Repurposing religious sublime heritage

Sint Augustinuskerk, Amsterdam -North



Religious heritage

An intense array of emotions

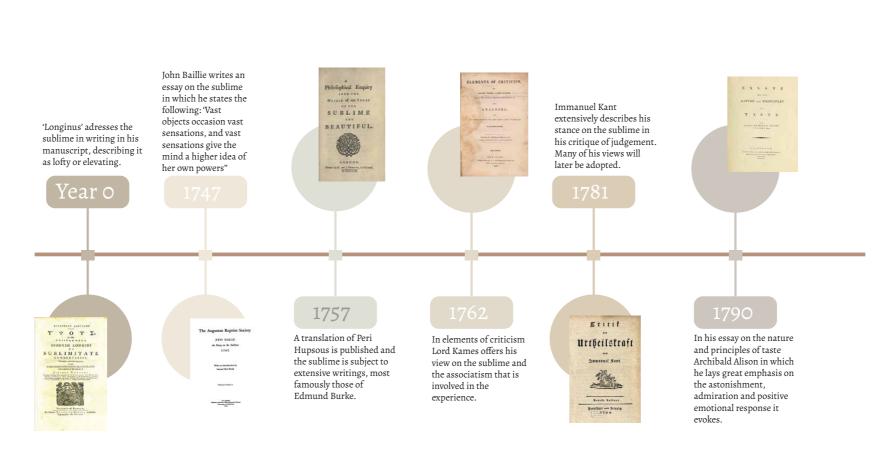


A philosophical debate



Immanuel Kant

"A sublime state of mind is one in which we take pleasure in the failure of sensible representation, because failure enables us to appreciate the power of reason to conceive of what can never be met with the senses, or rendered in sensible representation (Kant & Zweig, 2001)." Kant describes the Sublime as encountering something that is at first glance so overwhelming, powerful and simultaneously frightening that it overpowers our imagination for a brief moment (Wallis de Vries, 2012 p.6).





Edmund Burke

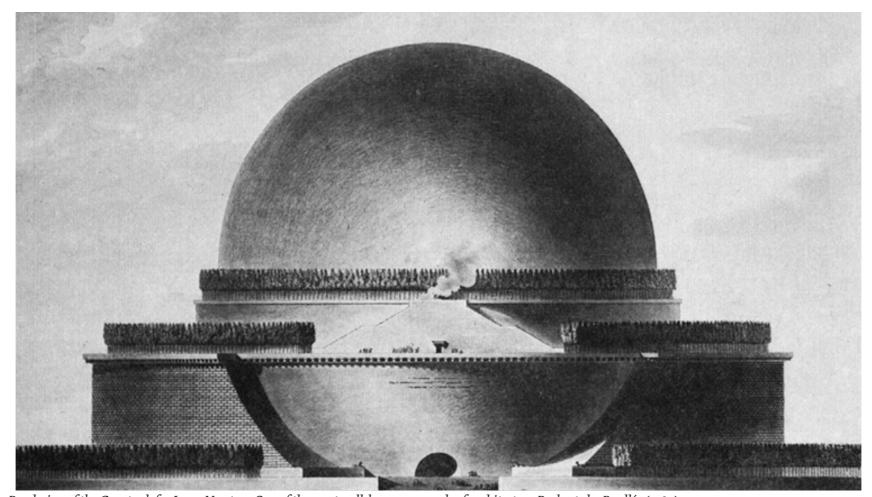
'The passion caused by the great and Sublime in nature, when those causes operate most powerfully, is astonishment; and astonishment is that state of the soul, in which all its motions are suspended, with some degree of horror. In this case the mind is so entirely filled with its object, that it cannot entertain any other, nor by consequence or reason on that object which employs it. Hence arises the great power of the sublime, that, far from being produced by them, it anticipates our reasonings, and hurries us on by an irresistible force (Burke, 2022).'

18th century romantic landscapes



Caspar David Friedrich, Wanderer above the Sea of Fog, 1817, Kunsthalle Hamburg. Romantic artists during the 19th century used the epic of nature as an expression of the Sublime (Caspar Friedrich's 'Wanderer Above the Sea of Fog' and Sublime Transformation, 2018).

Architecture parlante



Rendering of the Cenotaph for Isaac Newton. One of the most well-known example of architecture Parlante by Boullée (1784).

Revitalising heritage: Zero waste church, 2023

As a philosophical concept

The sublime

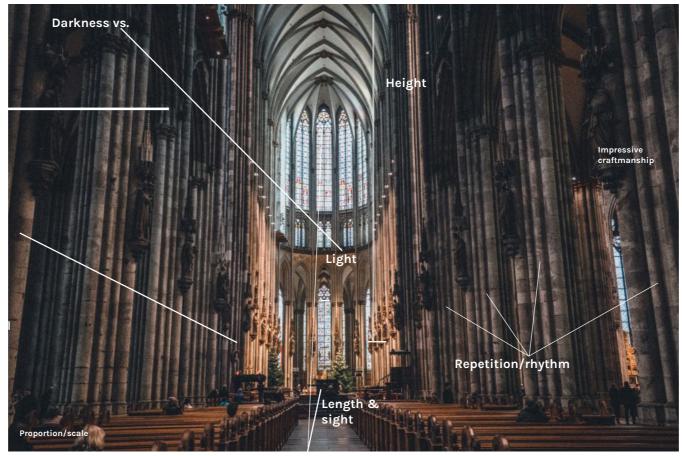
Various settings Intense emotions Art, music, rhetoric, architecture, Intense emotions: awe, transcendence, serenity, calmness, ancient history, nature, religion) inspired, astonished sublime architecture possesses specific characteristics that can evoke sublime emotions. The An object can be inherently An awereness of our freedom project & research are based on as autonomous beings. The sublime (wilderness) or the fact that aesthetics can sublime by association imagination is expanded produce emotions. However, it is through attempting to (power, great riches, left open wether this is due to present an image of the grandeur). associaton or not. object to the mind. The vast sensations following give the mind a higher idea of her own powers. religious architecture: to evoke transcendence, awe, belief of a higher power, slight terror & calmness positive influence on mental health dependent on characteristics

of subject: state of mind,

frame of reference,

capability.

Connection to religious heritage



Interior of the cathedral in Cologne, Germany (Nadeau, 2022).

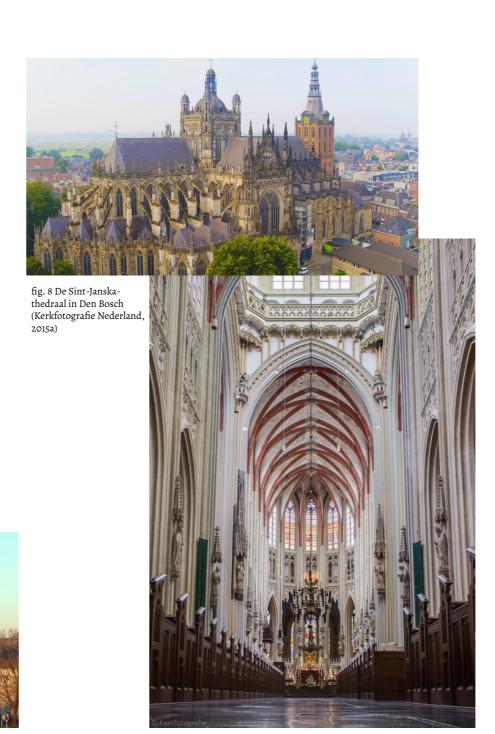
- Search for limits of human conception
- To convince of something bigger than the self
- To create fear and wonder simultaneously, fear for hell and hope in heaven

(van Manen, 2018), (Baaske, n.d.)

In Dutch religious heritage

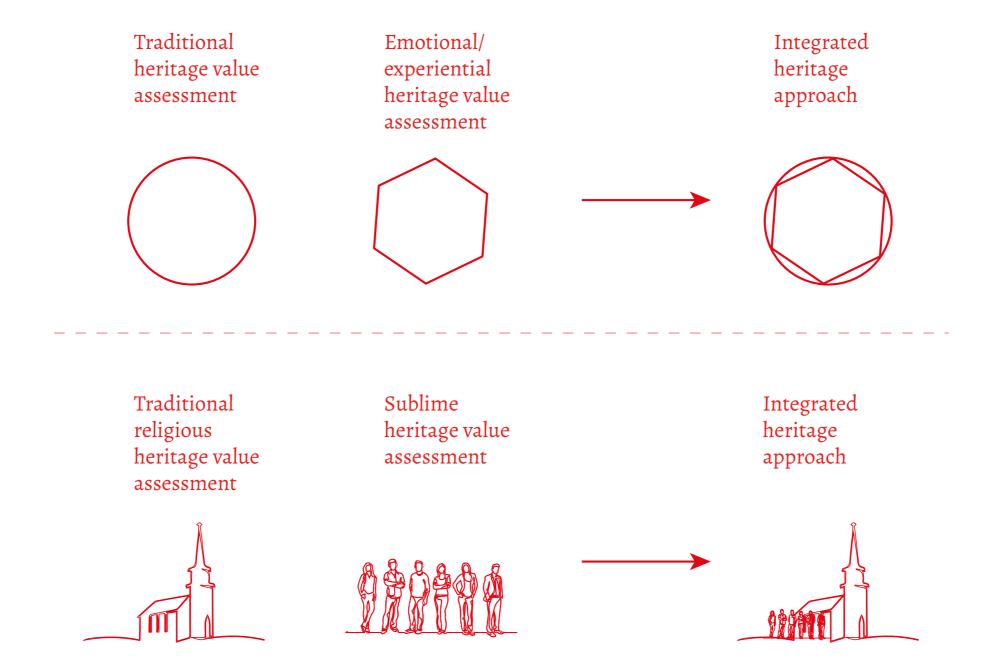


fig. 7 Onze lieve vrouw sterre der zee basiliek- Maastricht (Kerkfotografie Nederland, 2015b).



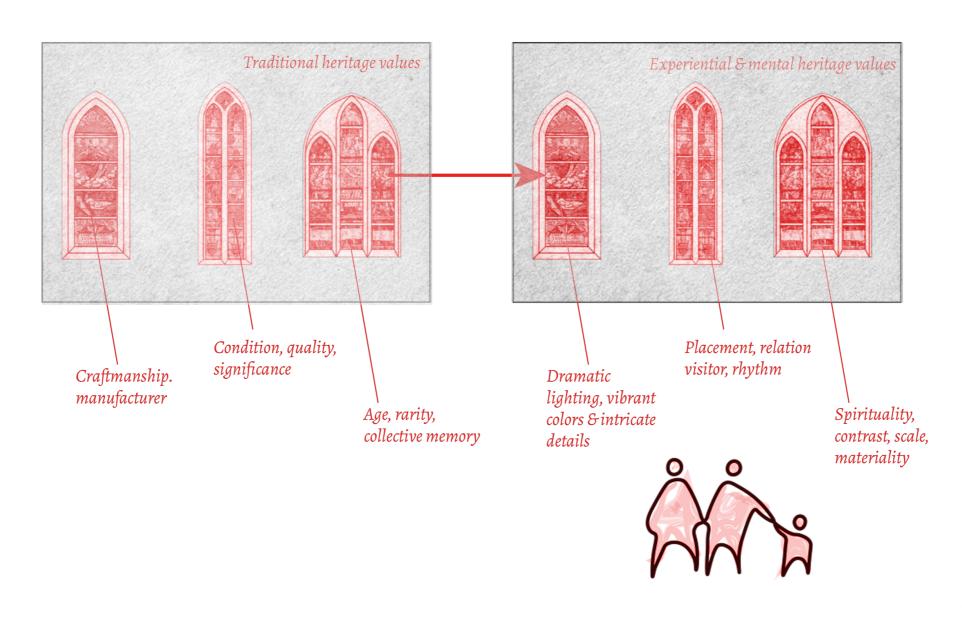
Heritage approach

Integrating experiential values



Heritage approach

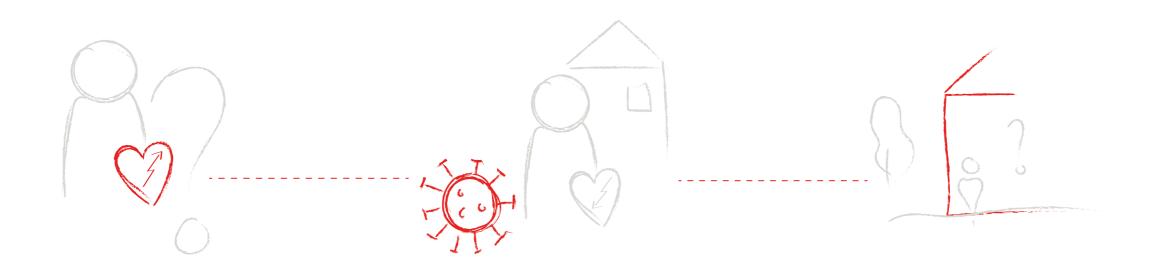
Integrating experiential values





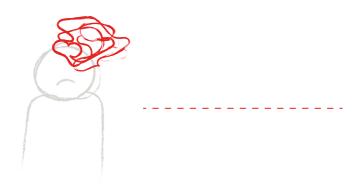
Project build-up

Nature deprivation and vacant churches



The World Health Organization defines health as "a state of complete physical, mental and social well being".

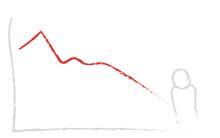
Hot topic: COVID-19 pandemic has made us more aware of the effect of architecture on health and well-being. We spend 90% of our time indoors and creating healthy spaces are an upcoming priority. By designing spaces with a focus on their impact on health, wellness architecture is capable of delivering buildings that host this multidimensional definition.



Mental health is decreasing worldwide, especially among young adults (Yasgur, 2022)



Experiencing the sublime, which includes emotions like awe and astonishment, has proven to have a positive influence on mental health (Arcangeli et al., 2020), (Bethelmy, 2019).



Deprivation of nature, wilderness, stillness and wonder in our current day 24/7 society and urban environment (Crawford, 2019) (Matei, 2020) (Antilla et al, 2018) (Mckivigan, 2020).

Project build-up

Nature deprivation and vacant churches

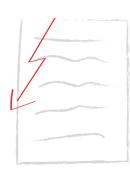




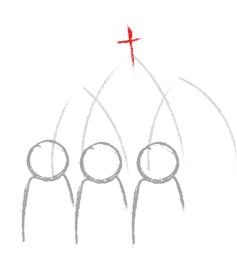
Can sublime architecture replace the missing piece that is nature and wilderness for sublime interaction?

Vacant religious heritage offer a great opportunity to maintain, re-invent and re-offer sublime architecture.

New research can offer awereness and knowledge about how to identify, preserve and enhance sublime architecture.







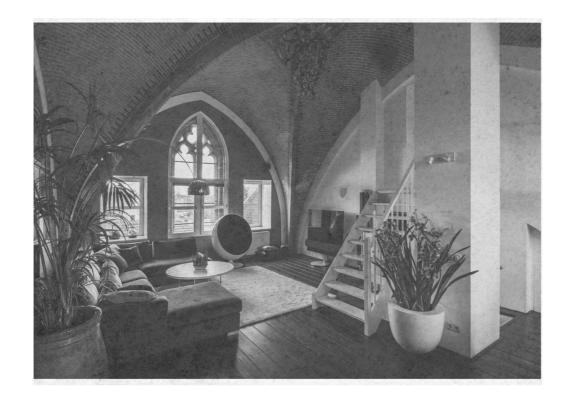
The GGZ in the Netherlands struggles with long waiting lists due to fast rise in demand and inefficienties within the system.

A mental health centre equipped with all comforts where the architecture can play a significant role in the healing process could prove a new approach to improving mental wellbeing.

The benefits of sublime architecture in religious structures should be available to the public, especially the community member who have always enjoyed the structure.

Demolition of the sublime

Problematic interventions



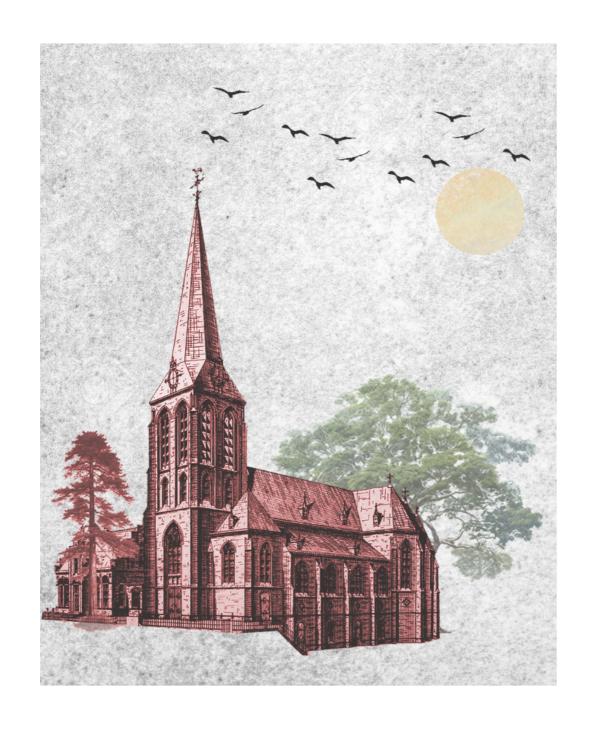


An example of a church that, during repurposing for a residential function, lost most sublime qualities (Jansen, 2022)

This church was transformed into an office space. Preservation of the sublime was not taken into consideration (De Sint Antonius Van Paduakerk, n.d.)

Case study

Sint Augustinuskerk, Amsterdam



Neo-gothic church, specifically Lower Rhine gothic, designed by Alfred Tepe in 1888.

Replacement of four previous churches on this site.

Vacant since 2014, different owners since then who could not save the church.

Church is not well-mantained but very loved within the community.

Construction is brick, roof & foundation are wooden and interior is plastered and painted.

Context

Sint Augustinuskerk, Amsterdam





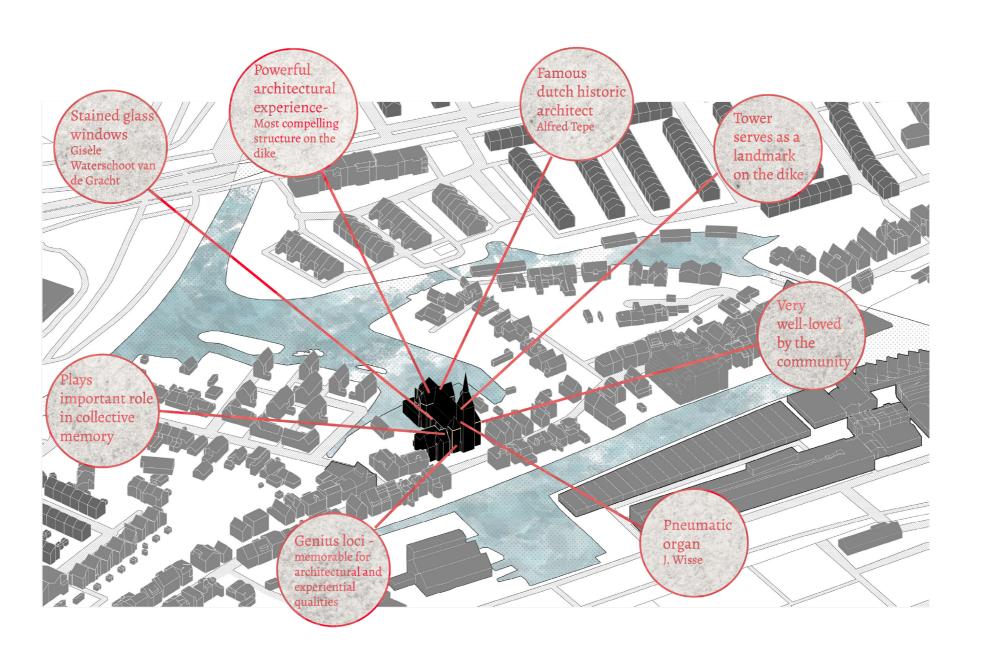
Context

Tower as a landmark

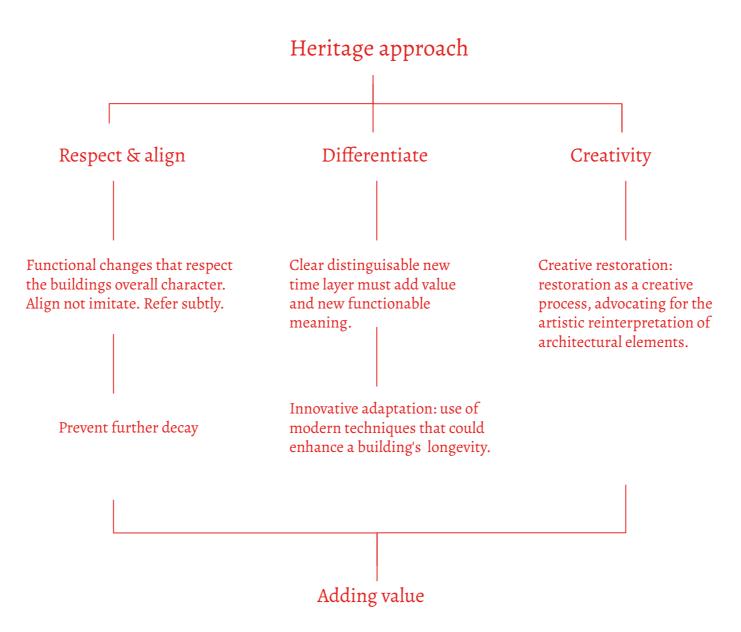


Heritage approach

Value assessment



3 key factors



"To restore a building is not to maintain it, repair it or remake it: it is to re-establish it in a complete state, even one which may never have existed at any single moment.' Viollet Le-Duc

Heritage approach

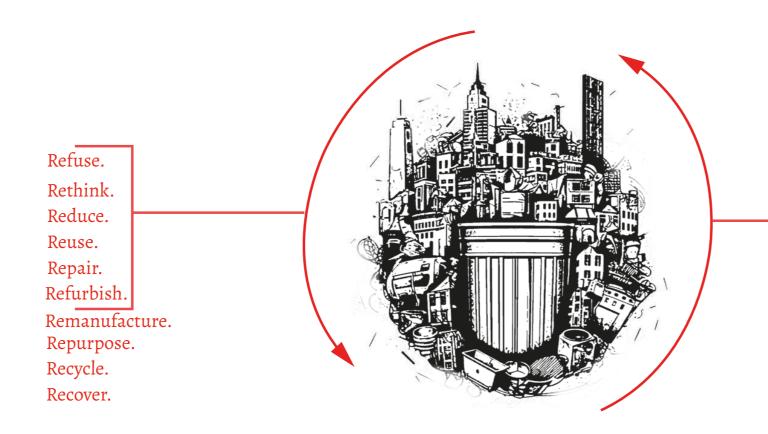
Preserving impactful architecture

'Aesthetically valuable and architecturally impactful buildings tend to garner greater public support, which can facilitate their preservation and longevity over time.'

(Source: "The Aesthetics of Architecture: A Psychological Approach" by Roger Scruton).

Zero Waste approach

Combining sublimity with R-strategies



Preservation strategy sublime architecture:

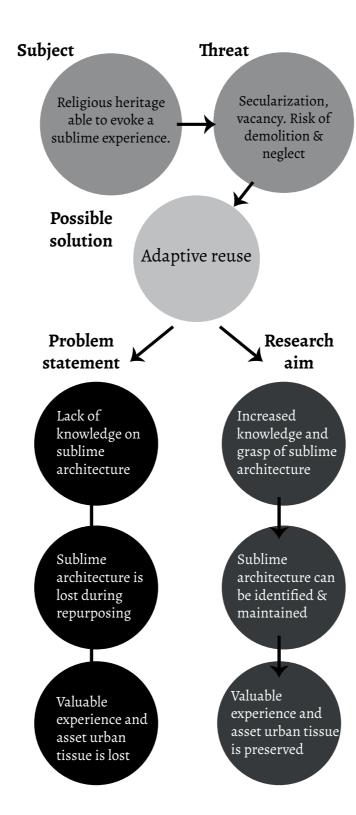
- 1. Preserve most of the original architectural features- due to need for uniformity in sublime experience.
- 2. Limit drastic interventions in the space.
- 3. Restore original architectural features.
- 4. Give priority to the most valuable parts of the structure (culturally, socially, historically).
- 5. Reuse original artifacts and decorative elements in the design.
- 6. Showing age & imperfections is preferable.

Main research question

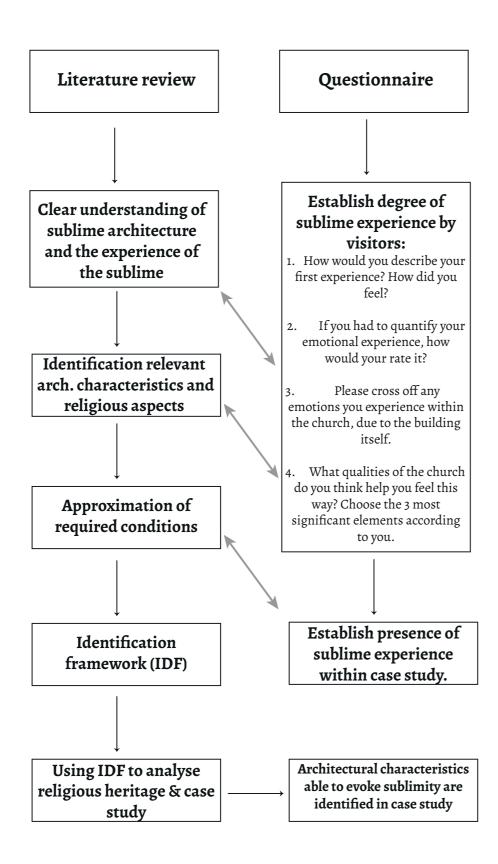
How can architectural characteristics able to evoke a sublime experience in religious structures be identified for the process of adaptive reuse?

Revitalising heritage: Zero waste church, 2023

Problem statement & aim



Methodology



- Most visitors would rate the emotional intensity of their experience visiting the church fairly high (7 or higher).
- Overwhelm and admiration were the top emotions that came out of the questionnaire.
- Fear was not experience at all, as well as feelings of unsafety or peace.
- Awe, feeling small or insignificant and inspired were experienced to a lesser degree.
- The height of the church was attributed at the number one reason for the intense emotional experience.
- The stained glass windows and the lighting in the church came second and third.
- Colour, ornaments, darkness & the length were also named.

 Materiality was deemed not responsible for the reaction.

Identification framework

Architectural	Elaboration on conditions
characteristics	
Height/loftiness	The significant height of the structure stands out in its context. The eye of the
	individual is drawn upwards, making the individual feel small or less significant
	in the context.
<u>Uniformity</u>	The structure exhibits a uniform architectural language, creating a coherent
	spatial context that forms one whole.
Repetition/rhythm	The structure exhibits extensive repetition of one or more architectural elements,
	creating a sense of infinity or boundlessness. The endless repetition of elements
	can also contribute to the overall complexity and obscurity of the structure.
Scale/vastness	The overall scale of the object or space seems oversized or very dramatic in
	comparison to its context. The individual can feel insignificant, overwhelmed or
	astonished by the amount of void or materiality.
Contrast/tension	Contrast, in this context, refers to the juxtaposition or interplay of elements that
	differ significantly in terms of their characteristics, such as scale, form, texture,
	or spatial qualities. Tension, on the other hand, represents the dynamic
	relationship or interaction between contrasting elements within the architectural
	composition. By introducing the individual to noticeable disparities between
	architectural elements, the design can generate a sense of dynamism,
	complexity, and create a visual and spatial dialogue that stimulates curiosity,
	intrigue, and a sense of wonder.
Dramatic lighting	By intense contrast between lighting and darkness within the space, specific
	architectural features are accentuated which can evoke a heightened sense of
	drama and visual interest. What is dramatic lighting is context-sensitive and
	depends on the overall spatial qualities, which should be judged by the
	designer/expert.
Complexity/obscurity	The overall interplay of all architectural characteristics of the structure, including
	ornamentation and artifacts, results in a complexity or obscurity of the space.
	The sublime, in this case, emerges from the confrontation with something that
	surpasses our cognitive capacities to measure or quantify. The structure exceeds
	the boundaries of what our minds can fully comprehend, leading to a sense of
	awe, wonder, and sometimes discomfort.
Uncommonness/novelty	The structure is uncommon in its context. It stand out and offers a different
	architectural experience as compared to other structures in the environment or
	daily life.
<u>Materiality</u>	The structure possesses richly textured, often natural materials such as natural
	stone, brickwork or wood. The texture adds to a sense of depth and complexity.
	Heavy (looking) materials exemplify the structures power or stature. Both can
	help in creating a profound architectural experience for the individual.
<u>Depth</u>	The depth of the structure is significant in that it offers extraordinarily far
	sightlines. The depth exemplifies the overall large scale of the space. The depth of
	the structure is uncommon in the build environment.
Spatial sequencing	The structure reveals spatial arrangements that lead visitors through a series of
	experiences and reveal dramatic vistas or focal points can heighten the sublime
	experience. Spatial sequencing is not often present in religious heritage, but it
	could contribute to a sublime experience.
Timelessness	The structure is able to evoke a sense of timelessness by showing its age (like
	ruins for example) or historical narrative. The spaces has the potential to evoke a
	sense of timelessness, where the occupants feel a connection to something
	eternal or beyond the present moment.

Height - Loftiness

Uniformity

Repetition/ rhythm

Scale - Vastness

Contrast - Tension

Dramatic lighting

Complexity

Novelty

Materiality

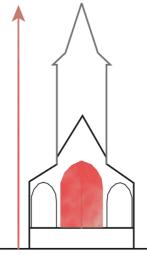
Depth

Spatial sequencing

Timelessness

'The overall interplay of all architectural characteristics of the structure, including ornamentation and artifacts, results in a complexity or obscurity of the space. The sublime, in this case, emerges from the confrontation with something that surpasses our cognitive capacities to measure or quantify, leading to a sense of awe, wonder and a fully present mind.'

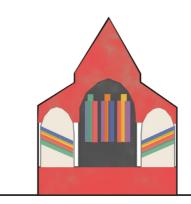
Analyses Sint Augustinuskerk



1. Height

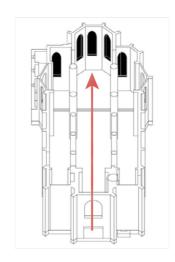
Context- tower: the tower is significantly higher than all other buildings on the Nieuwendammerdijk.

Interior - nave: The nave of the church has a significant height (in context & experience).



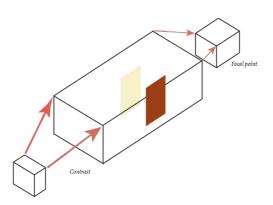
2. Lighting

Contrast darkness of the nave vs. lightness of stained glass in the apse and the side isles.



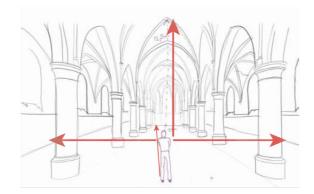
3. Depth

Upon entrance a 32m sightline makes a great impact on visitor.
Straight sightline from front to back with no interruptions.



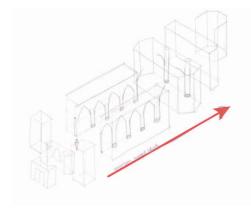
4. Contrast

Small entry opens up to big church hall.
Small historic dutch houses vs. big church/tower.
Architectural style- gothic vs. dutch. Brick exterior, white plaster interior.



5. Scale

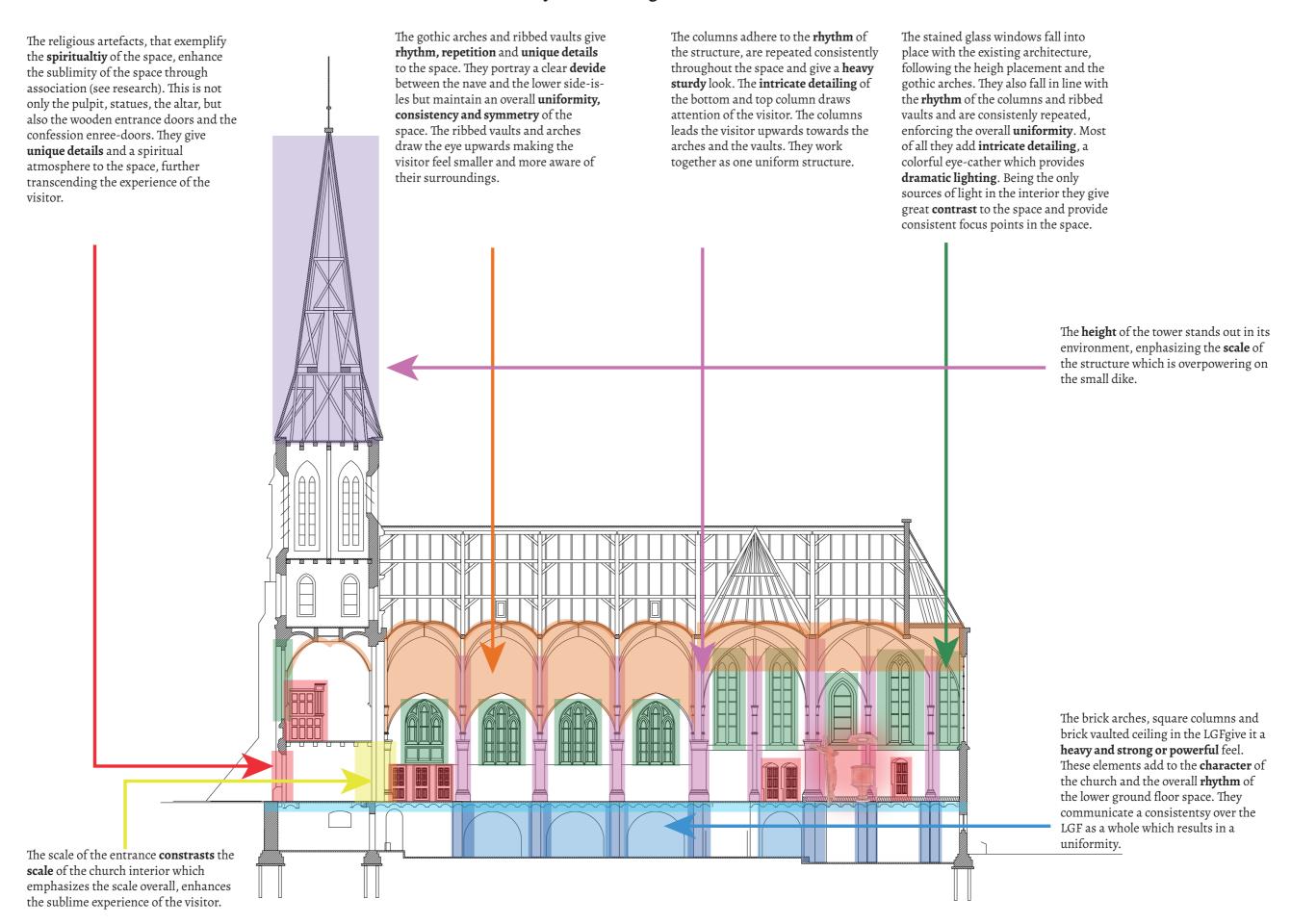
Difference in proportions of human and interior space is significant, making the individual feel small. In urban context the building scale is also significantly bigger.



6. Repetition/rhythm

Columns, windows ribbed vaults an arches represented a clear rhythm in the space by a multitude of repetitions.

Analyses Sint Augustinuskerk



Analyses Sint Augustinuskerk

A place to come together & reflect

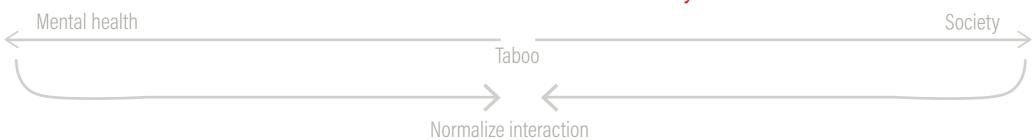
Connecting the past and the future

Architecture

Architecture & program working together, simultanously

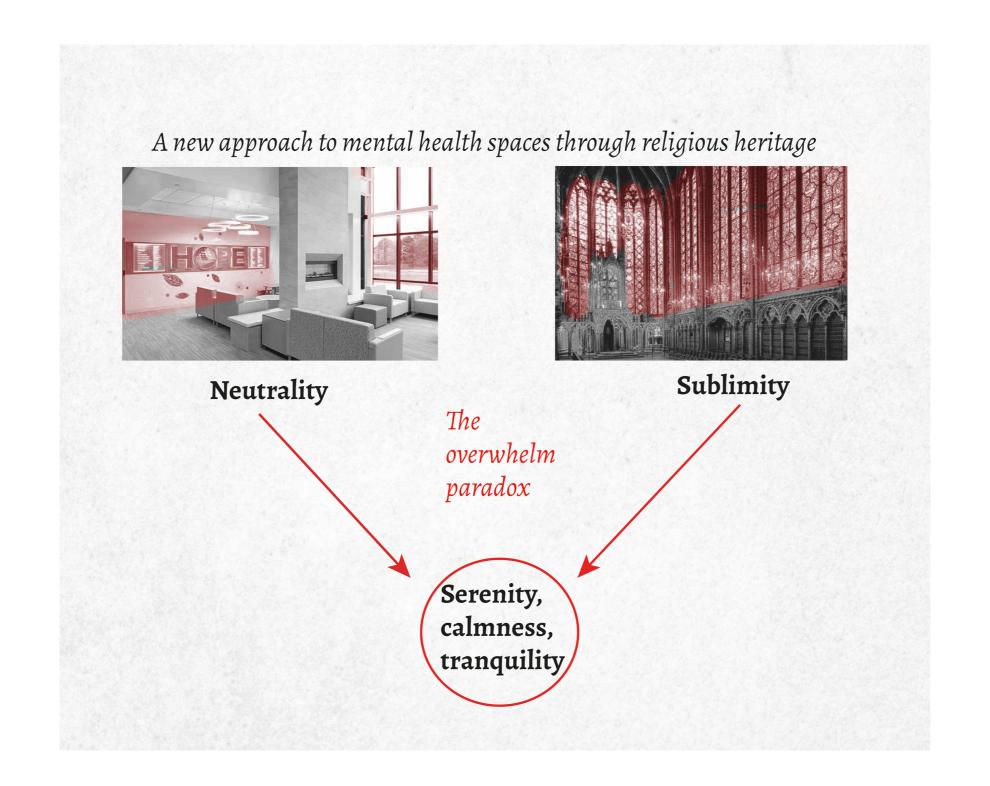


Mental health & taboo in society



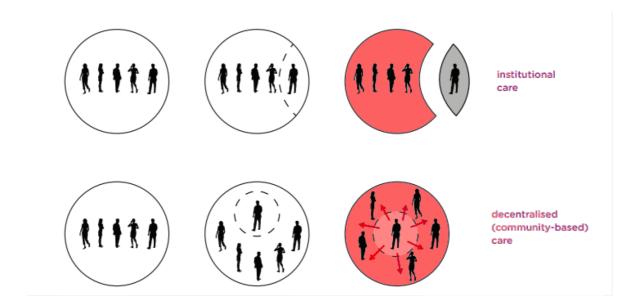
Design approach

The overwhelm paradox $\,$

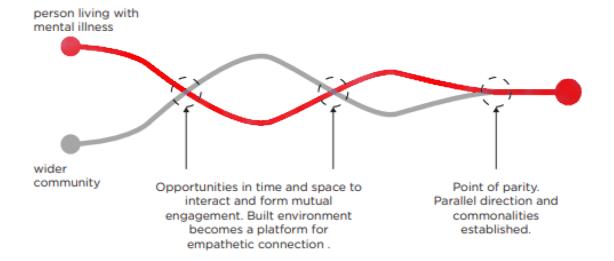


Design approach

Reducing mental health stigma



Reduction of stigma through contact



Combining program & needs



To feel safe.
To feel inspired.

To feel inspired.

To feel connected.

To feel accepted.

To feel supported.
To feel included.

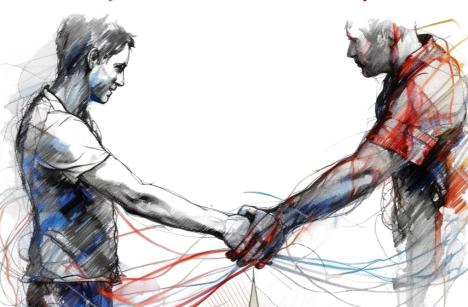
To feel understood. To feel calm, peaceful.

To feel loved.
To feel needed.

To feel like you matter. To feel growth.

mental health patient

community member



Needs

To feel seen.

To feel connected.

To feel joyful.

To feel entertained.

To feel like you matter.

To feel part of the group.

To feel supported.

To feel educated. To feel growth.

To feel calm.

To feel focussed.

To feel curious.

To feel included. To feel inspired.

Program

- Family & group therapy.
- Couple & individual therapy.
- Art therapy workshop
- Relaxation and excercise therapy.
- Music therapy.
- Horticulture therapy.
- Educational space.

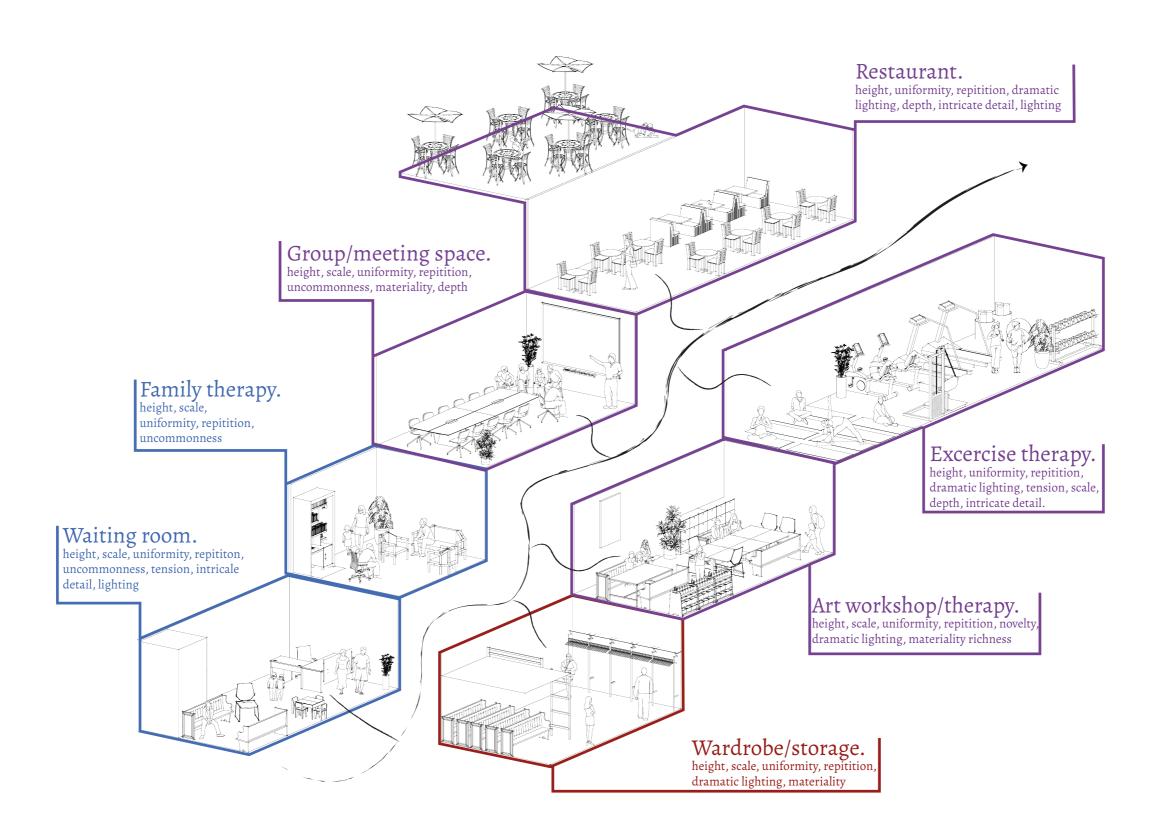
Program

- Multifunctional hall.
- Art workshops.
- Relaxation and excercise classes.
- Restaurant.
- Music rooms.
- Therapeutic garden.
- Meeting space.
- Resting & socializing space.

Repurposed religious heritage

Architecture able to evoke feelings of transcendence, inspiration, sedateness, awe, admiration, wonder. A place where one becomes conscious of the self. Where the imaginations is sparked, the mind forced to expand itself. A place for healing and growth.

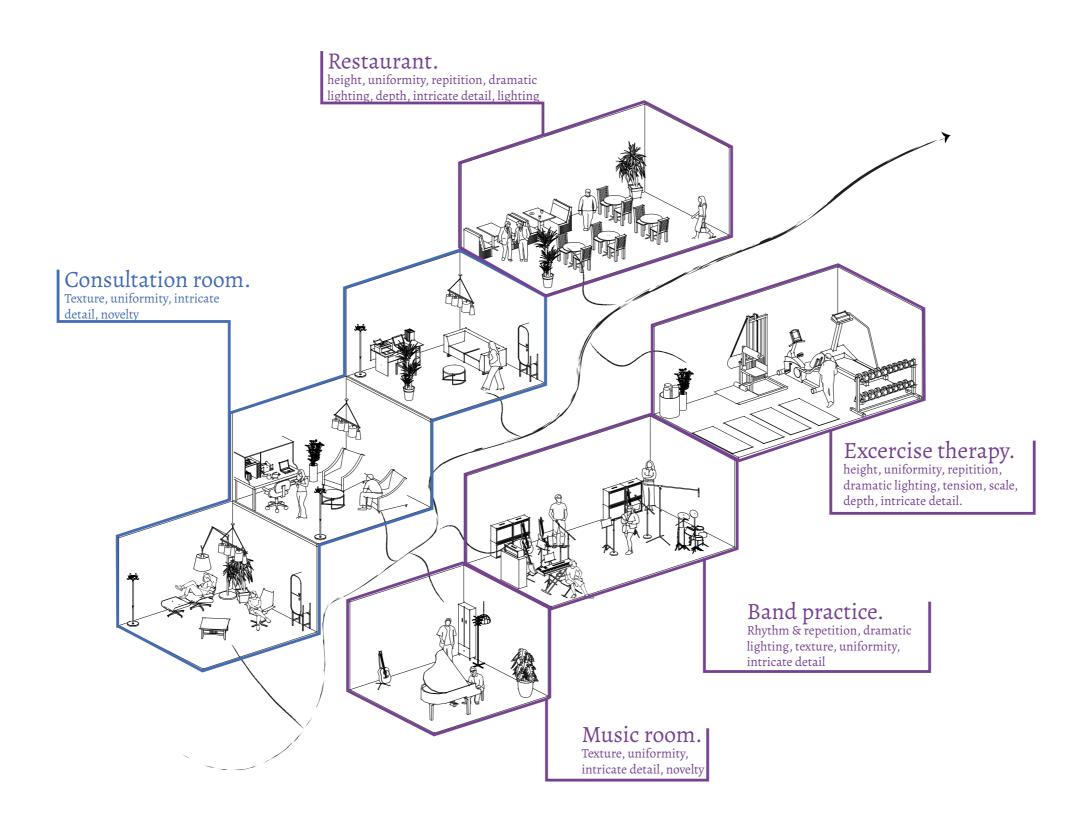
Determination of functions



Group therapy/ meeting space

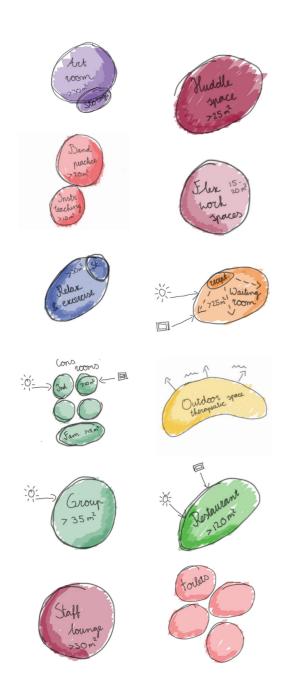


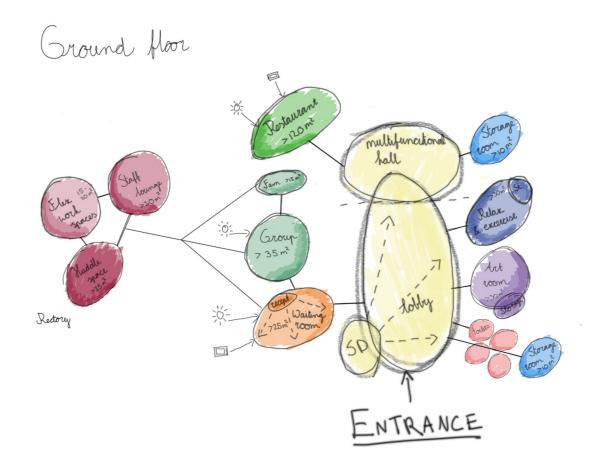
Determination of functions



Design brief

Requirements

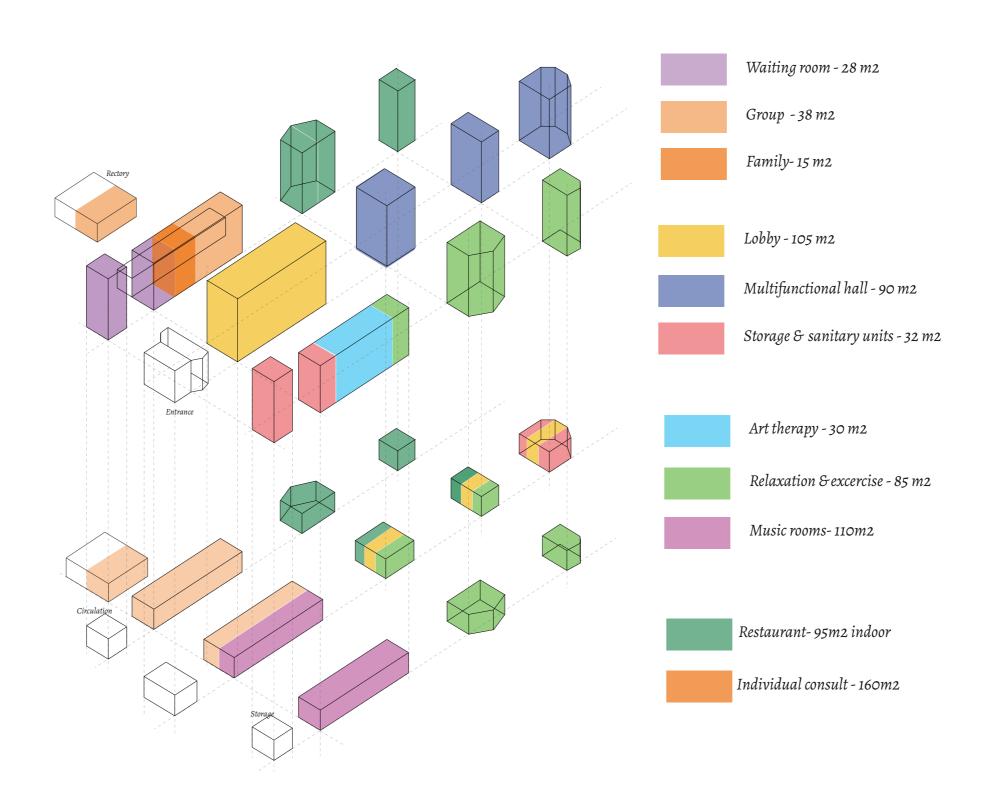




Easy wayfinding
Little decision points
Staff overview - desk placement
Individual rooms are more private
Interaction - shared facilities
Straight line towards garden
Accessibility
Flexibility

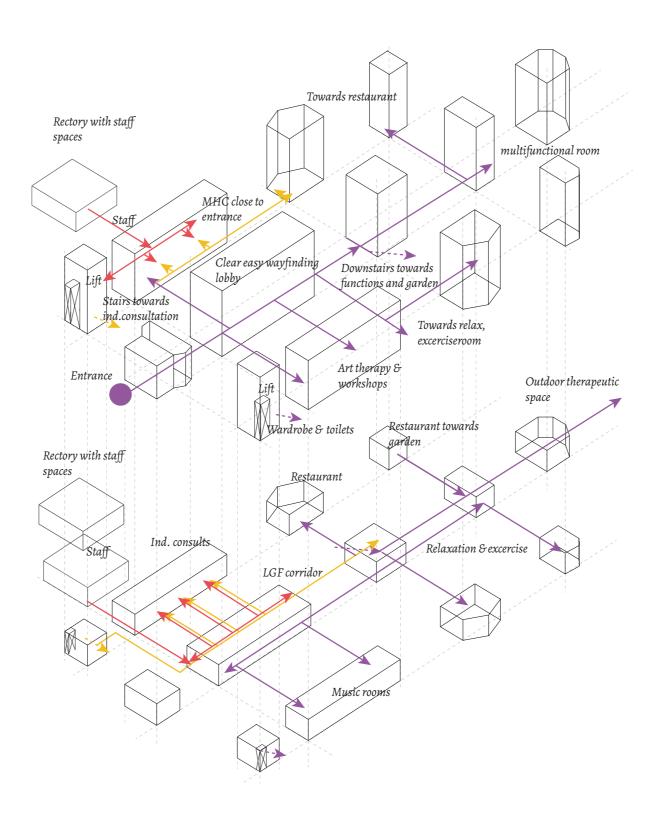
Design brief

Requirements



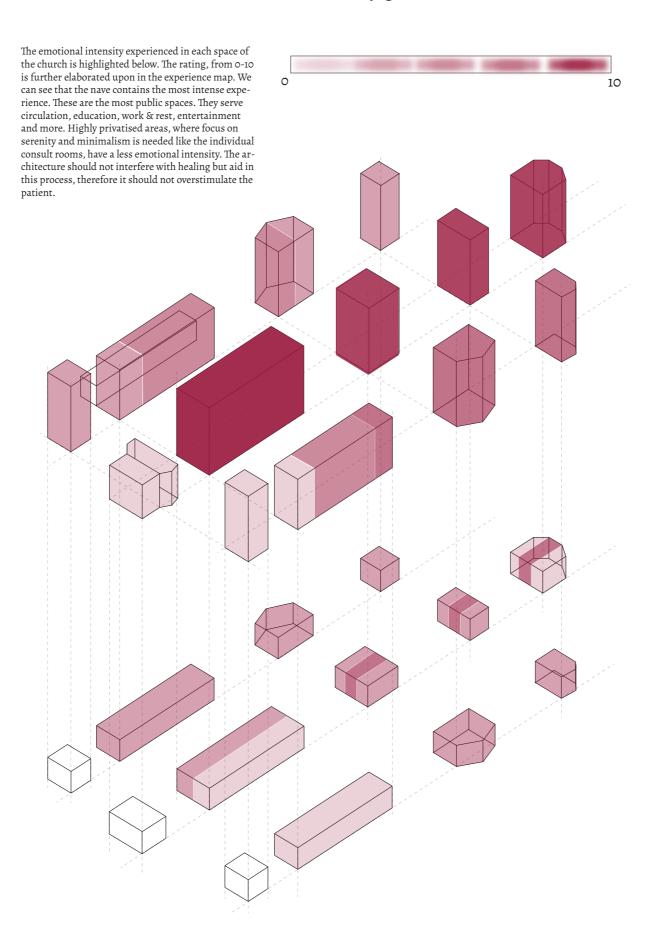
Circulation





Design brief

Emotional intensity gradient



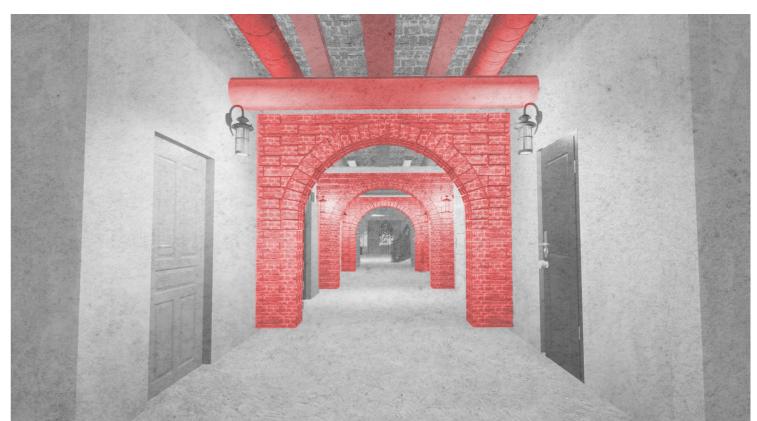
Design brief

Emotional intensity gradient

Here we see how the establishment of spacial intensity plays out in the architectural design, with the lobby on the left evoking intense emotions, but the corridor on the lower ground floor does so in a much more timid way.



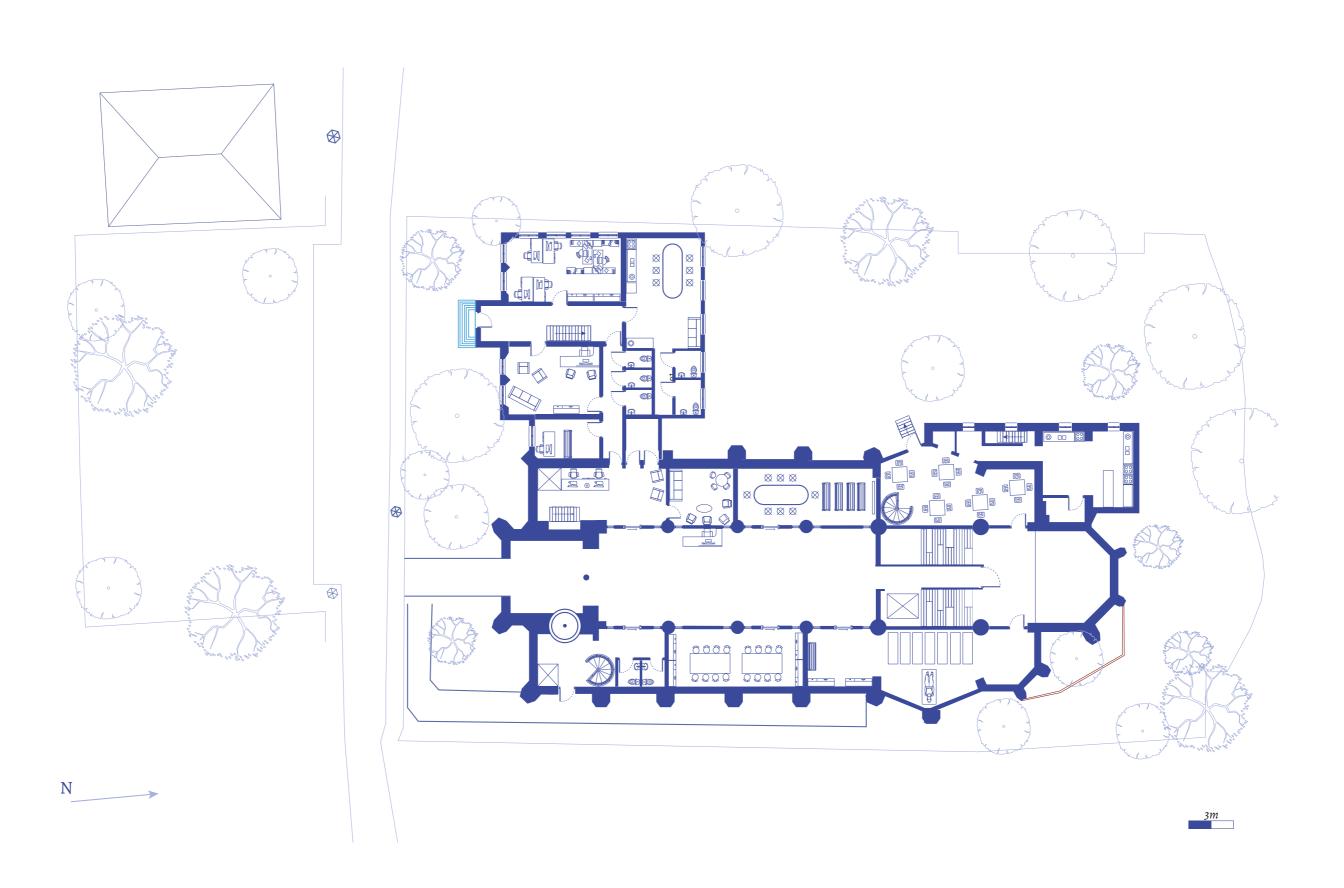
High emotional intensity - the nave



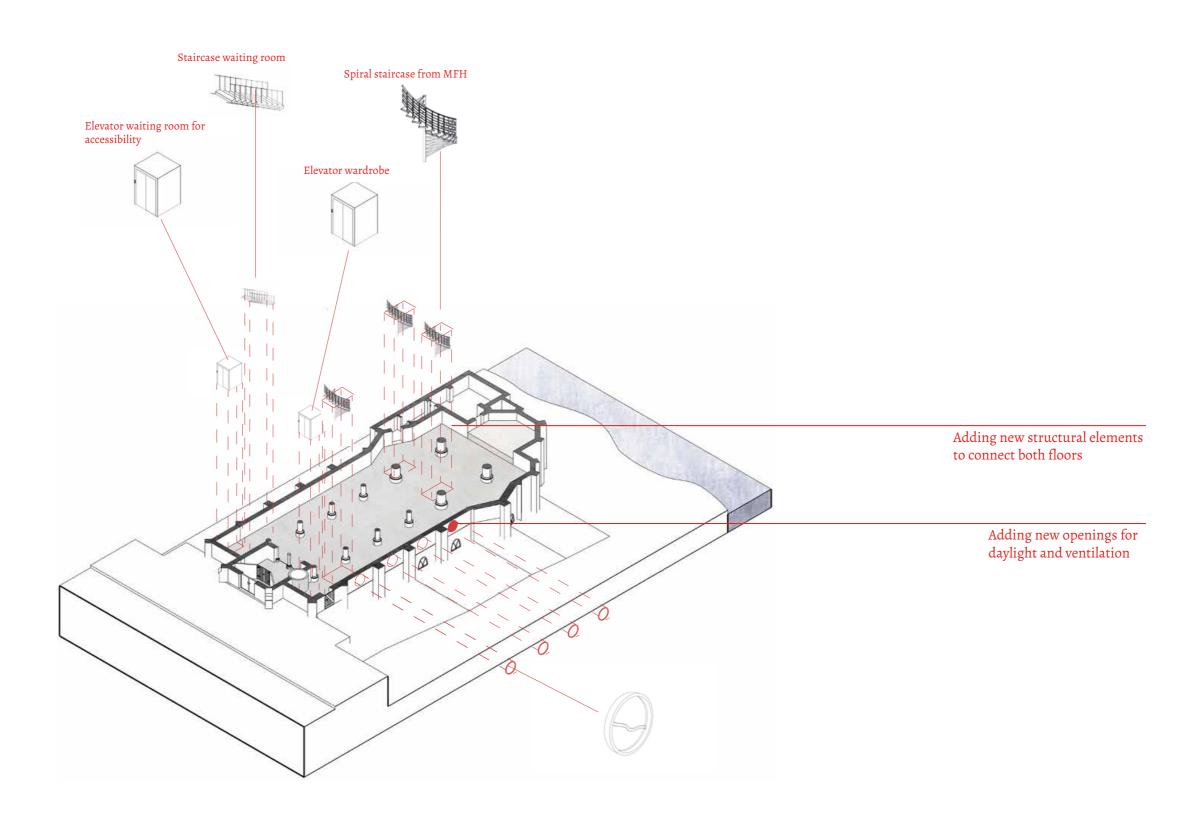
Medium emotional intensity - the lower ground floor corridor

Floorplan

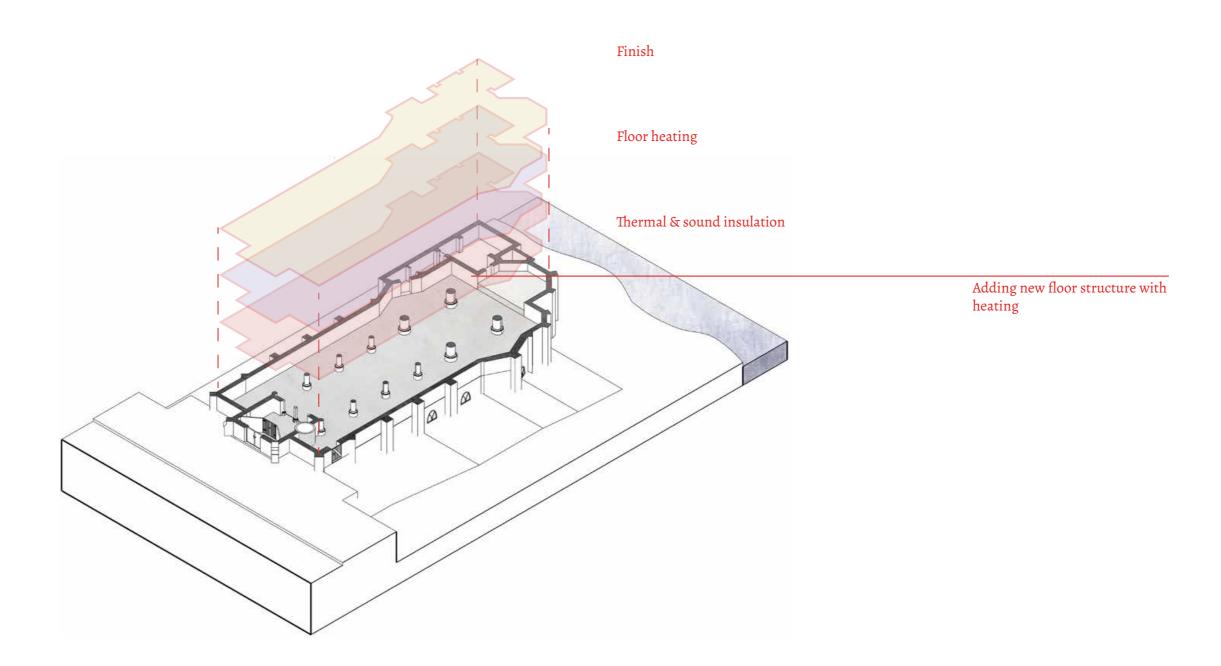
Ground floor



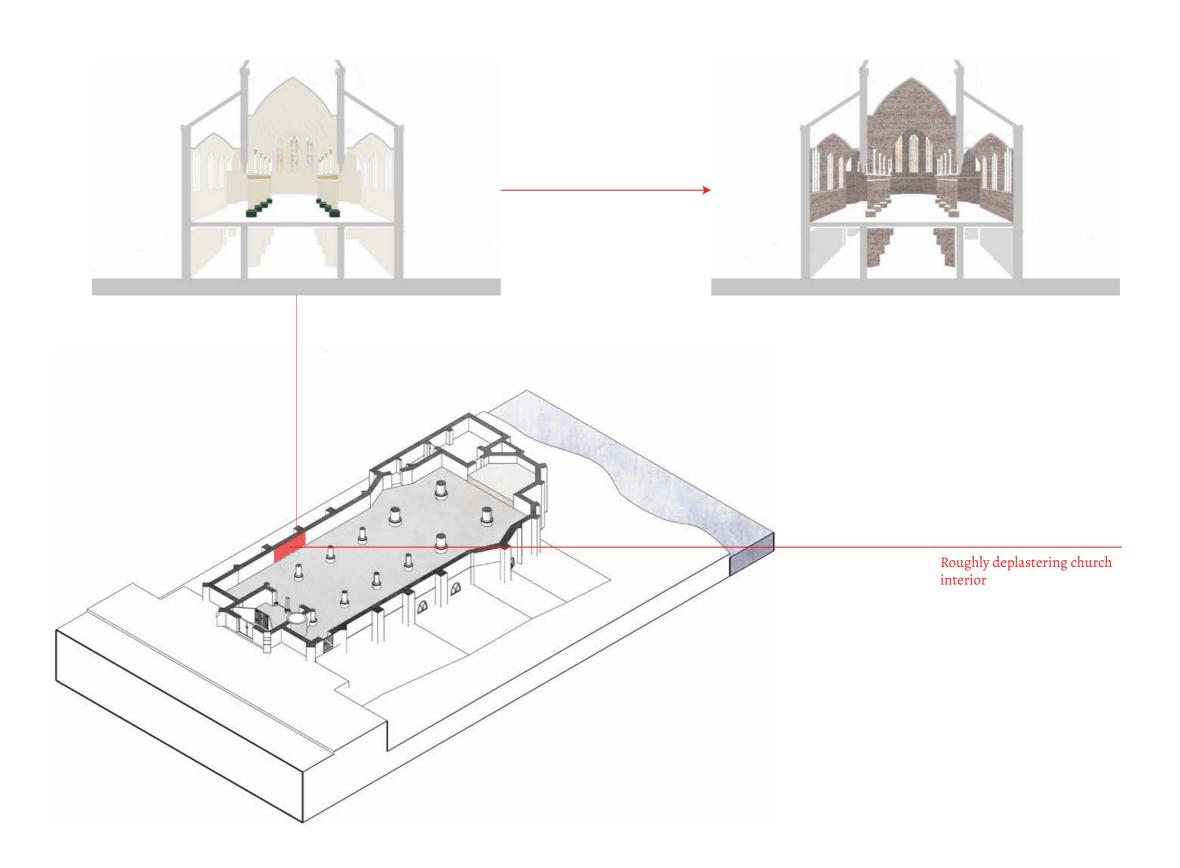
new openings



Flooring & heating



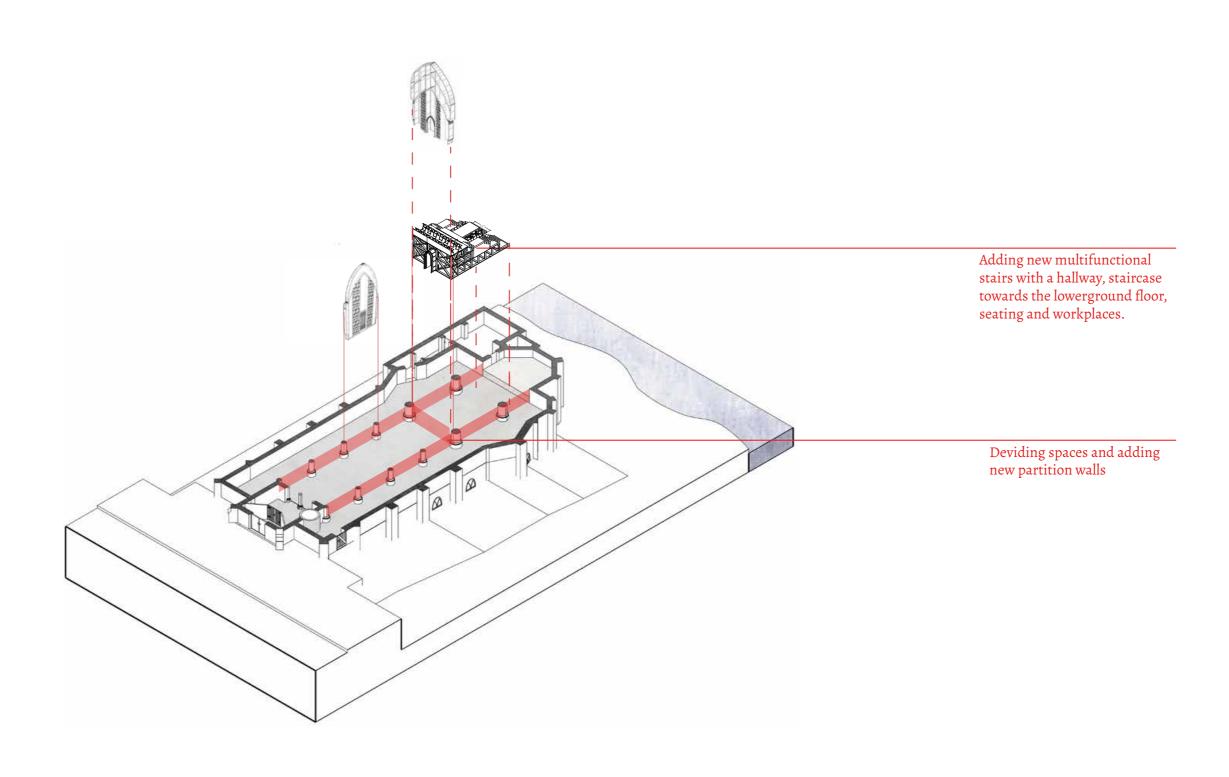
Deplastering



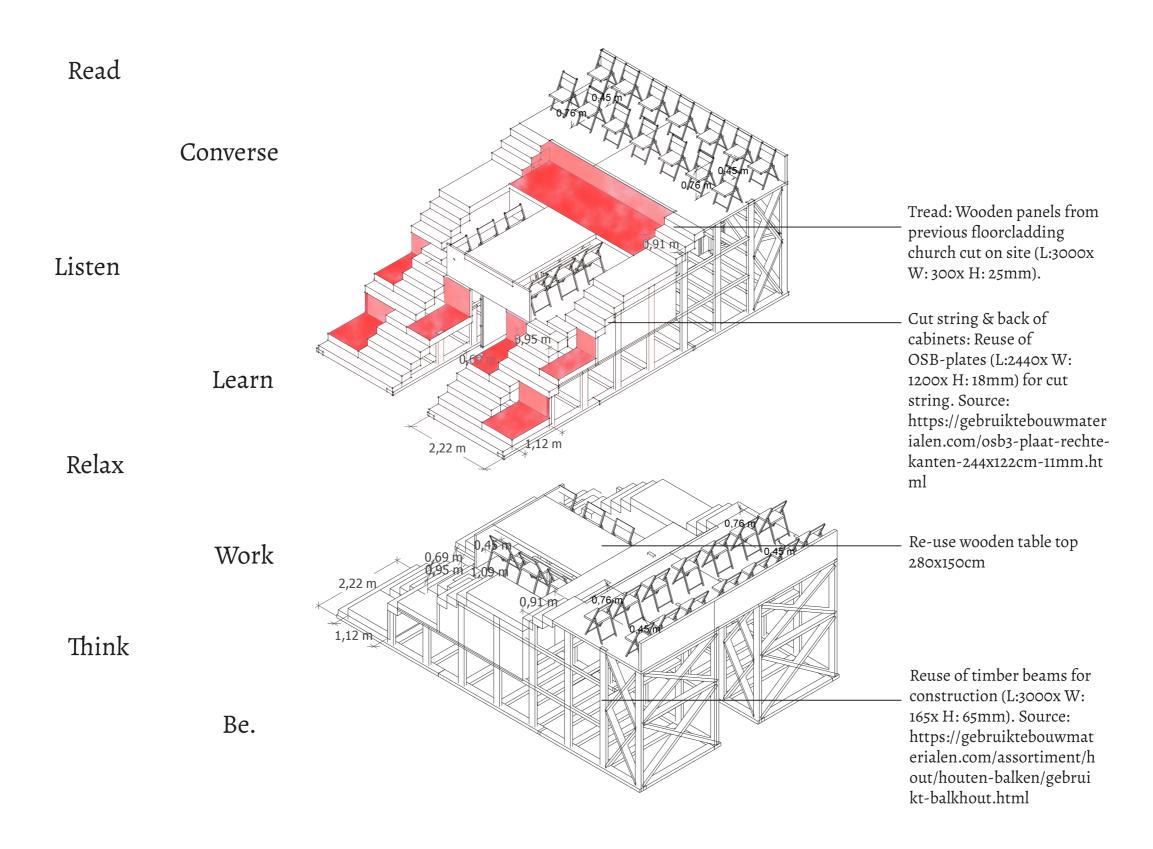
Deplastering



New placemaking

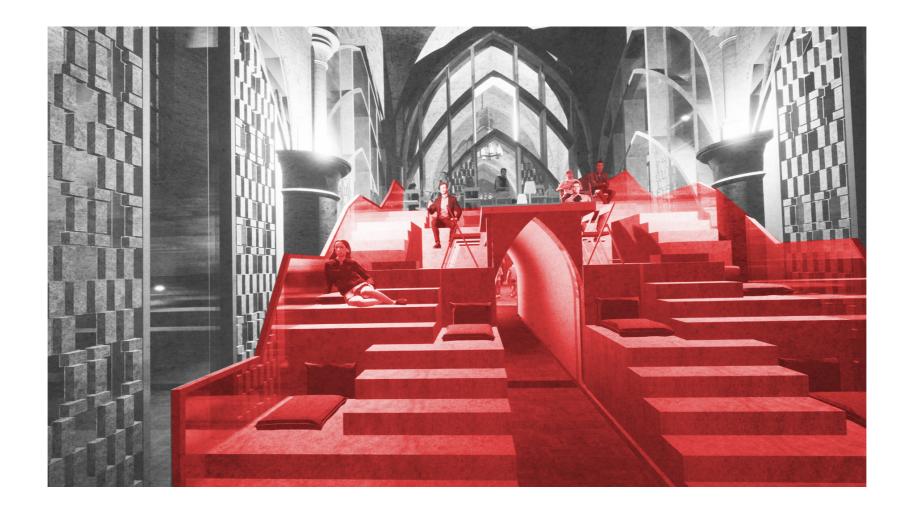


Multifunctional staircase

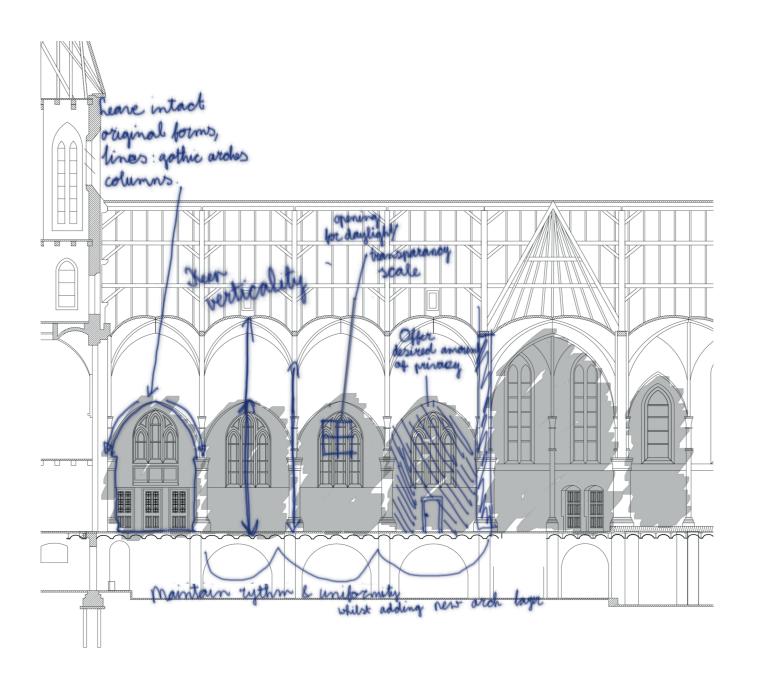


Interventions A view of the stairscase.

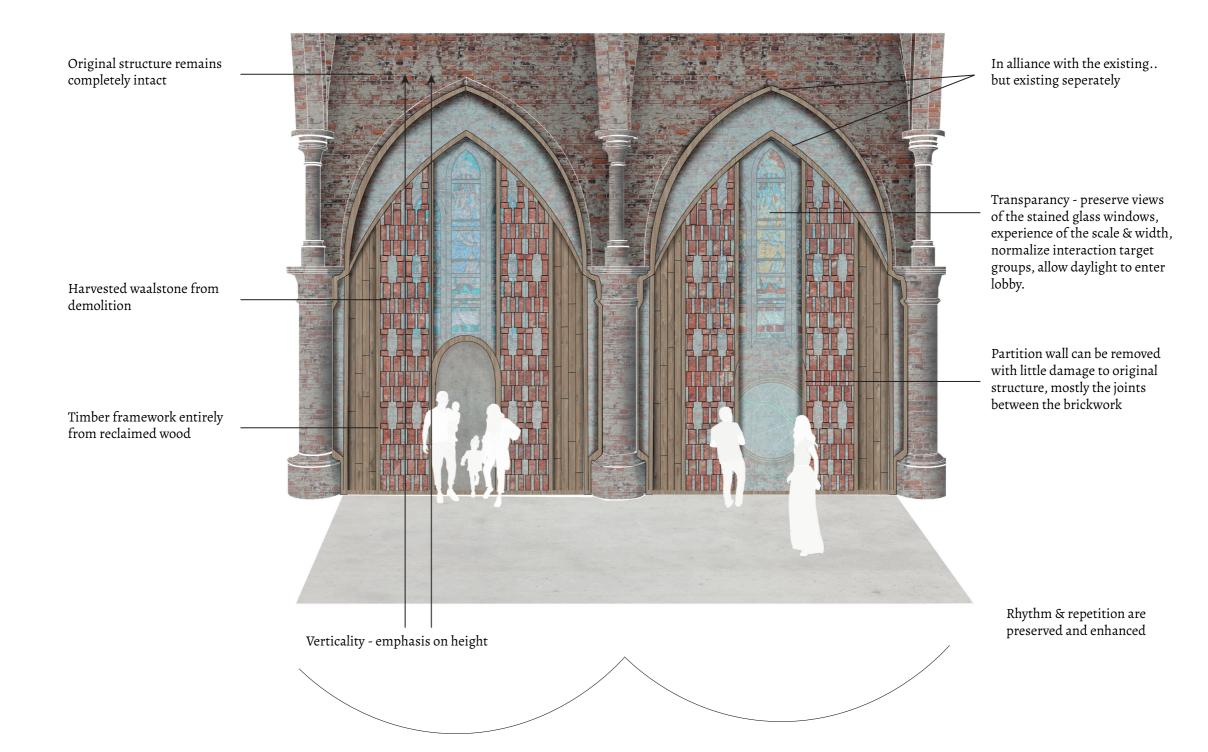
New placemaking



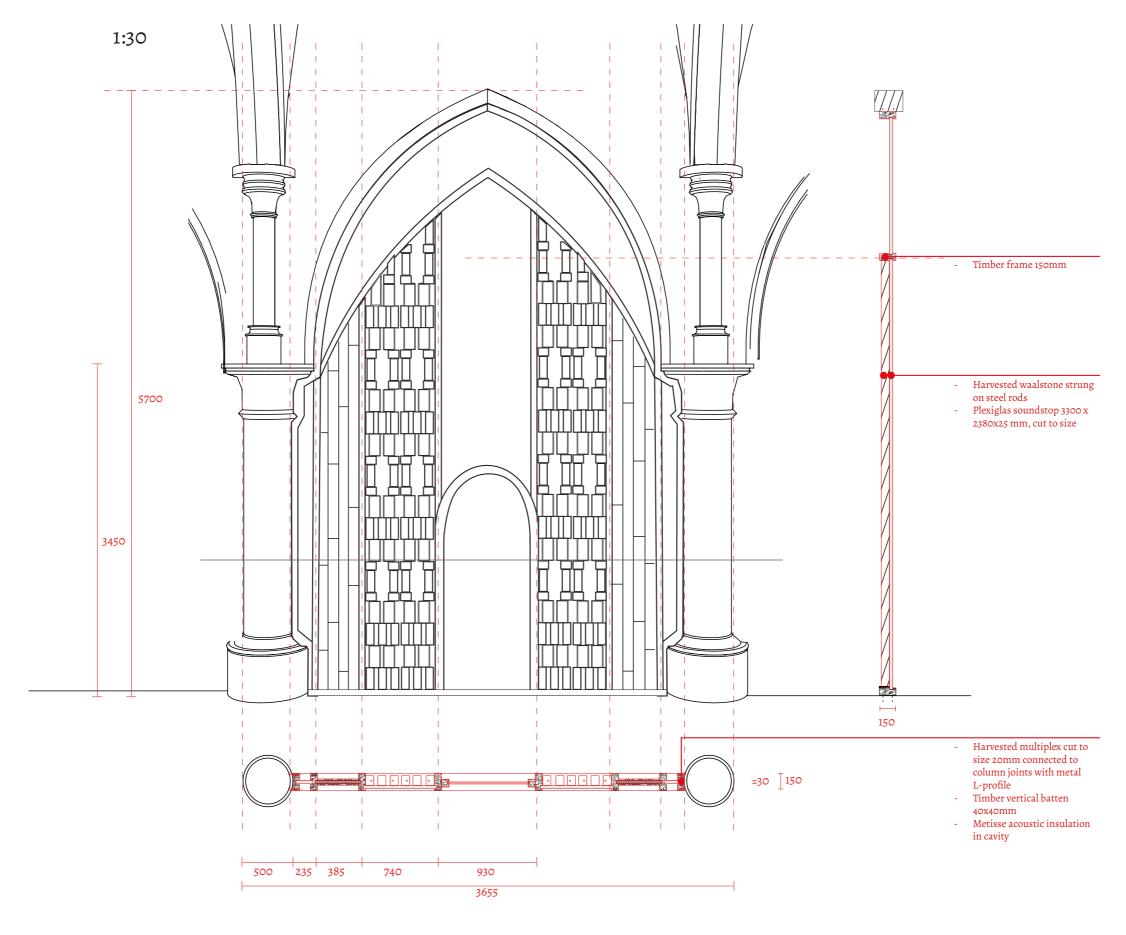
Partition wall starting points



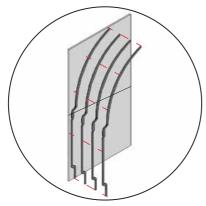
Partition wall



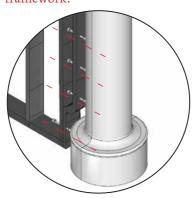
Partition wall construction



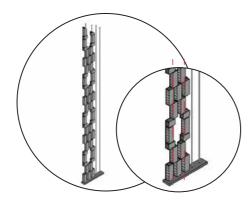
Partition wall construction



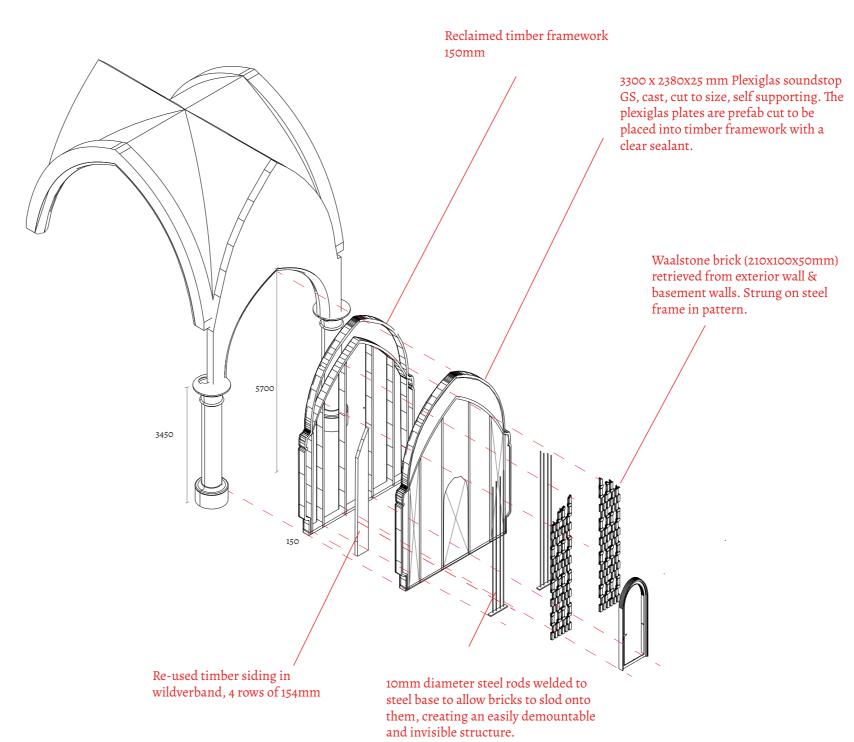
Reclaimed plywood 310x153x50mm boards are cut on site and and attached to column and timber framework.



The timber framework is screwed into the joints of the column to prevent damage to the brick.

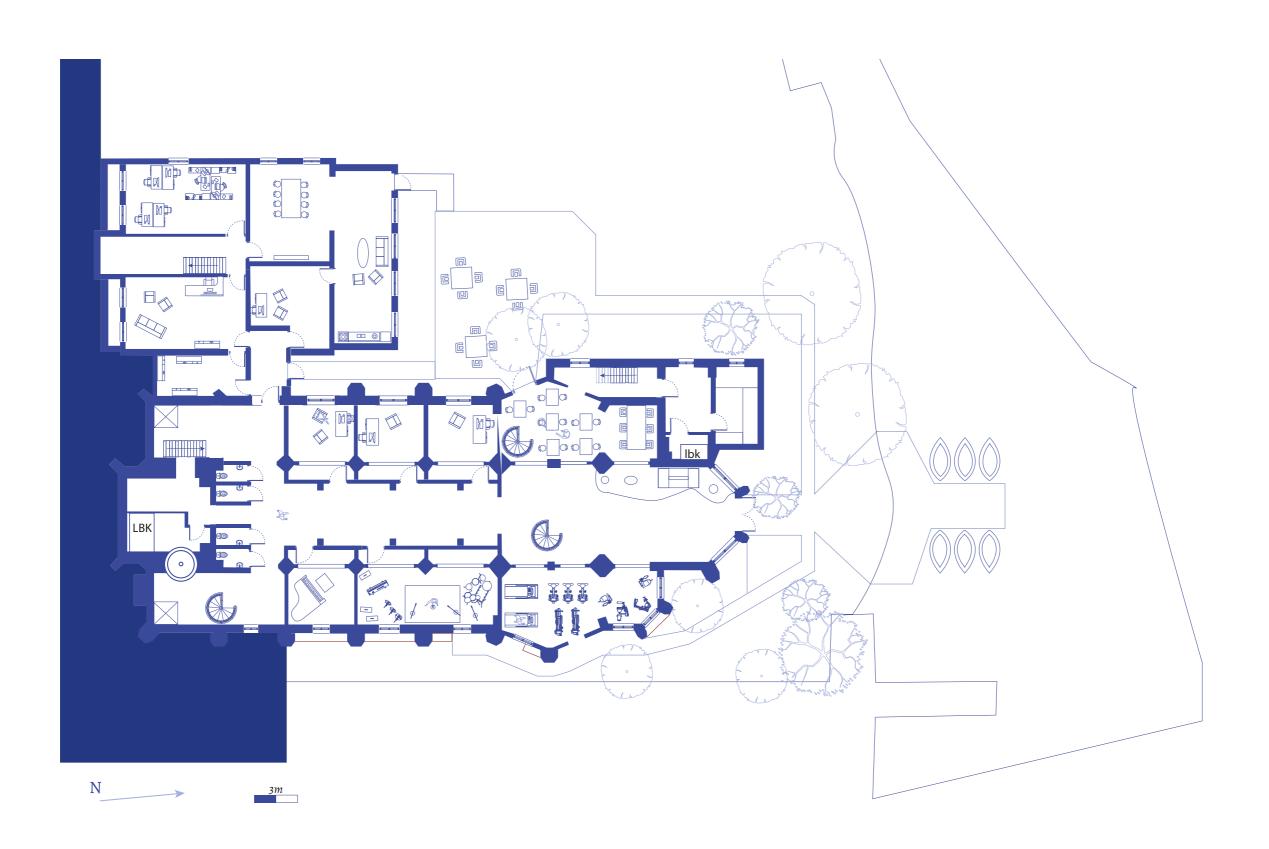


Harvested brick are prepared on site to be strung on steel frame, which is boulted to the ground.

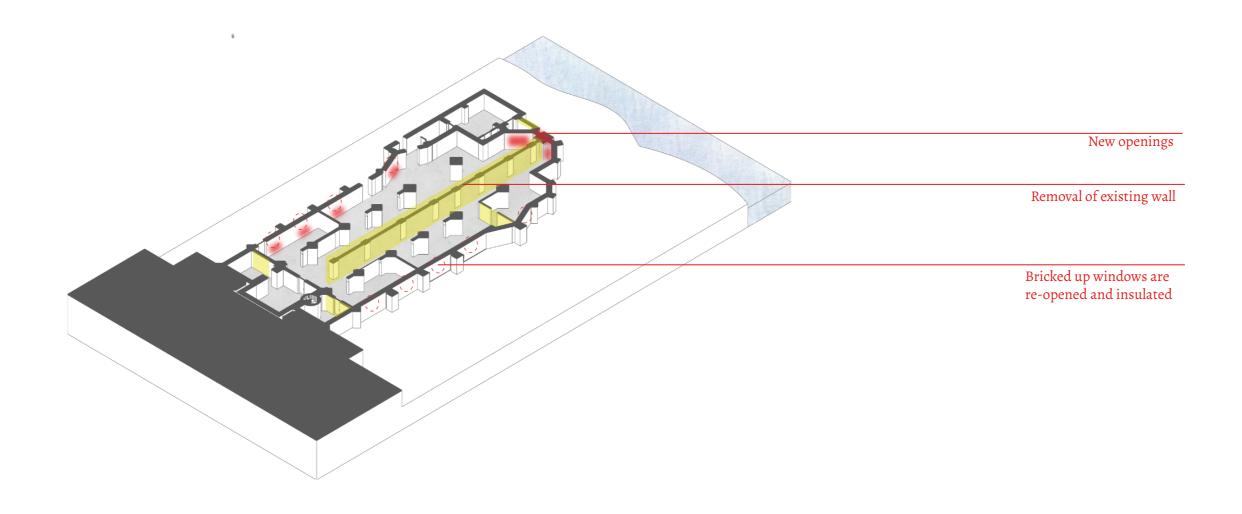


Floorplan

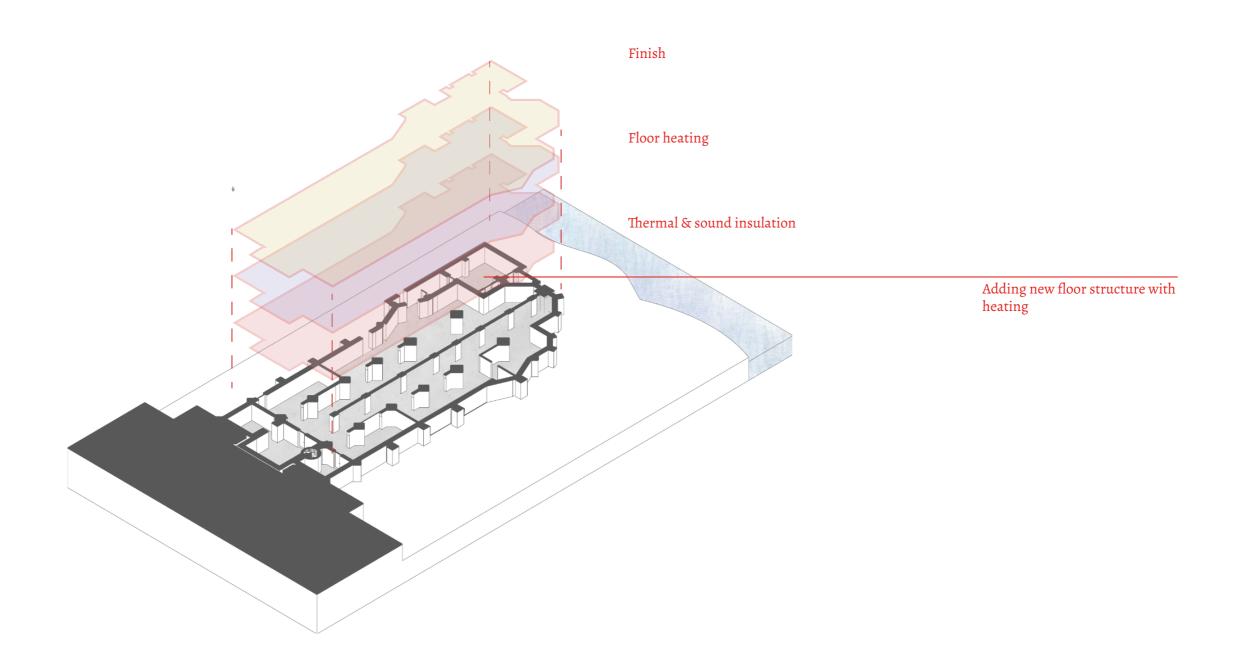
Lower ground floor



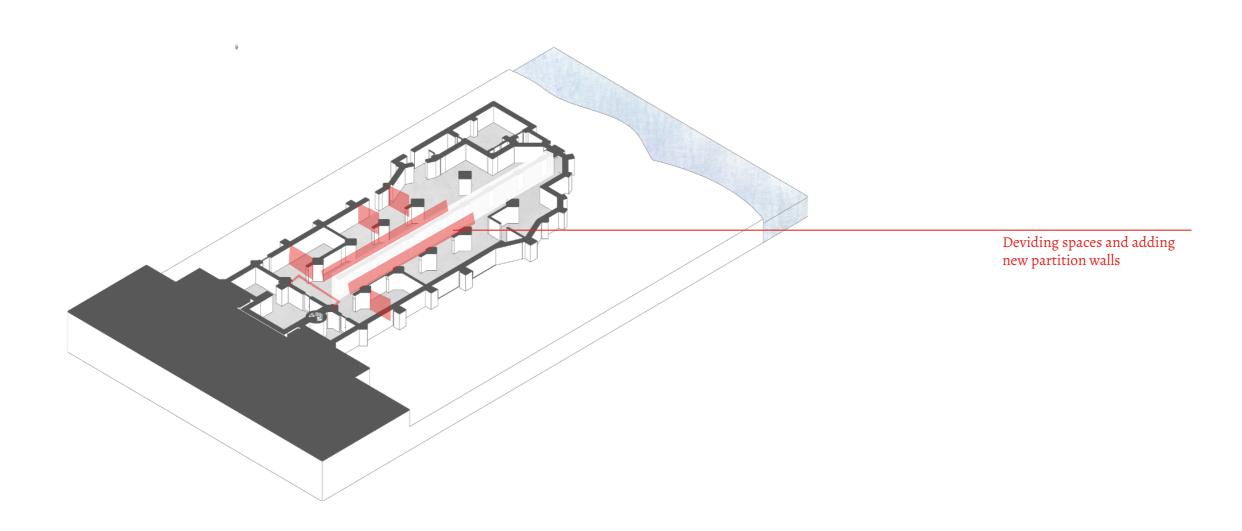
Demolition



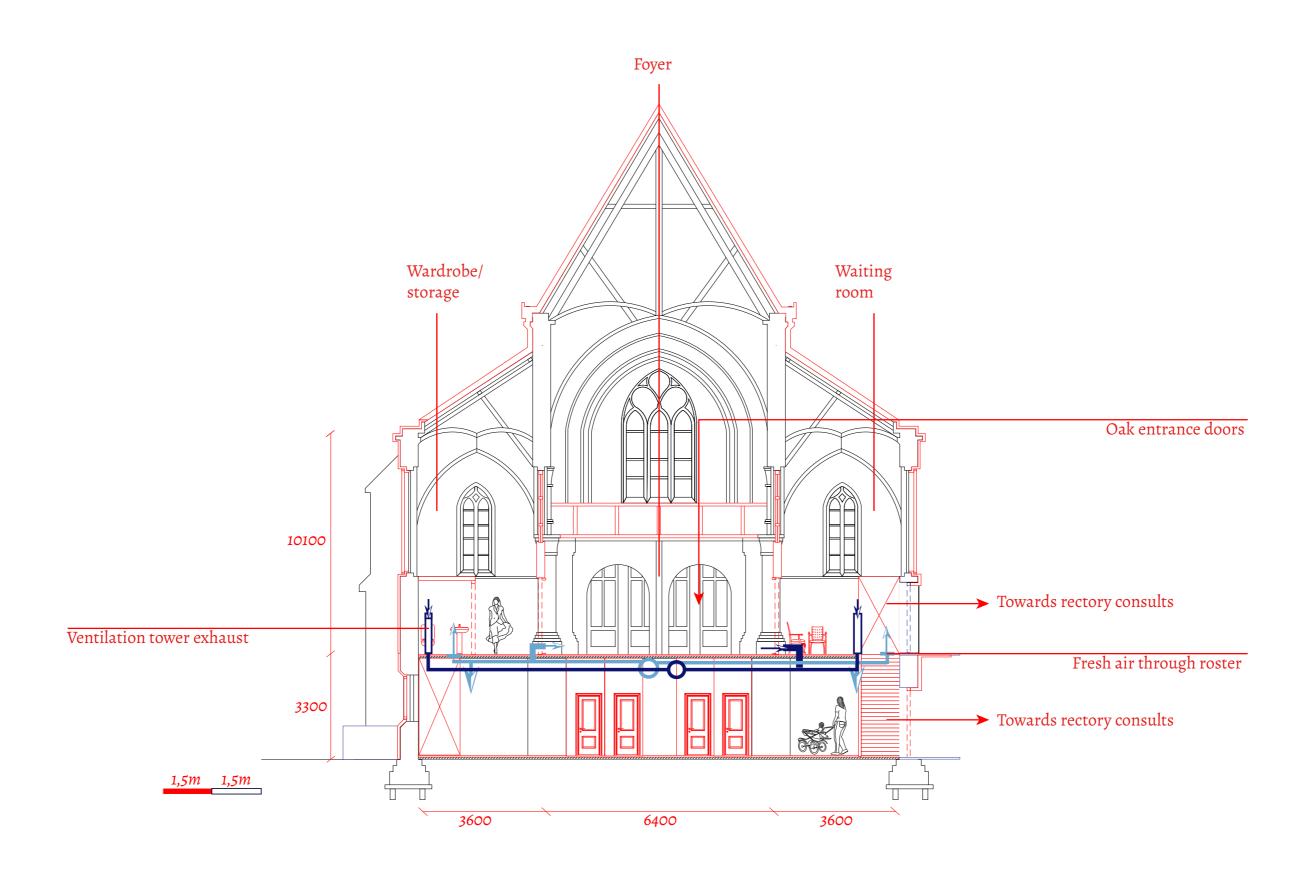
Flooring & heating



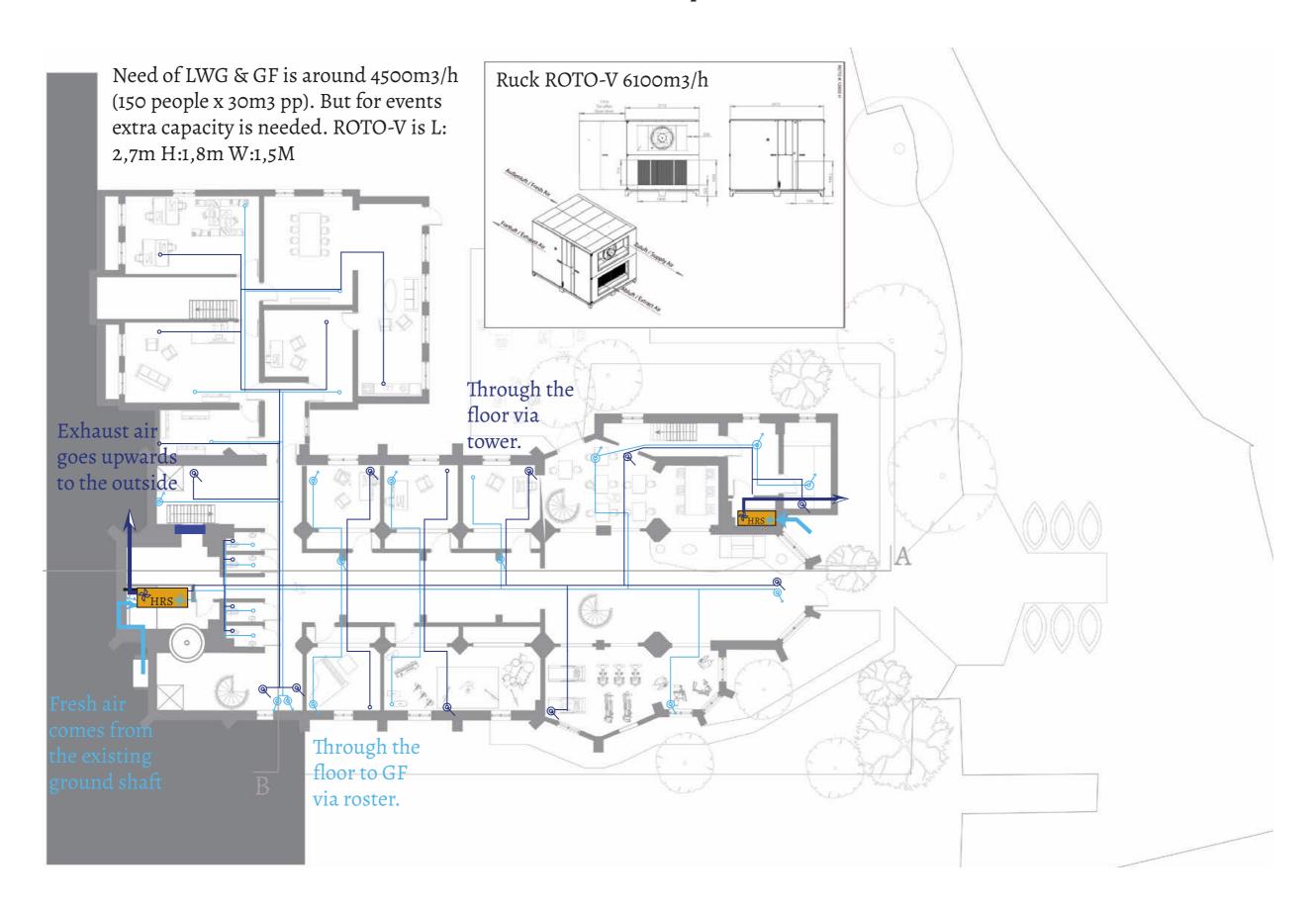
New additions



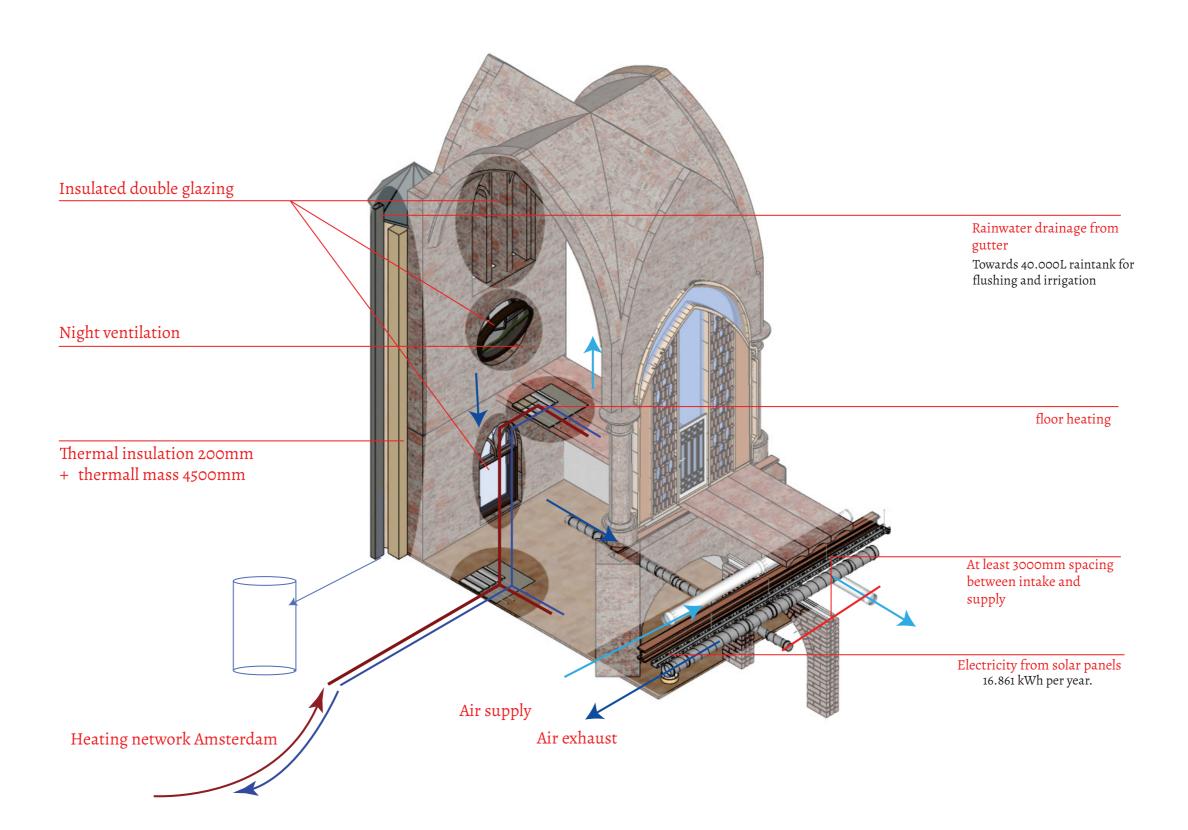
Cross section



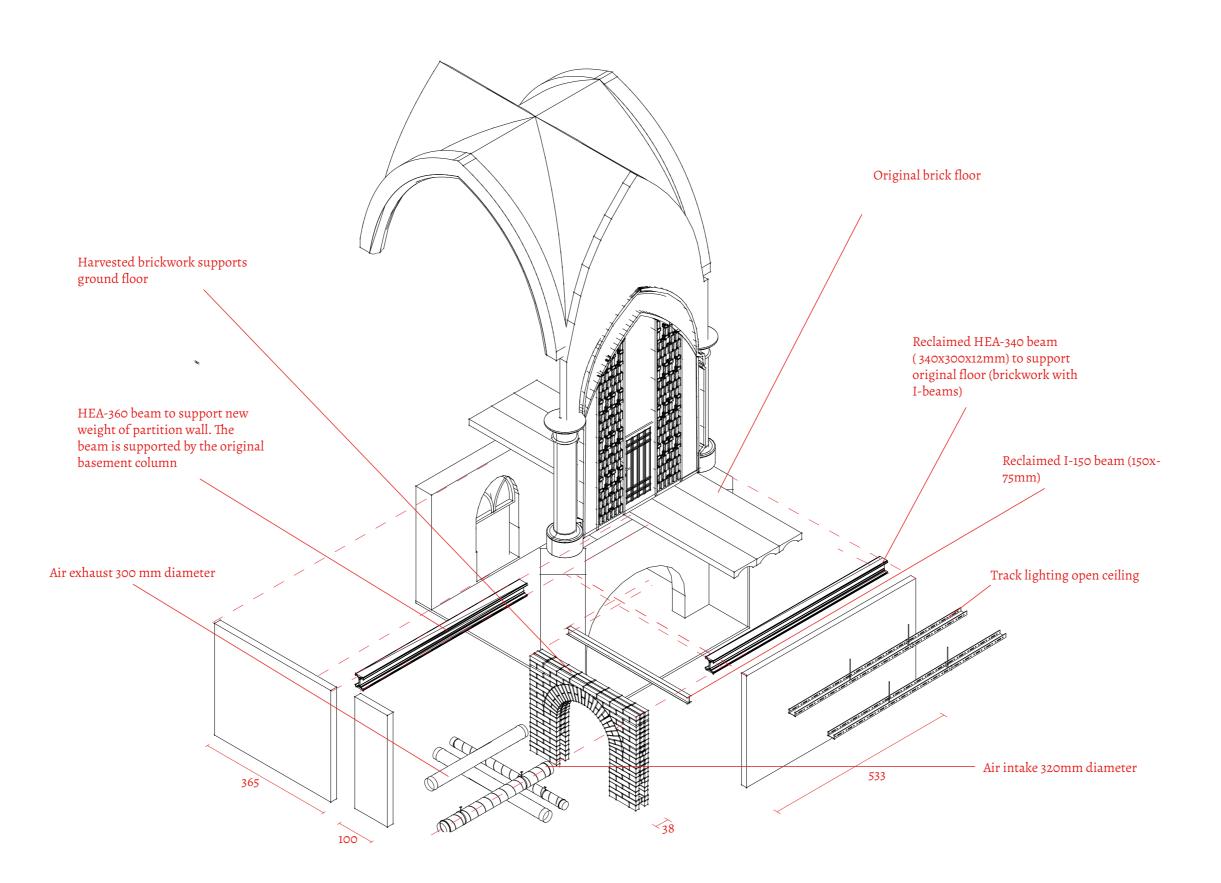
Ventilation plan



Climate control



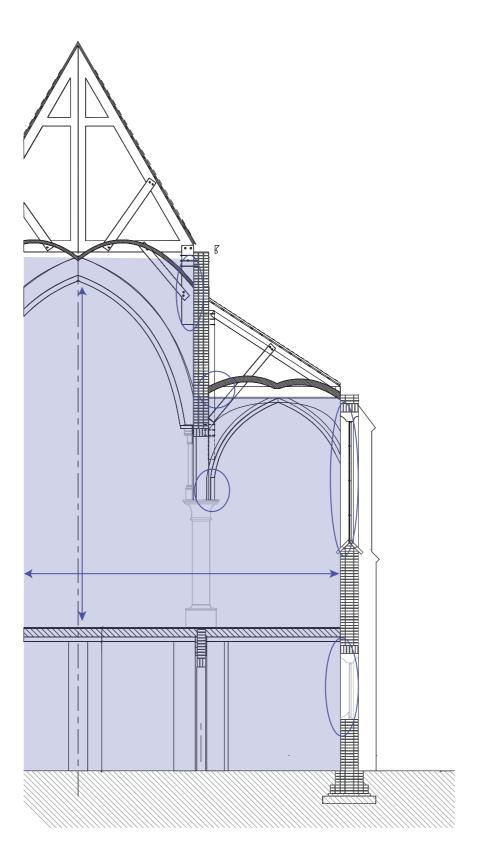
Structural axonometric



Why would one climatize the exterior vs. interior?

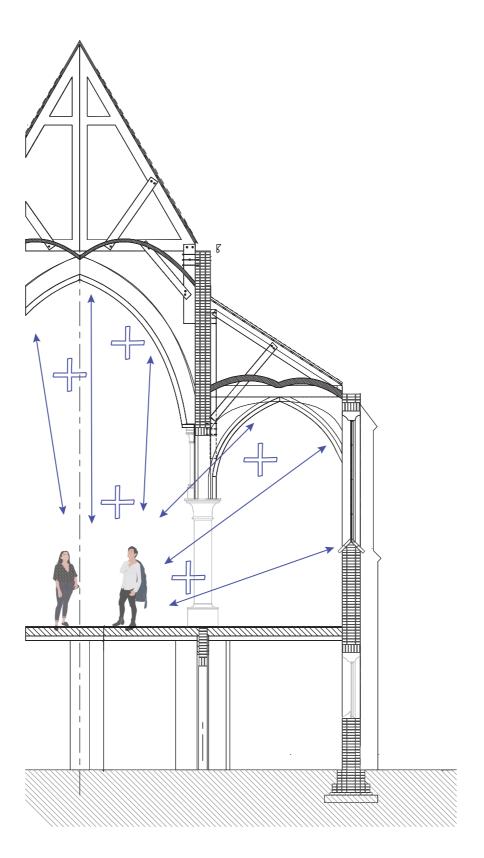
Revitalising heritage: Zero waste church, 2023

External insulation - reasoning



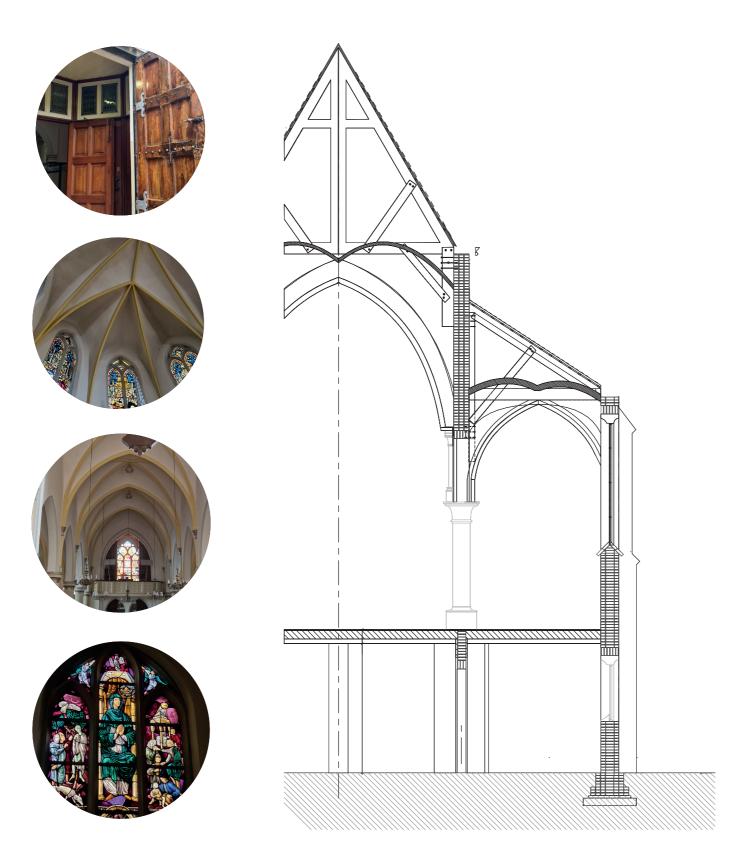
Preserve interior and architectural features, proportions, materials that induce sublimity.

External insulation - reasoning



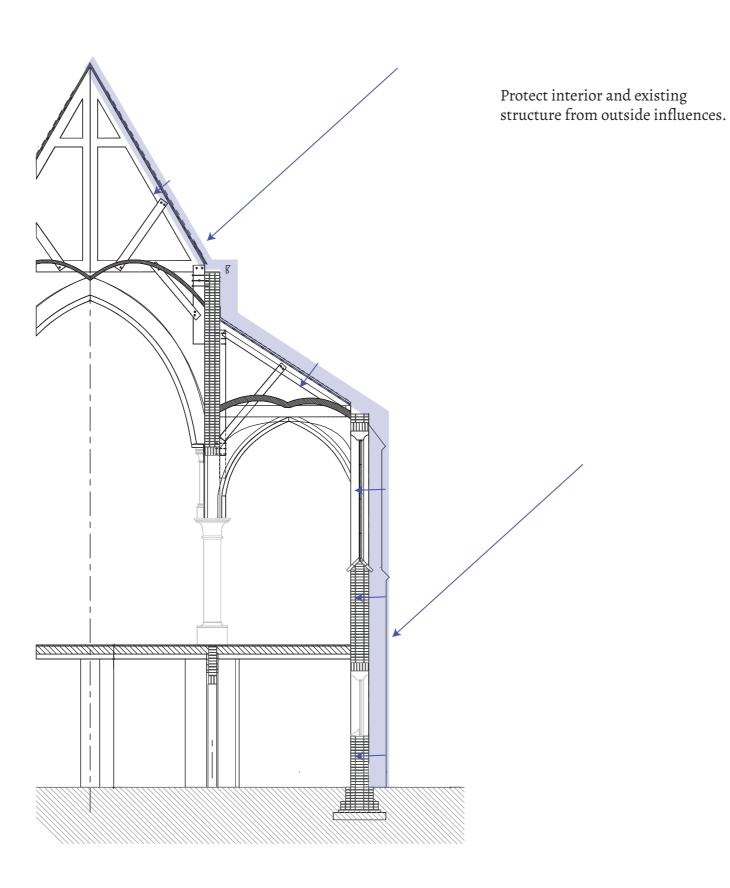
Preserve ability interior space to postivily influence mental health.

External insulation - reasoning

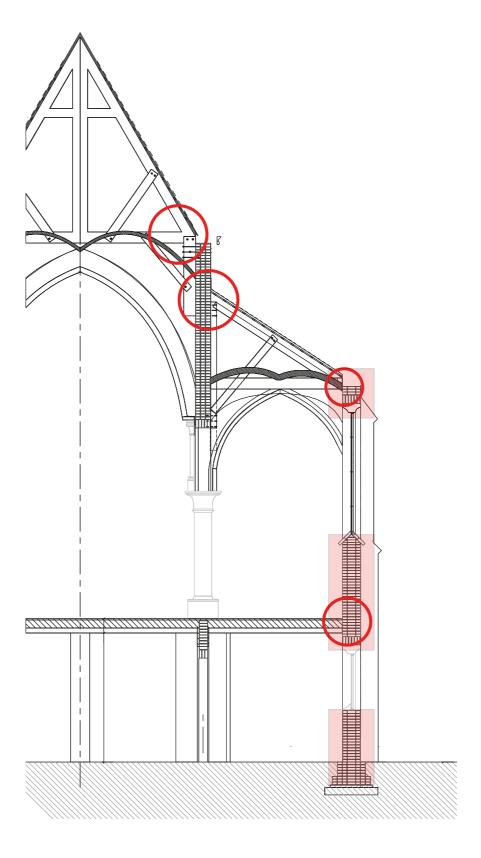


Preserve relation with most valued heritage aspects.

External insulation - reasoning



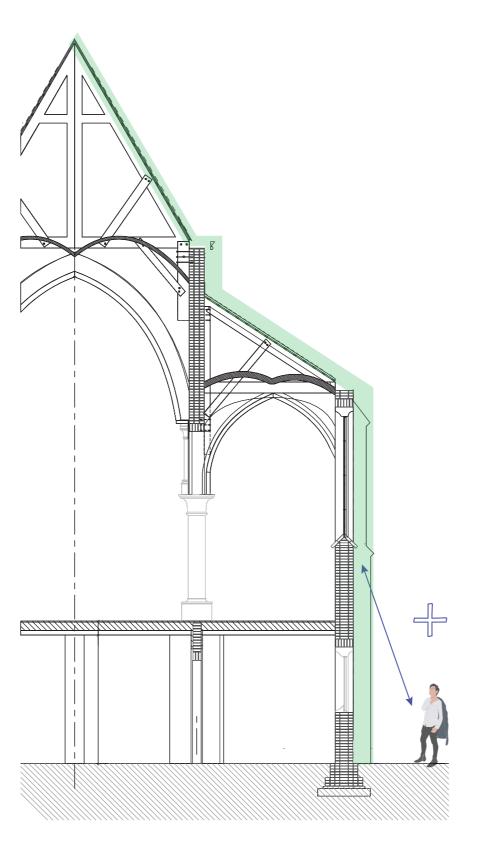
External insulation - reasoning



Eliminate cold bridges -> less condensation -> less damage -> less energy consumption -> less waste

Use advantages of existing thermal mass. Keep the builder cool in summer and warm in winter

External insulation - reasoning



Use new shell as an opportunity to add value to the overall building and purpose.

External insulation - reasoning



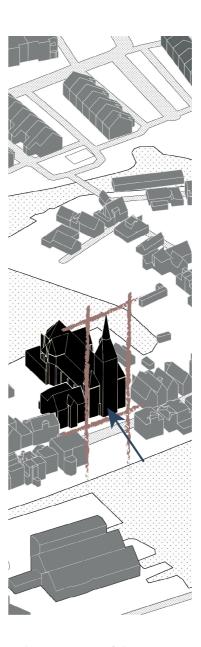
The impact of the exterior of the structure is reduced to the North facade due to the positioning in the urban fabric. The rectory on the west and housing on the east block out the architectural qualities of the church. All building have heritage value and are listed. This makes the impact of externally insulating much less: as well on the urban fabric, as on the heritage value & experience.



External insulation - reasoning

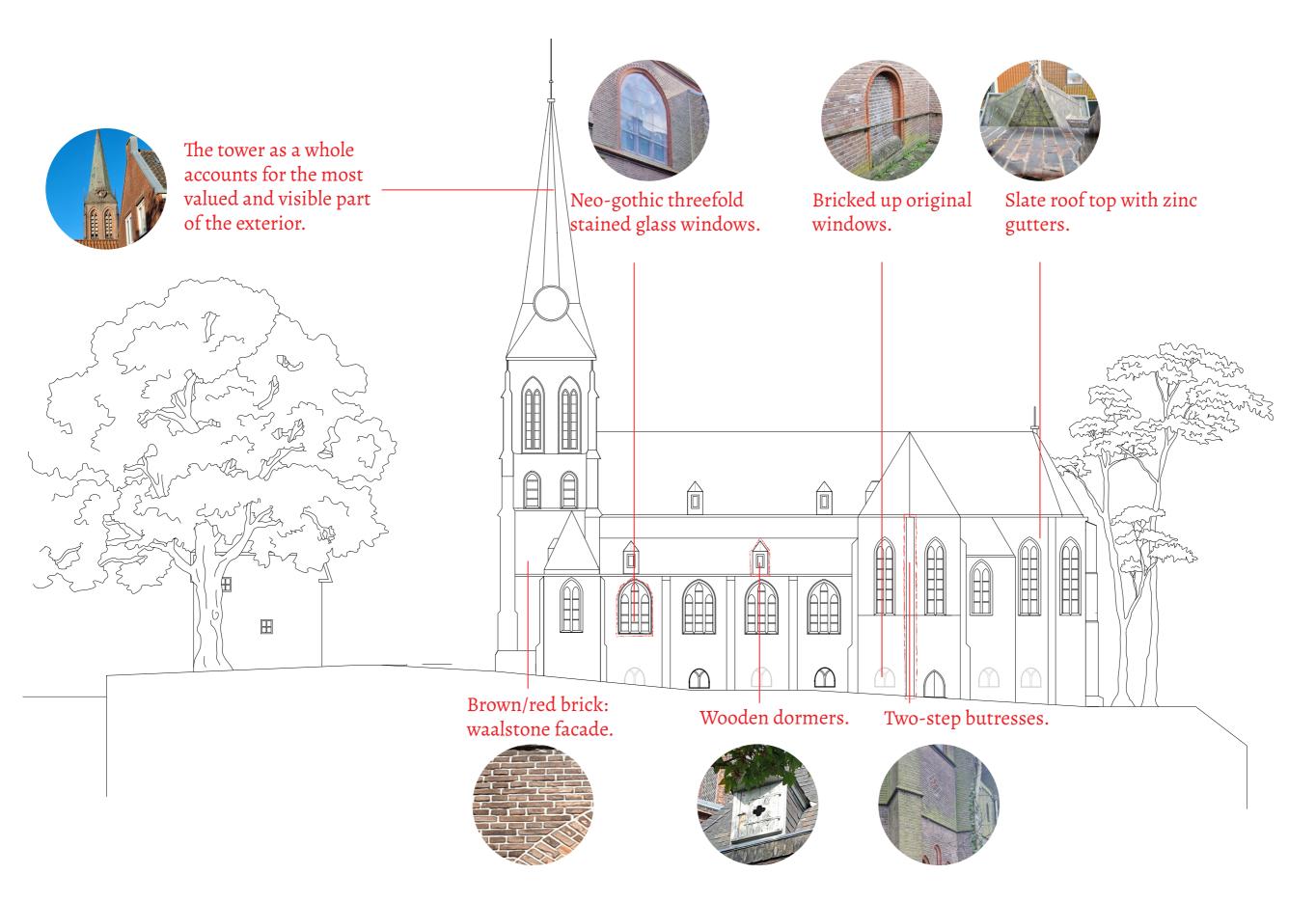






In fact, when one approaches the building directly from the street this is the only visual impact the exterior of the structure offers in its current positioning. Monumental trees even cover the side altars, causing the tower to be the only remaining visual exterior element.

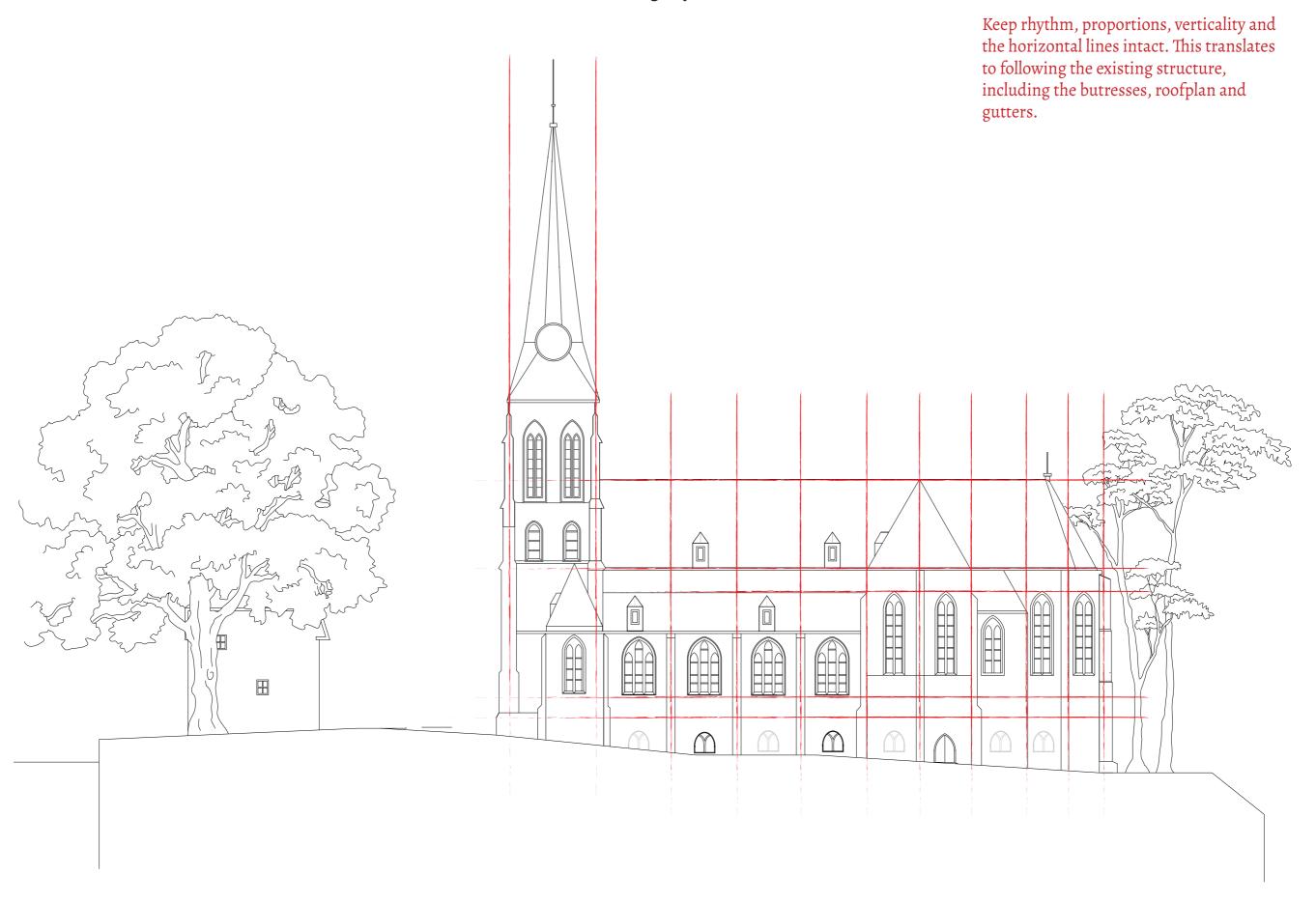
Existing elements of value



Margo Smeenge, 4647467

Revitalising heritage: Zero waste church, 2023

Existing rhythm

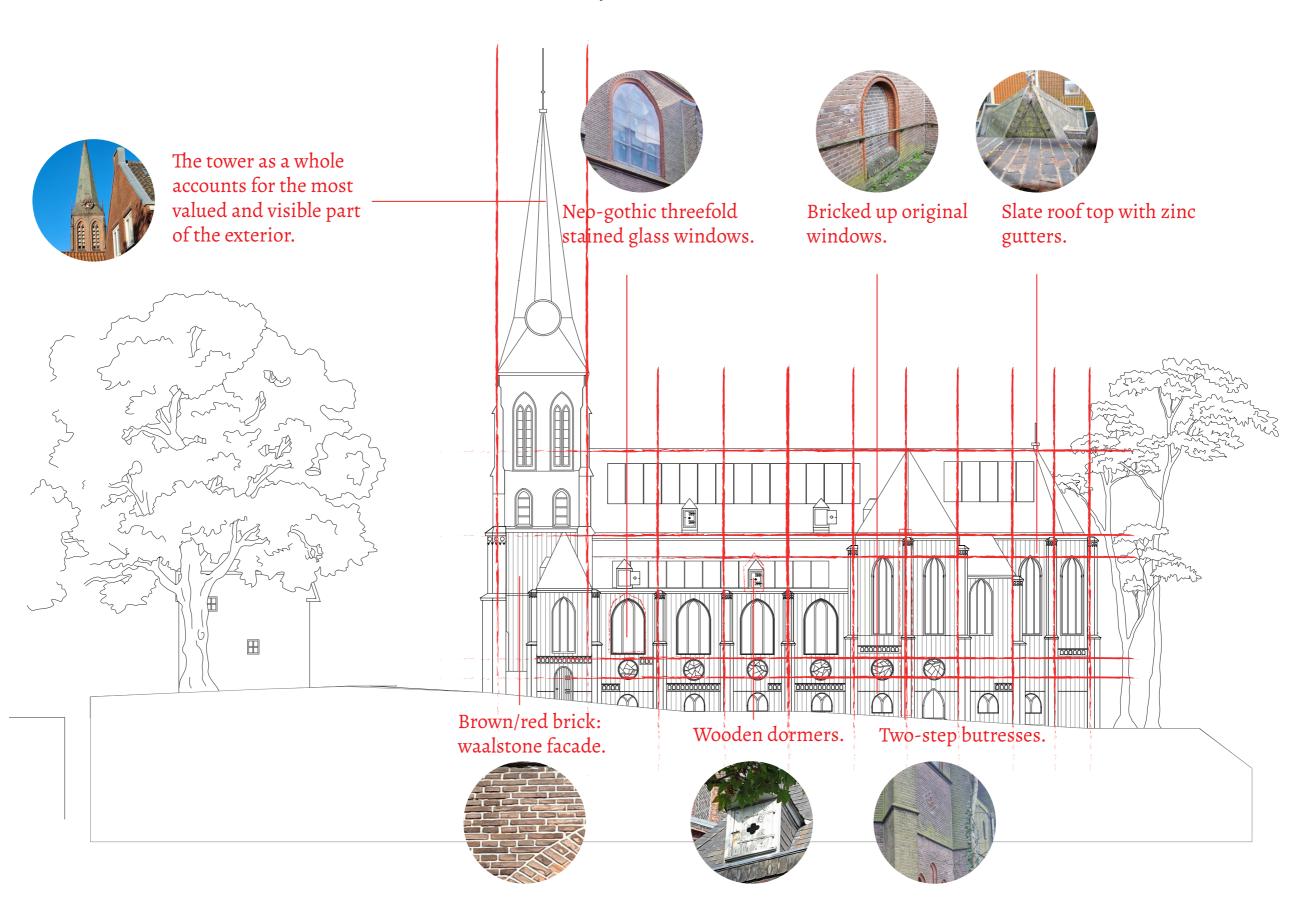


Facade

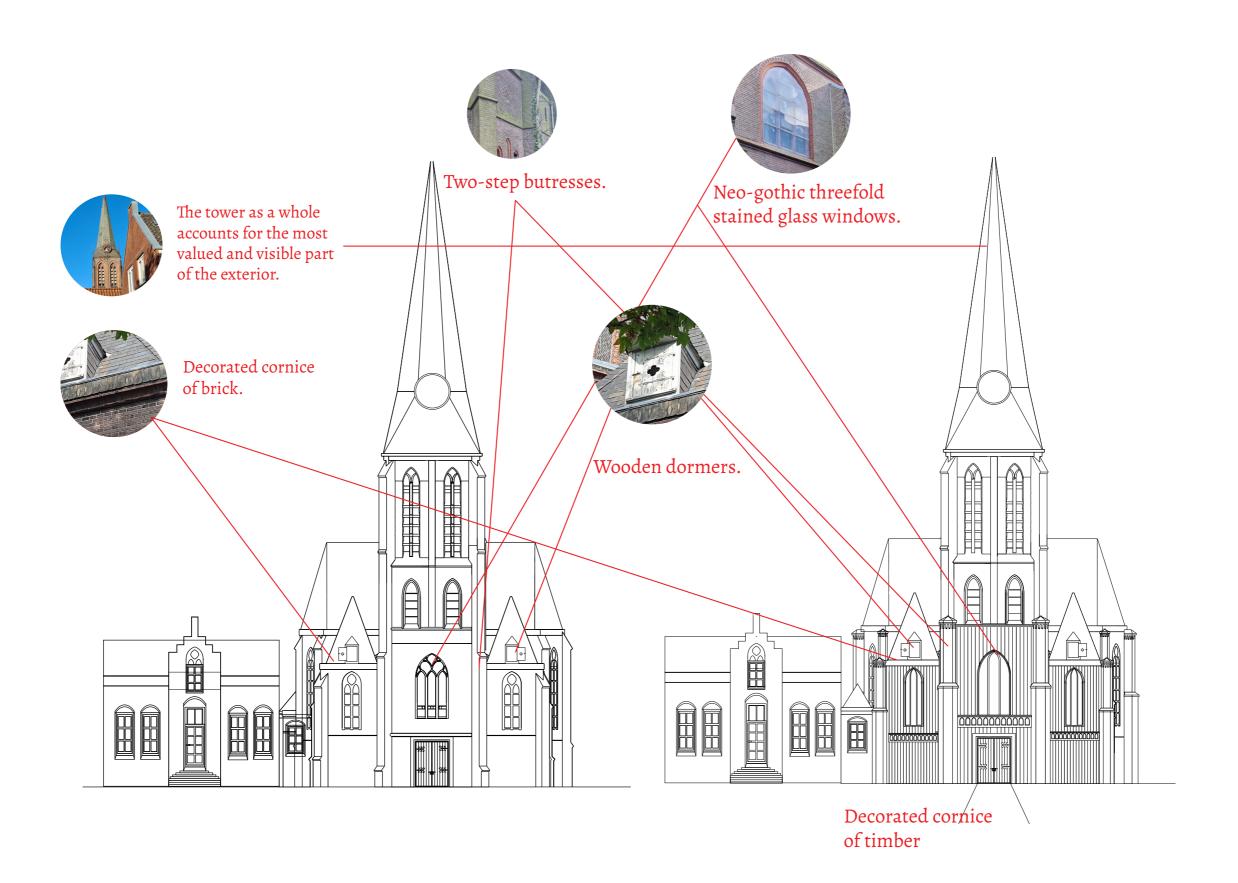
New east facade design



new rhythm & elements



south facade elements



Facade **South facade rhythm**



Facade Materiality

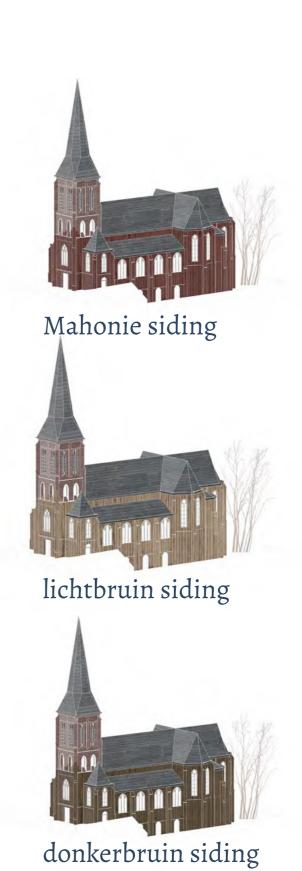


Wooden vertical

siding met brick

buttress



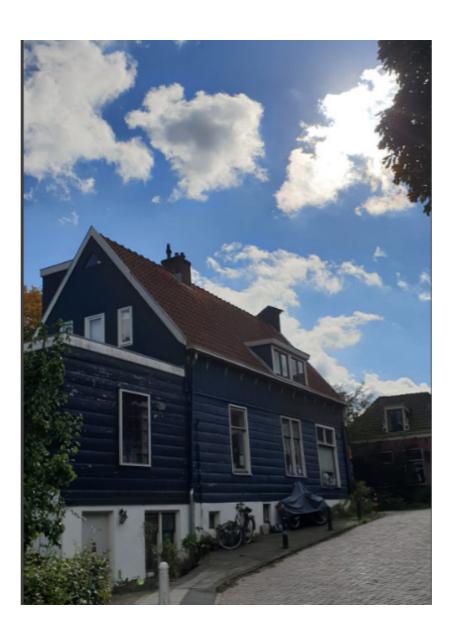


Margo Smeenge, 4647467 Revitalising heritage: Zero waste church, 2023

Facade

Context







Facade New east facade

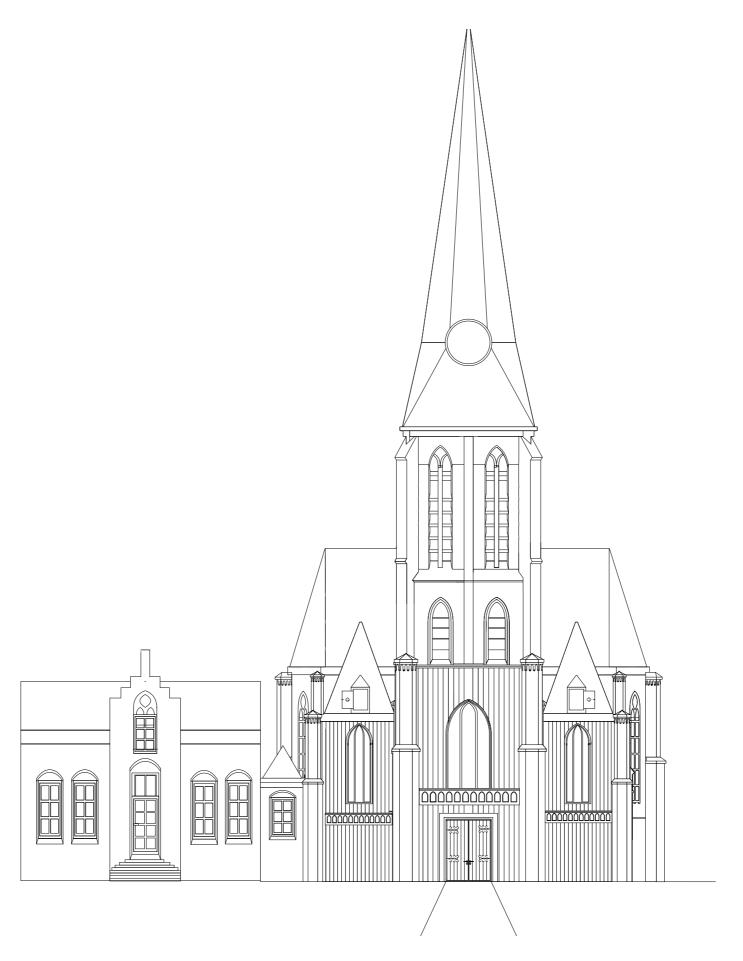


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Revitalising heritage: Zero waste church, 2023

Facade

New south facade



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Revitalising heritage: Zero waste church, 2023

Facade

Impression tower facade

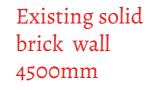


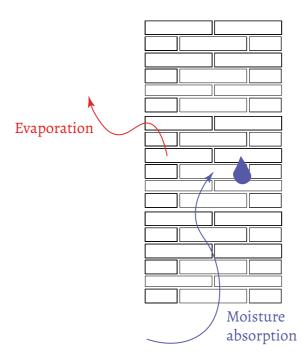
Margo Smeenge, 4647467

Revitalising heritage: Zero waste church, 2023

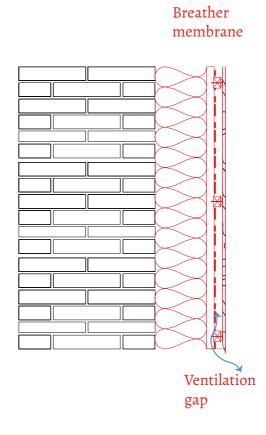
How is it build?

New exterior wall objective





Impermeable layer

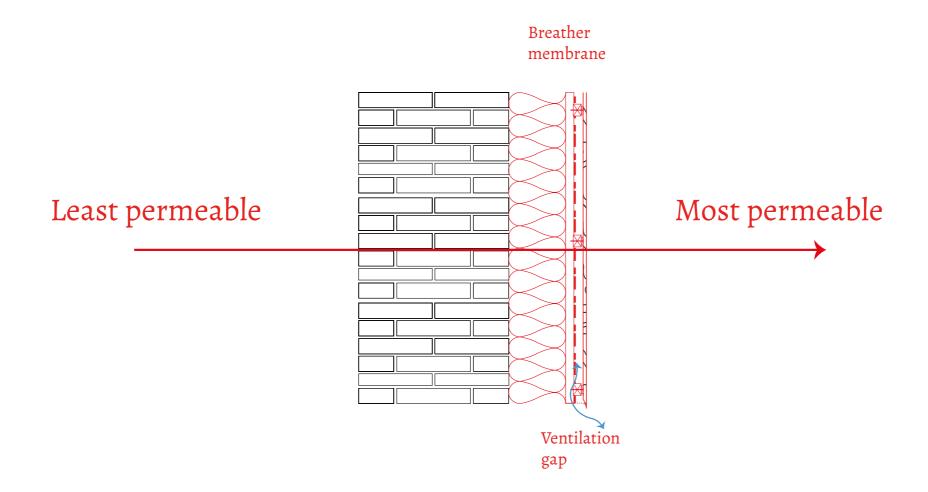


A 'breathing' structure

Moisture is trapped

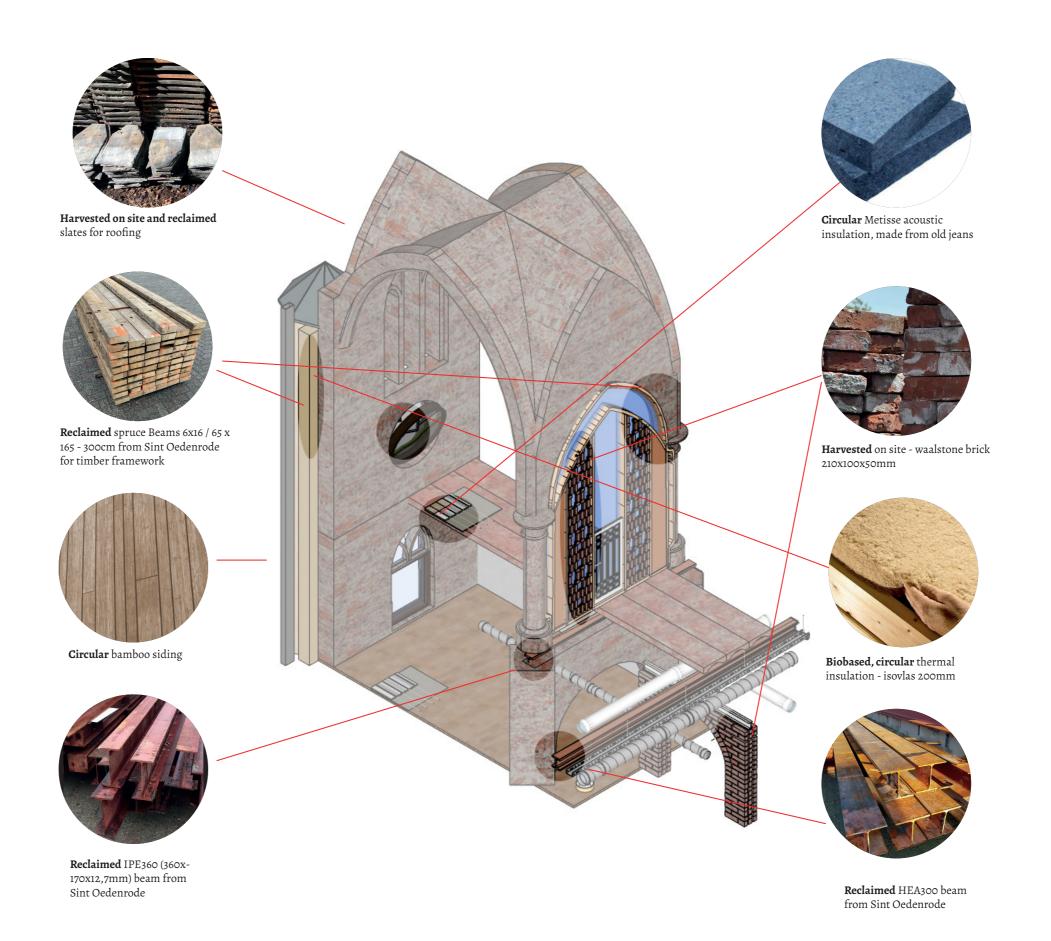
Damp-open building

New exterior wall objective



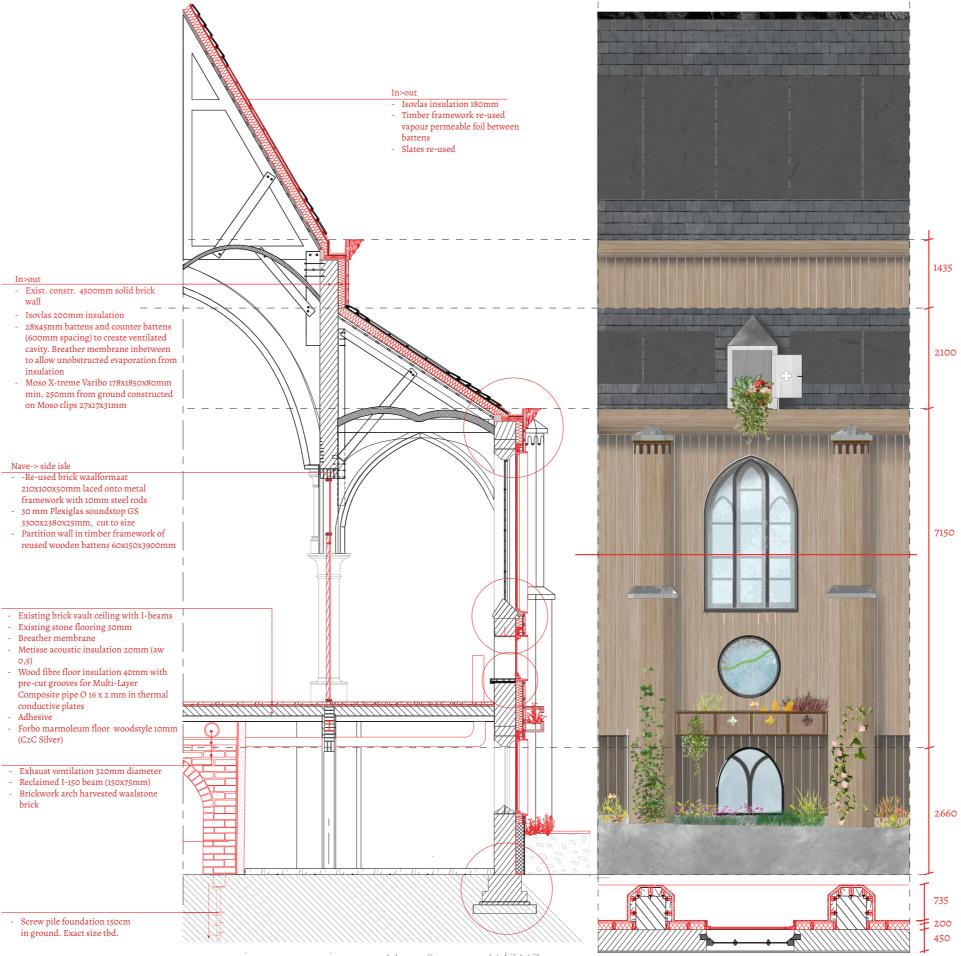
Damp-open building

Zero waste materials

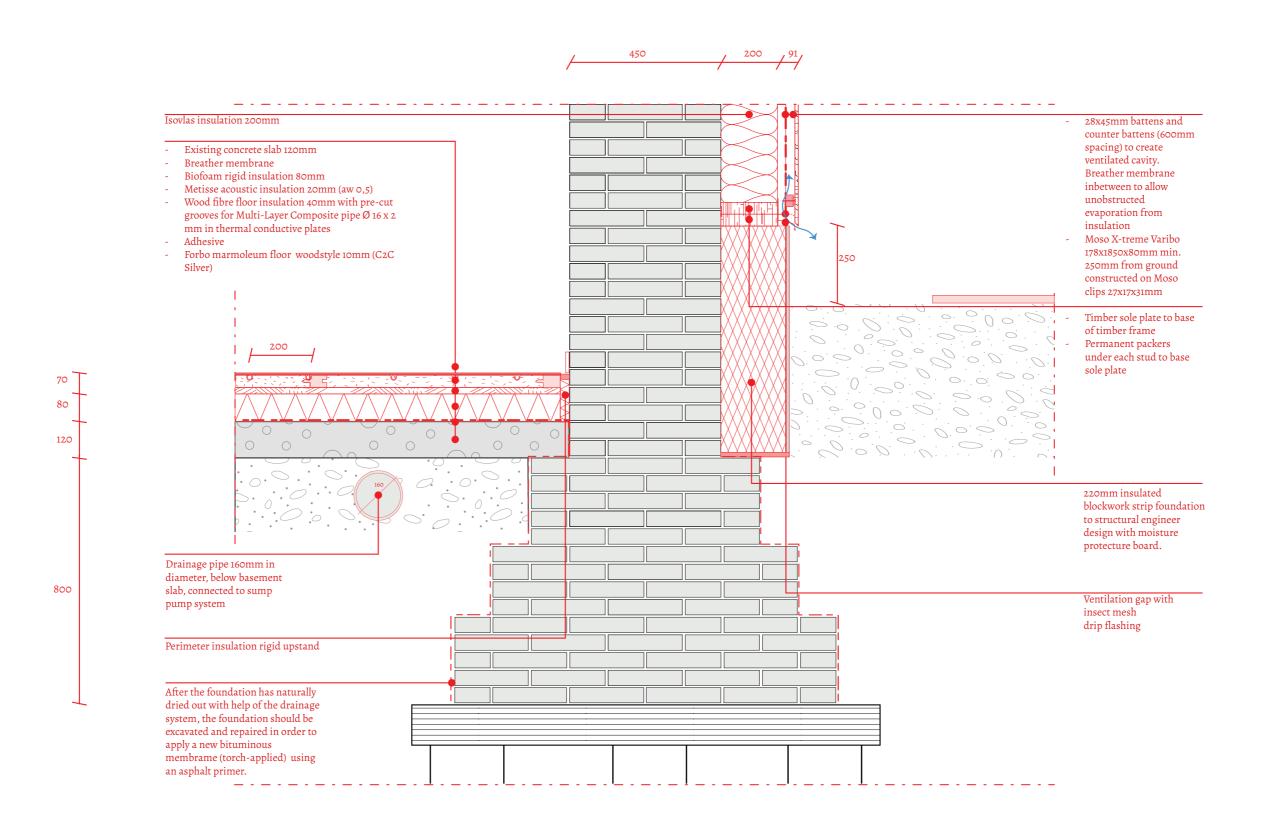


Margo Smeenge, 4647467

Facade fragment

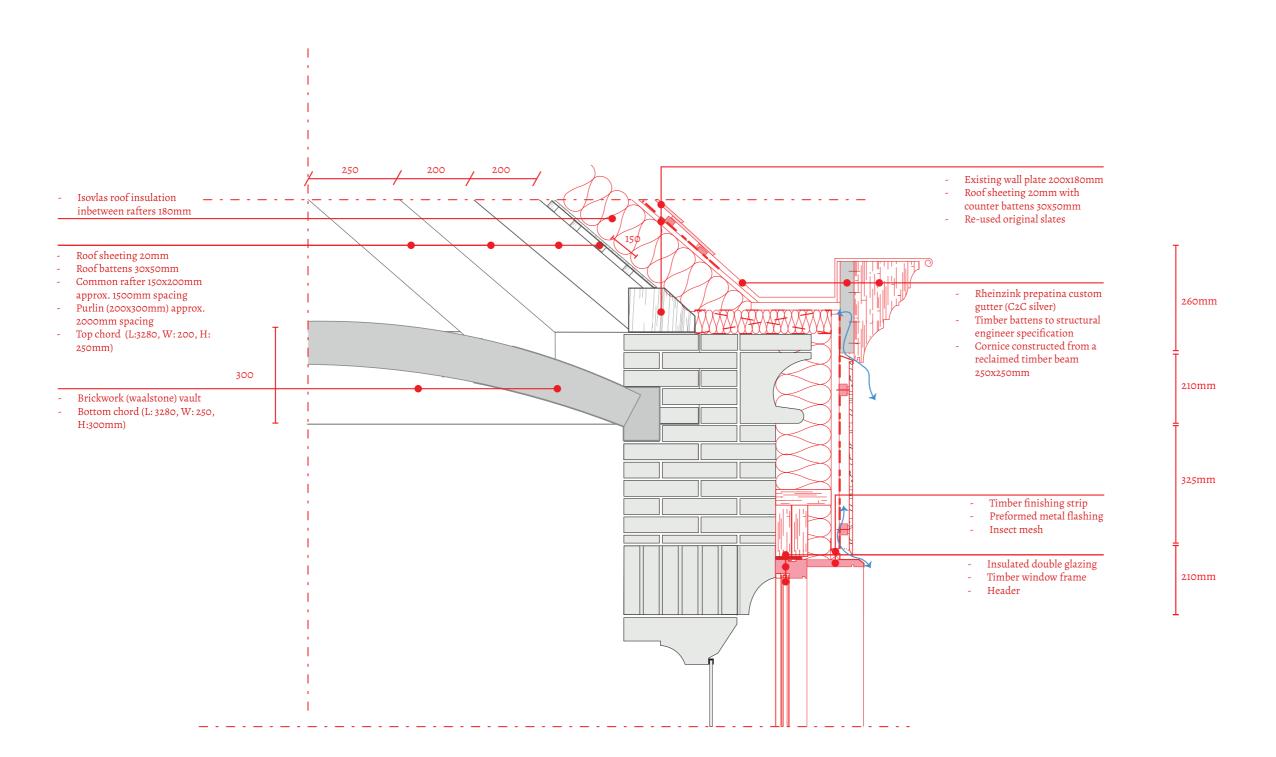


Foundation detail

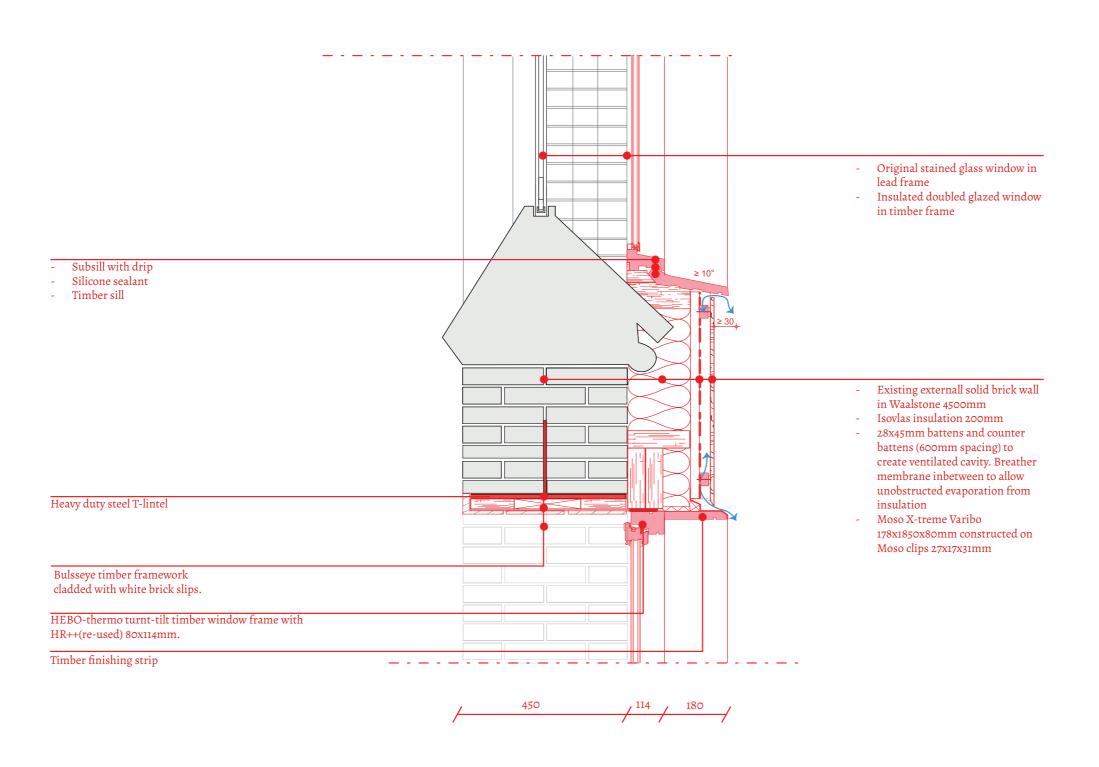


Build-up Add top window

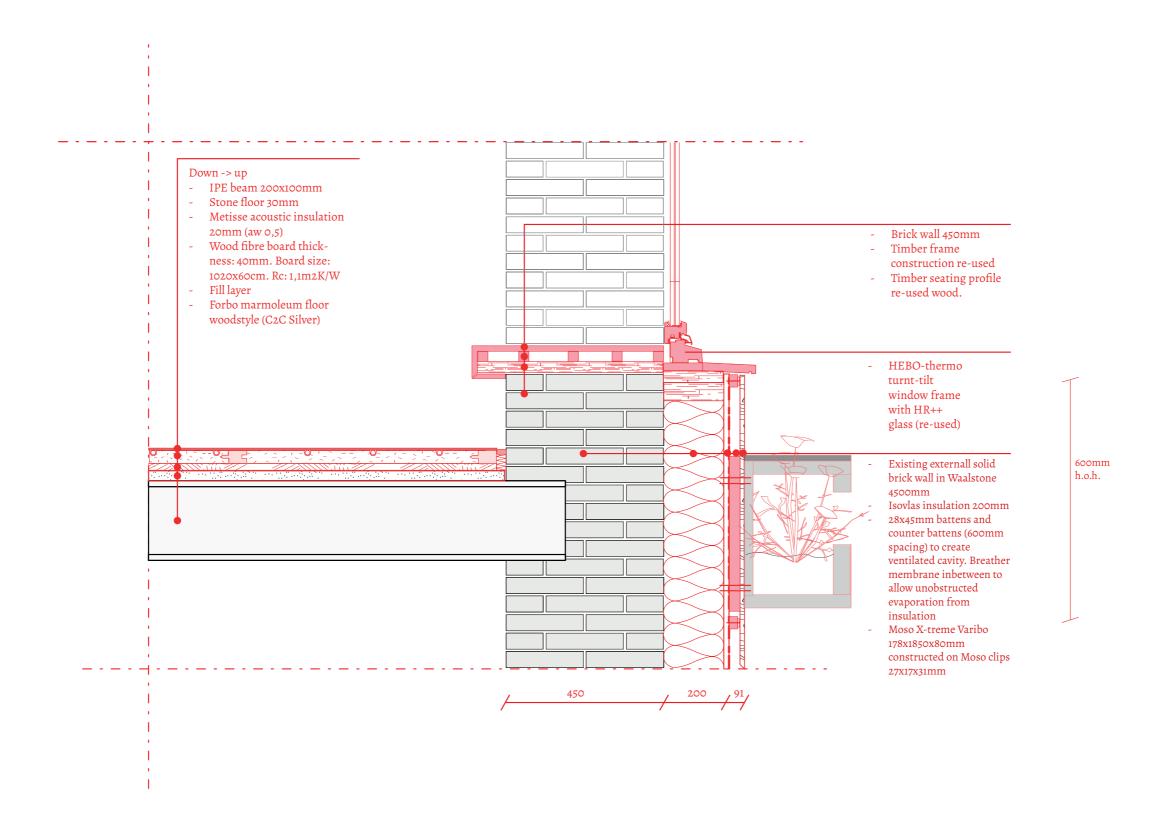
Gutter detail



Window detail



Window detail bottom



Onto the therapeutical garden

Description & requirements

Therapeutic garden

Specifically designed to **promote** physical, psychological and emotional **well-being**

It has imporved accessibility, well-defined perimeters and recognizable place making

Contains specific features that **trigger the senses** like fragrances, colors and textures

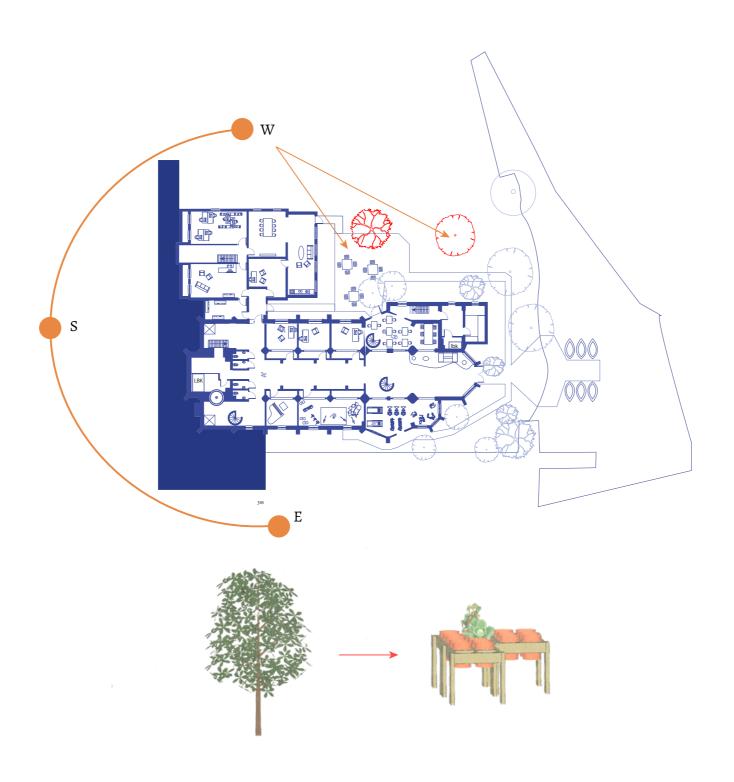
A wide **variety** of flora and fauna

It has **scheduled activities** for patients as well as community members seperately or joined like **horticulture programmes**

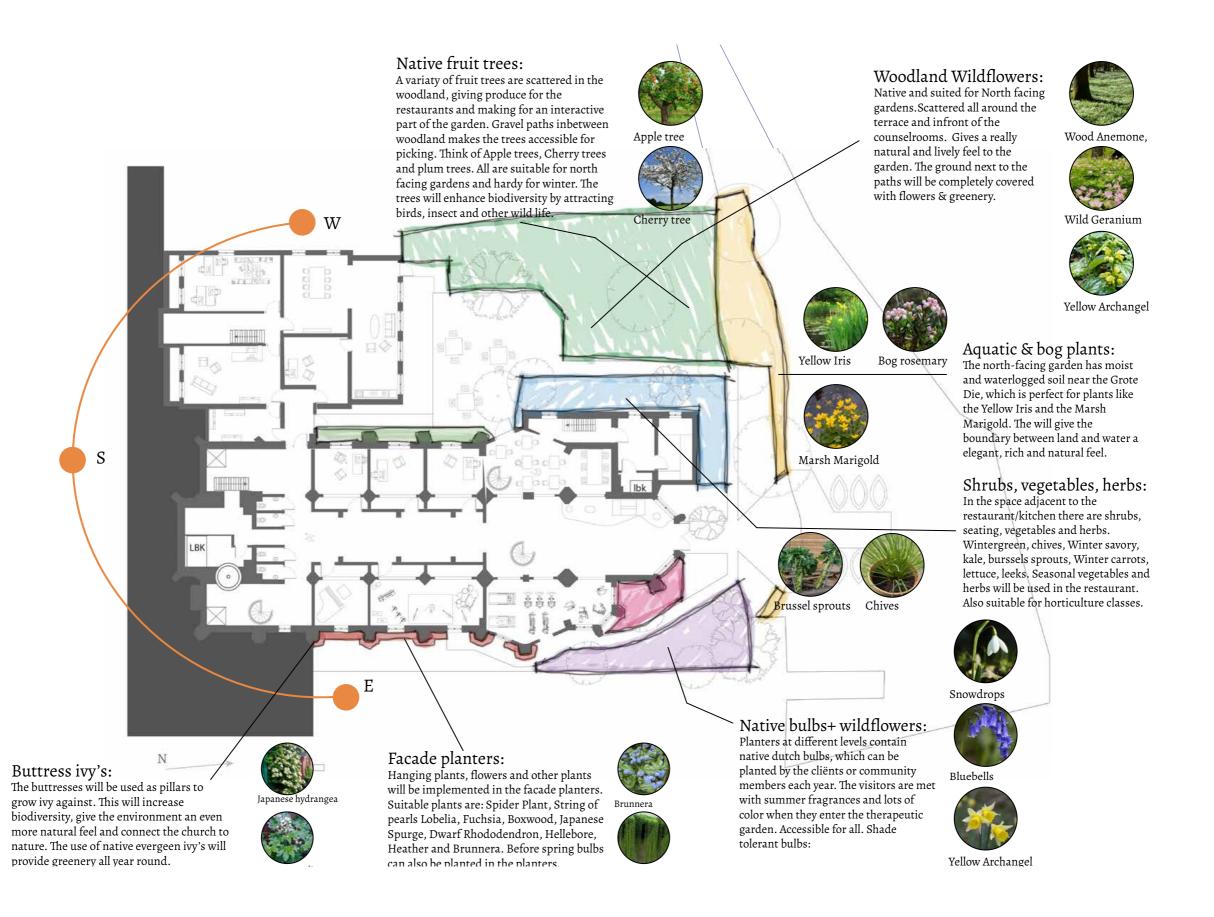




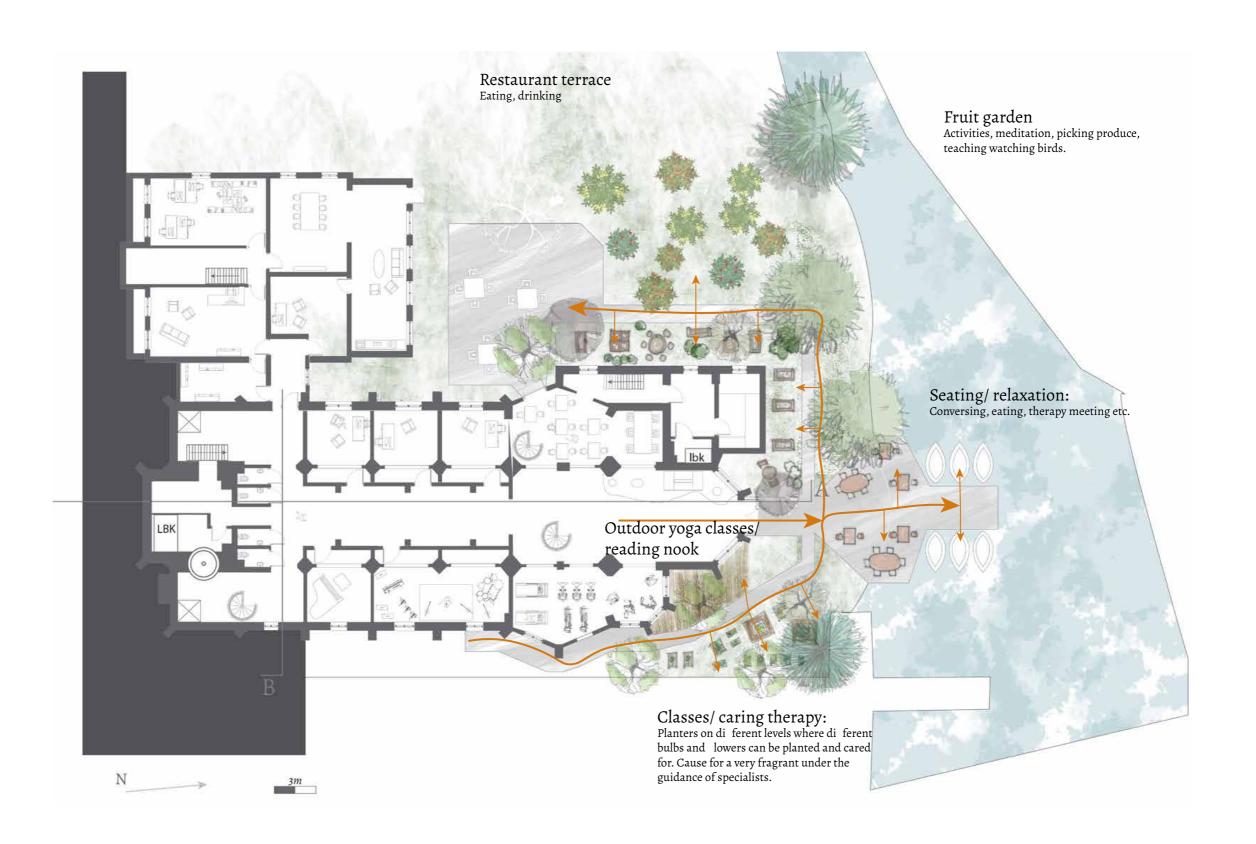
Demolition



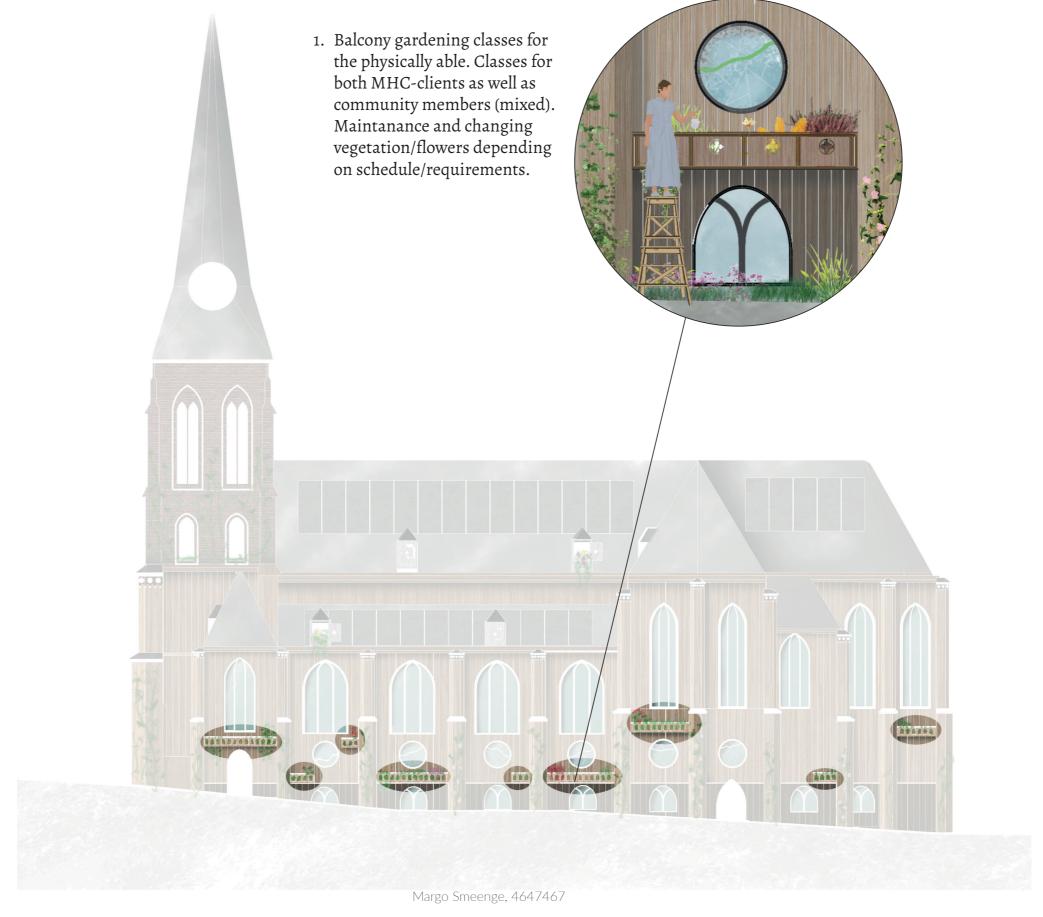
Plant selection



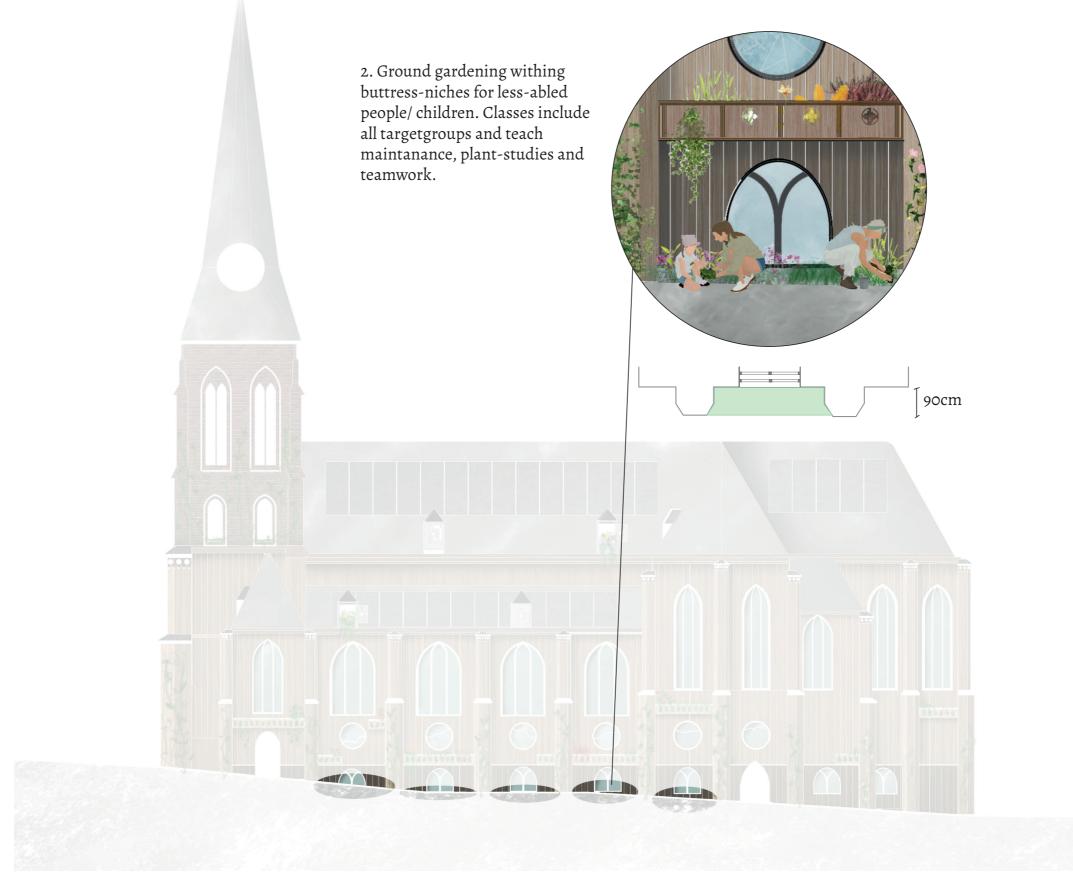
Program



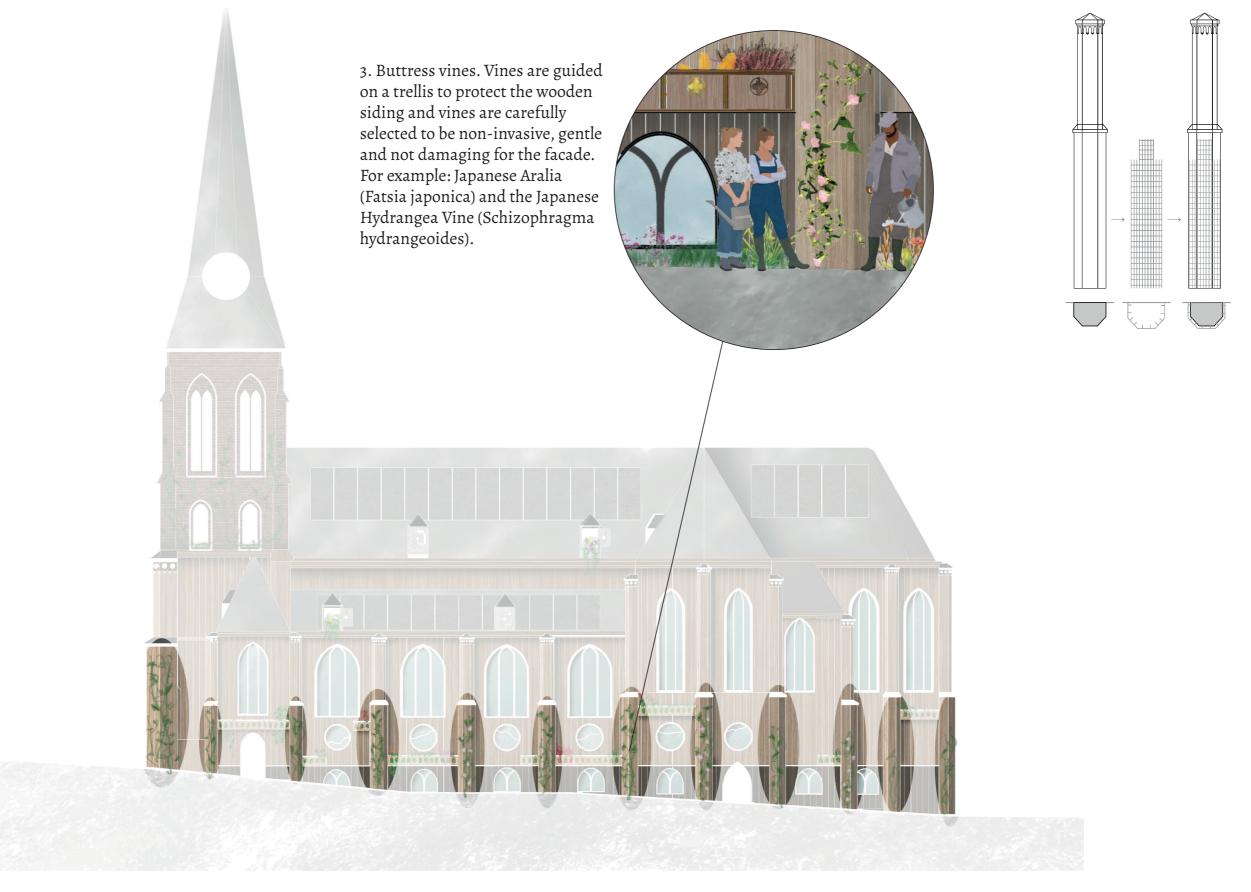
Facade functions



Facade functions



Facade functions



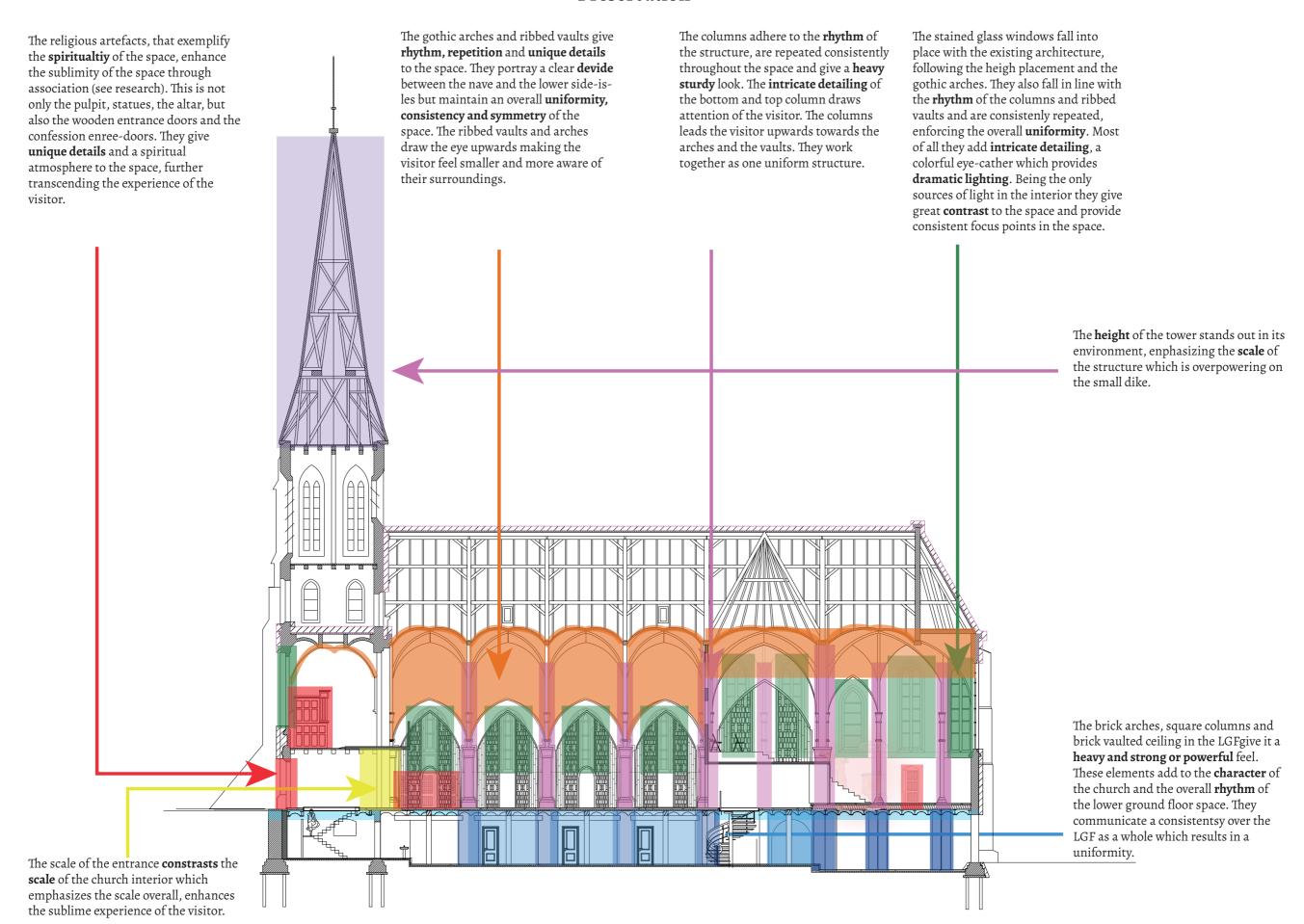
Impression



Experiencing the transformed Sint Augustinuskerk

The sublime

Preservation



Margo Smeenge, 4647467

The building

Experience





https://www.youtube.com/watch?v=FfsnVihi1YM&t=6s

Thank you.