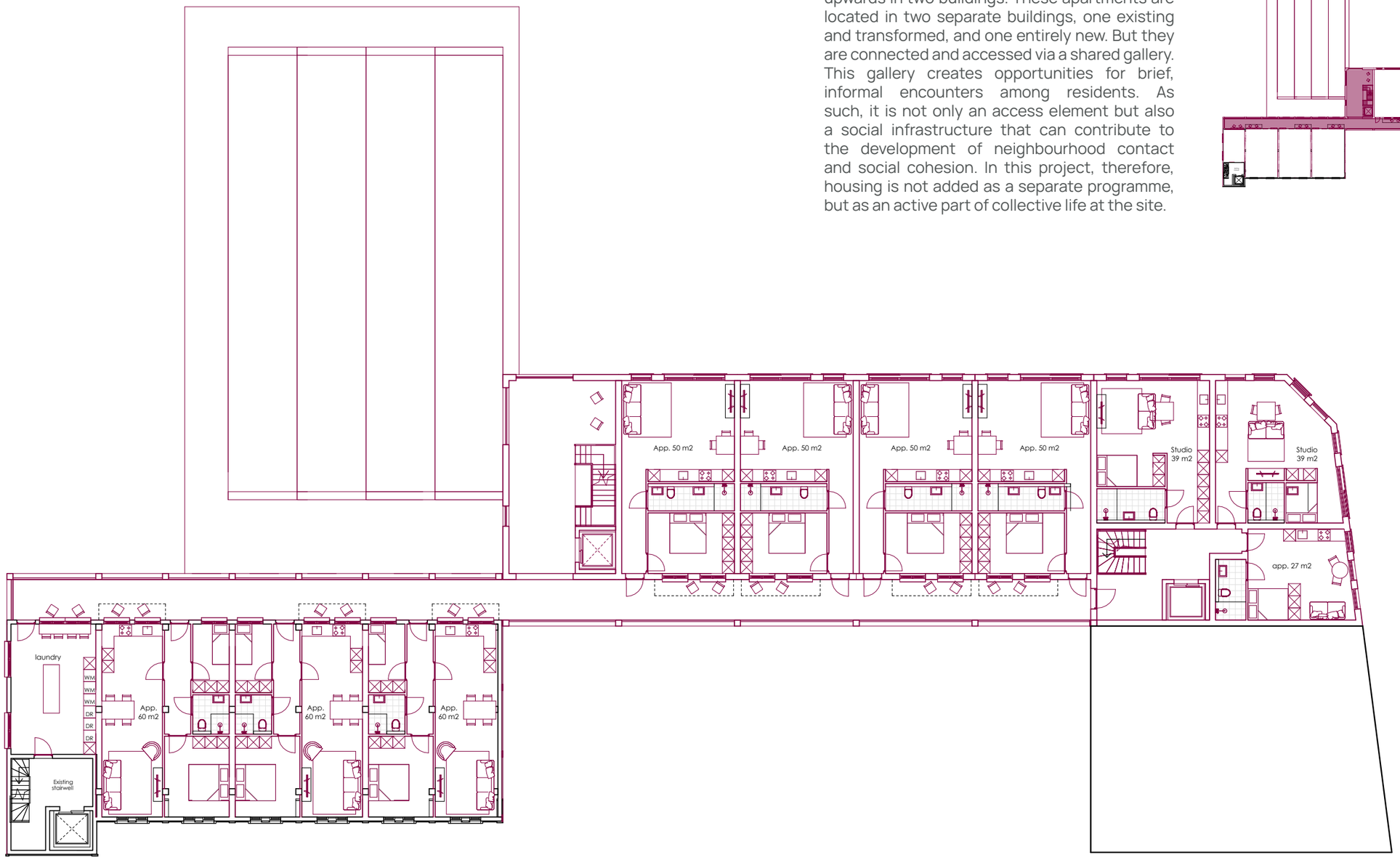
Office space (for SAAMO & LISA)

With the arrival of this building, the current streetscape is extended and guided around the corner. This creates a new contemporary interpretation of the historic façades in the surrounding neighbourhood. The materials, brick and concrete lintels, align with the surrounding buildings, whilst the rhythm of the façade openings forms a contemporary interpretation.
The building thus does not imitate the existing city, but continues it. It contributes to the recognisability of the street whilst adapting it to a new urban situation in which the park becomes part of the public frontage.

Second, third and fourth floor

Apartments are situated from the second floor upwards in two buildings. These apartments are located in two separate buildings, one existing and transformed, and one entirely new. But they are connected and accessed via a shared gallery. This gallery creates opportunities for brief, informal encounters among residents. As such, it is not only an access element but also a social infrastructure that can contribute to the development of neighbourhood contact and social cohesion. In this project, therefore, housing is not added as a separate programme, but as an active part of collective life at the site.

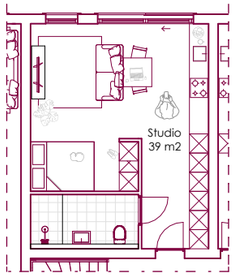




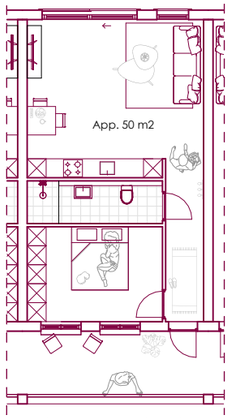
Onze size fits all?

The two residential buildings contain apartments of various sizes. This allows the buildings to be used by a diverse range of residents. Whilst one person may be content with a one-bedroom flat, neighbours with children may require more rooms. The project, therefore, does not opt for a one-size-fits-all approach, but for a more diverse mix of housing.

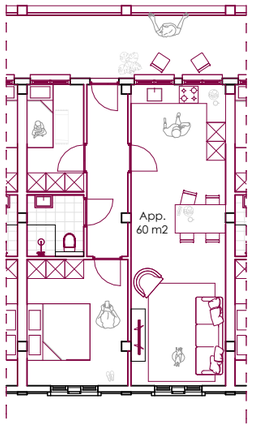
This diversity of housing types contributes to a varied group of residents and supports the ambition to create a socially mixed community. In this project, housing is therefore not merely a quantitative response to the housing shortage, but also a qualitative contribution to the long-term security and vibrancy of the location.



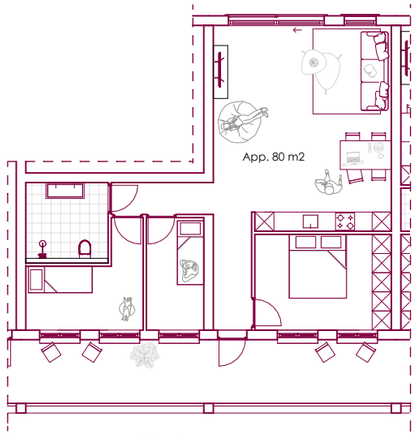
Studio apartment



1 bedroom apartment



2 bedroom apartment



3 bedroom apartment

Gallery as Connector

TO GROUND

How can the building ground itself within its surroundings?

Zenne 1080

CLIMATE STRATEGY

To achieve both a comfortable indoor climate and a sustainable building, the design opts for a predominantly passive climate strategy. A ground-source heat pump provides the building with heating and cooling year-round, whilst natural ventilation occurs through façade ventilation grilles and large skylights. The difference in height between the air inlets and the skylights creates a natural chimney effect, allowing warm air to rise and ventilating the building in an energy-efficient manner. In combination with underfloor heating, this system ensures a stable, comfortable indoor climate with low energy consumption.

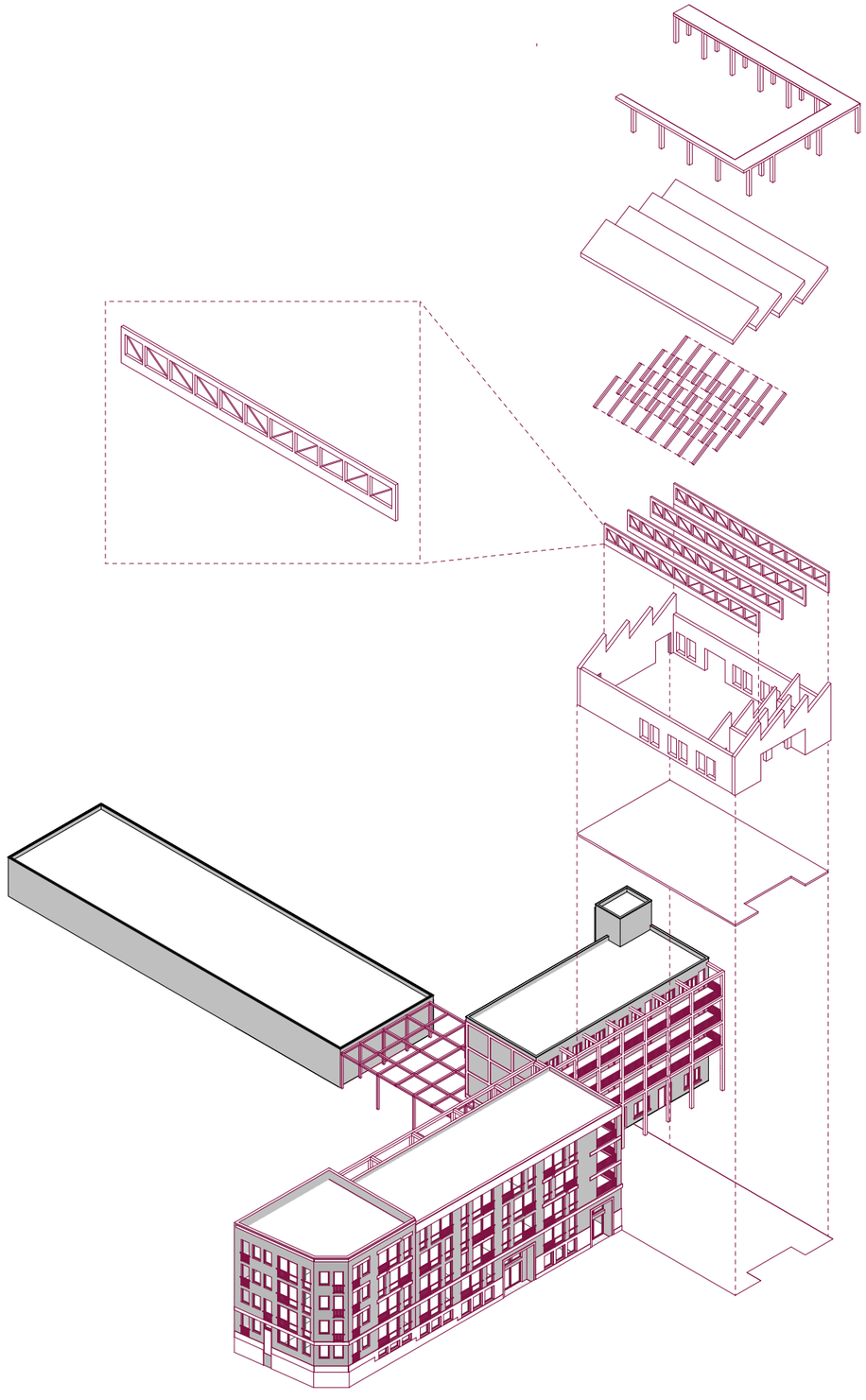
The climate strategy is tailored to the building's use. The underfloor heating operates at a constant temperature, whilst natural ventilation can adapt to fluctuating occupancy levels. During events with large numbers of visitors, the attendees themselves contribute significantly to the building's heat load, meaning that additional heating is required only to a limited extent. At the same time, the system is well-suited to accommodate future changes in use, such as conversions to workspaces.

The design also contributes to a healthier living environment at the urban planning level. Whereas the site is currently largely paved, the project introduces new trees, planting and unpaved ground surfaces. This greening creates shade, reduces heat stress and promotes the infiltration of rainwater. The trees moderate the warming of the park and the buildings during hot summers, whilst in winter, when the leaves have fallen, they allow more sunlight through. In addition, varied planting enhances biodiversity by creating new habitats for plants, insects and birds. As a result, the climate strategy supports not only the building's energy performance but also the quality of the future Petite Zenne Park.

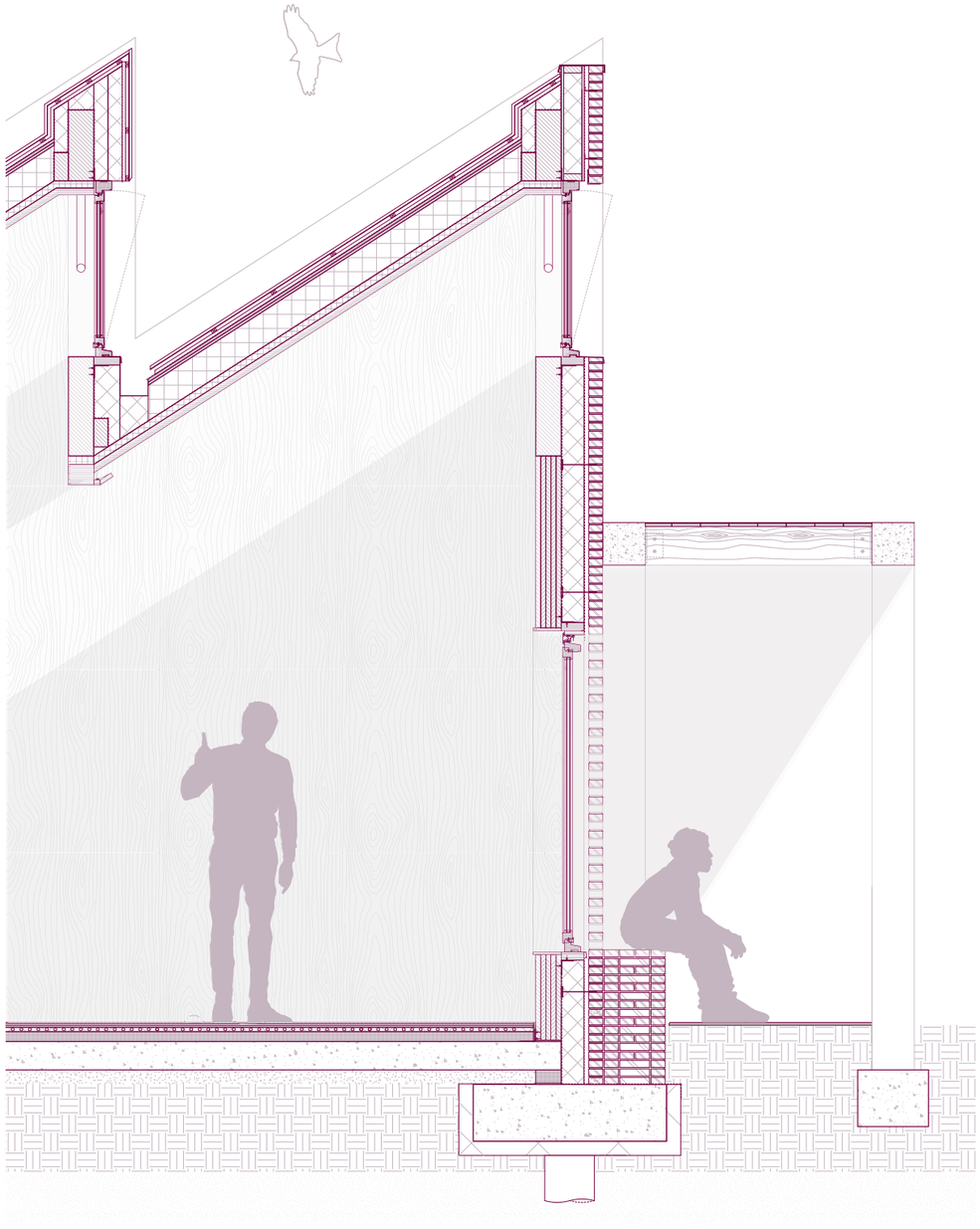
CONSTRUCTION

The choice of materials is based on three principles: sustainability, durability and spatial experience. The building is designed as a long-term addition to the neighbourhood and therefore requires materials that are future-proof both technically and architecturally.

CLT has been chosen for the load-bearing structure. The CLT walls provide stability and, together with the timber truss beams, form the building's main load-bearing structure. These truss beams enable large spans, creating flexible and freely configurable floor plans that can accommodate future changes in use. At the same time, the trusses integrate the skylights, allowing daylight to penetrate deep into the building. In addition to the structural and sustainability benefits, the exposed timber contributes to a warm, natural interior experience. This materiality supports the calm and inviting atmosphere that suits both the building's function as a church and its broader social role.

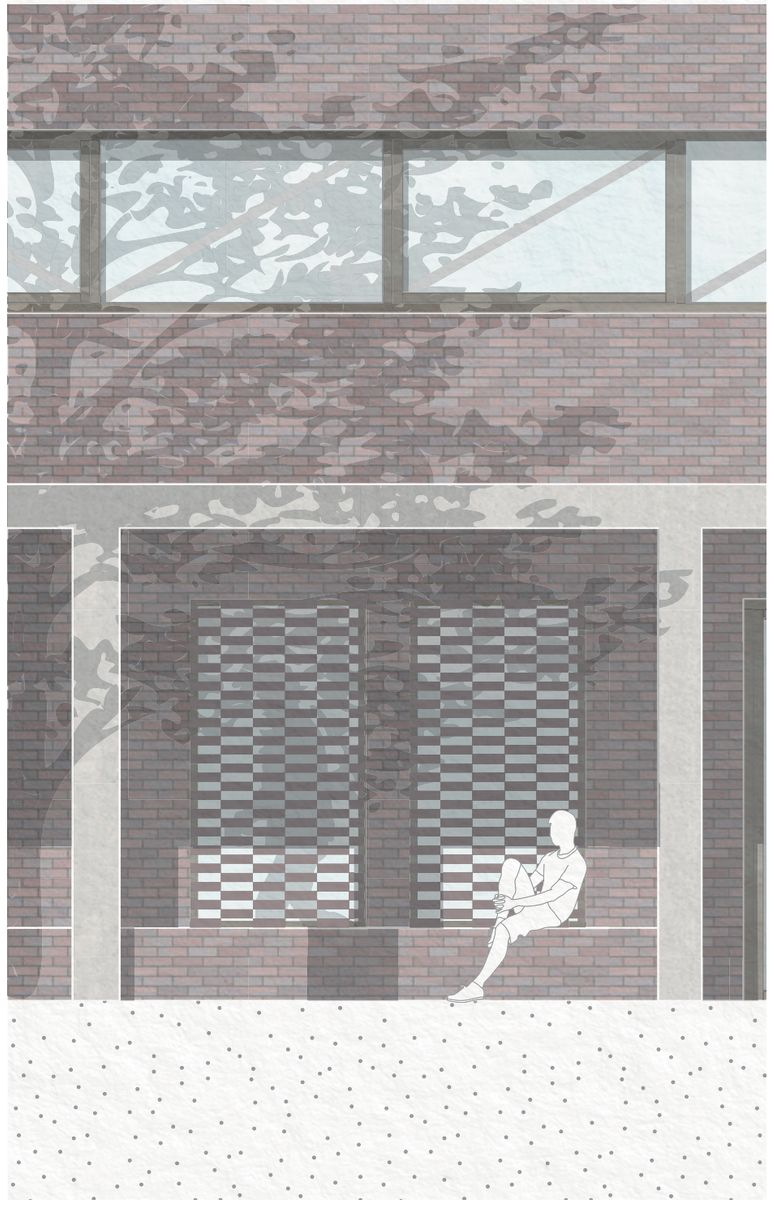


Construction diagram



Facade section

Multiple experiences



Facade fragment

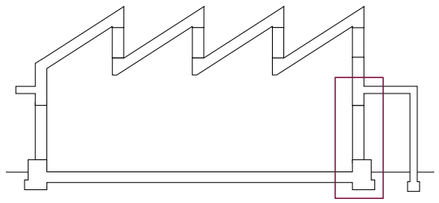
A place to linger

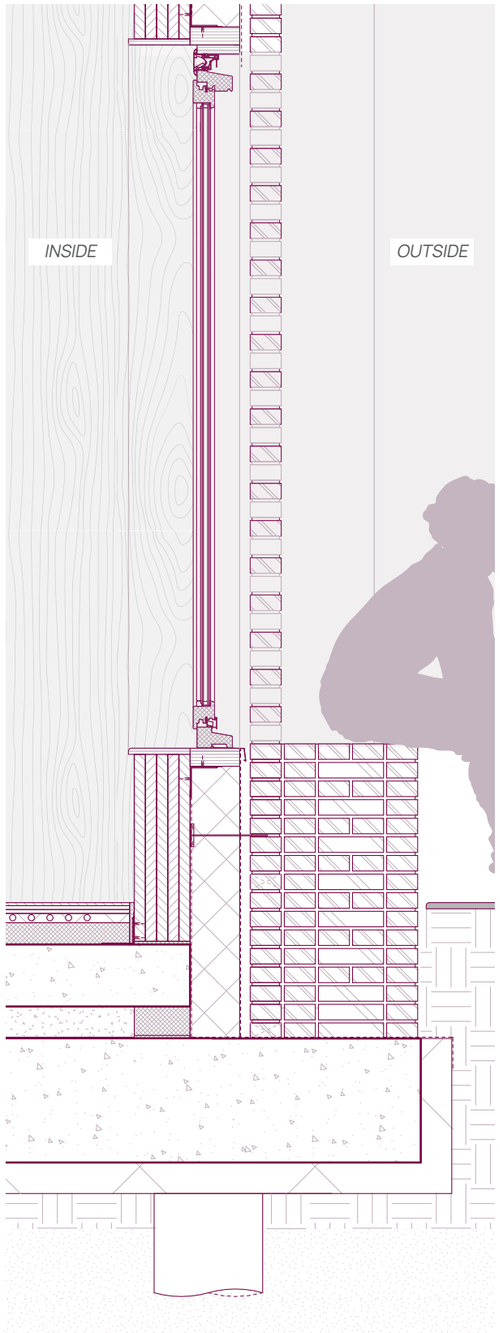
VERTICAL DETAIL 1

Floor construction

From inside to outside
Scale 1.10 (rescaled)

- Floor Finish, oak boards
- Fermacell 2 x 12.5 mm
- insulation board 30 mm with under floor heating coils
- Kingsplan theramafloor 70 mm insulation
- 200 mm suspended concrete slab
- 100 mm sand, compression layer
- Cause Aggregate
- [Inward-opening tilt-and-turn window with trickle vent]





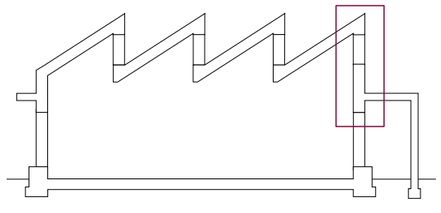
Brick has been chosen for the façades. This material ties in with the existing buildings in the Heyvaert neighbourhood and builds on a material tradition that is strongly present in the neighbourhood. This connection creates a recognisable relationship between the new building and its surroundings. The brick façade anchors the project in its urban context and contributes to a building that is not only new but also feels familiar to local residents.

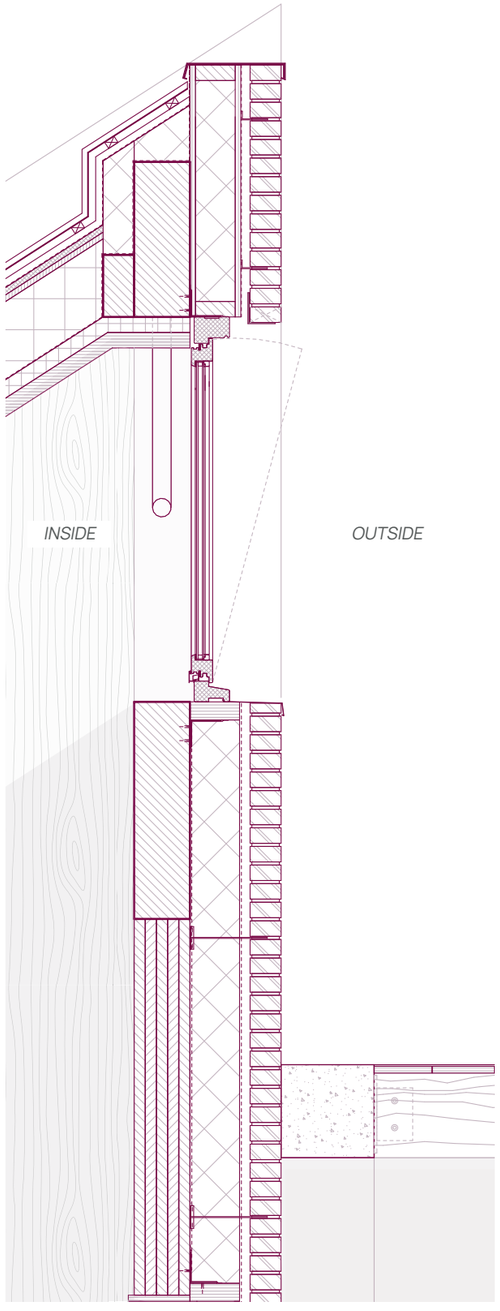
VERTICAL DETAIL 2

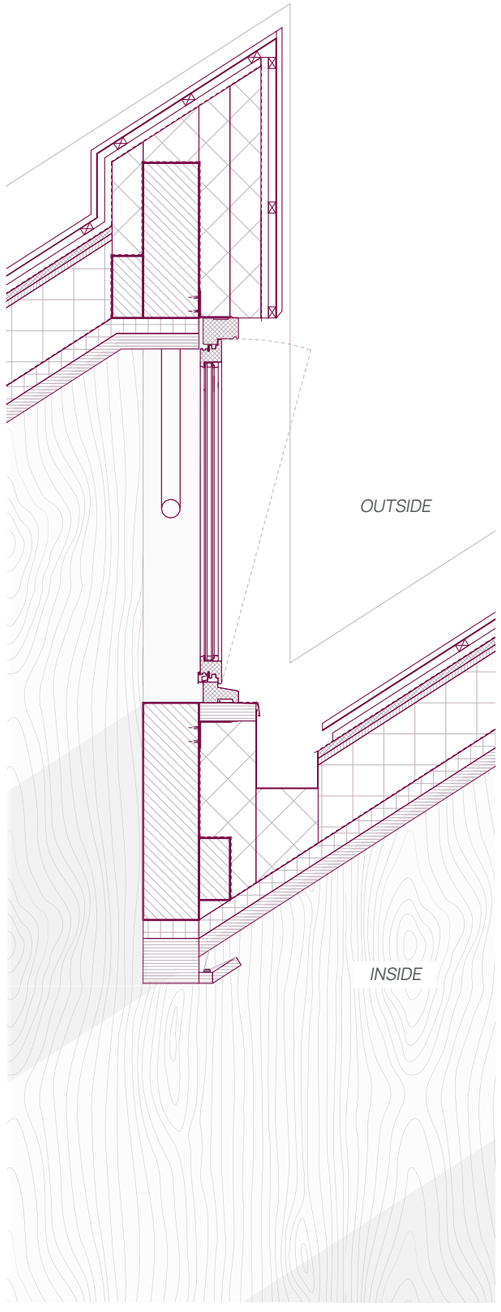
Wall construction

From inside to outside
Scale 1.10 (rescaled)

- 5-layer cross-laminated timber panel
- Vapour barrier
- 160 mm Insulation
- Breather membrane
- 35 mm continuous air gap
- 100 mm brickwork





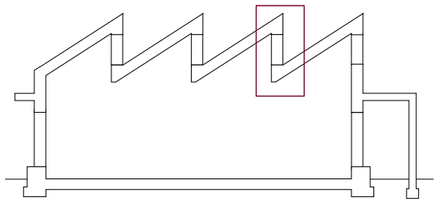


VERTICAL DETAIL 3

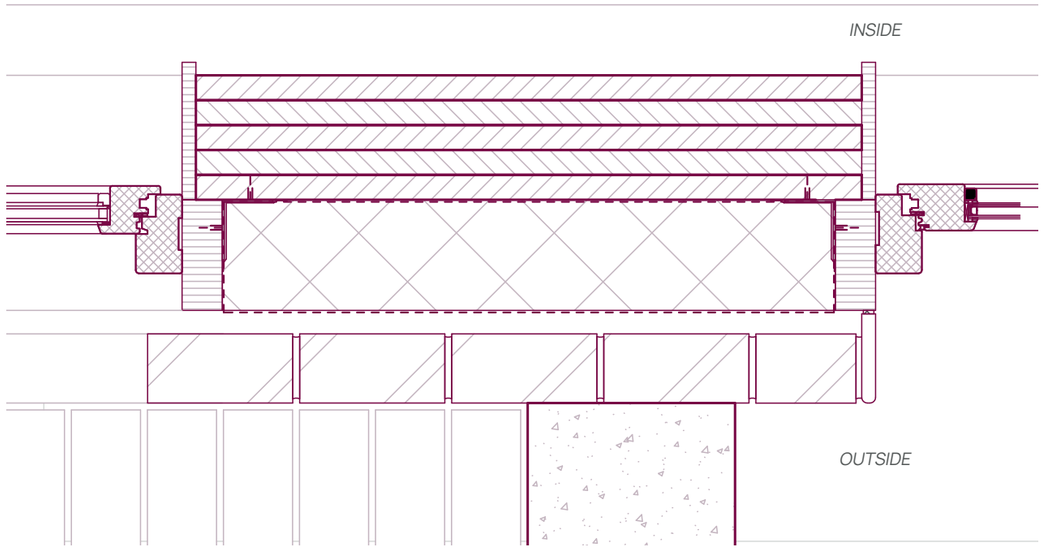
Roof construction

From inside to outside
Scale 1.10 (rescaled)

- Acoustic panel
- Vapour barrier
- 250 mm insulation between purlins
- OSB
- Insulation
- Breather membrane
- 24 mm timber battens on counter battens
- 1 mm zinc aluminium standing seam
- [Outward-opening tilt-and-turn window]



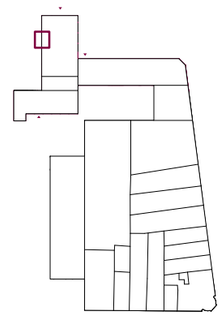
HORIZONTAL DETAIL

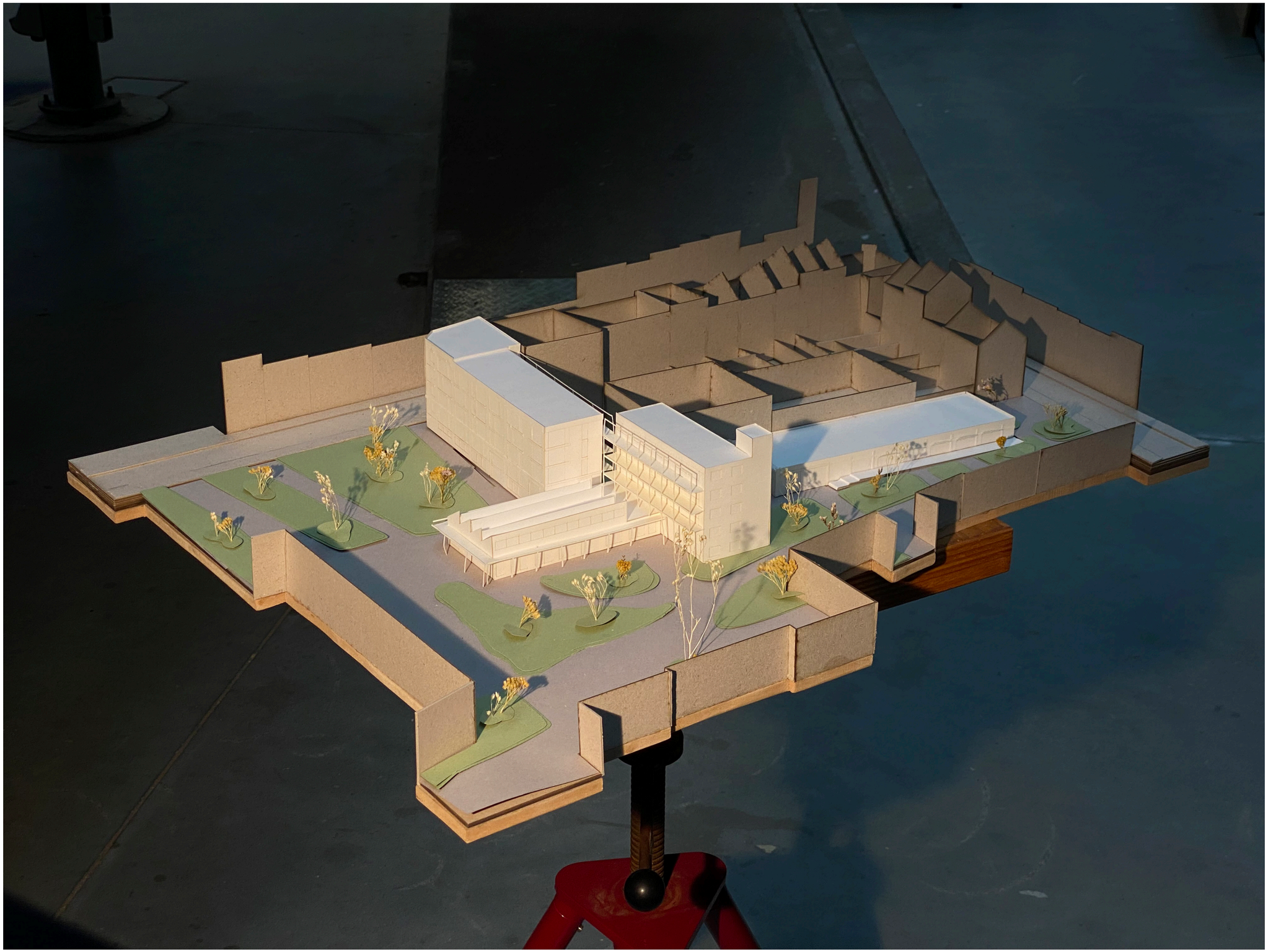


Wall construction

From inside to outside
Scale 1.10 (rescaled)

- 5-layer cross-laminated timber panel
- Vapour barrier
- 160 mm Insulation
- Breather membrane
- 35 mm continuous air gap
- 100 mm perforated brickwork
- [Inward-opening tilt-and-turn window]





REFLECTING

Architecture isn't always about making the biggest, most beautiful gesture. Sometimes, a small gesture is actually more valuable to the existing built environment.

This insight has become increasingly clear to me throughout my process. The answer to design challenges doesn't always lie in making the biggest, most beautiful or most striking gesture, rather, the solution is to be found in the context itself.

As a designer, I have learned that it is essential to take a stance. Without a clear stance, you are pulled in all directions, and a design remains up in the air. Having the courage to make choices, take a position and stand by it is key here.

At the start of the studio, I found it extremely valuable that we first explored the entire neighbourhood together, without immediately choosing our own site. This created a broad understanding of the neighbourhood as a whole, rather than just a specific plot. For me, this emphasised once again how important context is in making design decisions.

The group work with Nienke Hofte and Cinde Gool was very valuable. We were on the same wavelength, which meant we could quickly delve deeper into the research and project. We were able to combine and build on our different ways of working: one person had an affinity for model-making, another for drawing, and yet another for mapping. This strengthened and deepened the research. At the same time, this intensive collaboration also fostered a strong friendship. Because we closely followed each other's projects from the outset, we were able to give each other feedback, offer a fresh perspective and help one another when we got stuck in tunnel vision.

Throughout my entire design process, references have been an important source of inspiration. Not only functionally, but also in the various interpretations of what a church can be. By analysing many different types of churches, I realised that I too had to make a choice: what kind of church am I designing? Although I often said during the process that I was designing more than just a church, the question kept coming up about whether the building could still be seen as a church. Ultimately, I argued that this is indeed the case. The church organisation is the primary user, but the building also offers space to other users. It was important to me that, despite its multifunctionality, the church would not fade into the background. Precisely because this was one of the site's existing functions, my fascination lay in how it could be given a new, more suitable building.

Before starting the design process, I had (perhaps a naïve) view that anything is possible during a graduation project, because it is a highly personal process. During the process, I realised that working with an existing situation and its problems can initially feel as though restrictions are being imposed. But it is precisely these apparent limitations that have given me the freedom to delve deeper and create a project that is truly connected to reality. Sometimes I wonder whether the design could have had more of a 'wow factor', but I am proud that I have designed something that, in my view, really suits the neighbourhood.

What I take away as a designer is that I may not yet have found a single clear architectural style, but I do have confirmation that I want to continue prioritising people-centred design. I have also learned that a graduation project is not just a reflection of your skills at that moment, but above all, an opportunity to learn. I consciously focused on this during my process. In terms of architecture itself, as well as methods and processes. Whereas I previously made little use of model making and sketching, I now find myself turning to simple sketches as a design method more and more quickly and naturally.

This ties in with my belief that, as human beings, we never stop learning, and that this principle will remain central to my continued development as an architect.

ACKNOWLEDGEMENTS

Over the past two years, I have made the most of my time at Delft University of Technology to explore my options, develop my skills and constantly challenge myself. I wanted to discover what happens when I apply myself with total dedication and passion. Looking back, I am proud of how I have developed, both as a person and as a designer. Through this process, I have gained a better understanding of who I am and what I stand for.

I have mixed feelings about the end of my time at TU Delft. I'm looking forward to working in architectural practice again and designing buildings that, if all goes well, will eventually be realised. On the other hand, I'm leaving a special period behind me. When I first walked through the doors here 2.5 years ago, I felt: *now I'm home*, as if my world had shifted from black and white to colour. I will carry that precious feeling with me for the rest of my life. It strengthens my motivation to design spaces myself where people can feel just as at ease, supported, challenged and at home as I have felt here.

This graduation project would not have been possible over the past few months without the help of others. I would therefore like to thank my design tutor, Sam Stalker, and my research tutor, Eireen Schreurs.

I would also like to thank my fellow students in the studio. Over the past few months, they have become not only colleagues but also friends. In particular, I would like to thank Nienke Hofte for her enthusiastic outlook on life and architecture. I would also like to thank Mare Hogenelst, Cinde Gool, Femke Mooijaart, Pipi Kramer and Femque, with whom I have shared this period.

Thanks to my good friend in Stockholm, Cynthia Assenberg, for always being there to listen. A special thank you goes to my good friend and fellow student, Julia van Beek, who would sometimes pull me away from my laptop to take me on a break with a good cup of coffee. She always offered a fresh perspective and was passionately involved in my project. Despite her own graduation process, she was always ready to help me.

I am also grateful to my parents for their unconditional support. They have seen me struggle and grow, and have always expressed their faith in me.

Thank you all for your support and trust.

Waarom Architectuur?

- De schoonheid van gebouwen. Het oog voor details. die weldoend werkt.
- Dat je met zo iets tastbaars als een gebouw, zo direct of indirect, invloed kan hebben op het moeilijke tastbare van de gemoedstoestand van de mens.
- Architectuur, draait om de mens. architecturuur voor de mens. mens primair, architectuur Secundair.

- toekomst van architectuur → binnen gaan wonen. community tegen eenzaamheid en anonimiteit van deze tijd. oplossingen voor het droomhuis probleem in nl.

- Huma's afbreken, transformatie. tegen eenzaamheid. een nieuwe typologie voor ... ?
- Huis voelen (maar niet in je woning) een warme omgeving. andere mensen zo zachtjes direct met je interactie te hebben. third place. A Social hub.

Brainstorm stressfase voorafgaand stand afstuderen 10-11

- Een gebouw met een sociaal - maatschappelijke functie. (Waar mensen (bewust en onbewust) Samen worden gebracht.
- Een gebouw wat het welzijn van de bezoekers / gebruikers ten positieve beïnvloed zonder dat ze daar iets voor hoeven te doen.
- Een 'third place.' een plek buiten wonen en werken waar mensen elkaar kunnen ontmoeten + ontspannen.
- Een plek voor kwetsbare doelgroepen. (ook zij verdienen 'mooie' architectuur)
- Een plek vol kwetsbaarheid. met behoud van privacy.
- Een plek welke het woning tekort oplost (?!)
  (↔ kleine woningen voor starters / alleenstaanden met gemeenschappelijke functies) factoren tegen eenzaam leven.
- Een plek 'voor' het verzorgingstehuis waar ouderen naar toe kunnen verhuizen. zorgt voor doorstroom op de markt. tegen eenzaamheid.
- Een gebouw met een belangrijke sociale laag / functie, tot in de puntjes uitgewerkt.

IMAGE LIST

All images were produced by the author, except those listed below.

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- https://www.archiprix.nl/national/domain/nl/userfiles/file/2021reports/CityHallBrussels-DocumentHistoricalUrbanDevelopment.pdf

P. 44
- Facebook.com

P. 45
- https://www.bruzz.be/stedenbouw/150-jaar-overwelfd-de-verdwenen-zenne-van-z-tot-2021-11-21

P. 46
- https://www.okra.nl/nl/project/kleine-zennepark/

P. 47
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- https://www.google.com/maps/place/Liverpoolstraat+43B,+1080+-Sint-Jans-Molenbeek,+Belgi%C3%A-B/@50.8449861,4.3283878,673m/data=!3m2!1e3!4b1!4m6!3m5!1s0x47c-3c58ad44341f9:0x33aca34600fd3b00!8m2!3d50.8449861!4d4.3309627!16s%2Fg%2F-11vlt11p30?entry=ttu&g_ep=EgoyMDI2M-DUyNy4wIKXMDSoASAFQAw%3D%3D

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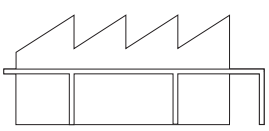
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