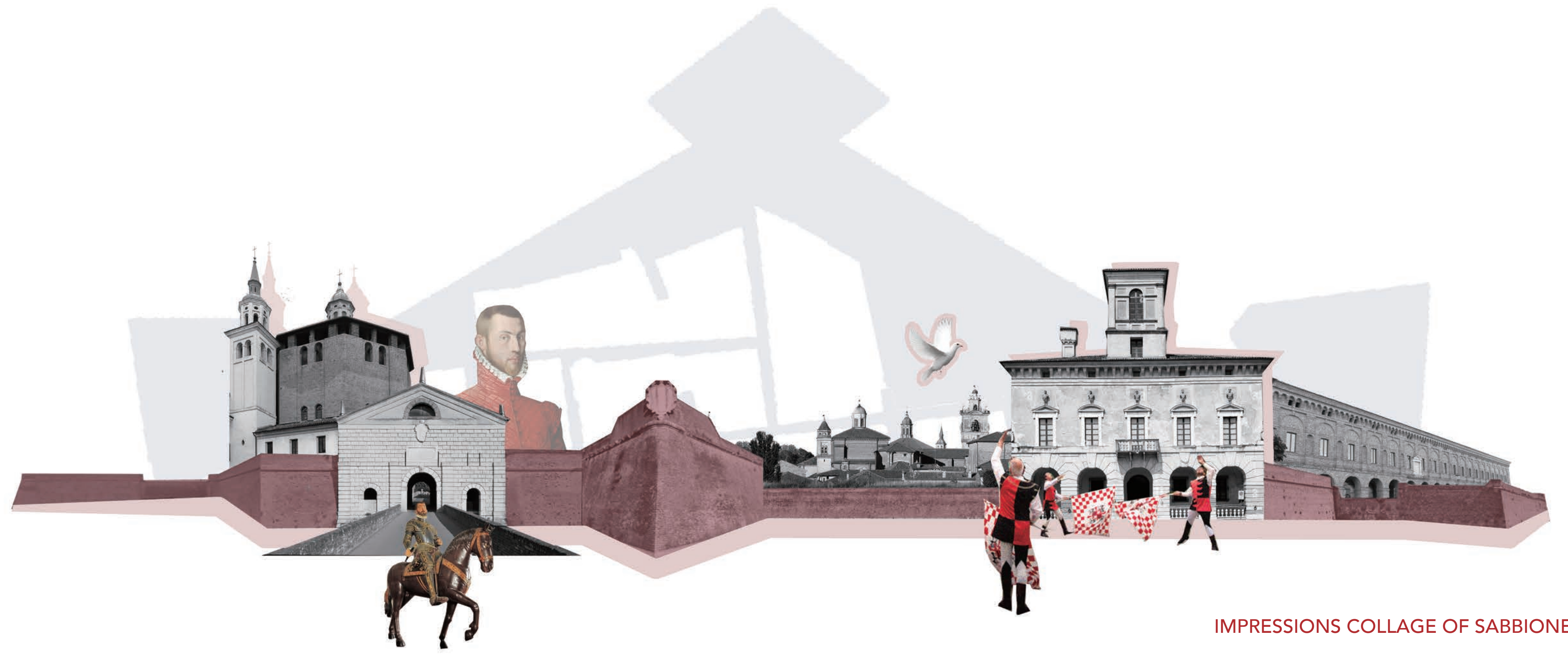
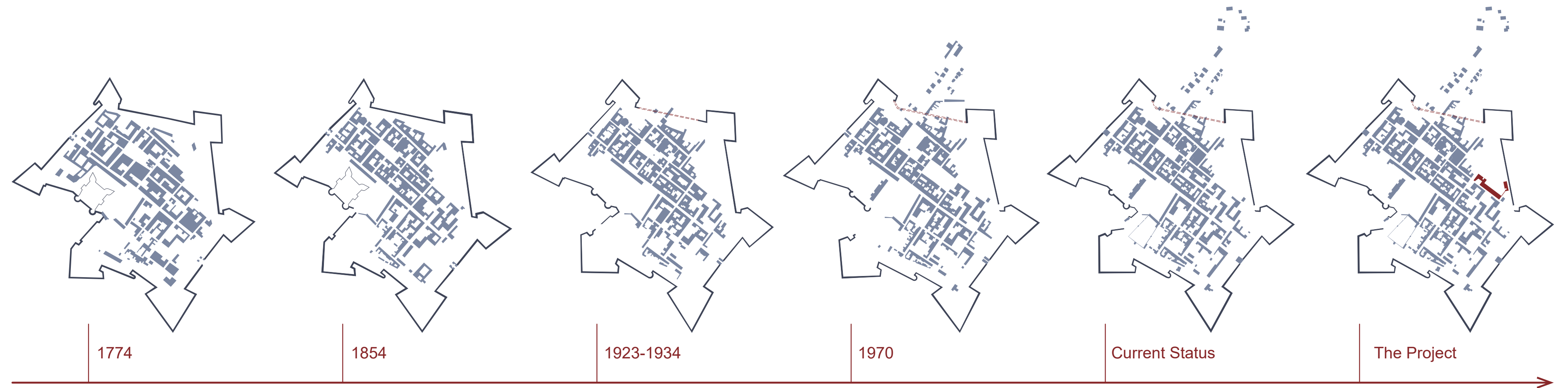


REGENERATION OF MARGINAL SPACE

A HOUSING COMPLEX IN SPALTO BRESCIANI



IMPRESSIONS COLLAGE OF SABBIONETA



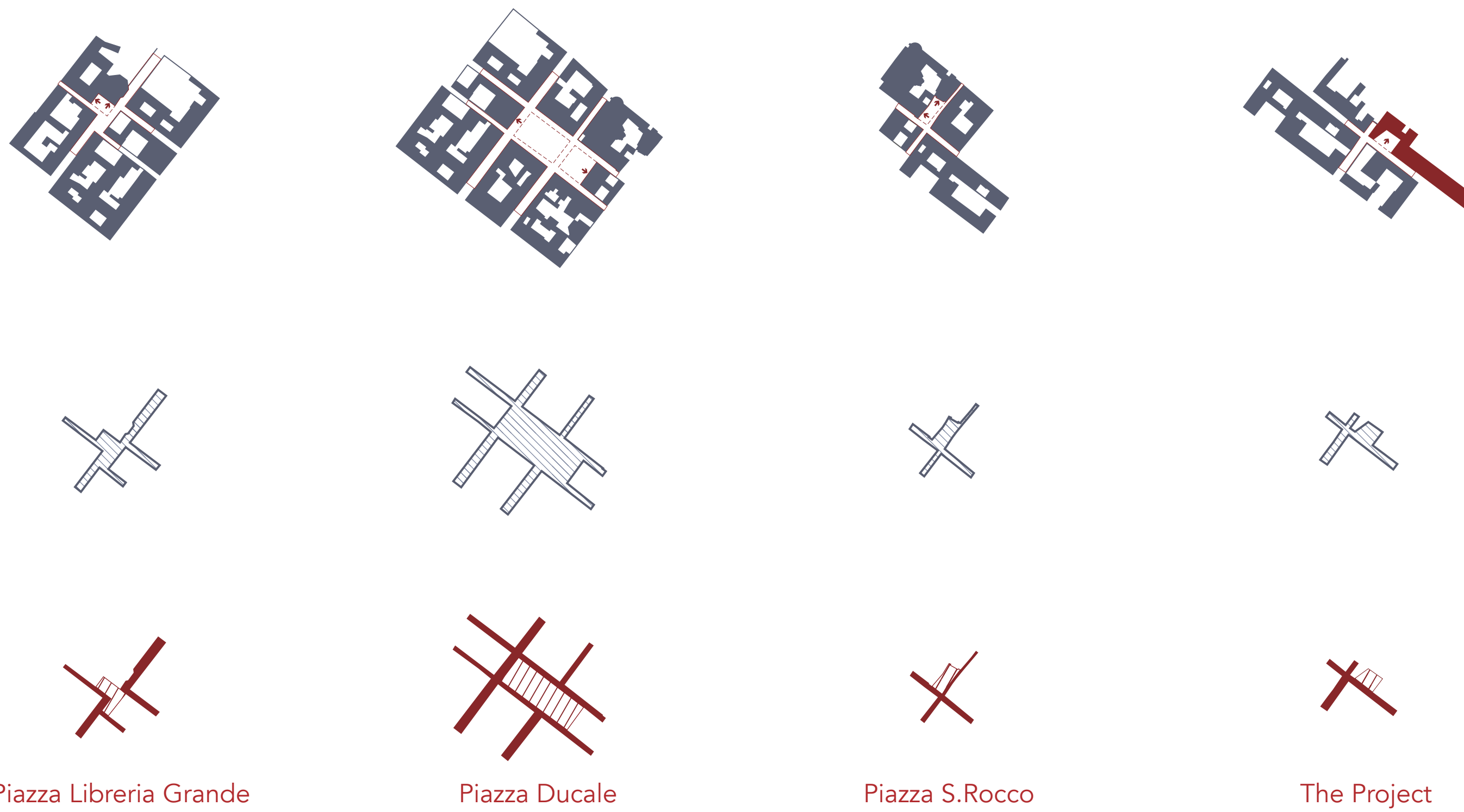
TIMELINE

ABSTRACT

The site of this project is in Sabbioneta, a UNESCO-listed Italian town. The city is also known as the ideal city of the Renaissance, but as the years have passed, although most of the buildings are well preserved, the city has increasingly lost its vitality, the structure of its inhabitants tends to age, and a significant portion of the city's architecture and landscape with its characteristic fortifications are in an unused state.

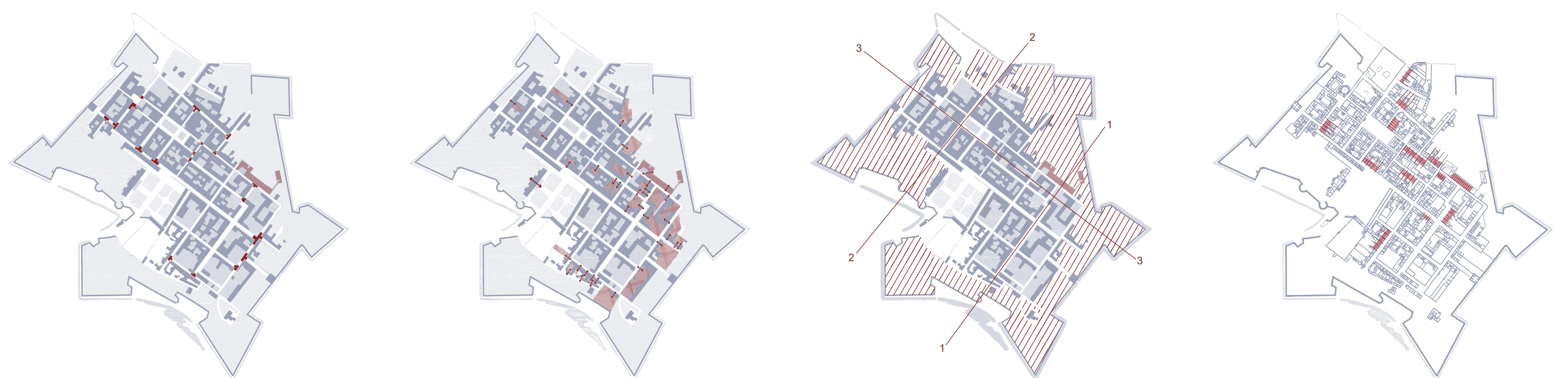
Spalto Bresciani is a huge green space between the city and the bastion area, adjacent to the Palazzo Forti (now a library and workshop and part of the internal accommodation). The design focuses on the possibility of using the urban marginal space, hoping to improve the whole function and urban structure of Sabbioneta, in order to activate the old city.

As a historical city Sabbioneta attracts people every year, but the hotel facilities in the city are not very good, so the first function we propose is residential. Secondly, some universities have workshops here during their holidays, so it is necessary to have a working space while already having a residential space. However, considering the use of working space on normal days, the third main function we propose is the exhibition space, which can provide exhibition space for artists as well as working space during the exhibition period. Finally, a cafe is equipped along the city wall to increase the interaction with the old city wall.



The enclosure of the building creates the street, but the setback of the public building produced the public space creating the square. Generally, the square is integrated with the road to assume the function of traffic.

PLAZA COMPOSITION



T-shaped ending of street keep the city streets from being endless.

With buildings arranged one by one to form a courtyard or garden, with a large centrally entrance hall at ground plan, connect the street and the courtyard.

The green space between the walls and the city, like a transition between the historic city walls and the cultural center of the city.

The plan of many residential buildings in the city arranged in a 1:1:1 scale.

VISUAL RELATIONSHIP OF SHADING OF ROAD SYSTEM

ENTRANCE TO THE COURTYARD OF THE BUILDING

GREEN SPACE INSIDE THE CITY WALL OF SABBIONETA

PROPORTION OF TYPICAL RESIDENCE

AUTHOR:
GUANGQUAN SUN

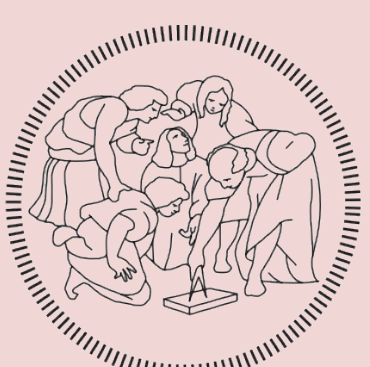
SUPERVISOR:
Prof. Angelo Lorenzi

TESI DI LAUREA MAGISTRALE
ANNO ACCADEMICO 2022-2023

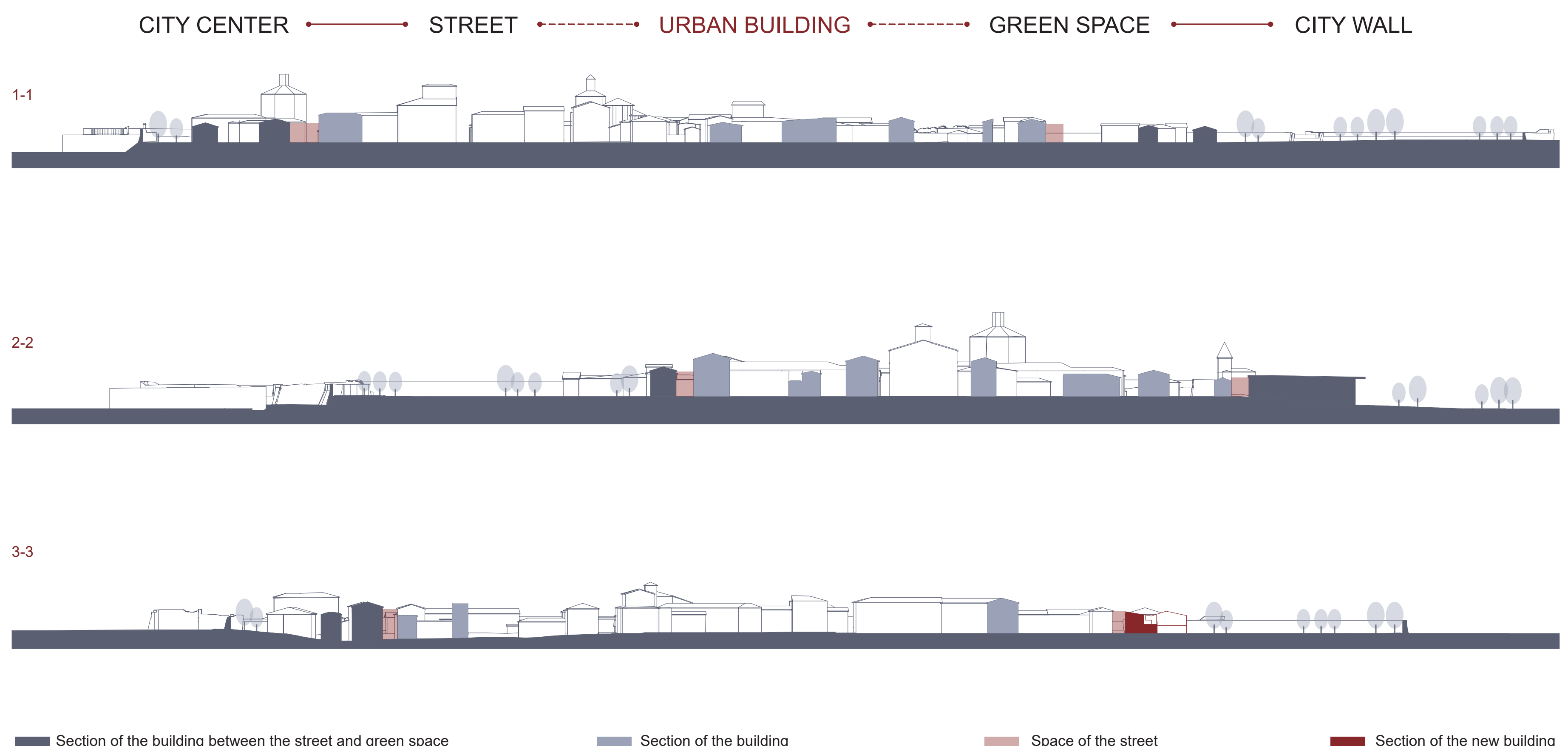
POLITECNICO DI MILANO

SCUOLA DI ARCHITETTURA URBANISTICA
INGEGNERIA DELLE COSTRUZIONI

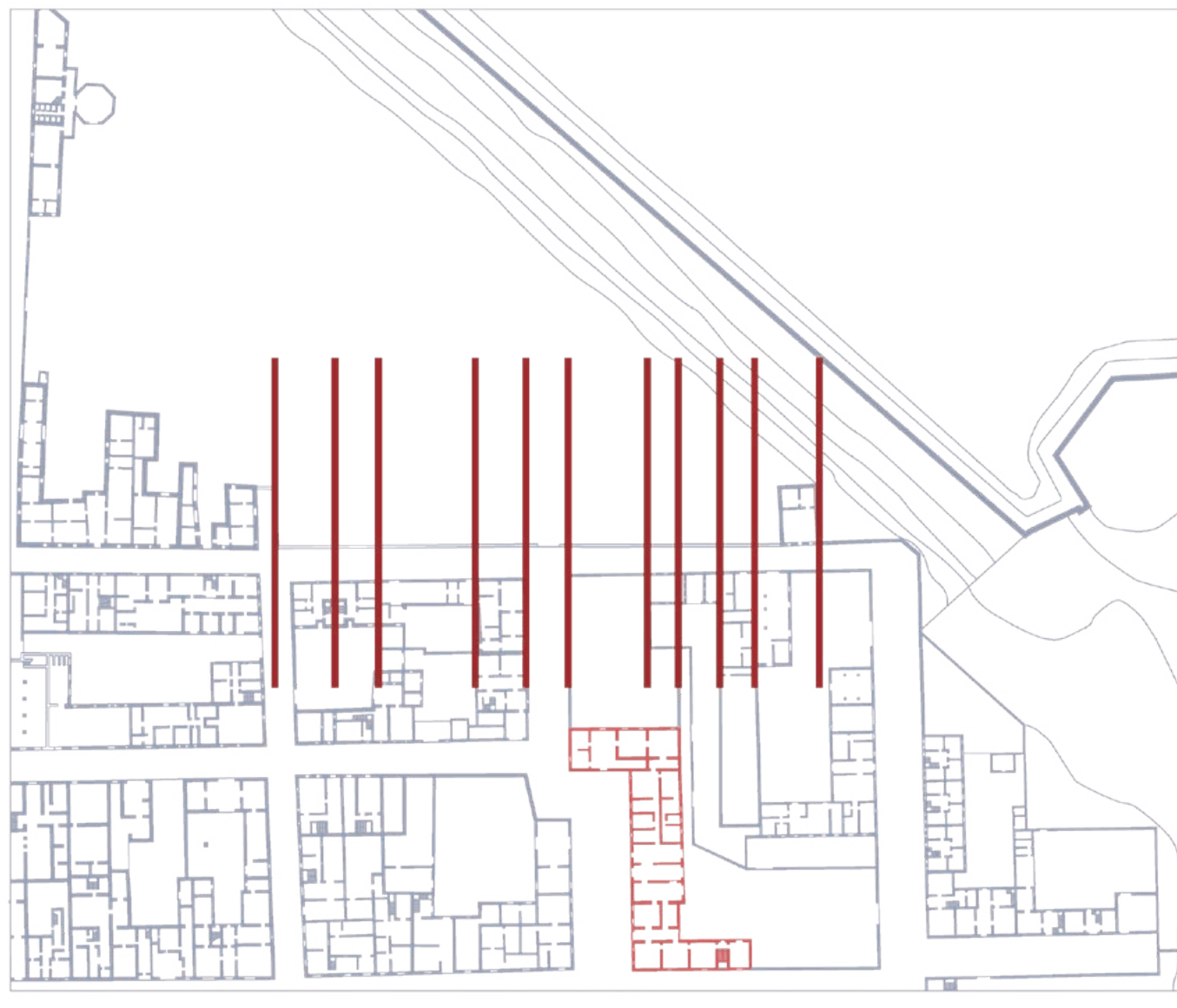
POLO TERRITORIALE DI MANTOVA



POLITECNICO
MILANO 1863



Section of the building between the street and green space Section of the building Space of the street Section of the new building



The building is mainly controlled by the residential structure next to the site and the existing narrow road.

Vertical Control Line



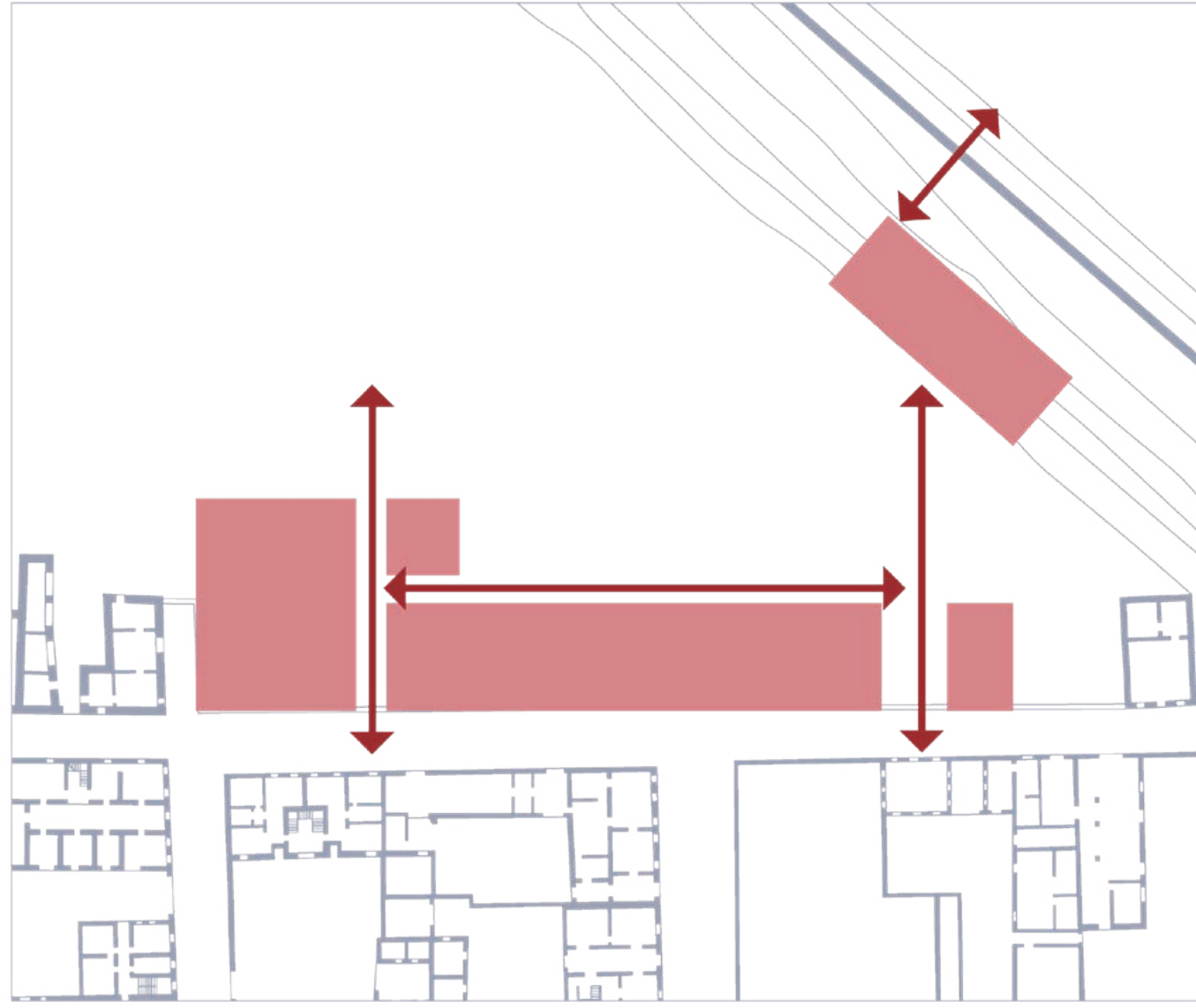
The control line of the landscape is parallel to the street and the old city wall, and is consistent in scale with the surrounding buildings.

Landscape Control Line



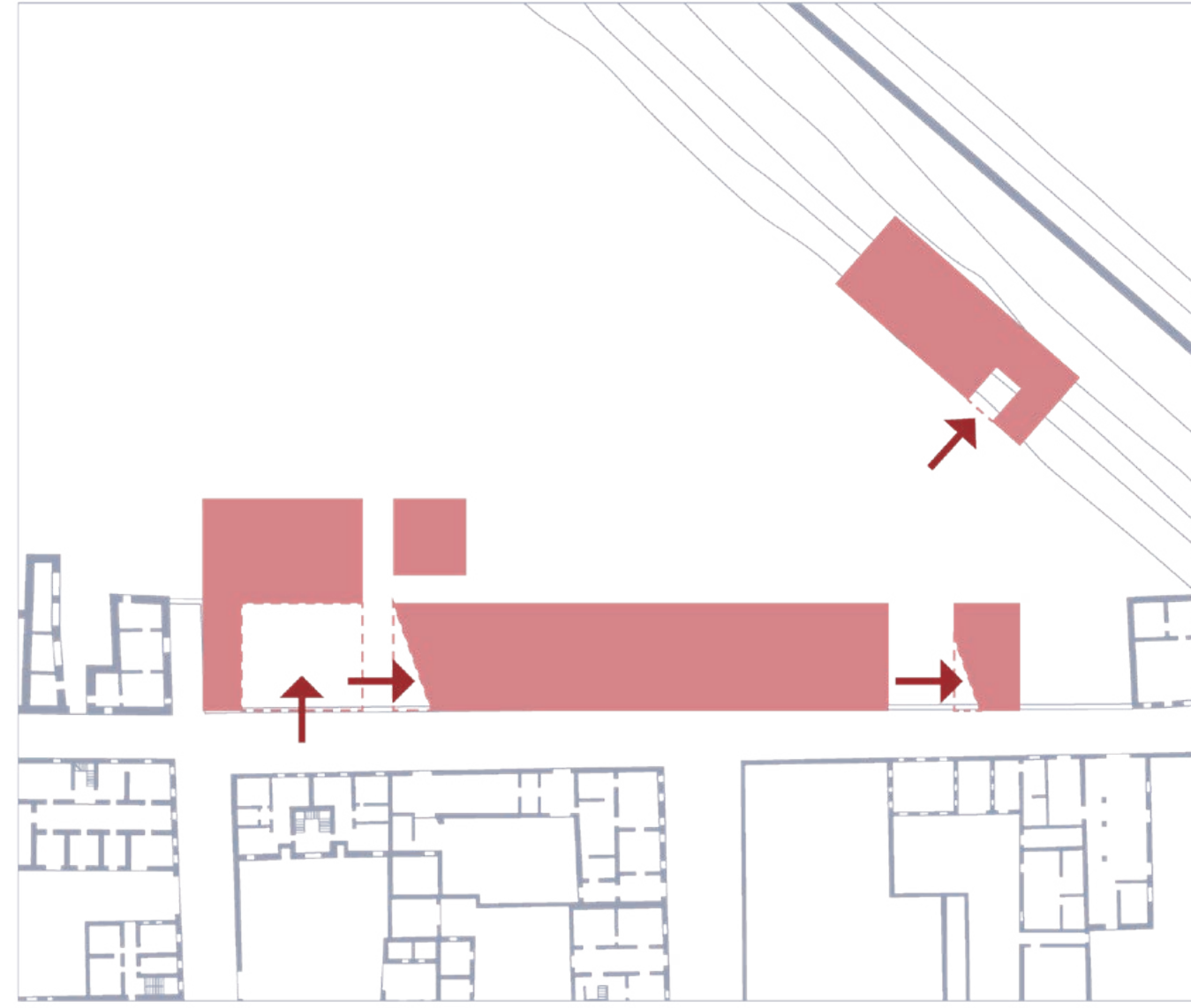
Through the control line to get building block that echoes the urban fabric.

Volume Study
CONTROL LINE OF THE PROJECT



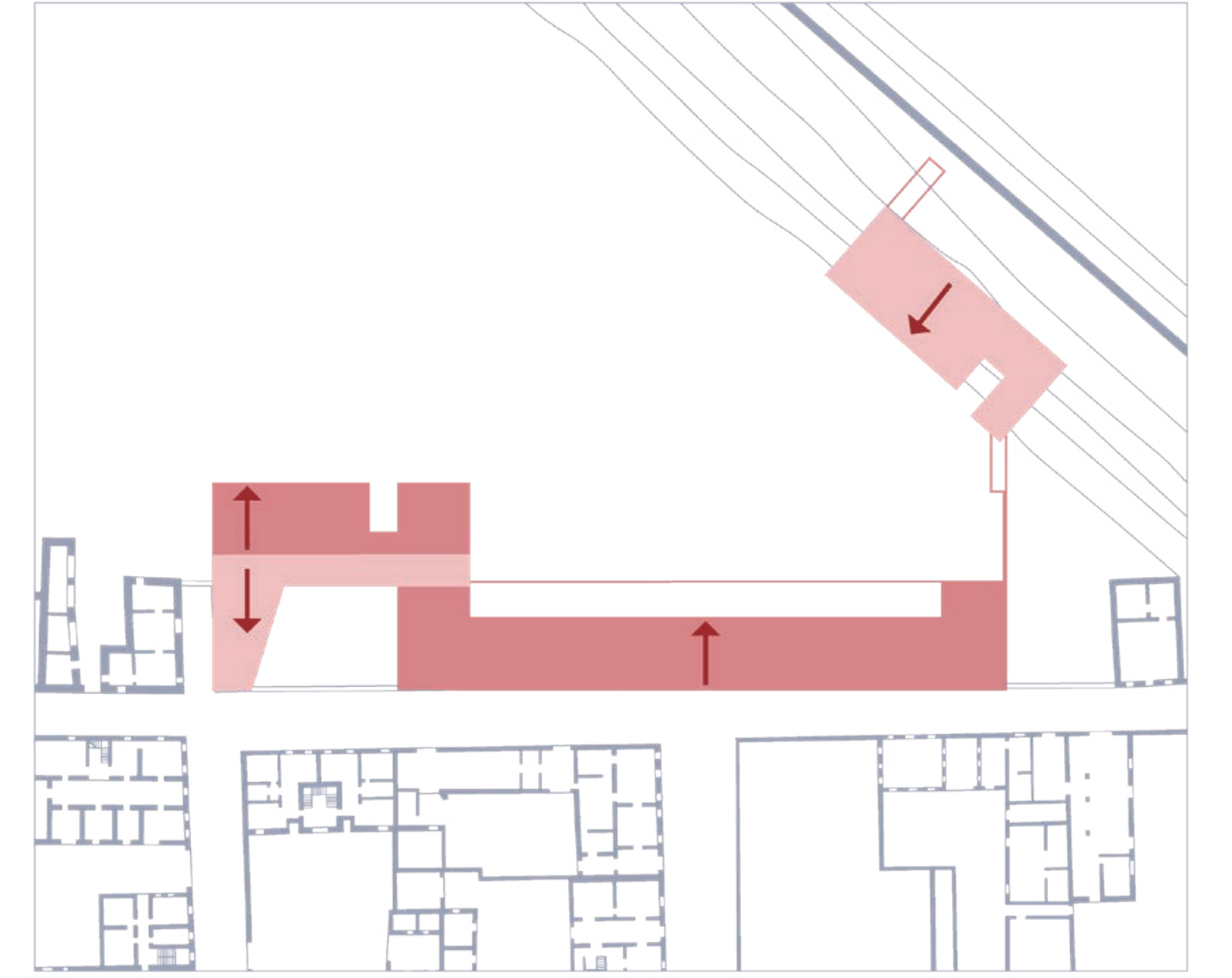
As a main entrance to the embankment, which connects the city to the city walls.

Connect The City With The Old Walls



The setback of the block creates the square, while the setbacks at the entrance create small gathering spaces and a welcome feeling of the entrance space.

Setback Of The Block



Referring to the type of sloping roofs of residential houses in the city, but converting them into a new form of folded slope.

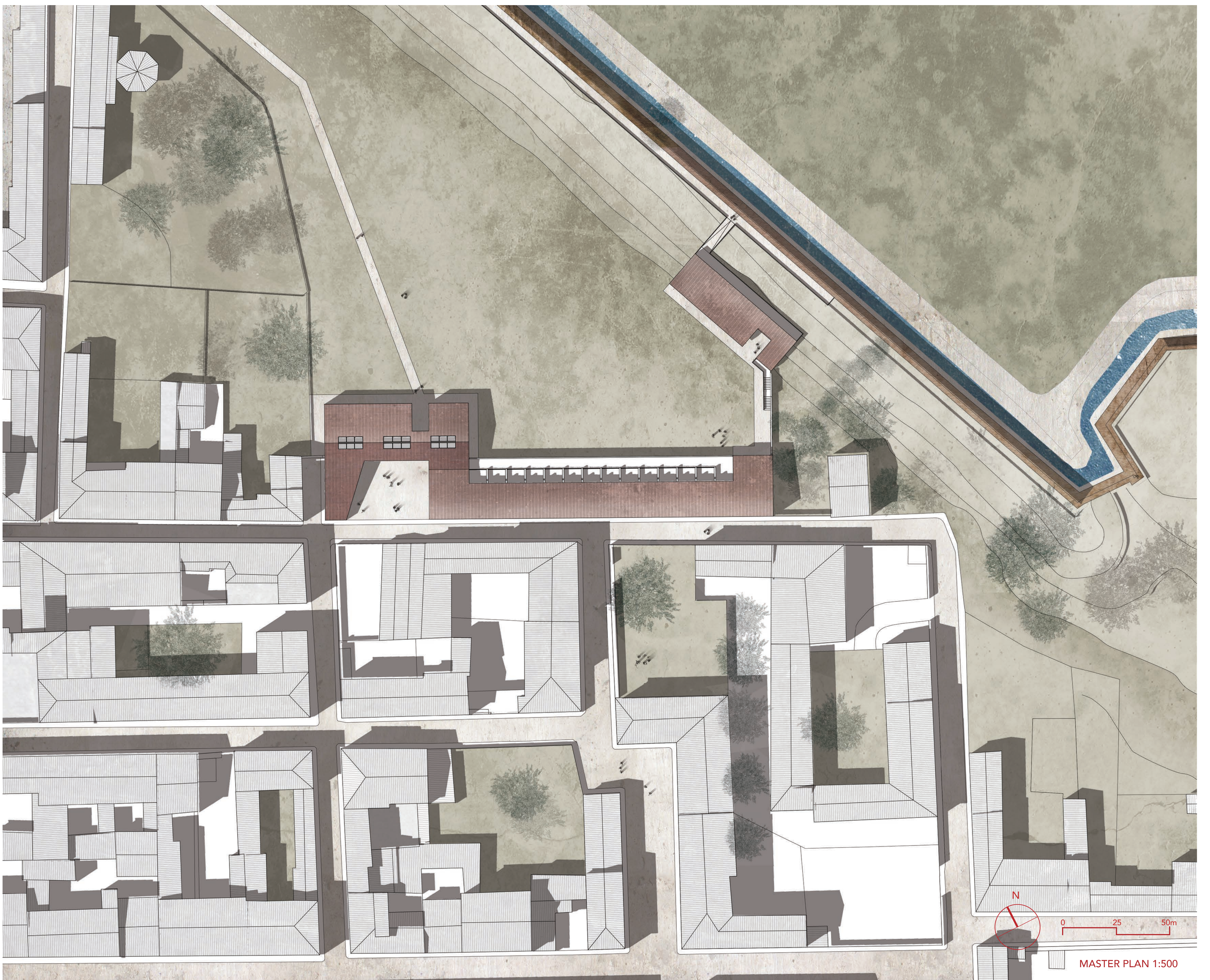
Transformation Of The Roof
GENERATION OF THE BUILDING



N
0 50 100m
MASTER PLAN IN CITY SCALE 1:2000

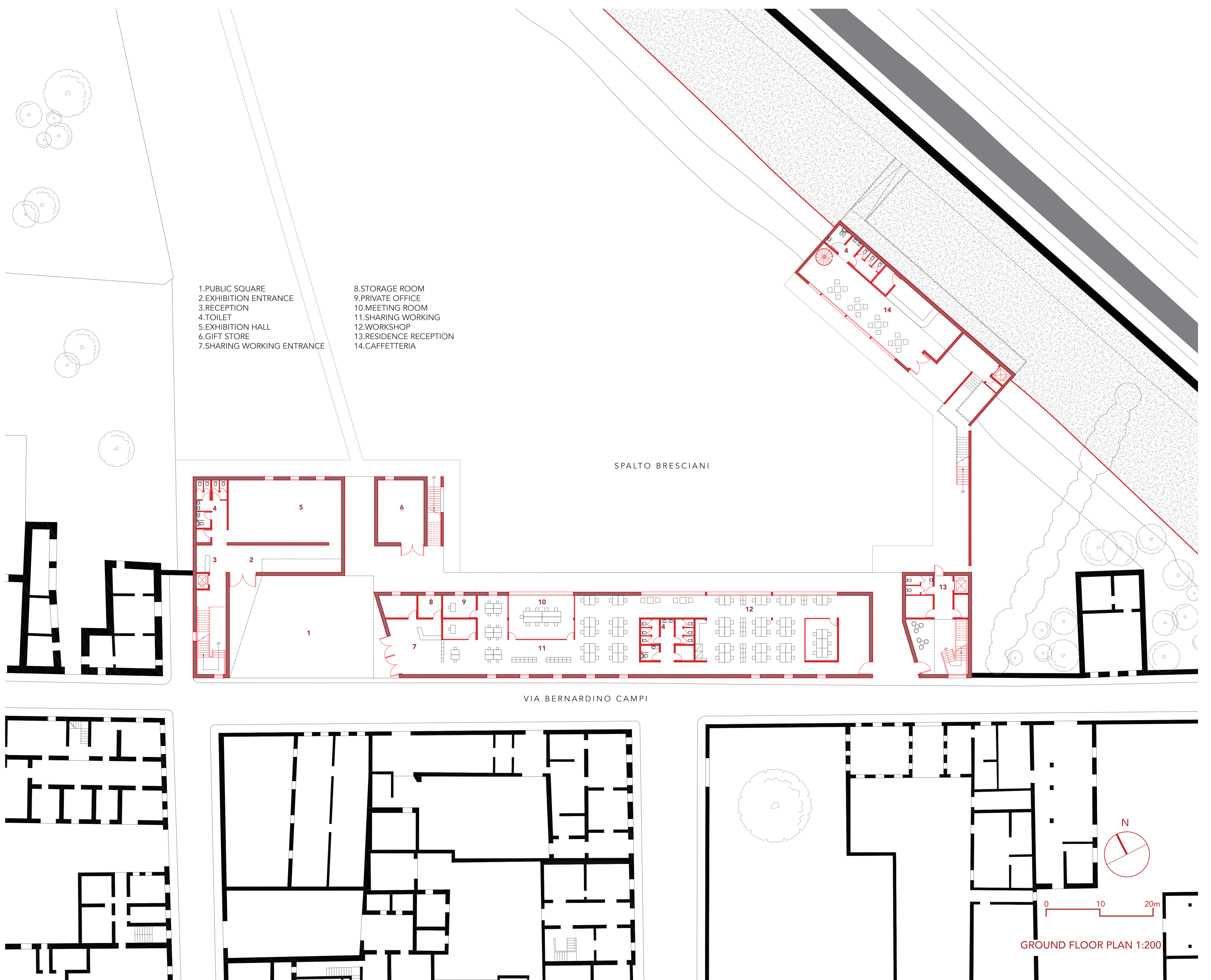


AXONOMETRIC RENDERING WITH CONTEXTS



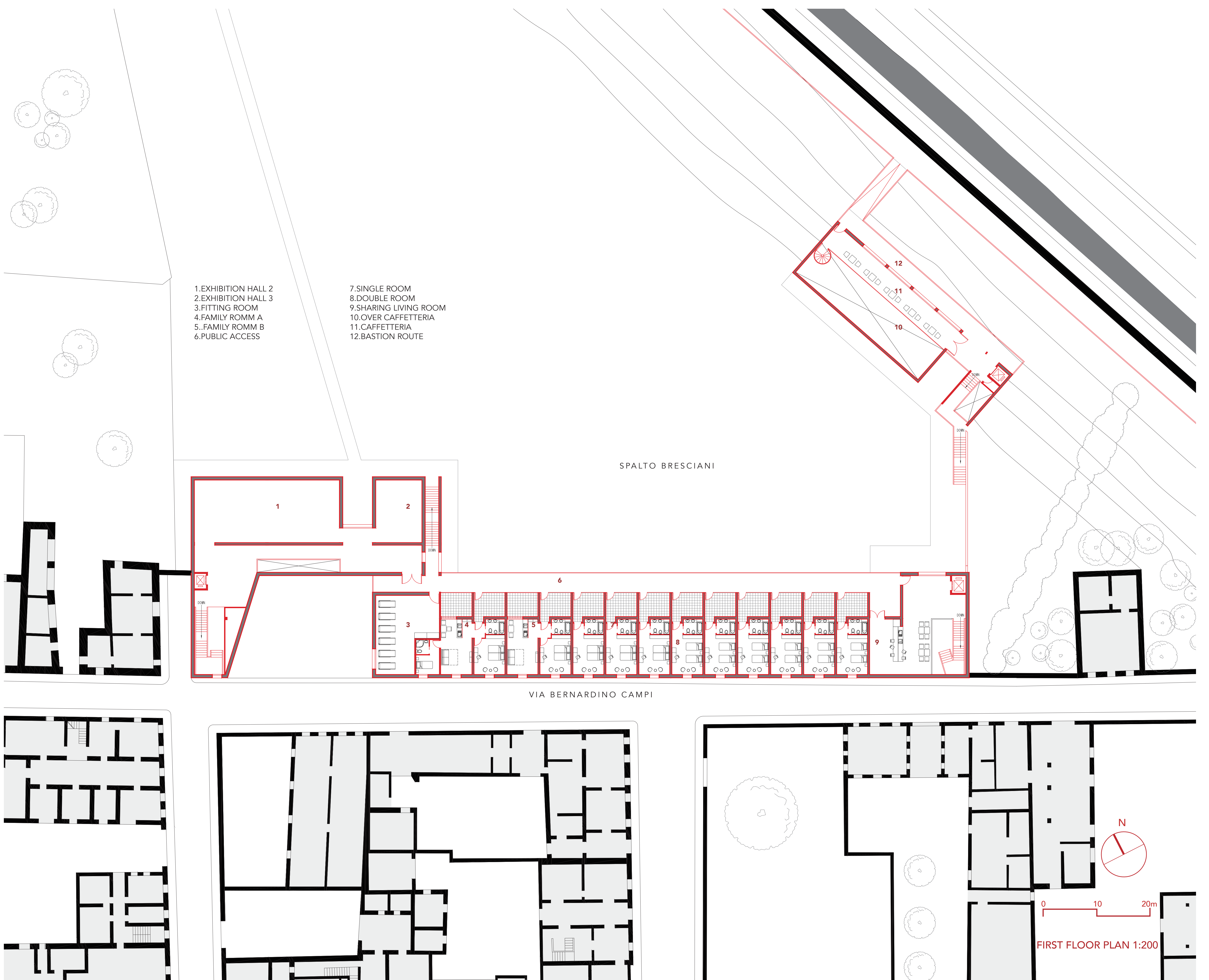


VIEW FROM THE MAIN ROAD



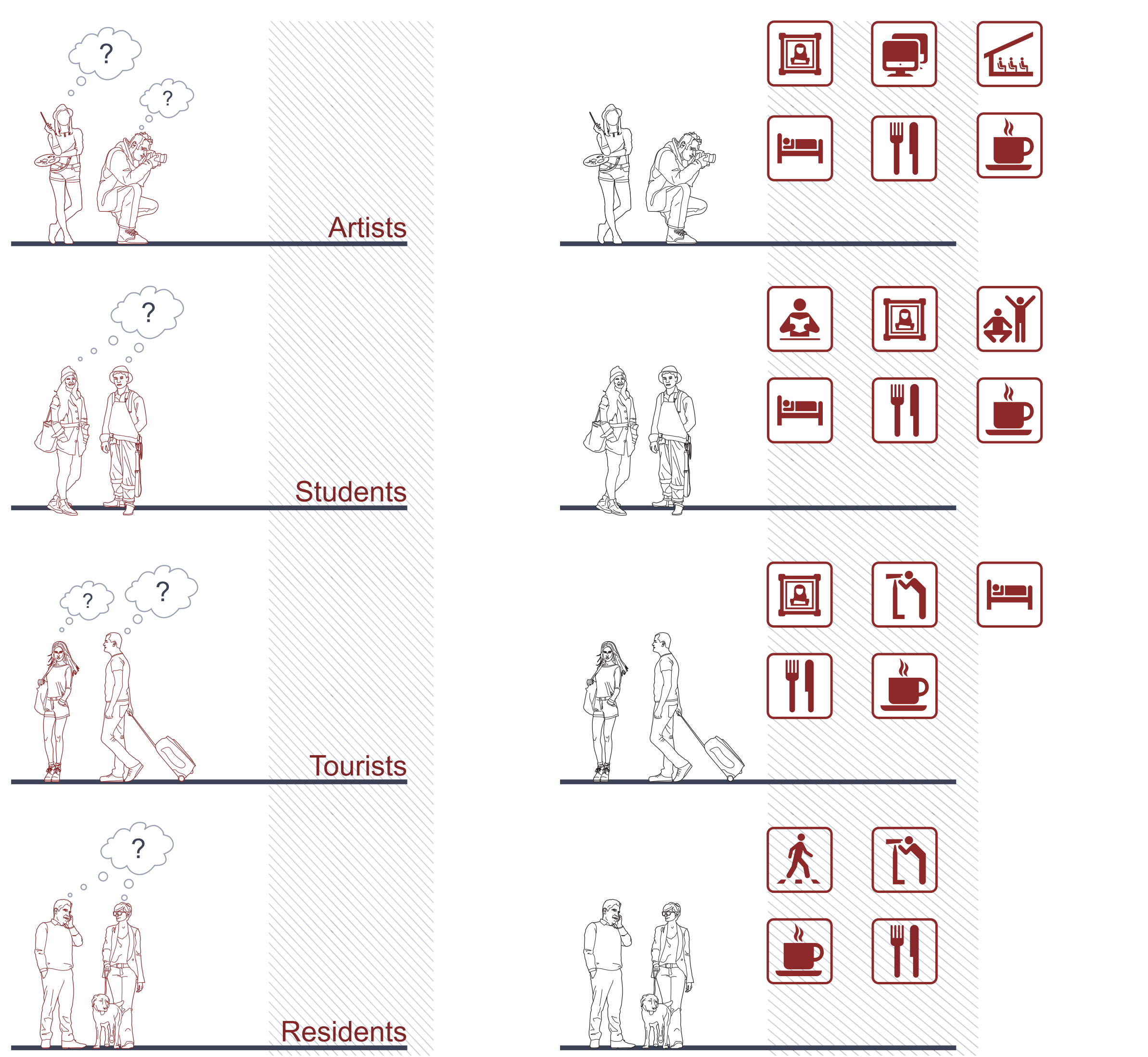


VIEW FROM THE MAIN PIAZZA

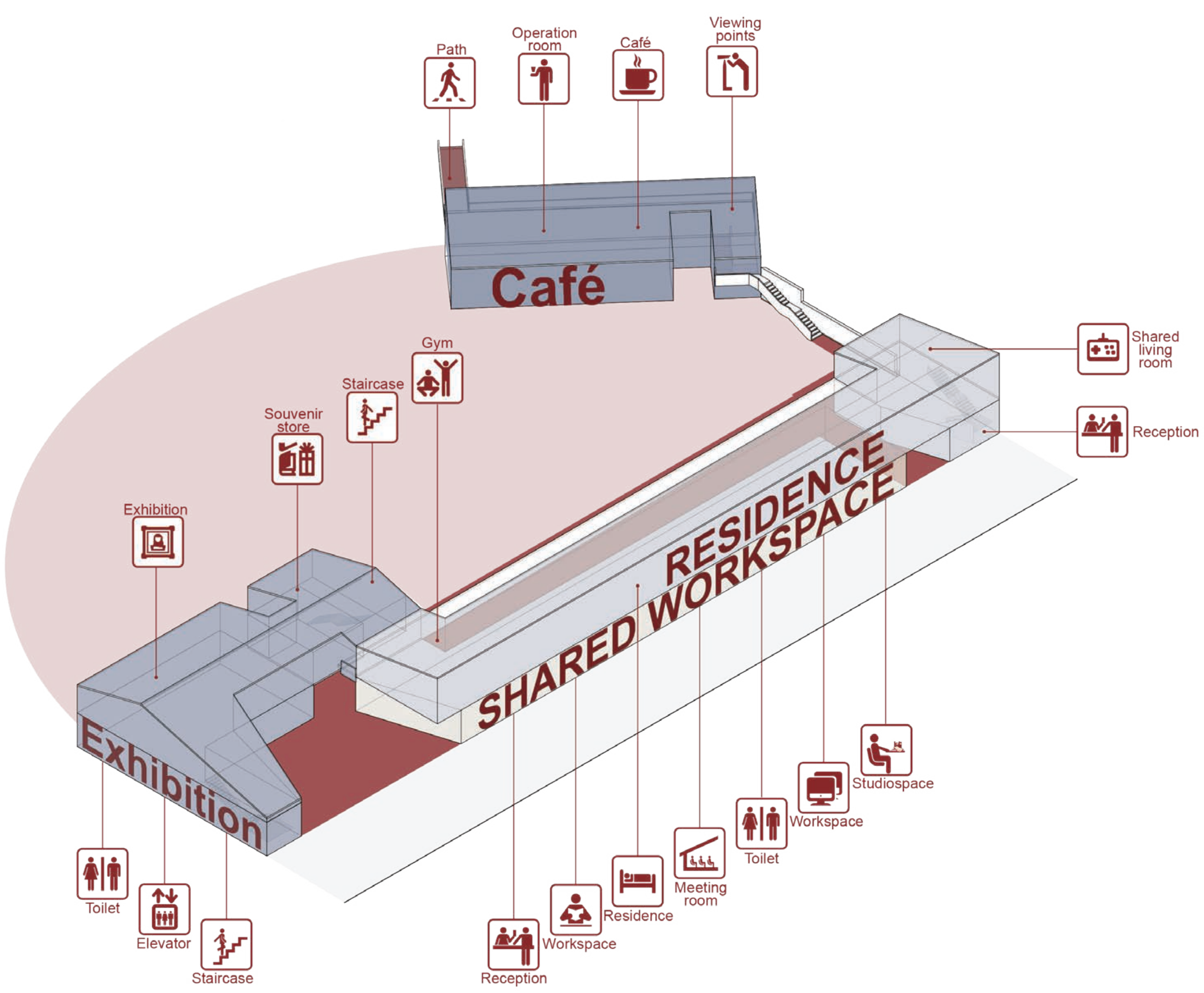




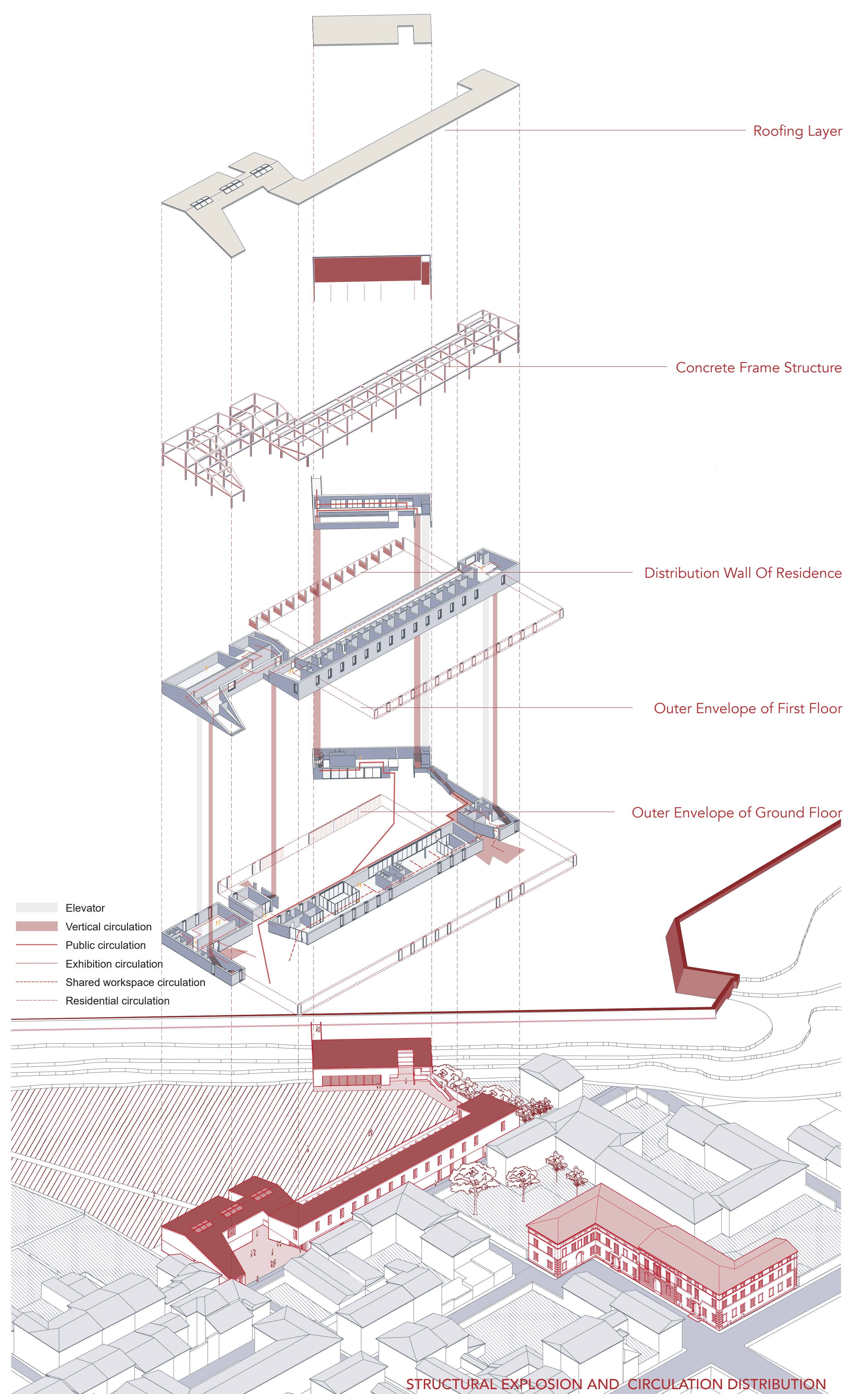
VIEW FROM THE THE EXISTING ARCHWAY



FUNCTION AND CIRCULATION DISTRIBUTION



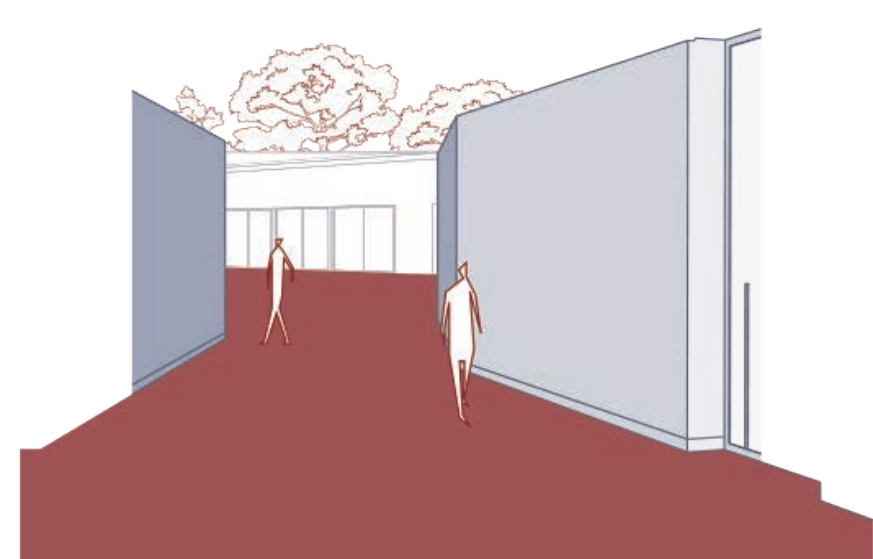
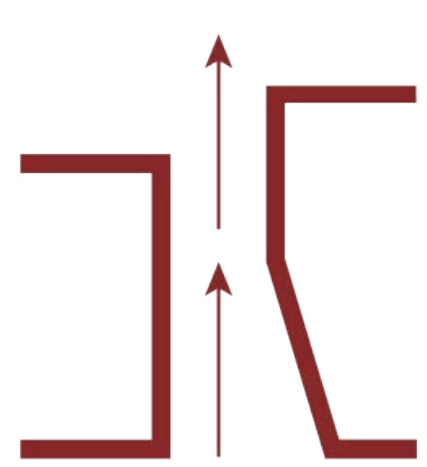
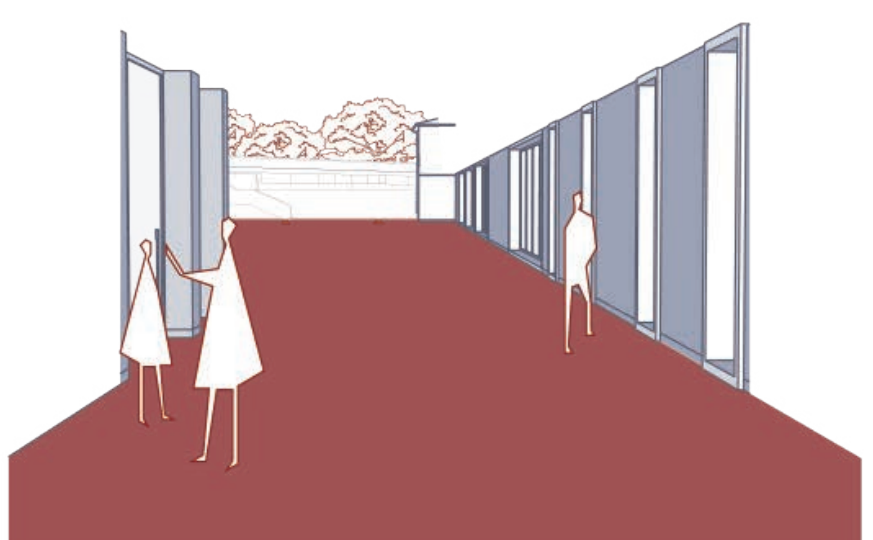
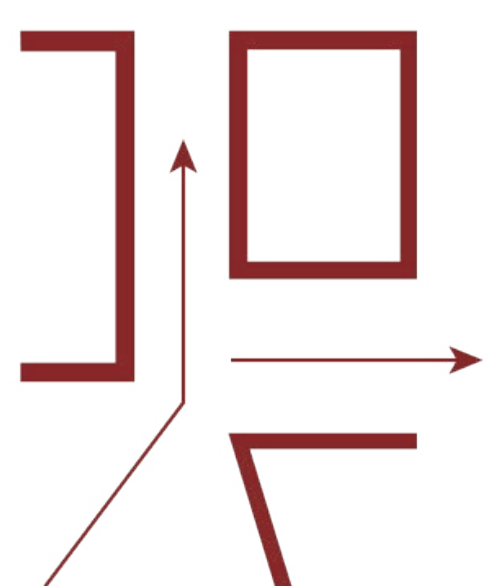
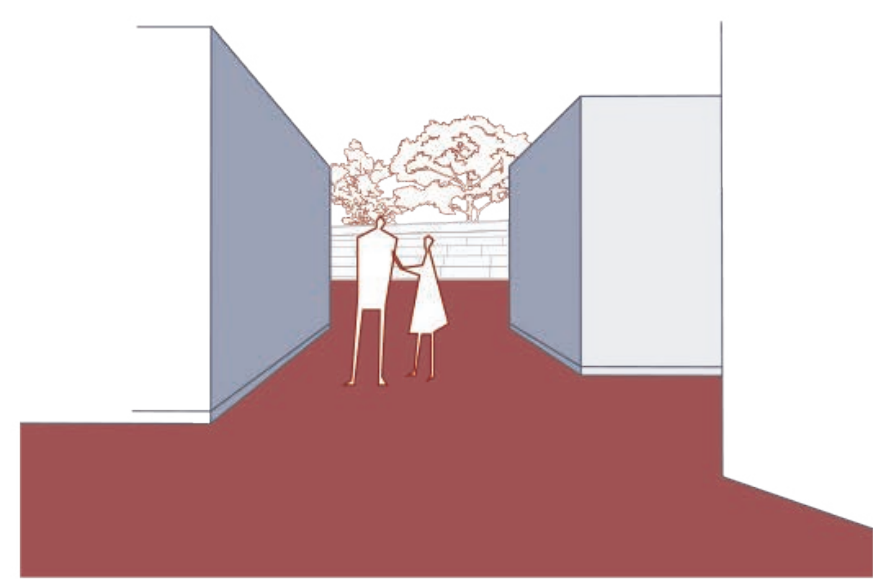
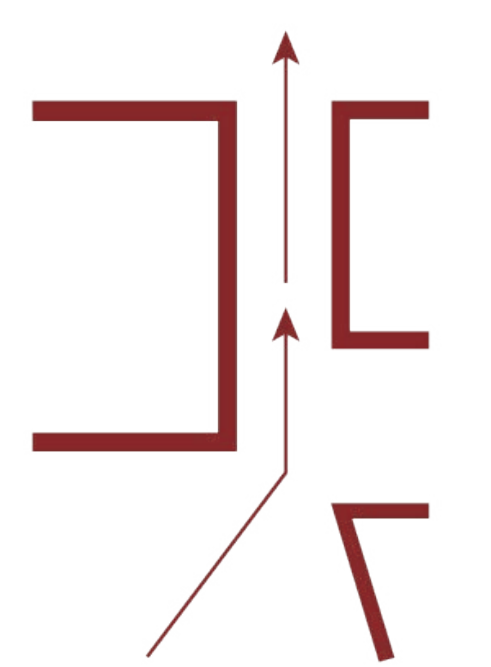
FUNCTION DISTRIBUTION



STRUCTURAL EXPLOSION AND CIRCULATION DISTRIBUTION

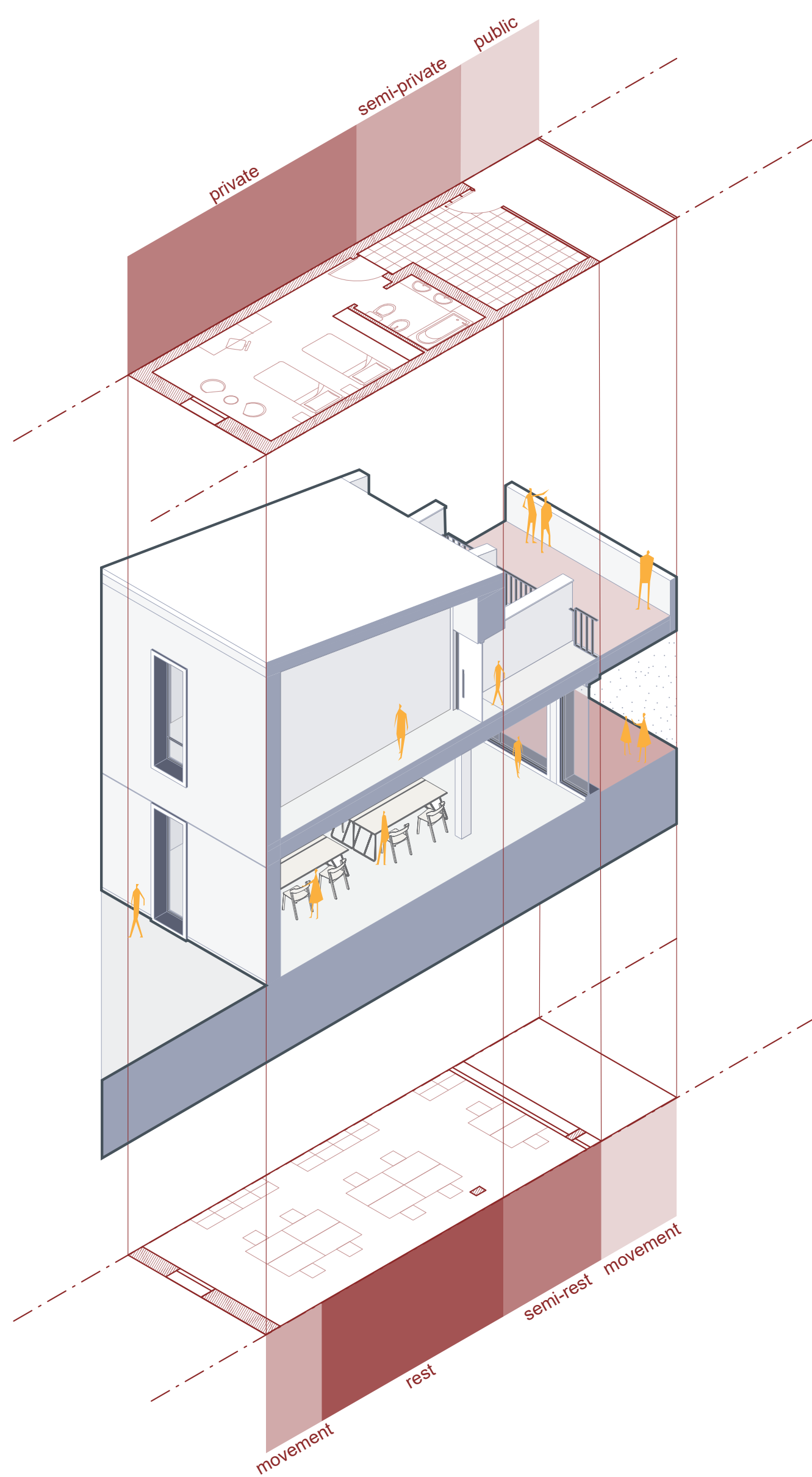


VIEW FROM THE ENBANKMENT



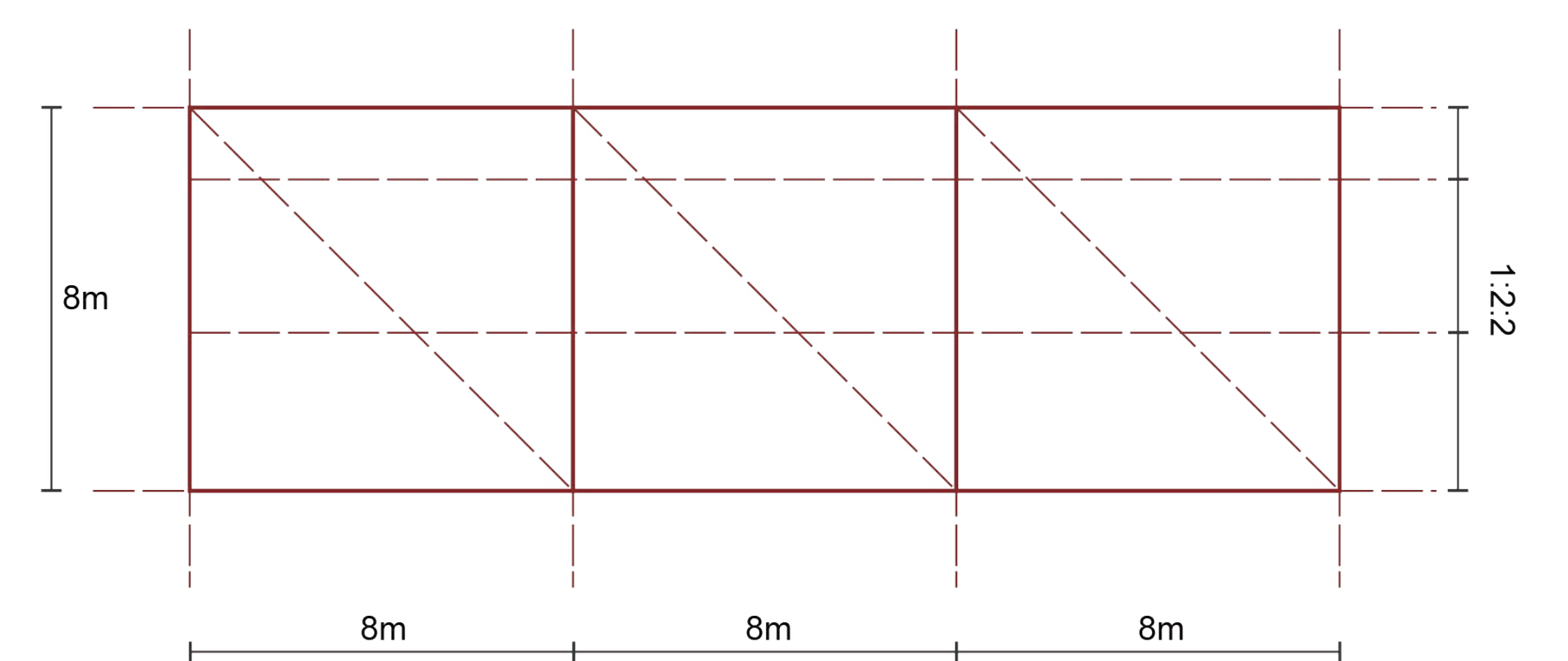
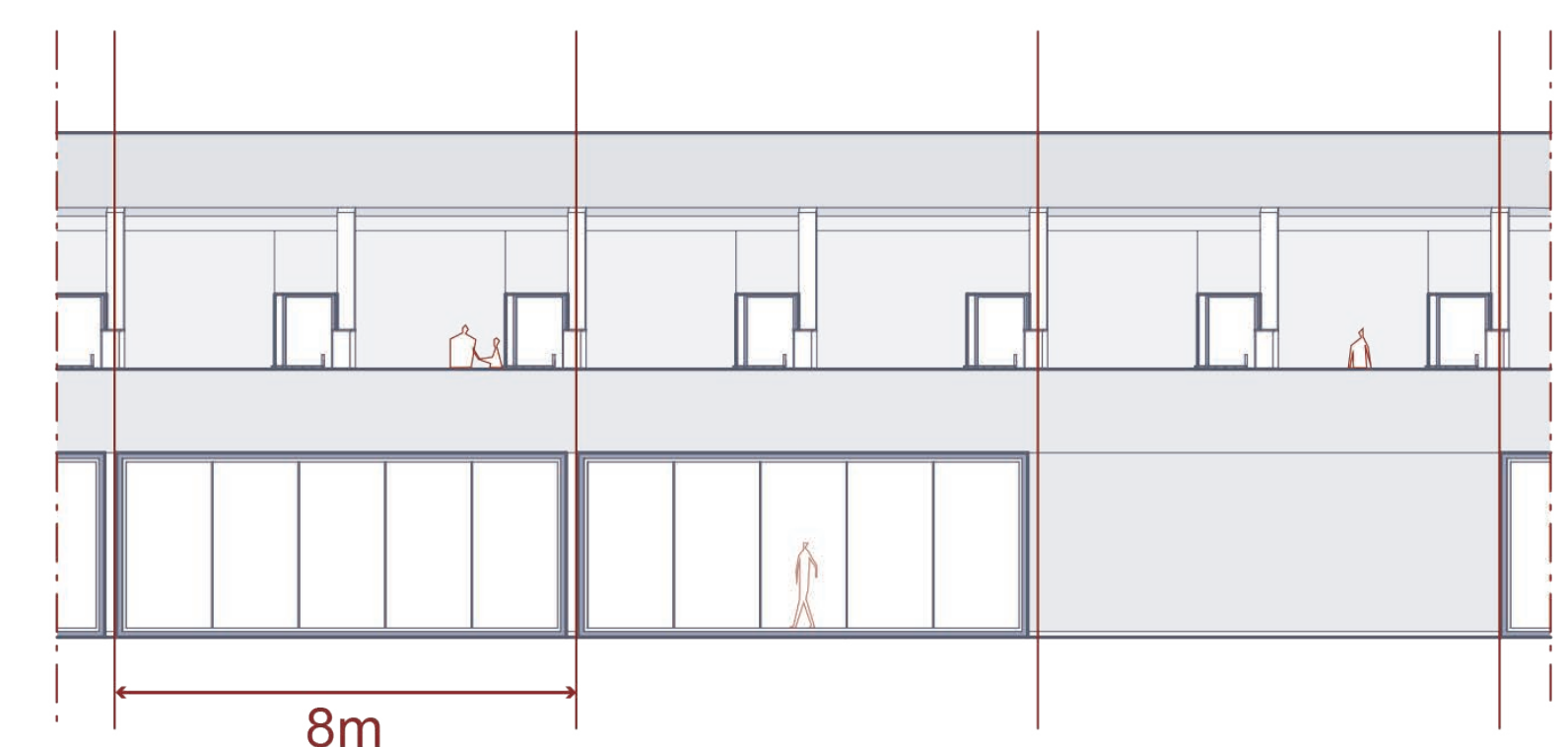
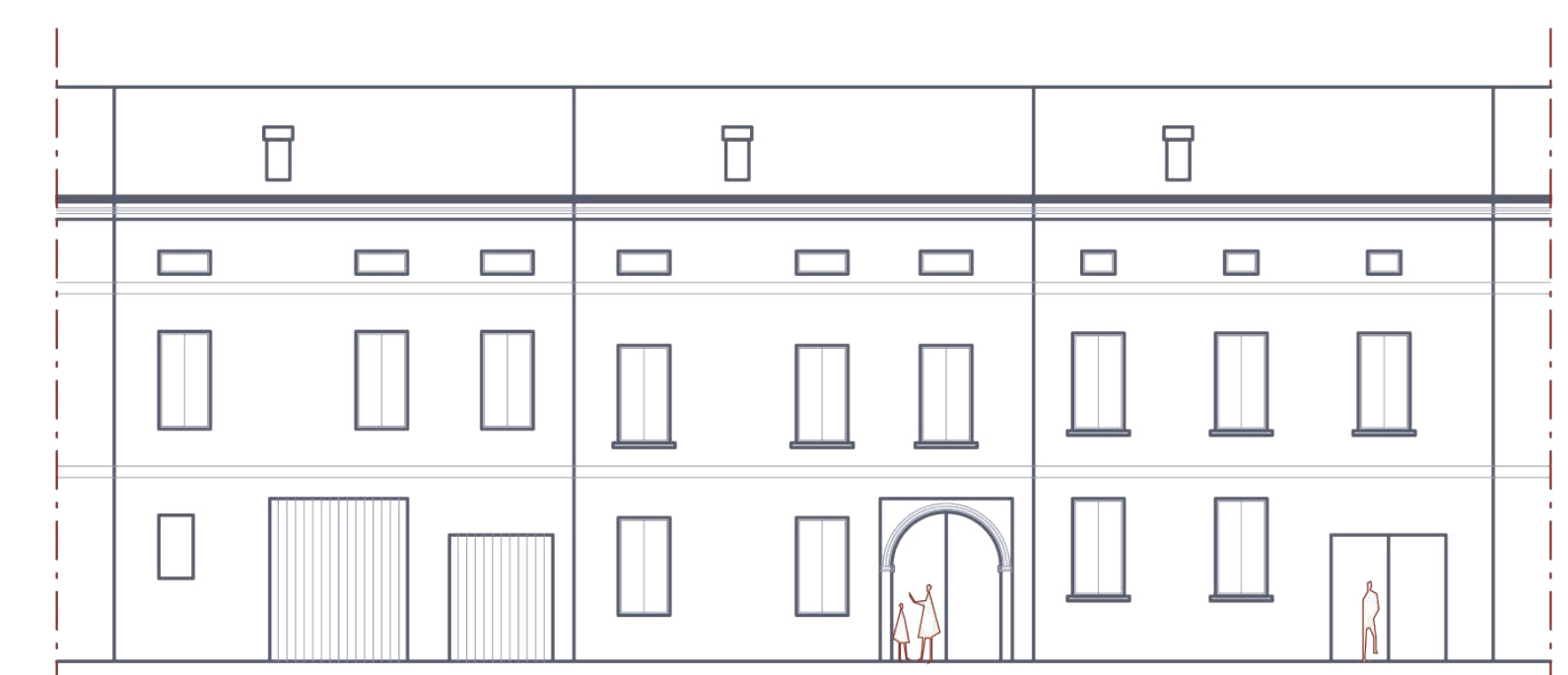
SPATIAL STRUCTURE ANALYSIS

The spatial forms of these intersections refer to Sabbioneta's typological analysis of the street, such as the blocking of view and the more natural shape of the street.



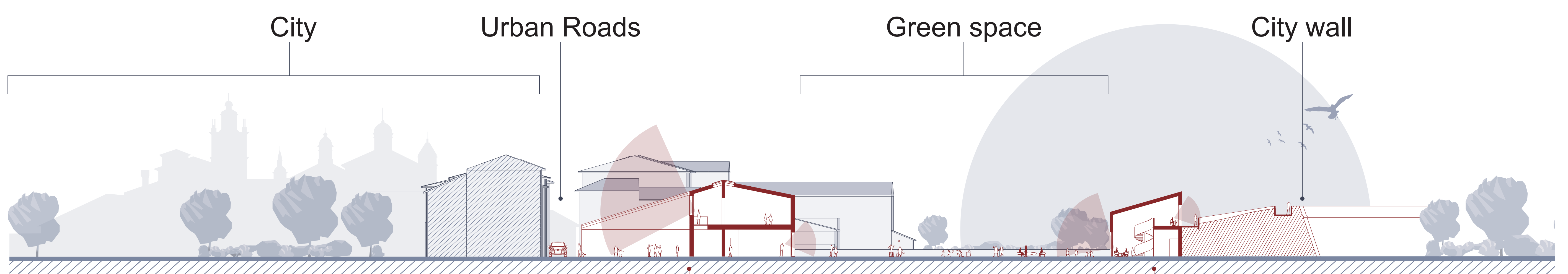
TYPES OF SPACE

In one unit in 1:1:1 proportion, the living space on the first floor is from public space to private space from the corridor to the room, and the garden at the entrance is used as a transitional semi-private space. In the corresponding part on ground floor, the transition from the dynamic space outdoor corridor to the static work area is made by a little indoor corridor space.



SCALE ANALYSIS IN FACADE

The arrangement of the facade and plan refer to the proportions of Sabbioneta's urban buildings. In comparison to the facade of a continuous residential building in the city, our project still follows this proportion.

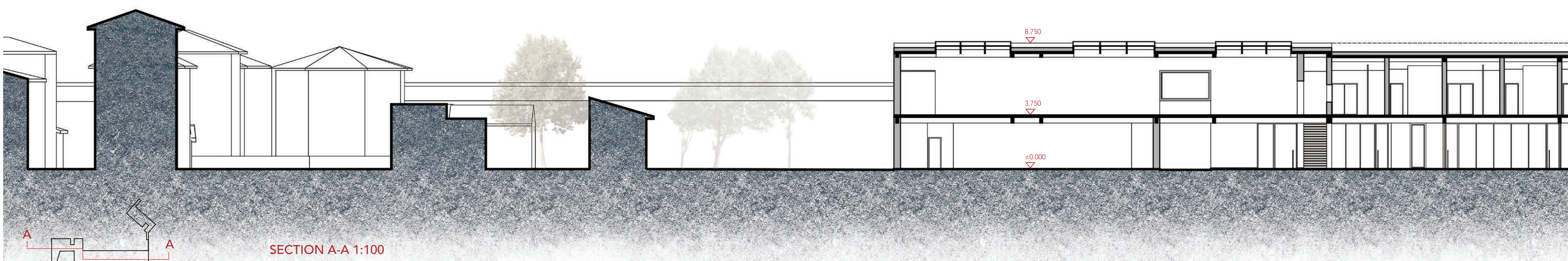
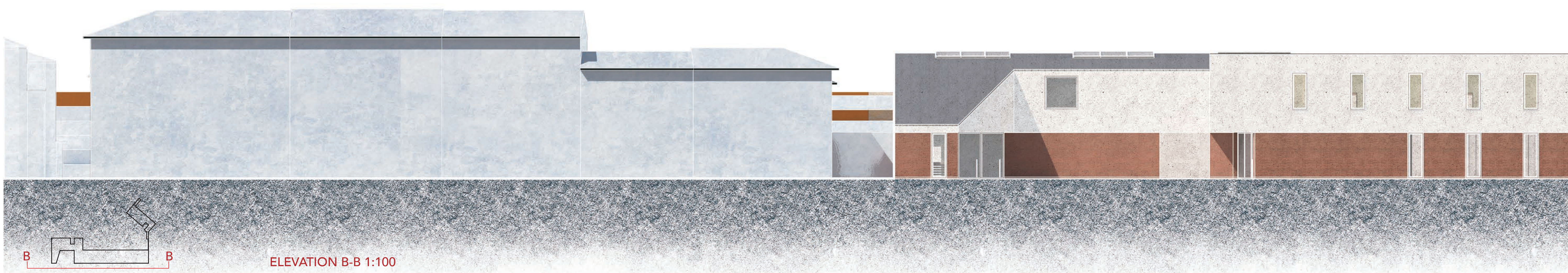
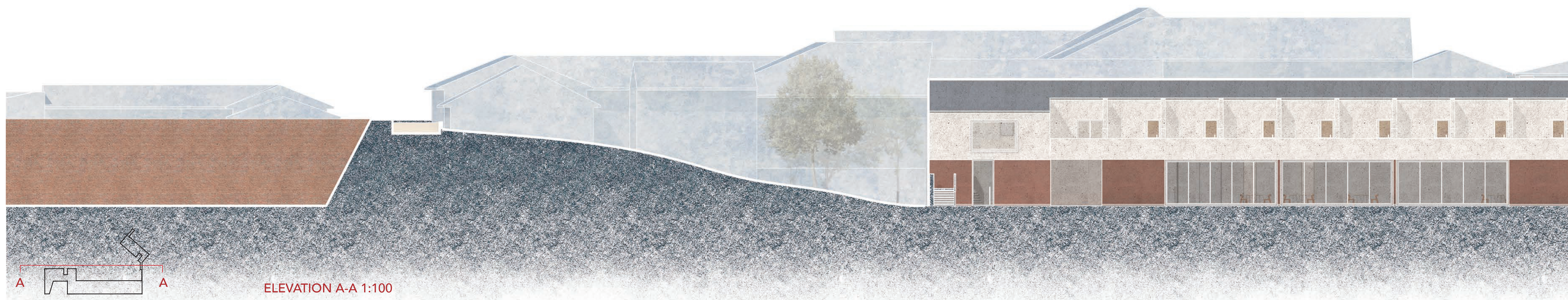


- Define a boundary between green space and urban roads
- Create a connection between the city walls and the city

SPACE CATEGORIES IN SECTION

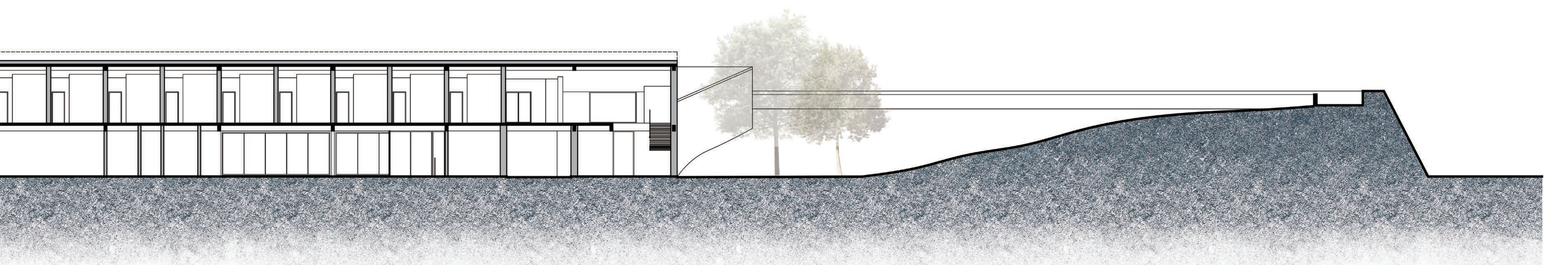
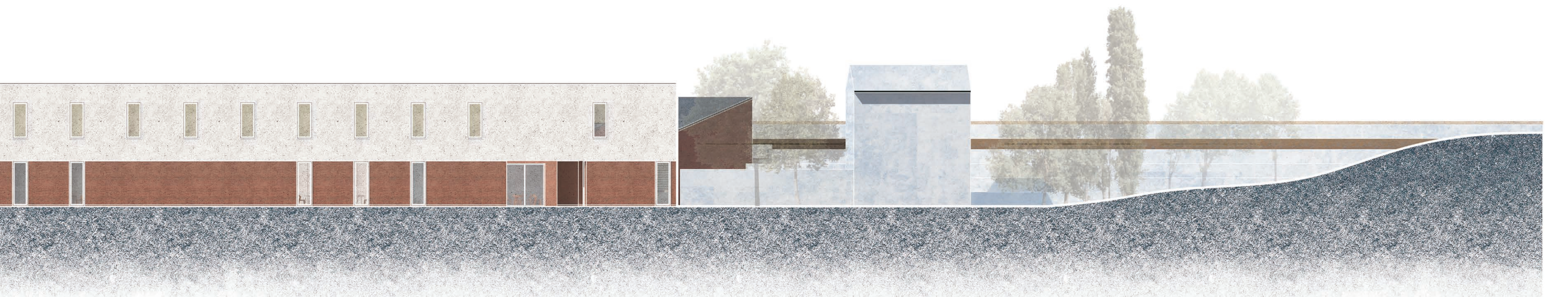
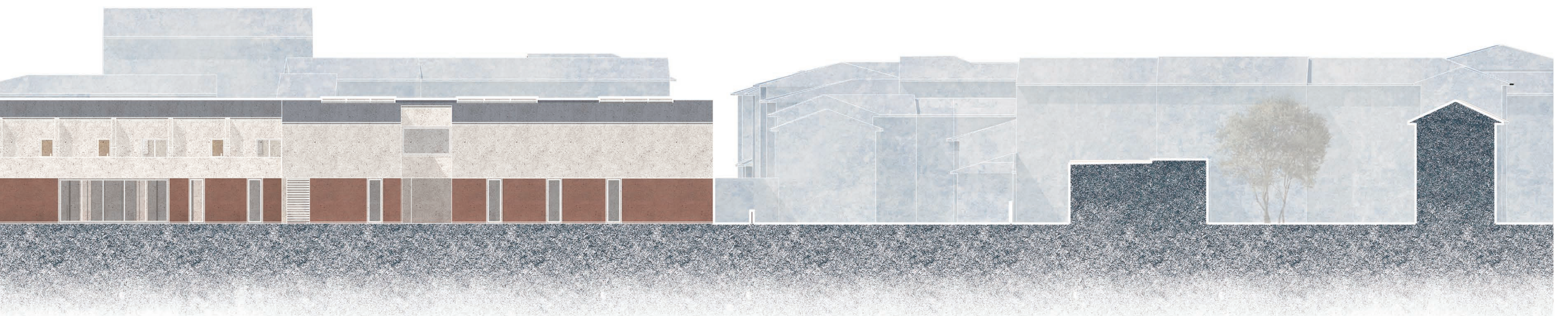


CAFFETERIA



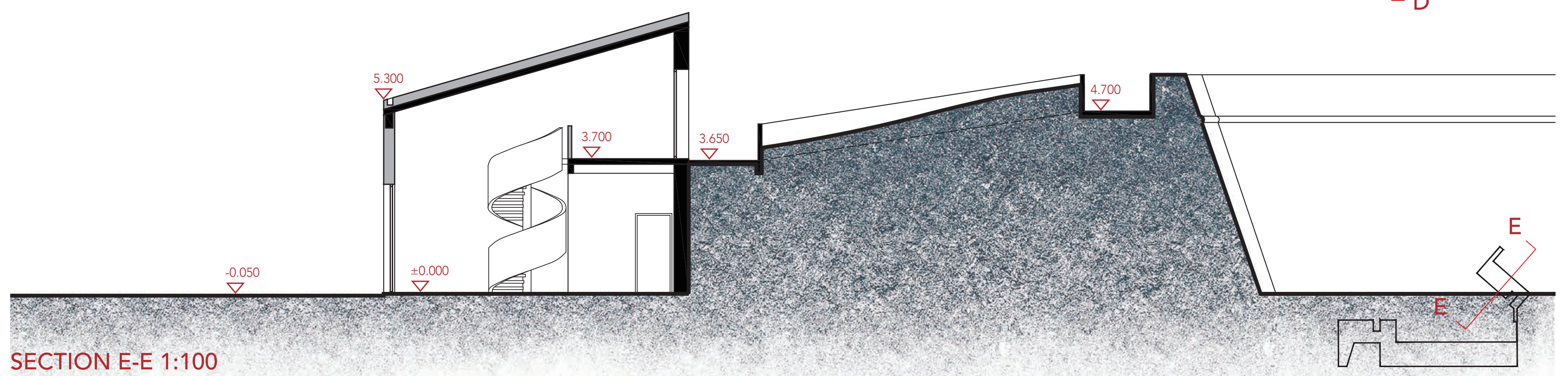
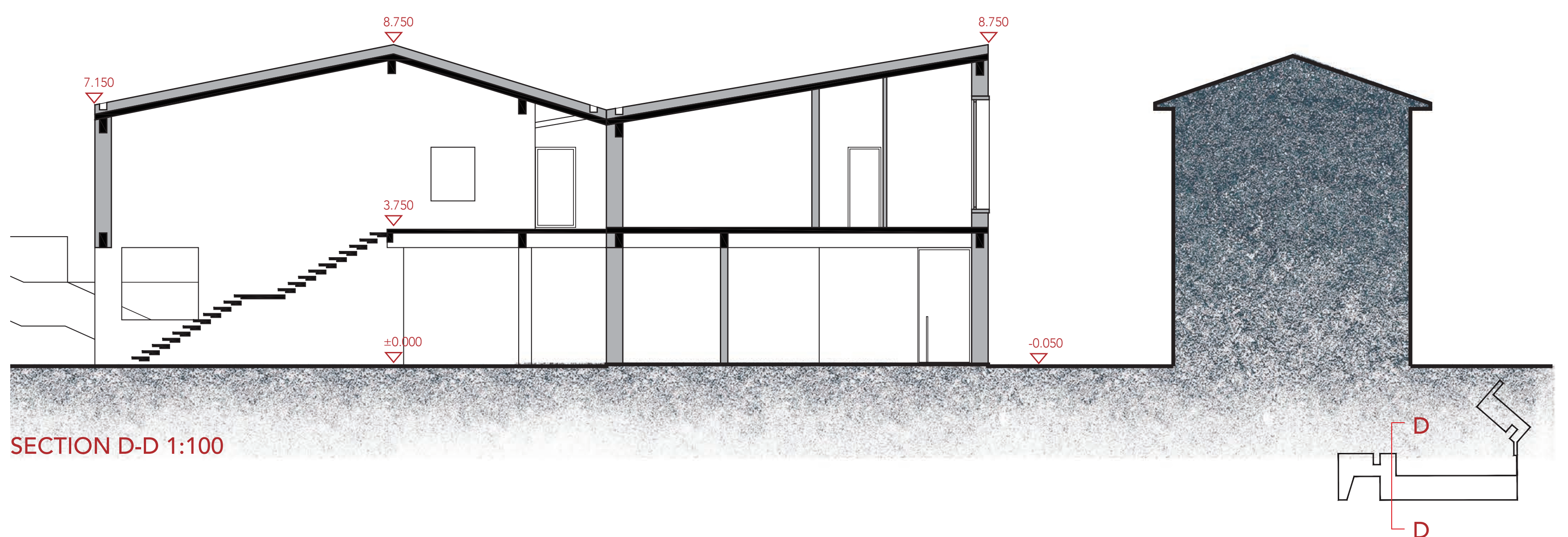
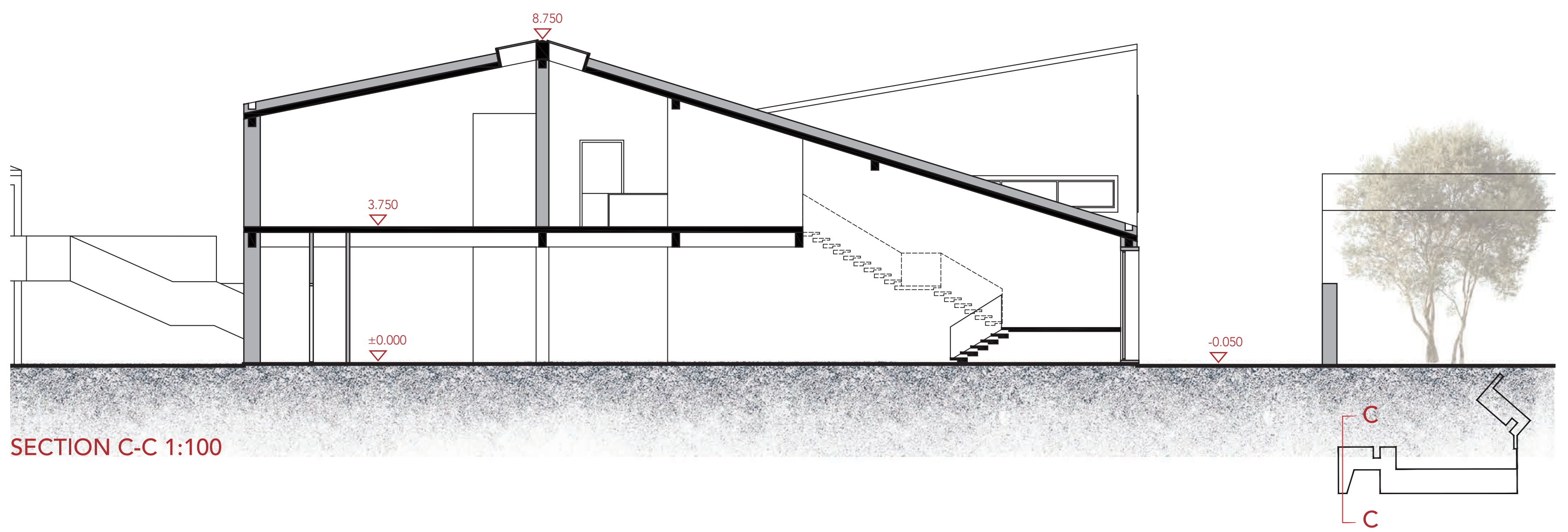
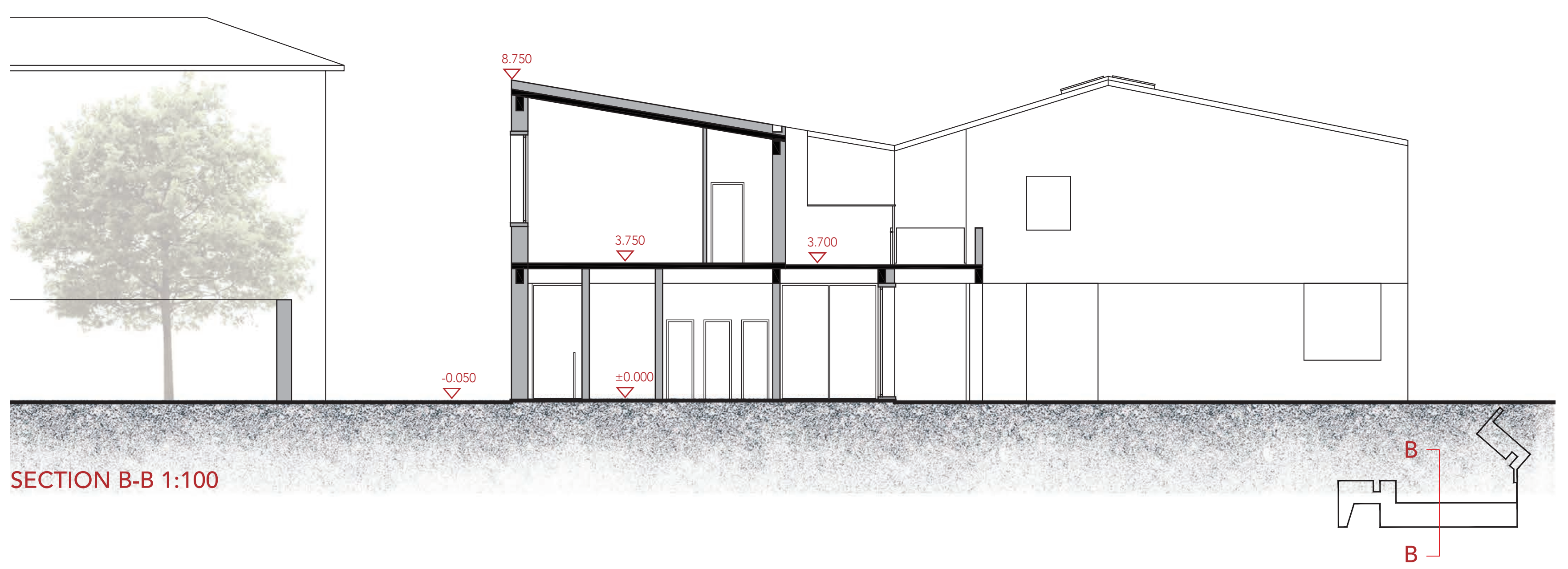


VIEW FROM THE UPSTAIR OF CAFFETERIA



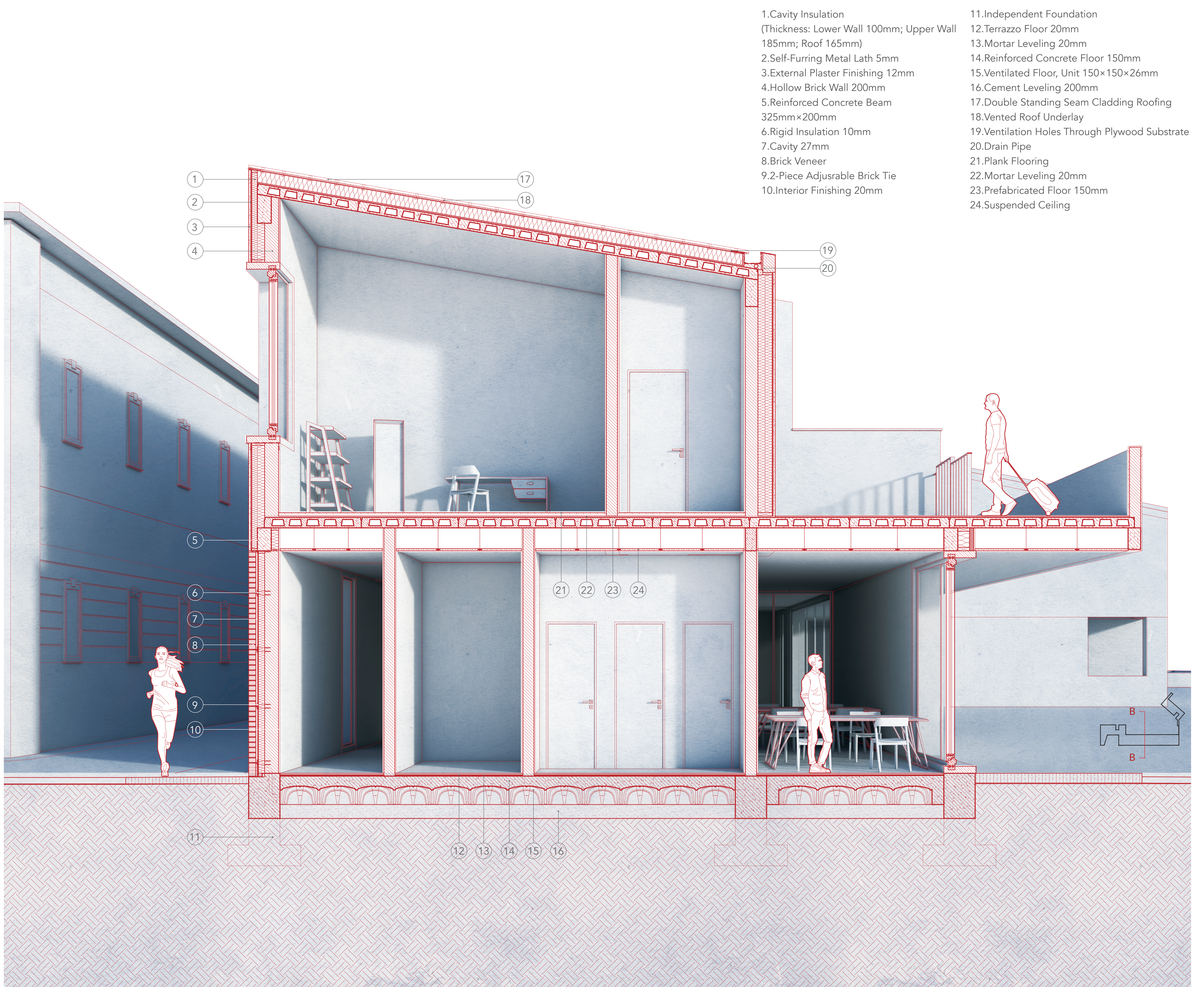


EMBANKMENT VIEW





VIEW FROM THE ENREANCE TO THE EMBANKMENT



- 1.Cavity Insulation
(Thickness: Lower Wall 100mm; Upper Wall 185mm; Roof 165mm)
- 2.Self-Furring Metal Lath 5mm
- 3.External Plaster Finishing 12mm
- 4.Hollow Brick Wall 200mm
- 5.Reinforced Concrete Beam 325mm×200mm
- 6.Rigid Insulation 10mm
- 7.Cavity 27mm
- 8.Brick Veneer
- 9.2-Piece Adjustable Brick Tie
- 10.Interior Finishing 20mm

- 11.Independent Foundation
- 12.Terrazzo Floor 20mm
- 13.Mortar Leveling 20mm
- 14.Reinforced Concrete Floor 150mm
- 15.Ventilated Floor, Unit 150×150×26mm
- 16.Cement Leveling 200mm
- 17.Double Standing Seam Cladding Roofing
- 18.Vented Roof Underlay
- 19.Ventilation Holes Through Plywood Substrate
- 20.Drain Pipe
- 21.Plank Flooring
- 22.Mortar Leveling 20mm
- 23.Prefabricated Floor 150mm
- 24.Suspended Ceiling