



Kvarteret Ithaka:
A proposal for a new housing district in Lund's
northern university area.

LTH 2022

AAHM10: Degree Project in Architecture

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To my dearest family and friends. Without your constant support this project would have never been possible.

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Introduction

Matters of housing are an often-discussed topic within architecture these days. When one riffles through an architectural magazine, it is highly likely that they will find an article on the topic. Numerous books have been written about housing. As a subject, it is also recurring in architectural debates, podcasts, videos, and other kinds of media.

Sweden, like large parts of the developed world, faces right now a multitude of unique issues related to housing. It has become an expensive commodity, especially for younger people, who are often forced to live in small rooms with expensive second-hand rent, move often, stay with their parents much longer than they want to, and refuse job and education opportunities. [1] Most of the housing stock that already exists is old, with outdated plans that do not fit with the lifestyle and needs of modern people. The modernistic ideals of the separation of functions have created housing districts that lack life, and whose residents are forced to commute long distances in order to work or access necessary commodities. Elements such as access to nature and environmentally friendly practices are not often taken into account.

Within this context, is it possible to design a housing neighborhood that is a satisfactory response to contemporary society's many demands? Is it possible to create an intervention that offers multiple forms of housing, as is appropriate in today's diverse society, as well as being environmentally friendly, combining multiple functions, and interweaving nature and urbanity?

This project my own effort to approach these questions within a realistic context. I shall design a new housing area located within the northern university area of Lund.

Vision

The vision of this project is to design a housing neighborhood within the northern university area of Lund. This new neighborhood shall provide diverse forms of housing, from temporary to more permanent. It shall mix it with other functions, such as workspaces, entertainment, trading, etc. Those shall evolve naturally, through providing multi-use spaces, mostly on the ground floors of buildings. Nature shall permeate the space, through multiple small interventions and vertical greenery. Finally, it shall provide outdoor activities, such as sports fields, skate parks, squares, outdoor exhibitions, etc. to raise interest

Method

This project began with the desire to explore the field of housing in architecture. The area chosen is the northern university of Lund. The reasons for that were several: it is an area I am familiar with, due to having lived almost two years here, and one that I have come to enjoy living in. Additionally, it is a city that constantly develops and changes, with a young, growing population that urgently demands housing [2]; thus, fertile ground for designing and testing different approaches regarding the subject.

The first part, the research, begins with a short summary of Lund's history, a presentation of the current situation and the future goals of Lund's urban planning and development, as defined by the municipality. This is to acquaint the reader with the historical and social context of the proposal, as well as other important subjects that are approached.

In the second part, the proposal, the area of my proposal is defined and analyzed, both through references to bibliography as well as my own explorations and observations. A masterplan is then proposed for the chosen area. Finally, a smaller sub-area of the masterplan is chosen, drawn and presented in greater detail, in order to illustrate the character and expression intended for the entire proposal.

PART 1: RESEARCH

A short flashback through Lund's history

Lund is one of Sweden's (and even Scandinavia's) oldest cities; it was founded the year 990. It was a religious center during the Middle Ages, the seat of the archbishop and was considered Denmark's second capital.

For several centuries, Lund was fought over by both the Swedes and the Danes, which resulted in the city becoming the site for many battles, and often sustaining serious damages. This, along with the restriction of the church's power during the reformation, stunted the city's growth, and it lost some of its past importance. The university was founded the 28th of January 1668. Eight years later, Lund became a part of Sweden for good.

After peace was established, Lund began to grow again. The university's importance and reputation grew, trade flourished with the grounding of new companies, especially after the invention of typography, when a number of newspapers and publishing houses were established. This tendency for growth was accelerated during the 19th century: the population grew, construction of buildings and public spaces became more common, the hospital was expanded, and more and more people attained higher education levels. Electricity, a new railway and central station, and telephone lines were few of the technological advancements that the city enjoyed towards the end of the 19th century and the beginning of the 20th.

Lund maintained its growth during the 20th century, with the incorporation of surrounding areas and the construction of new city areas. The city gained international attention and reputation throughout the years with the founding of companies such as the multinational giant Tetra Pak and the establishment of knowledge and research centers such as MAX-IV, ESS (The European Spallation Source) and Ideon Science Village.[3]

Lund, now and in the future

Today, Lund is home to over 100000 residents, and the university has 47000 students. [4] If its history could teach us something, it is that this trend of growth is not going to be halted in the future. In fact, this is confirmed by the predictions of the municipality. Given the fact that the municipal region has received 14000 new residents the last decennium, its population is expected to keep rising in the future. The expected percentage of population growth is 1,5% every year. This would result in a population numbering about 145000 on the year 2029. [5]

The plan that has been laid by the municipality in order to be able to respond to the needs of a prosperous, growing city focuses main-

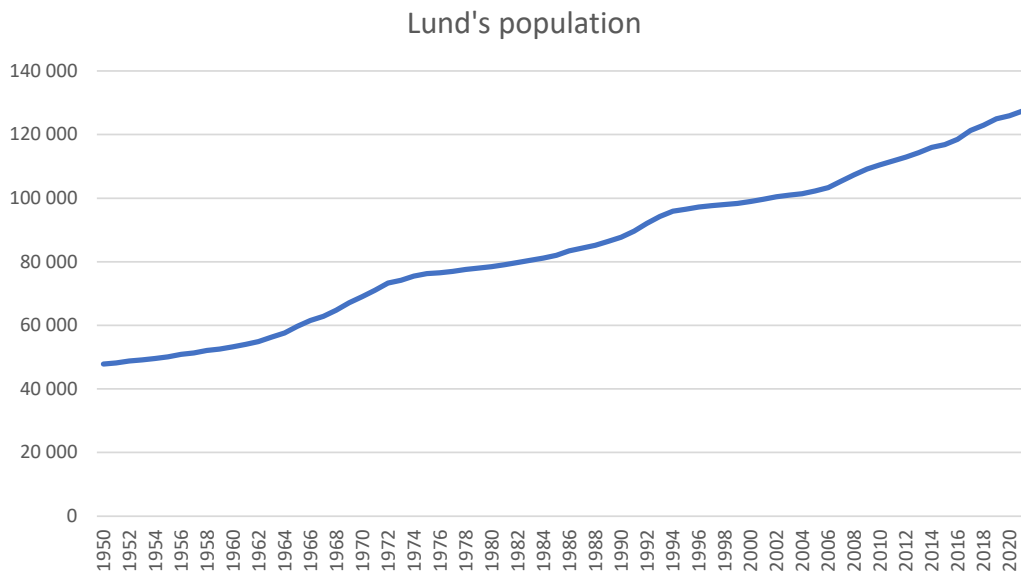


Figure 3: Lund's population increase from 1950 onwards. [6]

ly on densification of the city's already existing areas. [7] This would begin with the areas that lie near important nodes of public traffic routes, so as to encourage green mobility [8]. Another suggested starting point for densification is along routes that connect different areas in the city. [9]

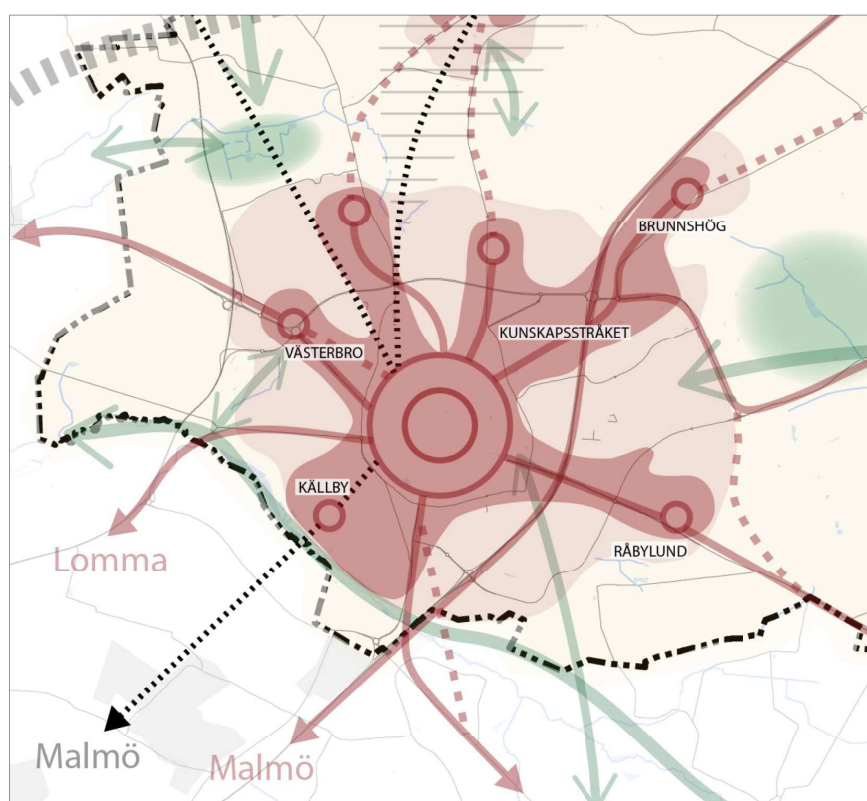
The reasons presented for this strategy are multiple: keeping the quality of the farmable soil around the city high and shielding it from urban expansion, creating an urban environment dominated by mixed functions, an environmentally, economically and socially sustainable model of urban planning, and minimizing the distance civilians need to travel in their everyday, thus encouraging them to walk, cycle or use public transport. [10]

Housing is given a lot of attention in the frame of this strategy. While the last decennium 6000 new houses were constructed, the plan from now on is an ambitious 1200 per year. Population groups such as young adults, students, internationals, as well as elders, children and people with disabilities are pointed out as those worth paying extra attention to when designing Lund's new housing. It is considered important to offer many different kinds of housing and forms of ownership or renting in order to be able to respond to the differing needs people have, at different stages of their lives and according to each individual's circumstances. [11]

Another area that are special attention is paid to is the city's environmental sustainability, with an urging for the creation of more energy-effective buildings, preferably those that generate renewable energy (for example, with solar panels) [12], creating a connected network out of Lund's multiple, small and fragmented green spaces, enriching existing public spaces with vegetation and integrating volumes of water within the urban environment. [13]

Finally, other functions' context and expected development is presented and analyzed. An important one is trade, which, while considered difficult to analyze holistically, due to the many different contexts it develops within in Lund's municipality, appears to have some overall noticeable tendencies. More and more people turn to e-trade to cover their needs, while physical stores become scarcer. There is

a bigger demand for experiences and services, such as those offered by cafes and restaurants. Therefore, it is important that the newly established parts of these functions are placed strategically, for example concentrated around important transport nodes, with a focus on quality and not quantity. [14]

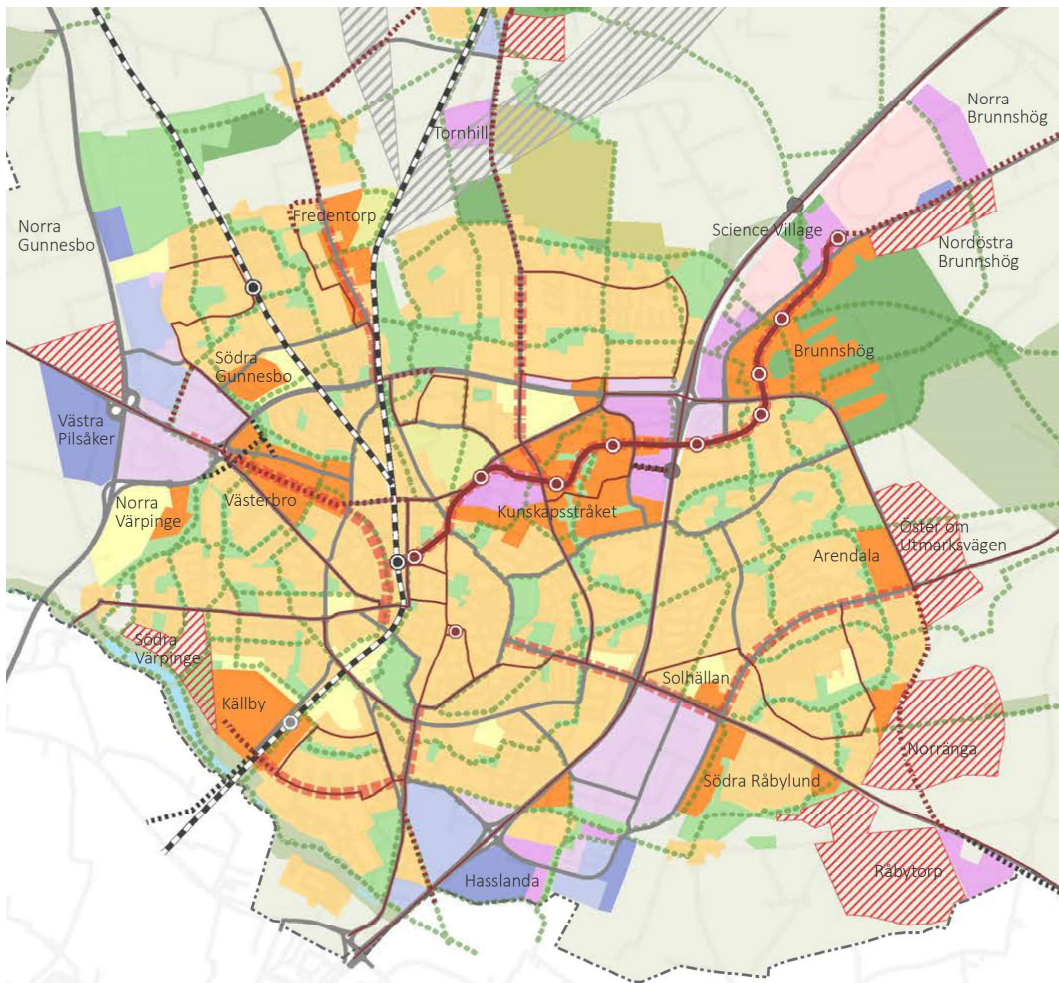


Utdrag ur strategikartan, Del 1 - Planstrategin

Legend

- | | | |
|---|--|---|
| City development focus | Railway | High quality nature areas |
| Urban area | Strong public traffic route | Important green connections |
| Development node | Possible strong public traffic route | Investigation area for 4-track railway |
| Farming areas | Outer freight tracks | |

Figure 4: Lund's overall development plan for the future.



Legend

- New train station
- Existing train station
- Existing tram station
- Existing popular public traffic station
- New strong public traffic routes
- Existing strong public traffic routes, tram
- Existing strong public traffic routes, bus
- Existing railway
- Railway, outer freight tracks
- ▨ Future railway
- Public traffic station, new
- Main street network, new
- Main street network, existing
- Green area, new
- Green area, existing
- Nature area, existing
- Blue - green streaks
- Water, existing
- Farmlands, existing
- Workplace area, new
- Workplace area, existing
- Area of activity, new
- Area of activity, existing
- Special facilities, existing
- Special recreation facilities, new
- Special recreation facilities, existing
- Graveyards, existing
- Mixed development, new
- Mixed development, existing
- City development streaks
- ▨ Expansion after 2040

Figure 5: Lund's detailed development plan for the future.

Defining the area of the proposal

Two of the most interesting sub-categories of the municipality's overall urban development plan for Lund are the establishment of the Kunskapsstråk, and the plan for the development of Lund University. In particular, the plan for the development of the northern university area, the campus of Lunds Tekniska Högskola, presents many possibilities for exploration through design, and development of different strategies for its densification and further construction.

The Kunskapsstråk is a conceptual urban development plan regarding the creation of a route along the newly established tram line in Lund. This route would have several characteristics: it would be an active path, oriented mainly towards pedestrians and cyclists. A concentration of scientific and knowledge-related organizations and innovative companies would happen along it. In addition to that, a desire for this route to incorporate multiple pleasant green spaces and vegetation is clearly communicated. [15] [16]



Figure 6: A conceptual image of the Kunskapsstråk.



Figure 7: A map of the development strategies along the Kunskapsstråk.

Lunds Tekniska Högskola's campus has its own interesting history, as well as offering many choices regarding its future development. After the Second World War a discussion for the founding of new universities and faculties begun in Sweden. After determining that there existed both an interest and a need for the establishment of a polytechnic school in Lund, it was decided to build one there. The following faculties were the first to be established: Physics (fysik), Electronical engineering (elektroteknik), Machine engineering (maskinteknik), Civil engineering (väg och vatten), Architecture (arkitektur) and Chemistry (kemi).

Architect Klas Anshelm was assigned the task to draw the new buildings that would house these faculties. The buildings steadily

took form in the first half of the 60s, together with the education programs offered. They were complete the year 1965 (aside for Kemicentrum, the Chemistry faculty building, where construction continued for a longer while). [17] (Figure 8)

The buildings were freestanding giants within a park environment. As the years went on, they were complemented with other, newer buildings as both the area and the university has been expanded and constructed further, and more education programs and possibilities were offered. (Figure 9)

The newer buildings were designed by different architectural of-





Figure 8: Sattelite photos that show the progressive development of the northern university area, from farmlands to campus, according to Klas Anshelm's plan. The constuction sites and completed buildings are marked in red. Years 1940, 1957, 1965, 1973.

fices, but the principles in their design and placing were similar. Modernistic ideals of the separation of functions were followed, which lead to an area that was, and still is, monofunctional to a large extent. The buildings stand often in the center of their respective plots, and the space around them is used for parking, deliveries, and other, mostly utilitarian, functions. [18] (Figure 10)



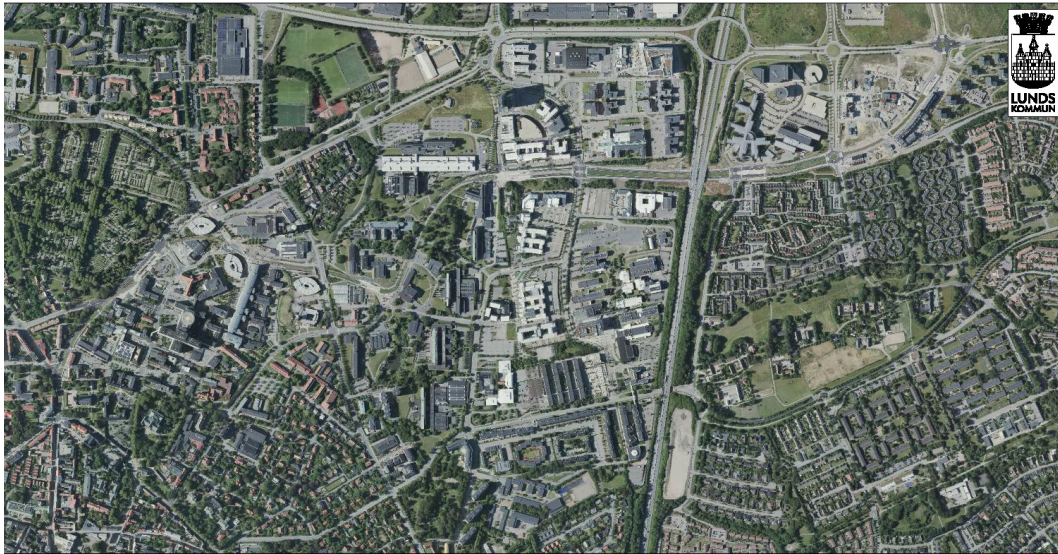


Figure 9: Sattelite photos of the northern university area. Years 1978, 1998, 2019.

There are a number of issues the area faces in the present, and many of these are noted in Lund University's plan for the development of the northern university area. The aforementioned large scale, combined with the area's monofunctionality, lead to it being occupied certain times of the day and days of the week, namely working hours and days, and being completely empty the rest. While the buildings offer attractive and pleasant working environments,

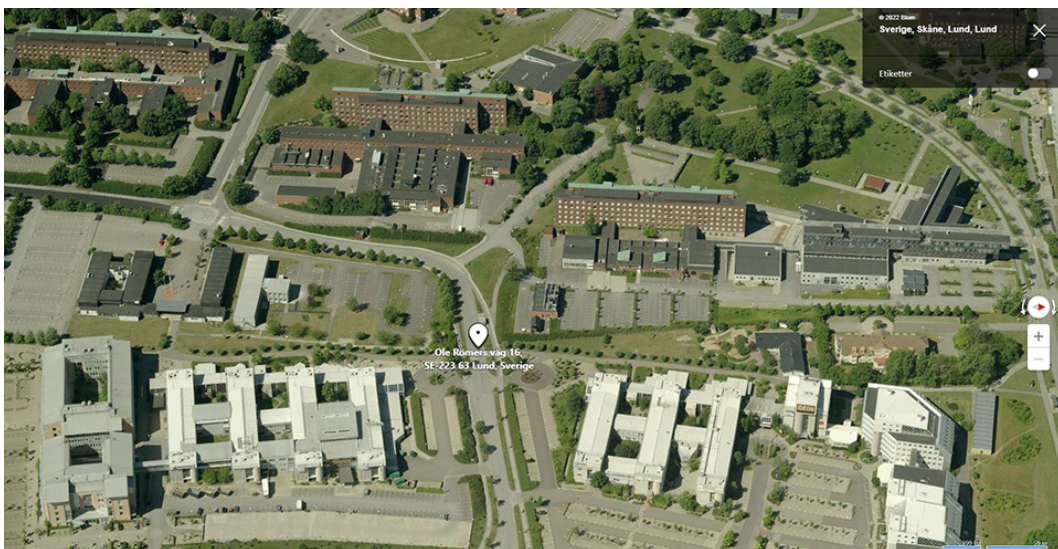


Figure 10: Bird's eye view of a part of the northern university area. The buildings have different designs, but follow similar principles in their placement and how the outdoors area around them is treated.

the space in-between them often has a weak character, and is not welcoming, especially the expansive parking areas. The park that occupies a large part of the area is truly one of its uncut gems. While it can be a thoroughly beautiful environment on many days, the areas covered with low grass that often extend as far as the eye can see can make extended stay unpleasant on rainy or windy days. One experiences many of those in this area, due to it having slightly higher altitude than the rest of Lund. (Figure 11)

The aforementioned urban development plan is a part of the municipality's overall plan, and therefore adopts many of its strategies when it comes to dealing with the issues presented in the area. The guidelines presented have to do with first of all the densification of the area. It is advised to design both the new buildings and the public space carefully, so that it corresponds to the human scale as much as possible. A more intimate scale is to be incorporated into the public space, and more meeting spaces and places for events and informal activities are to be created. New buildings have to incorporate principles of ecological and environmentally aware design, such as green roofs and solar panels. Cars have to gradually be removed from the area, and replaced by spaces for pedestrians and cyclists. [19]

Given the context presented above, the area chosen for the design of this project is the one presented in the following image. It begins in the crossroads of Getingevägen and Scheelevägen, and extends southward, ending at the small square in front of the Sparta student housing and the Economics faculty (Ekonomihögskolan), on the northern side of Tunavägen.





Proposal Area

Area analysis

The chosen area for this project gives the possibility of establishing a path that connects different areas of Lund, namely Norra Fäladen with multiple important public traffic nodes in the Northern University Area, as well as densification of the urban network along this new path.

Norra Fäladen is a good area to strengthen the university's connection to, as it houses a large student population, especially in its southern parts. There, one finds many of AF Bostäder's student housing areas, such as Delphi and Kämnärsrätten; there are also multiple new student housing complexes under construction there, such as Pireaus. [20]

Along this new proposed path one finds several additional, already existing, student housing areas. Ideon Student House, an accommodation for international students [21], lies by the new tram station Ideontorget. Along Ole Römers väg one finds Blekingska nation's new student accommodation. [22] Finally, at the south end of the new path lies Sparta, one of AF Bostäder's most well-known student housing complexes.

The path goes through two important public traffic nodes: the aforementioned Ideontorget along Lund's new tram line, as well as bus station Ole Römers väg. Another bus station can be found on the square in front of Sparta.

There is a substantial slope ascending from south to north along the path. That is to say, the northernmost point of the path lies about 15 meters higher than the southernmost. The degree of the slope varies; sometimes it is more noticeable, such as to the east of the Architecture building (A-huset), and sometimes it is gentler, such as to the west of Ideon Science Village's Alpha building.

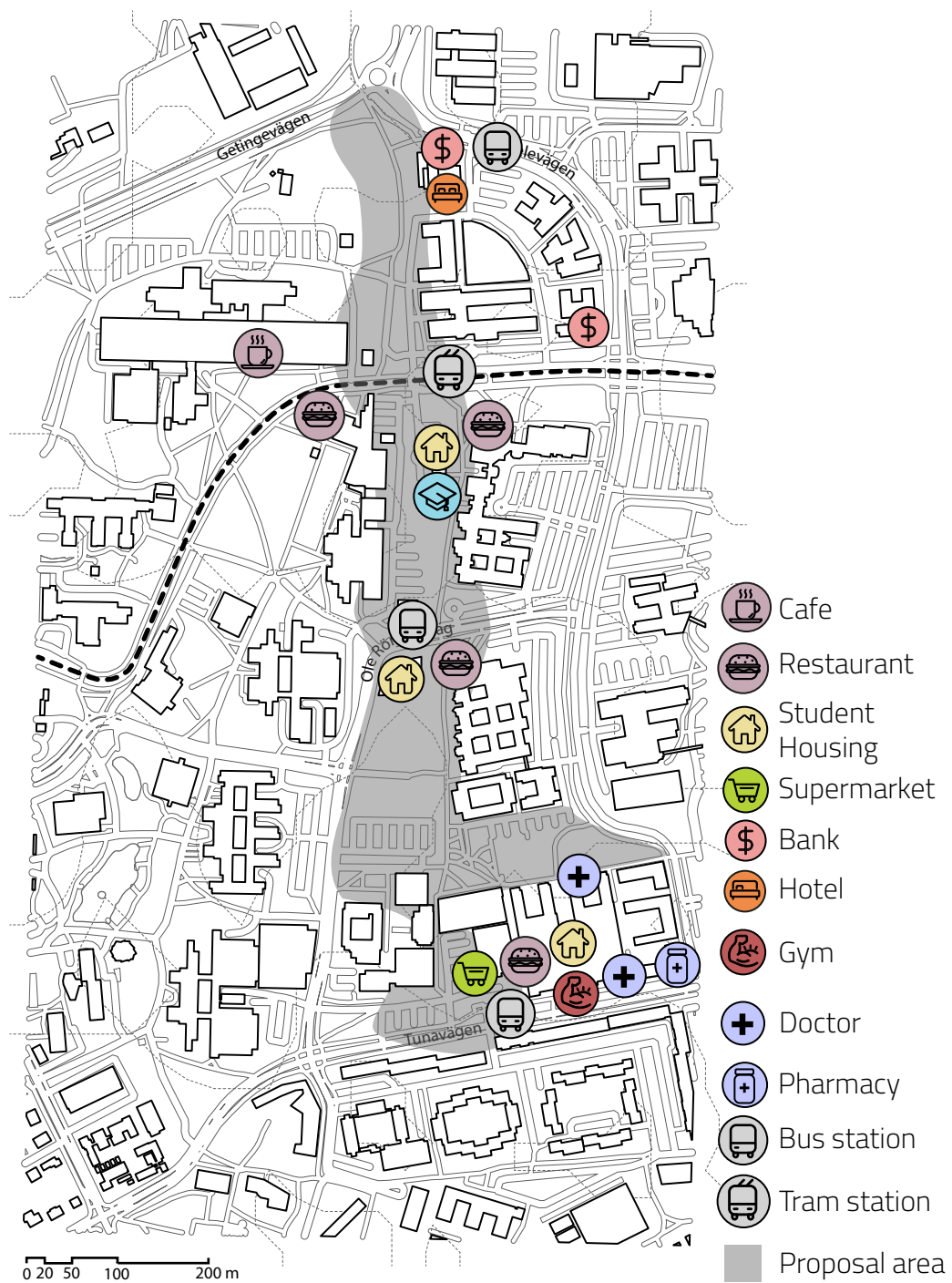
The area's character as mainly a work and education space is obvious. The most important educational institutions here are the Architecture building (A-huset), the buildings of Ideon Science Village

(mainly Alpha and Beta, but Gamma is also found nearby), the Civil Engineering building (V-huset), as well as the Economics and Informatics institutions. Aside from those, there are multiple office spaces for companies. Most of those are partially housed in the university's buildings, especially those of Ideon Science Village. Several are also found in the building of Elite Hotel Ideon. Notably, in the Alpha building one encounters the Venture Lab Business Incubator, which houses multiple small startup companies founded by students and recent graduates of Lund University.

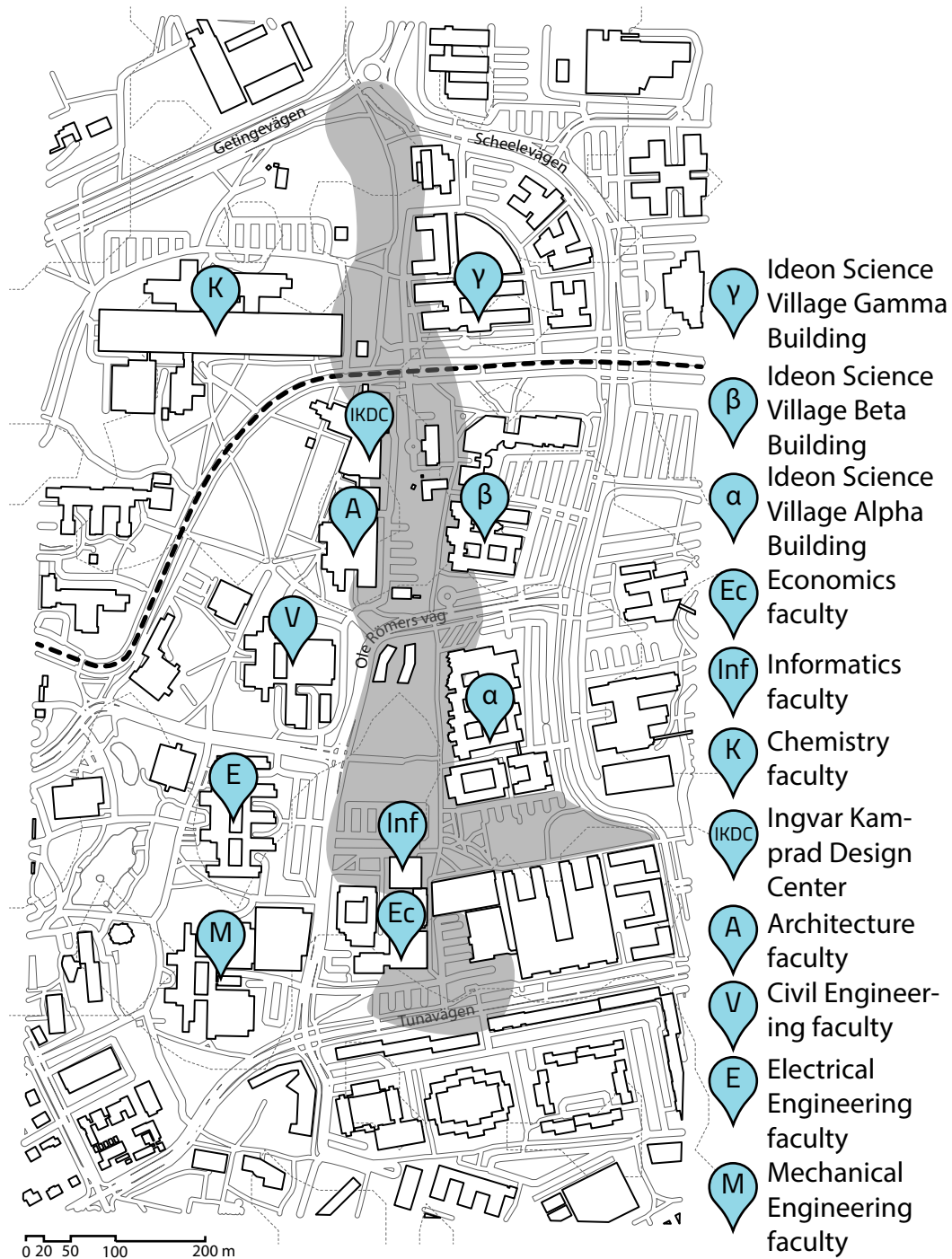
Other important functions found in this area is an ICA supermarket, a pizzeria, a general doctor, a paediatrician, a dentist, a gym, and several restaurants. Most of these are concentrated in the Sparta building. In the broader area one has access to a bank, as well as several parking buildings with charging stations for electric cars.

The area encompasses most of the issues named in the previous chapter. Namely, it is characterized by sparse construction of large scale buildings, with expansive but awkward free spaces in-between. Most of those free spaces are used as parking lots, for the delivery of goods, are fragmented green spaces of low quality, or large parks which, however, have an unfortunately low diversity of plants. Some spaces house no function at all. Streams of traffic are not properly handled and separated on some areas, which result in pedestrians, cyclists and cars having to share the same space, a practice that is awkward, and can even become dangerous.

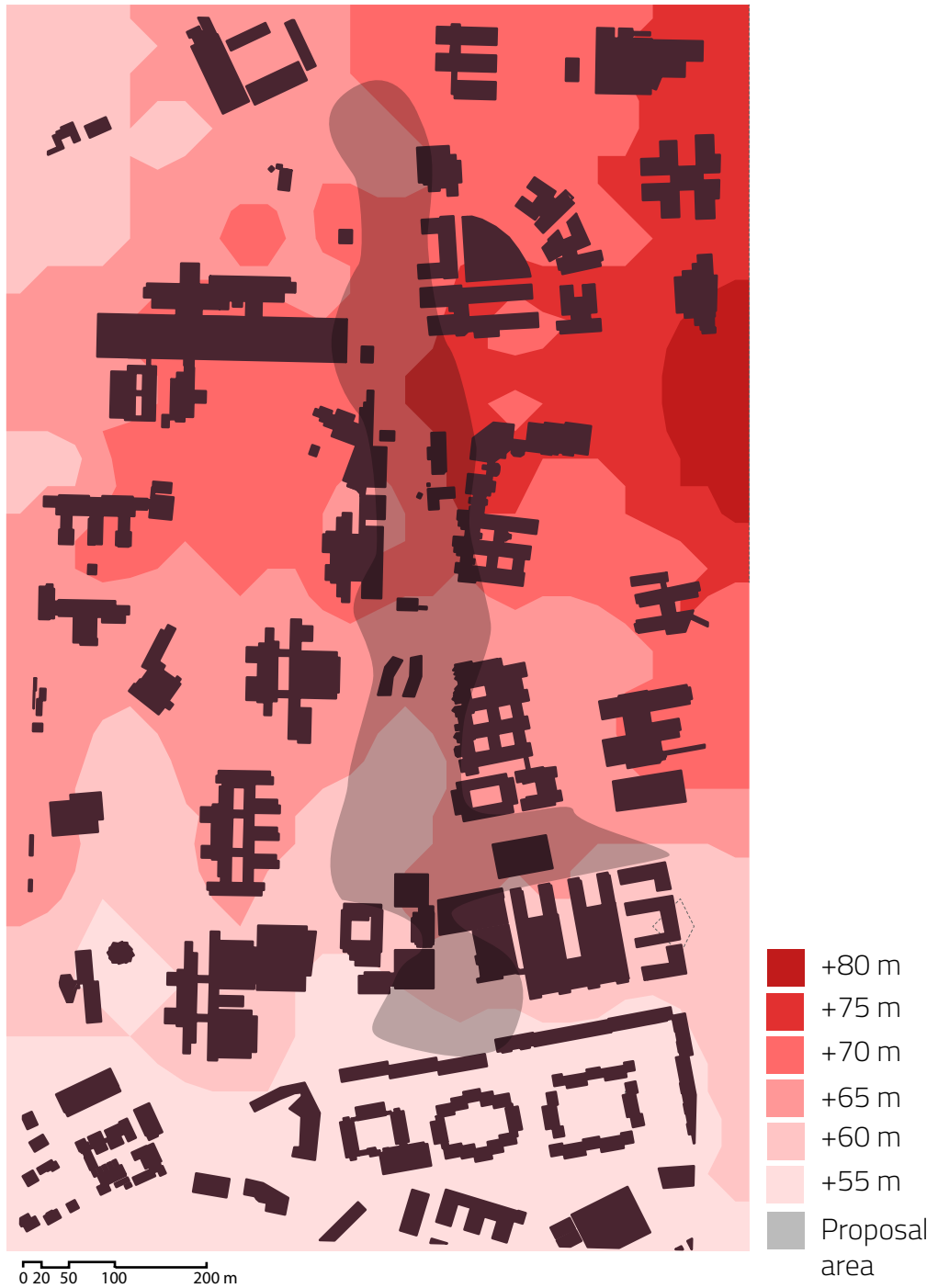
However, it is those characteristics that endow the area with a great amount of potential. Namely there is ample space for new construction, and, with the presupposition of thoughtful design, the creation of pleasant outdoor spaces that would activate the area even outside working hours.



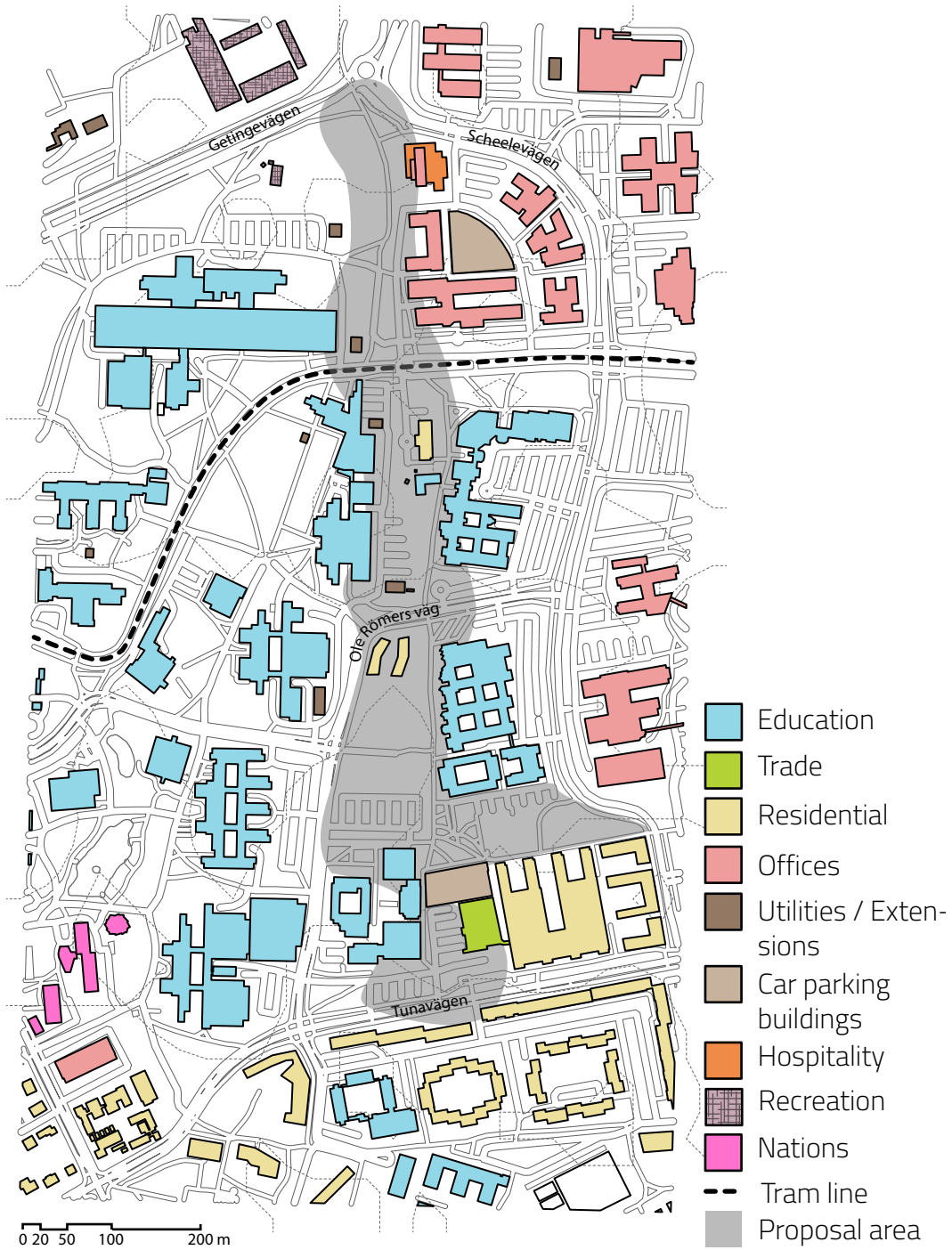
Interesting places and public transport nodes



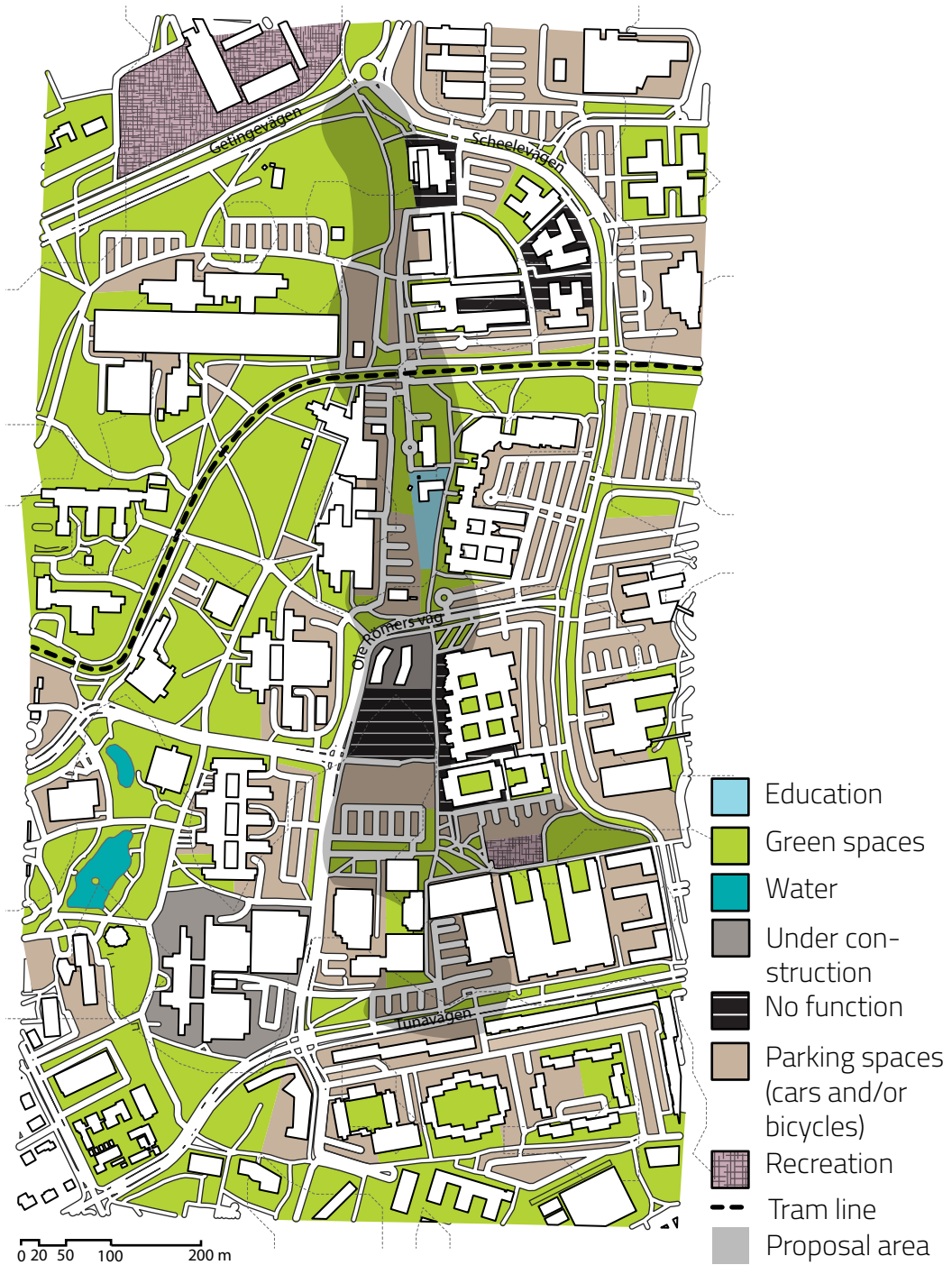
University's faculties and infrastructure



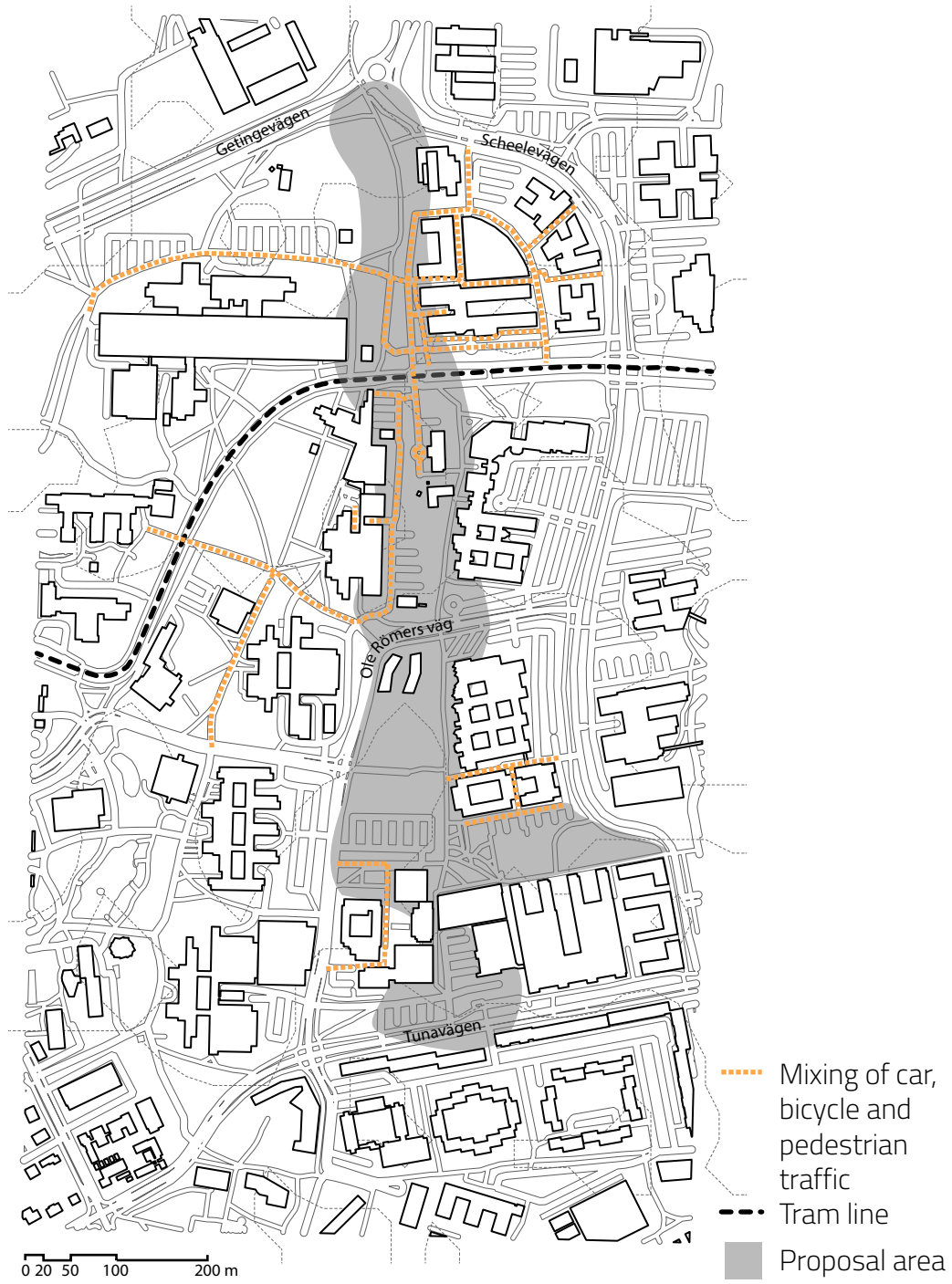
Topography



General functions of the buildings



General functions of the outdoor spaces



Traffic issues



Building density of the wider area of the proposal



Building density of an area of the same size at the center of Lund

PART 2: PROPOSAL

Conceptual master plan - aims and aesthetic

The main concept for this project is the idea of an active path, populated even outside of working hours. This fit the general premises of the municipality plans, but was also a concept that gave further meaning to the proposal of developing new housing areas in the area. Housing is one of the best and most efficient ways of populating a space; when people live in an area, they move within it, going about their daily lives and errands, aside from just working there.

A number of sub-goals were derived from this main concept. Those served to further ensure that the area would remain active the whole day round, as well as create a healthy, safe and thriving new community.

The area is home to a considerably broad and active entrepreneurial community. However, as most of the buildings in the area are quite introverted, the locales of these enterprises are often 'hidden' inside them, and there aren't many ways to find them aside from locating them through the internet. In order to bring more visibility to these businesses, and hopefully thus attract even more, the ground floors of the new proposed buildings will have to be extroverted, with interesting facades and storefronts. This will draw the interest of the passerby and encourage them to walk slower and even stop, therefore leading to them staying in public space longer. This would then hopefully lead to other, spontaneous activities which are not necessarily related to shopping. [23]

Aside from that, the mixing of workplaces and residential areas is also advantageous from a social perspective. This way, people from all phases of life come in contact with one another; children see their parents work, stay-at-home parents are able to experience other parts of life, students are not isolated in the 'student-bubble' and have the insight that there is a wider world out there. There are no artificial borders between phases of life, just like in reality. [24]

Similarly, in order for a neighborhood to thrive, it is important

that people from all ages and backgrounds live within it. When the young come in contact with the old and vice versa, various patterns of social behavior are created which promote healthy personality growth and the creation of balanced communities. [25] A similar effect is developed when people from many different walks of life and backgrounds come in contact with each other and occupy the same space. When meeting others unlike themselves, a person's horizons broaden, and they become richer in personality, confident and certain of their choices. The variety created in the urban environment also creates interest. [26] For the public space to function properly and promote the creation of a healthy, safe and diverse society, where differences in lifestyle and opinion are freely expressed, it is important that it houses many different social groups. [27]

Therefore, it is important that many different forms of housing are offered within this new neighborhood. Collective living, student corridors, small studios, student apartments, apartments for young couples, houses on the ground floor with a small urban garden, accessible housing for elders or people with special needs, short-term living such as apartment hotels, and others, are all residential forms which shall be included in this new proposal. This way, the necessary diversity for a healthy community is more easily achievable.

Another important goal for this proposal is actively enabling movement, preferably on foot but also cycling, and healthy activity. Sports fields and infrastructure are scattered across the neighborhood, in visible and accessible spaces. Other interesting outdoor spaces are also formed, such as areas where exhibitions can be held, a skate park, and lots of small and larger squares.

Additionally, many different forms of greenery were designed within the bounds of this new neighborhood. Rows of trees can create enclosure and shade, while small pocket parks, on some occasions with little ponds that would periodically be filled by rainwater, promote biodiversity and a pleasant microclimate. These natural elements can contribute in reducing the speed of the wind, which can be quite harsh in the area. [28] [29] The final piece of the puzzle in the effort of interweaving high quality nature in the urban network,

is utilizing vertical 'greening' systems. This would be mostly in the form of facade and street-edge vertical planting. This way, nature permeates this new environment; people can enjoy the advantages of being near it, and it offers habitat to insects and small animals, thus creating a robust and diverse ecosystem within the city. [30]

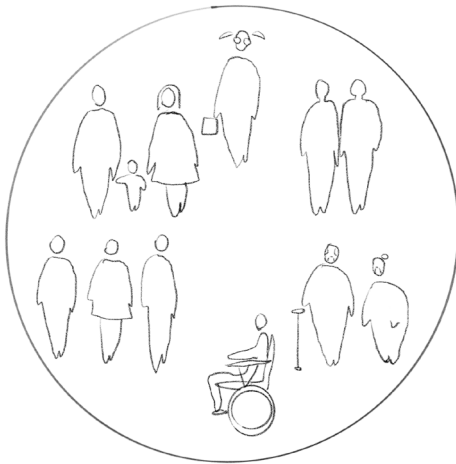
It is important that the neighborhood is safe for it to succeed. It is important that all spaces are brightly lit at night, and that all facades on the ground floors are active. Through offering housing units on the ground floor as well as on the other floors, as well as designing interesting, non-flat ground floor facades with volumetric details and large, bright storefronts, this goal can be achieved.

Finally, it is important to stress that the plans presented below are more of a concept than a proposal set in stone. If it were to become apparent that the aforementioned aims could be achieved in a more successful and effective manner through implementing changes in the proposed plan, then it would be appropriate to adjust the proposed design towards the direction that seems most appropriate.



Main goal: An active path, 24/7

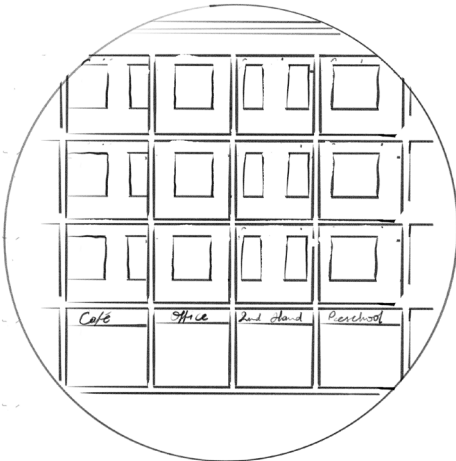
Diverse social groups
Diverse age groups



Safety
Lighting at night



Mixing of functions
Facades with a 'cell' expression
Public functions on the ground floor - housing on top



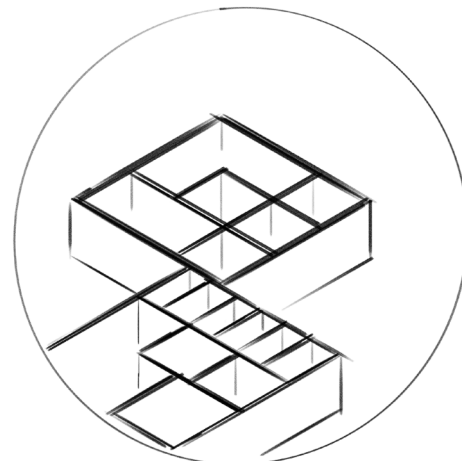
Small scale
Small businesses
Walking and cycling
Facades with life



Edges with volume and greenery




Varied housing
Movement in the center of the volumes






Proposal masterplan

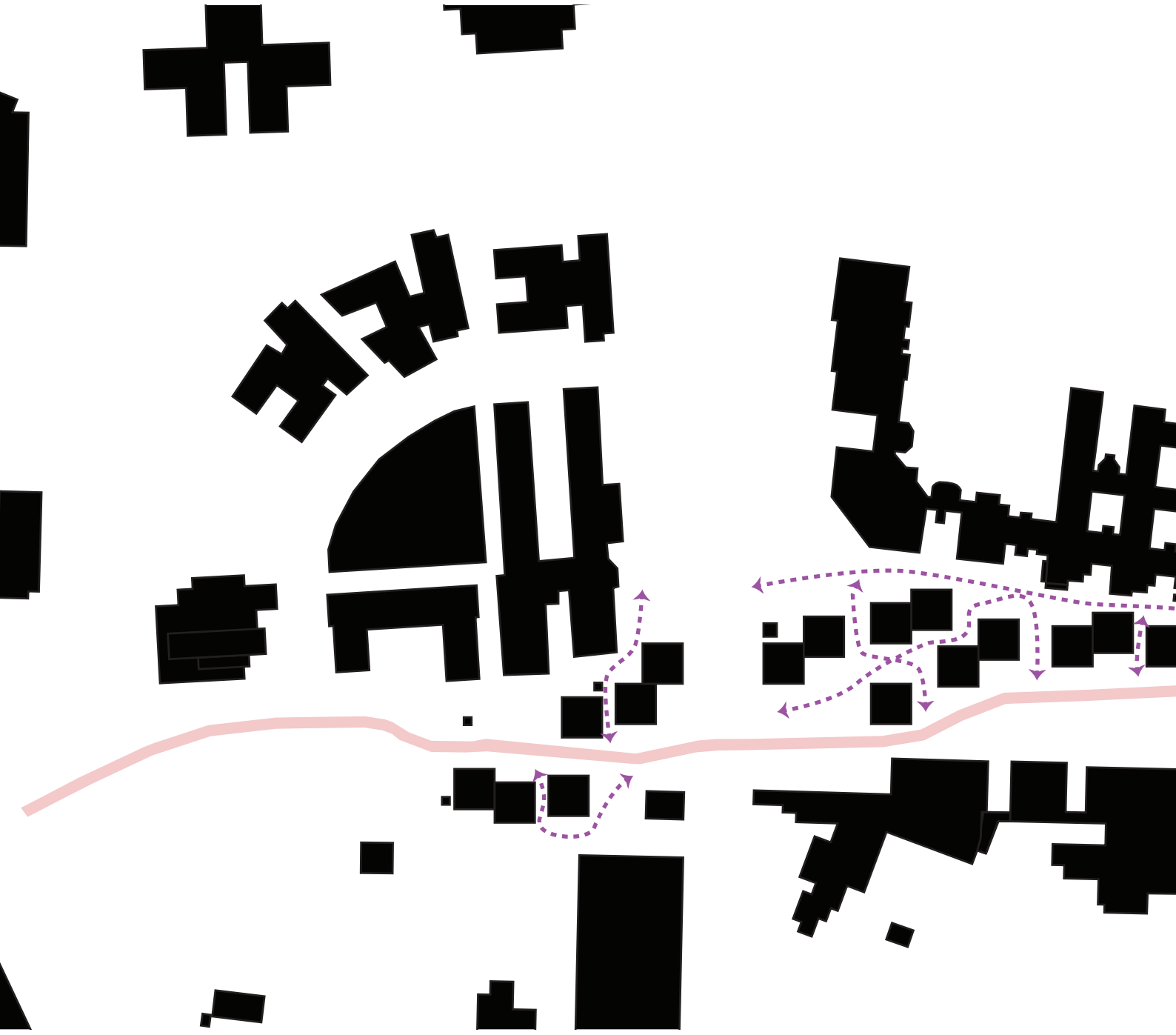
Scale 1:2500

-  New buildings
-  Existing buildings
-  Height curves
-  Greenery

-  Water - wells for rainwater drainage
-  Sand - playgrounds and paths
-  Main path
-  Bicycle roads
-  Pavement - tile
-  Streets





-  Outdoor exhibition
-  Tennis and badminton court
-  Football field
-  Volleyball field
-  Skate park
- Playground





Built and unbuilt spaces and paths

Scale 1:2500





-  Built space
-  Unbuilt space
-  Main path
-  Secondary and possible paths



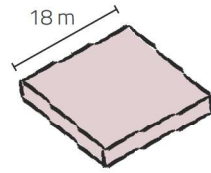


Entrances and general functions

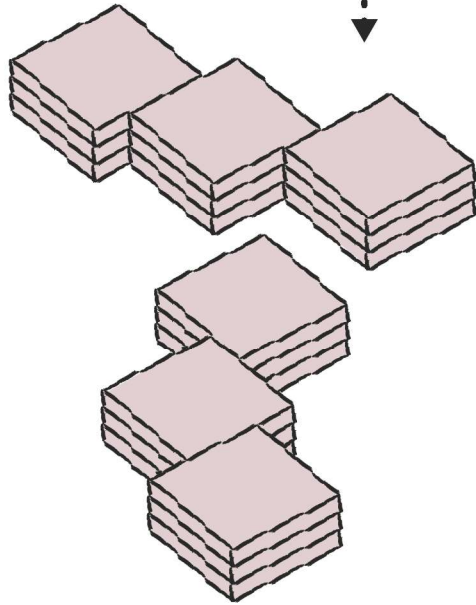
Scale 1:2500

-  Public functions (shops, offices, state, etc.)
-  Blended functions (mix of housing and public functions)
-  Entrances
-  Main path

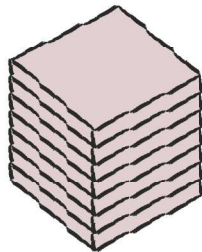




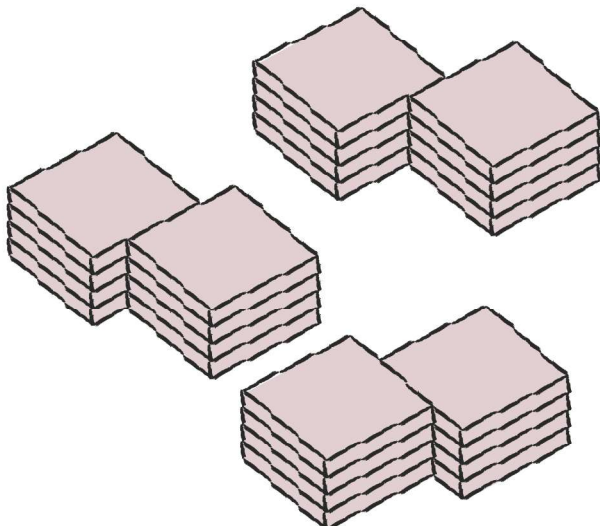
Module / Footprint



Combine to create longer buildings that offer more enclosure and can contribute to creating a better microclimate. Those shall not be higher than 3 floors in order to not block the sunlight from reaching the ground.

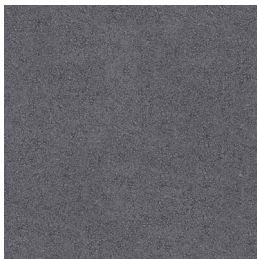
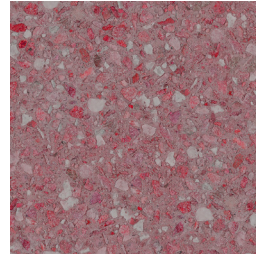
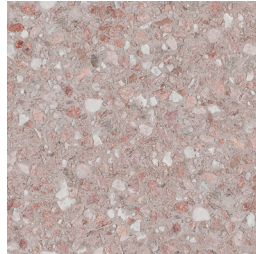


Stack to create towers that can function as landmarks and offer beautiful views on the top floors. These shall be higher than 4 floors.



Stack and combine to create intermediate forms. These offer a reasonable height while not sacrificing liveable space. They create a permeable urban space which is enclosed enough, but not intensely introverted.

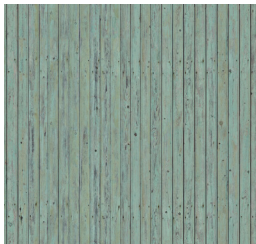
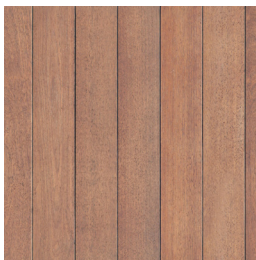
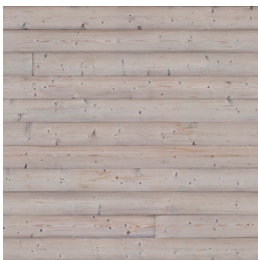
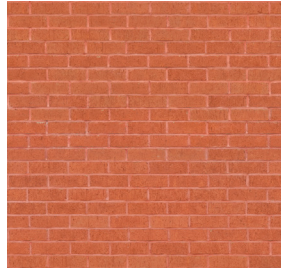
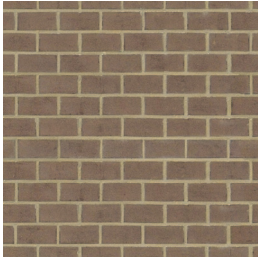
Material palette



Masterplan - hard surface materials. Left to right, top to bottom: pavement, bicycle paths, main path, asphalt roads.

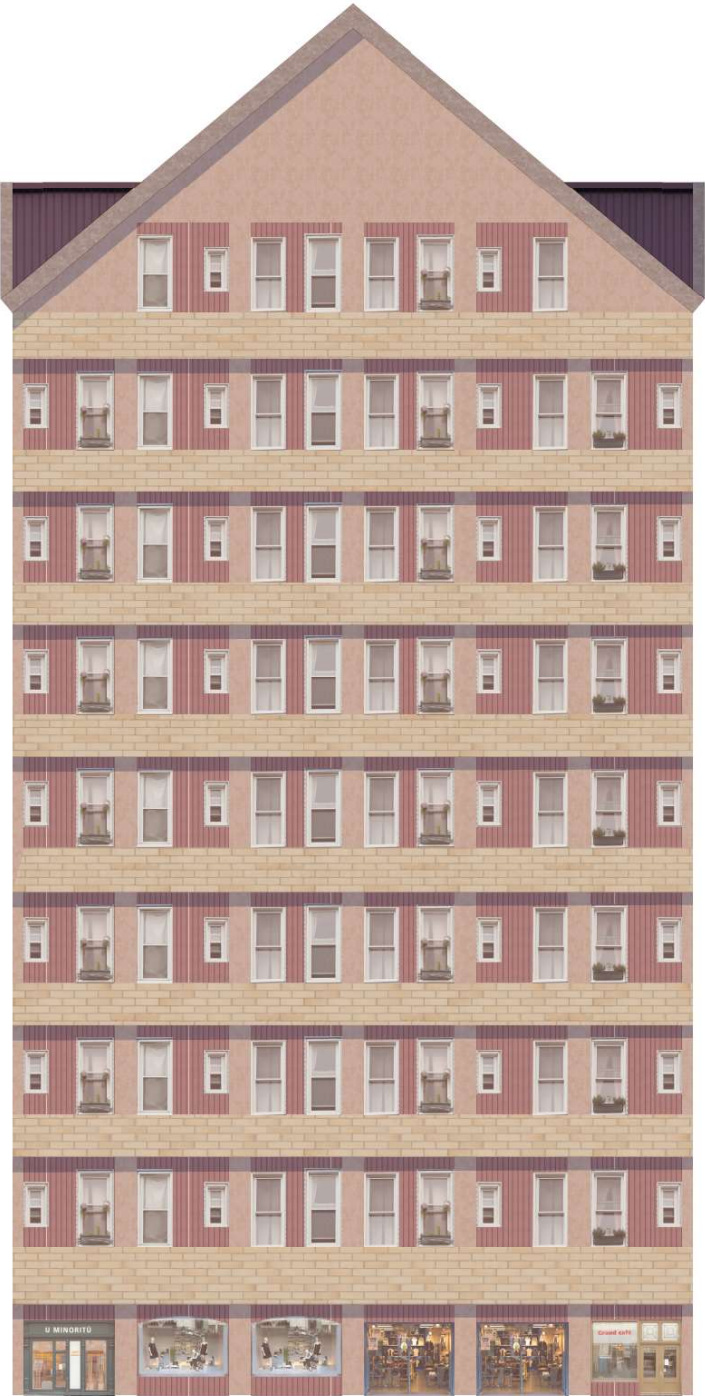


Masterplan - parks and soft surfaces. Left to right, top to bottom: grass, gravel paths, playgrounds, transition between soft and hard.



A selection of facade materials. The aim is to achieve a colorful expression, using materials such as brick, wood and plaster.

Example facade designs









Environment concept - urban





Environment concept -sports field



Zooming in a specific area

As the final part of this thesis, an attempt to further define and design a smaller subarea of the proposal will be made. This is done in order to further explore the character and aesthetic of the proposal, but also to offer some more concrete technical details regarding it.

The area chosen for this purpose is the small square on the north side of Ole Römerväg. This is a conscious choice made for multiple reasons. The first and foremost is familiarity; it is an area that I have frequented often under my studies, as it lies close to the A building. The second reason is that it makes for an important node along the new proposed path; it is not only an important crossroad, with a number of notable buildings surrounding it, but also home to an important bus stop. Several regional buses that connect Lund and Malmö pass through it. Finally, the topography of the area is unique, as the ground slopes abruptly upwards from south to north. A harsher topology like this is uncommon along the area of the proposal, but defining this space in more detail could act as an example for the few other spaces in the proposal where a similar situation is encountered.

The area, as defined in the overall proposal, houses a skate park and a rope playground in its northern part, and a square in the southern part. Two outdoor theater-like seating spaces are also found on the east side of each of the southern buildings (Building 1 and Building 2). Said buildings are designed to interact with the sloping ground; their 'ground floor' is dug into the slope, making its northern side underground. Their 'first floor' is on the same level as the ground on the northern side of the area, while being three and a half meters above the southern square.

In order to design the buildings, I started with a 6 x 6 meter square as a module. This smaller module is then multiplied by 3 in the x and y direction to form a footprint of 18 x 18 meters. The module itself

is integrated into this larger footprint, that is to say, it is not visible in the final plan as a separate entity.

These footprints can then stand individually, or be combined to form larger ones. In this particular area one can encounter both types of design.

The ground floor of all the buildings offers spaces for rent from businesses or other actors. These are only generally defined in the plans, in order to stress their character as multifunctional spaces that could be adapted to the needs of the one that rents them. Instead, the bulk of the focus was laid on the housing areas that are designed within the buildings. An effort was made to combine multiple kinds of housing in each building; from student corridors, to small studios, to larger apartments with three or four rooms, that could house families or even collectives. An apartment hotel was designed on the ground floor of the largest building (Building 1) in order to vary the forms of housing and living even further.

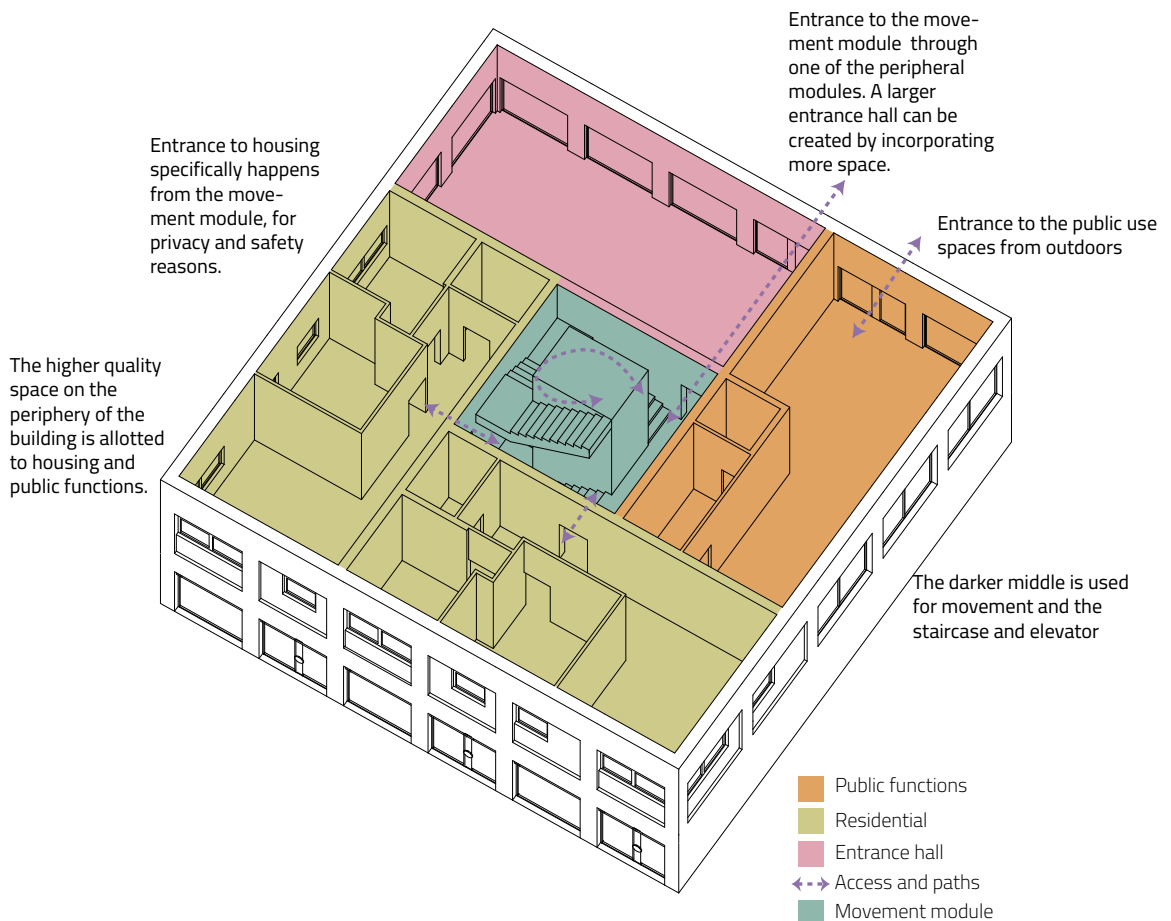
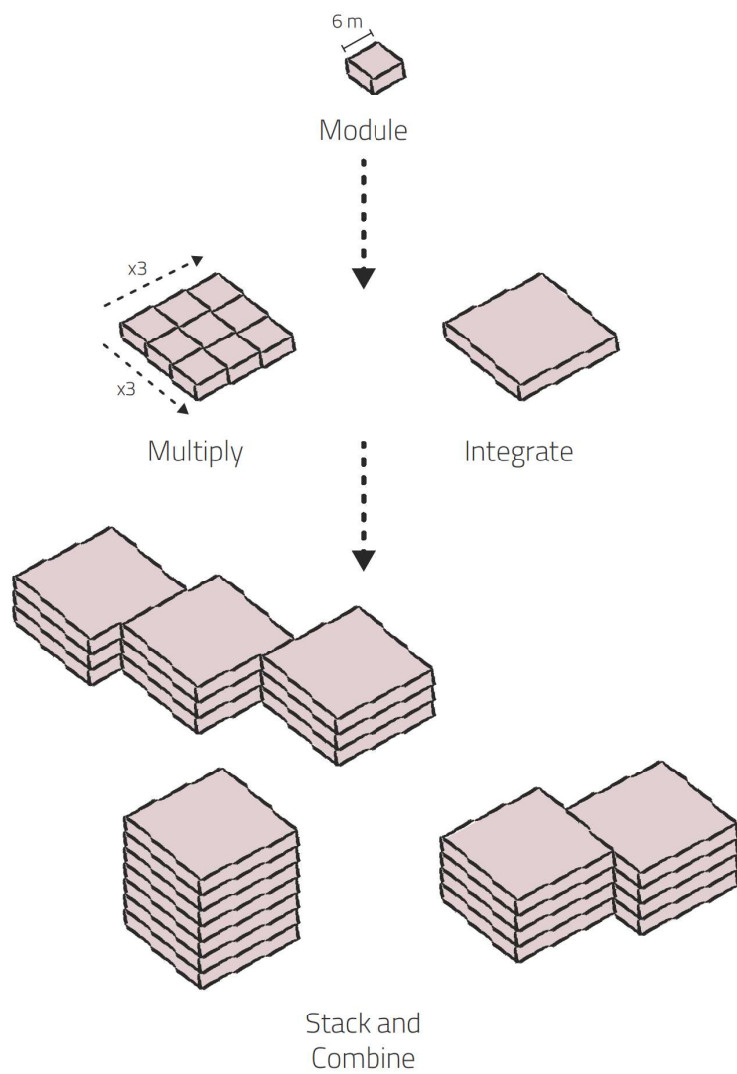
The buildings were designed to be constructed by massive timber. This is a material that offers multiple benefits. Bearing elements constructed by massive timber are capable of carrying a lot of weight while being much more slender and taking up less space than their concrete counterparts. Therefore, they are low in weight, which means that they can be transported with fewer trucks, making them more environmentally friendly. They can be prefabricated to a large degree, thus coming from the factory with all necessary installations, and are even quite simple and easy in their assembly. [32]

Therefore, the sizes of the buildings' elements used in the plans and sections of the proposal are derived from the following table, which offers the approximate sizes of various types of building elements constructed by massive timber [33]:

Building part	Approximate thickness in mm
Outer wall with facade of wood slate or plaster	300 - 350
Outer wall with brick facade	400

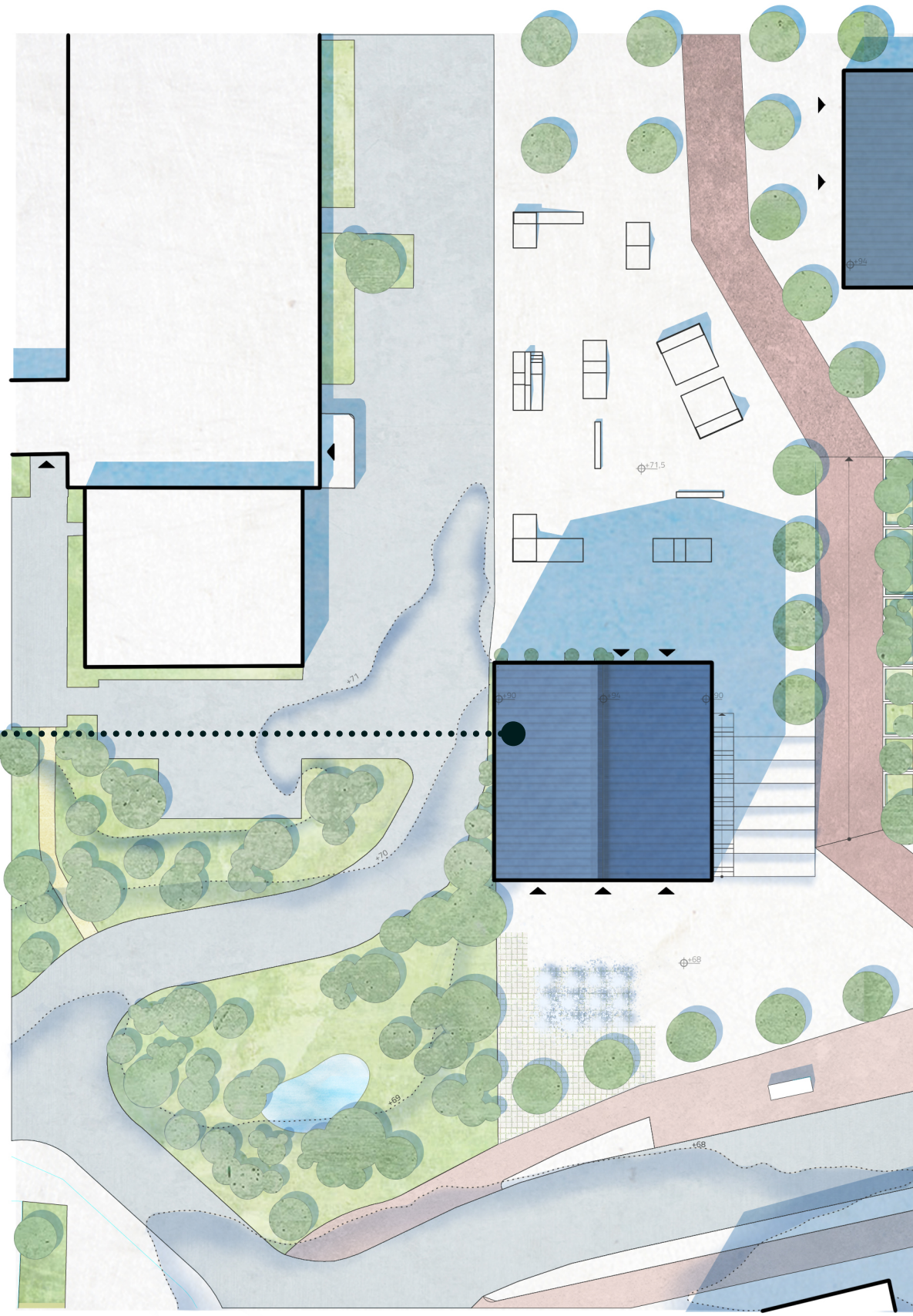
Non-bearing inner wall	100
Bearing inner wall, not separating apartments	100 - 150
Bearing inner wall, separating apartments	320–370
Non-bearing inner wall, separating apartments	300–320
Composite slab separating apartments, (< 6,5 m bridging distance between bearing elements)	300–550
Composite slab separating apartments, (6,5 - 12 m bridging distance between bearing elements)	500–700

Finally, when it comes to the facades of the buildings, a combination of brick and wood in various colors was preferred. The brick especially is a reference to both architect Klas Anshelm's original buildings for Lunds Tekniska Högskola, which are all built by red brick, but also to the historical center of Lund, where brick can be seen on the facades of several buildings. Wood is also a traditional construction element in Sweden, and is even encountered in the southernmost regions, although not as often as in the north. The red wood on the largest building's facades is especially a reference to the traditional 'faluröd' houses of the Swedish countryside. Vertical greenery is also introduced along the facades whenever possible, in order to complement the natural elements of the overall proposal, and to increase biodiversity in the area even further.



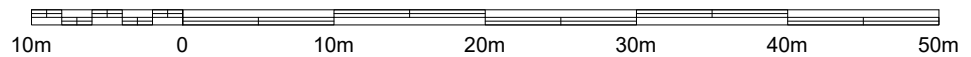
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Building 2

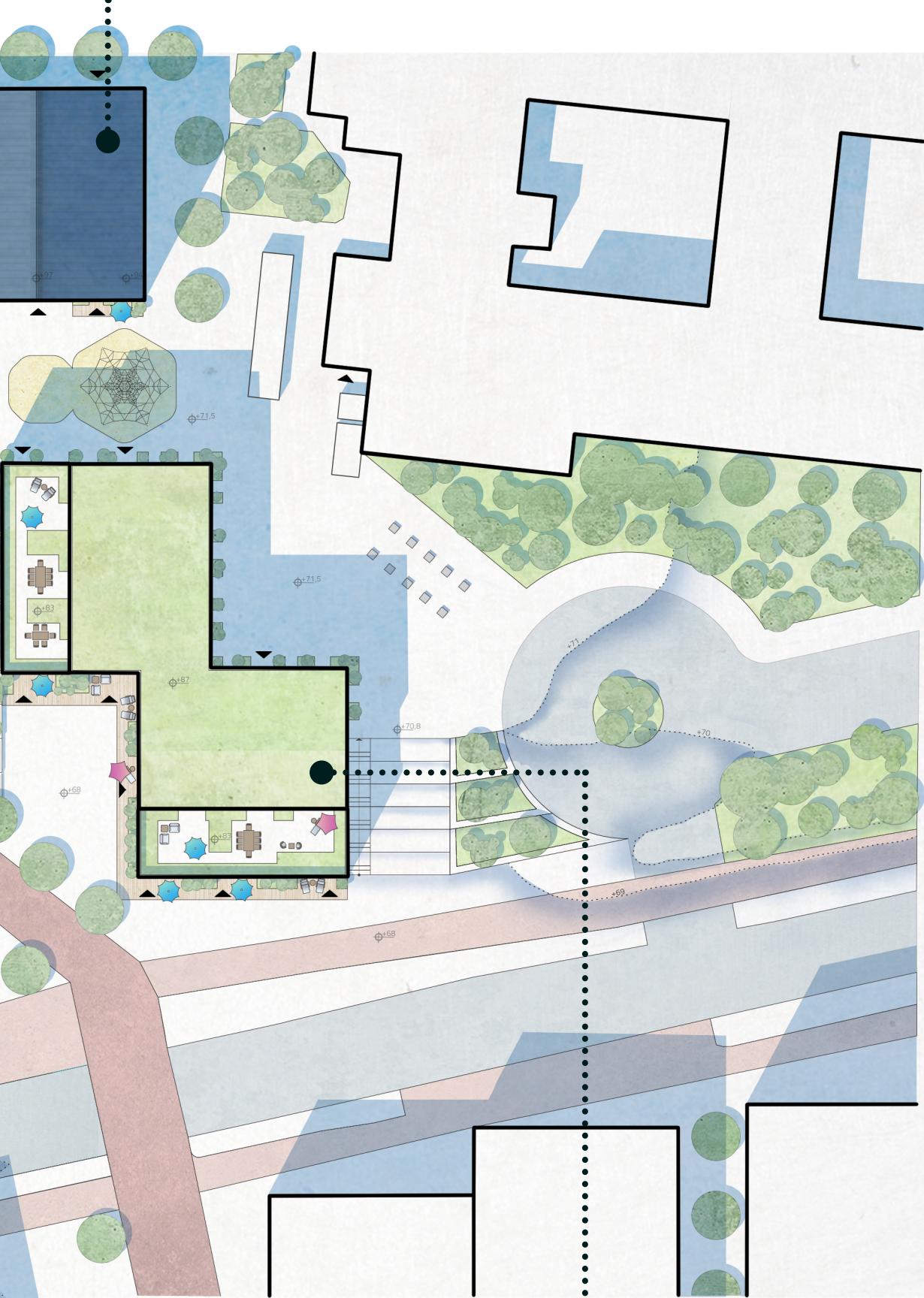


Site plan

1:500



Building 3



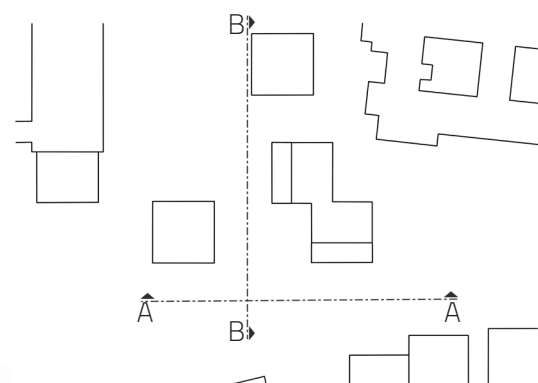
Building 1



Section A-A

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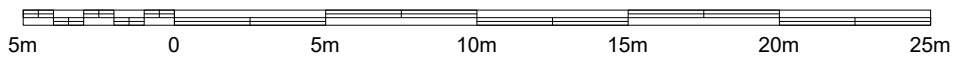


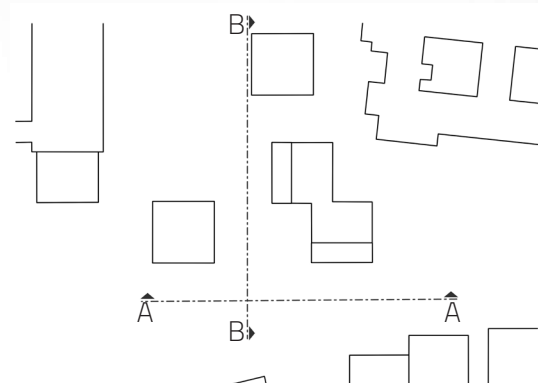
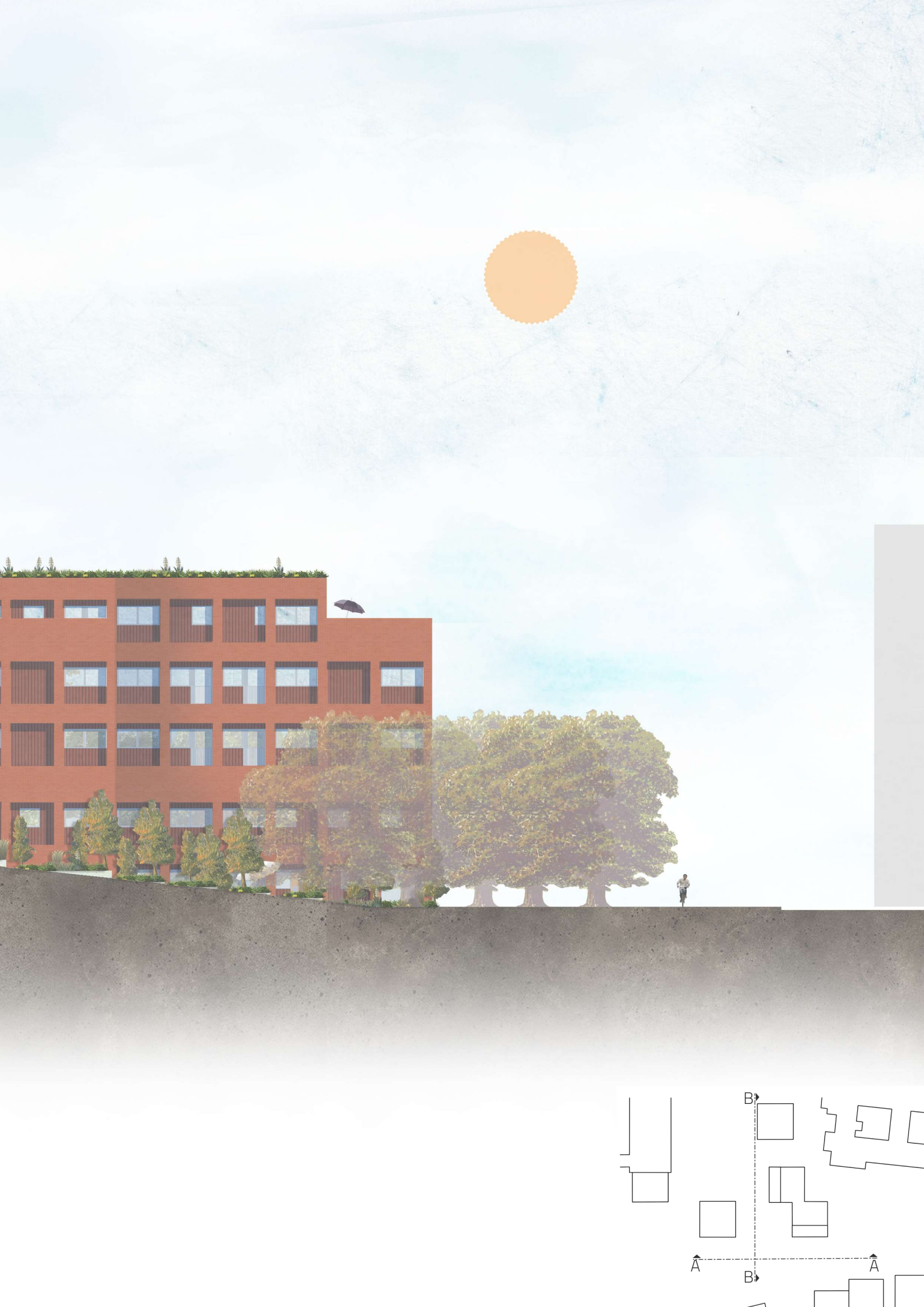




Section B-B

1:250







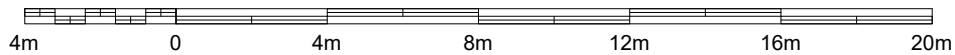
Building 1 Ground Floor

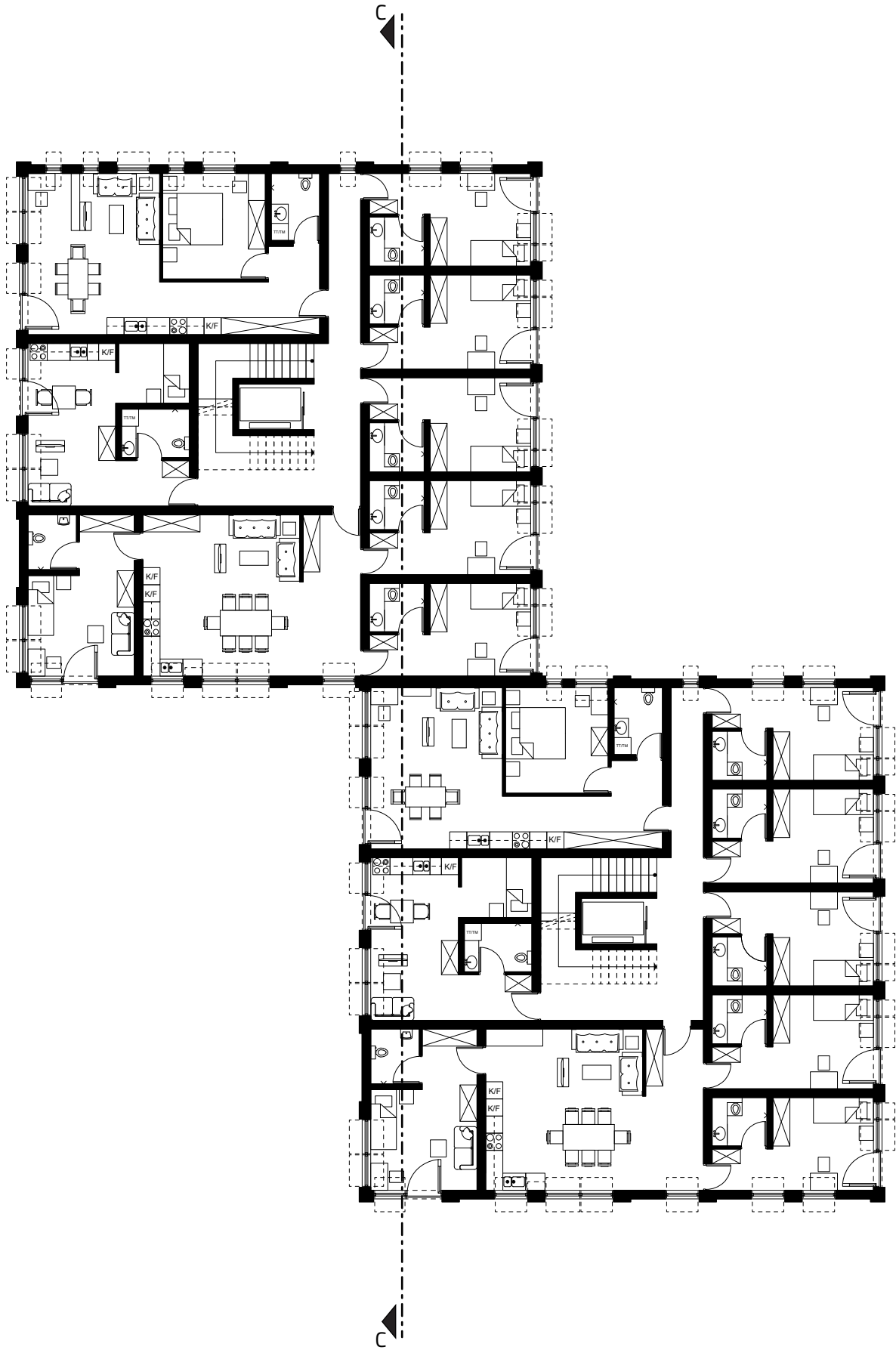




Building 1 First Floor

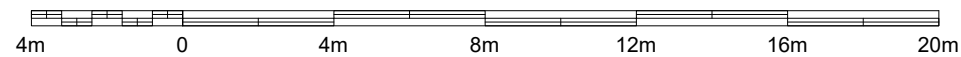
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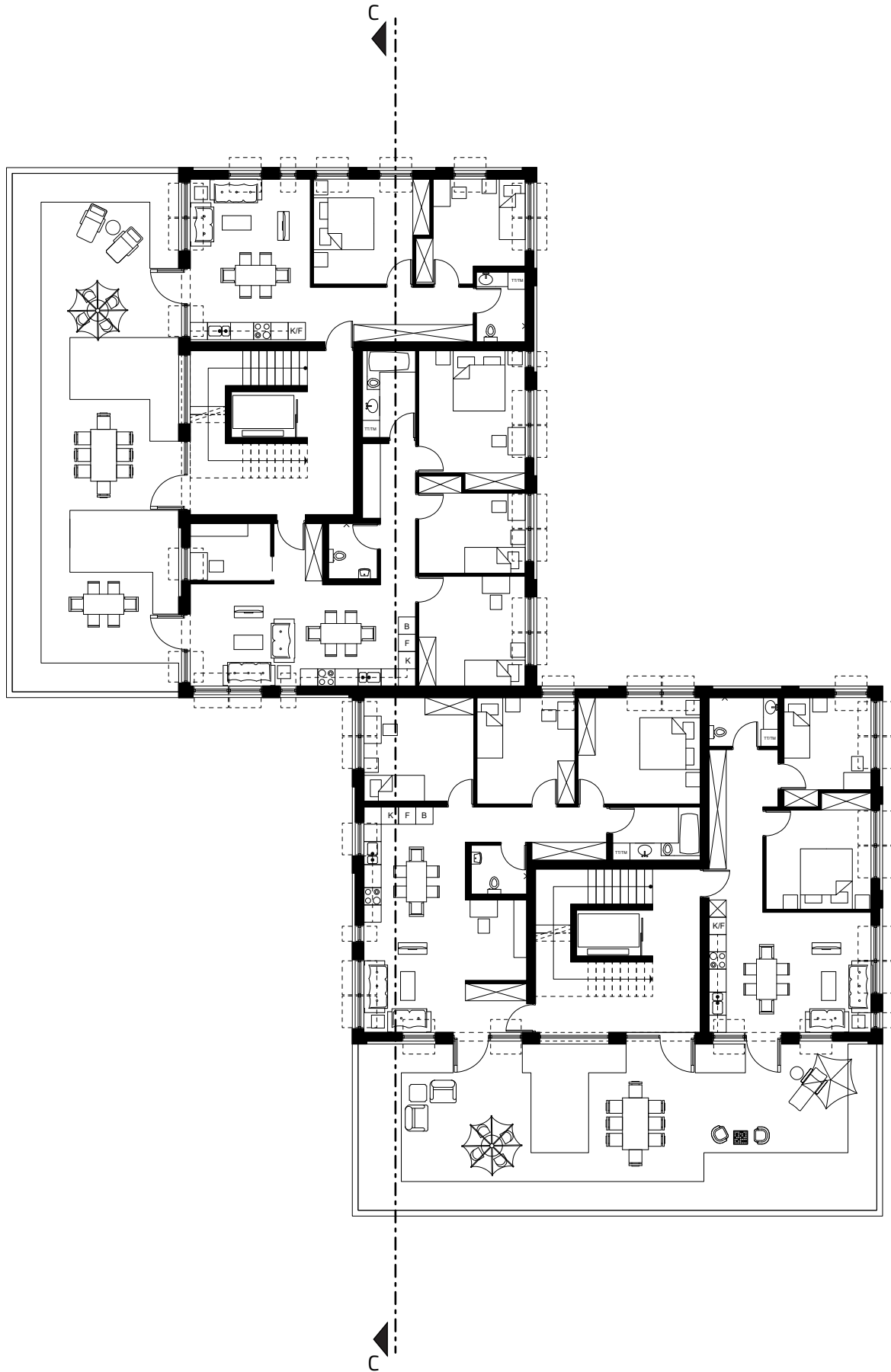




Building 1 2nd - 3rd Floor

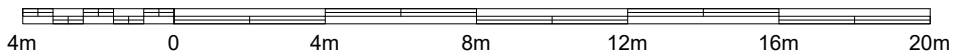
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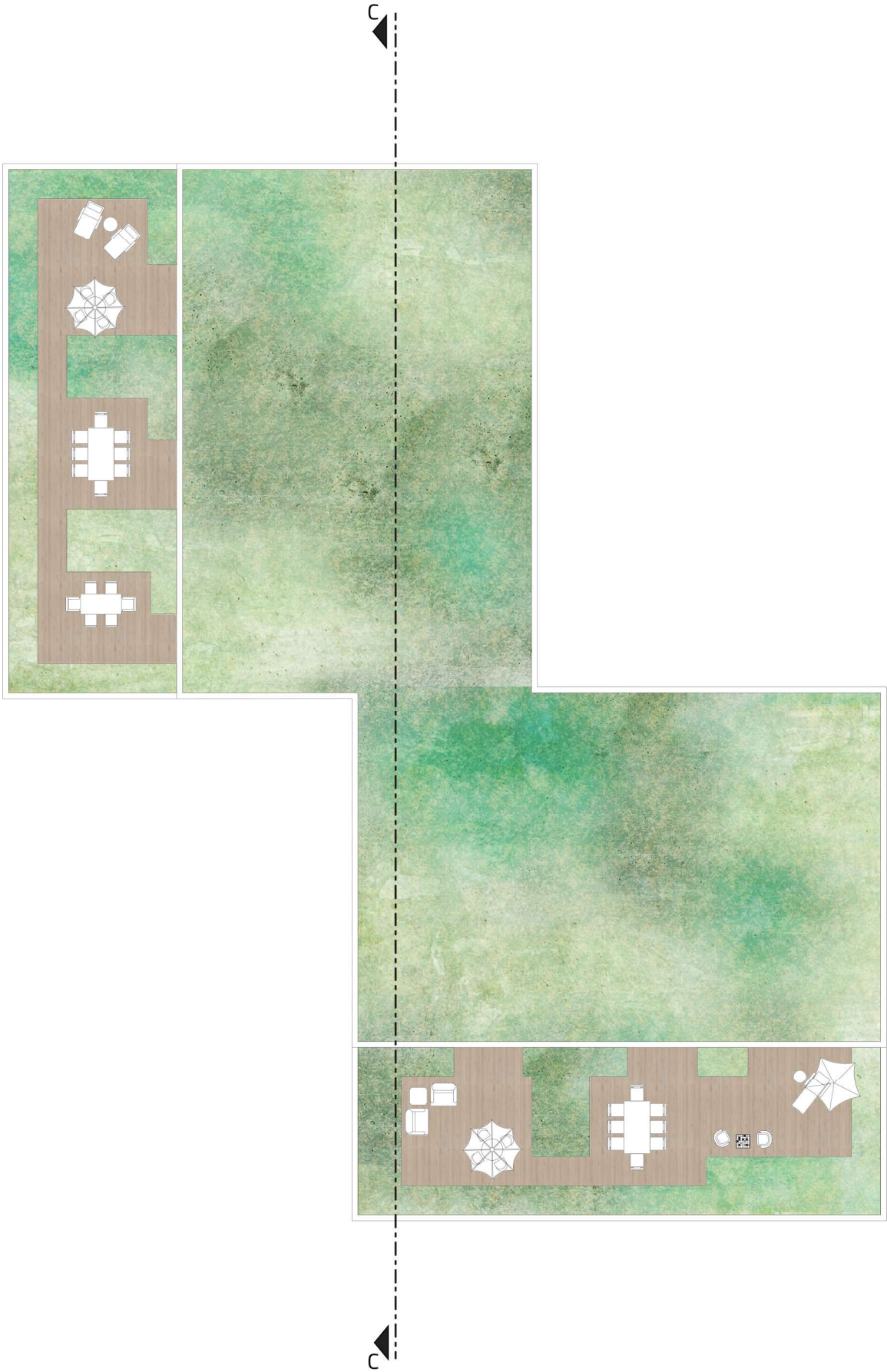




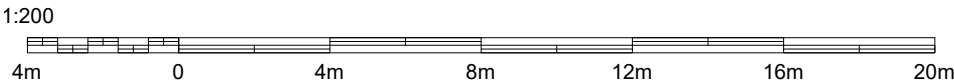
Building 1 4th Floor

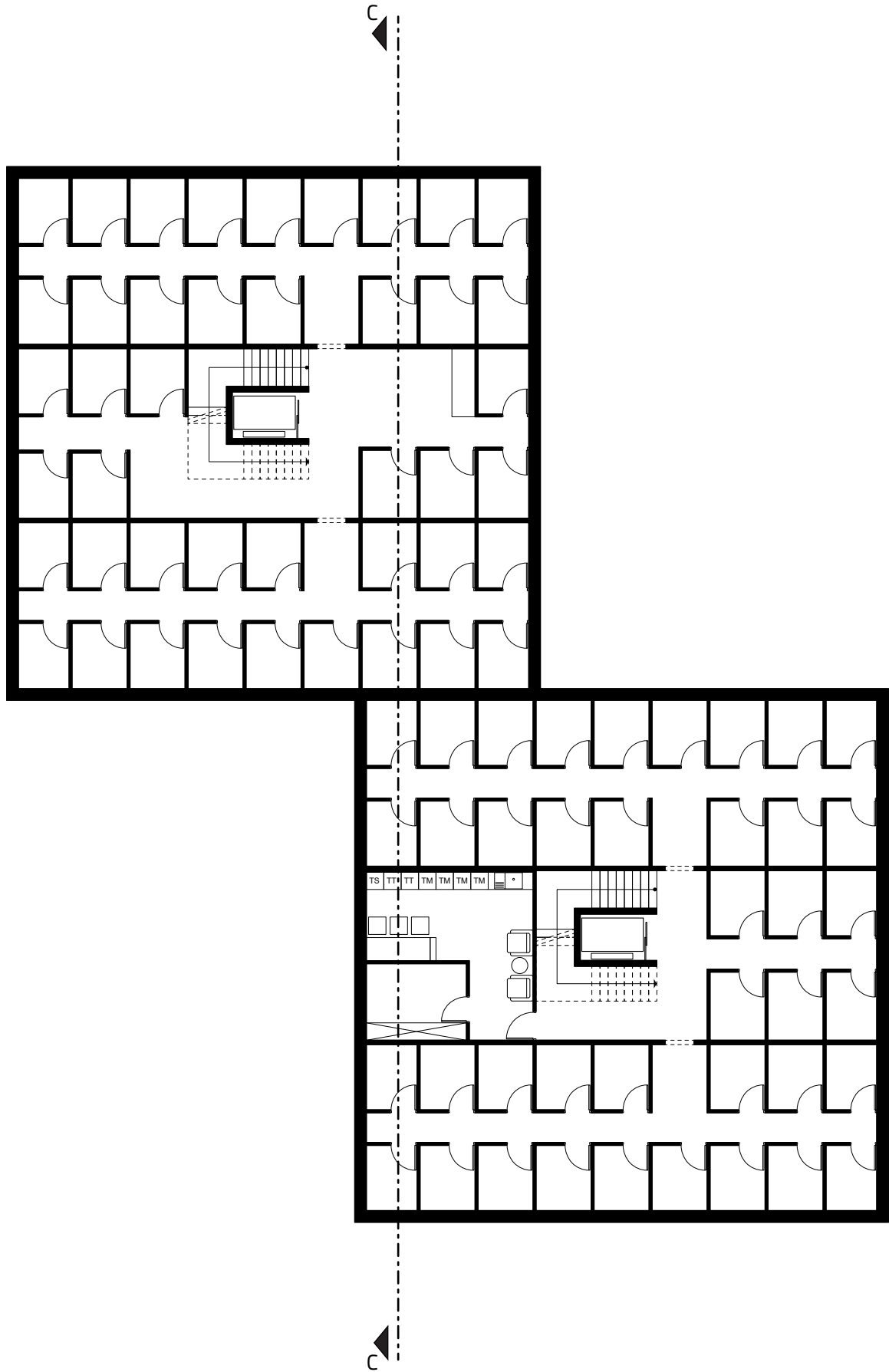
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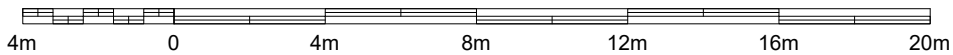
Building 1 Roof





Building 1 Basement

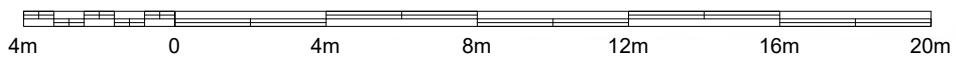
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Building 1 South Facade

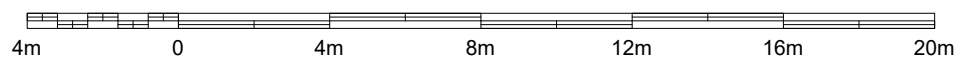
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Building 1 North Facade

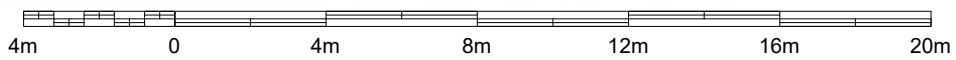
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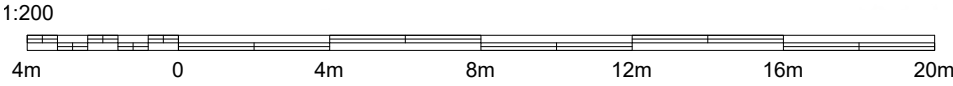
Building 1 West Facade

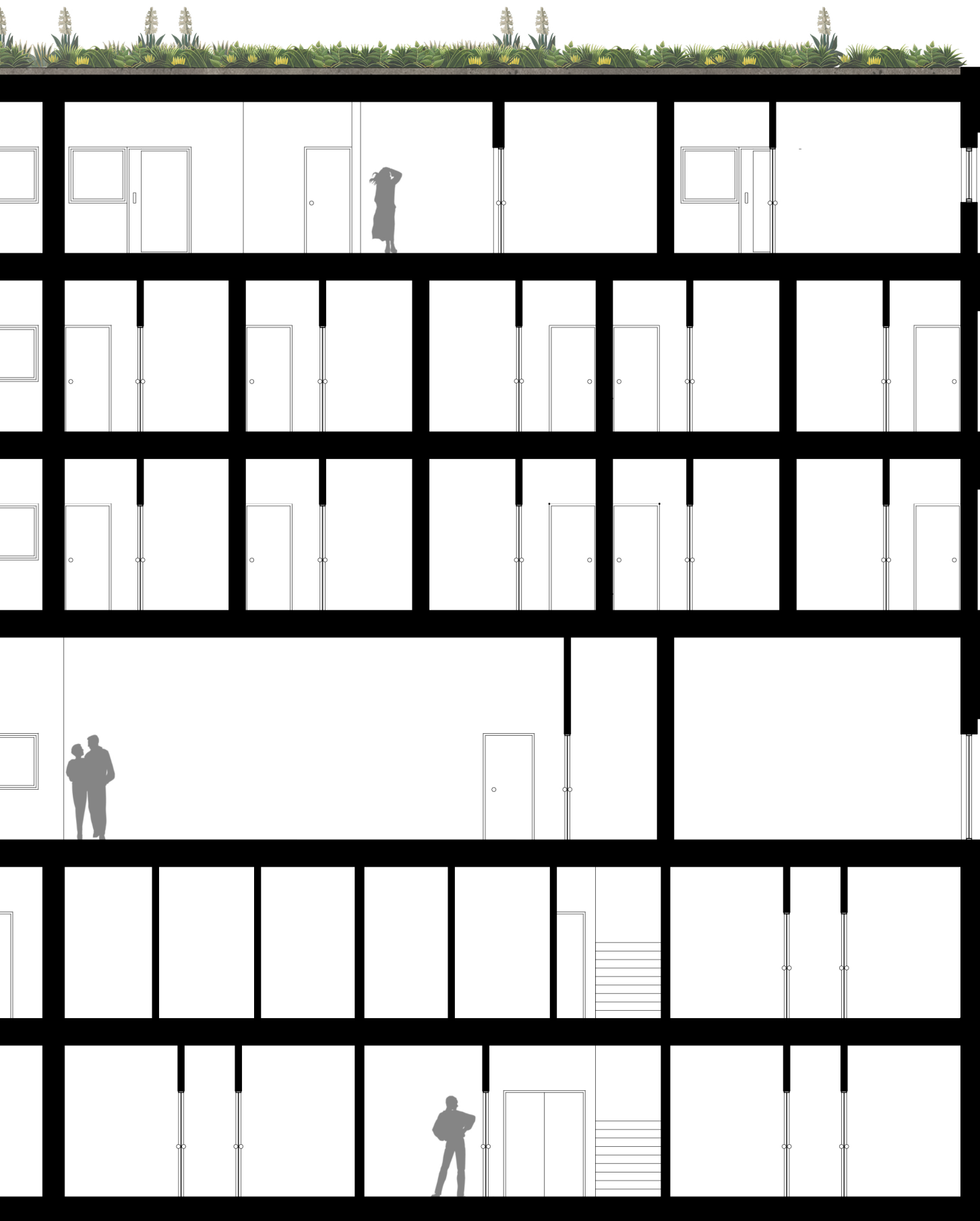
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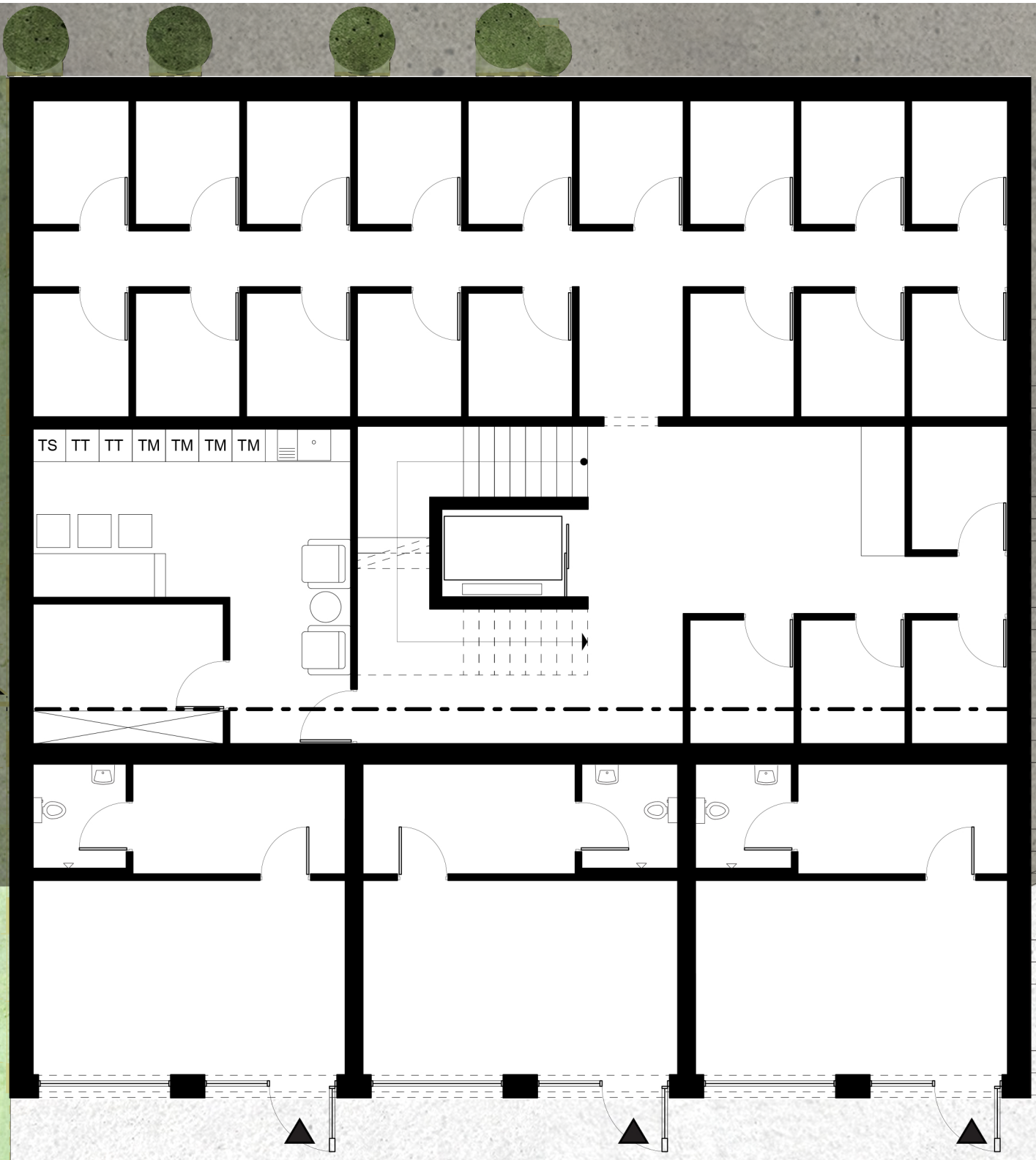




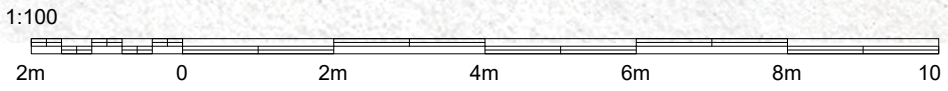
Building 1 East Facade

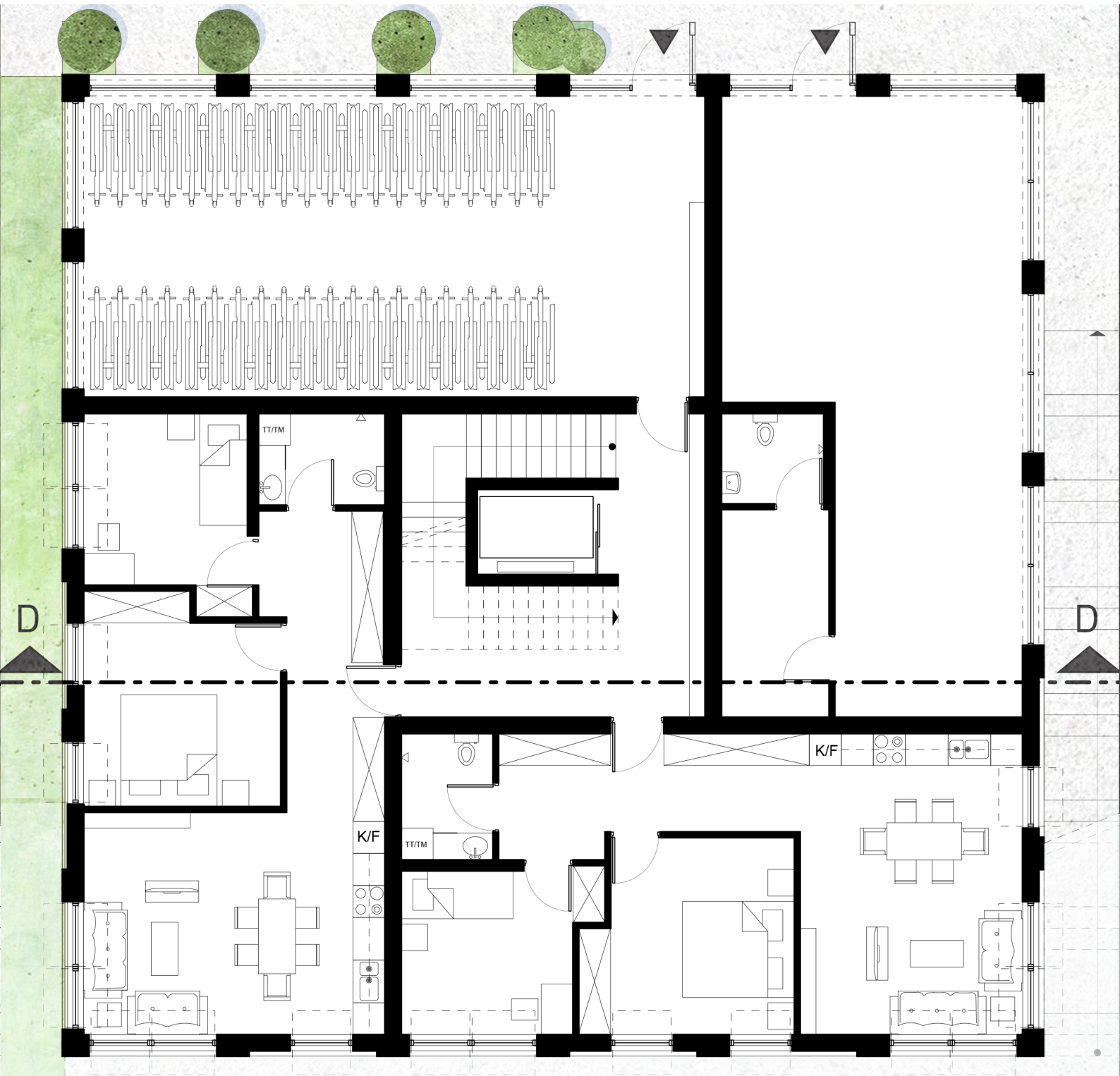






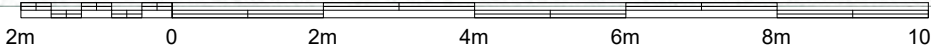
Building 2 Ground Floor

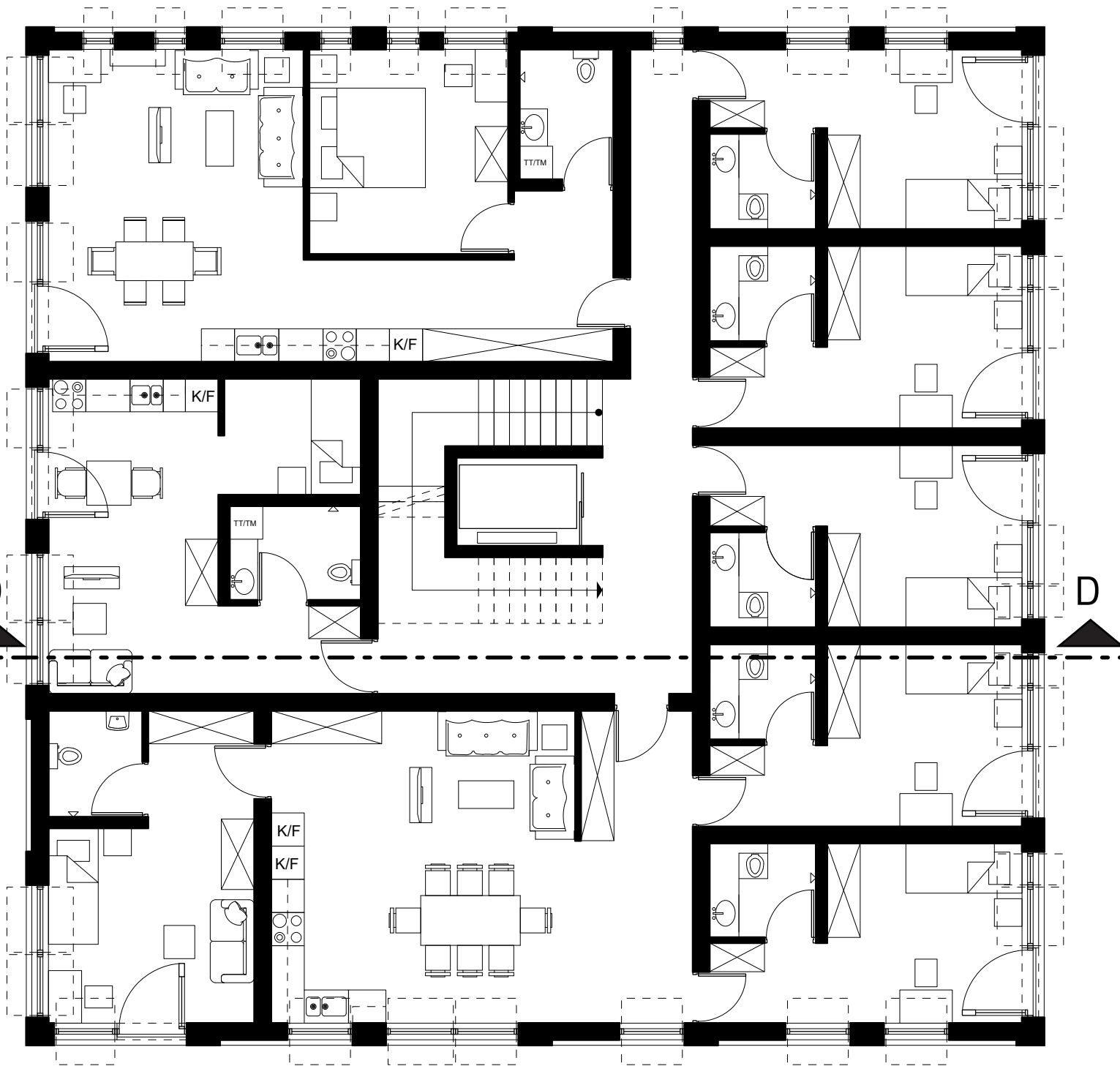




Building 2 First Floor

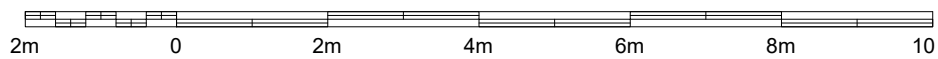
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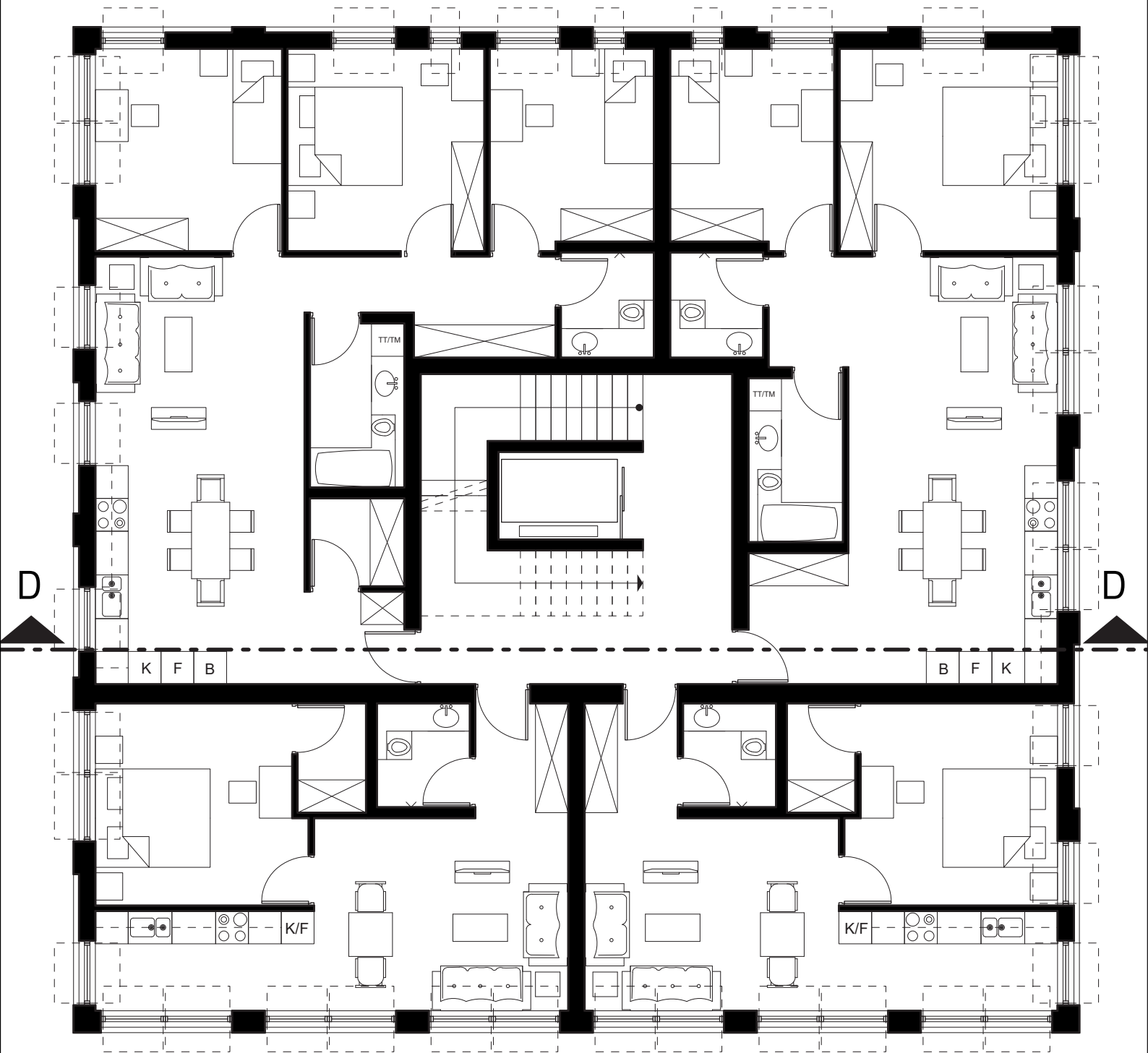




Building 2 2nd - 3rd Floor

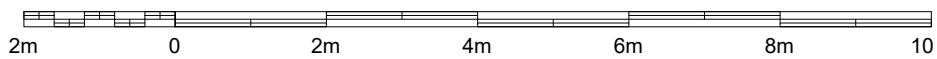
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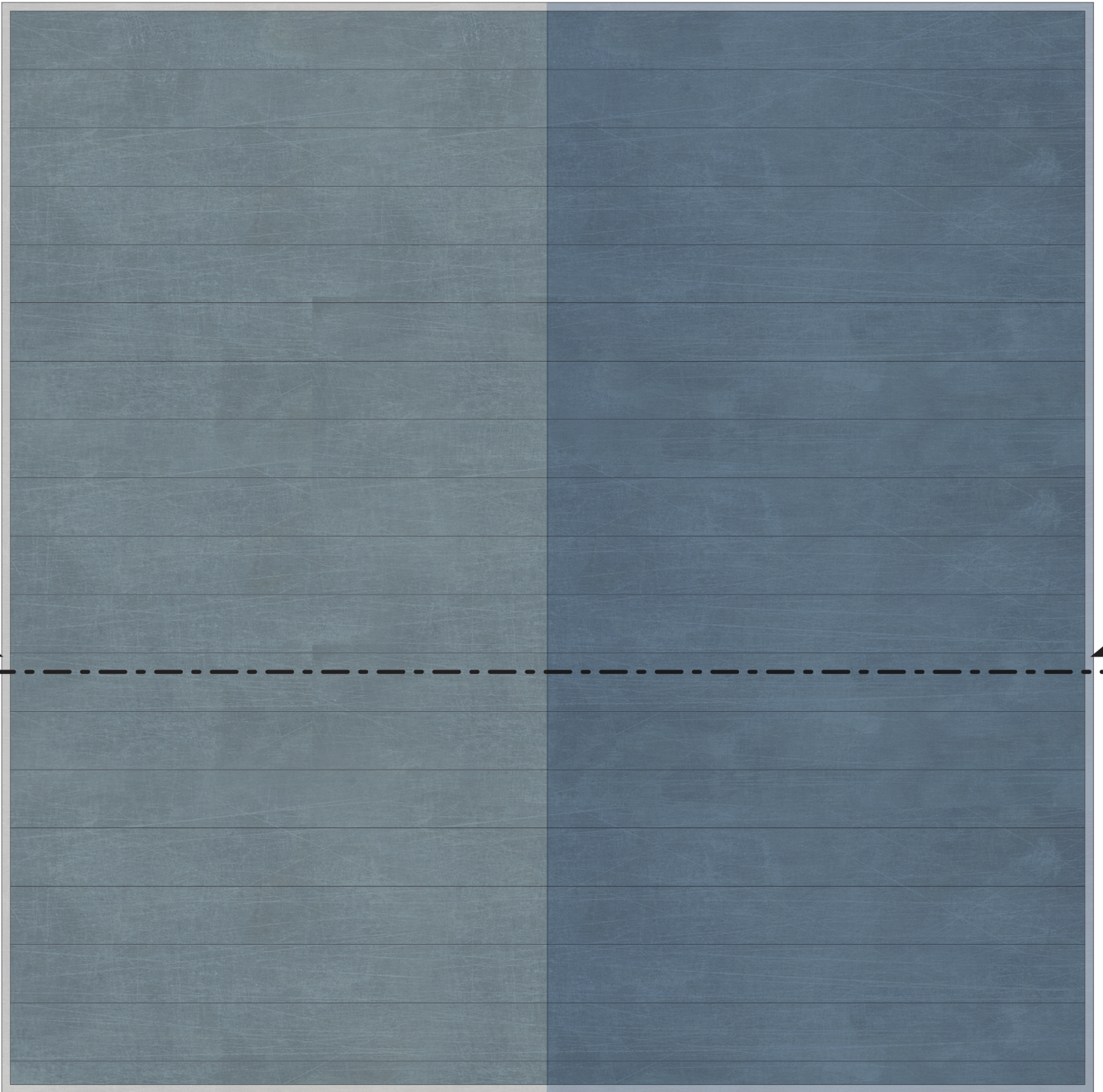




Building 2 4th - 5th Floor

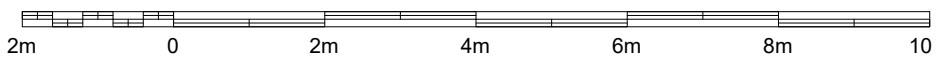
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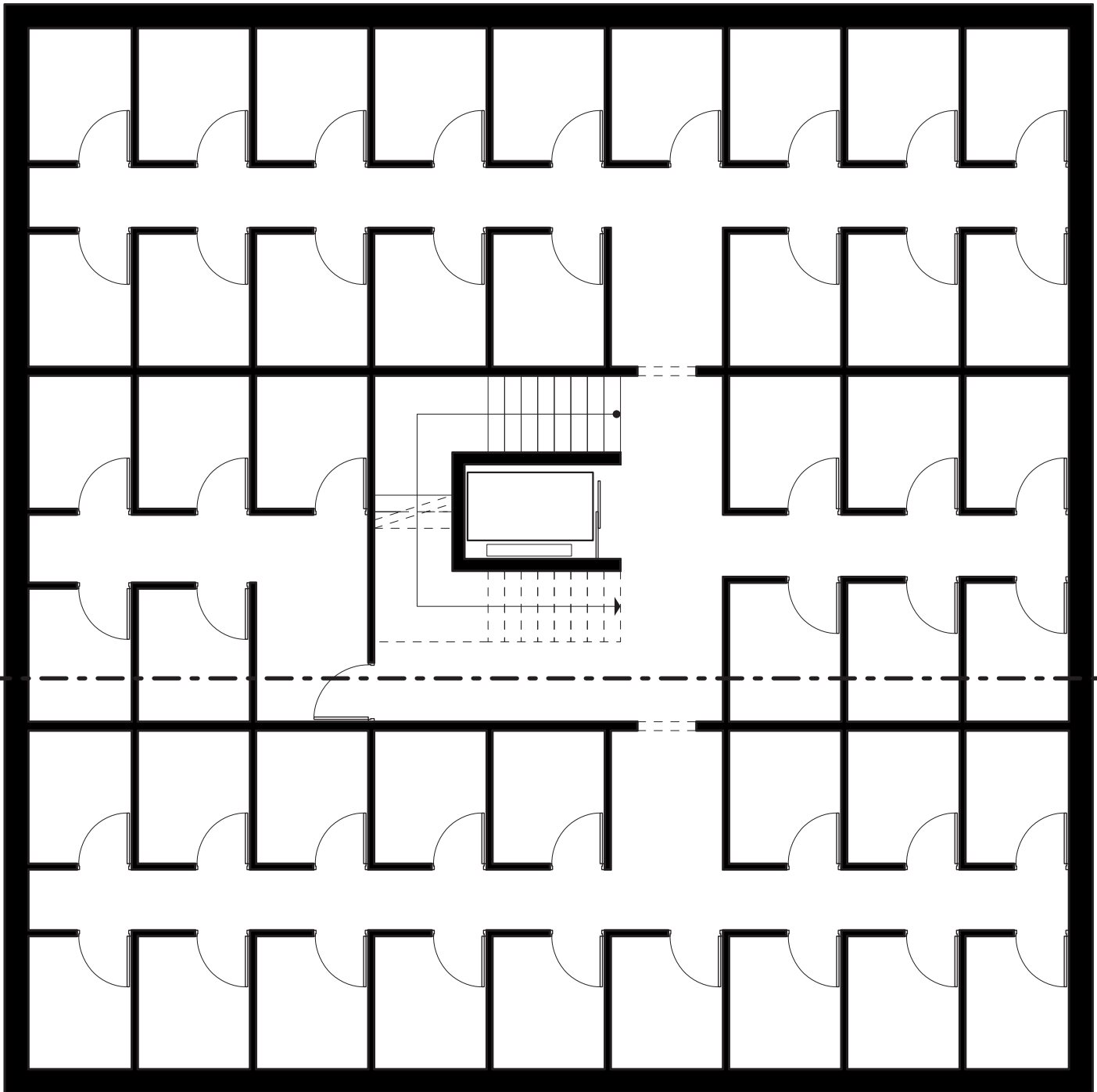




Building 2 Roof

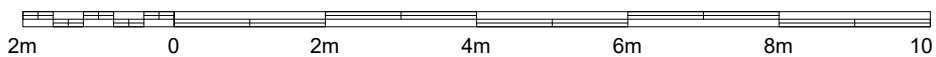
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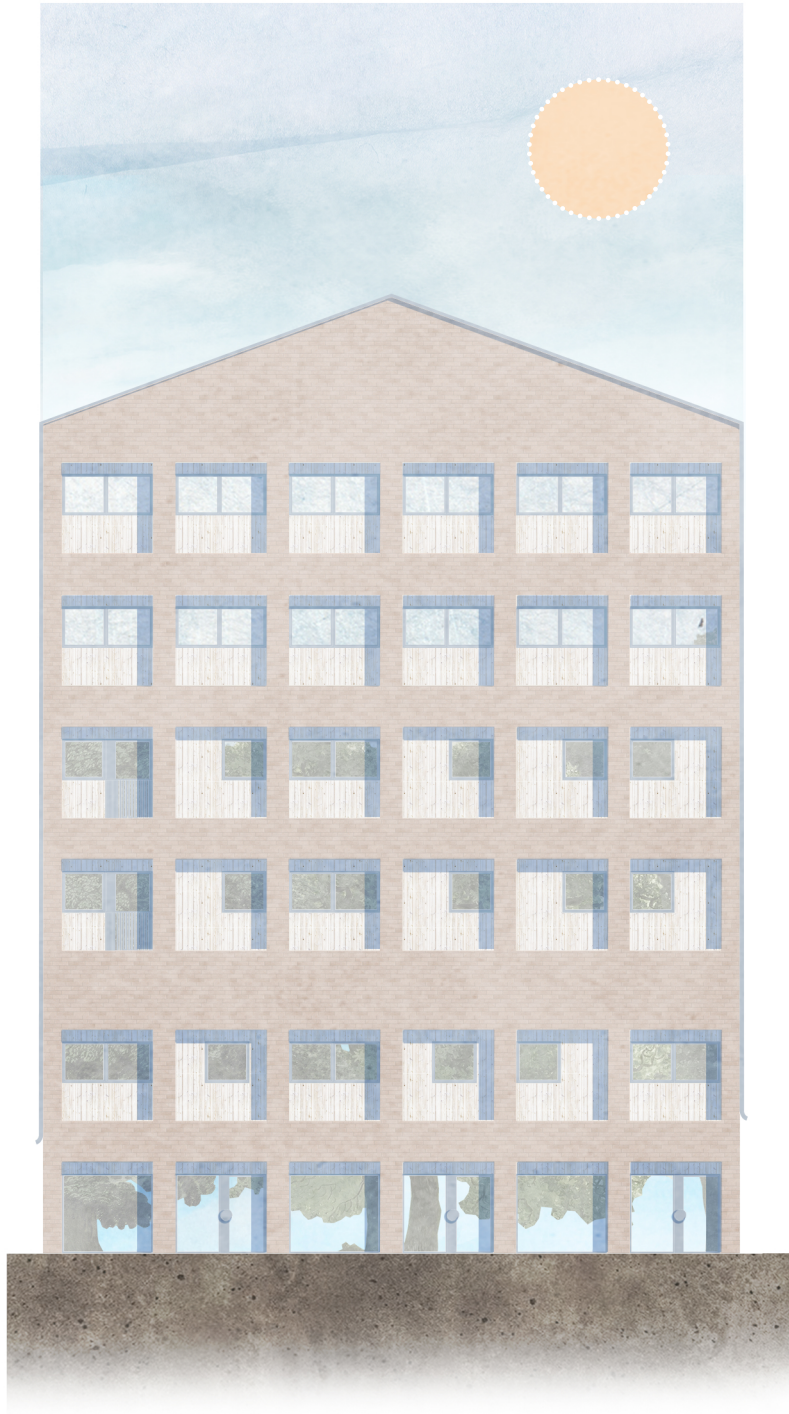




Building 2 Basement

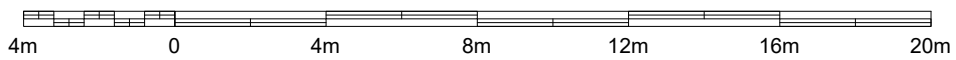
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Building 2 South Facade

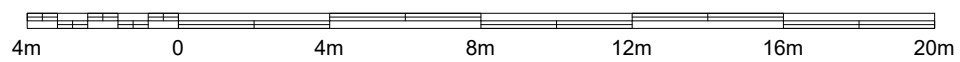
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Building 2 North Facade

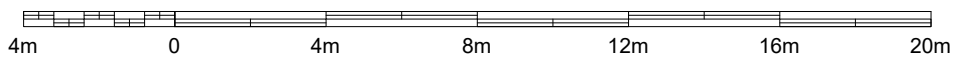
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Building 2 West Facade

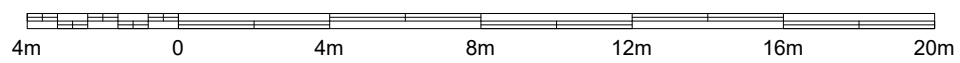
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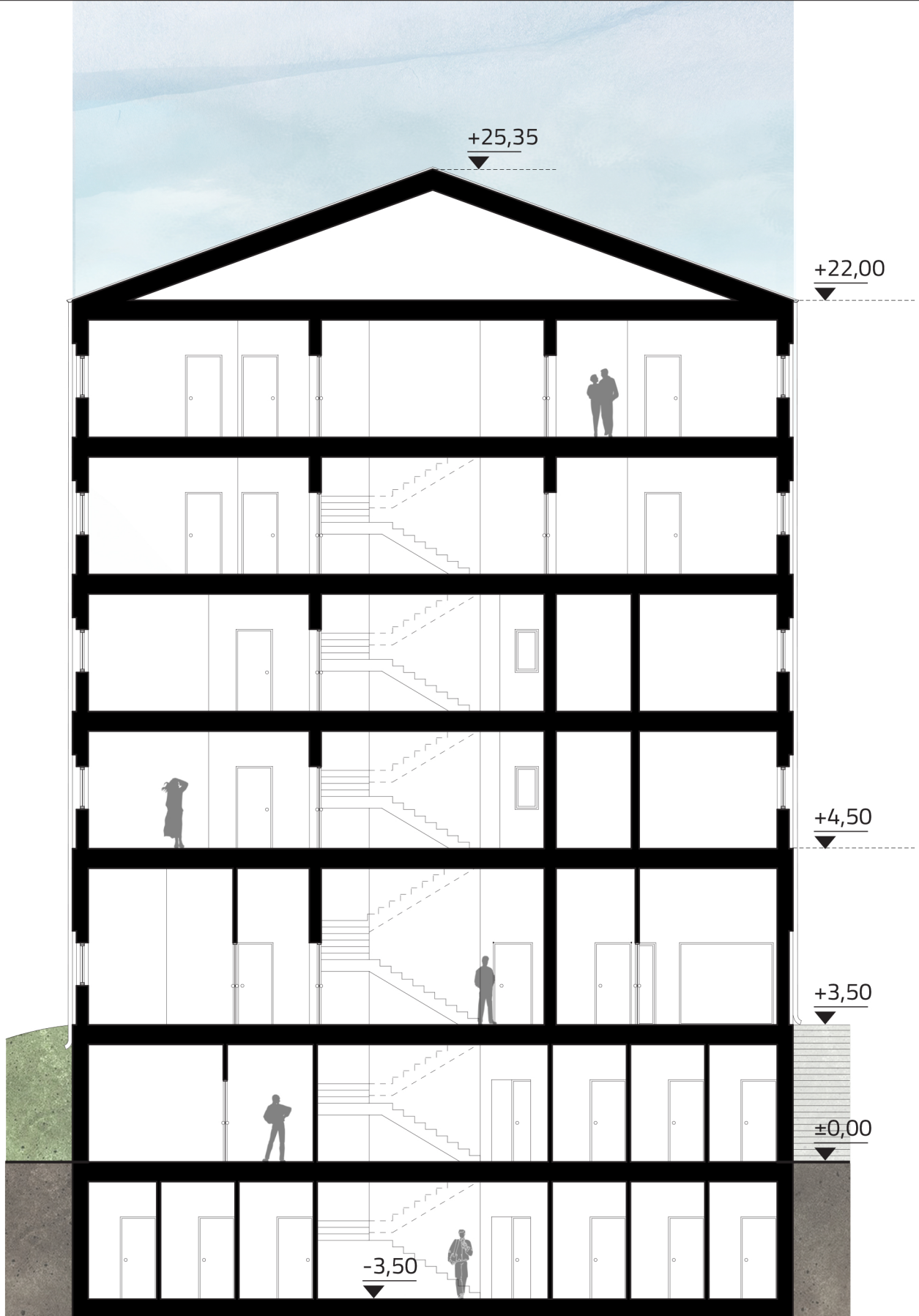




Building 2 East Facade

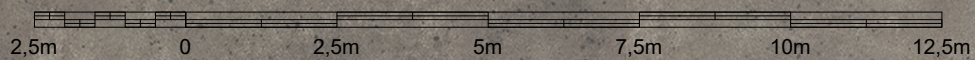
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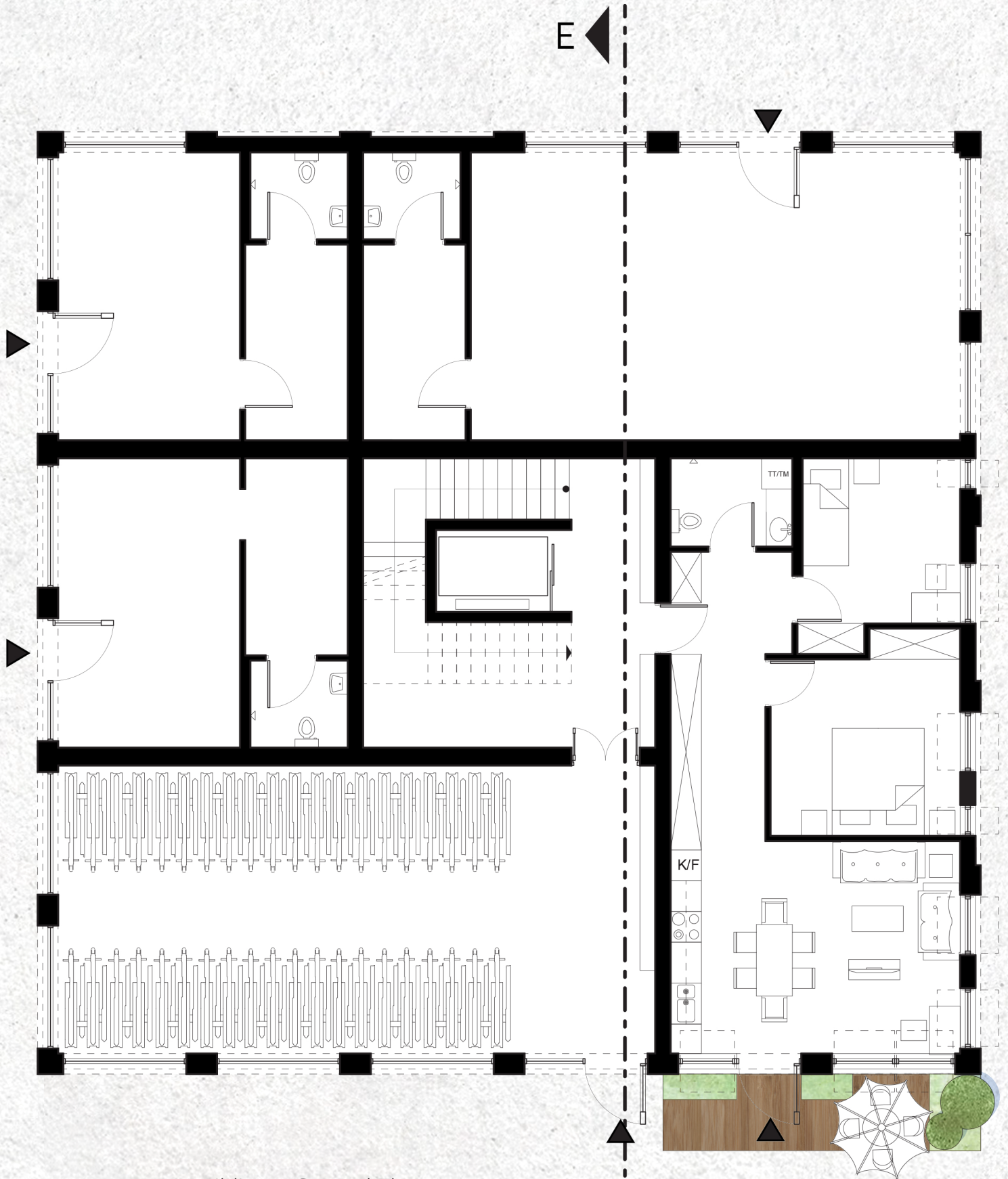




Section D-D

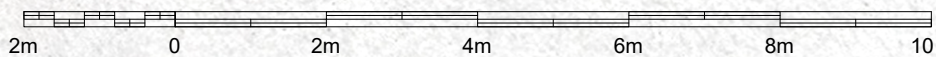
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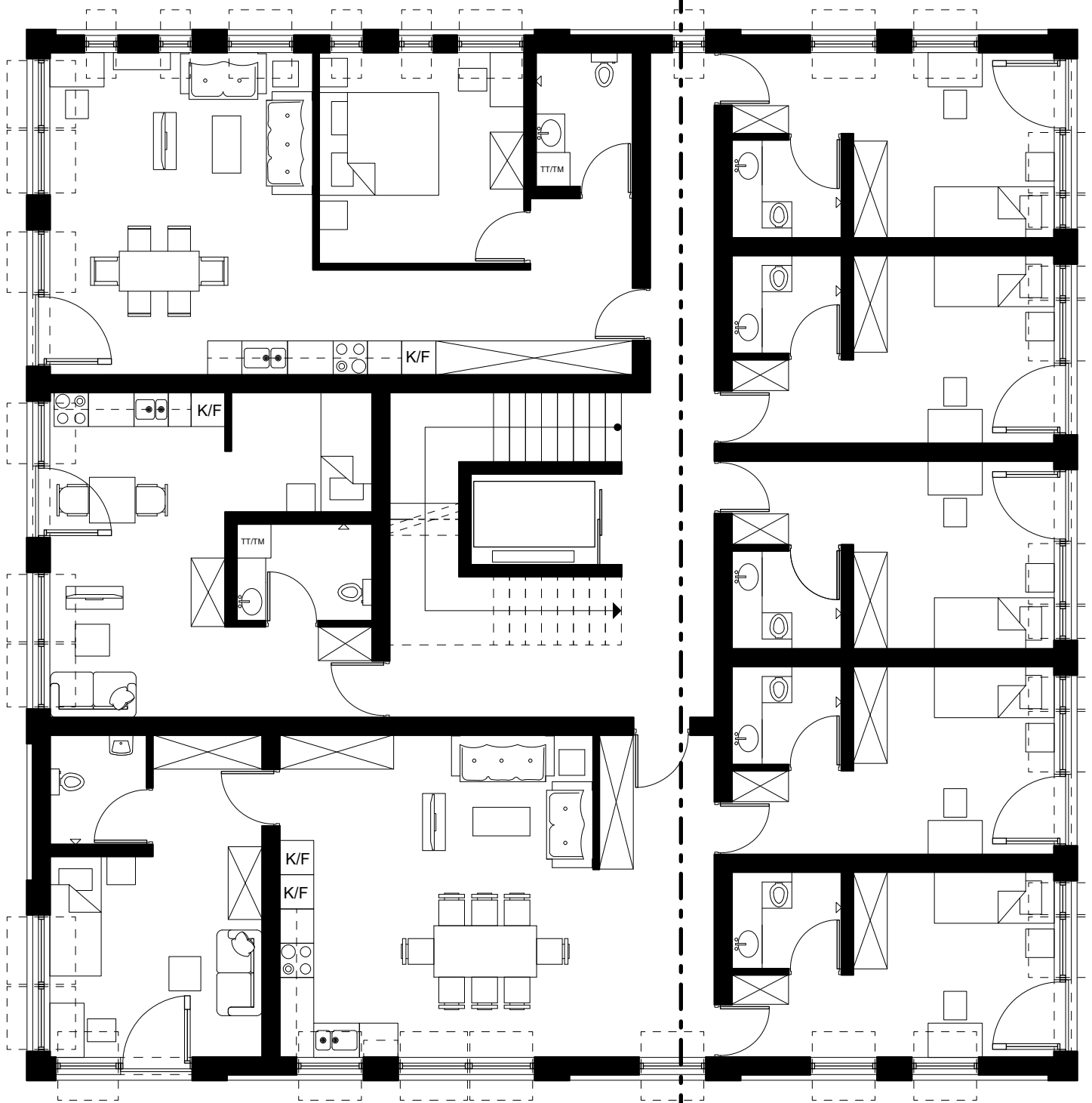


Building 3 Ground Floor

1:100



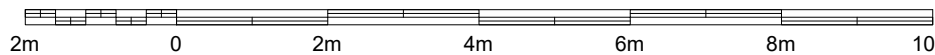
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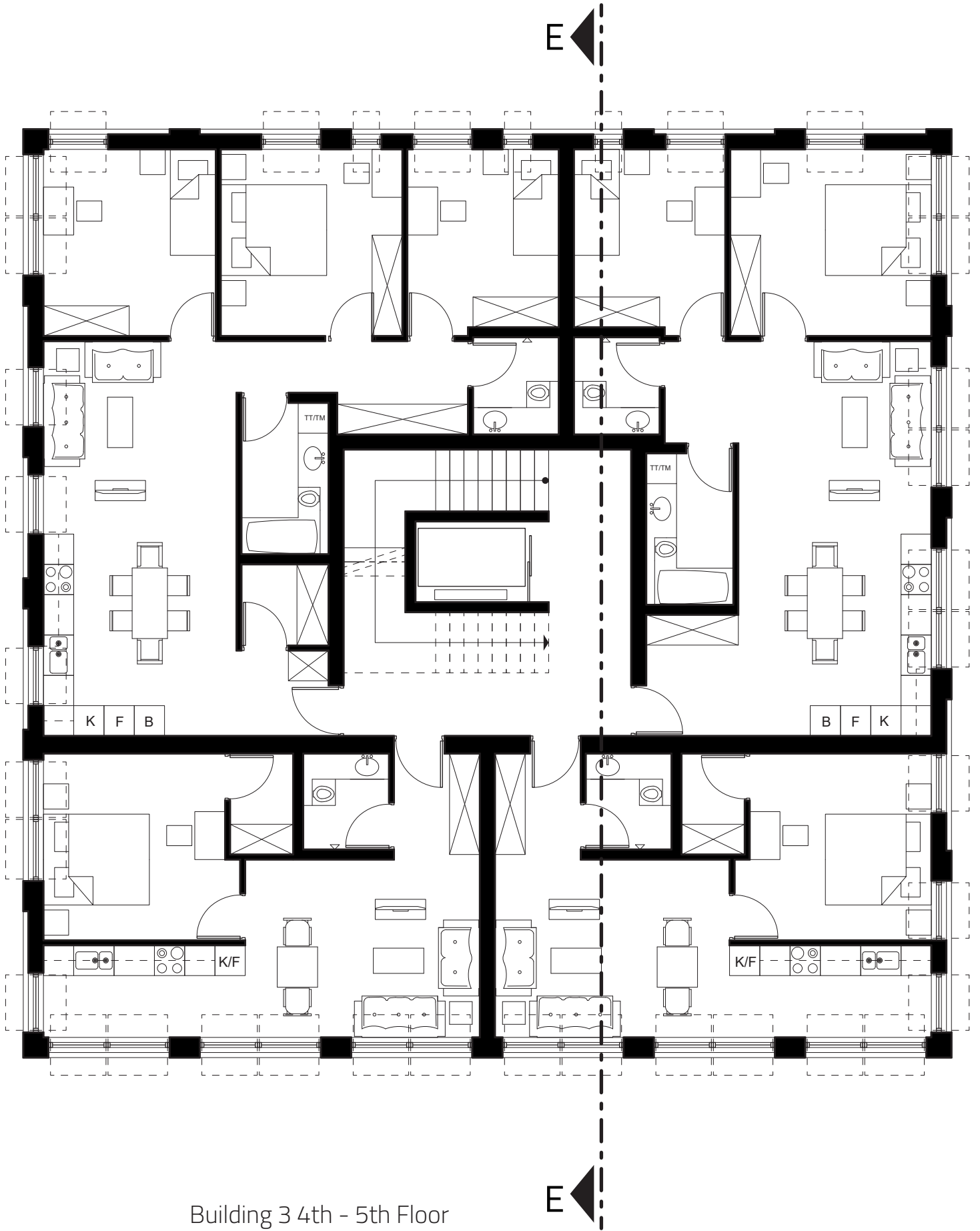


E

Building 3 1st - 3rd Floor

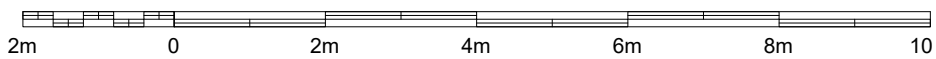
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Building 3 4th - 5th Floor

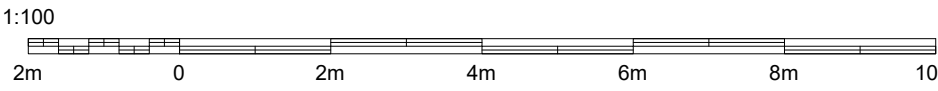
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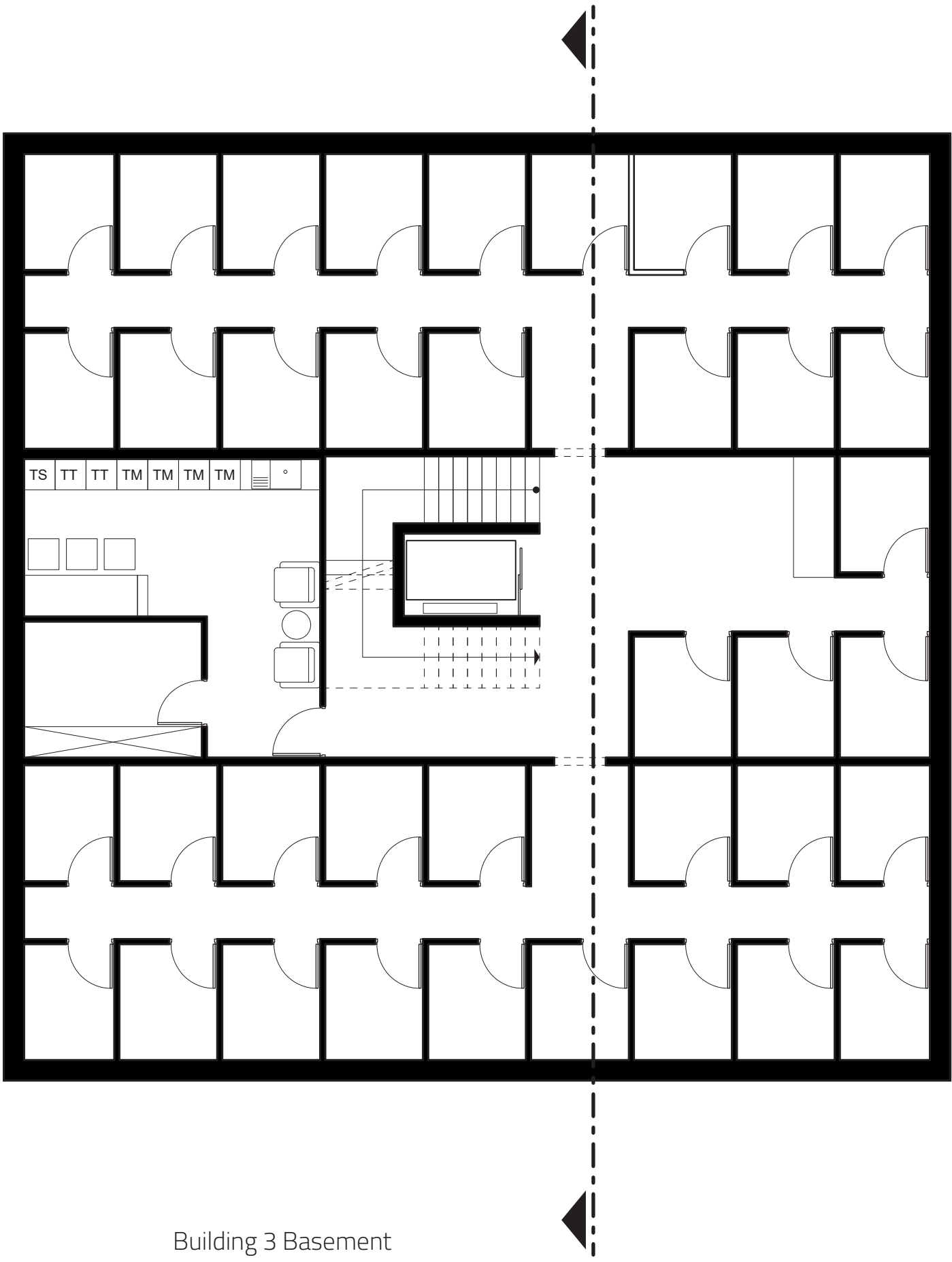


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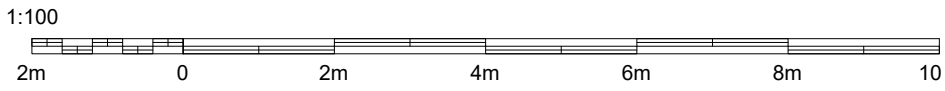
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Building 3 Roof





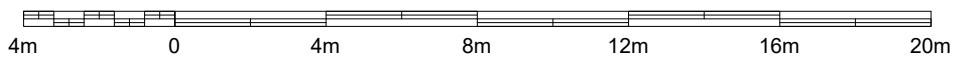
Building 3 Basement

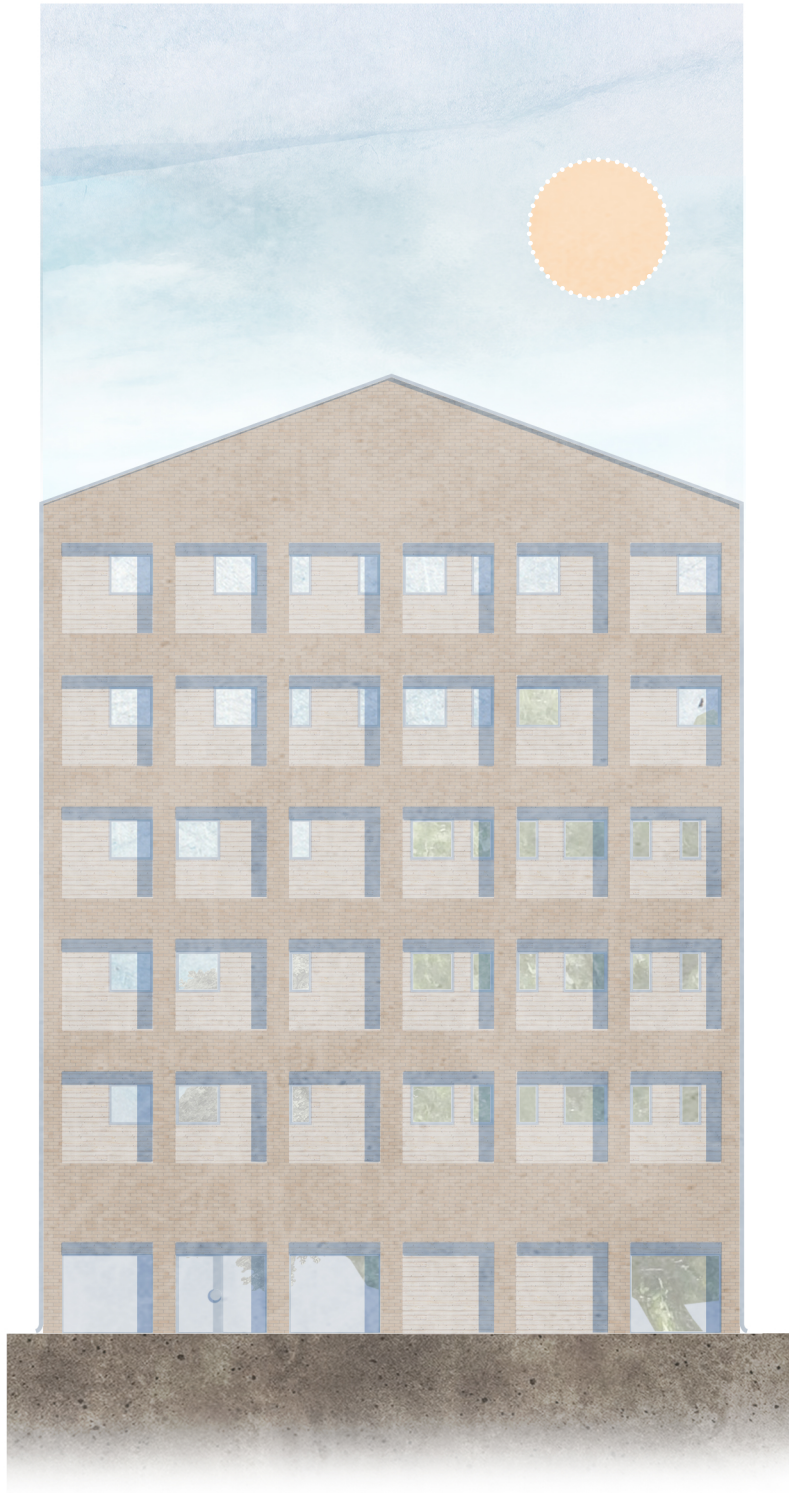




Building 3 South Facade

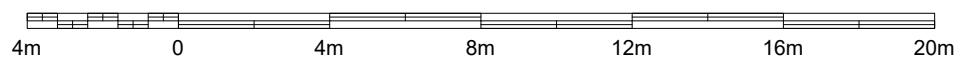
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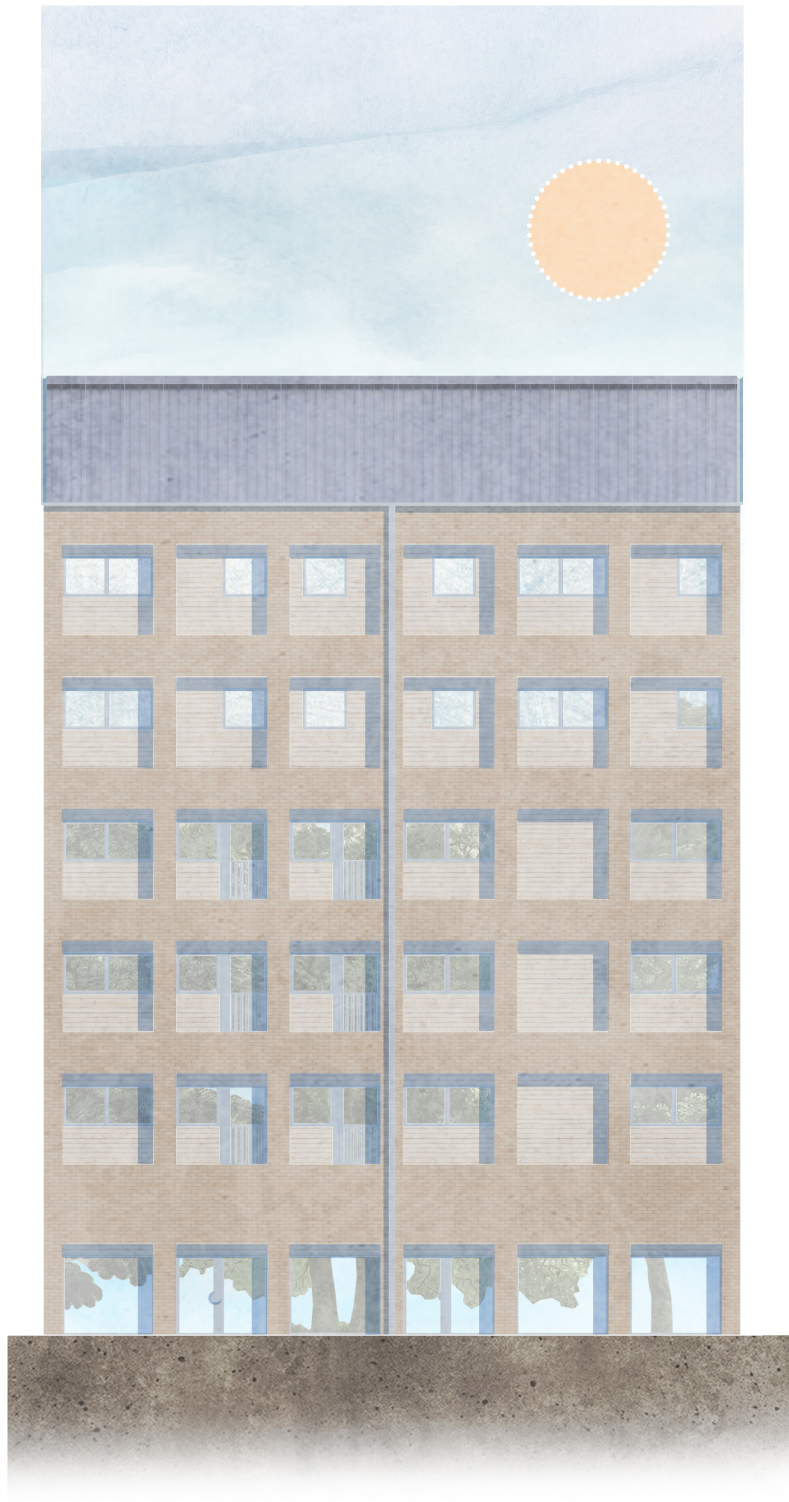




Building 3 North Facade

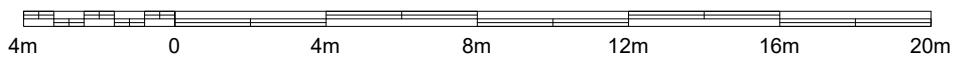
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Building 3 West Facade

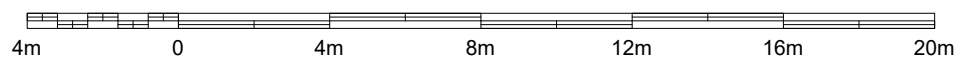
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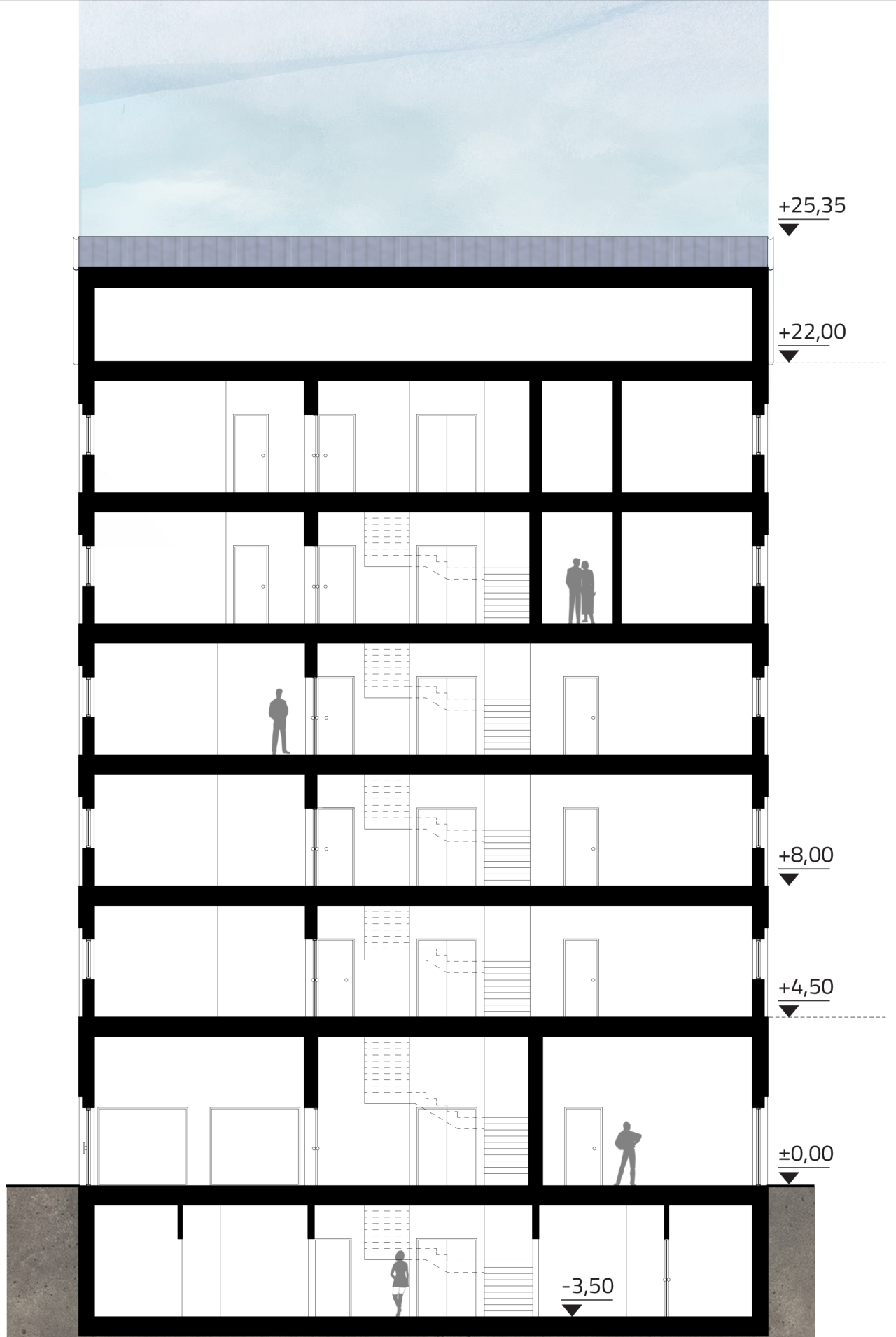




Building 3 East Facade

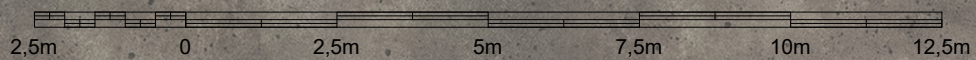
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Section E-E

1:125





Building 1 terrace entry - visualisation



Building 1 terrace - visualisation



Skate park - visualisation





Southern square - visualisation





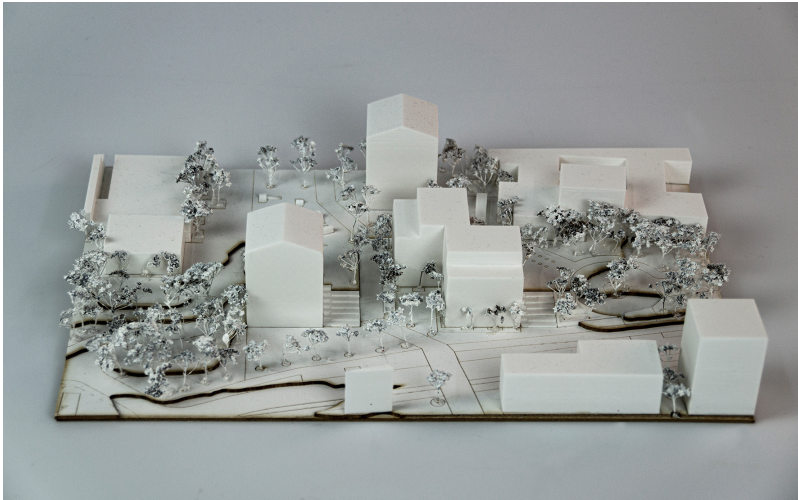
Student room - visualisations



Apartment kitchen - visualisation



Apartment living room - visualisation



Physical model photos

Conclusions and reflections

The ideas of densification and the mixing of multiple functions and styles of housing in one area have been popular within certain architecture circles for a long time. Given the way modern society functions, it is likely that these ways of designing will play a key role in the design of future housing areas. After the pandemic, more and more people seek out the opportunity of being able to work from home. At the same time, other issues such as rising gas prices and the global warming threat looming even closer, the constant use of cars is steadily becoming unsustainable. Therefore, it will become more important that everything one needs can be found within walking distance of one's home.

There are several ways that this project could be expanded on. Wood and brick are construction materials which could easily be re-used. Therefore, it would be interesting to explore the more technical aspects of either using recycled material to construct the buildings, or designing that to be deconstructed in order for their parts to be reused at the end of their life. The roofs could be optimized to house solar cells.

The 6x6 m modules, which were mostly used as a thought construct which mostly served to lead to the final footprints, could be adapted further to work as functional construction modules. This would create a clear structure within the building, and would alter its expression. It would be interesting to see how the spatial qualities would change if this part was further explored.

This project could be accurately described as a journey. The plans presented in this book have reached their present form through a rigorous process of iteration. Many solutions have been attempted, sketched, and some have even come quite far in the development process before being set aside. During this process I have learned a lot about many of the areas of architecture that most interest me, and that were the focus of this project: housing, building regulations,

experimenting with the materiality of buildings as well as with different colors, and multiple styles of visualisation and presentation. It has been a tough yet exciting and rewarding experience, and hopefully a fair attempt at exploring the vast field that is housing architecture.

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[3] [4] Kulturportal Lund, "Lunds historia i korta drag," kulturportallund.se, Aug. 17, 2014. [Online] Available: <https://kulturportallund.se/lunds-historia-i-korta-drag/> [Accessed Aug. 4, 2022]

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Figure 4: Lunds kommuns översiktsplan, del 2, Markanvändning och Hänsyn, p. 6. Available: <https://lund.se/download/18.44e3ea617a0905381360a26/1631609081227/Lunds%20kommuns%20%C3%B6versiktsplan%20%E2%80%93%20Del%0A1%20Planstrategi.pdf>

Figure 5: Lunds kommuns översiktsplan, del 2, Markanvändning och Hänsyn, p. 9. Available: <https://lund.se/download/18.44e3ea617a0905381360a26/1631609081227/Lunds%20kommuns%20%C3%B6versiktsplan%20%E2%80%93%20Del%0A1%20Planstrategi.pdf>

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Figure 8: <https://geoportal.lund.se/portal/apps/webappviewer/index.html?id=1dd53ab3b8614116a4aa0d075722f403>

Figure 9: <https://geoportal.lund.se/portal/apps/webappviewer/index.html?id=1dd53ab3b8614116a4aa0d075722f403>

Figure 10: <https://www.bing.com/maps/>

