



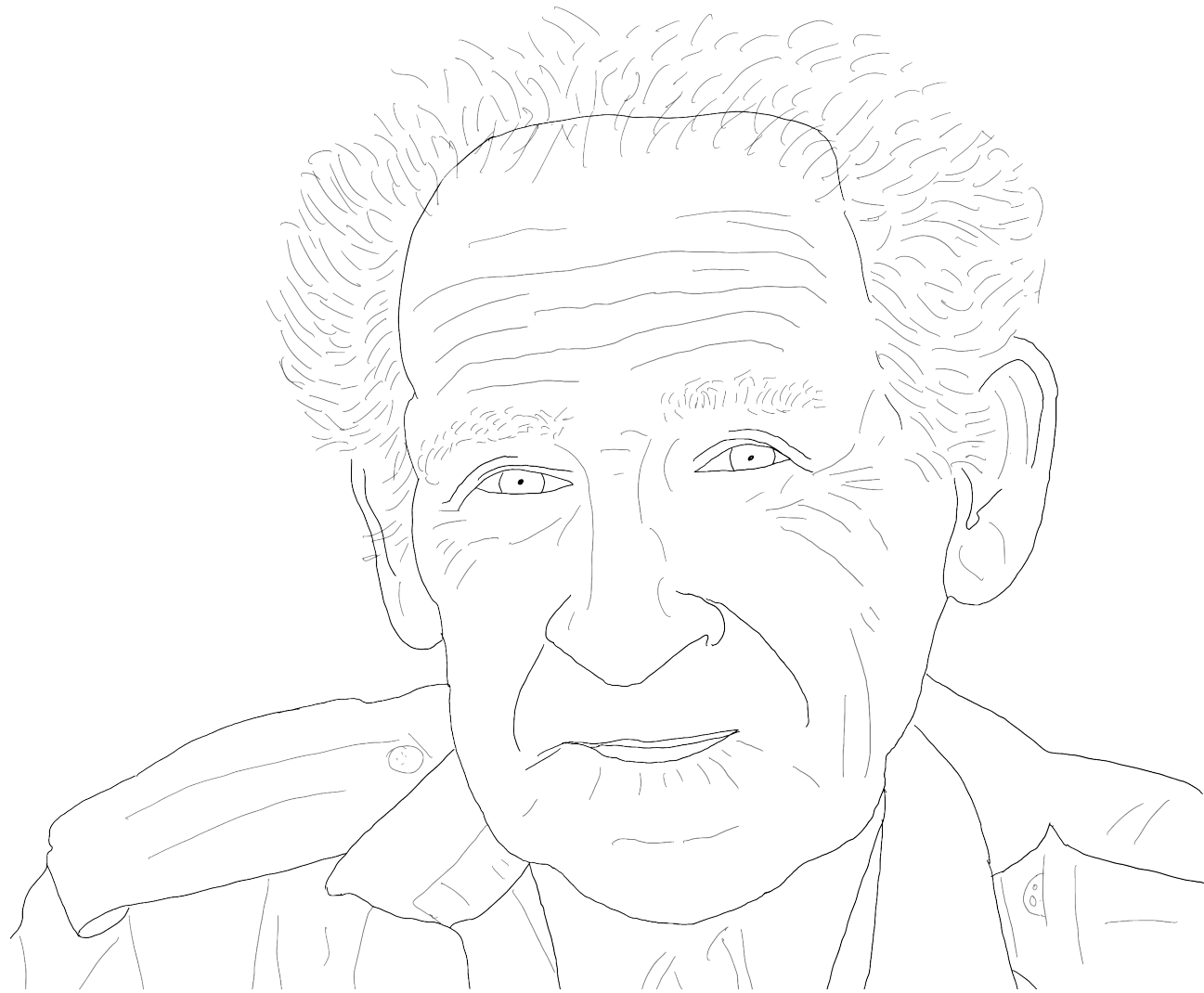
WELKOM!

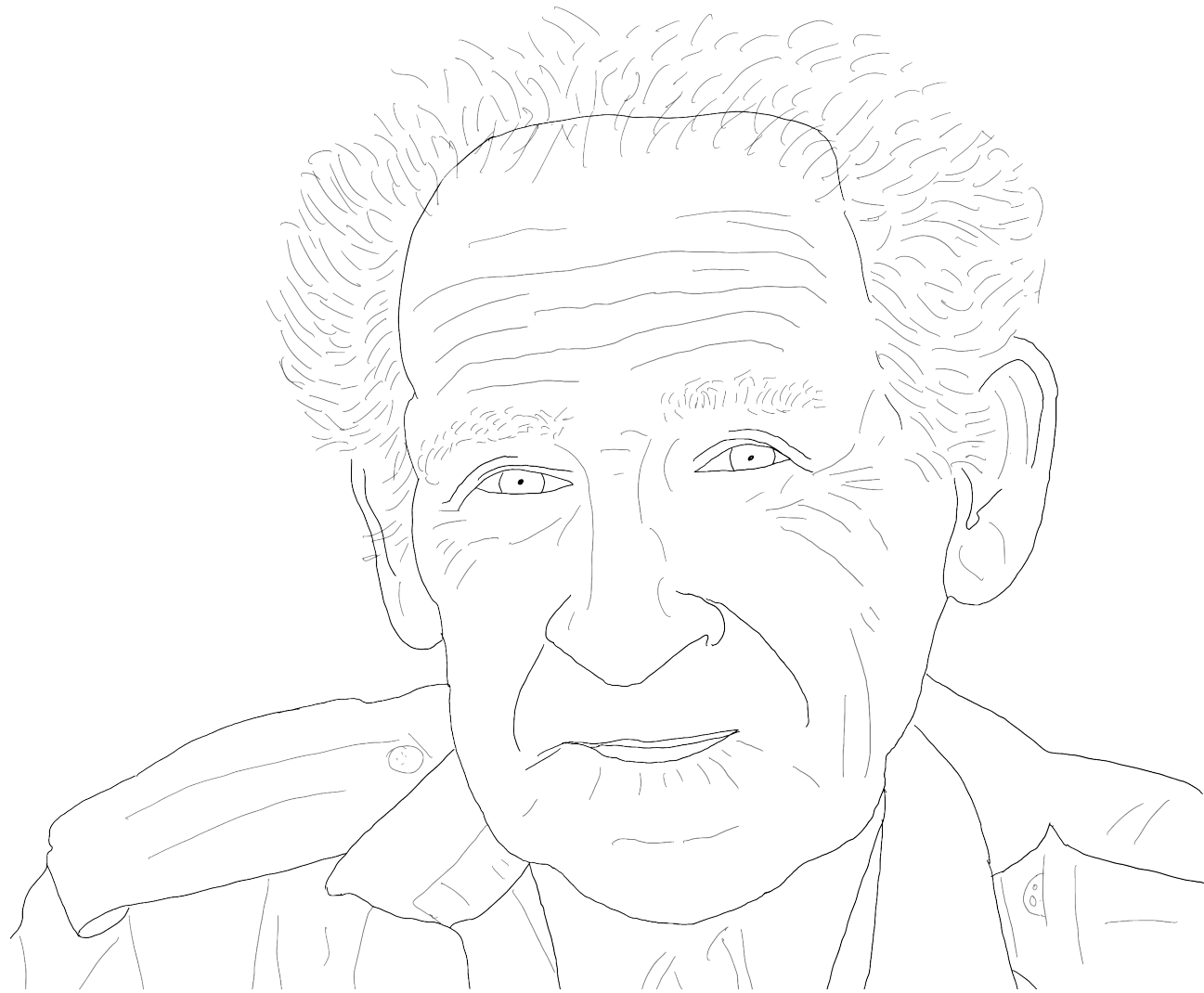
Afstudeerpresentatie Karlijn Kleine Punte
06-07-2023

NEIGHBOURS

A social interactive living environment with the elderly

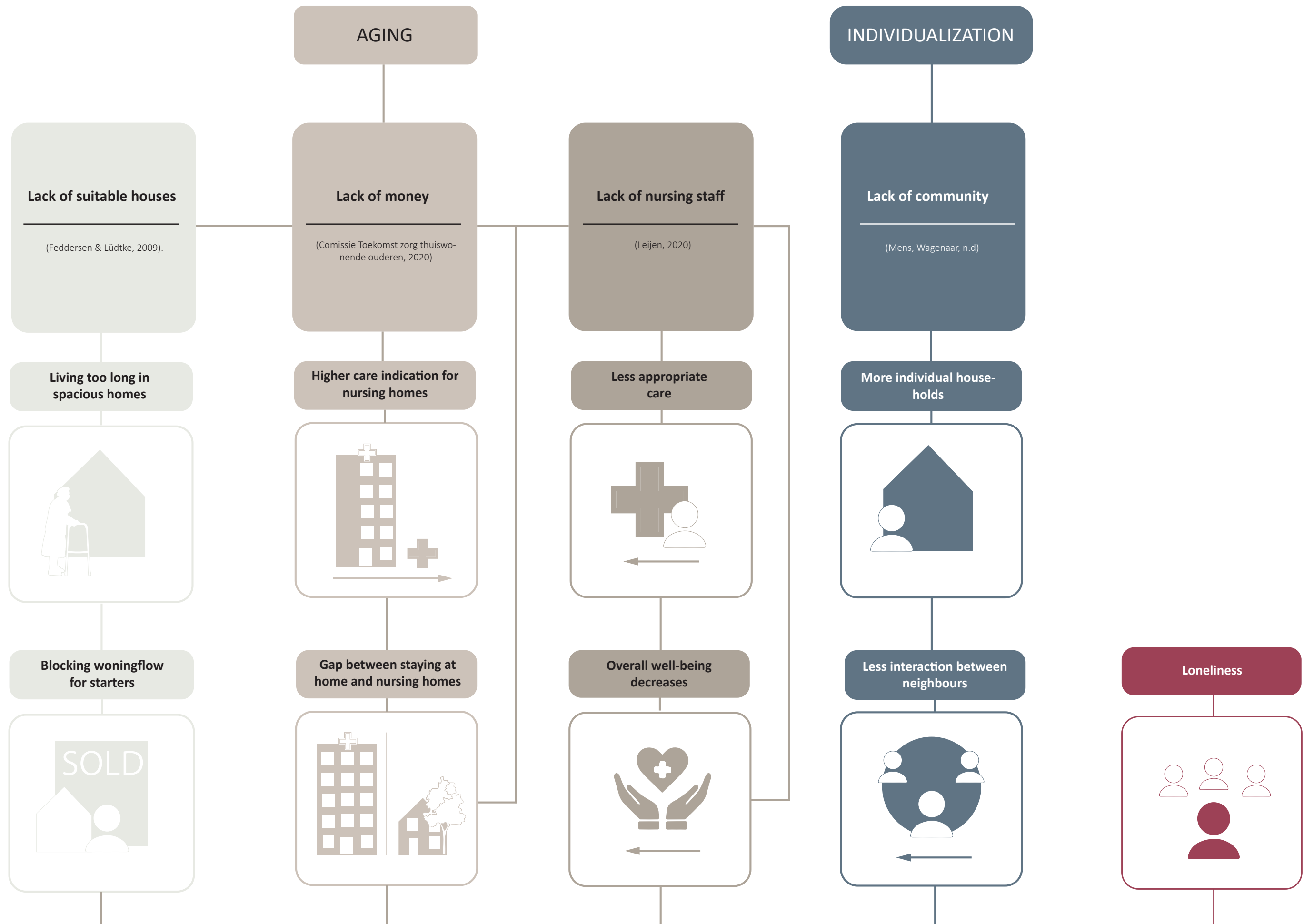






How will we live when we get older?

PROBLEM STATEMENT



Research aim

This study aims to find **new ways** in which **architecture** could contribute to a **living environment** where **elderly in need of light care** live together with people of **different ages and households.**

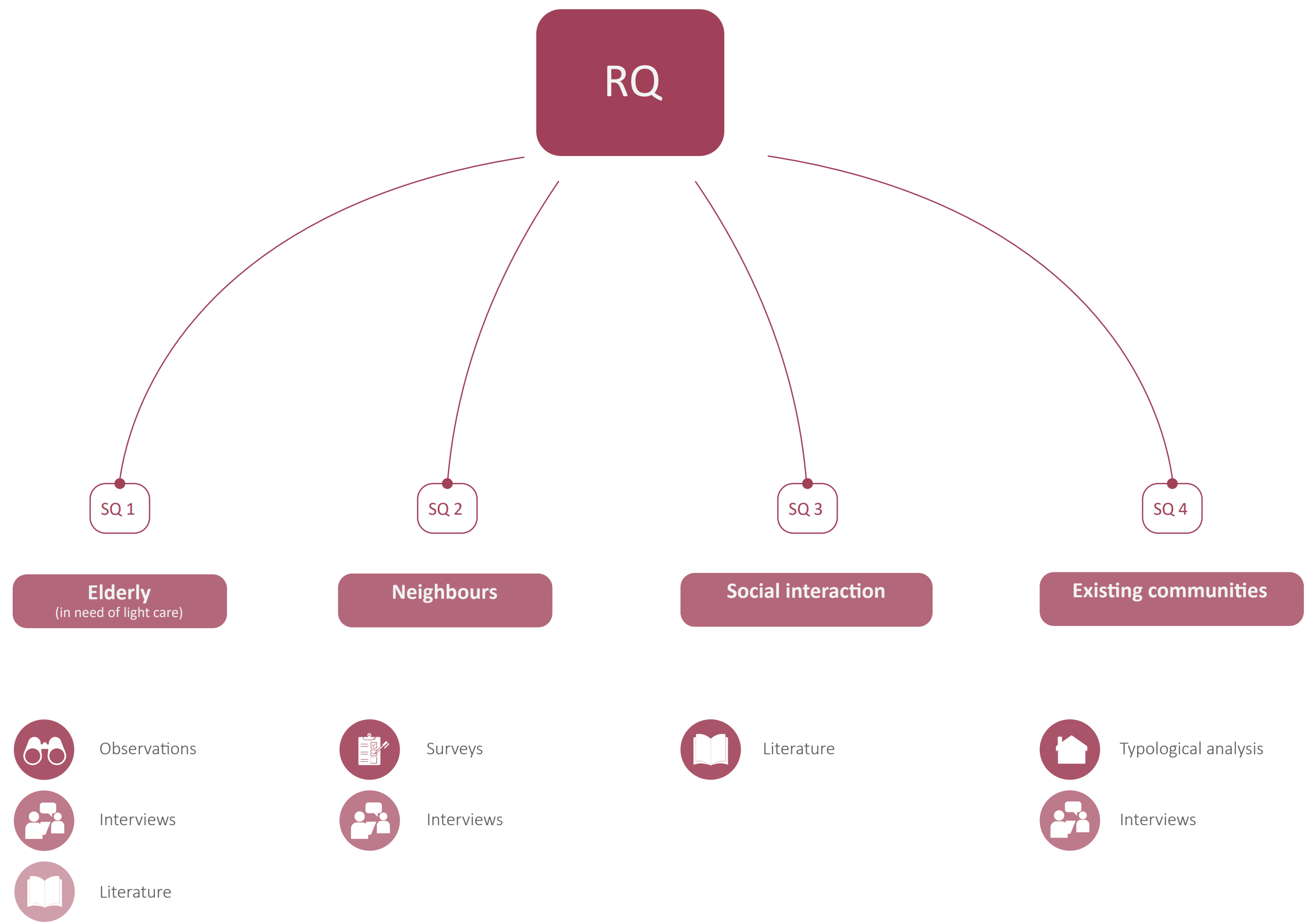
Research aim

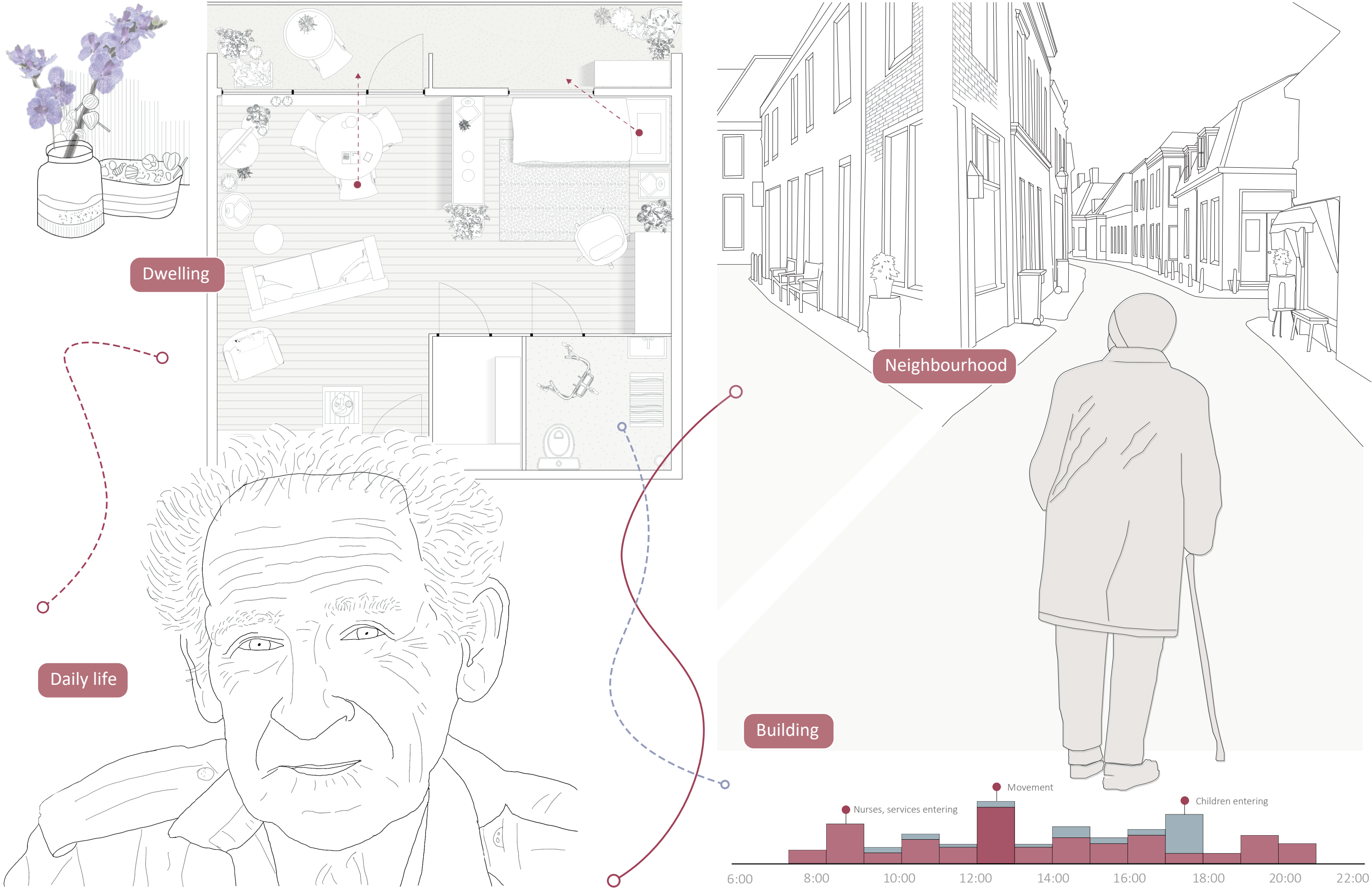
This study aims to find **new ways** in which **architecture** could contribute to a **a living environment** where **elderly in need of light care** live together with people of **different ages and households**.

A living environment where having **social interaction** with your **neighbours**, caring for the unable and taking a moment to **help** should become the norm.





Research question


Which design guidelines can encourage **social interaction**
in a **living environment** between
elderly in need of light care and their
neighbours?





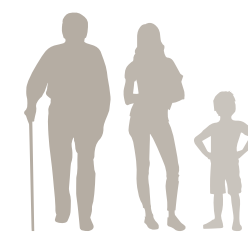
FIELDWORK

-  39 persons
-  Different ages
-  Different dwelling type:
-  Different households




97 %

Want to have shared facilities within a small neighbourhood community (+/- 100 persons).




Most people

Want to live with people of different ages in the same street.




82 %

Want do activities with neighbours in their neighbourhood.




82 %

Want do activities in their neighbourhood with people of different age groups.




96 %

Want to help elderly or others, if there are no barriers such as a lack of time or a lack of information.




37 %

Have a lack of information for providing help to the elderly.




Most people

Want to share a garden, horeca function, playground or a common room with this community.




43%

Do not want to share a room or anything with their direct neighbours (+/- 5 persons)




Most people

Want to help each other as an activity, but cooking, sporting and gardening are other preferences.




60%

Want to do these activities 1-2 a month.



Most people

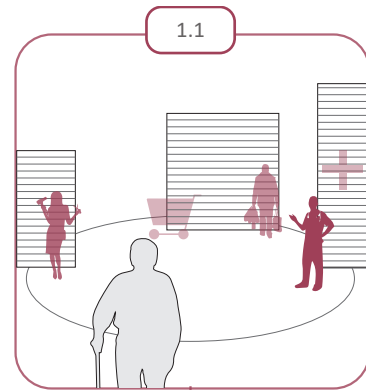
Want to provide help with cooking, provide companionship and handover knowledge



46 %

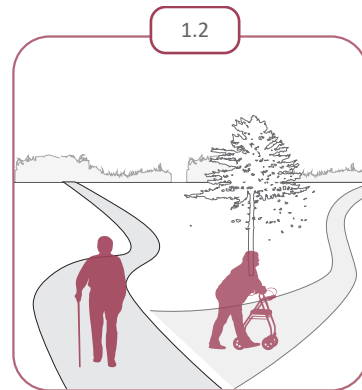
Needs a common room or low key meeting option to provide this help.

GUIDELINES ELDERLY AND NEIGHBOURS



FACILITIES ON WALKING DISTANCE

Services such as a supermarket and health functions should be within a distance of 500 meters of the dwelling.



DIFFERENT WALKING ROUTES

Provide easy walking routes of varying distances around the dwelling or building complex.



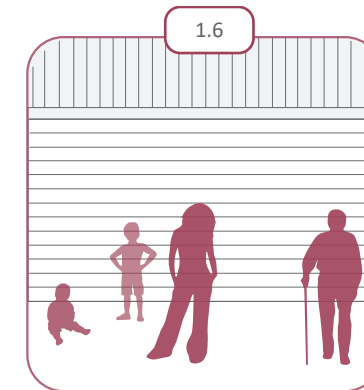
SMOOTH ROAD SURFACES

Create flat road surfaces without bumps so that this will not form a barrier for elderly to go outside for a walk.



ENOUGH BENCHES

Place enough benches where elderly can take a rest or just sit and watch others participate in public life.



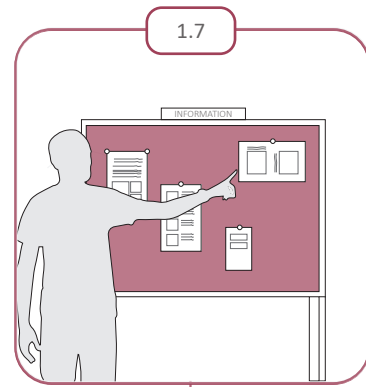
MIX OF DIFFERT AGE GROUPS

Research shows that people want to live and do activities with other people of various age groups.



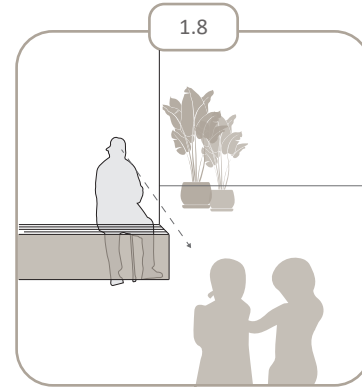
SMALL VARIATIONS IN FACADE

Vary a few variables as colours, materials, heights and depths in the facade to create recognizability.



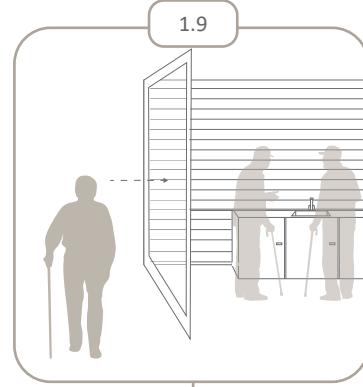
INFORMATION PROVISION

Clear information provision about who needs wat kind of help.



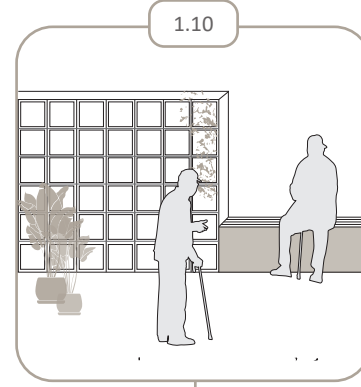
PASSIVE PARTICIPATION

Create opportunities for passive participation in common or public spaces.



VISUAL ACCESS

Elderly need the option to escape depending on who is present in a certain room. Visual acces to the room is needed so the person can observe and decide to join or not.



ADD QUALITY OF STAY

Add quality of stay (space, daylight, benches, etc.) to circulation space and daily used functions. That are the places where elderly bump into each other.



SIGHT ON PEOPLE OR GREENERY

Good view from the dwelling of activity or on trees and plants outside.



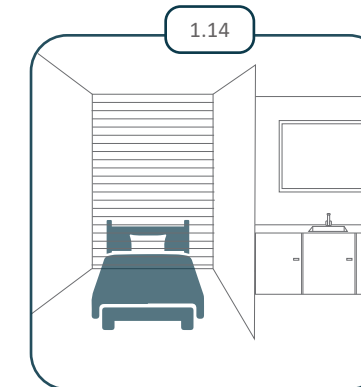
PRIVATE BALCONY OR GARDEN

The elderly like to have a private outside space, even if there dwelling is smaller than 40 square meter.



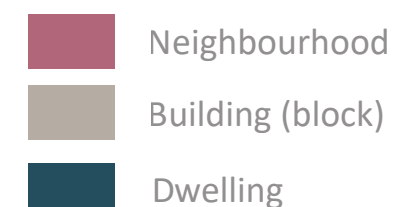
ENOUGH STORAGE SPACE

Enough storage space for all the things the elders have collected during the years and to place a wheelchair / walker out of sight.



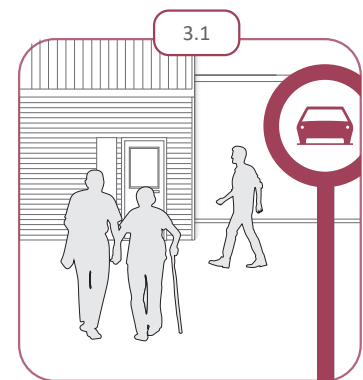
SEPERATE BEDROOM

Seperate the bedroom from the rest of the functions in the dwelling.



GUIDELINES SOCIAL INTERACTION

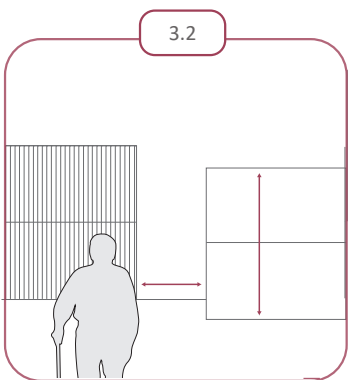
3.1



PEDESTRIAN ZONES

Provide pedestrian zones, this ensures a greater chance of interaction and more meaningful contact.

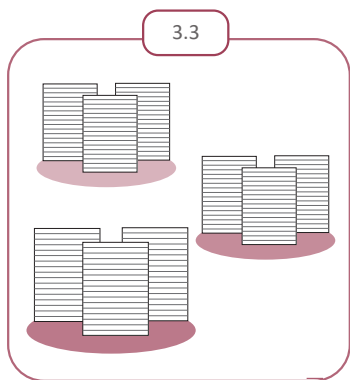
3.2



MODEST DIMENSIONS

Small spaces are perceived as warm and personal. Besides that seeing and hearing others is easier.

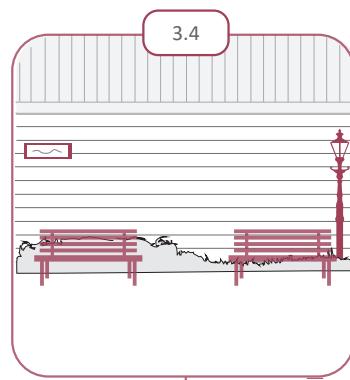
3.3



SUBDIVIDING THE AREA

Divide a residential area into more smaller areas. It gives the residents a feeling of security and a sense of belonging.

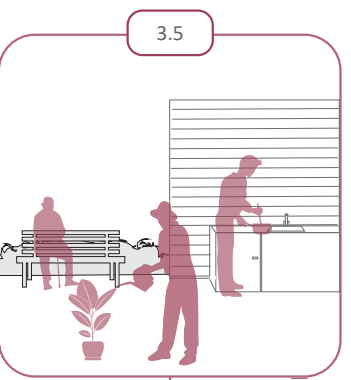
3.4



GOOD MATERIALIZATION

Spaces that are well materialized will be used more. Think of good wayfinding, places to sit, lighting and places with shelter.


3.5



MULTIFUNCTIONAL MEETING SPACES

Provide meeting spaces with a multifunctional and self-evident character.

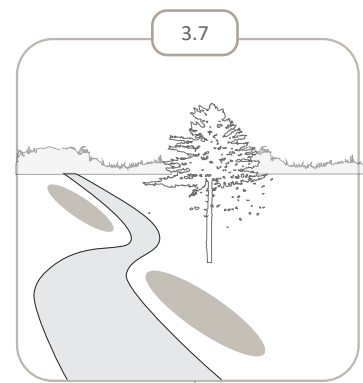
3.6



READABILITY OF SPACES

A clear and soft demarcation of spaces increases its use and improves the quality of stay. No hard physical barriers.

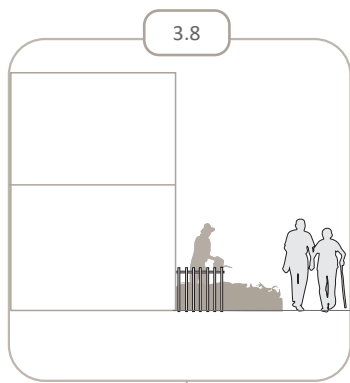
3.7



ENLARGE THE THRESHOLDS

Enlarge the thresholds at passages and circulation spaces (entrances, paths). This offers opportunities for interaction.

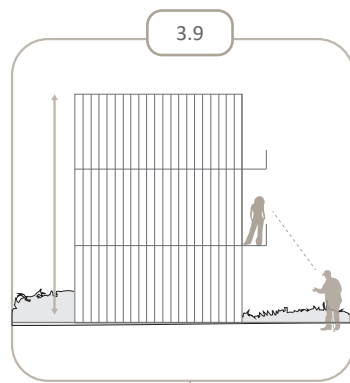
3.8



THRESHOLD SPACE IN FRONT OF EACH DWELLING

In the threshold spaces people feel the safety from home, therefore most interaction is happening here.

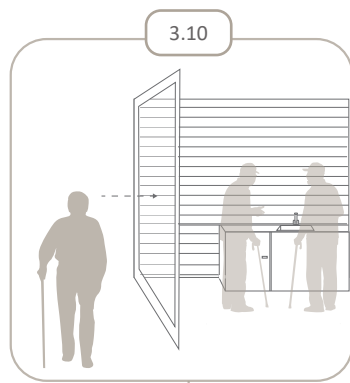
3.9



LOW BUILDINGS HEIGHTS

Building heights higher than 10 meters will be a barrier for contact. Conversations can be held up to 6,5 meters.

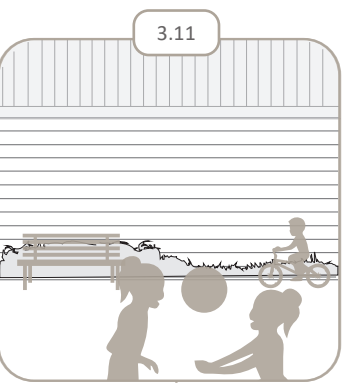
3.10



VISUAL ACCES

Elderly need the option to escape depending on who is present in a certain room. Visual access to the room is needed so the person can observe and decide to join or not.

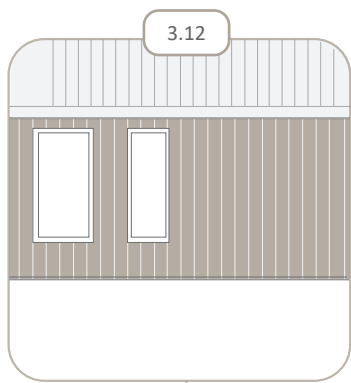
3.11



BENCHES WITH SIGHT ON ACTIVITY

Place benches with a view to activity in the immediate environment of dwellings. Place the backside against something closed.

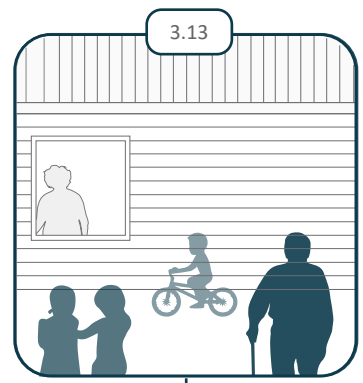
3.12



LIVELY FACADE

Provide an lively facade, vertical articulation, many openings and big windows. This will stimulate activity outside.

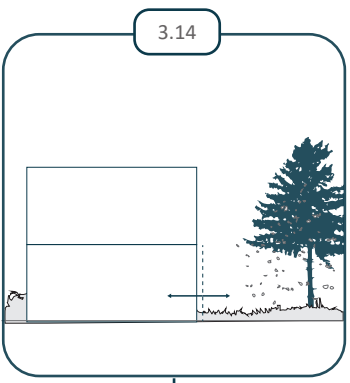
3.13



SIGHT ON PUBLIC SPACE

Create sight lines to the public or common space so elderly can gaze through the windows and people will be stimulated to interact.

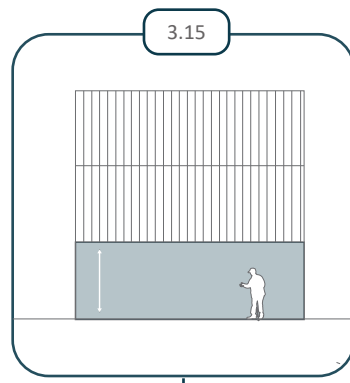
3.14



DIRECT CONNECTION WITH OUTSIDE

Create a direct connection between a living space of the dwelling and the threshold space.

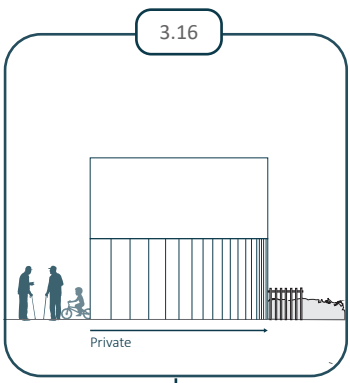
3.15



LIFE RESILIENT DWELLINGS

To maintain a social network, it is important that dwellers can continue to live where they live regardless a changing demand of care.

3.16



ZONING OF THE DWELLING

Zone a dwelling from public to private. Put rooms that need more privacy (sleeping-room for instance) behind.

- Neighbourhood
- Building (block)
- Dwelling

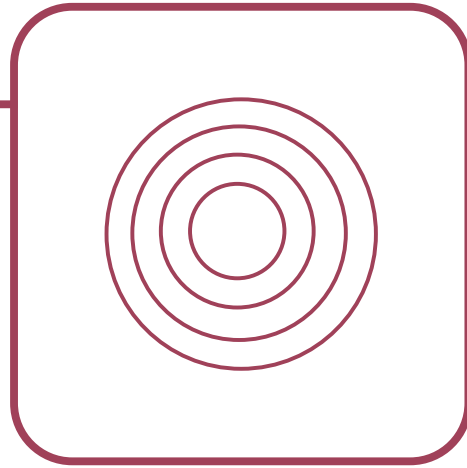
THE SITE

DRIEBERGEN-RIJSENBURG

WHY DRIEBERGEN?



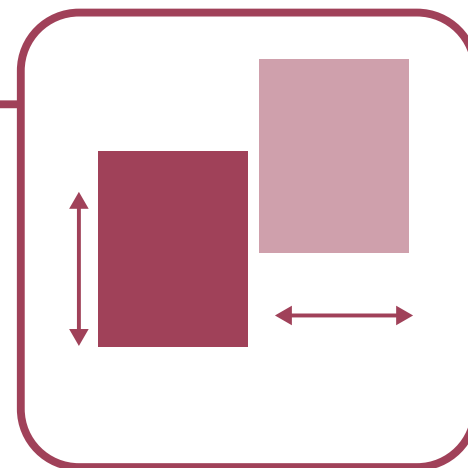
Green environment



Good accessibility



Other residences
around



Small scale
environment



Close to facilities

WHY DRIEBERGEN?



Green environment

Good accessibility

Other residences
around

Small scale
environment

Close to facilities



ON THE EDGE OF
A FOREST



CENTRALLY LOCATED
IN THE NETHERLANDS



NEXT TO A
RESIDENTIAL AREA



VILLAGE
ENVIRONMENT



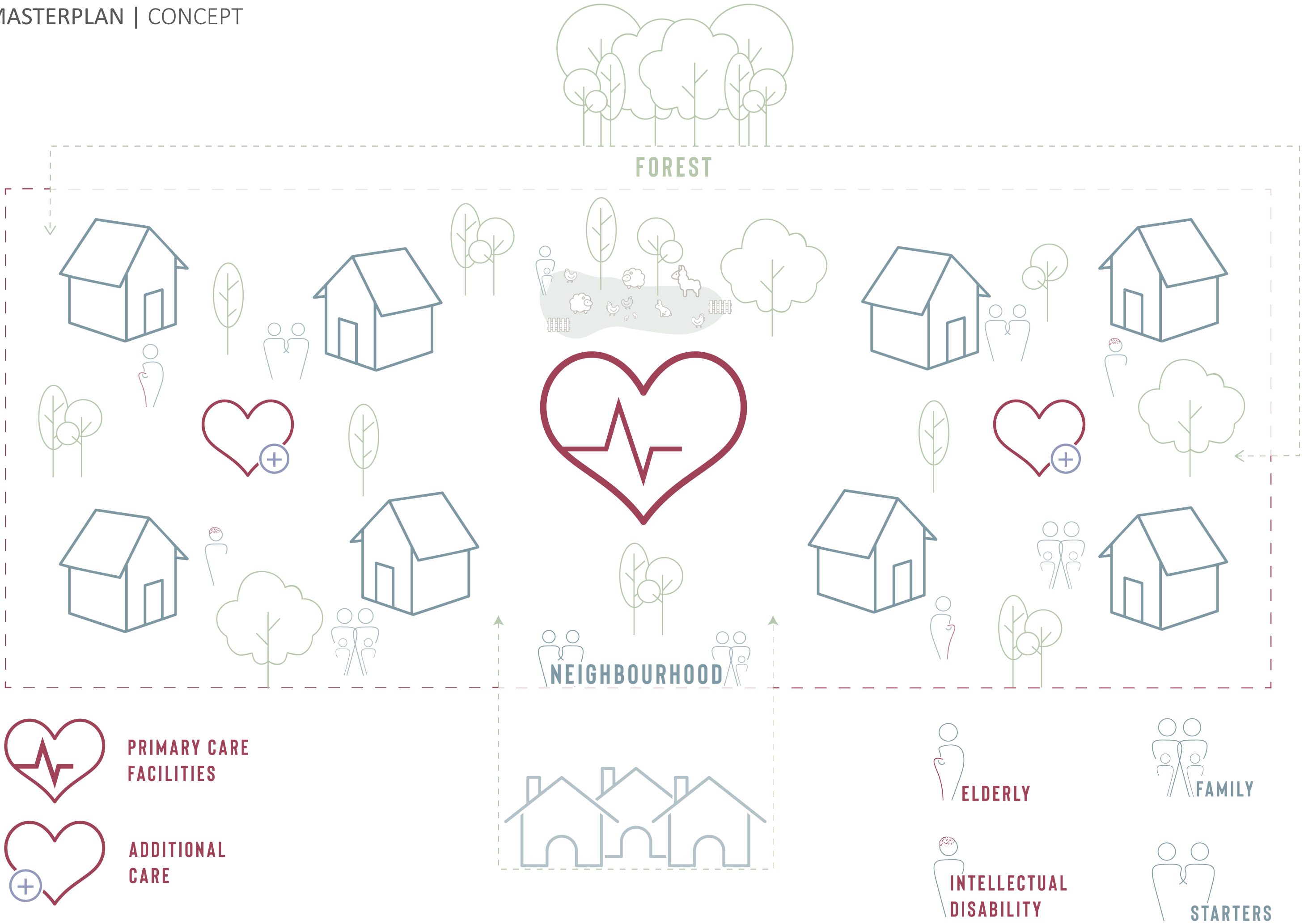
FACILITIES MORE
THEN 500 M AWAY





MASTERPLAN

DRIEBERGEN-RIJSENBURG



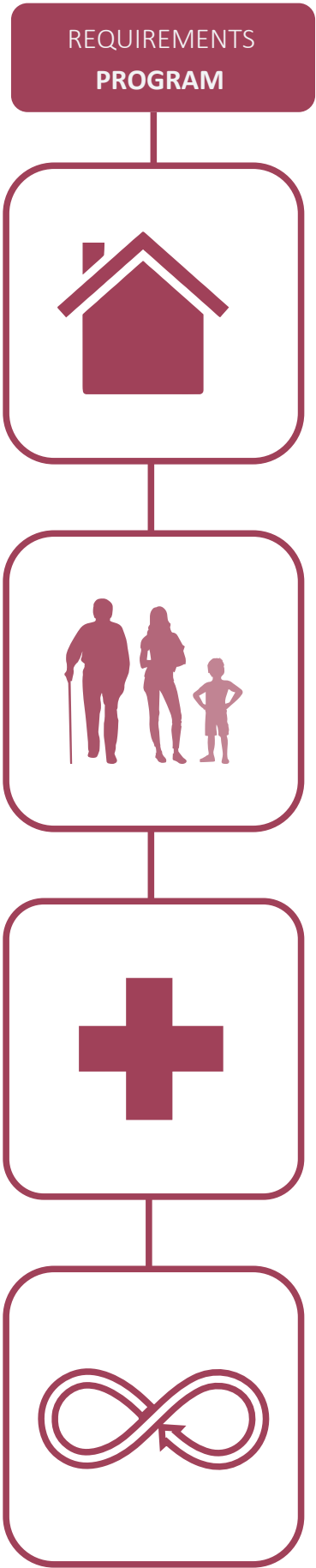
MASTERPLAN



OWN DESIGN

DRIEBERGEN-RIJSENBURG

PROGRAMM

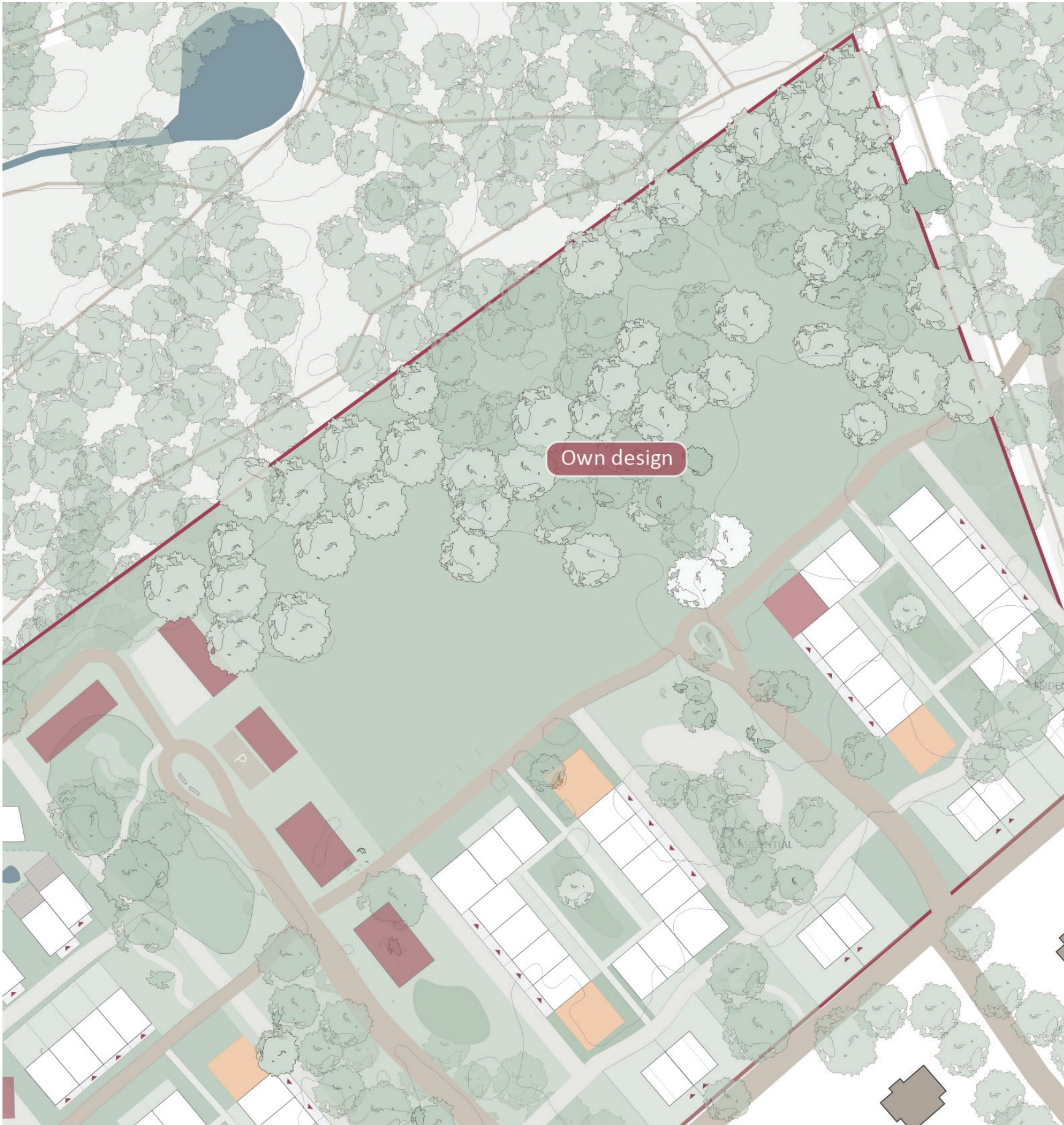


15 - 30 households
30% for families

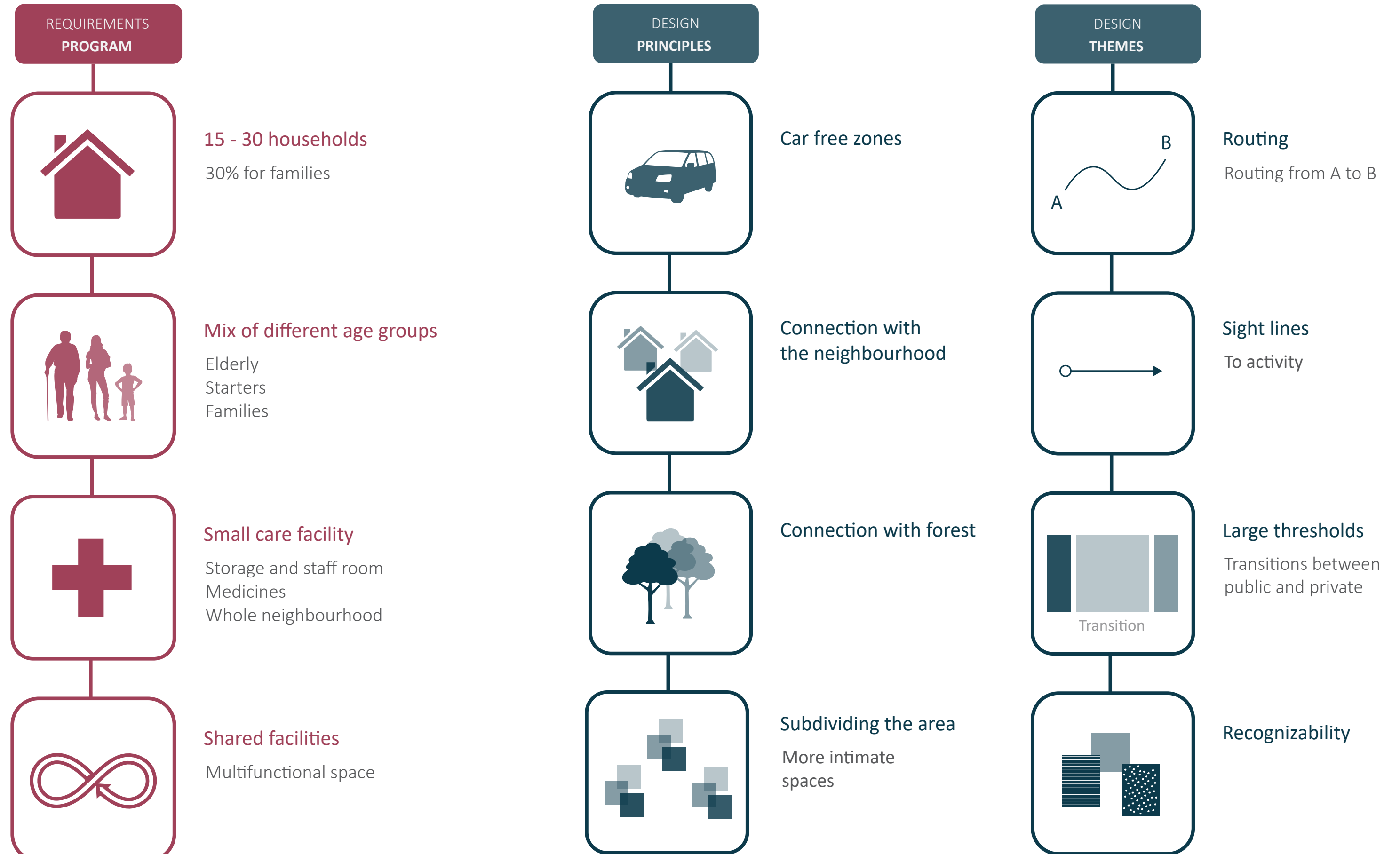
Mix of different age groups
Elderly
Starters
Families

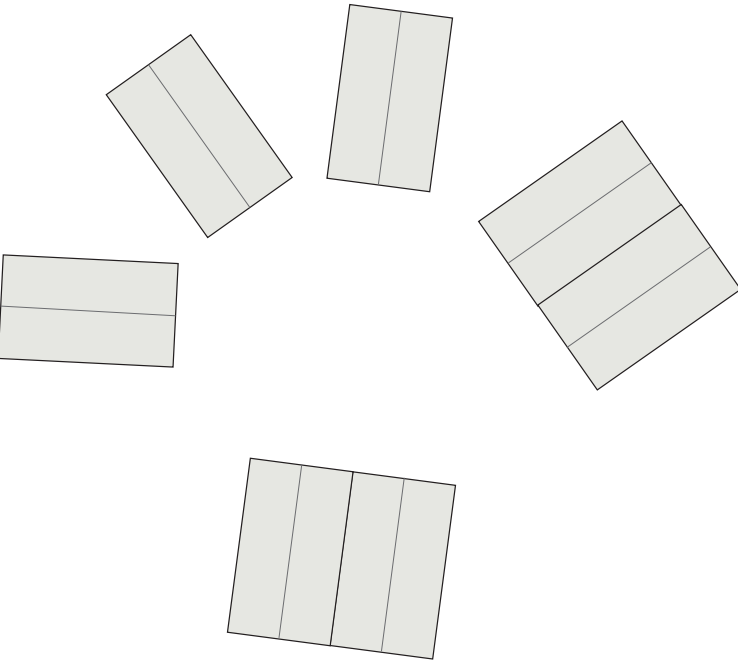
Small care facility
Storage and staff room
Medicines
Whole neighbourhood

Shared facilities
Multifunctional space

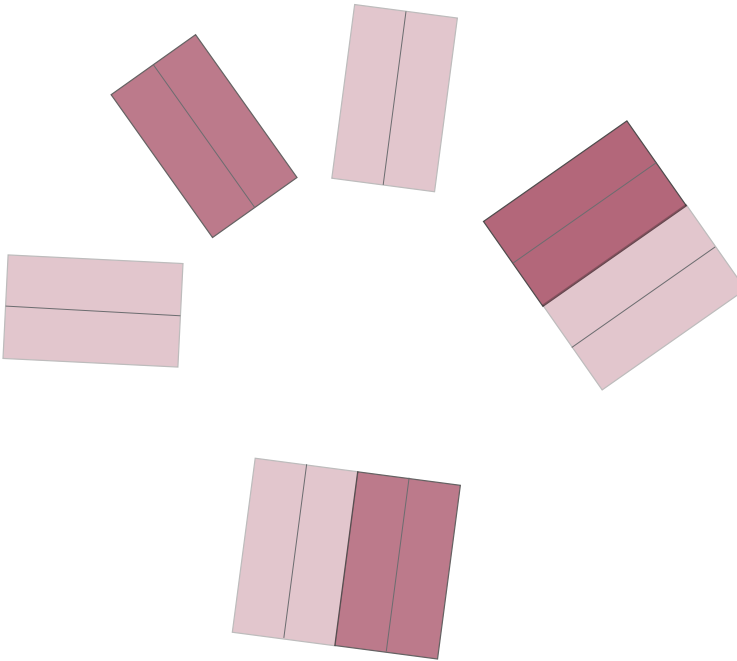


PROGRAMM

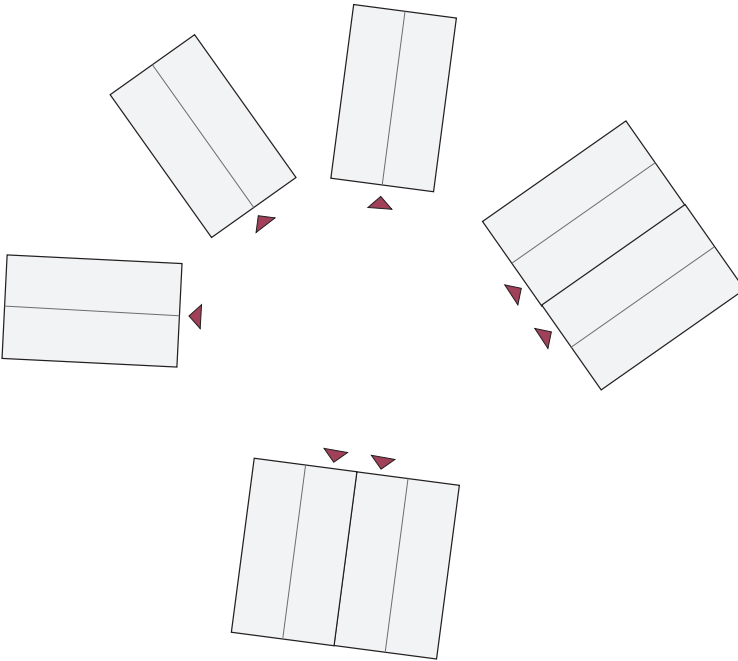




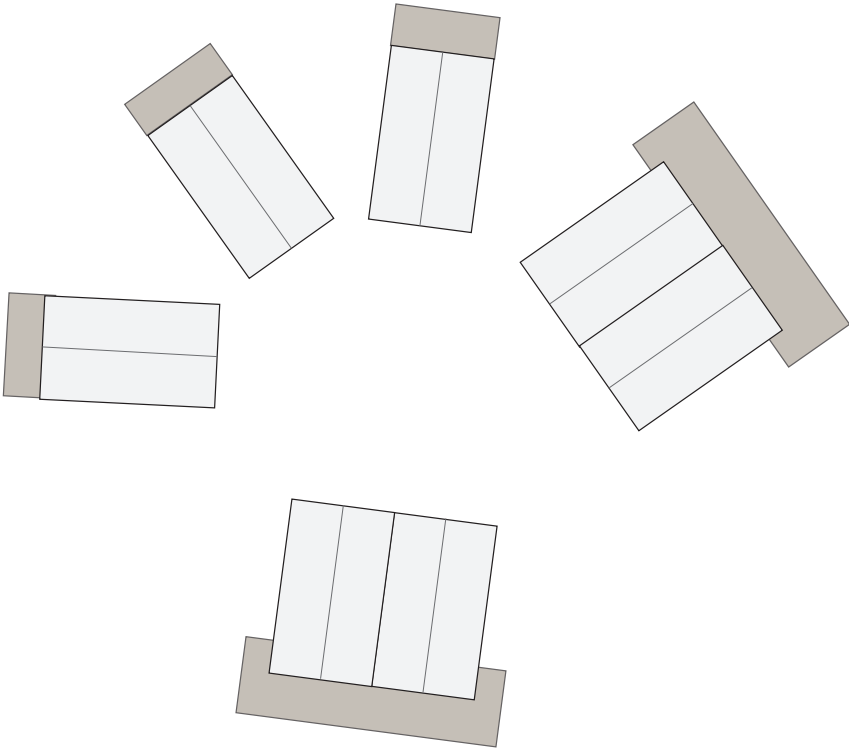
Buildings



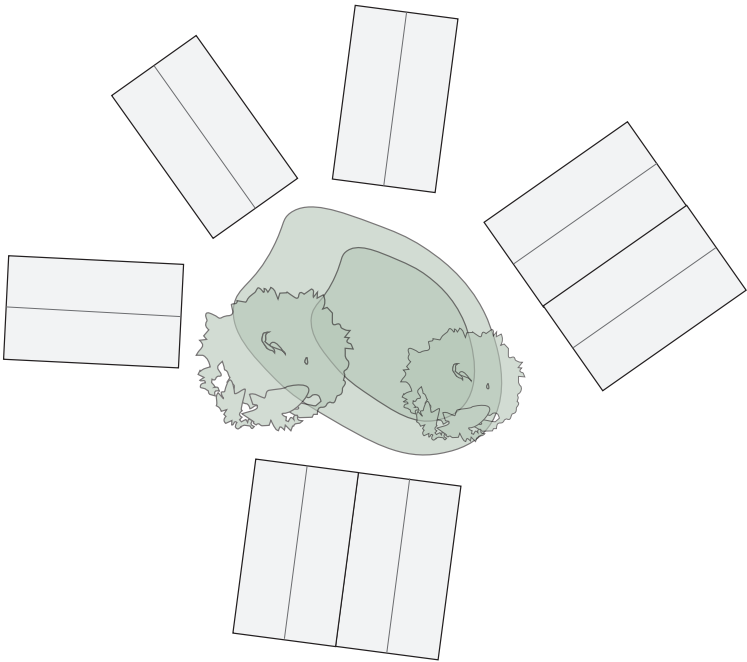
Typologies



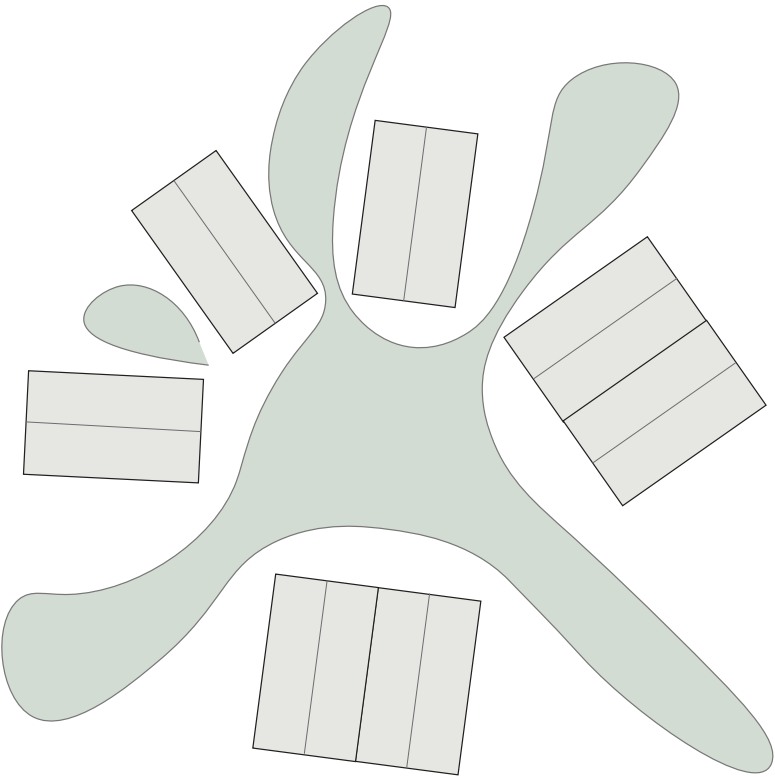
Entrances



Terraces

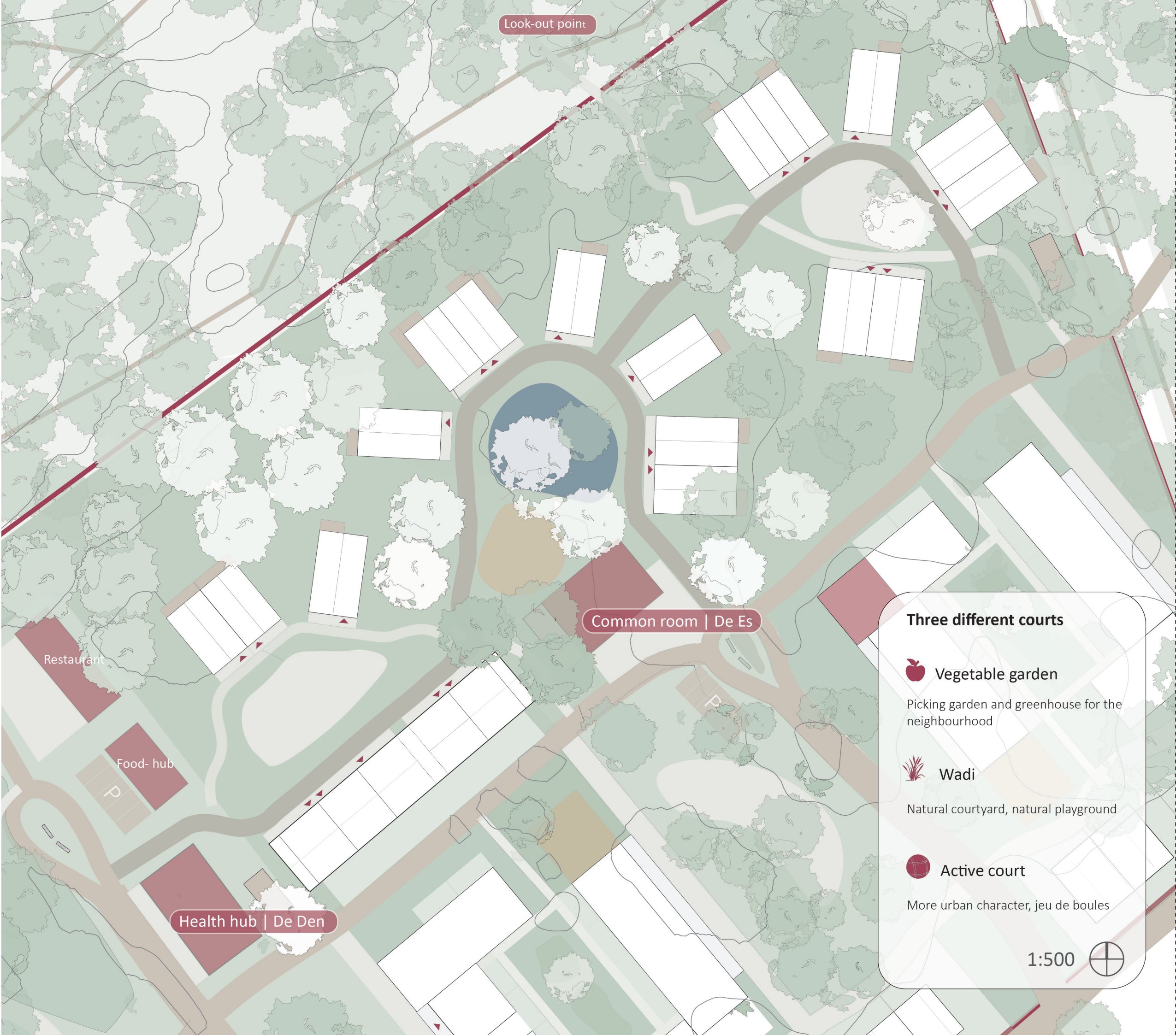


Different courts

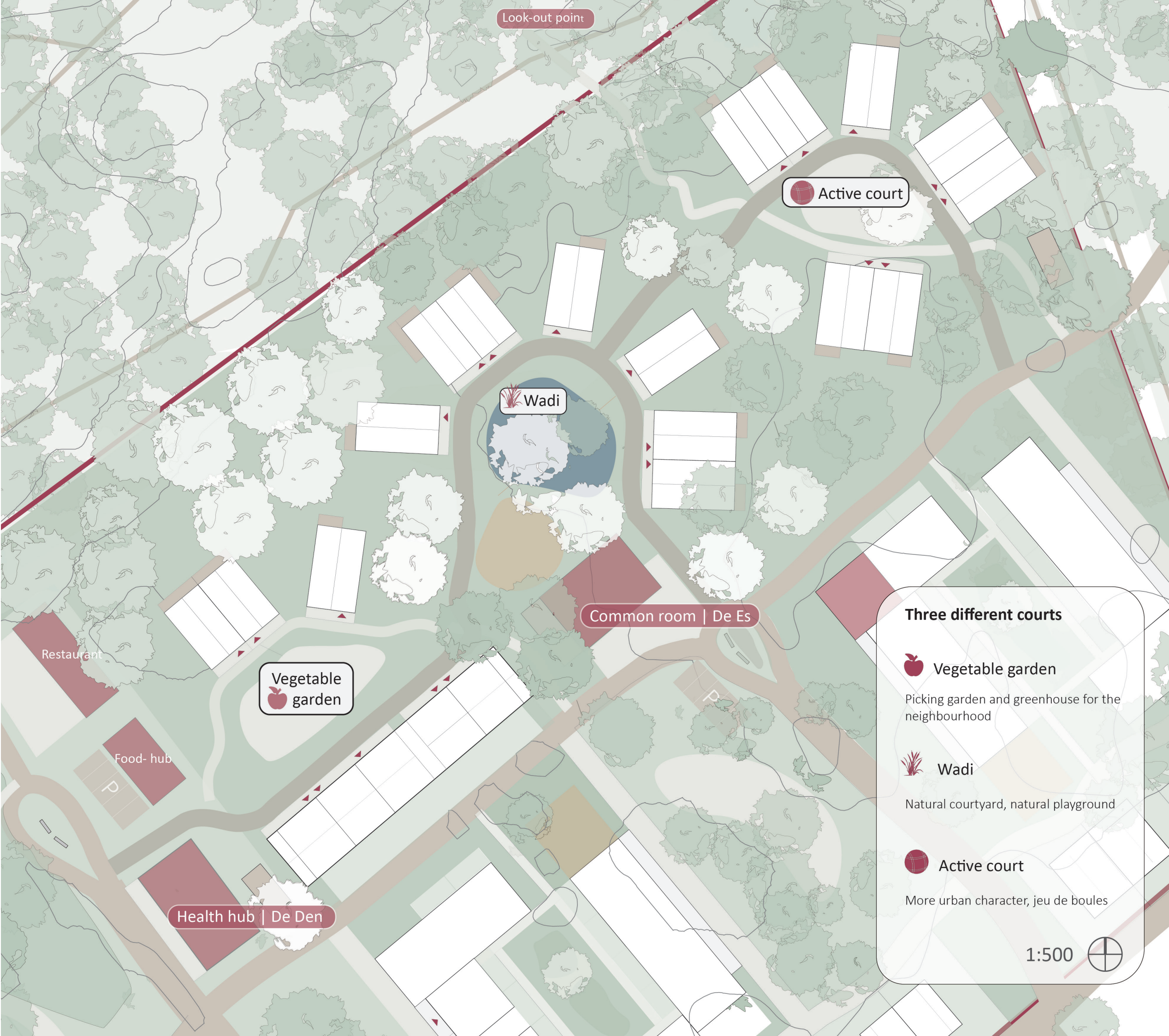


Greenery flows

SITE PLAN

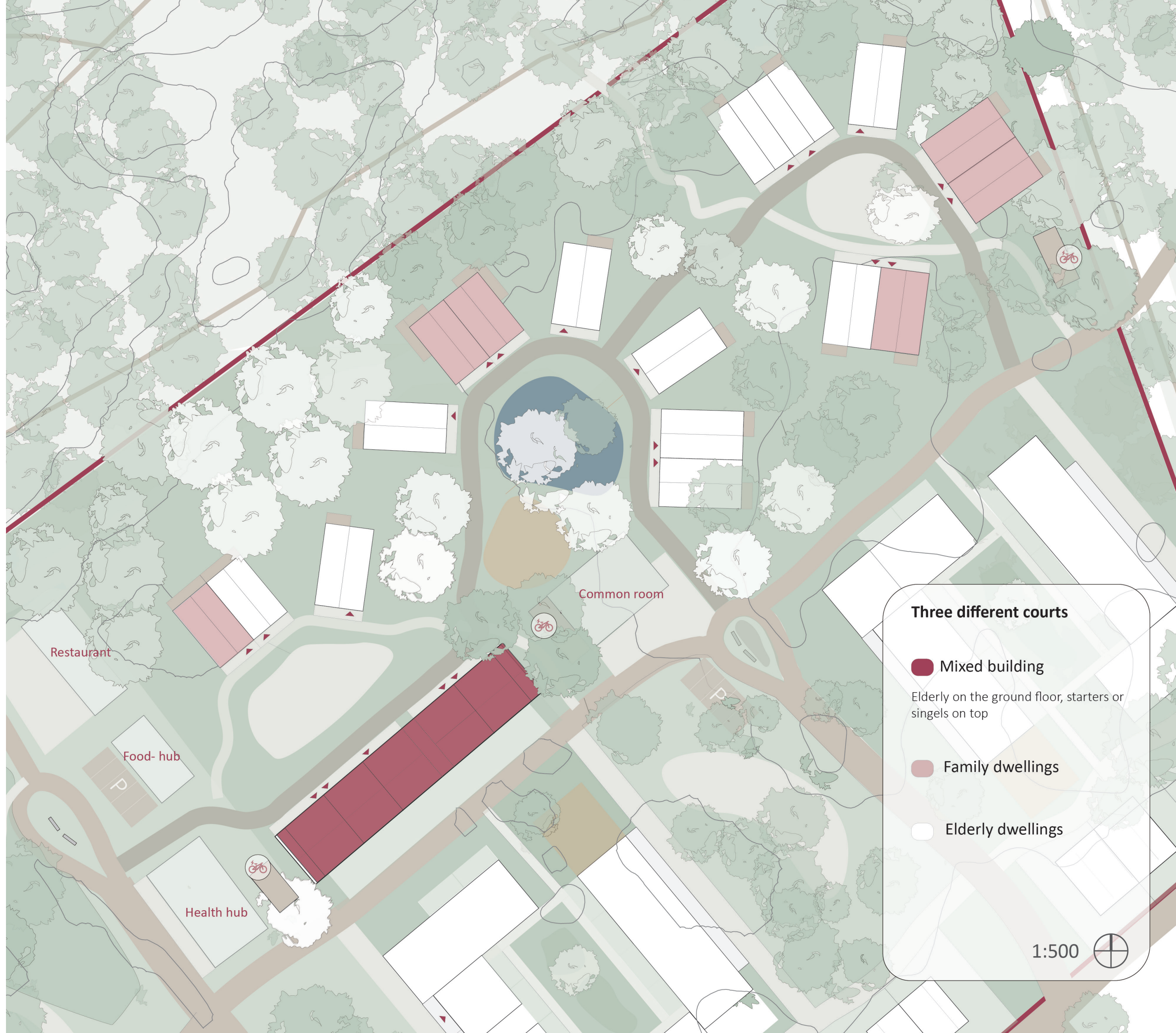


SITE PLAN



SITE PLAN

Dwelling types

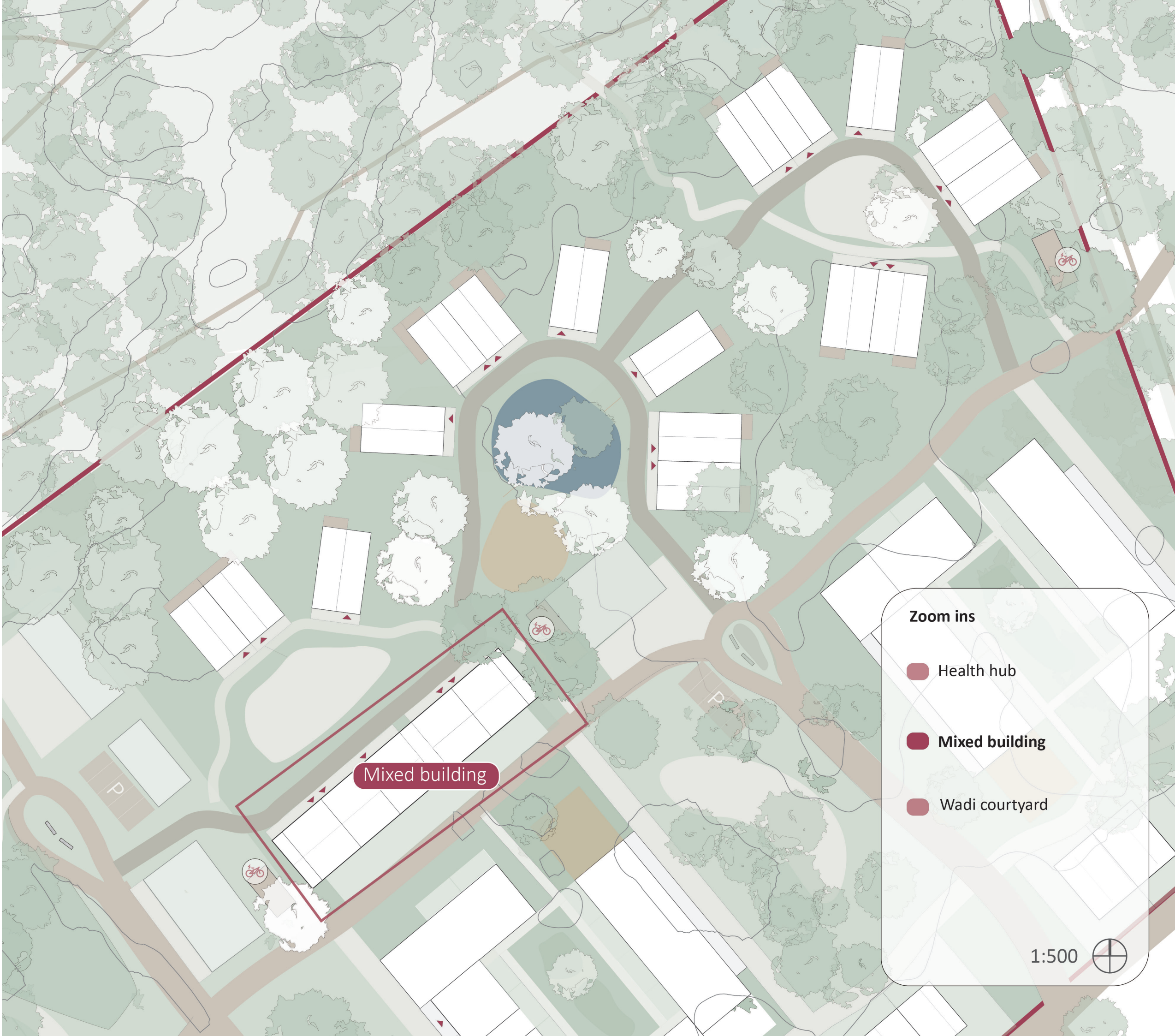




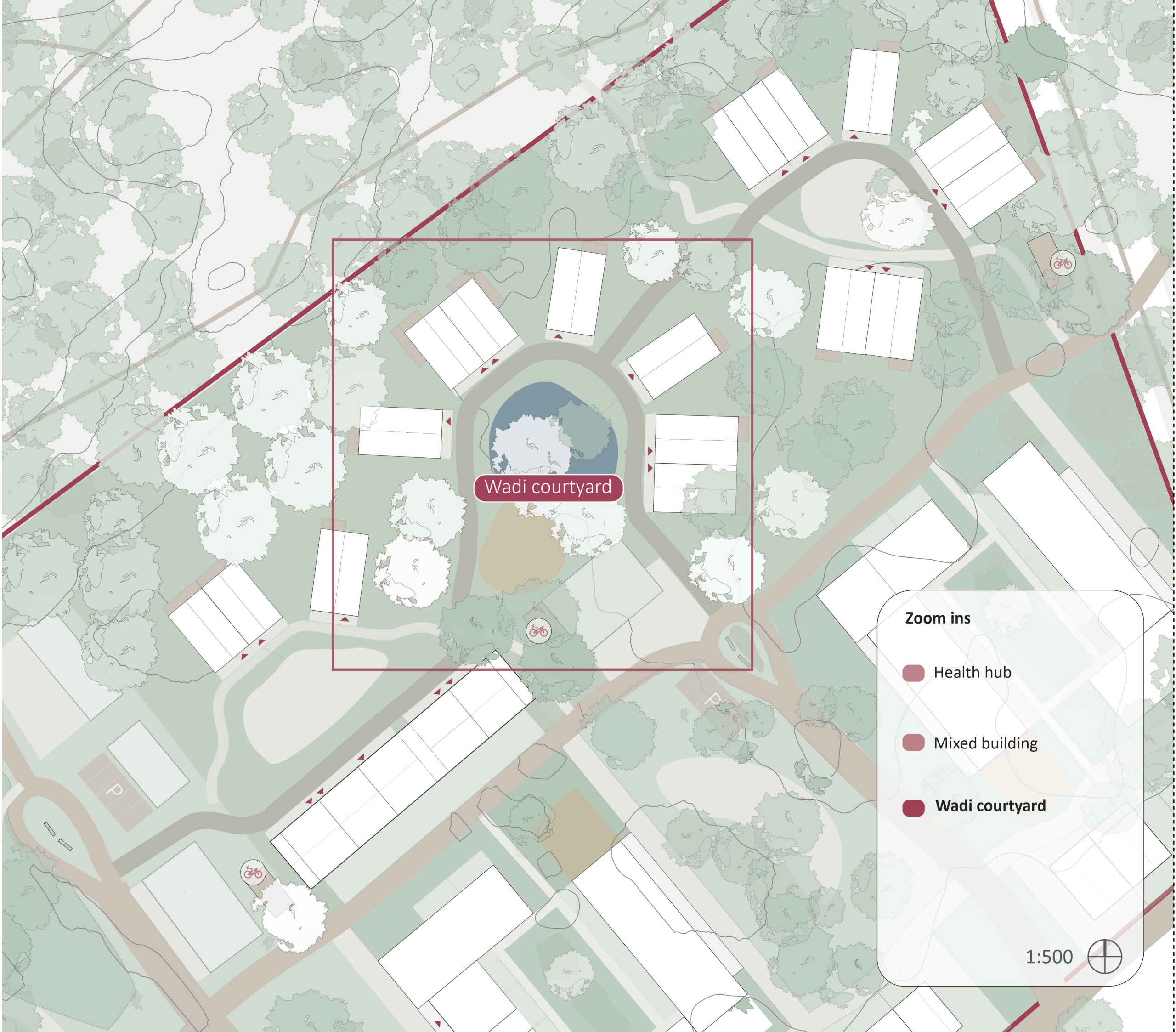
SITE PLAN
Health hub



SITE PLAN
Mixed building



SITE PLAN
Wadi courtyard



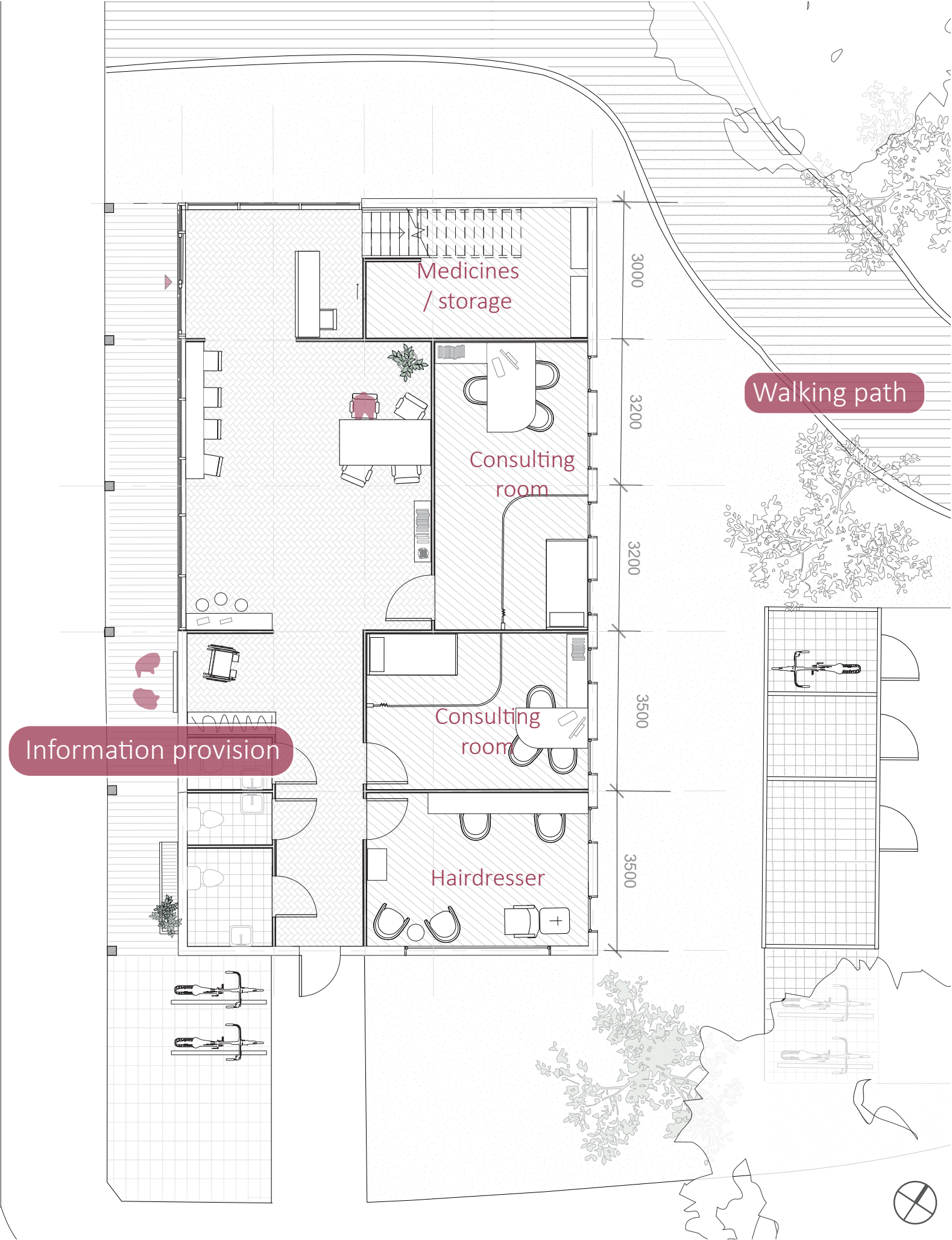
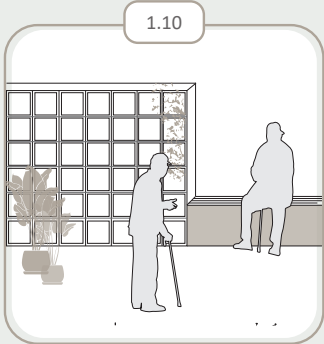
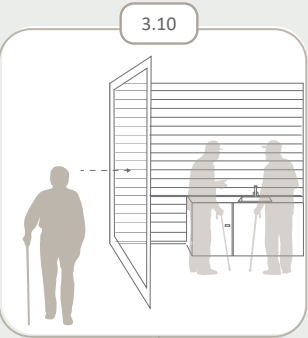
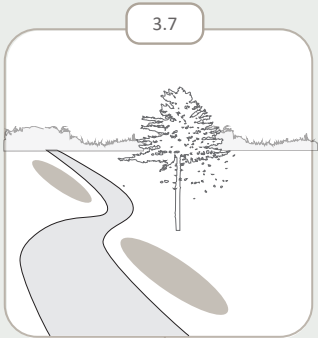
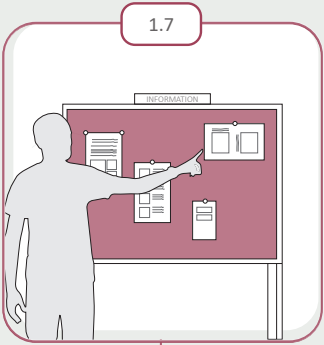


HEALTH HUB

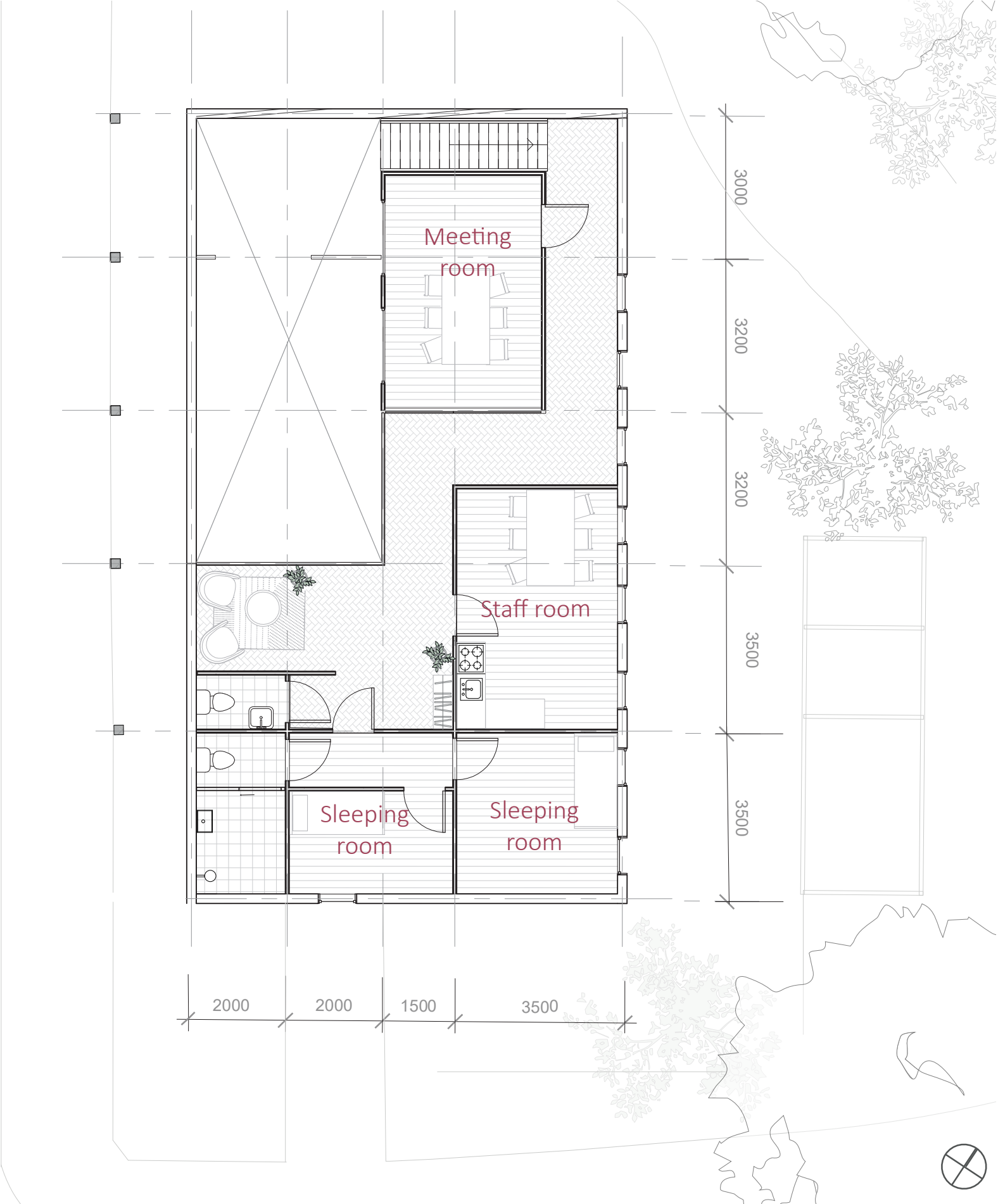
SITE PLAN
Care hub



HEALTH HUB
Ground floor
1:100

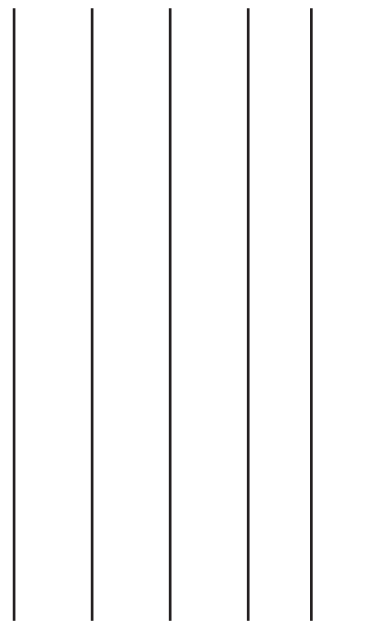


HEALTH HUB
First floor
1:100

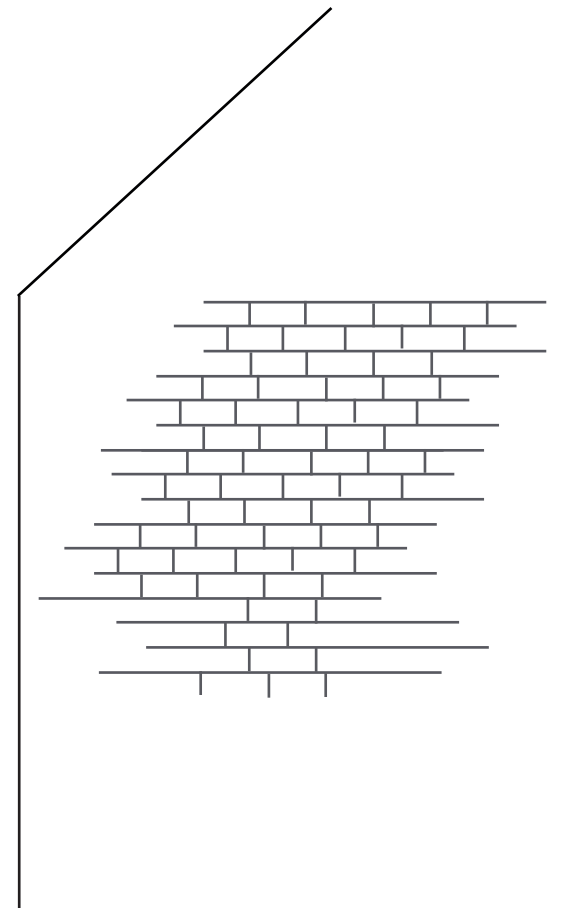
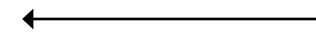
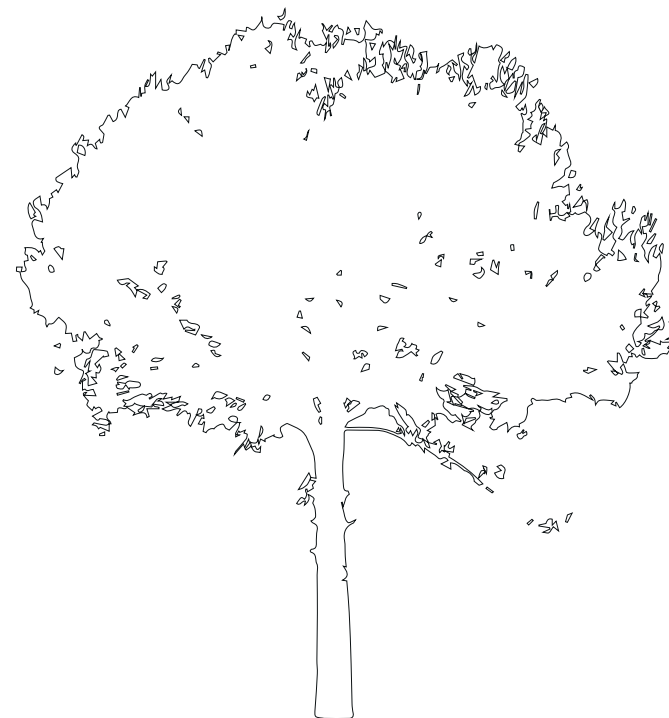


MATERIALS

Concept



Vertical articulation



Connection between forest and neighbourhood

MATERIALS



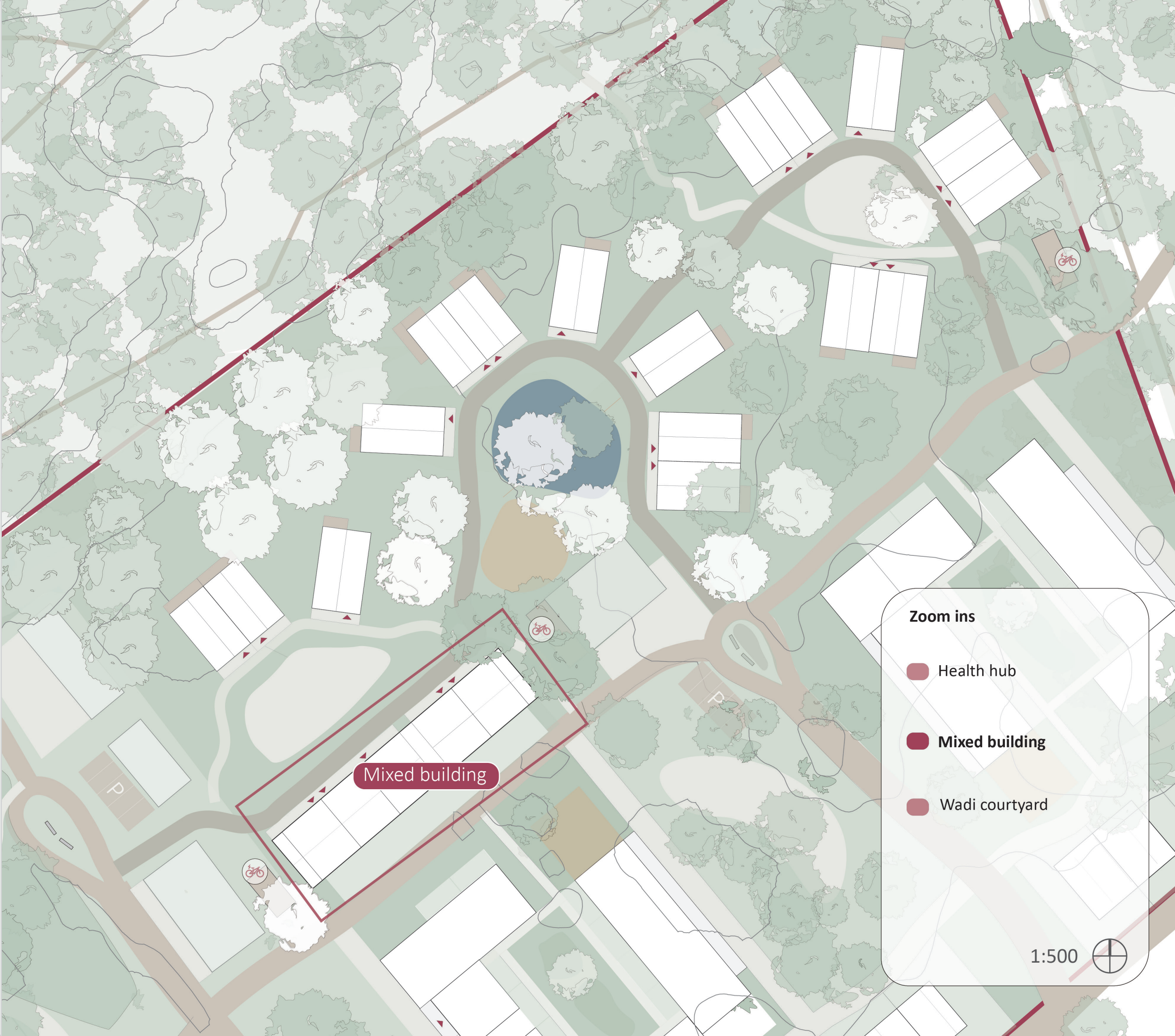
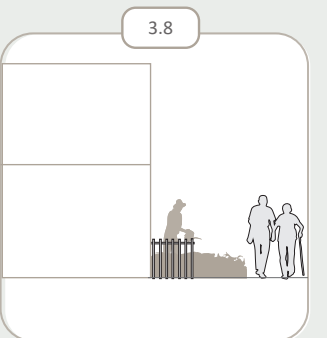
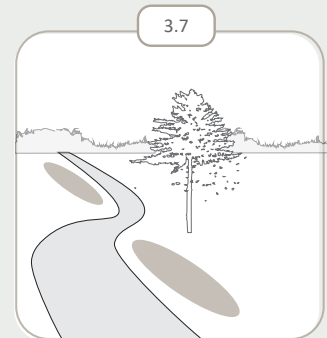
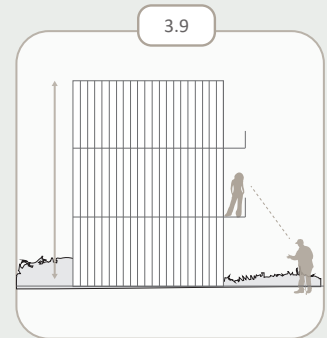
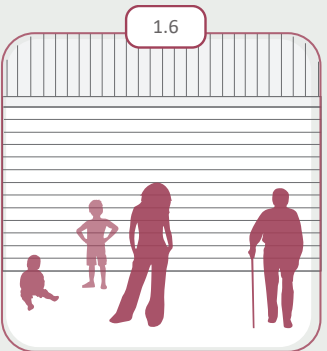
FACADE
Health hub
1:100





MIXED BUILDING

SITE PLAN



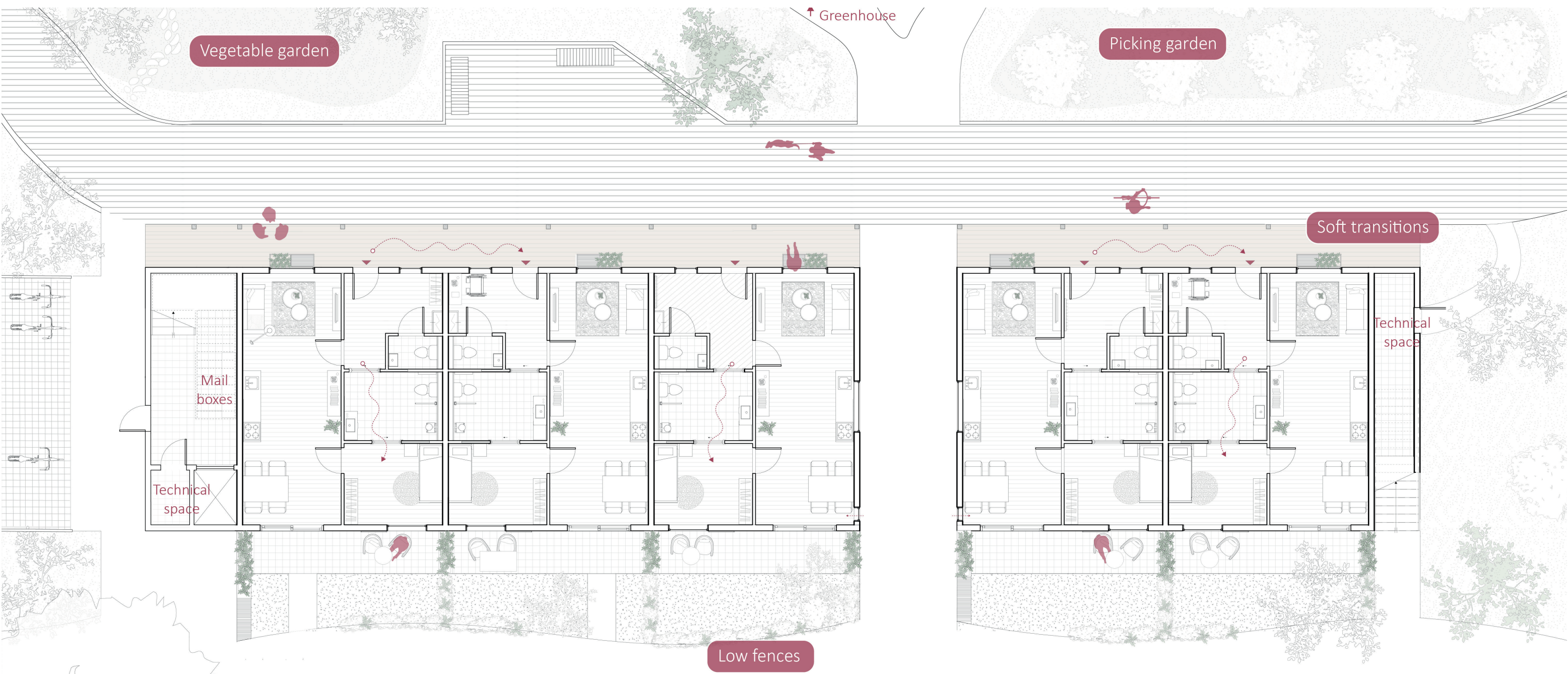
Zoom ins

- Health hub
- Mixed building
- Wadi courtyard

1:500



GROUND FLOOR
Mixed building
1:100 reduced in presentation



FIRST FLOOR

Mixed building

1:100 reduced in presentation



MATERIALS

Neighbourhood side

North facade

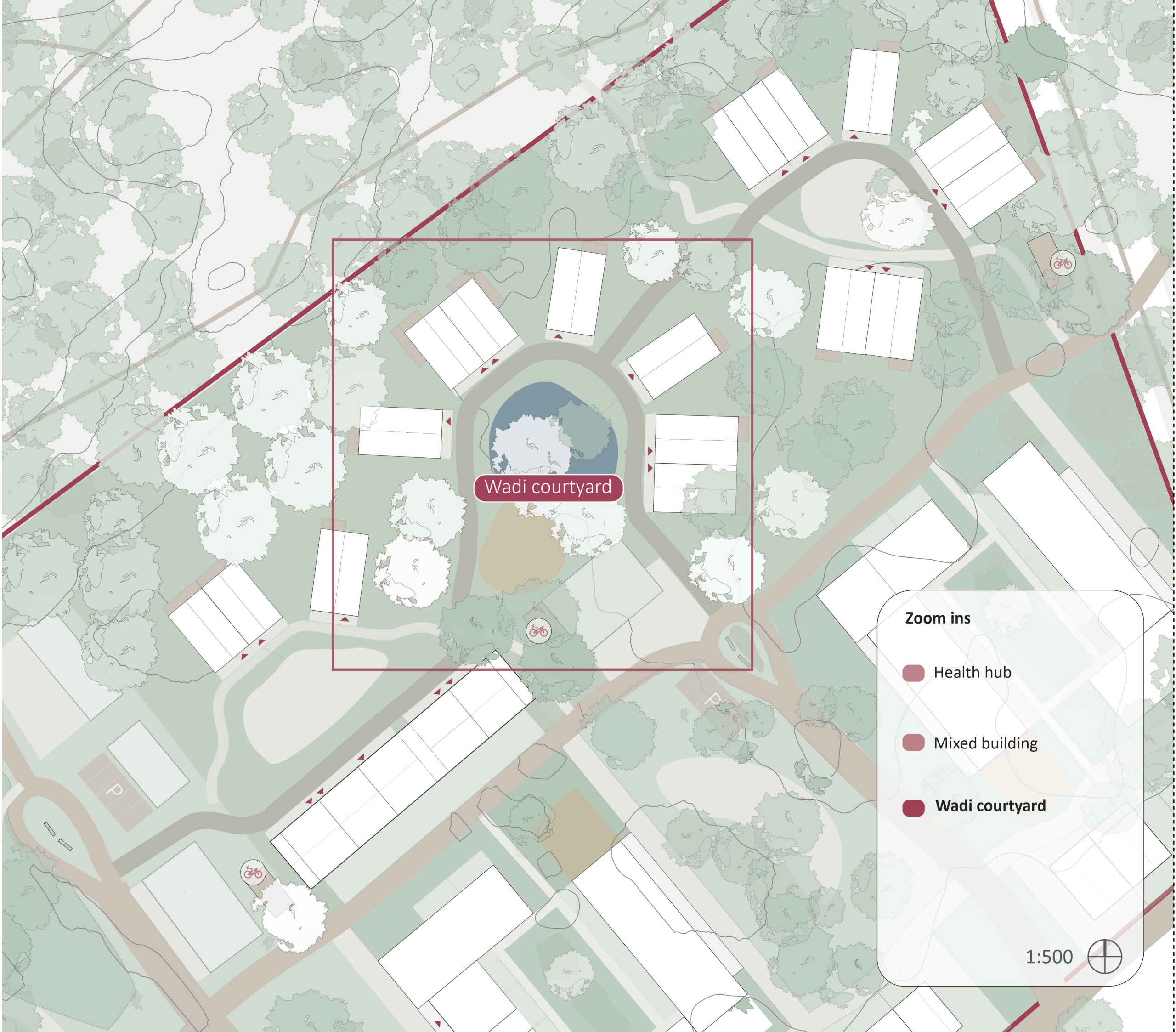


South facade





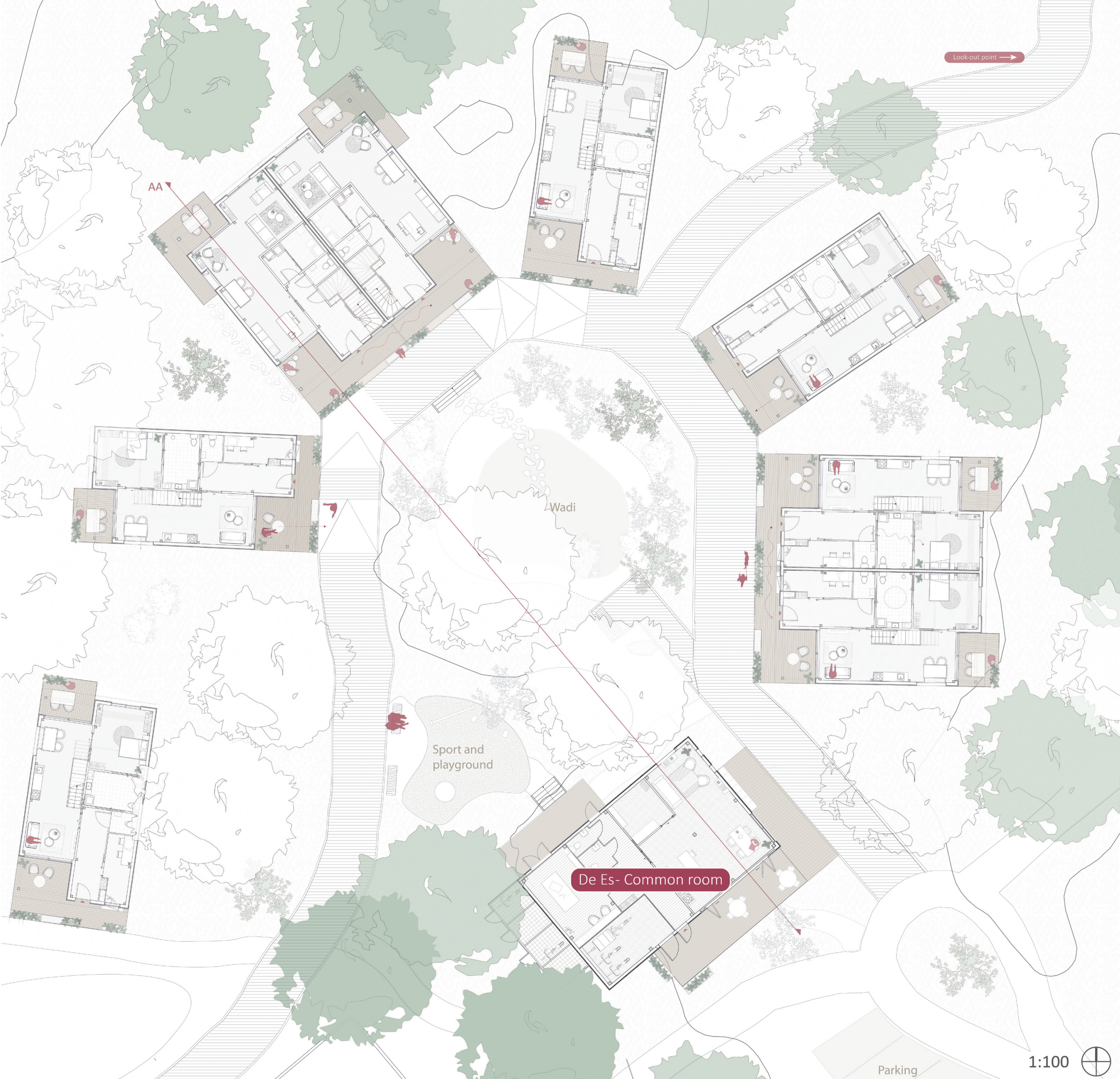
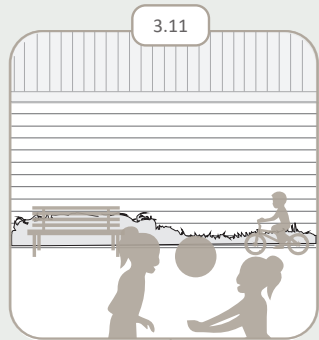
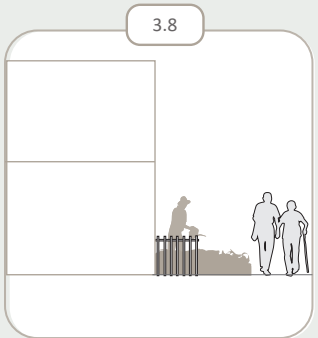
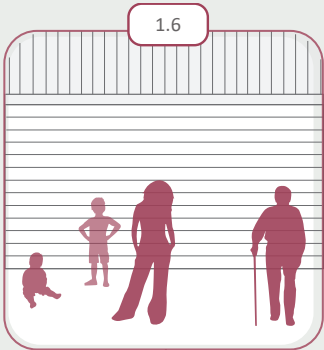
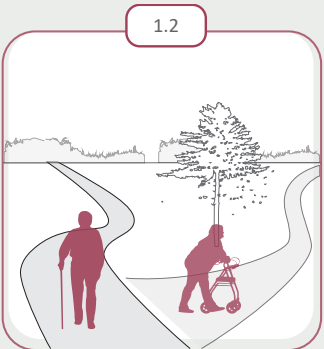
WADI - COURTYARD



PLAN COURT 2

Site plan

1:100 reduced in presentation



WADI COURTYARD
Connected dwellings



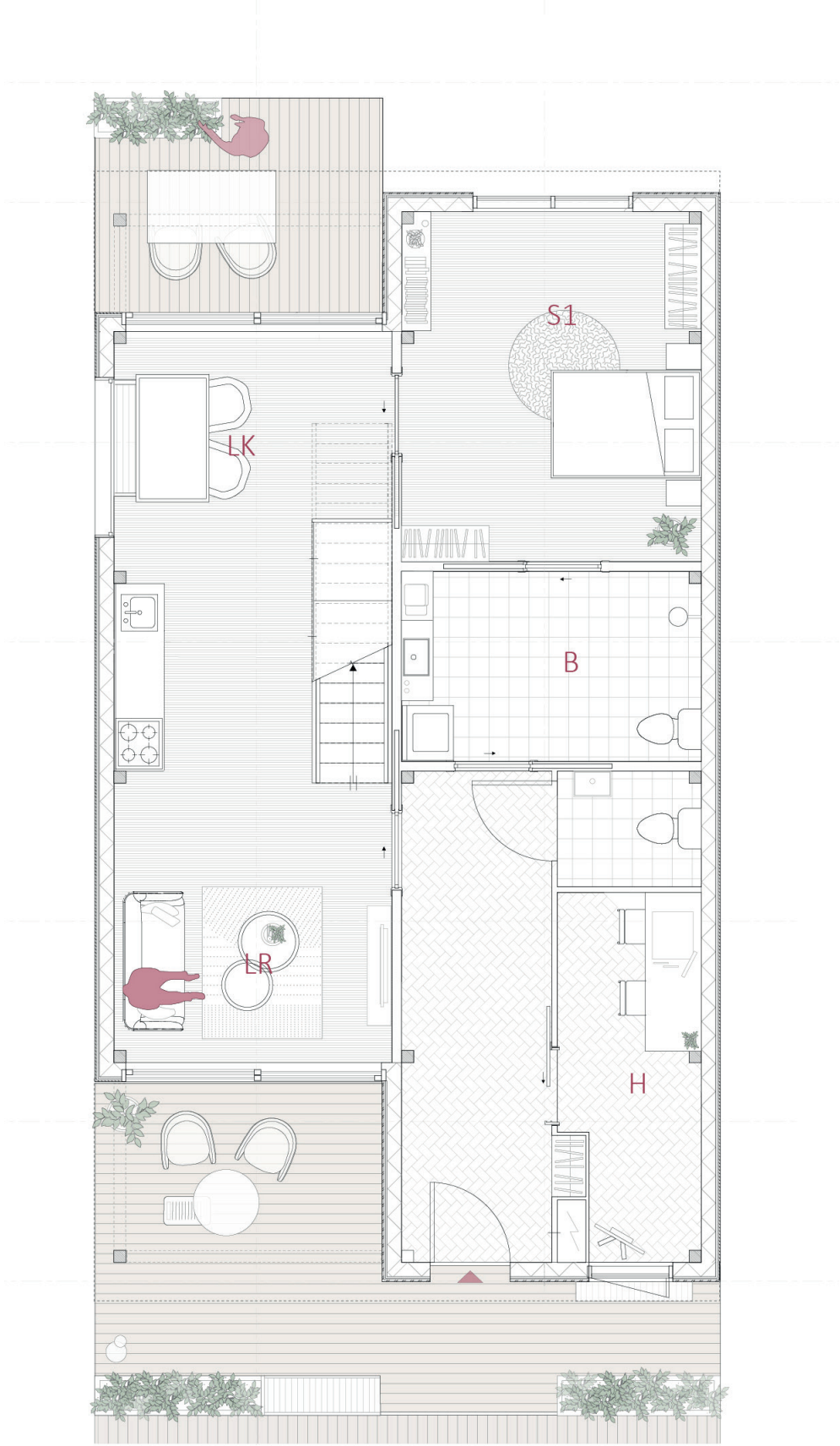
WADI COURTYARD
Connected dwellings



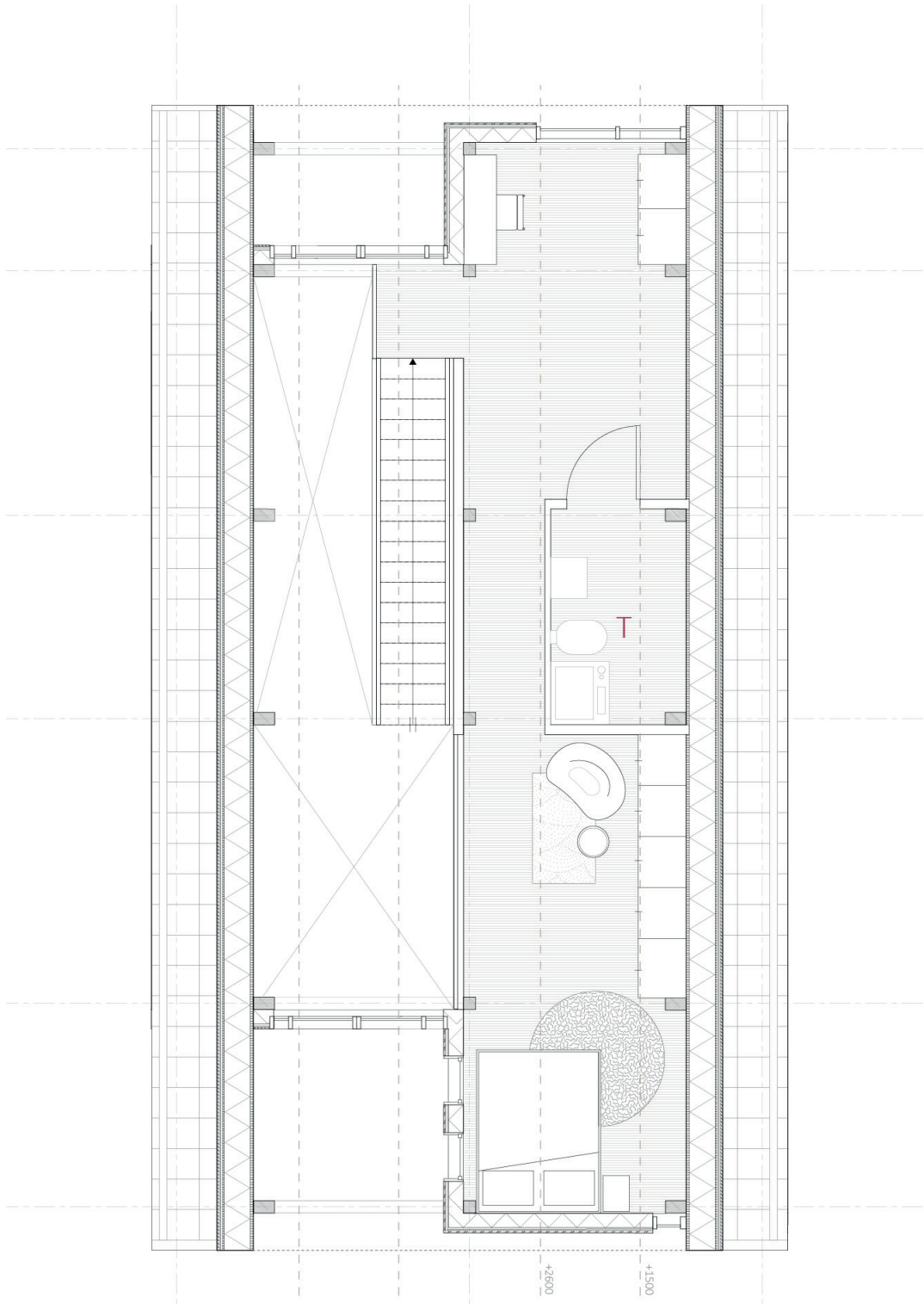
DWELLING TYPES

Elderly

1:50 reduced in presentation



Ground floor

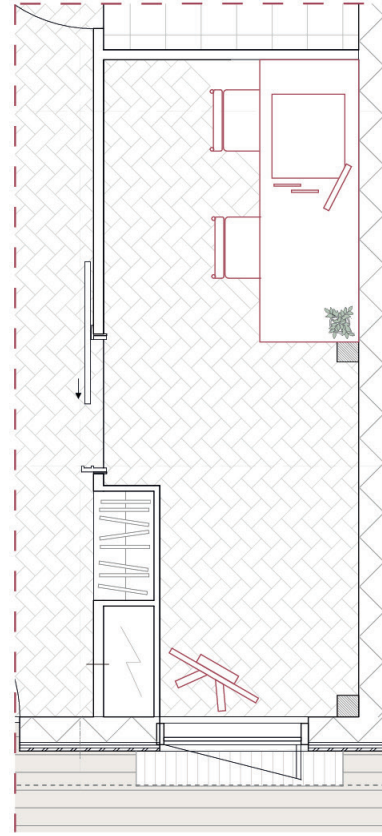
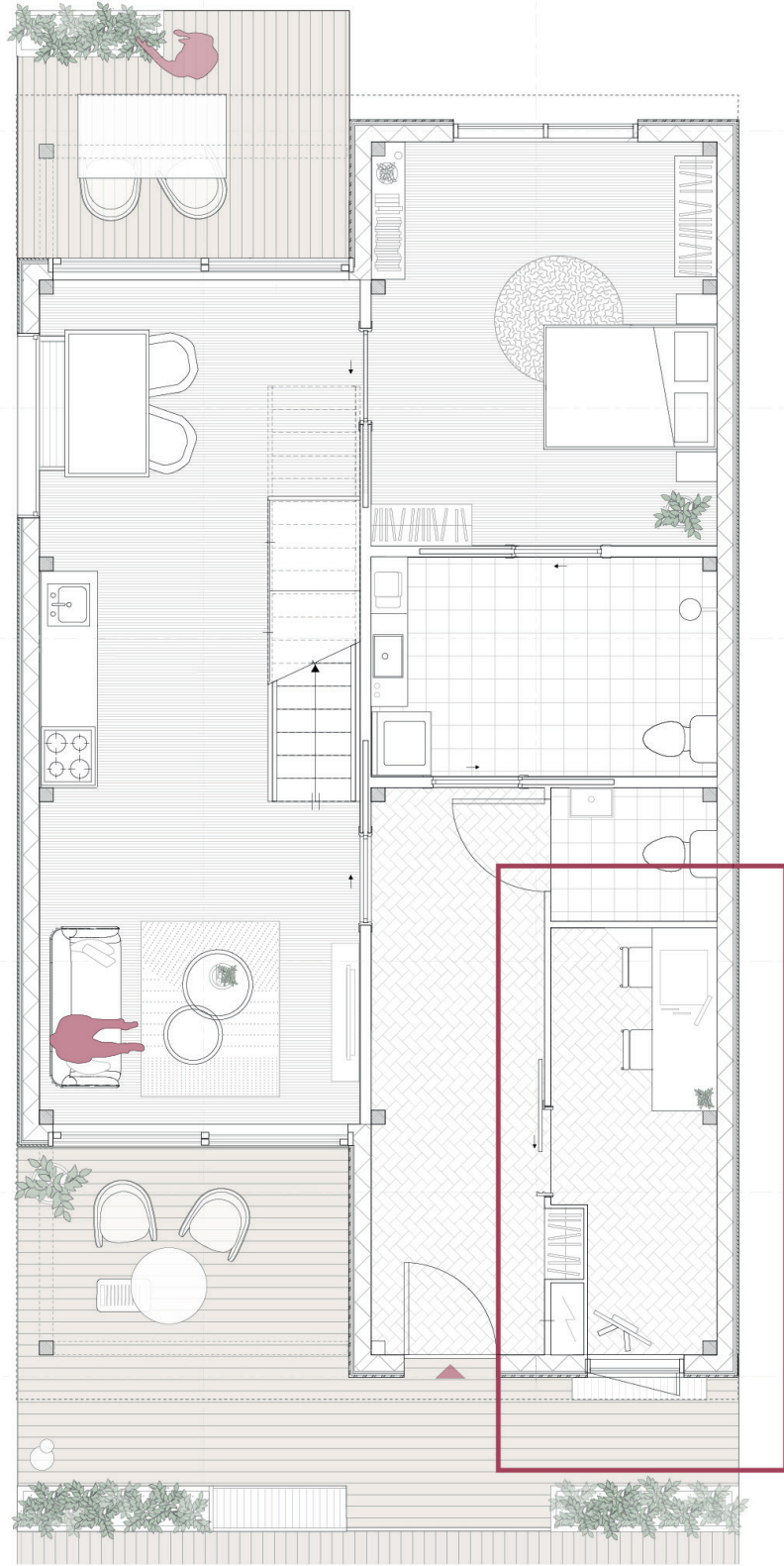


First floor

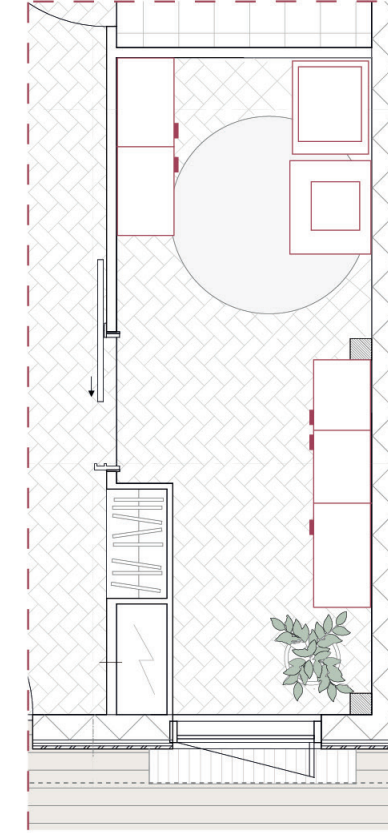
DWELLING TYPES

Elderly multifunctional space

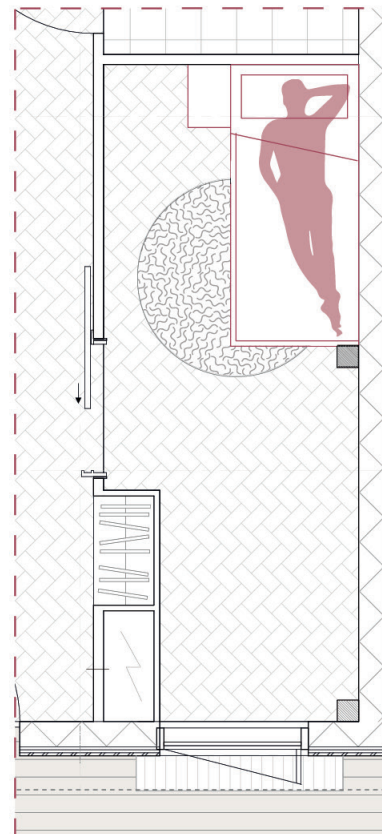
1:50 reduced in presentation



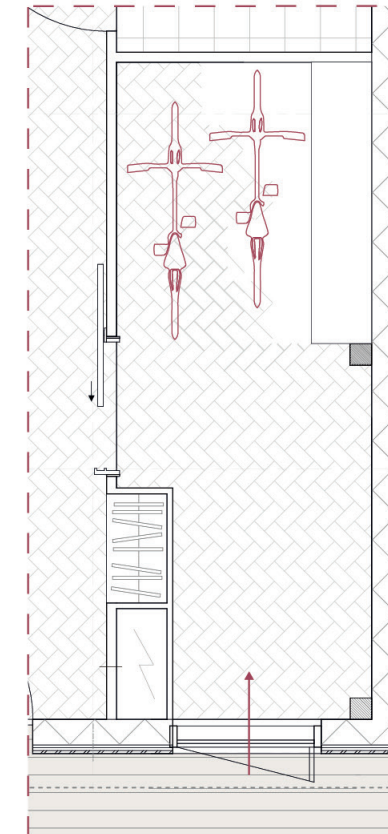
Hobby room



Storage



Bedroom

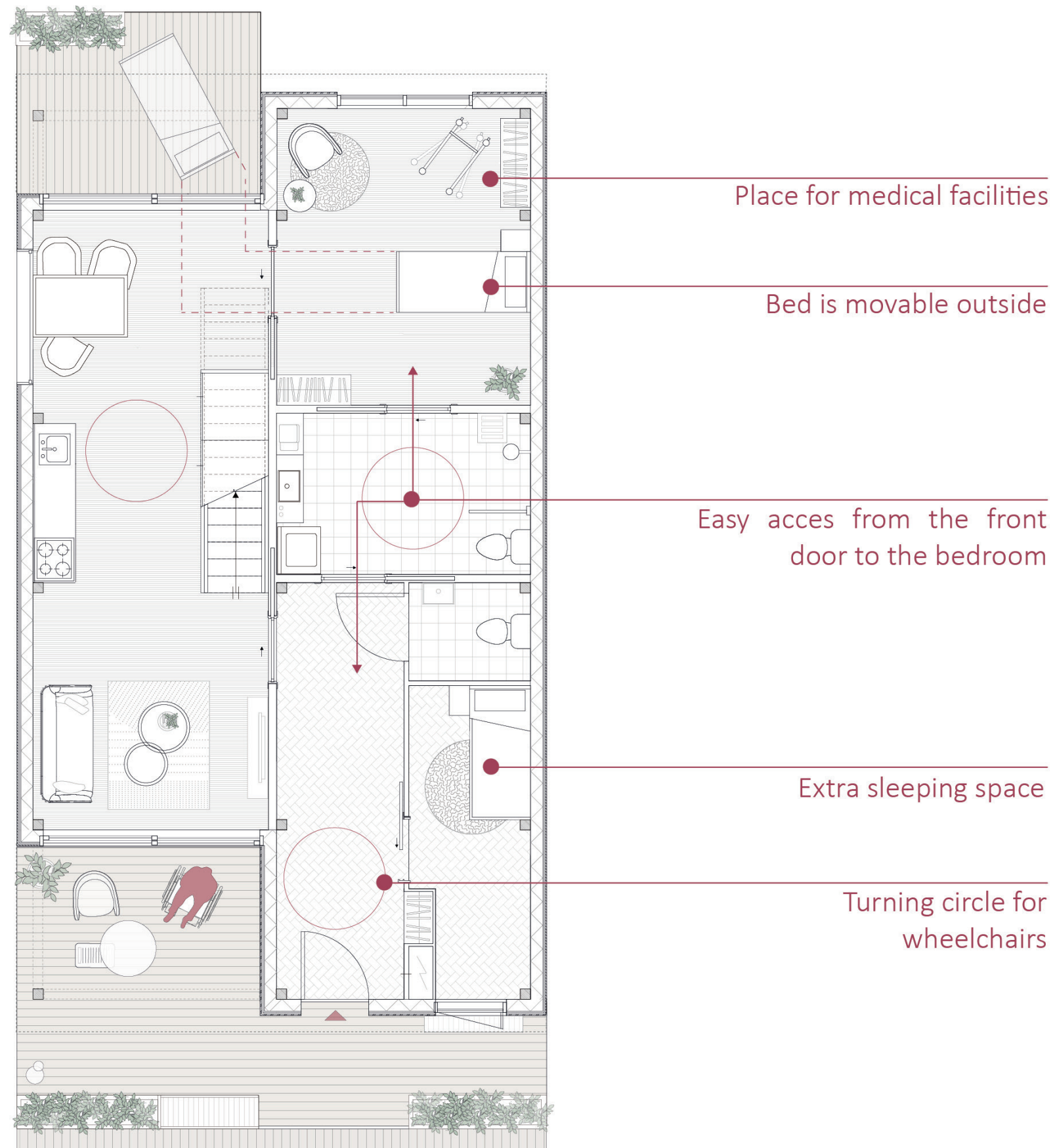


Bike storage

DWELLING TYPES

Elderly in need of care

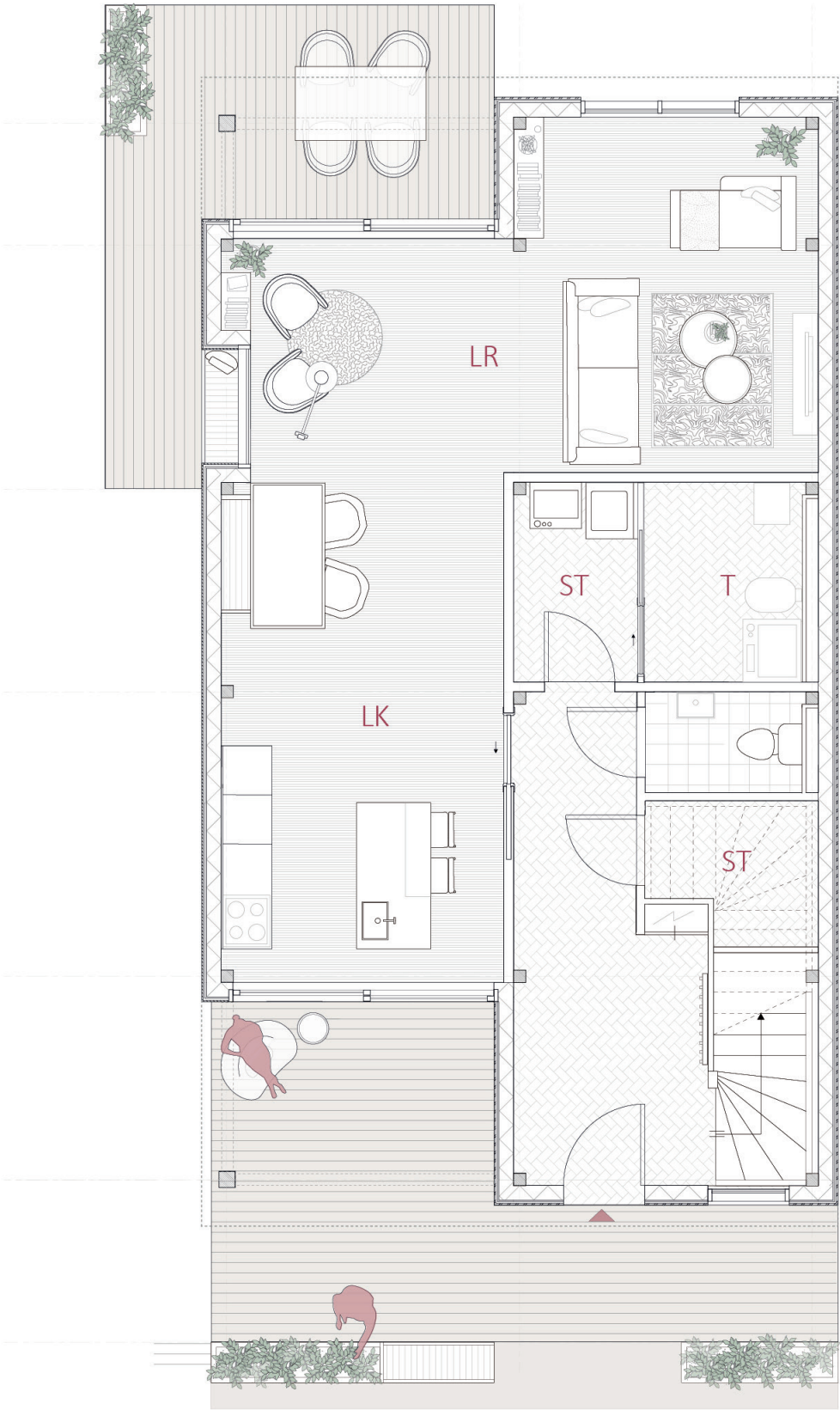
1:50 reduced in presentation



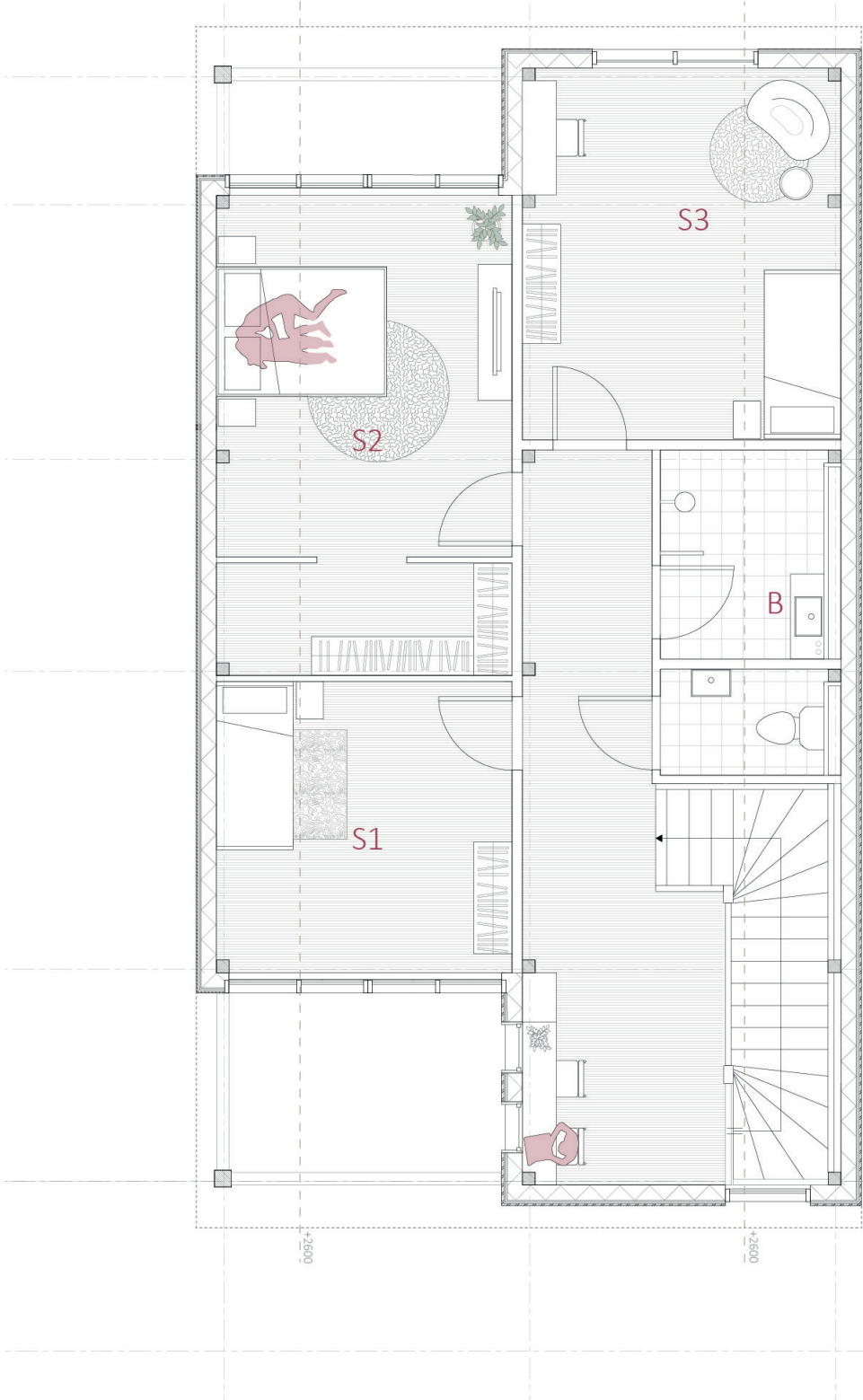
DWELLING TYPES

Families

1:50 reduced in presentation



Ground floor



First floor

SECTION WADI COURT
Section AA
1:200



SECTION WADI COURT
Section AA
1:100



SECTION WADI COURT
Section AA
1:100



COMMON ROOM
Multifunctional use
1:100





Front facade

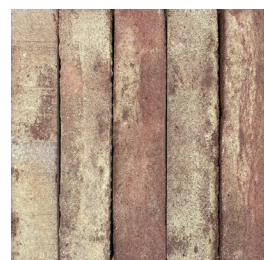


Side facade

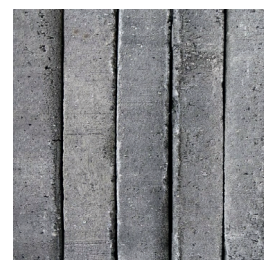
FACADES
Elderly different strips
1:100



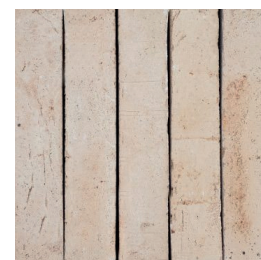
Pistachio



Radish



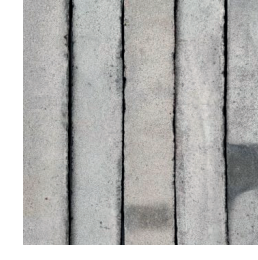
Mushroom



Almond



Mint



Mush. light

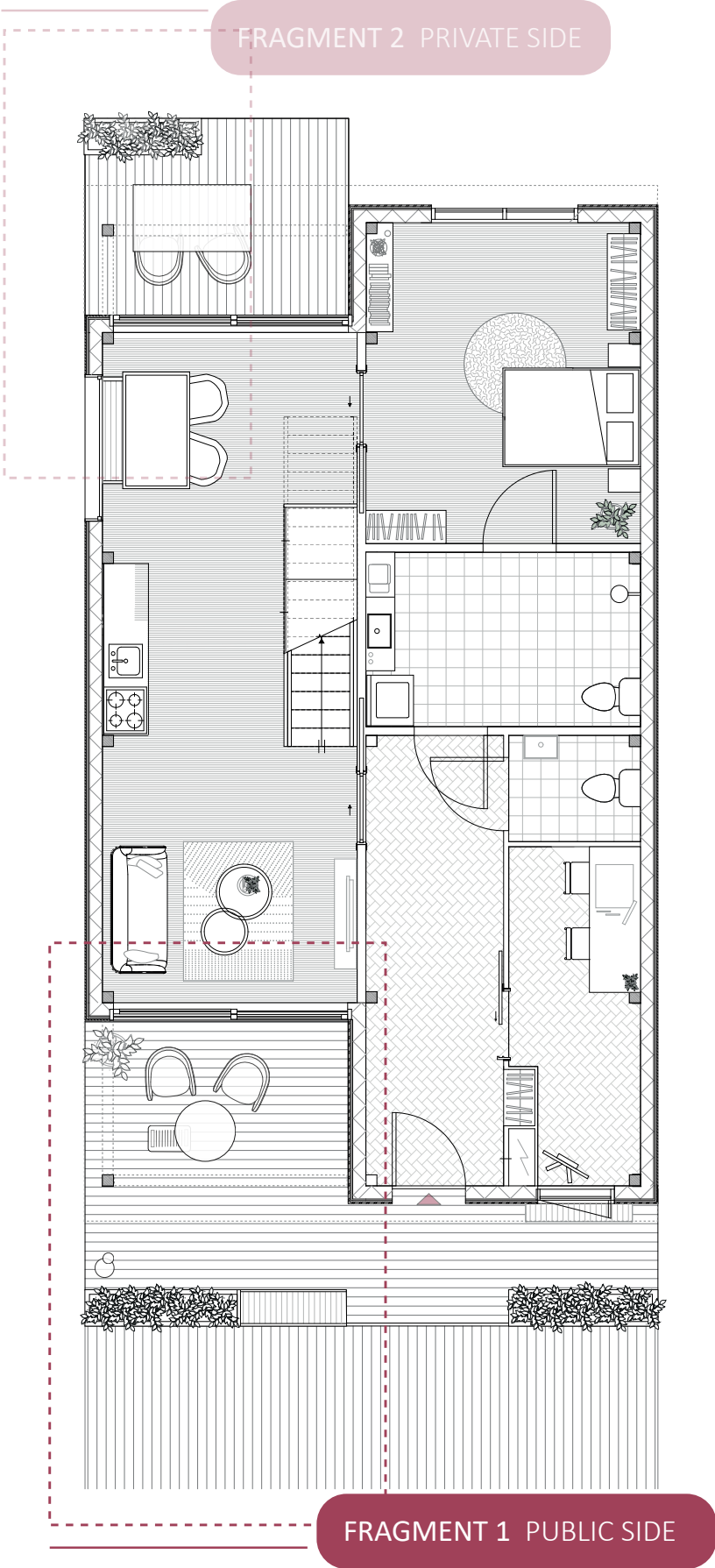


Orange

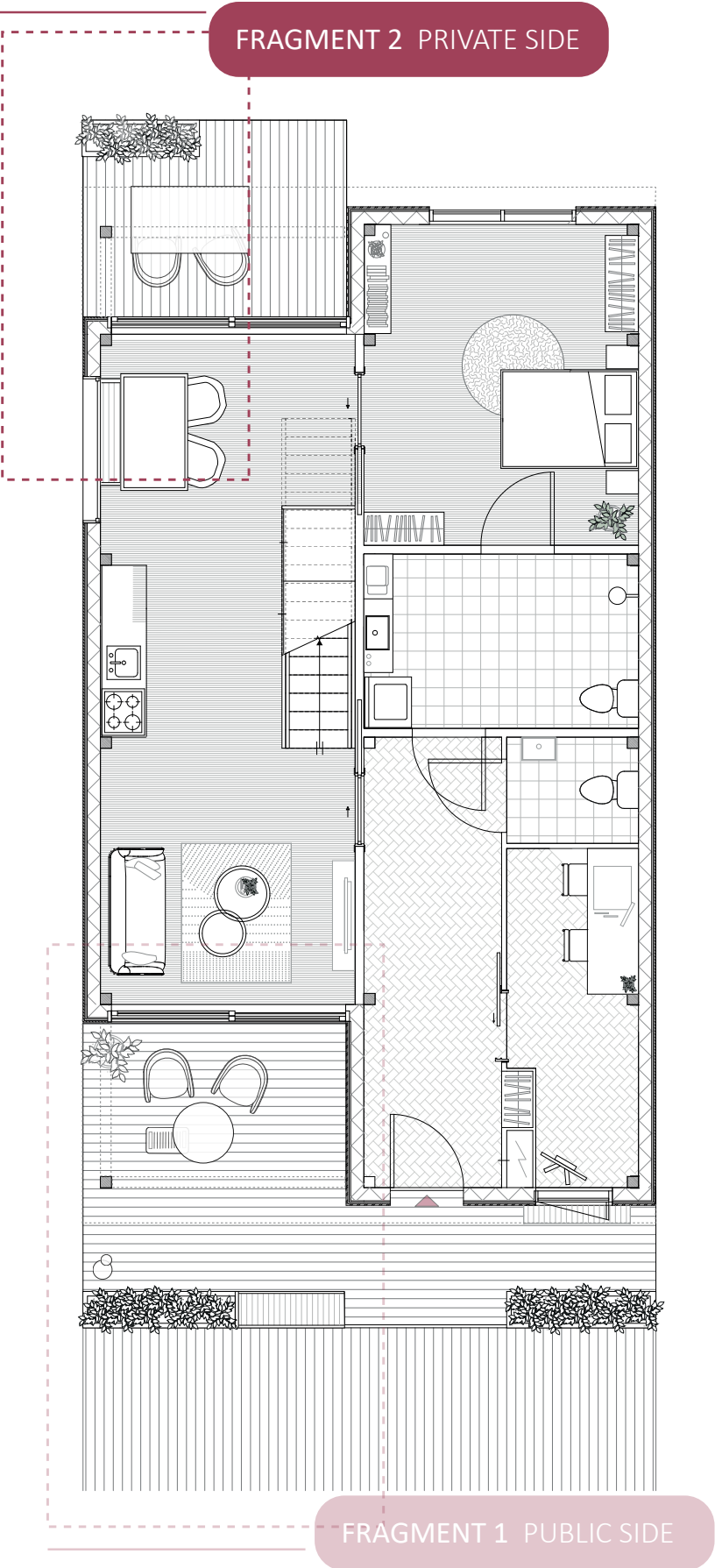
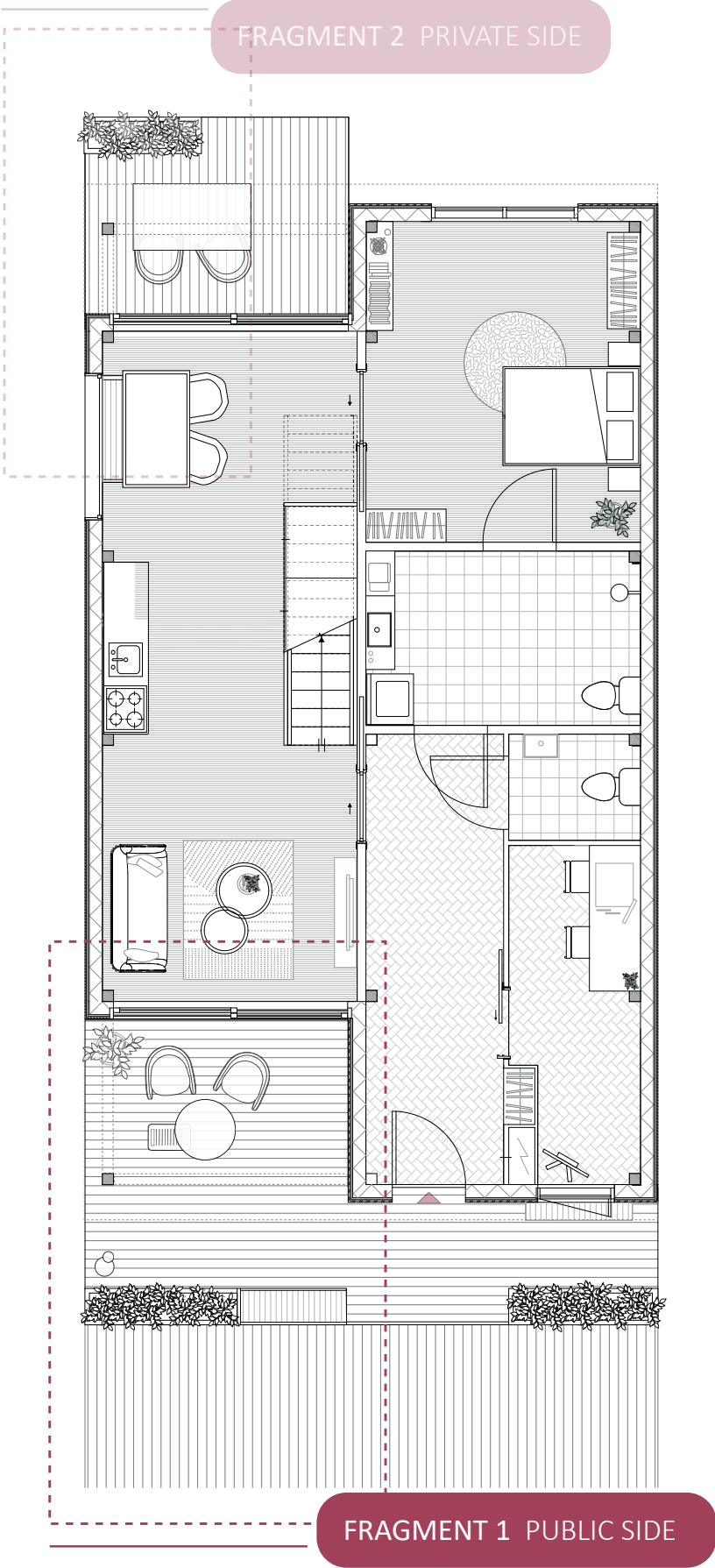
CONSTRUCTION

CONSTRUCTION AND DETAILS

FACADE FRAGMENT
1:20

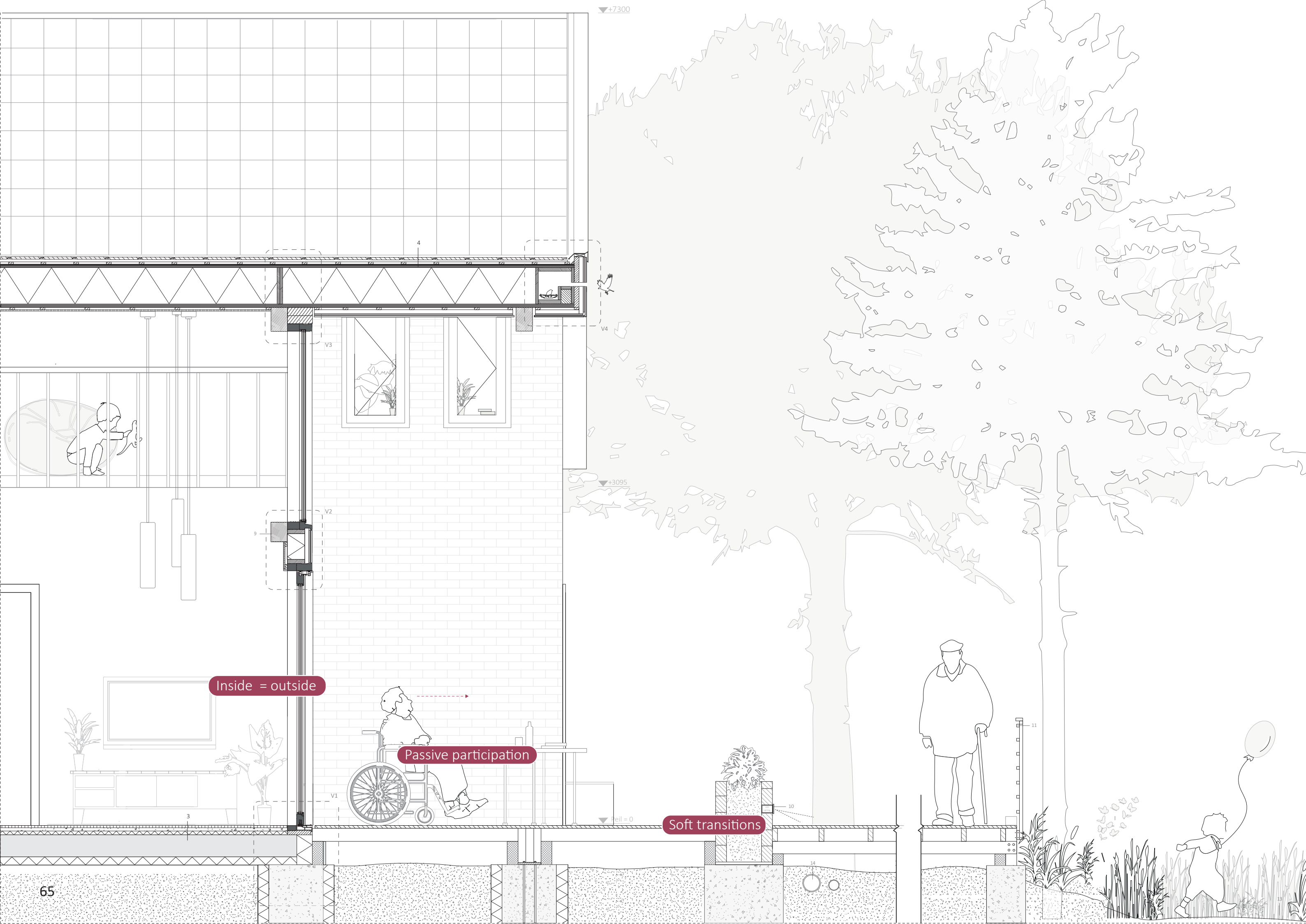


FACADE FRAGMENT
1:20



FACADE FRAGMENT (public)
1:20
reduced in presentation





Inside = outside

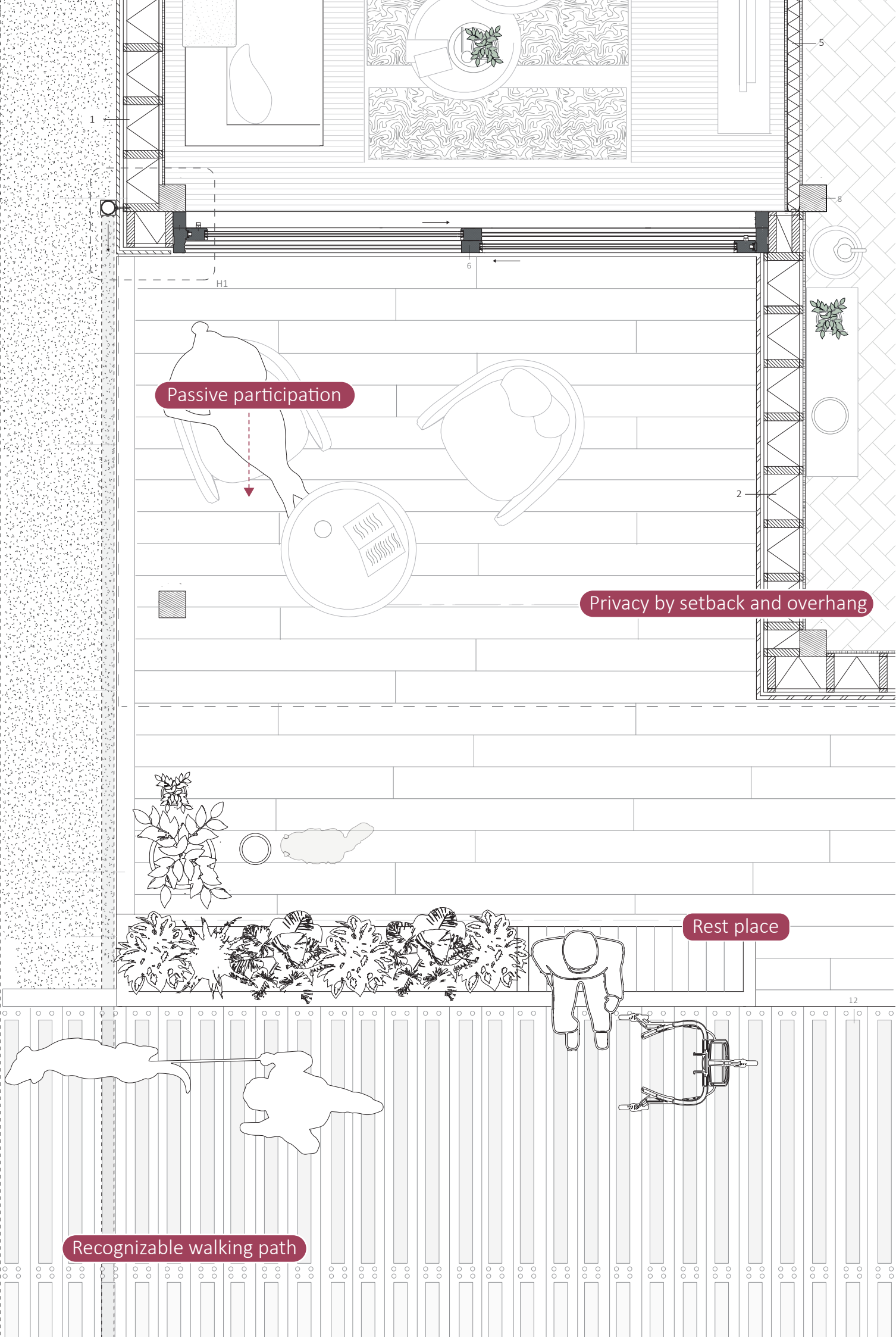
Passive participation

Soft transitions

HORIZONTAL FRAGMENT

1:20

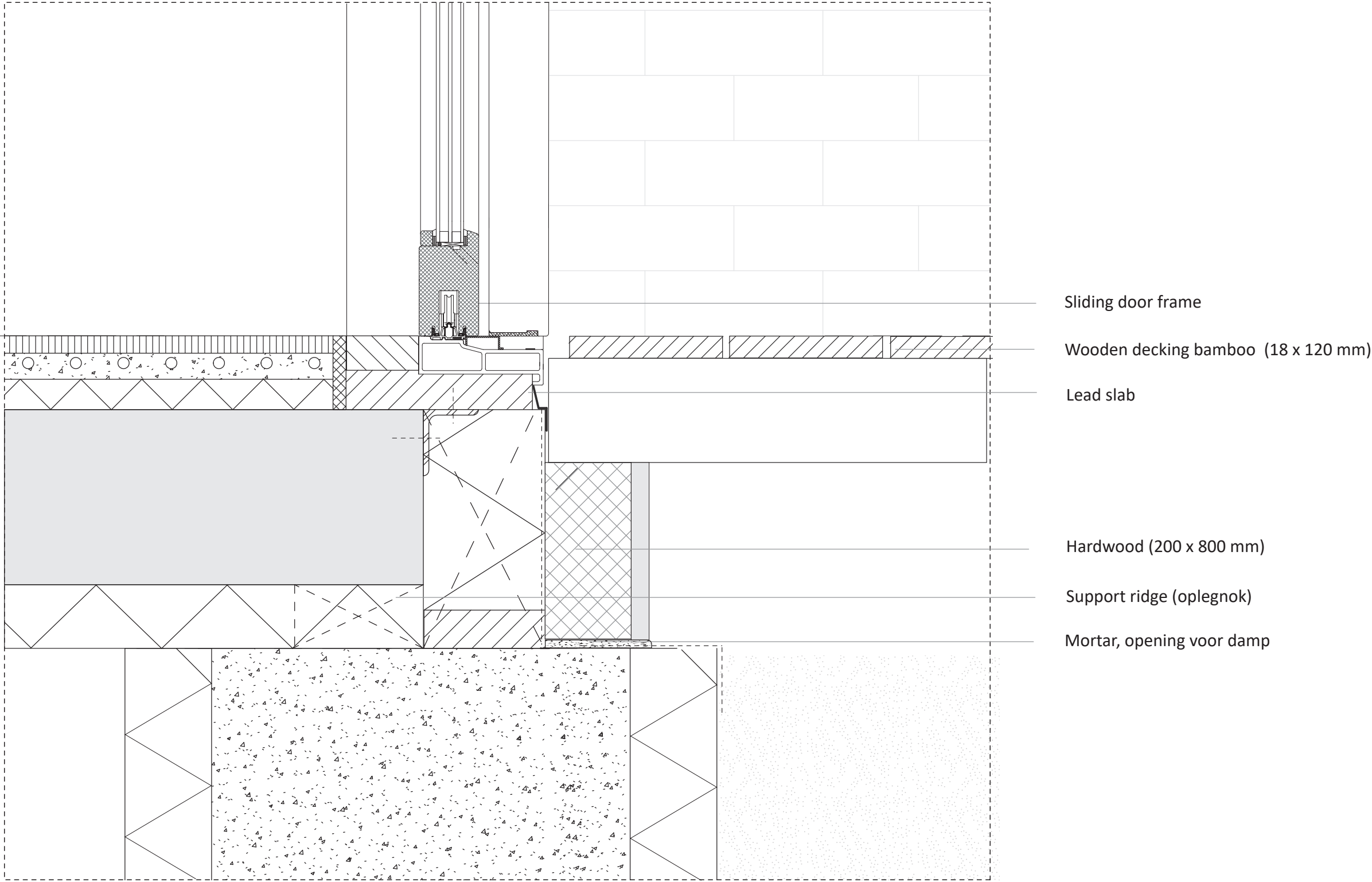
Reduced in presentation



DETAIL 1

Connection foundation

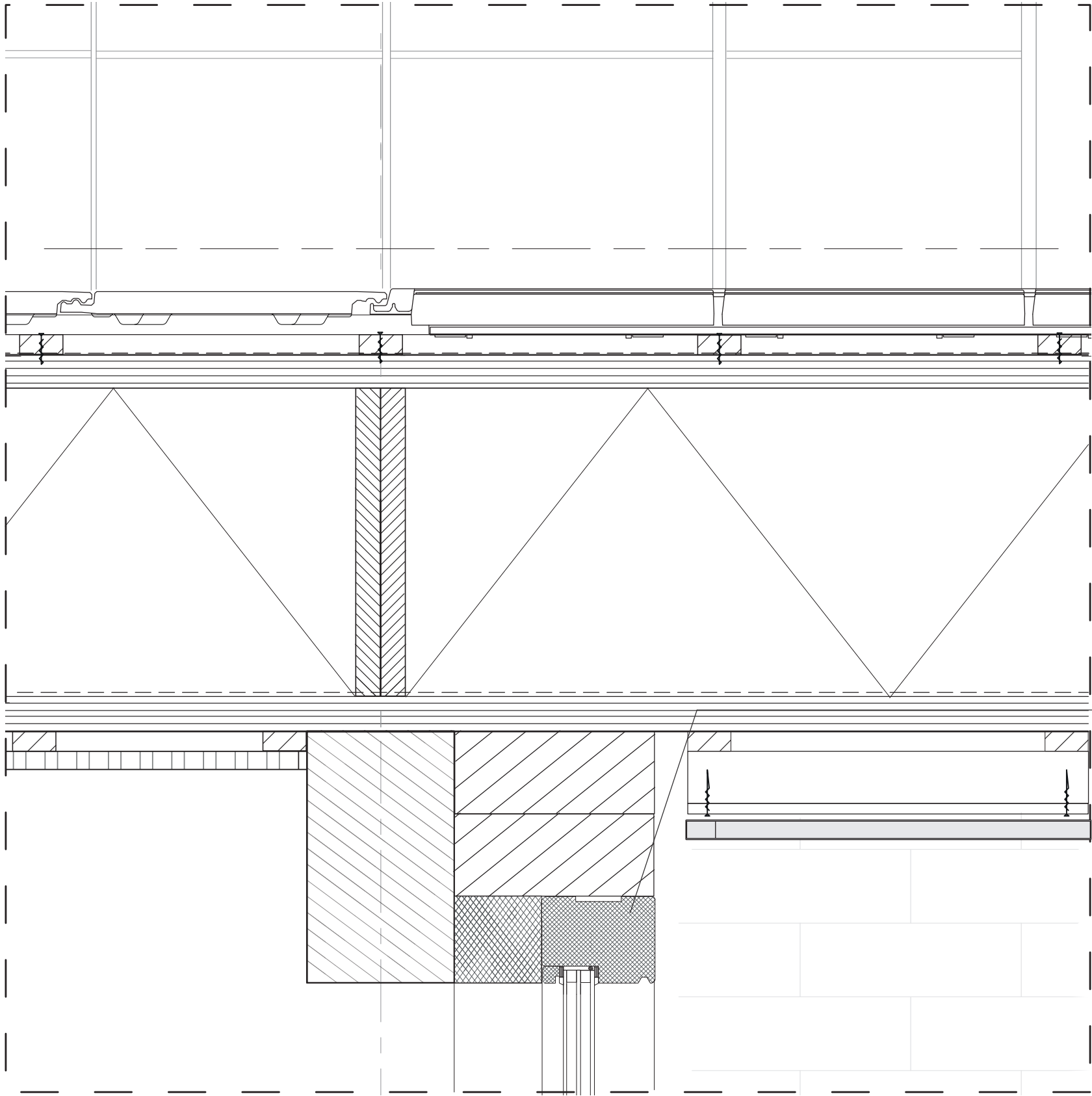
1:5



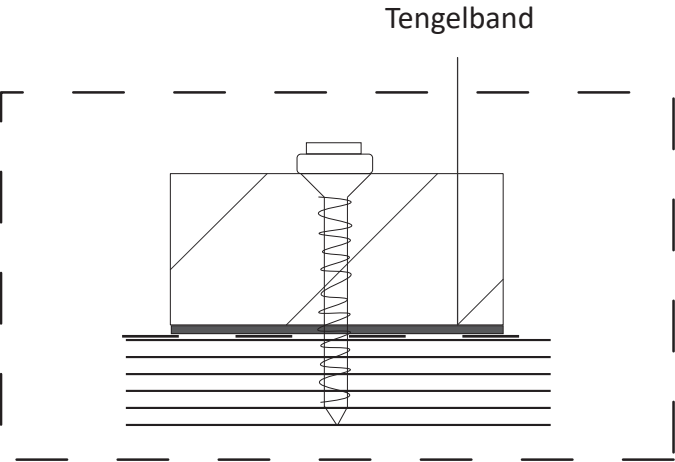
DETAIL 2

Vertical connection roof

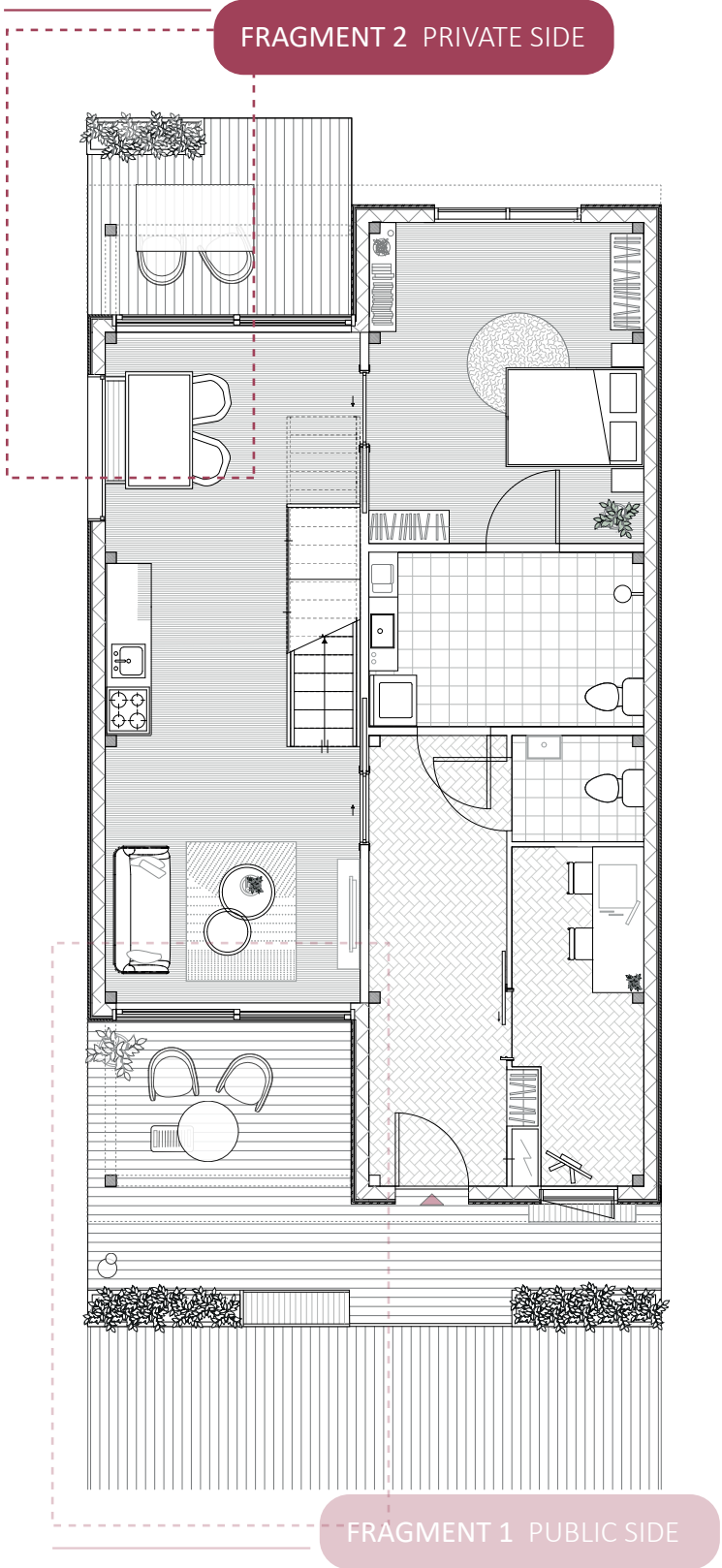
1:5



Wooden window frame (114 x 67 mm)



Tengelband



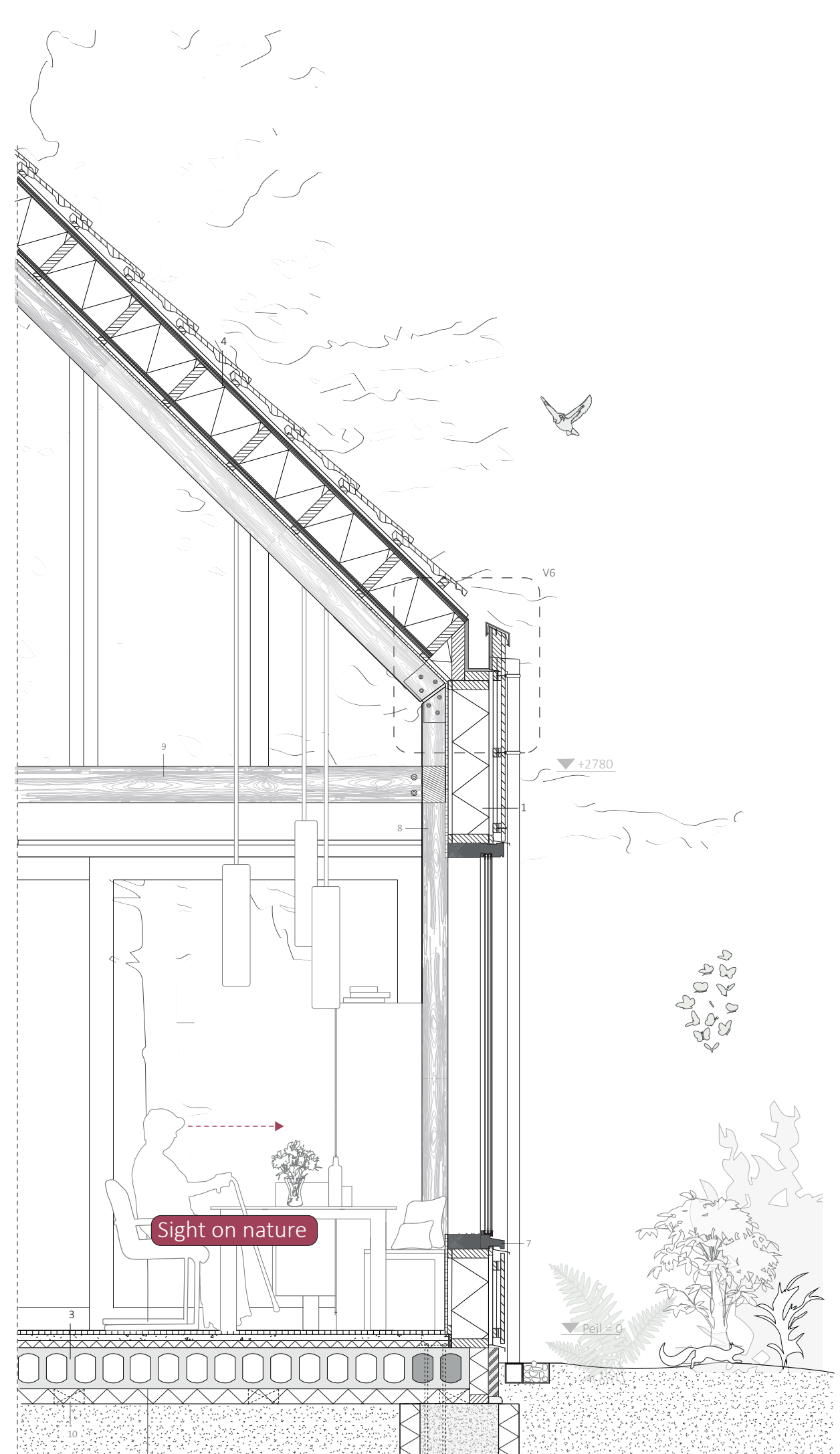
FACADE FRAGMENT (private)

1:20

reduced in presentation



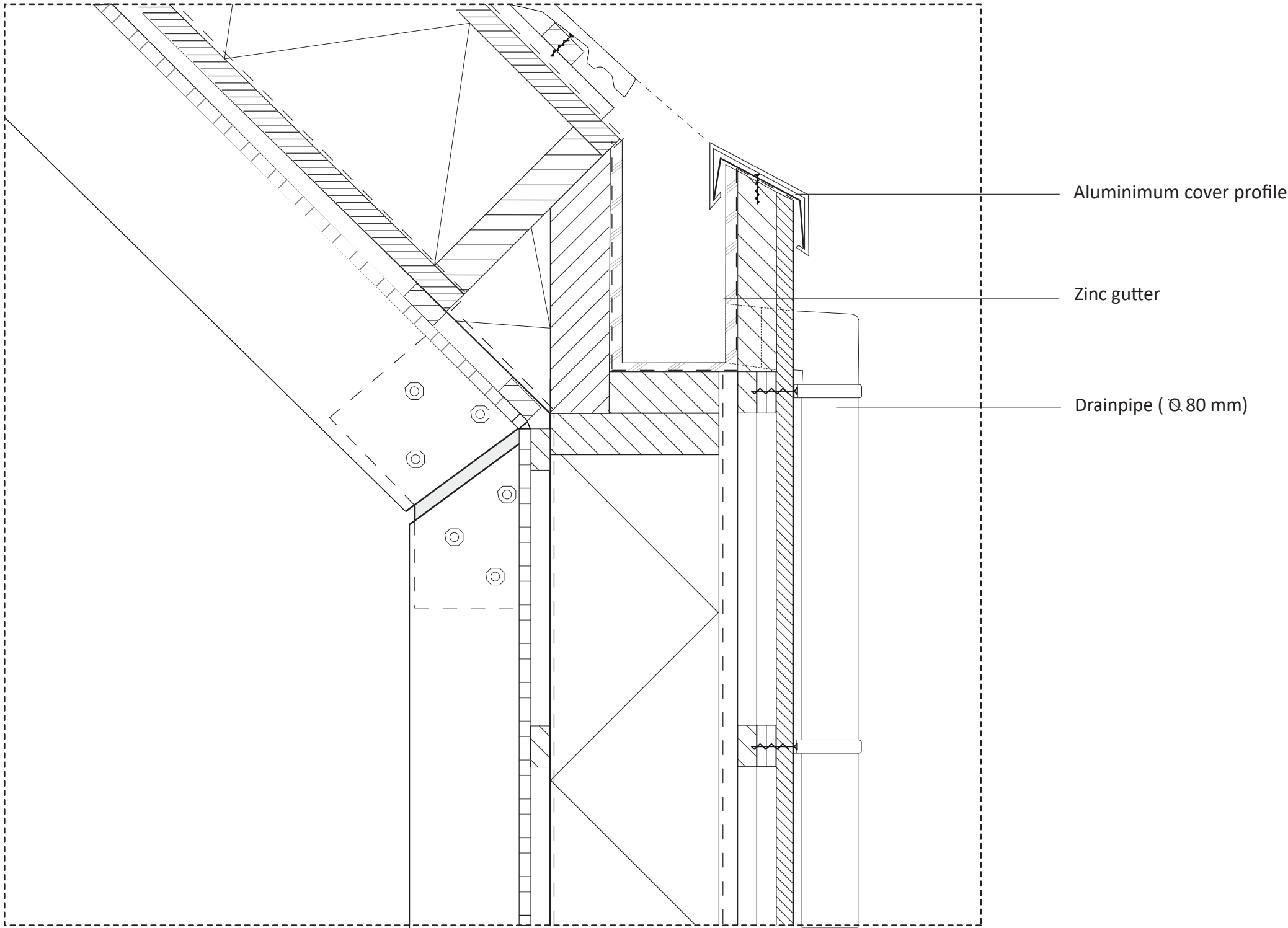
Section DD

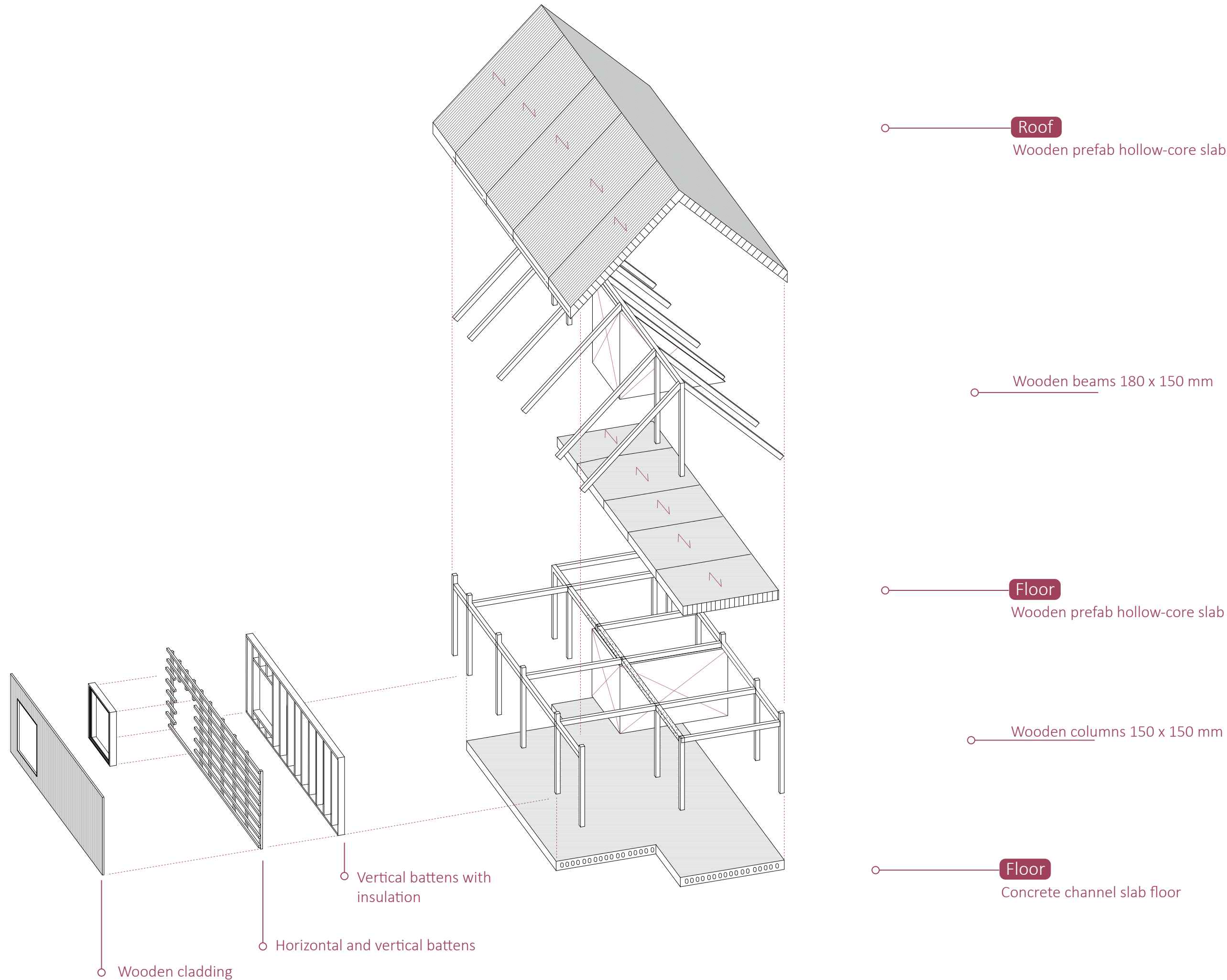


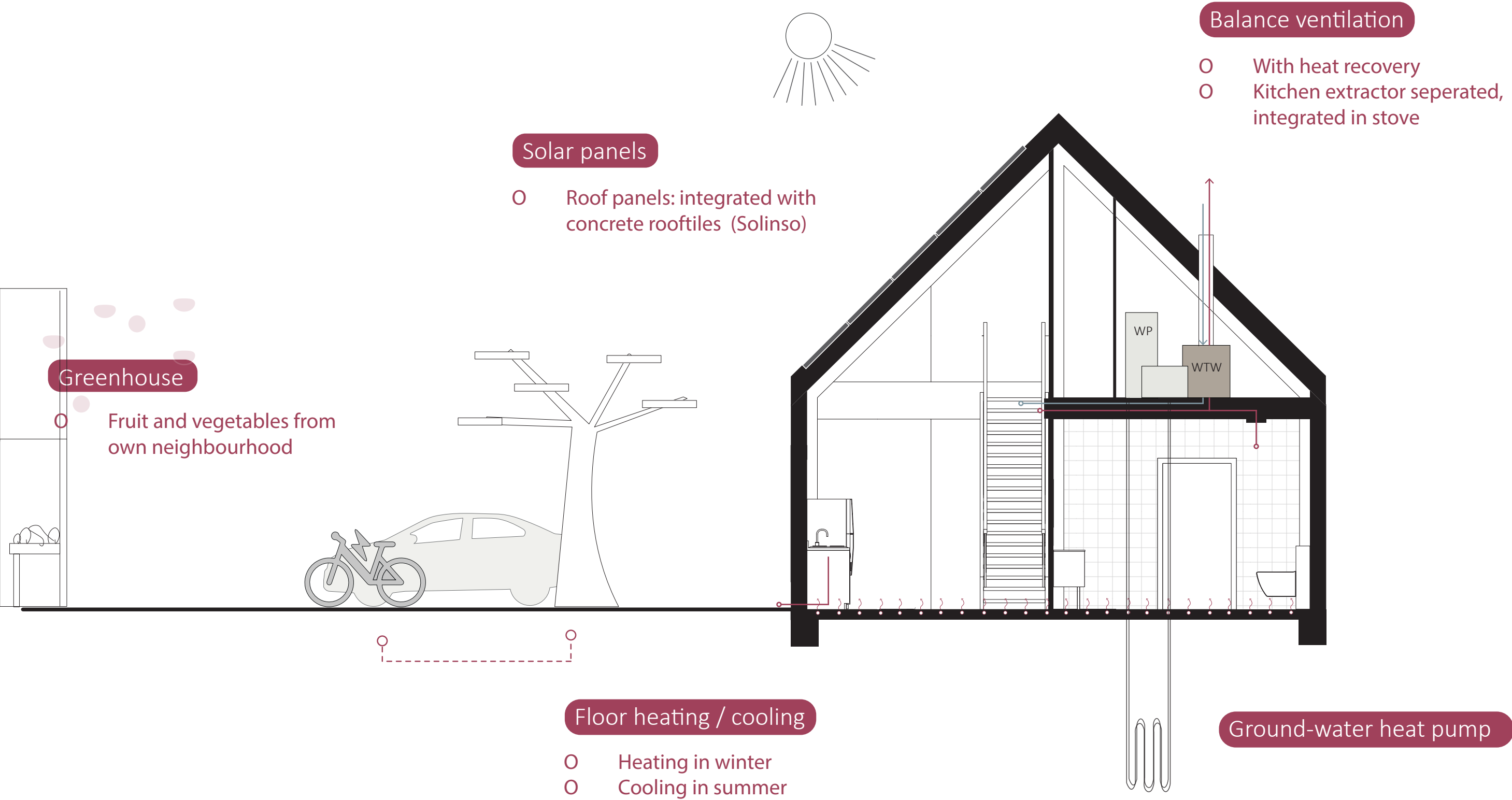
DETAIL V6

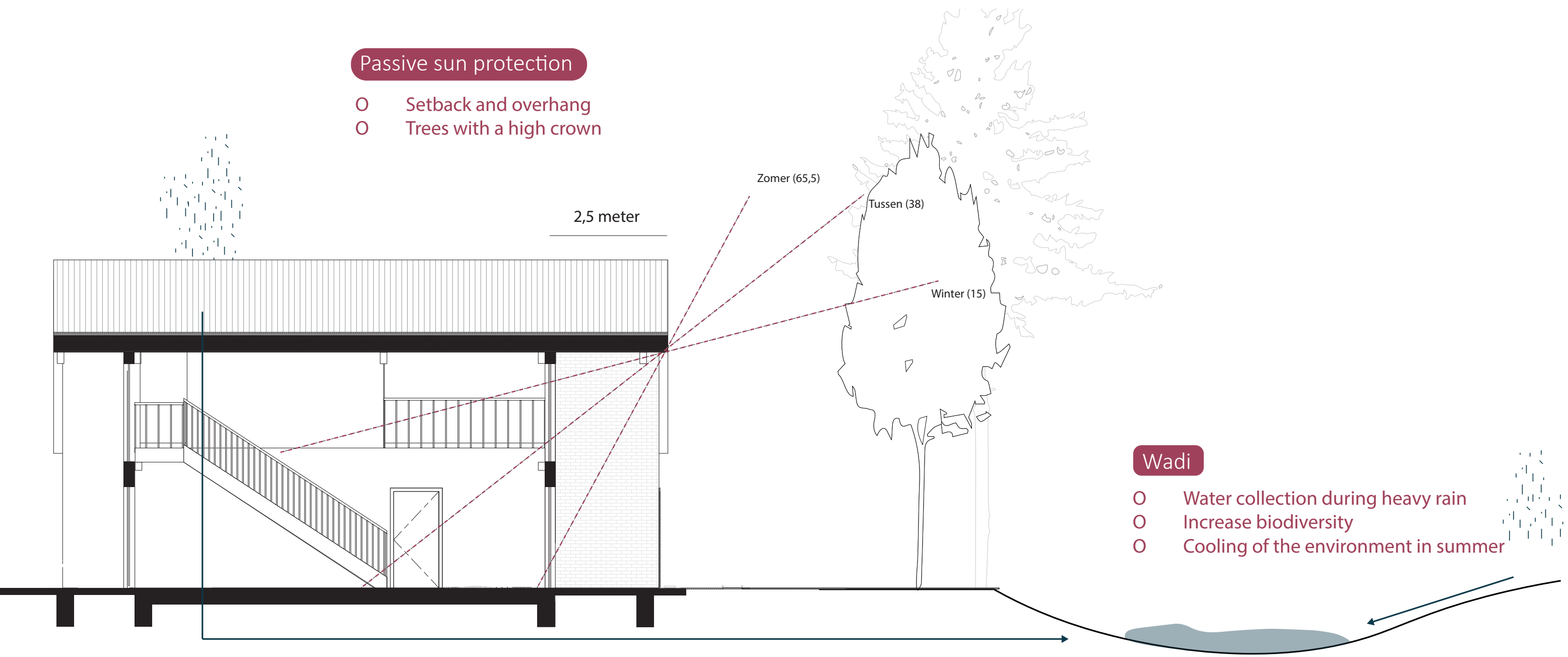
Connection roof

1:5









NEIGHBOURS





ELDERLY



ELDERLY Higher care demand





How will we live when we get older?

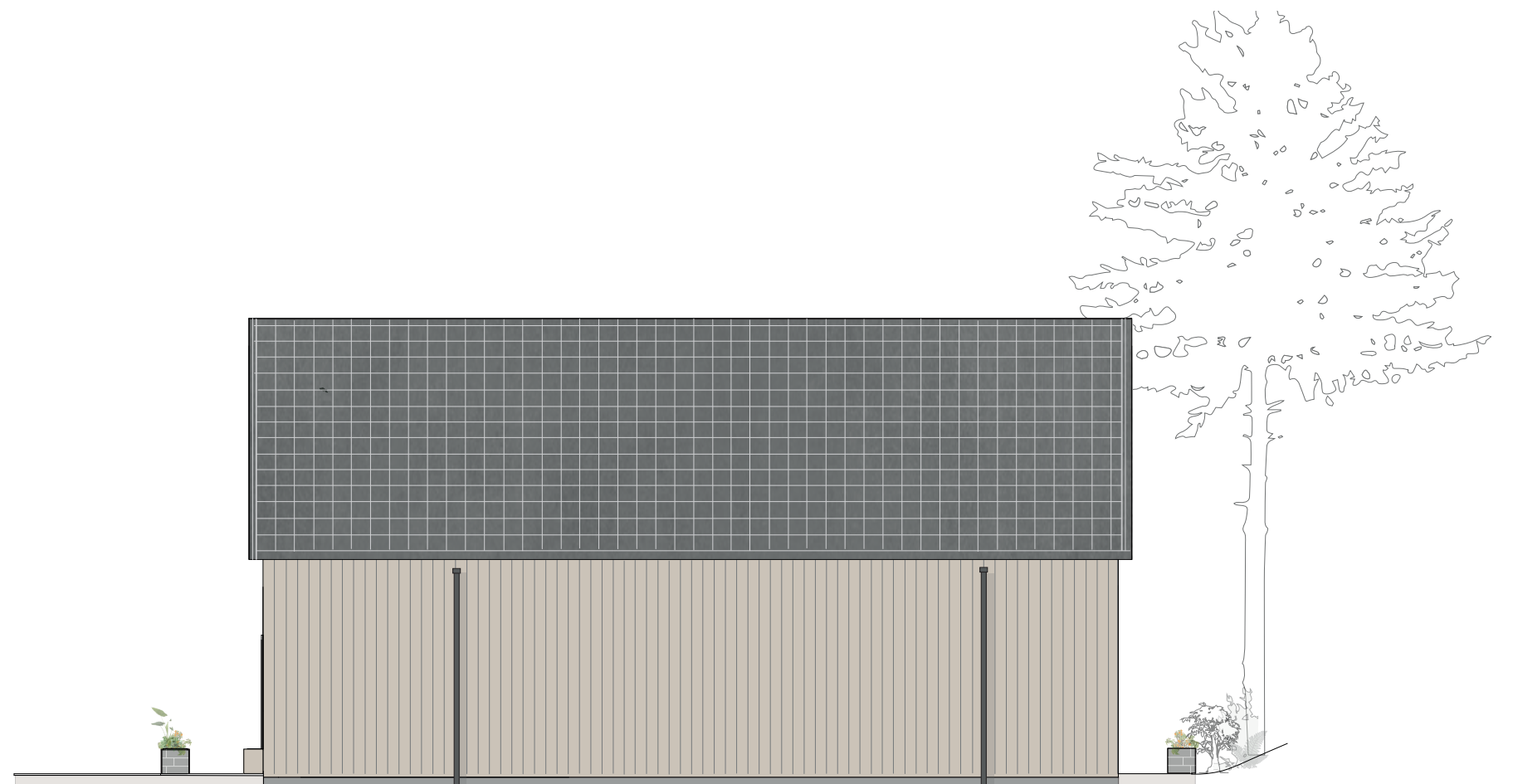
THANKYOU!



FACADES
Elderly
1:100



Front facade



Side facade



Side facade



Rear facade

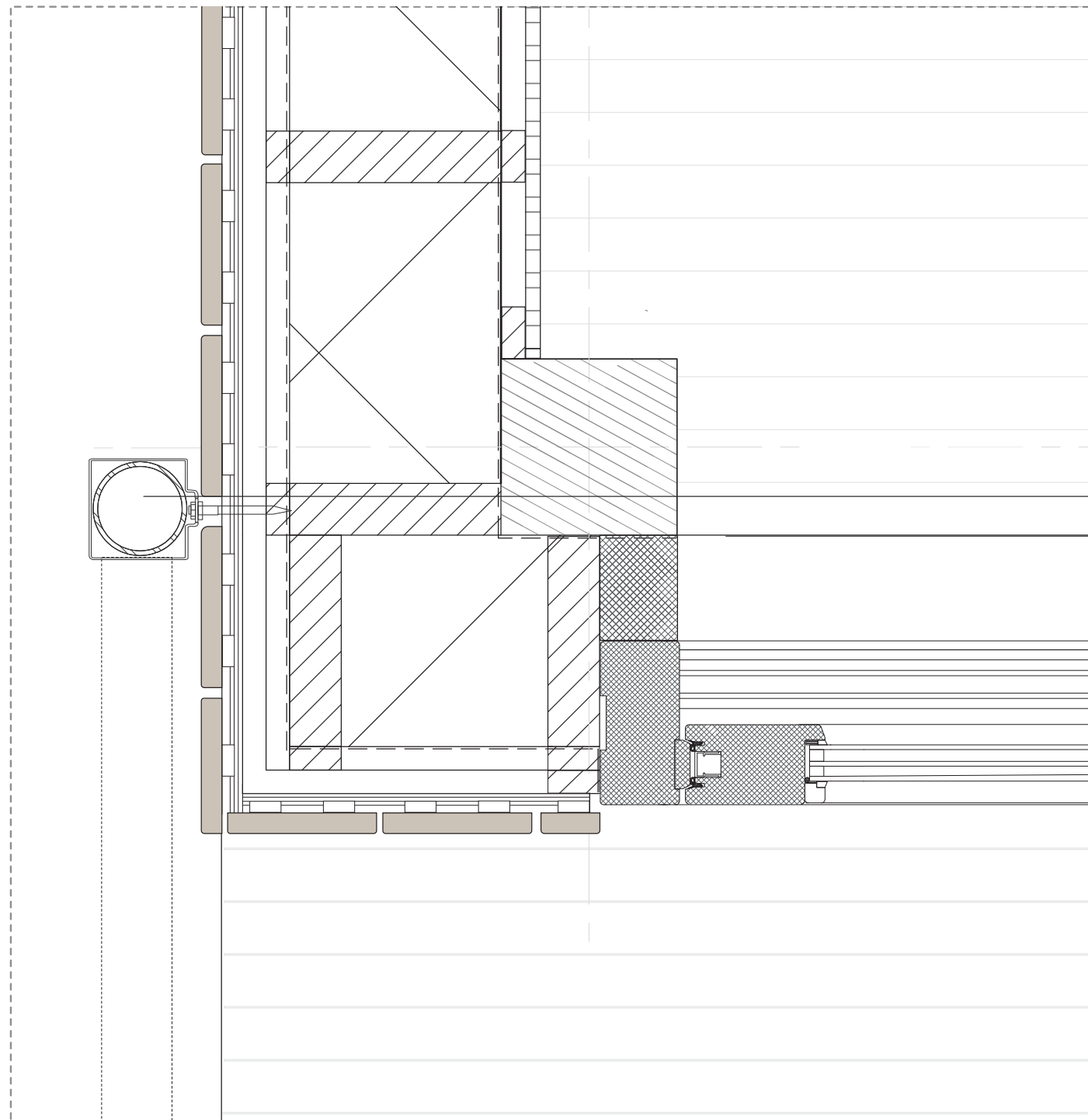
COMMON ROOM

Floor plan

1:100



DETAIL 2
Horizontal
1:5



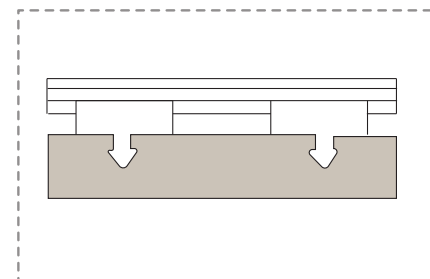
Facade construction (288 mm):

- Plasterboard with painting (12 mm)
- Horizontal battens (20 mm)
- Vapor barrier
- Insulation 180 mm ($R_c = 6,0 \text{ m}^2\text{K/W}$)
- Water resistant / vapor permeable foil
- Vertical trussing and horizontal battening (2 x 20 mm)
- Grad profile mounting system (18 mm)
- Bamboo cladding (18 mm)
(Moso Bamboo Xtreme)

HWA $\varnothing 80 \text{ mm}$

Wooden windowframe (67 x 138)

Grad installation system



DETAIL V2

Vertical

1:5

