GRADUATION REPORT

FROM HIERARCHY TO HARMONY

Adaptive Reuse of the Officer's Casino Soesterberg Inspired by Waldorf Education

Adaptive Reuse of Heritage
Graduation studio

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Table of contents

PART 1. Introduction

Introduction of the project 6
The Officer's Casino Soesterberg 6
Analysis 7
Value assessment 7
Preliminary position towards the existing building 7
Problem statement 9
Objective 9
Research questions 10
Scope 11
Personal motivation 12
Contribution to discipline 12

PART 2. Approach

Methodology 14
Theoretical framework 16

PART 3. Results

Research and/or design results 19
Final design proposal 27

PART 4. Conclusion and discussion

Conclusion 59
Discussion 60
Reflection 61

Bibliography and design references

Bibliography 64
Design references 66

Appendices

1. Analysis
2. Value matrix
3. Process booklet
4. Plan of Requirements

PART 1

Introduction

Introduction of the project

This graduation project is part of the studio Adaptive Reuse of Heritage. This studio focuses on the transformation of military heritage from the Cold War period, consisting of buildings that have become out-dated after the end of the Cold War in 1991. One of those buildings is the Officer's Casino in Soesterberg. In this project, this building will be redesigned and reprogrammed, addressing its future use while carefully responding to its cultural and historical significance.

The Officer's Casino Soesterberg

The Officer's Casino in Soesterberg was built in 1941 by the German army as a Wehrmachtheim. It was a military building for rest, leisure and propaganda. The complex had many functions, such as a large theatre hall, dining rooms, and other facilities, including a bowling alley in the basement. After the war, the building was used for different purposes, including as a training centre for KLM. From 1953, it became an officers' mess for the Dutch Air Force.

The building is empty today because Soesterberg Airbase closed in 2008. This meant the military use stopped. The casino officially closed on 1 January 2013. Some rooms are still used for events, but most of this national monument is empty and waiting for a new use and transformation.

Figure 1: The Officer's Casino

Analysis

As documented in the analysis of the Officer's Casino in Appendix 1, it is located in the central part of the Netherlands, between Utrecht and Amersfoort, Soesterberg is a village surrounded by forests and green landscapes. The village has a calm, residential character and is known as a family-friendly environment, offering schools, sports facilities, and daily amenities nearby. Within this setting, the Officers' Casino is situated on a spacious, green plot. While the building originally formed part of a military complex connected to the former airbase nearby, it is now embedded in a predominantly residential area and visually screened by surrounding trees.

The building itself is defined by a clear and formal spatial layout that reflects its former military function. Its organization follows a symmetrical and hierarchical structure, in which large, high-ceilinged spaces are concentrated in the main volume, whereas smaller and lower rooms are located in the side wings. This spatial hierarchy strongly shapes the character of the building and defines its overall spatial logic.

Value assessment

As part of the analysis of the Officer's Casino, a value matrix was collectively developed to systematically identify and assess the architectural, historical, and spatial qualities of the building (see Appendix 2). This assessment highlights key elements to be preserved, including rare architectural features such as the specially imported German camouflage bricks and the ceremonial expression of the façade. Internally, the spatial hierarchy is considered essential to the building's identity. Authentic finishes, such as Italian marble, and the structurally integrated safety bunker in the basement form additional irreplaceable historical layers.

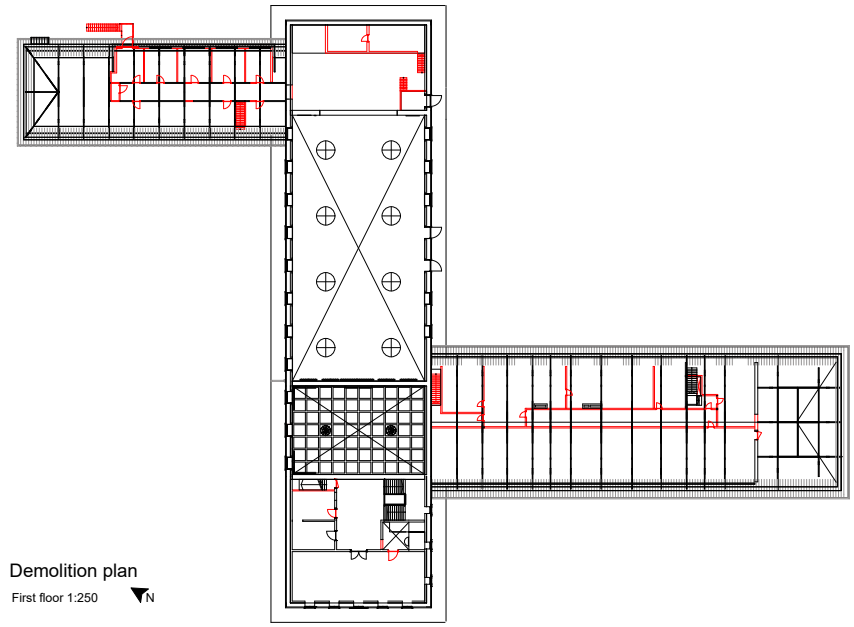
Elements of lower heritage value include outdated technical installations that limit comfort and adaptability, as well as deteriorated finishes in secondary spaces and the surrounding landscape, which offer opportunities for architectural renewal.

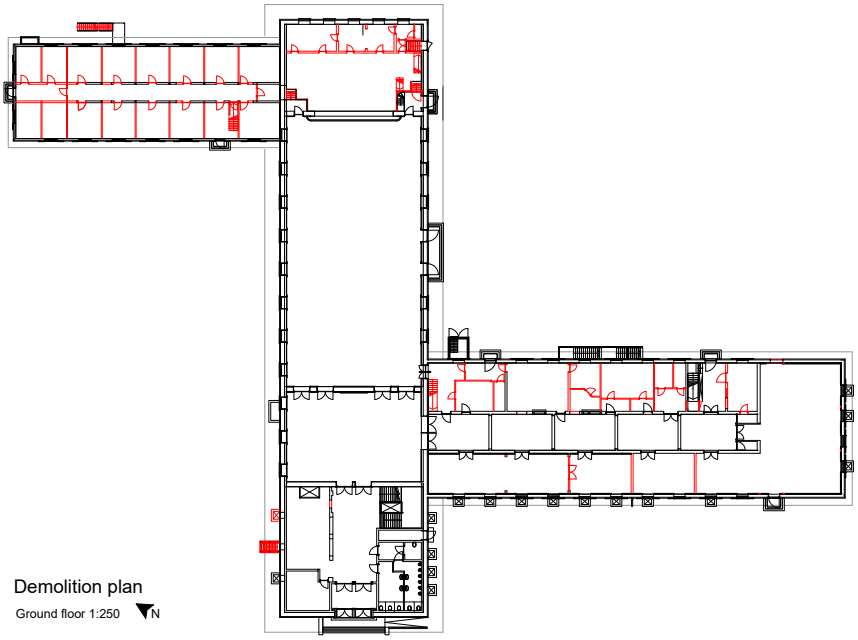
The heritage value of the casino can be understood through the concept of the shell-host (Wong, 2017), in which the formal and symbolic layers remain legible while other layers may be adapted to accommodate a new function.

Preliminary position towards the existing building

Building on this understanding of the Officer's Casino as a shell host, this project adopts a preliminary design position that prioritises the preservation of character-defining architectural elements. At the same time, selective interventions are considered necessary where existing spatial conditions limit the accommodation of the new function. The project therefore seeks to balance continuity and transformation through a selective demolition and retention strategy (see Figure 2).

Figure 2: preliminary demolition plans (scaled)





Problem statement

Within the village of Soesterberg, primary education plays an important role in daily community life. As a relatively small and family-oriented village, Soesterberg depends on schools not only as places for learning, but also as social anchors within the neighbourhood (Gemeente Soest, 2023). The increasing demand for educational and after-school facilities places growing pressure on the available space (PentaRho Huisvesting & Organisatie, 2020).

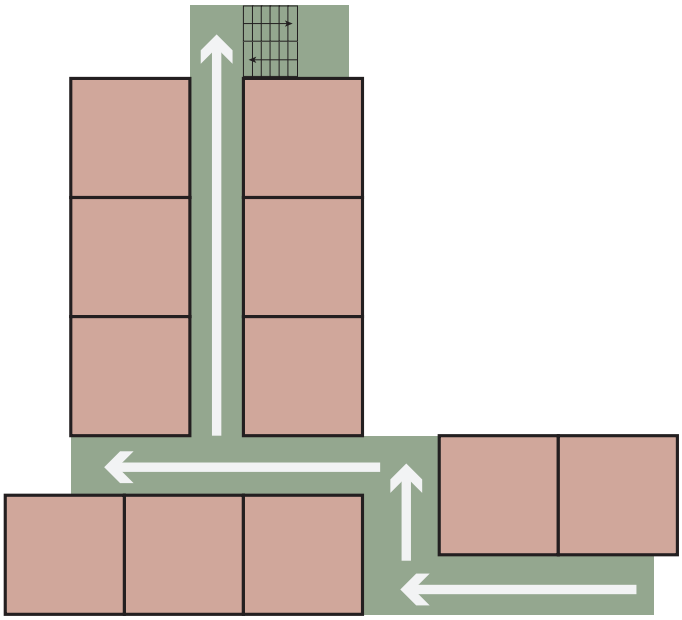
On a broader level, many existing primary school buildings struggle to provide an appropriate contemporary learning environment. This is not only due to changing educational methods, but also to architectural shortcomings (PentaRho Huisvesting & Organisatie, 2020). A common issue is the corridor-classroom typology, which results in monofunctional, isolated learning spaces and corridors that function merely as circulation zones and therefore remain underused. In addition, school buildings are often redesigned for a single mode of use during school hours, leading to inefficient use of space throughout the day.

When these broader challenges are considered within the context of the Officer's Casino, questions arise regarding how a monumental heritage building can accommodate a contemporary educational function.

Objective

The objective of this project is to develop an architectural design for a primary school combined with shared and community-oriented functions in the Officer's Casino. This design serves as a means to investigate the tensions arising between the existing architectural character of the building and its new function, including the spatial, material, and functional demands associated with this transformation. Through design, the project explores whether these tensions can be accommodated, require negotiation, or necessitate concessions, and how they can be brought together into a balanced and coherent architectural whole.

Figure 3: Corridor-classroom typology



Research questions

Building on the analysis, value assessment and problem statement, this graduation project formulates the following central research question to guide the design process:

How can the Officer's Casino complex be transformed while negotiating between architectural character and everyday educational use?

This central question is explored through the following sub-questions:

1. Which educational model is suitable for the adaptive reuse of the Officer's Casino in Soesterberg, based on its spatial characteristics and local context?

2. Which spatial and sensory principles characterise the selected educational model, and how can these be translated into architectural strategies for learning environments?

3. Which character-defining architectural elements of the existing Officer's Casino interact or conflict with the spatial and material requirements of the new educational function?

4. How can architectural design mediate the tensions between heritage values and the spatial principles required for everyday educational use within a monumental structure?

Scope

This graduation project focuses on the architectural transformation of the Officer's Casino in Soesterberg into a primary school. The research addresses the spatial and experiential dimensions of architecture, with particular attention to spatial organization, scale, spatial hierarchy, materiality, and sensory experience. Central to the project is the examination of architectural tensions between the character-defining qualities of the existing structure and the spatial principles required for everyday educational use.

The tensions are examined primarily through collective and semi-collective spaces, where patterns of use over time become spatially tangible, particularly in relation to after-school activities and shared use. New architectural additions are considered as part of the overall transformation strategy, insofar as they support both the functioning of the school and the spatial qualities of the heritage building, rather than functioning as an independent architectural task.

The design is developed within the regulatory framework of the Dutch Frisse Scholen guidelines, which define requirements for indoor climate, comfort, and energy performance in school buildings. These guidelines are treated as technical boundary conditions rather than as a primary research focus.

Educational pedagogy, curriculum development, and learning outcomes fall outside the scope of this research. Technical aspects such as structural systems, building physics, and building services are addressed at an architectural level. These aspects are elaborated through spatial sections, principled details, and indicative calculations to demonstrate feasibility.

Personal motivation

My personal motivation for choosing the studio Adaptive Reuse of Heritage stems from my interest in redesigning existing buildings with a pronounced architectural character and a distinct narrative. I am particularly interested in working with existing spatial and material conditions as starting points, and in exploring how these can acquire renewed meaning through redesign. Furthermore, I consider this type of redesign assignment essential within the Dutch context, where spatial scarcity and sustainability call for alternatives to demolition and new construction.

The decision to accommodate a primary school in the Officer's Casino arises from my desire to design from a position of personal involvement and a clear architectural vision. Through professional experience documenting the structural systems of several primary school buildings, combined with my own experience as a pupil, I have developed a strong affinity with educational buildings and learning environments.

Contribution to discipline

This graduation project contributes to the debate on adaptive reuse by investigating how a predominantly preservative design approach can be tested through architectural design, rather than being defined in advance. By approaching a monumental Cold War building as a spatial framework that generates tensions, the project understands heritage not as a fixed constraint, but as something that can be actively engaged with through design.

The project explores how learning environments can be conceived as spatial and sensory experiences within a monumental structure by employing an educationally informed spatial framework as a design and research instrument. In doing so, it provides insights into how architectural design can be used to negotiate tensions between heritage values and everyday educational use within the adaptive reuse of heritage buildings.

PART 2

Approach

Methodology

This research is conducted through the application of two complementary methods. The overarching methodology is Research by Design, in which the design process itself is employed as an instrument to generate knowledge and explore spatial possibilities. The research follows an iterative process in which analysis, design, and reflection continuously inform one another. Design iterations include both interventions within the existing structure and explorations of architectural additions, which are used to test different relationships between old and new. Based on the building analysis, educational requirements, and anticipated user groups, a Plan of Requirements was developed to establish the spatial programme for the project (Appendix 4).

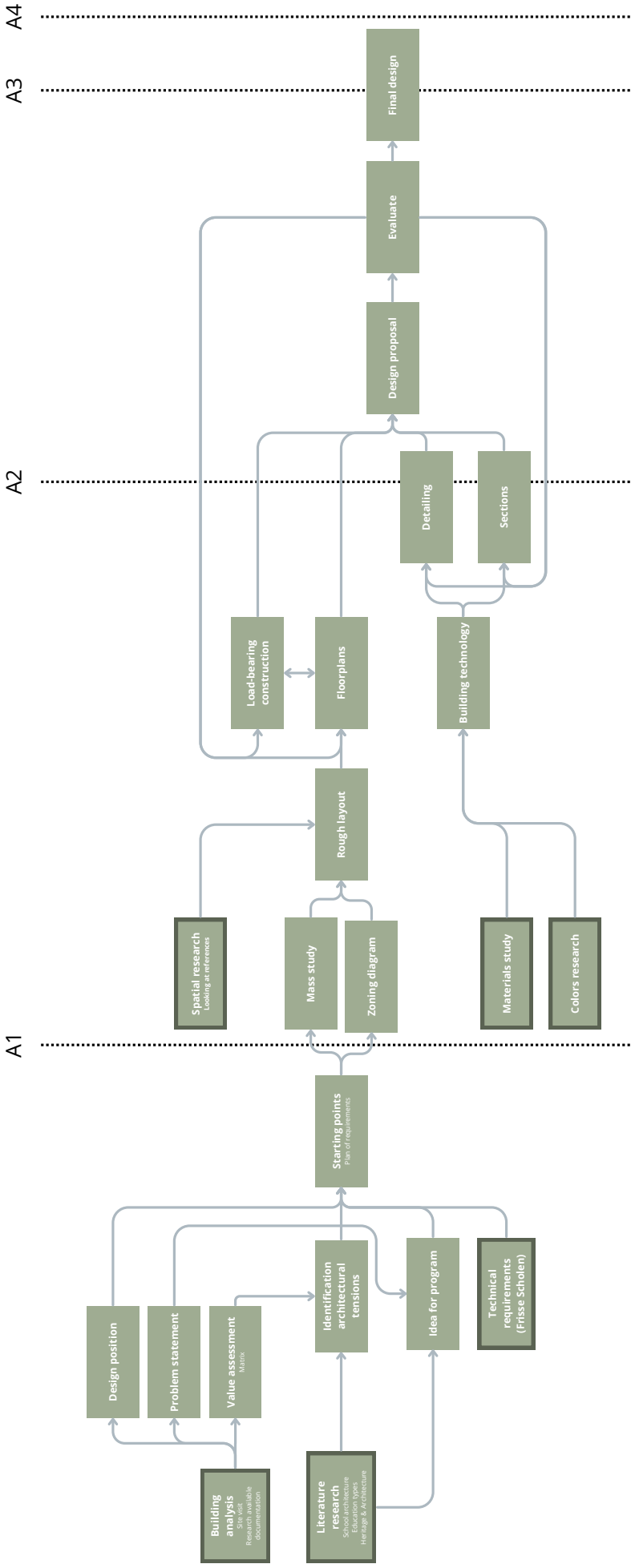
Within this iterative framework, design interventions are used to test the tolerances of the monumental building. The core of this method lies in negotiating between existing heritage values and new spatial requirements derived from contemporary use. Through architectural design, the research investigates how the tension between the preservation of architectural character and the demands of everyday use can be spatially mediated.

To systematically understand the Officer's Casino, the method of Spatial Building Typology (SBT) (Zijlstra et al, 2022) is employed. This method prioritises the building's physical and spatial organisation as a constant in processes of adaptive reuse. Within this research, SBT is not applied as a strictly classificatory tool, but as an analytical framework to examine spatial hierarchy, spatial sequences, and shell-host qualities, informing the positioning of design interventions within the existing monumental structure.

In addition to Research by Design and Spatial Building Typology, this research is informed by a targeted literature study and the analysis of relevant precedent projects. Literature research functions as a supportive and contextual layer within the overall methodology, informing both the theoretical framework and the design process. Precedent studies are used to investigate both the spatial organisation of educational environments and the architectural strategies employed in comparable adaptive reuse and heritage transformation projects.

The expected output of this research consists of a series of analytical drawings, iterative design studies, and a final architectural proposal that together function as research outcomes. The project produces spatial insights into the adaptive capacity of a monumental Cold War building.

Figure 4: Design scheme



Theoretical framework

This theoretical framework establishes the conceptual foundation for investigating the transformation of the Officer's Casino, focusing on the negotiation between architectural character and everyday educational use. It defines the key concepts that structure the research and clarifies how these concepts are understood and applied within the context of this project.

Learning environment

Within architectural discourse, a learning environment is understood as the spatial, material, and sensory setting in which learning takes place on an everyday basis. Rather than functioning as a neutral container, architecture actively shapes behaviour, interaction, and experience through spatial organisation, scale, materiality, and spatial sequence (Upitis, 2004). A learning environment therefore includes not only classrooms, but also circulation spaces, transitions, and collective and informal areas that support different forms of use throughout the day.

Everyday educational use

Everyday educational use refers to the daily patterns of occupation and activity through which educational spaces are used over time. It encompasses formal teaching moments as well as informal activities such as movement, social interaction, and after-school use. Rather than being defined by a single function or moment, everyday educational use is characterised by repetition, rhythm, and changing intensities of use throughout the day. It places emphasis on flexibility, adaptability, and the capacity of spaces to accommodate collective, semi-collective, and informal activities beyond scheduled lessons.

Architectural character

Architectural character refers to the set of spatial, material and formal qualities that define the identity of a building. It arises from the relationship between spatial organisation and hierarchy, scale and proportions, materiality, and structural logic, which together shape how a building is perceived, experienced, and used over time (Wong, 2017).

In heritage buildings, architectural character is expressed through character-defining elements such as spatial layout and sequence, characteristic scales, materials, construction methods, and architectural details including façades, window types, roof forms, and ornamentation. These elements operate collectively rather than in isolation, forming a coherent spatial framework that gives the building its historical and cultural meaning and contributes to its sense of place (Kuipers & De Jonge, 2017).

Heritage value

Heritage value is not a single attribute, but a collection of values attributed to a building by society (Kuipers & De Jonge, 2017). These values explain why certain aspects of a building's architectural character are recognized as significant and considered worthy of preservation, rather than merely describing the building's physical or spatial qualities.

Heritage values are understood as dynamic and layered, emerging from successive phases of use, adaptation, and interpretation over time. There is a commonly applied distinction between age value and use value (Kuipers & De Jonge, 2017). Age value relates to the historical integrity, material traces, and patina that express a building's past, while use value concerns its capacity to

accommodate contemporary functions and remain meaningful in everyday use.

In the context of adaptive reuse, heritage values do not function as fixed constraints but as a framework for evaluation and decision-making. They guide how architectural interventions can negotiate continuity and change, informing which elements of the architectural character should be preserved, reinterpreted, or transformed in order to support a sustainable future for the building.

Tension

Tension refers to the frictions that arise when existing architectural characteristics and heritage values encounter new spatial and functional demands. For this project, some tensions are made explicit and visualised in Figure 5.

Rather than being approached as problems that require resolution, tensions are understood as conditions that reveal both the limitations and the potential of architectural transformation.

Negotiation

Negotiation refers to an architectural approach in which adaptive reuse is understood as a process of revaluation, seeking a balance between historical values and the necessary adaptations required to accommodate a new function (Plevoets & Van Cleempoel, 2019). Within this approach, architectural design operates as a mediating instrument between preservation and change.

Rather than aiming to resolve tensions prematurely, negotiation employs architectural interventions to reveal, test, and critically engage with tensions between monumental values and contemporary forms of use. This approach aligns with the principle of 'conservation through development', in which meaningful and characteristic elements are respected, while supportive or less valuable layers offer scope for adaptation and transformation (Meurs, 2016).

Figure 5: Tensions between existing heritage qualities and contemporary requirements

Existing heritage qualities	vs	Contemporary requirements
Monumental scale	vs	Human scale and intimacy
Formal spatial hierarchy	vs	Informal and flexible use
Representational character	vs	Everyday occupation
Age value and patina	vs	Comfort, safety, and usability
Fixed spatial structure	vs	Adaptability over time

PART 3

Results

Subquestion 1: **Which educational model is suitable for the adaptive reuse of the Officer's Casino in Soesterberg, based on its spatial characteristics and local context?**

Spatial characteristics of the Officer's Casino

Building on the analysis and value assessment presented in Part 1, several characteristics can be identified that are relevant for selecting an appropriate educational model for the Officer's Casino. The building has a strong spatial hierarchy, resulting in clear differences in scale and atmosphere. Monumental spaces, such as the theatre hall, contrast with the need for smaller, more intimate learning environments. This calls for an educational model that is able to work across different spatial scales.

In addition, the theatre hall also offers opportunities for cultural and collective activities, which can play an important role within the educational concept. The building is also situated in a green and quiet environment, allowing for a direct relationship with nature. Finally, its strong historical character enables the building itself to function as a pedagogical instrument, where learning is connected to the spatial and narrative qualities of the place.

Figure 6: The theatre hall

Educational context in Soesterberg

To further support the selection of an educational model, the existing educational landscape in Soesterberg is considered. As shown in Appendix 6, most schools follow a mainstream educational approach, with limited variation in educational visions and relatively little focus on art and culture, nature, and experiential learning. This suggests an opportunity for a school that offers a more holistic and experience-based educational vision.

Waldorf education as a suitable model

In this context, Waldorf education emerges as a suitable educational model for the Officer's Casino. Its emphasis on imagination, artistic expression, rhythm, and a strong connection to nature aligns with the spatial and sensory qualities of the building. Learning is approached as a holistic and experiential process, in which spatial and atmospheric qualities actively contribute to the learning environment (Steiner, 1965).

Tension between heritage and educational vision

At the same time, the formal and historical military character of the Officer's Casino forms an interesting contrast with the open and organic principles of Waldorf education. Instead of viewing this tension as a weakness, it can be seen as a valuable aspect of adaptive reuse, in which a historically rigid environment is reinterpreted as a place centred on imagination, sensory experience, and collective learning.

Subquestion 2: **Which spatial and sensory principles characterise the selected educational model, and how can these be translated into architectural strategies for learning environments?**

Waldorf education and holistic learning

Waldorf education, founded by Rudolf Steiner in 1919, approaches learning as a holistic process in which thinking, feeling, and willing are developed in balance (Rawson, 2021). Within this educational model, the physical learning environment is not understood as a neutral backdrop, but as an active component of the educational experience. Architecture therefore becomes part of the pedagogical process, because it supports the emotional, sensory, and cognitive development of the child (Mezentseva, 2019).

Organic functionalism

A central principle within Waldorf pedagogy is the idea of "organic functionalism", in which forms and spaces grow organically from the inner functions and human needs they serve (Adams, 2004). Spatial environments are therefore designed in relation to the developmental phases of the children. In early childhood, spaces are characterised by softer, rounded and enclosed forms that provide a sense of safety and protection. As children grow older, spatial expression gradually shifts towards more articulated and structured forms that support the development of individuality and abstract thinking. Architecture thus becomes a temporal framework that evolves in dialogue with human development.

Sensory learning environments

Within Waldorf education, sensory experience plays an essential role in the learning environment. Natural materials, daylight, colour, texture, and atmosphere are carefully integrated into classrooms and learning spaces to create environments that stimulate imagination, concentration, and emotional well-being (Grella, 2015). Classrooms are typically characterized by the extensive use of wood, soft transitions between spaces, filtered daylight, and age-related colour palettes, with warmer tones for younger children and cooler, more muted palettes for older students (Adams, 2004) (Figure 7).

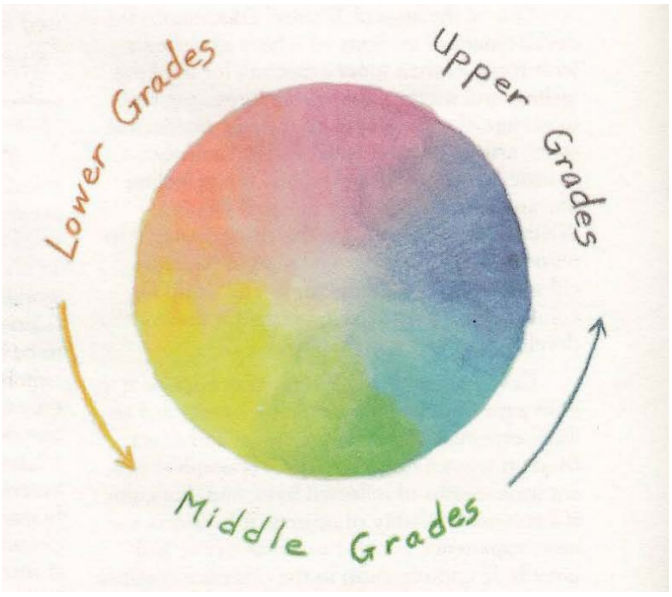


Figure 7: Colour circle through the grades in Waldorf education (Hughes, n.d.)

Movement and spatial experience

Movement is also considered as a fundamental aspect of Waldorf pedagogy. Learning environments are designed to encourage circulation, bodily awareness, and interaction through spatial sequences, flexible classroom arrangements, and dedicated rooms for activities such as eurythmy, a movement art that enhances awareness of the relationship between body and space (Kapoor, 2023). Furthermore, movement is sometimes integrated into lessons because it helps students better understand abstract concepts or process the material more effectively. For this type of learning, sufficient space and flexibility in the classroom are necessary to allow movement alongside the intellectual content.

Connection to nature

Another key principle is the strong connection between education and nature. Outdoor spaces are seen as a direct extension of the learning environment. "Breathing nature" is an everyday part of the school experience, both in structured lessons and free play. Students go outside in all kinds of weather, with teachers modelling acceptance and enthusiasm for any type of weather (Grella, 2015). Architecturally, this translates into a strong visual and physical connection between interior and exterior spaces, as well as the integration of natural landscapes within the educational environment.

Learning environments for child development

Together, these principles show that Waldorf architecture is not a fixed architectural style, but a way of designing learning environments around the needs and development of children. Atmosphere, sensory experience, movement, and contact with nature all play an important role within this approach. In spatial terms, this often means that spaces for younger children are more enclosed and protective, while spaces for older children become more open and structured as children grow more independent.

Subquestion 3: **Which character-defining architectural elements of the existing Officer's Casino interact or conflict with the spatial and material requirements of the new educational function?**

In the adaptive reuse of the existing Officer's Casino as a Waldorf school, several character-defining elements of the original architecture create both interactions and conflicts with the spatial and material requirements of the new educational function. These tensions became an important driver within the design process.

Architectural contrast

The Officer's Casino is characterized by a strong symmetry, strict geometry, and hierarchical spatial organisation. Rooted in its military origin, the building conveys a formal and rational architectural language with sharp lines and articulated proportions. This contrasts with the softer, more organic, and sensory spatial principles associated with Waldorf education, where rounded forms, spatial fluidity, and warm atmospheres are often used to support feelings of comfort, protection and imagination.

Tensions between preservation and adaptation

Another challenge is the limited flexibility to modify the existing building due to its heritage value. The façade and roof structure are considered highly valuable and should therefore largely be preserved. This creates tensions when adapting the building to contemporary educational requirements. For example, the limited number of windows results in insufficient daylight levels in several parts of the building, particularly within the south wing. According to the requirements of the Frisse Scholen programme (Rijksdienst voor Ondernemend Nederland, 2025), the existing daylight conditions do not meet the recommended standards. In addition, the lack of windows and visual connections to the outside also weakens the relationship between interior and exterior space. While this connection forms an important principle within Waldorf education, this disconnection forms a significant conflict.

Spatial constraints of the existing structure

Conflicts also arise when integrating educational functions within the existing spatial structure. The dimensions and proportions of certain spaces make it difficult to accommodate full-sized classrooms while preserving important architectural elements. In the south wing, for example, the existing corridor structure limits the usable depth of adjacent rooms. Similarly, integrating functions such as movement spaces or a gymnasium within the rigid structural layout of the building proves challenging.

Technical requirements and heritage preservation

Additional tensions emerge when addressing contemporary thermal, acoustic, and technical requirements. The existing façades and windows do not meet current insulation standards, while interventions to improve thermal or acoustic performance may negatively affect the architectural and heritage qualities of the building envelope and interior spaces. This is particularly sensitive within the theatre hall and the entrance hall, where both the exterior appearance and the interior spatial character are considered high valuable.

These conflicts reveal the complexity of adapting a monumental building to a contemporary educational environment. They form the basis for investigating how architectural design can mediate between heritage preservation and the spatial requirements of Waldorf education.

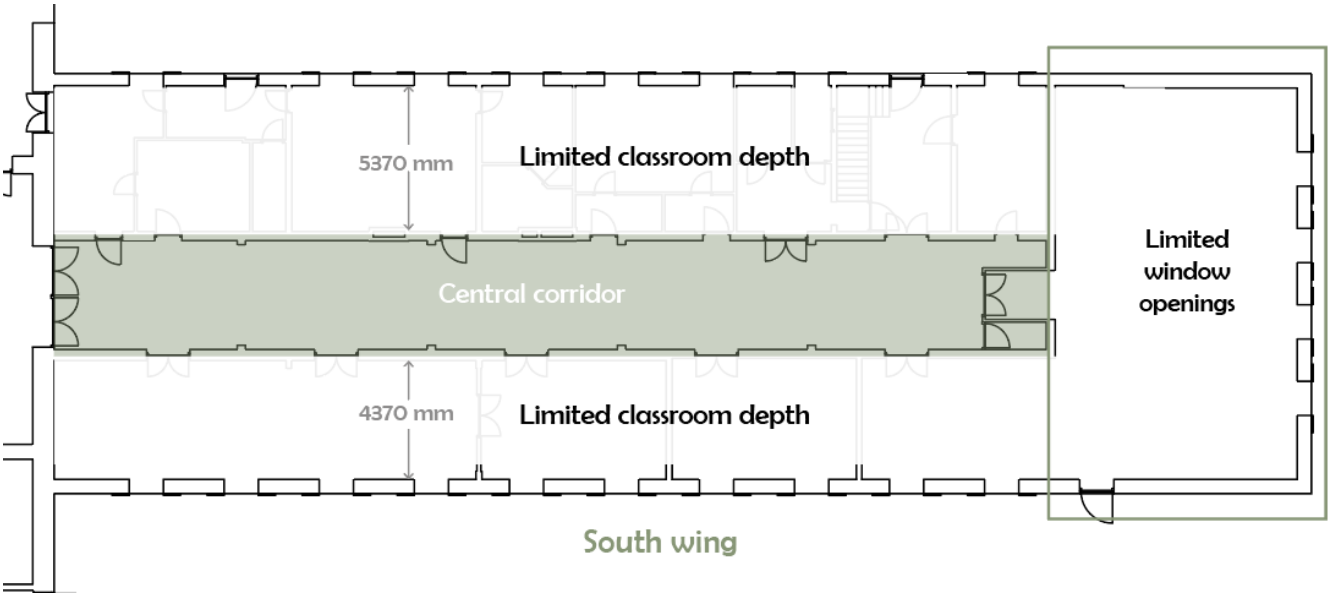


Figure 8: Floorplan of the south wing showing the central corridor structure, limited classroom depth, and restricted daylight access

Subquestion 4: **How can architectural design mediate the tensions between heritage values and the spatial principles required for everyday educational use within a monumental structure?**

The architectural design aims to balance heritage preservation with the spatial principles of Waldorf education through selective interventions, spatial reinterpretation, and carefully integrated additions. Throughout the design process, several studies were carried out to explore how daylight conditions, spatial flexibility, climate requirements, and the relationship between interior and exterior spaces could be improved while respecting the character-defining elements of the monument.

Selective adaptation strategy

A key part of the design strategy is the distinction between different parts of the building based on their heritage value and spatial potential. Instead of transforming the entire Officer's Casino according to Waldorf principles, the design selectively adapts certain areas while preserving others largely in their original state. The main volume, including the theatre hall, the representative central spaces and the attic floor, is preserved as much as possible in order to maintain the historical identity and monumental character of the building. These spaces are reused for functions that can operate within the existing architectural conditions, such as collective activities, performances, workshops, and gathering spaces. In contrast, the wings and new additions provide more flexibility for interventions needed to accommodate contemporary educational functions.

Softening through interior interventions

Because the exterior of the building largely needs to remain intact due to its heritage value, most interventions focus on the interior spaces of the wings. The strict geometry and hierarchical structure of the existing building are softened using natural materials, filtered daylight, warm colours, and more sensory interior atmospheres. The extensive use of wood in floors, ceilings, furniture, and interior finishes contributes to creating a learning environment that feels warmer and more connected to the principles of Waldorf education.

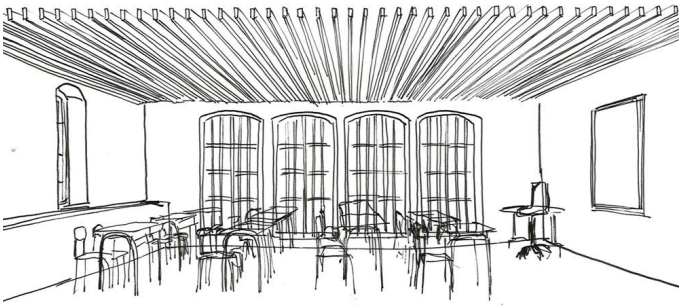


Figure 9: Sketch of classroom with wooden lowered ceiling

Figure 10: Reference image from the Vrijeschool Amsterdam West showing the use of wood in floors, furniture, and interior finishes

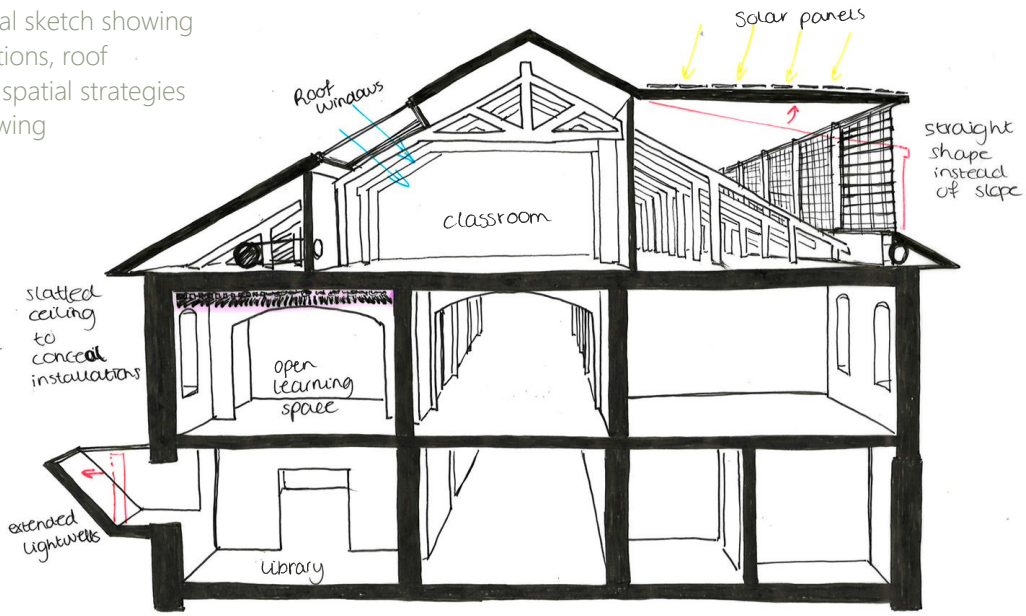


Figure 11: Sectional sketch showing daylight interventions, roof adaptations, and spatial strategies within the south wing

Daylight interventions and connection to landscape

One of the main challenges within the design was the limited amount of daylight and the weak visual relationship with the surrounding landscape. In the basement, the existing light wells are enlarged to bring more natural light into the library spaces without making major changes to the historic façade. On the ground floor, new openings are added at selected points, to strengthen the connection between the classrooms and the surrounding greenery. These openings follow the rhythm and proportions of the existing façade as closely as possible.

On the first floor of the south wing, the existing dormers are replaced by one continuous dormer to create more usable space and improve daylight conditions. The dormer windows follow the same subdivision and proportions as the existing dormers, which ensures continuity with the architectural character of the building. The dormer is designed with a flat roof, which makes it possible to integrate solar panels while keeping them largely hidden from view. Additional roof windows are carefully positioned within the existing roof slope to introduce more daylight while maintaining the overall appearance of the roofscape.

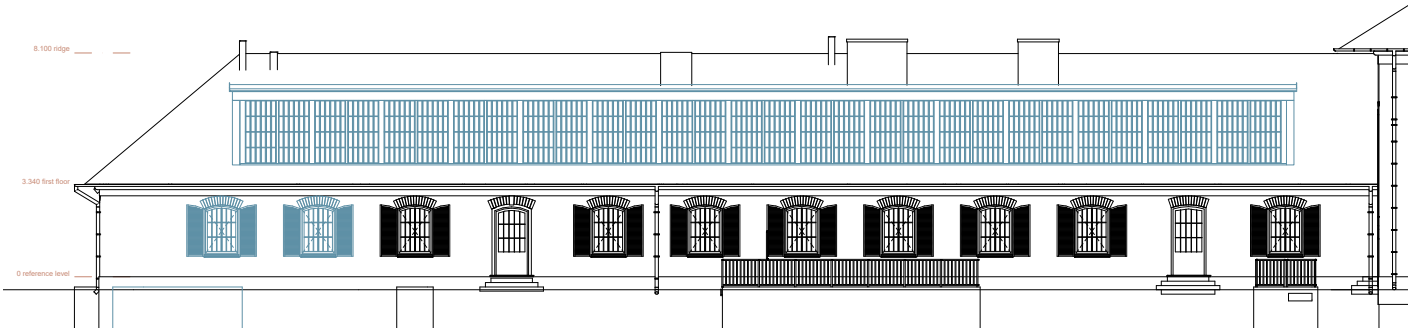


Figure 12: Elevation of the east façade of the south wing showing the new continuous dormer and carefully integrated window openings following the rhythm of the existing façade

Connecting the monument to the landscape

Since the full educational programme could not fit within the existing building alone, additional volumes were introduced within the park. The kindergarten functions are placed in separate pavilion-like buildings, creating smaller-scale learning environments more suited to younger children. Their softer and more rounded forms form a transition between the strict and monumental architecture of the Officer's Casino and the surrounding natural landscape. Through their scale, materiality, and positioning, the additions help connect the existing building to the park while supporting the spatial principles associated with Waldorf education. Bricks removed from the existing façade during the addition of new window openings are reused within the new additions, helping to establish a material relationship between the old and new parts of the project.

Technical integration within the historic structure

In order to preserve the exterior, the building is insulated from the inside. Within the main volume, interventions are kept minimal due to the high heritage value of both the interior and exterior spaces. Comfort is therefore mainly improved through carefully integrated technical systems and air heating solutions, avoiding major alterations to the historic structure and spatial character of the building.

In addition to heritage-related considerations, the design responds to the principles of the Dutch *Frisse Scholen* guidelines. Daylight levels are improved through roof windows and dormers, opportunities for natural and mechanical ventilation are integrated within the existing structure, and thermal and acoustic comfort are enhanced through insulation, floating floor constructions, and suspended ceilings.

Figure 13: Sketch showing the use of wood and brick within the new additions

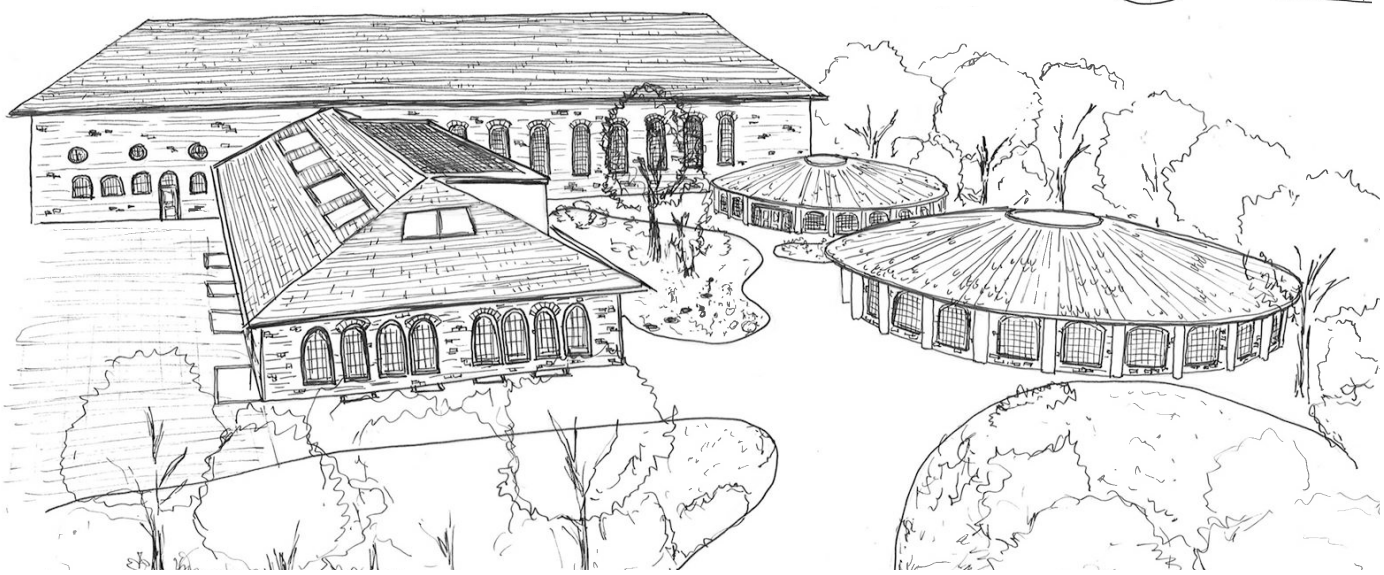
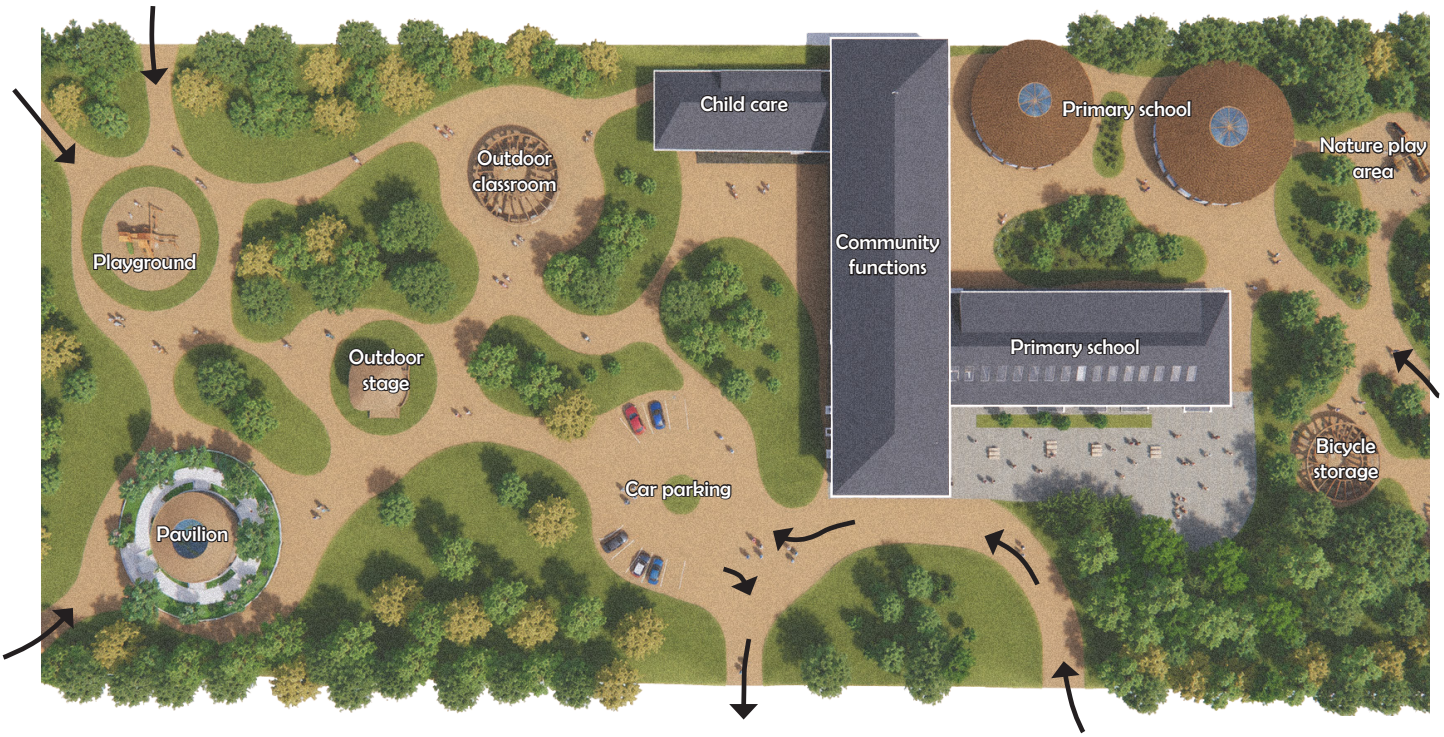


Figure 14: Perspective sketch showing the Officer's Casino and the additional volumes

Final design proposal

The following drawings present the final architectural proposal for the adaptive reuse of the Officer's Casino as a Waldorf-inspired community school.

Masterplan


Child care
Primary school
Nature play area
Outdoor classroom
Playground
Community functions
Primary school
Outdoor stage
Bicycle storage
Car parking
Pavilion

Floorplans

29540 mm
16485 mm
18430 mm
22370 mm
46256 mm
10770 mm
52830 mm
15435 mm

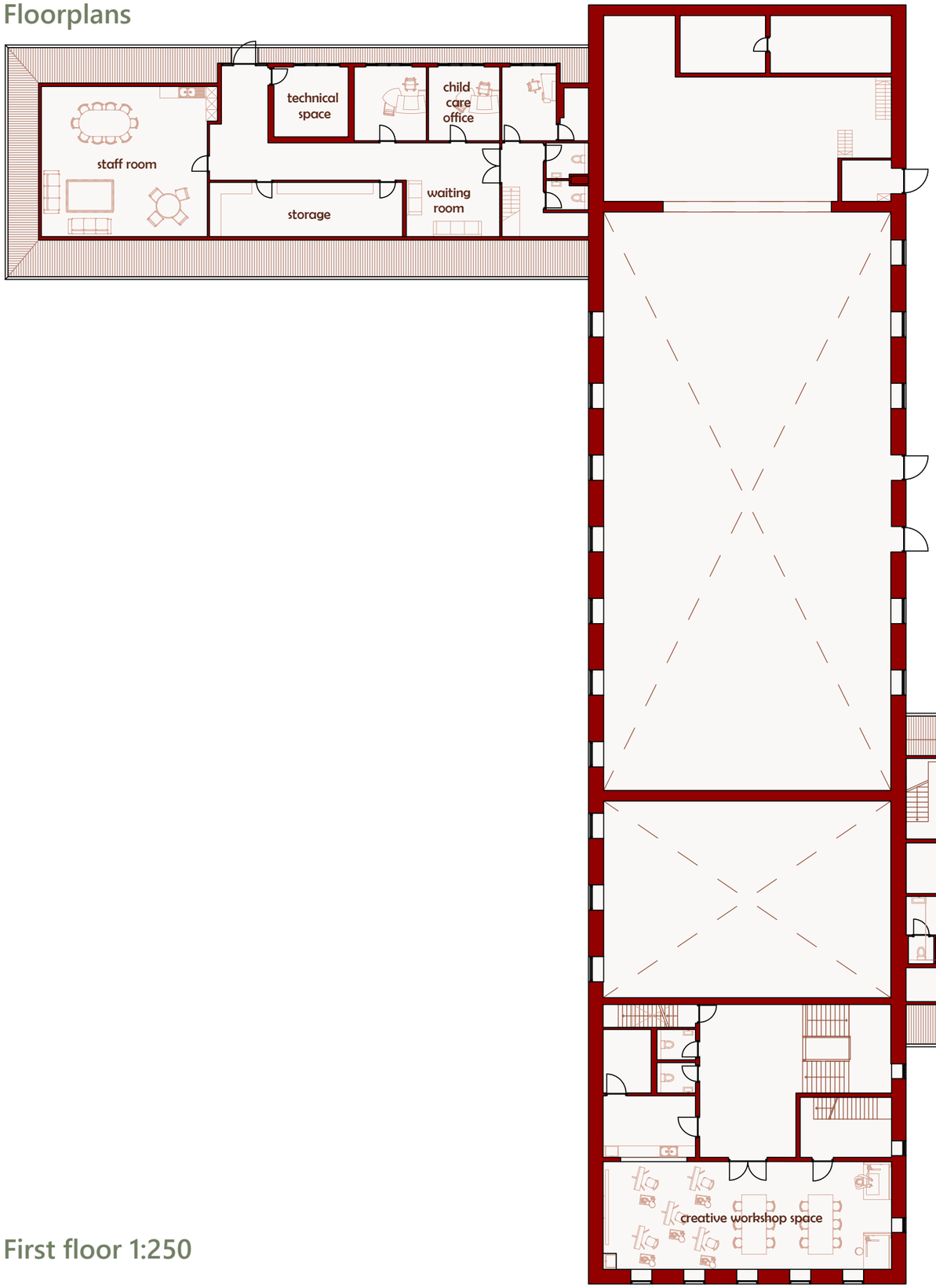
groupspace
kitchen
groupspace
open play area
theatre hall
open play area
technical space
dressing room
classroom
classroom
technical space
classroom
foyer
staff entrance
technical space
entrance pupils
classroom
classroom
staff room
open learning space/ after school care
cloackroom

0 m 2,5 m 5 m 7,5 m 10 m 12,5 m

N

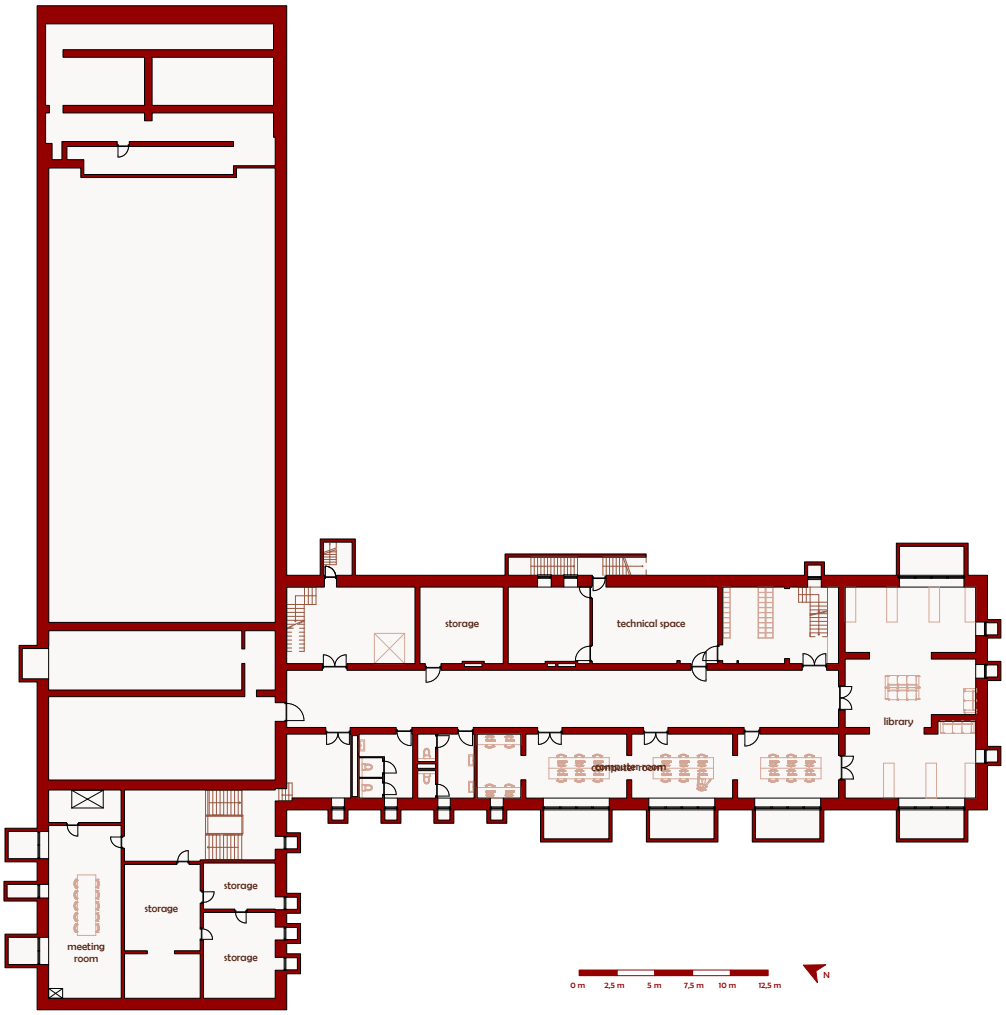
Ground floor 1:250

Floorplans

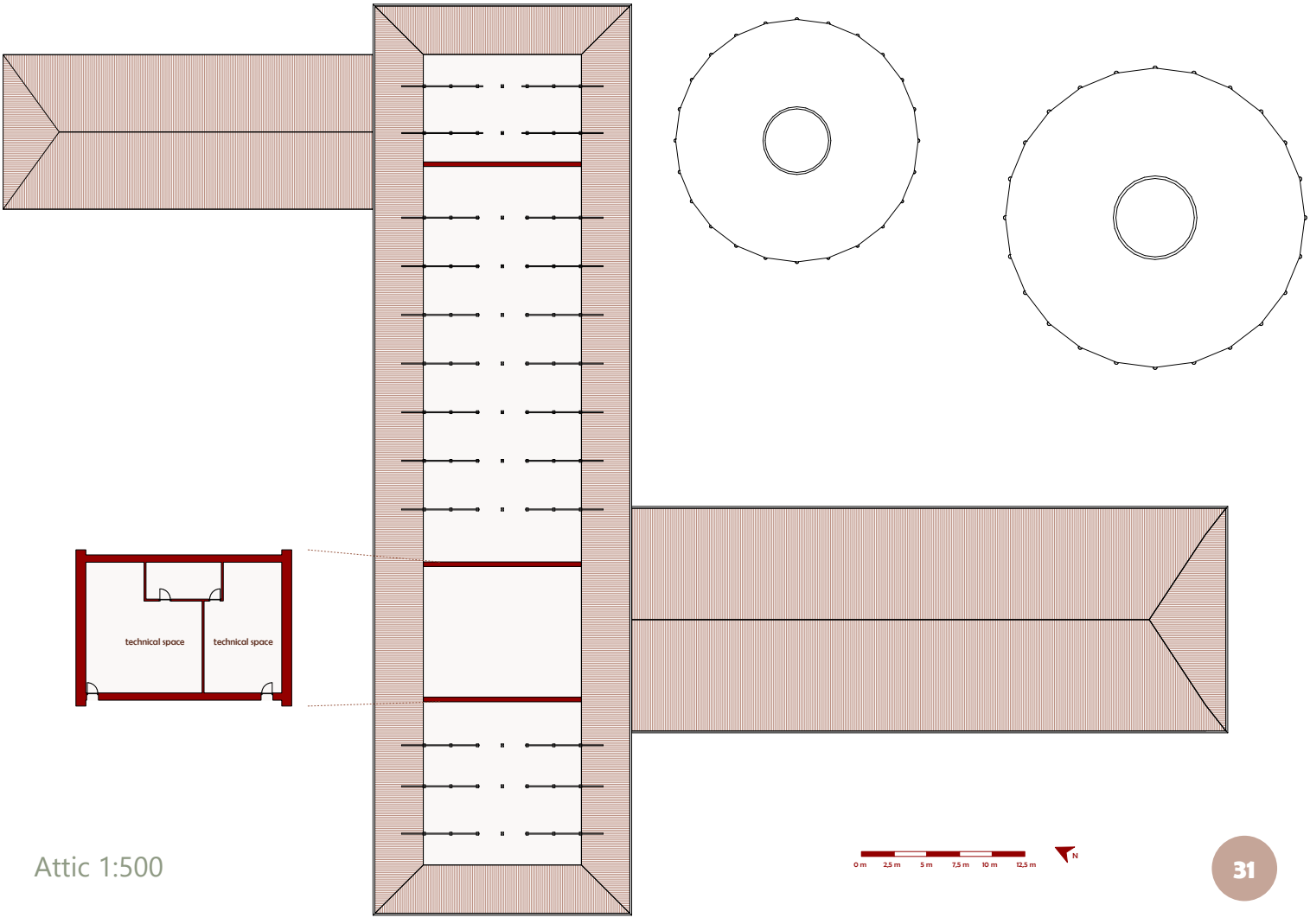


First floor 1:250

Floorplans

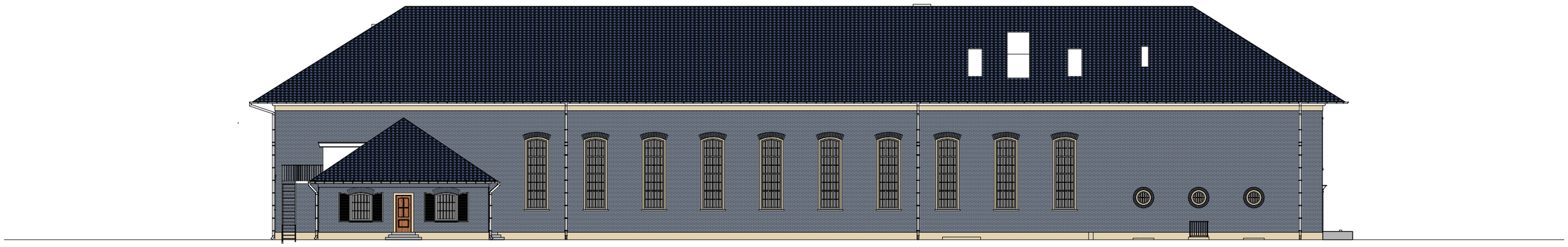


Basement 1:500



Attic 1:500

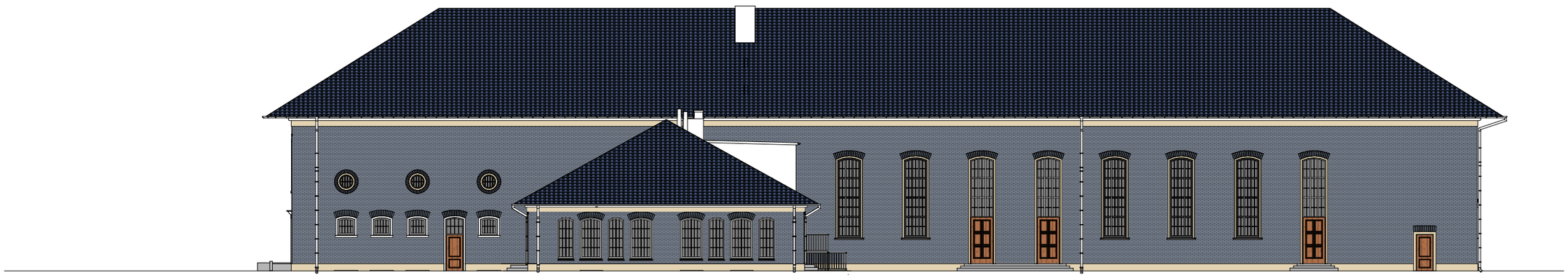
Façades



North façade 1:250

West façade 1:250

Façades



South façade 1:250

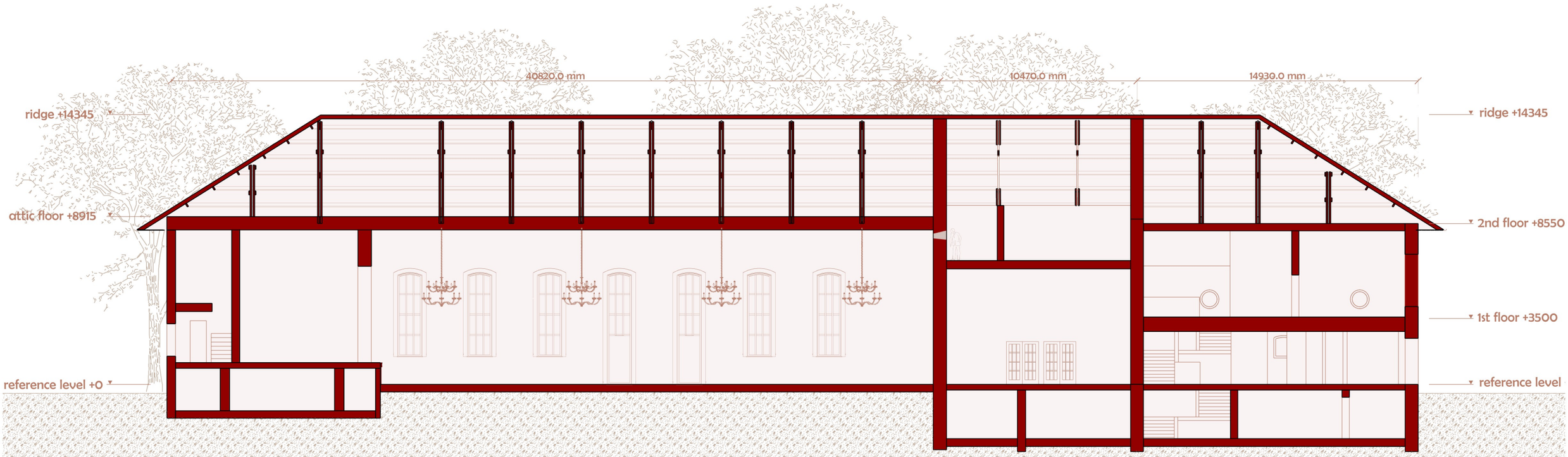
East façade 1:250

Façades

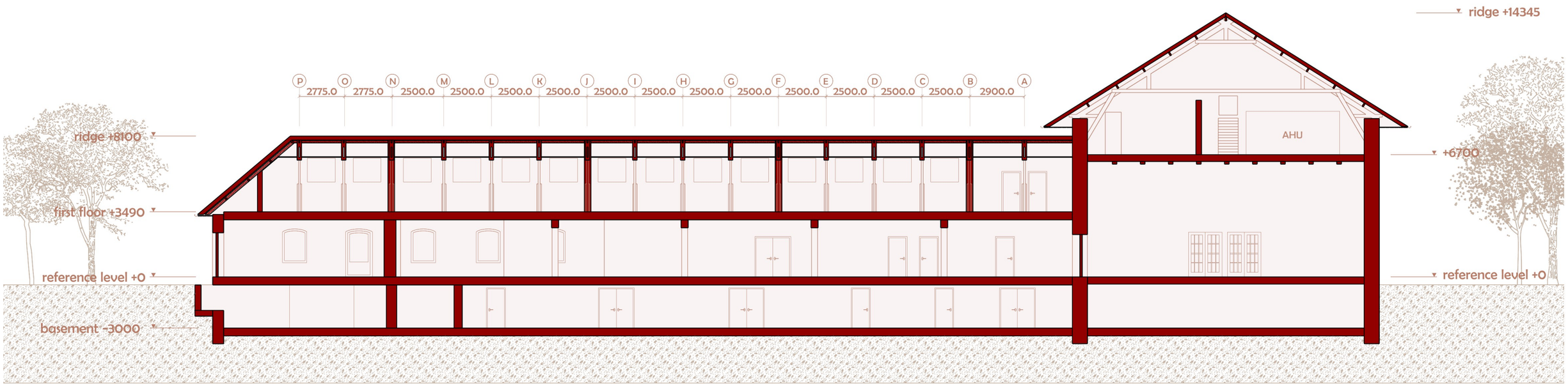
Façade new addition 1 1:250

Façade new addition 2 1:250

Sections

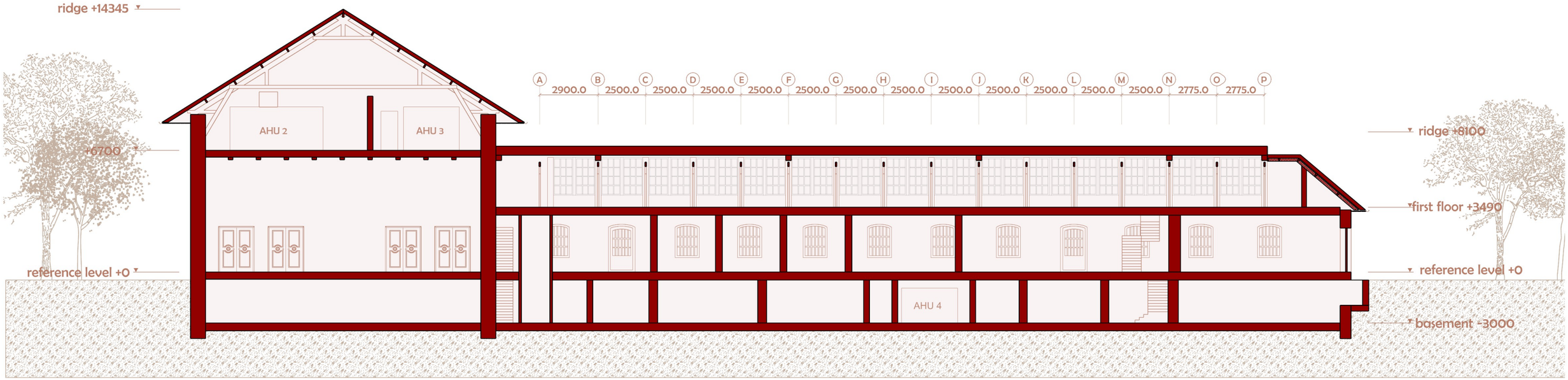


Section BB' 1 1:200

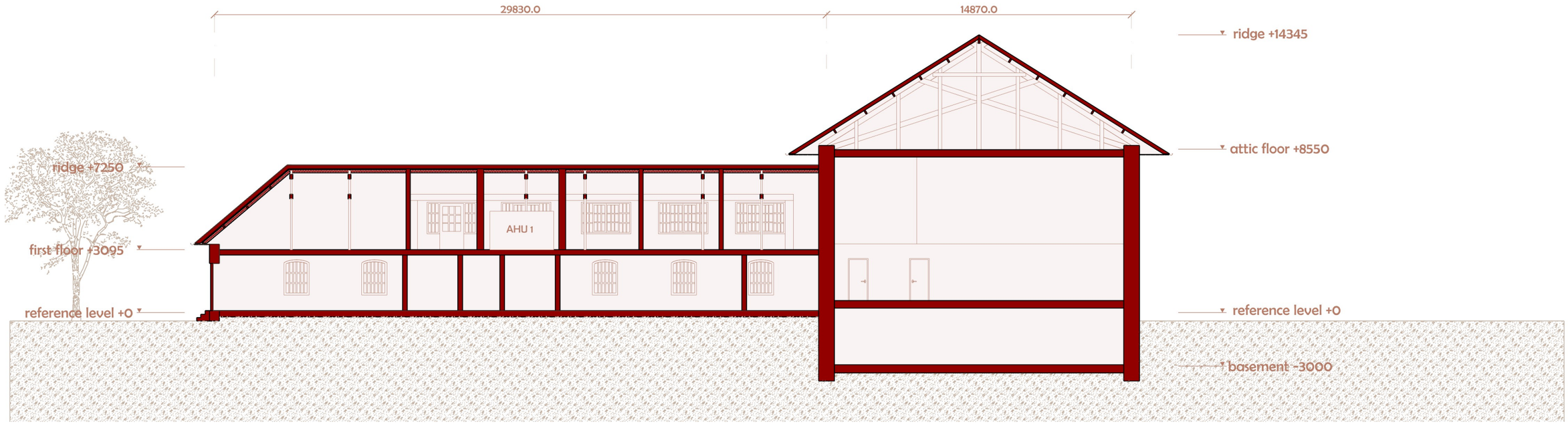


Section CC' 1 1:200

Sections

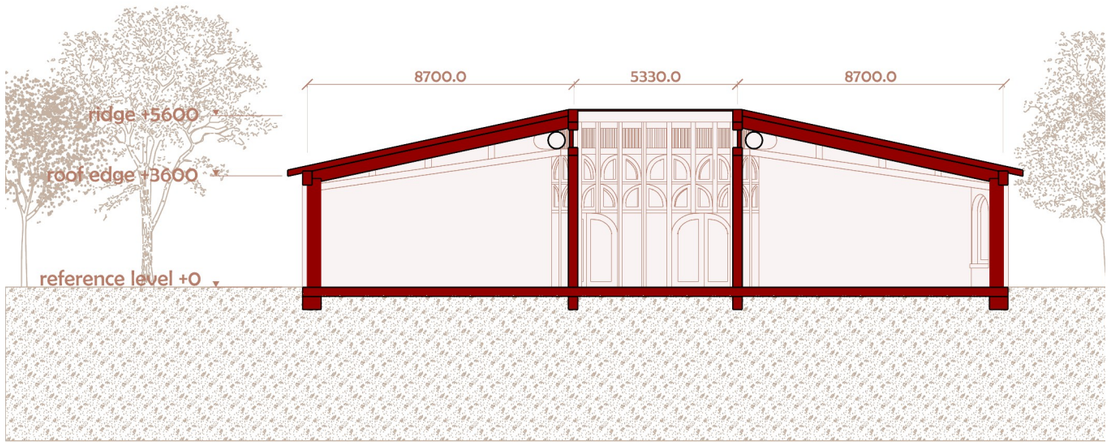


Section DD' 1 1:200

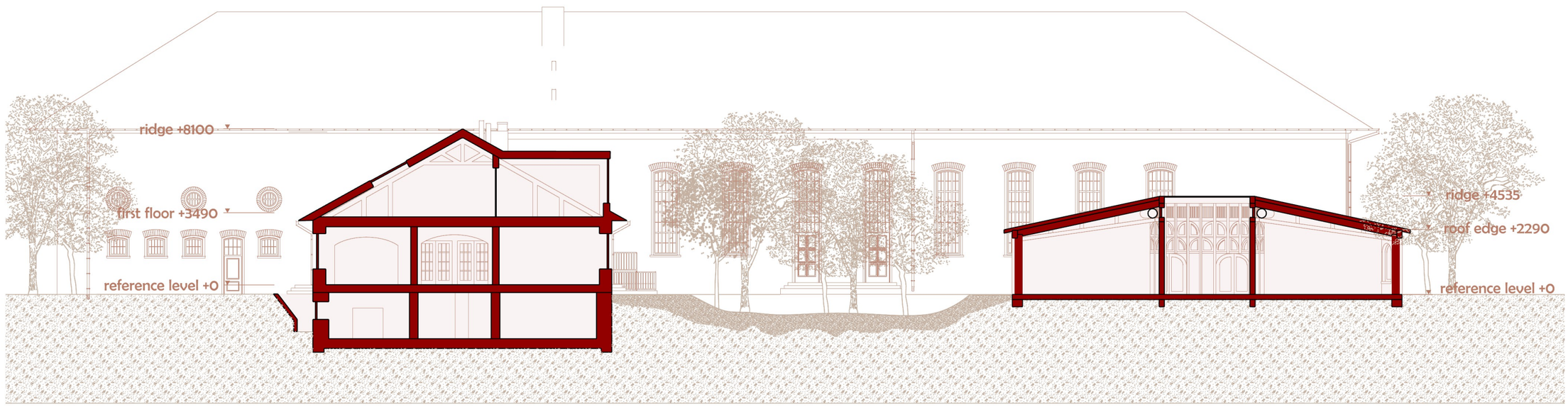


Section EE' 1 1:200

Sections



Section FF' 1 1:200



Section GG' 1 1:200

Architectural section

Architectural section AA' 1 1:50

Materials

Floors, furniture, slatted ceilings

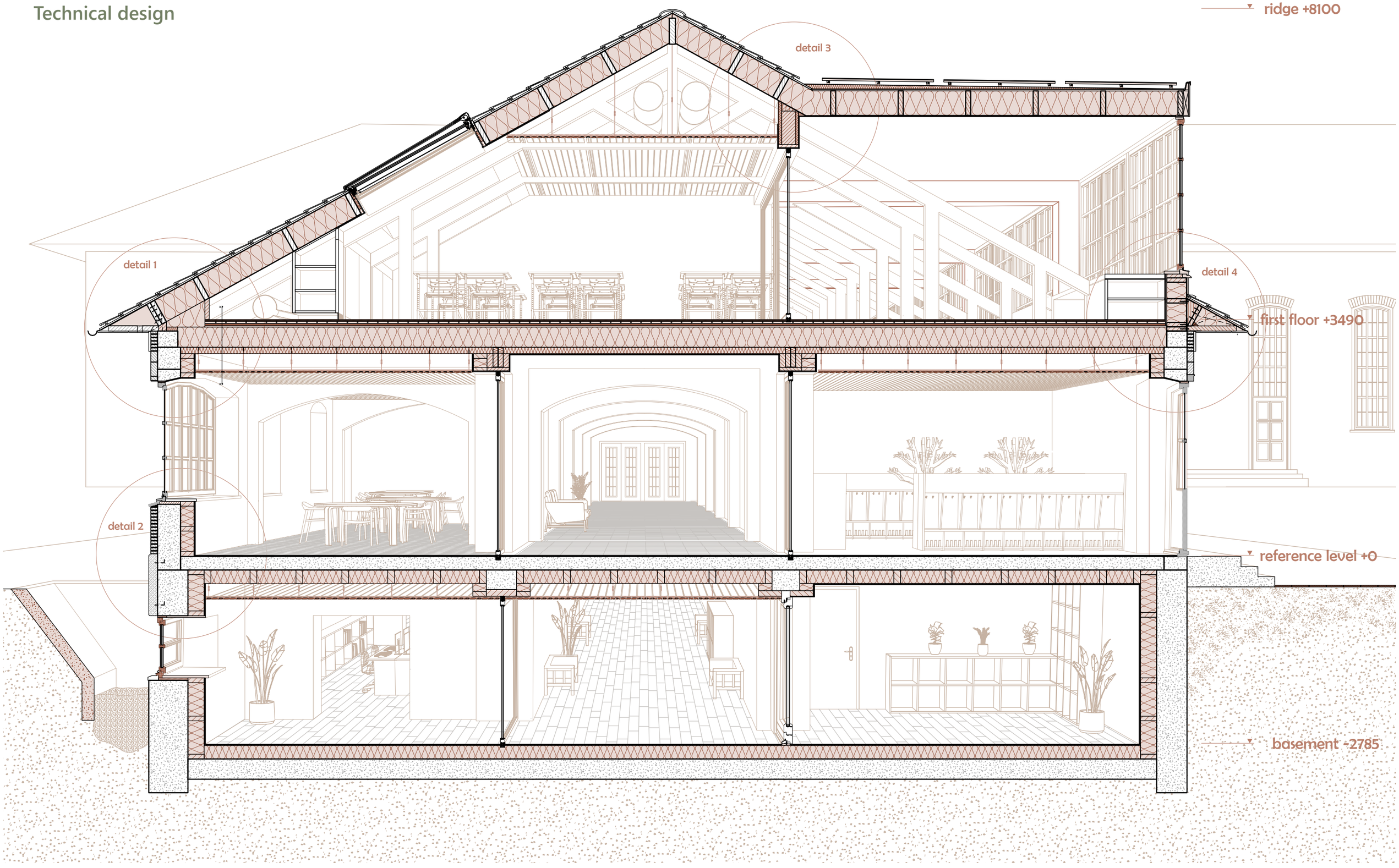
Oak

Bamboo

Walls

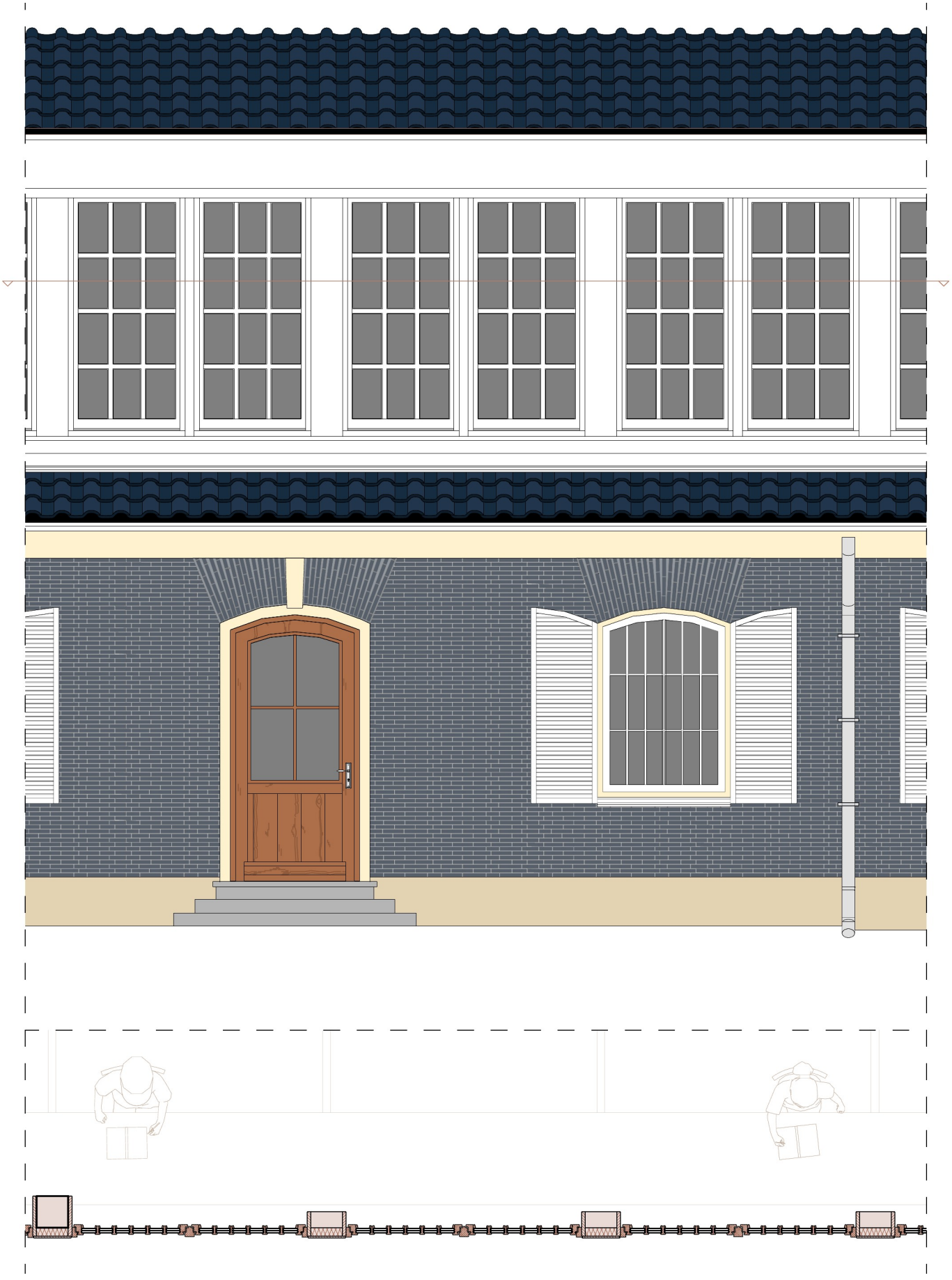
Clay plaster

Technical design



Section AA' 1 1:50

Technical design



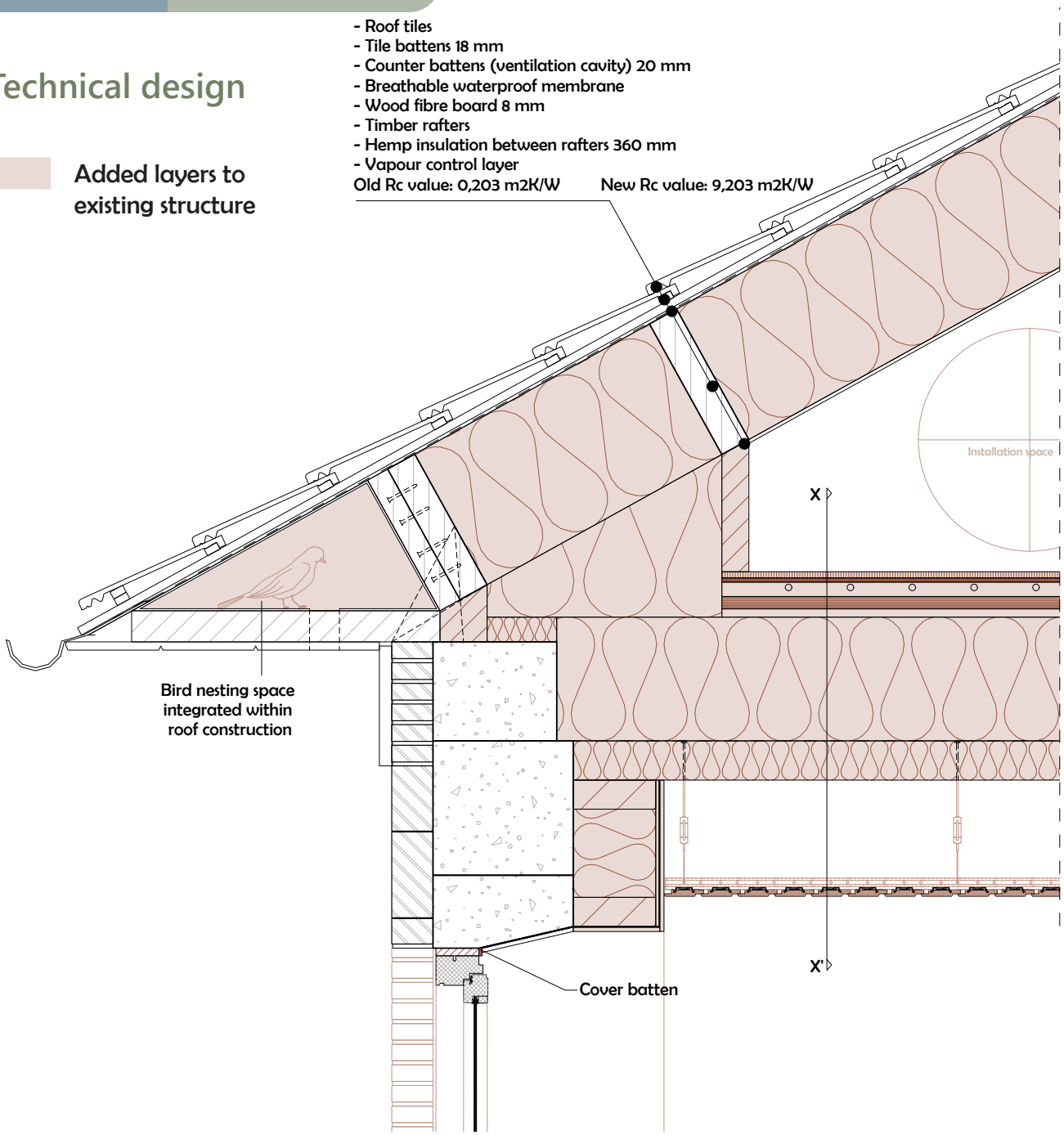
Façade fragment and horizontal section south wing 1:50

Technical design

Added layers to existing structure

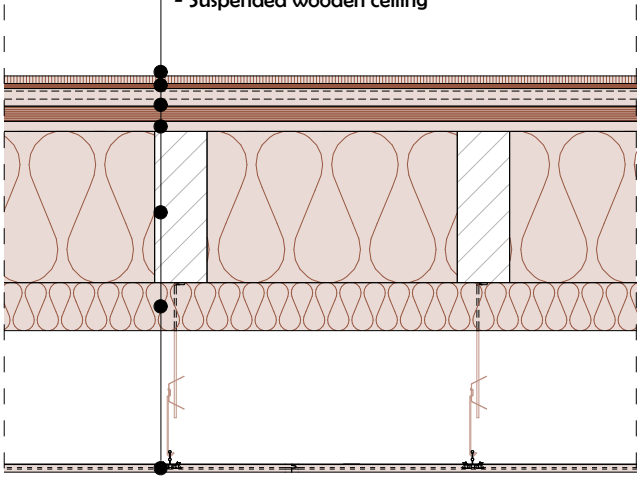
- Roof tiles
- Tile battens 18 mm
- Counter battens (ventilation cavity) 20 mm
- Breathable waterproof membrane
- Wood fibre board 8 mm
- Timber rafters
- Hemp insulation between rafters 360 mm
- Vapour control layer

Old Rc value: 0,203 m2K/W New Rc value: 9,203 m2K/W



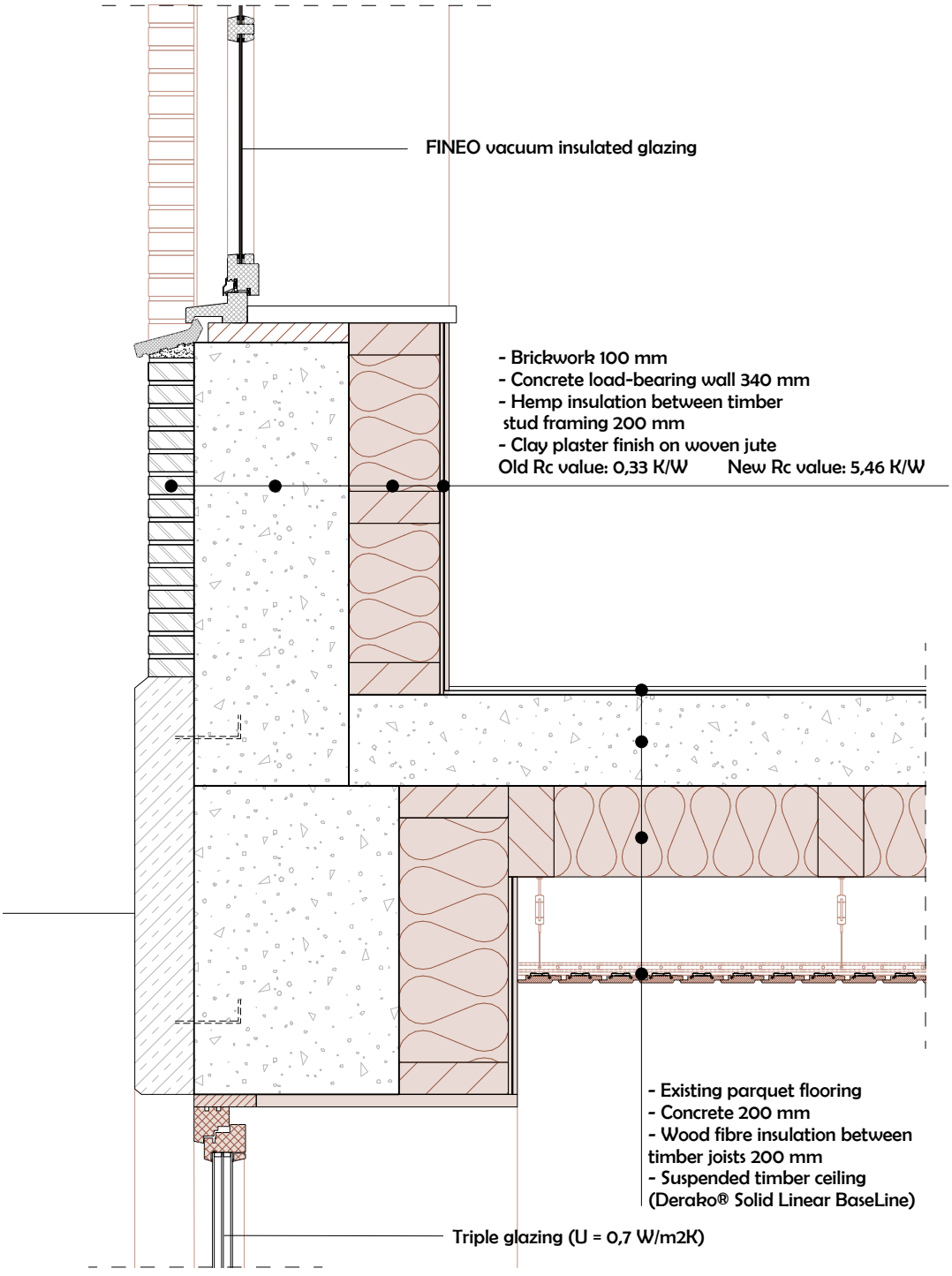
Technical detail 1 1:15

- European oak flooring 15 mm
- Fermacell load distribution panel 10 mm
- Dry-build underfloor heating with aluminium diffusion plates 30 mm
- Fermacell 2E31 with wood fibre board 30 mm
- OSB 20 mm
- Timber joists 300 mm
- Hemp insulation 300 mm
- Suspended wooden ceiling



Cross section XX' 1 1:15

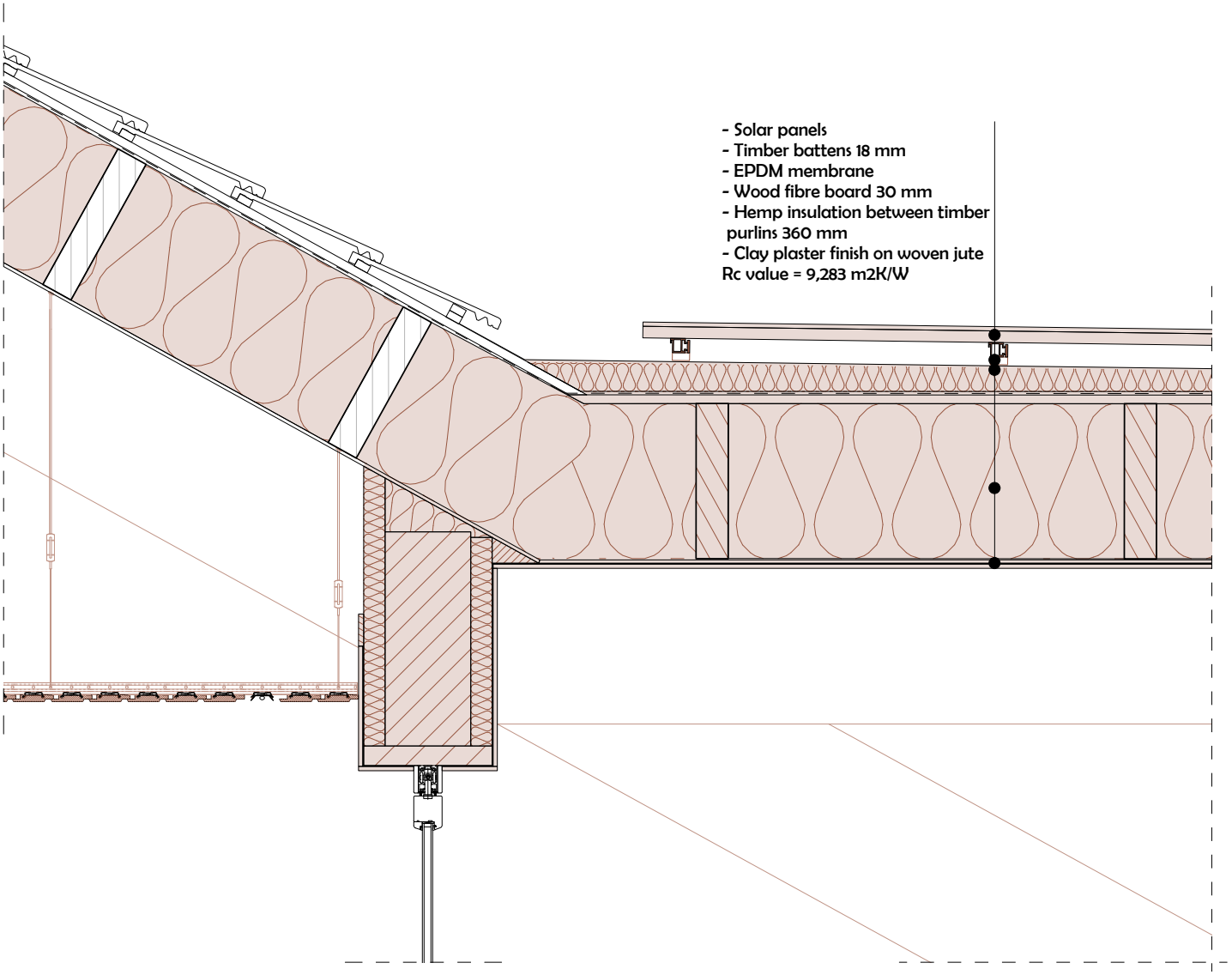
Technical design



Technical detail 2 1:15

Added layers to existing structure

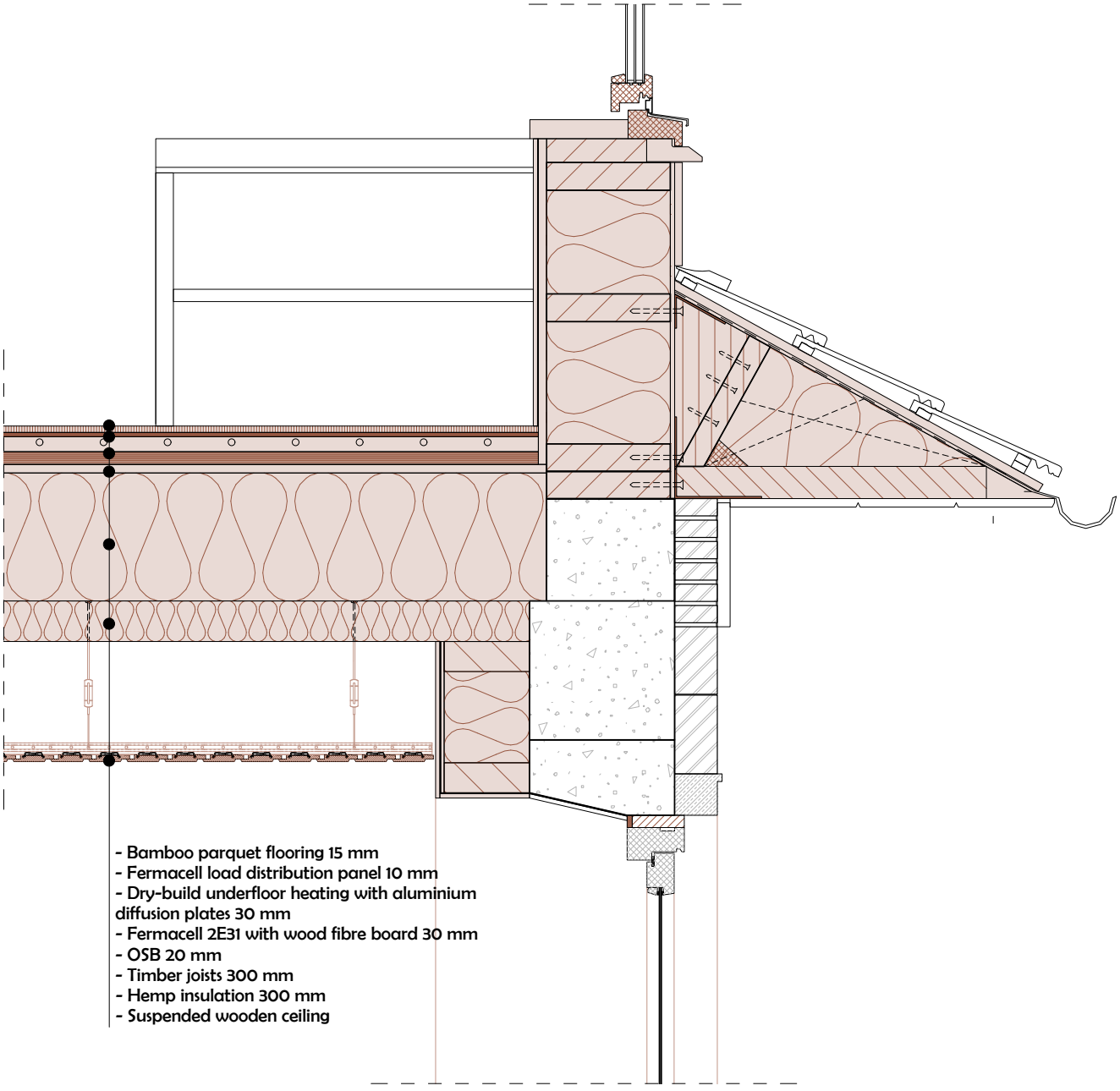
Technical design



Technical detail 3 1:15

Added layers to existing structure

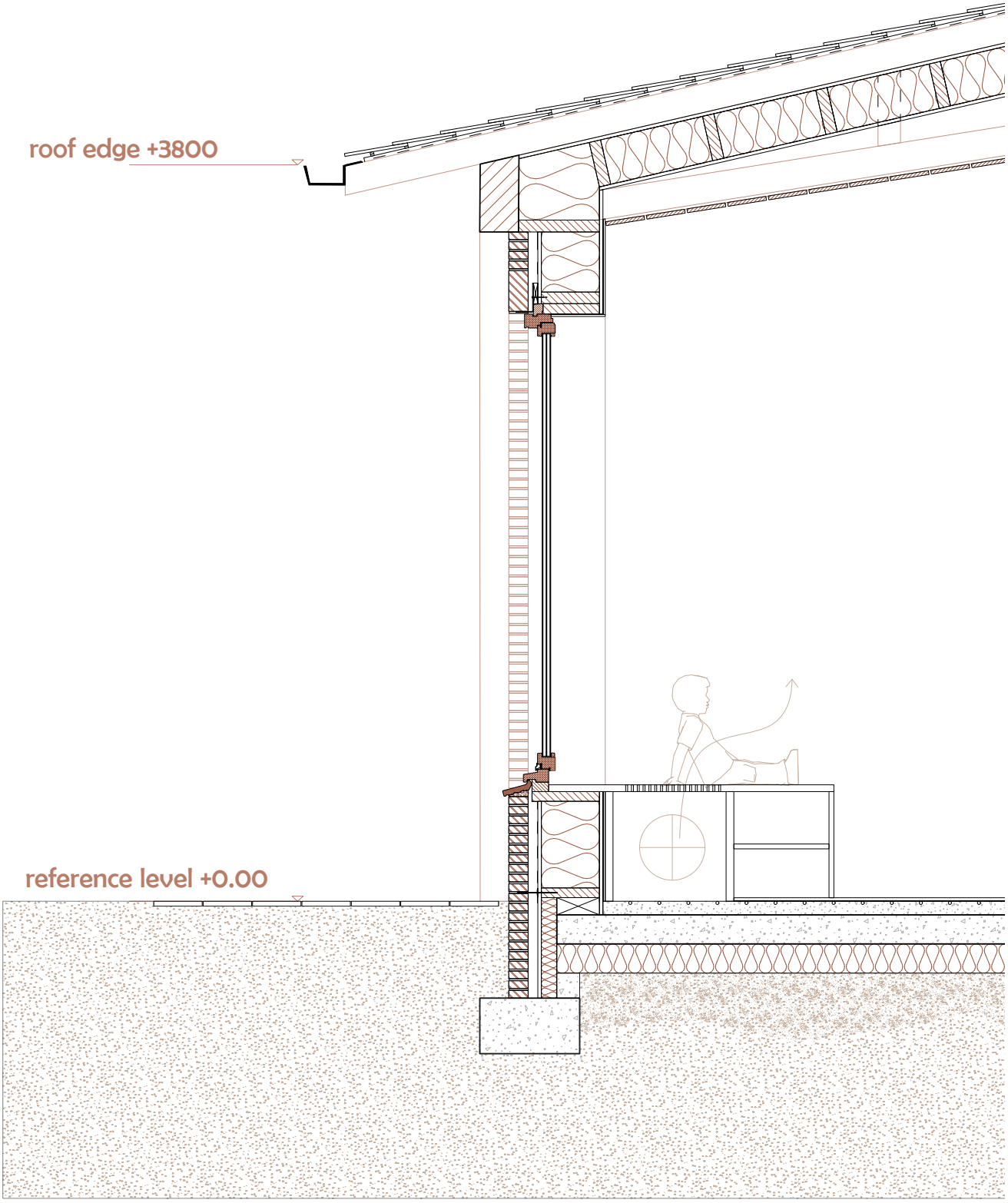
Technical design



Technical detail 4 1:15

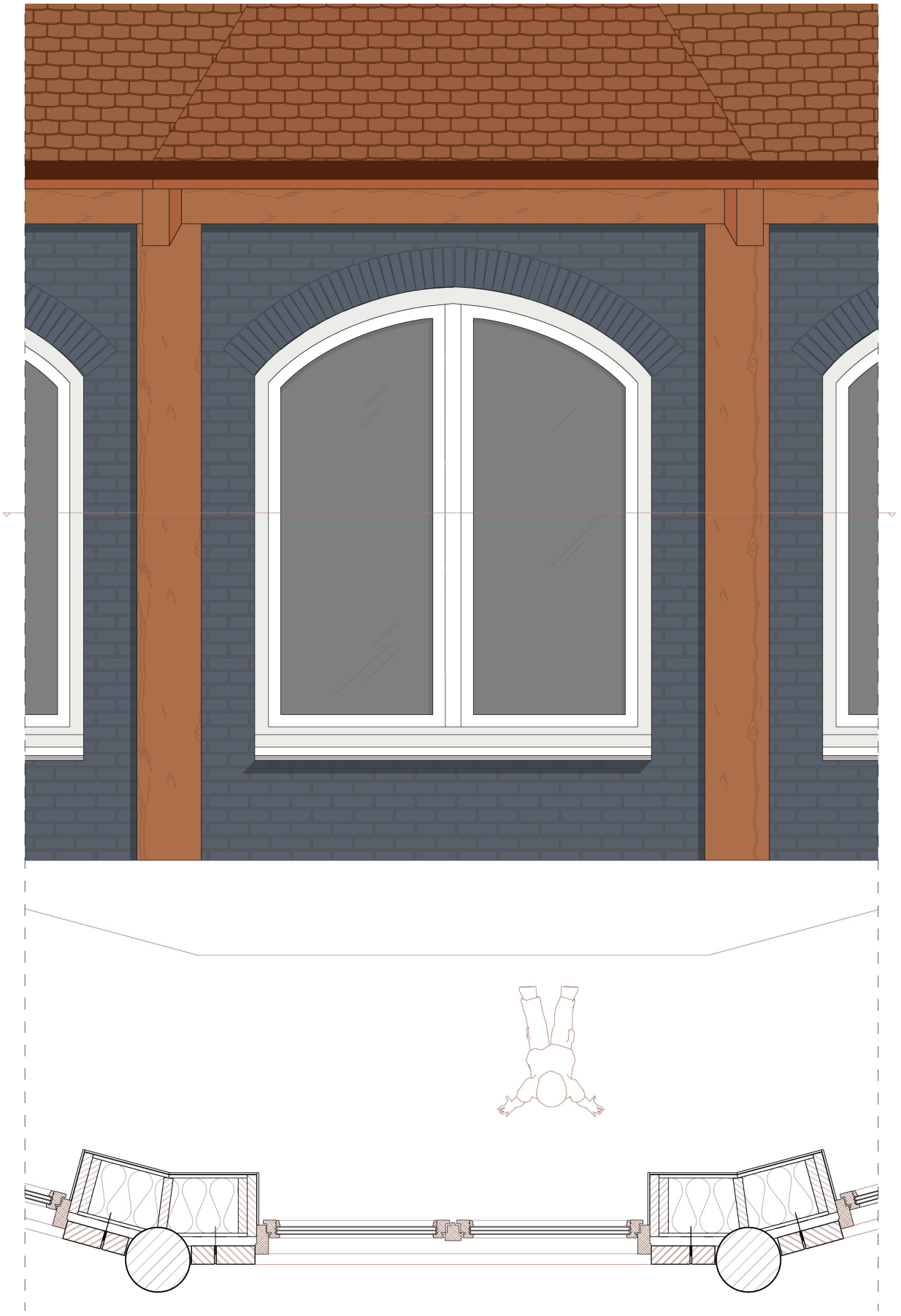
Added layers to existing structure

Technical design



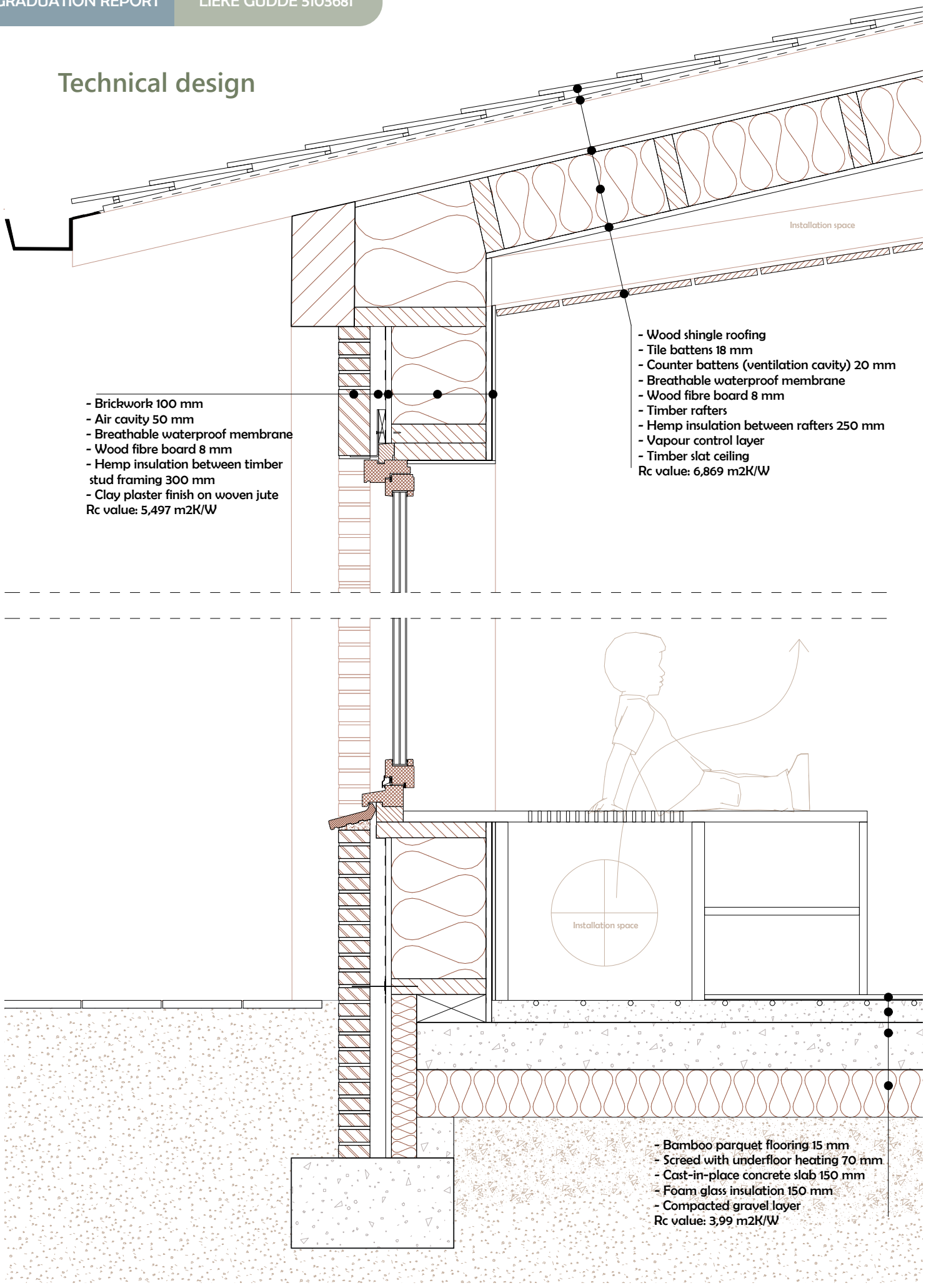
Façade fragment new additions 1:30

Technical design



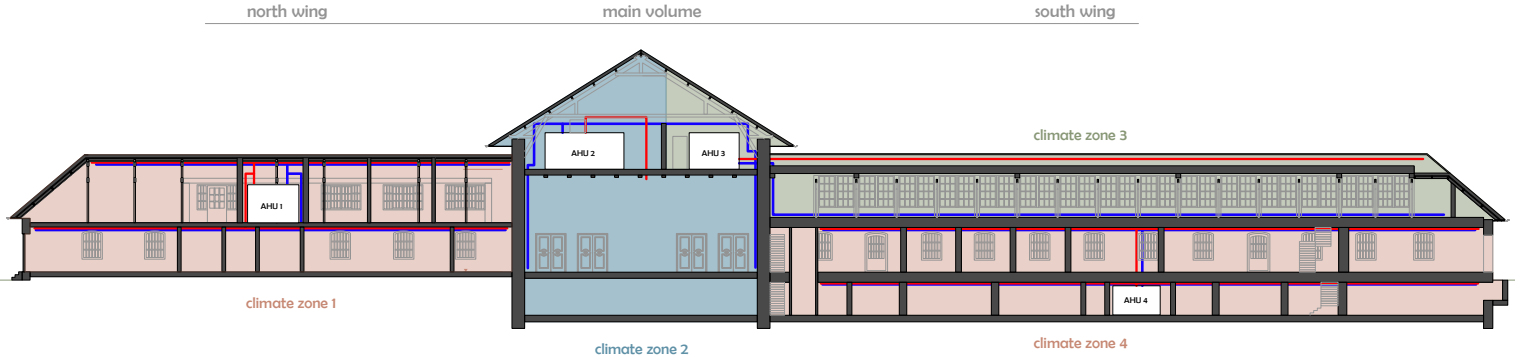
Façade fragment and horizontal section new additions 1:30

Technical design



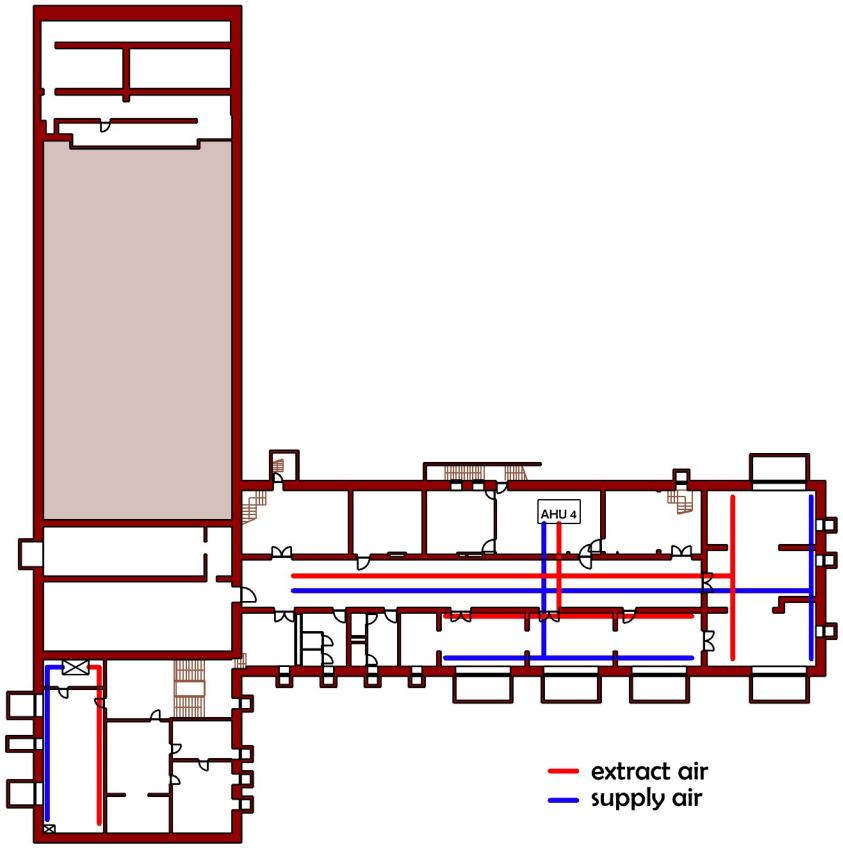
Technical details new additions 1:15

Climate design

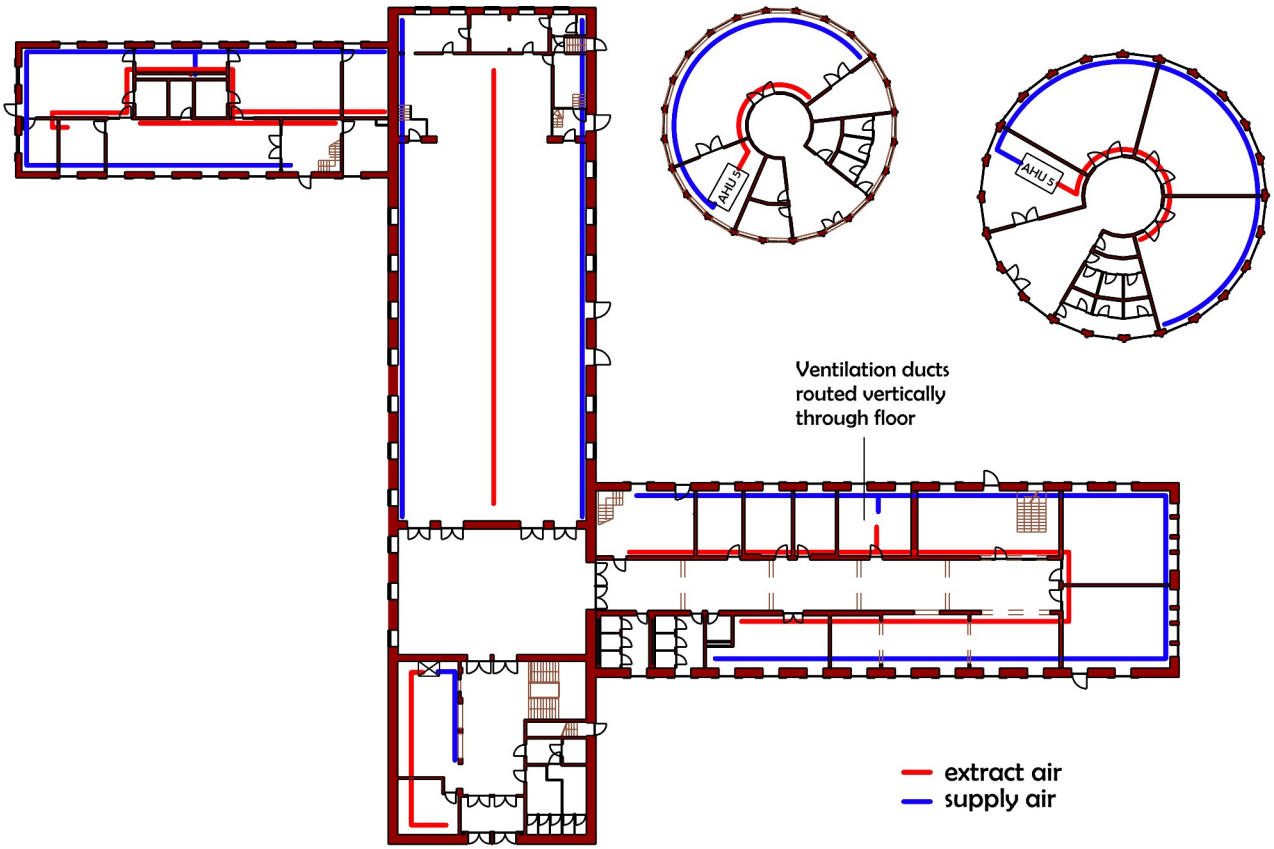


Climate zones

Climate design

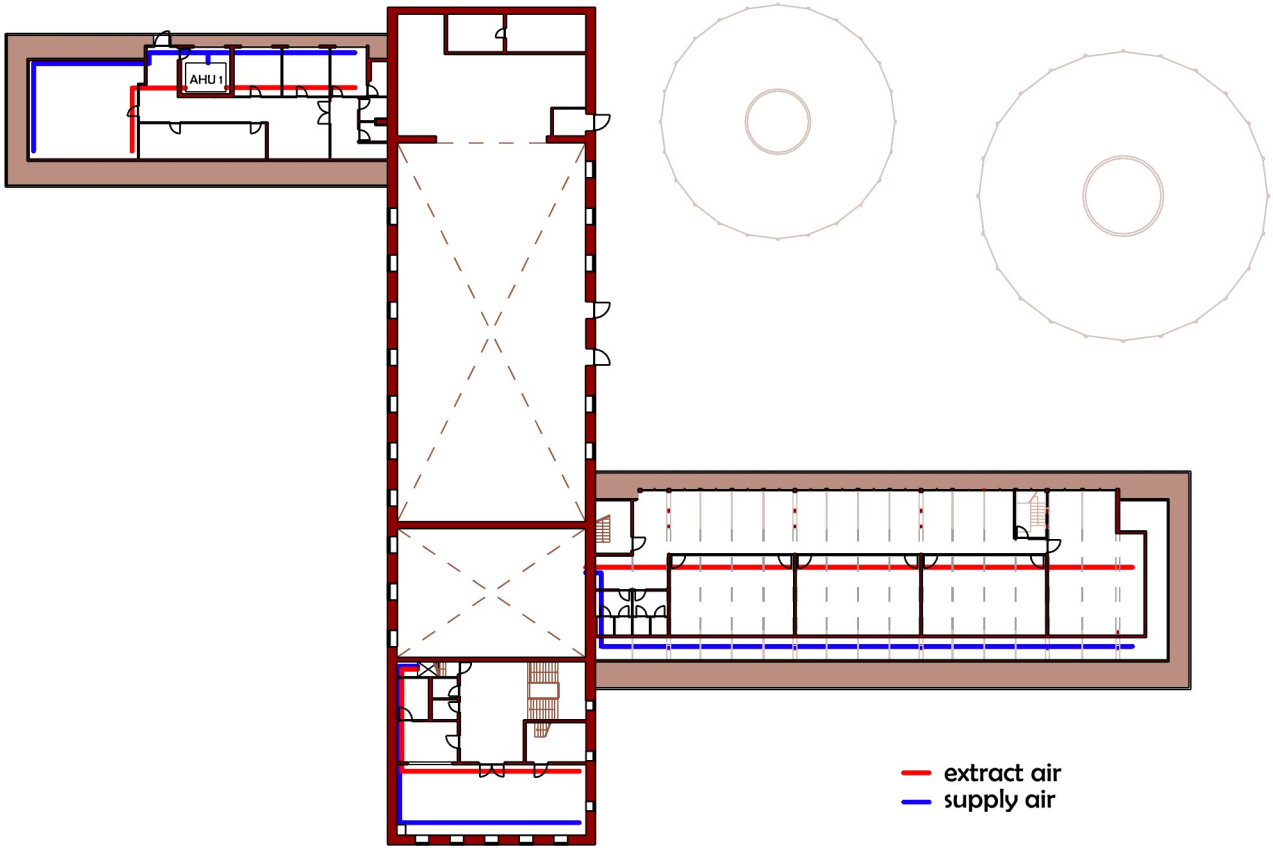


Ventilation plan basement 1:600

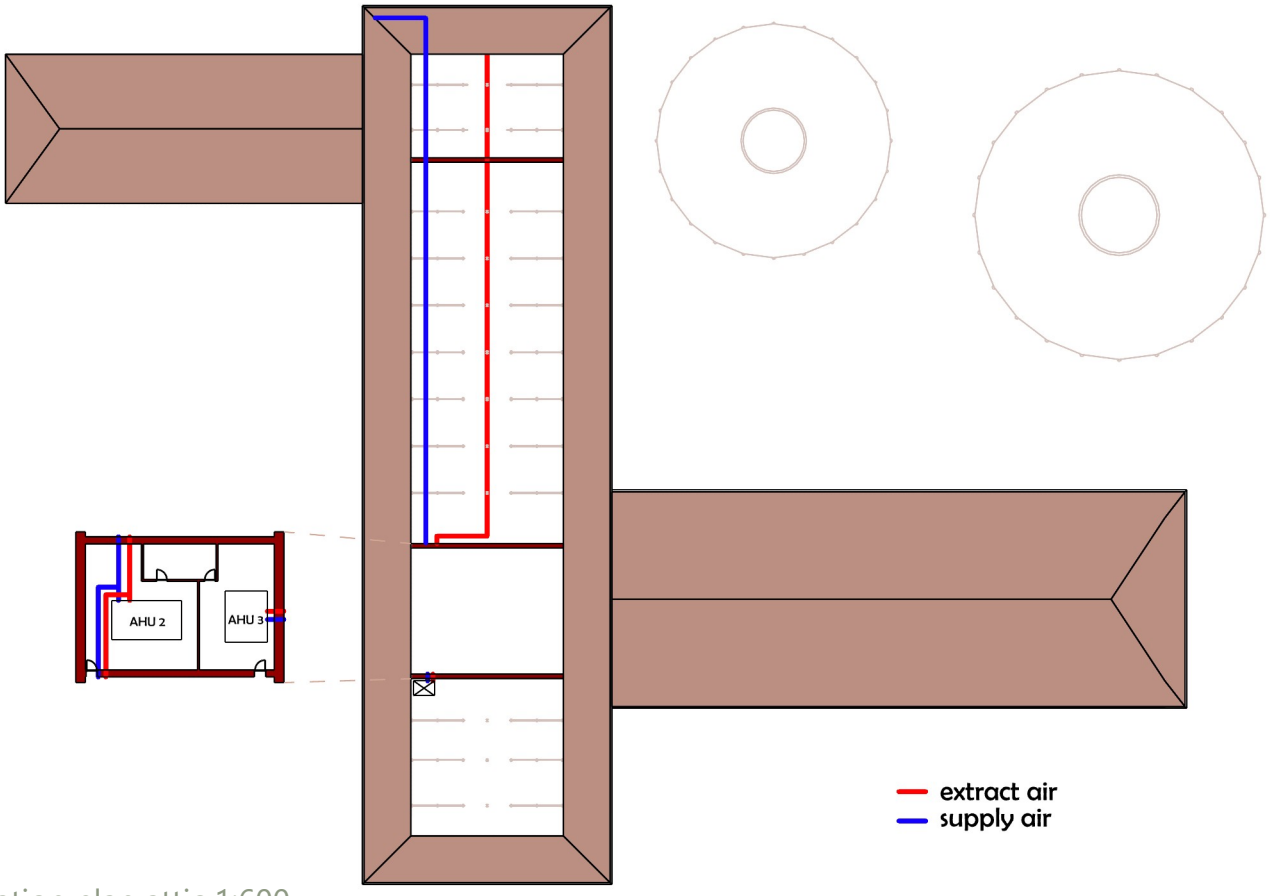


Ventilation plan ground floor 1:600

Climate design

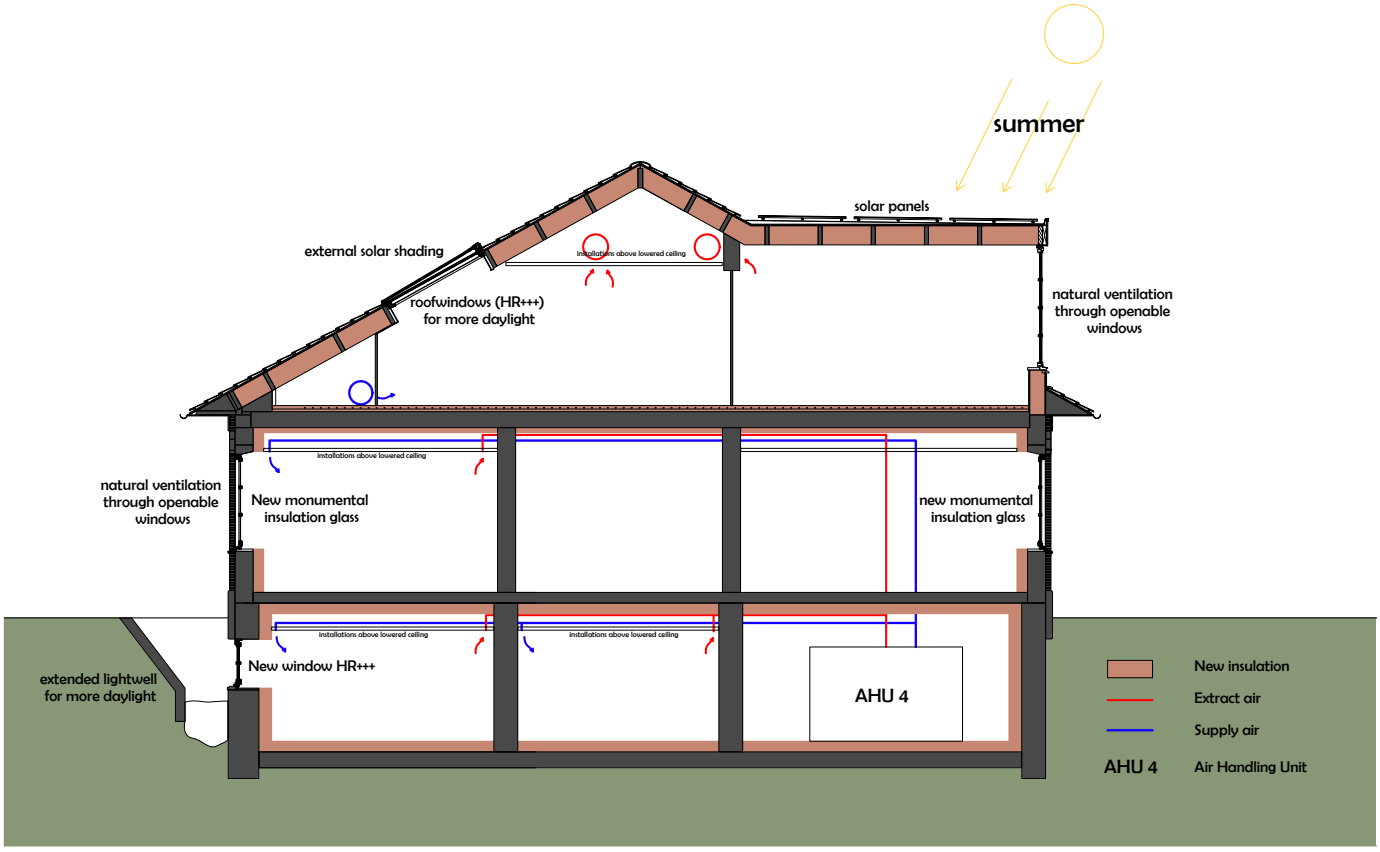


Ventilation plan first floor 1:600

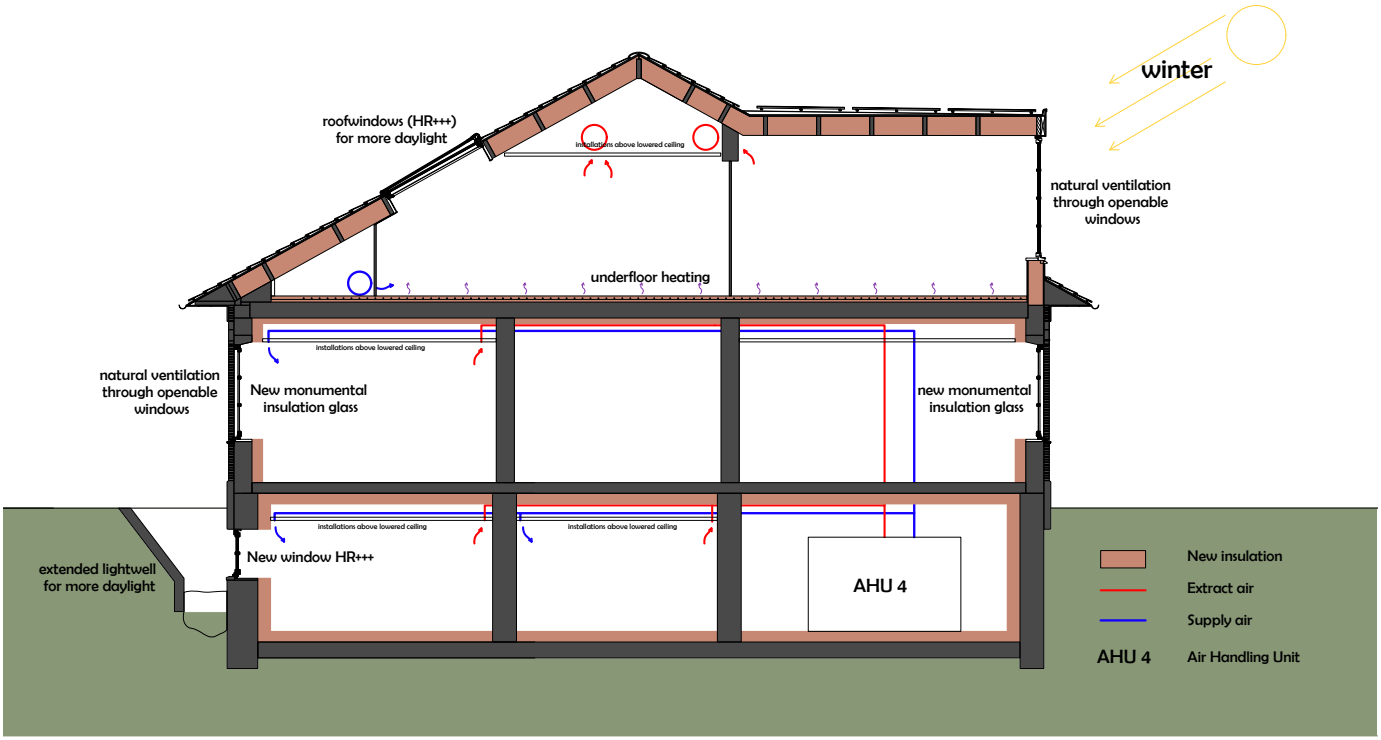


Ventilation plan attic 1:600

Climate design

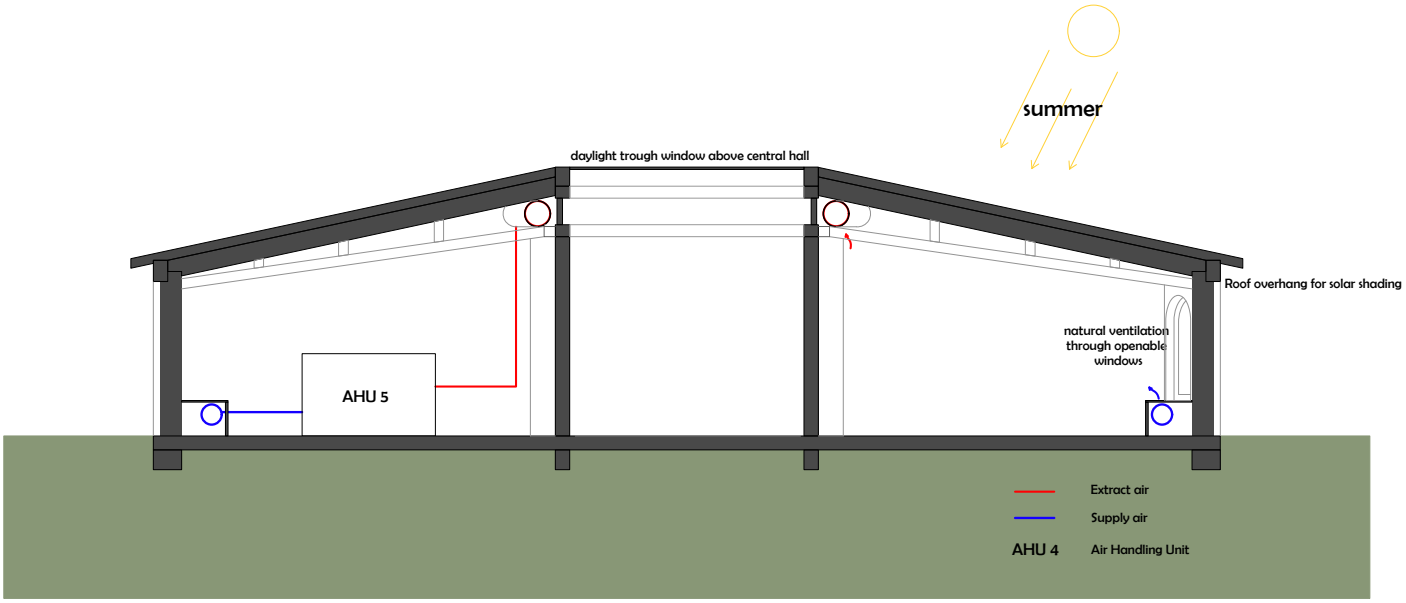


Climate section south wing (summer)

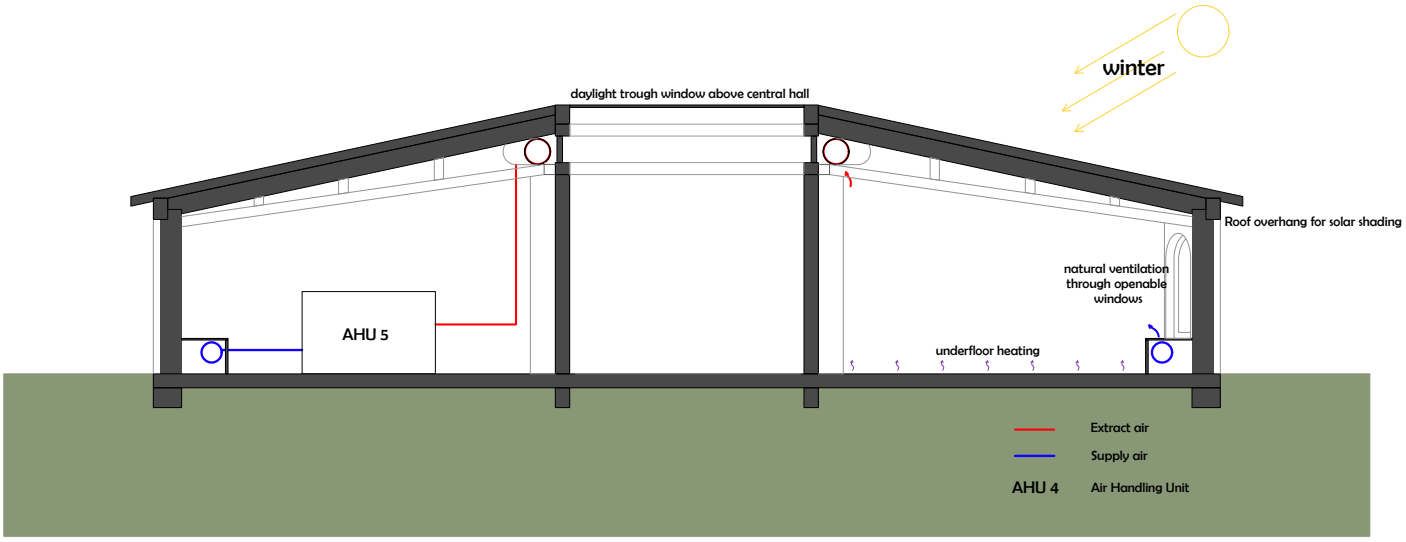


Climate section south wing (winter)

Climate design

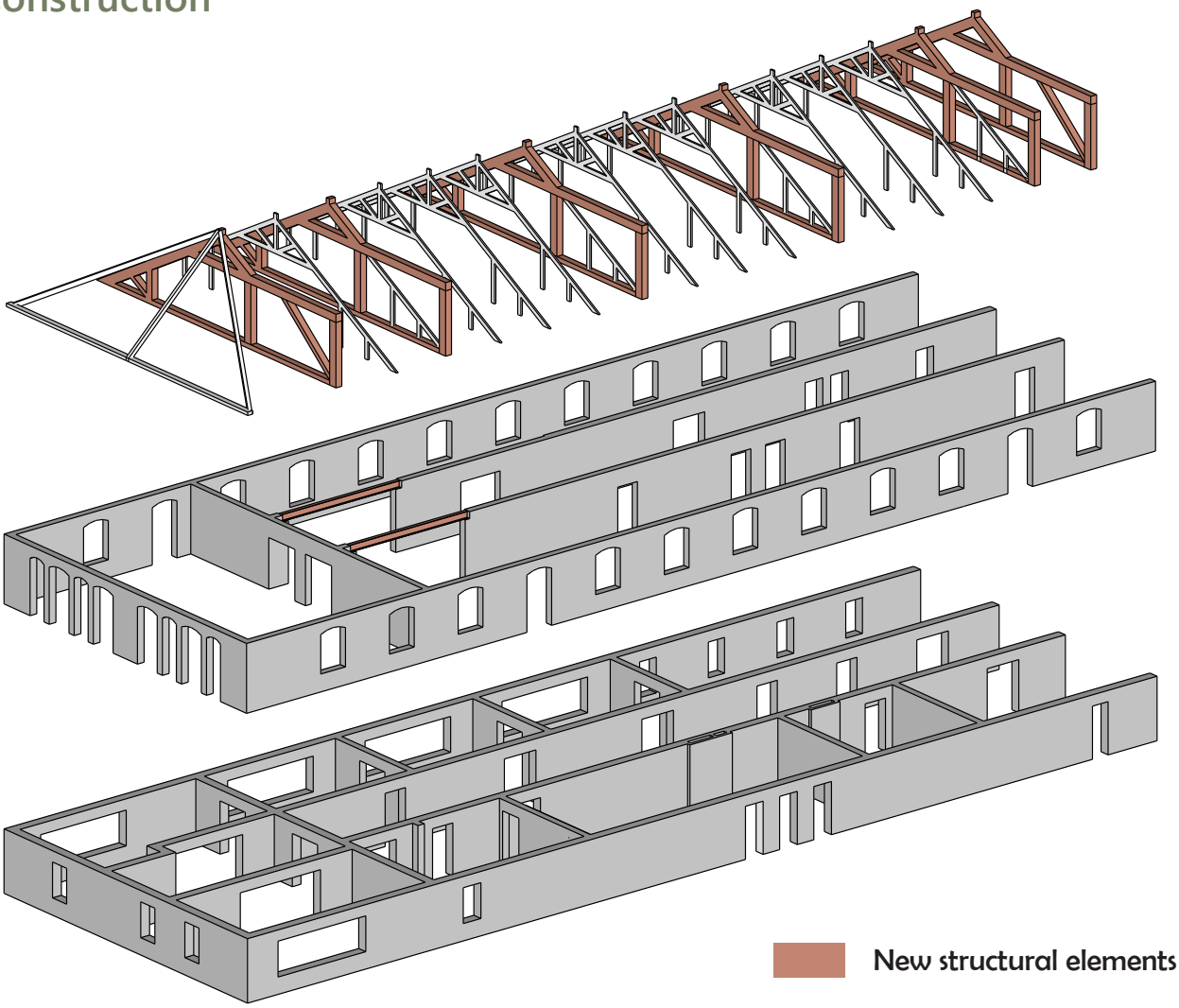


Climate section additional volumes (summer)

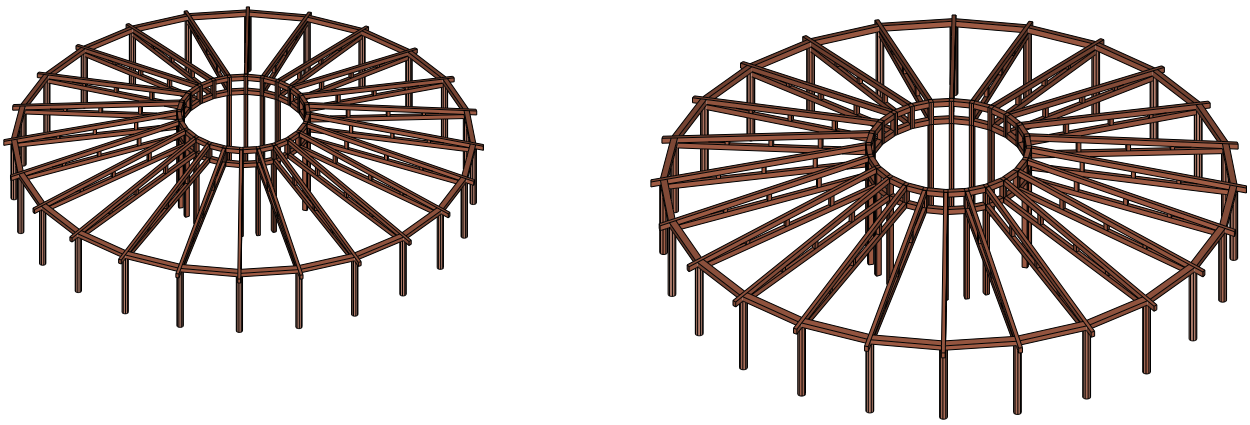


Climate section additional volumes (winter)

Construction

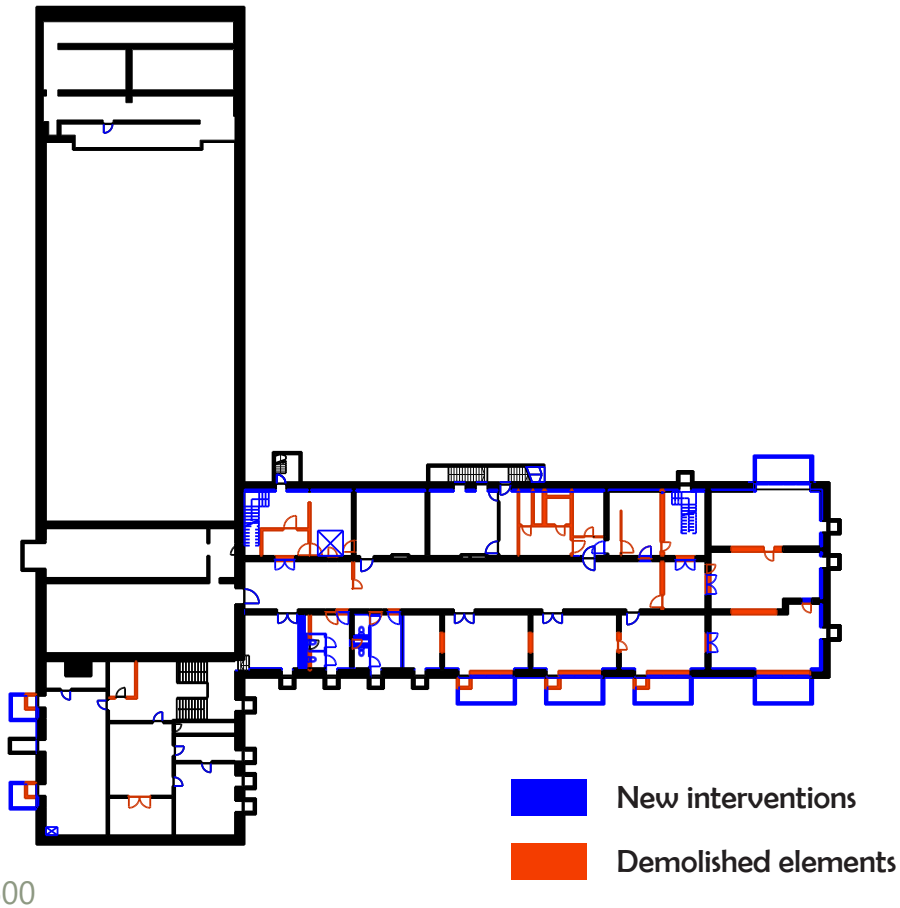


Load-bearing structure of the south wing



Load-bearing structure new additions

Demolition plans



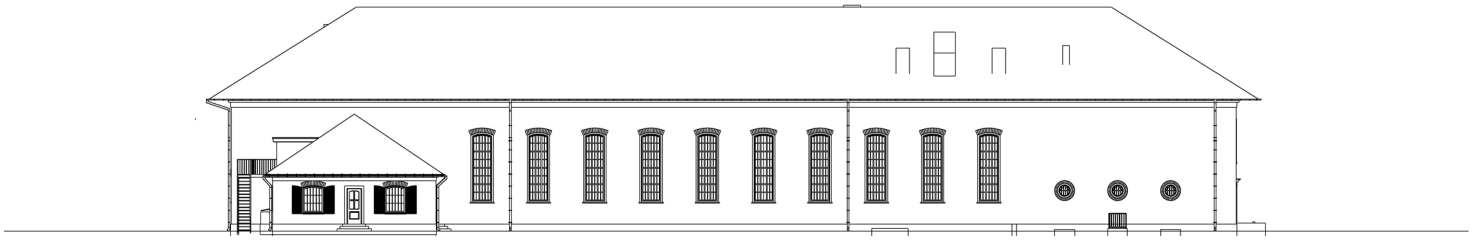
Demolition plan basement 1:600

Demolition plan ground floor 1:600

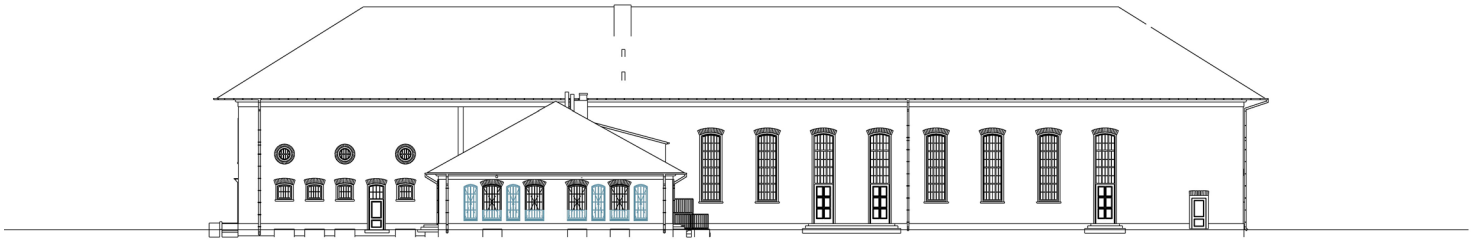
Demolition plans

Demolition plan first floor 1:600

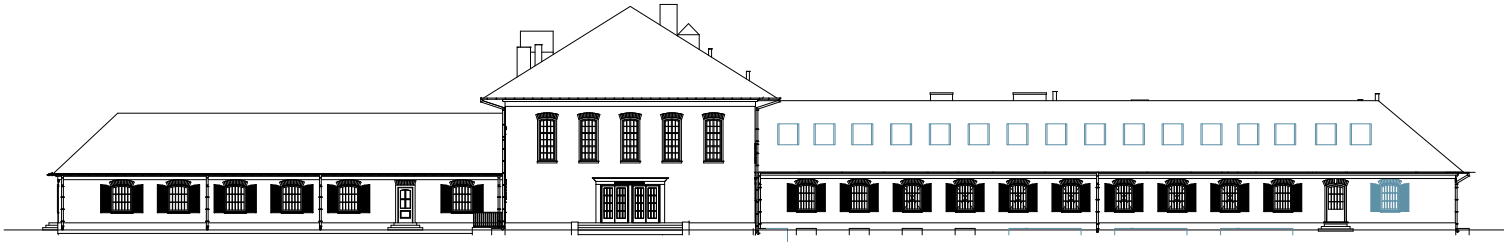
Façade interventions



North façade 1:500



South façade 1:500



West façade 1:500

East façade 1:500

New interventions

PART 4

Conclusion, discussion & reflection

Conclusion

This graduation report investigated how the Officer's Casino in Soesterberg can be transformed into a contemporary educational environment while balancing heritage values and everyday educational use. Based on the spatial analysis, value assessment, and local context, Waldorf education was chosen as a suitable educational model for the adaptive reuse of the Officer's Casino. The focus within Waldorf education on atmosphere, sensory experience, movement, rhythm, and connection to nature matched well with several existing qualities of the building and its green surroundings. At the same time, the contrast between the formal military character of the Officer's Casino and the softer, more organic principles of Waldorf education created clear architectural tensions. These tensions formed the starting points for the design process.

The research showed that the adaptive reuse of a monumental building for education does not mean that the entire building must be completely transformed. Instead, the project demonstrates that different parts of the building can be treated differently within the transformation, depending on their heritage value and spatial possibilities. Within the design proposal, the main volume of the Officer's Casino, including the theatre hall and representative central spaces, was largely preserved in order to maintain the historical and monumental identity of the building. These spaces proved suitable for certain community-oriented functions, meaning that only limited interventions were needed. The wings, on the other hand, offered more possibilities for interventions related to daylight, spatial flexibility, sensory experience, and everyday educational use.

The project shows that the balance between heritage preservation and educational use is not achieved through one large architectural intervention, but through multiple targeted interventions on different scales. Daylight interventions, such as new façade openings, roof windows, and a dormer, as well as material choices and the additional volumes, were used to make the building suitable for contemporary educational use while preserving its monumental character.

Ultimately, this project shows that the transformation of a monumental building into a contemporary educational environment does not depend on completely resolving the tensions between old and new. By selectively combining preservation, adaptation, and new additions, the Officer's Casino can maintain its historical identity while also providing space for new forms of everyday educational use.

Discussion

Waldorf beyond architectural style

An important finding within this project was that Waldorf education should not be seen as a fixed architectural style. During the design process, Waldorf pedagogy increasingly became a spatial and sensory starting point rather than a specific formal or aesthetic style. Principles such as sensory experience, spatial rhythm, movement, materiality, and the relationship with nature formed the basis for the architectural interventions, without requiring the entire building to adopt organic forms. This became especially relevant within the context of the Officer's Casino, where the existing strict geometry and hierarchical organisation remained an important part of the building's identity. The project therefore shows that educational principles can work together with contrasting architecture, as long as the focus lies on atmosphere, spatial experience, and use, rather than only on style or form.

Limitations and compromises

At the same time, the project showed the limitations and compromises that arise when adapting a monumental building to contemporary educational needs. Several tensions identified during the analysis could not be fully resolved within the existing building. For example, the fixed corridor structure and the dimensions of certain spaces limited the flexibility of classroom layouts, while the high heritage value of the façades made it difficult to introduce additional daylight. Requirements related to insulation and acoustics also regularly conflicted with the preservation of valuable interior and façade elements. As a result, targeted and selective interventions were necessary, and in some cases it had to be accepted that not all spaces could fully meet ideal contemporary educational standards. The project therefore shows that within adaptive reuse, not only the building is adapted to a new programme, but sometimes the programme also must adapt to the existing architecture.

Heritage buildings as learning environments

This project also shows that existing monumental buildings can offer different spatial qualities compared to many contemporary school buildings. Many schools today are organised according to a standard corridor-classroom layout, focused mainly on efficiency and clear functional separation. In contrast, the Officer's Casino has a more varied spatial structure, with large collective spaces, differences in scale, and strong transitions between rooms. Although these qualities sometimes made it more difficult to fit the educational programme into the building, they also created opportunities for different types of learning environments and collective activities. The reuse of heritage buildings can therefore add spatial qualities to educational environments that are often less present in newly built schools. The project therefore suggests that the adaptive reuse of heritage buildings can make a valuable contribution to the spatial quality and diversity of contemporary educational environments.

Reflection

Design vision and starting points

In this graduation project, I made a redesign for the Officer's Casino in Soesterberg, in which the building was transformed into a community school with both educational and public activities. This choice came from the first site visit, where I immediately saw the potential of the building as a learning environment. This was mainly because of the central corridor in the south wing, where I imagined classrooms on both sides.

Besides that, I wanted to design something in which I could include my own experiences and vision. I wanted to create a school where I personally would have liked to go as a child. This starting point helped me during the process when making design choices that were not only functional, but also focused on atmosphere, experience, and spatial quality.

After researching different types of education, I eventually chose Waldorf education. Although I first had quite a stereotypical image of it, I became interested in its strong focus on art, creativity, and culture. These principles matched both the character of the Officer's Casino and my own interests.

Combining heritage and education

The main challenge within this project, which was also central to my research question, was combining a monumental building with a contemporary school program. In many ways, the Officer's Casino does not meet current requirements for acoustics, ventilation, and indoor climate, while these aspects are very important in a school environment. At the same time, the heritage values of the building had to be respected.
Another challenge was the clear contrast between the formal architecture of the Officer's Casino and the more organic atmosphere that is often associated with Waldorf schools. At first, these two ideas seemed completely opposite, which made me question whether this was the right combination. However, by studying reference projects of Waldorf schools located in historic buildings, I realised that Waldorf education is not dependent on one specific architectural style. Instead, it is mainly focused on spatial experience, materiality, and sensory experience.

This insight became an important starting point within my design. The goal was not to completely transform the building, but to introduce a new atmosphere and way of use within the existing structure.

Research by design

During the design process, I designed, tested, and later let go of many ideas. While doing this, I noticed that my strong focus on the experience of the future user sometimes became a weakness. I often looked at the design from my own perspective as a student, which sometimes led to choices that were difficult to justify from a heritage point of view. Because of this, I regularly had to take a step back from the design and look again at the historical values of the building, to see whether my design decisions were still balanced with them.

Because I could not fit the full program inside the existing building, an extension became necessary. This turned out to be a difficult design challenge, where I spent a long time searching for the right balance between old and new. In the end, I designed two additions that remain secondary to the existing building, while at the same time creating a connection between the monumental architecture, the surrounding landscape, and the principles of Waldorf education.

Reflection on the process

Looking back at my process, I am satisfied with several parts of the project. Quite early on, I decided to divide the building into three main volumes, which allowed me to study each part separately and decide what could be preserved or adapted. This made the design process more clear and structured. The final program layout was also decided relatively early and continued to work logically throughout the process.

I am also satisfied that I considered technical aspects such as ventilation and installations from the beginning. Because of this, these elements could be integrated into the design instead of being added later.

There were also parts of the process that went less well. For too long, I tried to fit a program into the building that was too large. I should have looked more critically at the actual capacity of the school and what was really needed in the surrounding area. Because of this, I spent a lot of time designing solutions for spaces that later turned out to be unnecessary.

I also sometimes found it difficult to make final design decisions. Because heritage values, functionality, and educational principles often conflicted with each other, I sometimes kept doubting my choices for too long. The feedback from my teachers helped me to better support my design decisions and understand that a design does not always become better by adding more elements.

What I learned

This project taught me that heritage is not only something that needs to be respected, but can also actively guide design decisions. Instead of completely adapting the monument to fit the new school program, I learned to design from the existing qualities of the building. The monumental structure, routing, and spatial atmosphere therefore became not only a limitation, but also an important starting point within the design.

I also learned that not all conflicts within a design need to be fully solved. The contrast between the formal architecture of the Officer's Casino and the softer principles of Waldorf education actually gives the project more layers and character.

Another important lesson during this project was that I should not move too quickly into working with computer programs during the design process. Because of this, I sometimes designed too much from functional spaces instead of focusing on the overall composition and spatial form. This way of working also cost a lot of extra time.

Through feedback from my teacher, who encouraged me several times to start by sketching first, I realised how valuable it is to explore ideas freely with pen and paper. By also drawing solutions that at first seemed unsuitable, new insights and design ideas started to appear.

What I will take with me into future projects is that I want to make decisions more quickly and spend less time doubting certain choices. This will leave more time for the further development of the design. I also want to document design decisions more clearly during the process itself. During this project, I noticed that it was sometimes difficult to look back and understand exactly why certain choices were made or rejected. By documenting this better, the process becomes more organised and design decisions can later be explained more clearly.

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Waldorf education

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ENKA Kantinegebouw

Architect **D. Masselink**
Location **Ede, The Netherlands**
Year **1950 (renovation 2013-2020)**
Floor area **4.000 m²**

© Luuk Smits

The transformation of the ENKA Kantinegebouw in Ede is a relevant reference because it demonstrates how a monumental, collective building can be adapted for contemporary use while preserving its spatial identity. Originally designed as a communal facility within an industrial complex, the building shares typological characteristics with the Officierscasino, particularly in its large shared spaces and clear spatial hierarchy.

Rather than fragmenting the existing volumes, the project retains the legibility of the original structure and introduces new functions through restrained and readable interventions. This approach illustrates how heritage buildings can accommodate everyday use without losing their collective and representative character, making it a valuable precedent for transformation strategies within a protected monumental context.

Rudolf Seiner College and School

Architect **Willem de Visser, Atelier Pro**
Location **Haarlem, The Netherlands**
Year **2017-2021**
Floor area **6.399 m²**

© Ronald Tilleman

The Rudolf Steiner College and School in Haarlem is a relevant design reference because it demonstrates how Waldorf-inspired spatial principles can be translated into a coherent architectural ensemble that accommodates different age groups while maintaining spatial continuity. Rather than applying a uniform school typology, the building is organized as a sequence of spaces with varying scales, atmospheres, and degrees of collectivity.

A key quality of this project is the way circulation spaces function as active, lived-in environments. Corridors widen into informal gathering areas, staircases become spatial moments, and transitions between spaces are carefully articulated through changes in height, light, and materiality. This approach aligns with Waldorf pedagogy, where movement, rhythm, and sensory experience are integral to learning.

Vrijeschool Vredehof

Architect **9graden architectuur**
Location **Rotterdam, The Netherlands**
Year **1911 (renovation 2020-2023)**
Floor area **1.413 m²**

© Stijn Poelstra

Vrije School Vredehof is a relevant reference because it demonstrates how Waldorf-inspired spatial principles can be applied through an architectural extension to an existing school building. The project shows how new learning spaces are carefully added to a pre-existing structure, maintaining spatial coherence while introducing variation in scale, light, and atmosphere.

For this graduation project, Vredehof is particularly relevant in illustrating how a child-oriented learning environment can emerge from the interaction between old and new. The project offers insight into how additions can support collective spaces and everyday use without undermining the identity of the original building, an issue that closely aligns with the transformation of the monumental and hierarchically organized Officierscasino.

Vrijeschool Amsterdam West

Architect **9graden architectuur**
Location **Amsterdam, The Netherlands**
Year **1896 (renovation 2021)**
Floor area **1.834 m²**

© 9graden architectuur

The renovation of the Geert Groote School in Amsterdam illustrates how Waldorf educational principles can be spatially embedded within an existing urban building through precise and restrained interventions. The project works with the limitations of the original structure, reinterpreting classrooms, circulation, and shared spaces to create a differentiated and child-oriented learning environment. It is particularly relevant as a precedent for adapting a fixed architectural framework to support everyday educational use without relying on large-scale spatial reconfiguration.

Albatros en Fontein: van school naar school

Architect **Studio Nauta & Vanschagen Architecten**
Location **Dordrecht, The Netherlands**
Year **1958 (renovation 2020)**
Floor area **ca. 1.179 m² per location**

© Vanschagen architecten

This project is a relevant reference because it demonstrates how existing school buildings can be adapted to support contemporary education through targeted and phased interventions. Particular attention is given to the reconfiguration of the schoolyard and the relationship between inside and outside, where entrances, thresholds, and semi-open zones play an active role in everyday school life.

This approach is especially relevant for a broad primary school context, as it shows how outdoor spaces and transitions can function as extensions of the learning environment rather than as residual spaces. The project provides valuable insight into how spatial continuity between interior and exterior can support shared use, flexibility, and daily rhythms, an issue that directly informs the transformation of the Officierscasino and its surrounding grounds.

Waldorf School Mauer

Architect **Dietrich Untertrifaller and Andreas Breuss**
Location **Vienna, Austria**
Year **2022 – 2024**
Floor area **3.125 m²**

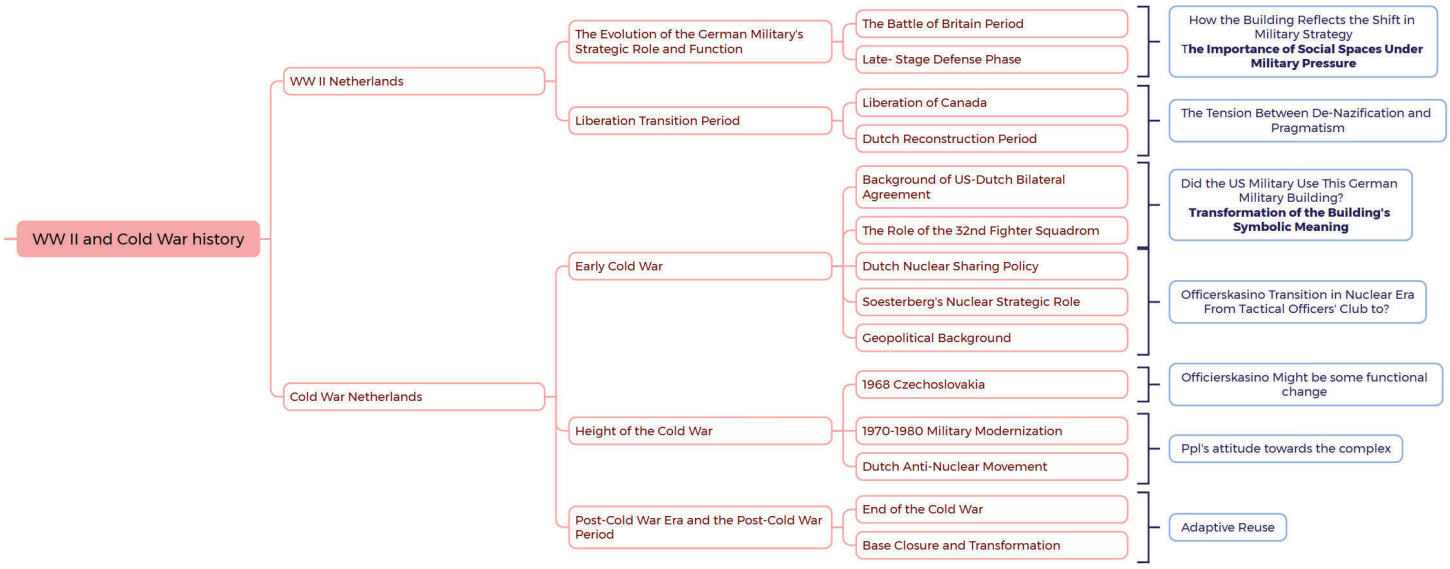
© Kurt Hoerbst, Dietrich Untertrifaller

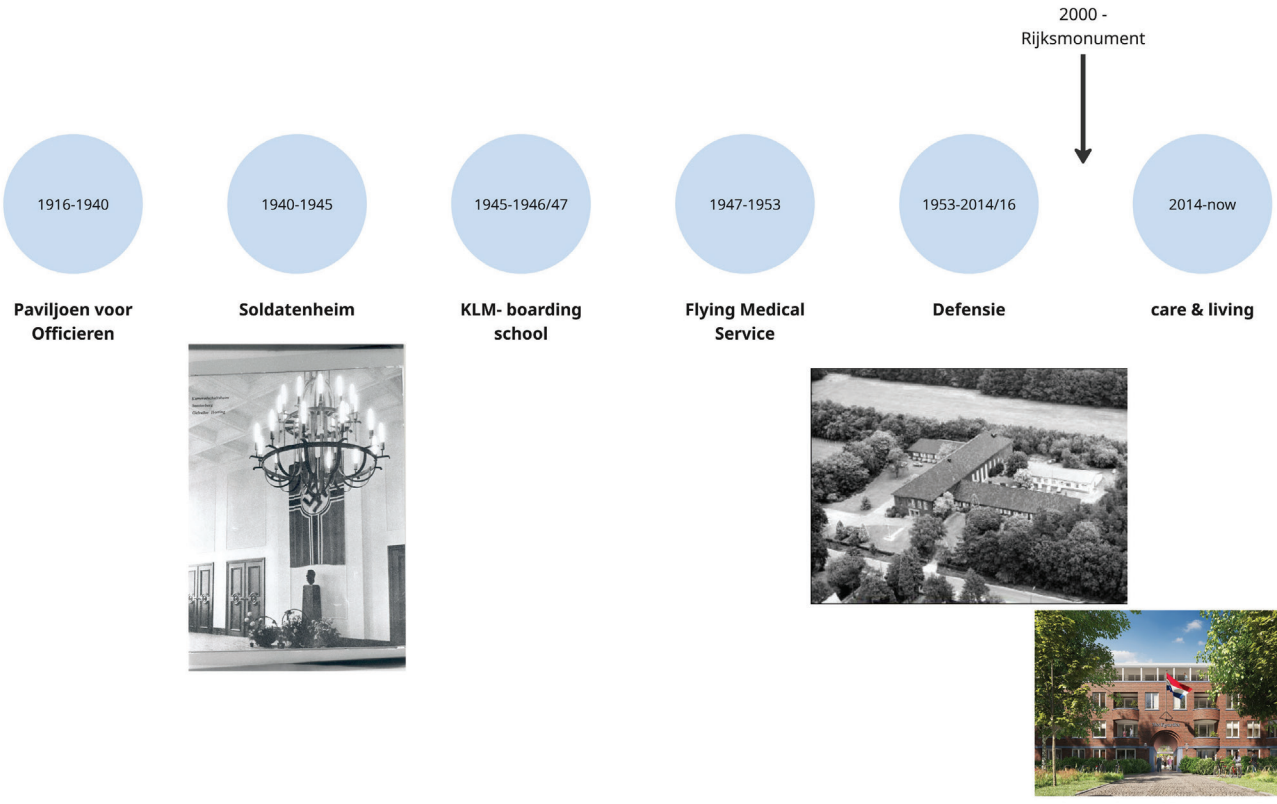
The Waldorf School Mauer in Vienna is a relevant reference because it demonstrates how a contemporary Waldorf learning environment can be integrated within a historic and protected building ensemble through carefully designed additions. Similar to the Officer's Casino, the project negotiates between heritage preservation and contemporary educational requirements, balancing the identity of the existing building with the spatial needs of a modern school.

Furthermore, the project illustrates how Waldorf educational principles can be translated into architecture through flexible learning environments, natural materials, sensory spatial qualities, and strong connections between interior spaces and nature.

Appendix 1: Analysis

To keep this document concise and manageable in file size, some drawings, analyses, and process material are shown at a reduced scale. The selection included in this document focuses on the most relevant material for understanding the research and design process.

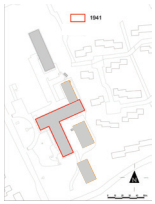




Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

Source: Groupwork from Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang, Aleid Niessing and Lieke Gudde

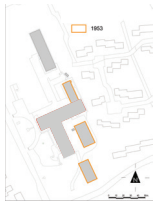
Chronological Mapping of Use and Transformation – Officierscasino Soesterberg



Luftwaffe architect Hanns Schiffers built a permanent neoclassical officers' casino at Fliegerhorst Soesterberg (1940–1941), replacing wooden canteens. It combined theater, bowling alley, dining rooms and integrated air-raid shelters, finished with Italian marble as a prestigious Nazi recreation hub.

Nazi construction

1940 -1941



In 1953 the complex was reassigned as Dutch Officierscasino for Vliegbasis Soesterberg. A new north wing in a similar neoclassical style and a nearby outdoor swimming pool expanded capacity for growing officer staff while keeping the original 1941 volume and representative façade largely unchanged.

Expansion

1953

Since 2016, the Officierscasino has been integrated into the residential redevelopment of the Het Kwartier area. The historic main building and gatehouse were preserved as protected rijksmonuments, with their representative façades and key interior spaces retained. While new residential development took place in the surrounding site, several non-listed auxiliary structures were demolished from 2024 onward, reinforcing the monument's position as a preserved architectural and historical anchor within a transforming residential context.

Present: Integration into a Residential Context

2016-now

Cultural initiatives

Rijksmonument

WW1

WW2

COLD WAR PERIOD

1914 **1918** **1939** **1945** **1947** **1991** **2000** **2024-now**

1818-1890s

Early camp origins

Kamp van Zeist founded in 1818 as a summer exercise ground for Dutch artillery; by 1870s–1890s, temporary wooden officers' canteens added alongside barracks for seasonal training, but no permanent casino building yet existed.

April/May 1945

Liberation and Reuse

Captured almost intact in spring 1945, the casino avoided demolition and briefly housed NSB detainees. It then became a KLM training hostel and, from 1945–1953, the Dutch Air Force medical service headquarters, shifting the building from Nazi recreation to Dutch peacetime aviation use. This was a functional reinterpretation, without architectural interventions

1982-1983

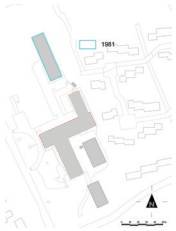
Further additions

Around 1982–1983 a large, modern barracks was built next to the historic casino to host extra Dutch and US Air Force personnel. The new block absorbed most lodging needs, allowing the original Officierscasino to remain the symbolic social center without major alterations to its WWII core.

2013-2016

Transitional period

After defence vacated the site by 2014, the casino stood empty but gained temporary cultural programming as "ANNA's Casino" for events, conferences and concerts. This interim use tested how the building could serve civilian audiences and underlined its potential as a heritage-based cultural venue.



Soesterberg in relation to neighbouring cities & towns

Scale 1:100.000

motorway
national road

site
village of interest
neighbourging large cities/towns

Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

Soesterberg - traffic

Scale 1:10.000

highway
national road
50 km/h
30 km/h
15 km/h
bike lane

Soesterberg - bus stops

Scale 1:10.000

Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

Soesterberg - functionality

Scale 1:10.000

Note: Despite their residential designation, these areas contain minor commercial and healthcare functions (such as local clinics and small enterprises), indicating a mixed-use character.

- residential
- recreation
- medical
- care services
- education
- aviation research area
- cultural
- commercial
- waste management/recycling
- light industrial/mixed-commercial
- industrial
- religious
- cemetery

Master Plan

Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

Source: own work

Primary schools in Soesterberg

St Carolusschool

Type: Mainstream

Denomination: Catholic

Number of students: approx. 175

Basisschool de Postiljon

Type: Mainstream

Denomination: Protestant

Number of students: approx. 211

Kindcentrum De Startbaan

Type: Mainstream

Denomination: public

Number of students: approx. 175

Day care center and after-school care

Bink Kinderopvang Melkweg

Day care

Bink Buitenschoolse opvang Vliegdorp

After-school care

Bink Buitenschoolse opvang Vliegwereld
Bink Peuterspeelzaal Helikopter

Day care and after-school care

Source: own work

Cold War Greenery Pattern

The **Cold War greenery pattern** refers to the landscape structure developed around military and governmental sites between **1945–1990**.

Vegetation was not decorative but **strategic**—used to conceal, protect, and control environmental conditions around buildings.

This landscape combined **defensive, camouflaged, and functional ecological** logics.

Historical Context

Across Western Europe—especially in the Netherlands and Germany—military complexes were often built within forests or dunes.

Vegetation served three key purposes:

1. **Camouflage –** Forest belts masked buildings and infrastructure from aerial surveillance.
2. **Buffer** – Dense planting reduced noise, dust, and visibility from nearby towns.
3. **Climate control** – Trees moderated wind, temperature, and radiation around large concrete structures.

Spatial Characteristics

Typical Cold War greenery followed a clear structural logic:

1, Green belt – Grey core: Enclosed forest edges surrounding a central open zone.

2, Mixed vegetation: Coniferous-deciduous species (Scots pine, oak, beech) for year-round cover.

3, Controlled visibility: Curved paths, broken sightlines, and hidden perimeters.

4, Self-contained ecology: Limited disturbance created small but rich ecosystems.

Application to Officierscasino, Soesterberg

The **Officierscasino** exemplifies this model.

1, The building complex is almost completely **wrapped by woodland**, with a single narrow entrance.

2, The **central lawn** acts as an open core for gathering and view control.

3, Species such as **oak, beech, and Scots pine** provide local adaptation and visual camouflage.

4, Decades of isolation allowed the woodland to mature into a **stable ecological enclave**, now valuable for biodiversity and microclimate regulation.

Contemporary Relevance

Today, this Cold War greenery can shift from **defensive camouflage** to **ecological resilience.**

Advice:

1, Retain the **forest belts** as biodiversity corridors;

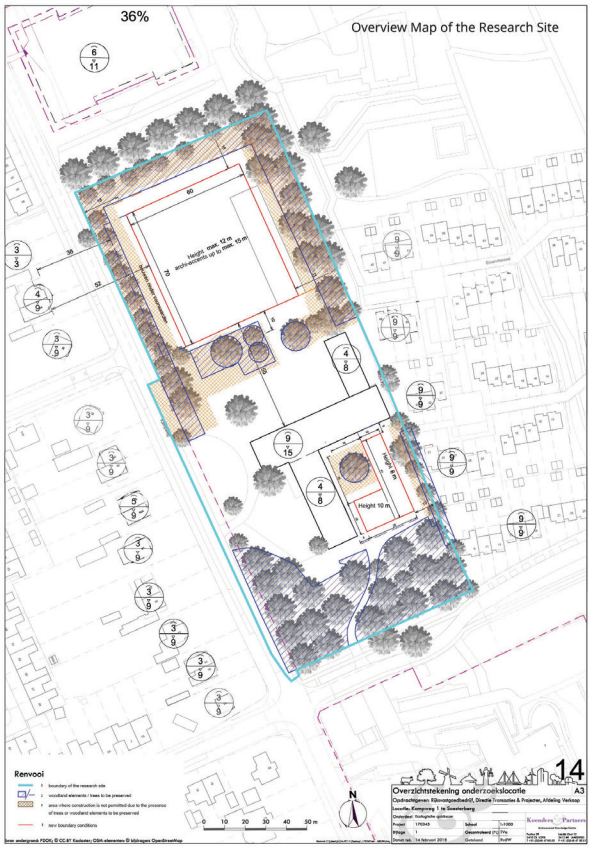
2, Introduce **pathways and interpretation** to make the hidden landscape legible;

3, Adapt its function from **protection and secrecy** to **carbon storage, noise buffering, and cultural memory**.

Summary

The Cold War greenery pattern is both an ecological infrastructure and a memory landscape.

Its transformation should maintain the dense spatial structure while reinterpreting its meaning—from secrecy to openness, from defense to ecology.



Tree Inventory Report
for the Redevelopment of the Officierscasino, Soesterberg

Commissioned by: Rijksvastgoedbedrijf – Directorate of Transactions & Projects, Department of Sales
Prepared by: Koenders & Partners Advisors and Process Managers
Date: 23 March 2018
Project number: 170345
Total area: approx. 2.5 hectares

Legal and Regulatory Framework

General
According to the tree policy of the Municipality of Soest:
In Soest, trees along avenues, in parks, wooded residential areas, and valuable or monumental trees are protected. Prospective monumental trees on private land are also protected. Felling or removing trees is regulated, and major pruning, transplanting, or thinning are subject to similar rules. Diseased or dead trees also fall under these provisions.

Protected trees fall into the following categories:
1. **Tree structures** – public or private (avenues, parks, park districts)
2. **Monumental trees** – public or private
3. **Valuable trees** – public
4. **Private trees** – with a trunk diameter ≥175 m^2 plot area
5. **Other public trees**

For trees in categories 1–3, no felling permit is granted unless there is a compelling reason, such as safety concerns. When felling is permitted (with license), replanting is required. All protected trees are listed on the *Bomenkaart van Soest* (Municipal Tree Map), while monumental and valuable trees are also entered into the official register.
For trees in categories 4–5, felling may be permitted if they are not designated as protected, possibly with replanting obligations.

2.2 Site-Specific Provisions
According to the *Bomenkaart van Soest*, the project area is classified as **Category 1 – Park and Tree Structure (parkwijk/bomenstructuren)**. Thus, all trees with a trunk diameter of **30 cm or more measured at 1.3 m height** require a felling permit. Selective thinning for forestry management purposes may be allowed, provided that replanting obligations are observed.

Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

Tree Inventory Report

Method

The study was carried out according to the *Netwerk Groene Bureaus* professional code. Fieldwork focused on identifying tree species, measuring trunk circumference at 1.30 m height, and assessing overall condition and vitality.

14–20 June 2017 Determination of tree species, measurement of trunk circumference, visual assessment of condition, and mapping of positions in RD coordinate system Specialist from KEN Infra, supervised by Drs. M.J. Perk

174 Trees+
Other trees (schematically represented):
18 × Acer pseudoplatanus (Sycamore maple) – ≥ 60 cm
20 × Quercus robur (Pedunculate oak) – ≥ 30 cm
42 × Fagus sylvatica (Beech) – 30–100 cm
17 × Betula pendula (Silver birch) – 75–110 cm

The Officierscasino site contains approximately **317 trees**, primarily oak (*Quercus robur*), Scots pine (*Pinus sylvestris*), and beech (*Fagus sylvatica*).

Most trees are in **good condition**, with several of **monumental** or **high ecological value**.
The recommendation is to **retain existing woodland structures**, integrate them into the redevelopment plan, and ensure compliance with the Dutch **Nature Protection Act (Wet Natuurbescherming)**.

Biodiversity

Nature Protection Law (Wet Natuurbescherming)

All native bird species (except exotics) and their nesting sites are protected.

No construction or felling should occur during the breeding season (**mid-March to mid-July**) unless verified by a qualified ecologist that no nesting is present.

General duty of care applies to all flora and fauna, requiring minimization of harm whenever reasonably possible.

Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

Photographic Documentation

Photo 1: The northern boundary of the site consists of a compact wooded strip providing visual enclosure and ecological continuity.

Photo 2: Another view of the same wooded belt in Vak A, showing its continuity and relation to the open grass field and auxiliary building in the background.

Photo 3: In the middle zone (Vak B), mature trees dominate the view, with a prominent linden (*Tilia*) forming the central visual element.

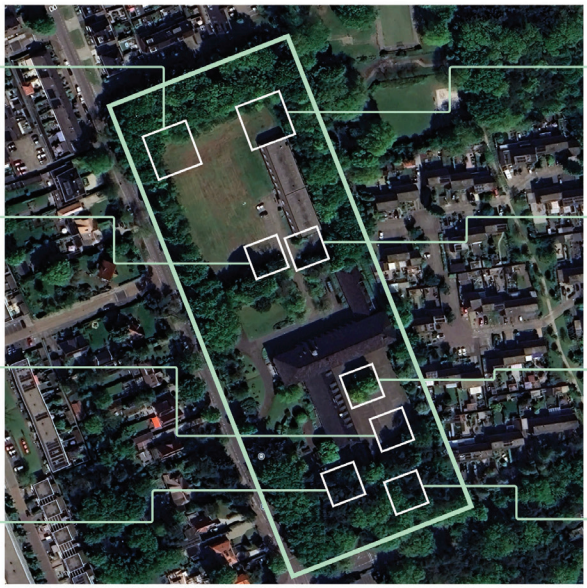
Photo 4: Within Vak B, several *Catalpa bignonioides* (trumpet trees) are present, contributing to the diversity of tree species.

Photo 5: The southern area (Vak D) features an open woodland edge. The left-hand side of the image still shows part of Vak C, the narrow rowan strip.

Photo 6: To the rear of the main building (Officierscasino) stands a **monumental horse chestnut (*Aesculus hippocastanum*)**, characterized by its large canopy and good overall condition.

Photo 7: The tree arrangement in Vak D is relatively open, with moderate canopy cover allowing good light penetration to the understory.

Photo 8: A footpath traverses Vak D, linking the southern part of the site with the main building. It passes through a naturally shaded zone lined with mature vegetation.



Integration of Tree Structures

Vak A:
Preserve the forested belt. During redevelopment, sufficient space must be reserved around crowns and root zones. If surface paving is necessary, appropriate root protection measures are required.

Vak B:
Retain the mature tree structure and incorporate into new design.

Vak C:
Maintain the narrow rowan belt for its ecological and visual value.

Vak D:
Maintain open woodland character; prune dead branches and avoid soil compaction.

Monumental horse chestnut: must be fully retained and protected during works.

1941–1945: Wehrmachtsheim Construction

Keywords:

Nazi occupation planning, ceremonial architecture, need for clear order and visibility.

Masterplan:

A symmetrical, axial layout was established with large open lawns and clearly defined building fronts. Spaces were designed to be visually open and easily controlled.

Landscape:

Planting was sparse and formal, consisting mainly of **oaks** and **Scots pines** near entrance areas. Surroundings remained largely open, with little undergrowth or edge planting.

Reason for pattern:

The landscape served symbolic and representational functions, prioritising clarity and authority over concealment or ecological concerns.

Site in 1941

Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

1950s–1970s — Cold War Military Use

Keywords:

Increased security demands, need for camouflage, noise buffering, and controlled access.

Masterplan:

The site shifted toward a **zoned military campus**. Additional buildings and internal routes were introduced, while a single controlled entrance was maintained for security.

Landscape:

Dense belts of **oak, beech, birch, and maple** were planted around the perimeter, forming the characteristic **"green belt – grey core"** structure. Vegetation served as screening and microclimate regulation.

Reason for pattern:

Cold War strategies relied on vegetation for visual concealment, acoustic buffering, and spatial containment, transforming the site into an enclosed military enclave.

Site in 1970

1980s–2000s — Post-Cold War Transition

Keywords:

Declining military activity, removal of temporary buildings, reduced maintenance.

Masterplan:

Temporary structures were replaced by a new barracks building, softening contrasts between open and enclosed areas. The **single-tree planting near the sports field was cleared**, leaving edges more open.

Landscape:

Undergrowth expanded, especially toward wooded edges. Rhododendrons disappeared from the transverse wing area but remained abundant at the forest transition and entrance park. A **topiary beech hedge** was added as greenery became increasingly overgrown.

Reason for pattern:

Reduced maintenance and partial abandonment shifted the site from controlled Cold War planting to a **semi-natural, overgrown landscape**.

Site in 2014

Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

2010s–Present — Redevelopment and Ecological Integration

Keywords:

Adaptive reuse, ecological planning policies, recognition of Cold War landscape heritage.

Masterplan:

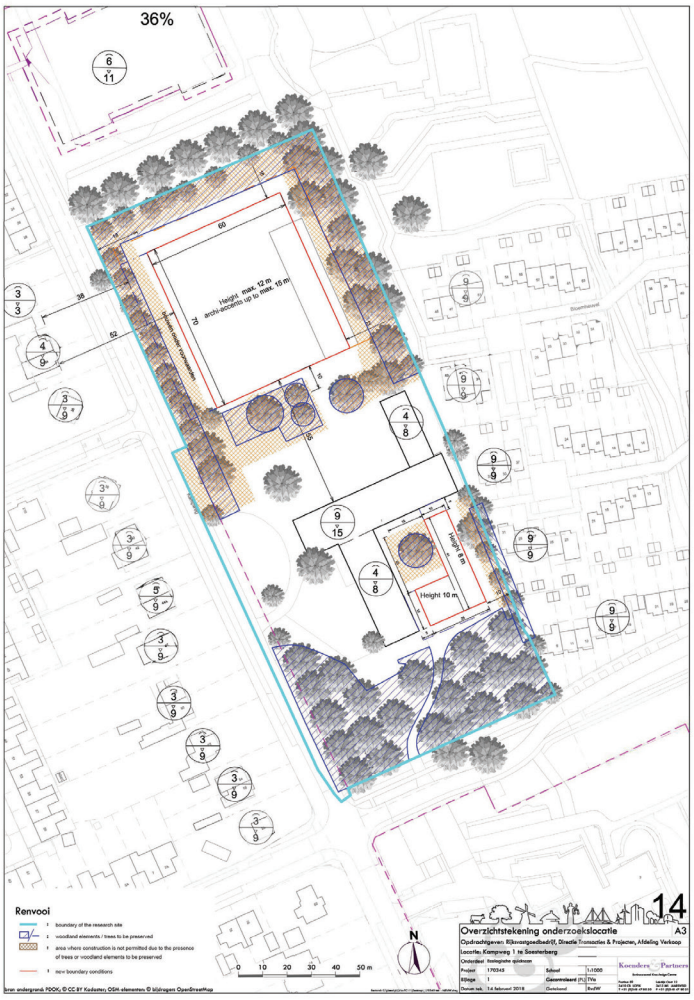
New residential and care buildings were introduced while retaining the central open lawn and the historical spatial framework. Improved pedestrian links were added between Kampweg and the rear park.

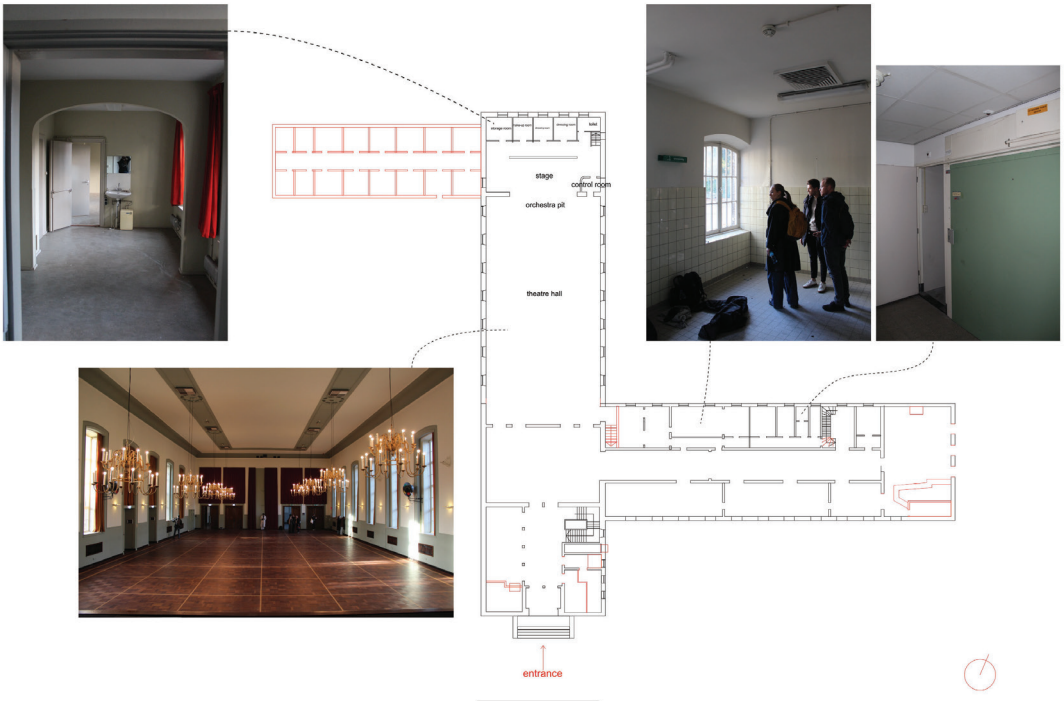
Landscape:

Most of the **317 existing trees** were preserved, with limited removals. Permeable surfaces, root-protection zones, and **wadi infiltration areas** were integrated. Woodland belts were maintained as biodiversity corridors.

Reason for pattern:

The former defensive vegetation is now reframed as ecological infrastructure, supporting **biodiversity, climate resilience, and heritage identity** in the redevelopment.





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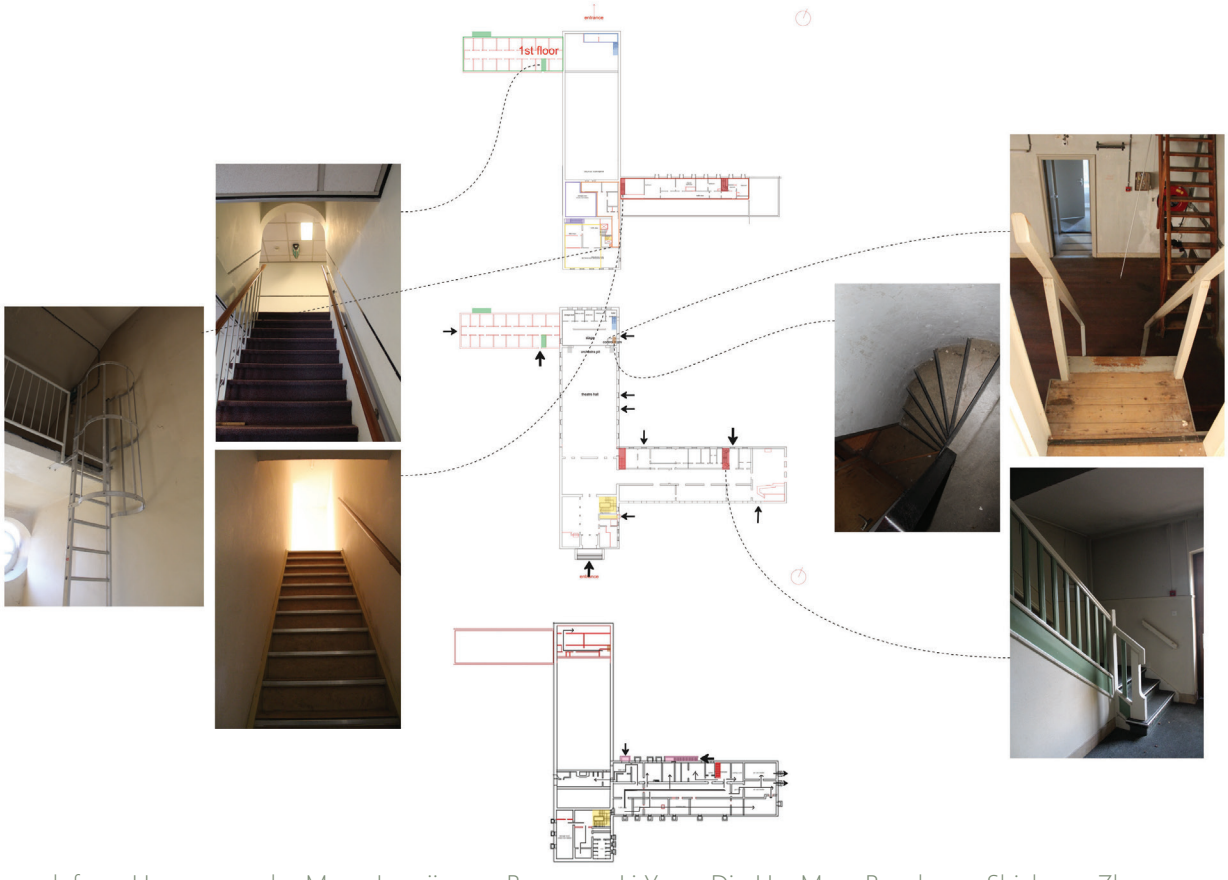

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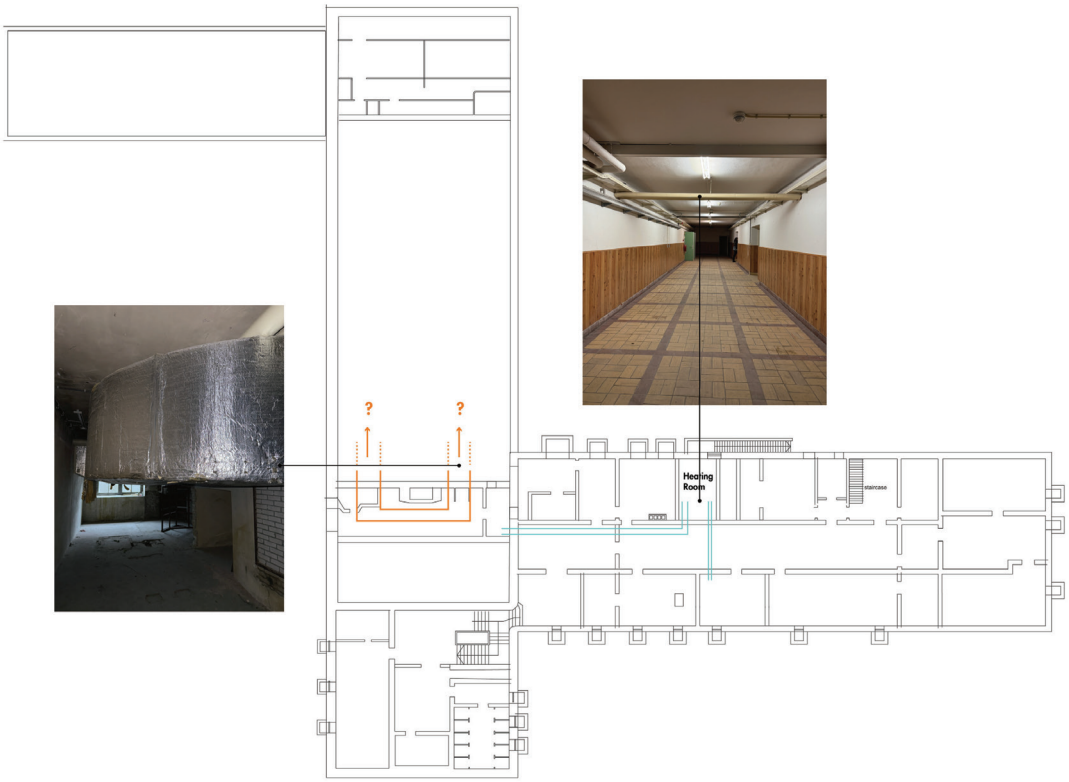

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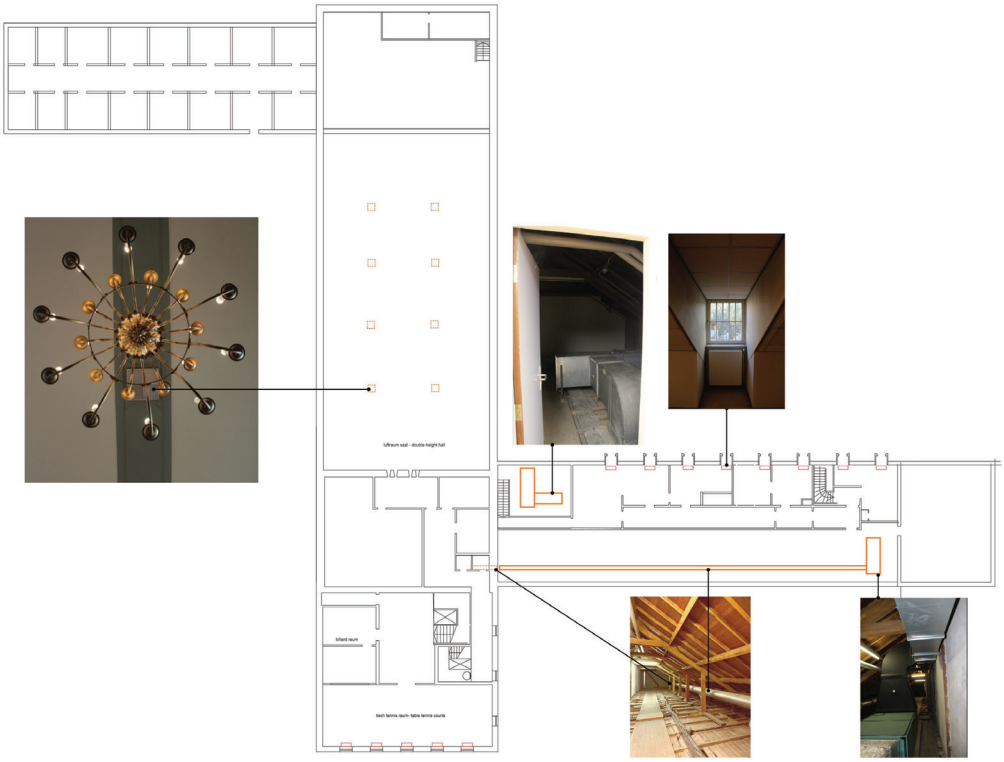
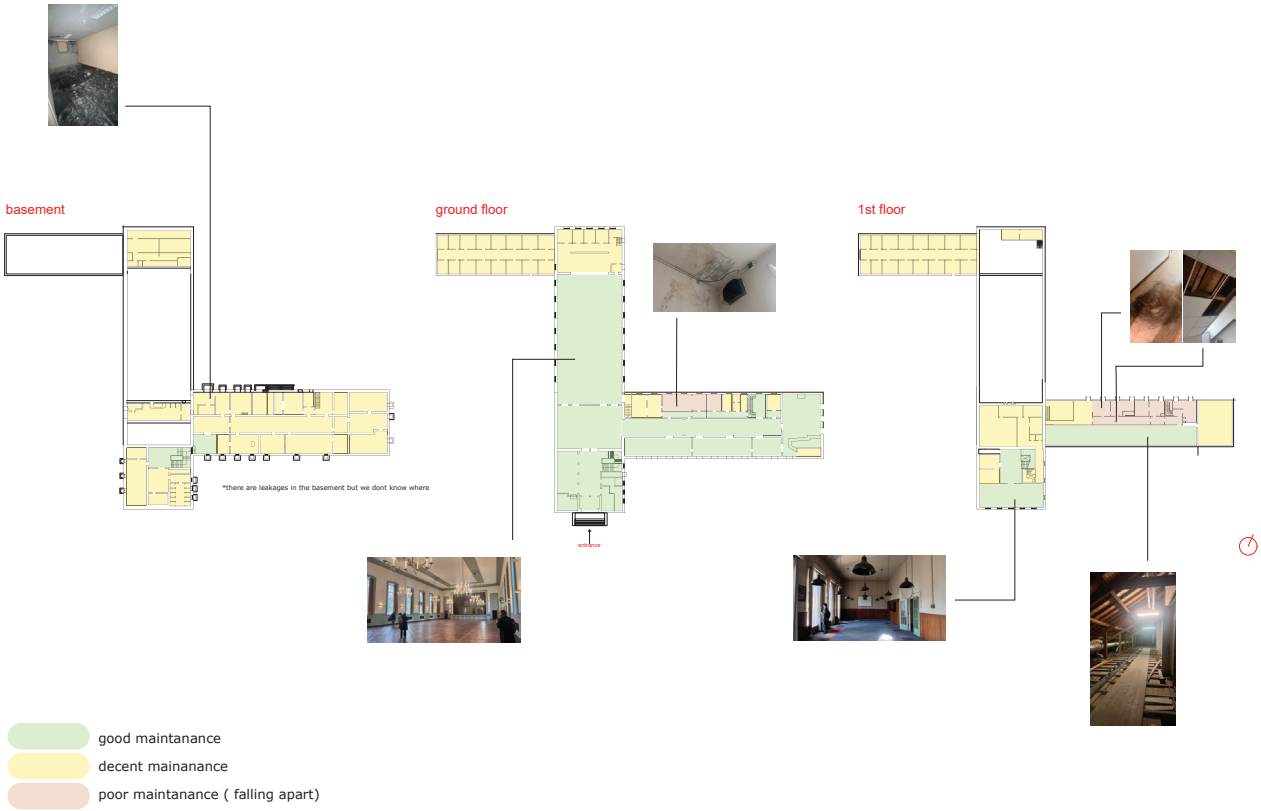


Map of Building Maintenance Status



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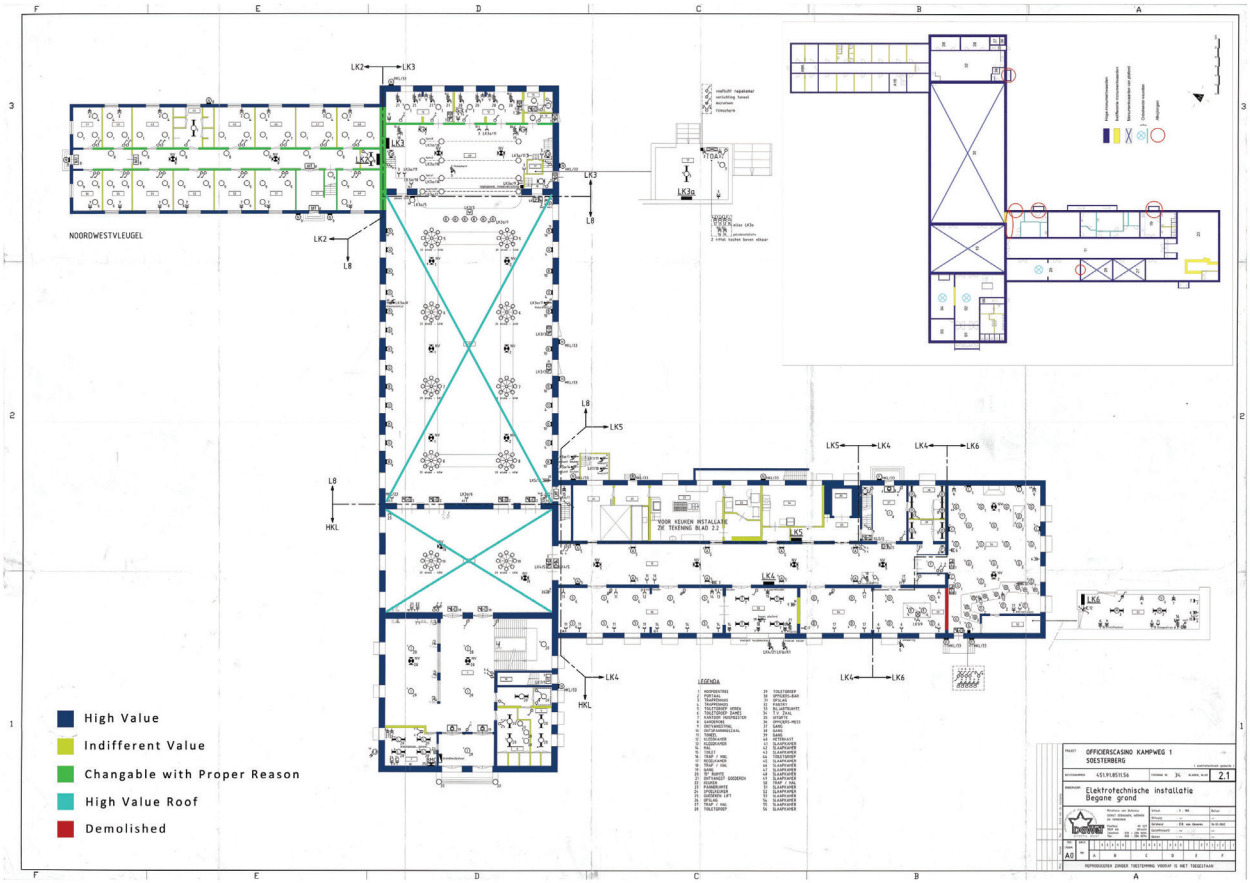

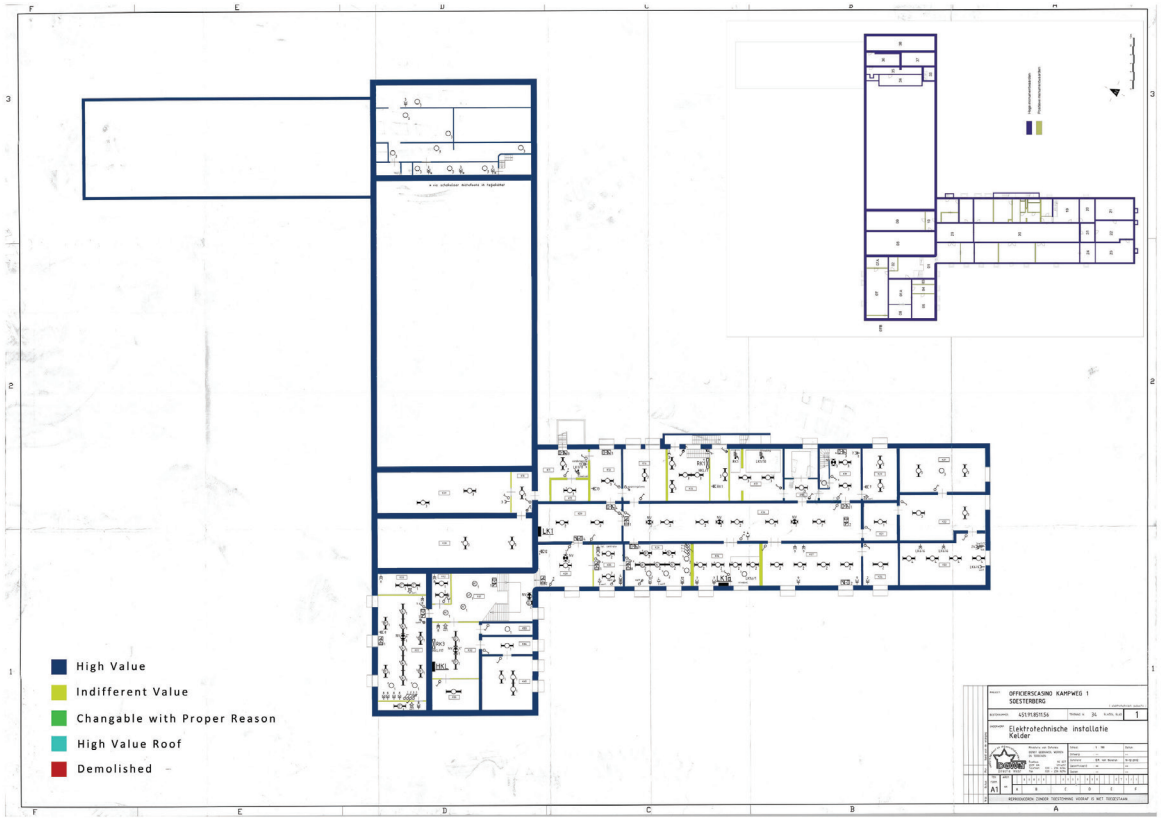

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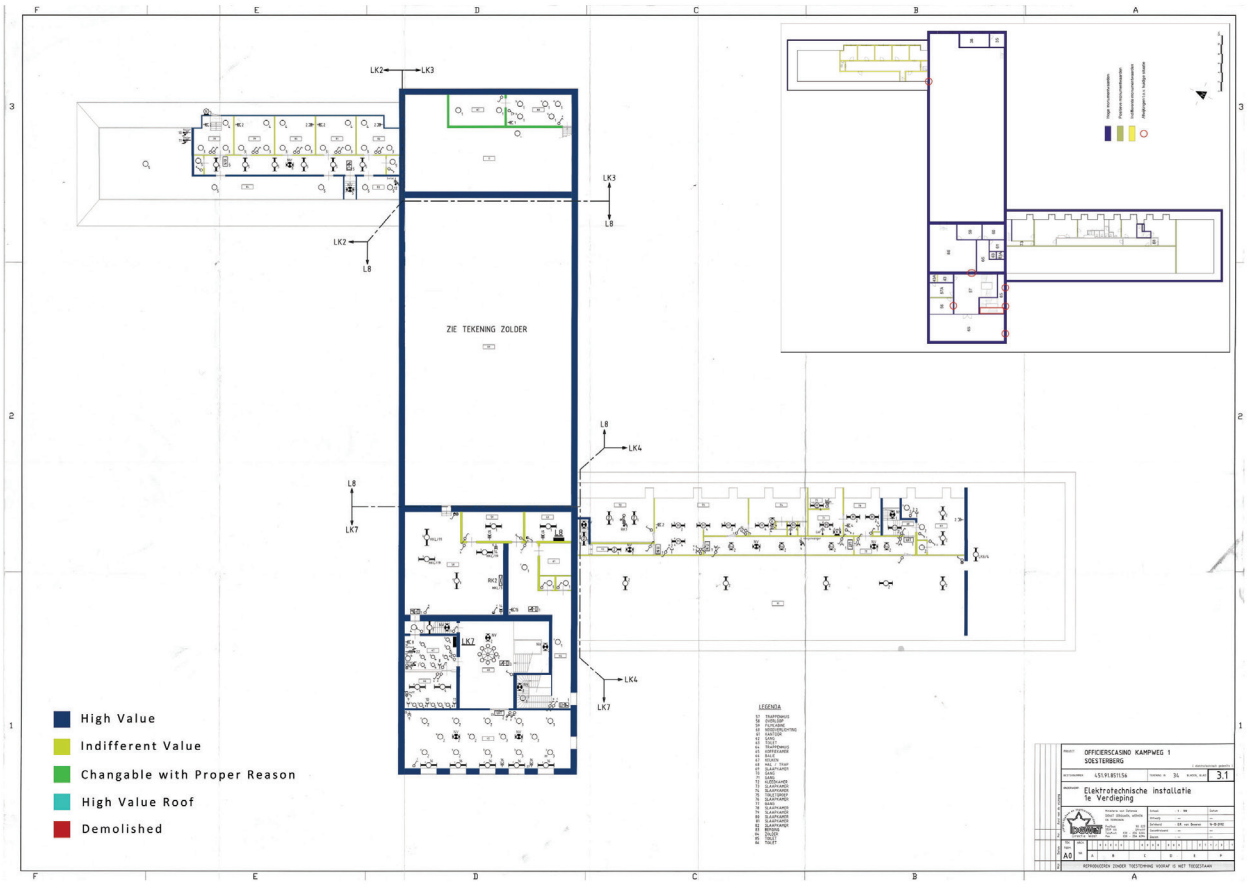
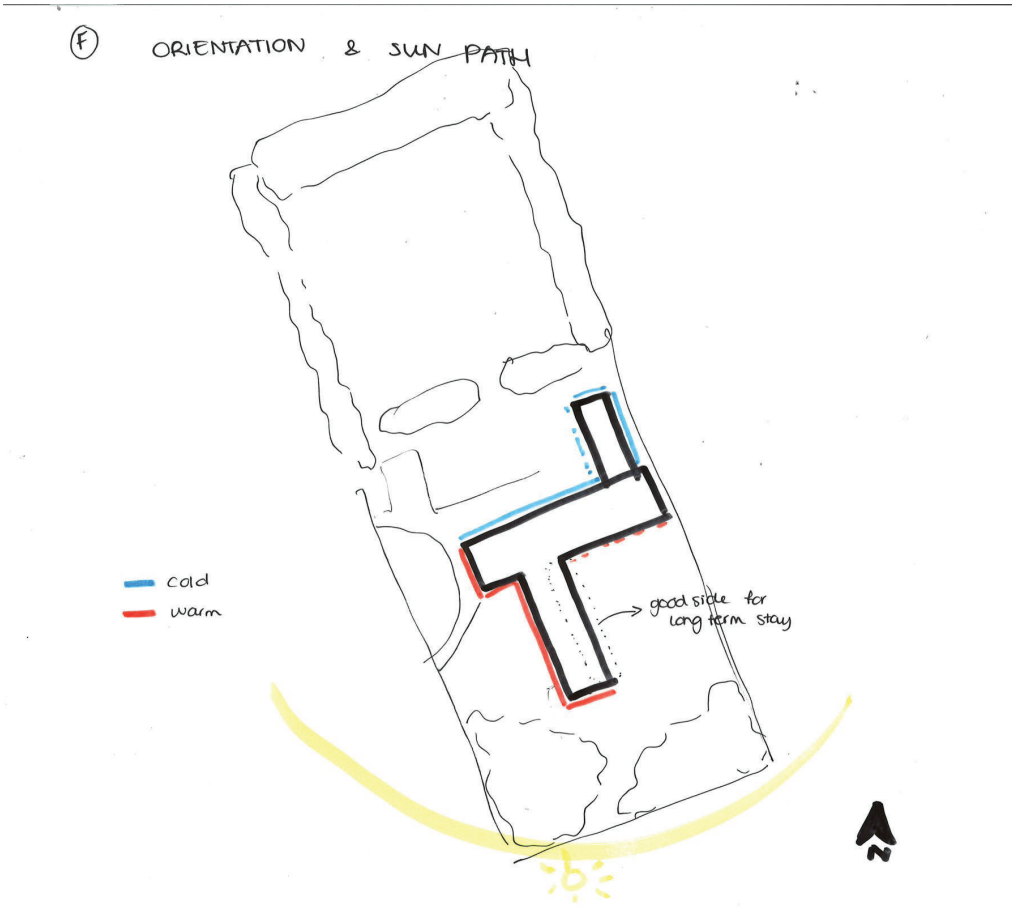


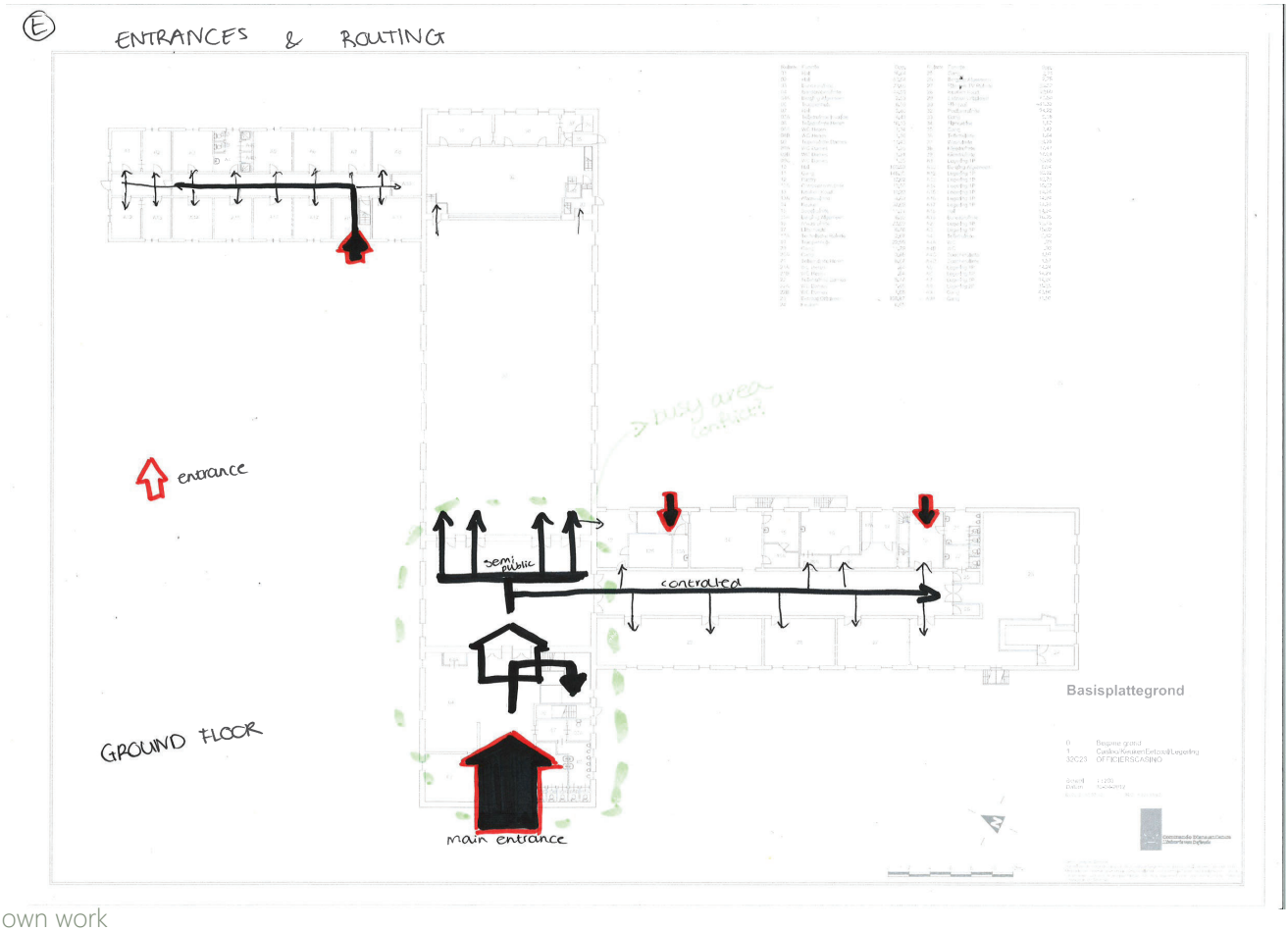
Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

Half Public Community

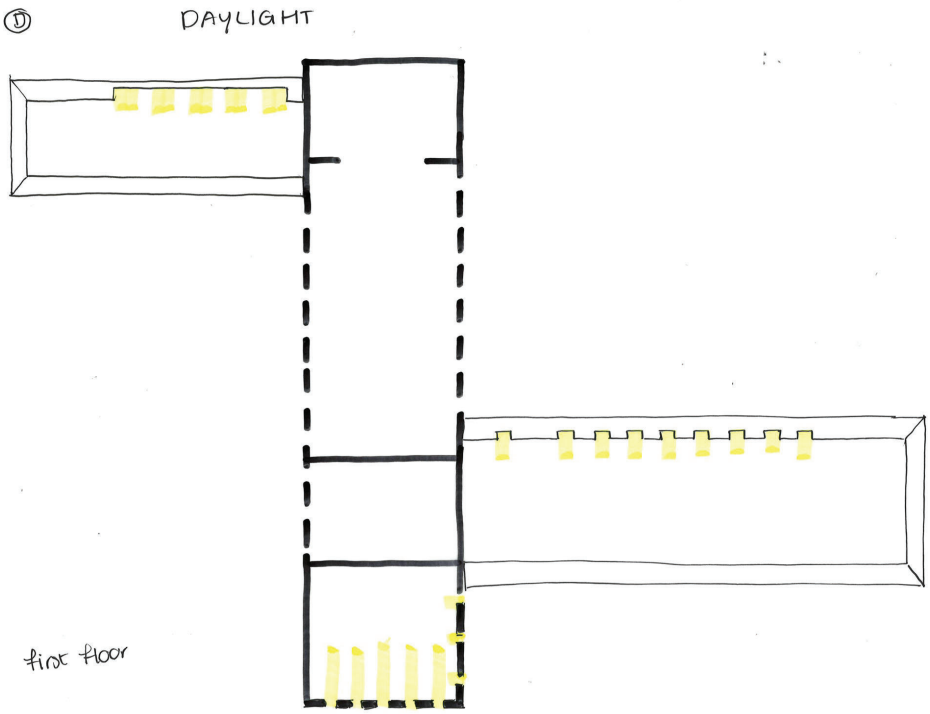
HBV Reunion

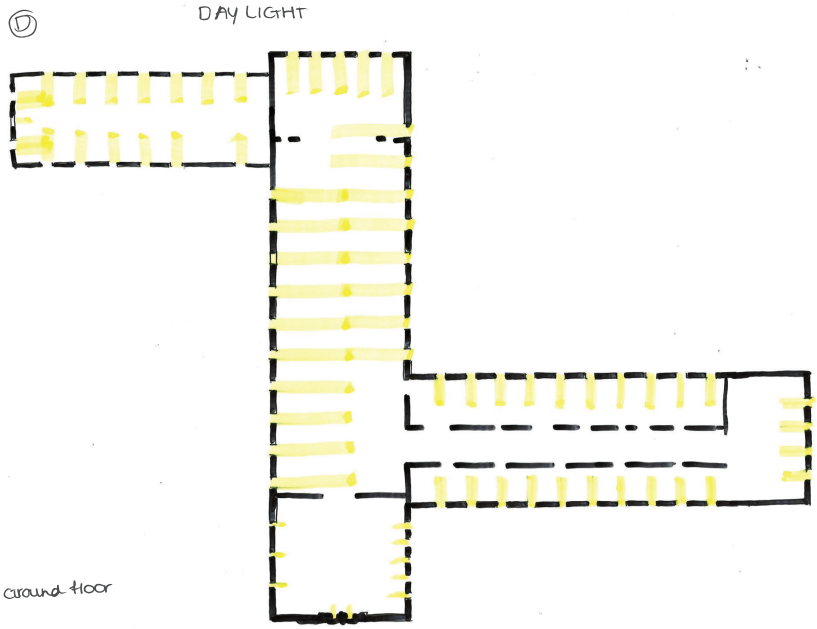
Source: Groupwork from Harma van der Meer, Jasmijn van Breemen, Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang

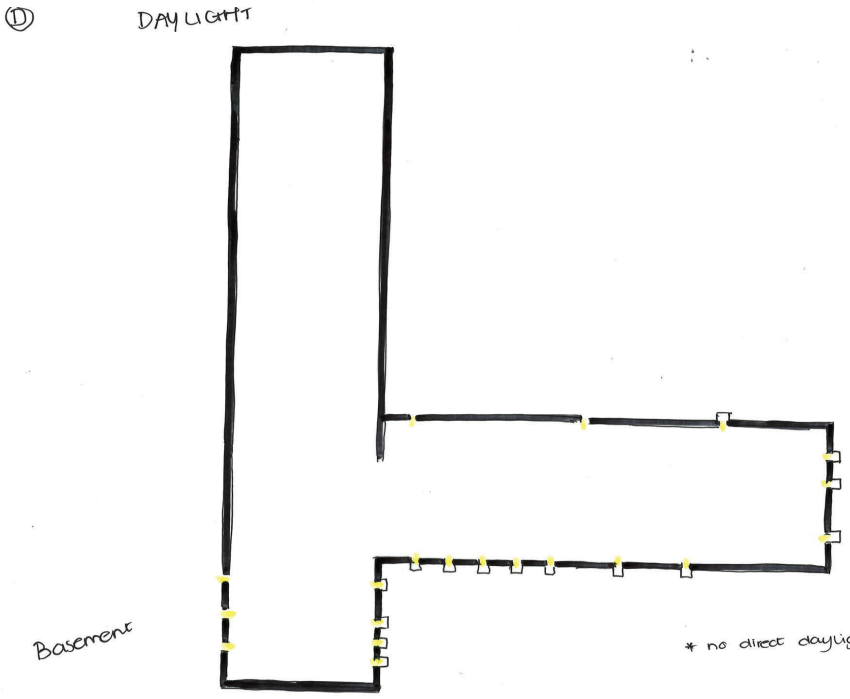




Source: own work







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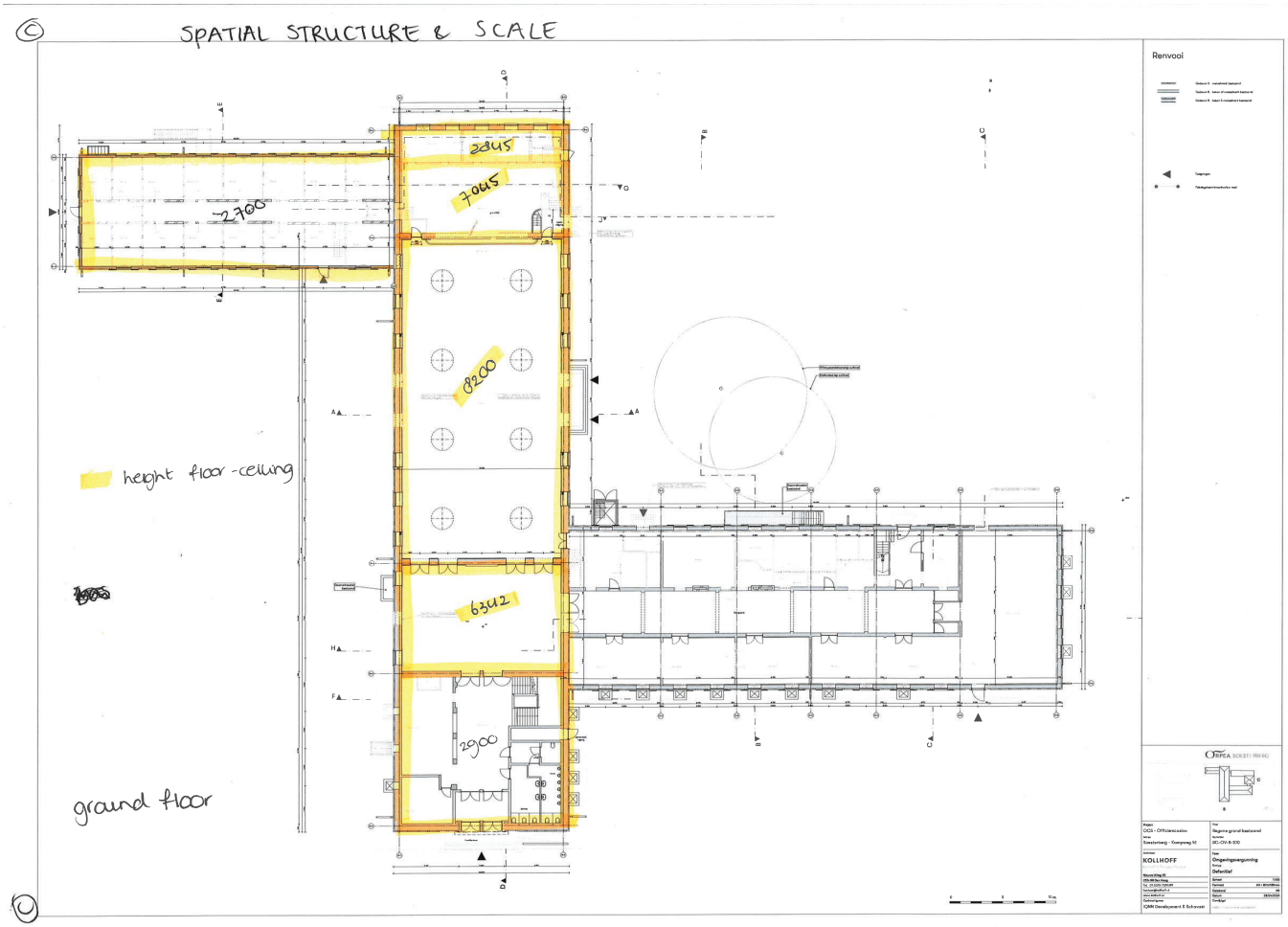

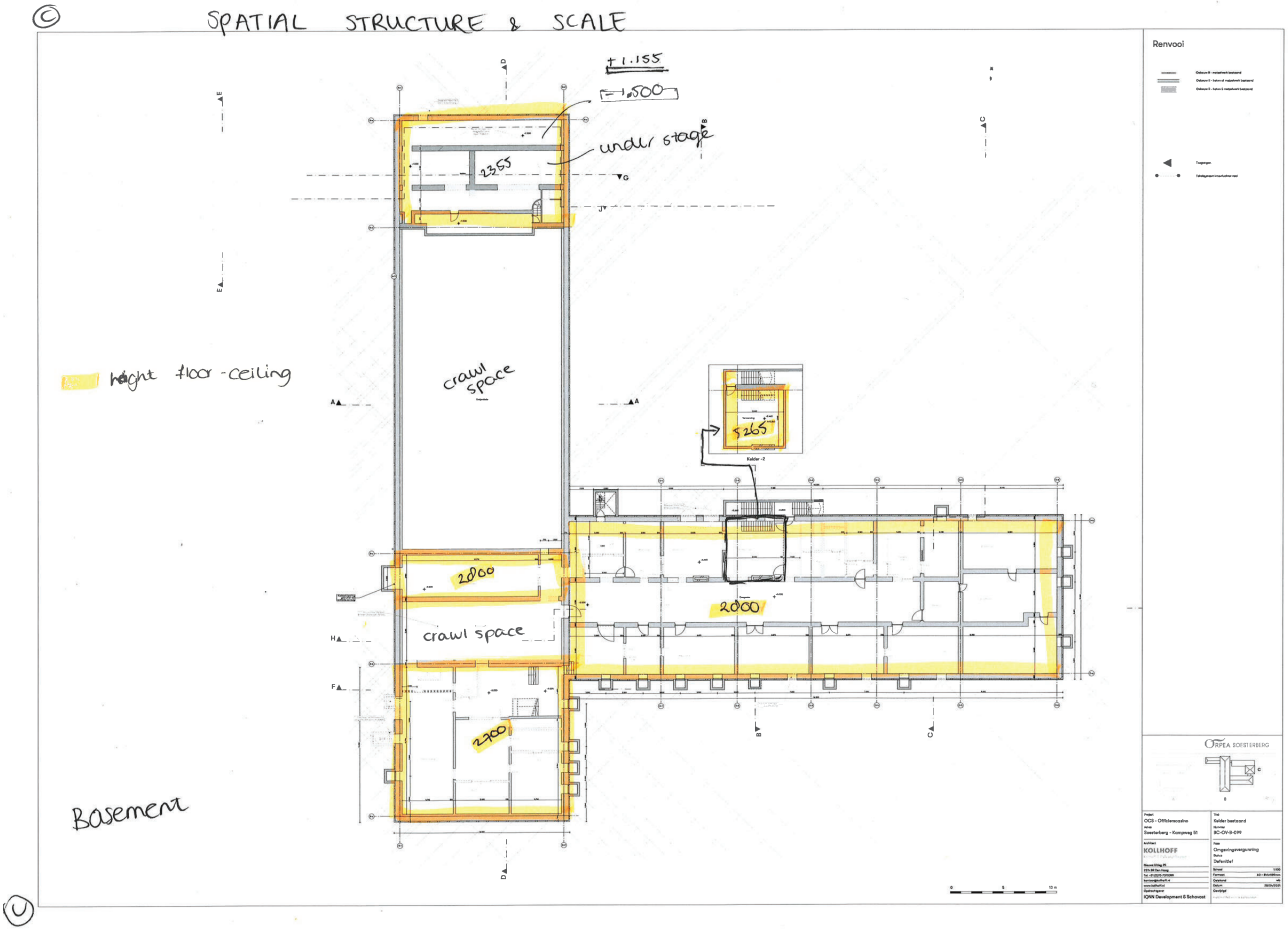

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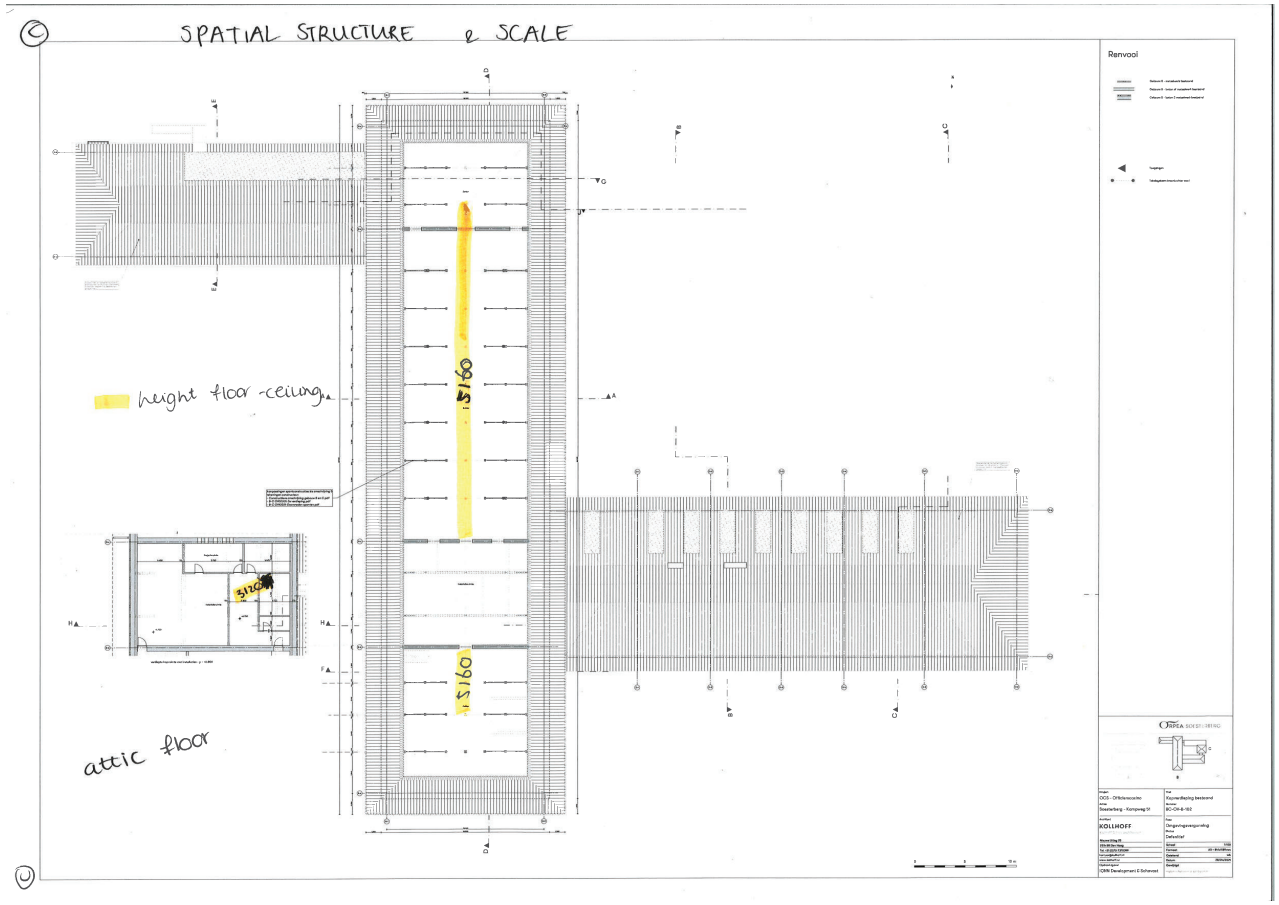

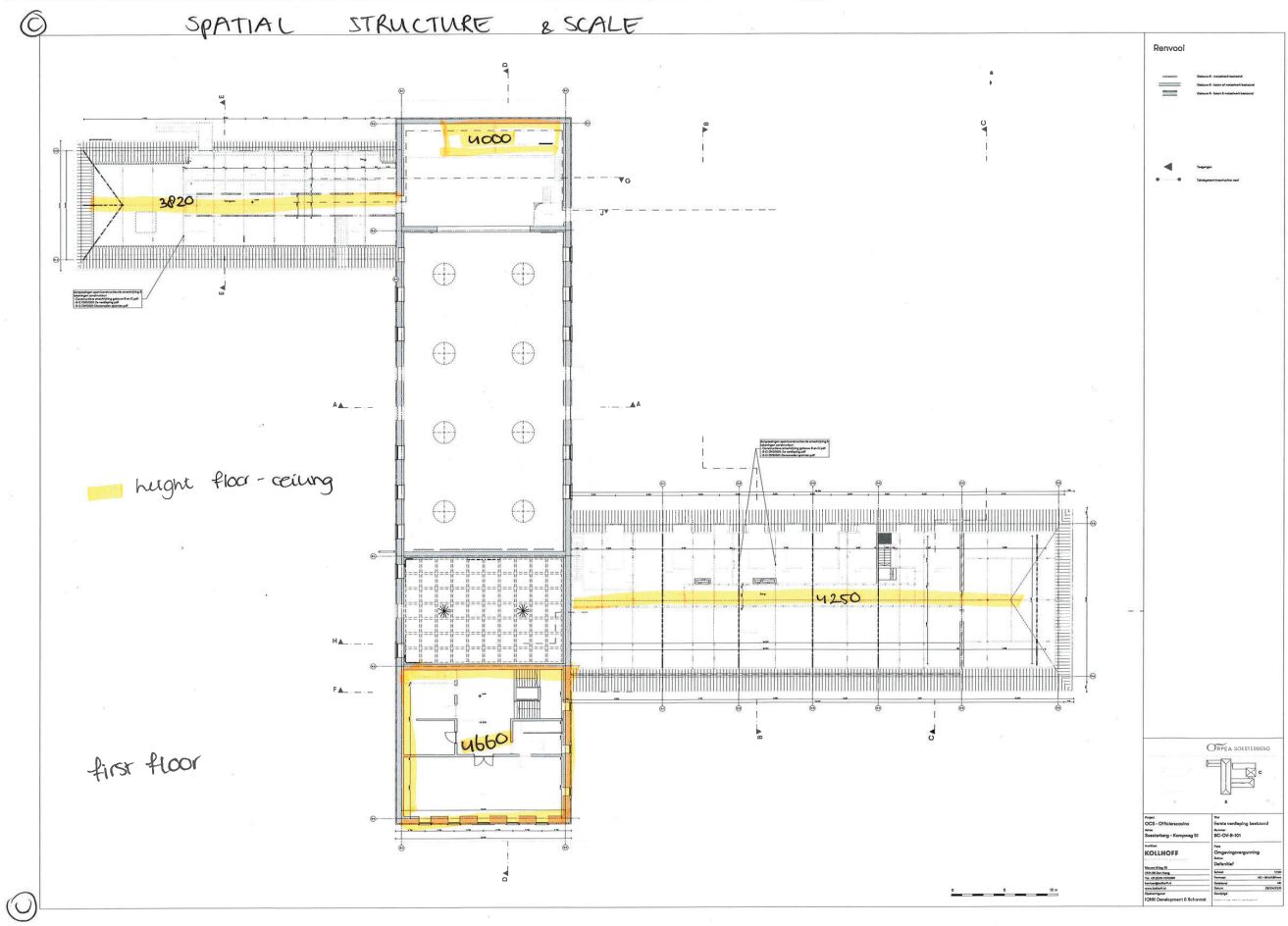

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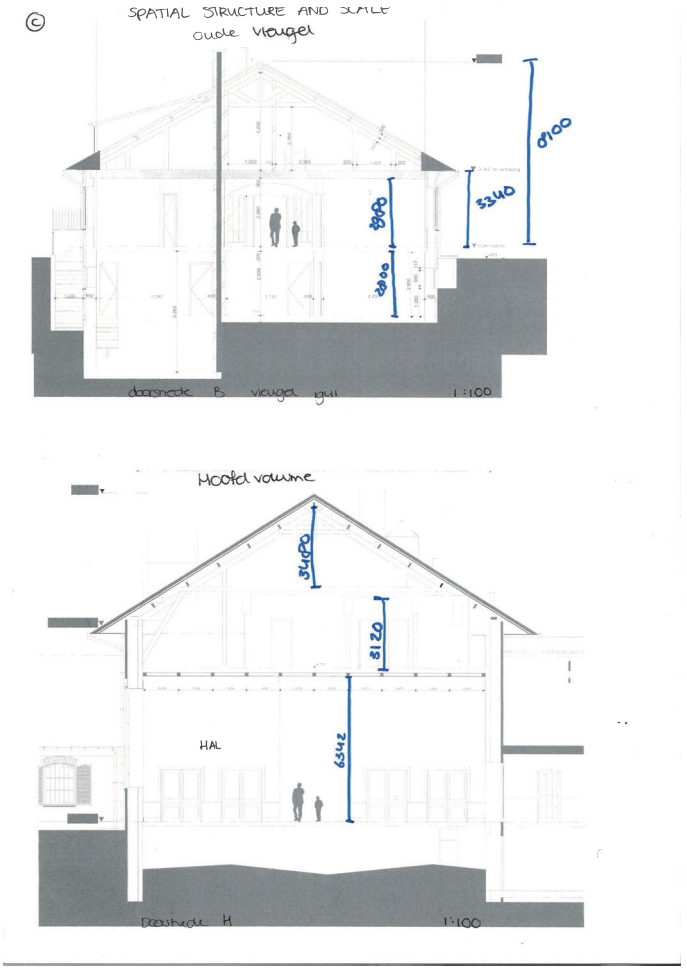

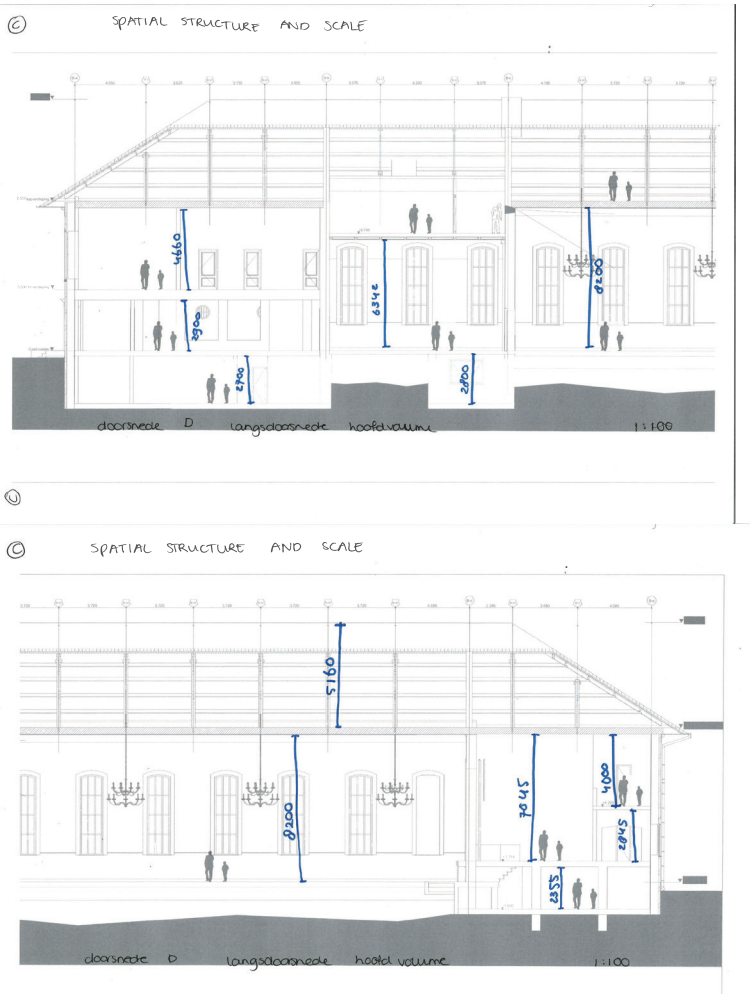

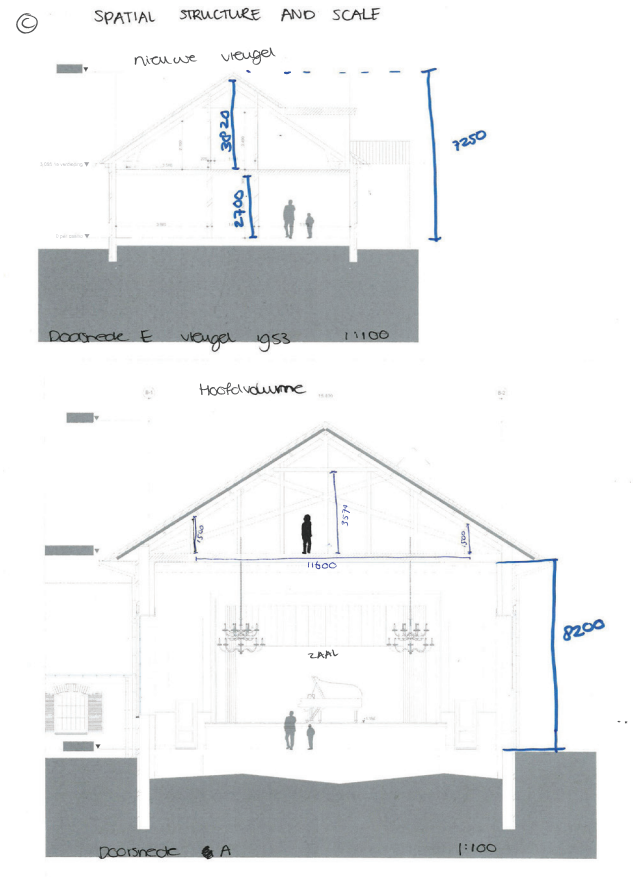

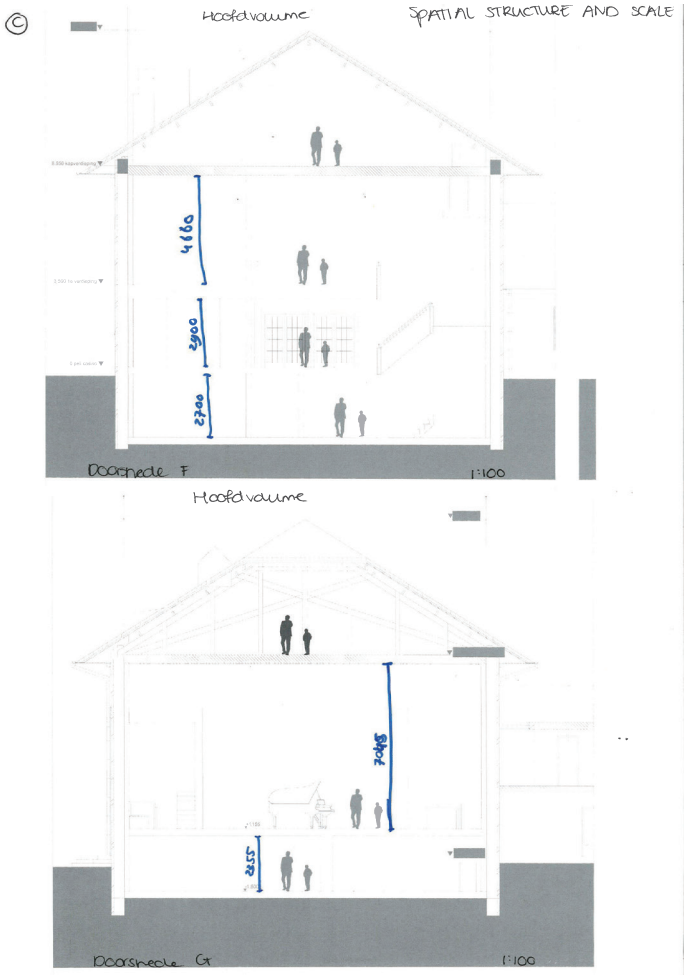

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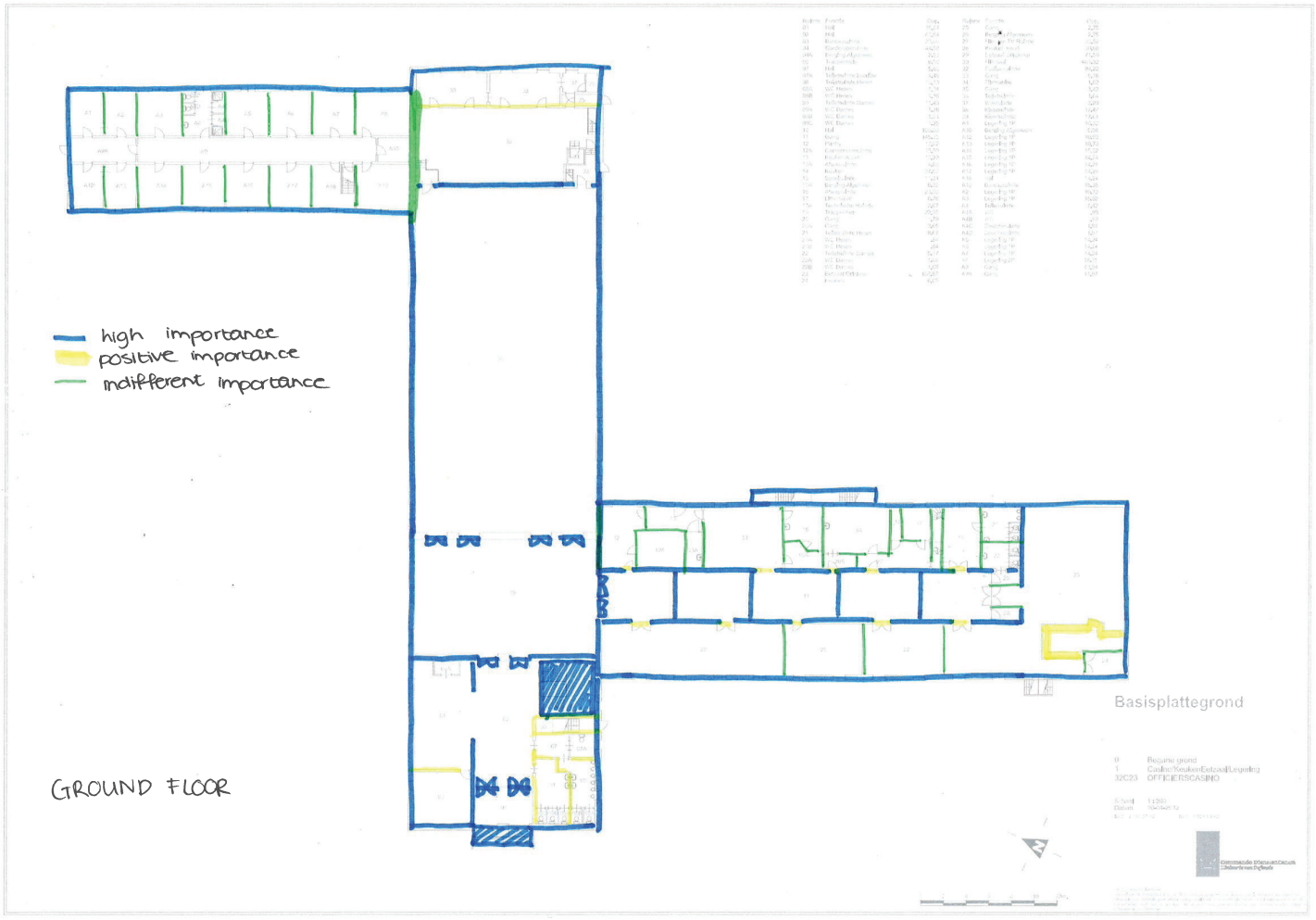
Ⓑ HERITAGE VALUE MAP



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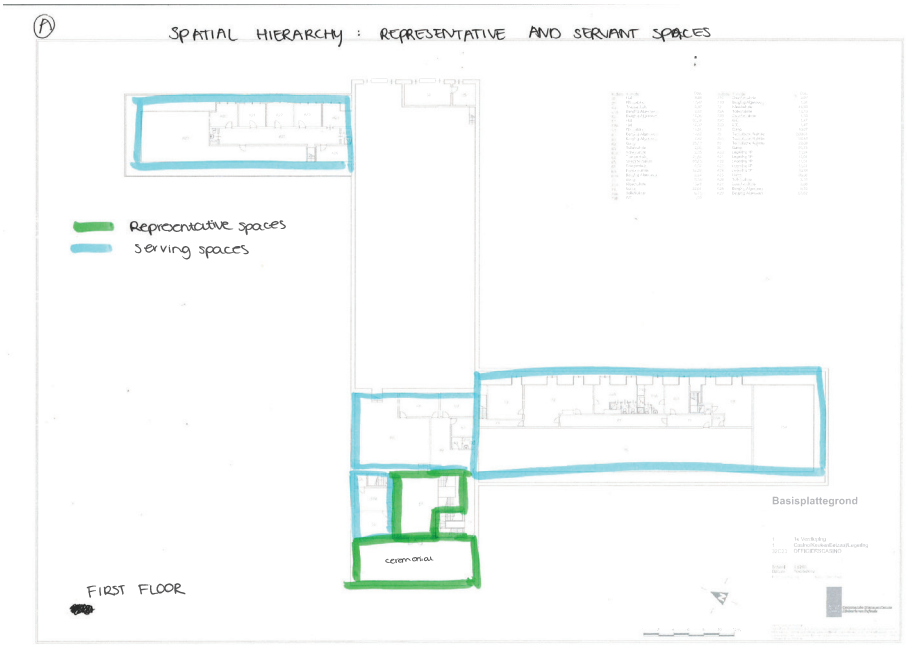

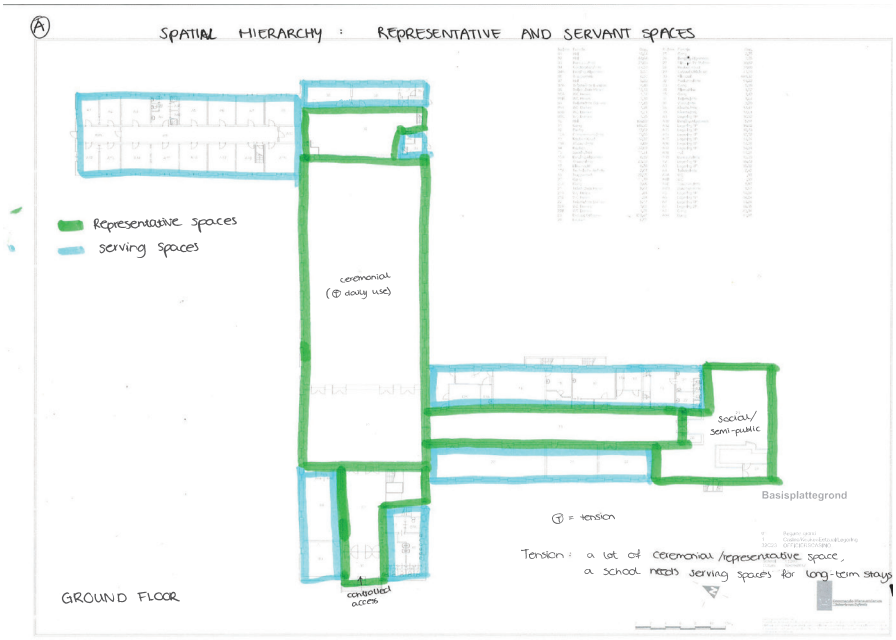

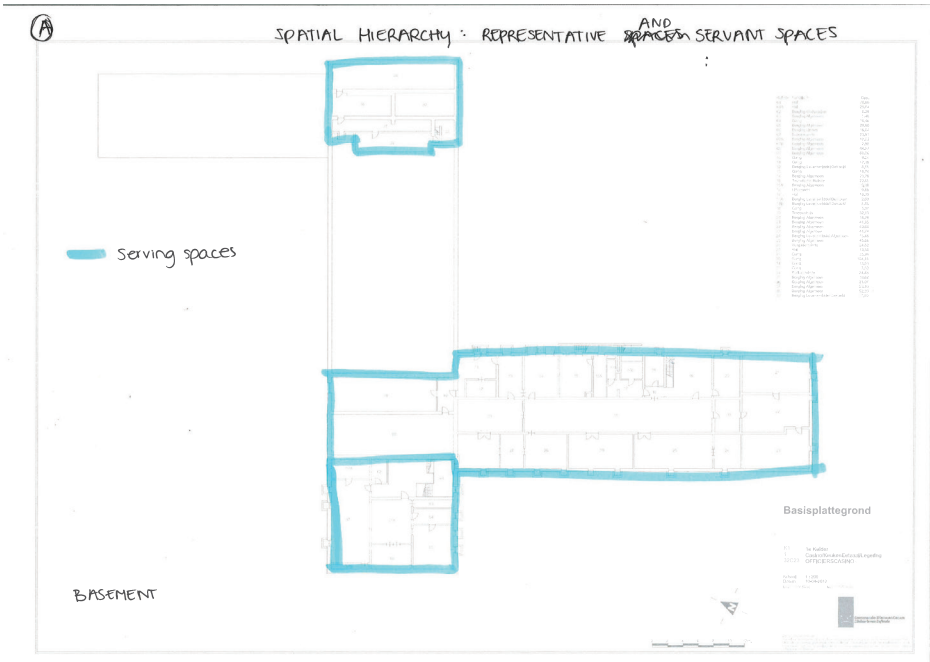

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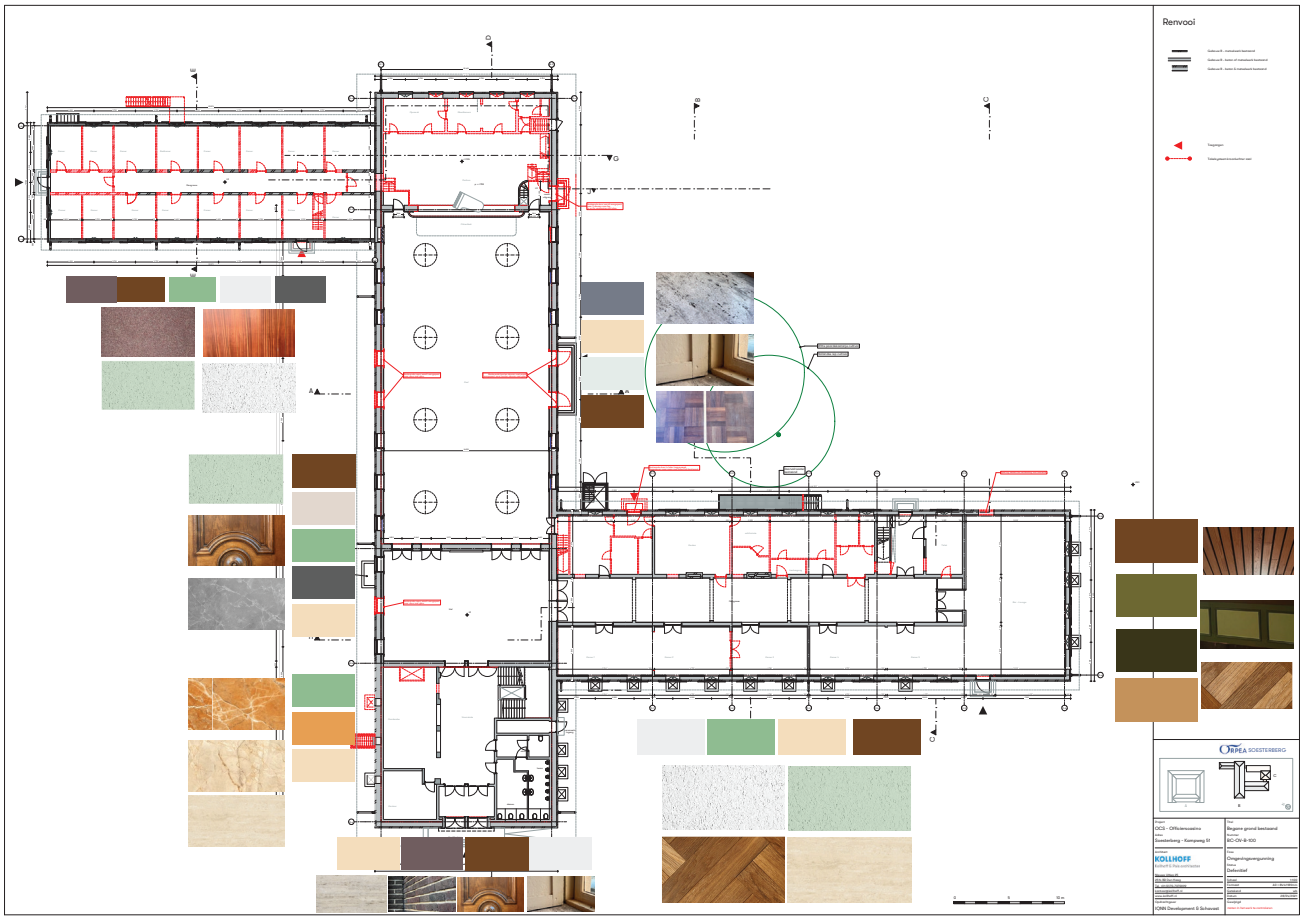
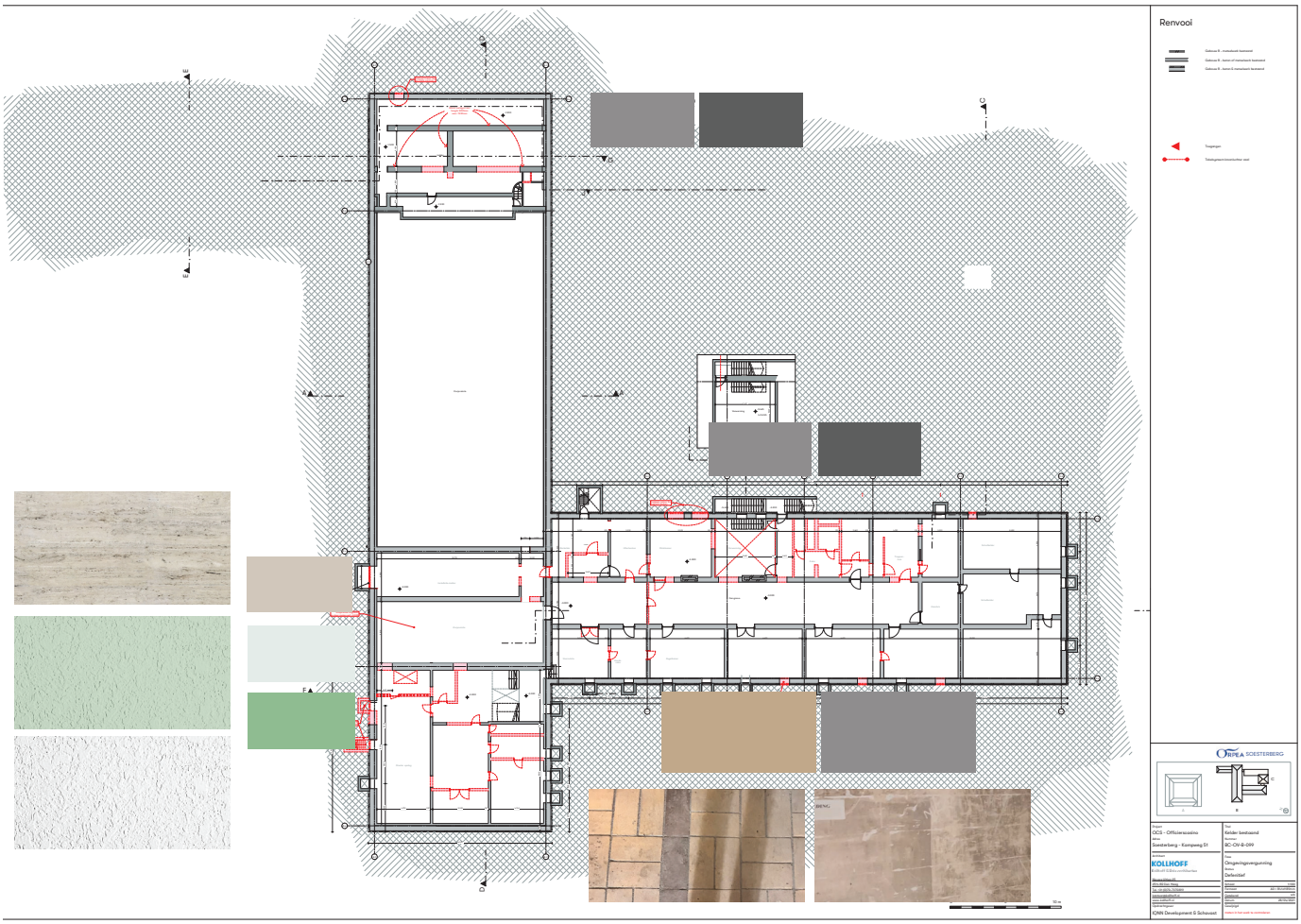
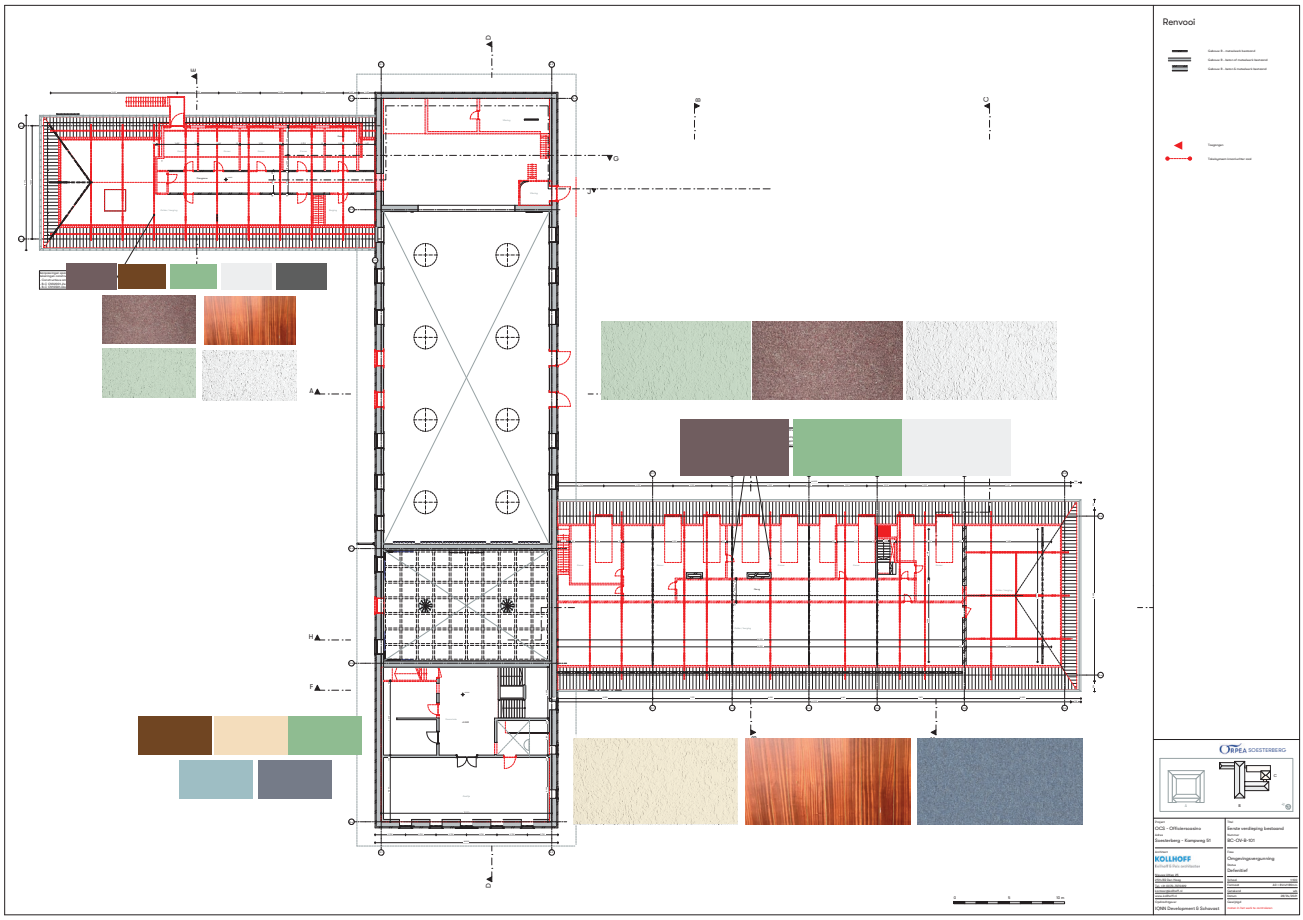




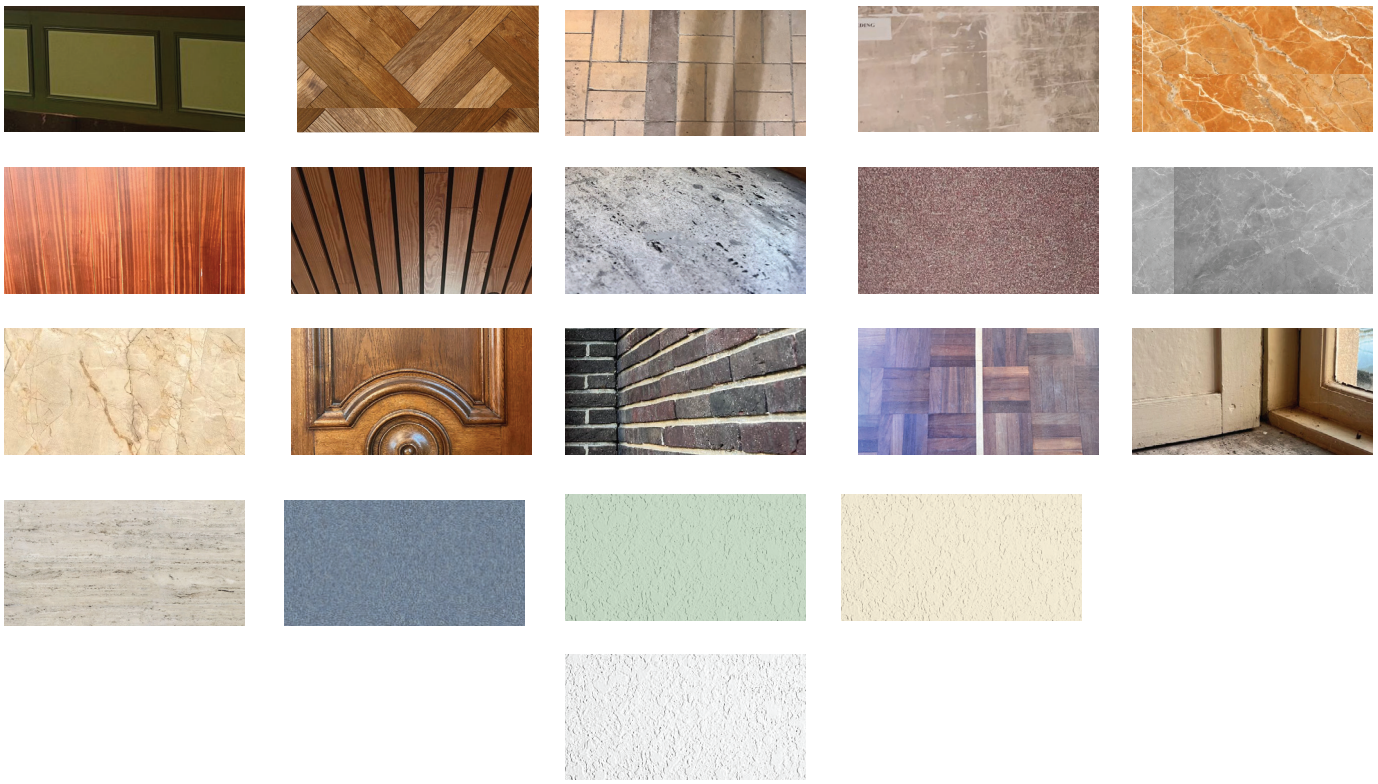
Source: Groupwork from Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang, Aleid Niessing and Lieke Gudde



Source: Groupwork from Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang, Aleid Niessing and Lieke Gudde

COLORS

TEXTURES



Source: Groupwork from Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang, Aleid Niessing and Lieke Gudde

Material / element	Location	State according to report
Manganese brick facades	All facades main volume	Generally intact; some local damage to the plinth.
Natural stone skirting plates	Plinth main volume, rear facade	Damaged around anchors due to corrosion, pieces spalled off
Natural stone window frames	Front and side facade	Locally damaged, loss at anchors.
Bluestone landing at main entrance	Front facade	good and recognizable.
Concrete landing emergency door	Suction facade	Not explicit, functional
Romanesque tiled roof	Hood head volume	Original type, disturbed by later breakthroughs; gutters replaced.
Wooden frames / glass	Windows main volume	Some of the locks and hinges still date from the construction period; the yellow windows in the hall have been preserved.
Travertine floor vestibule	Vestibule	Cool and of high monument value.
Marble floor Empfangshalle	Empfangshalle	Perfect, precisely aligned; very high value.
Parquet floor theater hall	Great Hall	good condition
Wooden paneling	Hall, Empfangshalle, hall	Cool and iconic
Chandeliers (metal)	Empfangshalle, hall	Original, cool, classified as unique art.
Concrete basements, walls/ceilings	Under vestibule, hall, rear section	Cool, thick and constructively exceptional; high monumental value.
Sheet steel cellar doors	Various basement compartments	Present, essential for appreciation; not negatively labeled.

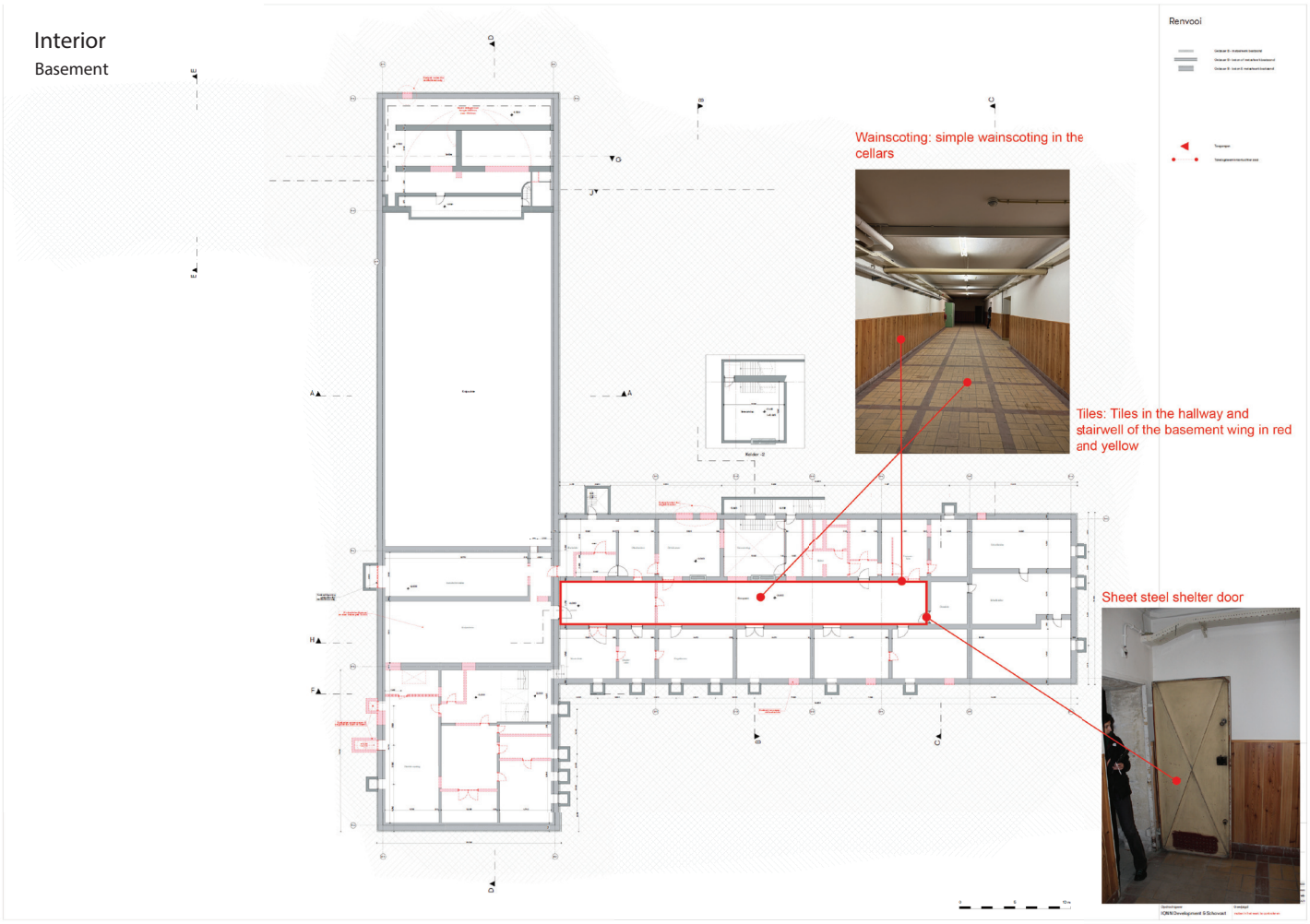
Original cross wing - 1941

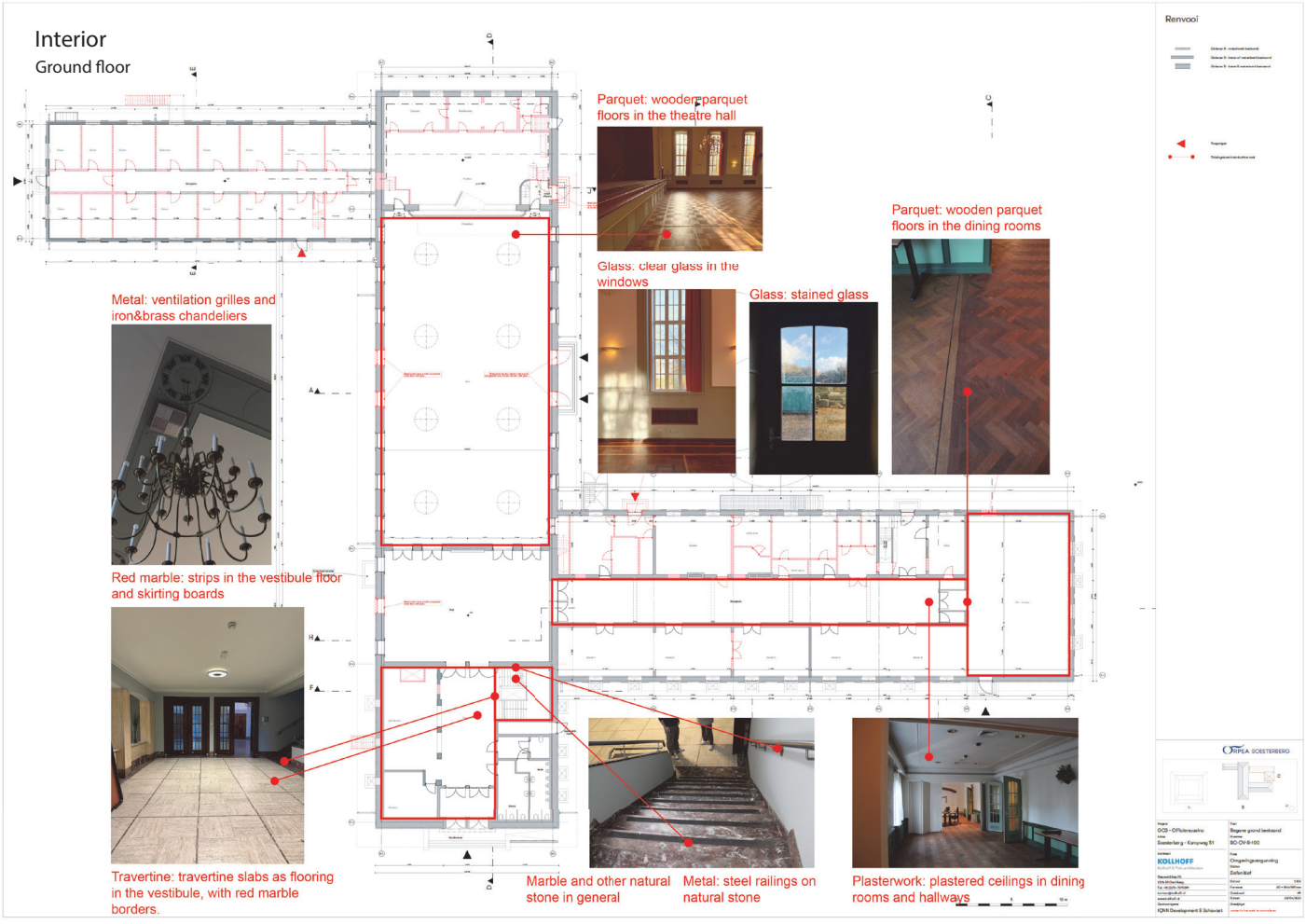
Material / element	Location	State according to report
Brick facades + plinth/molding	Front, rear and gable facade	Cool, main structure with high monument value.
Sill tiles with water groove	Under windows	Not explicit, but positively appreciated as an original detail.
Wooden shutters with blinds	Front and rear facade	Present; no damage noted.
Romanesque tiles + dormers	Hood cross wing	The roof shape and dormers are valuable as a whole; later roof openings are disturbing.
Parquet (herringbone / blocks)	Dining rooms	Present, probably post-war; condition good.
Stucco ceilings	Dining rooms	Present; partly hidden behind false coffered ceilings.
Wainscoting	Hallway and dining rooms	Cool, of high monument value.
Kitchens (modernized)	Kitchen strip	Original interior has disappeared; brick arches are still visible.
Wooden balustrade staircase 19	Stairwell cross wing	Original and preserved.
Red/yellow tiles	Basement hallway and stairs	Cool
Wooden floors in cellars (beer pub)	Under dining rooms	Present, with positive monument value.
Sheet steel shelter doors	Head cellar	Present, essential detail; no damage noted.

New wing 1953

Material / element	Location	State according to report
Brick facades + plinth/molding	Front, rear and gable facade	Cool, main structure with high monument value.
Sill tiles with water groove	Under windows	good condition & positively appreciated as an original detail.
Wooden shutters with blinds	Front and rear facade	Present; no damage noted.(I don't have pics of that)
Romanesque tiles + dormers	Hood cross wing	The roof shape and dormers are valuable as a whole; later roof openings are disturbing.
Stucco/sculpture reliefs birds of paradise	Dining room (29)	Cool, partly gold-plated in the 1980s; of high value.

Source: Groupwork from Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang, Aleid Niessing and Lieke Gudde

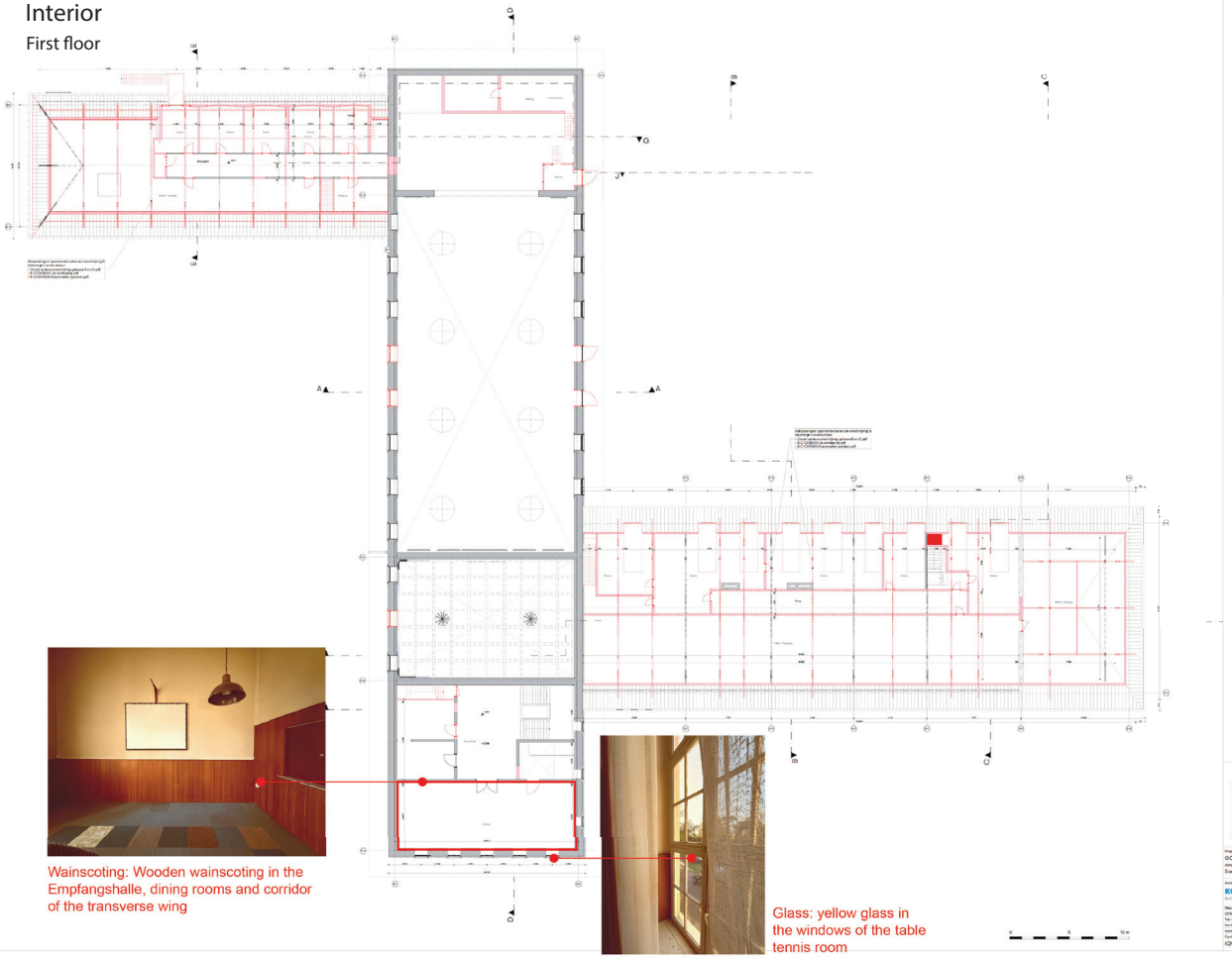




Source: Groupwork from Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang, Aleid Niessing and Lieke Gudde

Interior

First floor

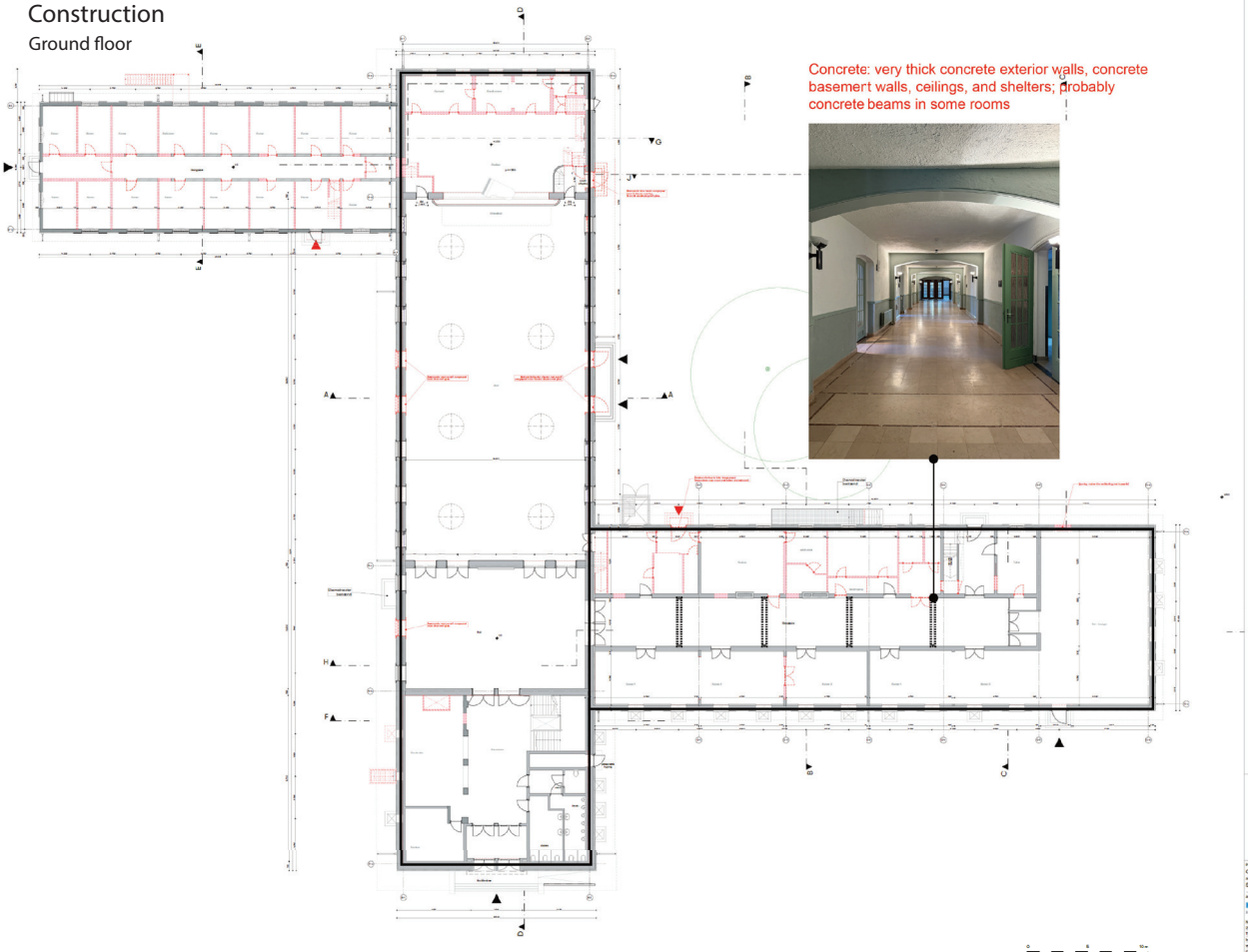


Wainscoting: Wooden wainscoting in the Empfangshalle, dining rooms and corridor of the transverse wing

Glass: yellow glass in the windows of the table tennis room

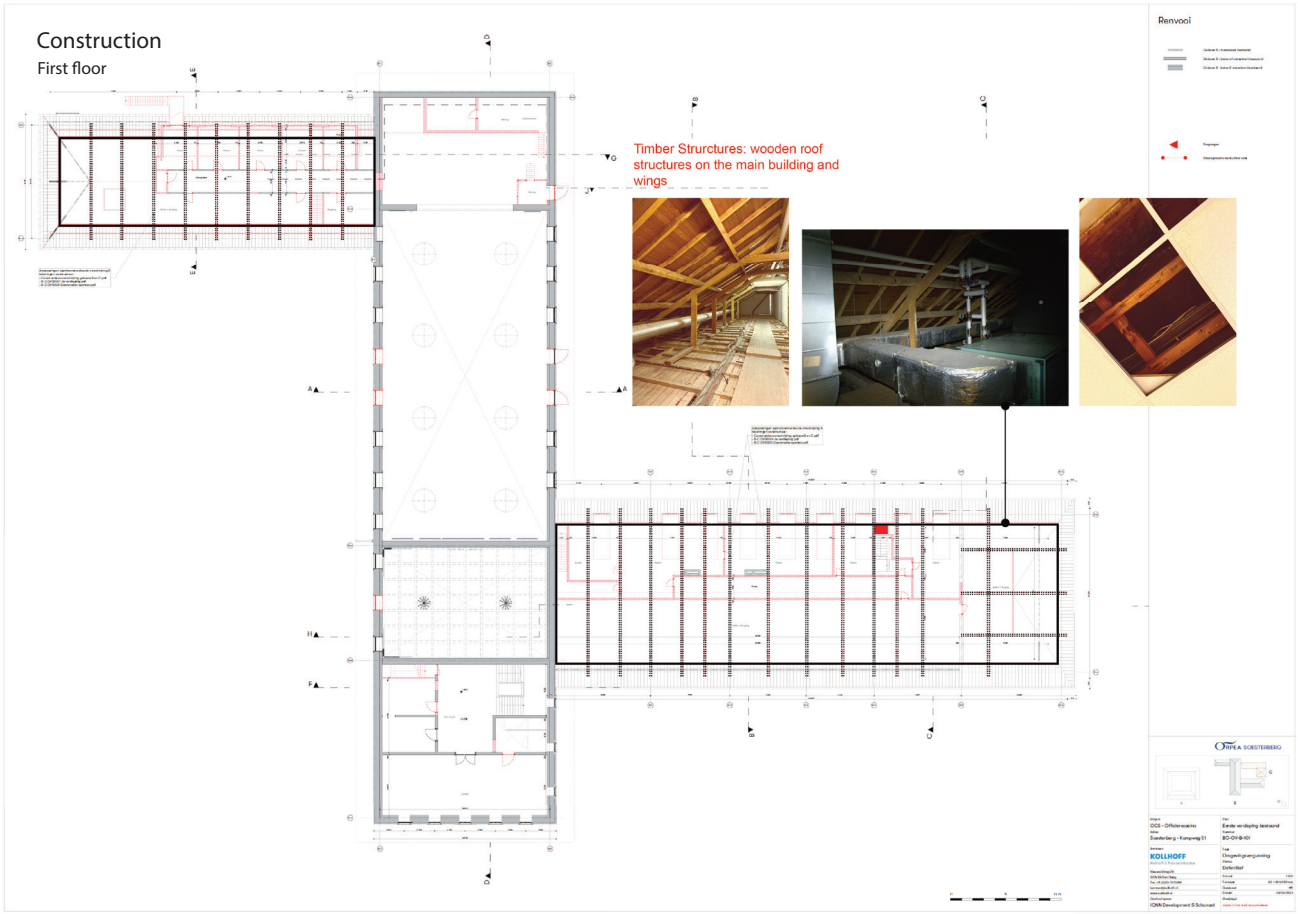
Construction

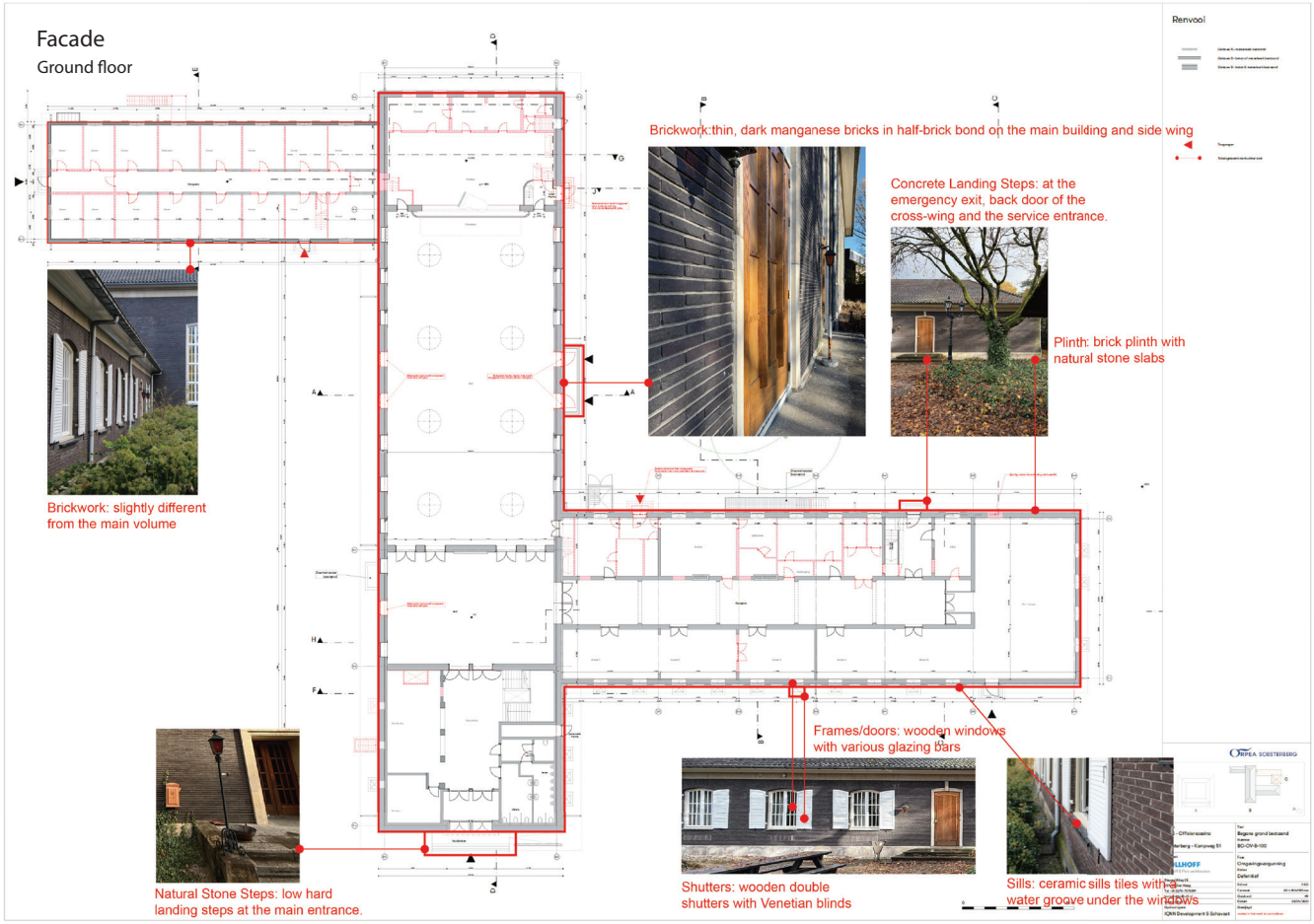
Ground floor



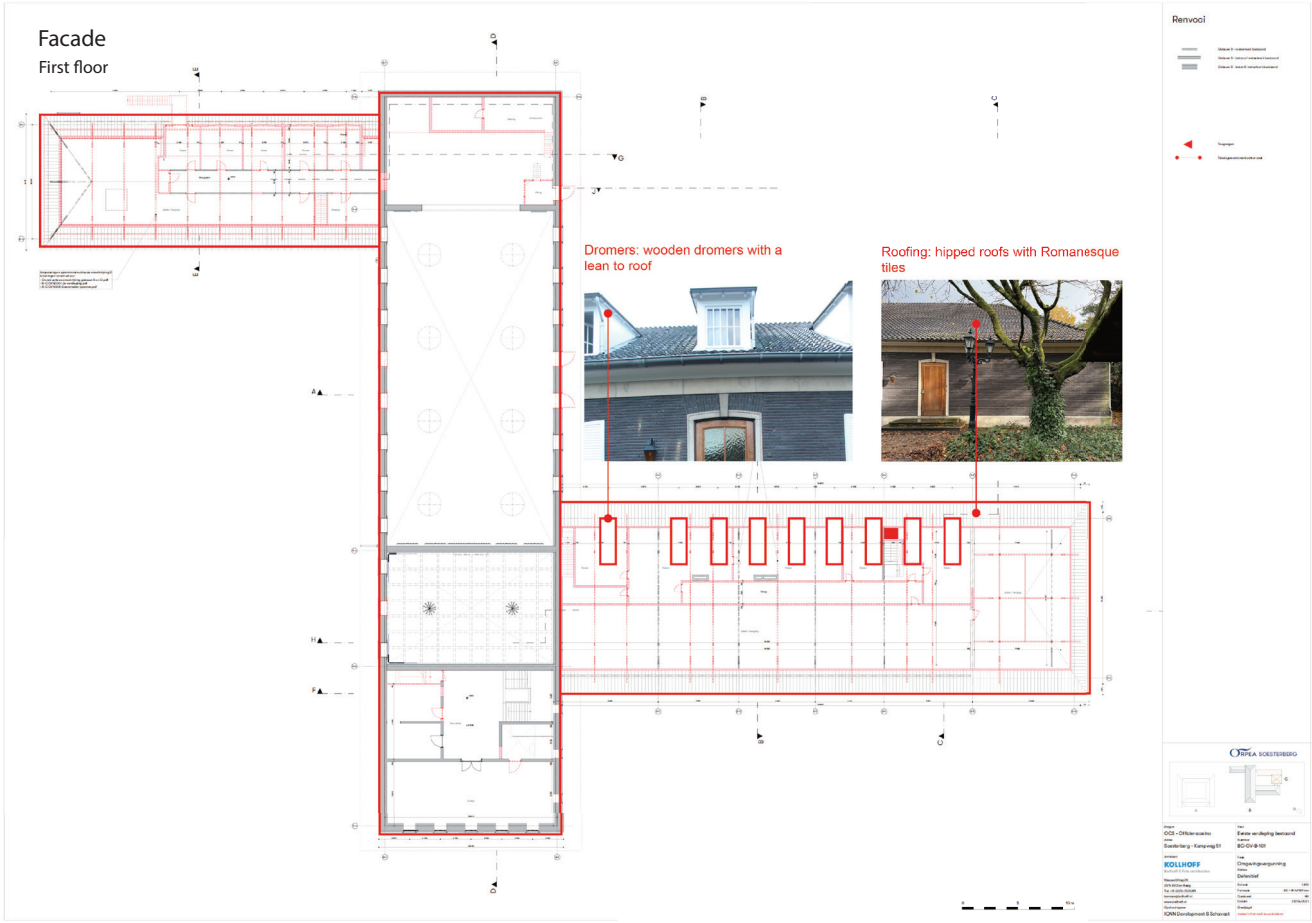
Concrete: very thick concrete exterior walls, concrete basemert walls, ceilings, and shelters; probably concrete beams in some rooms

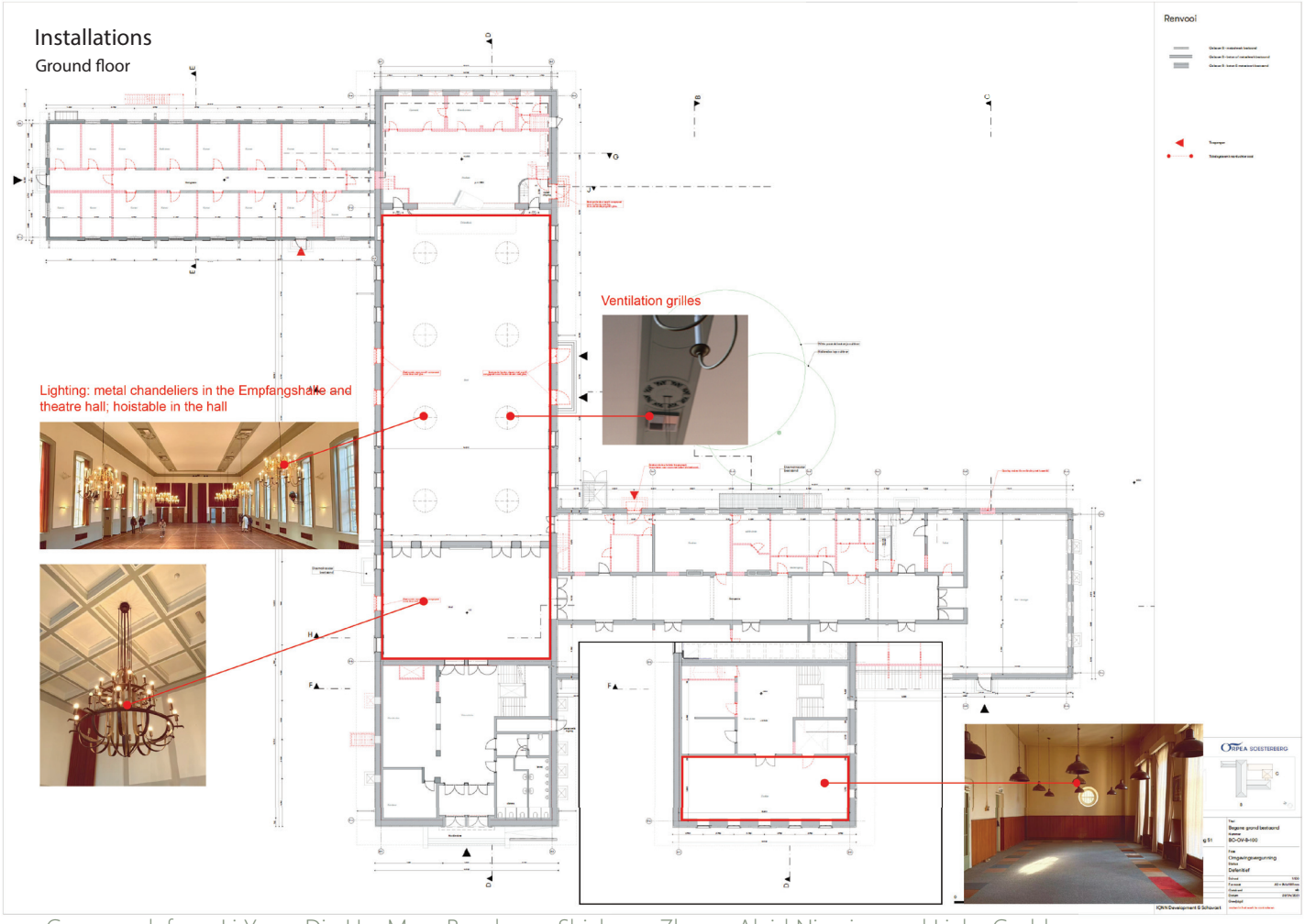
Source: Groupwork from Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang, Aleid Niessing and Lieke Gudde





Source: Groupwork from Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang, Aleid Niessing and Lieke Gudde





Source: Groupwork from Li Yuan, Die Hu, Mara Borghean, Shizhong Zhang, Aleid Niessing and Lieke Gudde

Appendix 2:
Value matrix

Dialectical values (Alois Riegl) > shearing layers (Steward Brand)	AGE value	HISTORICAL value	INTENTINAL COMMEMORATIVE value	NON INTENDED COMMEMORATIVE value	USE value	NEW-NESS value	(relative) ART value	RARITY value	ATMOSPHERE INFLUENCED BY LIGHT	OTHER relevant values [+]
SURROUNDINGS / SETTING		Military landscape in use since 1818 (artillery camp, later air base), with over 200 years of continuous defence-related activity;	posh residential area for people from amersfoort or utrecht	Active military/aviation hub	quite and not so diverse village; there are a majority of middle aged families that usually communte for most of their activities (work, leisure, school)	Growing village		Kamp van Zeist 1818 origins, aviation archaeology	The surrounding forest landscape filters daylight and creates a calm, subdued atmosphere	
SITE	the old landscape recognizability is in the contrast between open and dense vegetation	the contours of the 17th-century reclaimed land, and in relation to the route to the former air base	The access road at the building's entrance leads directly to the airbase. Located within a residential area, the site was likely chosen for both its proximity to the airbase and its potential influence on the surrounding community.	Lots of greenery that was previously used for defence and camouflage is now available on site	quality of its urban design, with its open location, amidst green surroundings	The site had a strong potential for newness through refreshed landscape design, clearer access, and upgraded outdoor spaces.	The presence of old and expansive trees is of great aesthetic value?		The building's orientation and open clearings on the site allow direct daylight to shape the spatial experience around the casino	
SKIN (exterior)	Intact preserved building, few of these german structures from early 1940s remain	Architectural style - Nazi architecture in the Netherlands	Camouflage, architecture mend to blend into dutch architecture	Material usage stands out in dutch neighbourhood	Grand' architecture and monotome skin can be continued easily	Dark coloured brick is in good condition	Refined proportions, masonry detailing, ceremonial architectural expression. The craftsmanship and formal composition gives a strong relative art value	Special imported 'camouflage' brick form germany	High contrasts in the skin of the building. Dark masonry gives different expression at night vs daytime	Use of high value materials for skirting of the building.
STRUCTURE	well-preserved structure	functional zoning expressed in the structure. German built structure	sturdy concrete structure, long-lasting	Safety bunker in cellar.	potential in repurposing the labirnth-like basement. Reinforced basement walls for storage, safety and shelter.	Strong foundation, wall structure built to last	The load bearing structure in the hallway of the wing, roof structure in the first hall. High ceilings	Nazi/german labor and material ethics. Amount of different and innovative structures		
SPACE PLAN	The original space plan is still intact, although the programs in it has changed. Historic spatial hierarchy still legible: central hall, ballroom, salons, corridors, and service areas retain original proportions and sequence. Reflects early 20th century military culture, ceremonial circulation and social zoning.	The space plan illustrates the power hierarchy of the Nazi regime through compartmentalization, routing (accessibility and escape routes), and in striking details such as the sheet steel doors and escape routes. As well as the instability of its occupation of NL and the great oppression power of the allies through the inclusion of an air-raid shelter in its space plan.	?clearly structured floorplans? [X] [The space plan was not designed to commemorate a certain figure or event.]	?Complex basement, theatre hall? Multiple events during and after WWII took place in these spaces. Great not intended commemorative value may be shared by the veterans who held their gatherings in the building.	Great potential in all three layers of the building: basement, theathre hall level, dorms level	The original space plan is largely kept, yet with different programs. The proper proportions and connectivity of the space plan provide great potentials for newness through refreshed landscape design, clearer access, and upgraded outdoor spaces.		The combination of individual relaxation and mass gatherings makes the Wehrmachtheim in Soesterberg a unique example of 'perpetrator heritage'. One of the few examples left in NL.		
SURFACES (interior)	Aging traces of interior walls, marble flooring, wood crafts	Aging Italian marble, original woodwork doors and windowframes, moulding, ceiling skeleton, refurbished during cold war age (green repaint and etc)	ratio and symmetry express prestige (authority) and the presence of the German occupier, not just to house soldiers(staged monumentality)	Wartime luxury & occupation, cold war time refurbishment	privde a feeling of formal, serious,political,exclusiveness, care to detail	Marble preservation and woodwork in great state	Craftsmanship of that time (air vents, wood details , moulding, chandelier etc.) / gold paint on the wall	Interior experienced WW2 and cold war these two ages, and each age had some traces		
SERVICES	Built in the 1940s, yet abandoned with gravel inside.	The ventilation system for the hall represents German building technology in the 1940s.			Existing service routes and technical spaces offer a usable framework for new systems, but outdated installations limit comfort, performance, and flexibility.	The original system is no long in use.		A rare example of integrated air based heating system from the 1940s.		
STUFF	well-preserved objects in the main rooms: theatre hall, tabletennis room; they have left to decay in the rest of the spaces	Original chandeliers, original bar counter elements	wartime luxury		restored to resemble original design; can be used					
SPIRIT of PLACE	Aged atmosphere or early officers' culture still perceptible in the building's spatial grandeur, acoustic, worn thesholds, and ceremonial layout. These qualities evoke memories of past military gatherings and give the casino a distinctive historic mood.	WWII occupation, resistance narratives; As Cold War heritage (also as a part of Soesterberg Air Base): can be understood as one of the architectural manifestations of the diplomatic relationship between the NL and the US	the ceremonial atmosphese intentionally created to honour military identity still permeates the building. Its grand halls and formal spatial character evoke the commemorative purpose for which the casino was designed, giving the place a dignified and symbolic spirit.	Implicit sense of exclusiveness created by furbishment and lighting	Cultural events, concerts, weddings	Unique hybrid: Nazi prestige + Allied liberation + Cold War + modern civility		The qualities of spaces for entertainment that evokes memories of past military gatherings couldn't be seen everywhere.	Assembly hall: tall and vertically proportioned windows, abundant daylight, bright and uplifting; Cafe: low ceiling and a column-free layout, subdued lighting , reinforces a sense of intimacy and comfort; Table tennis room: yellow-tinted glazing, filters daylight into a softer, warmer light quality, more relaxed spatial experience.	

high importance
positive importance
indifferent importance

assumed assesment
stated assesment

Appendix 3:
Process booklet

PROCESS BOOKLET

FROM

HIERARCHY

TO

HARMONY

Adaptive Reuse of the Officer's Casino Soesterberg Inspired by Waldorf Education

Adaptive Reuse of Heritage
Graduation studio

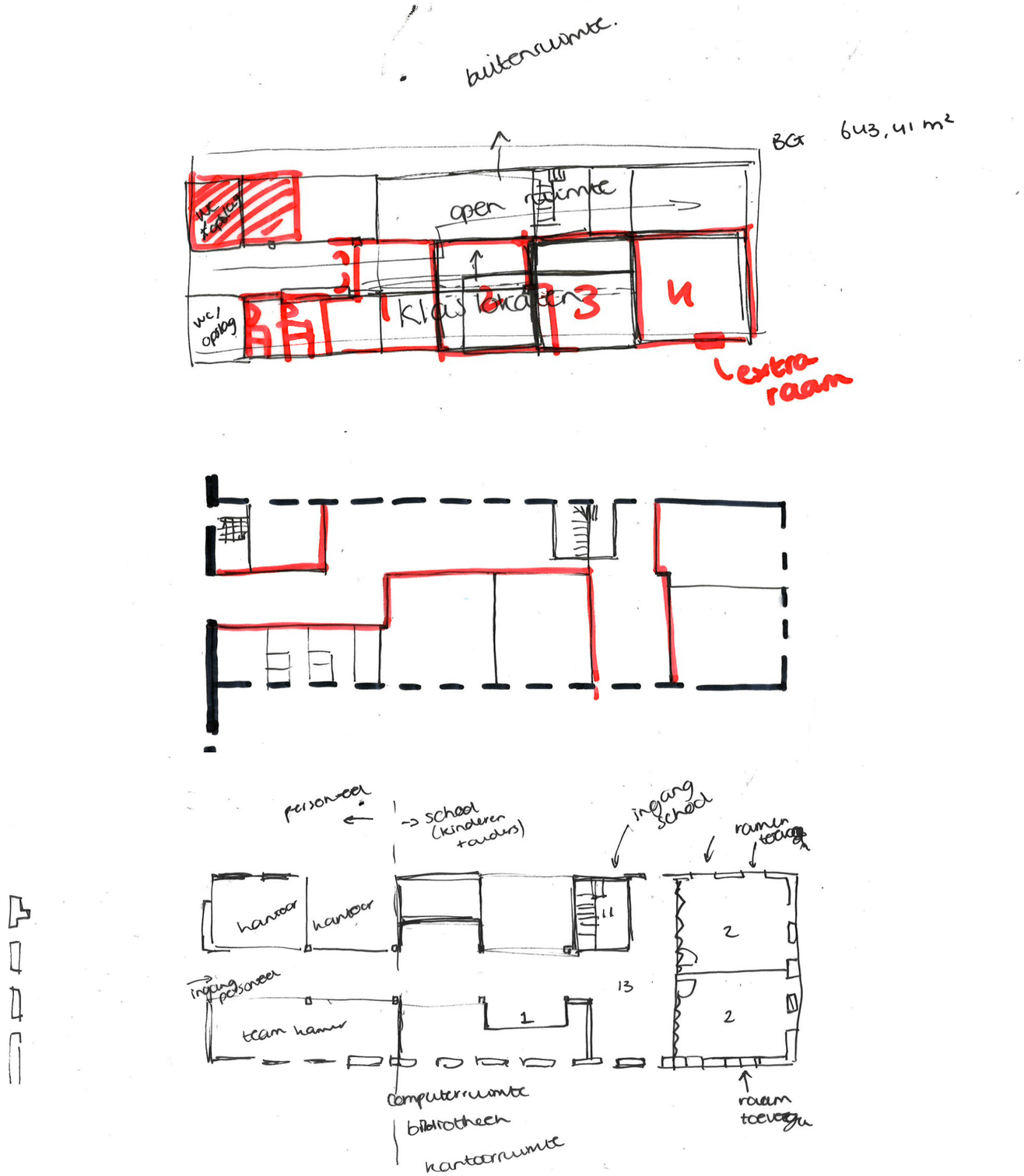
Lieke Gudde 5103681

18/2

South Wing

Some initial layout options for classrooms in the south wing

After receiving feedback during the A1 presentation, I decided to explore how the school functions, particularly classrooms, would fit within the existing building, rather than placing them in a separate building. This approach aligns better with my research, as it creates real tensions between the existing structure and the new function.

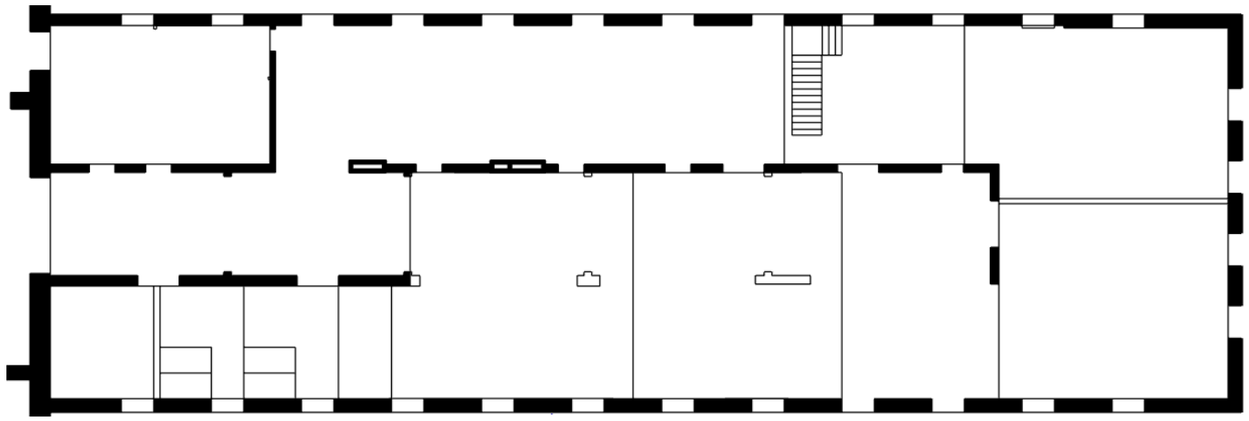


Ground floor

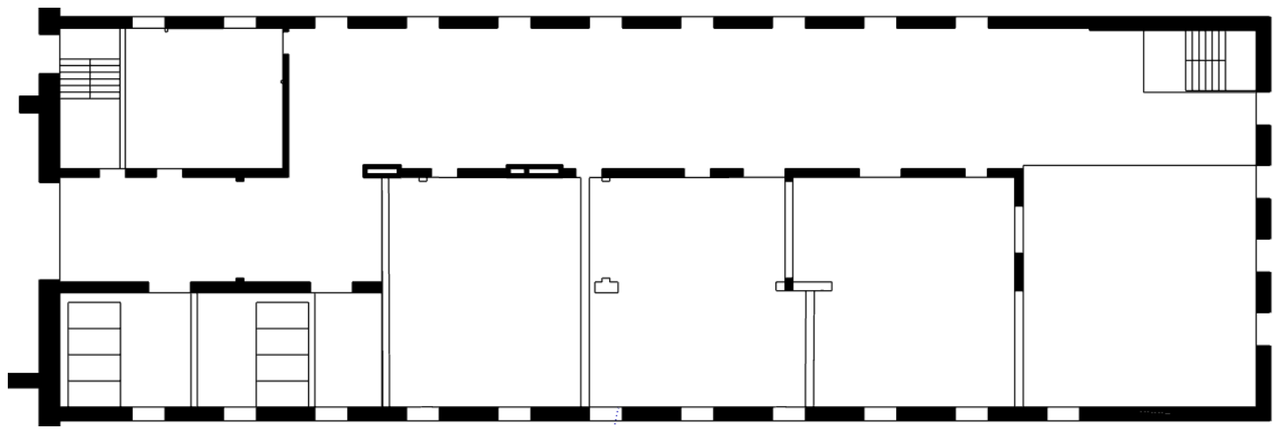
19/2

South Wing

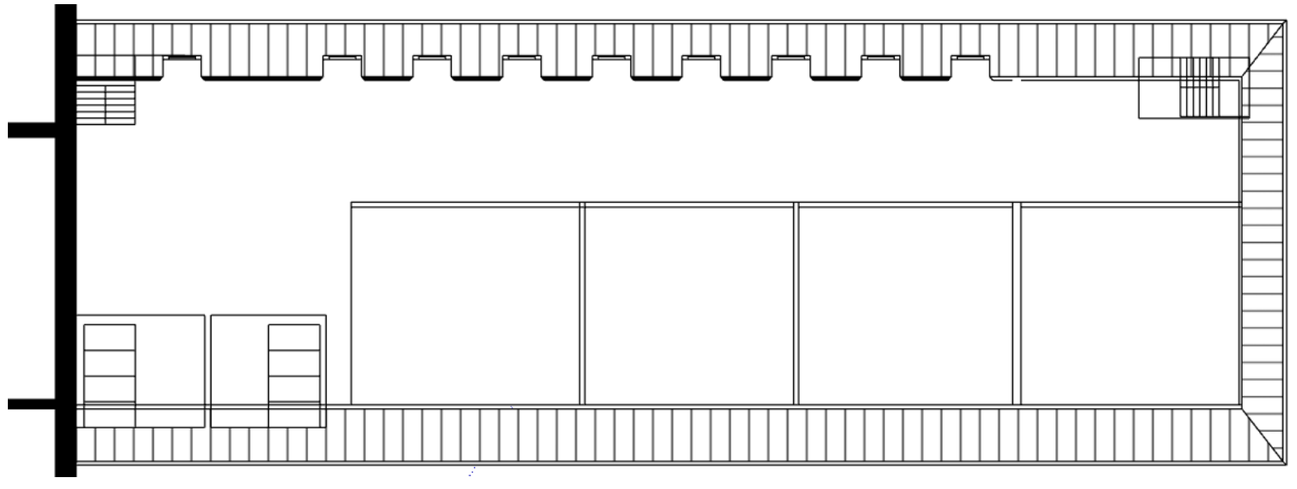
Exploring options for layouts



Ground floor



Ground floor



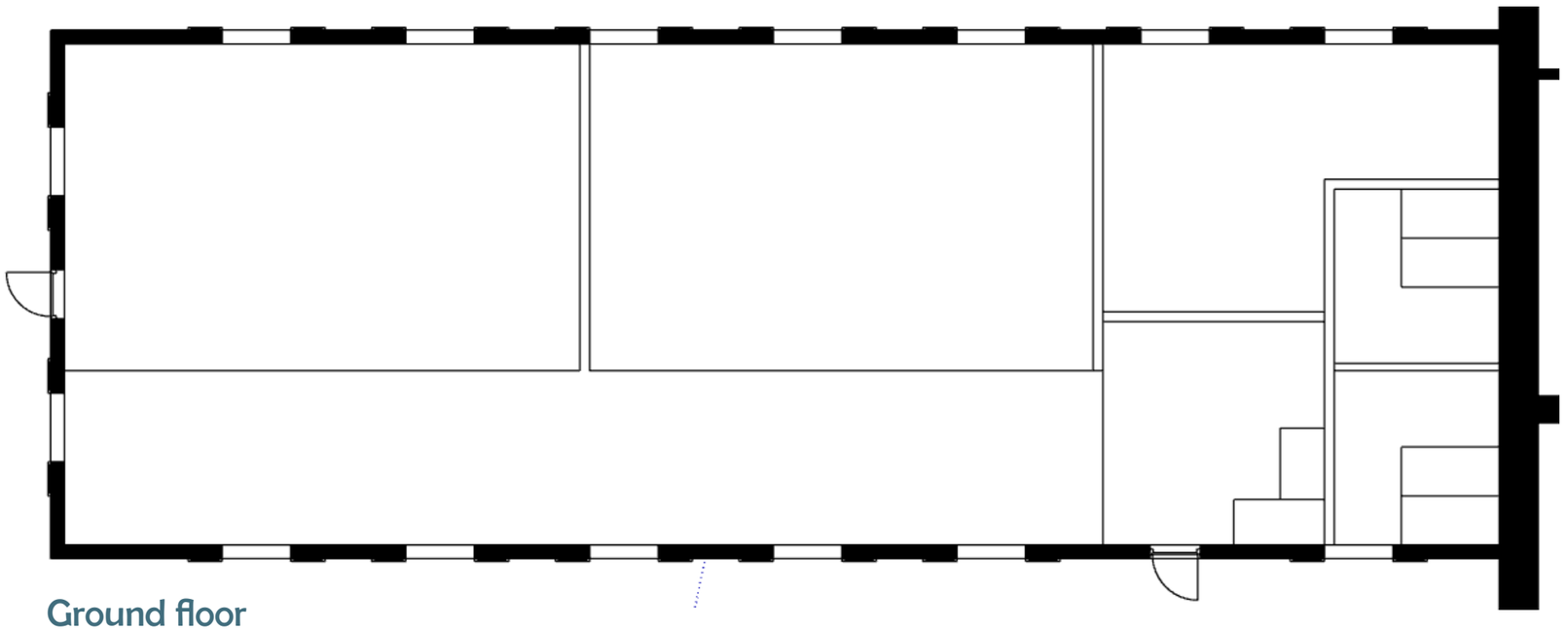
First floor

23/2

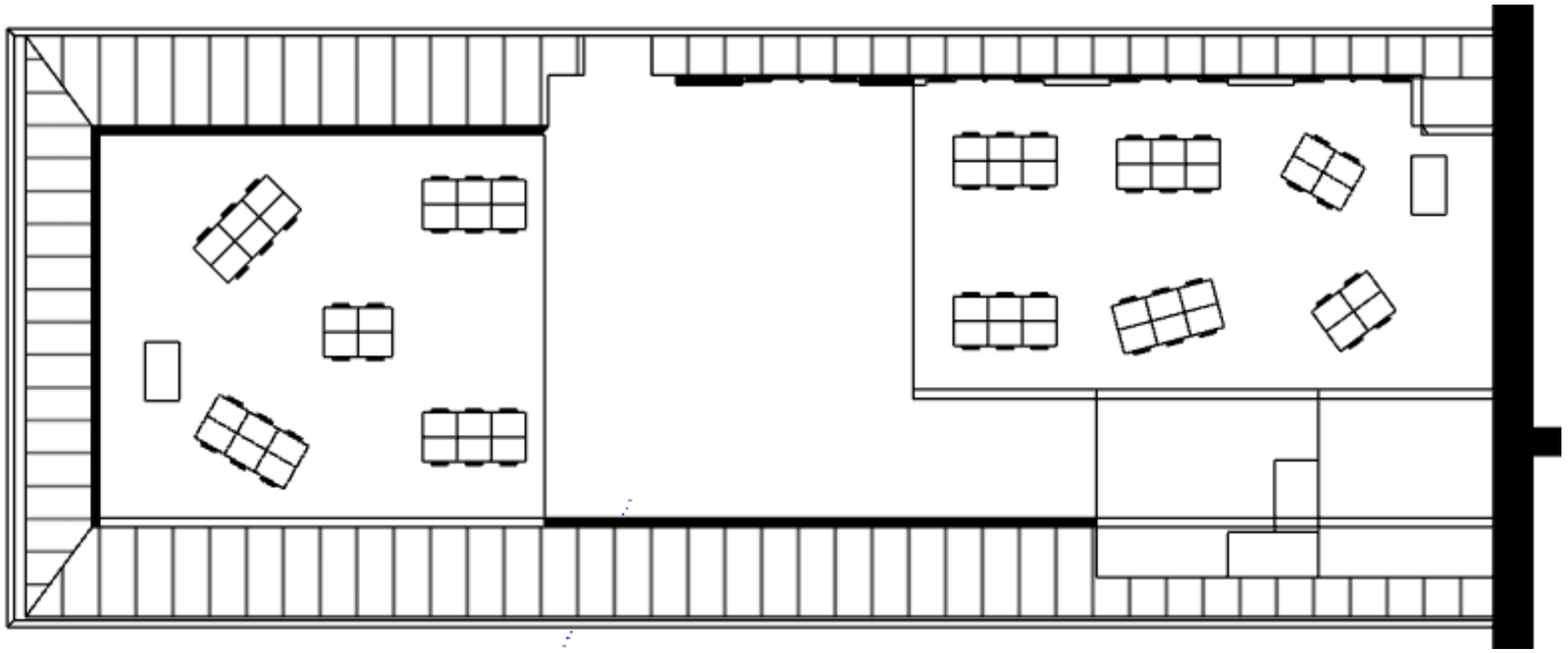
North Wing

Some initial layout options for classrooms in the north wing

I also explored options for creating classrooms in the north wing



Ground floor



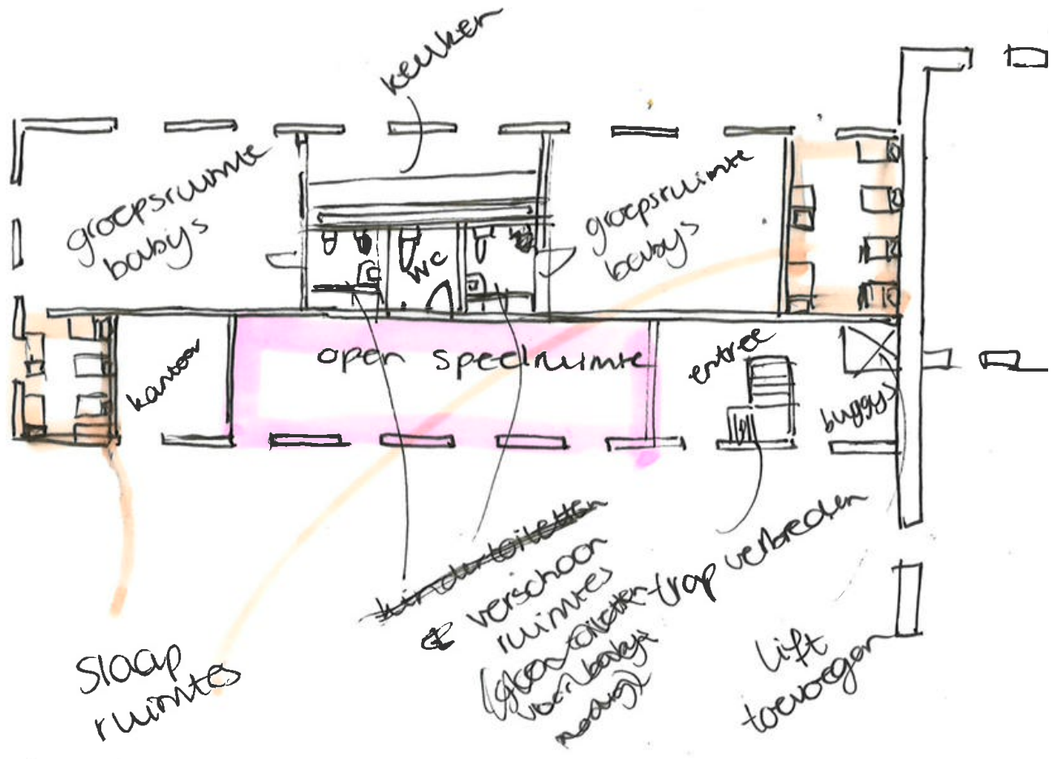
First floor

25/2

North Wing

Childcare functions in the north wing

I came up with the idea of placing the daycare in this wing. This way, the daycare would have its own dedicated wing, slightly separated from the school, providing more peace and privacy.



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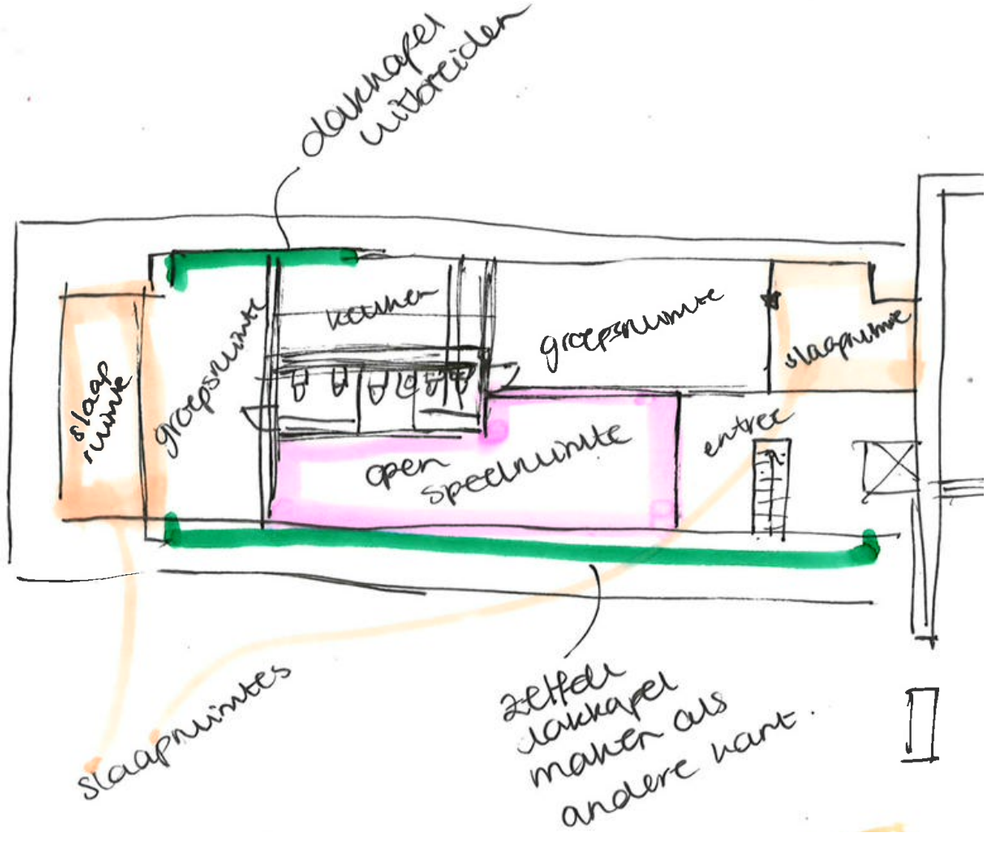


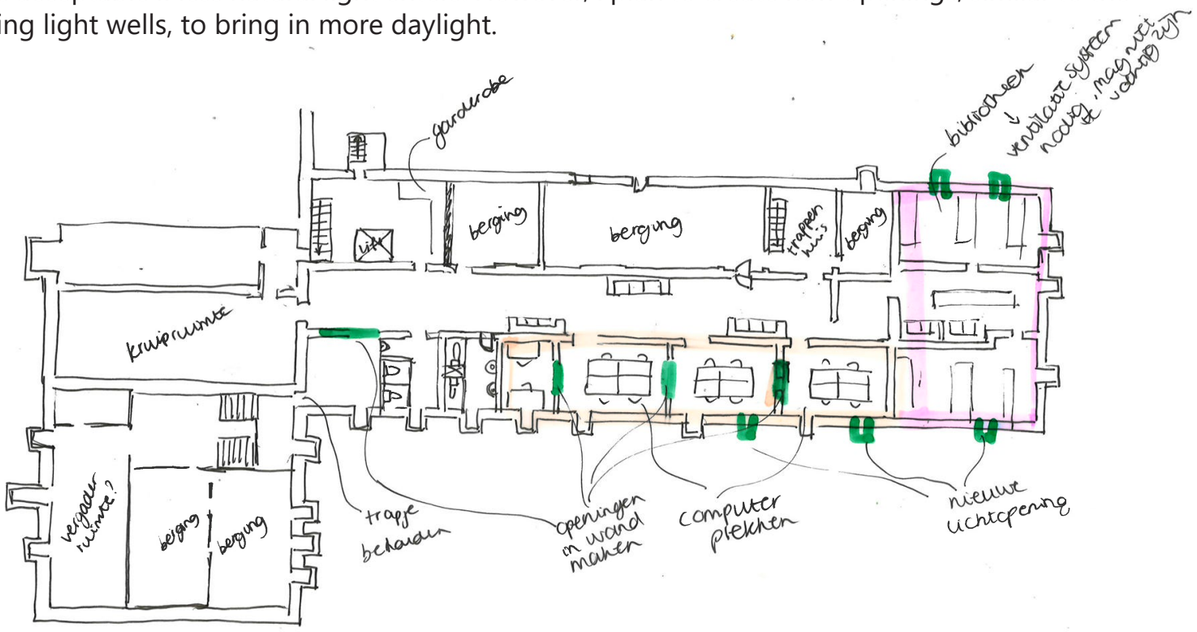
First floor

27/2

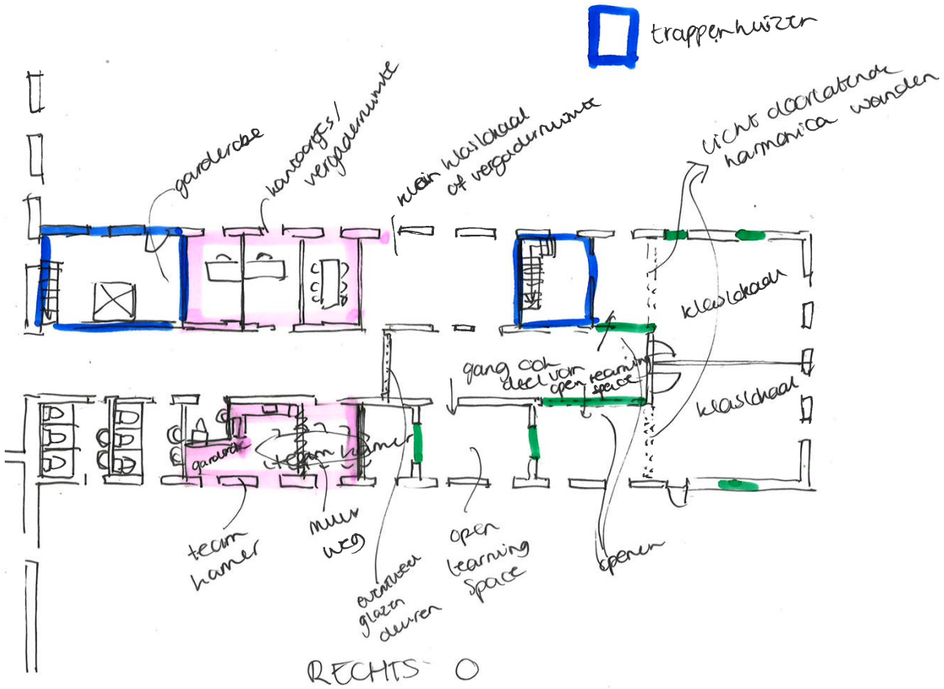
South Wing

Developing floorplans for the south wing

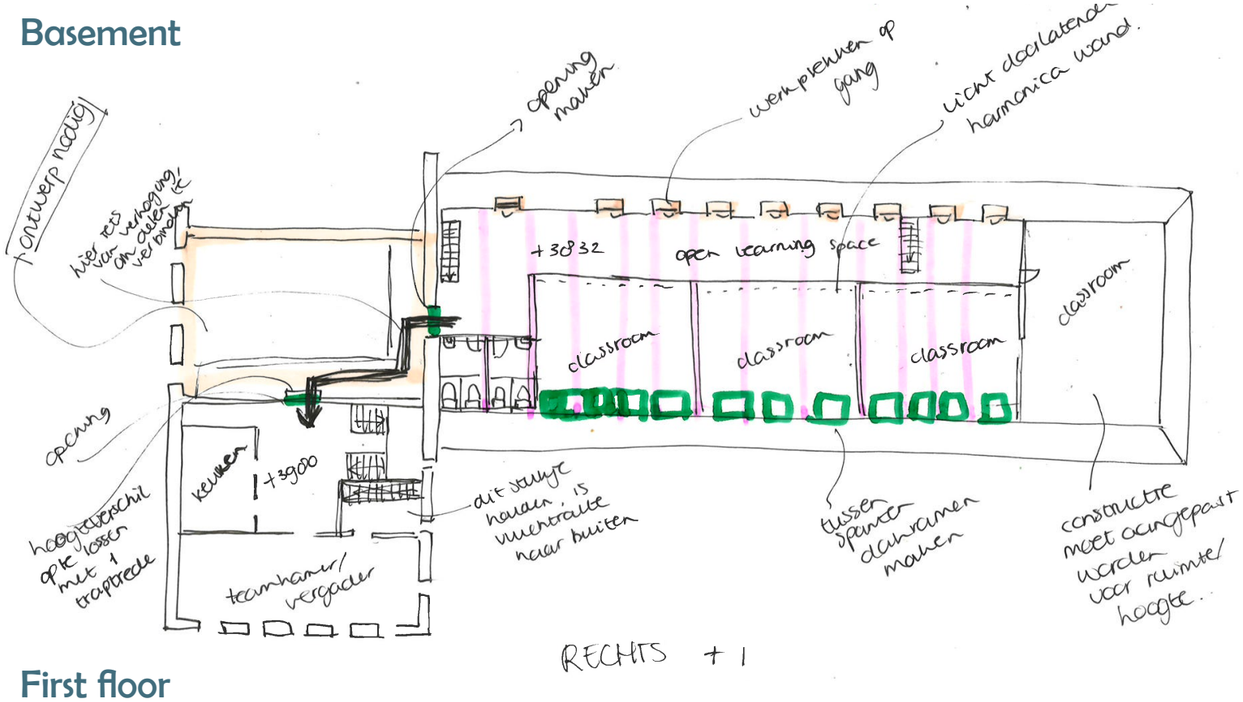
The floor plans are being further developed. While exploring options for utilizing the basement, the decision was made to create a library there. The library won't serve as a space for all-day stays, so it's acceptable if less natural light enters. However, I plan to create new openings, similar to the existing light wells, to bring in more daylight.



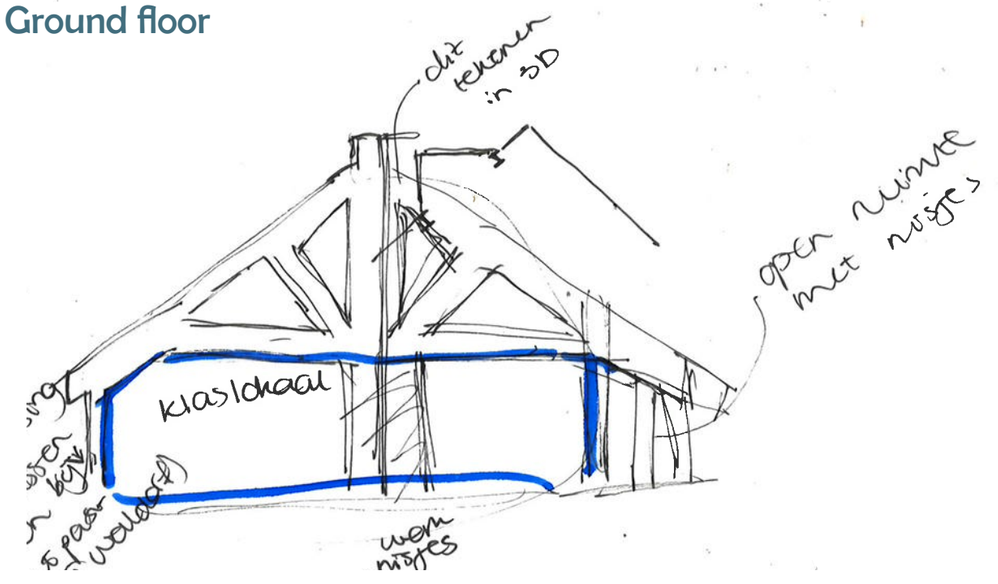
Basement



Ground floor



First floor



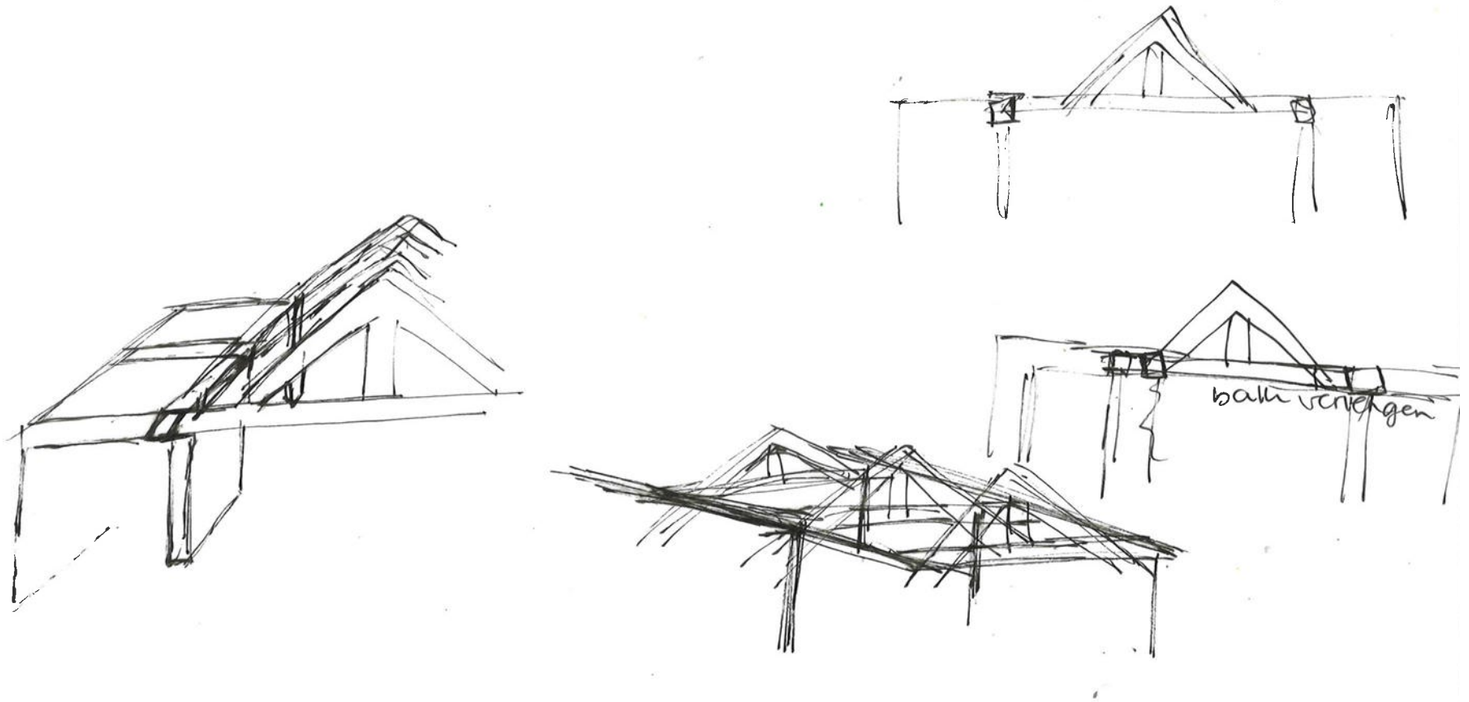
First floor section

28/2

North Wing

A new dormer

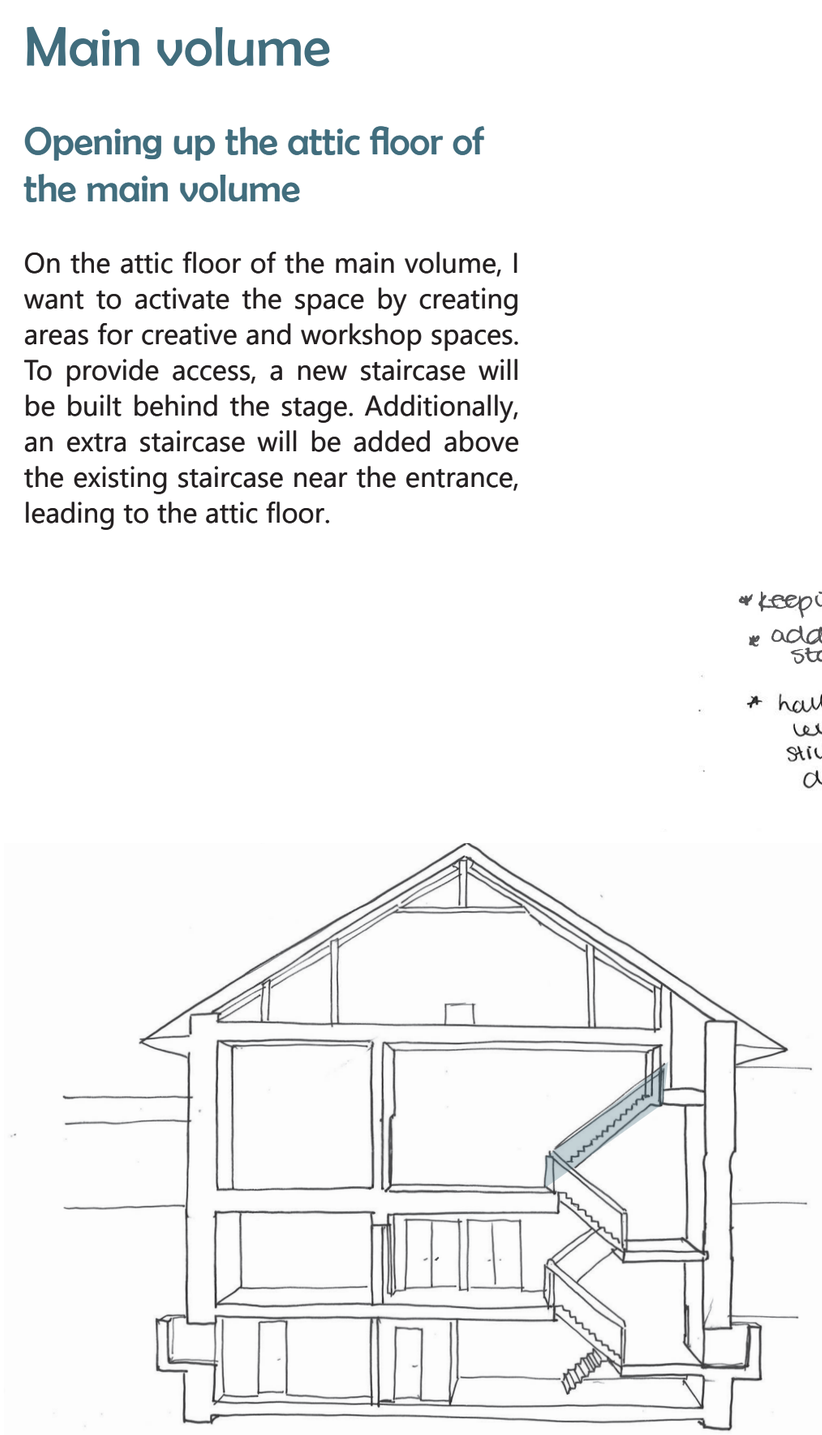
To create more usable space on the first floor of the north wing, I wanted to add an extra dormer on the opposite side, with the same design as the existing dormer.



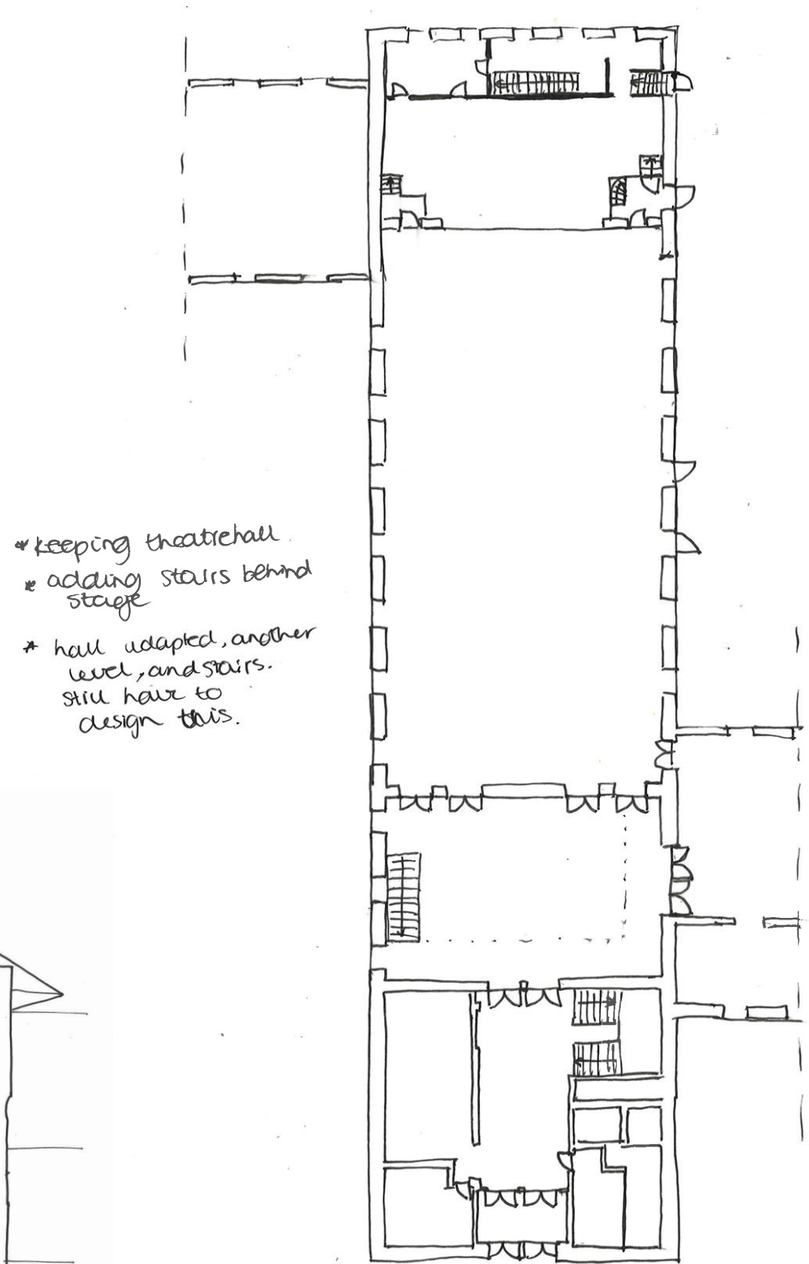
Main volume

Opening up the attic floor of the main volume

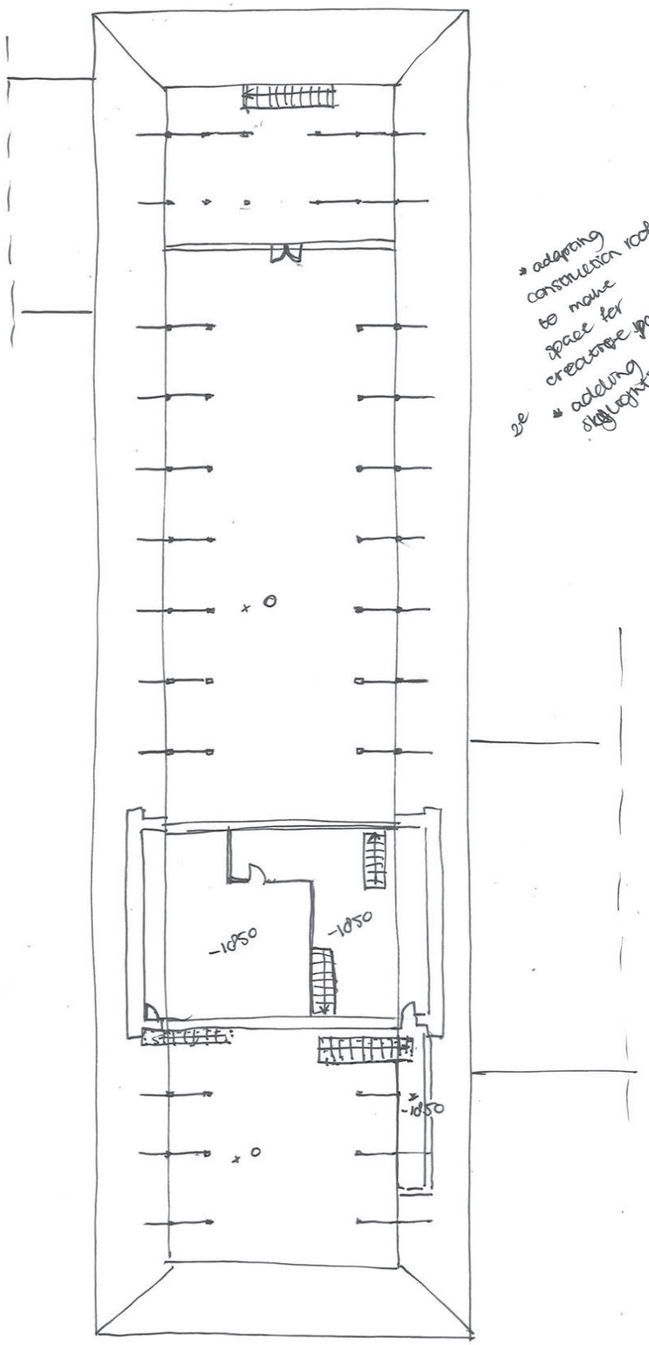
On the attic floor of the main volume, I want to activate the space by creating areas for creative and workshop spaces. To provide access, a new staircase will be built behind the stage. Additionally, an extra staircase will be added above the existing staircase near the entrance, leading to the attic floor.



Extension of the existing staircase to the attic floor.



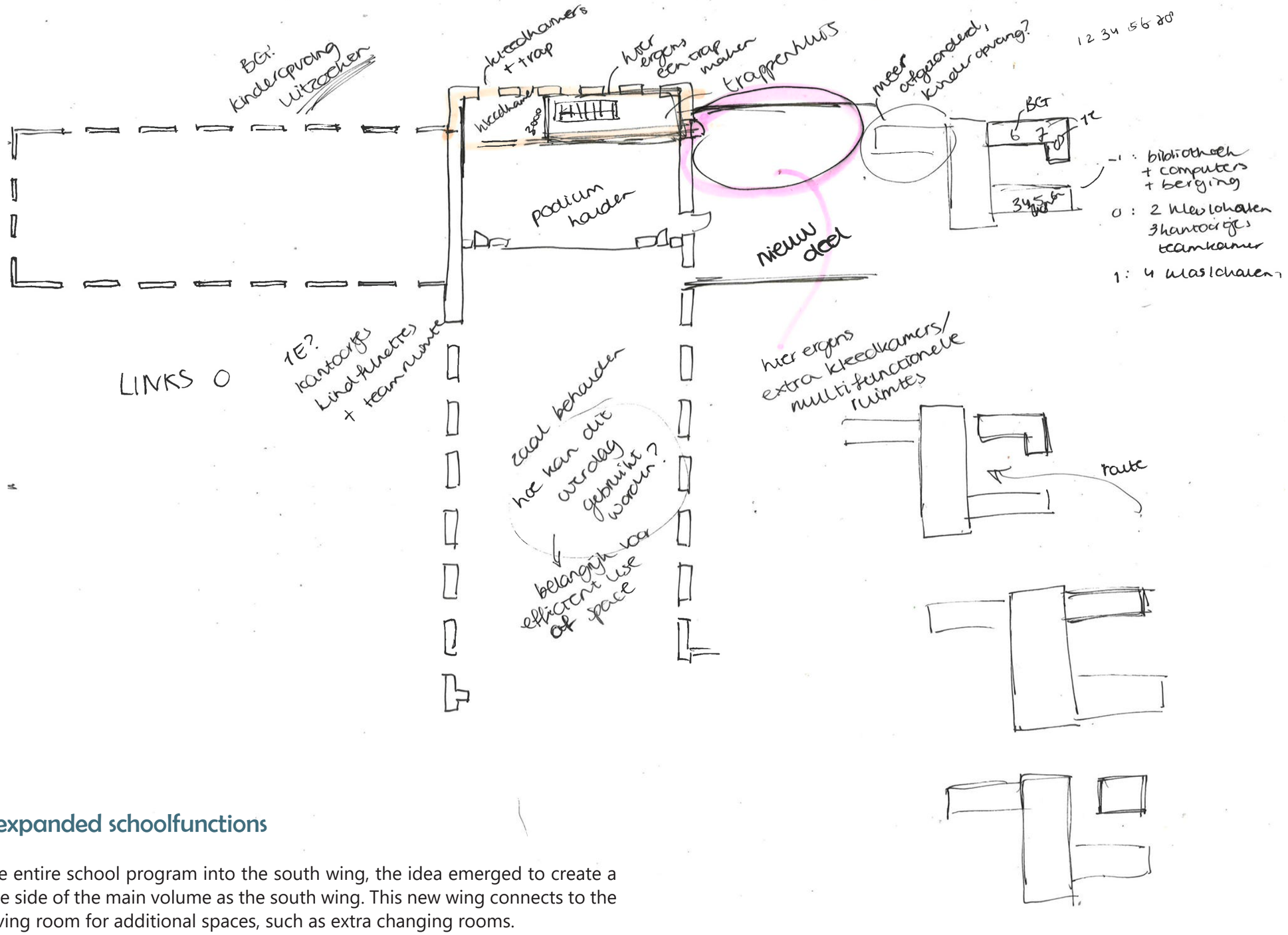
Ground floor



Attic floor

3/3

New Addition



A new wing for expanded schoolfunctions

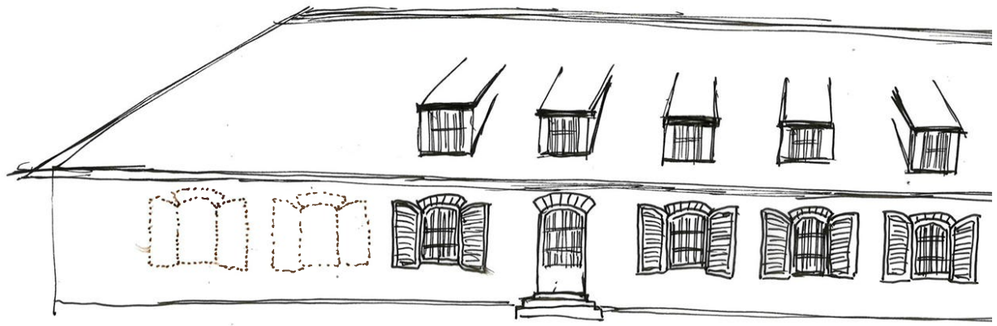
Since I couldn't fit the entire school program into the south wing, the idea emerged to create a new wing on the same side of the main volume as the south wing. This new wing connects to the side of the stage, leaving room for additional spaces, such as extra changing rooms.

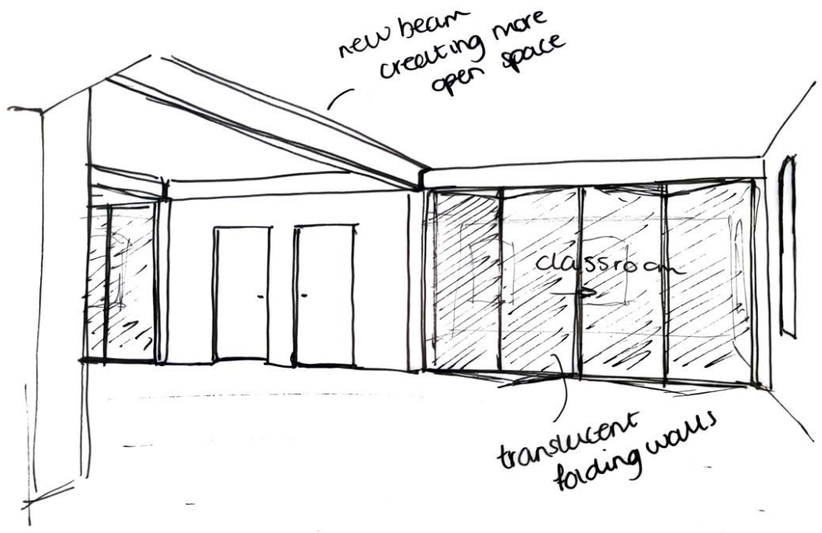
3/3

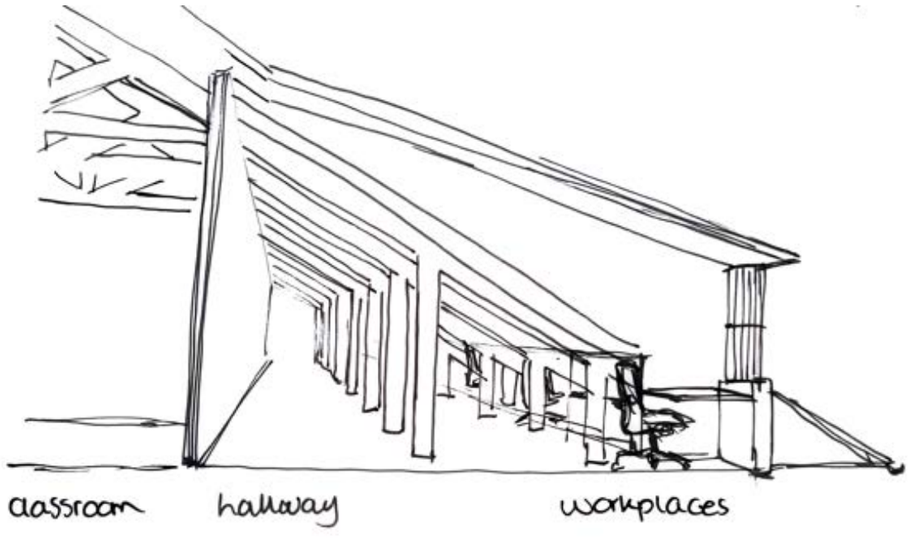
South Wing

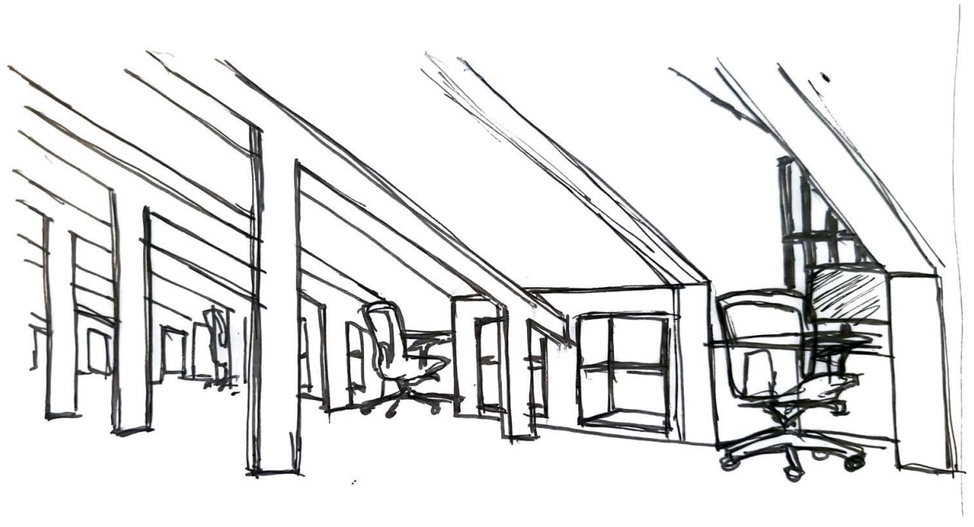
Some ideas for the south wings

The new openings in the facade will follow the rhythm and design of the existing windows. On the ground floor, the corridor will function as a living space rather than just a circulation area. The classrooms will feature translucent folding walls to allow more light. The dormers on the first floor will be transformed into workspaces.







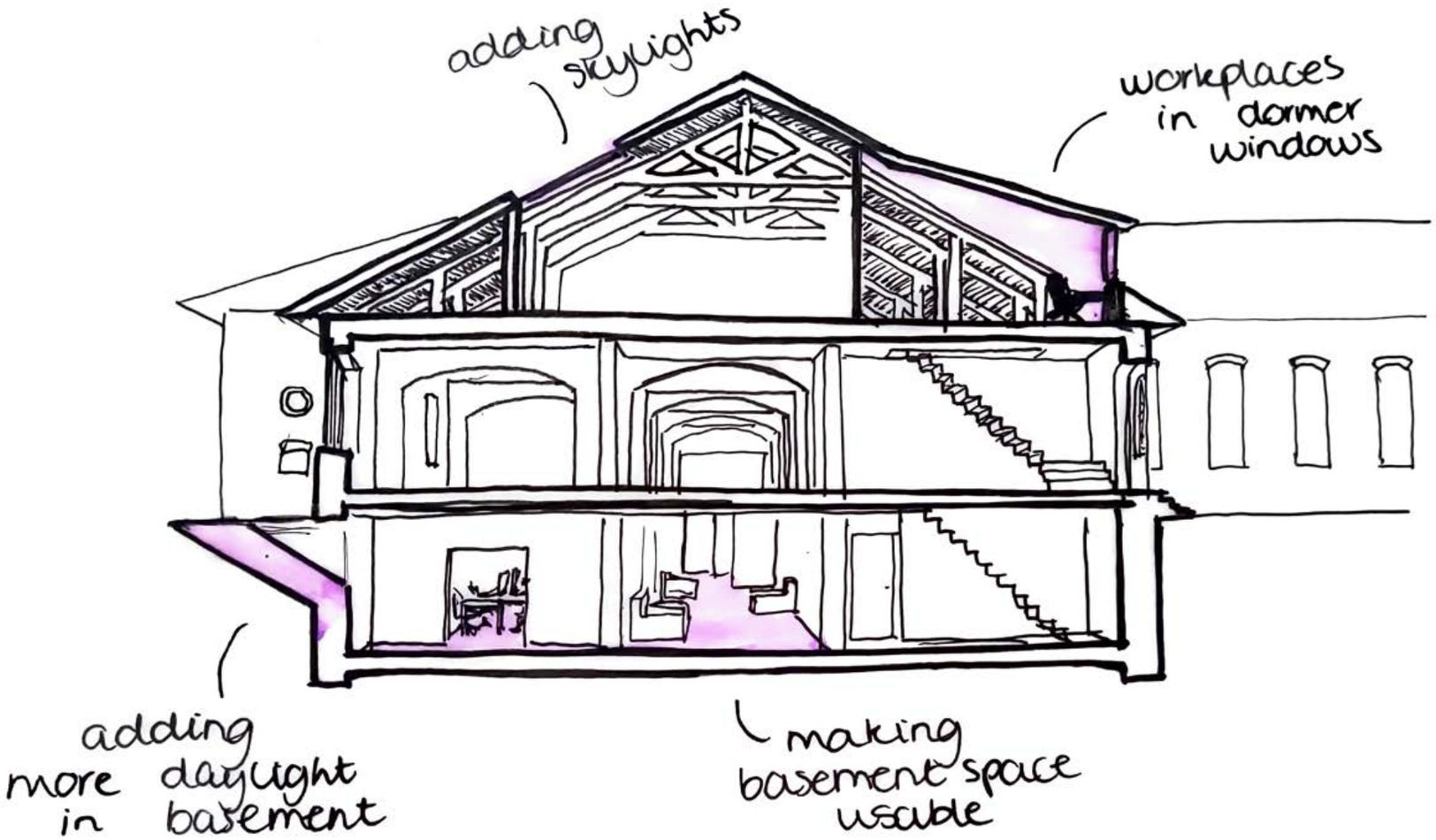


3/3

South Wing

Overview of new interventions

I want to expand the light wells in the basement to bring in more light, as well as create sightlines to the outside from the library. Additionally, I plan to add skylights in the classrooms on the first floor for more daylight. These will respect the shape of the existing roof.

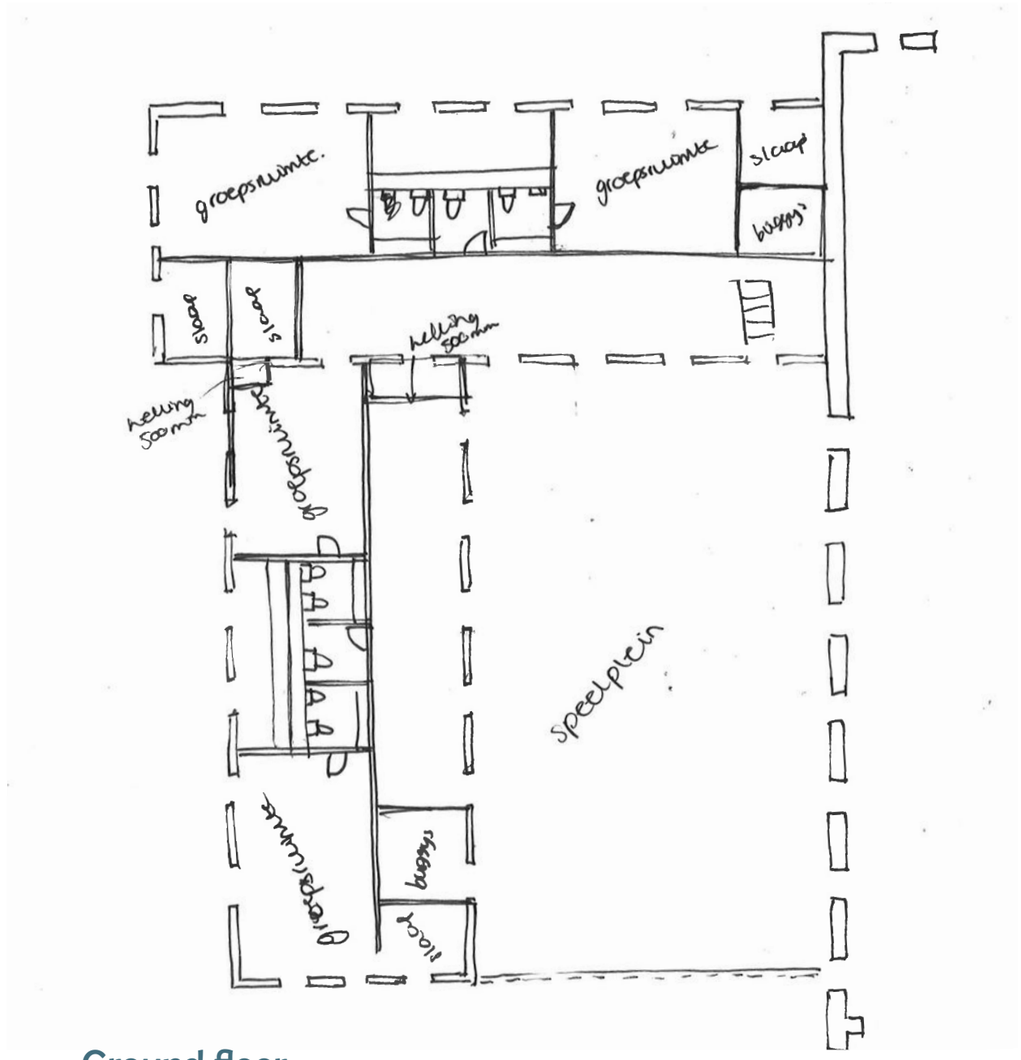


5/3

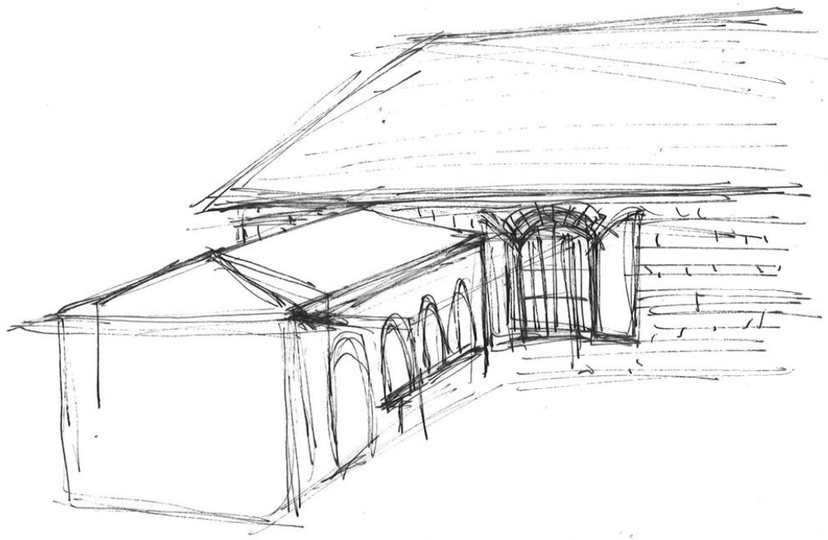
North Wing

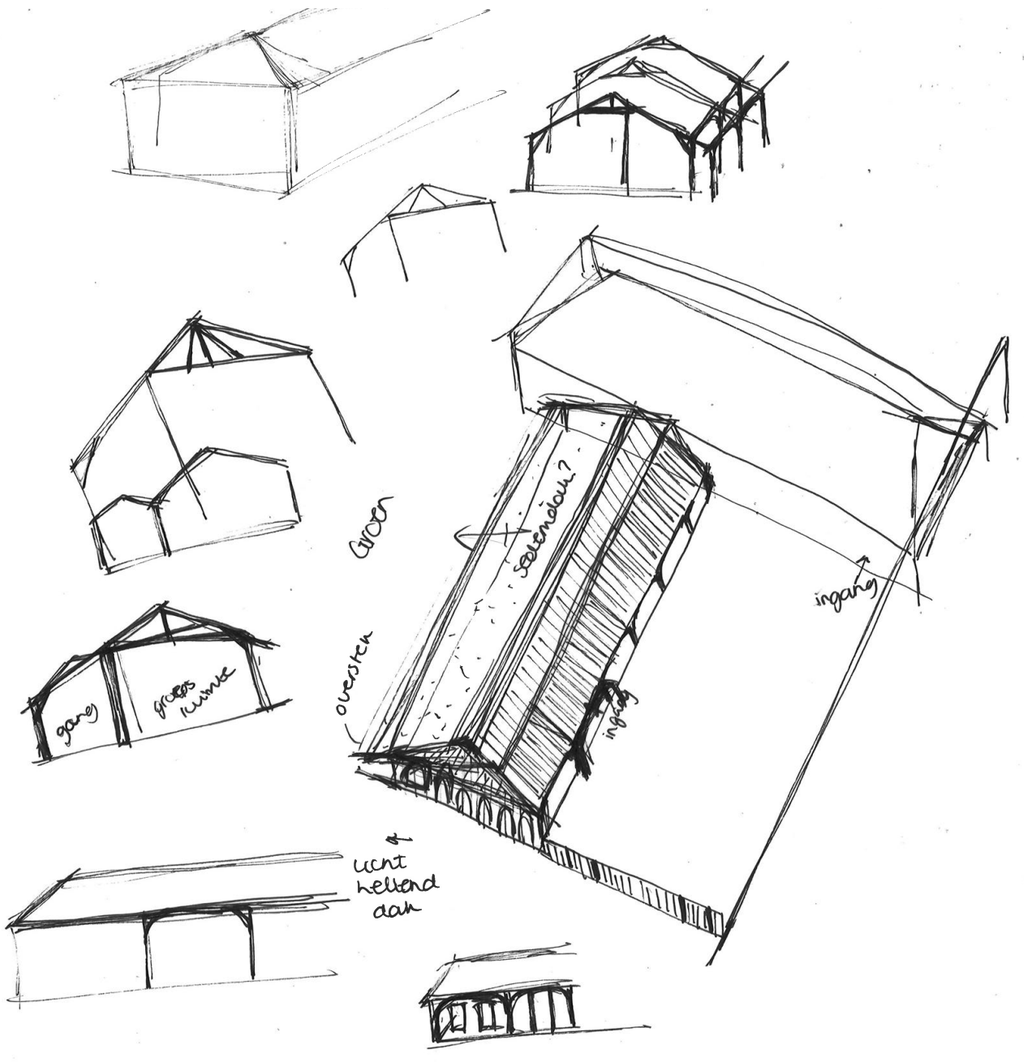
Adding more ground floor space for child care

Since the space on the first floor of the wing was not ideal for daycare group rooms, and it's generally better to place these groups on the ground floor, I added an extra 'small' wing, which can accommodate two additional group rooms. As a result, it is no longer necessary to add an extra dormer on the first floor, allowing the shape of the monumental gable roof to be preserved.



Ground floor



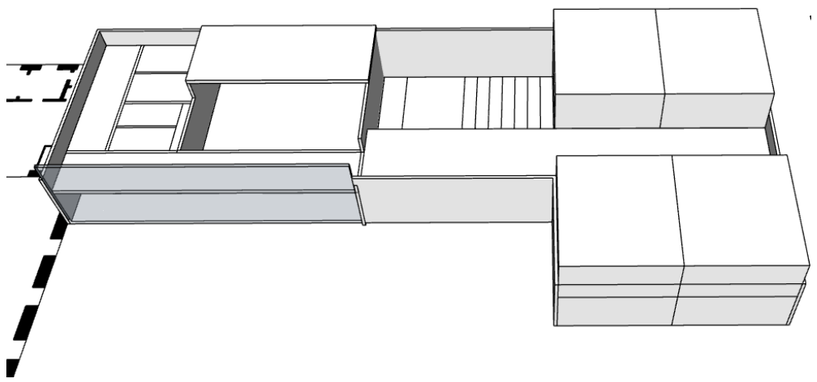


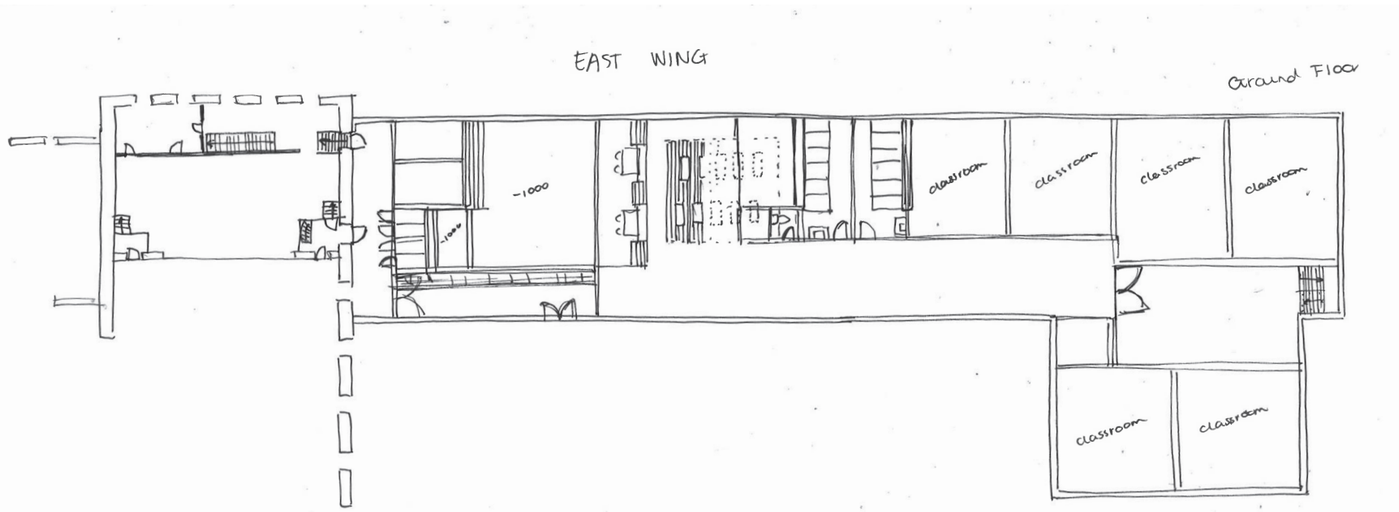
10/3

New Addition

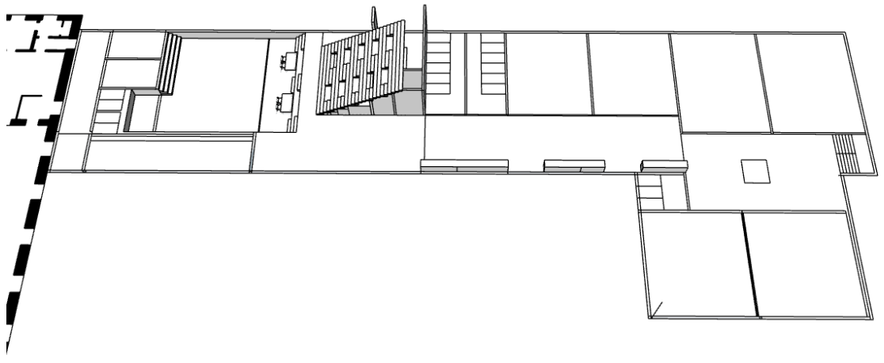
New schoolfunctions in a new wing

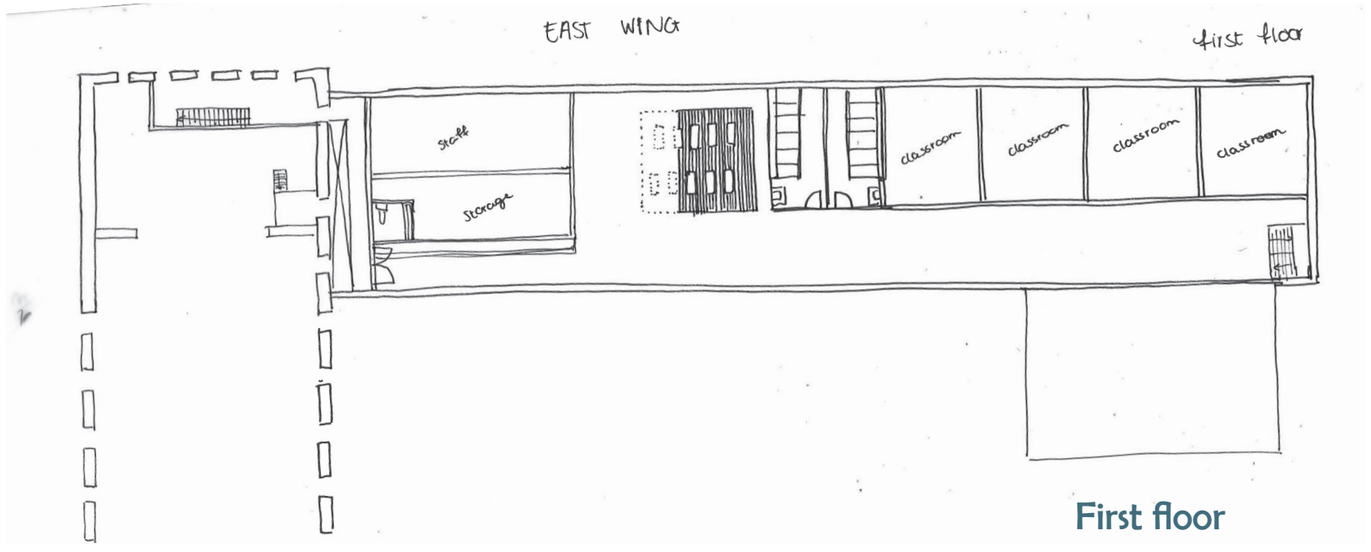
Trying to fit a program into a wing that connects with the design of the existing building.





Ground floor





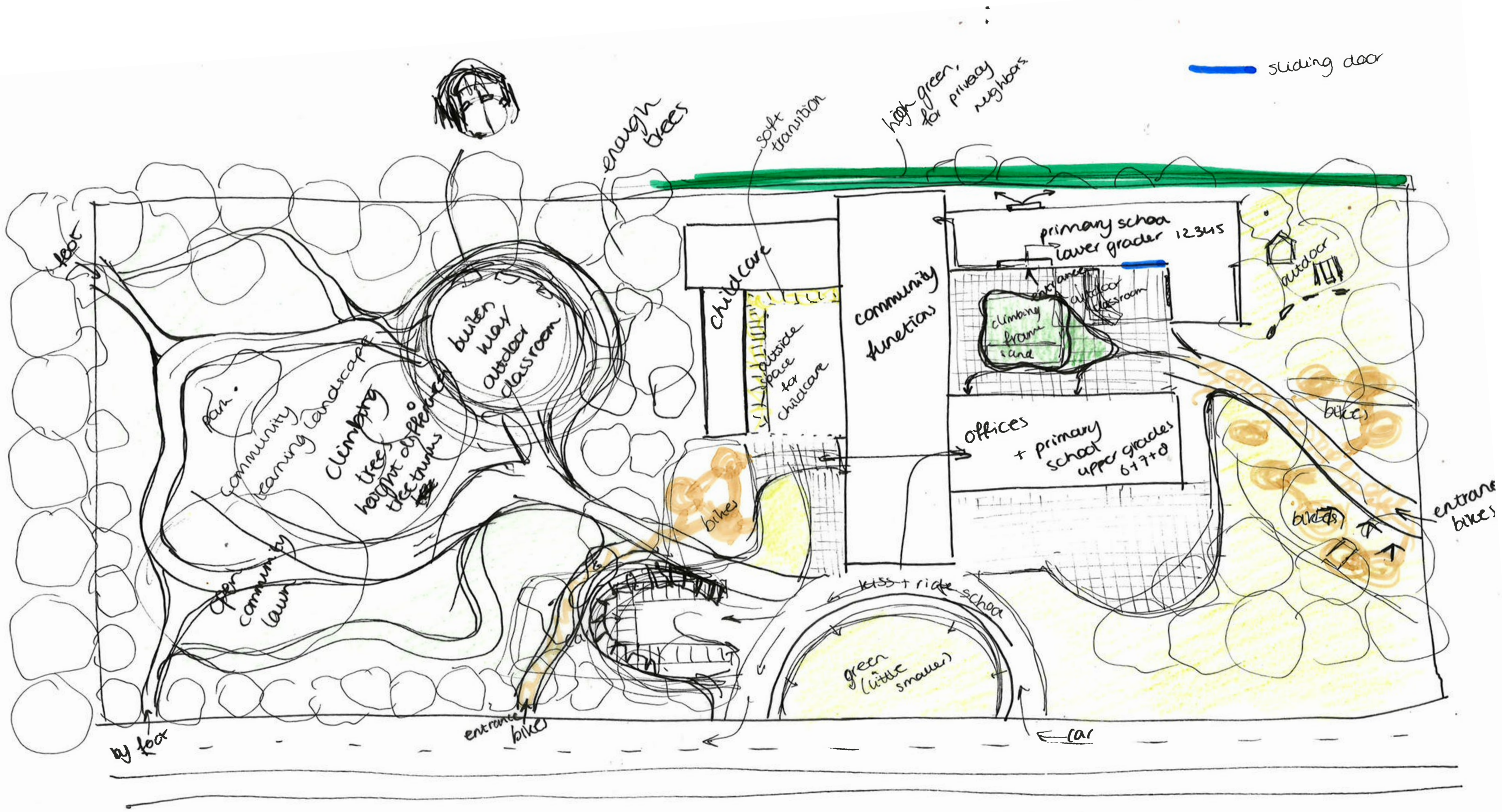
First floor

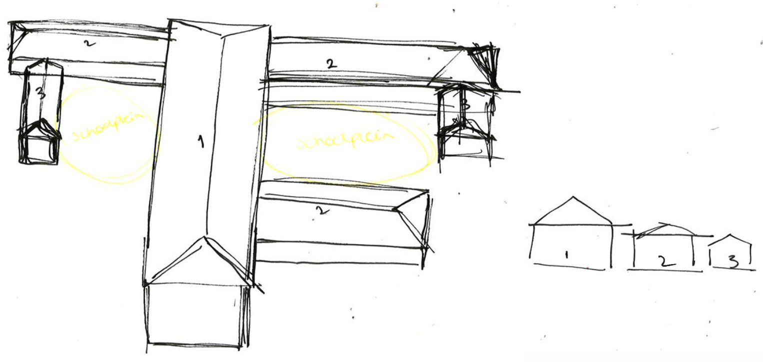
11/3

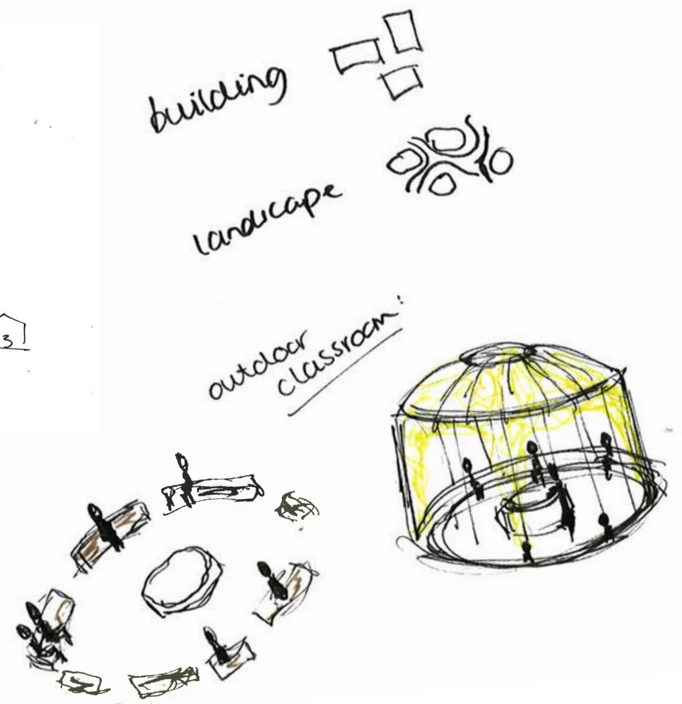
Masterplan

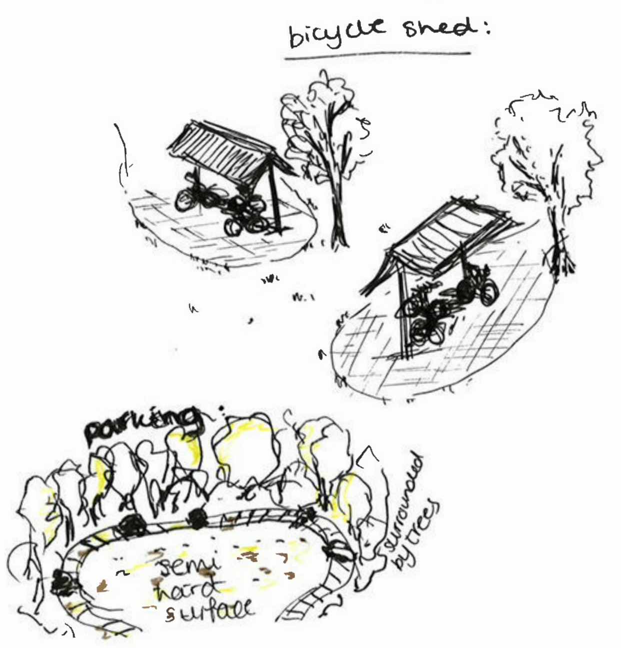
A masterplan for the whole site

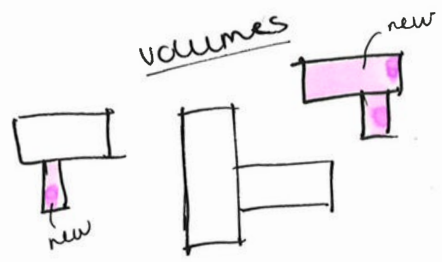
I'm not planning to build a new structure on the large empty part of the plot, but I do want this area to be supportive and complementary to the officers' casino. Therefore, I propose a master plan that includes the creation of a park with various collective and education-supporting functions.









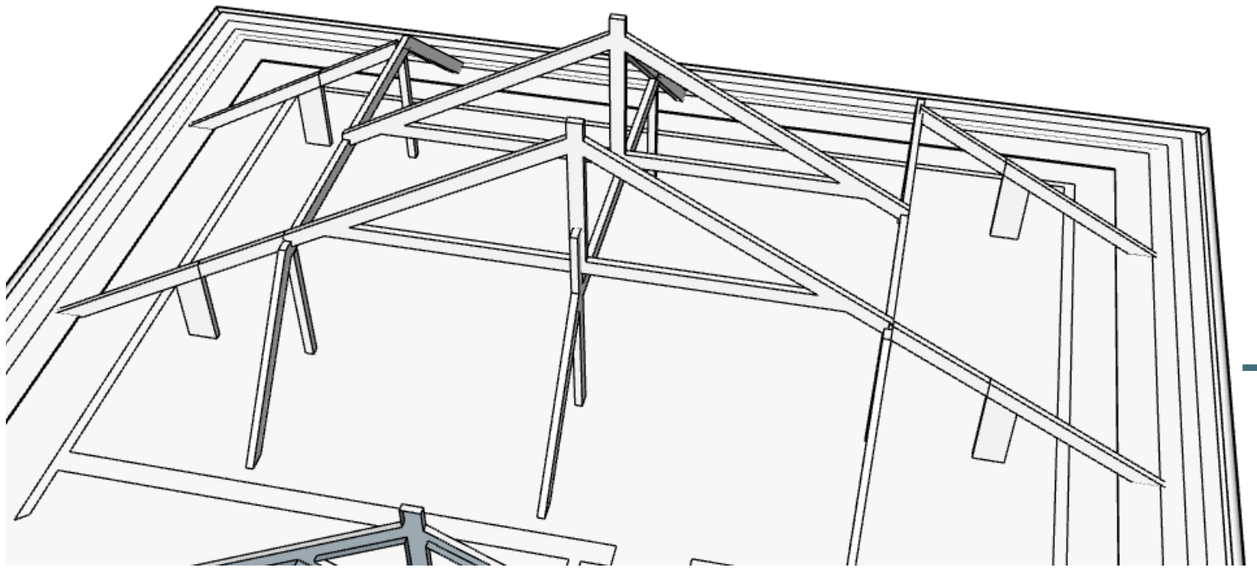


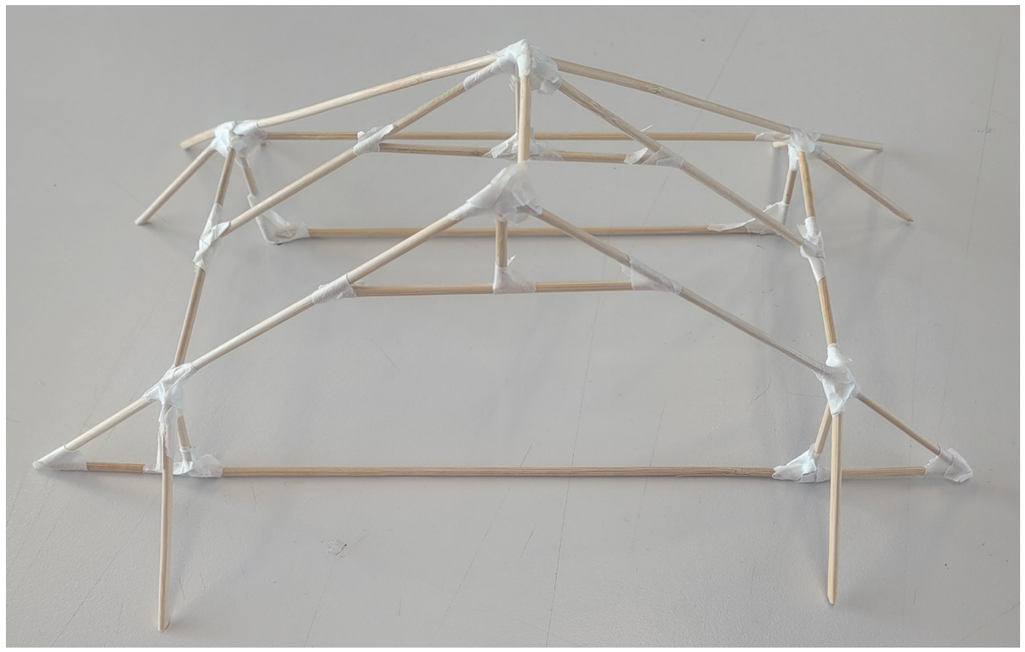
11/3

South Wing

Construction

In the south wing, there is a lot of construction at the end, which is too low to create a good passage space. I made a model to experiment with how I can adjust this construction to maintain stability while still creating enough space for a classroom.





12/3

Masterplan

Zooming out again and looking more at context

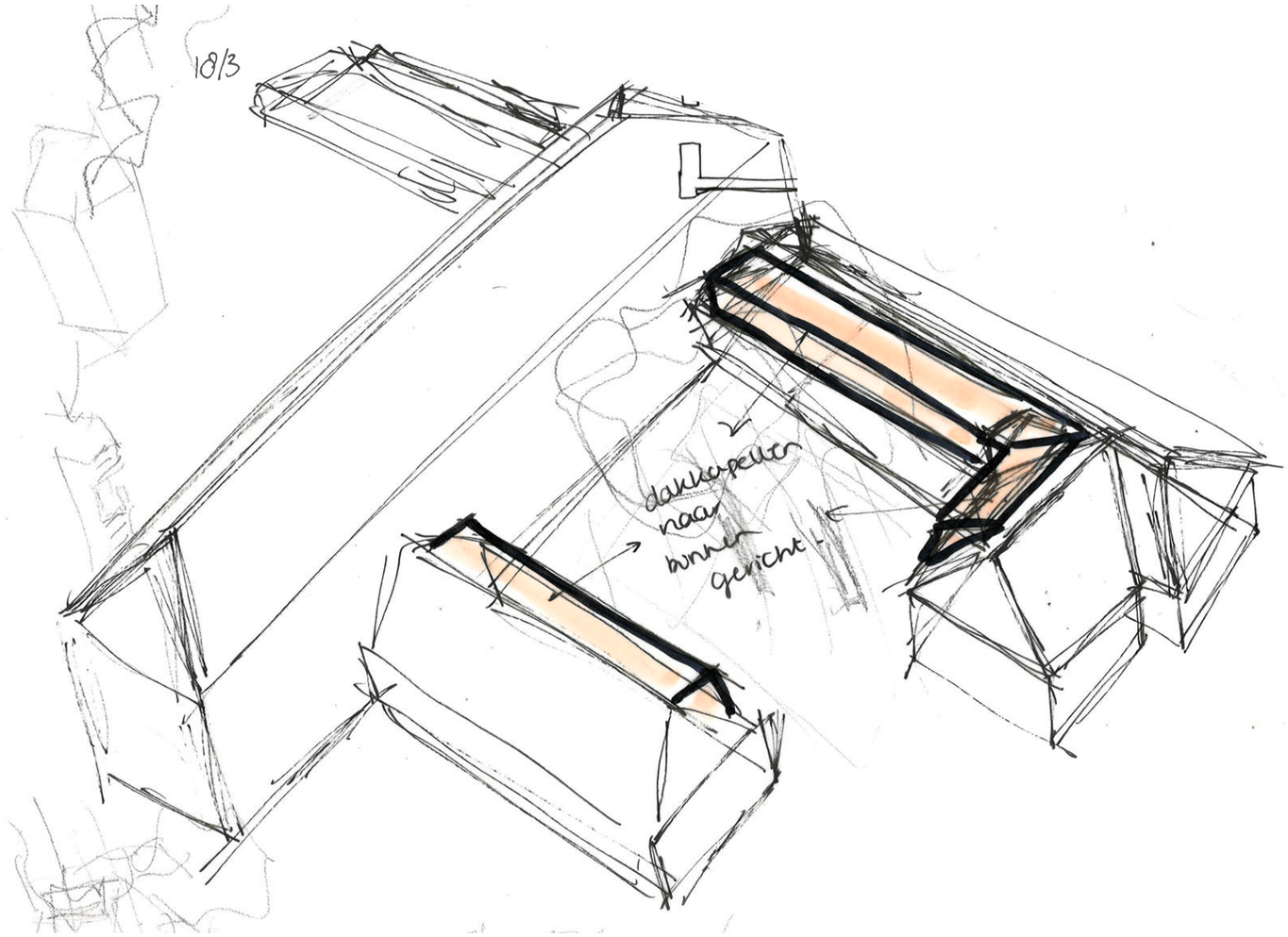
For the development of the master plan, it was important to zoom out again and examine the green and road structures in the surrounding area to ensure the master plan aligns well with them.

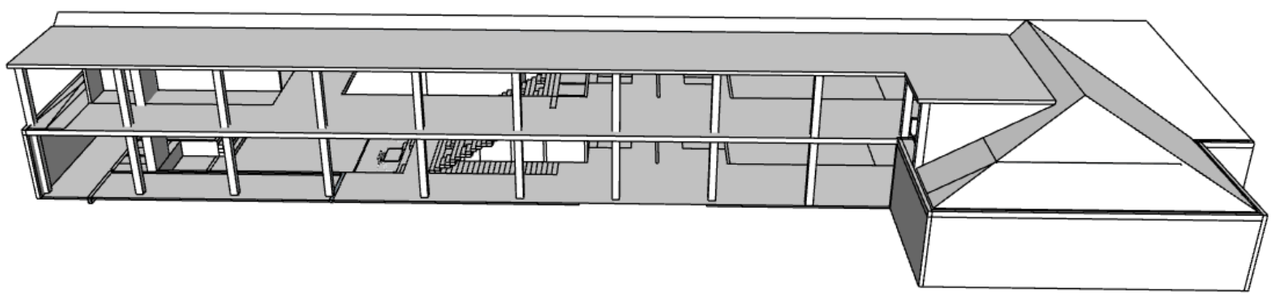
Additionally, I looked again at the existing primary schools and daycare centers to assess how much new capacity is needed. It became clear that I was setting up a too large program, and that the number of classrooms and group rooms could be significantly reduced. So, I've decided to remove the extra small wing from the north wing and only create two group rooms on the ground floor. The upper floor will be used for office and child care-related functions.

18/3

New Addition

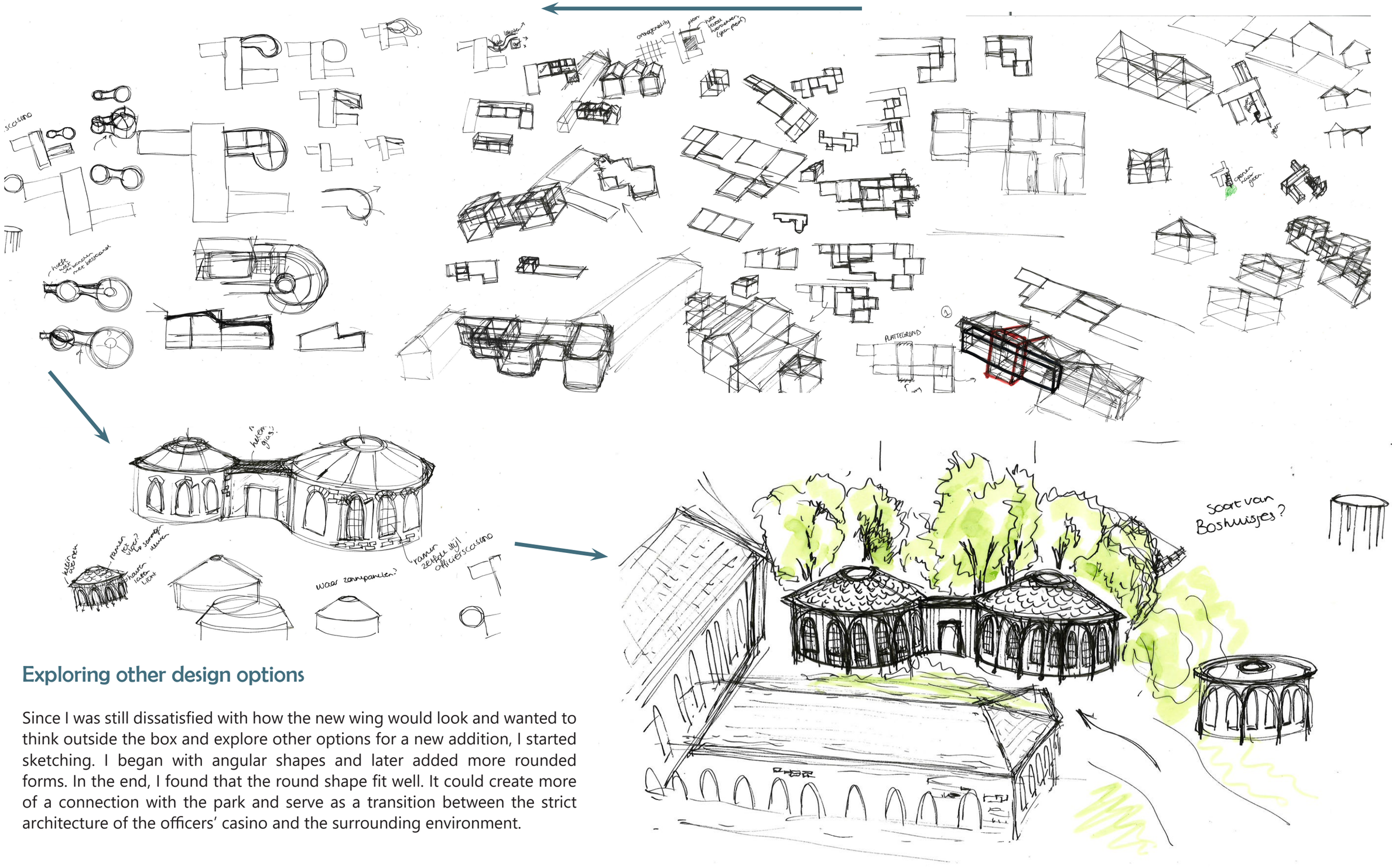
Sketches for the layout and design of the new wings





19/3

New Addition



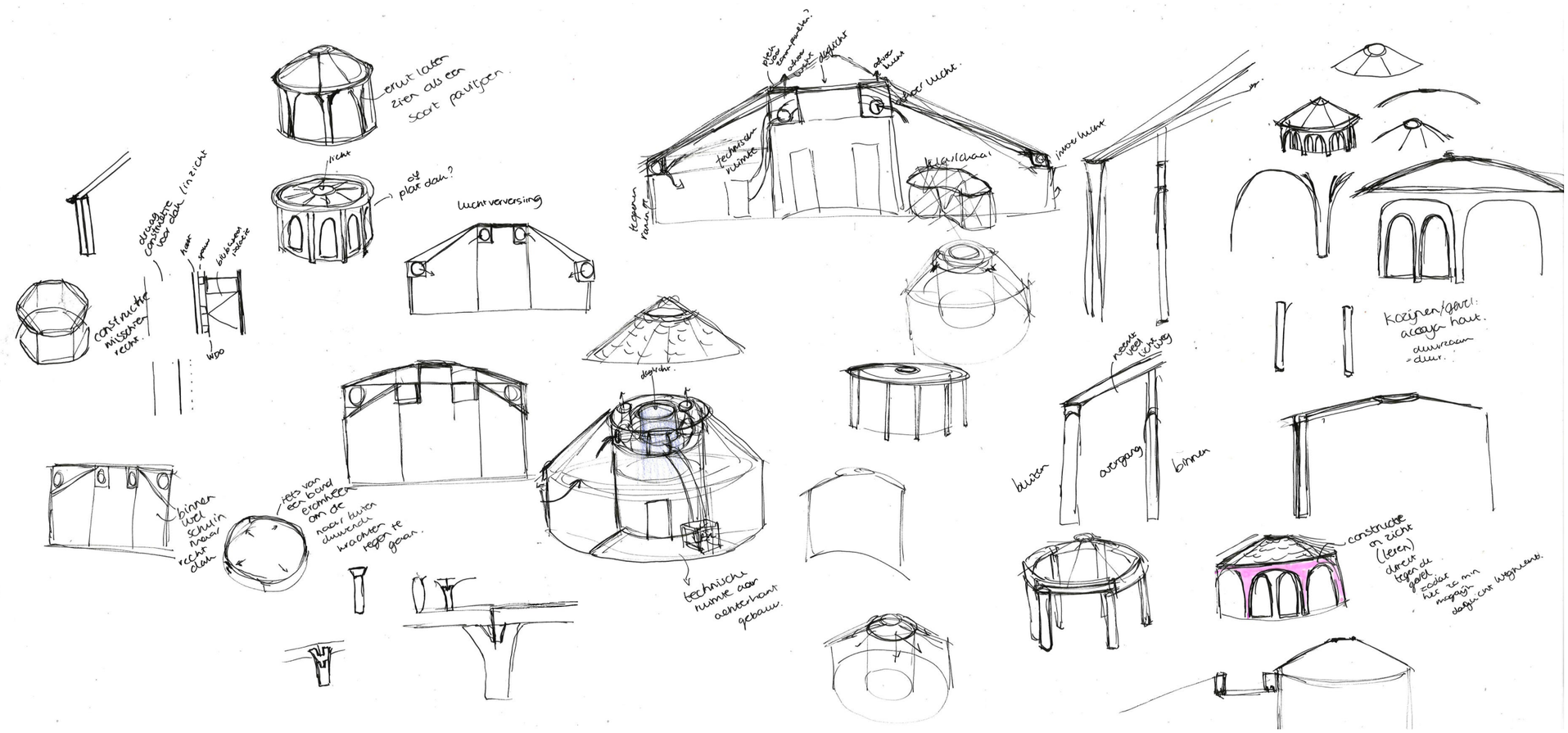
Exploring other design options

Since I was still dissatisfied with how the new wing would look and wanted to think outside the box and explore other options for a new addition, I started sketching. I began with angular shapes and later added more rounded forms. In the end, I found that the round shape fit well. It could create more of a connection with the park and serve as a transition between the strict architecture of the officers' casino and the surrounding environment.

24/3

New Addition

Exploring climate design and construction ideas

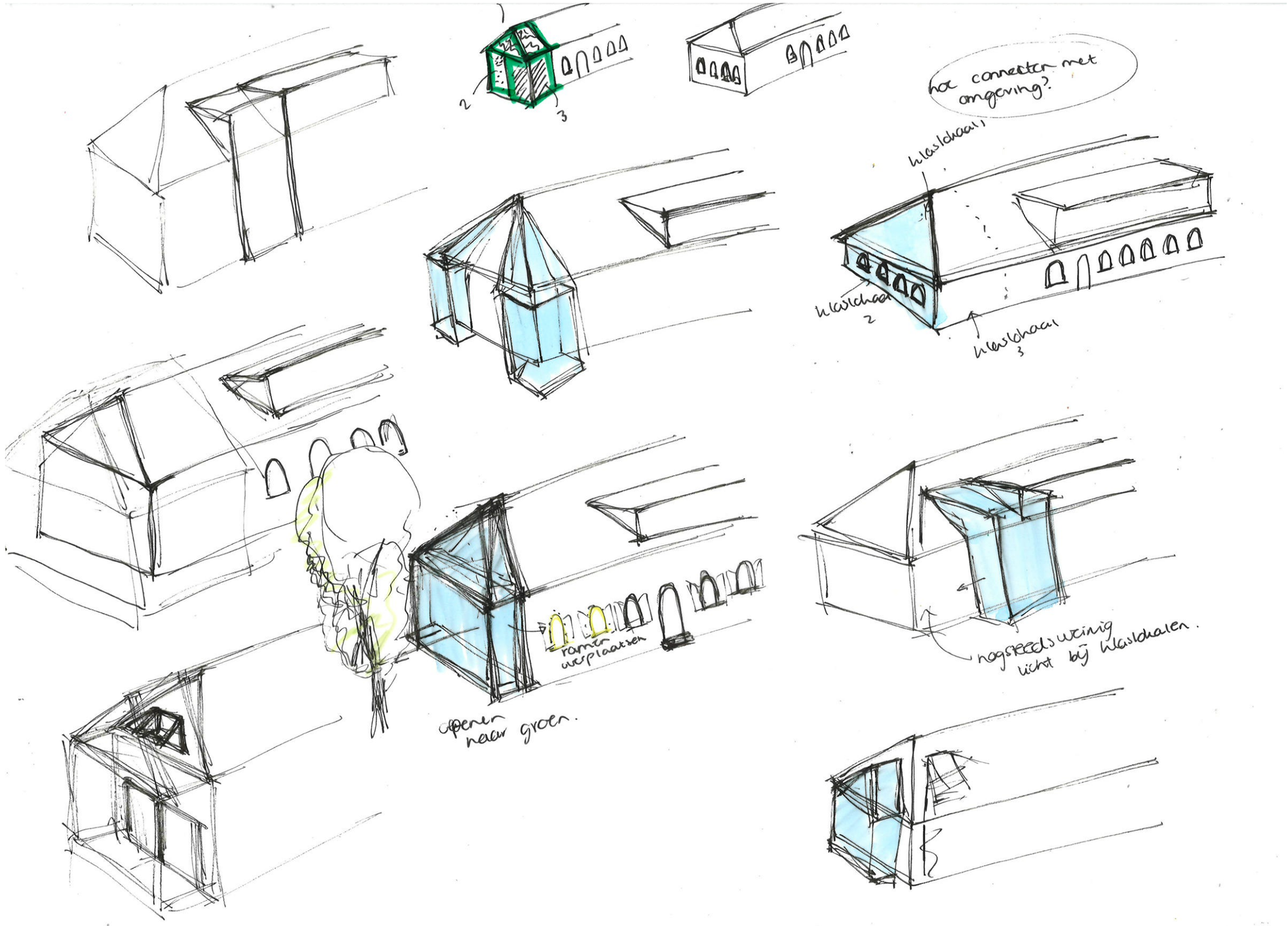


26/3

South Wing

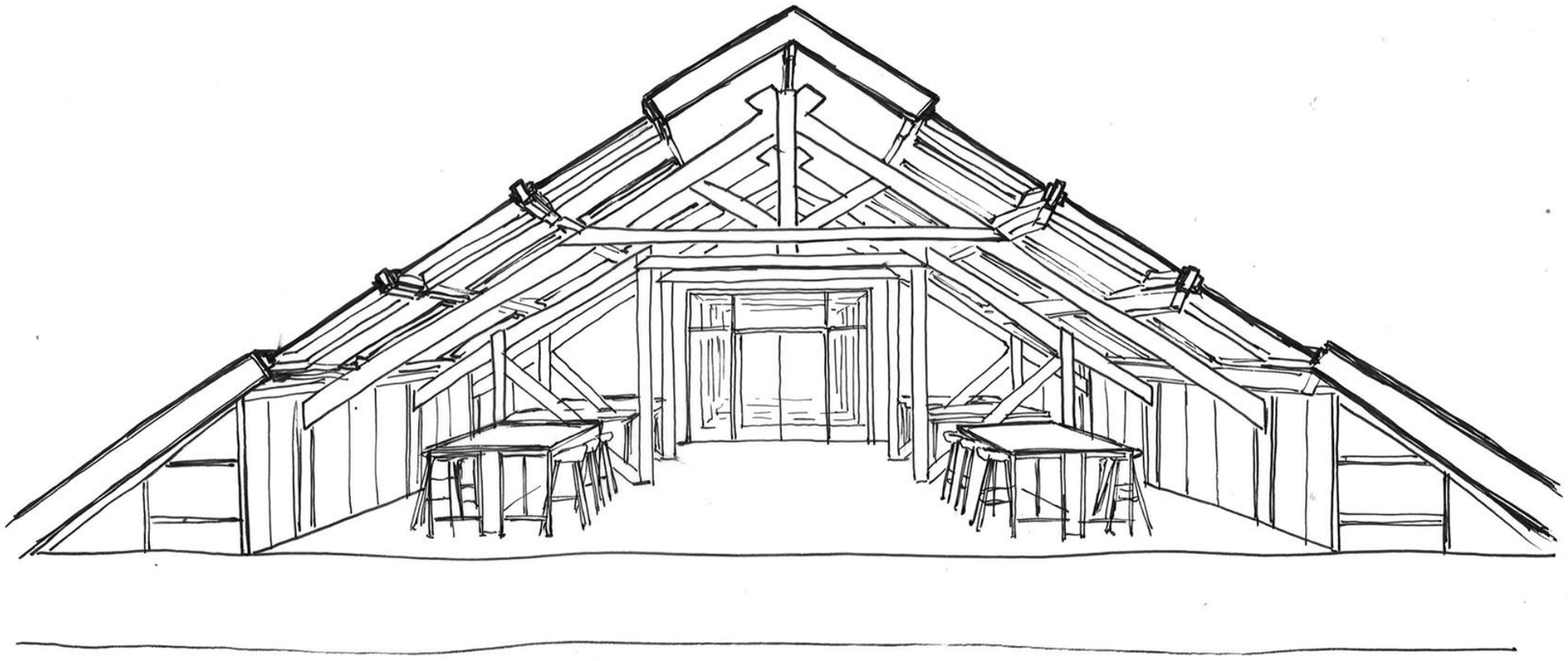
Options to create more daylight and a softer transition between inside and outside

Since there is little natural light entering the areas where I want to place classrooms on the ground floor, I have been exploring ways to bring in more daylight. I also want to soften the transition between inside and outside. There is a tension here between respecting the monument and its highly valued shell, and introducing the new function.



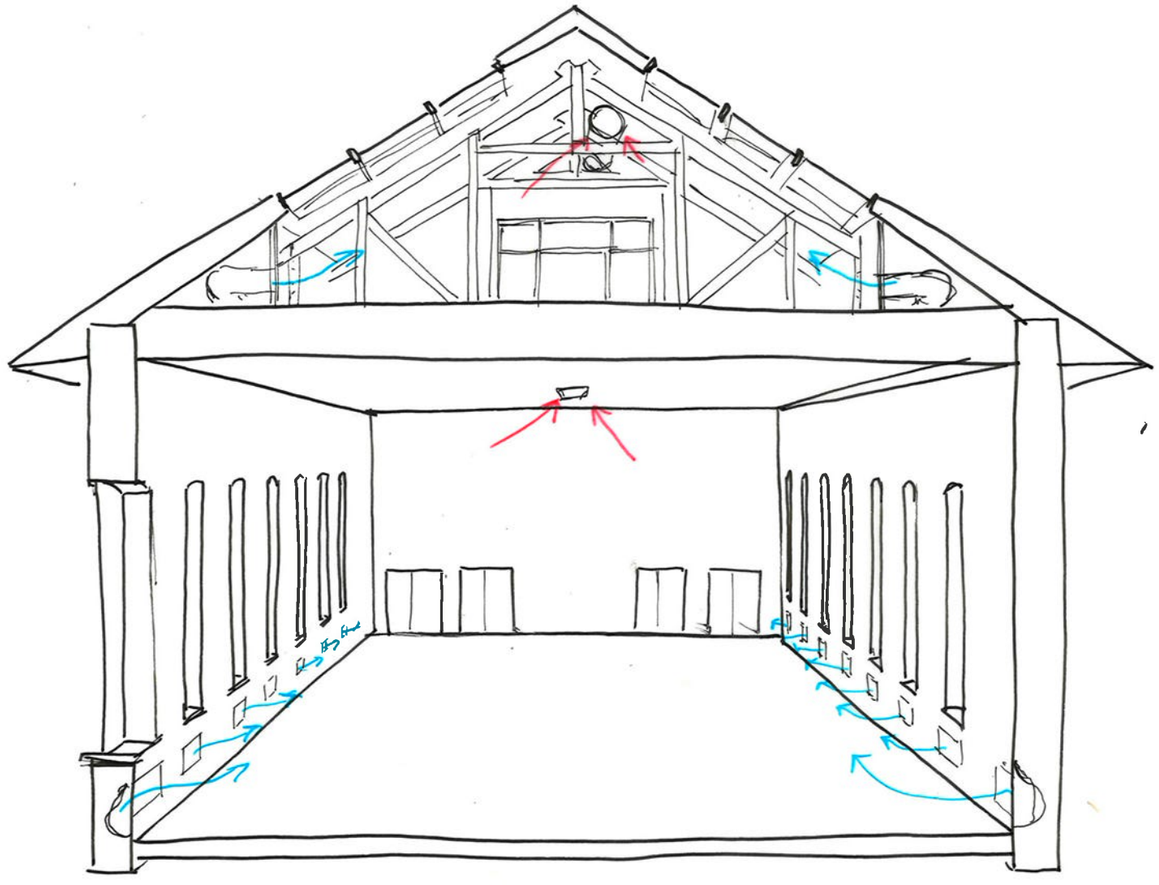
30/3

Main Volume



Ventilation systems in the main volume

The ventilation system for the attic of the main volume will primarily run along the sides, at the ends of the roof, in built-in cabinets. This keeps it as out of sight as possible. However, the air exhaust will be visible. Since this is a creative and technical workspace, I don't mind that it is visible in this part of the building. In the main hall, the existing heating cavities in the wall will be reused. The air will be extracted at specific points in the ceiling, which lead to technical rooms in the attic.



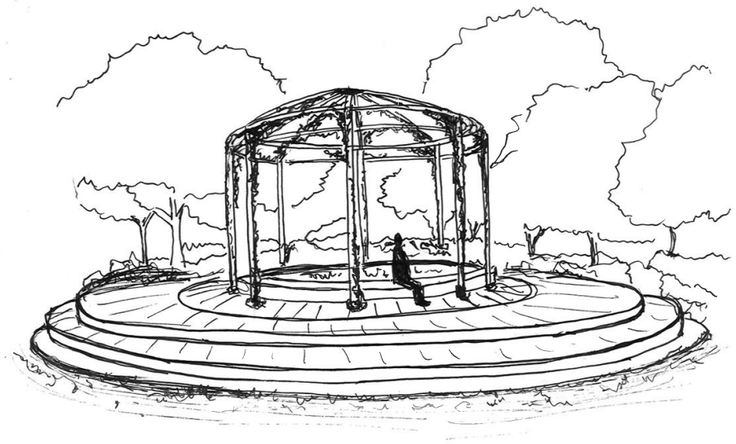
31/3

Masterplan & New Addition

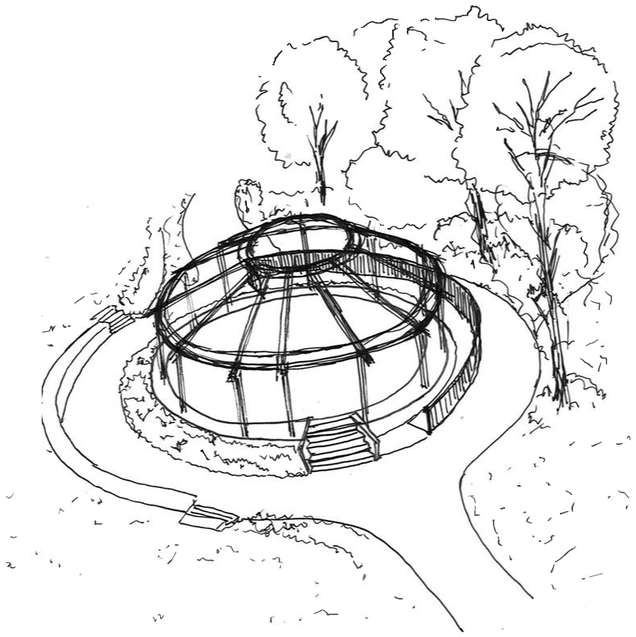
Adapted masterplan and two separate new additions

I have created a new master plan, in which certain ‘pavilions’ are placed in the park, where functions such as an outdoor classroom, an open-air stage, and a playground can be located.

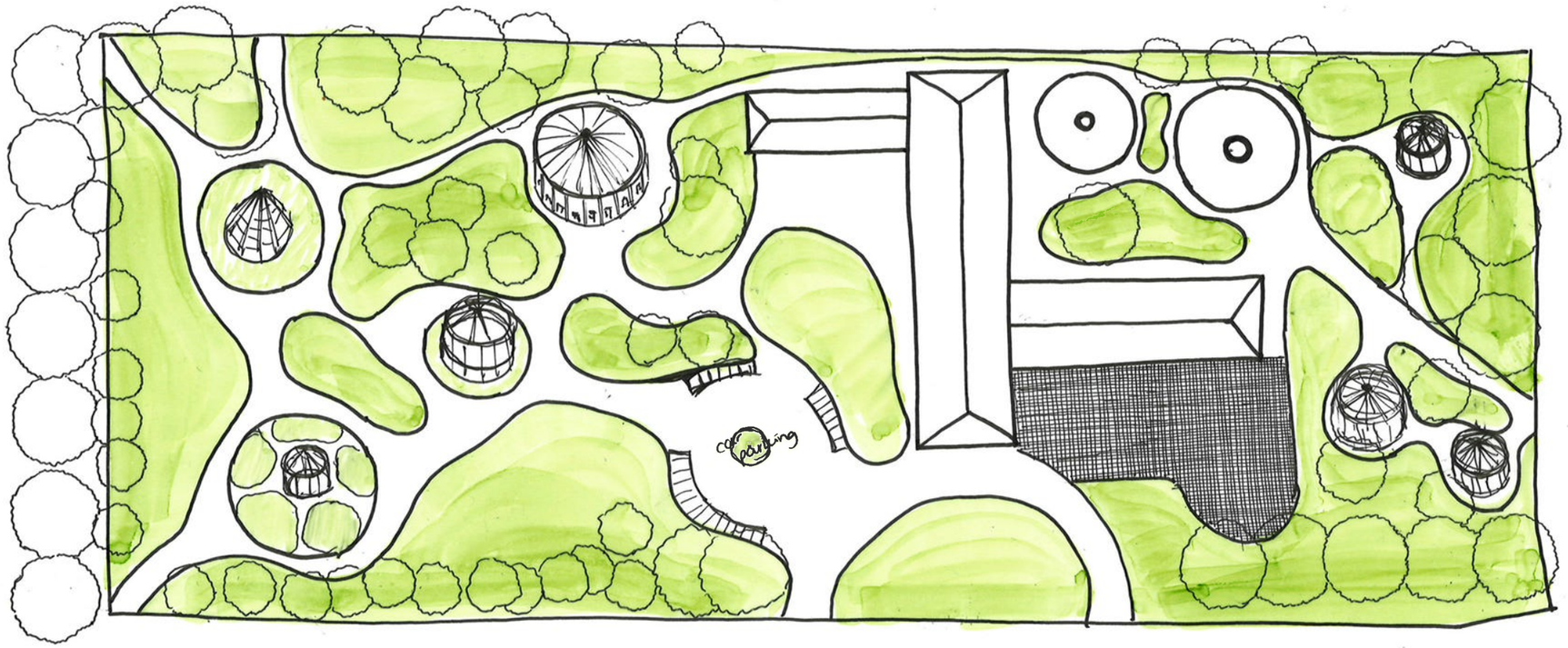
The new buildings are now separated from each other, making them standalone structures. In terms of design, they reference the small pavilions in the park.



Pavilion

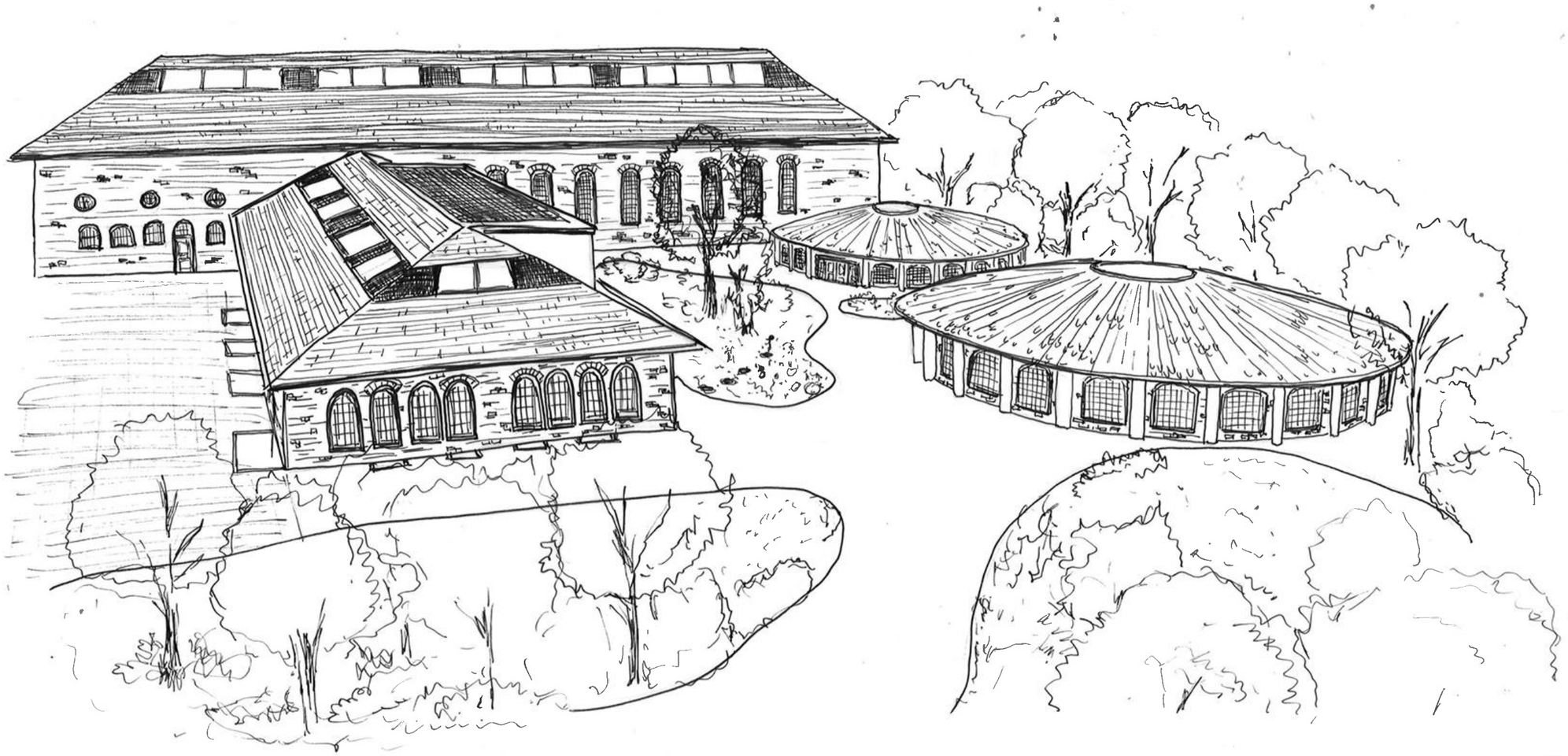


Outdoor stage



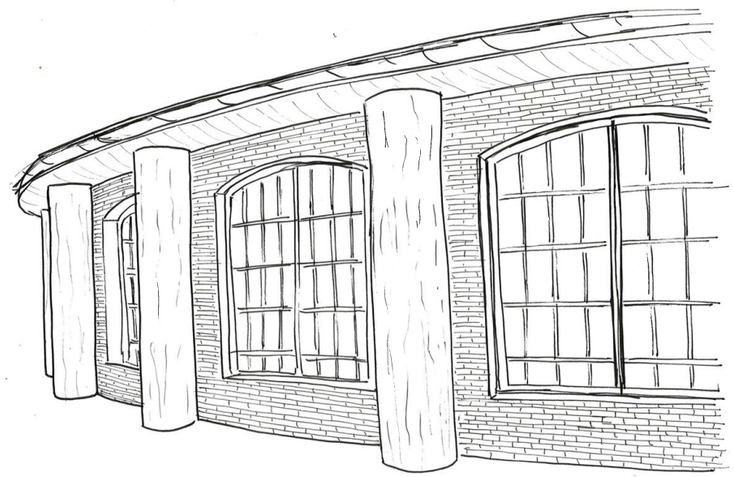
31/3

New Addition



Transition between existing Officer's casino and surrounding park

The new additions are designed to form a transition in both shape and material between the strict architecture of the existing officers' casino and the surrounding park. In terms of materiality, I propose a combination of brick and wood. The brick will partly consist of bricks reclaimed from the new openings created in the facade of the officers' casino, while the use of wood helps establish a softer connection with the natural surroundings.



3/4

South Wing

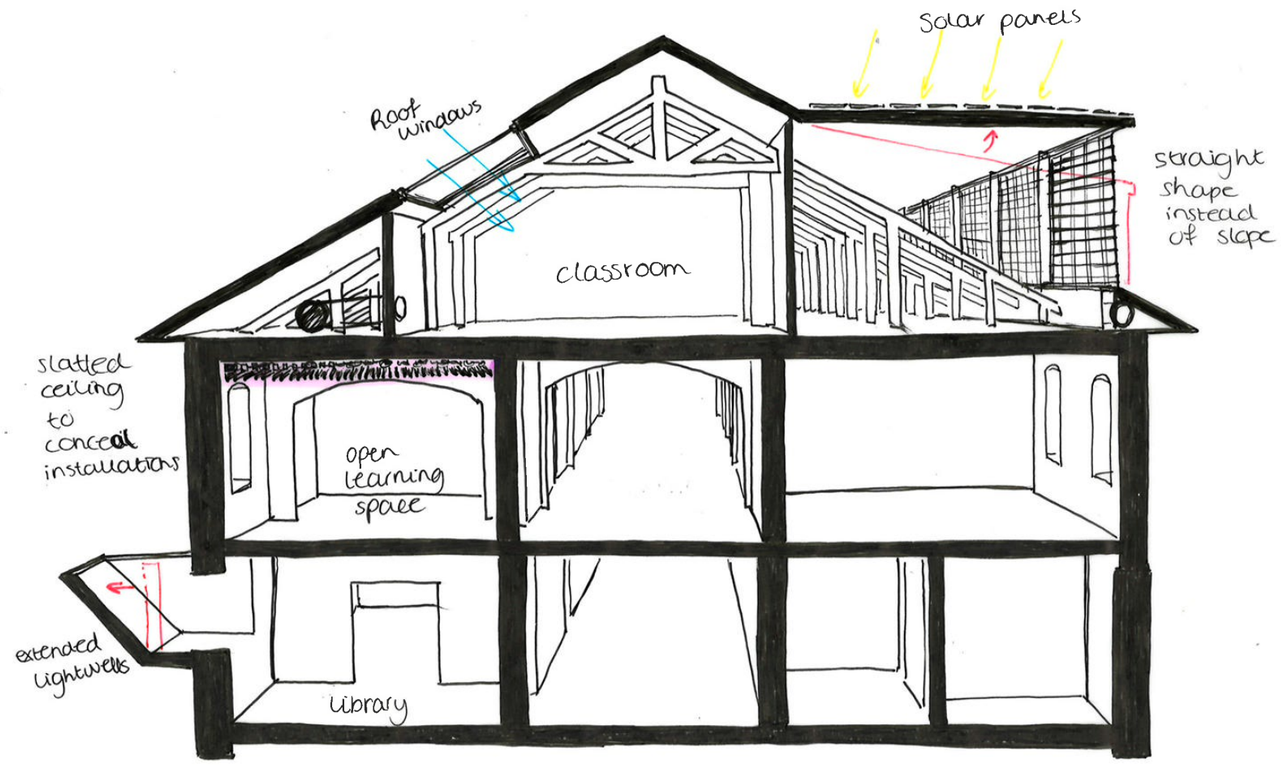
Overview south wing interventions

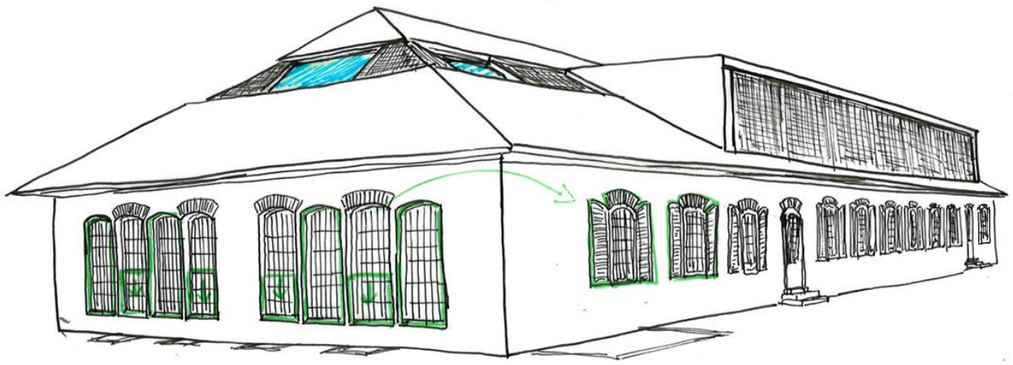
The existing dormers will be extended into one continuous dormer. The original dormers were about one meter wide, with a lot of unusable space in between. By combining them into a single long dormer, a significant amount of usable space is created. By keeping the existing roof trusses in place, the space is naturally divided into different zones that can be used as workspaces. By designing the dormer with a straight roof instead of a sloping one, space is also created for solar panels on the roof.

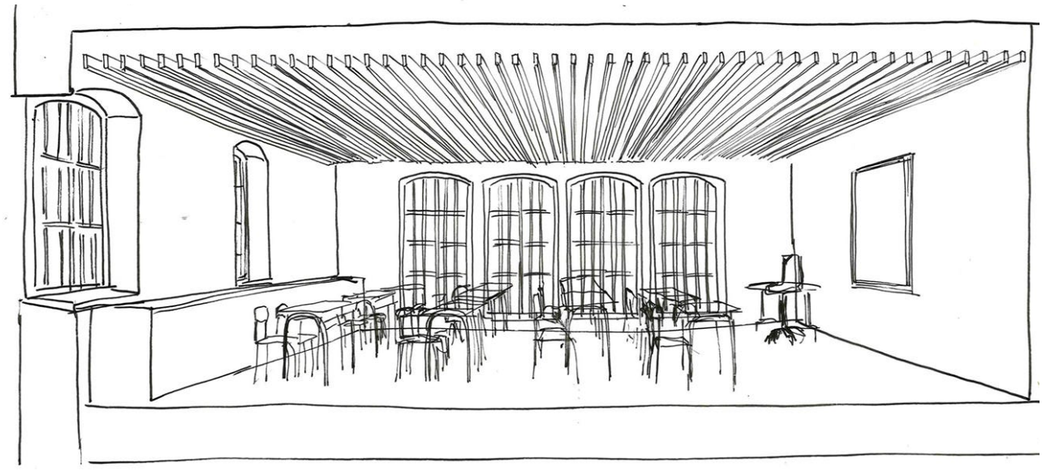
The ventilation system, similar to that in the main volume, will be placed as much as possible along the edges of the roof. In addition, I plan to use a slatted ceiling made of wooden slats. This conceals the installations while also giving the interior of the building a warm appearance.

For the skylights, I plan to arrange them in a strip across the roof, where windows alternate with solar panels.

To bring more light into the ground floor at the end of the wing, new openings will need to be created. These will follow the rhythm and design of the existing openings as much as possible.







20/4

South Wing

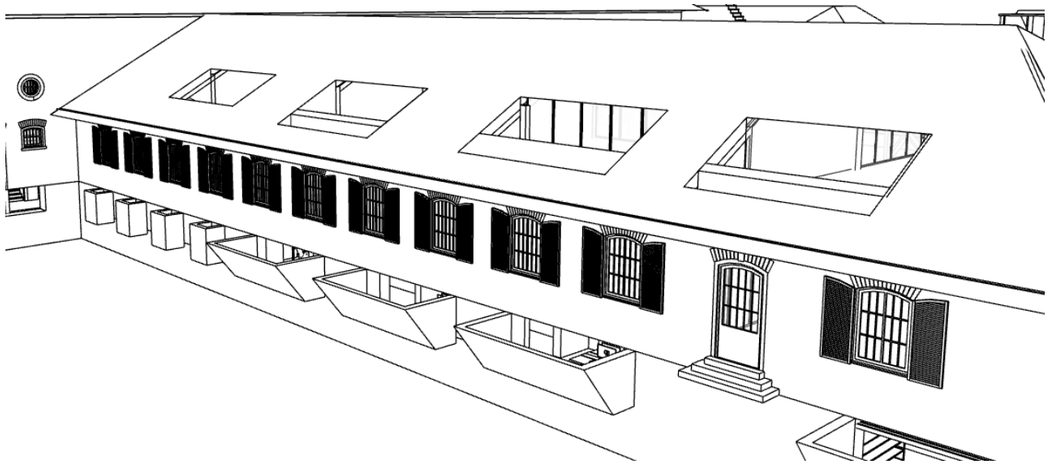
Research into alternative ways of bringing more daylight into the building

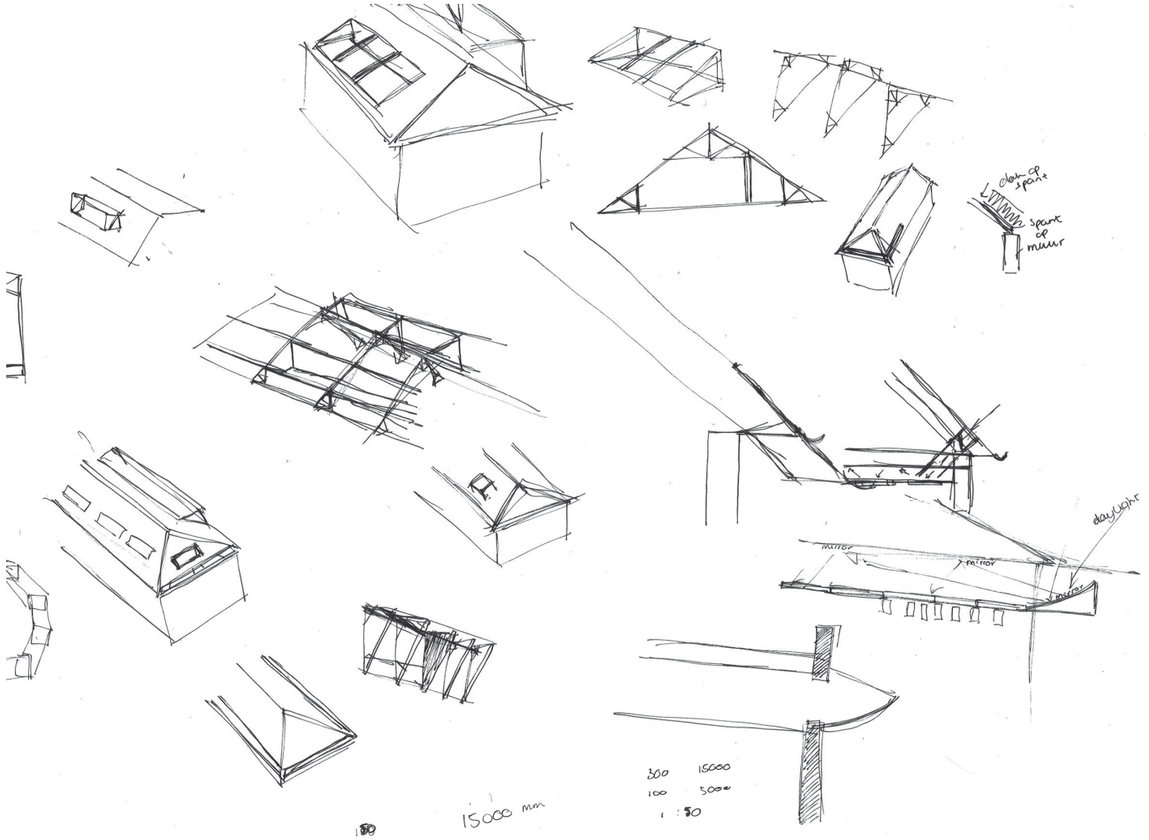
This week I explored whether there are other ways, besides roof windows, to bring more daylight into the building. Ideas emerged to cut openings into the roof, create a roof loggia, or even remove an entire section of the roof to create a roof terrace. By extending the timber trusses into the exterior space, or continuing the purlins outward, the visual form of the roof could still be maintained.

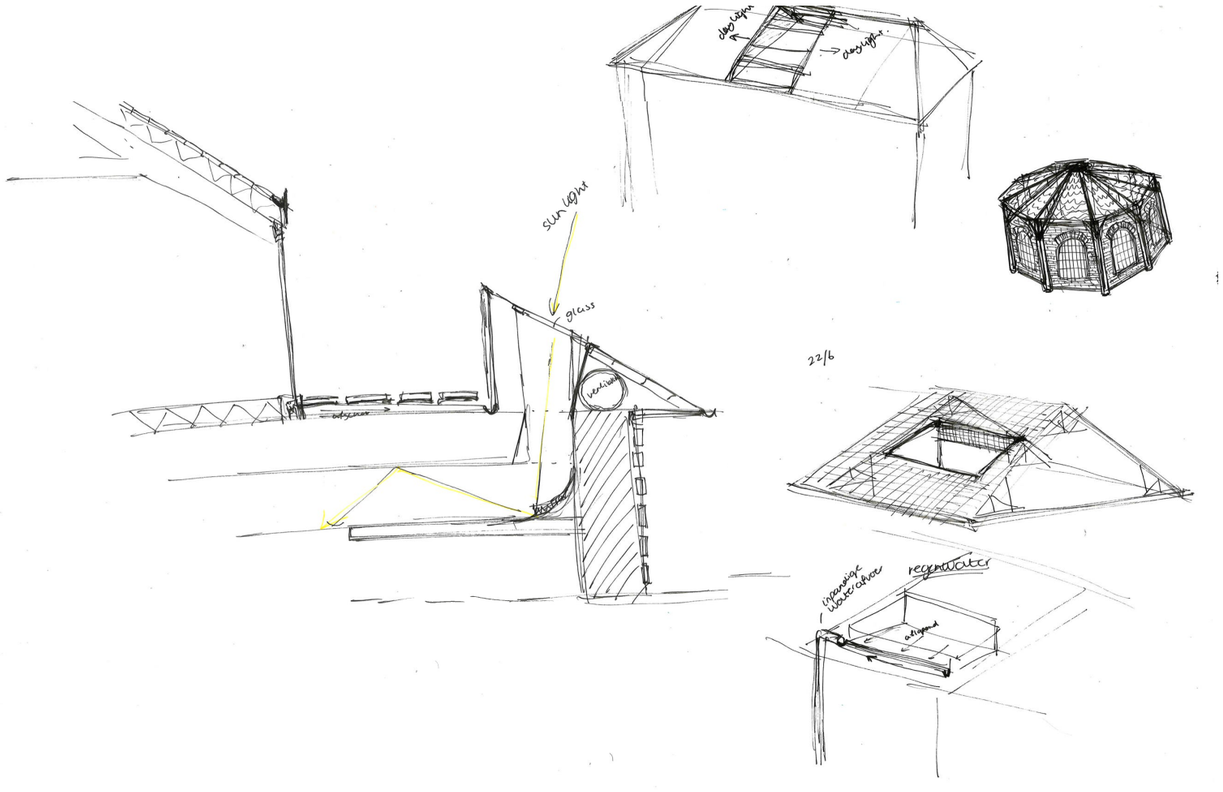
In the end, however, I was not fully satisfied with either option. Cutting openings into the roof affects the roof form too much, even if architectural elements are used to visually continue the original shape. The roof form is highly valued, and I consider it too important to the overall appearance of the building to alter it so drastically.

In addition, I looked into anidolic lighting, where mirrors are used to bring daylight deeper into the building. However, this would require a major intervention, involving changes to the exterior as well as creating many structural challenges on the interior. Ultimately, I concluded that the additional daylight would not outweigh the complexity and disruption caused by such an intervention.

Looking back at my earlier ideas for increasing daylight, using roof windows and creating several new façade openings that align with the shape and rhythm of the existing openings, I find these to be more suitable solutions.





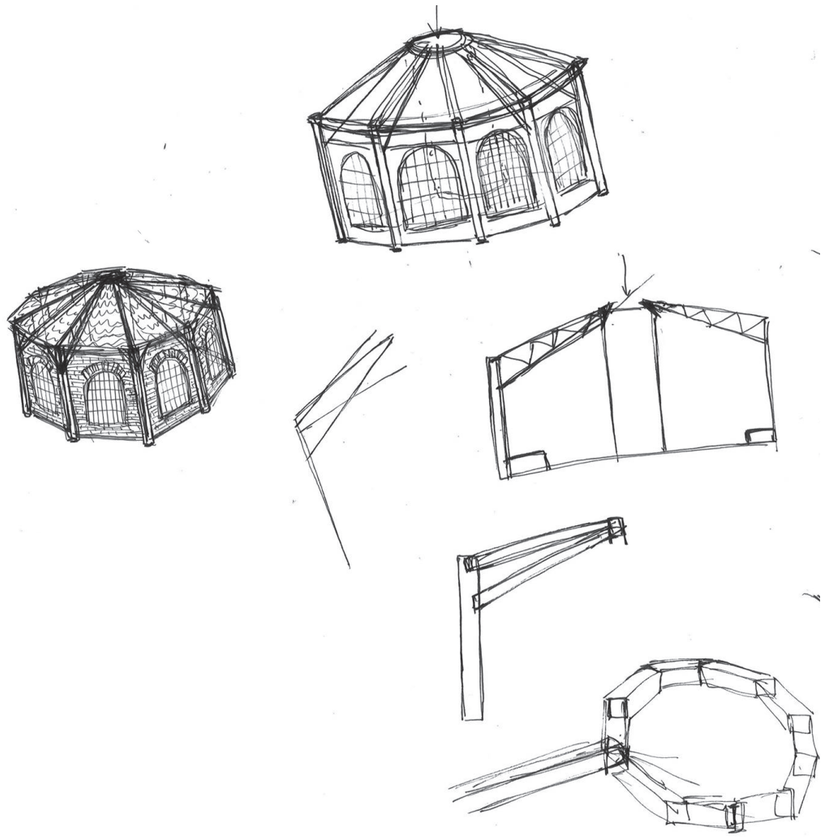


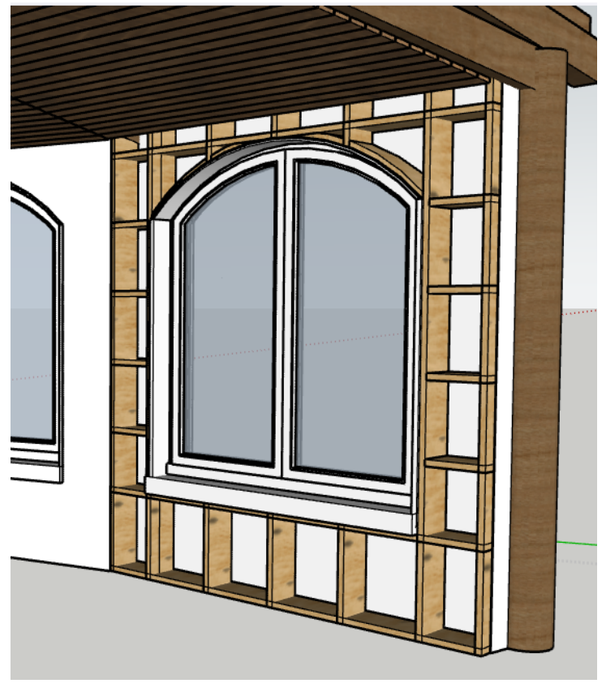
23/4

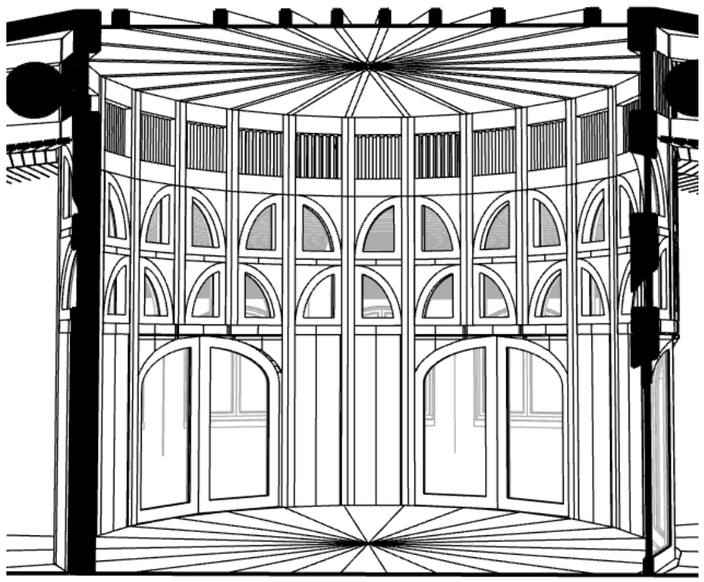
Additional volume

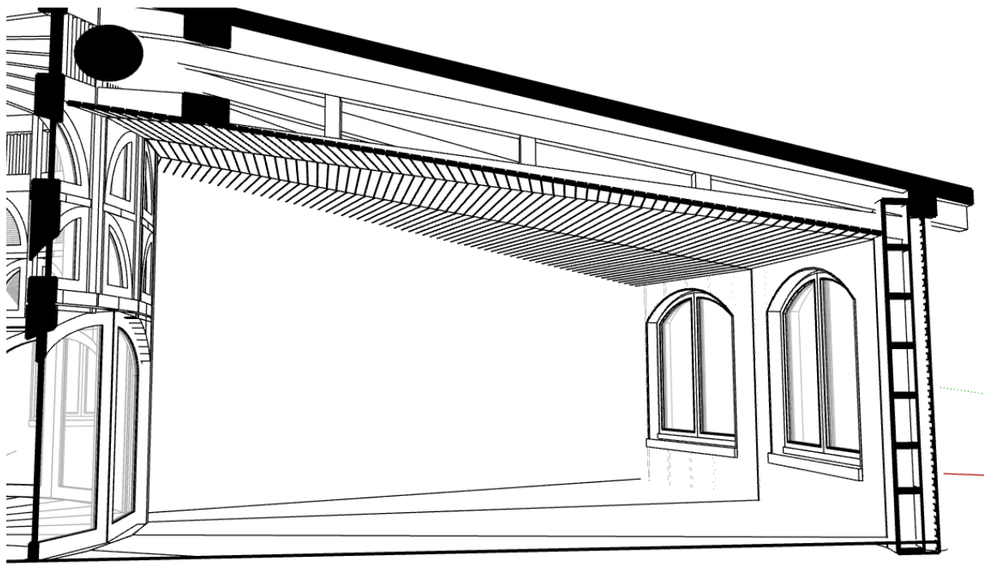
Further design of additional volume

In the further development of the additional volumes, I explored how I want to design the structure, the wall build-up, and partly also the interior. I want to make as much use of timber as possible, both because of its sustainability and because this natural material aligns well with Waldorf principles. The roof is supported by columns, some of which stand independently from the walls. The walls are made of timber-frame construction (HSB), which are self-supporting. The principle of having a separate structural system supporting the roof is derived from the structural concept of the Officers' Casino, where the outer layer also acts as a separate load-bearing structure for the roof trusses. The exterior windows are distributed evenly around the building, and their shape references the window openings of the Officers' Casino.









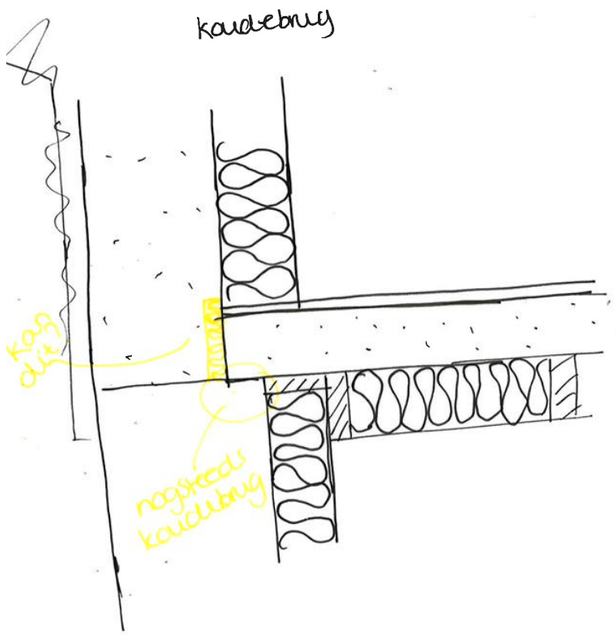
Furthermore, I wanted to incorporate bamboo into the ceiling design of the interior, as it creates a warm atmosphere. The circular central hall is illuminated from above. By using many windows and glazed doors, a large amount of daylight can also enter the classrooms from this central space. I designed the window openings in a pattern whose rounded corners refer to the arched tops of the existing windows of the Officers' Casino, while also referencing the softer, more organic forms associated with Waldorf theory.

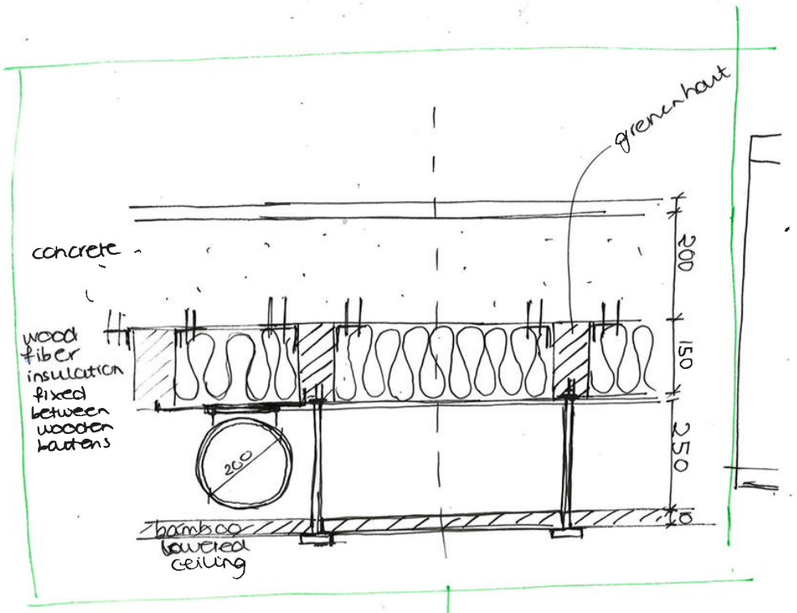
5/5

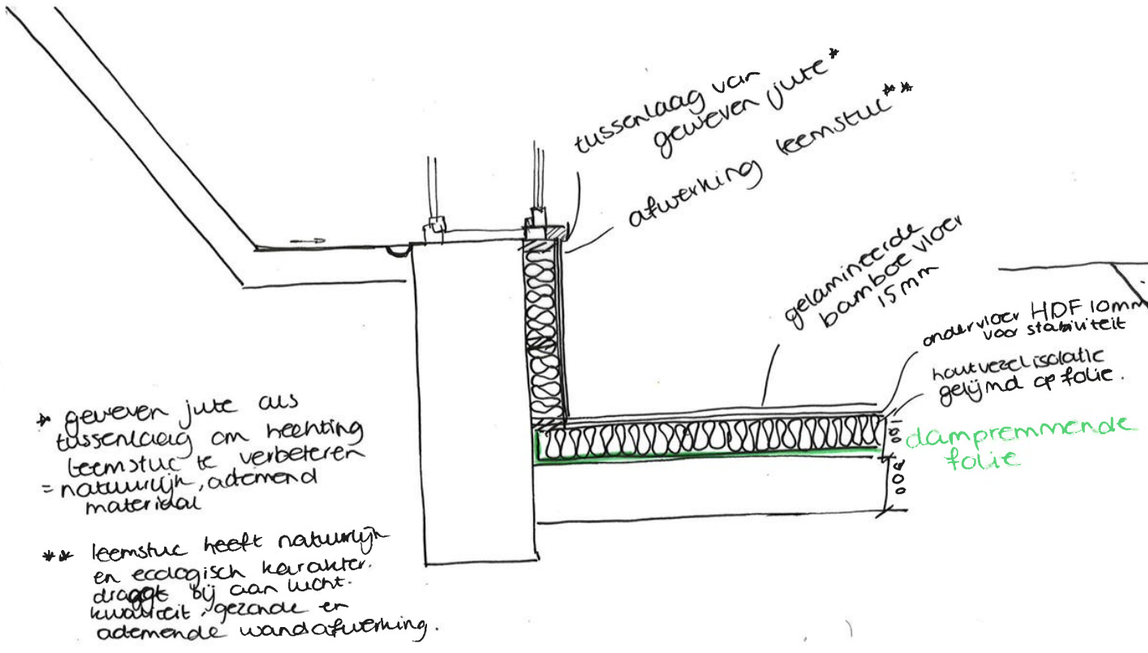
South Wing

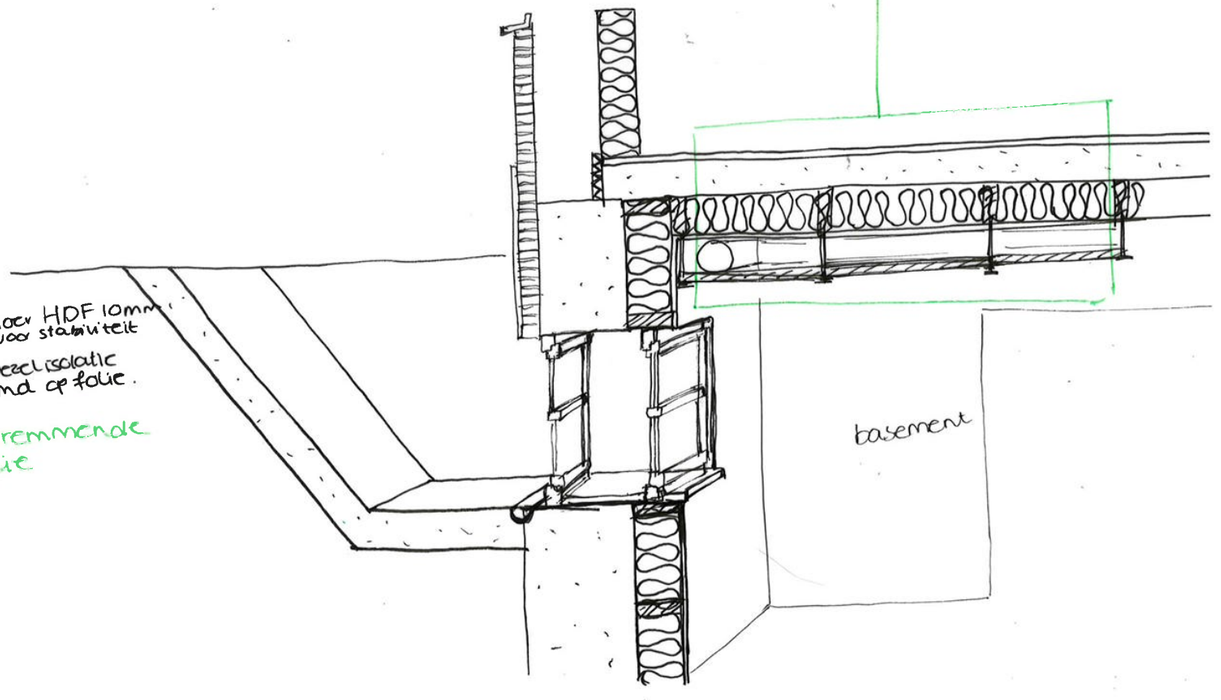
Detailing south wing

Using sketches to explore how all elements fit together, where the insulation and interior elements should be placed, and where potential problems may arise.



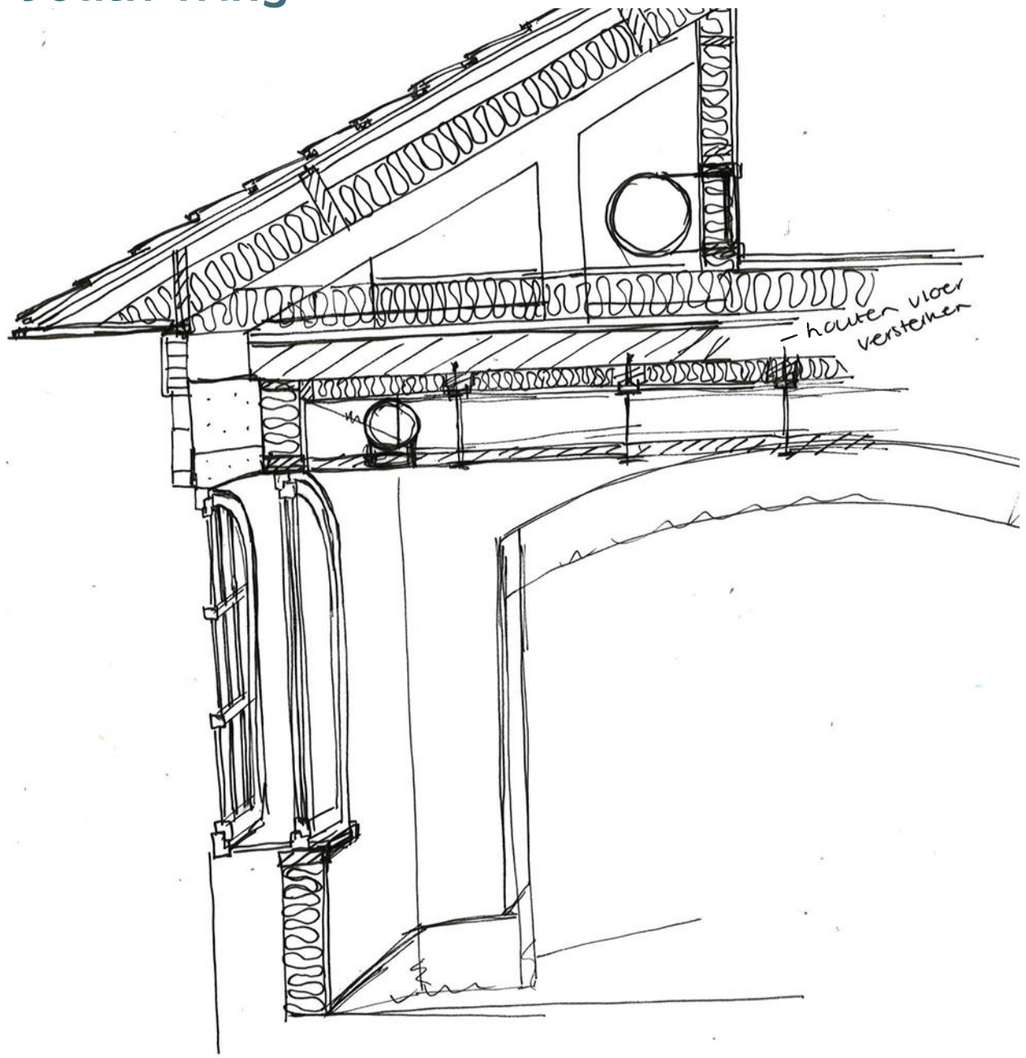


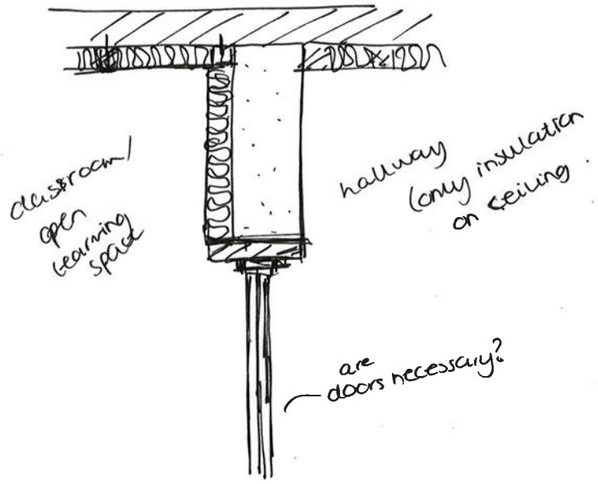




6/5

South Wing



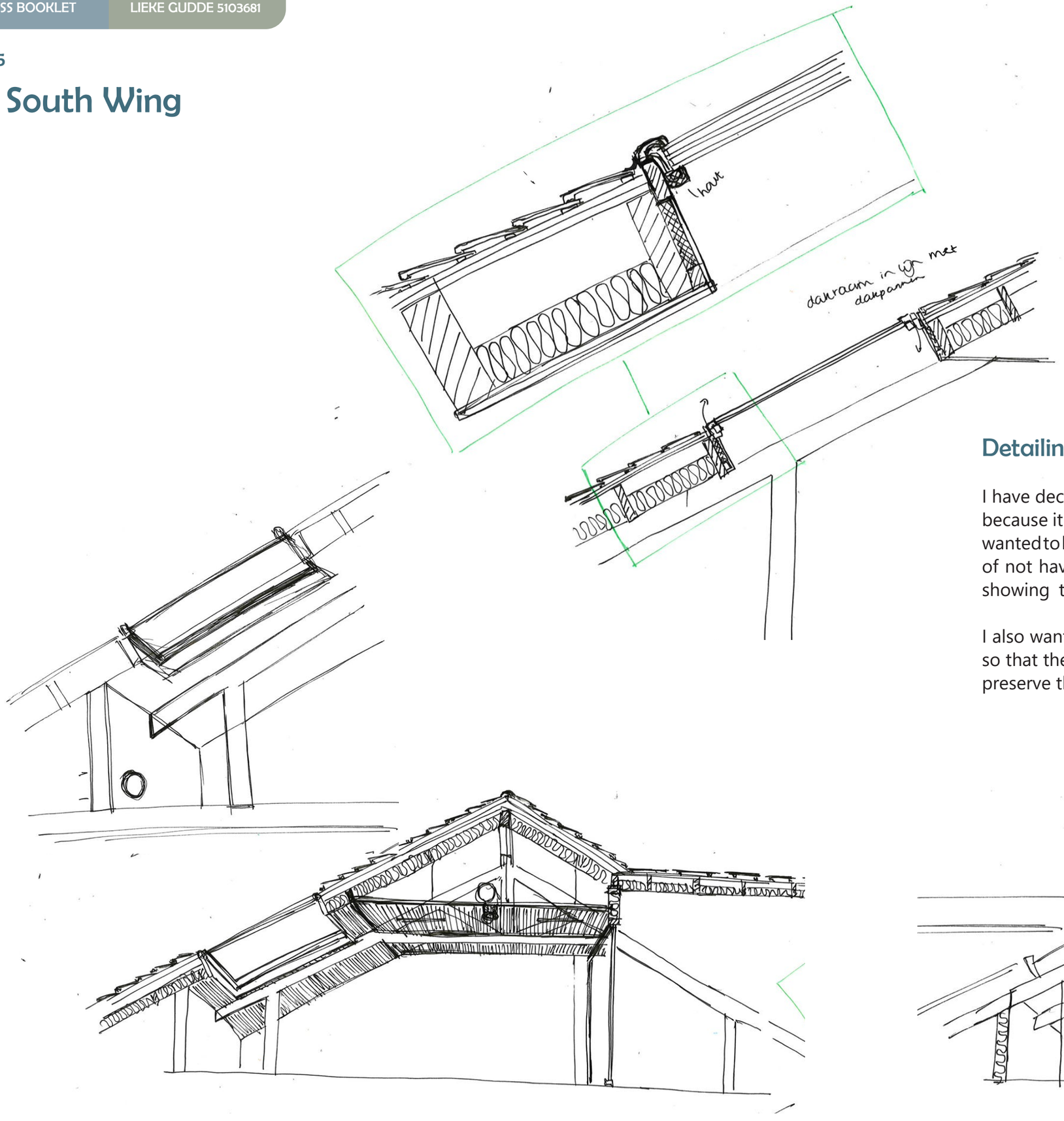


Detailing and choosing materials

I want to make as much use as possible of natural materials. For example, I intend to use wood fibre insulation, which is installed between wooden battens. On top of this, woven jute is used as an intermediate layer to which the clay plaster can adhere.

6/5

South Wing



Detailing and choosing materials

I have decided to add a suspended ceiling on the first floor after all, because it allows the installations above it to be concealed. Initially, I wanted to keep the entire truss visible, but I think the calmer appearance of not having all the installations in sight outweighs the benefit of showing the full truss. The truss will still remain partially visible.

I also want to position the roof windows as far outward as possible, so that they align as much as possible with the roof tiles, helping to preserve the shape of the roof as much as possible.

7/5

Main Volume

Relocating the workshop space

During the design process, I reconsidered whether the interventions required to transform the attic into a creative workshop space were worth the impact they would have on the existing building. Since the Zeger Hall on the first floor of the main volume had not yet been assigned a clear programme, I explored whether the workshop function could be accommodated there instead. This space proved to offer more than enough room for the intended activities.

I therefore decided to leave the attic largely untouched. By relocating the workshop space, the main volume can be preserved more extensively, allowing the historical character and story of the building to remain visible.

28/5

South Wing

Reconsidering material choices

I decided to replace the bamboo flooring in the south wing with European oak. While bamboo was initially selected because of its sustainable qualities, European oak was ultimately considered more appropriate in relation to the historical context of the building. As a material commonly found in Central Europe, it establishes a stronger connection to the German origins of the Officer's Casino and contributes to the narrative of the project.

In addition, oak offers a long lifespan and can be repaired, refinished, and reused over time, making it a durable choice for a school environment. Bamboo remains present within the project through interior elements and continues to be used as the primary flooring material in the new additions, creating a distinction between the historic building and the newly added volumes.

Appendix 4:
Plan of Requirements

Plan of Requirements

The programme is based on approximately 200 pupils. Area requirements were derived from Dutch educational accommodation guidelines, precedent studies, and project-specific requirements identified throughout the research.

Quantity	Space		Area (m^2)
	Primary school		
6	Class		
		Classroom	55
		Adjacent learning plaza/workspace	20
		Storage and sanitary	9
		Coat racks/closets	6
3	Kindergarten class		
		Classroom	70
		Storage and sanitary	9
	Shared educational spaces		
1		Additional open learning space	70
2		Quiet/instruction room	15
1		Studio/workshop/art room	50 - 100
1		Library/media library	120
1		Staff room	30
1		Teacher office spaces	15
1		Storage	25
1		Gymnasium kindergarten	140
	After-school care (BSO)		
1		Play space	50 - 80
1		Quiet/chill room	15
1		Small kitchen/pantry	
		Sanitary facilities (shared with school)	
		Outdoor play area	
	Child care		
2		Groupspace	45
2		Sleeping room	10
2		Sanitary facilities for children	7
1		Toilet for staff	5
1		Kitchen/pantry	
1		Stroller storage	15
1		Office	15
1		Staff room	40
1		Storage	30
	Child-care facilities		
3		Office	12
		Waiting room	
1		Storage	10
		Sanitary	5