DESIGN PORTFOLIO

P5
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HERITAGE AS PART OF THE PALIMPSEST

Rethinking heritage at risk in London through an approach that is driven by the context

Table of Contents

Chapter 1 **6**
Exploration of Graduation Topic

Chapter 2 **32**
Project Definition

Chapter 3 **80**
Developing the Project

Chapter 4 **142**
Establishing the Project

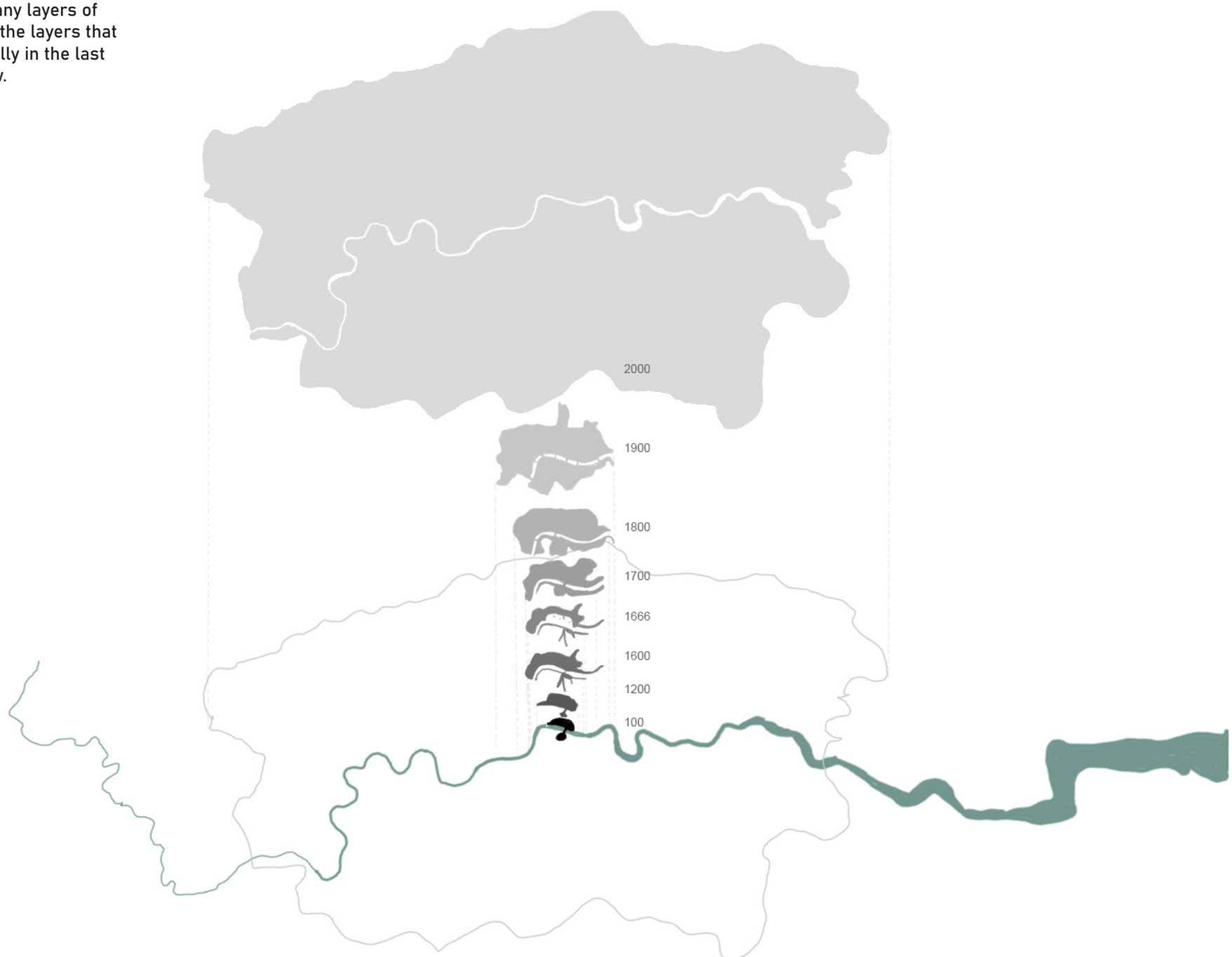
Chapter 5 **180**
Final Steps

CHAPTER 1
EXPLORATION OF GRADUATION TOPIC

Heritage in London: first maps 1.1
Analysing heritage at risk 1.2
Typomorphological analysis of four sites 1.3

1.1 Heritage in London: first maps

From my background in architectural history, I was firstly interested in the many layers of London. This drawing shows all the layers that were created over time. Especially in the last century, the size of London grew.

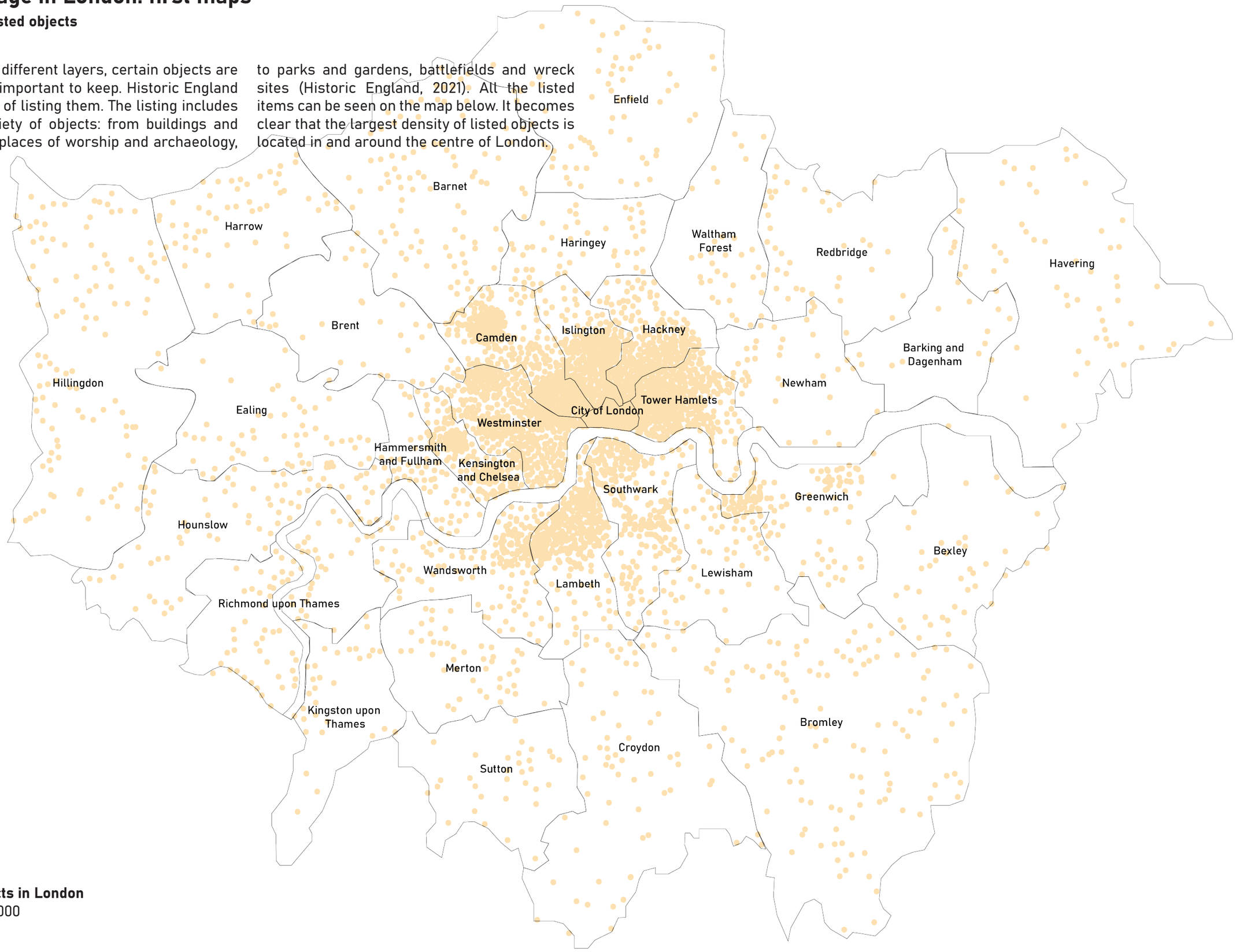


The layers of London

1.1 Heritage in London: first maps

The listed objects

From these different layers, certain objects are considered important to keep. Historic England is in charge of listing them. The listing includes a large variety of objects: from buildings and structures, places of worship and archaeology, to parks and gardens, battlefields and wreck sites (Historic England, 2021). All the listed items can be seen on the map below. It becomes clear that the largest density of listed objects is located in and around the centre of London.

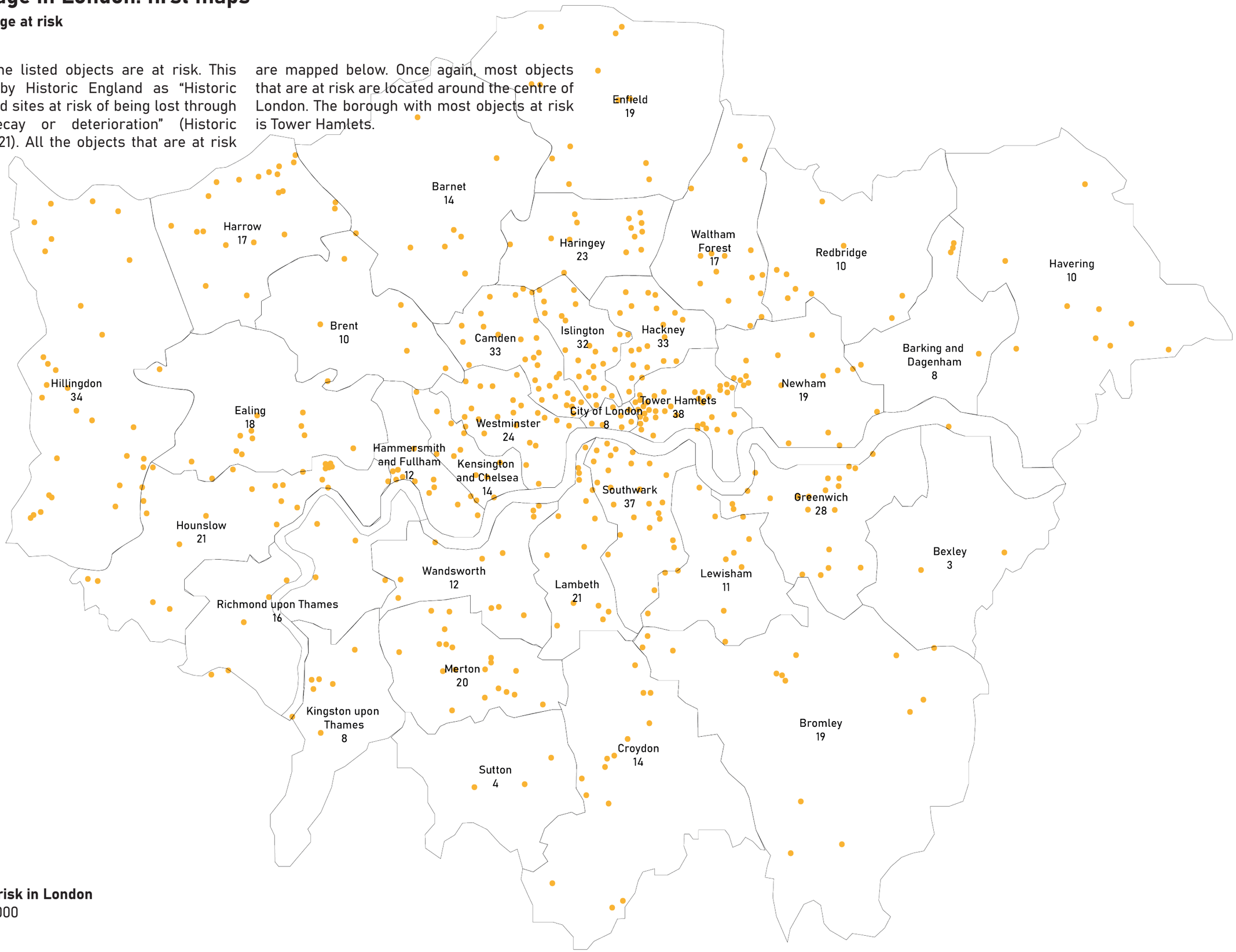


Listed objects in London
Scale 1:200.000

1.1 Heritage in London: first maps

Heritage at risk

A part of the listed objects are at risk. This is defined by Historic England as “Historic buildings and sites at risk of being lost through neglect, decay or deterioration” (Historic England, 2021). All the objects that are at risk are mapped below. Once again, most objects that are at risk are located around the centre of London. The borough with most objects at risk is Tower Hamlets.

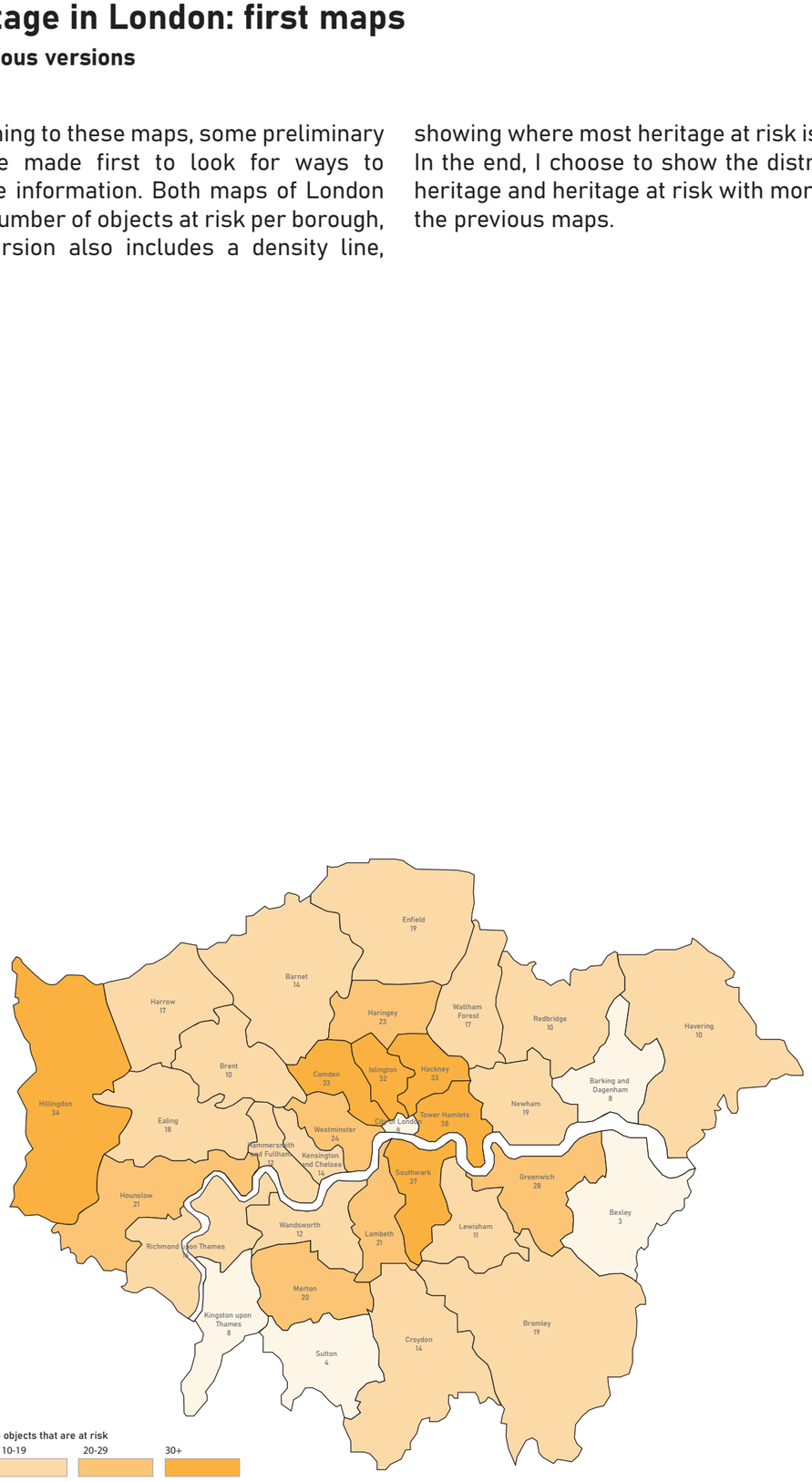


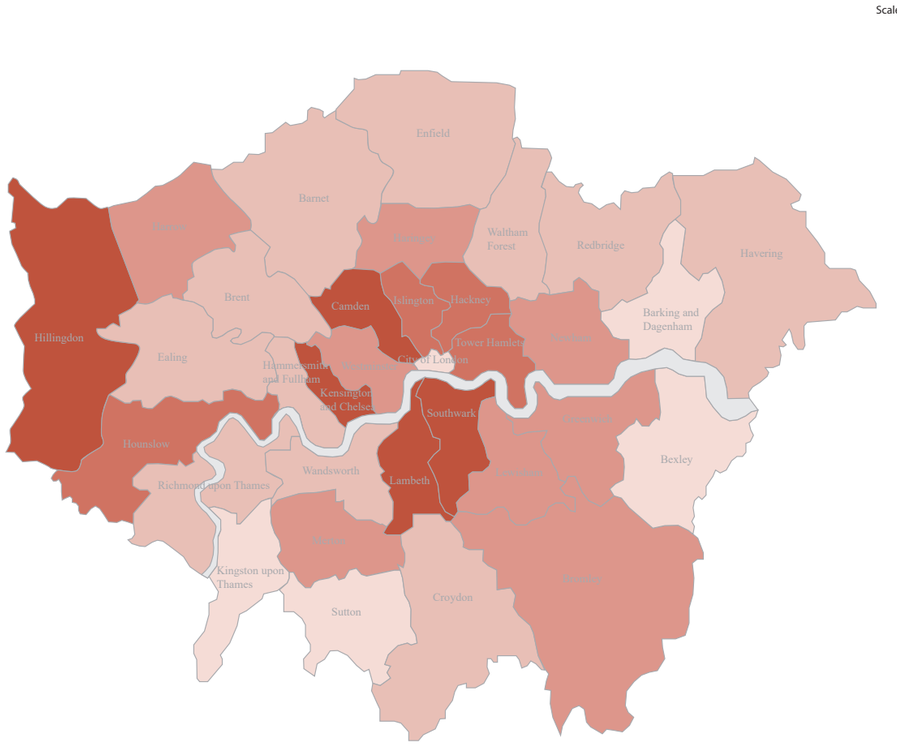
Heritage at risk in London
Scale 1:200.000

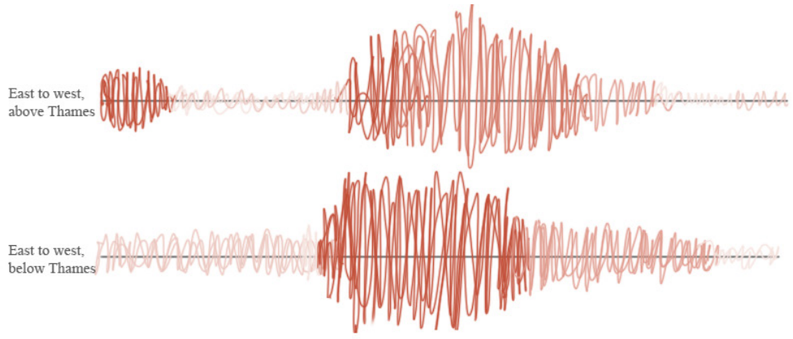
1.1 Heritage in London: first maps

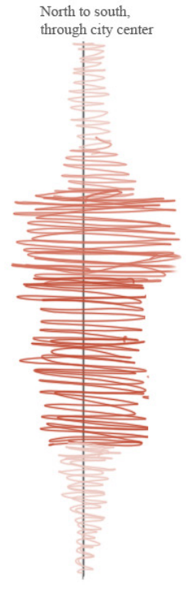
Previous versions

Before coming to these maps, some preliminary maps were made first to look for ways to present the information. Both maps of London show the number of objects at risk per borough, the red version also includes a density line, showing where most heritage at risk is situated. In the end, I choose to show the distribution of heritage and heritage at risk with more detail in the previous maps.









1.2 Analysing heritage at risk

Source for heritage at risk

At the base of the further research was the document shown on this page: the heritage at risk register. The right page shows an example of the way the heritage at risk is portrayed.

Heritage at **Risk**

Historic England

London & South East Register 2021

© London Borough of Haringey

SITE NAME:	**Public toilets, Bruce Grove, Tottenham N17**
DESIGNATION:	Listed Building grade II, CA
CONDITION:	Poor
OCCUPANCY:	Vacant/not in use
PRIORITY CATEGORY:	D (C)
OWNER TYPE:	Local authority
LIST ENTRY NUMBER:	1259316

Public toilet circa 1920, with fine external ironwork. The building is currently empty. Some works to secure the building have been carried out and the ironwork has been restored. The Local Authority commissioned a structural survey in 2018 and has secured funding for repair and renovation of the building. Discussions with all relevant parties are underway and work is progressing on discharging the conditions in respect of the approved Planning and Listed Building Consent applications prior to work to refurbish the toilets as a community arts cafe, expected to start in summer 2021.

Contact: Elisabetta Tonazzi (LPA) 020 8489 4497

© London Borough of Haringey

SITE NAME:	**7, Bruce Grove, Tottenham N17**
DESIGNATION:	Listed Building grade II, CA
CONDITION:	Very bad
OCCUPANCY:	Vacant/not in use
PRIORITY CATEGORY:	B (B)
OWNER TYPE:	Commercial company
LIST ENTRY NUMBER:	1188605

One of a pair of early C19 houses. The building is vacant and has suffered substantial internal collapse. A scheme of refurbishment and conversion to flats has been approved. A proposal to amend the approved scheme in order to optimise the configuration of the second and top floors is under discussion. The building was sold to a new owner in 2020. The Council has recently (May 2021) taken enforcement action to obtain access and carry out a condition survey.

Contact: Elisabetta Tonazzi (LPA) 020 8489 4497

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SITE NAME:	**West wall, Bruce Castle Park, Church Lane, Tottenham N17**
DESIGNATION:	Listed Building grade II, CA
CONDITION:	Poor
OCCUPANCY:	N/A
PRIORITY CATEGORY:	C (C)
OWNER TYPE:	Local authority
LIST ENTRY NUMBER:	1294666

C17 red brick boundary wall to Bruce Castle Park. In urgent need of essential repairs as the brickwork is deteriorating. An initial programme of repairs has been undertaken, but further works are needed.

Contact: Elisabetta Tonazzi (LPA) 020 8489 4497

© Historic England

SITE NAME:	**662, High Road, Tottenham N17**
DESIGNATION:	Listed Building grade II, CA
CONDITION:	Fair
OCCUPANCY:	Vacant/not in use
PRIORITY CATEGORY:	F (F)
OWNER TYPE:	Commercial company
LIST ENTRY NUMBER:	1358832

Early C18 building of three storeys, in stock brick with stone coped parapet, lower than the neighbouring properties with which it has group value. The building was badly fire damaged during the 2011 riots. The upper floors and roof of the building have been renovated and repaired. Listed Building Consent was granted in 2019 for renovations to the ground floor of the building with restoration of the shop frontage, and works are due to start on site.

Contact: Elisabetta Tonazzi (LPA) 020 8489 4497

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SITE NAME:	**810, High Road, Tottenham N17**
DESIGNATION:	Listed Building grade II*, CA
CONDITION:	Fair
OCCUPANCY:	Vacant/not in use
PRIORITY CATEGORY:	D (D)
OWNER TYPE:	Commercial company
LIST ENTRY NUMBER:	1358835

Fine house built circa 1715 as part of a symmetrical pair. Planning Permission and Listed Building Consent have been granted for the refurbishment and re-use of the building as part of Tottenham Hotspur Football Club's wider redevelopment proposals. Work has not yet started.

Contact: Elizabeth Whitbourn 07889 808145

PRIORITY CATEGORIES

A Immediate risk of further rapid deterioration or loss of fabric; no solution agreed.
B Immediate risk of further rapid deterioration or loss of fabric; solution agreed but not yet implemented.
C Slow decay; no solution agreed.
D Slow decay; solution agreed but not yet implemented.
E Under repair or in fair to good repair, but no user identified; or under threat of vacancy with no obvious new user (applicable only to buildings capable of beneficial use).
F Repair scheme in progress and (where applicable) end use or user identified; or functionally redundant buildings with new use agreed but not yet implemented.

NOTE
Last year's priority category is shown in brackets (otherwise, New Entry is noted).

ABBREVIATIONS

CA	Conservation Area
LB	Listed Building
LPA	Local Planning Authority
NP	National Park
RPG	Registered Park and Garden
SM	Scheduled Monument
UA	Unitary Authority
WHS	World Heritage Site

1.2 Analysing heritage at risk

Finding information per Heritage at risk site

	Borough	Amount of Heritage sites at risk	*Newly calculated amount*
2	Tower Hamlets	38	*38*
3	Southwark	42	*37*
4	Hillingdon	40	*34*
5	Camden	42	*33*
6	Hackney	34	*33*
7	Islington	39	*32*
8	Greenwich	29	*28*
9	Westminster	24	*24*
10	Haringey	23	*23*
11	Hounslow	31	*21*
12	Lambeth	43	*21*
13	Merton	24	*20*
14	Bromley	29	*19*
15	Enfield	19	*19*
16	Newham	21	*19*
17	Ealing	18	*18*
18	Harrow	21	*17*
19	Waltham Forest	17	*17*
20	Richmond upon Thames	17	*16*
21	Barnet	15	*14*
22	Croydon	15	*14*
23	Kensington & Chelsea	47	*14*
24	Hammersmith & Fullham	15	*12*
25	Wandsworth	16	*12*
26	Lewisham	20	*11*
27	Brent	10	*10*
28	Havering	10	*10*
29	Redbridge	11	*10*
30	Barking & Dagenham	8	*8*
31	City of London	8	*8*
32	Kingston upon Thames	8	*8*
33	Sutton	7	*4*
34	Bexley	3	*3*
35			
36	TOTAL	744	

Overview | Southwark | Camden | Islington | Hackney | Hillingdon | Tower Hamlets | Lambeth | Westminster

	Name	Priority category	Type	Address	Date	Condition	Owner	State	Comment
2	Tomb Of Joseph Westwood,	A	Graveyard	Southern Grove, Tower Hamlets Cemetery	Late 18th c	Very Bad	Local authority	Vacant	Immediate risk of b
3	34, Mount Terrace, Whitechapel	A	Housing	34, Mount Terrace, Whitechapel	1899	Very bad	Local authority	Vacant	
4	Gentlemen's Public Convenience,	A	Urban Furniture	Bow Road, Bromley-By-Bow	1869	Very bad	Commercial cor	Vacant	
5	Former Caird & Rayner Ltd Warehouse,	B	Commercial buil	777-783, Commercial Road	1874	Poor	Religious organ	Vacant	
6	St Pauls Mission Room And Infant Nursery,	C	Building	Wellclose Square	1893	Poor	Local authority		
7	Drinking Fountain	C	City furniture	(On Pavement Outside 31-74 Mile End Road), Mile End Road, Stepney					
8	How Memorial Gateway,	C	Gates	Bromley High Street					
9	Tower Hamlets Cemetery, Bow	C	Graveyard						
10	Wentworth Street, Bethnal Green	C	Enclave	Unknown					
11	2, Wilkes Street	C	Housing	2, Wilkes Street					
12	19, Princelet Street, Spitalfields	C	Housing/religiou	19, Princelet Street, Spitalfields	Early 18th c	Poor	Private	Vacant	
13	London Hospital, Stepney	C	Medical building		1719	Poor	Charity	Partly occupied	
14	Church Of St John On Bethnal Green,	C	Religious buildin	Cambridge Heath Road, Bethnal Green					
15	Church Of The English Martyrs,	C	Religious buildin	Prescott Street, Stepney					
16	Sandy's Row Synagogue,	C	Religious buildin	Sandys Row, Bethnal Green					
17	St Anne's Limehouse Parish Church,	C	Religious buildin	Commercial Road, Stepney					
18	Calvary Charismatic Baptist Church (Former Trinity Methodist C	C	Religious buildin	East India Dock Road, Poplar					
19	New Testament Church Of God (Former Holy Trinity),	C	Religious buildin	Morgan Street, Bethnal Green					
20	Former Bromley Hall School,	C	School	Bromley Hall Road, London					
21	2 Bollards	C	Urban Furniture	(Between Statue Of Gladstone And St Mary's Churchyard Entrance), Bow Road, Bromley-By-Bow					
22	Drinking Fountain Set In Wall Of Former St Mary's Churchyard	C	Urban Furniture	Whitechapel Road	19th C	Poor	Government		
23	Drinking Fountain,	C	Urban Furniture	Stepney Green					
24	Braithwaite Viaduct, Bishopsgate Goods Yard,	C	Viaduct	Wheler Street / Brick Lane	1840	Poor	Utility	-	
25	Whitechapel	C	Enclave	High Street Aldgate					
26	Ragged School Museum	C	Public building	46 and 48, Copperfield Road					
27	113, Redchurch Street, Tower Hamlets	D	Housing	113, Redchurch Street, Tower Hamlets	1735	Very Bad	Private	Vacant	
28	One Lamp Standards	D	Lamp standards	In Front Of The Star Of The East Public House, Commercial Road					
29	Church Of St Mary Stratford Bow,	D	Religious buildin	Bow Road, Poplar					
30	Priory And Hospital Of St Mary Spital,	E	Medical building	Steward Street (f					
31	Front Wall, Gate Piers And Gates At St Clements Hospital,	F	Gates	Bow Road, Bow		Poor	Government		
32	Limehouse District Library,	F	Library	Commercial Road, Limehouse					
33	Royal London Hospital -	F	Medical building	Front Block, Whitechapel Road, Whitechapel					
34	St Clements Hospital,	F	Medical building	Bow Road, Bow					
35	St Saviours Church,	F	Religious buildin	Northumbria Street, Poplar					
36	Accumulator Tower And Chimney,			Mill Place					

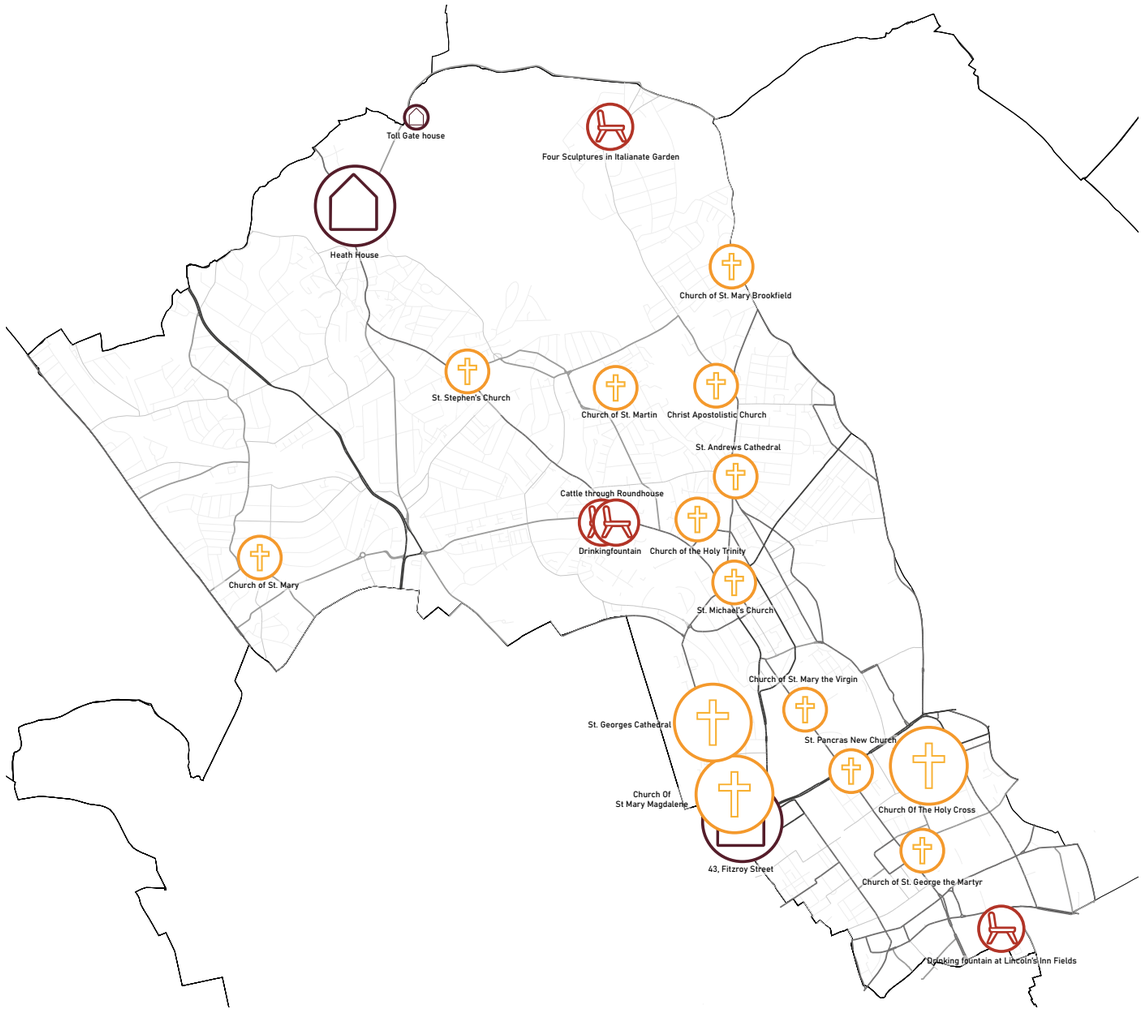
Excel sheet of Heritage at risk.
First sheet shows list per borough, the second sheets investigates the sites, Tower Hamlets is taken as an example . Relevant information from the catalogue is organised.

1.2 Analysing heritage at risk

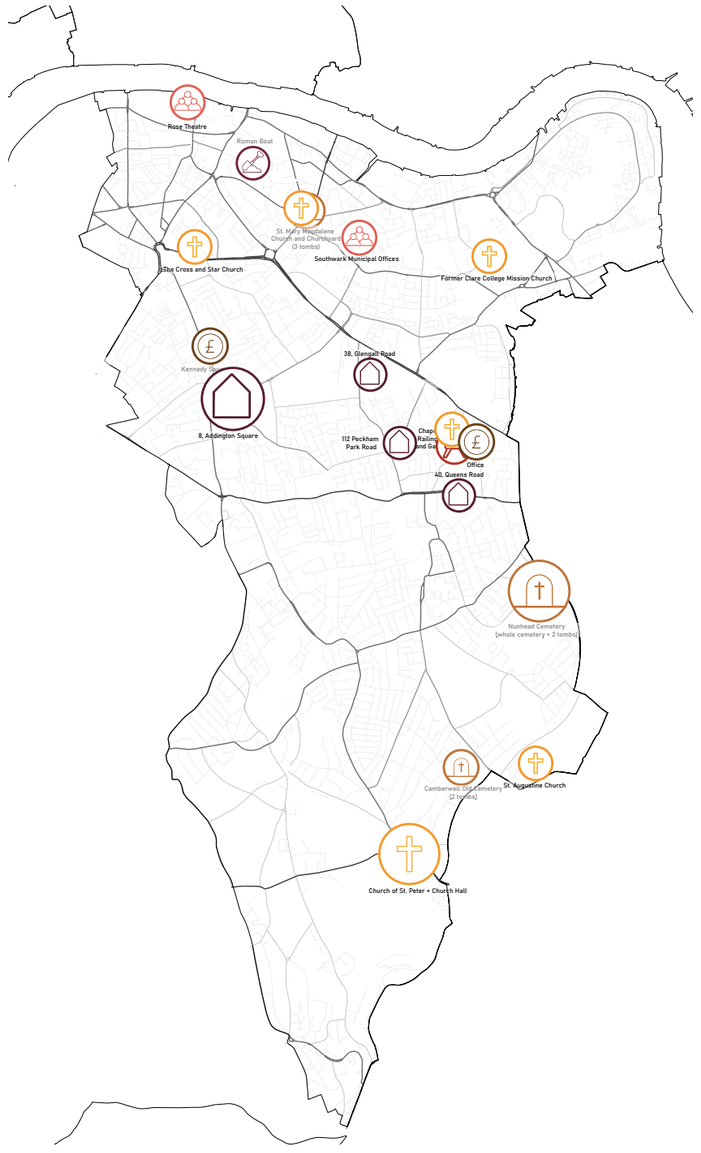
Heritage at risk in Camden and Southwark

Each markation on the map shows a listed object at risk. The size of the circle refers to the urgency of the risk, and therefore the priority to interfere.

Because this specific way of mapping did not bring me a new perspective, I decided from now on to focus on the borough with the most heritage at risk: tower Hamlets



Heritage at risk in Camden
Scale 1:35.000



Heritage at risk in Southwark
Scale 1:35.000

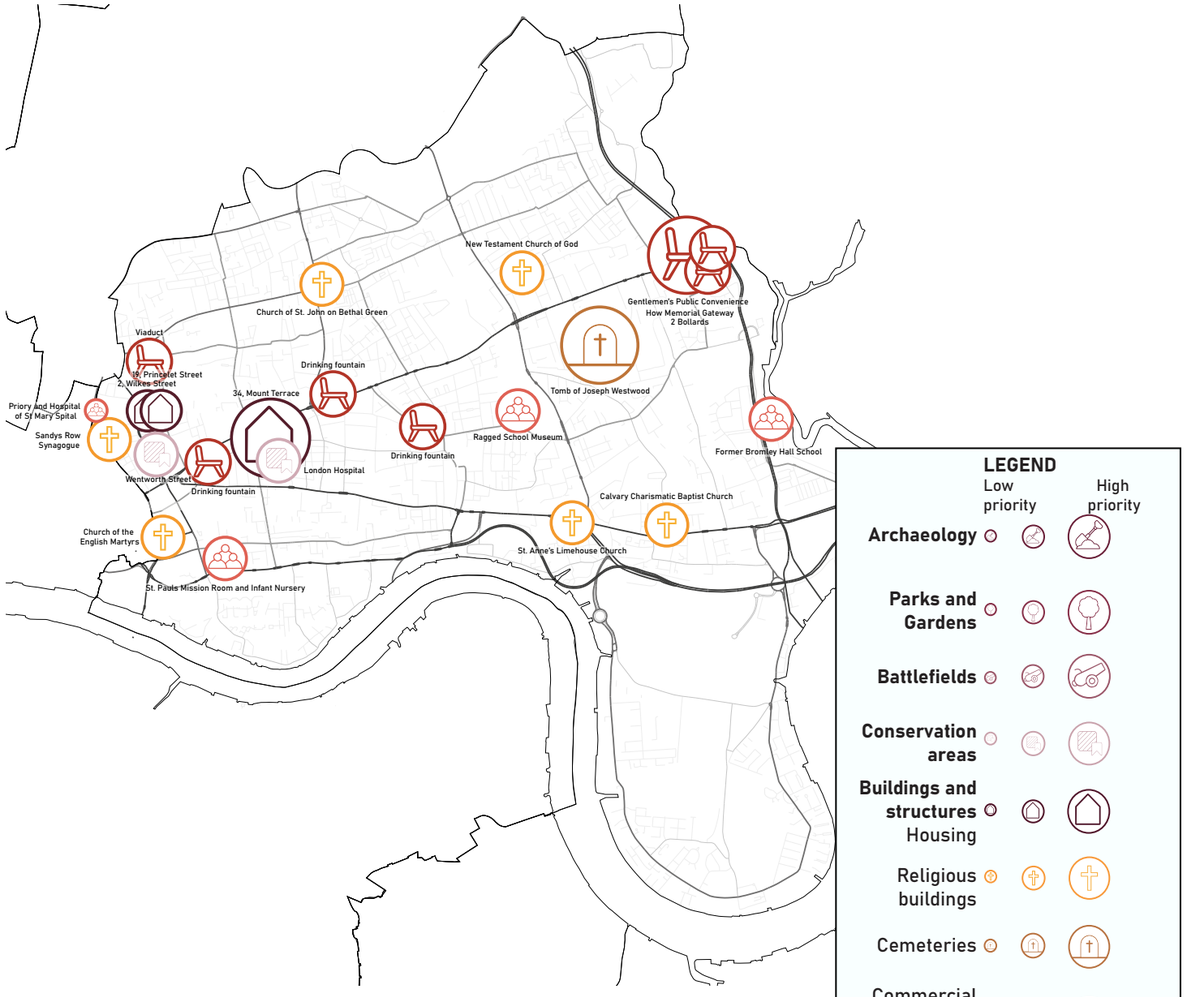
LEGEND

	Low priority	High priority
Archaeology		
Parks and Gardens		
Battlefields		
Conservation areas		
Buildings and structures Housing		
Religious buildings		
Cemeteries		
Commercial buildings		
Public buildings		
Urban furniture		

1.2 Analysing heritage at risk

Heritage at risk in Tower Hamlets

The borough with the most heritage at risk, Tower Hamlets, is shown on this page, mapped in the same way as the boroughs of Camden and Southwark. Then, the projects are looked at more individually in the table on the right. In the end, projects are evaluated on their potential: in what way can this project show how a context-based approach work? The projects with the most potential to show the method are highlighted.



LEGEND

	Low priority	High priority
Archaeology		
Parks and Gardens		
Battlefields		
Conservation areas		
Buildings and structures Housing		
Religious buildings		
Cemeteries		
Commercial buildings		
Public buildings		
Urban furniture		

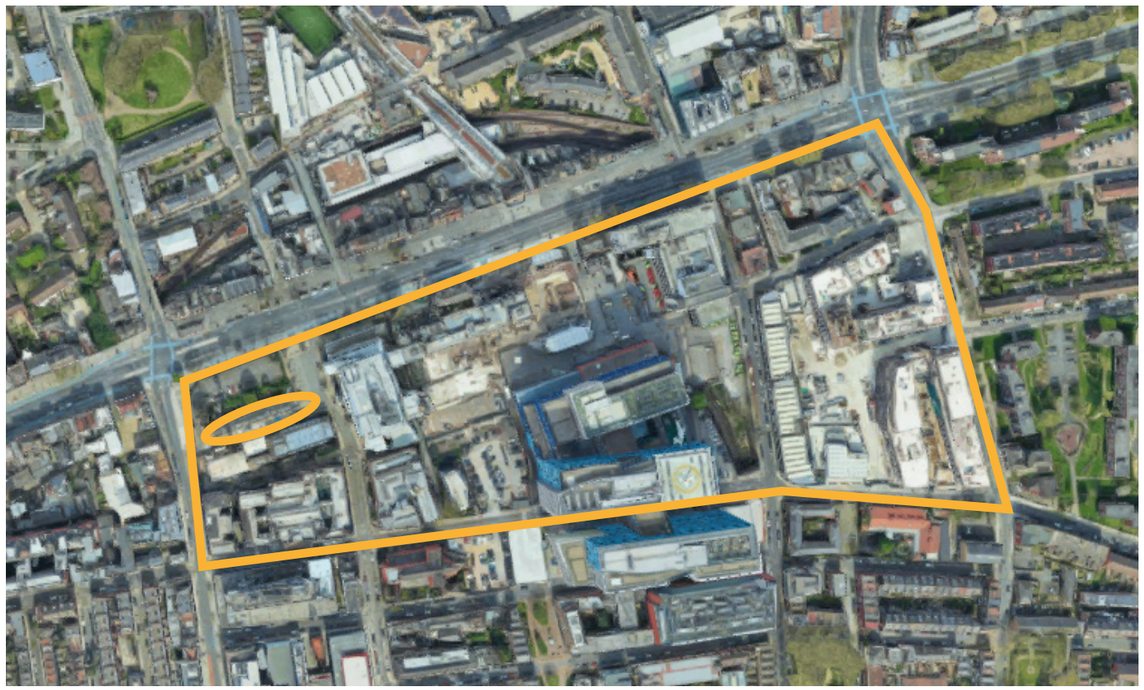
Heritage at risk in Tower Hamlets (in map and in table per project)
Scale 1:35.000

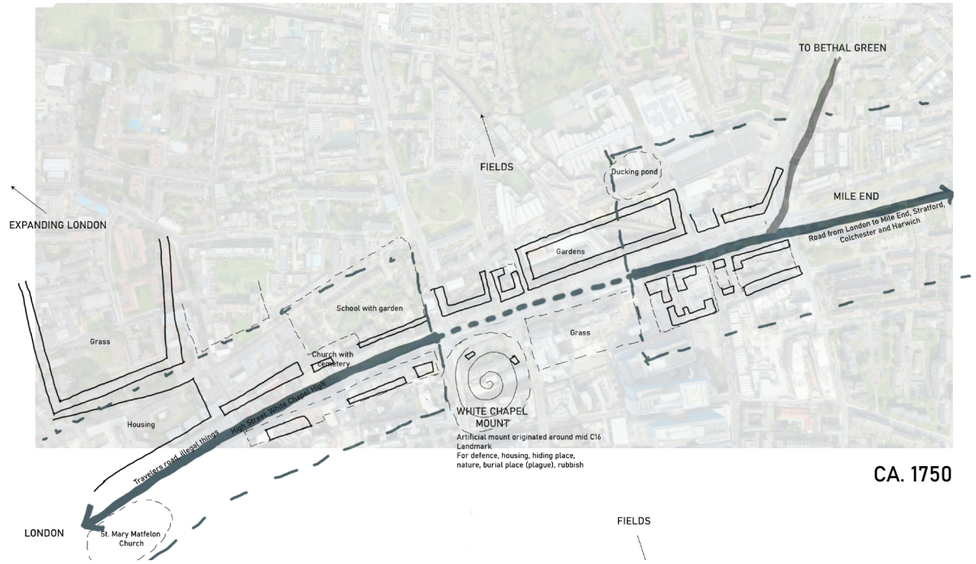
Name project	Image	Priority	Scale*	Owner	Surroundings	Former/current programme	Potential programme	Potential
Tomb Of Joseph Westwood, Tower Hamlets Cemetery		High	S	Local authority	Tomb is placed in cemetry of ca. 1 km2, in the midwest. The cemetery is now used as a park, which makes the direct surroundings green, two roads intersect before tomb.	Tomb, memorial place, natural place	-	Low
34, Mount Terrace, Whitechapel Three storeys terraced house with basement, late C18/early C19, brick end of row of houses.		High	M	Local authority	Part of two rows of 17 houses (only one realized), originally constructed for City Corporation. Next to London Hospital (also at risk), forms enclave.	Former: Housing Current: Vacant	Housing, health supporting function, part of enclave renovation, commercial/public building, museum/education (small)	High
Gentlemen's Public Convenience Underground gentlemen's public convenience, opened in 1899, constructed by Board of Works. Entrance around statue of WE Gladstone. Marble urinals.		High	M	Local authority	In between two large roads, in front of church + cemetery in busy urban fabric. Churches, housing around	Former: public convenience Current: unused	Underground function. Commercial building, nightclub, public restroom	Medium
St. Pauls Mission Room and Infant Nursery Gothic style structure, 1874, large open room		Medium	L	Religious organisation	Part of a school complex in an old church + other school building next door. Surroundings are green, some roads and some high residential towers and blocks.	Former: religious building + nursery Current: unused, storage	Educational function, sports function, commercial use, public use, housing, religious use	High
Drinking fountain on Mile End Road C19 drinking fountain on plinth, to commemorate drinking water facilities, bowl on top has been removed		Medium	XS	Government/agency	On pavement next cyclist lane on the busy Miles End Road with nearby bus stop. In front of large (social) housing block, which is placed in fabric with rowhouses and other blocks.	Former: drinking fountain Current: out of use	Drinking water fountain, sports?	Low
How Memorial Gateway Gothic arch from 1893, entrance to former churchyard.		Medium	S	Local authority	Entrance to former churchyard, on medium road, with housing around. Next to yard is school, and A12. Parking spaces in front	Gate	Gate, entrance	Low
Tower Hamlets Cemetery		Medium	XL	Local Authority	Cemetry of ca. 1 km2,. The cemetery is surrounded by a fence and wall and around that, by urban fabric. The cemetery can be used as a park.	Memorial place, park	Memorial place, park	Low
Wentworth Street, Bethal Green Conservation area street with shops and houses on top.		Medium	XL	Various	Three stories high, in a commercial area, street with pavement next to it. Street is curved	Commercial street	Commercial buildings, public buildings, houses, community function	Medium
2, Wilkes Street Early C18 terraced house, with basement and attic		Medium	M	Private	Residential street with comparable housing blocks, in row. Next to church, with gardens inside block, parking spaces on street, close by large commercial street	Former: housing Current: vacant	Housing, commercial building, public building, religious programme, health function (sports?). Large window of opportunaty	High
19, Princelet Street, Spitalfields Terraced house (1719) with added synagogue (1869).		Medium	M	Charity	Close by Wilkes street house, same neighborhood. Instead of garden, a synagogue is built and now the two buildings function as one	Former: housing + religious building Current: partly in use	Housing, commercial building, public building, religious programme, health function (sports?). In combi with Wilkes Street?	High
London Hospital, Stepney Complete hospital area. Block of five buildings, bad state.		Medium	XL	Local authority	Complex of hospital buildings next to enlarged health area. next to 34, Mount terrace. Area is blocked off with fence from street	Former: hospital Current: vacant	Housing, commercial building, public building, religious programme, health function (sports?). In combi with Mount terrace, complete enclave	High
Church of St John On Bethnal Green Parish church of 1824 by Sir John Soane (heavily restored in C19)		Medium	L	Religious organisation	Next to large road crossing, large gardens on both sides, church itself has fence around it. The street is in urbanised area (houses of three stories)	Church (religious function), still useful	Church (religious function), when this function is not needed any more: housing, commercial building, public building, health function	Low
Church of the English Martyrs Town church by Pugin from 1875, had bomb damage in 1940		Medium	L	Religious organisation	Faces street on the front, new buildings around it, opposite a hotel, others are housing and some commercial. The back faces a railway. Close to road-crossing	Church (religious function), in use	Church (religious function), when this function is not needed any more: housing, commercial building, public building, health function	Low
Sandy's Row Synagogue Former Huguenot chapel, already was repaired in 2011		Medium	L	Religious organisation	Part of dense urban fabric, is on very narrow road in the row of houses, only pavement and 1 way road (looks like pedestrian area). Shops and houses around it	Synagogue (religious function), in use	Synagogue (religious function), when this function is not needed any more: housing, commercial building, public building, health function	Low
St. Anne's Limehouse Parish church English baroque style, 1730 finished, had a fire in 1851 -> interior restored		Medium	L	Religious organisation	Freestanding church in green field/land/cemetery. On small street facing housing, area is surrounded with wall/fence. On the borders of churchyard -> houses	Church (religious function), in use	Church (religious function), when this function is not needed any more: housing, commercial building, public building, health function	Low
Calvary Charismatic Baptist Church Ensemble of church, hall and offices around a courtyard, 1950s, part of architectural exhibition		Medium	L	Religious organisation	Complex next to a large road, park behind the complex. The church is orientated to the courtyard that is opened to the street, two other churches on other side of the road	Church (religious function), in use	Church (religious function), when this function is not needed any more: housing, commercial building, public building, health function	Low
New testament church of God 1836-1839, a lot of repairs are needed		Medium	L	Religious organisation	Surrounded by green churchyard, thin fence in front. On average street, a street ends at the entrance of church, surrounded by housing blocks	Church (religious function), in use	Church (religious function), when this function is not needed any more: housing, commercial building, public building, health function	Low
Former Bromley Hall School Former school for physically disabled children, 1967-8 and extension from later. Industrial vernacular language		Medium	L	Local authority	On side street of extremely busy road. Industrial sheds behind, houses to the south. The complex is surrounded with brick wall	Former: school Current: vacant (because of changes in educational requirements	School (also for special needs?), public building, commercial building, recreation, hotel, sports	High
2 bollards Used to form a group with (furniture at) St. Mary's church, a third one is missing but will be reinstated		Medium	XS	Government or agency	Bollards stand on 'island' between streets at the entrance of public convenience, statue and church on the other side of the road. See Gentlemen's Public Convenience	Bollard	Bollard	Low
Drinking fountain St. Mary's Churchyard Norman style arch, has no water supply now, part of project with other water fountains		Medium	XS	Local authority	Drinking fountain in wall/fence of former churchyard, now park. On the corner of a busy road, housing and commercial buildings surround the little place	Water fountain	Water fountain	Low
Drinking fountain Stepney Green Granite fountain, not functioning, part of project with other water fountains		Medium	XS	Local authority	On little square with seating area, paved, where several roads come together in residential area and park to the other side. Parking spaces in next to road.	Water fountain	Water fountain	Low
Braithwaite Viaduct Early railway viaduct of 1840, vaulted goods yard also part of it		Medium	XL	Utility	Divides space for railway and has green on top. In busy road area, with metro station next to it. Viaduct itself is a dark passage for pedestrians/cyclists	Viaduct, green area, mobility	Park, community area, improvement of mobility, commercial function, area between openings are potential	High
Priory and Hospital of St. Mary Spital Scheduled monument of part of the hospital		Medium	L	Commercial company, multiple owners	Building in more quite sideroad of large road. Part of row of buildings.	Unknown, not sure which exact building it is	School, commercial building, public building, museum, hotel, health building, sports	Low
Ragged School Museum Brick building, first school, now museum, 1877, used to be warehouse		Medium	L	Charity	Building in street in green urban fabric. The back faces a river, in a row of other buildings. Sports facilities are opposite the building	Former: warehouse, school Current: partly museum, partly empty due to bad condition	School, commercial building, public building, museum, hotel, health building, sports	Medium

1.3 Typomorphological analysis of four sites

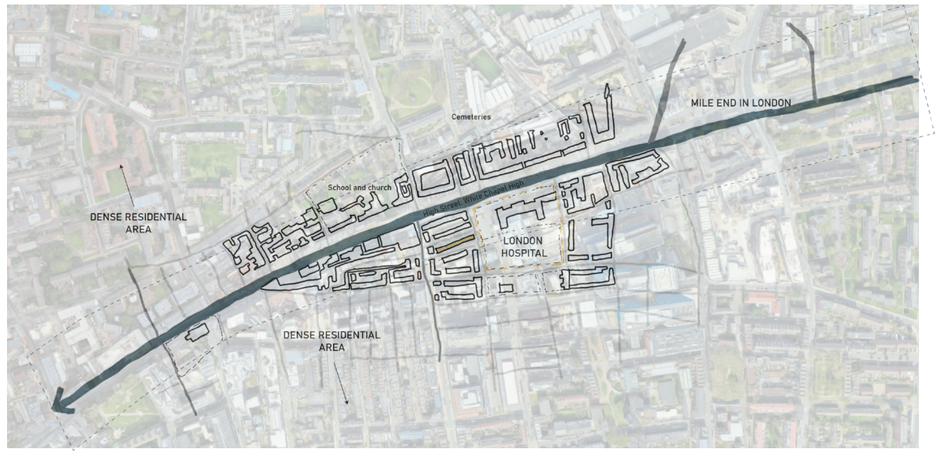
Location 1: the Royal London Hospital

After analysing the projects in the table on the previous page, four projects with the most potential were choosen to further investigate with typomorphological analysis. First the sites are introduced with aerial pictures with the at risk elements highlighted.

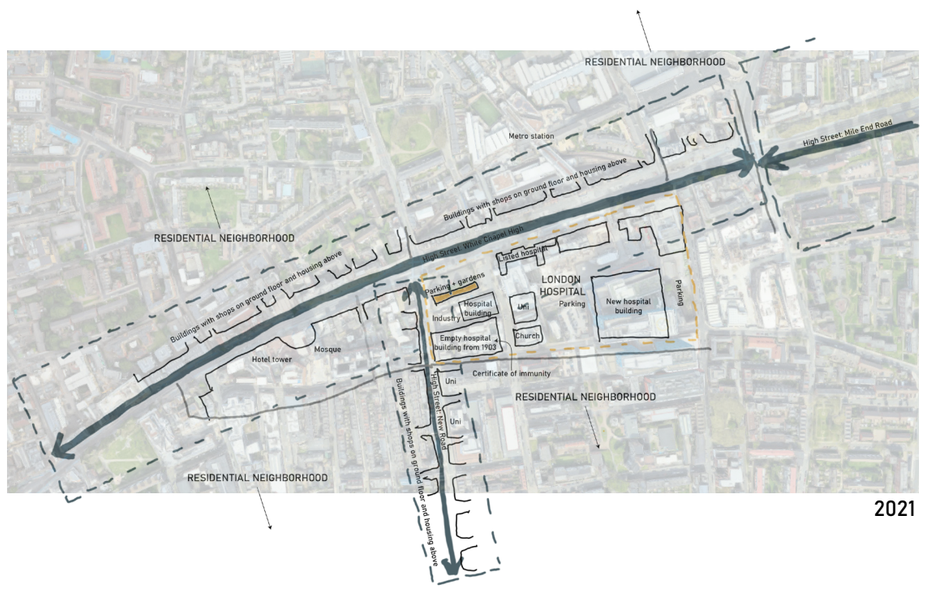




CA. 1750



CA. 1830



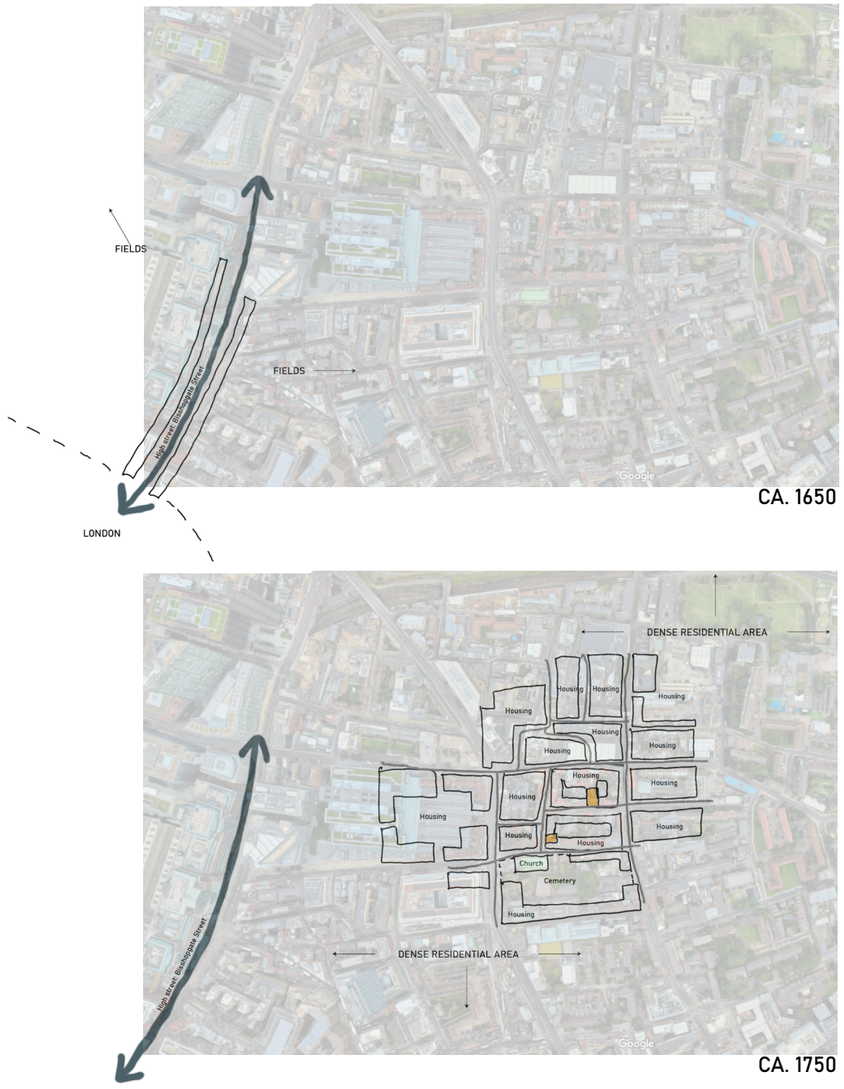
2021

1.3 Typomorphological analysis of four sites

Location 2: Housing in Spitalfield

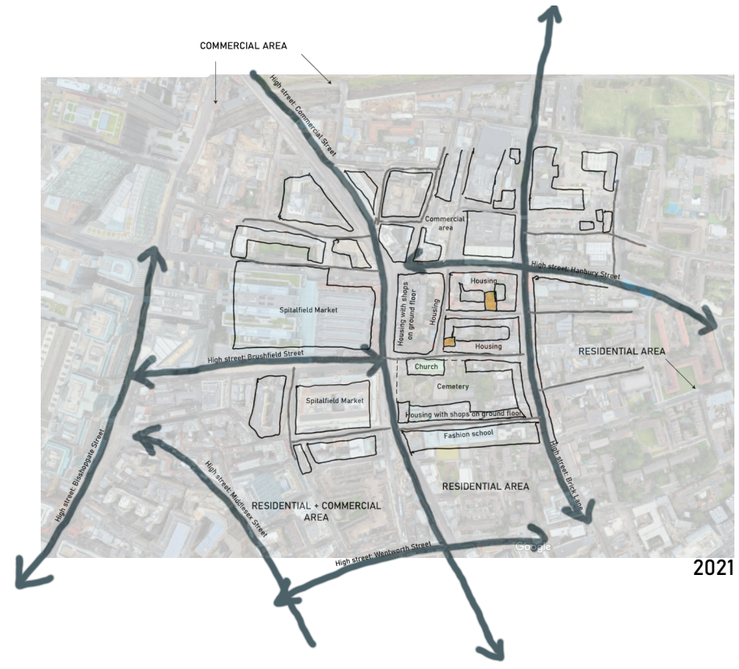
2, Wilkesstreet, spitalfield

19, Princelet street, Spitalfield



CA. 1650

CA. 1750

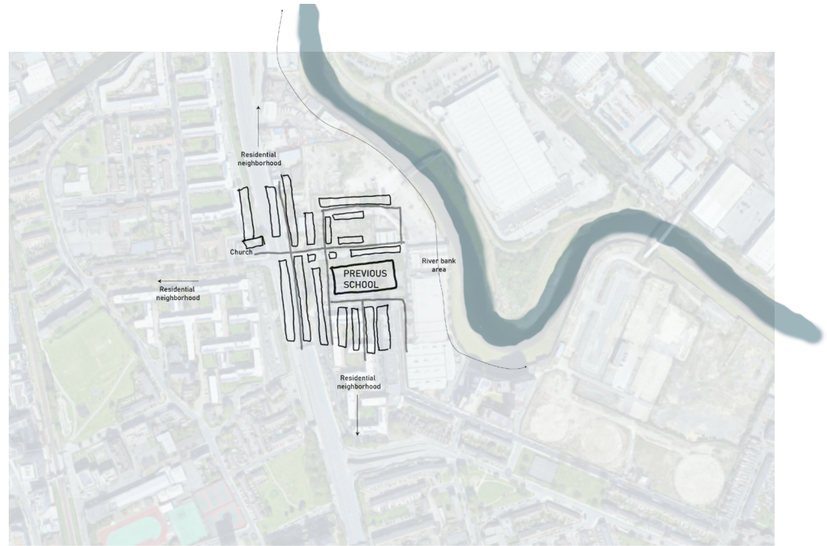


2021

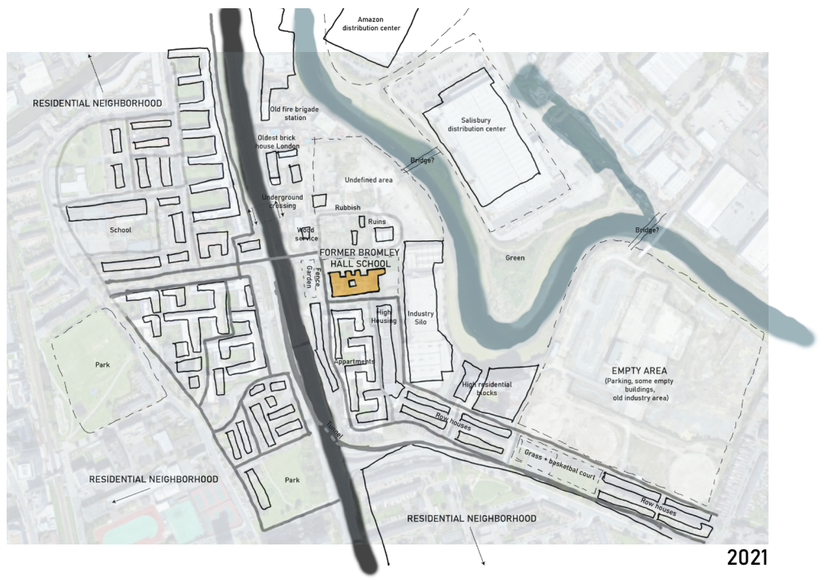
1.3 Typomorphological analysis of four sites

Location 3: Former Bromley Hall School

CA. 1800



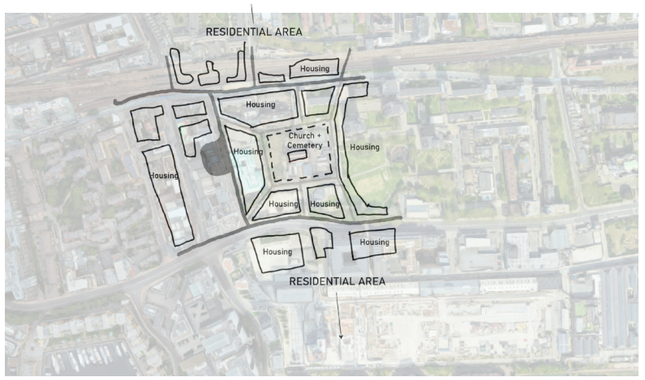
CA. 1900



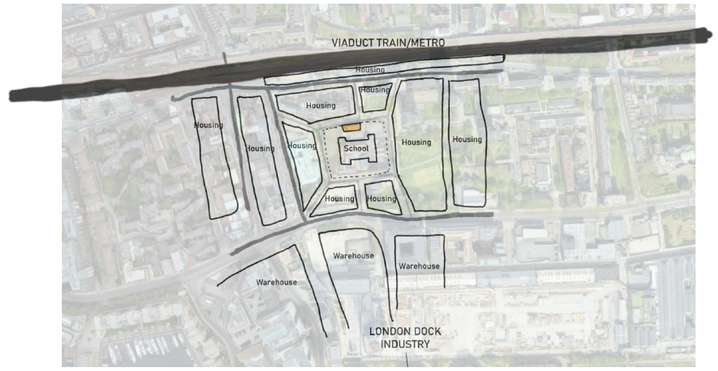
2021

1.3 Typomorphological analysis of four sites

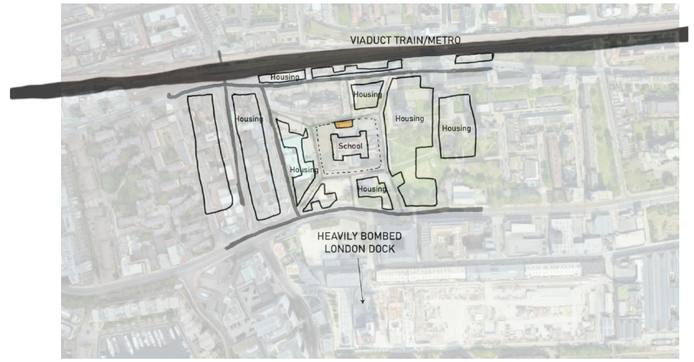
Location 4: St. Pauls Mission Room and Infant Nursery



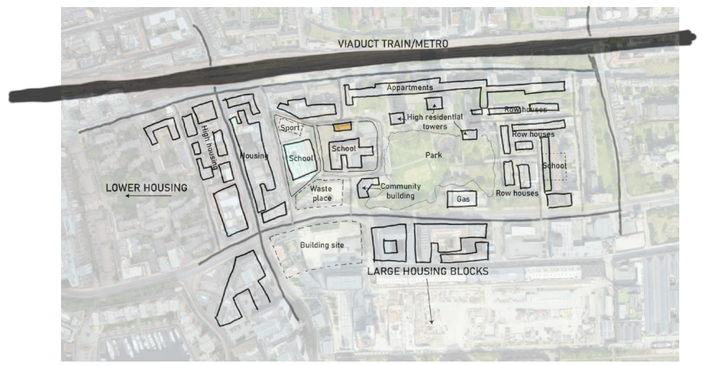
CA. 1750



CA. 1880



CA. 1950



2021

CHAPTER 2
PROJECT DEFINITION

Visiting London	**2.1**
Comparing the four possible sites	**2.2**
Analysing the Royal London Hospital Site	**2.3**
Historic maps	2.3.1
Context matrix: changing context over time	2.3.2
Analysing the fundamental healthcare in context	2.3.3
Strategy for the Royal London Hospital	**2.4**
First sketches	2.4.1
Area plans	2.4.2

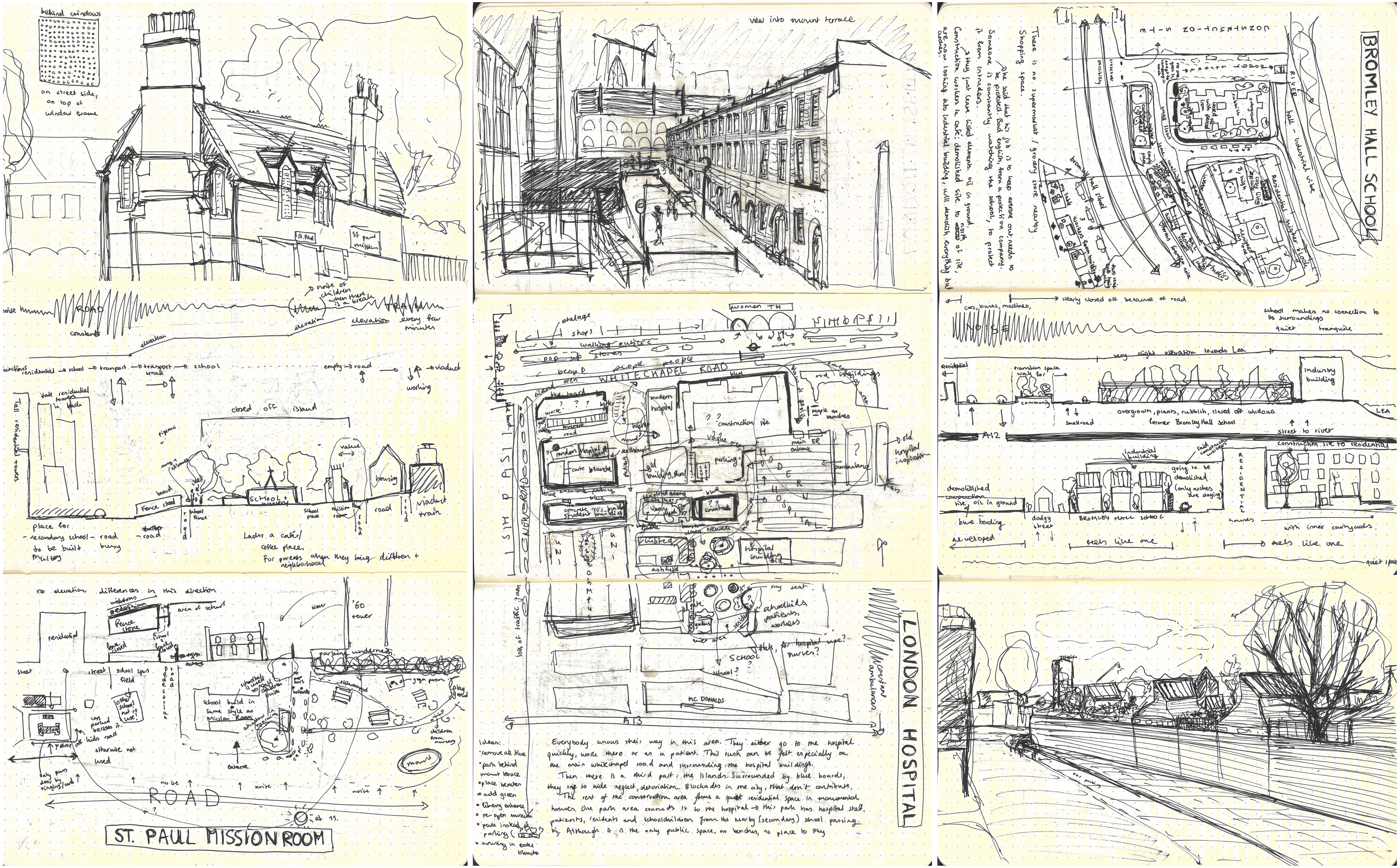
2.1 Visiting London

Routes through London

Before my trip to London I prepared to visit the four previously discussed location in Tower Hamlets. On Monday I quickly visited three out of four sites (St. Pauls Mission Room, Royal London Hospital, housing in Spitalfield). The next day, I visited them again, but this time a little longer and with a more elaborate route. Wednesday I visited the fourth location: the former Bromley Hall School. The routes that I walked are indicated in the plans below.

2.1 Visiting London

Handsketches in London with annotations



2.1 Visiting London

Photographs

During my trip to London I took as many photographs as possible of the four locations I visited, as well as the routes in between them. The pictures on this page show an overview of the visited places.

Housing Spitalfield

St. Pauls Mission Room and
Infant Nursery

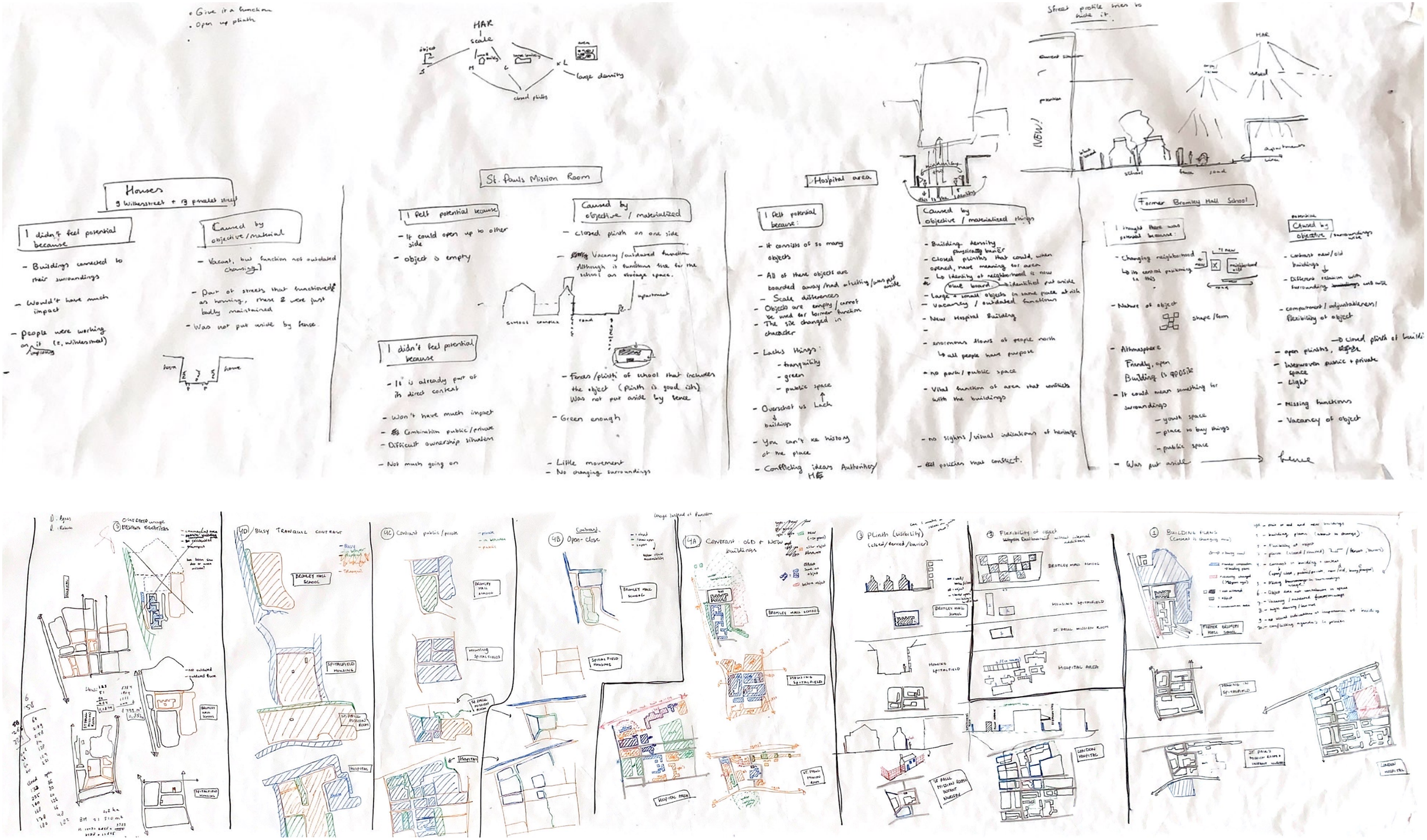
Former Bromley Hall School

Royal London Hospital

2.2 Comparing the four possible sites

First evaluations after the trip to London

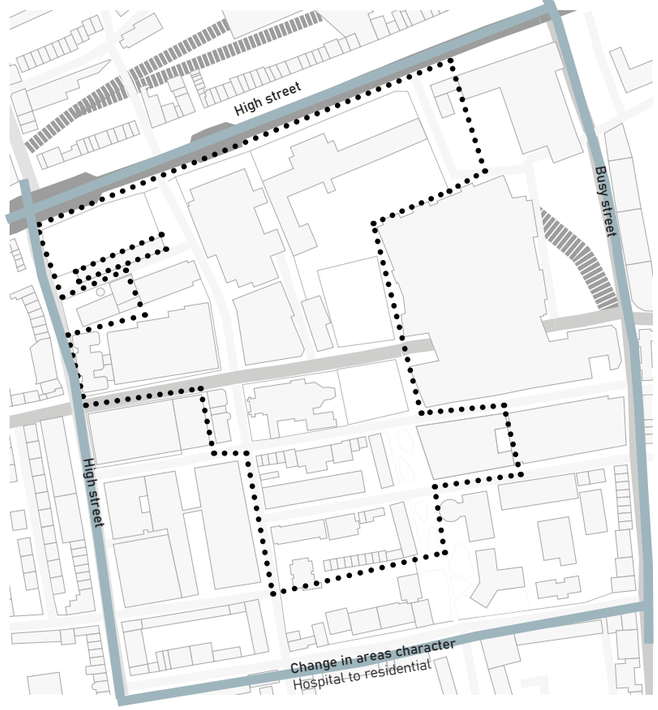
These sketches and writings show the first thoughts after my trip to London. They all serve the goal to determine which location I should futher persue, as well as to structure all the information I found on the sites.



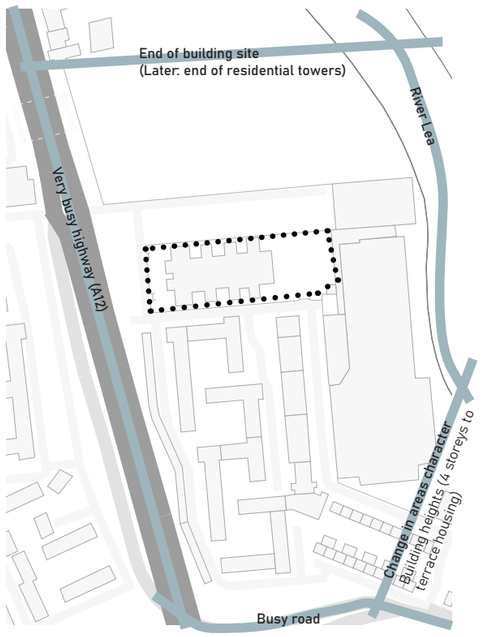
2.2 Comparing the four possible sites

Analysis into boundaries and relations

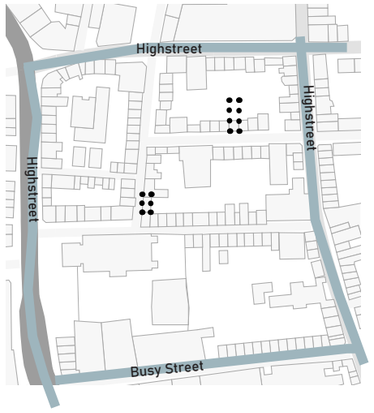
The result of the analysis is shown in these drawings that compare boundaries, relations and other outstanding elements from my visit to London for each site.



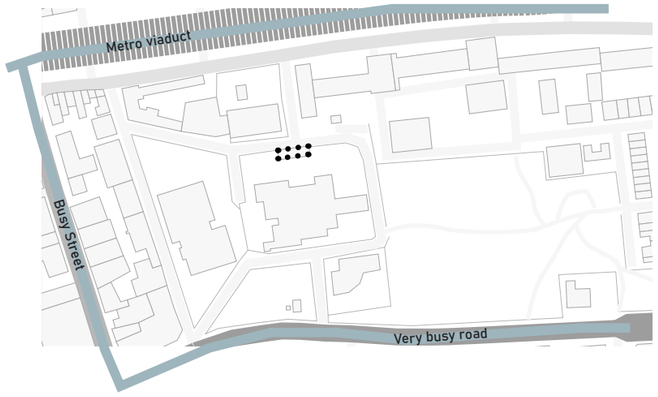
Royal London Hospital



Former Bromley Hall School



Housing Spitalfield

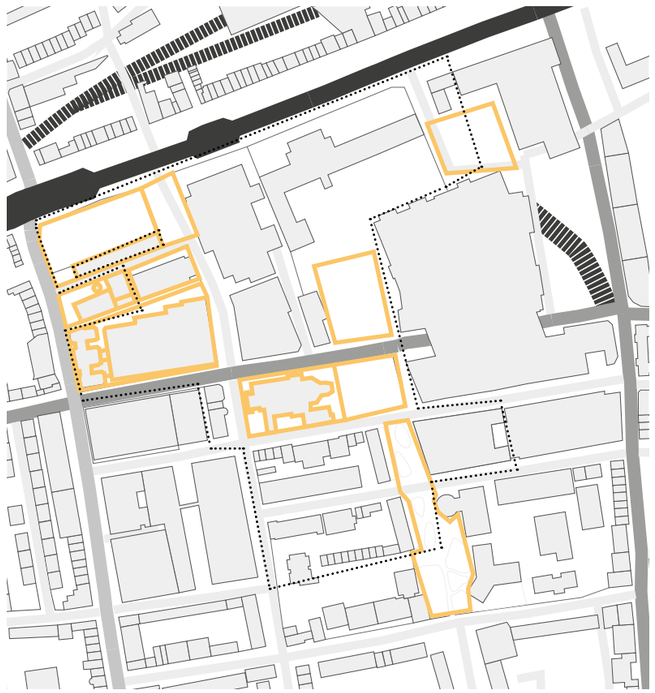


St. Pauls Mission Room and Infant Nursery

Definition of boundaries of each site: where does the relevant context stop?

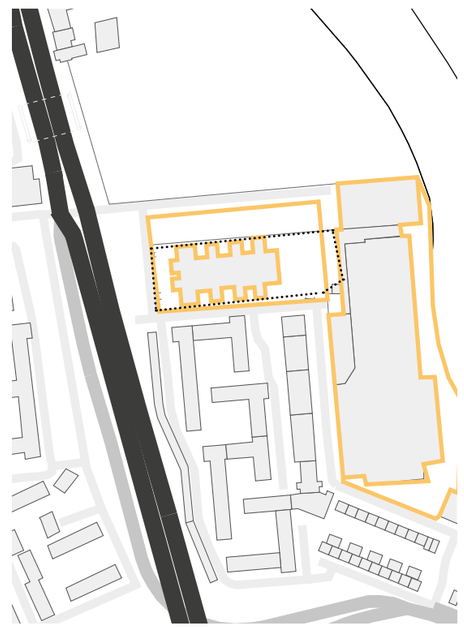
Listed object

Boundary of context



Royal London Hospital

2,3 ha outdated use



Former Bromley Hall School

2,2 ha outdated use

Housing Spitalfield

0,03 ha outdated use

St. Pauls Mission Room and Infant Nursery

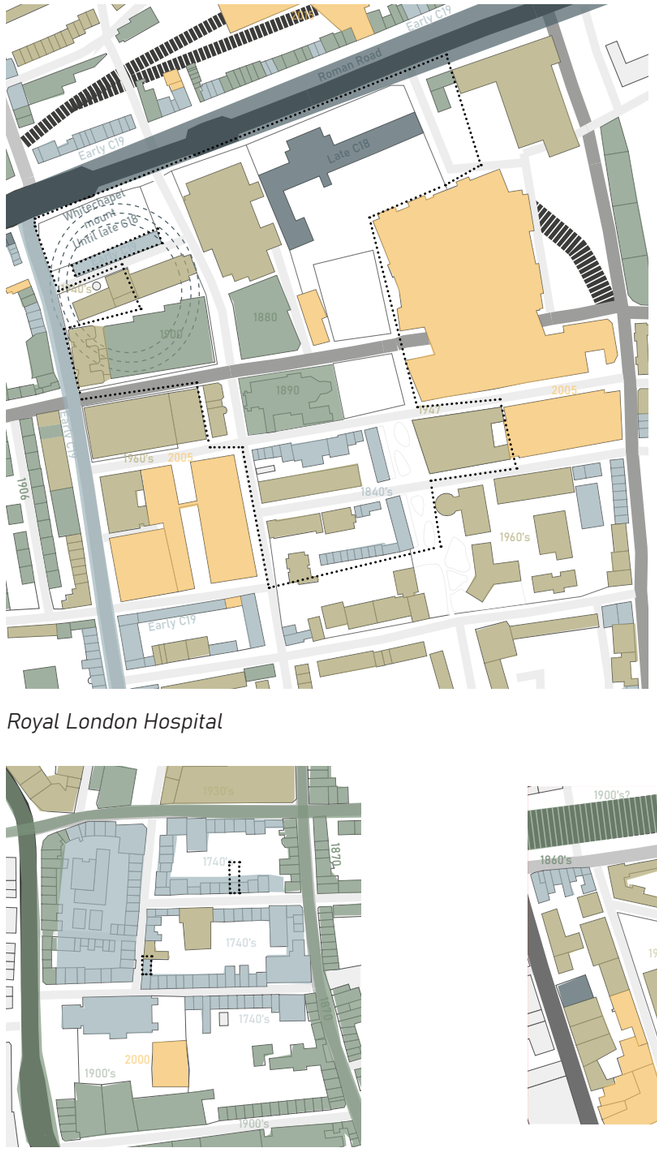
0,85 ha outdated use

Outdated use: which elements in the context of the object are out of use

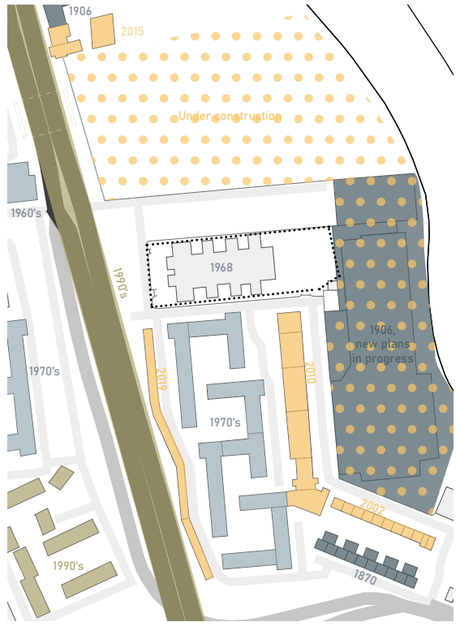
Object with outdated use

2.2 Comparing the four possible sites

Analysis into boundaries and relations



Royal London Hospital



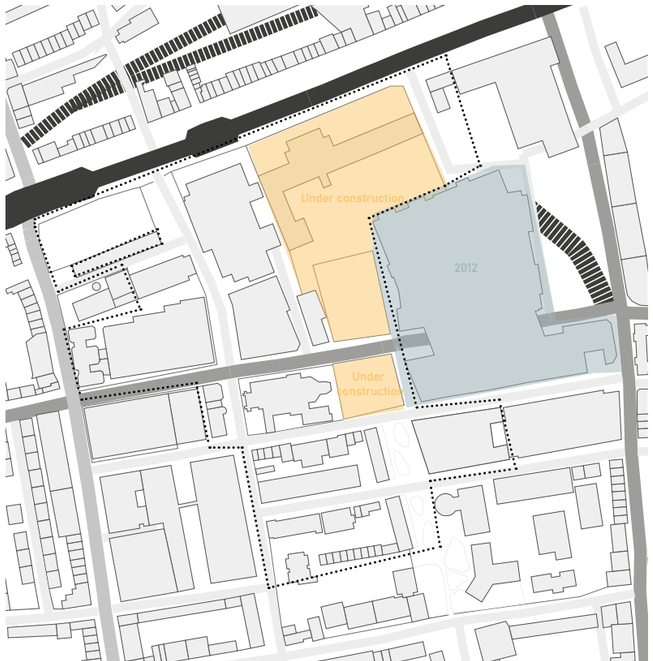
Former Bromley Hall School

Housing Spitalfield

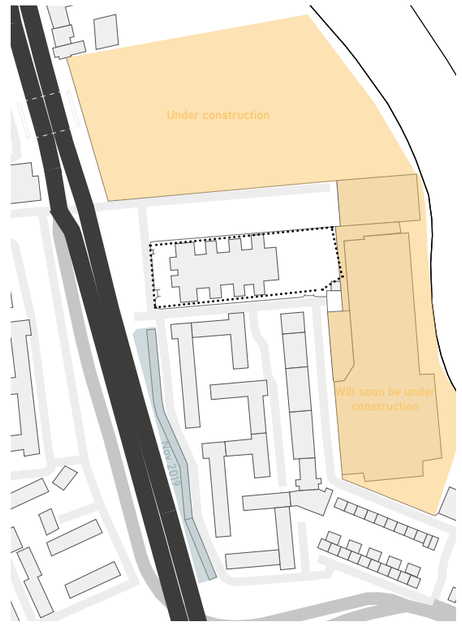
St. Pauls Mission Room and Infant Nursery

Changed palimpsest

- New object (<20 years)
- Realized long after object
- Realized shortly after object
- Realized at the same time as object
- Realized before object
- Listed object



Royal London Hospital



Former Bromley Hall School

Housing Spitalfield

St. Pauls Mission Room and Infant Nursery

Currently changing palimpsest

- Under construction
- Recently changed (<10 years)
- Listed object

2.2 Comparing the four possible sites

Analysis into boundaries and relations

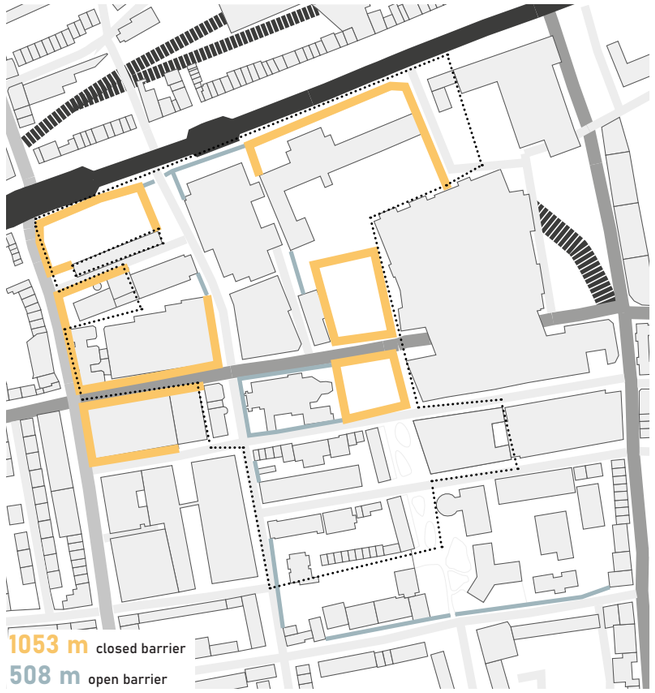
Royal London Hospital

Former Bromley Hall School

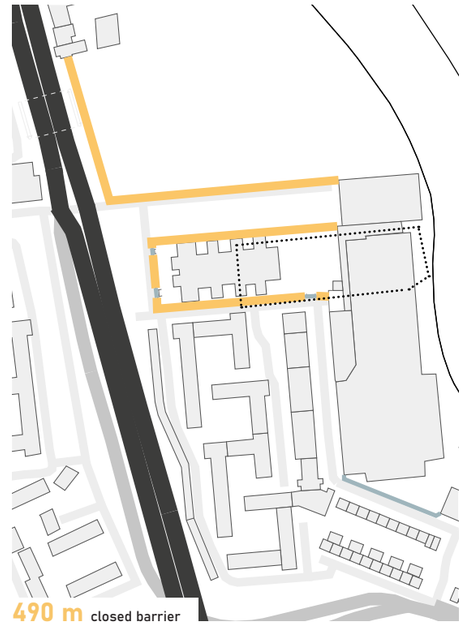
Housing Spitalfield

St. Pauls Mission Room and Infant Nursery

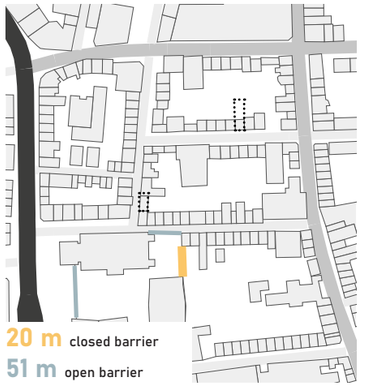
Boundaries (highlighted) between heritage and context



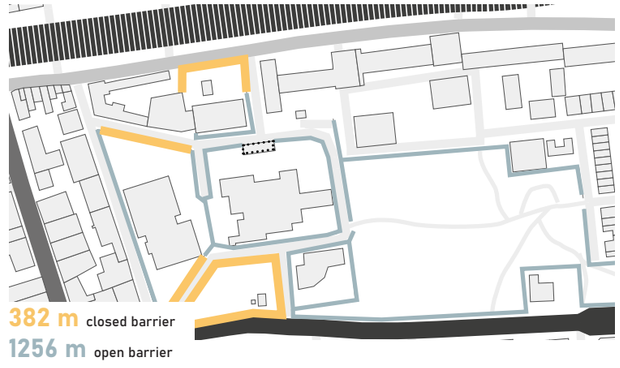
Royal London Hospital



Former Bromley Hall School



Housing Spitalfield



St. Pauls Mission Room and Infant Nursery

Barriers between heritage and context in map

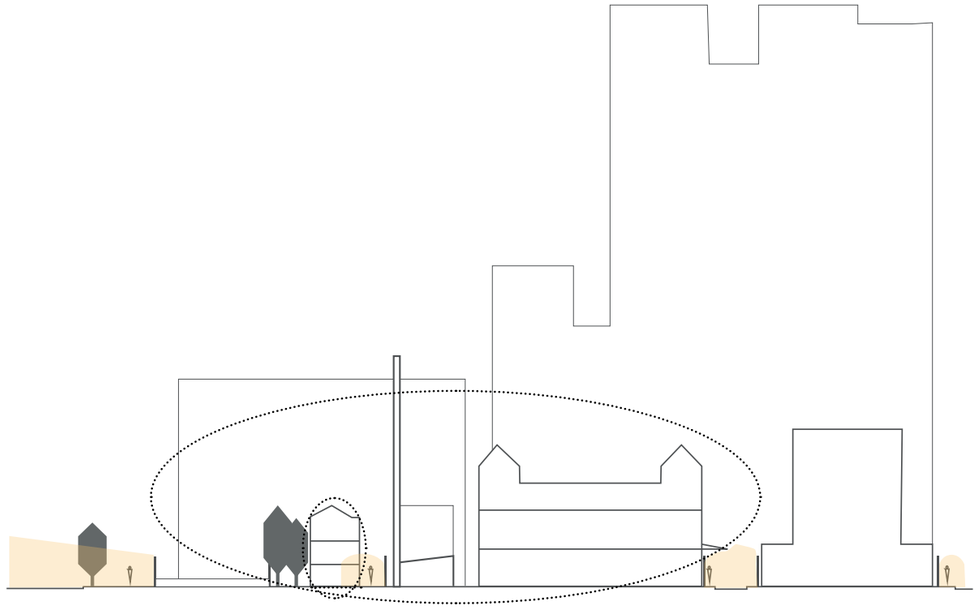
Closed barier/wall

Open barier/fence/see through

Listed object

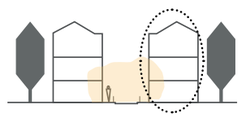
2.2 Comparing the four possible sites

Analysis into boundaries and relations

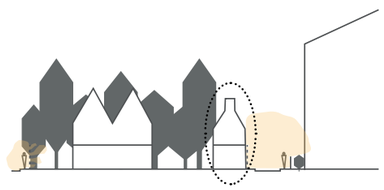


Royal London Hospital

Former Bromley Hall School



Housing Spitalfield



St. Pauls Mission Room and Infant Nursery

Boundaries between heritage and context in section

View

Closed barrier

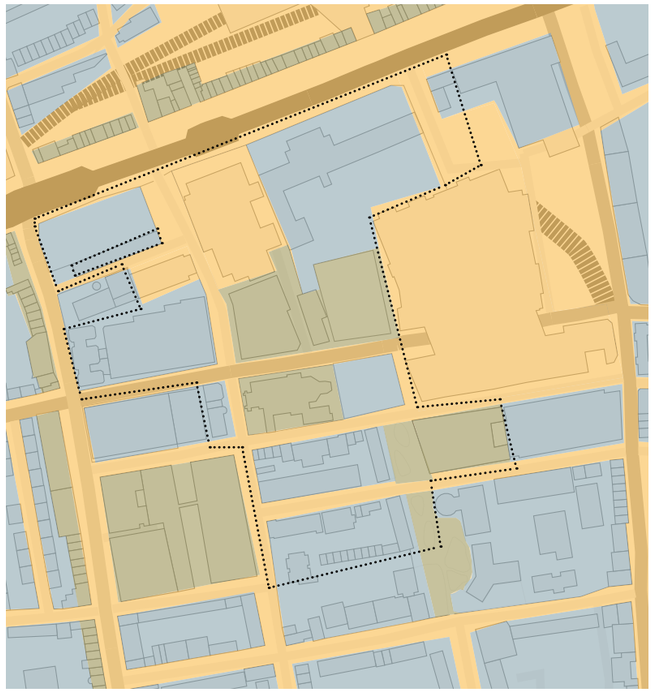
Open barrier

Listed object

2.2 Comparing the four possible sites

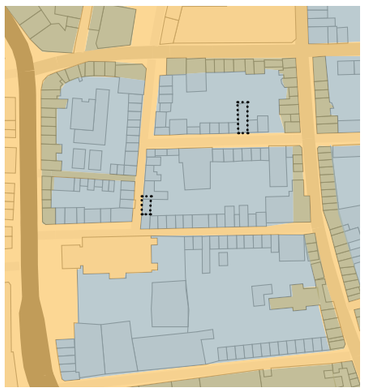
Analysis into boundaries and relations

These two sets of analysis form the final comparisons. As a result of this analysis, the Royal London Hospital site is choosen, because it is standing out in each analysis.



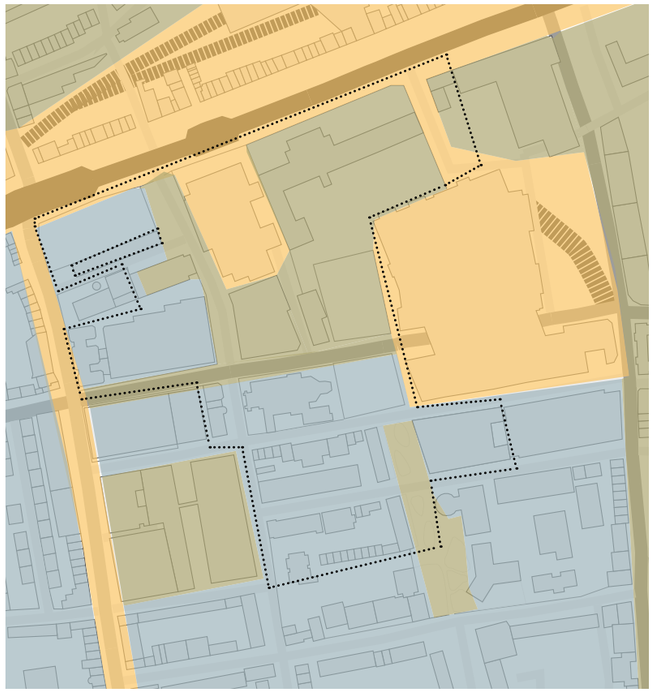
Royal London Hospital

Former Bromley Hall School



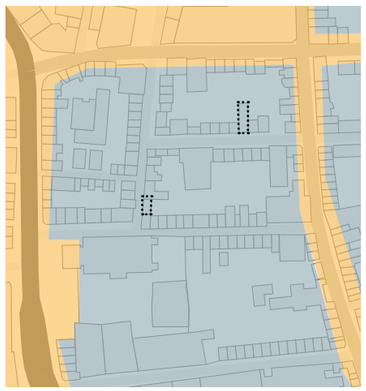
Housing Spitalfield

St. Pauls Mission Room and Infant Nursery



Royal London Hospital

Former Bromley Hall School



Housing Spitalfield

St. Pauls Mission Room and Infant Nursery

Atmospheres: public and private

Public

In between (either ground floor is public, upper floors are private or it is not clear)

Private

Listed object

Atmosphere: busy and tranquil space

Busy

In between

Tranquil

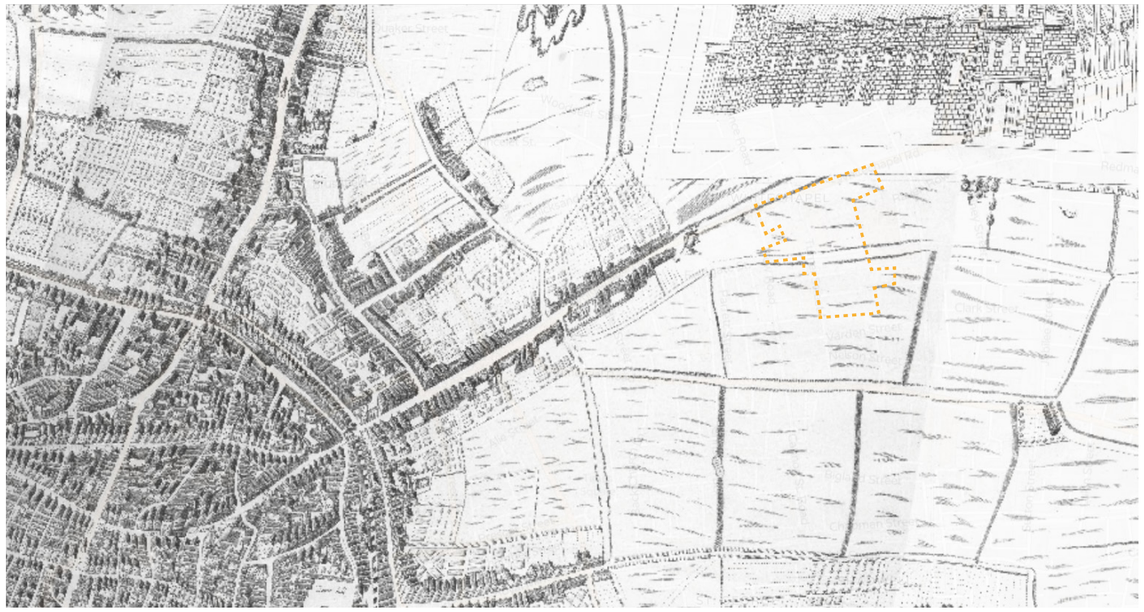
Listed object

2.3 Analysing the Royal London Hospital Site

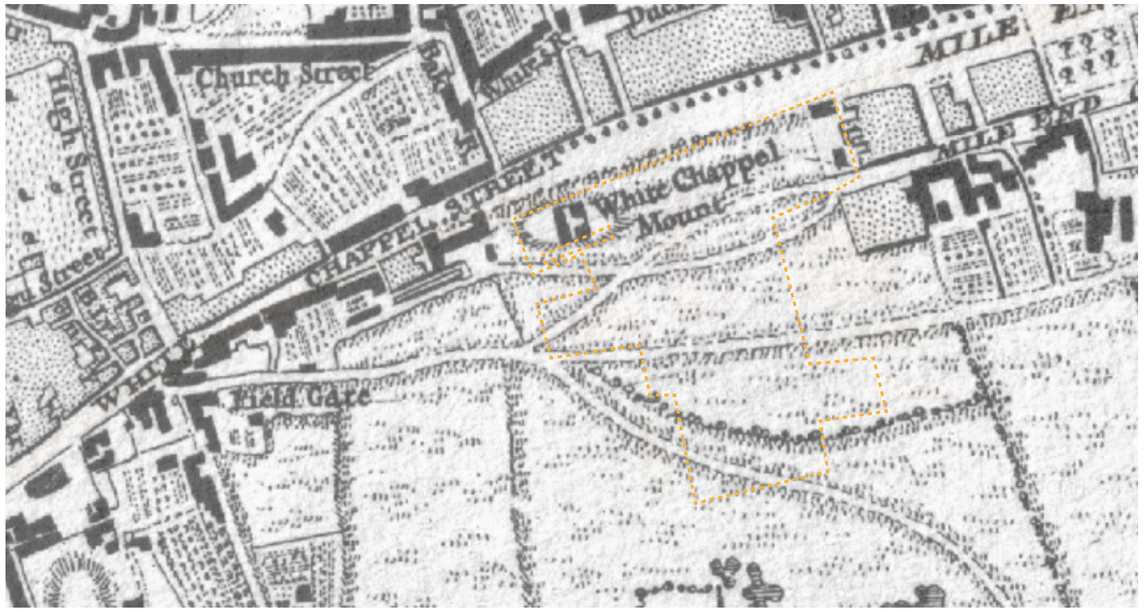
3.1.1 Historic Maps

To understand the Royal London Hospital area better, its history was examined more closely by comparing historic maps. Each map highlights the hospital area and in it becomes clear that the character of the area changed a massively over time. All maps are acquired via layersoflondon.org and Google Earth.

1658
Faithorne & Newcourt



1746
John Rocque

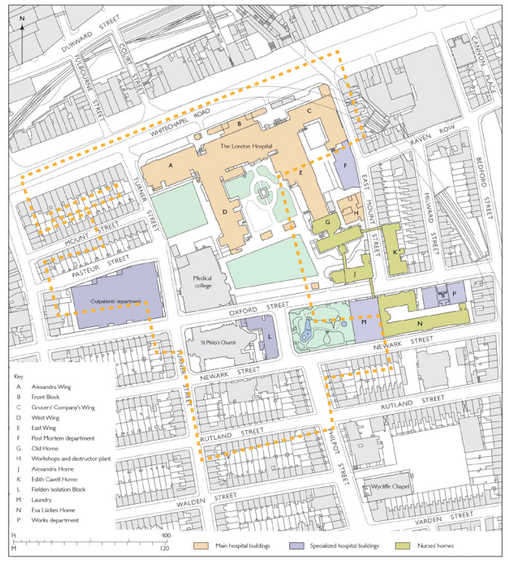


1799
Horwood

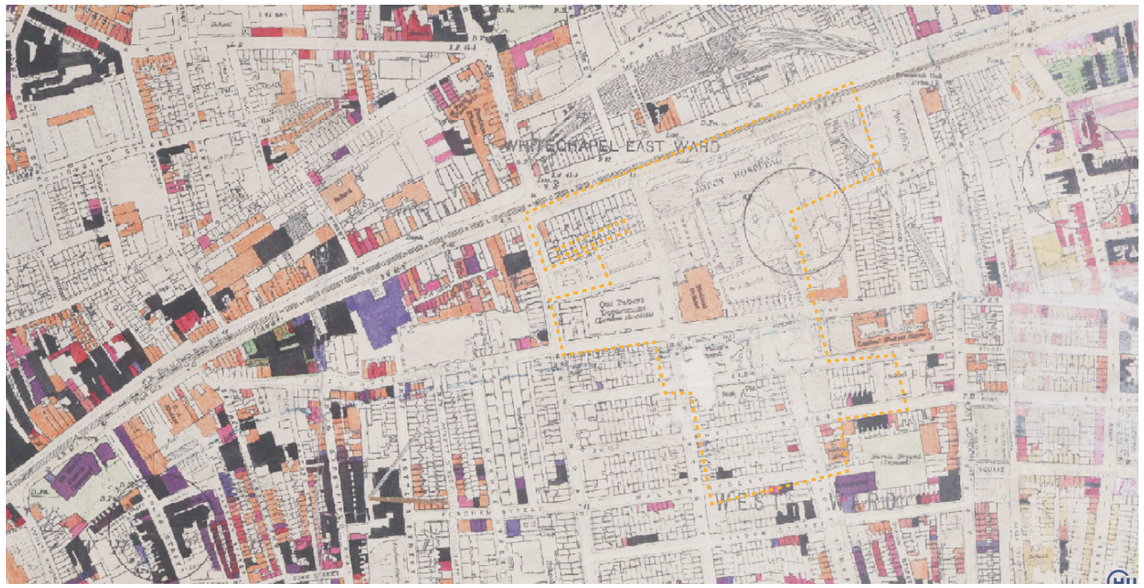
1828
C. & J. Greenwood

1893
OS Maps

1910
The London Hospital



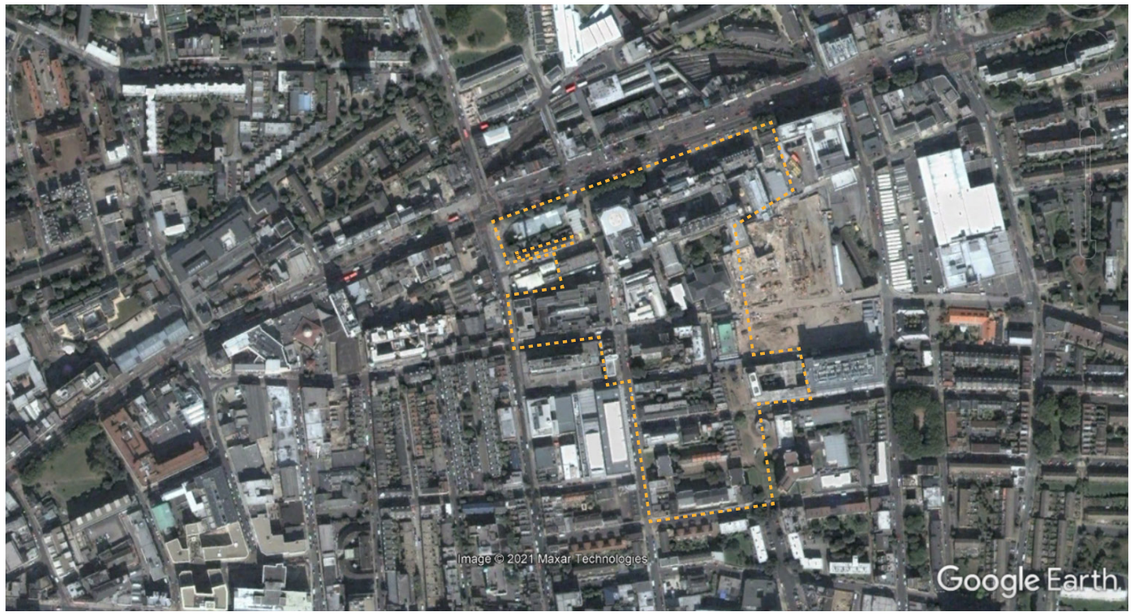
1945
Bombing Map of London



1999
Google Earth

1950
OS Maps

2006
Google Earth



2010
Google Earth

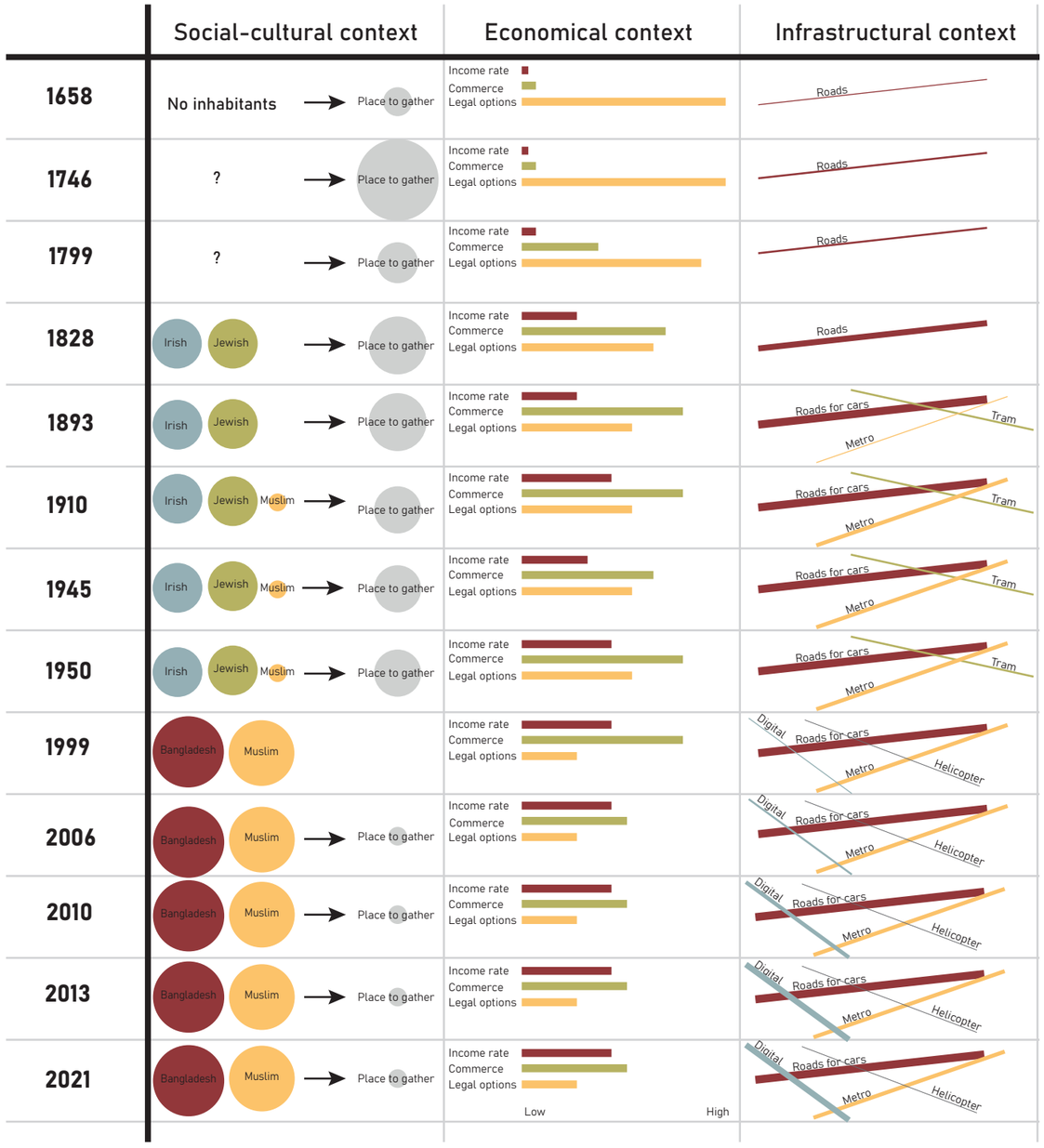
2022
Google Earth

2013
Google Earth

2.3 Analysing the Royal London Hospital Site

2.3.2 Context matrix: changing context over time

To make the changes over time more clear and visible at once, I developed the context matrix, which clearly showed how all different contexts, as defined earlier, changed over time.



2.3 Analysing the Royal London Hospital Site

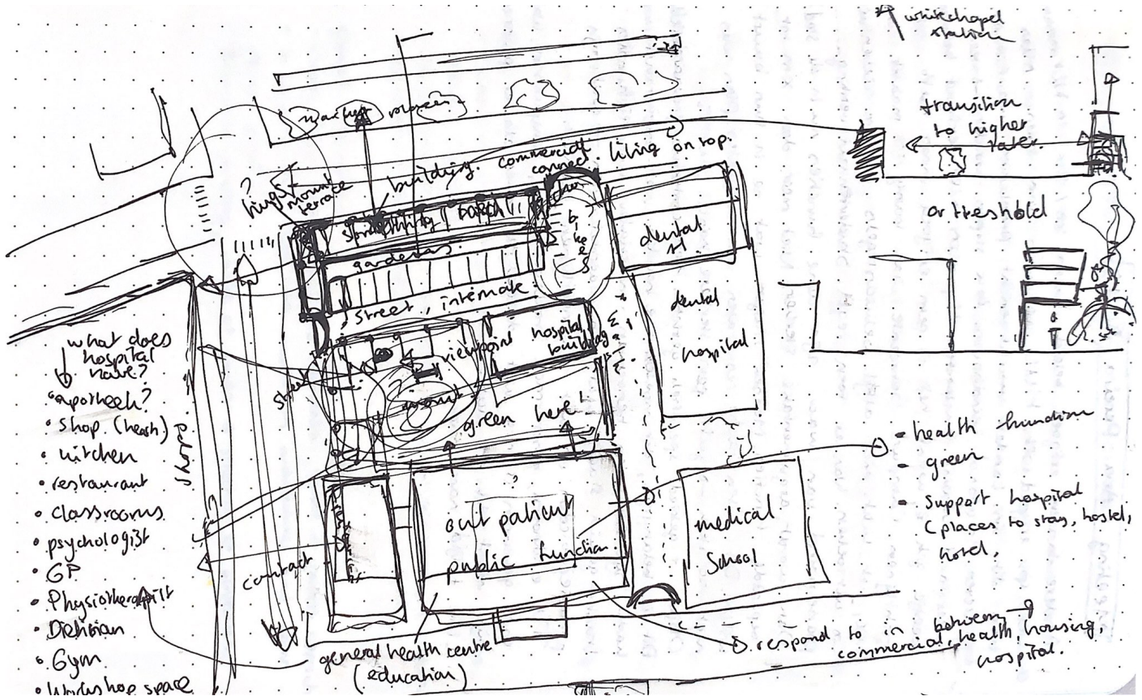
2.3.3 Analysing the fundamental healthcare in context

To find missing uses that could be placed in the empty buildings within the Royal London Hospital area, this analysis into the presence of fundamental healthcare was conducted. This was done because the new hospital provides with crisis, large scale healthcare, but I wondered whether there was enough healthcare for the residents in the neighborhood as well. The map shows the proximity of healthcare facilities. It becomes clear that there are not many fundamental healthcare places.

2.4 Strategy for the Royal London Hospital area

2.4.1 First sketches

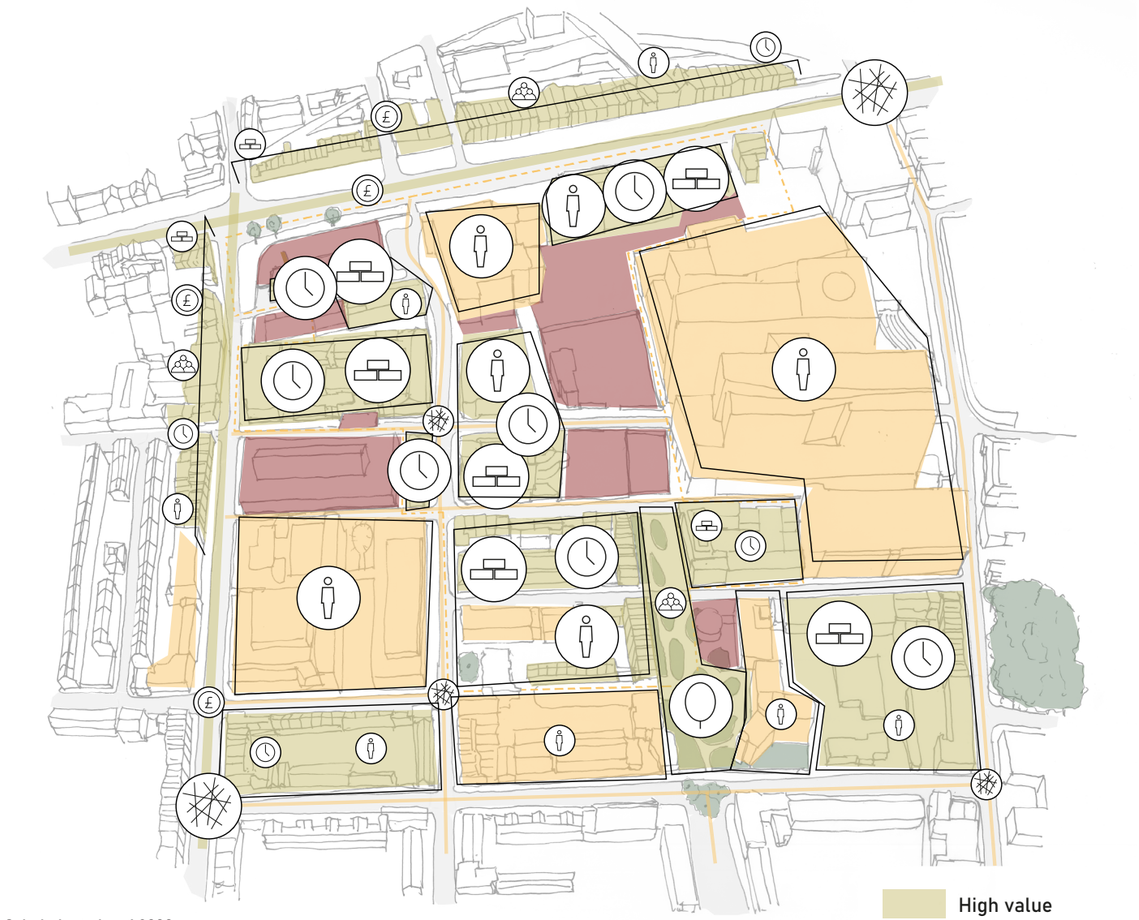
The top right image shows the first inventarisation of a plan for the area. The bottom two images show further development.



2.4 Strategy for the Royal London Hospital area

2.4.2 Area plans: current situation

The strategy of the area came into existence by taking all the former analysis into account, that resulted in the value map of the area. In the upcoming pages, the strategy will be explained by discussing the five interventions for the area. To start with, this page shows the current values in the area and the current situation.



Schale based on 1:2000

High value

Medium value

Low value

CAUSED BY:

Infrastructural value

Economic value

Social value

Material value

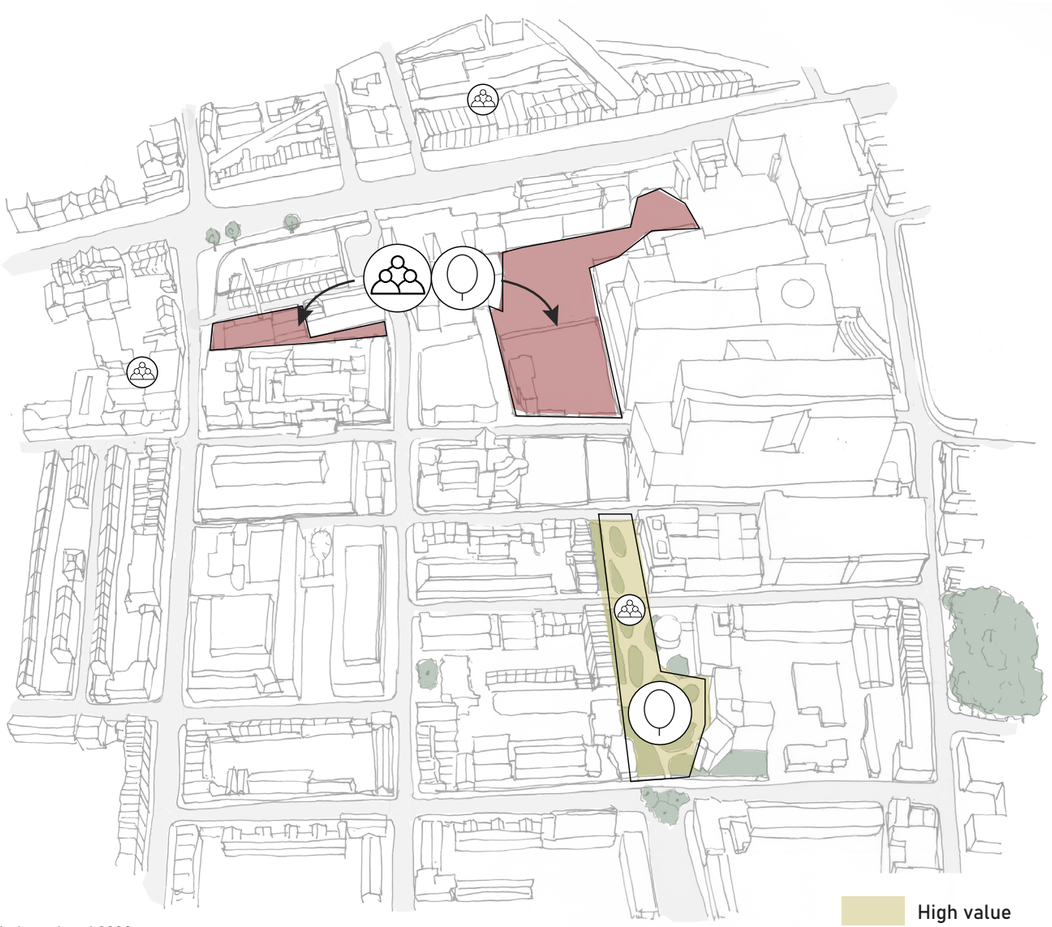
Use value

Ecological value

Historical value

2.4 Strategy for the Royal London Hospital area

2.4.2 Area plans: intervention one (introducing green space)



Schale based on 1:2000

Whitechapel Road Consultation:
- More public green and open spaces
- More places to sit, relax and socialise

High value
Medium value
Low value

CAUSED BY:

Infrastructural value
Economic value
Social value
Material value
Use value
Ecological value
Historical value

Precedent for this intervention

Bailgate Court
Jonathan Hendry Architects
2019 - Lincoln, United Kingdom

2.4 Strategy for the Royal London Hospital area

2.4.2 Area plans: intervention two (restoring Mount Terrace Housing)

Schale based on 1:2000

Whitechapel Road Consultation:
- Respect the heritage of the existing buildings.

High value
Medium value
Low value

CAUSED BY:

Infrastructural value
Economic value
Social value
Material value
Use value
Ecological value
Historical value

2.4 Strategy for the Royal London Hospital area

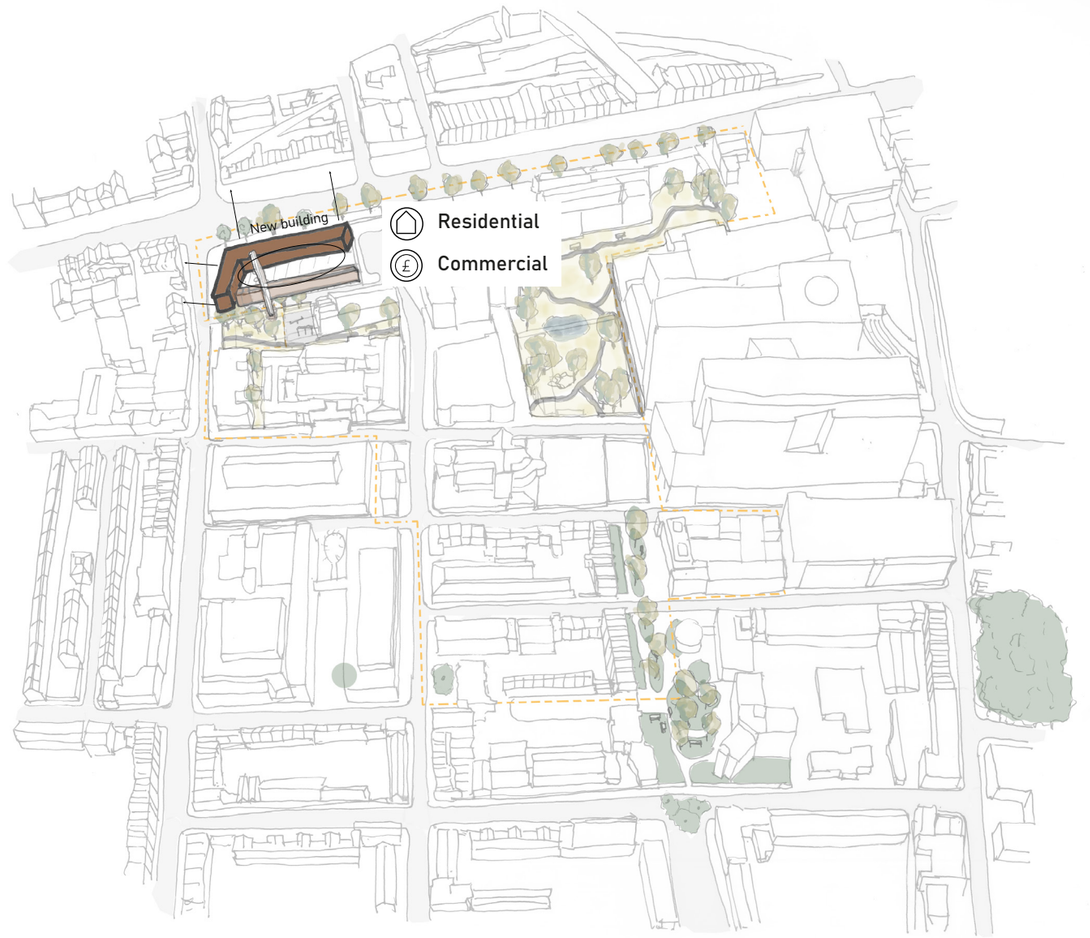
2.4.2 Area plans: intervention three (new building Whitechapel Road)

Schale based on 1:2000

High value
Medium value
Low value

CAUSED BY:

- Infrastructural value
- Economic value
- Social value
- Material value
- Use value
- Ecological value
- Historical value



Precedent for this intervention

Plumstead Centre
Hawkins\Brown
2020 - Plumstead, London, United Kingdom

Bailgate Court
Jonathan Hendry Architects
2019 - Lincoln, United Kingdom

2.4 Strategy for the Royal London Hospital area

2.4.2 Area plans: intervention four (the Former Outpatient Department)

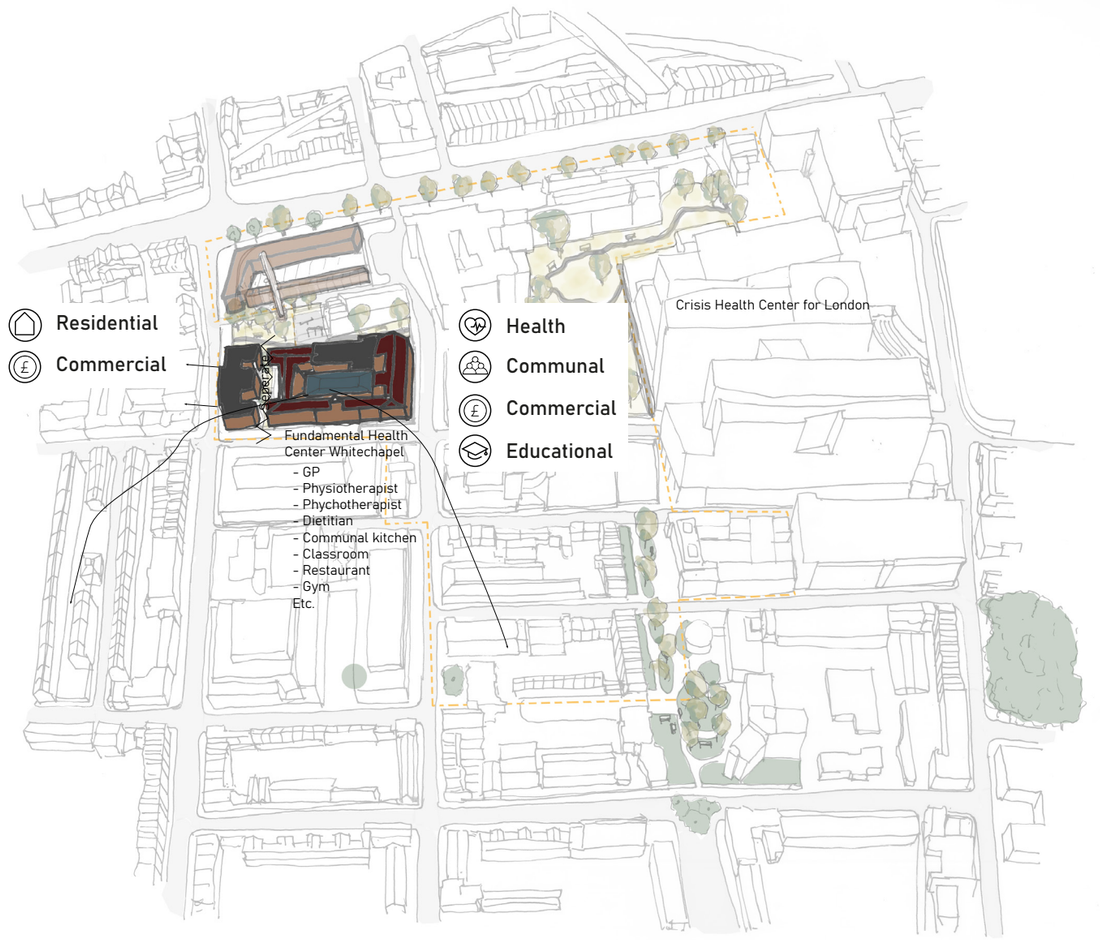
Schale based on 1:2000

Whitechapel Road Consultation:
- Respect the heritage of the existing buildings.

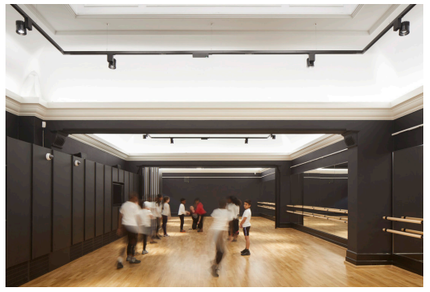
High value
Medium value
Low value

CAUSED BY:

Infrastructural value
Economic value
Social value
Material value
Use value
Ecological value
Historical value



Precedent for this intervention



Plumstead Centre
Hawkins\Brown
2020 - Plumstead, London, United Kingdom

Utrecht Central Library & Post Office
Zecc Architecten + Rijnboutt
2020 - Utrecht, The Netherlands

2.4 Strategy for the Royal London Hospital area

2.4.2 Area plans: intervention five (new building Stepney Way)

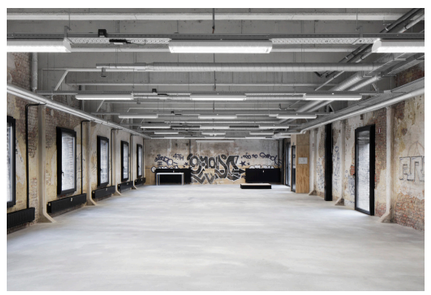
Schale based on 1:2000

High value
Medium value
Low value

CAUSED BY:

- Infrastructural value
- Economic value
- Social value
- Material value
- Use value
- Ecological value
- Historical value

Precedent for this intervention

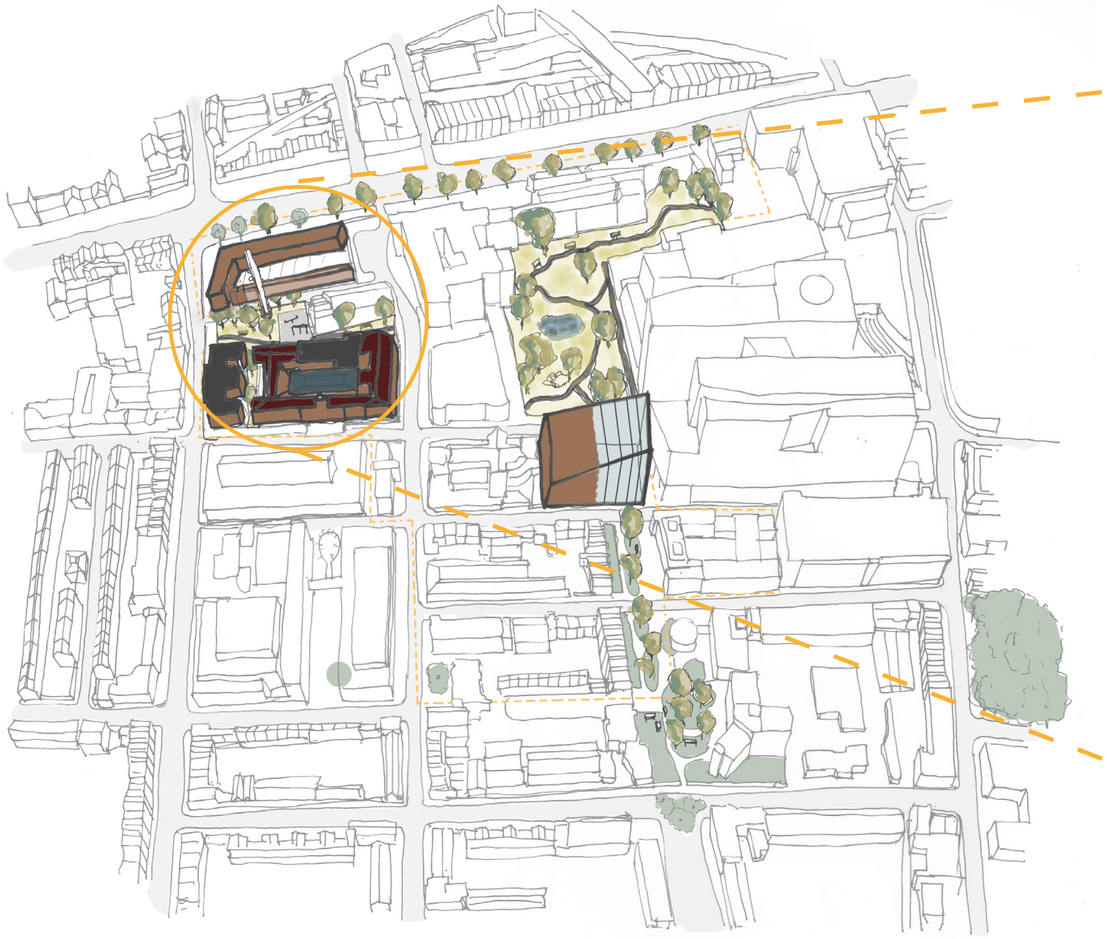


COOP Interpretation Centre and Incubator
Bogdan & Van Broeck
2016 - Anderlecht, Belgium

2.4 Strategy for the Royal London Hospital area

2.4.2 Area plans: full overview interventions and zoom in

To elaborate my context driven approach further, the Former Outpatient Department will become the more detailed area of investigation.



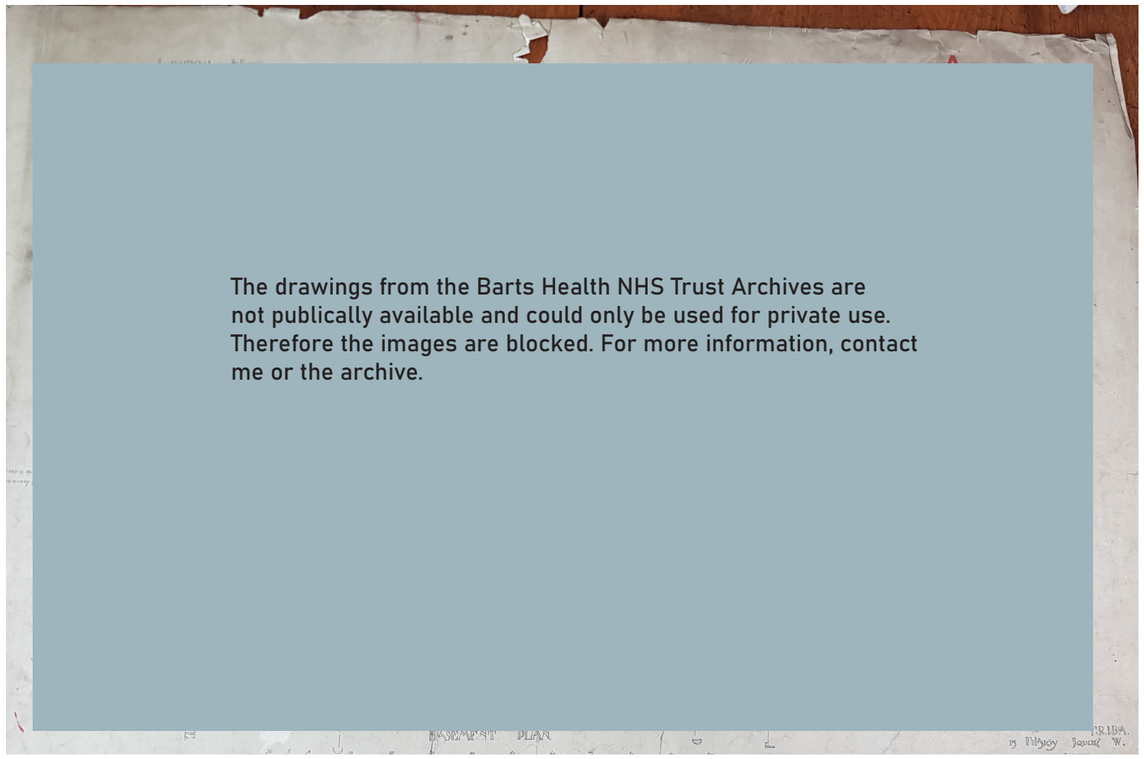
CHAPTER 3
DEVELOPING THE PROJECT

Archival material of the Former Outpatient Department from Barts Health NHS Trust Archives **3.1**
Drawings 3.1.1
Images 3.1.2
First ideas for the Former Outpatient Department **3.2**
Connecting the Former Outpatient Department to the context 3.2.1
Developing the connections to the context in floorplan 3.2.2
First set up of building technology 3.2.3
Rethinking initial ideas **3.3**
Conceptualisation sketches 3.3.1
The coloured glass roof 3.3.2
Workshop week **3.4**
Development of roof- and (small) atria structures **3.5**
The large Atrium 3.5.1
The small atria 3.5.2
The roof structure 3.5.3

3.1 Archival material of the Former Outpatient Department from Barts Health NHS Trust Archives

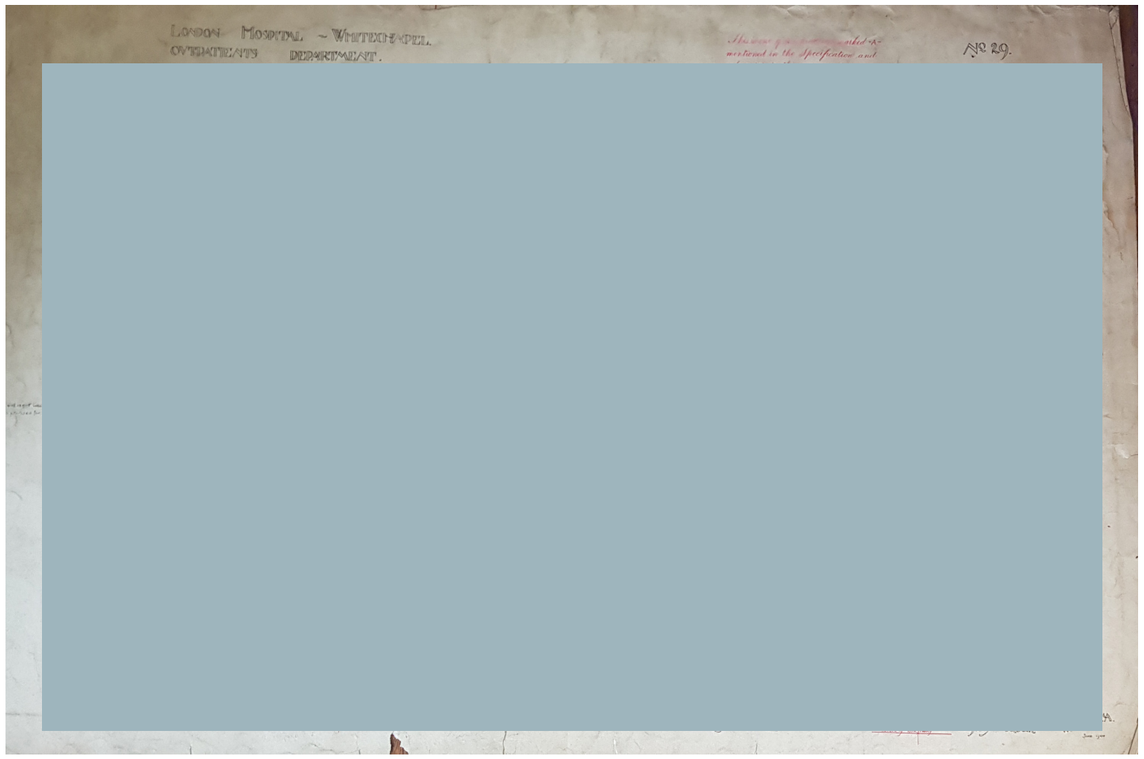
3.1.1 Drawings: Original drawings of 1900

Via contact with the Barts Health NHS Trust Archives, original drawings of the Outpatient Department were acquired. The first set of drawings was made for the initial design around 1900 by Barmondsey builder WIlliam Shepherd. The floorplans do not show the second floor on the west side of the building, which was actually build right with the rest of the building. The Outpatient Department got three extra floors on the north, of which the details are made in 1909-1910 by W. Lawrence & Sons. Lastly, the building was internally remodelled in 1963, which is shown in the last floorplans.



The drawings from the Barts Health NHS Trust Archives are not publically available and could only be used for private use. Therefore the images are blocked. For more information, contact me or the archive.

Floorplan basement



Floorplan ground floor

3.1 Archival material of the Former Outpatient Department from Barts Health NHS Trust Archives

3.1.1 Drawings: Original drawings of 1900

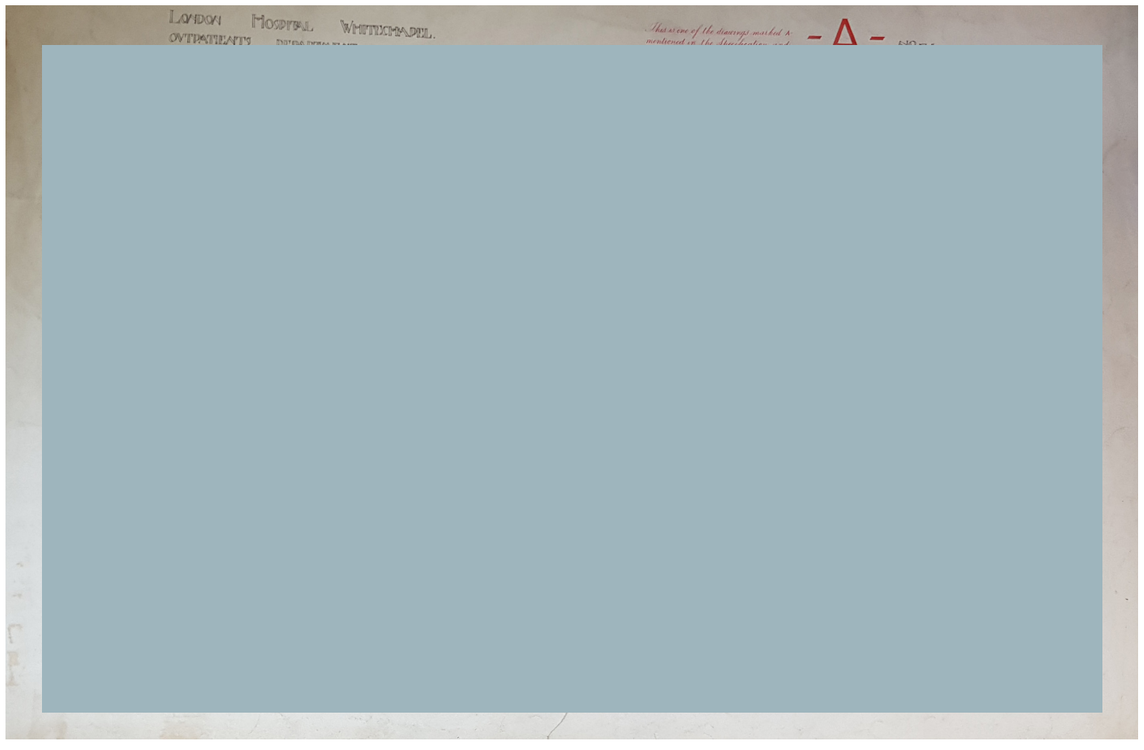
Floorplan first floor

Floorplan second floor

3.1 Archival material of the Former Outpatient Department from Barts Health NHS Trust Archives

3.1.1 Drawings: Original drawings of 1900

Plan of the roof



Elevations

3.1 Archival material of the Former Outpatient Department from Barts Health NHS Trust Archives

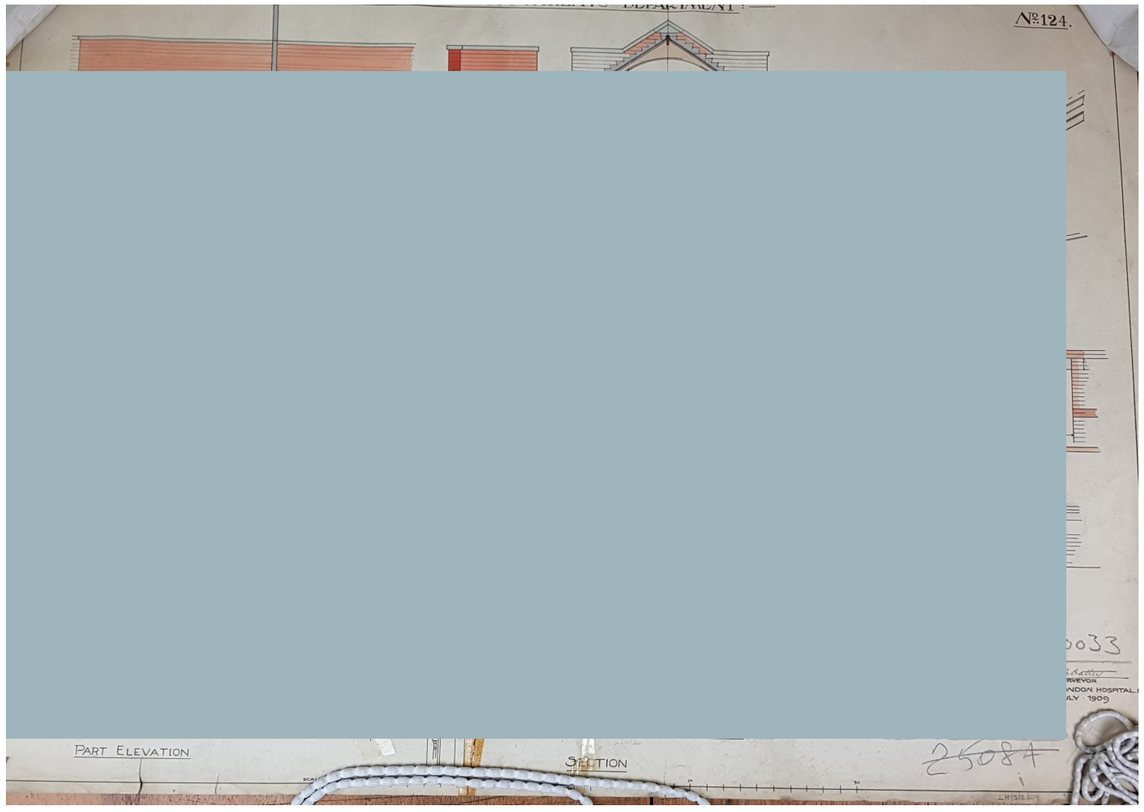
3.1.1 Drawings: Original drawings of 1900

Sections

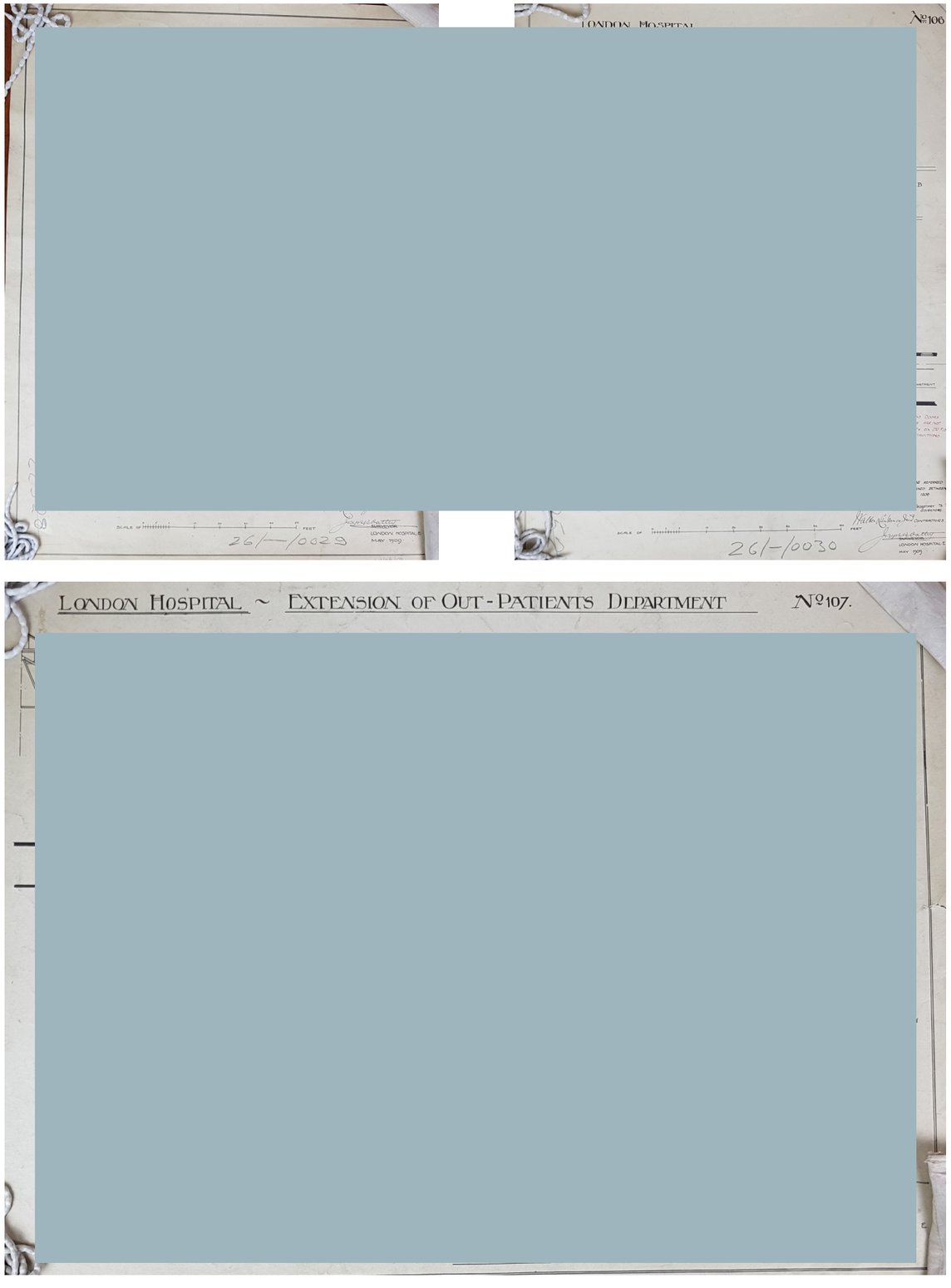
Drawing of foundation (top) and load bearing structure (basement)

3.1 Archival material of the Former Outpatient Department from Barts Health NHS Trust Archives

3.1.1 Drawings: extension 1909-1910



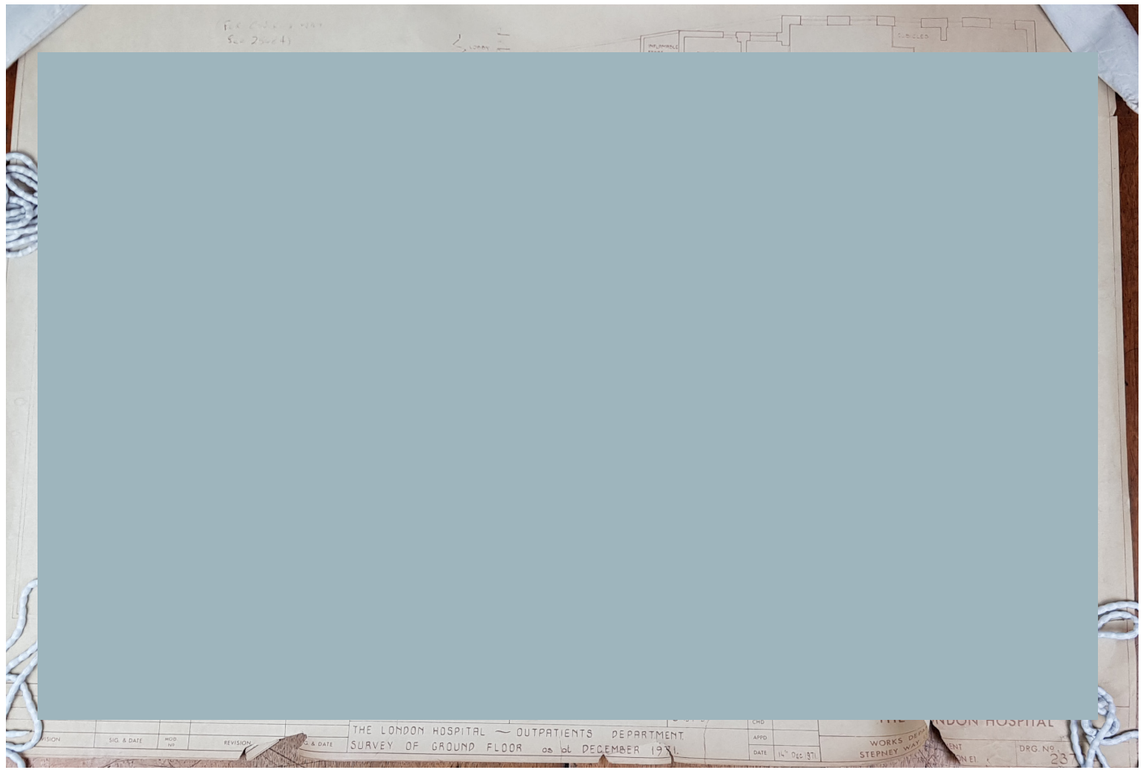
Detailed section and elevation of facade



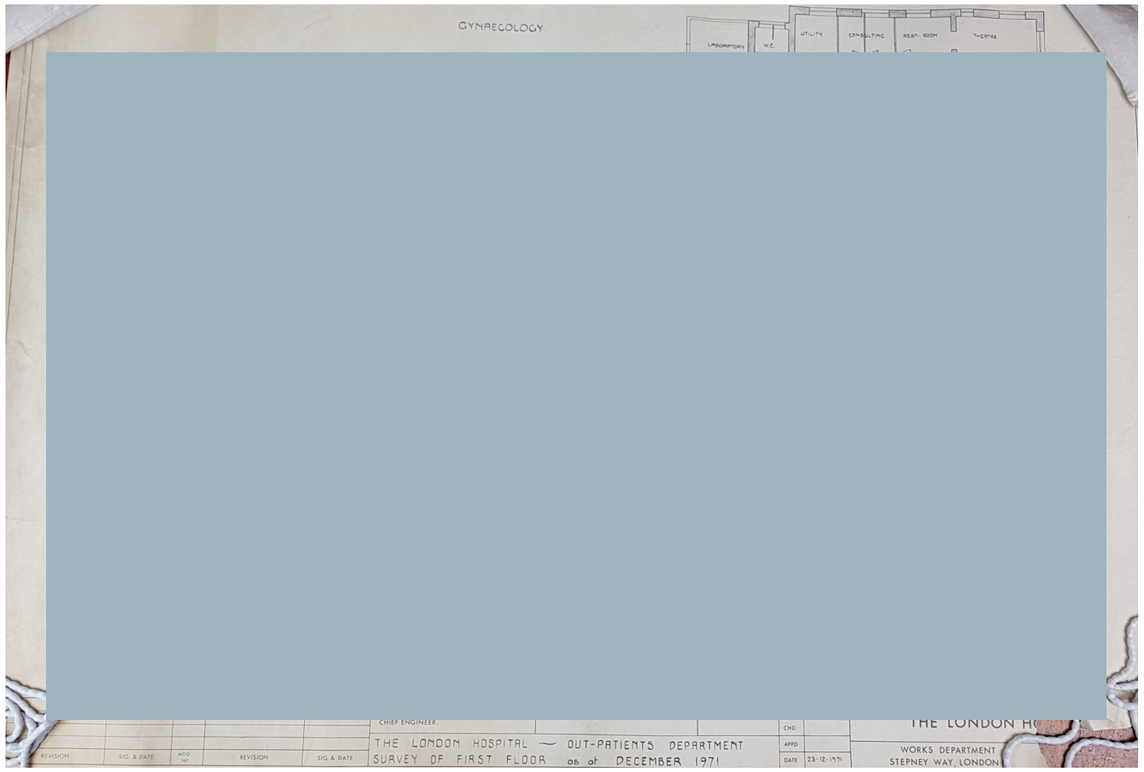
Floorplans, elevation and sections of extension

3.1 Archival material of the Former Outpatient Department from Barts Health NHS Trust Archives

3.1.1 Drawings: floorplans after remodelling of 1963



Ground floor



First floor

3.1 Archival material of the Former Outpatient Department from Barts Health NHS Trust Archives

3.1.2 Interior images

The following images are acquired from the same archive and show the building in different periods.

View atrium - 19X

View atrium - 19X

View entrance hall - 19X

3.1 Archival material of the Former Outpatient Department from Barts Health NHS Trust Archives

3.1.2 Interior images

View compartmentarisation in main atrium - 1960

View reception - 19X

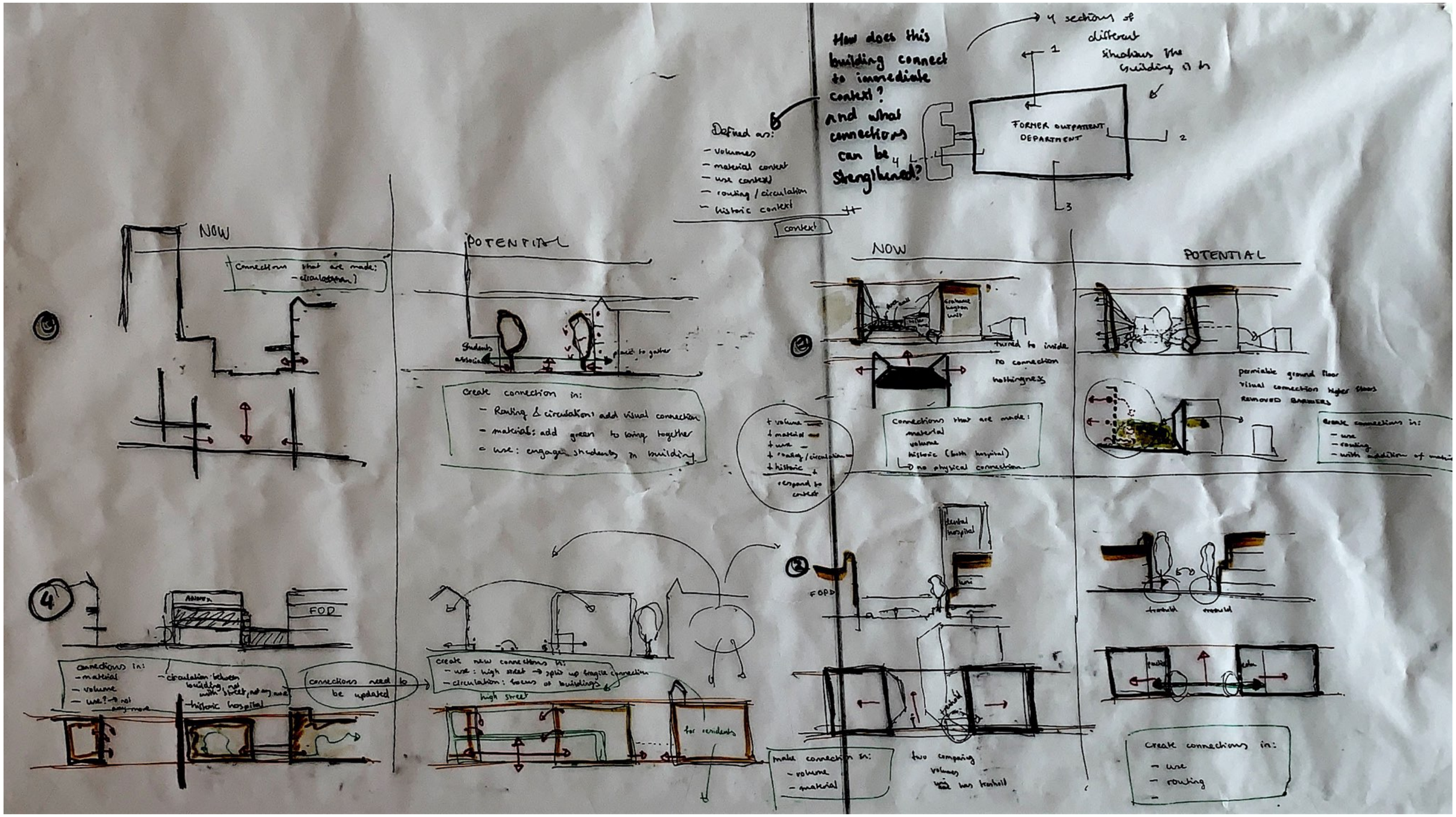
View entrance medical department reception

View entrance hall - 1963

3.2 First ideas for the Former Outpatient Department

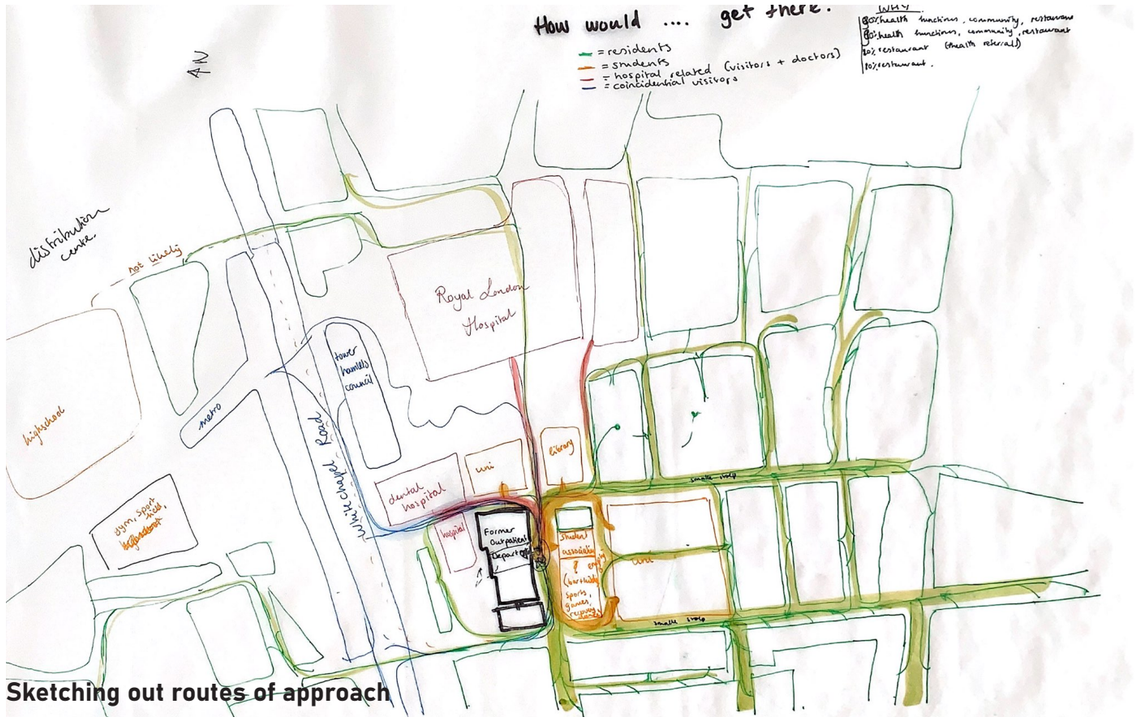
3.2.1 Connecting the Former Outpatient Department to the context

Before being able to make connections to the context, the direct surroundings of the building needed to be explored first. This is done with sections and analysis of routes of approach. As a result, the connections to the contexts, with the tools of the research, are made.



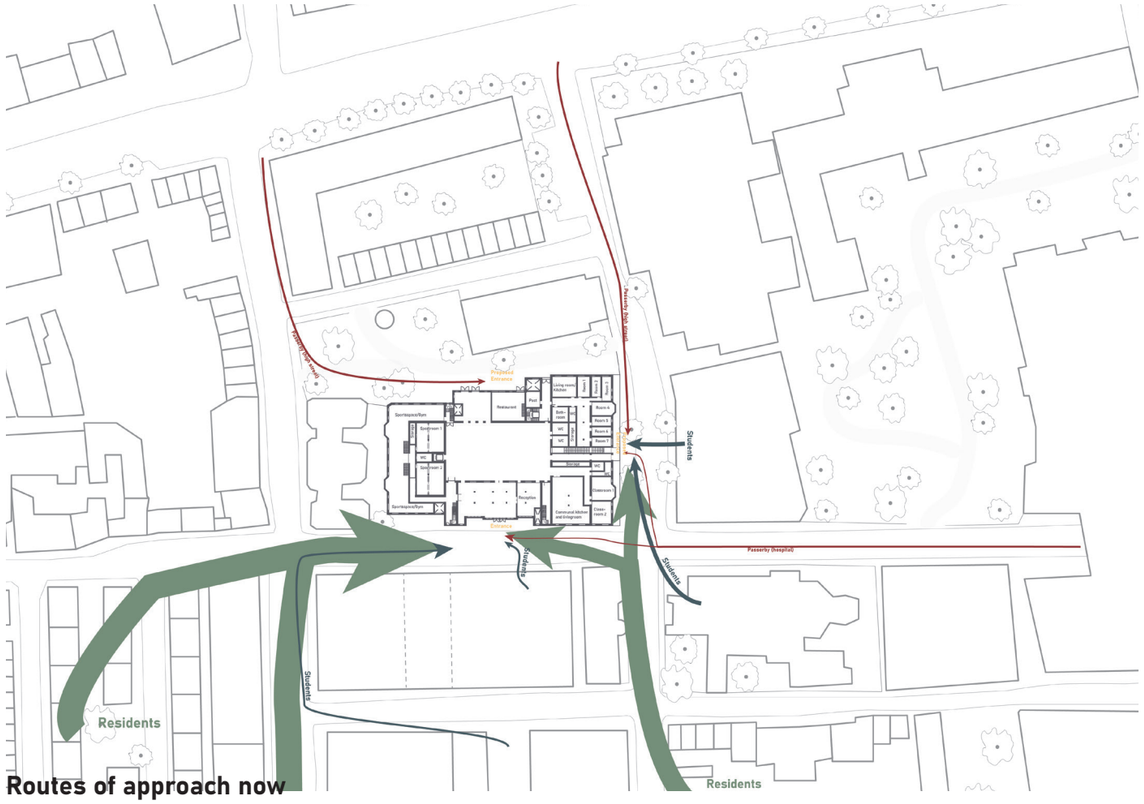
3.2 First ideas for the Former Outpatient Department

3.2.1 Connecting the Former Outpatient Department to the context

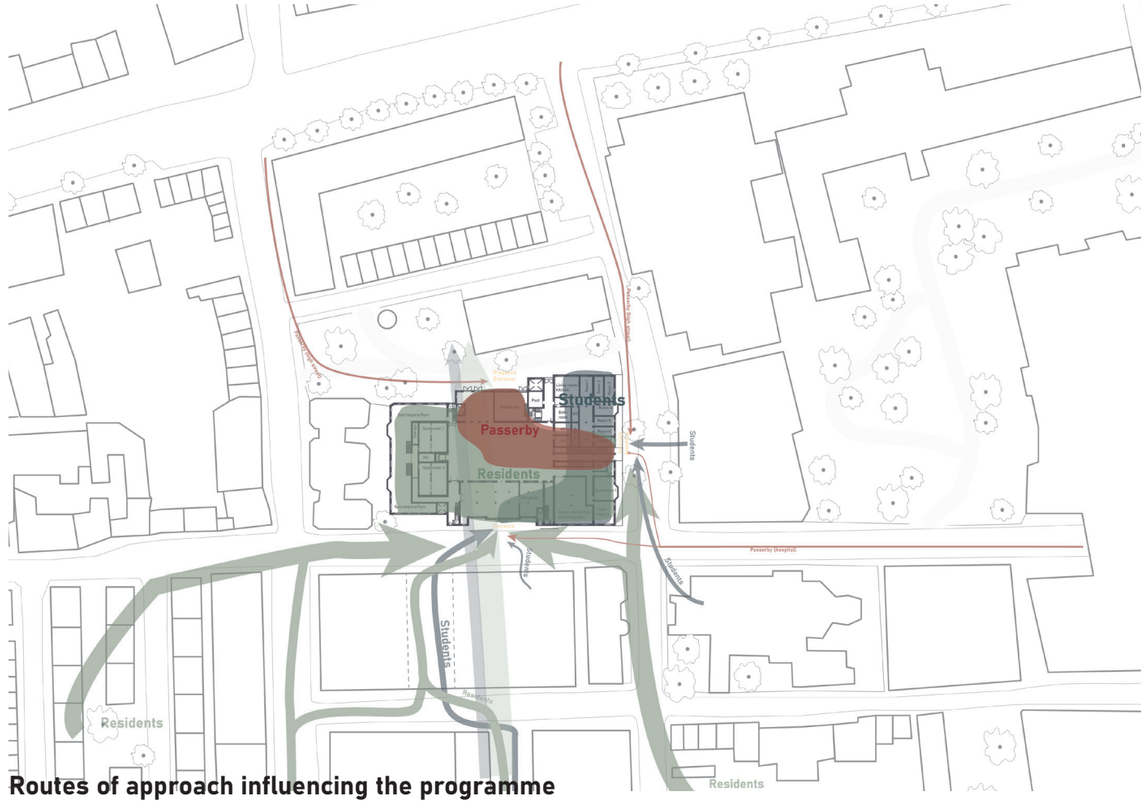


Sketching out routes of approach

Routes of approach including creation of passageway through Atrium



Routes of approach now



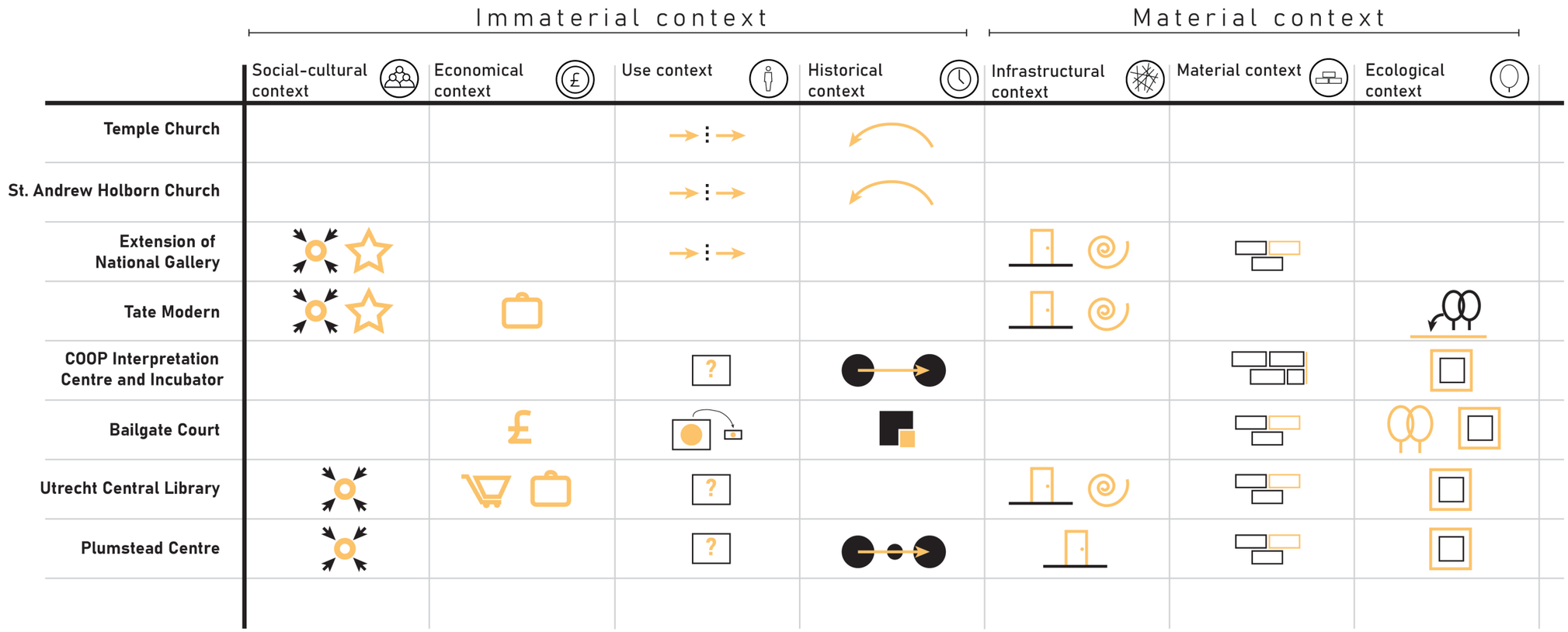
Routes of approach influencing the programme

3.2 First ideas for the Former Outpatient Department

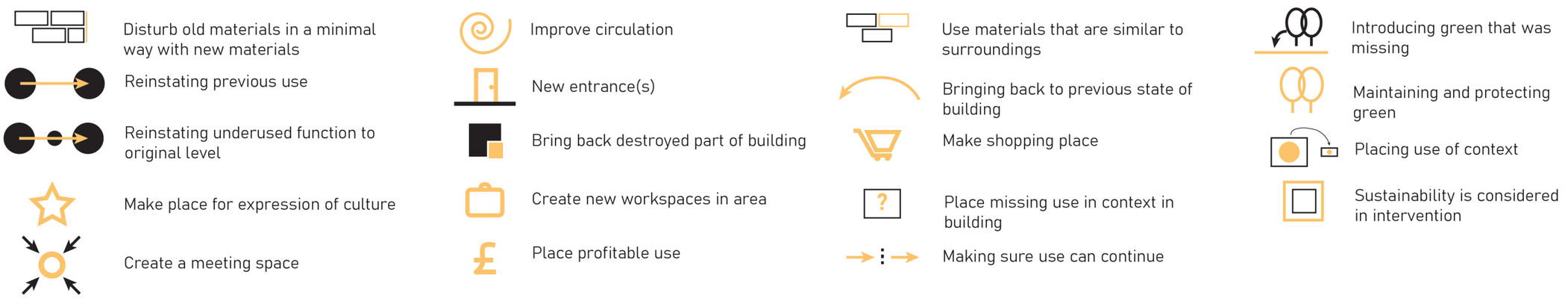
3.2.1 Connecting the Former Outpatient Department to the context

Tools from precedent research to connect to context

For more information, see research essay



Legend:

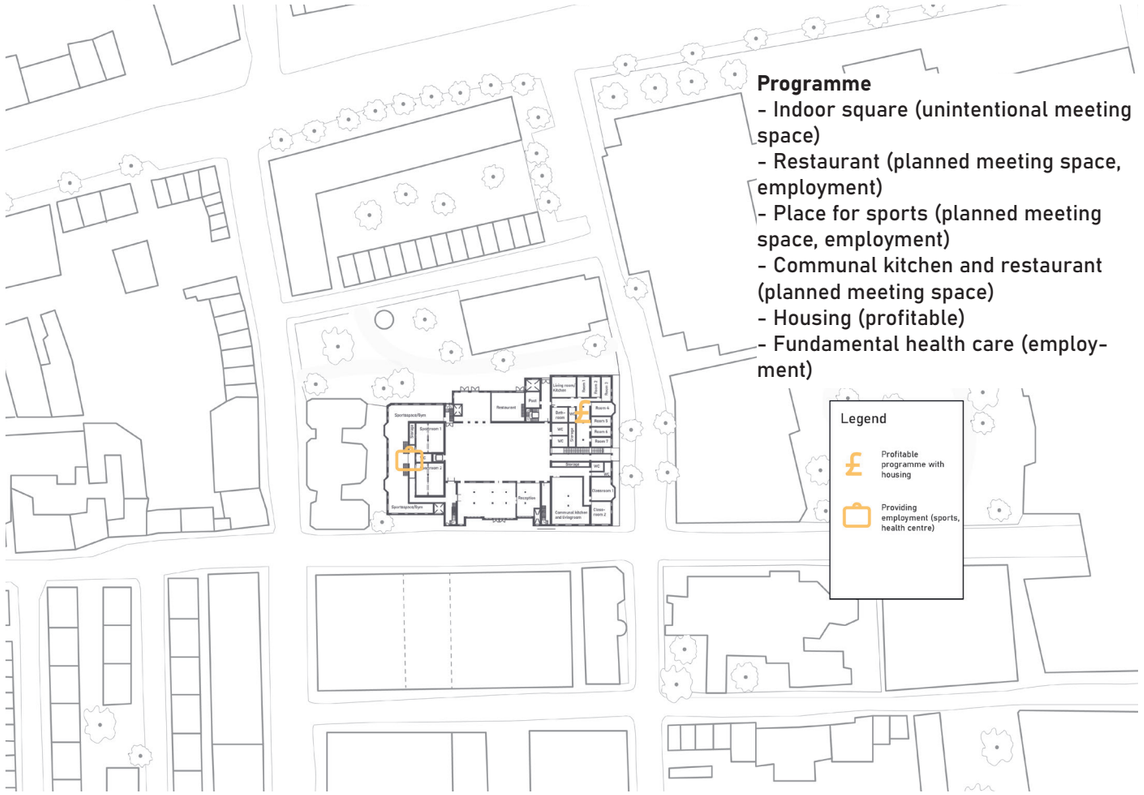


3.2 First ideas for the Former Outpatient Department

3.2.1 Connecting the Former Outpatient Department to the context

Connecting to socio-cultural context

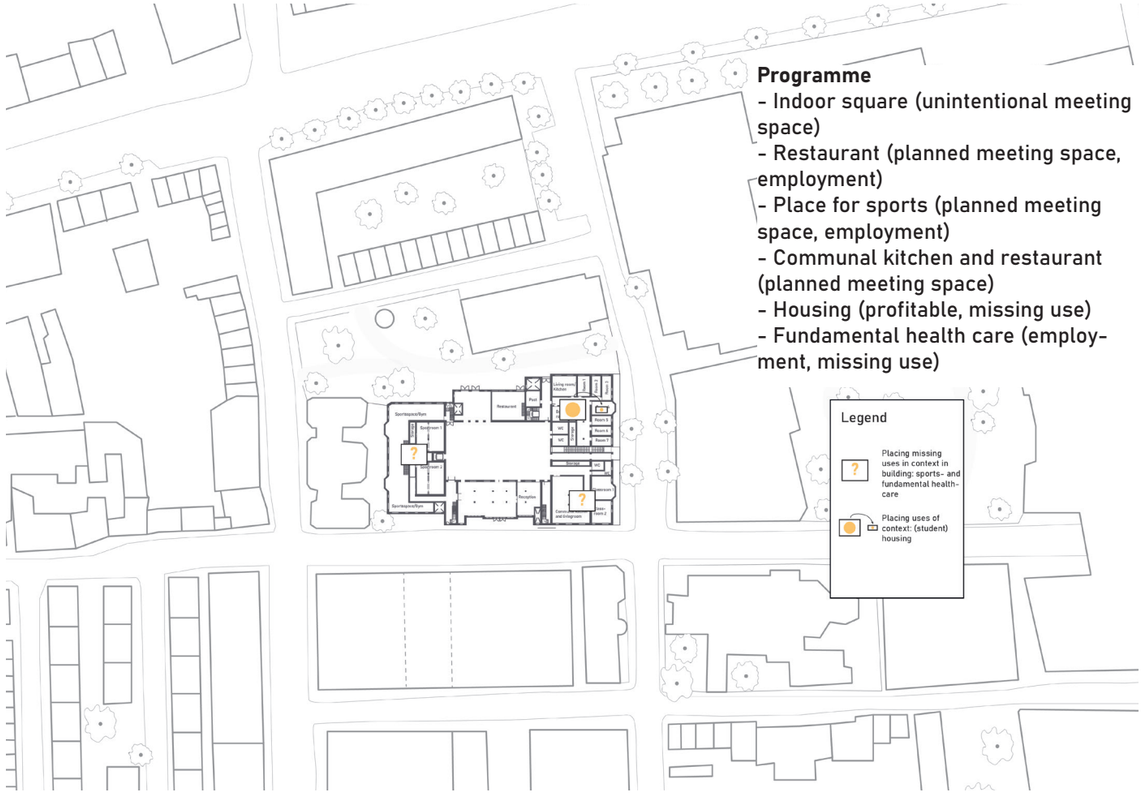
Connecting to economical context



3.2 First ideas for the Former Outpatient Department

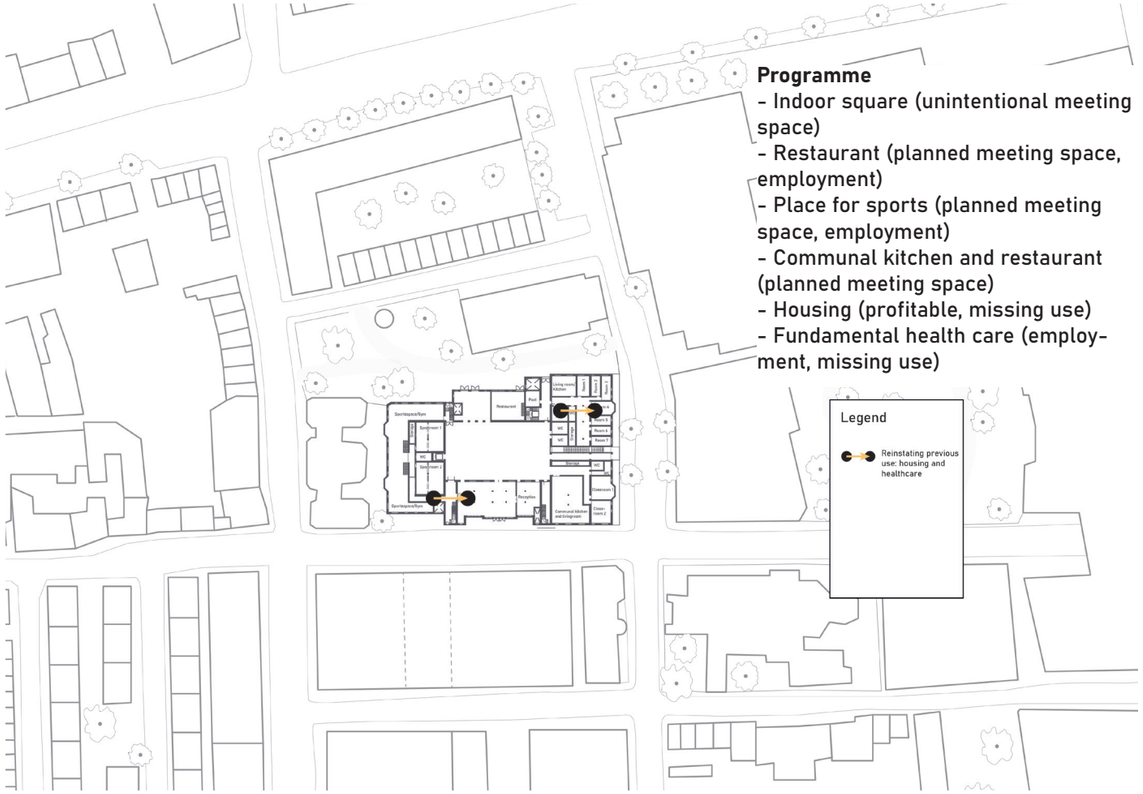
3.2.1 Connecting the Former Outpatient Department to the context

Connecting to use context



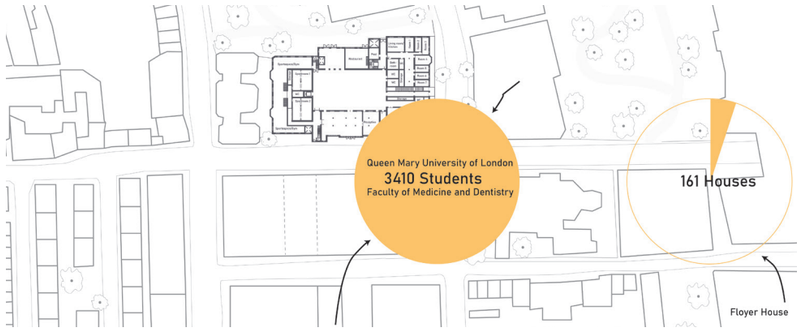
Programme
- Indoor square (unintentional meeting space)
- Restaurant (planned meeting space, employment)
- Place for sports (planned meeting space, employment)
- Communal kitchen and restaurant (planned meeting space)
- Housing (profitable, missing use)
- Fundamental health care (employment, missing use)

Connecting to historical context



Programme
- Indoor square (unintentional meeting space)
- Restaurant (planned meeting space, employment)
- Place for sports (planned meeting space, employment)
- Communal kitchen and restaurant (planned meeting space)
- Housing (profitable, missing use)
- Fundamental health care (employment, missing use)

Why student housing?



Why reinstating previous use of housing and healthcare?

Historic England Archive: bl23998

3.2 First ideas for the Former Outpatient Department

3.2.1 Connecting the Former Outpatient Department to the context

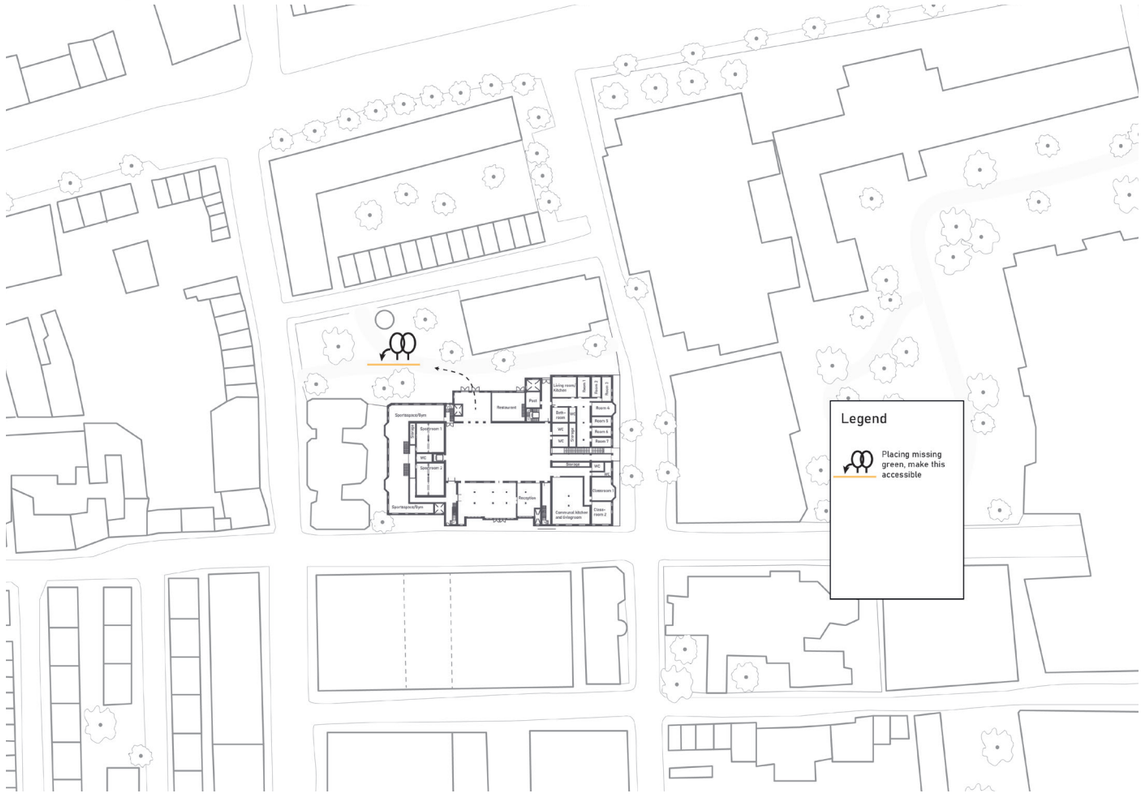
Connecting to infrastructural context

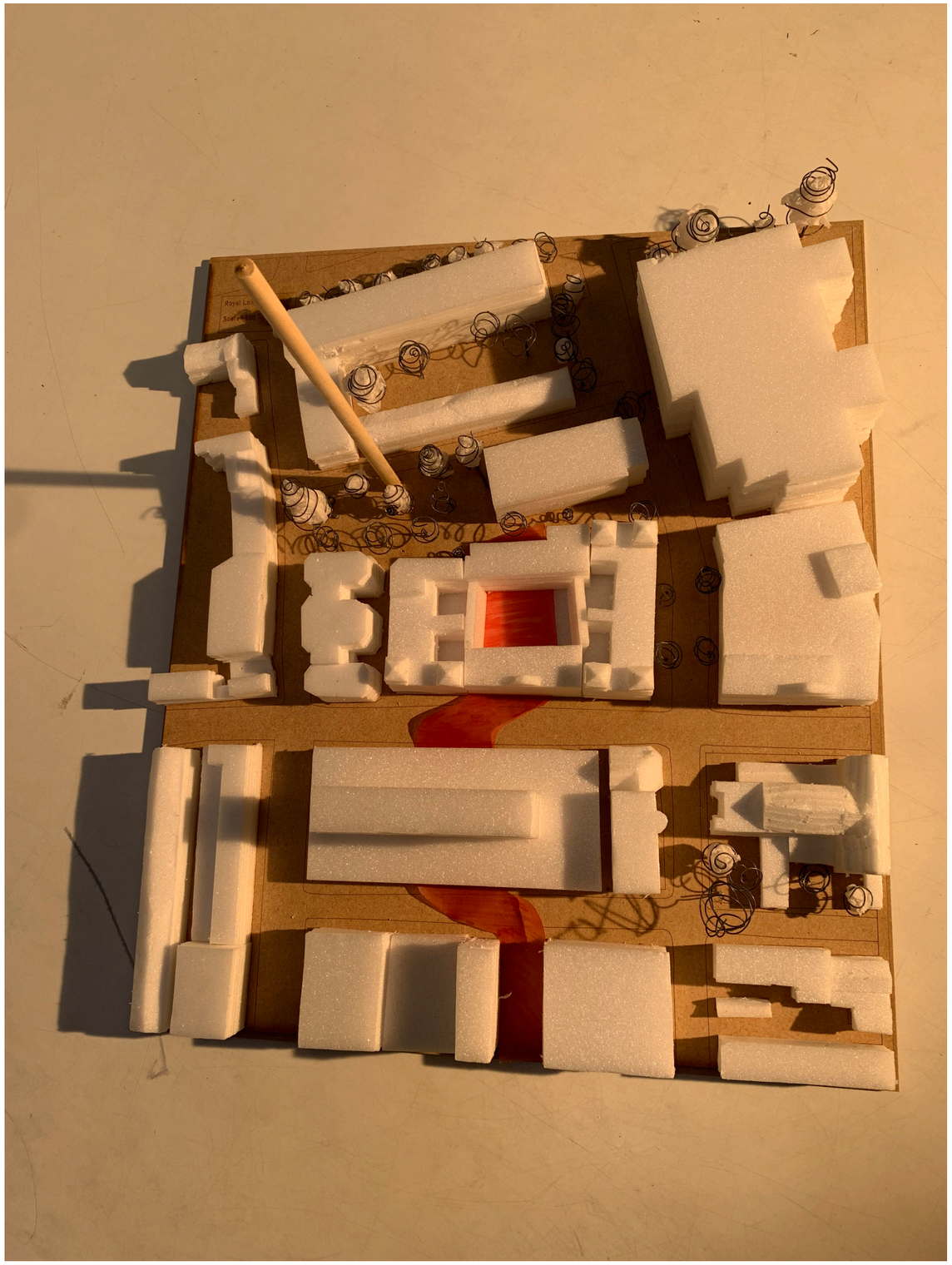
Connecting to material context

3.2 First ideas for the Former Outpatient Department

3.2.1 Connecting the Former Outpatient Department to the context

Connecting to ecological context





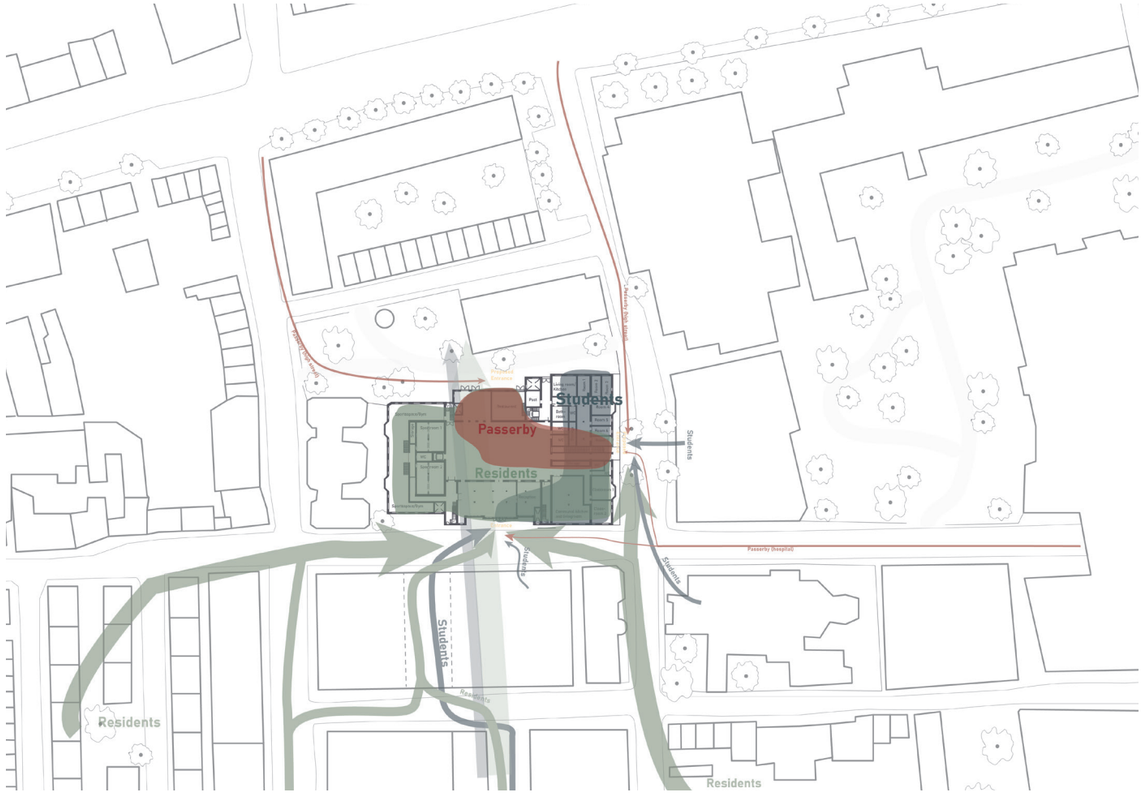
Model of the Former Outpatient Department in the neighborhood with planned interventions

3.2 First ideas for the Former Outpatient Department

3.2.2 Developing the connections to context in floorplan

The connections that were established brought a programme to the building and the routes of approach already brought a rough zoning (see below). First, all elements that needed to go into the building were listed, after which they were placed in the building in various try outs. The sketches of these tries are shown in the following pages.

Routes of approach influencing the programme



M² calculation of the programme

General practitioner (4 GP's)

	Waiting room per consult room	12x4 = 48 m2
	Consulting room	4x15 = 60m2
	Clinical area for nurse	10m2
	Treatment room	7,5m2
	Procedural room	16 m2
	Administrative area	10x4 = 40m2
	Storage	20m2
	Reception	10m2
Total		**210m2**

Psychologist (2)

	Waiting room per consult room	12x2 = 24 m2
	Consulting room	2x15 = 30m2
	Administrative area	10x2 = 20m2
	Storage	10m2
	Reception (combine with other caretakers)	0
Total		**84 m2**

Physiotherapist (4)

	Waiting room per consult room	12x4 = 48 m2
	Consulting room	4x15 = 60m2
	Administrative area	10x4 = 40m2
	Storage	20m2
	Reception (combine with other caretakers)	0
Total		**170m2**

Dietitian (1/2)

	Waiting room per consult room	12x1 = 12 m2
	Consulting room	1x15 = 15 m2
	Administrative area	10x1 = 10m2
	Storage	10m2
	Reception (combine with other caretakers)	0
Total		**47m2**

Communal kitchen and living room

	Kitchen	50m2
	Dining/sitting area	50 m2
	Storage space	10 m2
Total		**110 m2**

Classroom 2x

	Classroom	2x55m2
Total		**110 m2**

Restaurant

	Kitchen, storage etc (40%)	50m2
	Dining/sitting area (60%)	75 m2
Total		**125 m2**

Gym/sports facilities

	Gym	200 m2 (can be smaller)
	Sport room large	1x 100 = 100m2
	Sport room small	2x 50 = 100m2
	Changing rooms	2x 40 = 80m2
Total		**480 m2**

Other

	Toilets	10x20m2 = 200
	Staff room	30m2
	Technical rooms	Basement space
	Circulation space	25-40% of total space
Total		

Space calculation building

Usable space for this programme is:

- Basement: 1000m2 for storage without daylight. Limited amount of light (windows beneath floor level, but cavity is made) for another 1000m2
- Ground floor: 500 m2 + 650 m2 (and the atrium and entrance and exit space in between 1000m2)
- First floor: 300m2+ 400m2+ 350 m2
- Second floor: 350 m2
    - TOTAL: Completely usable space: 2.550 m2
      Semi usable space: 2000 m2

- **All identified uses added onto each other is 1500 m2, and the whole gym can go in basement in terms of light, so 1000m2. Which is the ground floor.**

Housing (for a total of 1000m2)

	1 bedroom apartment	35-50 m2
	2 bedroom apartment	60 m2
	3 bedroom apartment	75 m2
	4 bedroom apartment	90 m2
Total	**(10 4-bedroom or 20 1-bedroom)**	**1000m2**

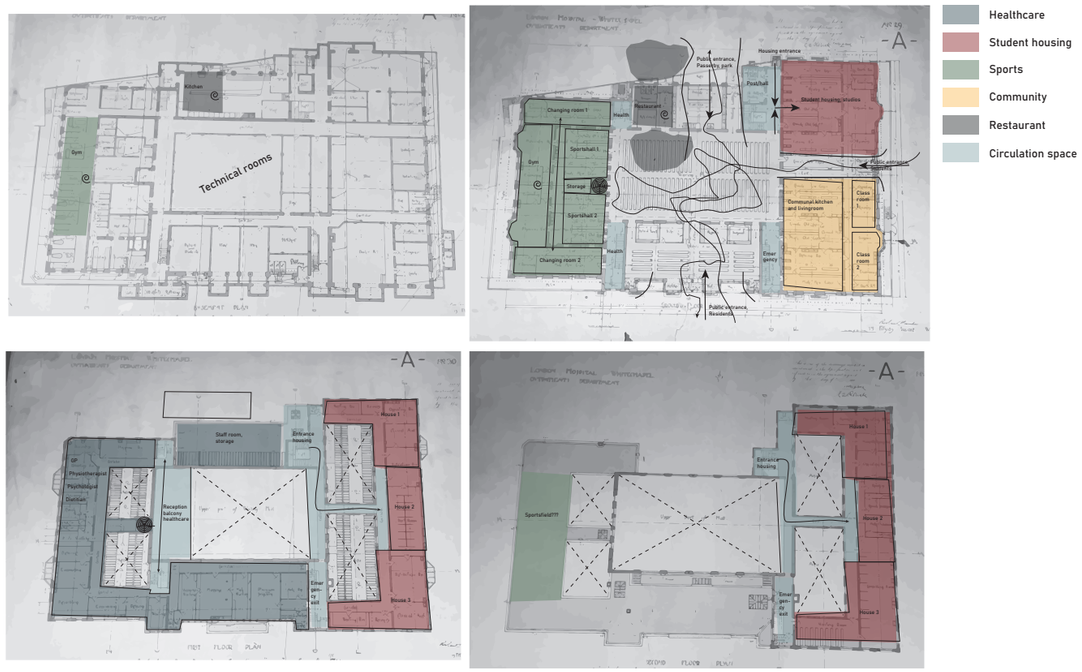
https://talk.towerhamlets.gov.uk/newcouncilhomes

https://www.labc.co.uk/news/what-average-house-size-uk

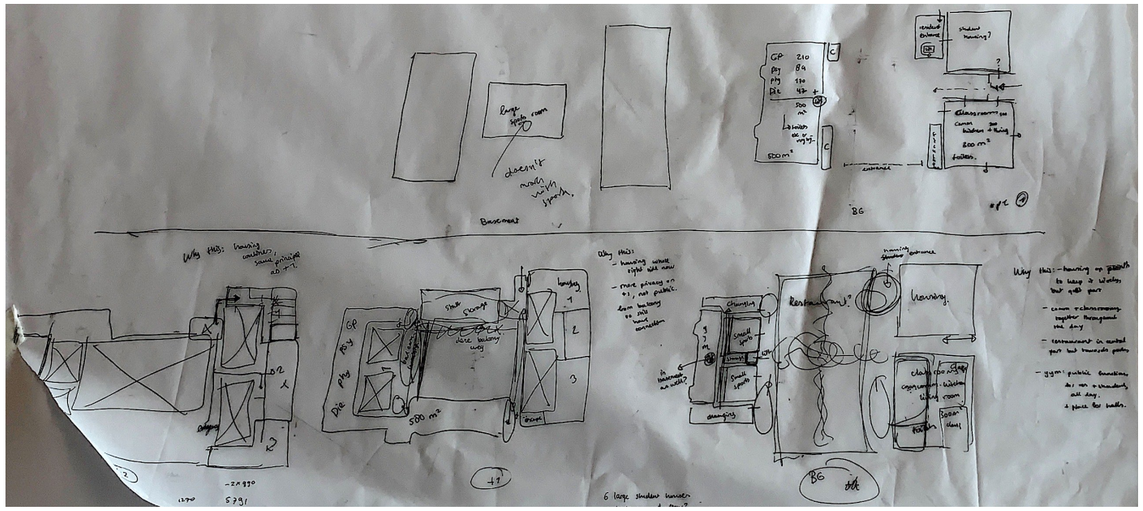
We will build a mixture of 1, 2, 3 and 4 bedroom homes – to meet the needs of a wide range of families and households.
We're making the most of land that we already own, including buildings no longer used as they once were.

3.2 First ideas for the Former Outpatient Department

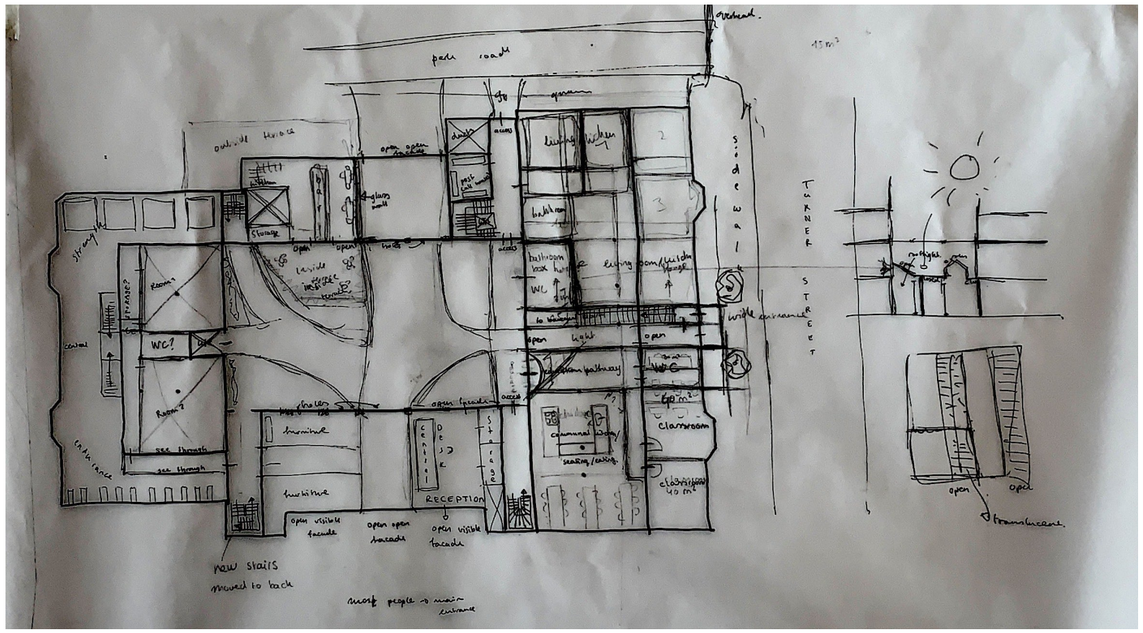
3.2.2 Developing the connections to context in floorplan



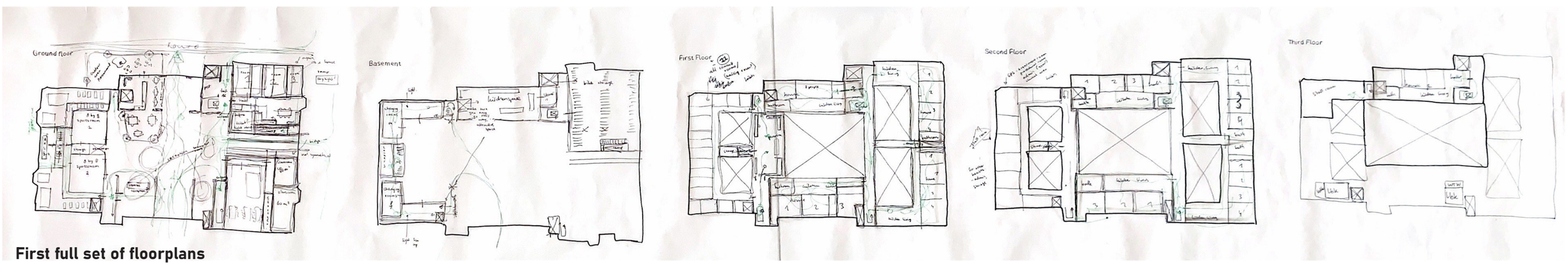
Placing programme



Sketching out placing programme



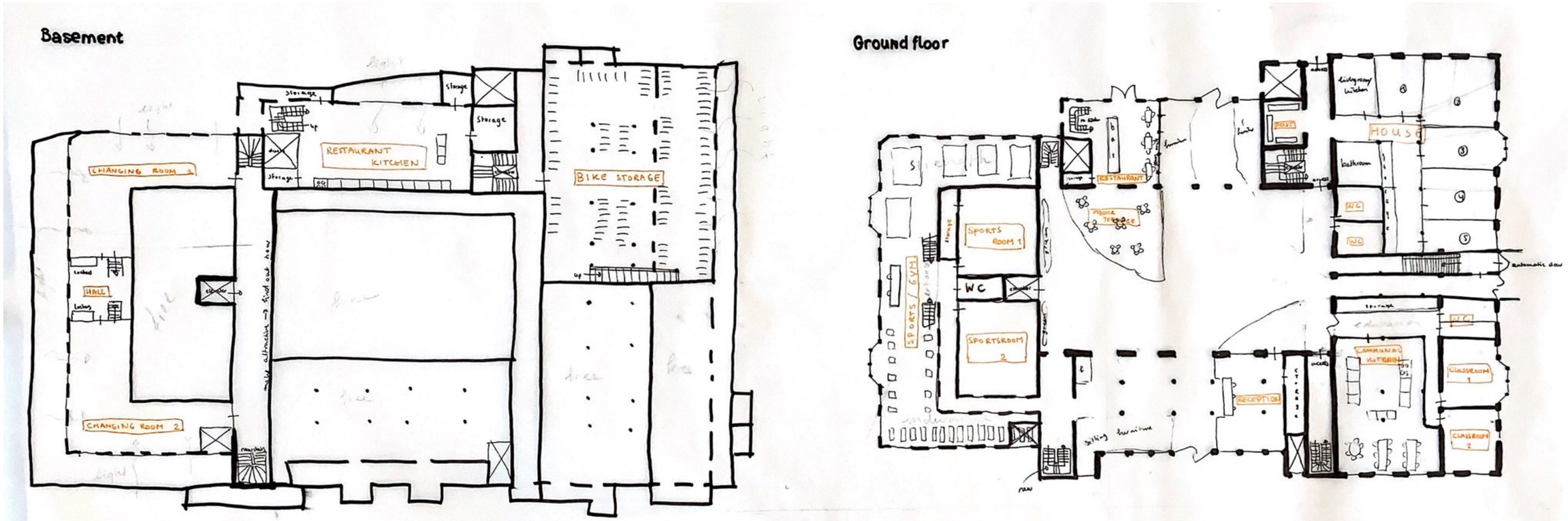
Sketch ground floor



First full set of floorplans

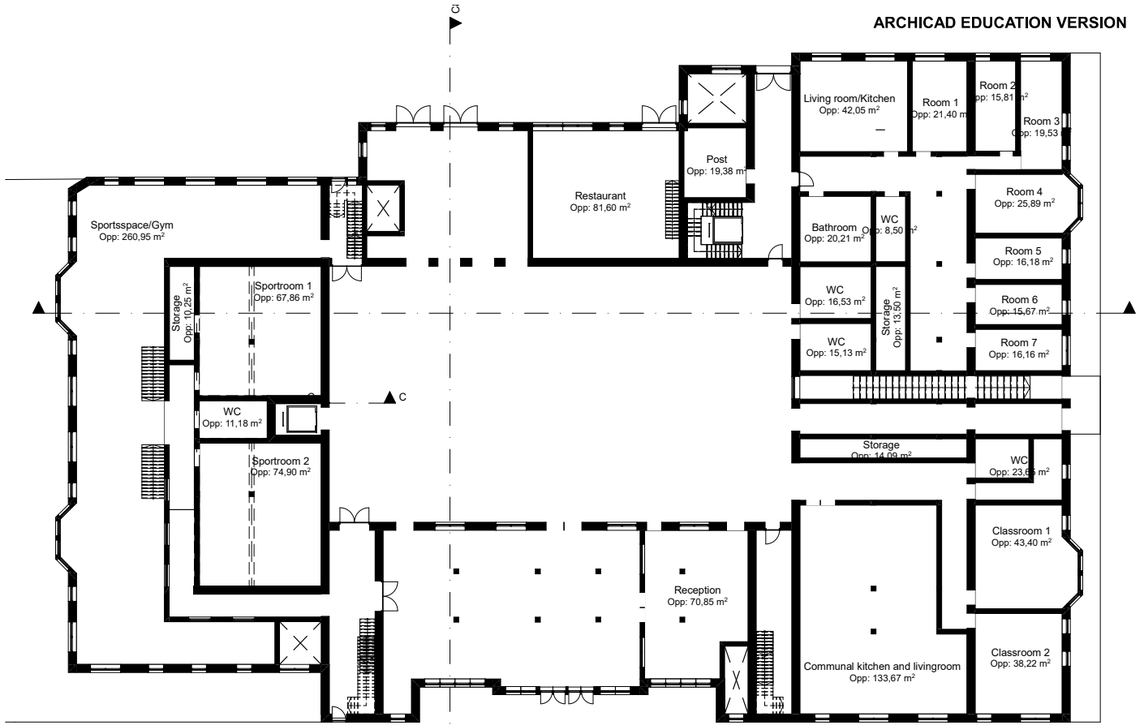
3.2 First ideas for the Former Outpatient Department

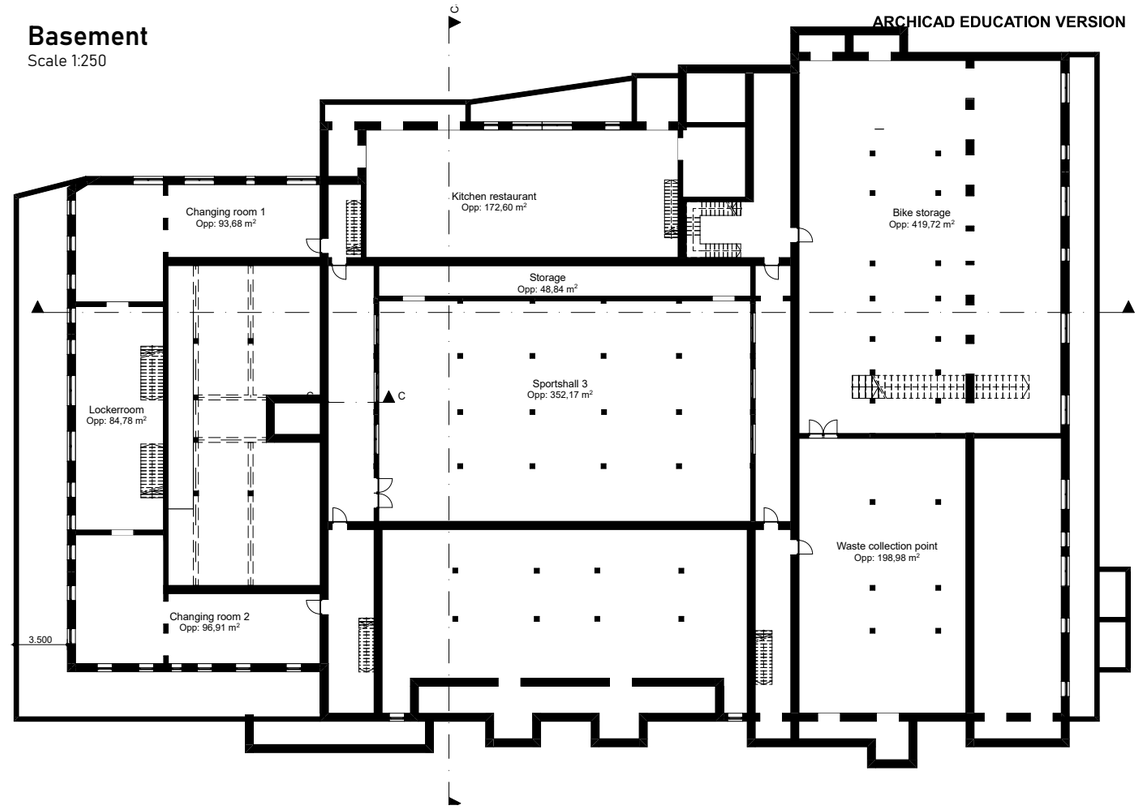
3.2.2 Developing the connections to context in floorplan

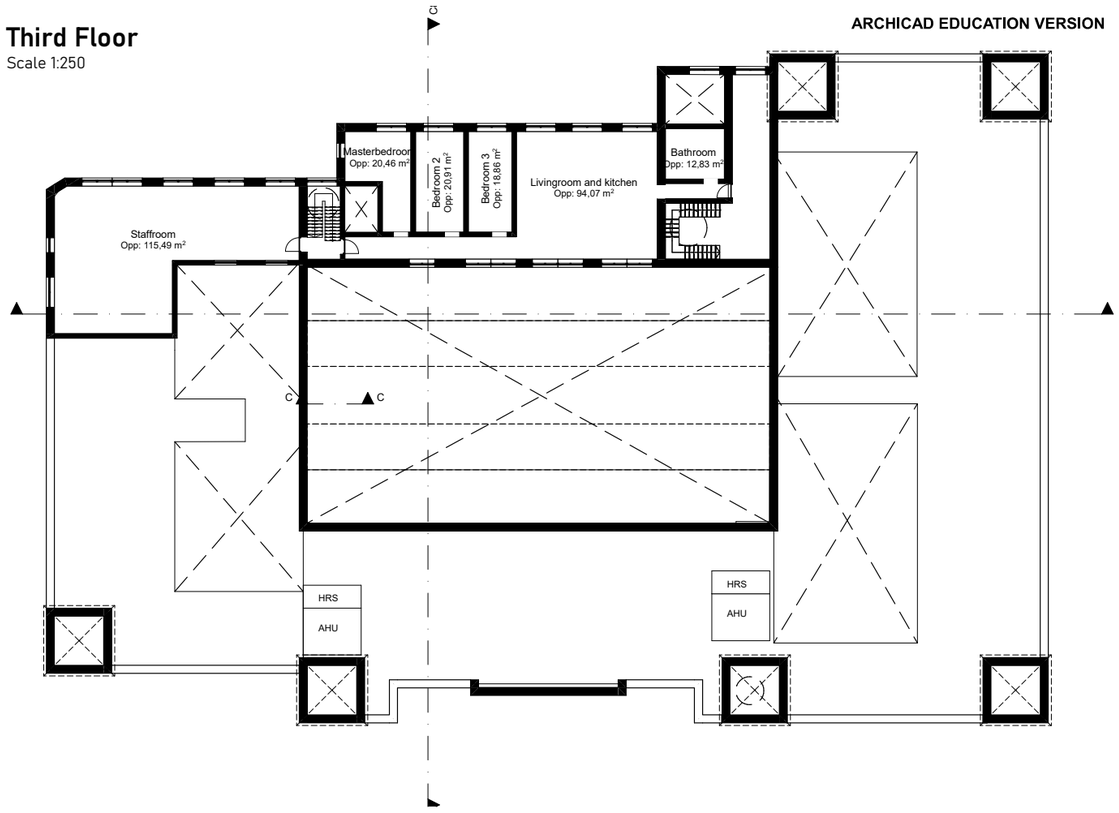


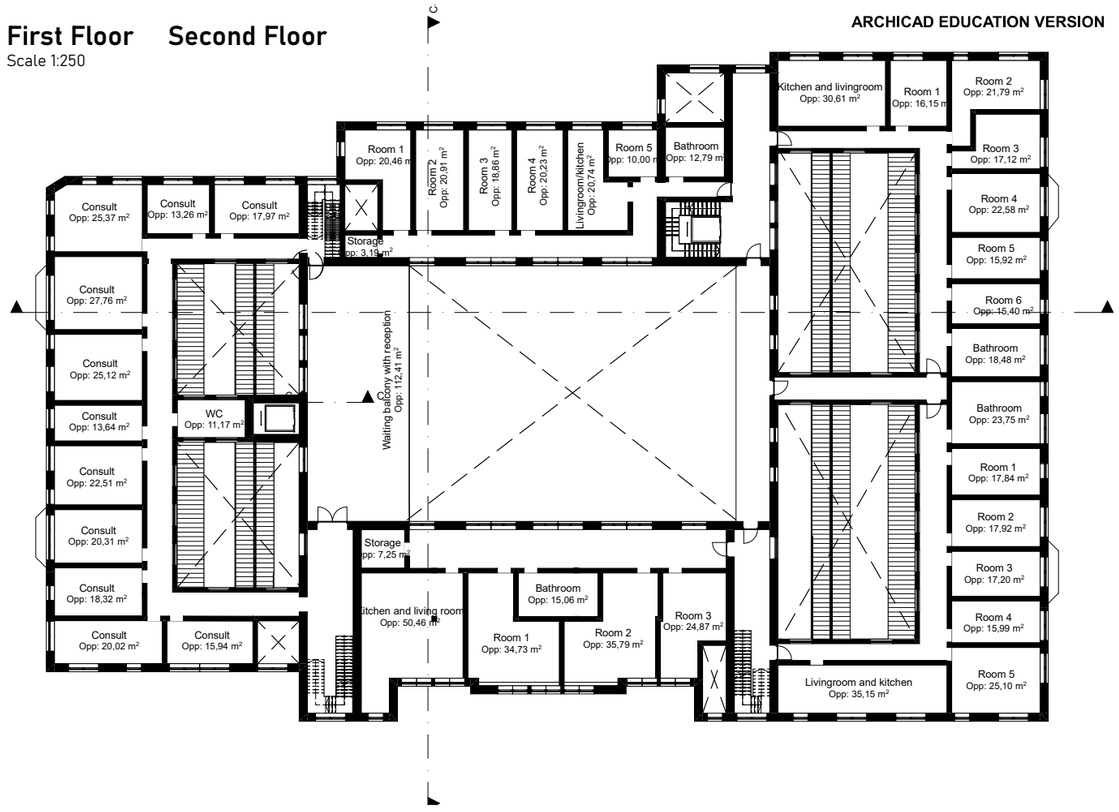
3.2 First ideas for the Former Outpatient Department

3.2.2 Developing the connections to context in floorplan





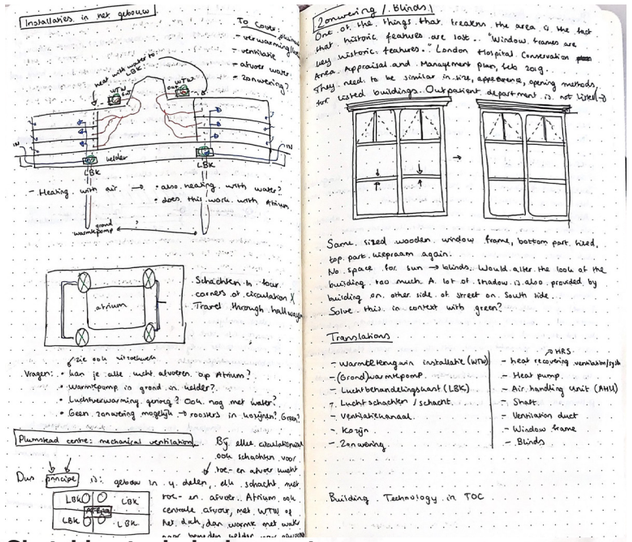




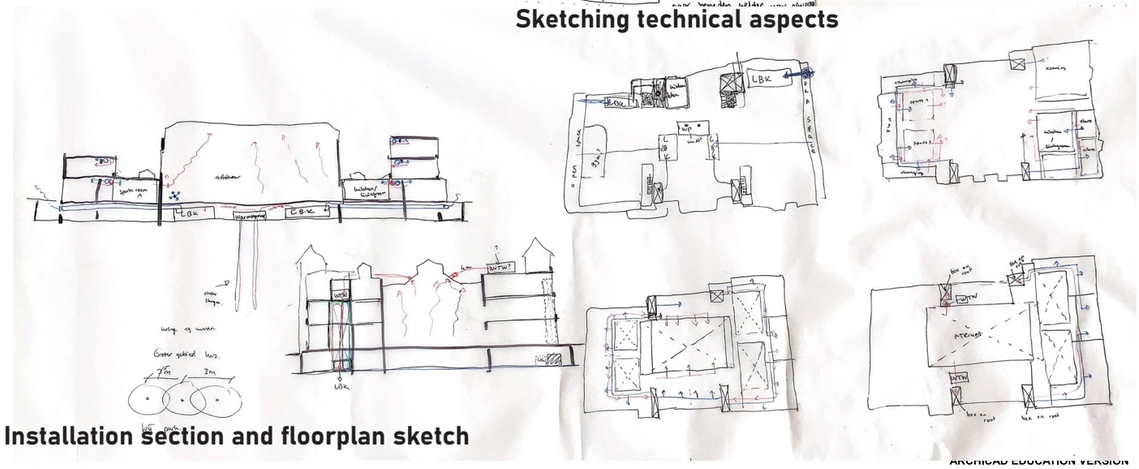
3.2 First ideas for the Former Outpatient Department

3.2.3 First set up of building technology

The first sketches of the climate in the building are made, after which it was drawn more precise in section. Other than that, the first 1:20 sections were realised.



Sketching technical aspects



Installation section and floorplan sketch

ARCHICAD EDUCATION VERSION

Sections

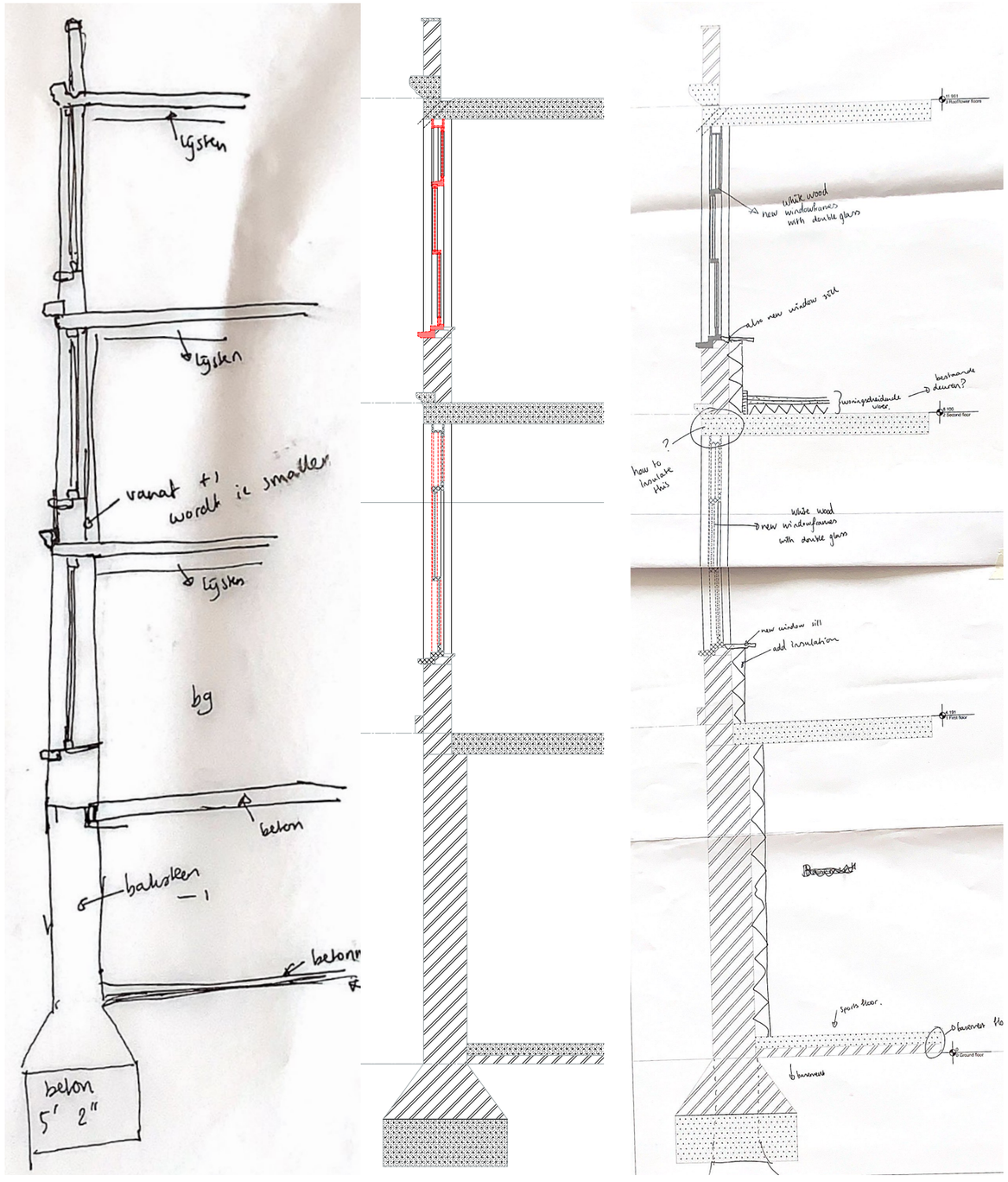
Scale 1:250

Installation section

Heat from earth. Multiple circuits placed in park

Facade section 1:20

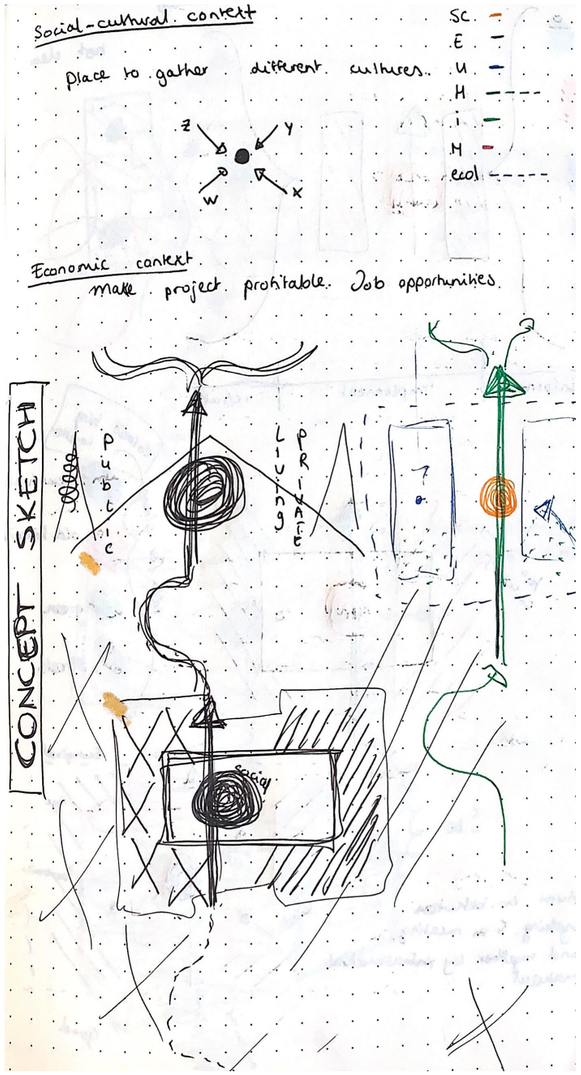
Left to right = oldest to newer versions

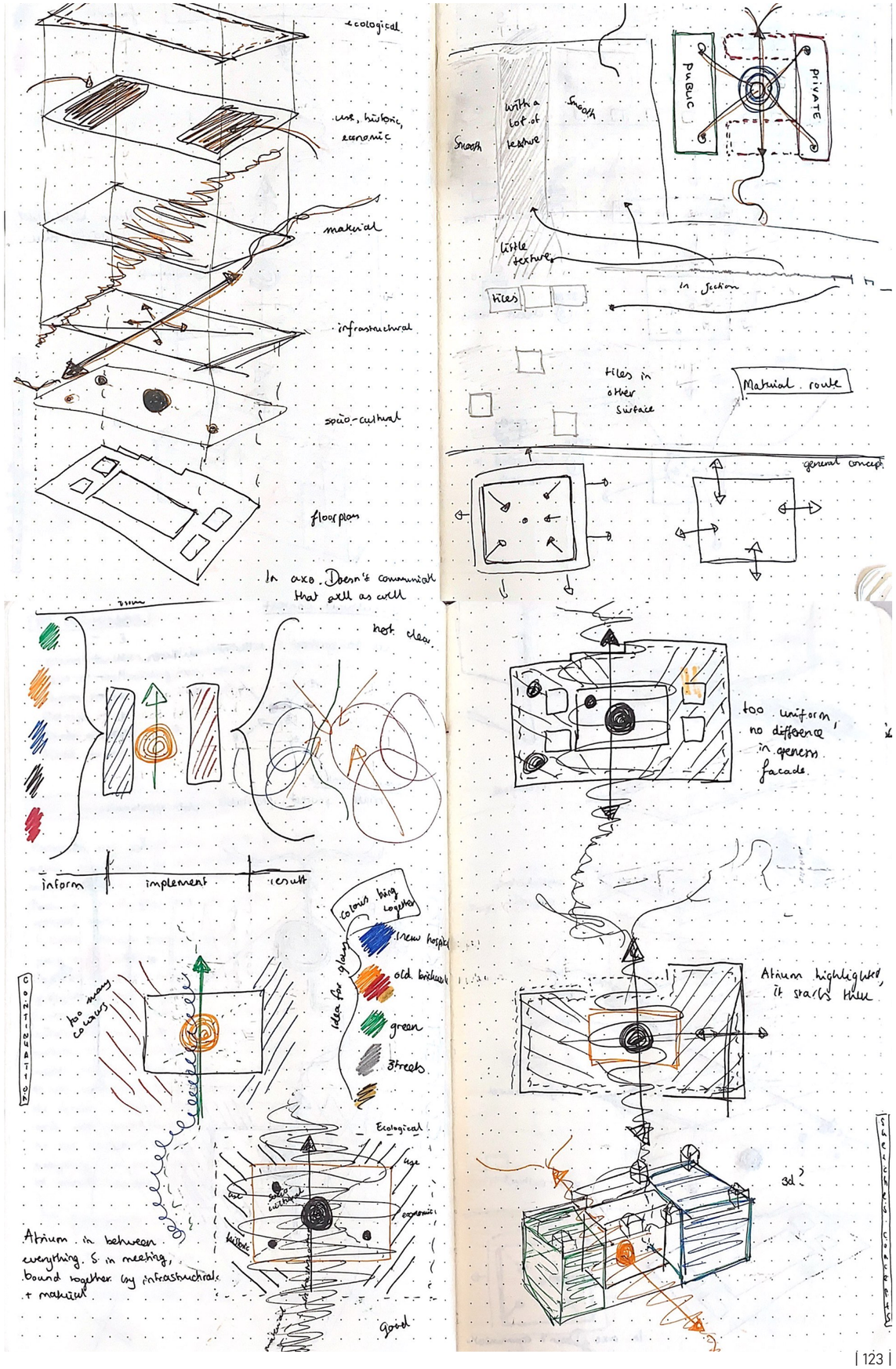


3.3 Rethinking initial ideas

3.3.1 Conceptualisation sketches

After the P2,5 presentations, the initial ideas were reconsidered. In order to structure my mind, I tried to sketch out how my concept work, as can be seen on this spread.

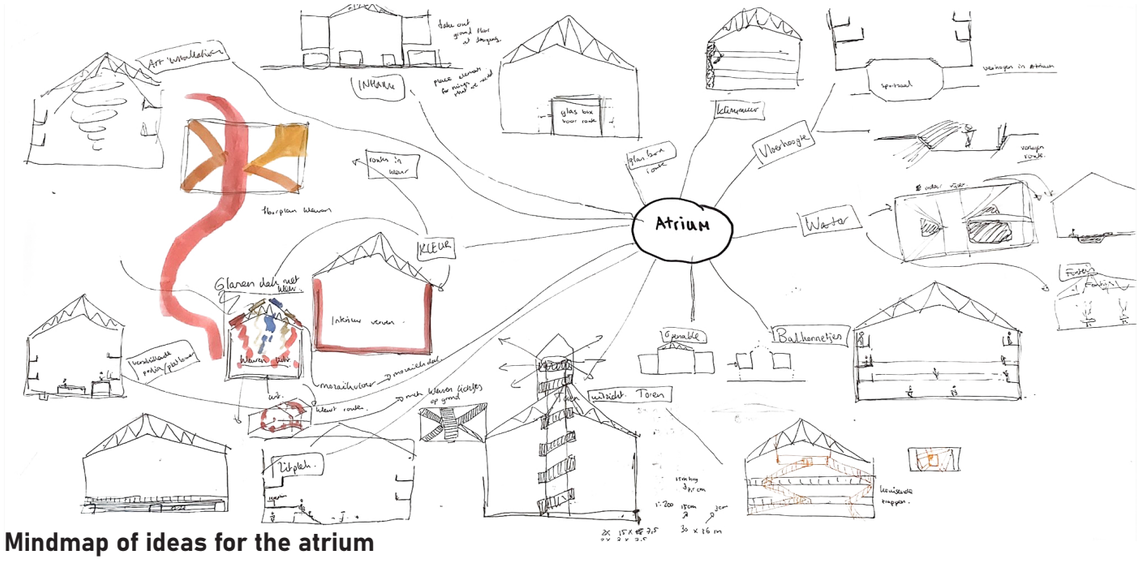




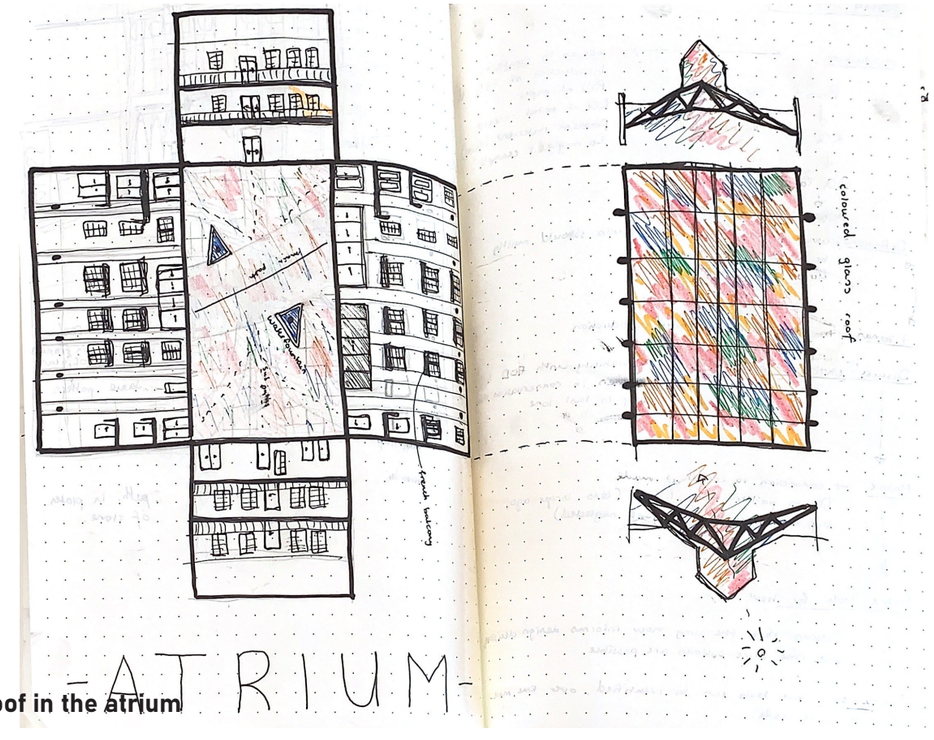
3.3 Rethinking initial ideas

3.3.2 The coloured glass roof

Another aspect of rethinking the initial ideas was to think about what was happening in the atrium. After a brainstorming session, I worked further on an idea of making a coloured glass roof. In the end, this idea did not go through because it did not contribute much to the connecting to the context approach.



Mindmap of ideas for the atrium



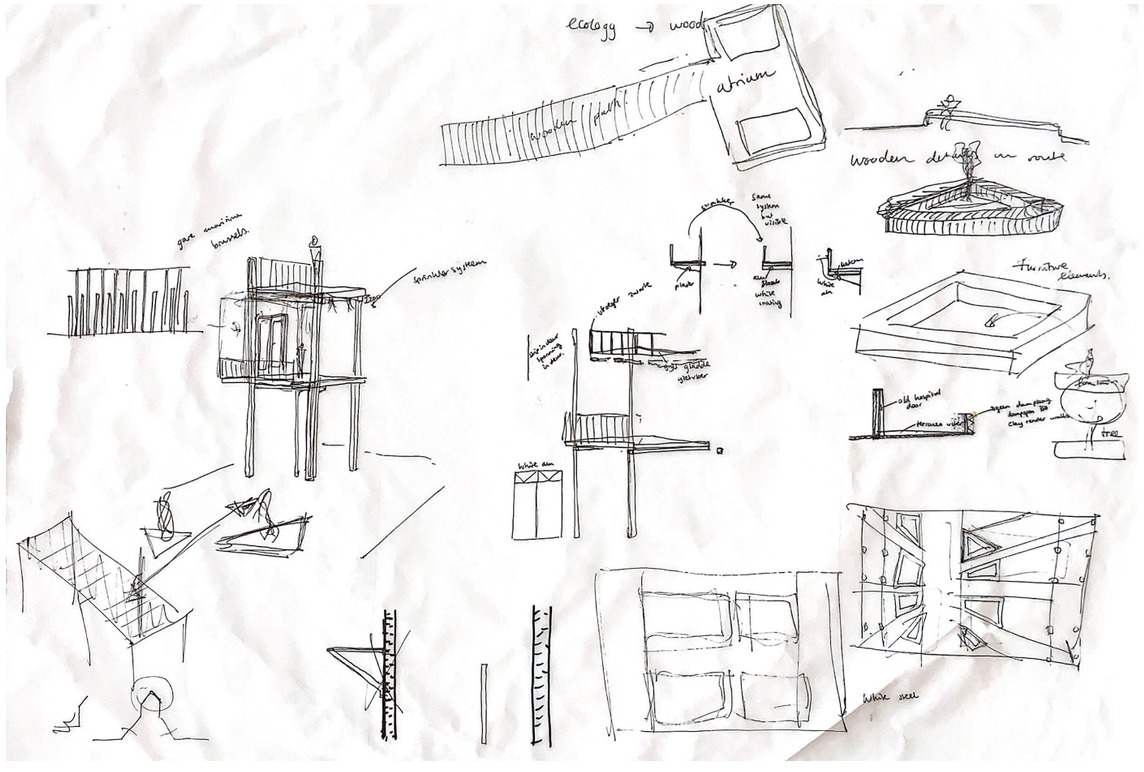
Glass roof in the atrium

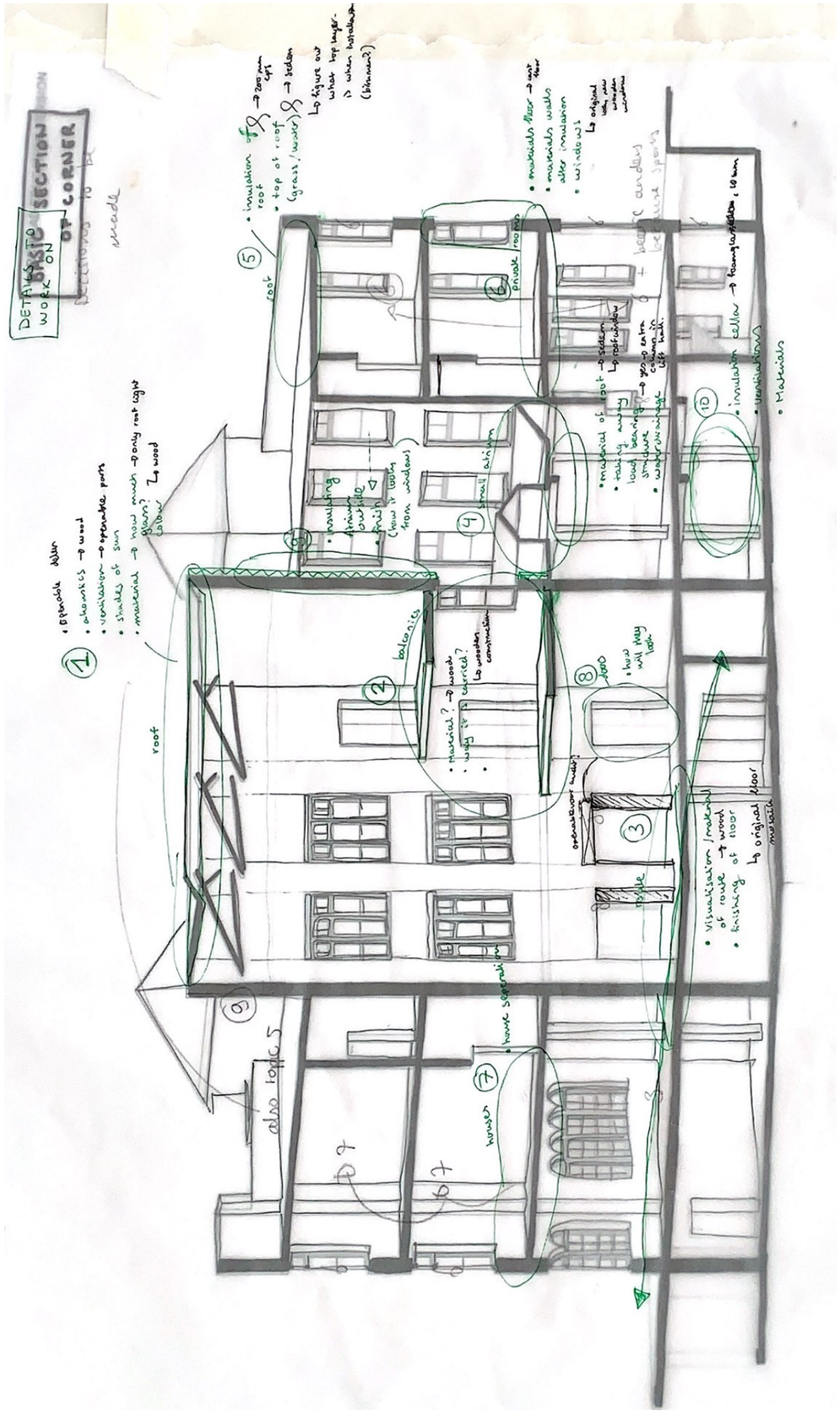
Coloured glass in entrance and experiments

Reference project: Artem Campus by Anma in Nancy

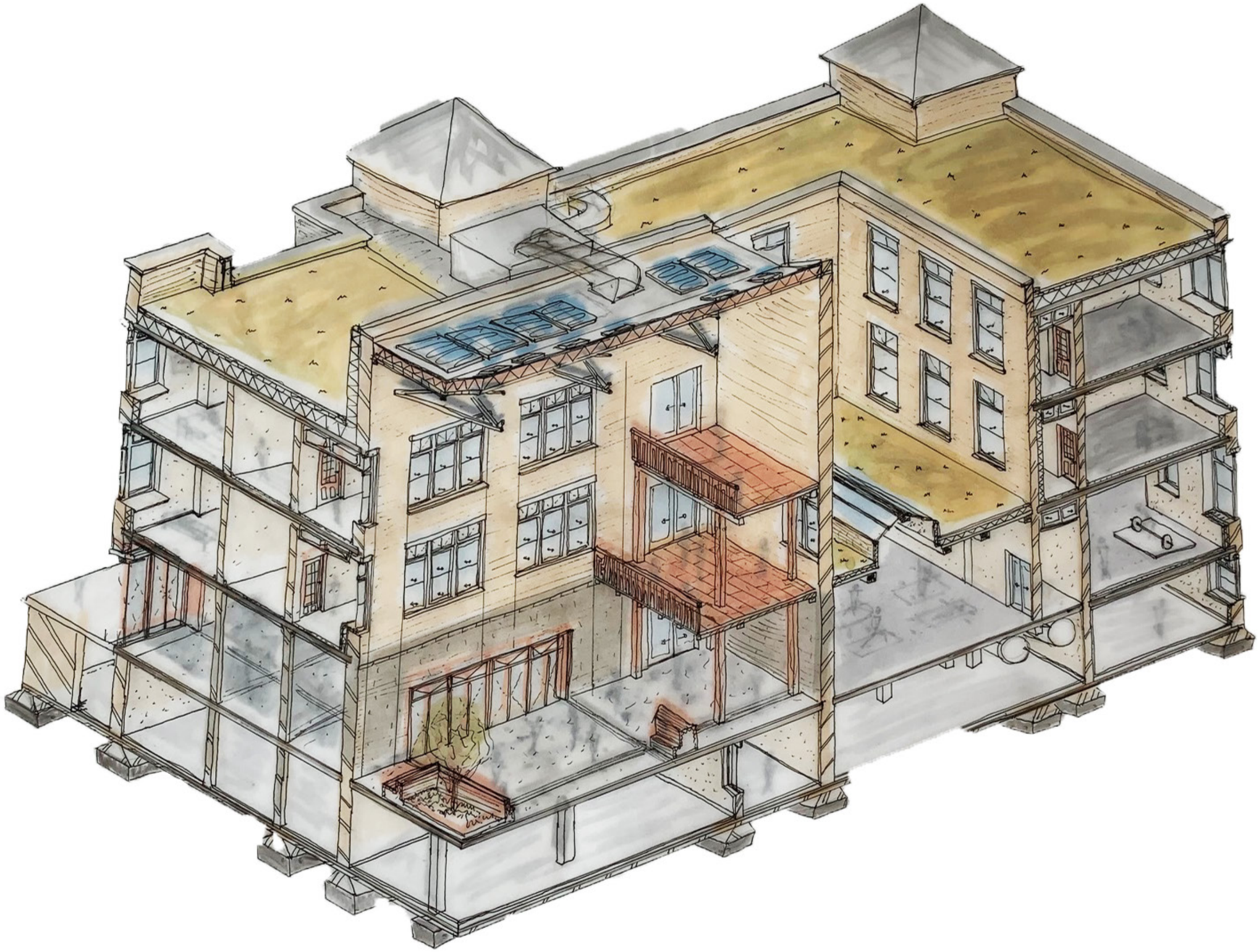
3.4 Workshop week

During the building technology workshop week I focussed on working out materiality and some connection points in my design. In the section to the right, I highlighted which things needed to be thought about, the sketches below show some drawings in the decision making process. In the end, I produced the axonometric section as shown on the next pages, with a materiality catalogue.





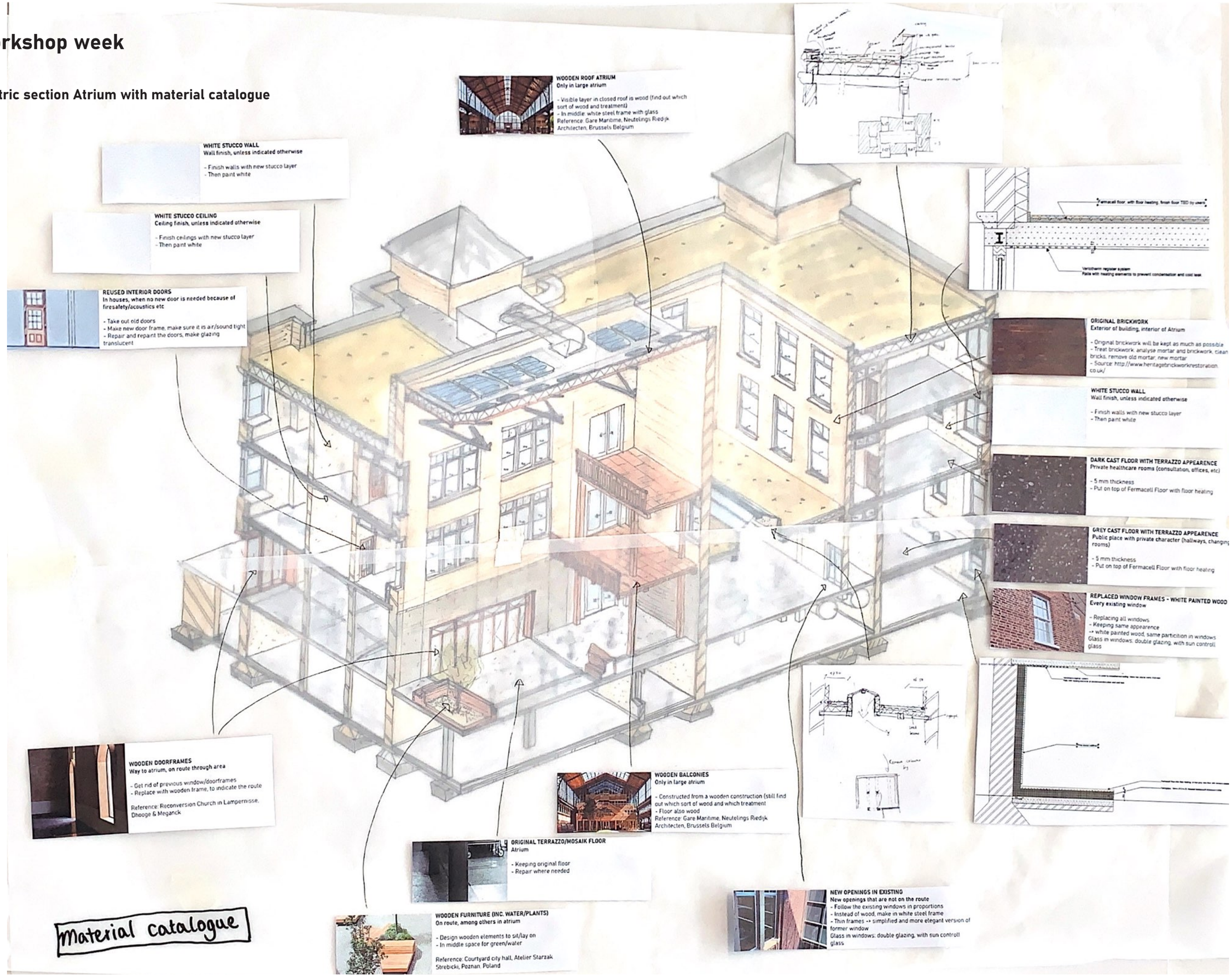
3.4 Workshop week



Axonometric

3.4 Workshop week

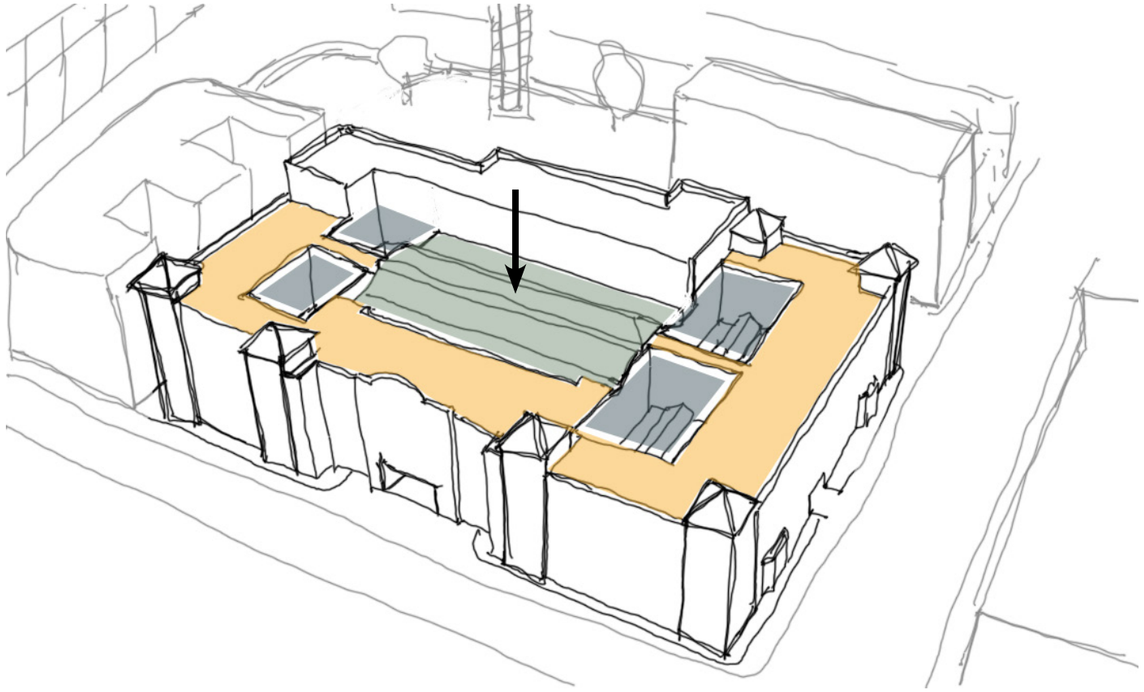
Axonometric section Atrium with material catalogue

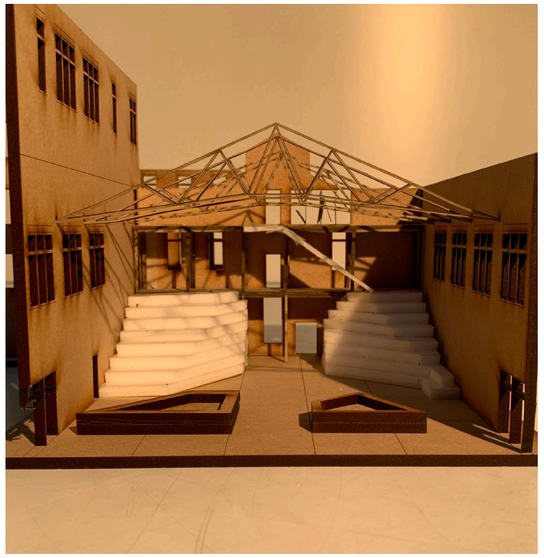


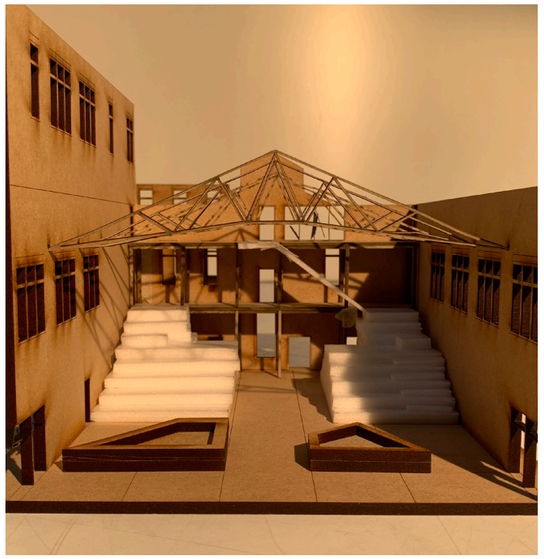
3.5 Development of roof- and (small) atria structures

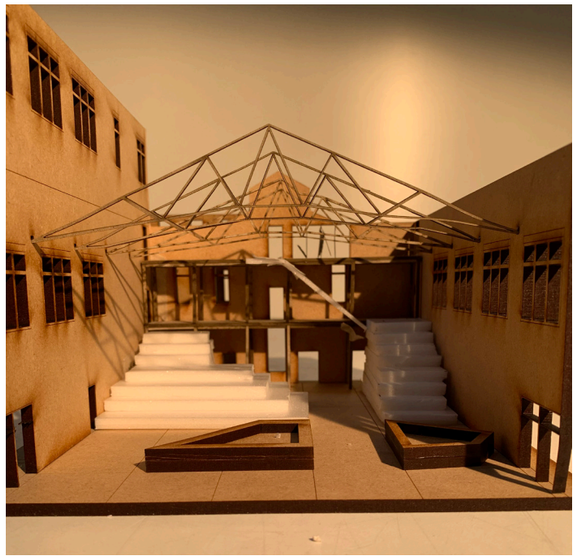
3.5.1 The large atrium

After the workshop week I focussed on three aspects of my building where my context-based approach was most visible. The first being the central large atrium (green). While looking at the Gare Maritime (Neutelings Riedijk Architecten, in Brussels), I worked on structures of stairs in the central atrium in a model.





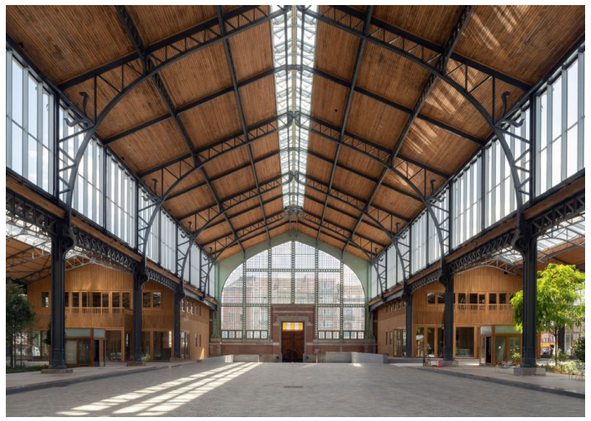




Stair shape variants in model

Precedent for this intervention

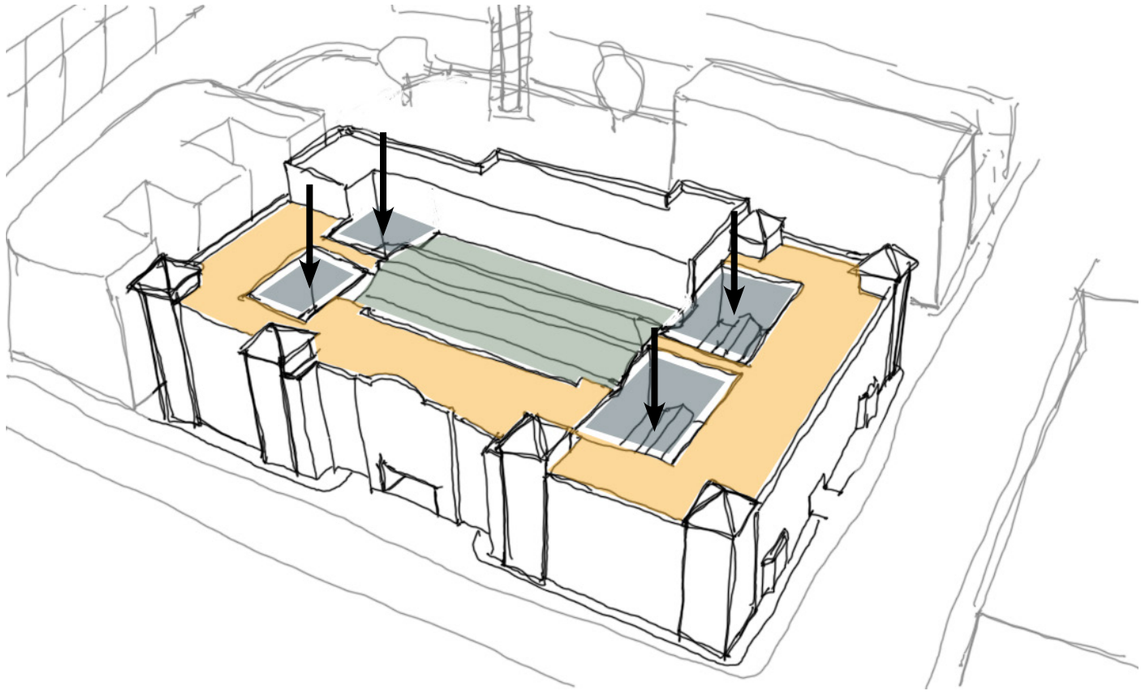
Gare Maritime
Neutelings Riedijk Architecten
2020 - Brussels, Belgium



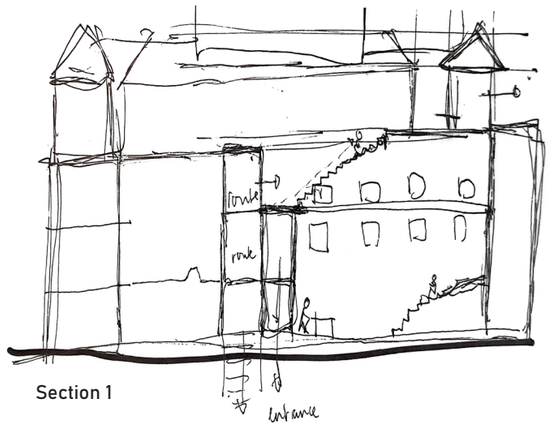
3.5 Development of roof- and (small) atria structures

3.5.2 The small atria

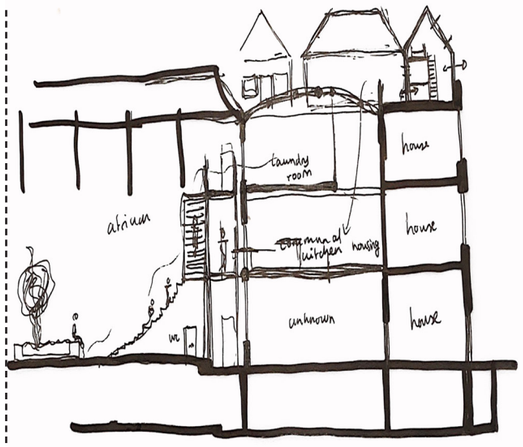
Another aspect I worked on was the filling in of the small four atria of the building. These spaces could be used more efficient than previous (where it was just used as shaft for daylight) and could help connect the building to the context. The drawings show floorplans, sections and detailing for the intervention.



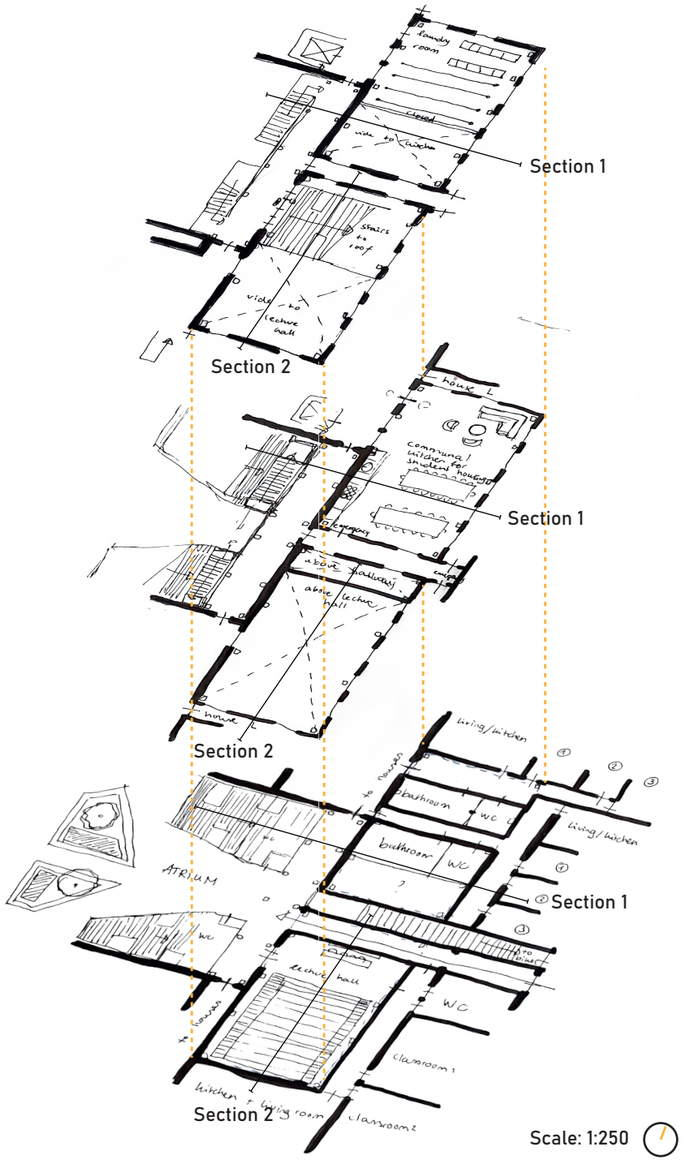
Small atria east



Section 1

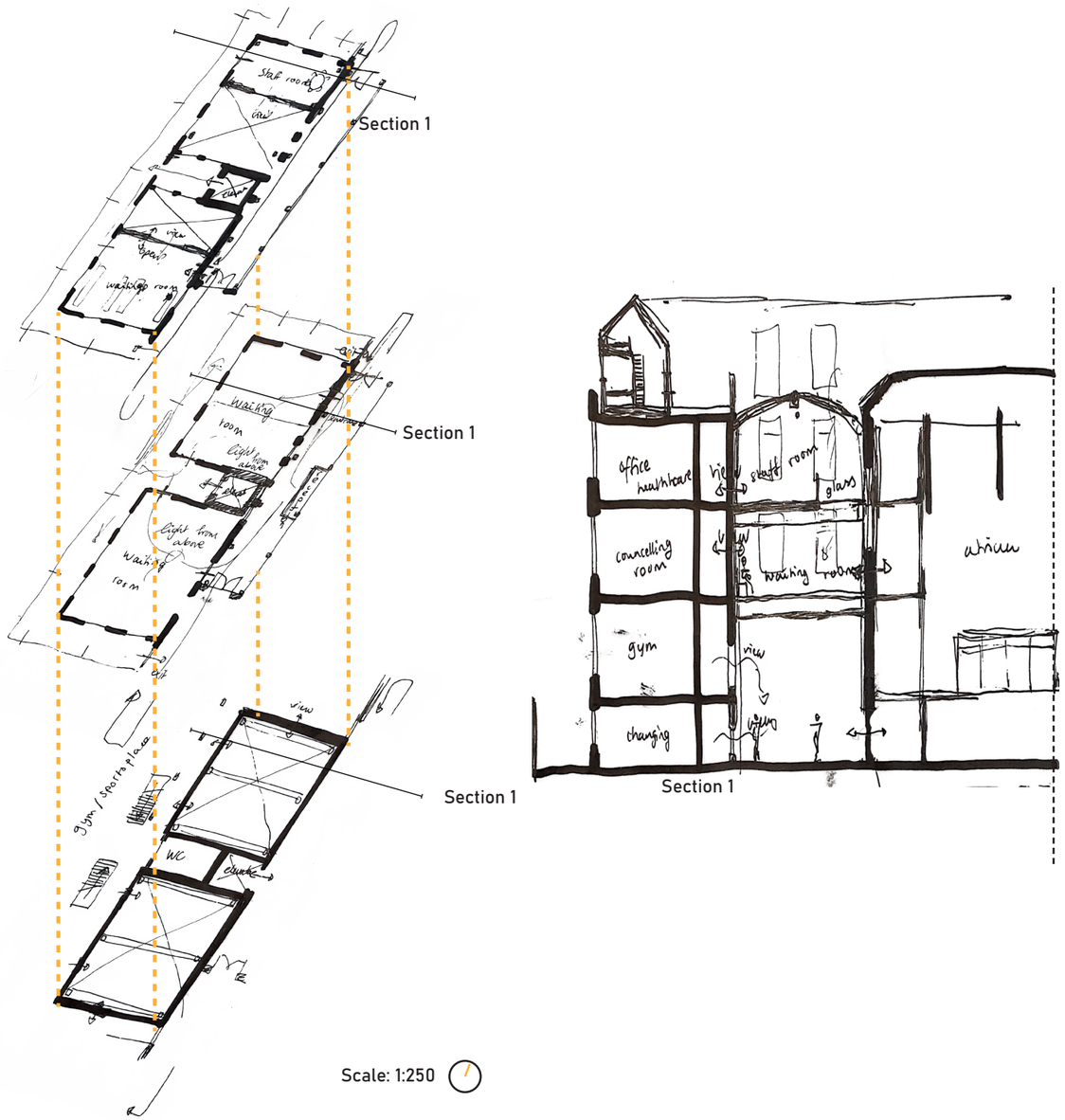


Section 2

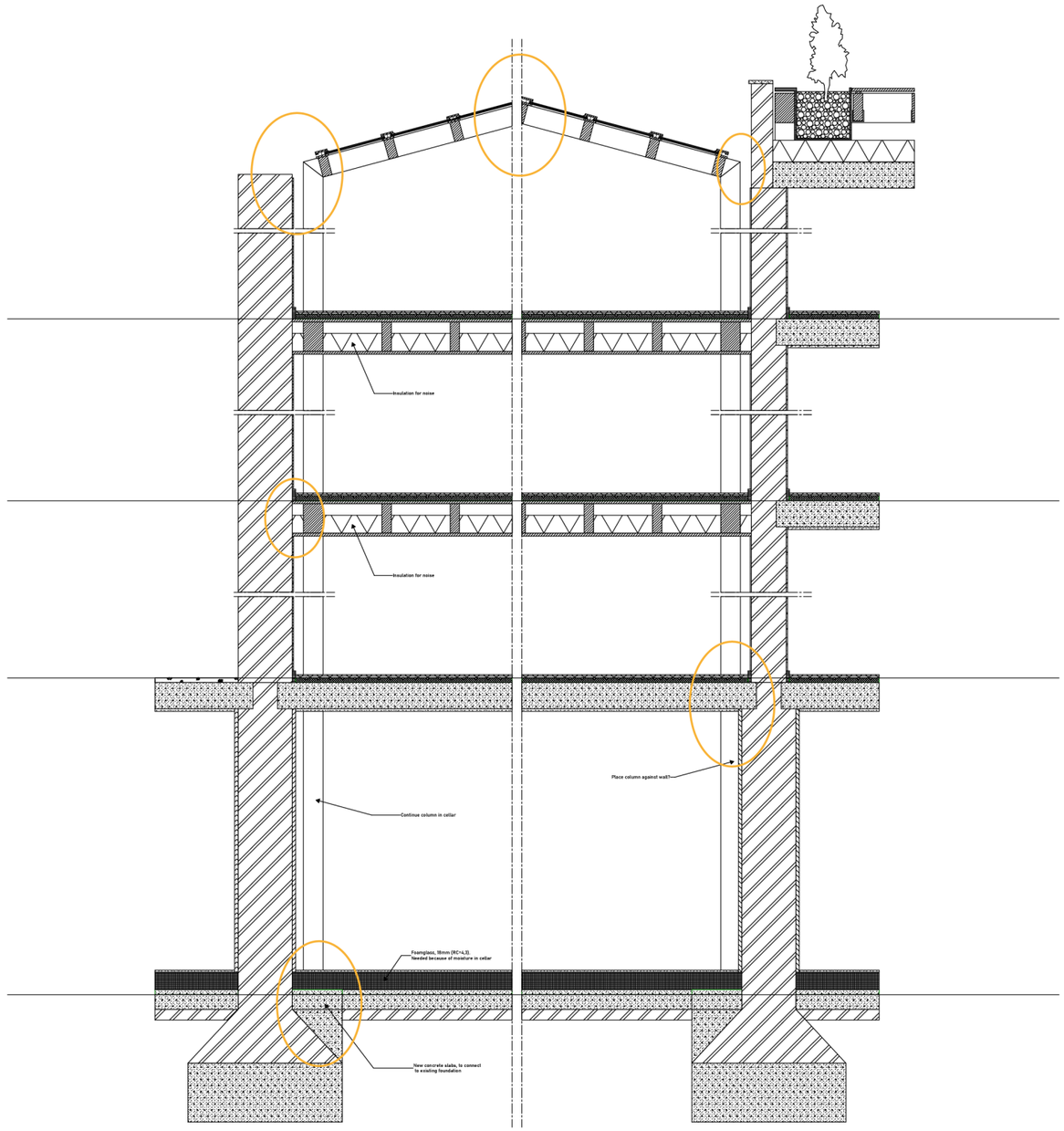


Scale: 1:250

Small atria west



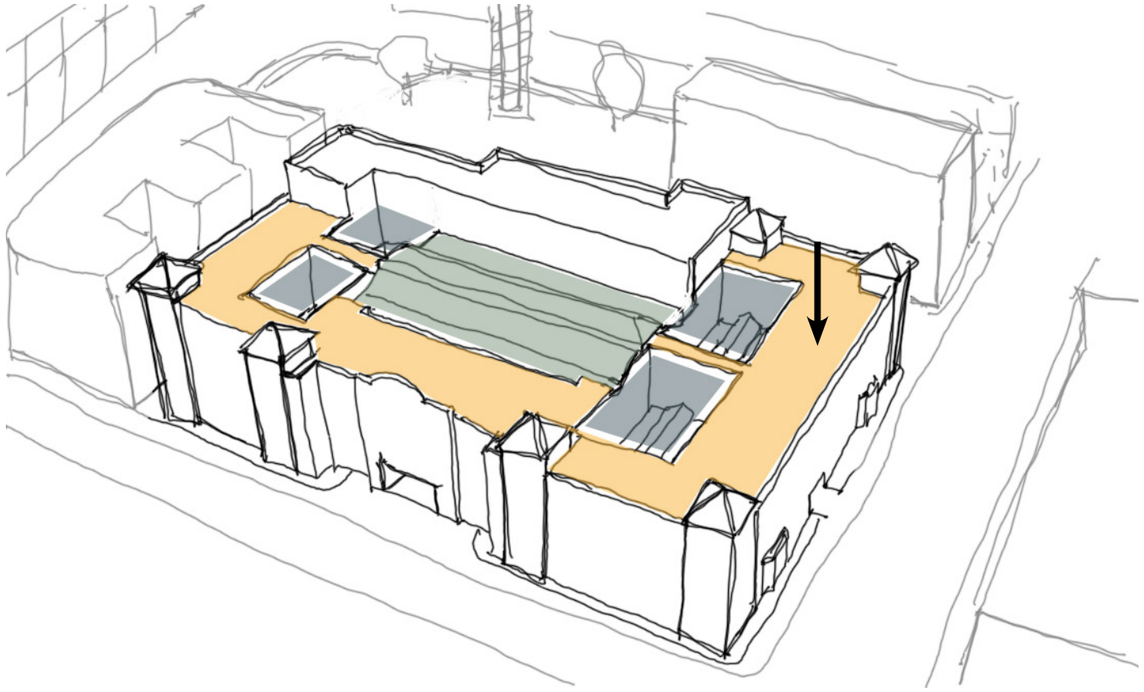
Small atria detailing (in yellow: points to further investigate)



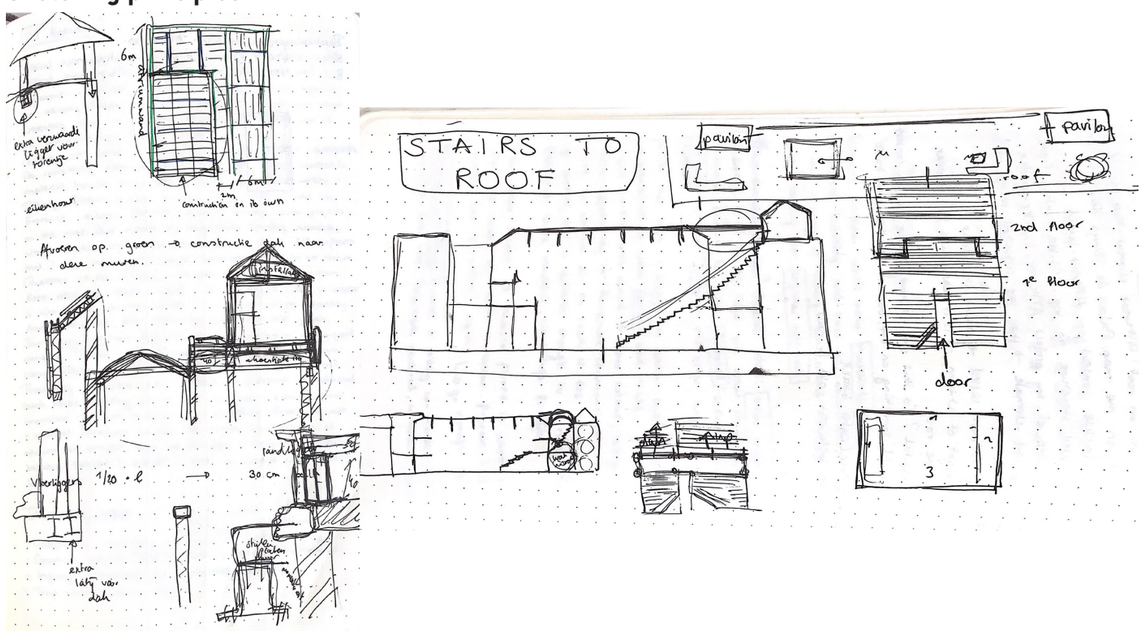
3.5 Development of roof- and (small) atria structures

3.5.3 The roof structure

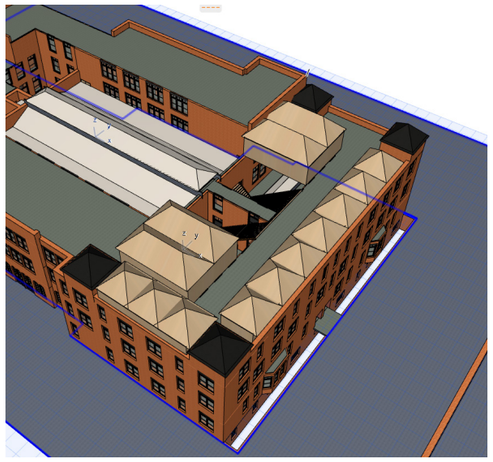
The last aspect I worked on after the workshop week was a new structure on the roof. This section shows some first explorations in terms of shape, floorplan, materiality and detailing.

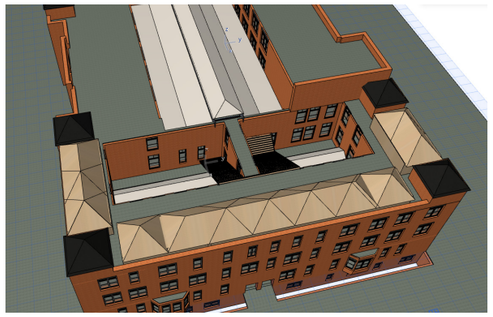


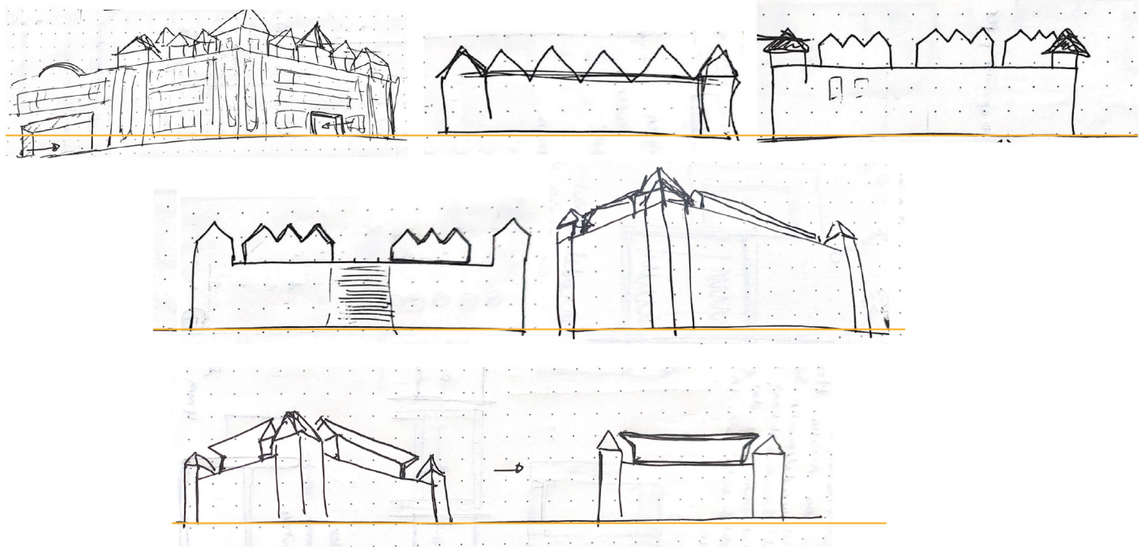
Sketching principles



Explorations of shape





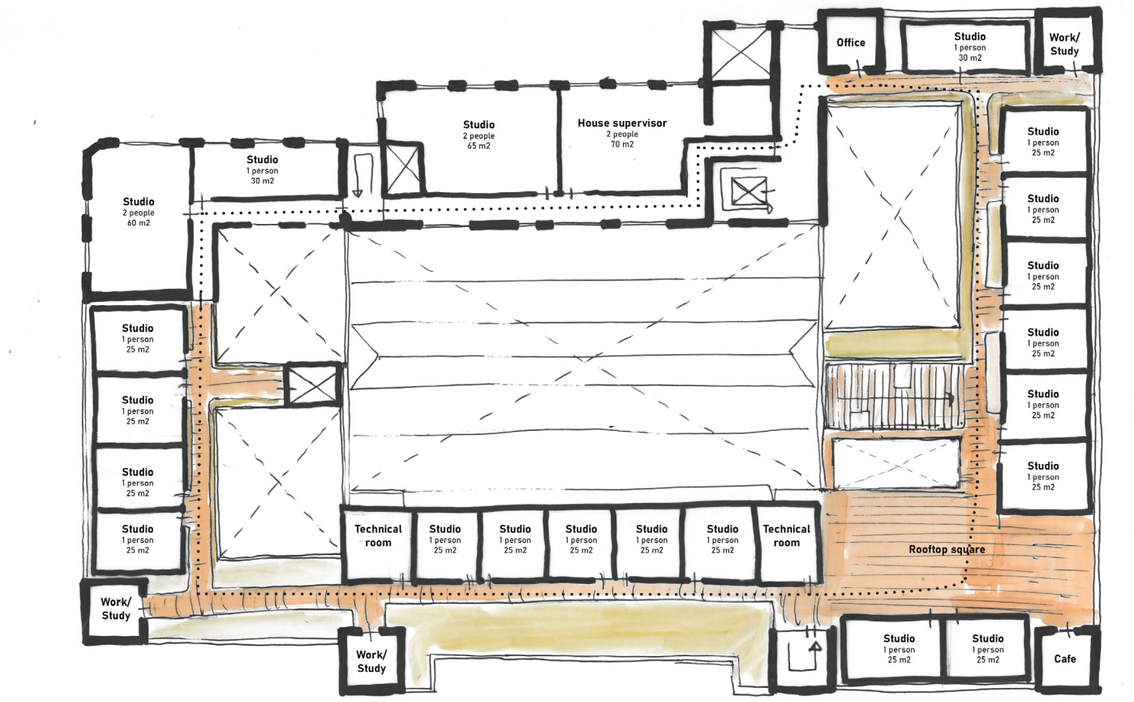


Impression of structure on roof

Camillo Botticini
T House, Nicola
Martinoli Architetto

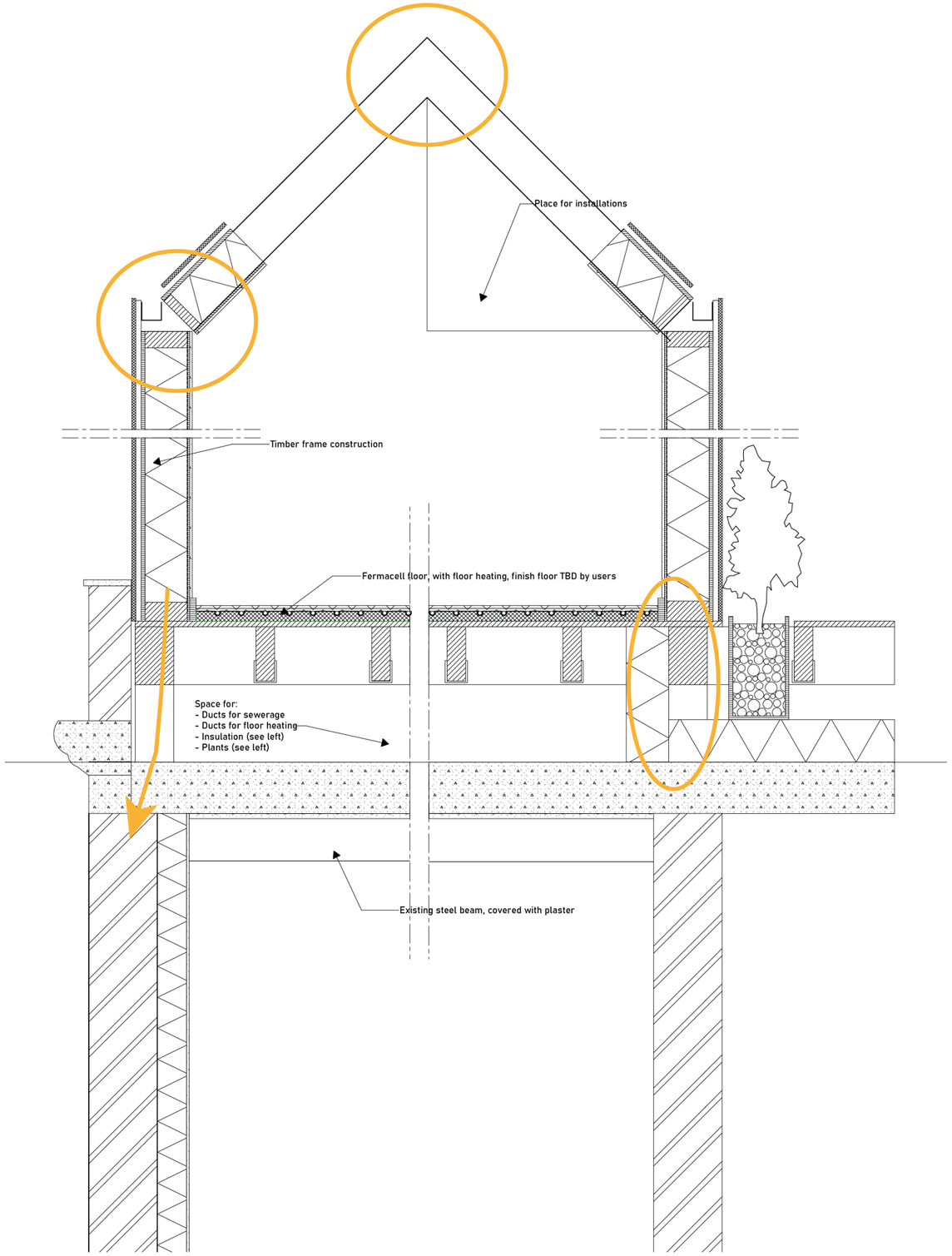
SV House, Rocco
Borromini

First floorplan



Drawn on scale: 1:250

Roof structure detailing (in yellow: points to further investigate)



Drawn on scale: 1:20

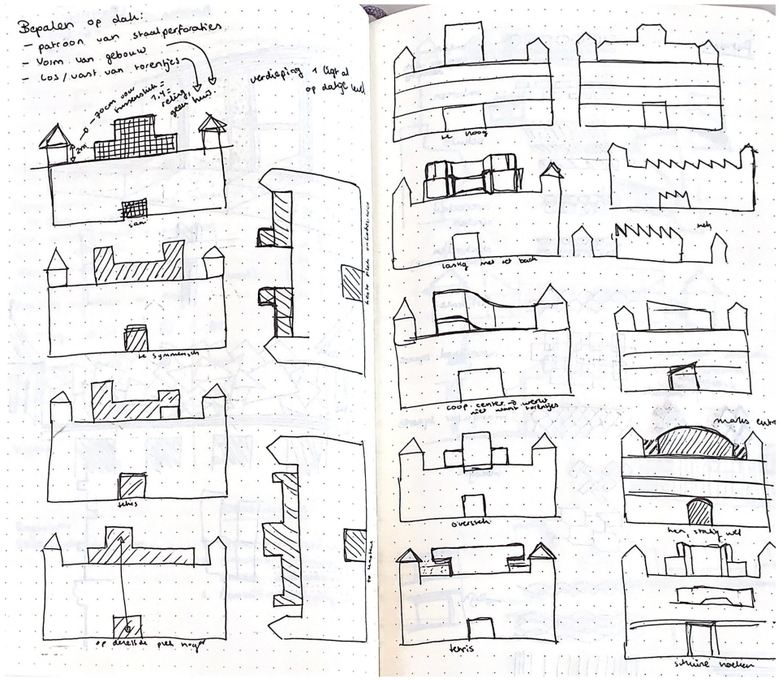
CHAPTER 4
ESTABLISHING THE PROJECT

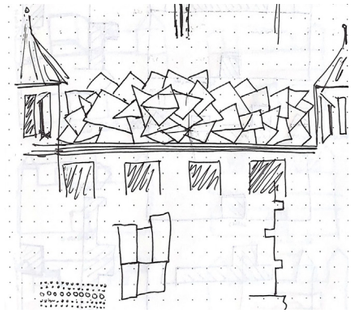
Design elaboration	**4.1**
The roof	4.1.1
The small atria	4.1.2
The entrance	4.1.3
Building technology elaboration	**4.2**
Detail development	4.2.1
Ventilation schemes and calculations	4.2.2
Rainwater disposal	4.2.3
P4 products	**4.3**
Site	4.3.1
Building	4.3.2
Elements	4.3.3

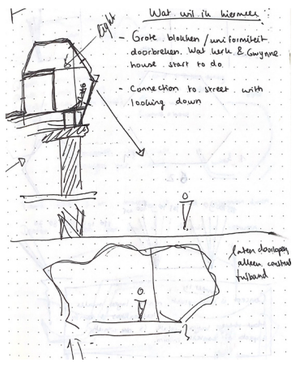
4.1 Design elaboration

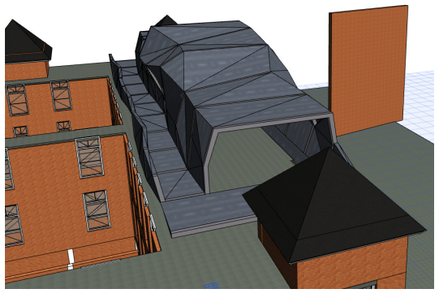
4.1.1 The roof

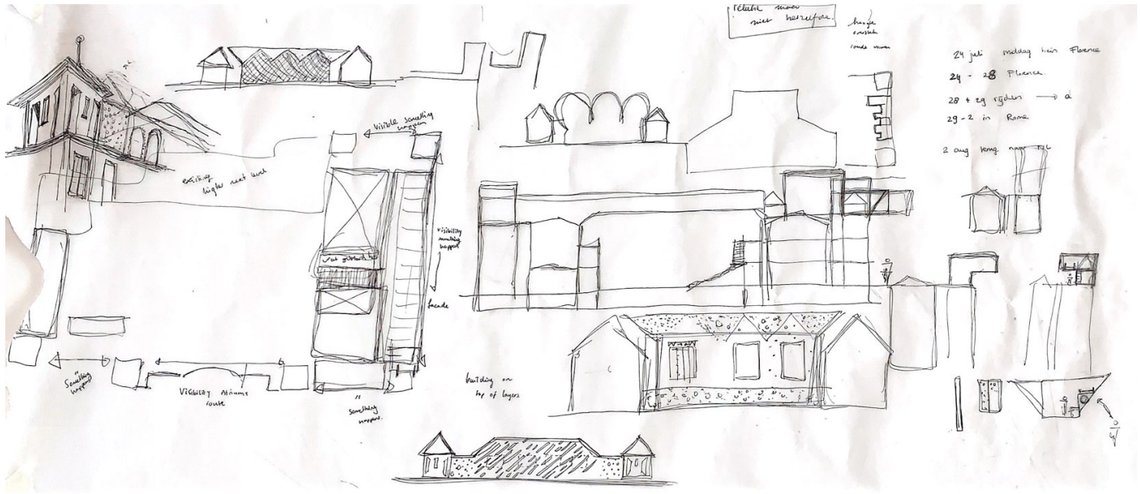
In the weeks after P3 I continued to work out the shape of the roof. I did this with sketching and 3D modelling, after which I could compare the results. This page shows all the previous versions of roofscapes. The final version of this exploration is shown later, in combination with the materialisation aspects.

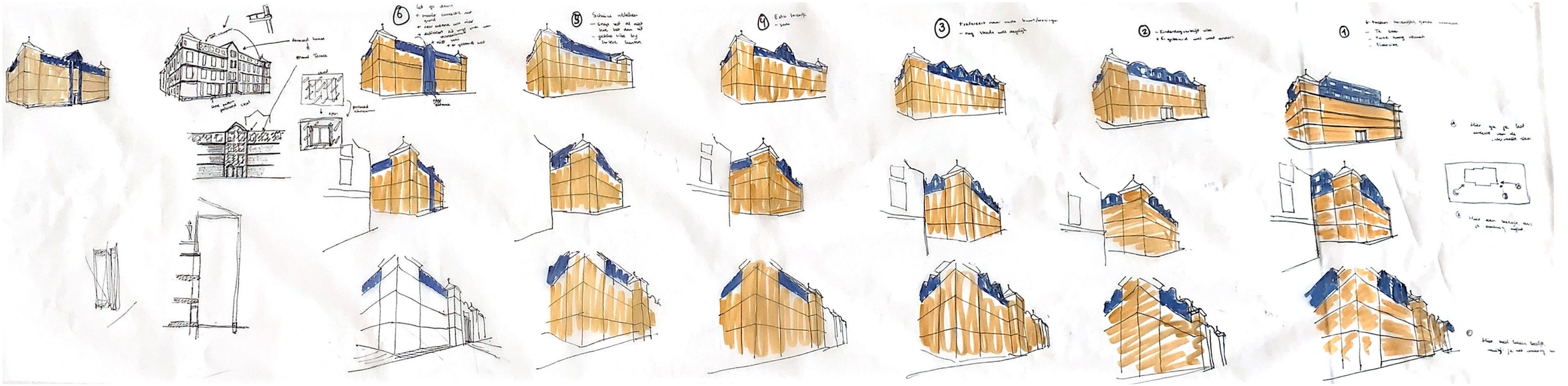








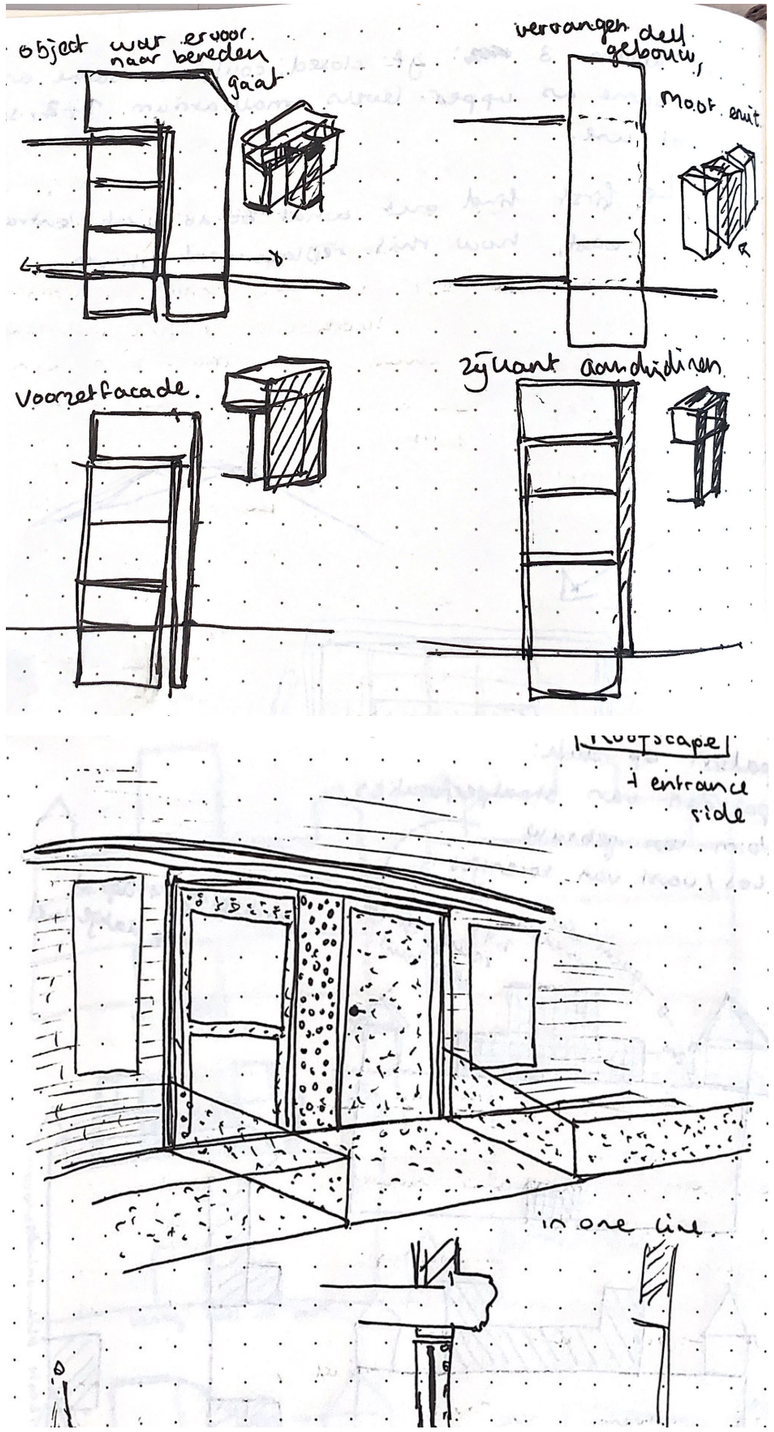




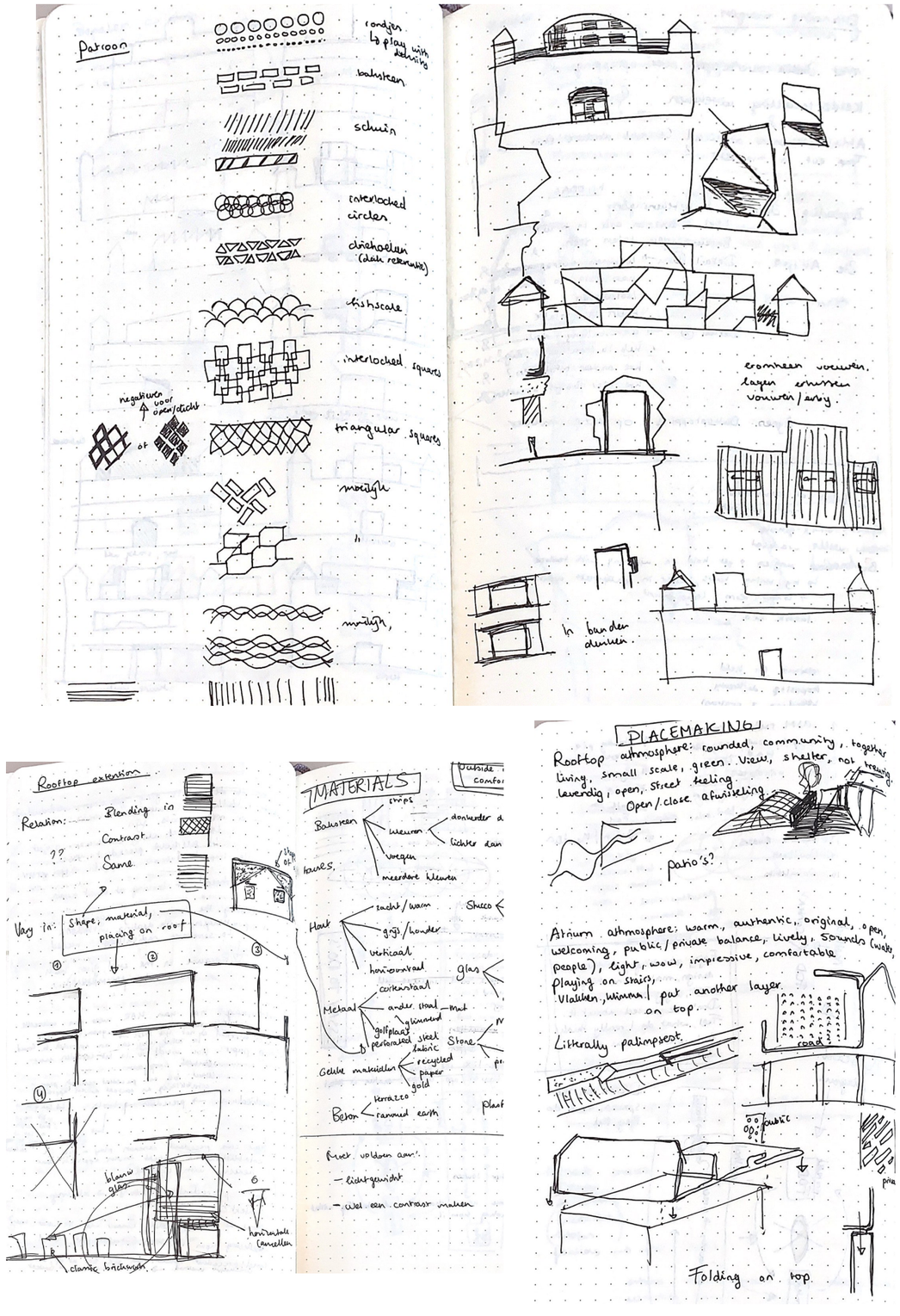
4.1 Design elaboration

4.1.1 The roof

Shape roof goes down to entrance, sketches



Materiality roof sketches



4.1 Design elaboration

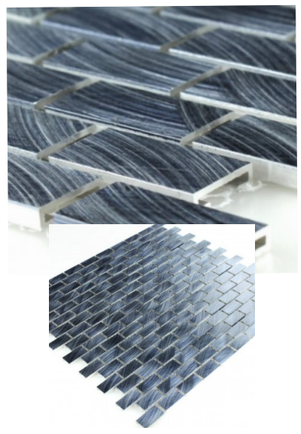
4.1.1 The roof

The end result of the exploration is showed in this collage. The shape cantilivers over the original roofline to also connect with the street.

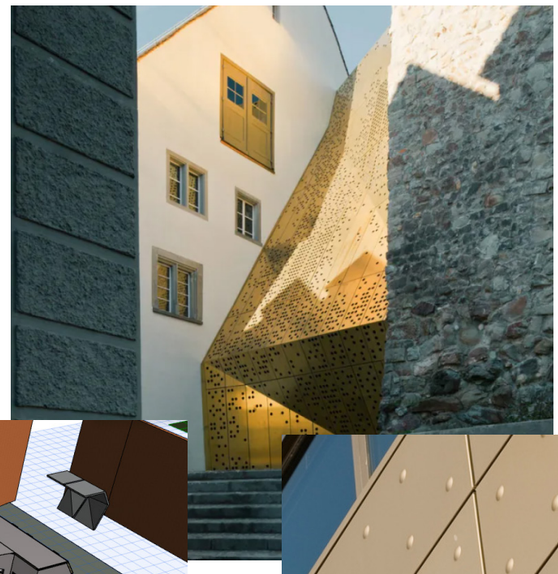
The materiality is expressed with precedents and information from manifacturers

Maar dan grotere perforaties

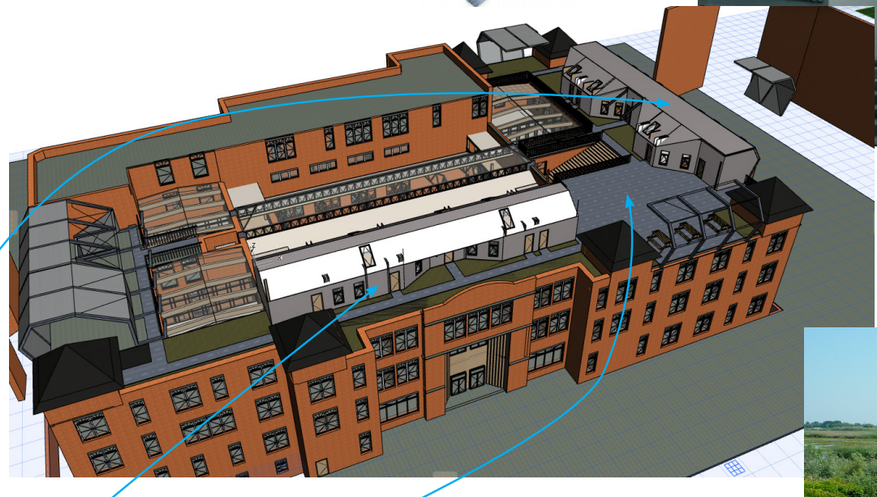
Voor pergola's

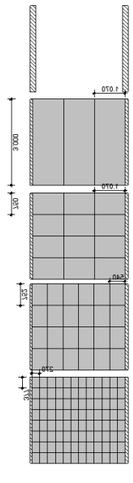


Voor dichte delen



Maar dan in uitvoering:
geanodiseerd aluminium,
bronskleurig, mat





Grid, 3,2 m

Grote panelen
Buitenkant, tm dak

Medium panelen
Binnenkant straat,
woningen

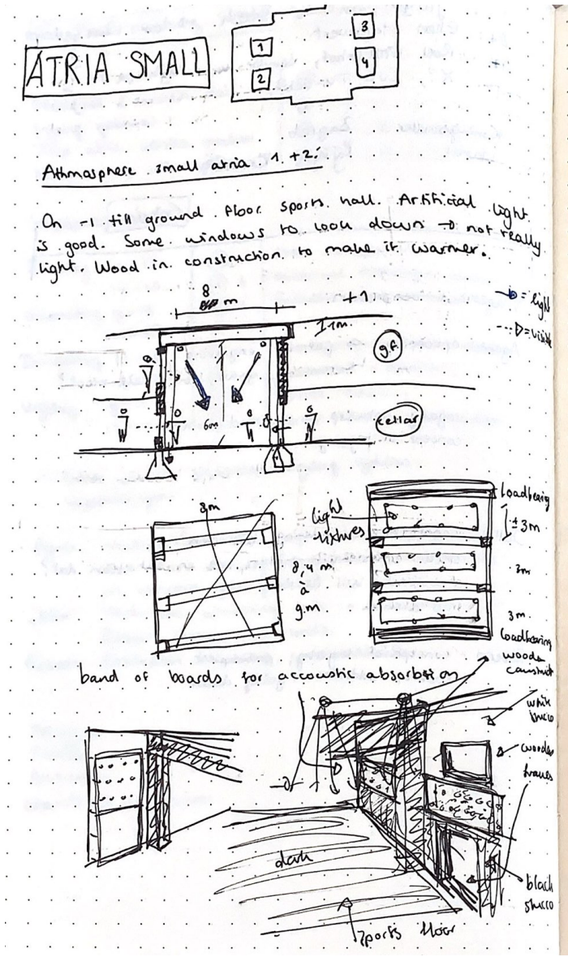
Kleine panelen
Vloer, straat op +3

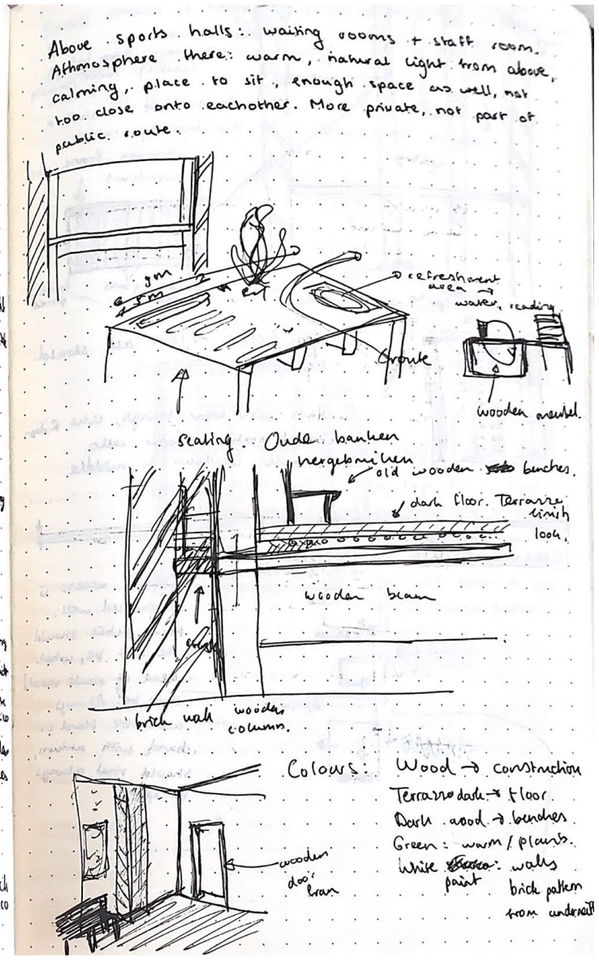
Sedemdak, waar niet gelopen
wordt

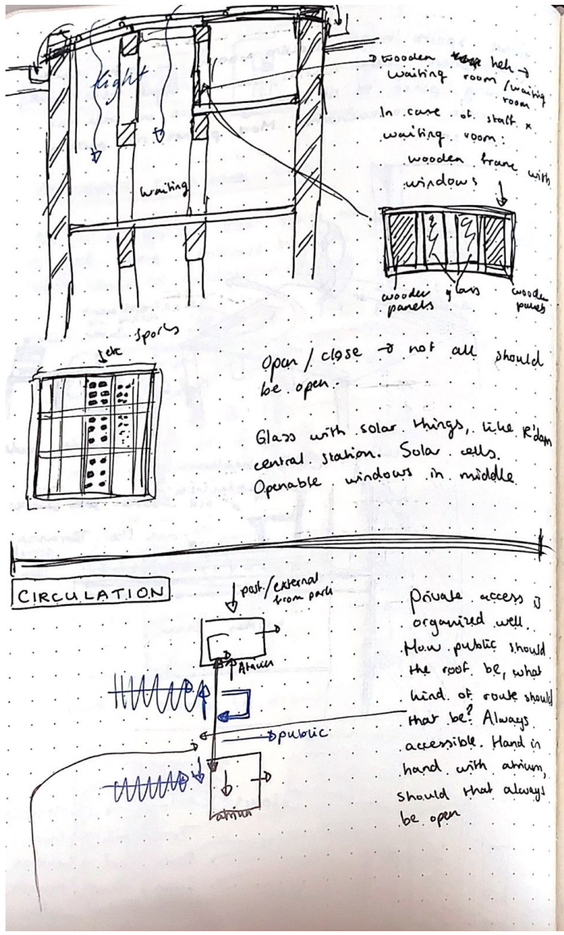
4.1 Design elaboration

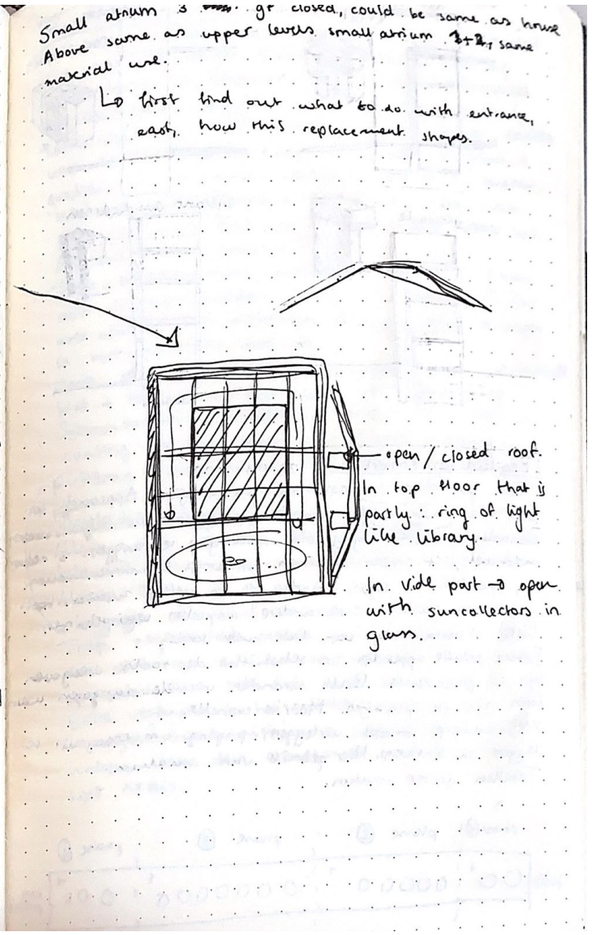
4.1.1 The small atria

These sketches show the more precise realisation of the small atria. The sketches consern both the programmatic realisation and sketches on the technical realisation.





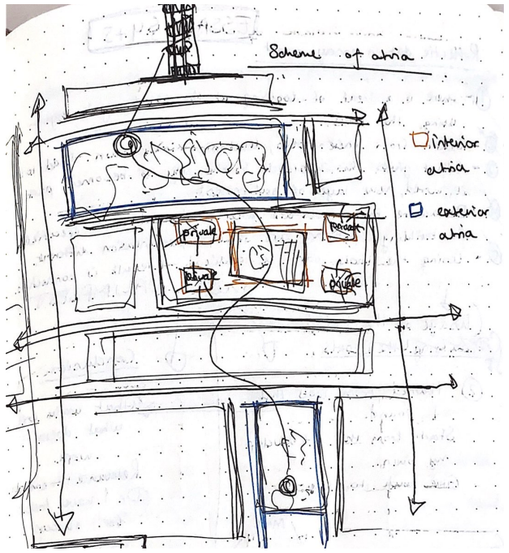


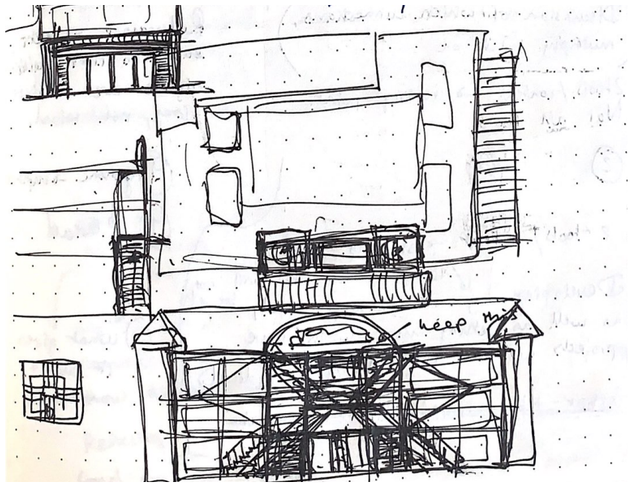


4.1 Design elaboration

4.1.1 The entrance

Another underdeveloped aspect of the project was the entrance. This spread shows sketches for the entrance. In the end, the entrance connects with the context and welcomes people into the building by having a set-back. It also has the same material language as the large atrium, which also connects them in material way.

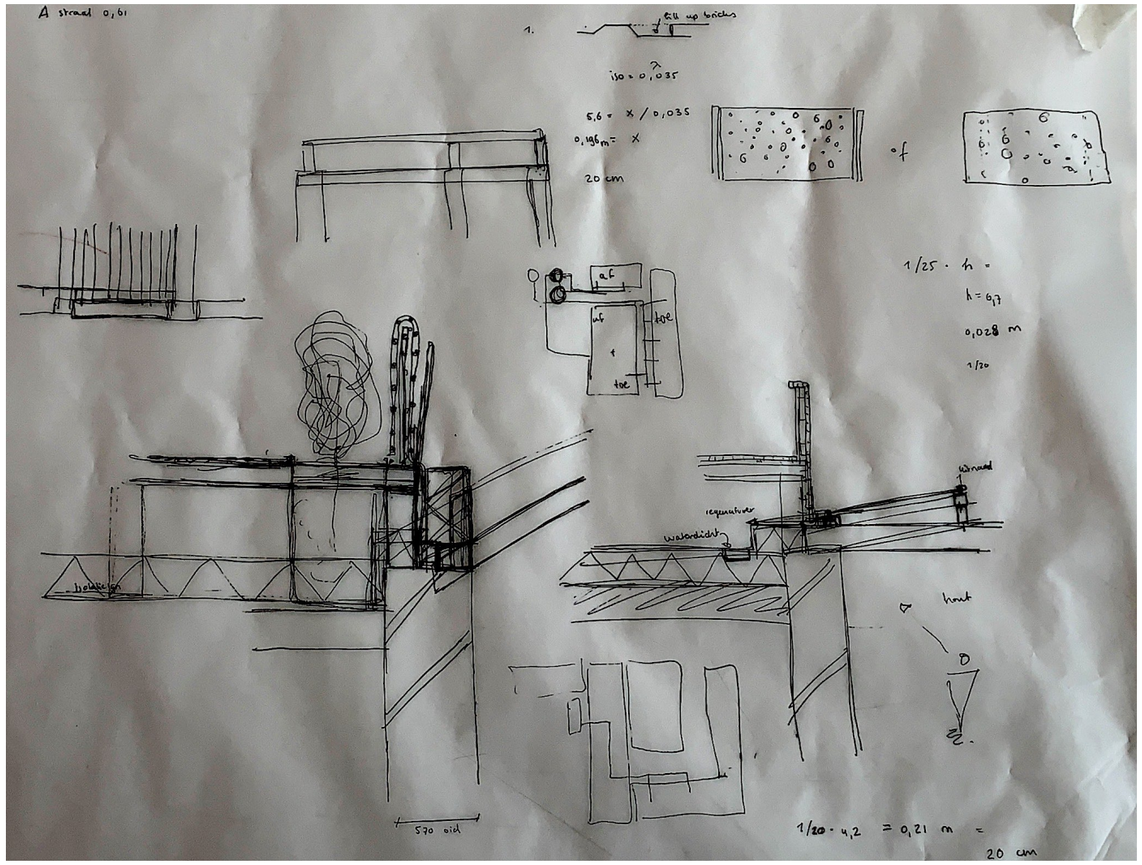


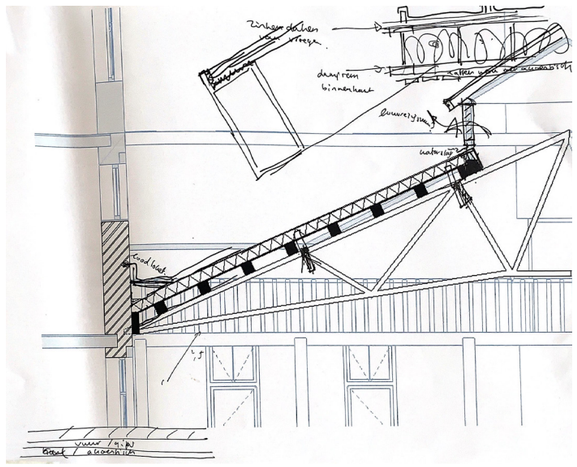


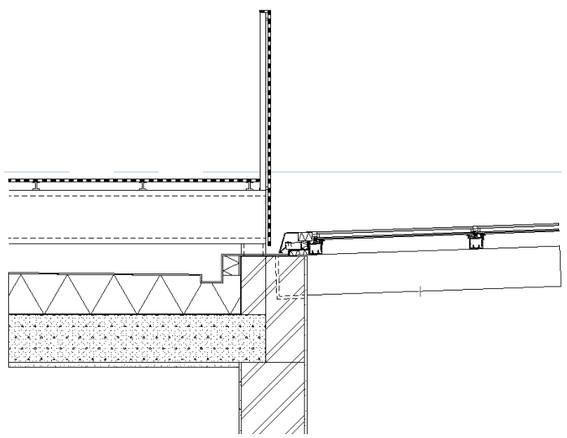
4.2 Building Technology elaboration

4.2.1 Detail development

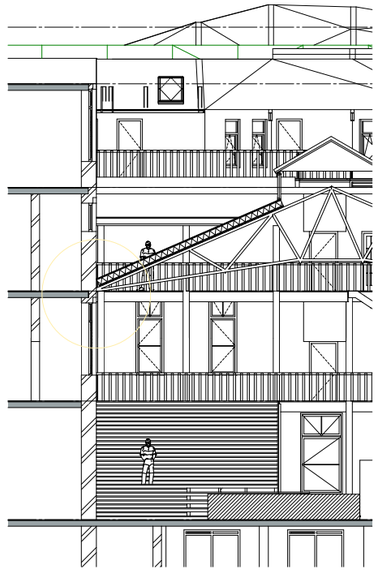
In this phase, the detailing also developed a lot. I started by defining which details were needed to explain my approach, which ones were the most crucial. I concluded that I needed a detail of the connection between small atrium and existing building, the detailing of the new roof of the large atrium, and a detail of the top addition. This is what I started to develop and the stages of this is shown in this spread.



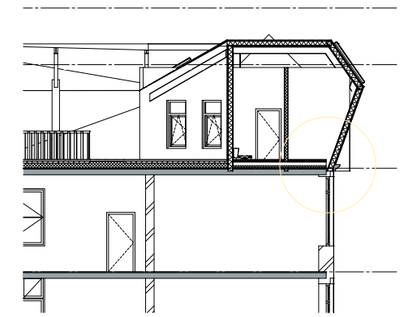




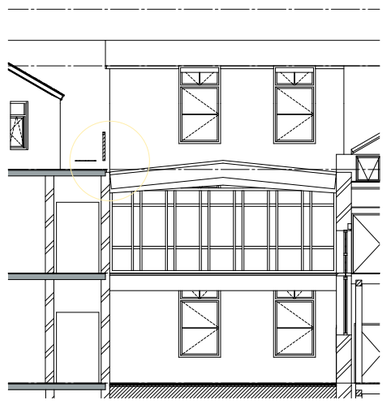
Details on 1:50 and 1:10, first set up for P4



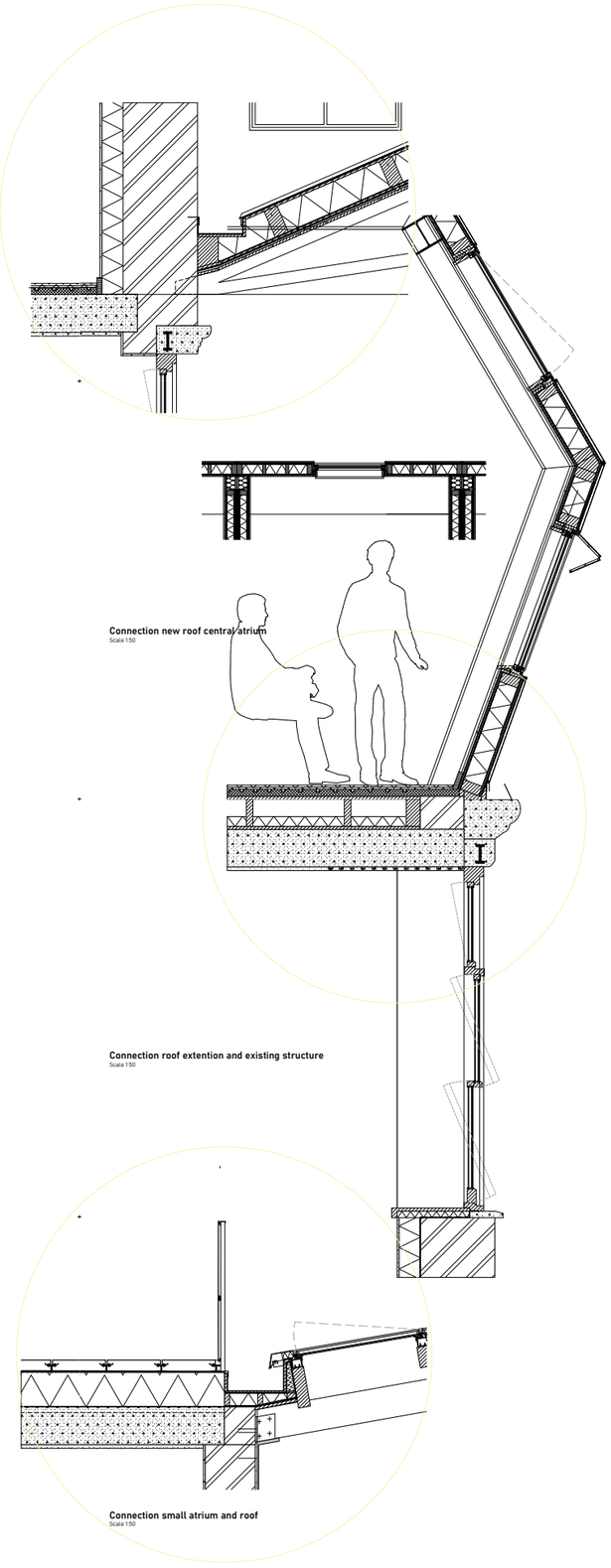
Fragment central atrium
Scale 1:50



Fragment roof addition
Scale 1:50



Fragment small atrium
Scale 1:50



Connection new roof central atrium
Scale 1:50

Connection roof extention and existing structure
Scale 1:50

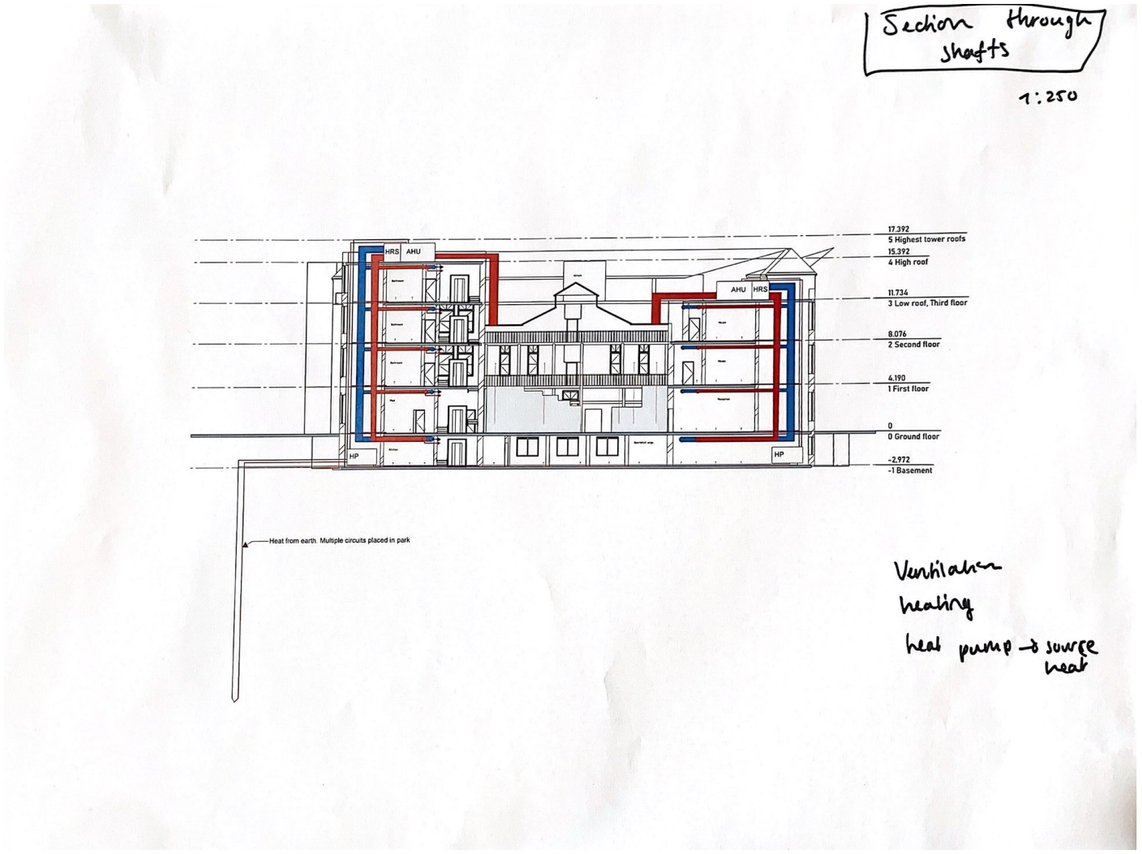
Connection small atrium and roof
Scale 1:50

4.2 Building Technology elaboration

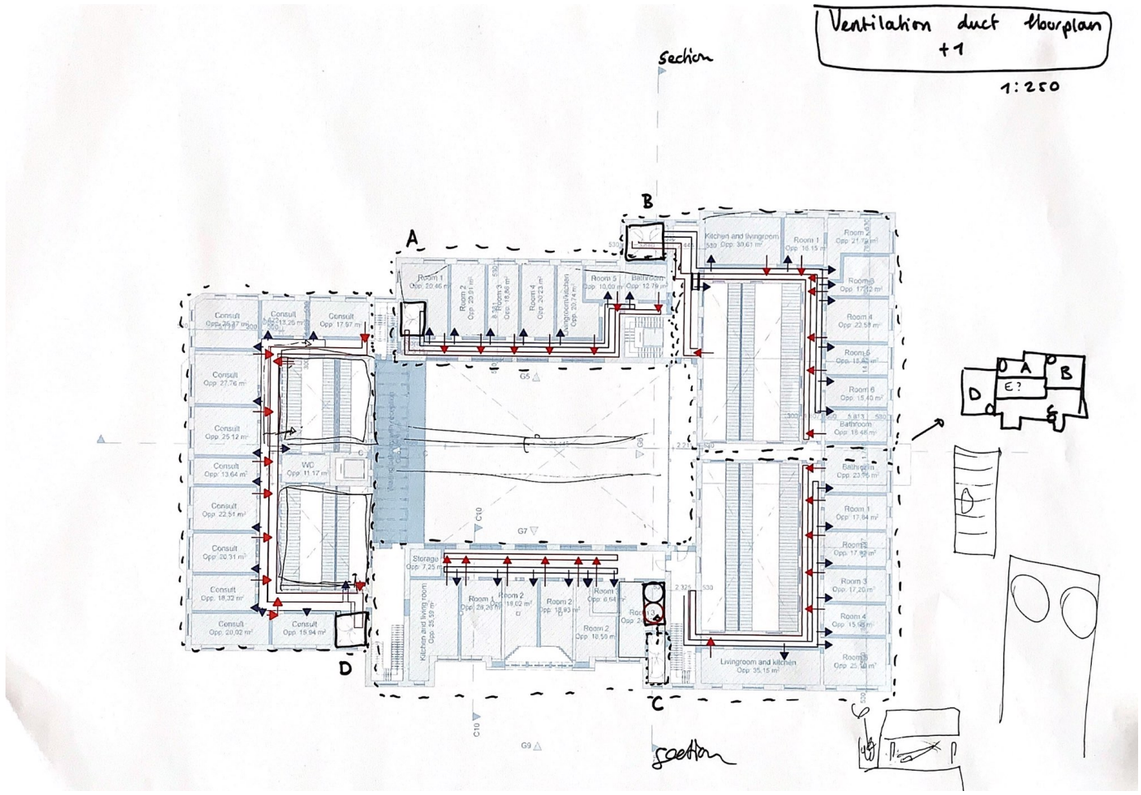
4.2.2 Ventilation schemes and calculations

I also worked on integrating the ventilation system in the building. Since I wanted to place this system in the hallway, to maintain the high rooms in the building, and the space is therefore limited, I wanted to calculate the system quite precisely. I calculated the needs of the building, and with that the size of ducts. I drew them in floorplan and section. After the climate consult with Willem van der Spoel, I changed up some of the calculations and also drawings.

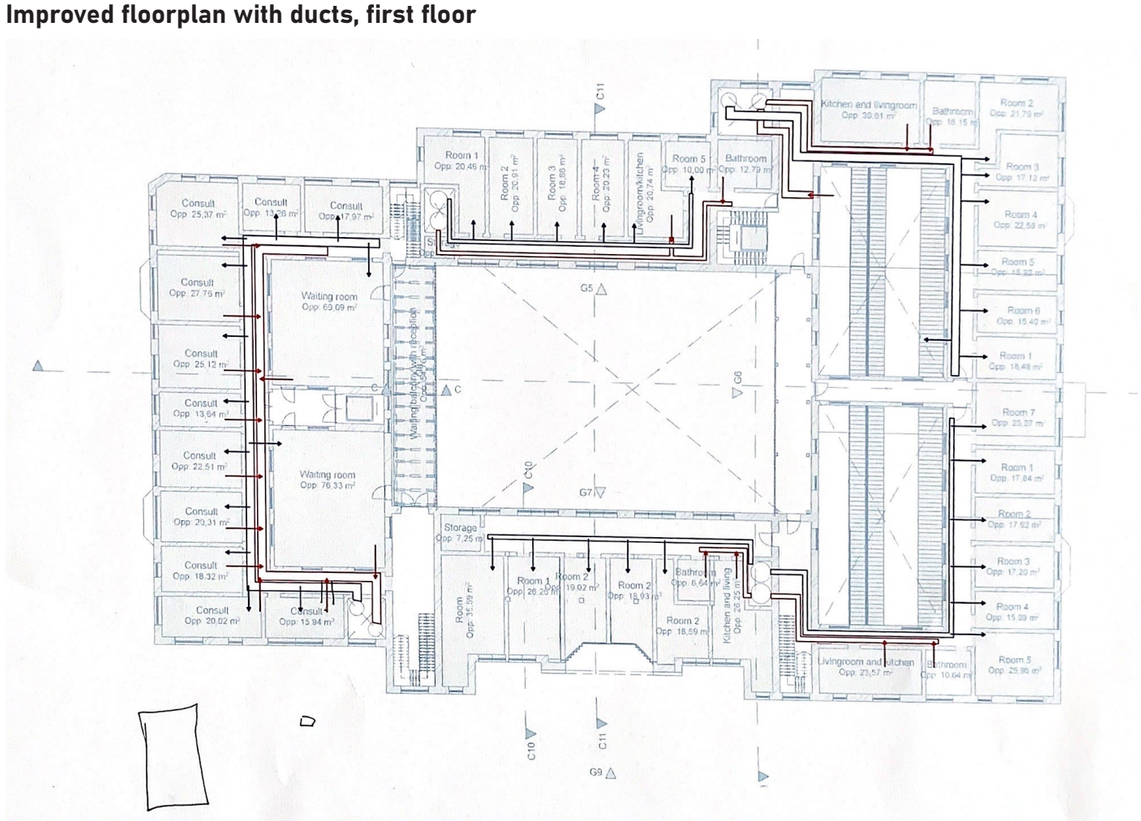
Initial climate section



Initial floorplan with ducts, first floor



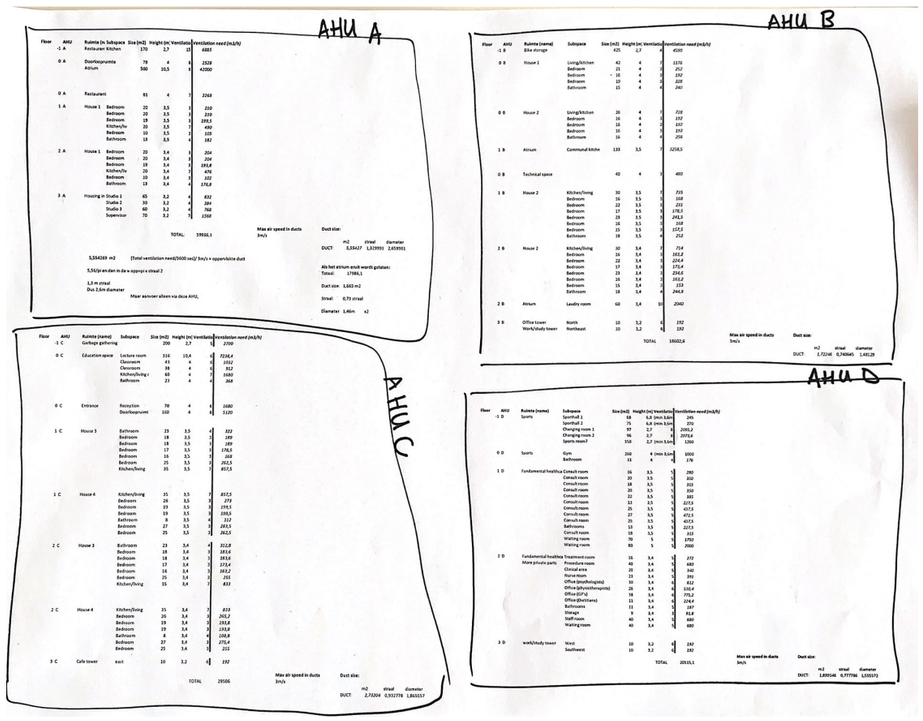
Improved floorplan with ducts, first floor



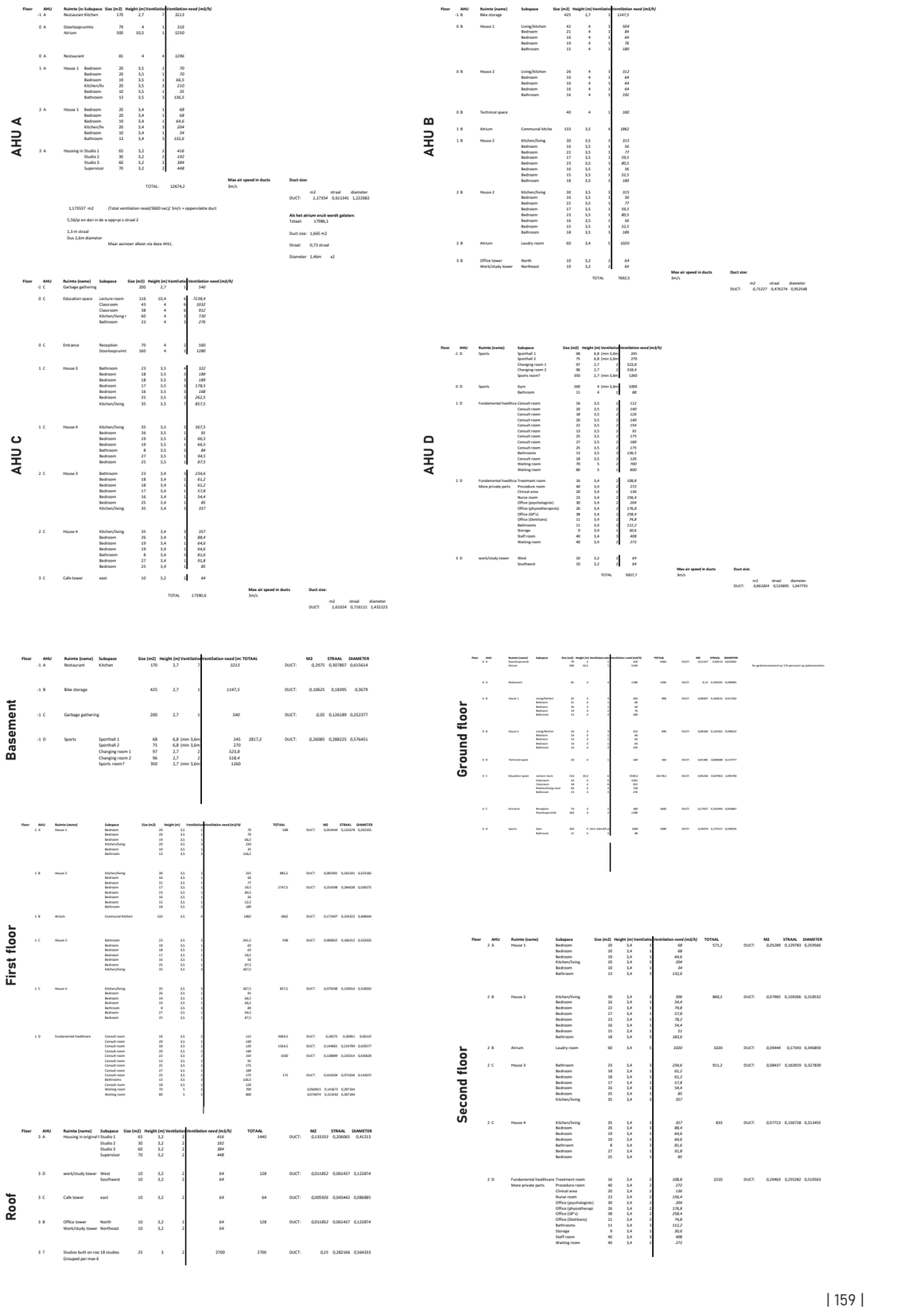
4.2 Building Technology elaboration

4.2.2 Ventilation schemes and calculations

Initial calculations



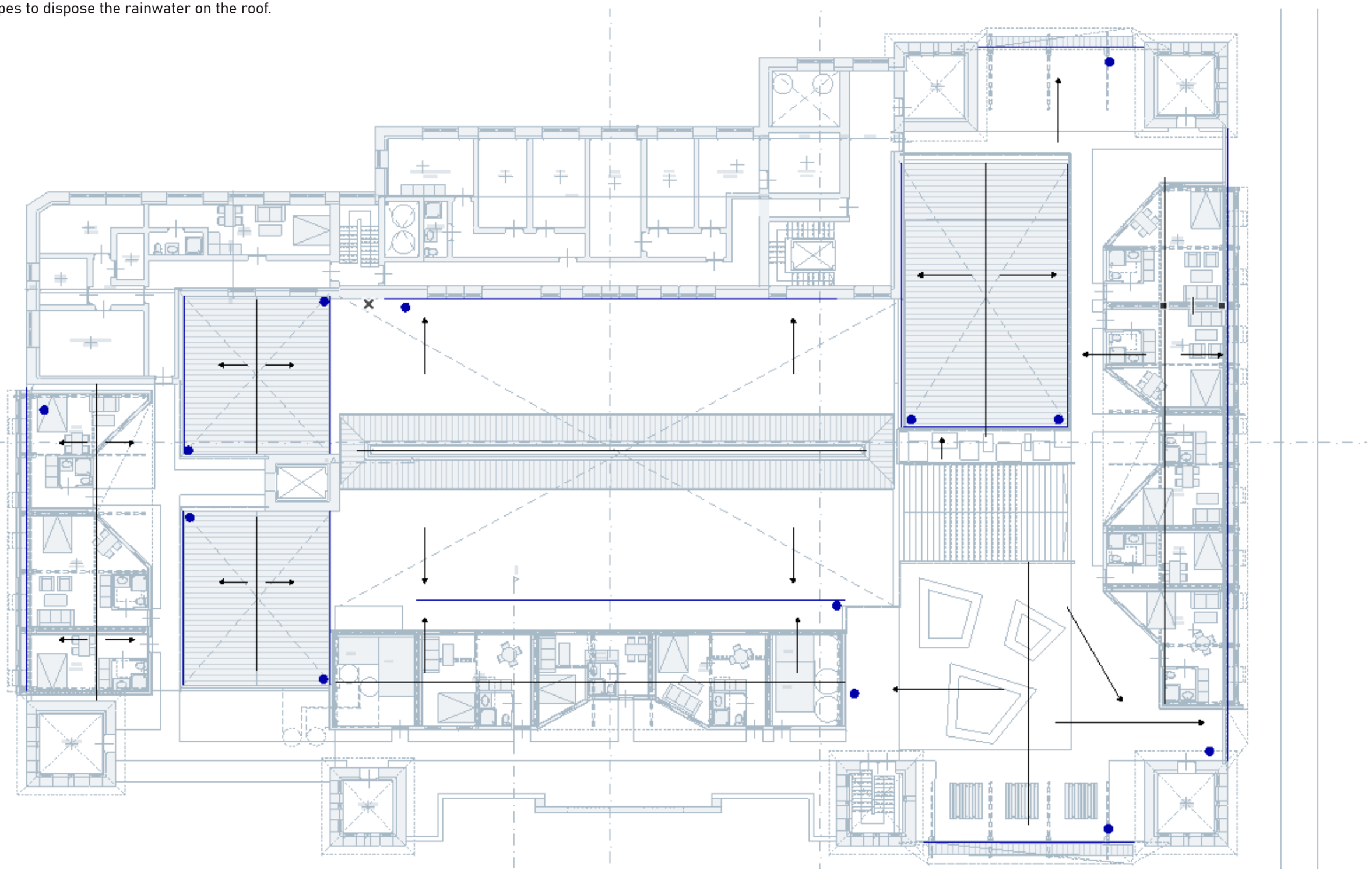
Improved calculations



4.2 Building Technology elaboration

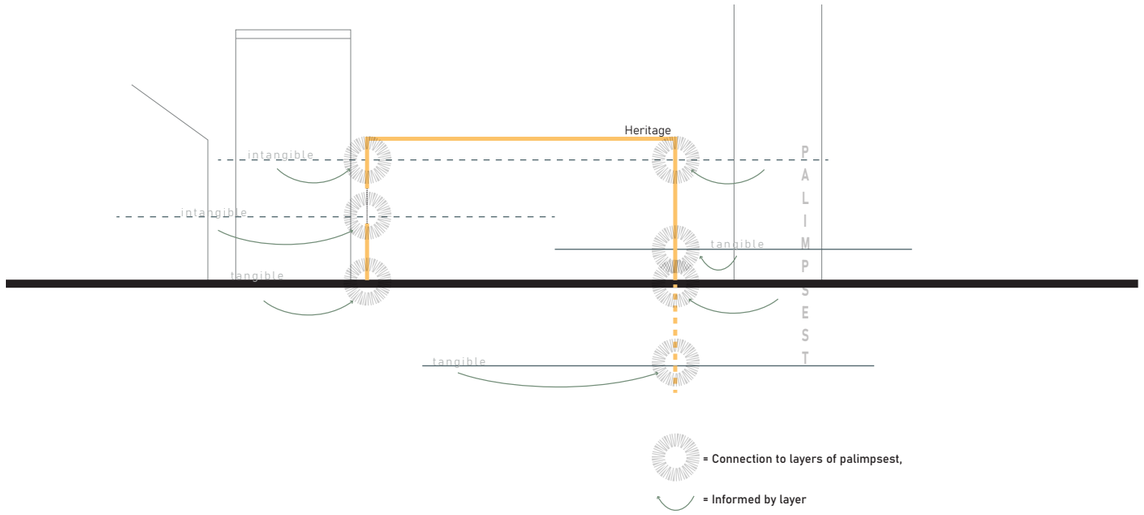
4.2.3 Rainwater disposal

This drawing shows the placement of gutters and pipes to dispose the rainwater on the roof.

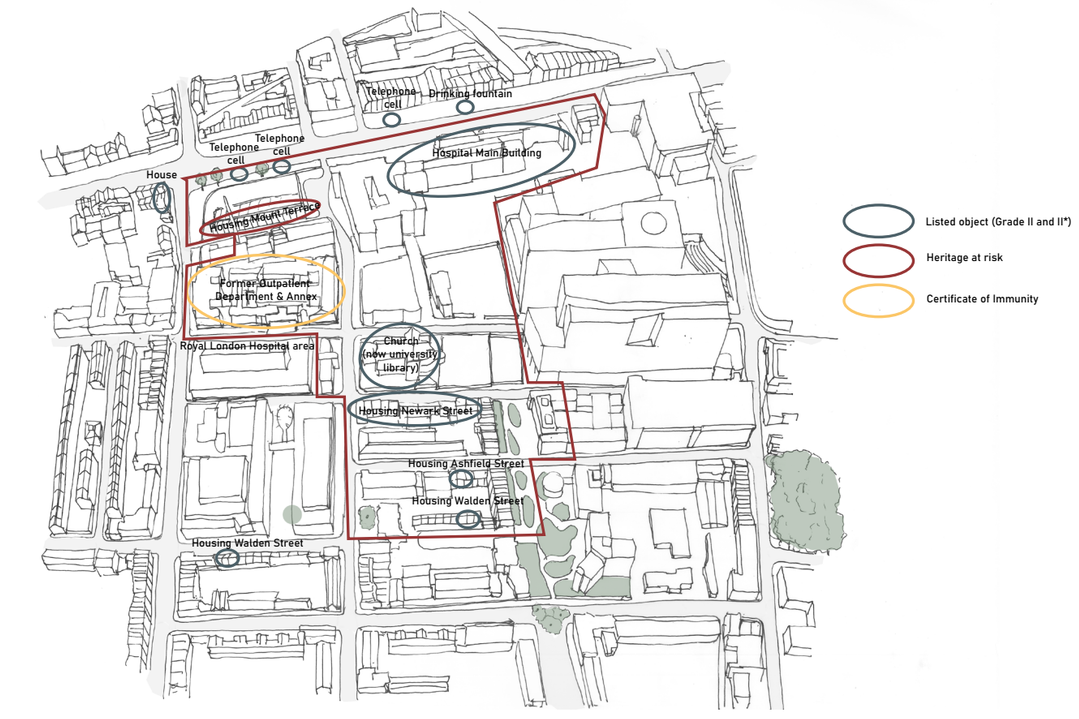


4.3 P4 products

4.3.1 Site

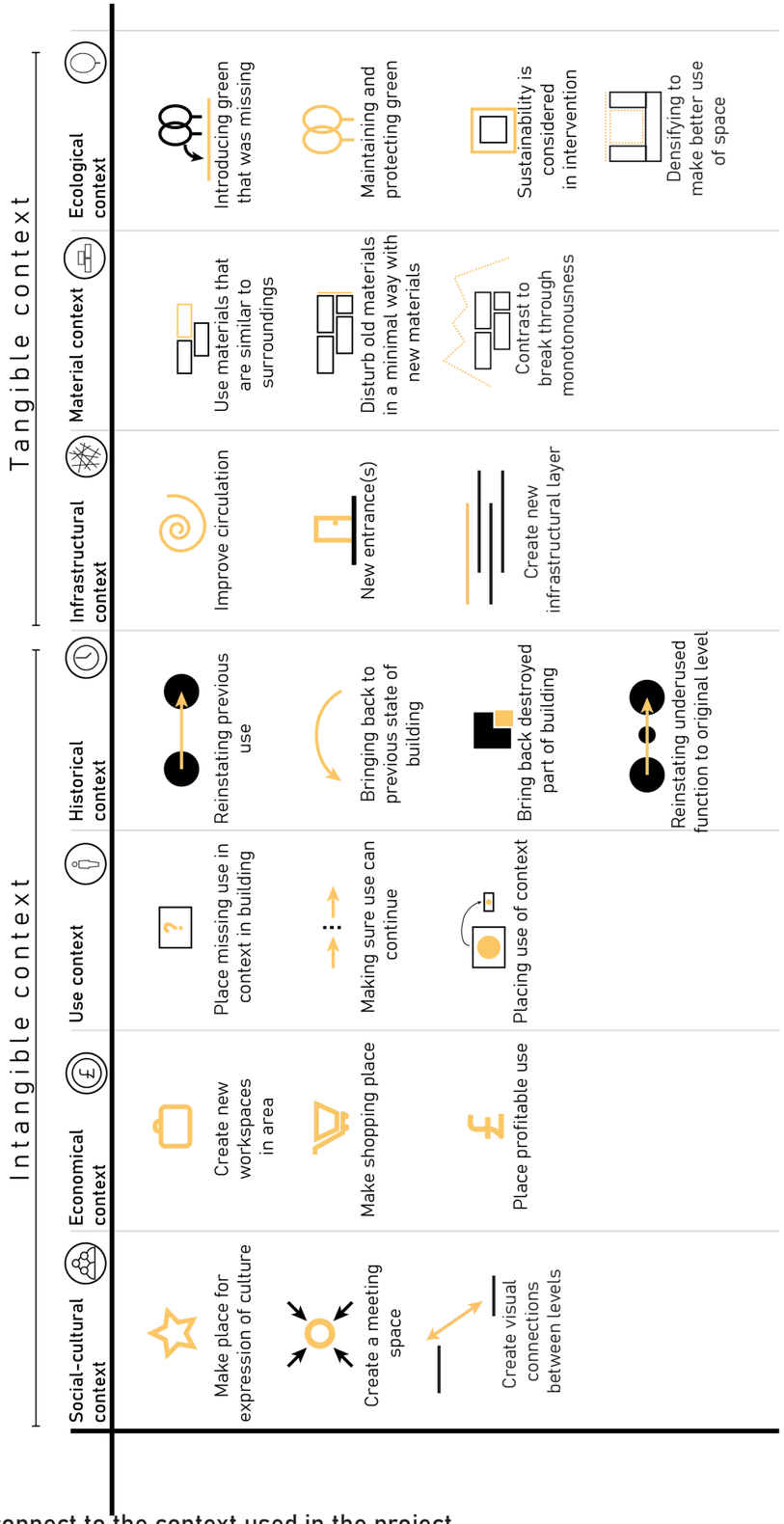


Concept explanation of project



Current situation of listing in the Royal London Hospital area

Based on scale 1:2000



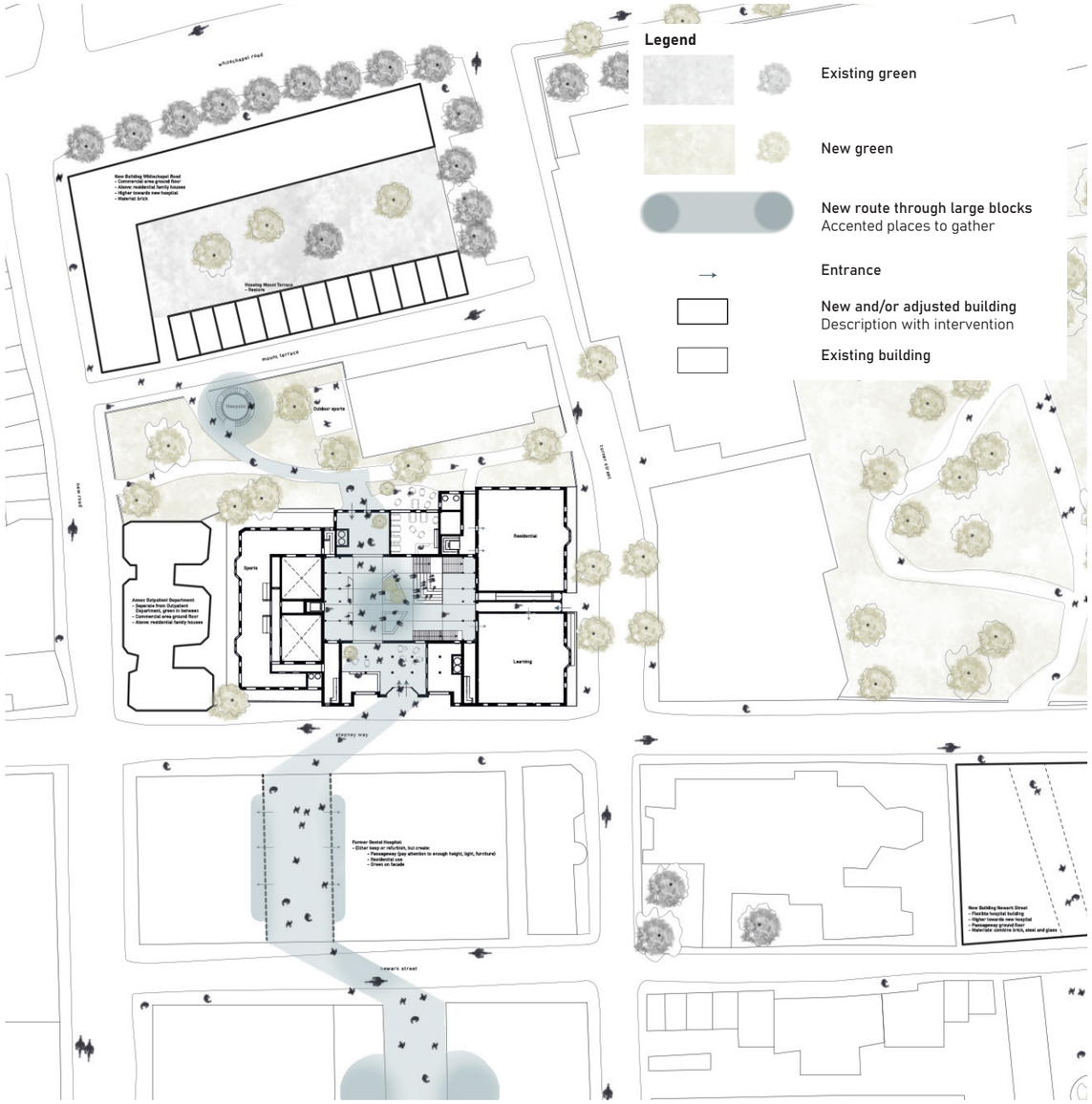
All tools to connect to the context used in the project

Based on precedent research (see research essay)

4.3 P4 products

4.3.1 Site

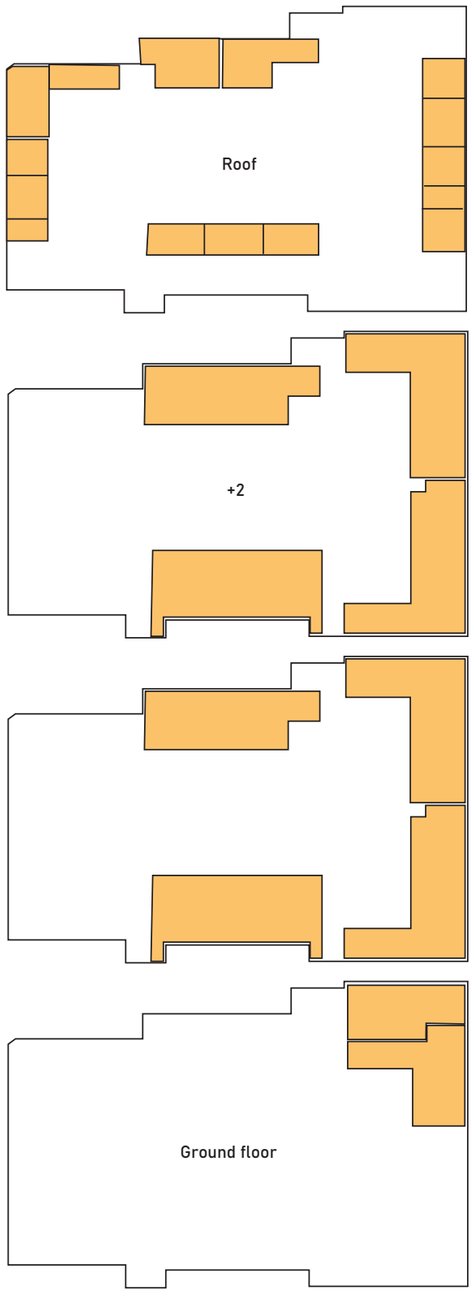
Area overview with planned interventions in colour
Based on scale 1:2000



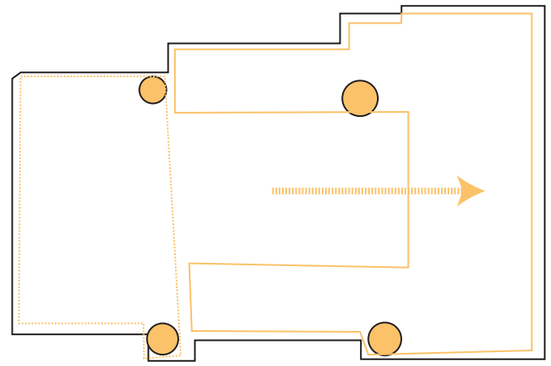
Site plan
Scale 1:500

4.3 P4 products

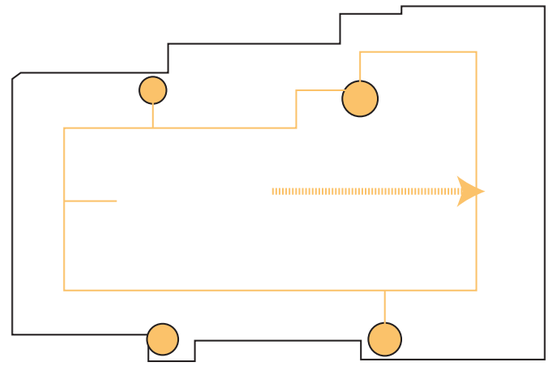
4.3.2 Building



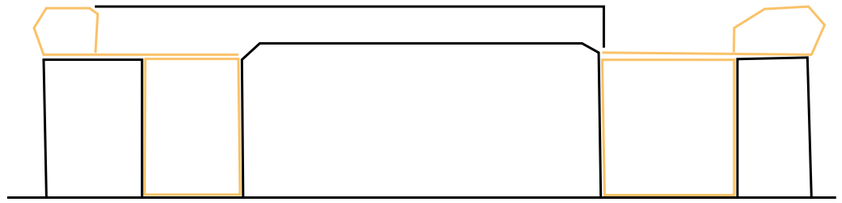
Scheme of houses per floor
Based on scale 1:200



Circulation scheme for existing structure
Based on scale 1:200



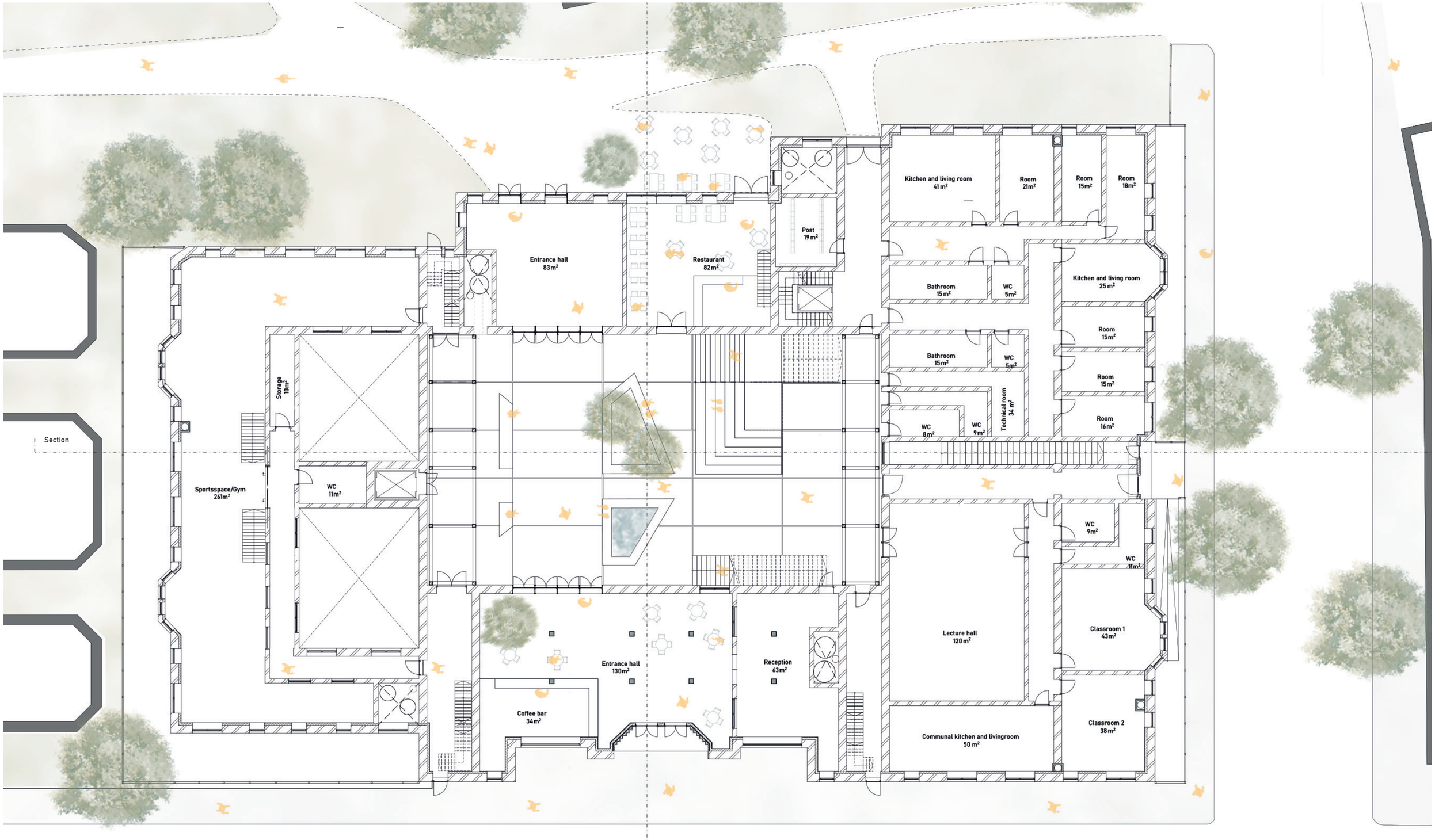
Circulation scheme roof addition
Based on scale 1:200



Scheme of densification of building
Based on scale 1:200

4.3 P4 products

4.3.2 Building



Ground floor
Scale 1:100

Cross section

4.3 P4 products

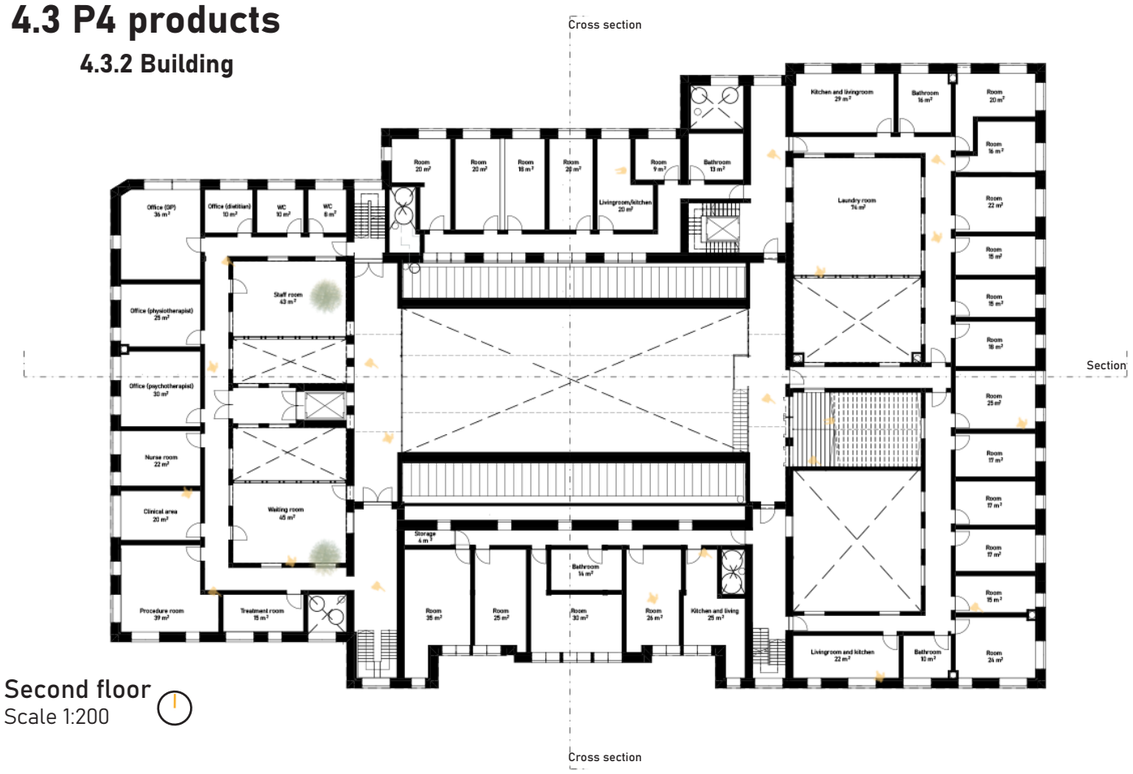
4.3.2 Building

Cross section
Scale 1:100

Section
Scale 1:100

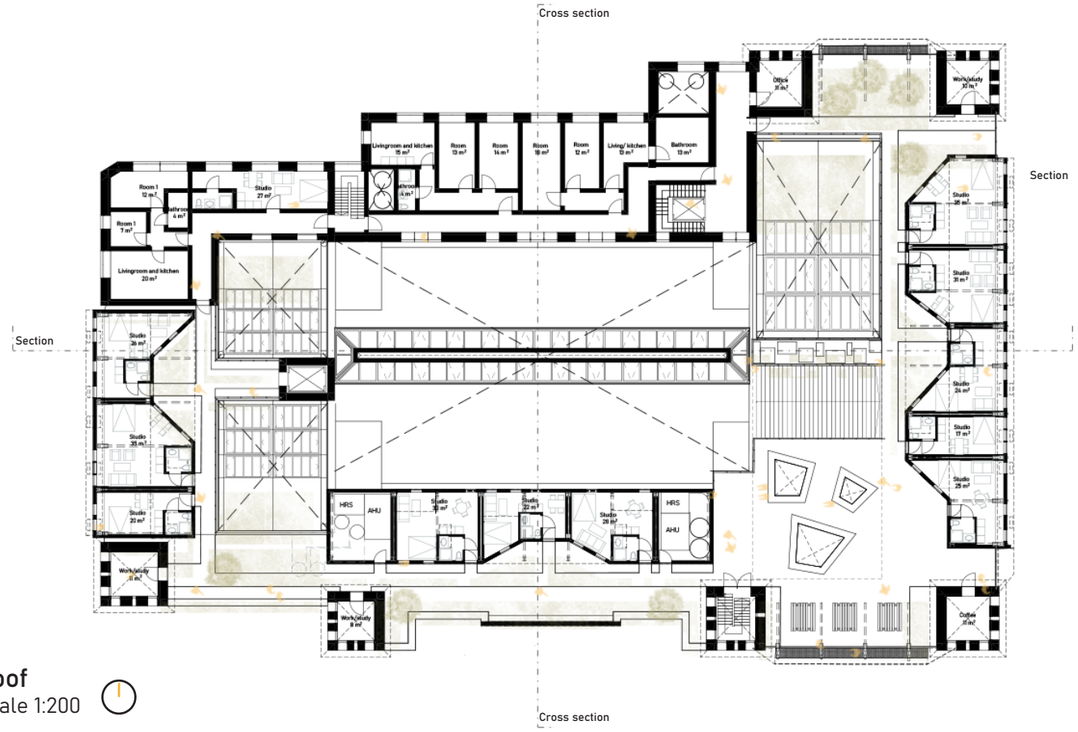
4.3 P4 products

4.3.2 Building

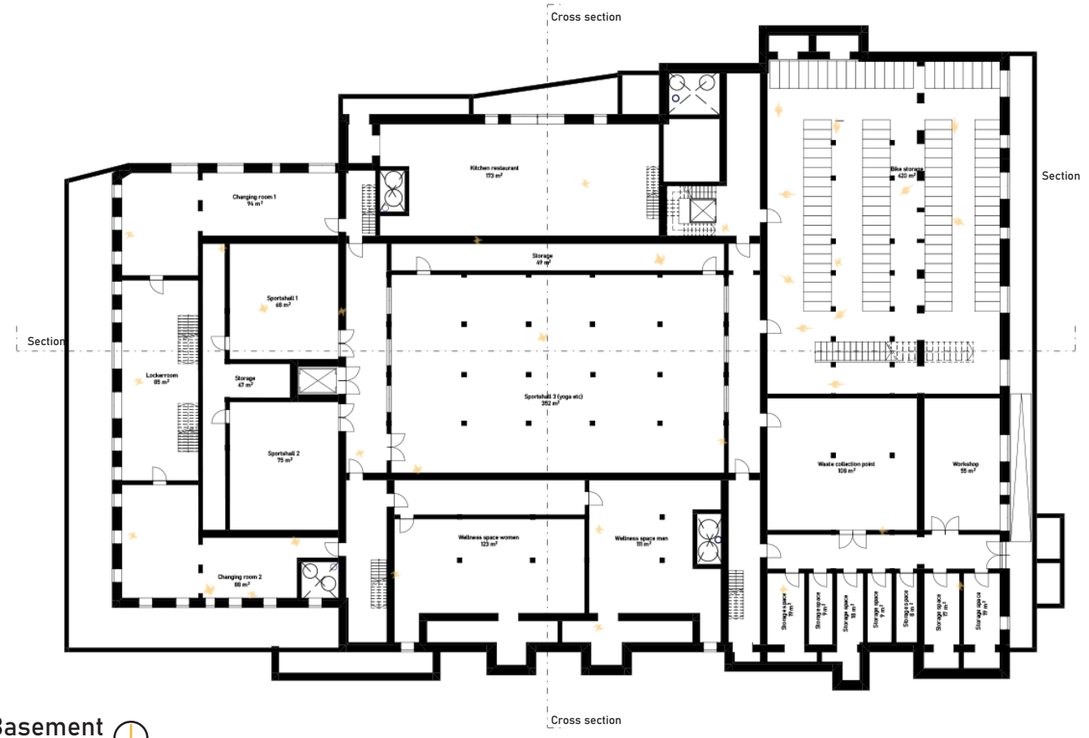


Second floor
Scale 1:200

First floor
Scale 1:200



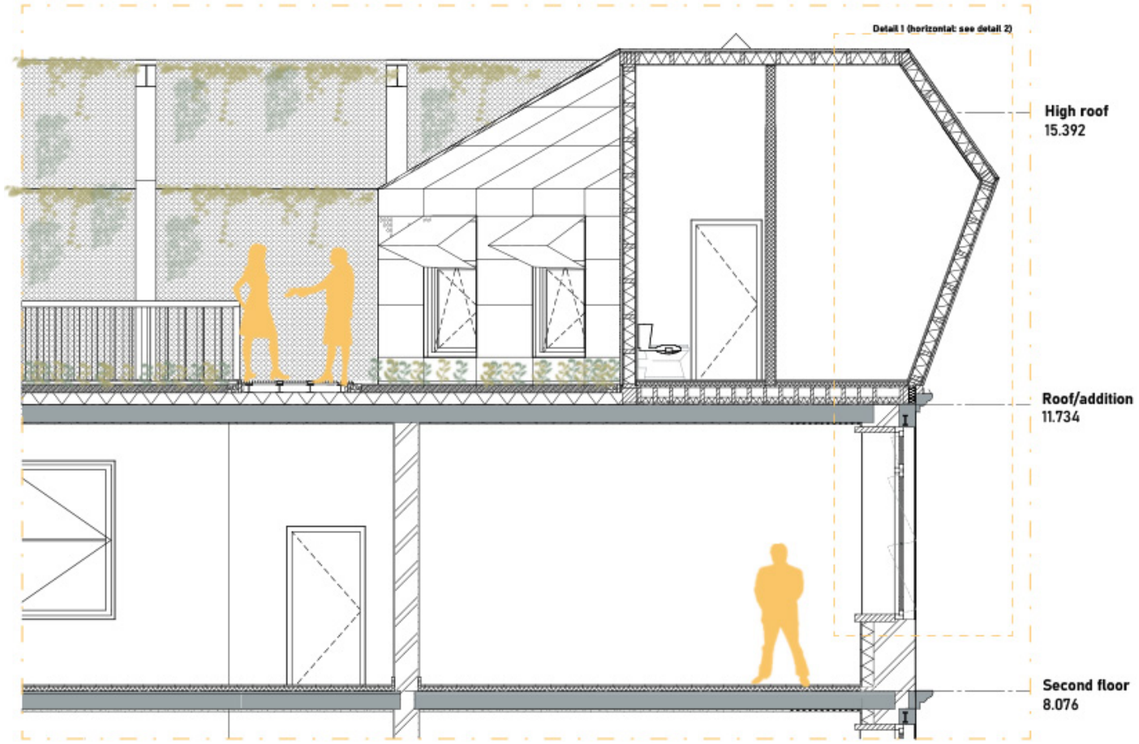
Roof
Scale 1:200



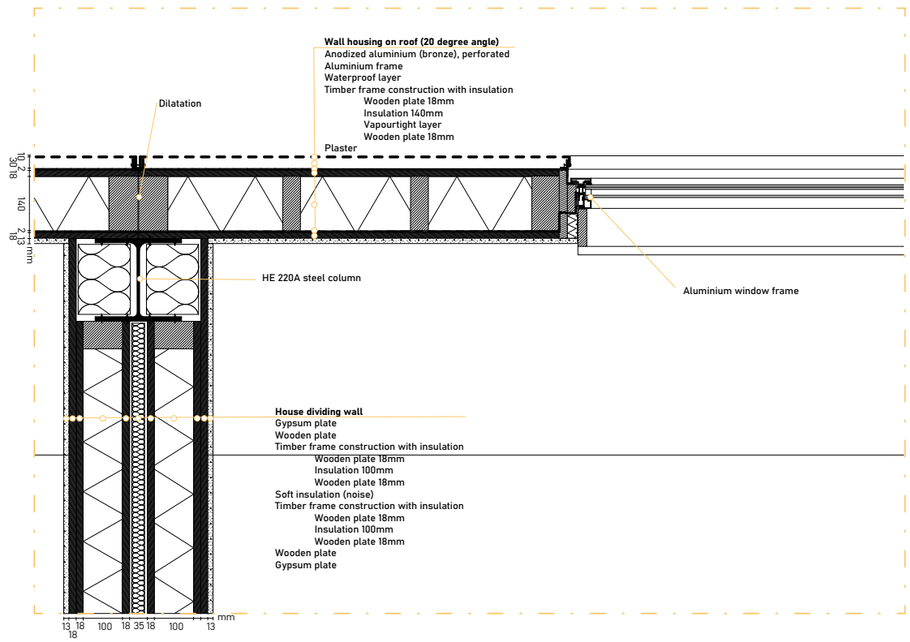
Basement
Scale 1:200

4.3 P4 products

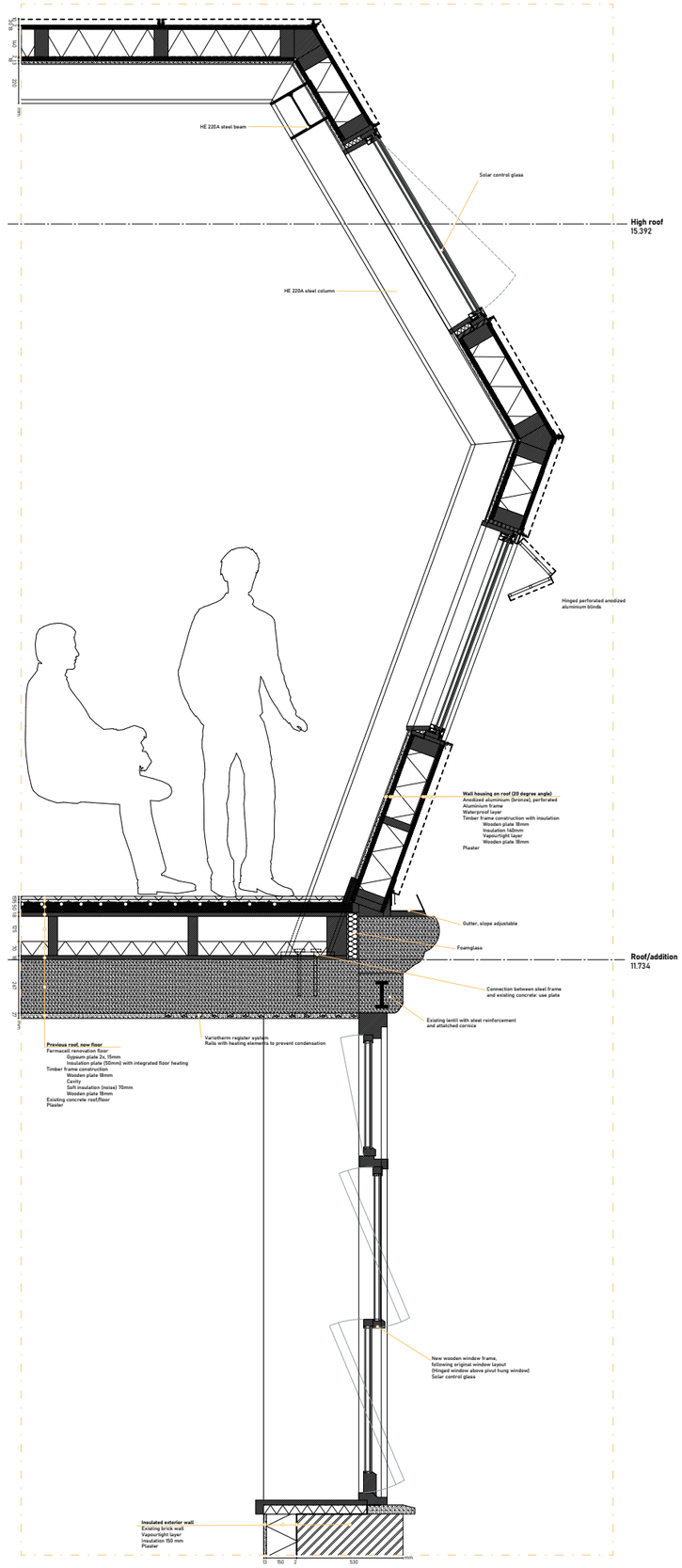
4.3.3 Elements



Fragment 2 (structure on roof)
Scale 1:50



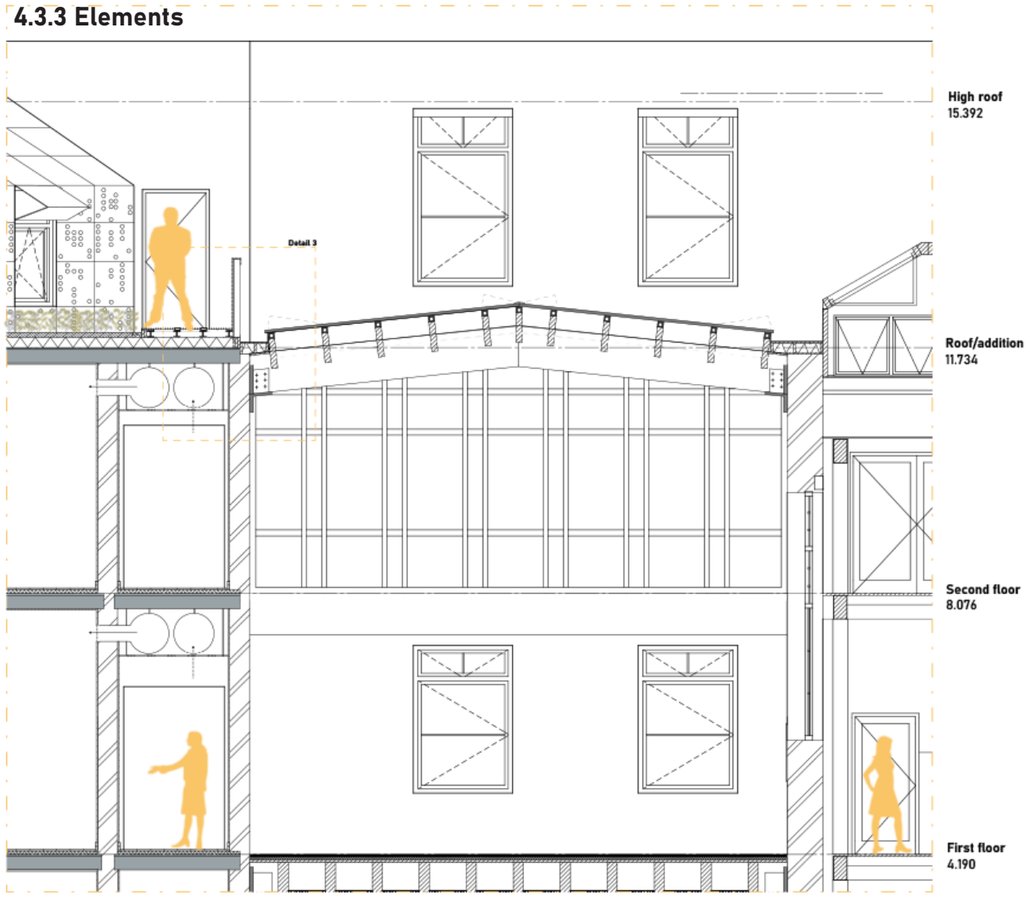
Detail 2 (new structure, horizontal)
Scale 1:10



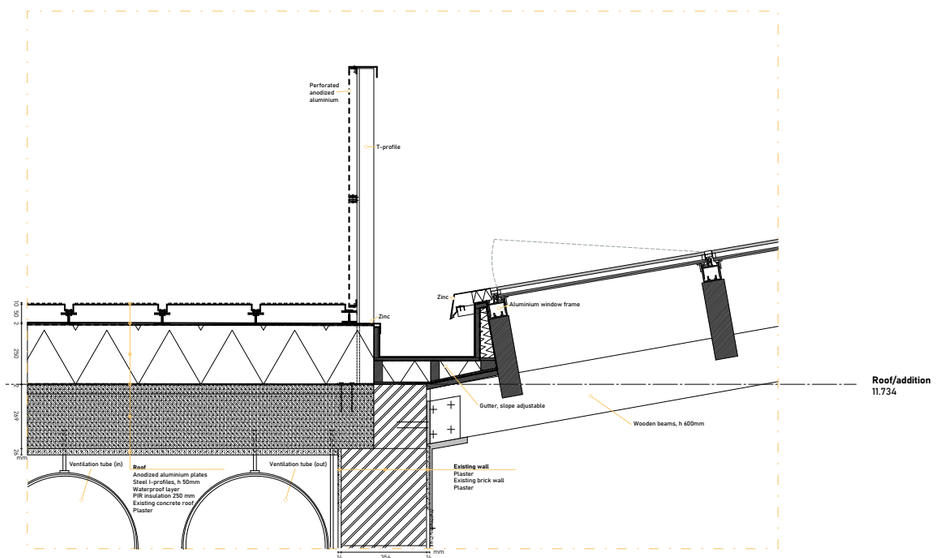
Detail 1 (structure on roof)
Scale 1:10

4.3 P4 products

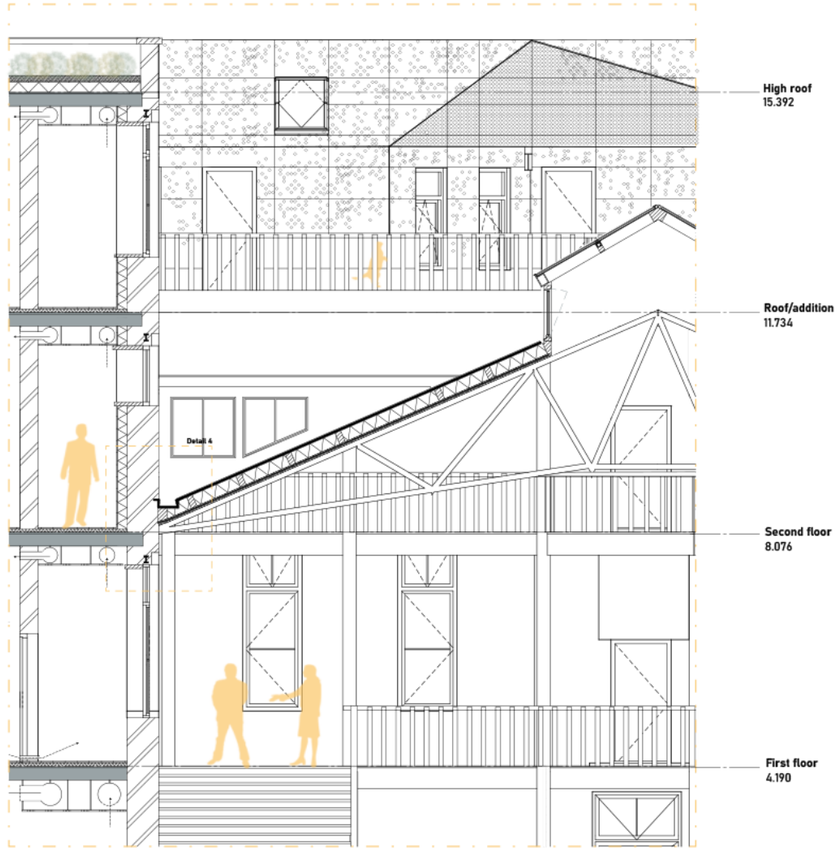
4.3.3 Elements



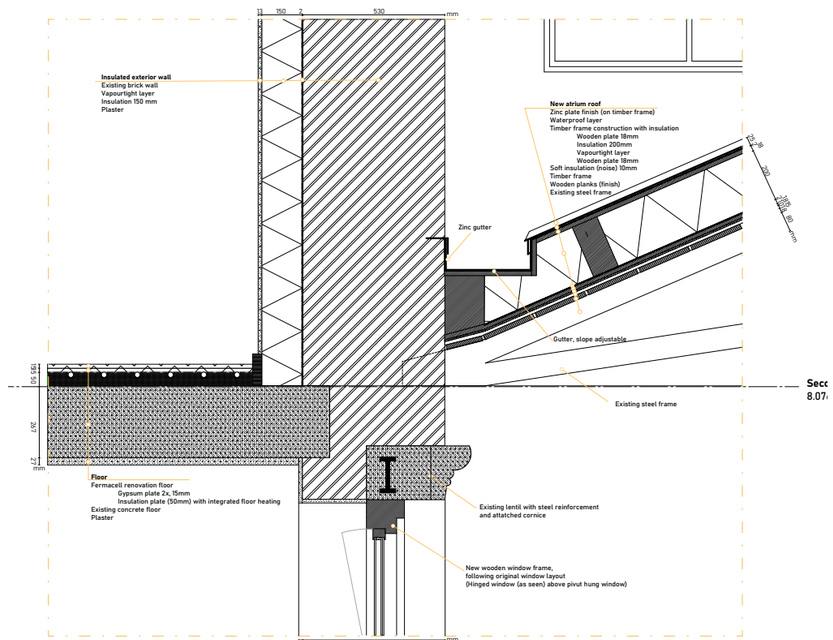
Fragment 1 (small atrium)
Scale 1:50



Detail 4 (small atrium and new roof)
Scale 1:50



Fragment 3 (new roof large atrium)
Scale 1:50

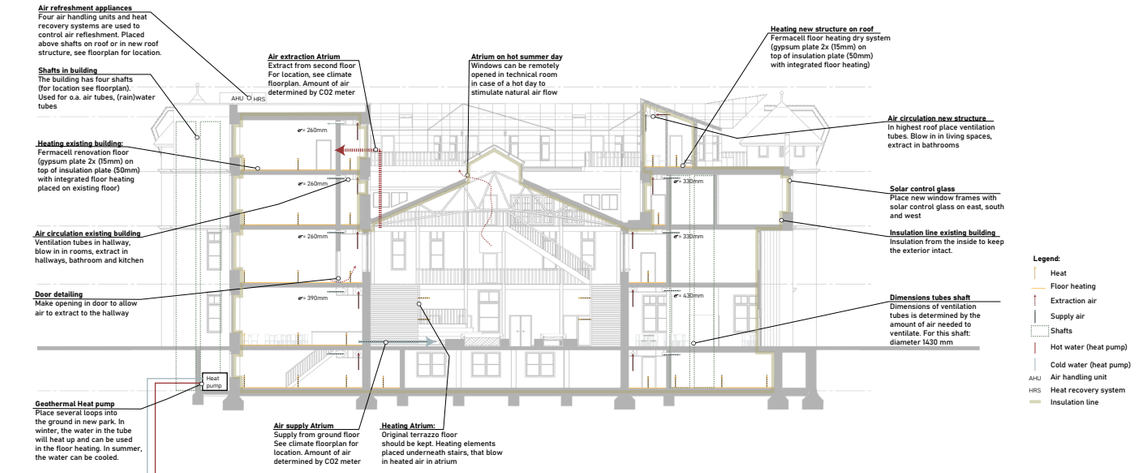


Detail 3 (new roof large atrium and existing building)
Scale 1:10

4.3 P4 products

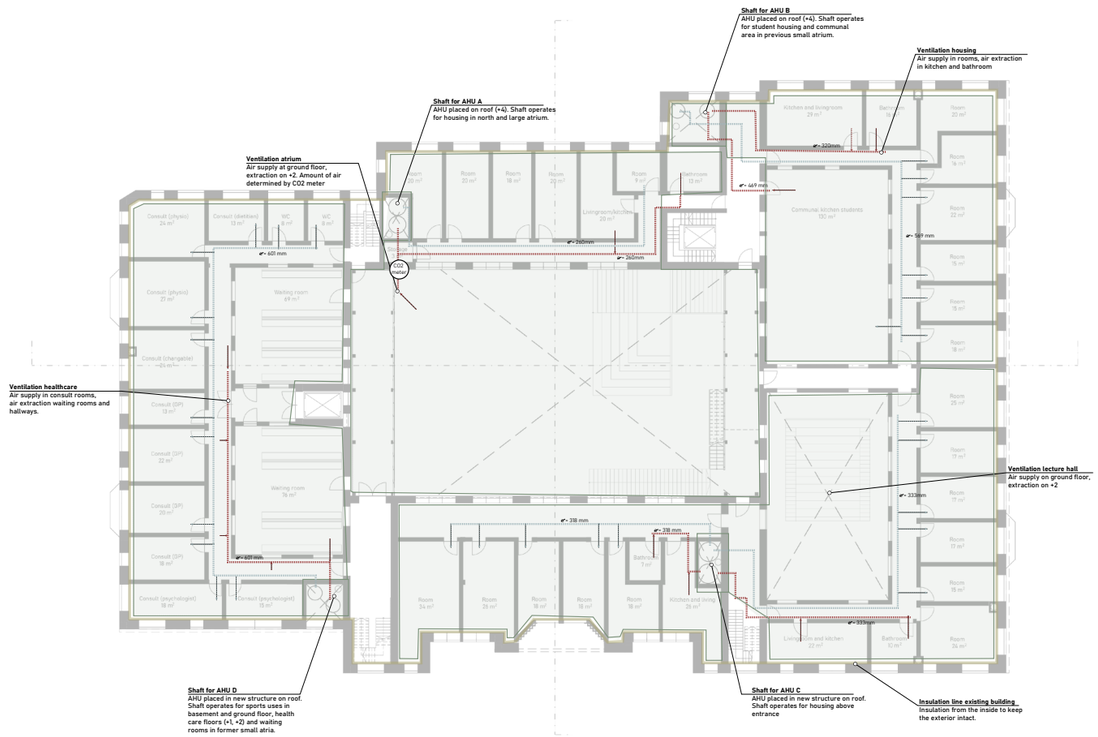
4.3.3 Elements

Exterior view Outpatient Department



Climate section

Scale 1:200



Climate floorplan (first floor)

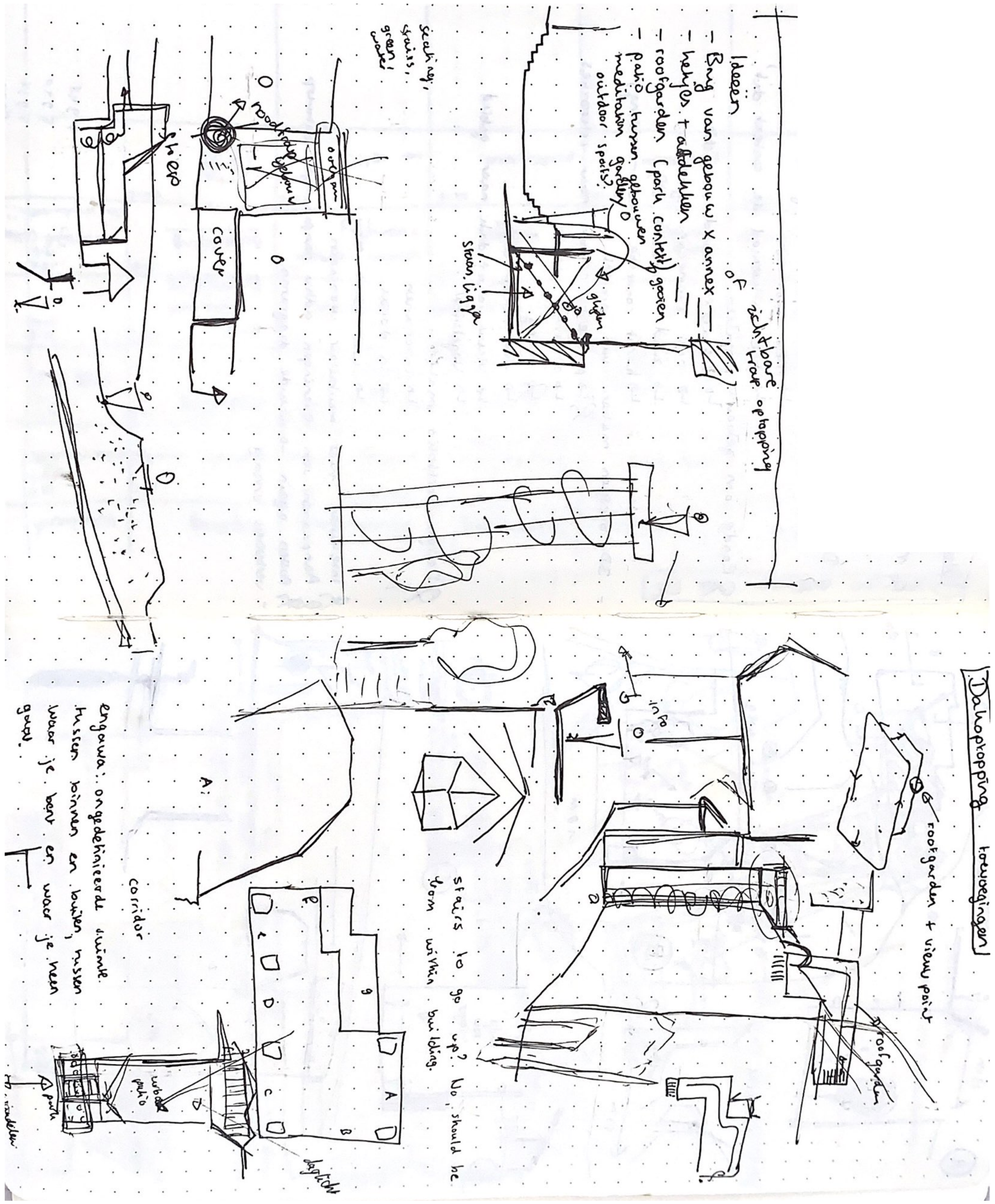
Scale 1:200, this floor is shown as an example because it best represents the whole building

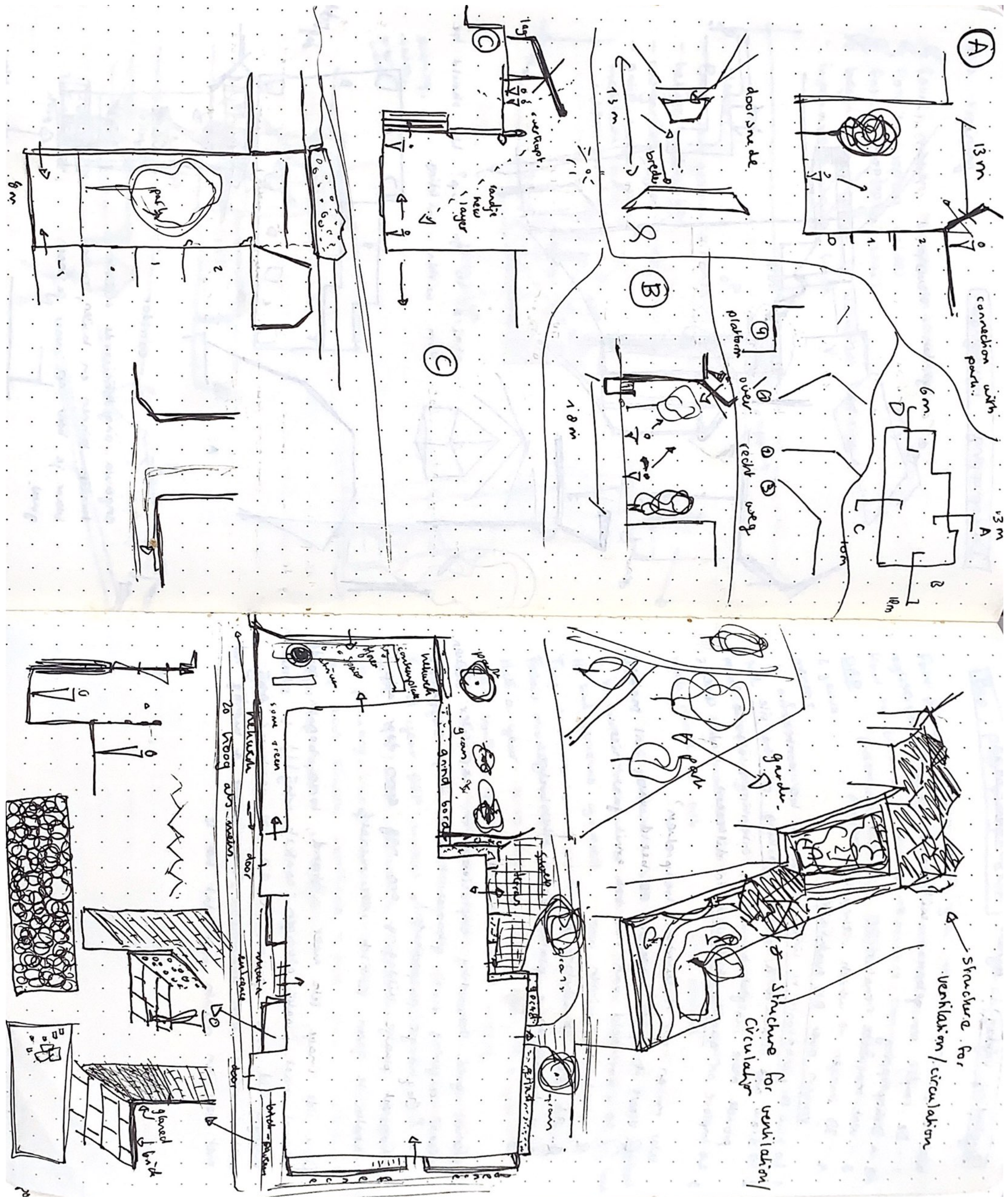
CHAPTER 5
FINAL STEPS

Rethinking the roof and edges of the building **5.1**
Old and New **5.2**
Models **5.3**
P5 products **5.4**
Site 5.4.1
Building 5.4.2
Elements 5.4.3
Views 5.4.4

5.1 Rethinking the roof and edges of the building

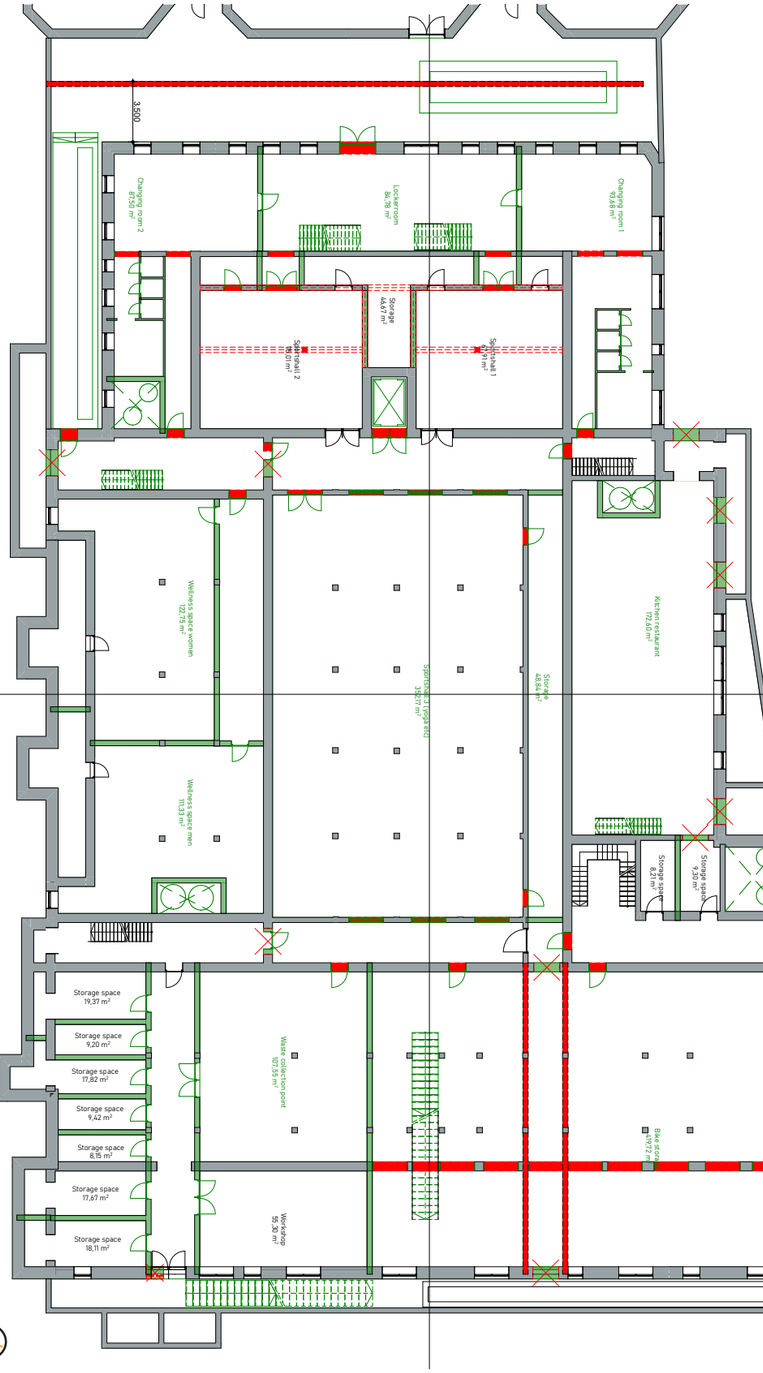
After the P4, I focussed on two parts of the building that needed further attention. This concerned the addition on the roof and its shape, as well as the direct surroundings of the building, the edges. The sketches on this page show the ideas of this time.



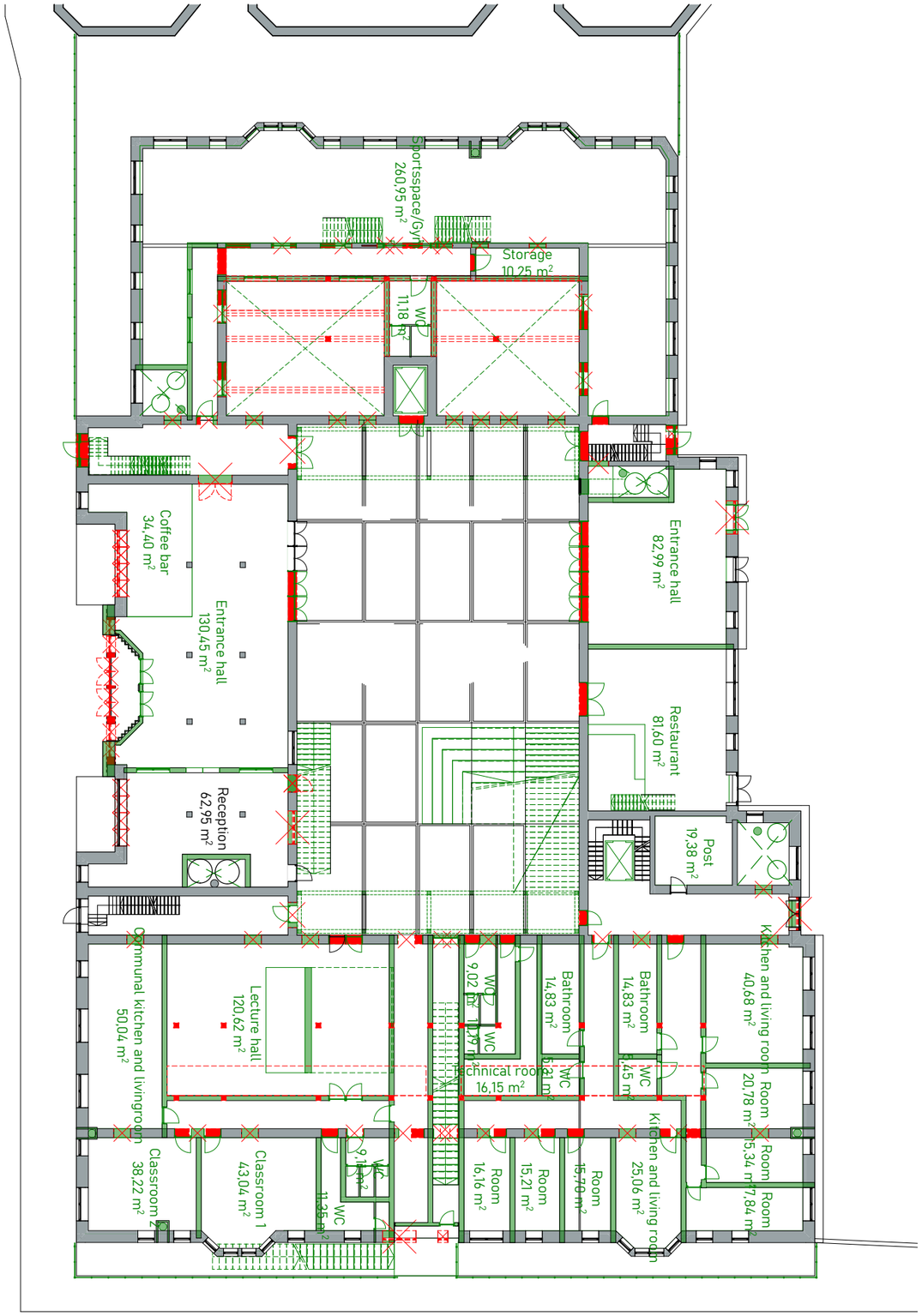


5.2 Old and New

This set of drawings shows all the things that will stay after (grey) the interventions in the Former Outpatient Department, as well as the new elements (green). The red elements are the ones that will be demolished.

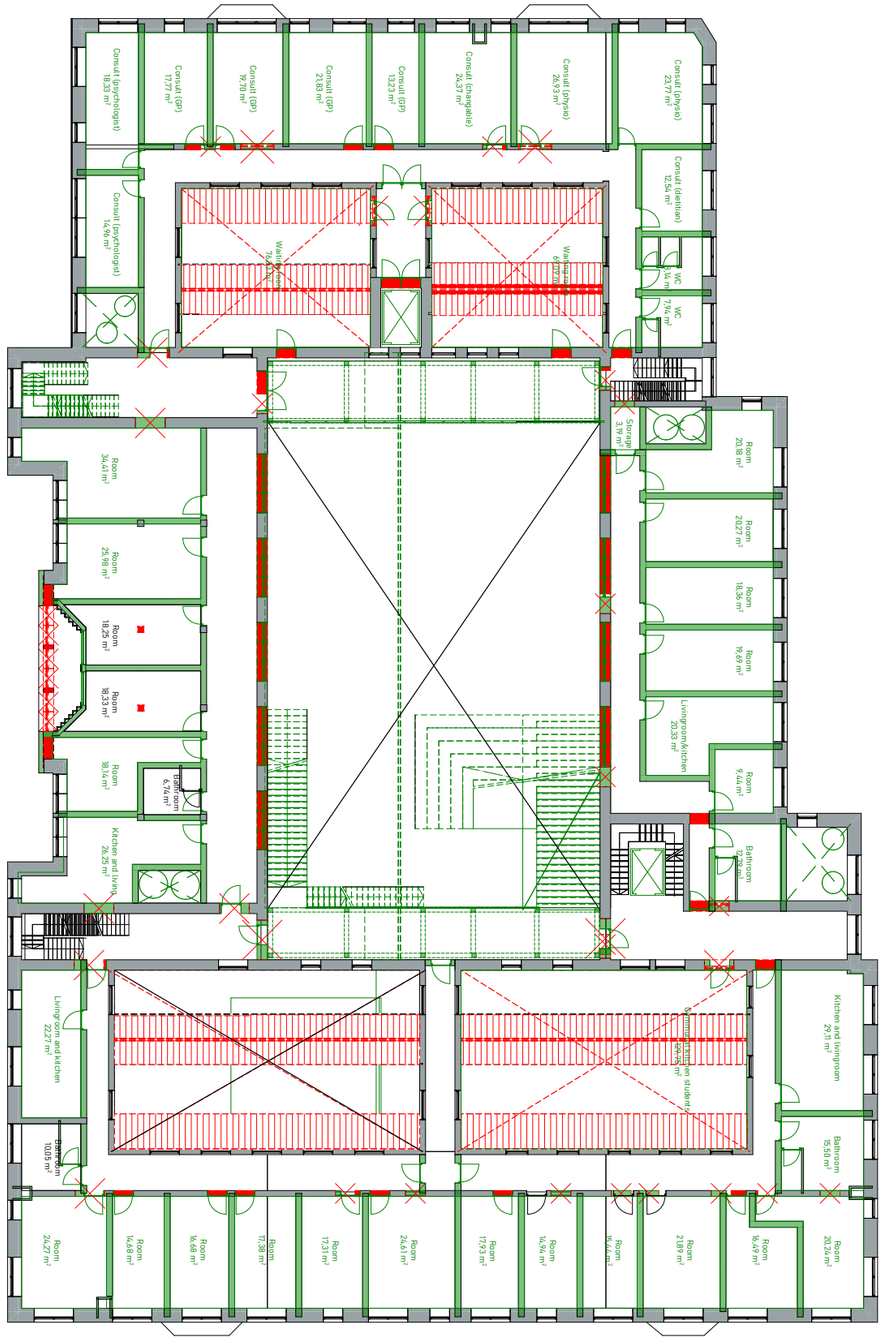


Basement
Drawn on 1:200



Ground floor
Drawn on 1:200

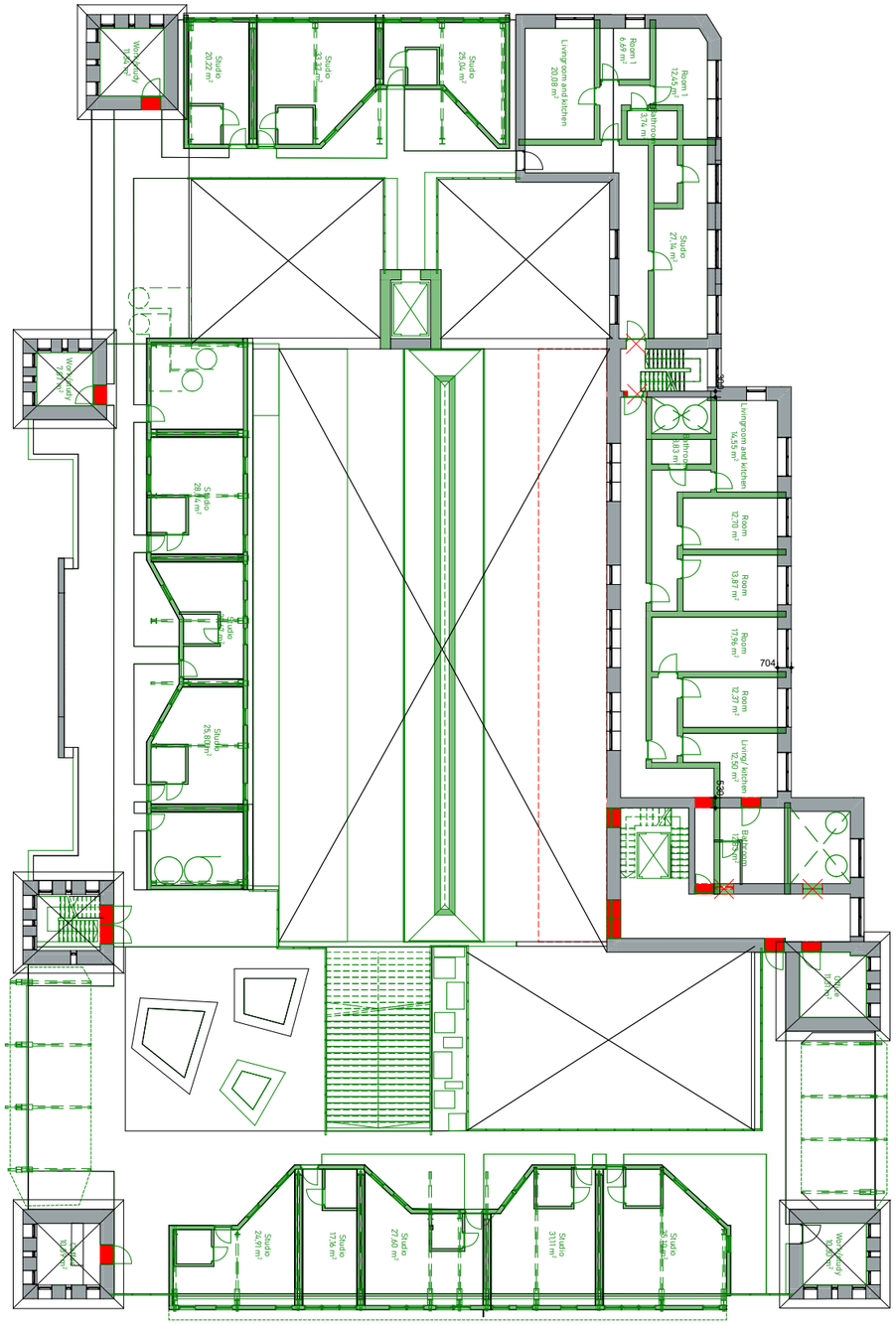
5.2 Old and New



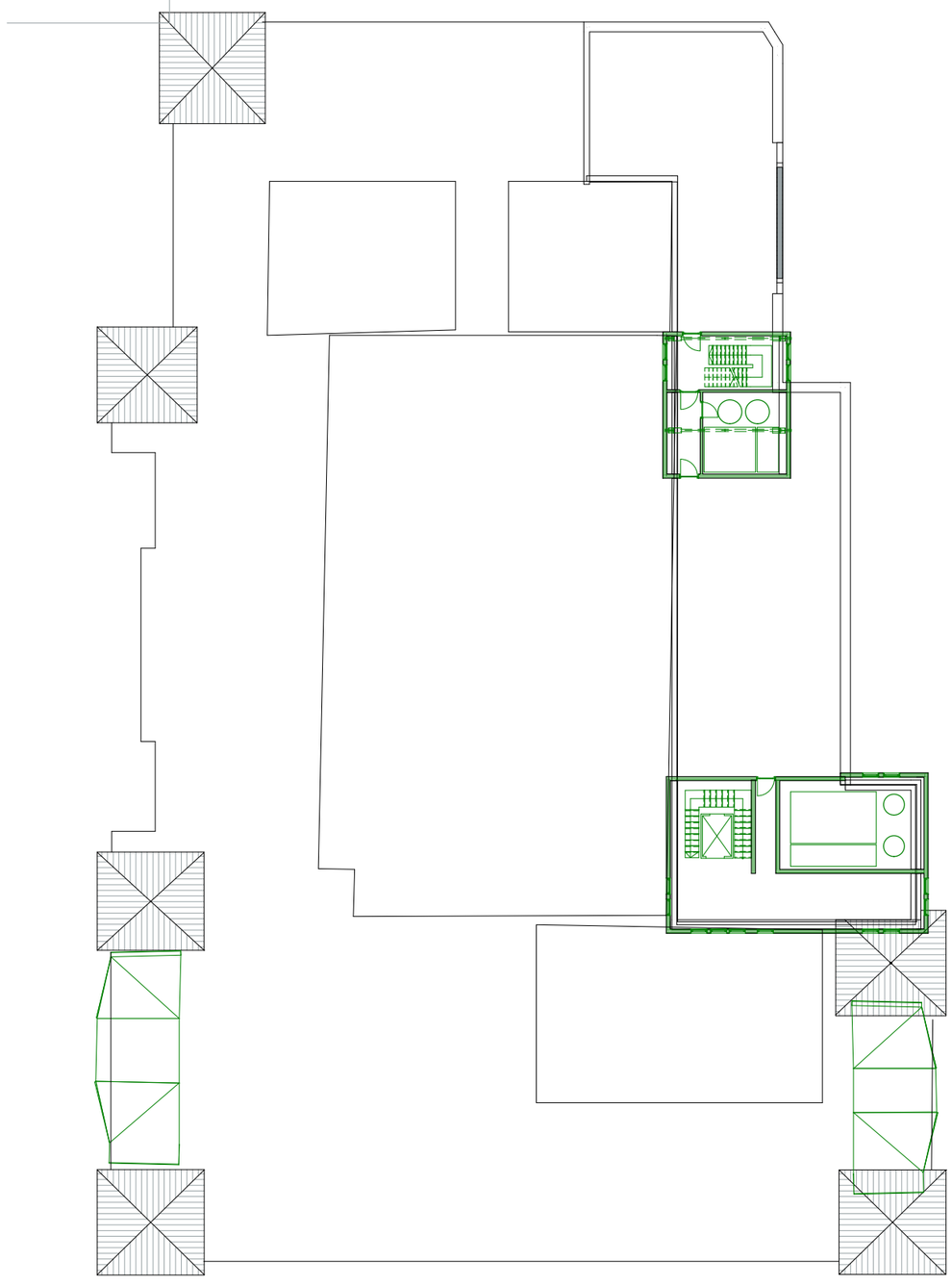
First floor
Drawn on 1:200

Second floor
Drawn on 1:200

5.2 Old and New



Third floor
Drawn on 1:200

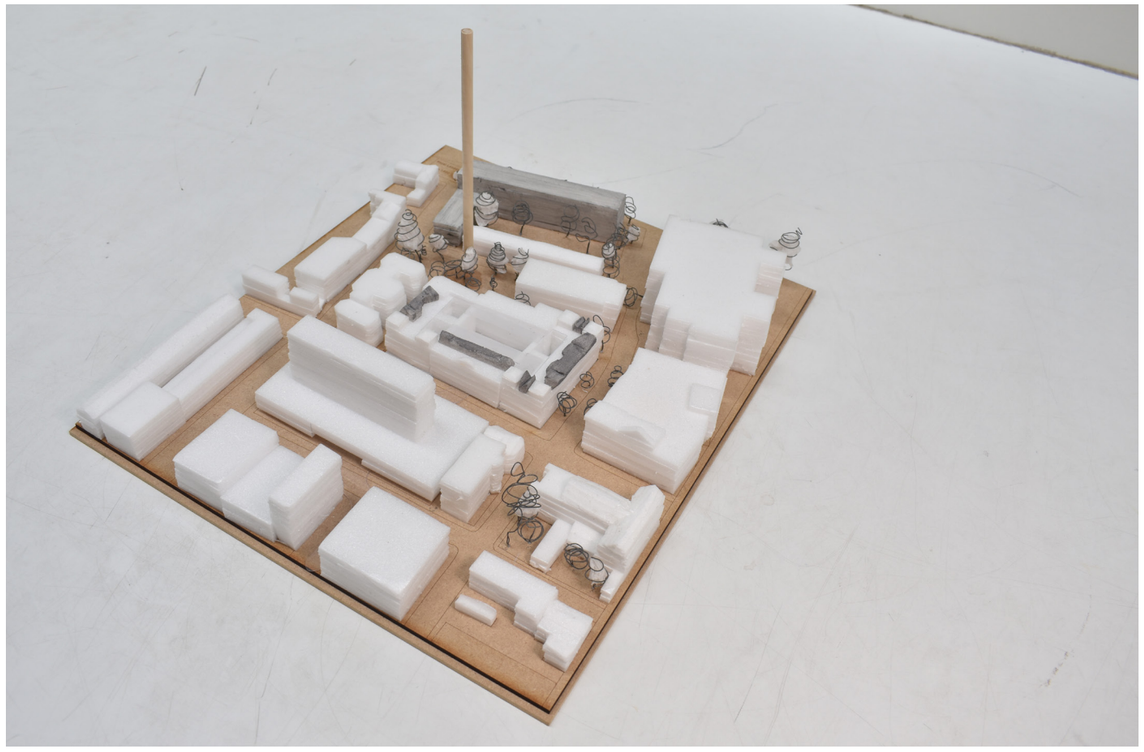


Fourth floor
Drawn on 1:200

5.3 Models

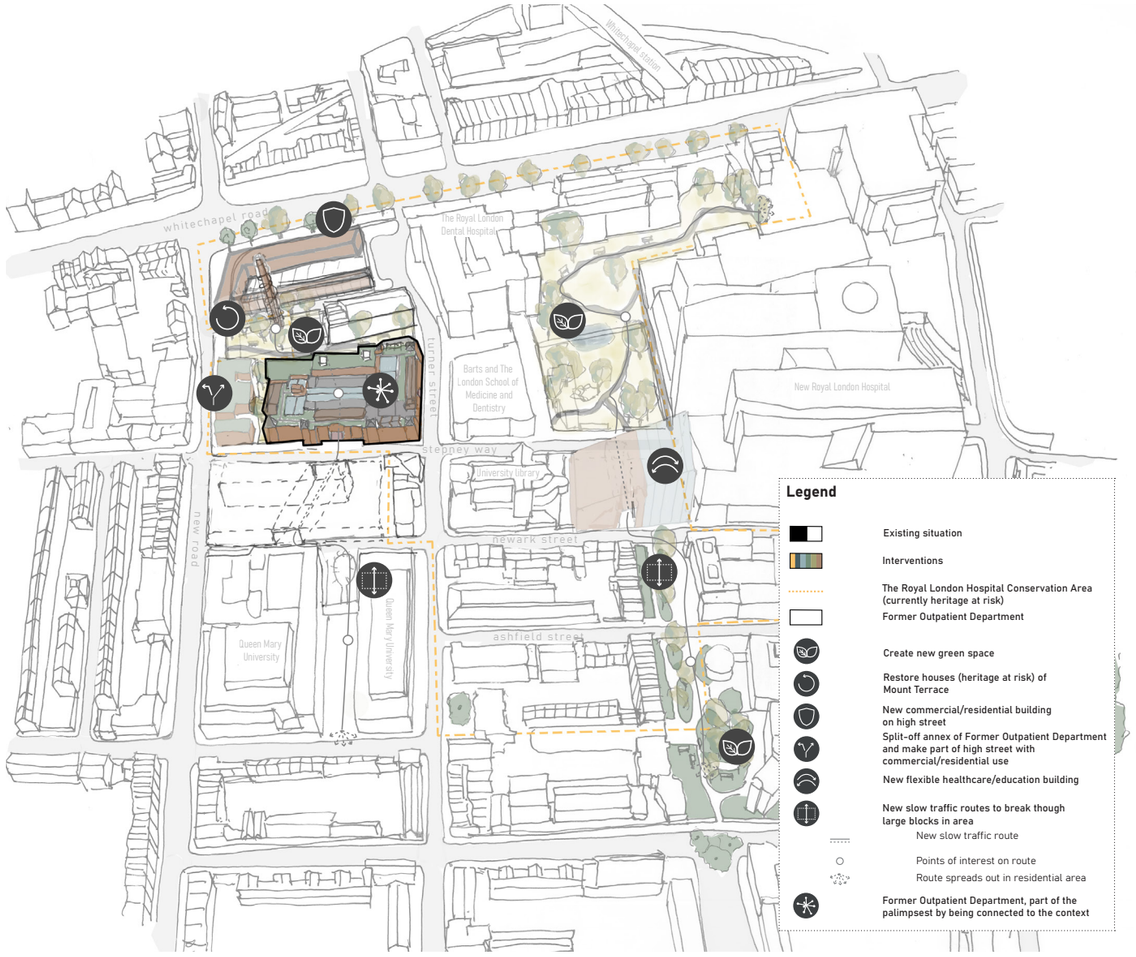
During the final weeks of working on the project, I made some models. First of all, I updated the existing two models to fit the final decisions. Besides, I made a section of the facade at the side entrance, in which I show materiality and the relation between ground floor and addition on the roof.

5.3 Models

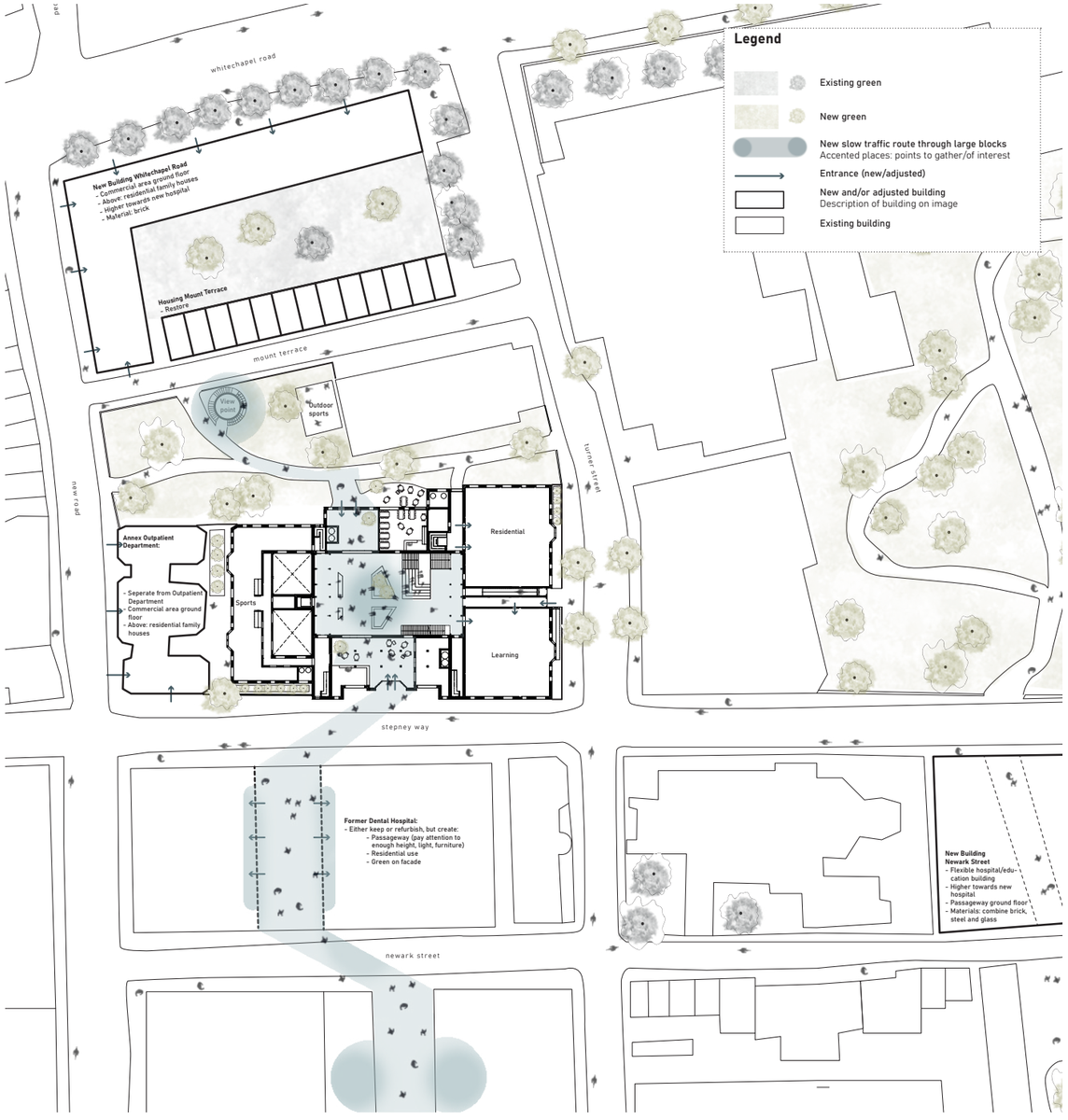


5.4 P5 products

5.4.1 Site



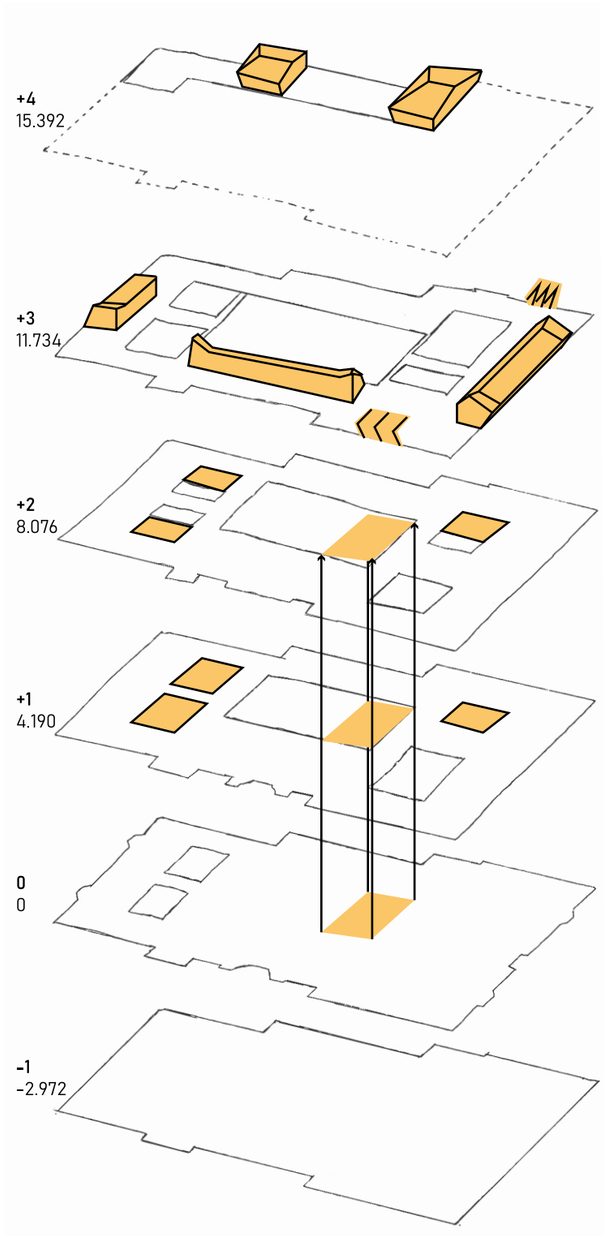
Area overview with planned interventions in colour
Based on scale 1:2000



Site plan
Scale 1:500

5.4 P5 products

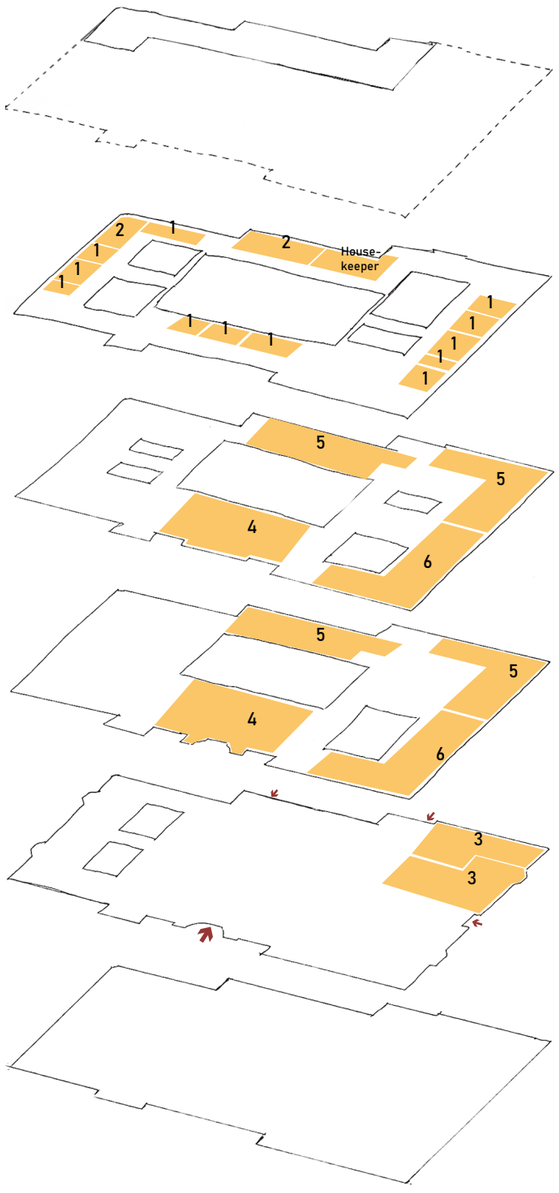
5.4.2 Building



Legend

- Added elements
- Stairs

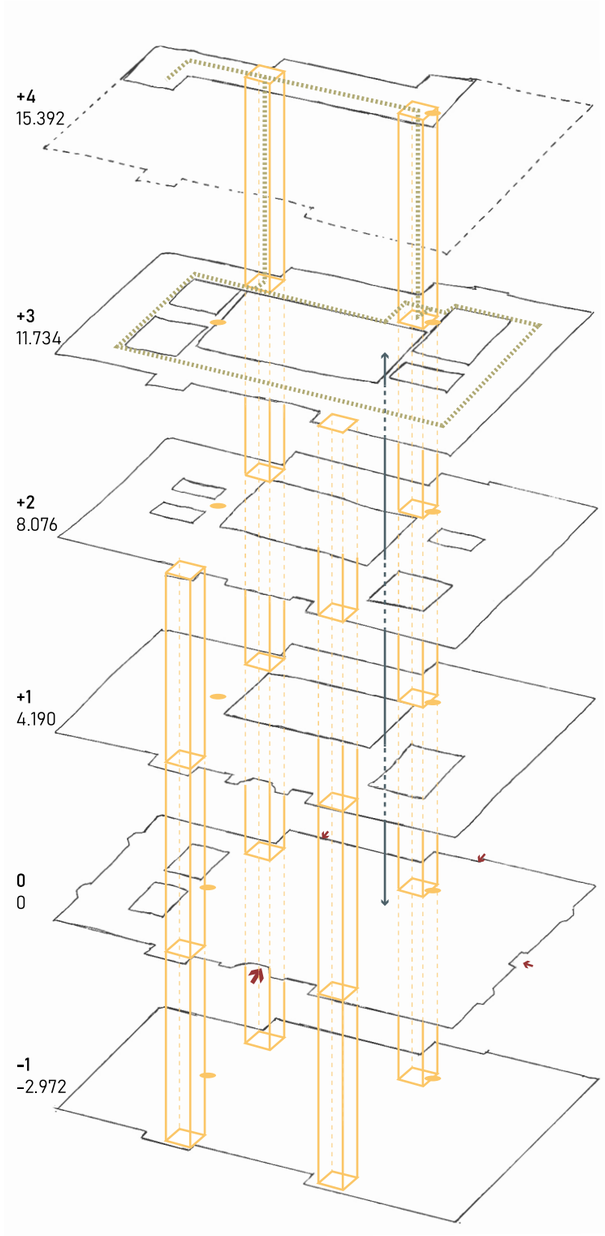
New and Old



Legend

- Housing unit
- 4 Amount of inhabitants

House placement



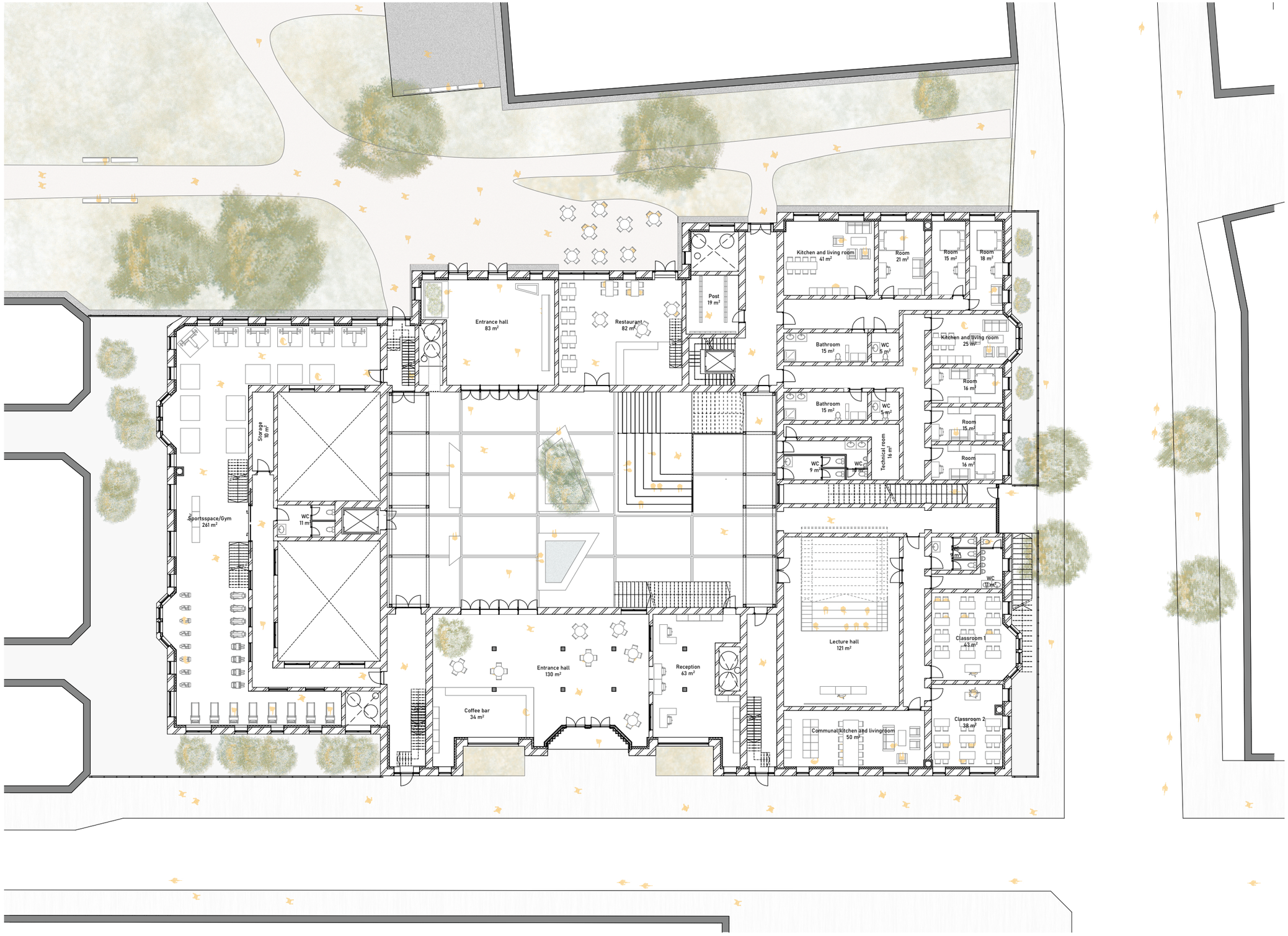
Legend

- Main circulation points
- Scenic route to roof
- Rooftop route
- Elevator
- Entrance

Circulation system

5.4 P5 products

5.4.2 Building



Ground floor
Scale 1:100

5.4 P5 products

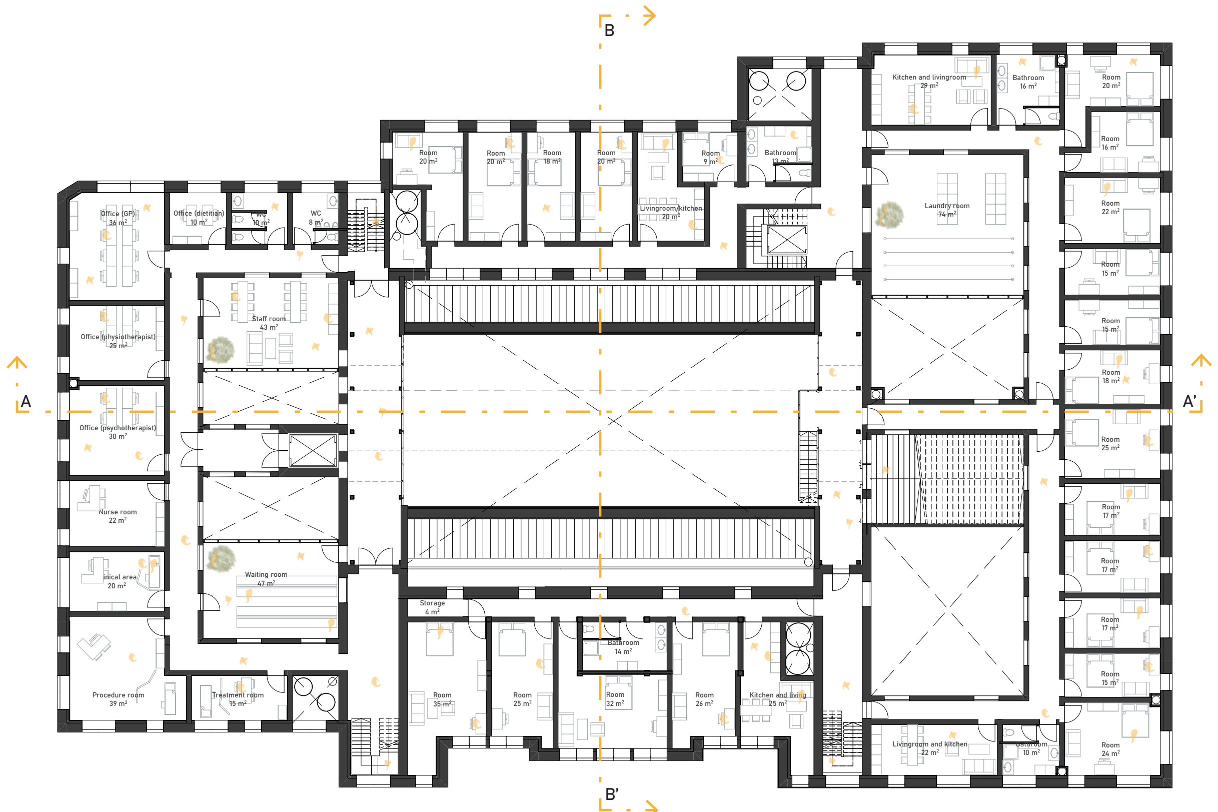
5.4.2 Building

Cross section
Scale 1:100

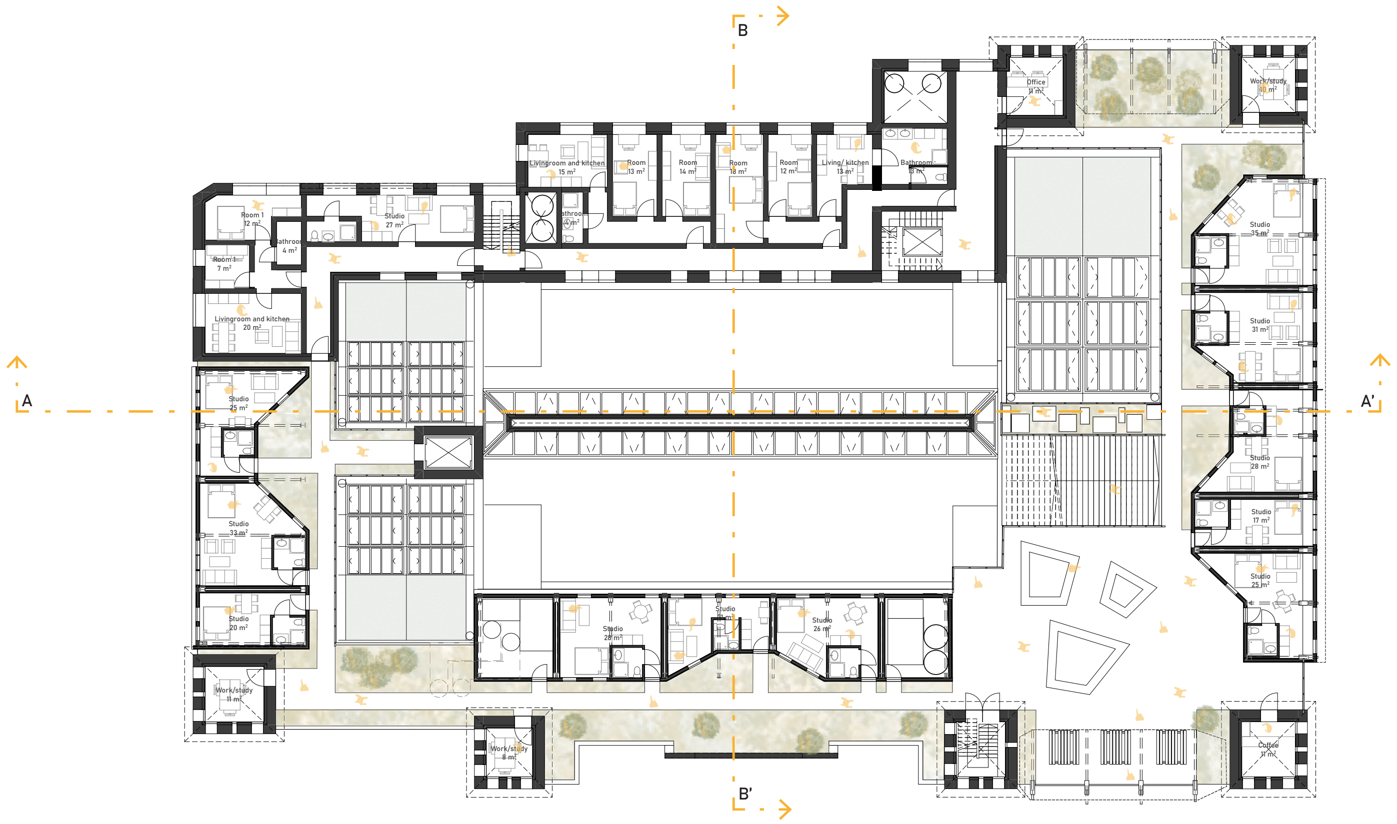
Section
Scale 1:100

5.4 P5 products

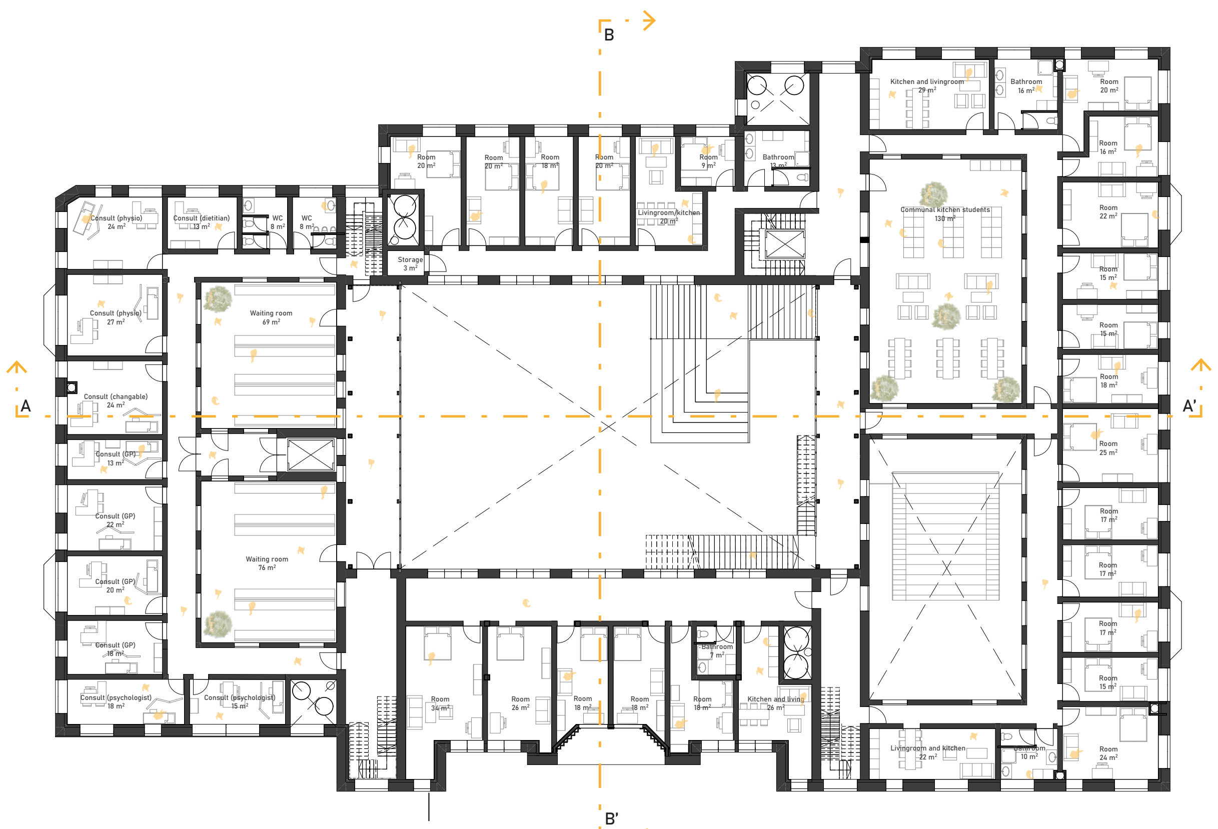
5.4.2 Building



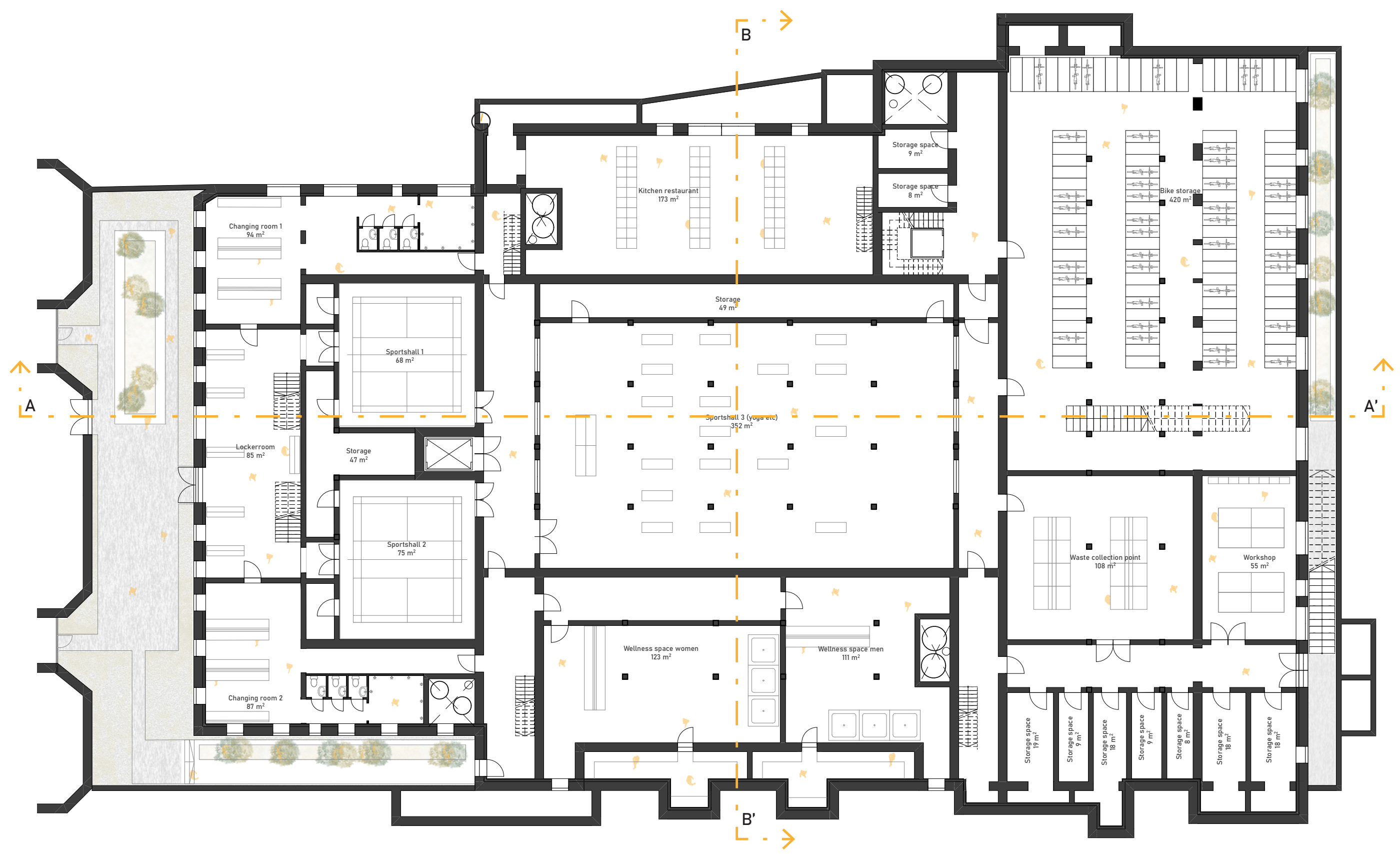
Second floor
Scale 1:200



Roof
Scale 1:200



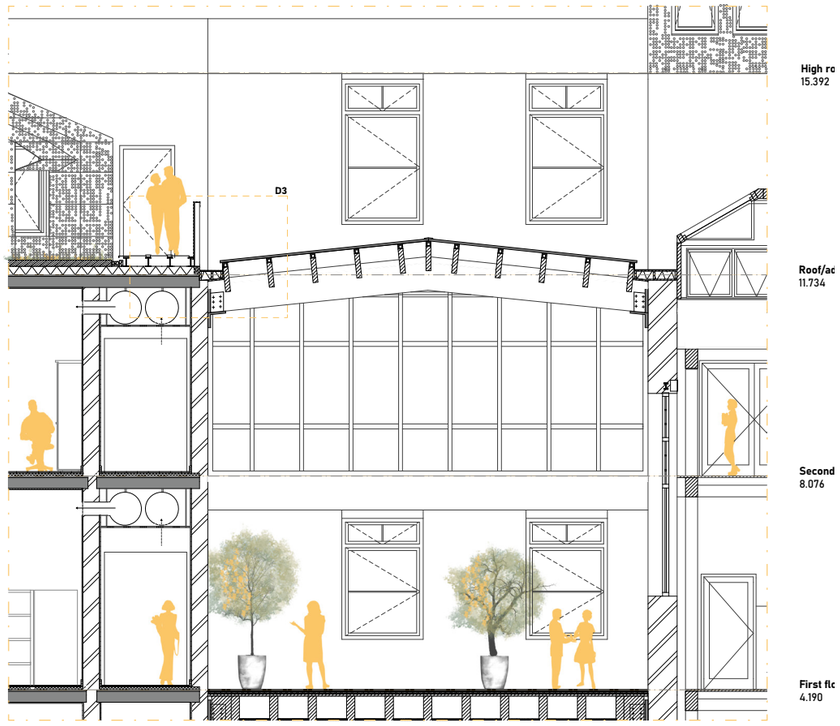
First floor
Scale 1:200



Basement
Scale 1:200

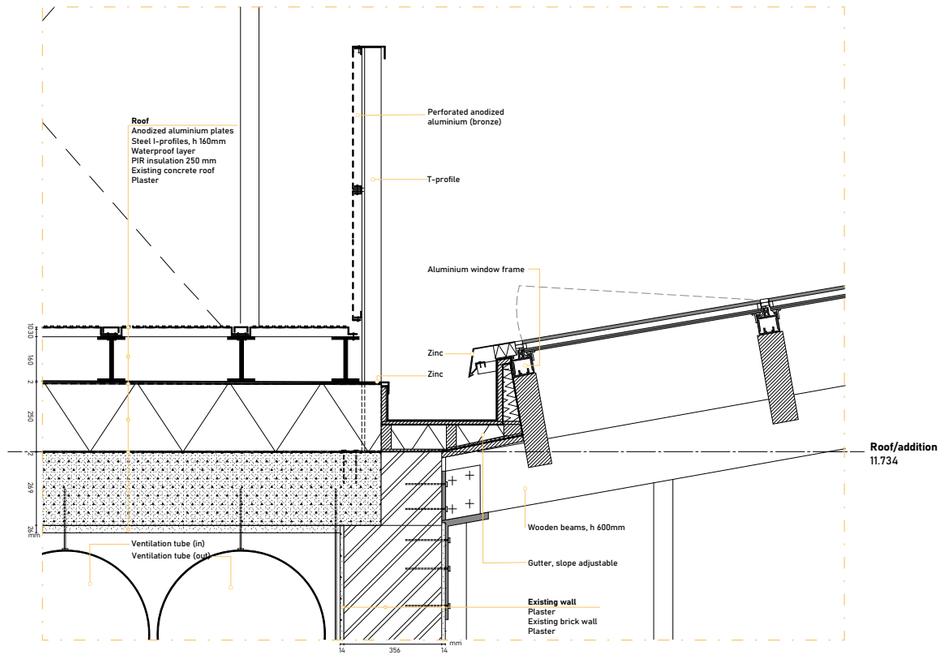
5.4 P5 products

5.4.3 Element



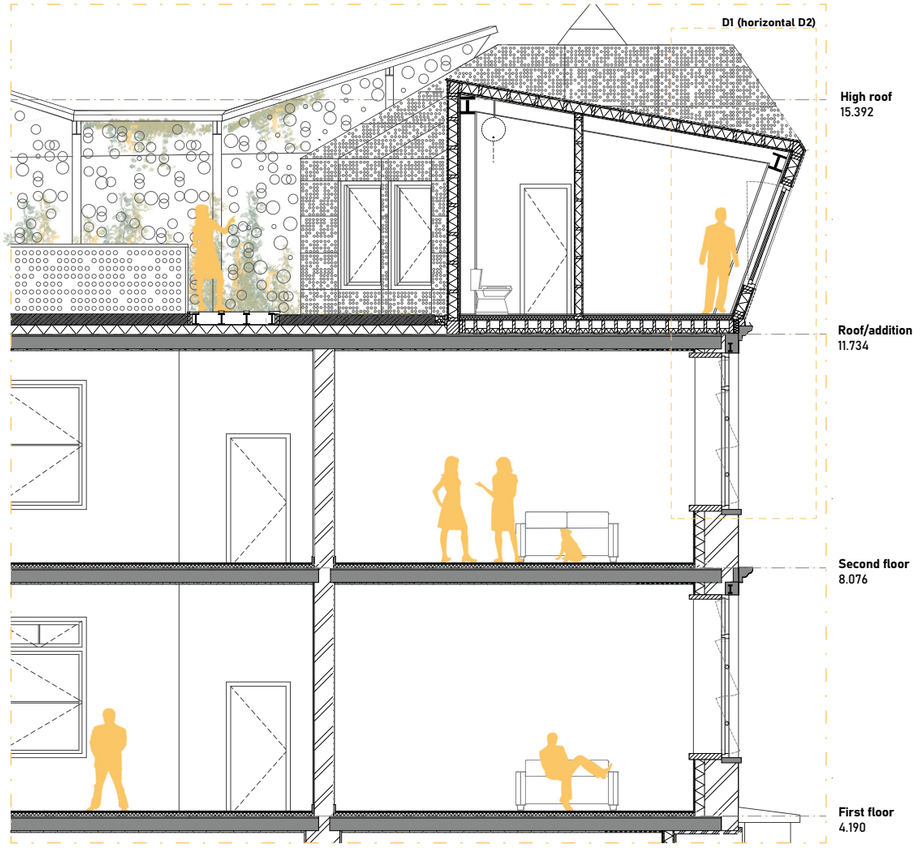
Fragment small atrium

Scale 1:50



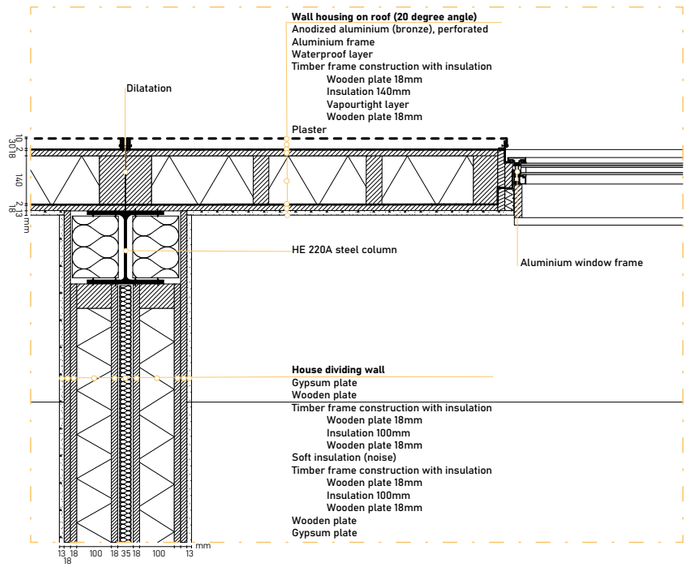
Detail 3

Scale 1:50



Fragment roof addition

Scale 1:50

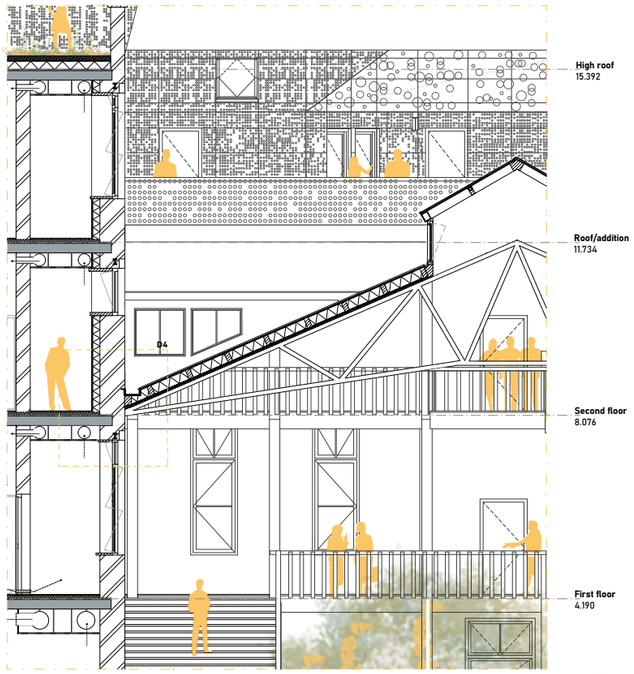


Detail 2

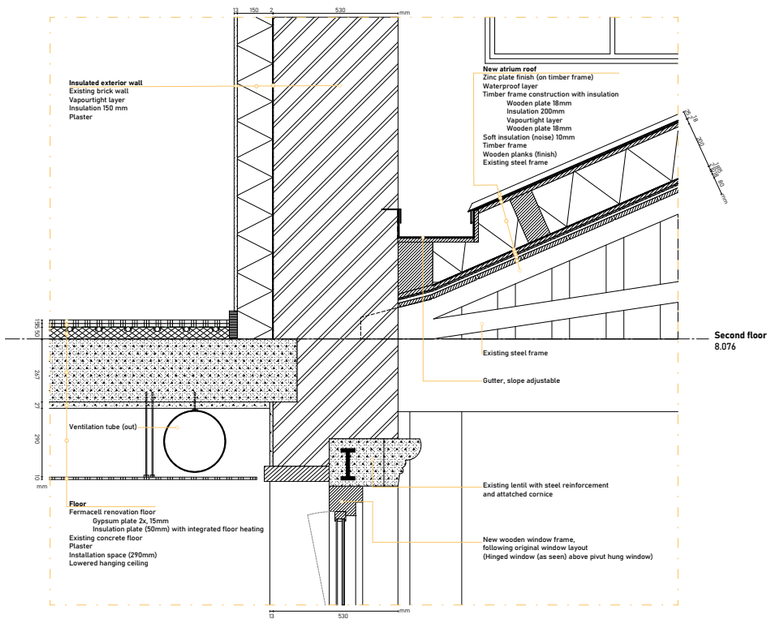
Scale 1:10

5.4 P5 products

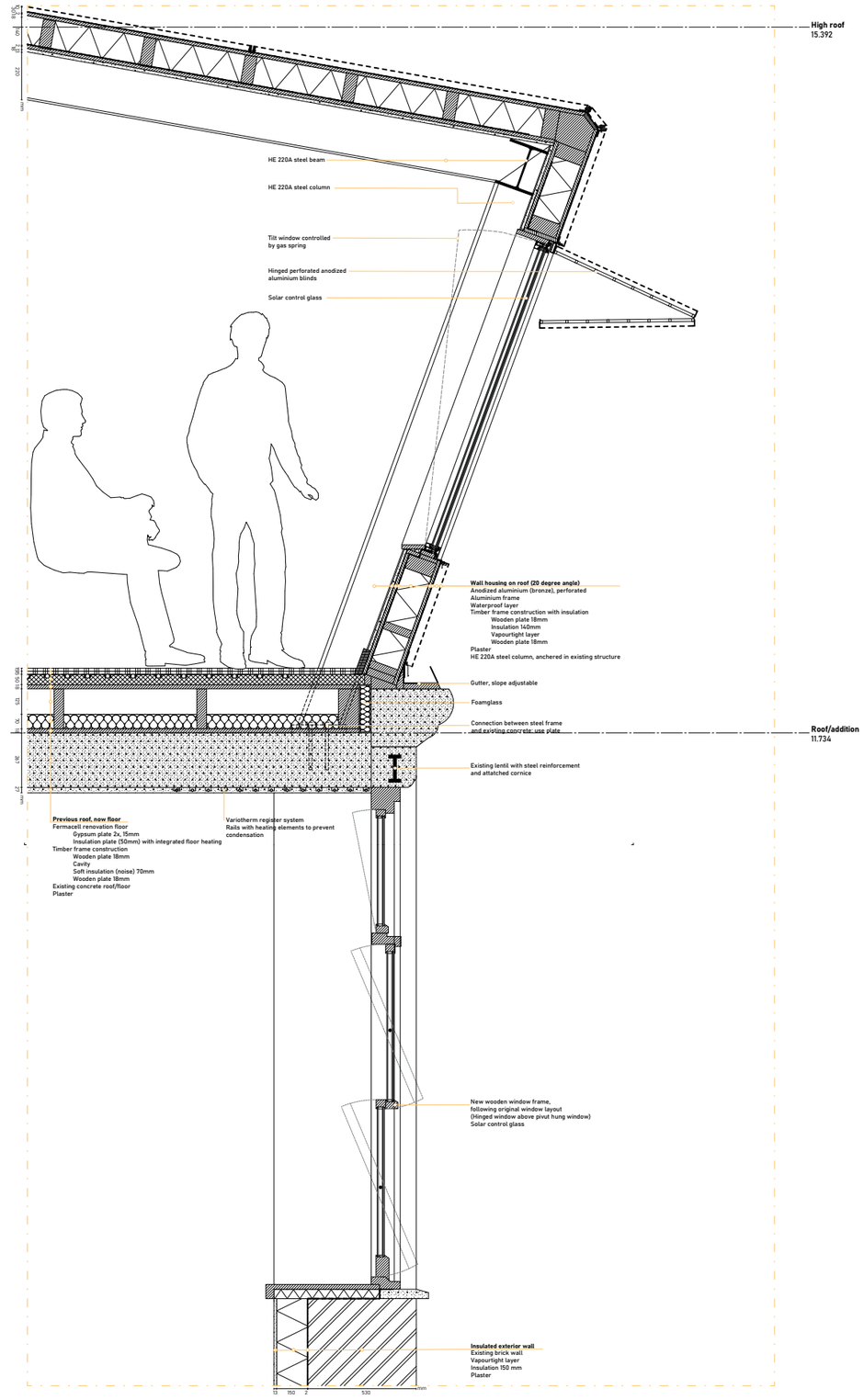
5.4.3 Element



Fragment large atrium
Scale 1:50



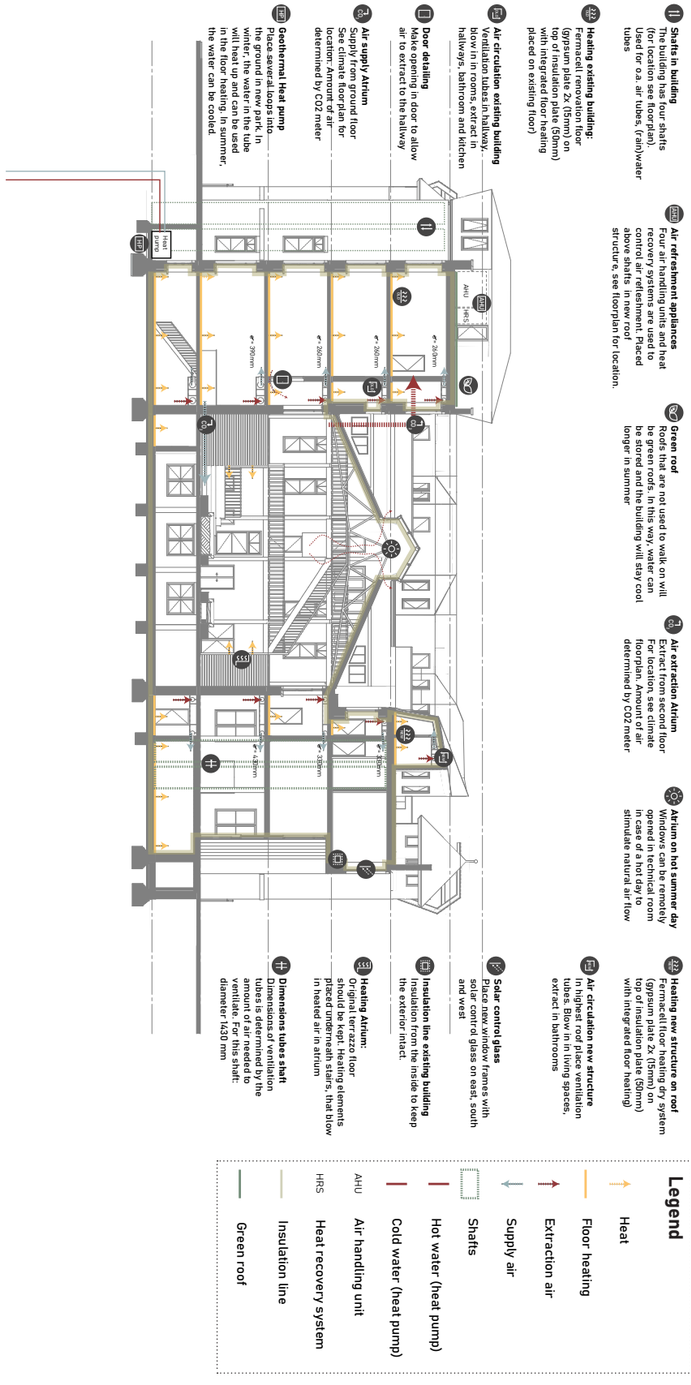
Detail 4
Scale 1:10



Detail 1
Scale 1:10

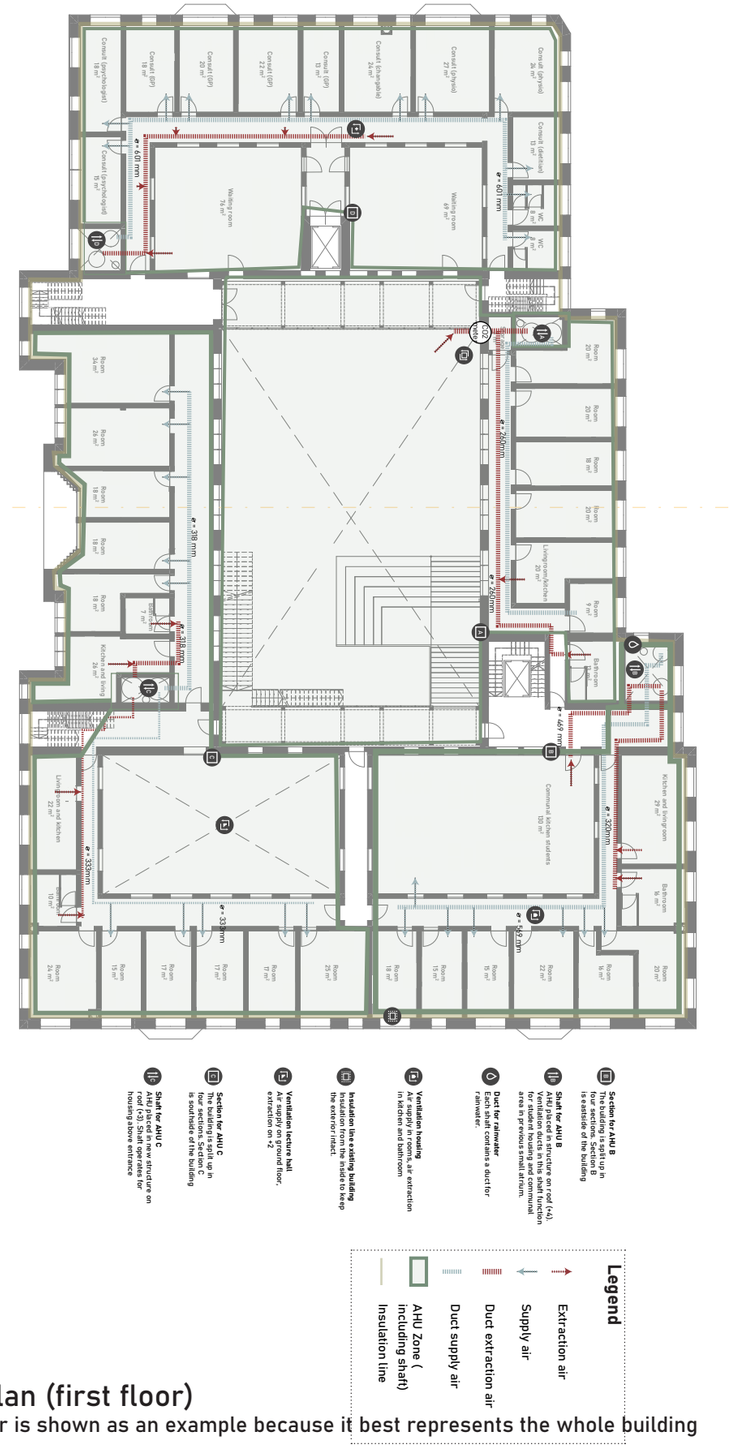
5.4 P5 products

5.4.3 Element



Climate section

Scale 1:200



Climate floorplan (first floor)

Scale 1:200, this floor is shown as an example because it best represents the whole building

5.4 P5 products

5.4.4 Views