

AFFORDABLE HOUSING IN AMSTERDAM, MICRO APARTMENTS FOR THE NEW URBANITES



1. CURRENT SITUATION



2. RESEARCH



3. DESIGN

1. CURRENT SITUATION



Onderzoek De stille woonrevolutie

Van hippiestad tot pretpark voor hoogopgeleiden

10 mei 2017 In Amsterdam wordt ruim een kwart van de huizen gekocht zonder geleend geld, meldt De Nederlandsche Bank (DNB) deze week. In februari van dit jaar beschreef Floor Milikowski in 'De Groene' hoe de liberalisering van de woonmarkt ervoor zorgt dat lage inkomen naar de rand van Amsterdam worden gedreven.

<https://www.groene.nl/artikel/van-hippiestad-tot-pretpark-voor-hoogopgeleiden> (retrieved 9 May 2017)

De onweerstaanbare, onbetaalbare stad

🕒 9 mei 2017

<https://www.nrc.nl/nieuws/2017/05/09/huizenprijzen-de-onweerstaanbare-onbetaalbare-stad-8757571-a1557893> (retrieved 11 May 2017)

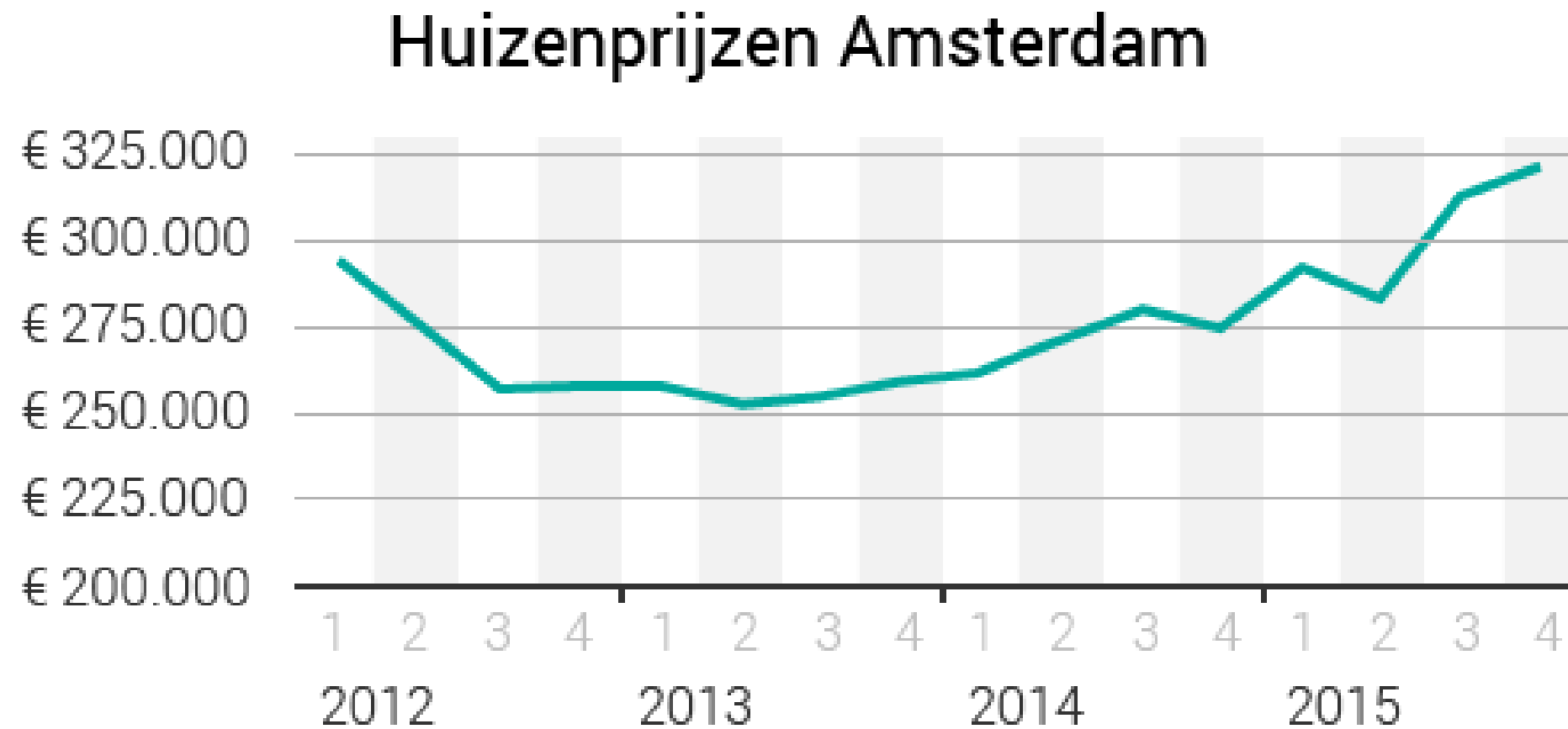
Newspapers 10th of May

Betaalbare huurwoningen voor middeninkomens: hardnekkig probleem

🕒 DINSDAG, 18:39 ECONOMIE



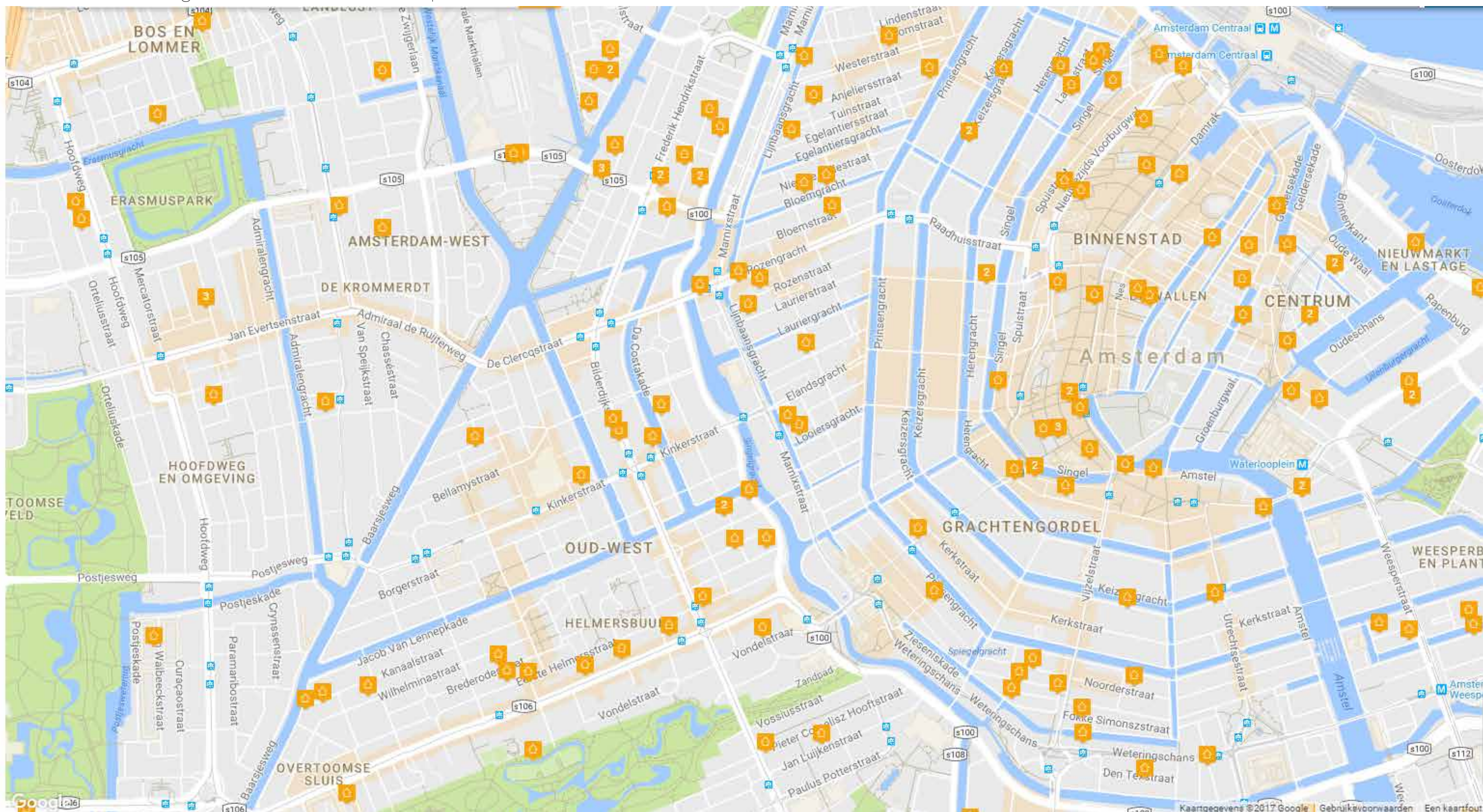
<http://nos.nl/artikel/2172307-betaalbare-huurwoningen-voor-middeninkomens-hardnekkig-probleem.html> (retrieved 9 May 2017)



- **25,03** euro per m² in city centre
- An apartment of 75 to 100 square meters will cost more than **2,100 euros** per month of rent or around **€337.000** to buy it

1. CURRENT SITUATION | HOUSING MARKET

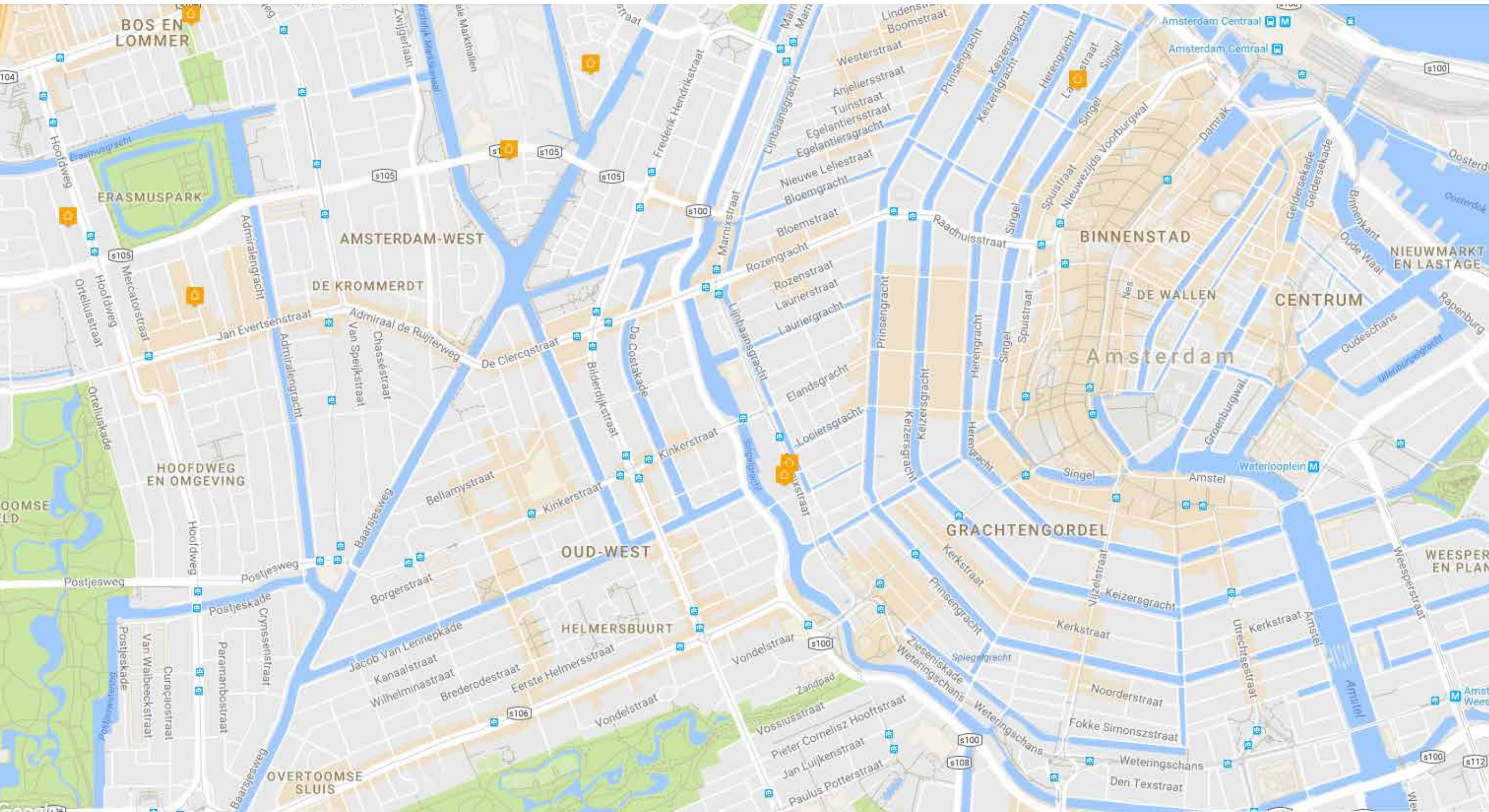
rentable housing **1250-1750** euro per month



1. CURRENT SITUATION | HOUSING MARKET

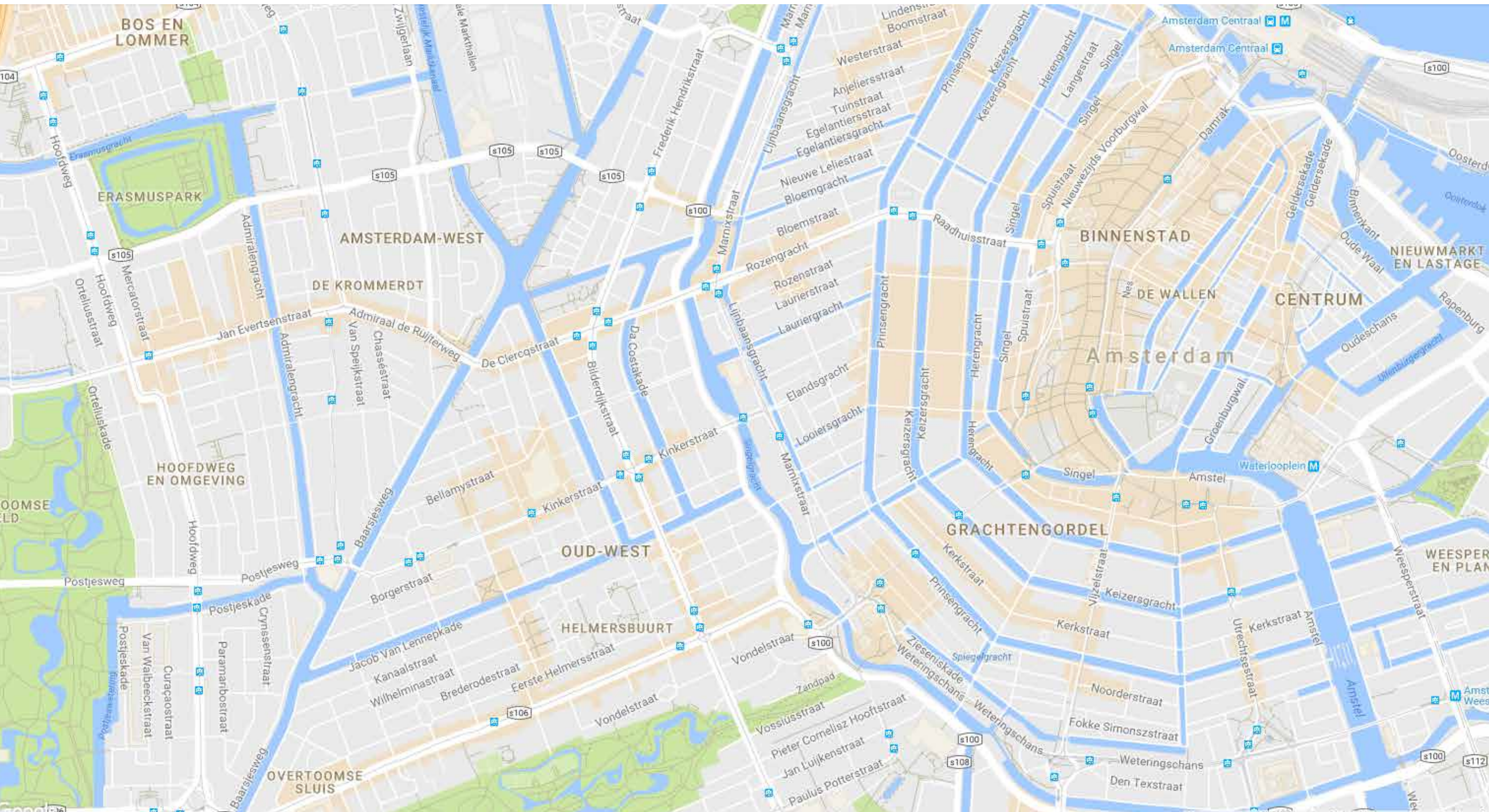
7

rentable housing **900-1250** euro per month

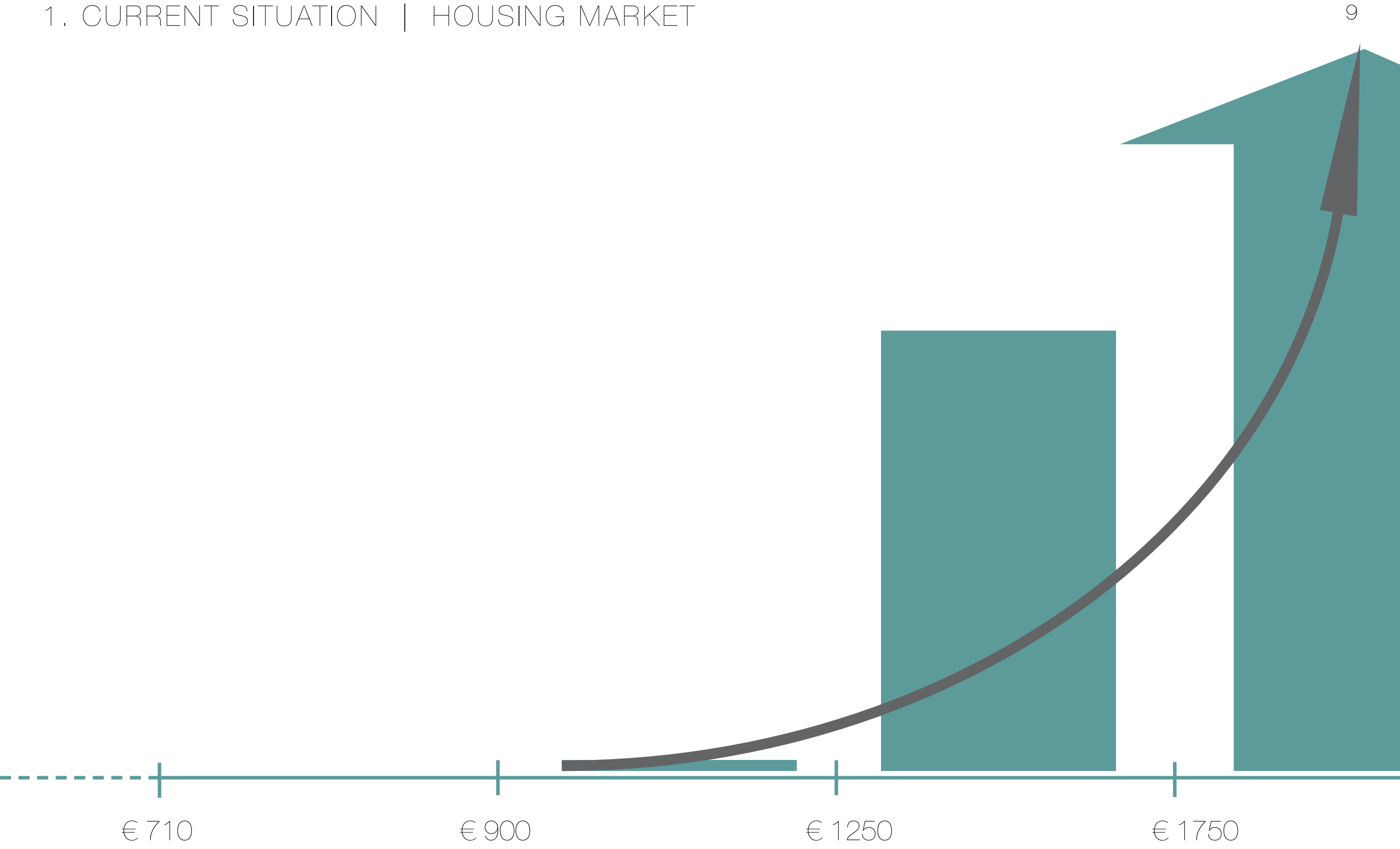


1. CURRENT SITUATION | HOUSING MARKET

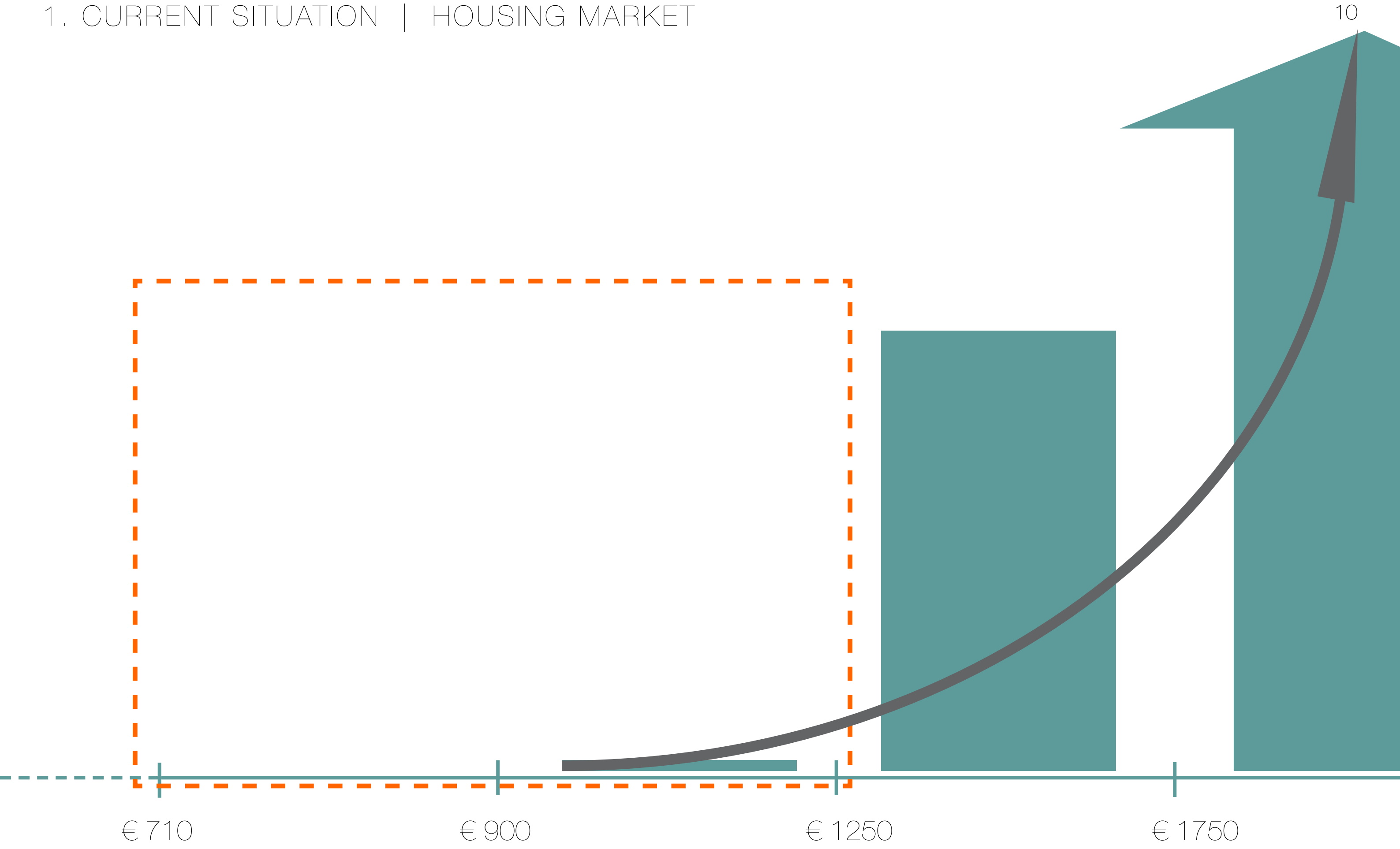
rentable housing **700-900** euro per month



1. CURRENT SITUATION | HOUSING MARKET



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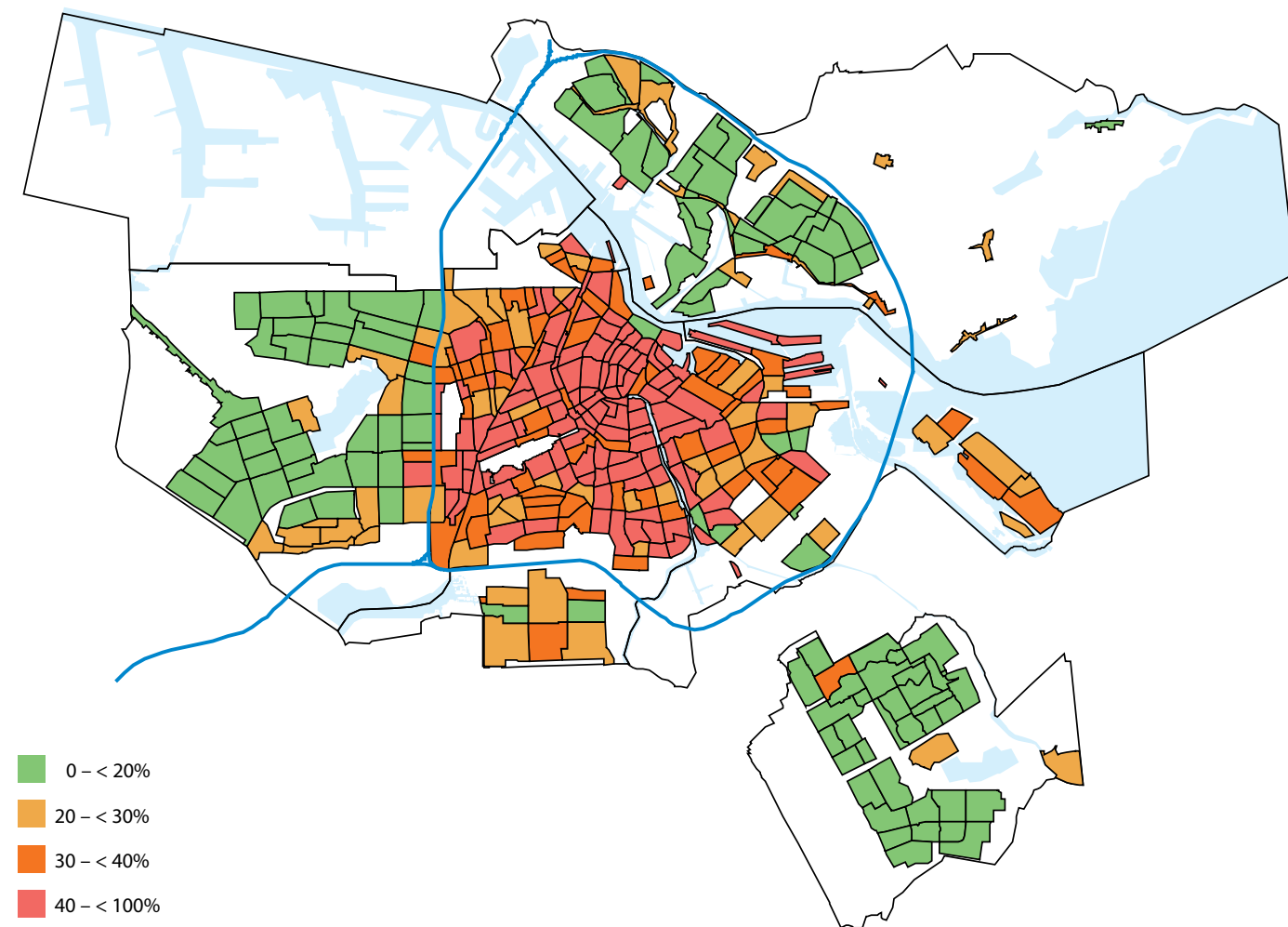


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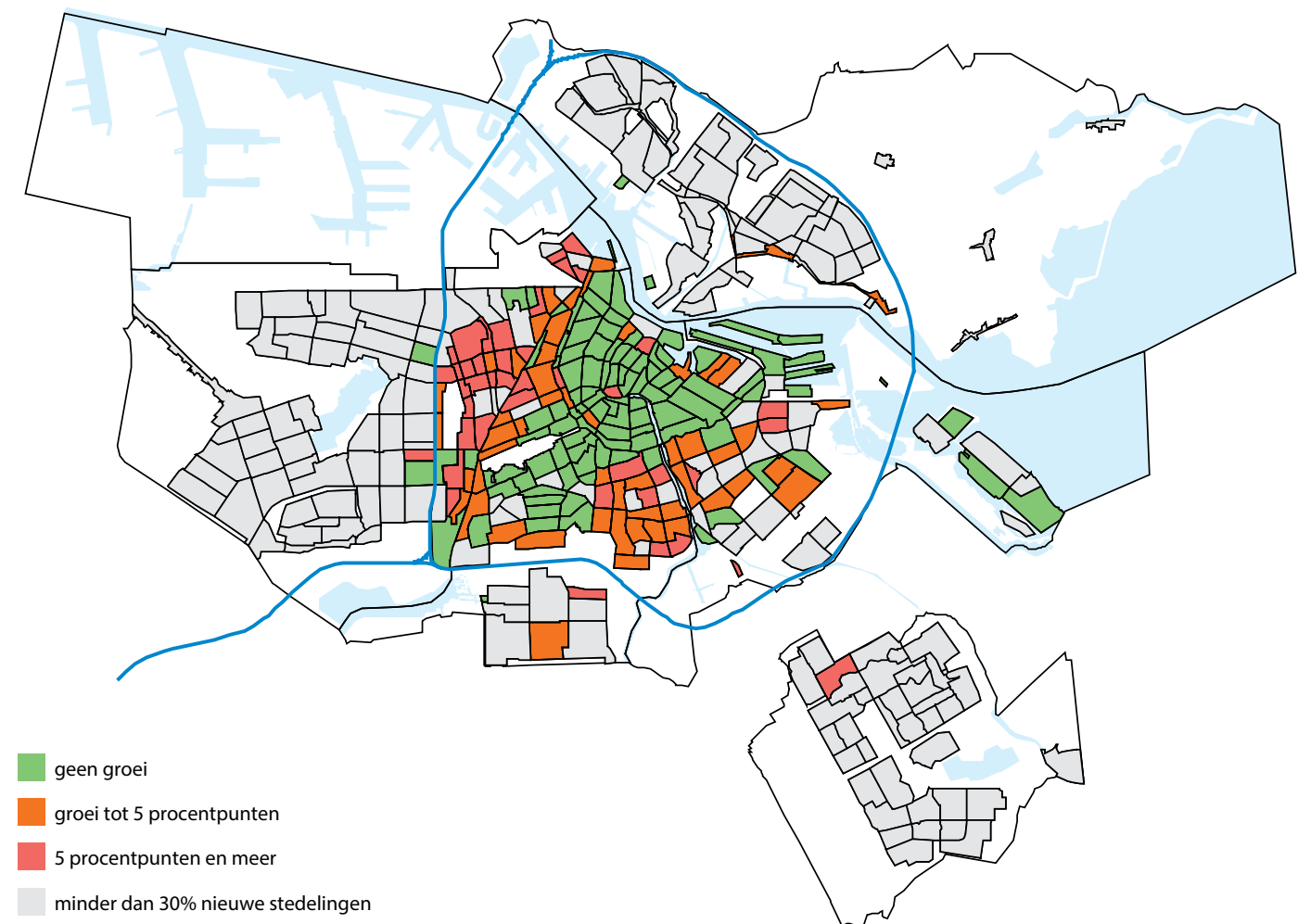
Eric Brunge of nArchitects, designer of the first micro-apartment building in New York, states;

*"It's very important that cities remain affordable. It's not just a question of human right and ethics, **it's the only key to a really diverse and vibrant and social and economic resilient city**".*

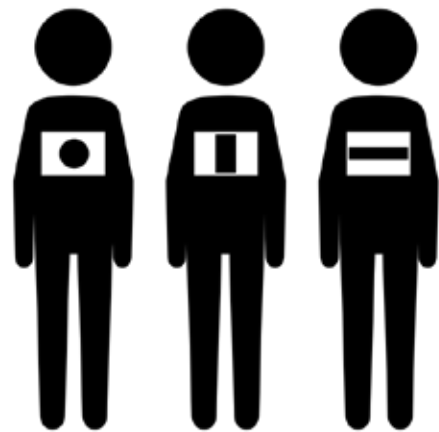
Number of new urbanites per neighborhood, 2012



Growth of the number of new urbanites per neighbourhood, 2002-2012



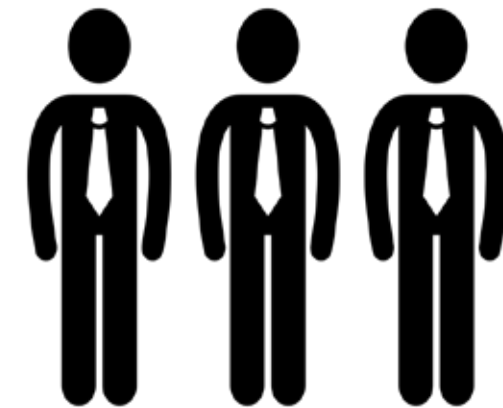
Persons of Dutch- or other Western origin
Come from outside Amsterdam
Are between 18 years 55 years old



Expats



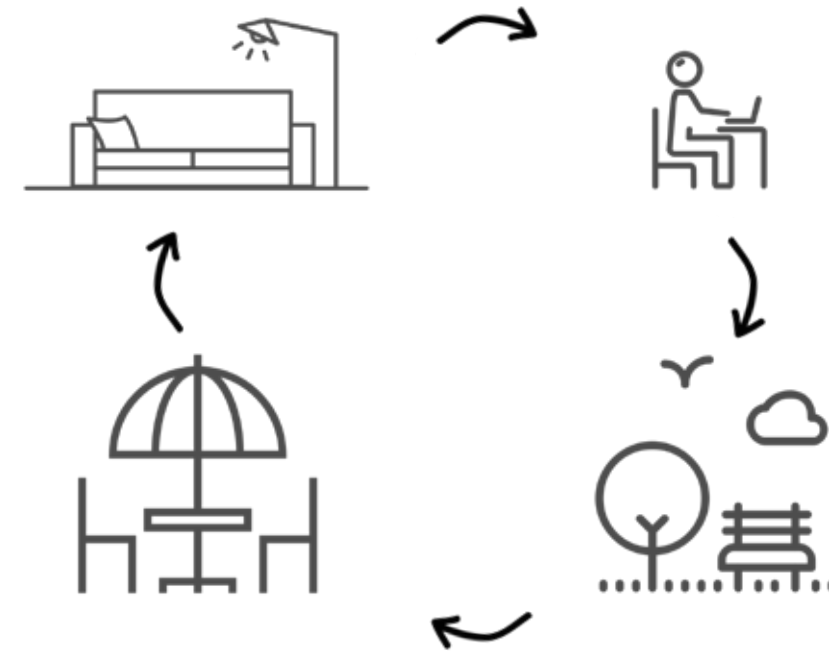
Starters (20-35 years)



Working people (25-45 years)



The city is there living room, social network close to their home



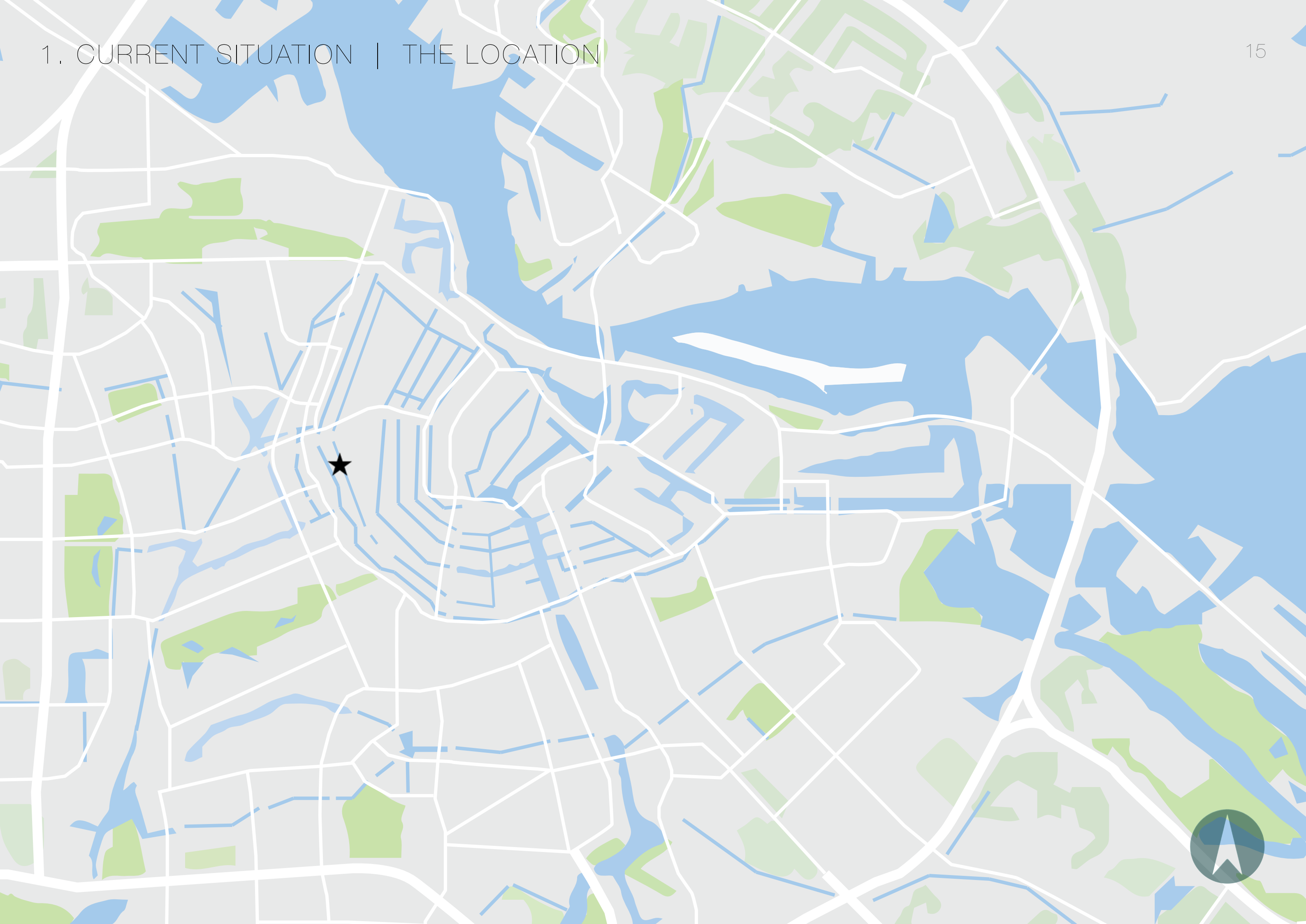
They have a flexible work- and living environment



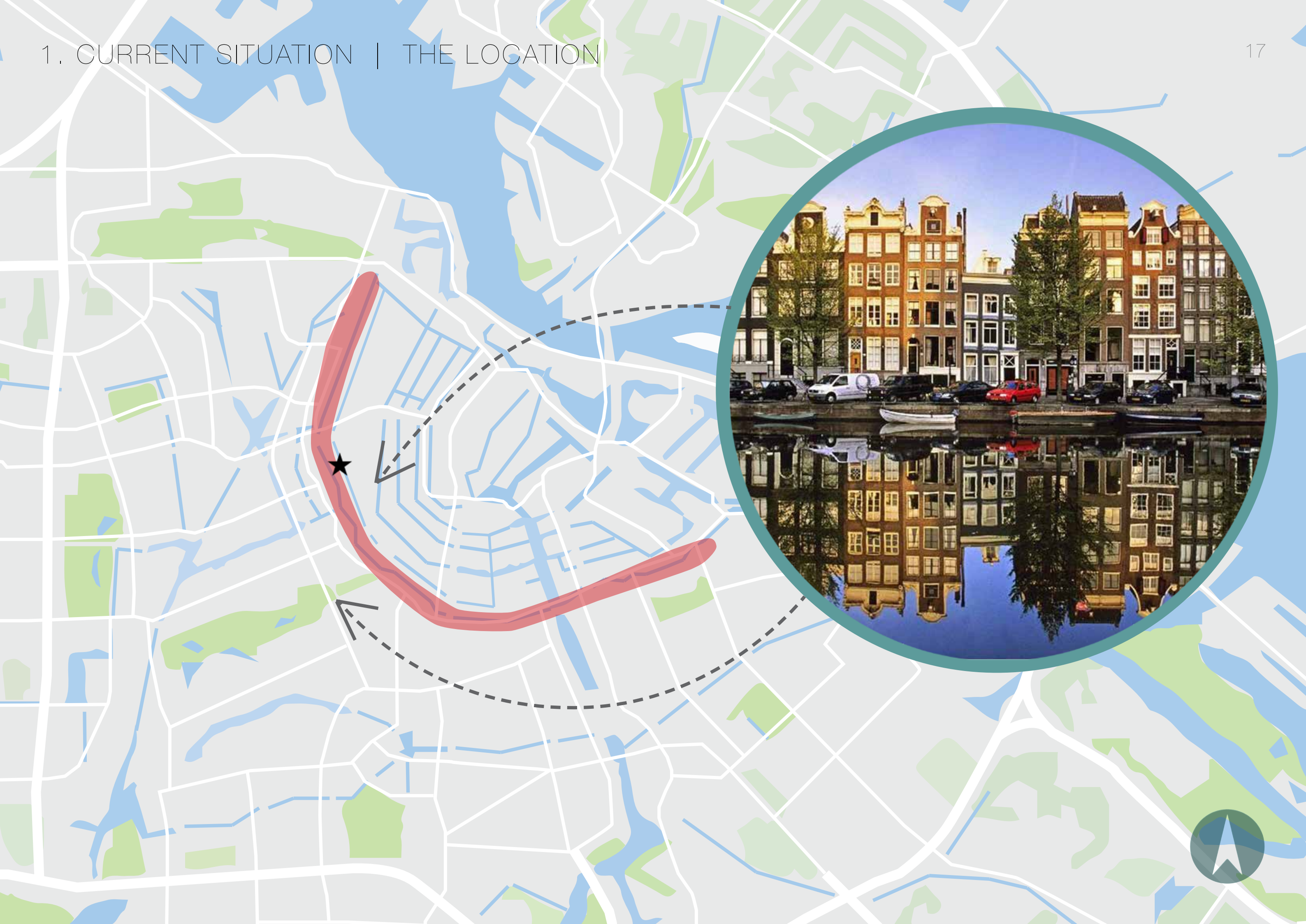
Sharing is the new way of owning



Sustainability is part of their lifestyle









Swimmingpool de Marrix



dwelling / office



Police office



Dutch Bank



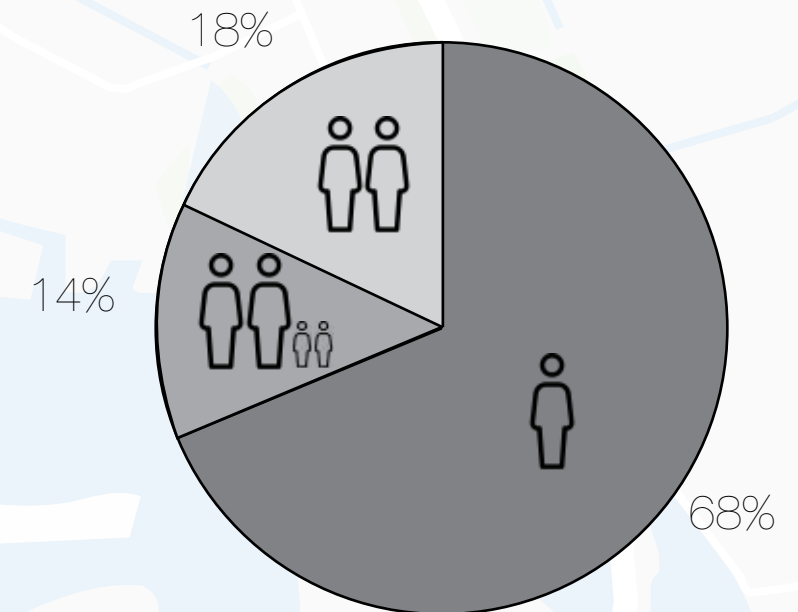
American Hotel



Modern apartment block

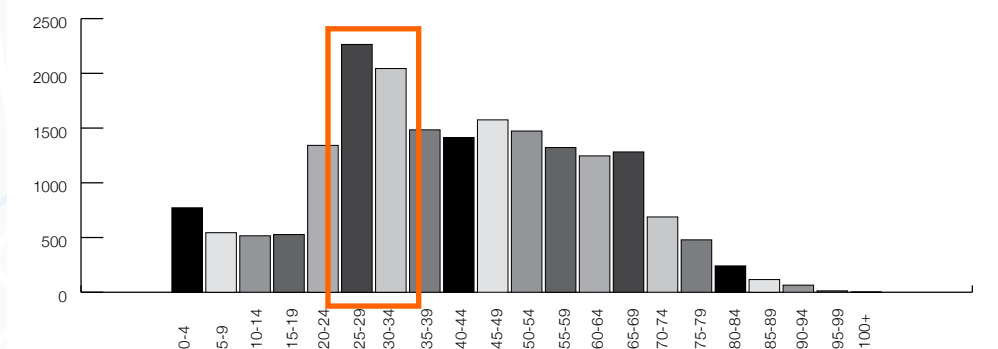


HOUSEHOLDS (JORDAAN)



Average home occupation = 1,5

AGE (JORDAAN)



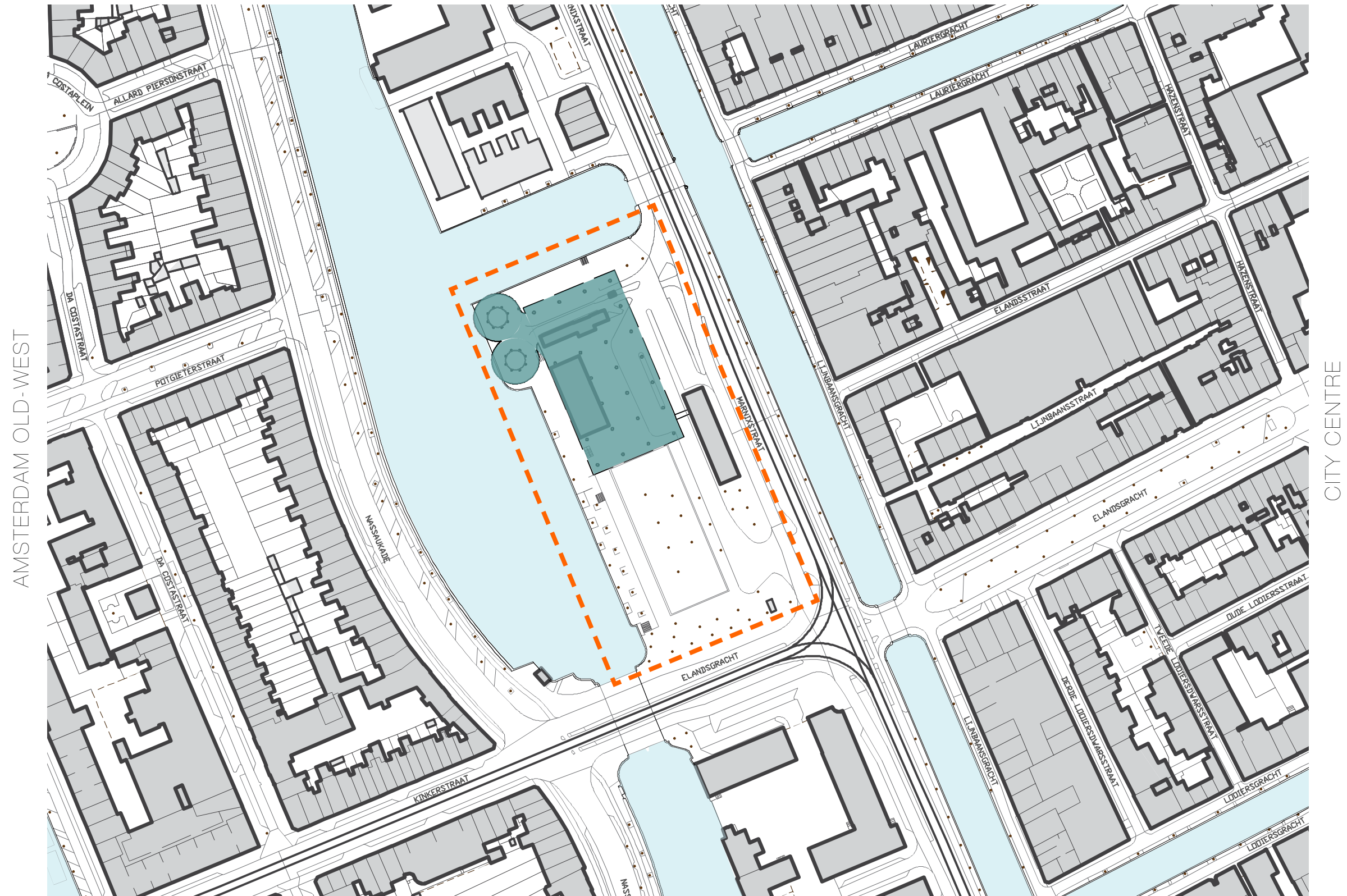
Age 26-29 most present

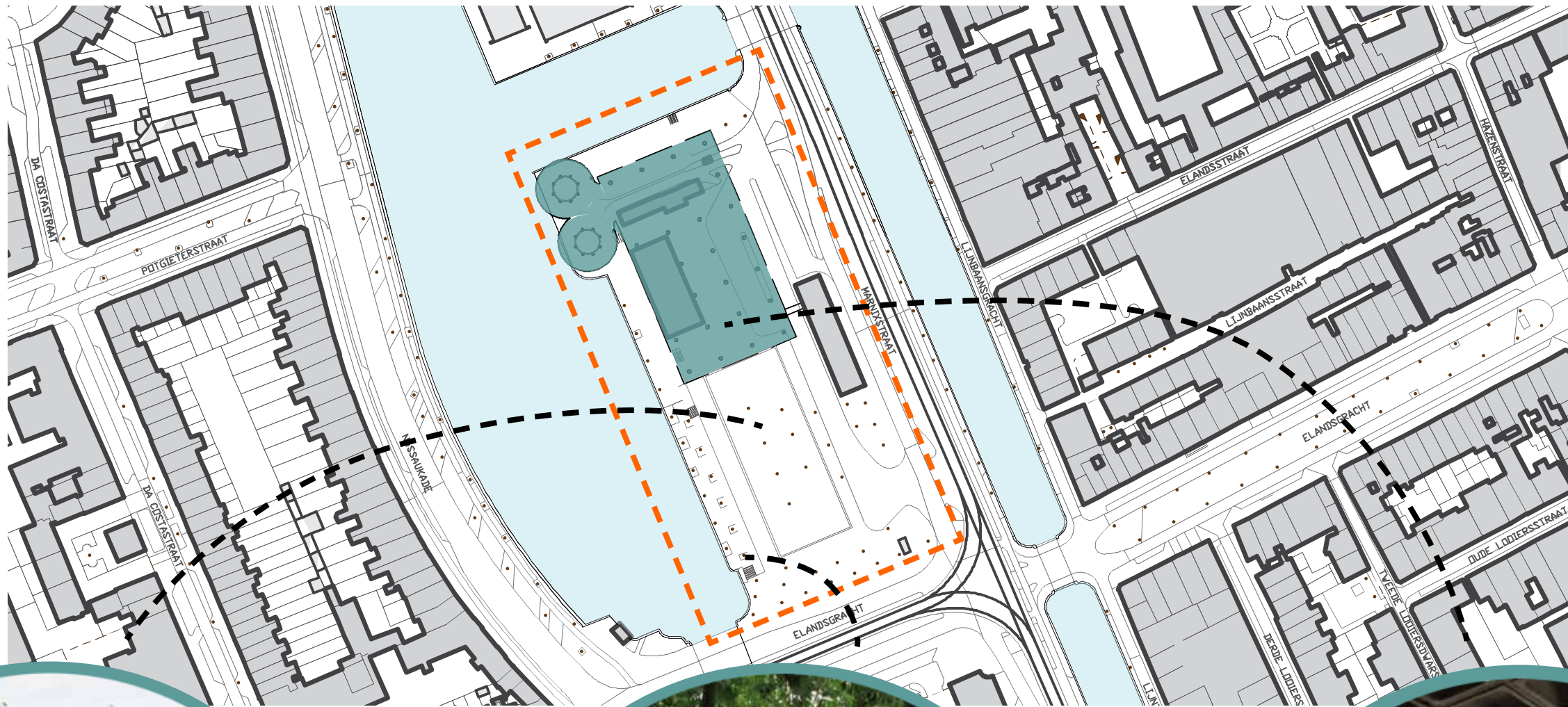
Age 30-34 second most present





JORDAAN





Square with parking garage in the background



Boulevard and square with the parking garage in the background



Open ground floor below the parking garage, overlooking the square





restaurant below the spirals of the parking garage, with view on te water



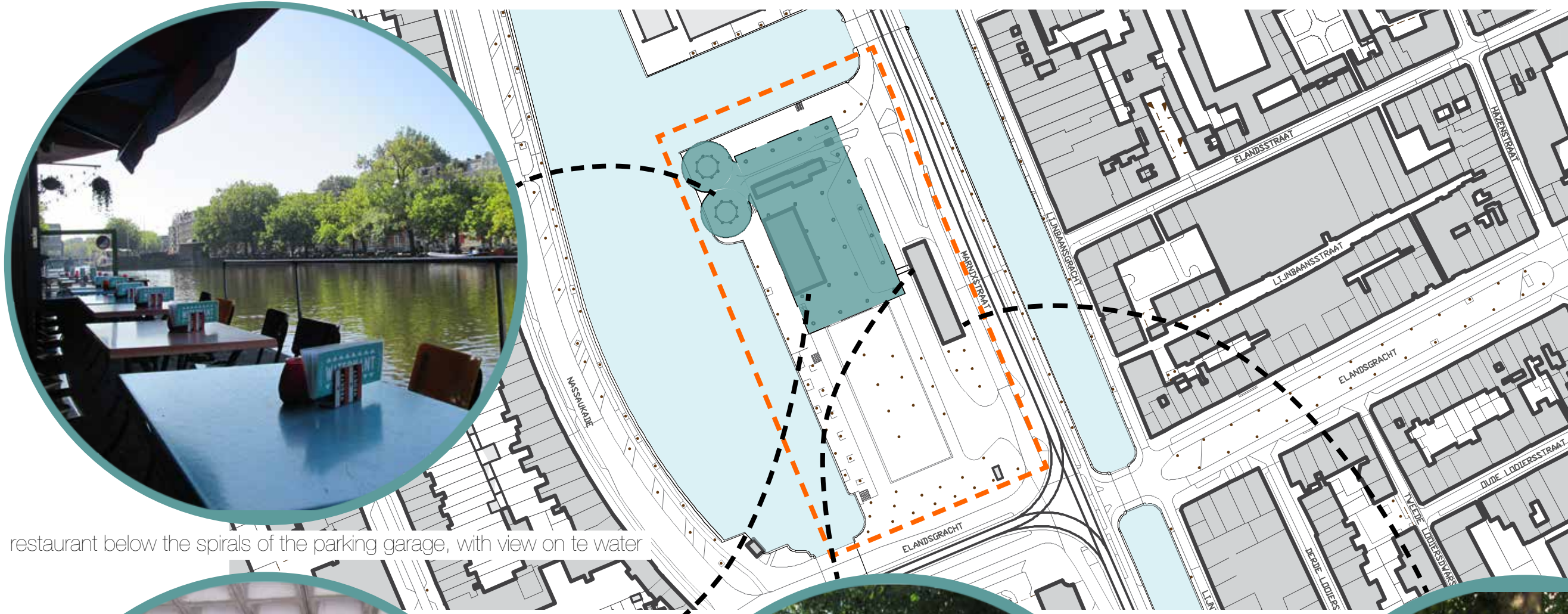
stoelenproject below the parking garage



tankstation besides the parking garage along the Mamixstraat



piano store along the Mamixstraat



2. RESEARCH



Research Question 1

Which solutions can be used to keep the rent low,
but keep the living comfort high?

Zijn micro-appartementen in het stadscentrum de toekomst?

<https://vastgoedjournaal.nl/news/17493/57/Zijn-micro-appartementen-in-het-stadscentrum-de-toekomst/> (retrieved 17 October 2016)

Stad zoekt in 'Tiny Houses' betaalbare woonvormen

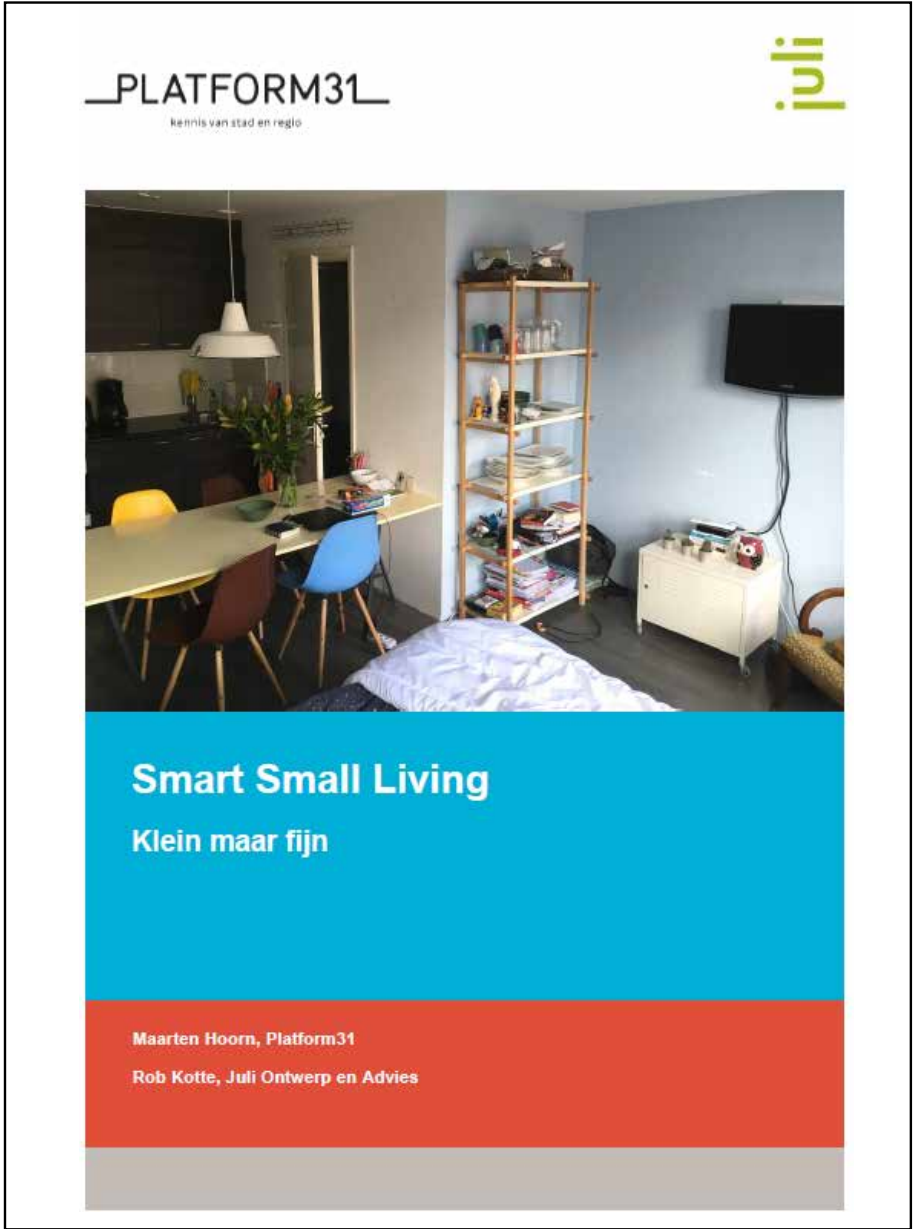
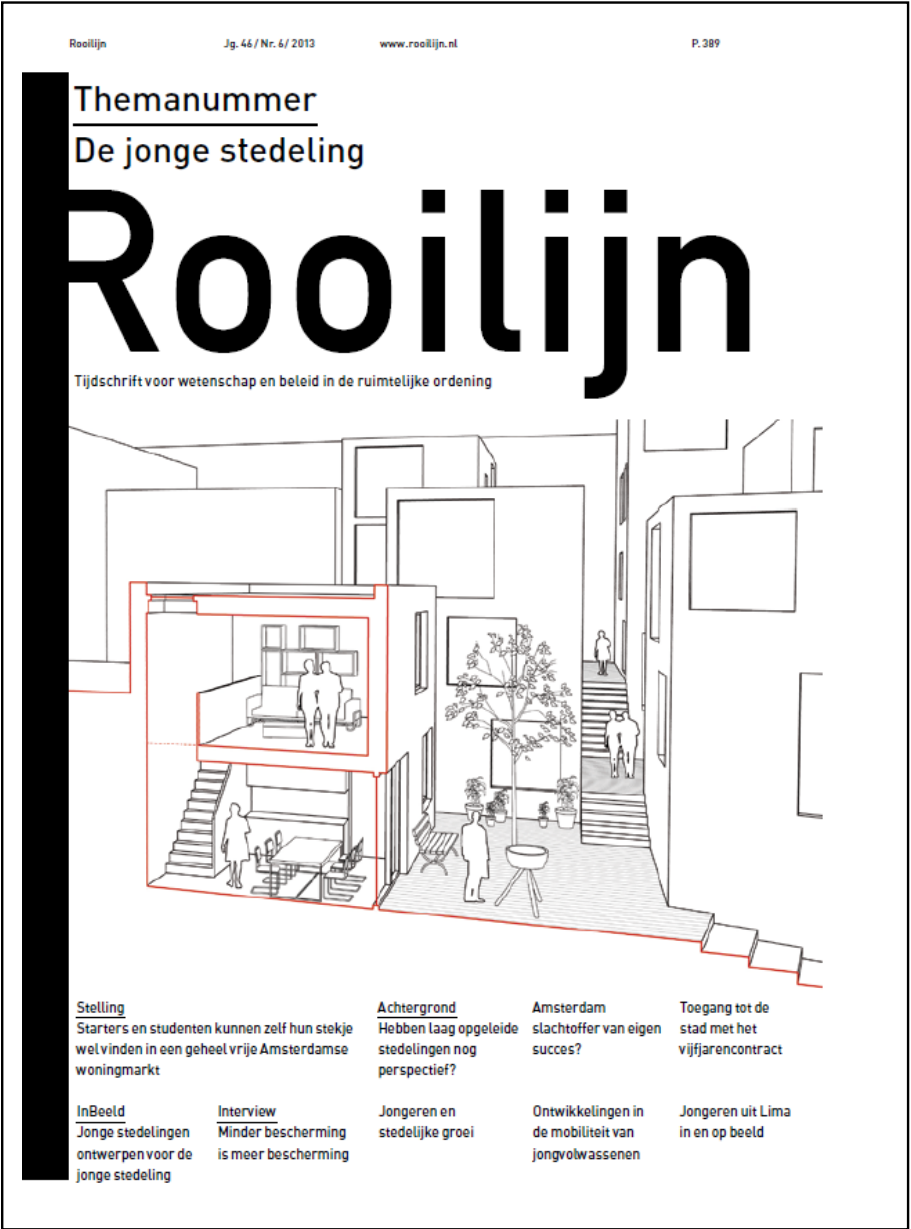
<http://hetkontaktharderwijk.nl/lokaal/stad-zoekt-tiny-houses-betaalbare-woonvormen-184904> (retrieved 16-11-16)

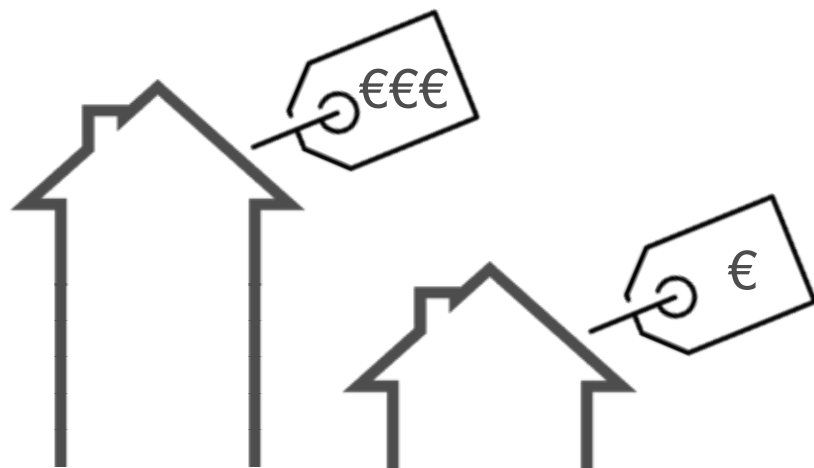
STADS WONEN OP 30M2 OF KLEINER De opkomst van micro-appartementen

<http://www.residence.nl/interieur/binnenkijken/42645-stads-wonen-op-30m2-of-kleiner/> (retrieved 17 October 2016)



<http://elsevierjuist.nl/12239-2/> (retrieved 17 october 2016)





smaller, more affordable



sharing amenities in the building



sustainable and energy-sufficient



single or duo's

Research Question 2

Which solutions can be distinguished in micro apartments, in order not to make it claustrophobic?

Research Question 3

What do the new urbanites need in their apartments or in the building and is simultaneously a valuable contribution to the city?



Donghyum Kim's Micro Housing Concept



Gans Studio - Micro Housing Concept



Micro Urban Prefab Project



EkoHaus Freedom Center



Ivy Lofts - micro apartments



Nakagin Capsule Tower



Micro Huntong - Try-out



Smart City lofts



Songpa Micro Housing

CARMEL PLACE • NEW YORK



ZOKU HOTEL • AMSTERDAM



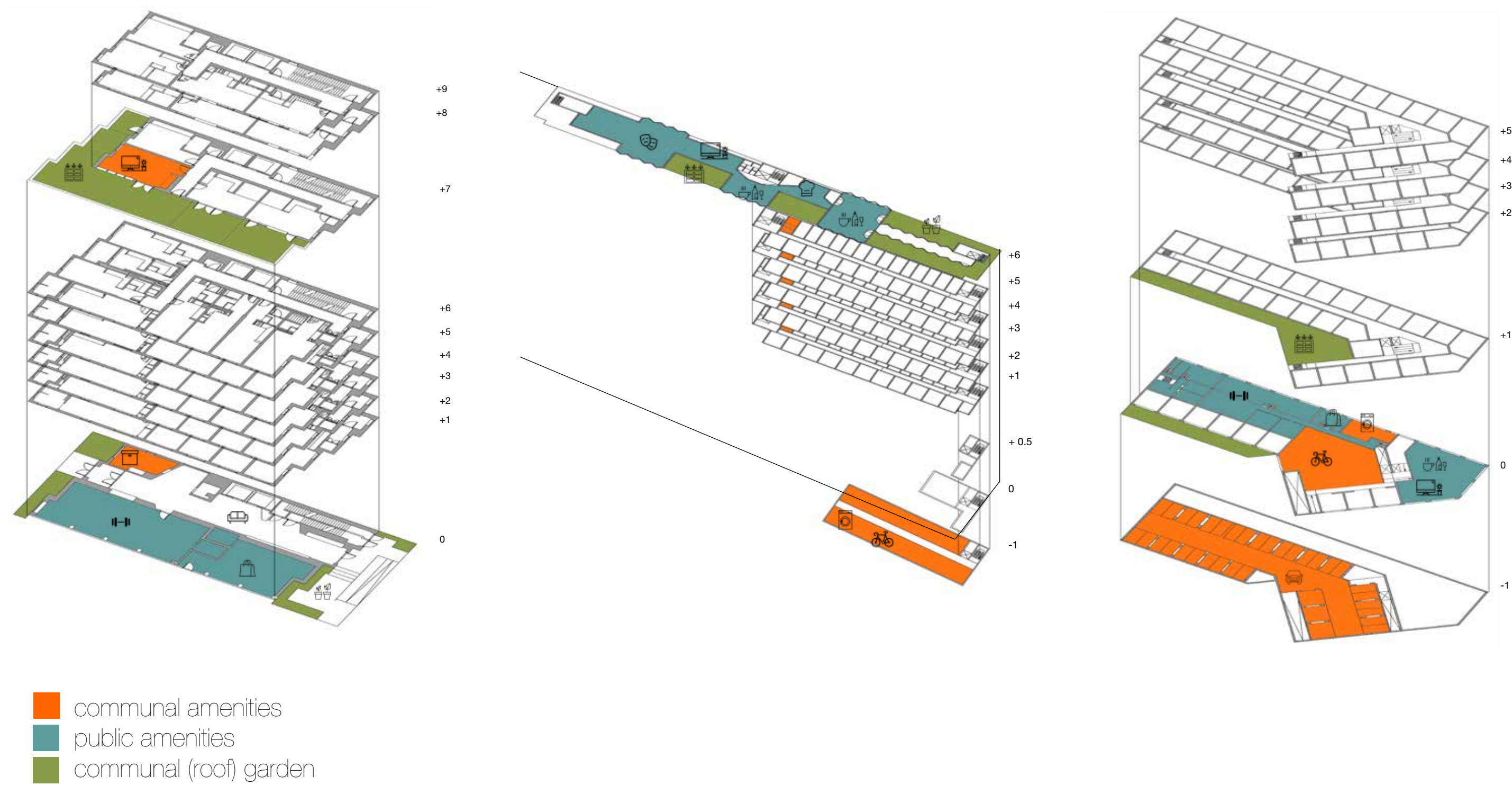
DE LOFTS 020 • AMSTERDAM



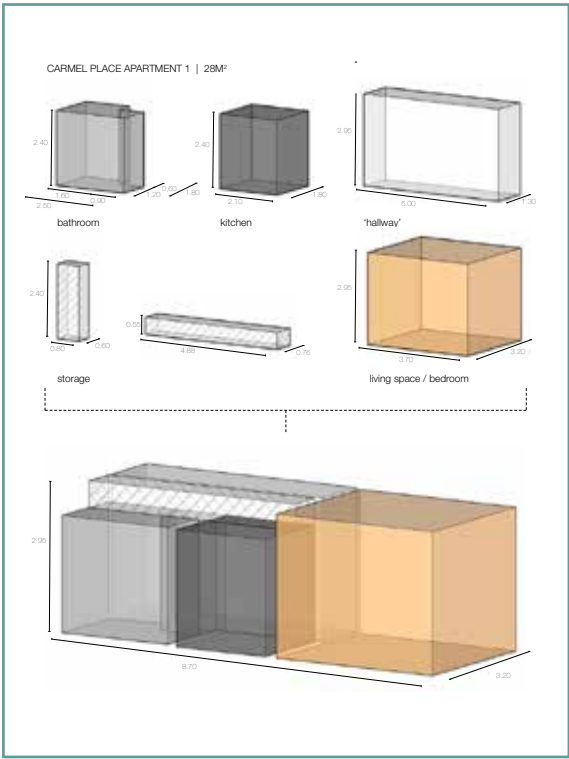
CARMEL PLACE • NEW YORK

ZOKU HOTEL • AMSTERDAM

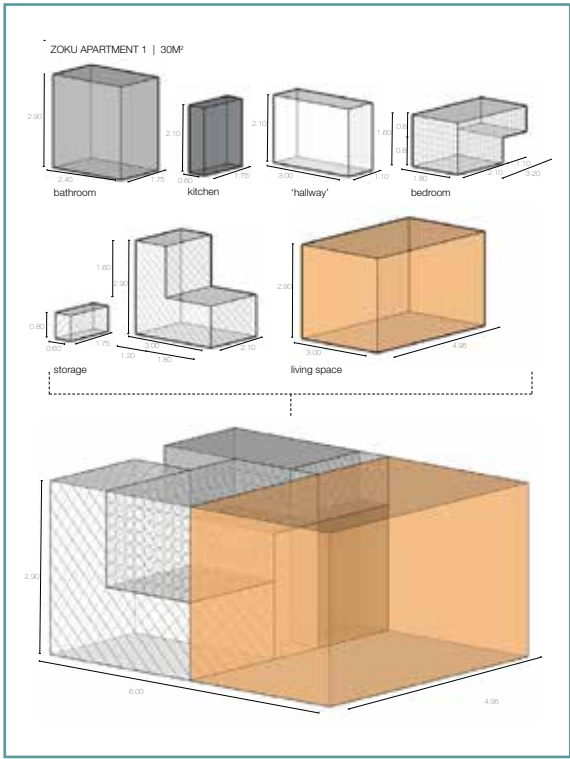
DE LOFTS 020 • AMSTERDAM



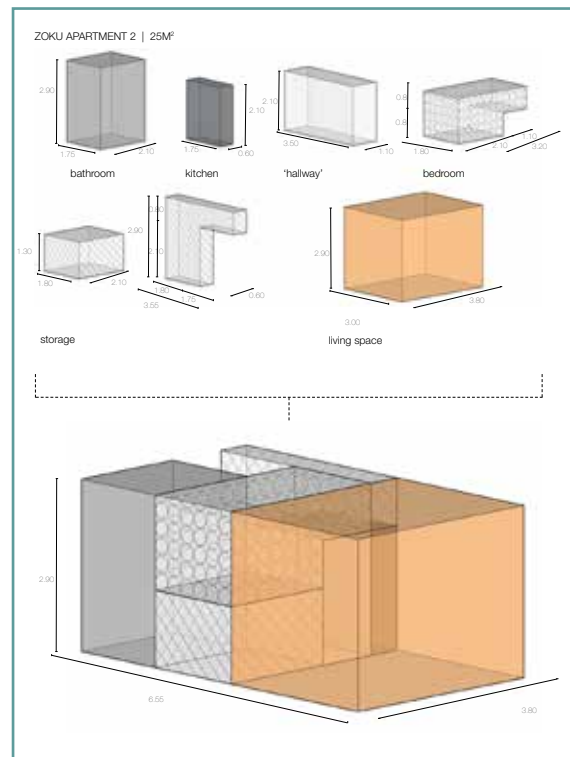
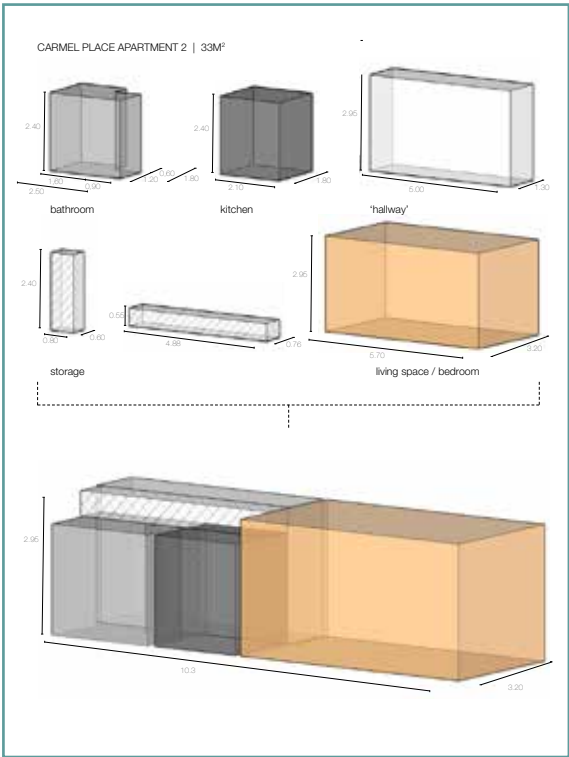
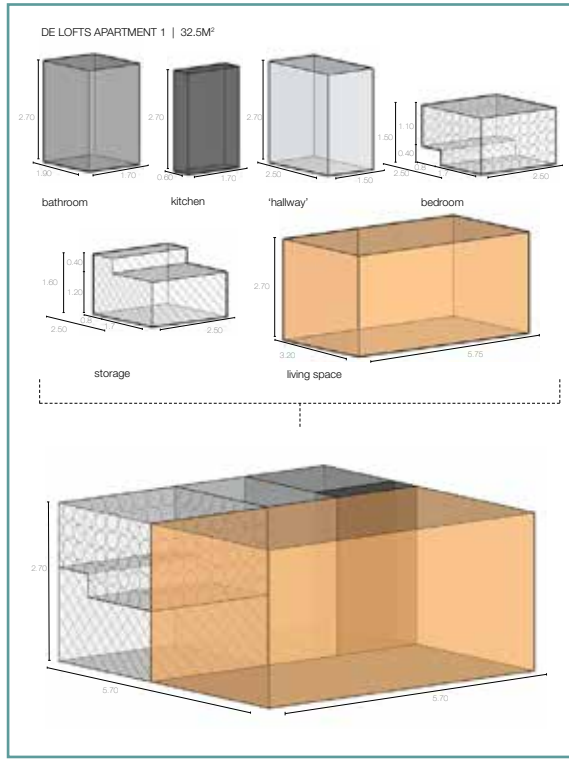
CARMEL PLACE • NEW YORK



ZOKU HOTEL • AMSTERDAM

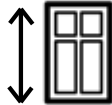


DE LOFTS 020 • AMSTERDAM



- hallway
- kitchen
- bath room
- storage
- bed room
- living room

SOLUTIONS



extra storage space (under bed or above bath room)

high ceiling (between 2.7 m - 2.95 m)

big windows

sliding windows

sliding doors

smart furniture

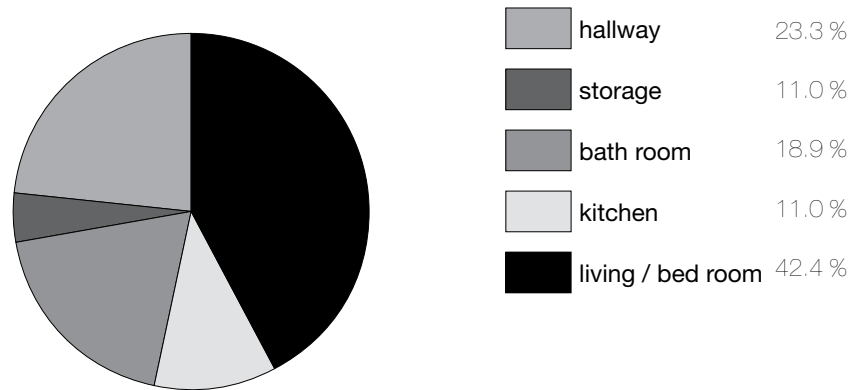
juliet balconies

or



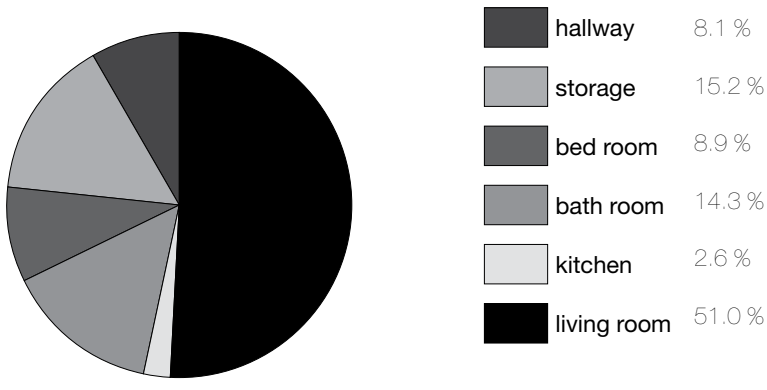
bay window

CARMEL PLACE • NEW YORK



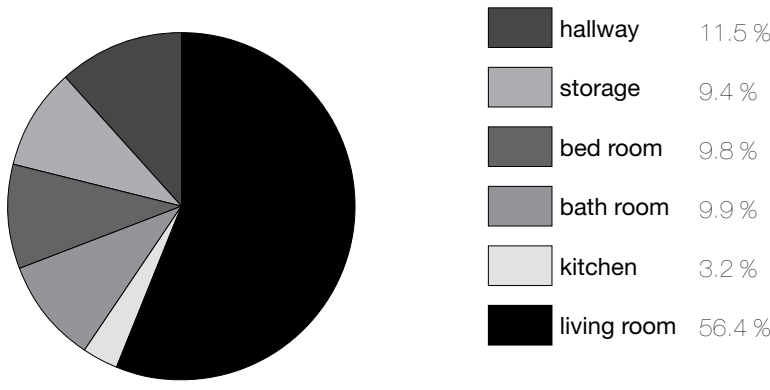
Percentage of functions in the first dwelling

ZOKU HOTEL • AMSTERDAM

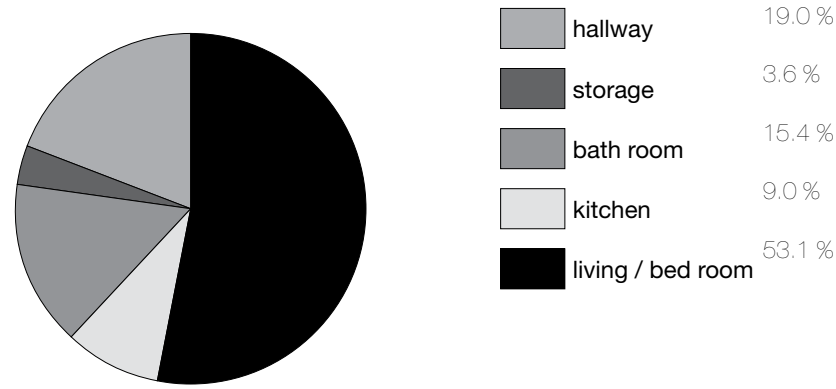


Percentage of functions in the first dwelling

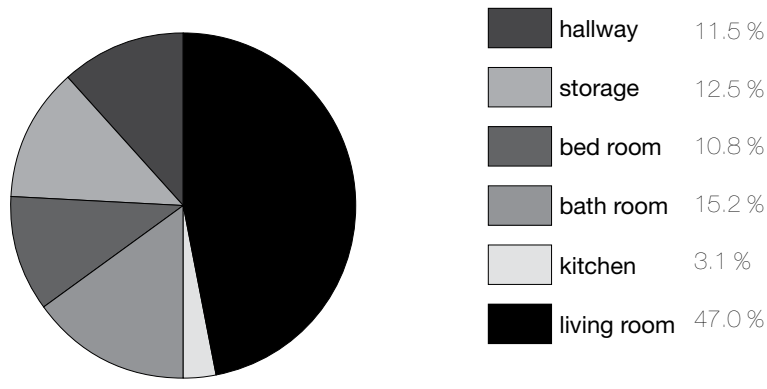
DE LOFTS 020 • AMSTERDAM



Percentage of functions in the dwelling



Percentage of functions in the second dwelling

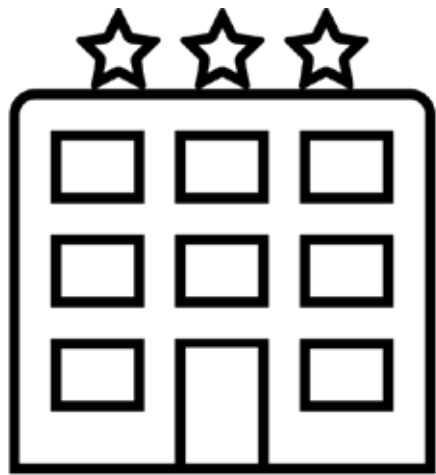


Percentage of functions in the second dwelling

storage 10%
living room 50 %

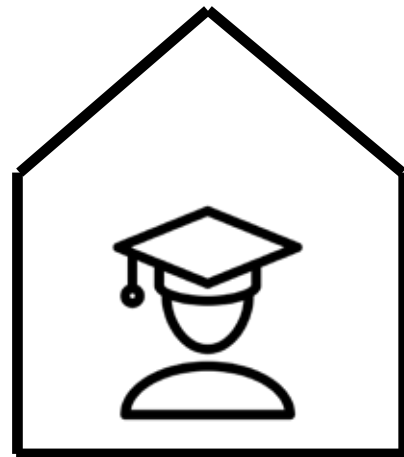
What the future residents expect

- **20 - 30 % smaller** as most apartments
- expect **25-30 % less** rent as conventional apartment
- **location & price** is very important for them
- greatest hesitancy is the **lack of storage**
- ability to **live alone**



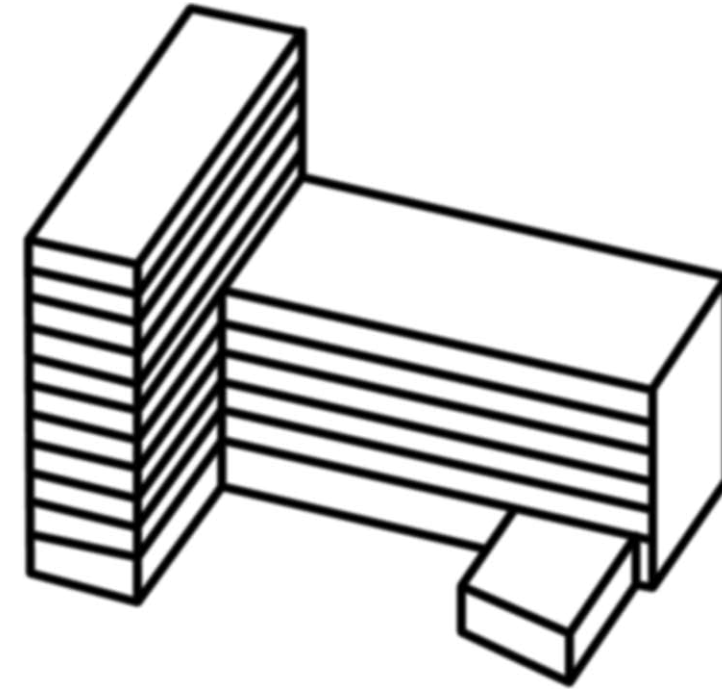
Hotel

- extra services
- no kitchen in the room
- stay for one or more days



Student house

- no extra services
- no kitchen and badroom in the room
- stay for one or more years
- need to share spaces

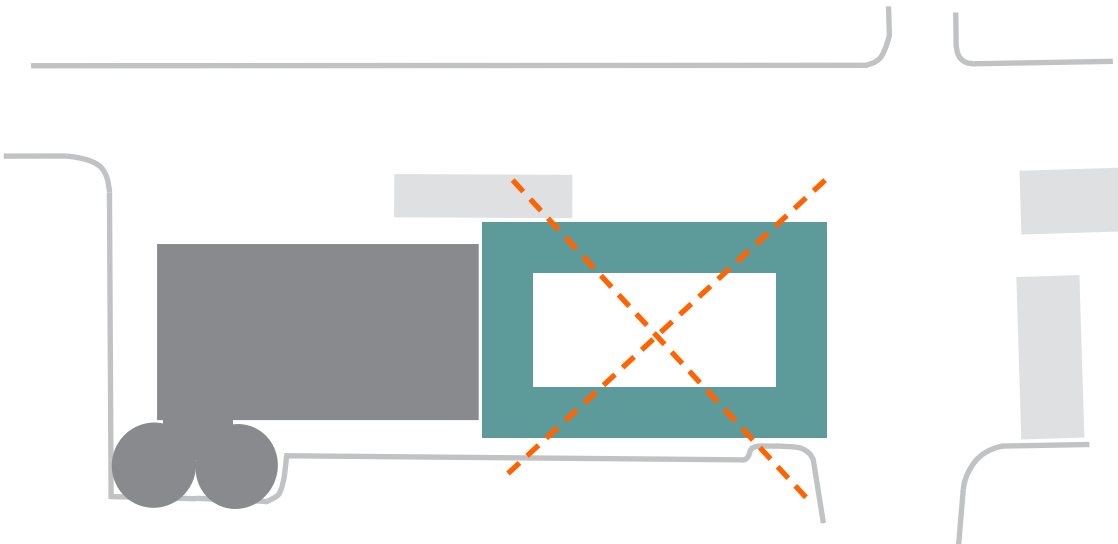


Micro apartments with shared amenities

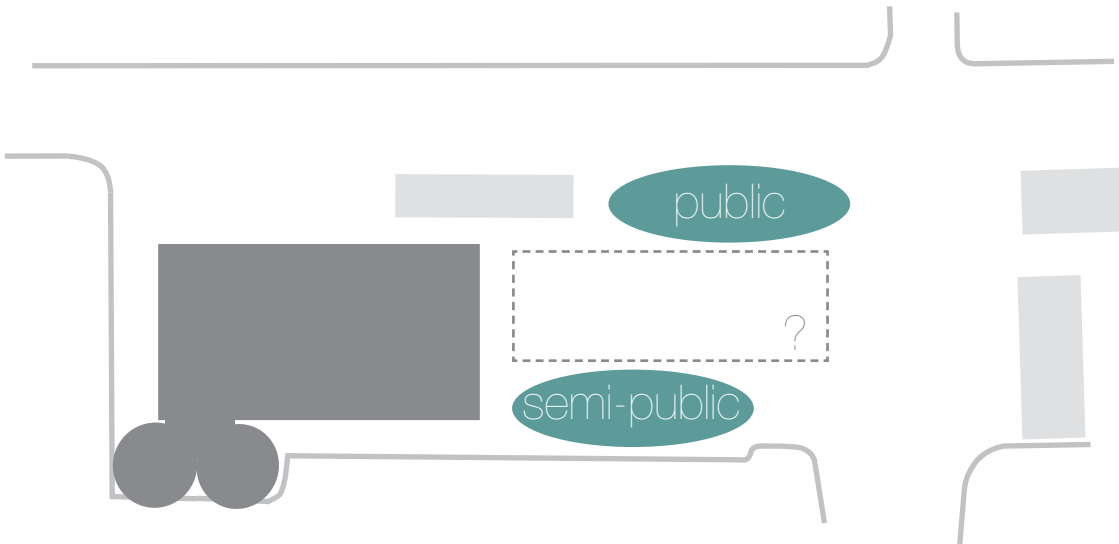
- no extra services
- kitchen and badroom in the apartment
- stay between 3-5 years
- ability to life alone, but share spaces when needed or wanted

3. DESIGN

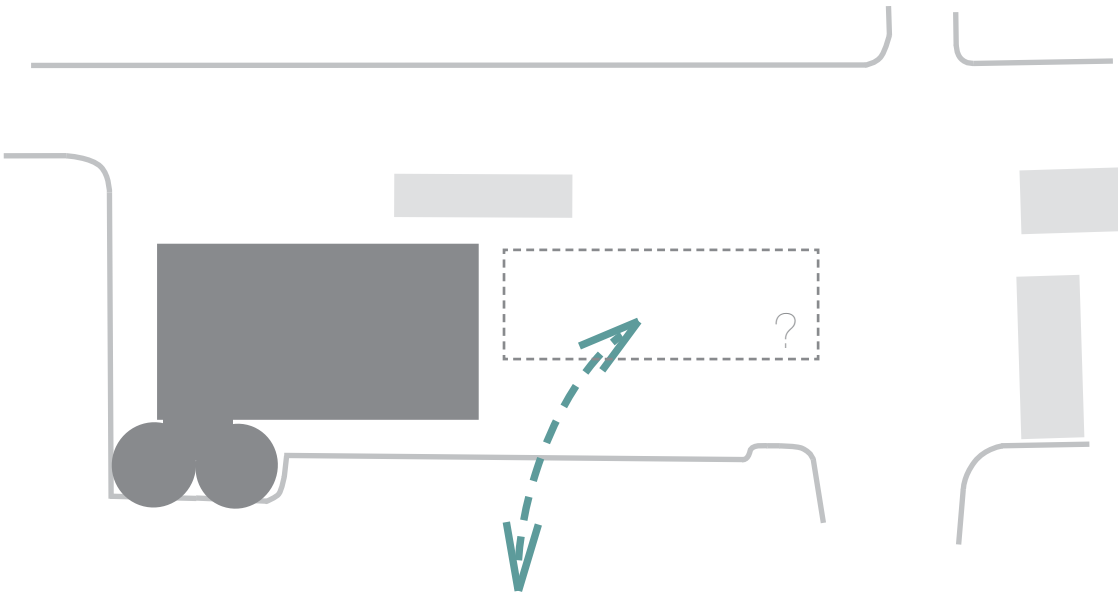
1. Keep the area part of the city, not excluded from the city



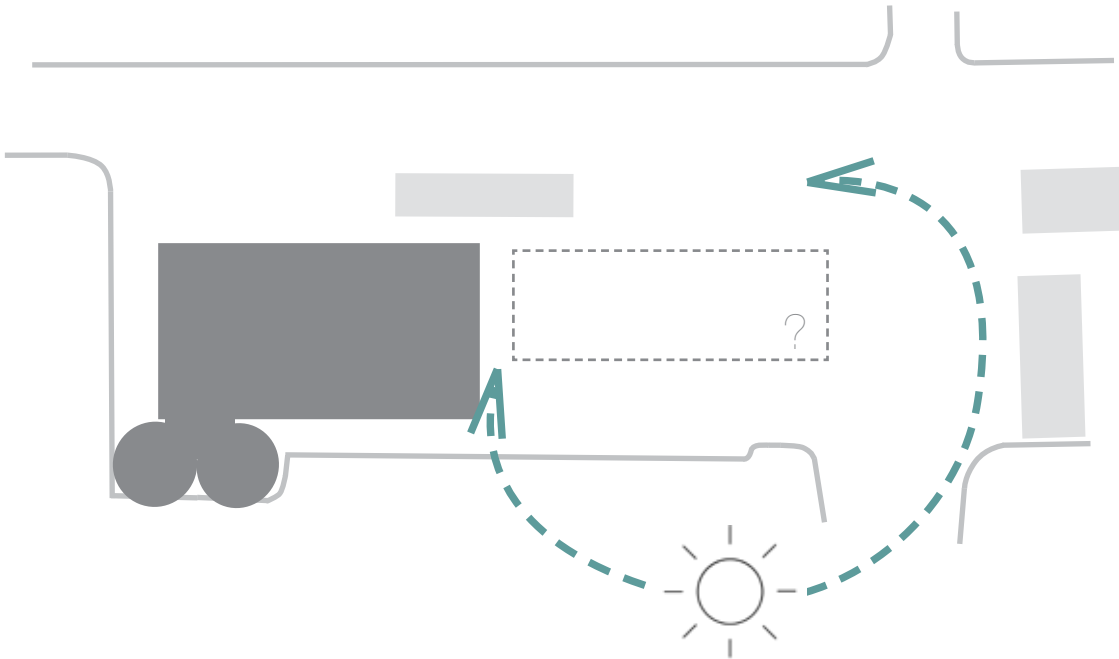
2. The building separates area in public and semi-public



3. Visible connection between the building and the Singelgracht



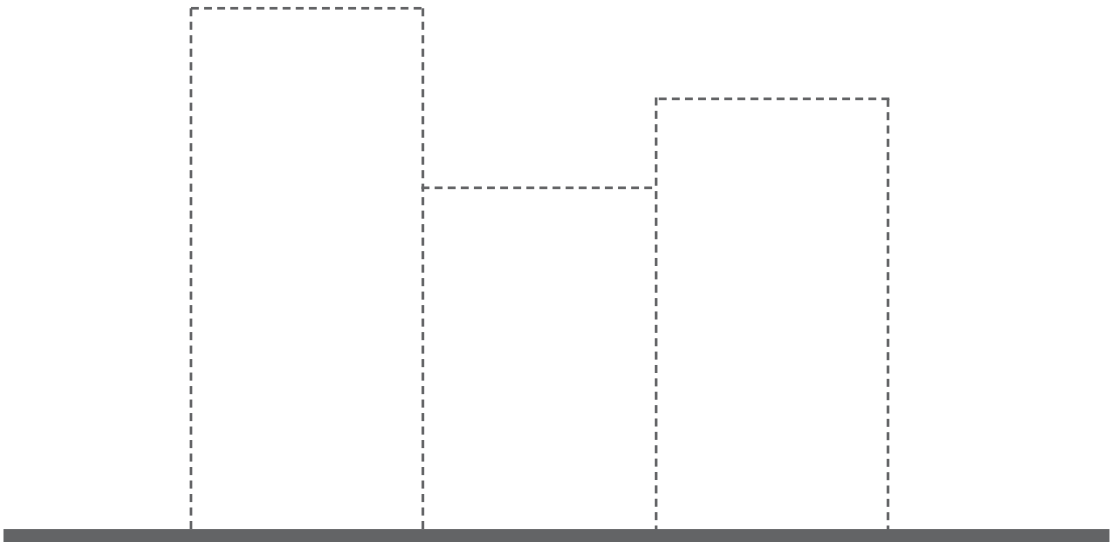
4. Keep sunlight in mind. No apartments with only a North facade



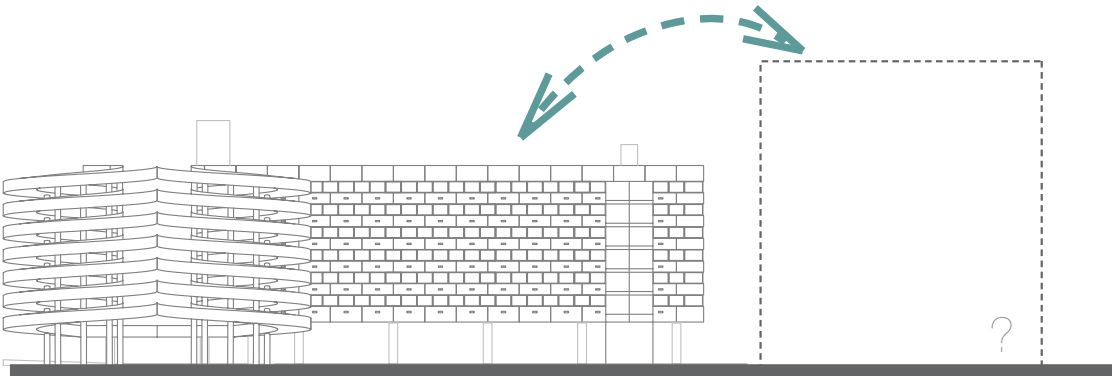
1. High rise building, for more affordability



2. No mono form, but different heights



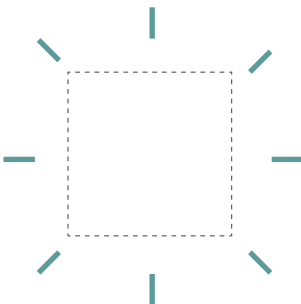
3. Mass of the building response to the mass of the garage



3. Three area's in de building

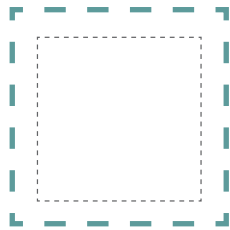
PUBLIC

for neighbourhood
ground floor



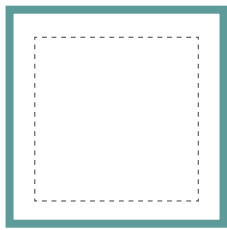
COLLECTIVE

for community
on every level



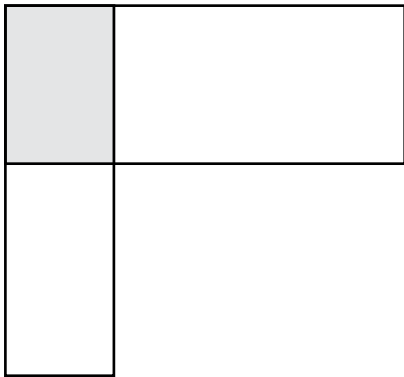
PRIVATE

for residents
apartments

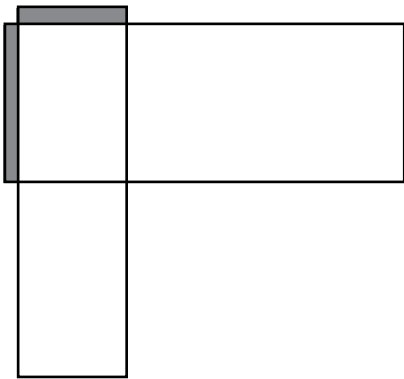




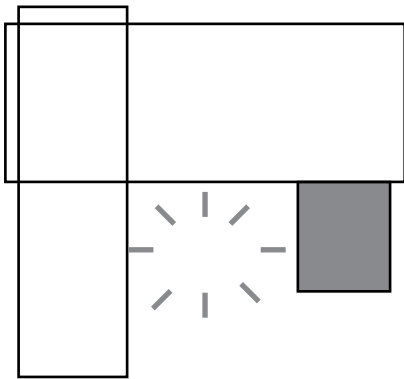
1. TWO MASSES



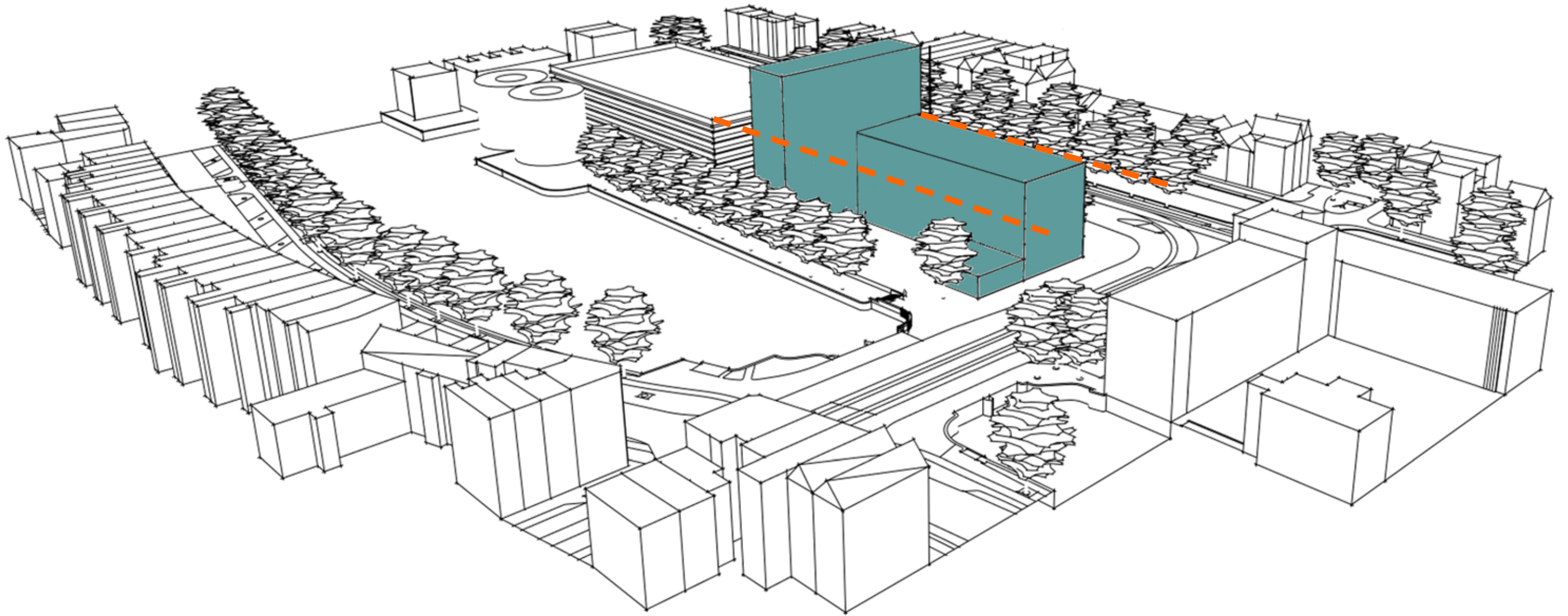
2. COMBINE MASSES

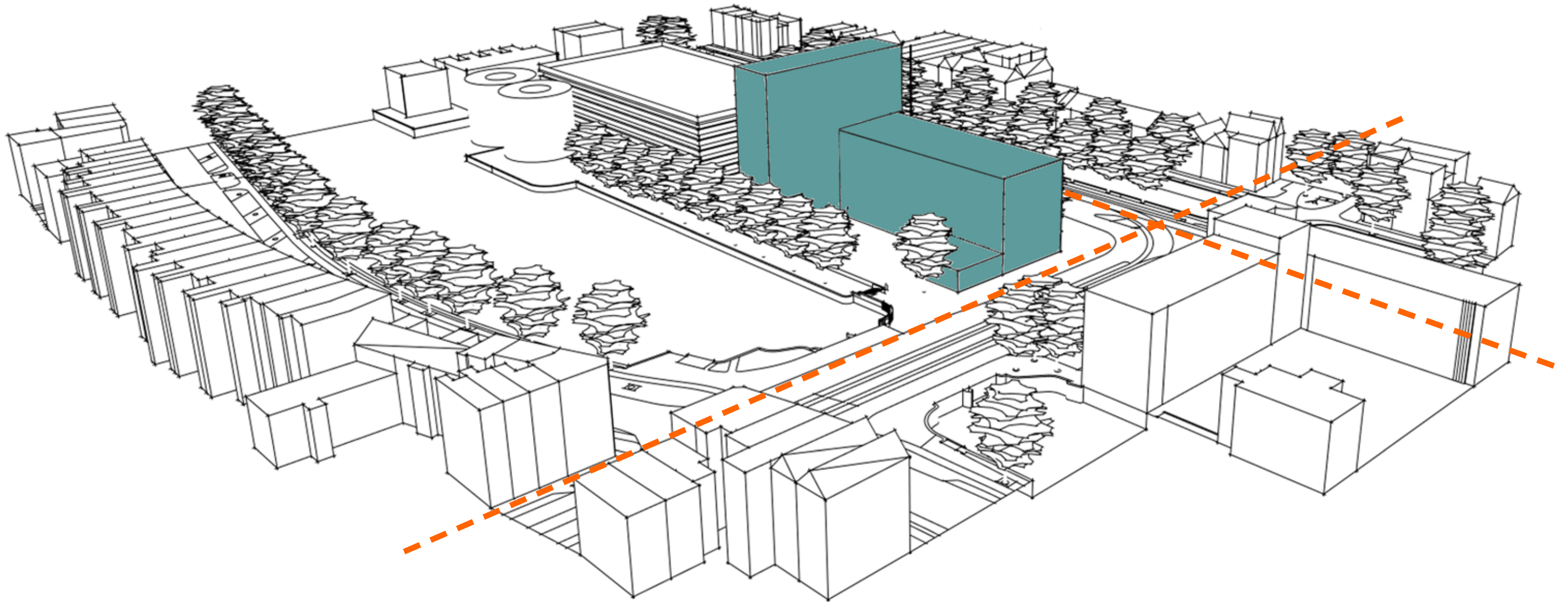


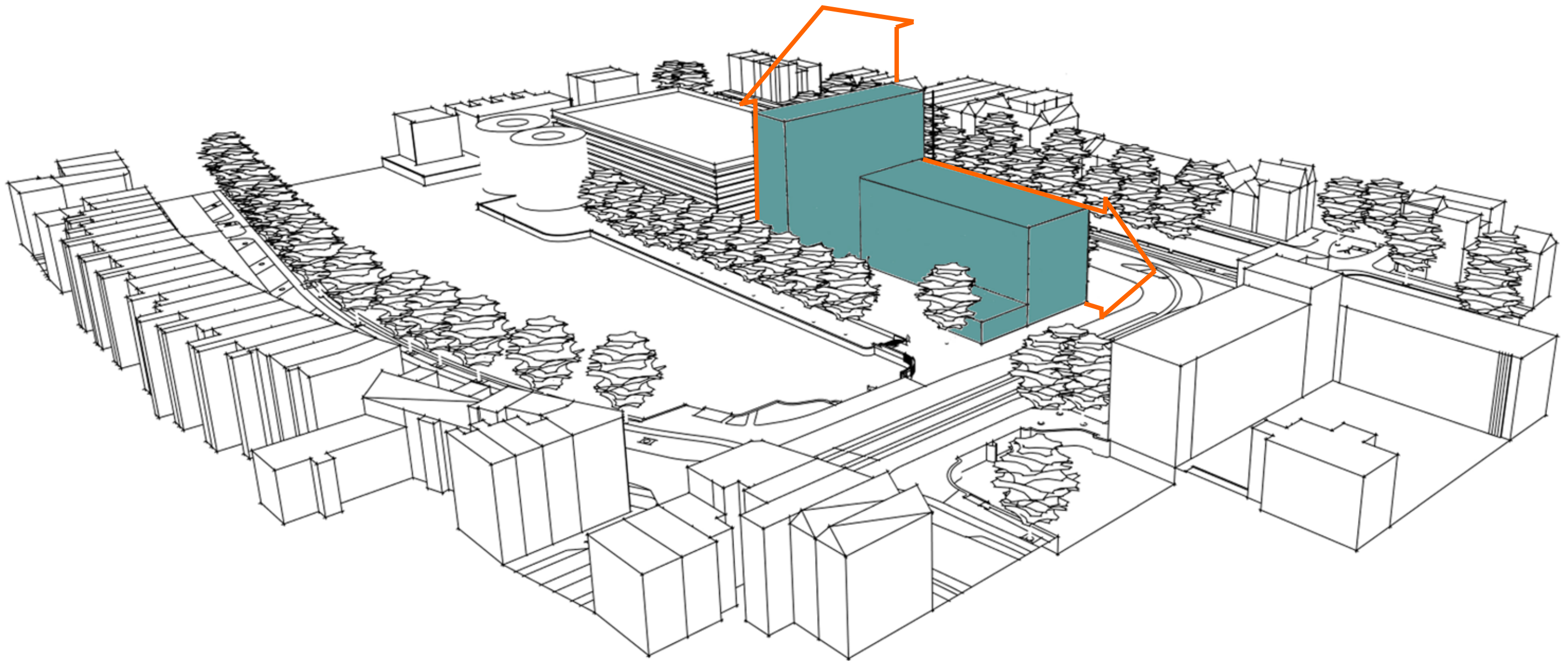
3. OVERHANG ON TWO SIDES

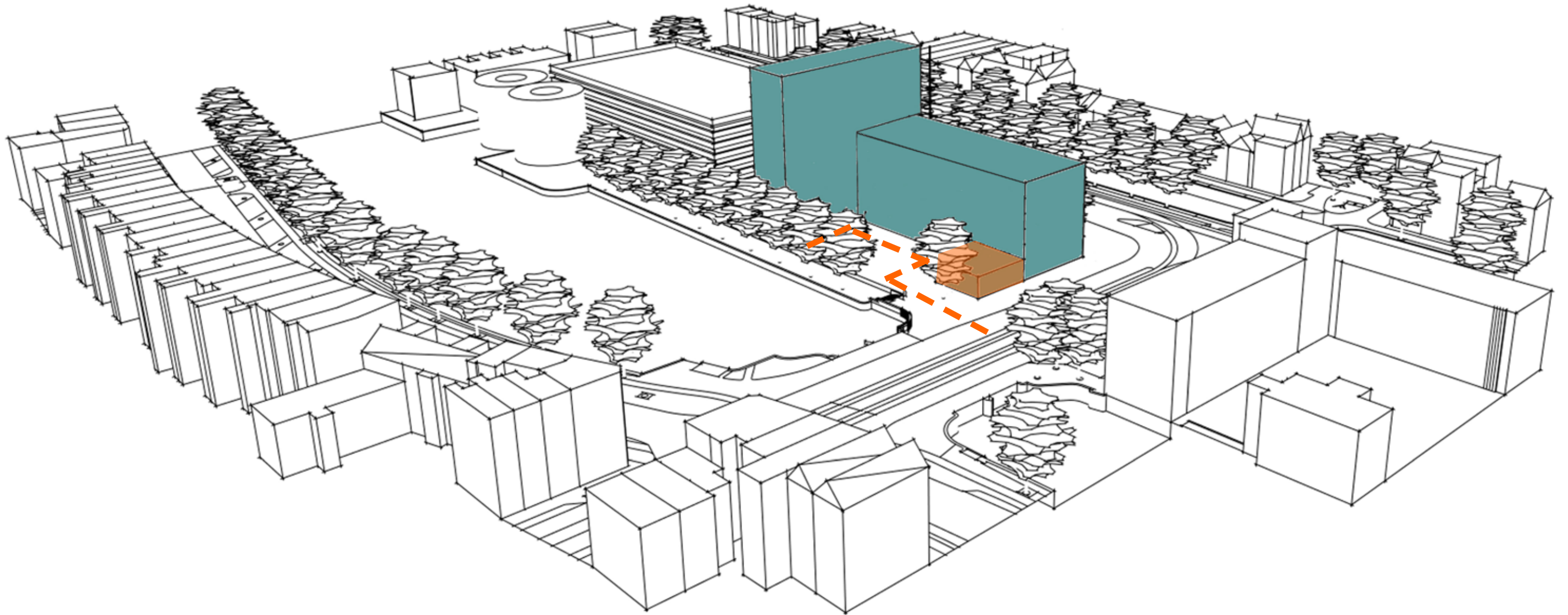


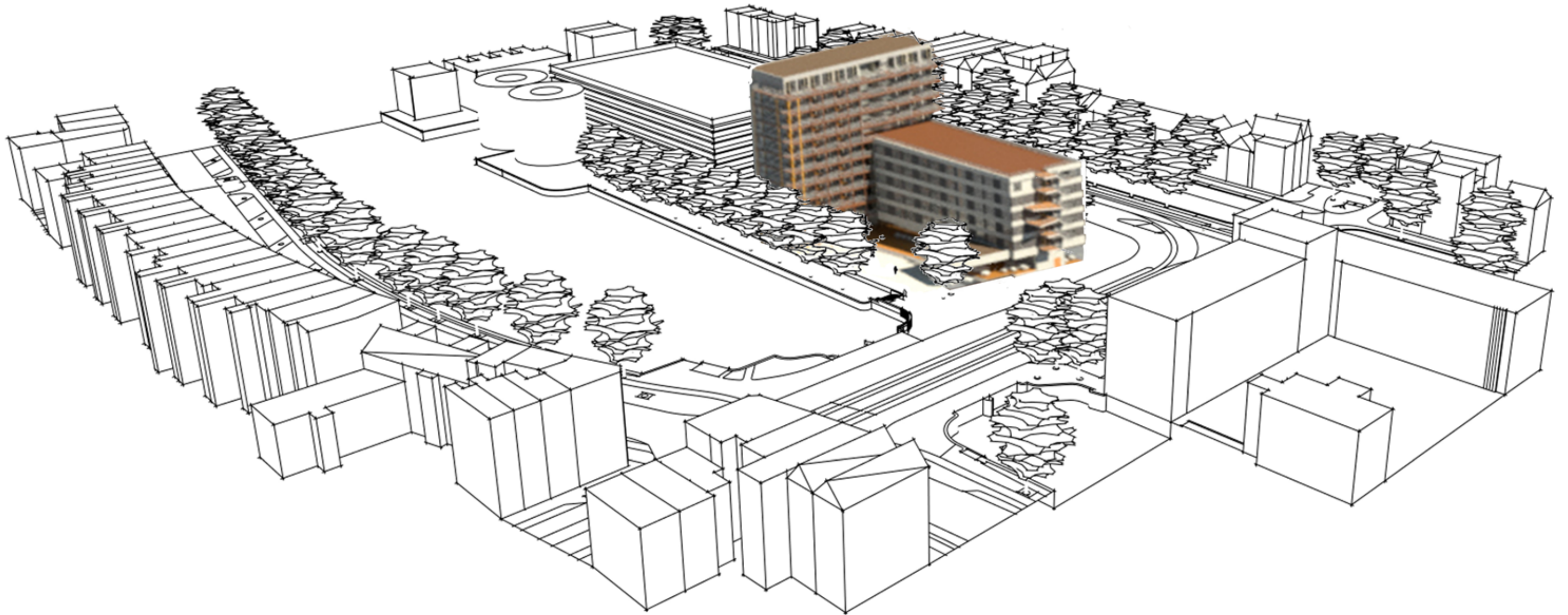
4. SECRETORY SPACE

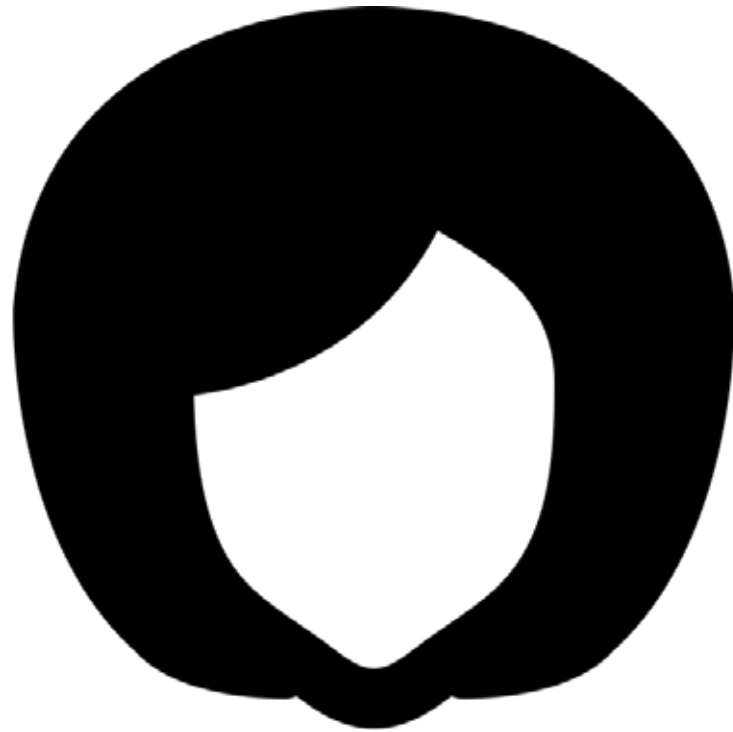












Floor

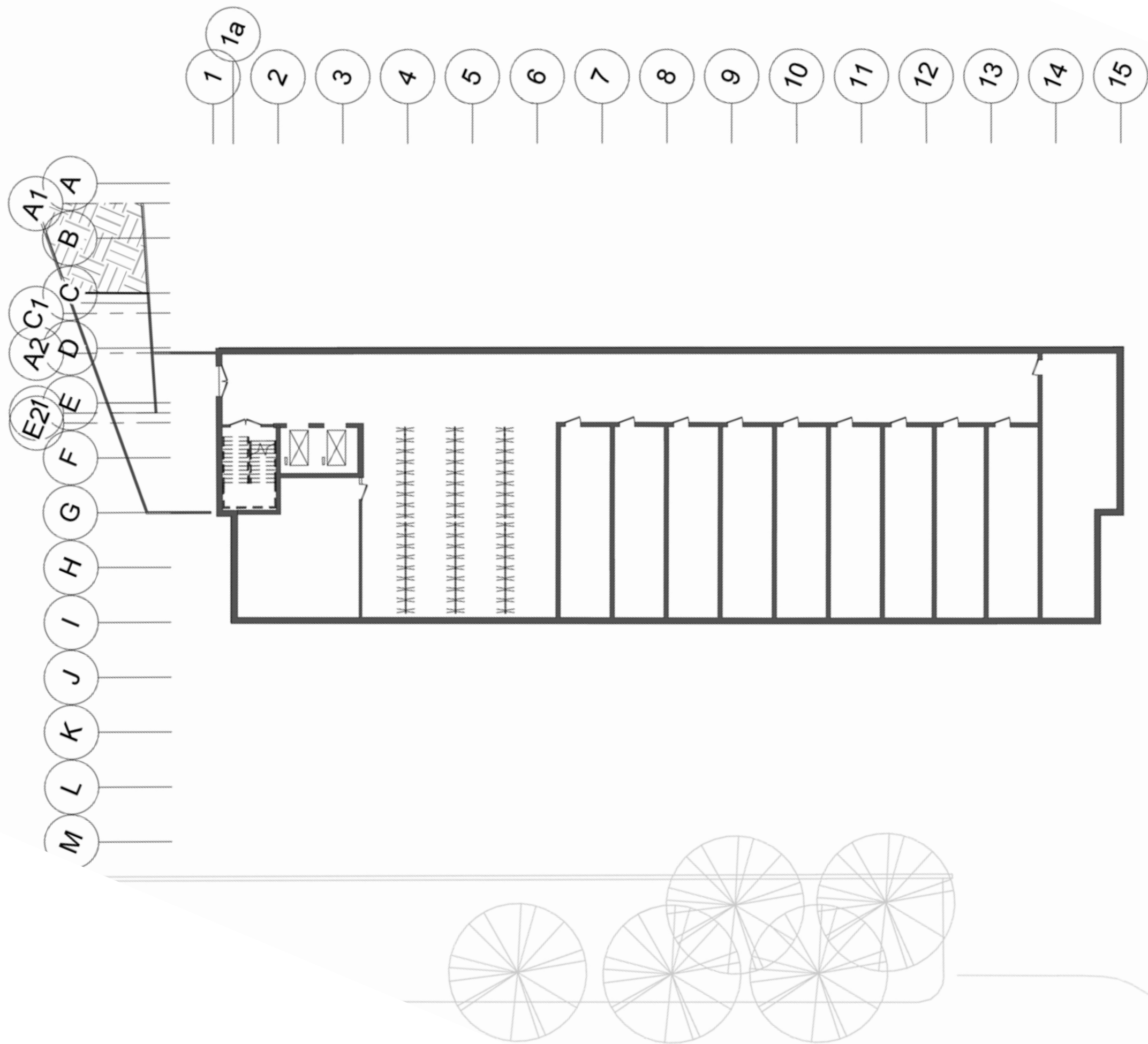
31 year

single

freelance webdesigner



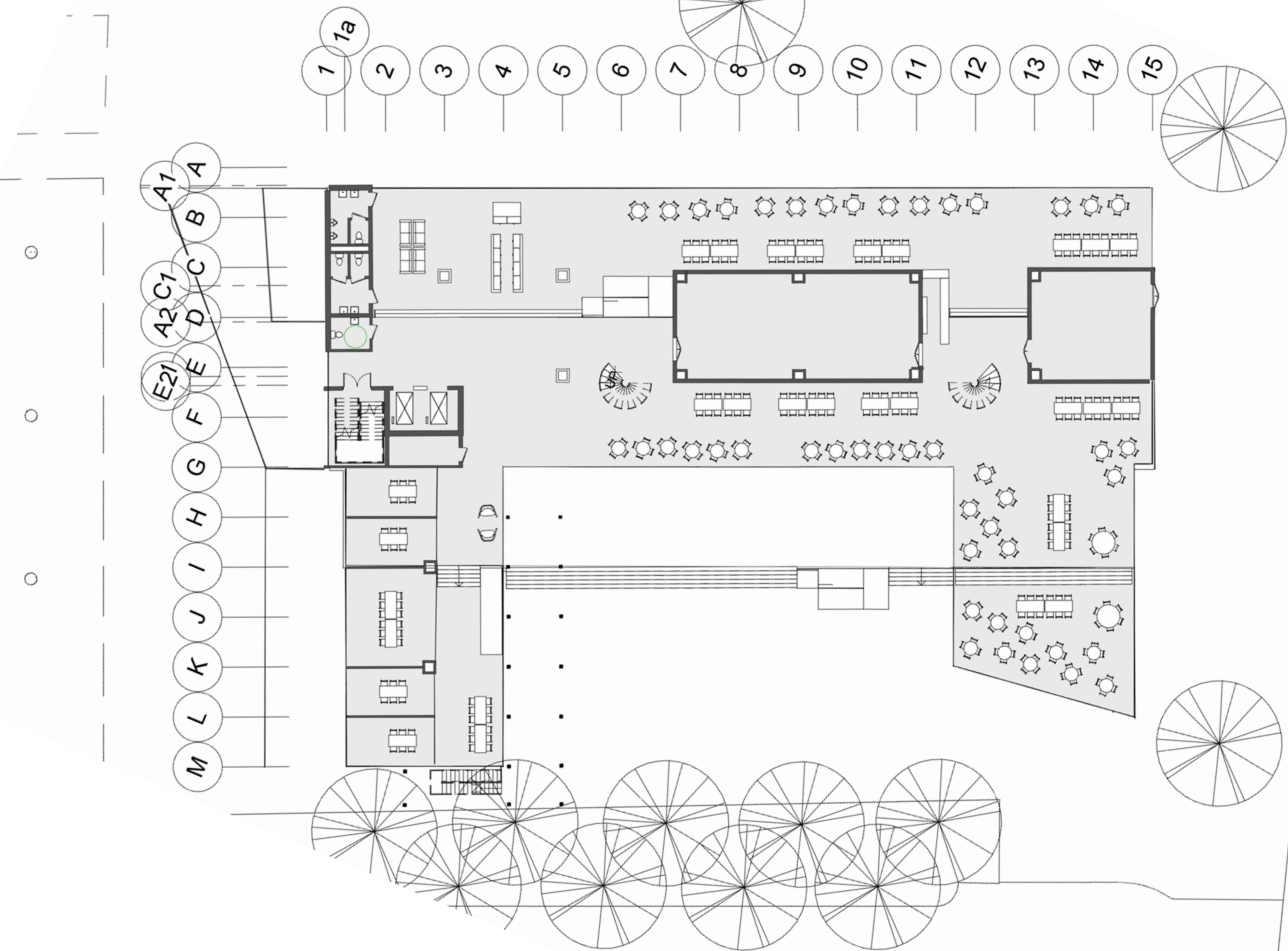
cycling home

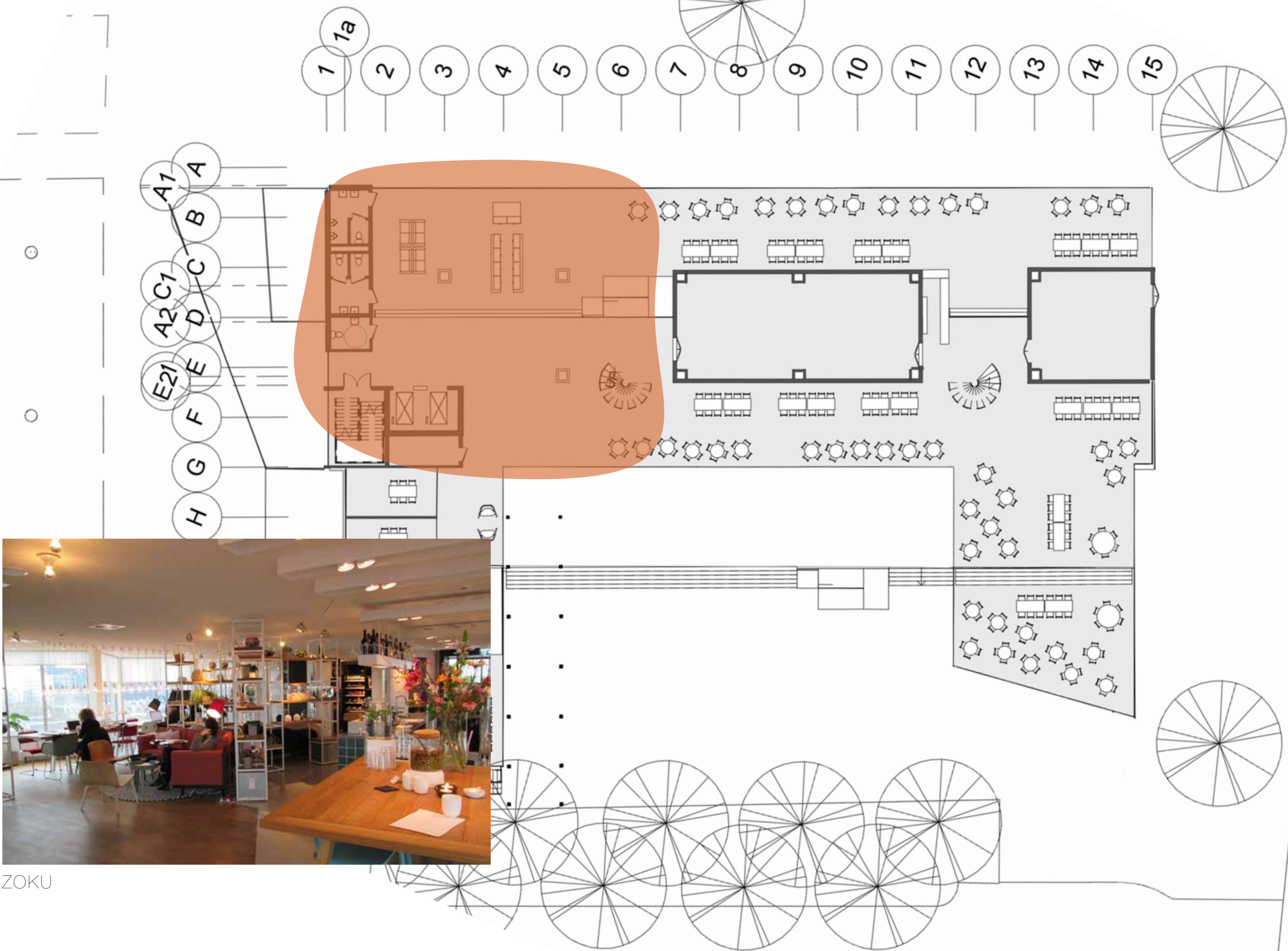


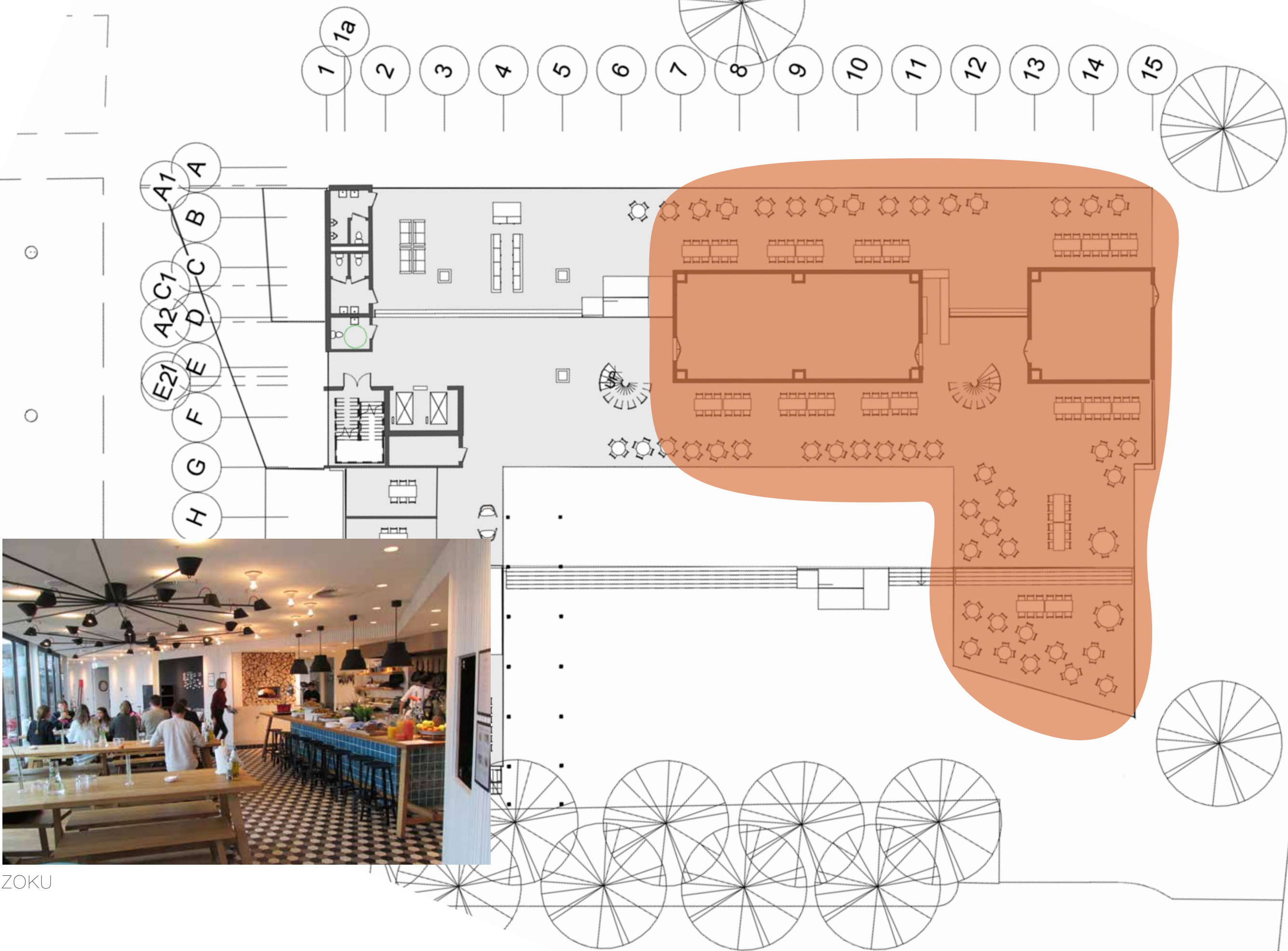




having a meeting with an employer

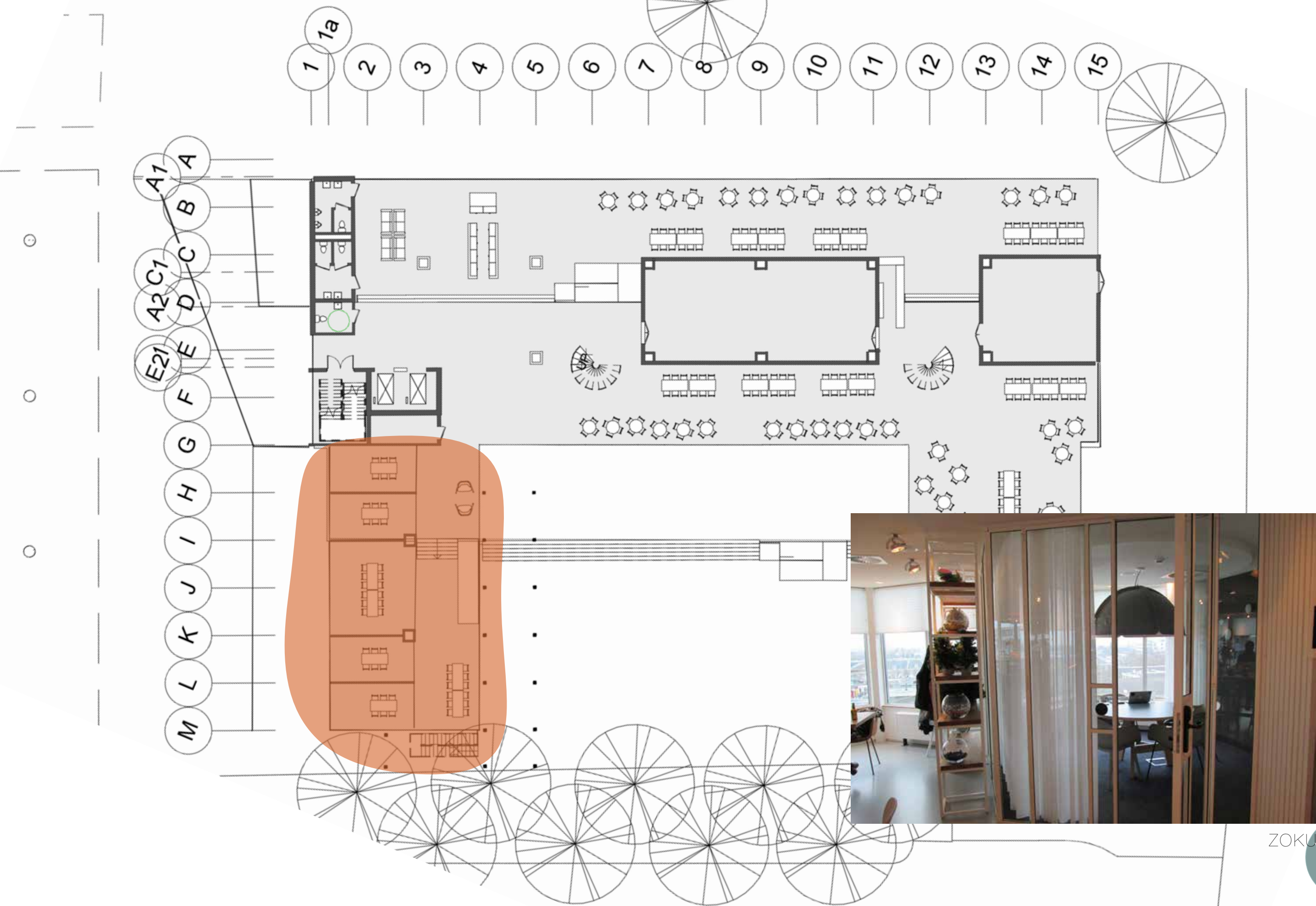






ZOKU

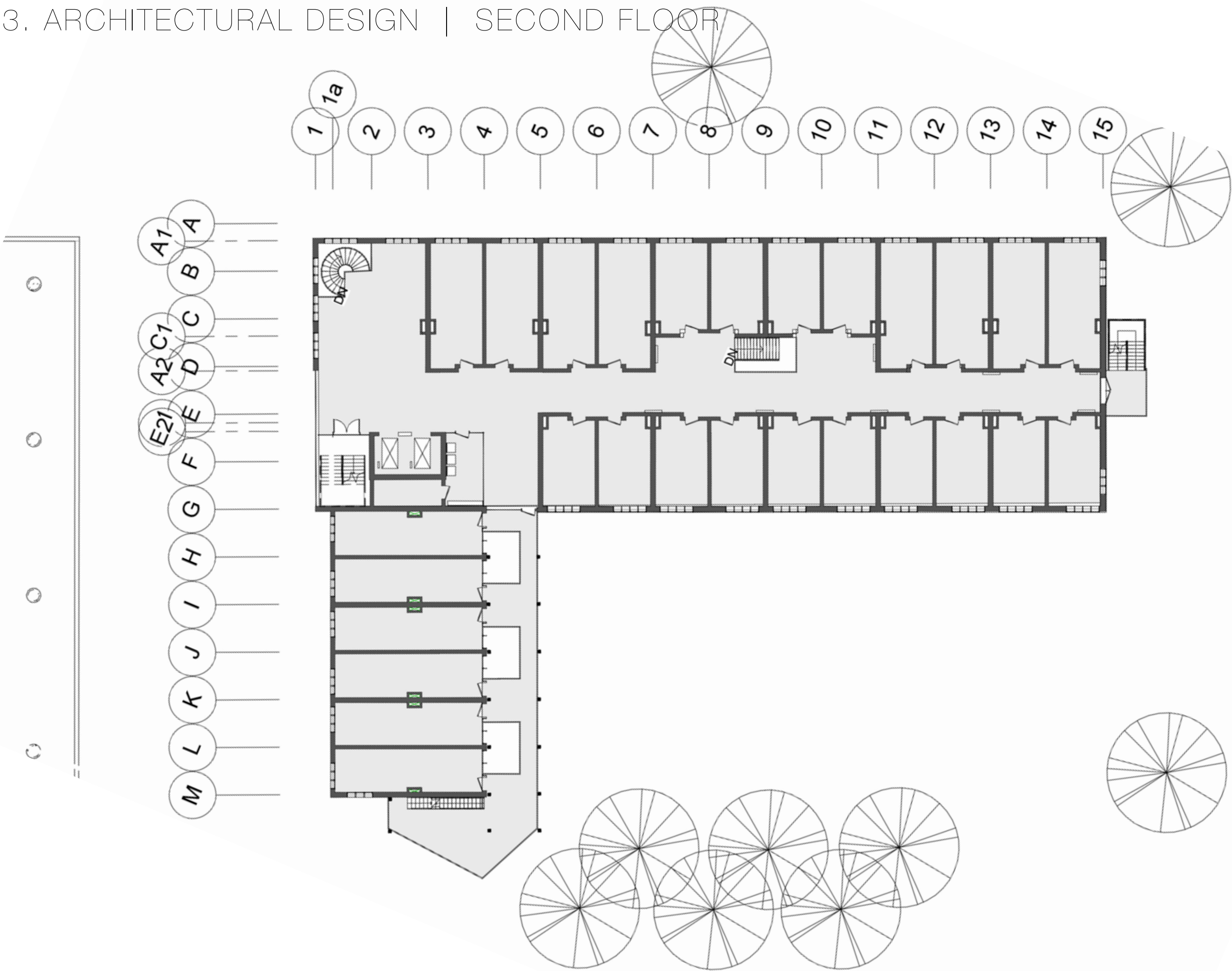


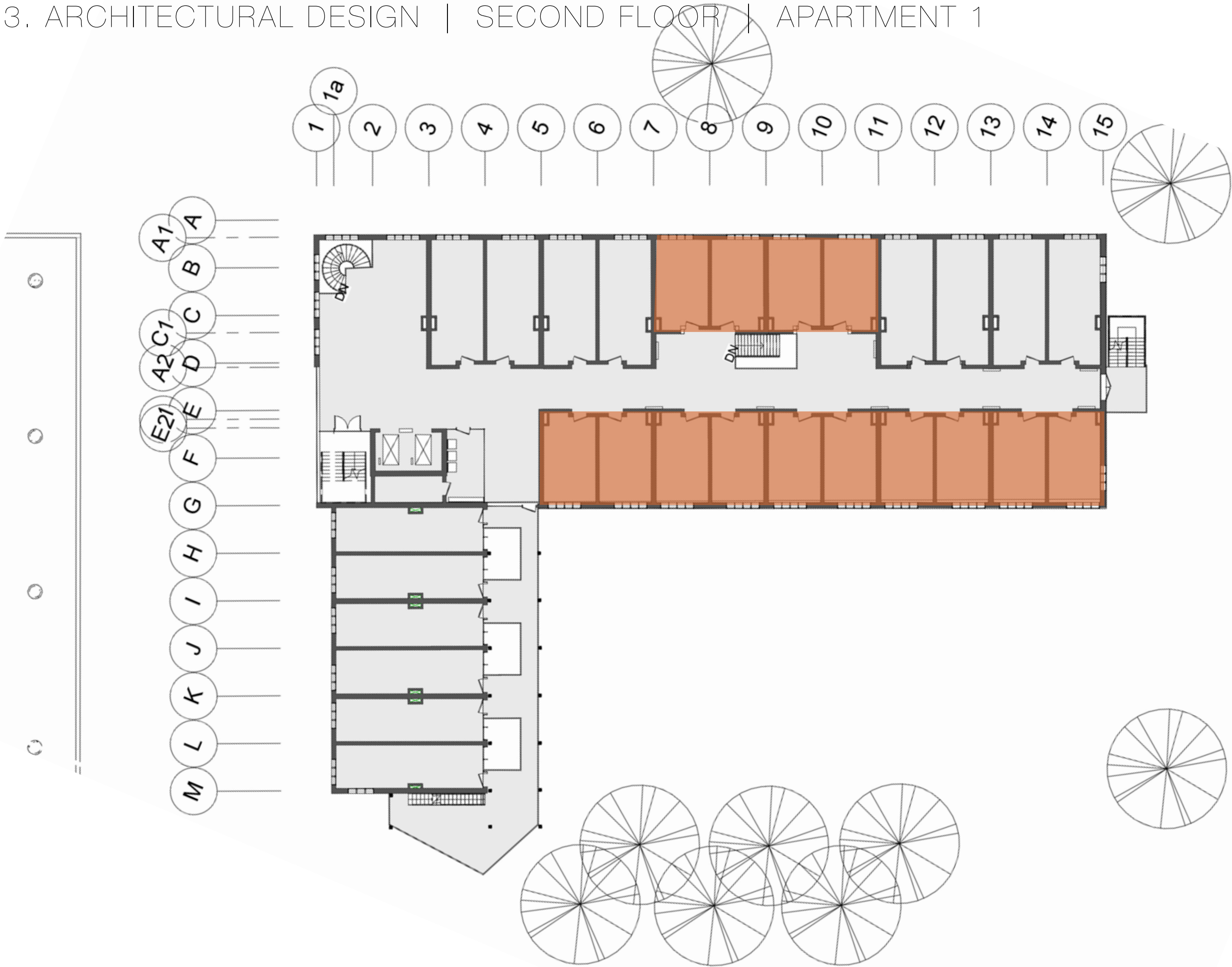


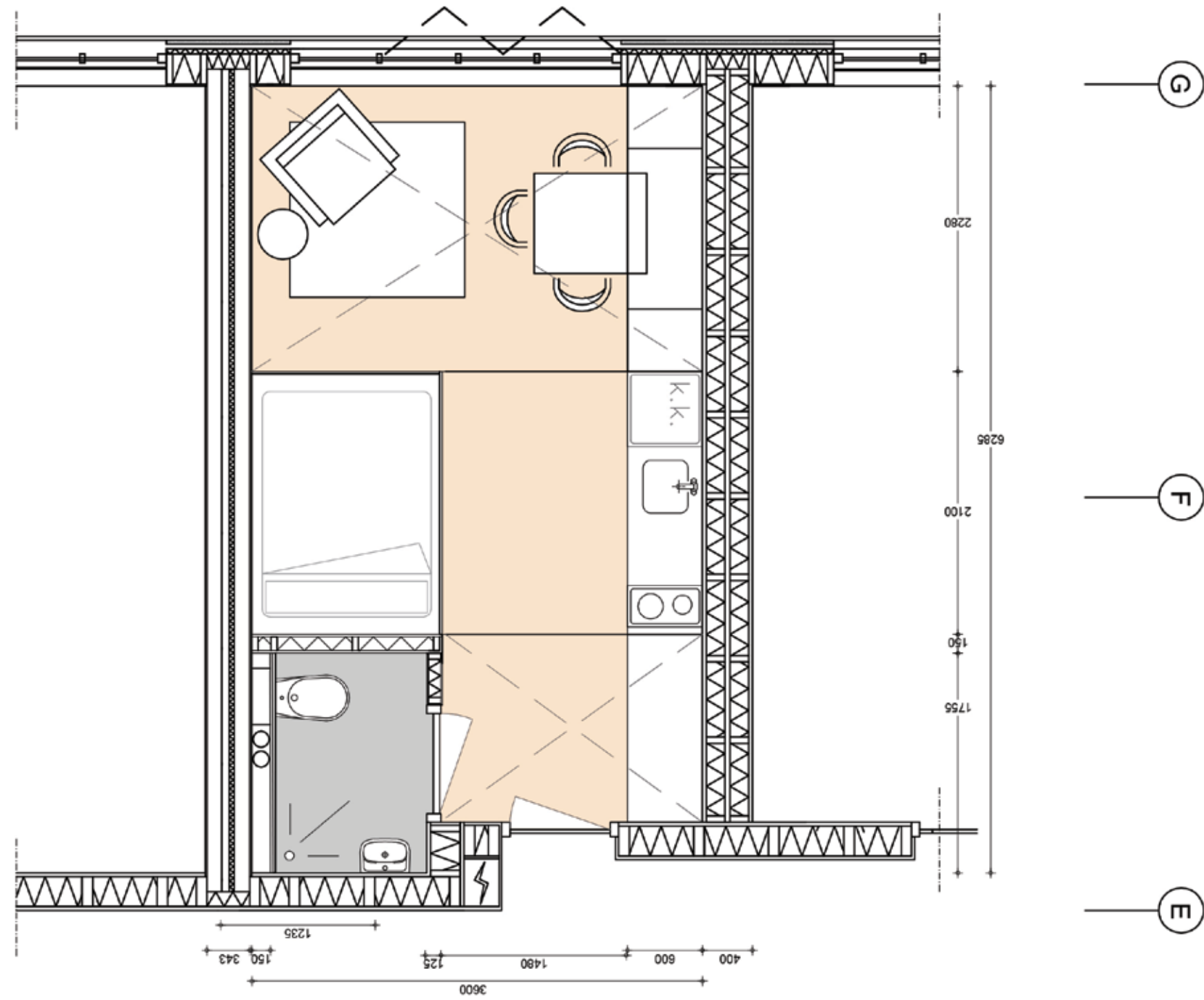


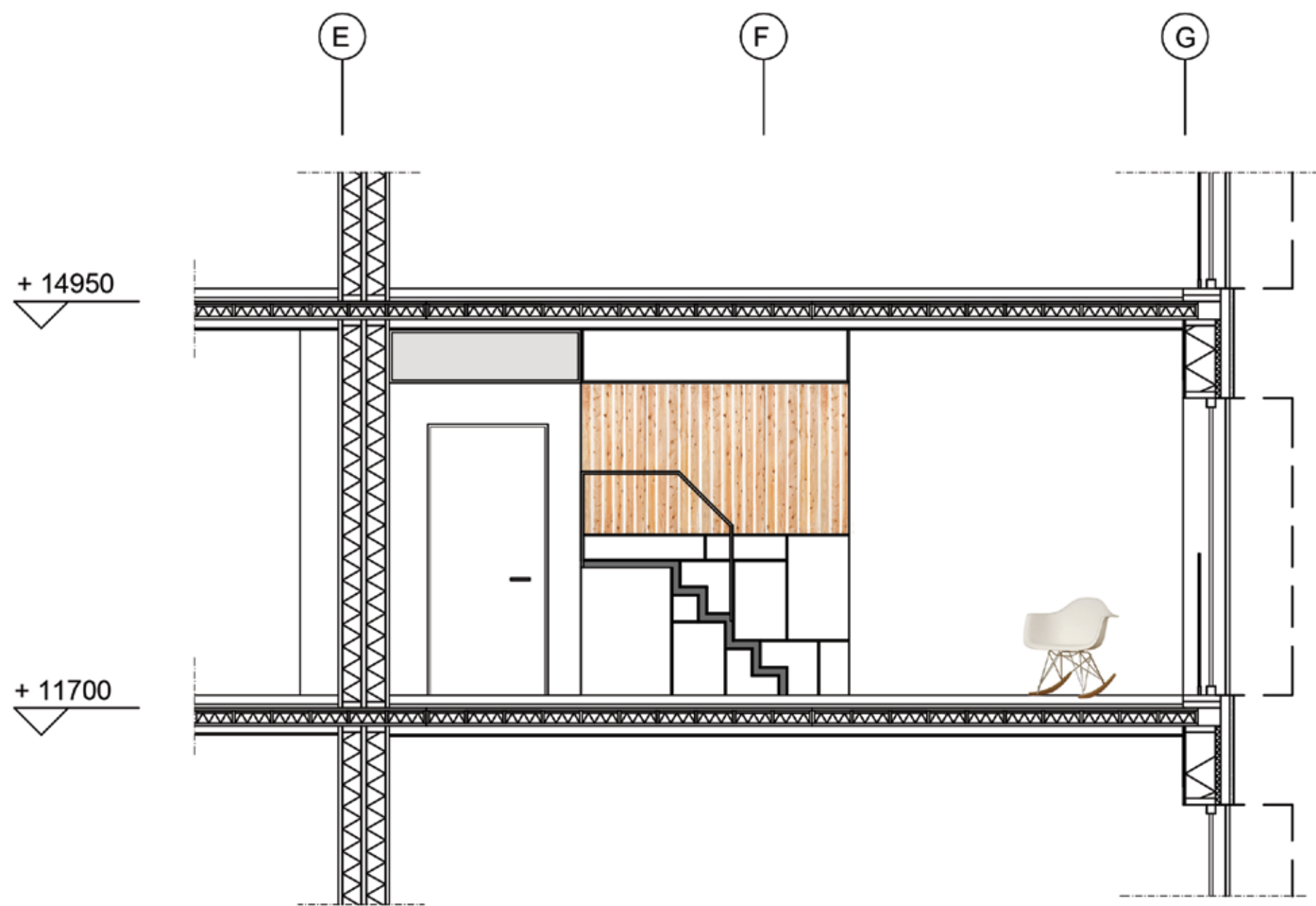


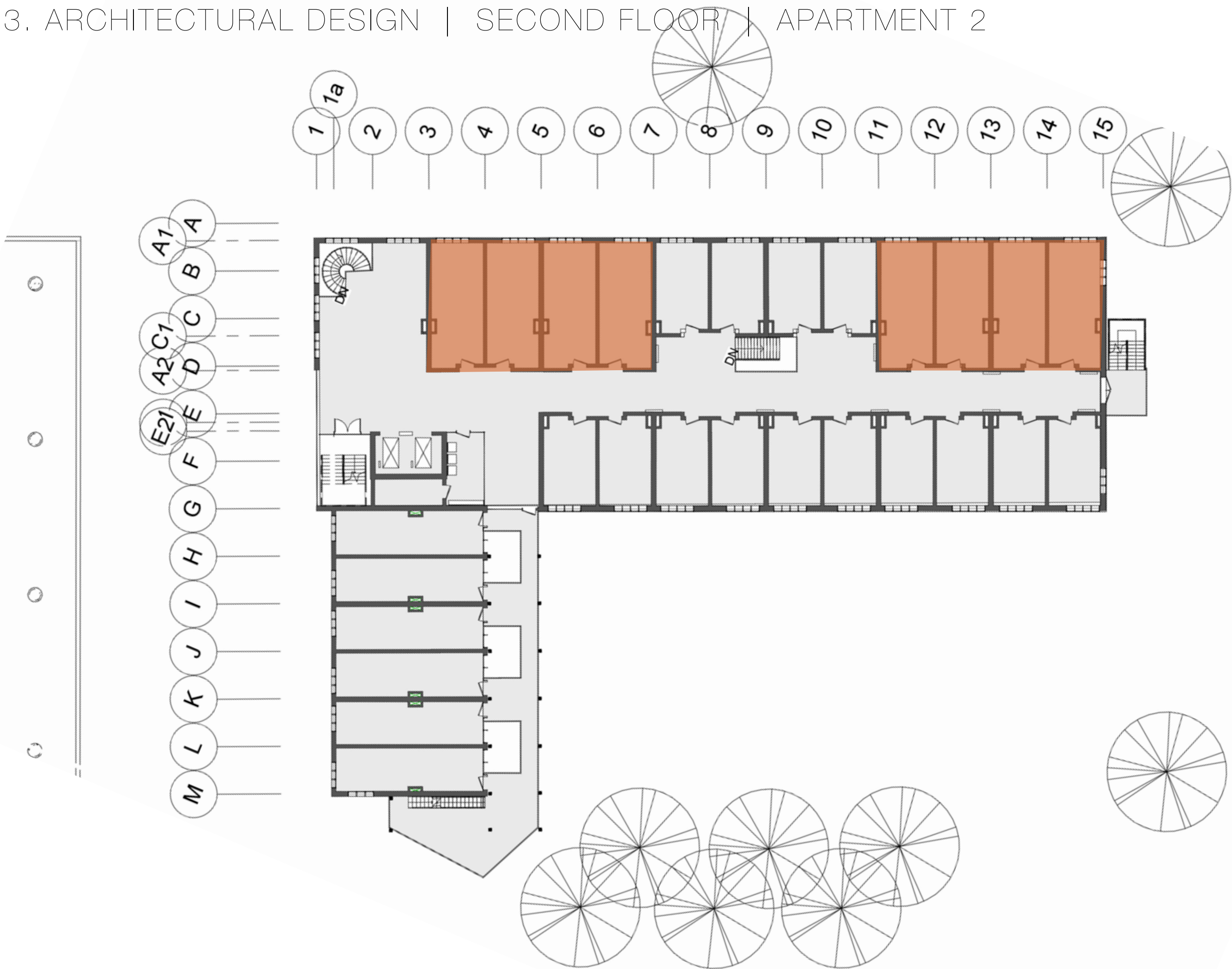
going to her apartment

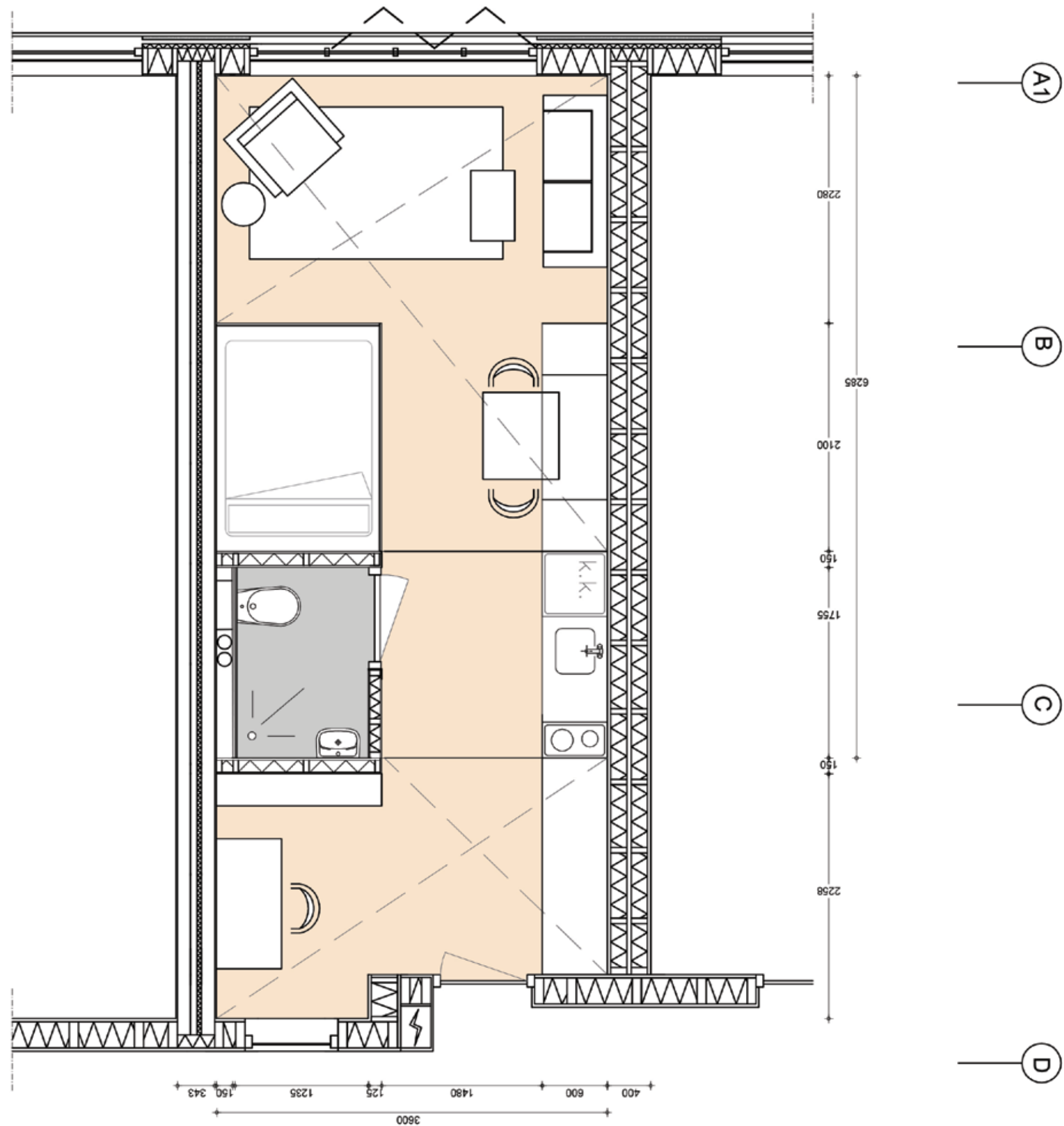


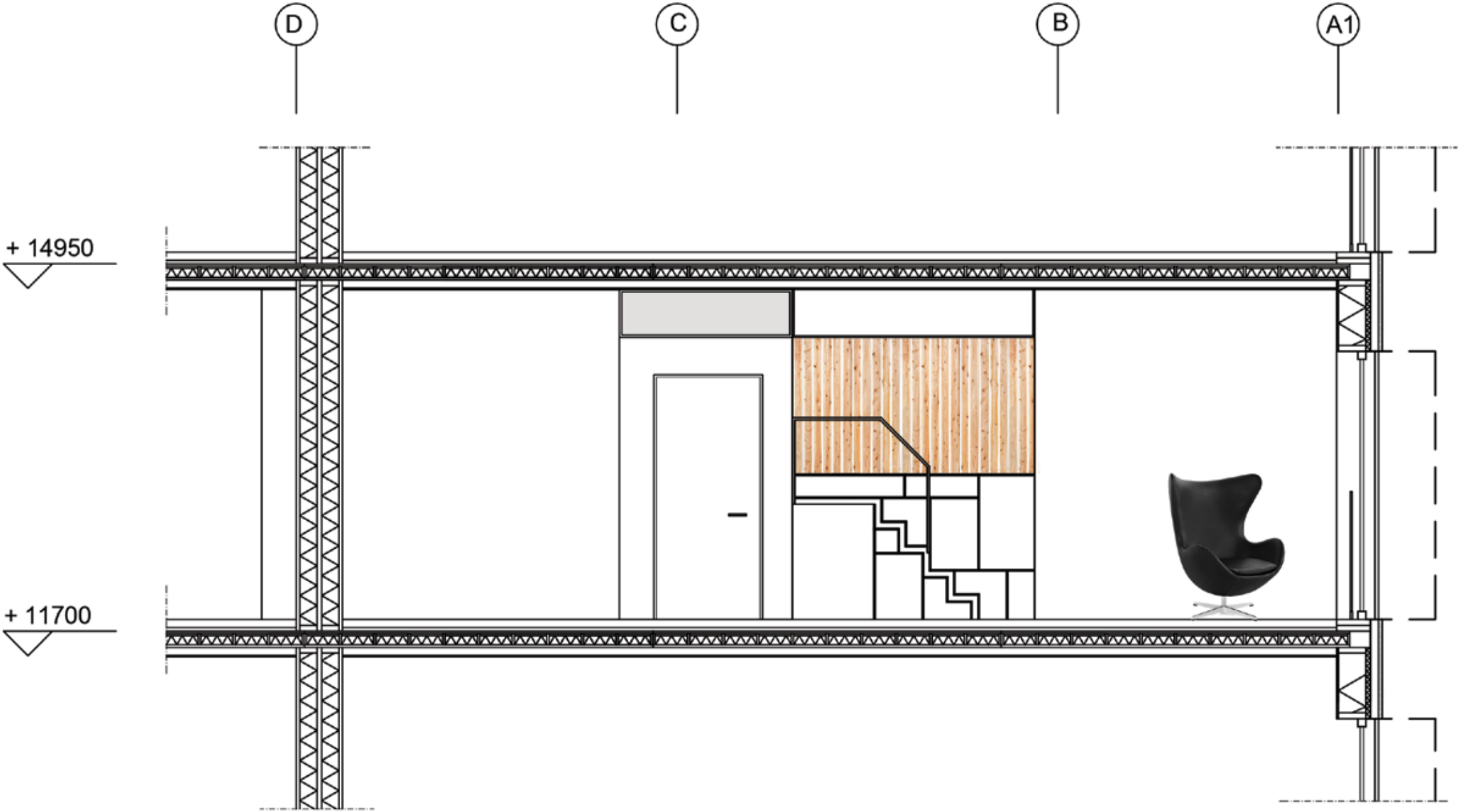


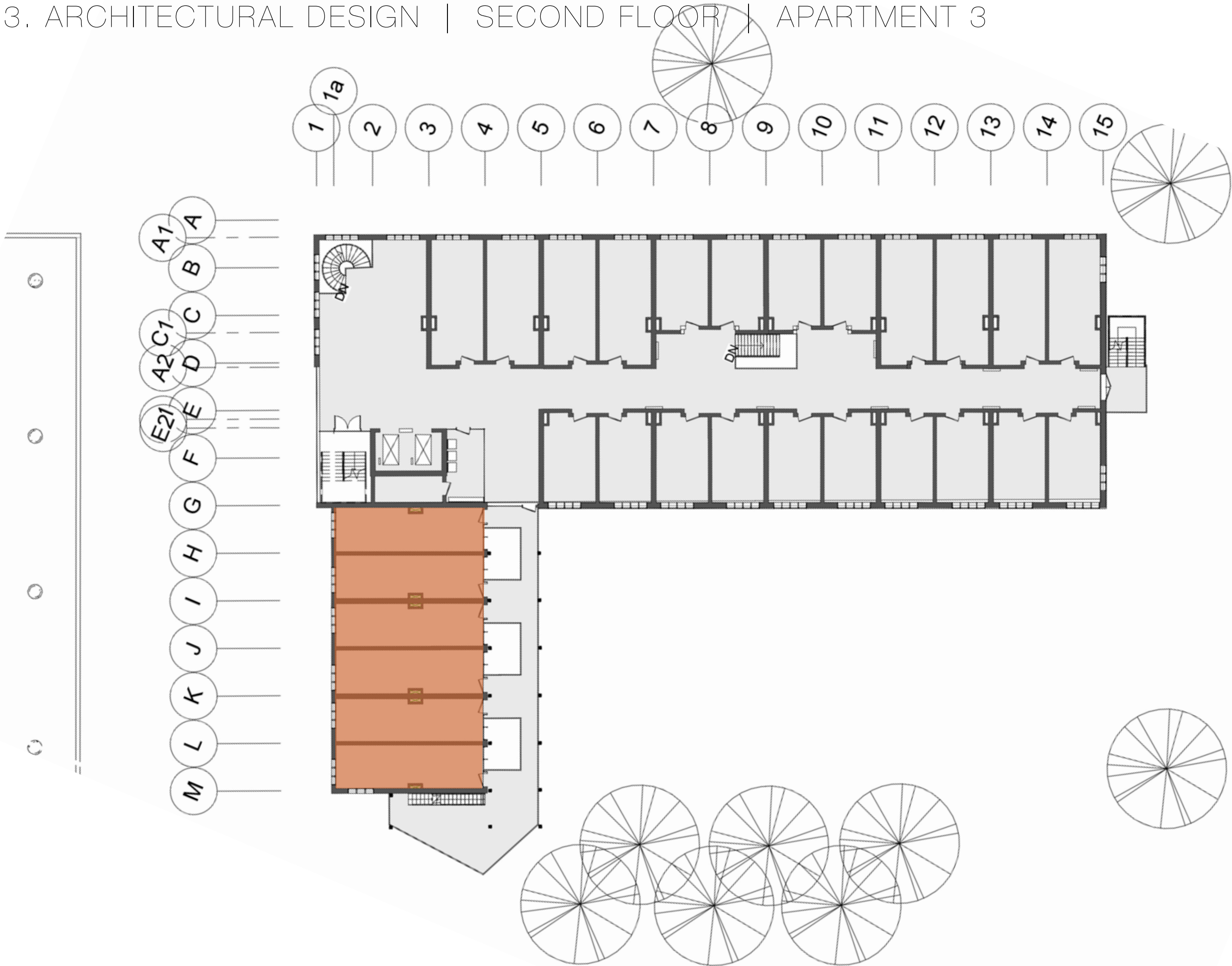


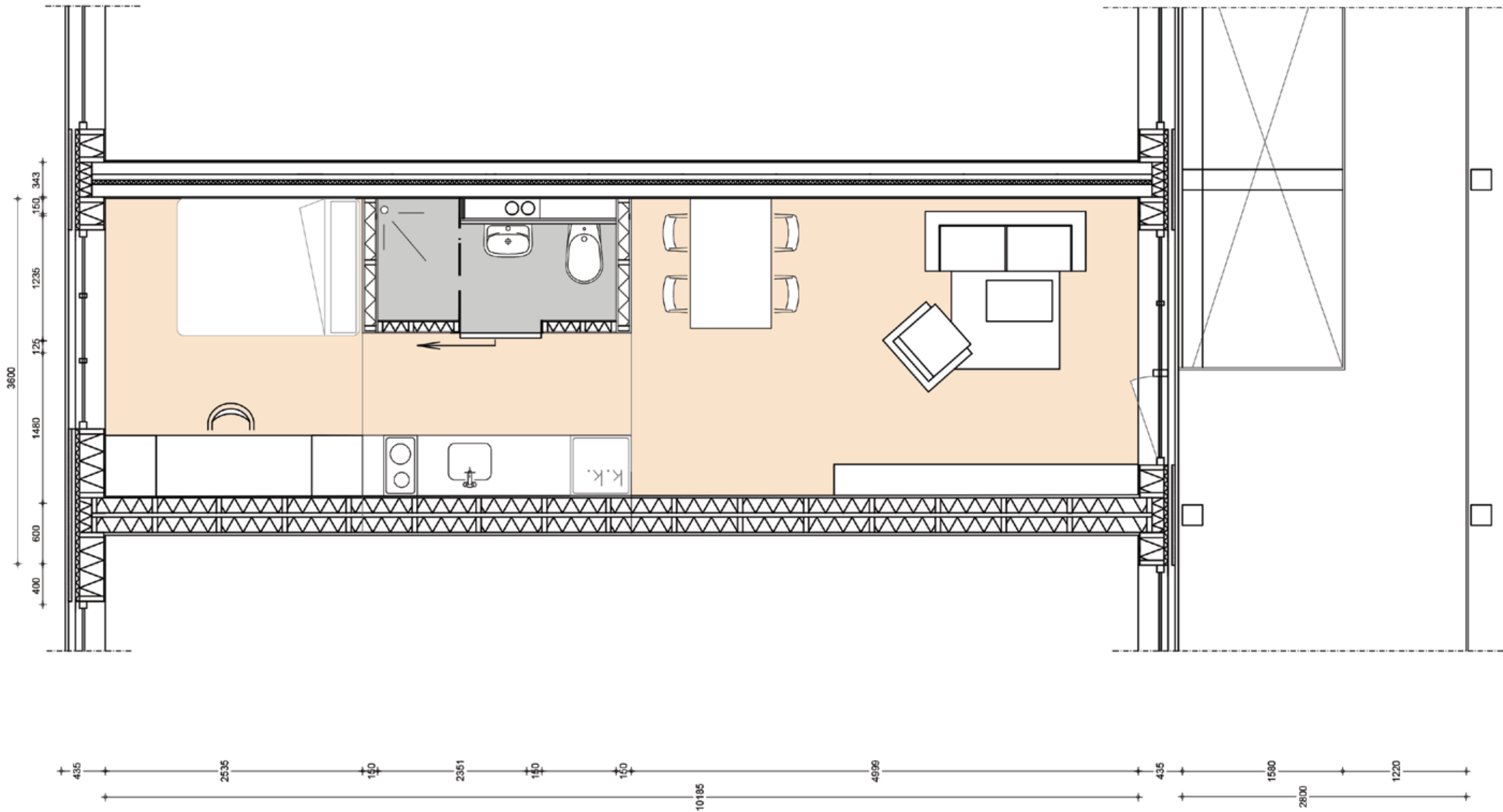


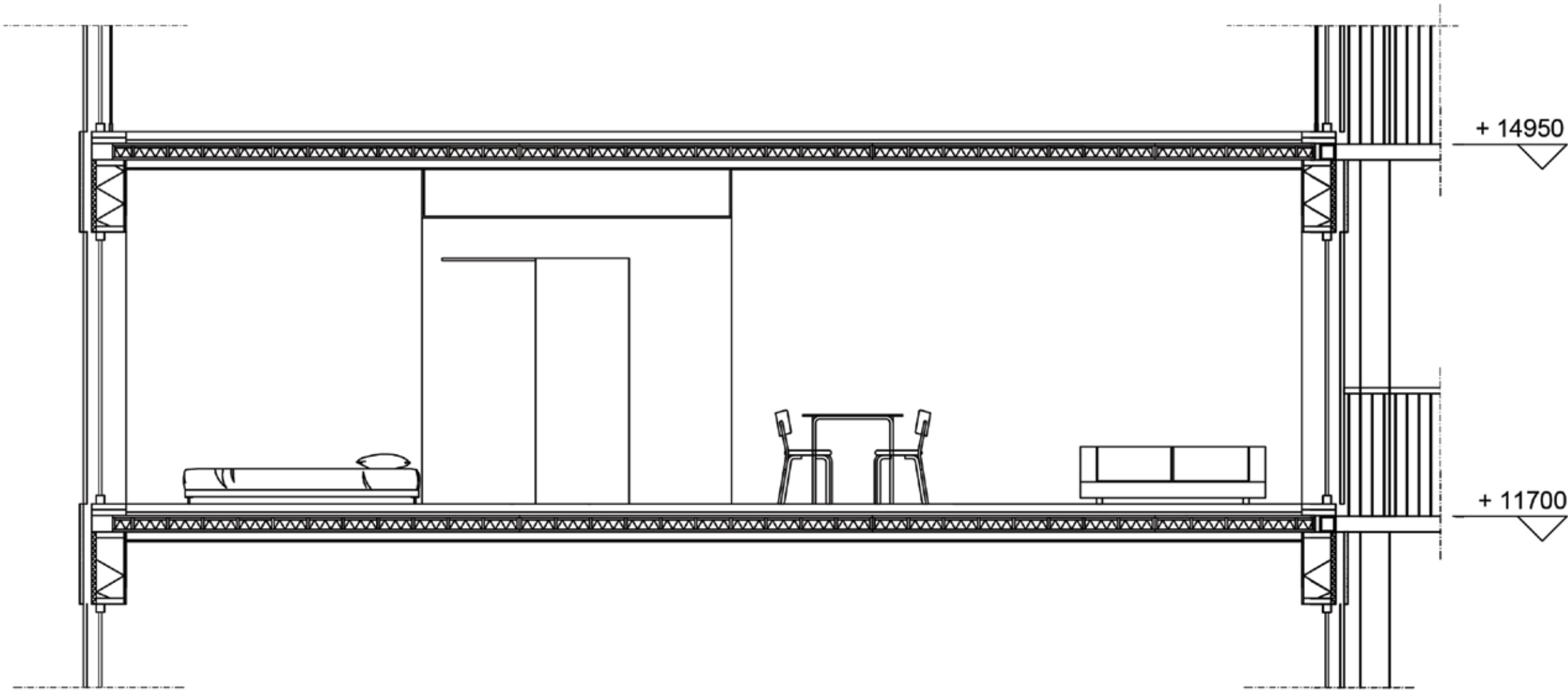






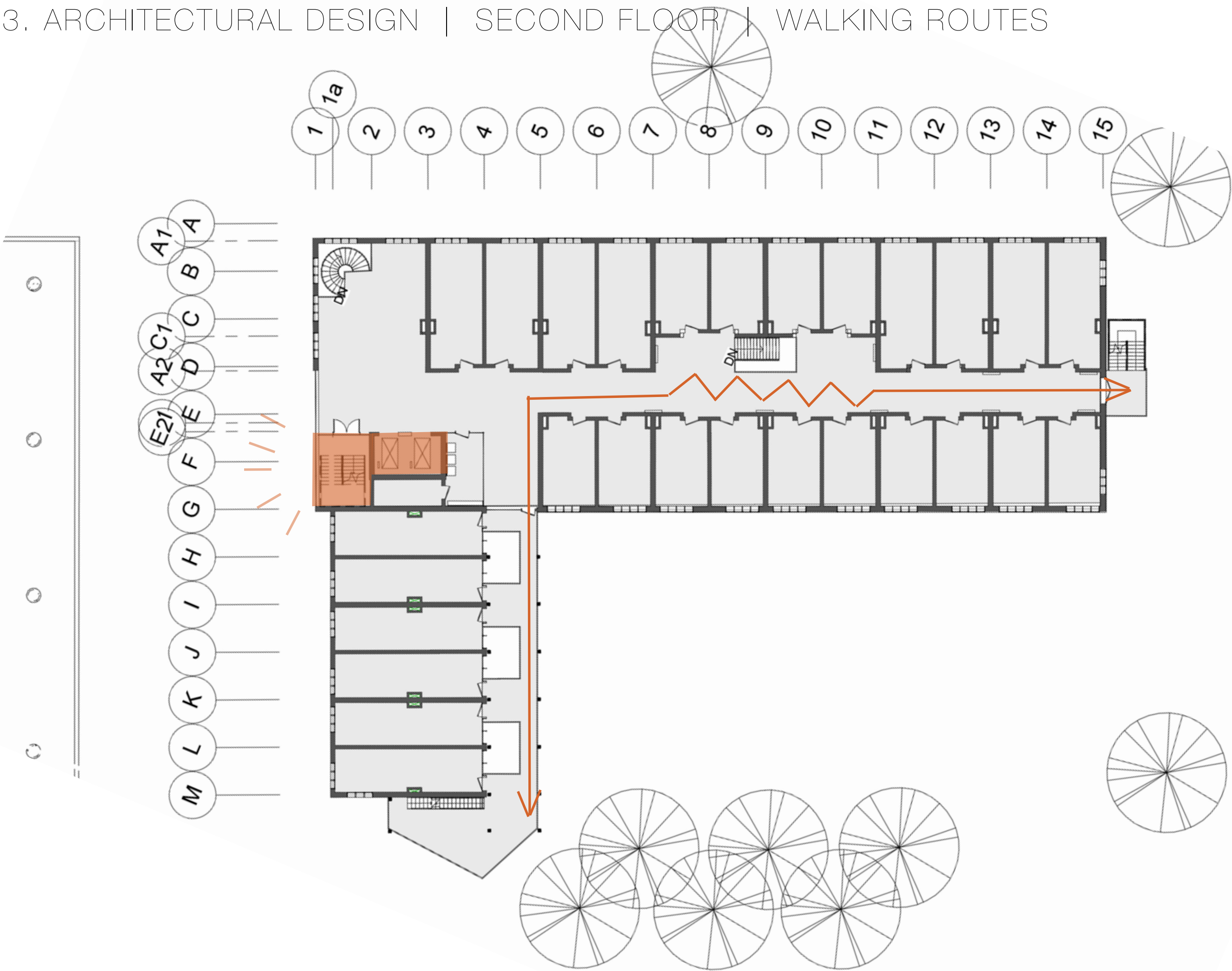




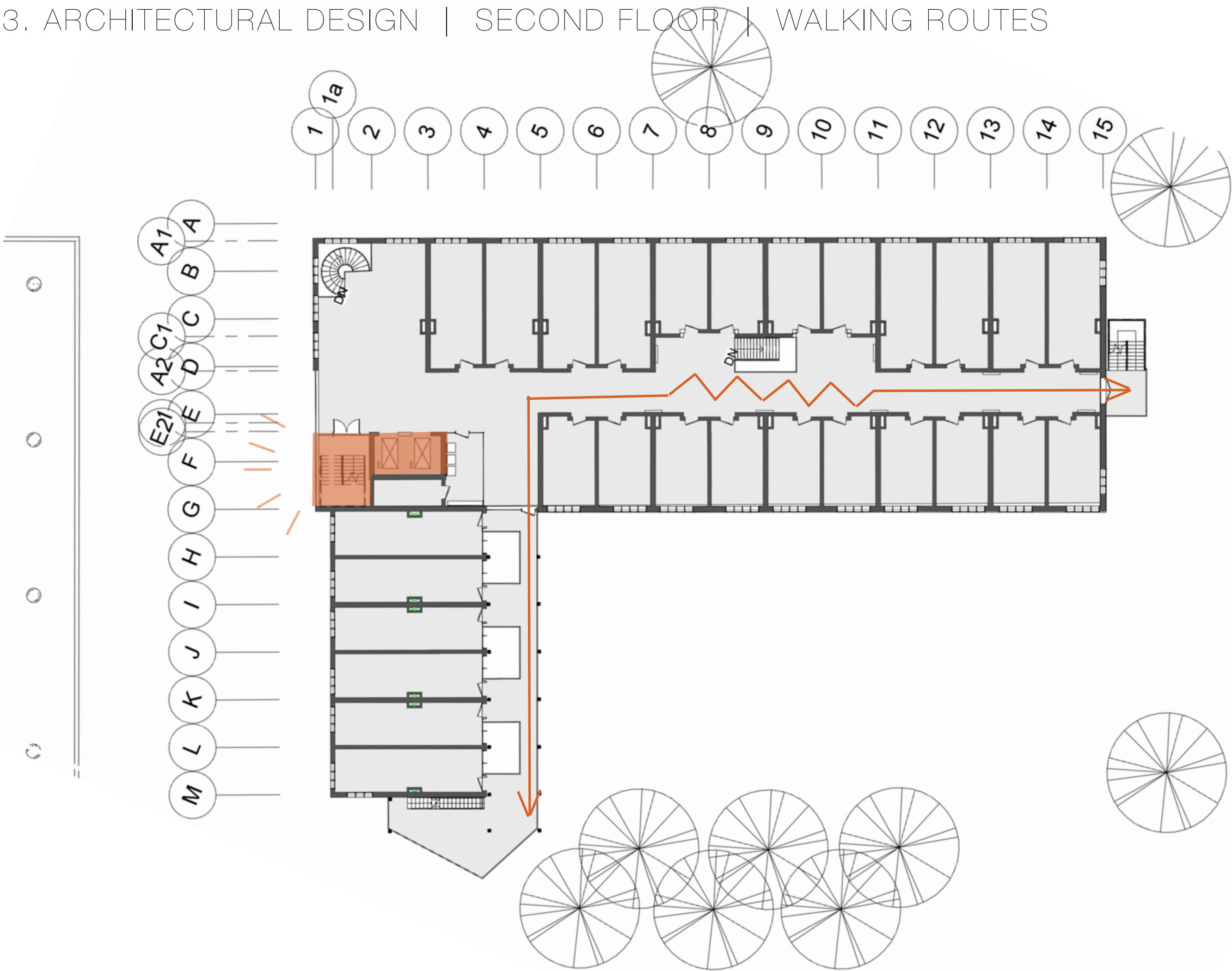




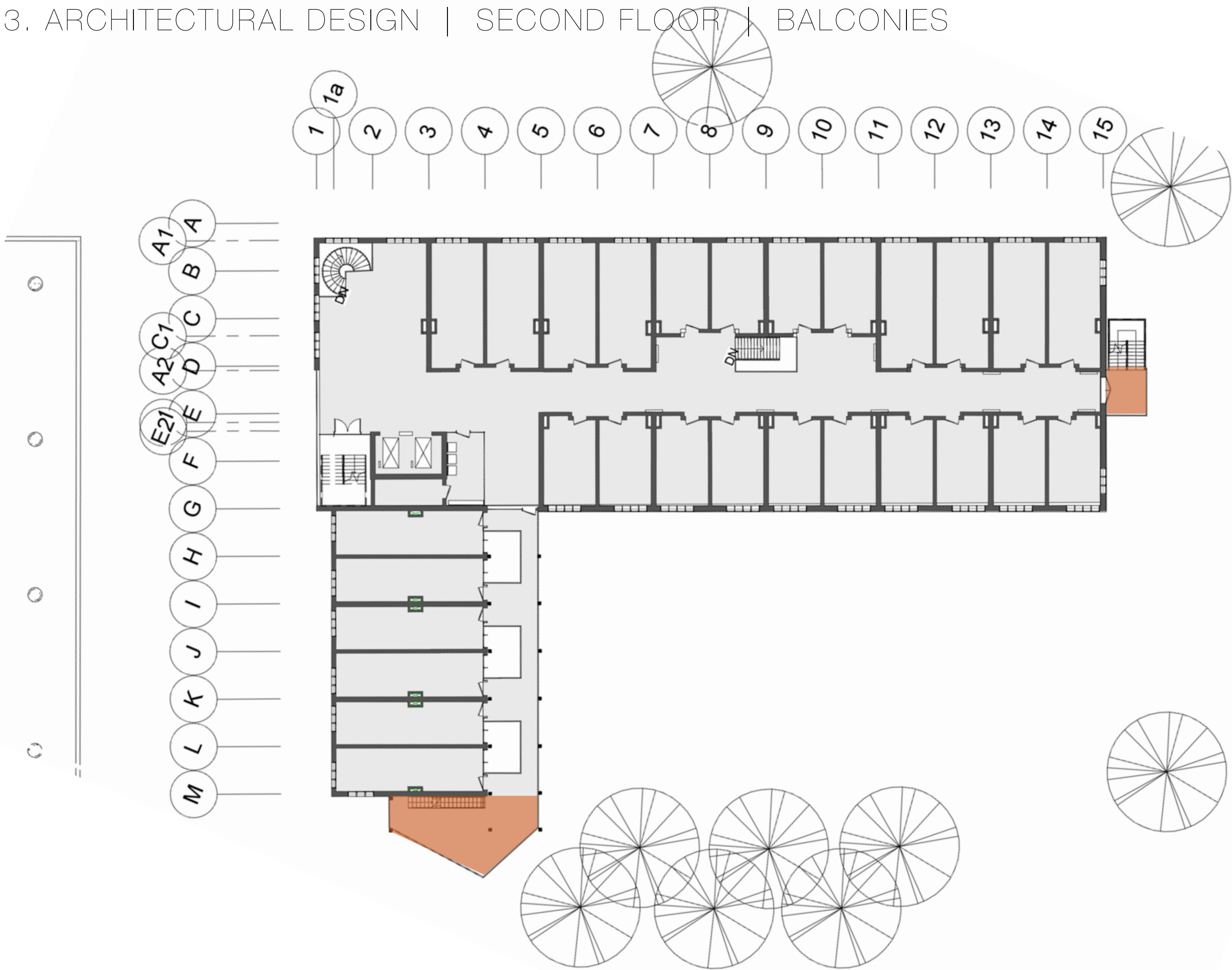
having dinner with the neighbours

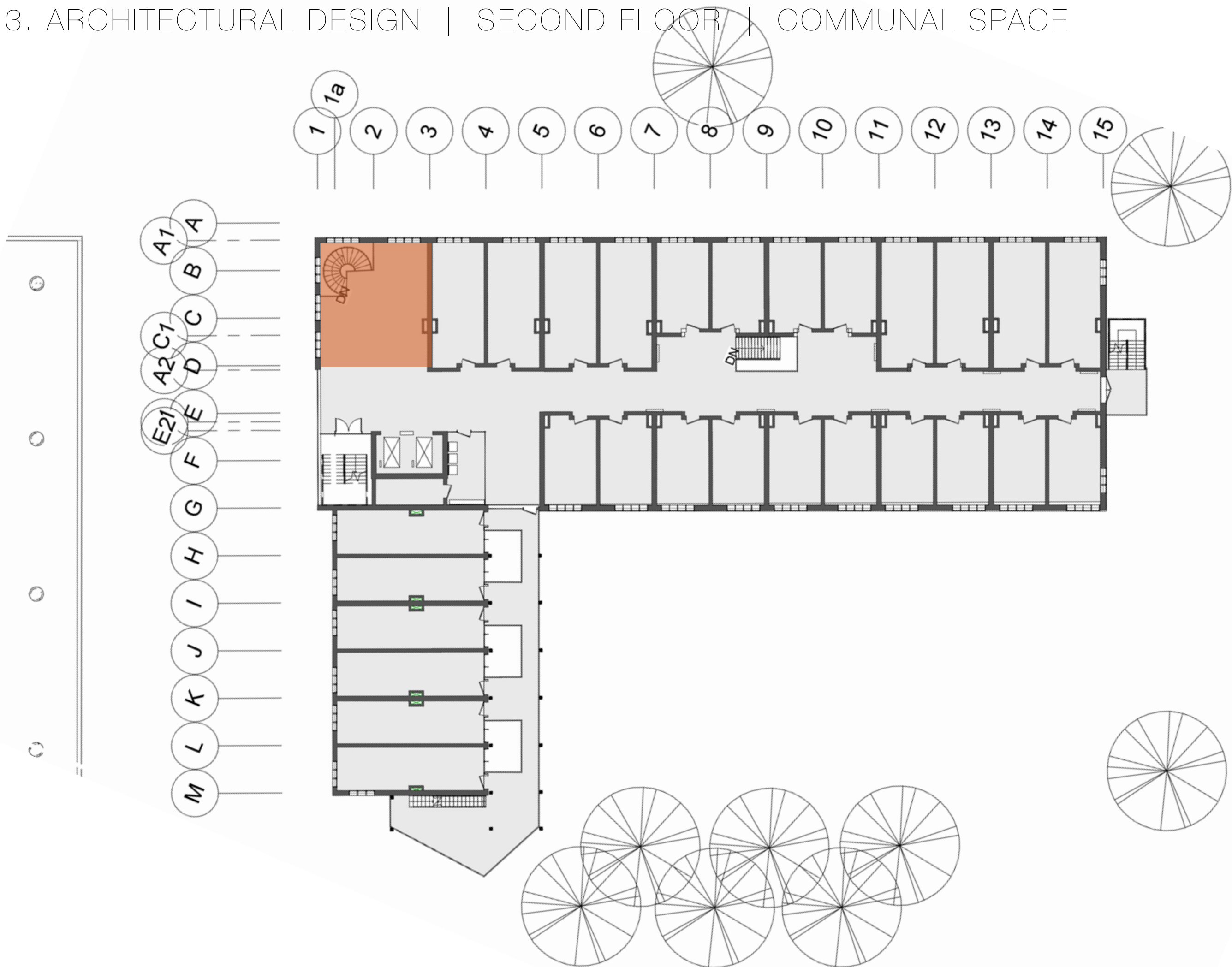




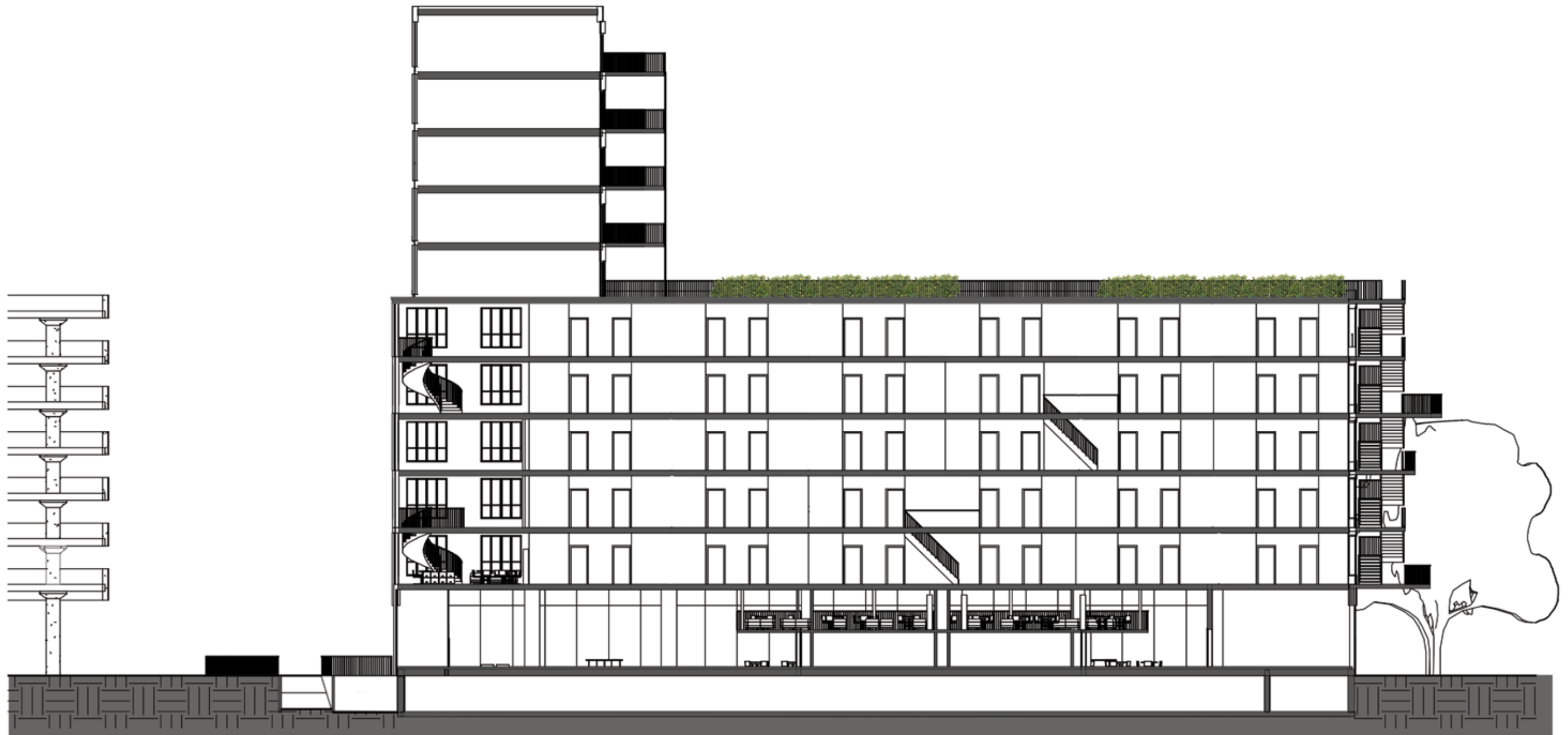






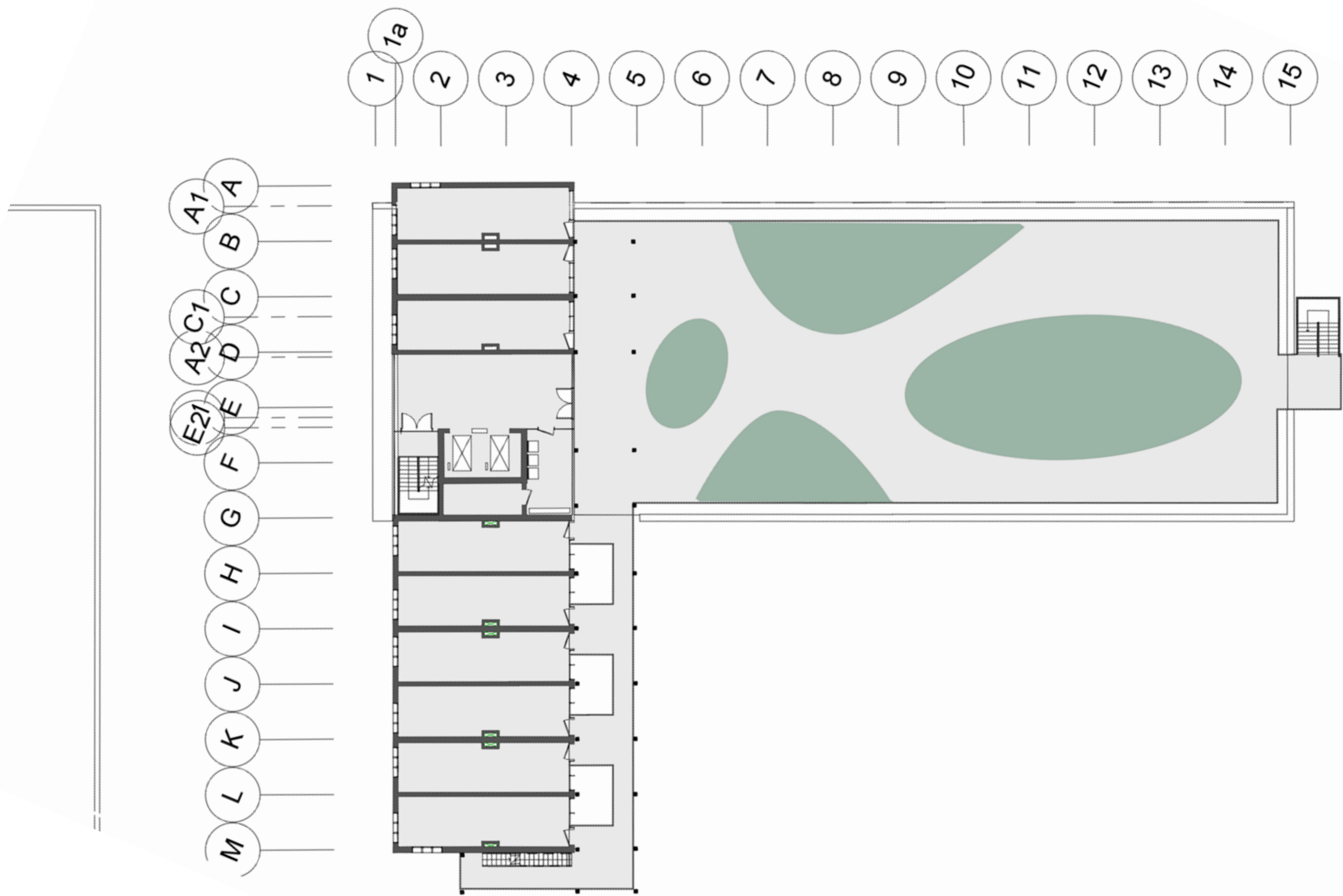


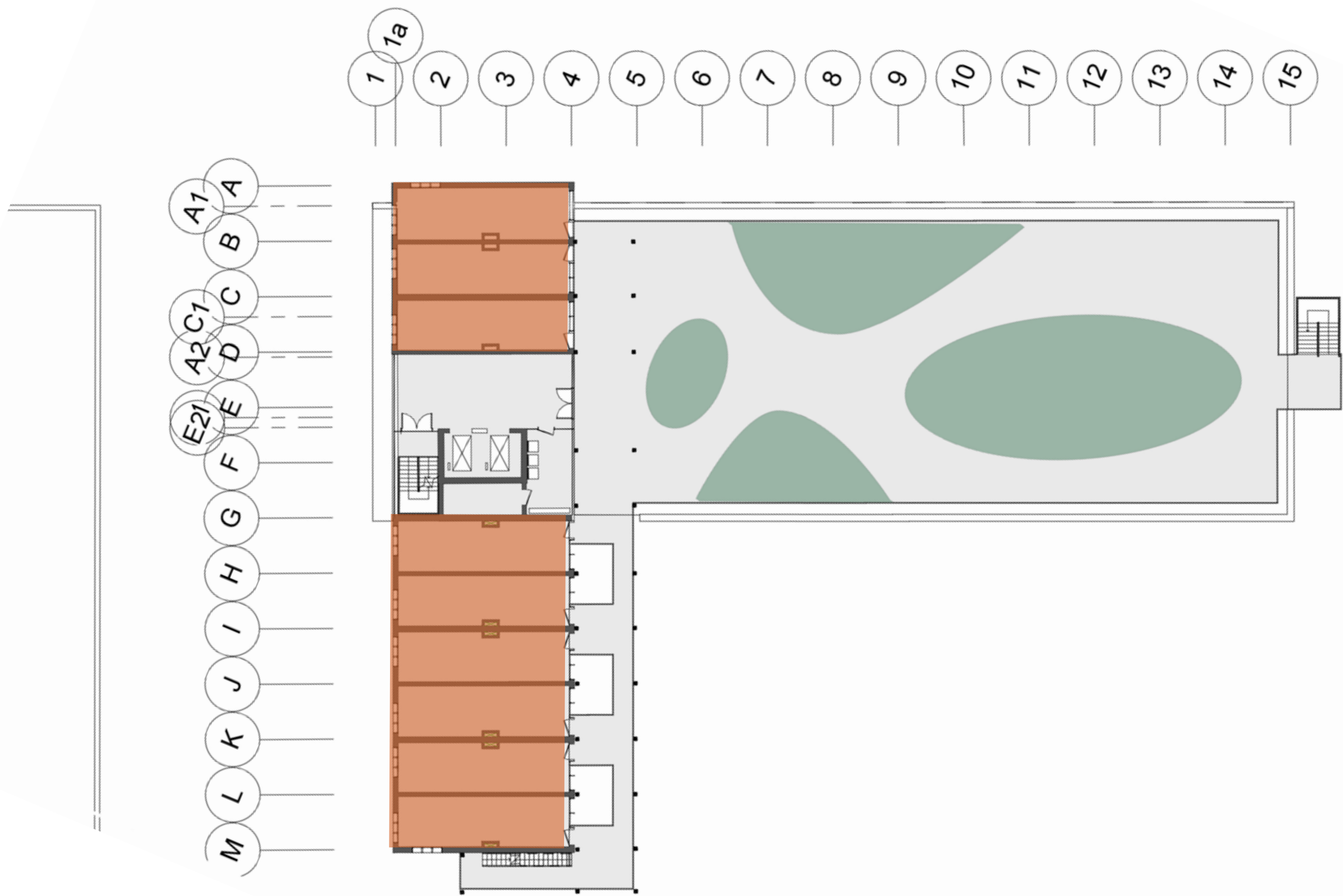


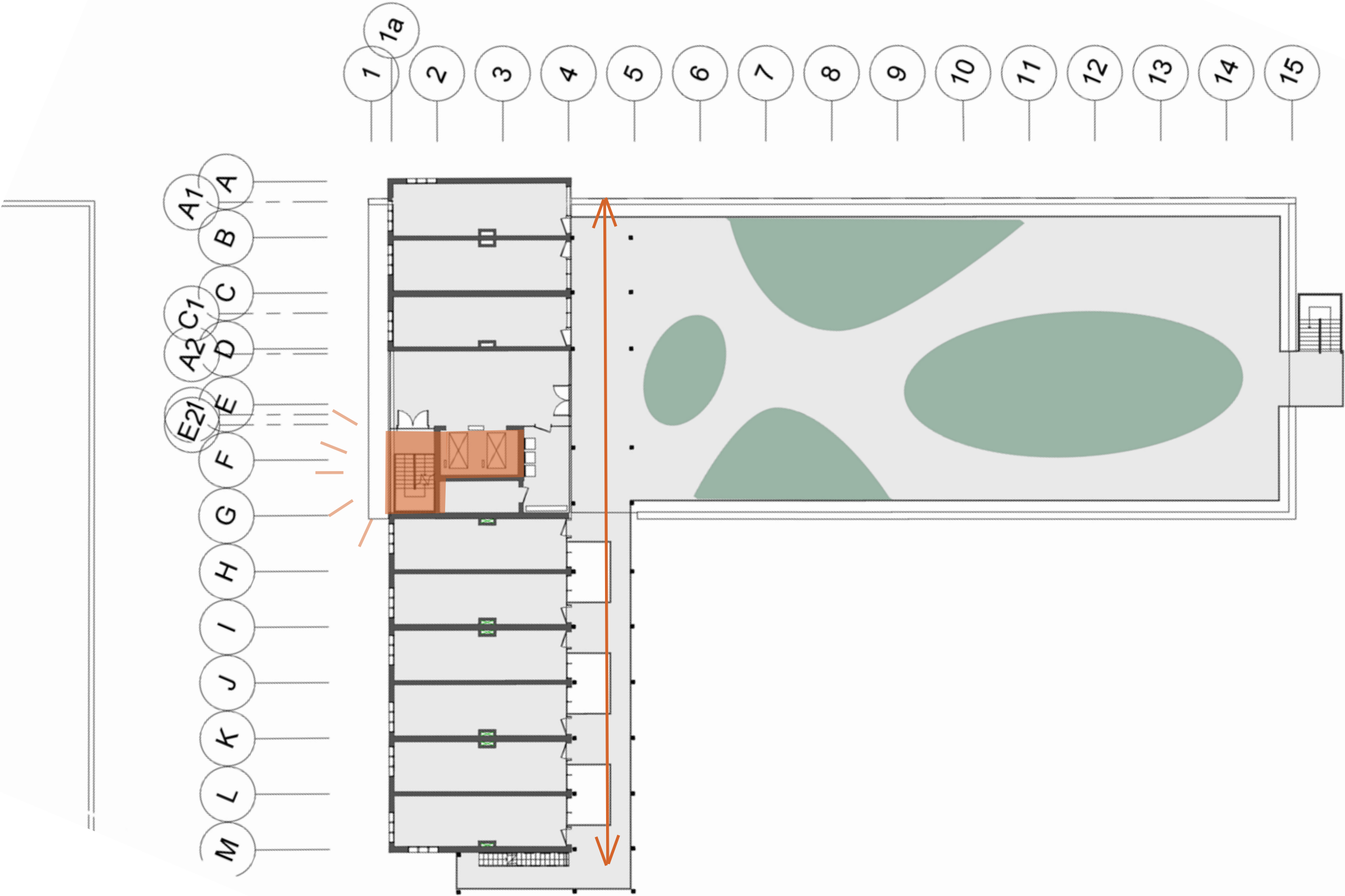


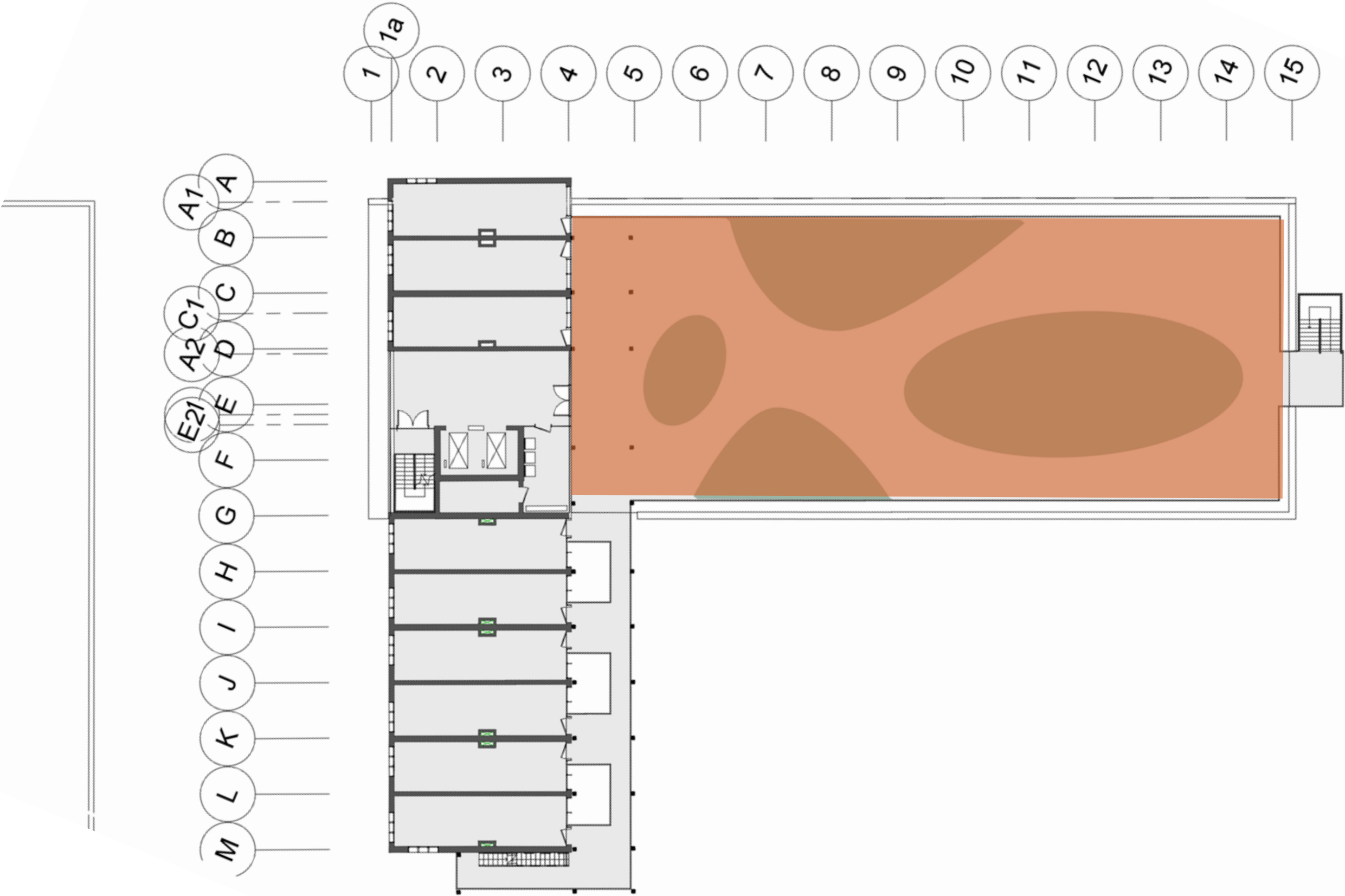


having drinks at the roofgarden





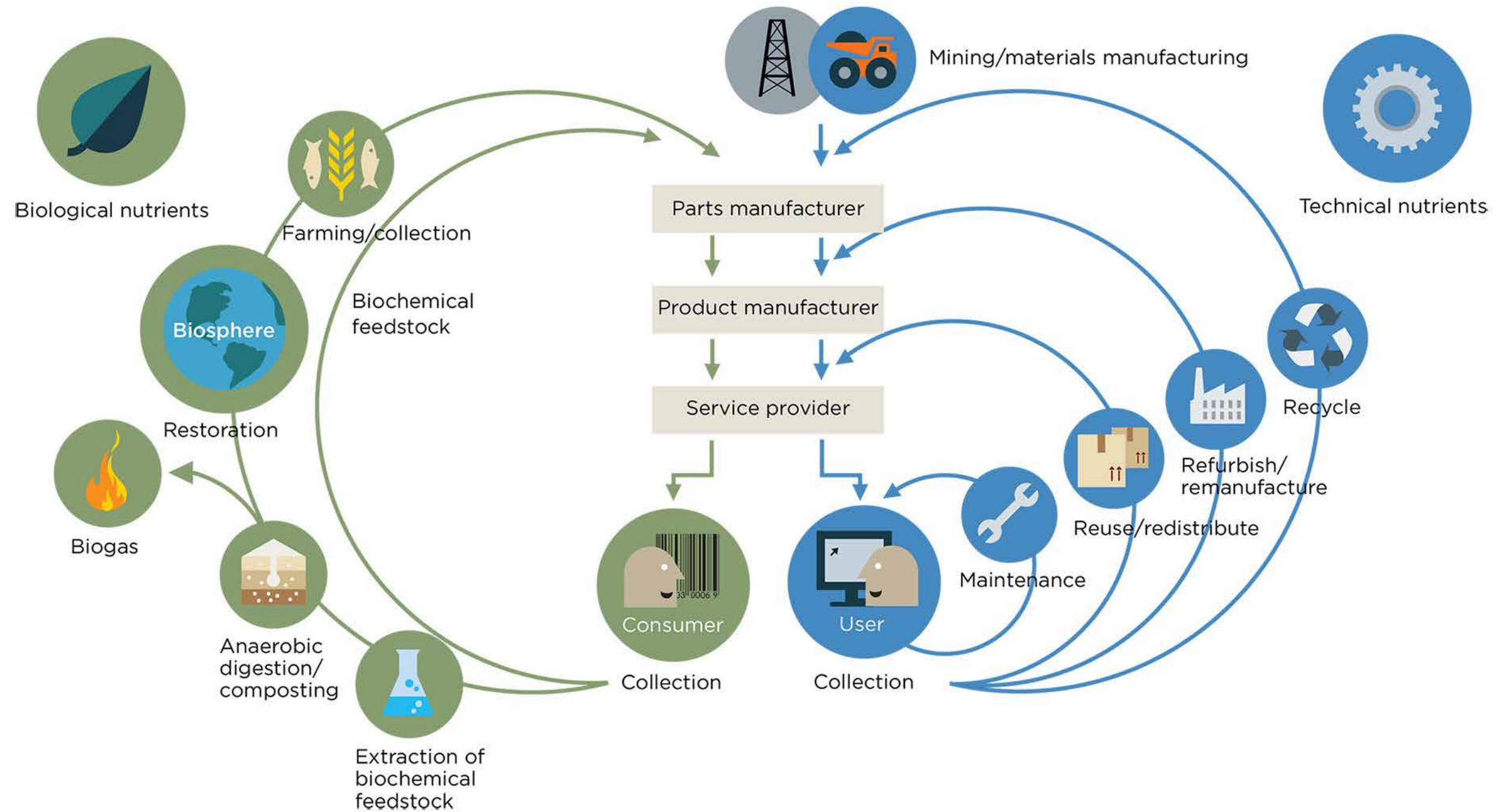








4. TECHNICAL DESIGN



OFFICE ALLIANDER • DUIVEN



TOWN HALL • BRUMMEN



TEMPORARY COURT • AMSTERDAM



- demountable
- reuse of several materials

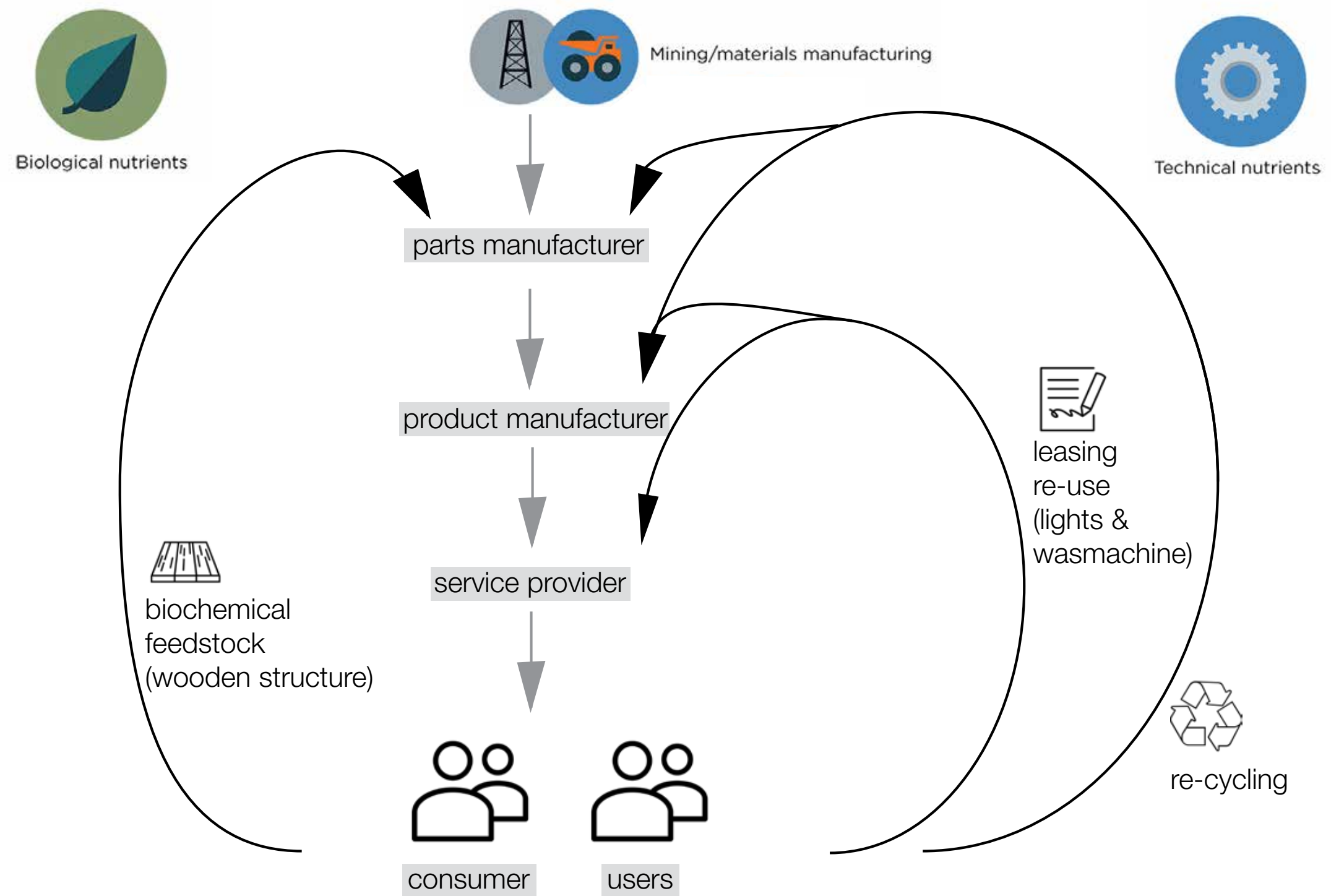
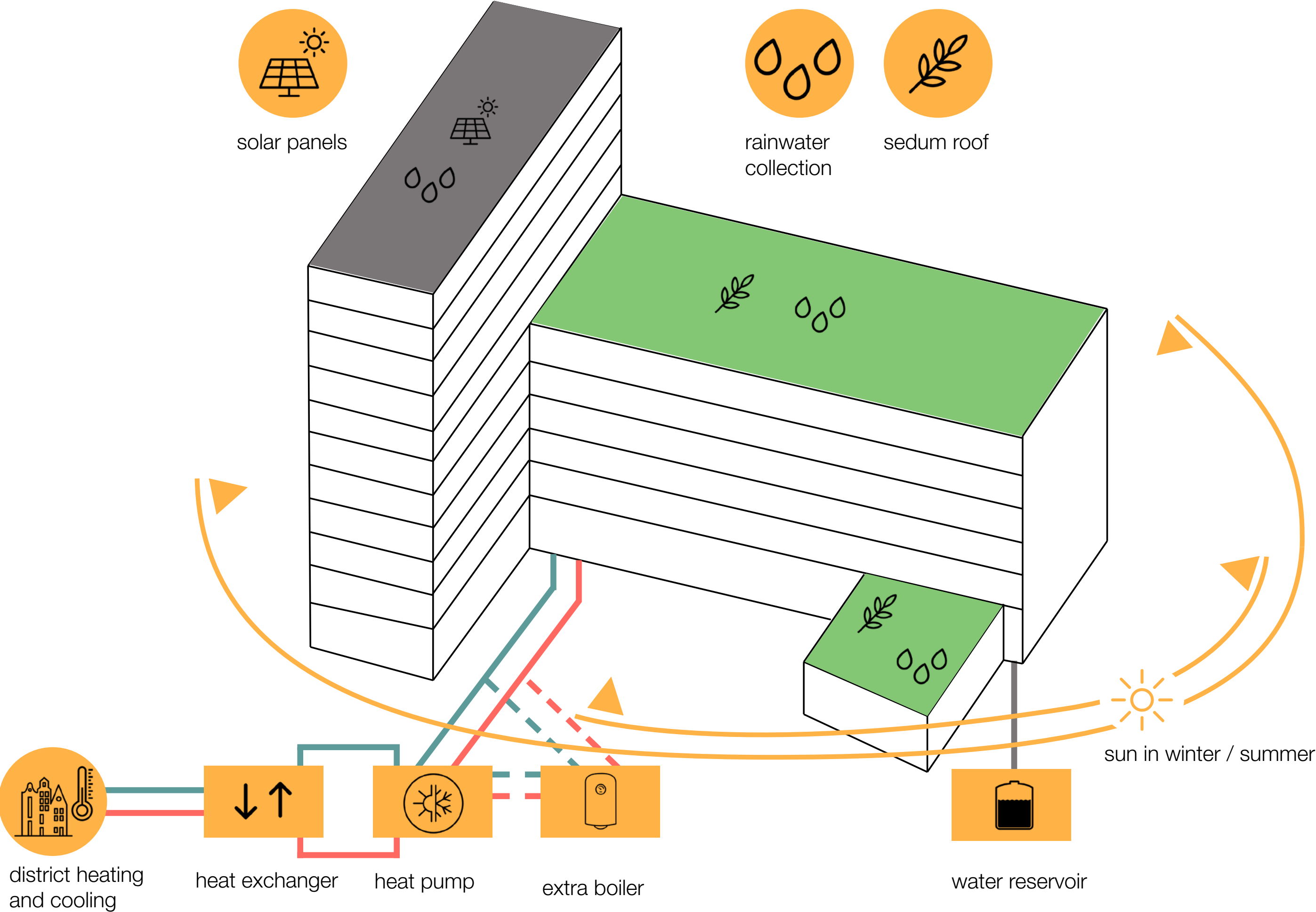
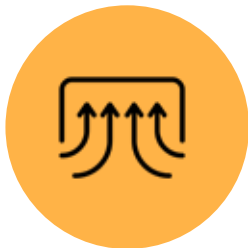
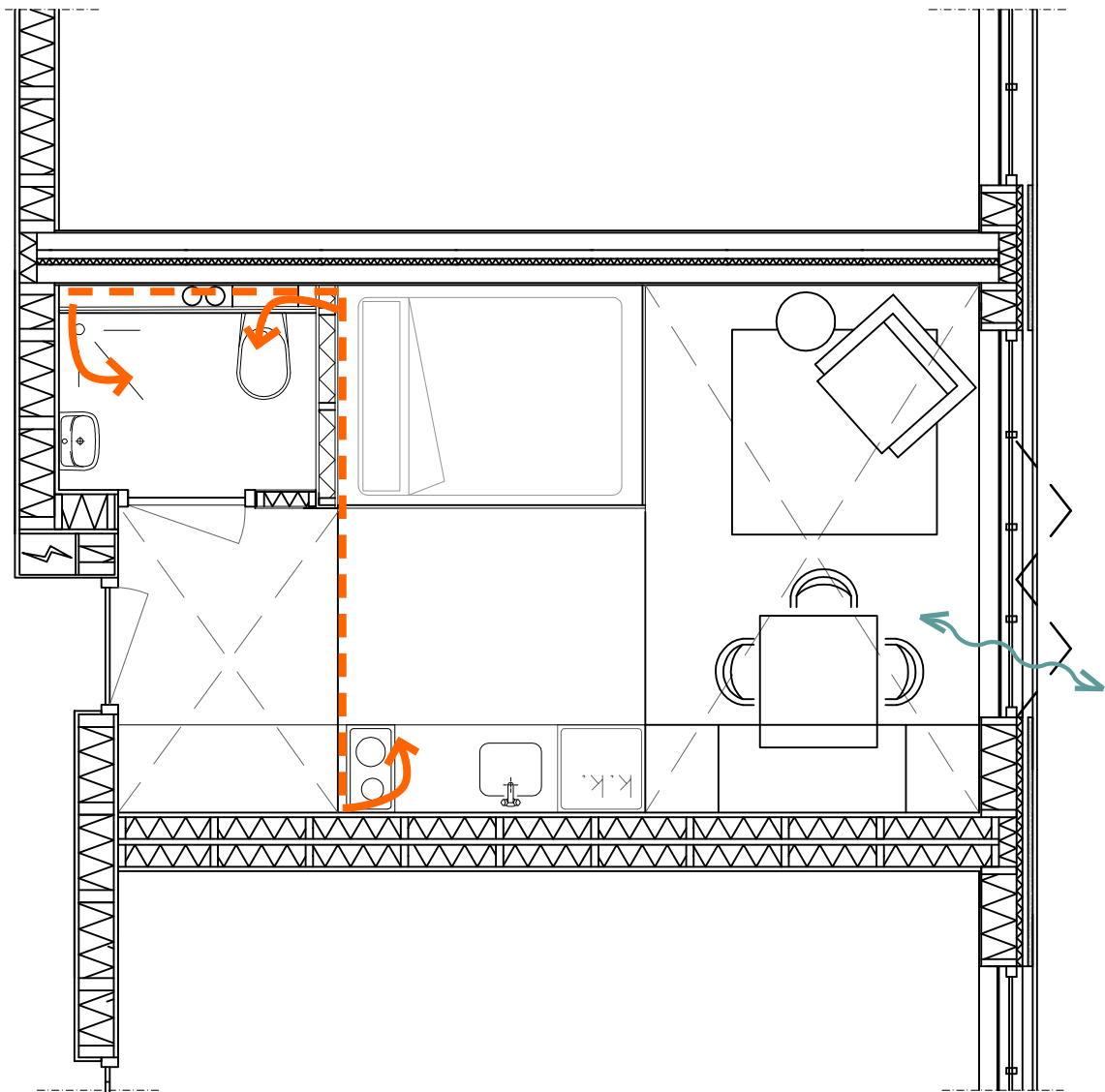


Diagram of the application in the building

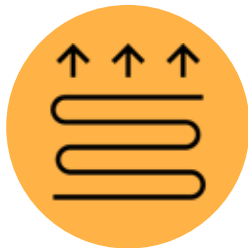




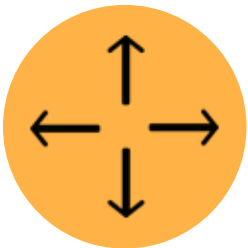
mechanical extraction



Water-saving
sanitation



floor heating
(& cooling)



adaptable
wall



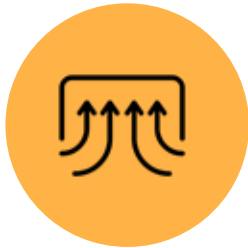
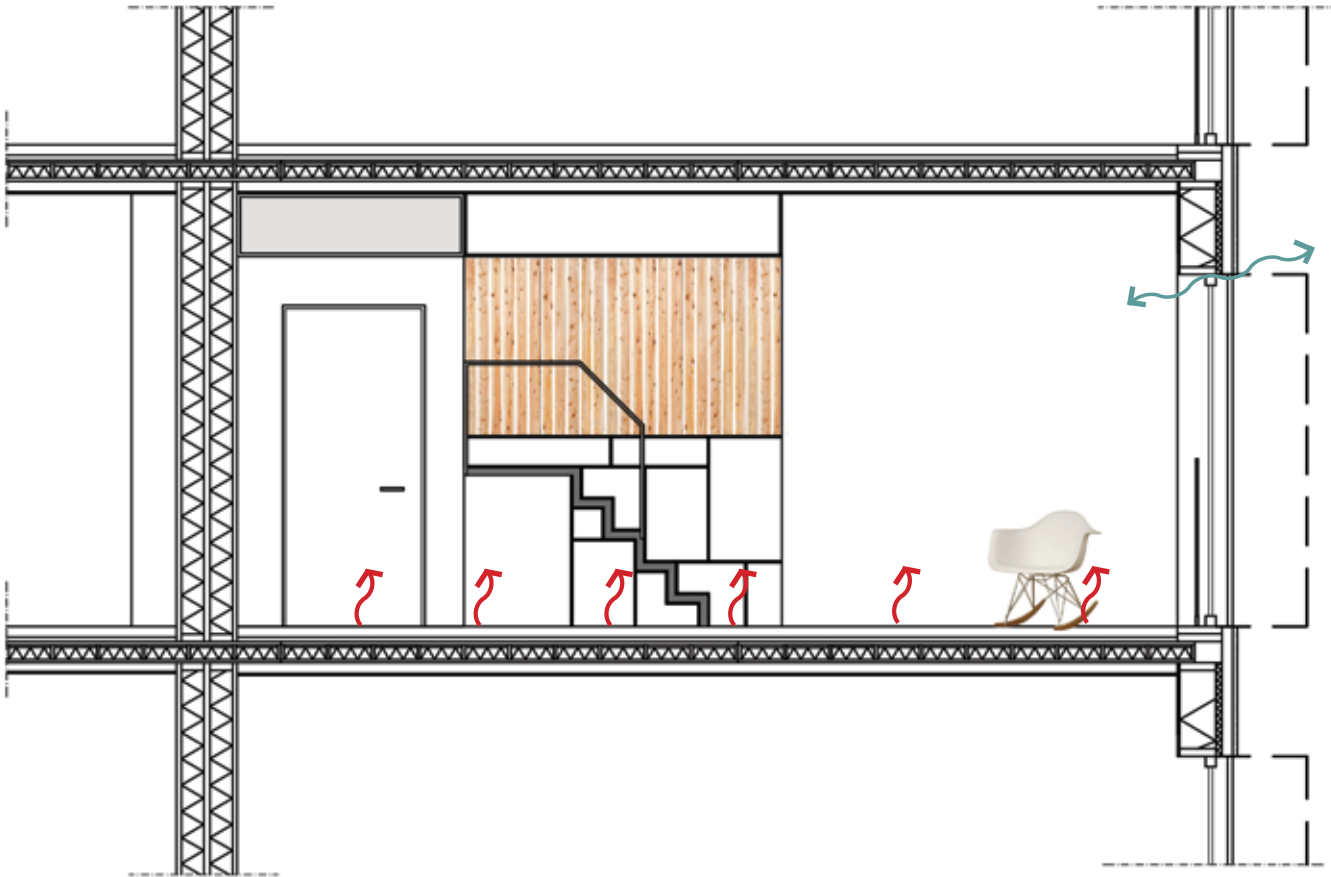
natural ventilation



demountable
construction



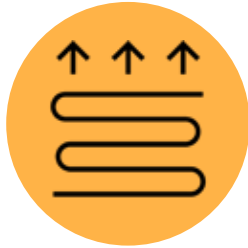
determine
facade openings
by residents



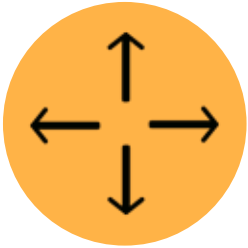
mechanical extraction



Water-saving
sanitation



floor heating
(& cooling)



adaptable
wall



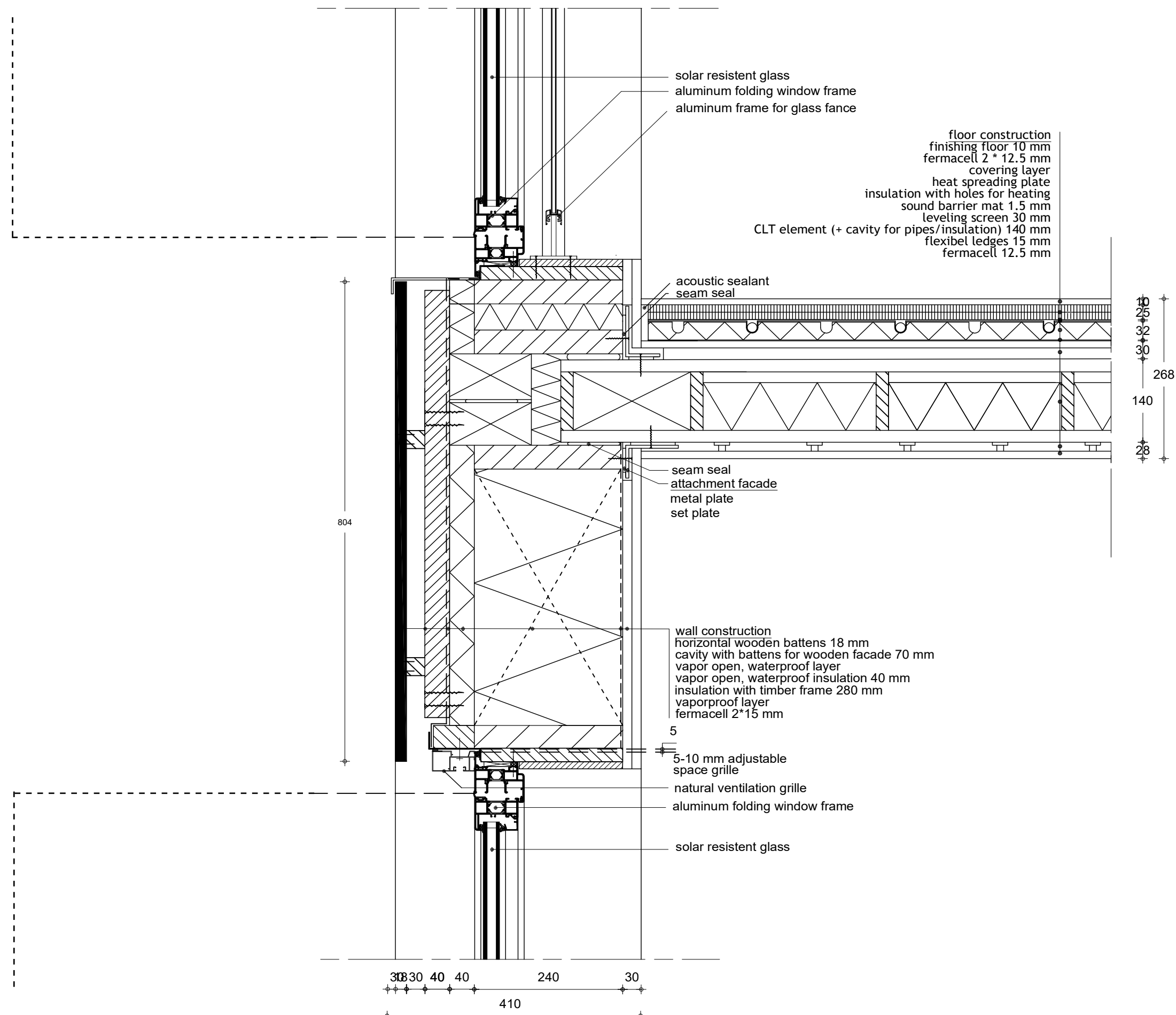
natural ventilation



demountable
construction



determine
facade openings
by residents

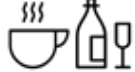


5. CONCLUSION

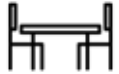
SHARED AMENITIES

-  laundrette
-  bicycle storage
-  kitchen
-  living space
-  roof terrace
-  balconies

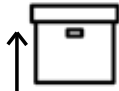
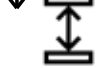
PUBLIC

-  working spaces (small / big, rentable)
-  bar / restaurant
-  gym
-  retail

APARTMENTS

-  bed
-  kitchen
-  diner-, workspace
-  storage space
-  living space
-  bathroom

SMALL SOLUTIONS

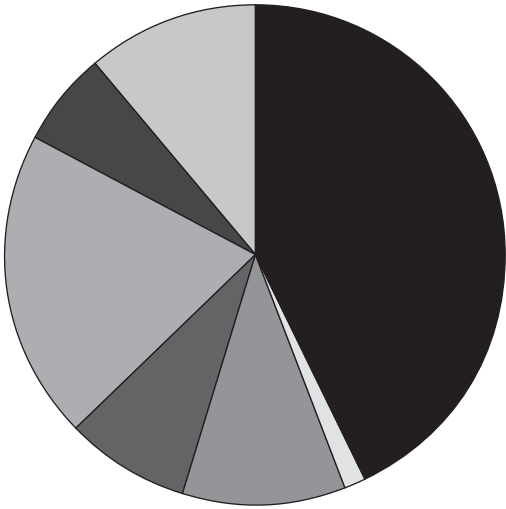
-  extra storage space
-  high ceiling
-  big windows
-  sliding door
-  juliet balcony

APARTMENT 1



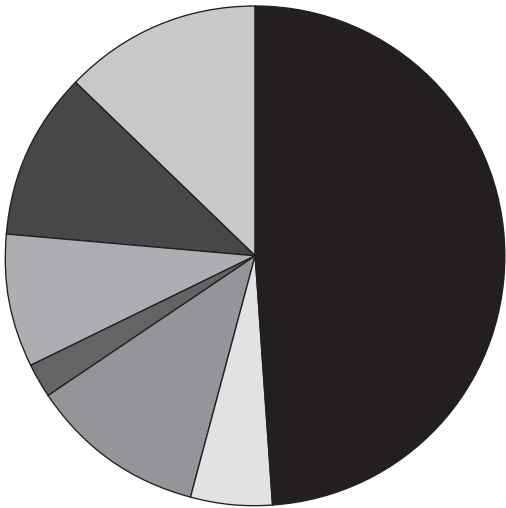
	bed room	8.07 %
	hallway	22.8 %
	storage	11.1 %
	bath room	1.6 %
	kitchen	5.7 %
	living room	38.4%

APARTMENT 2



	office	10.9 %
	bed room	6.1 %
	hallway	20.1 %
	storage	7.8 %
	bath room	10.6 %
	kitchen	1.3 %
	living room	43.2 %

APARTMENT 3



	office	12.6 %
	bed room	10.9 %
	hallway	8.7 %
	storage	2.2%
	bath room	11.4 %
	kitchen	5.2 %
	living room	49.8 %

Price average apartment Amsterdam (60m2)
30 % of average price
25 % of average price

€ 303.000,00
€ 212.100,00
€ 227.250,00

price per m2 dwelling (centre Amsterdam)

€ 5.000,00

shared space per level
gallery / corridor
amount of apartments per level

420 m2
28 (total 185 dwellings)

apartment 1
23m2

€ 189.821,43
37.4%

apartment 2
30 m2

€ 224.821,43
25.8%

apartment 3
30 m2

€ 224.821,43
25.8%

MICRO APARTMENTS FOR THE NEW URBANITES
