



Vivacity Village

a meaningful life for people with dementia

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DEMENTIA

Dementia is a disease that mainly affects people over 65 years old and approximately one out of four gets affected. It develops gradually through different stages; beginning with memory loss, then continues with difficulties of orientation and recognition. Finally, it is common that the person affected forgets who he or she is and socially isolates him- or herself. Usually, the condition lasts for about 10 years and then leads to death since there is no cure. Instead, there is only treatment for delaying dementia and working with options to improve the person's life quality.

PHYSICAL ACTIVITY

Studies show that people who exercise are less likely to develop dementia. According to various studies, physical activity also reduces the effects of dementia. This can help someone living with dementia live a healthier, and also fuller lifestyle (Active Norfolk, n.d.).

BRAIN ACTIVITY

Studies of animals show that keeping the mind active may:

- Reduce the amount of brain cell damage that happens with Alzheimer's
- Support the growth of new nerve cells
- Prompt nerve cells to send messages to each other

When you keep your brain active with exercises or other tasks, you may help build up a reserve supply of brain cells and links between them. You might even grow new brain cells. This may be one reason scientists have seen a link between Alzheimer's and lower levels of education. Experts think the extra mental activity from education may protect the brain by strengthening connections between its cells.


Neither education nor brain exercises are a sure way to prevent Alzheimer's. But they may help delay symptoms and keep the mind working better for longer (Webmd, 2020).

REFERENCES

Active Norfolk (n.d) *Adapt activity so it's Dementia friendly*
<https://www.activenorfolk.org/organisations/health-social-care-hub/how-to-adapt-activity-so-its-dementia-friendly/>
Accessed 2021-12-28

WebMD (2020) *Brain Exercises and Dementia*
<https://www.webmd.com/alzheimers/guide/preventing-dementia-brain-exercises>
Accessed 2021-12-28

IDENTIFIED PROBLEMS AND NEEDS


 **PHYSICAL ACTIVITY**


 **BRAIN ACTIVITY**

 **SOCIALIZE**

 **SOCIAL WITHDRAWAL**

 **ROAMING**


 **MEMORY LOSS**


 **NATURE**


 **WAY FINDING**

DESIGN PRINCIPLES


 **ACTIVE LIFESTYLE**
Design for an active every day life

 **GAMES**
Create spaces for board games, painting, musical instruments to encourage keeping the brain active


 **INCLUDE DESTINATIONS AND PUBLIC SPACES**
Design spaces for local amenities, venues, and services


 **REDUCE SCALE**
Reduce the perceived size and number of occupants per care/living area

 **NO DEAD ENDS**
Looping design to avoid frustration and confusion

 **INTEGRATE MEMORY CARE**
Enable interaction between those with and without dementia
Facilitate contact and engagement with the surrounding community

 **PROVIDE ACCESS TO NATURE**
Offer visual and physical access to natural features

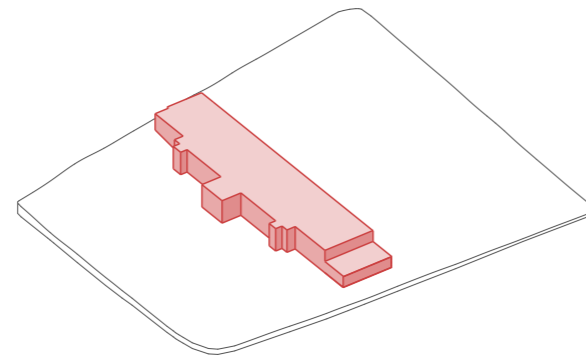
 **SIMPLIFY LAYOUT**
Design intuitive room configurations, adjacencies, privacy and affordances

 **MAXIMIZE FAMILIARITY**
Emphasize a residential ambience, character and décor

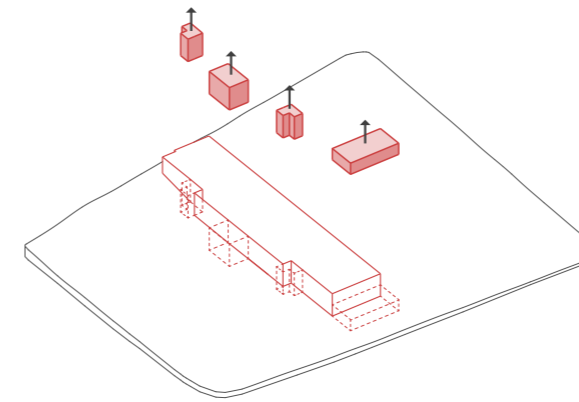
DESIGN DEVELOPMENT

In the central area of the site, an existing building is located. The whole site is approximately 22'000m², which is larger than necessary. The east side of the existing building measures 12'000m², which seemed more suitable since Kärä is in need of densification. Therefore, a space efficient design approach seemed to be of importance. With this in mind, the design took shape with the idea of reusing the existing building in the project instead of demolishing it.

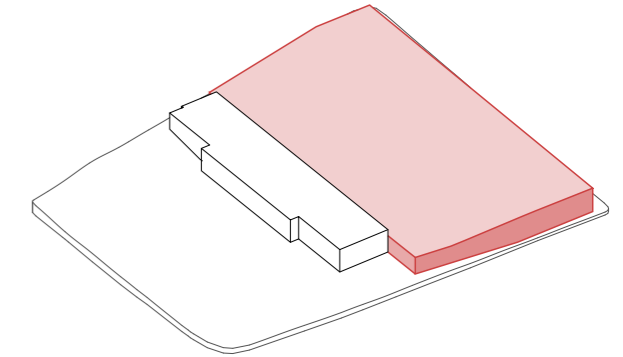
The terrain of the site is sloping, approximately three meters. By adding three stories to two of the units on the east side of the site and designing the landscape within the units with a ramp and stairs, the slope became an asset rather than a disadvantage - promoting an active everyday life with all areas accessible.



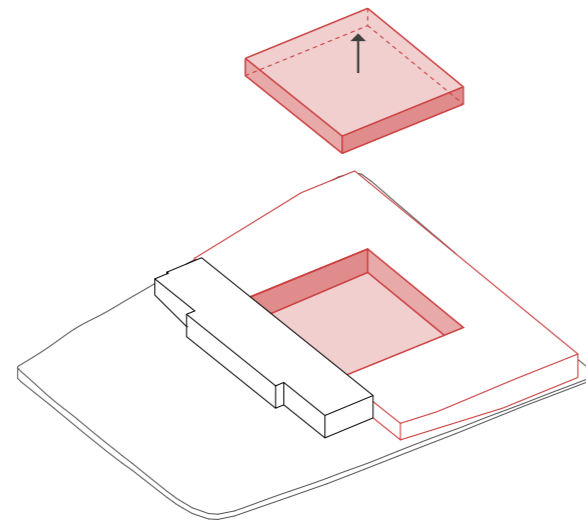
01 EXISTING BUILDING
on site



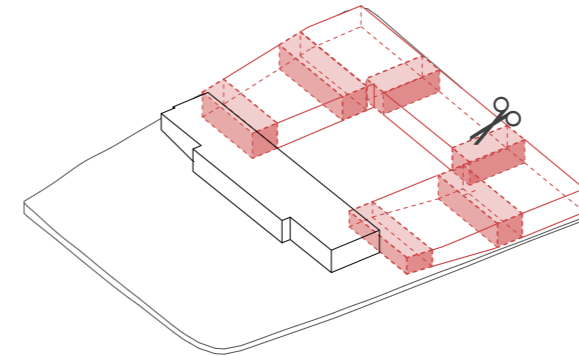
02 REMOVE
additions and smaller parts



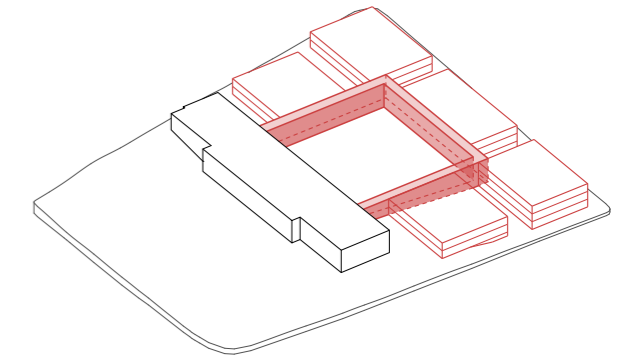
03 ADD VOLUME
to the chosen part of the site



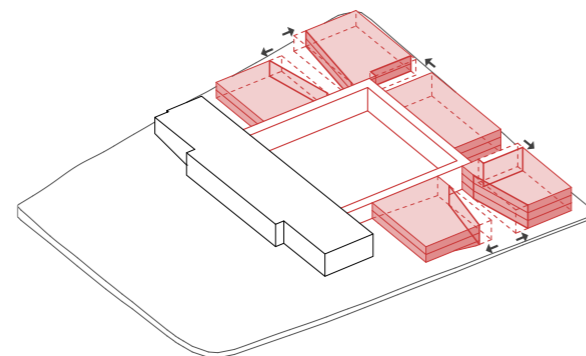
04 CARVE
to create central, safe courtyard



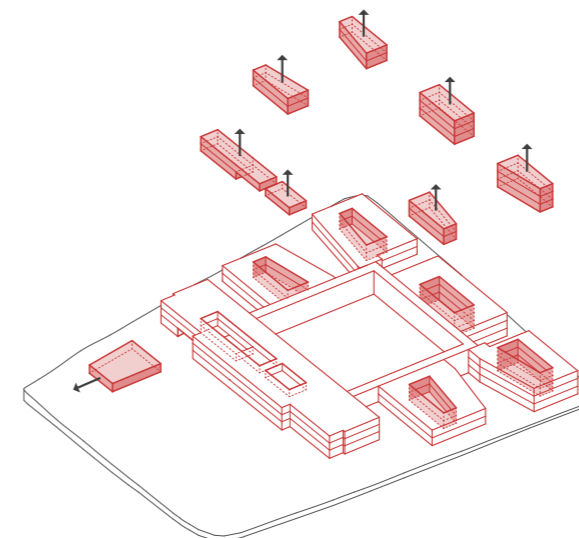
05 CUT AND DIVIDE
into five units



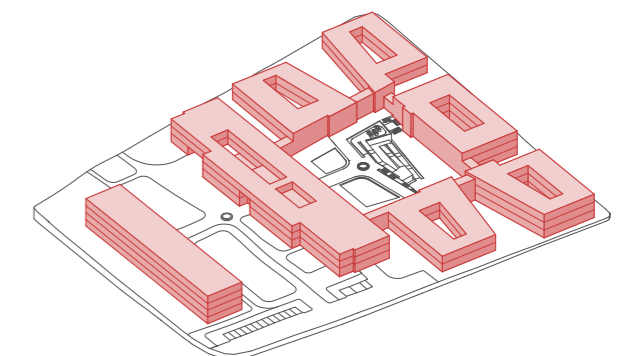
06 ADD CORRIDOR
to connect units and existing building



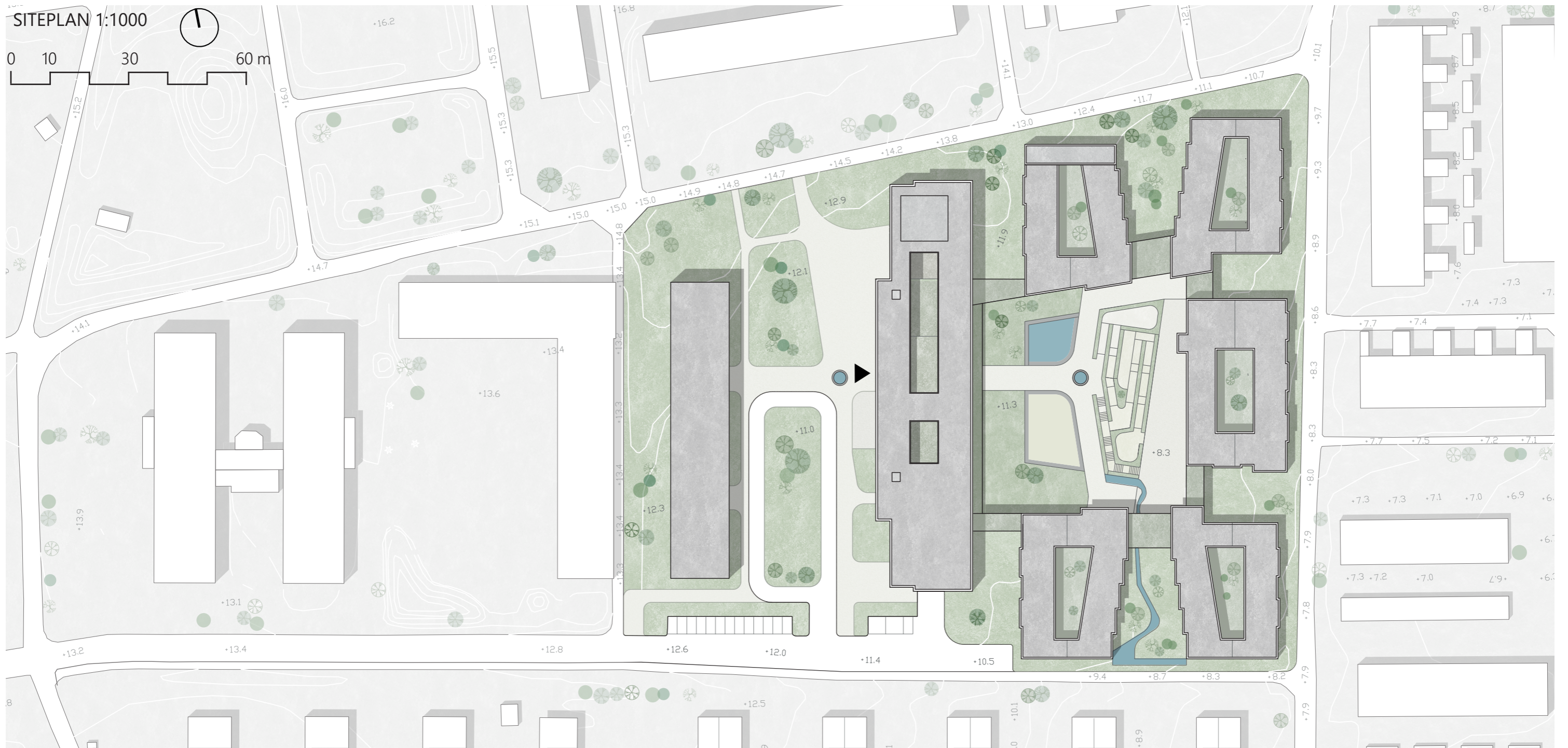
07 OPEN UP
for better views and more space



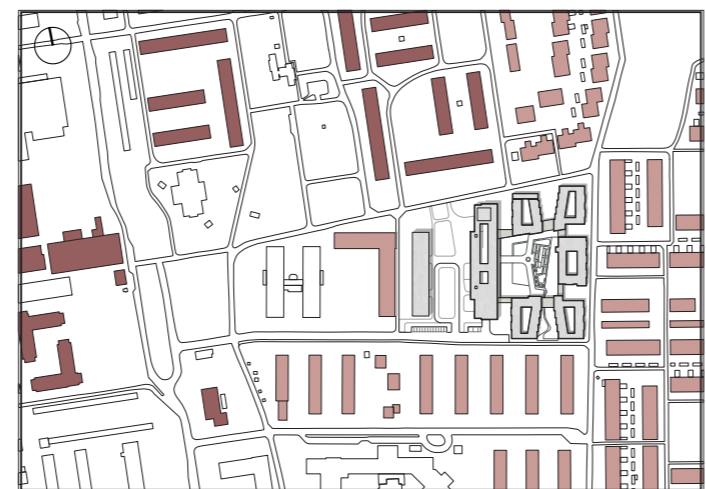
08 CARVE
to create smaller courtyards and openings



09 FINAL
development of the project - defining
entrances, landscape design and densifying
the site with a residential complex



TRAFFIC
4 | Team 5



MATERIALS

- Brick
- Wood
- Primary car road
- Secondary car road
- - - Public transport

The structure of Kärra city prioritizes biking and walking, there is no thoroughfare for cars. The walking path on the north side of the site, leading from west to east is a nice existing path that is thought of to use as the main way to get to the Village. The closest bus stop is also located from this direction. For deliveries or for people who need to get to the site by car, an existing secondary road can be used.

There is a lot of residential housing in the area, mostly in wood and brick. These two materials are mainly used in the project to connect to the area.



The Vivacity Village aims to empower elderly people suffering from dementia, by giving them a rich, meaningful life and integrate them with the rest of the society.

By renovating the existing building on site, a diverse range of features could be provided in the large facility, without having to build more. This gives extra luxuries for the residents as

well as it supplies Kärä with public functions such as a large restaurant, a gym, an art gallery and more. By adding these functions a connection between the Village and the society of Kärä is created.

Future densification is of the essence in Kärä, which is possible on the large site. Therefore, residential apartments are designed

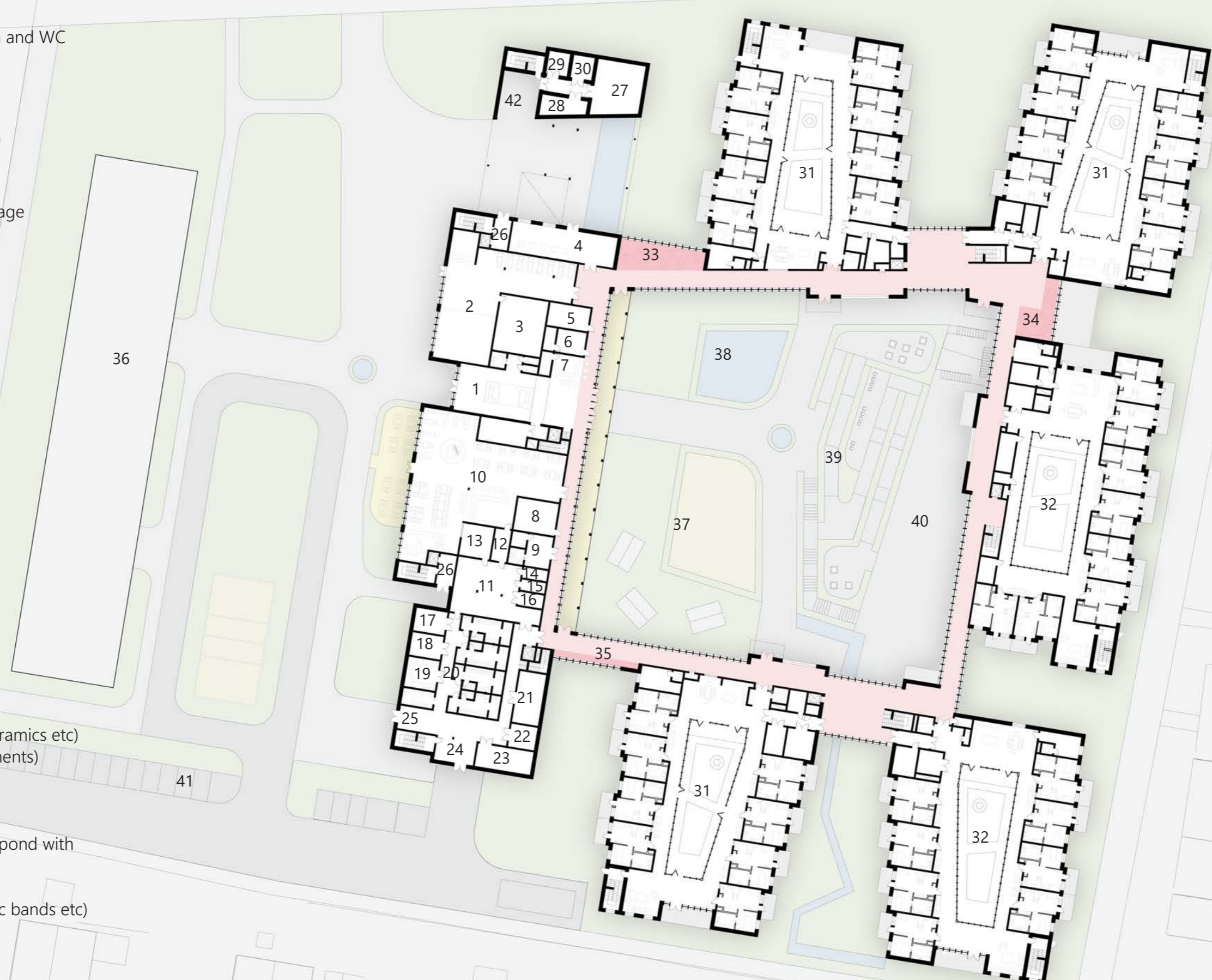
on the 1st and 2nd floor in the existing building. Furthermore, a residential complex in the west area of the site is added. By doing so, a public space between the complex and the Village is created. Designed as a green square, to be attractive for both residents and people visiting the Village for its public functions, it become a lively area in Kärä.

FLOOR PLAN 0

Scale 1:600



1. Main entrance with reception and WC
2. Gym
3. Dressing room
4. Art gallery
5. Book shop
6. Beauty salon
7. Café
8. Grocery store
9. Flexi room with WC and storage
10. Restaurant
11. Kitchen
12. Preparation room
13. Dish room
14. Fridge room
15. Freezer room
16. Storage (kitchen)
17. Storage (general)
18. Storage (aid)
19. Laundry
20. Dressing with WC
21. Cleaning (central)
22. Storage (outdoor furniture)
23. Waste management
24. Delivery entrance
25. Staff entrance
26. Residential entrance
27. Ventilation
28. Sprinkler room
29. Incoming district heating
30. Incoming electricity
31. 2 story unit
32. 3 story unit
33. Creative space (painting, ceramics etc)
34. Music space (piano, instruments)
35. Library area
36. Residential complex
37. Activity area
38. Contemplation area (water pond with fish)
39. Sensory garden
40. Stage area (for dance, music bands etc)
41. Car parking
42. Bike parking



FLOOR PLAN 1

Scale 1:600



- 1. Residential apartment
- 2. Courtyard
- 3. Hotel
- 4. Conference room
- 5. Office
- 6. Meeting room
- 7. Lunch room (staff)
- 8. Music space (piano, instruments)
- 9. Library area
- 10. 2 story unit
- 11. 3 story unit
- 12. Residential complex
- 13. Storage



FLOOR PLAN 2

Scale 1:600



- 1. Residential apartment
- 2. Courtyard
- 3. Storage
- 4. 2 story unit
- 5. 3 story unit



FLOOR PLAN -1
Scale 1:600



- 1. 3 story unit
- 2. Ventilation
- 3. Sprinkler room
- 4. Incoming district heating
- 5. Incoming electricity

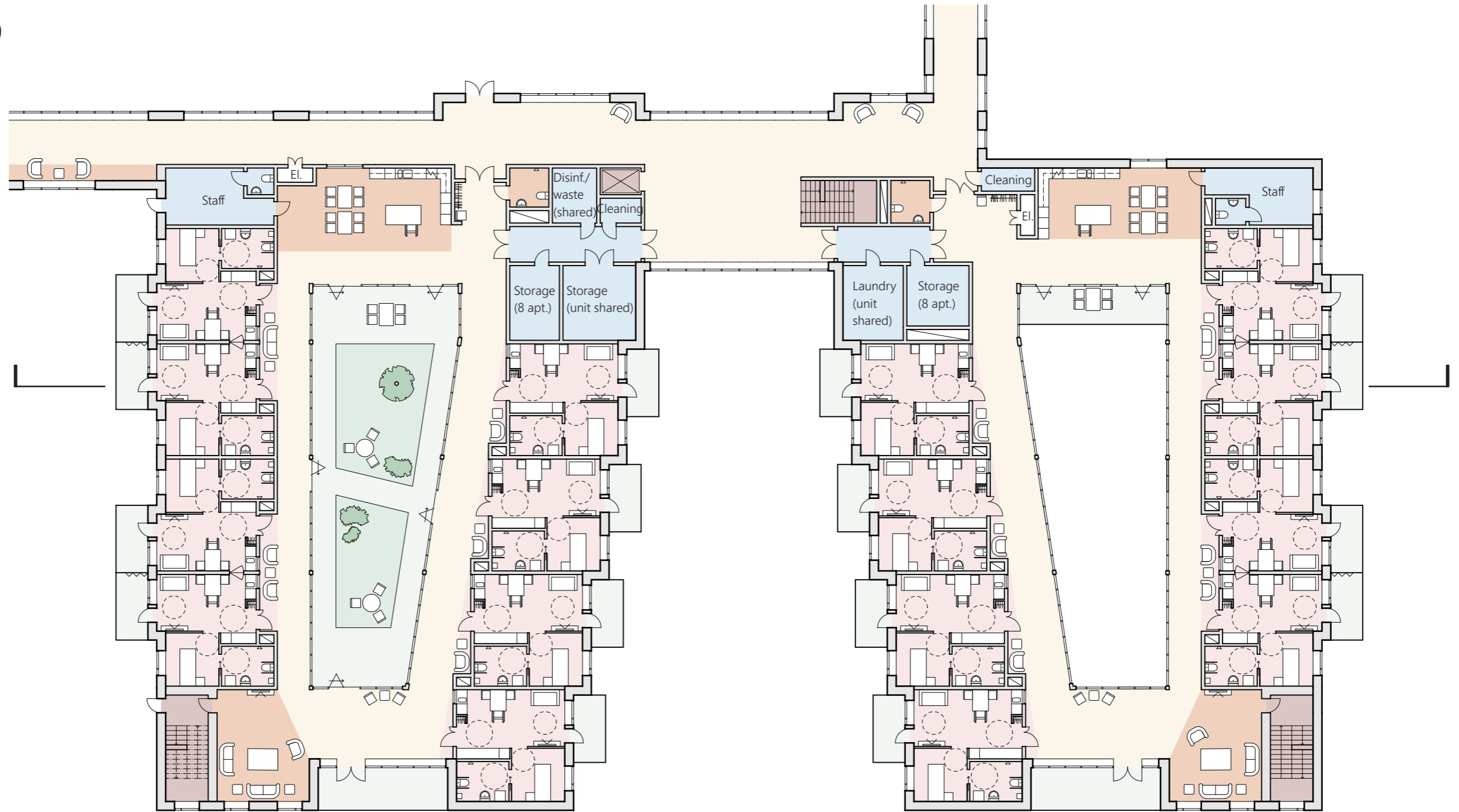


UNIT FLOOR PLAN 0

Scale 1:250

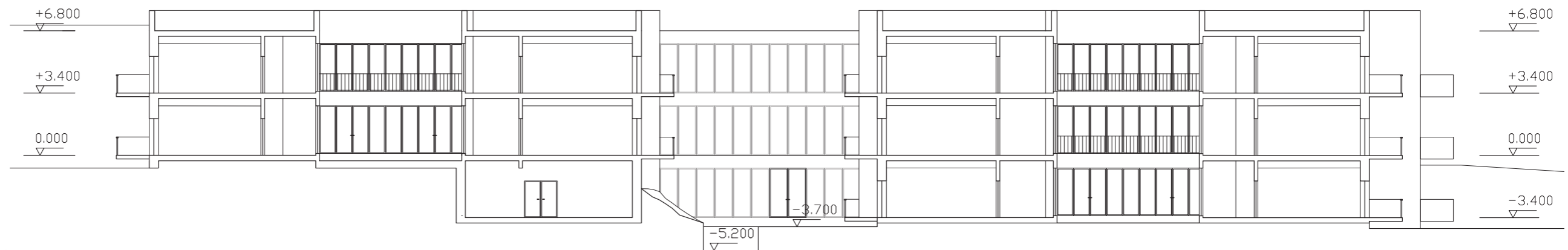
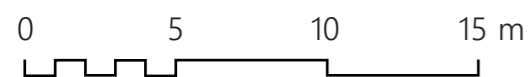


- Vertical transport
- Staff
- Common space
- Apartments
- Transportation
- Outside



UNIT SECTION A-A

Scale 1:250





WAY FINDING

Each unit has its own entrance color, which is the same in the kitchen to help with orientation. The same goes for the entrance to the residents own apartment, where they have an individual color or wallpaper. To make it more personal, the staff helps organize photographs and paintings that the residents are familiar with.

The glazed courtyard also gives a great overview from all spaces in the unit.

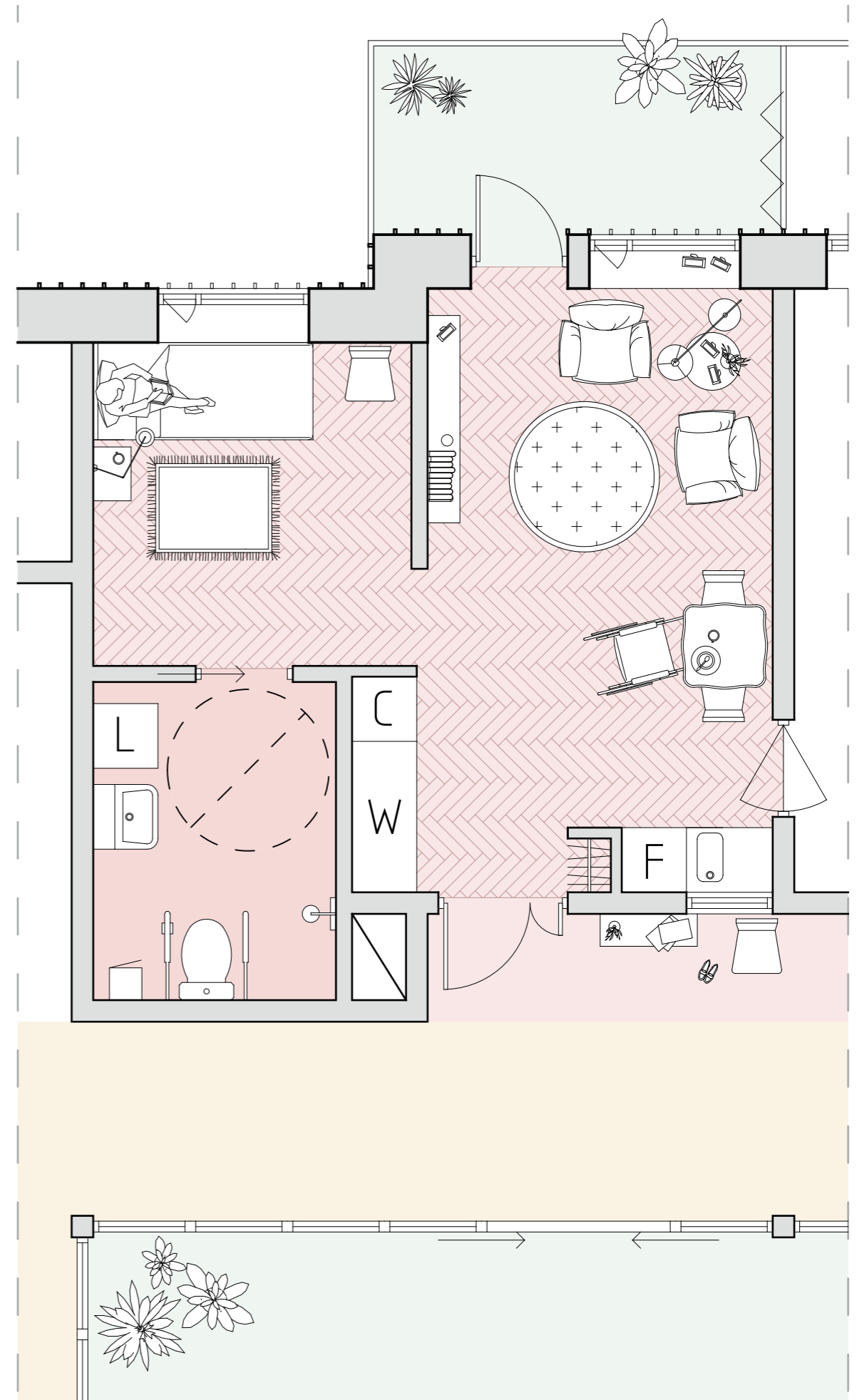
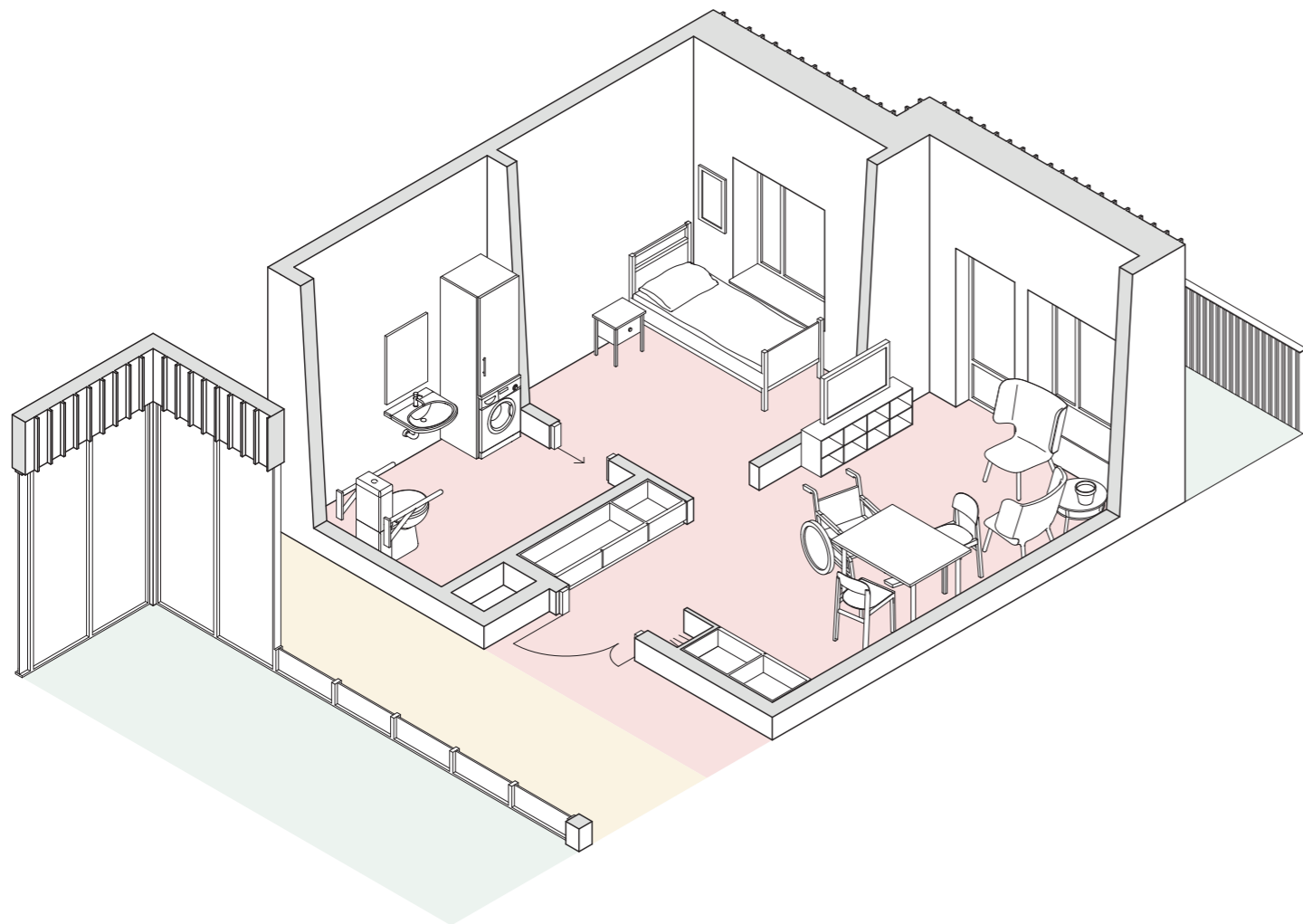
APARTMENT A

PLAN

Scale 1:50



Apartment type A is 35m², with a semi-private area in the corridor at the entrance. This is created by pushing the walls one meter in to the apartment. The same push was done in the facade to create a more interesting impression.



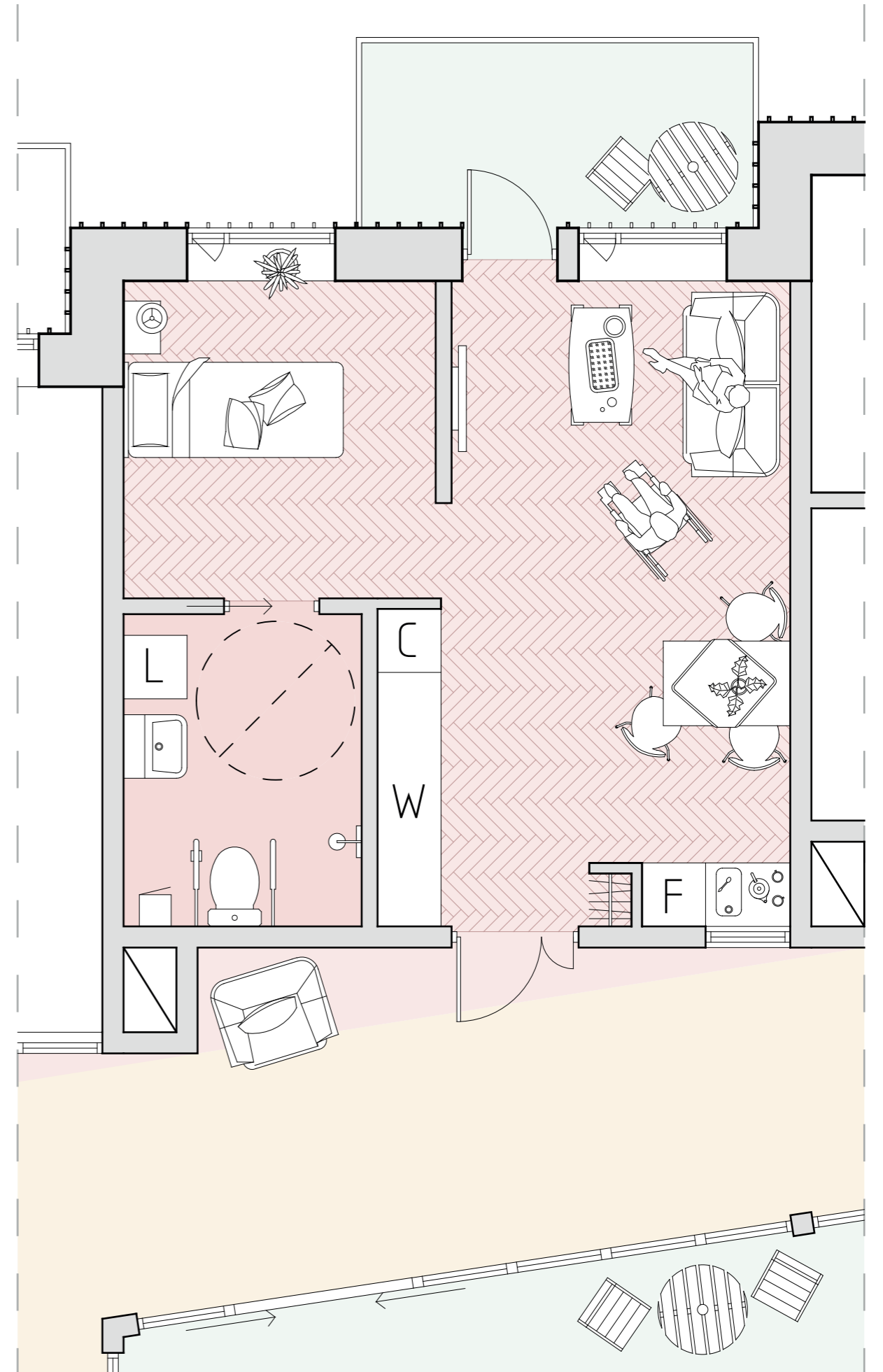
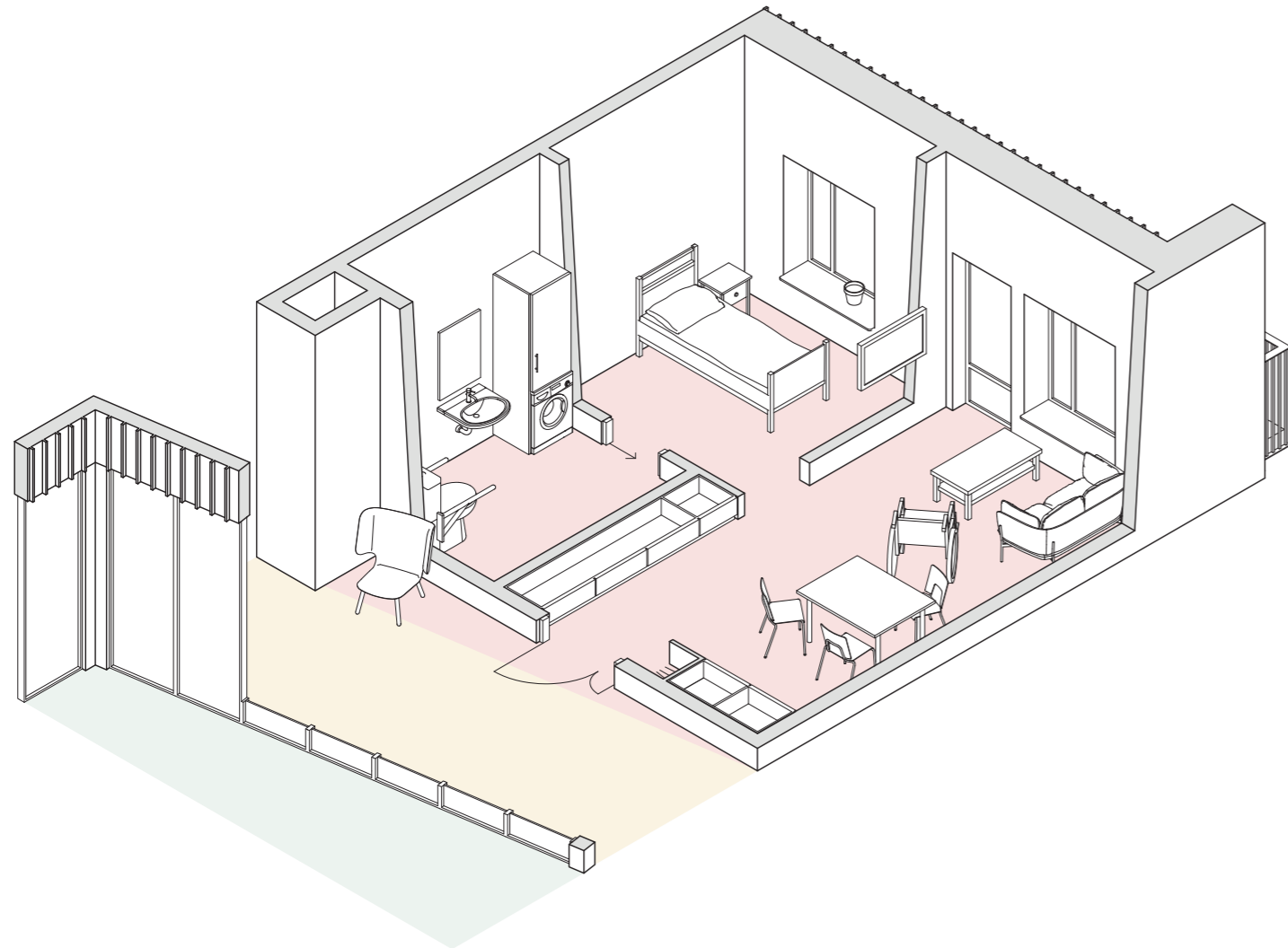
APARTMENT B

PLAN

Scale 1:50



Apartment type B is 35m², with a smaller semi-private area in the corridor at the entrance. This is created by pushing the neighbour apartment 1 meter out.



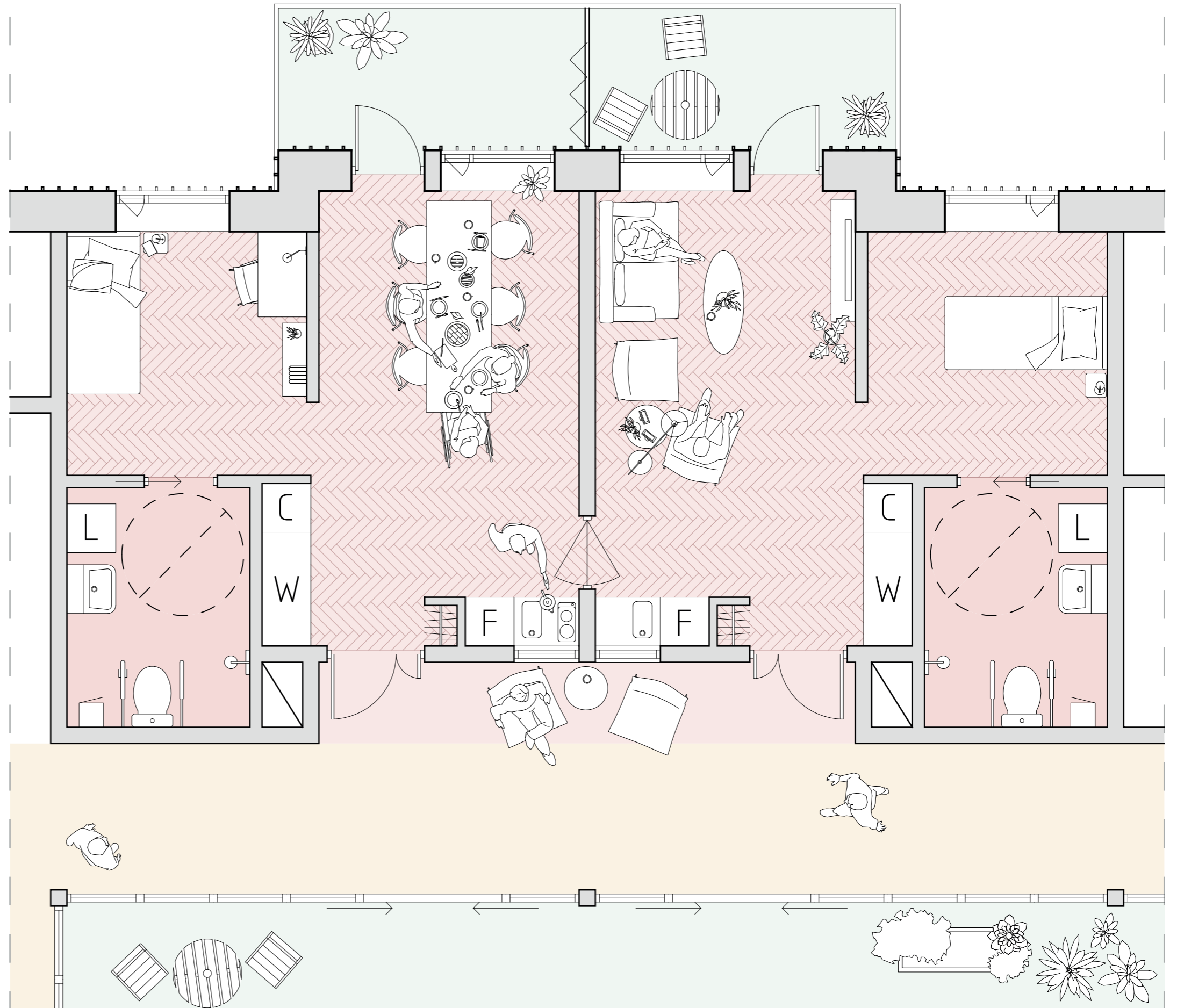
APARTMENT AA

PLAN

Scale 1:50

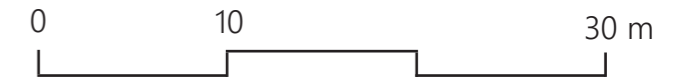
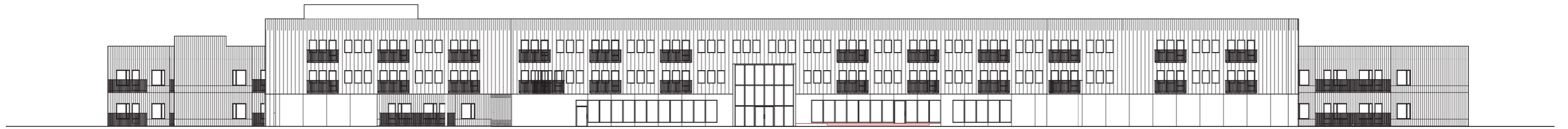


Apartment type A can be transformed into a couple apartment, by opening up with a door in the kitchen.

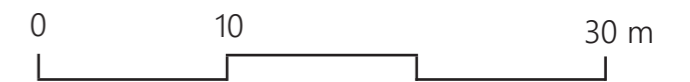
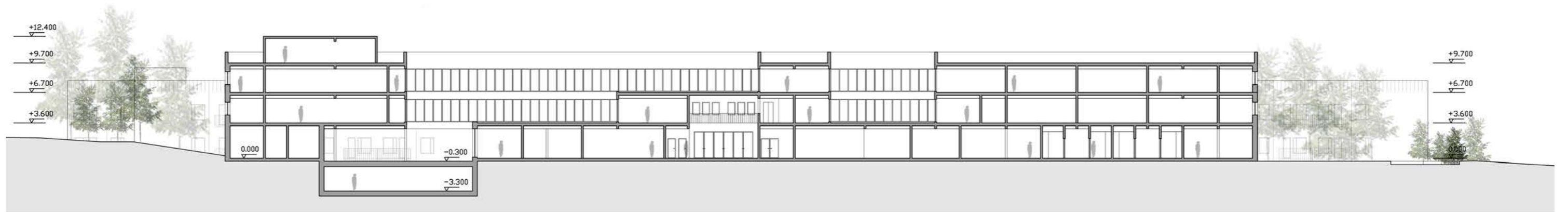




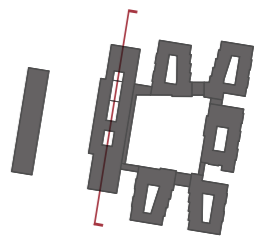
Warm wooden floors meet creamy and neutral walls, so that each resident can set their own touch with paintings, textiles and furnishings



FACADE WEST
Scale 1:400



SECTION B-B
Scale 1:400

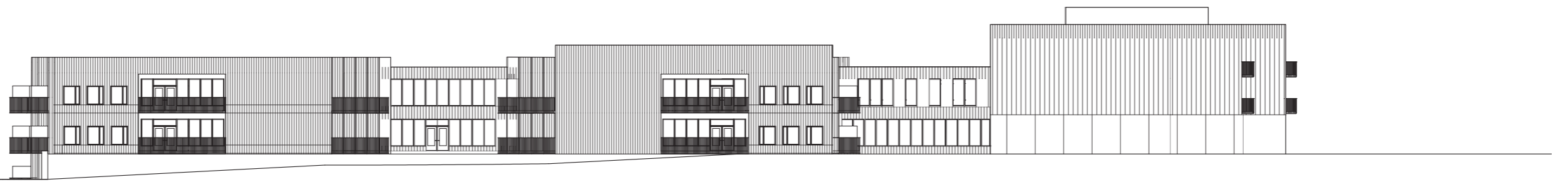


SUSTAINABILITY

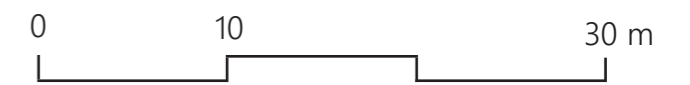
The site is sloping down towards the three story high units that are located 3 meters below the rest of the project. Therefore, these are extra exposed to water damage, the water will naturally be collected in close connection to the foundation of the facade. By designing a small stream that winds its way through the entire big courtyard of the project, and being connected to a pond and fountain, the rainwater is taken care of in a more sustainable way and the construction gets protected from flooding.

The large courtyards within the existing building also provide water management since the green foundation delays the water. Opening up the building in this way also creates better light conditions within the building.

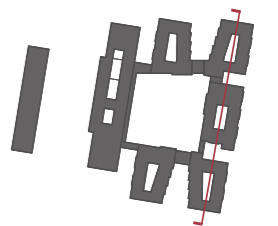
Since our built environment will have to be used in several new ways in the future, the new apartments in the existing building has potential to be used as service houses, since the facilities needed are already designed.



FACADE NORTH
Scale 1:400

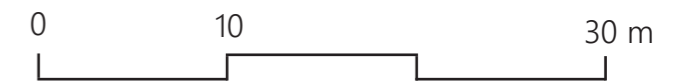


SECTION C-C
Scale 1:400

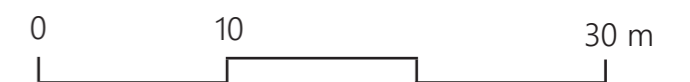
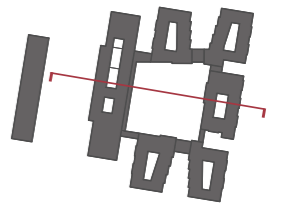


INTERACTIONS

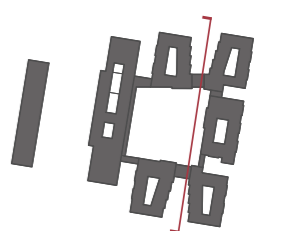
In the Village, many different interactions takes place. Each unit has its own courtyard which invite residents to connect. If more privacy is preferred, each apartment has its own balcony with nice views of green gardens that are accessible from the connecting corridor, as well as views to the neighbor unit.



SECTION D-D
Scale 1:400



SECTION E-E
Scale 1:400



LIFE QUALITY

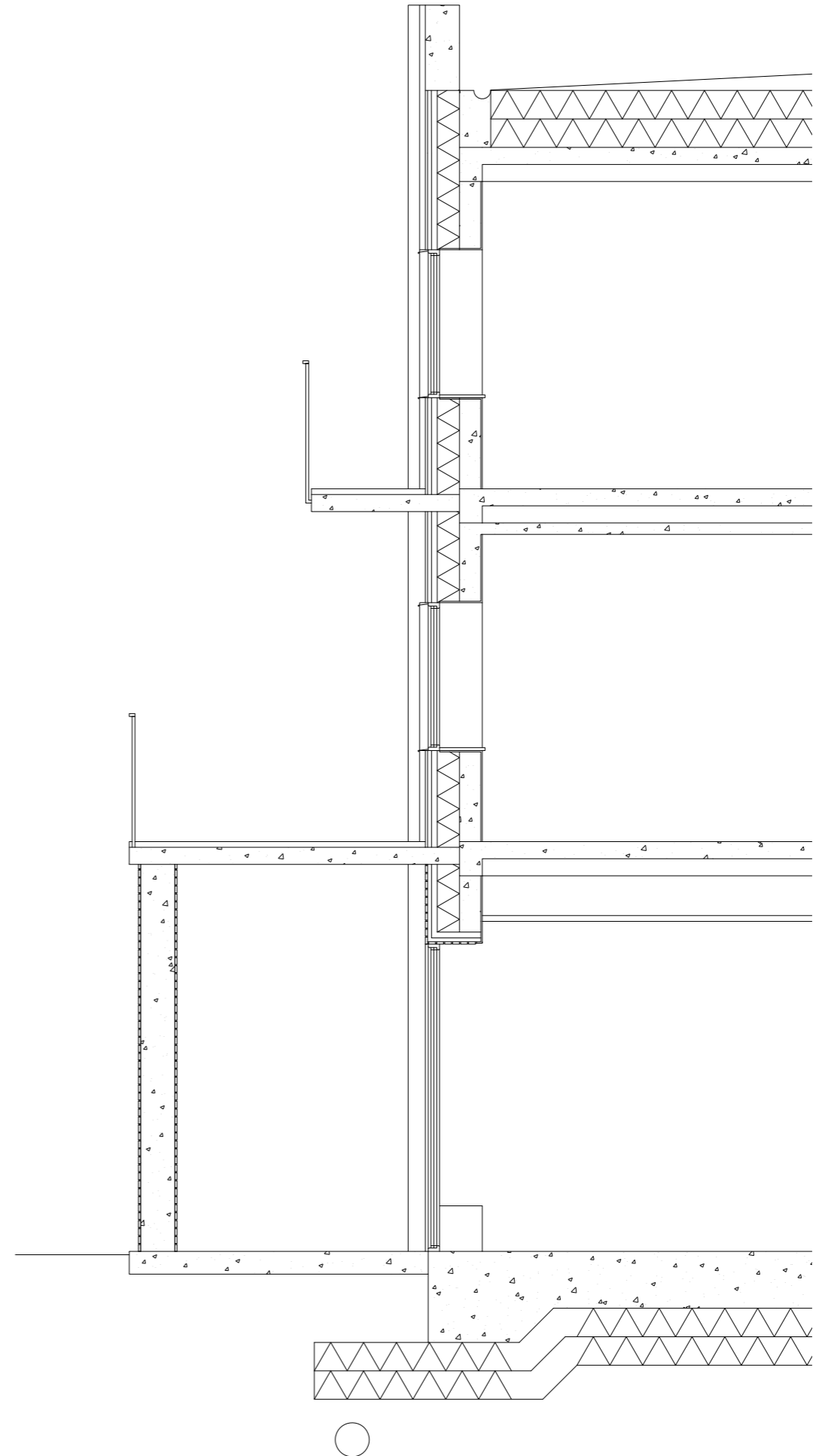
The Vivacity Village provides exactly that, vivacity, to its residents. By offering a wide range of different functions and surrounding environments, with great overview and easy access, anyone could find a lifestyle suitable for them.

The Sensory Garden enriches the Village with beautiful colors, scents and is designed in a sloping terrain - to promote an active everyday life



TECHNICAL SECTION (EXISTING)

Scale 1:50





A small café and many other shops enriches the life of the residents - day and night