DESING BOOKLET

Desing Booklet

Step by Step

Colophon
Design booklet

Delft University of Technology
Master Graduation MSc3/4 Research Plan
Studio: Designing for Health & Care (AR3AD110)
Course: Research Plan (AR3A010)
Design tutors: Birgit Jürgenhake
Research tutor: Leo Oorschot

20/06/2023
Marie-Claire Hazenbroek (5445779)

Introduction

CONCEPT

SUPERVISED
OPEN ENVIRONMENT
SPACE TO MOVE AROUND
WITHOUT LIMITATIONS

SITE

- 2 groups of 8 people
- 2 supervisors
- Recognizeble outside
- Public to private
- Close to daycare option

- 8 people - 1 supervisor
- Studio 50 m^2
- Medicines at office
- Extra shared living room

- Medicine point
- Office space to report
- Open & accessible
- Extra sleeping are for emergency shelter

- Private canteen
- Clear schedule
- Meaningfull
- Calm interior
- (Open kitchen)

BUILDING

90 m^2
- Combined living and kitchen
- Separate seating option(s)
- Open kitchen with cooking plate placed to living area

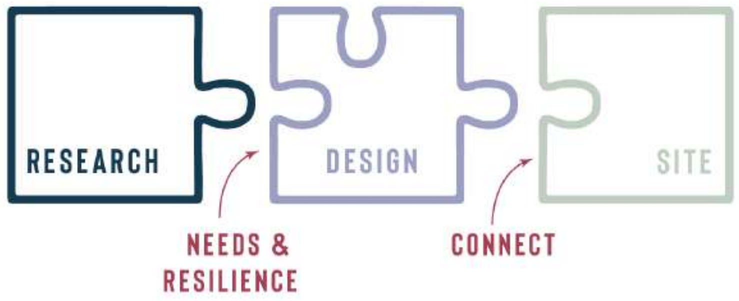
1.5 meter wide
- Sightlines into public spaces
- No extra steps
- Avoid corners
- Door width at least 1.5 meter

25/30 m^2
- At least 1 big window
- personal addition hallway
- Sink or small kitchen block

10 m^2
- Wheelchaire proof (1.5 meter)
- Shower with handels
- 1 bathroom with tub

Prior Q3

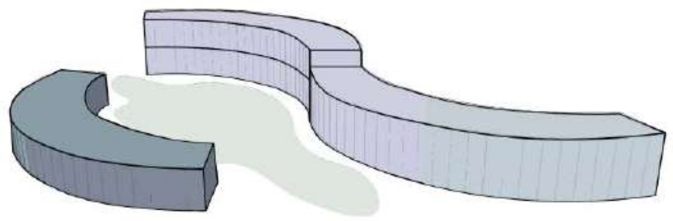
P2 presentation

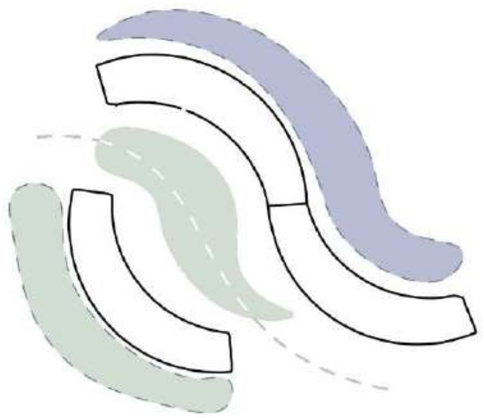


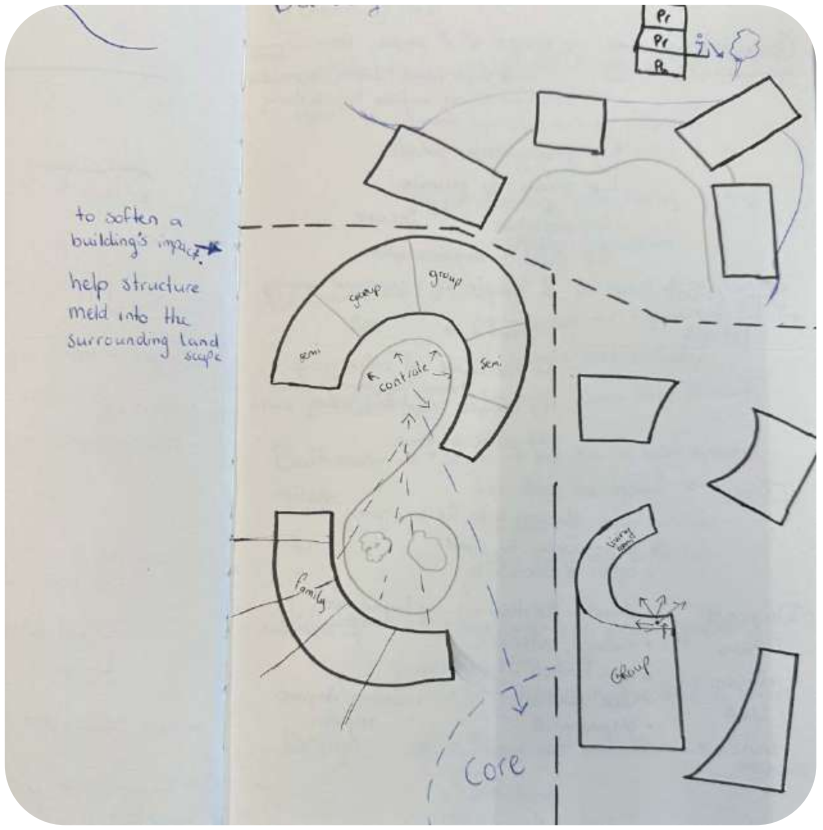
LIVING ROOM / KITCHEN — 90 M²

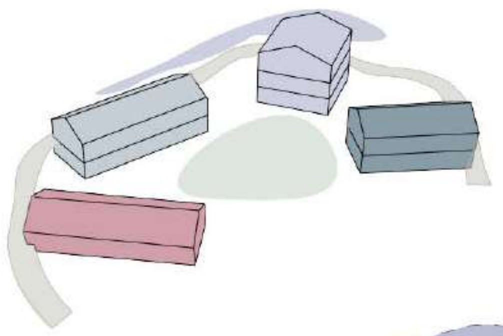
BEDROOM — 20/ 30 M²

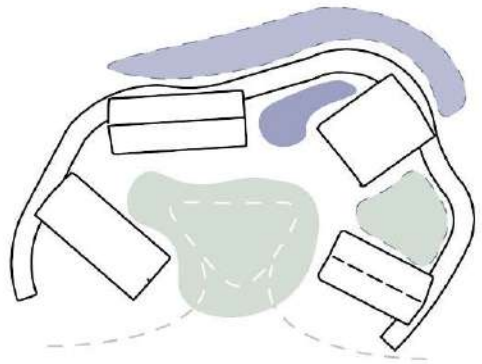
BATHROOM — 10 M²

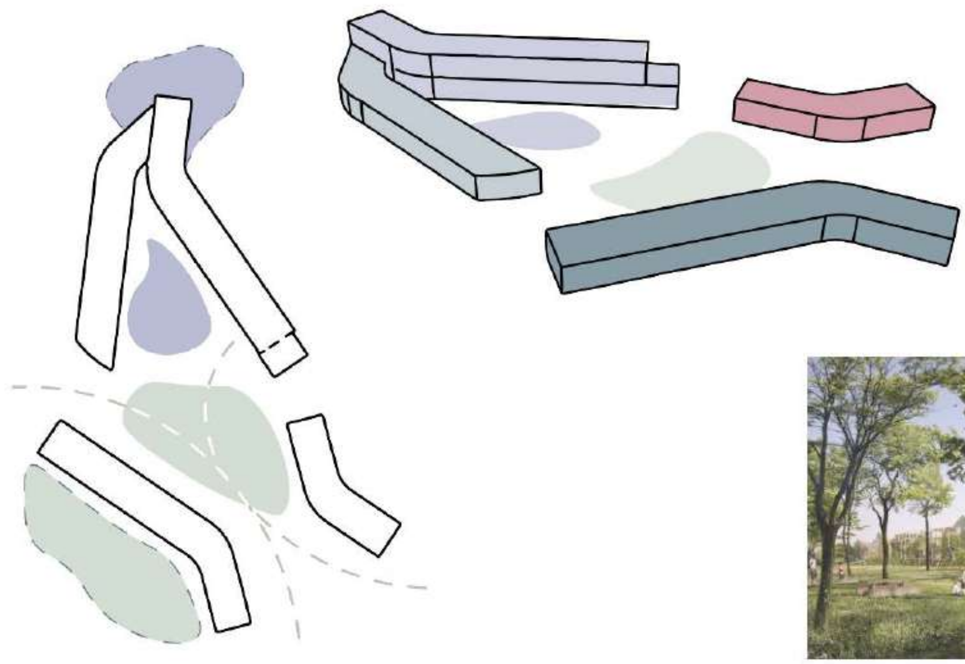




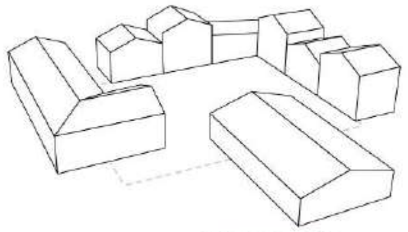


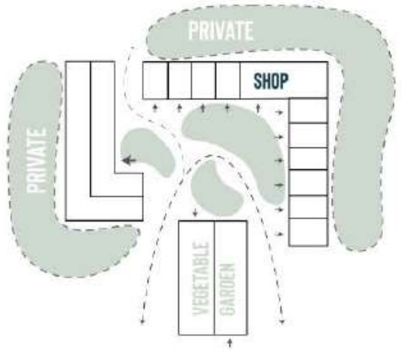


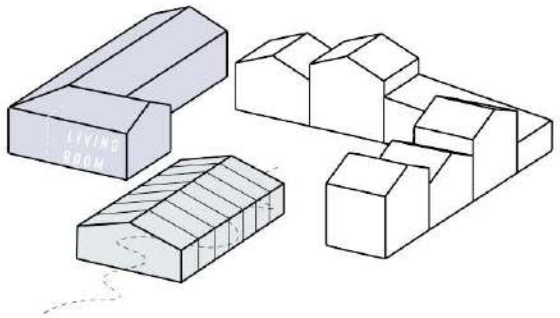


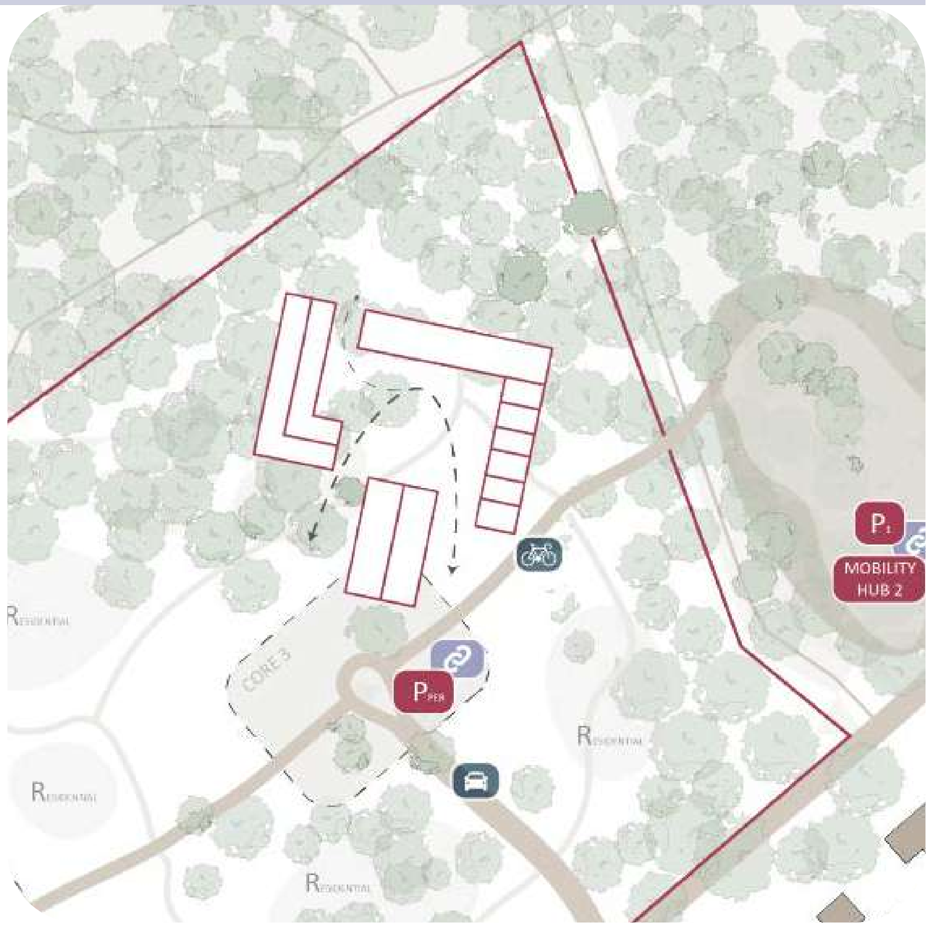


NEIGHBOURS

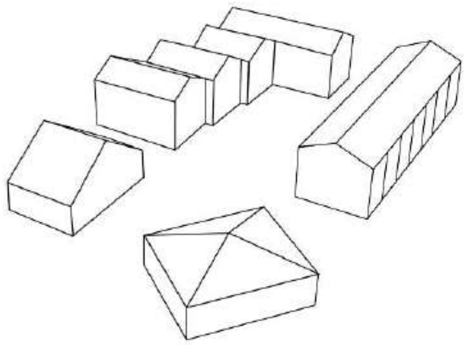


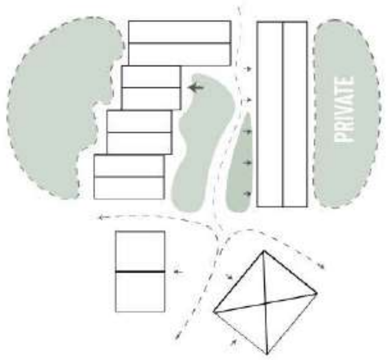


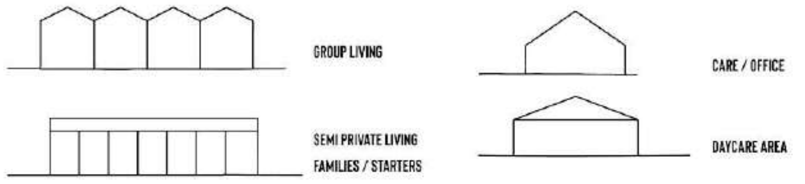


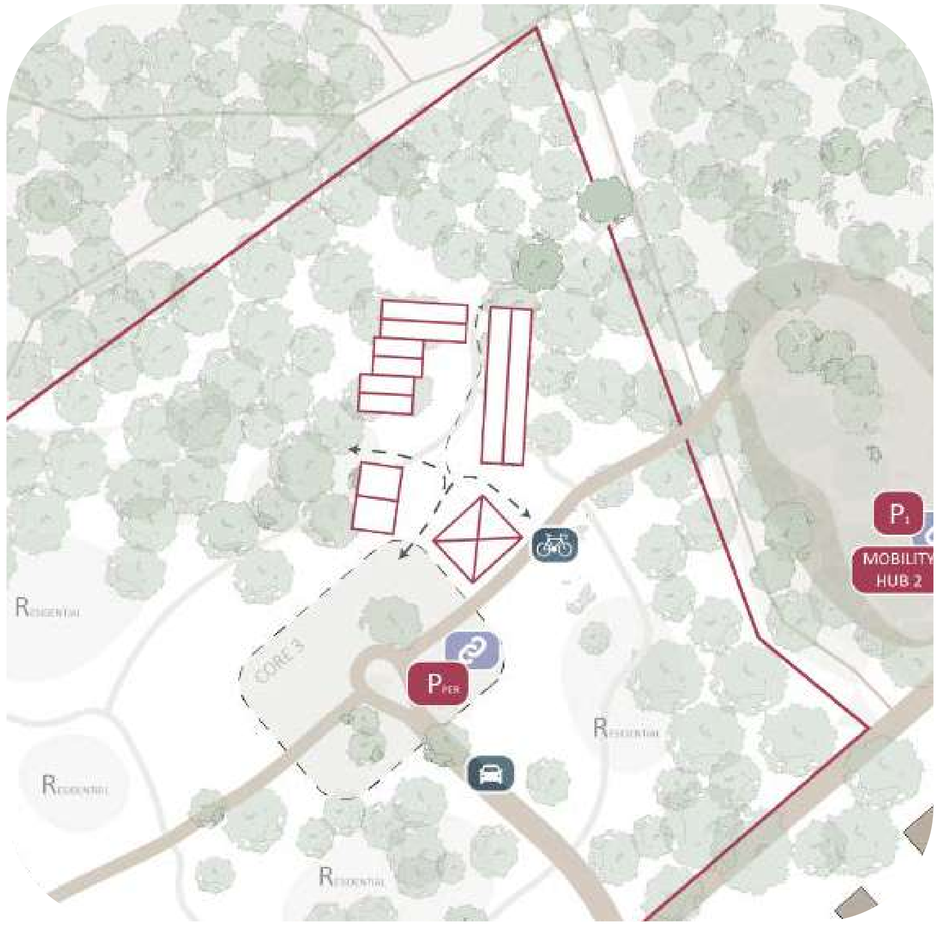


IDENTITY

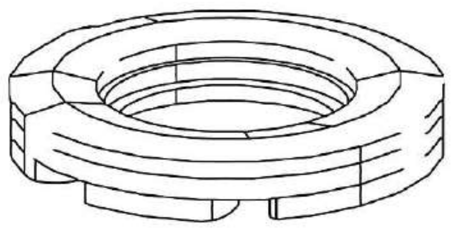


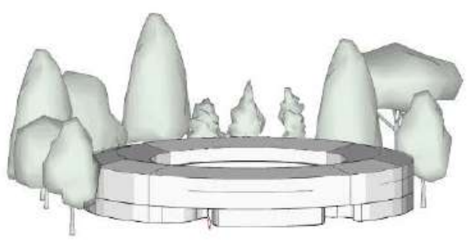


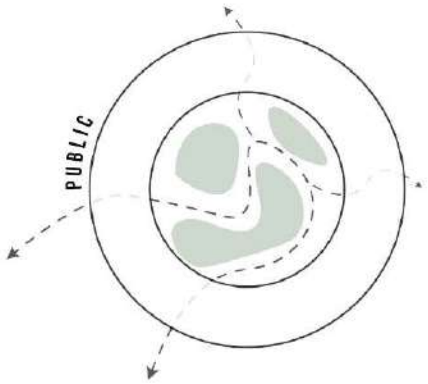


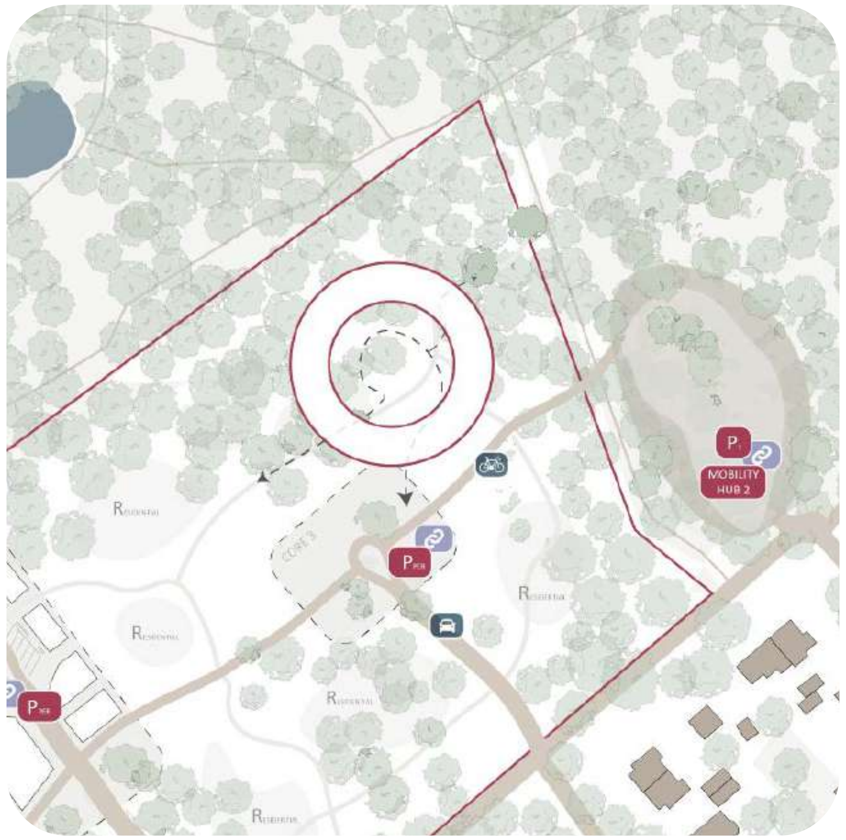


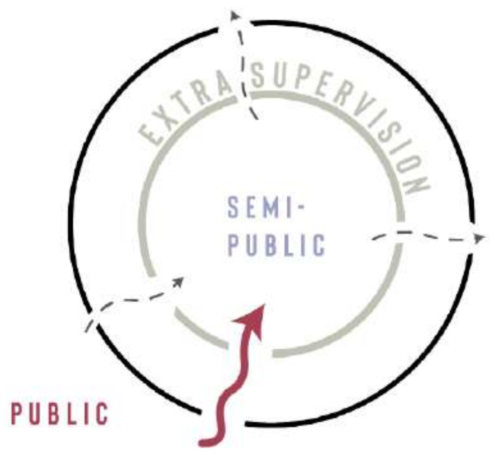
COURTYARD





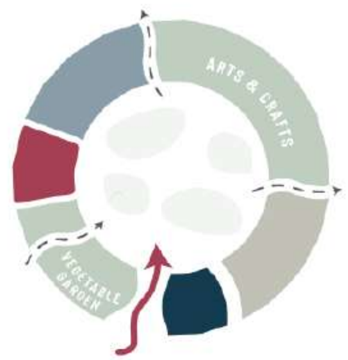




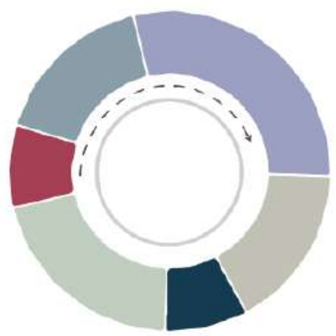


SECTION

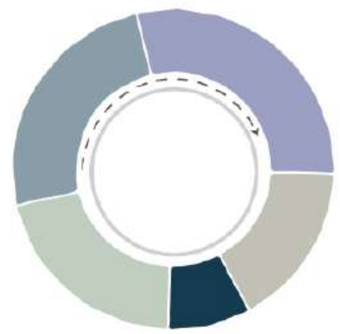
GROUND FLOOR



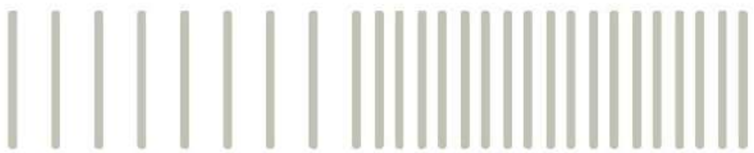
FIRST FLOOR



SECOND FLOOR



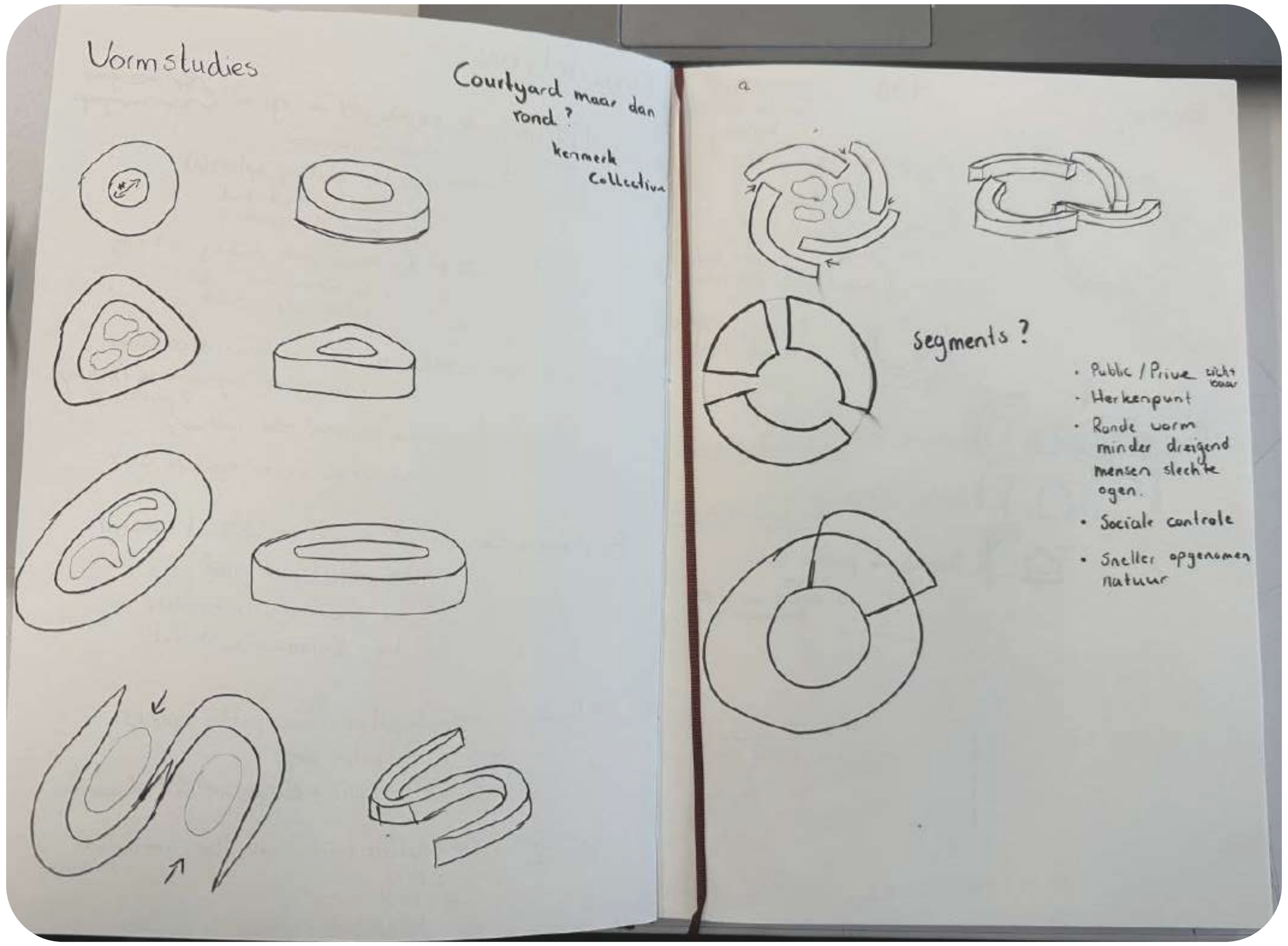
- Daycare area
- Lunch Room
- Care / Office
- Group living
- Semi private living
- Families / Starters

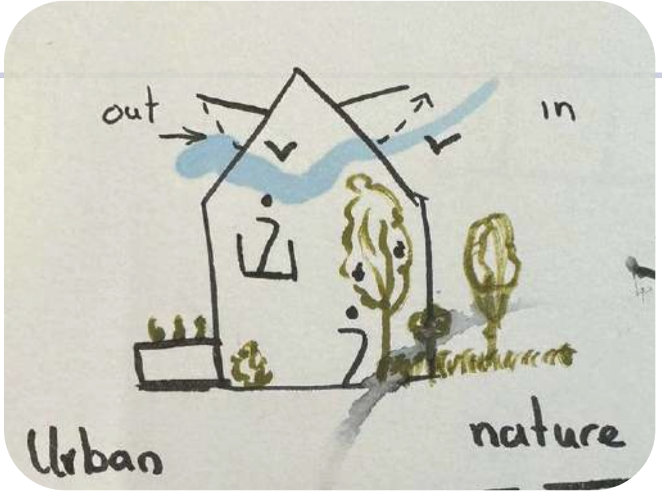


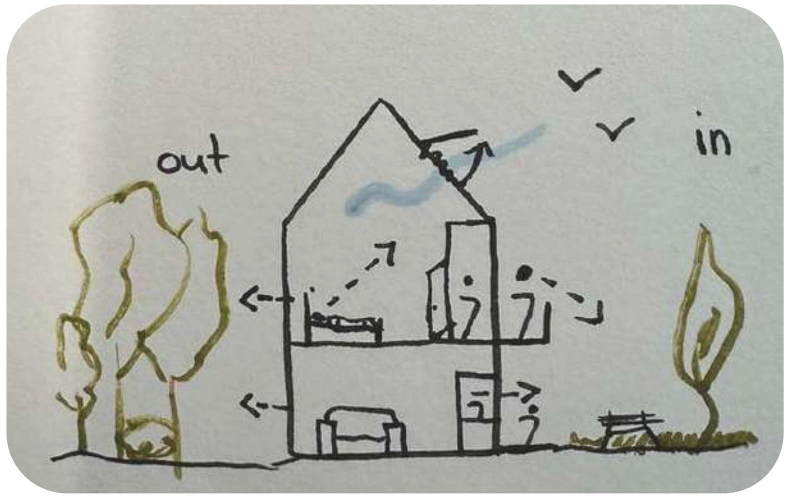
Public Private

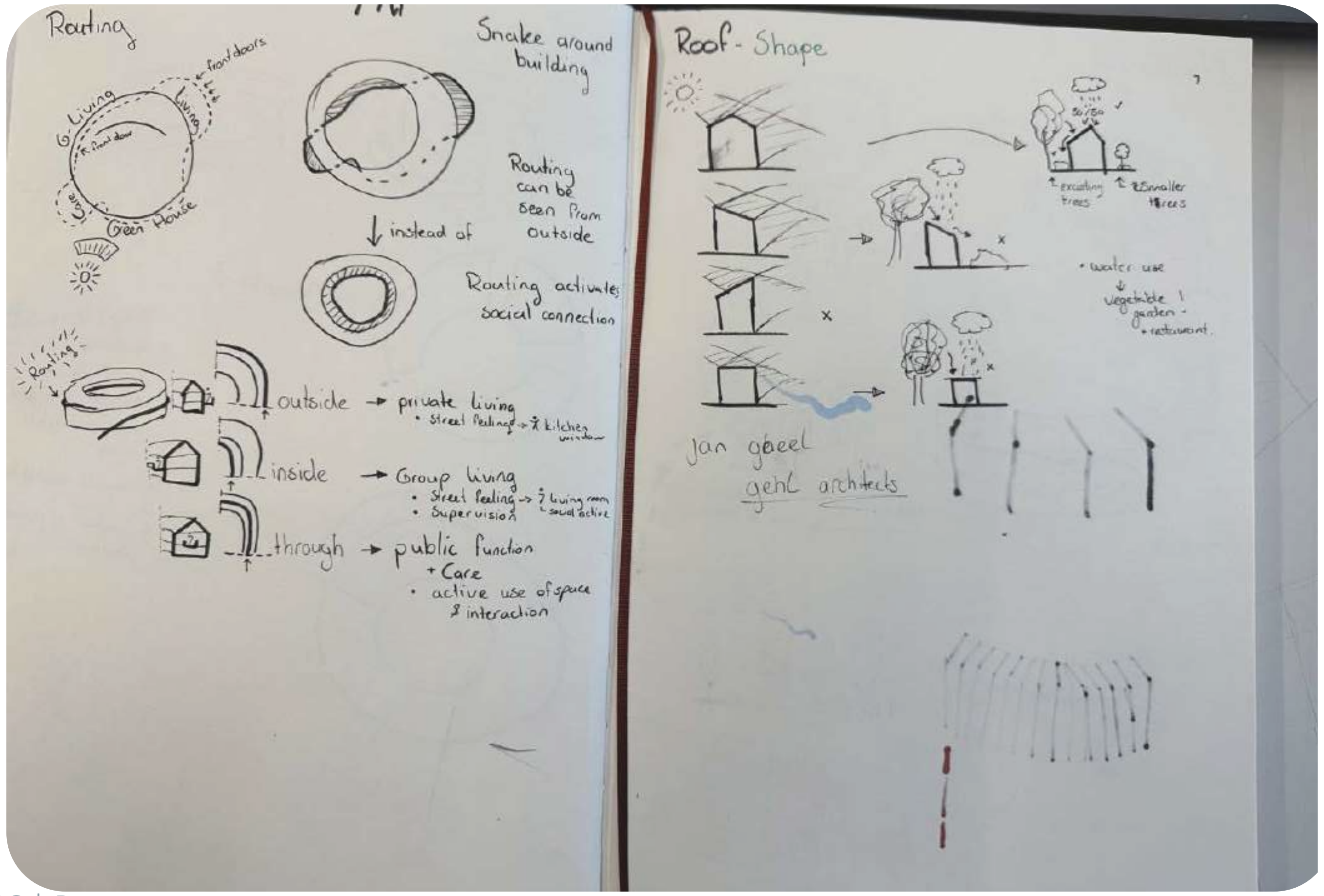
Design Steps

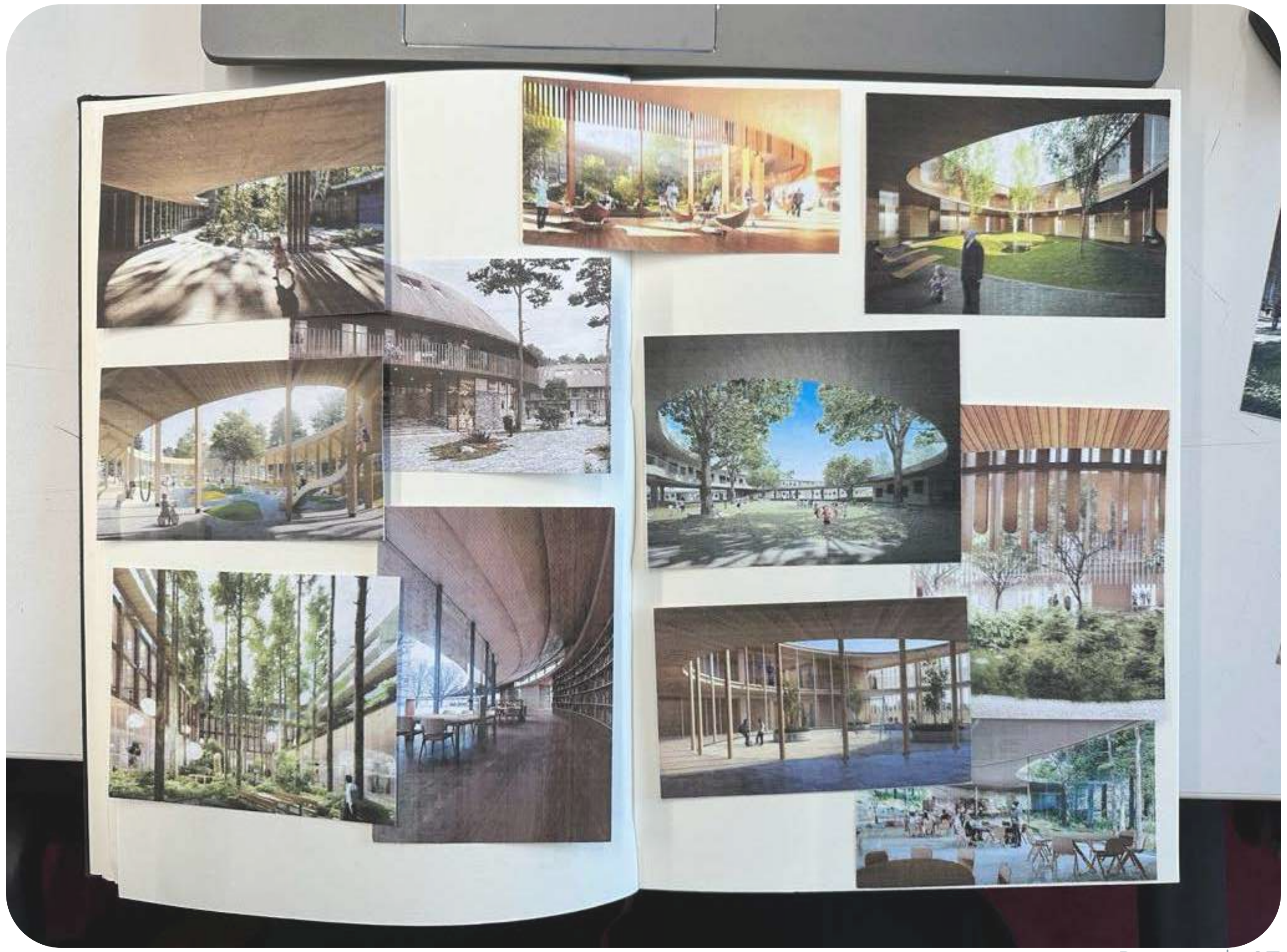
Q3

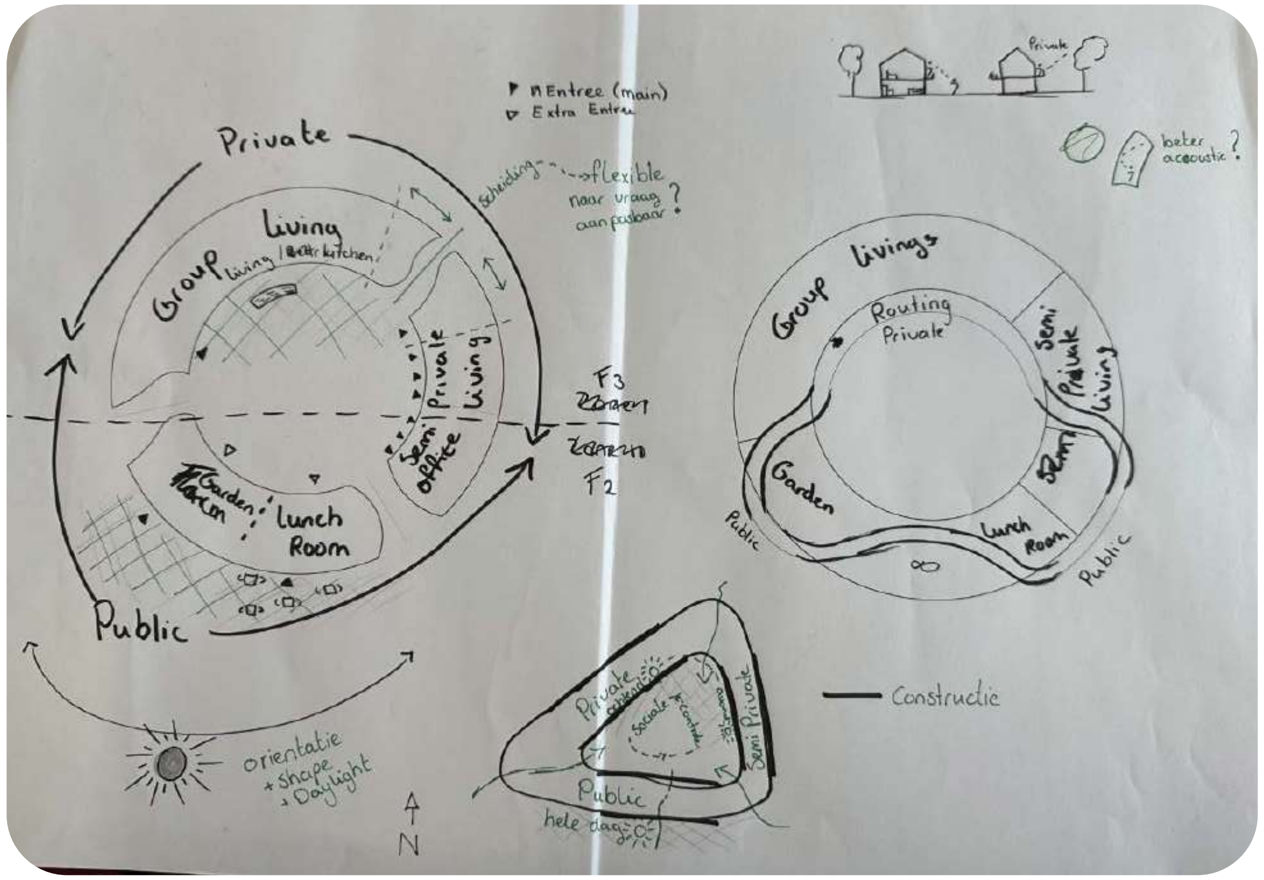

Vormstudies
Courtyard meer dan rond ?
segments ?
Public / Prive
Herkenpunt
Ronde vorm minder dreigend mensen slechte ogen.
Sociale controle
Sneller opgenomen natuur


out
in
Urban
nature

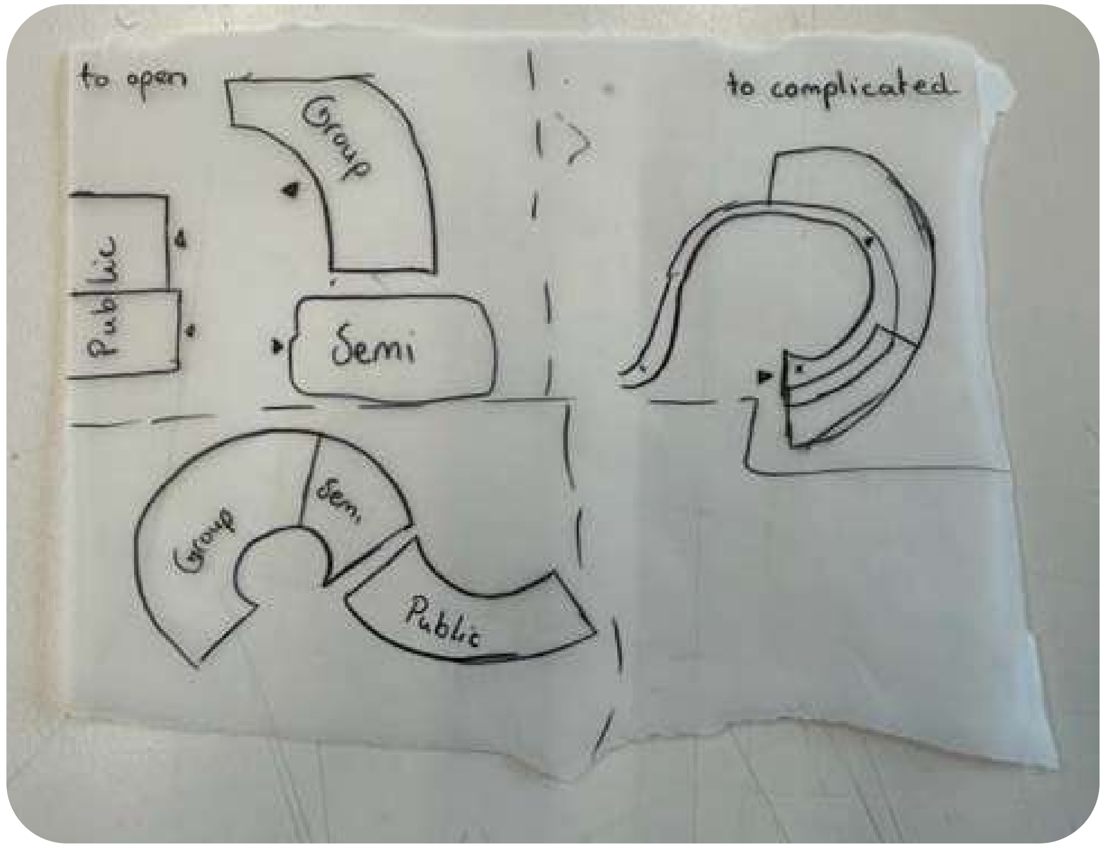

out
in

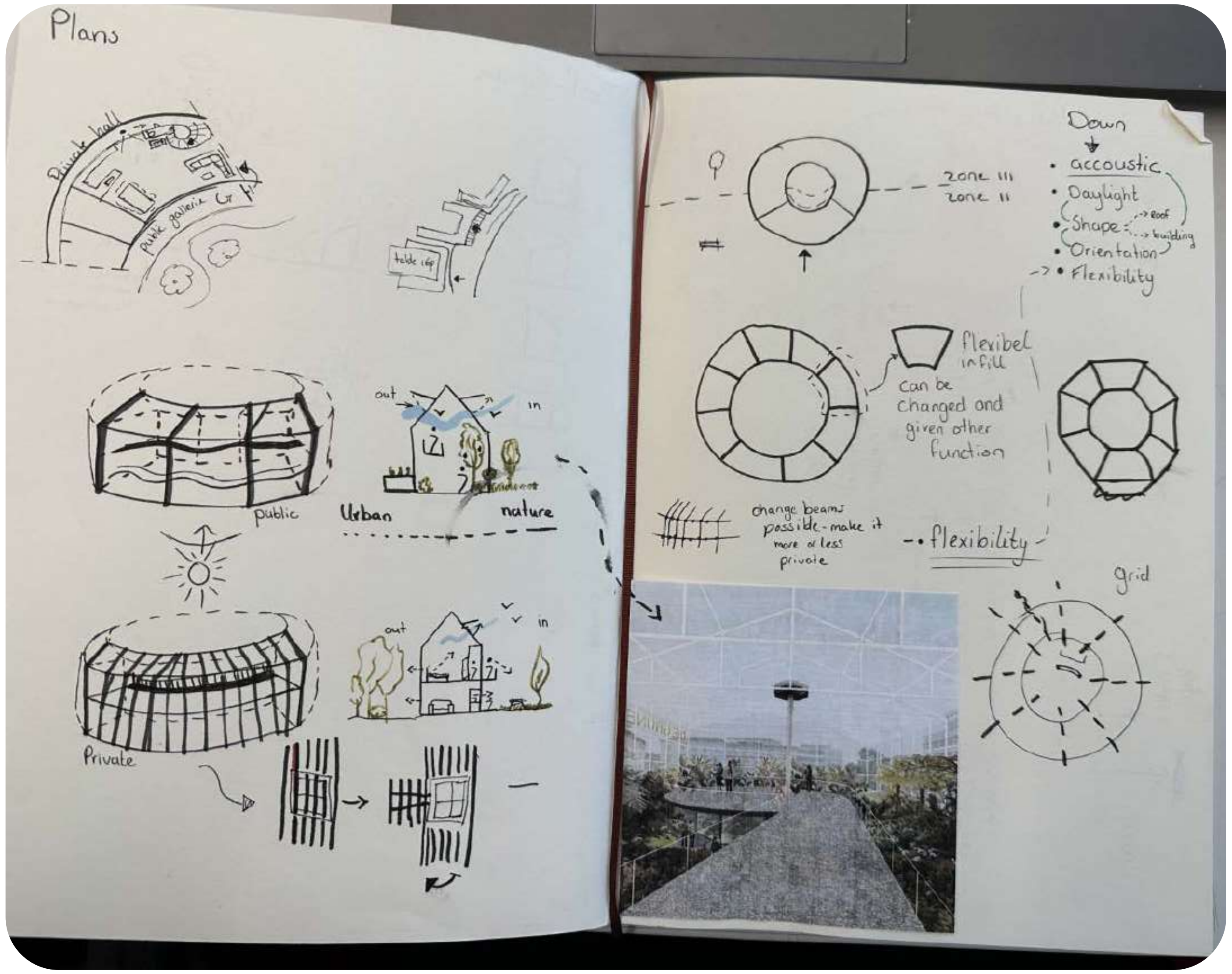

Routing
Snake around building
Routing can be seen from outside
instead of
Routing activates social connection
outside → private living
inside → Group living
through → public function
+ Care
active use of space & interaction
Roof - Shape
gehl architects

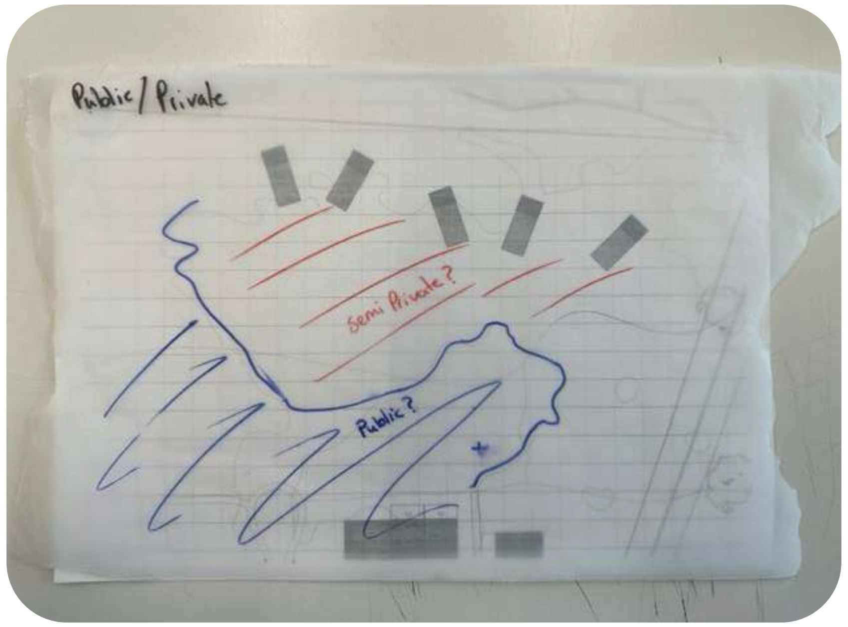


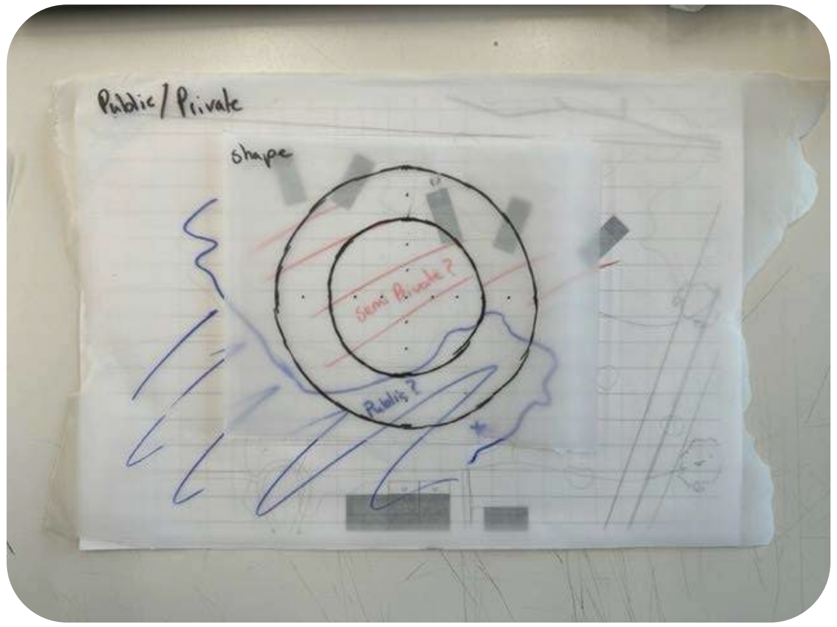

Private
Living
Group
Public
Lunch Room
Garden
Semi office
Private living
Routing Private
Semi Private living
Constructie
orientatie + shape + Daylight
N

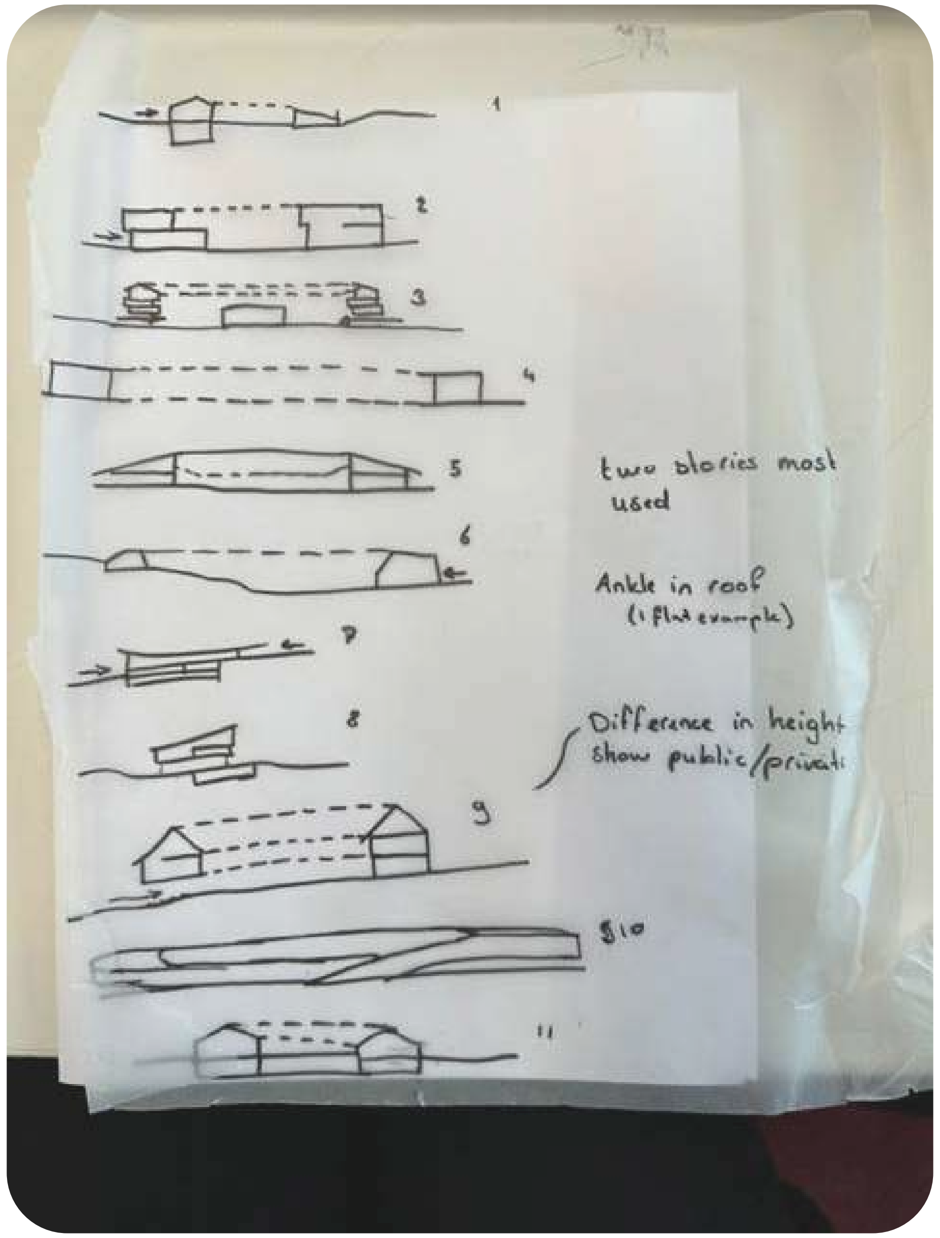

transition
Fluid Shape
Stronger 2gether
Adaption forest
Bird eye sight
Place private
Recognition
Blends in Stands out
Public / Private
Social Supervision
Supervision
interior
Security / geborgen
Private
public


to open
to complicated
Group
Public
Semi
Sem
Public

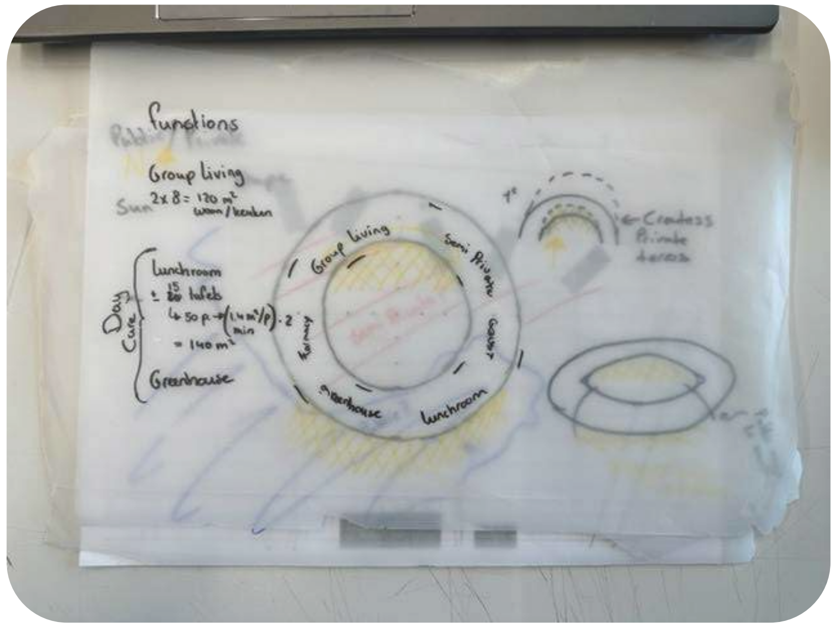

Plans
Down
accoustic
Daylight
Shape
Orientation
Flexibility
Flexibel infill
can be changed and given other function
flexibility
grid
public
Urban
nature
out
in
Private

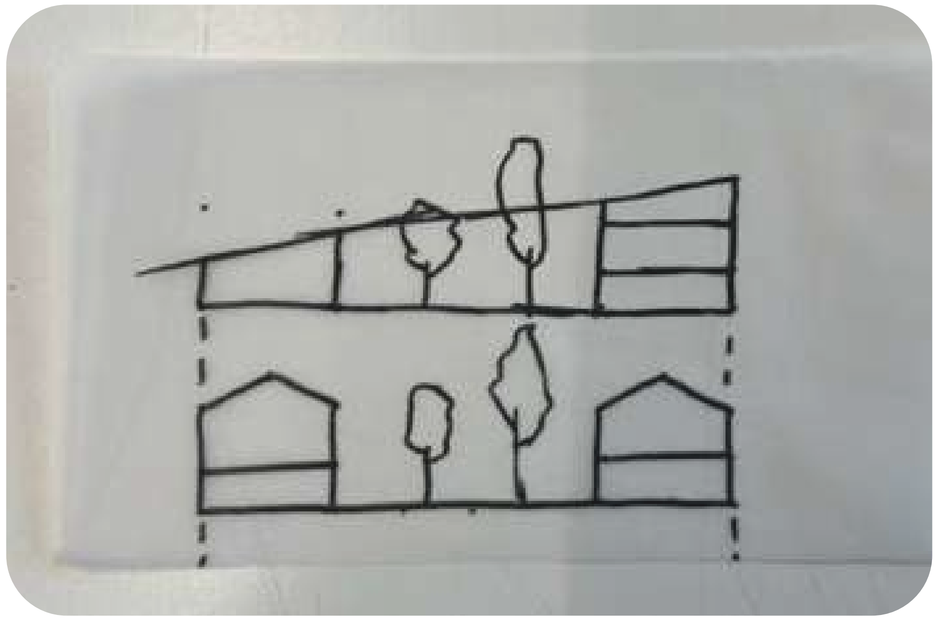

Public / Private
Semi Private?
Public?

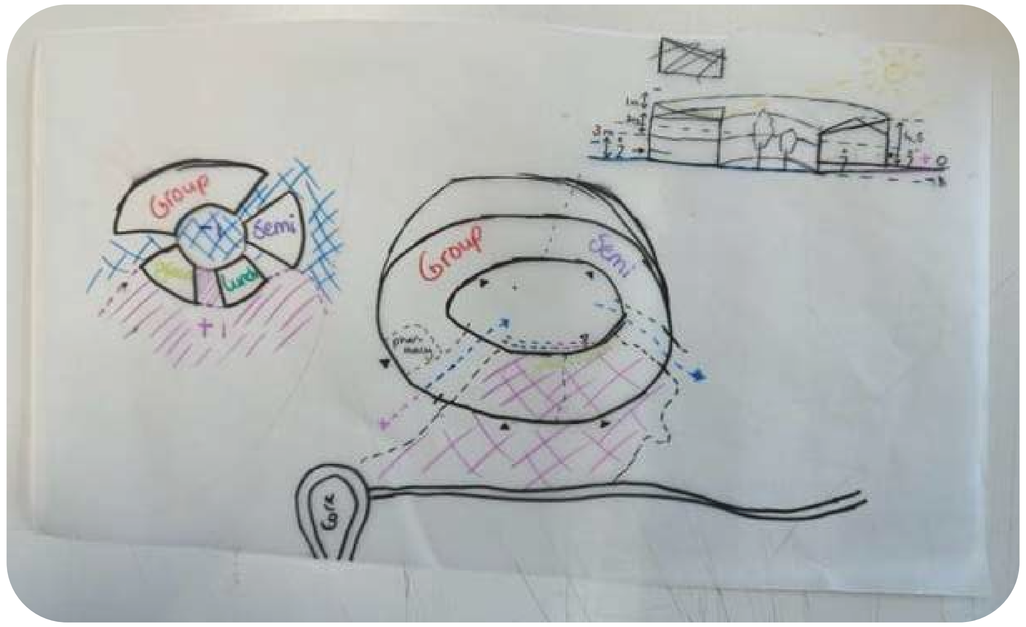

Public / Private
shape
Semi Private?
Public?


1
2
3
4
5
6
7
8
9
10
11
two stories most used
Ankle in roof (1 flat example)
Difference in height show public/private

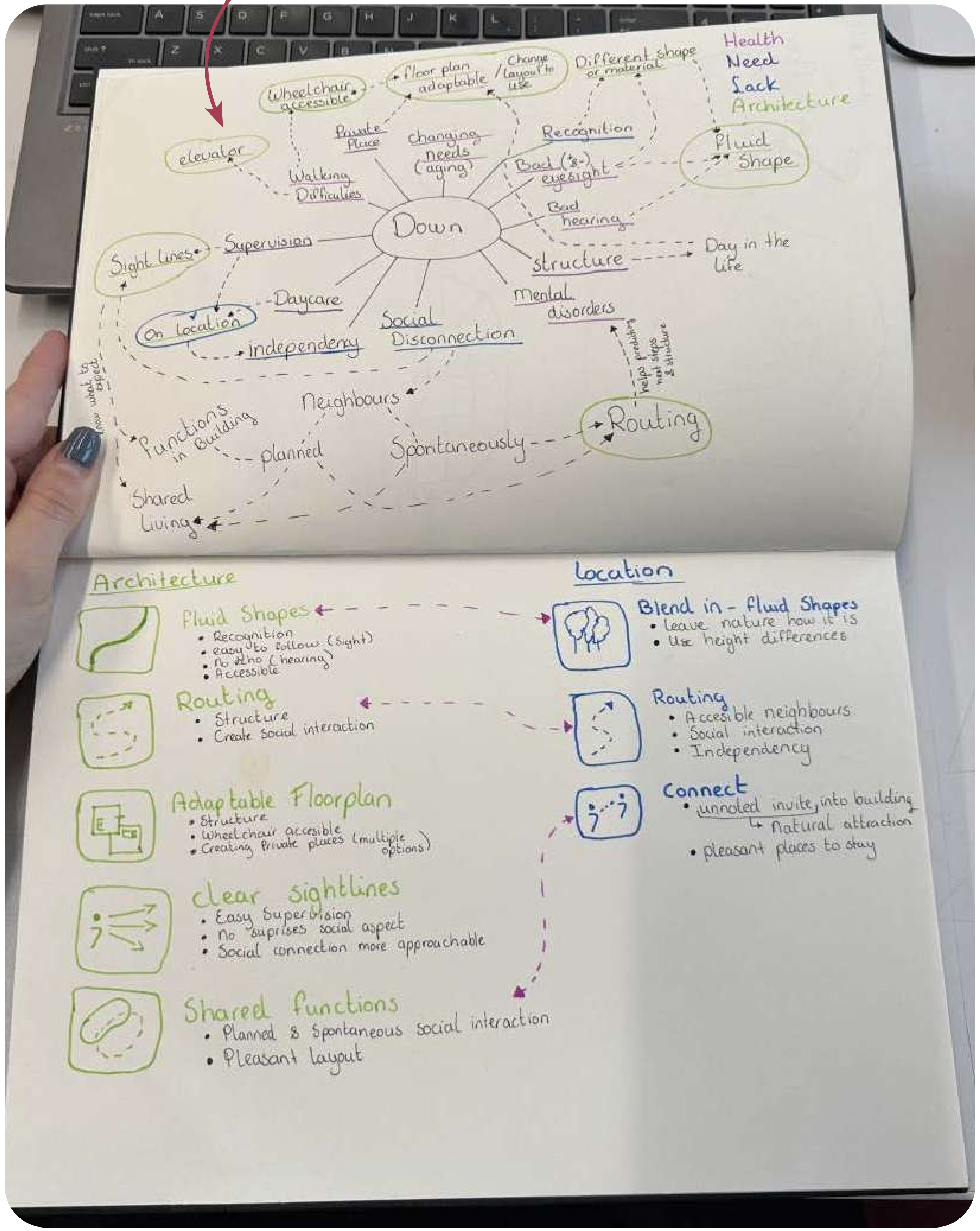

Public / Private
Sun
shape
Semi Private
Public?

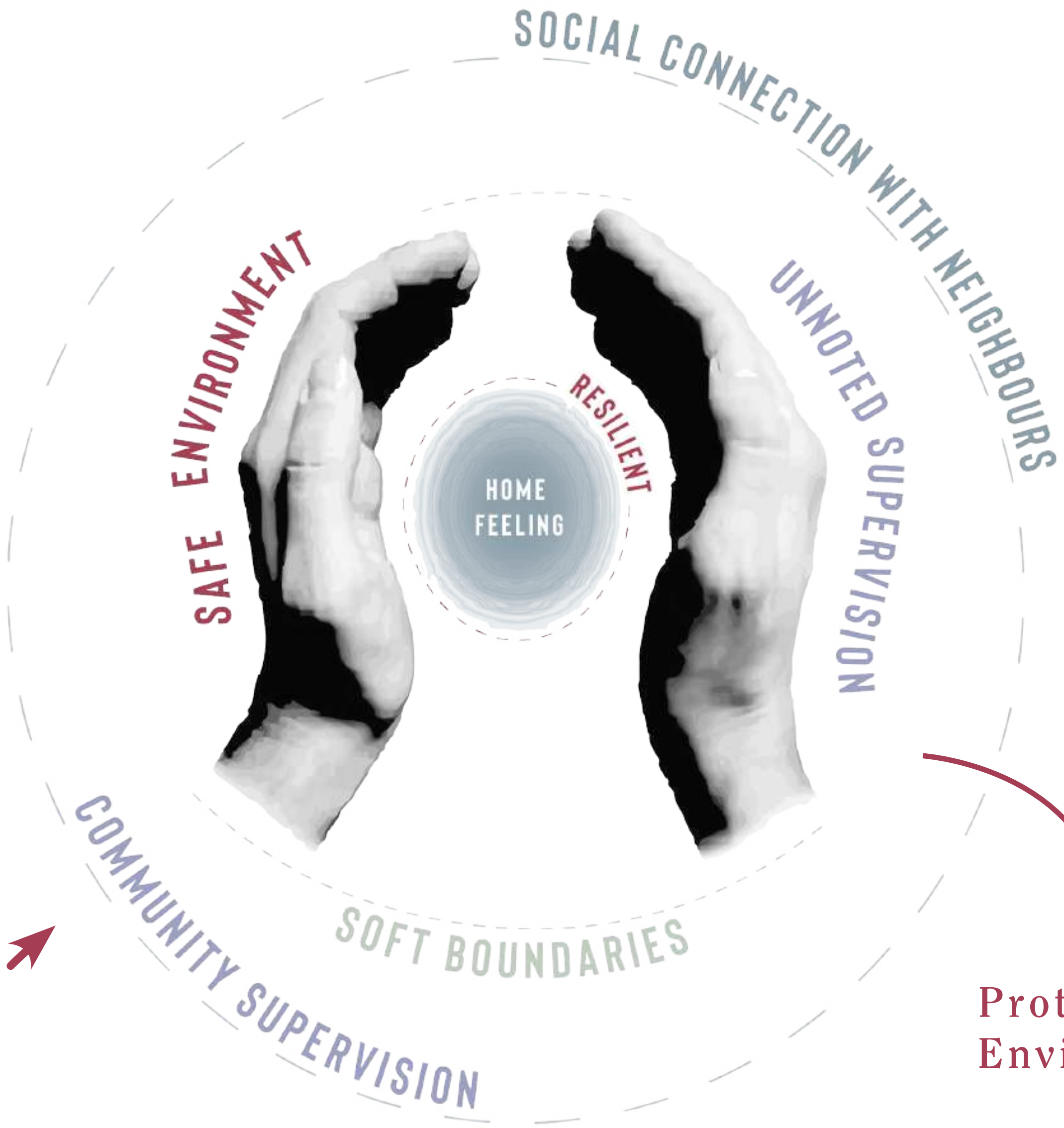

Functions
Group living
Day Care
Lunchroom
Greenhouse
Semi Private



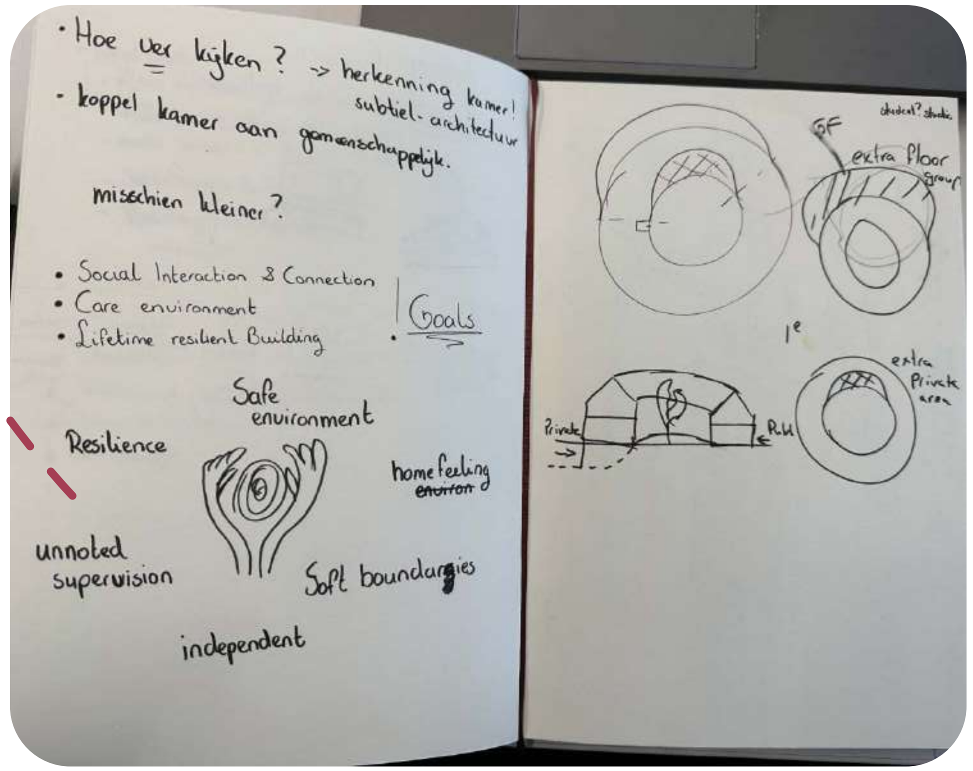

Group
Semi
Lunch

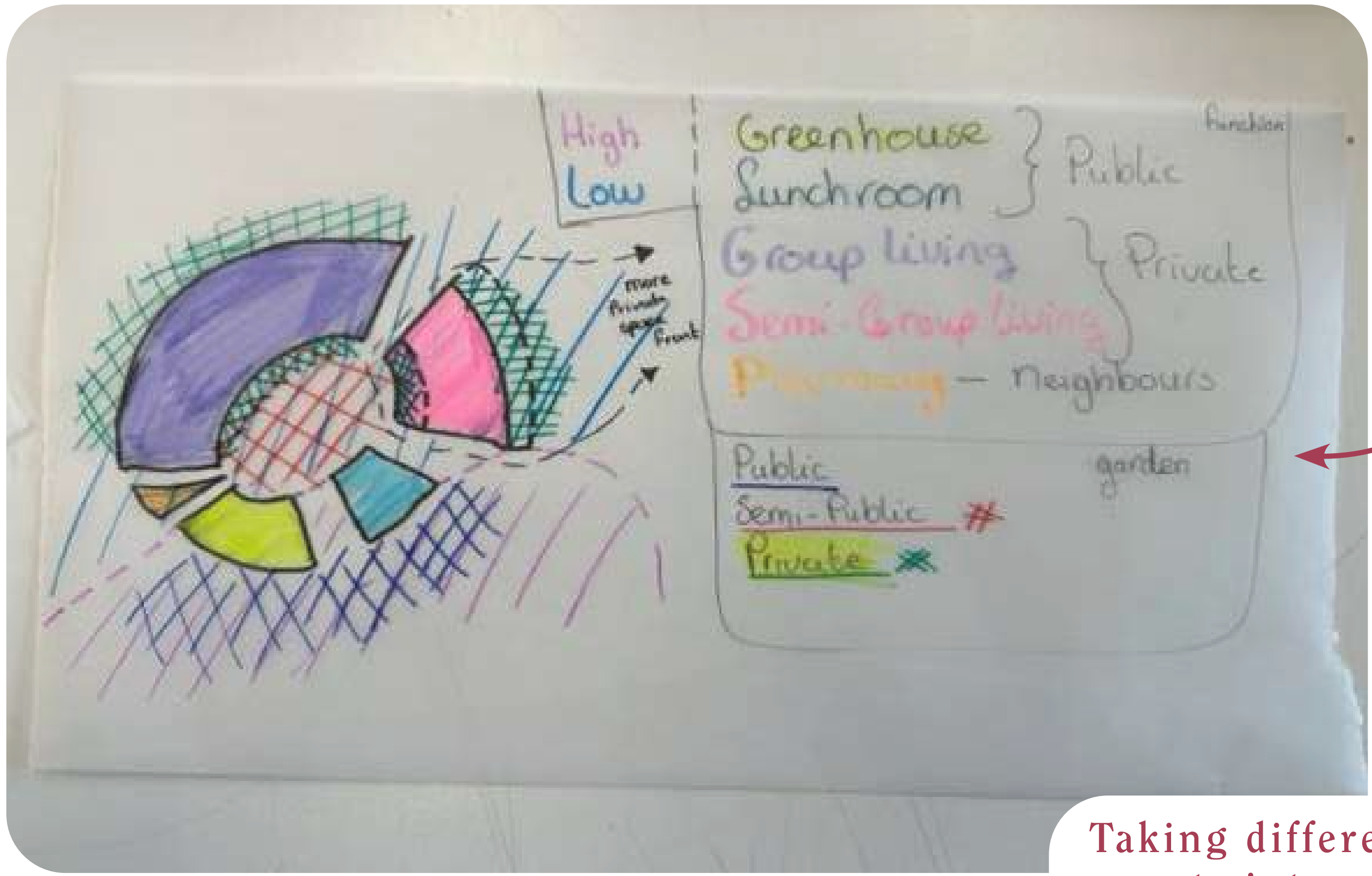
Take a step back to look at the guiding themas for designing





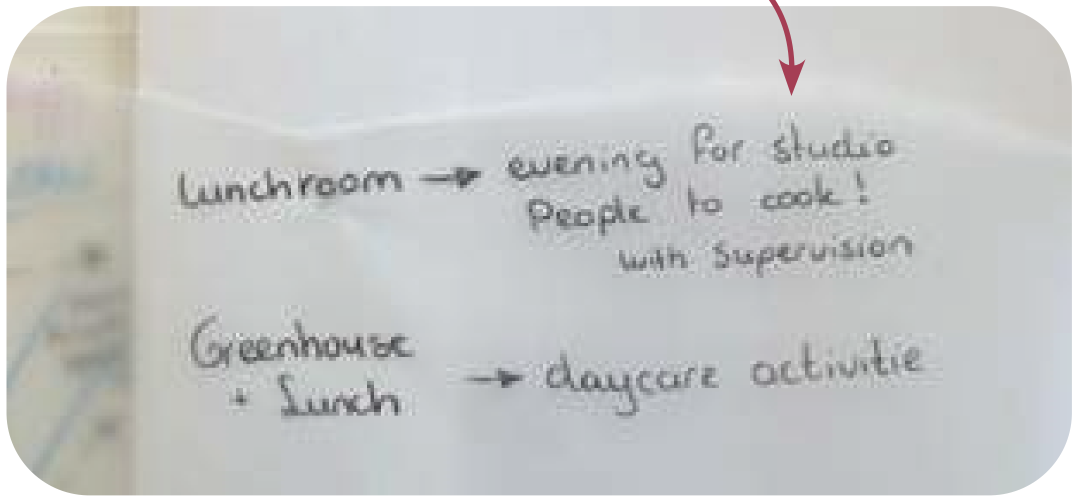
Protected Environemnt





Hight Difference
Functions
Gardens

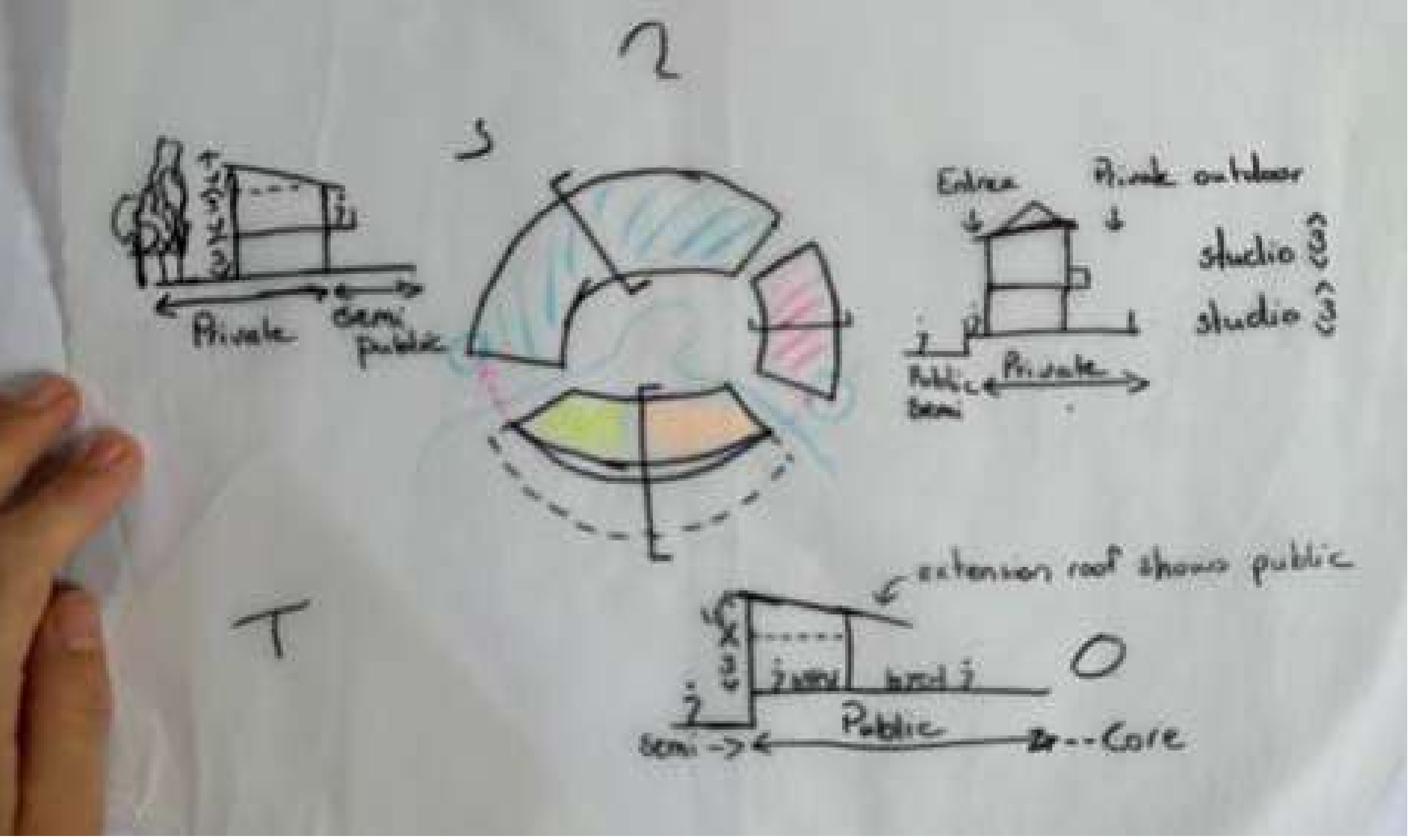
Giving functions multiple purpose



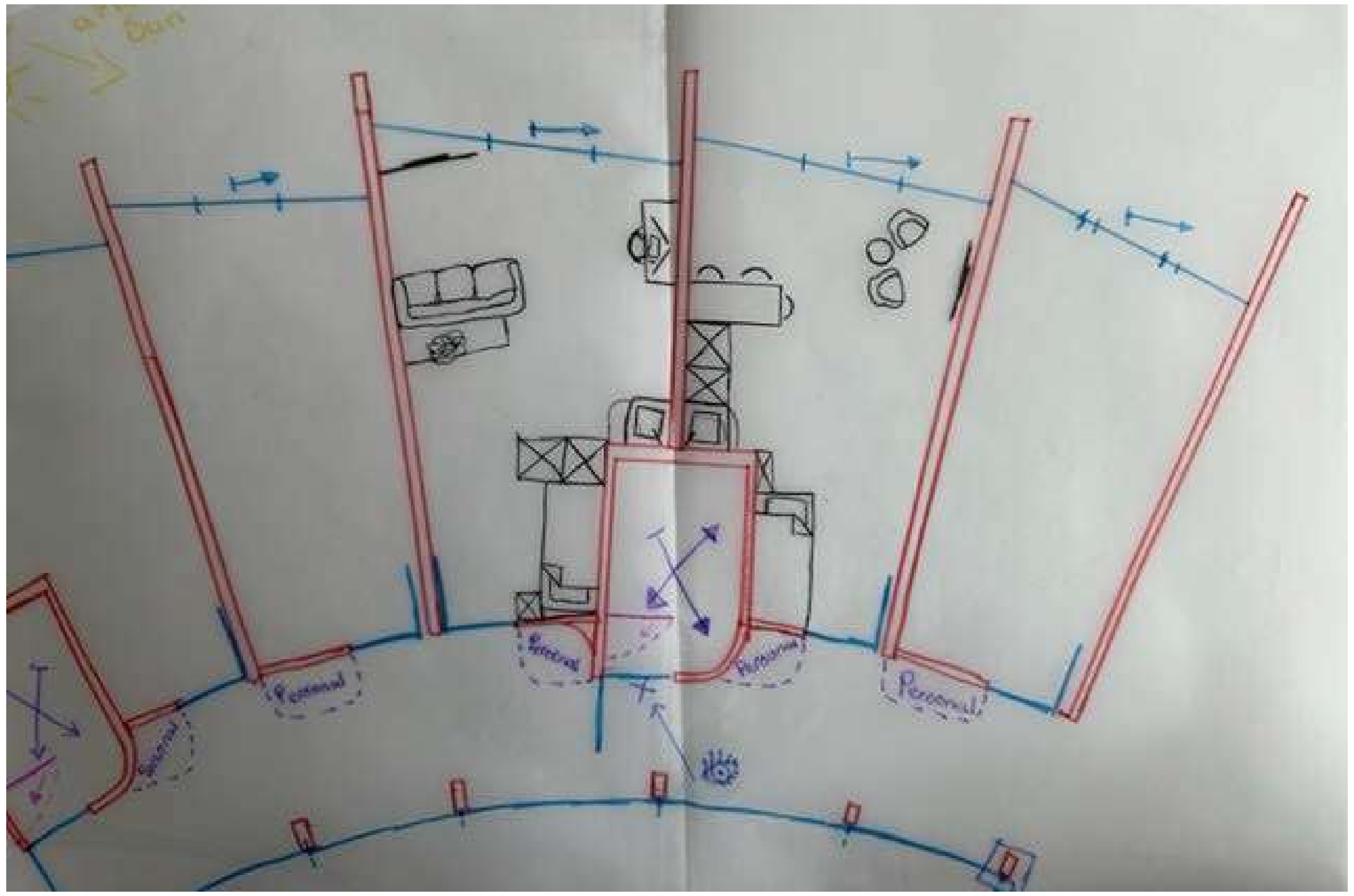
Taking different aspects into account

Floor plan

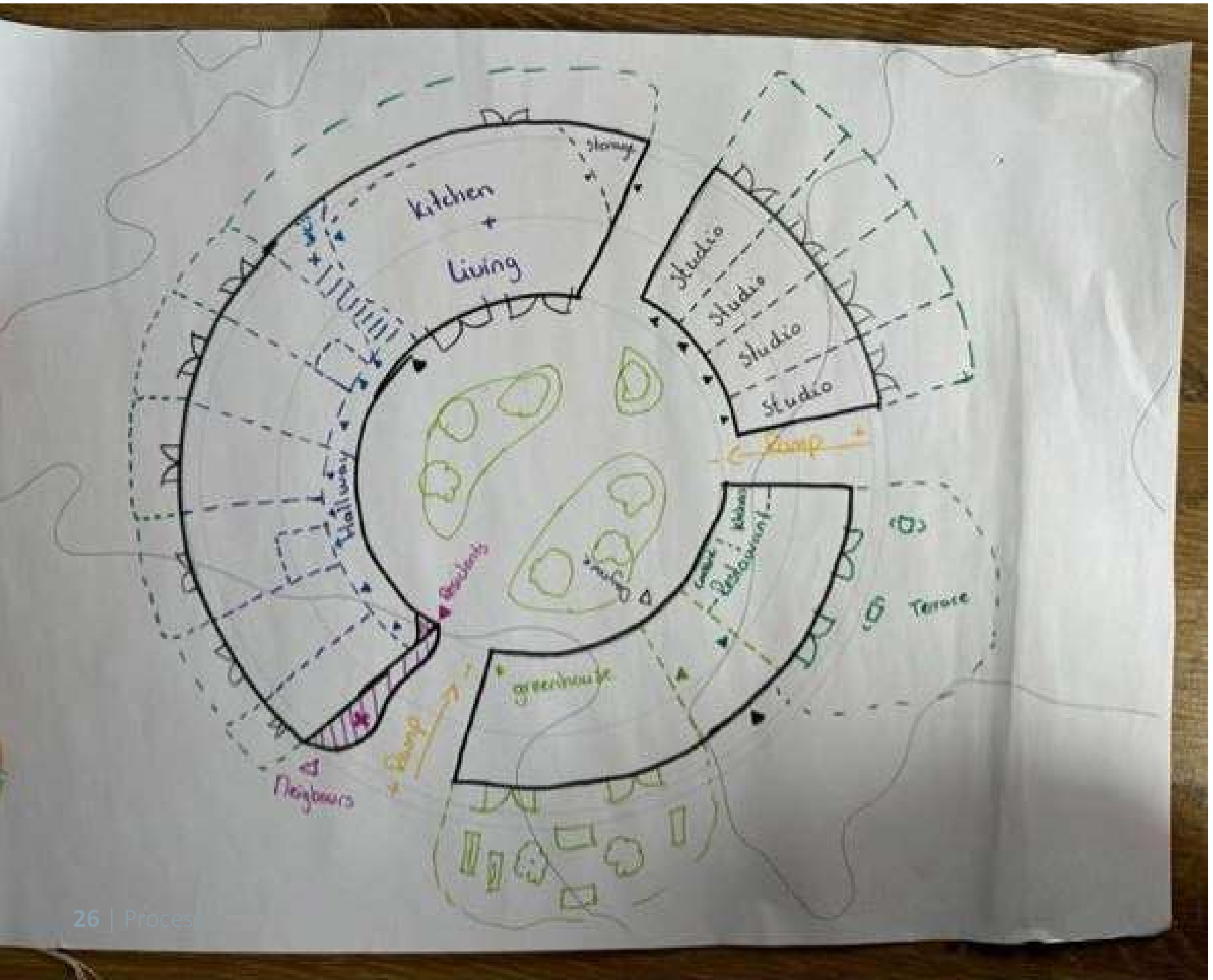
Floor plan
Routing
Entrees



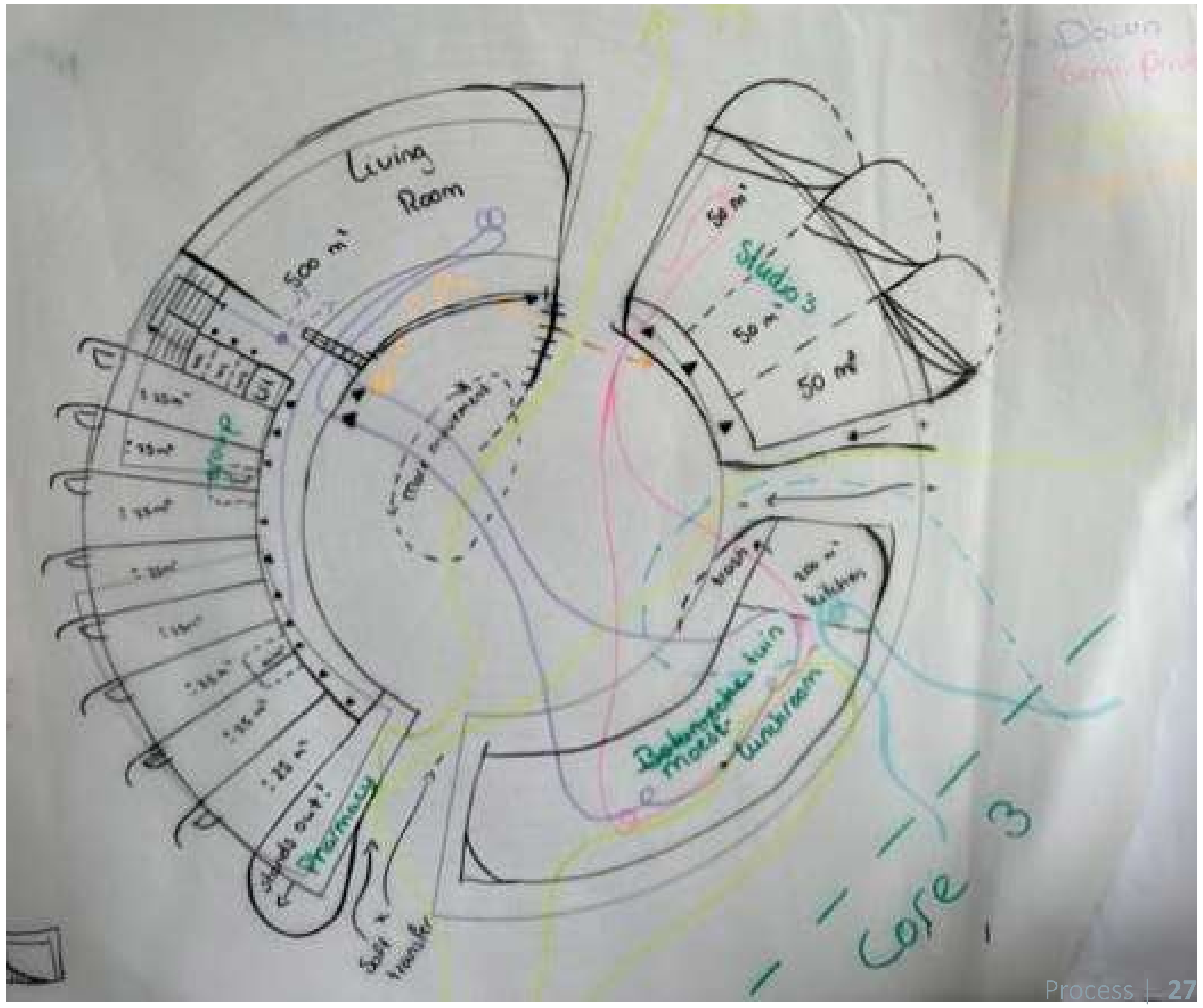
Private
semi public
Entree
Private outdoor
studio
studio
Public
Semi
Private
extension roof shows public
Semi
Public
Core



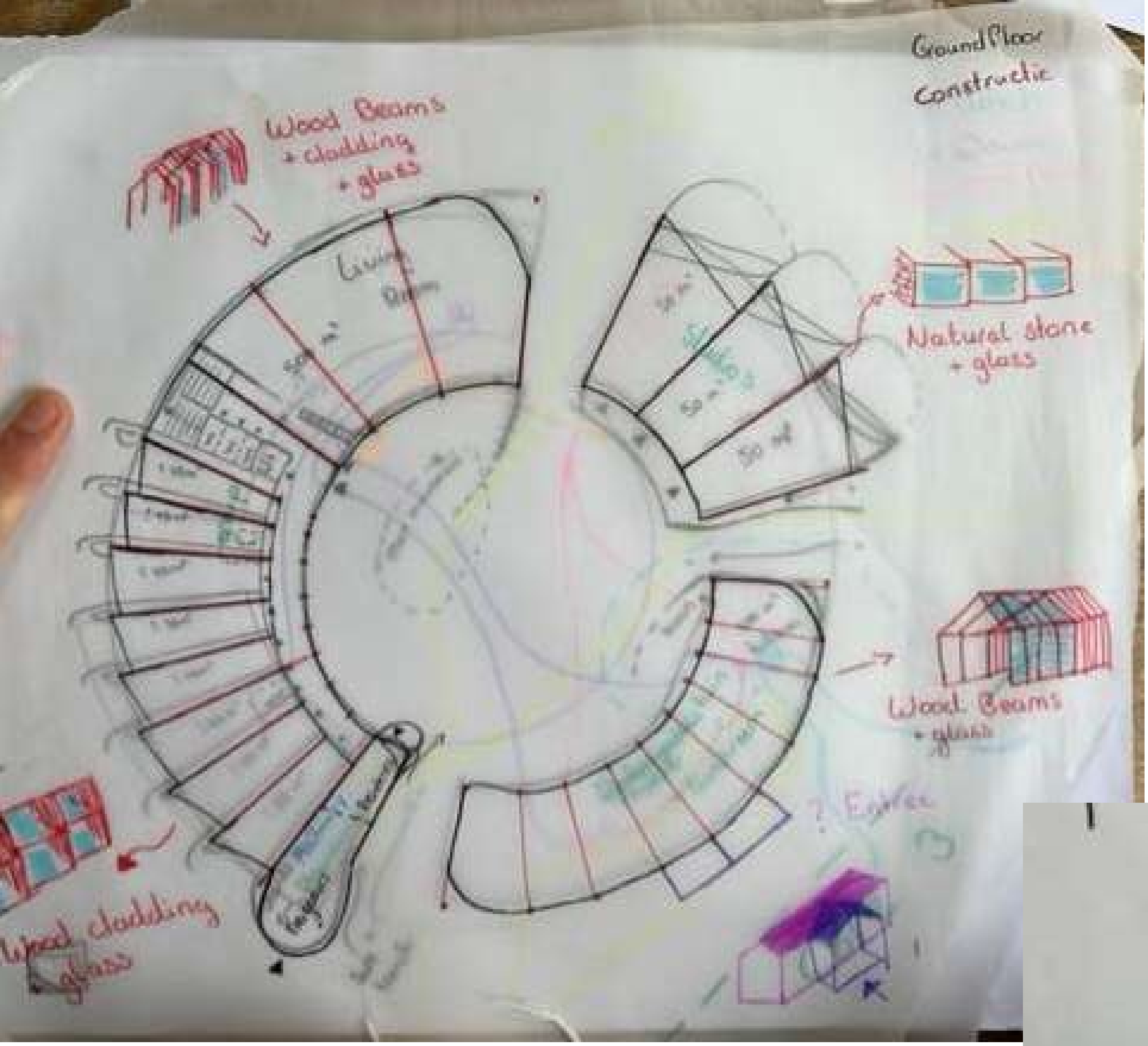
Personal
Personal
Personal
Personal
Personal

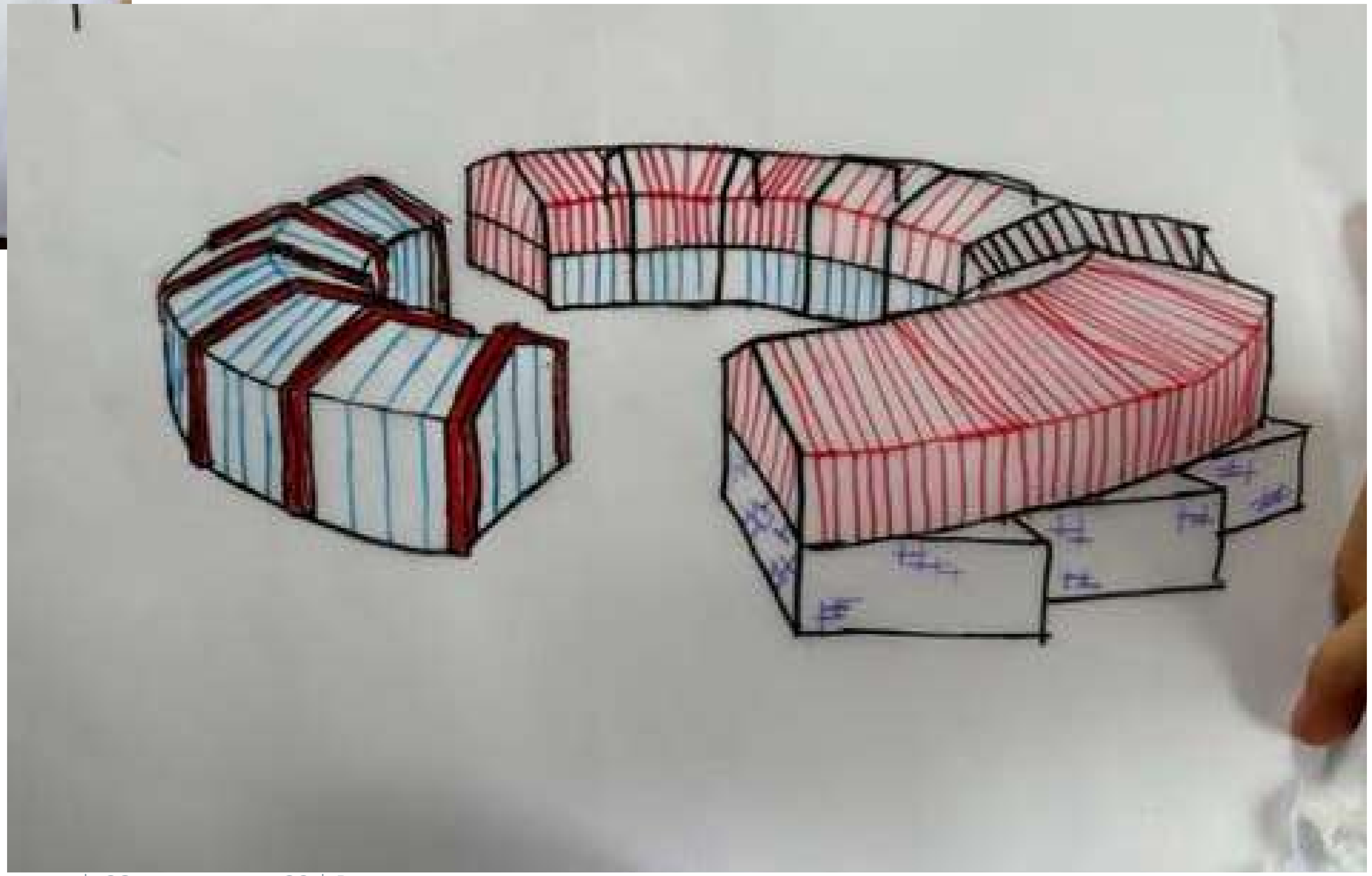


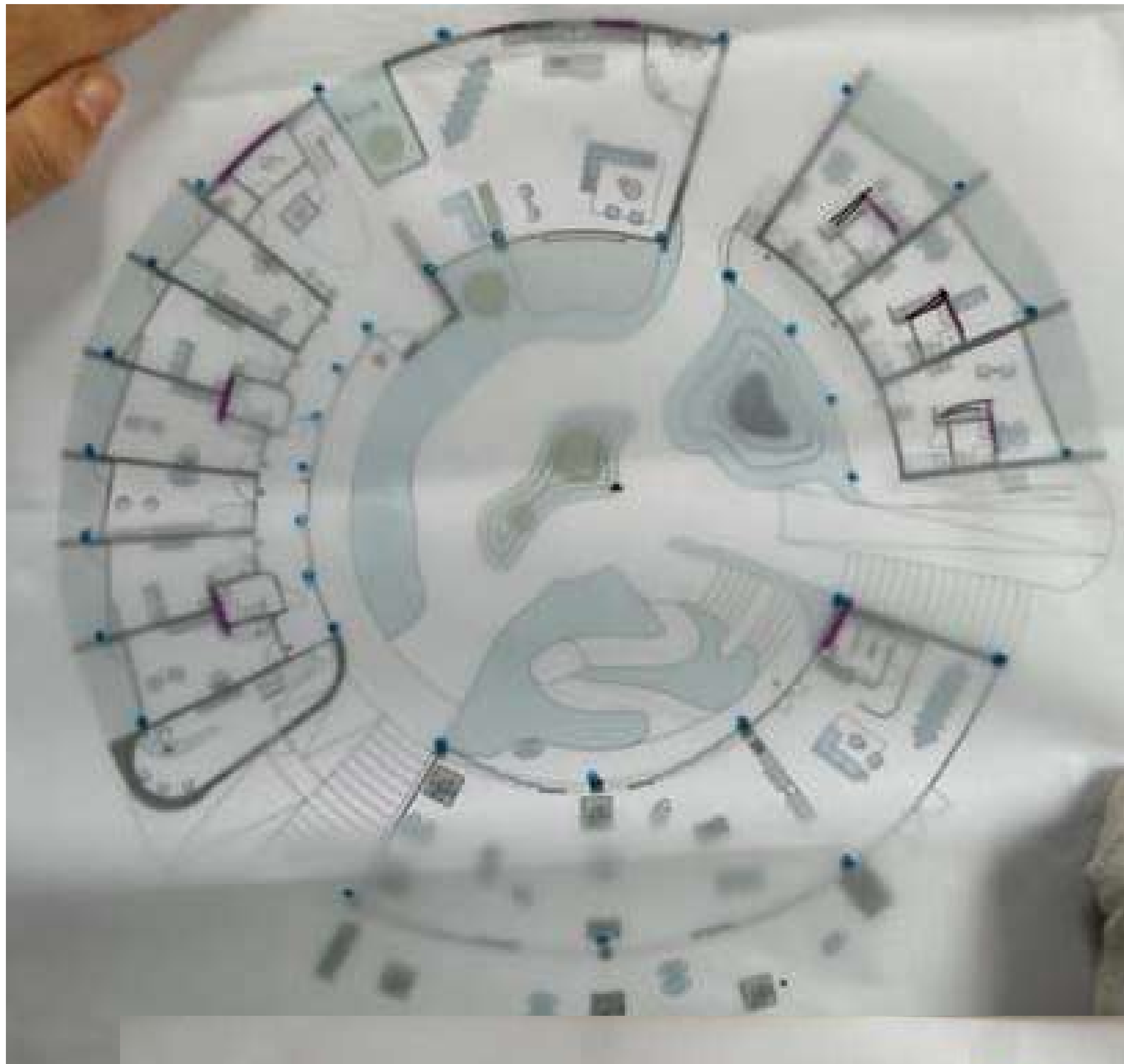
storage
kitchen
+
Living
studio
studio
studio
studio
Hallway
Ramp
Restaurant
Terrace
greenhouse
Ramp
Students
Neighbours

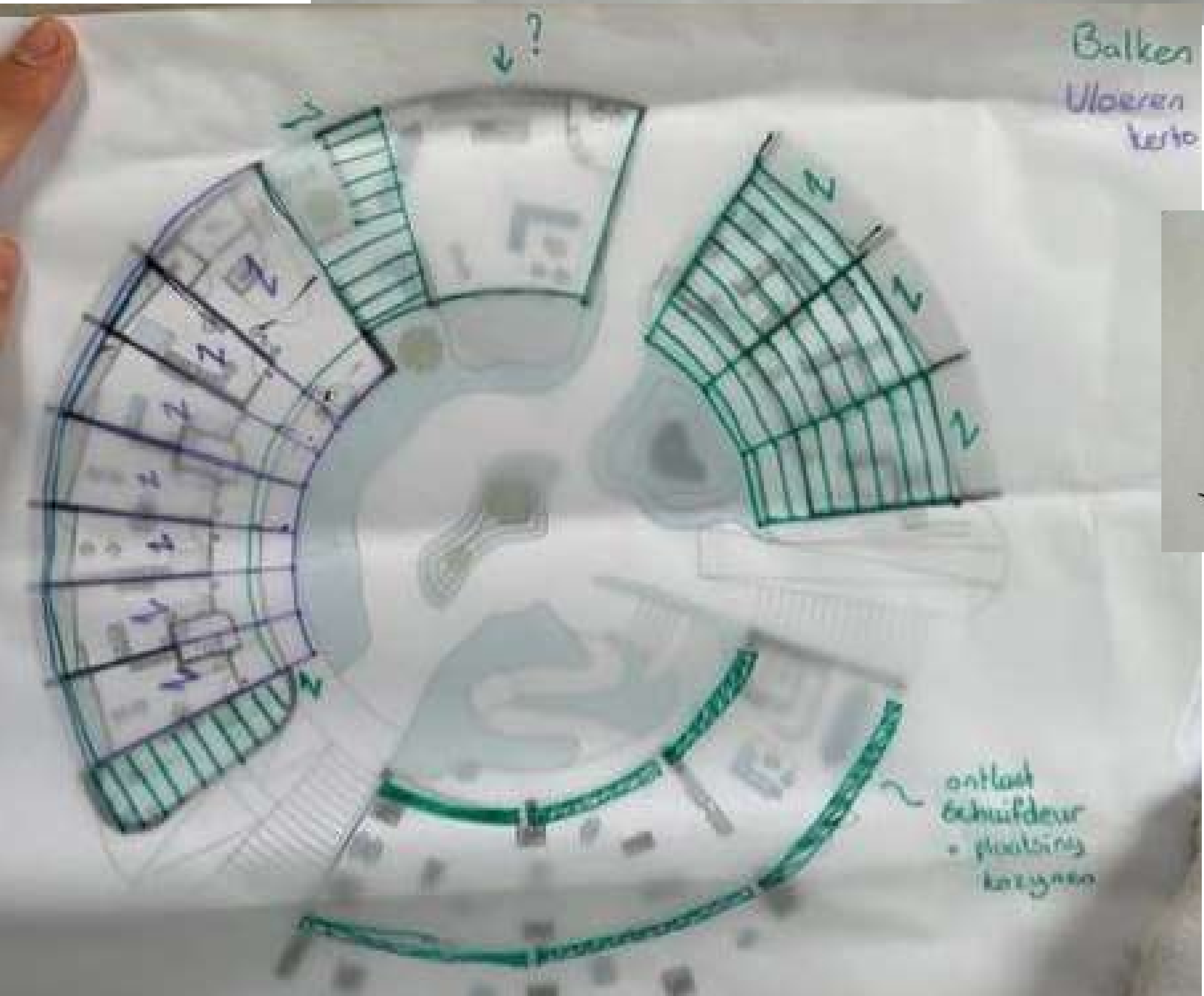


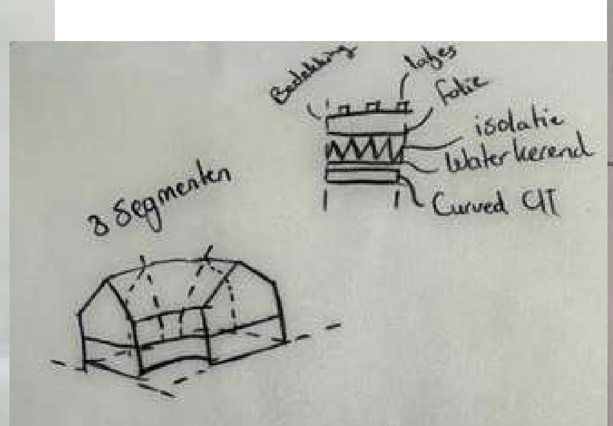
Living
Room
500 m²
Studio's
50 m²
50 m²
50 m²
Pharmacy
Core 3

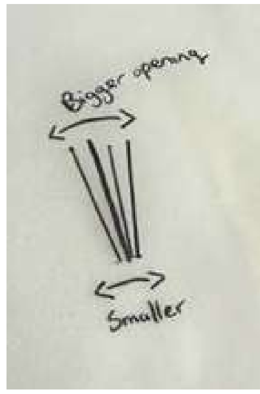

Ground Floor
Constructio
Wood Beams
+ cladding
+ glass
Natural stone
+ glass
Wood Beams
+ glass
Wood cladding
+ glass

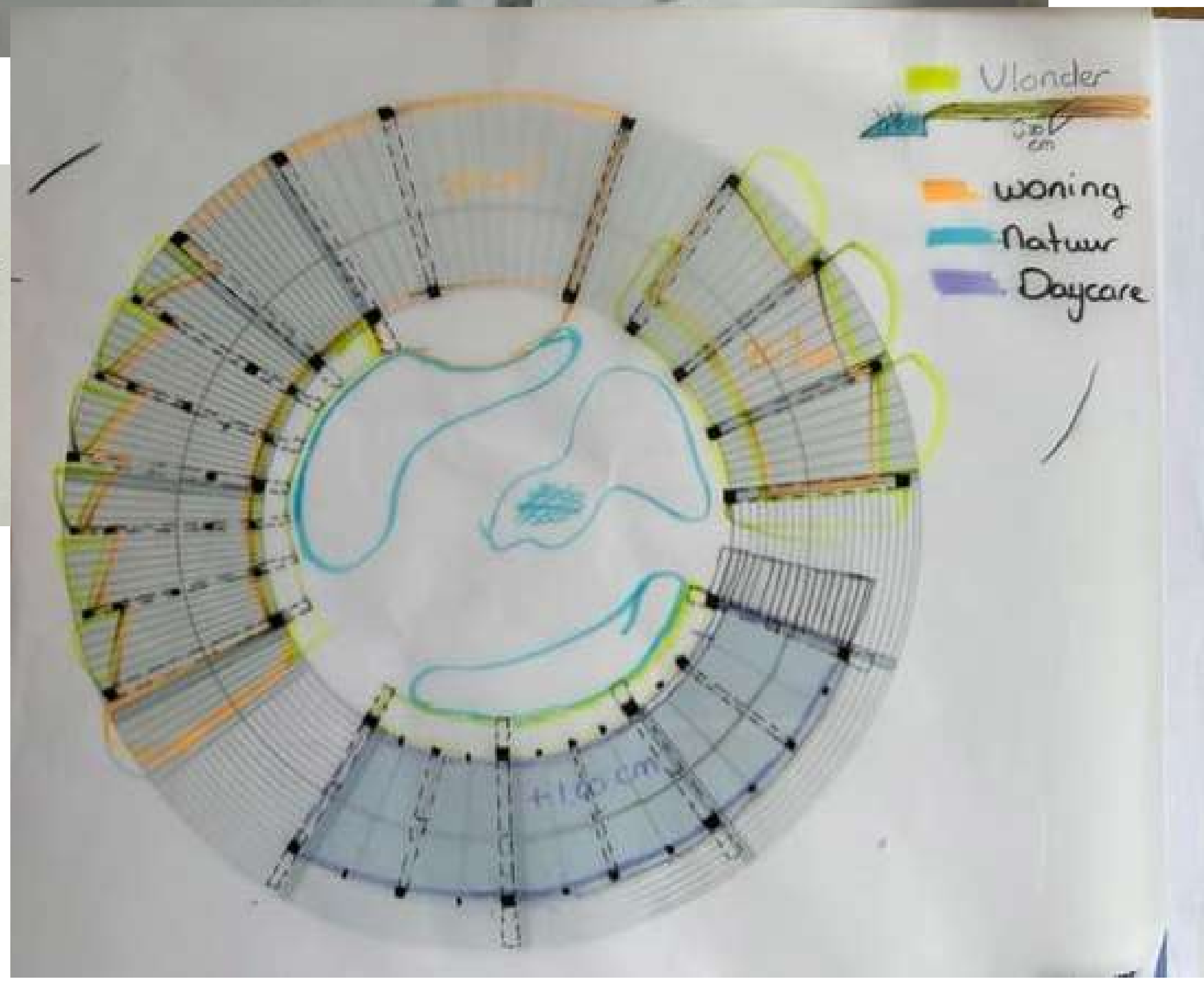


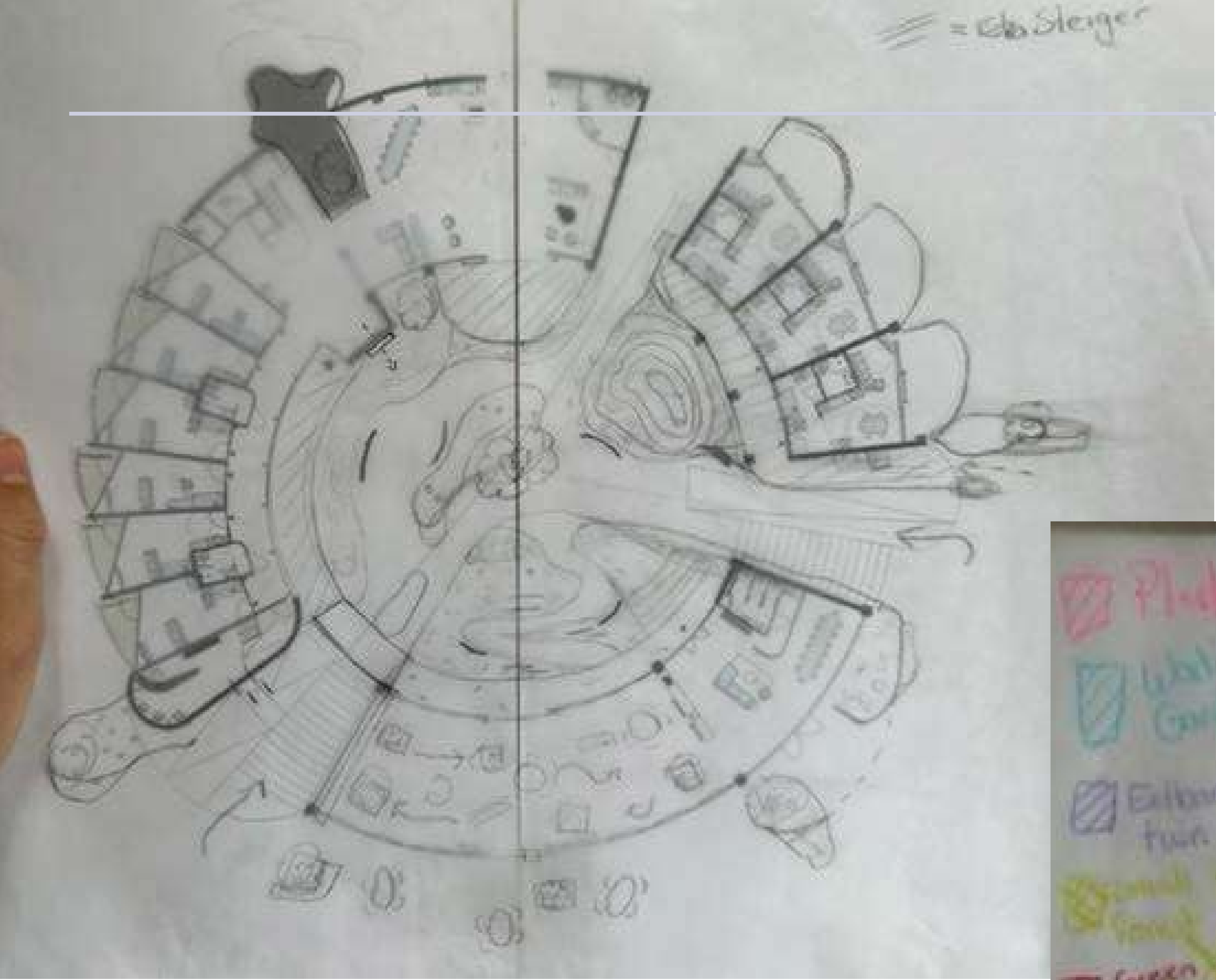


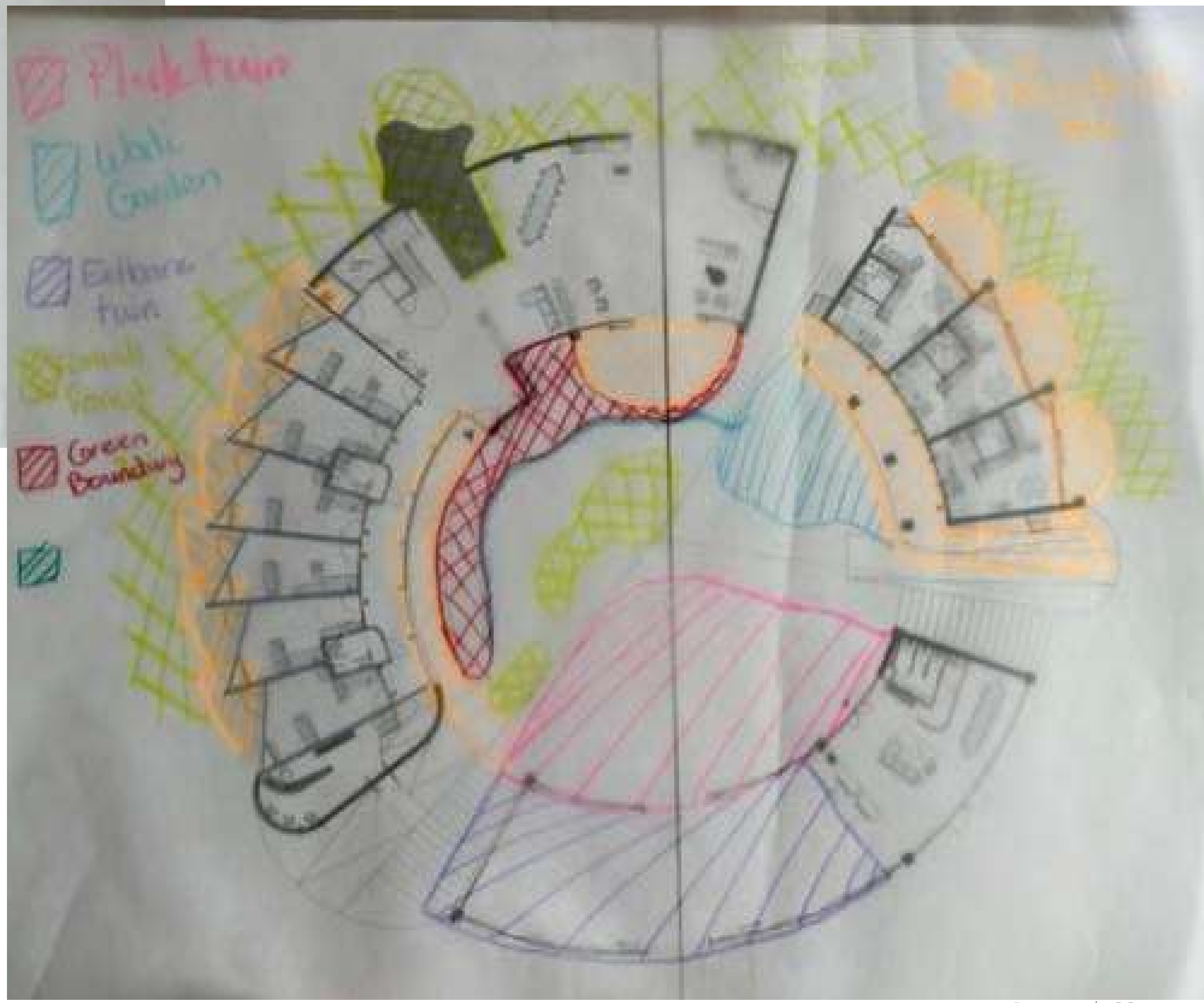

Balken
Vloeren
ontlast
Schuifdeur
+ plaatsing
kozijnen


Bedekking
latjes
folie
isolatie
Waterkerend
Curved CLT
3 Segmenten


Bigger opening
Smaller


Vlonder
woning
Natuur
Daycare




Pluktuin
Green Bounding

final design

Q4

Masterplan

Density

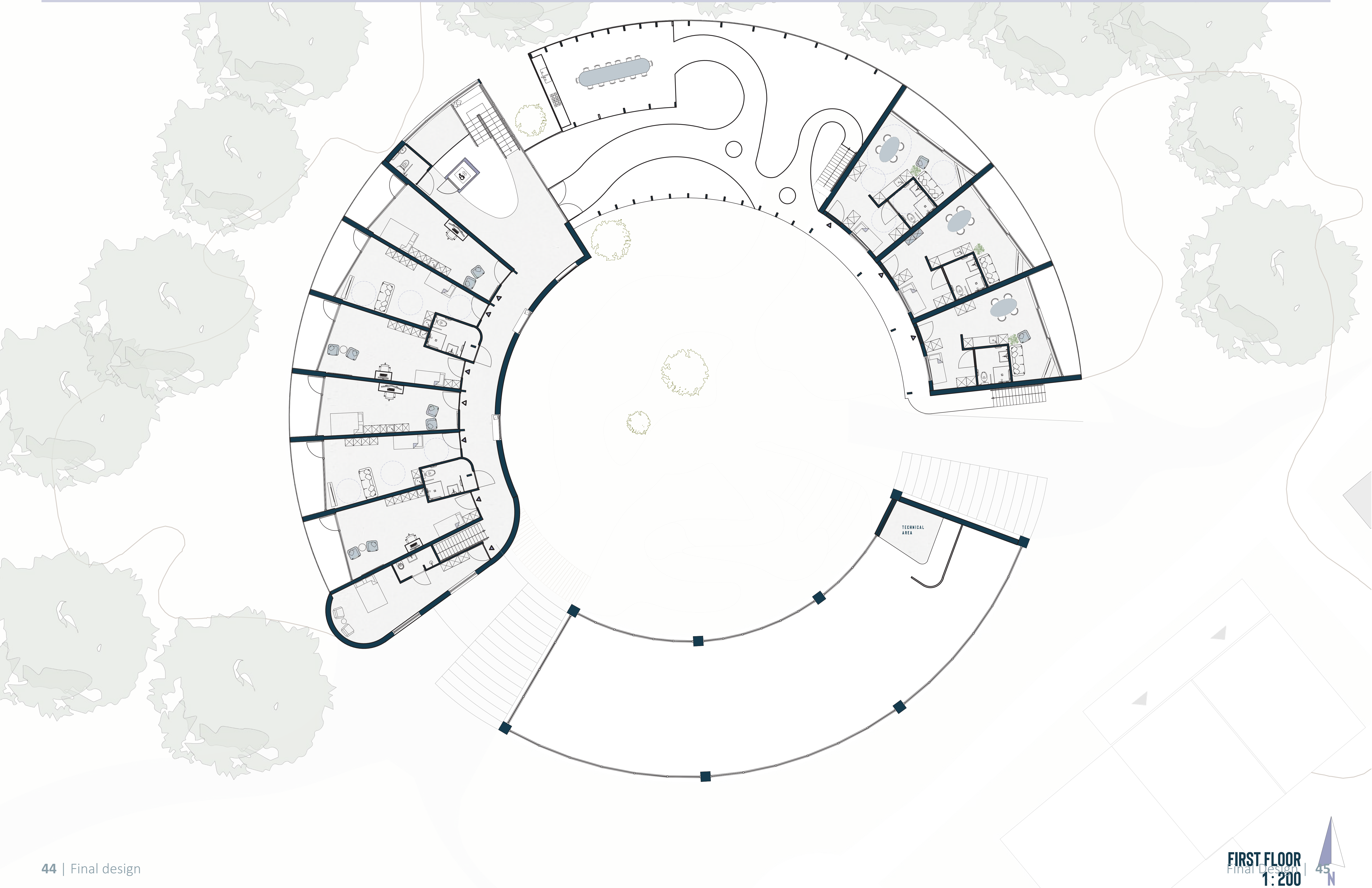
30 appartments
20 2 under-1 roof
52 Courtyard living
14 Row houses
14 nature courtyard living
20 collective
+ Own design


CABIN
SEMI PRIVATE
COLLECTIVE
CABIN
LUNCHROOM
GREENHOUSE
COURTYARD
TERRACED
COURTYARD
2-UNDER 1 ROOF
COLLECTIVE
NATURE
TERRACED
NATURE
COURTYARD
TERRACED
APPARTMENTS
COURTYARD
2-UNDER 1 ROOF
2-UNDER 1 ROOF
1 : 1500

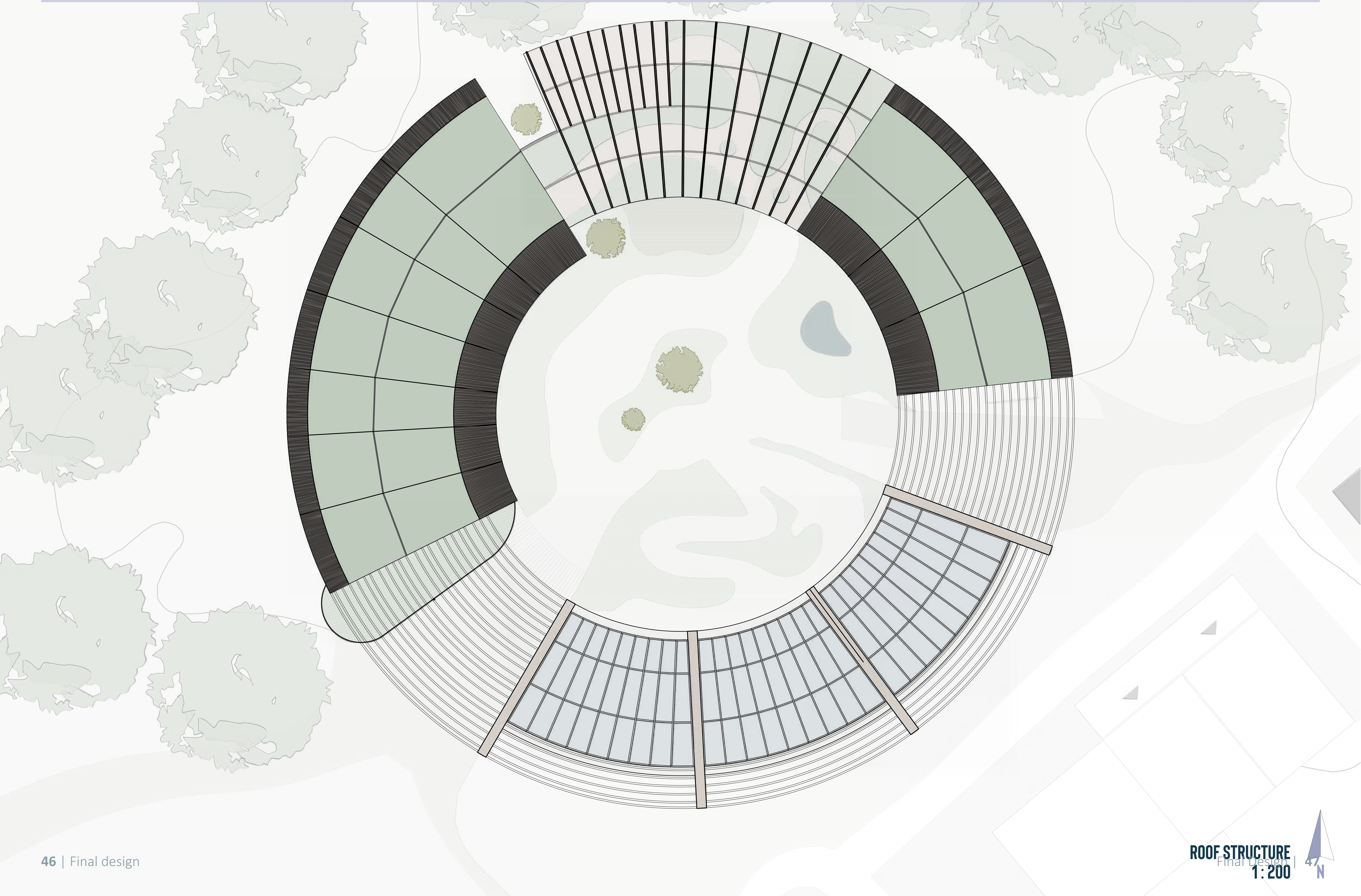
Masterplan 1:500


TECHNICAL AREA
GROUND FLOOR
1 : 200
N

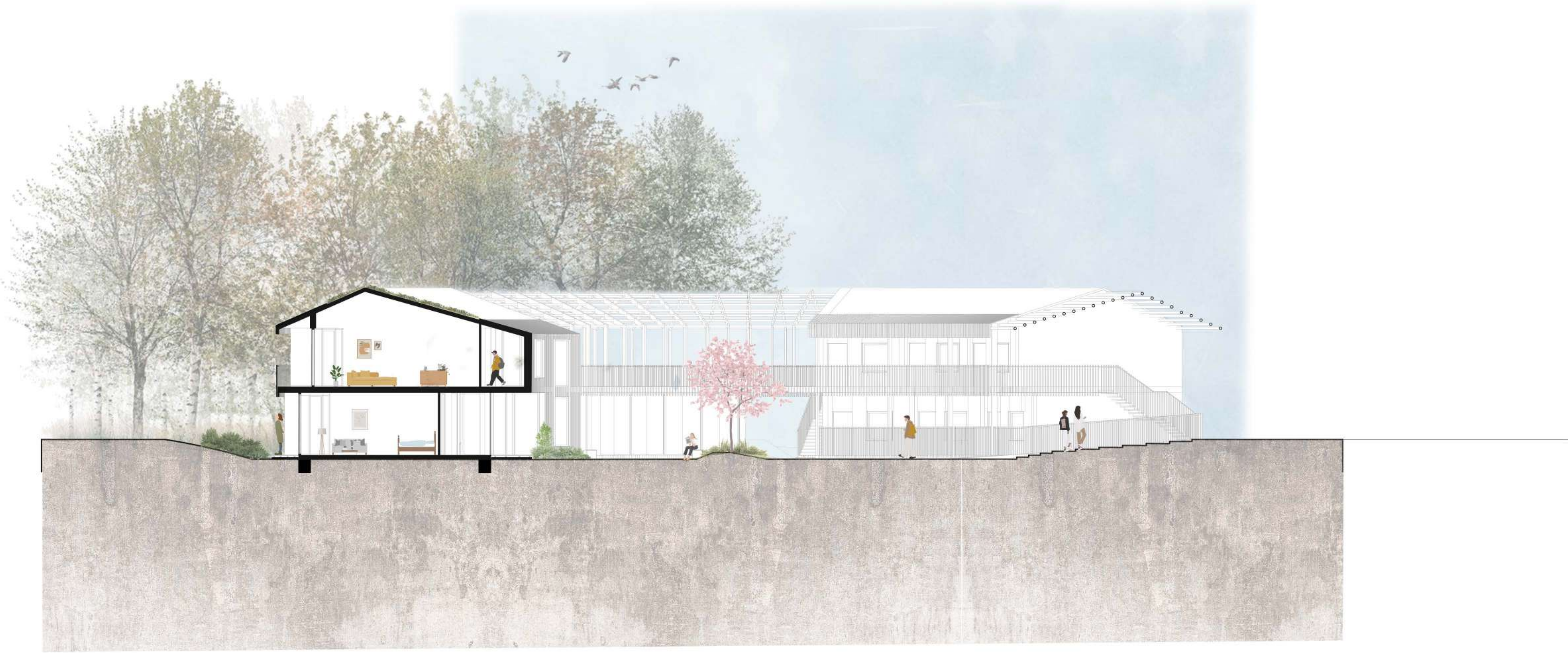
First floor



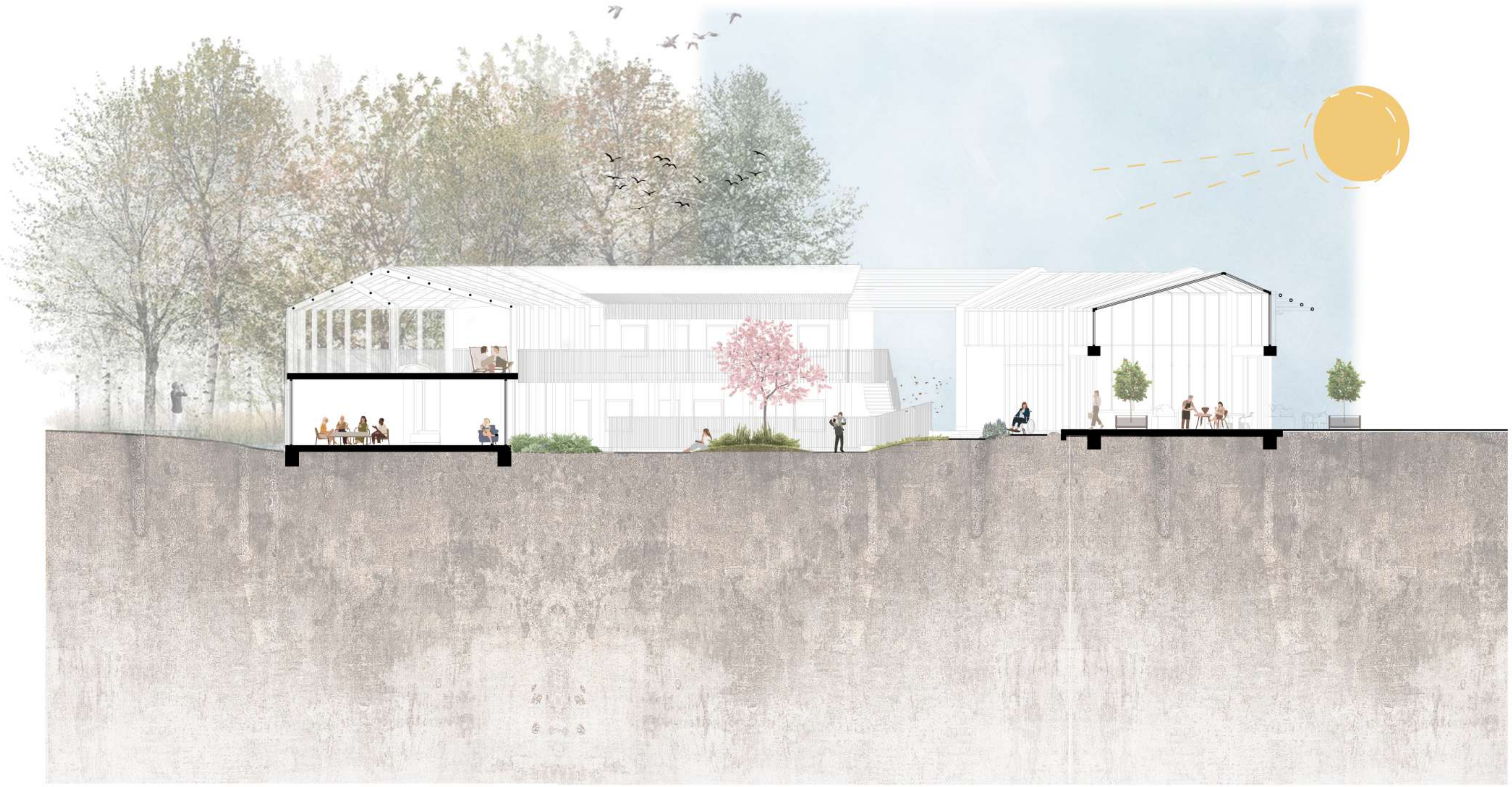
Roof



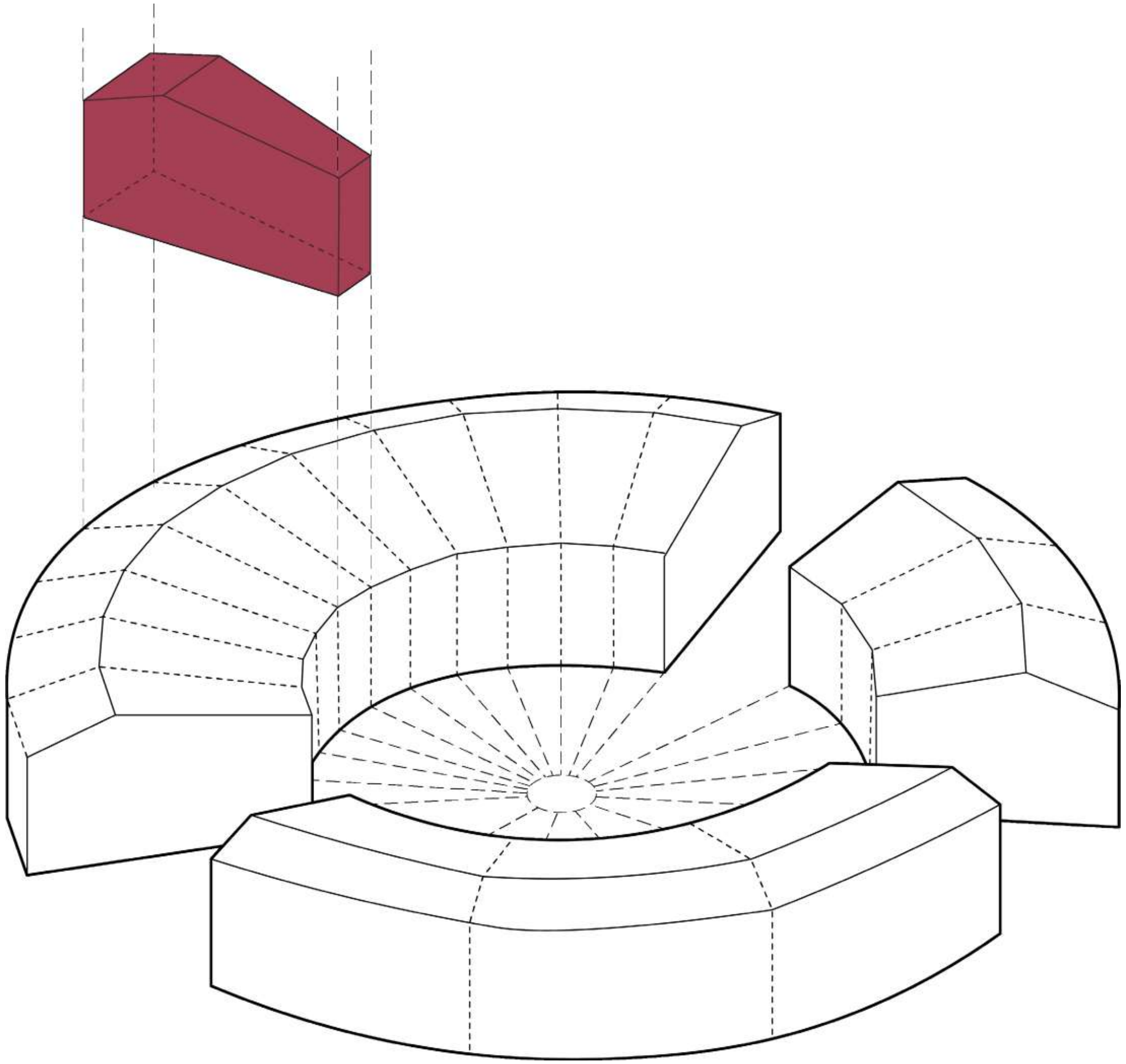
Section 2

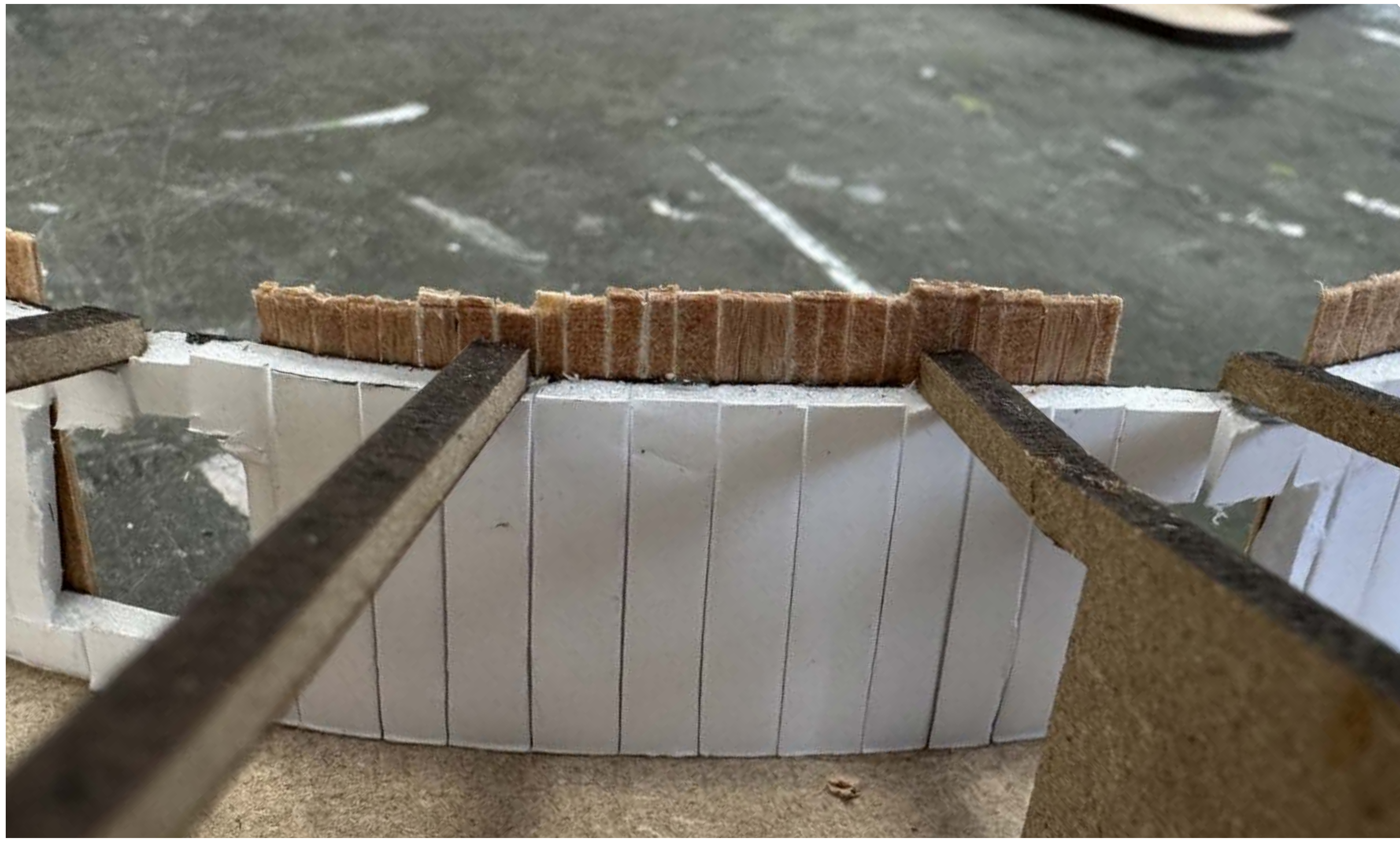


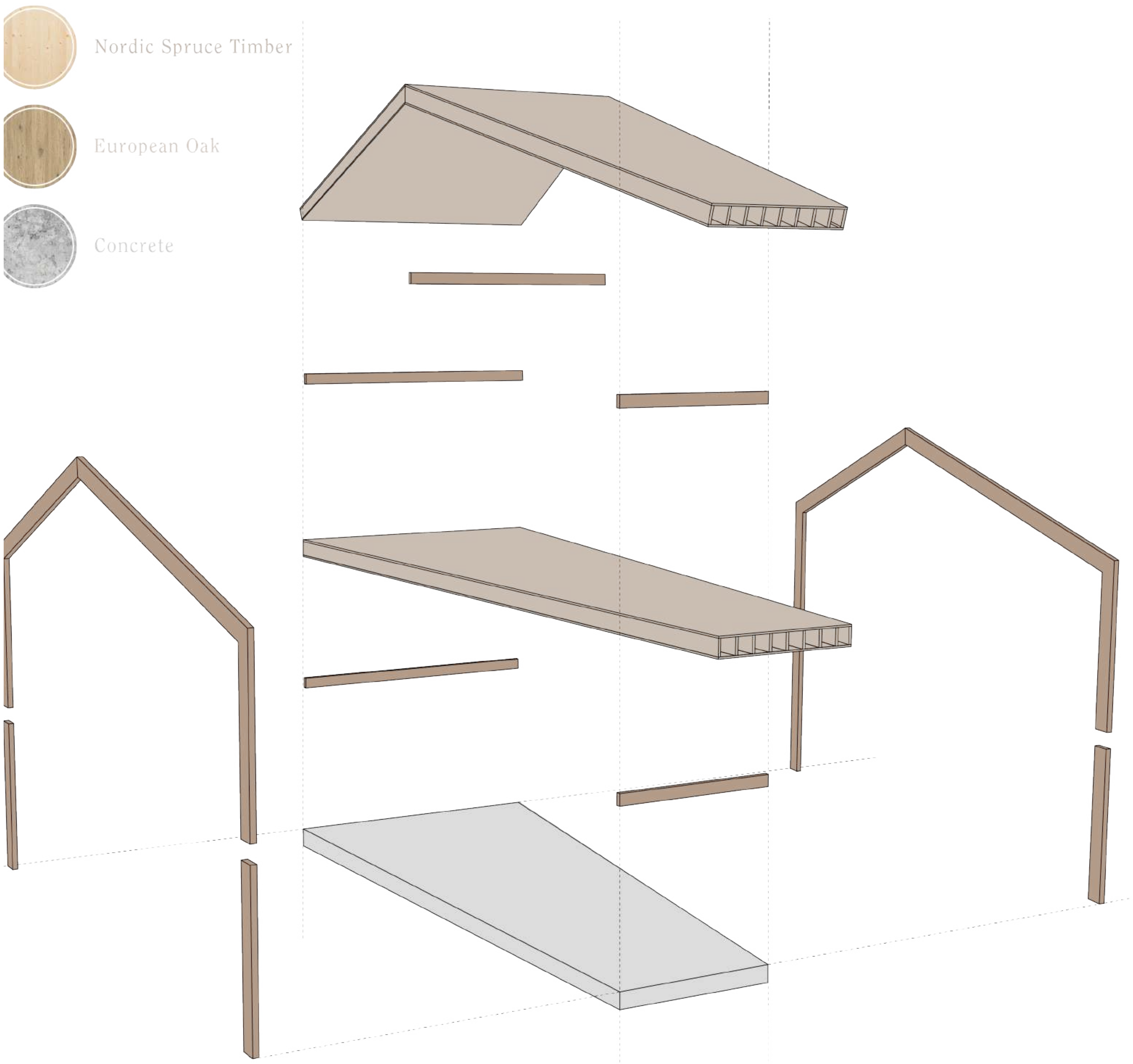
Section 2

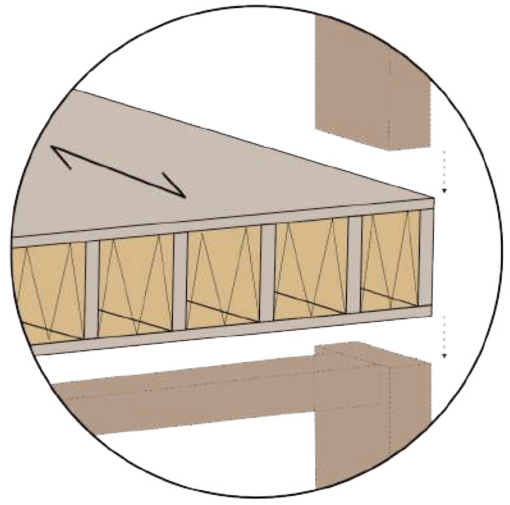


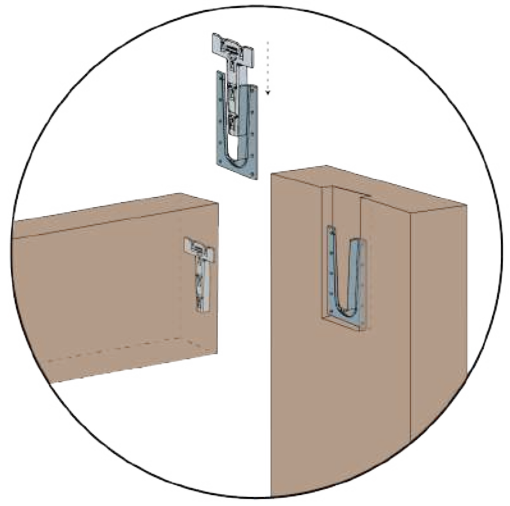
Construction

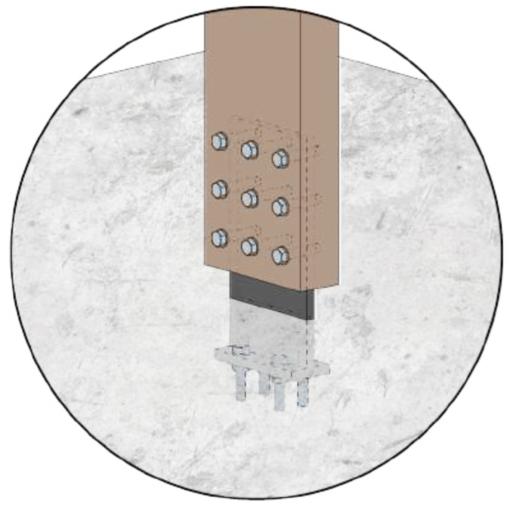





Nordic Spruce Timber
European Oak
Concrete



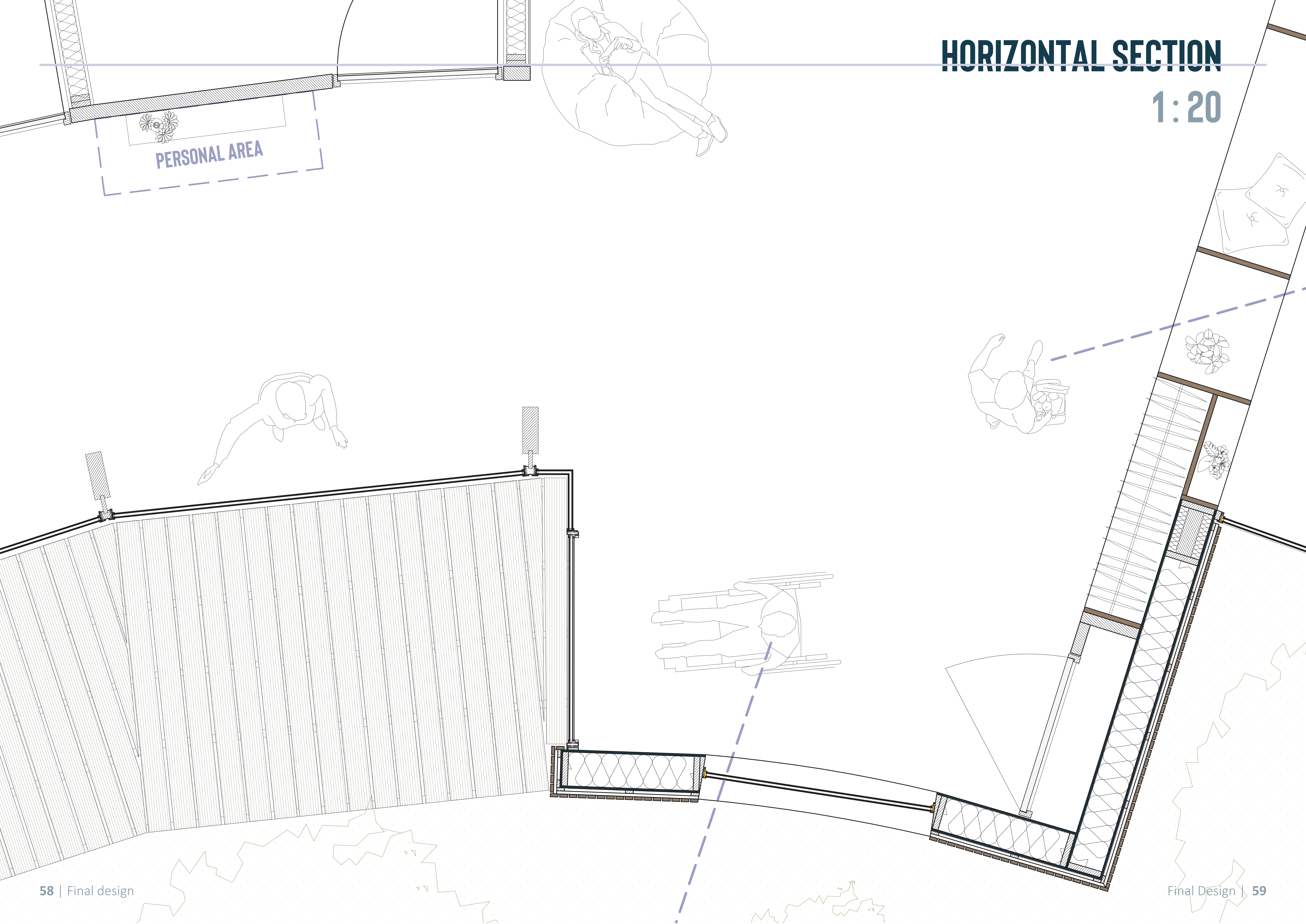


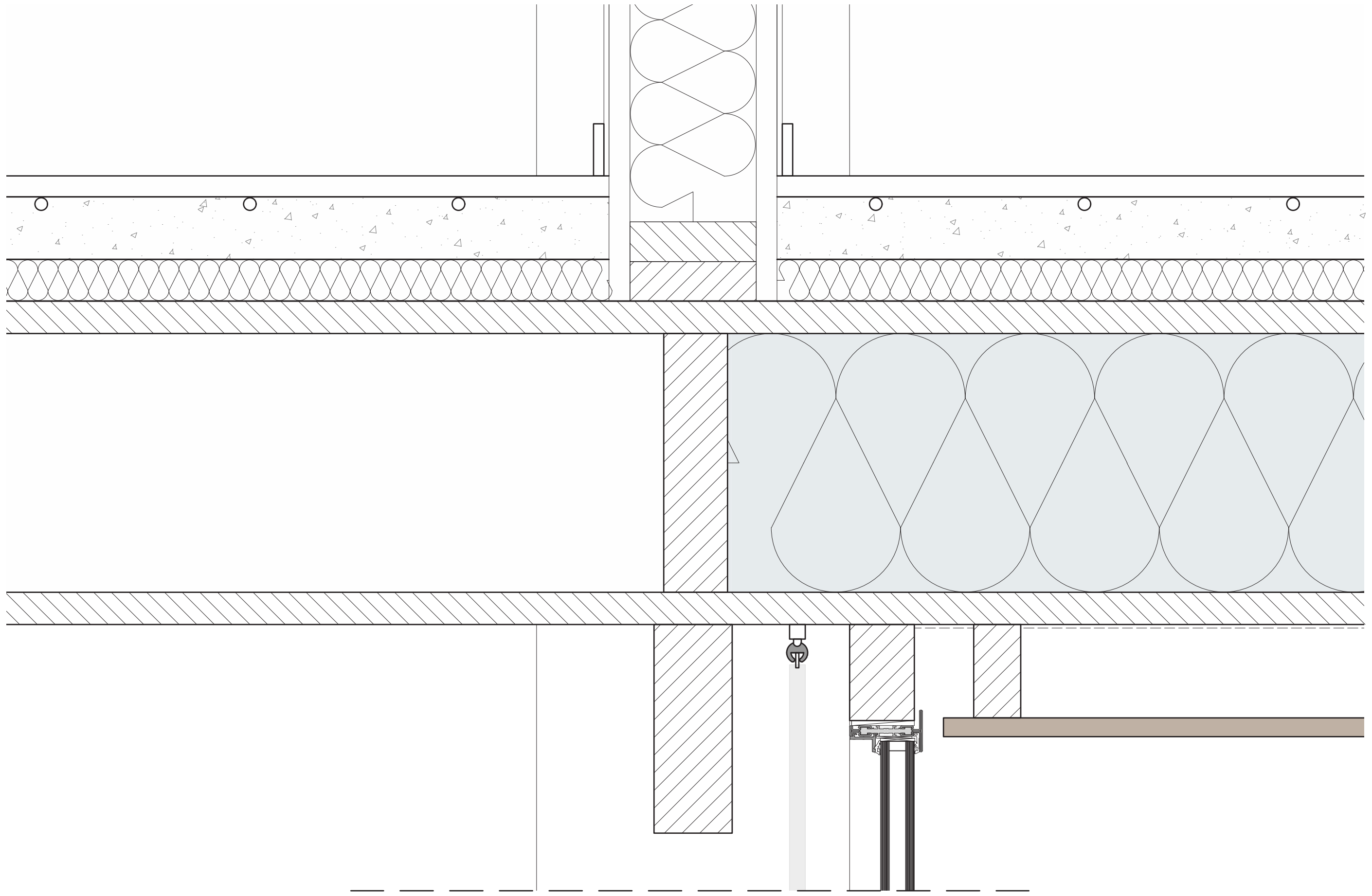


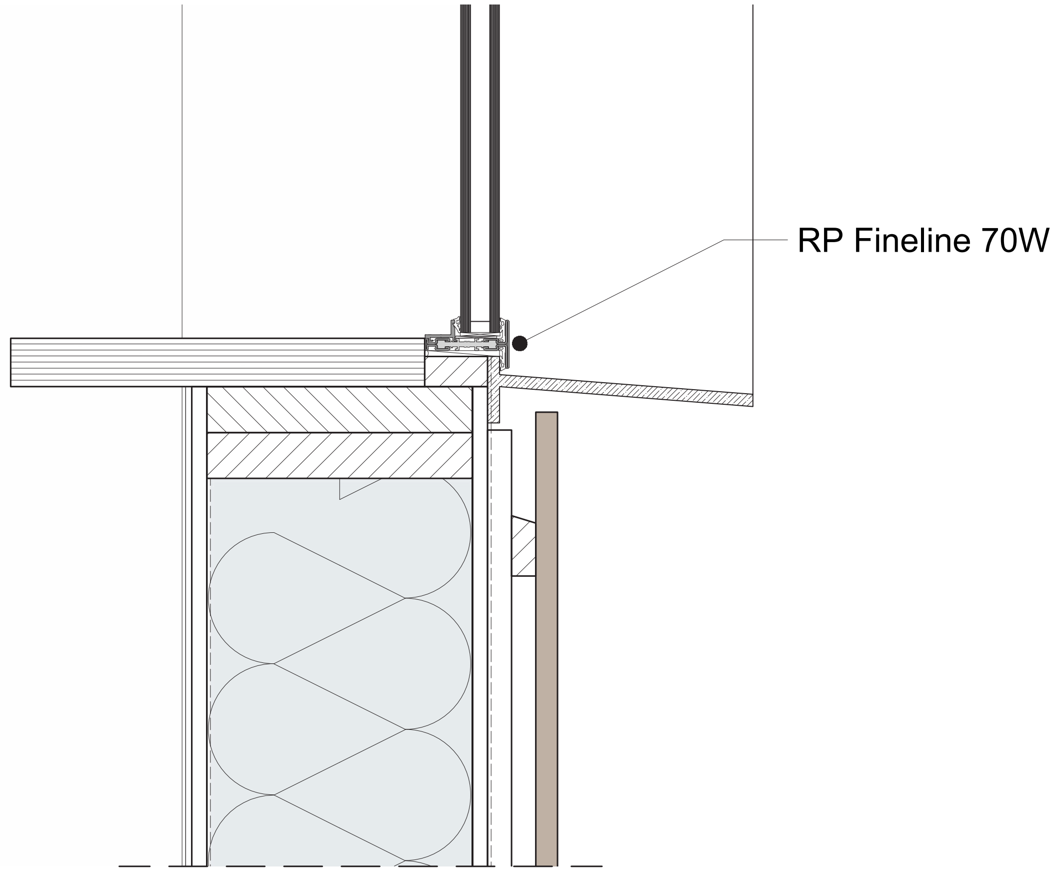
Facade
1:20

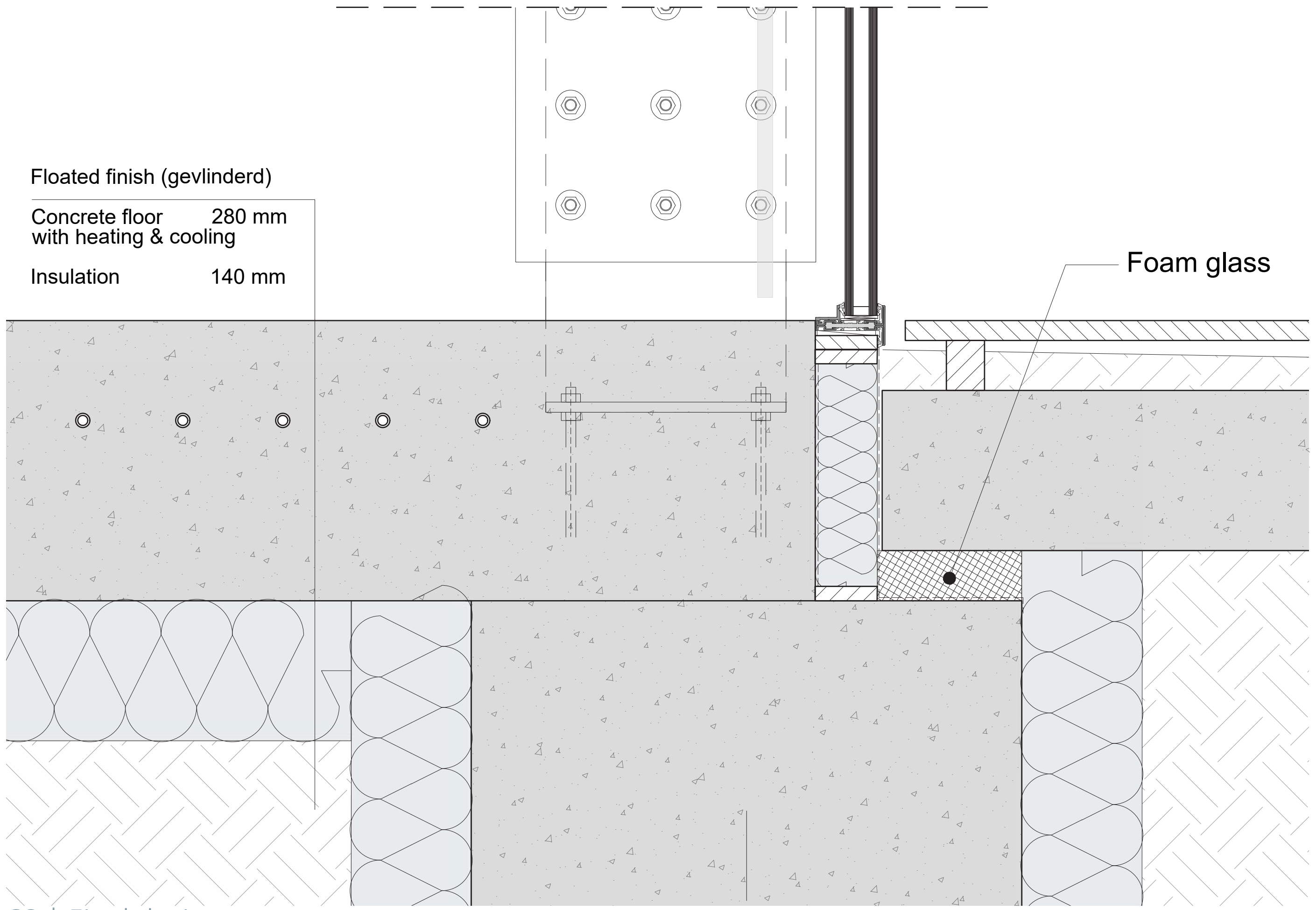
HORIZONTAL SECTION

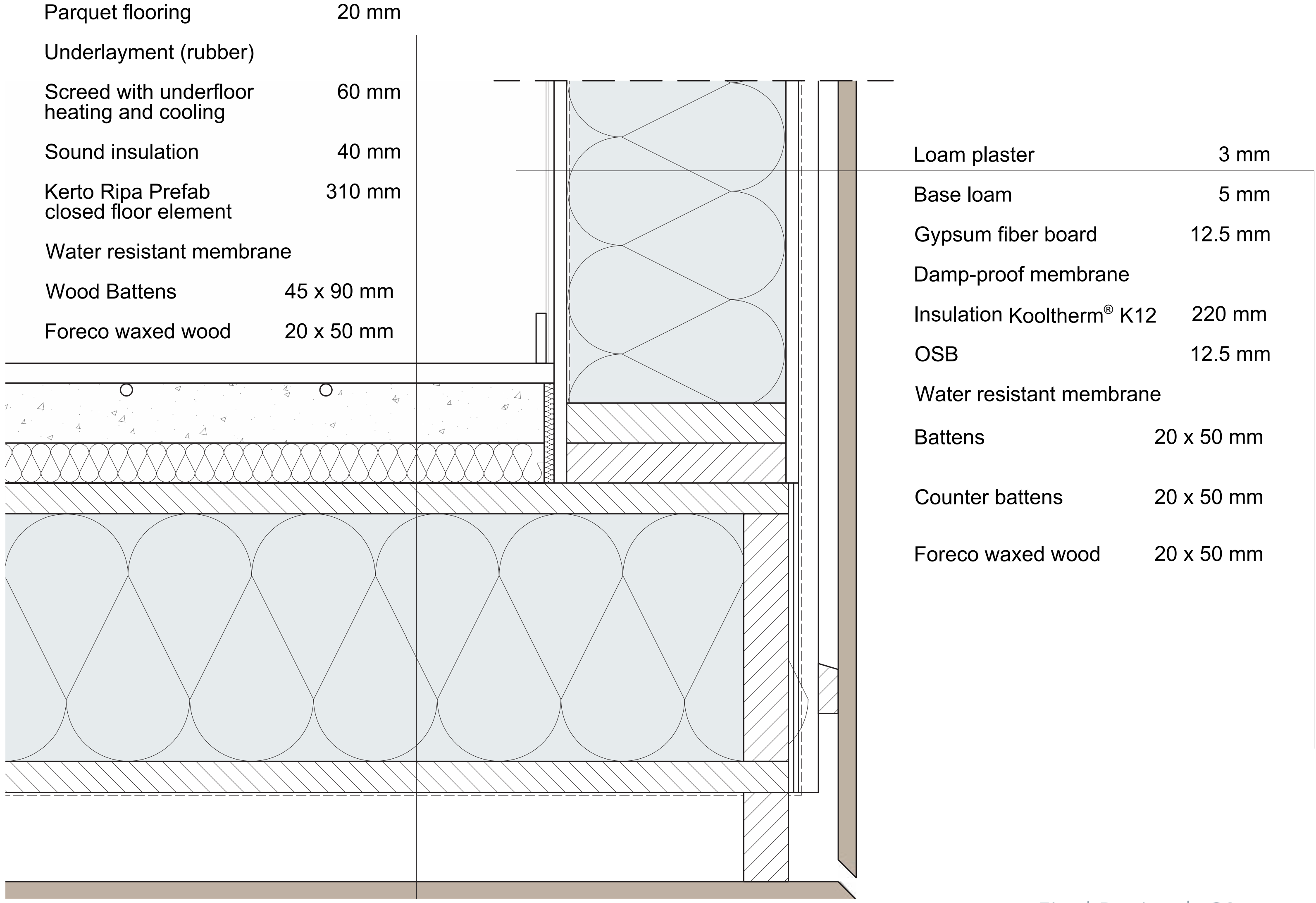
1 : 20

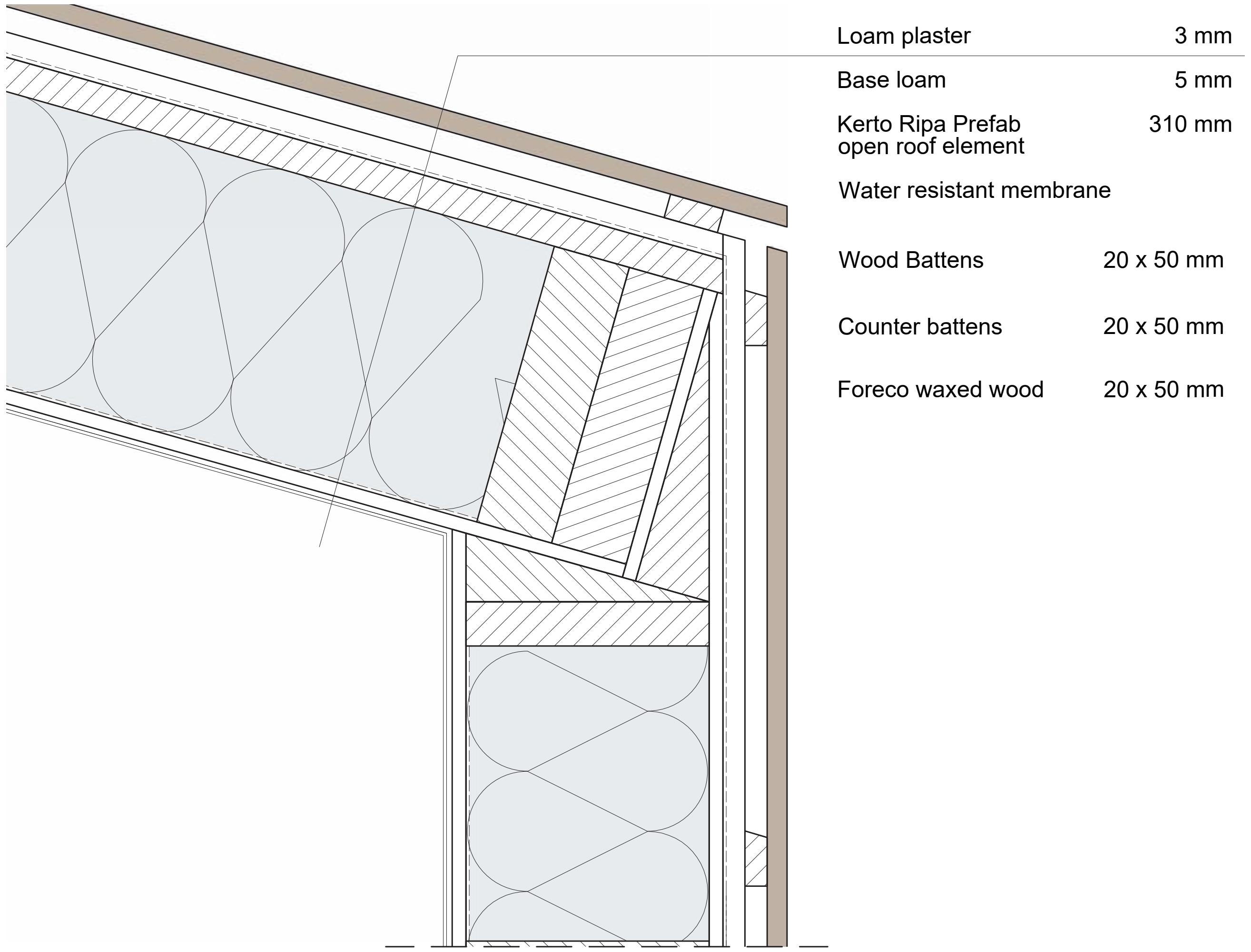


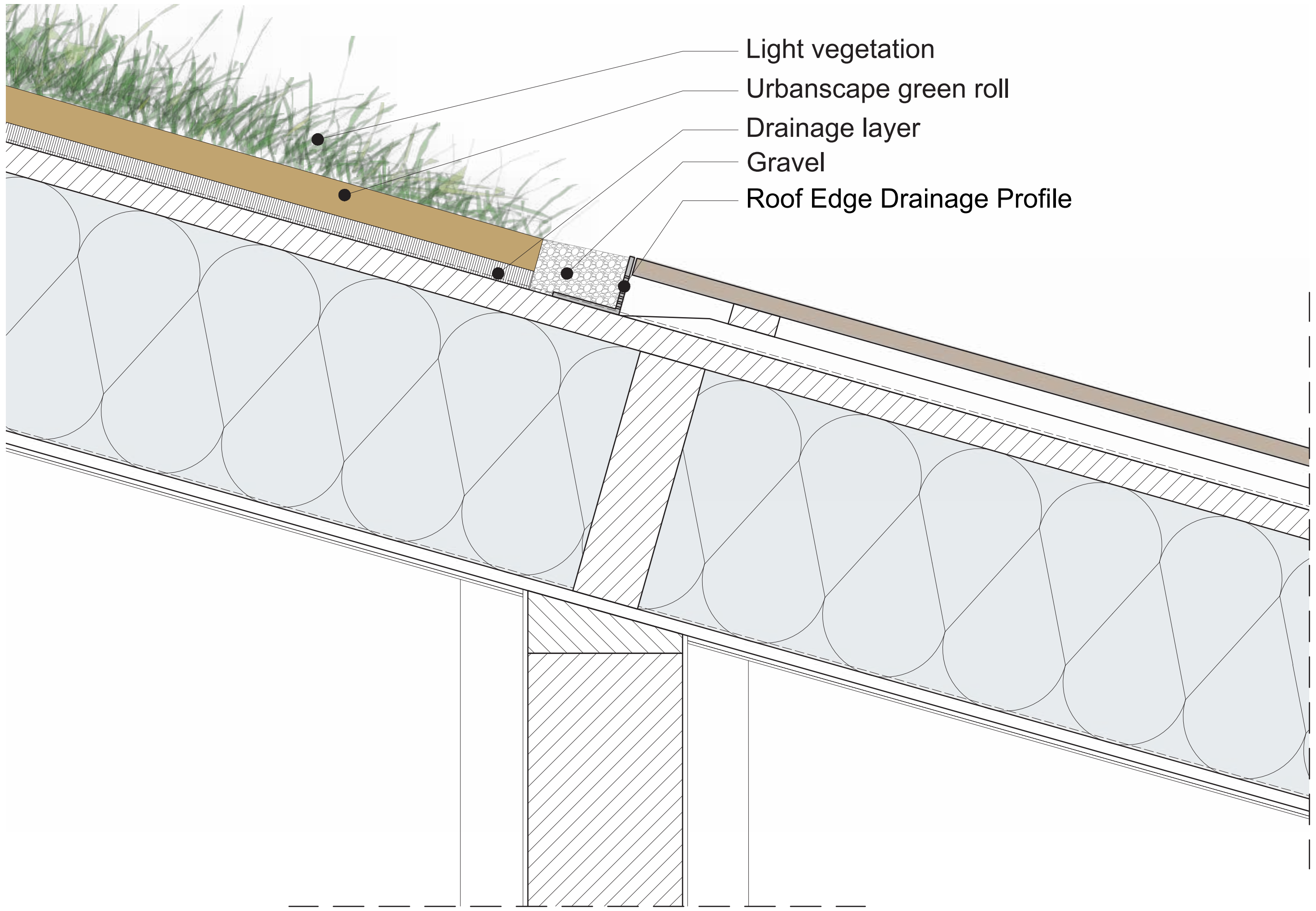


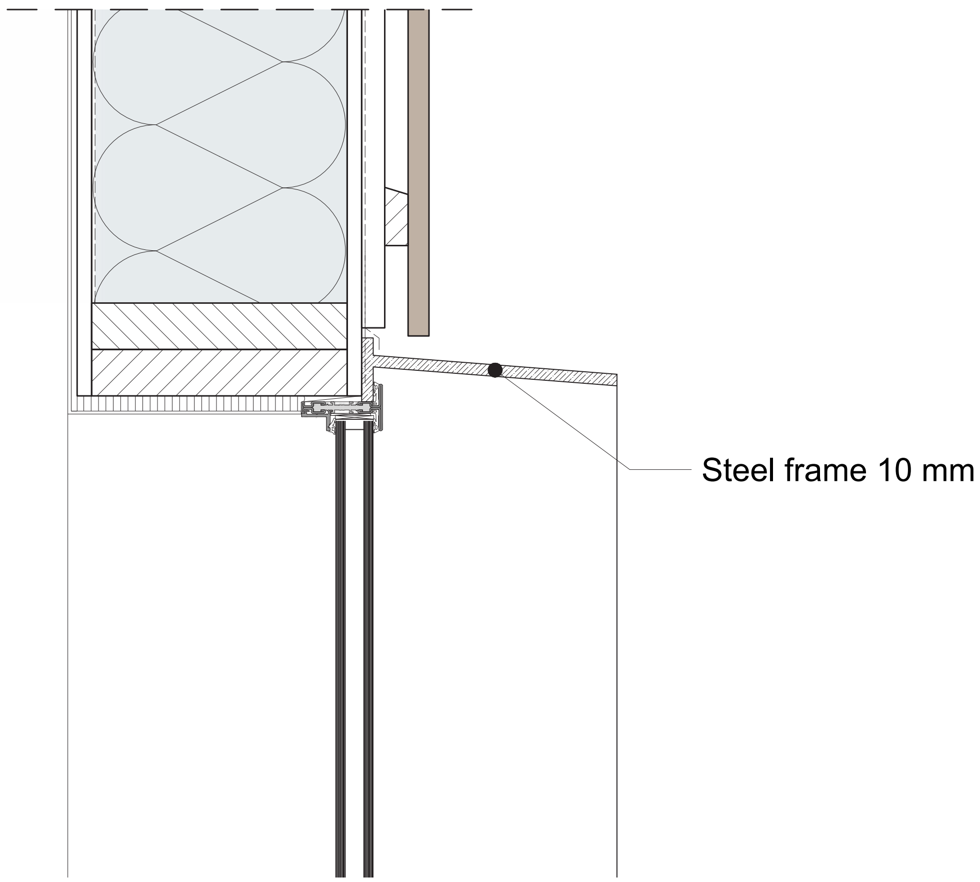

RP Fineline 70W

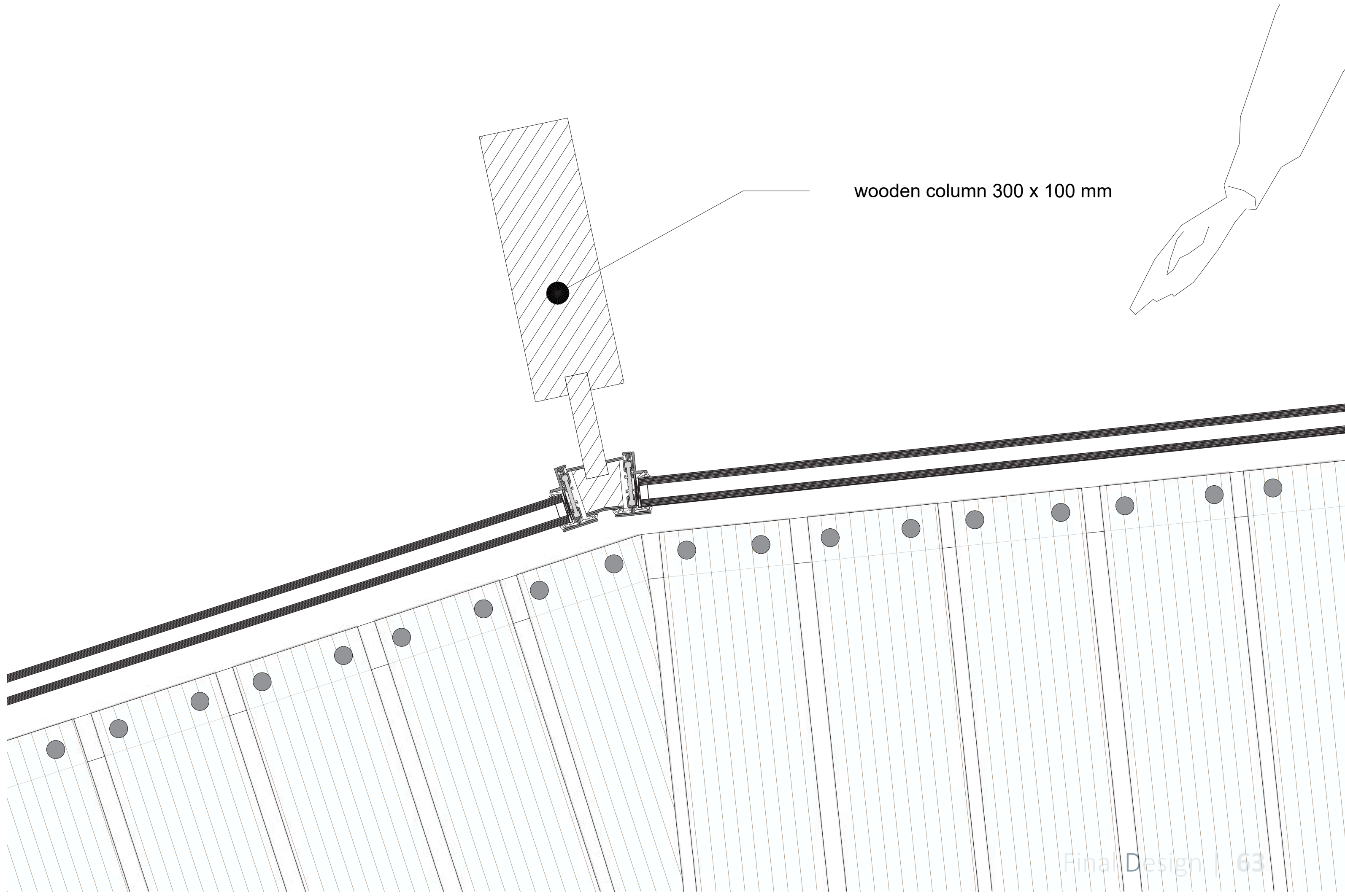

Floated finish (gevlinderd)
Concrete floor with heating & cooling 280 mm
Insulation 140 mm
Foam glass

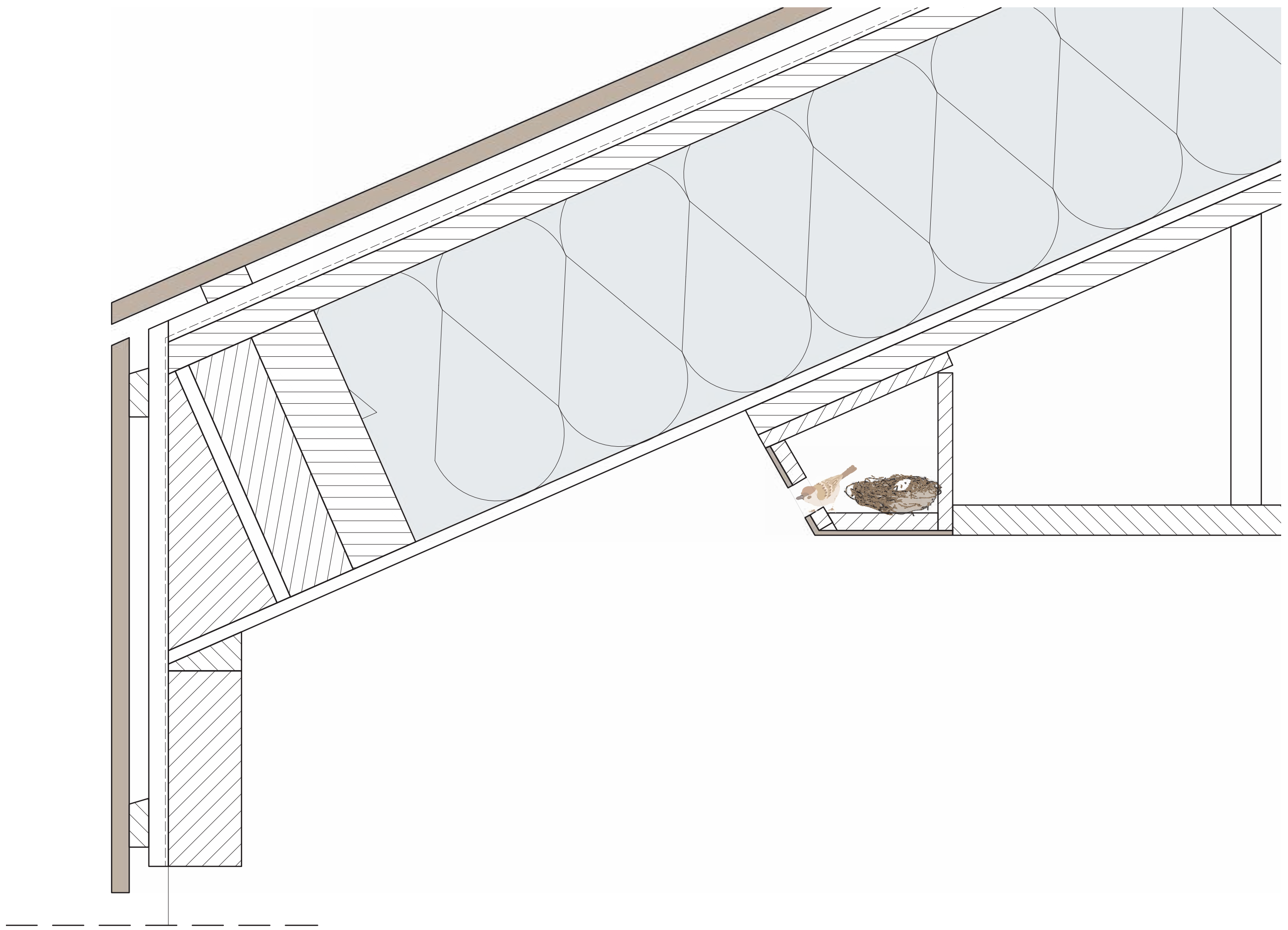

Parquet flooring 20 mm
Underlayment (rubber)
Screed with underfloor heating and cooling 60 mm
Sound insulation 40 mm
Kerto Ripa Prefab closed floor element 310 mm
Water resistant membrane
Wood Battens 45 x 90 mm
Foreco waxed wood 20 x 50 mm
Loam plaster 3 mm
Base loam 5 mm
Gypsum fiber board 12.5 mm
Damp-proof membrane
Insulation Kooltherm® K12 220 mm
OSB 12.5 mm
Water resistant membrane
Battens 20 x 50 mm
Counter battens 20 x 50 mm
Foreco waxed wood 20 x 50 mm

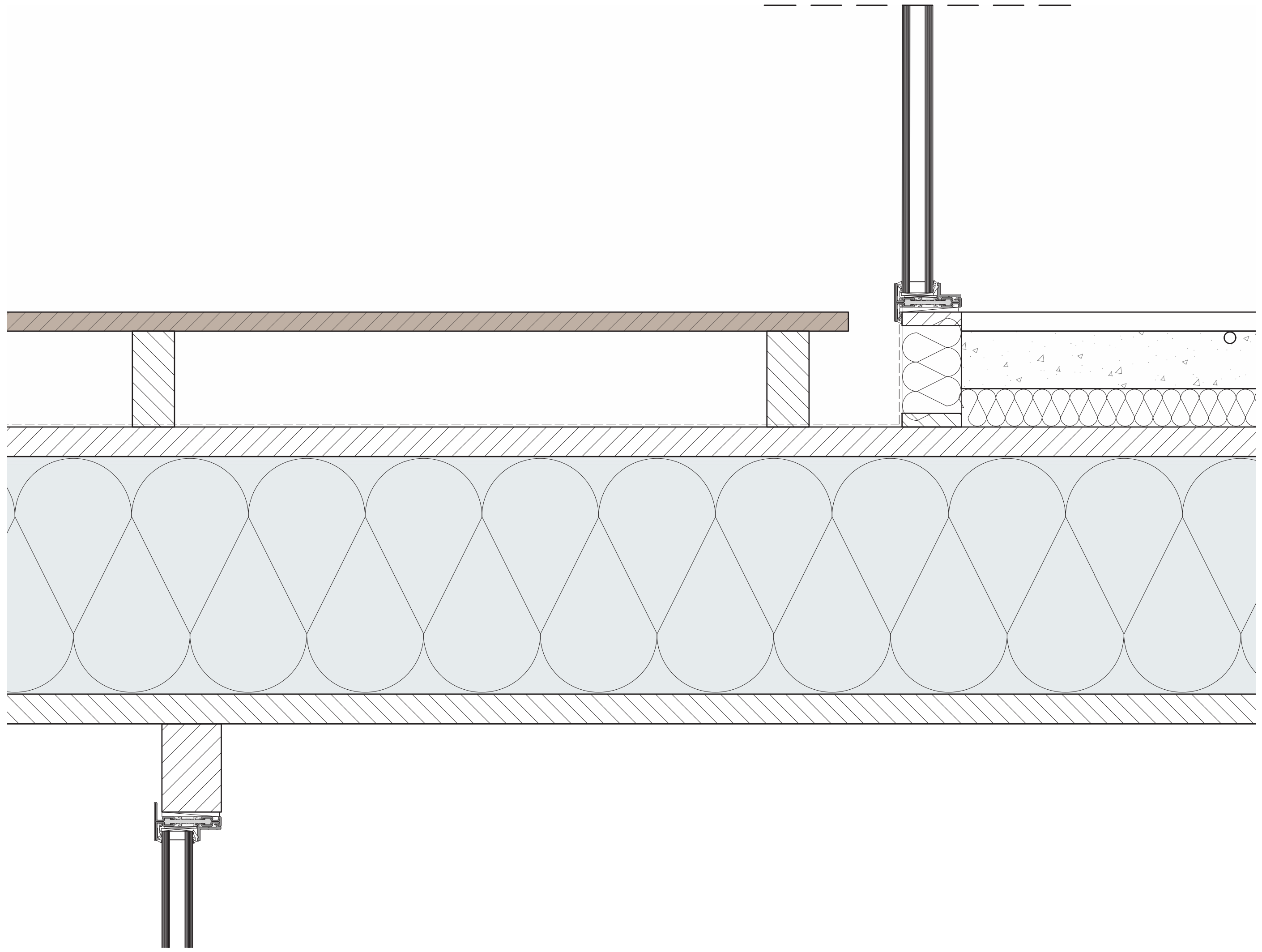

Loam plaster 3 mm
Base loam 5 mm
Kerto Ripa Prefab open roof element 310 mm
Water resistant membrane
Wood Battens 20 x 50 mm
Counter battens 20 x 50 mm
Foreco waxed wood 20 x 50 mm


Light vegetation
Urbanscape green roll
Drainage layer
Gravel
Roof Edge Drainage Profile

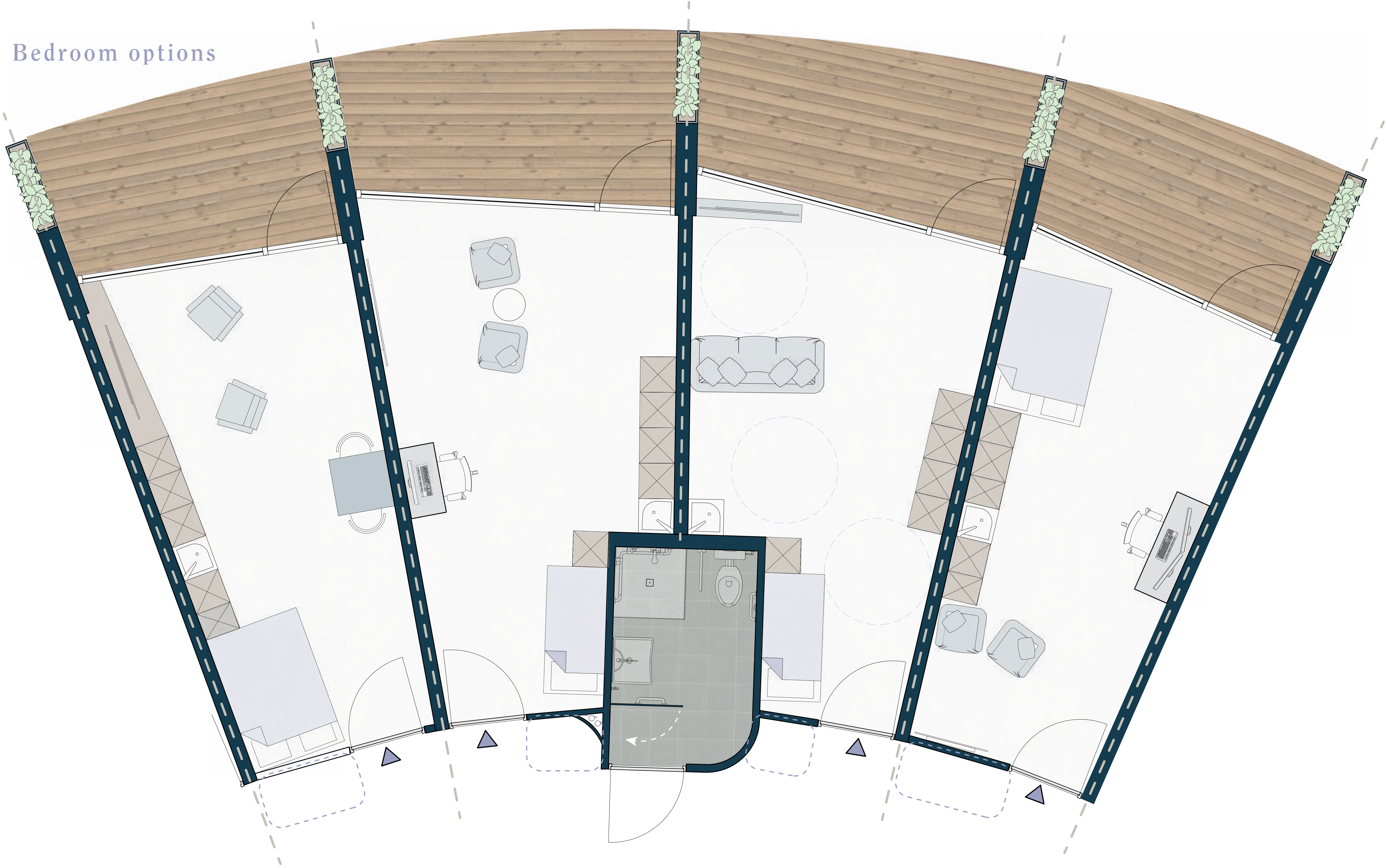

Steel frame 10 mm


wooden column 300 x 100 mm

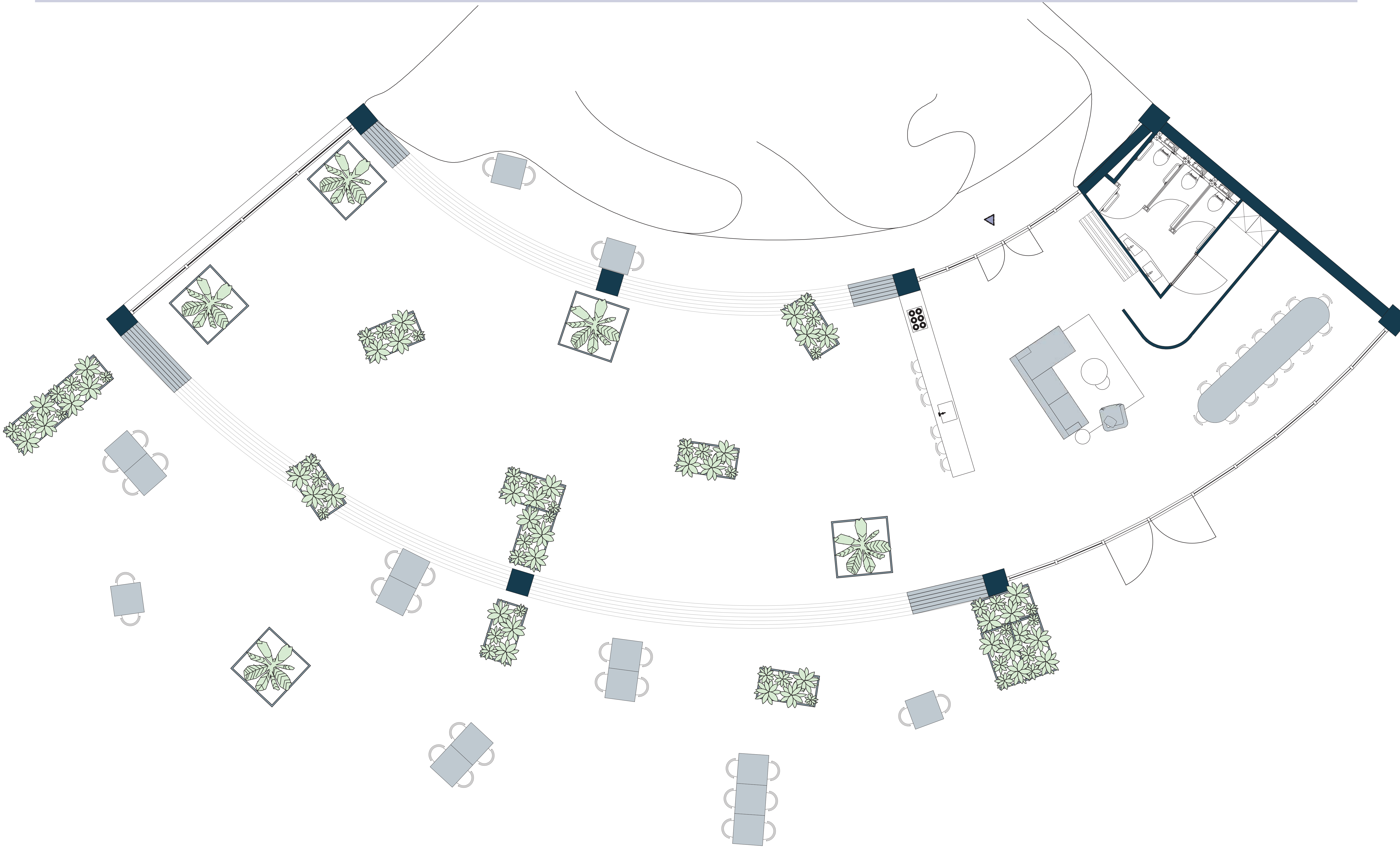


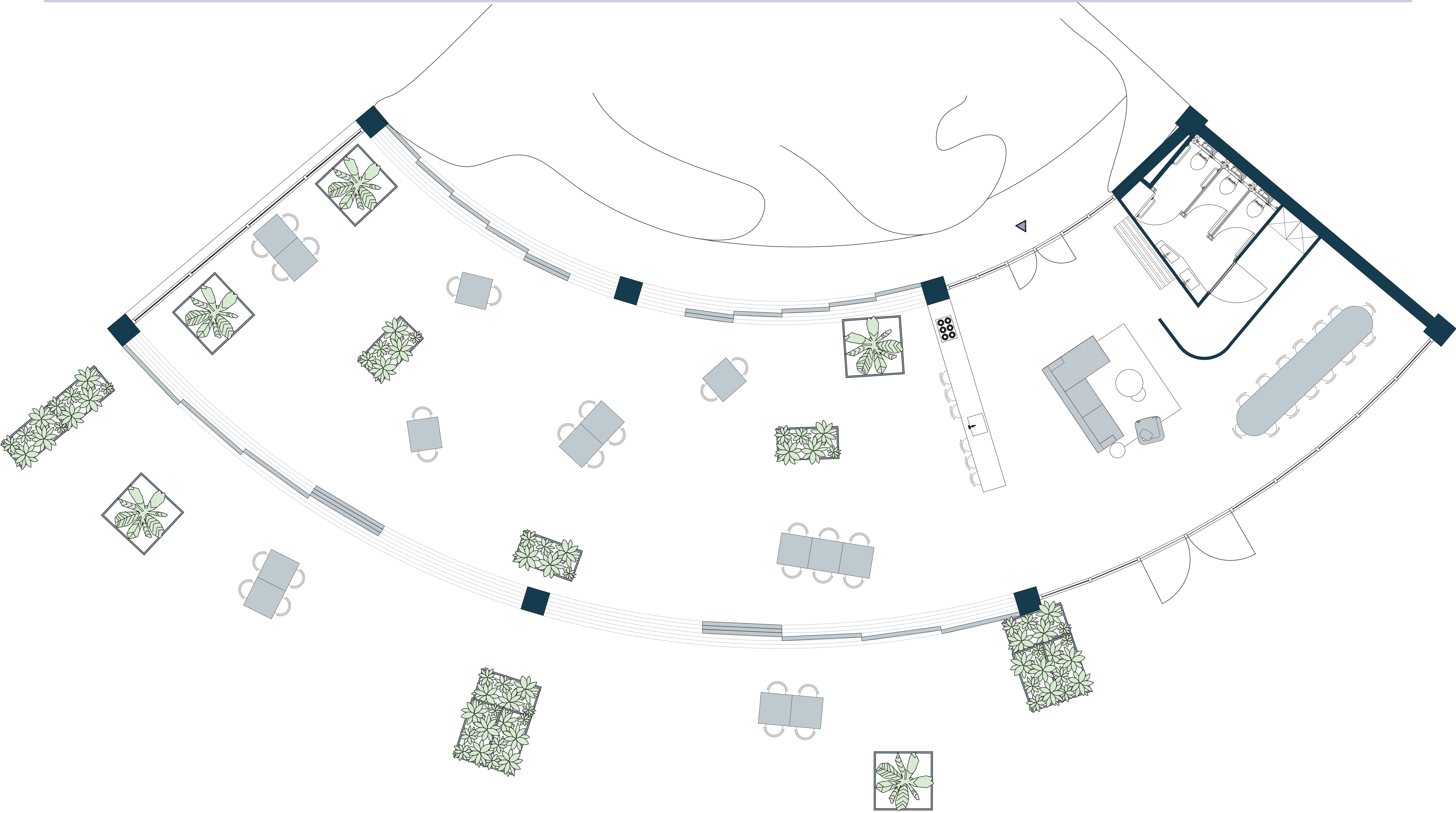


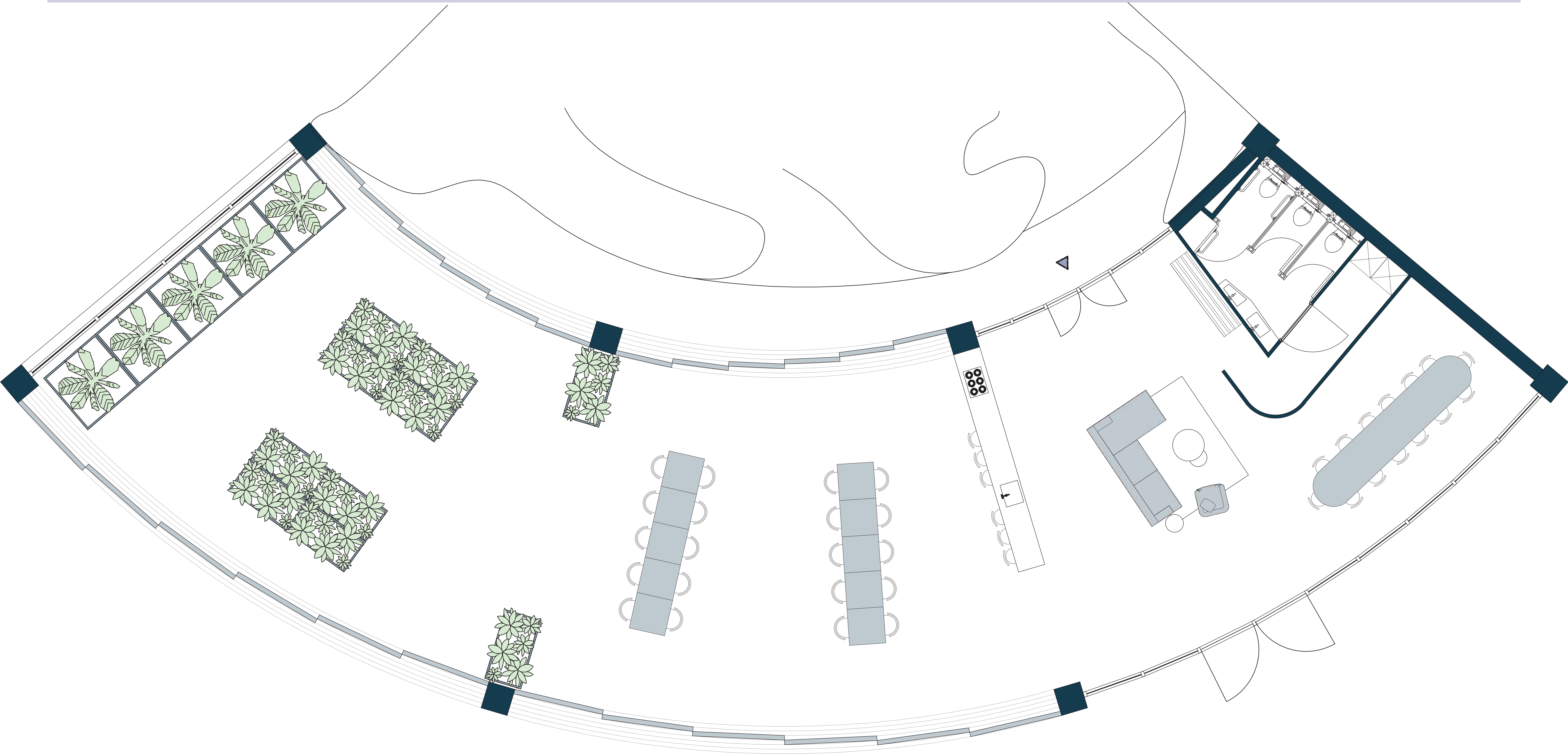
Bedroom options



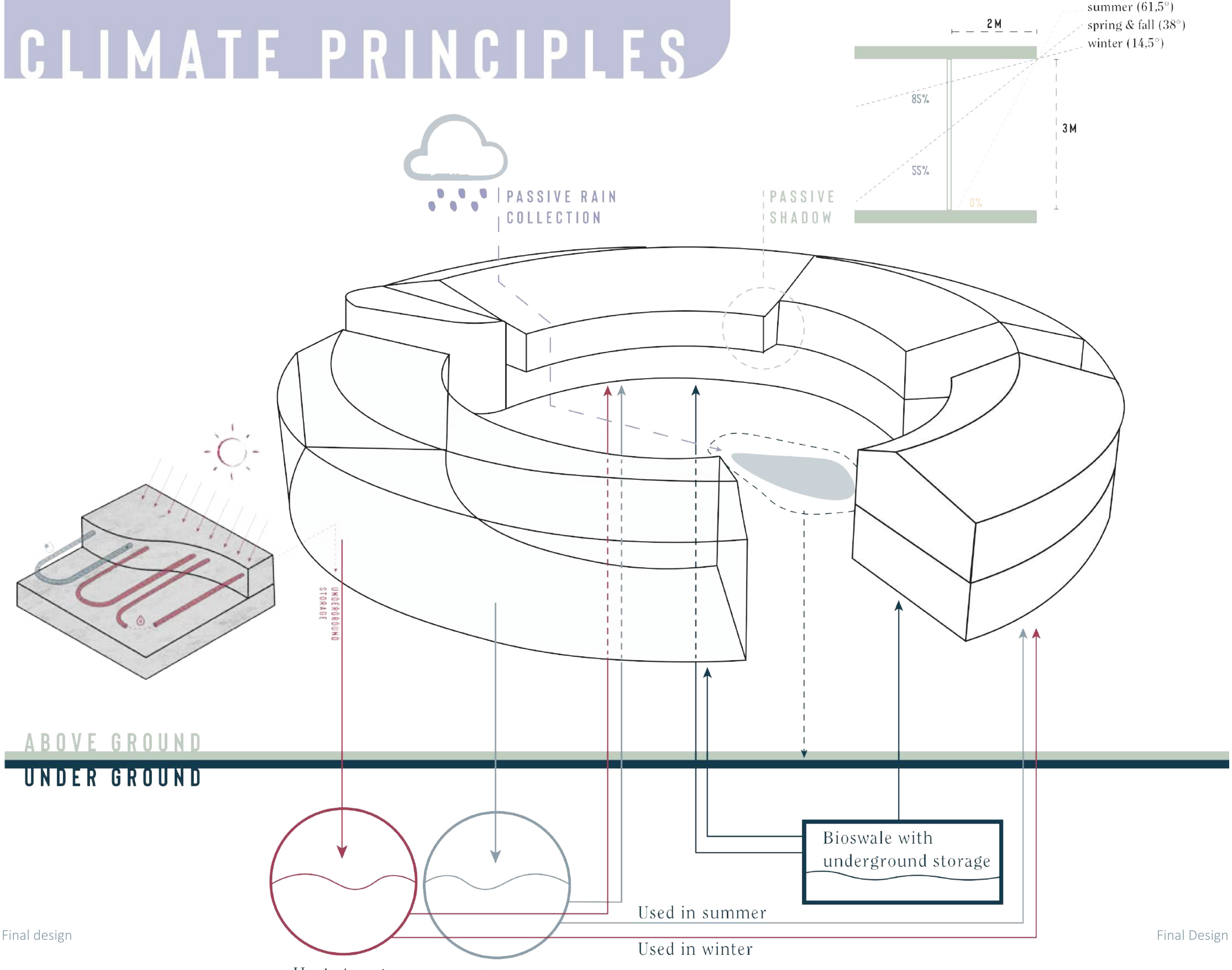
Daycare option I Summer



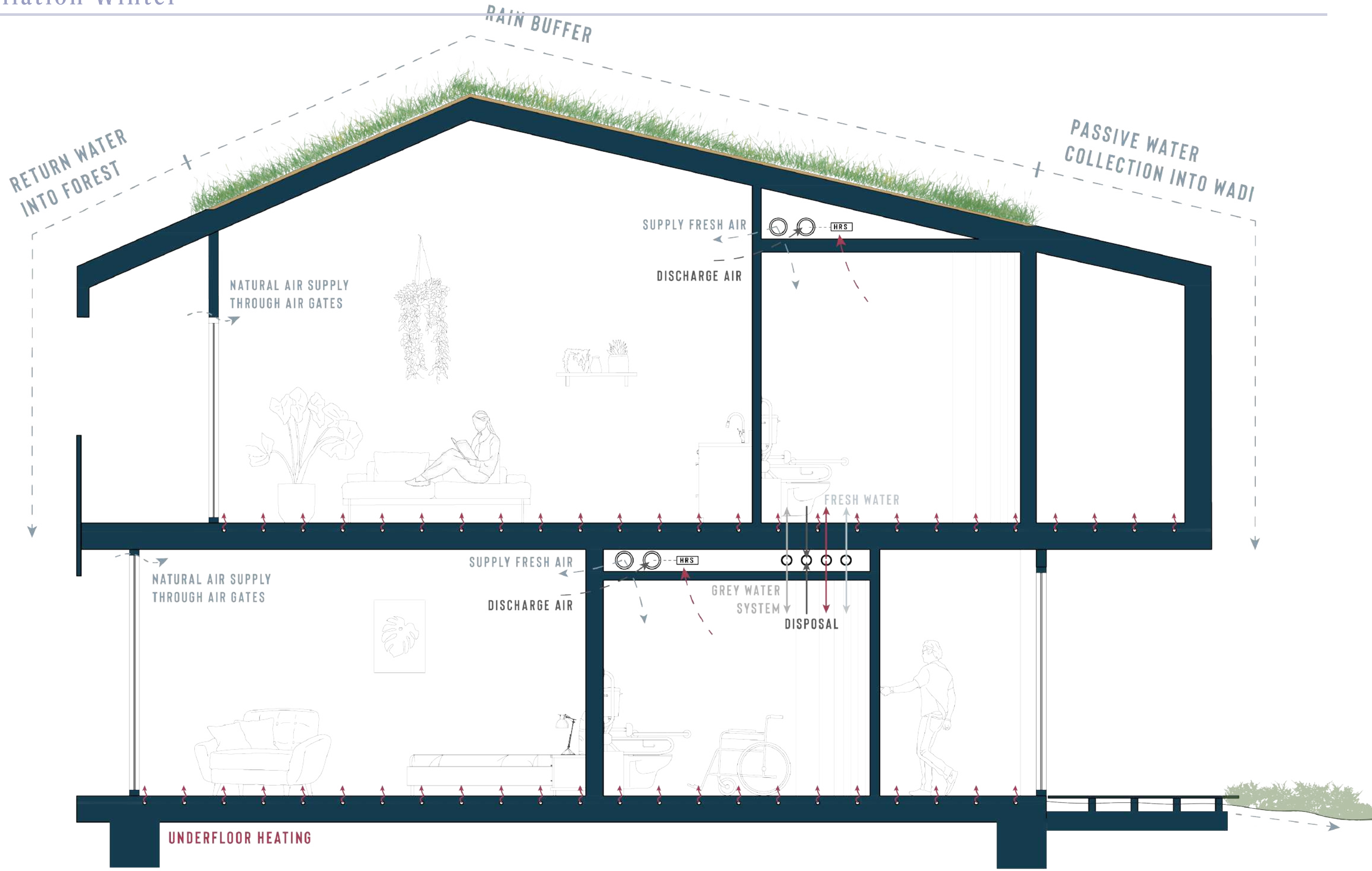




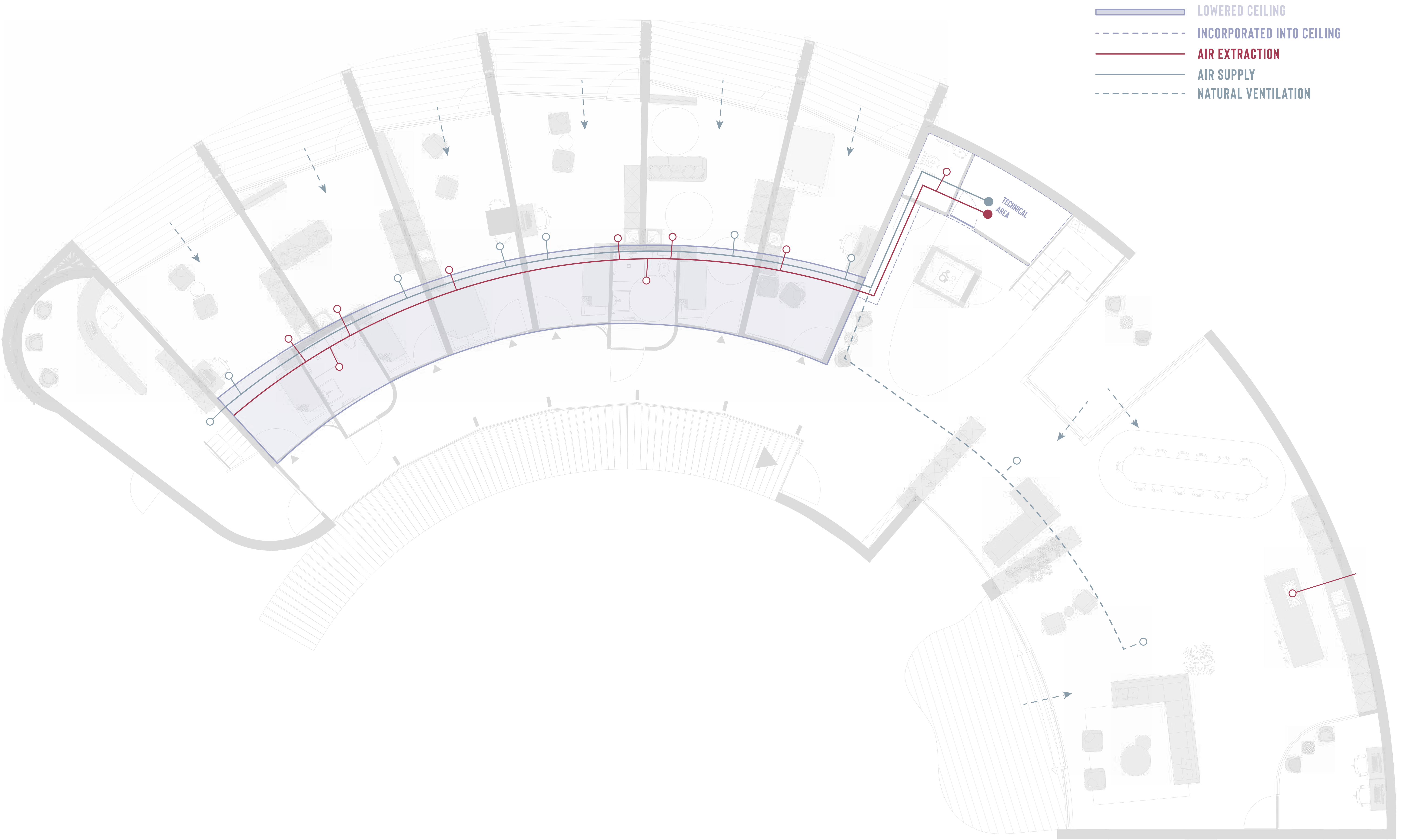
CLIMATE PRINCIPLES



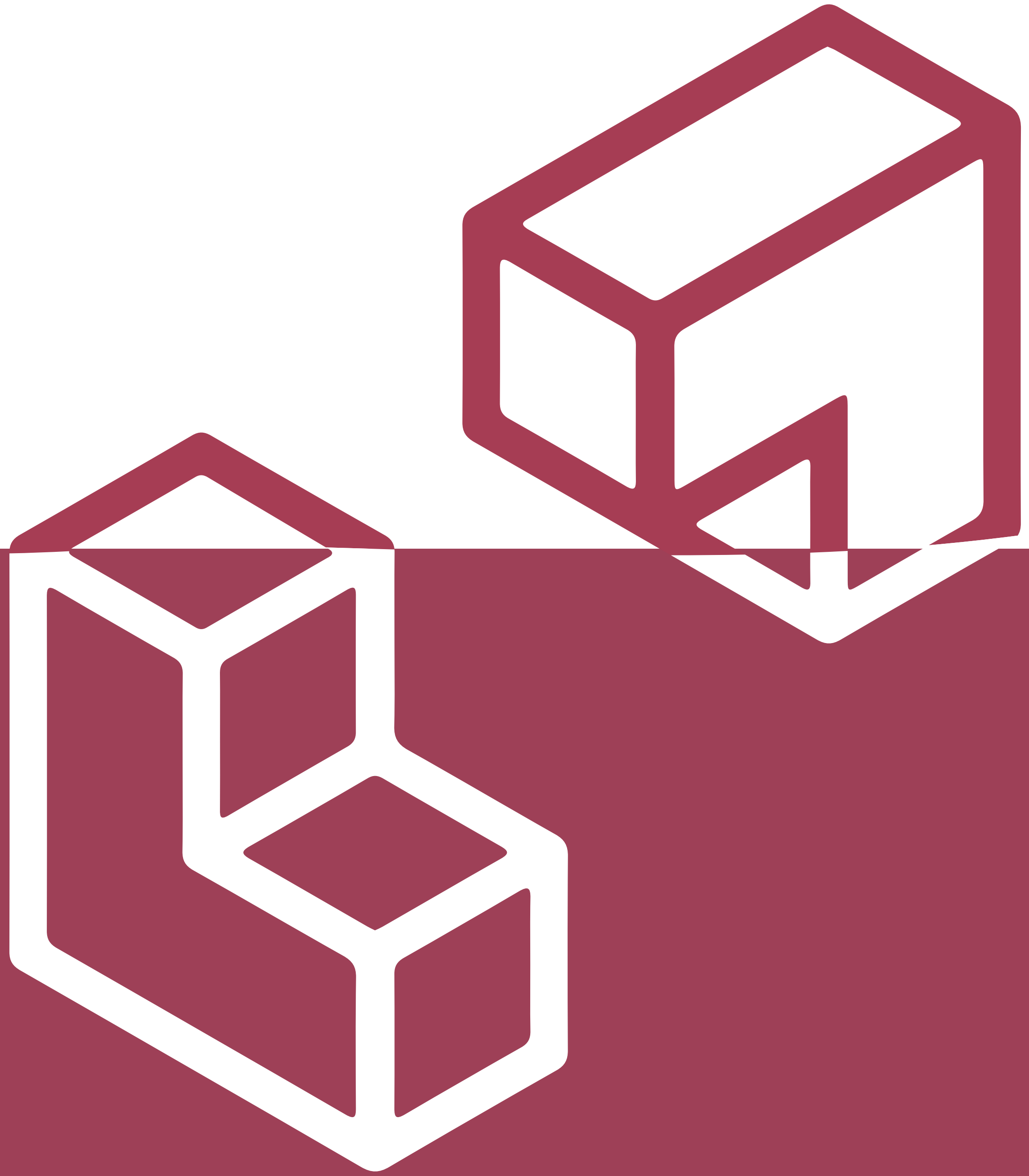

PASSIVE SHADING
SUPPLY FRESH AIR
HRS
DISCHARGE AIR
NATURAL AIR SUPPLY
FRESH WATER
SUPPLY FRESH AIR
HRS
DISCHARGE AIR
GREY WATER SYSTEM
DISPOSAL
NATURAL AIR SUPPLY
PASSIVE SHADING
UNDERFLOOR COOLING


RAIN BUFFER
RETURN WATER INTO FOREST
PASSIVE WATER COLLECTION INTO WADI
SUPPLY FRESH AIR
HRS
DISCHARGE AIR
NATURAL AIR SUPPLY THROUGH AIR GATES
FRESH WATER
SUPPLY FRESH AIR
HRS
NATURAL AIR SUPPLY THROUGH AIR GATES
DISCHARGE AIR
GREY WATER SYSTEM
DISPOSAL
UNDERFLOOR HEATING

Installation Winter

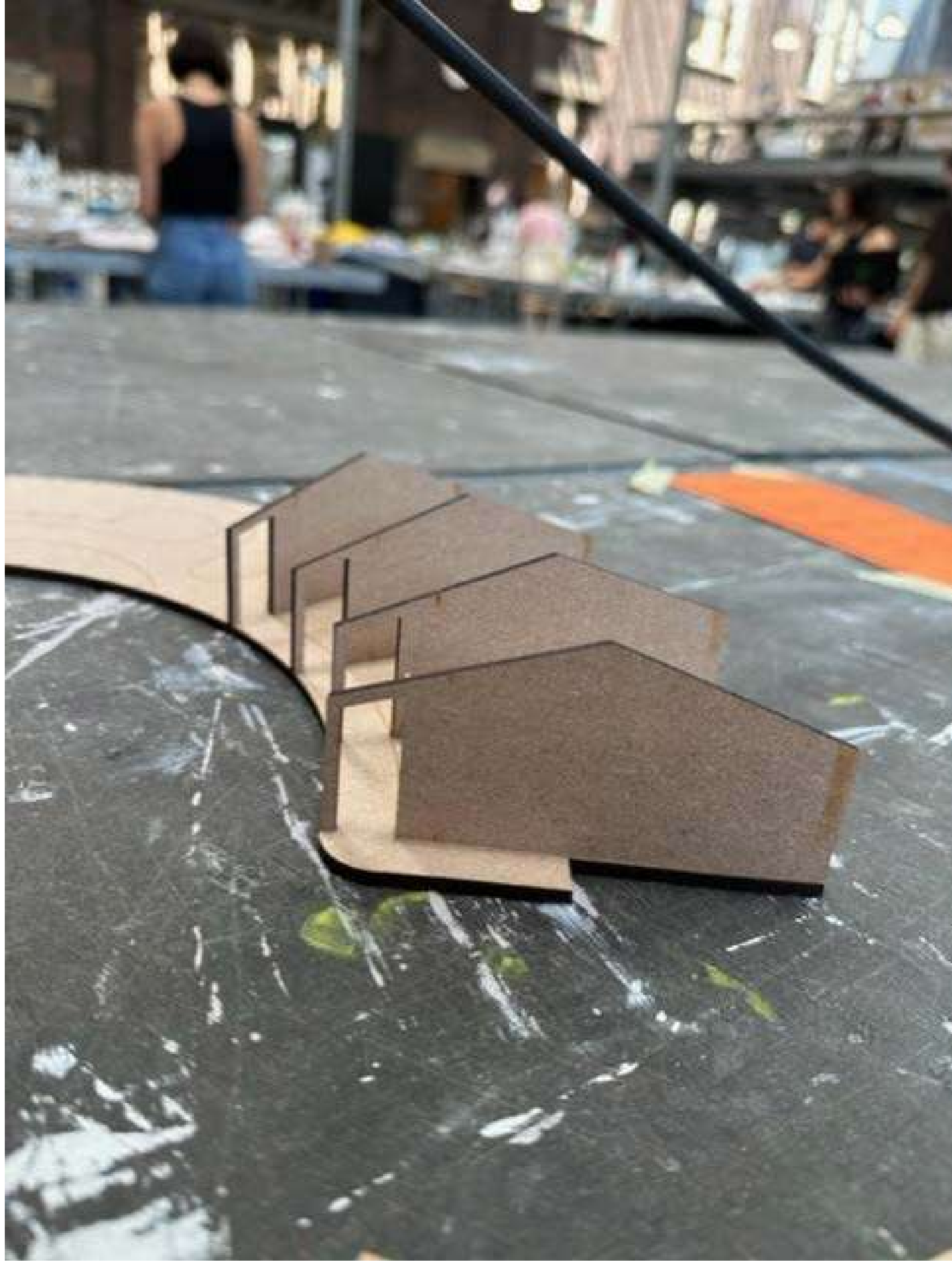


USE GREEN IN ADVANTAGE



Maquette

After P4




WEST
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A+

Z