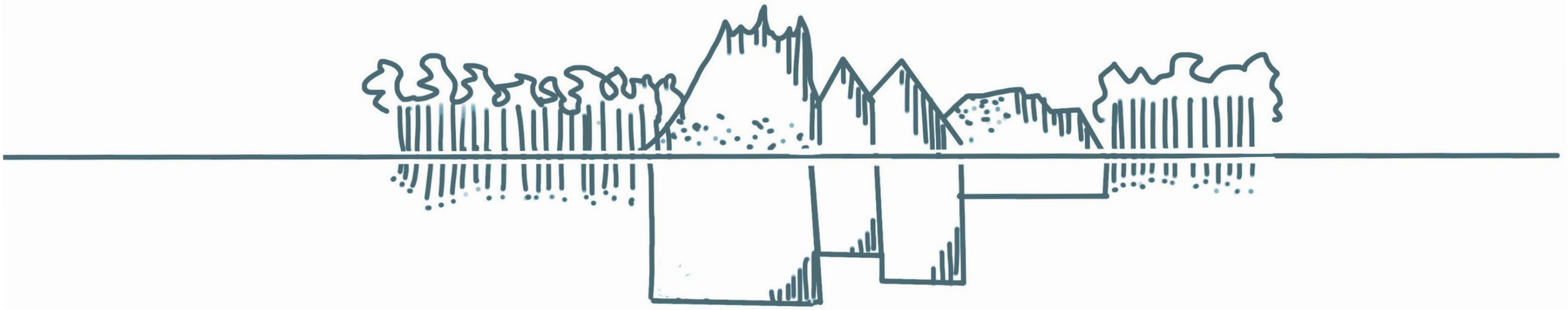
ECOLOGIES OF INCLUSION

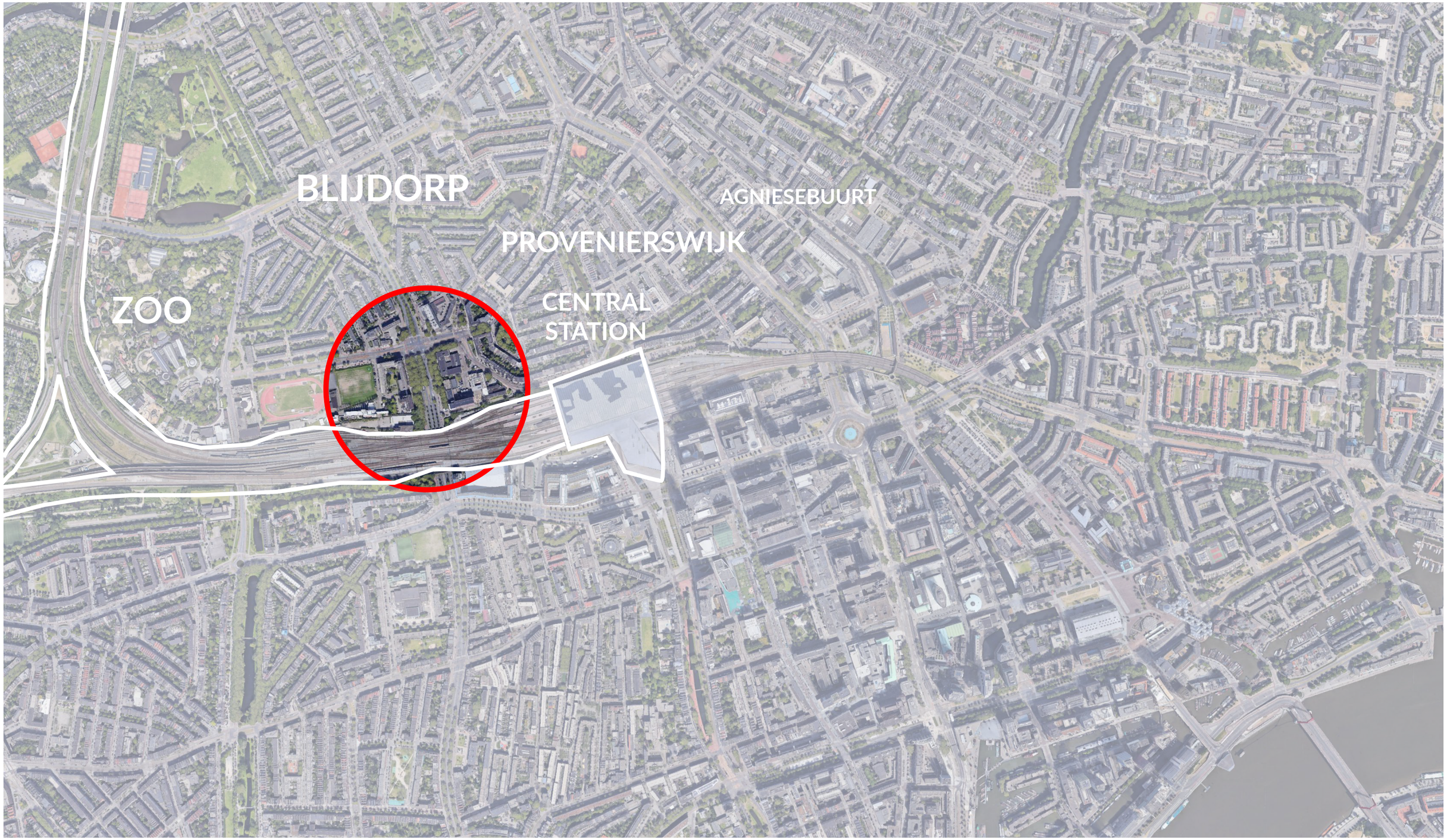
TOGETHERNESS

SOLO SPECIES SHARING SPACE IN CENTRAL ROTTERDAM



SAVANNE VAN HARREWIJEN

P5 - THURSDAY, JUNE 23, 2022



Site location

Rotterdam north

Site location

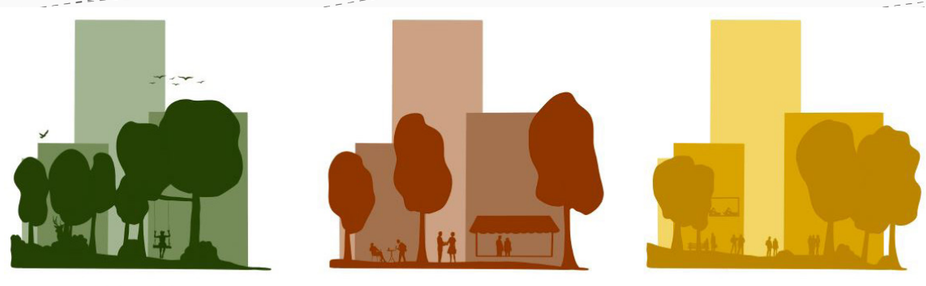
Wahlenburghof

Masterplan

Position building

Masterplan

Position building

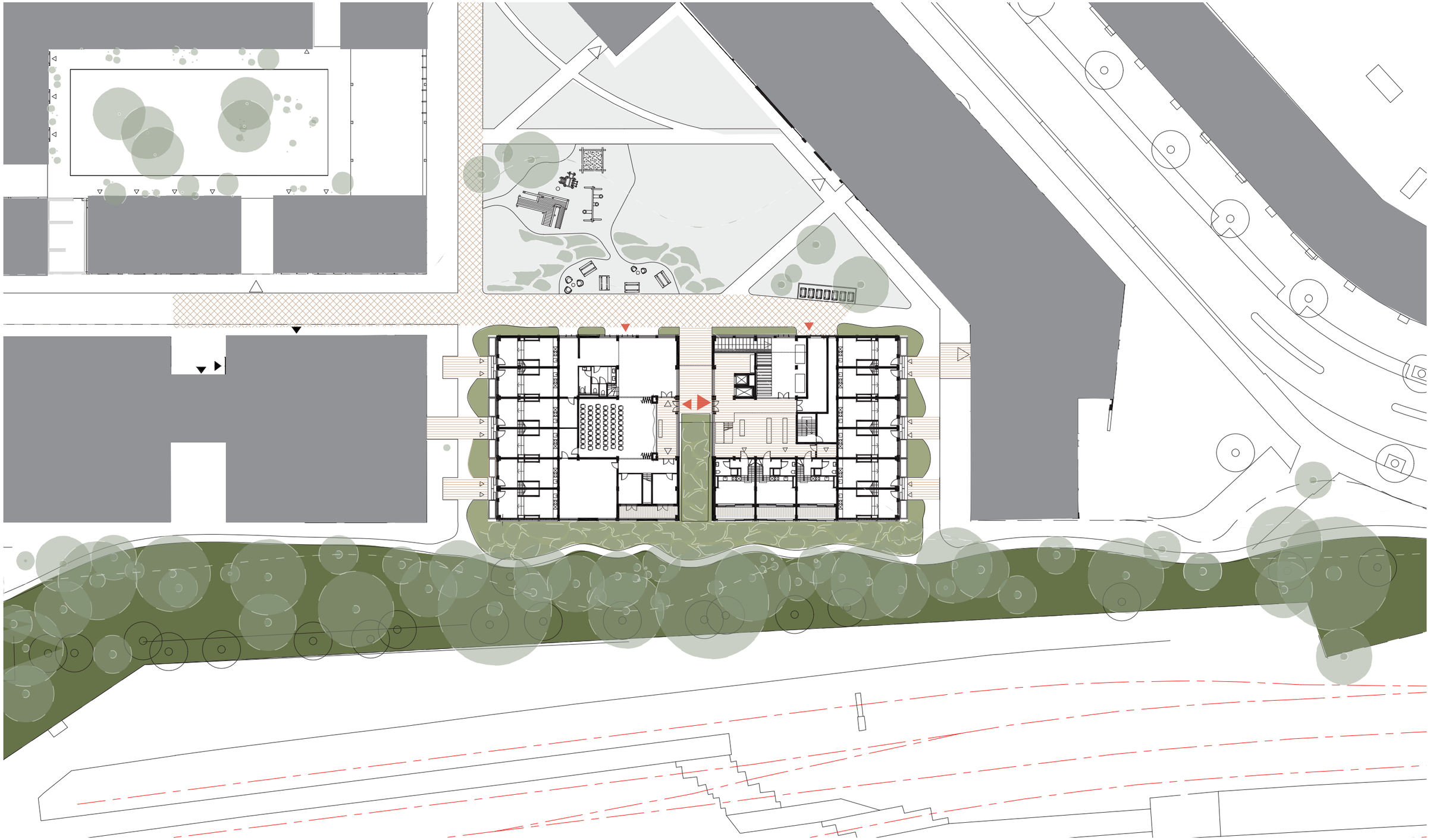


Site location

Wahlenburghof

Masterplan

Position building

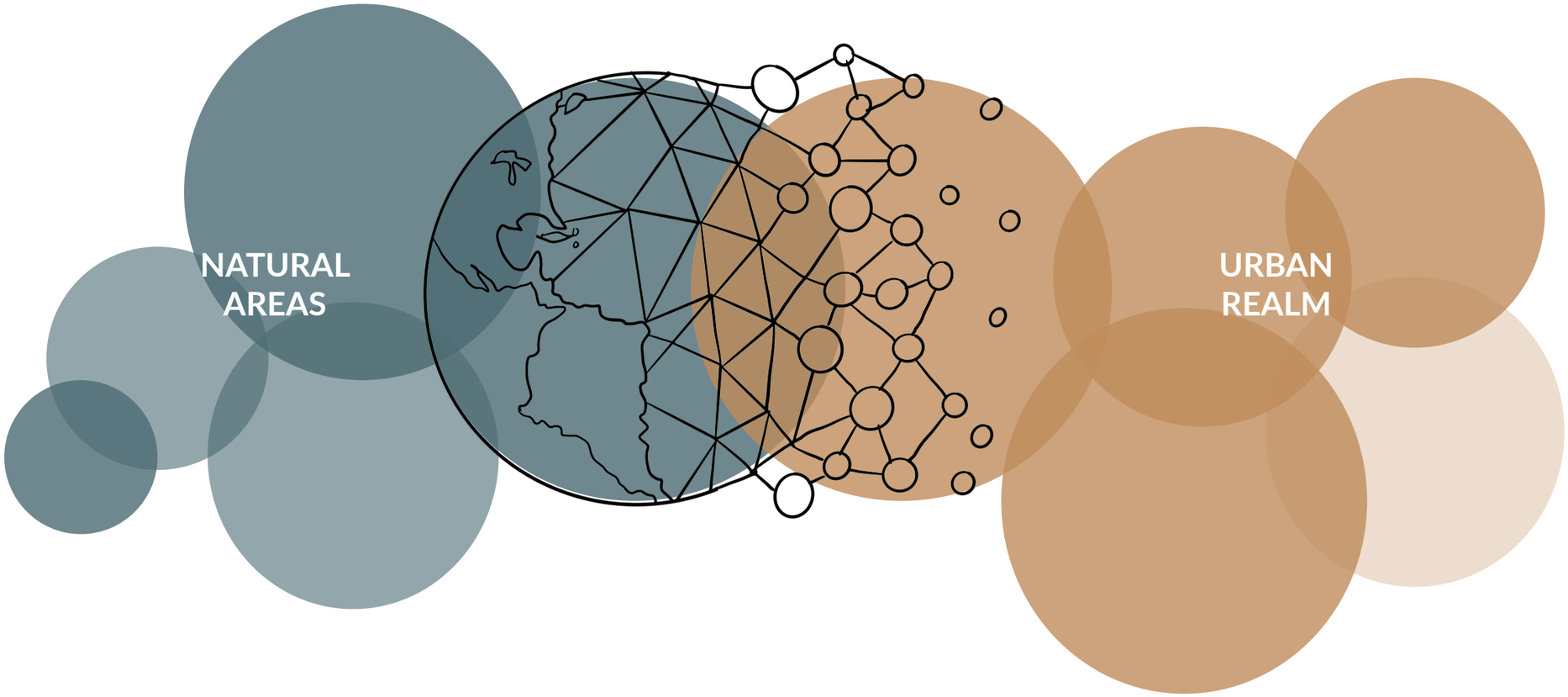


Ground floor

Concept:
Connect two worlds

TOPIC

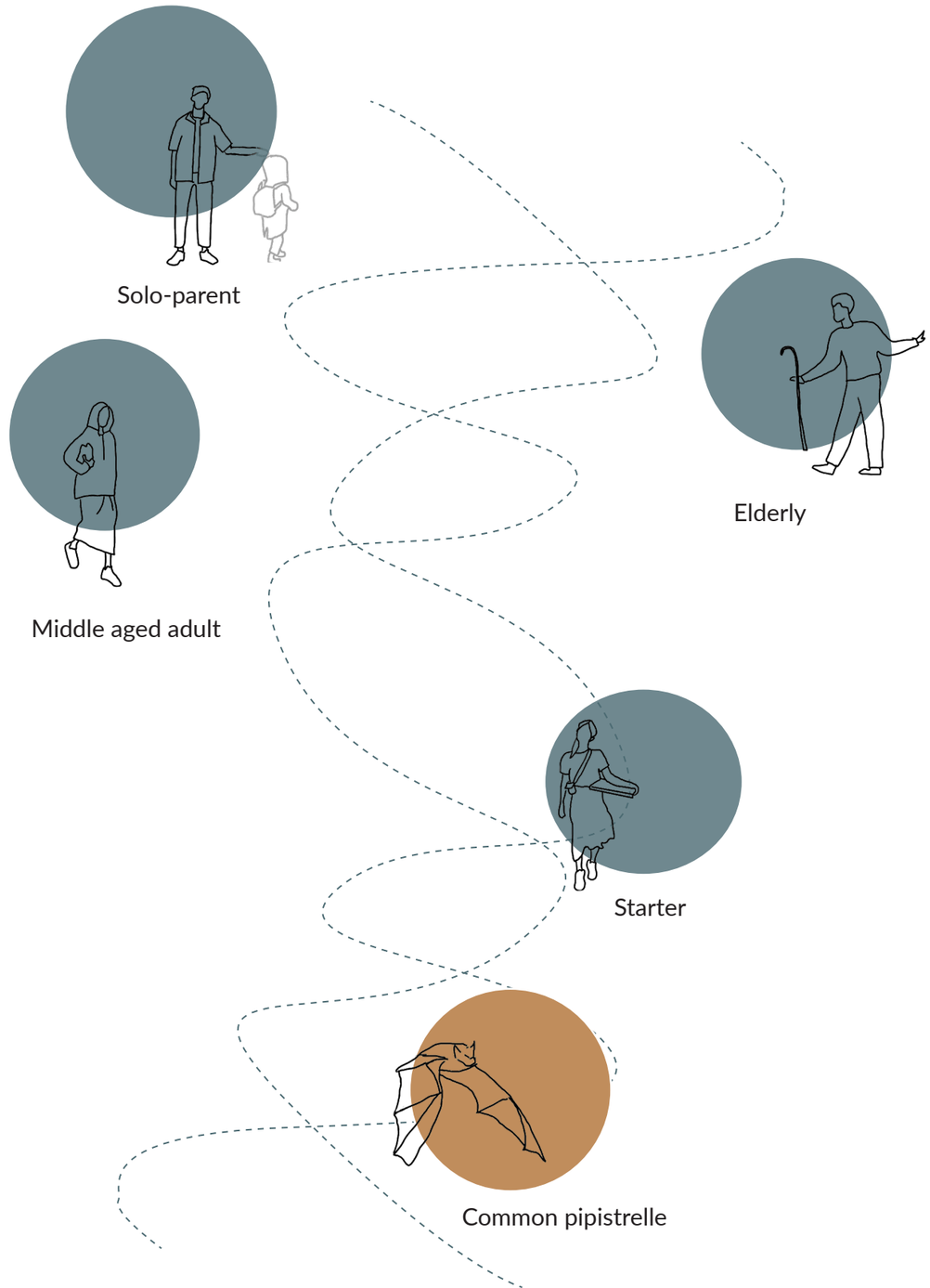
WHAT IF?



ECOLOGY

INCLUSIVE

TARGET GROUPS



String figures are like stories; they propose and enact patterns for participants to inhabit, somehow, on a vulnerable and wounded earth."

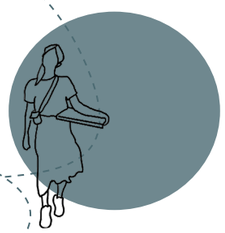
(Haraway, 2016, p. 10)

QUESTION

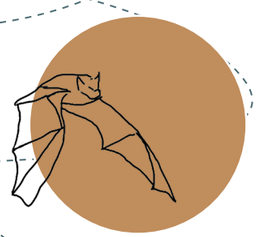
Solo-parent

Middle aged adult

Elderly



Starter



Common pipistrelle

How can a community of

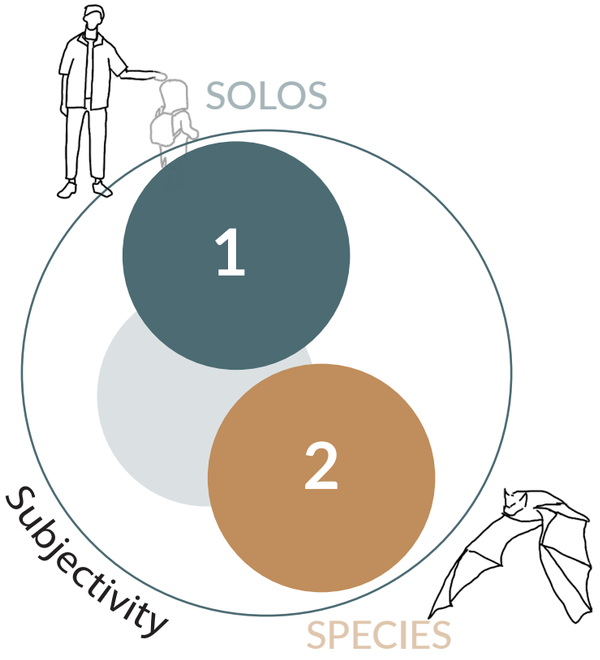
multi-generational solo dwellers
and non-human species

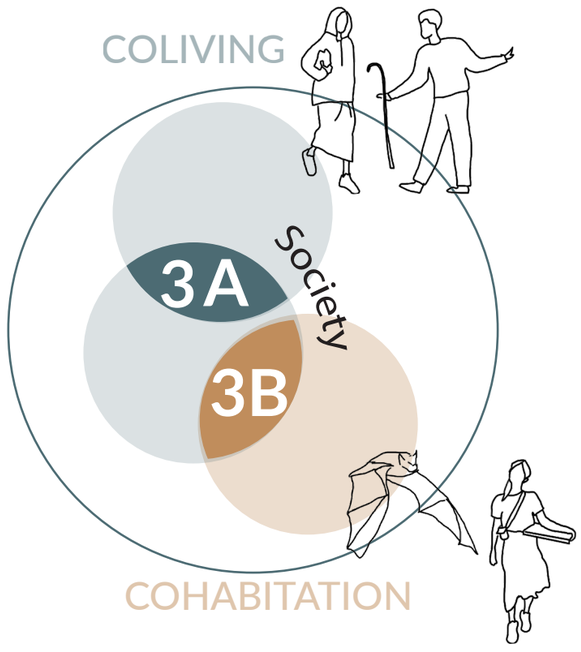
cohabit near Rotterdam station today

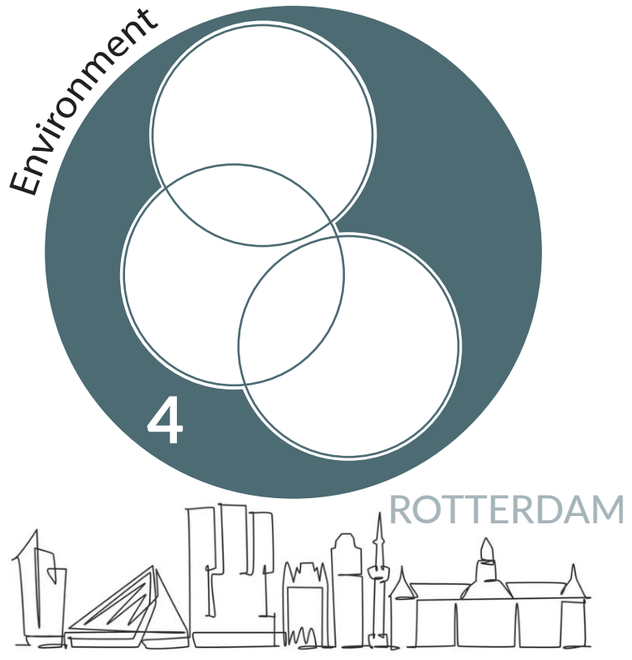
– considering each species' specific
dwelling needs and
capacity for sharing?

DE-CONSTRUCTION

RESEARCH FRAMEWORK

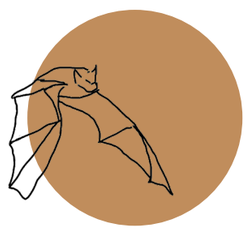






Rotterdam context

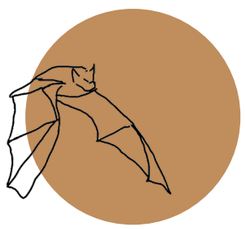
Species observations



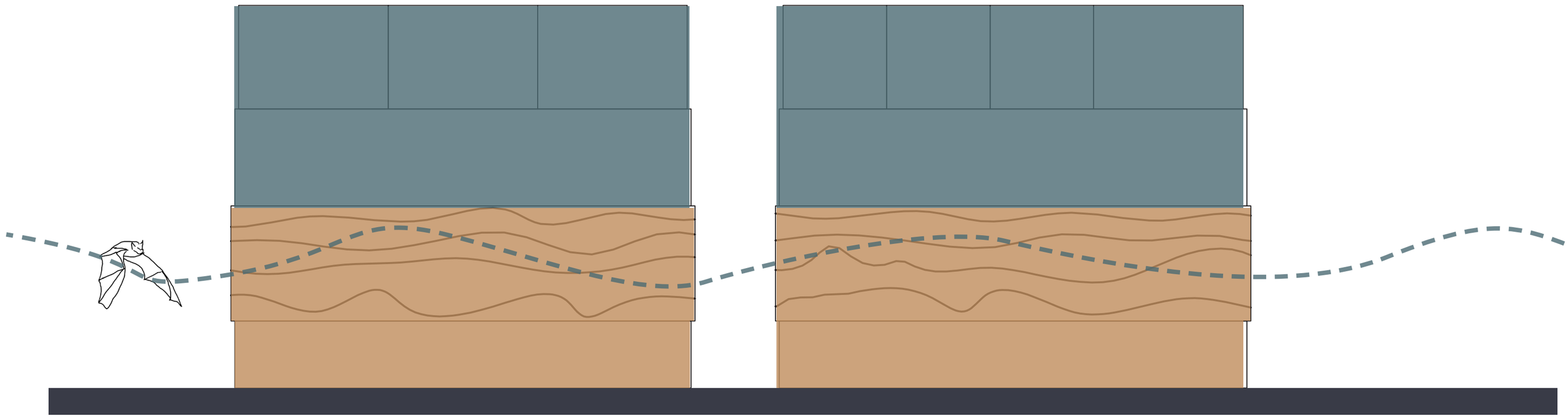
Elevation

South

0 1 2 5m



THE BAT SPECIES



Spatial needs

Common Pipistrelle

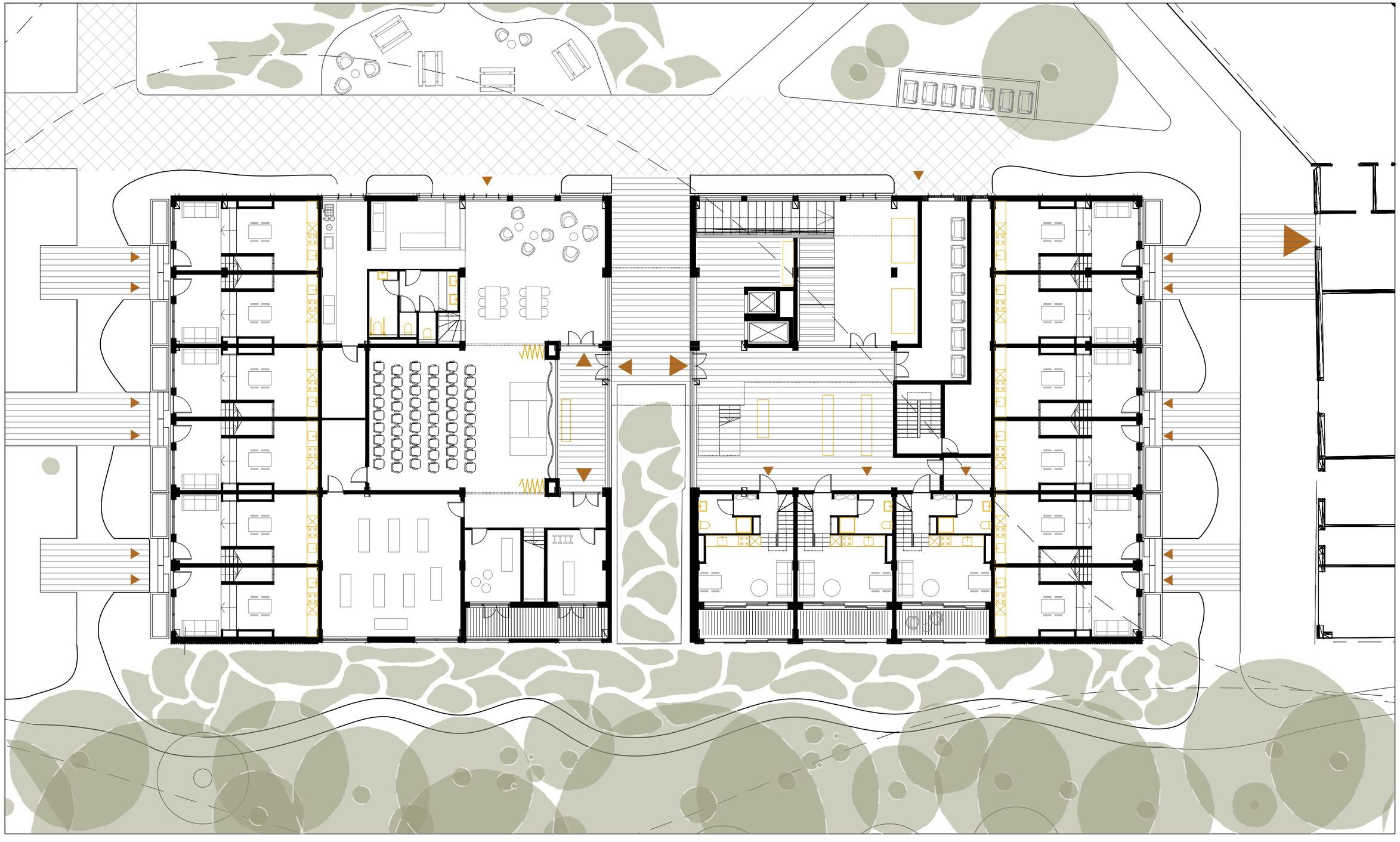
Elevation

South

0 1 2 5m

Elevation
North - by day

0 1 2 5m



Floor Plan (0)
in context

0 1 2 5m

COURTYARD

- PLAYGROUND
- TERRACE FOR CAFE
- SPECIAL NECTAR PLANTS

MOUNTAIN LANDSCAPE

GREEN ROOFS
with solar panels

ROOFTOP GARDEN
RAINWATER RETENTION

LAUNDRY
with grey water

COLLECTIVE
VEGETABLE GARDENS

BREEDING AND SHELTER
PLACE FOR BATS

SOUNDBLOCKING
VEGETATION WALL

ACOUSTIC
GREENERY

RAINWATER RETENTION

FLORAL SPACES
FOR INSECTS

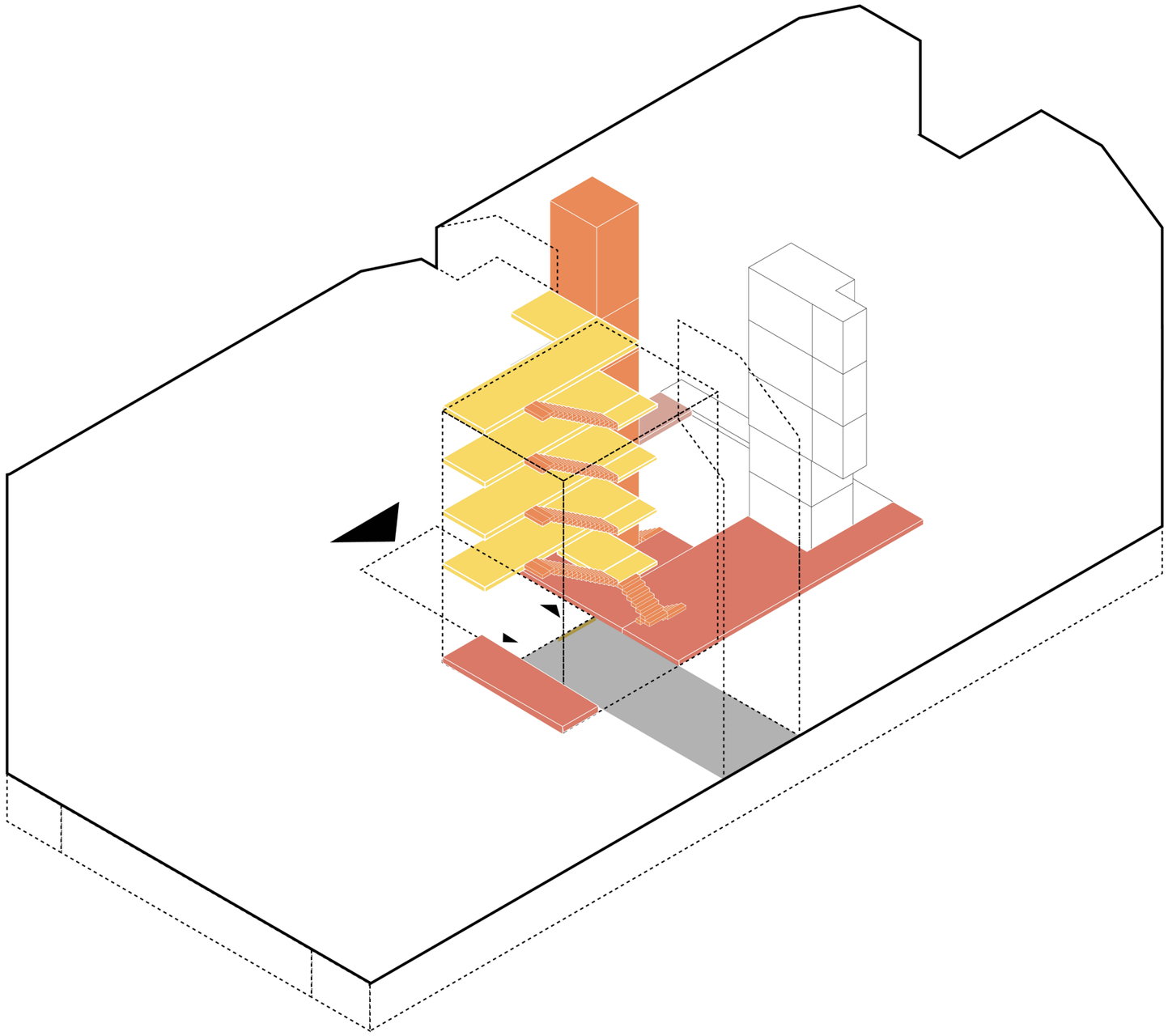
SHELTER PLACE
FOR BUTTERFLIES

FOREST EDGE

- DENSE GREENERY
- WOOD SCRAPS LANE
- NESTLING PLACES IN TREES
- SPECIAL NECTAR PLANTS

Sustainability principles

Section

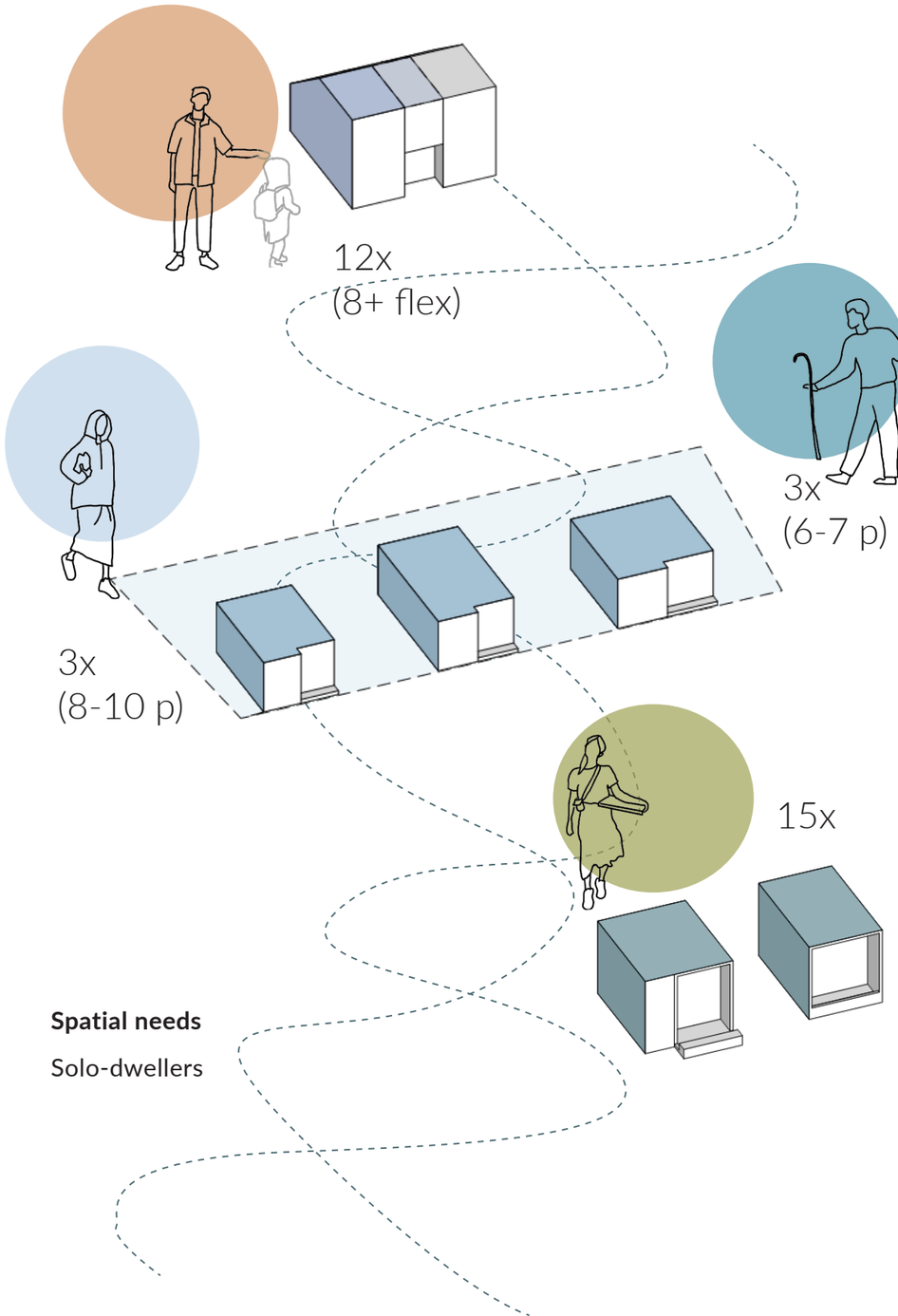


Circulation

Central core

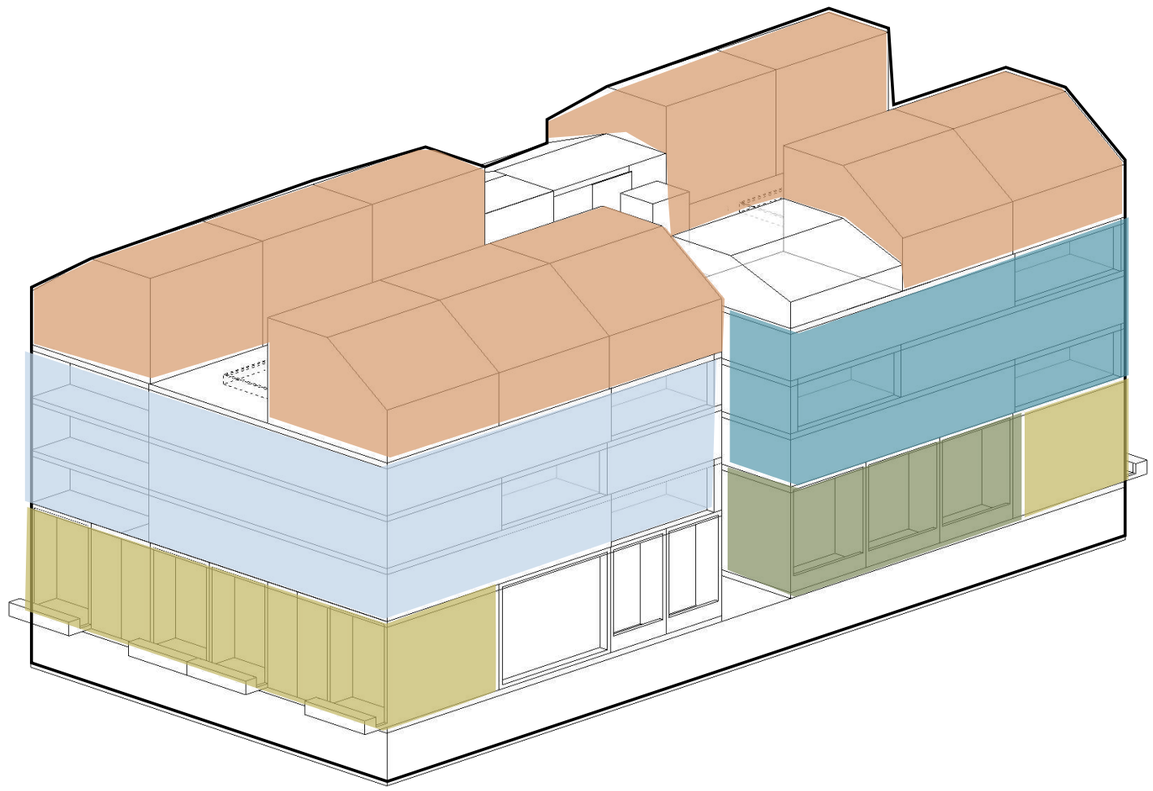
THE SOLO DWELLERS

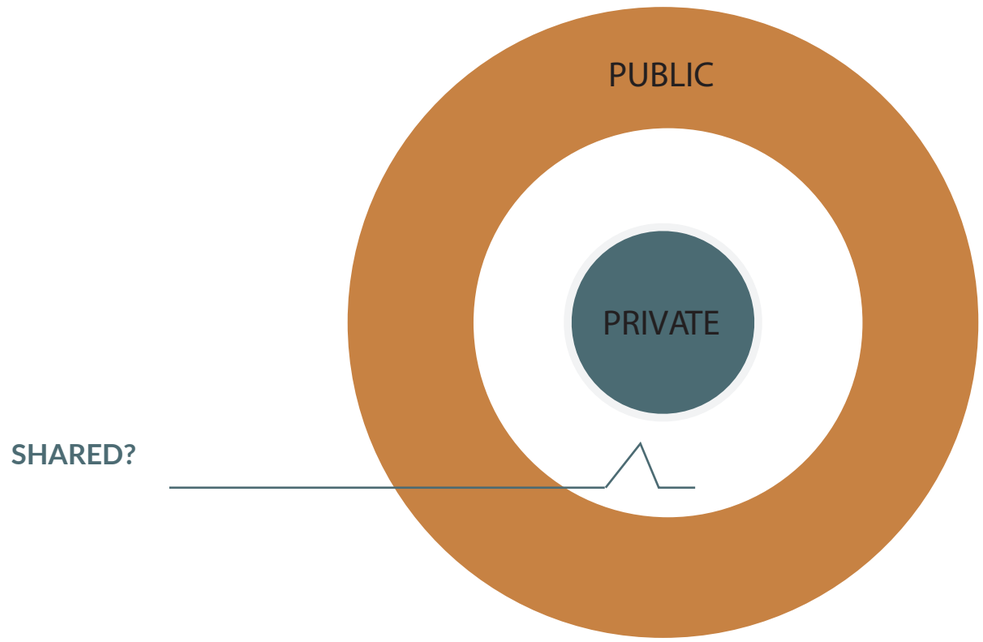
DWELLING TYPES IN BUILDING



Spatial needs

Solo-dwellers




PUBLIC
PRIVATE
SHARED?

Program

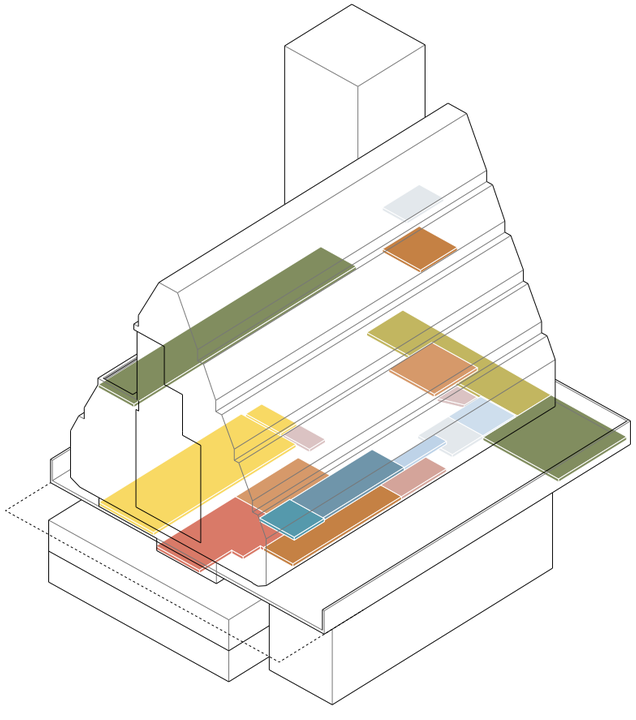
Case studie

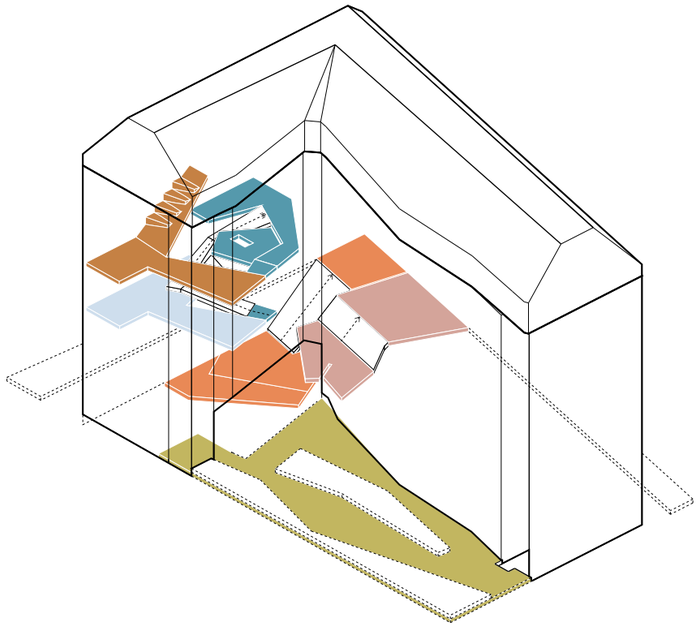
Functions

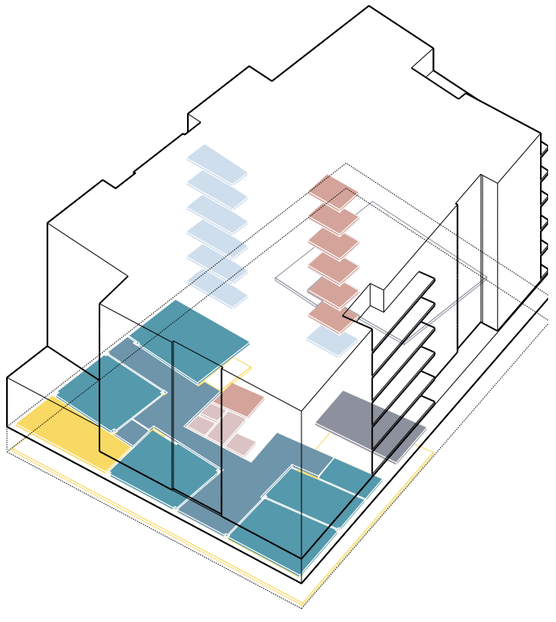
TREEHOUSE

MISS SARGFABRIK

HAUS A

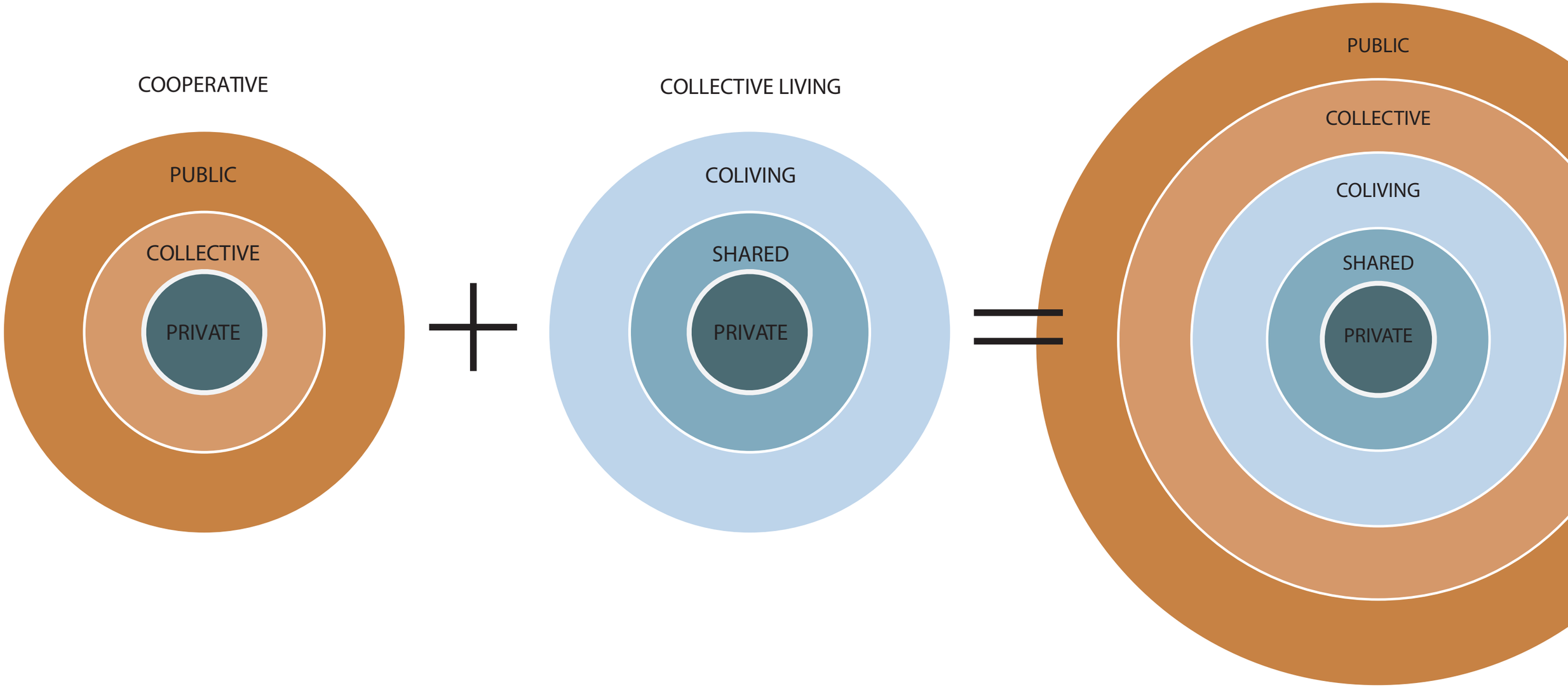






COHABITATION

COOPERATIVE MODELS
TO CREATE A SHARED COMMUNITY

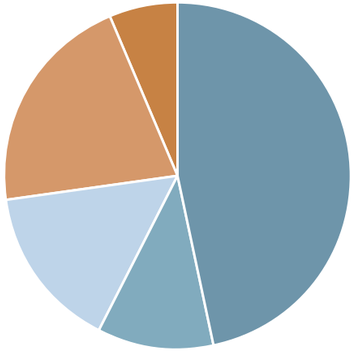


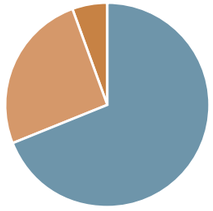
TOGETHERNESS

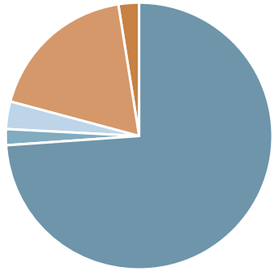
TREEHOUSE

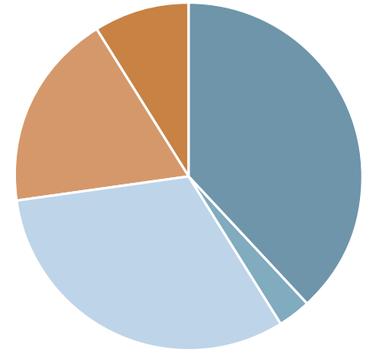
MISS SARGFABRIK

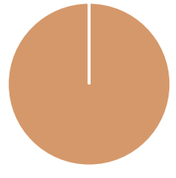
HAUS A





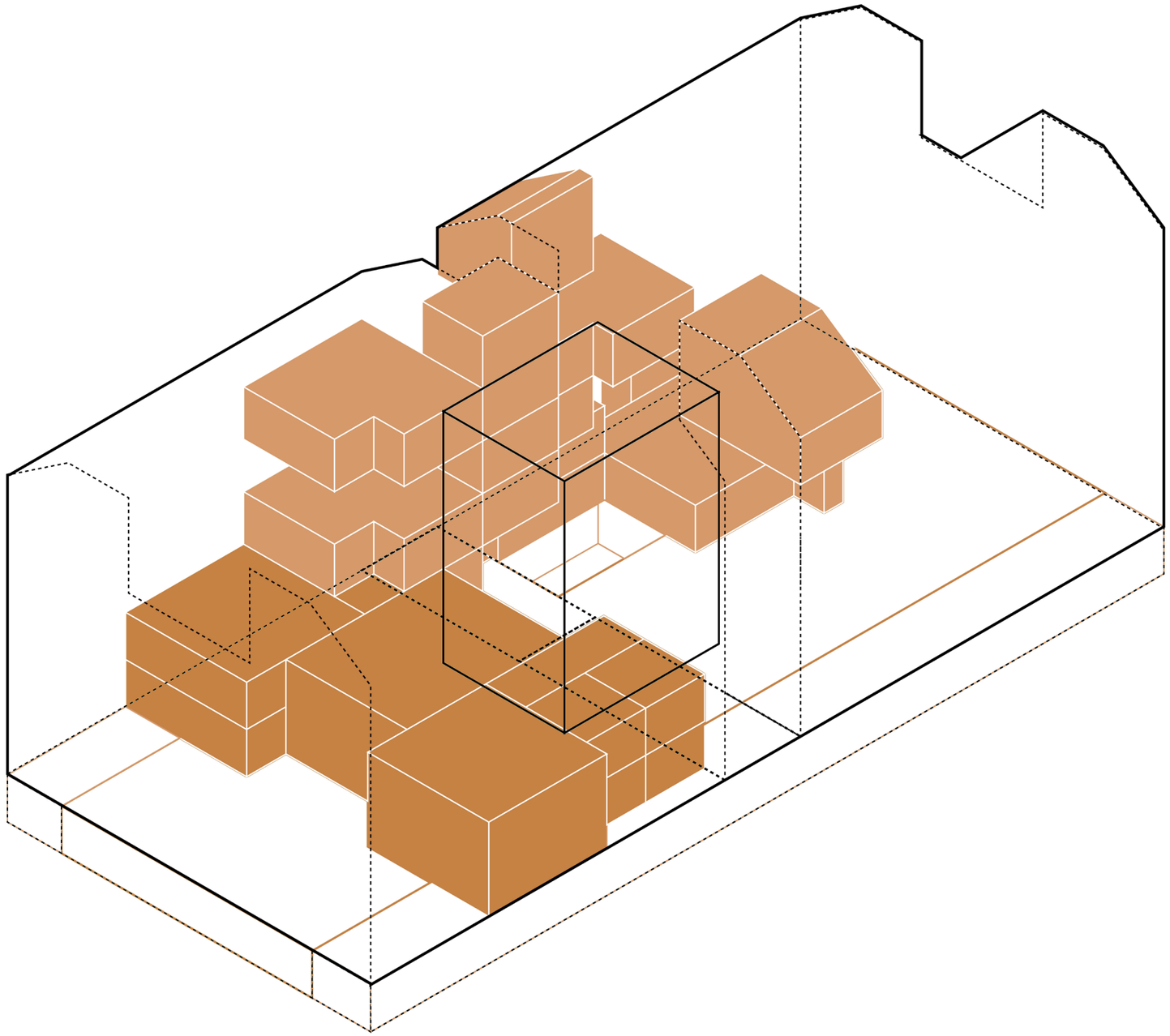






Program

Percentages functions



Program

Public and Collective

Position in building

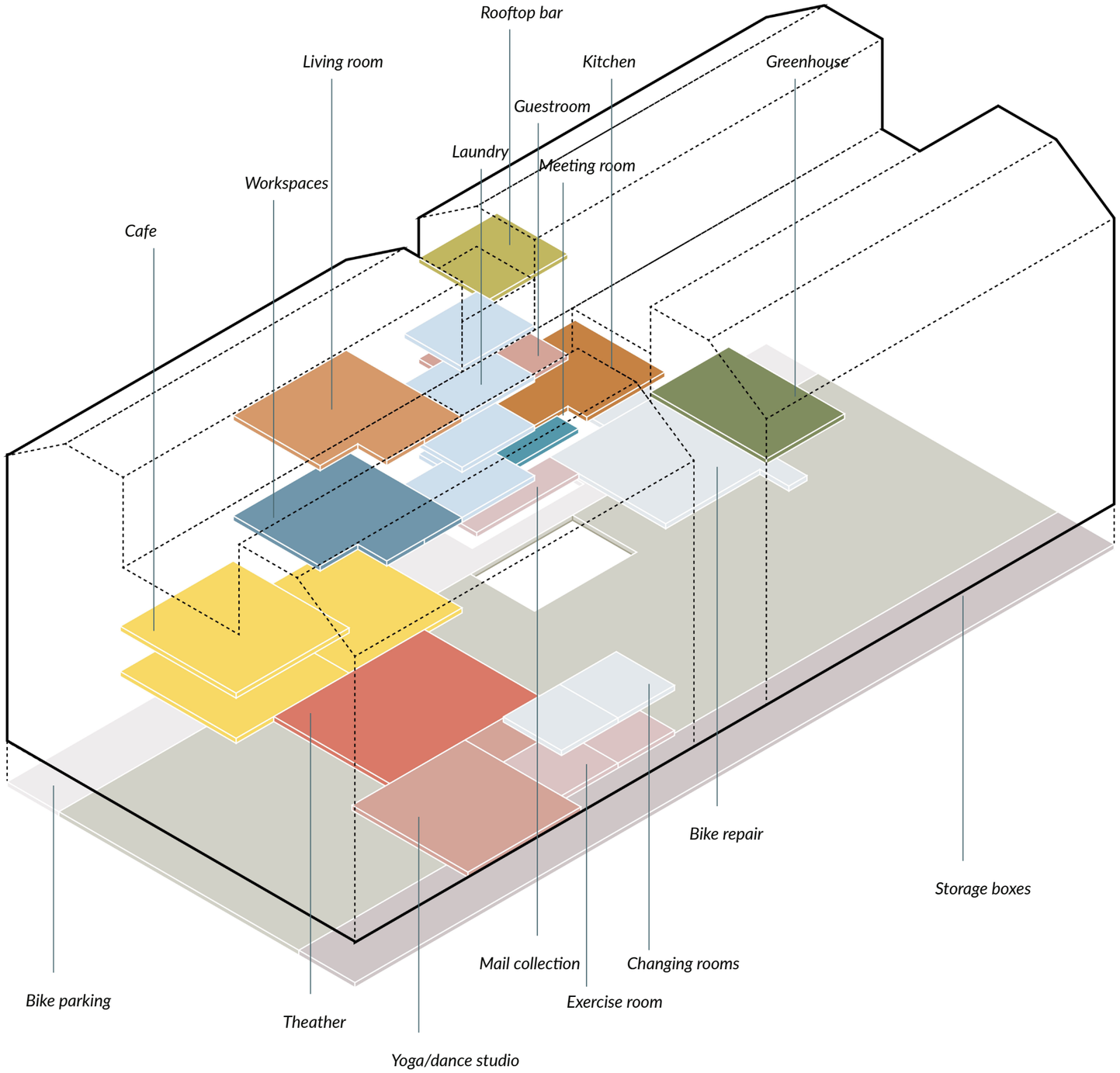
Public

Collective

Co-living

Shared

Private



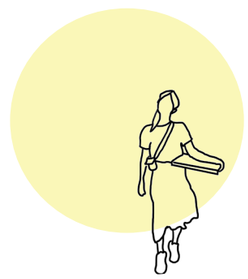
Program

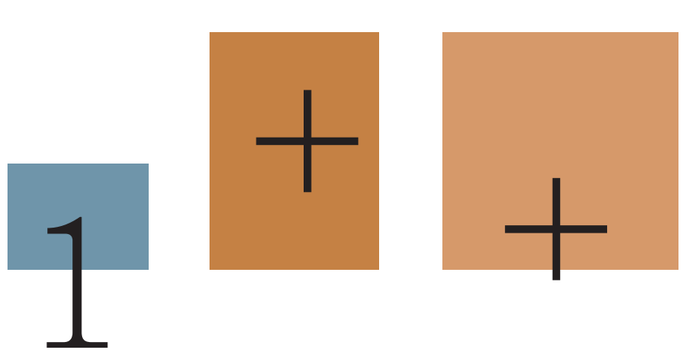
Public and Collective

Functions

Circulation

Central core





Sharing layers

Starter

Floor Plan (0)

0 1 2 5m

Public
Collective
Co-living
Shared
Private

Public:
1 Cafe
2 Theather
3 Yoga studio
4 Dance studio

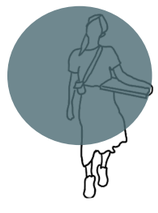
Collective:
5 Entrance
6 Post collection
7 Bike repair
8 Waste collection

Coliving:

Sharing:

Private:
G Garden type
F Forest type

Private dwelling



1

Floor Plan (1)

0 1 2 5m

Public
Collective
Co-living
Shared
Private

Public

Collective:

1 Laundry room
2 Living room
3 Guest room

Coliving:

4 Kitchen
5 Living room
6 Wintergarden (wg)
6 Play room
7 Balcony

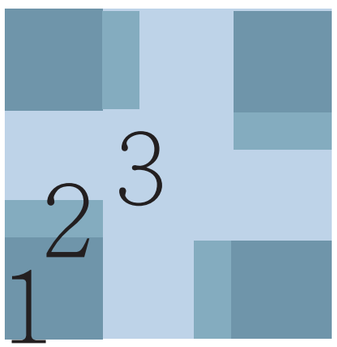
Sharing:

8 Kitchenette + Bathroom
9 Small room + Bathroom
10 Kitchenette
11 Library
12 Games

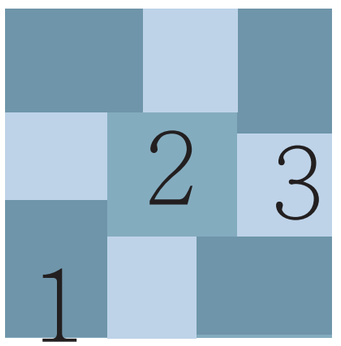
Private:

Unit A: wintergarden
Unit B: big room
Unit D: disabled
Unit E: disabled + wg

Coliving kitchen



Shared hall



Floor Plan (4)

0 1 2 5m

Public
Collective
Co-living
Shared
Private

Public

Collective:

1 Laundry room
2 Rooftop bar
3 Garden plots
4 Street

Coliving:

Sharing:

8 Streetrooms

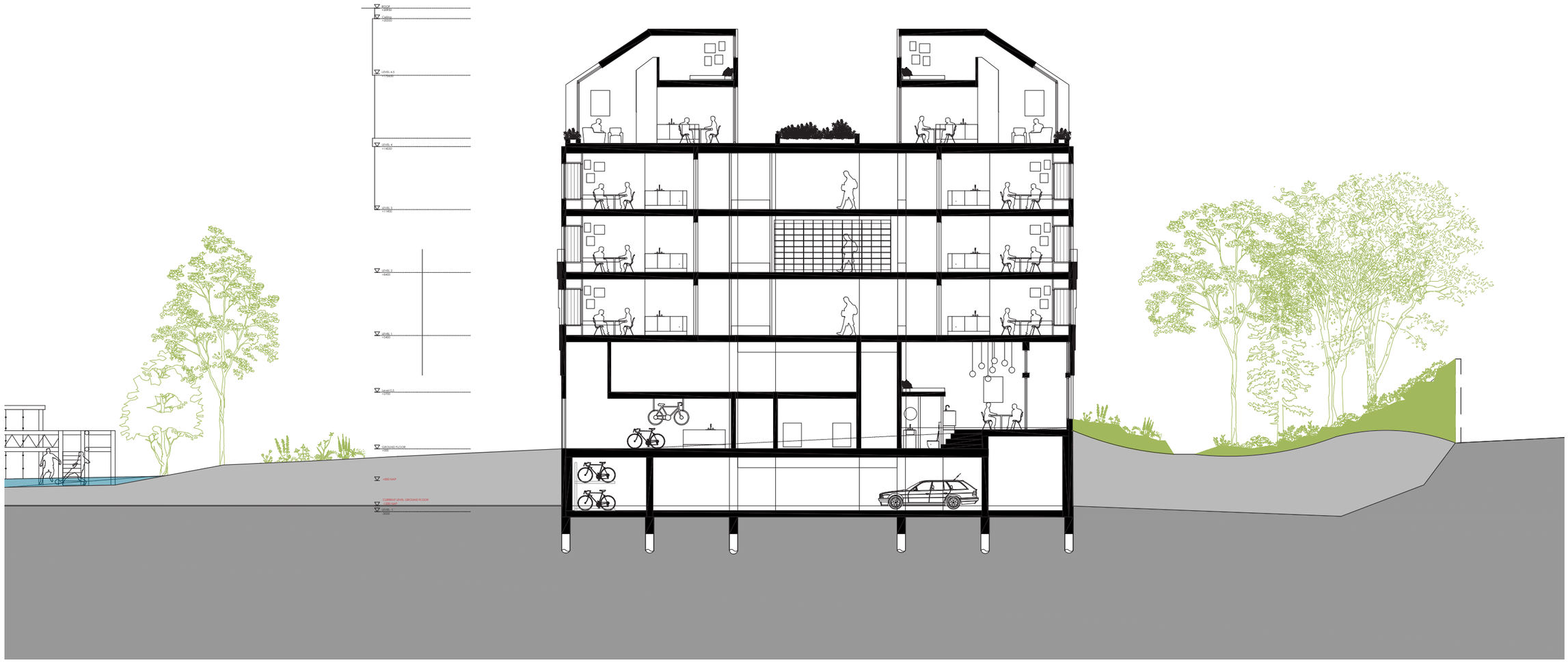
Private:

Top Small
Top Medium

Collective street

1 + 2

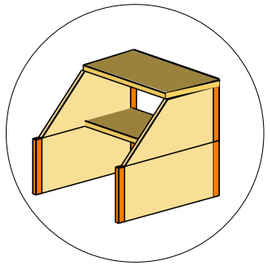
+



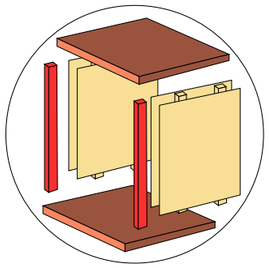
Section (A)

North - South

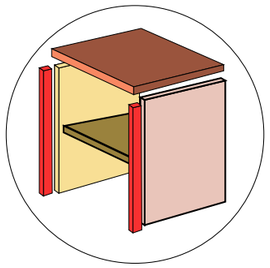
0 1 2 5m



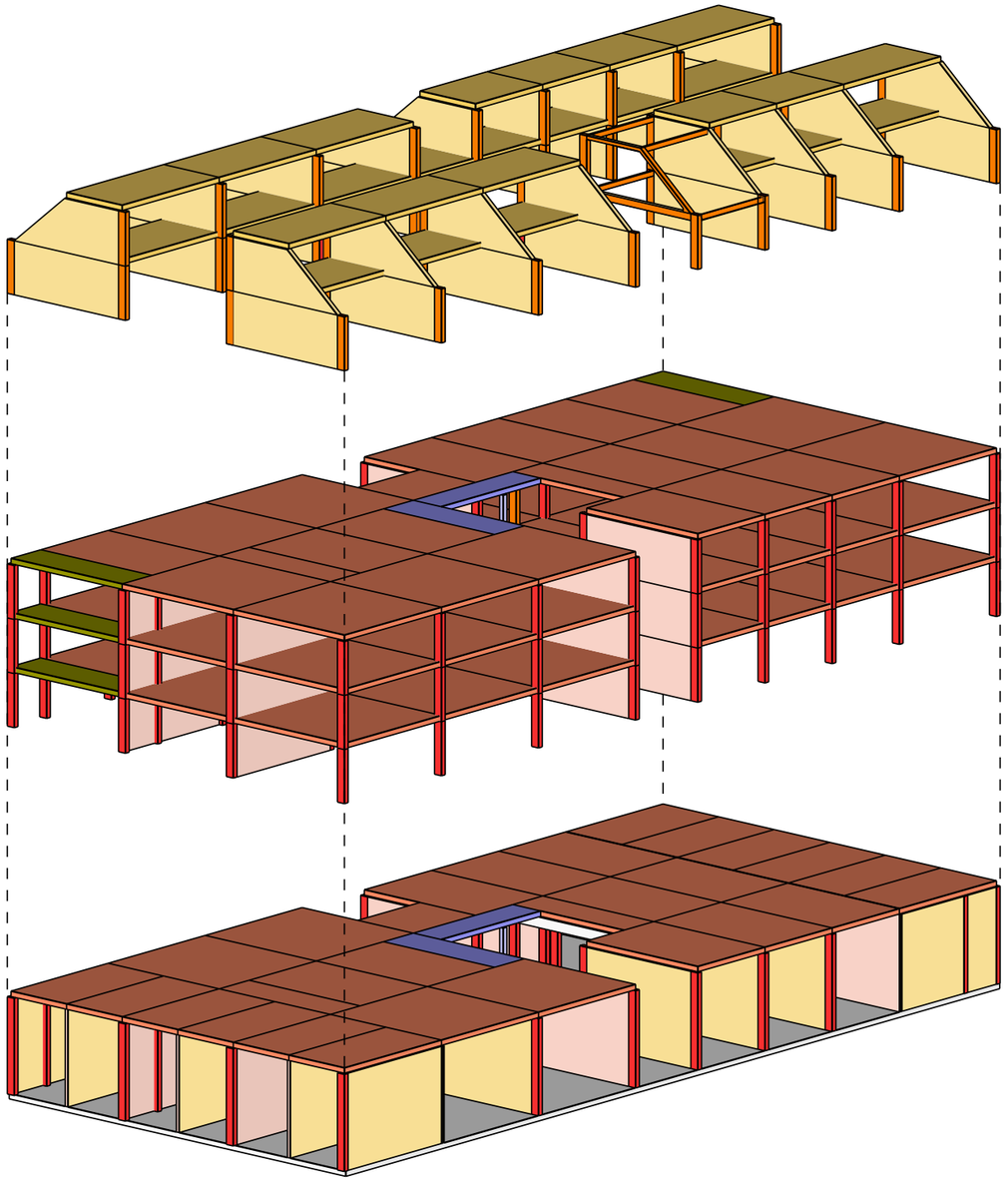
CLT
self-contained top
construction



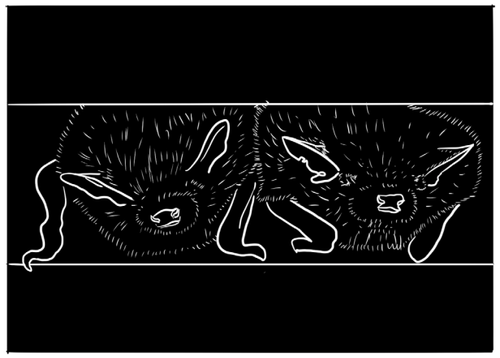
Concrete
Flexible collum
structure with panels

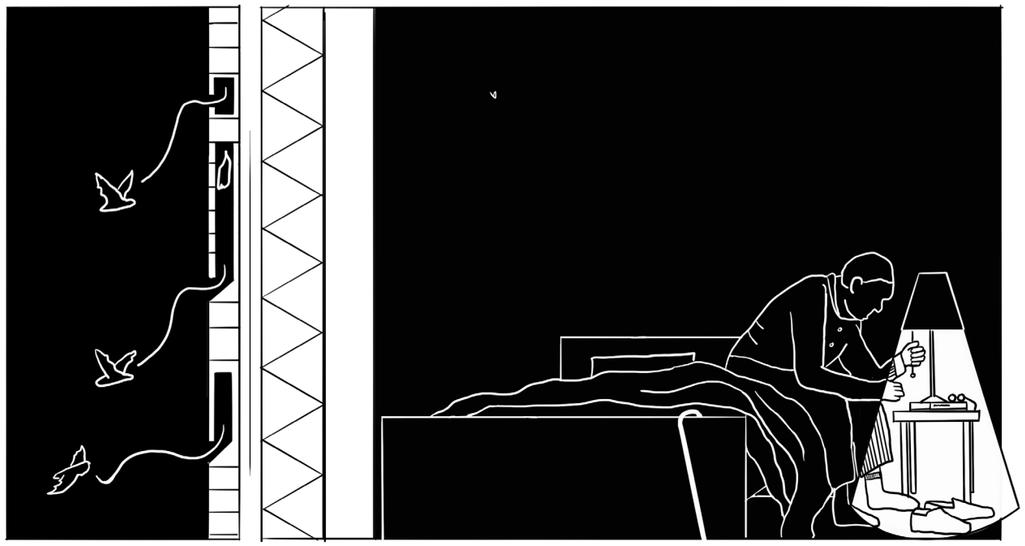


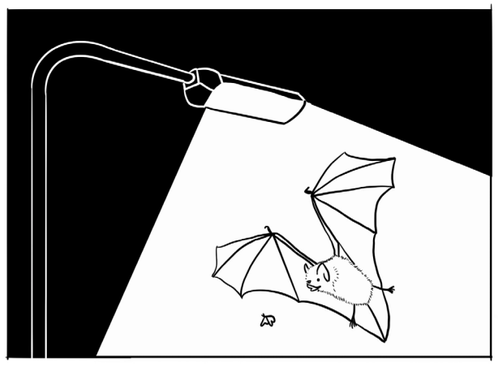
Concrete
Table top ground floor
with CLT Loft boxes



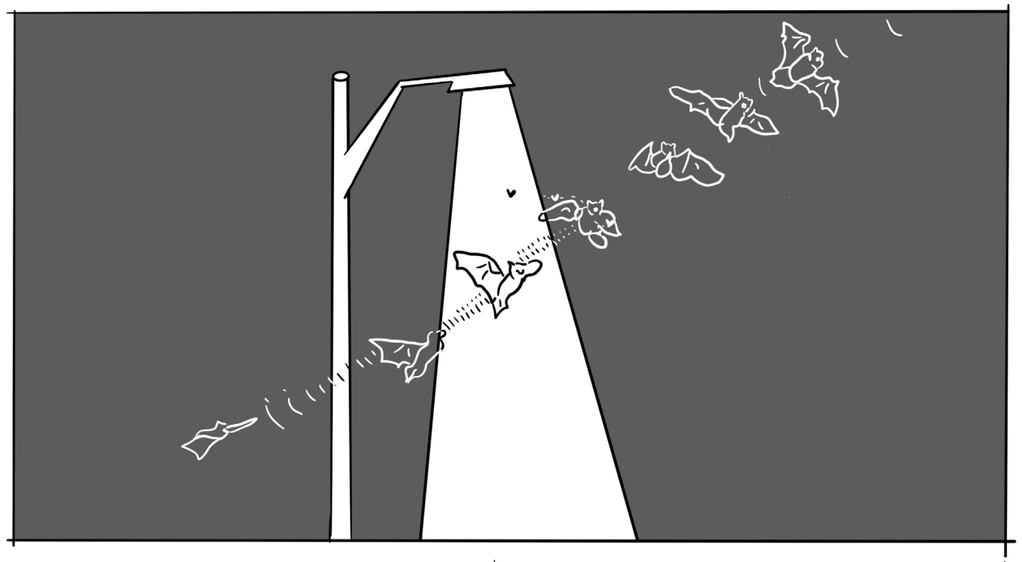
Structure
Axonometric

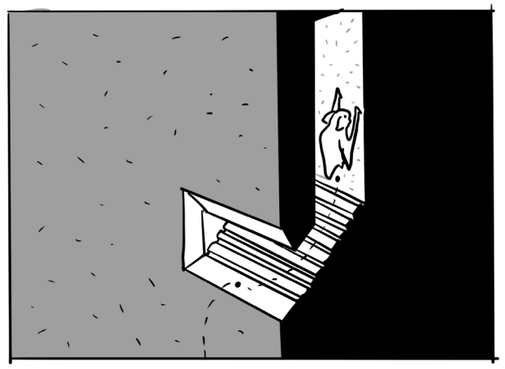


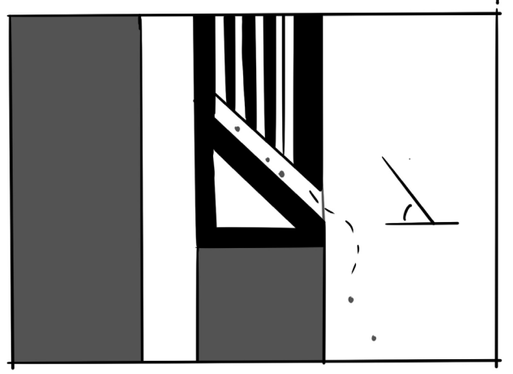




Cohabitation

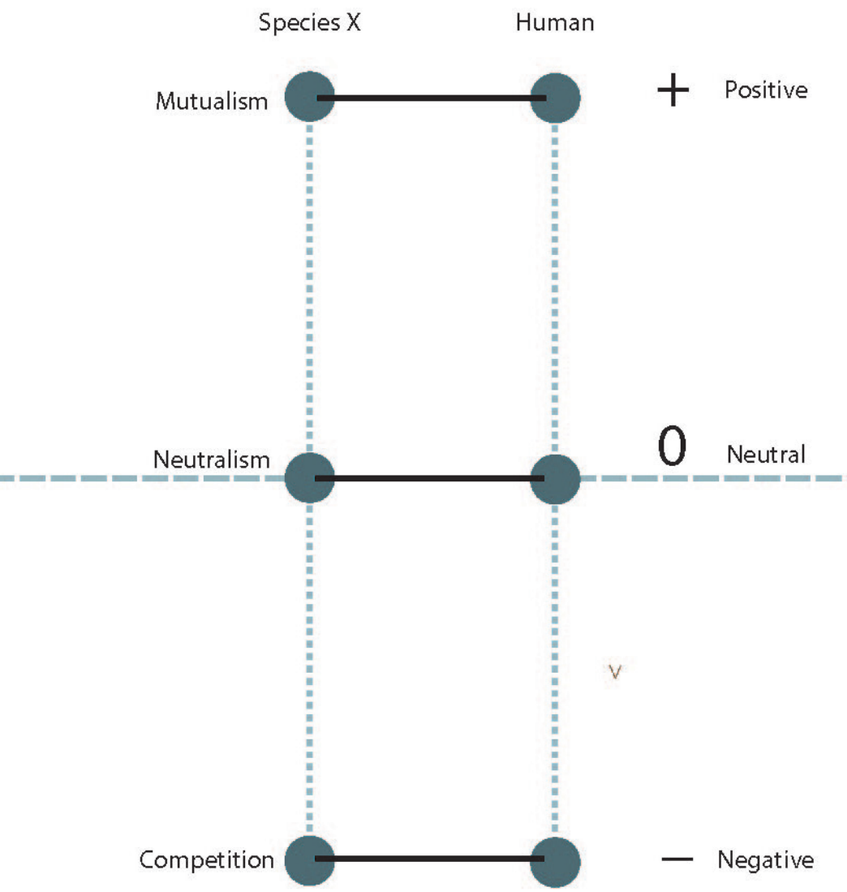


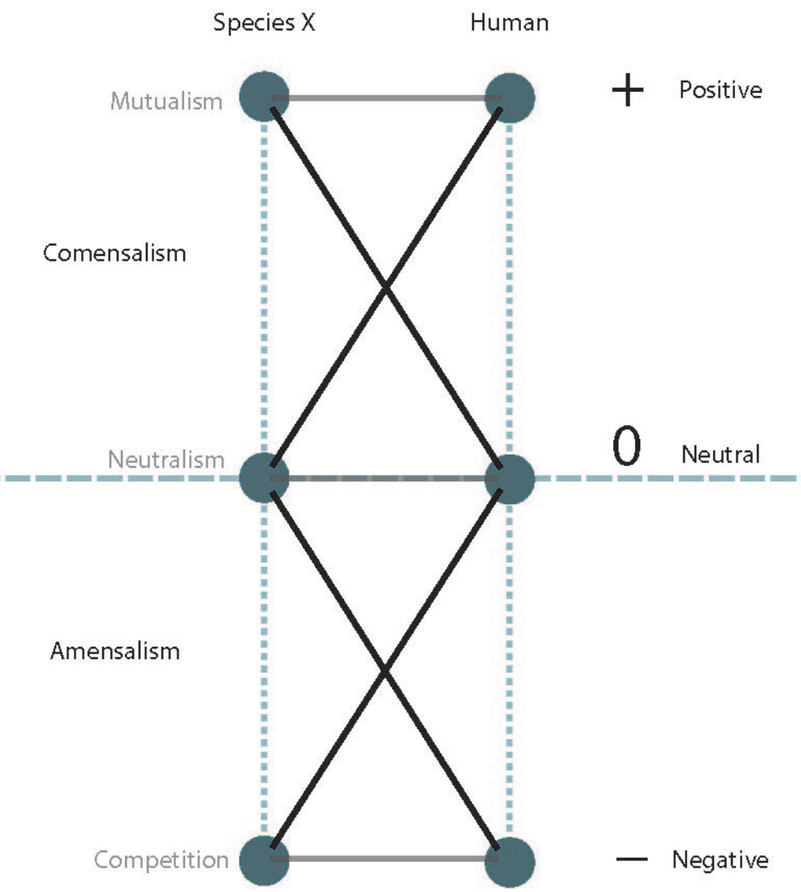


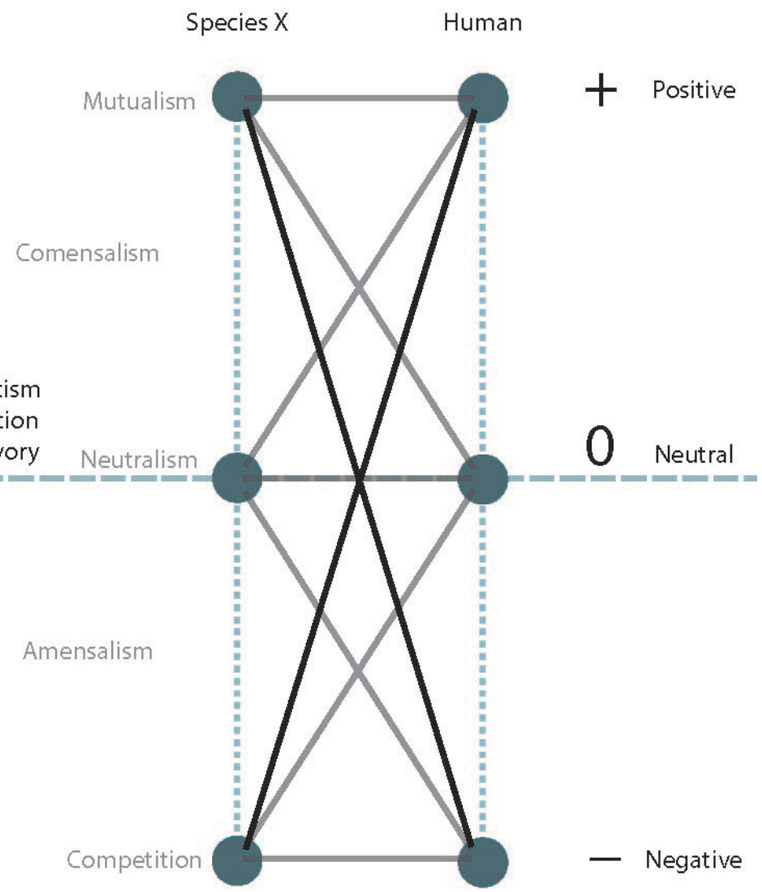


Daily routines bats

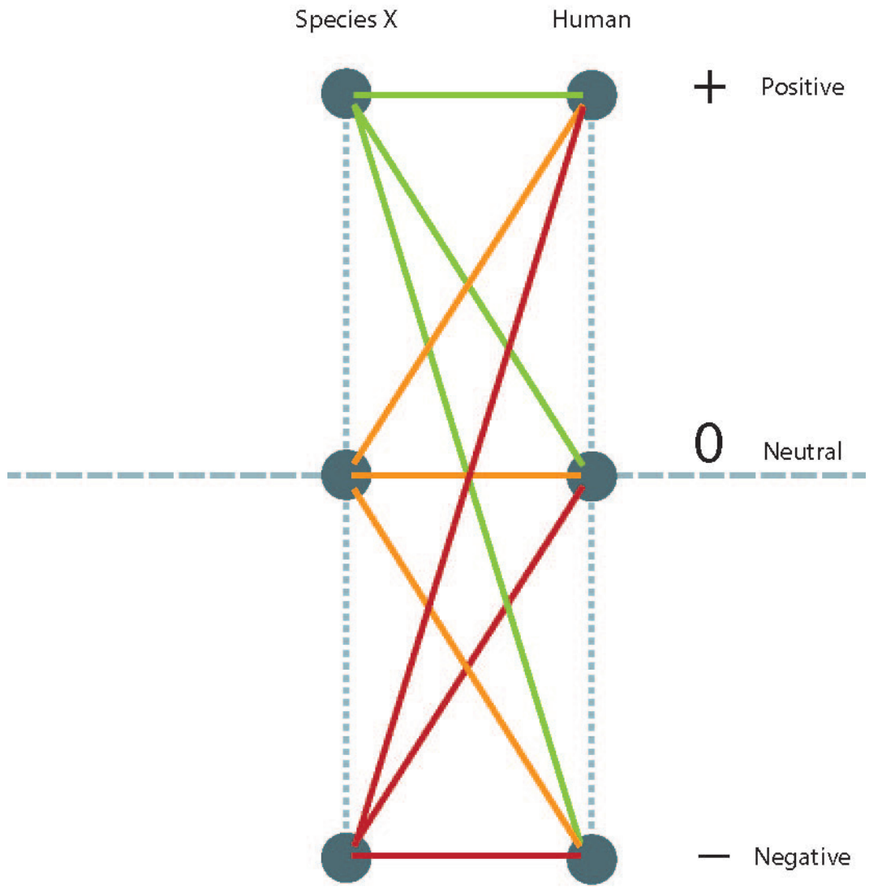
COHABITATION



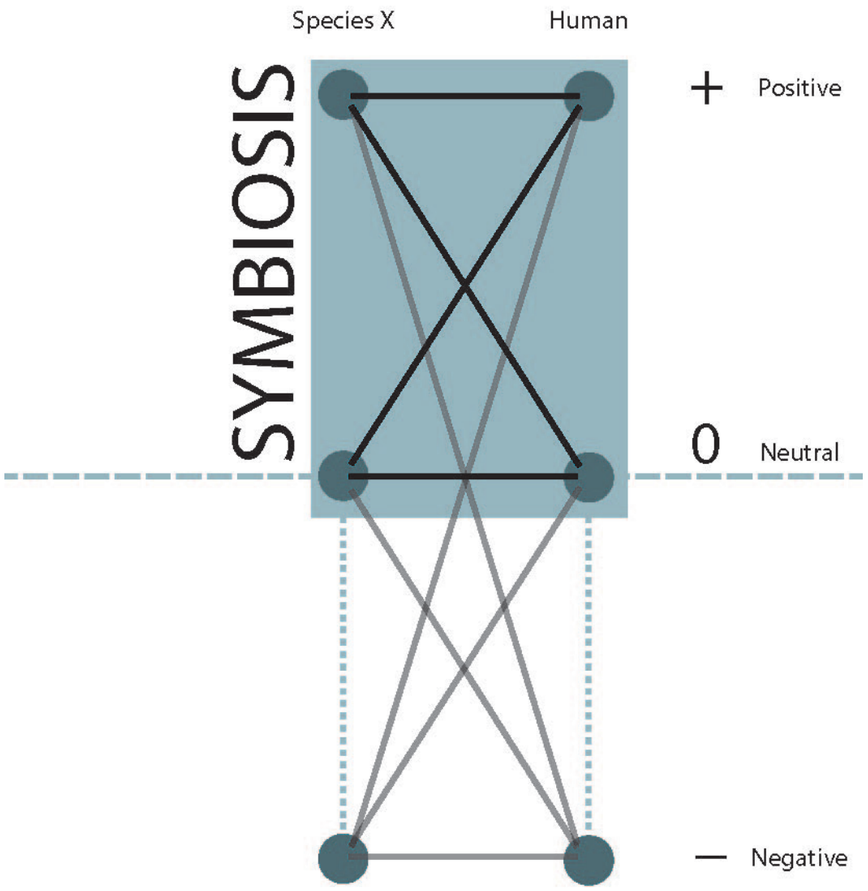




COHABITATION

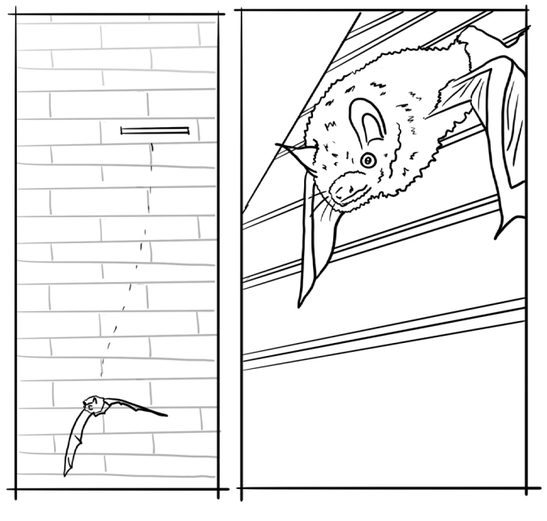


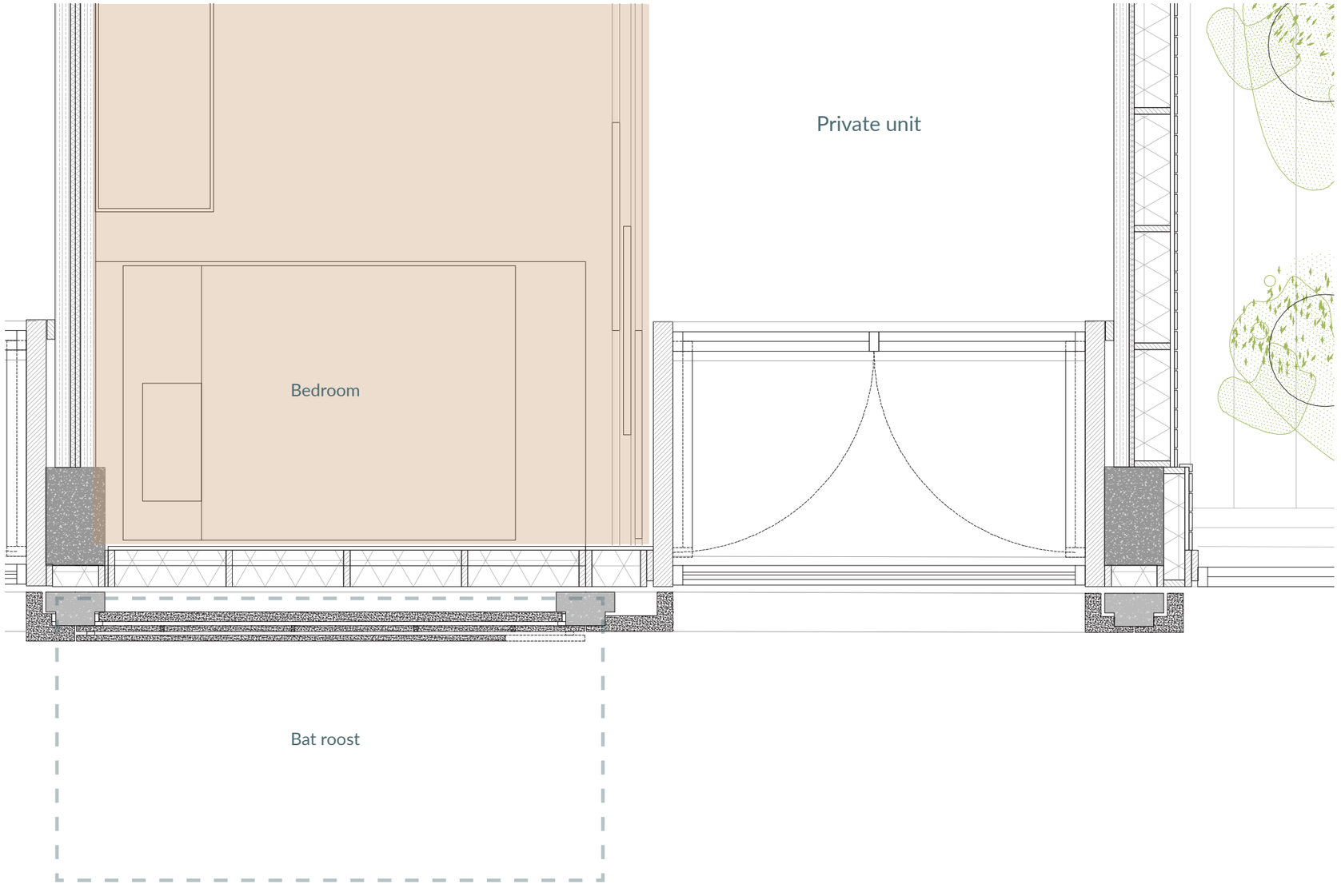
COHABITATION



COHABITATION

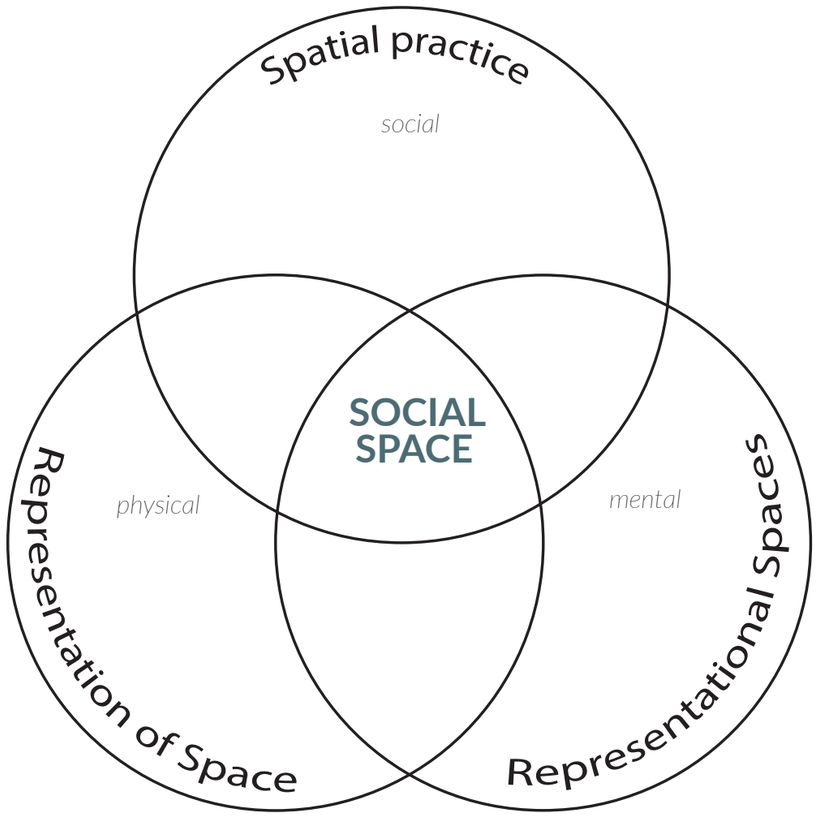
PROVIDING SPACE FOR NON-HUMAN SPECIES





RESEARCH FRAMEWORK

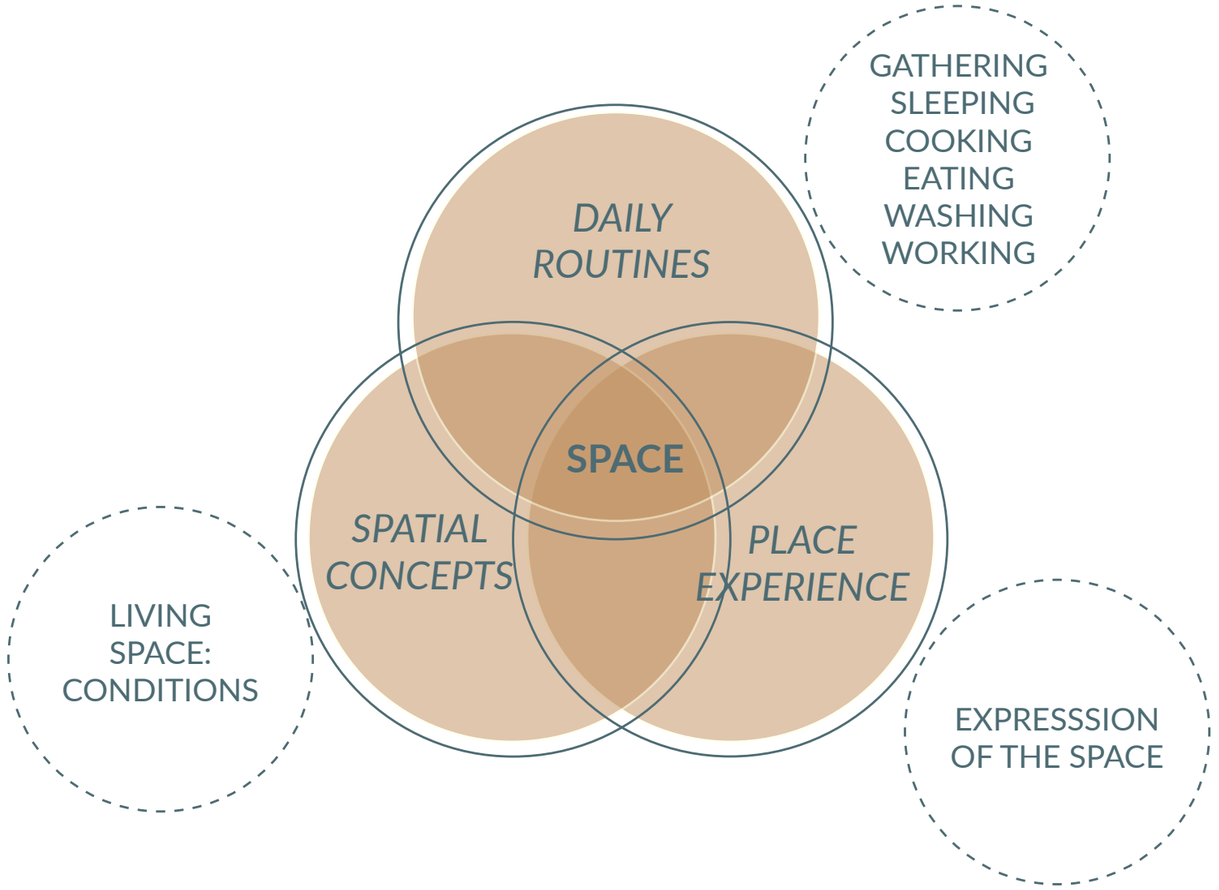
PRODUCTION OF SPACE (1974) - HENRI LEFEBVRE

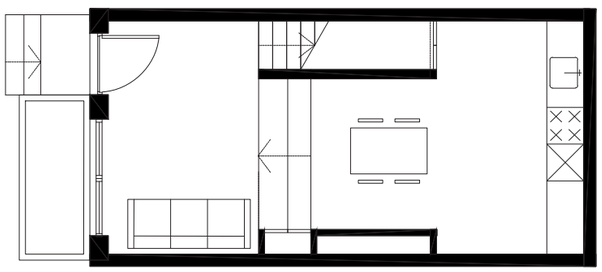


“[SPACE is] a precondition and a result of social superstructures”
(Lefebvre, 1974, p. 85)

RESEARCH FRAMEWORK

LAYERS OF DWELLING SPACE





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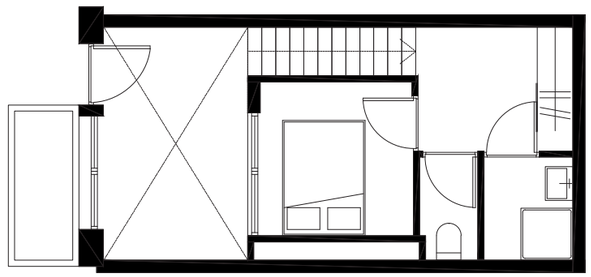
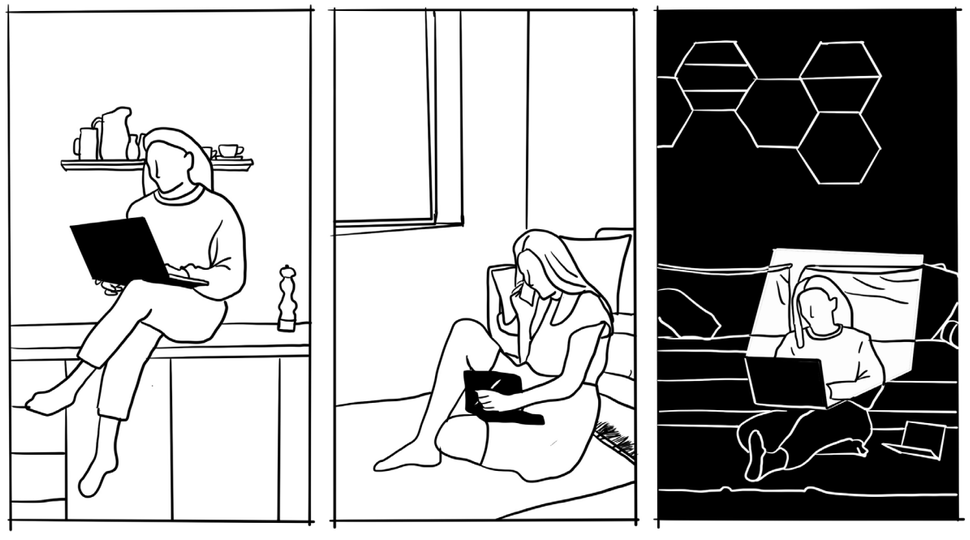
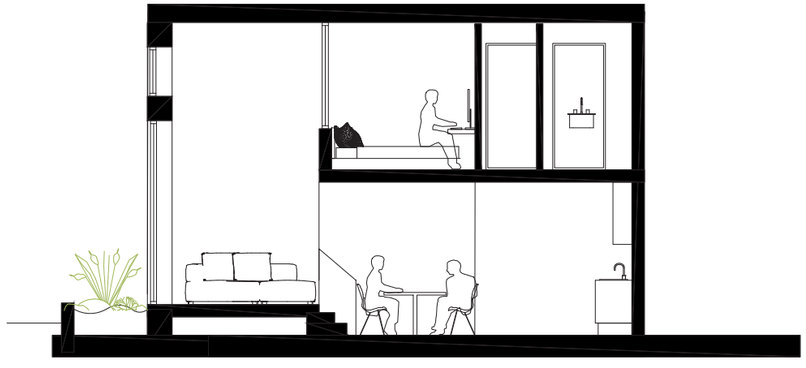


(1)



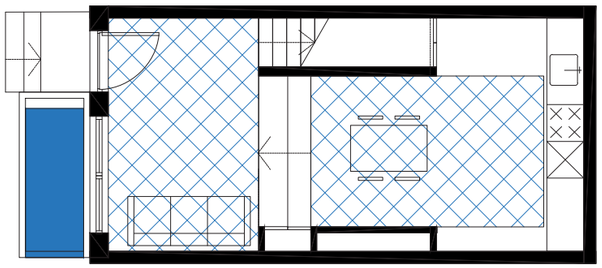


Garden Type

Target: Starter

0 1 2 4m

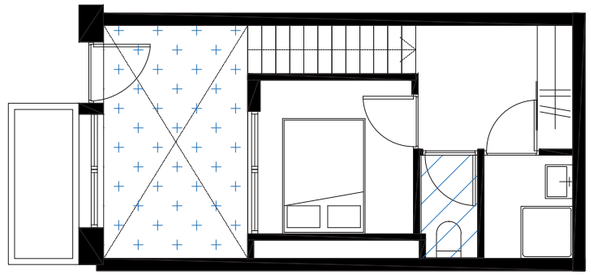
Garden as extension of the living space



(0)

Similar room sizes

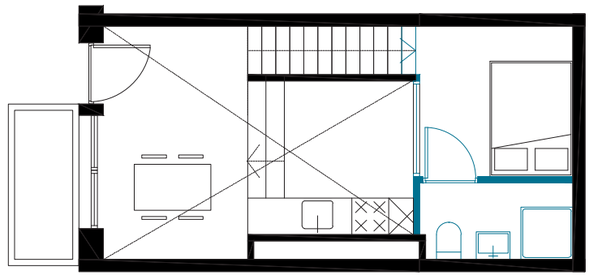
M3 vs M2



(1)

Separate toilet

Casco to be determined

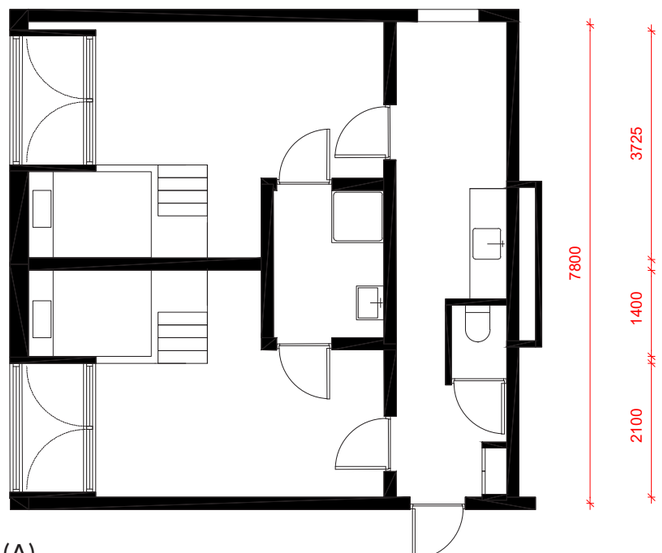


Spatial concepts

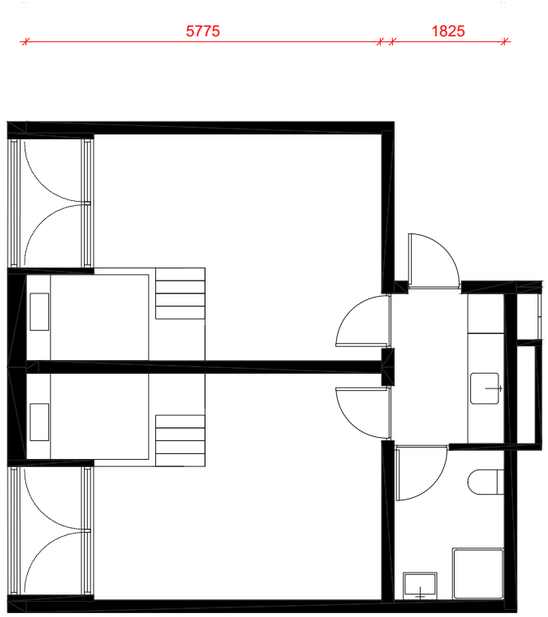
Garden Type

Target: Starter

0 1 2 4m

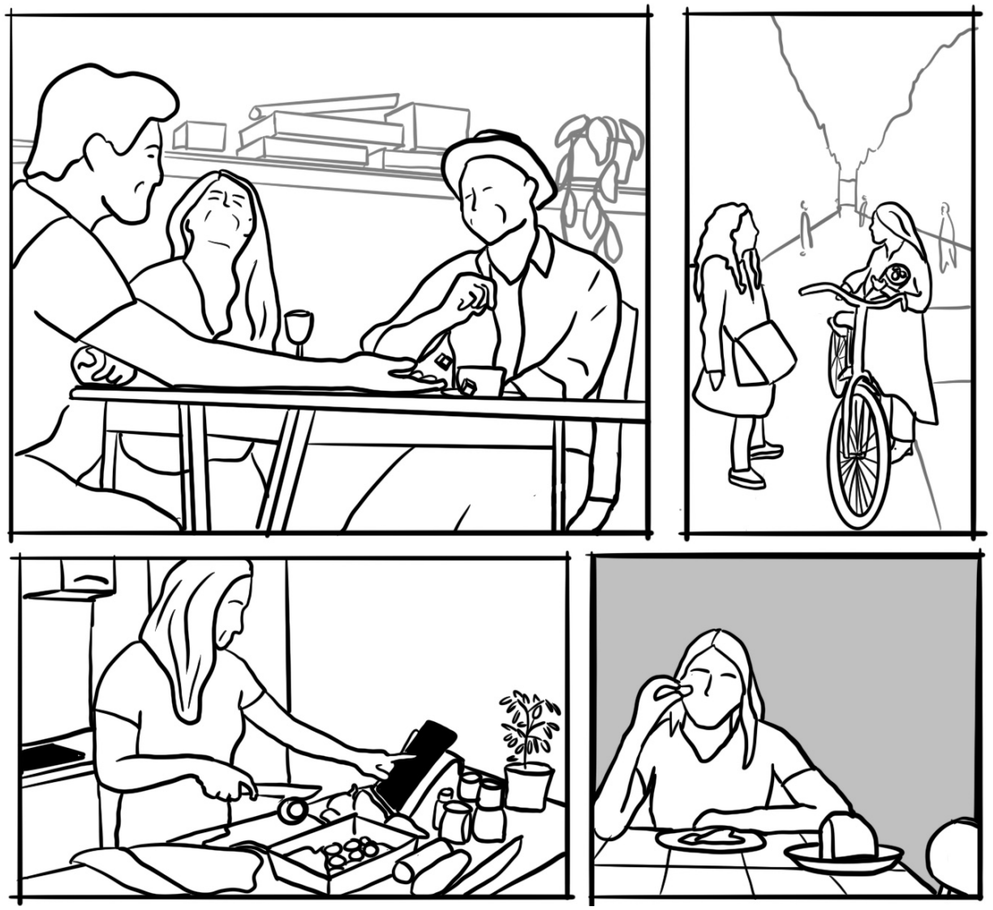


(A)



(B)

(C)

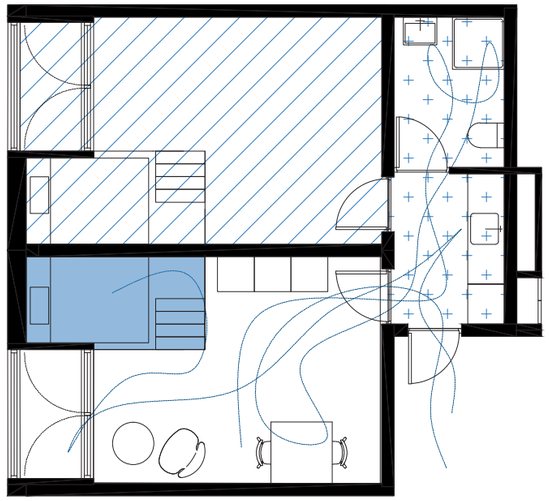


Cluster A - Shared

Target: Middle aged adults

0 1 2 4m

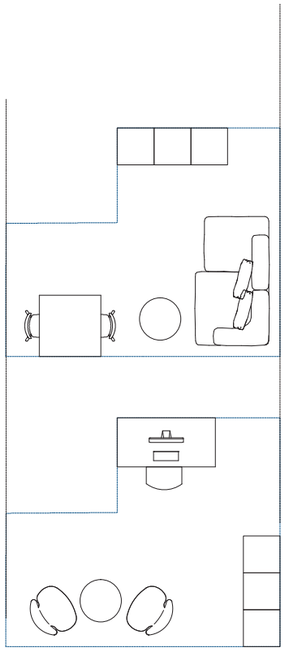
Selected roommate



Shared kitchenette utensils

Storage under the bed

(B)



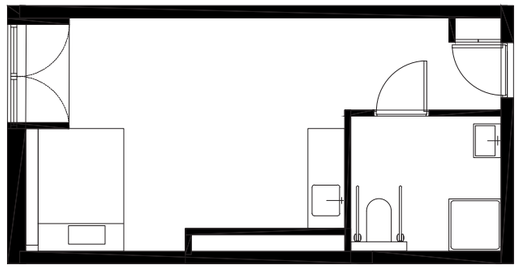
L-shape with multiple options

Spatial concepts

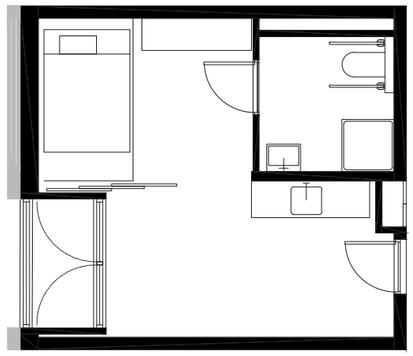
Cluster A - Shared

Target: Middle aged adults

0 1 2 4m



(A)



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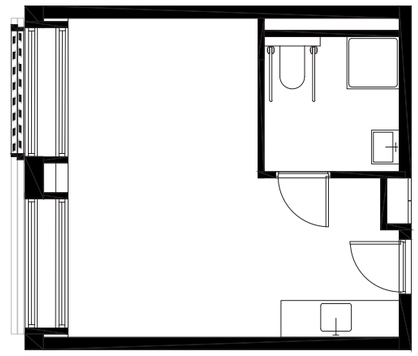
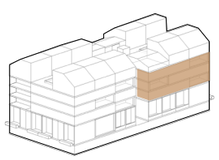


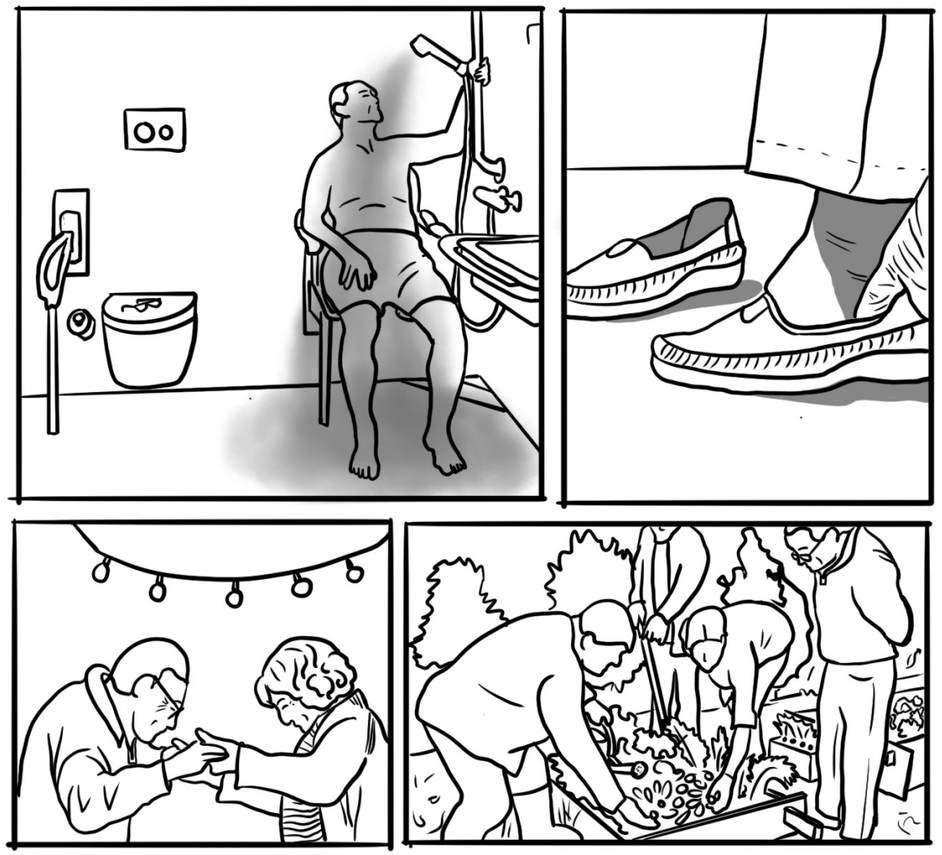
(C)

Cluster B - Individual

Target: Elderly

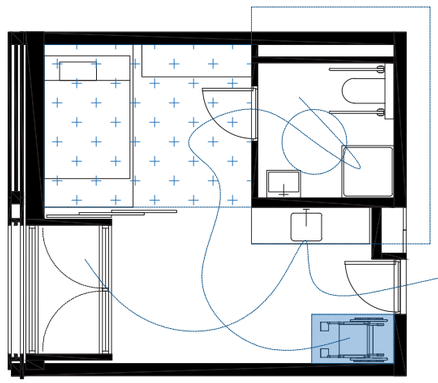
0 1 2 4m



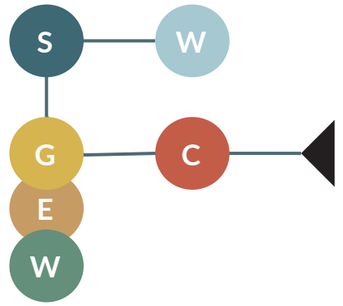


Disabled accessible bathroom

Room divided into two parts



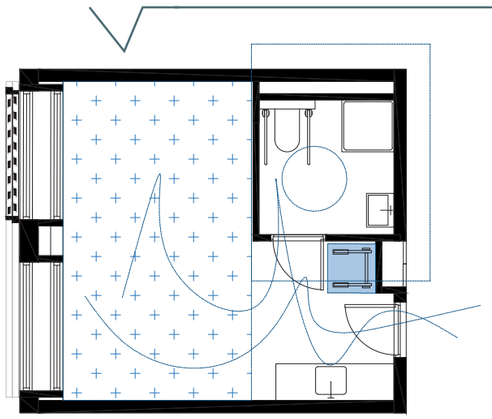
Private kitchenette and bathroom

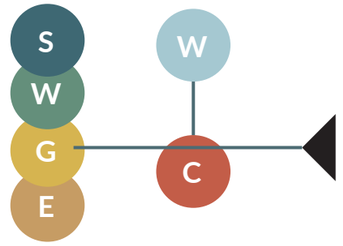


(B)

Possible wheelchair space

One big open space



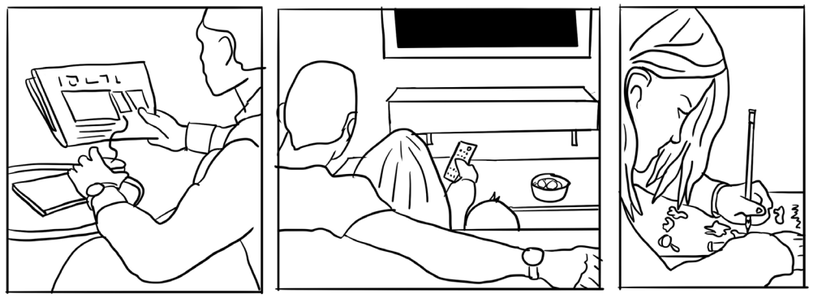


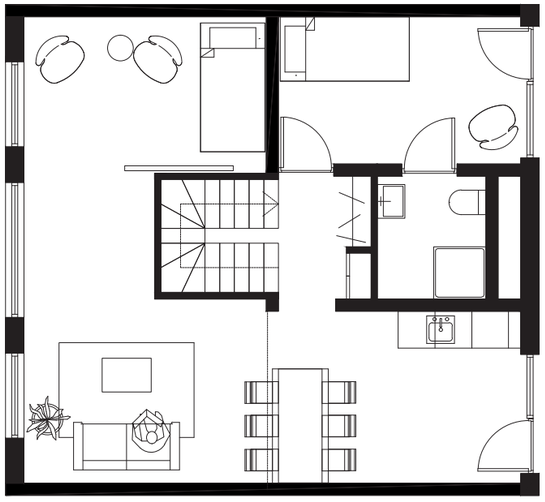
Spatial concepts

Cluster B - Individual

Target: Elderly

0 1 2 4m





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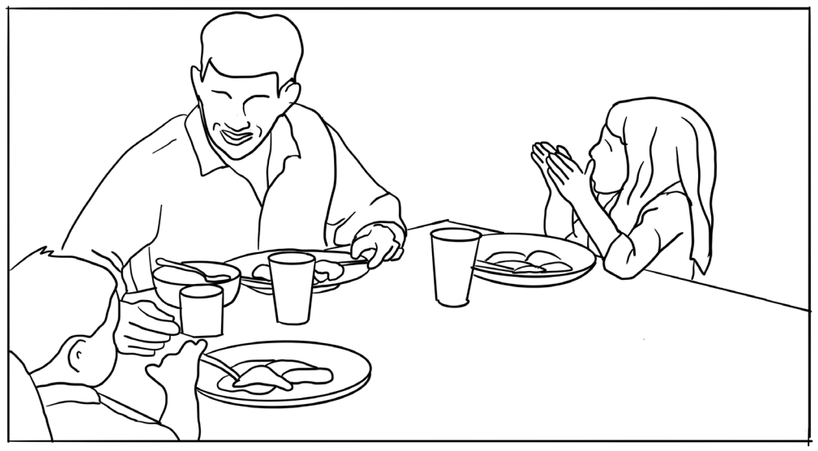
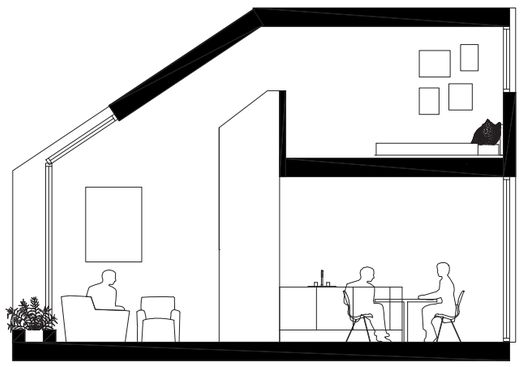
(1)



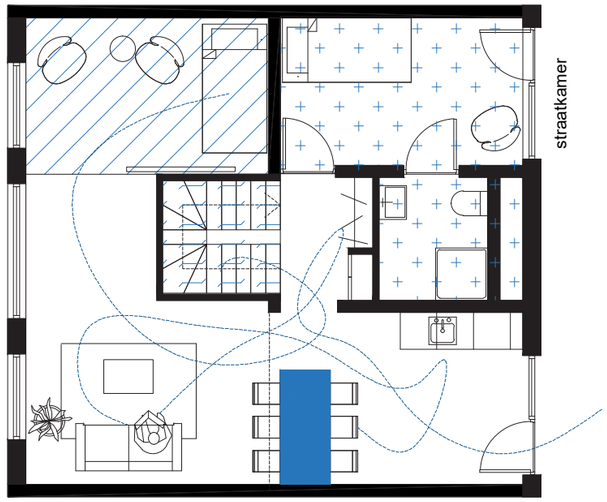


Topper

Target: Single parent

0 1 2 4m

Annex room



Similar bedroom sizes

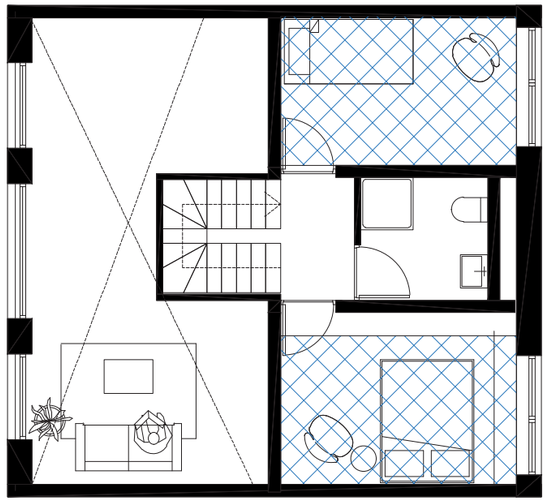
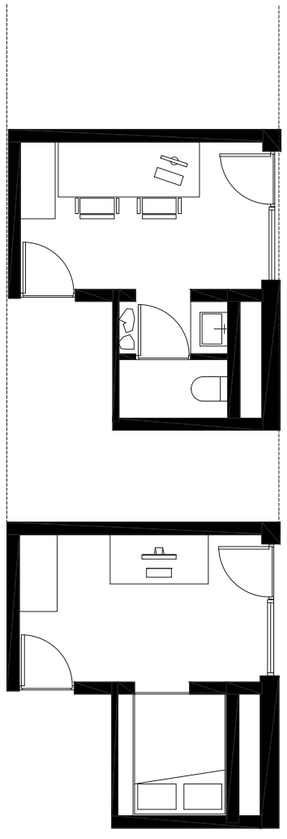


Table at the centre

Casco to be determined

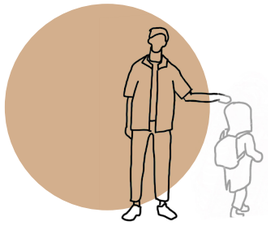
Streetroom flexible funtion



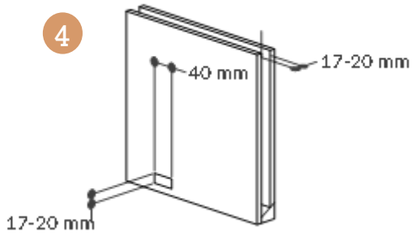
Spatial concepts

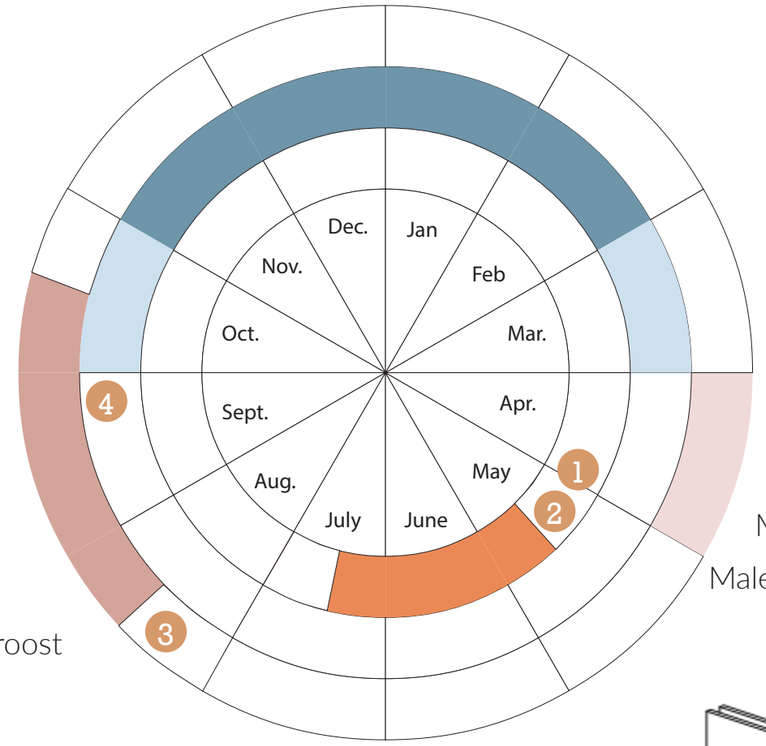
Topper

Target: Single parent



0 1 2 4m



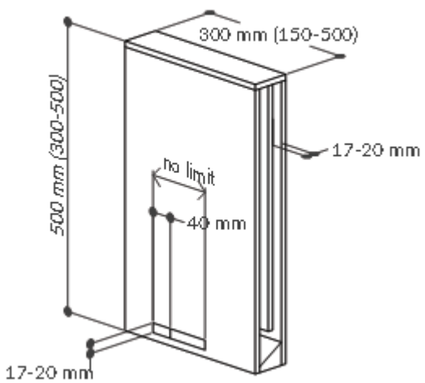


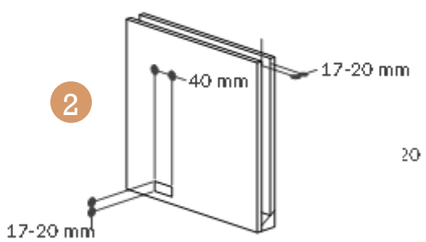
Hibernation roost

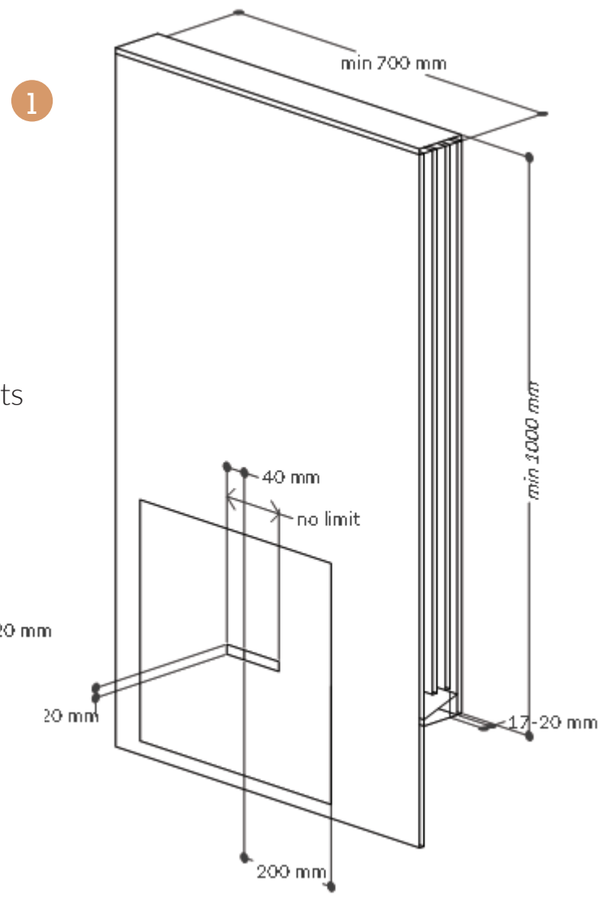
Maternity roots

Male roost

Mating roost

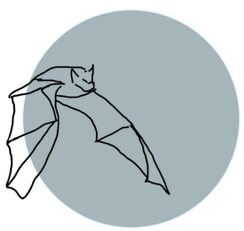


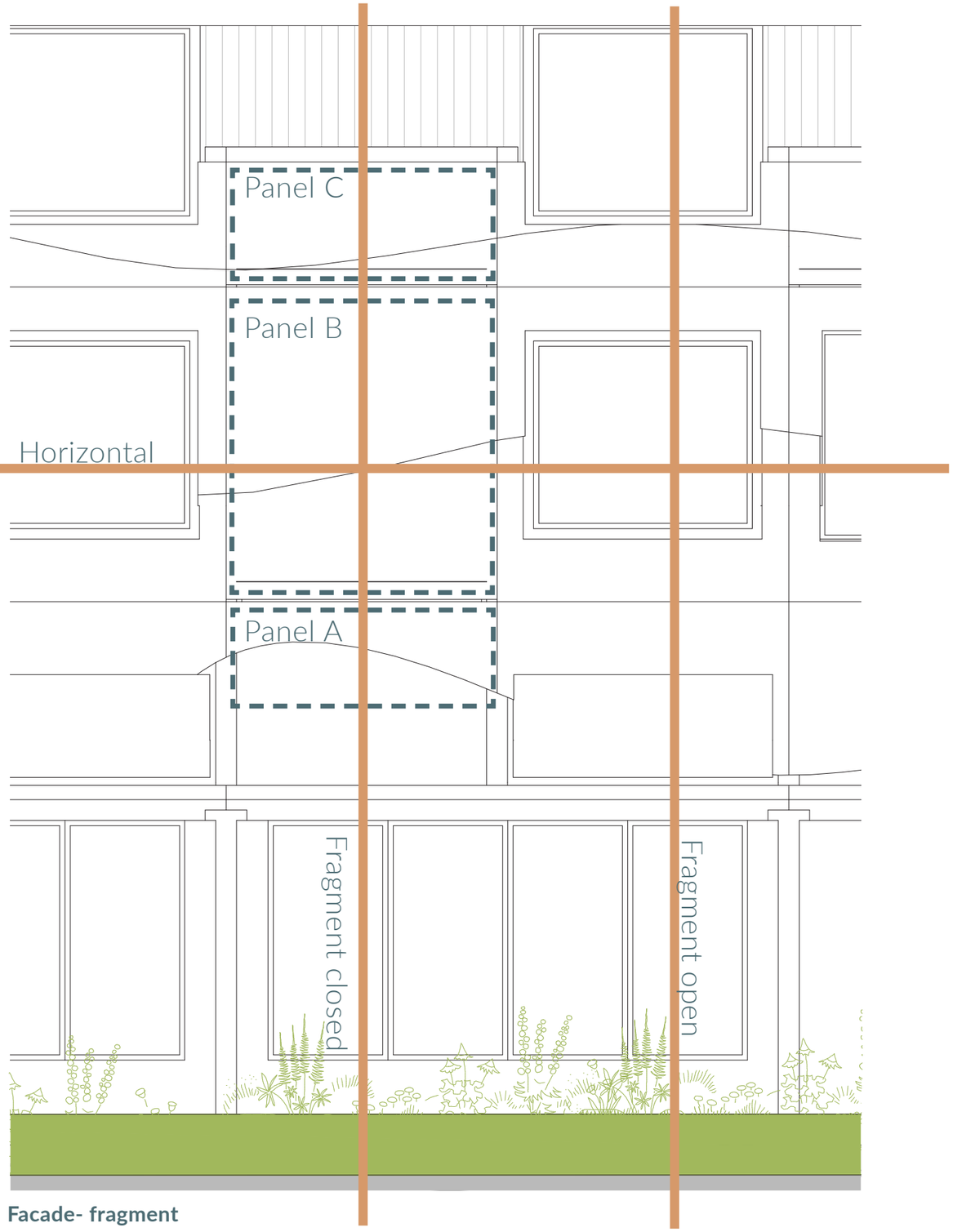




Lifecycle

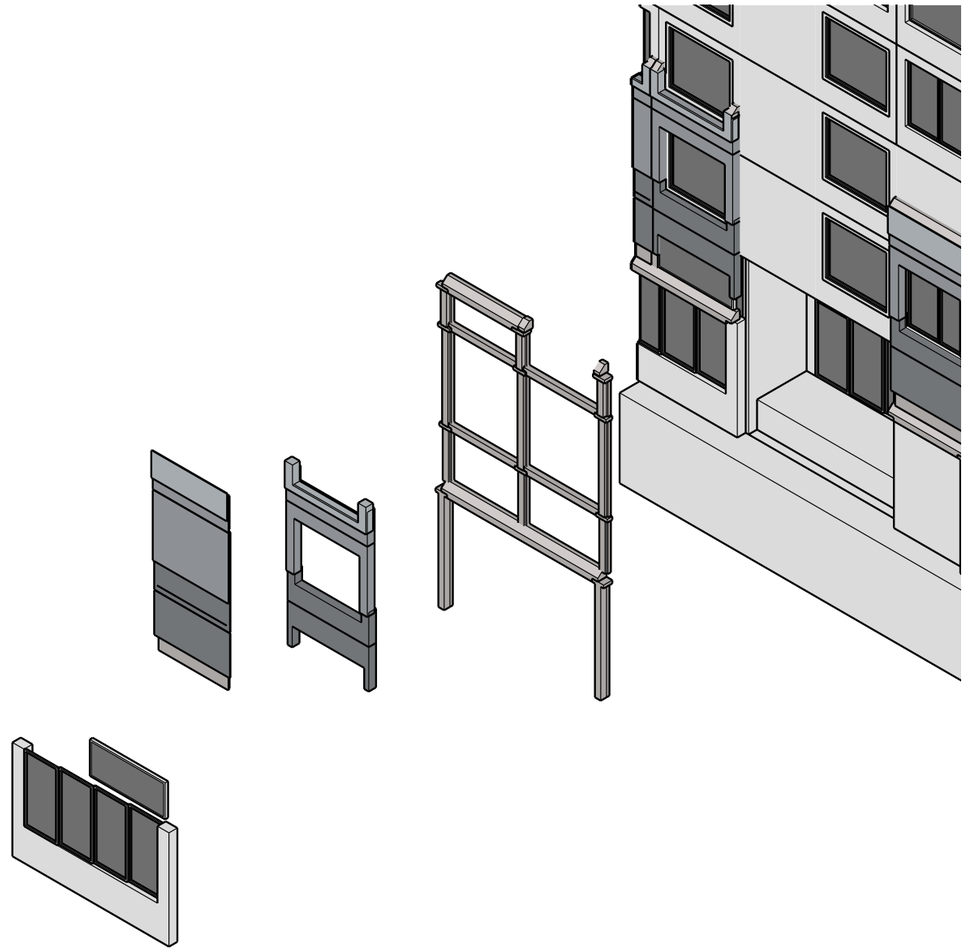
Target: Common pippistelle





Facade- fragment

0 0.5 1 2m



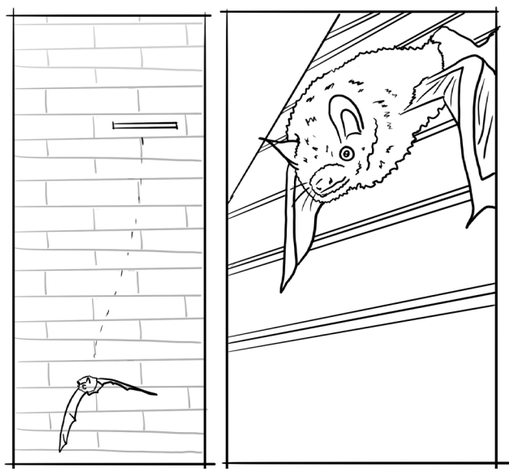
Facade construction
Axonometric

Materialization

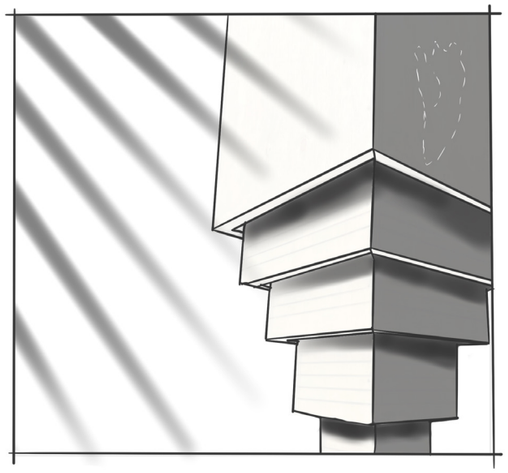
0 0.5 1 2m

Wood
Weathered
Timber Stack

Wood-Concrete
Panels made out
a mix of 75%
wood fibers
and cement



Rough materials and no obstacles



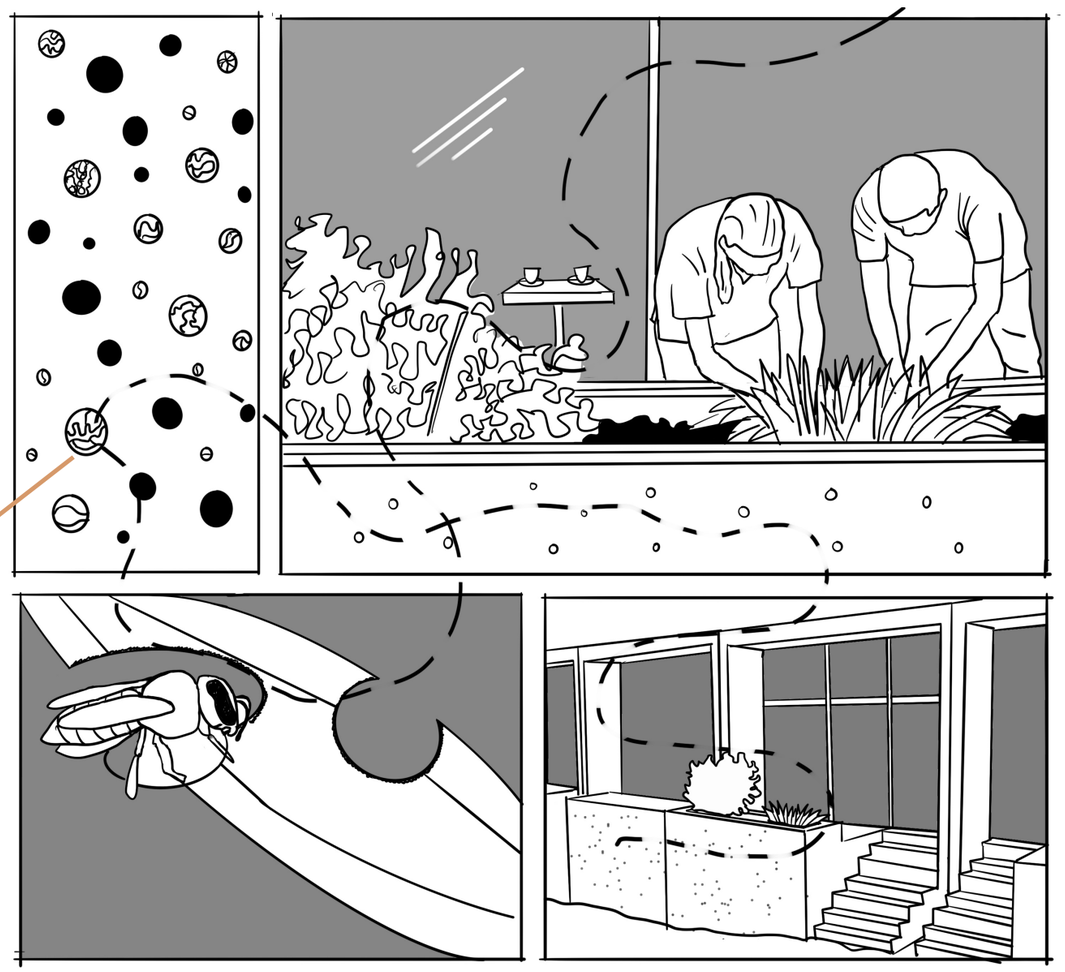
Microclimates

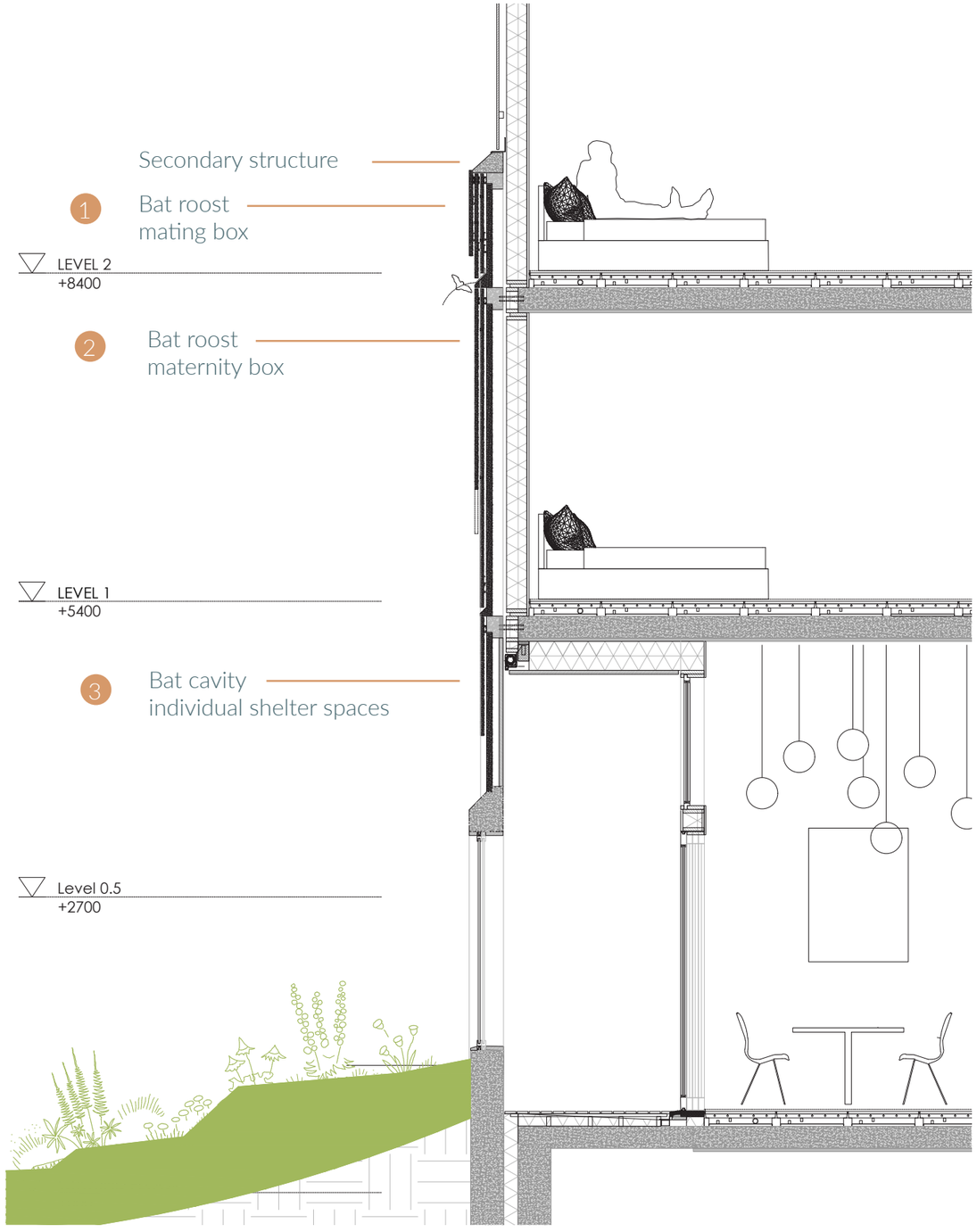
Materialization

0 0.5 1 2m

Biodiversity

Panels also facilitate shelters for butterflies, to improve the bat's ecosystem.

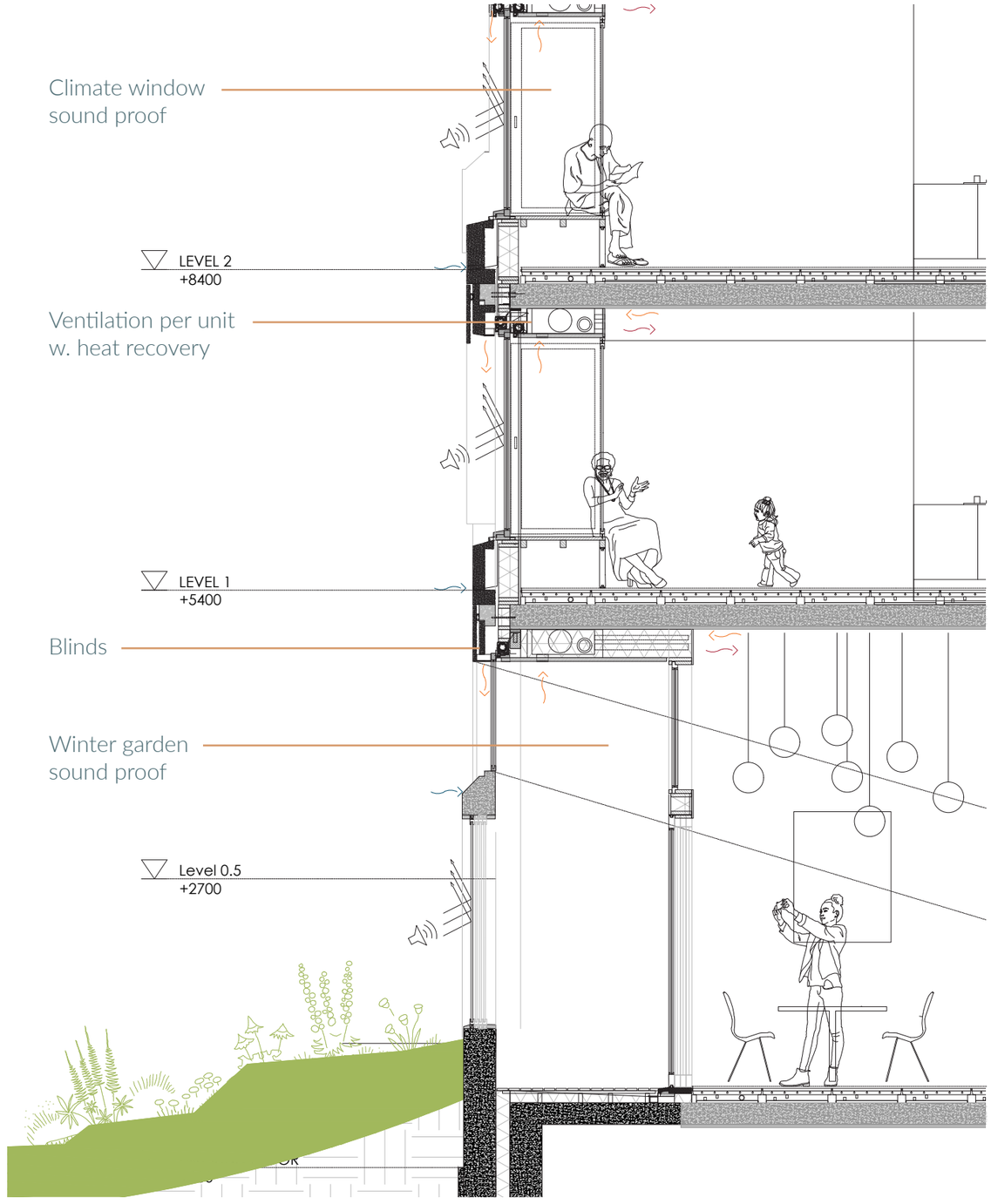




Fragment A

Closed facade

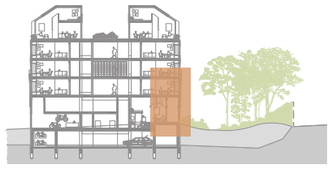
0 0.5 1 2m

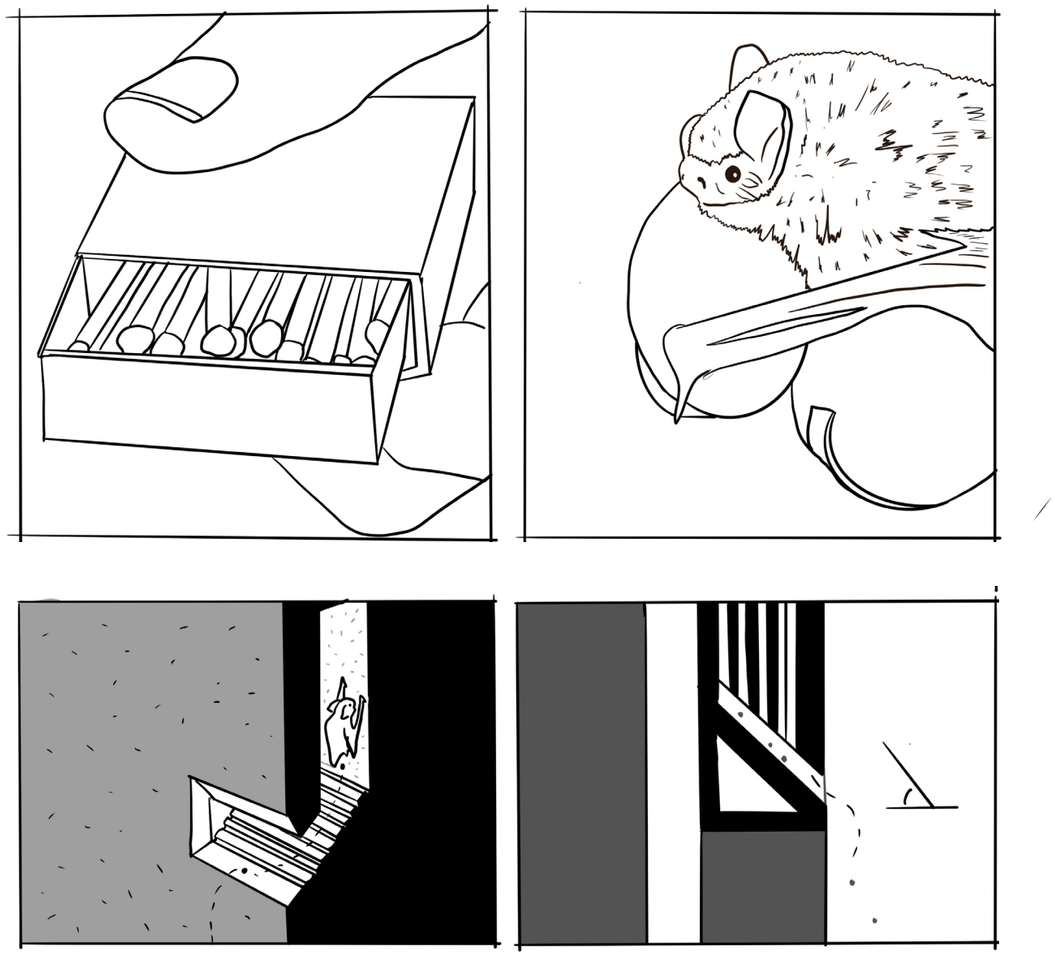


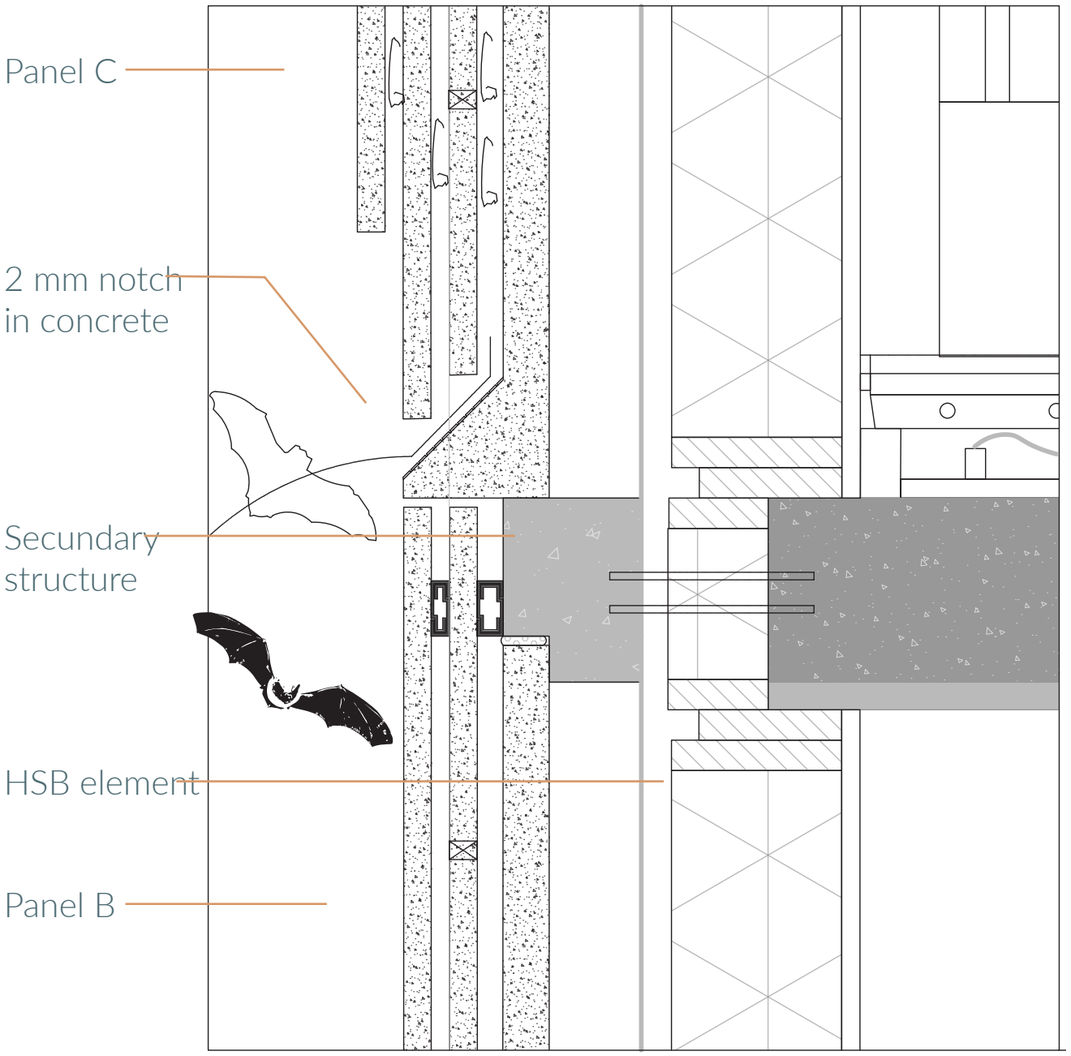
Fragment B

Open Facade

0 0.5 1 2m

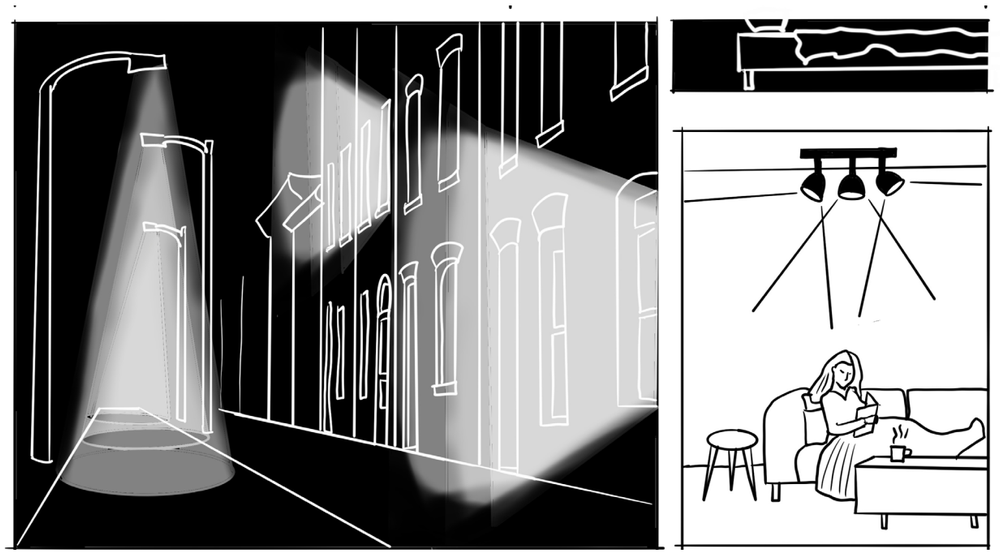


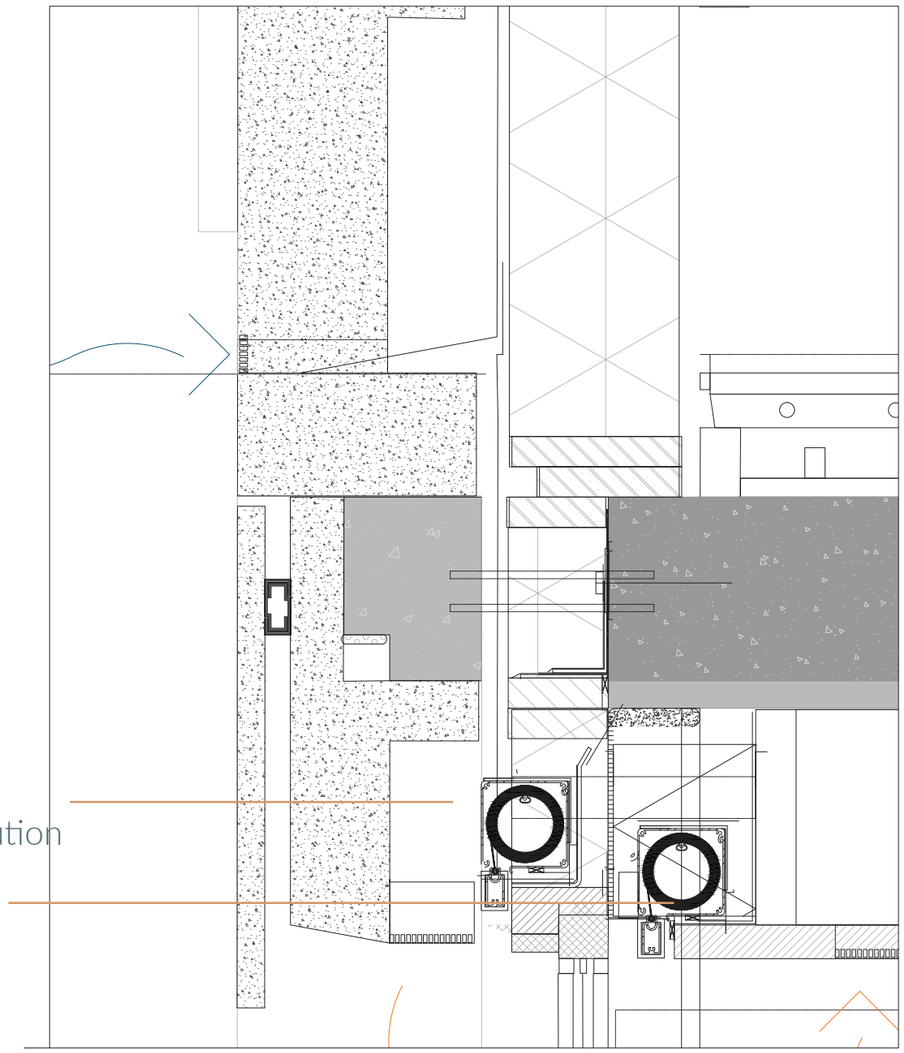




Facade- Details

Scale: 1:5



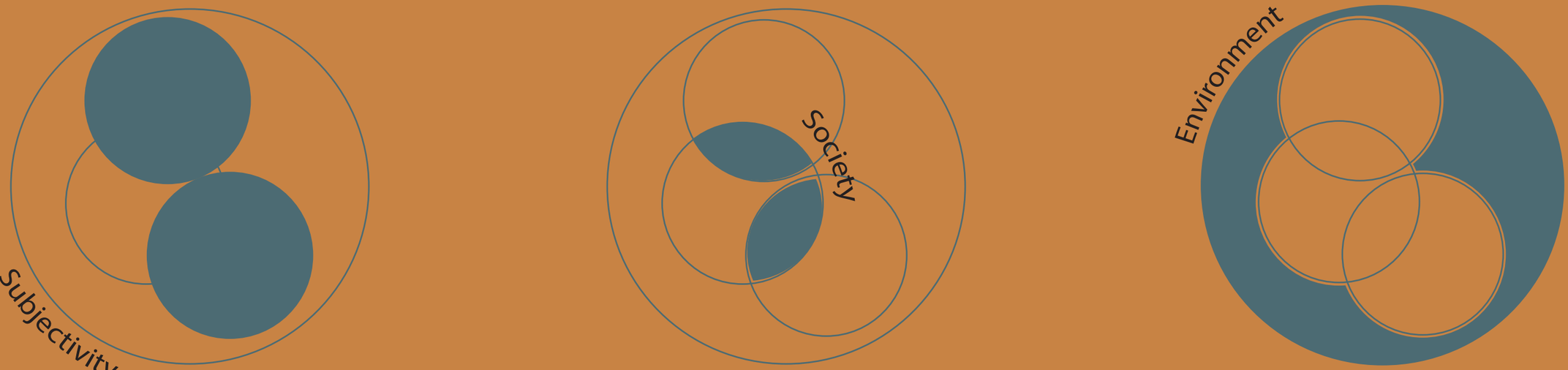


Facade - Details

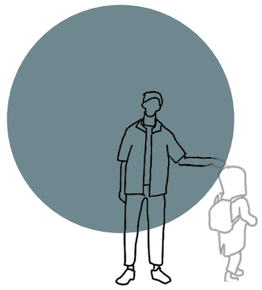
Scale: 1:5

SUMMERY

BASED ON GUATTARI'S THREE ECOLOGIES

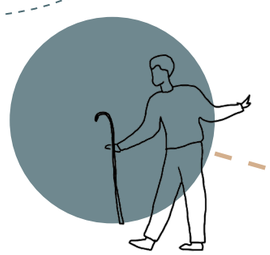


CONTINUE

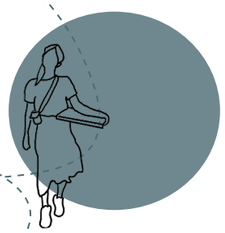


Solo-parent

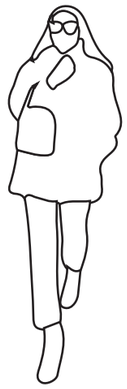
Middle aged adult

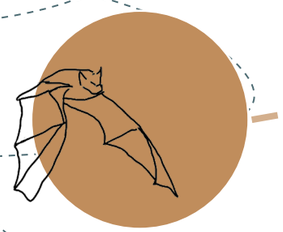


Elderly



Starter

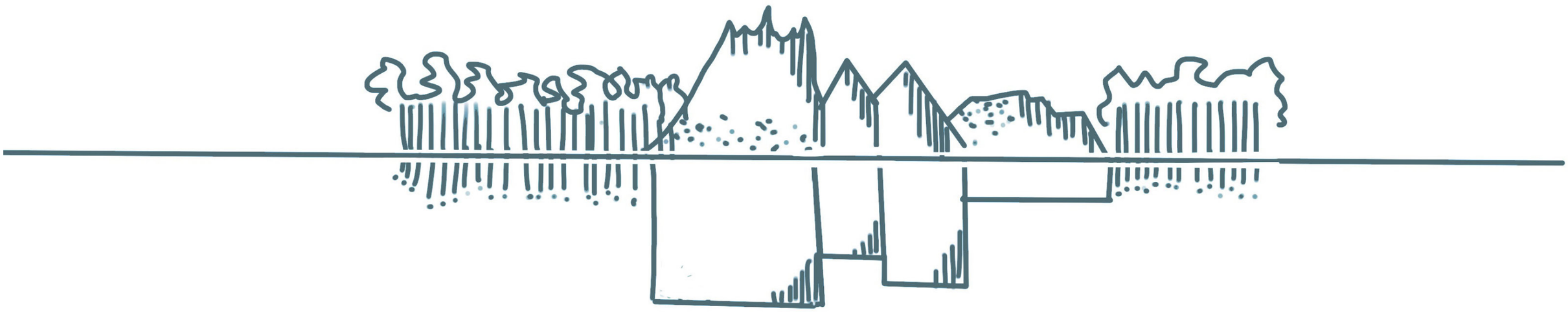




ECOLOGIES OF INCLUSION

TOGETHERNESS

THANK YOU!



37% Private units

9% Shared areas

12% Coliving spaces

16% Collective facilities

17% Public facilities

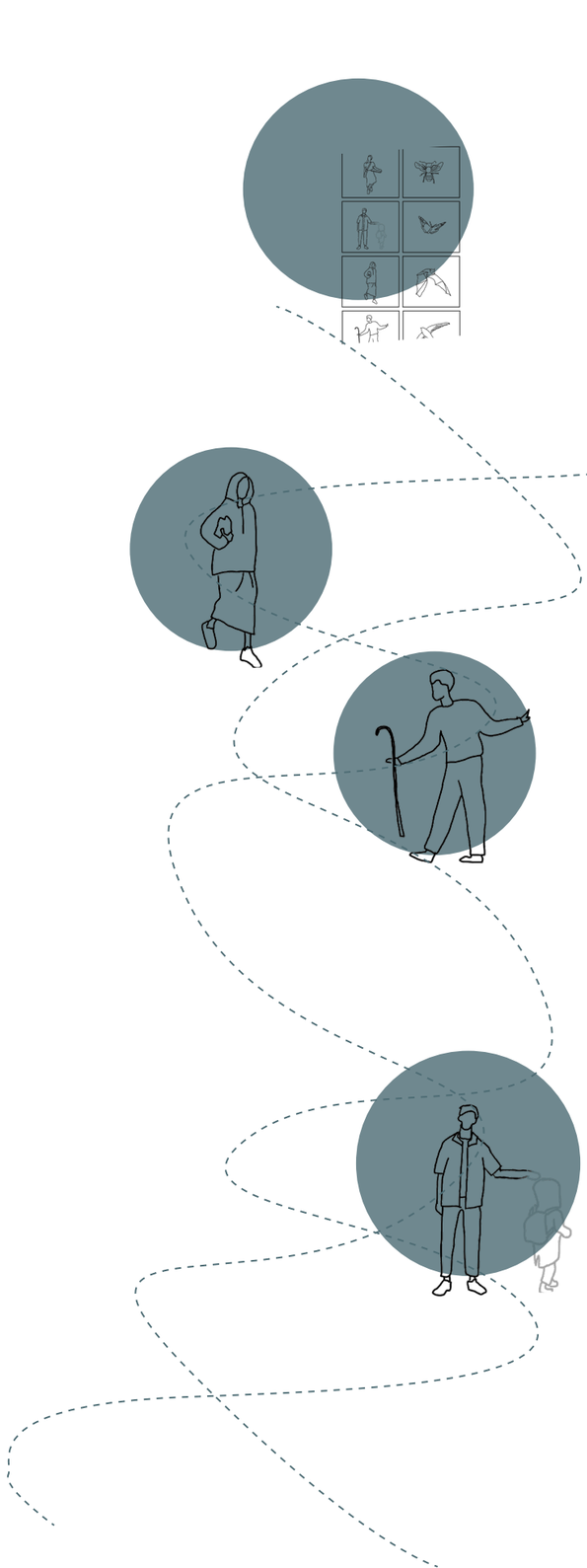
5% Circulation

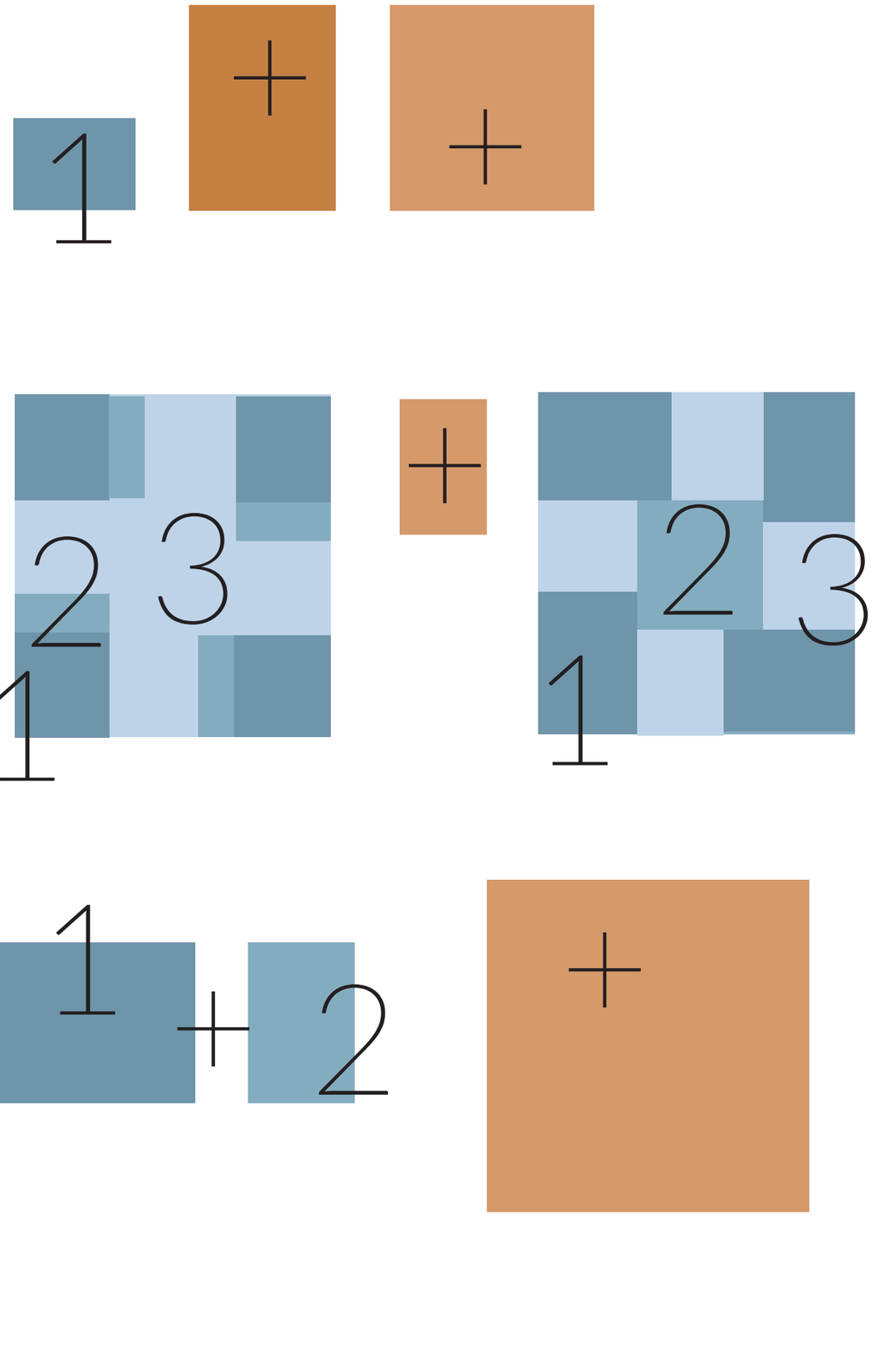
4% Others

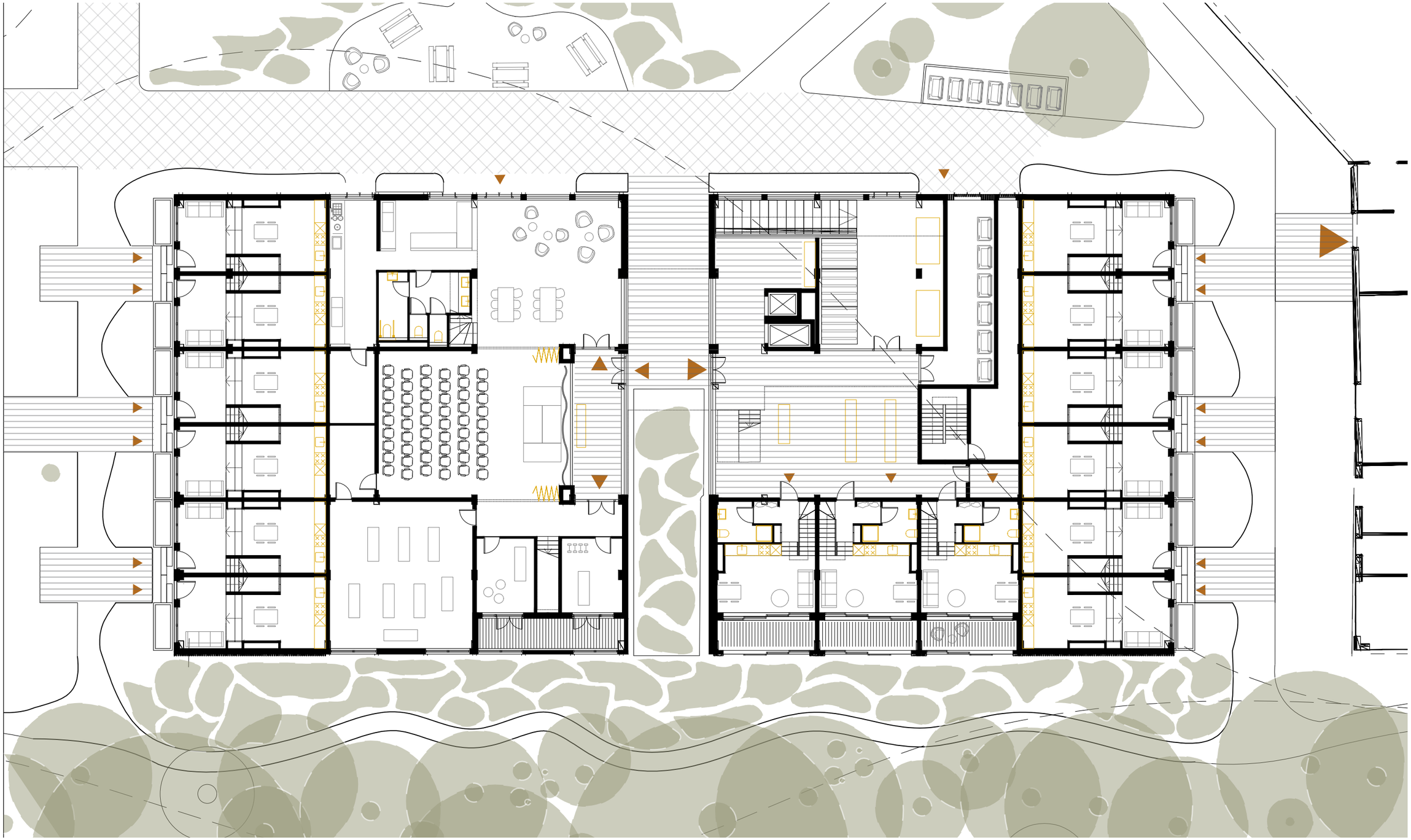
Program

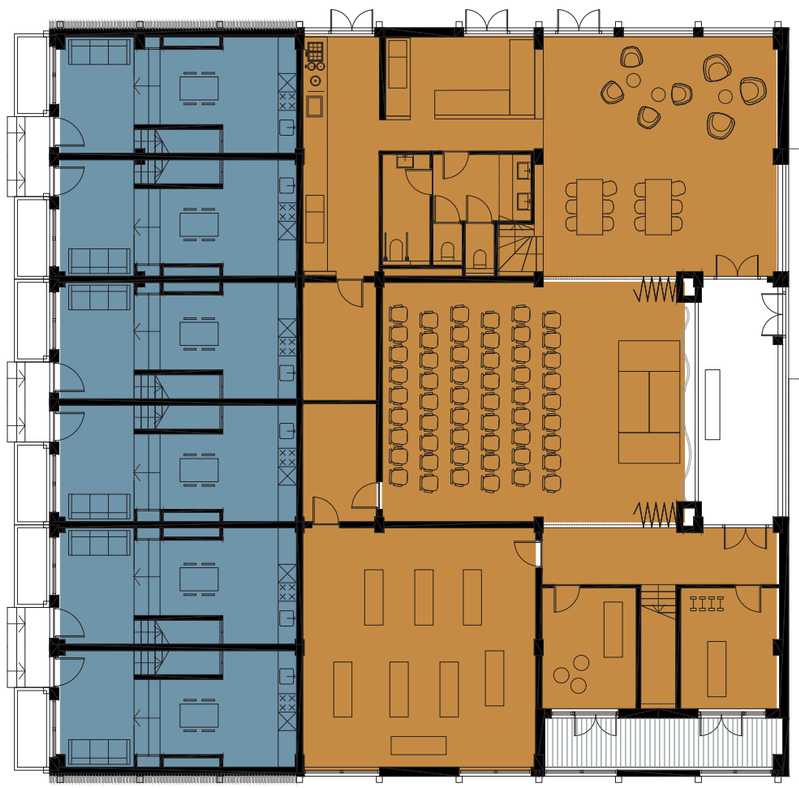
Public and Collective

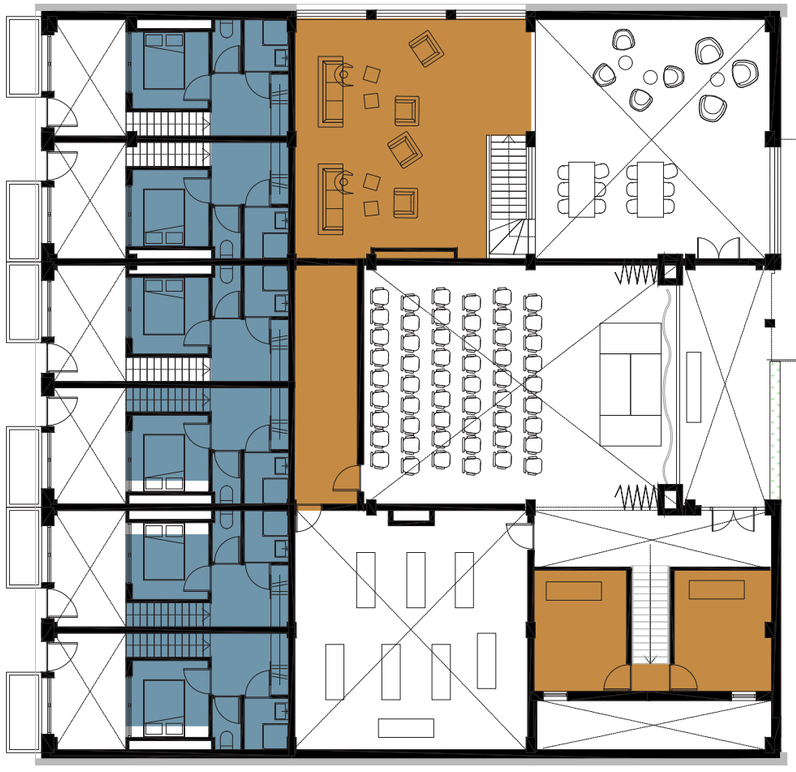
Functions

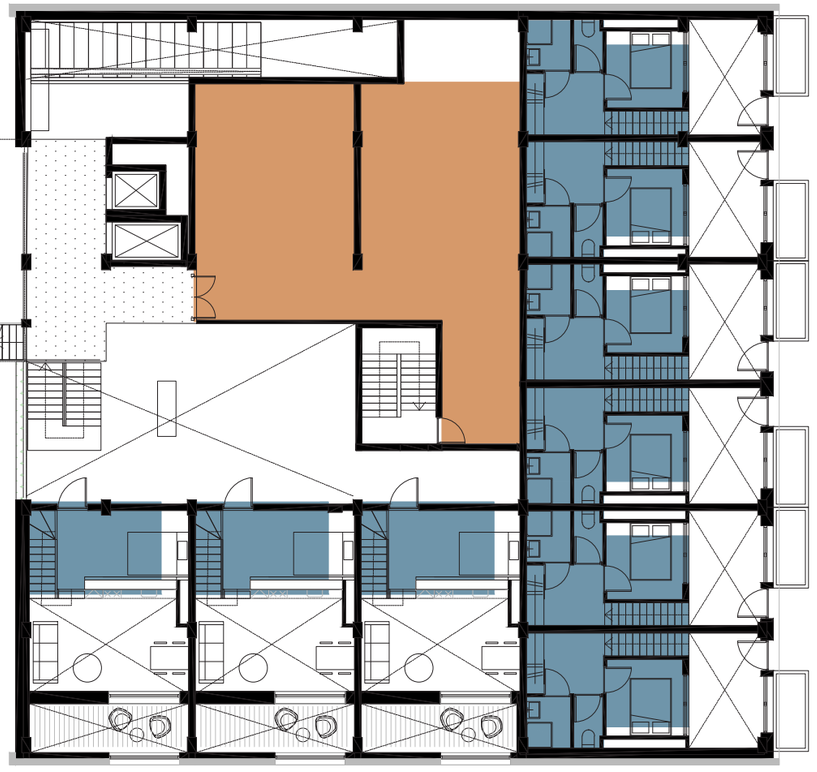










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