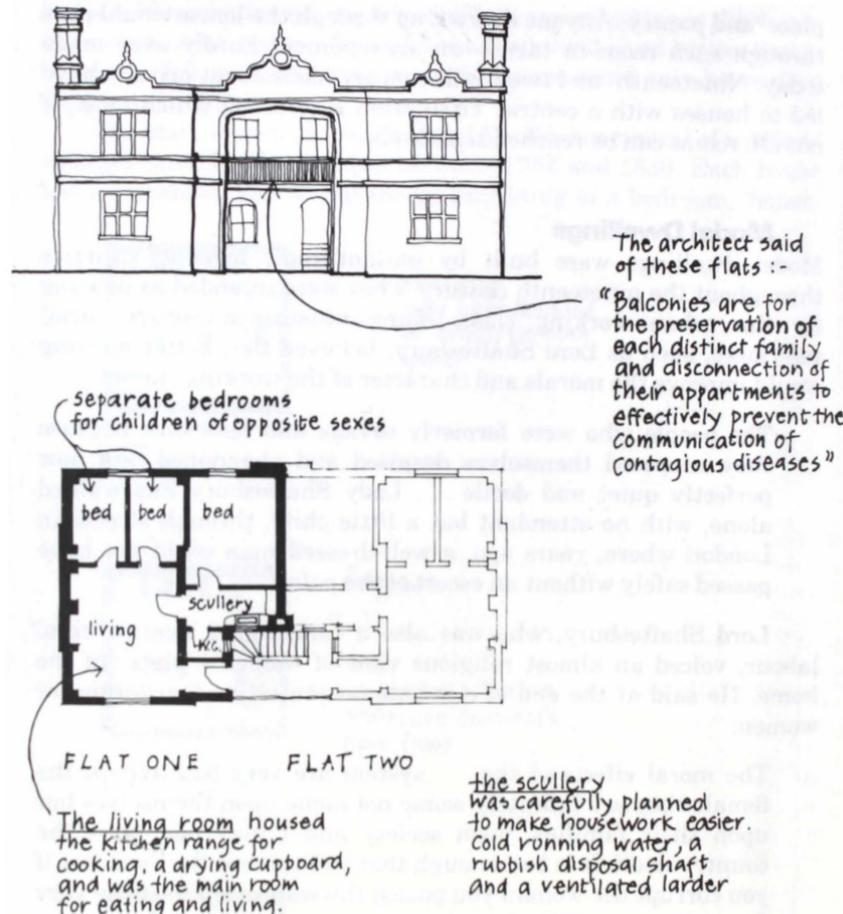


graduation project P5
TU Delft

Gaia



Model Dwelling

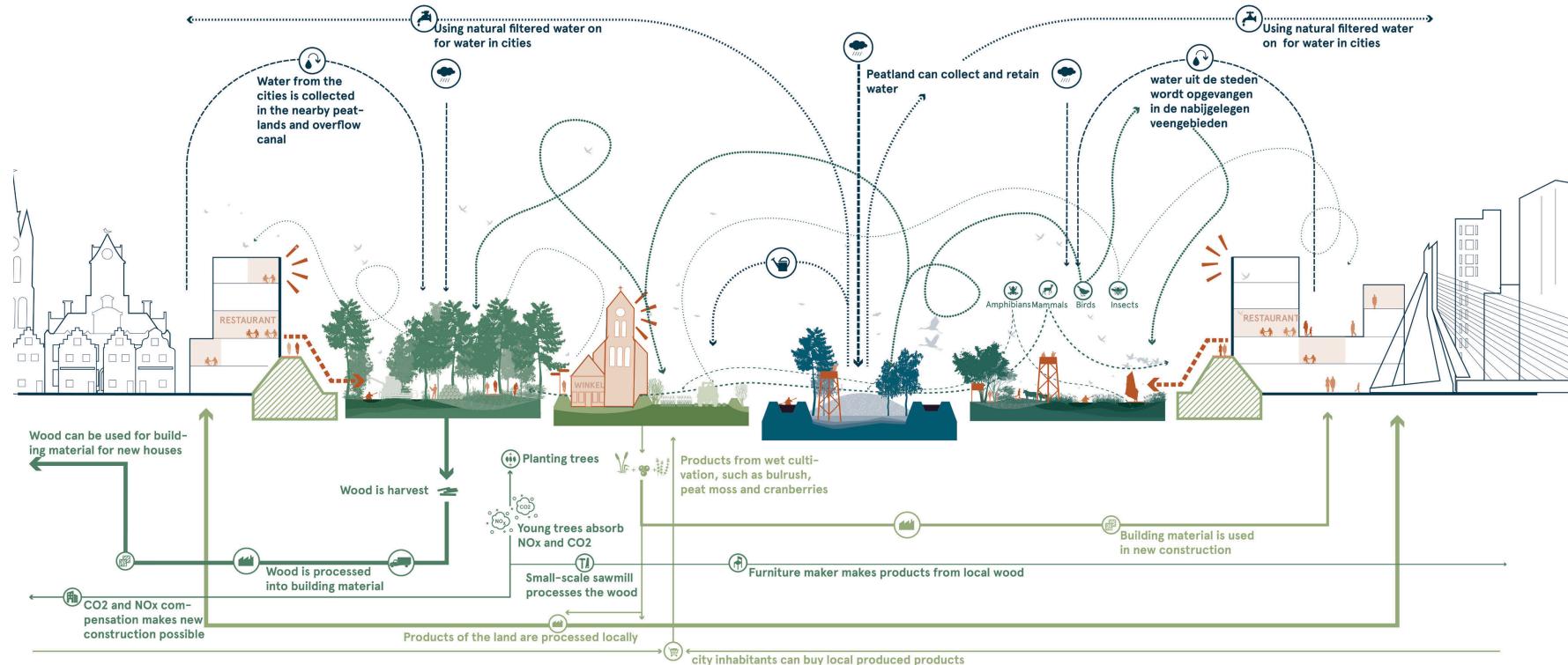
Adapting to Changing Family Compositions and Lifestyles.



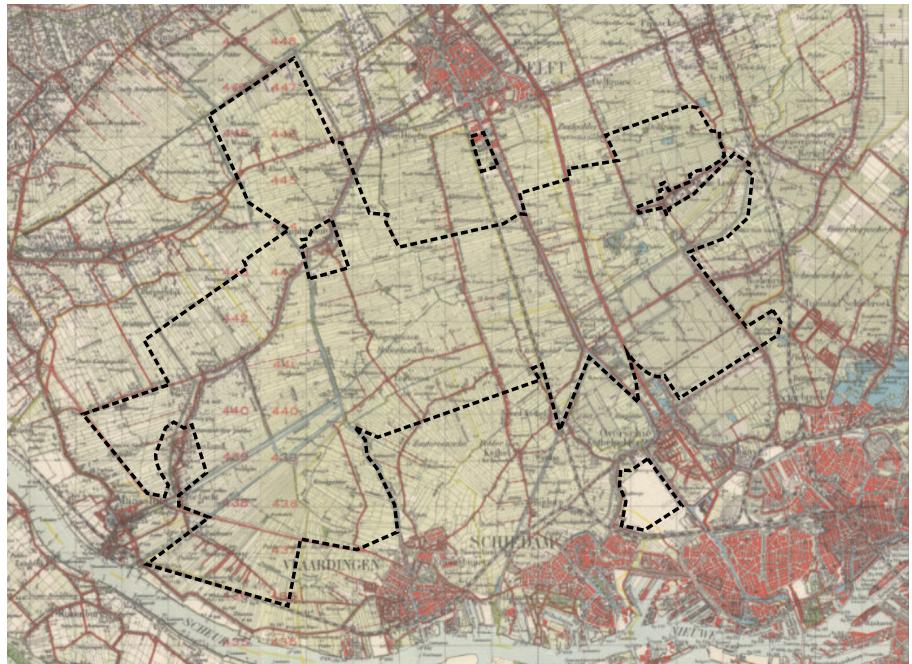
NATIONAL PRODUCTIVE
PARK DELFTLAND



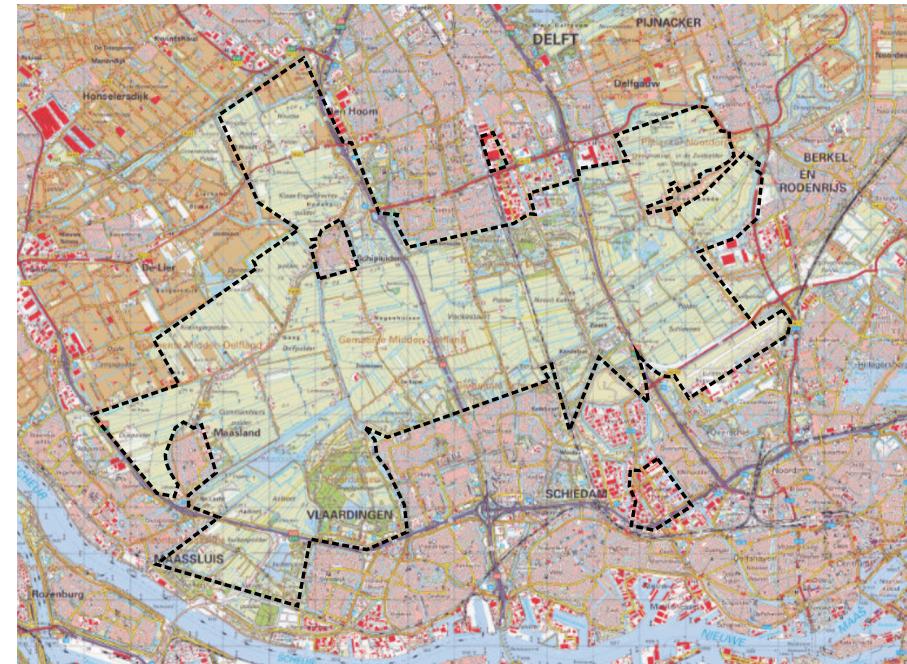
National productive park Delfland



National productive park Delfland

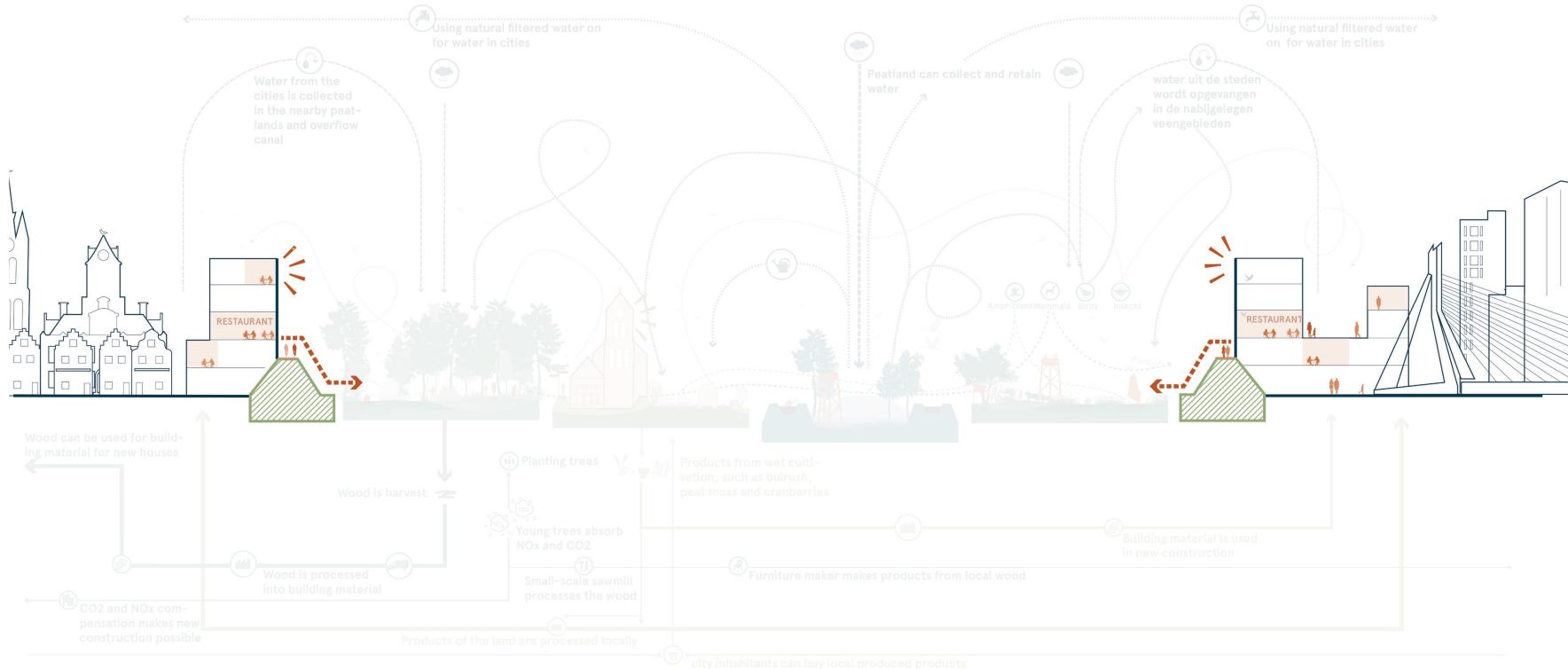


1950



2020

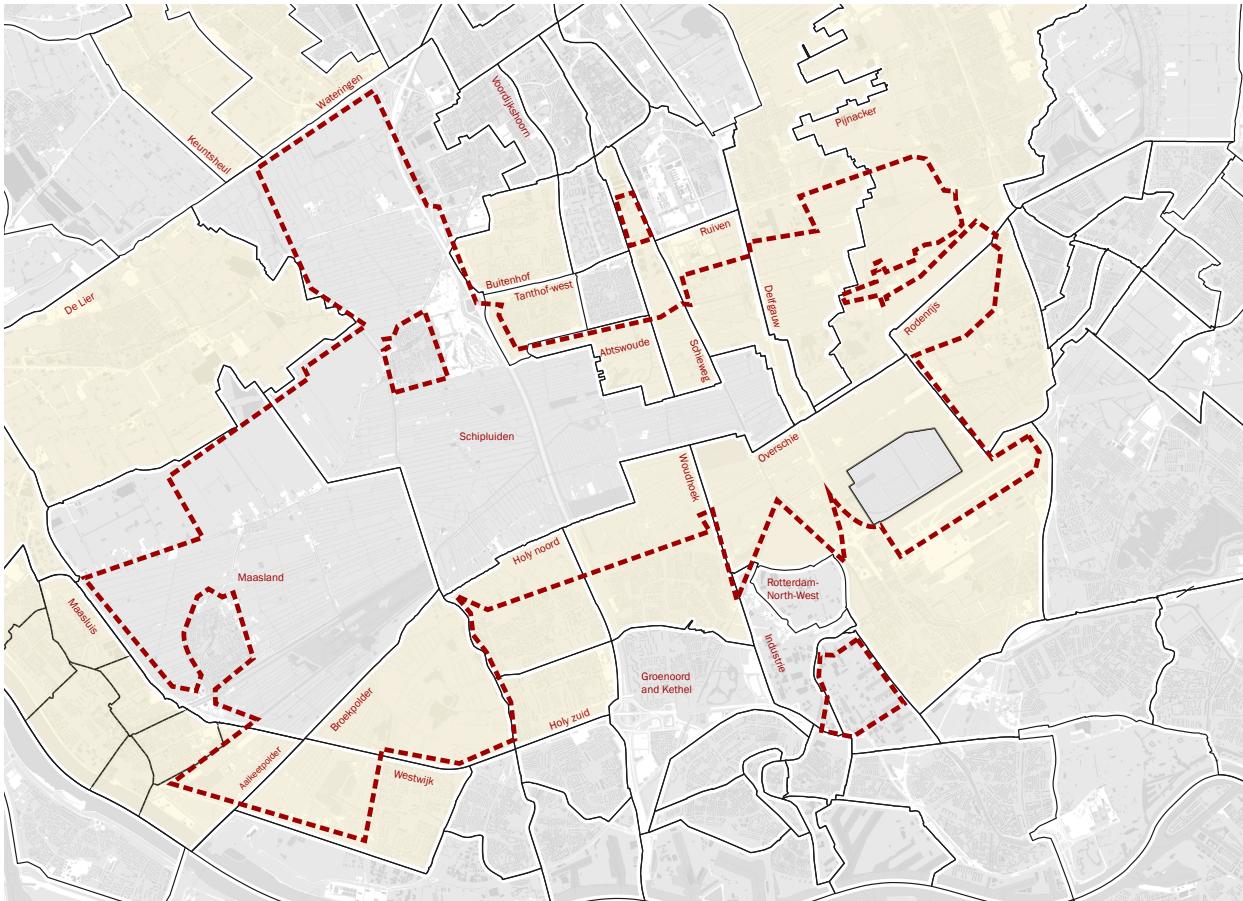
Expansion of Midden-Delfland



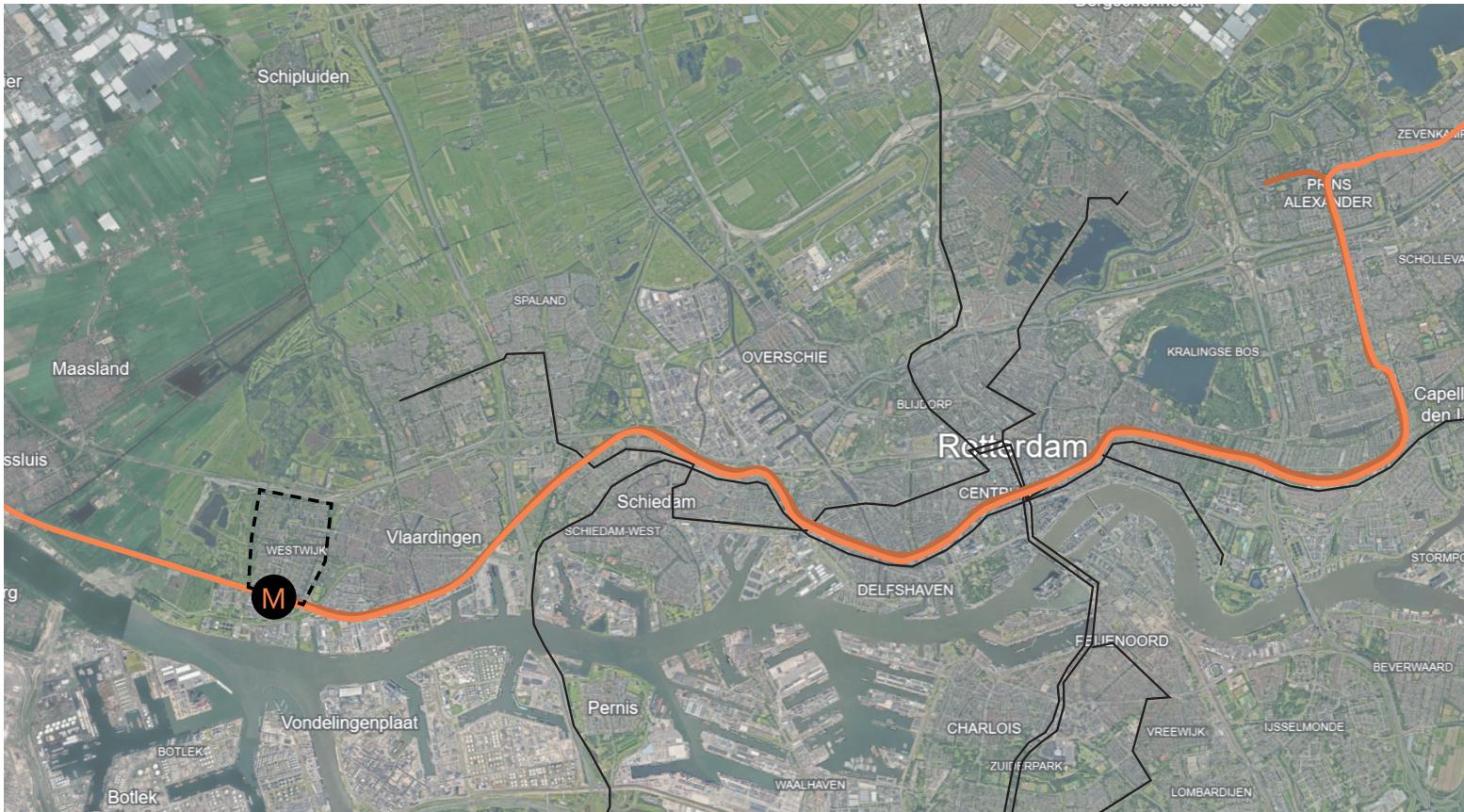
Houses



Houses



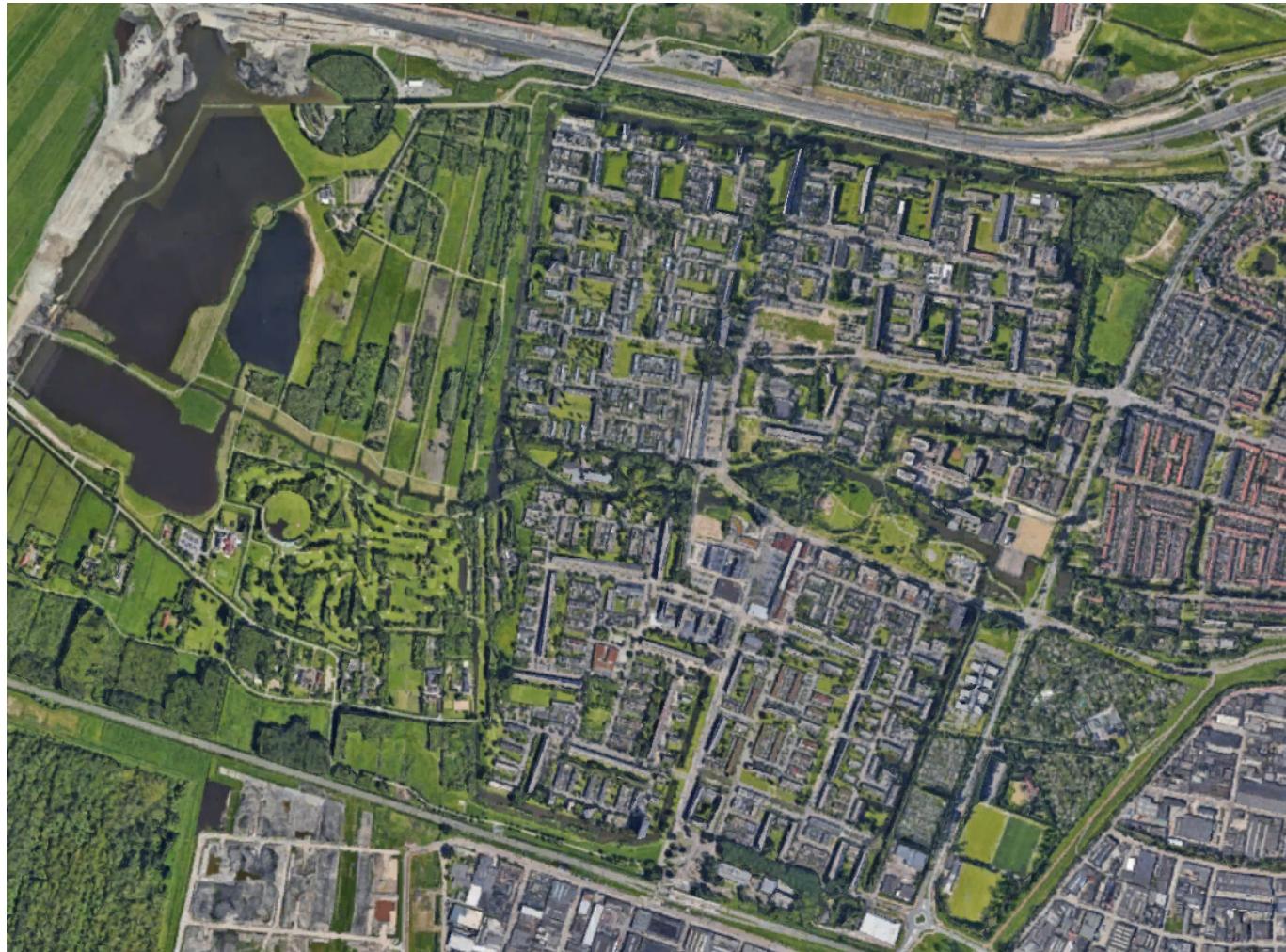
Neighbouring areas



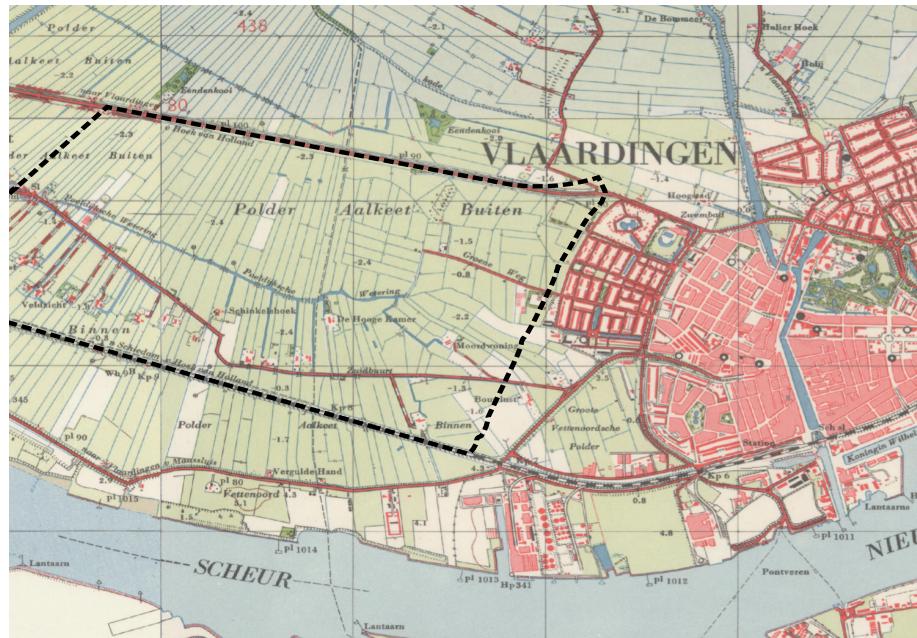
Mobility



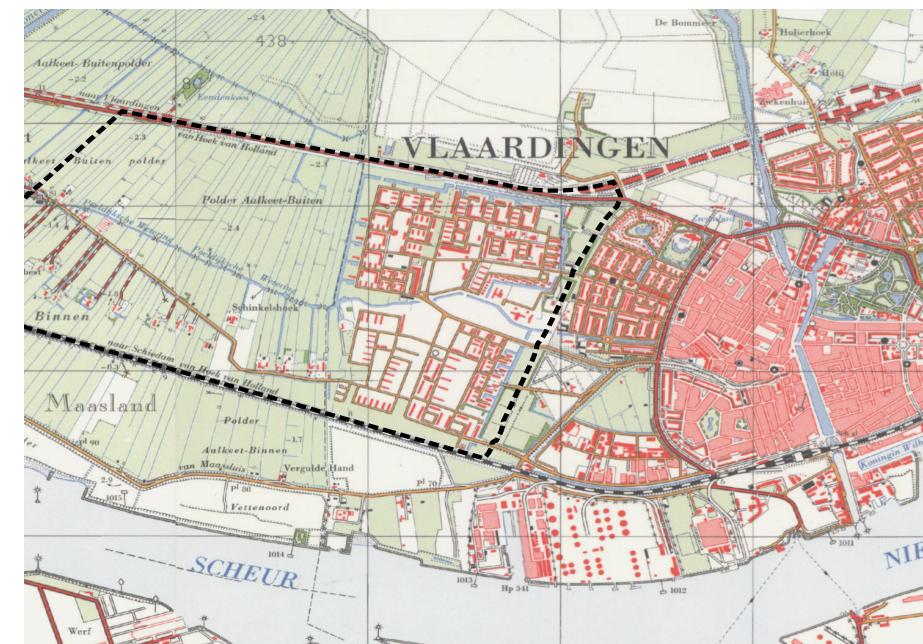
Westwijk Vlaardingen



Westwijk Vlaardingen

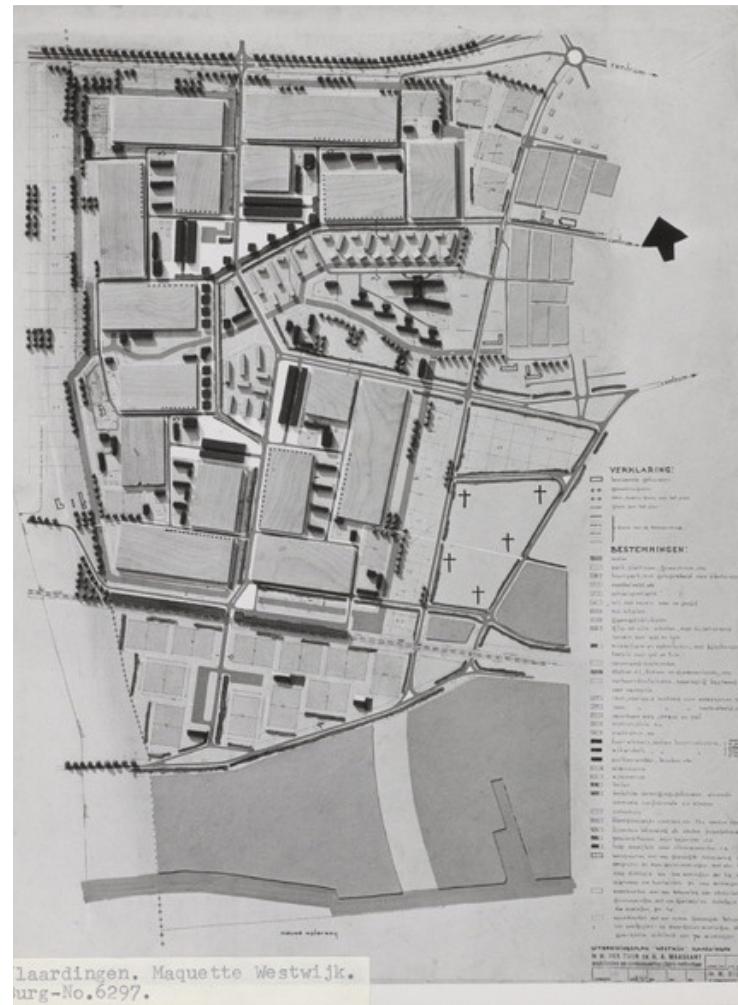


1950



1960

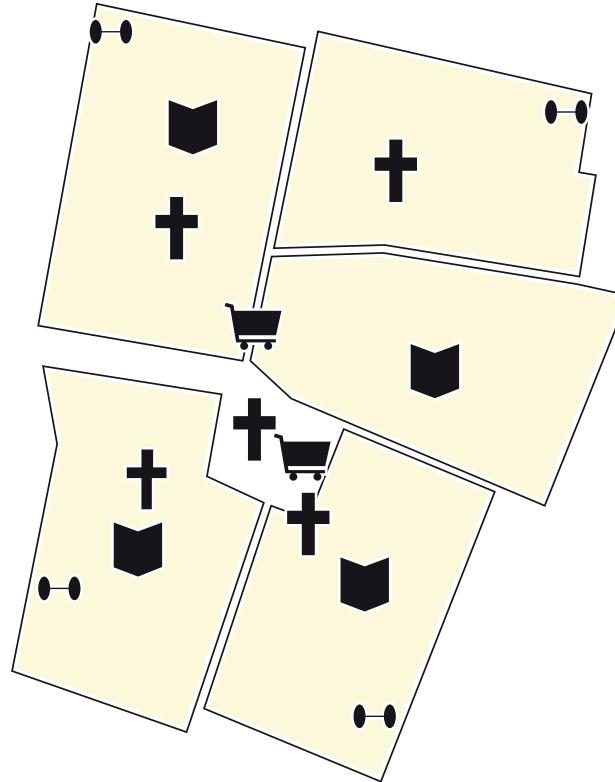
Post-war neighbourhood



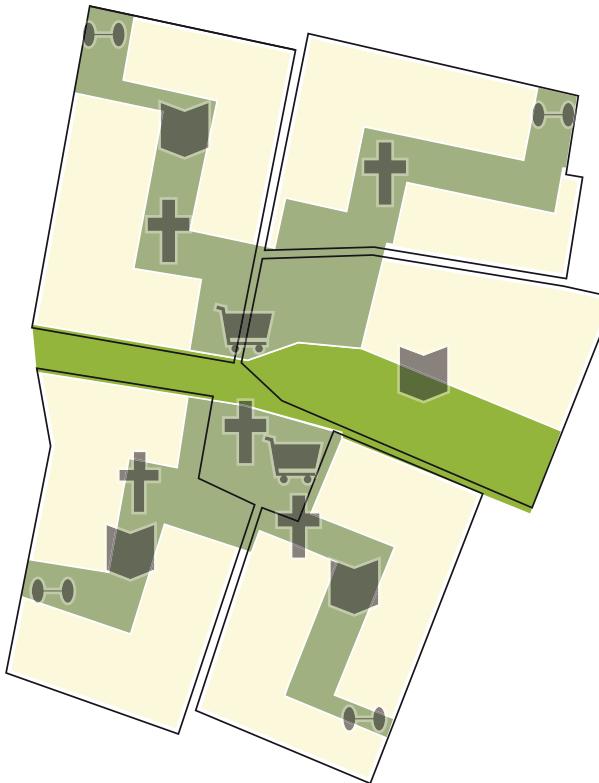
Master plan designed by Maaskant and Van Tijen



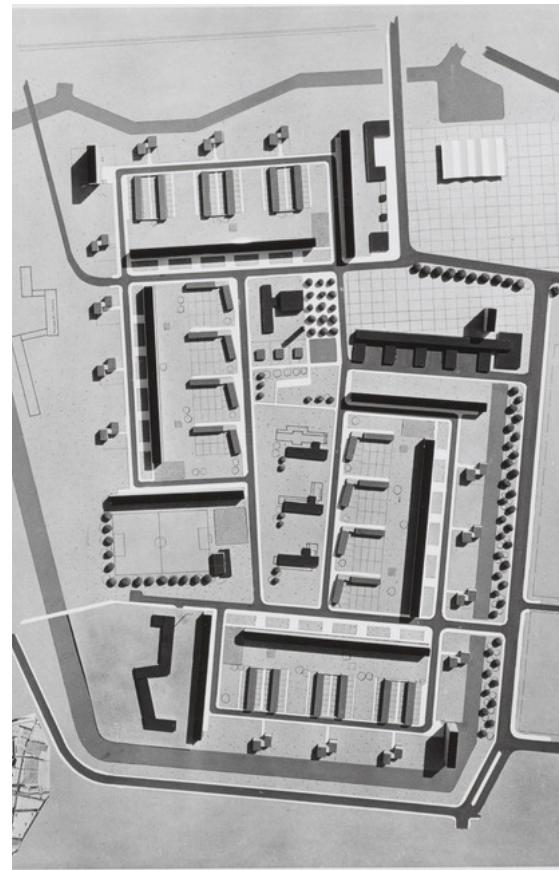
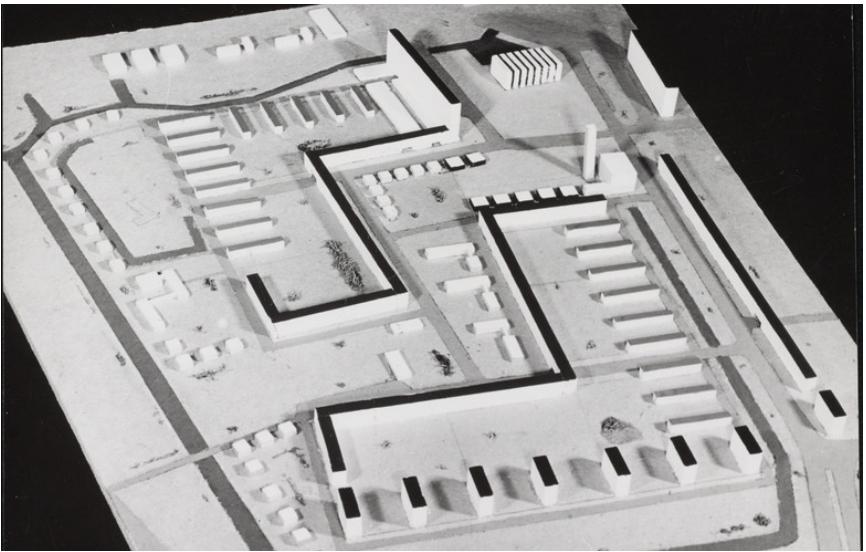
‘Buurten’



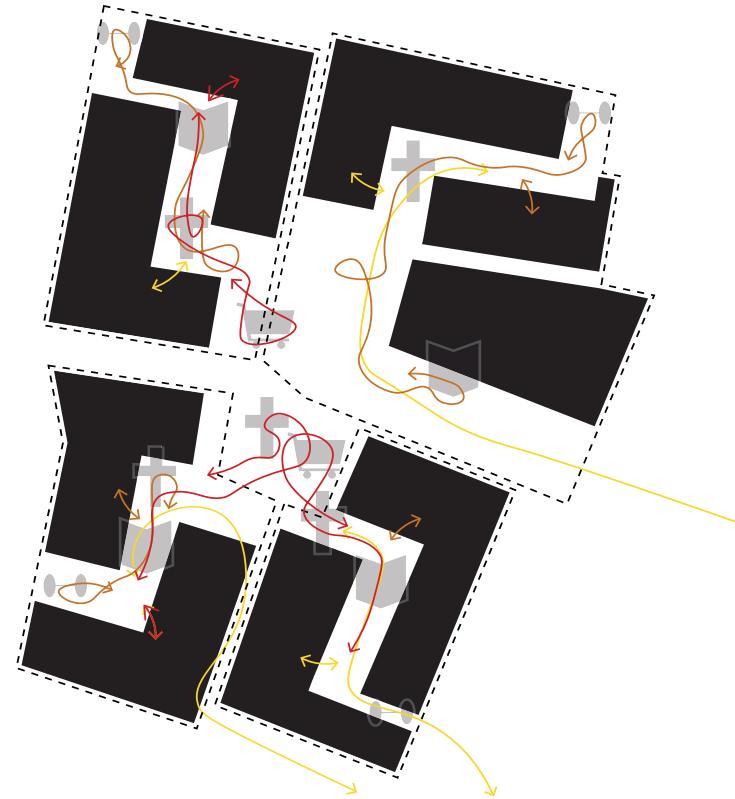
Pillarisation of facilities



Green structure



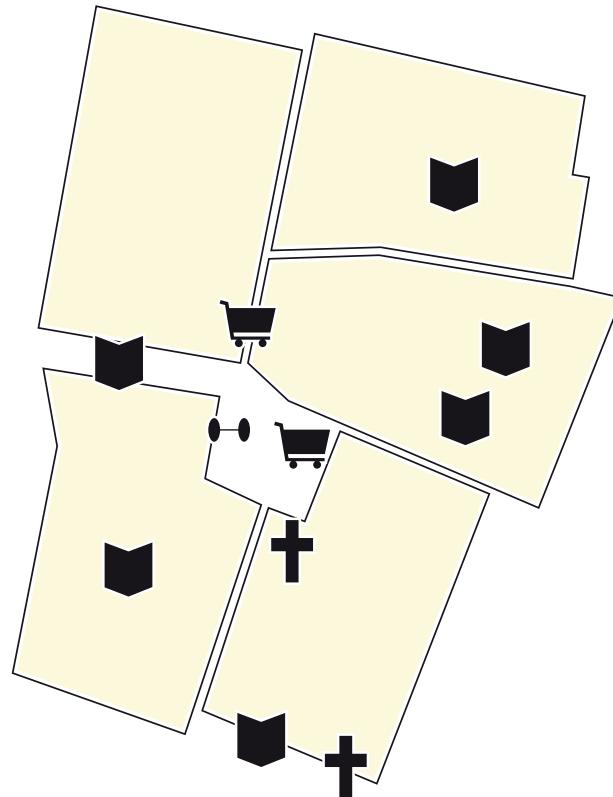
Green structure



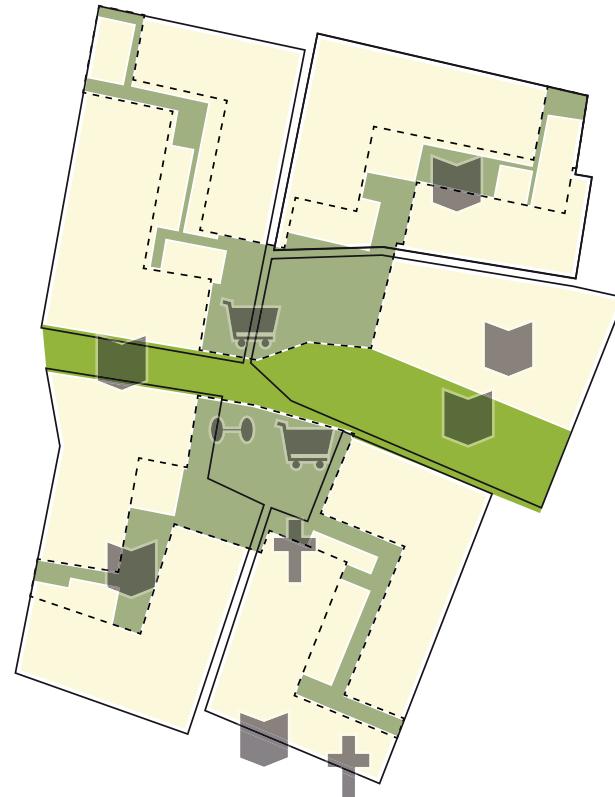
Intended user patterns



Intended users



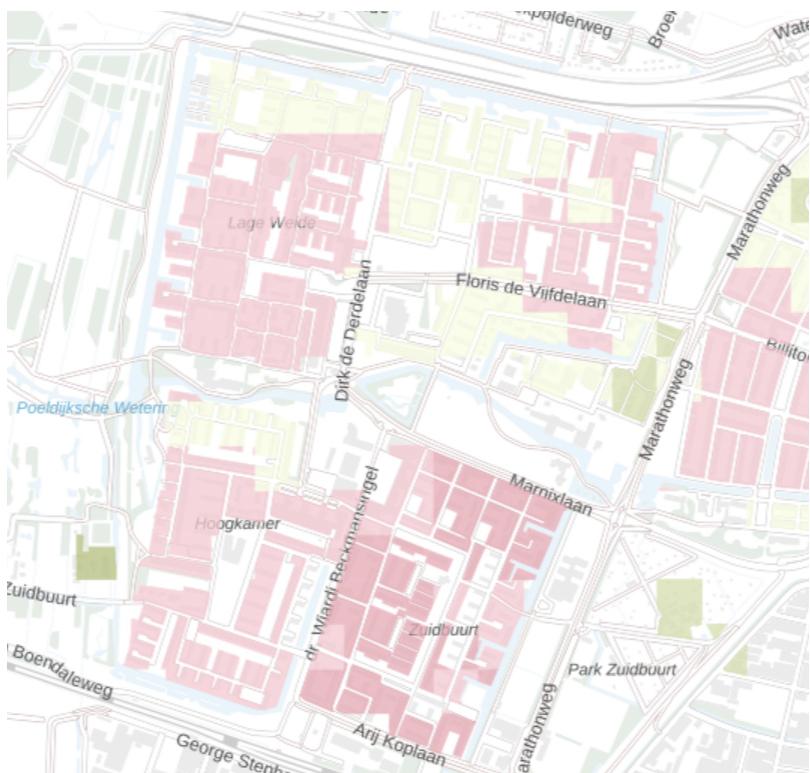
Spread out facilities



Green structure obscured



Other users



social cohesion



nuisance and insecurity

Liveability

Source; Leefbarometer, 2020



Hoogkamer



Arm in 1960



Public facilities



Arm in 2005

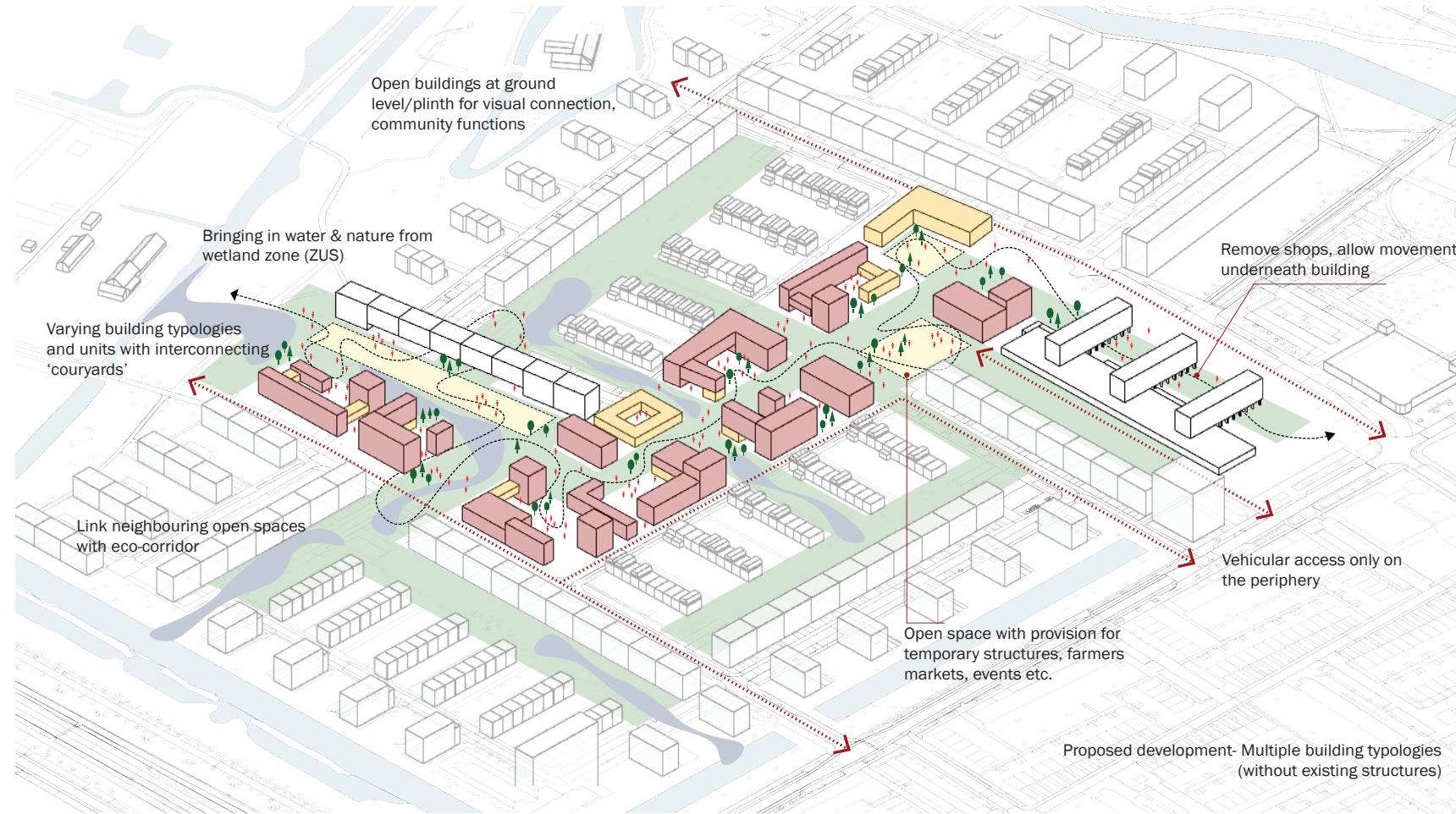


Houses

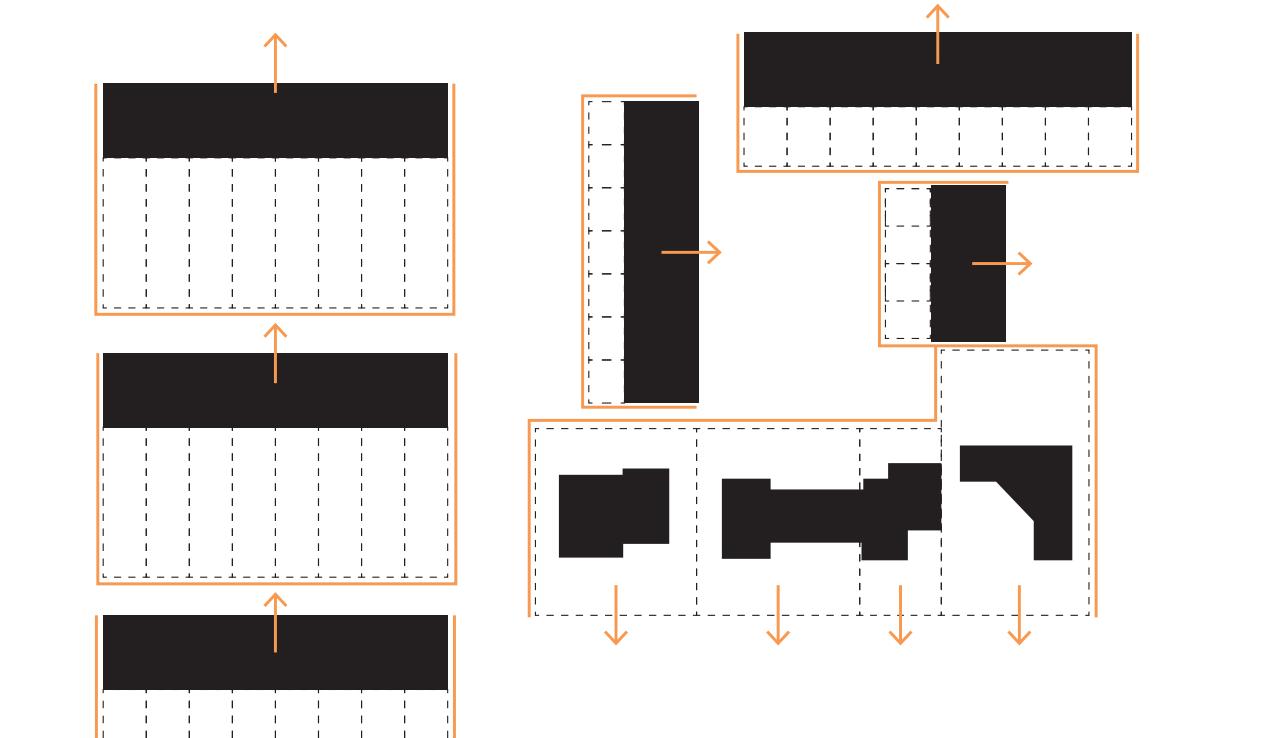




Houses



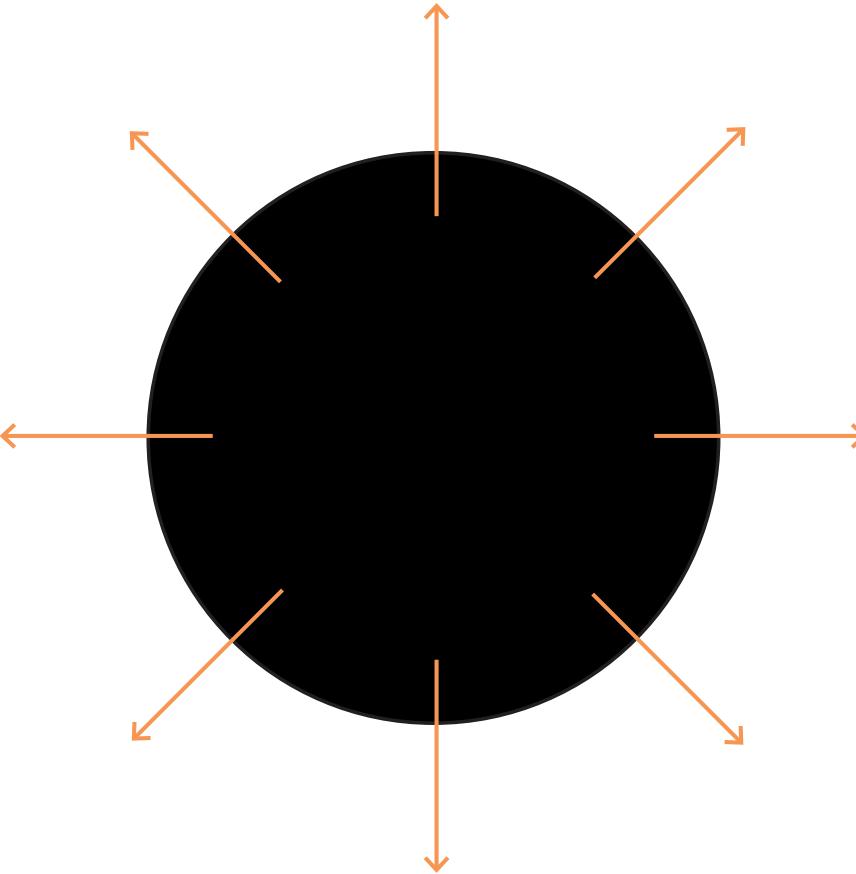
Vision



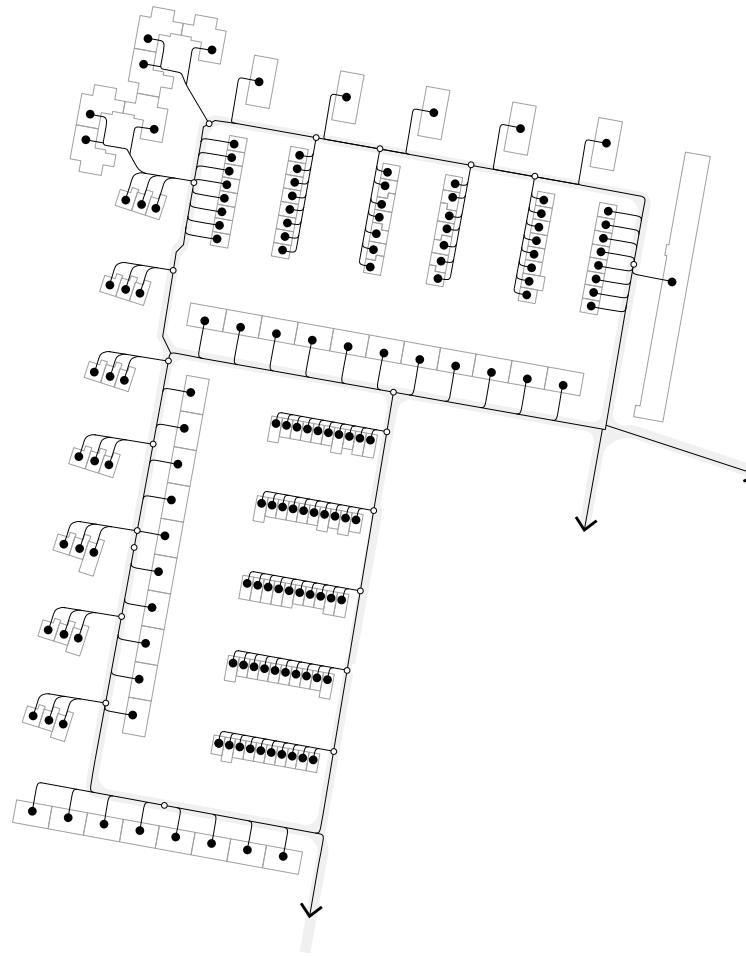
Orientation



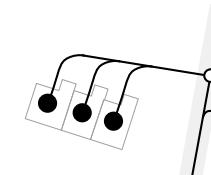
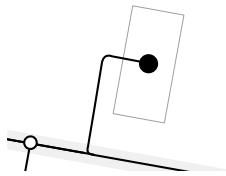
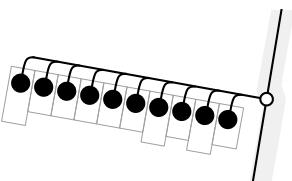
Orientation



Orientation

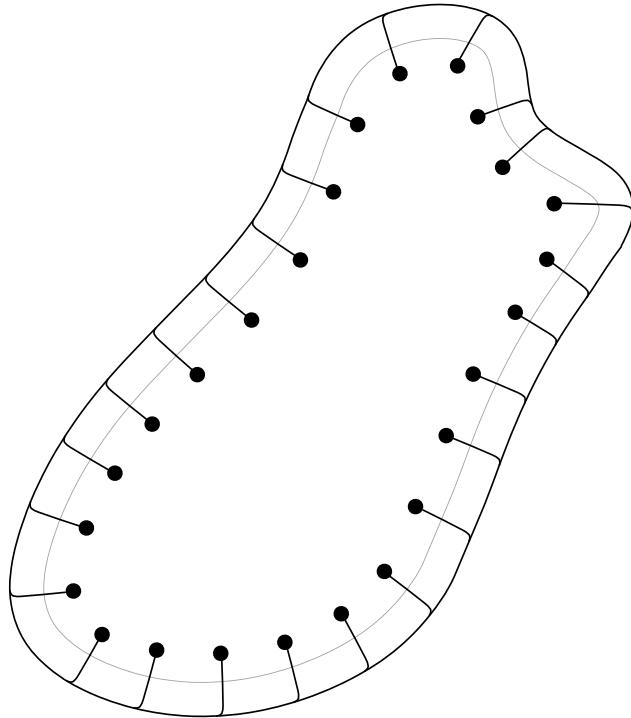


Descriptive space

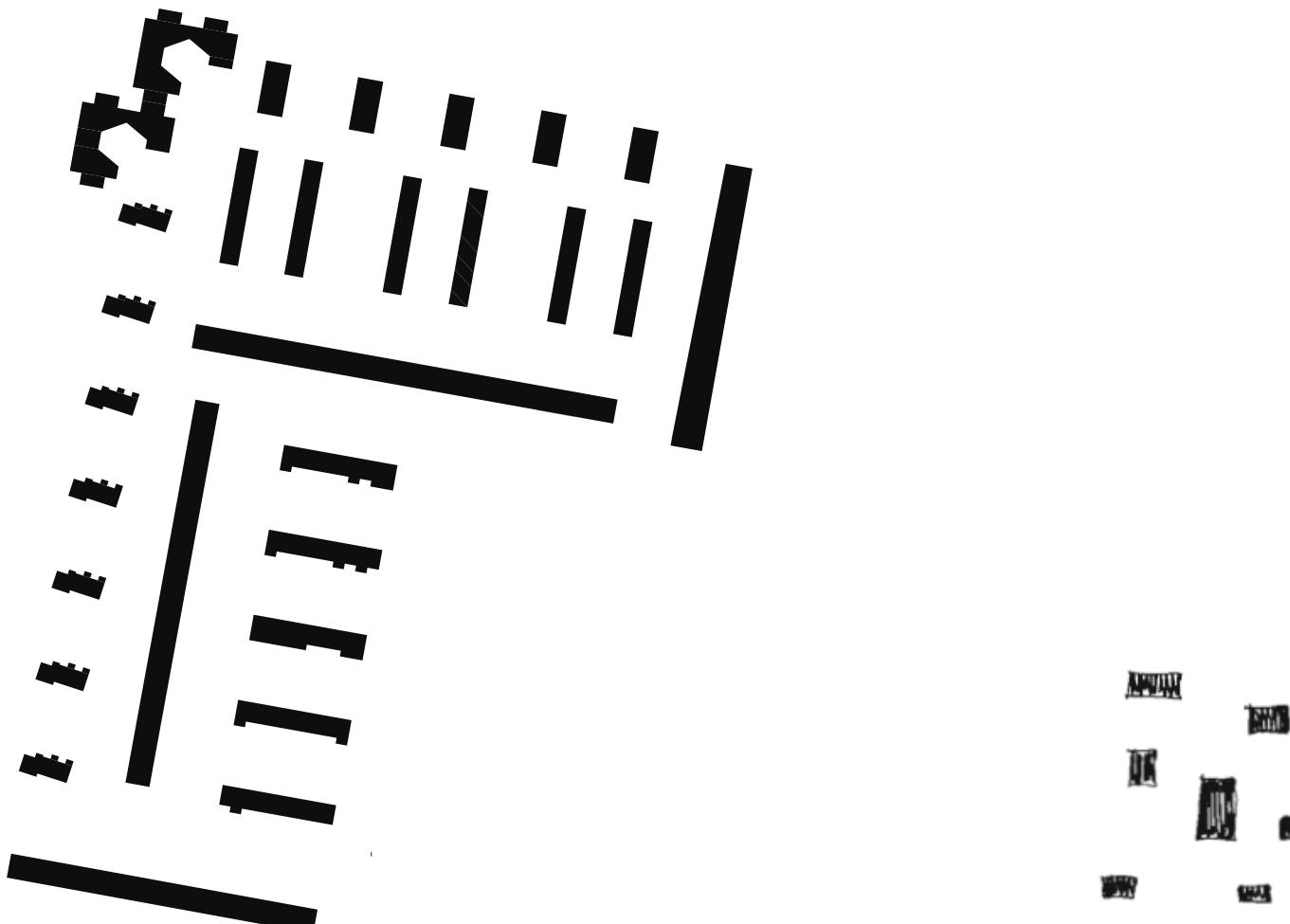


Descriptive space

Source: The Social Logic of Space (Hanson & Hillier, 1989)



Non-discriptive space



Negative space

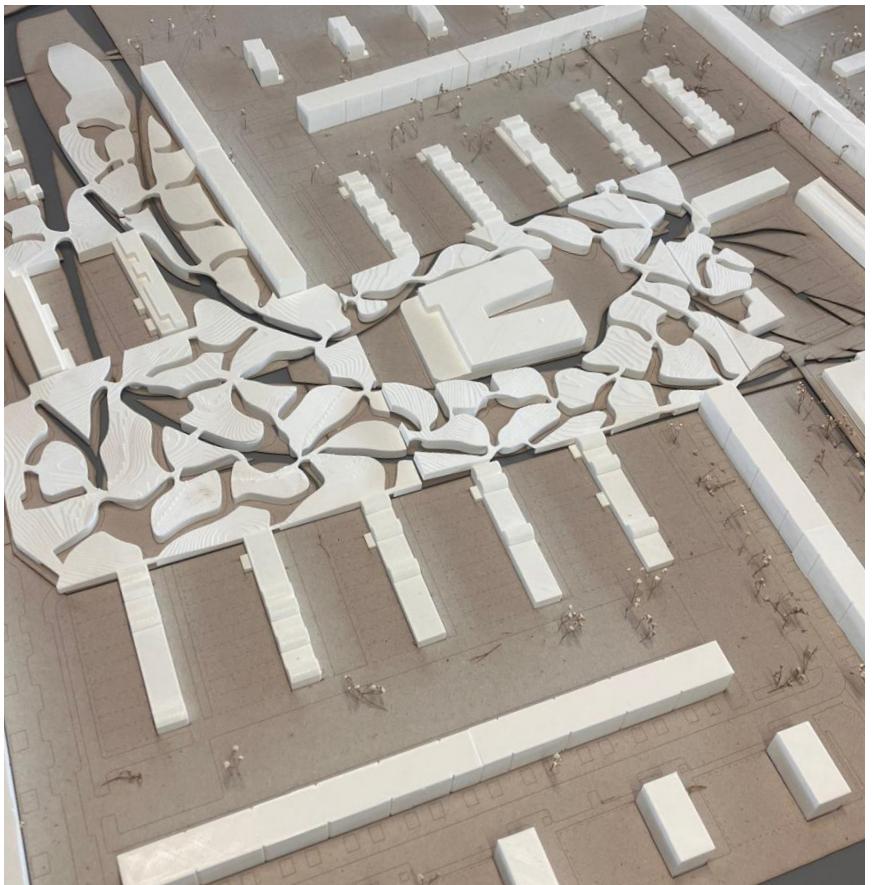


Positive space





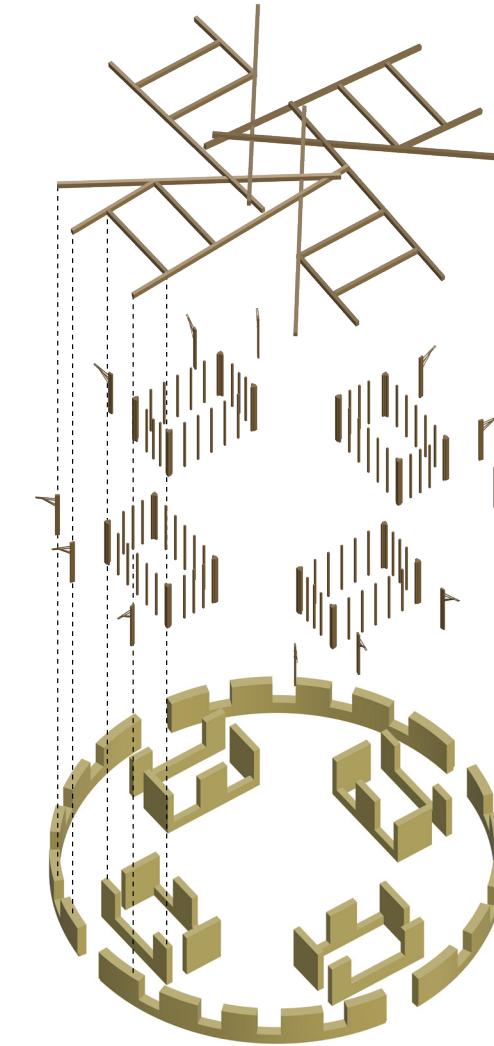
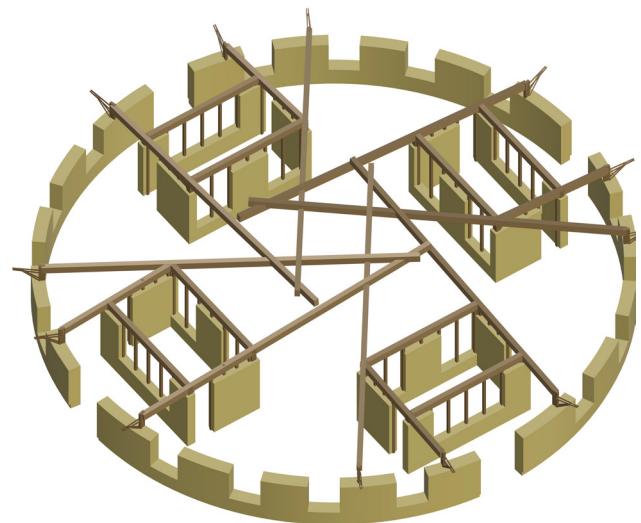
Water



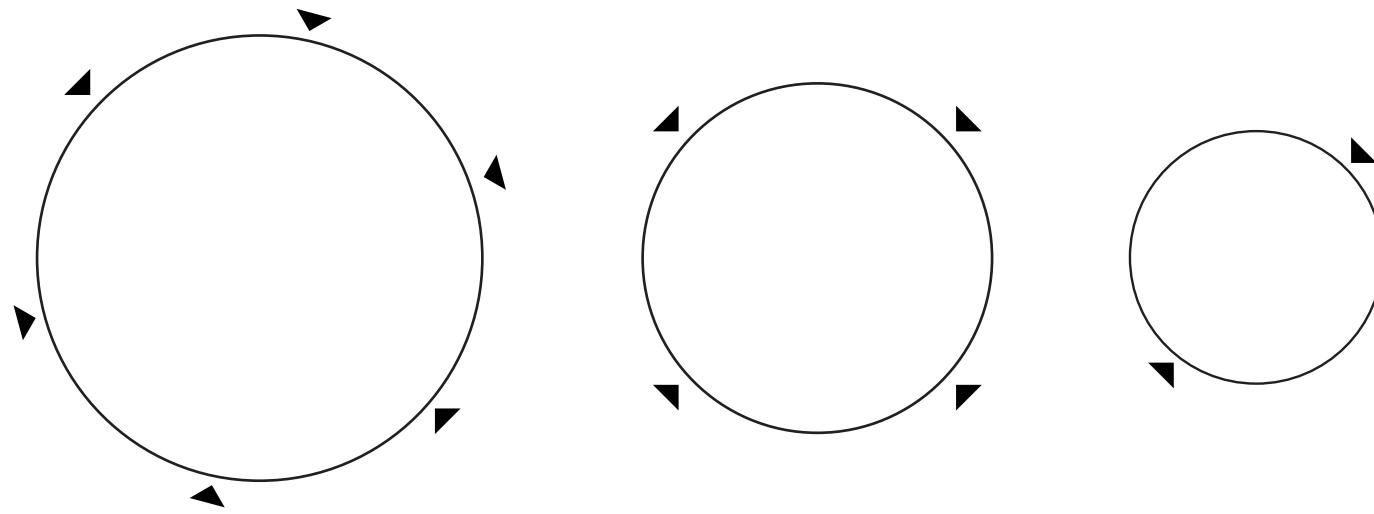
P2



Construction



Construction

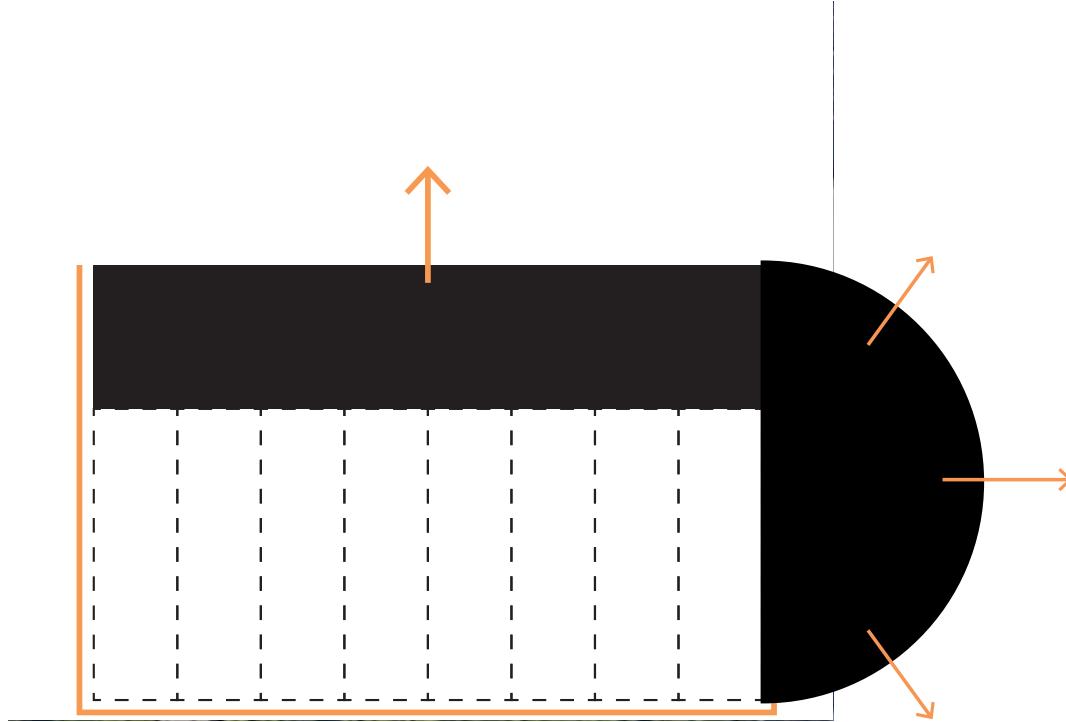


$R=14m$ (6 houses)

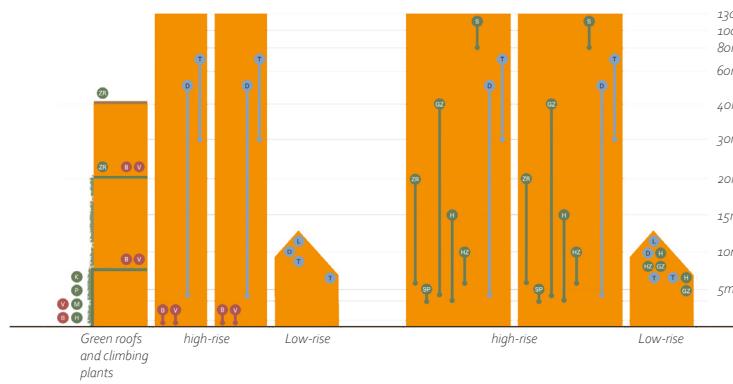
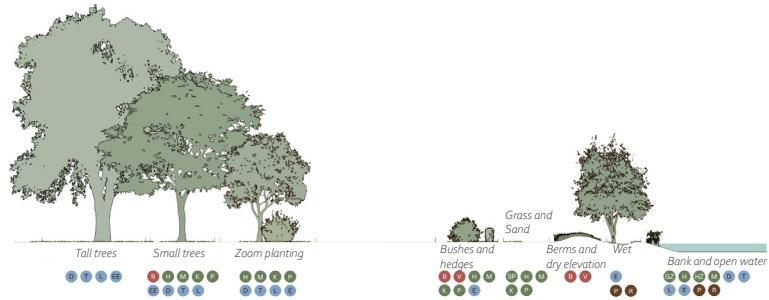
$R=11m$ (4 houses)

$R=8m$ (2 houses)

Houses



Orientation



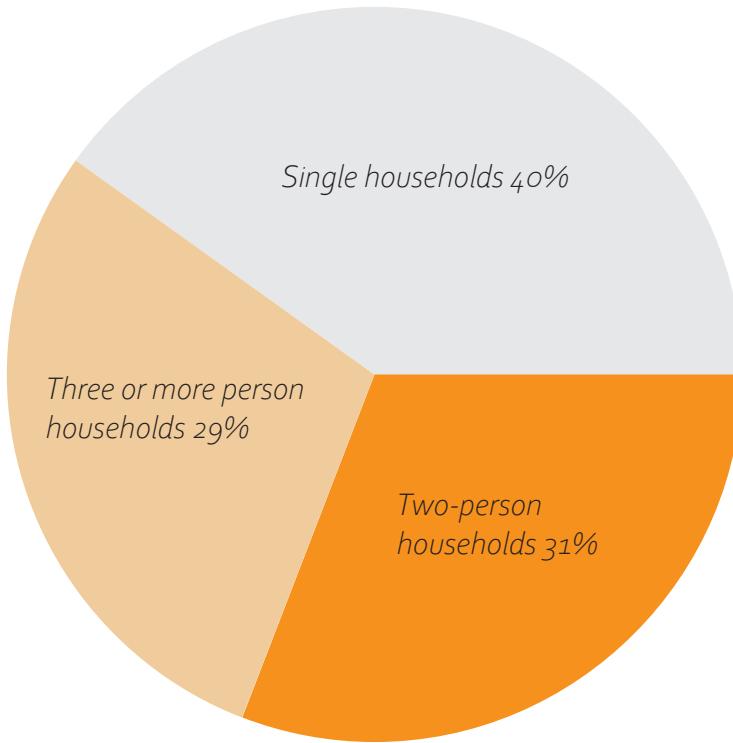
Birds

	Titmouse		Starling
	Blue tit		Swift
	Blackbird		House swallow
	House sparrow		Peregrine falcon
	Black redstart		

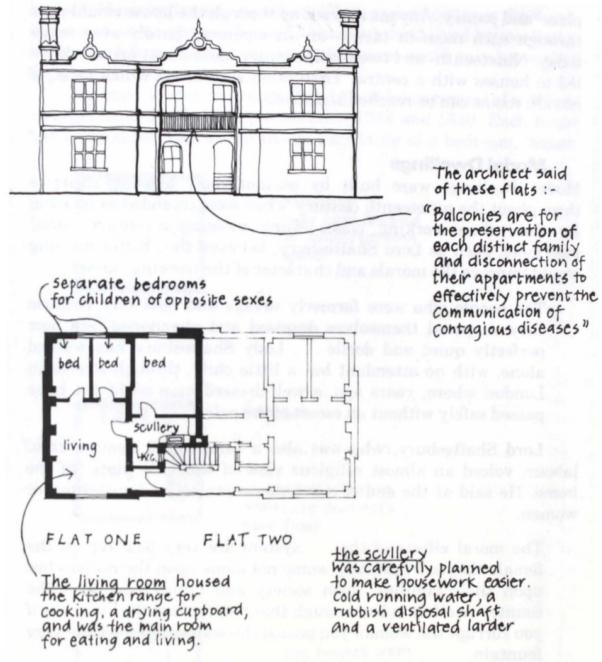
Mammal

	Common dwarfbat		Bees
	Bicoloured bat		Butterflies
	Late-flying bat		Mammal
	Squirrel		Poolfrog
	Hedgehogs		Natterjack toad

Target group; Non-Humans



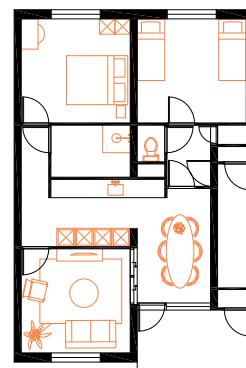
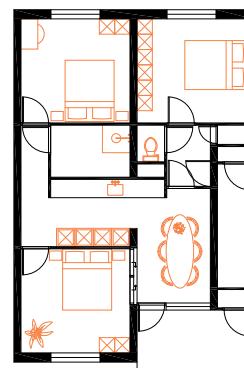
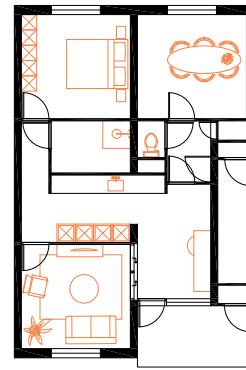
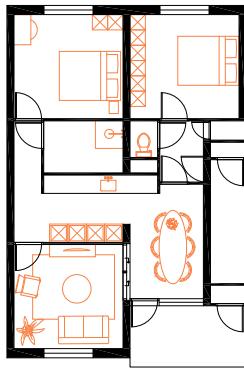
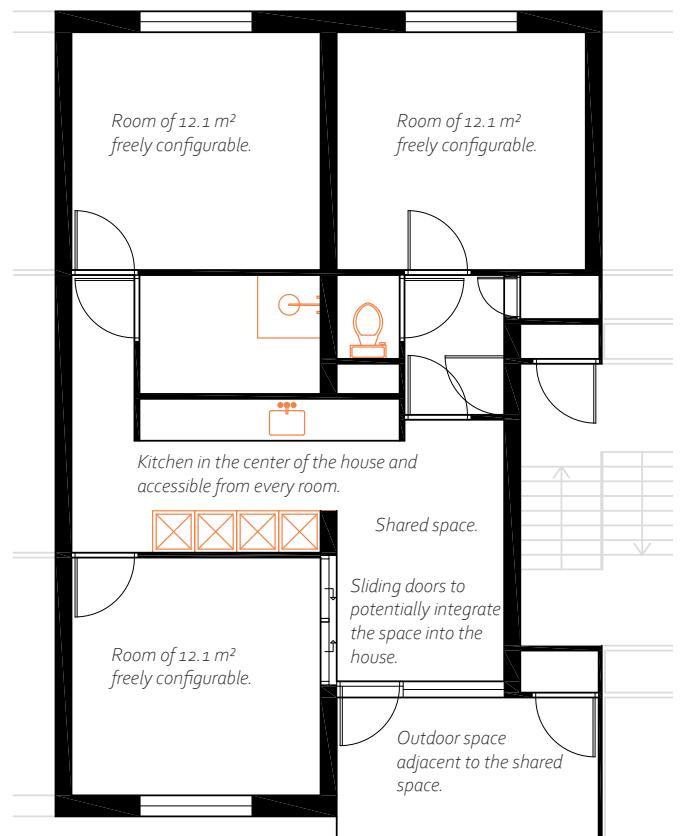
Target group; Non-Humans



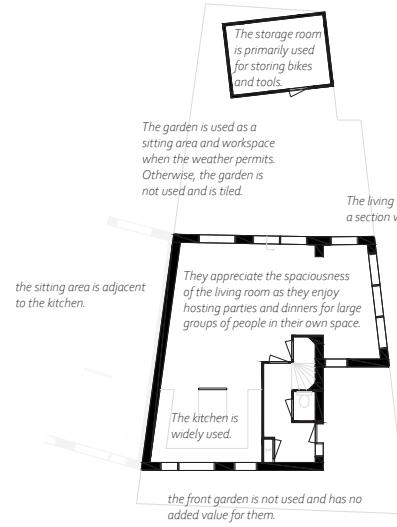
Quantity
 Typological Thinking



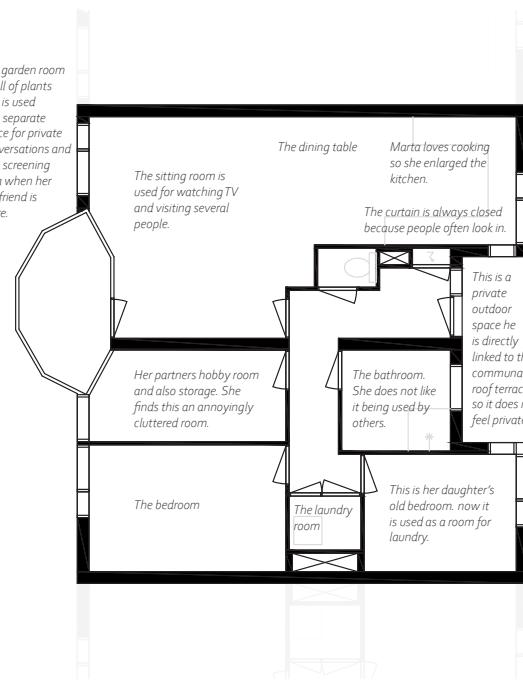
How a design emerges



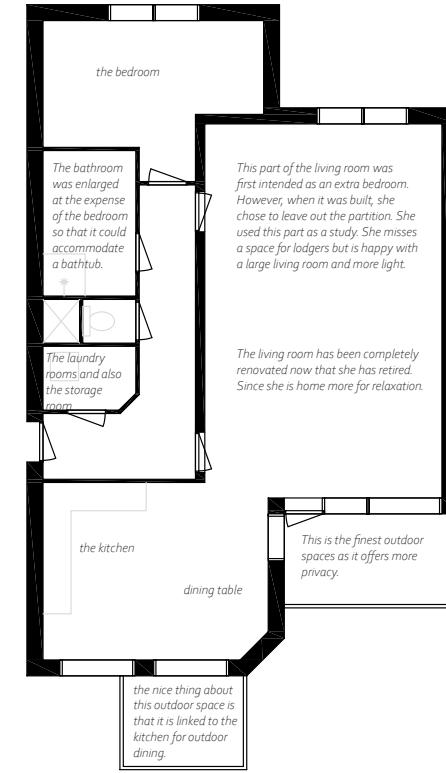
Non-hierarchical house



Loes and Ijnze



Martha

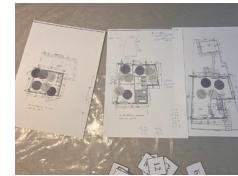


Lidy

Research

Couples

interacting
with people in
space



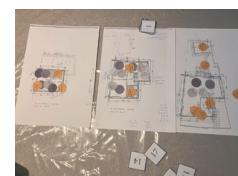
LAT relationships

the feeling
and
perception of
space

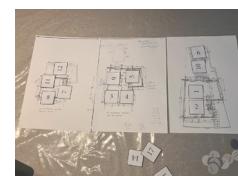


Singles

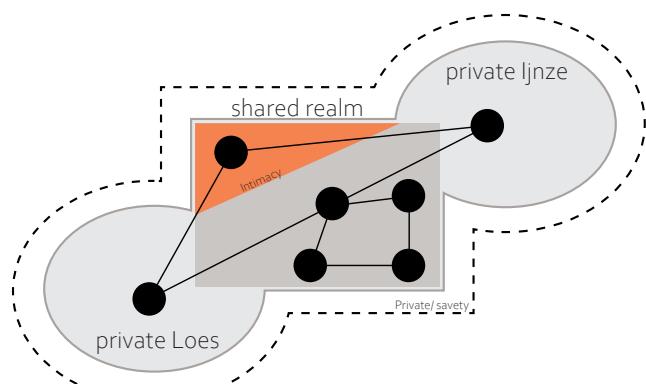
sharing
tasks and
care in
space



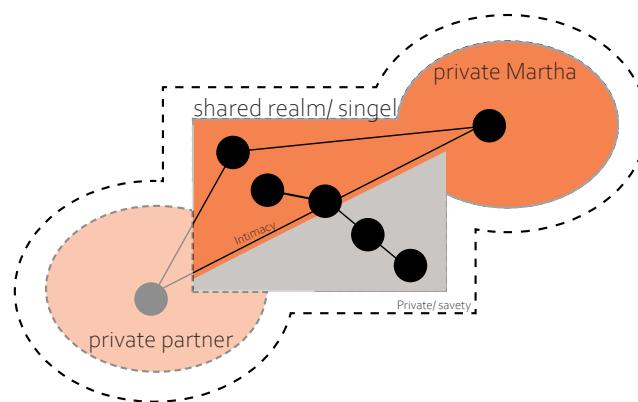
the
importance
of space



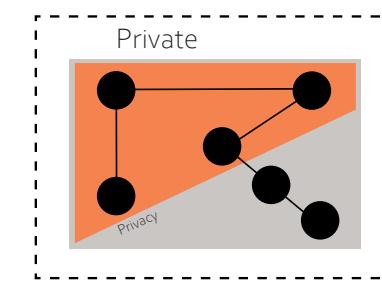
Game



Couples

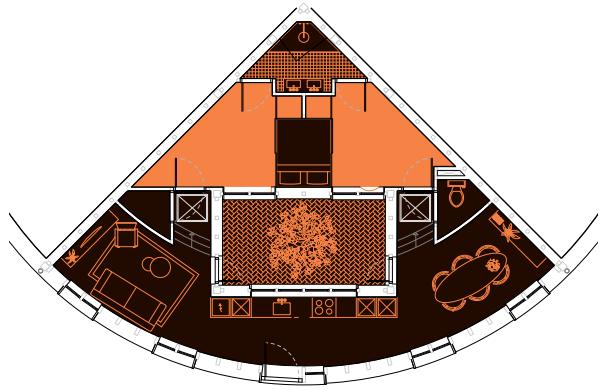


LAT relationships

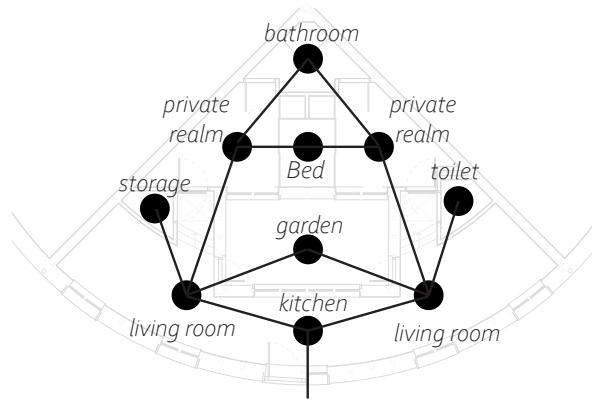


Singles

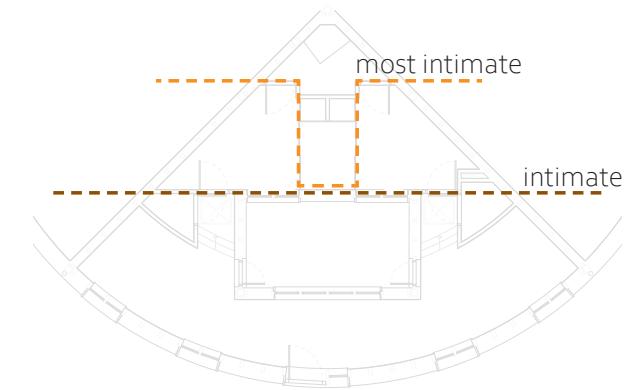
Relationship diagram



Shared (black) and private realm (orange)

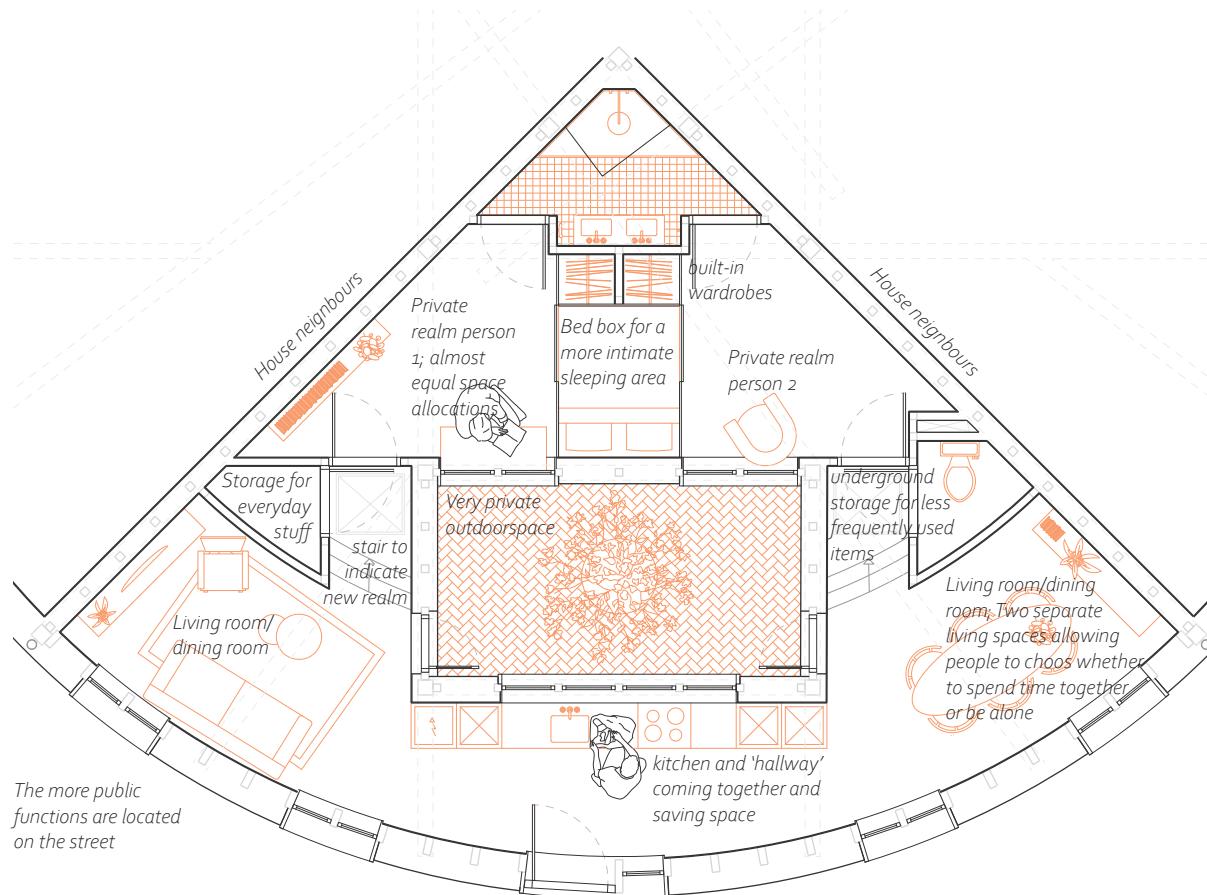


Space syntax



Relationship diagram

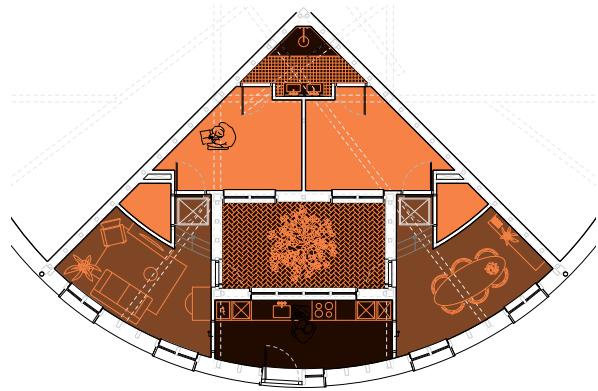
Intimate couples



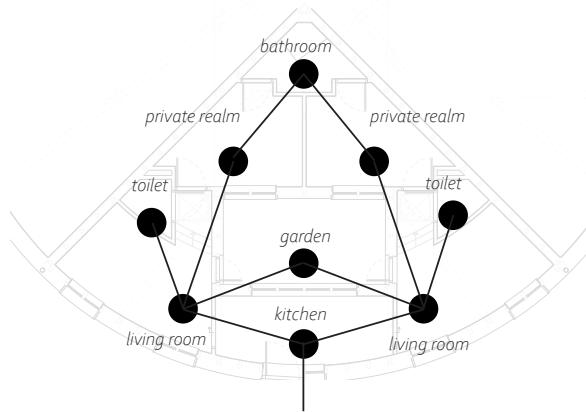
Intimate couples



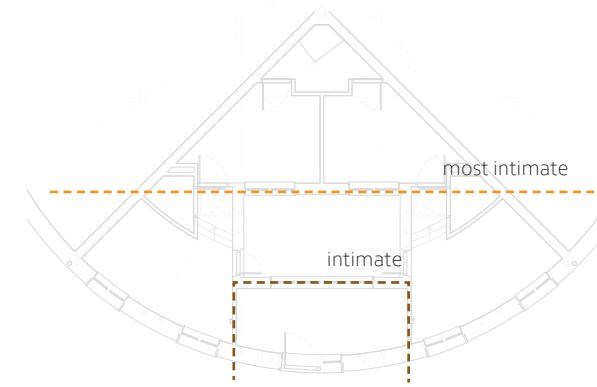
one house of four
 $R=11m$
 $65 m^2 GO$



Shared (black) and private realm (orange)



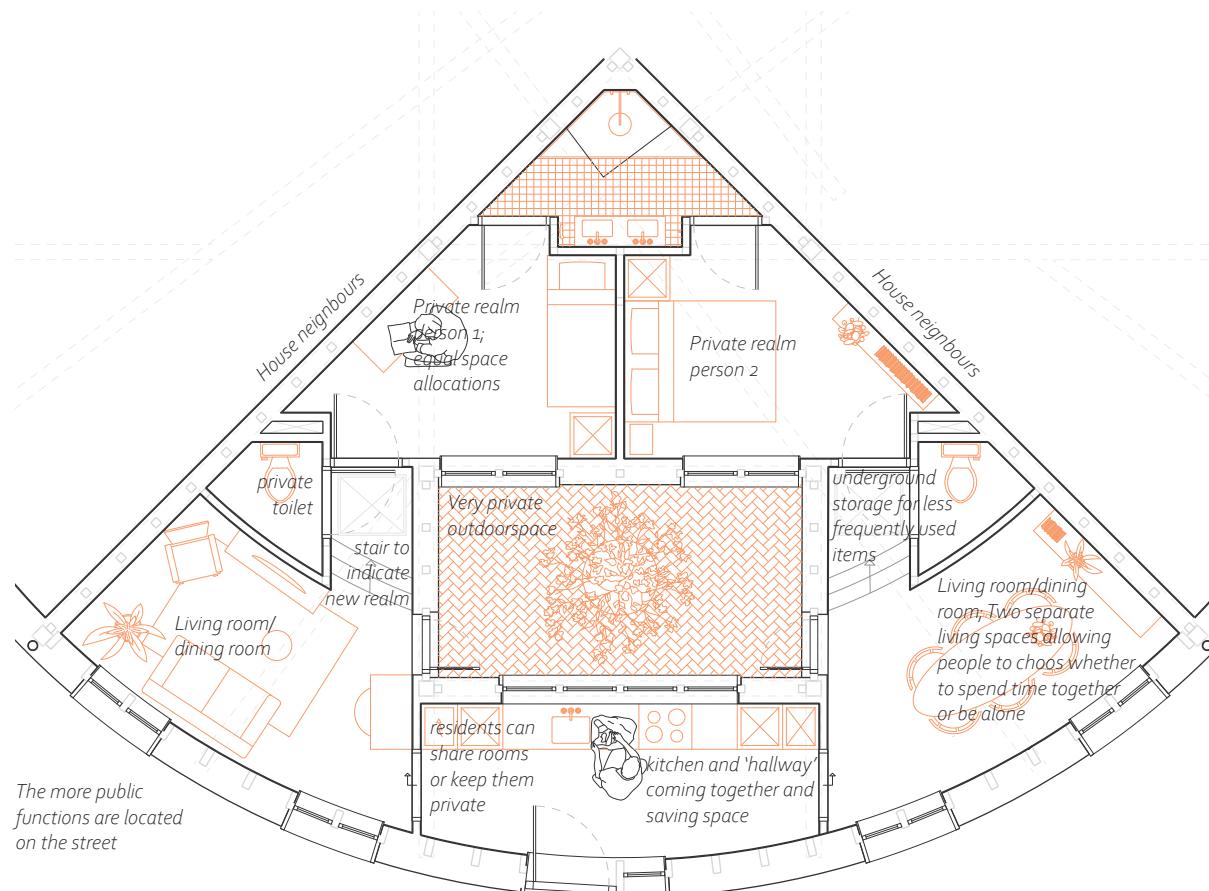
Space syntax,



Relationship diagram

Non-intimate couples

Source; (Alexander, et al., 1997) & (Hillier and Hanson, 1984)



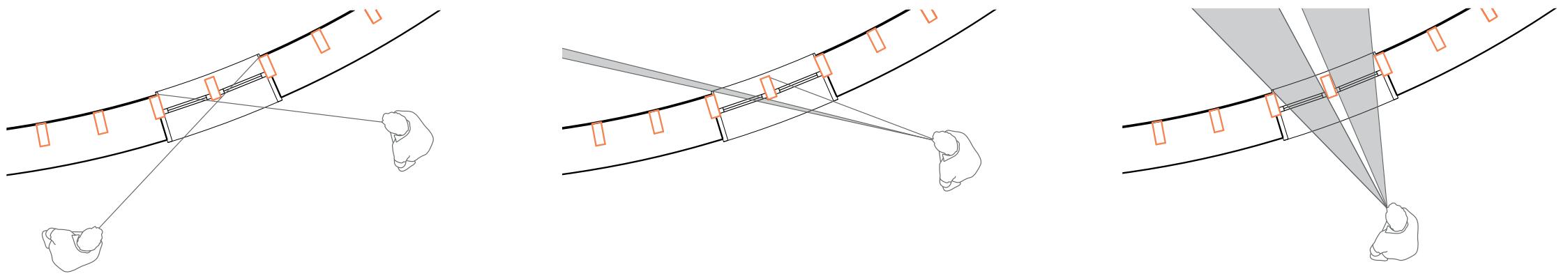
Non-intimate couples



one house of four
 $R=11m$
 $65 m^2 GO$

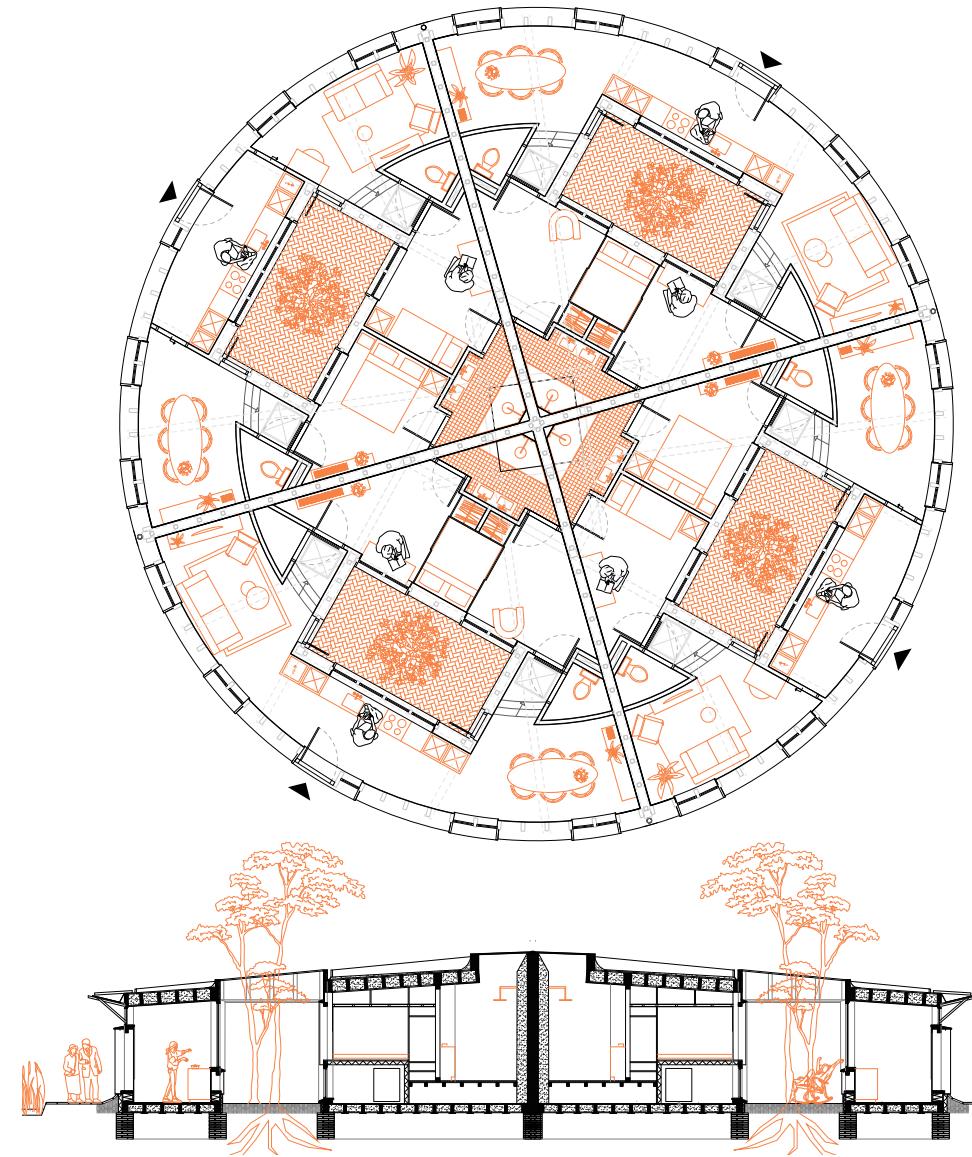


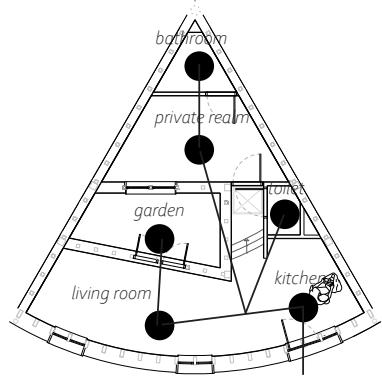




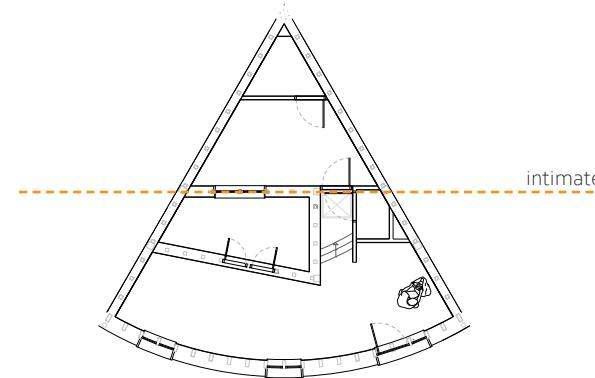
Relationship with inside and outside





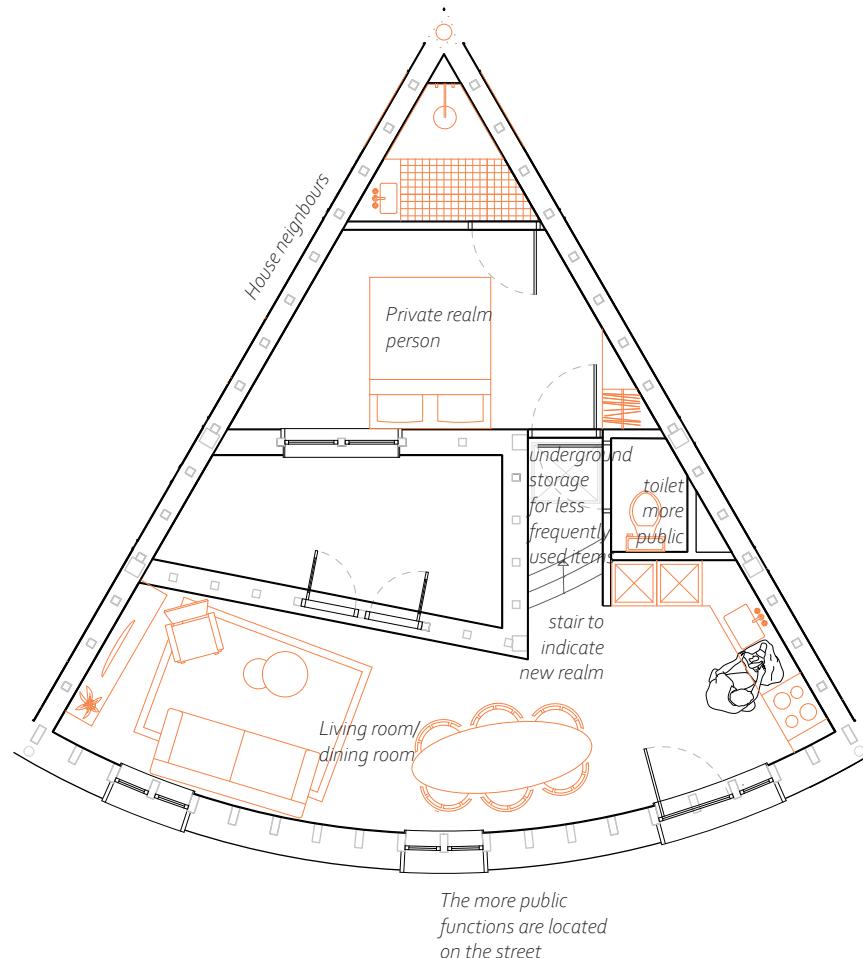


Space syntax

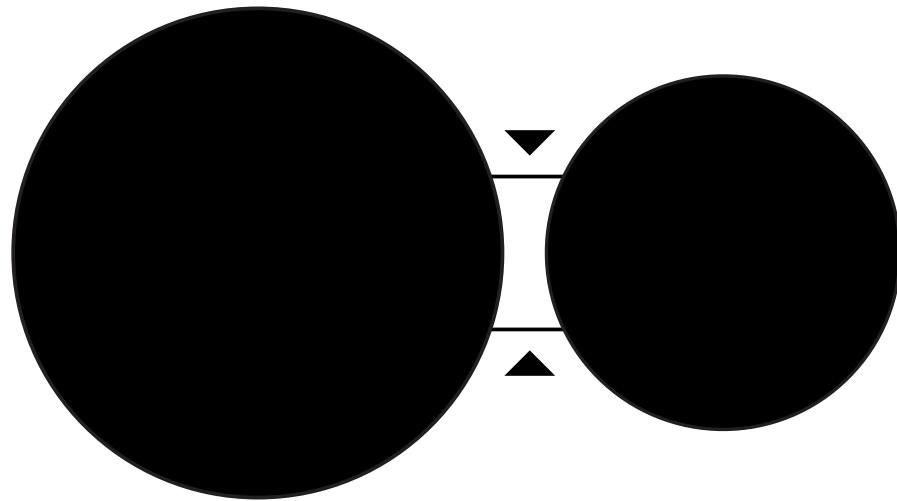


Relationship diagram

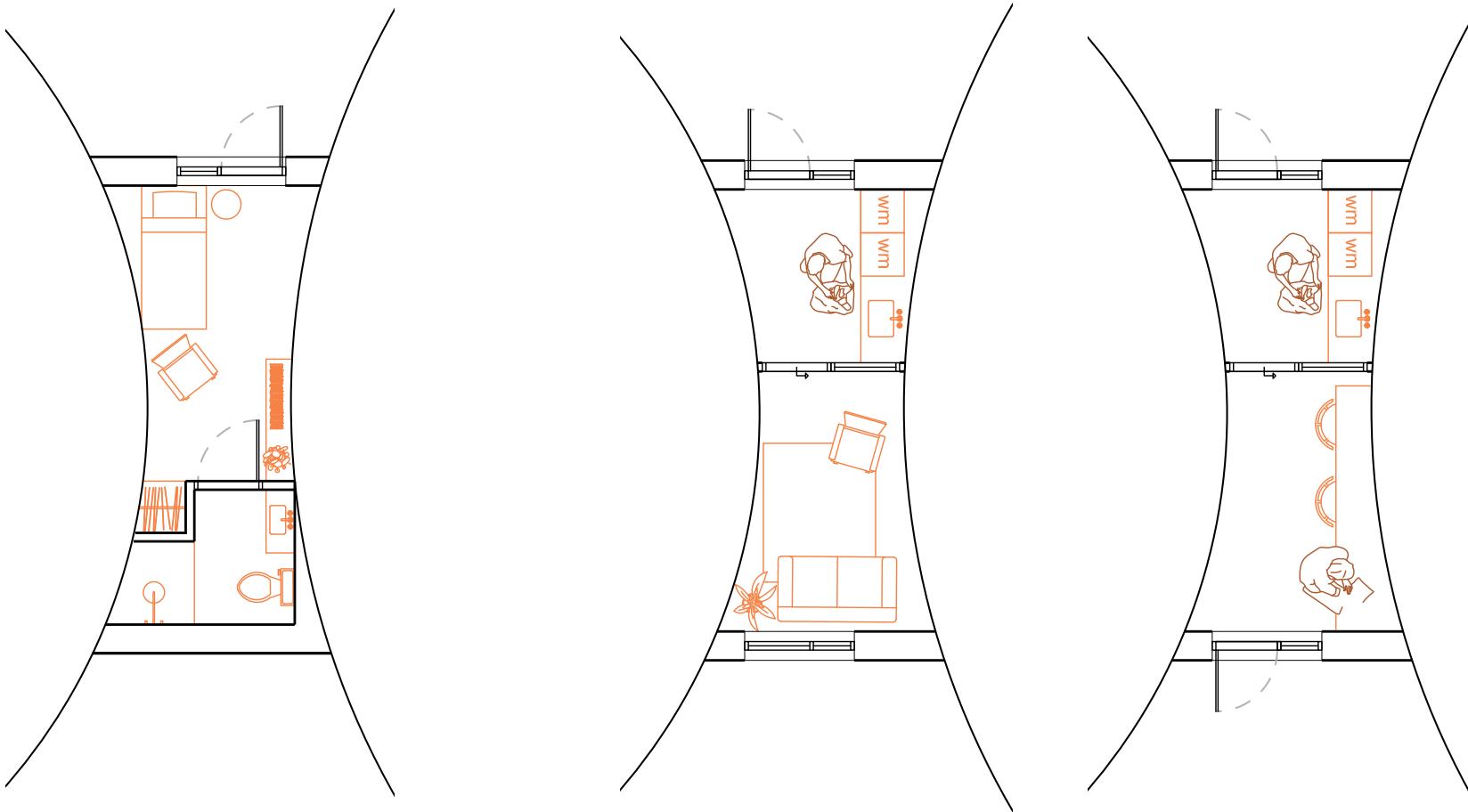
One person households



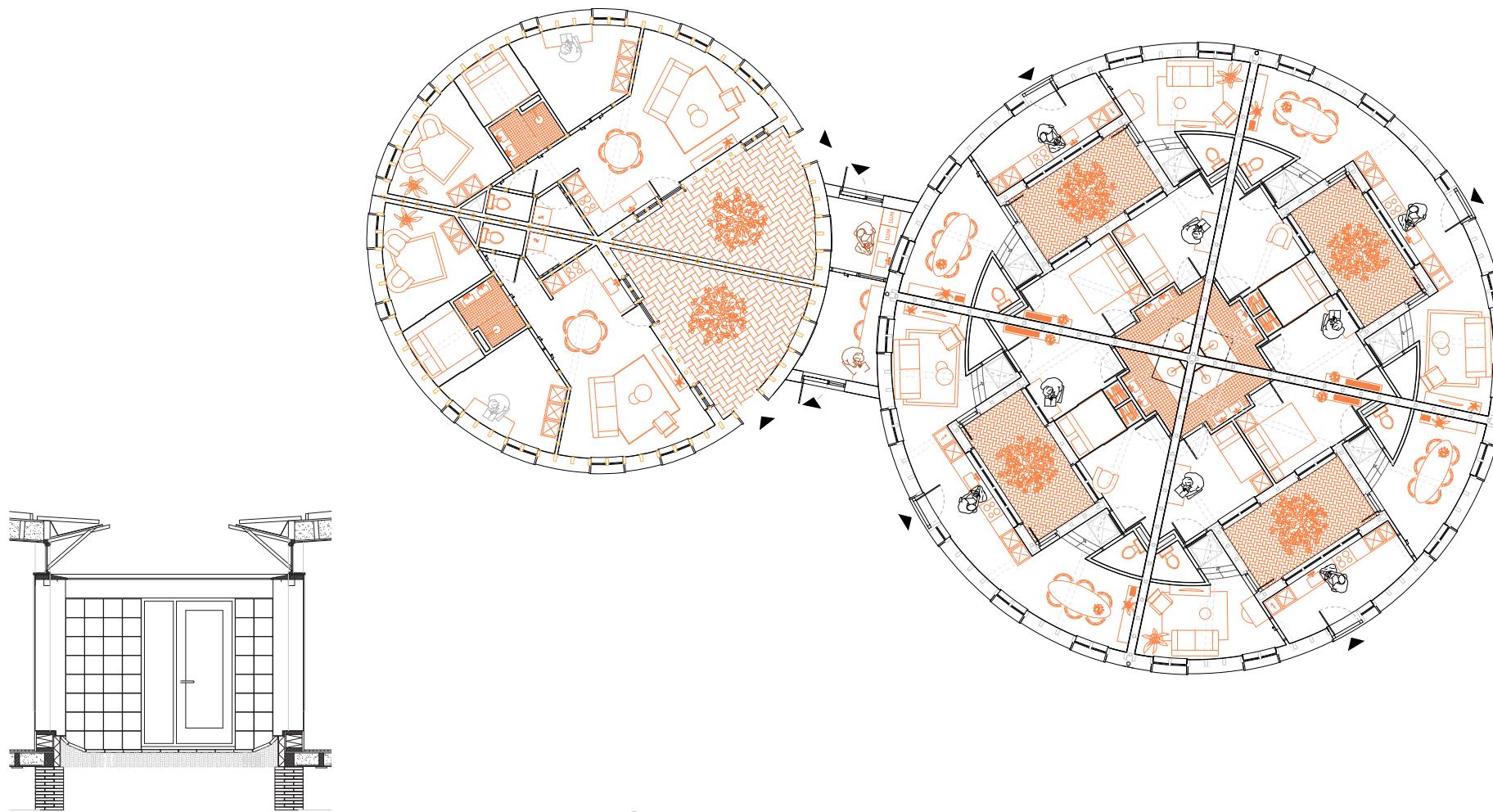
One person households



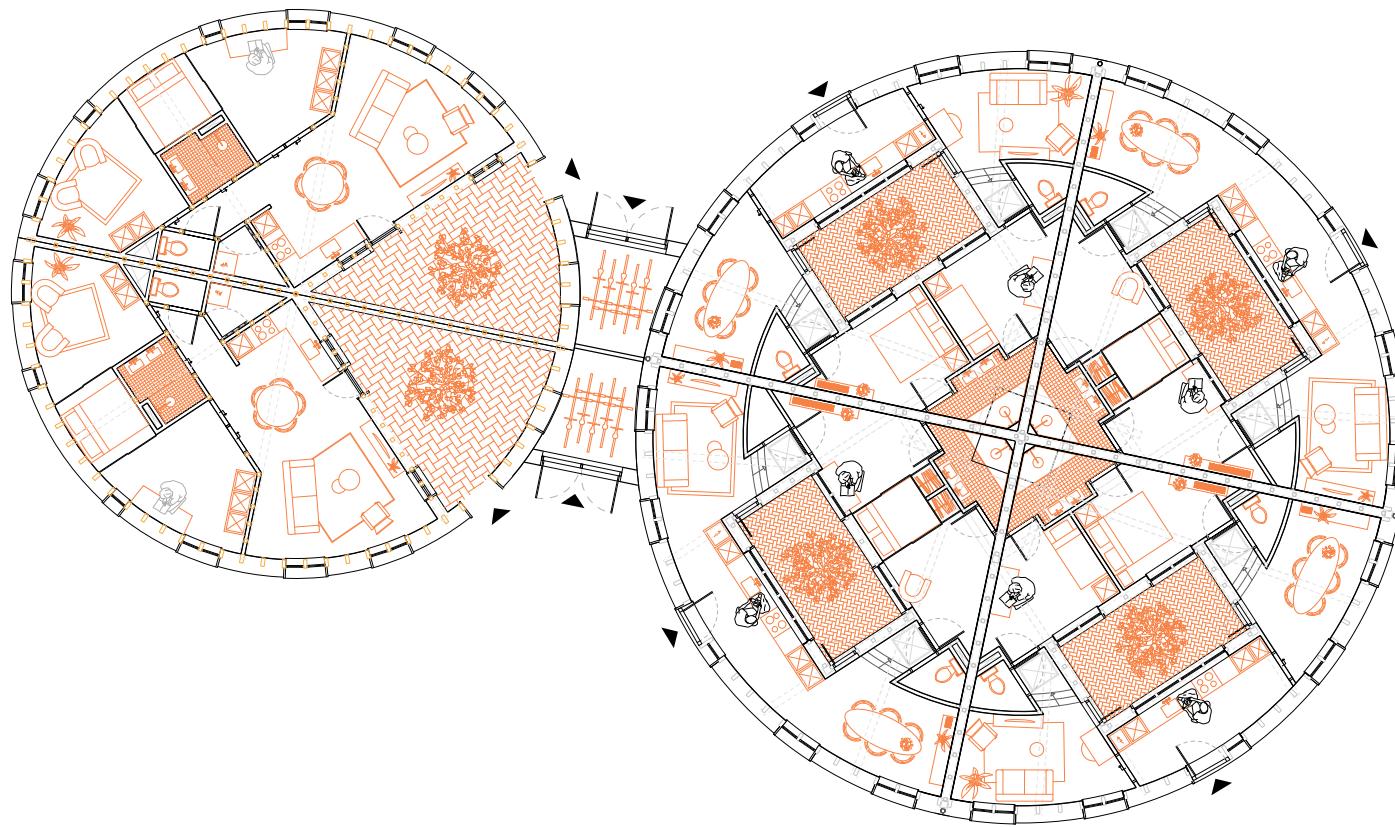
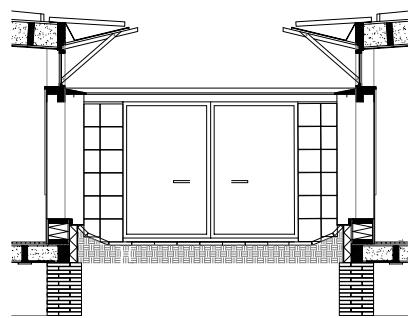
Shared spaces



Shared spaces



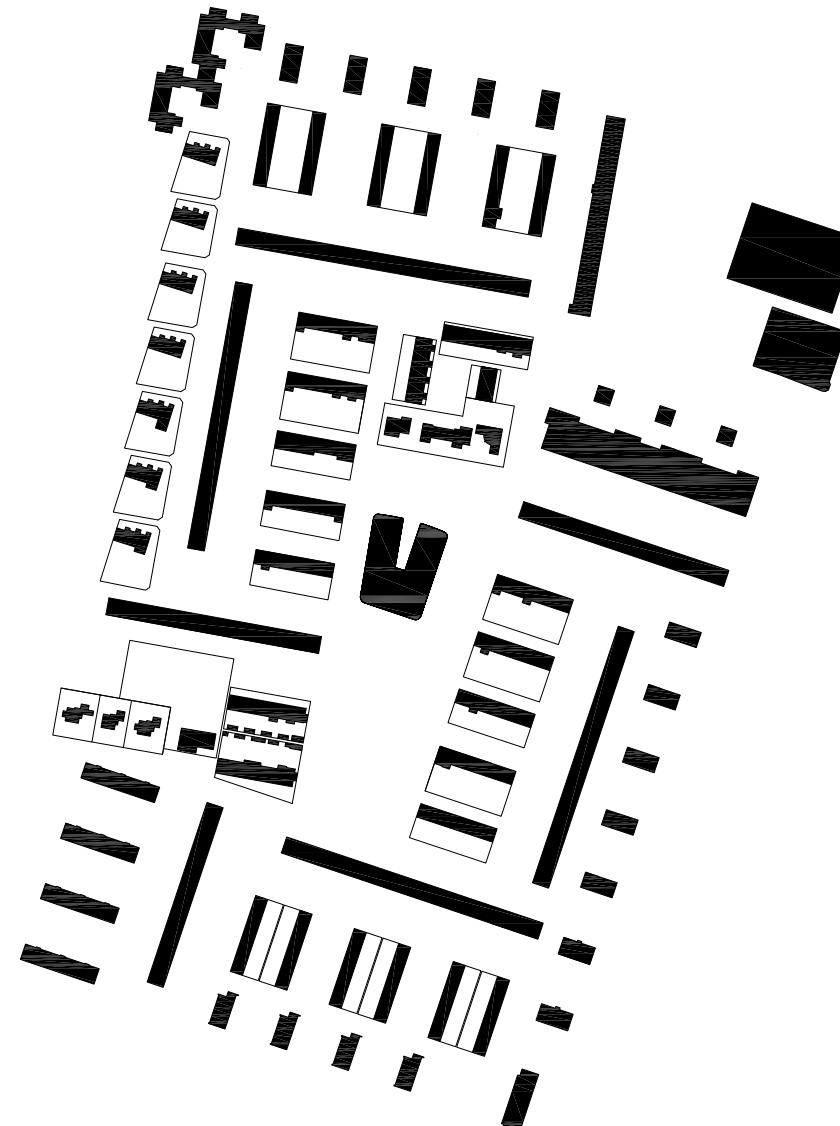
Shared spaces



Shared spaces



Using the house



Current neighbourhood



current neighbourhood

2. Dog school woef



5. Park



6. IKC Prins Willem Alexander

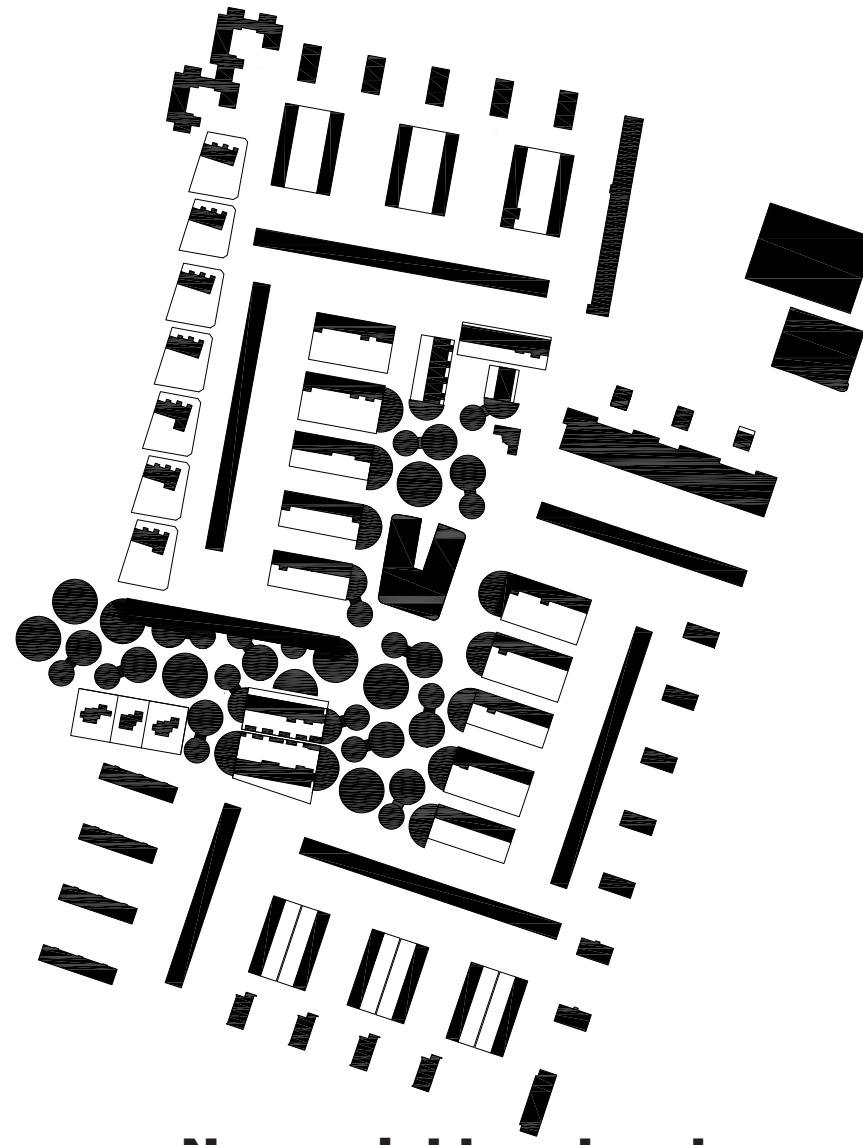




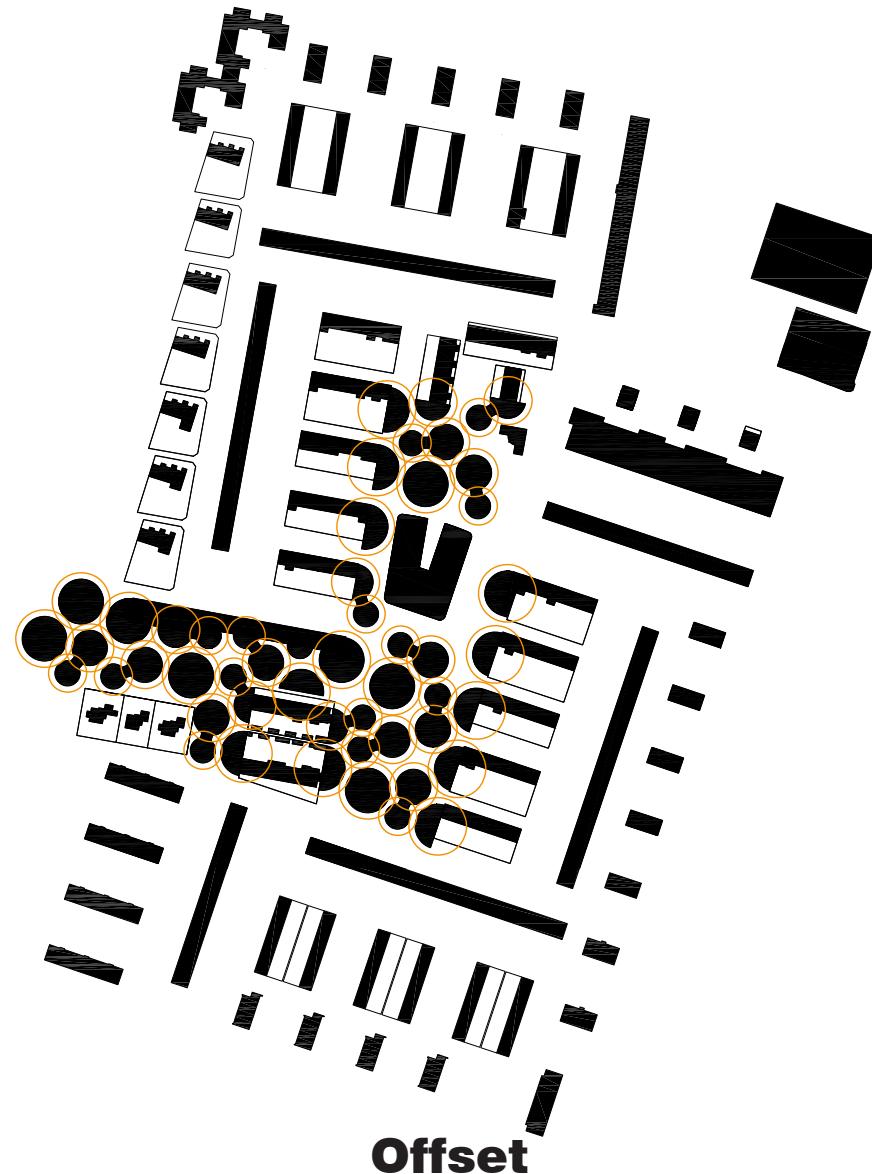
Mobility

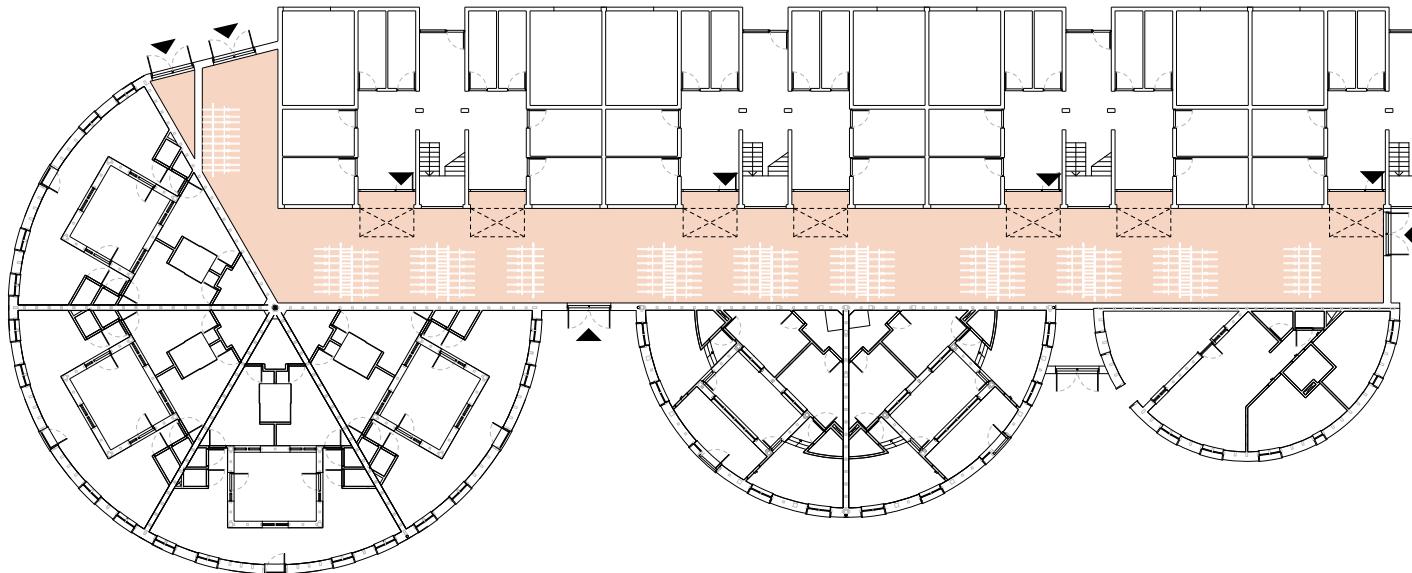


Testing of composition homes

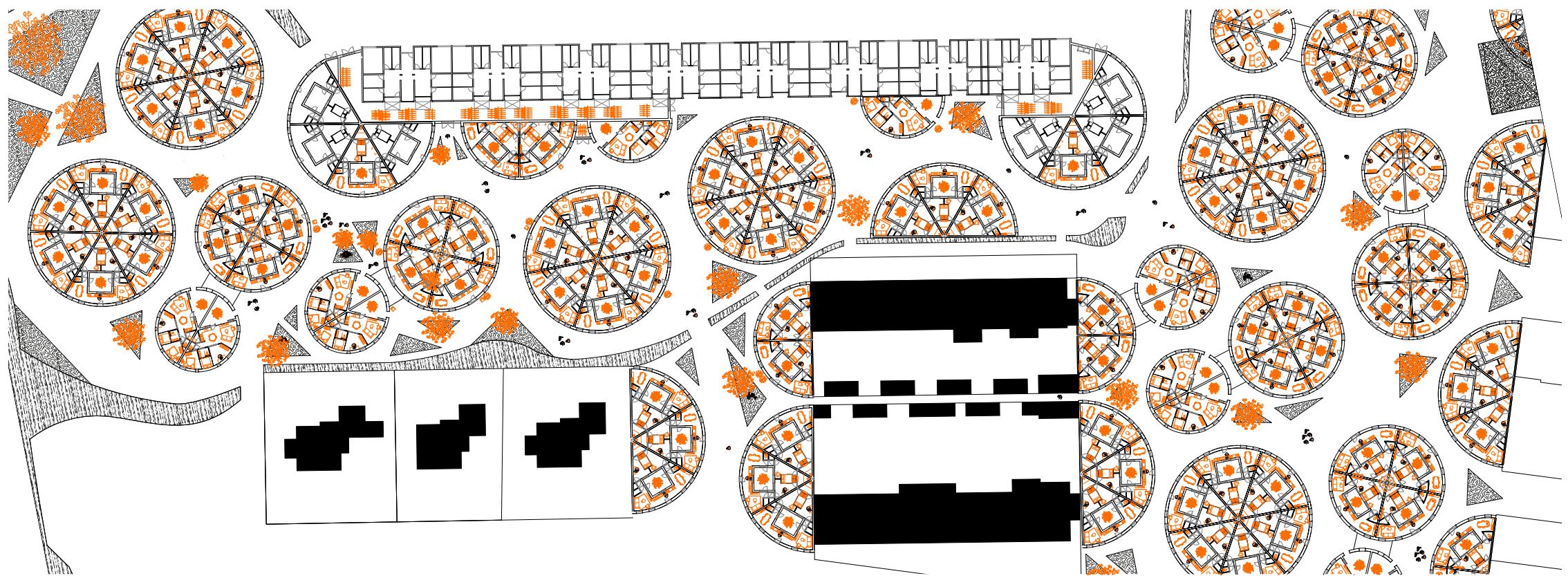


New neighbourhood

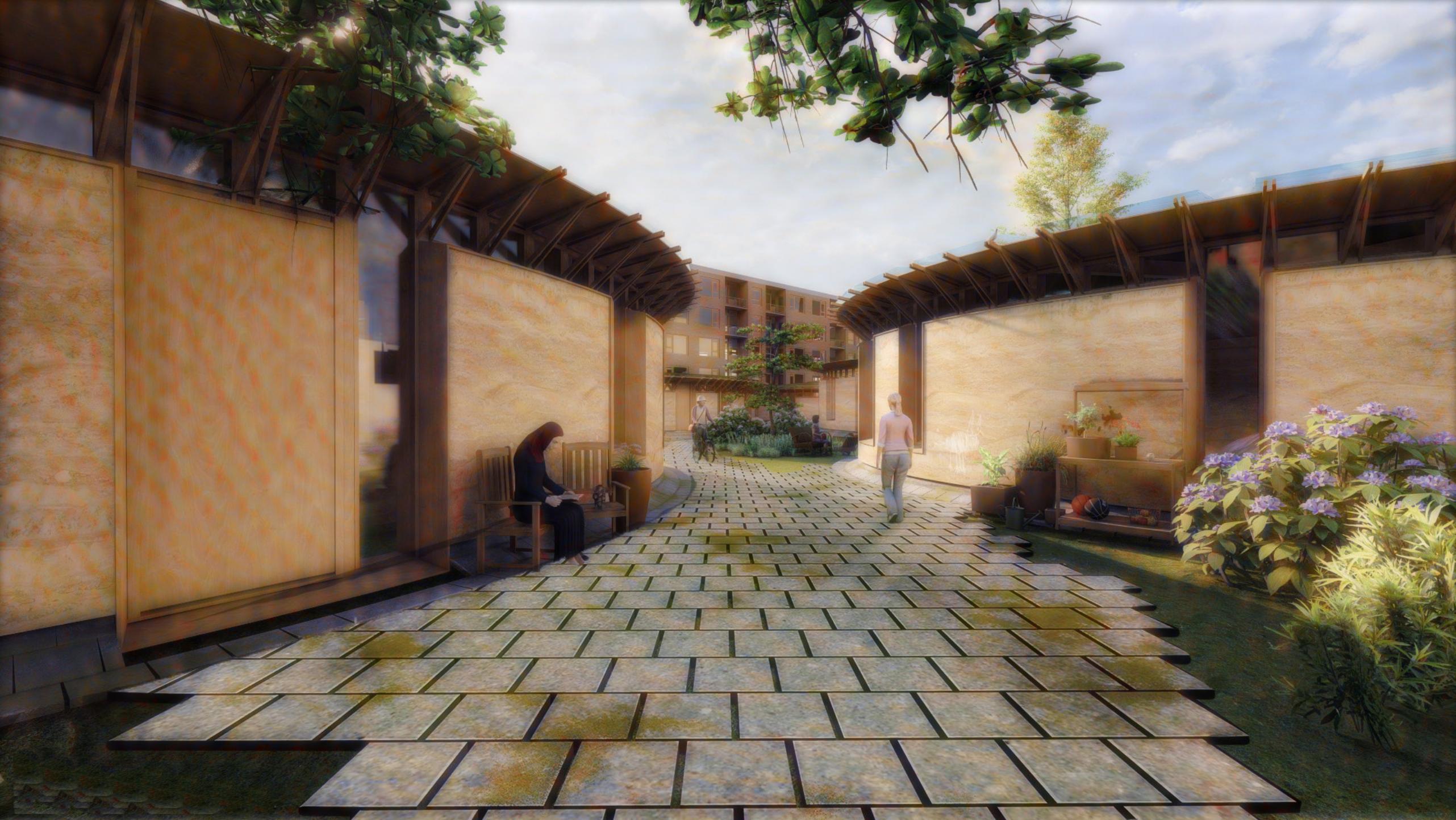




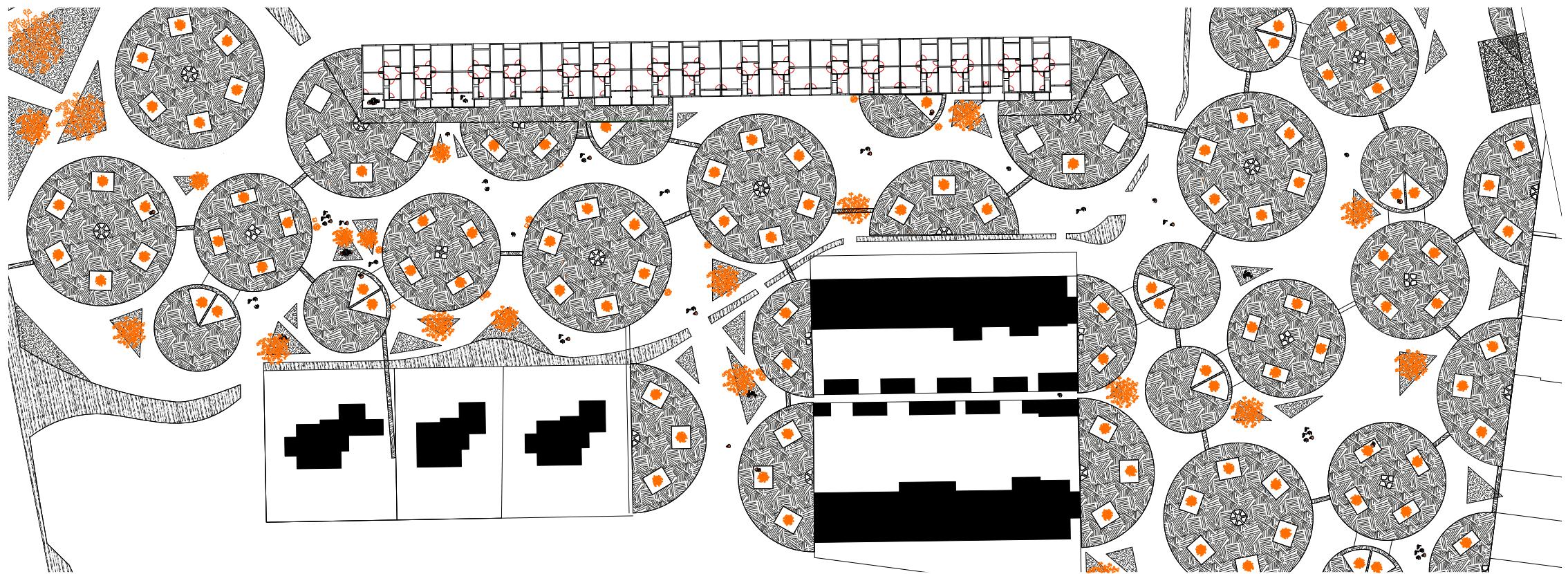
Bicycle parking



Place for humans



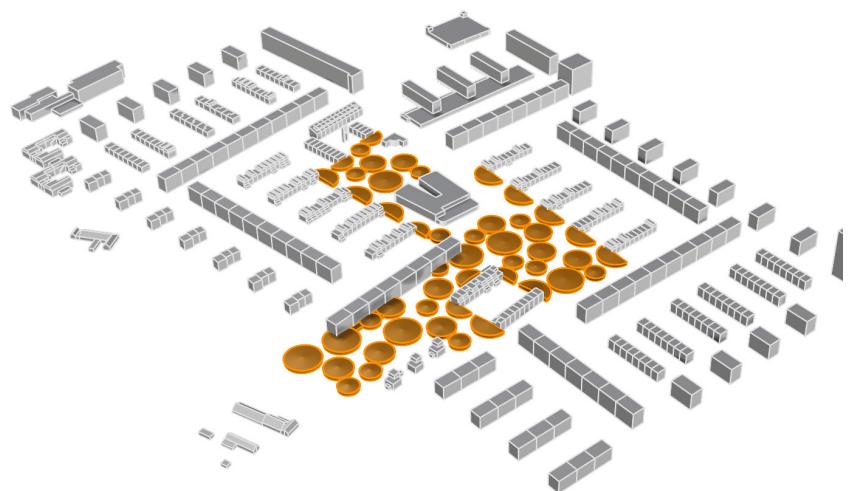




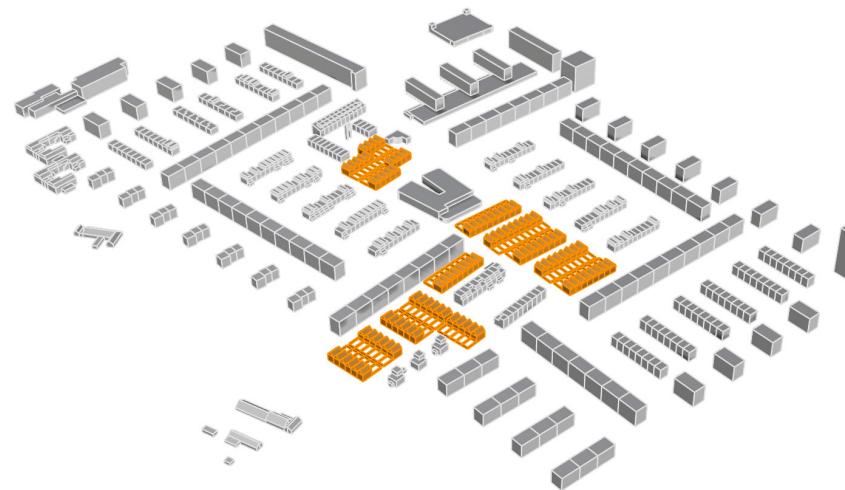
Place for non-humans







150 houses
82 ground surface BVO



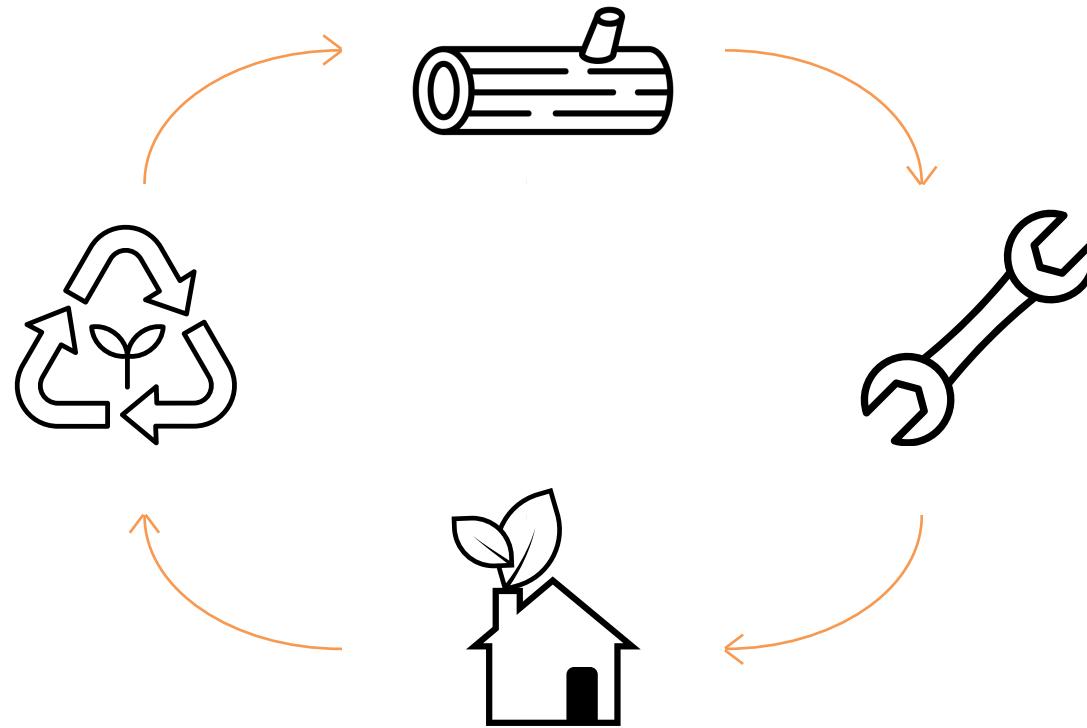
93 houses
54 ground surface BVO

Traditional building



NATIONAL PRODUCTIVE
PARK DELFTLAND

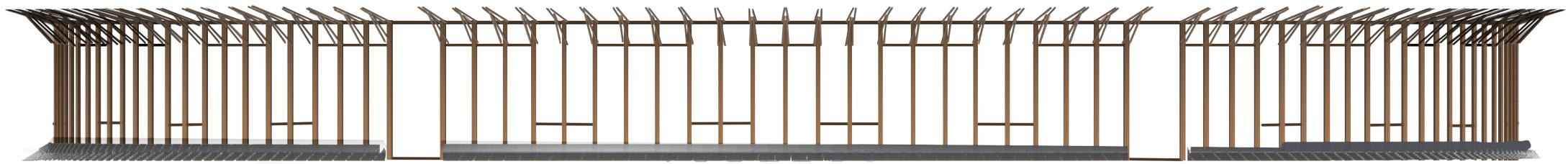
National productive park Delfland



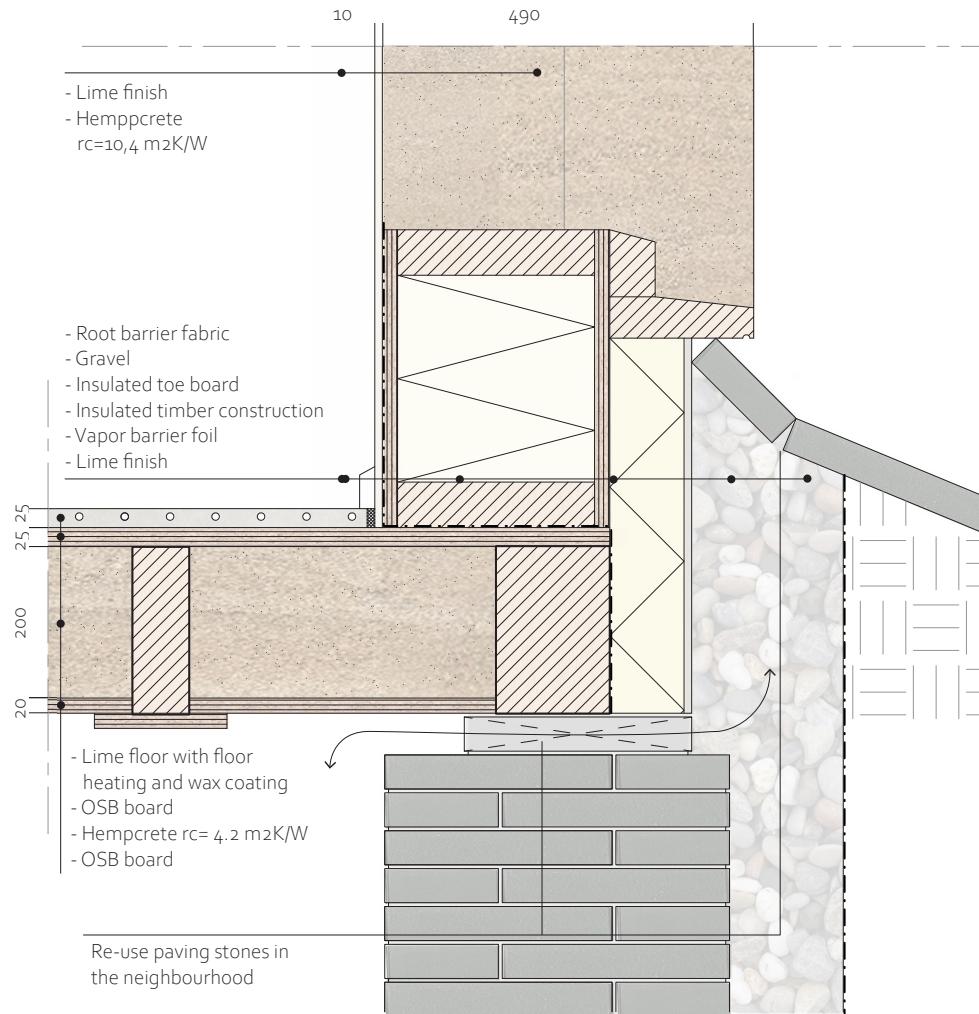
biobased building



Material testing



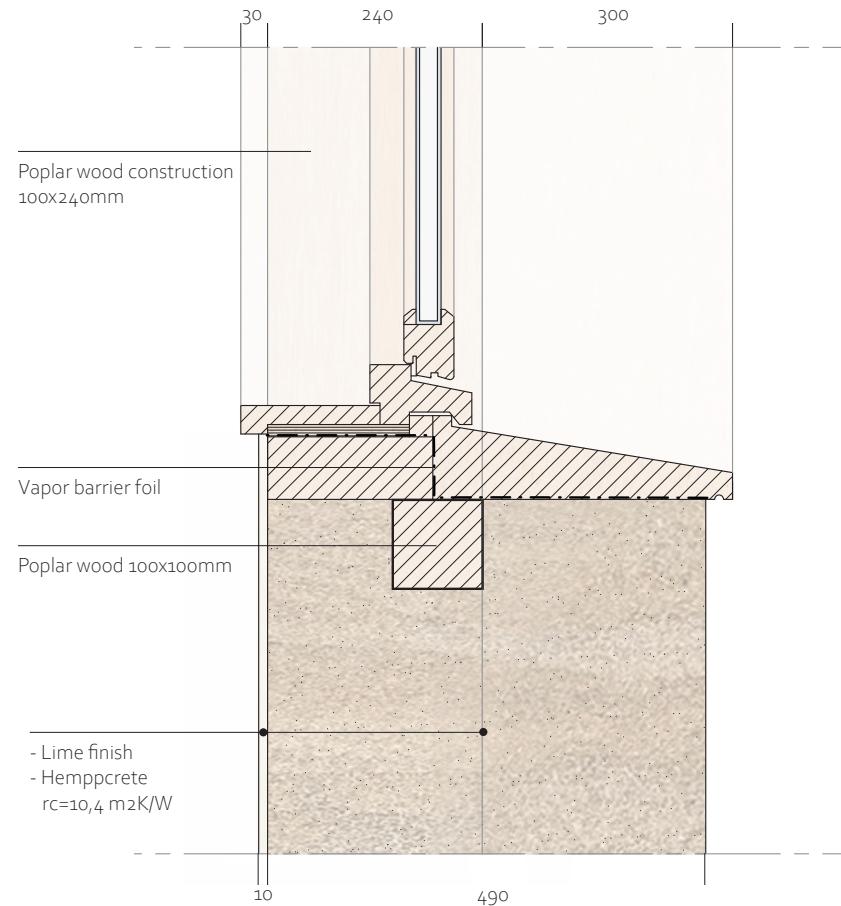
Facade



Floor detail



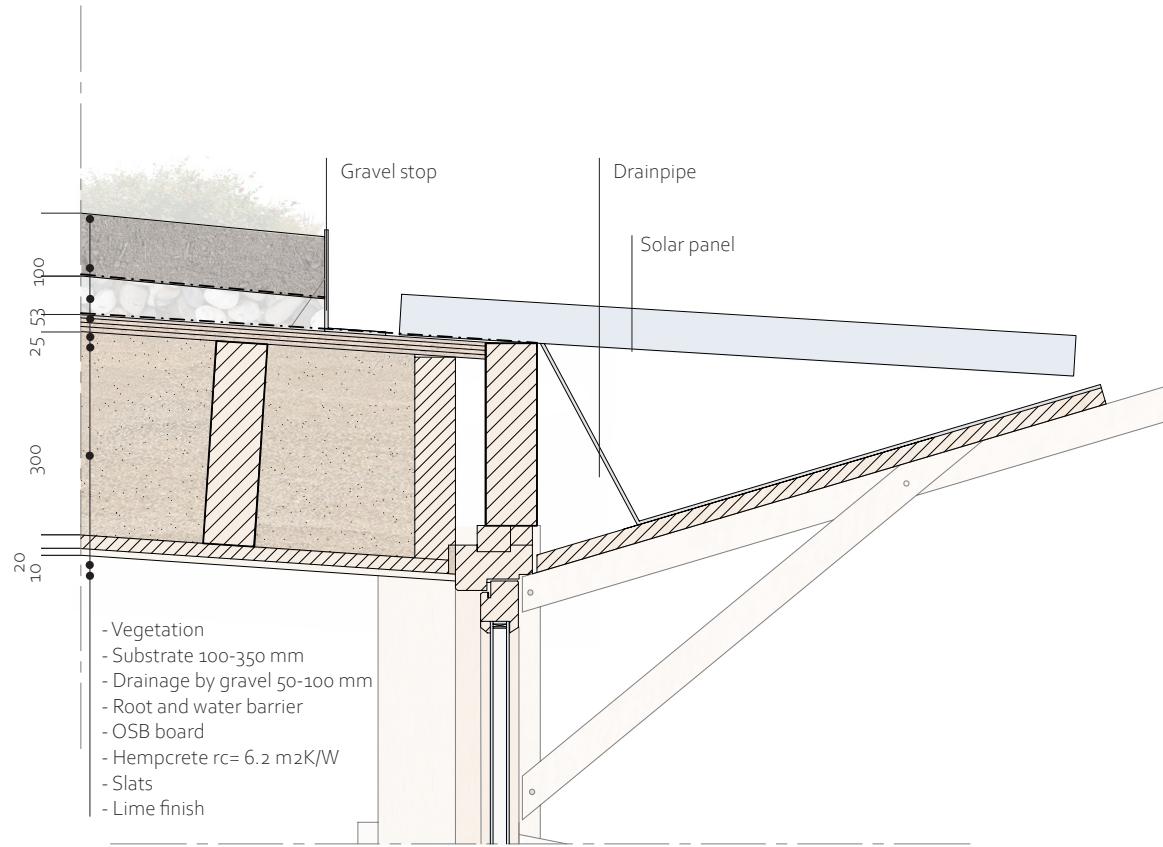
Facade



Window detail



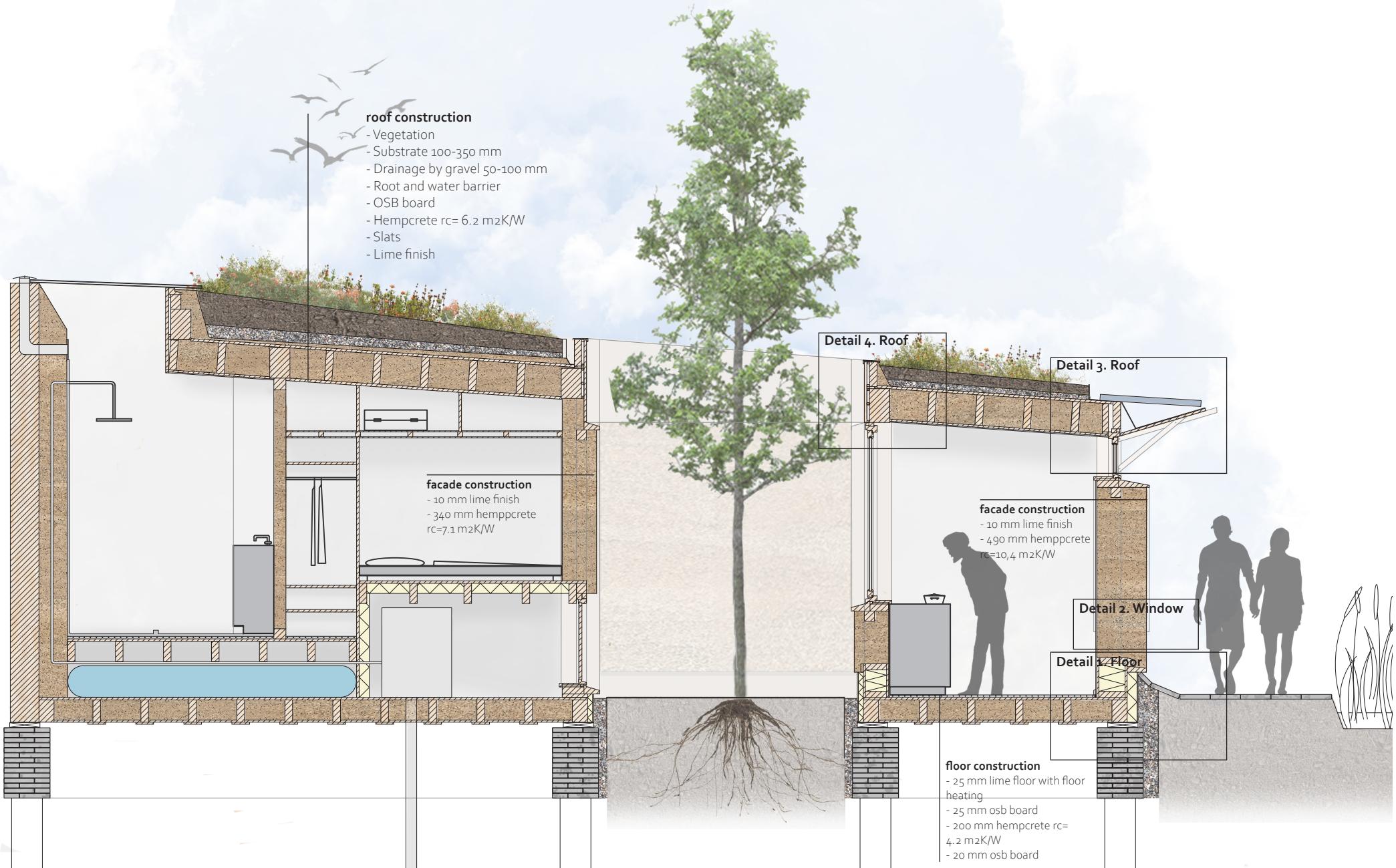
Facade



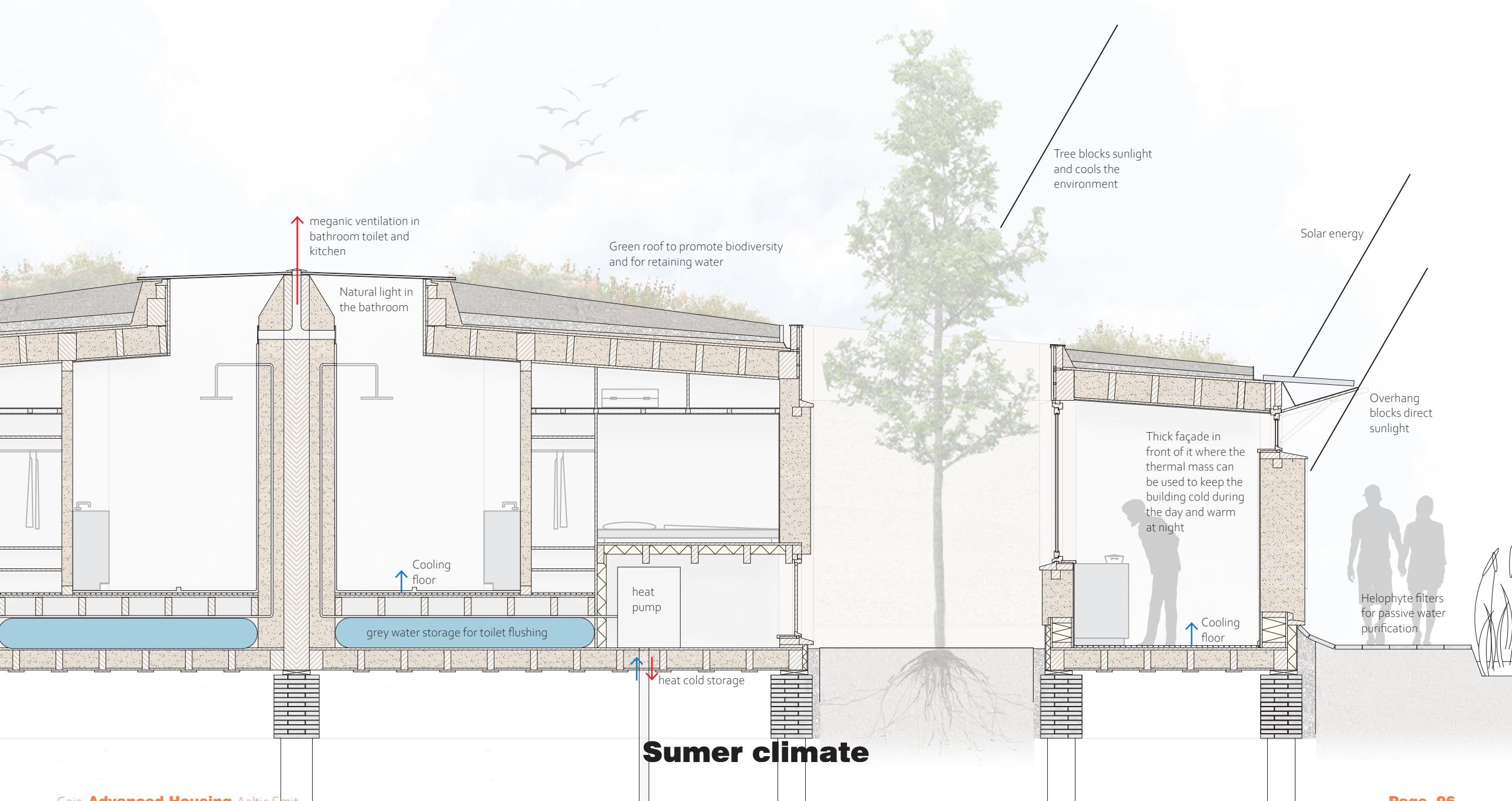
Roof detail

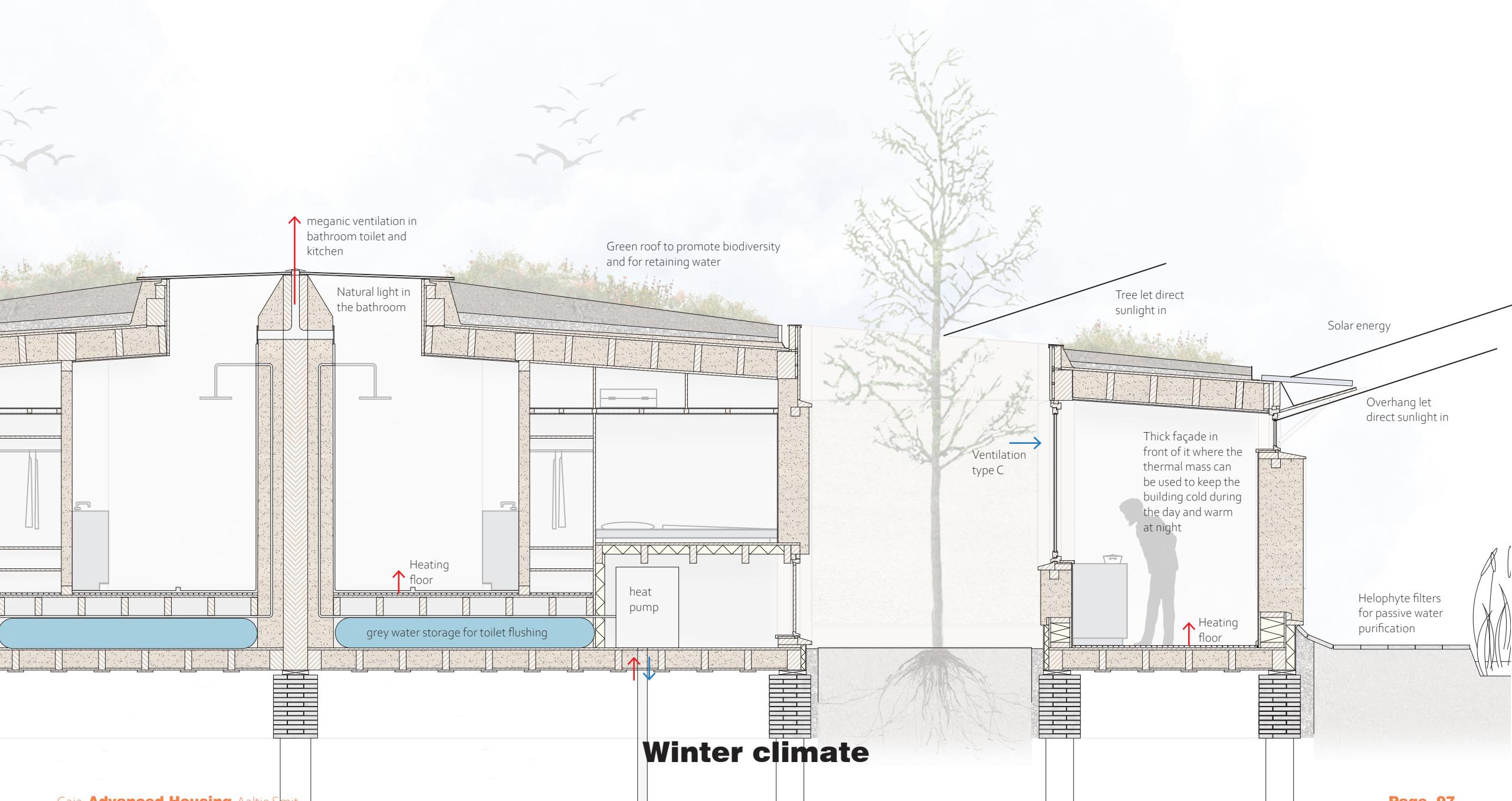


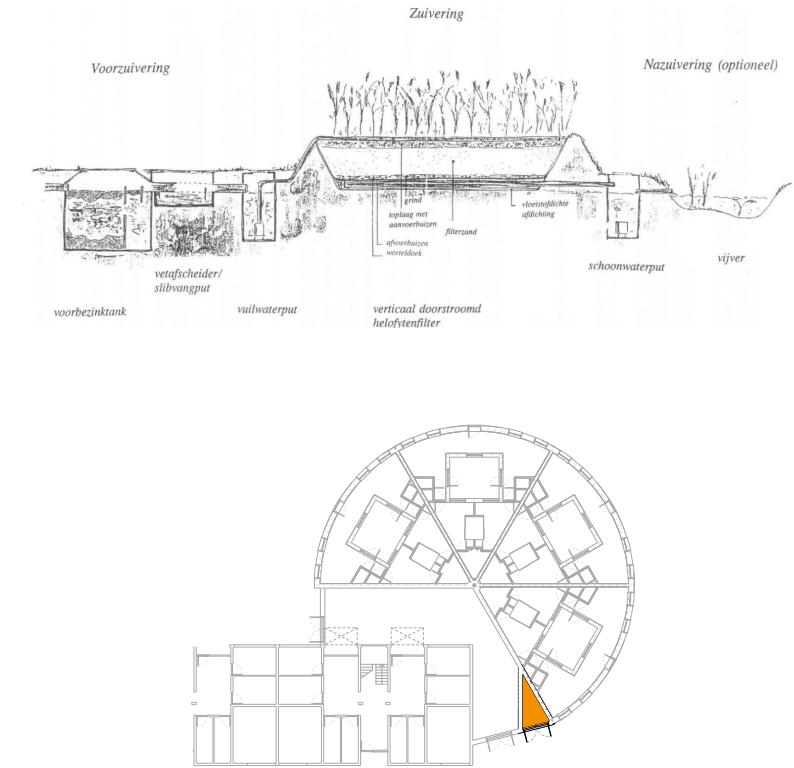
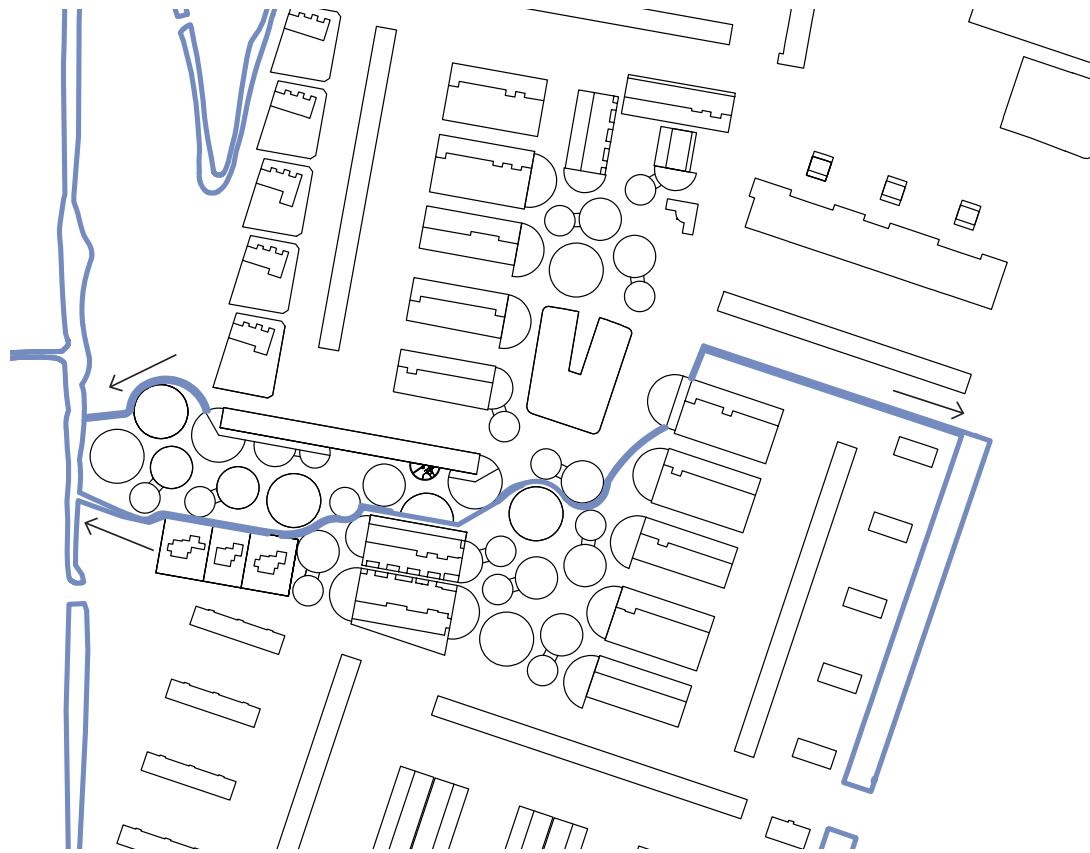
Facade











Helophyte filters



Phases



Phases



Phases



Phases



Phases



Phases

