Growing up in the city

Creating a safe environment for young families
in the center of Amsterdam

Terrie van den Brink | P5 | June 28th 2018 | Dutch Housing Graduation studio: Stronghold Amsterdam | Tutors: Theo Kupers, Ferry Adema, Pierijn van der Putt

Problem statement

nrc.nl›

Digitale editie | Webwinkel

Binnenland | Buitenland | Economie | Cultuur | Sport | Opinie | Wetenschap | Tech & Media

Jonge gezinnen trekken weg uit de grote steden

9 juni 2016

Source: NRC, 2017

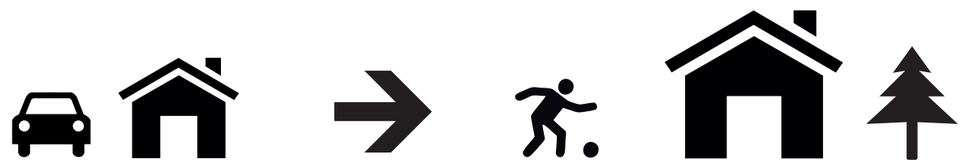
Growing up in the city

Problem statement

Reasons to leave

Small dwellings
No or limited outdoor space
High costs

Traffic (pressure)
Unsafe feeling



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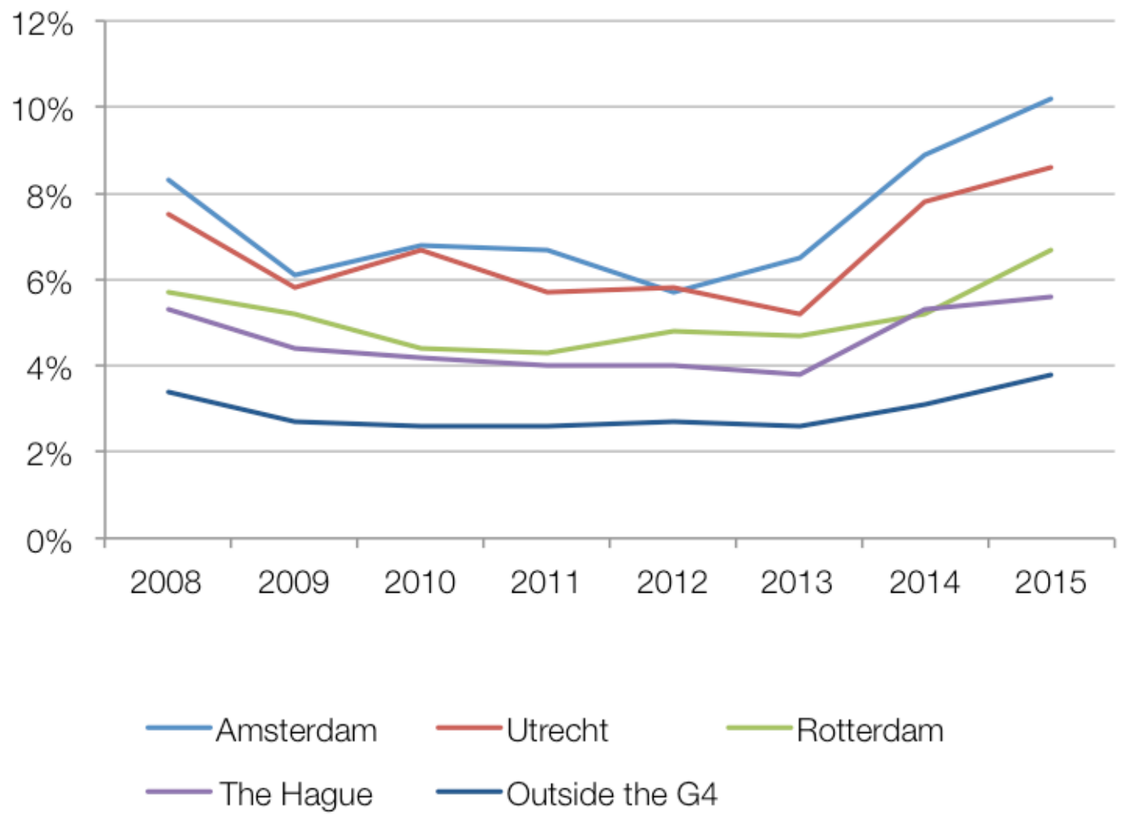


Source: CBS, 2017

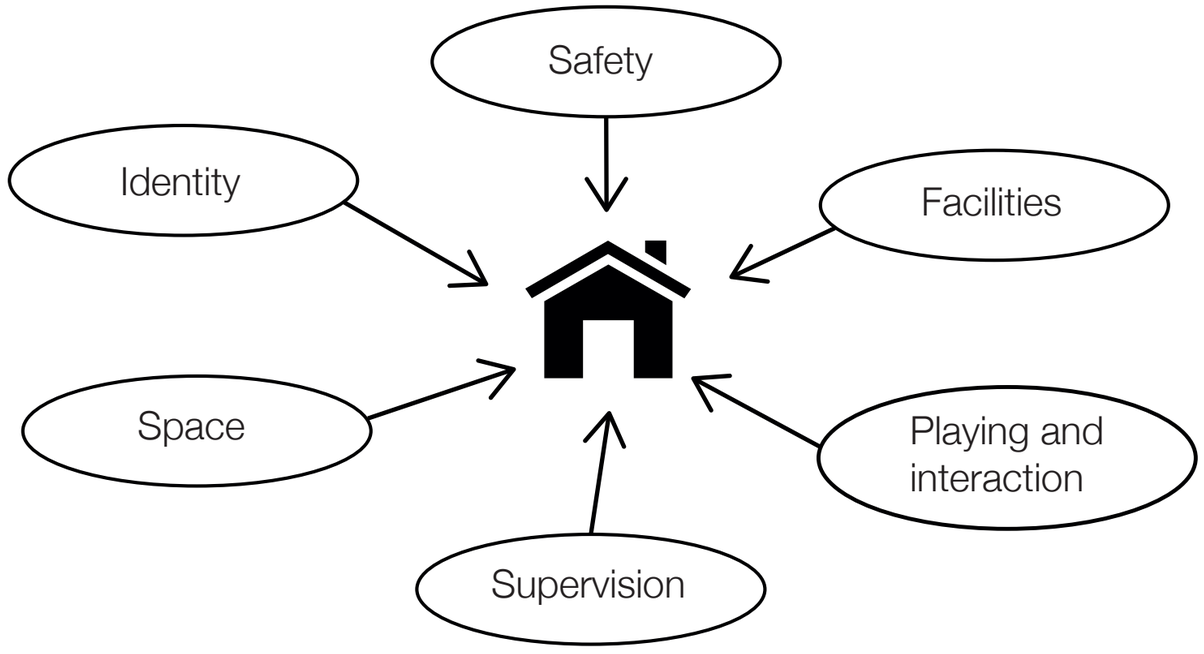
Reasons to stay

Cultural climate
Social connections
Lifestyle

Research question

What are the **needs** of young families and which **design solutions** can satisfy them on the neighbourhood, building and dwelling scale?

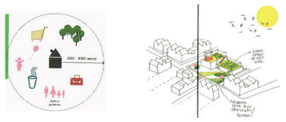
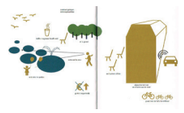
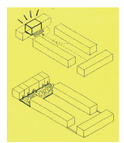
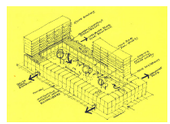
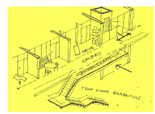
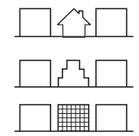
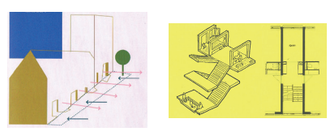
Needs


Safety
Identity
Facilities
Space
Playing and interaction
Supervision

Growing up in the city

Design solutions

Design solutions

	Safety	Facilities	Playing & interaction	Supervision	Space	Identity
Neighbourhood	Safe bicycle route through the city, connecting places that are important for children.[1] Provide more space for bicycles, sidewalks and room for playing.[1] Create wide sidewalks.[1] 	The neighbourhood should provide enough facilities.[1] Playing and sport facilities or other after school activities can be located on flat roofs.[1]  Make sure the range to the facilities is acceptable.[3] 	Schoolyard can function as meeting point for children and their parents.[1] <u>Different street types:</u> Playing street (no cars allowed between 9am and 5pm)[1] Parking street[1] Bicycle street[1] Playing on flat roofs of parking or schools.[2] 	Facilities at the playground for the parents: coffee place, benches, covered place, inside place.[1] 	Playing and sport facilities on flat roofs.[1] Schoolyard as meeting point for children and their parents.[1]	-
Building	<u>Create boundaries or barriers around places where children play:</u> Fence Hight difference Sloped planes Playing in the lee (luwte).[1]  Provide a playground for young children in the building itself.[3] 	Creating a bike parking, to clean the sidewalks (more space for playing).[1] Adding missing facilities to the building.[1] Make a neighbourhood room (buurtcentrum).[2] 	Use circulation (transition space) for playing and meeting.[2] Allow for double use of the street (elements).[1] Separate parking and playing on the street.[1] Double use of circulation space.[3] Combining collective and private outdoor spaces.[3] Using leftover space (sloped) of playing area.[2]	Supervision from gallery.[1] Make an inner courtyard in the building.[2]  	Communal gallery garden, private space at gallery.[2] Playing and meeting place in circulation space of the building.[2] Playing above ground level[2] Use the transition space from inside to outside as an extra place to stay in, for children to play in and to meet the neighbours.[2] 	Strong identity of the building helps the wayfinding for young children.[3] 
Dwelling	-	-	Connecting dwellings to the public space.[1] Using space in the staircase as playing area. [2] 	Supervision from dwelling.[1] 	Create a lot of storage space for multiple types of infill.[2] A separate kitchen can provide privacy when needed.[2] Create a lot of rooms.[2] Sliding doors can help create more rooms and privacy when needed.[2] Separation between private and representative rooms.[2] <u>Flexible use:</u> The right dimensions of rooms and the façade can make future renovations and changes better feasible.[2] Make the use of rooms and hallway available for mulitple functions.[2] Wide hallway[2] Central core.[2] Create a devision in between the private and representative areas.[3] Provide enough outdoor space.[3]	-

1: Nestelen in de stad (Keesom, 2013)
2: De nieuwe generatie stadskinderen (Karsten & Felder, 2016)
3: Case study results

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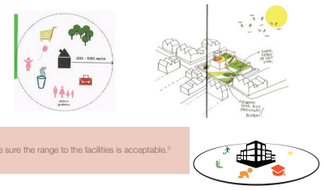
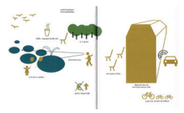
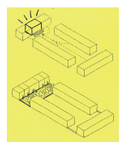
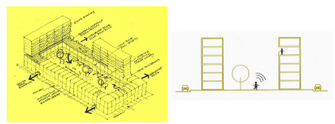
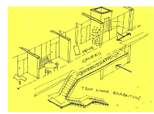
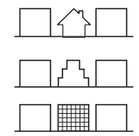
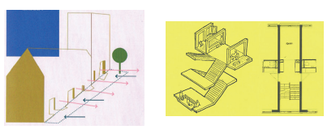
Neighbourhood	Safe bicycle route through the city, connecting places that are important for children.[1] Provide more space for bicycles, sidewalks and room for playing.[1] Create wide sidewalks.[1] 	The neighbourhood should provide enough facilities.[1] Playing and sport facilities or other after school activities can be located on flat roofs.[1]  Make sure the range to the facilities is acceptable.[3]	Schoolyard can function as meeting point for children and their parents.[1] Different street types: Playing street (no cars allowed between 9am and 5pm)[1] Parking street[1] Bicycle street[1] Playing on flat roofs of parking or schools.[2] 	Facilities at the playground for the parents: coffee place, benches, covered place, inside place.[1] 	Playing and sport facilities on flat roofs.[1] Schoolyard as meeting point for children and their parents.[1]	-
Building	Create boundaries or barriers around places where children play: Fence Hight difference Sloped planes Playing in the lee (luwte).[1]  Provide a playground for young children in the building itself.[3] 	Creating a bike parking, to clean the sidewalks (more space for playing).[1] Adding missing facilities to the building.[1] Make a neighbourhood room (buurtcentrum).[2] 	Use circulation (transition space) for playing and meeting.[2] Allow for double use of the street (elements).[1] Separate parking and playing on the street.[1] Double use of circulation space.[3] Combining collective and private outdoor spaces.[3] Using leftover space (sloped) of playing area.[2]	Supervision from gallery.[1] Make an inner courtyard in the building.[2] 	Communal gallery garden, private space at gallery.[2] Playing and meeting place in circulation space of the building.[2] Playing above ground level[2] Use the transition space from inside to outside as an extra place to stay in, for children to play in and to meet the neighbours.[3] 	Strong identity of the building helps the wayfinding for young children.[3] 
Dwelling	-	-	Connecting dwellings to the public space.[1] Using space in the staircase as playing area. [2] 	Supervision from dwelling.[1] 	Create a lot of storage space for multiple types of infill.[2] A separate kitchen can provide privacy when needed.[2] Create a lot of rooms.[2] Sliding doors can help create more rooms and privacy when needed.[2] Separation between private and representative rooms.[2] Flexible use: The right dimensions of rooms and the façade can make future renovations and changes better feasible.[2] Make the use of rooms and hallway available for mulitple functions.[2] Wide hallway[2] Central core.[2] Create a devision in between the private and representative areas.[3] Provide enough outdoor space.[3] 	-

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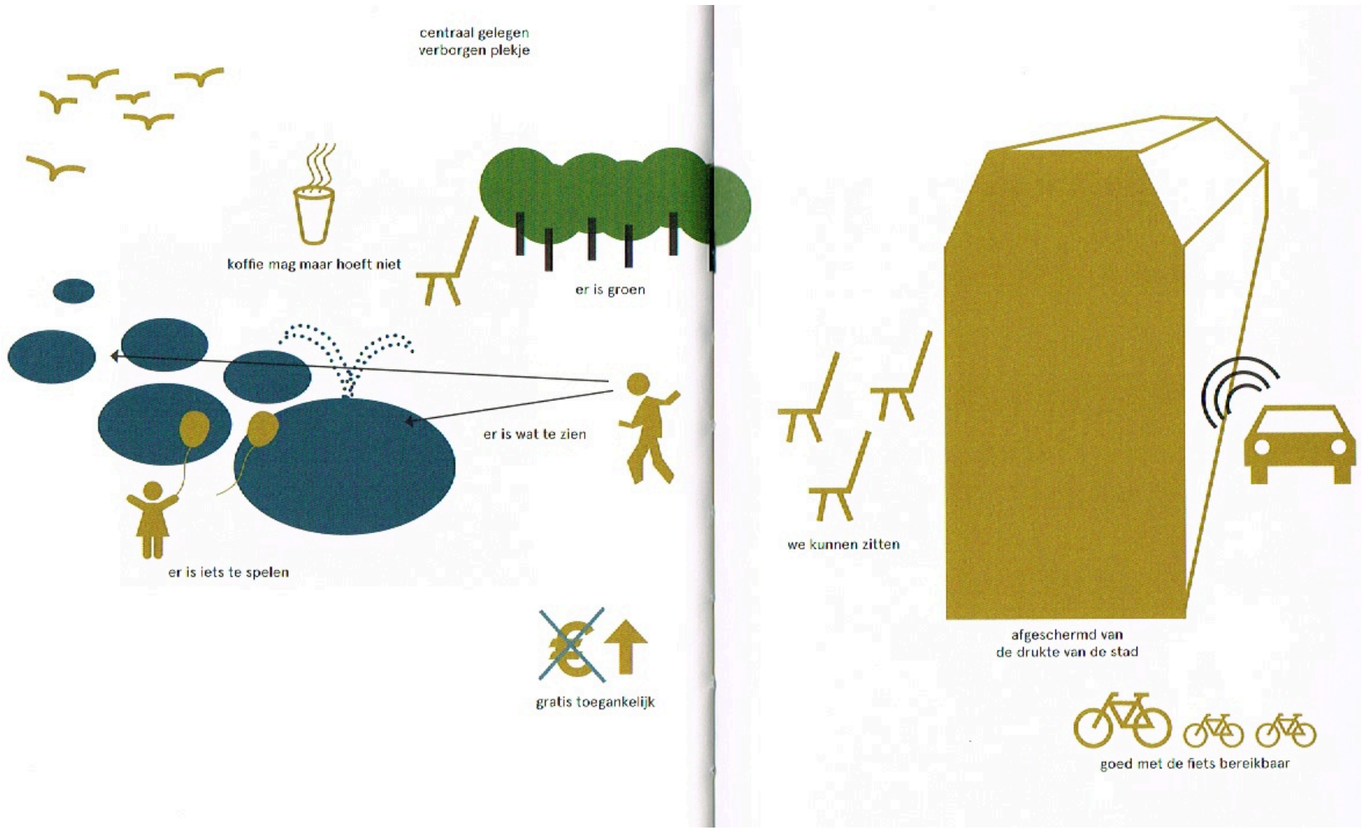
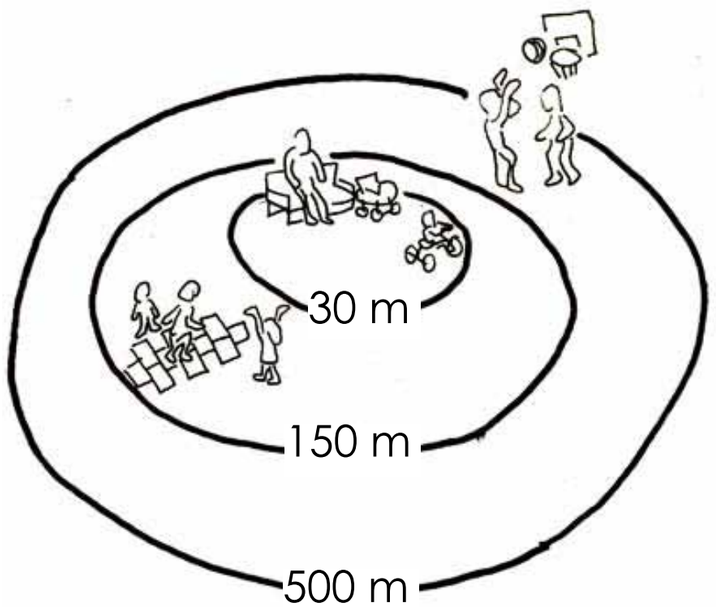
Safety - playing in the lee



Source: Keesom, 2013

Facilities - range of activity



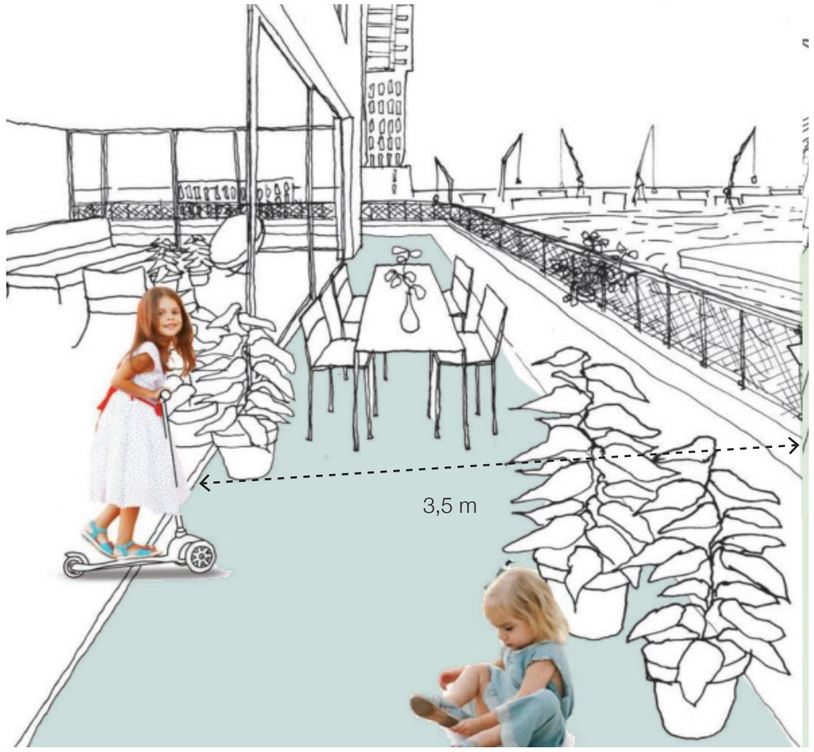
Source: Liesker & Atteveld, 2010

Facilities - range of activity

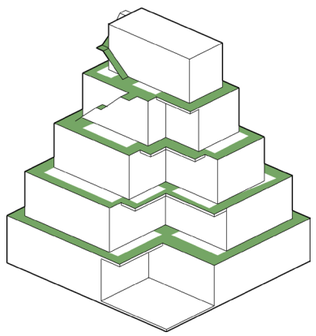
Kolenkithuis, Amsterdam

Source: heren5.eu

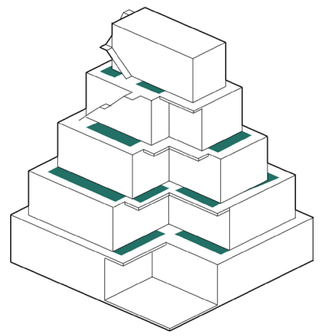
Playing and interaction - double use circulation space



Babel, Rotterdam



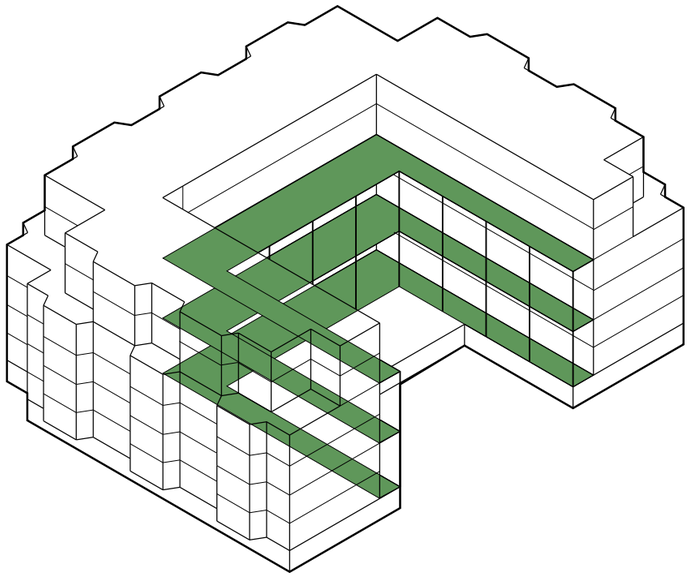
Gallery: Informal meeting space



Private outdoor space

Source: Boodt

Supervision - inner courtyard



Wisselspoor, Leuven

Source: hcva.nl

Space - expension living space

Streetlife in 19th century Amsterdam, workers district

Source: Hertzberger, 1991

Identity

Babel, Rotterdam

Source: Boodt, 2017

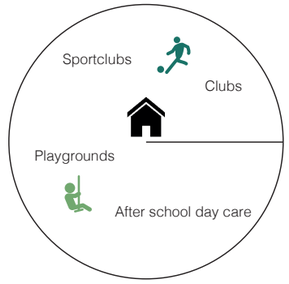
Location

Source: aerophotostock.com

Site analysis

Site analysis

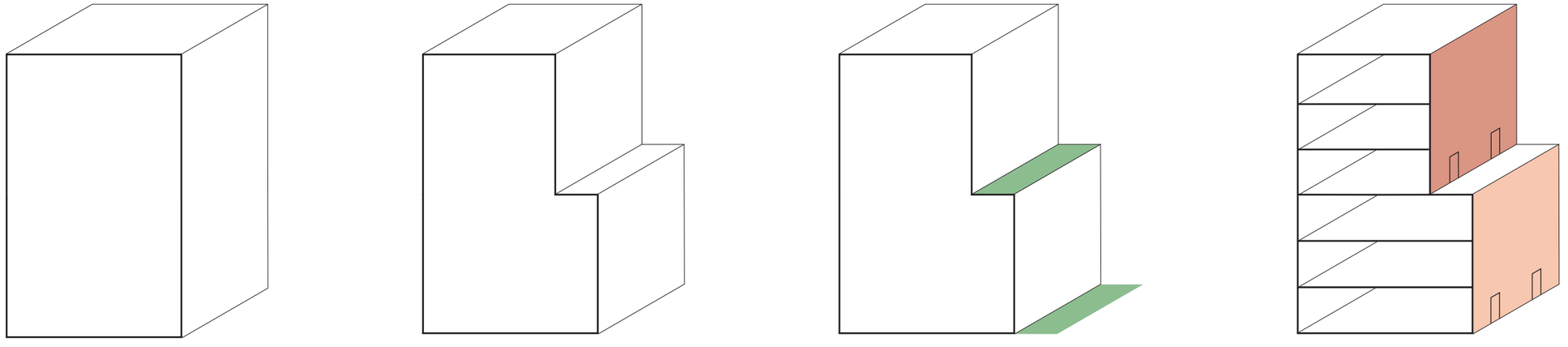
Daily



Weekly

Monthly

Building concept



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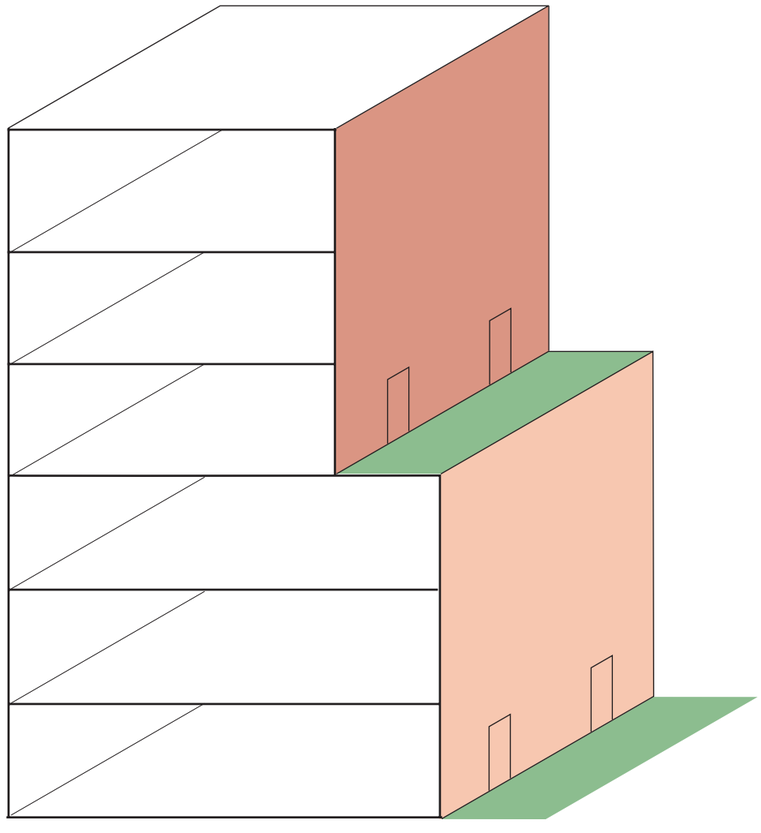

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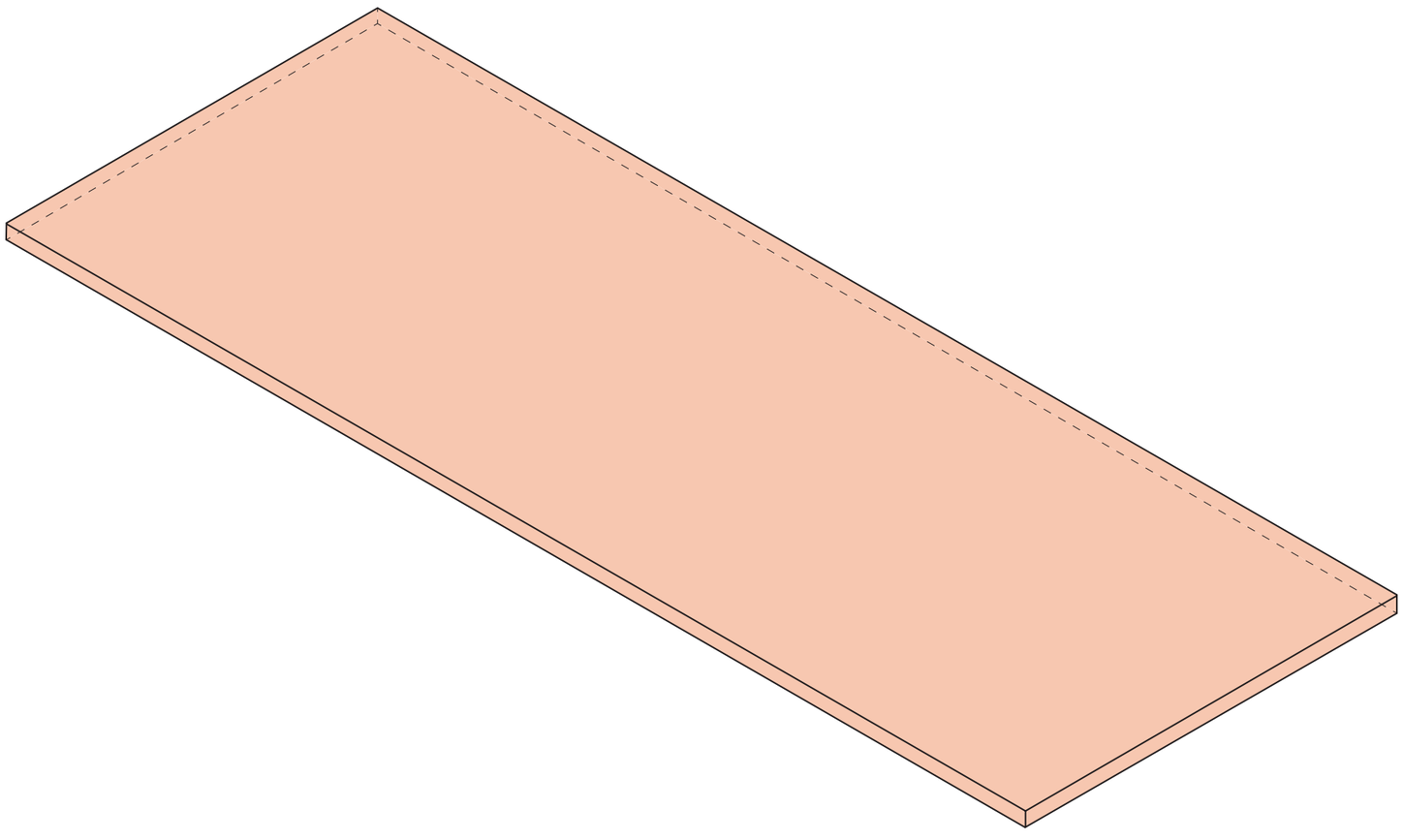

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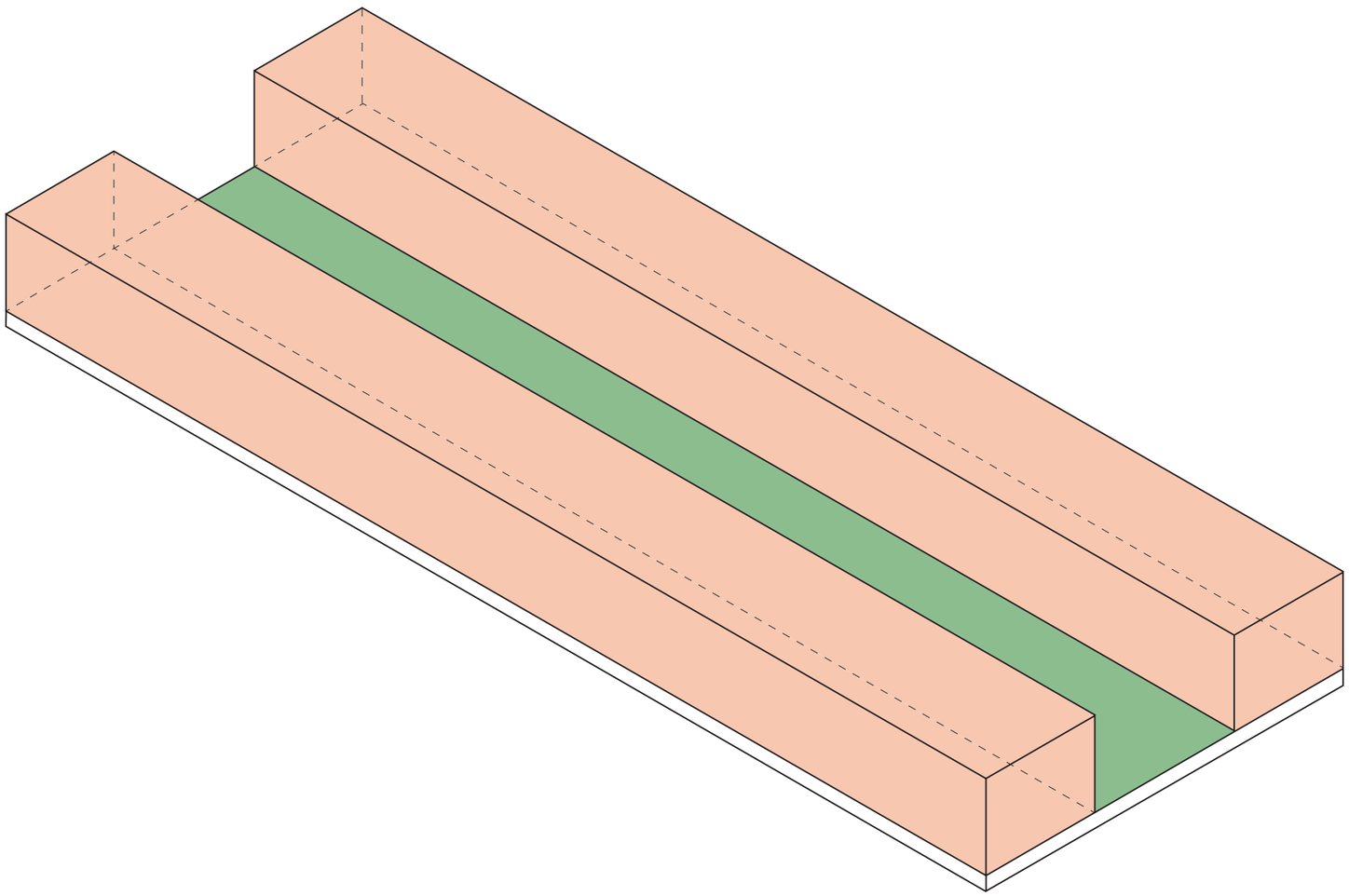

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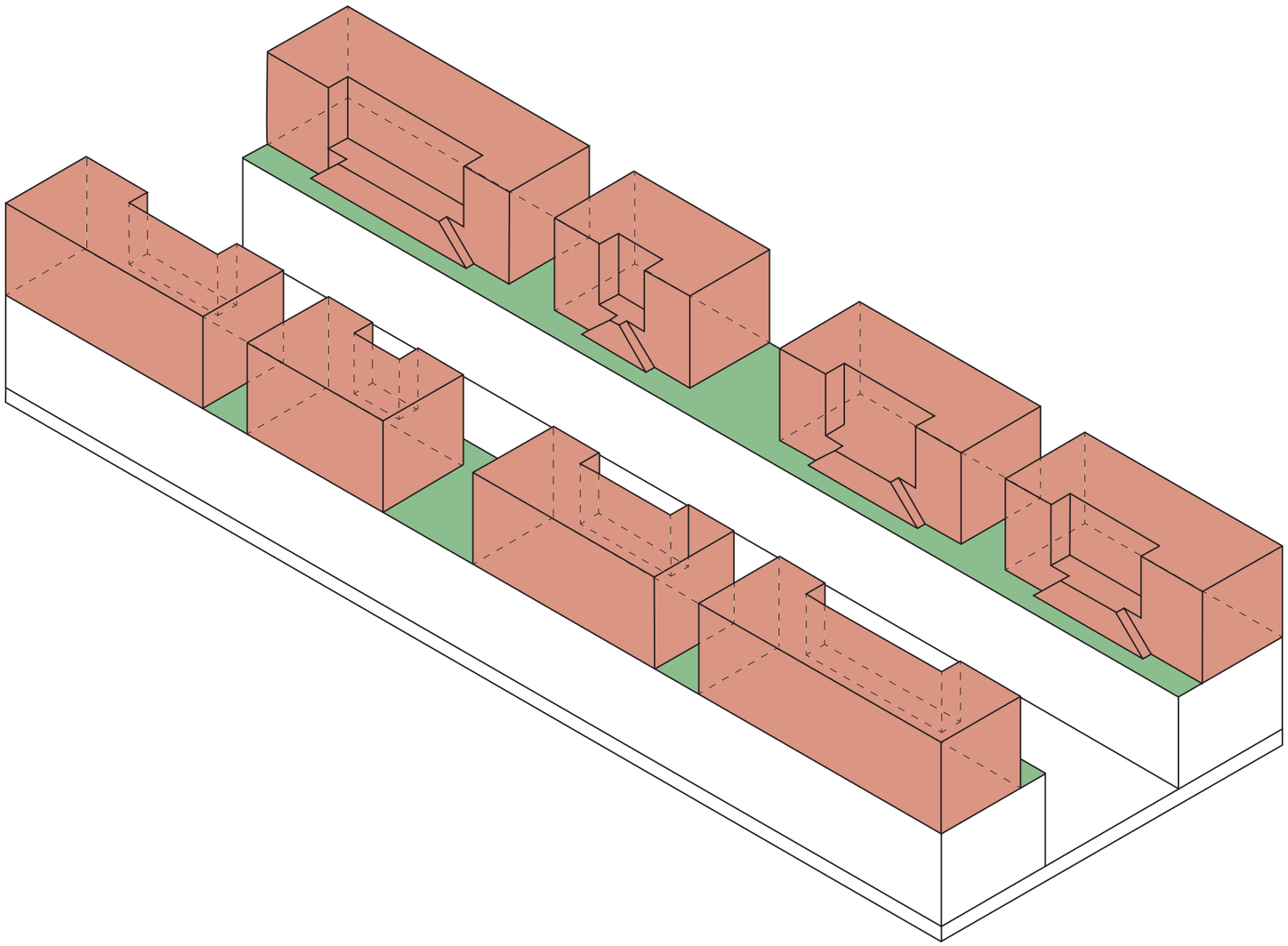
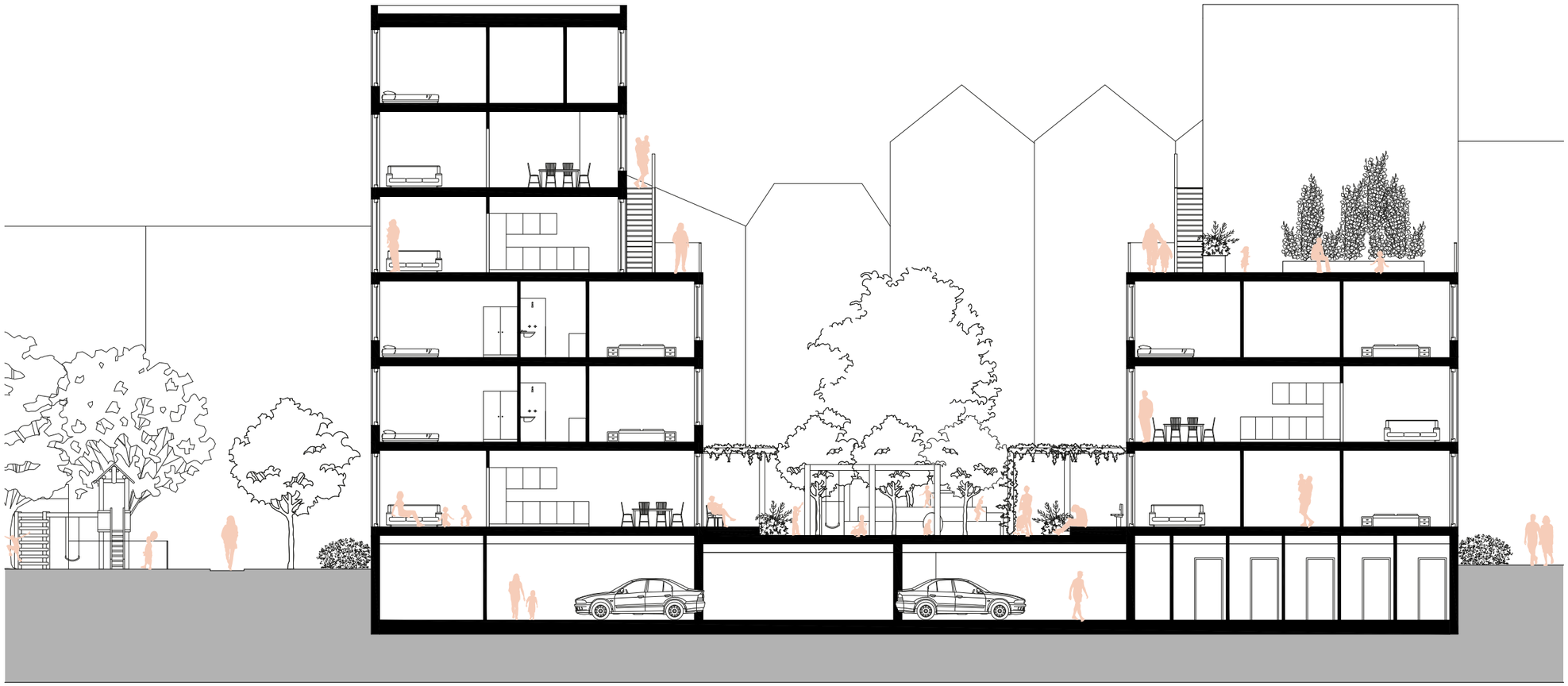
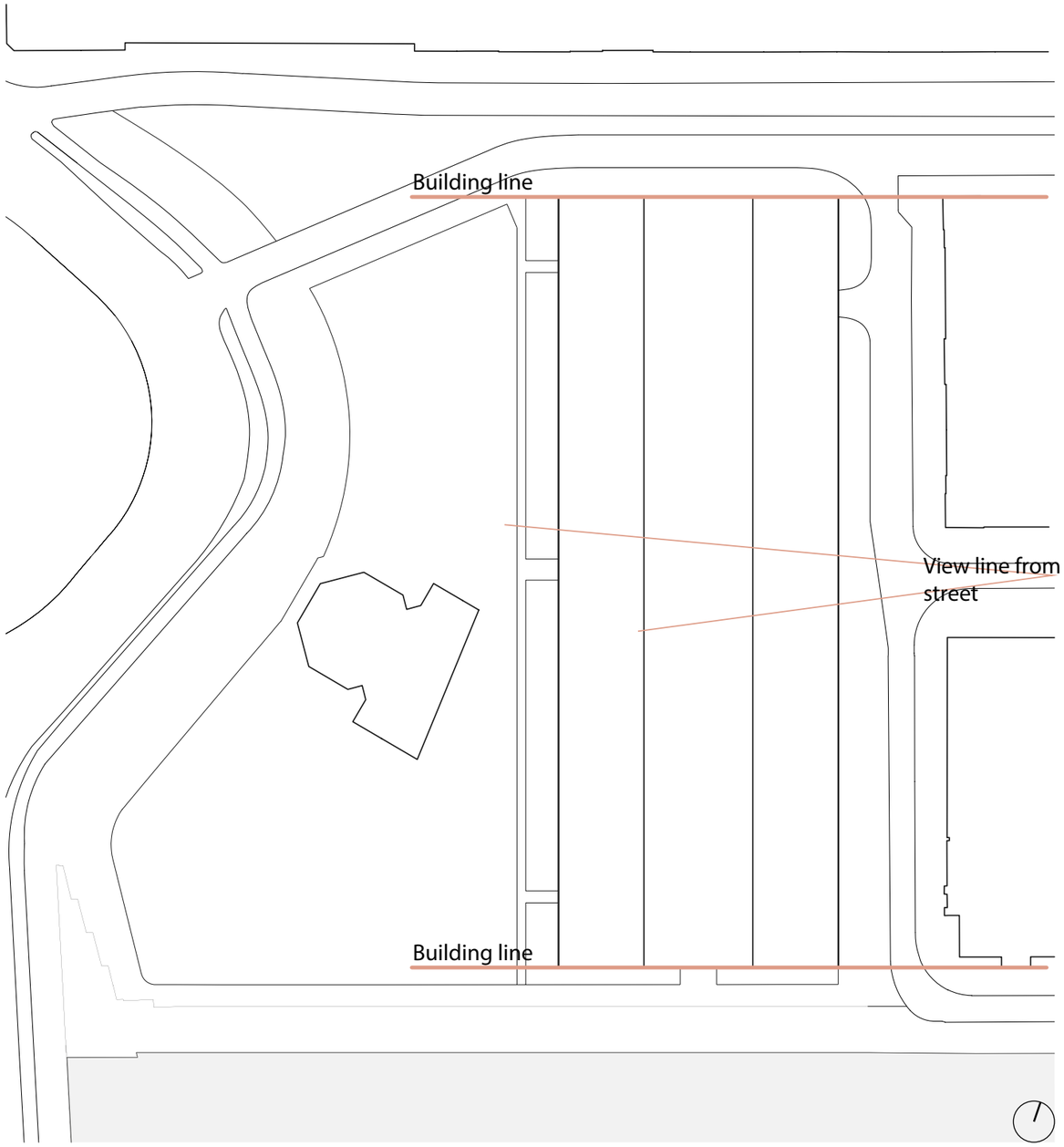


Building section



Urban concept



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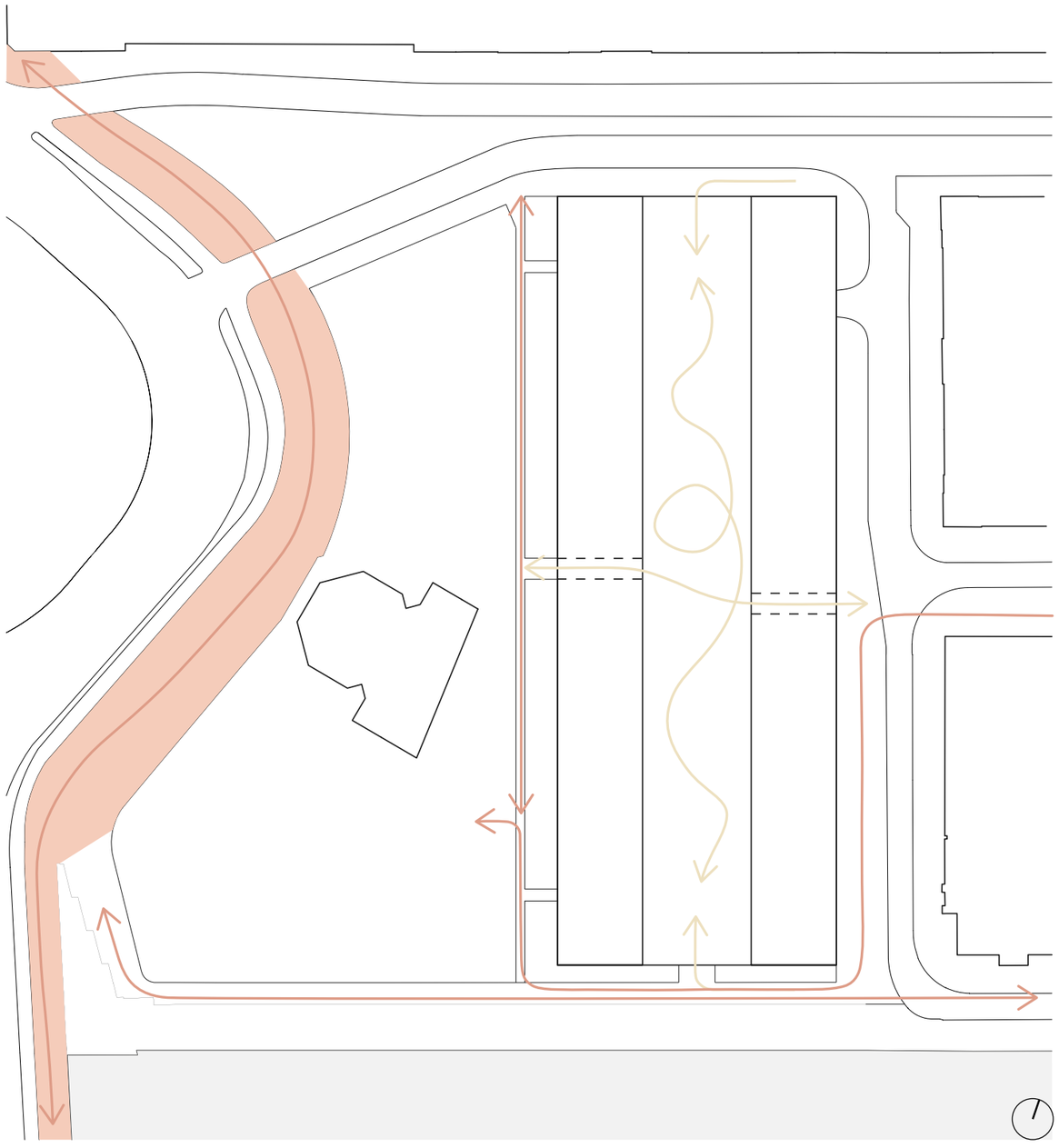

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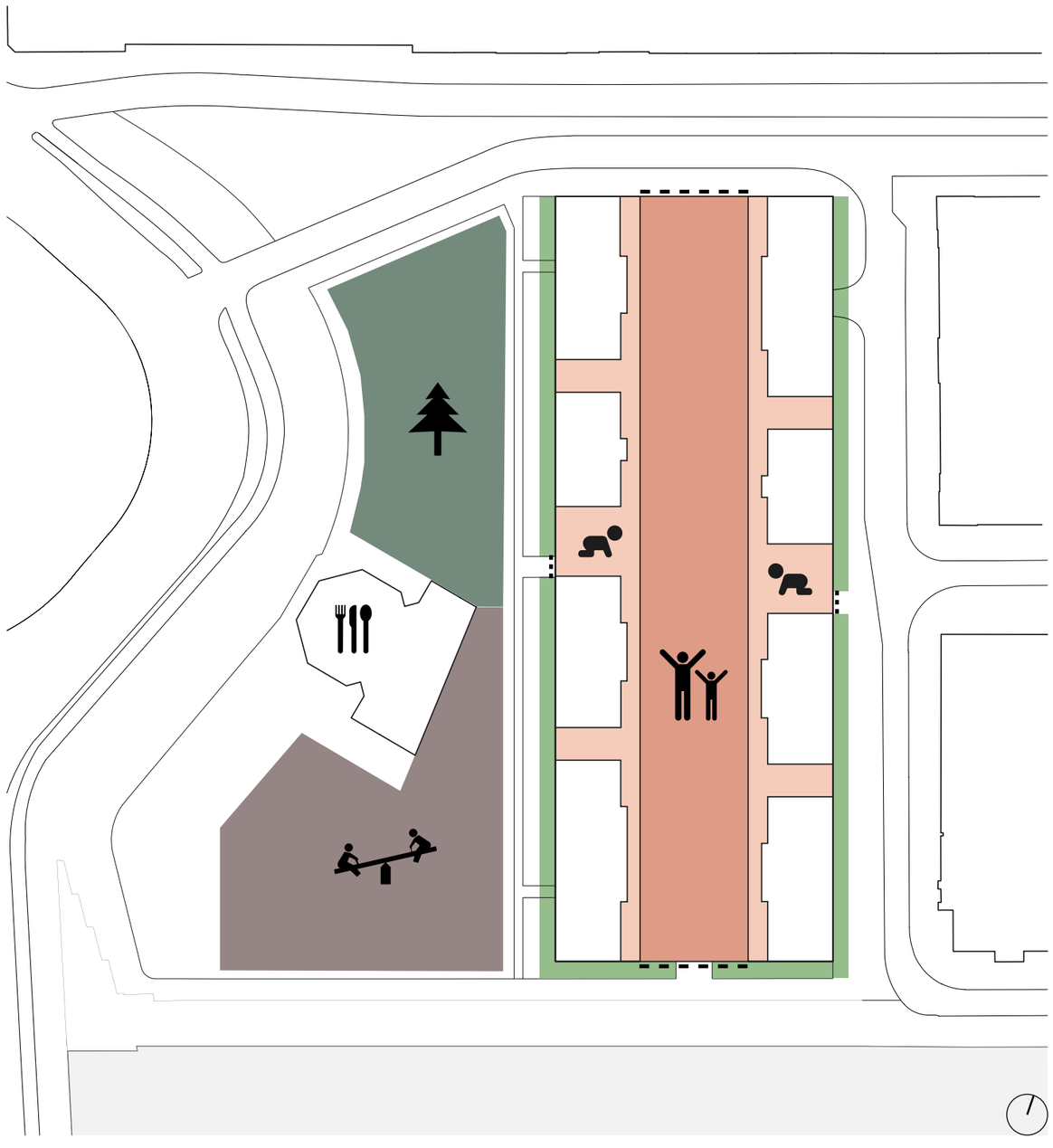

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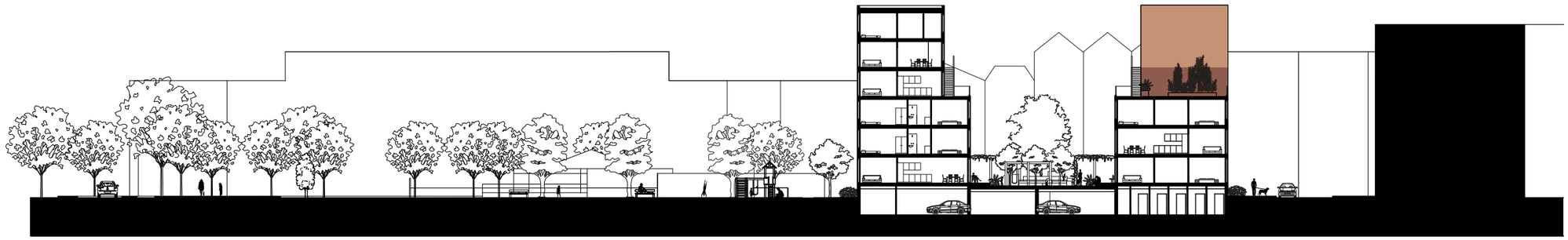


Road of the round about

Red Carpet (side walk)
(safety)

Green strip
(safety)

Pancake restaurant
(facility)

Playground and park
(facility, playing & interaction)

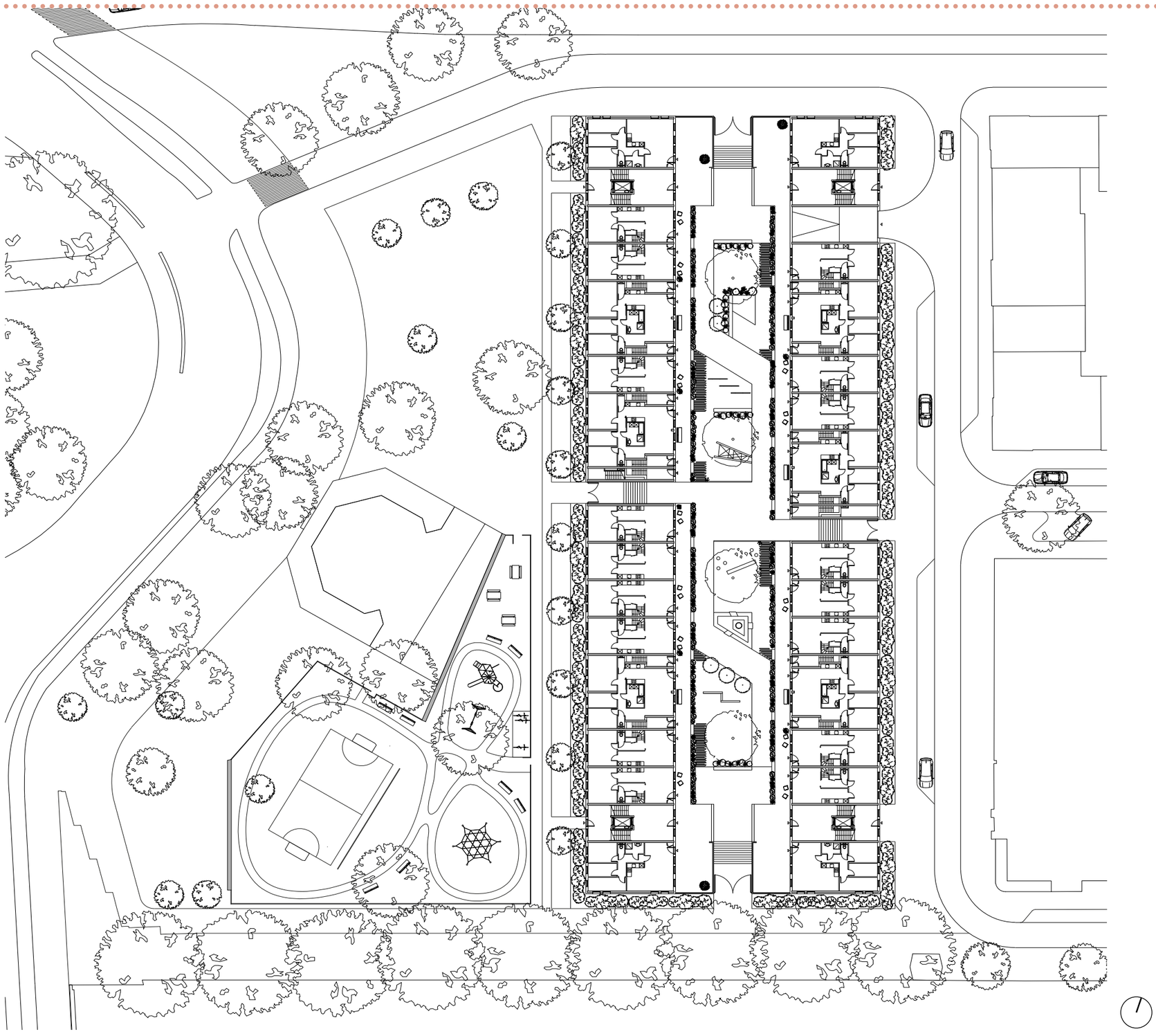
Path with wide green border
(safety)

Alley through building
(short cut to the playground for children)
(safety)

Raised square
(playing & interaction, space)

Second level square
(playing & interaction, space)

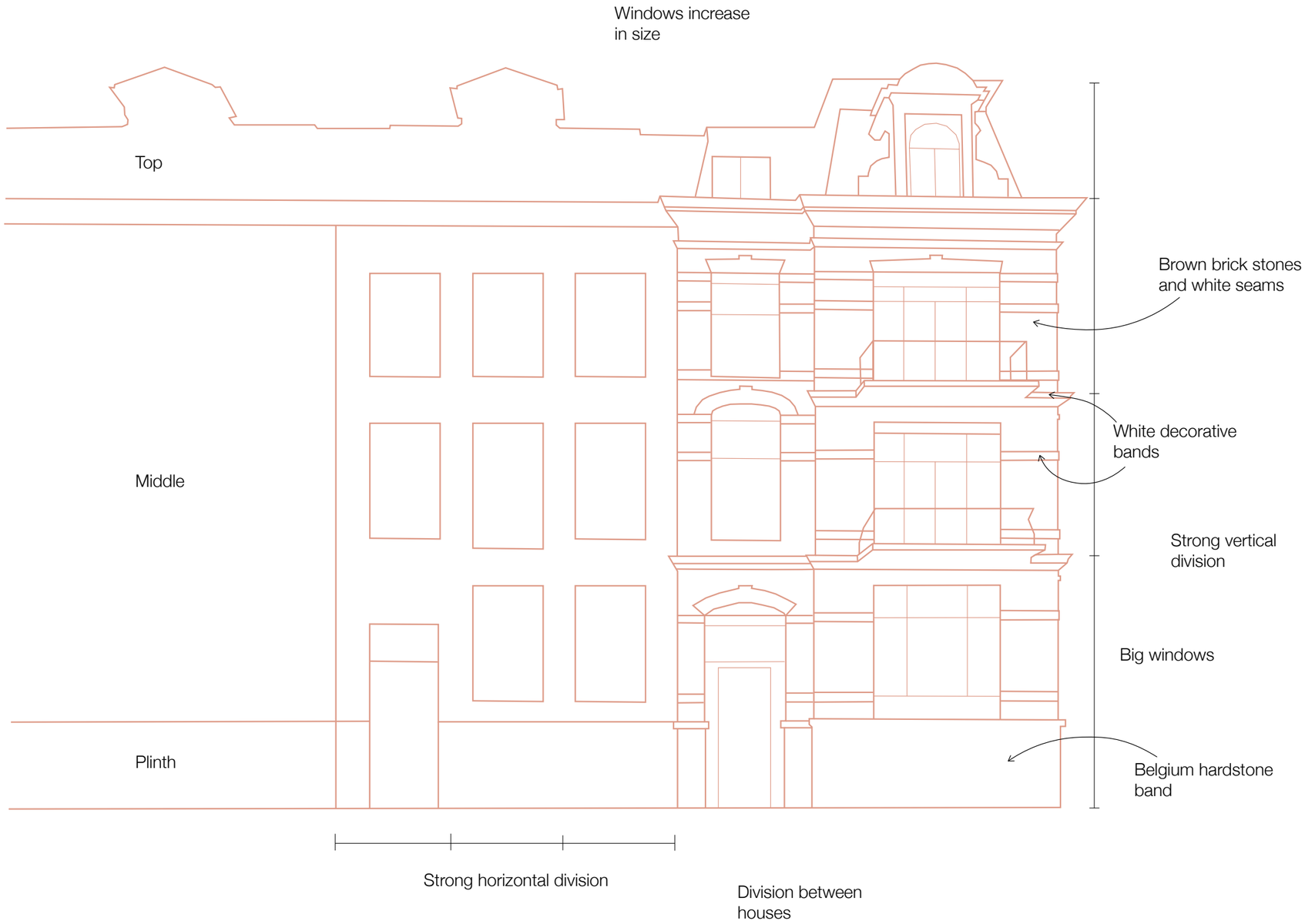
Wide side walk
with green border



Facade analysis

Source: funda.nl

Facade analysis



City facade

City facade

City facade

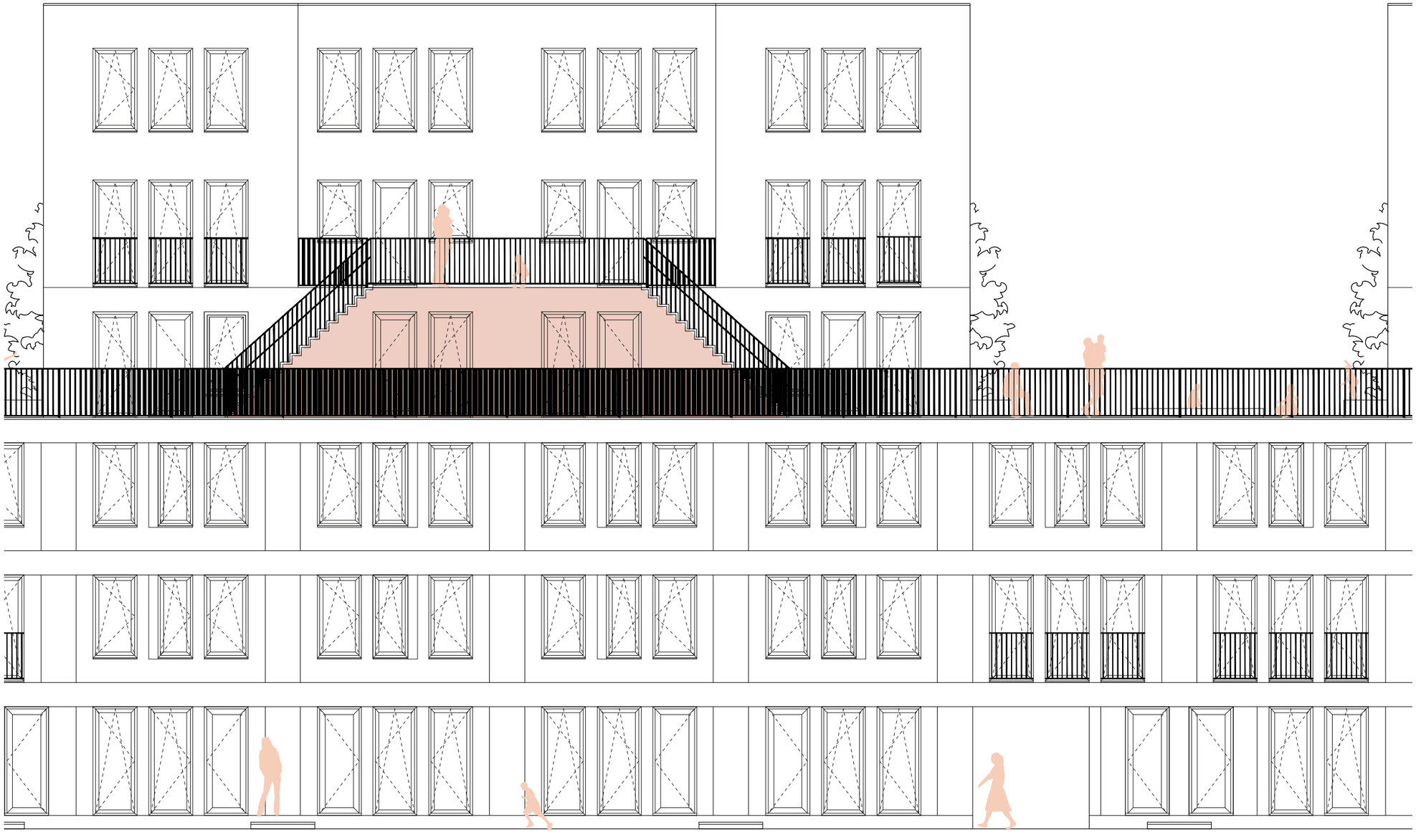
City facade

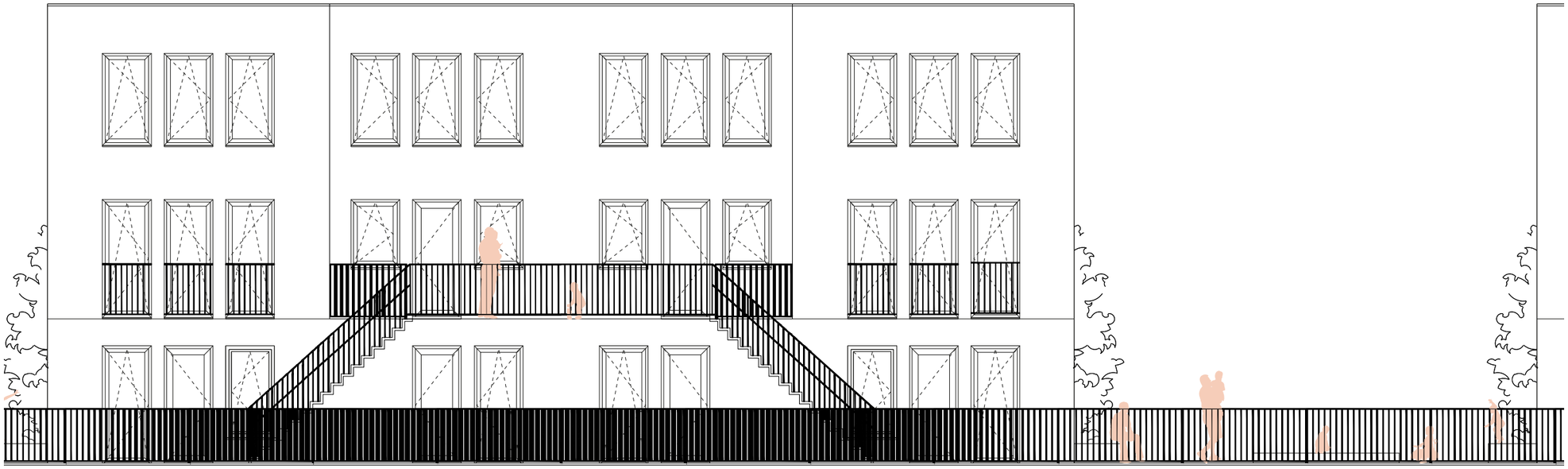
Inner facade

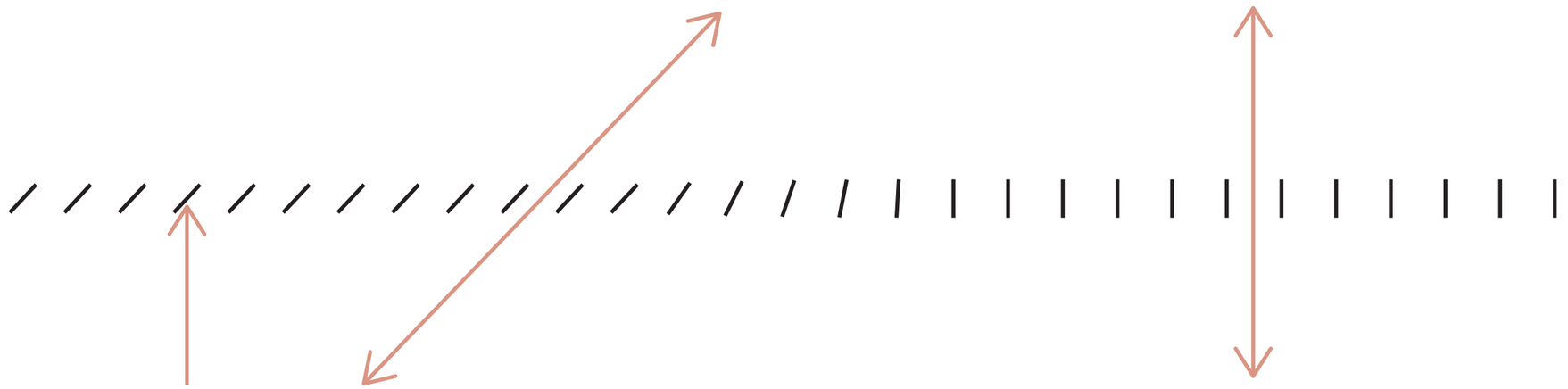
Impression inner facade

Impression gallery facade

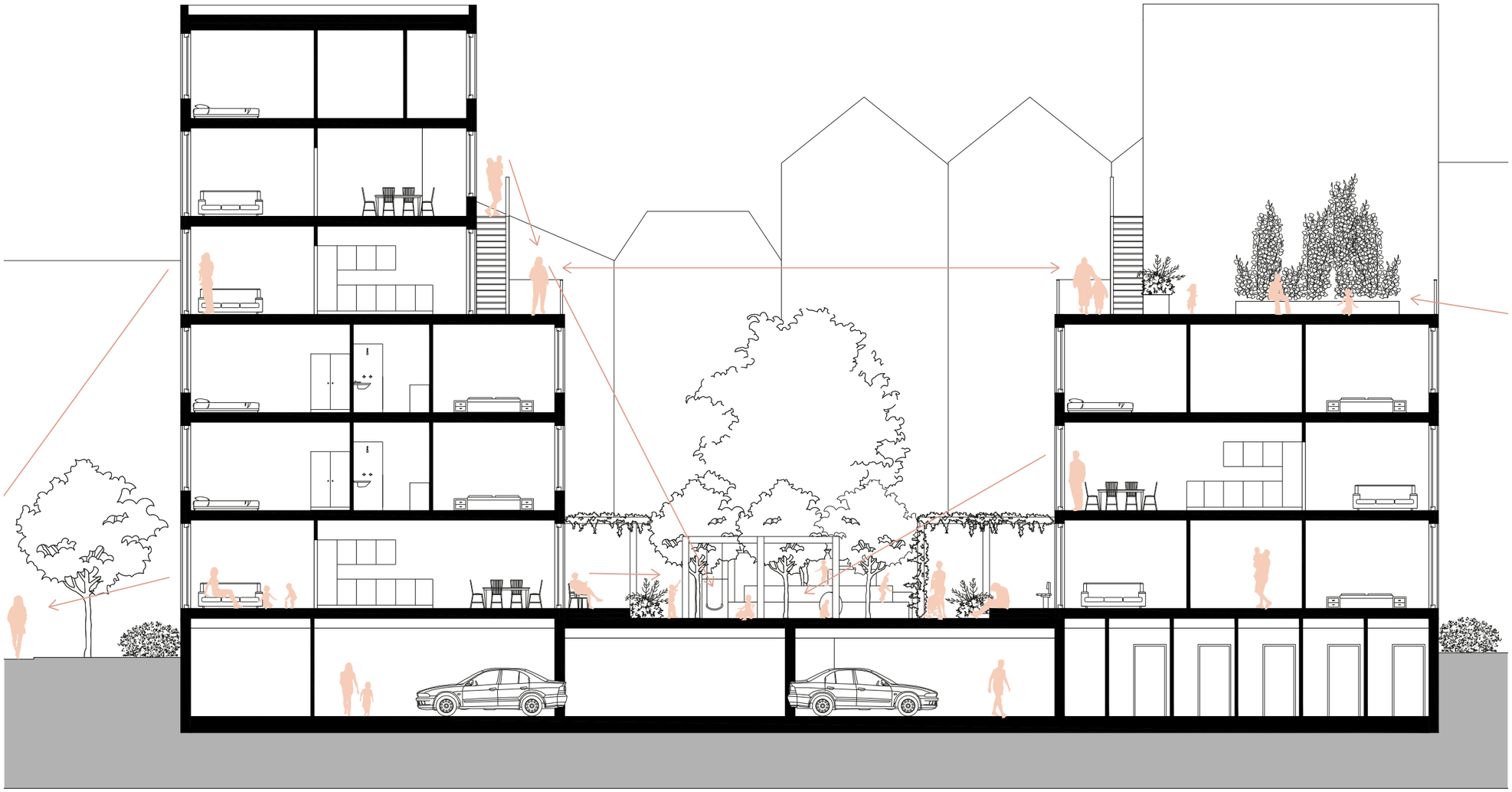
Inner facade



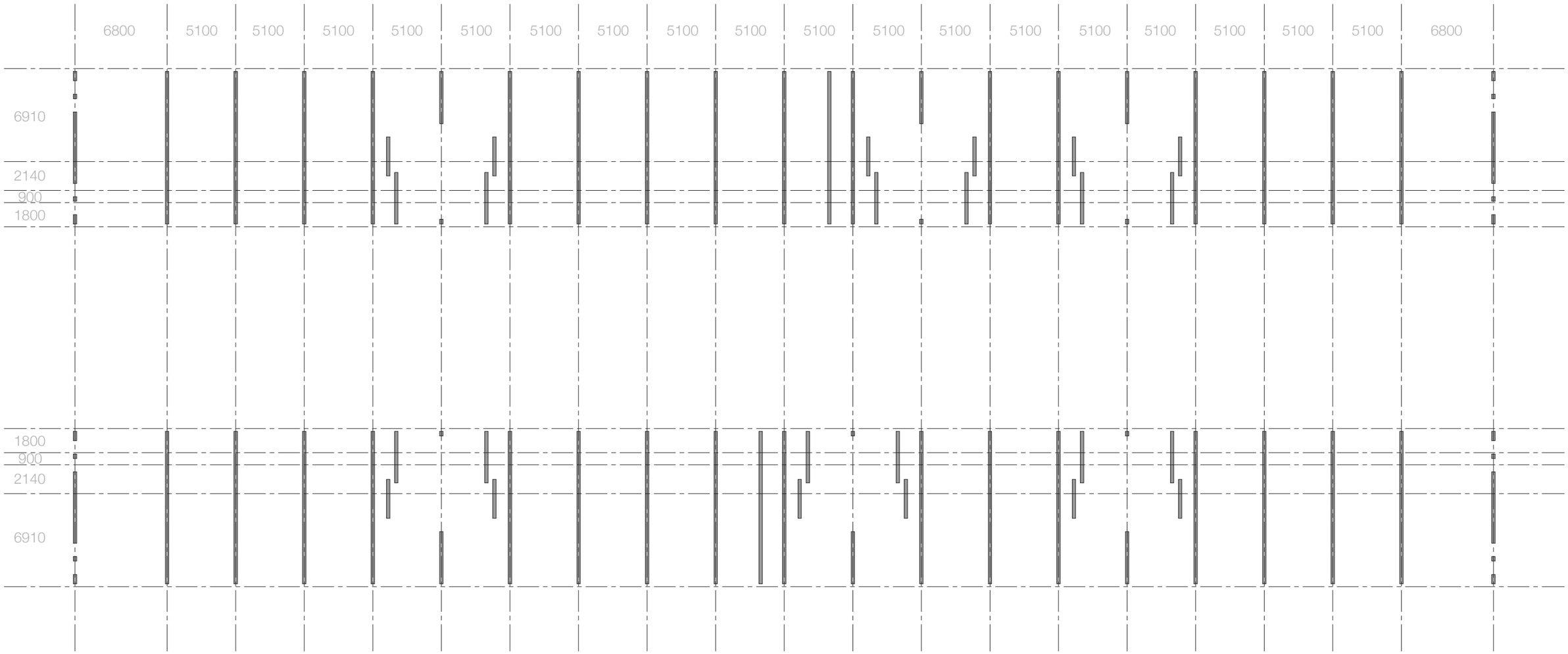




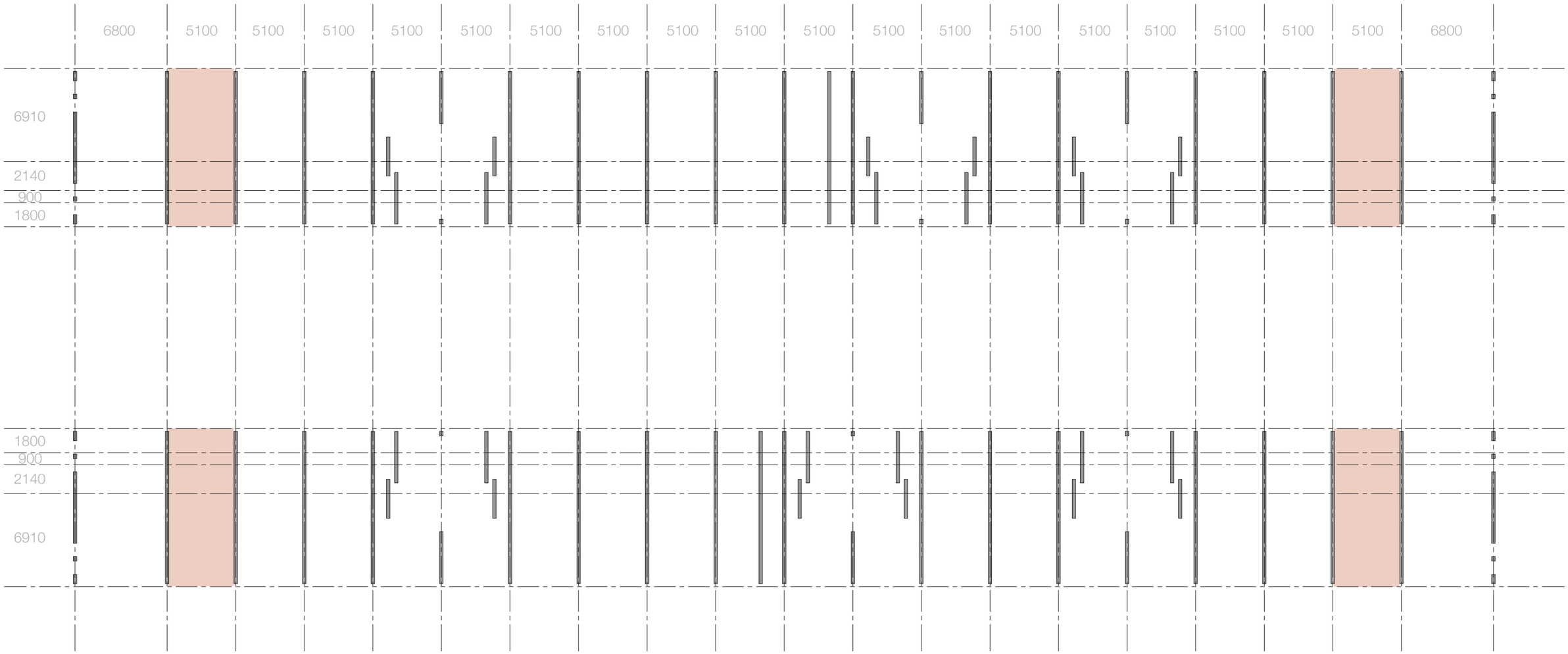
Supervision



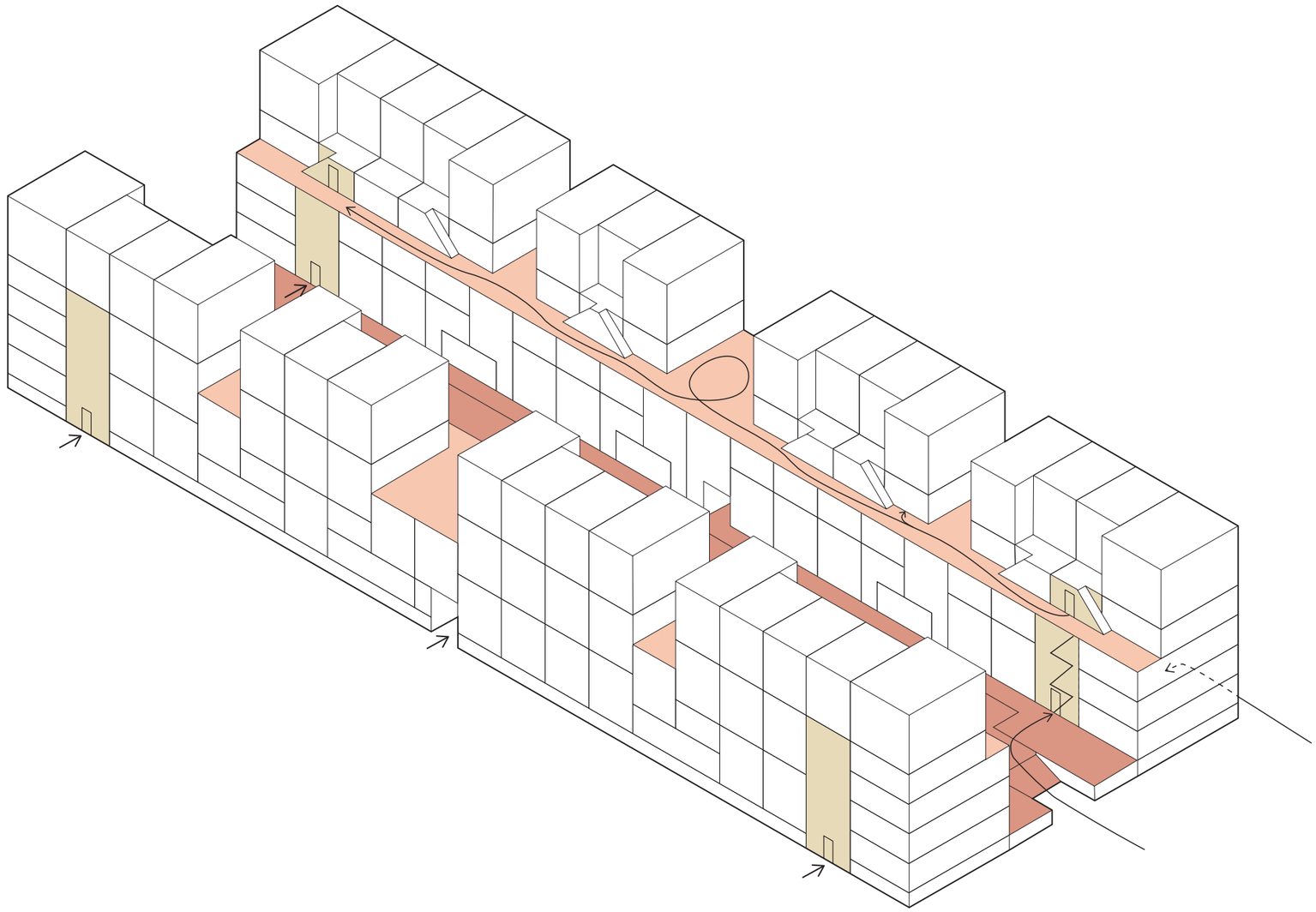
Building structure



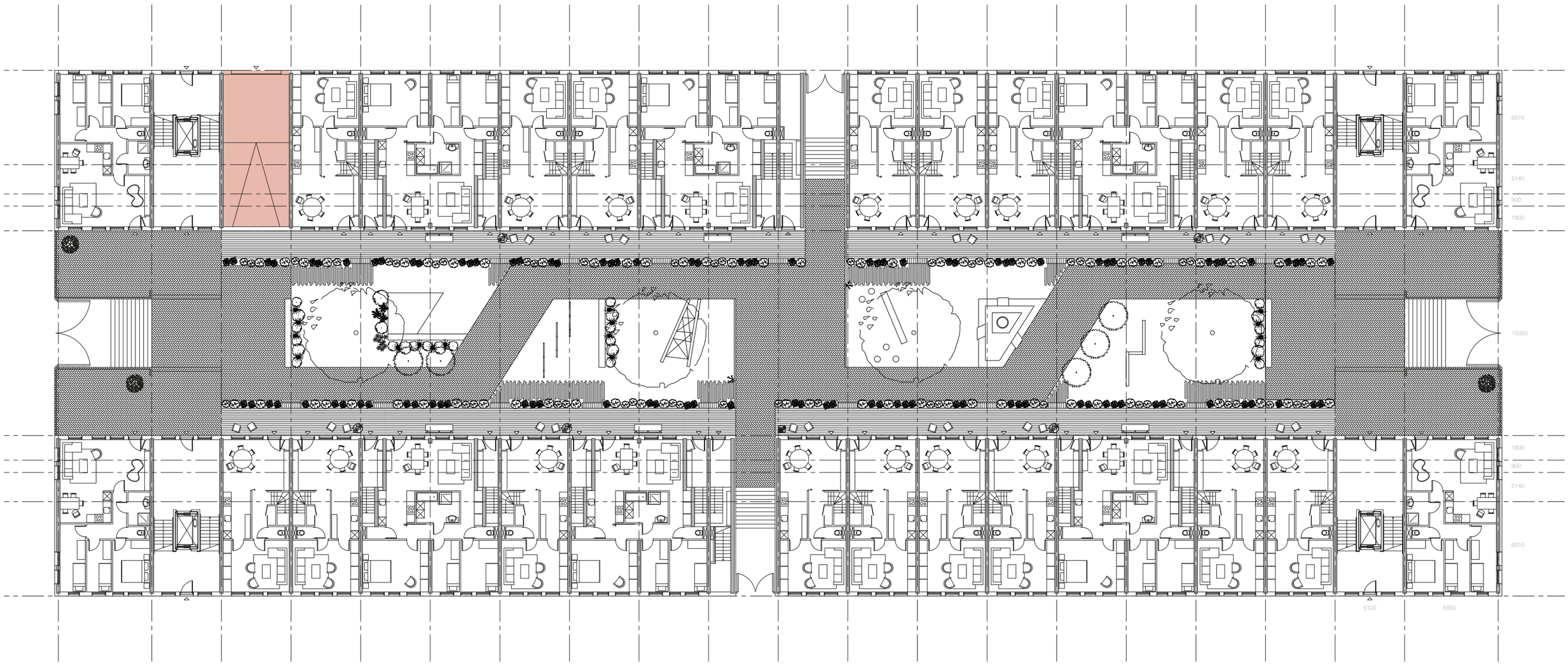
Vertical circulation



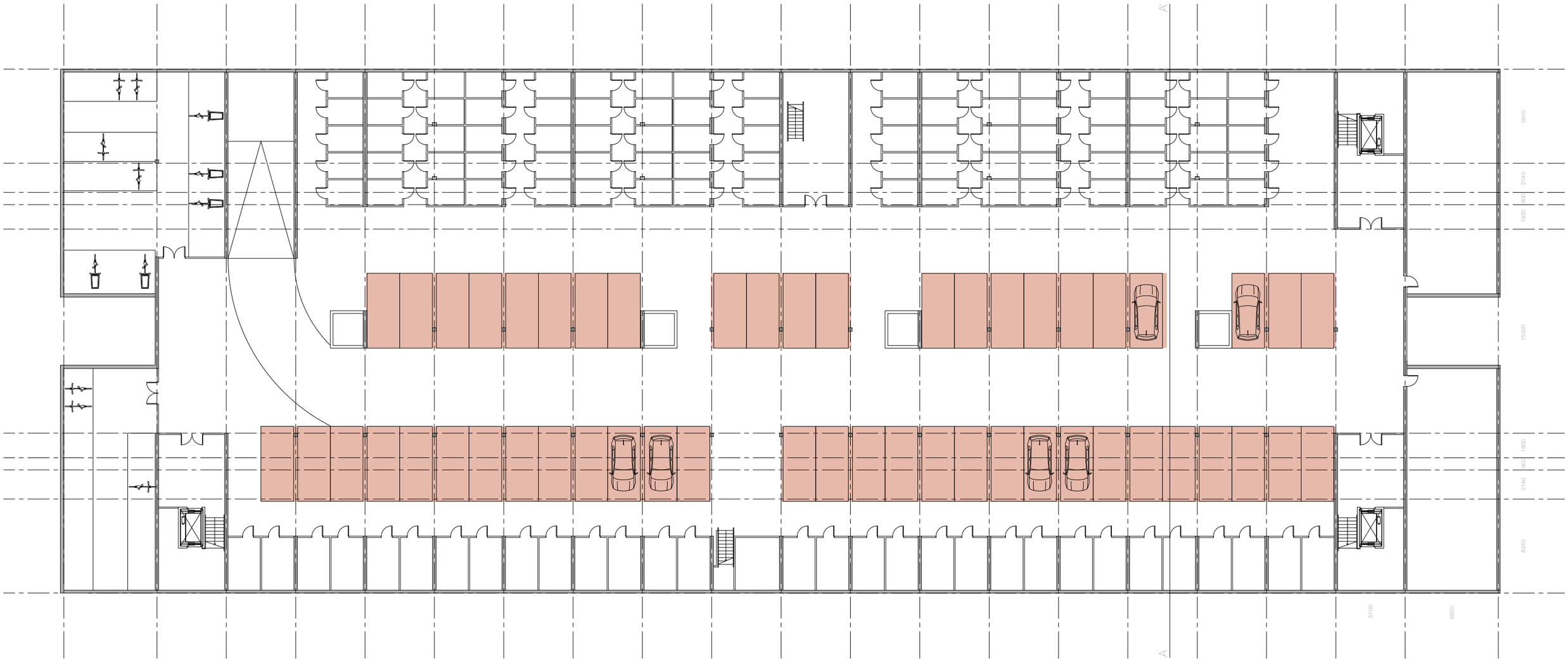
Circulation system



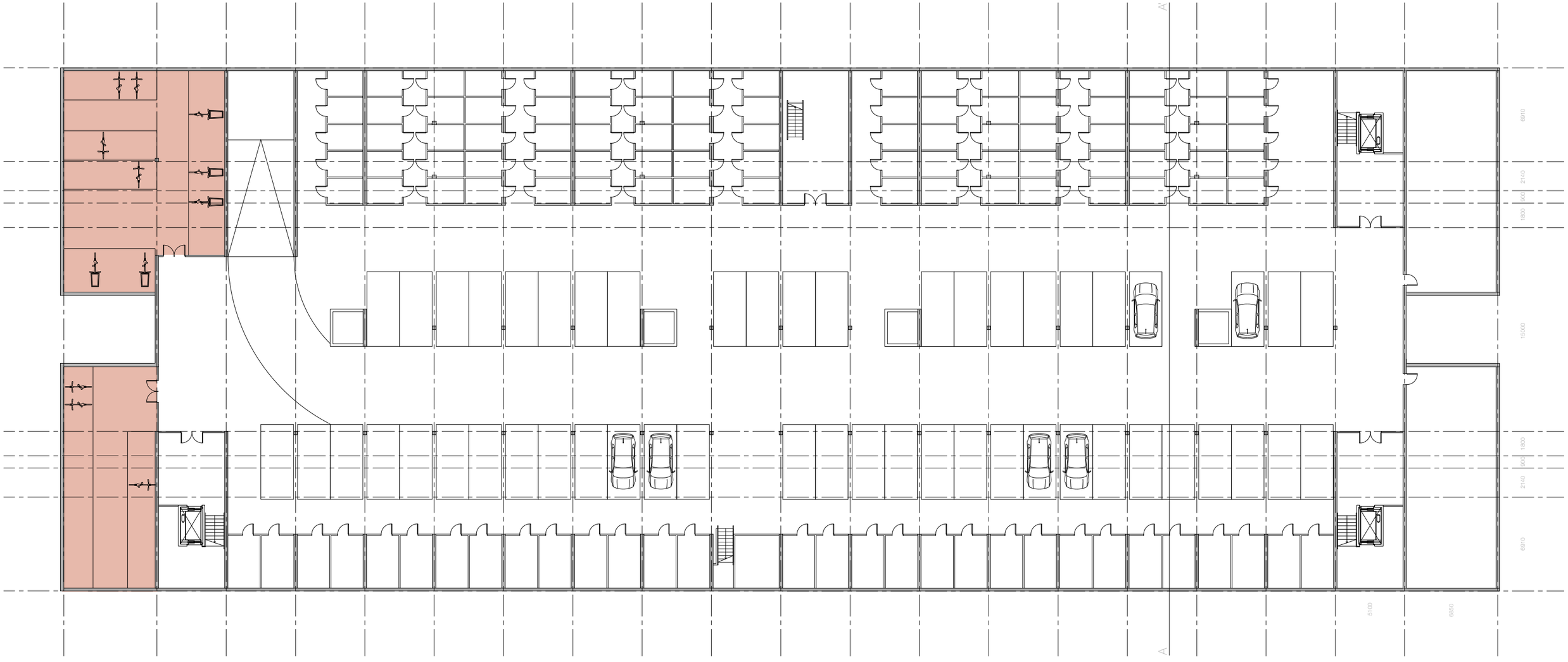
Entrance parking



Basement - car parking



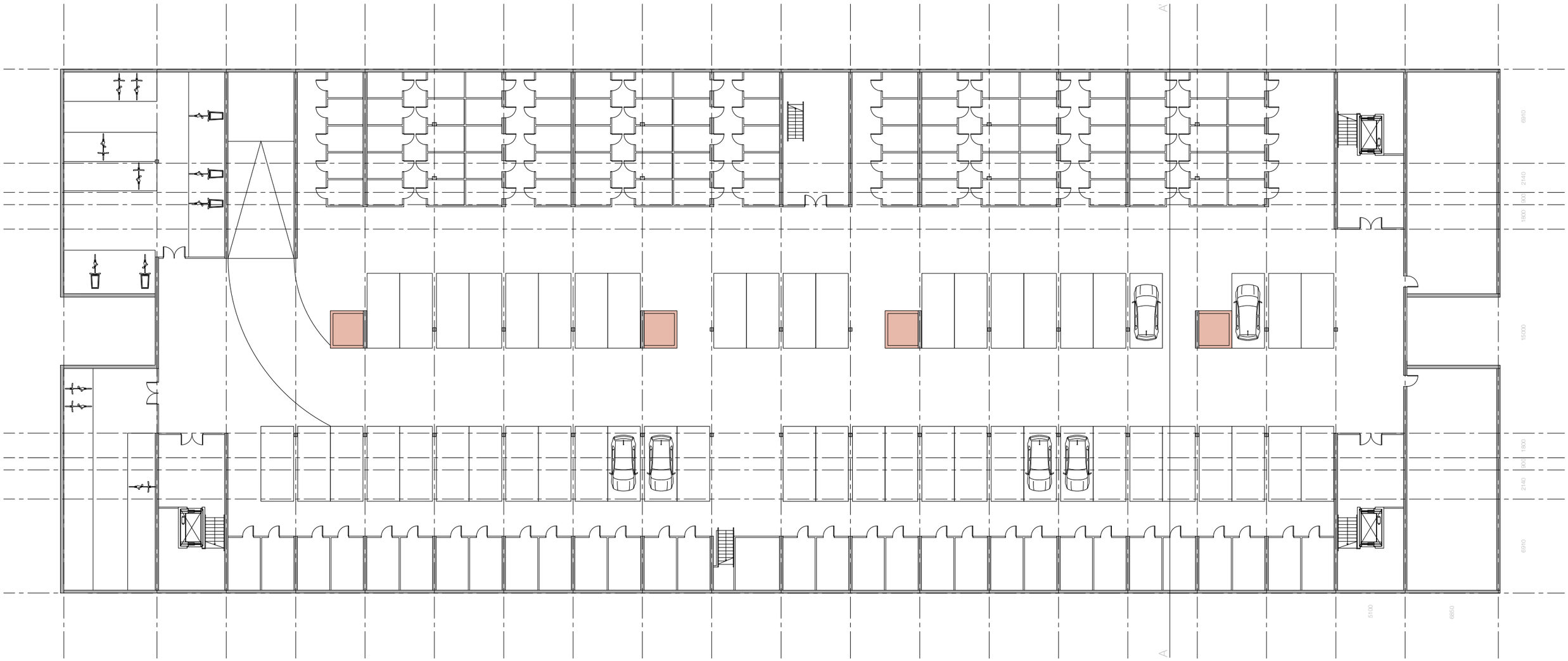
Basement - bicycle parking



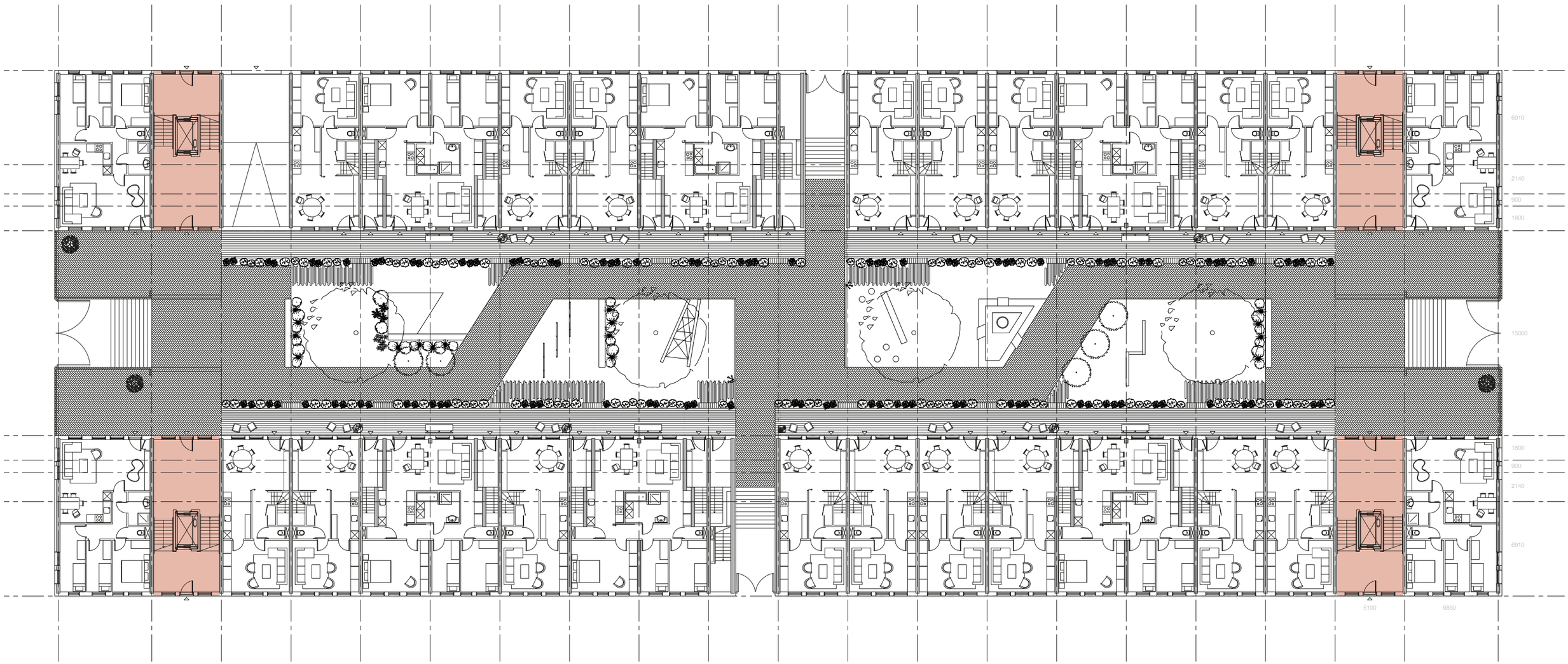
Basement - (external) storage space

Growing up in the city

Basement - Tree roots

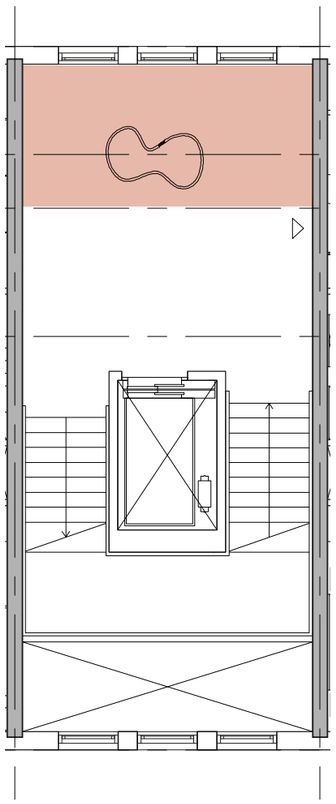


Entrances building



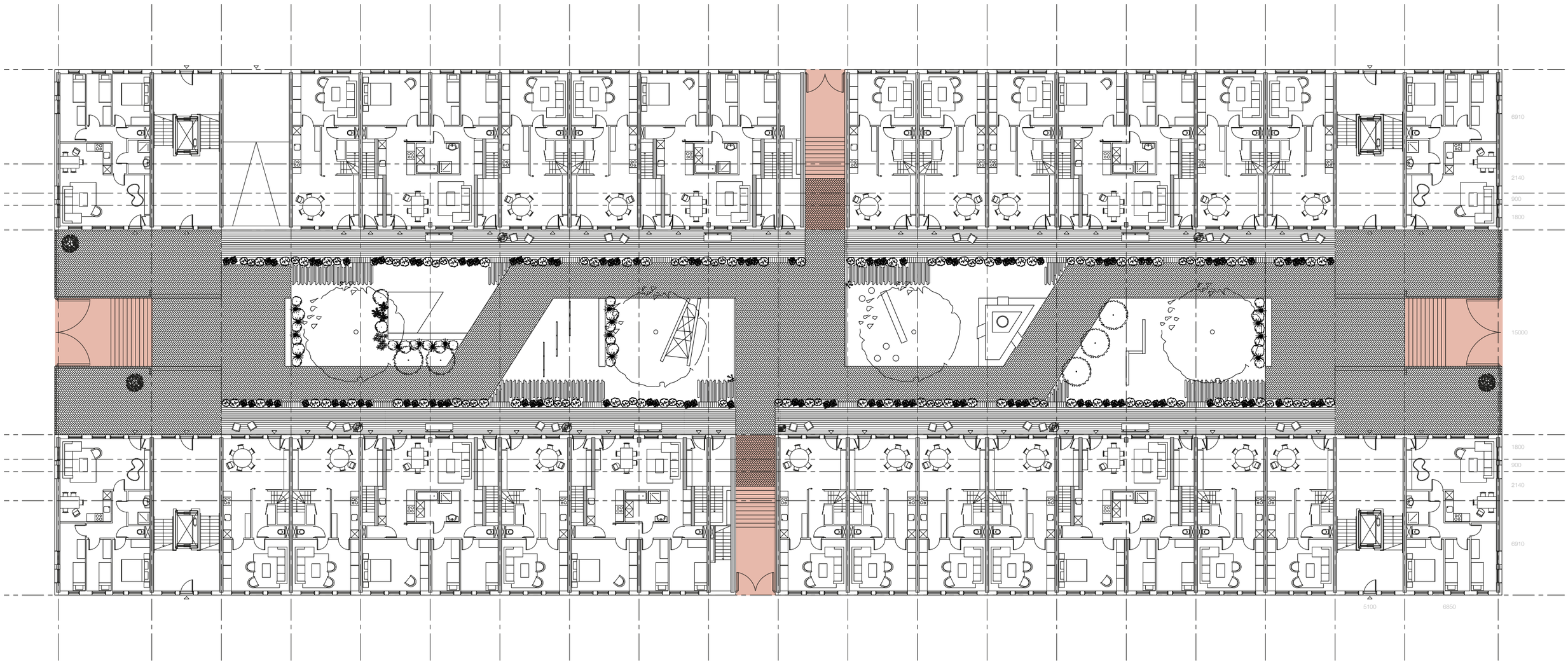
Entrance building

Playing area - double use



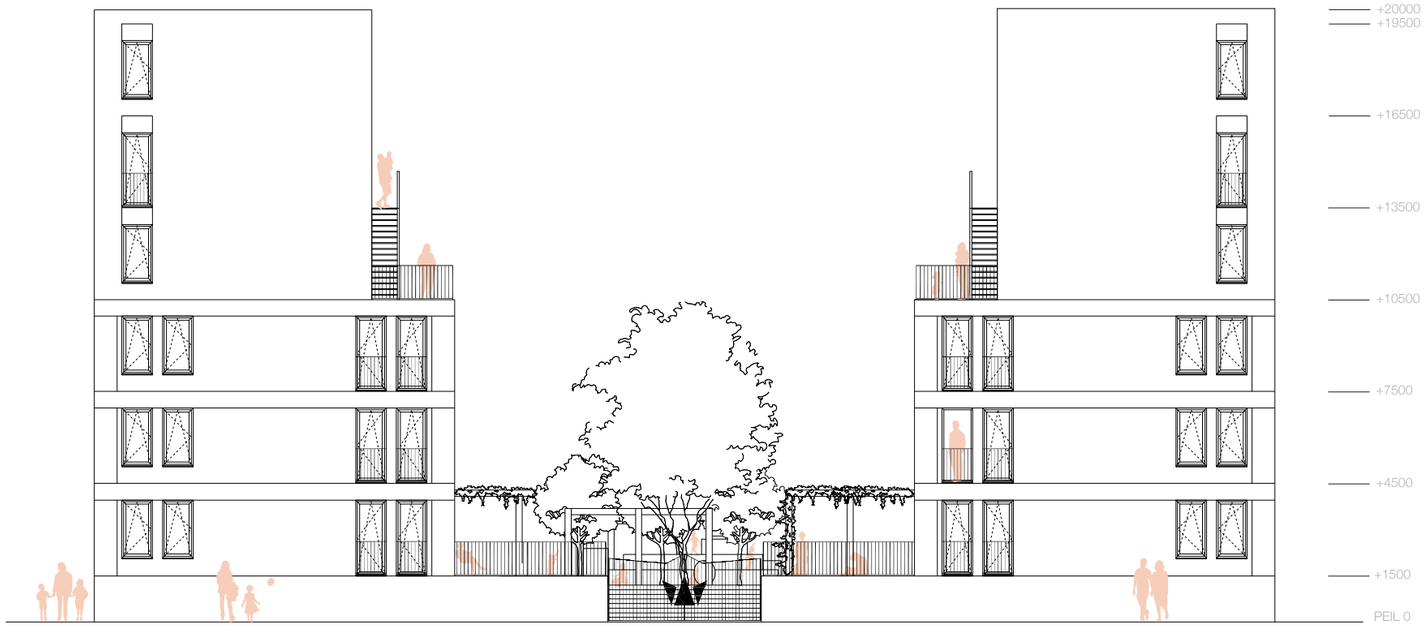
Growing up in the city

Entrances raised square

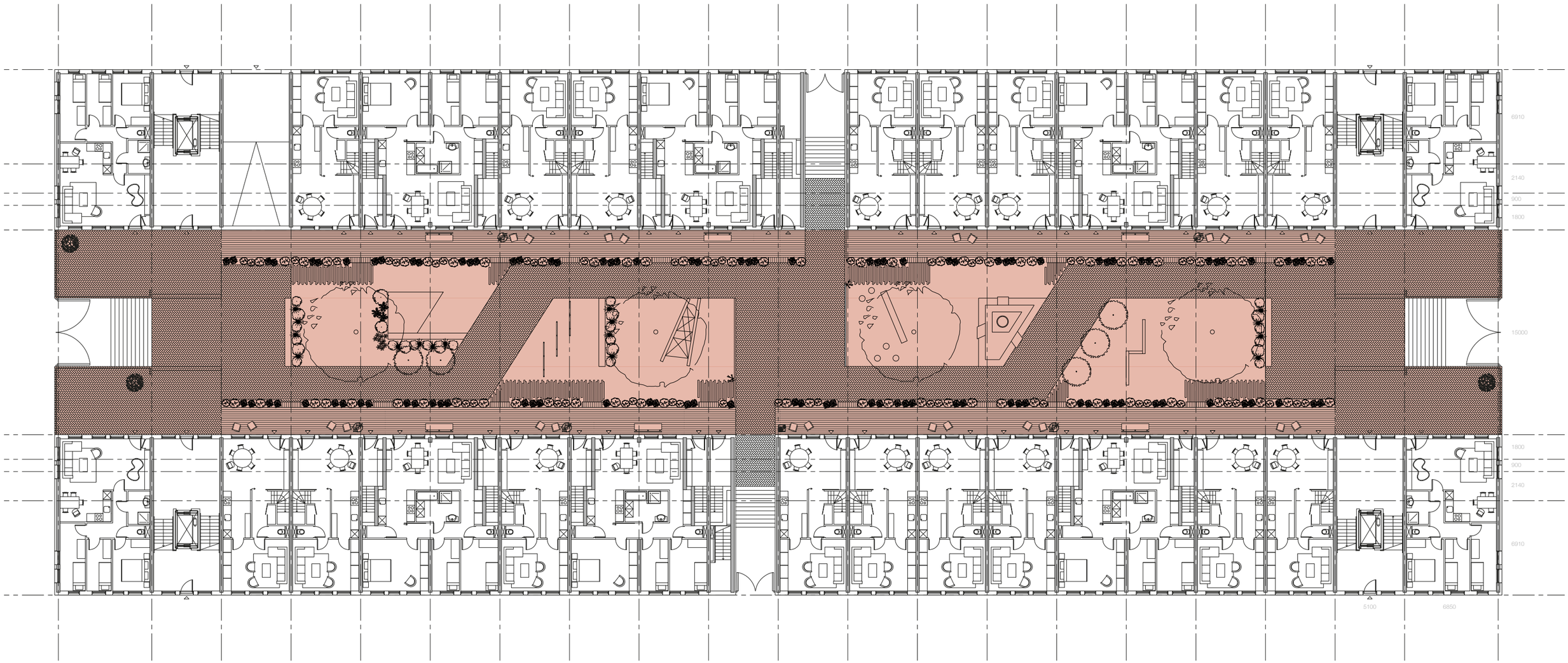


Growing up in the city

Main entrance square

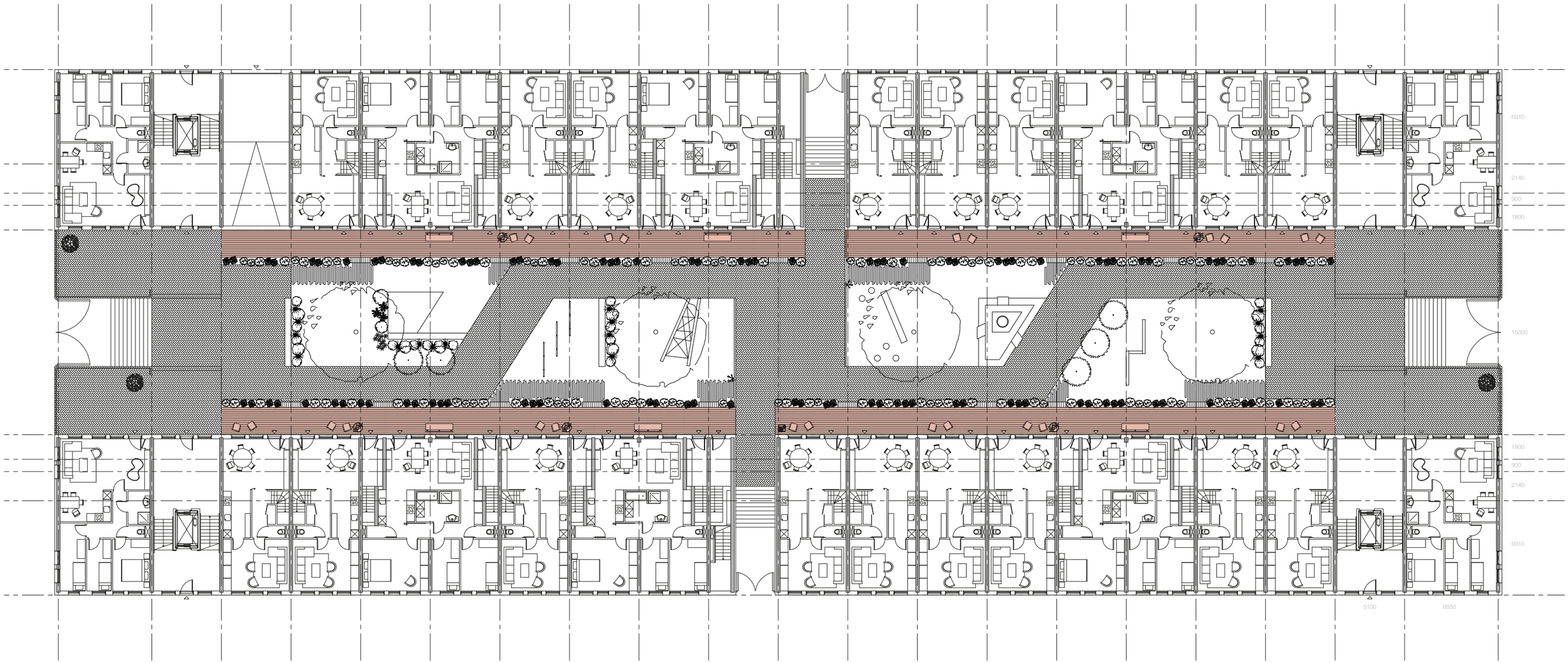


Raised square

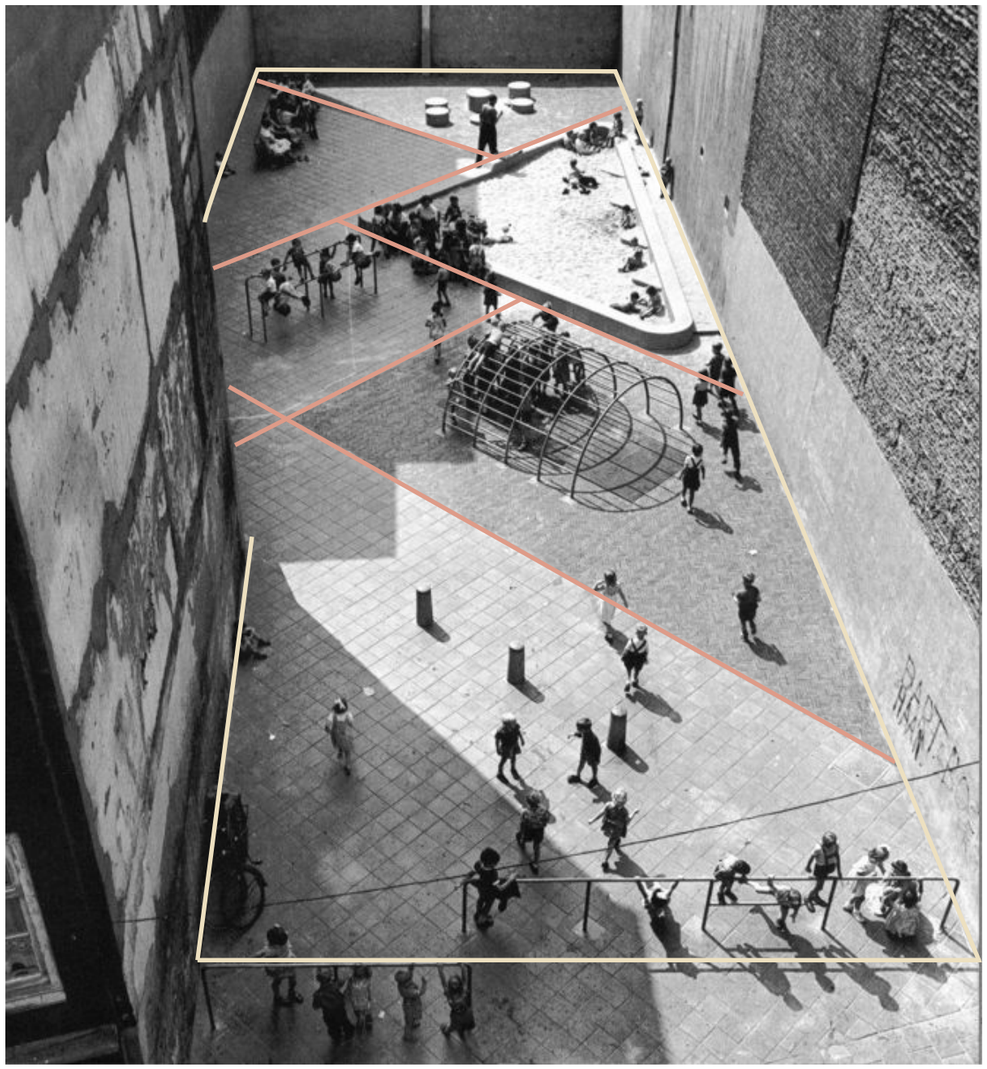


Growing up in the city

Private outdoor space



Playground Aldo van Eyck



Raised square

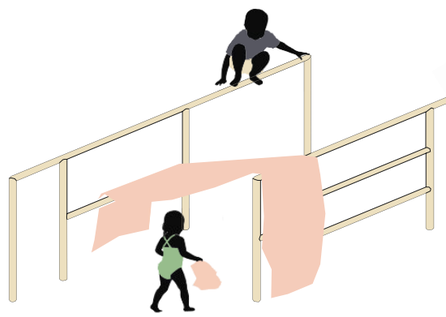
Cycling

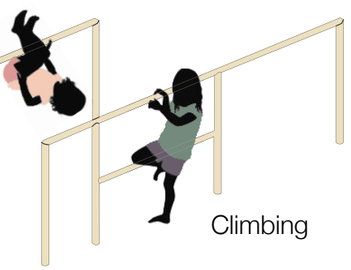
Skating

Stepping

Coloring

Rope jumping

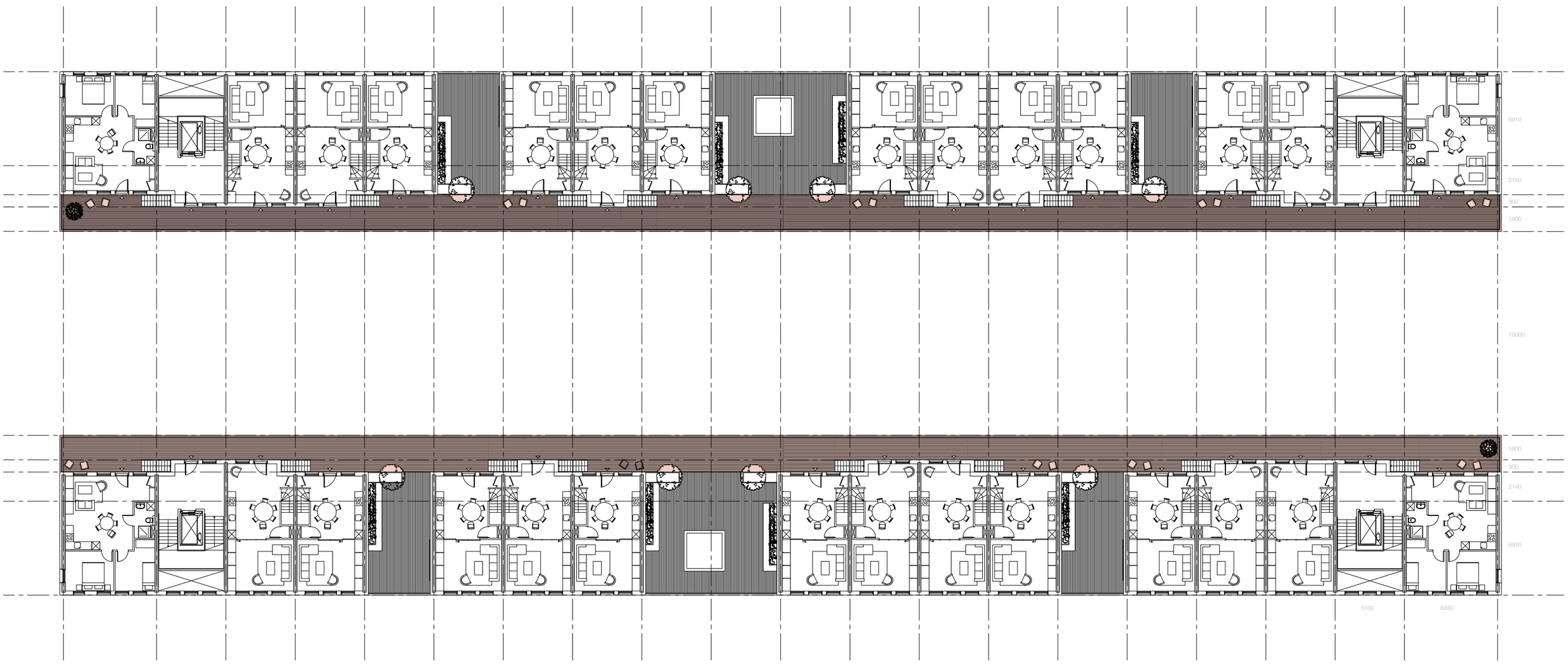

Making a tent


Hanging

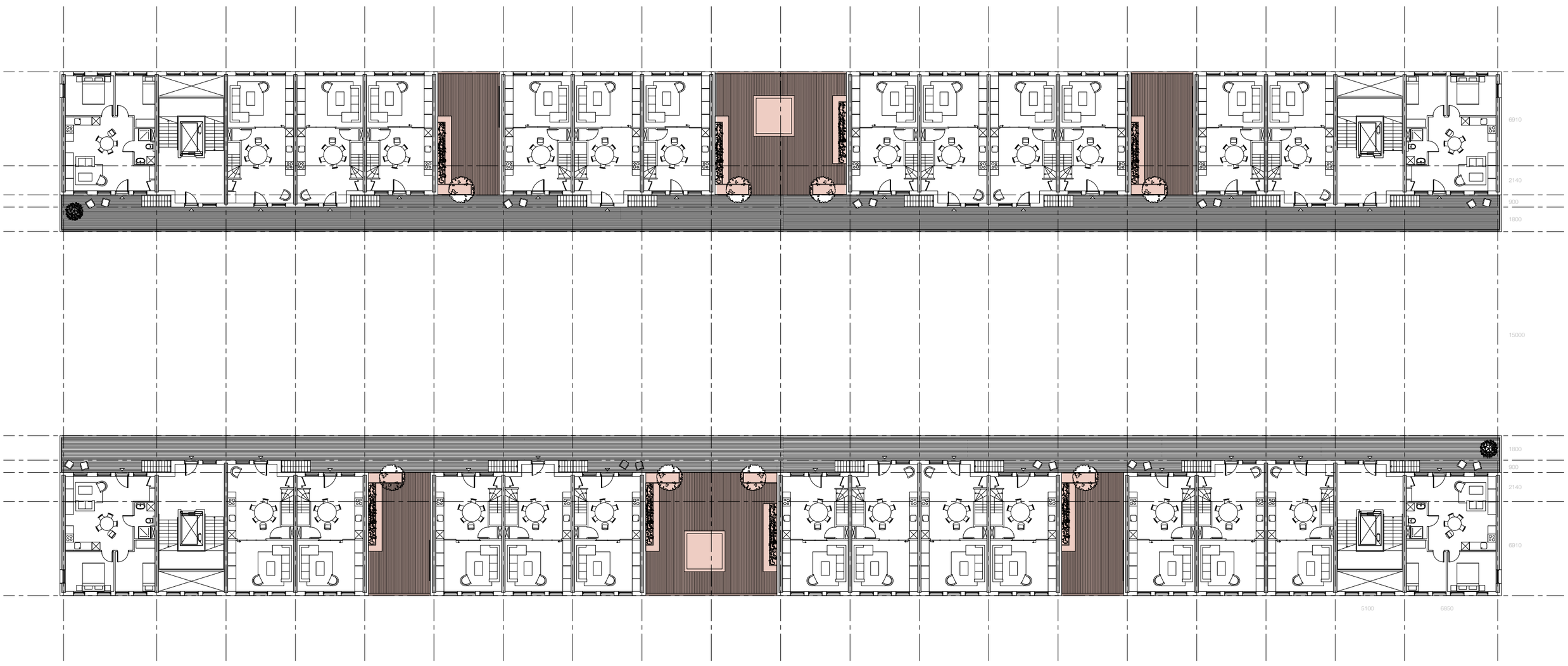
Climbing

Impression raised square

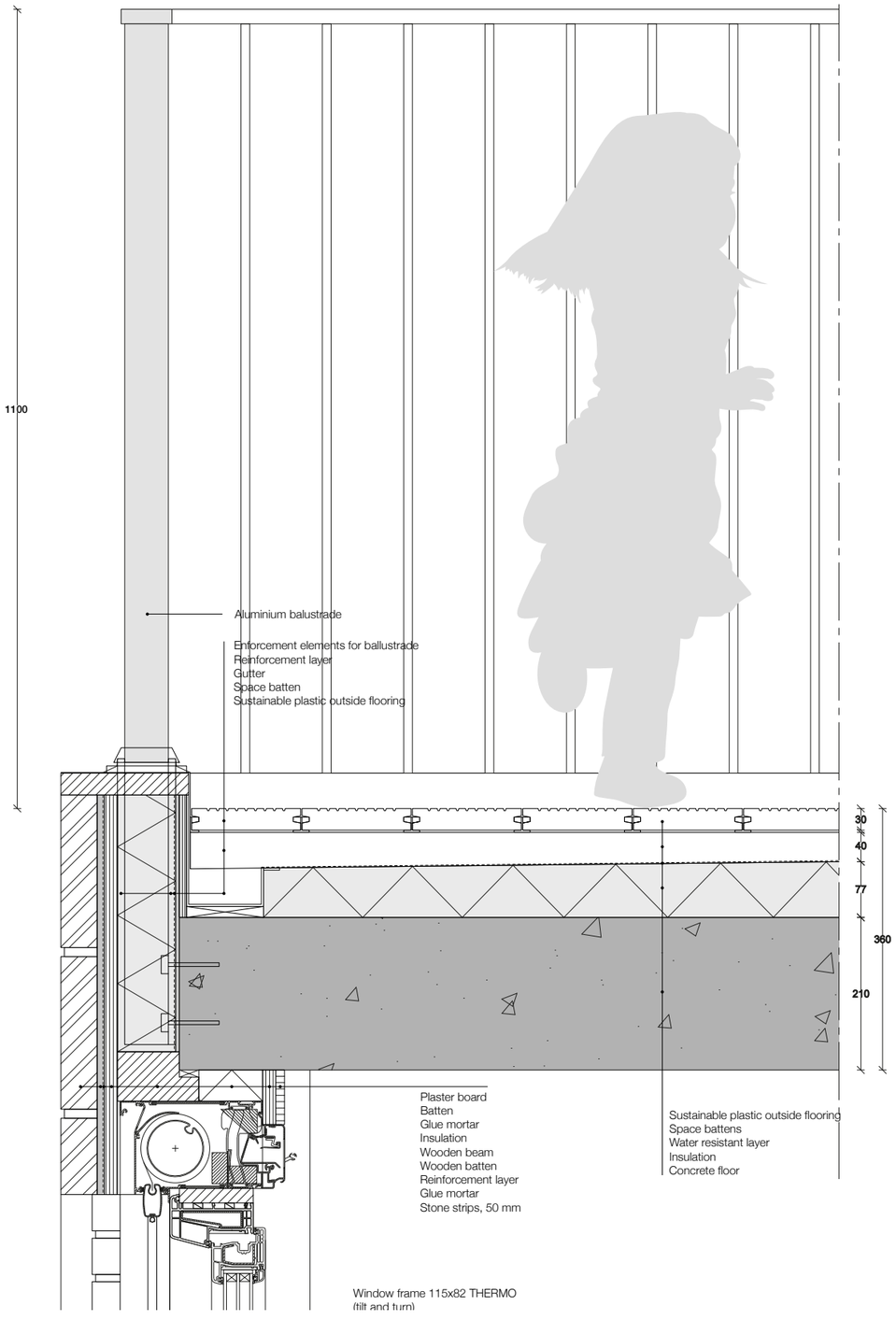
Gallery



Small squares

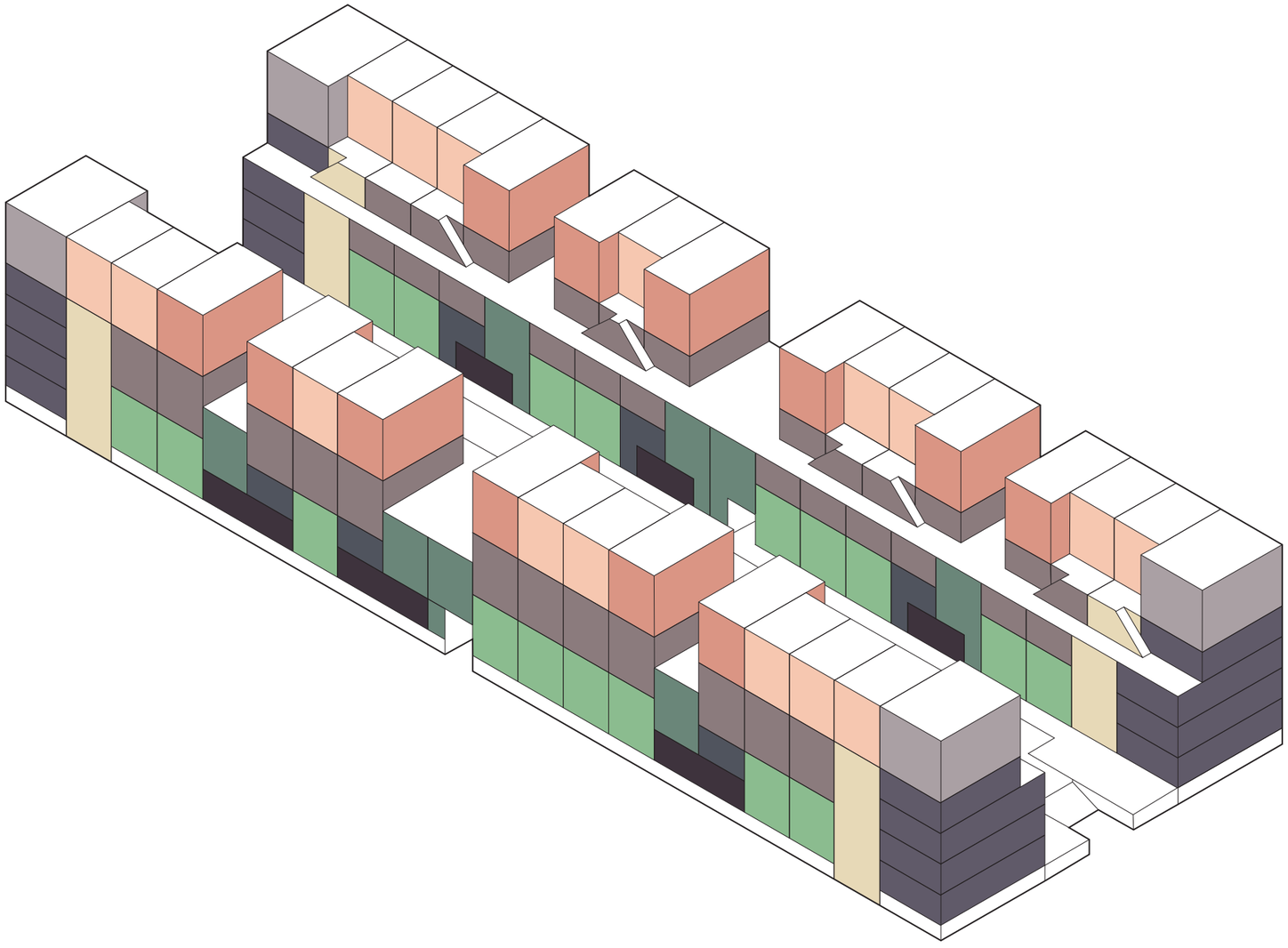


Detail 1:5

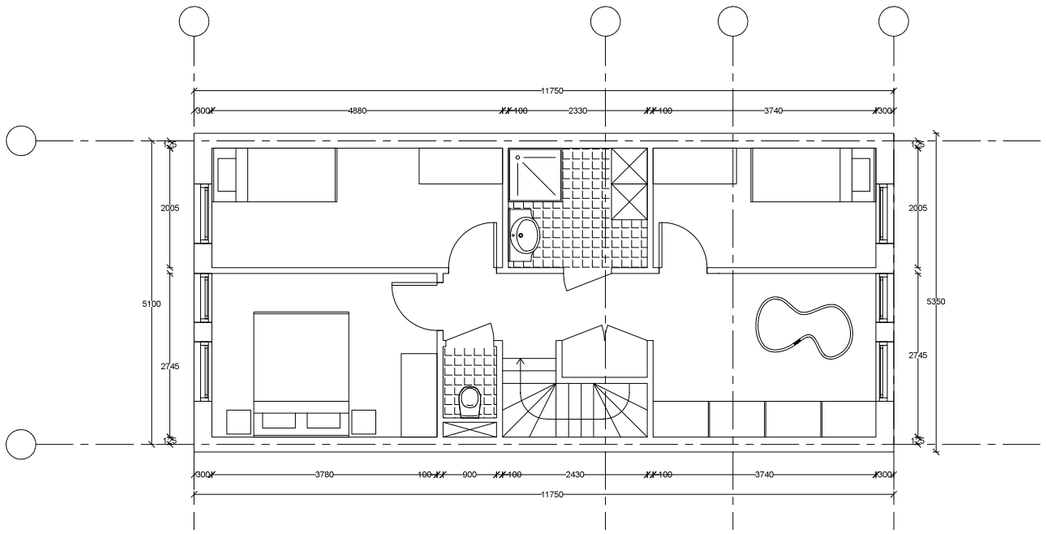

1100
Aluminium balustrade
Enforcement elements for ballustrade
Reinforcement layer
Gutter
Space batten
Sustainable plastic outside flooring
30
40
77
360
210
Plaster board
Batten
Glue mortar
Insulation
Wooden beam
Wooden batten
Reinforcement layer
Glue mortar
Stone strips, 50 mm
Sustainable plastic outside flooring
Space battens
Water resistant layer
Insulation
Concrete floor
Window frame 115x82 THERMO
(tilt and turn)

Impression small square

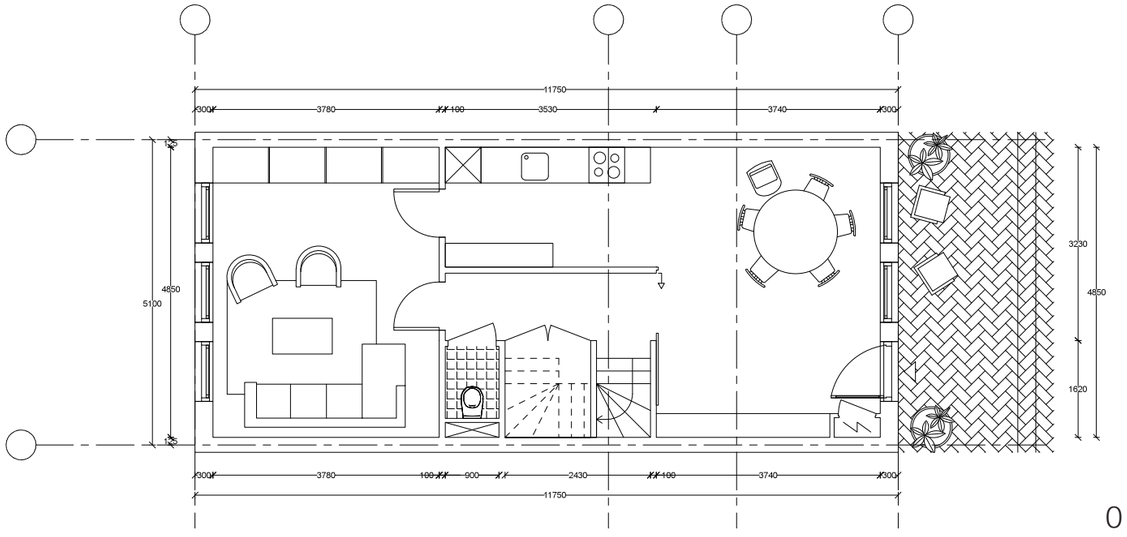
Dwelling types



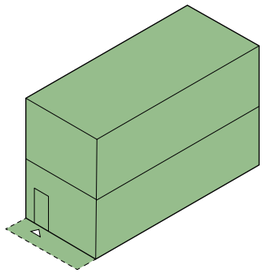
Maisonette type 1



1 - First floor



0 - Ground level - Entrance



Maisonette type 1

Living room

Hall and kitchen

Dining room

Outdoor space

Raised square

Growing up in the city

Impression dwelling

Maisonette type 1

Bedrooms

Hall and bathroom

Bedroom

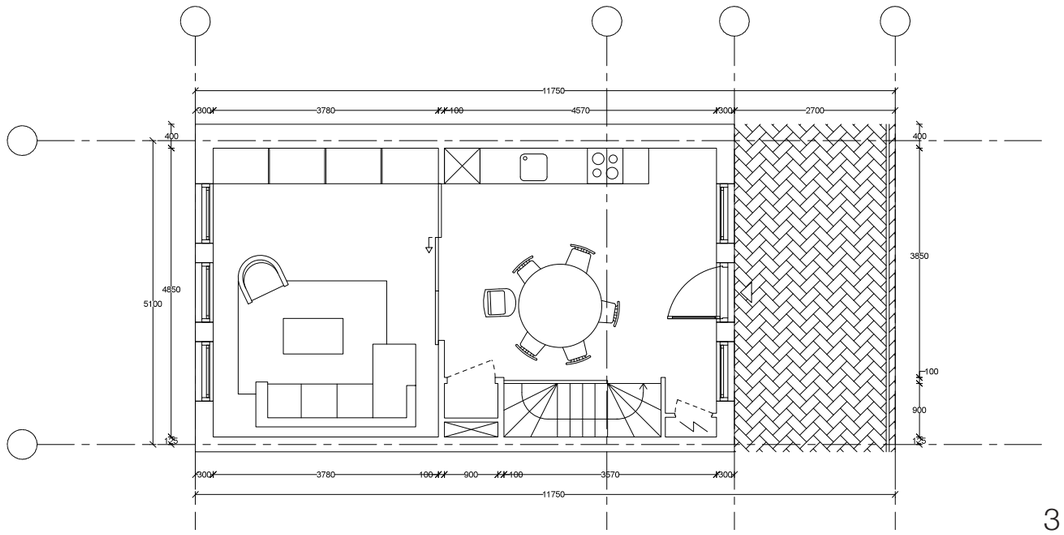
Addaptive dwelling

3 bedrooms

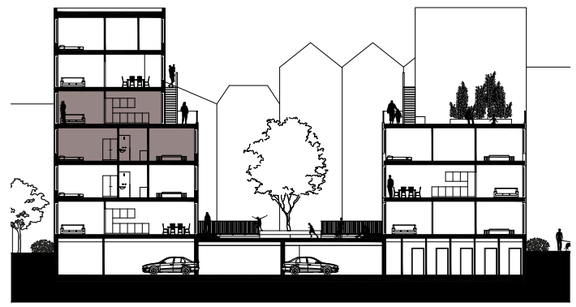
3,5 bedrooms

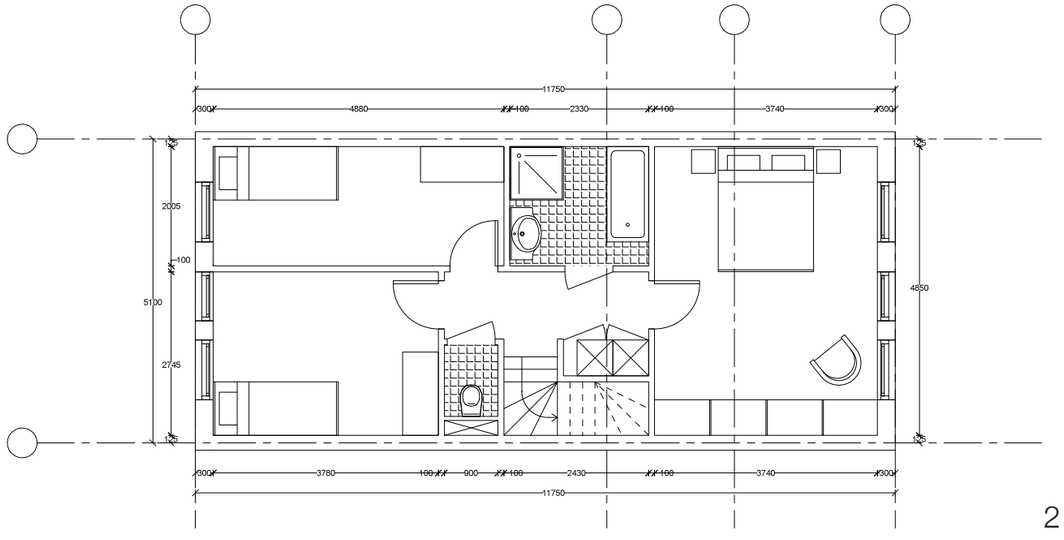
4 bedrooms

Maisonette type 2

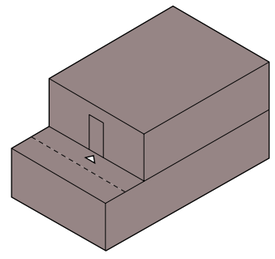


3 - Gallery level - Entrance





2 - Second floor

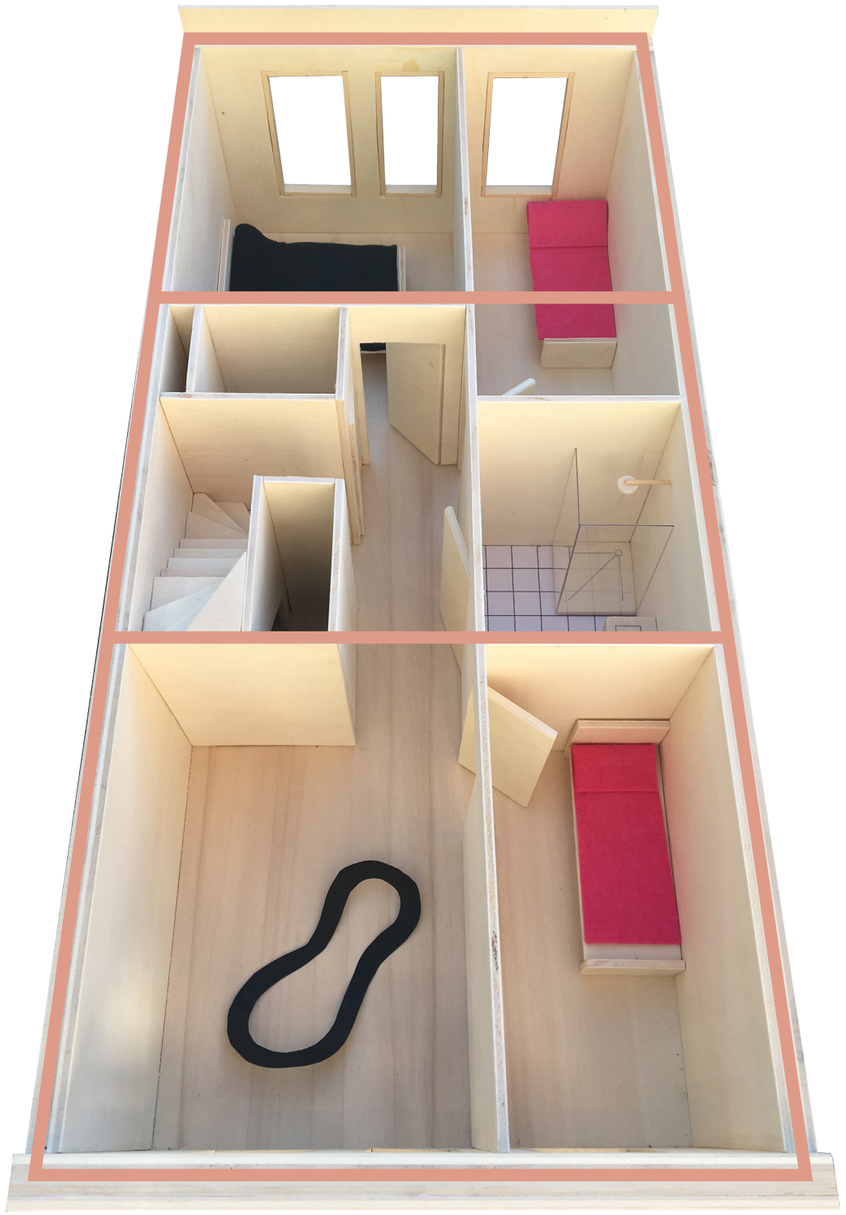


Maisonette type 2

Bedrooms

Hall and bathroom

Bedroom



Maisonette type 2

Living room

Stairs, kitchen and dining room

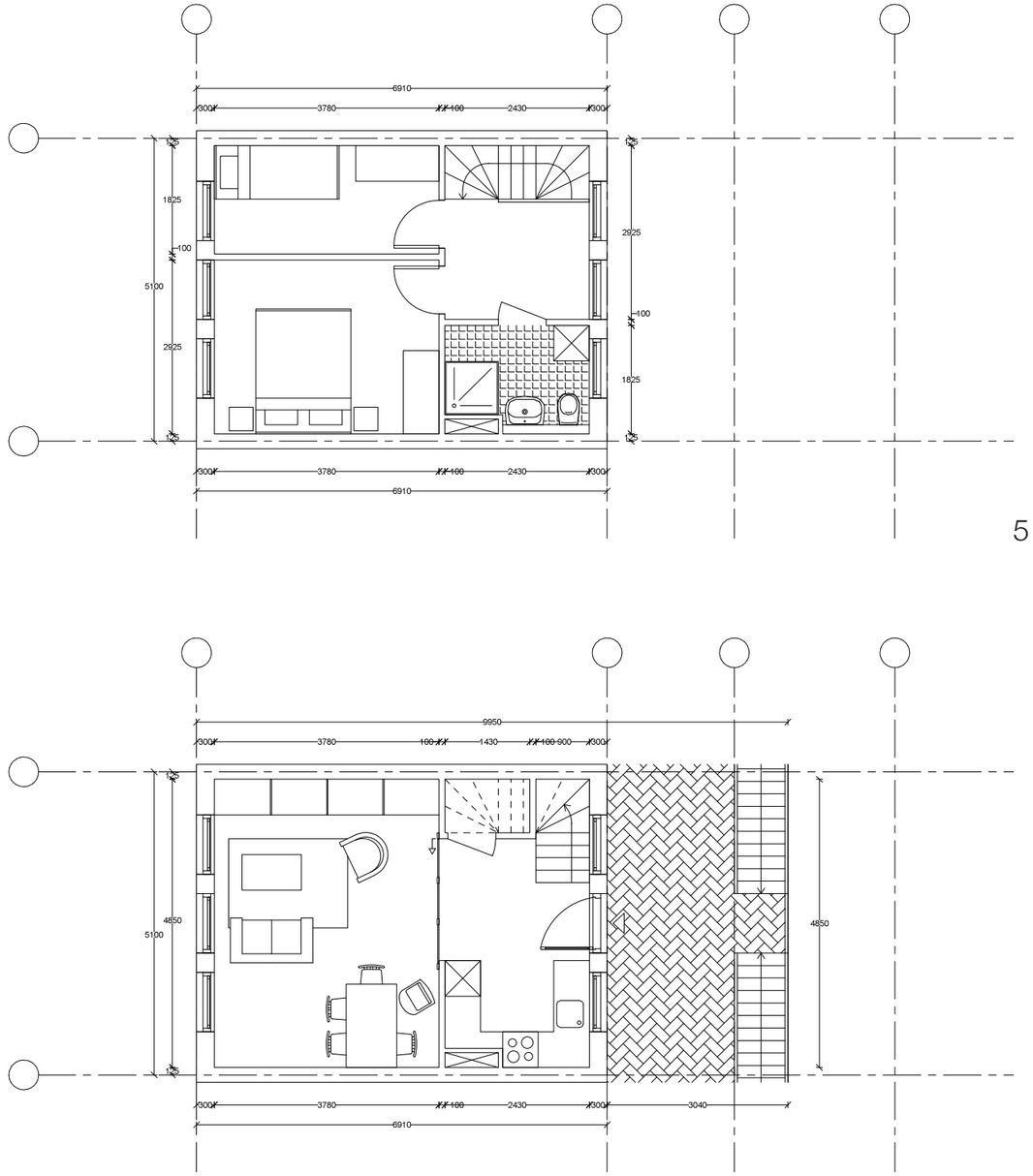
Outdoor space

Gallery

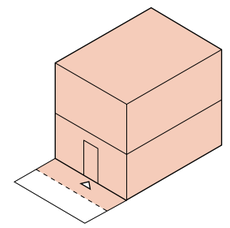
Deviding door

Deviding door

Maisonette type 3



5 - Fifth floor



4 - Forth floor - Entrance

Maisonette type 3

Living & dining room

Stairs & kitchen

Outdoor space

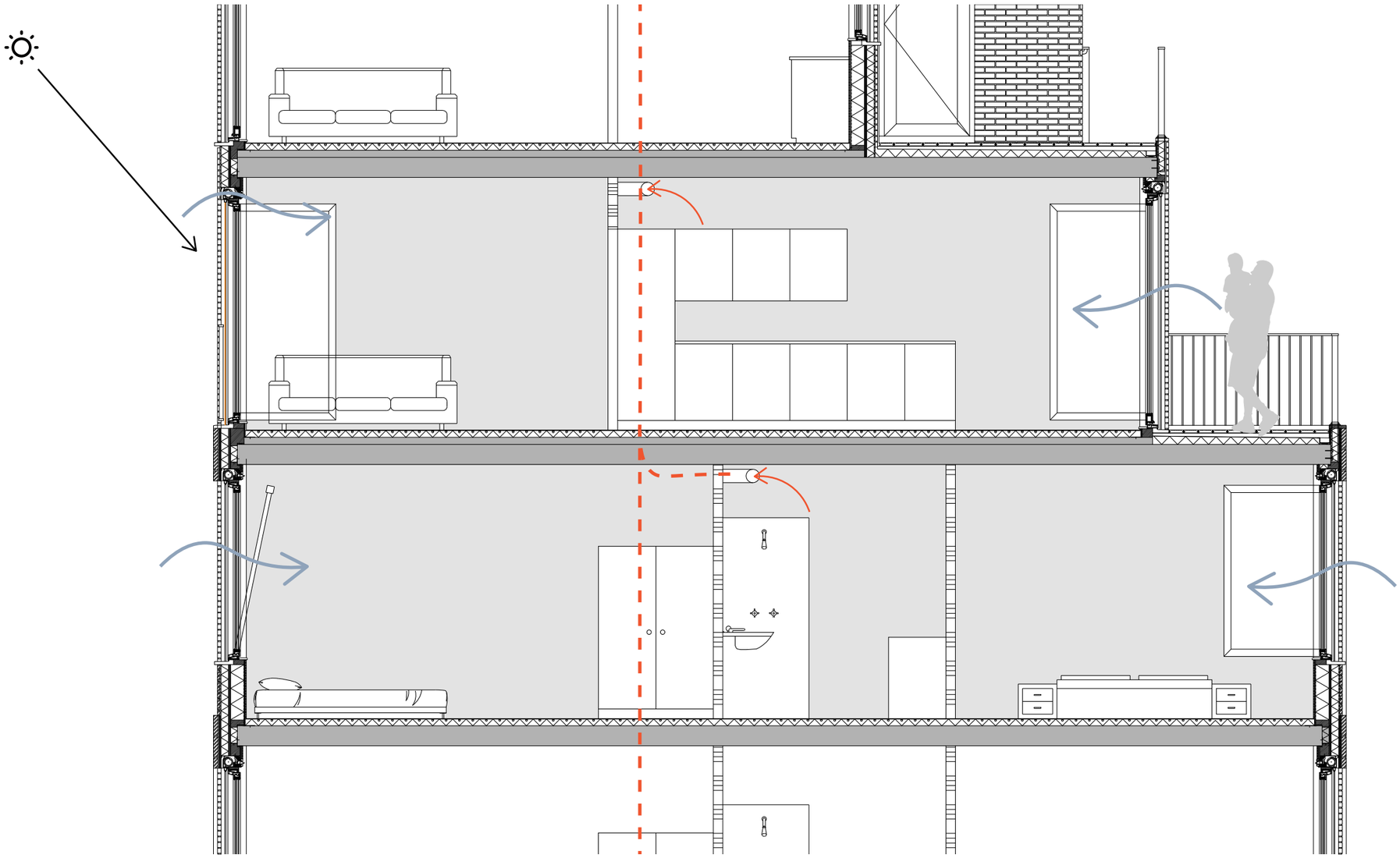
Gallery

Maisonette type 3

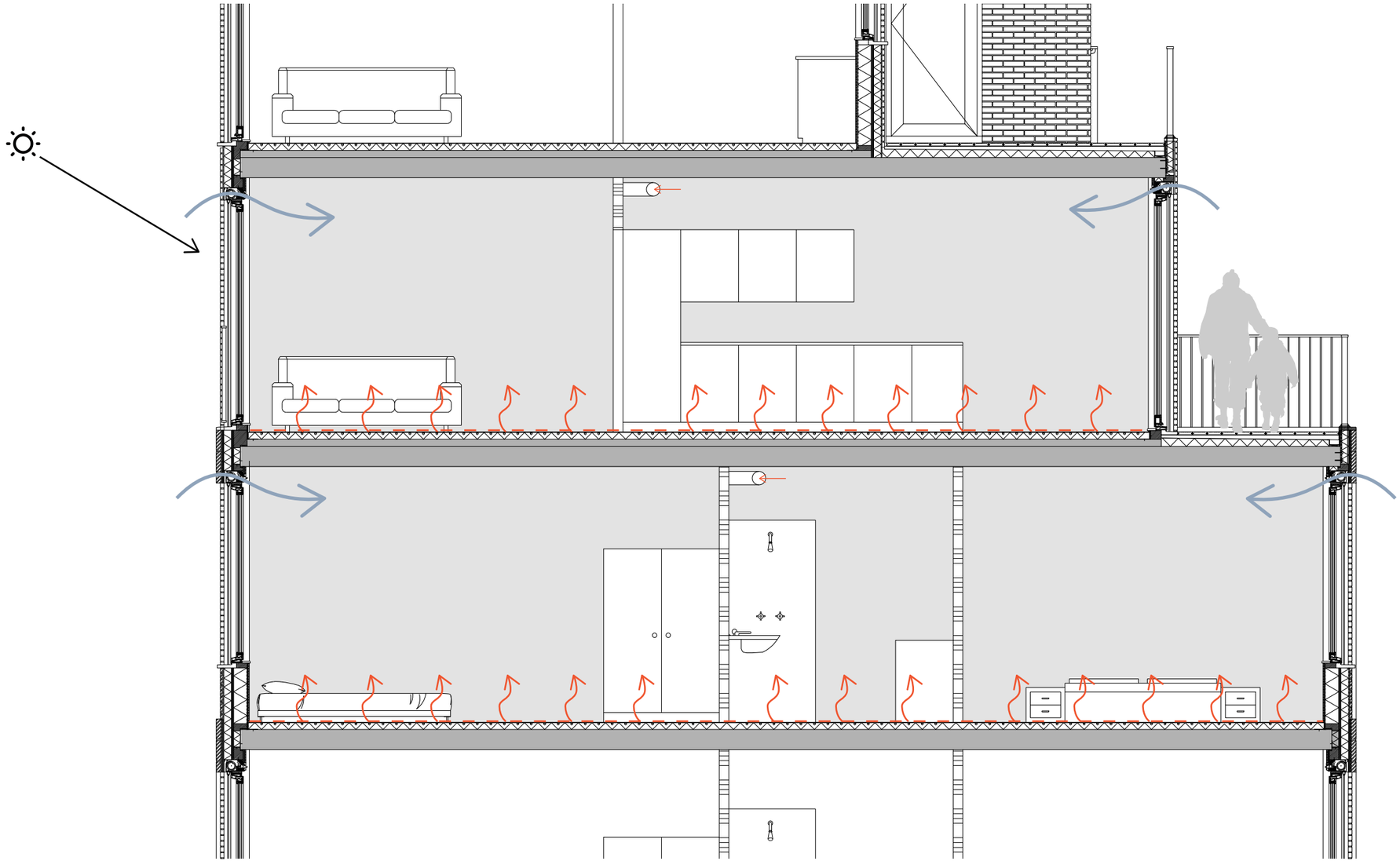
Bedrooms

Hall and bathroom

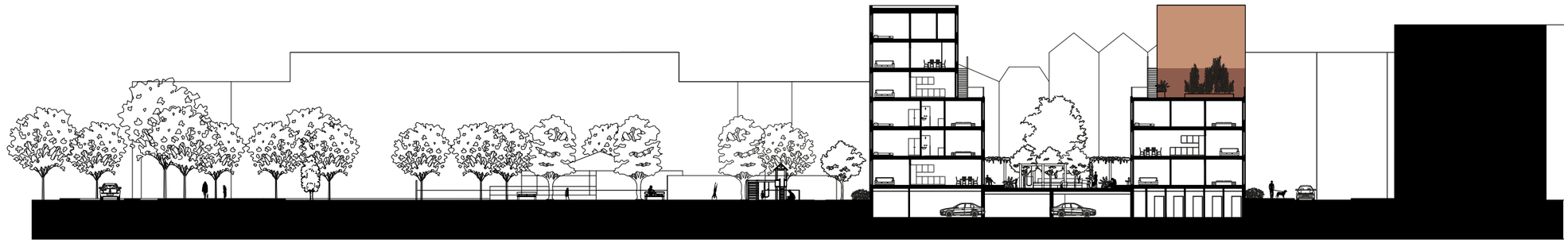
Climate design in summer



Climate design in winter



Conclusion



Road of the round about

Red Carpet (side walk)
(safety)

Green strip
(safety)

Pancake restaurant
(facility)

Playground and park
(facility, playing & interaction)

Path with wide green border
(safety)

Alley through building
(short cut to the playground for children)
(safety)

Raised square
(playing & interaction, space)

Second level square
(playing & interaction, space)

Wide side walk
with green border

Thank you!