

# Healthy Ageing through the Living Environment



Designing for Care in an Inclusive Environment

Eline Koes



# Content



RESEARCH

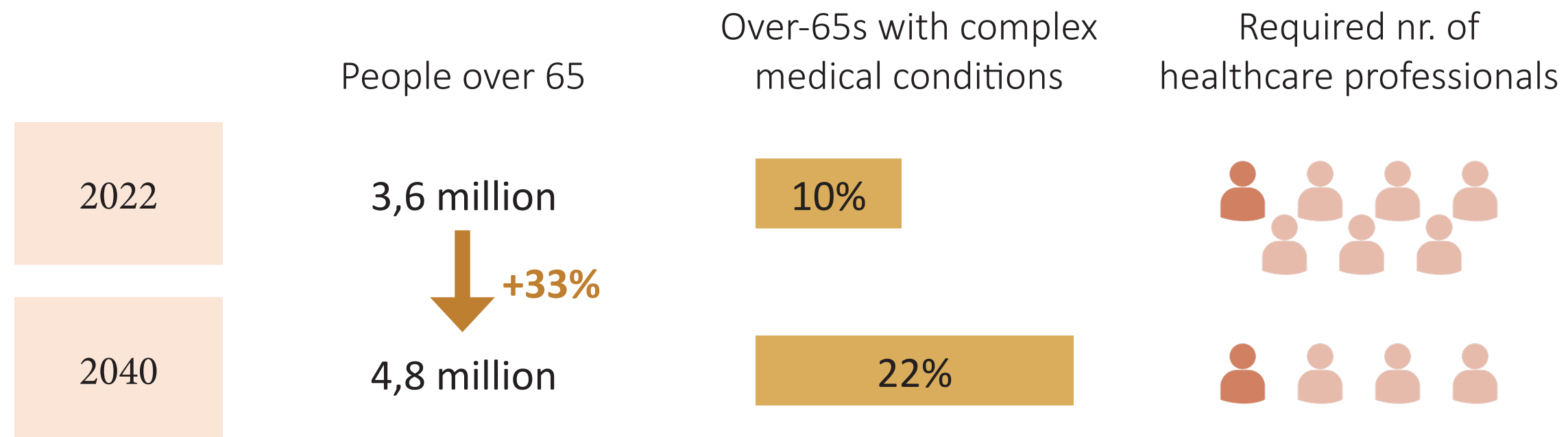
- Introduction
- Problem statement
- Research
- Location
- Experiences fieldwork

DESIGN

- Design
- Proposal Neighbourhood



# Ageing Society





## Research question

**How can Dutch living environments be adapted or designed to promote healthy ageing and assist the elderly in maintaining their vitality?**

## Goal

**Creating Health Promoting  
Living Environments where  
People can age healthily**



# Life & Healthspan

25%  
**genetic factors**



75%  
**non-genetic factors**  
social, cultural, and  
lifestyle conditions

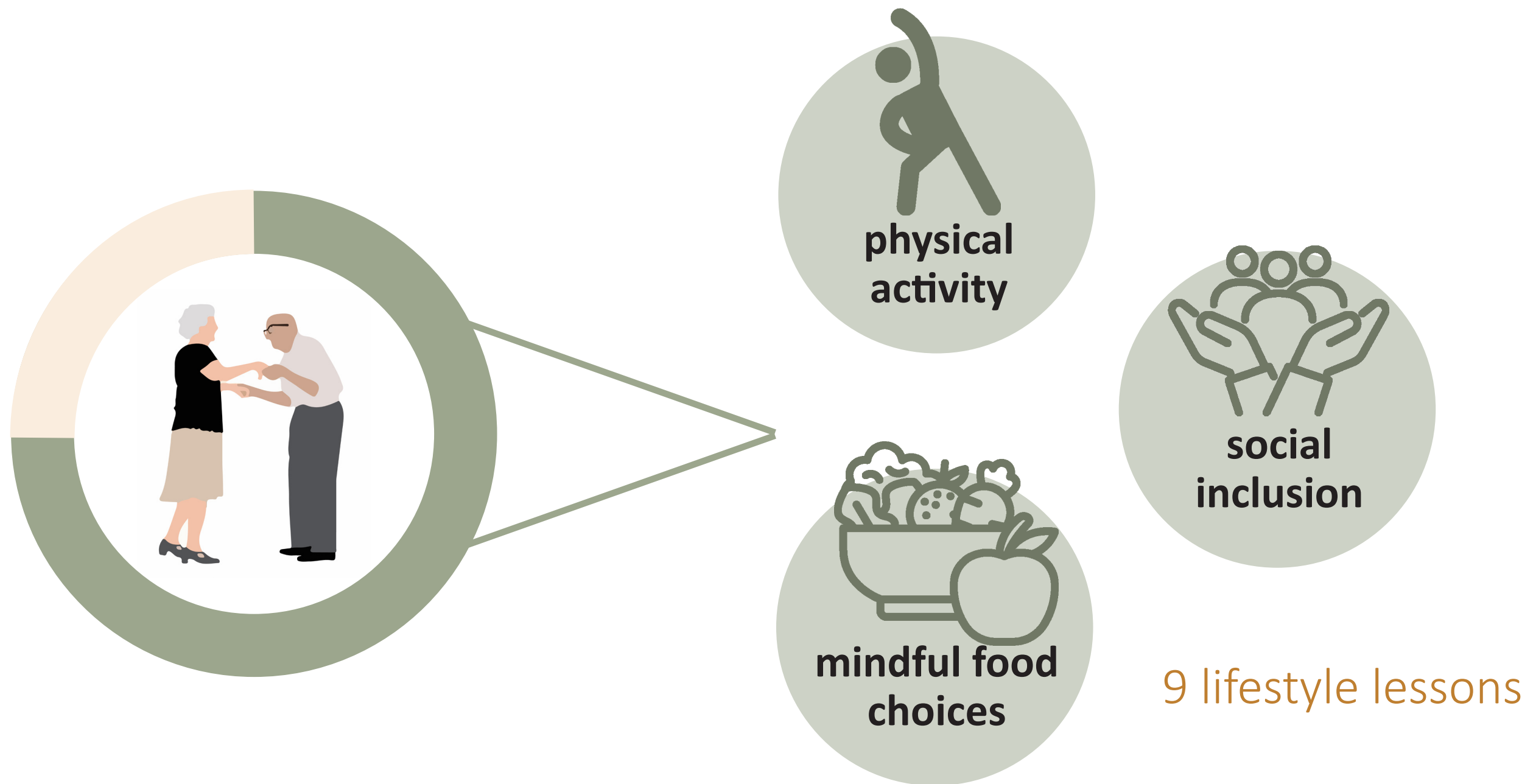


# Blue Zones | healthy ageing

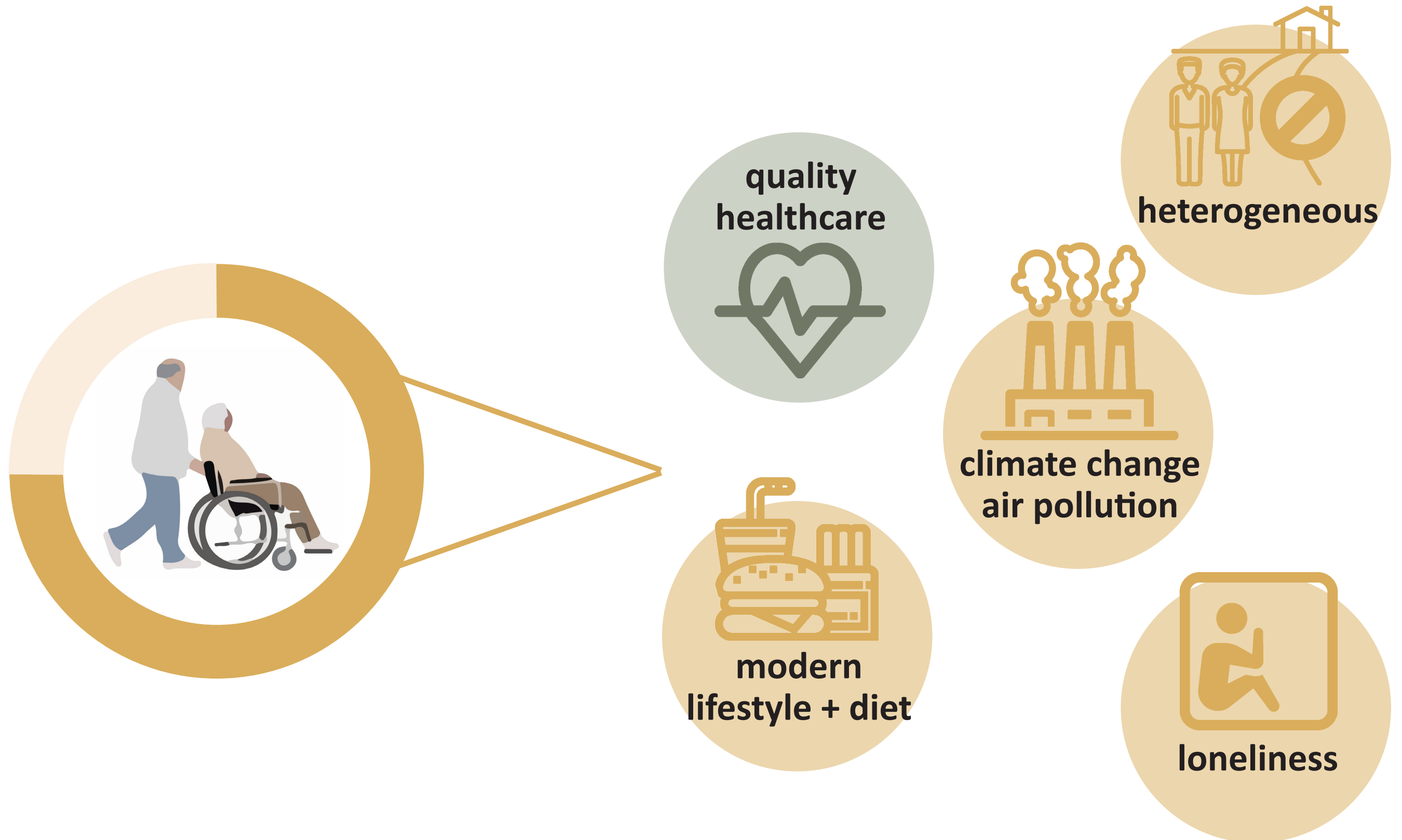




# Blue Zones | characteristics



# Western Environments | characteristics





# Conclusion | creating healthy living zones

## Physical Activity



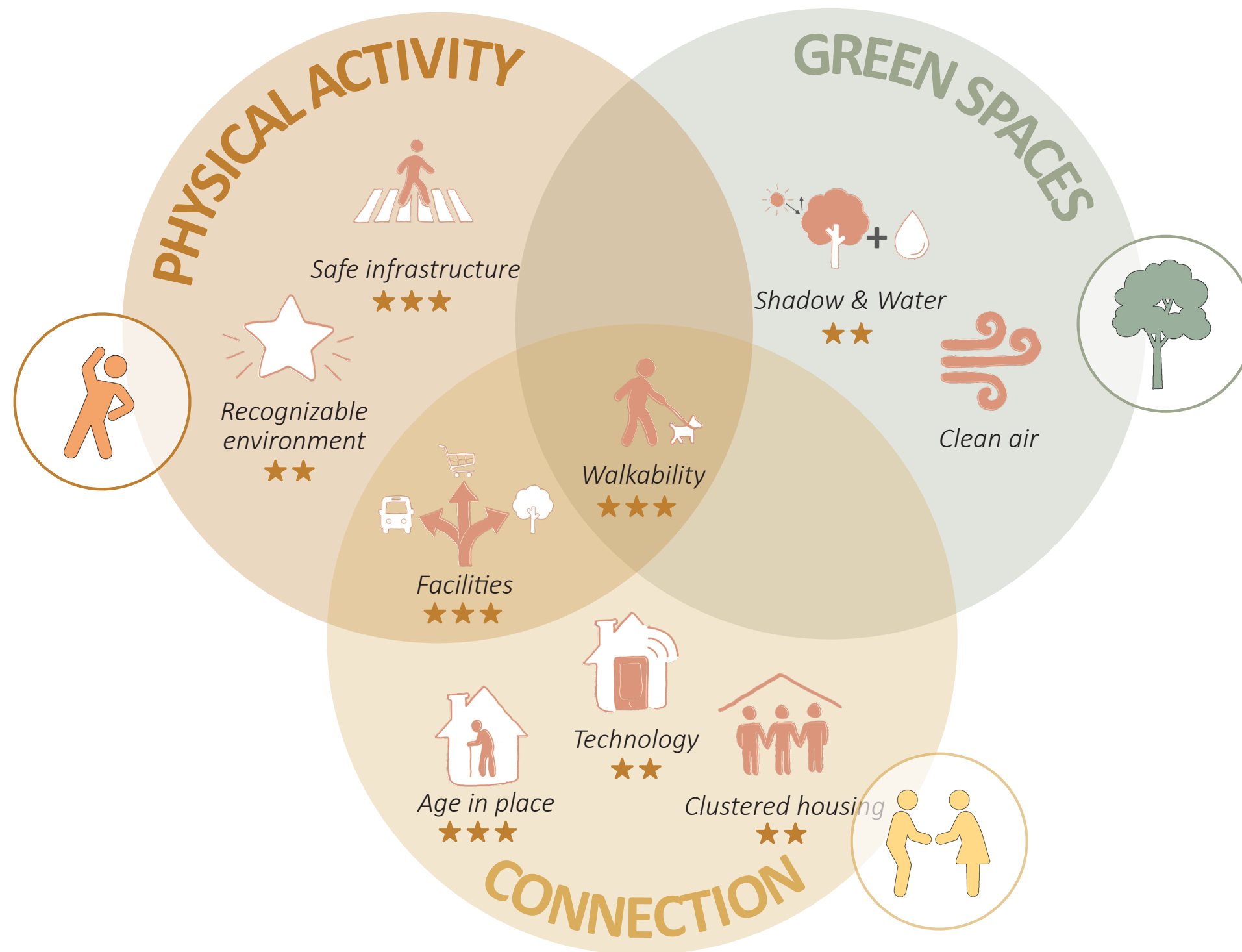
## Social Connection



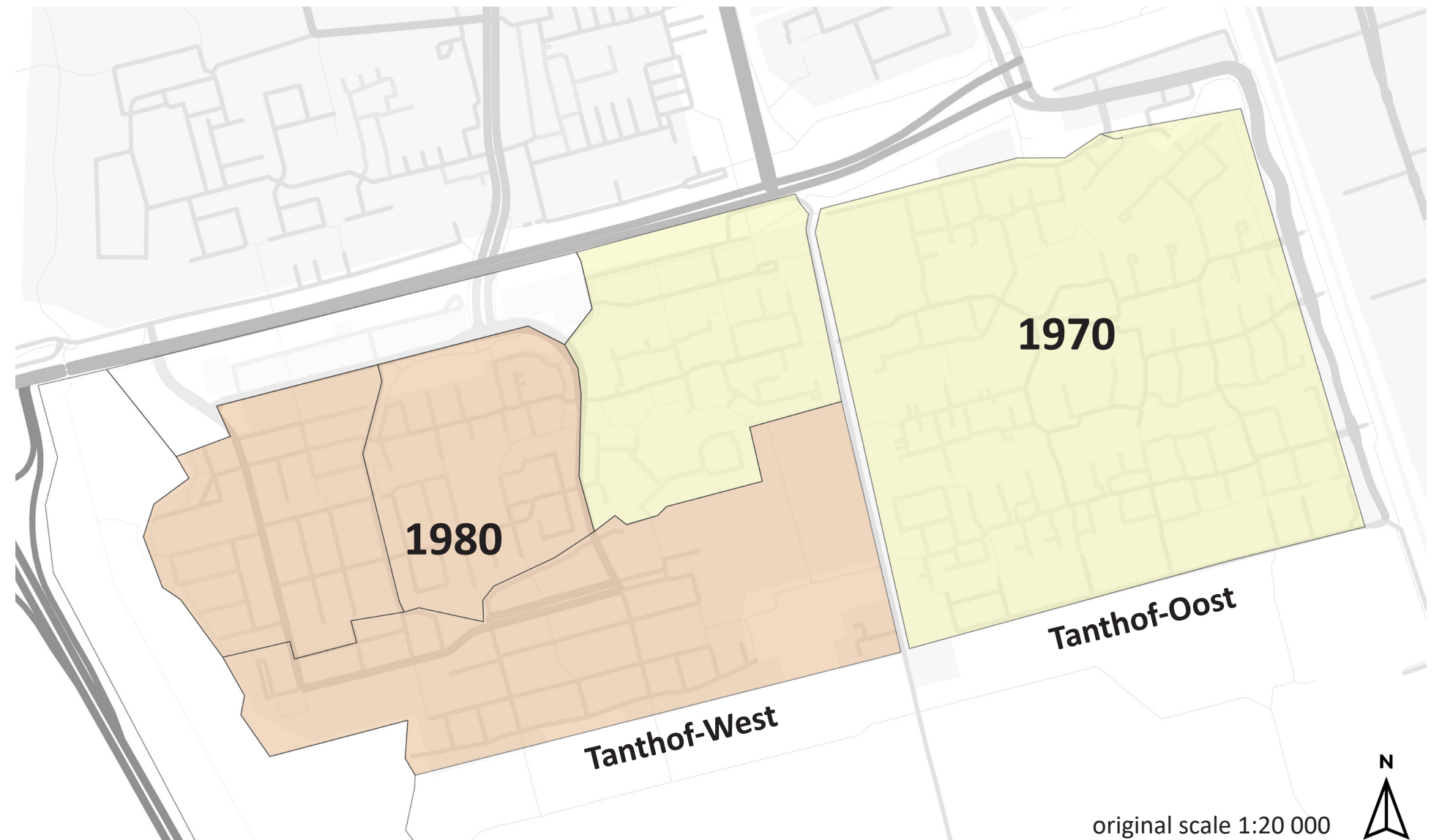
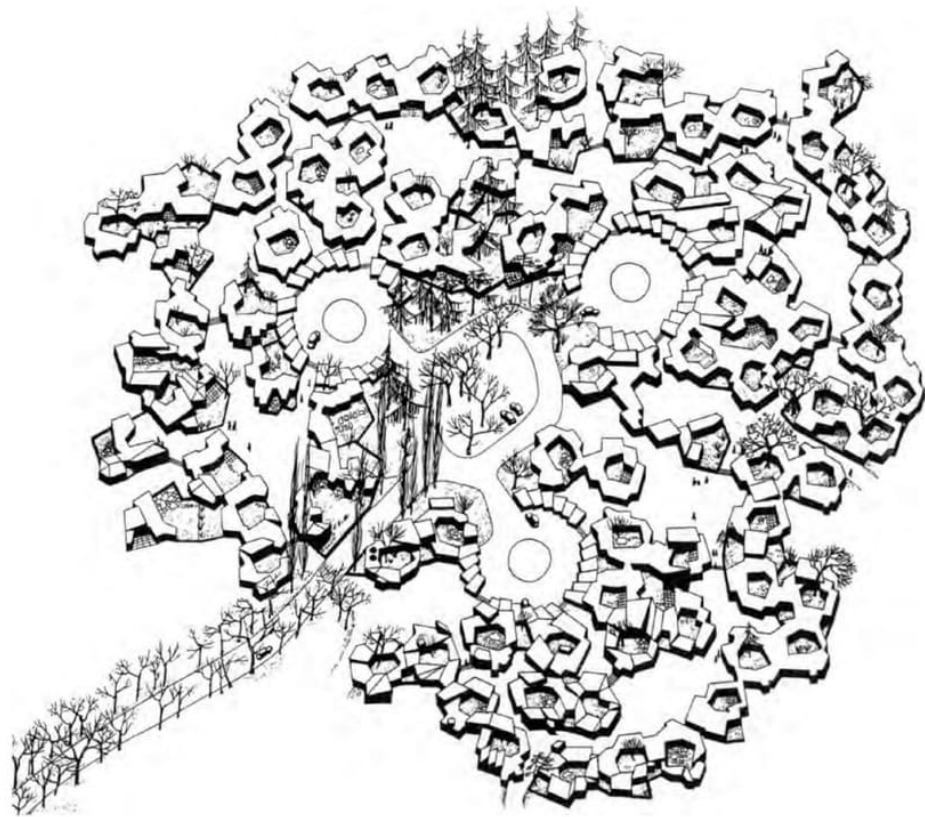
## Green Blue Spaces



# Conclusion | creating healthy living zones

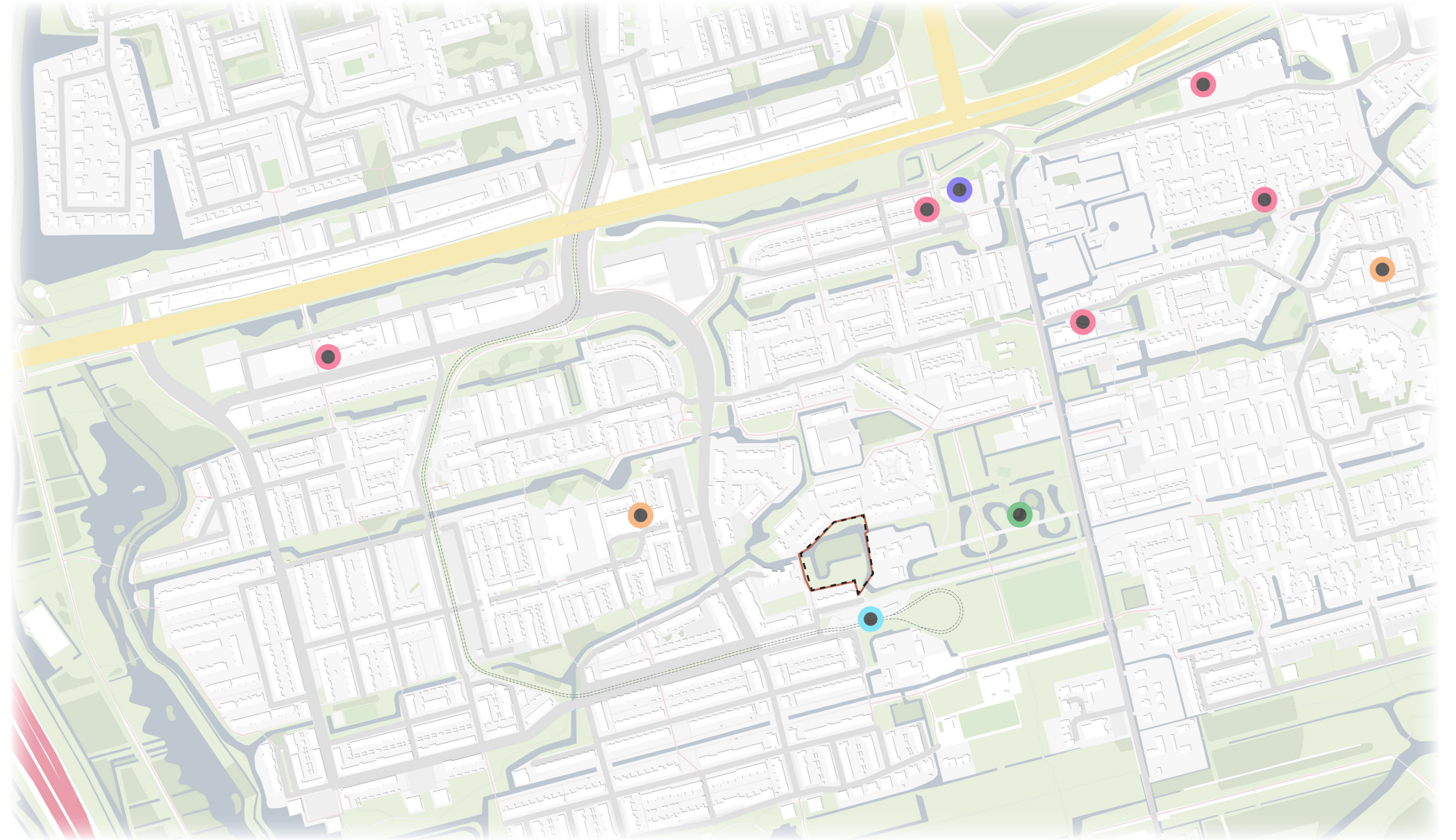


# Analysis | Tanthof





# Analysis | Tanthof





# Meet Betty

an elderly woman living in the  
Cauliflower Neighbourhood Tanthof,  
Delft

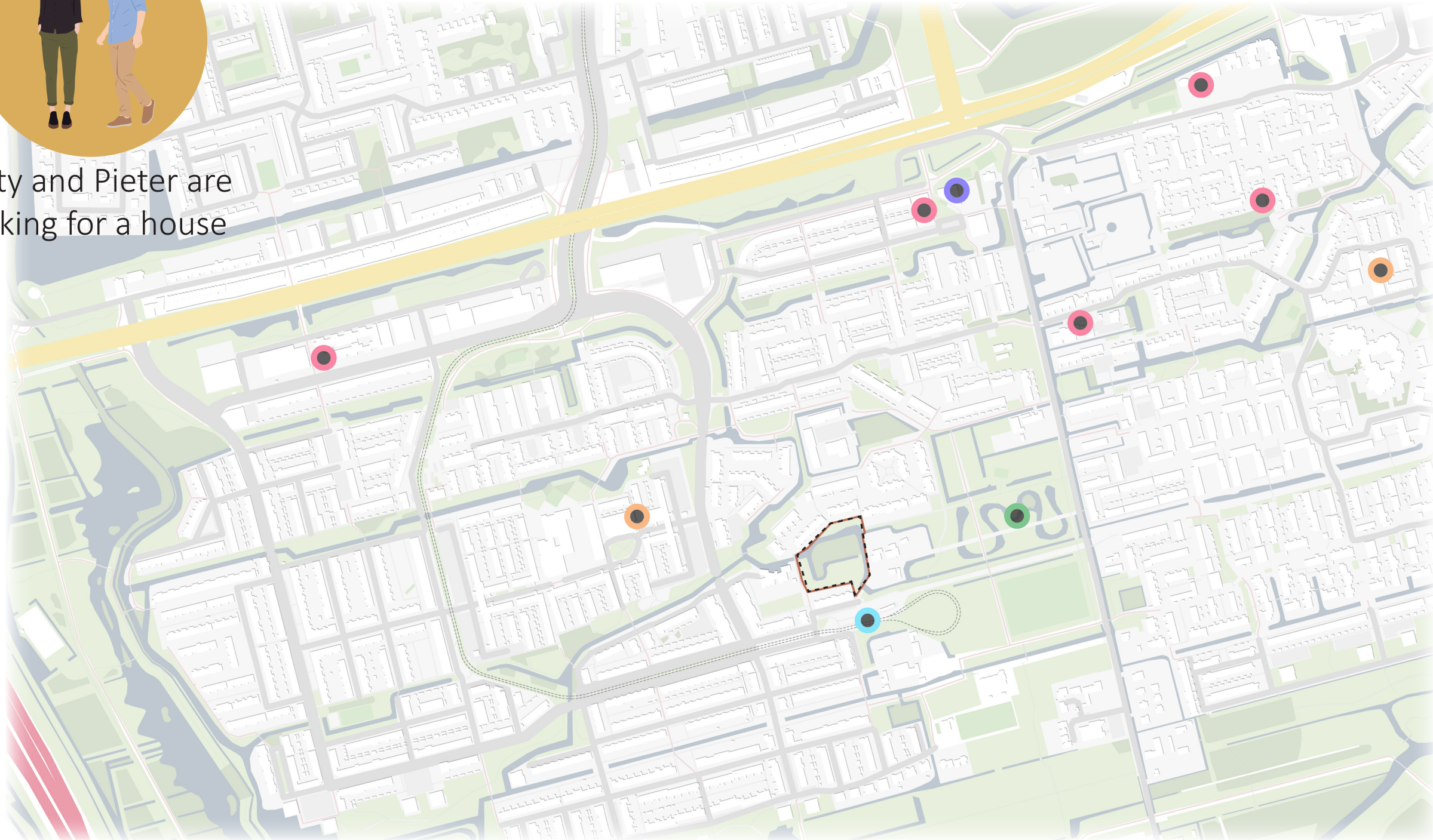


# Tanthof | 1971

1971



Betty and Pieter are looking for a house



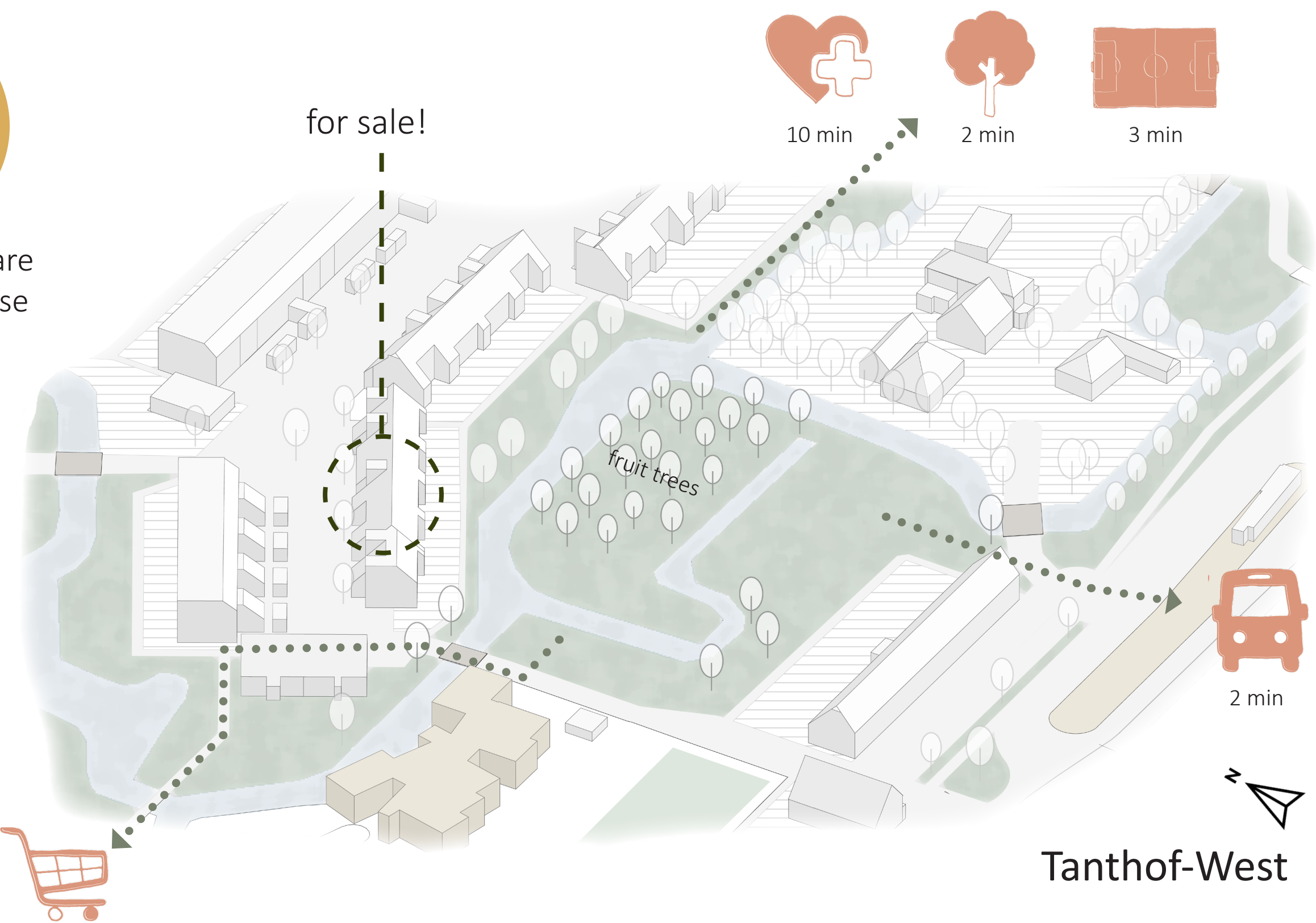


# Looking for a House

1970



Betty and Pieter are looking for a house



# Starting a Family

1970

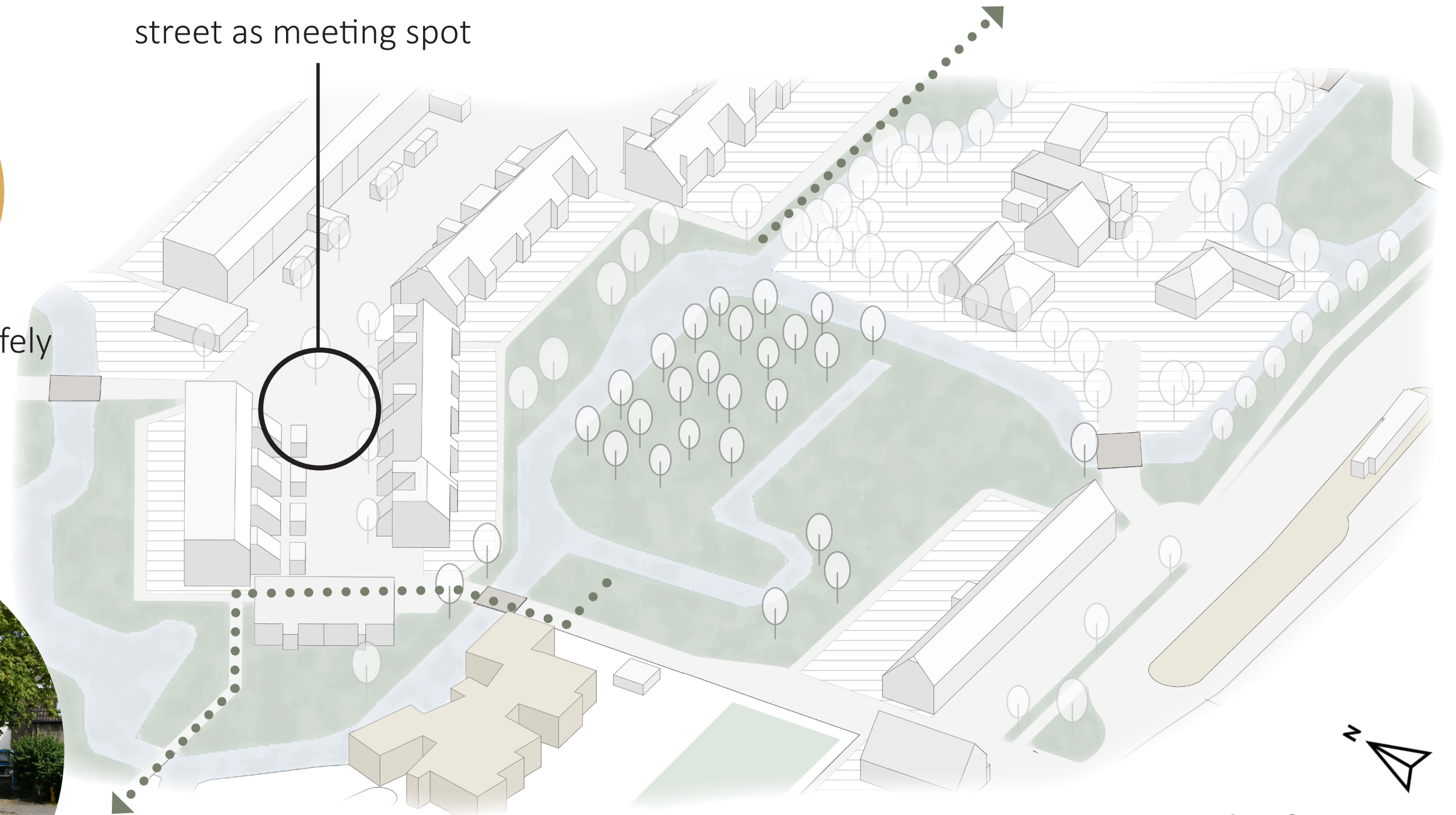
1975



Children can play safely on the street



street as meeting spot



Tanthof-West



# Children leaving Home

1970

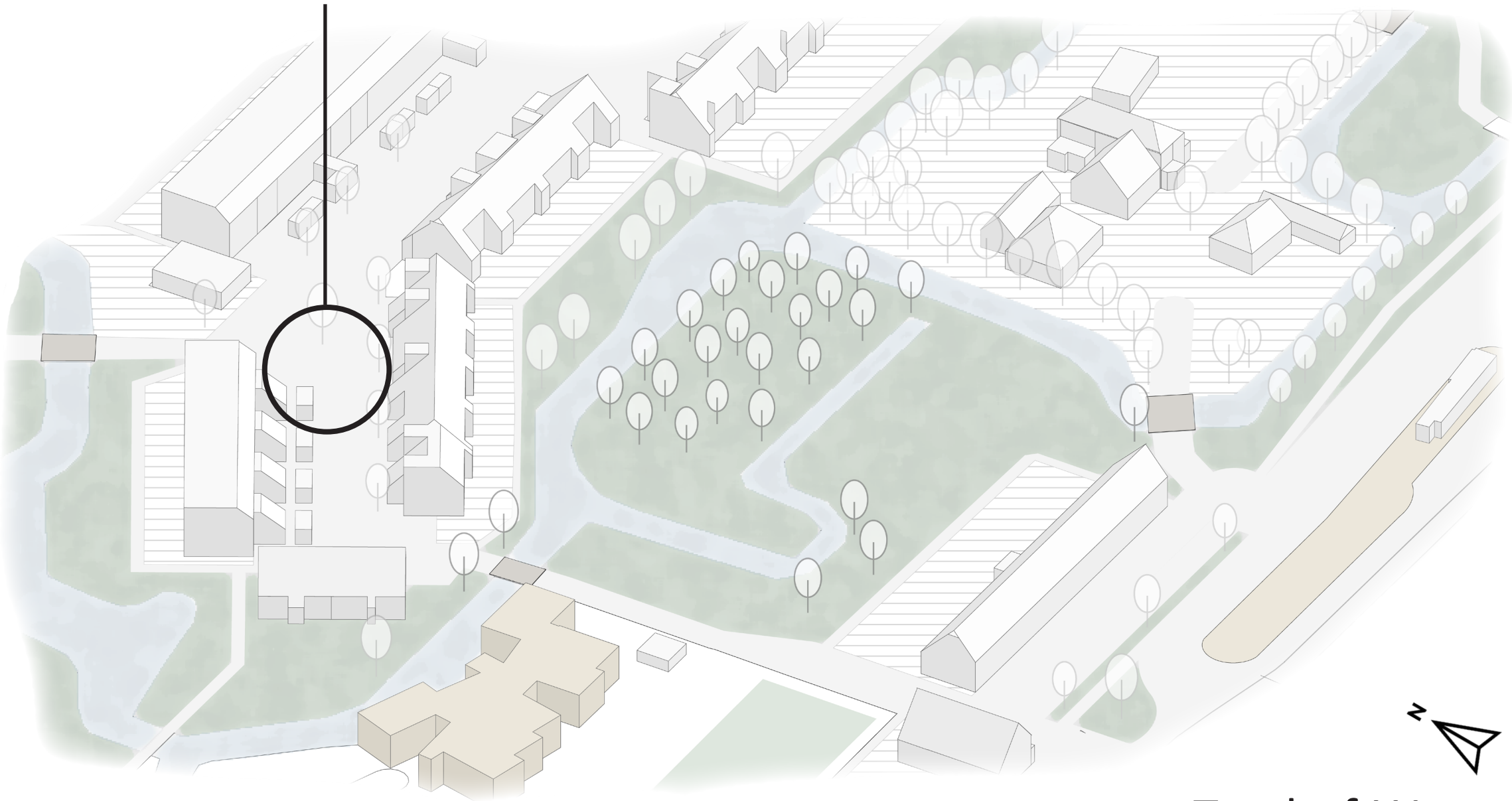
1975

1995



Betty and Pieter live together in a family house

Cars + fences



Tanthof-West



# Analysis | Fences + Parking





# Betty lives Alone

1970

1975

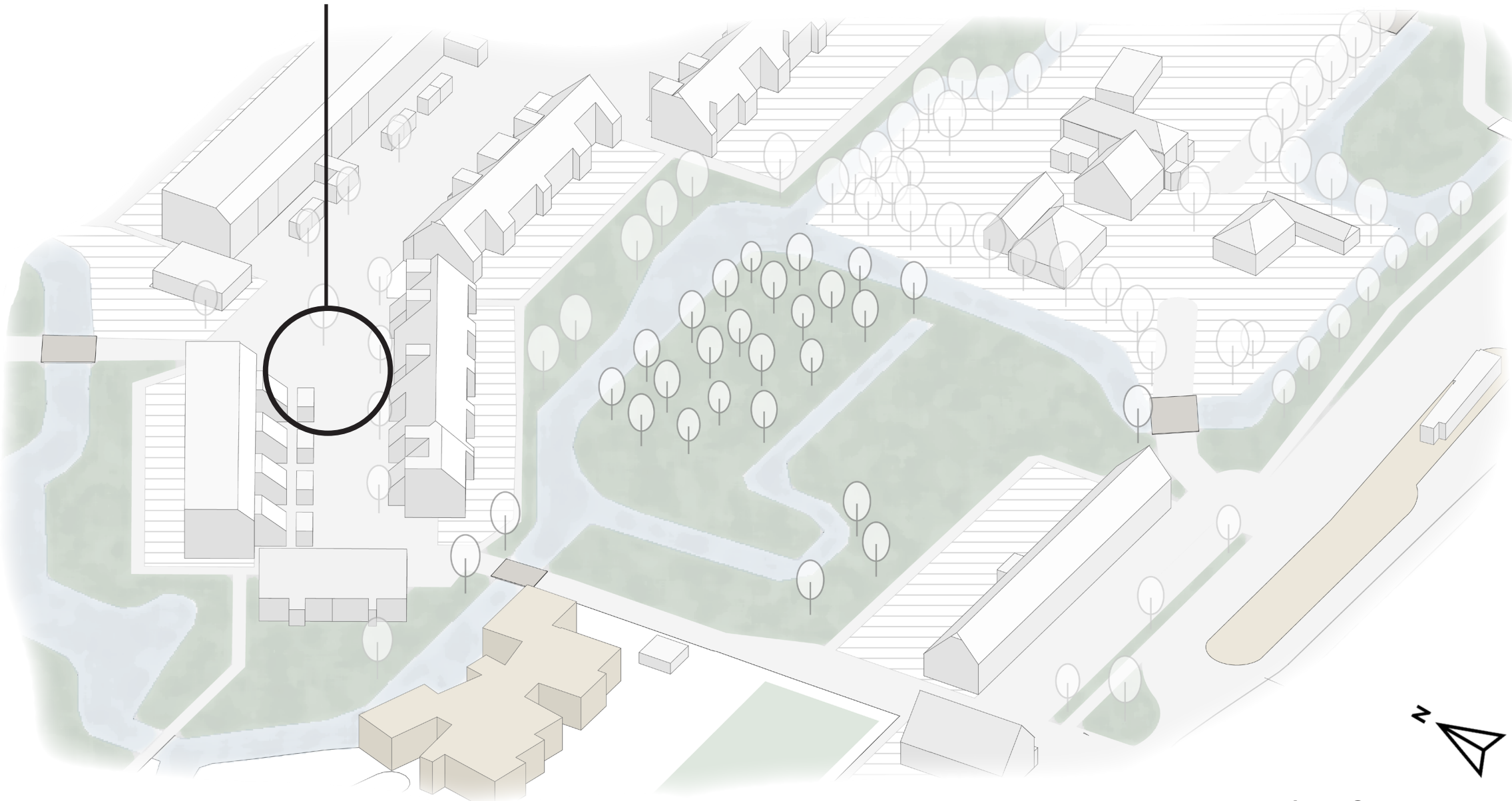
1995

2020



Betty feels lonely

Cars + fences



Tanthof-West



# Conclusion | mismatch in needs current residents



## **Conclusion :** Loneliness + Unsustainable Healthcare System



Betty's loneliness is causing rapid aging and frequent hospital visits

How can we revive the cauliflower neighbourhoods so that loneliness is replaced with a sense of community and belonging?



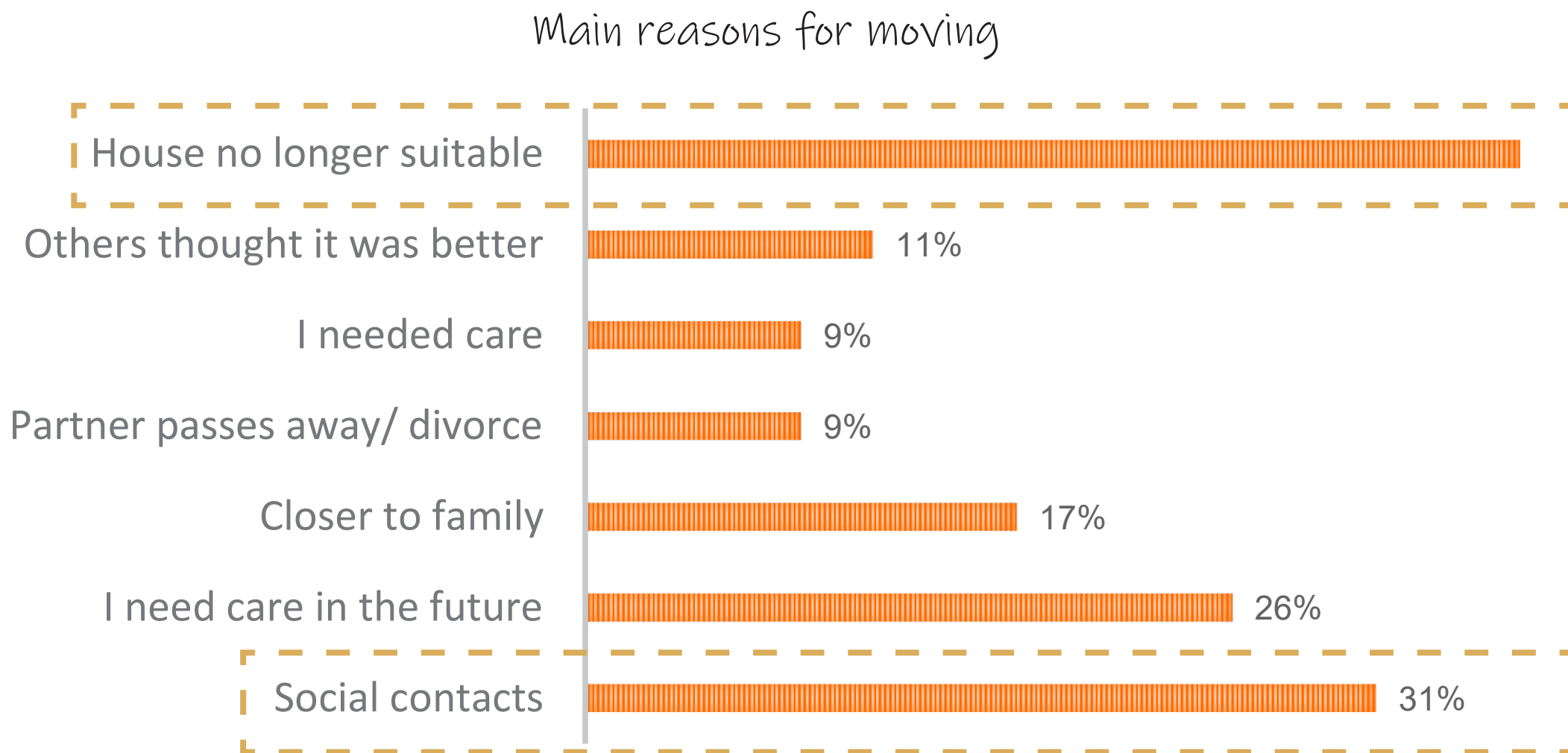


# Fieldwork | community living



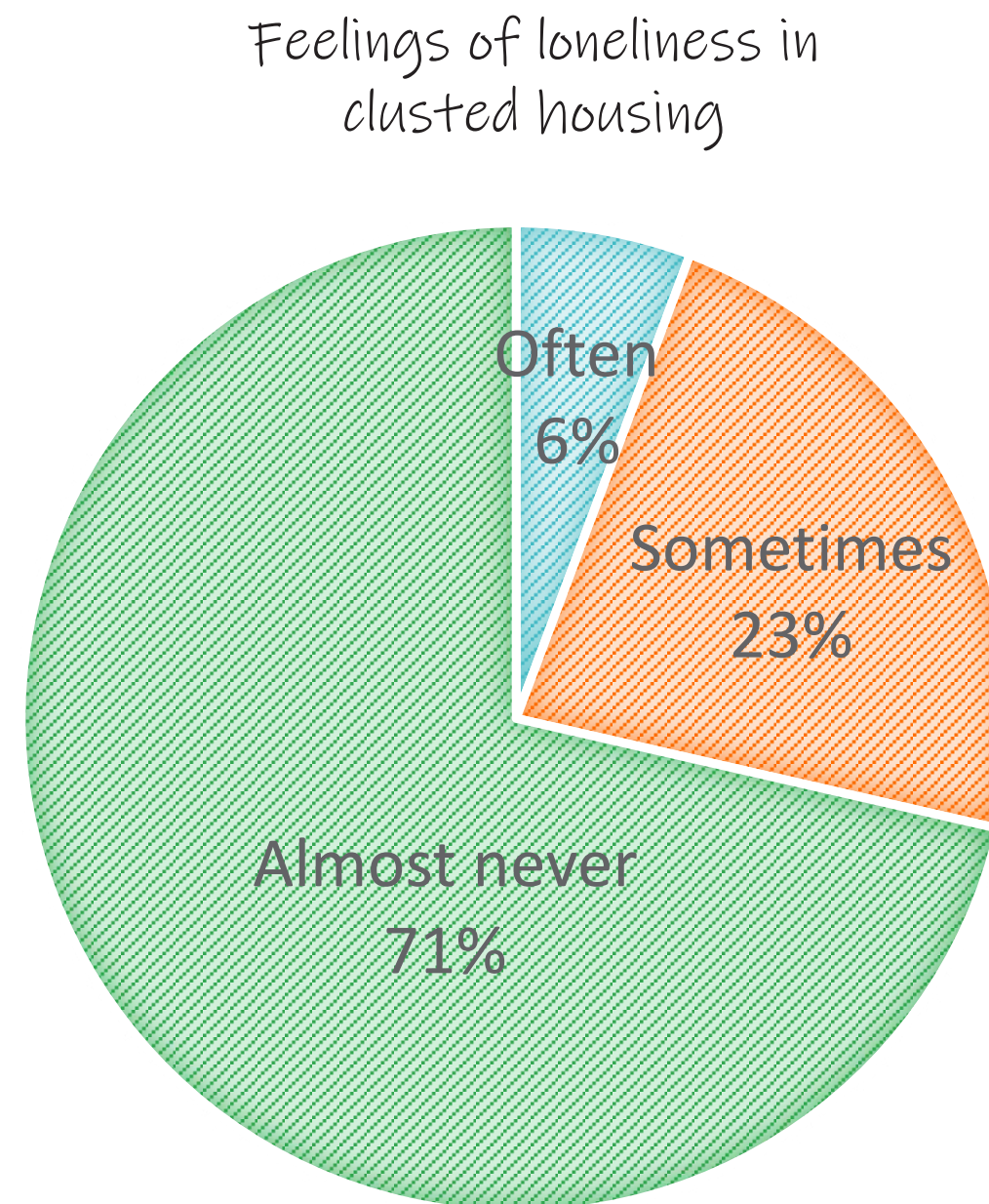


# Fieldwork | community living



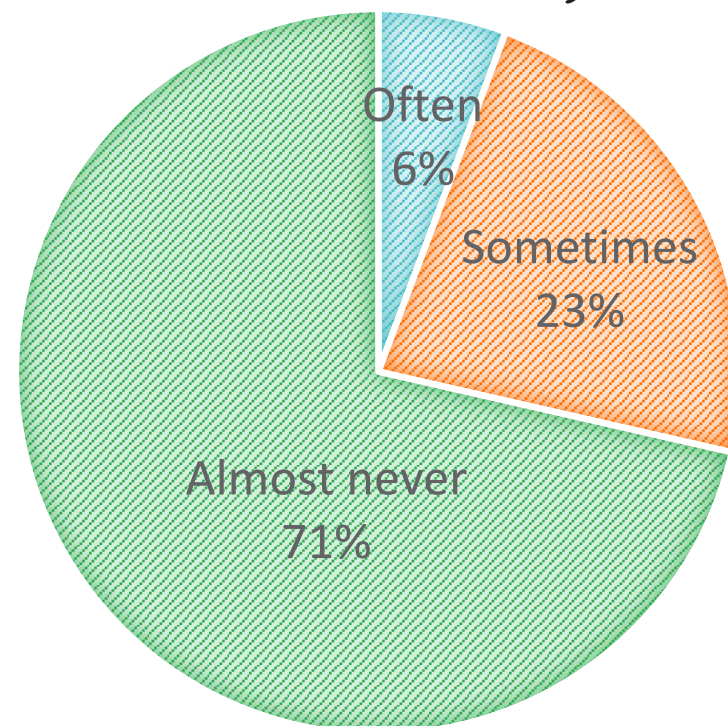


## Fieldwork | community living



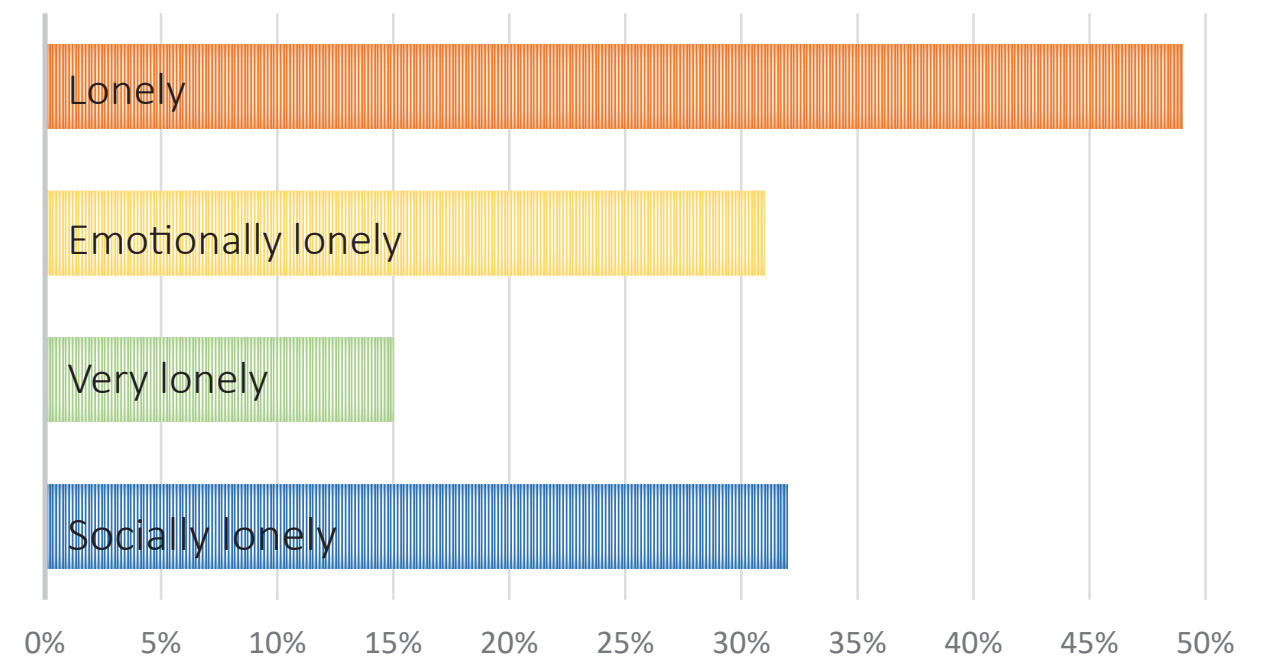
# Fieldwork | community living

Feelings of loneliness in  
clusted housing



VS

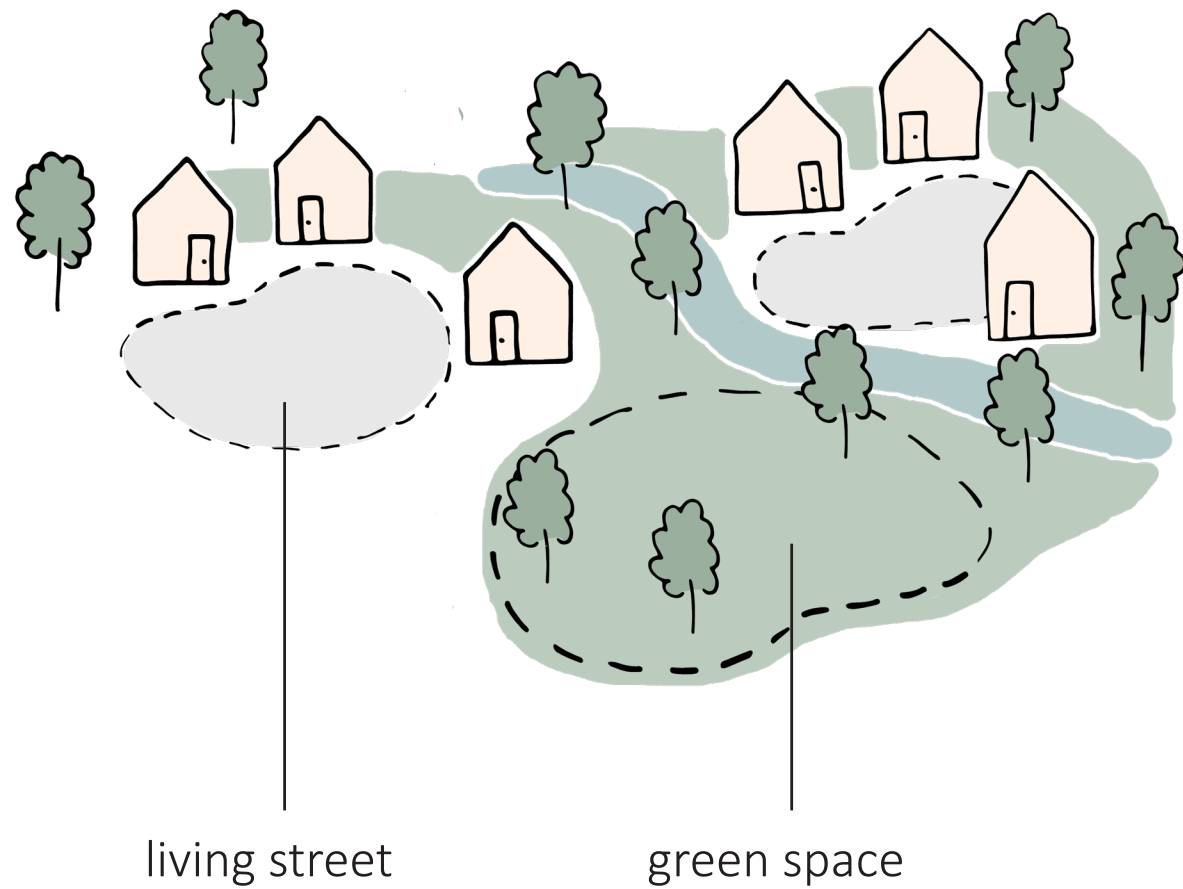
Loneliness in Tanthof



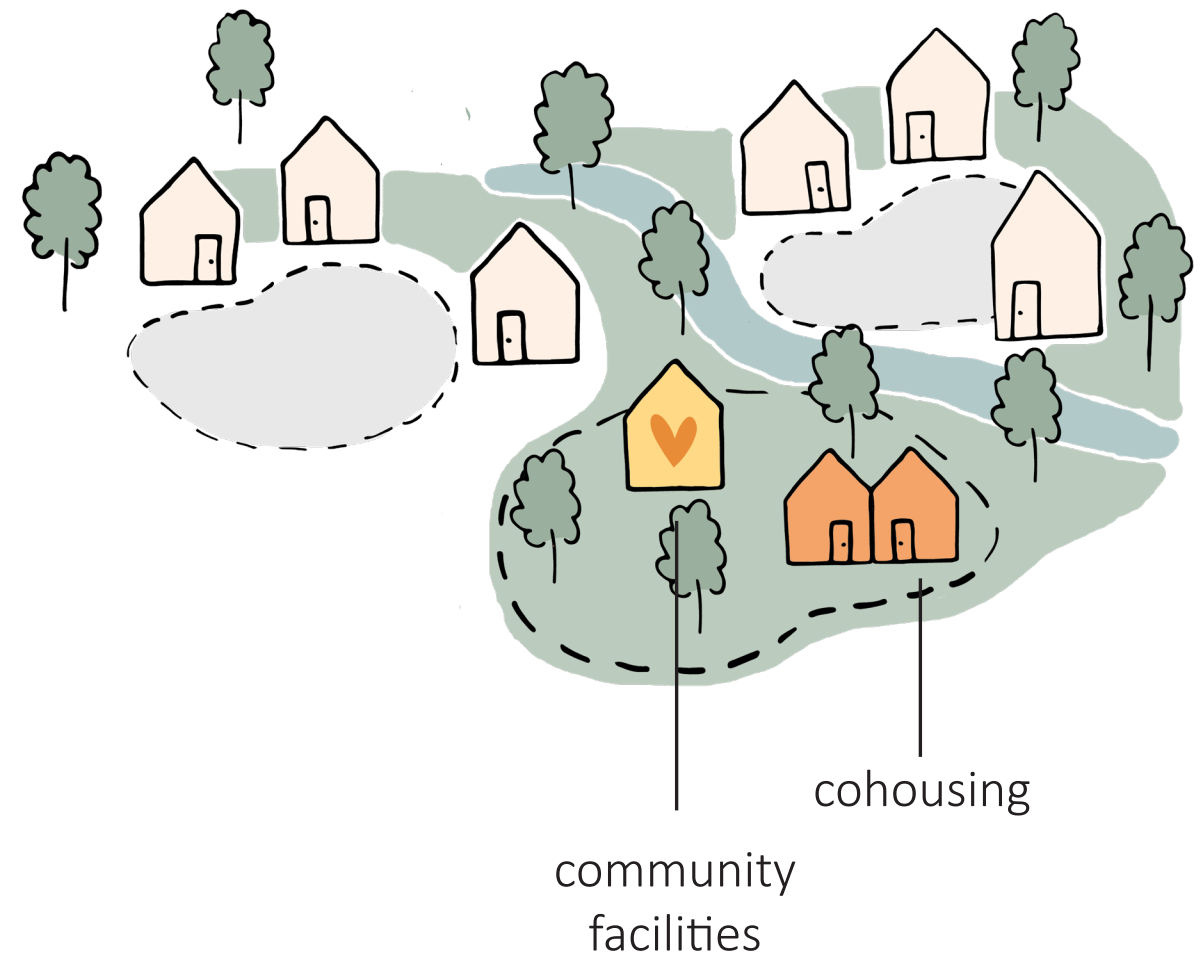


# Vision | reviving the cauliflower neighbourhoods

green spaces with potential



adding cohousing + community facilities



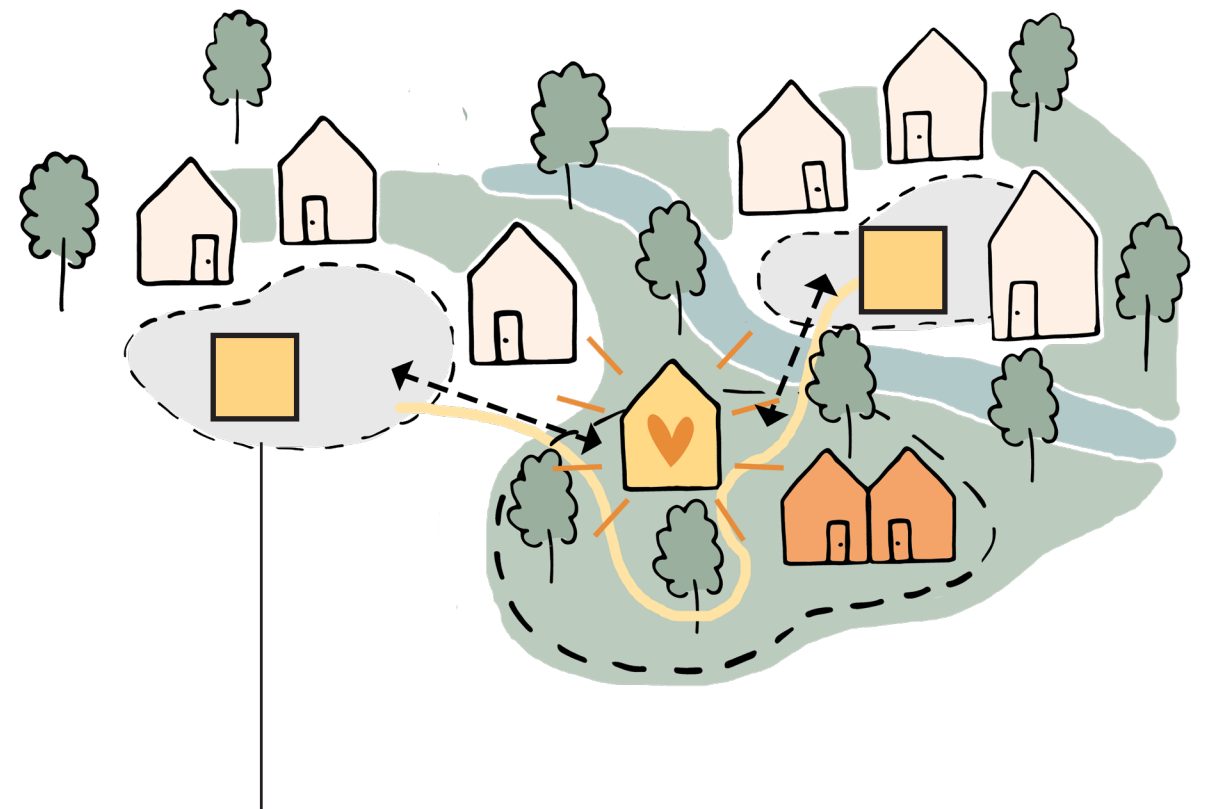
# Vision | reviving the cauliflower neighbourhoods

activating + connecting green space



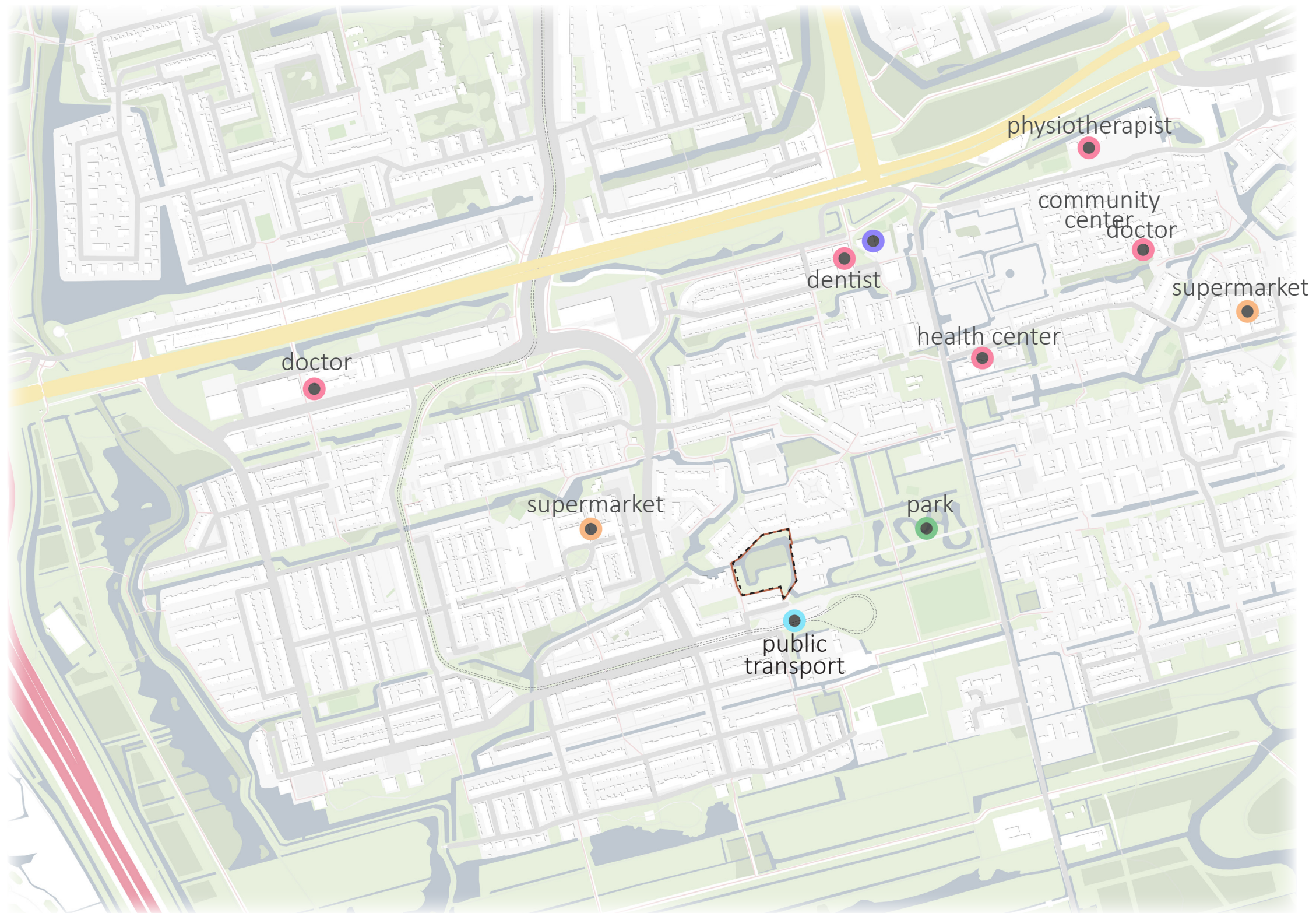
attractive walking  
+ bicycle paths

adding facilities to the living streets



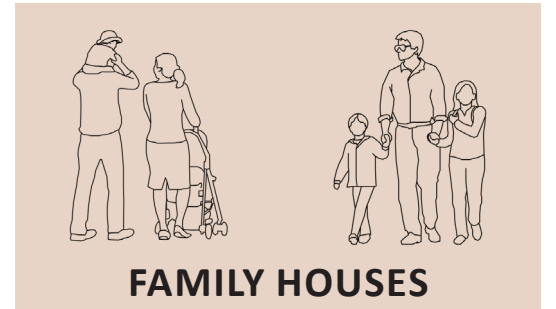
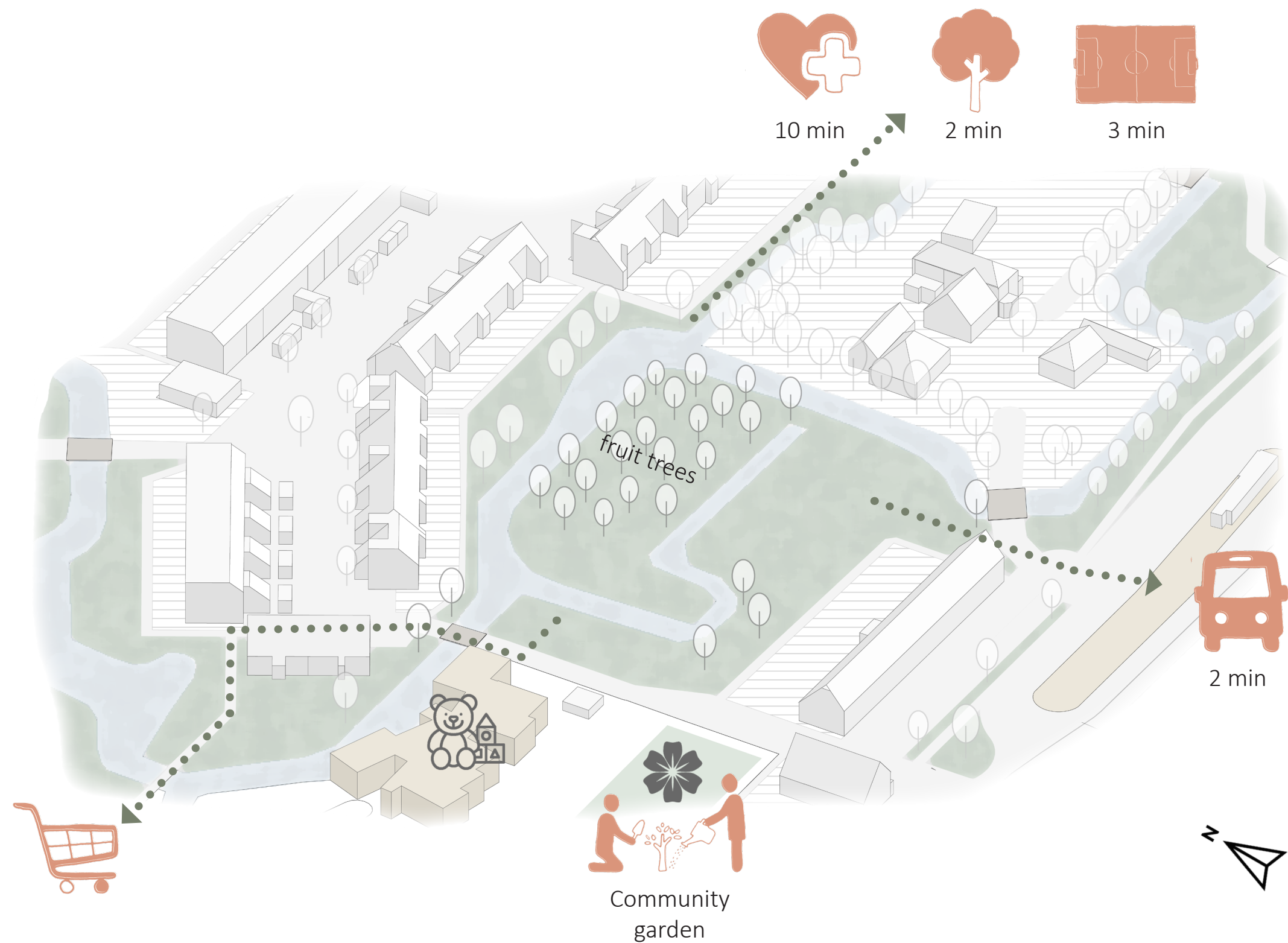
community spaces

# Site | facilities



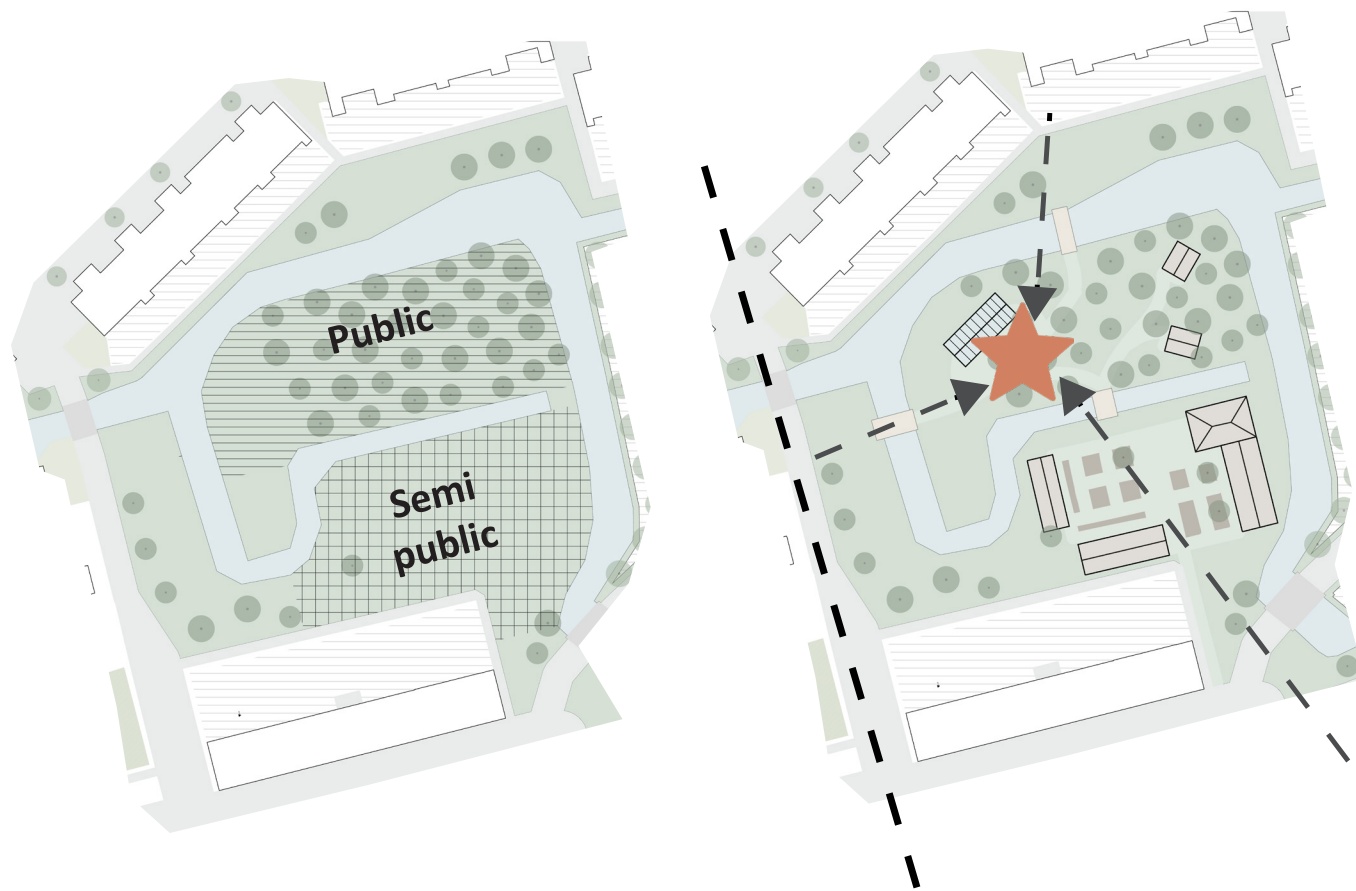


# Site | facilities



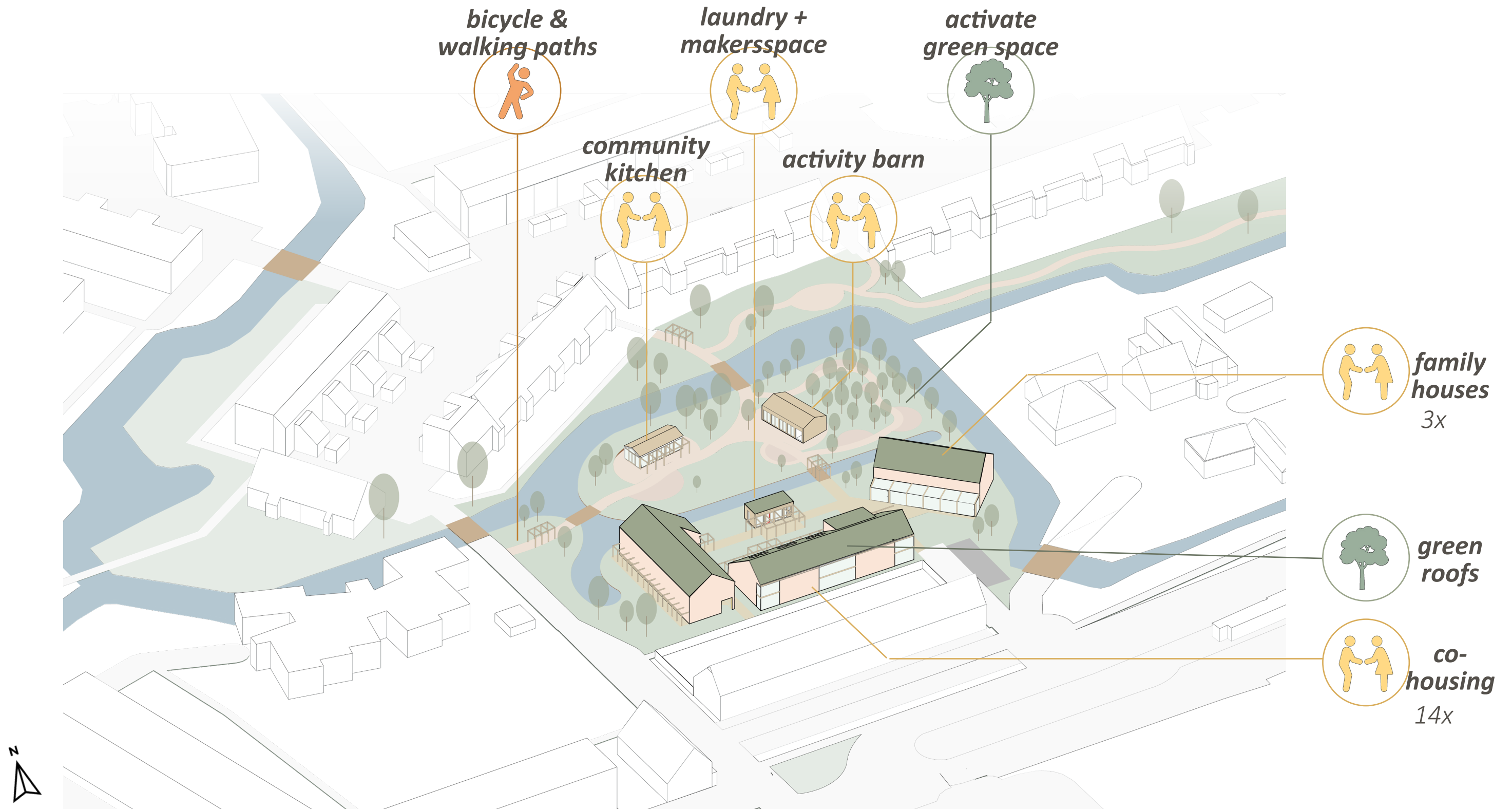


# Design | mass studies





# CoLi Flow | implementing the research





# CoLi Flow | community living





# CoLi Flow | community living



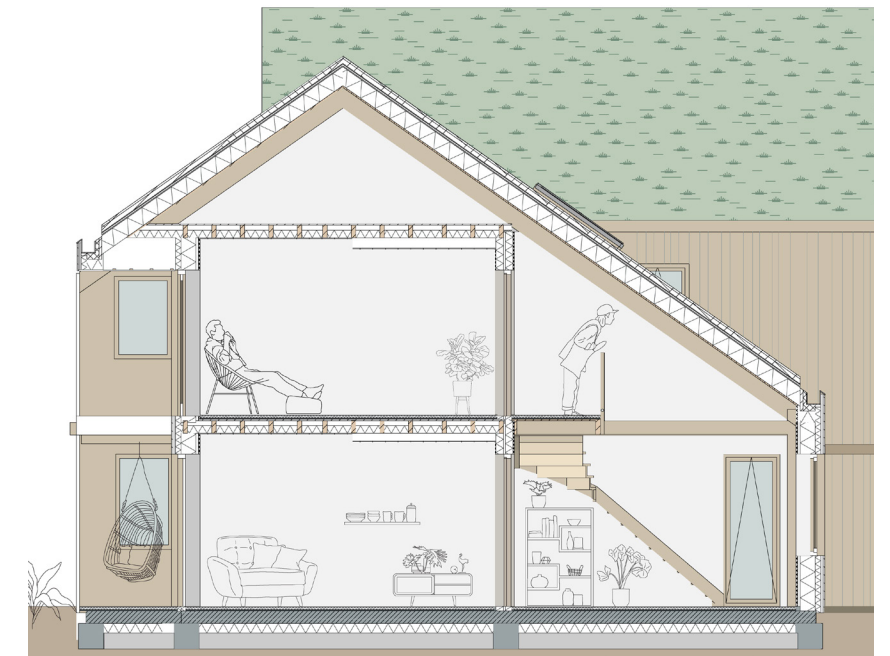


# CoLi Flow | community living





# CoLi Flow | co-housing

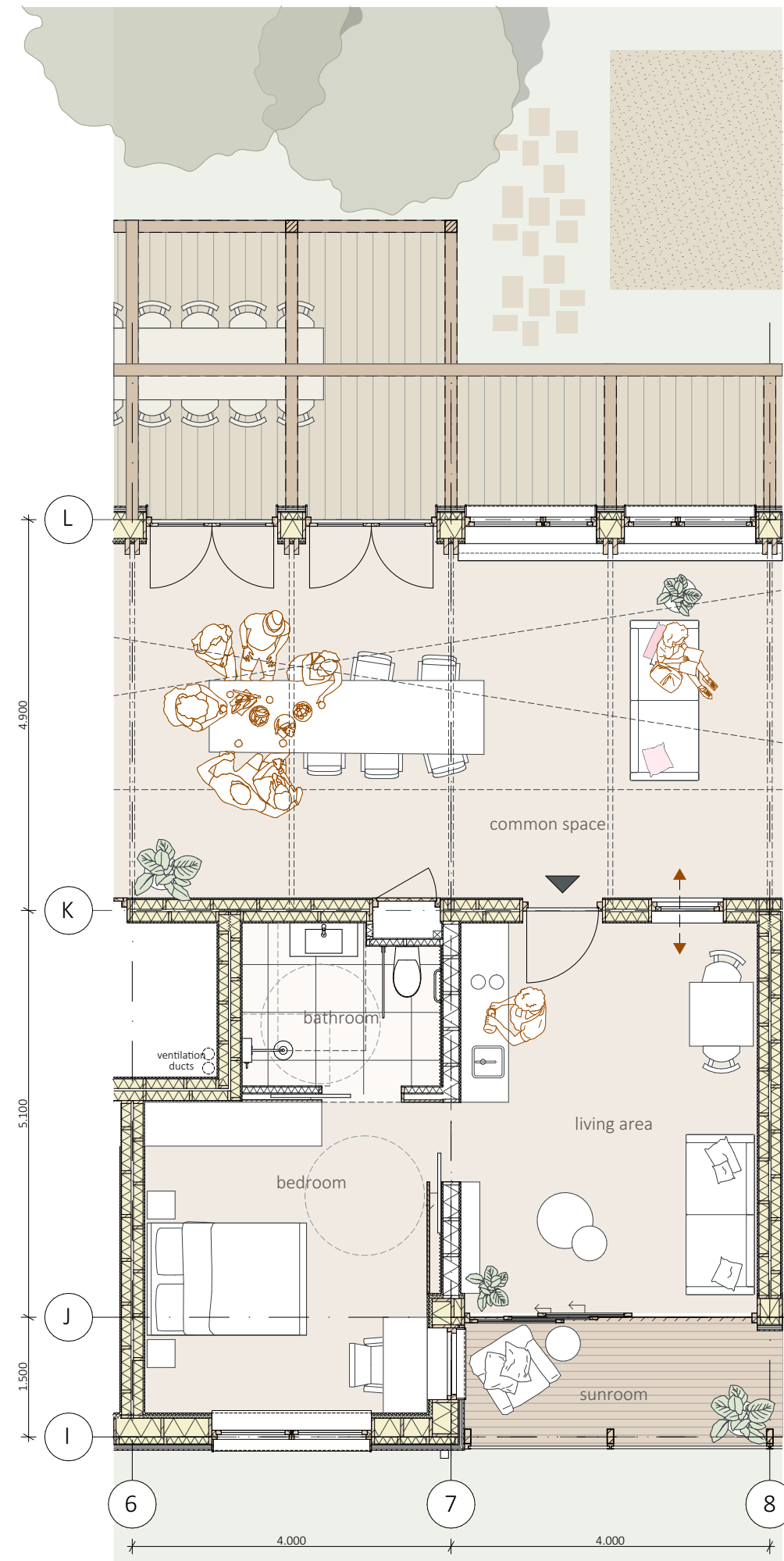
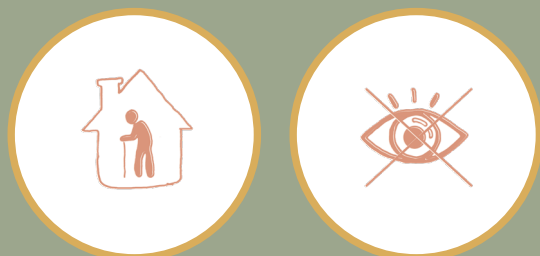


# CoLi Flow

## CoHousing

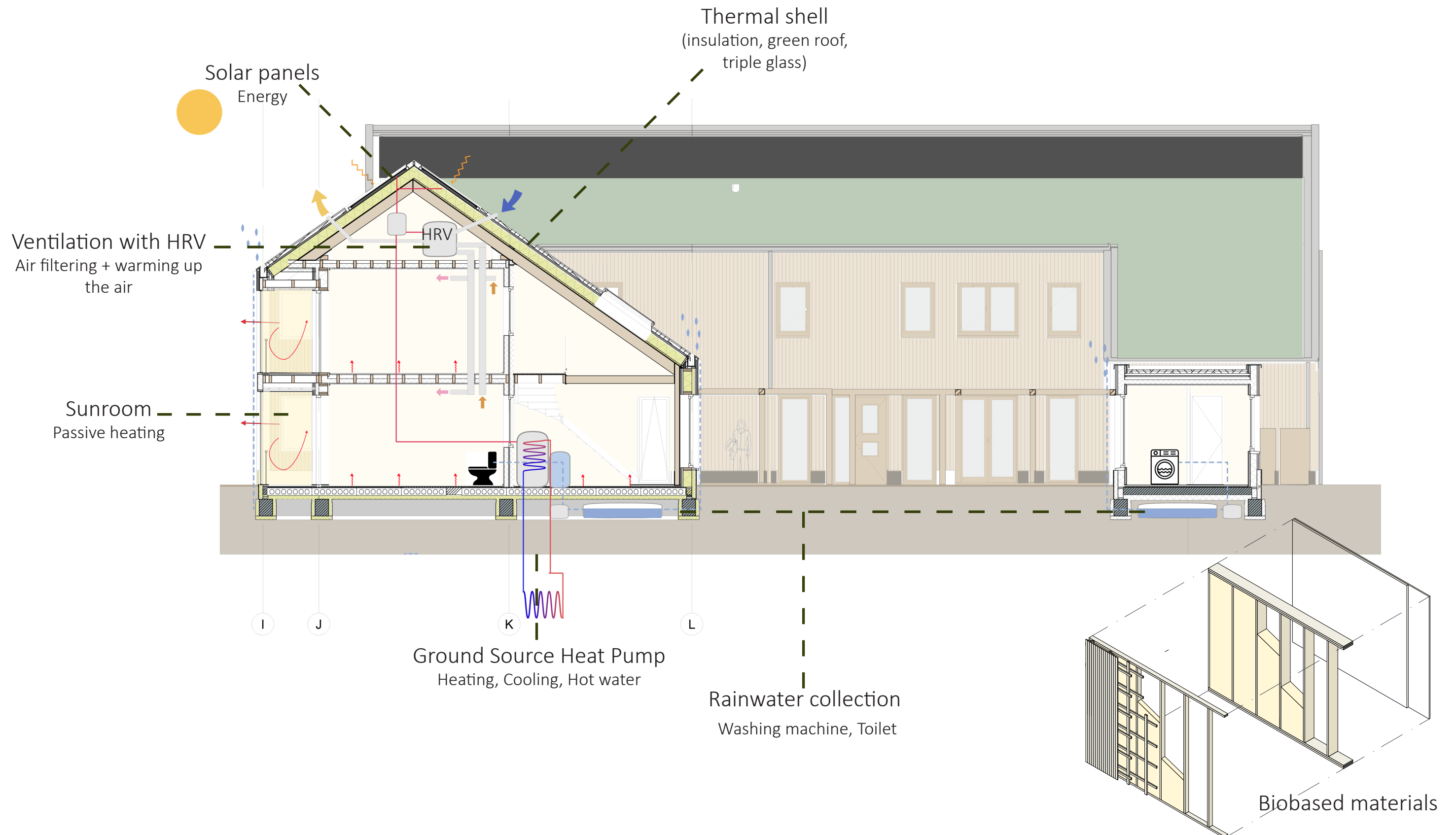


Balancing community living  
with private spaces



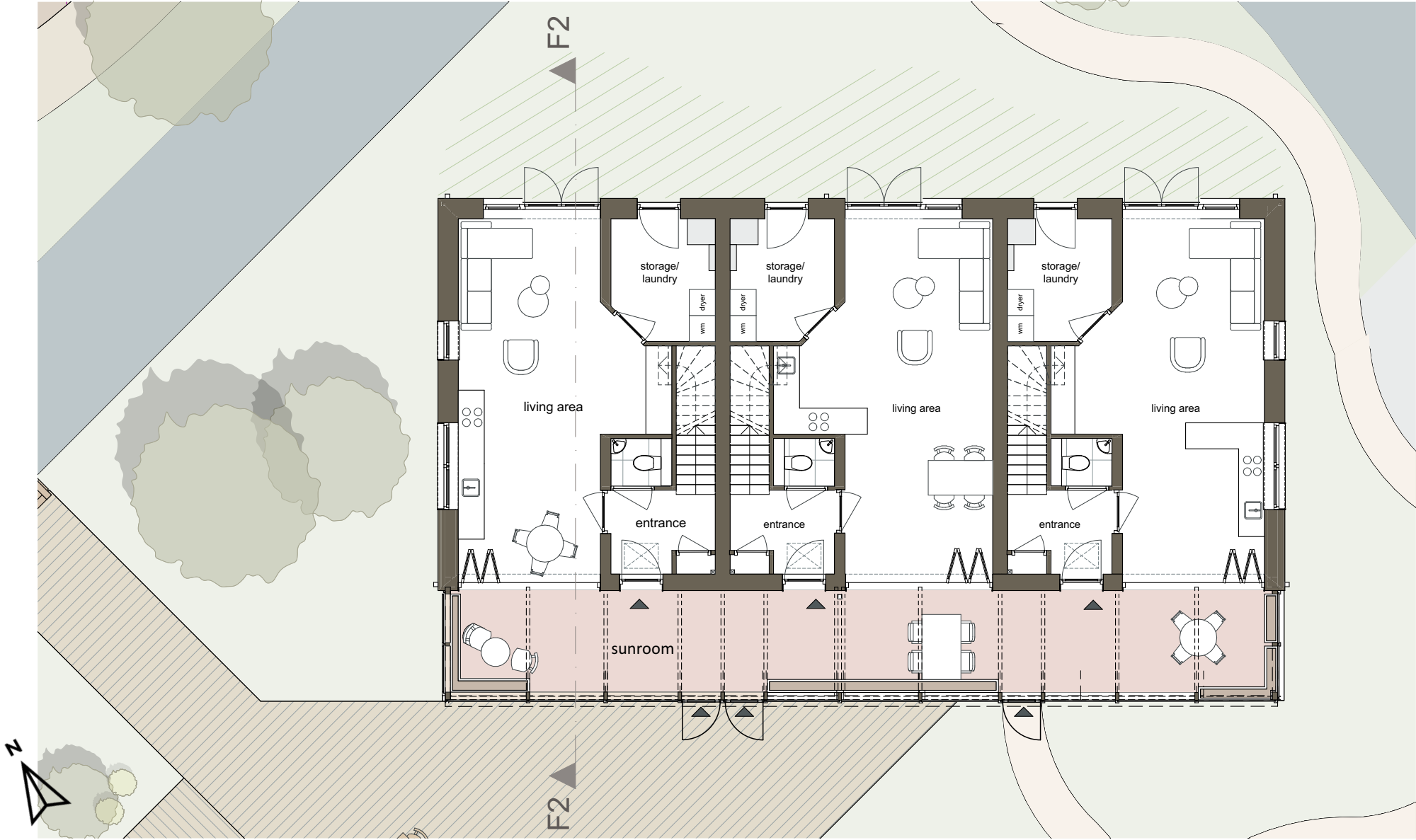


# CoLi Flow | climate diagram



# CoLi Flow

Family Houses



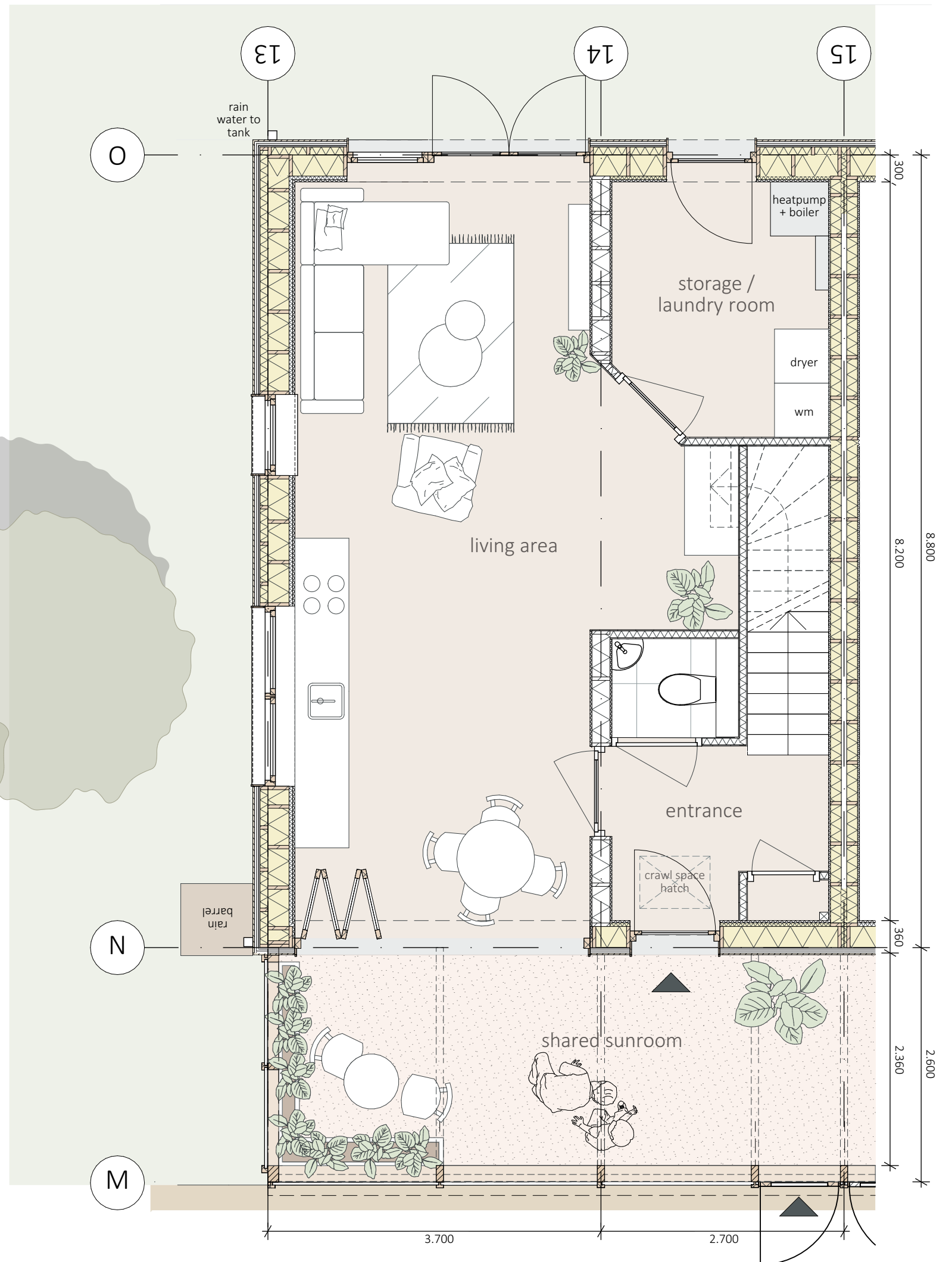


# CoLi Flow

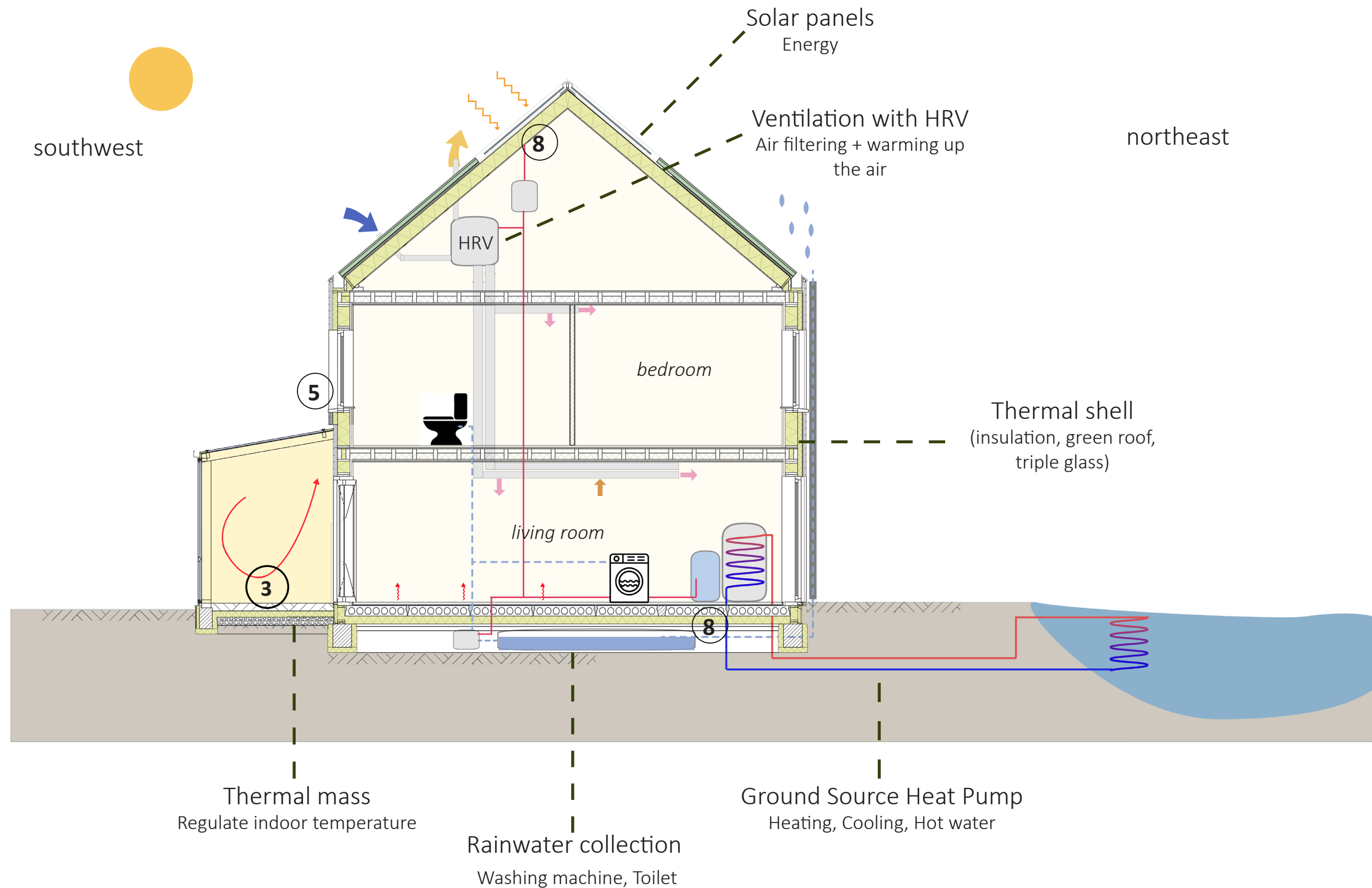
## Family House



“extension  
of the living space”

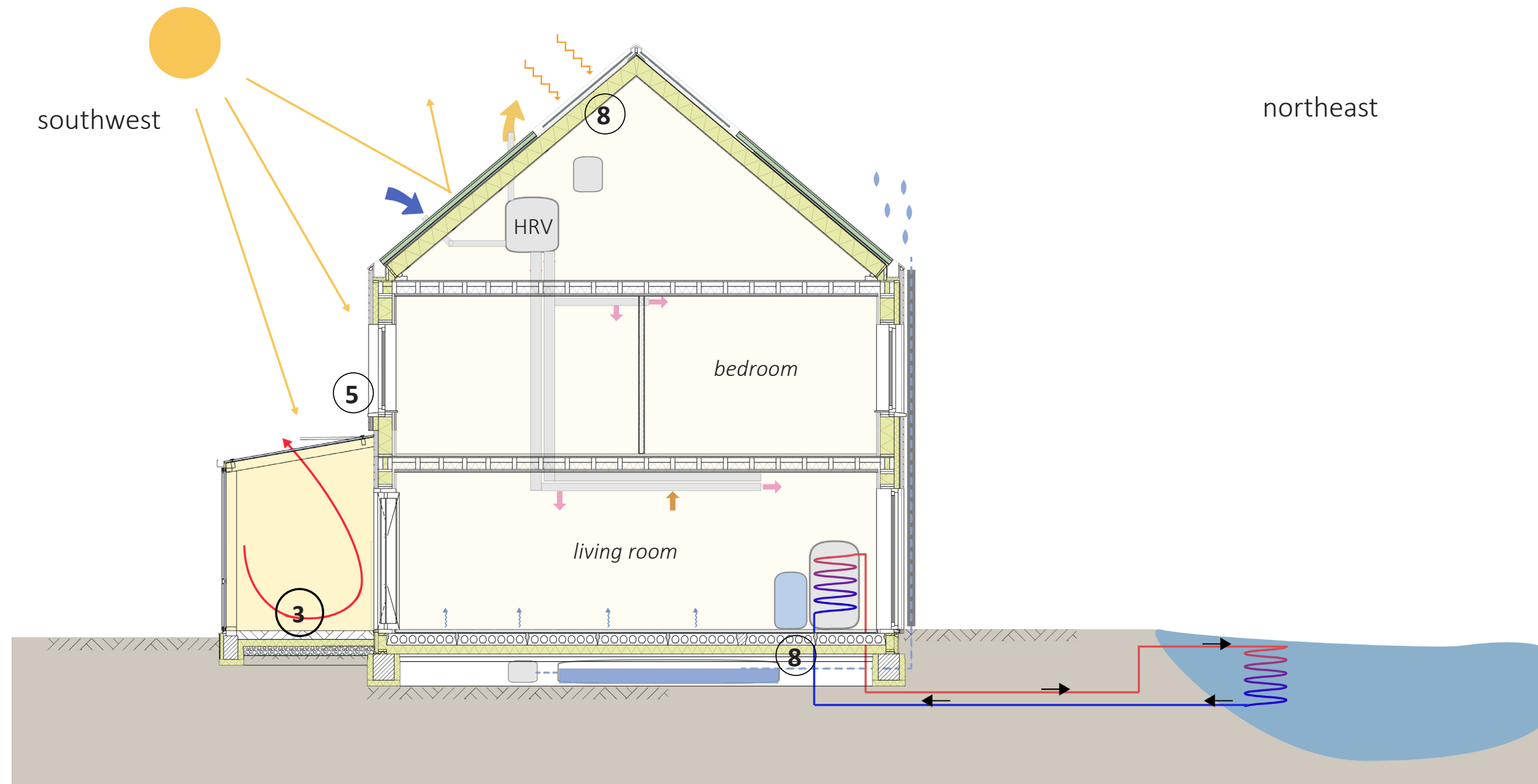


# CoLi Flow | climate diagram

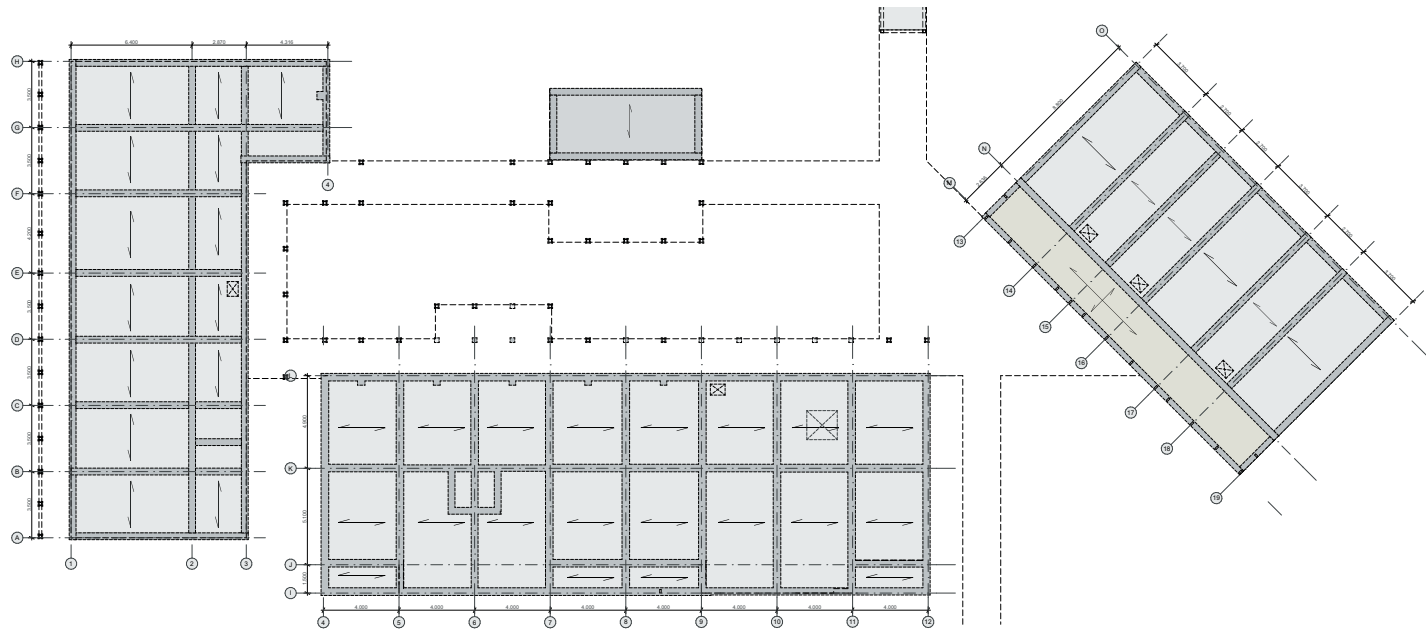




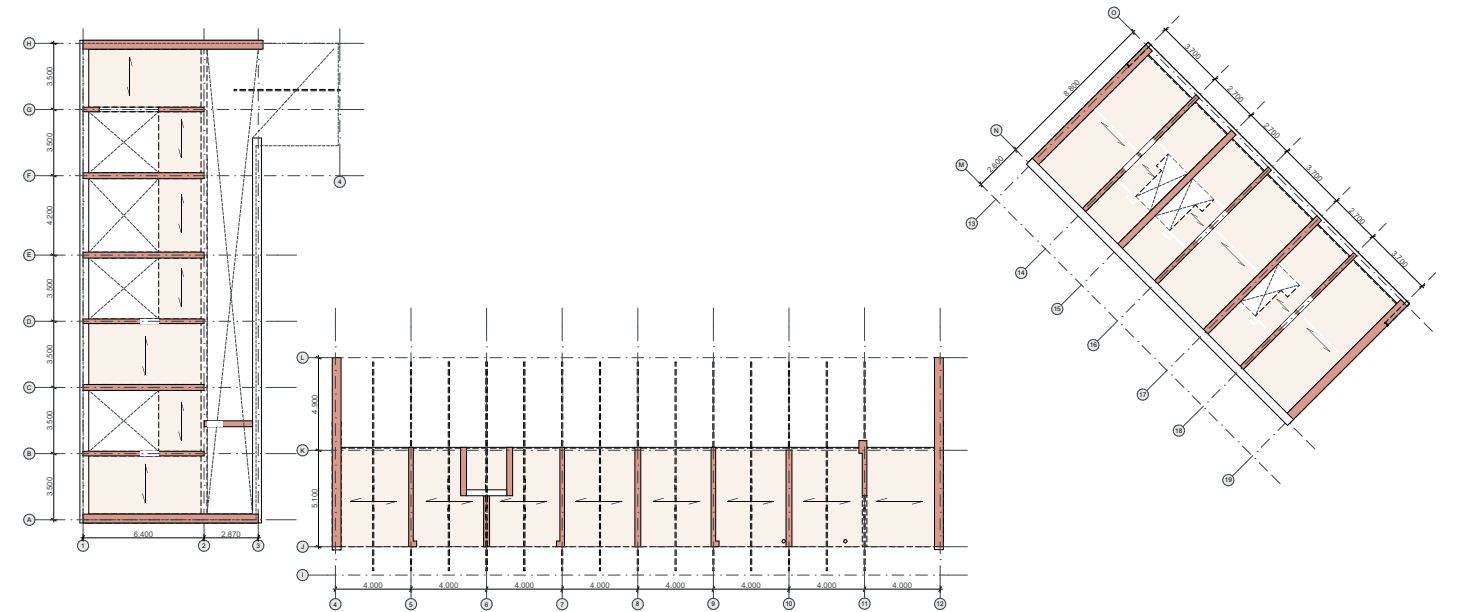
# CoLi Flow | climate diagram



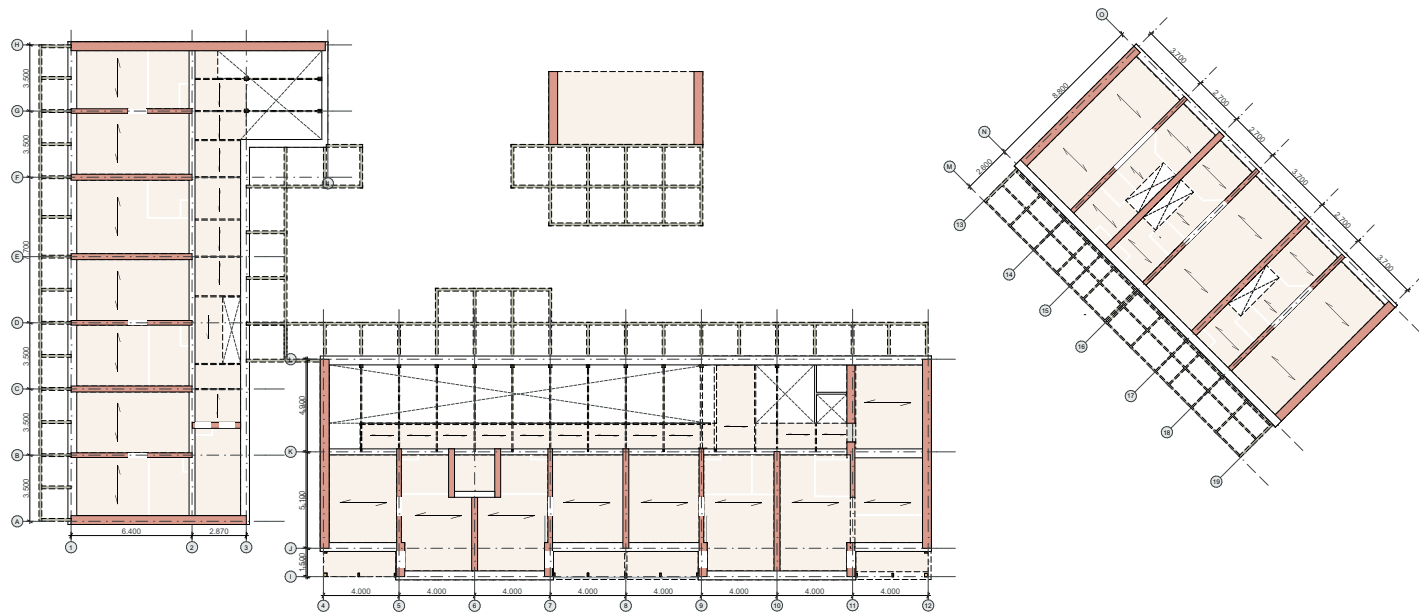
# CoLi Flow | construction



Ground floor + Foundation



Second floor + Construction underneath



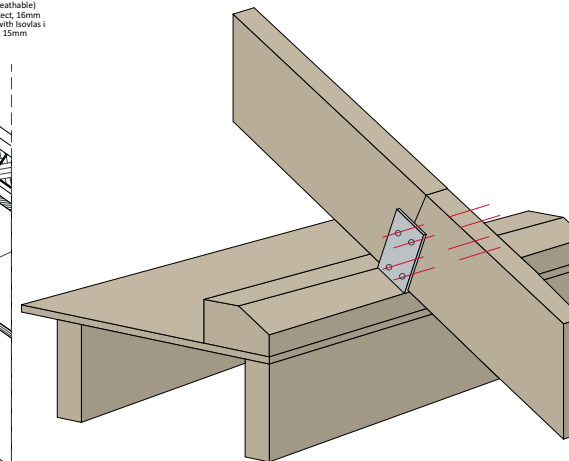
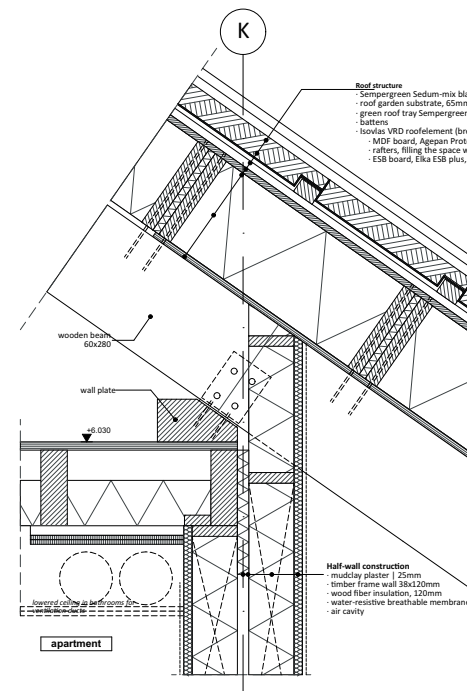
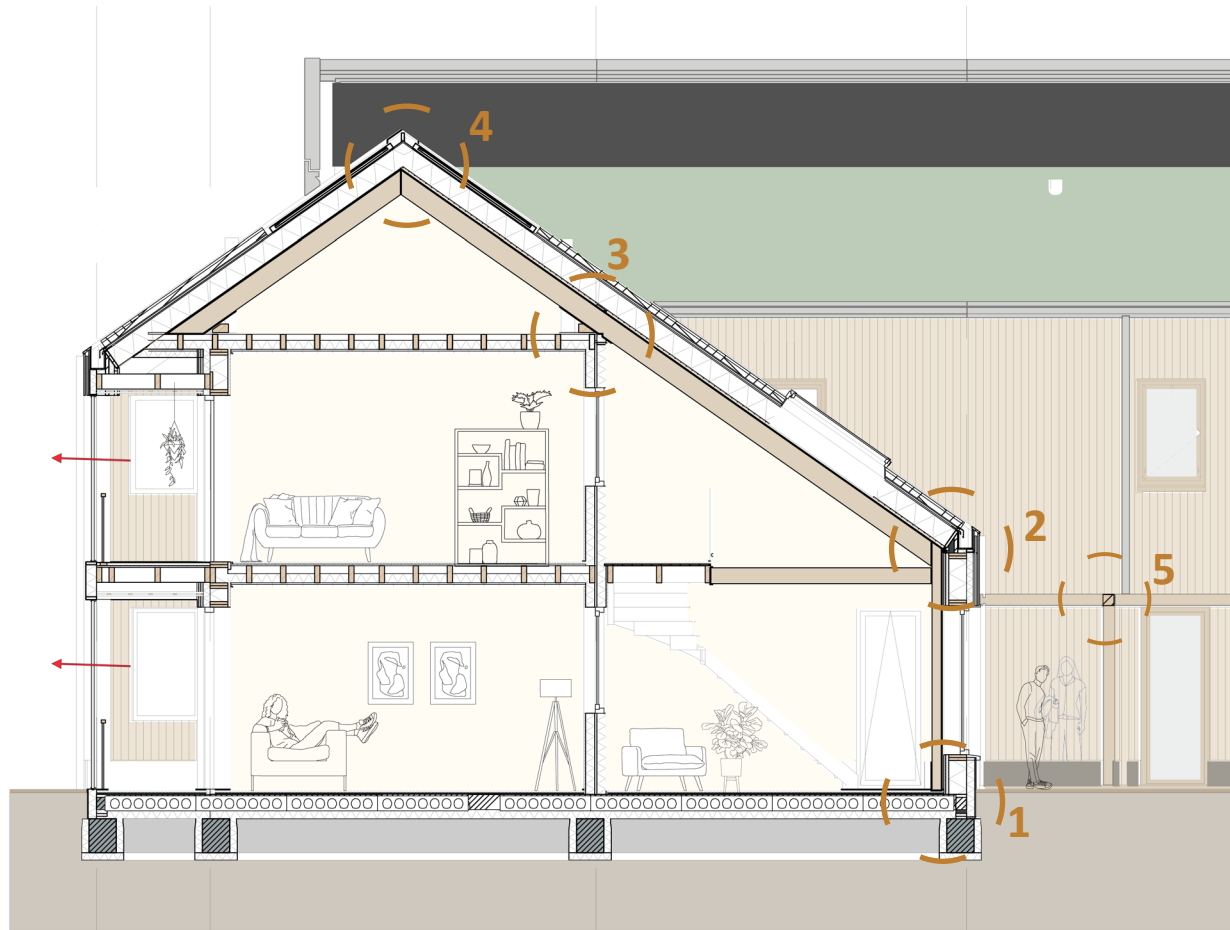
First floor + Construction underneath



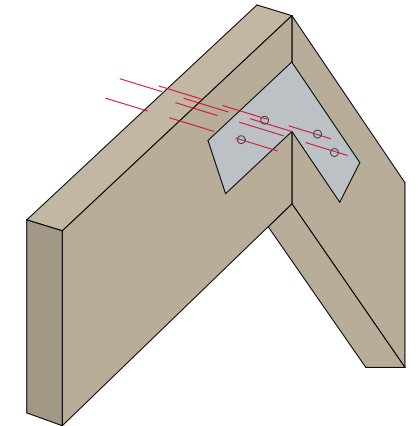
Impression timber construction



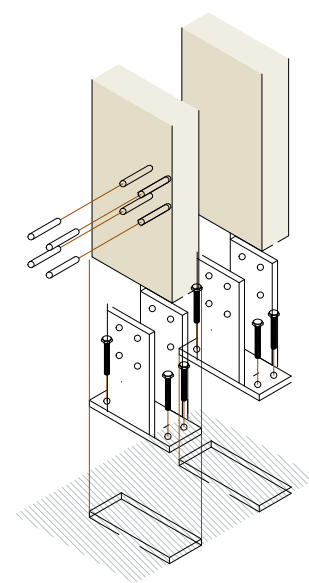
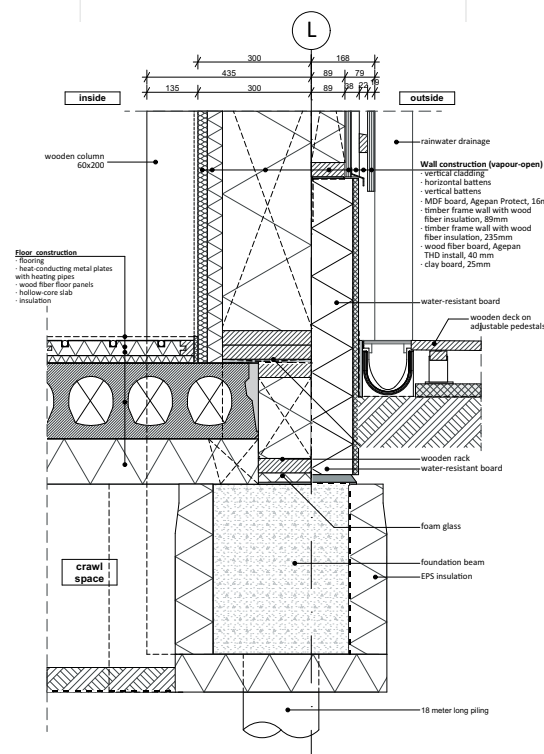
# CoLi Flow | joints



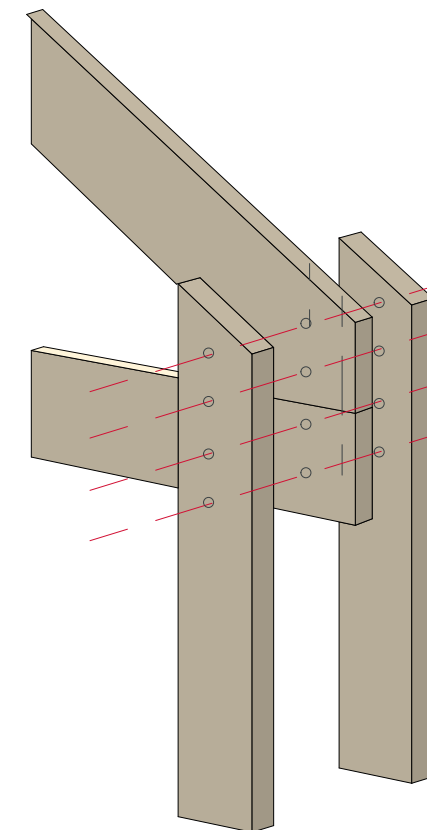
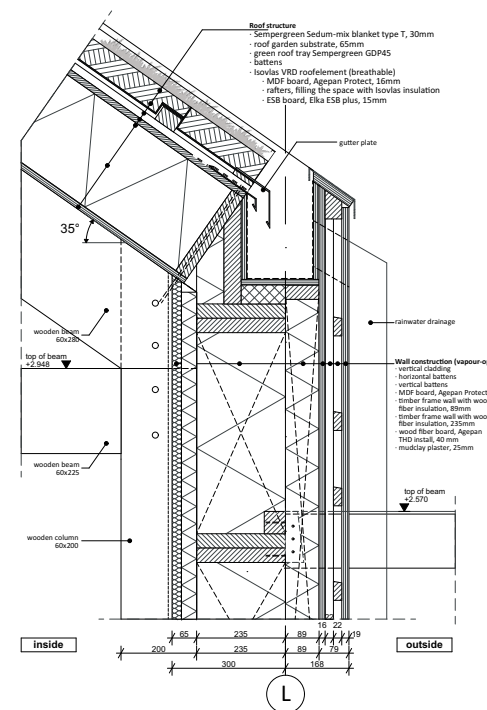
3 | Connection beams and wall plate



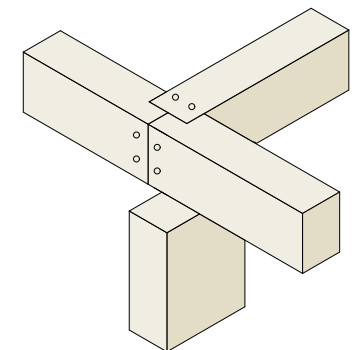
4 | Connection beams



1 | Connection columns foundation

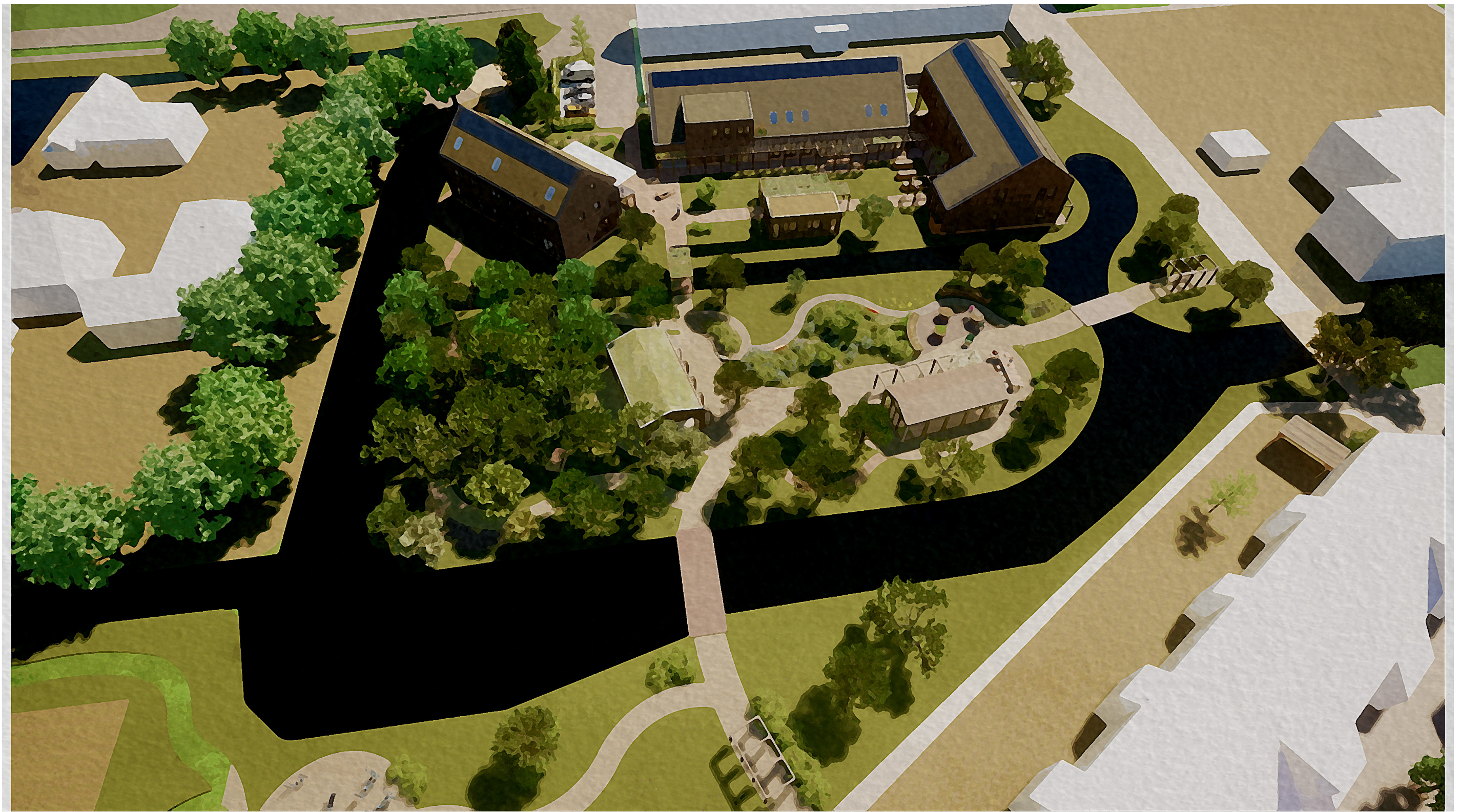


2 | Connection beams and columns

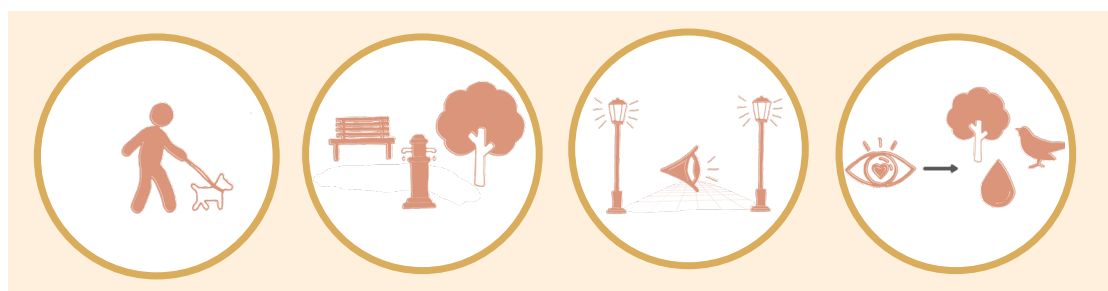


5 | Connection Columns and Beams Pergola

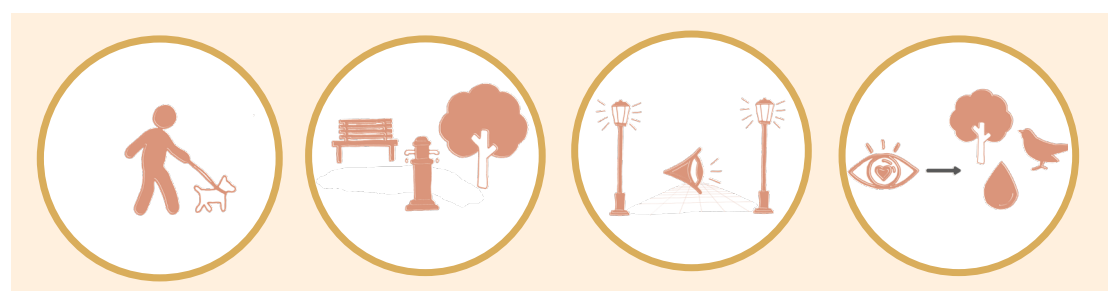
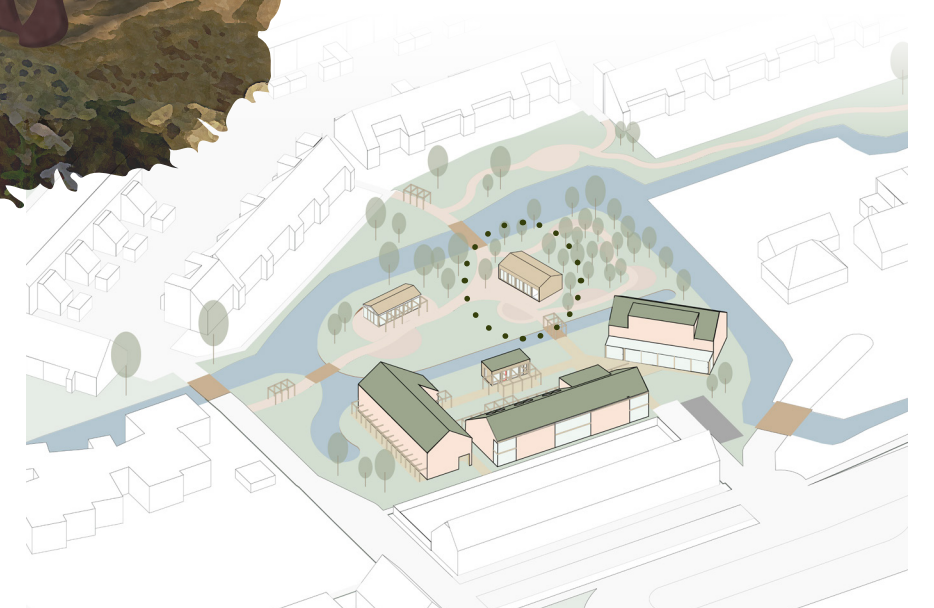




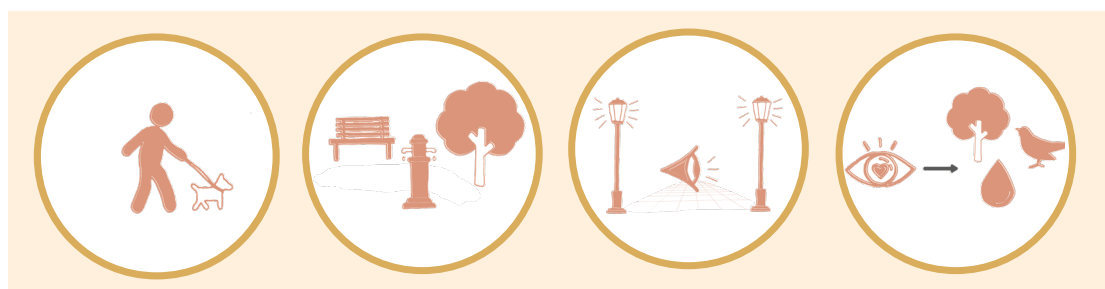








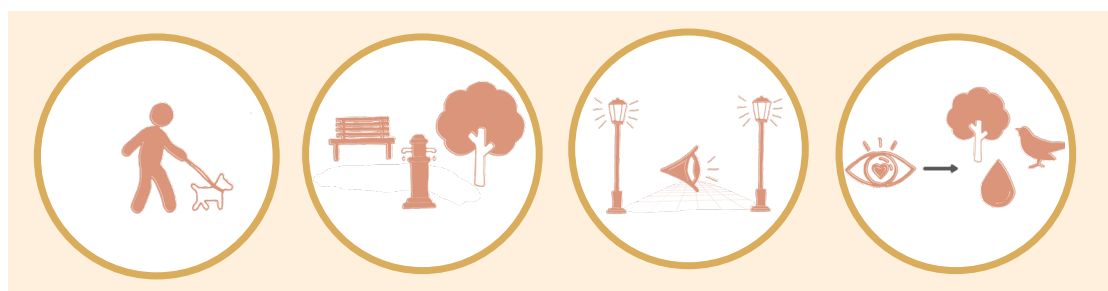
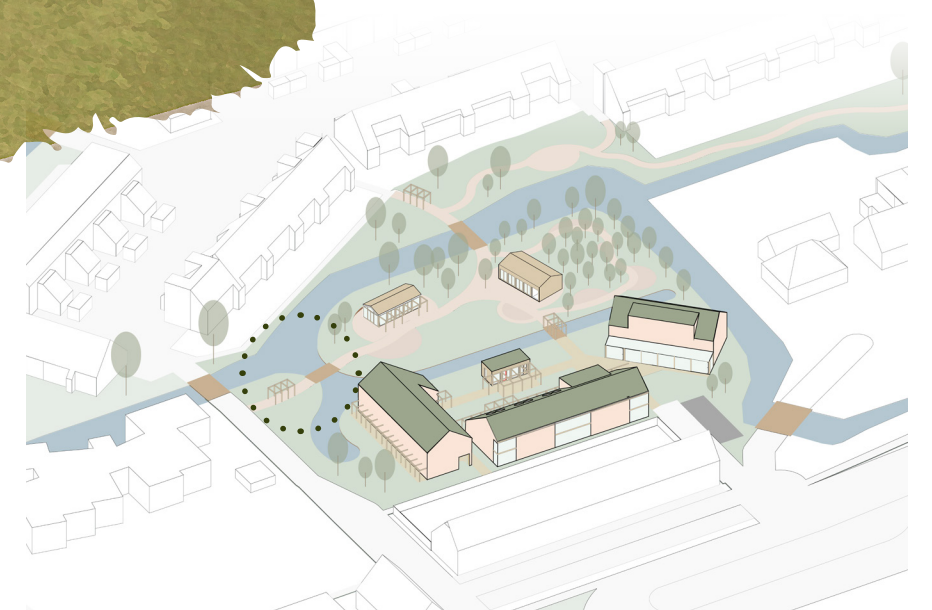














# Neighbourhood | activate living street





# Neighbourhood | activate living street



reduce pavement

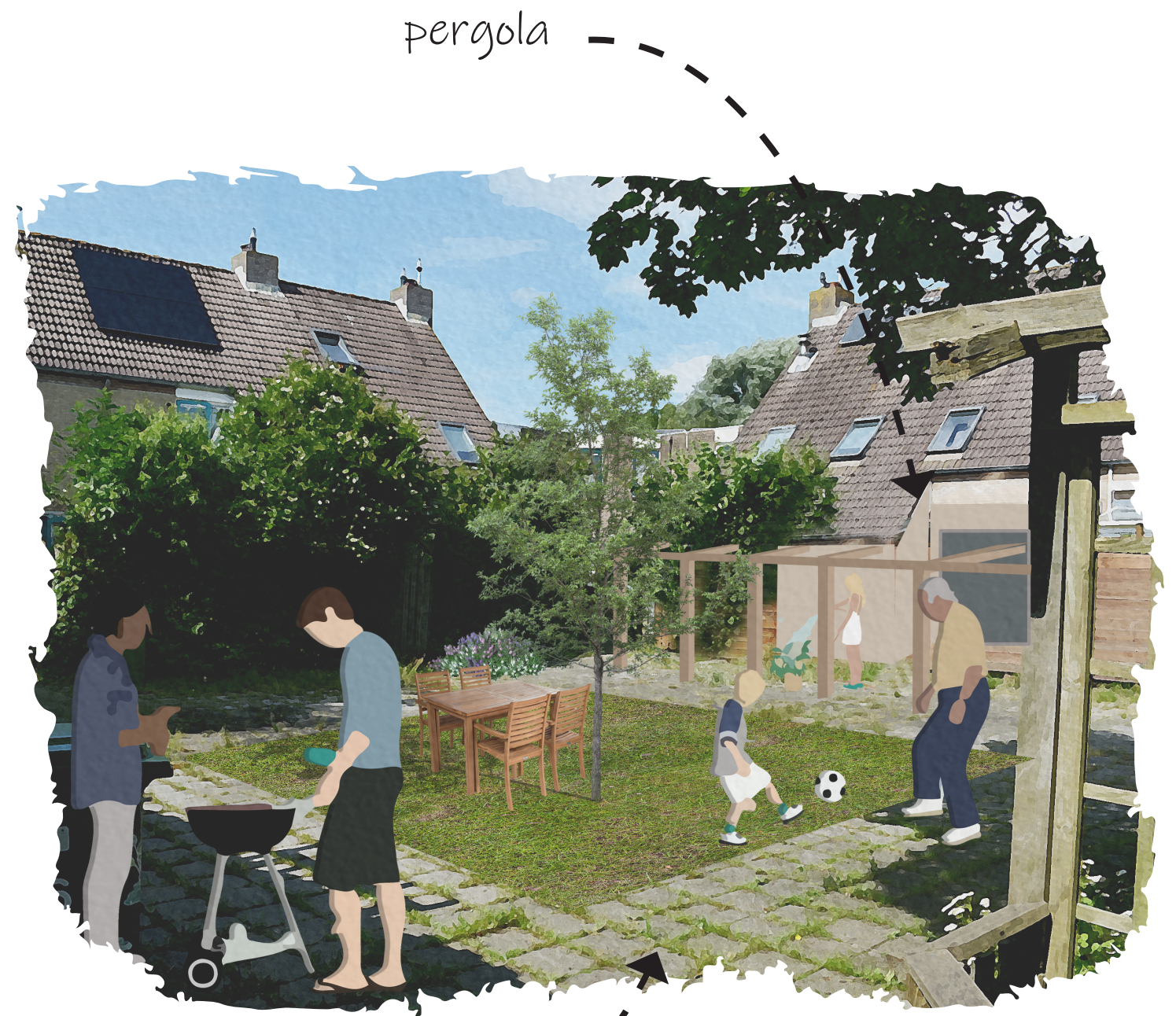


# Neighbourhood | activate indoor courtyards





# Neighbourhood | Activate indoor courtyards

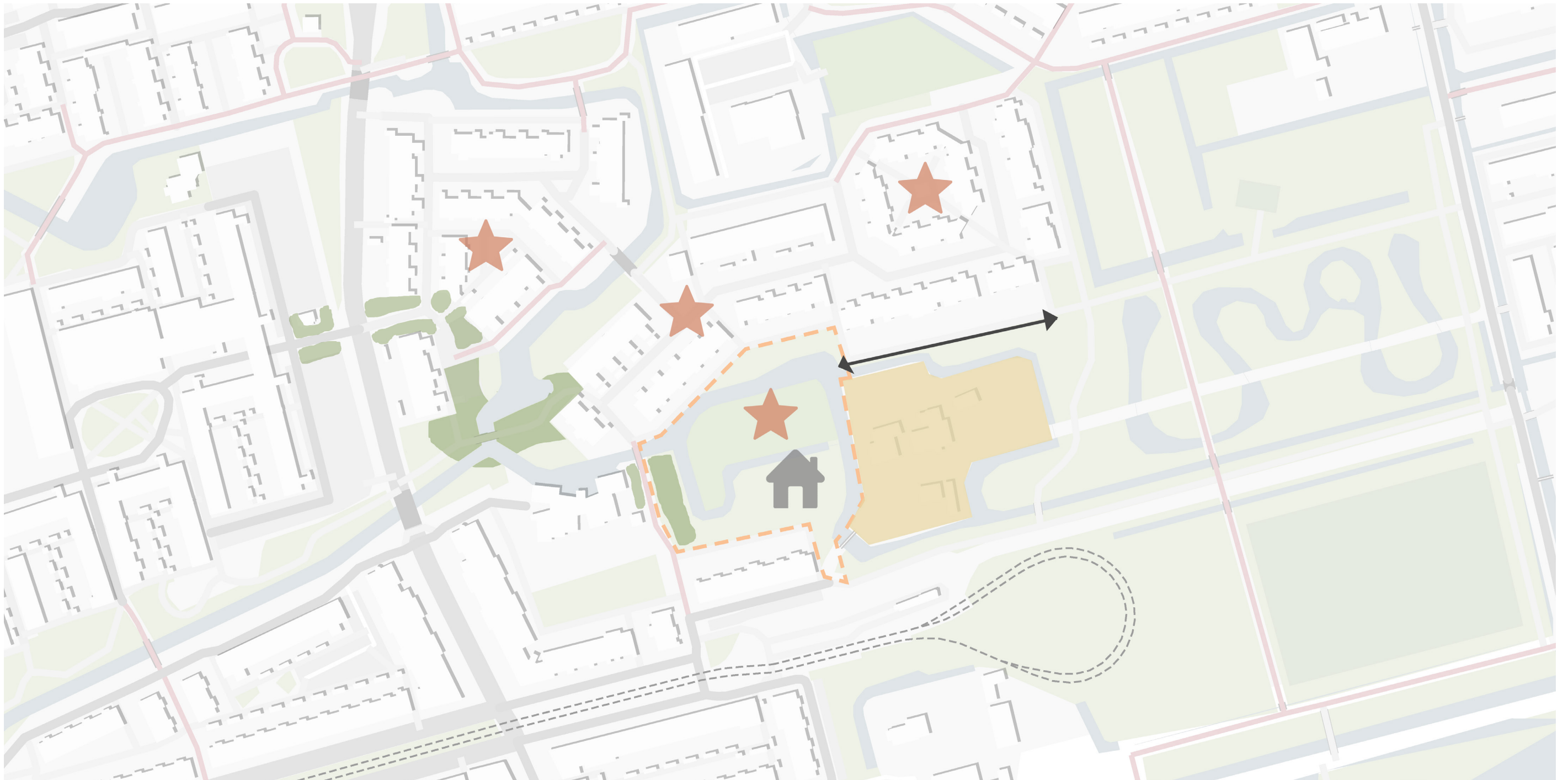


pergola

reduce pavement



# Neighbourhood | Urban Farm





# Healthy Ageing through the Living Environment



“when a flower doesn’t bloom you fix the environment in which it grows, not the flower.”

- Alexander den Heijer



# Density | compared to the neighbourhood

## Dichtheid per km2 van bevolking, adressen en auto's [↗](#)

Grafiek

Tabel

Onderstaande tabel toont de dichtheid van de bevolking-, adressen- en personenauto's per km2 oppervlakte in Nederland en de Latijns Amerikabuurt voor 2023:

Dichtheid	Nederland	Latijns Amerikabuurt
Bevolking	533	8.455
Adressen	2.055	3.013

**Co-li flow**

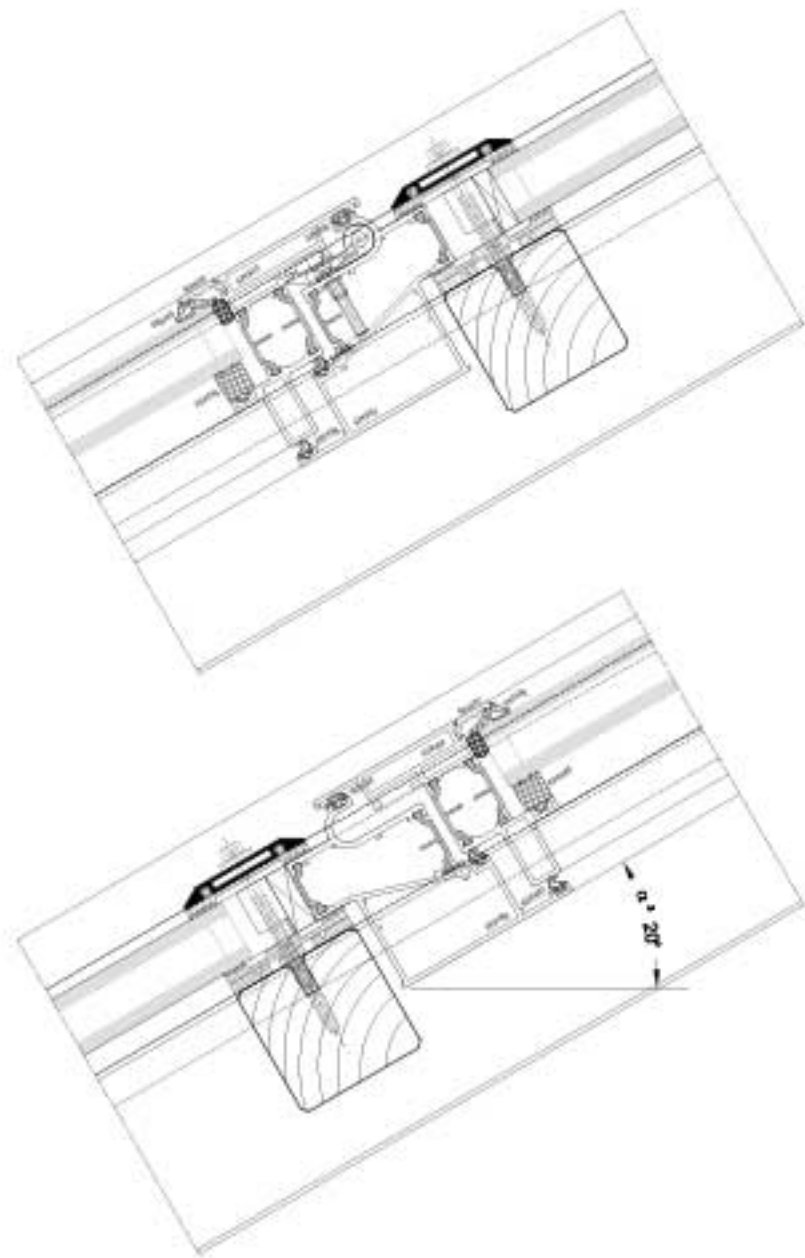
10.699

6.995

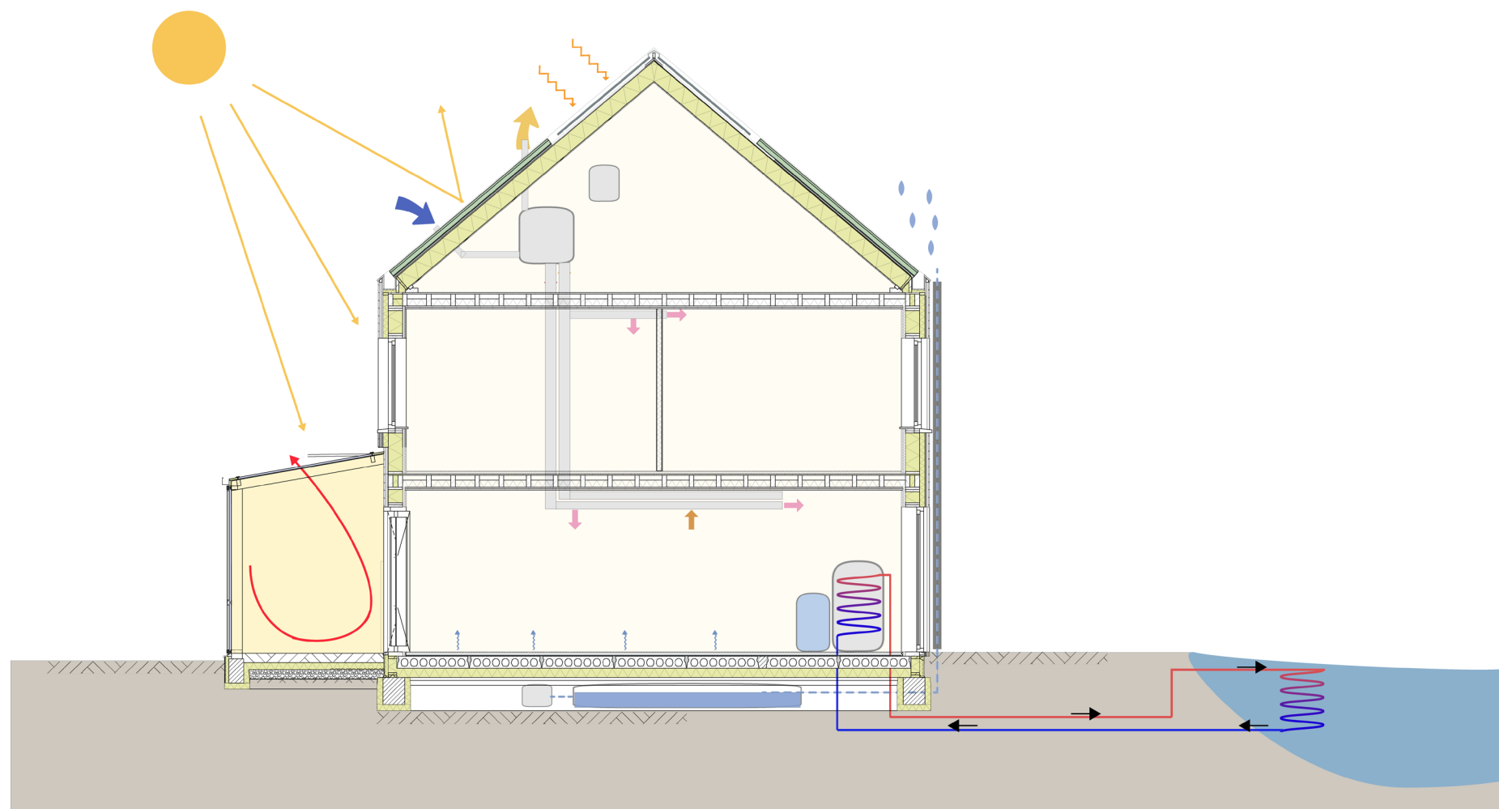
De data over het aantal inwoners-, adressen- en personenauto's per vierkante kilometer land geven een beeld van 'de mate van concentratie van menselijke activiteiten' in de Latijns Amerikabuurt ten opzichte van het gemiddelde voor Nederland. Merk op: de *gemiddelde* omgevingsadressendichtheid is een ander cijfer dan de uitkomst van het aantal adressen gedeeld door de oppervlakte. Zie de [definities van de verschillende lokale verdichtingsmaten](#).



# Ventilation | sunroom

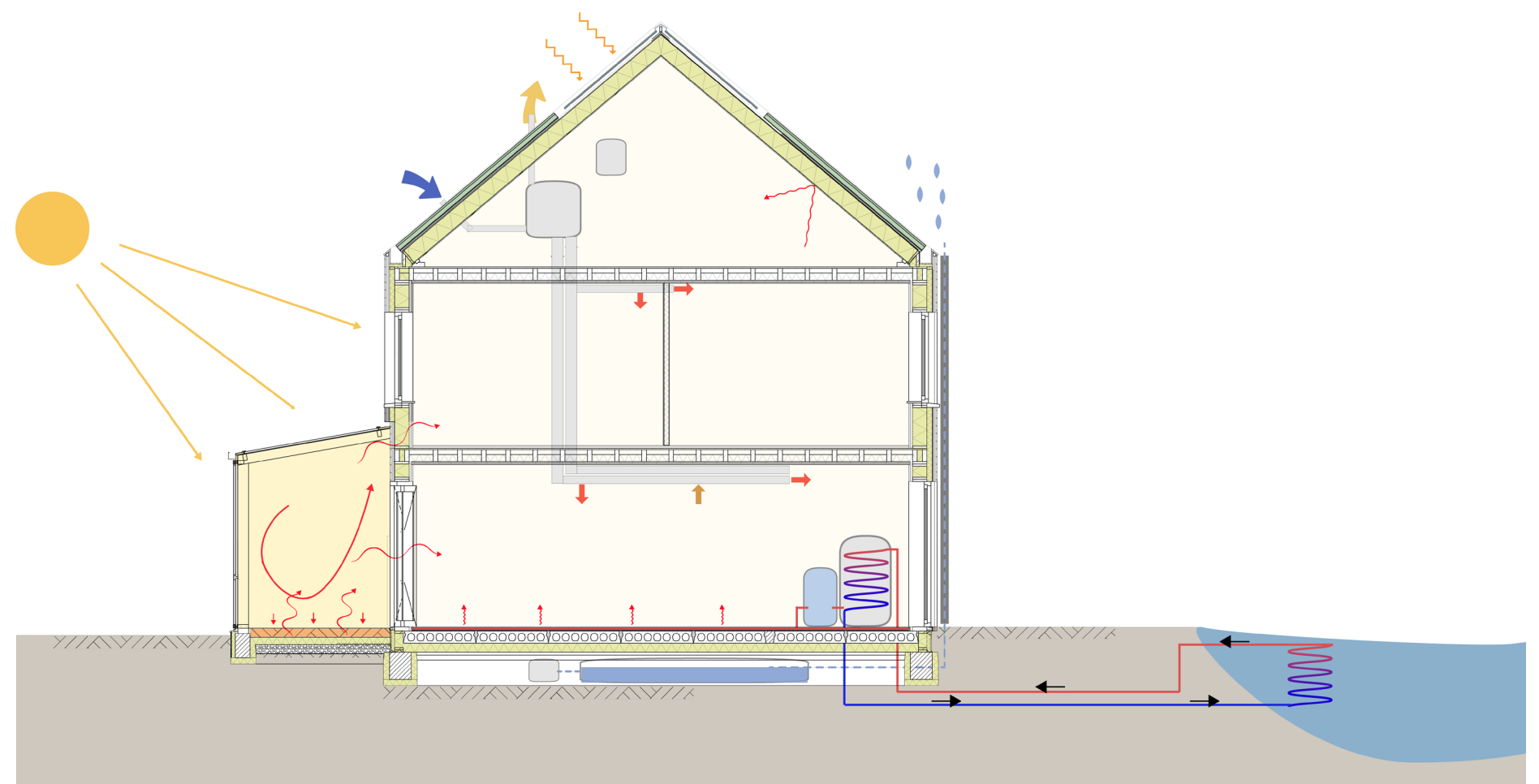


**Skylight Stabalux Ak-h**



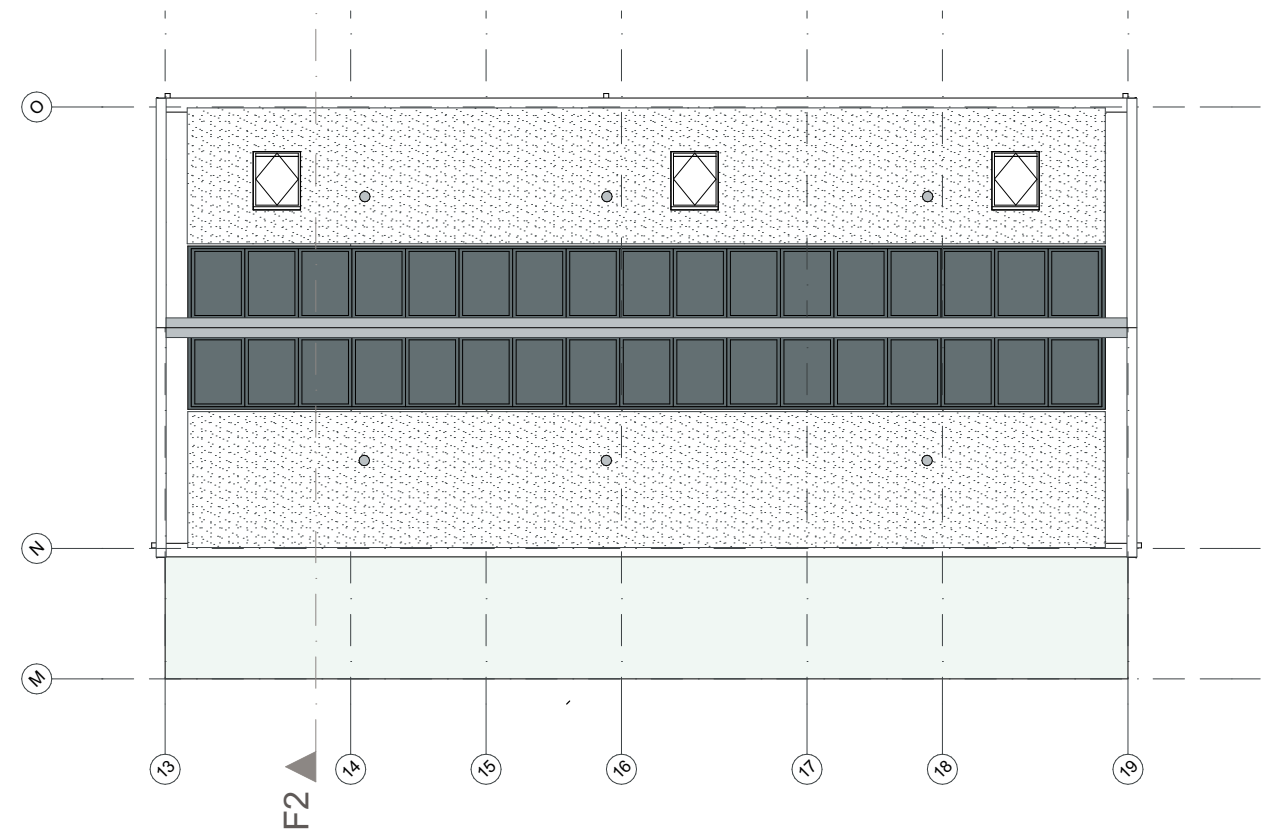
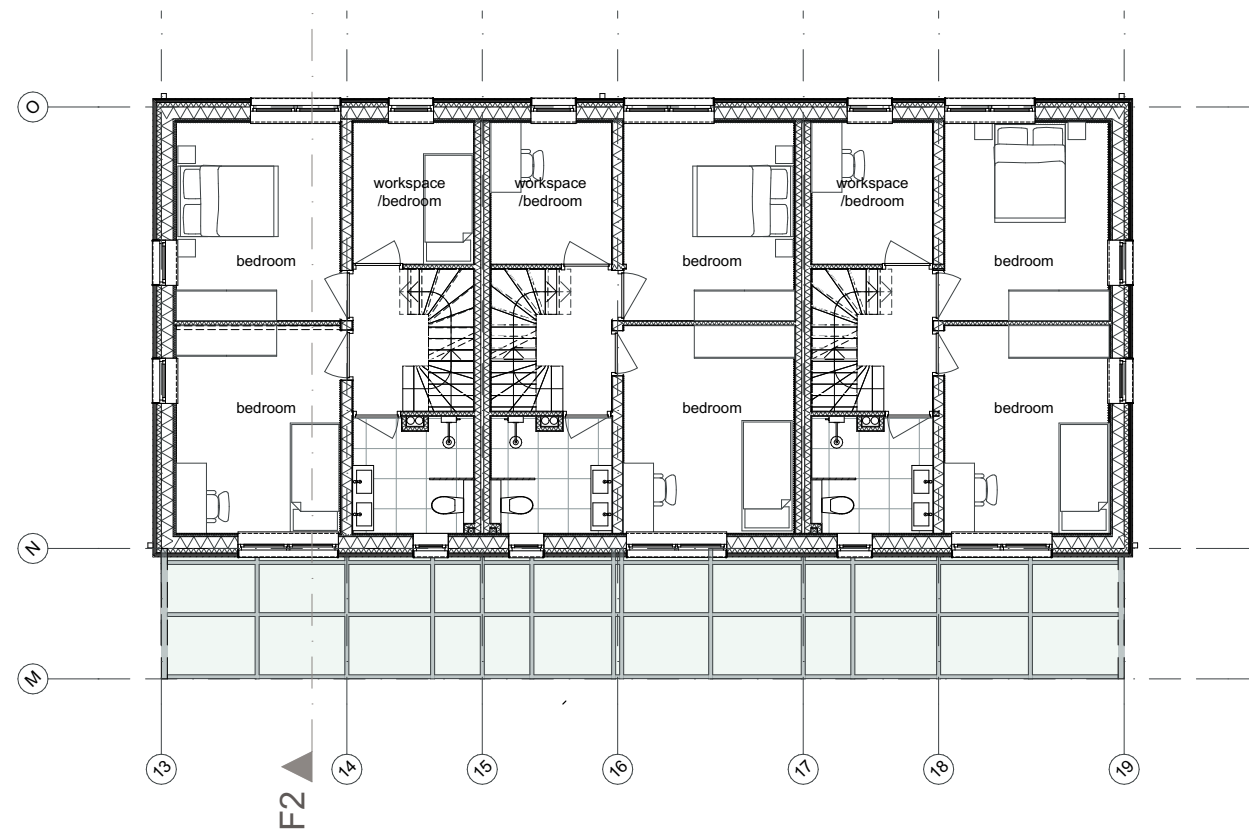
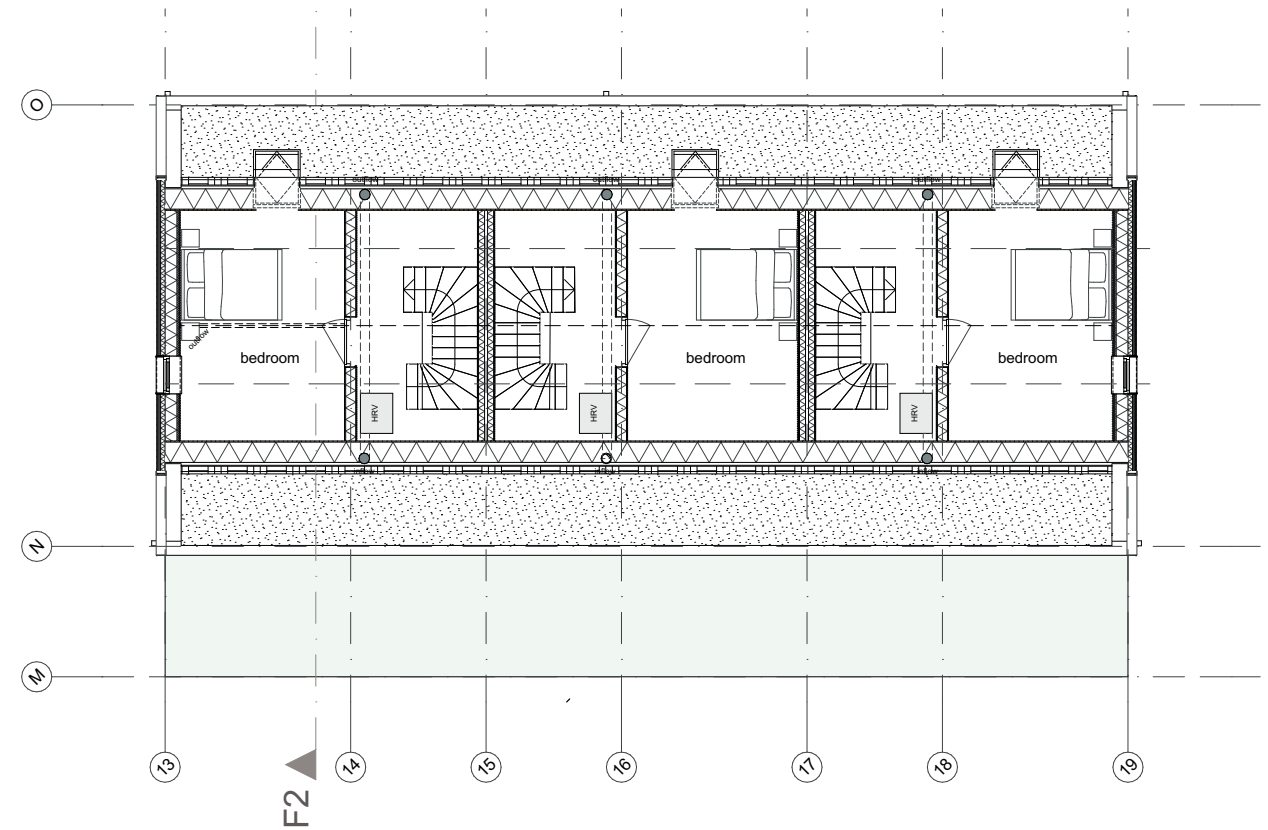
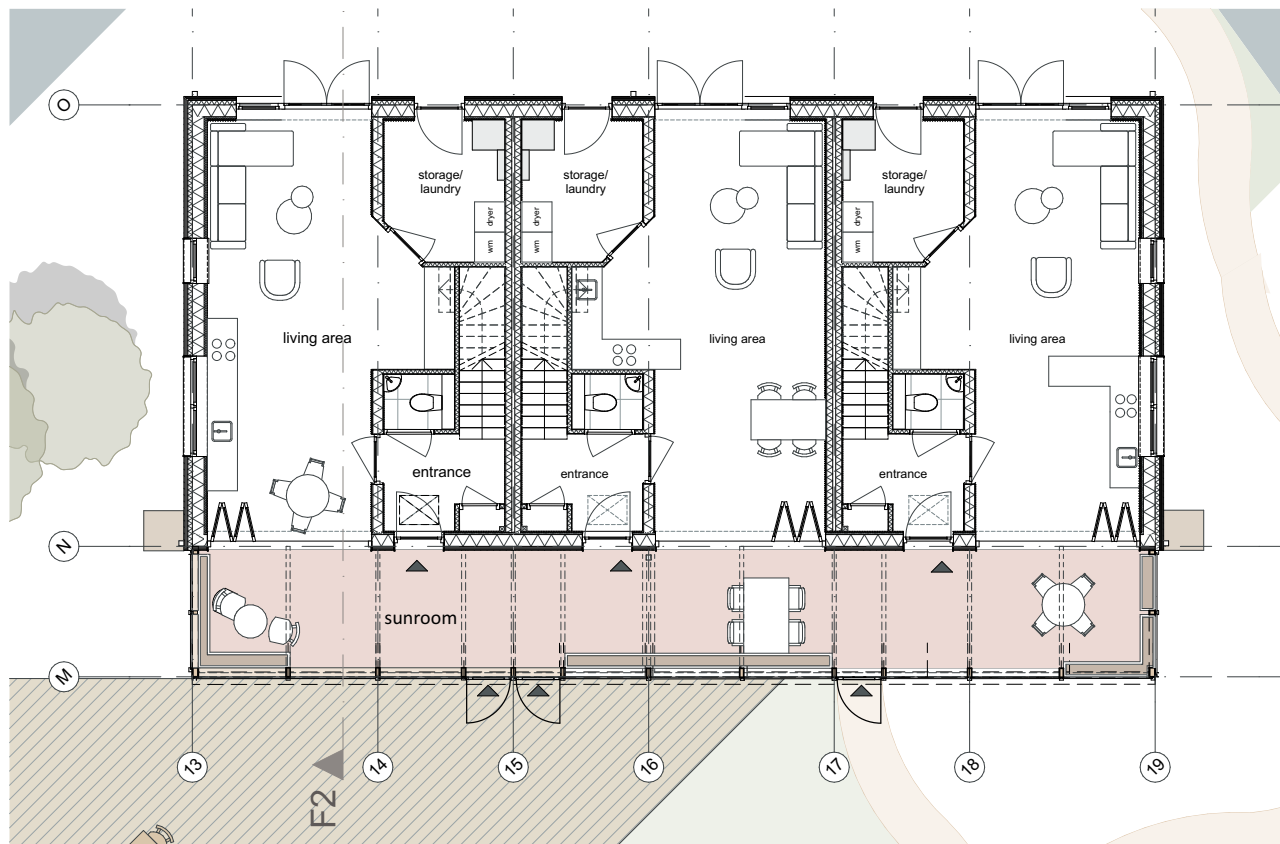


# Ventilation | sunroom



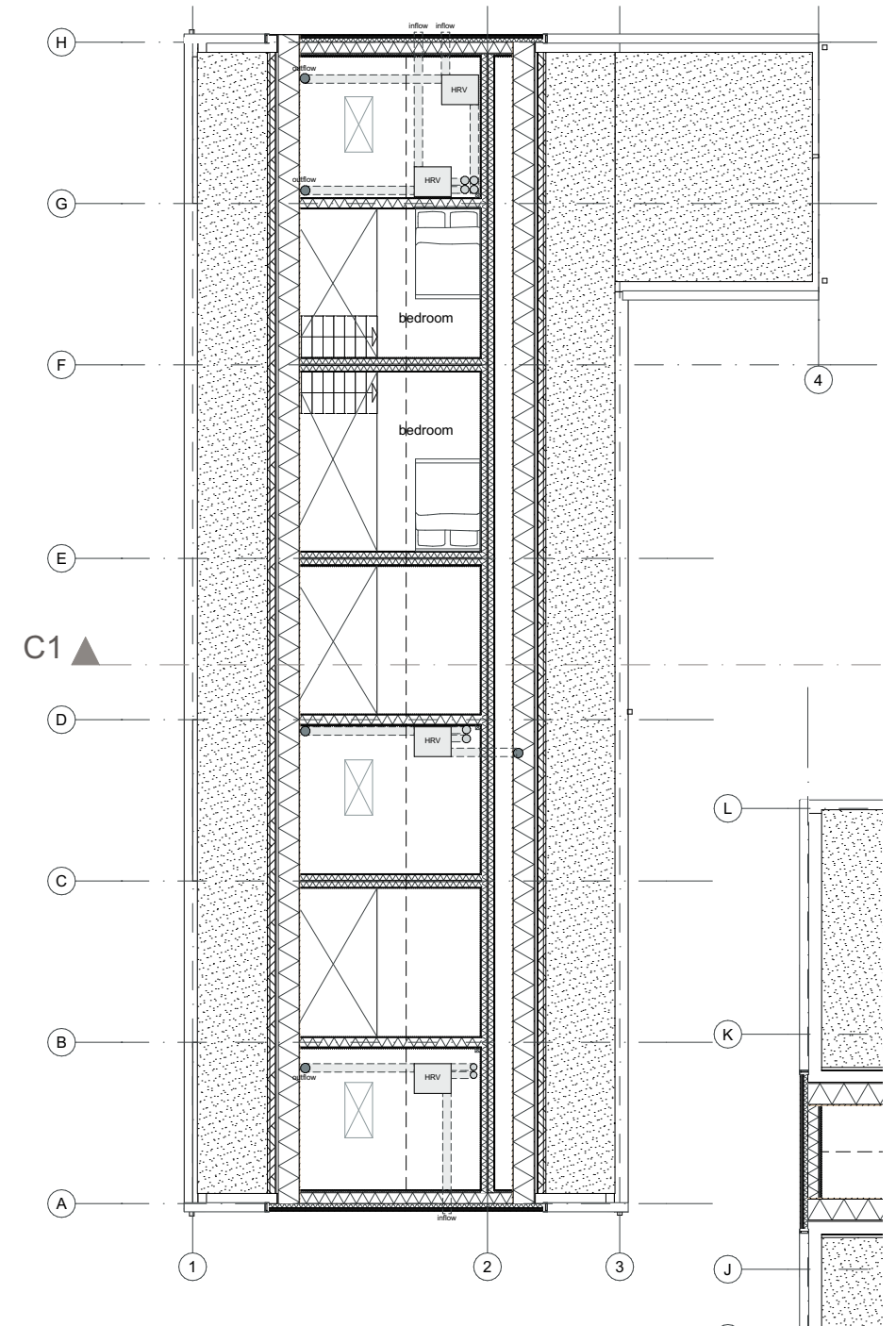
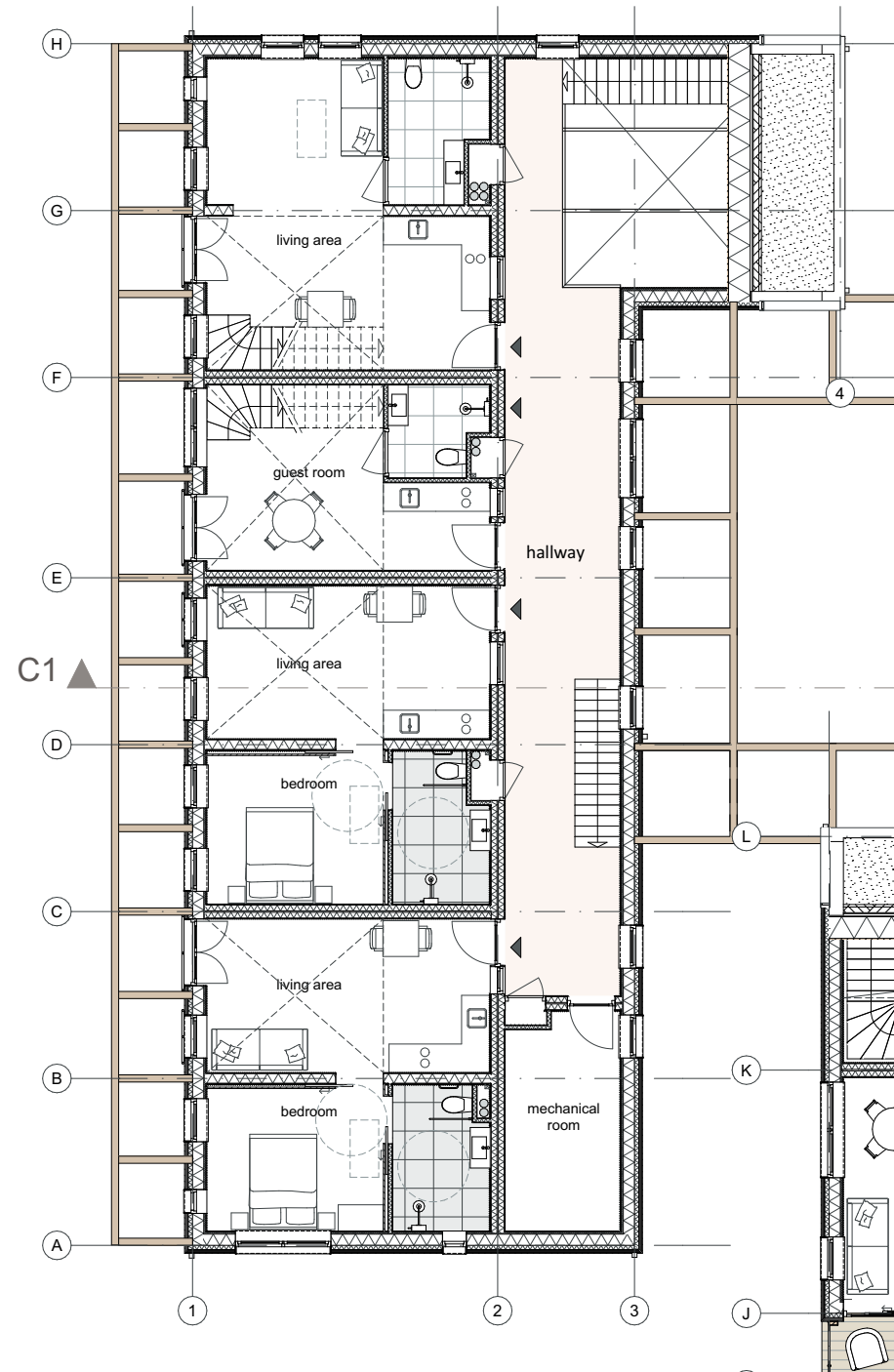
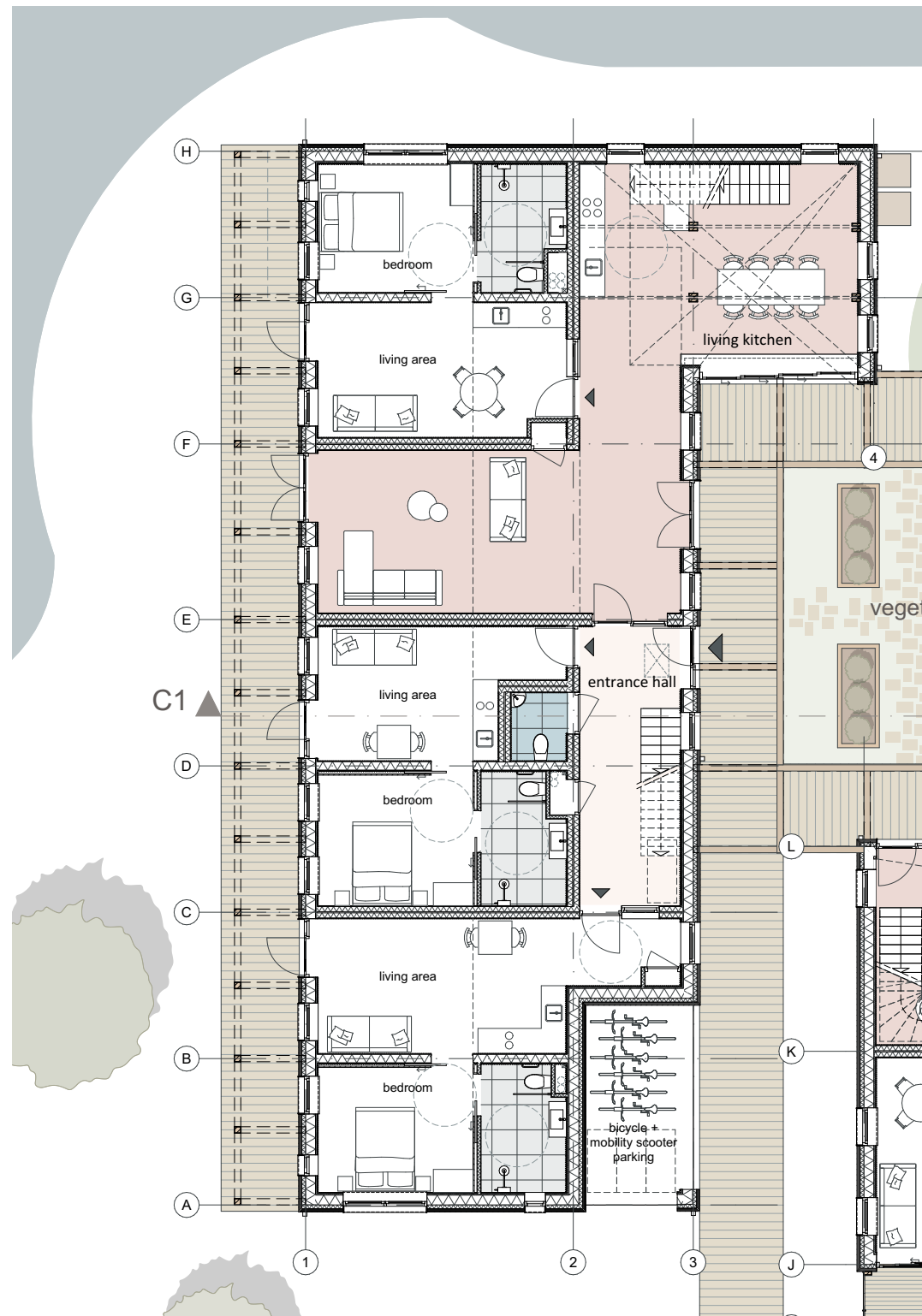


# Floorplans | Family Houses





# Floorplans | Cohousing 1





# Floorplans | Cohousing 2

