

Architecture

# PORTFOLIO

Salome Shengelaia | Selected Work 2025-24

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# OOLONG TEA FACTORY



Year 2025 | Semester VI

Authors: Salome Shengelaia | Nodar Chagiashvili

Scale Model 1:20  
Scale Model Structural Joint 1:2

## Craft, Climate, and the Quiet Logic of Oolong.

The Oolong Tea Factory is an architectural interpretation of the tea-making process, transforming each production stage into a spatial and environmental narrative.

The building is composed of four main functional blocks that correspond to the linear sequence of Oolong tea processing. After studying the preparation techniques of different tea types, Oolong's distinctive requirement for sun-exposed withering became the central concept of the architectural logic.

Because Oolong requires periodic exposure to sunlight, light courts are inserted between the blocks, forming open-air drying courtyards that choreograph the movement of workers, the tea leaves, and daylight. This creates a continuous narrative in which architecture mirrors the transformation of the tea itself.

Location: Naruja village

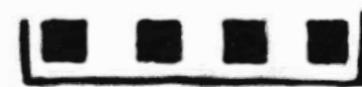
Typology: Industrial

Size: 660 m<sup>2</sup>

Materiality reinforces the project's environmental logic. The building is entirely wooden, using natural timber treated with the Yakisugi technique for durability. Polycarbonate panels modulate natural light, while cross-ventilation, a double-layer ventilated roof, and adjustable brise-soleil systems ensure passive climate control.

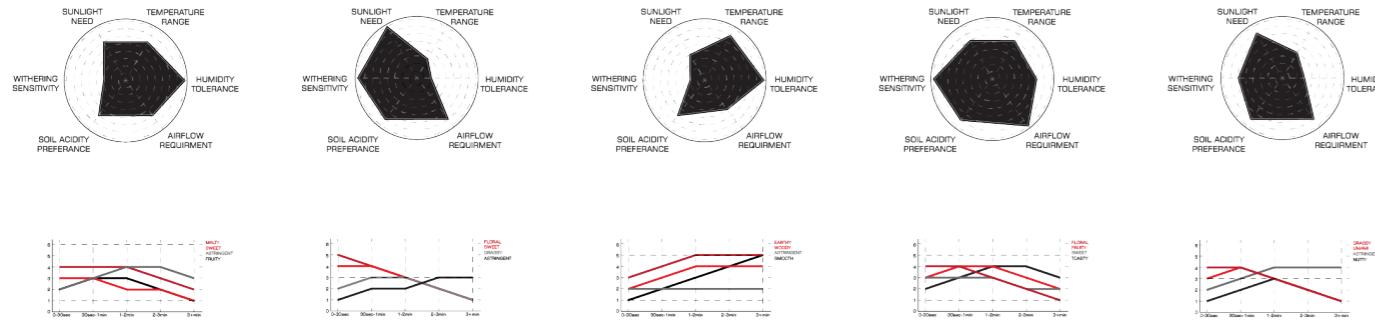
Although the four blocks share identical architectural geometry, the adjustable facade and interior atmospheric conditions create a flexible, process-driven environment tailored to each stage of tea production.

Overall, the factory acts as both a production facility and an environmental machine - an architectural response to the temporal, climatic, and spatial demands of Oolong tea making.



# Tea Brewing Methods

Tea types and temperature-based brewing methods that shaped the project's interior layout.



Black Tea



White Tea



Pu-erh Tea



Oolong Tea



Green Tea



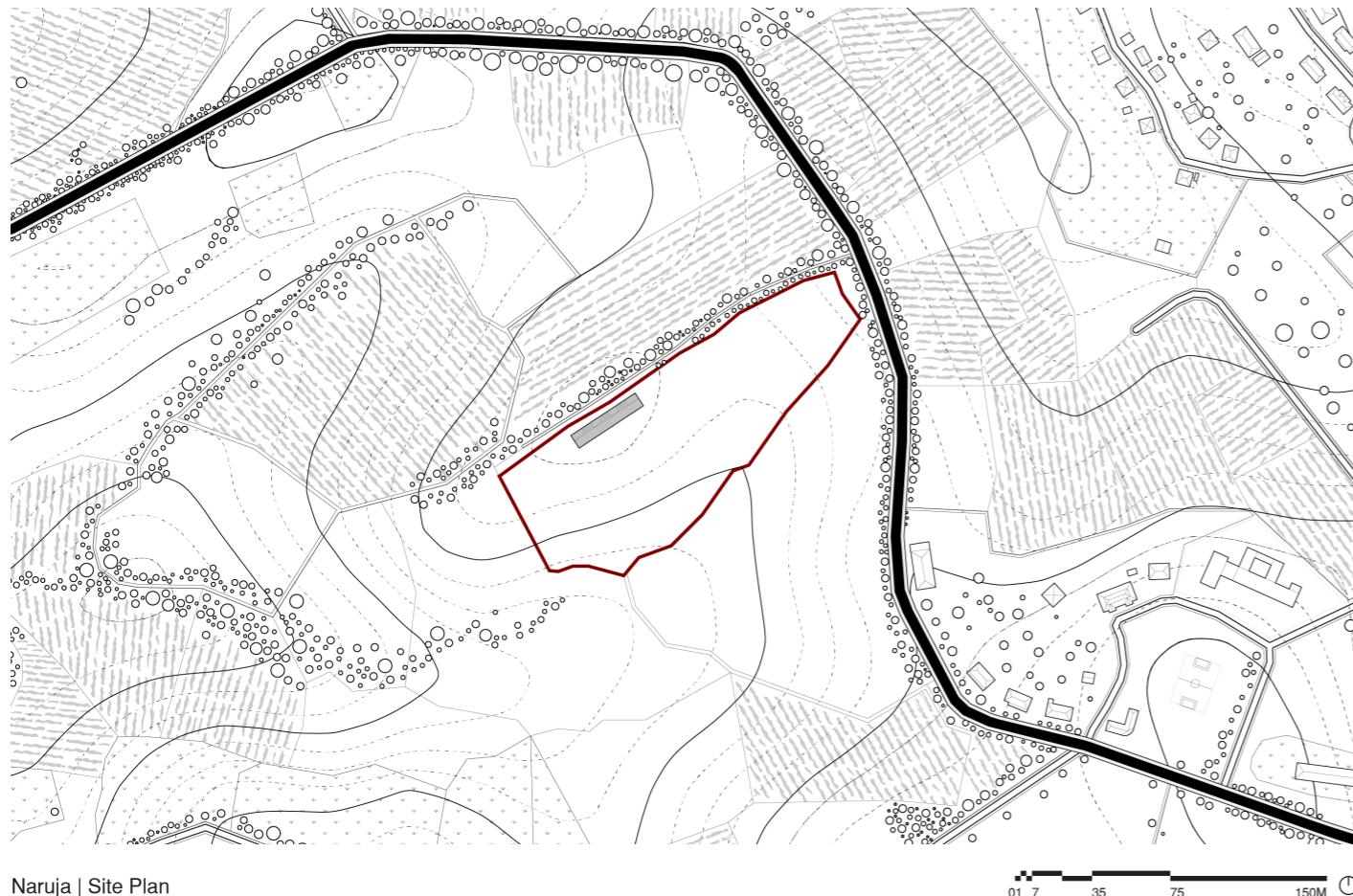
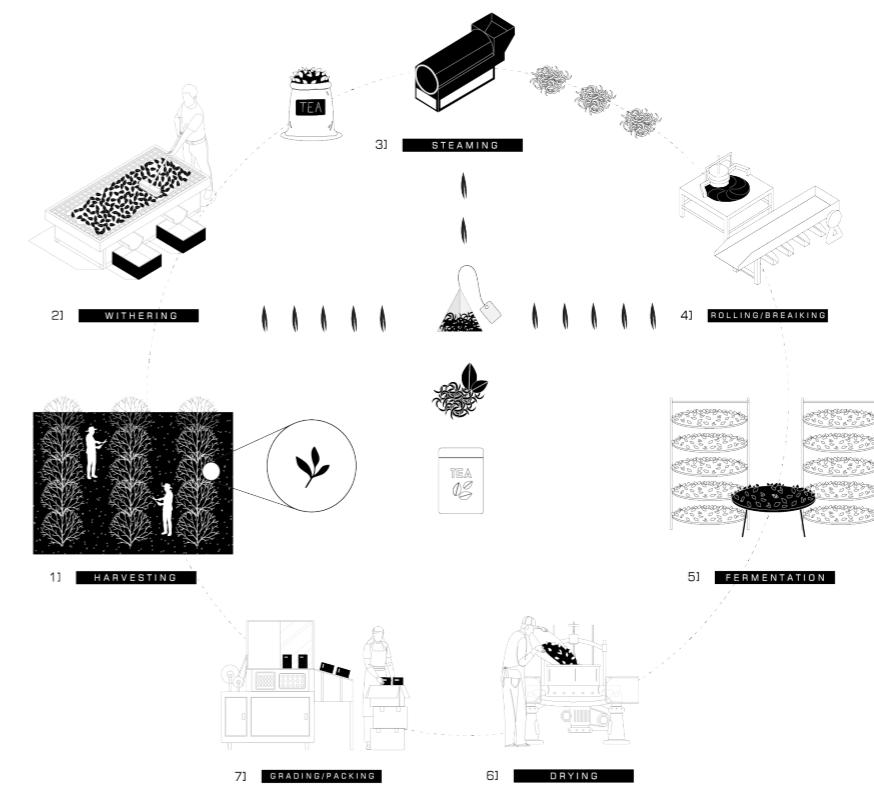
1) Tea leaves are hand-picked from the tea bushes, usually selecting the youngest, most tender leaf buds for the highest quality tea.

2) Fresh leaves are spread out to reduce moisture. This softens the leaves, making them flexible for the next stages.

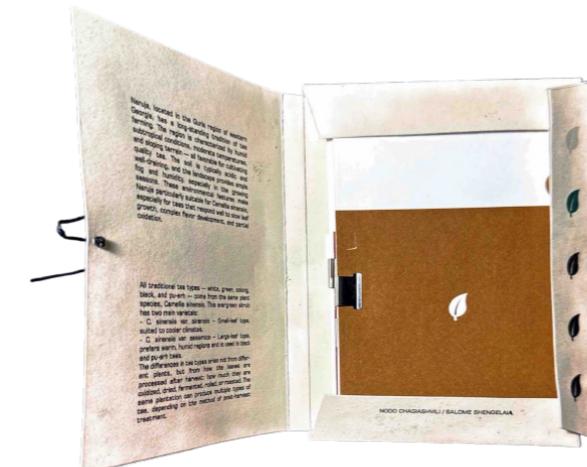
3) Leaves are briefly steamed (or pan-heated) to stop oxidation. This preserves the green color and fresh, grassy aroma.

4) The softened leaves are rolled to break their cell walls. This releases natural juices and shapes the leaves. 5) Rolled leaves are left to rest so enzymes react with oxygen.

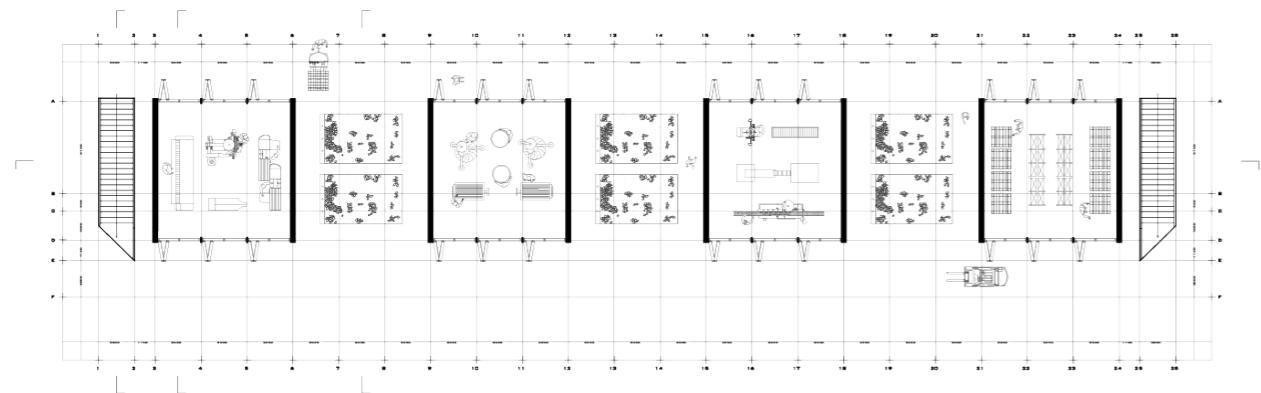
6) The oxidized leaves are heated to remove remaining moisture. This locks in flavor and ensures long shelf life. 7) Dried tea leaves are sorted by size and quality, then packed for distribution.



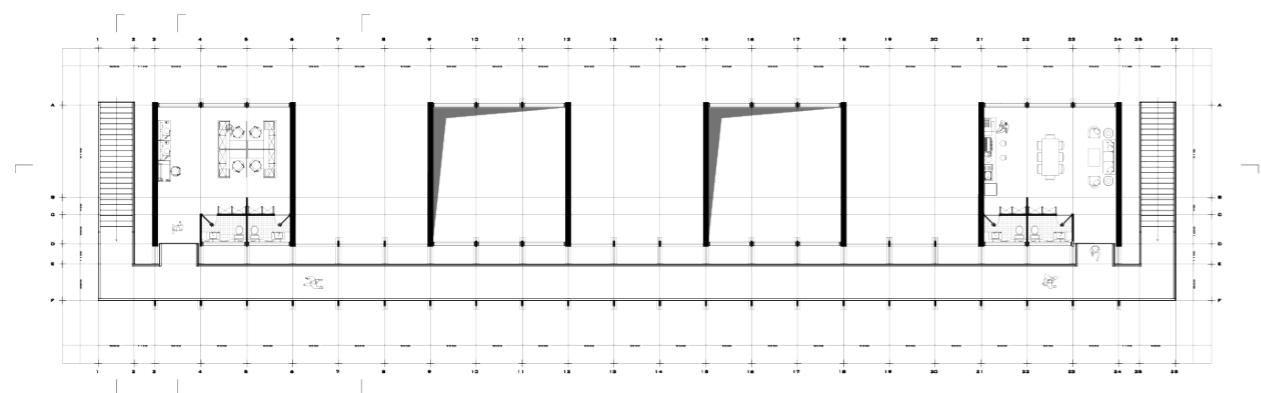
Naruja | Site Plan



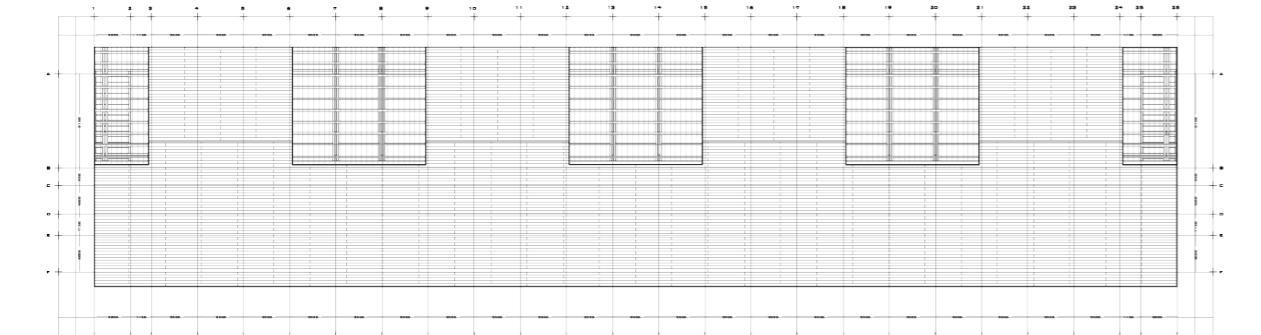
# Concept



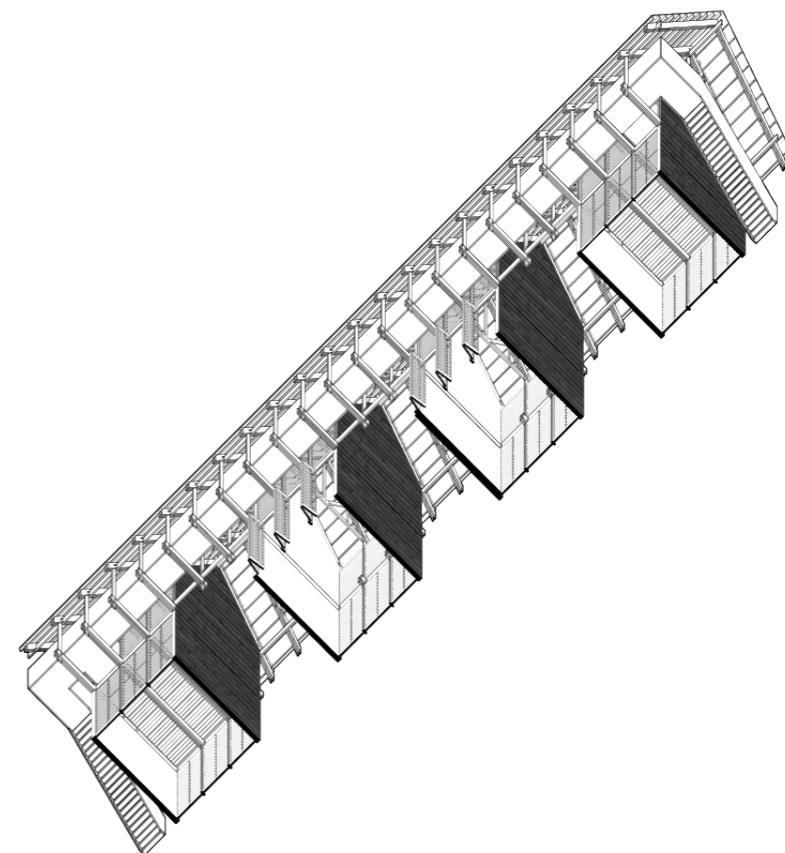
Ground Floor Plan

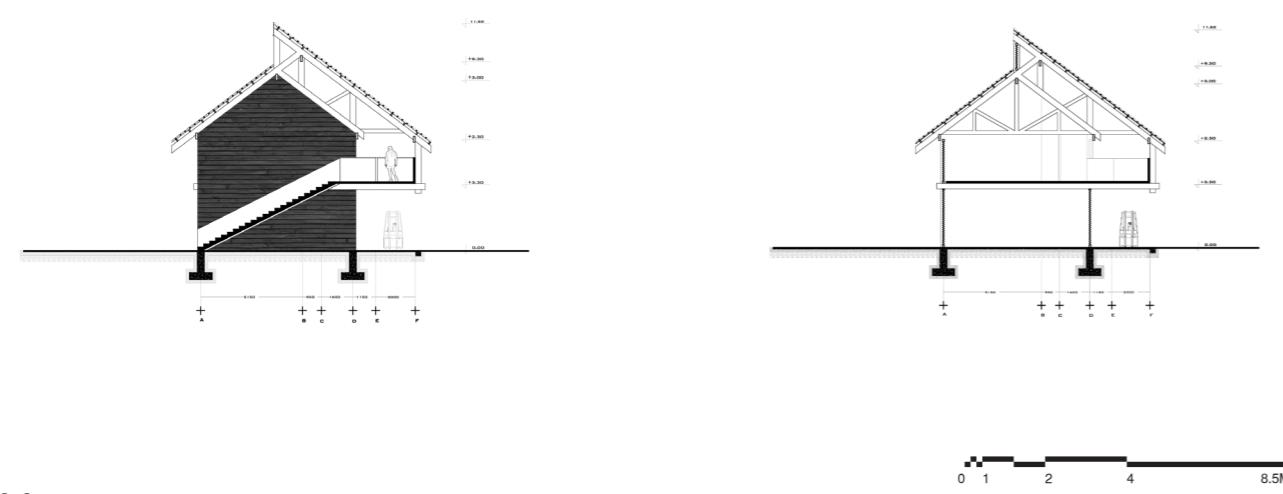
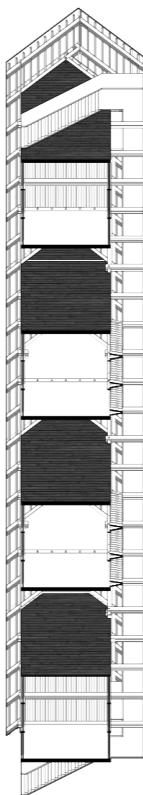
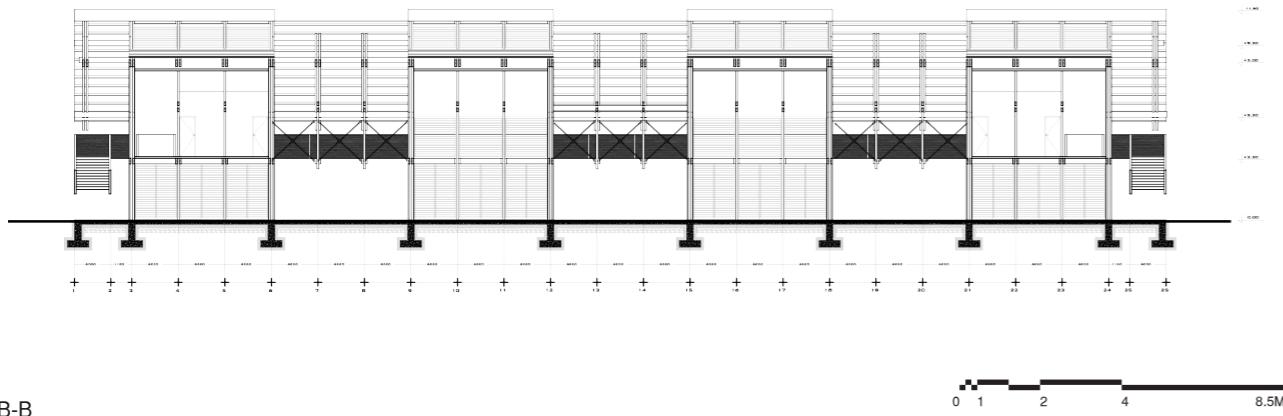
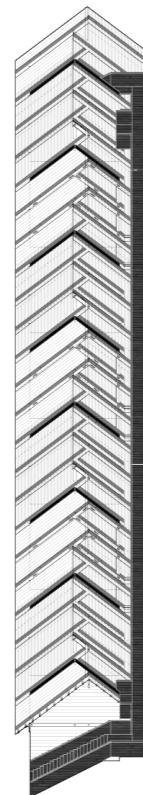
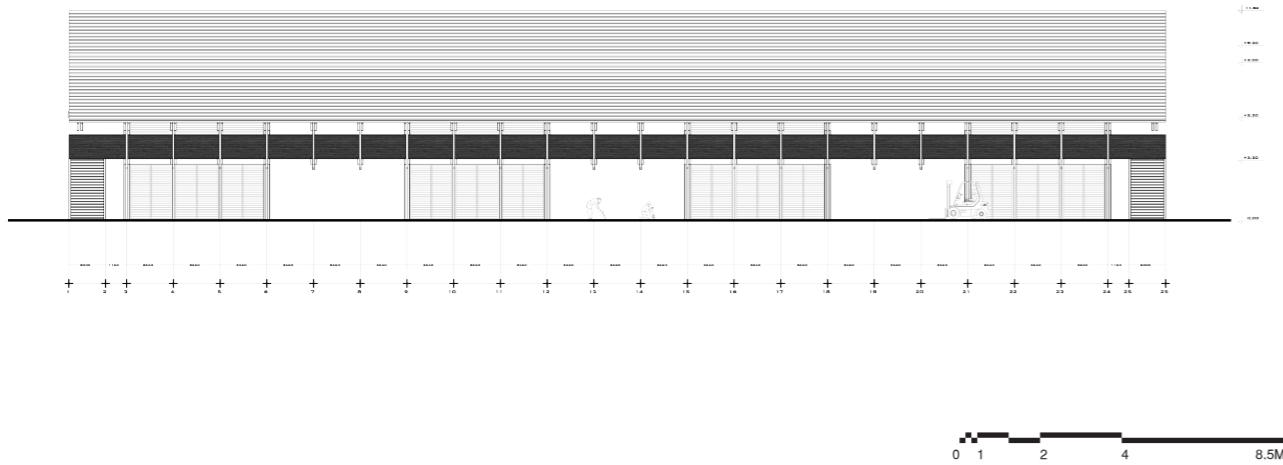


Second Floor Plan



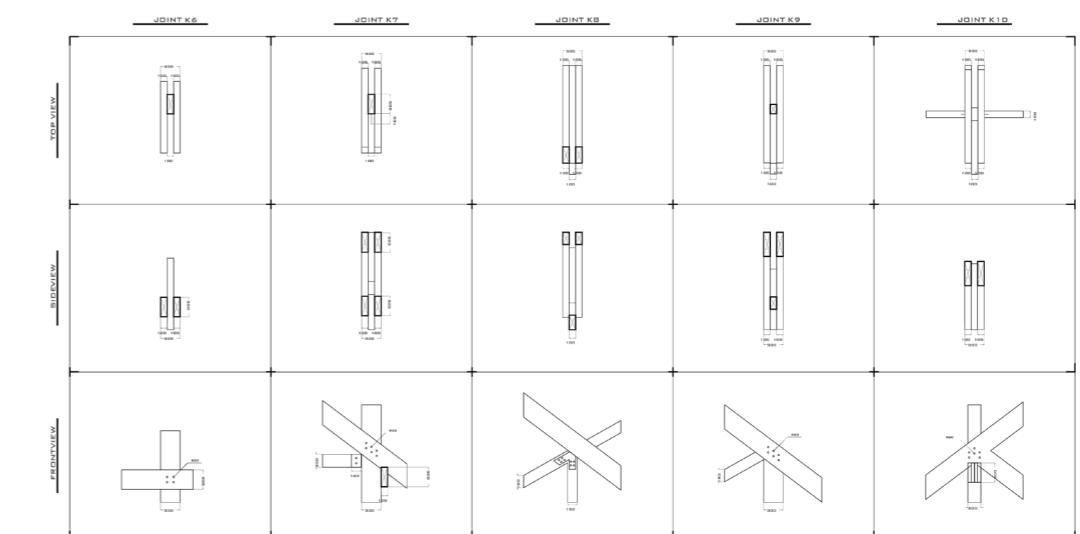
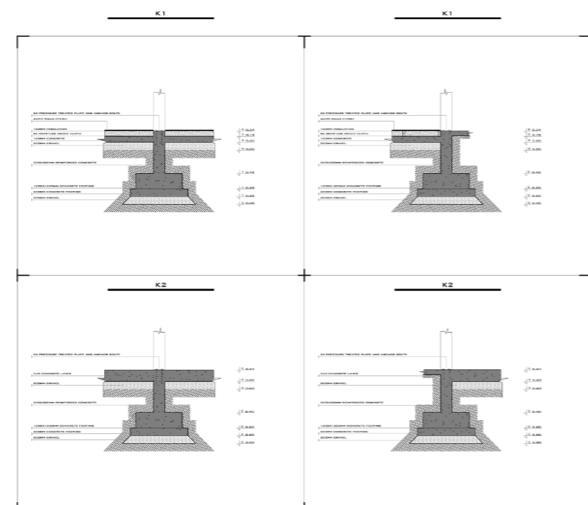
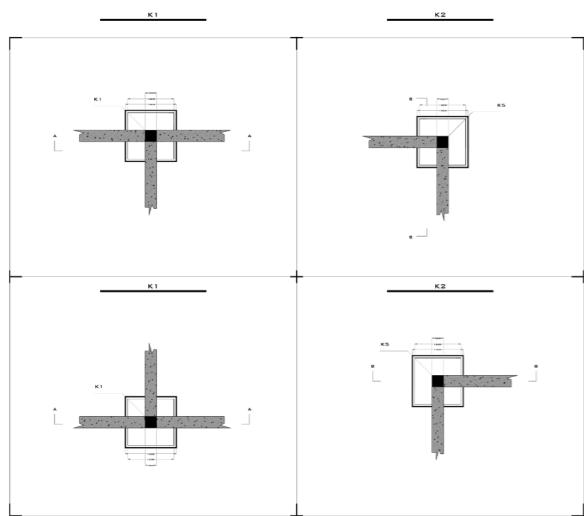
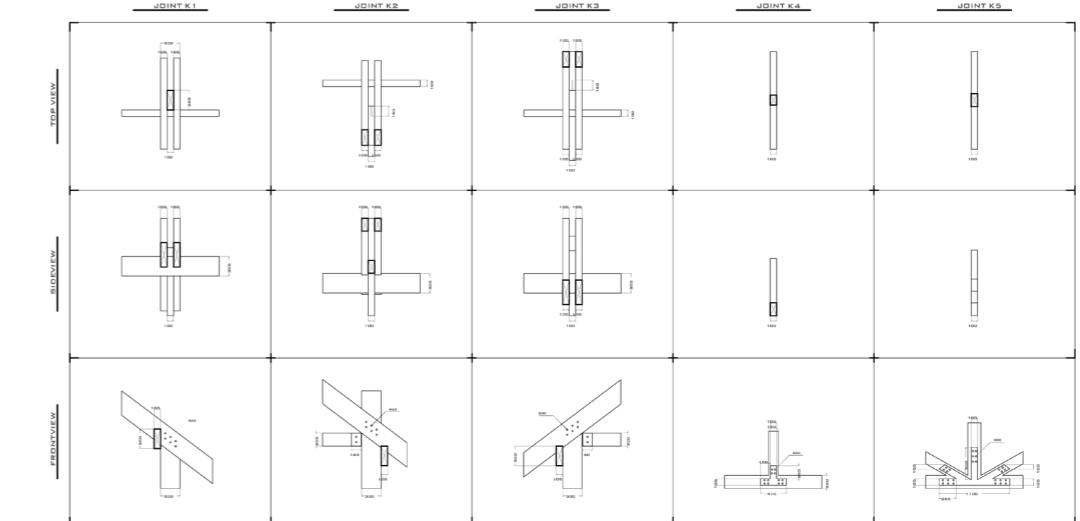
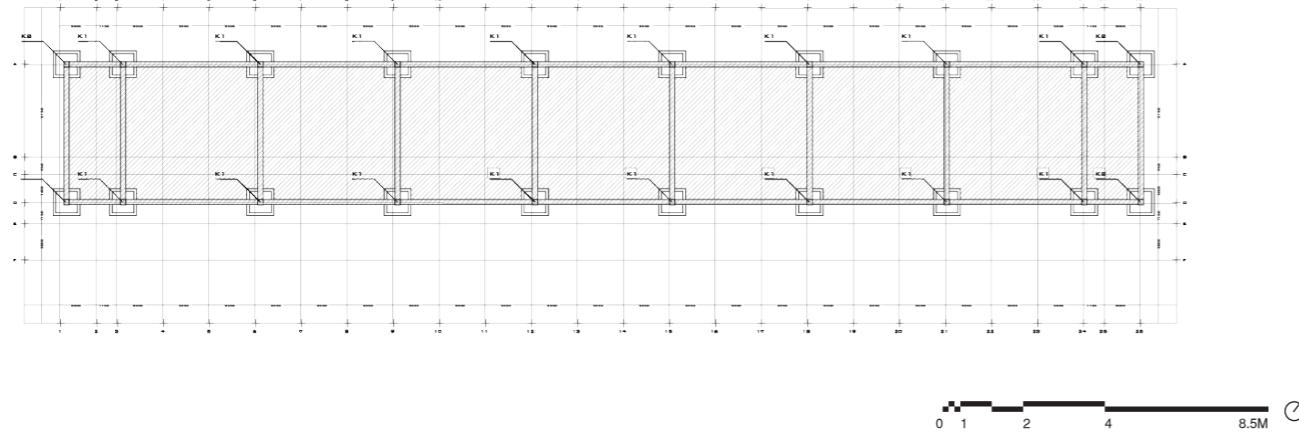
Roof Floor Plan



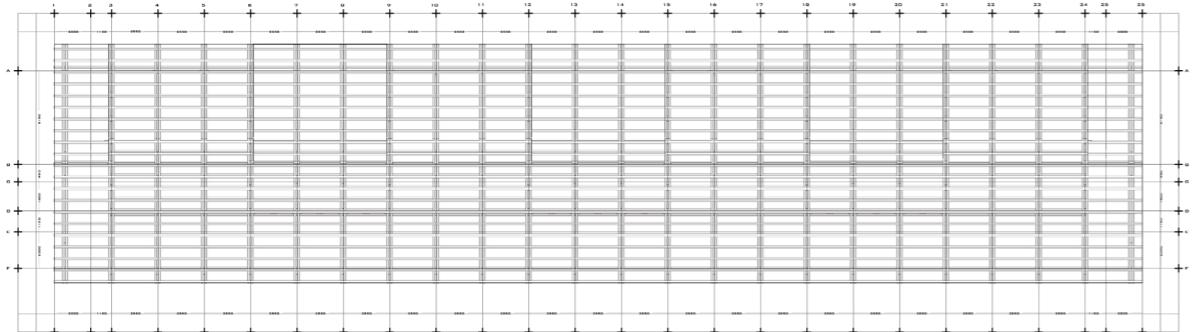


Axonometry

# Structural Details

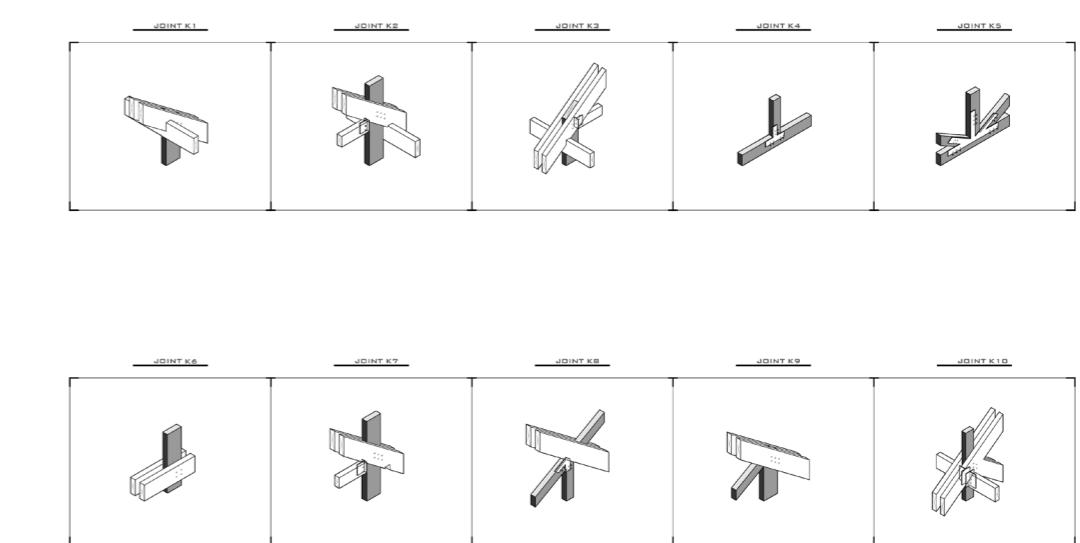


Foundation Sections



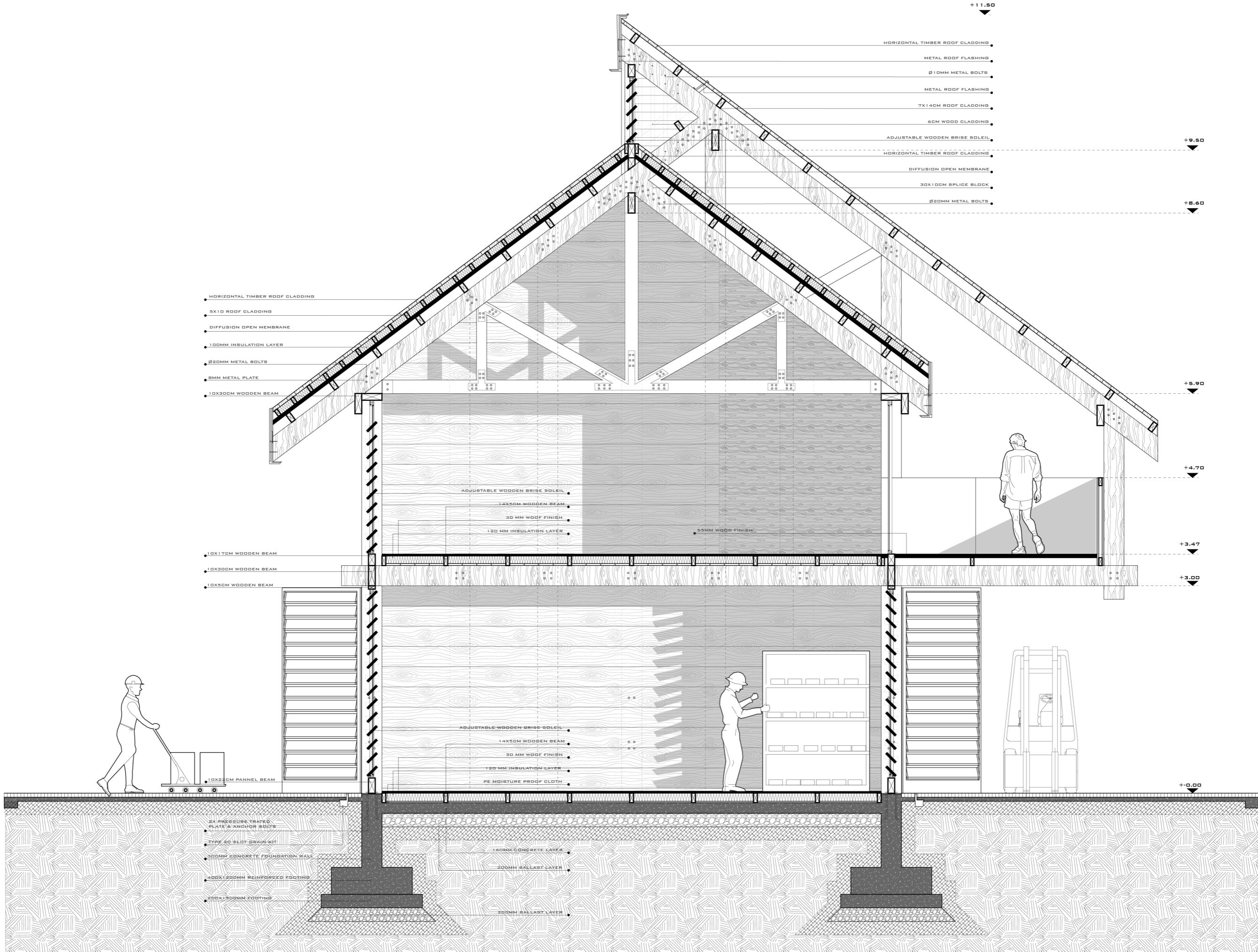
0 1 2 4 8.5M

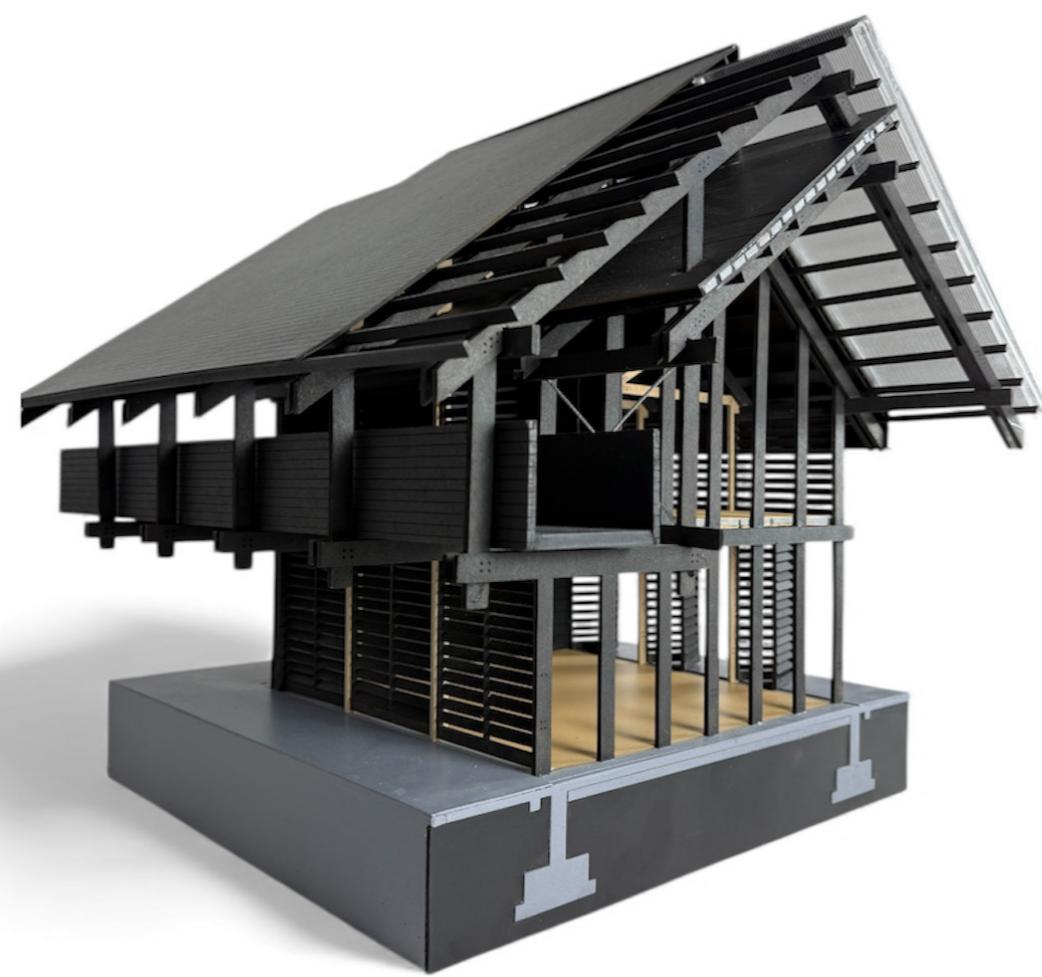
Roof Plan

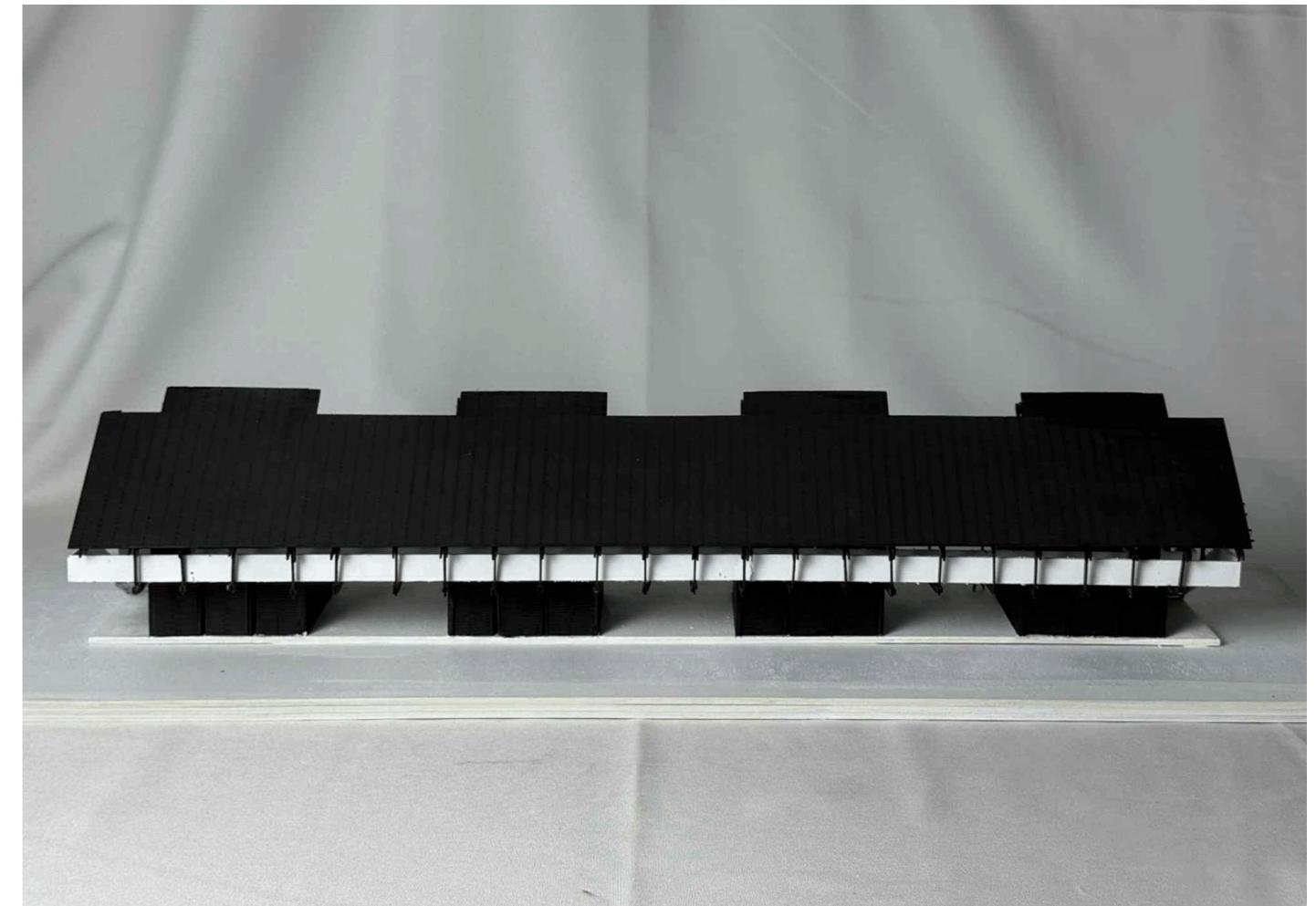


Roof Structural Joints

# Section A-A









# NARUJA MEURNEOBA



Scale Model 1:25

Year 2025 | Semester VI

Authors: Salome Shengelaia / Keti Kvaratskhelia / Tornike Kikonishvili / Data Shermadini / Kristine Tslobadze / Bachana Lortkipanidze

## Want to feel strong and healthy? Drink Georgian tea!

Naruja is a settlement in the Ozurgeti Municipality, located in the interflue of the Choloki and Natanebi rivers. It is situated 10 kilometers southwest of the city of Ozurgeti, to the east of Laituri. The toponym "Naruja" is associated with iron production in this area during the Iron Age. Near Naruja, in Anaseuli, a settlement has been discovered where evidence of iron smelting has been confirmed.

The settlement of Naruja emerged in 1929-30. At the end of 1949, it separated from Laituri and was established as an independent agricultural enterprise, which owned a 230-hectare tea plantation. By the early 1980s, tea cultivation had expanded to 550 hectares. The Naruja farm specialized in tea production. Its activity documents cover the period from 1949 to 1986.

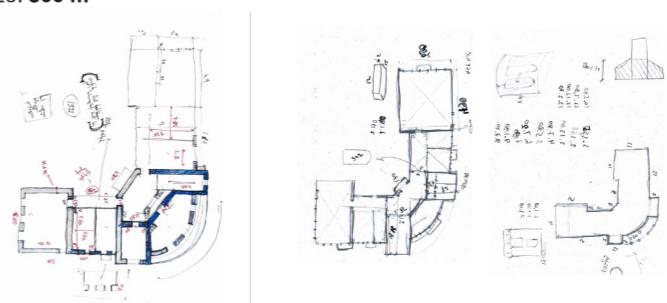
Location: **Naruja village**

Typology: **Administrative**

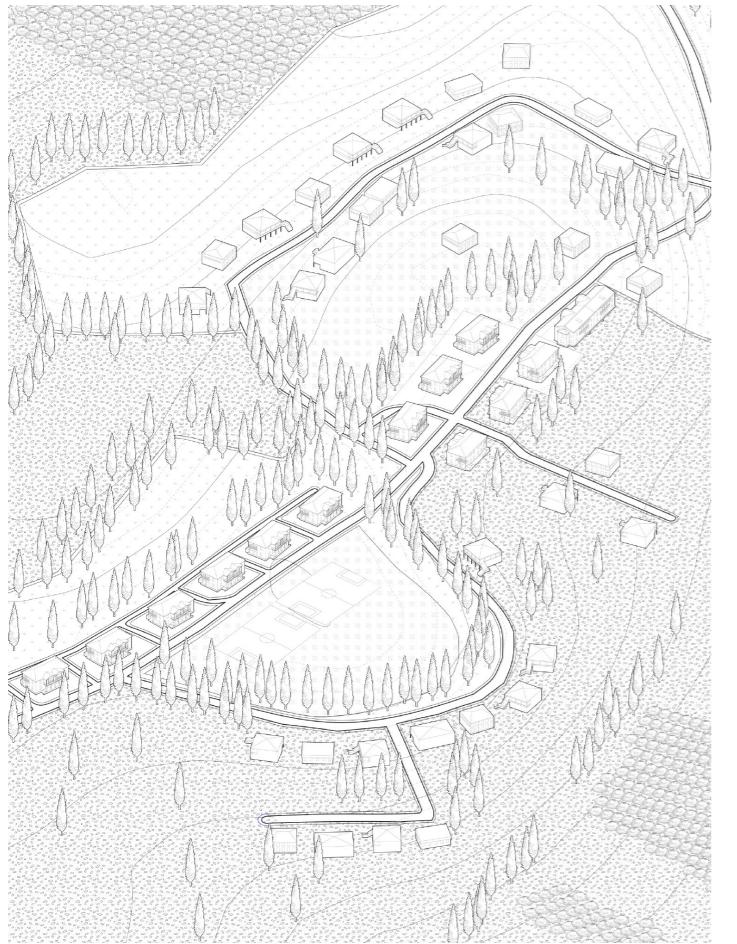
Size: **560 m<sup>2</sup>**

The administrative building of Naruja is located in the center of the village. During the Soviet tea-collective era, the building served as the management hub of the tea farm, accommodating functions such as livestock and product administration, accounting, and general supervision. The floor structure between levels is made of timber, while the walls are constructed entirely of brick. The roof is supported by a wooden structural system, which has been reinforced with additional beams added later for greater stability.

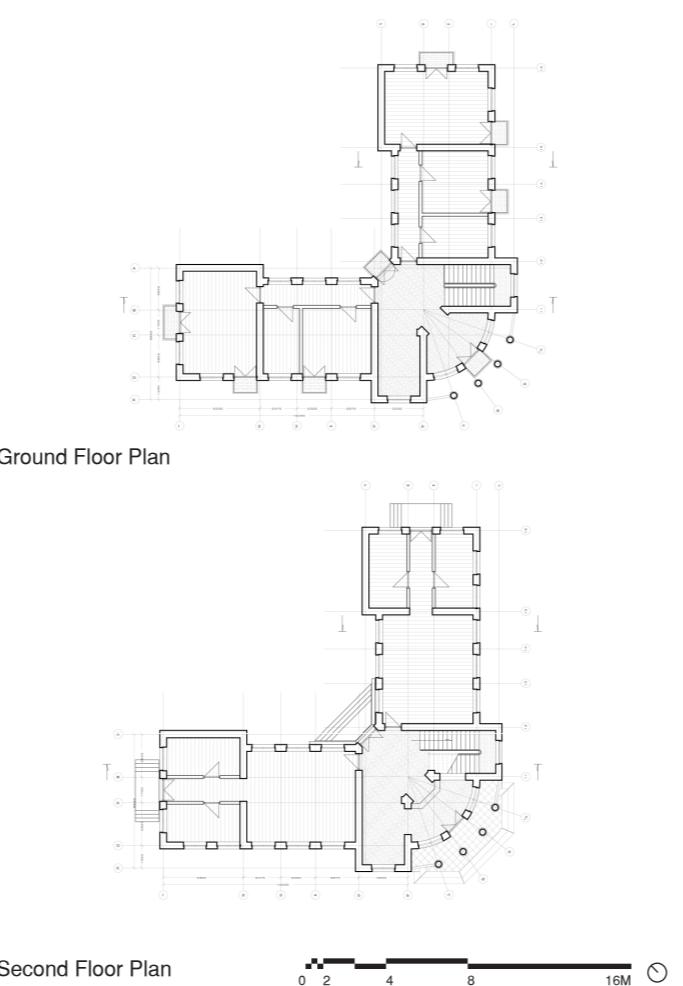
On the main facade, the building features a series of arched openings supported by four classical columns. The columns are topped with Corinthian capitals, which hold a continuous system of semicircular arches. This arcade gives the entrance a distinctive architectural character.



# Administrative Building



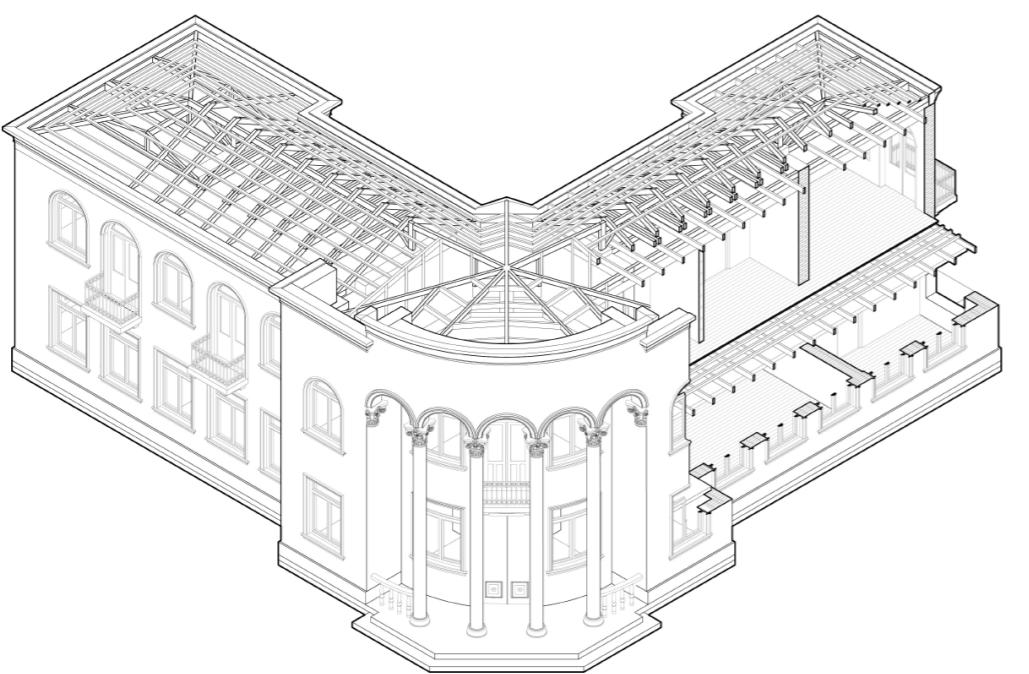
Naruja Village Axonometry



Ground Floor Plan

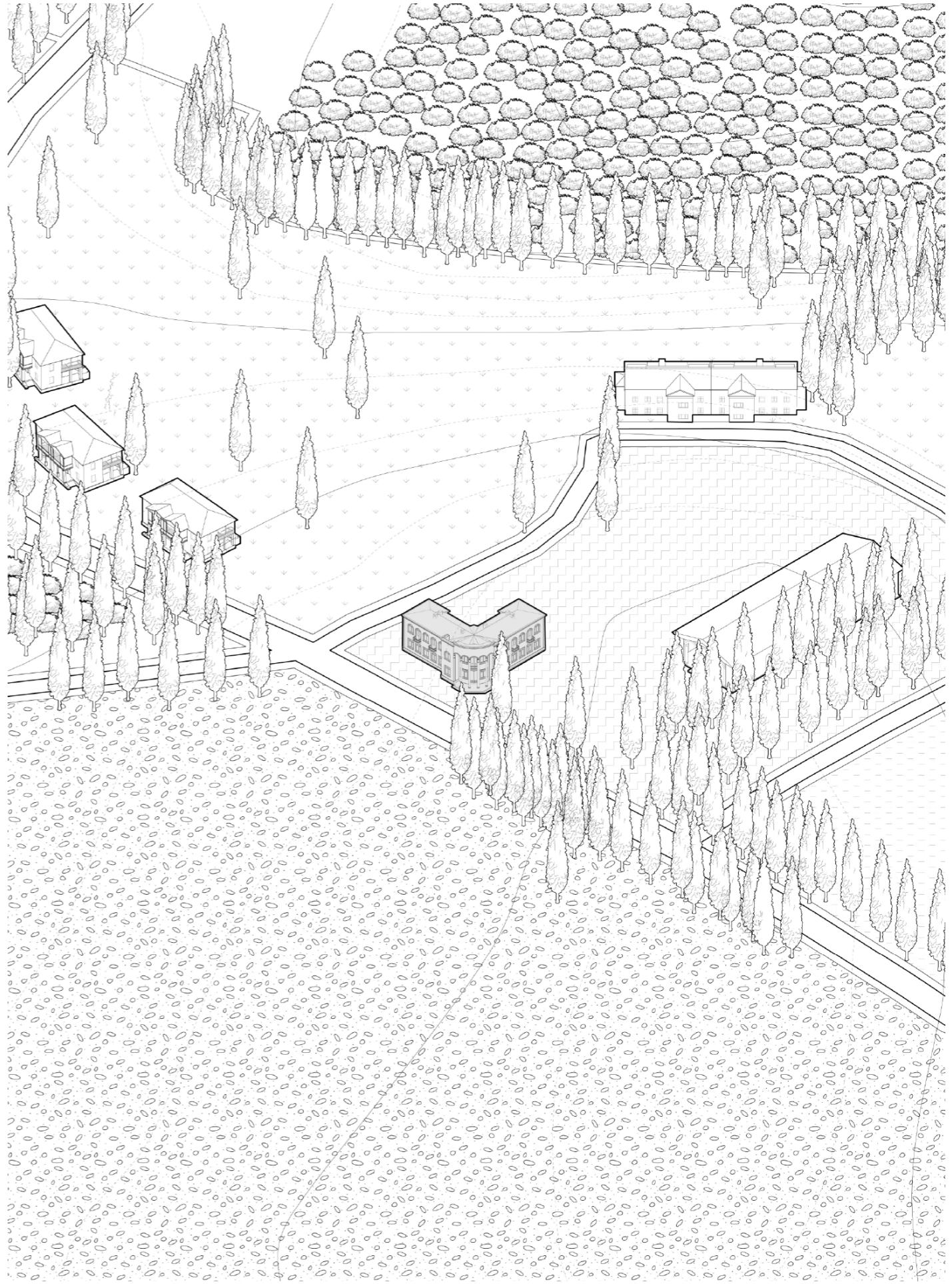
Second Floor Plan

0 2 4 8 16M



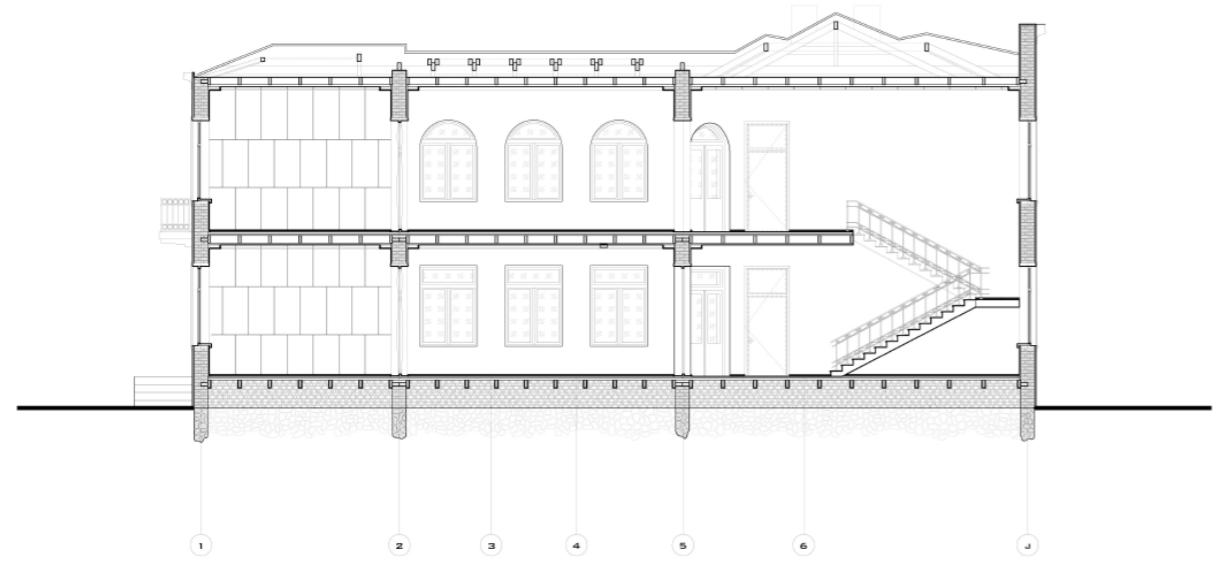
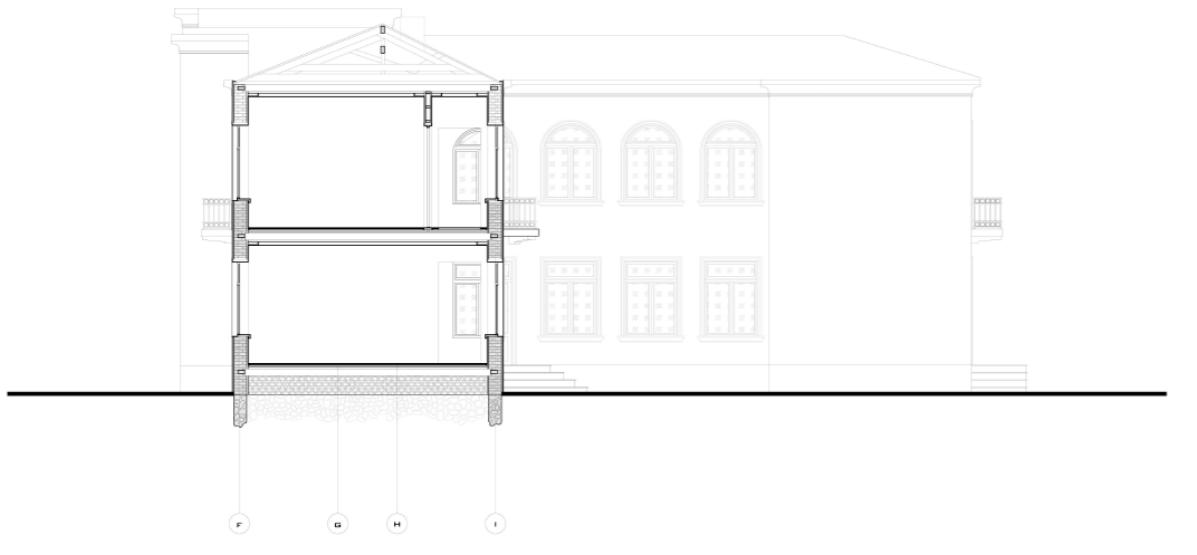
Naruja administrative building | Axonometry

0 0.5 1 2 4M



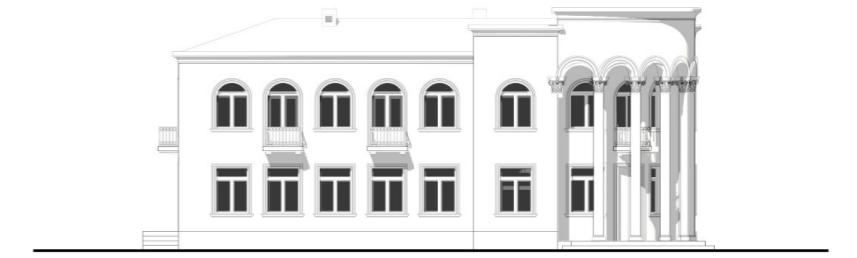
Naruja administrative building | Site Axonometry

0 2 4 8 16M



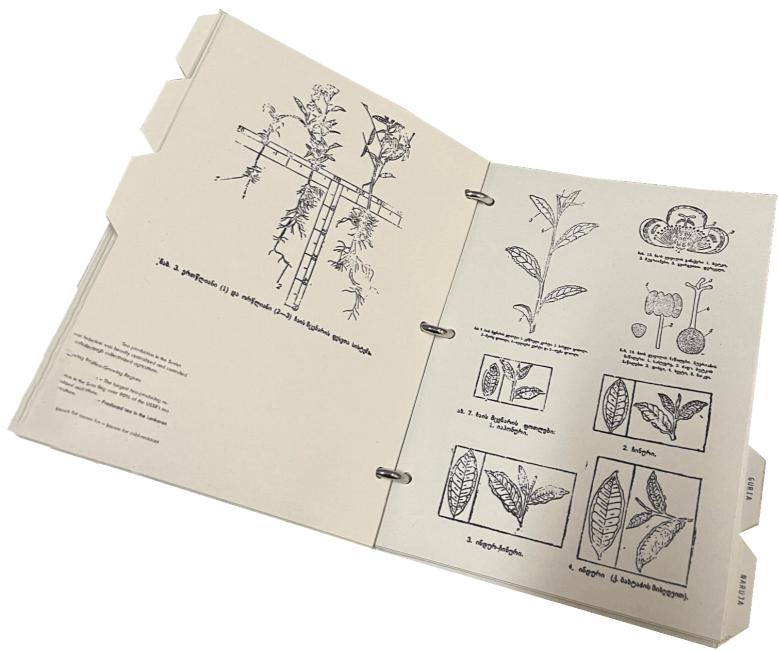
Naruja administrative building | Section B-B | A-A

0 0.5 1 2 4M

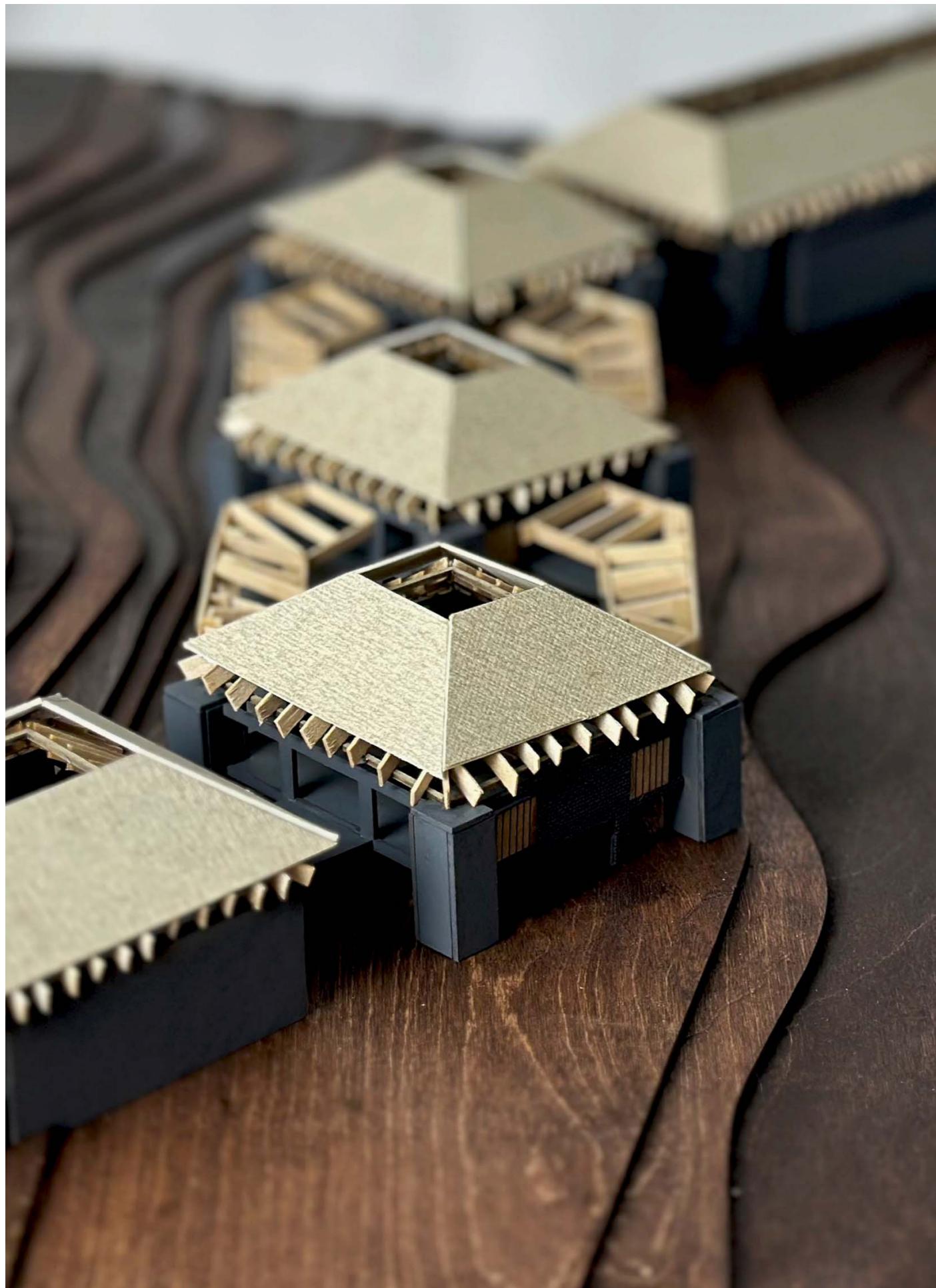


Naruja administrative building | Facade Views

0 2 4 8 16M



# TELAVI SCHOOL



Year 2024 | Semester V

Author: Salome Shengelaia

Scale Model 1:25

## Raise a Child, Raise a City.

During the Telavi research phase, several historical and infrastructural insights shaped the foundation of the school project. Telavi, a quiet city with a strong industrial and winemaking heritage, holds a site that once belonged to the old silk factory—a place that historically gathered workers and families in one functioning urban hub. Today, this four-hectare territory feels like a leftover fragment between a busy highway and a calmer local road used by nearby schools, giving it both strategic and contrasting qualities.

The school philosophy emerges from this context. As many of Telavi's traditional communal spaces have disappeared or turned into tourist attractions, the school is imagined not only as an educational institution but as a new social anchor. It aims to restore a sense of local belonging, offering spaces that serve both students and the broader community.

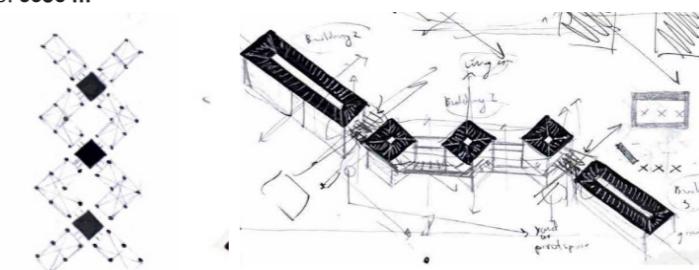
Location: **Telavi**

Typology: **Education**

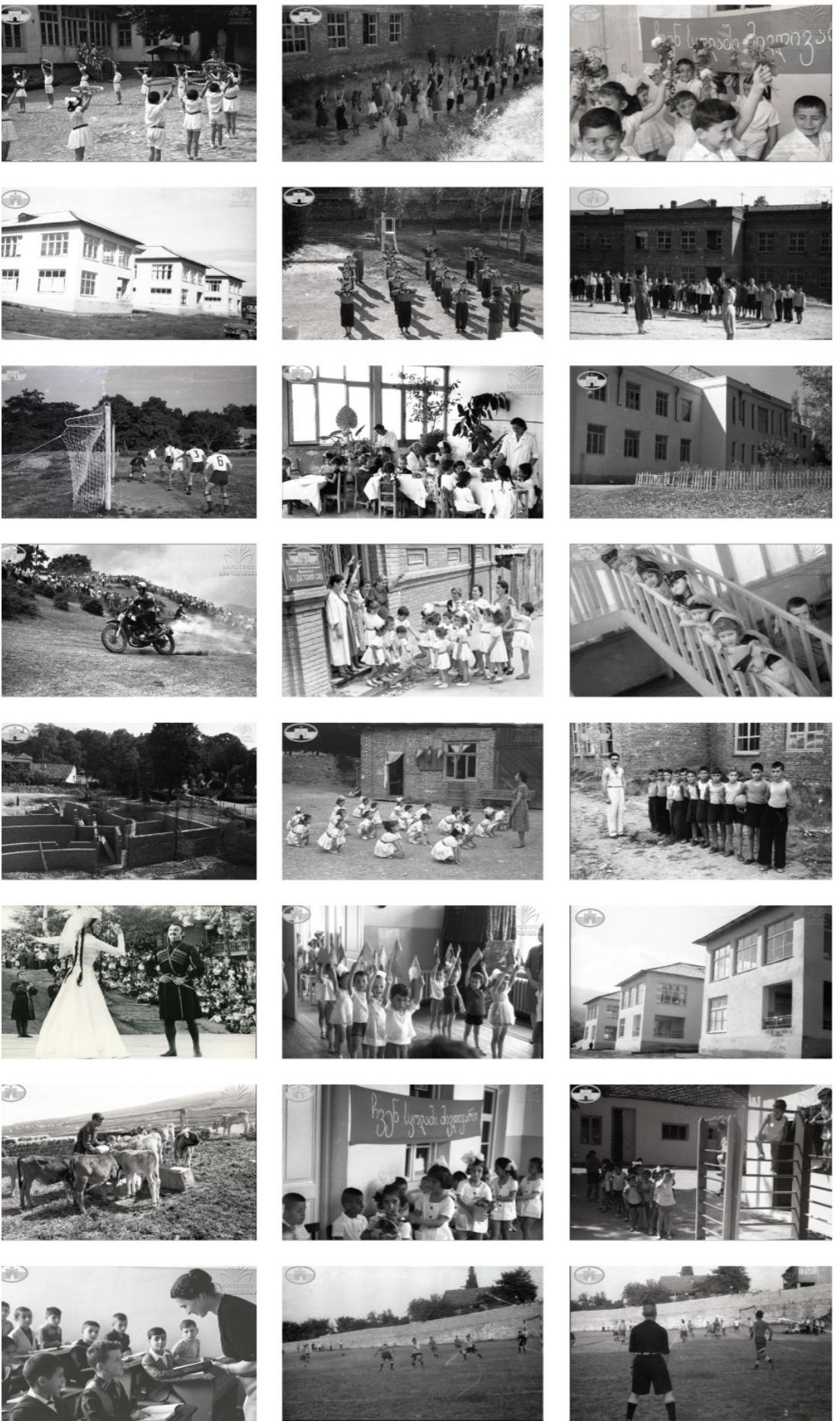
Size: **6650 m<sup>2</sup>**

Distribution concept blends protected learning environments with open, public functions. Inspired by Montessori principles, the school prioritizes self-directed learning, shared experiences, and hands-on practice. The building is positioned at the intersection of the site's main axes, forming three interconnected learning cores—primary, secondary, and senior groups—organized through rhombus-shaped modules. Though distinct, these groups remain visually and socially connected, encouraging mentorship, interaction, and continuity across ages.

Common recreational spaces unify the students beyond their modules, creating areas for rest, gathering, and informal learning. The school consists of 24 classrooms across two floors, with circulation centered around shared hubs within each module.



## Context



Photos from the Telavi archive that document various activities in schools, kindergartens, and across the city.



Telavi | Figure ground plan

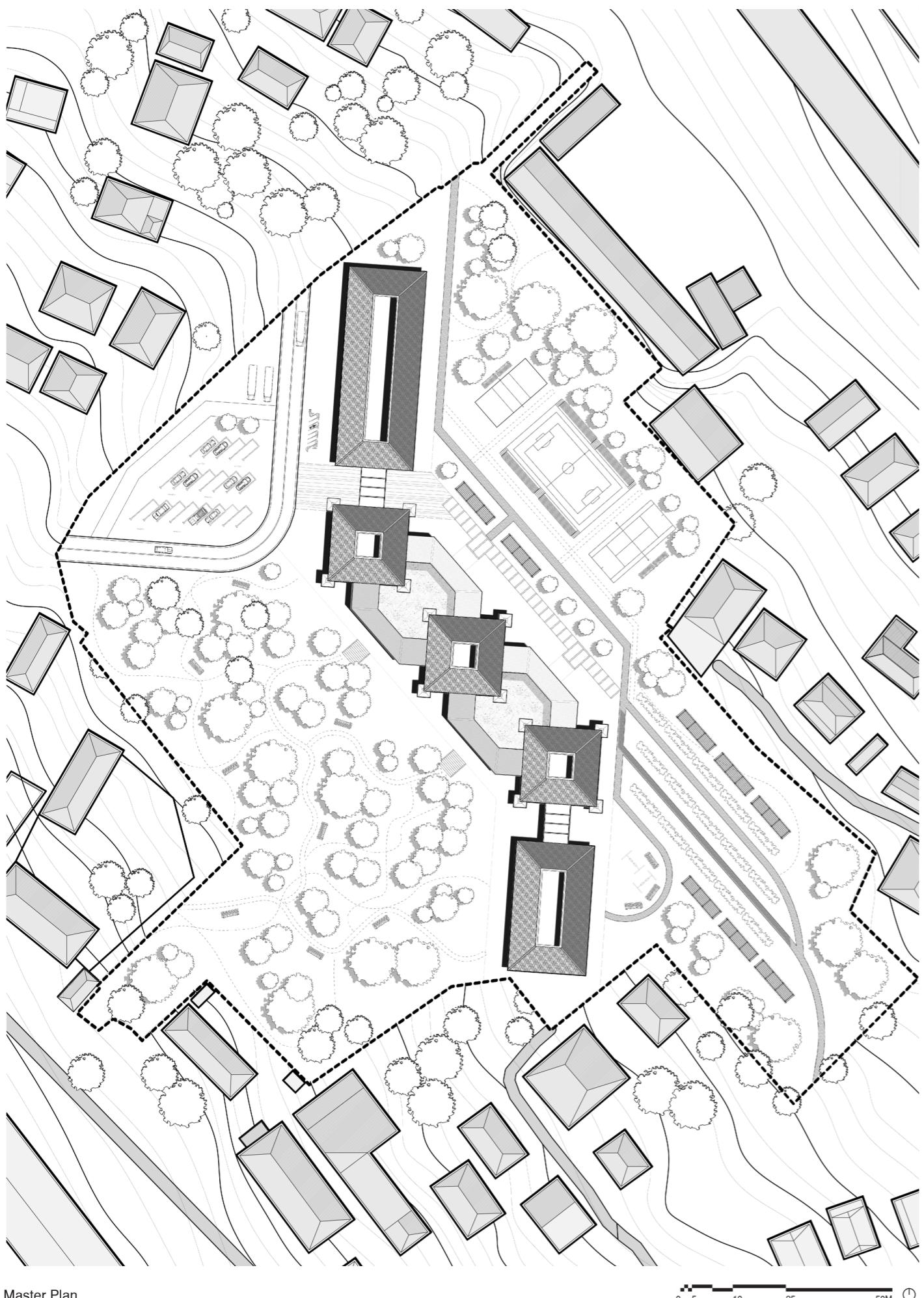


Recreation, Cognition, Activity, Culture - Describing four elements of space distribution

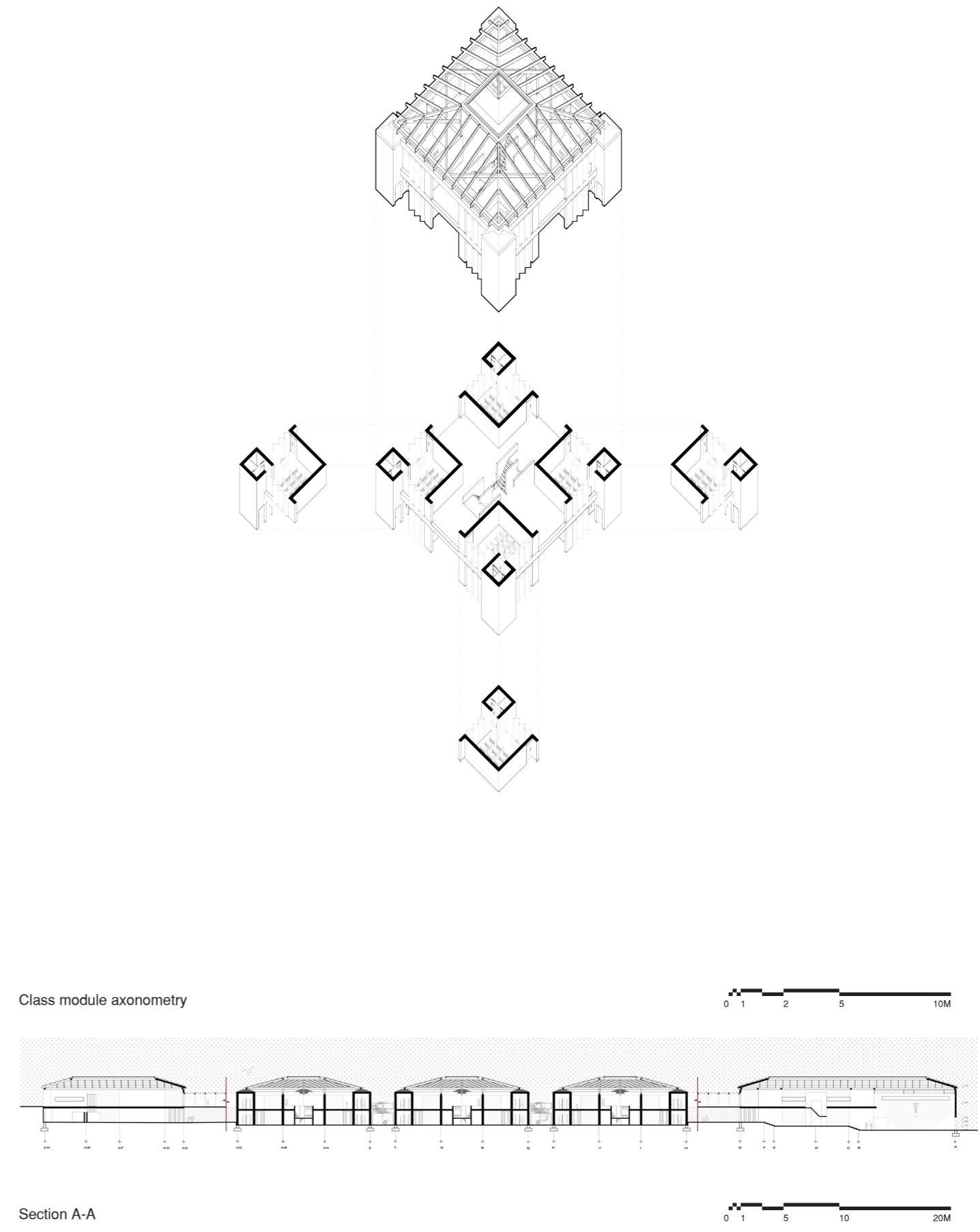


School concept model of modular systems

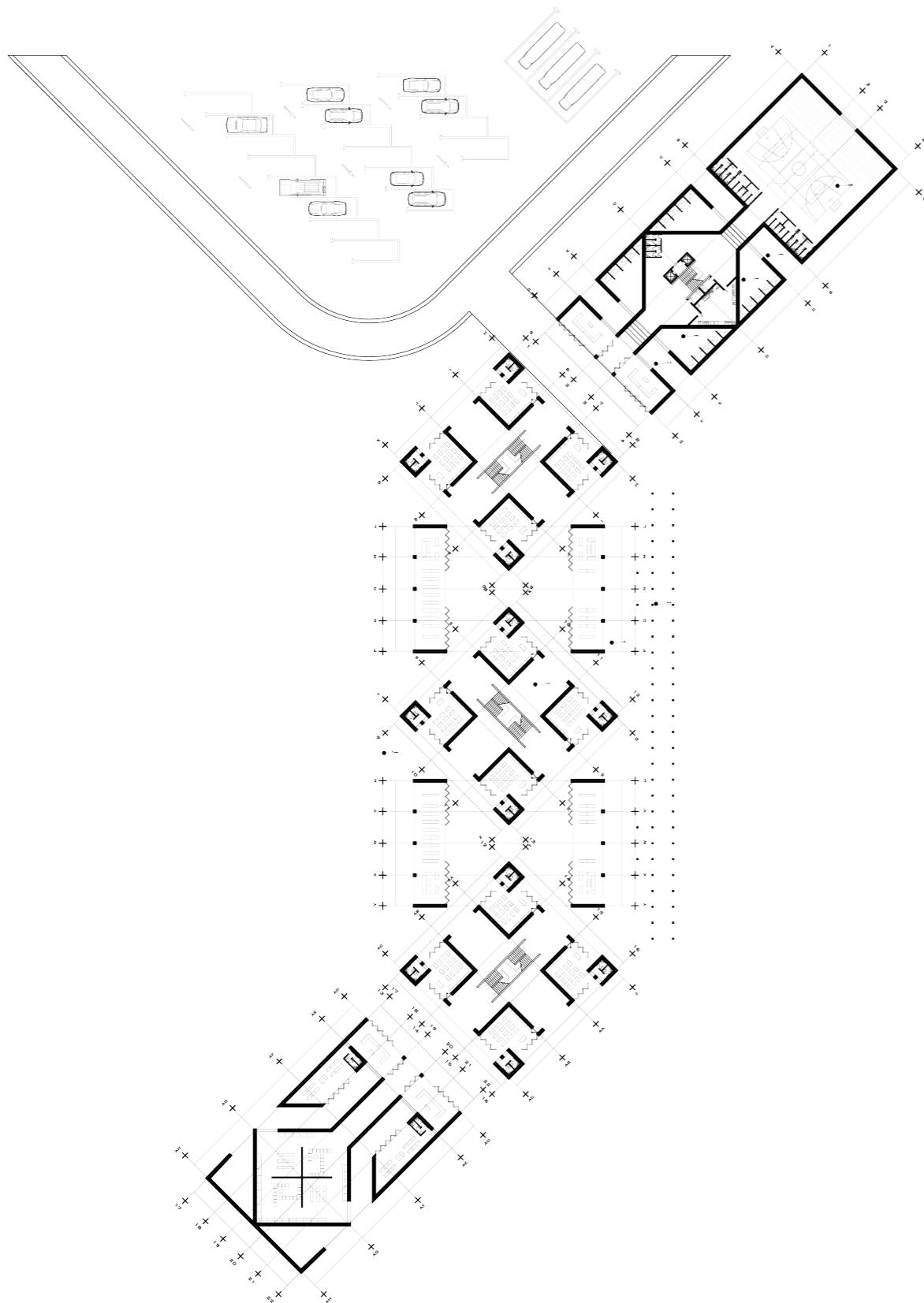
## Concept



Master Plan

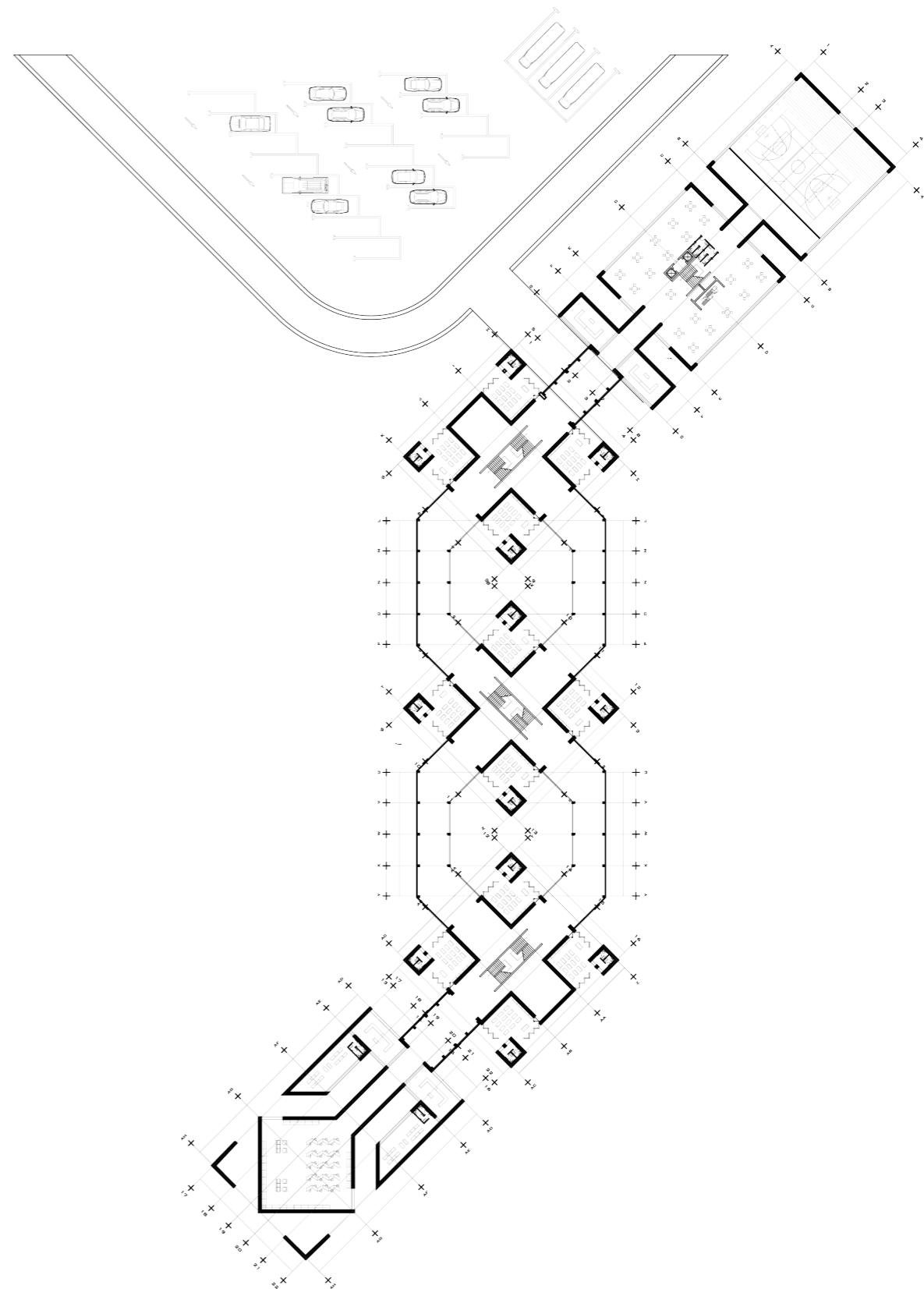


Section A-A



Ground Floor Plan

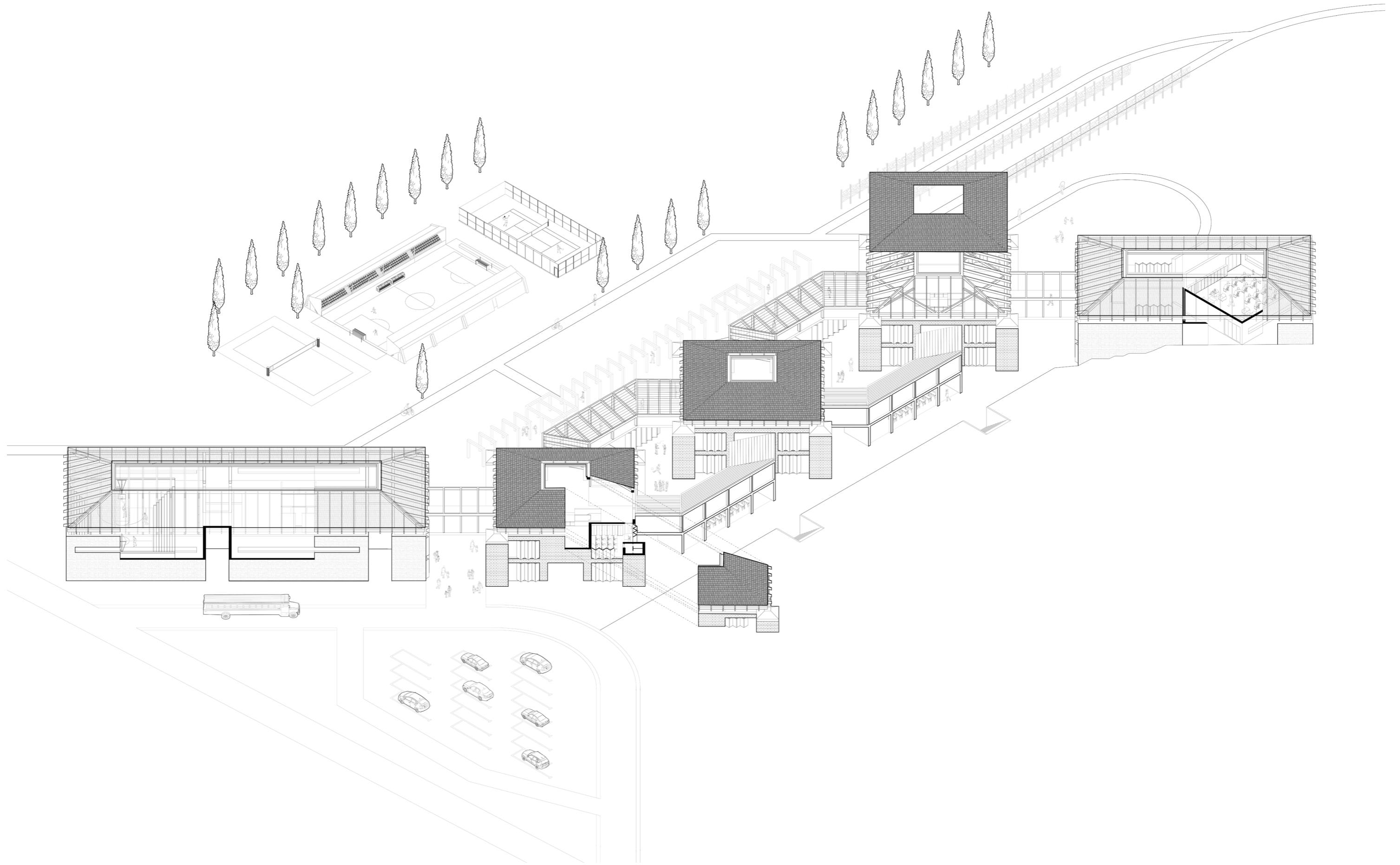
0 3 6 12.5 25M



Second Floor Plan

0 3 6 12.5 25M

## Axonometry





# MORBIO INFERIORE



## Botta's Philosophy

Mario Botta's Middle School in Morbio Inferiore exemplifies the essence of his early architectural approach. Completed in 1977, the school reflects a disciplined and thoughtful relationship between form, material, and landscape, while highlighting Botta's exploration of modernist ideals integrated with a strong regional identity.

The architecture of the school is distinguished by its sense of order. Botta's design is rigorously geometric, with clear rectilinear forms that dominate the layout. These forms are not arbitrary; they are carefully positioned to give the building a sense of structure and clarity. The repetition of windows and openings across the facade creates a rhythm that is both functional and visually cohesive. This rhythm, combined with the clean lines of the building, imbues it with a serene yet dynamic presence, reflecting

Location: Switzerland

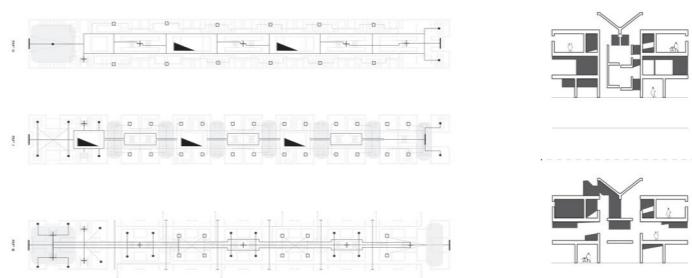
Typology: Educational

Size: 15000 m<sup>2</sup>

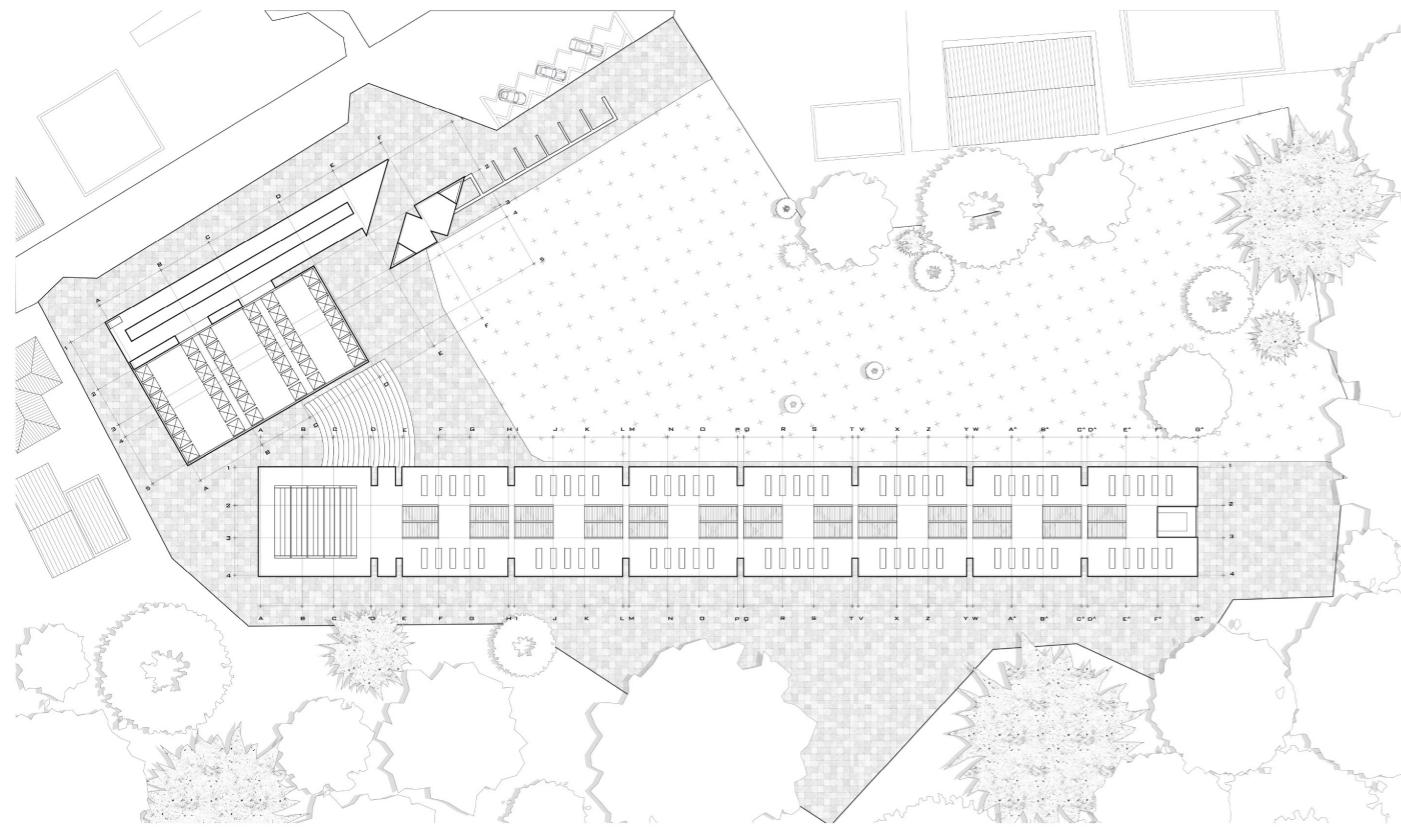
the calm authority a school building should convey.

A key feature of the project is the role of natural light. The building's orientation toward the northwest ensures all sides receive balanced sunlight. Botta incorporates large windows to maximize the inflow of natural light. These windows become more than mere openings; they define the atmosphere of the space, ensuring that light remains a vital element of the school's design.

In the broader context of Botta's career, the Middle School is pivotal. It marks a shift from his early modernist influences, such as Le Corbusier, to a more mature architectural style, characterized by a strong connection to place, materiality, and geometry. This project is where Botta began to assert his distinct architectural voice - rooted in tradition but firmly contemporary.

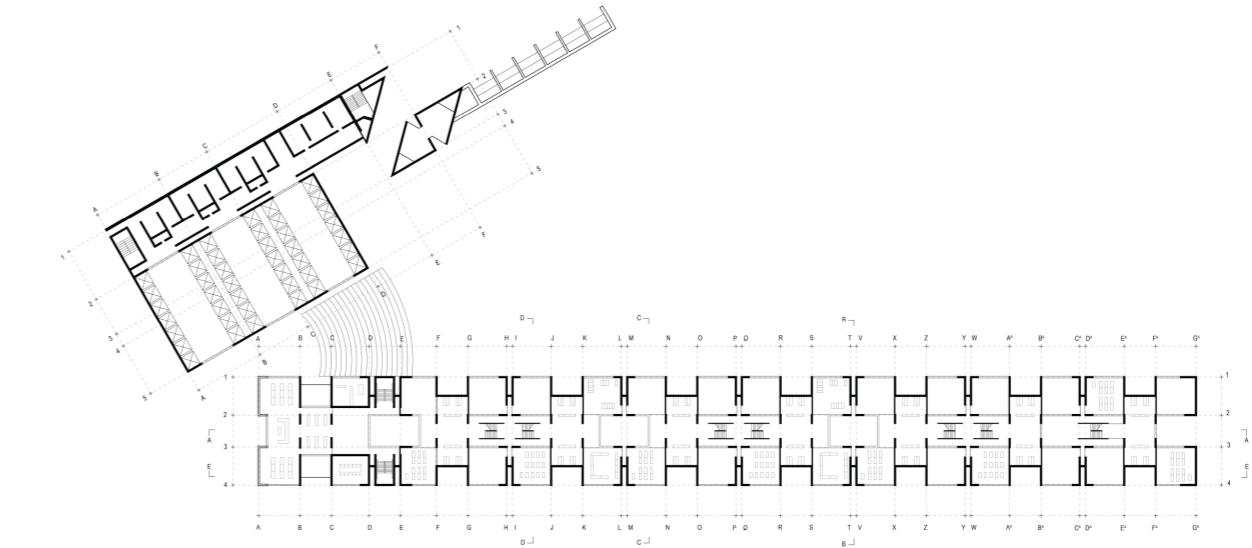


# Building Analysis



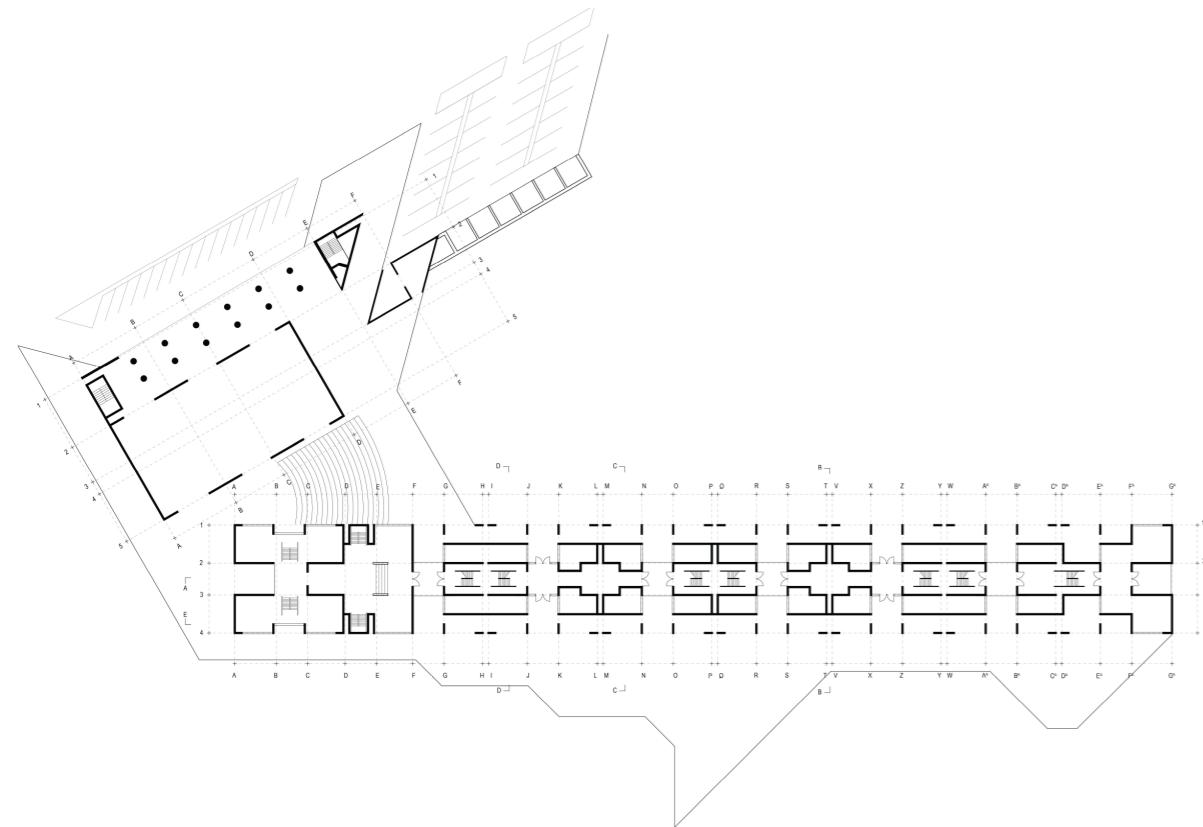
Roof Plan

0 5 10 20 40M



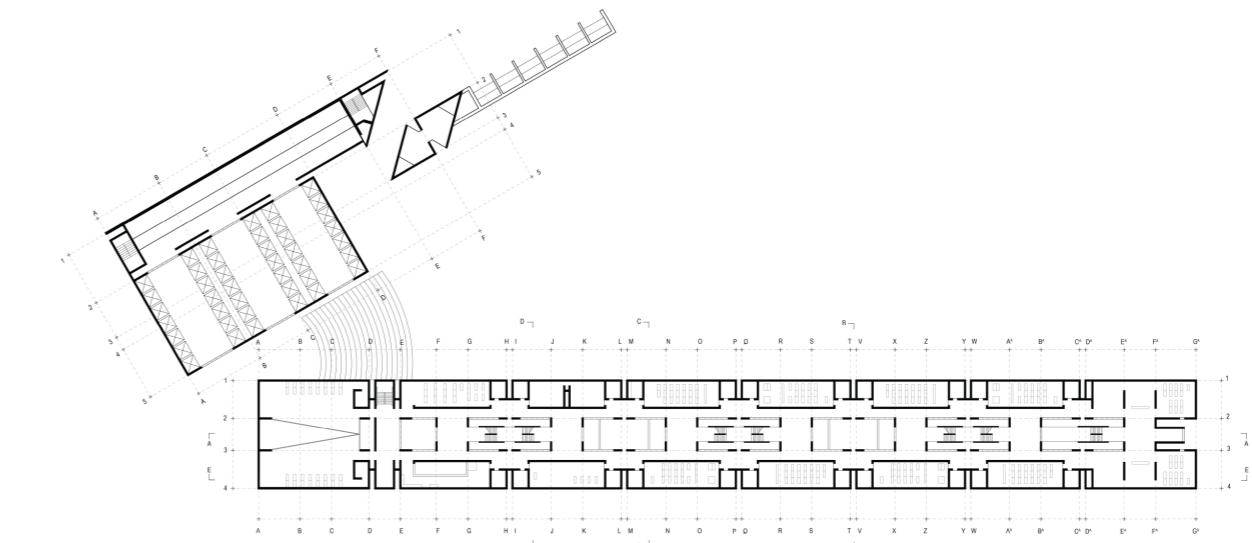
Second Floor Plan

0 5 10 20 40M



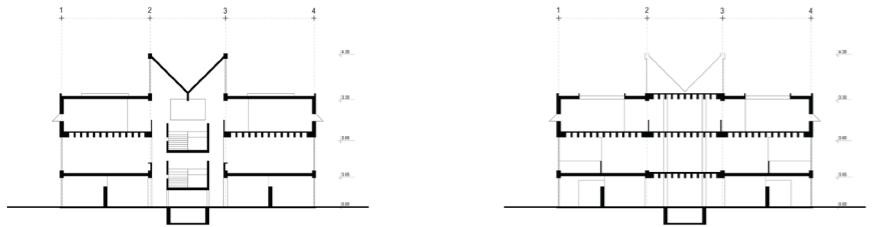
Ground Floor Plan

0 5 10 20 40M

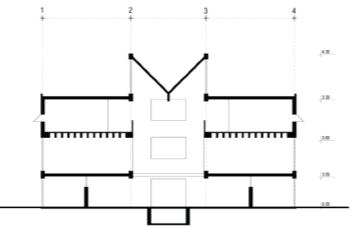


Third Floor Plan

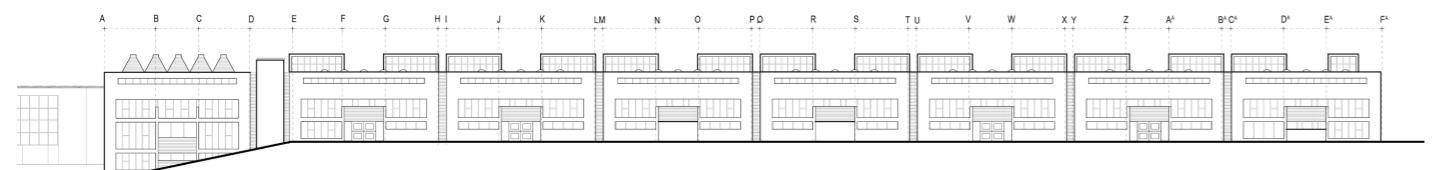
0 5 10 20 40M



Section B-B | C-C | D-D

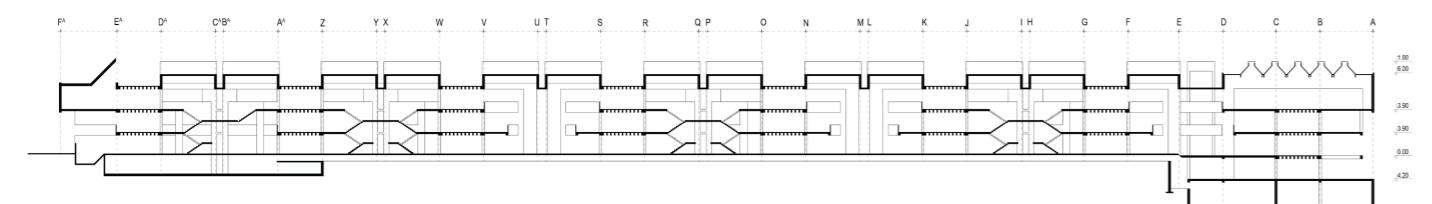
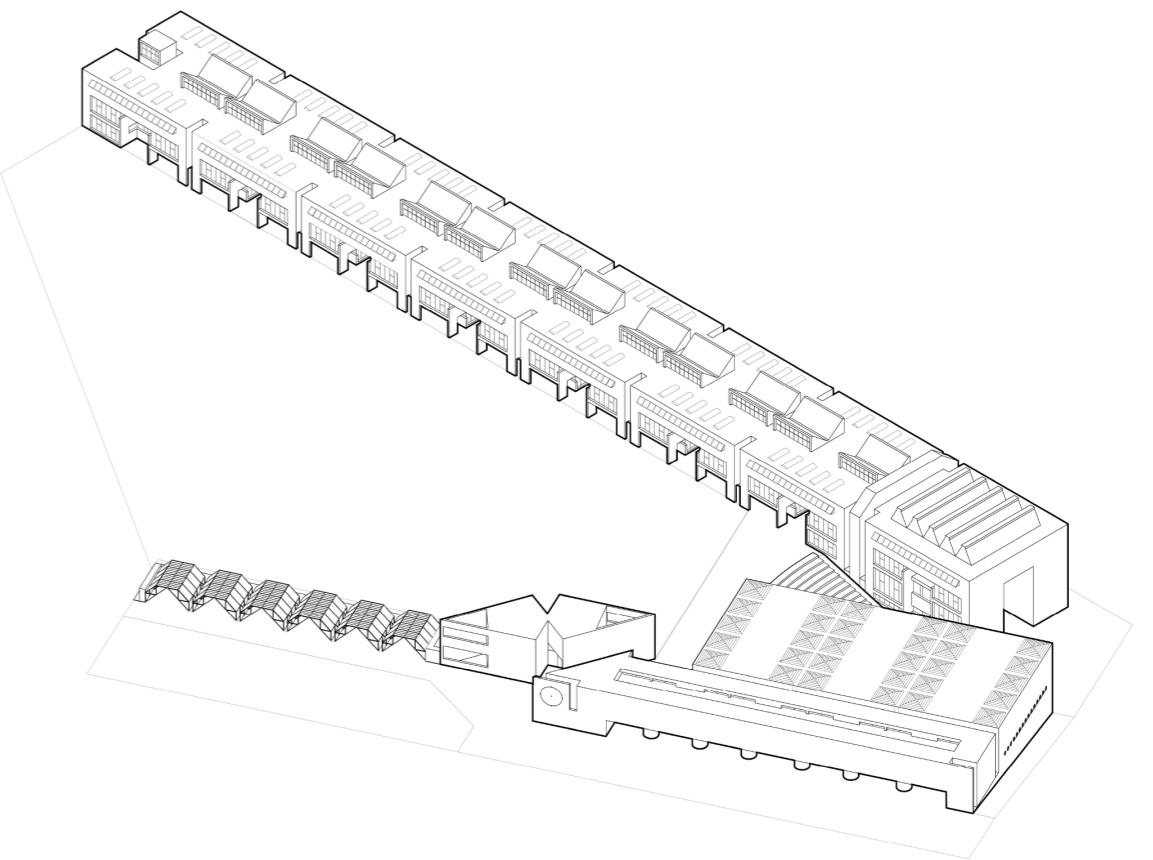


0 1.5 3 7 15M



Façade

0 5 10 20 40M

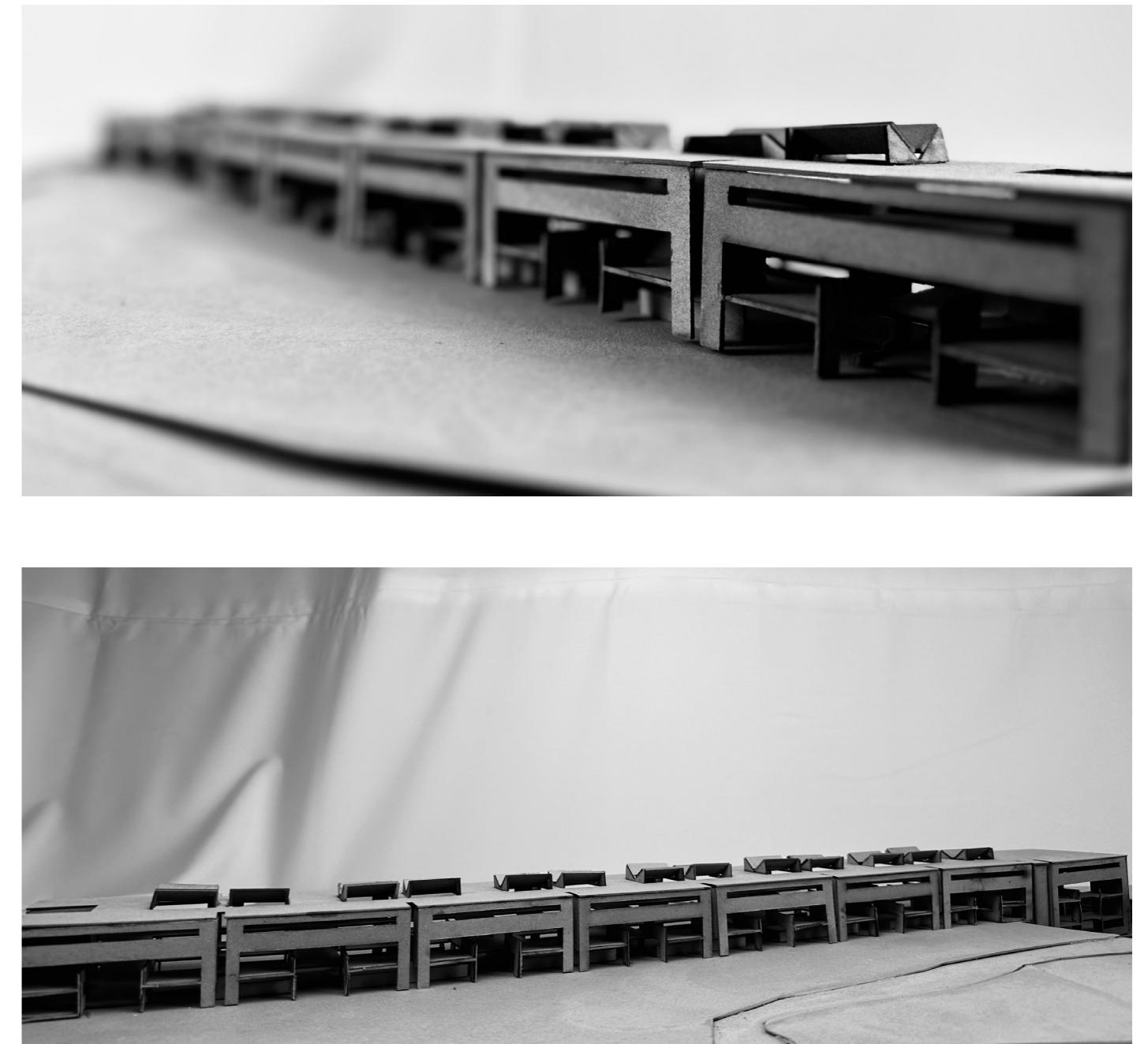
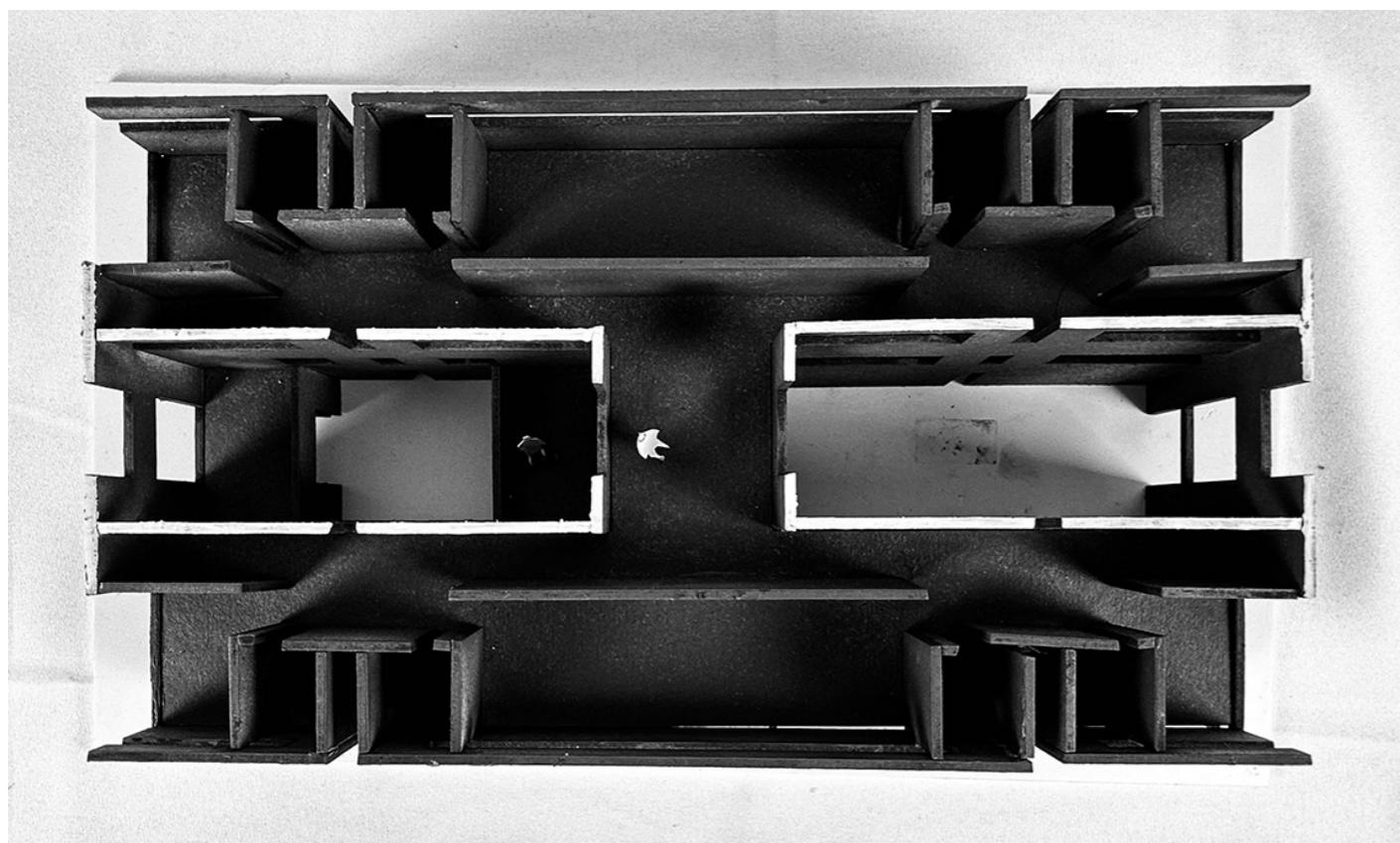


Section A-A

0 5 10 20 40M

Axonometry

0 5 10 20 40M



# GABION WALL



Year 2025 | Semester V

Authors: Salome Shengelaia | Anano Nozadze | Kristina Tslobiladze

Model: 1:1

## From Conventional Gabion to Wood & Asphalt Gabion

The concept of the class was to divide the students into 6 groups and assign each group a conventional technique of building paired with an experimental suggestion of using the same approach but with a different material.

Our gabion wall went through several iterations before reaching its final form. We began with a standard gabion concept but chose to replace the metal mesh and stones with alternative, repurposed materials. Research into the history of gabions-dating back to ancient Egypt, where reed baskets held stones to reinforce the Nile-led us to experiment with woven structures. Inspired by traditional Georgian fence weaving, we tested various patterns, but their density hid the infill too much. This pushed us toward using thicker wooden slats, spaced 0.5 cm apart, which provided the semi-transparency we wanted.

Location: Free Uni backyard

Typology: Material Based

Size: 1.8mx0.6m

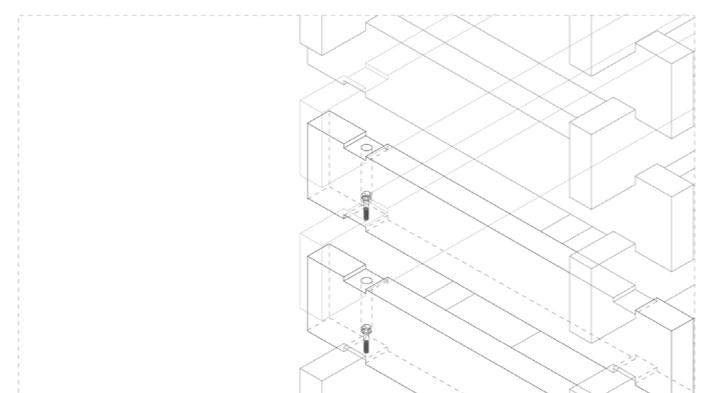
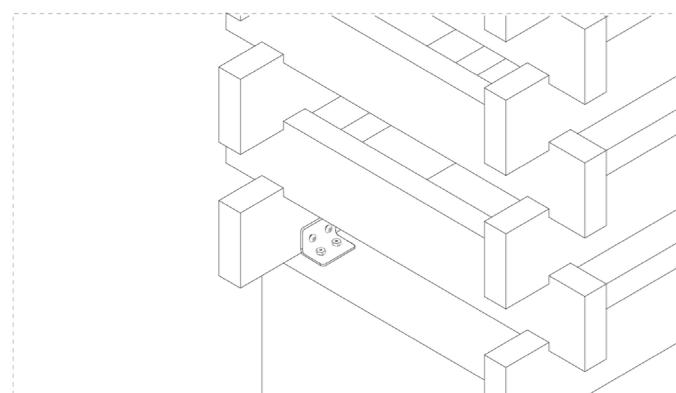
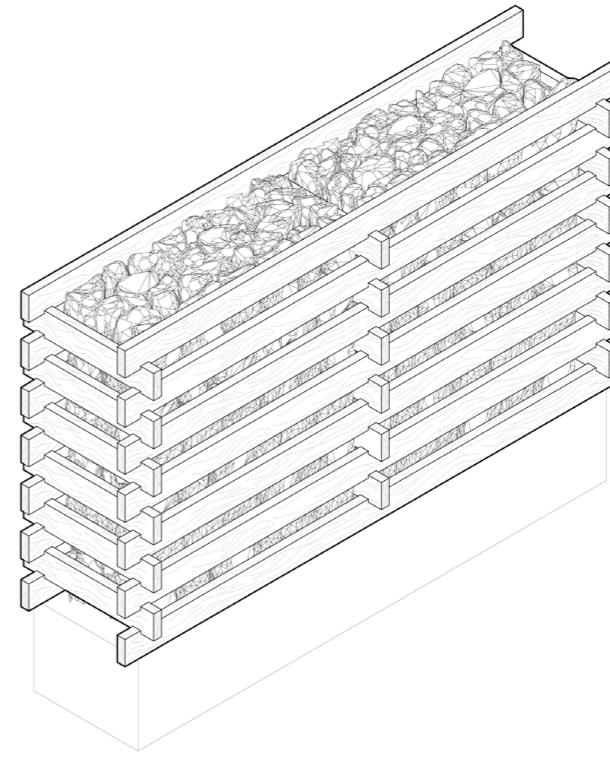
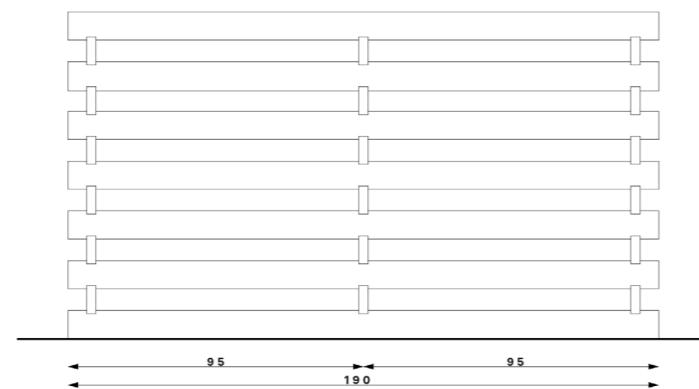
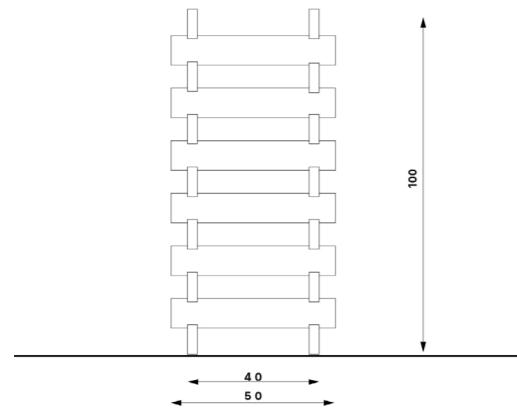
The infill consists of construction debris-concrete, bricks, and block fragments-including the remains of a failed rammed-asphalt experiment, giving the wall a layered material history. The wooden frame, reinforced with interior screws, was finished with a black-pigmented coating to create a matte effect and emphasize contrast between the structure and its contents.

In the end, the wall combines historical references with contemporary techniques, using reclaimed materials to achieve a balance of tradition, experimentation, and sustainability.



VA[A]DS

kera



# MARJANISHVILI HOUSING



Year 2024 | Semester IV  
Authors: Salome Shengelaia

Concept Model 1:200

$$1 + 1 = 3$$

This housing project explores the idea of in-between space—neither fully private nor entirely public, but a fluid, shared realm that connects individuality with community. Inspired by the notion of One Room Architecture, the project treats living spaces as open, flexible, and multifunctional modules, where slabs and spatial loops become both structure and circulation.

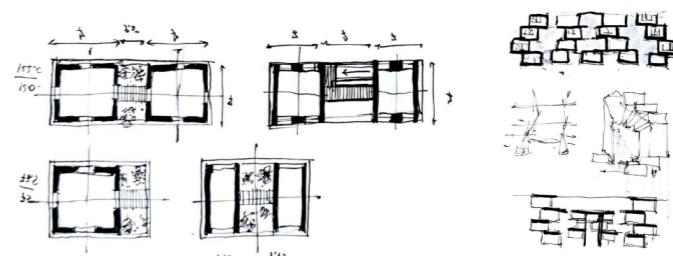
Using principles such as Connected While Separated, Infinite Nesting, and  $1+1=3$ , the design creates a system where units remain independent yet interwoven—allowing visual, spatial, and social connectivity without merging boundaries. The arrangement forms a village-like community through shared slabs, communal courtyards, and a U-shaped circulation that links all apartments, fostering accessibility and interaction.

Location: **Tbilisi, Marjanishvili**  
Typology: **Residential**  
Size: **3100 m<sup>2</sup>**

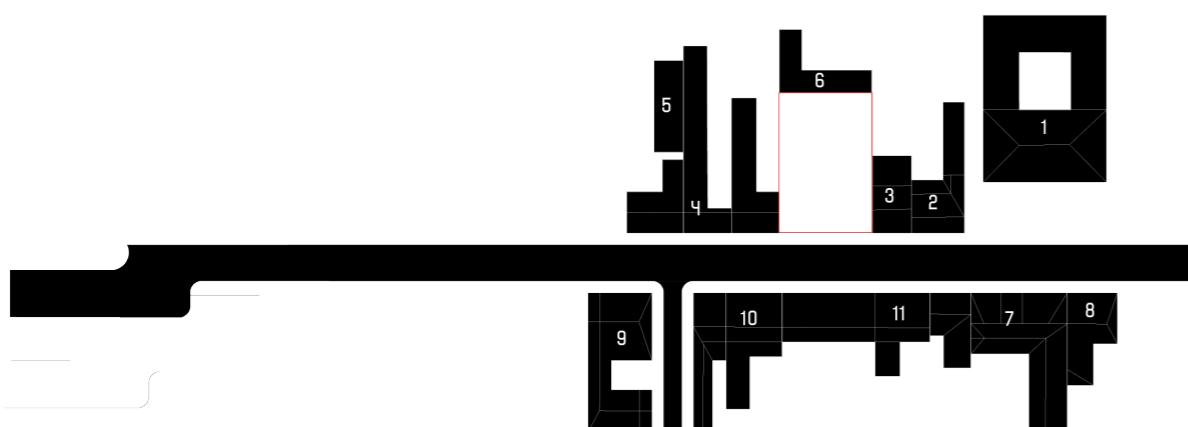
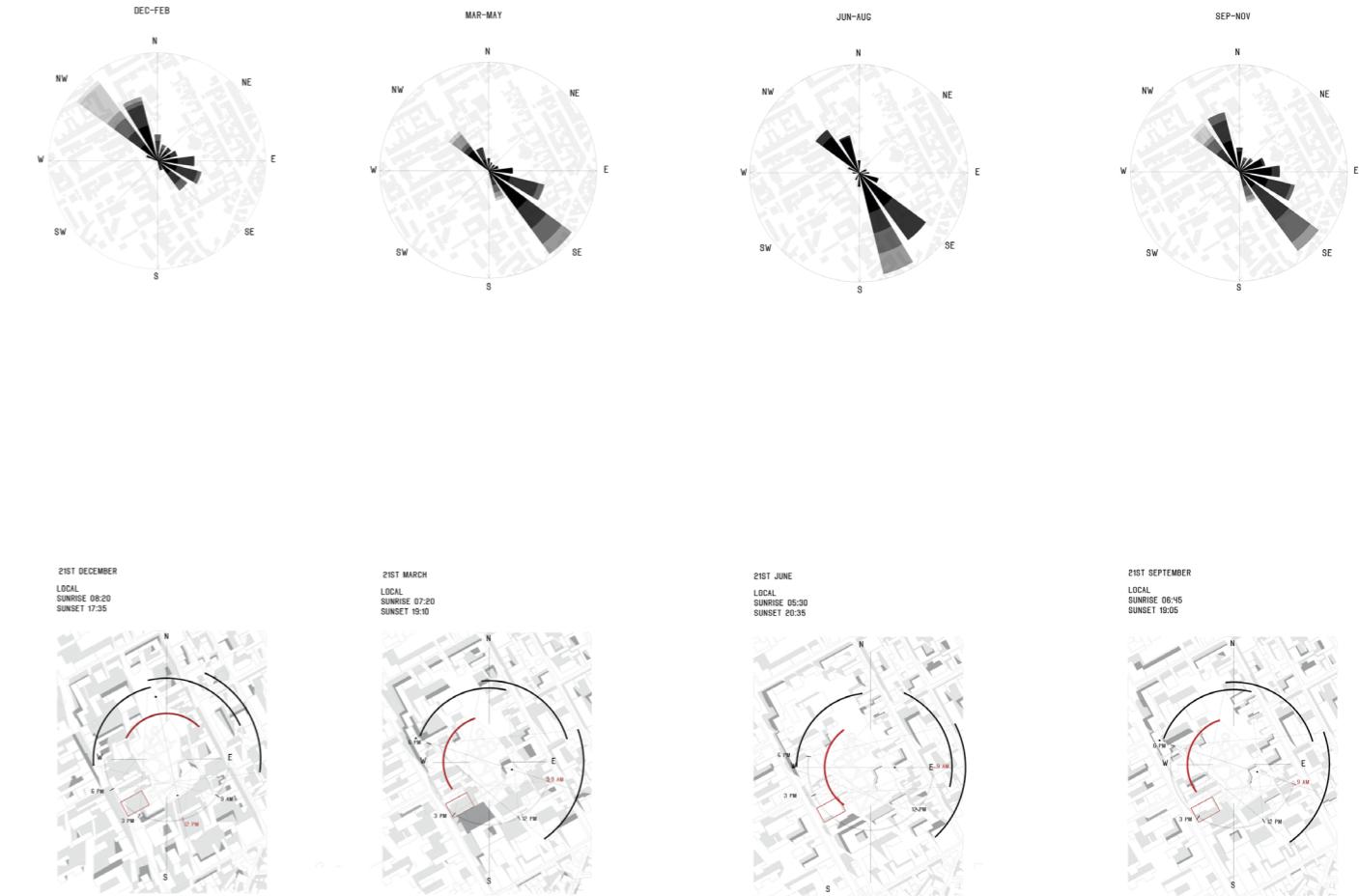
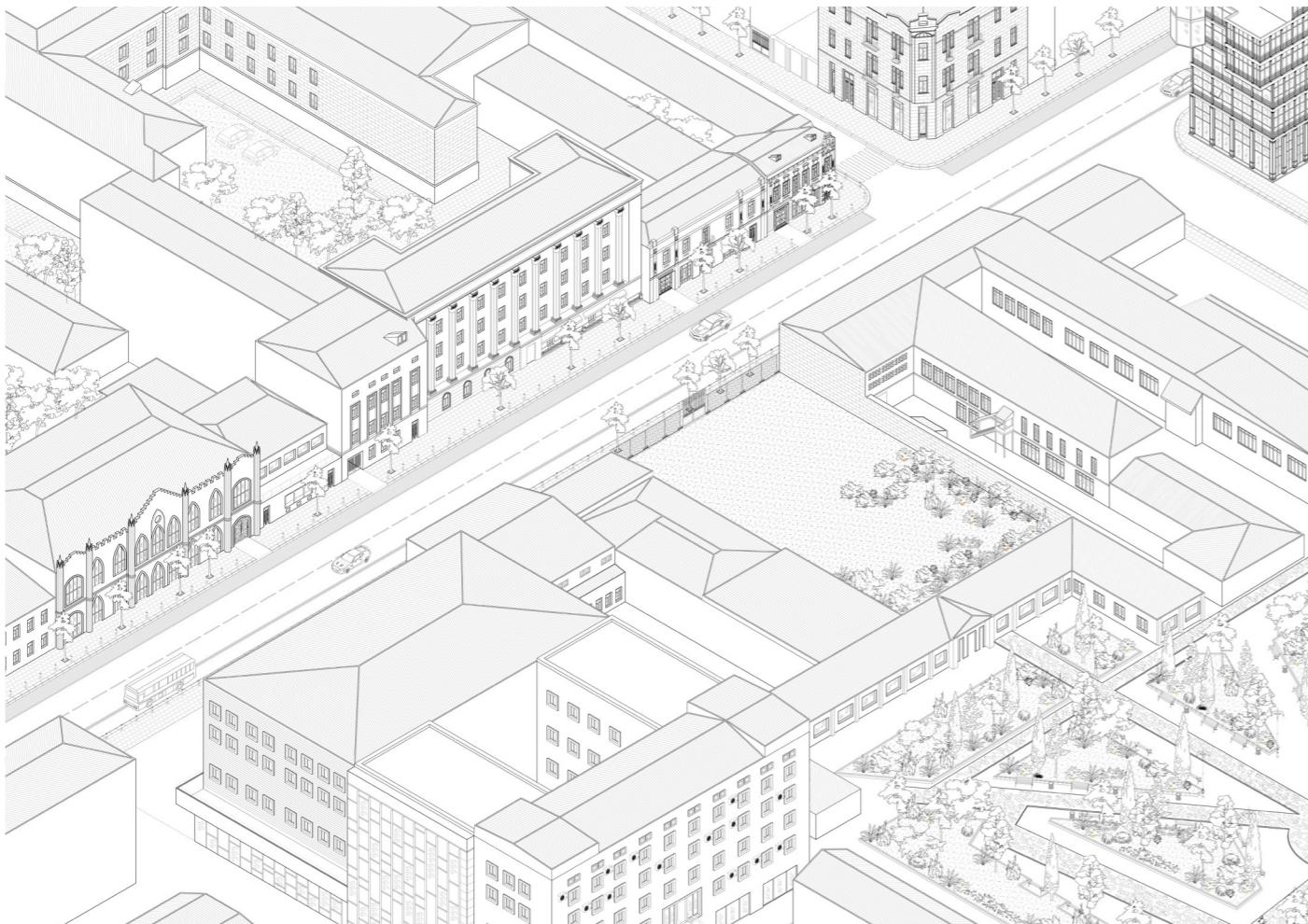
Vertical and horizontal movement becomes a "Street in the Sky", transforming corridors into social routes. Private and semi-public zones overlap gradually rather than abruptly, creating a functional gradation from home to community.

The building is composed of three module typologies, each based on equal spatial distribution. All rooms have the same square area, following a proportional and simple planning system. The spaces are divided-and simultaneously connected-by cross-shaped walls, which define the rooms while maintaining their spatial relationship.

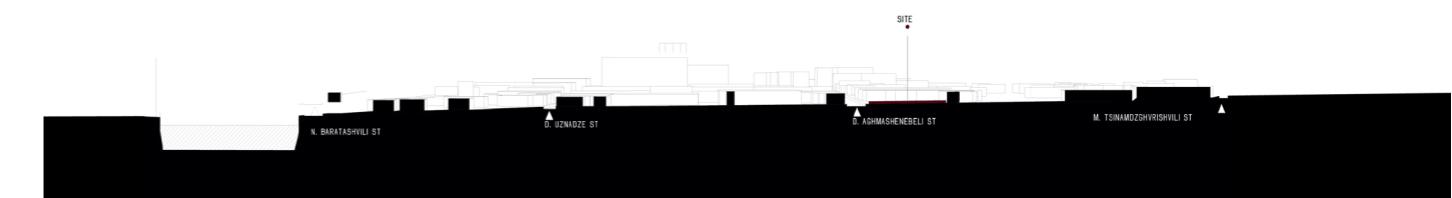
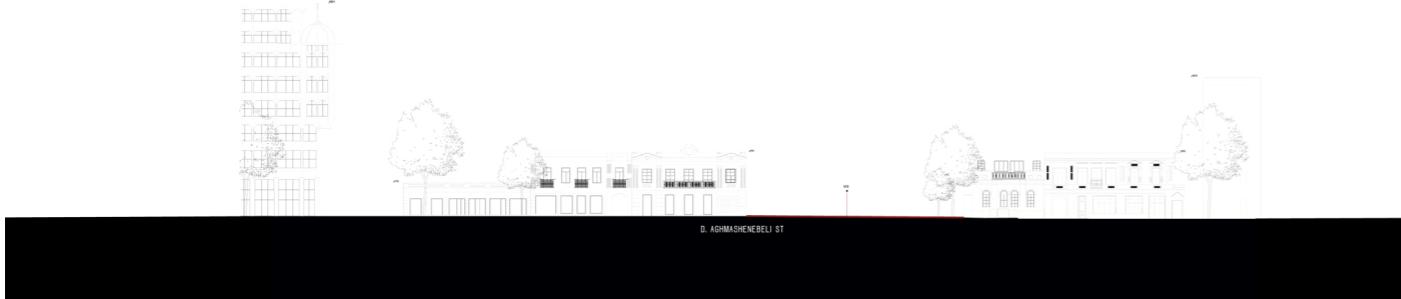
In the second and third typologies, inner courtyards are introduced. These courtyards act as functional separators between modules, organizing them into sleeping units and living/service units, and communal interaction.



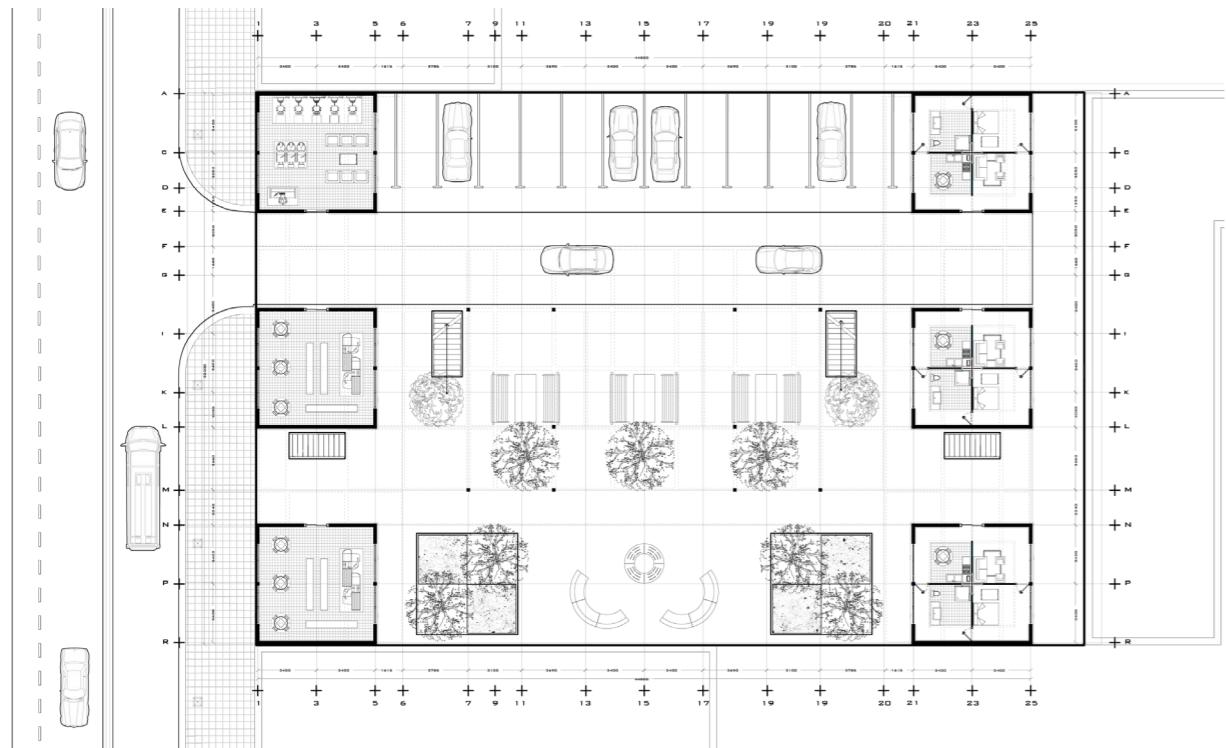
## Context



- 3. TWO STORY BUILDING WITH A SUIT RENTAL LOCATED ON THE ROAD SIDE. LEFTOVER SPACE USED AS RESIDENTIAL.
- 4. THREE "L" SHAPED BUILDINGS STACKED NEXT TO EACH OTHER. FEATURES AN INNER COURTYARD ACCESSED BY AN ARCHWAY. THE COURTYARD FEATURES A WEDDING DRESS SHOP/RENTAL, A REAL ESTATE AGENCY, A CONVENIENCE STORE AND A SHAWARMA JOINT.
- 5. SMALL PROPERTY OWNED BY "URBAN PARK HOTELS".
- 6. ONE STORY "L" SHAPED BUILDING LOCATED IN THE PARK. THE BUILDING SERVES AS A GYM.
- 7. 3 STORY BUILDING FLANKED BY TOWER-LIKE CORNERS THAT USED TO BE PART OF A LARGER HOSPITAL/SANATORIUM COMPLEX.
- 8. A SMALL TWO STORY RESIDENTIAL BUILDING PENETRATING INTO THE FORMER HOSPI-TAL/SANATORIUMS COURTYARD.



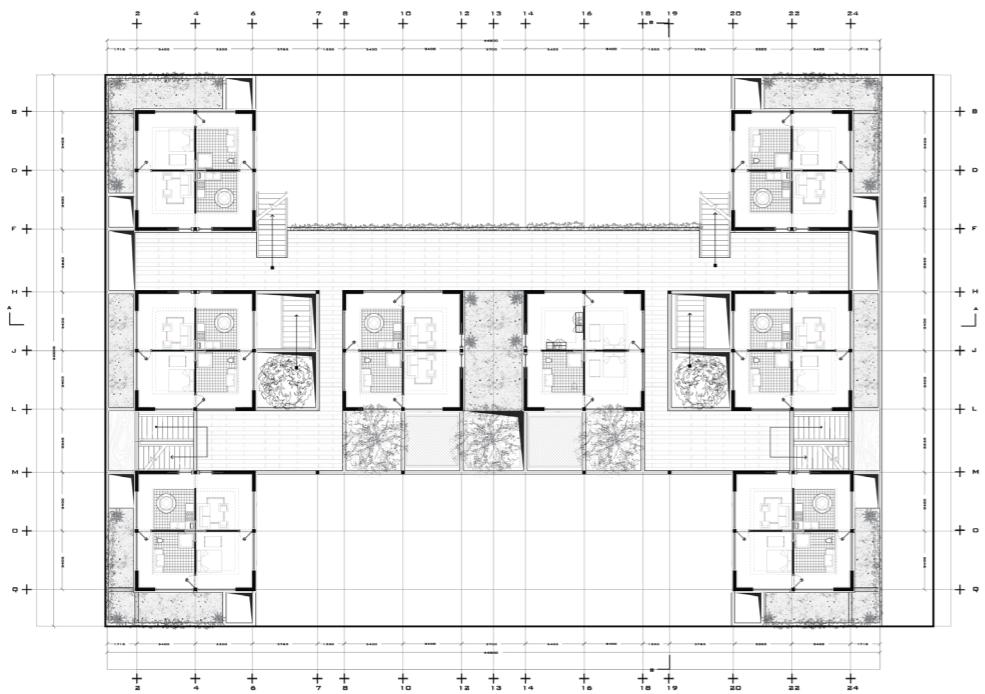
# Concept



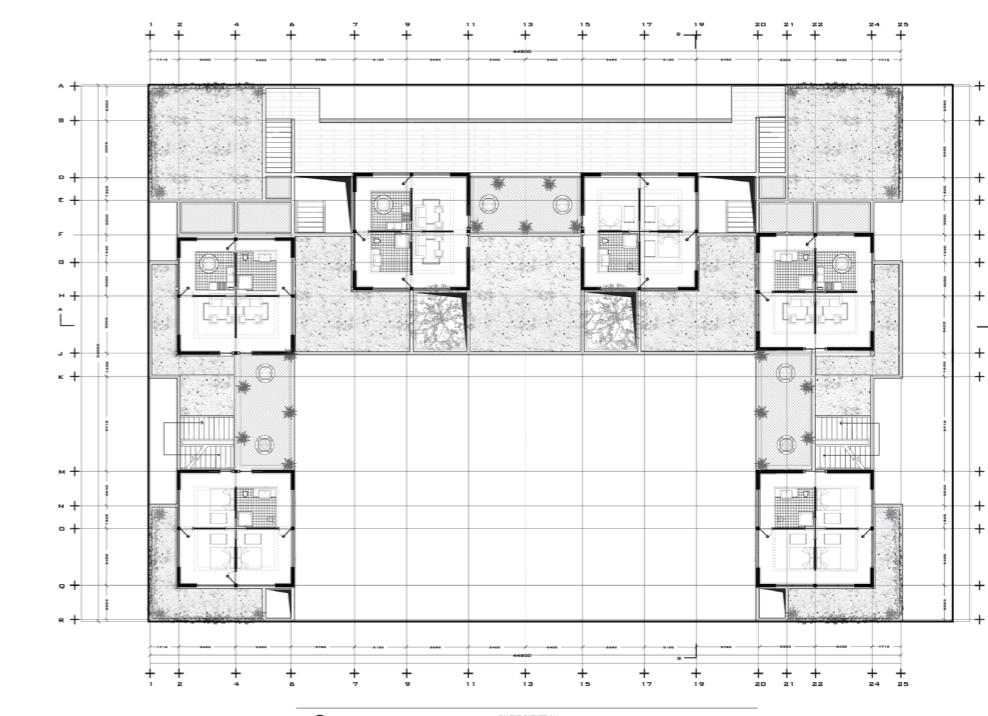
Ground Floor Plan



Third Floor Plan

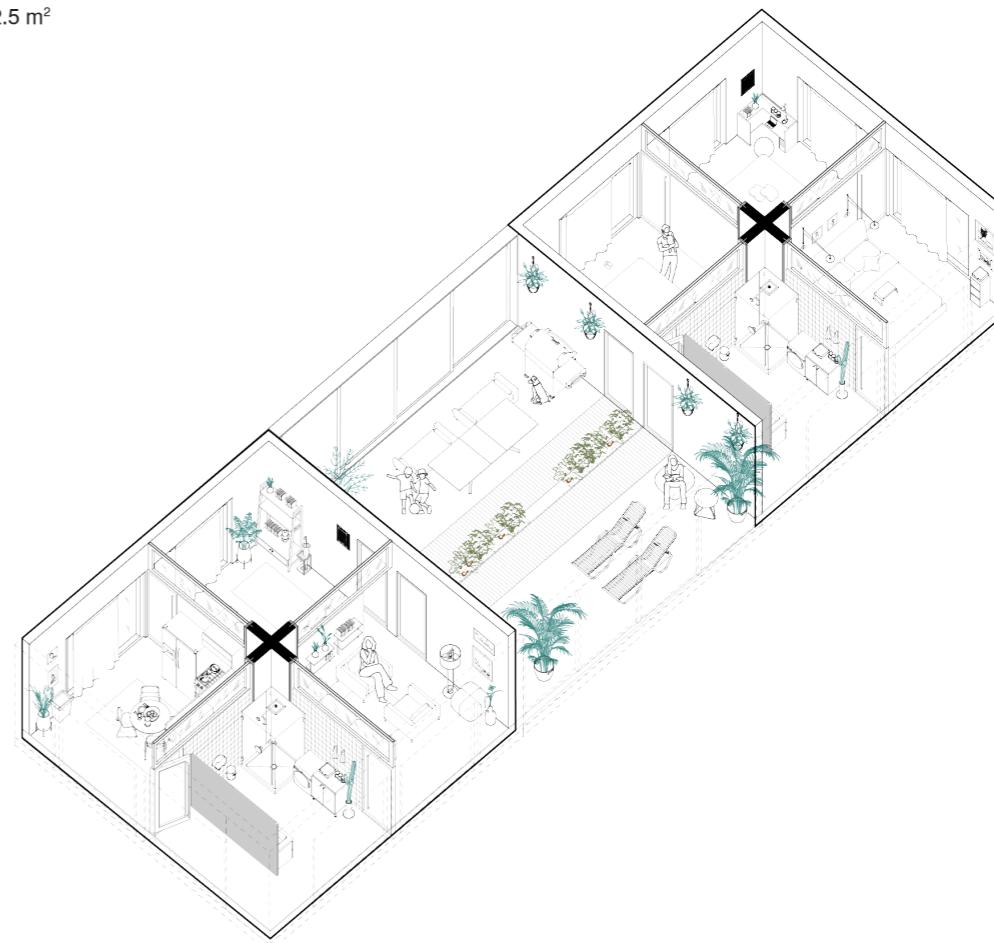
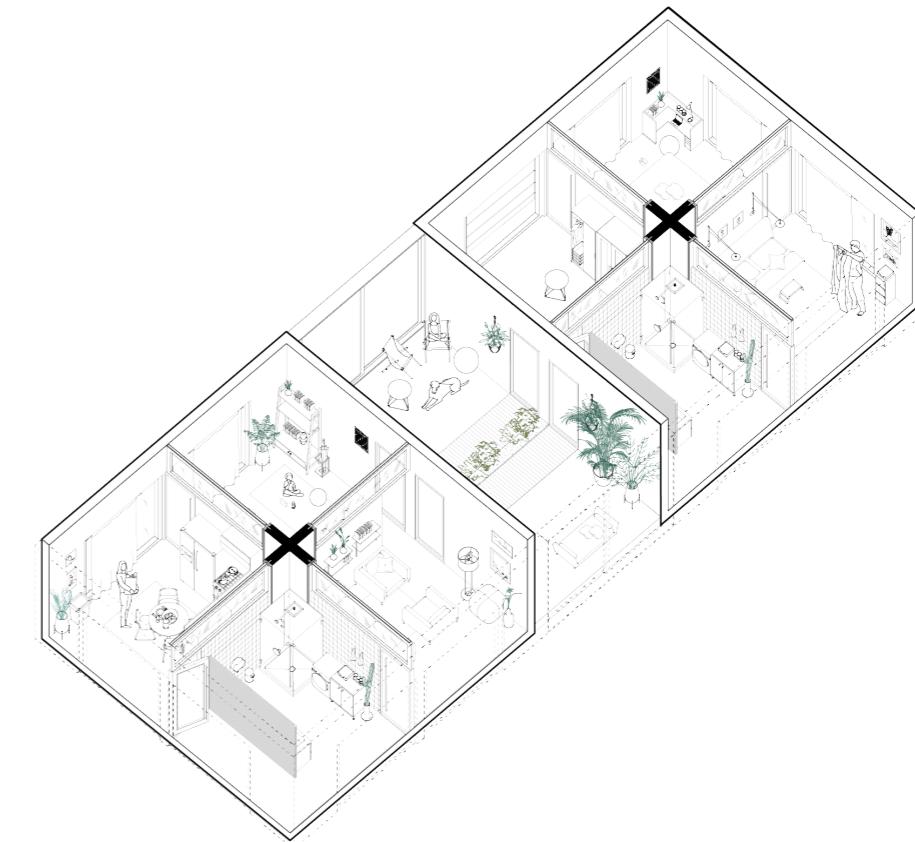
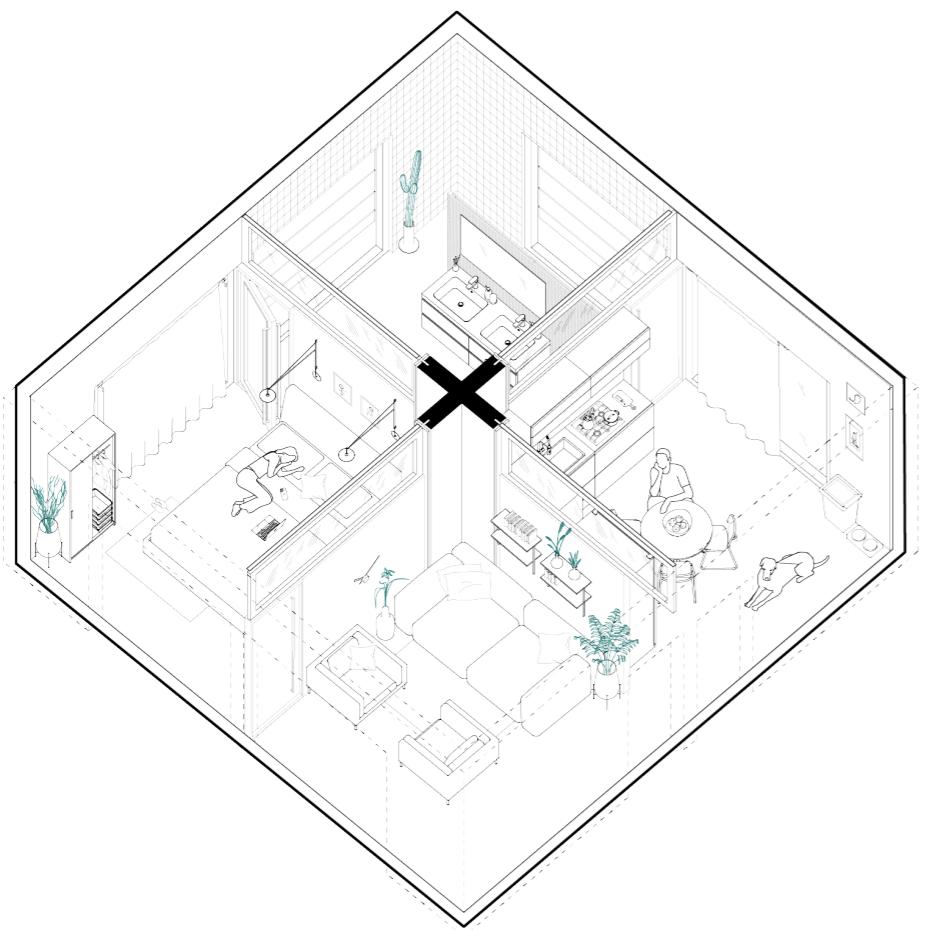


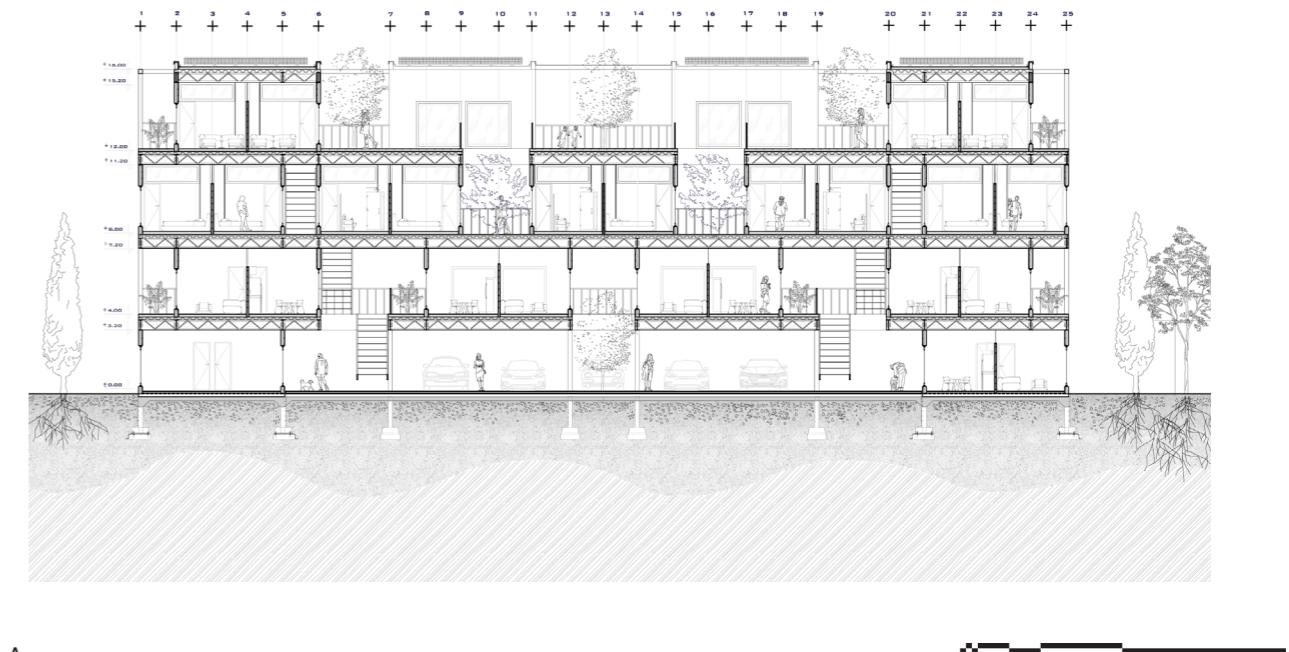
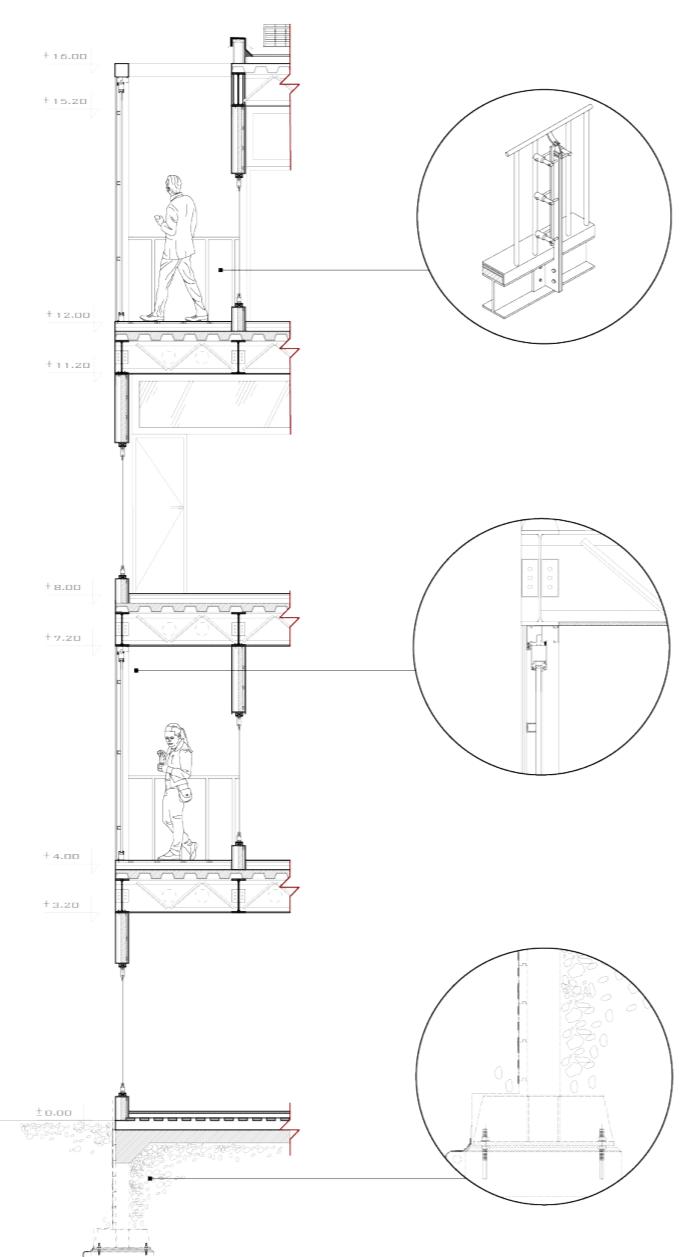
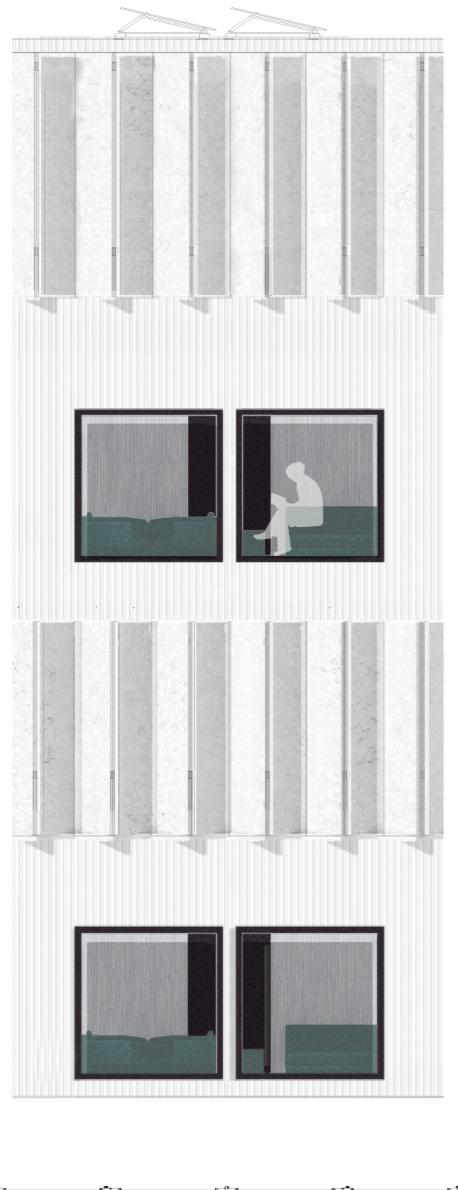
Second Floor Plan



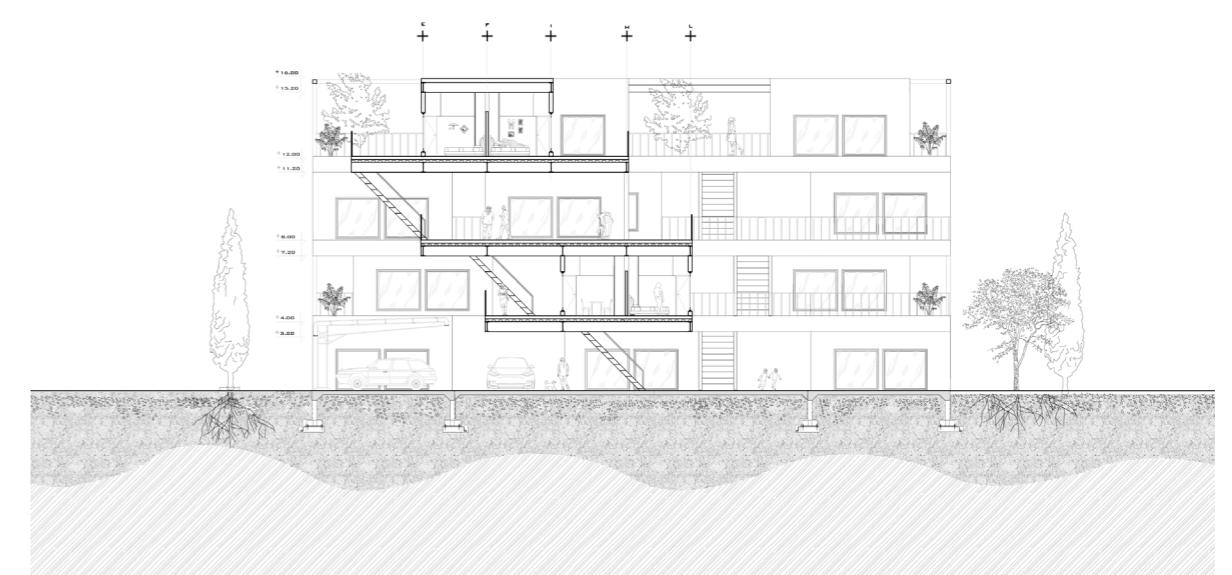
Fourth Floor Plan

## Apartment Axonometries





Section A-A



Section B-B

Facade Detail

0 1 2.5 5 10M

## **Section A-A**



