

P5

Art Complex Het Steiger

adaptive reuse of a Dominican church complex in Rotterdam

Chiem Hollander

A brief history

Panorama of Rotterdam from *het Witte Huis*, 1902



Sint-Dominicuskerk, 1922

A brief history



The St. Dominic Church after bombing of Rotterdam, June 1940

A brief history



The destroyed St. Dominic church and the new location

A brief history



The new St. Dominic Church designed by Kraaijvanger, 1960

The current situation



Front facade of the St. Dominic Church, 2023

The current situation



Back side Het Steiger with bell tower and former day chuch, 2023

The current situation



Church hall with
sacramental altar, 2023 (left)

Cloister with inner courtyard,
2023 (right)

The current situation



Interior front facade

The future of the Steigerkerk?

July 2021

May 1940



The destroyed
St. Dominic Church

1960



Completion of the new
St. Dominic Church



22 JULI 2021

Voorgenomen besluit onttrekking Steigerkerk

De bestuur van de parochie H. Johannes in Rotterdam heeft het voornemen te besluiten tot verkoop en onttrekking aan de eredienst van de Dominicus- of Steigerkerk.

Dit staat in een brief van het bestuur aan de geloofsgemeenschap van het Steiger, ook gepubliceerd op de site van de parochie.

De parochie, een fusie van drie gemeenschappen, heeft de afgelopen jaren uitvoerig onderzoek gedaan naar de financiële vooruitzichten. Het bestuur verwacht dat eind volgend jaar het vermogen van de parochie zal zijn verdwenen. Als er geen groot onderhoud gedaan moet worden, kunnen de jaarlijkse tekorten nog tot eind 2025 opgevangen worden. Dan is de kas echt leeg, schrijft het bestuur, dat op 18 juli met de Steigerse gemeenschap in gesprek is gegaan.

Overleg met de drie gemeenschappen 'heeft niet geleid tot vertrouwen in een ontwikkeling naar een levendige en ook in financieel opzicht gezonde gemeenschap'. Integendeel, men verwacht dat alle drie de gemeenschappen binnen een termijn van vijf tot tien jaar niet meer kunnen functioneren.

Een voorgenomen besluit is een formele stap. Het besluit moet aan de bisschop voorgelegd worden. Deze moet dan de gemeenschap, de priesterraad en het kapittel van het biddom hierover horen. Pas daarna kan de bisschop het voorgenomen besluit om de kerk aan de eredienst te onttrekken en te verkopen al dan niet goedkeuren. Zonder deze goedkeuring kan er geen verkoopcontract gesloten worden met mogelijke kopers. Het uiteindelijke verkoopcontract moet ook weer door het biddom goedgekeurd worden. Het hele traject kan drie à vier jaar duren. De kerk blijft dus, de komende tijd, gewoon in gebruik.

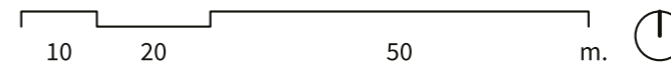
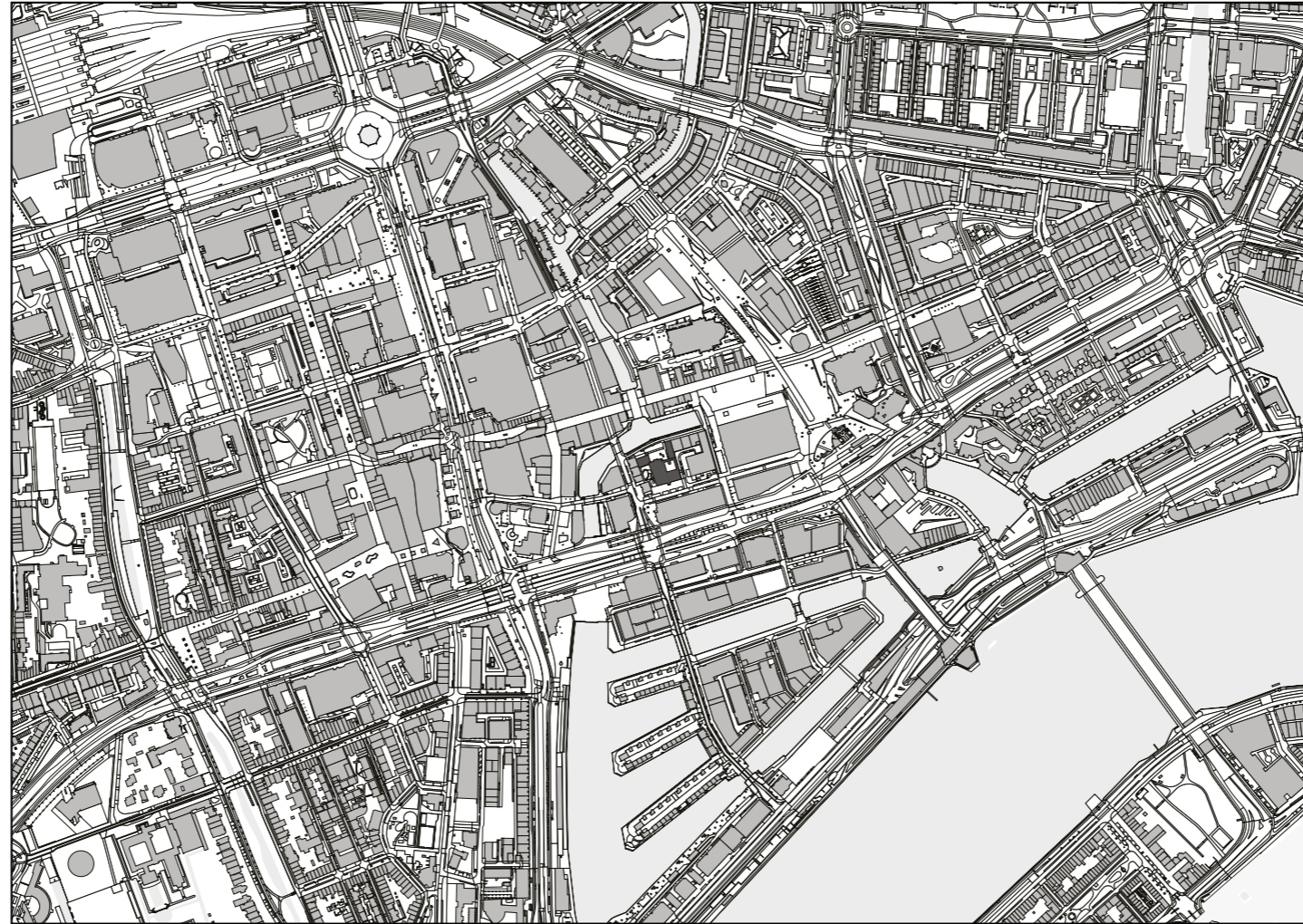
Intention to cease worship
at the St. Dominic Church

Urban context

✕ Het Steiger



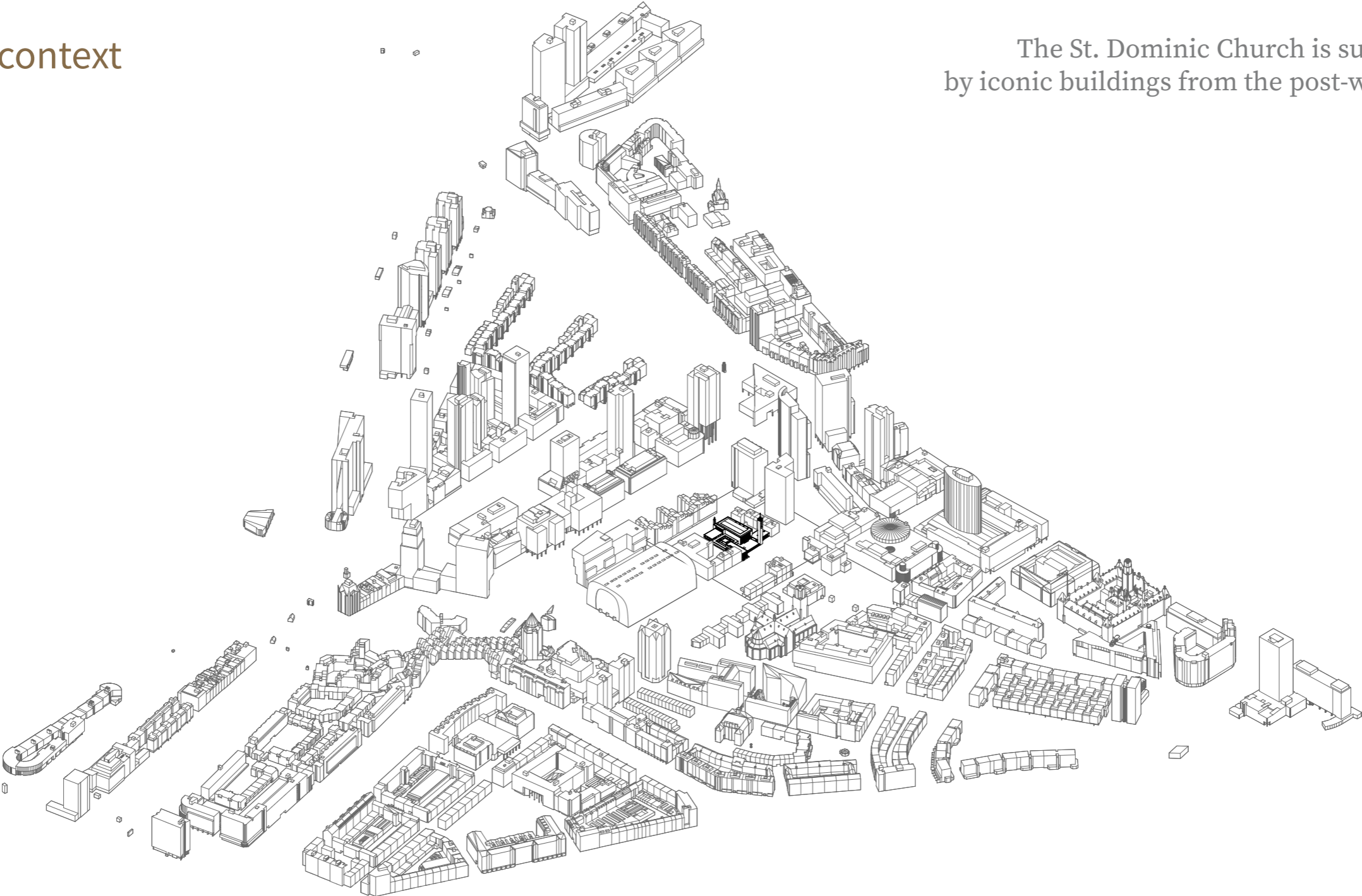
Urban context



The St. Dominic Church is located in the centre of the Stadsdriehoek

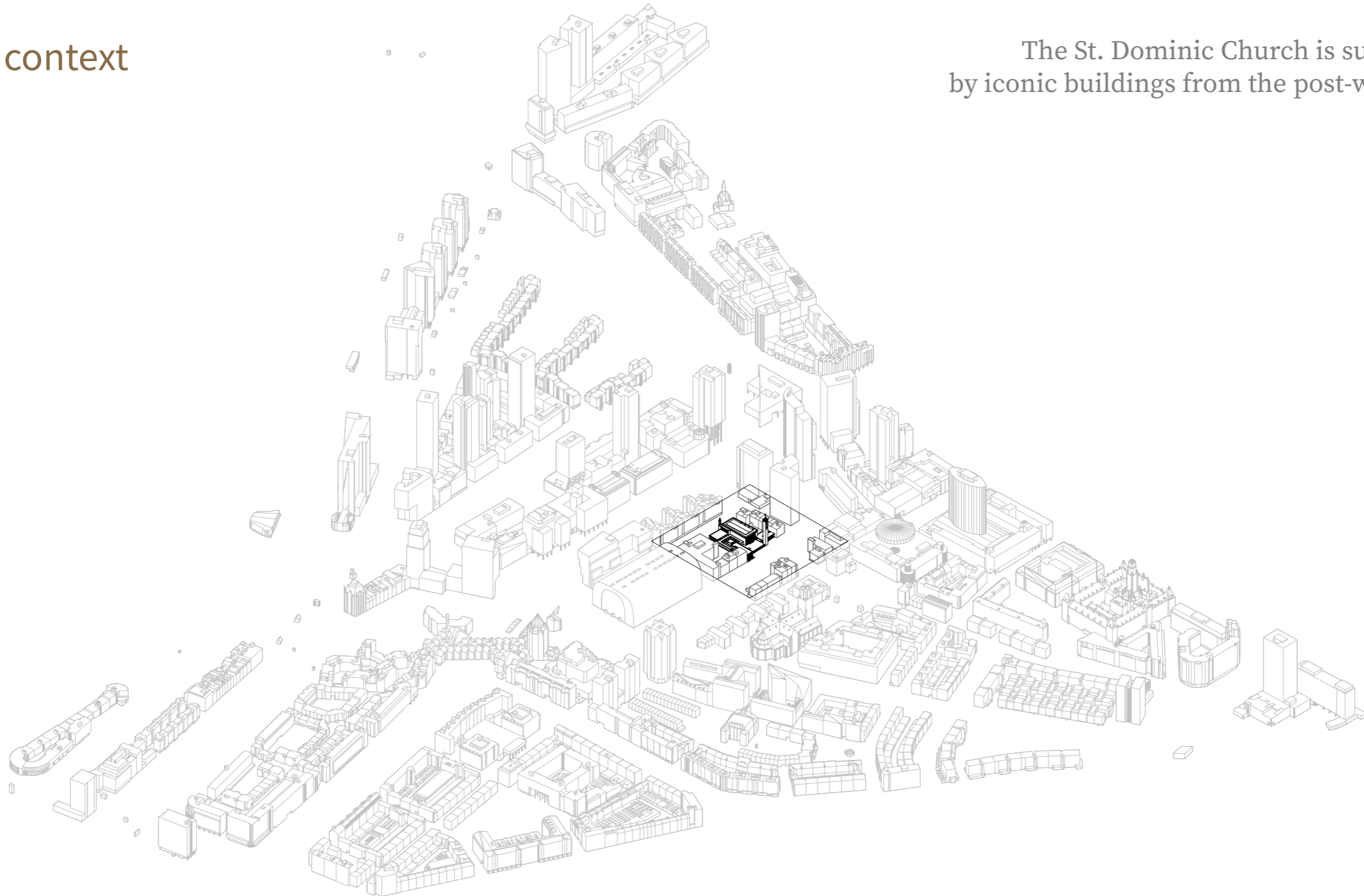
Urban context

The St. Dominic Church is surrounded by iconic buildings from the post-war period



Urban context

The St. Dominic Church is surrounded by iconic buildings from the post-war period



Urban context



Brief information

Architect

Kraaijvanger

Design

design: 1953-1957

built: 1959-1960

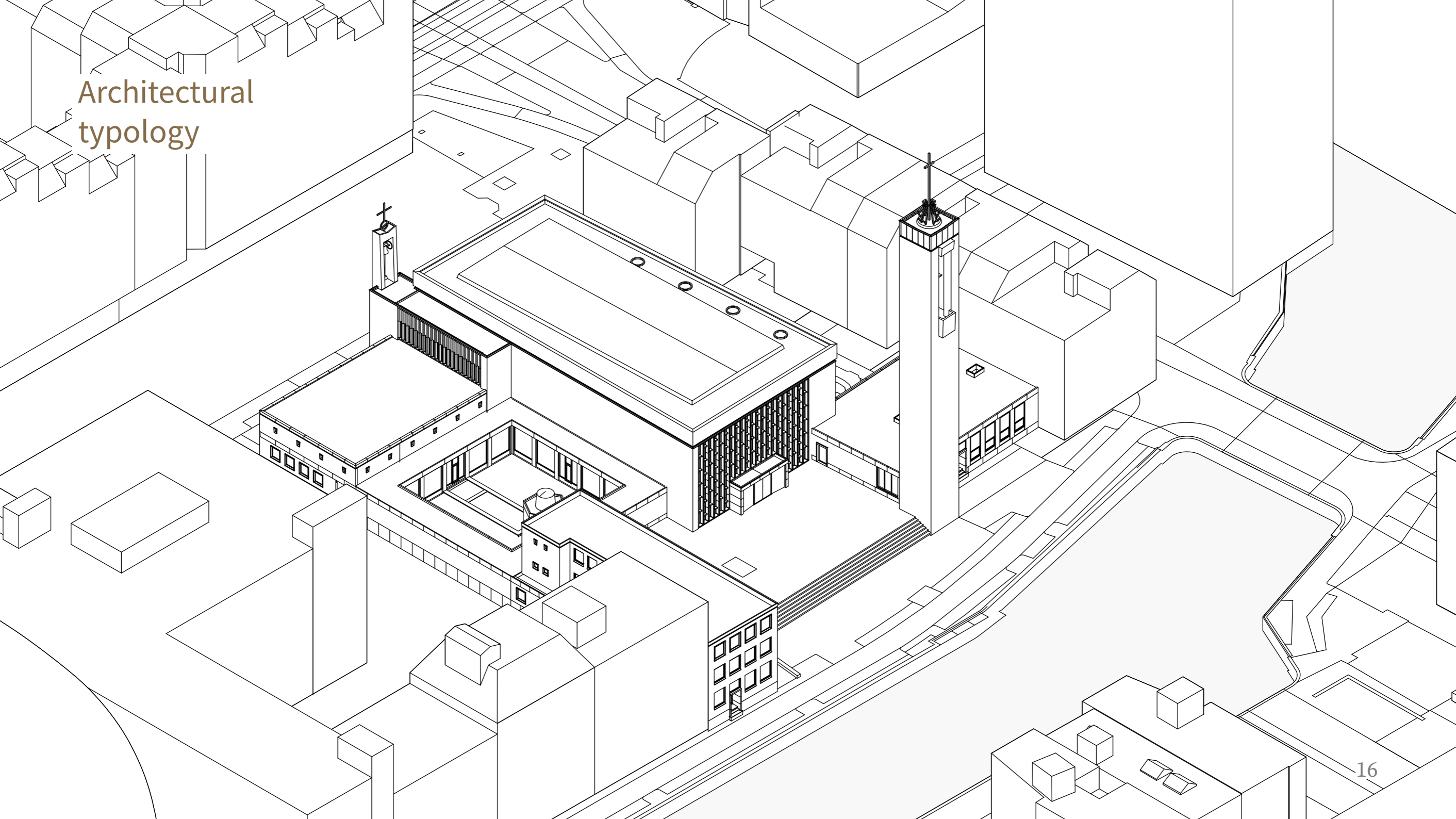
Typology

Dominican monastery:
convent, church hall
and parish house

Style

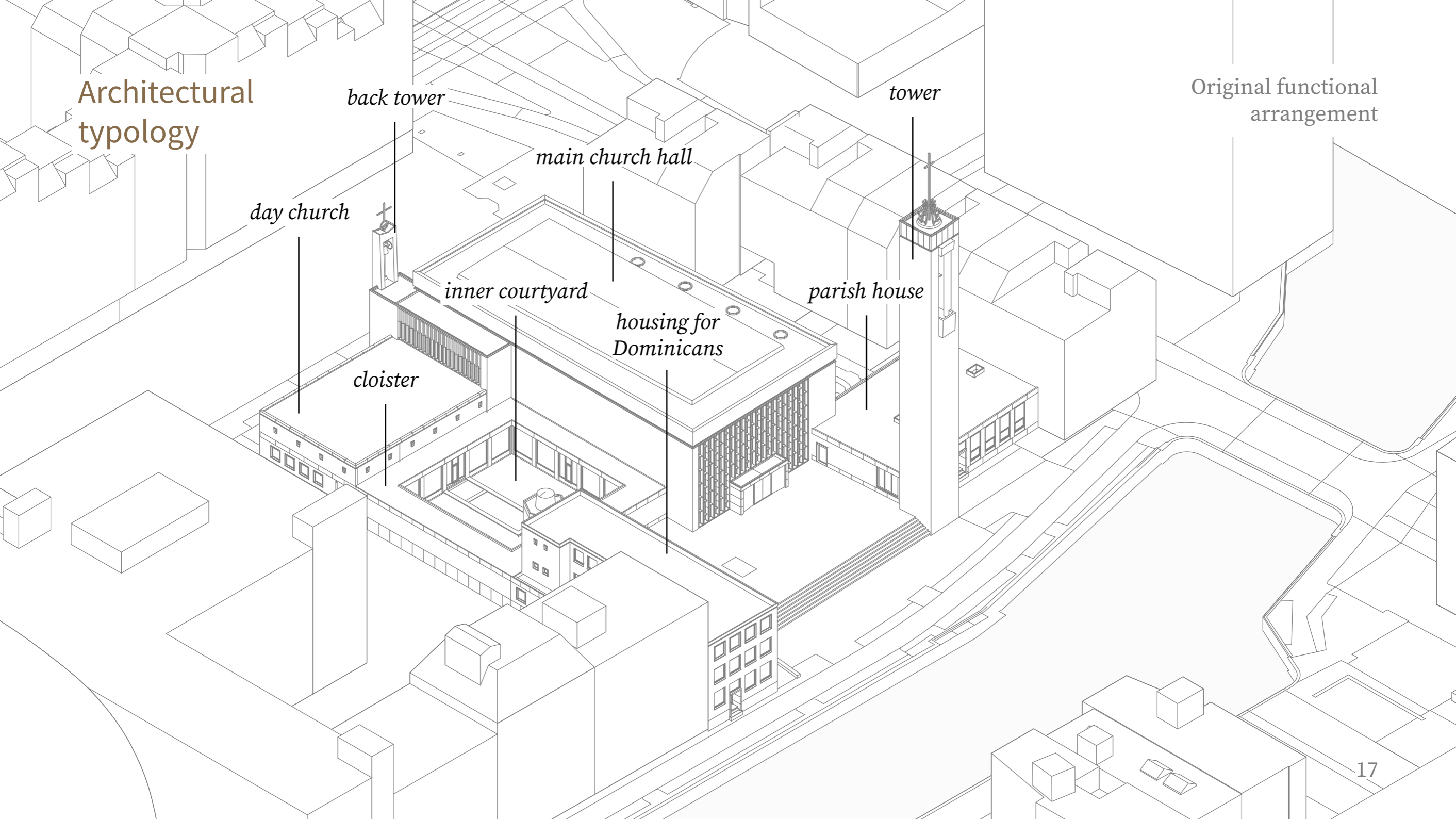
Modern eclecticism

Architectural
typology



Architectural
typology

Original functional
arrangement



back tower

tower

day church

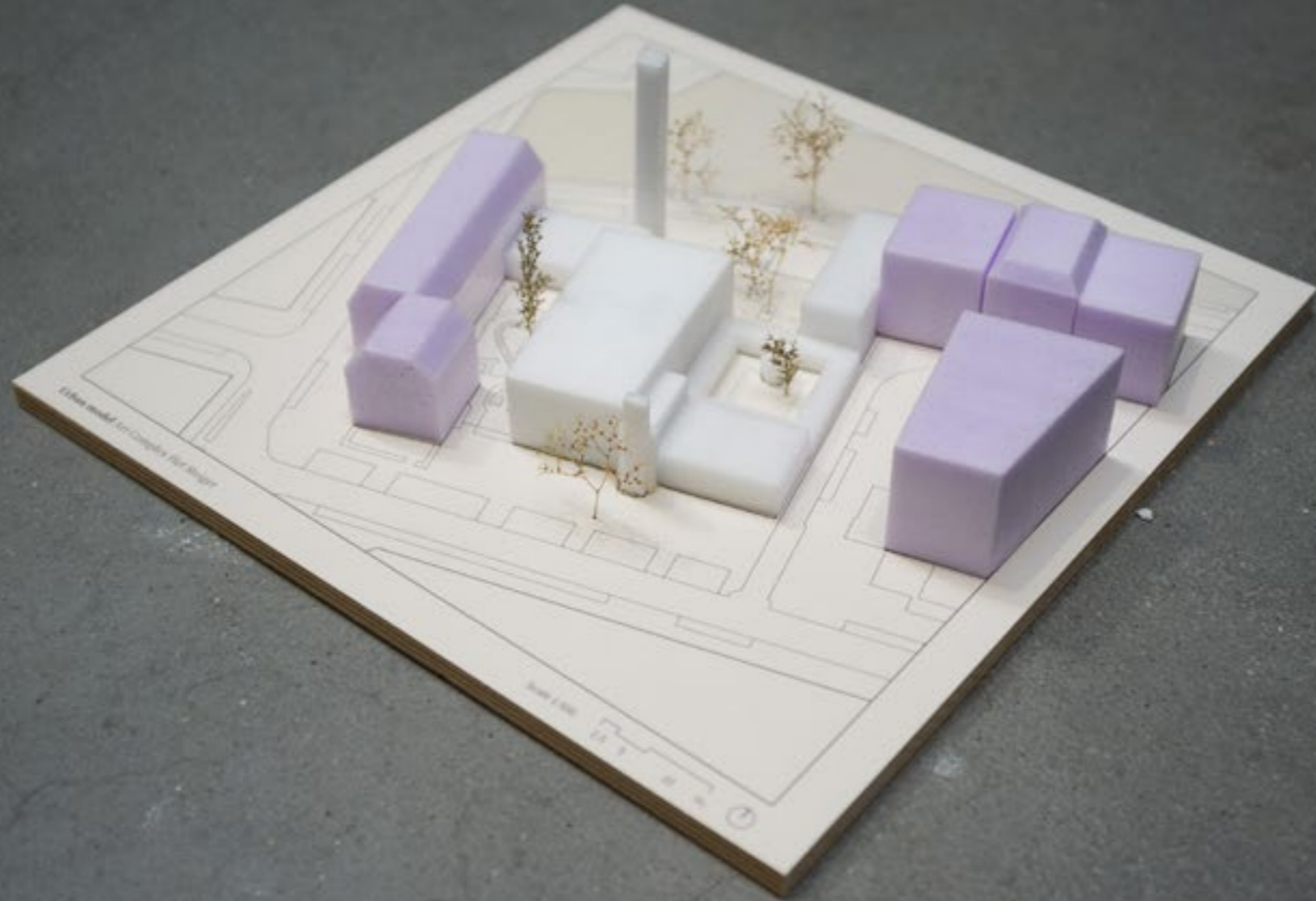
main church hall

inner courtyard

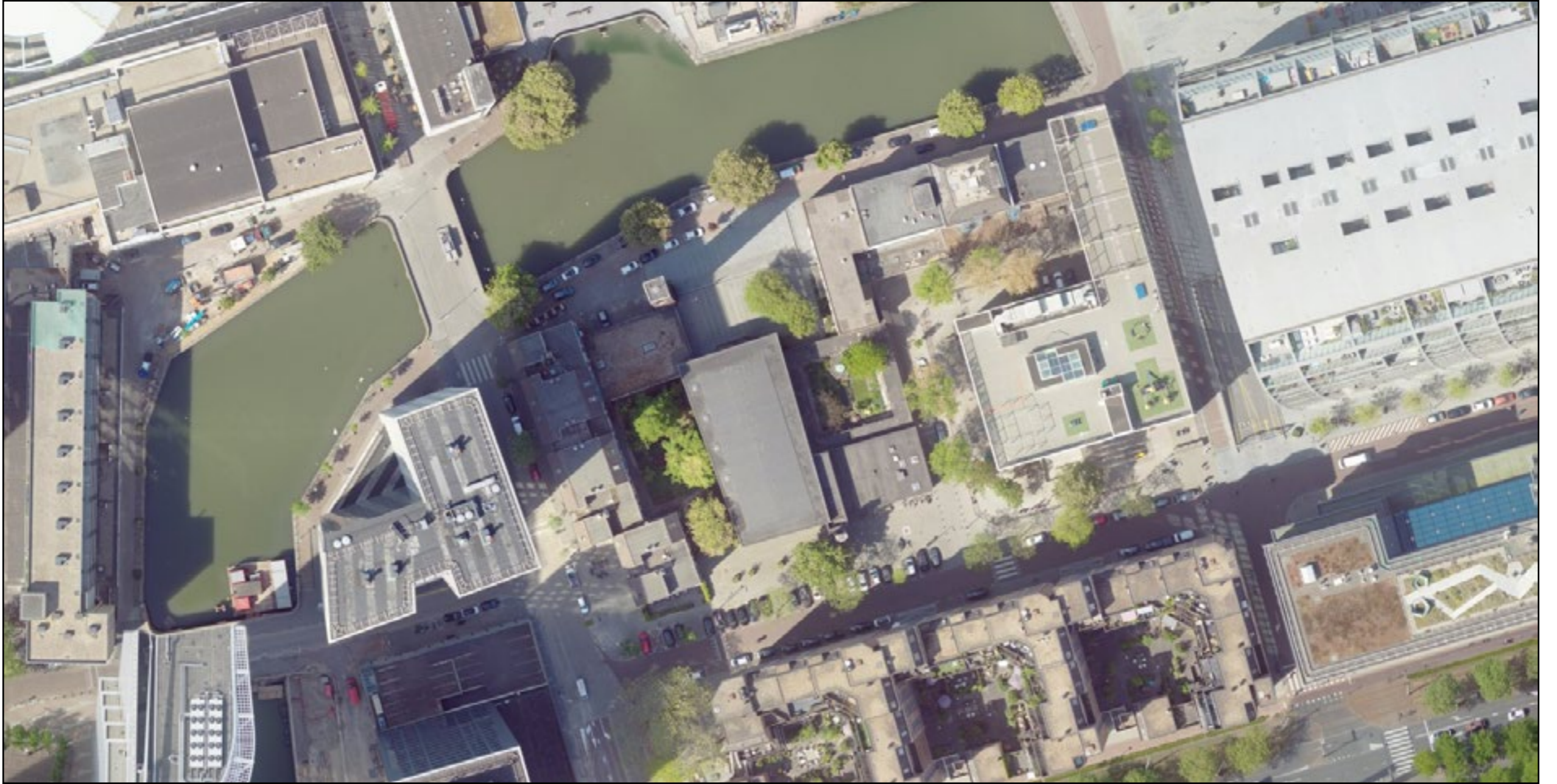
parish house

*housing for
Dominicans*

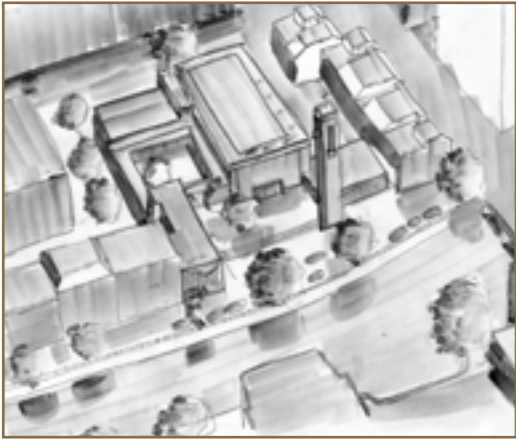
cloister



Urban model 1:500



Value assessment

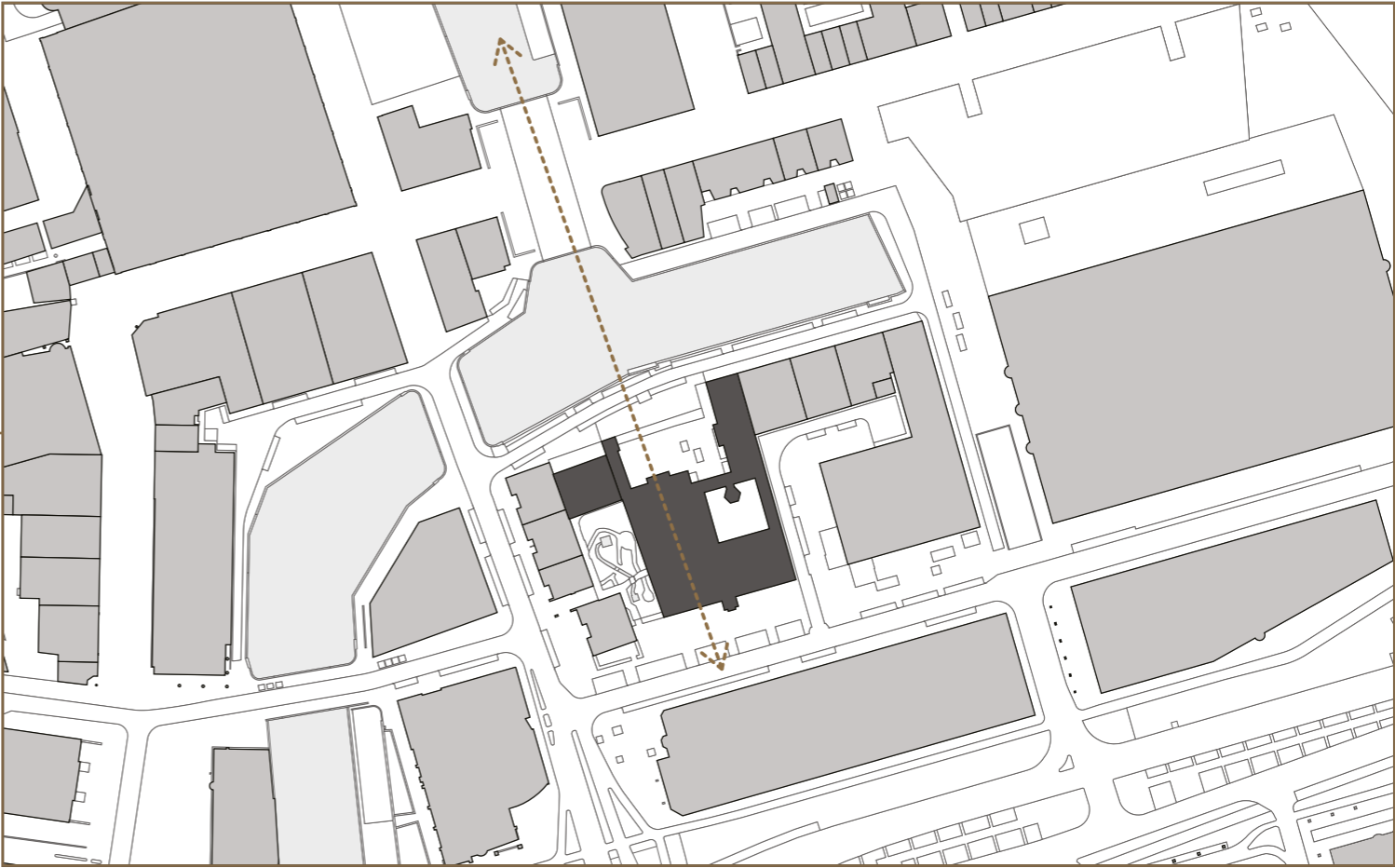


1. seclusion and openness

Value assessment



1. seclusion and openness



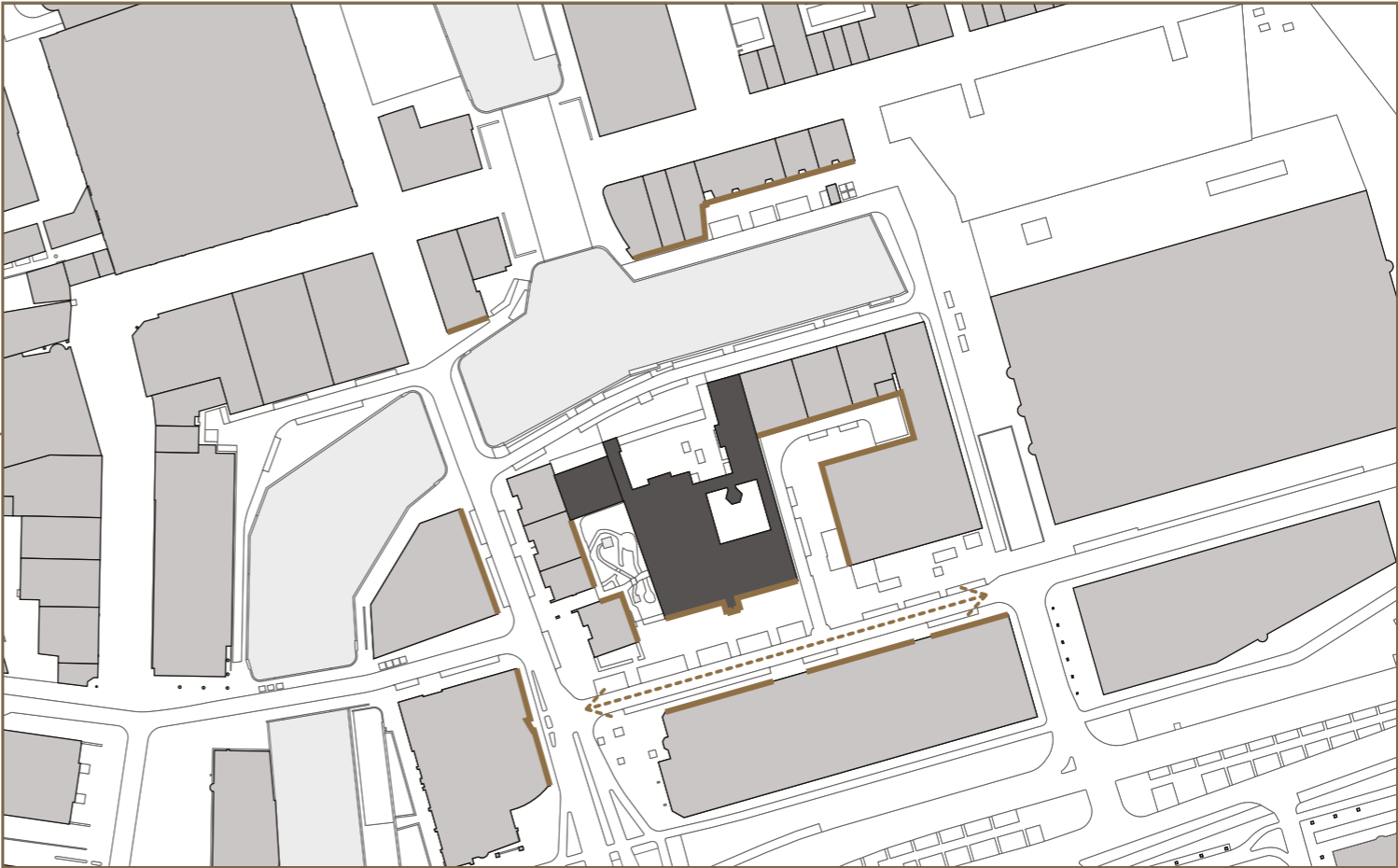
Central axe towards Vlasmarkt & Delftsevaart



Value assessment



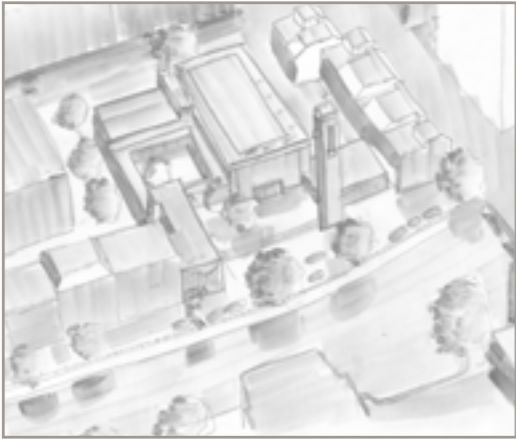
1. seclusion and openness



The backside of Het Steiger is surrounded by backsides of other buildings



Value assessment

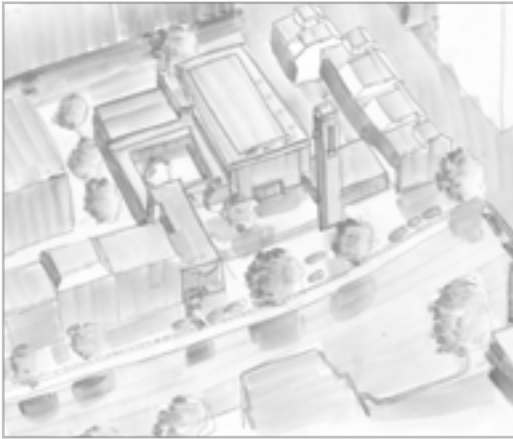


1. seclusion and openness



2. art value of the building

Value assessment



1. seclusion and openness

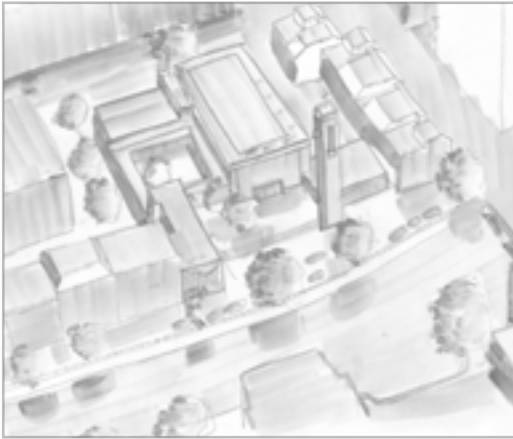


2. art value of the building



3. open space plan
and spatial transitions

Value assessment



1. seclusion and openness



2. art value of the building

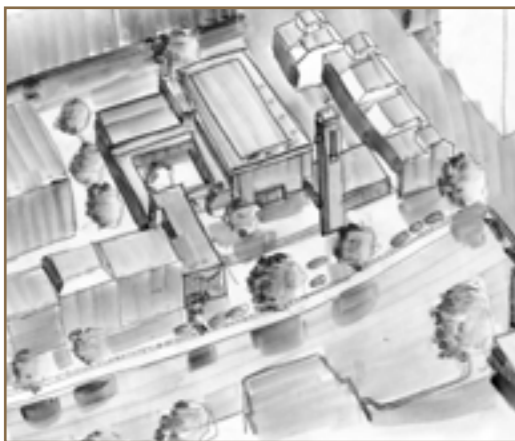


3. open space plan
and spatial transitions



4. the integration of artworks

Value assessment



1. seclusion and openness



2. art value of the building



3. open space plan
and spatial transitions



4. the integration of artworks

Societal challenges



The screenshot shows a news article from Rijnmond. The main headline is "Zorgen in Rotterdam over tekort aan ateliers, 'kunstenaars in de verdrukking'". The article includes a photo of a glass filled with paintbrushes and a text block discussing the shortage of studios. To the right, there are several smaller news snippets under the heading "Net binnen" and "Uitgelicht".

RIJNMOND

Welkom Nieuws Sport Regio nieuws Lokaal Weer Kijk Luister Verkeer Bureau Rijnmond Over ons

NEWS

Zorgen in Rotterdam over tekort aan ateliers, 'kunstenaars in de verdrukking'

29 december 2020, 21:26 • 4 minuten leestijd



© Pixabay

Maakt niet meer kunnen zitten in je woonkamer omdat die vol staat met schilderijen, stellingen en verfspullen. Het is hoe de Rotterdamse kunstenaar Dineke van Hulzen er nu bij zit, meldt de NOS. Ze moest noodgedwongen haar atelier uit en kan geen andere geschikte werkplek vinden, waardoor alles nu in haar woning staat.

Ze is niet de enige in zo'n situatie. Volgens de PNV Kunstebond is het tekort aan ateliers een probleem in alle grote steden. "We zien dat overal in het land werkplekken voor kunstenaars onder druk staan", zegt Peter van den Bunder van de bond. Hoewel landelijke cijfers ontbreken, zegt de bond zulke signalen van meerdere plekken te krijgen.

In Rotterdam hebben ze de cijfers wel. Een groep kunstenaars hield daar een enquête om in beeld te brengen hoe groot het probleem is, meldt de NOS. Daaruit blijkt dat ongeveer eendertig van de vierduizend kunstenaars in de stad nu geen werkruimte heeft.

Net binnen

FC Rijnmond liveblog: 'Rotterdam' Kaagverdiel verrast op de Afrika Cup tegen Ghana

William belt 134 keer als zijn vriendin het ineens uitmaakt, omdat hij de 'verkeerde' huids...

Amsterdamse taxichauffeur frisbelt al rijdend met mobiel en eindigt in het Spui bij Nieuw...

Uitgelicht

Miljoenenprijs valt op lot gekocht bij Rotterdamse supermarkt

The current shortage of art studios in Rotterdam

Research



Dominican involvement with Het Steiger

Research

Research question

What architectural considerations, part of three distinct priorities - St. Dominicus Church, Sainte-Marie de la Tourette, and the Dominican Motherhouse - can be integrated into the redesign of the St. Dominicus Church in Rotterdam, transforming it into a multifunctional art complex?

Research

1. St. Dominic Church (Het Steiger)



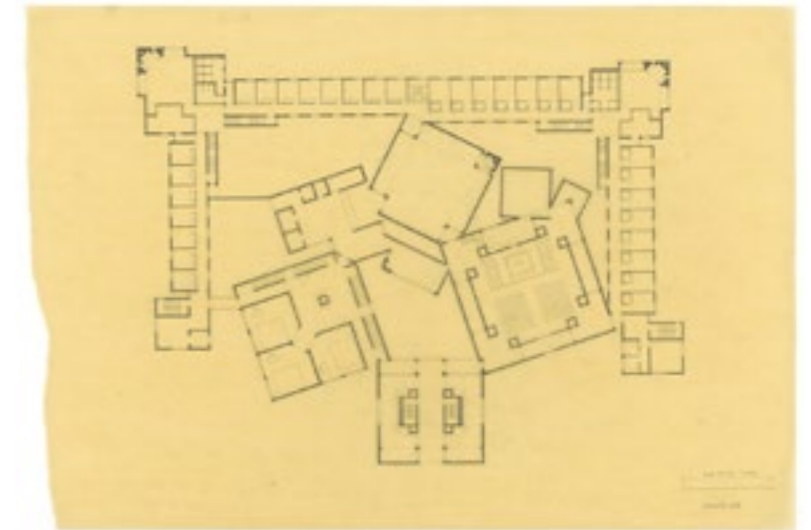
1. introverted environment
2. building as architectural canvas
3. hierarchy of importance
4. expressive space with artworks

2. Sainte-Marie de La Tourette



1. monastic and mystic tone through architectural style
2. theme of lighting
3. modular and dimensions

3. the Dominican Motherhouse

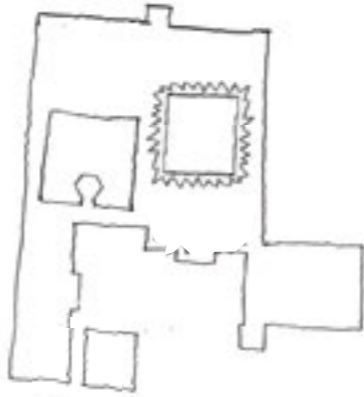


1. interweaving user groups
2. equally significant spaces
3. architecture of connection

Recap of different layers

1. Historical layer: Het Steiger as post-war city icon
2. Societal layer: housing and art studio shortage
3. Urban layer: Part of a dense urban fabric
4. Values layer: national monument
5. Research layer: Dominican architectural themes

General design goals



1. introduction of 'a new heart' of the building



2. diversity of 'independent functioning' art studios



3. equal entrances + new corridor

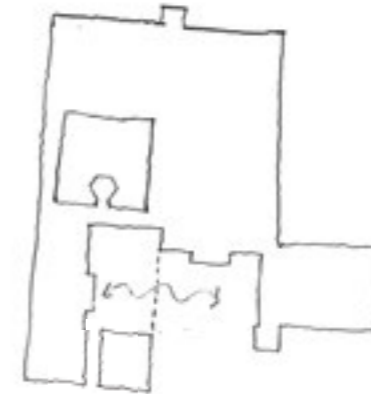
General design goals



4. preserve the inner courtyard



5. make use of the open floor plan for exhibition space



6. clarify the residential and public zone

Design brief

Het Steiger will be transformed into a multifunctional art complex.

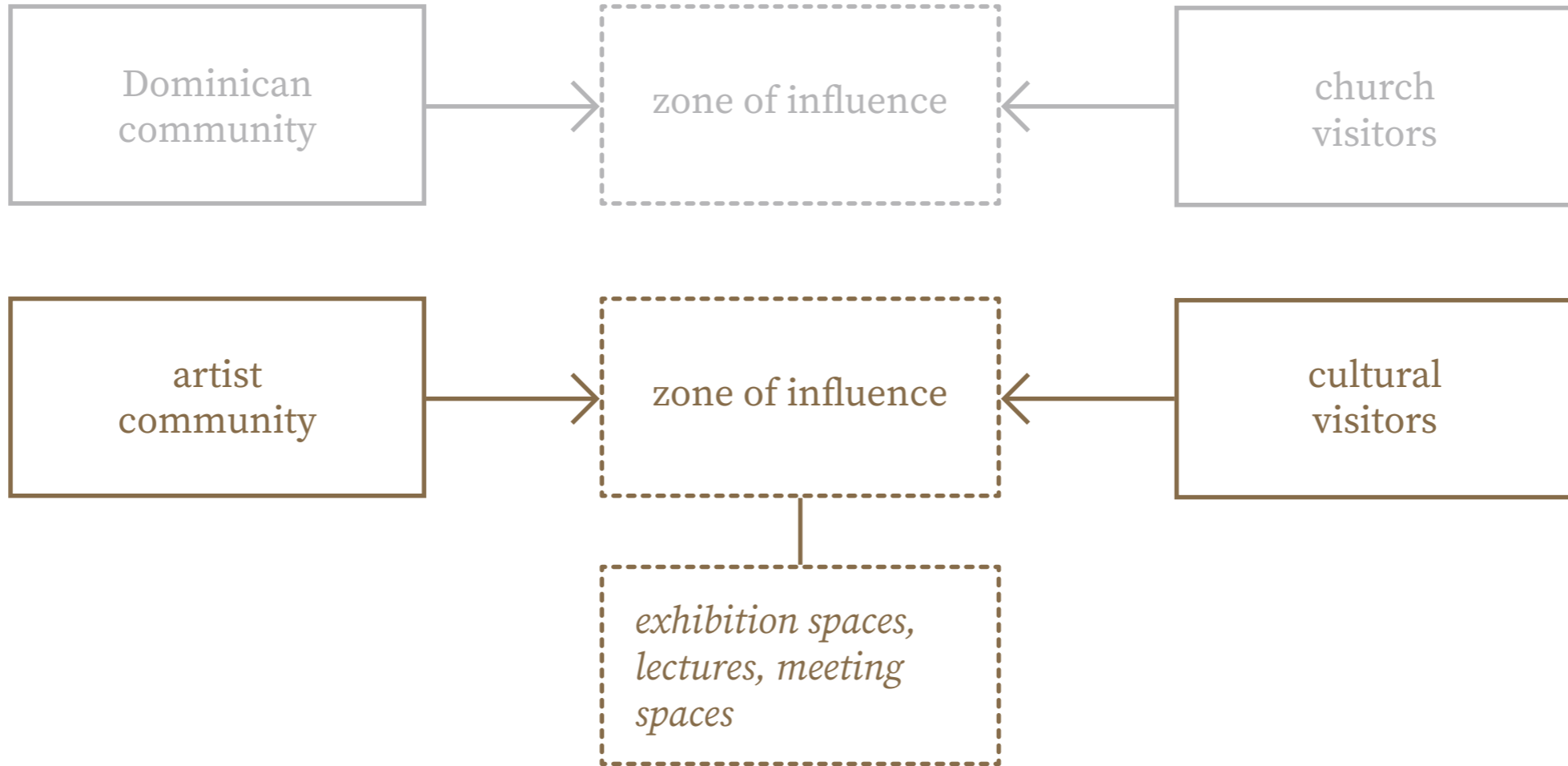
The building houses artists-in-residence and a dynamic public area for visitors.

This public area involves:

- a grand café
- exhibition spaces
- service area

Art Complex Het Steiger aims to offer talented art students from the Willem de Kooning academy the opportunity to participate in an annual artists-and-residents program.

Design brief



Design brief

3 programmatic zones

1. public area for visitors
2. working spaces for artists
3. residential area for artists

Design strategy

Main themes in this design project

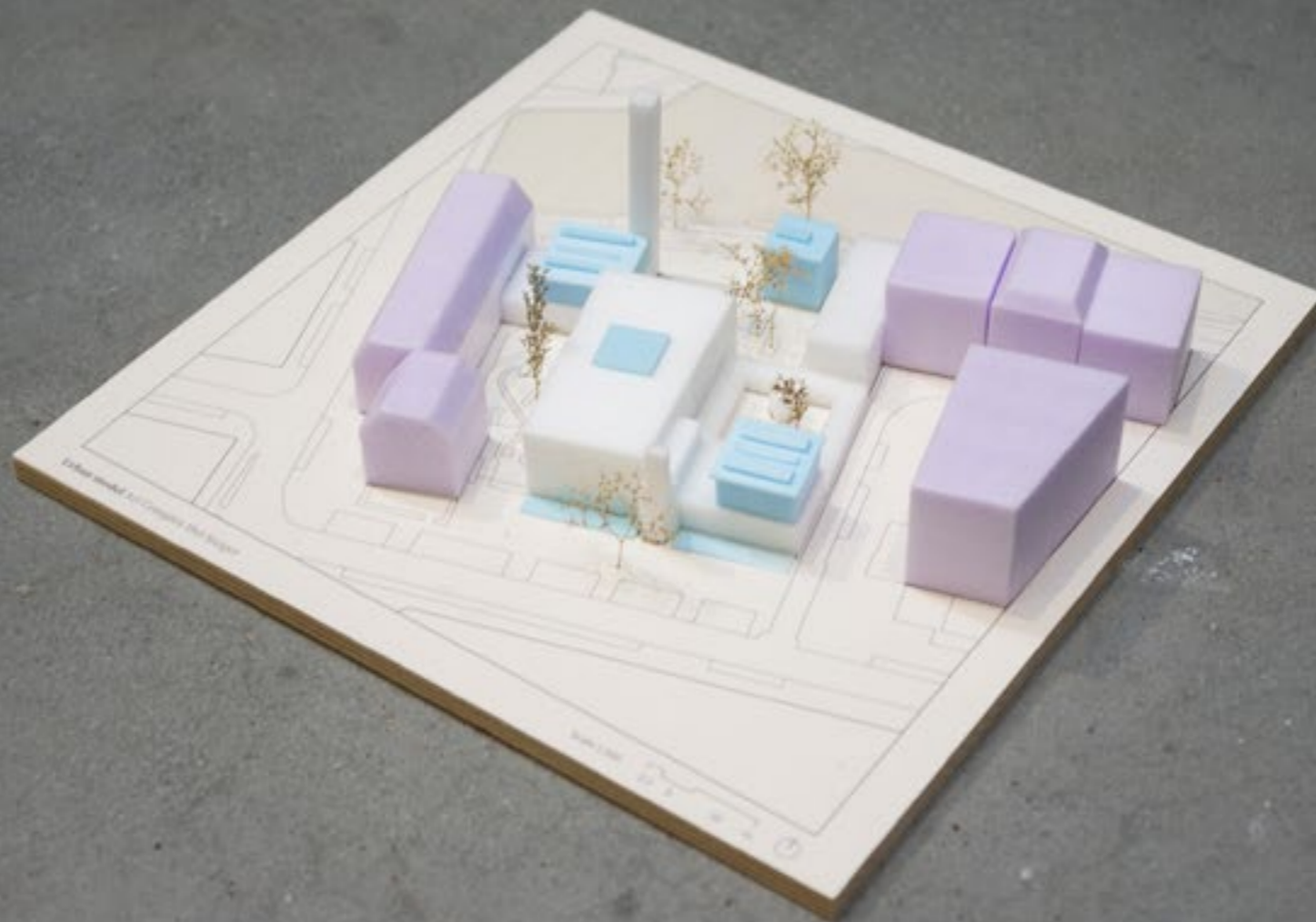
1. collection of interventions
2. recognizable new layer: timber
3. design solutions that complement
4. search for a personal ornamental architectural language

Design interventions



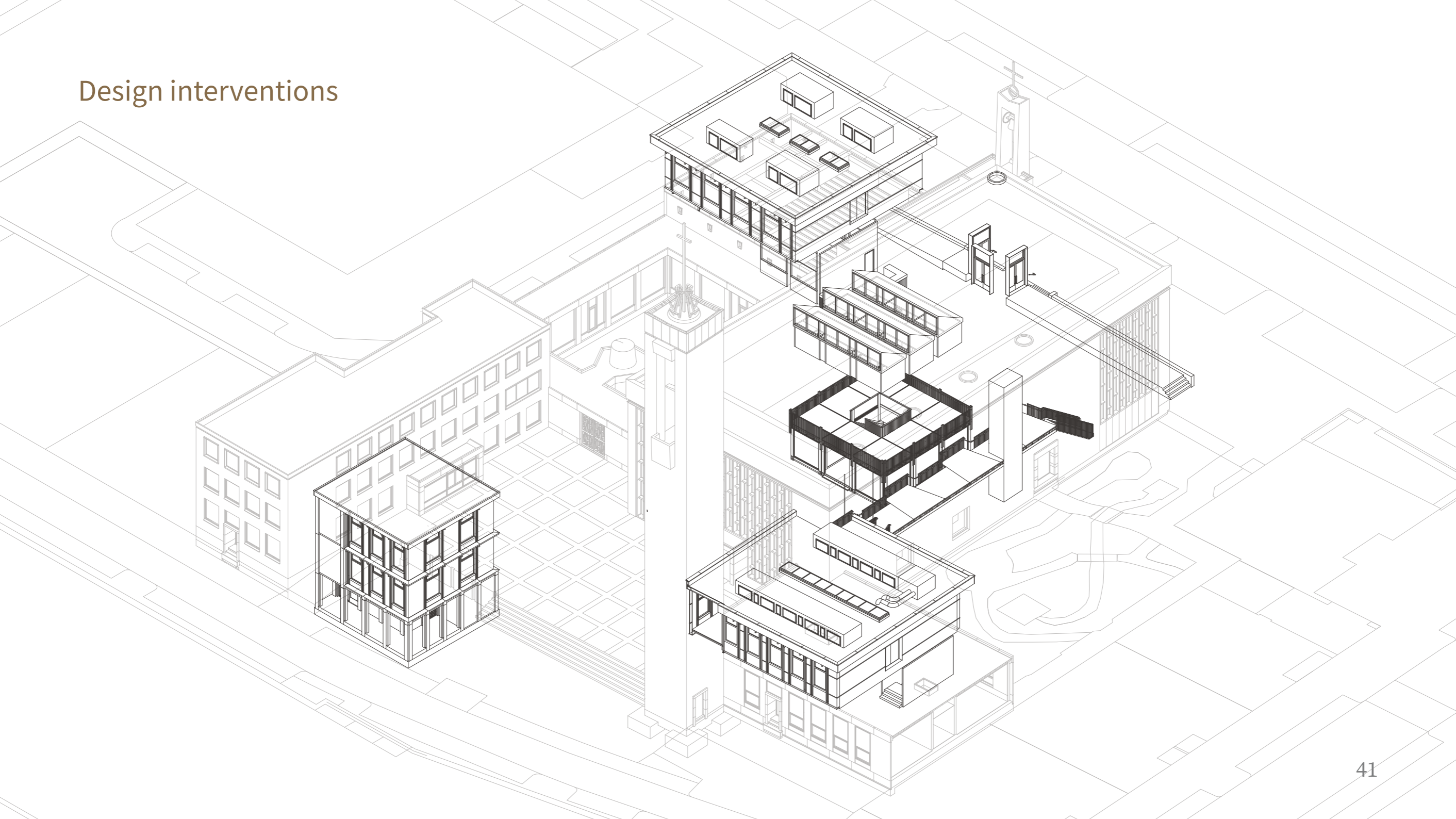
Urban model 1:500

Design interventions

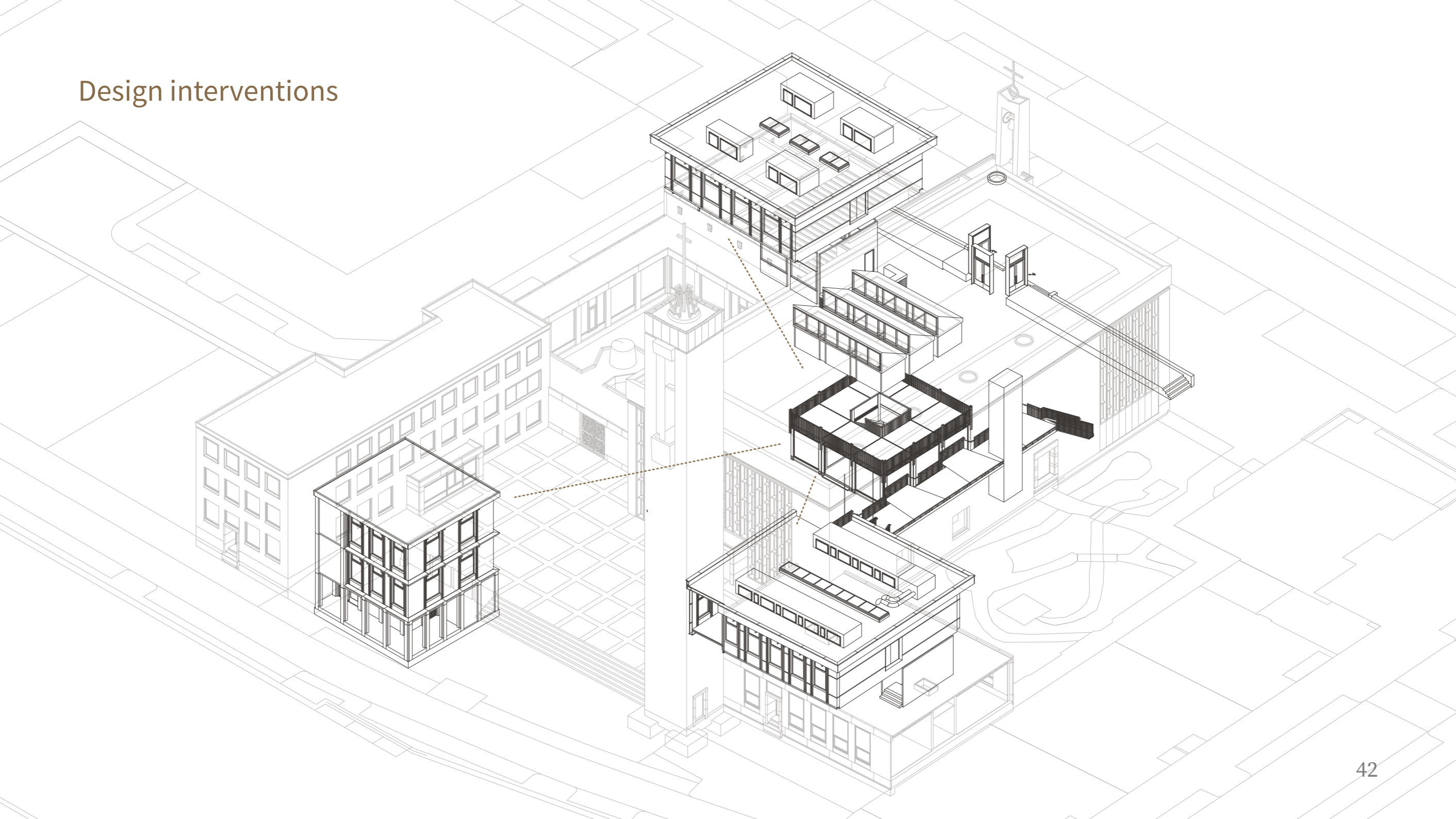


The former back as a new front

Design interventions



Design interventions



Design interventions

new interior space plan

atelier spaces (1)

*roof lights
main hall*

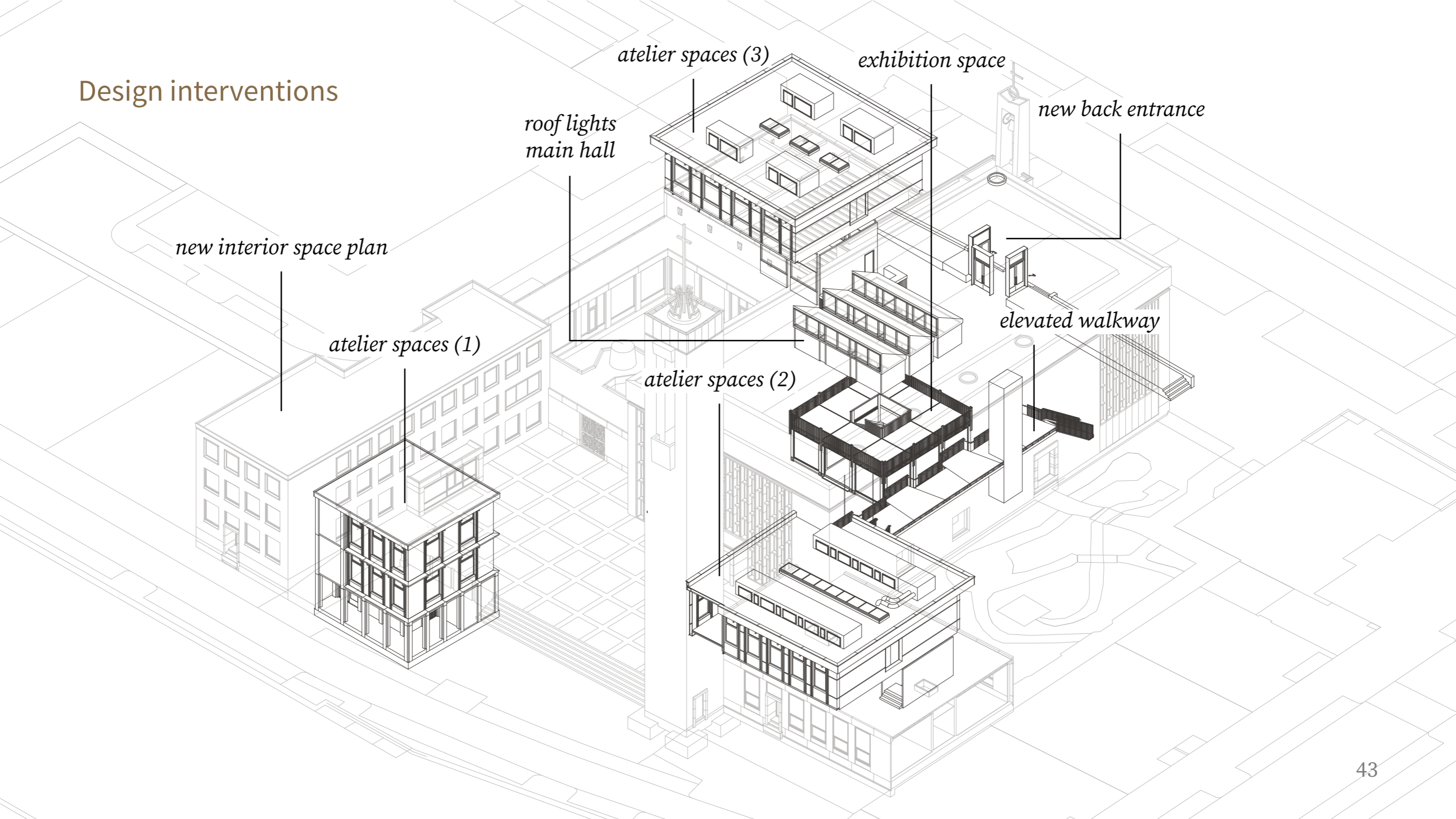
atelier spaces (3)

exhibition space

new back entrance

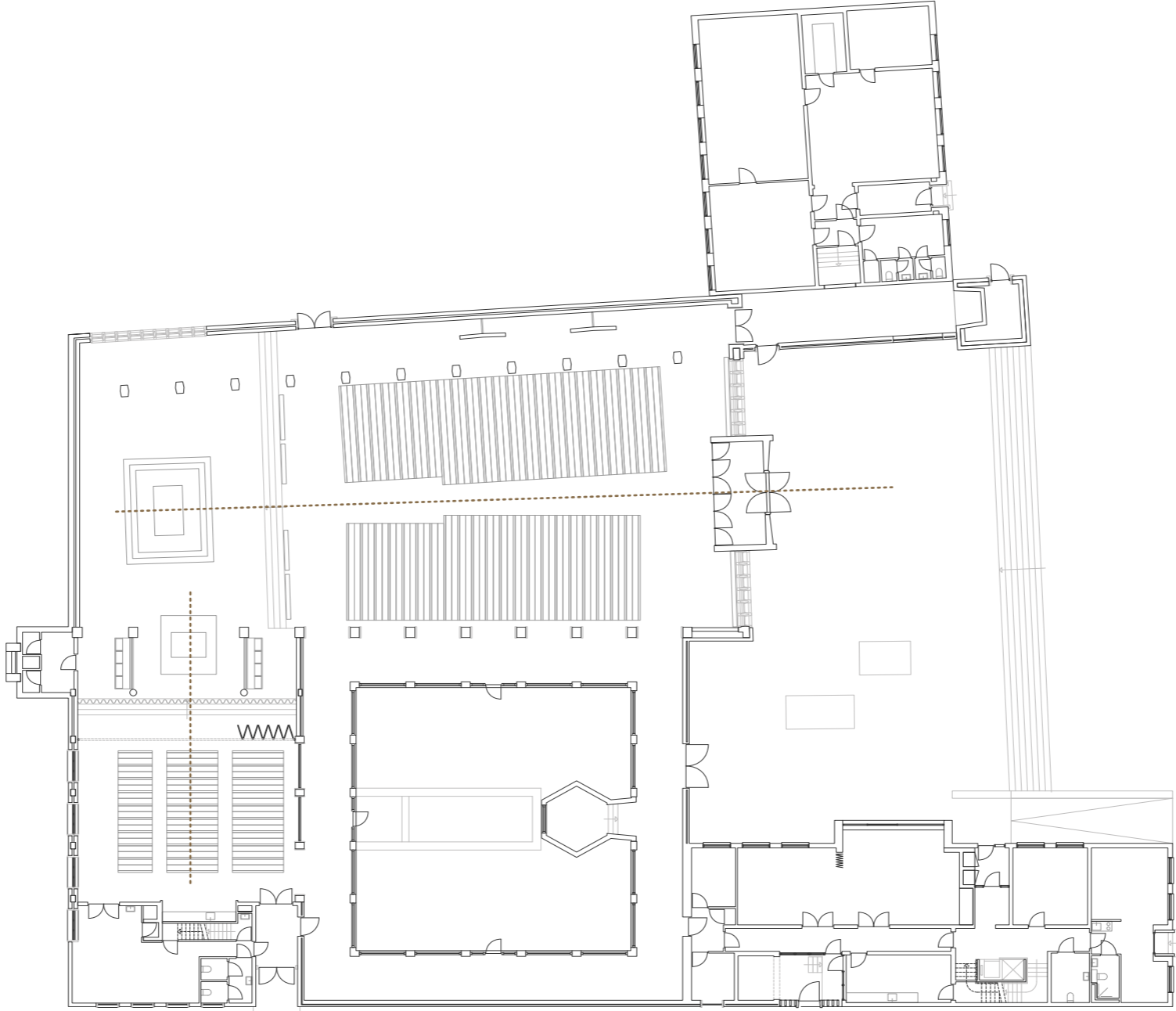
elevated walkway

atelier spaces (2)



Functional overview

ground floor
old situation



12 5 10 m.

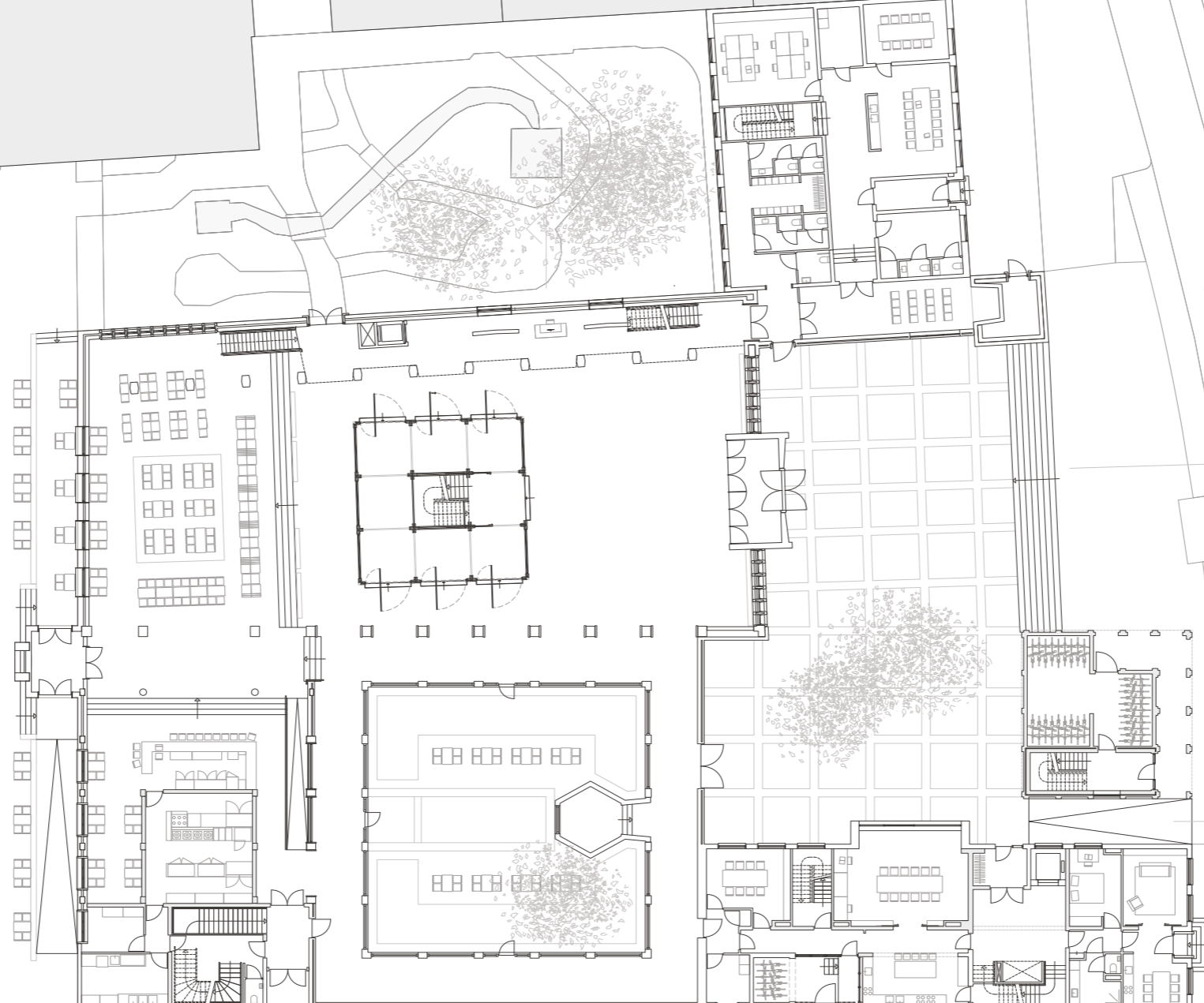
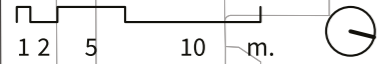




The transition zone between the main church hall and the day church hall, 2023

Design proposal

ground floor
new situation






Ely Cathedral interior choir stalls

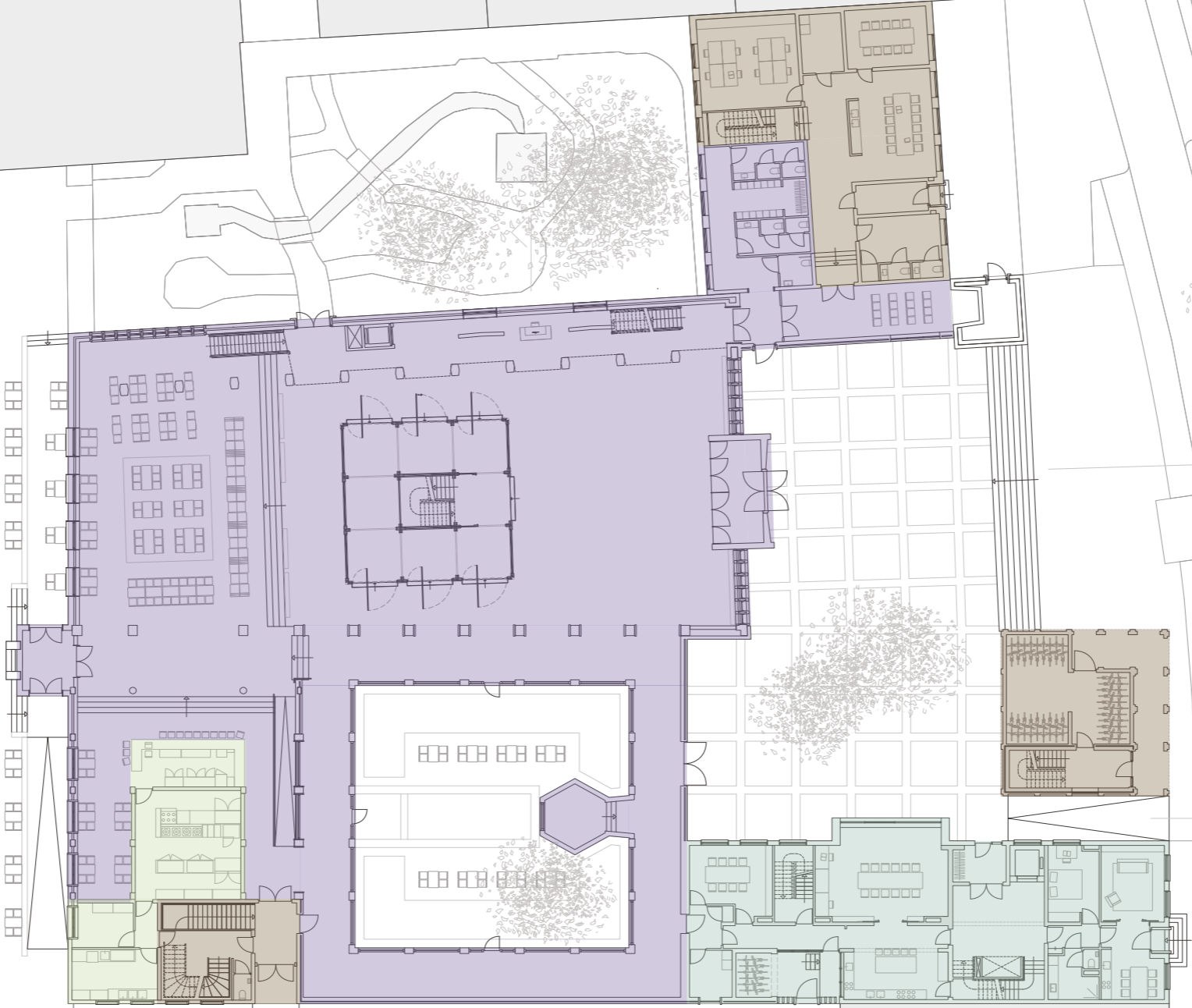


Design proposal

ground floor new situation

- art complex visitors ●
- art studios ●
- residential zone ●
- service area ●

12 5 10 m. 



Design proposal

first floor
new situation

- art complex visitors ●
- art studios ●
- residential zone ●
- service area ●



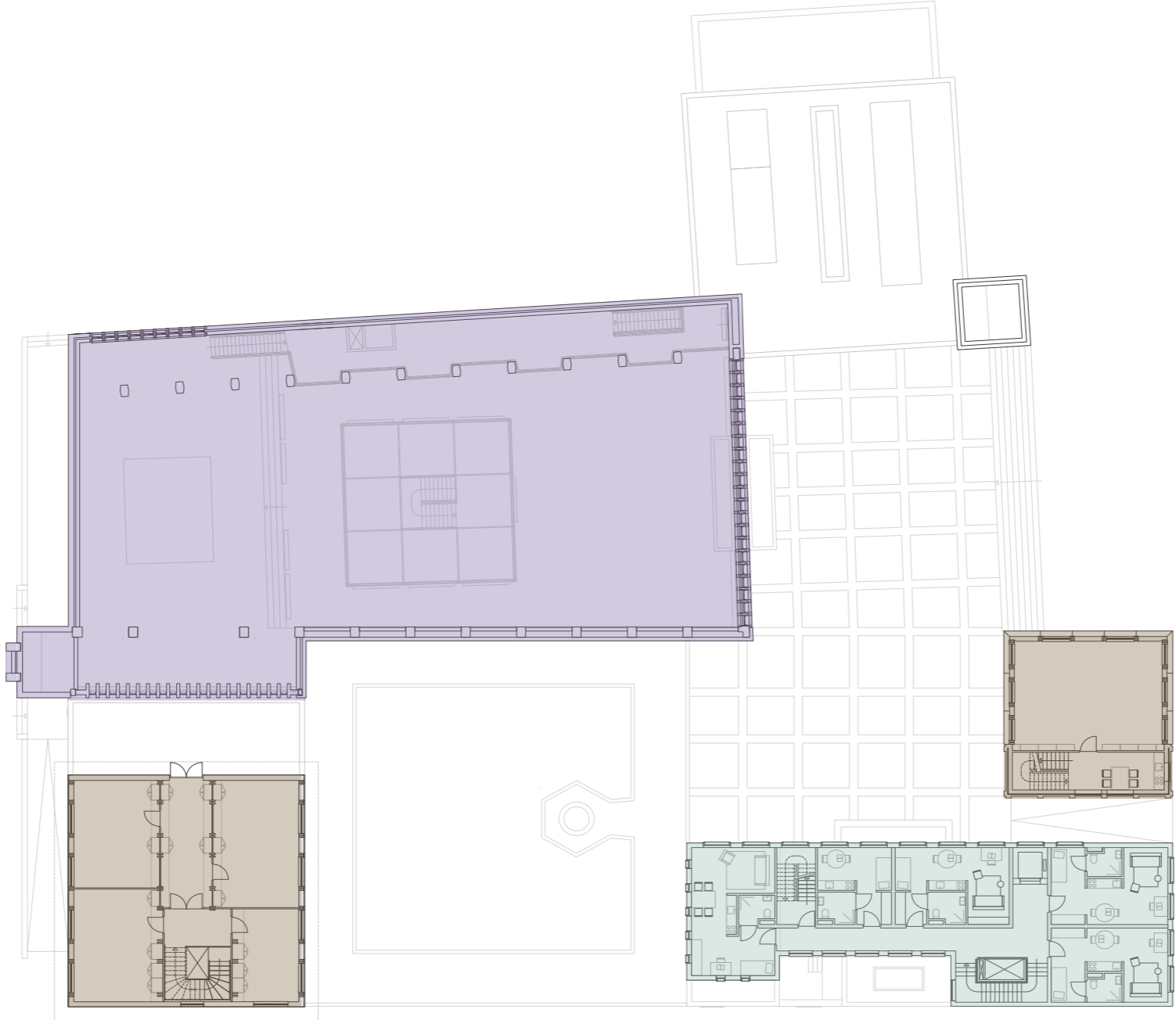
12 5 10 m.



Design proposal

second floor new situation

- art complex visitors ●
- art studios ●
- residential zone ●
- service area ●



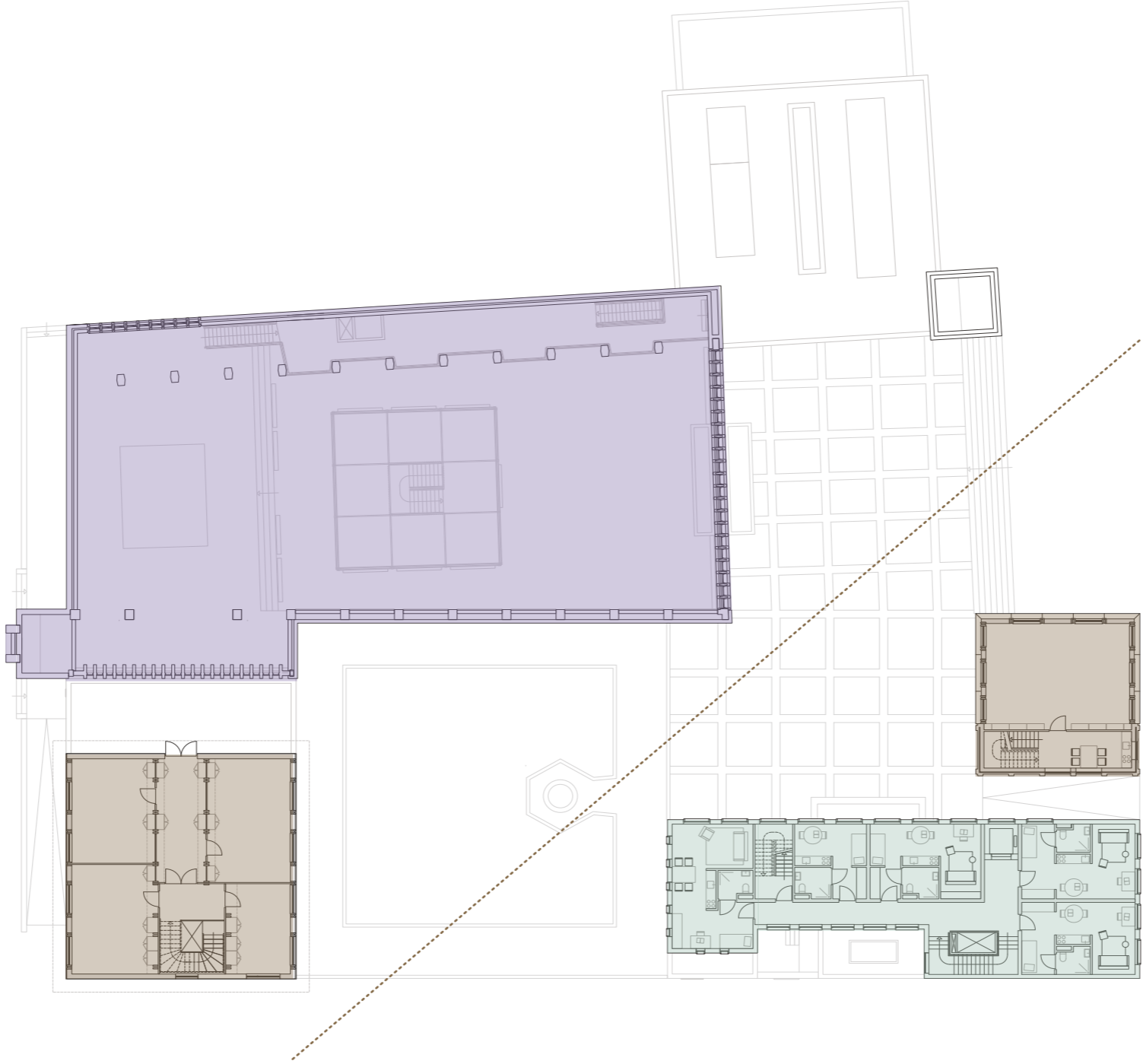
12 5 10 m.



Design proposal

second floor new situation

- art complex visitors ●
- art studios ●
- residential zone ●
- service area ●

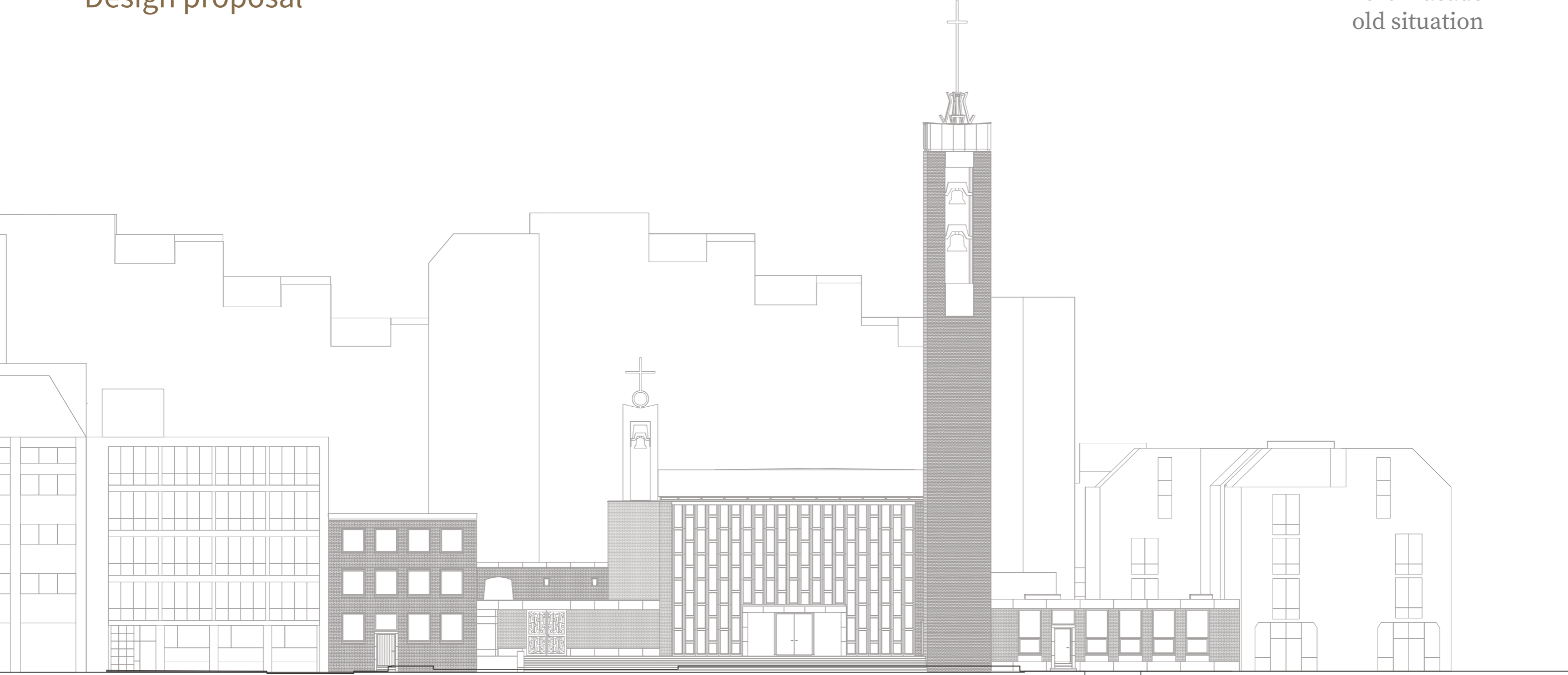


12 5 10 m.



Design proposal

north facade
old situation



Design proposal

north facade
new situation



Design proposal

north facade
new situation





Forecourt with new roof addition

Design proposal

north facade
new situation



The new facade aligns with the existing facade

Design proposal

north facade
new situation



Facade as functional expression

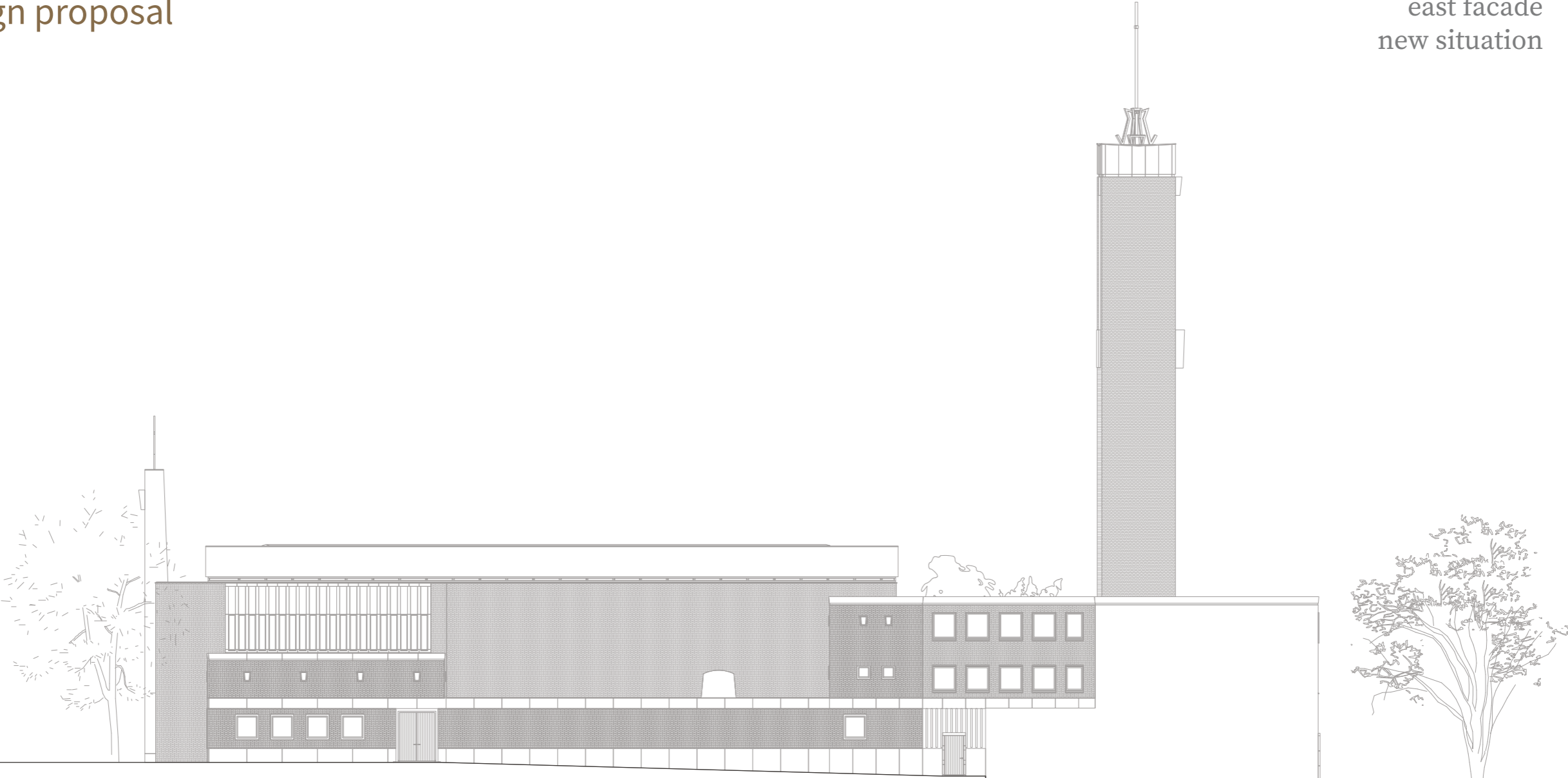
Design proposal

north facade
new situation



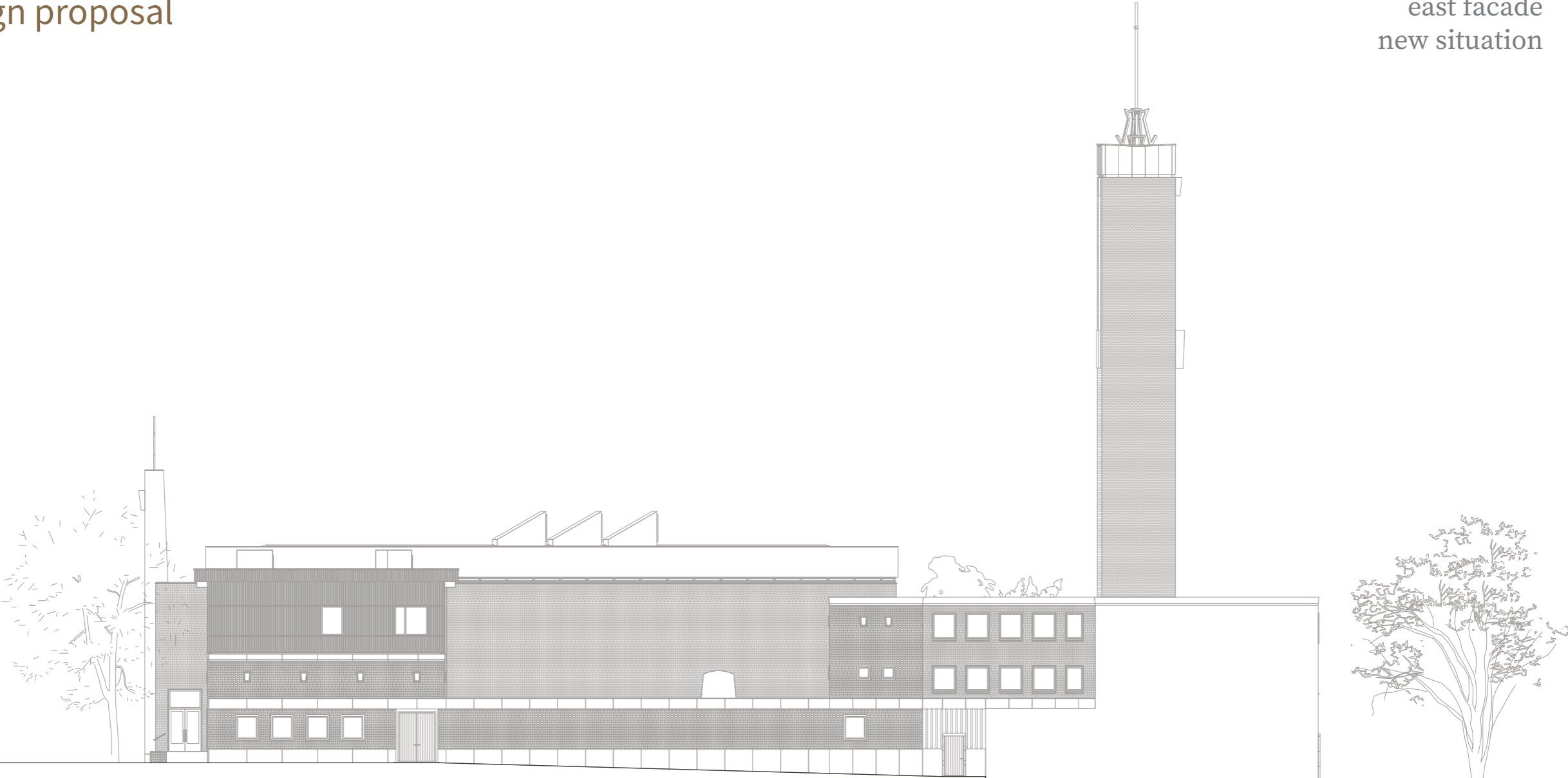
Design proposal

east facade
new situation



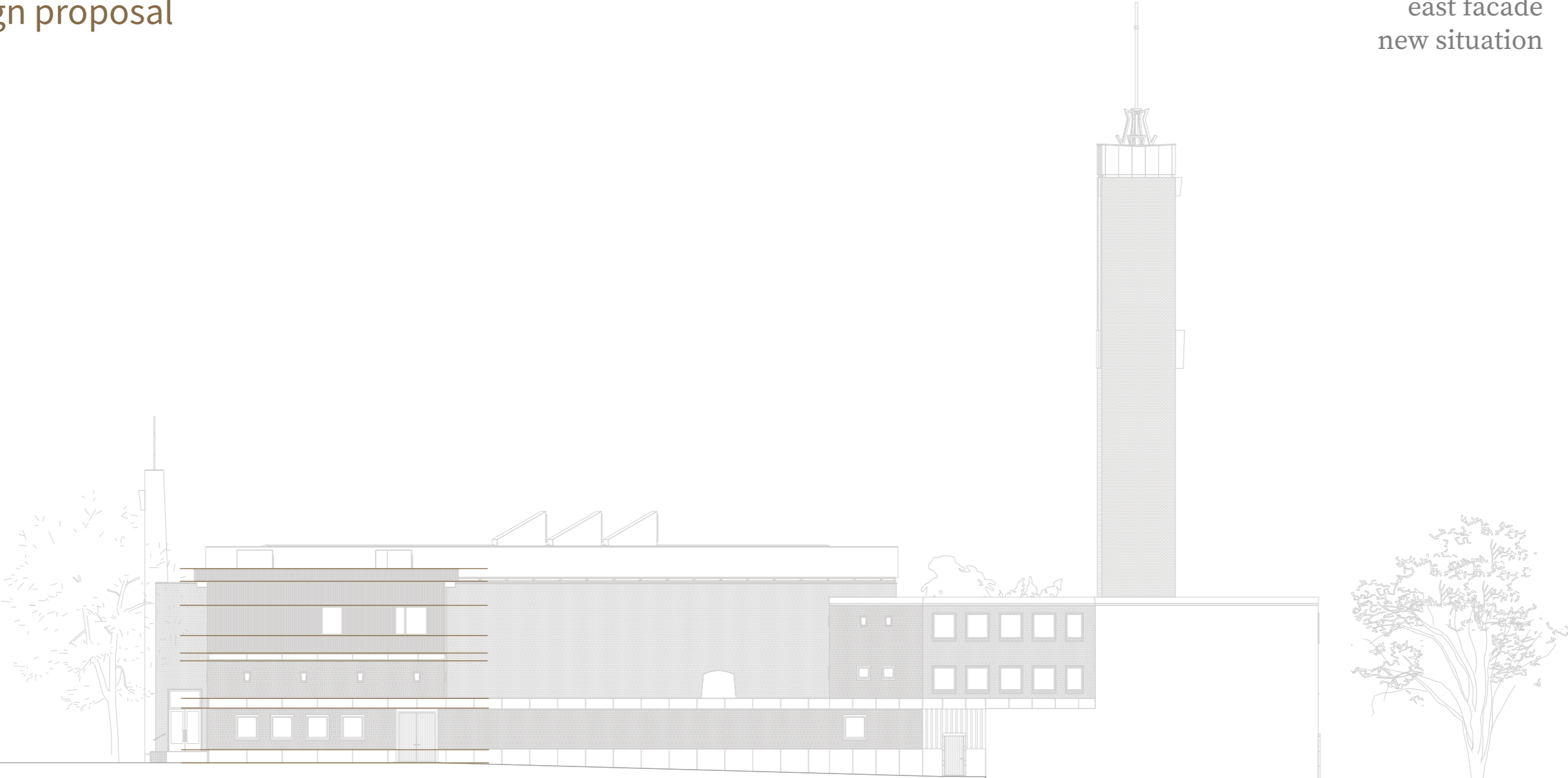
Design proposal

east facade
new situation



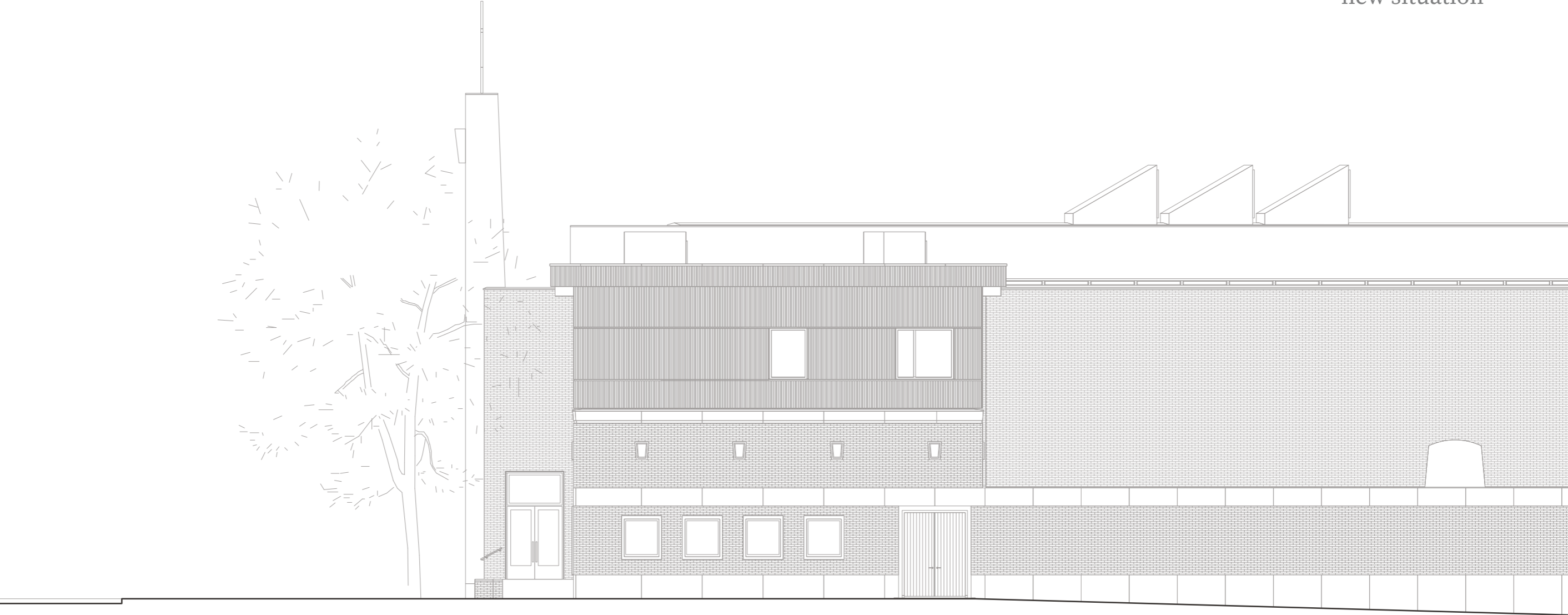
Design proposal

east facade
new situation



Design proposal

east facade
new situation



Design proposal

south facade
old situation



Design proposal

south facade
new situation



Design proposal

south facade
new situation



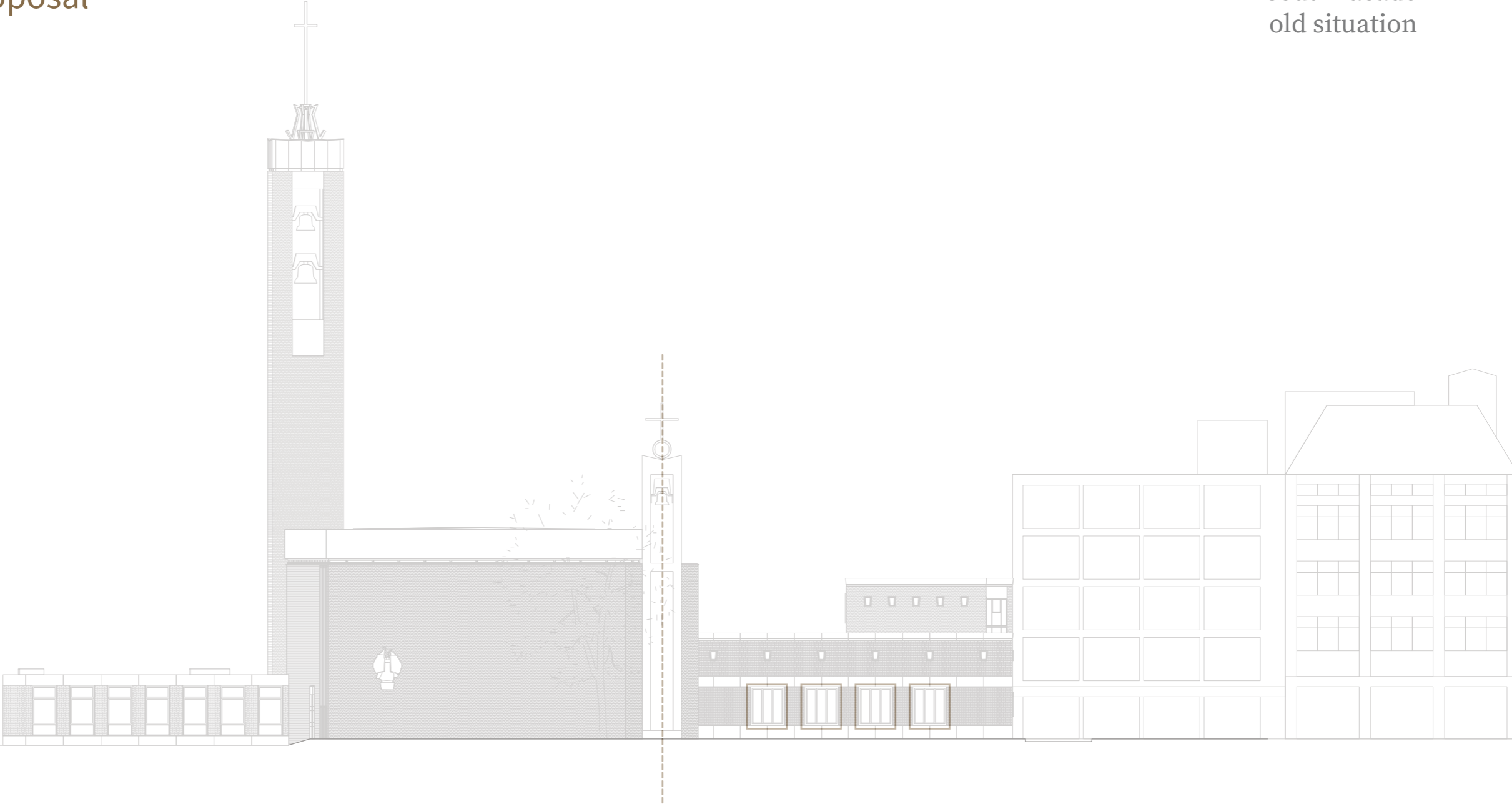
Design proposal

south facade
old situation



Design proposal

south facade
old situation



Design proposal

south facade
new situation



Design proposal

south facade
new situation



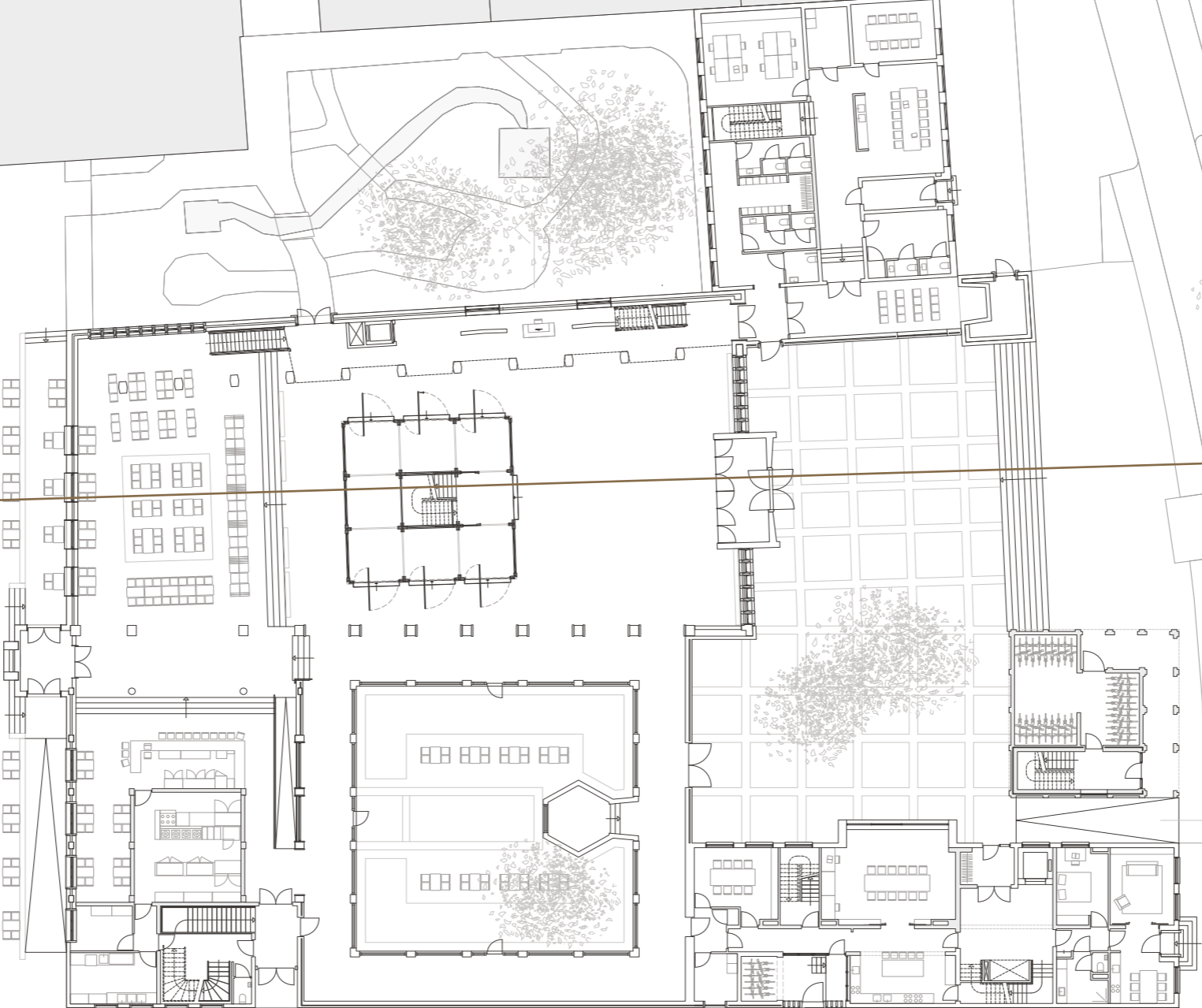




South facade with new terrace

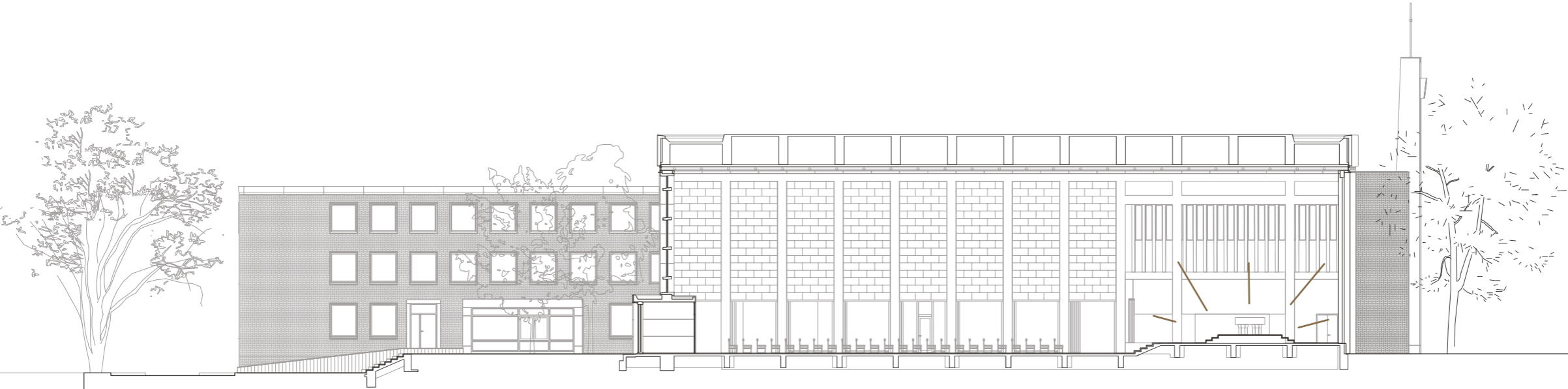
Design proposal

12 5 10 m.



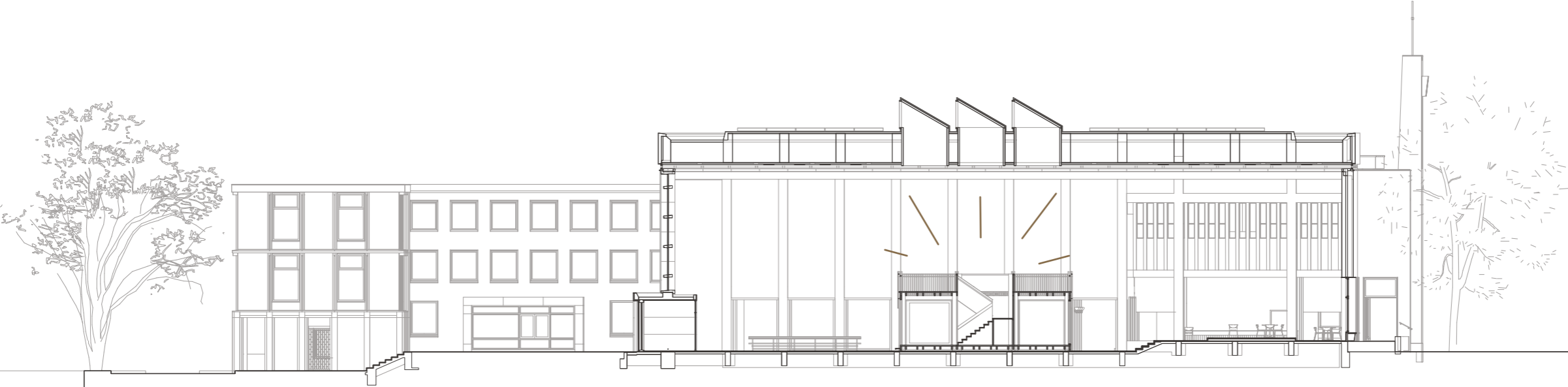
Design proposal

longitudinal section
church hall
old situation



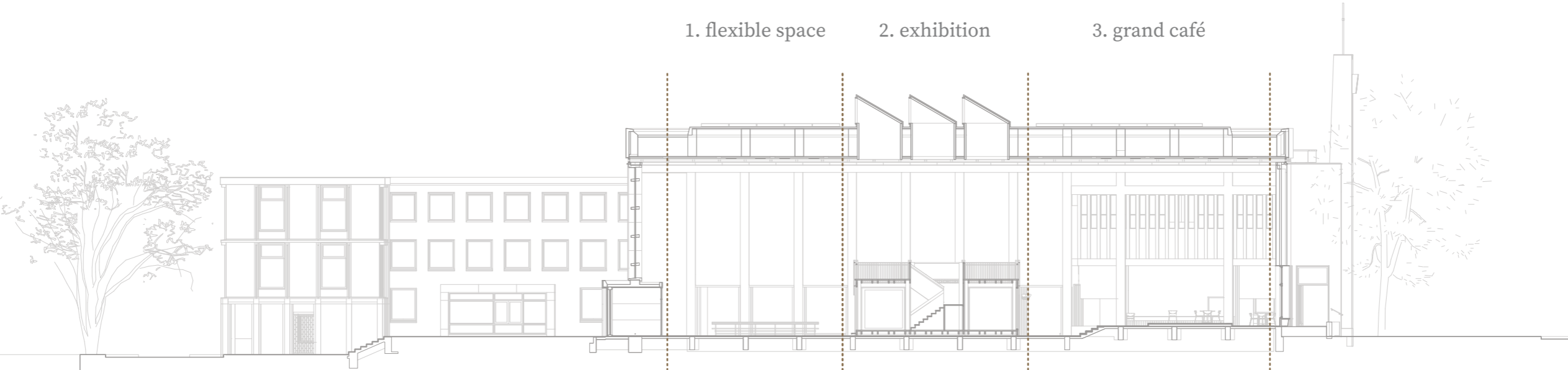
Design proposal

longitudinal section
church hall
new situation



Design proposal

longitudinal section
church hall
new situation



Design proposal



Design proposal

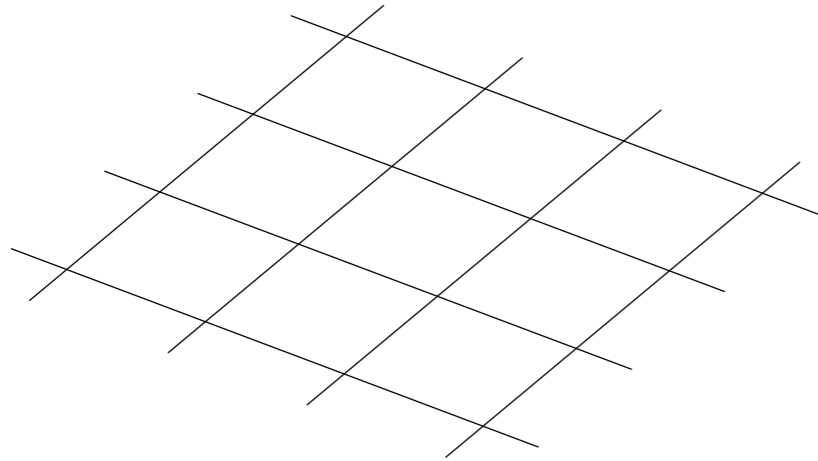
exhibition space



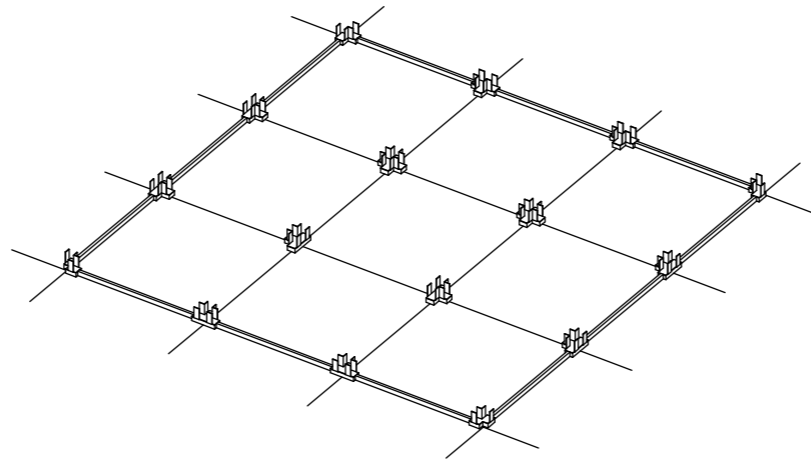
Design proposal

exhibition space

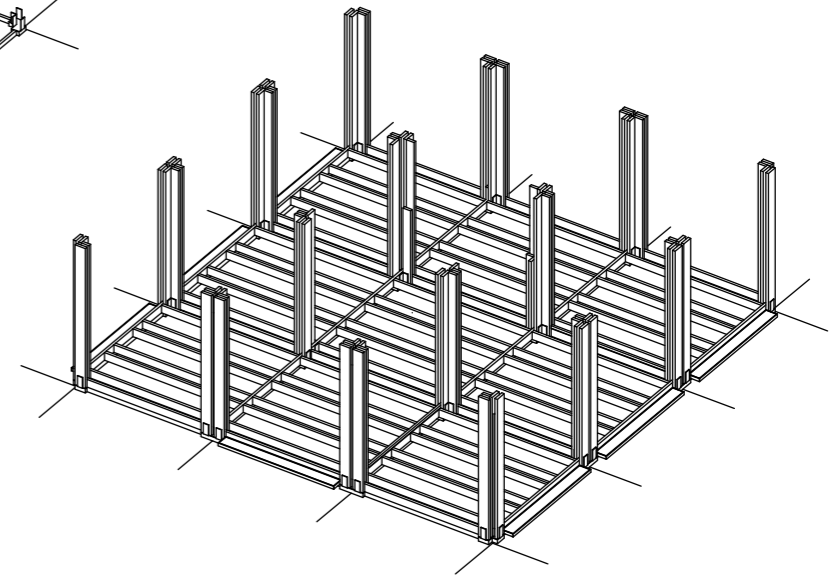




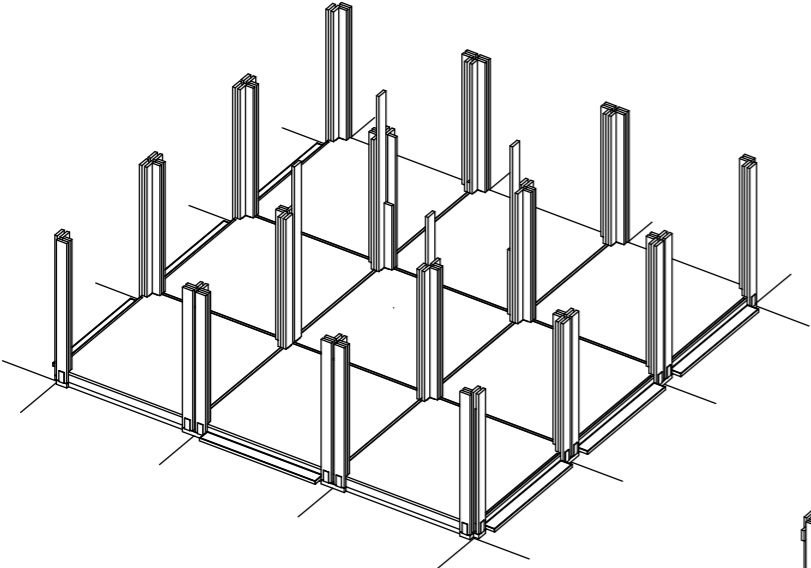
1. orthogonal grid



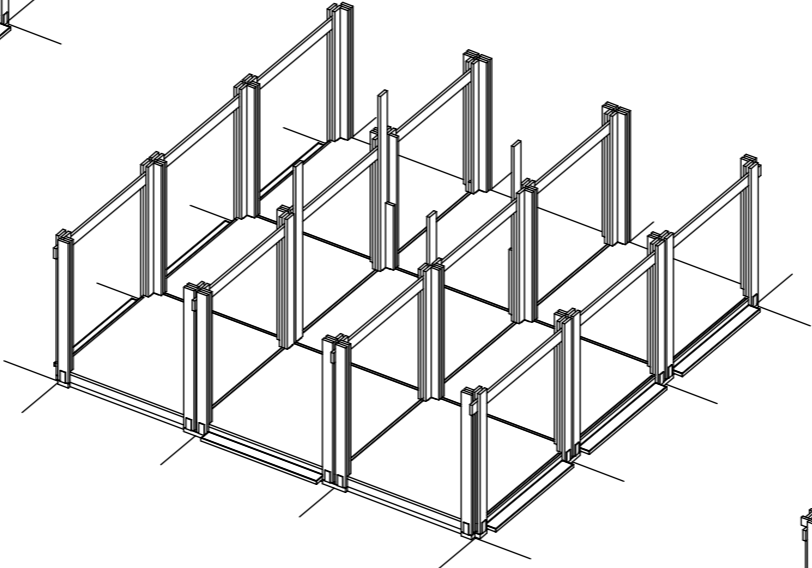
2. steel foundation elements



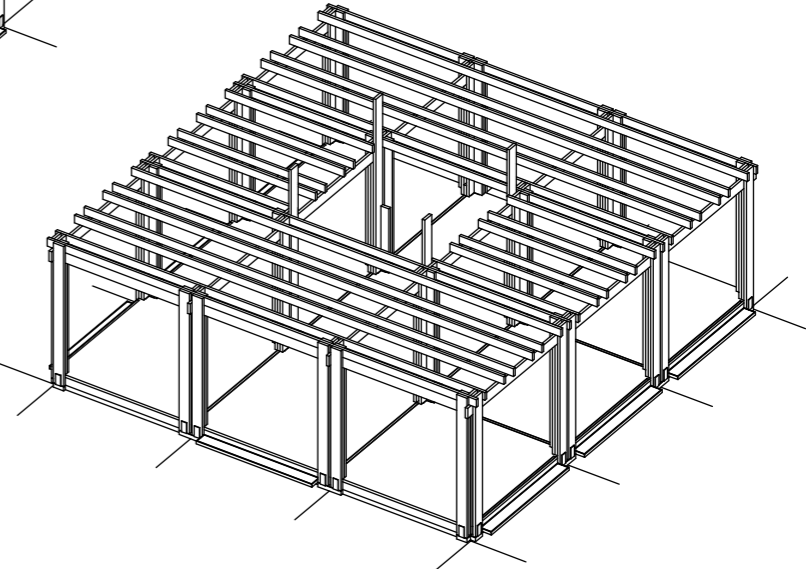
3. double oak beam system
with oak floor beams



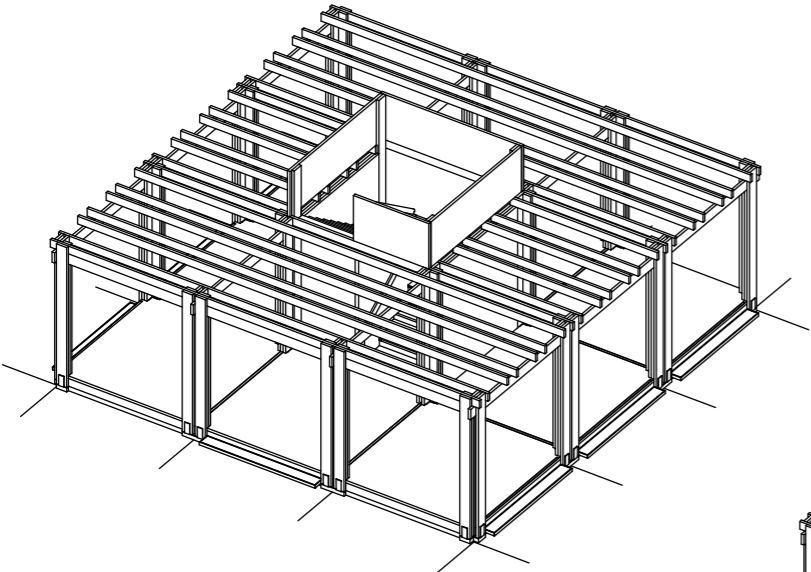
4. clt floor elements



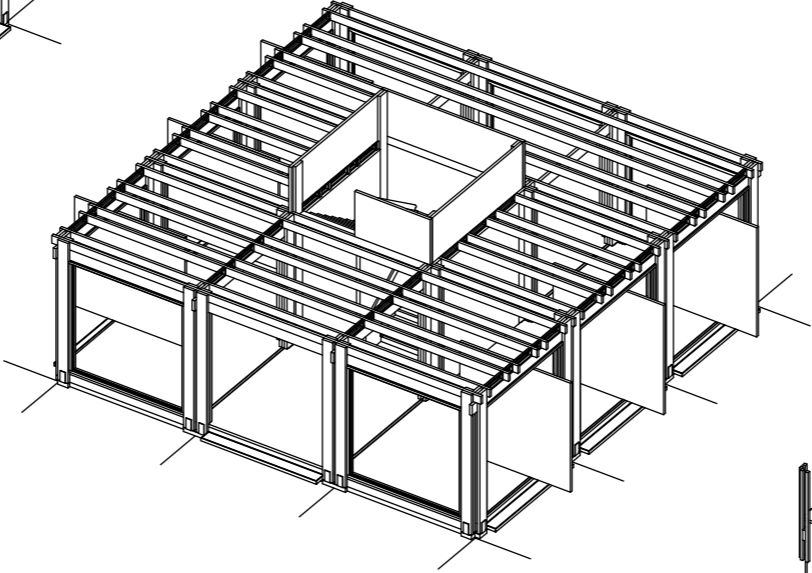
5. main supporting beams
(laminated oak timber)



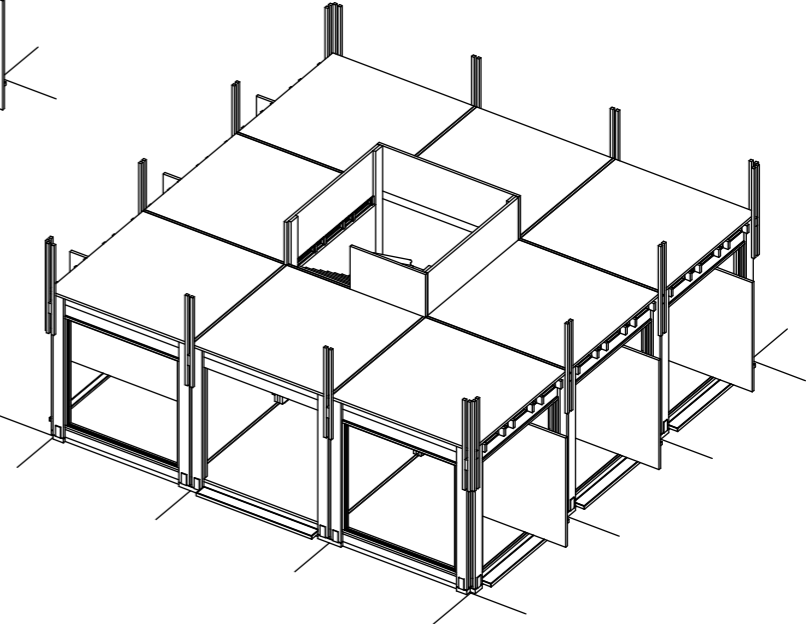
6. 'free' secondary beams
(laminated oak timber)
stacked on top of primary beams



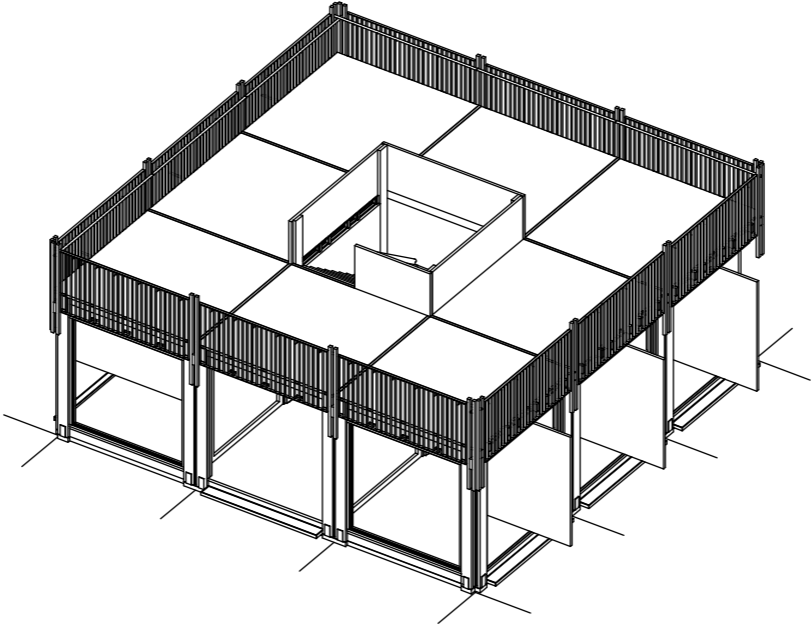
7. clt core that provides for stability



8. massive pivoting doors



9. clt floor elements and secondary columns for balustrade



10. attachment of steel balustrade



exhibition space seen from the main entrance



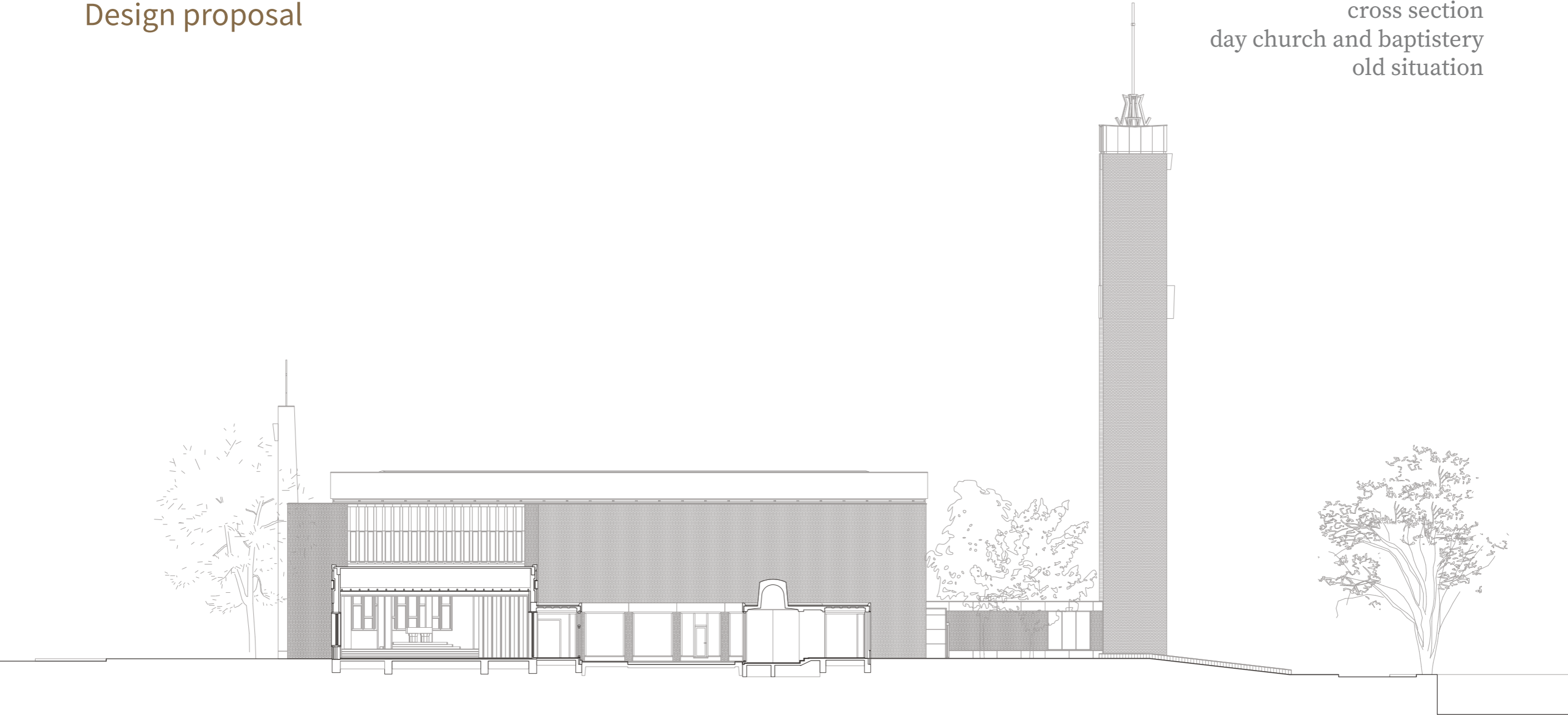
exhibition space seen from the café area



view from the top of the exhibition space

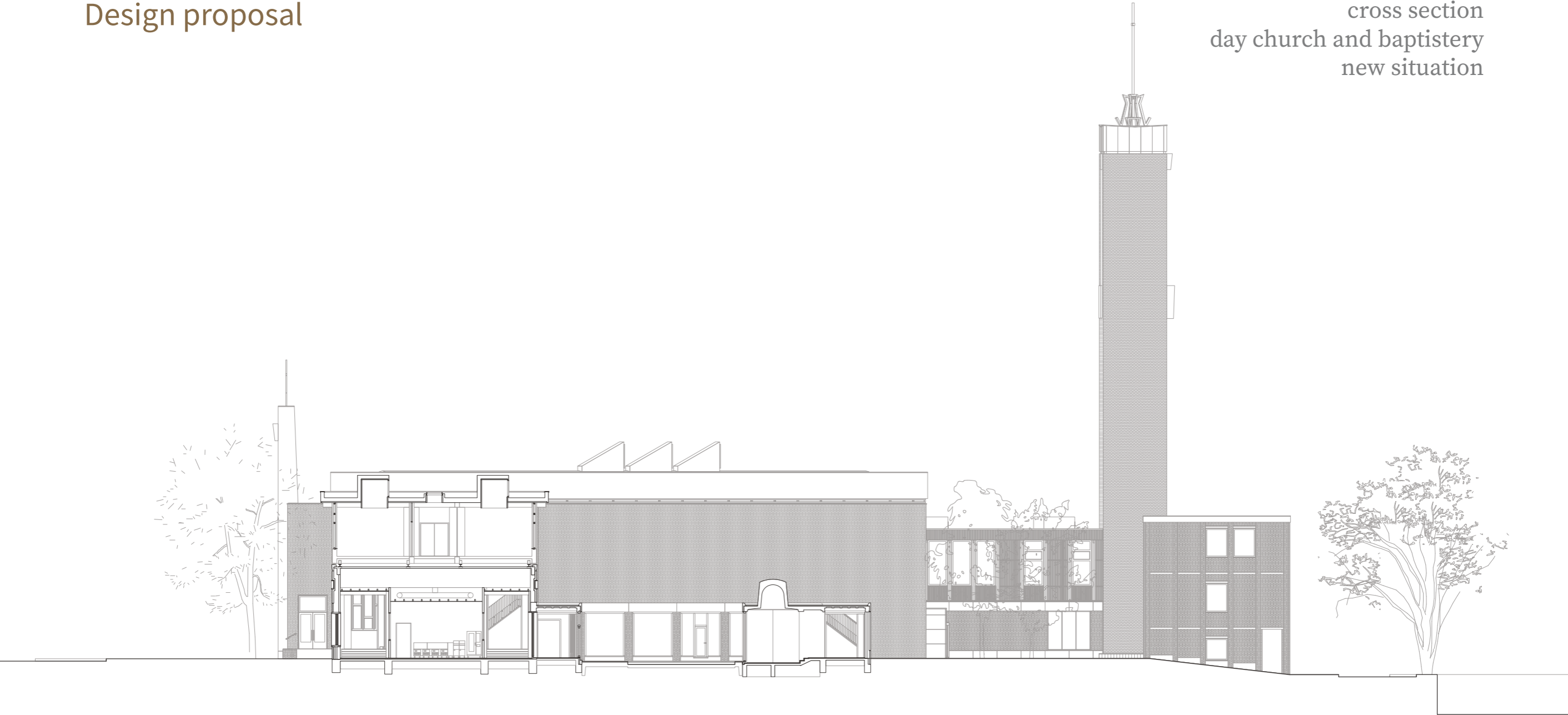
Design proposal

cross section
day church and baptistery
old situation



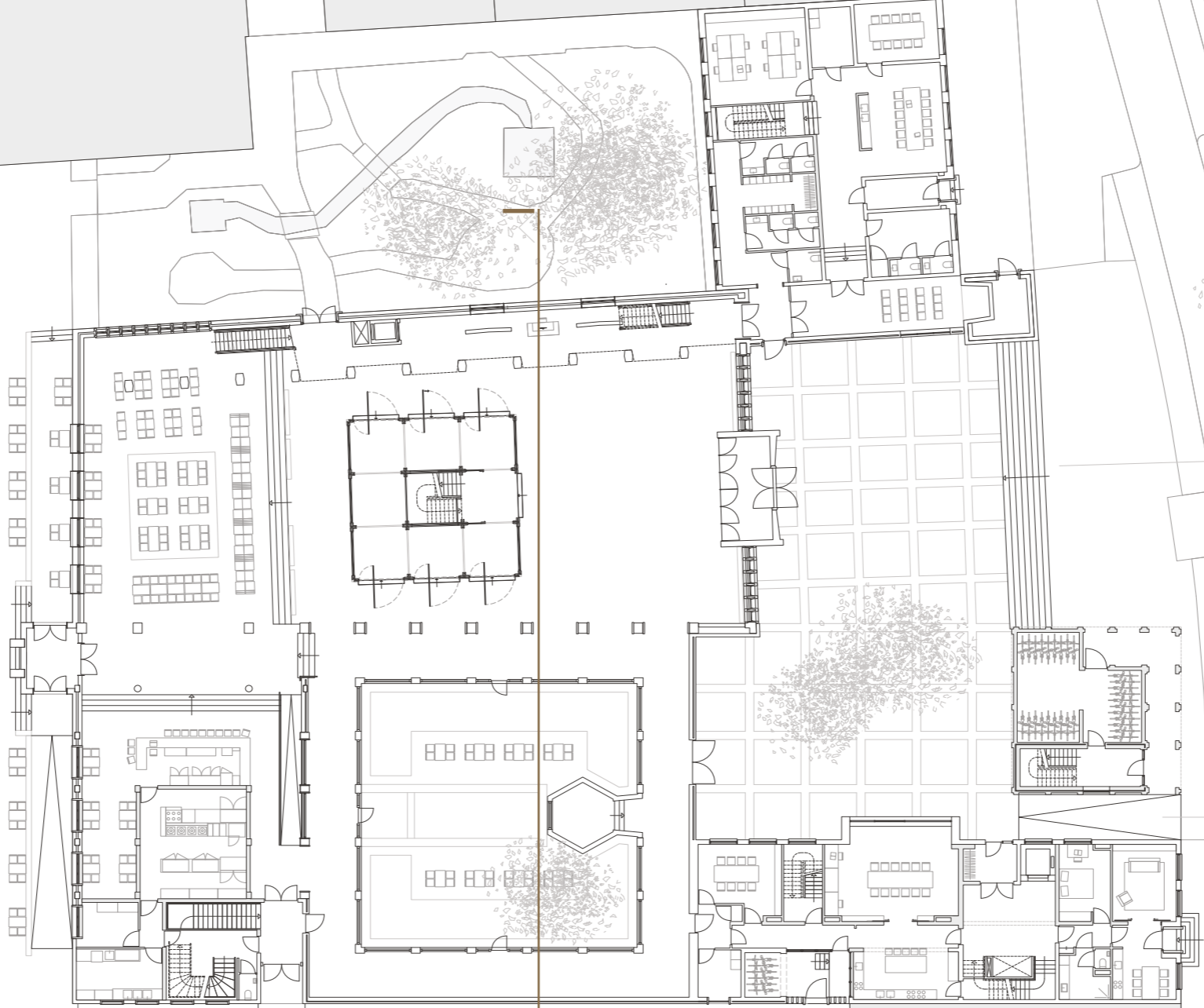
Design proposal

cross section
day church and baptistery
new situation



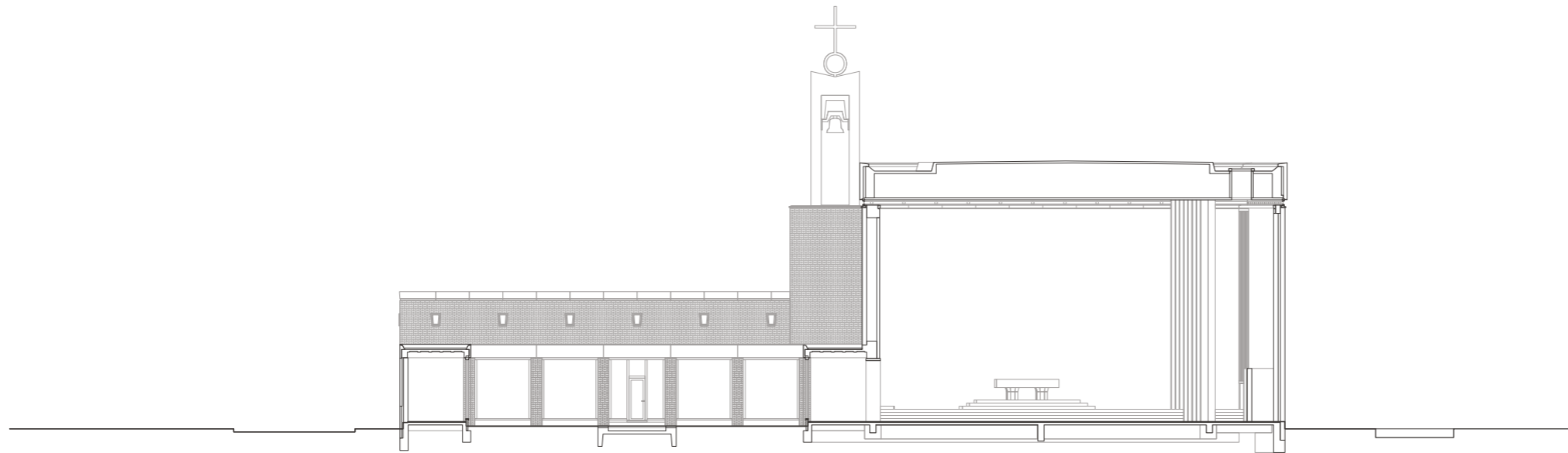
Design proposal

12 5 10 m.



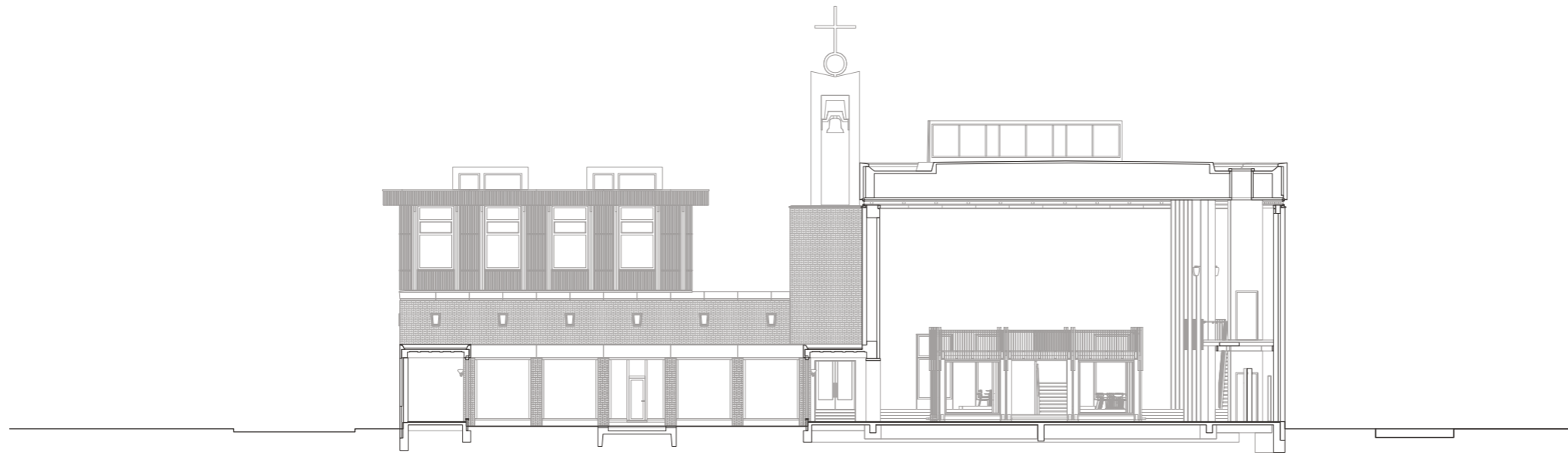
Design proposal

cross section
church hall and courtyard
old situation



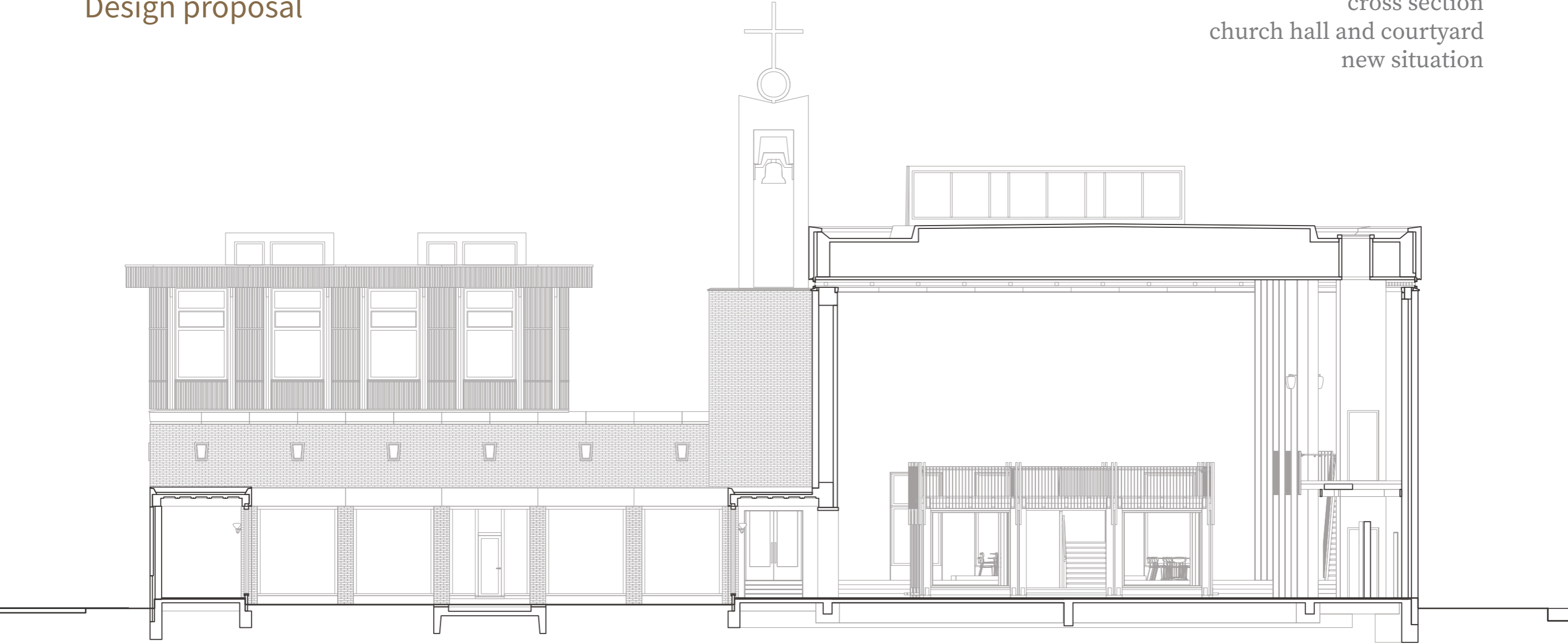
Design proposal

cross section
church hall and courtyard
new situation



Design proposal

cross section
church hall and courtyard
new situation





elevated walkway from north



elevated walkway from south

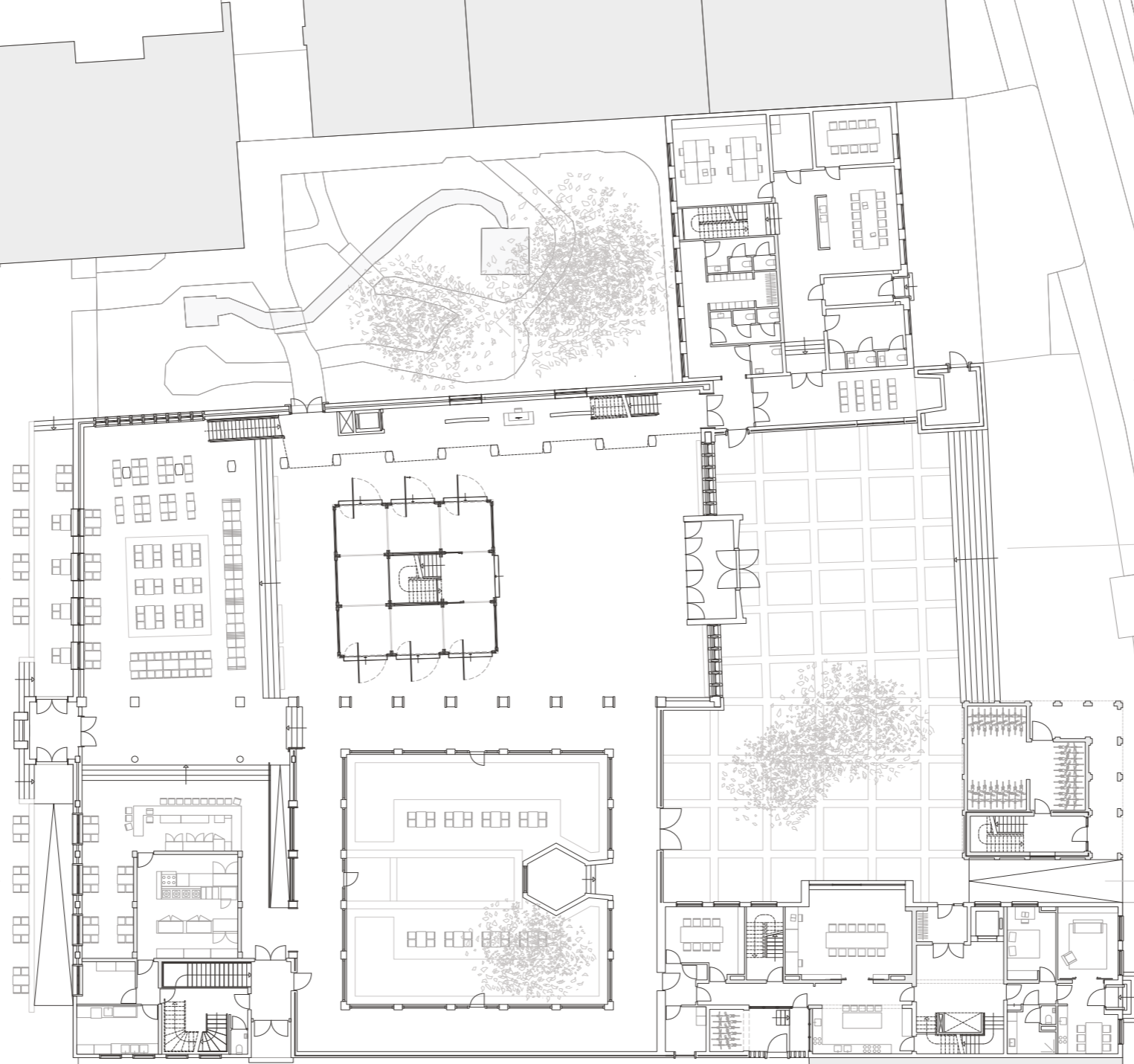


elevated walkway from side
with new entrance to the atelier spaces

Design proposal
residential area

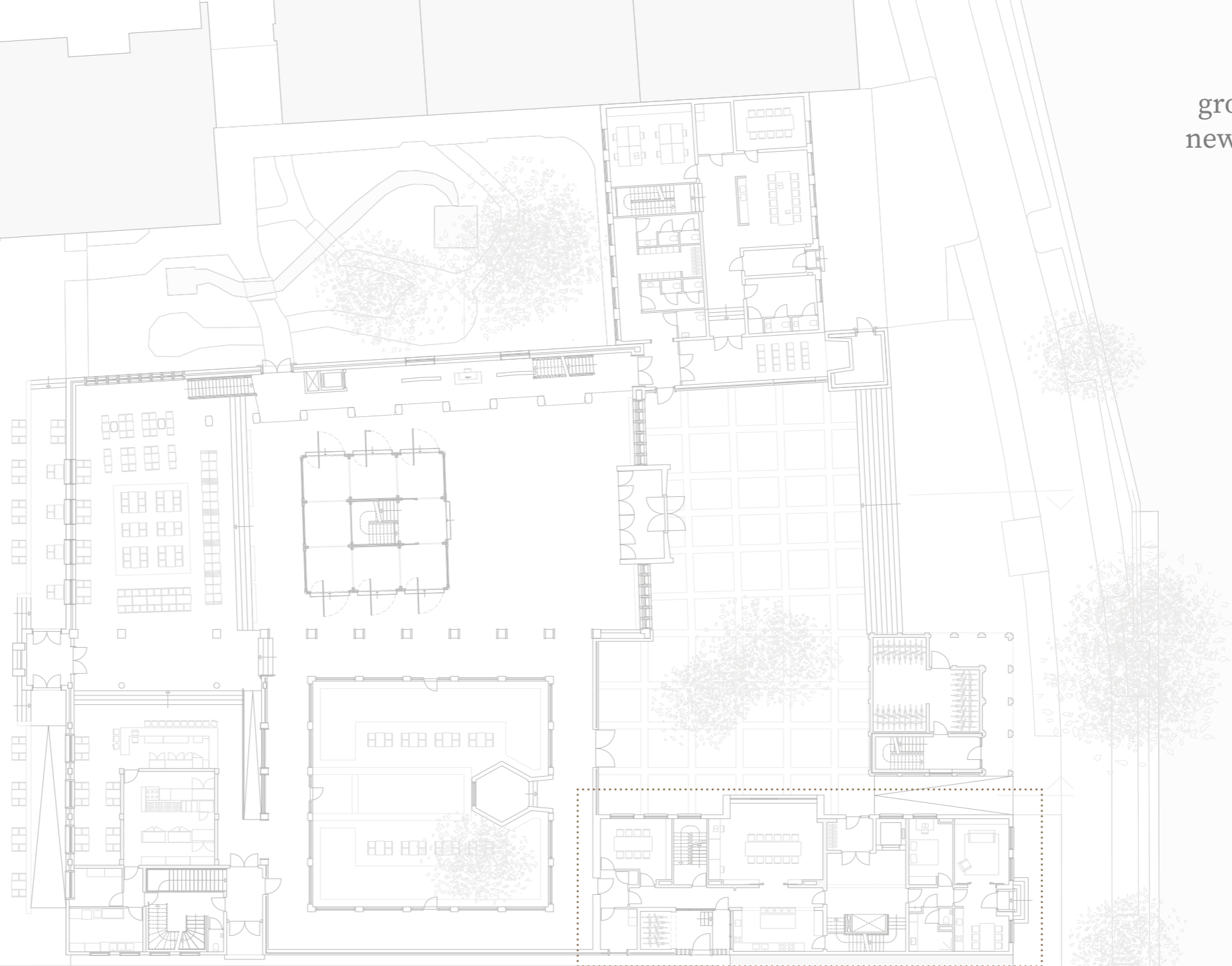
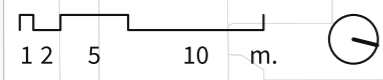
ground floor
new situation

12 5 10 m.

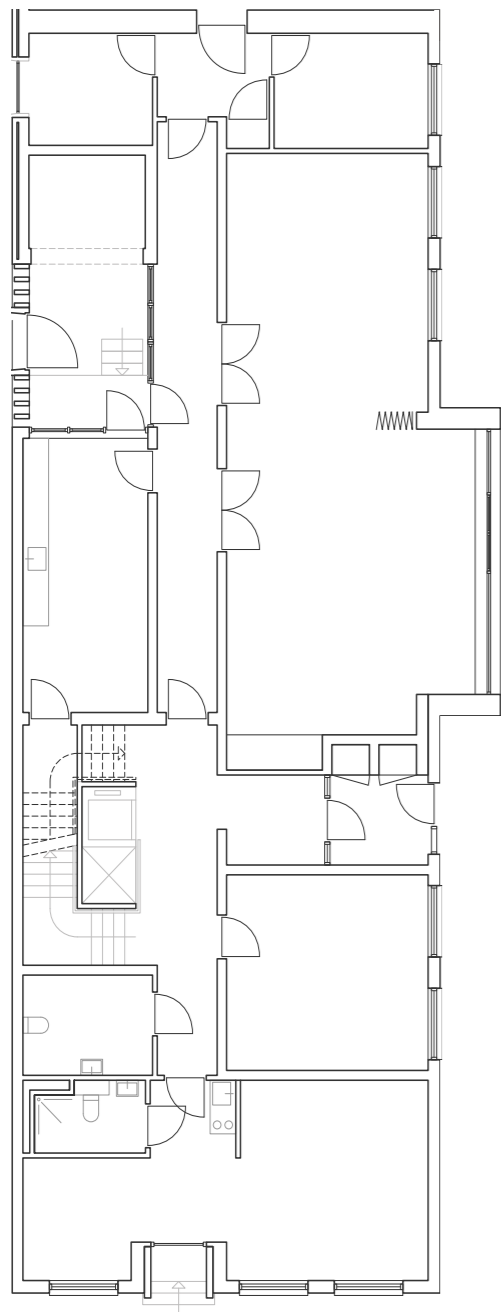


Design proposal
residential area

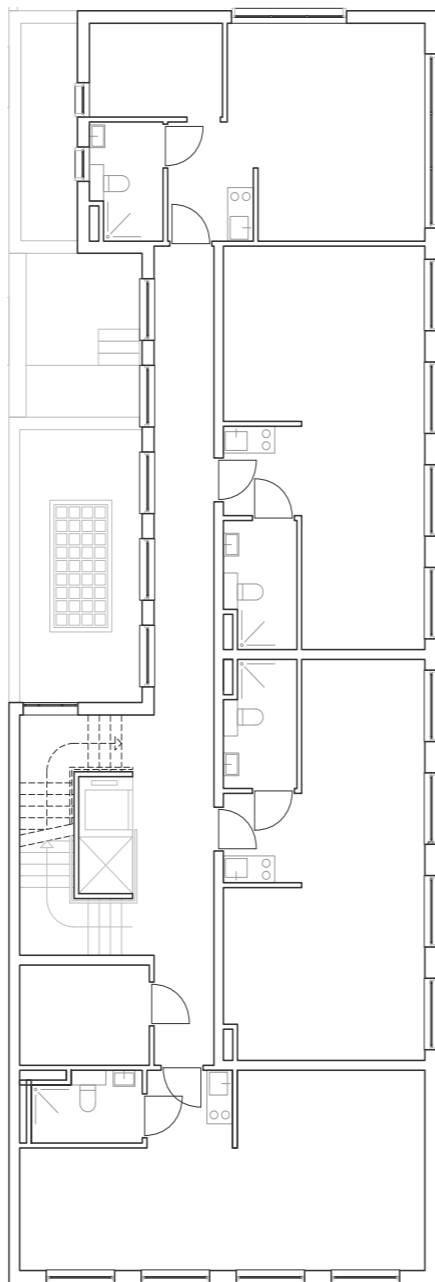
ground floor
new situation



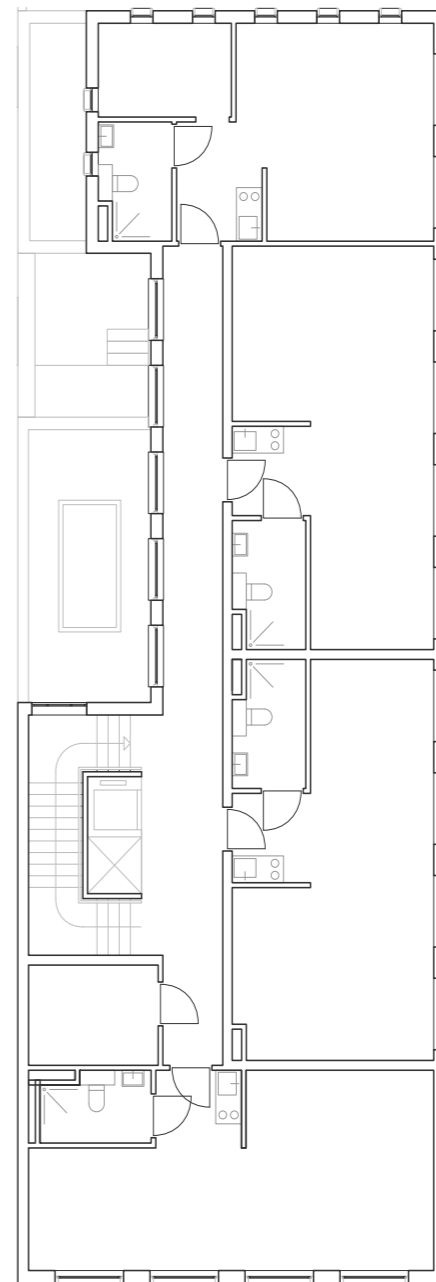
floor plans
old situation



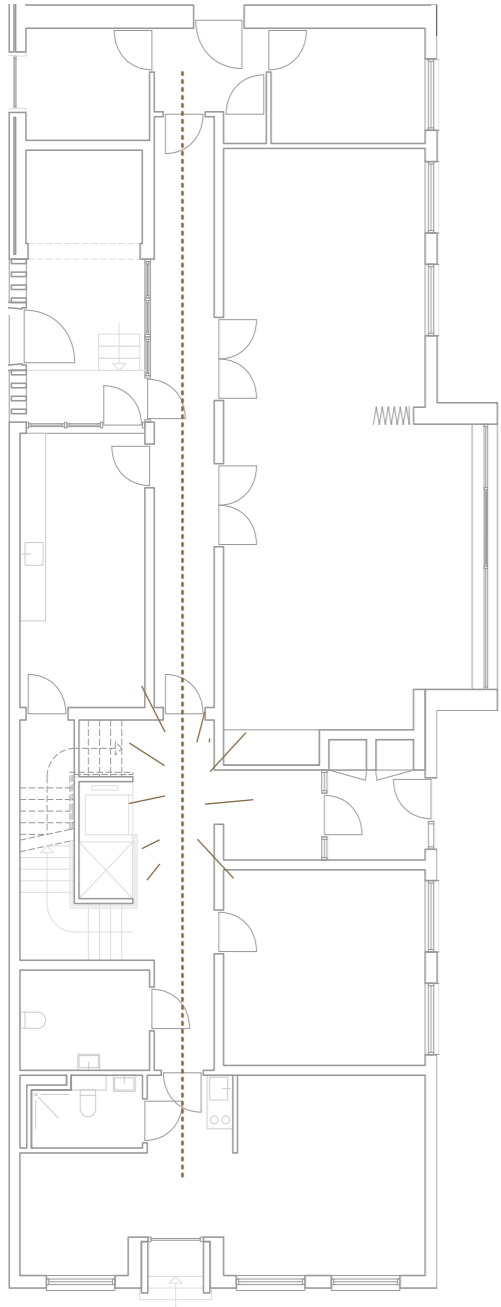
ground floor



first floor

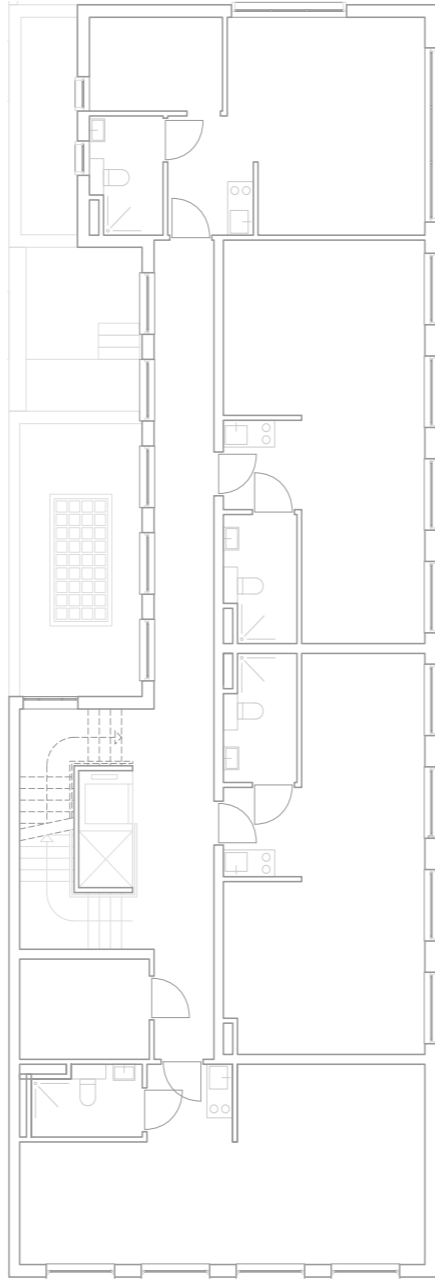


second floor



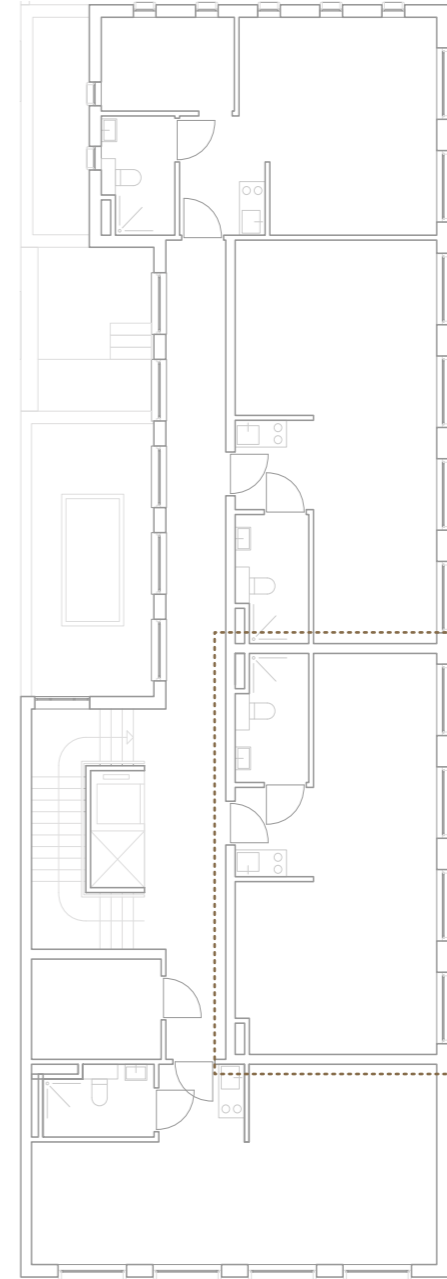
narrow
corridor

ground floor



need for
extra
staircase

first floor

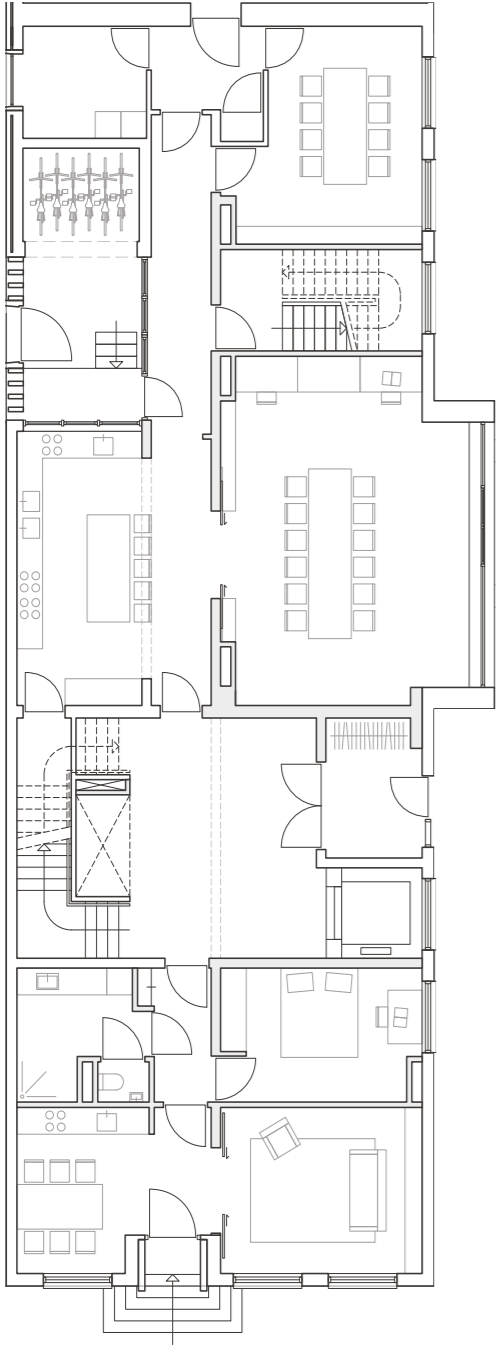


floor plans
old situation

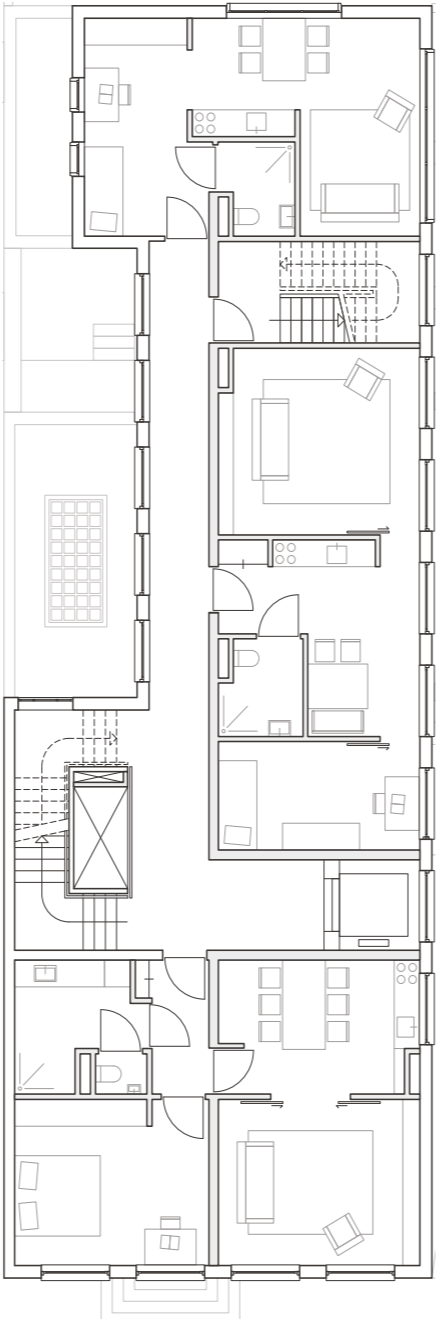
repetition
of room
typology (9x)

second floor

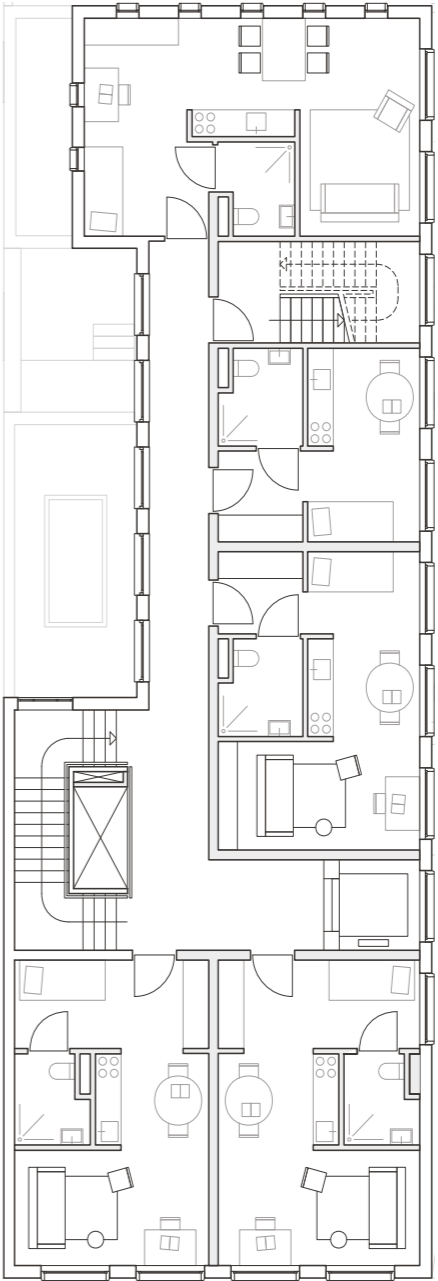
floor plans
new situation



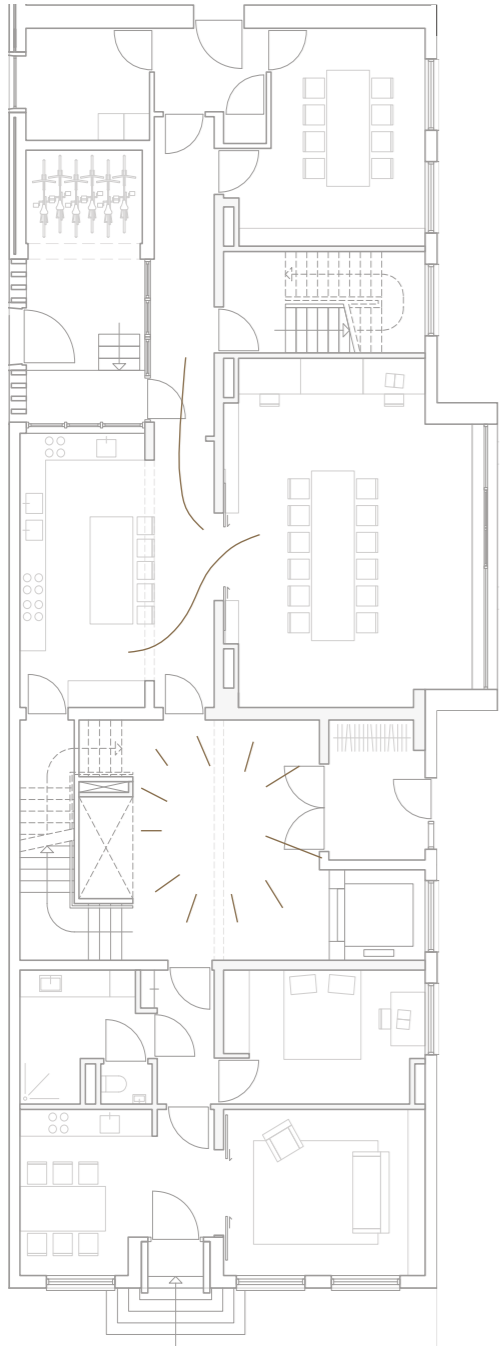
ground floor



first floor

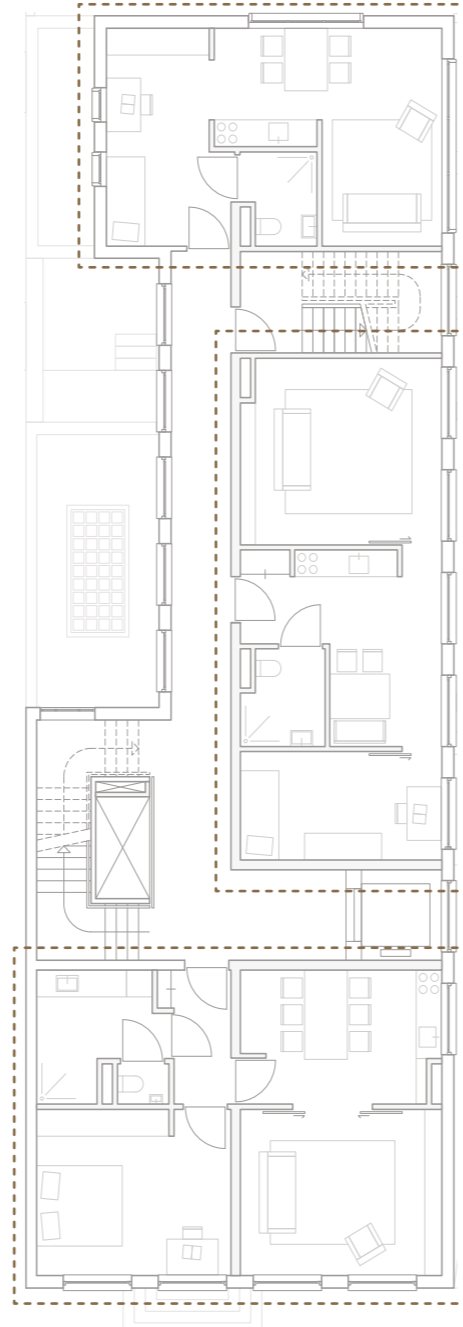


second floor



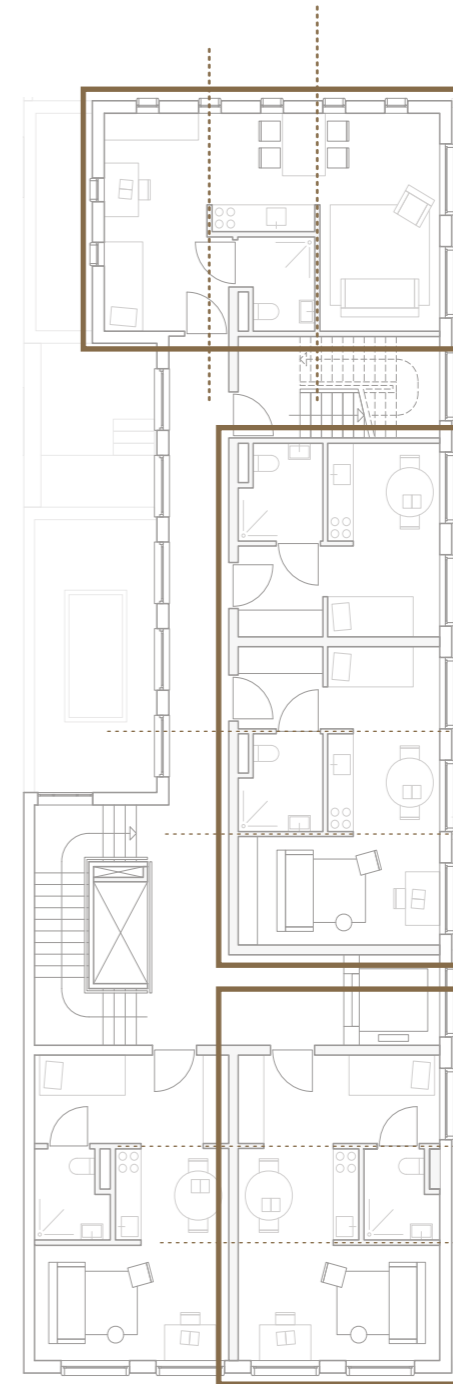
more spacious
ground
floor

ground floor



more
variety
of room
typologies
30 - 65 m²

first floor



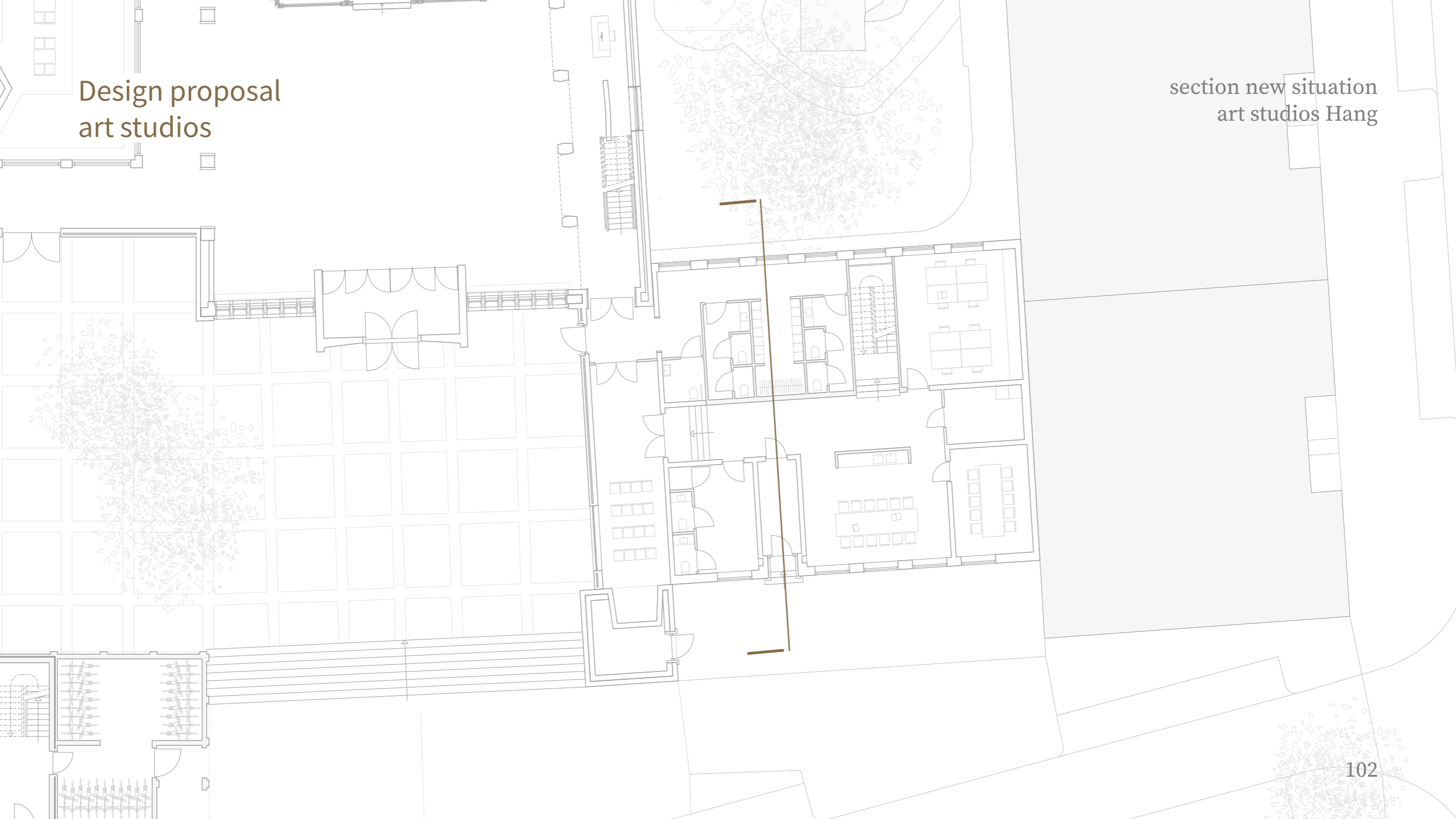
floor plans
new situation

introduction
of zoning

second floor

Design proposal
art studios

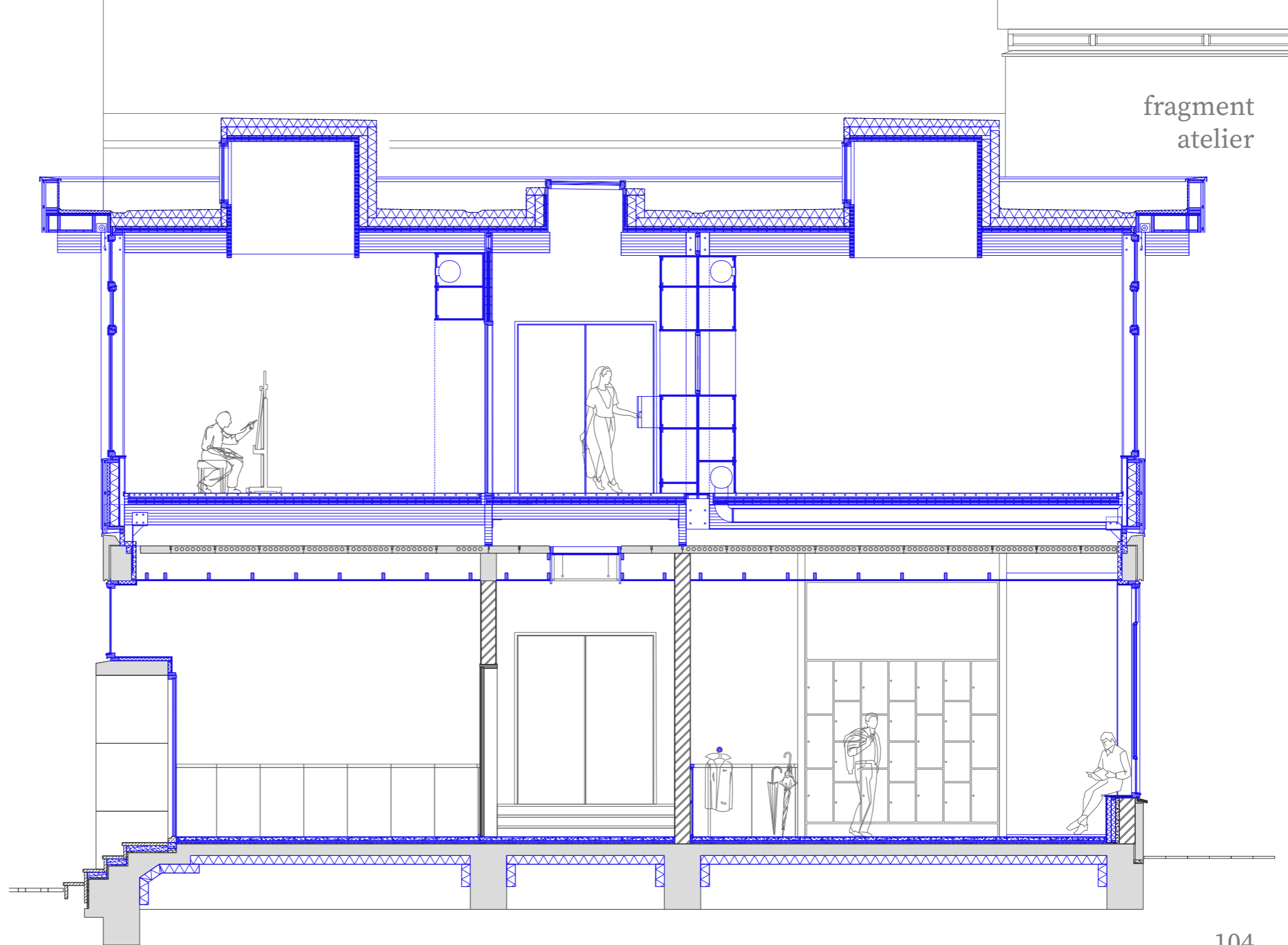
section new situation
art studios Hang



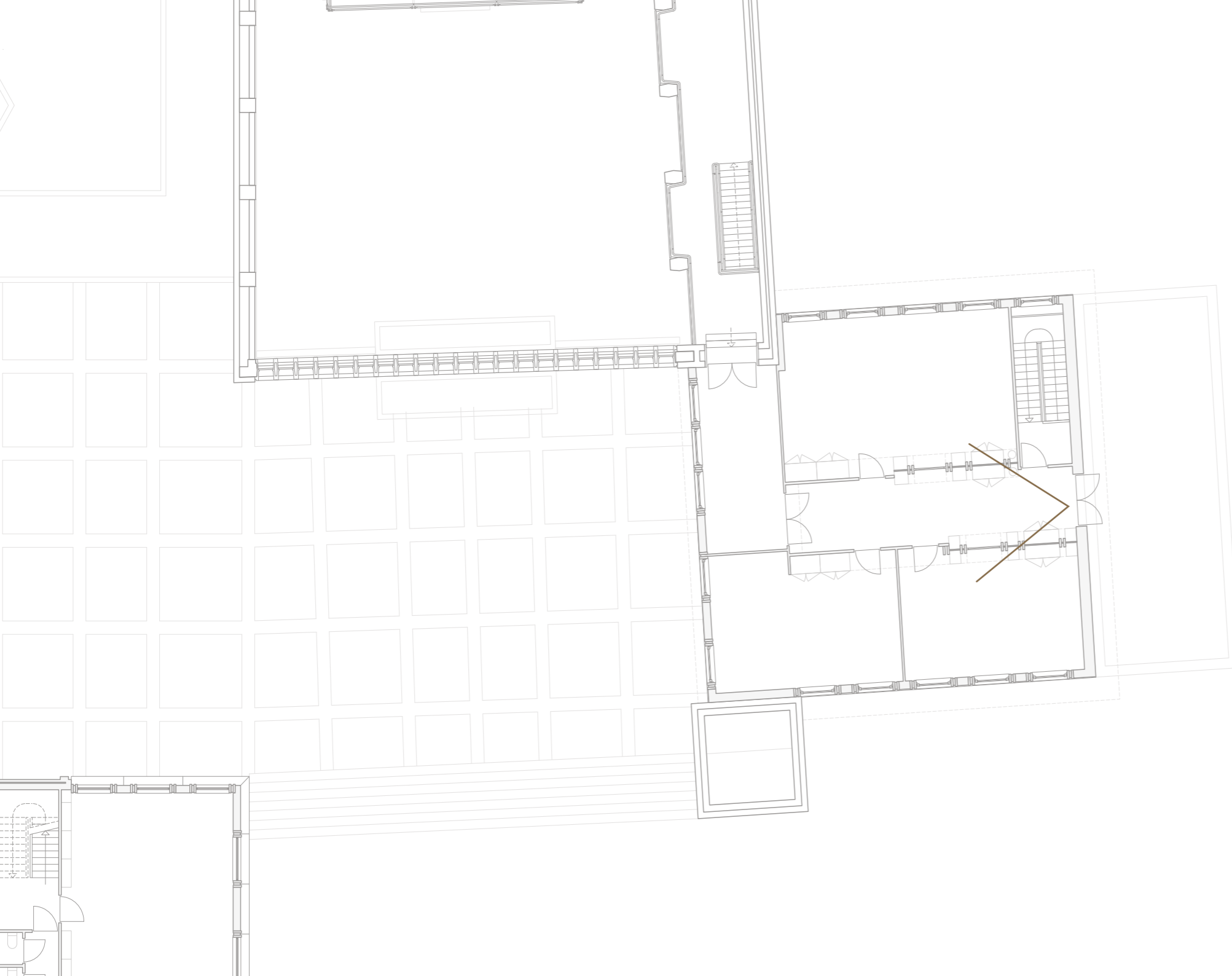
Design proposal
art studios

section new situation
art studios Hang





first floor
art studios Hang



interior view of the
central corridor





The current situation

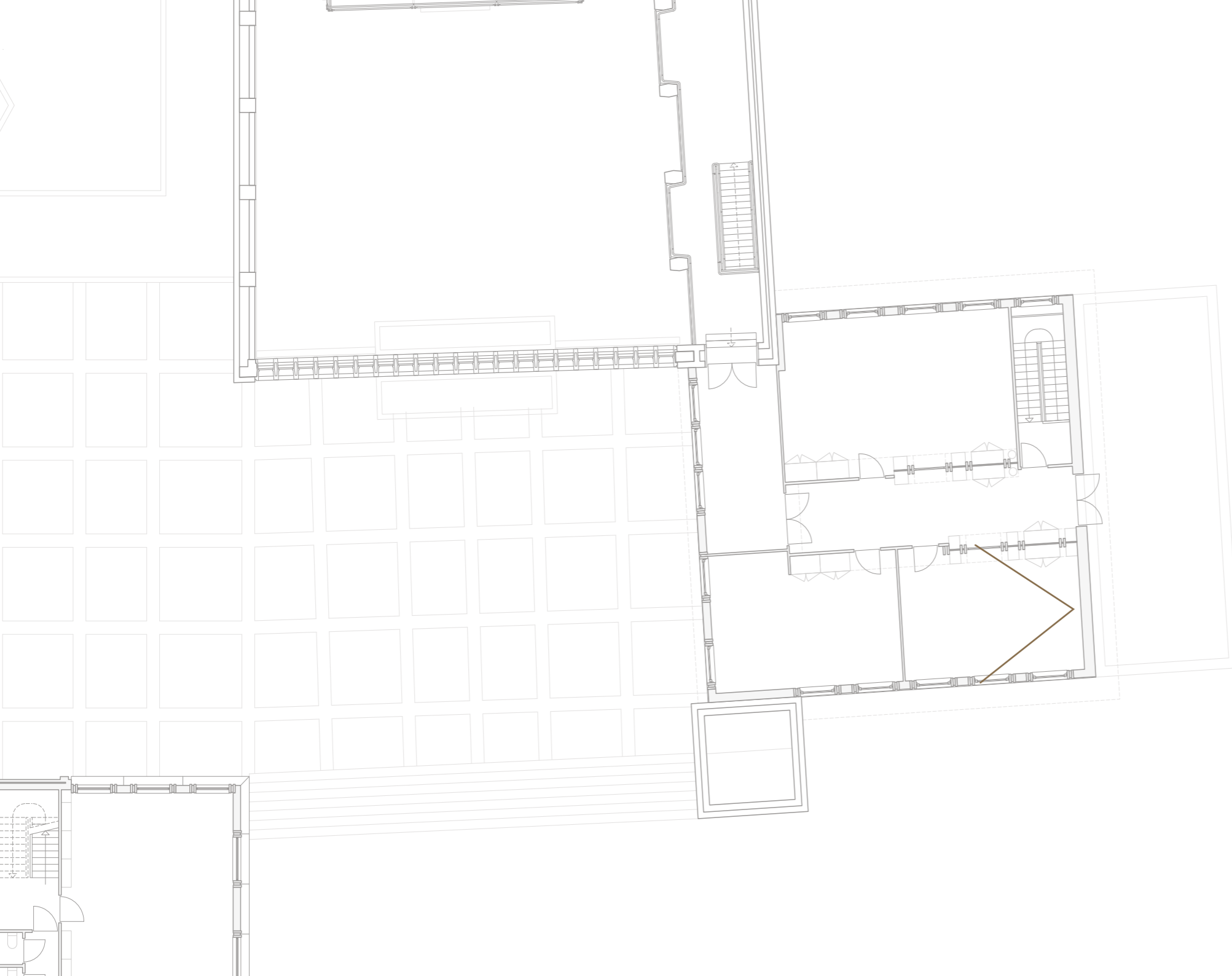
exterior view
new situation



facade
art studios Hang

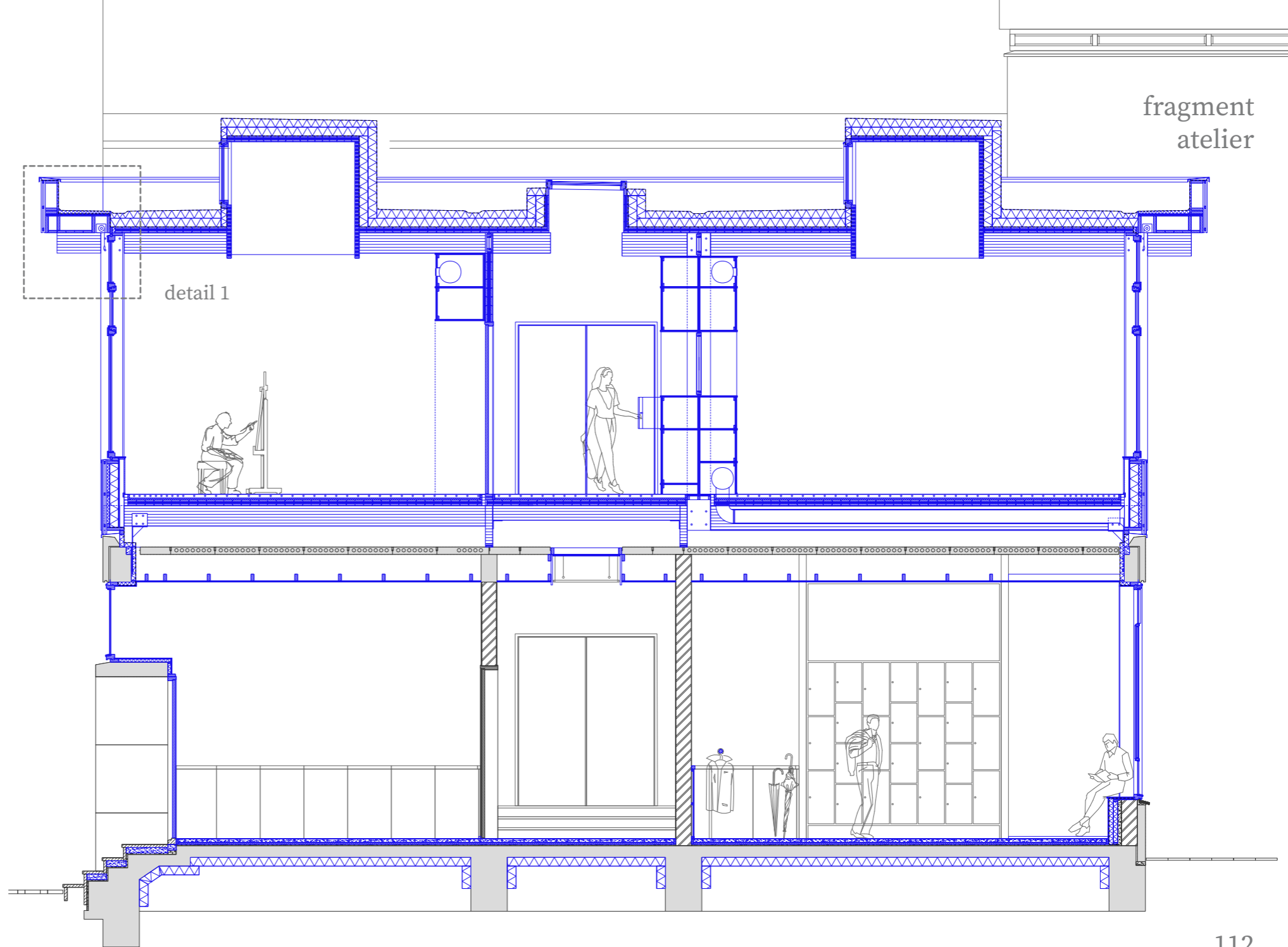


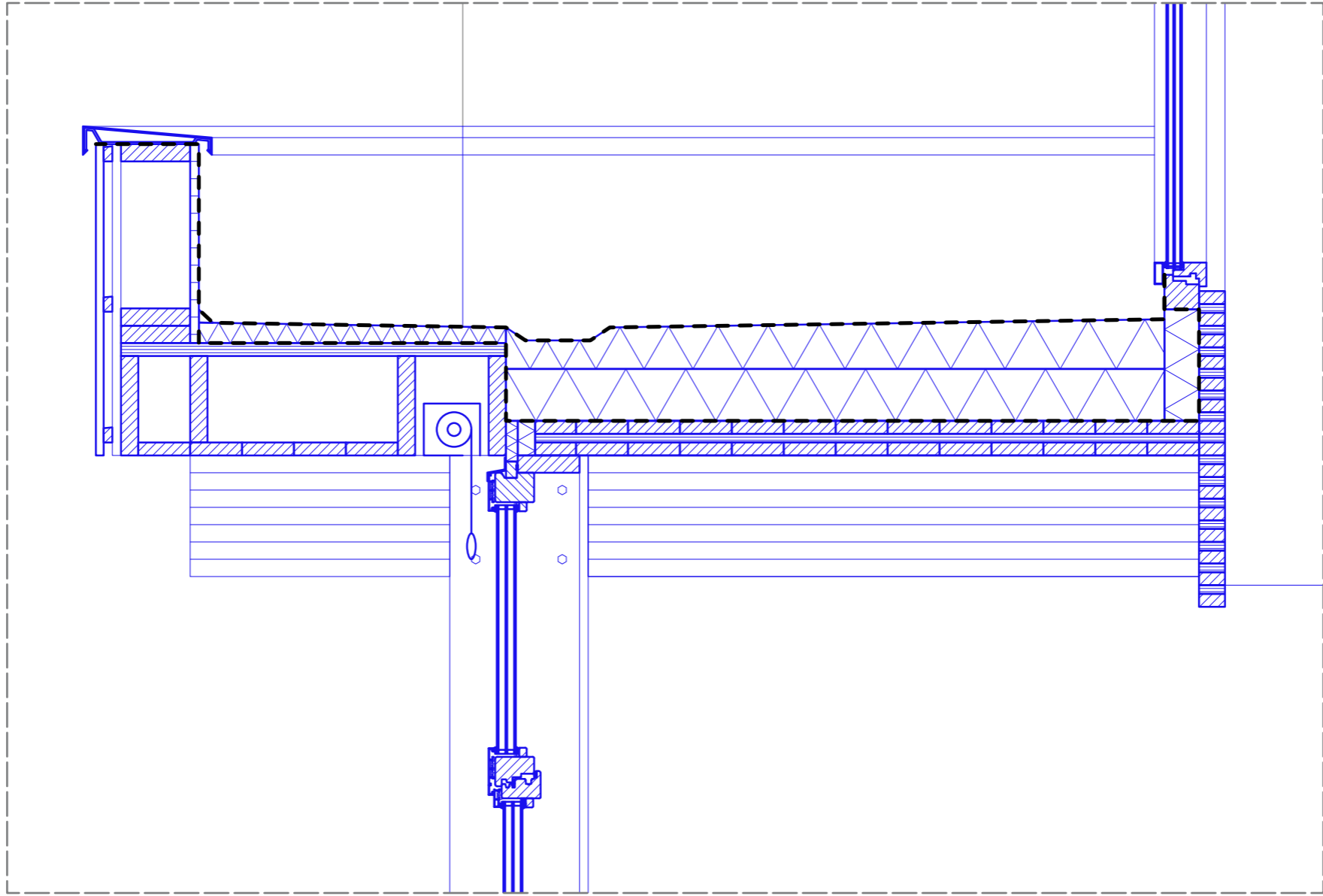
first floor
art studios Hang



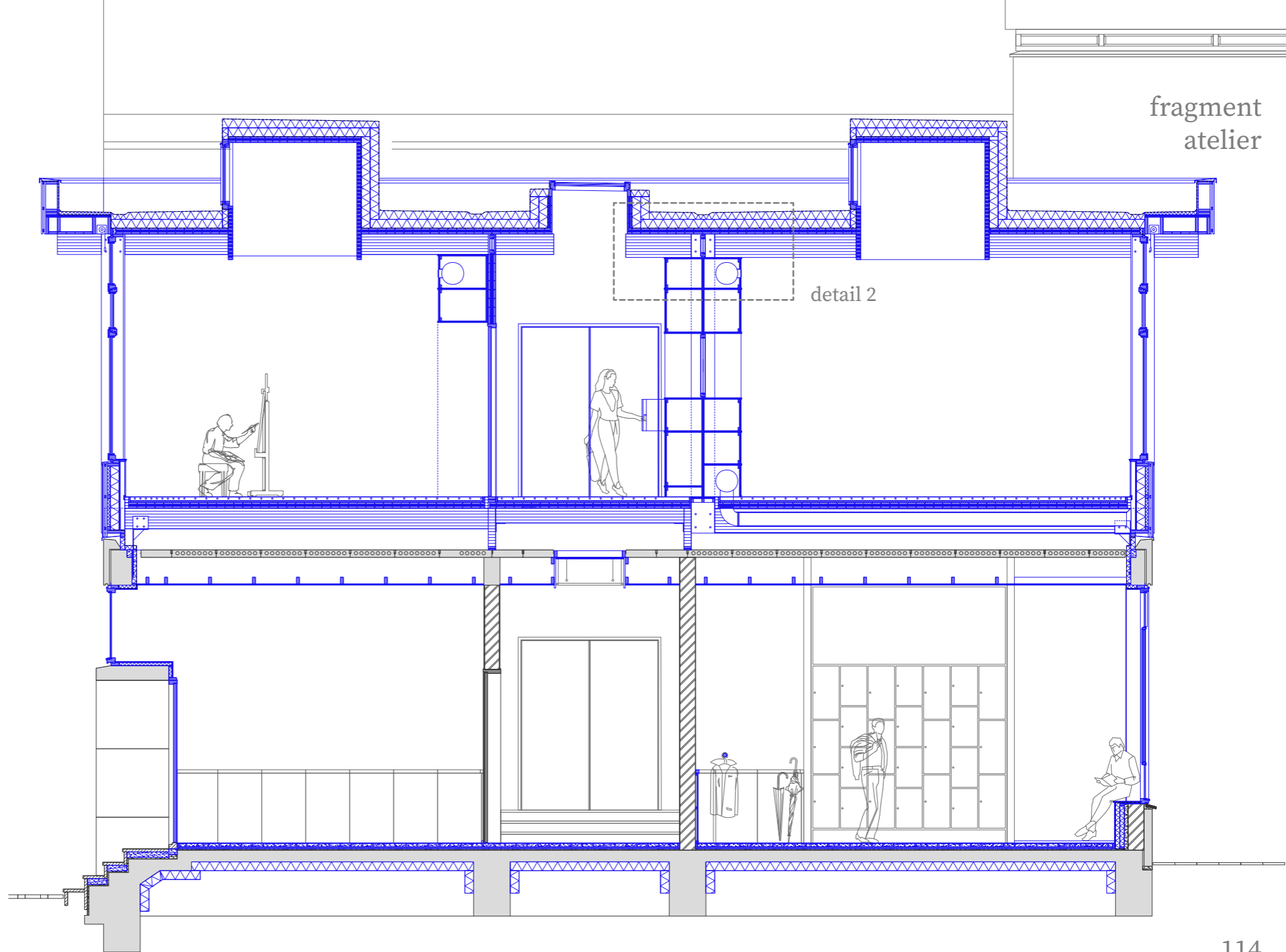


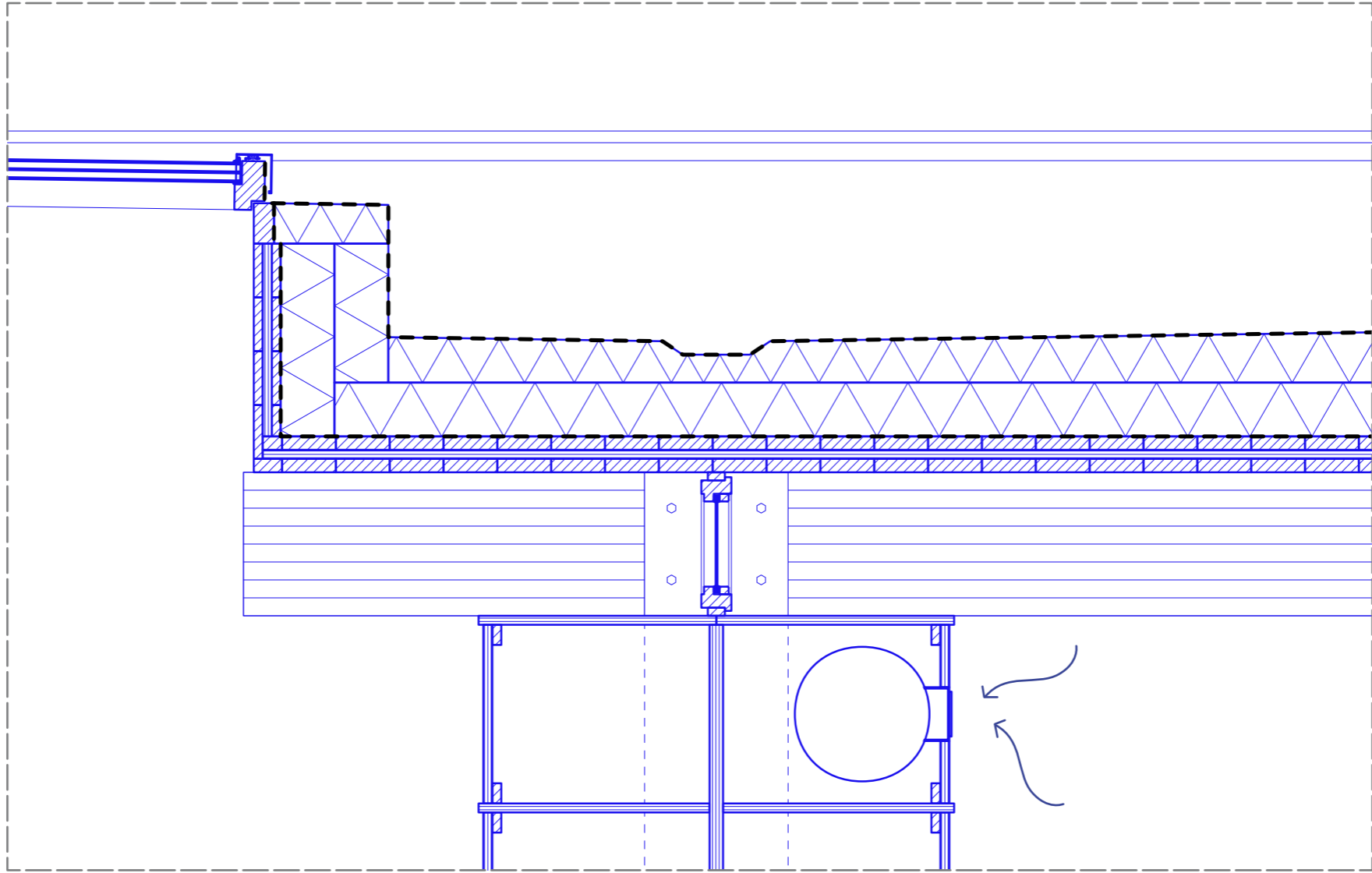
interior view
art studio



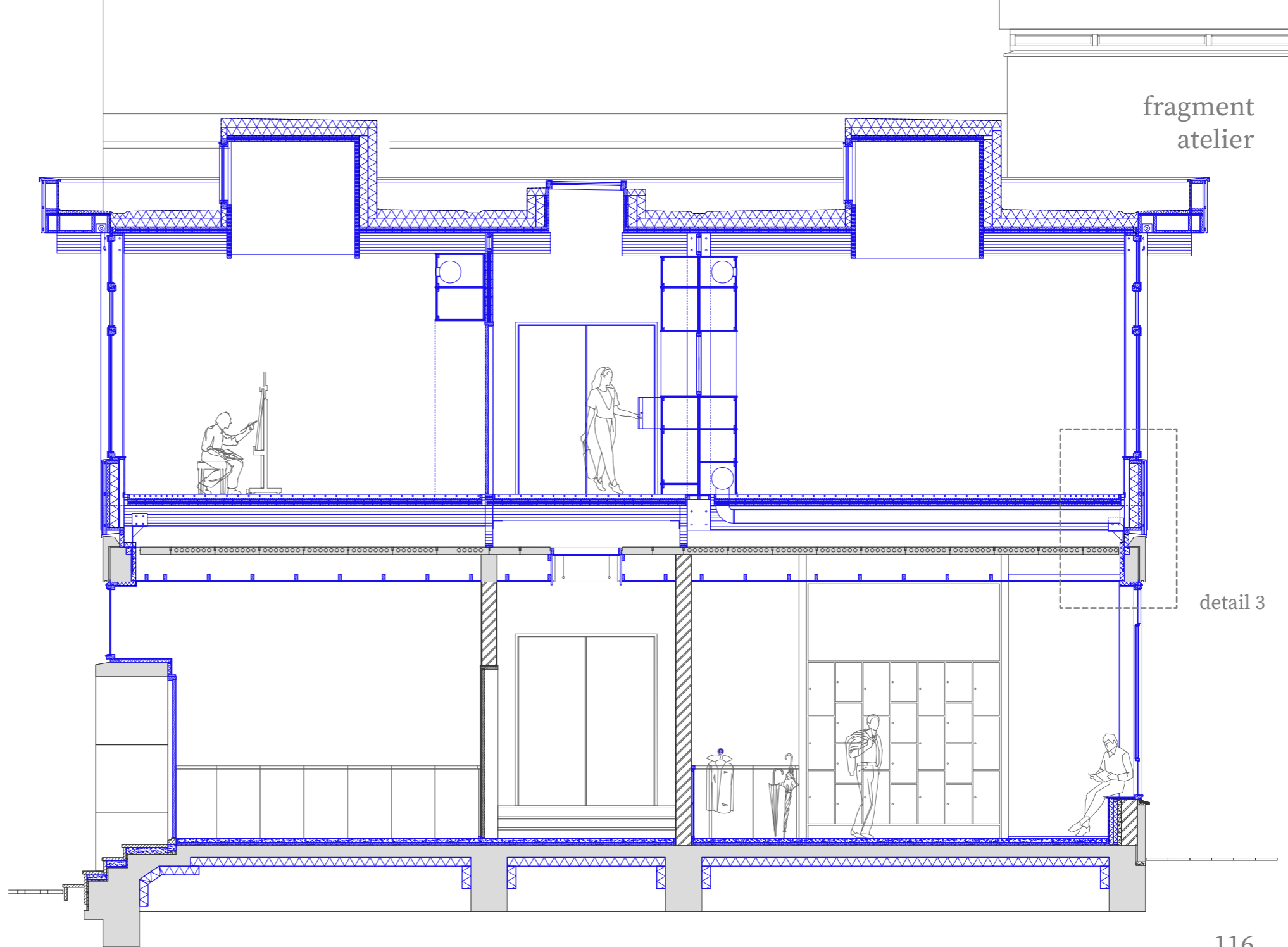


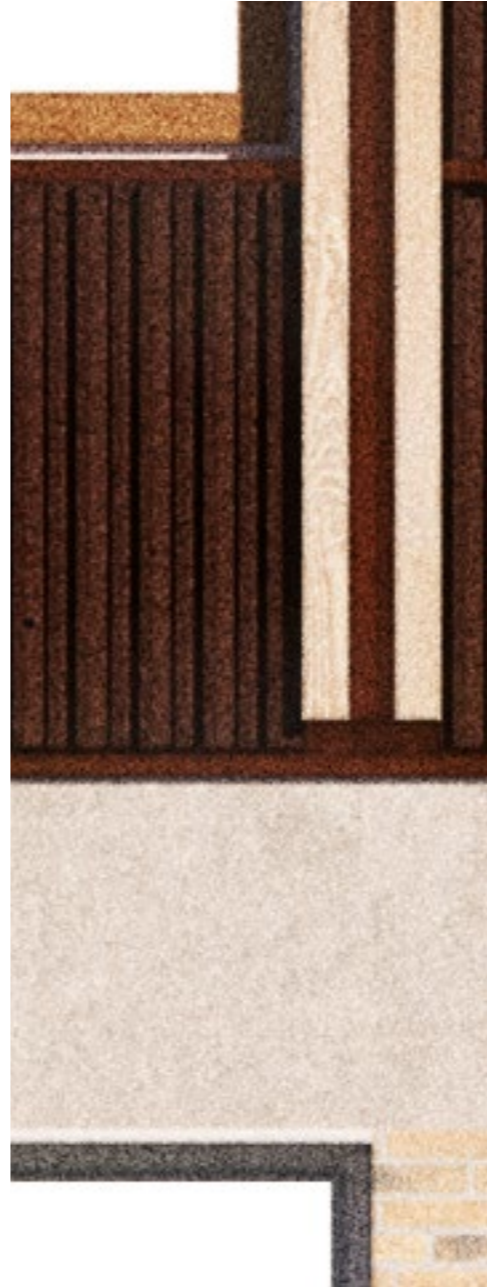
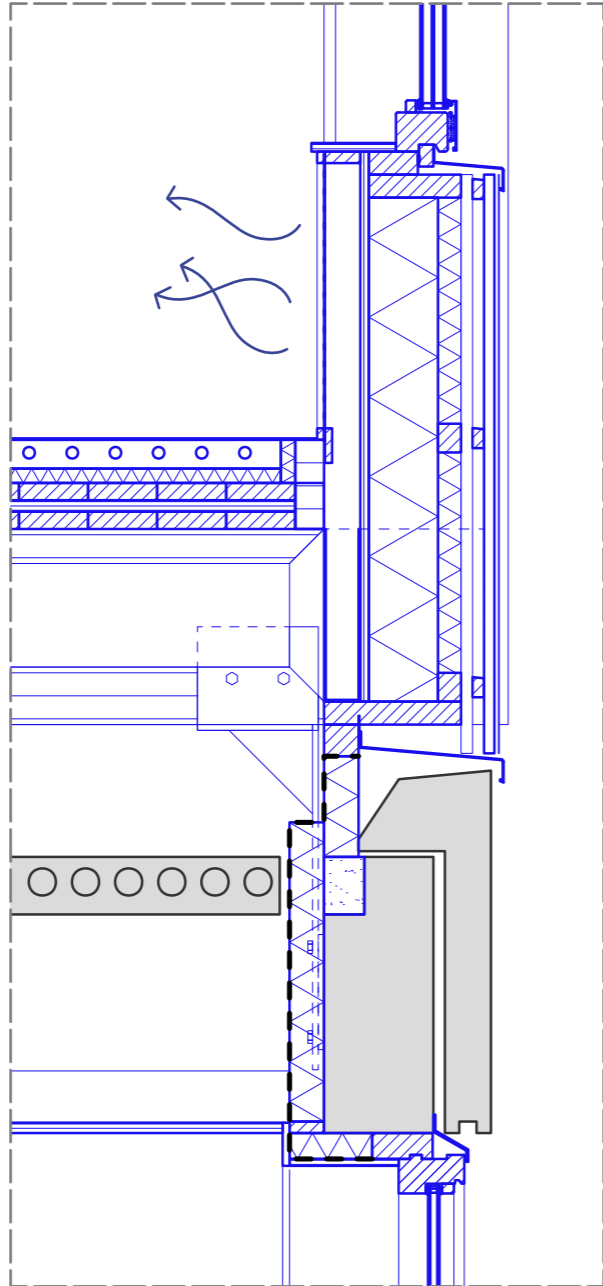
detail 1





detail 2





hemp fibre
panels

detail 3

Climate concept

Basic principles

Winter situation

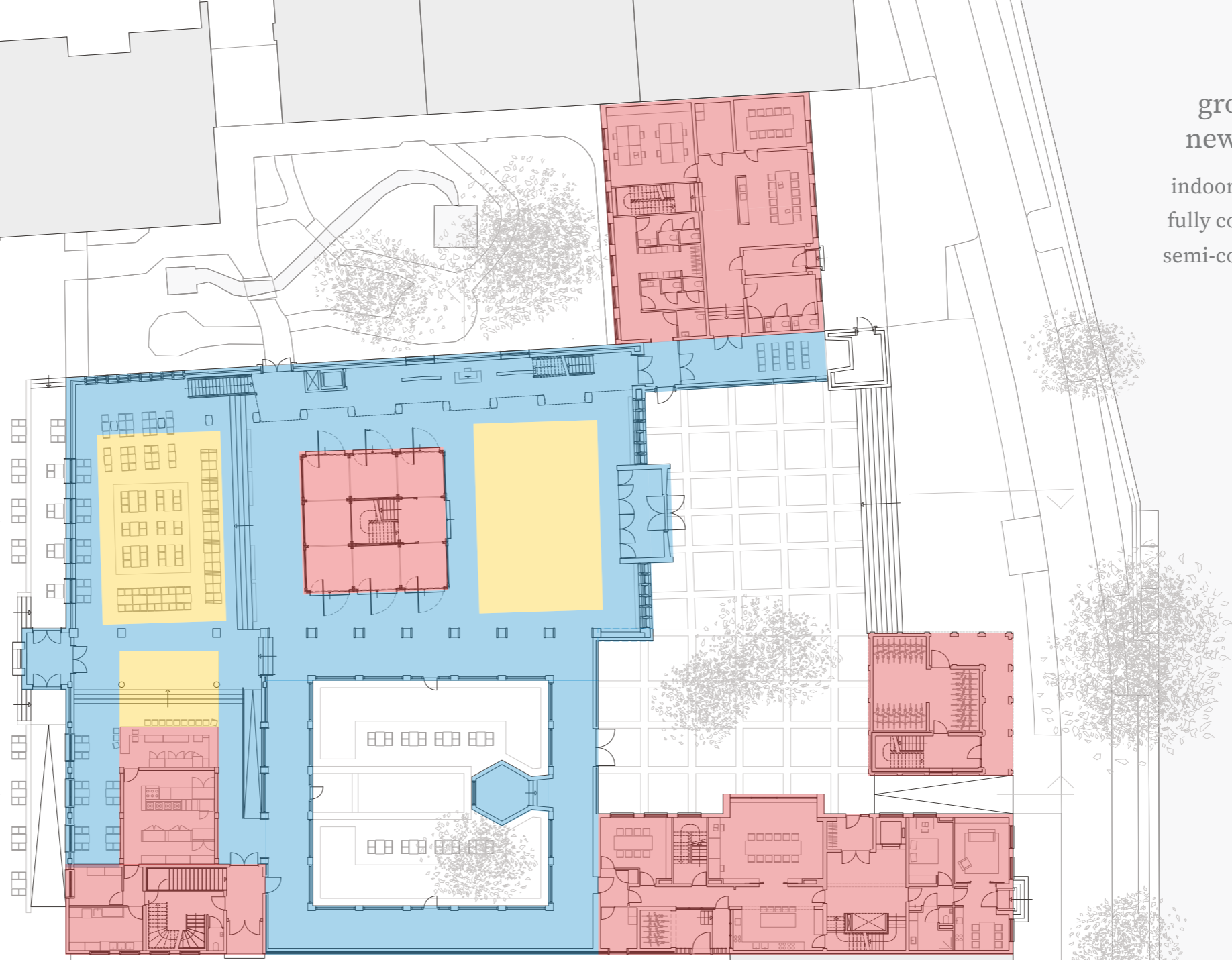
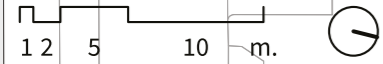
1. city heating provides warmth to the exhibition spaces
2. extra heating with heat panels

Winter/summer situation

3. art studios and residential area use heat pumps as source

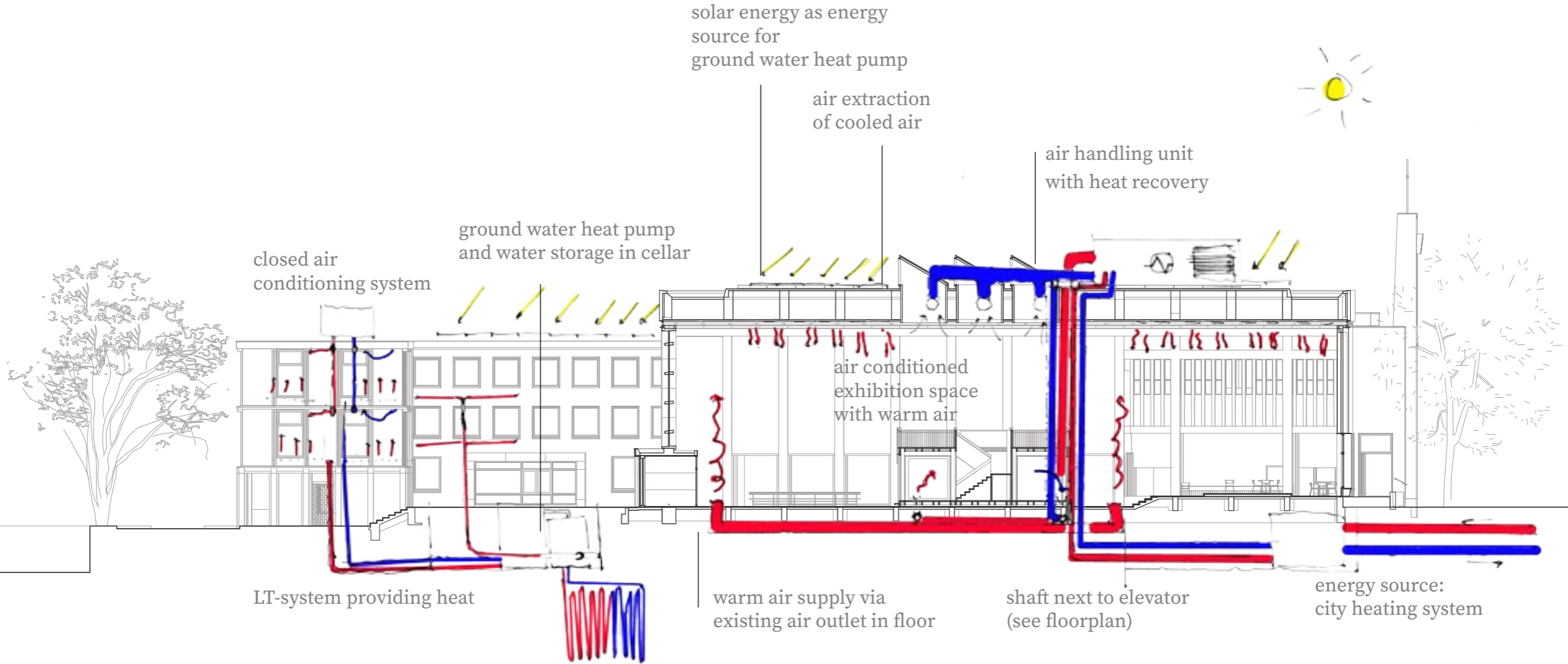
ground floor
new situation

- indoor climate type
- fully controlled ●
 - semi-controlled ●
 - rough ●



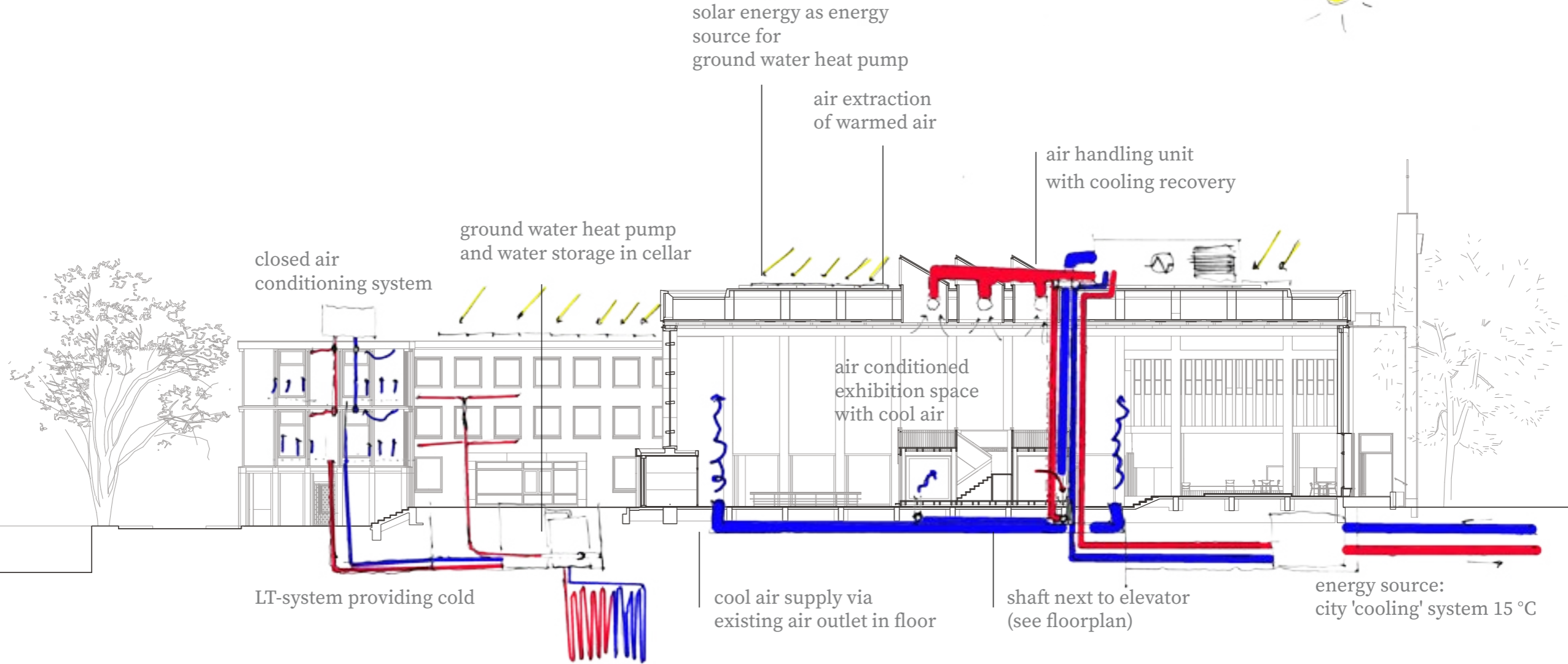
Climate concept

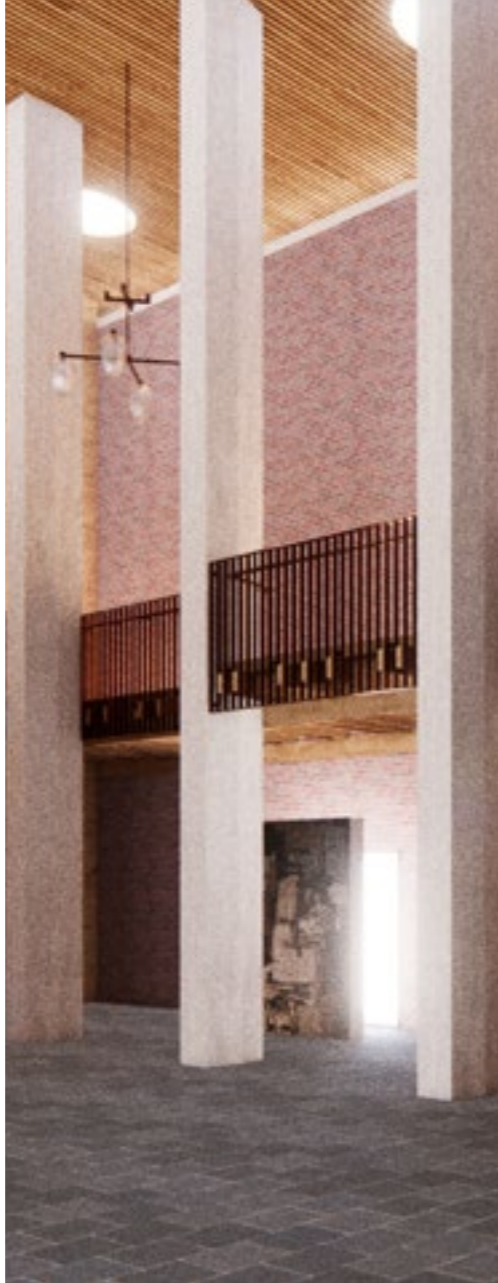
winter situation



Climate concept

summer situation





Of the elements of a room the window is the most marvelous.

The great American poet, Wallace Stevens, prodded the architect, “What slice of the sun does your building have?”

To paraphrase: what slice of the sun enters your room. What a range of mood does the light offer from morning to night from day to day from season to season and all through the years.

Louis Kahn