



# DEVELOPMENT OF PUBLIC SPACES IN DIFFERENT CONTEXTS

ELEMENTS OF CREATING PUBLIC SPACES IN DESIGN

THEMATIC PORTFOLIO

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**POLITECNICO**  
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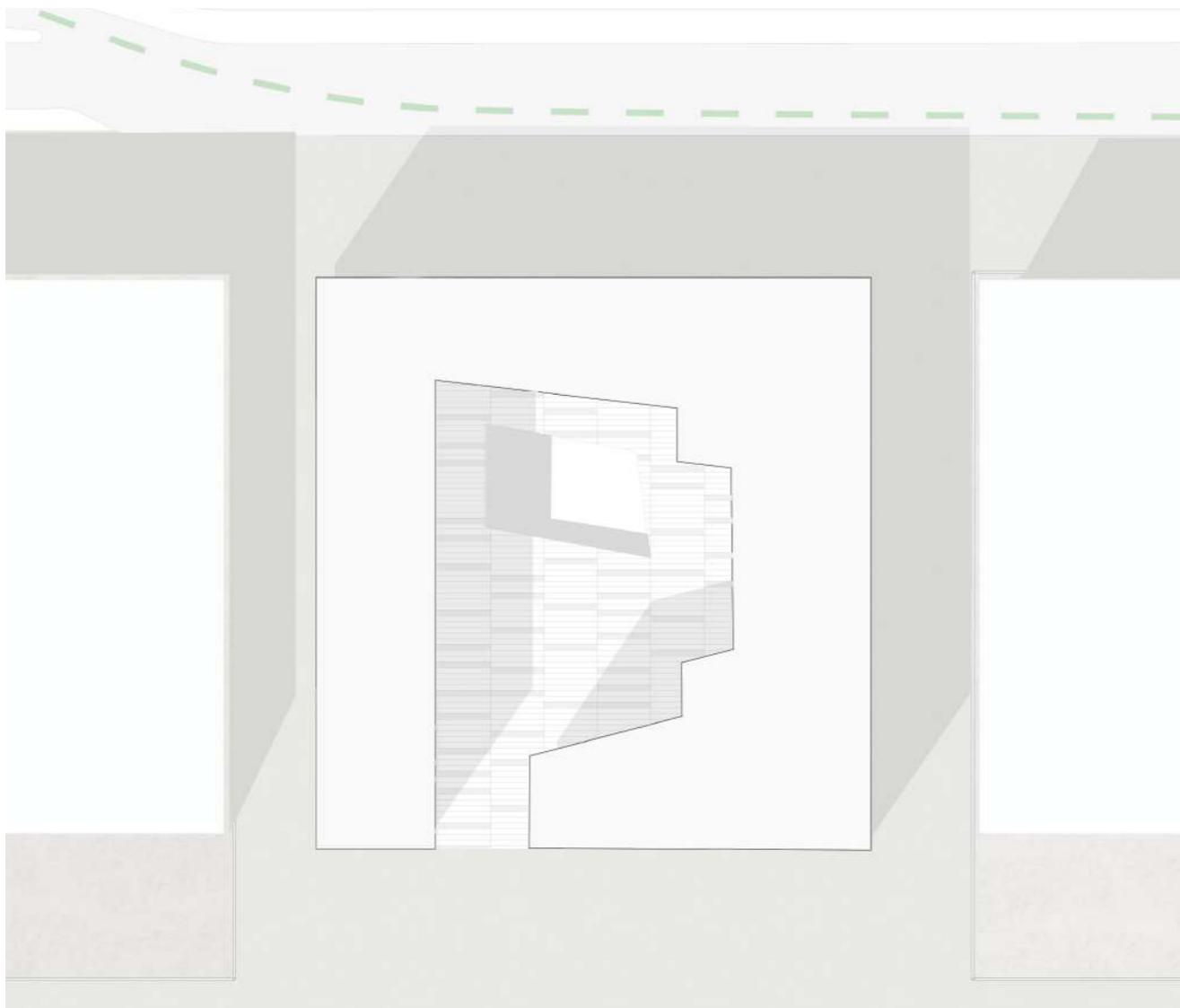
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## Abstract

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The creation of public spaces is an essential component of urban planning and design, having important implications for a community's social, economic, and environmental elements. Parks, plazas, and streetscapes, for example, serve as a focal point for community activities and events while also offering space for rest, enjoyment, and social contact. The creation of public spaces is a complicated and multi-faceted process that involves careful consideration of a variety of issues, including community needs and wants, the role of technology, and the influence of environmental conditions. This portfolio investigates many elements of public space development, with a particular emphasis on identifying essential variables that lead to effective public spaces. The portfolio examines great techniques and successful initiatives via literature reviews and case studies. The ultimate purpose of this portfolio is to illustrate the creation of public places that are not only practical and visually beautiful but also sustainable, accessible, and inclusive.



### 01: Olympic Village

Studio: Building Technology Studio a.y. 2020/2021

Professors: Andrea Tartaglia, Giovanni Castaldo

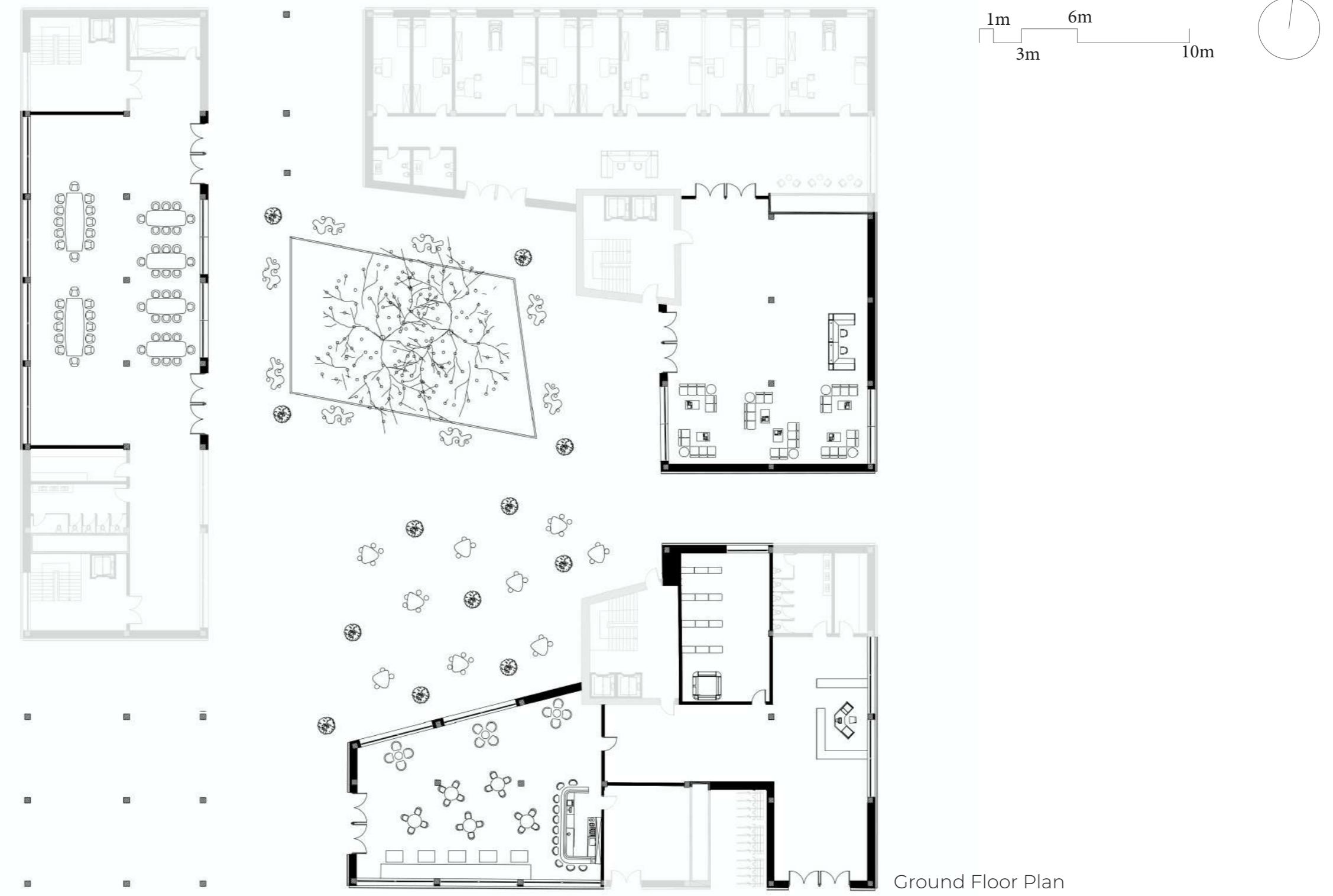
Group members: Leyla Dilmen, Philip Valkov, İrem Erpolat

Location: Scalo di Porta Romana, Milano (MI)

**Project Description:** The purpose of this project was to construct a complex of buildings in the restored Scalo di Porta Romana district to accommodate athletes during the 2026 Olympic Games in Milan/Cortina. Since the facility would need to be turned into student housing after the Games, it required to be versatile and flexible. Our building's main goals are to give the students and athletes a welcoming, secure, and high-quality "home," as well as serve as a gathering place for them. We wanted to provide individuals the opportunity to socialize in completely or partially public spaces since we think that it is an essential component of daily life. Our structure is made of angles and courtyards for privacy and separation from the outside while having communal areas that promote social interaction.

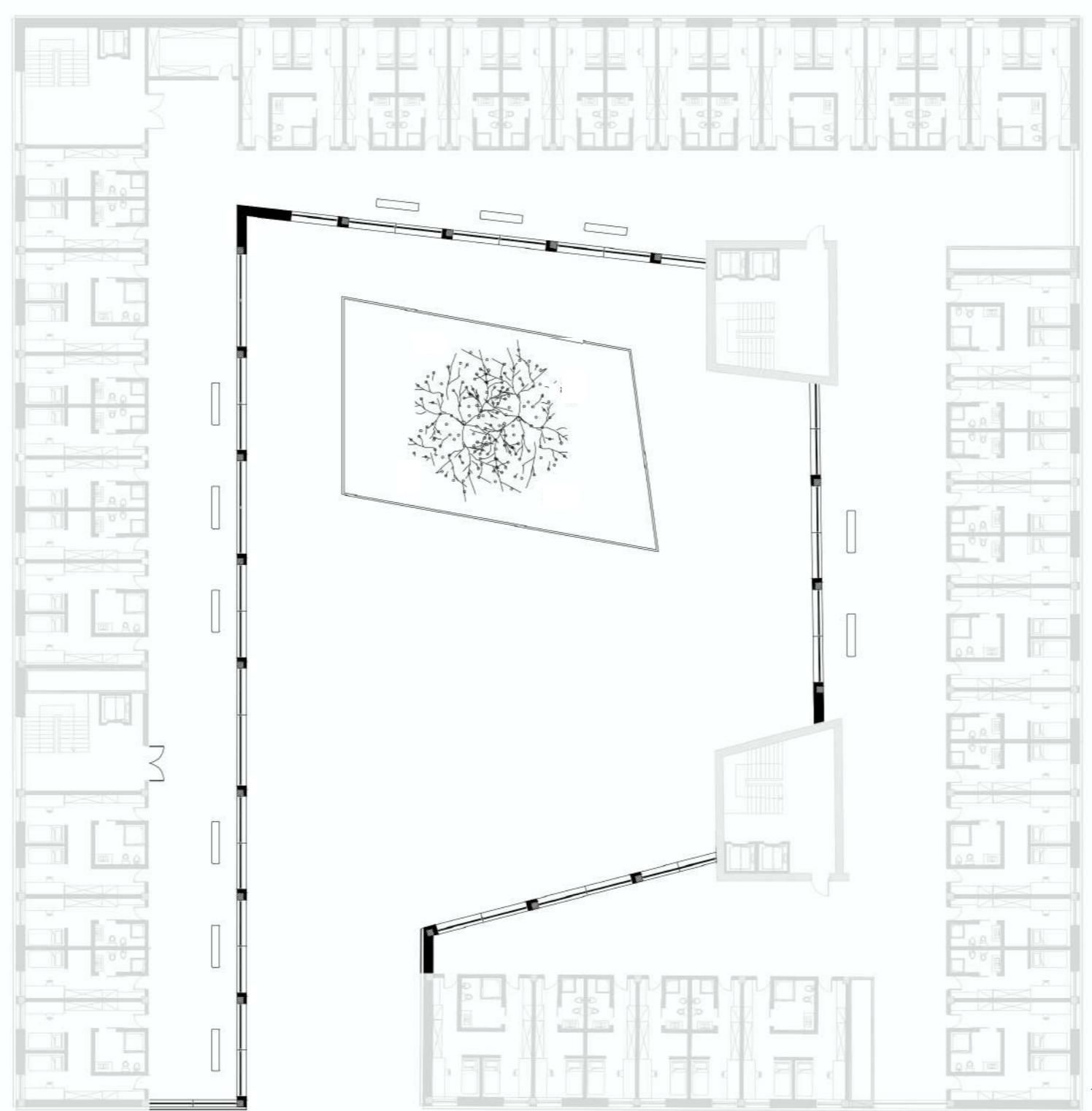


Lewicka says that some people have a strong sense of attachment to a location due to the links with the locals, their family history, or religious meaning. While for others, it's based on the area's physical resources, such as its natural assets, recreational options, or overall stimulating surroundings (Zieleniec, "Lefebvre's Politics of Space: Planning the Urban as Oeuvre"). While we were designing our project, we decided that we wanted to create a sense of belonging for the people who were going to live there. The study by Rogers and Sukolratanaametee (2009) demonstrated that a favorable impact on community building and consequently the identification with a particular space, if an attractive environment, in particular ecological spaces such as mini-parks and pedestrian areas are provided, because they encourage spending time outside, forming interactions with others, and engaging in various activities. In our project, we paid attention to providing these spaces to the residents. We began by evaluating our surroundings in order to better understand what to include in our proposal. We studied the public, private, and pedestrian accessibility to the property and chose to locate the complex's entrances accordingly. Another key consideration was the amount of greenery in the neighborhood. We saw that the neighborhood lacked vegetation and decided to establish our own garden and open space within our building.



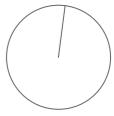
Ground Floor Plan

Our building has seven floors. Two of them are the entrance level and the minus one floor, which are dedicated to multiple functions. The other five floors are dedicated to the rooms. We wanted to create a friendly environment on our entry level to encourage more people to hang around and connect. So we placed the majority of the public spaces at the entrance. There is a public study space, cafe, lobby, library, polyclinic, and flower store on the entrance floor. The courtyard is the focal point of the entry floor. It is a public space where anyone can relax and socialize while enjoying the sunshine and fresh air. Dorota Mantey's study claims that the gathering spaces frequented by young people are more public than private in terms of user diversity and activity variety, as well as freedom of access, usage, and behavior; in this project, since young people are the target group, we paid attention to creating a free space (Mantey, "The Role of Public Spaces in Creating Place Attachment (Example of Zaczisze, Warsaw Housing Estate)"). Also, the structure includes entrances on each side, making the complex more open and approachable.

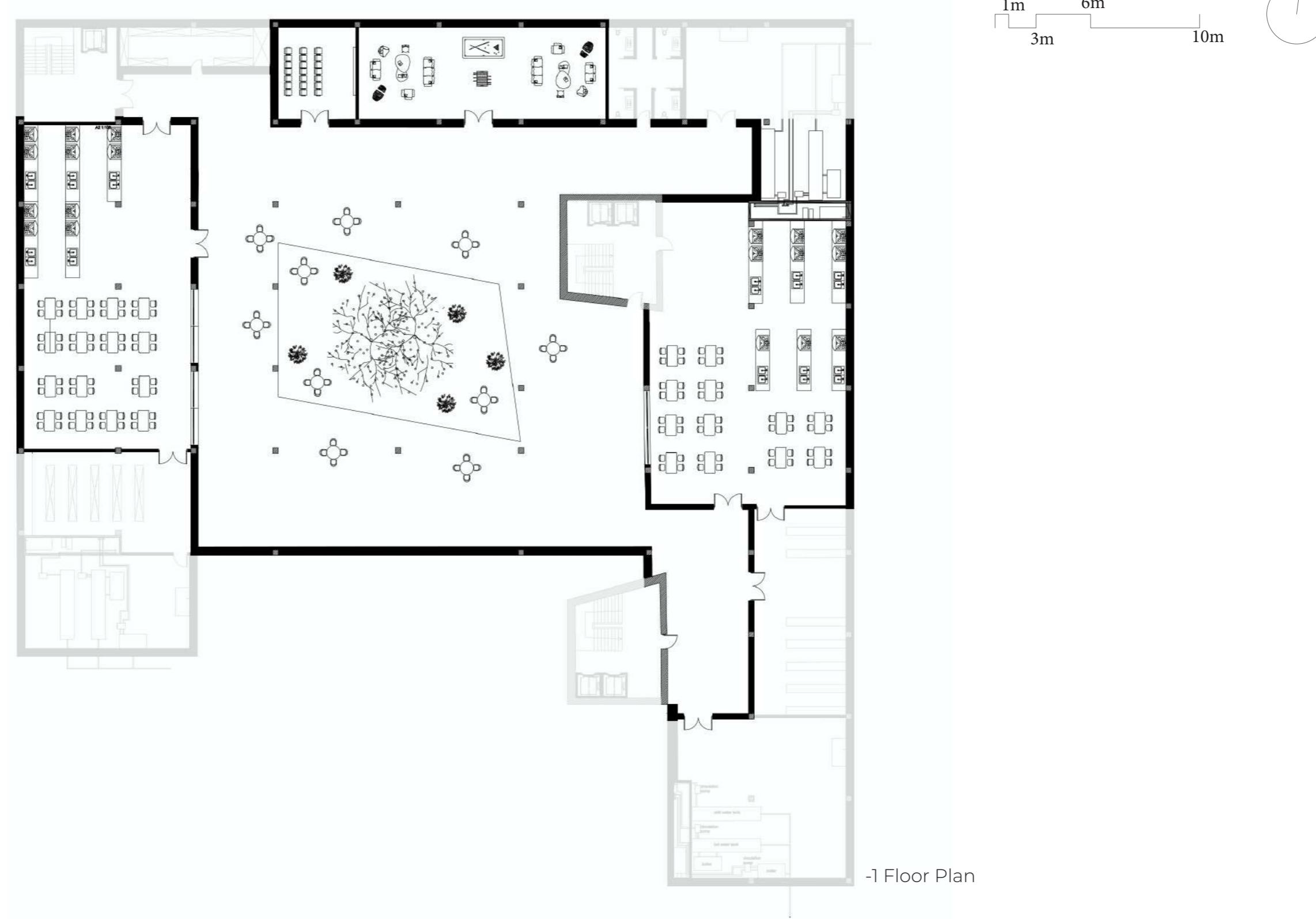


Typical Floor Plan

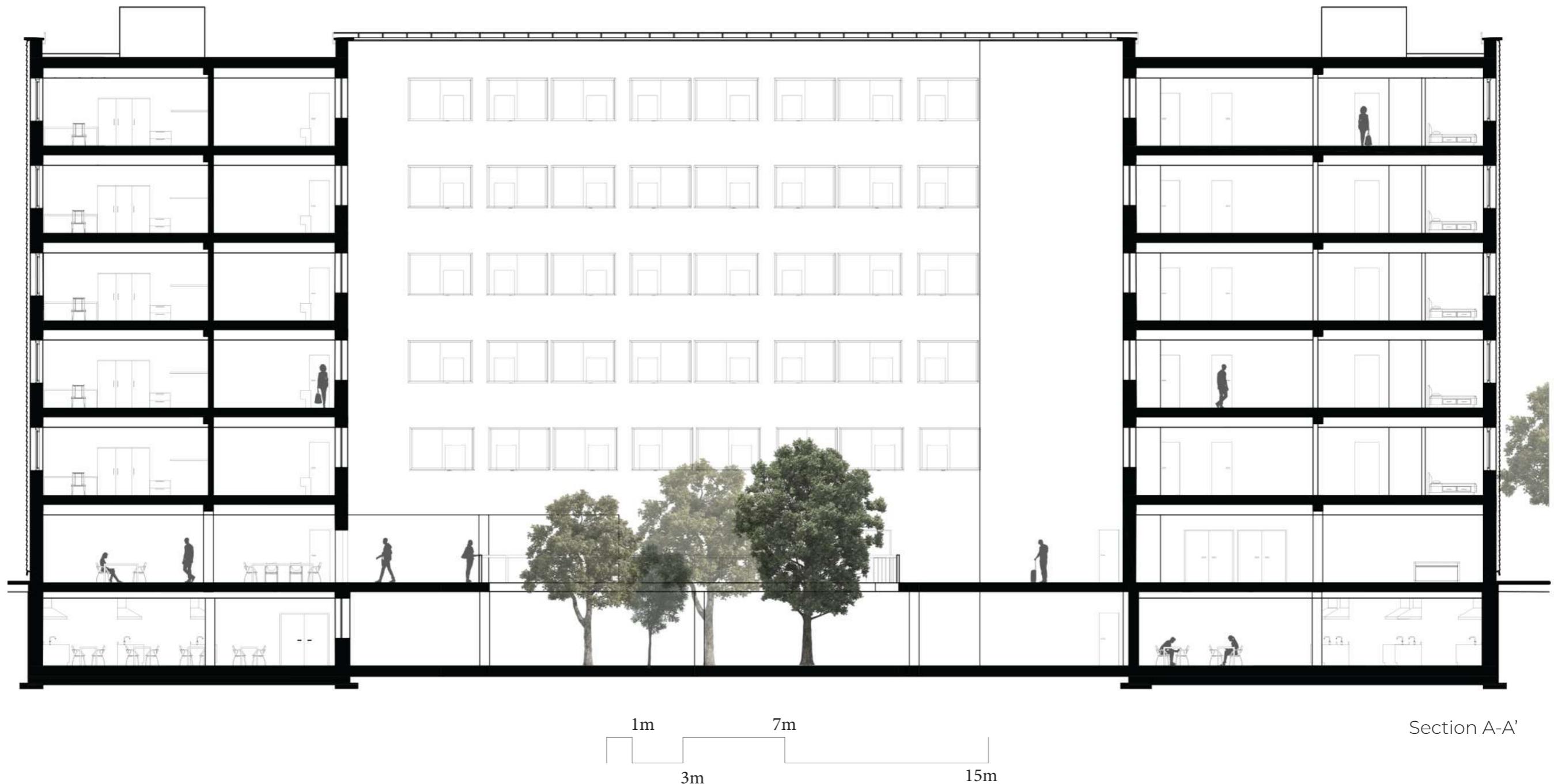
1m 6m  
3m 10m



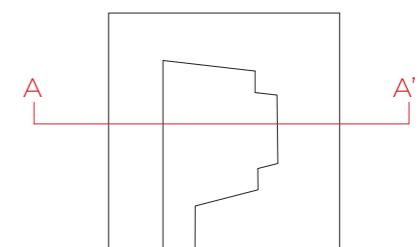
Each of our main floors has 30 single and 12 double bedrooms. All of the double rooms have been made accessible. Elevators and staircases are placed on each story in accordance with fire and distance restrictions. We installed seats and large openable windows to revitalize the vacant corridors and turn it into a functional social areas to encourage social contact between rooms. Social areas of distraction and exhibition are as important to urban society as working and dwelling environments.



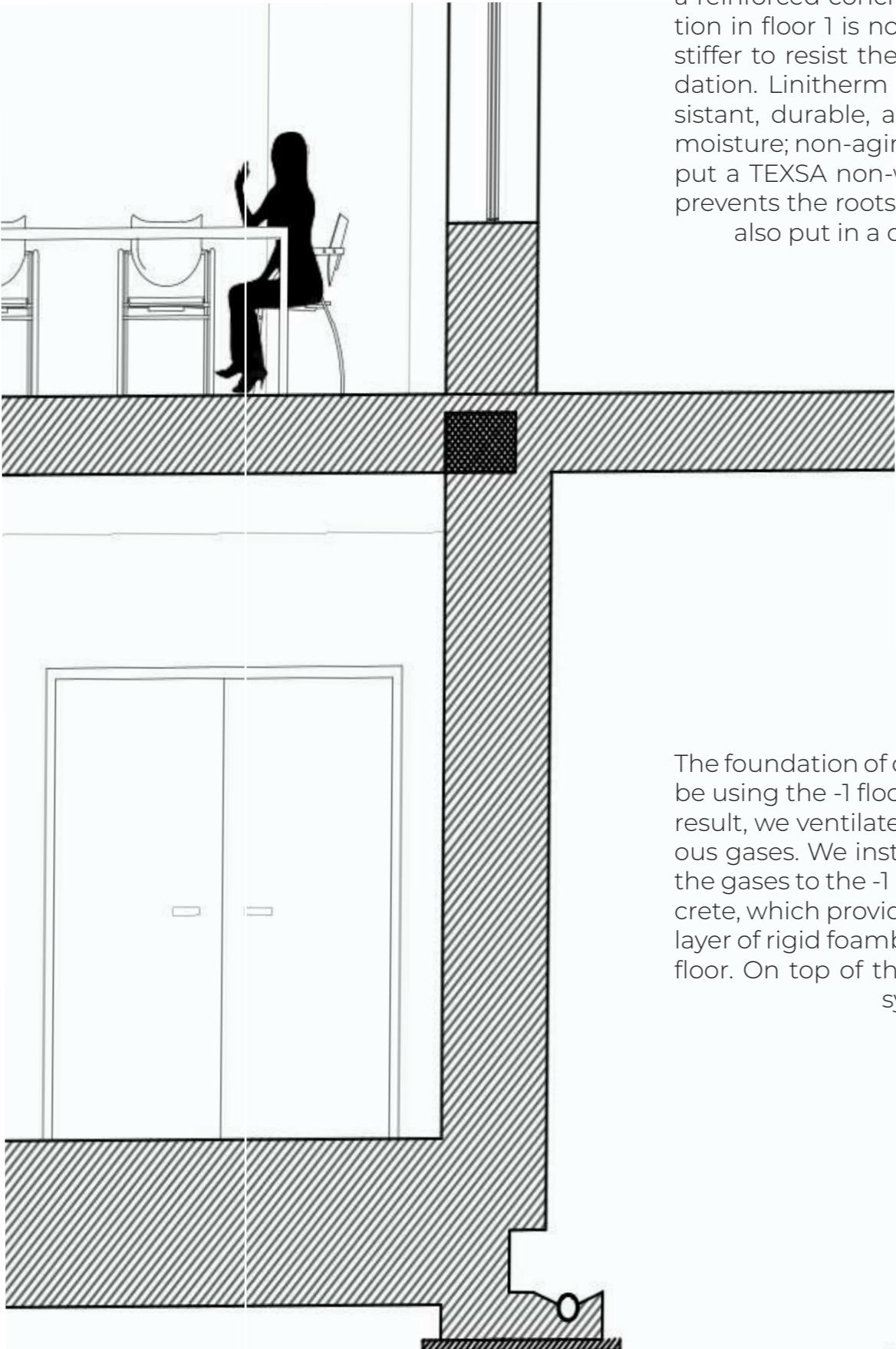
We offer entertainment spaces on the minus one level, such as a theater, television, and table pool room. Because the rooms lack kitchens, we have two open cafeterias/kitchens on this floor. According to Dorota Mantey's research, people who use local services and restaurants have a stronger attachment to the neighborhood (Mantey, "The Role of Public Spaces in Creating Place Attachment (Example of Zaczise, Warsaw Housing Estate)"). In more remote areas, service rooms can also be found on the minus one. The second courtyard is located on this floor. To contribute to the area's greenery, we built a small garden in the center and arranged seating places around it for residents to enjoy the outdoors and socialize.



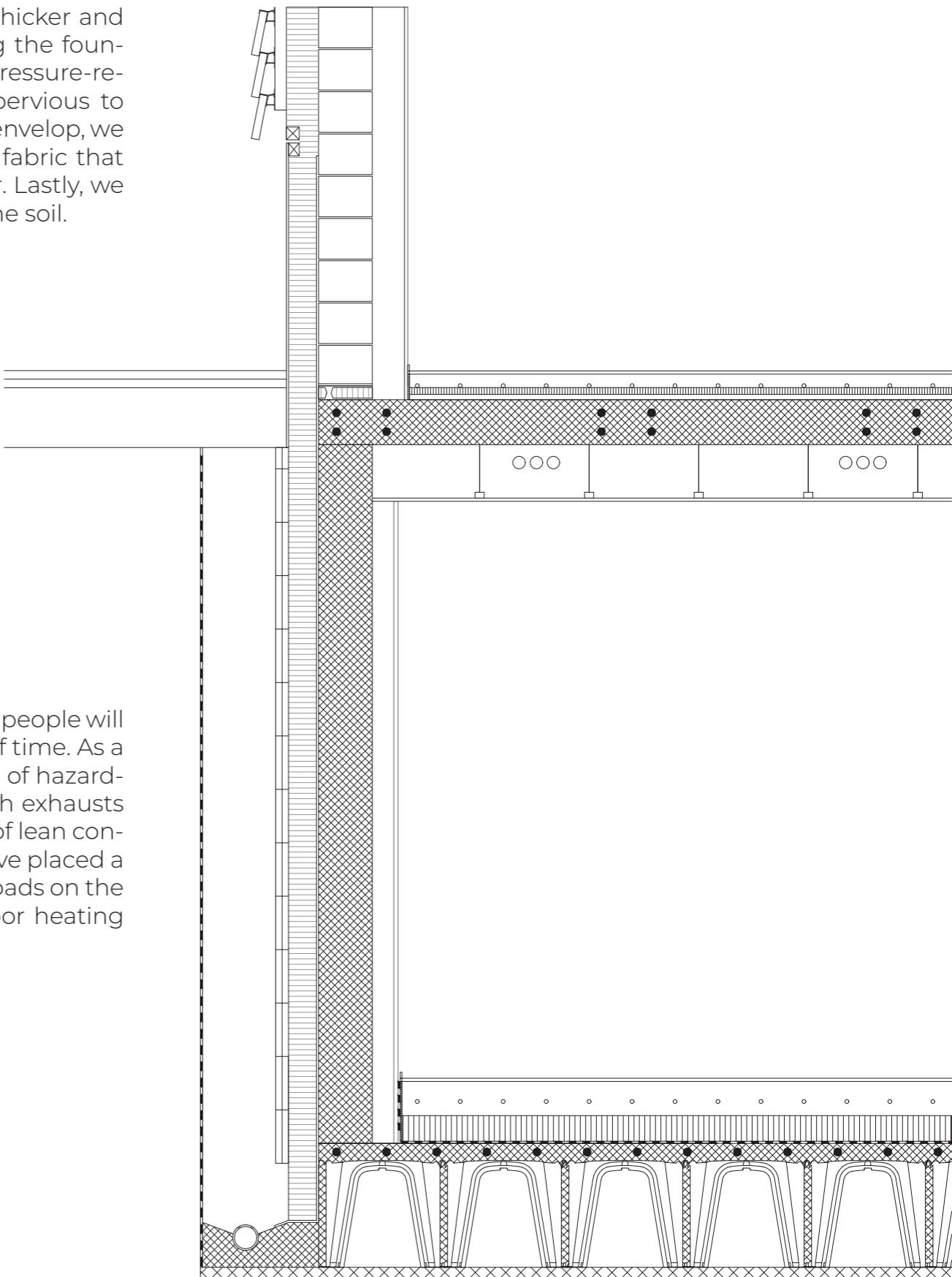
The relationship between the floors may be noticed in this section. The balcony gap on the entry floor in the middle of the courtyard generates contact between the entrance and the minus-one story. People may enjoy the down-stairs garden while they are in the entry area. The tree on the left also adds a sense of nature and greenery to the entrance floor because it extends over the floor. All of the corridors on the top levels face the courtyard, allowing residents to enjoy the scenery while interacting with others in this semiprivate space. The majority of the social spaces, as seen in the section, are located on the last two bottom floors.



In our project, the first floor is used as a recreational space, kitchen, and dining area. As a result, we had to design the walls, foundation, and floor of the minus one accordingly. For instance, instead of the brick layer, we have a reinforced concrete layer connected to the plinth base. Also the insulation in floor 1 is not the same as that in the upper floors; it is thicker and stiffer to resist the pressure coming from the soil surrounding the foundation. Linitherm Pal rigid foam insulation was chosen. It is pressure-resistant, durable, and permanently temperature-resistant; impervious to moisture; non-aging; and it does not rot. At the last layer of the envelop, we put a TEXSA non-woven geotextile mat made from polyester fabric that prevents the roots of the trees from interfering with the -1 floor. Lastly, we also put in a drainage pipe to collect the excess water in the soil.

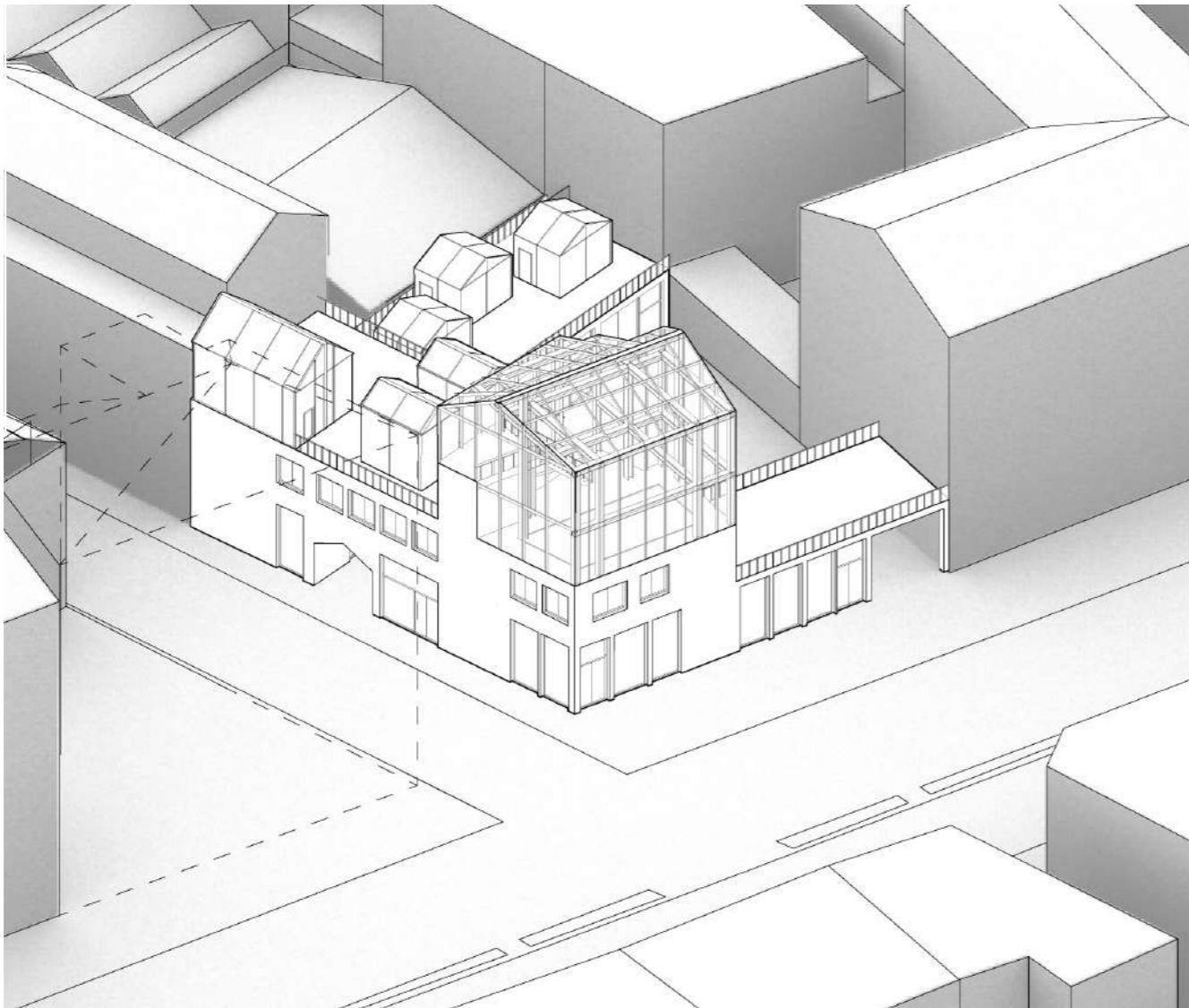


The foundation of our project is also designed with the idea that people will be using the -1 floor on a regular basis for an extended period of time. As a result, we ventilated the floor slab to prevent the accumulation of hazardous gases. We installed the IGLU system in the floor slab, which exhausts the gases to the -1 level open area. The IGLUs lay on a thin layer of lean concrete, which provides a level surface. On top of the IGLUs, we have placed a layer of rigid foamboard insulation, as it needs to resist the live loads on the floor. On top of the screed is the Europlus-Silentium underfloor heating system with insulation under the pipes.





As demonstrated in Dorota Mantey's report, accessible public places may be successfully replaced with quasi-public areas. Not only may publicly owned sites serve as public spaces, but quasi-public areas can also allow people to assemble and create local social life. In our project, besides having only the courtyard or garden, we created quasi-public spaces like the cafe, open study space, lobby, library, and semi-public corridors where people can interact (Mantey, "The Role of Public Spaces in Creating Place Attachment (Example of Zacisze, Warsaw Housing Estate)"). As Lefebvre states, space is more than just a natural, material blank waiting to be filled. It is a product of society. We attempted to create options for transforming our structure into a more compassionate, accessible, and liveable social place and tried to use the voids in favor of the public (Zieleniec, "Lefebvre's Politics of Space: Planning the Urban as Oeuvre").



02: Mercato Gorla

Studio: Architectural Design Studio 2 a.y. 2020/2021

Professors: Cassandra Cozza, Virginio Quaglini,  
Eleonora Bruschi, Stefano Sartorio, Davide Giuseppe Vizzini

Group members: Leyla Dilmen, Marina Alonso Martínez,  
Tadas Liudvinavicius, İrem Erpolat

Location: Viale Monza, Milano (MI)

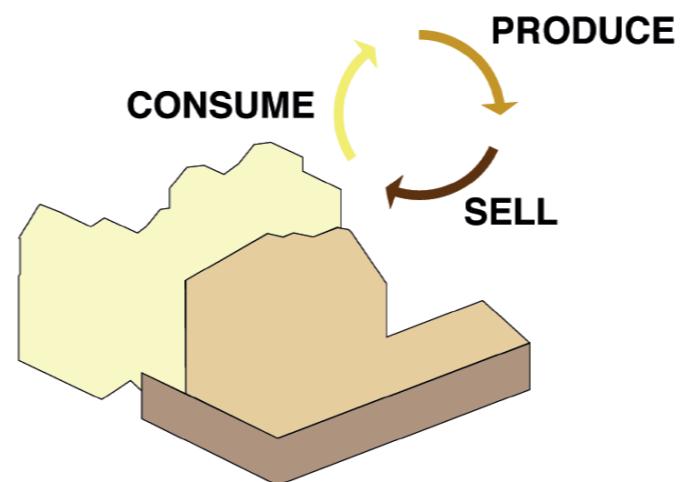
**Project Description:** The goal of this project was to create a public complex at the place where Mercato Gorla is situated today. The Mercato Gorla would be torn down, and we needed to create the building from zero. The structure needed to be welcoming and attracted since it's on the main road at Viale Monza. Our building's main goals are to give the people of Gorla a safe, warm, free space that they can spend time in and enjoy. We intended to give people the ability to socialize in entirely or partially public settings while still giving them solitude in private study rooms.

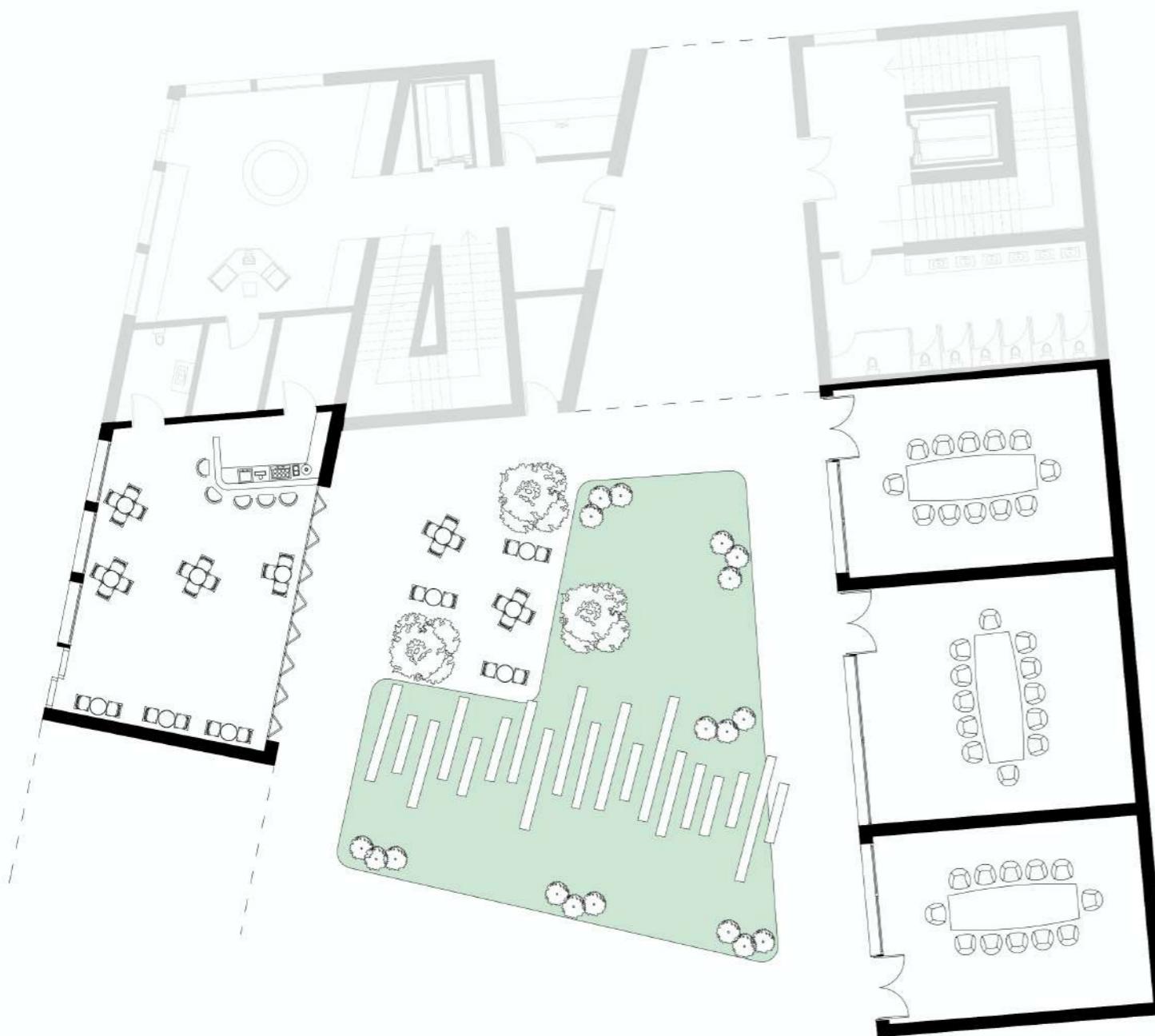


In our project, we started by analyzing the neighborhood of Mercato Gorla by aspects, and detected the territorial fragilities that need to be considered and resolved in our design. Our project's main goal is to provide a place for the public where people can gather and meet, as well as a study space, while also increasing the greenery. According to our analysis, the main vulnerabilities in the area are the lack of green and public parks and gathering spaces.

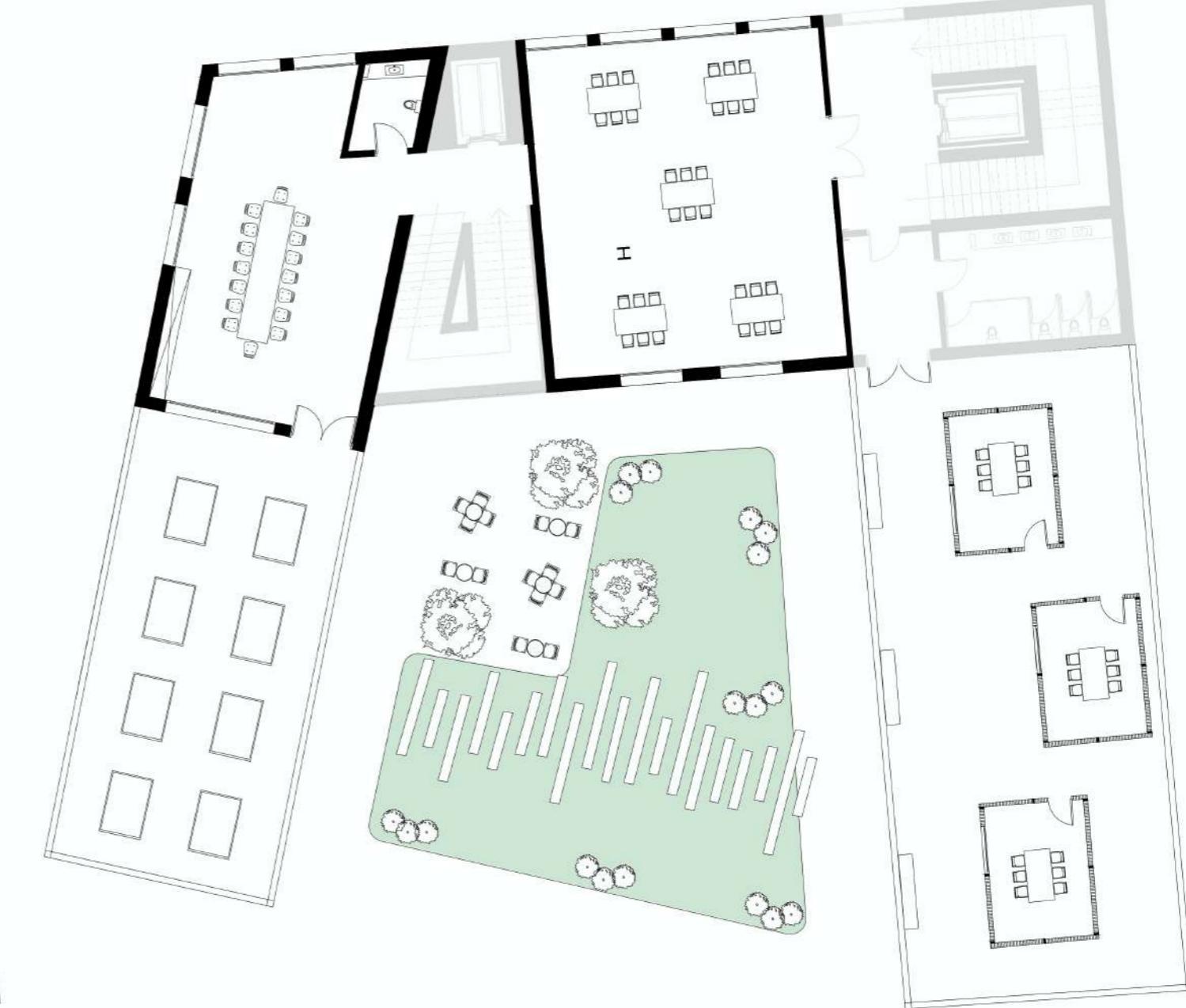
Also, there are many schools, but there are few and small libraries that are present, resulting in the need for space for people to study and meet to spend time together.

During the design of our project, we wanted to create a cycle. The cycle consists of production, consuming, and selling parts.



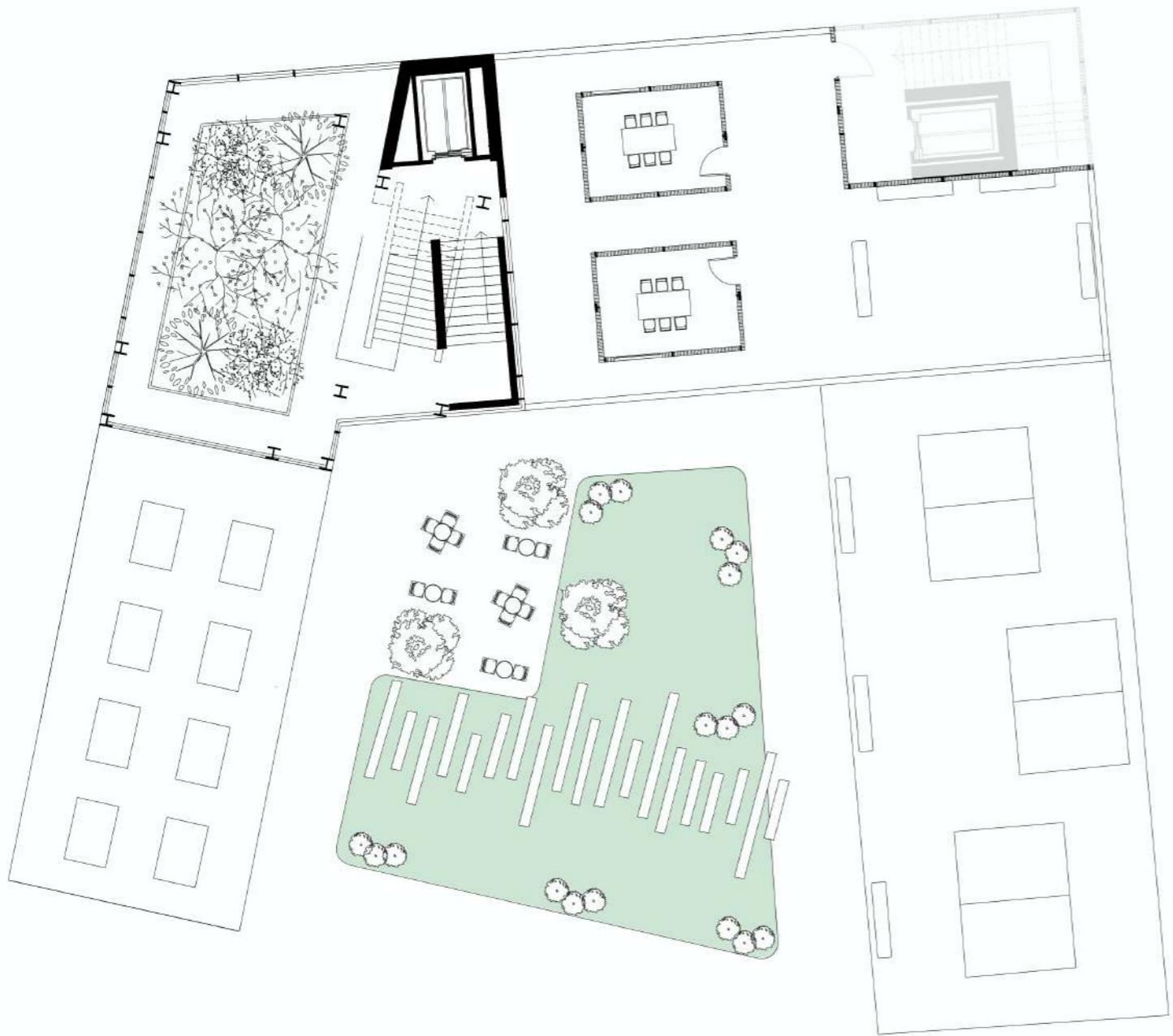


Ground Floor Plan

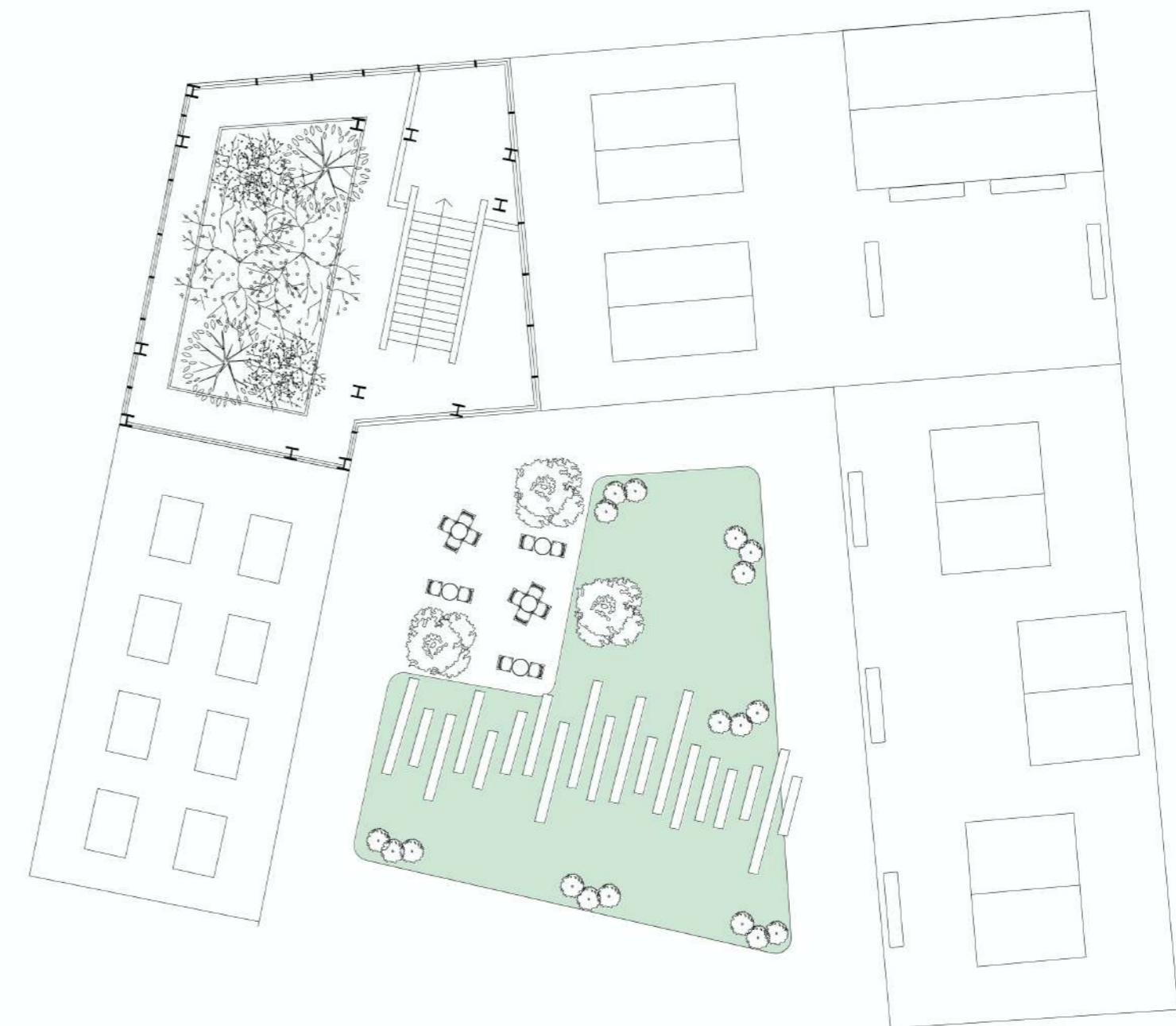


1st Floor Plan

In the consumption part, we have public study spaces on the first floor and private study rooms on the second and first floors. On the east part of the site, there are workshops. Spaces that are also consumed. Workshops are for the public to gather and practice arts and crafts like pottery and painting. At the same time, the space can be used for other kinds of presentations to be done, and it could also be useful for crowded meetings. In the selling part of the cycle, we have the café and the flower shop on the ground floor. The café is on the side of Viale Monza, which would attract the most people. The flower shop sells both flowers and seeds and plants to the general public. People can go and plant them in the community garden. Also on the ground floor, we have a fully public garden in the middle, accessible to everyone, to enjoy, hang out, and socialize.



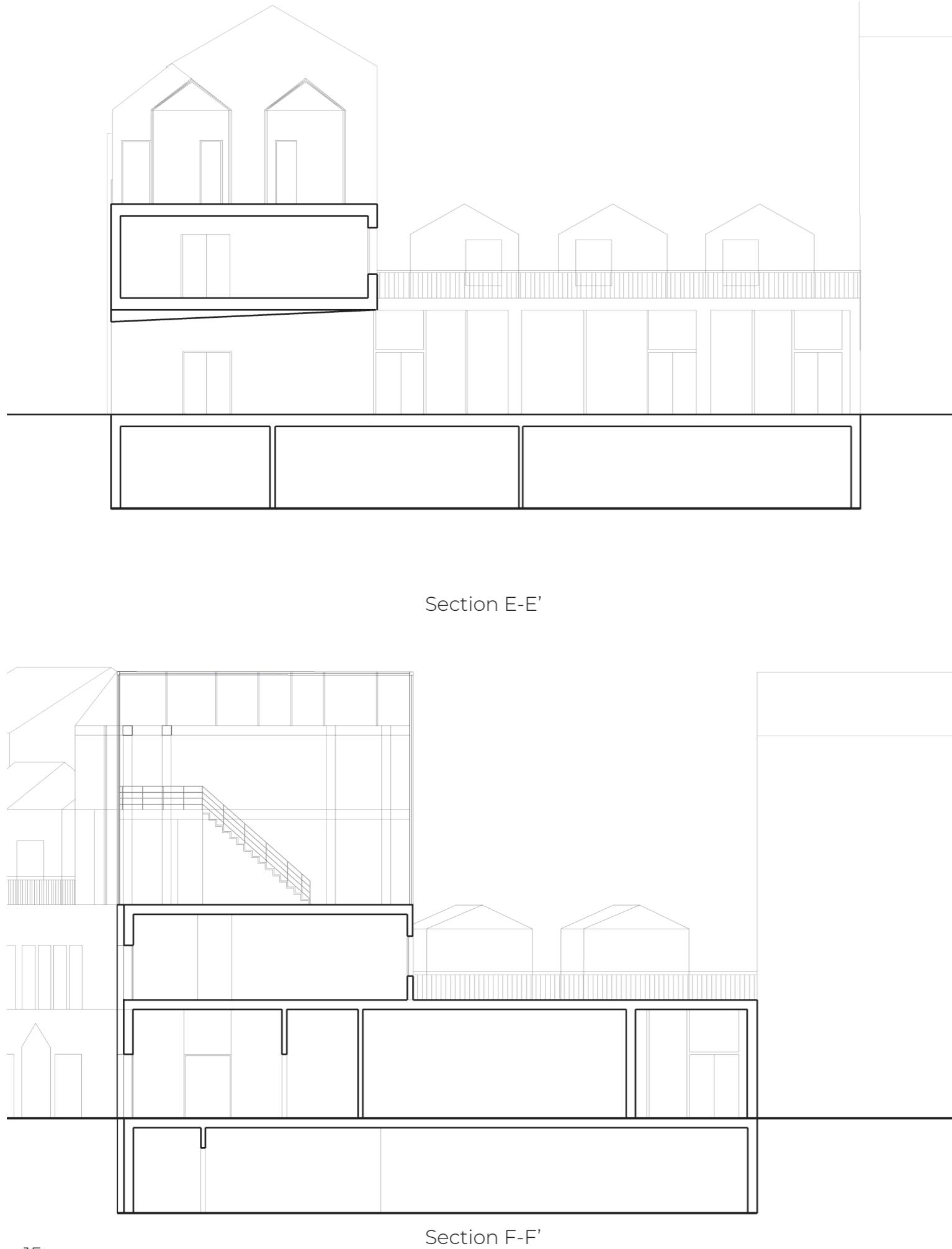
2nd Floor Plan



3rd Floor Plan

The production part is positioned on the west side of the site, which receives the most light, avoiding the surrounding built space of the site. On our production site, we included roof gardens and a rooftop greenhouse. We believed that community gardens could be a chance for the public to blend with nature and raise awareness about the importance of environmental protection.

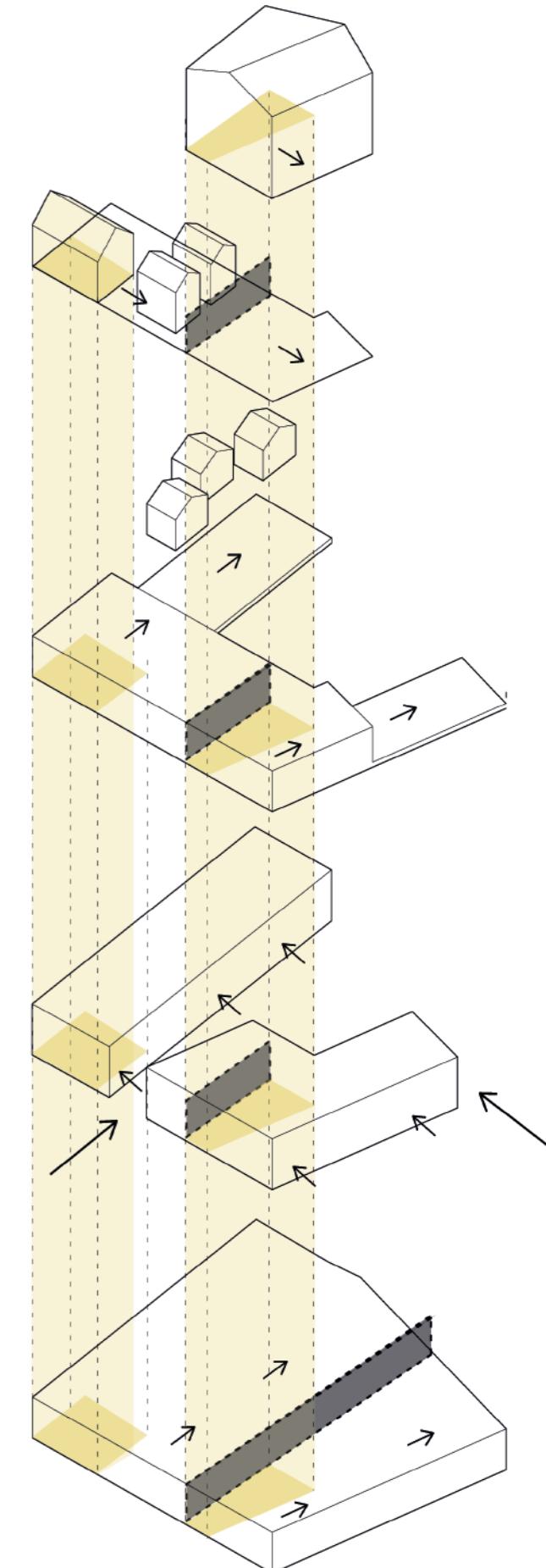
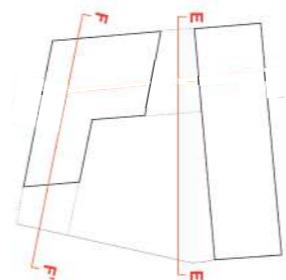
Community cultivation areas are also an opportunity for people to socialize and interact. There are spaces for people to gather what they harvested, learn more about gardening, and educate children about cultivating. Additionally, to solve the greenery problem, we designed a large garden on the ground floor that is easily accessible to everyone and useful for the visitors to relax, hang out, and enjoy.



Section E-E'

Section F-F'

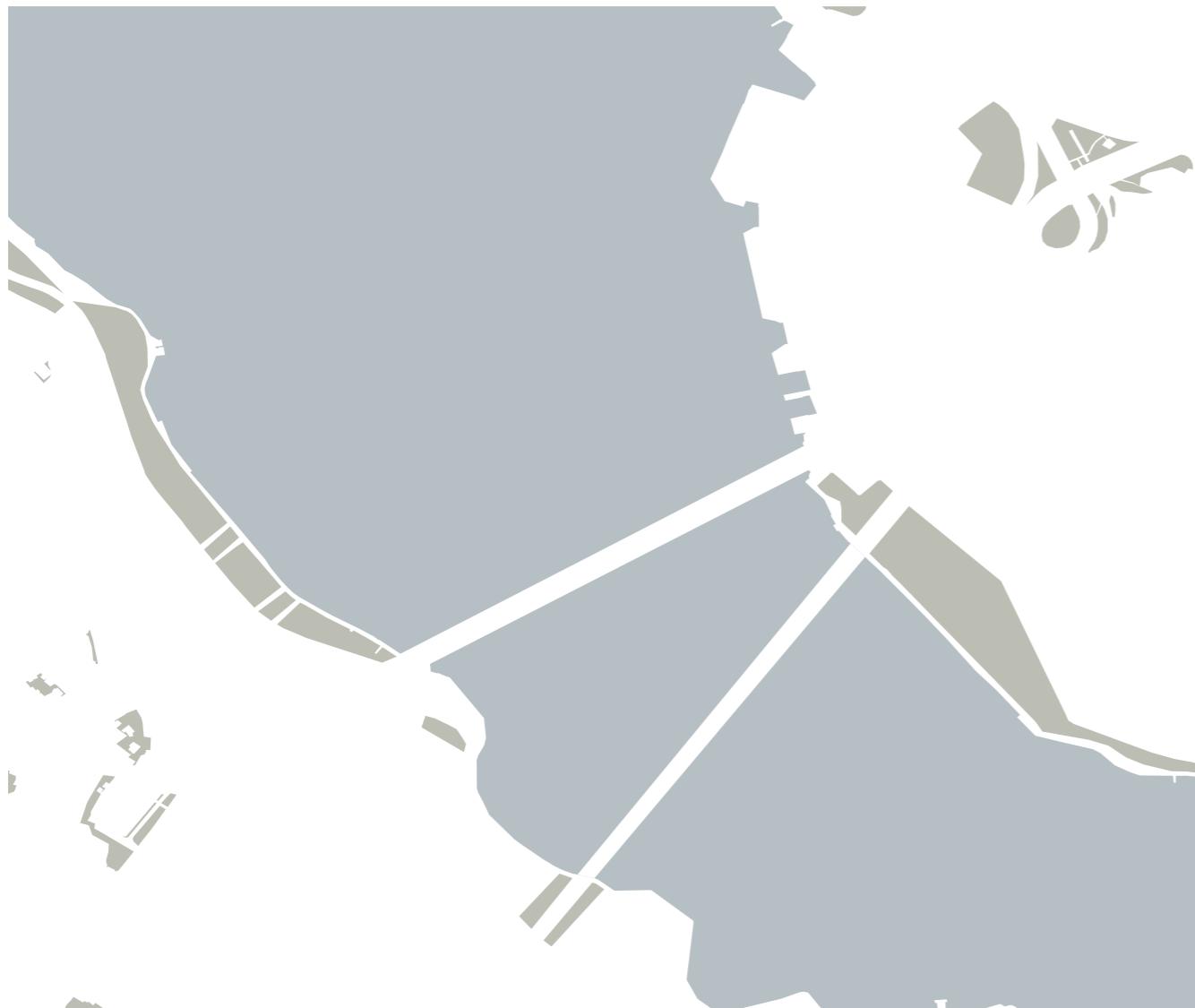
The most important part of the project is that it has both public, semi-public, and private spaces. We built the circulation in this manner in order to effectively develop these distinct places inside the same complex. We developed two sets of stairs and elevators for the internal circulation. The staircases on the project's interior lead to the private and semi-private study rooms. Although the public cultivation level and the greenhouse are accessible through the stairs and elevator on the Viale Monza side, The public stairs may be accessed through the café and flower store, both of which are easily accessible from the street. The public and private elements are also separated. There is no access between them; they can only be reached by their own set of stairs and elevators. The structure has two primary entrances on Viale Monza and Via Monte S. Gabriele. Both gates lead to the large garden in the center, which is one of the main gathering spaces in the project. Since the Via Monte entrance is on a more exclusive street, that is where the private stairs and elevator are located. Since Viale Monza is a more accessible road, the public stairs and elevator are located there.





The greenery is essential to our project since the lack of it in the area is one of the main fragilities that we found at the beginning. That is why we decided to create a large garden accessible to all. Cities must rethink their food model, bring crops closer to their urban life, and move towards a more local consumption formula that is less dependent on tools imposed by the global industry. As a solution, we thought of a circular economy that provides an agricultural terrace with ecological management that serves as agricultural education for future urban farmers.

According to the research of Sarah J. Knight, Colin J. McClean, and Piran C.L. White, natural settings play an important role in determining human well-being. This may be especially beneficial to the well-being of people living in cities. Parks, woodlands, and domestic gardens are examples of urban green spaces. These natural environments have been linked to a variety of benefits, including improved self-esteem and mood, psychological restoration, lower levels of self-reported depression, anxiety, and stress, and higher levels of subjective well-being. (Knight, McClean, and White, "The Importance of Ecological Quality of Public Green and Blue Spaces for Subjective Well-Being."). In the project, our aim was to create a qualitative natural environment in the city where people could go when they wanted to escape from the dense urban life. At the same time, the public can socialize, exchange knowledge, and interact in this natural environment.



03: Haliç Shipyard

Studio: Final Design Workshop a.y. 2021/2022

Professors: Antonella Contin, Paolo Scrivano,  
Edward Duncan Wall, Valentina Galiulo, Federico Mistò, Stefano Sanna,  
Andrea Ardizzi

Group members: Leyla Dilmen, Celine Speetzen, İrem Erpolat

Location: Haliç, Istanbul, Turkey

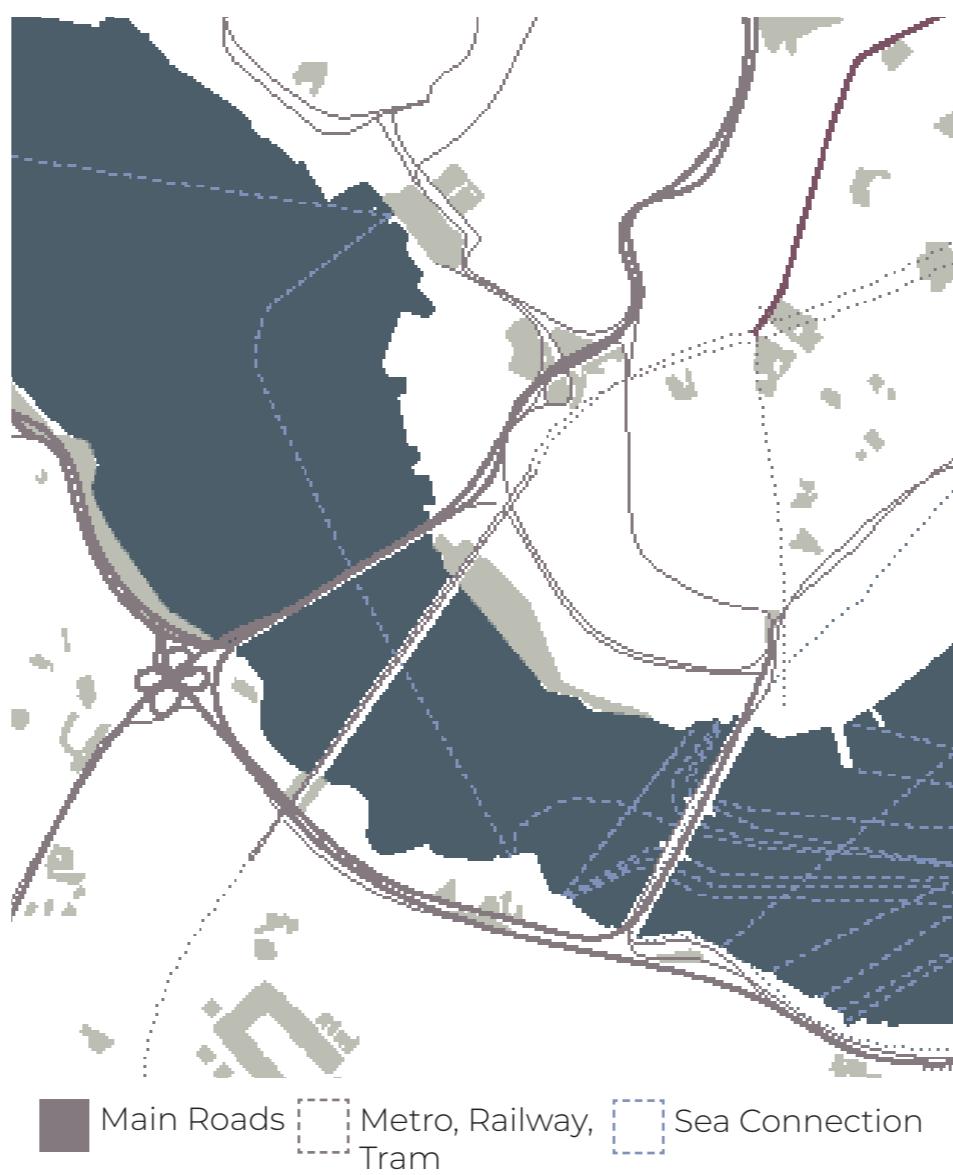
Project Description: The goal of this project was to revitalize the old shipyard at Haliç, Istanbul, and turn the area into a functional space. The area is fairly large and located in an important portion of Istanbul. We needed to pay attention to the city's fabric as well as the area's link to the city and its environment. To accomplish this, we developed a mixed space with highly public, semi-public, and private parts. For the public, our goal was to create a friendly environment where people could relax, socialize, and spend quality time. Everyone may enjoy the seaside, park, museum, movie, restaurant, exhibition, library, and amphitheater. The hotel and the condos are the private component of our project to bring more visitors to the region.

Our analysis of the metropolitan area of Istanbul started off with several problem identifications. Through the project process, our understanding of these problems and how they might be changed with architecture has transformed.

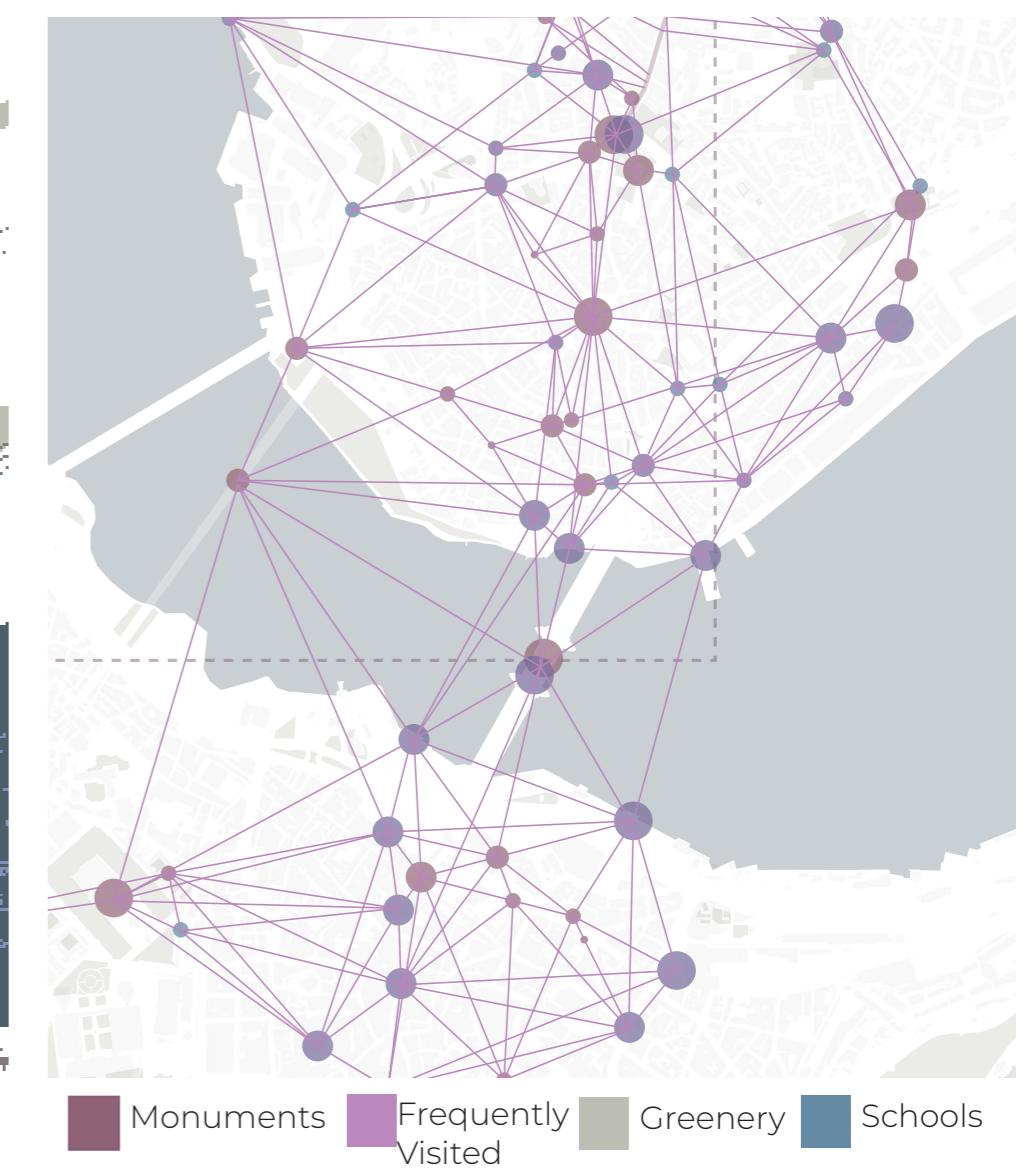
Pedestrian Accessibility Map



Transportation Map



Frequently Visited Places Map



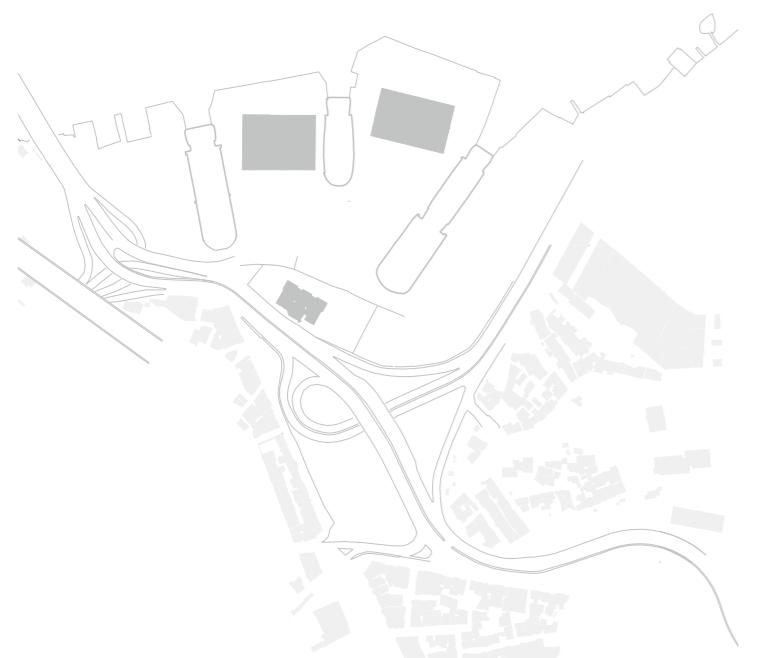
In the effort of trying to understand how the space works for the pedestrian user, we have realized that the area has very limited walking areas. The ones that are there are usually dominated by the car traffic, making the pedestrians a secondary user, which was something we saw as a problem. In our project, we wanted to create a space where people could walk freely.

To better understand how the area was connected to the main highway infrastructure, a map was drawn. The accessible and non-accessible areas were discovered, and during the design phase of the area we understood where to create our entrances, roads, and paths.

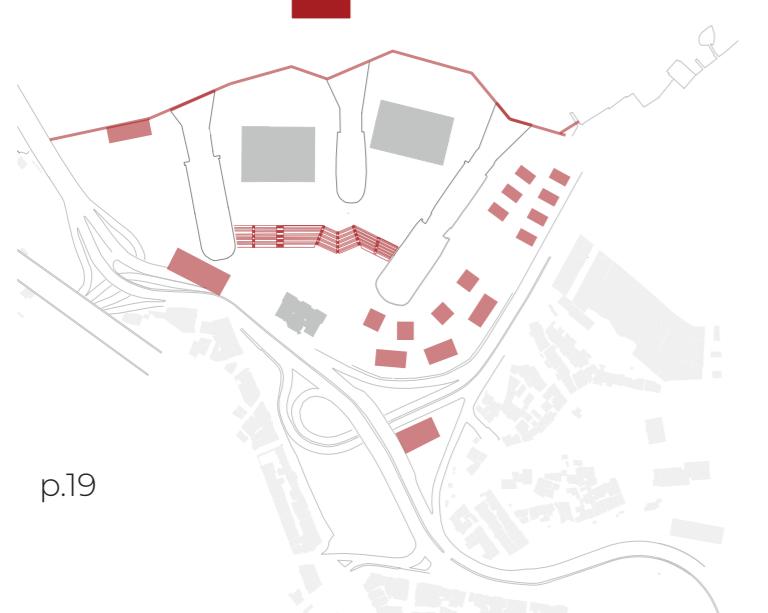
According to the significance levels and modes of connection, a network graphic between the monuments and frequently visited locations were drawn to better understand what our site requires as a public function and what we can add to the city and to the region's people.



Existing Blocks



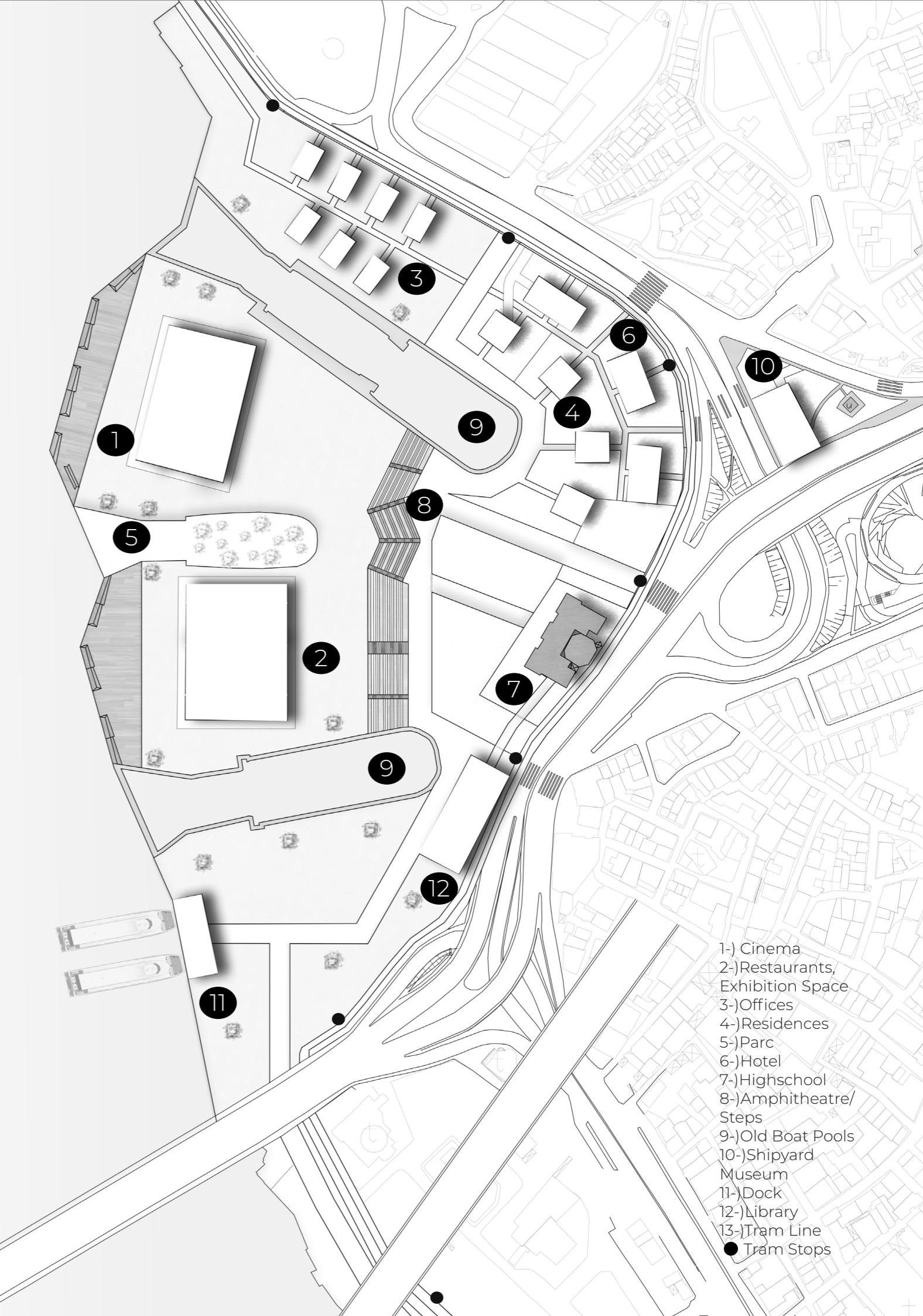
Preserved Blocks

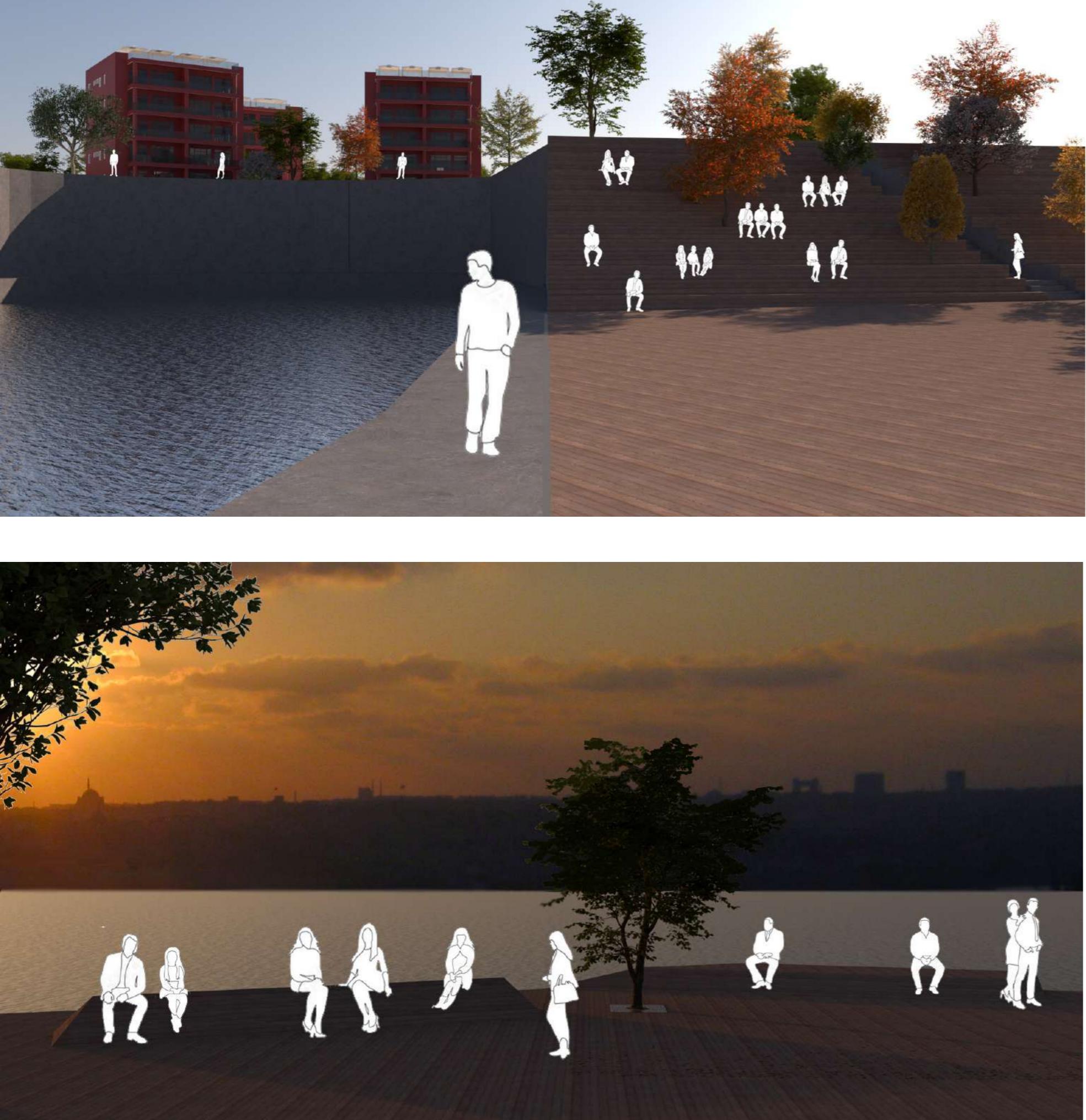


New Blocks

Considering the memory and the historic value of the two industrial buildings and the school building in the middle, we decided to take them as our reference points for alignment. The presence of these buildings and the site being used as a shipbuilding area have been in the memories of many generations living in Istanbul. Thus, to reference the memory of the boats, we decided to keep their pools, which were adjacent to our conservation area.

While designing the coast, we thought about the three different approaches one can take on a waterfront: retreating, defending, and attacking. We then decided to have a combination of two. We used an attack strategy to control the waterfront's border; however, in order to give the sea room to move, we chose to liberate the two larger islands, boat spaces and retreats. We decided to build a tram line and a pedestrian network to provide a car-free connection between the two ports, Kasımpaşa and Karaköy, and the metro stop *işhane*. The pedestrian network is in relation to the industrial buildings in order to make them easily accessible, and it moves in between three different levels of topography.





"The city is itself an oeuvre," a feature that contrasts with the irreversible tendency towards money and commerce, exchange, and products... They do not only contain monuments and institutional headquarters but also spaces appropriated for entertainment, parades, promenades, "celebrations" (Lefebvre, 1996, p. 66)

(Zieleniec, "Lefebvre's Politics of Space: Planning the Urban as Oeuvre").

Connecting with the city fabric and allowing people to own the space and feel a sense of ownership belonging, we decided to create a mixed-use space on the northern border of the site. The office and store buildings are connected by a central spine road, and they are permeable from both sides, which allows for free movement. The hotels and residences, on the other hand, while following the same aspect of being open from both sides, are selectively permeable. only to those who reside there. There is an amphitheater located on the axis of the middle boat pond, which is proposed to be a massive vase for artificial greenery. There is a series of small terraces that connect the connective pedestrian road and the cultural space "island" in the middle. in order to establish an active connection with the Şişhane metro stop. We decided to create a museum building that will also act as a vertical connection between the infrastructure level and the site entrance level. The museum building is also connected to the parking lot project done in 2014 with an already-existing tunnel underneath the infrastructure. From our architectural history research, we have understood that the combination of commercial and cultural spaces that are well connected with the rest of the city, makes the space live and convey a sense of belonging to anyone who goes there. The connection to the city is achieved through the pedestrian and tramline connection as well as the sea connection with the new proposed dock on the south part of the site. This connection will also be close to the metro bridge, thus creating a node of different transportation stops on our site. The cultural creation space and the residences, on the other hand, will be for the memory of the people visiting the space.

## Conclusion

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In recent years, the development of public spaces has gained significant attention from urban planners, architects, and designers. The importance of public spaces in creating healthy and vibrant communities cannot be overstated. They provide a gathering place for people to engage in a range of social, cultural, and recreational activities, strengthening the bonds within communities and fostering a sense of place. One of the main ambitions of the projects Olympic Village, Mercato Gorla, and Haliç Shipyard aimed to create healthy, functional, and accessible public spaces. The benefits of public spaces are multifaceted. They offer a venue for cultural events, recreational activities, and community celebrations, allowing residents to participate in events and activities that promote a sense of pride and belonging. Public spaces also create opportunities for people to interact with one another, bridging social divides and promoting social cohesion. Dorota Mantey's report, for example, mentions a study conducted in Warsaw. As a consequence, they determined that they needed to establish a network of public places that would enable them not only to spend their free time outside the home but also to engage with society. They recognized that public space fosters strong relationships with neighbors and provides opportunities to engage in public life. They realized that the uniformity and modest size of the area, as well as the physical appeal of the housing estate owing to its suburban character, would not be enough to foster a strong commitment to the land (Mantey, "The Role of Public Spaces in Creating Place Attachment (Example of Zaczise, Warsaw Housing Estate)"). In each of our projects, we tried to establish this sense of belonging and welcome. Even when we didn't have enough space to create a big public space, we designed two-floor courtyards, open study areas, cafes, entertainment rooms, museums, and libraries to gather the public's attention and encourage them to interact in various ways. Moreover, public spaces offer a range of health benefits. Access to green spaces and active play areas promotes physical activity and can improve mental health outcomes. Public spaces that prioritize sustainable design and eco-friendly practices can also help improve air and water quality, providing a healthier living environment for residents. In the report of Sarah J. Knight, Colin J. McClean, and Piran C.L. White, they mention research done in London that investigates the importance of the ecological quality of public green and blue spaces for well-being. The results imply that the ecological quality of publicly accessible open spaces are crucial for the well-being of Greater London's inhabitants, highlighting the need for improvement of high-quality Urban green- and bluespaces (Knight, McClean, and White, "The Importance of Ecological Quality of Public Green and Blue Spaces for Subjective Well-Being"). We believe that it is critical for people's health to include healthy greenery where they can enjoy fresh air, walk, and participate in outdoor activities. In our projects, we included community gardens, courtyards, greenhouses, and walking paths to be able to implement healthy lives in our projects.

The creation of public spaces is not without its challenges. It requires a collaborative effort between various stakeholders, including local governments, community members, and private developers. The social and public areas that constitute city living as "a way of life" (Wirth, 1938) are gradually legislated, controlled, monitored, and policed. Having control over the shape, function, usage, and accessibility of public and social places is crucial because how our lives are organized, ordered, time and space regulation and control teaches us who we are and where we belong. The creation of public spaces is not a one-size-fits-all endeavor. The needs and preferences of each community are unique, requiring a tailored approach to design and development. Community engagement, participatory design, and user-focused evaluation are important strategies for ensuring public spaces meet the needs of the community. Before designing each project, we thoroughly examined the space from all angles to ensure its suitability for the area. A few of the analyses can be seen in the Haliç Shipyard project, where we analyzed the population, infrastructure, and social activities. Sustainability is also an important consideration in the development of public spaces. Incorporating sustainable design practices, such as using eco-friendly materials, implementing efficient energy systems, and creating green spaces, can help reduce the environmental impact of public spaces. In the Mercato Gorla project, we tried to implement a self-sufficient agriculture and economic system. We implemented community gardens and a greenhouse for the public to participate in the sustainability of the area. In conclusion, the development of public spaces is a crucial aspect of creating healthy and vibrant communities. Public spaces offer numerous benefits, including promoting social interaction, community engagement, and improving physical and mental health outcomes. Lefebvre saw social and public space as essential not just for healthy and humane cities but also for a genuinely democratic and inclusive urban society. It is in what he refers to as "street chaos" that change and potential—the sharing of ideas, meanings, and experiences—exemplify the best of urban experience, one that should be open and available to everyone, giving a venue for interchange, engagement, and communal existence. According to Lefebvre, the street functions as a meeting place since no other specified contacts are conceivable without it. The street is a place for children to play and learn. For him, the street is a mess. This condition keeps us active, educates us, and surprises us (Zieleniec, "Lefebvre's Politics of Space: Planning the Urban as Oeuvre"). As such, investing in the development of public spaces is critical to creating healthy, sustainable, and vibrant communities. With careful planning, collaboration, and sustainability in mind, public spaces can be designed and developed to meet the unique needs of each community, creating a lasting legacy for future generations.

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