

HOME IN HOUTWIJK

Exploring age-friendly housing design

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5208238

23-6-2026

AR4AD300 Designing for Health and Care
Graduation Studio

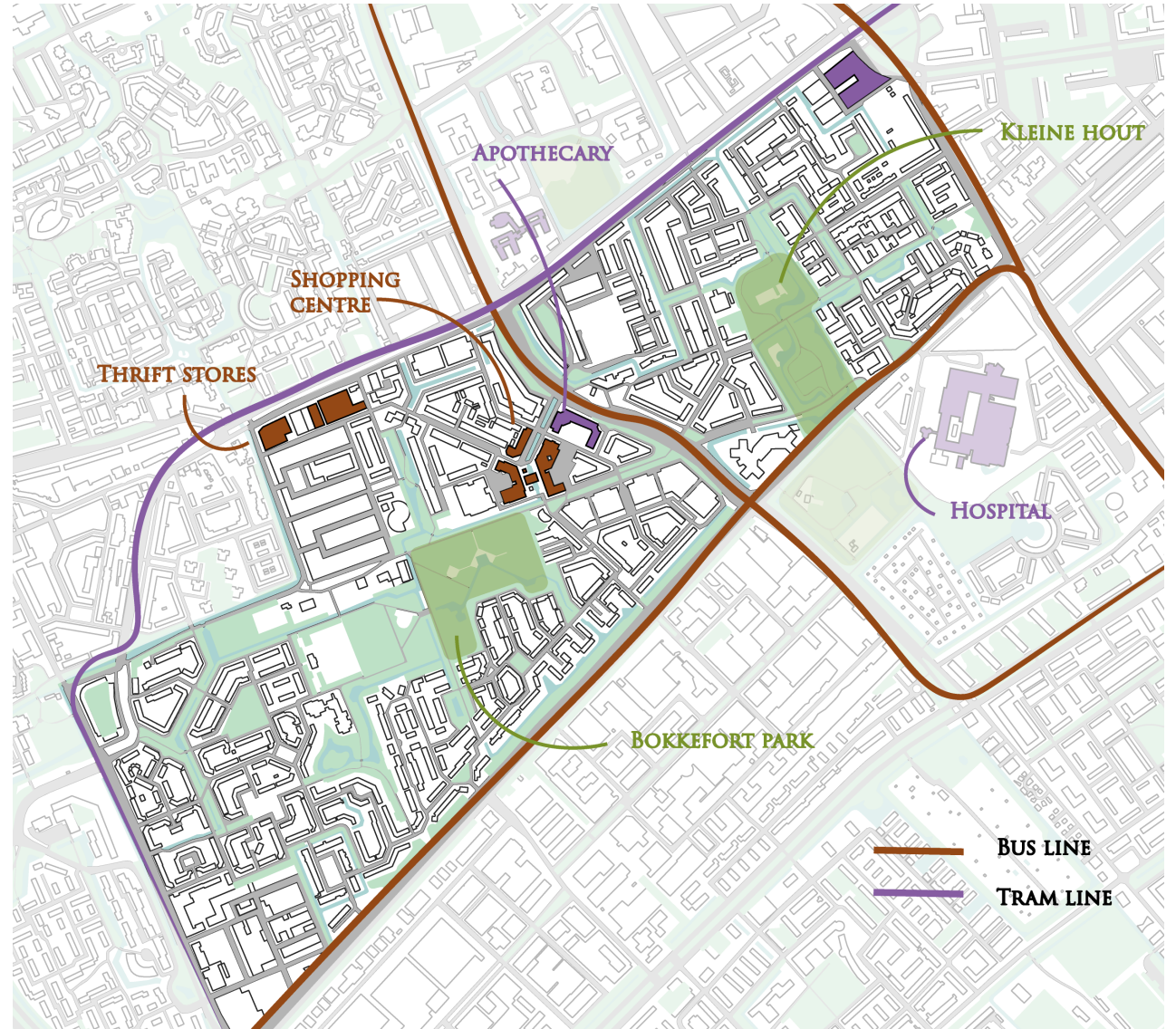
Birgit Jürgehake
Kobe Macco



HOUTWIJK

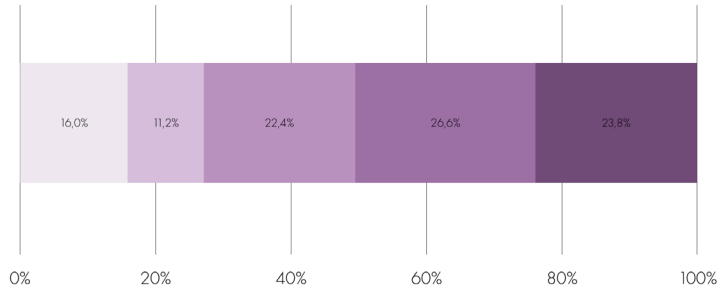
CHARACTERISTICS

- Neighbourhood in Den Haag
- Consists of two parts
- Many private owned family houses
- Differences in income
- Ageing population

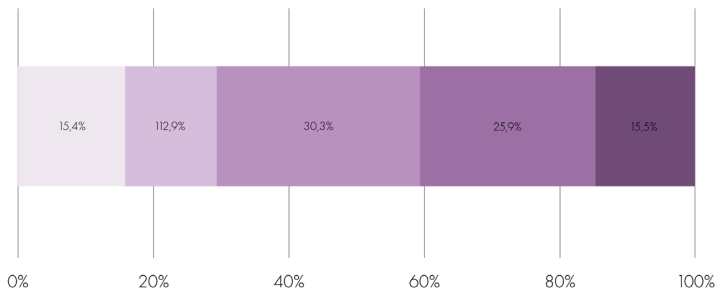


AGEING POPULATION

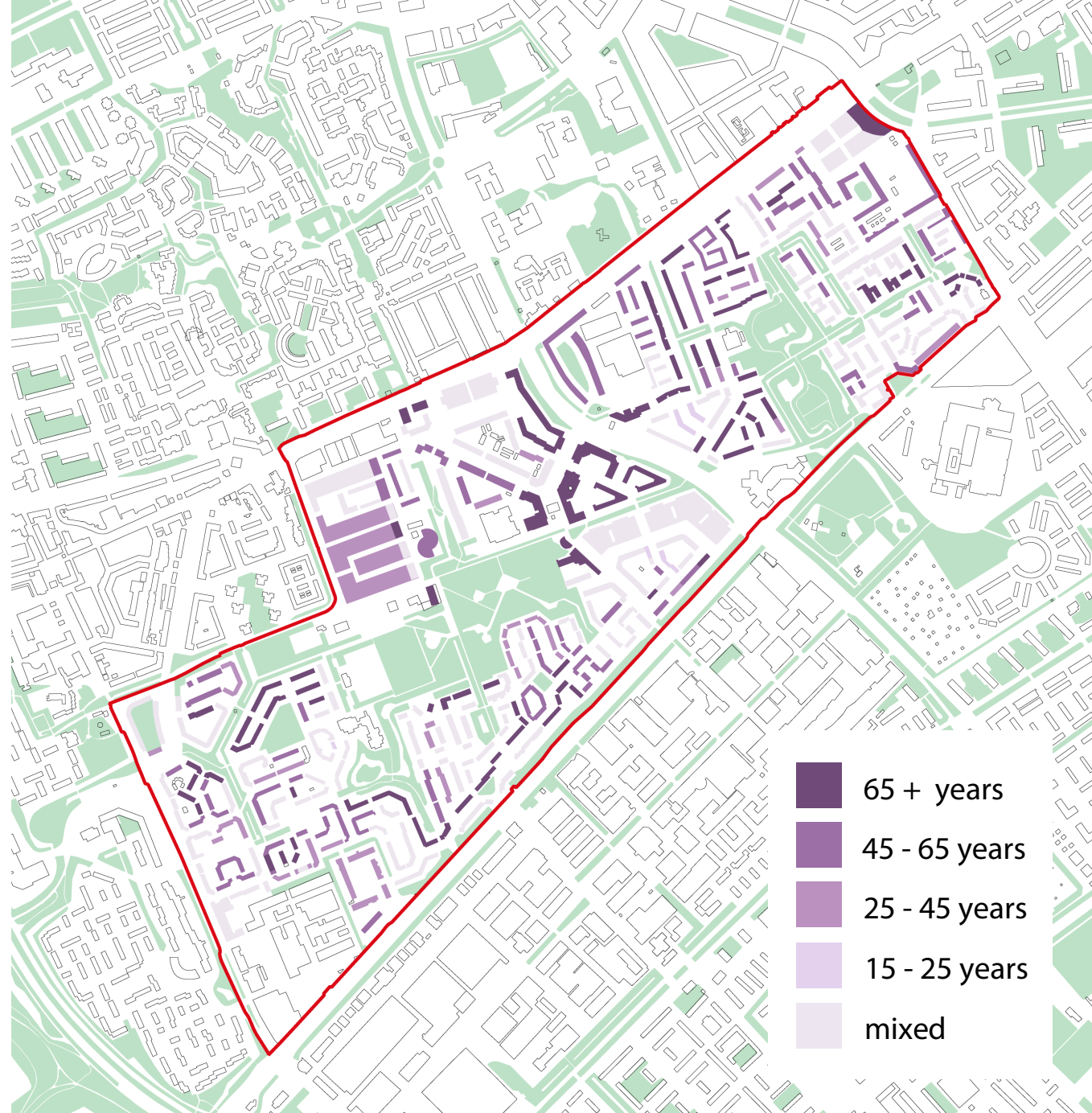
Population by age group Houtwijk



Population by age group Den Haag



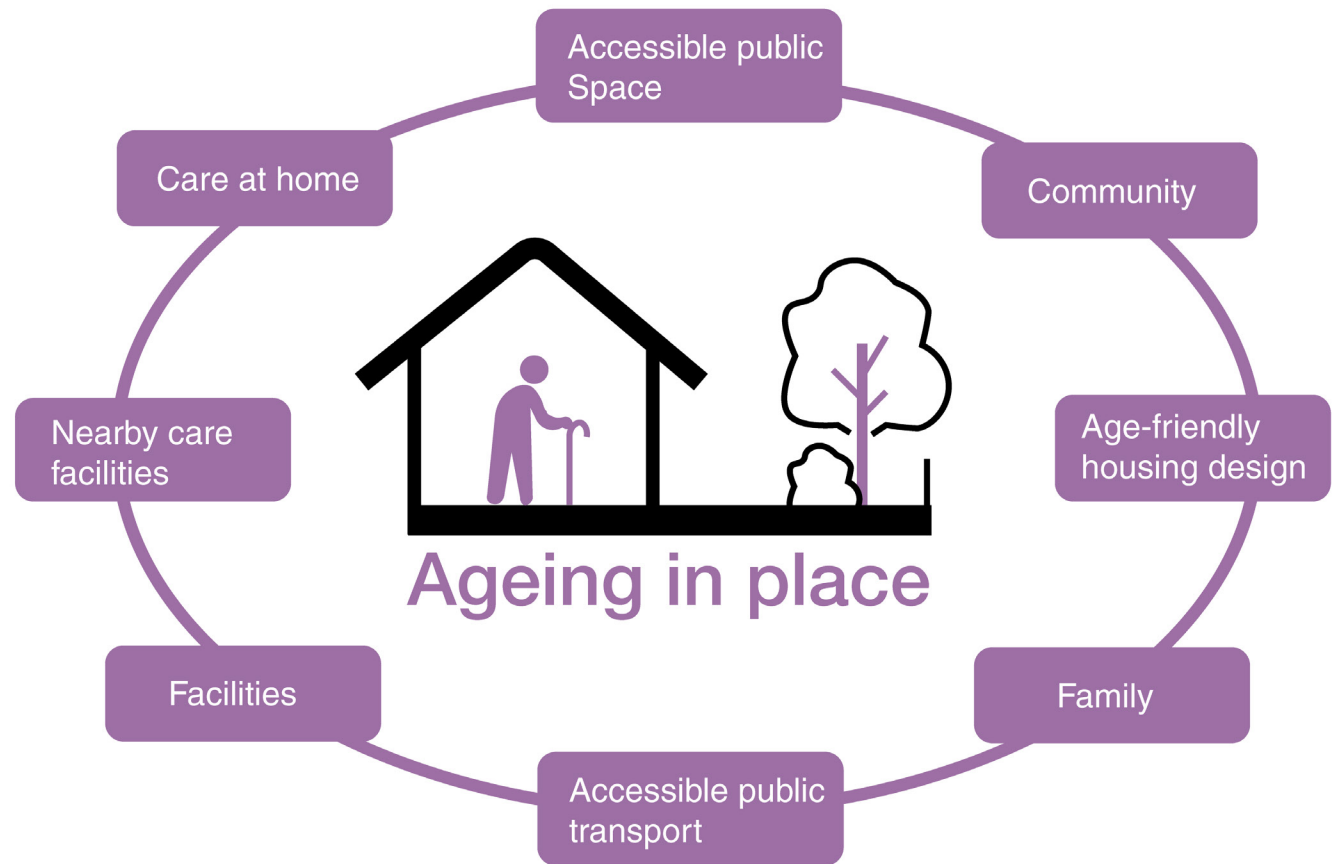
0 - 15 years 15 - 25 years 25 - 45 years 45 - 65 years 65+ years



AGEING IN PLACE

Ageing in place is the ability for older adults to keep living in the home and community of their choice safely, independently, and comfortably as they grow older. (LaFave et al., 2021)

Essential that the dwelling is suitable for ageing.



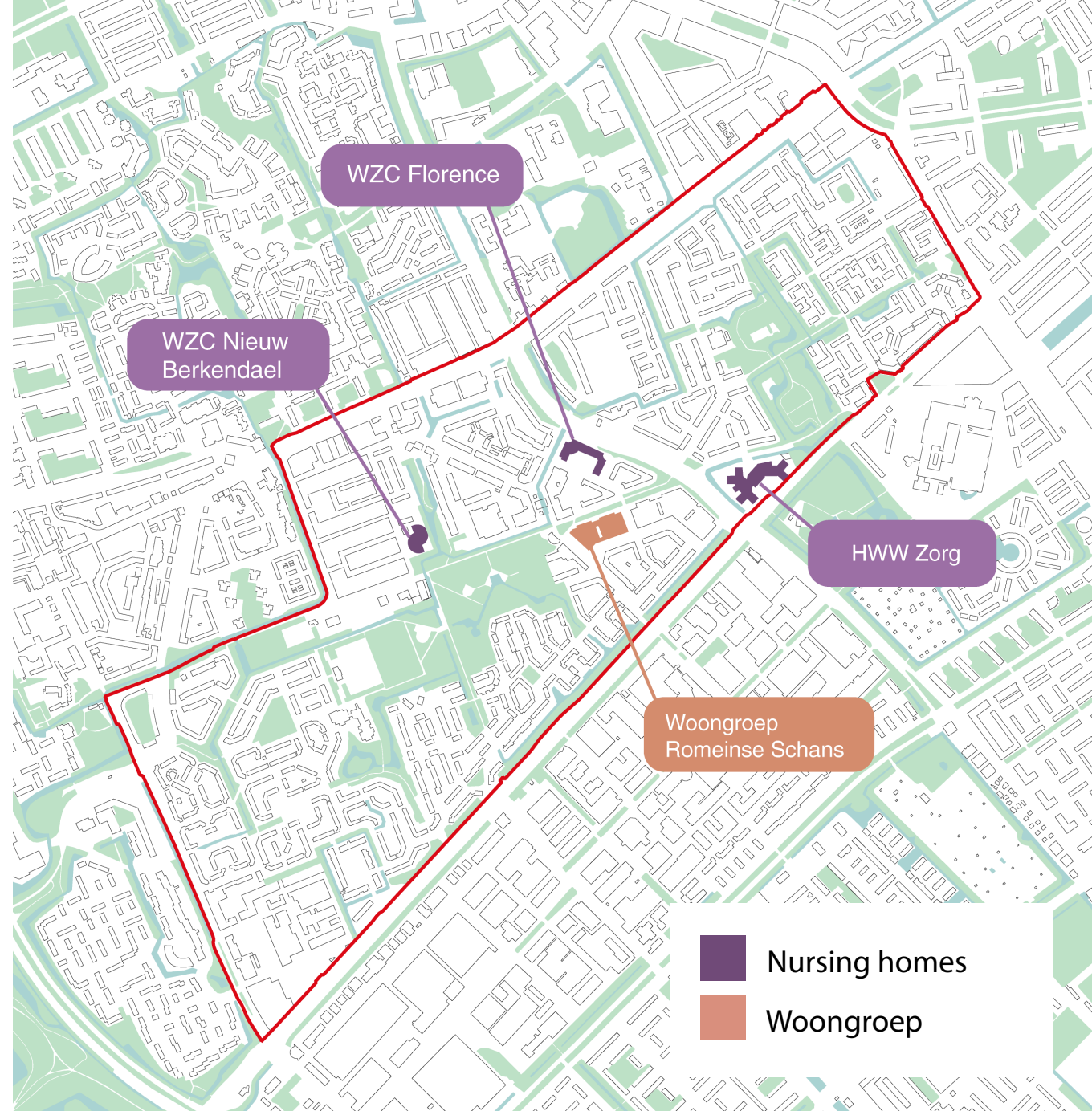
TEKORT AAN GESCHIKTE WONINGEN

Many older adults live in big
family houses

No alternatives in Houtwijk

Moving barrier:

- Older adults feel at home in
their own house



ONDERZOEKSVRAAG

How can architectural- and environmental design create a sense of home and support the willingness of older adults to relocate?

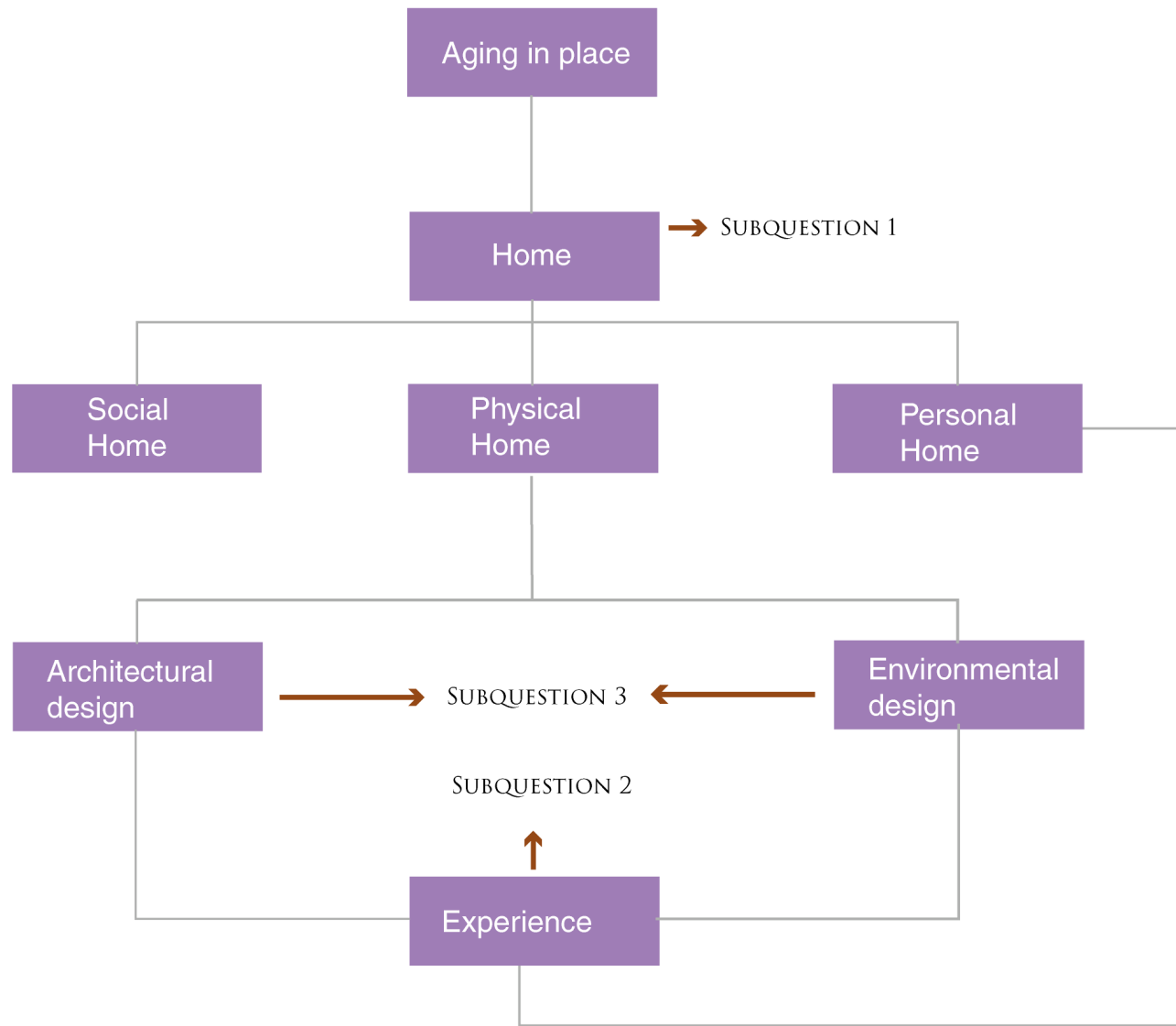
1. What does home mean to older adults?
2. How do older people in Houtwijk experience and value their current home and neighbourhood in relation to ageing?
3. What spatial qualities are indispensable in a new dwelling or neighbourhood to make it attractive enough for older people to relocate and to make them feel at home again?

RESEARCH

WHAT MAKES
YOU FEEL AT
HOME?

THEORETIC FRAMEWORK

THREE DOMAINS OF HOME		
PHYSICAL HOME	PERSONAL HOME	SOCIAL HOME
ORGANISATION OF SPACE LAYOUT MATERIALITY ENVIRONMENTAL CONDITIONS/COMFORT	SENSE OF BELONGING IDENTITY SAFETY PRIVACY AGENCY	ROUTINES SOCIAL CONTACTS FAMILIARITY



WHAT DOES HOME MEAN TO OLDER ADULTS?

Home means different things to different people.

Home is more than a physical space

Personal:

- **Safety**
- **Privacy**
- **Agency**
- **Comfort**

Social:

- **Connected**

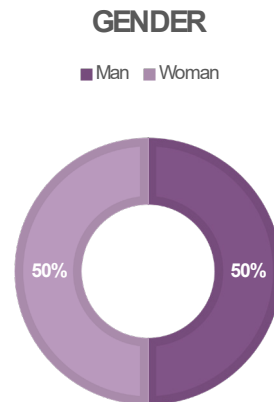
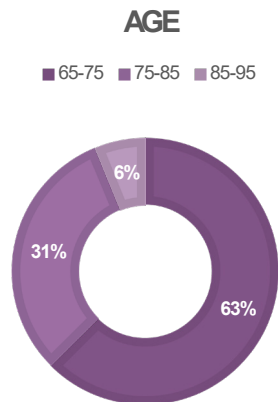
RESULTS LITERATURE		
PHYSICAL	PERSONAL	SOCIAL
SPACIOUS ACCESSIBILITY: - WHEELCHAIR ACCESSIBLE	SENSE OF BELONGING SAFETY AGENCY/CONTROL PRIVACY	FAMILIAR SURROUNDINGS CLOSE TO PUBLIC FUNCTIONS CONNECTED TO NEIGHBOURHOOD

RESULTS SURVEYS		
PHYSICAL	PERSONAL	SOCIAL
SPACIOUS - STORAGE SPACE - 3 ROOMS ACCESSIBILITY - ONE-LEVEL - BICYCLE PARKING NICE VIEW GARDEN SUSTAINABILITY	COMFORT SAFETY AGENCY/CONTROL PRIVACY	FAMILIAR SURROUNDINGS CLOSE TO PUBLIC FUNCTIONS CONNECTIONS WITH OTHER AGE GROUPS MEETING PLACES
USED SURVEYS: OUDERENPANEL DEN HAAG, (2024), PRETTIG OUD IN DE BUURT (2019), WOONWENSEN SENIOREN (2022), CBS 55+ERS OVER HUN TOEKOMSTIGE WONING (2020)		

HOW DO OLDER PEOPLE IN HOUTWIJK EXPERIENCE AND VALUE THEIR CURRENT HOME AND NEIGHBOURHOOD IN RELATION TO AGEING?

Workshop with 16 participants

Mostly physical elements of home



RESULTS WORKSHOP		
PHYSICAL	PERSONAL	SOCIAL
<p>SPACIOUS</p> <ul style="list-style-type: none"> - STORAGE - BIG BATHROOM - PRIVATE OUTSIDE SPACE <p>ACCESSIBILITY:</p> <ul style="list-style-type: none"> - ONE-LEVEL - BIG BATHROOM - PARKING <p>SUSTAINABLE:</p> <ul style="list-style-type: none"> - REGULATED TEMPERATURE - LIGHT <p>CONNECTIONS TO GREEN:</p> <ul style="list-style-type: none"> - VIEW - PRIVATE OUTSIDE SPACE 	<p>COMFORT</p> <p>SAFETY</p> <p>NO NUISANCE</p>	<p>CONNECTION WITH NEIGHBOURS</p> <p>BEING TOGETHER WITH FAMILY</p> <p>ACCESSIBILITY</p> <ul style="list-style-type: none"> - CLOSE TO PUBLIC TRANSPORT <p>CLOSE TO PUBLIC FUNCTIONS</p> <p>CONNECTIONS WITH OTHER AGE GROUPS</p>

PHYSICAL FACTORS TO FEELING AT HOME

Physical factors can be literally implemented into a design.

Personal and social factors can be influenced by spatial design.

RESULTS TOTAL		
PHYSICAL	PERSONAL	SOCIAL
<p>SPACIOUS:</p> <ul style="list-style-type: none"> - 2 OR 3 ROOMS - PRIVATE STORAGE SPACE <p>ACCESSIBILITY:</p> <ul style="list-style-type: none"> - WHEELCHAIR ACCESSIBLE - BIG BATHROOM - ONE-LEVEL - PARKING - BICYCLE PARKING <p>SUSTAINABLE:</p> <ul style="list-style-type: none"> - REGULATED TEMPERATURE - LIGHT <p>GREEN CONNECTIONS:</p> <ul style="list-style-type: none"> - VIEW - PRIVATE OUTSIDE SPACE - GARDEN 	<p>COMFORT</p> <p>SAFETY</p> <p>AGENCY/CONTROL</p> <p>PRIVACY</p>	<p>FAMILIAR SURROUNDINGS</p> <p>CLOSE TO PUBLIC FUNCTIONS</p> <p>CLOSE TO PUBLIC TRANSPORT</p> <p>CONNECTIONS WITH OTHER AGE GROUPS</p> <p>CONNECTED TO NEIGHBOURHOOD</p> <p>MEETING PLACES</p>

NON-PHYSICAL FACTORS TO FEELING AT HOME

SAFETY

PRIVACY

AGENCY

COMFORT

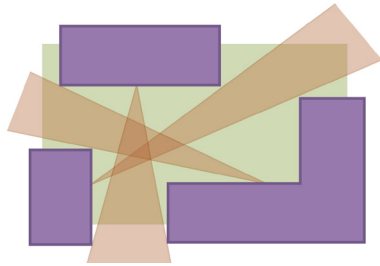
CONNECTED

TO NEIGHBOURHOOD

WITH OTHER AGE
GROUPS

TO NEIGHBOURS

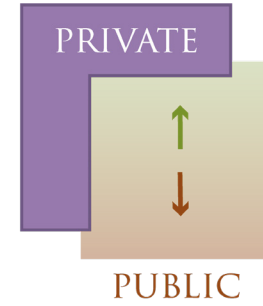
SPATIAL QUALITIES



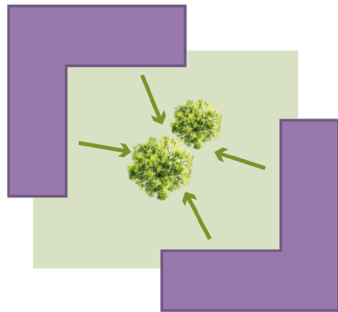
1. Sightlines/clear overview



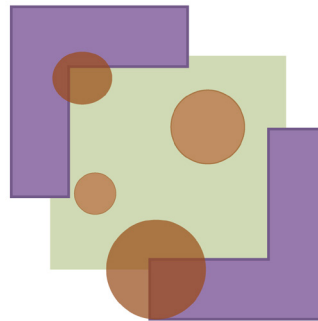
2. Organic/soft forms:



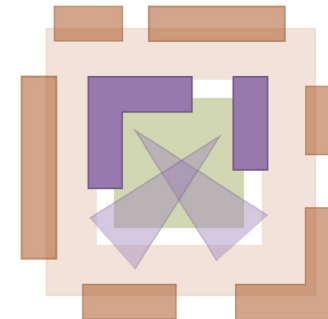
3. Layered privacy



4. Oriented to greenery



5. Formal and informal meeting places



6. Openness to neighbourhood

DESIGN CHALLENGE

Design a senior housing project that complies to both the six spatial elements and to the physical requirements for older adults to feel at home.

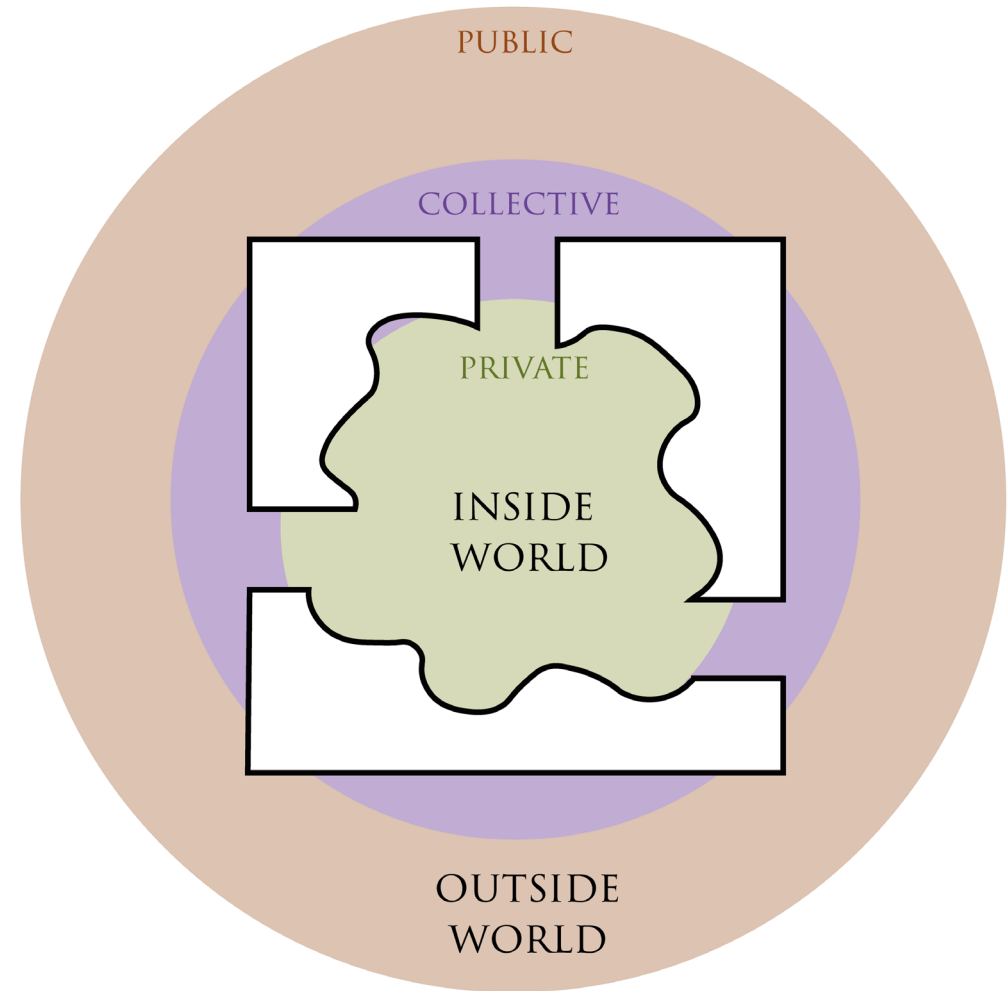
PHYSICAL REQUIREMENTS DWELLING	
PRIVATE	COLLECTIVE
SPACIOUS: <ul style="list-style-type: none">- 2 OR 3 ROOMS- PRIVATE STORAGE SPACE	
ACCESSIBILITY: <ul style="list-style-type: none">- WHEELCHAIR ACCESSIBLE- BIG BATHROOM- ONE-LEVEL	ACCESSIBILITY BUILDING BLOCK: <ul style="list-style-type: none">- PARKING SPACE- BICYCLE PARKING
SUSTAINABLE: <ul style="list-style-type: none">- REGULATED TEMPERATURE- LIGHT	
GREEN CONNECTIONS: <ul style="list-style-type: none">- VIEW- PRIVATE OUTSIDE SPACE- GARDEN	GREEN SPACE: <ul style="list-style-type: none">- VIEW- GARDEN

DESIGN

CONCEPT

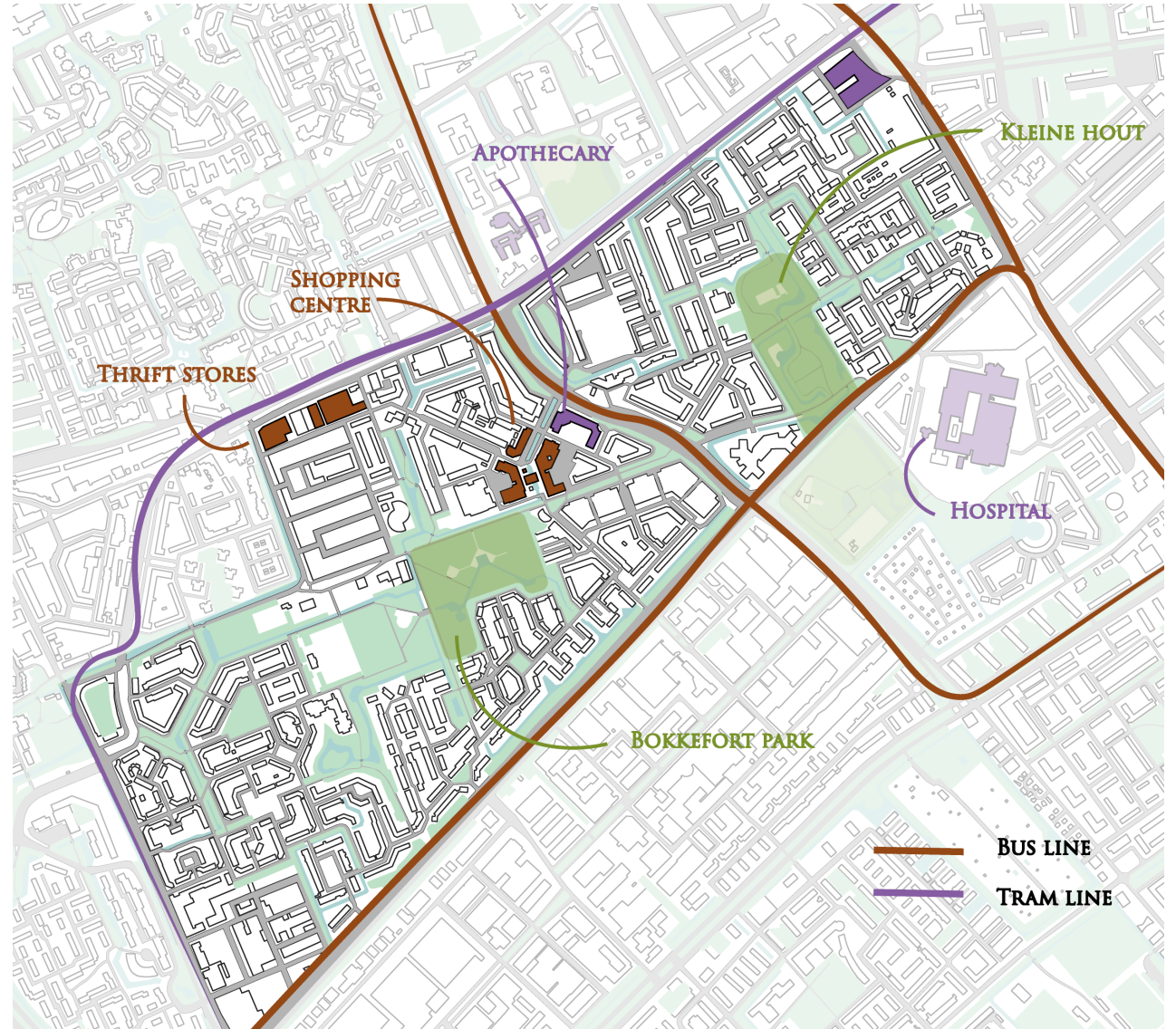
- Inside - Outside world
- Layerd privacy
- Complies to six spatial requirements

OUTSIDE WORLD	INSIDE WORLD
<ul style="list-style-type: none">- URBAN- PART OF THE REST OF THE NEIGHBOURHOOD- STRAIGHT LINES- PUBLIC- FIRM- MATERIALS LIKE SURROUNDING BUILDINGS- ORIENTED TO OUTSIDE	<ul style="list-style-type: none">- NATURAL- WORLD ON ITS OWN- CURVED LINES- PRIVATE- SOFT- BIOBASED MATERIALS- ORIENTED TO INSIDE



LOCATION

1. Close to facilities
2. Close to public transport
3. Close to greenery
4. In the same neighbourhood:
Houtwijk
5. Connected to the surrounding



LOCATION

Connexion area

- Empty terrain
- Opportunity to connect to the shopping centre
- There is already an existing plan



EXISTING PLAN

- Nieuw Houtwijk
- 2 apartment blocks
- 4 blocks with private housing
- Public plinths



PROGRAMM OF REQUIREMENTS

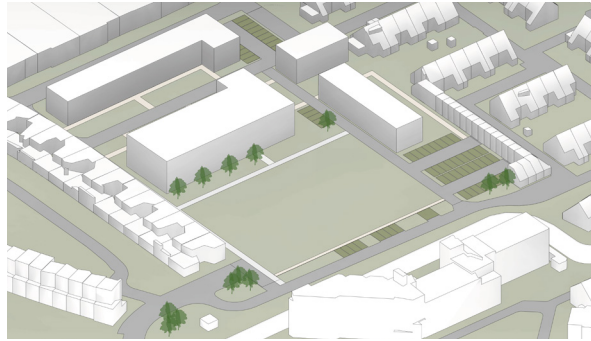
Programm consists of public, collective and private functions, based on the workshop and the current facilities in Houtwijk.

Public: To connect different public spaces and to bring other age groups to the project

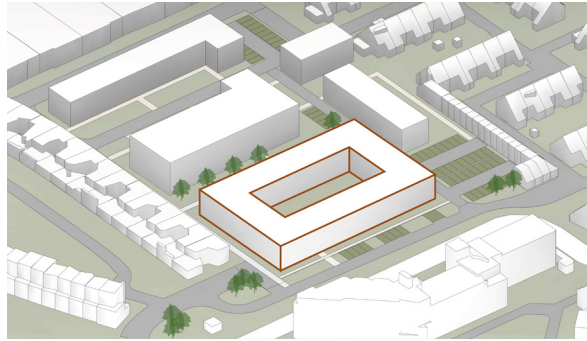
Collective: Formal and informal meeting spaces

PROGRAMM OF REQUIREMENTS		
URBAN LEVEL	BUILDING LEVEL	APARTMENT LEVEL
Location: <ul style="list-style-type: none">- In Houtwijk- Close to public transport- Close to public facilities	Public programm: <ul style="list-style-type: none">- Buurtcafé- Terrace Collective programm: <ul style="list-style-type: none">- Collective garden- Collective vegetable garden- Collective living room<ul style="list-style-type: none">- Kitchenette- Toilet- Collective storage- Car parking- Bike parking- Technical room- Trash- Guest room/studio Private programm: <ul style="list-style-type: none">- Apartments	Programm: <ul style="list-style-type: none">- Kitchen- Living room- Bedroom- Bathroom- Toilet - Extra room- Storage- Private outdoor space

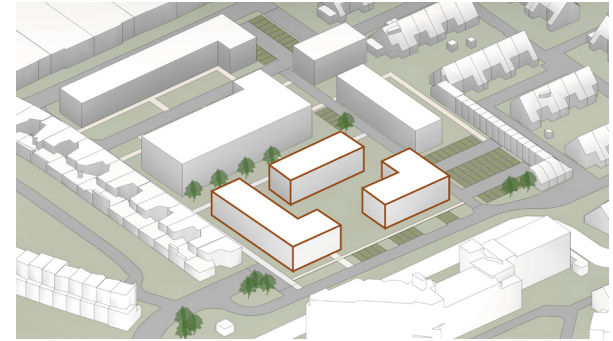
MASS STUDY



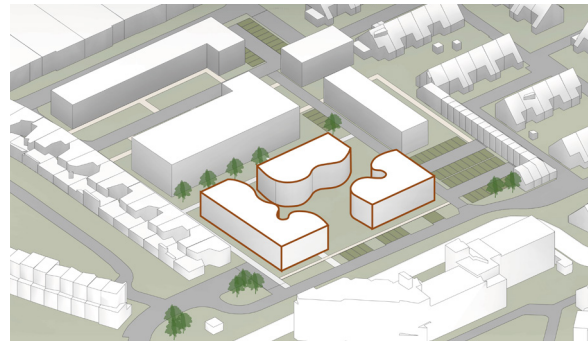
1. Empty location



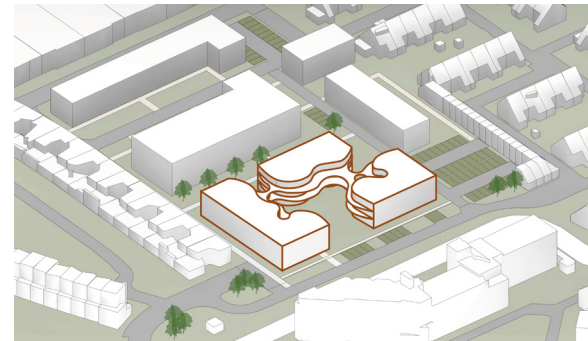
2. Create Inside-Outside world



3. Create openings

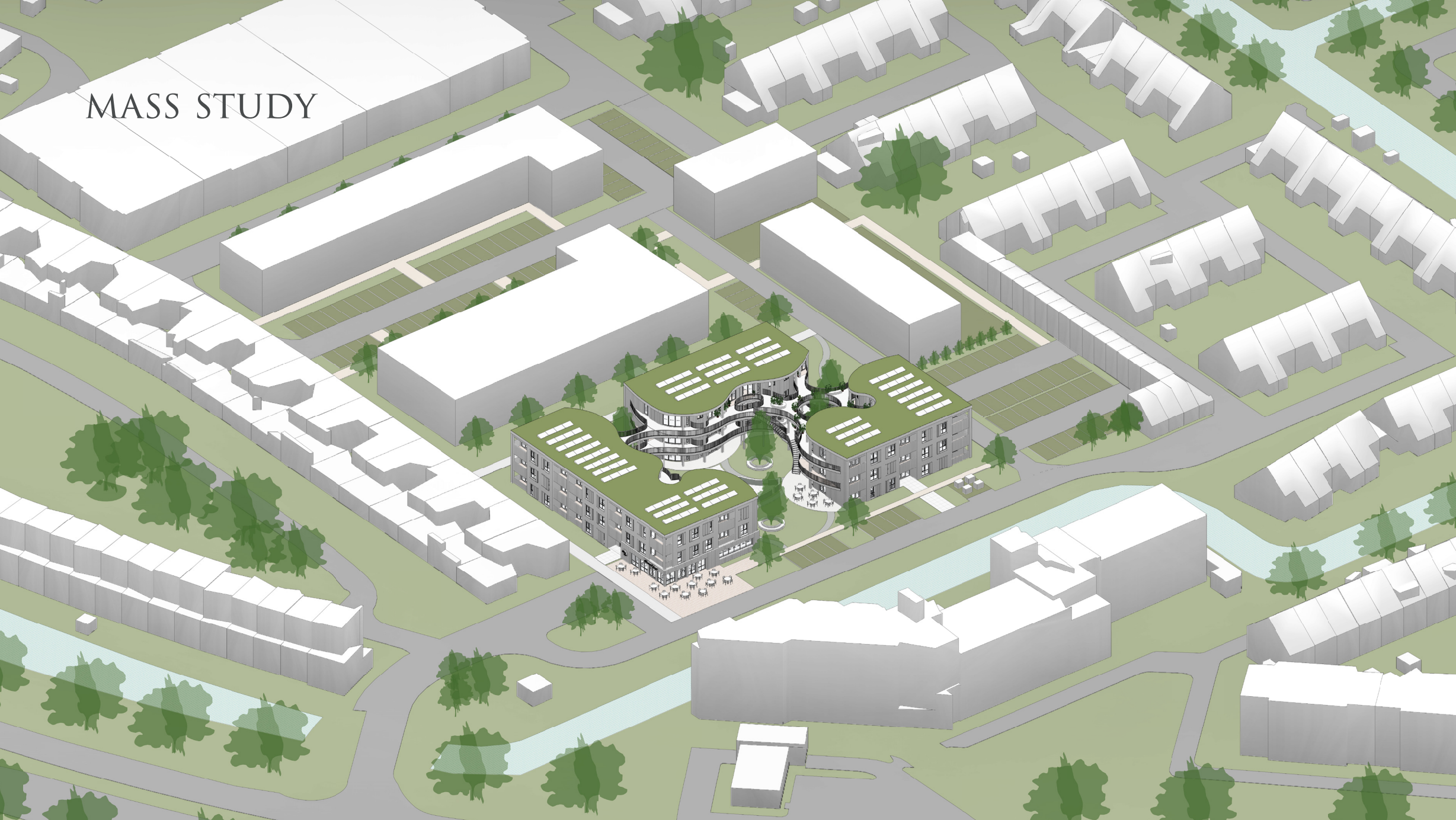


4. Adding curved facades



5. Adding a gallery

MASS STUDY



SITE

APARTMENT BLOCK
WITH PUBLIC PLINTH

PRIVATE HOUSING

BACK GARDENS

LAAN VAN VREDESTEIN

HOUTWIJLAN

CYCLING PATH

CYCLING PATH

COMMUNAL
PARKING



PUBLIC
TERRACE

LAAN VAN VREDESTEIN

TEMPORARY
PARKING

TRASH

SITE

APARTMENT BLOCK
WITH PUBLIC PLINTH

PRIVATE HOUSING

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CYCLING PATH

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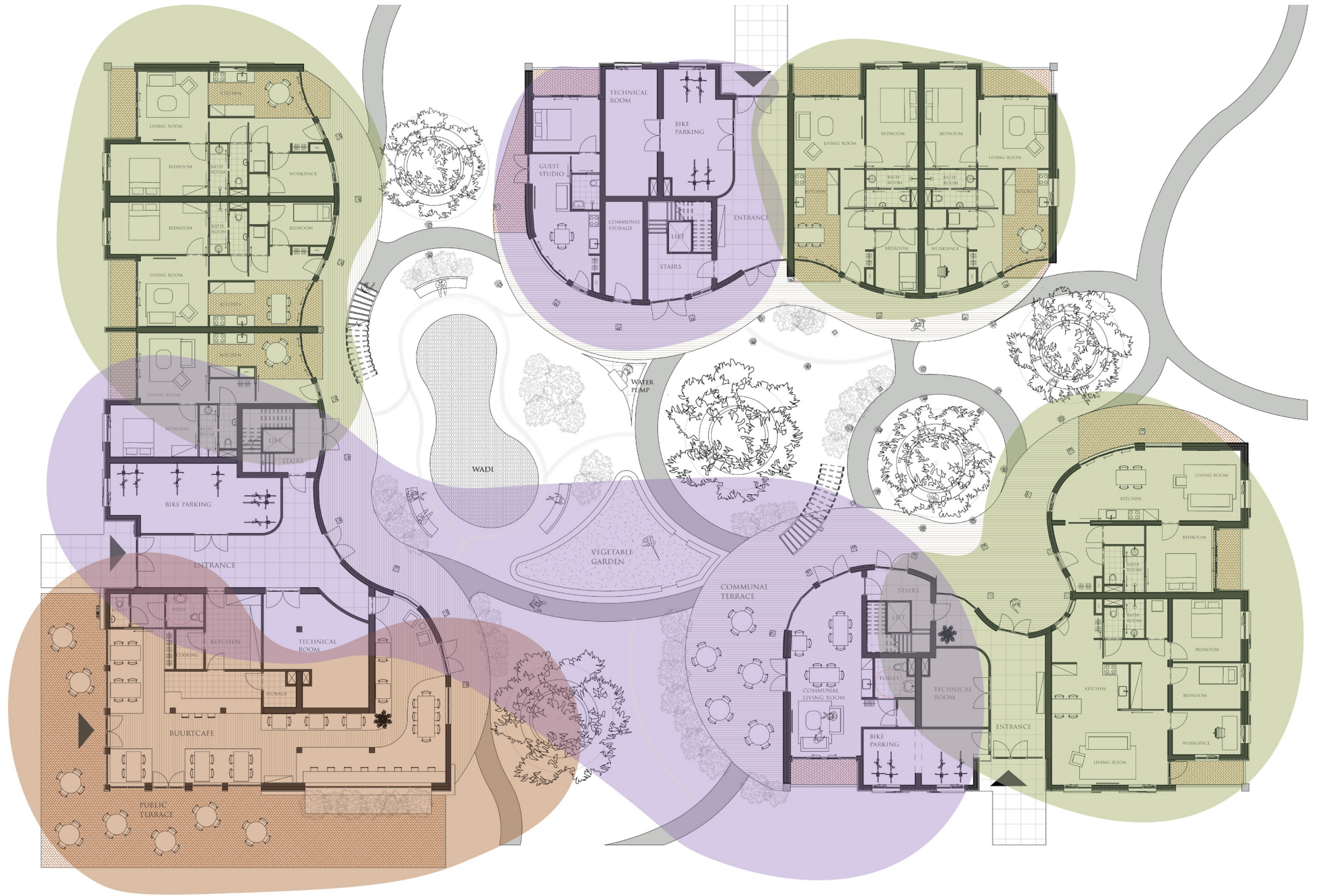
LAAN VAN VREDESTEIN

TEMPORARY
PARKING

TRASH



GROUND FLOOR



GROUND FLOOR



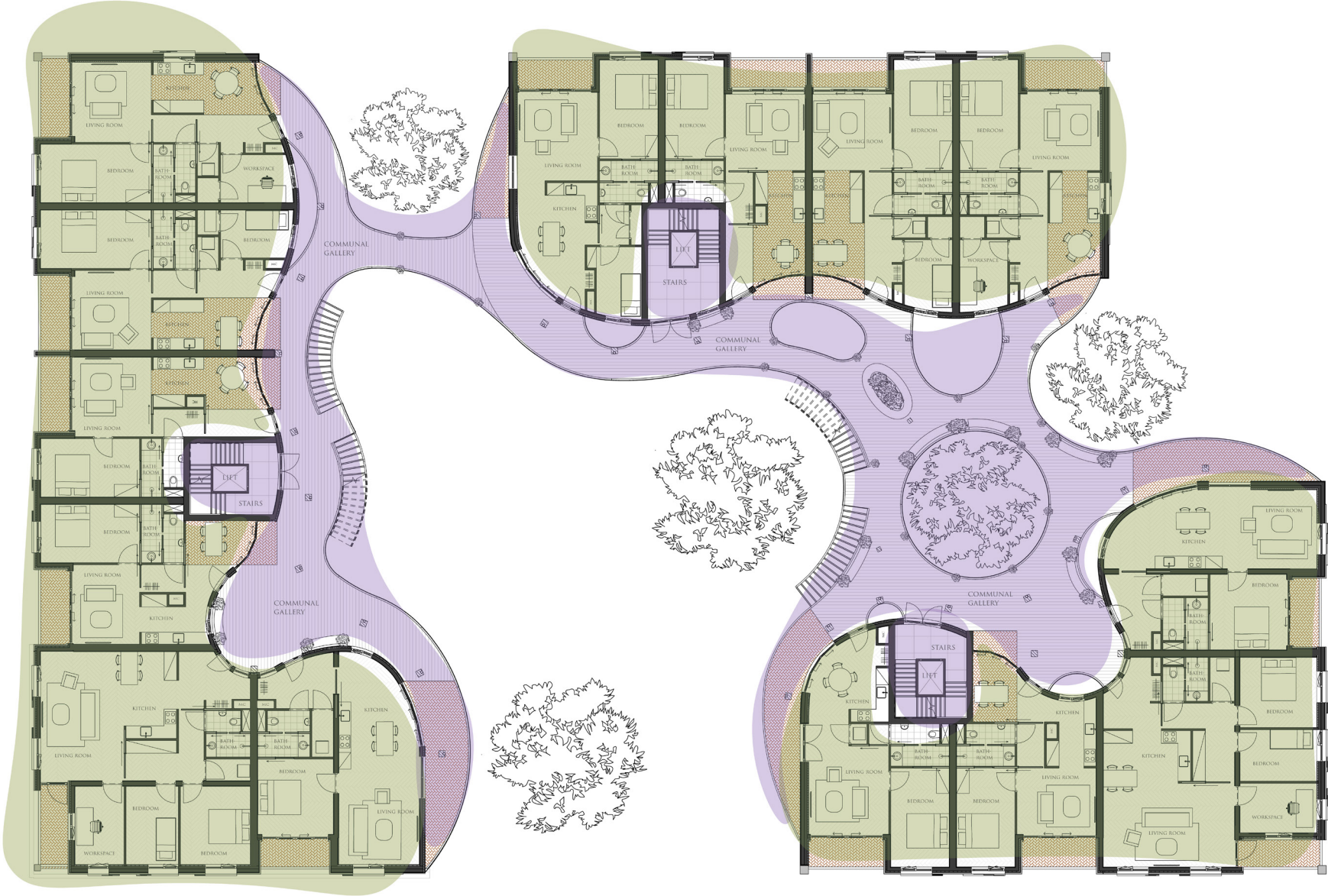
GROUND FLOOR



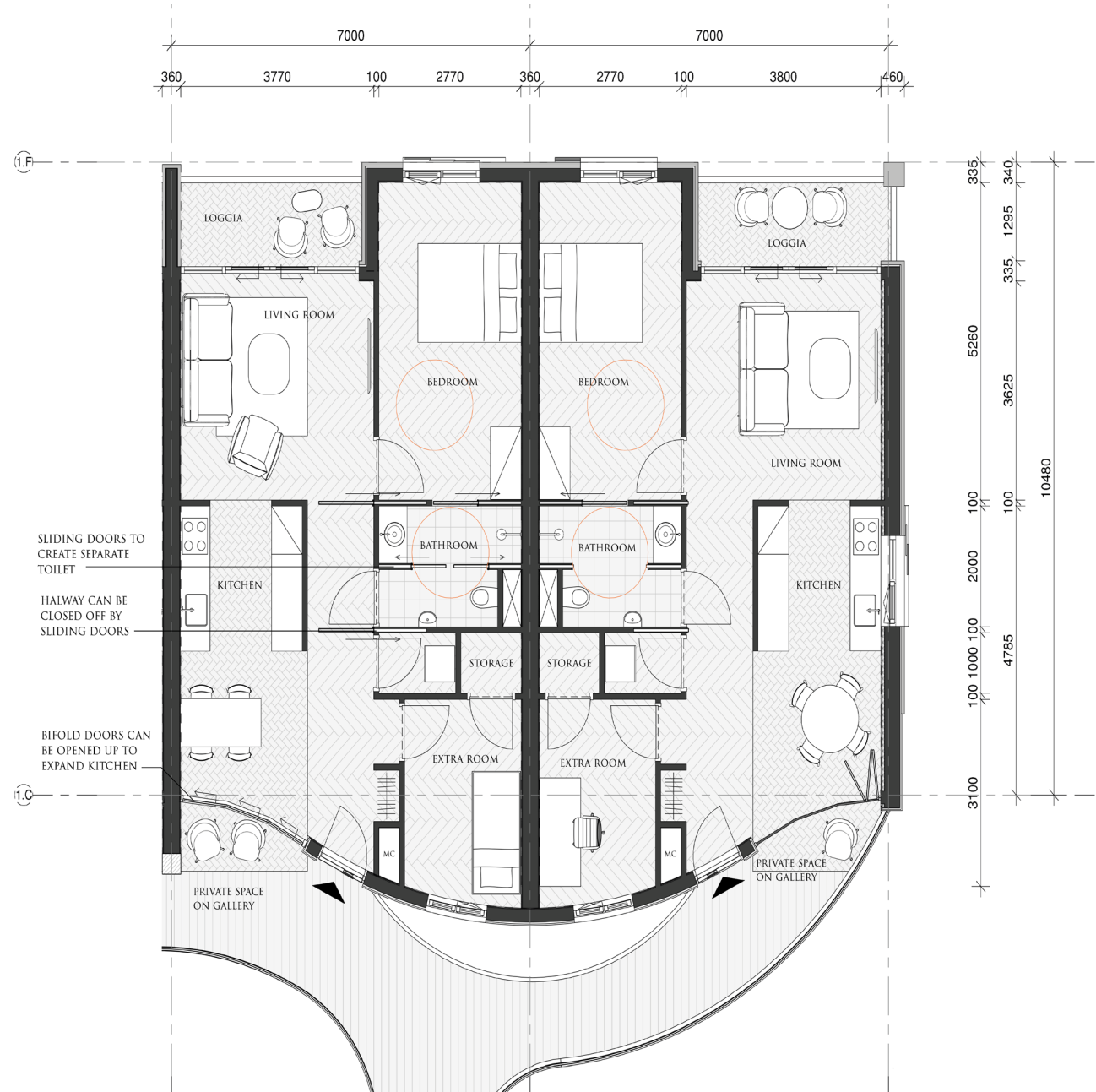
FIRST/ SECOND FLOOR



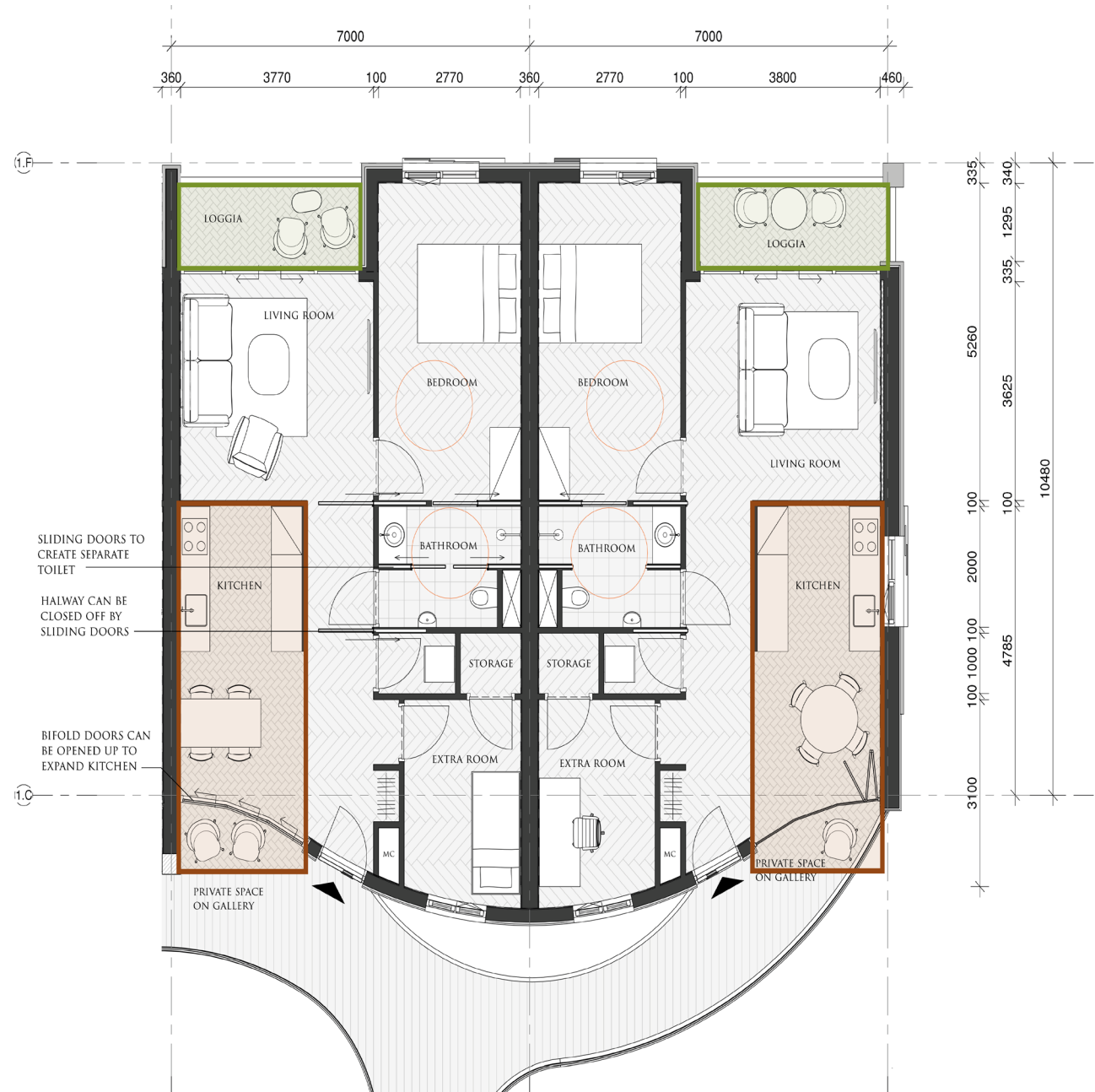
FIRST/ SECOND FLOOR



APARTMENT LAYOUT



APARTMENT LAYOUT



FACADES - MATERIALS

Facade outside world



Match Nieuw Houtwijk



Bamboo sliding panels for sunshading



Pirrouet bricks

Facade inside world



Curved gallery with holes for sunlight



Bamboo facade panels N-durance

FACADES

Facade outside world



Facade Outside world

Facade inside world



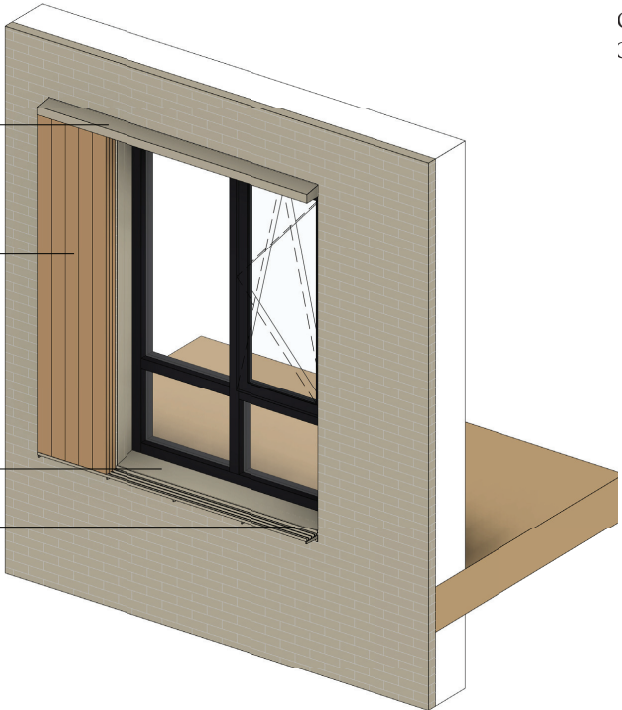
FACADES - SLIDING PANELS

LOAD BEARING RAIL

SLIDING PANELS BAMBOO
3X 500 MM

ALUMINIUM WINDOW SILL

RAIL - NON-STRUCTURAL
2 CM FROM WINDOW SILL

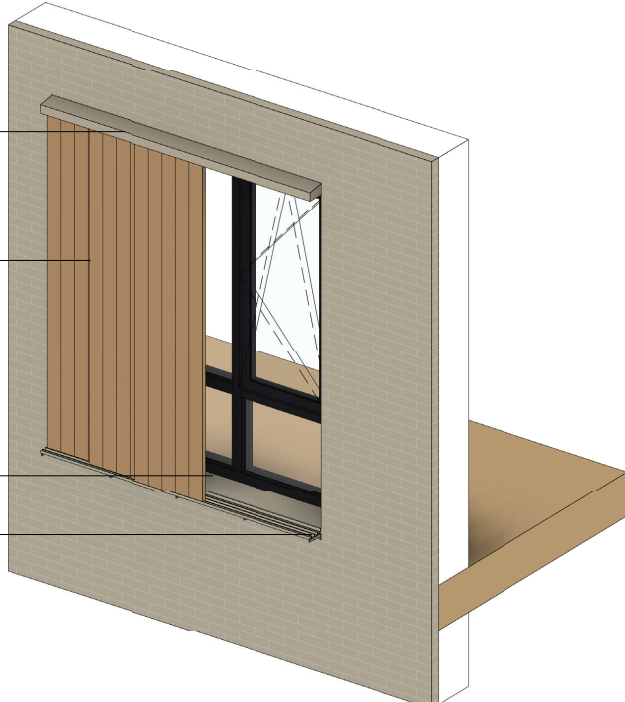


AD BEARING RAIL

SLIDING PANELS BAMBOO
500 MM

ALUMINIUM WINDOW SILL

NON-STRUCTURAL
2 CM WINDOW SILL



3D OVERVIEW



FACADE OUTSIDE WORLD

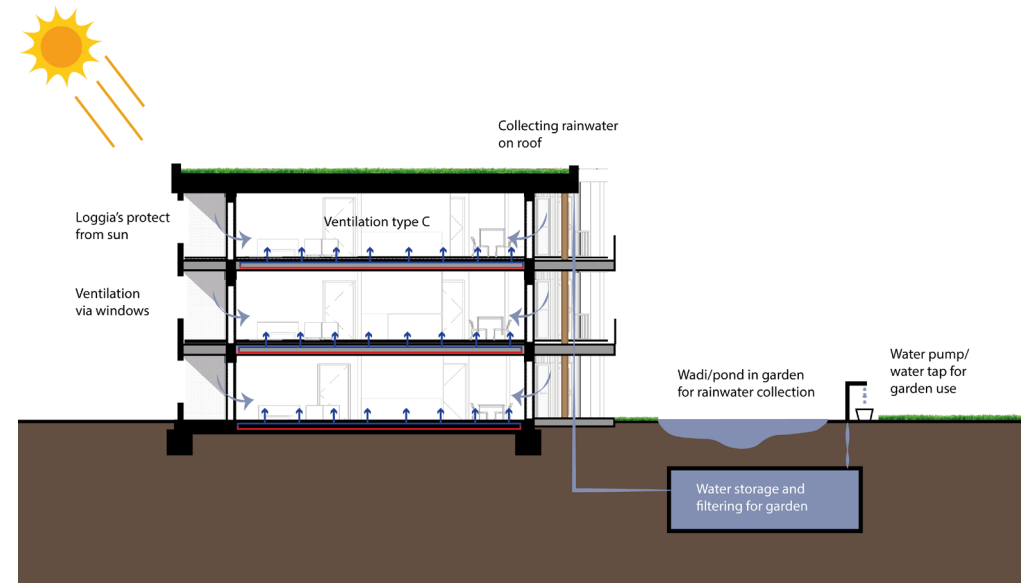
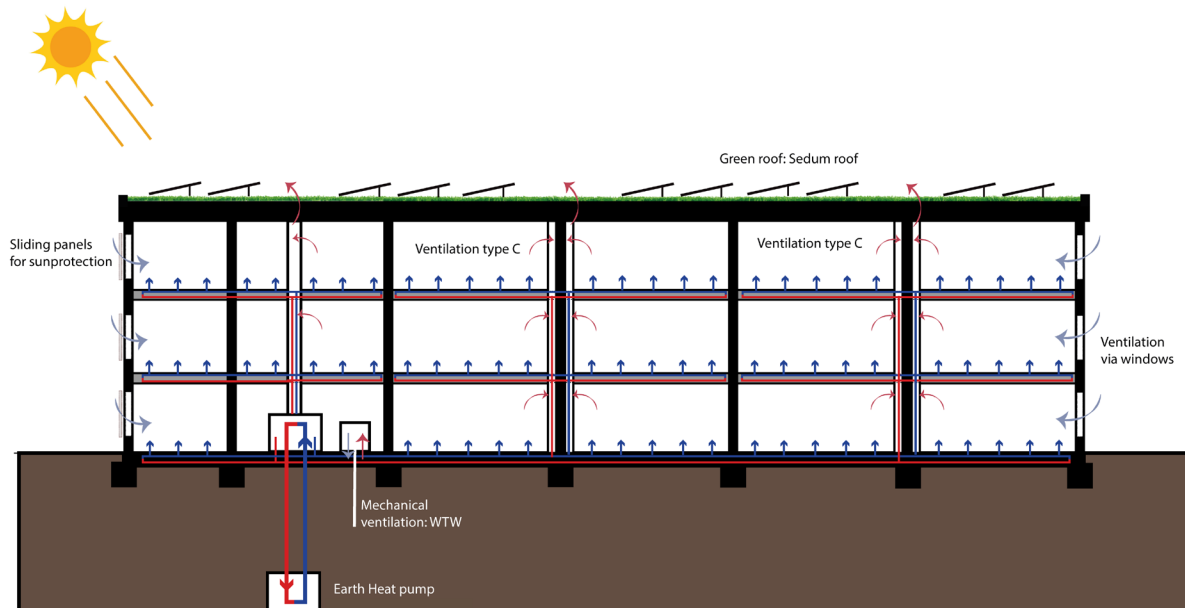
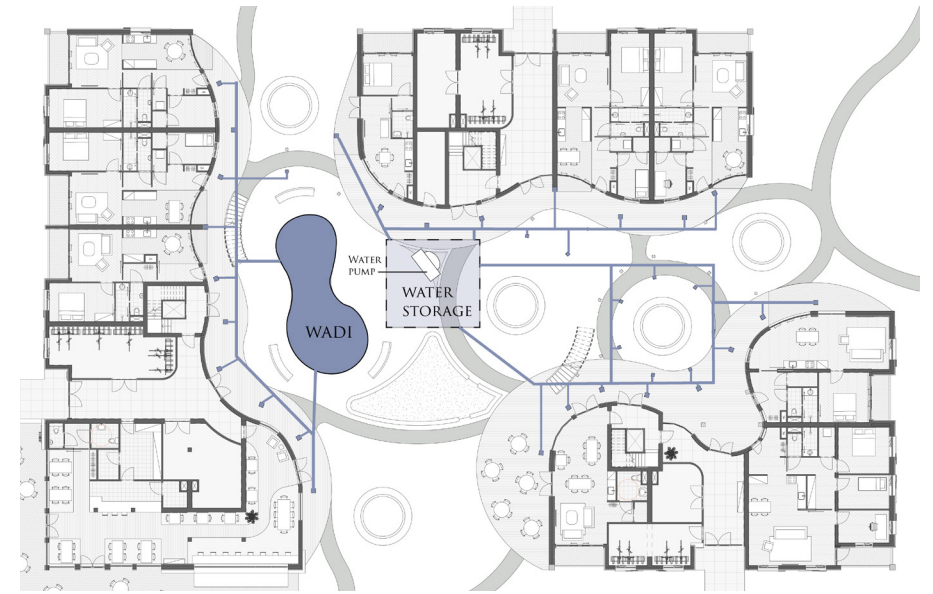


FACADE INSIDE
WORLD



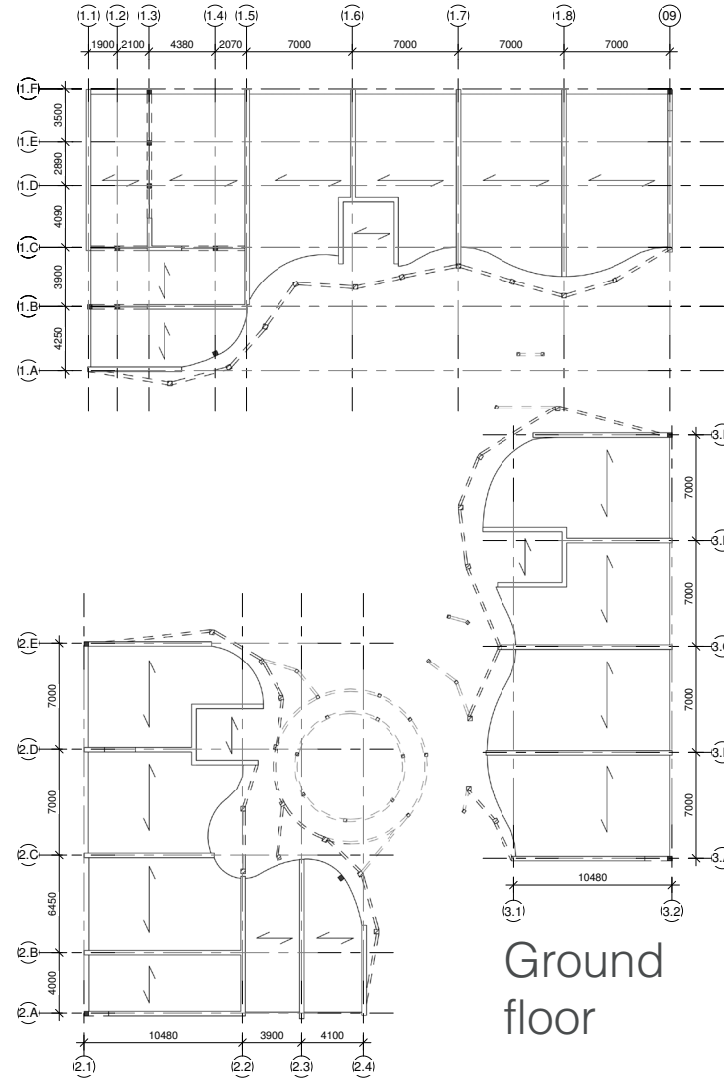
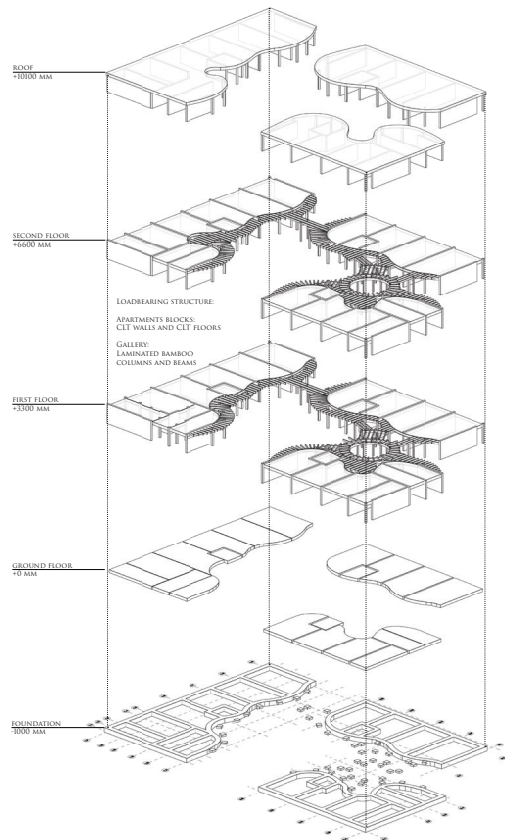
CLIMATE SECTIONS

- Climate adaptive: future-proof
- Collective technical rooms
- Sliding panels, loggias and galleries for shading
- Rainwater is collected for reuse

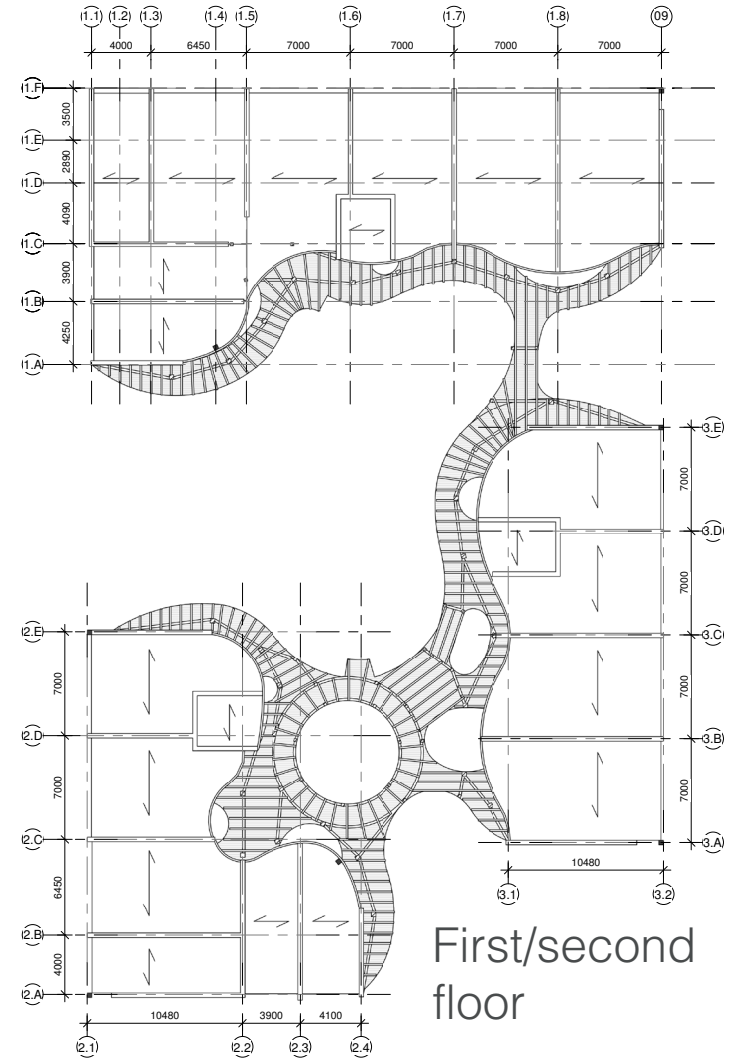


CONSTRUCTION

CLT construction

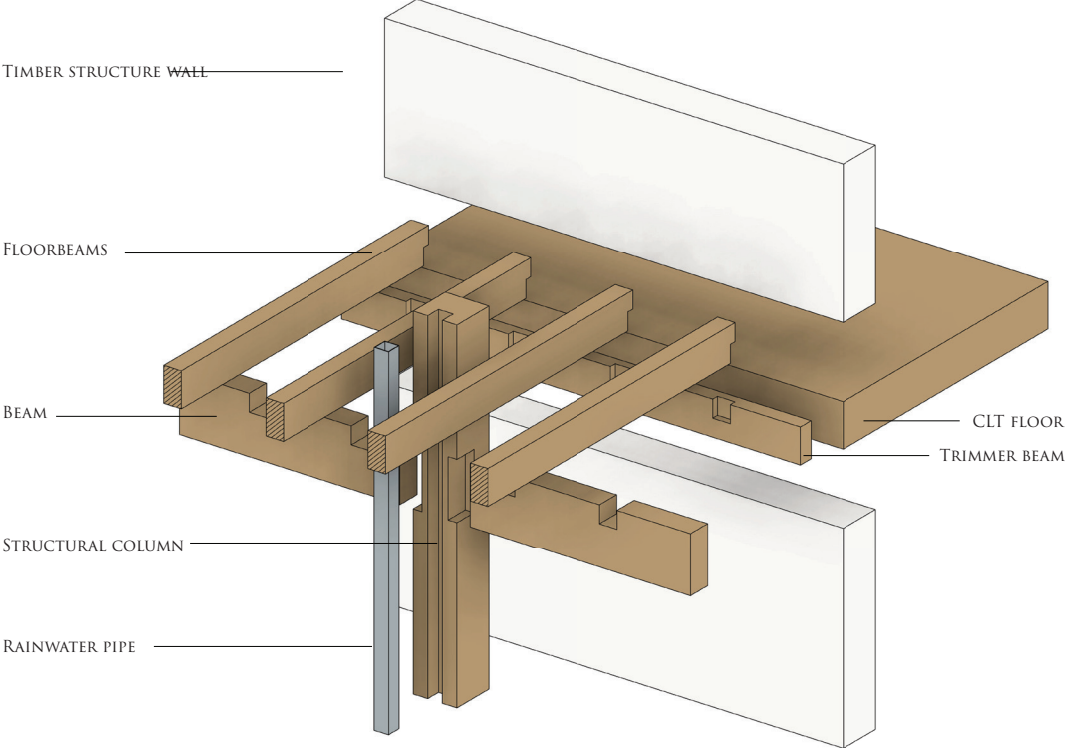


Ground floor

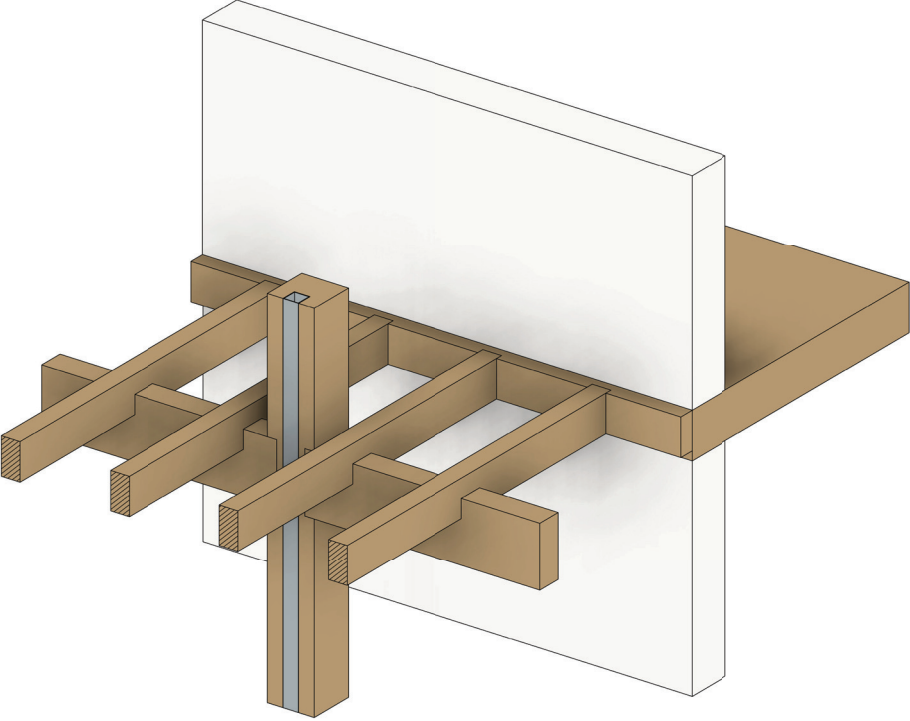


First/second floor

CONSTRUCTION GALLERY

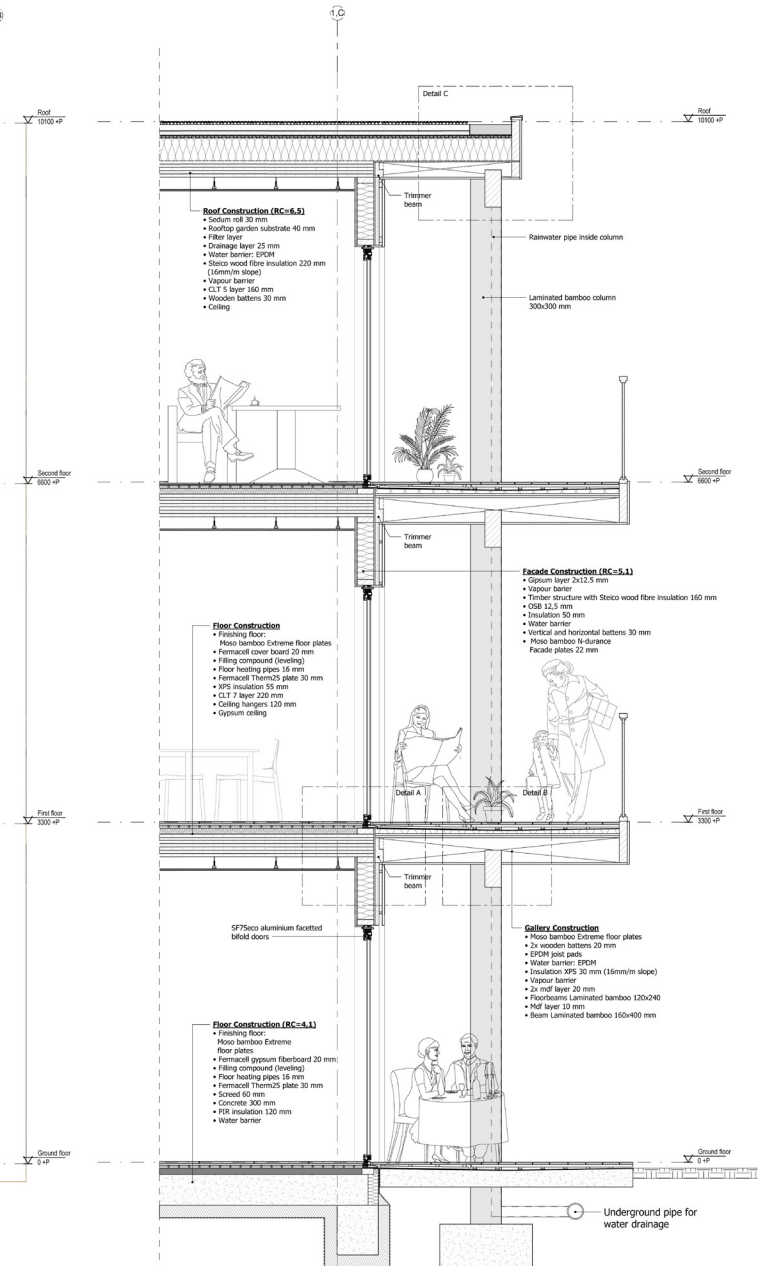
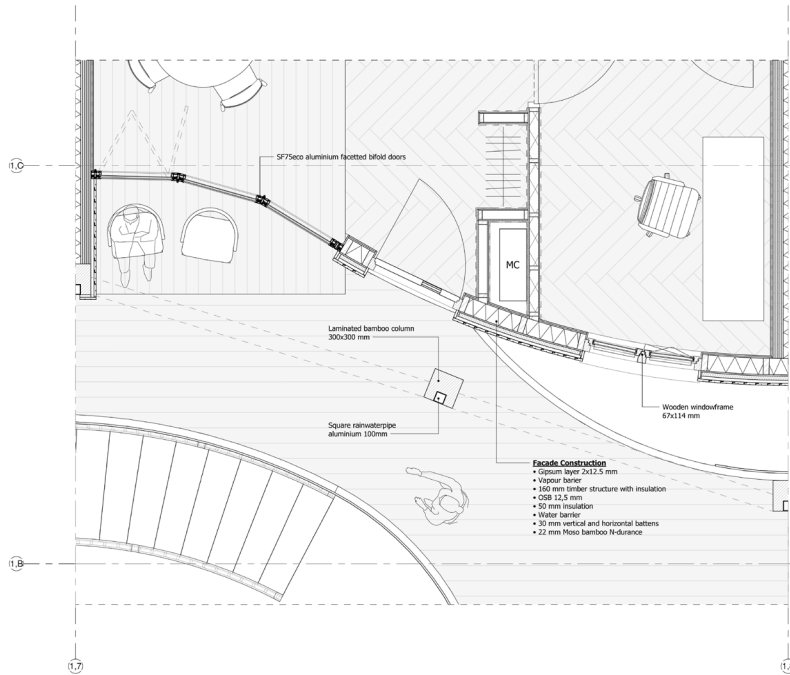


3D DETAIL
CONSTRUCTION GALLERY



3D DETAIL
CONSTRUCTION GALLERY

1:20 FACADE



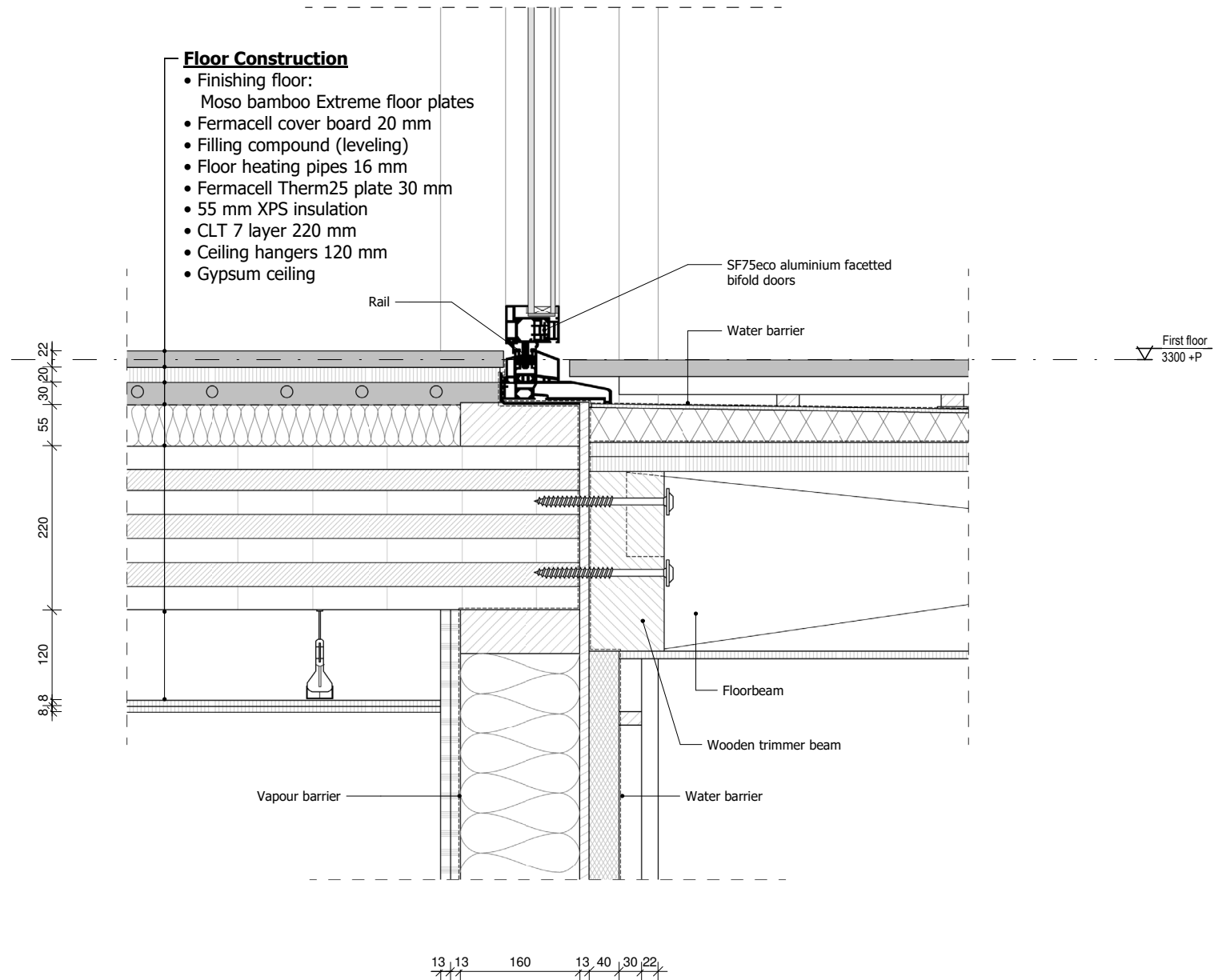
Fragment first floor

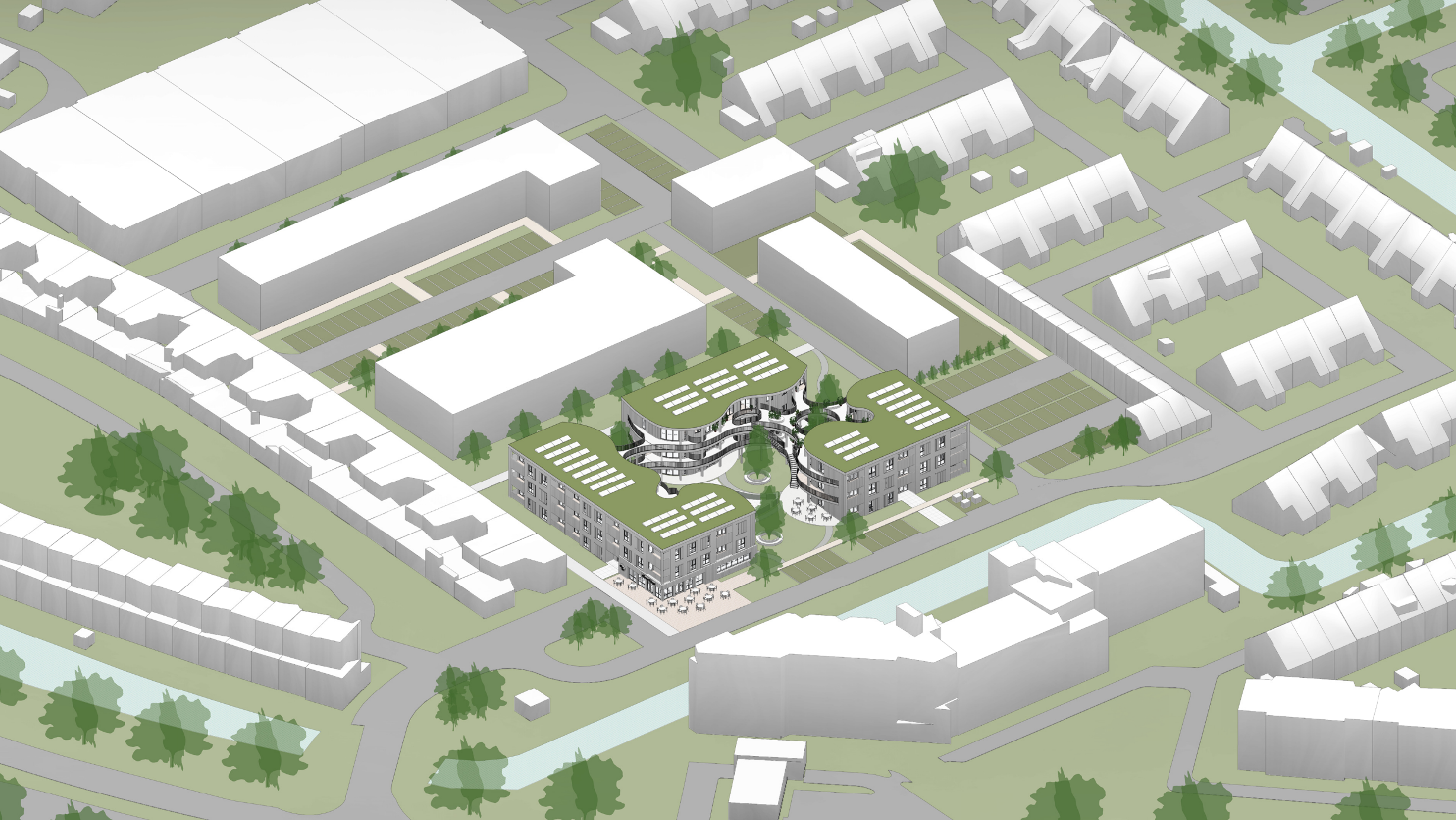
Facade

Facade section

DETAIL A

- Window frame underneath flooring
- Curved bifold doors
- Floor heating





TOUR



Jannie
66 years old

Lives together with her
husband John on the
first floor.



TOUR



Jannie
66 years old

Lives together with her
husband John on the
first floor.



Route ground floor

TOUR



Jannie
66 years old

Lives together with her
husband John on the
first floor.



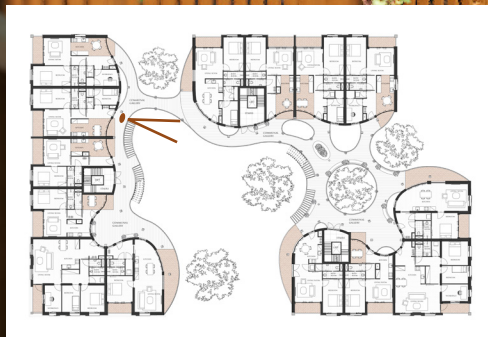
Route first floor





















CONCLUSIE

Home is more than a physical space.

This means that architectural and environmental design does not directly create a sense of home, but it does strongly influence it by shaping the conditions that support these five factors of feeling at home.

The project aims to make every resident feel at home, acknowledging that the meaning of home differs from person to person. The design therefore offers a variety of spaces and living qualities that support different lifestyles, preferences, and needs.

