

**INNOVATION
CENTER**

INSPIRE 2021 AWARDS

STU CAMPUS
Center of Innovation



Europa



Eslovaquia



Bratislava

TALLER COMBES VII-VIII



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DESCRIPTIVE MEMORY

Opportunity, unity and functionality.

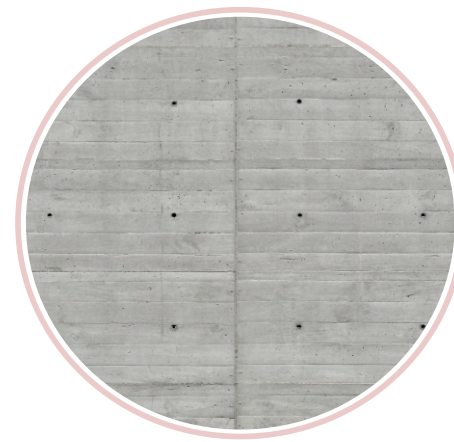
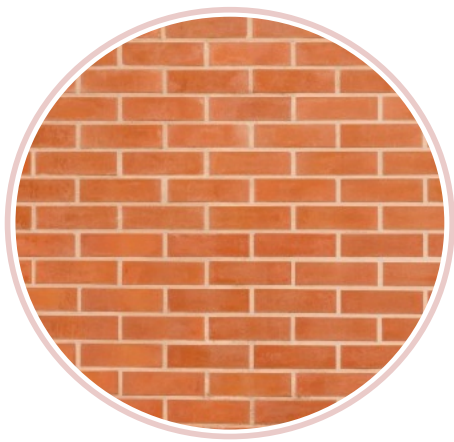
"Innovation Center", located in the heart of the premises of the Slovak University of Technology (STU according to its Slovak acronym) in Bratislava, materializes a studied conception of spatiality, the result of the identification of the needs of all the agents involved in the project and without neglecting the existing opportunities on the site to intervene.

Within the premise of the search for a multifunctional space that achieves a social, student and teaching unit, the old disused building of the "heavy laboratories", located in the center of the property, was intervened. When identifying the functional possibilities of its specific structure, its wide dimensions and its exterior materiality coinciding with a sober and functional architecture, like a large part of the buildings in its environment, it was decided to categorize a this volume as an opportunity rather than a problem to be eliminated.

That is why the project materializes physical and symbolic "lanterns" that emerge both from this existing building and from the surroundings of the ground where it is located, indicating new and renewed situations, without eliminating the origins of the places where they are located and highlighting the spatial opportunities that were always there. The new base not only maximizes the functional possibilities of the architectural proposal, but also unifies and integrates a terrain currently marked by its irregular and varied slopes. When moving and locating the garages in the underground levels, large free areas are ideal for the development of spaces equipped for recreation and relaxation. In this way, the "Innovation Center" of the STU renews, re-functionalizes and revalues a vital space, both for the members of the STU and for the citizens and visitors of the city of Bratislava.



MATERIALS

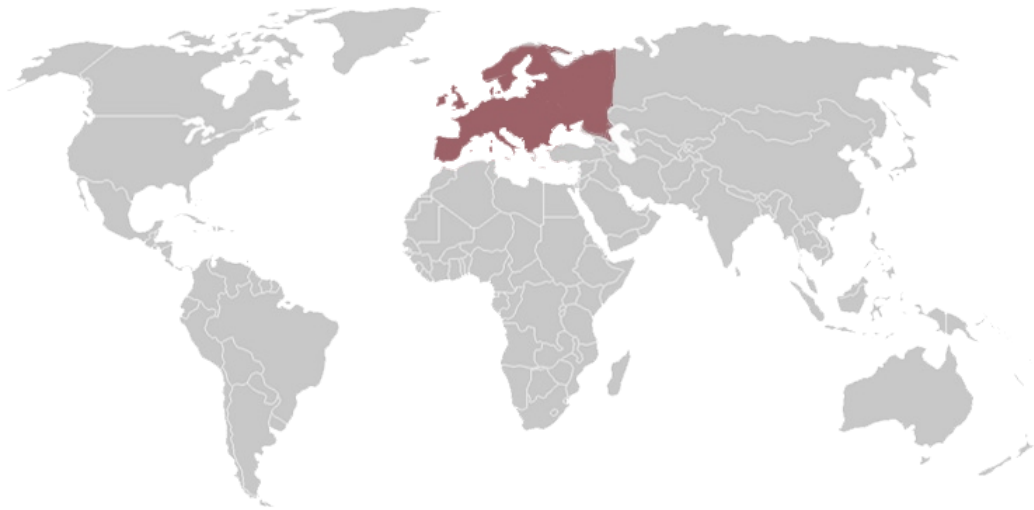


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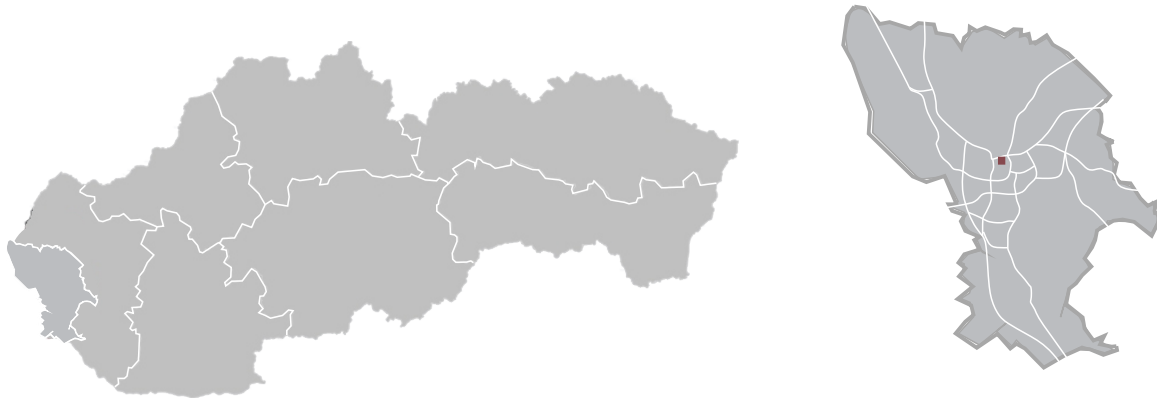
- 01-LOCATION
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LOCATION

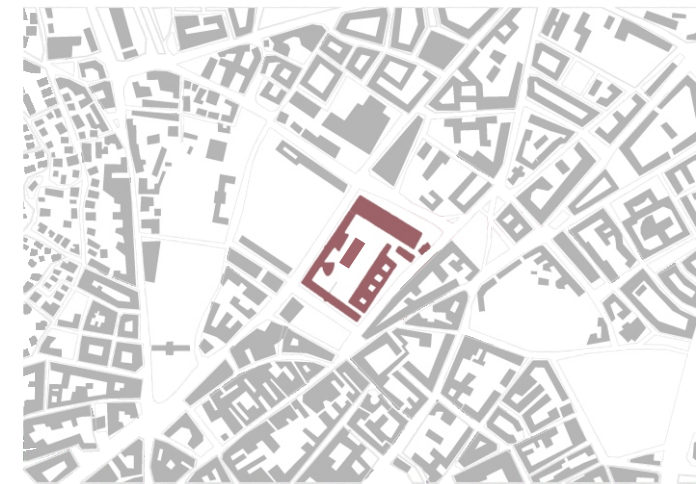




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Campus STU

SITE ANALYSIS





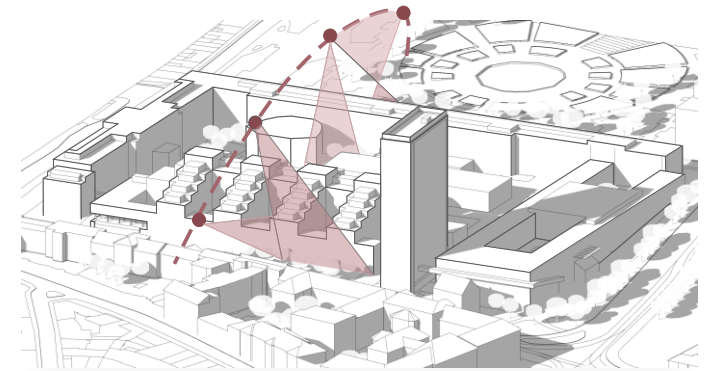
BRATISLAVA

Climate

- Continental climate
- With marked variation between hot summers and cold, wet winters
- One of the warmest and driest in Slovakia.

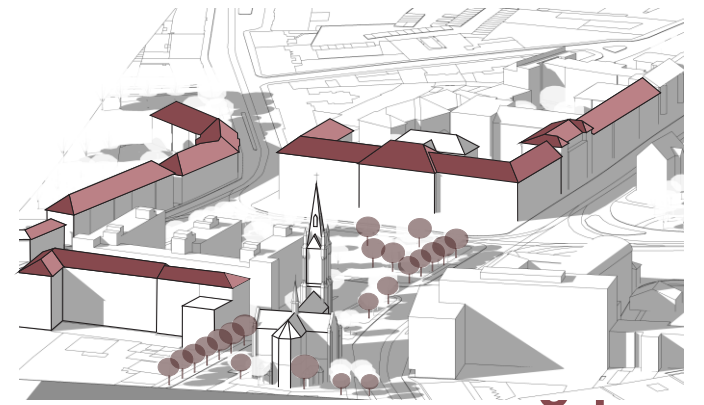
Sunning

- The length of the day varies extremely during the year.
- The shortest day is December 21, with 8 hours and 21 minutes of natural light; the longest day is June 21, with 16 hours and 4 minutes of natural light



Urban Landscape

- Medieval towers and great century buildings
- Forests near the city center

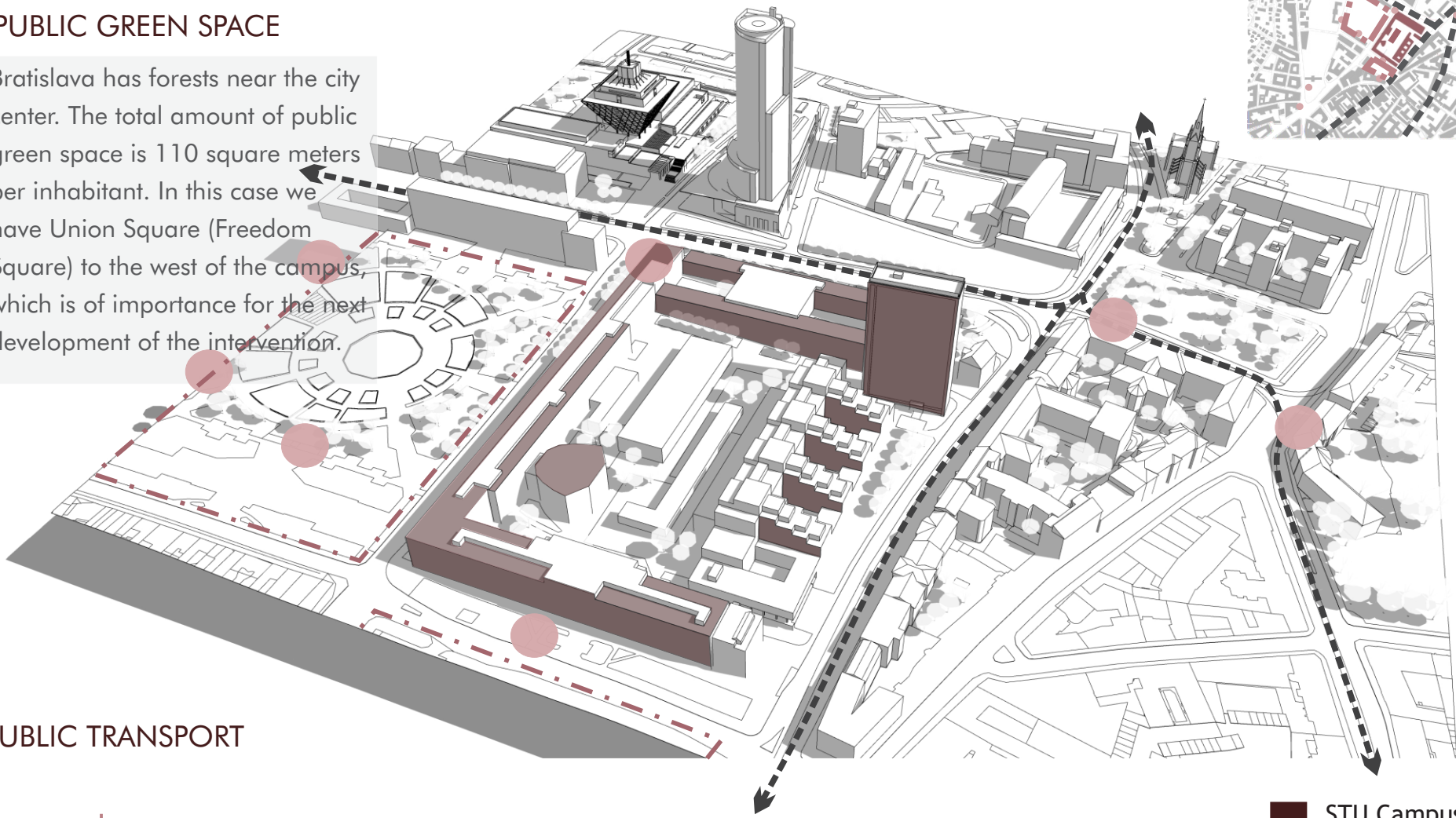


Culture

- Multicultural influenced by various groups including Germans, Slovaks, Hungarians and Jews Numerous theaters, galleries, cinemas, museums, clubs

PUBLIC GREEN SPACE

Bratislava has forests near the city center. The total amount of public green space is 110 square meters per inhabitant. In this case we have Union Square (Freedom Square) to the west of the campus, which is of importance for the next development of the intervention.



PUBLIC TRANSPORT

3 types

- 1 - Buses: they cover almost the entire city with 66 daytime and 20 nighttime lines
- 2 - Trams: they run on 13 lines
- 3 - Trolleybuses: they are a complement to the means of transport with 14 lines

An additional one is the Integrated Transport of Bratislava, which interweaves the train and bus routes in the city with the most distant points

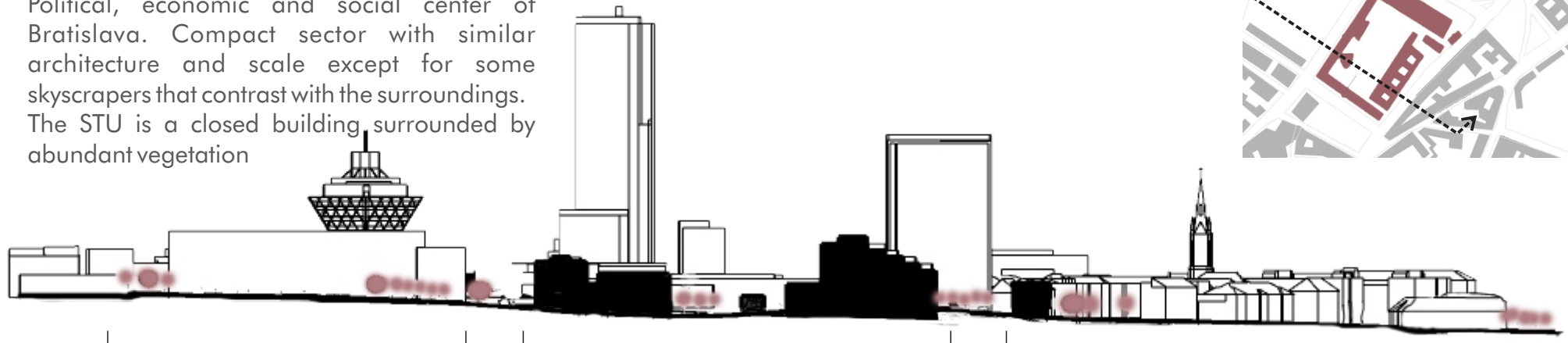
- STU Campus
- Bus
- Trolley car
- Public spaces



Immediate context Campus STU

The STU Campus is inserted in an environment of buildings and important mobility.

Political, economic and social center of Bratislava. Compact sector with similar architecture and scale except for some skyscrapers that contrast with the surroundings. The STU is a closed building surrounded by abundant vegetation



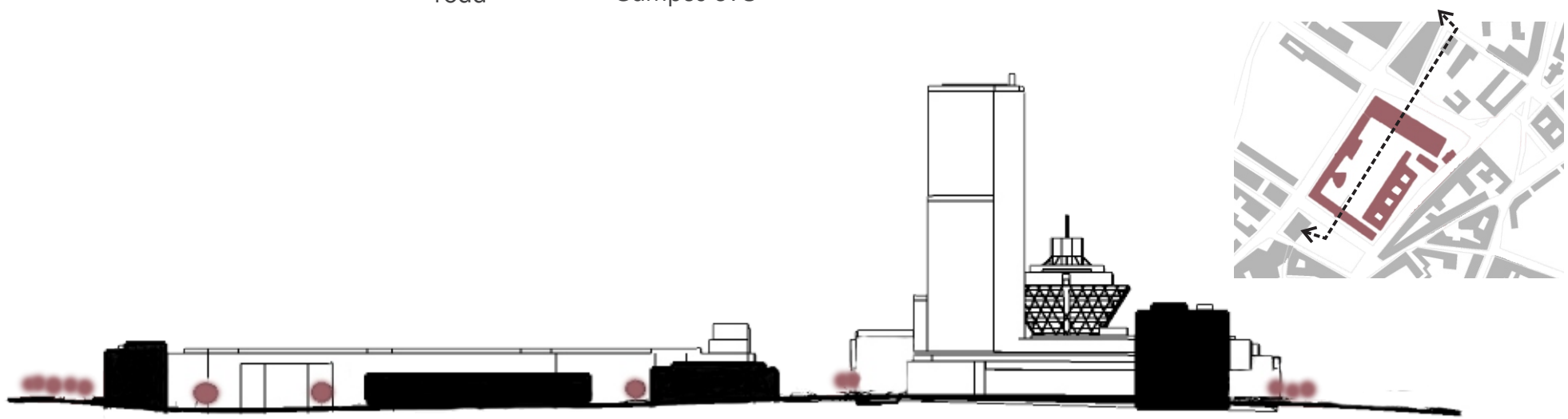
Open space: public pace

Public road

Closed space: Campus STU

Public road

Homogeneity of heights



Closed space: Campus STU

Public road

Homogeneity of heights

Terrain Unevenness

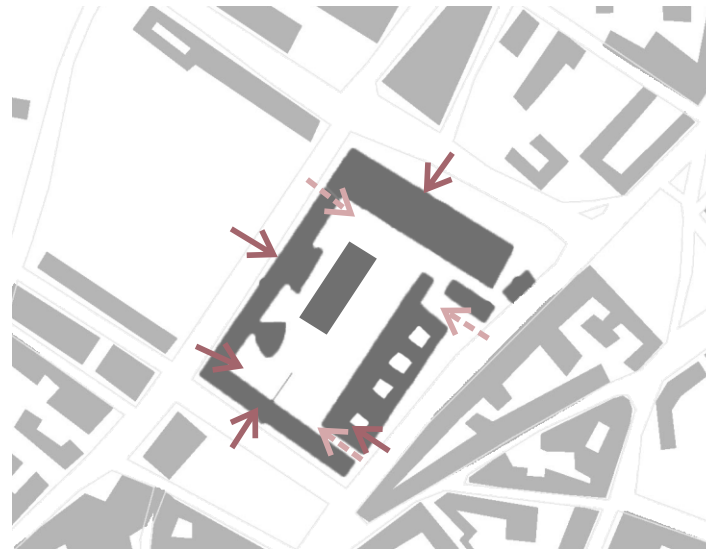
The land where the STU Campus is located is characterized by having well differentiated levels from one sidewalk to the other in the same block



Between the east and west side there is a difference of approximately 4 meters. Where we will take the 144mnm level as our reference level 0.

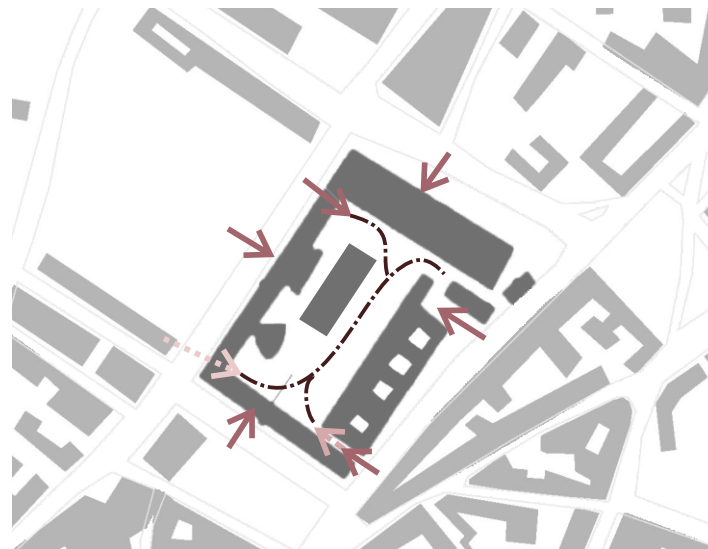
ACCESS

We identify different accesses to the faculties and the center of the block, both pedestrian and vehicular



- Pedestrian Entrance
- - - - - Vehicle Entrance

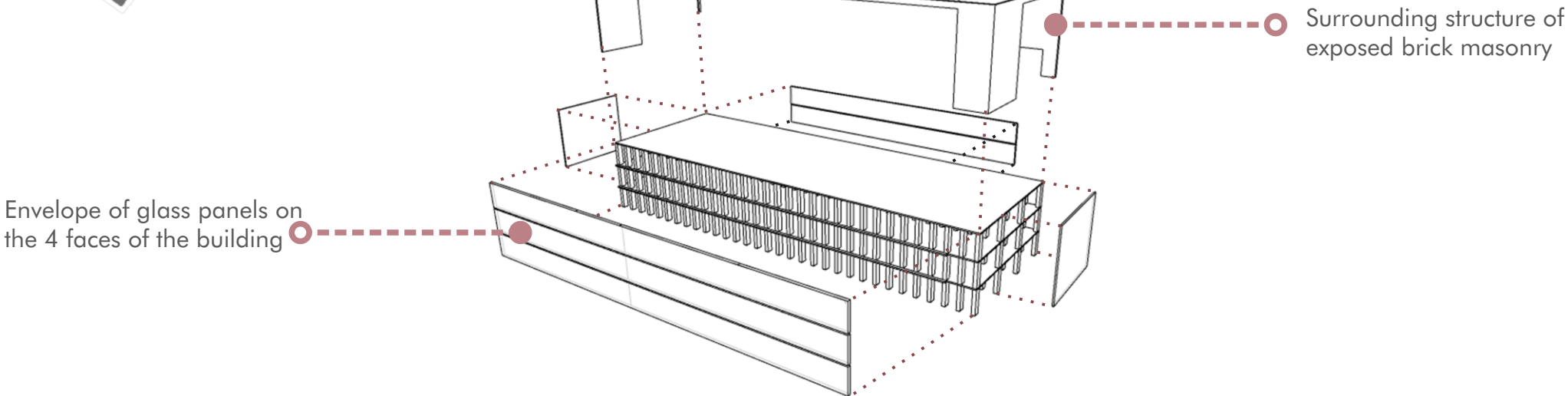
We make two of the vehicular accesses pedestrian to have a more direct entrance to the center of the block from the sidewalk. A pedestrian is turned into a bike path. The intention of this income is to create a route and connection with the center of the block



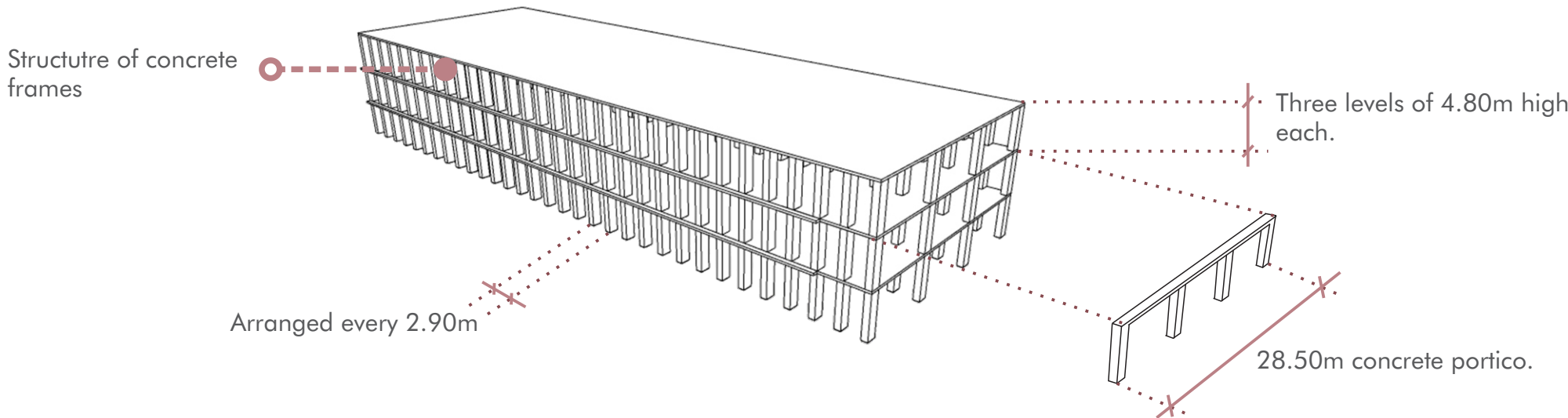
- Pedestrian entrance
- - - - - Vehicle income
- Bike Path Entrance
- - - - - Route



Constructive parts- Existing bulding



Structure



PROGRAM ANALYSIS



Functional Spaces

• Interdisciplinary innovation center	4000m ²
• Science and research center	1000m ²
• Rectorate administrative offices	500m ²
• Social space, exhibition and multipurpose space	1000m ²
• Multimedia library, study room	800m ²
• Workshops	500m ²
• Information service, entrance area	500m ²
• Restaurants, café	500m ²
• Technical support	500m ²
• Underground garage	7500m ²

Use of free space

- Meeting space
- Relaxation space
- Educational spaces
- Presentation and exhibition areas
- Formal meeting areas
- Amphitheater
- Pavilions



Keys to the program

- Functional centrality in multi levels.
- Indirect and semi-direct connections materialized with social meeting facilities
- Permeability.

Speaces

Information service, entrance

- entrance hall,
- meeting room,
- warehouse, maintenance
- workshop

Office administration

- customer service,
- information and control.
- Dispatches

Common space

- entrance hall,
- meeting room,
- warehouse

Social, exhibition and multipurpose space

- Speakers area,
- public and warehouse

Library

- reading, loan,
- information,
- work

Workshops

- Flexible Area
- Warehouse
- Furniture

Laboratory

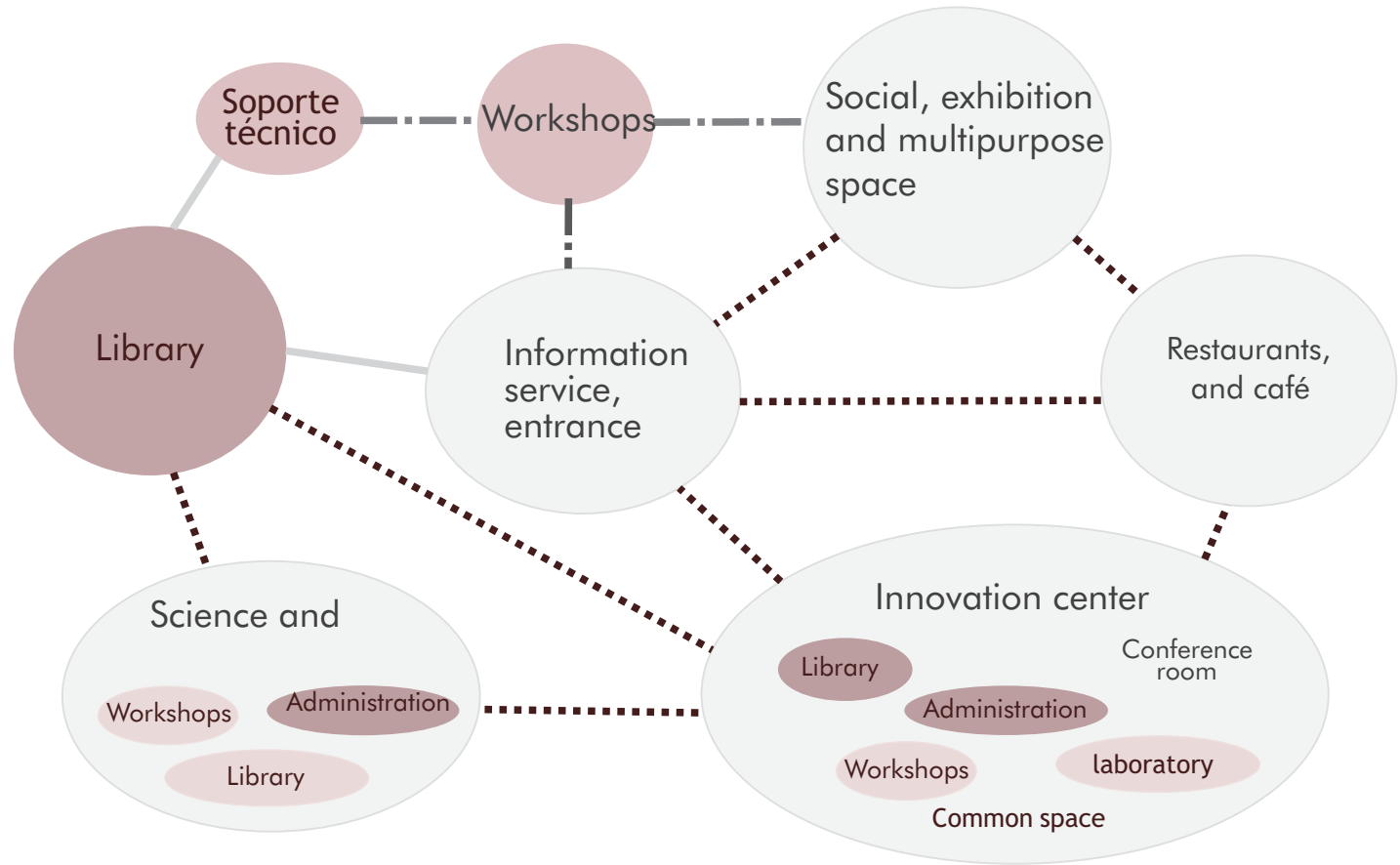
- theoretical
- explanations room,
- practical room,
- warehouse

Conference room

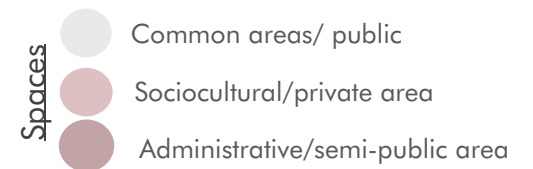
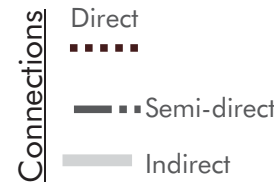
- Multipurpose space

Restaurants, and café

- Bar for cafeteria, general
- Room furniture,
- Warehouse-kitchen

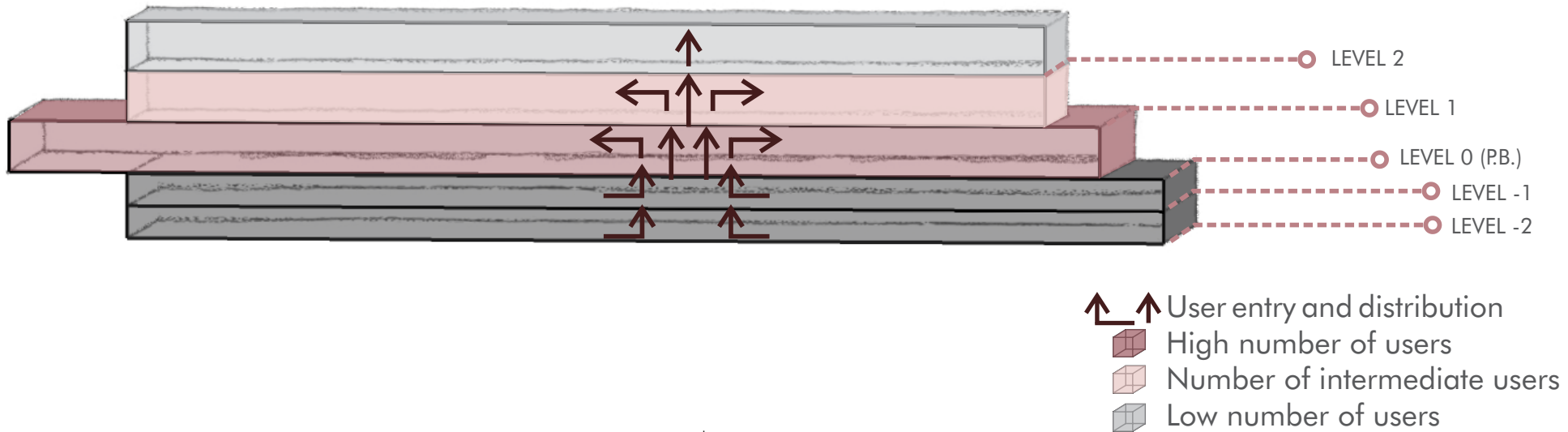


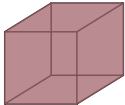

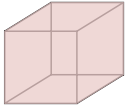

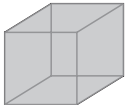
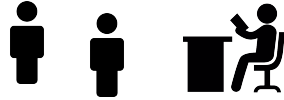
Program relationship



Functional distribution in levels

According to the amount of flow of people



Simultaneous user level		Funciones (segun el programa)	
	HIGH 	<ul style="list-style-type: none"> -Functions (depending on the program) -Showroom -Workshops Laboratories 	LEVEL 0 / GROUND FLOOR
	HALF 	<ul style="list-style-type: none"> -Gastronomic services -Various classrooms -Information services -Administration -Recreation spaces 	LEVEL 1 / FIRST FLOOR
	UNDER 	<ul style="list-style-type: none"> - Biblioteca central de la STU - Rectorado 	LEVEL 2 / SECOND FLOOR



Theoretical Concepts

PRESENT (Heavy Laboratory

Heavy
Closed
Dark
Lasted
Strict
Cold



Concepts to be achieved

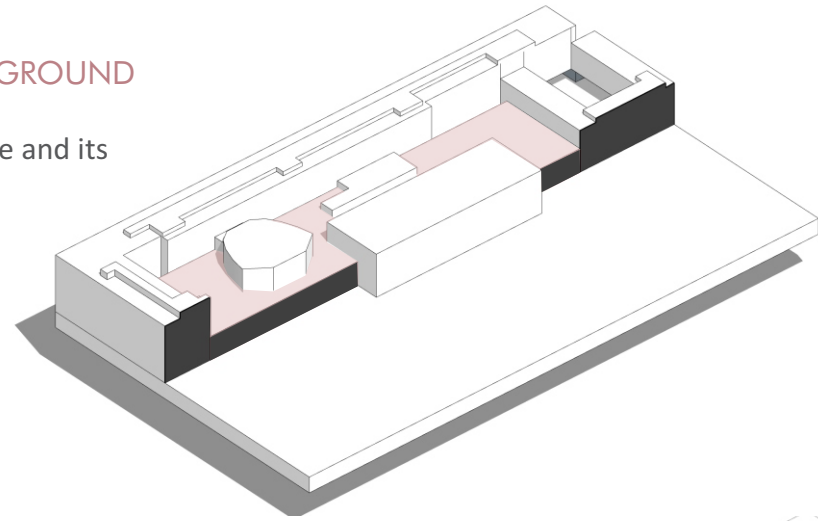
Lightweight
Open
Transparent
Participatory
Liberty
Warmth

Via

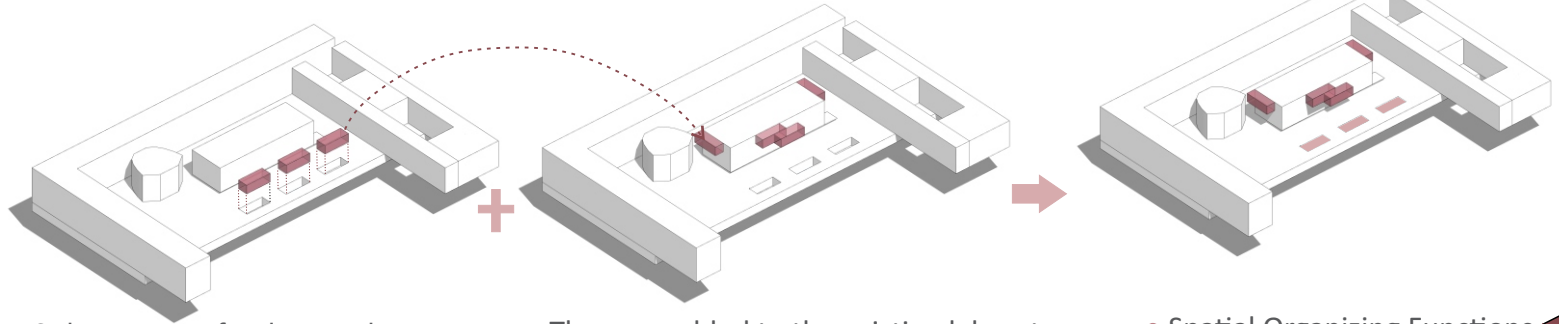
Community insertion
Equipment
Space insertion

① EXTENSION OF THE SLOPE OF THE GROUND

For its use in its upper level for public space and its lower level for covered functions



② FLASHLIGHTS



Subtraction of volumes that leave empty spaces (courtyards)



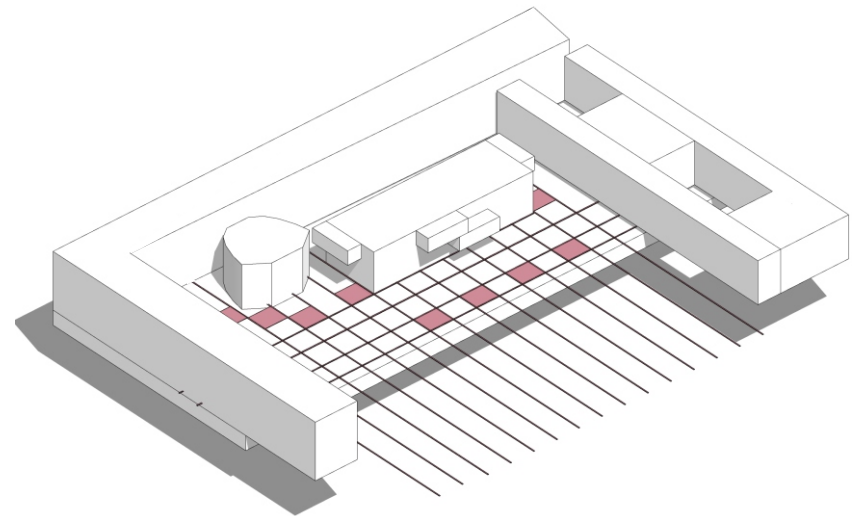
They are added to the existing laboratory building, ranking important spaces.

- Spatial Organizing Functions
- Climate regulators



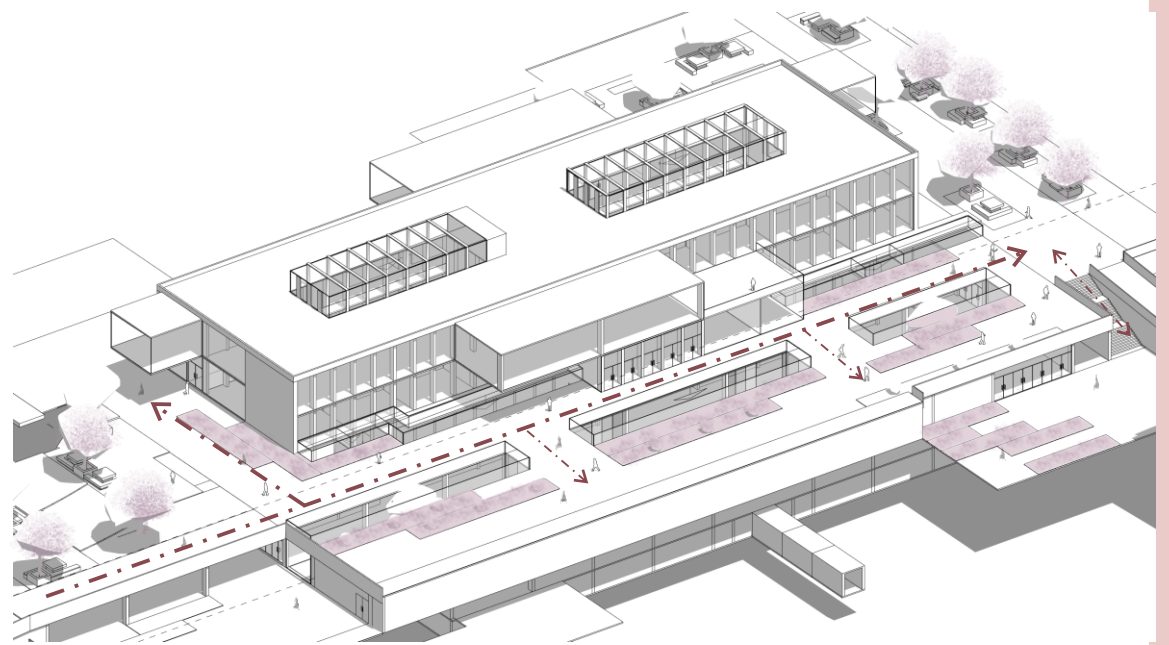
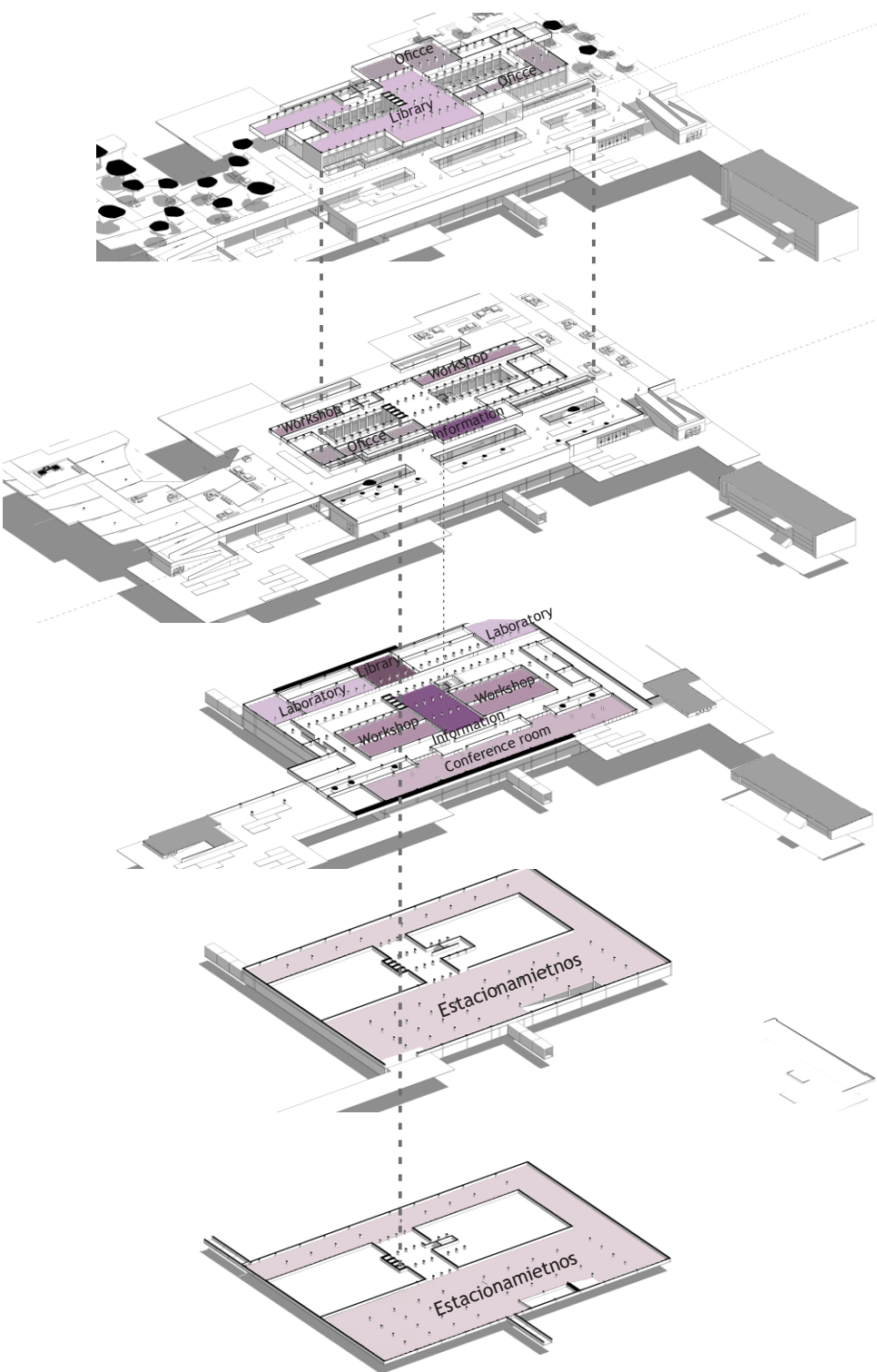
③ TERRITORIAL INTEGRATION

Spatial and conceptual continuity of the idea of lanterns



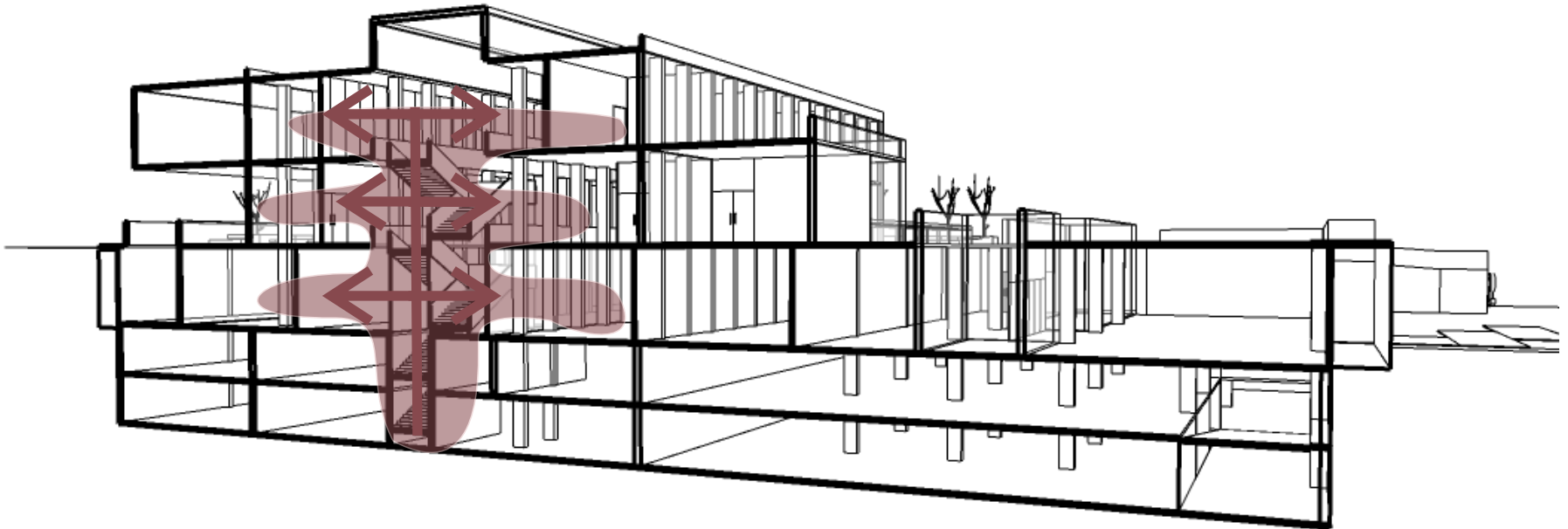
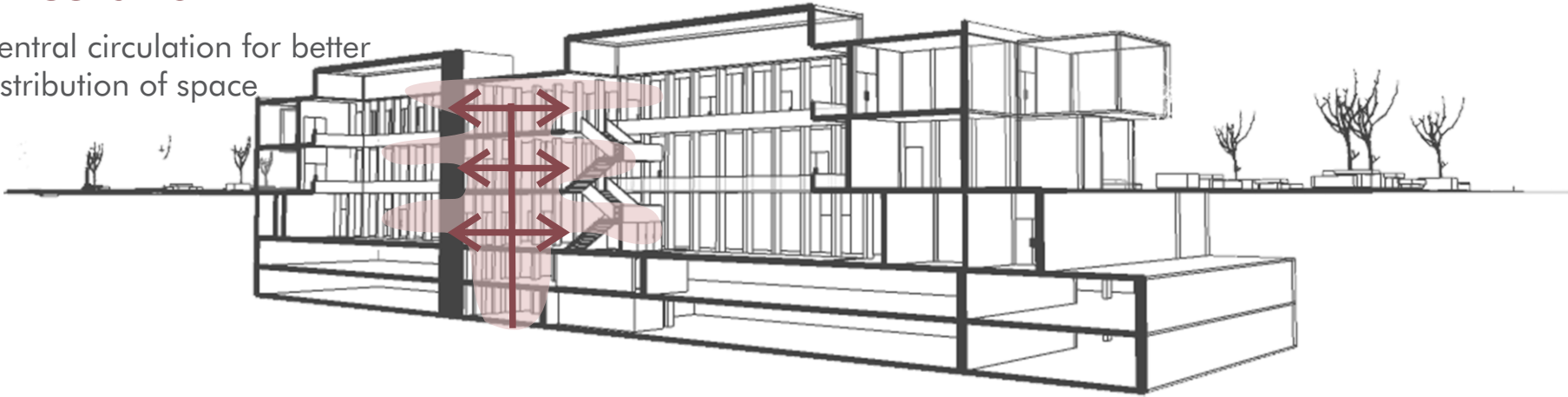


Distribution of spaces



Circulation

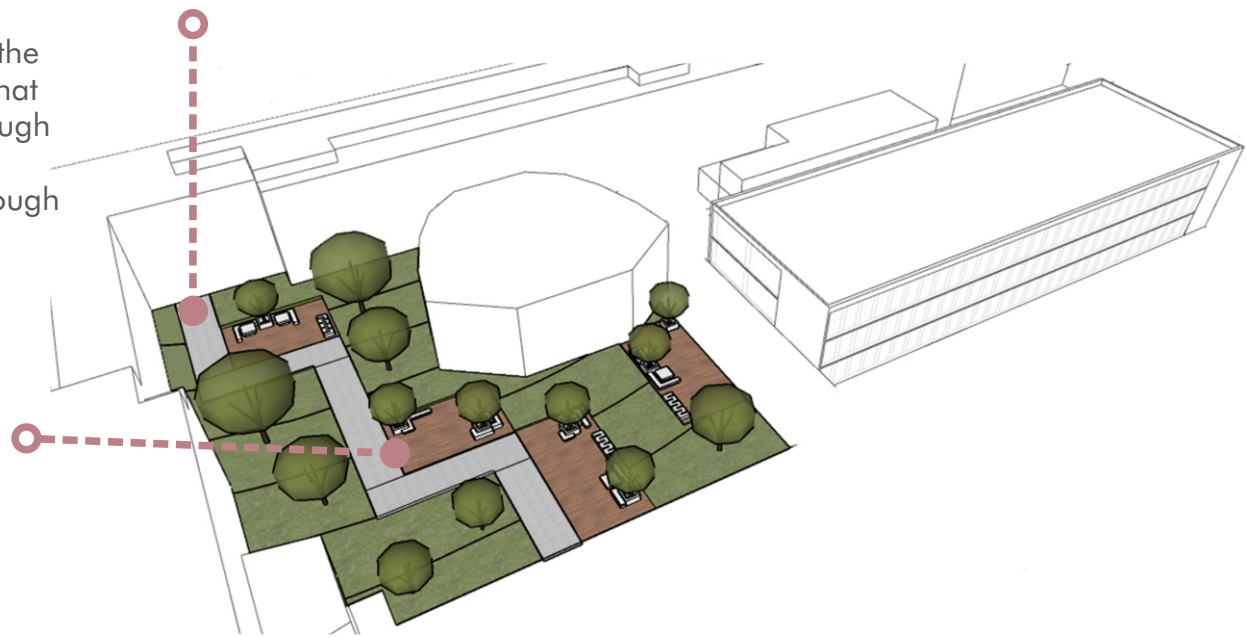
Central circulation for better distribution of space



CITY PARK

Park designed to connect Union Square with the Innovation Center, by means of a bike path that enters through Námestie Slobody Street, through the Faculty of Mechanical Engineering and crosses the campus to Radlinského Street through the Faculty of Chemistry

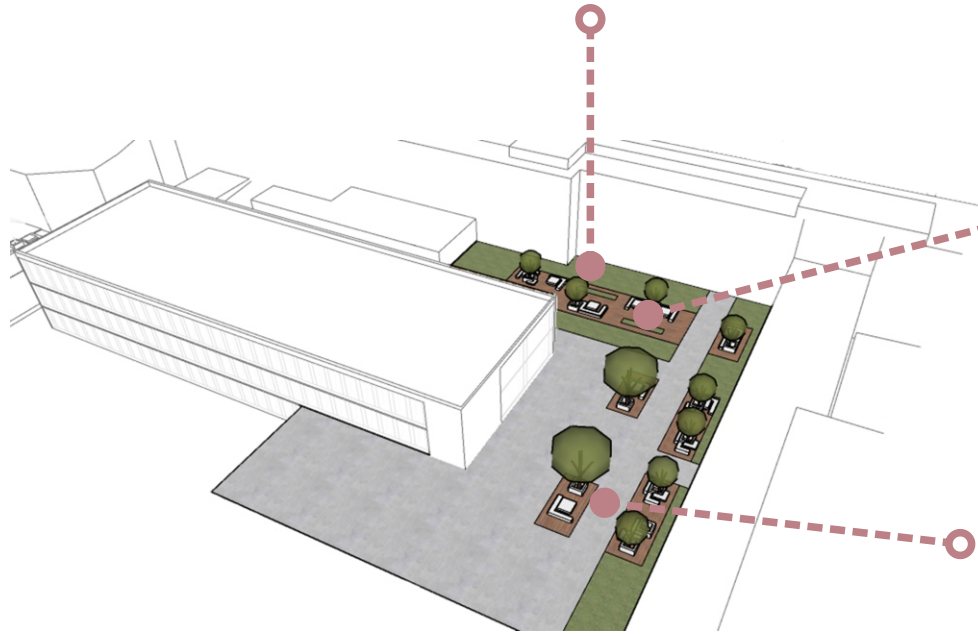
It has recreational spaces and places to put bicycles..

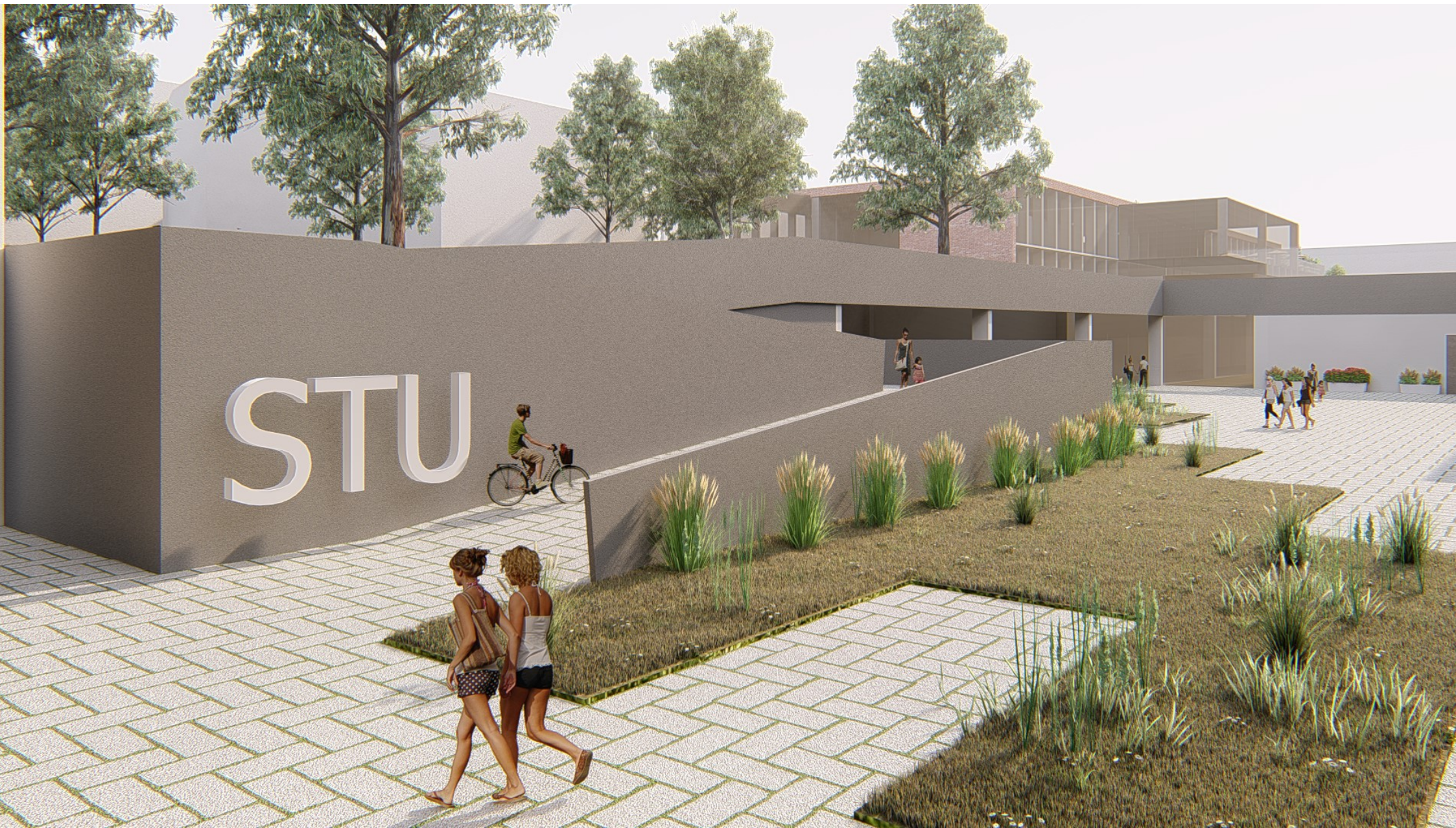


STUDENTS' YARD

Recreation spaces for students in the areas where there is more sun during the day to take advantage of it

Equipment designed for the use of students with trees for greater comfort during the day.

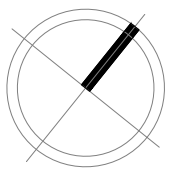
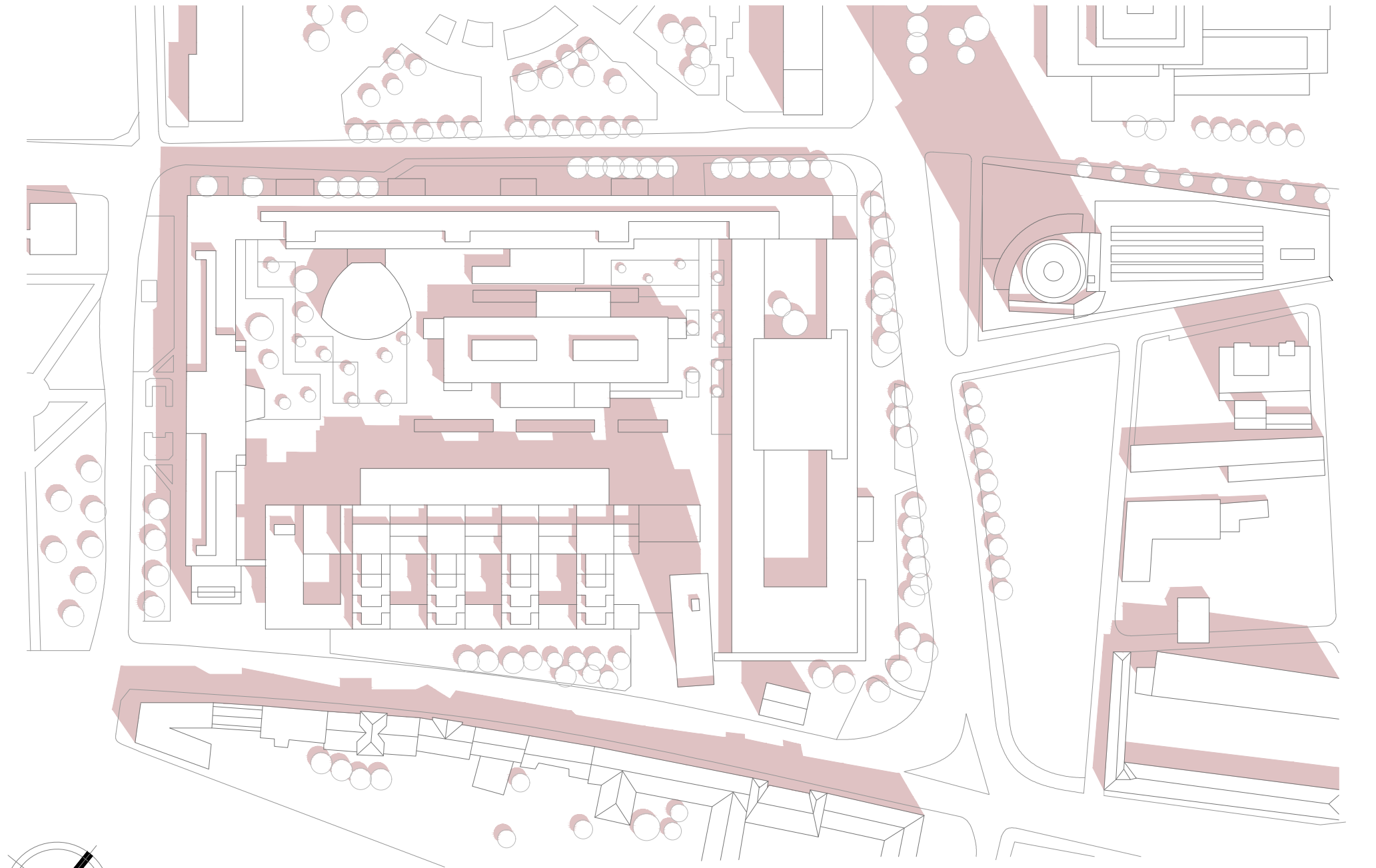


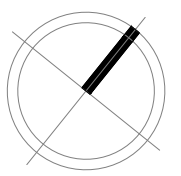
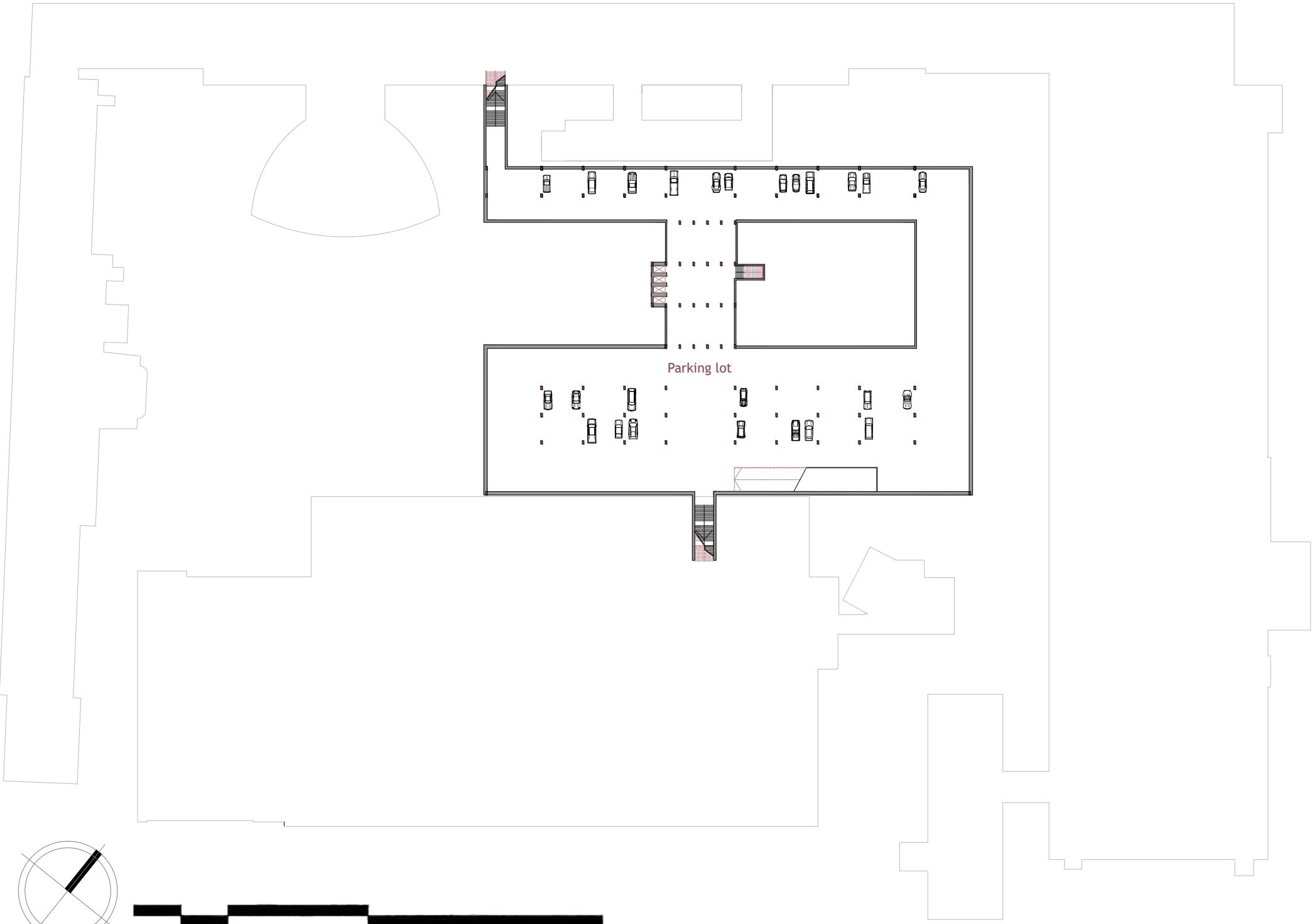


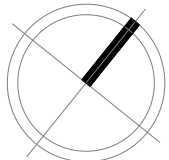
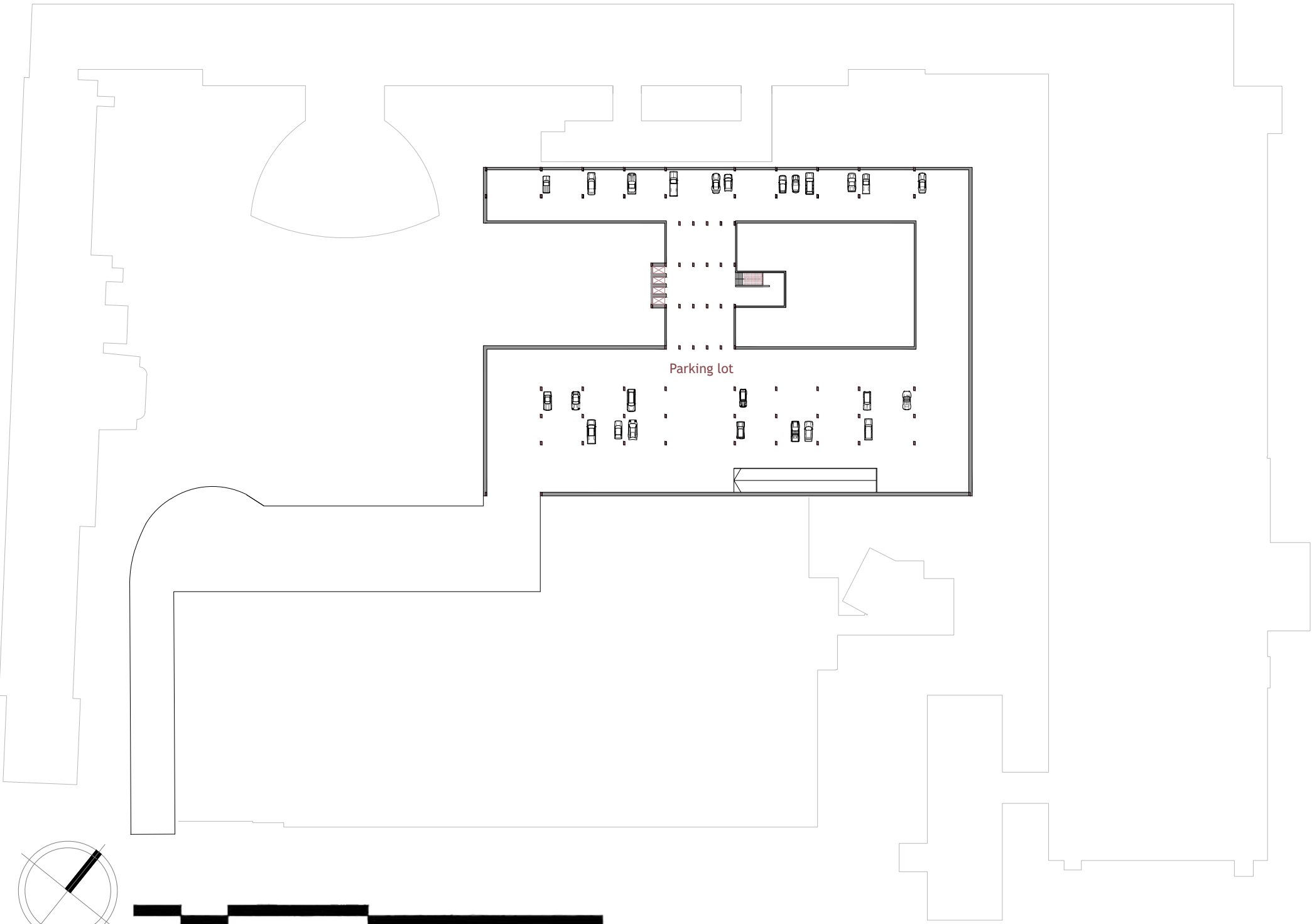


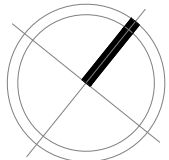
PLANIMETRY

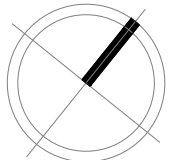
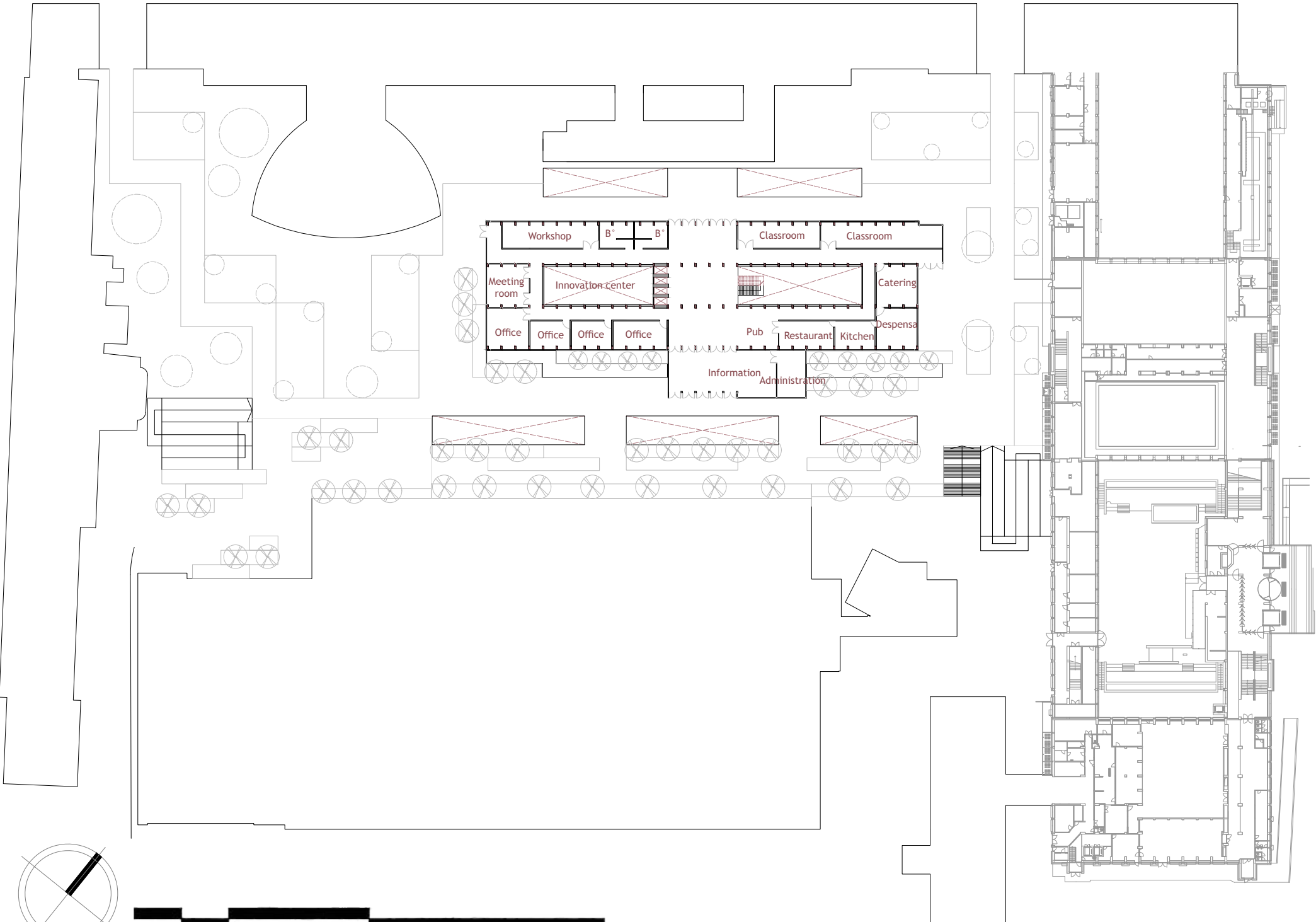


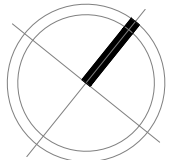
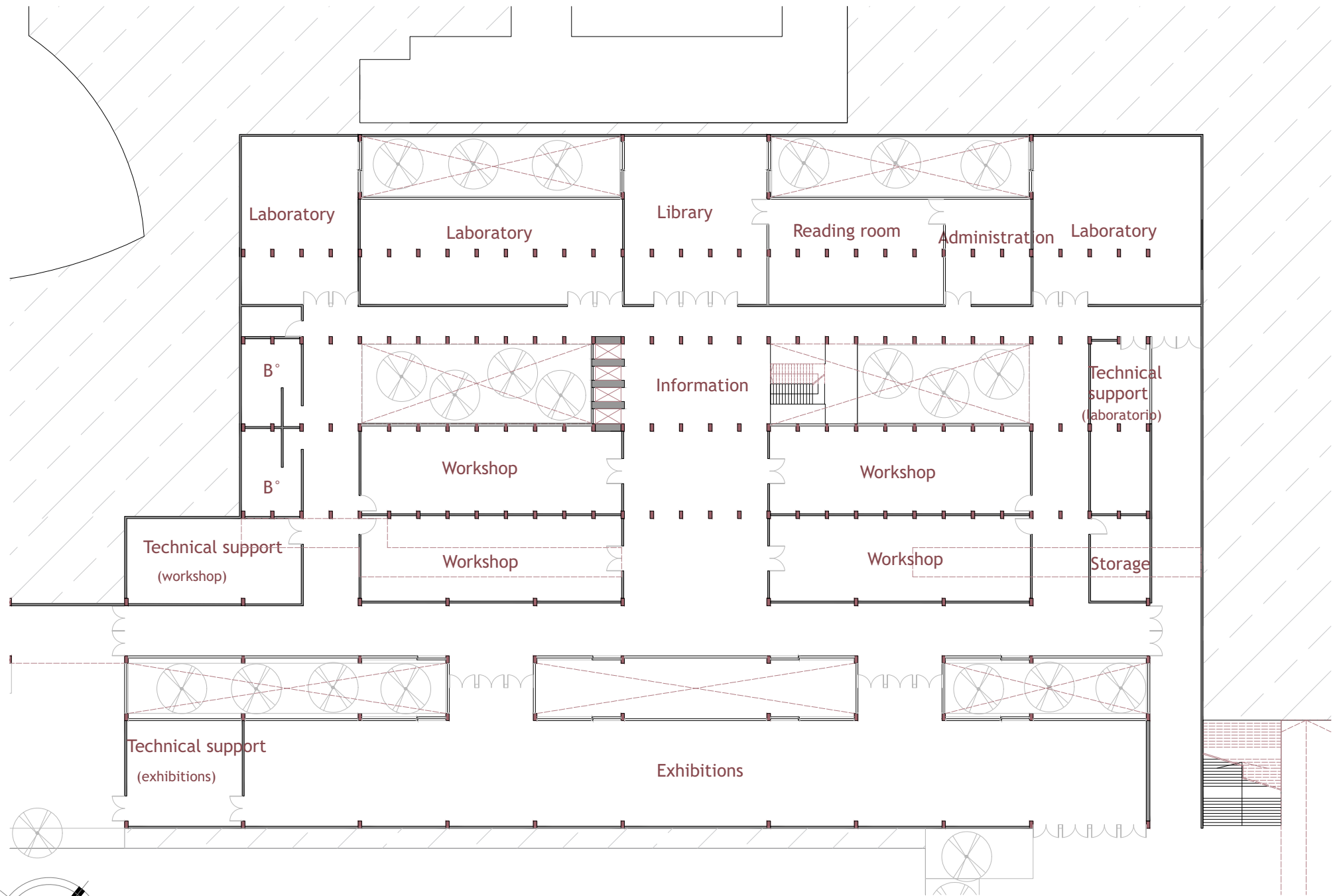


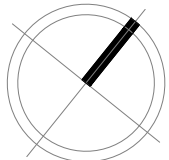
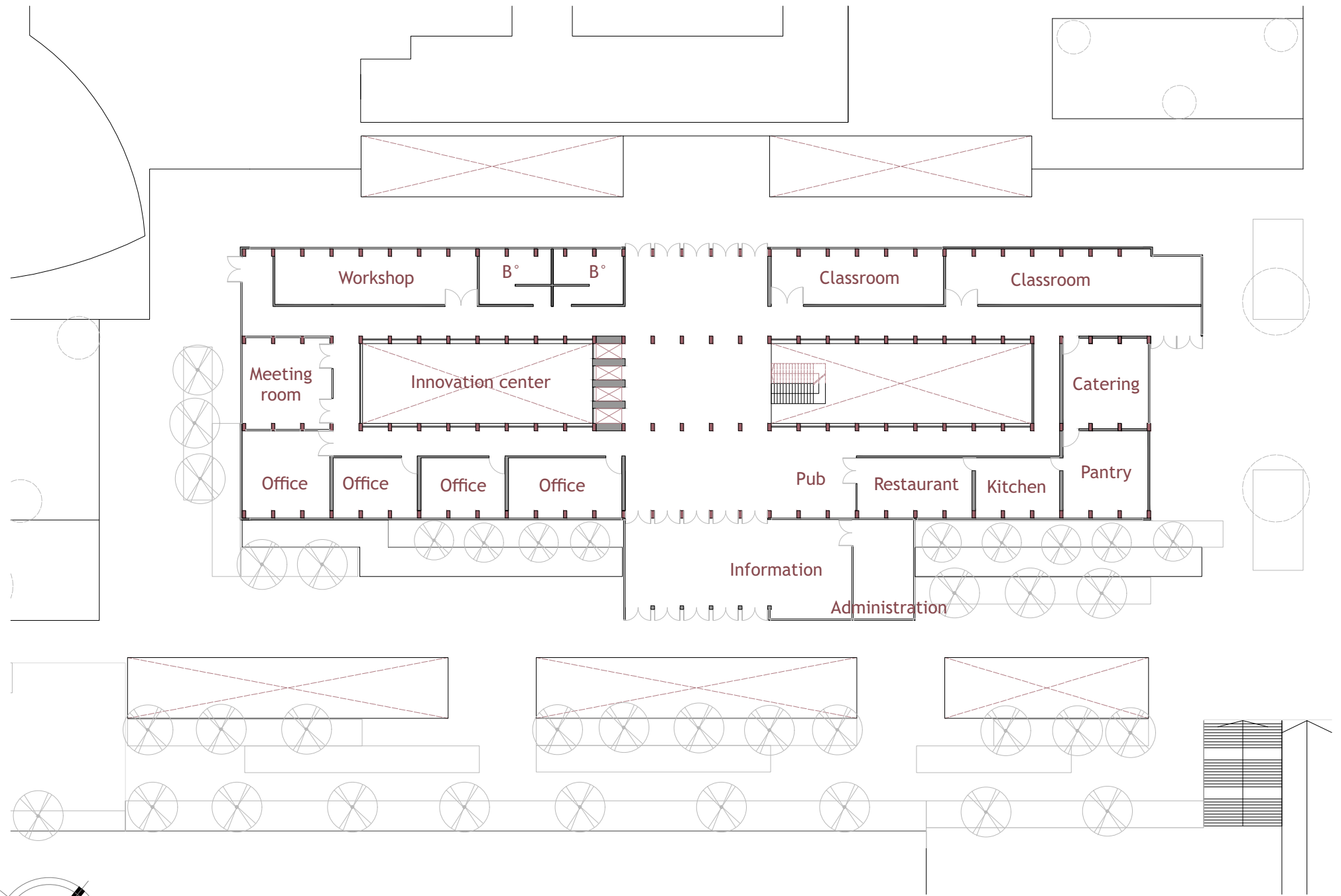


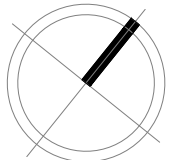


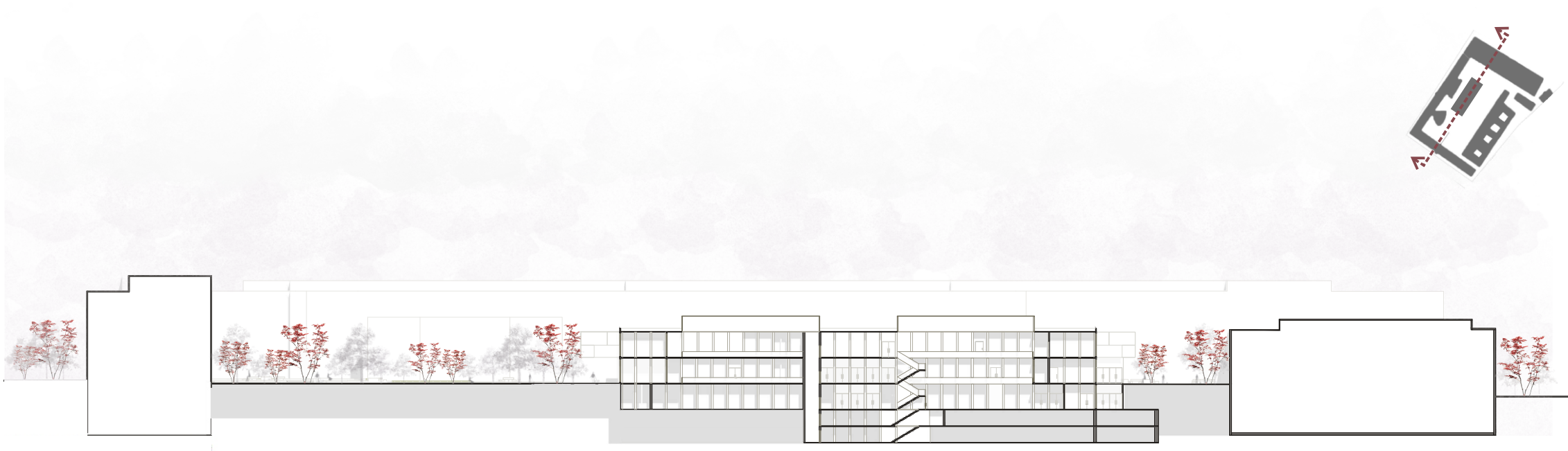
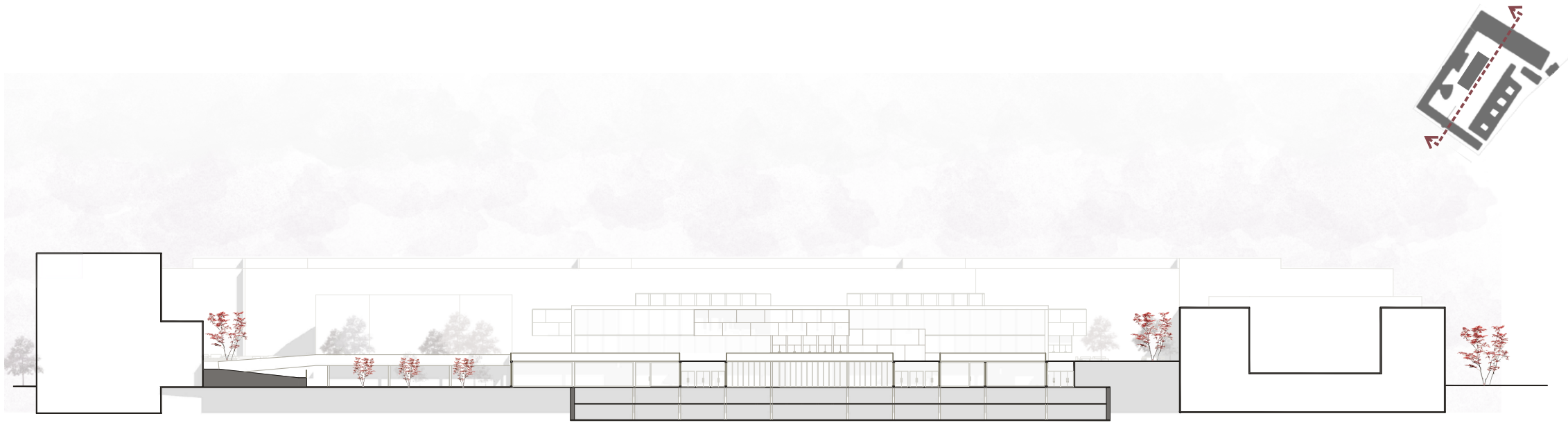


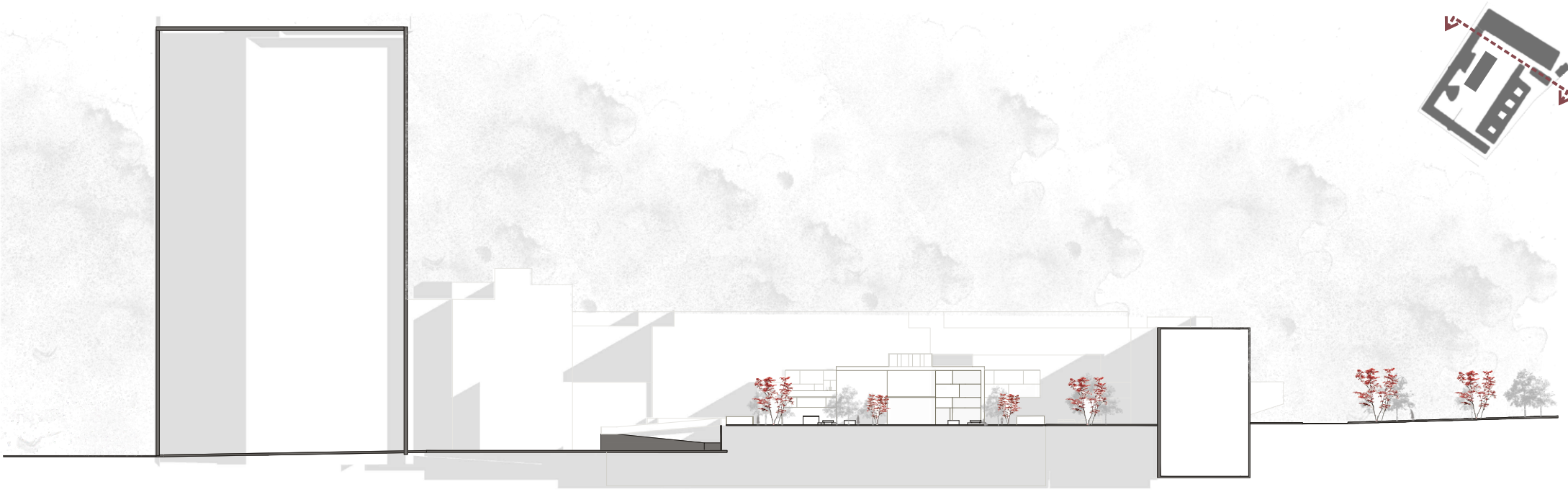
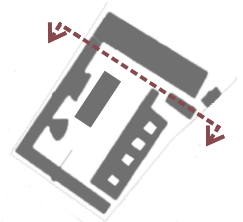
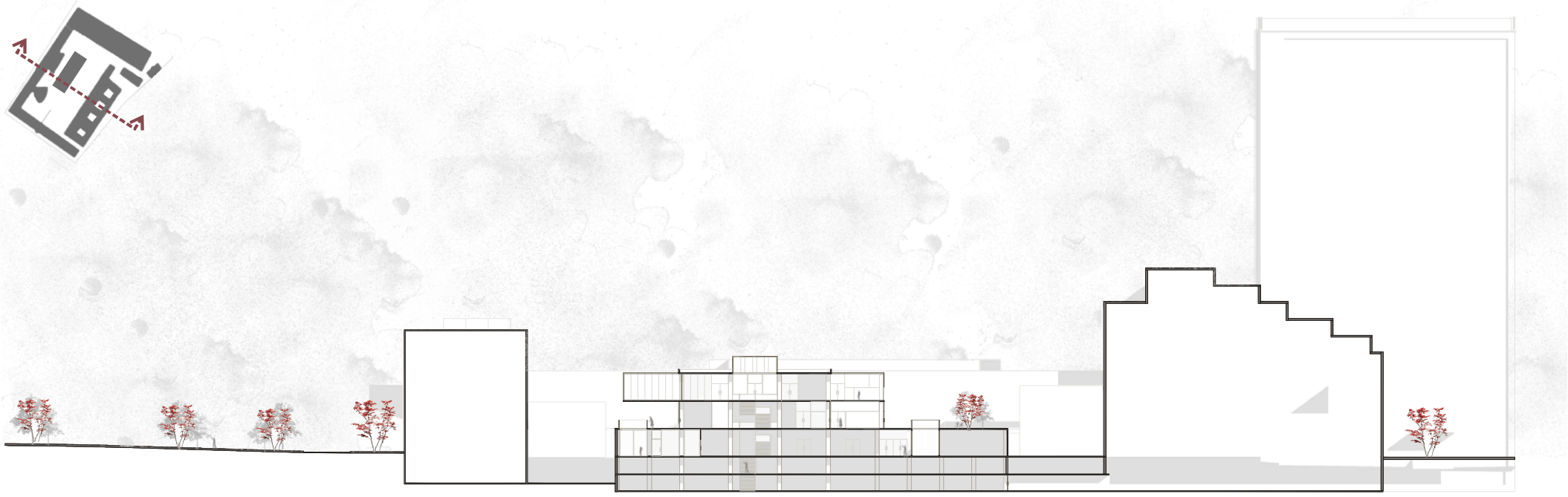
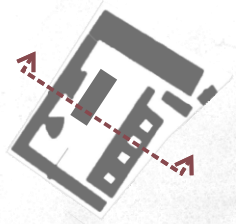






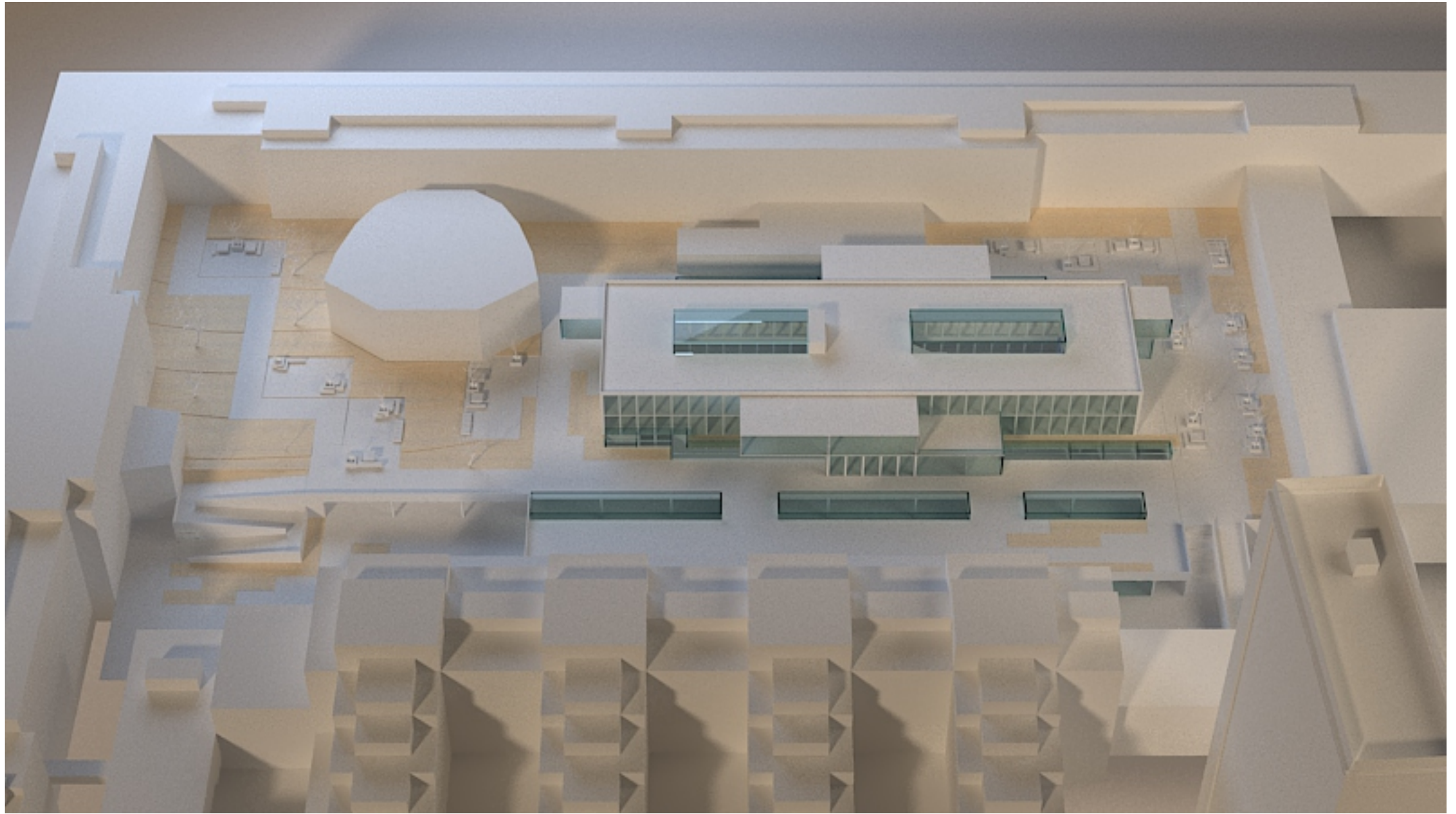


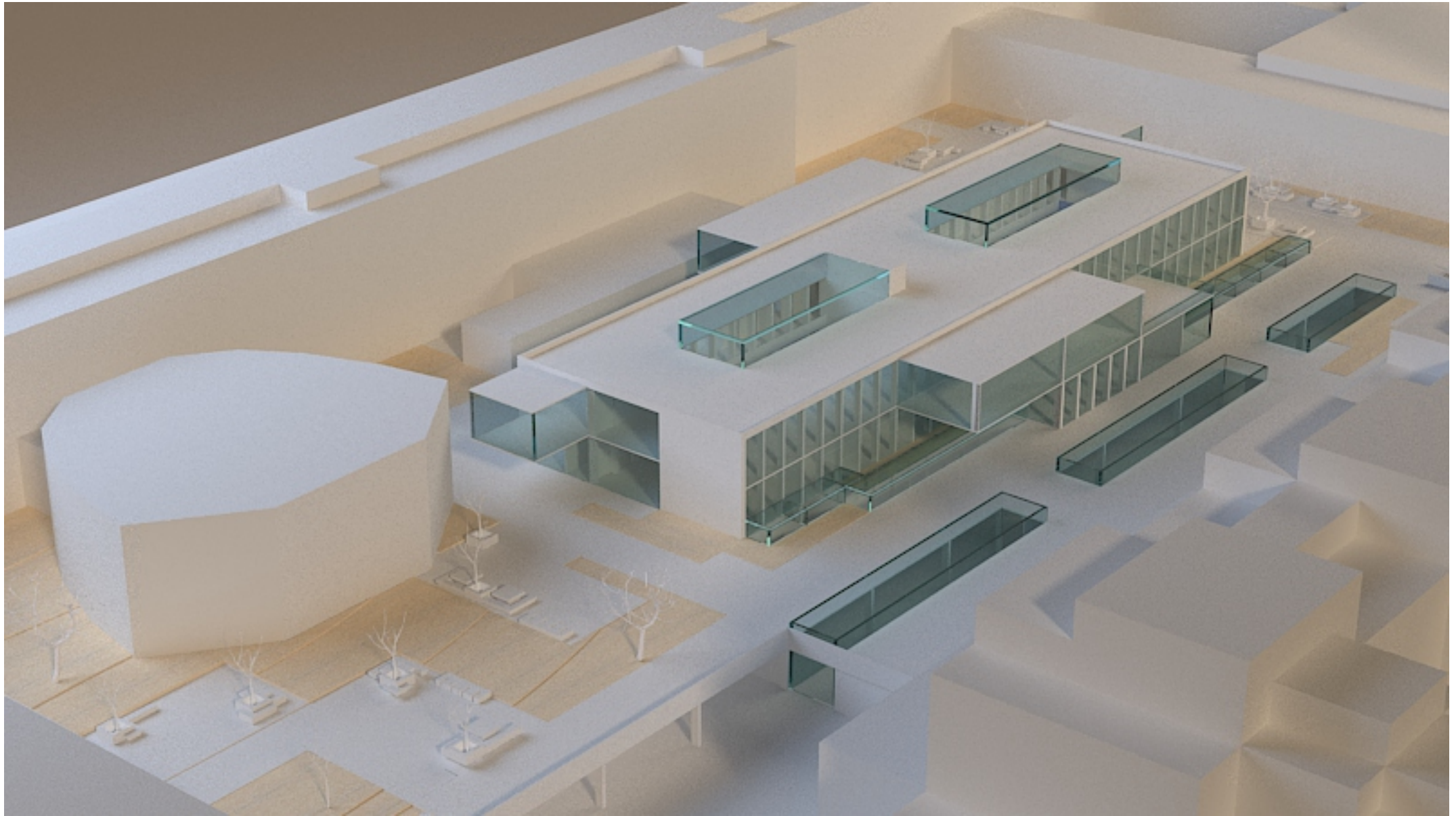


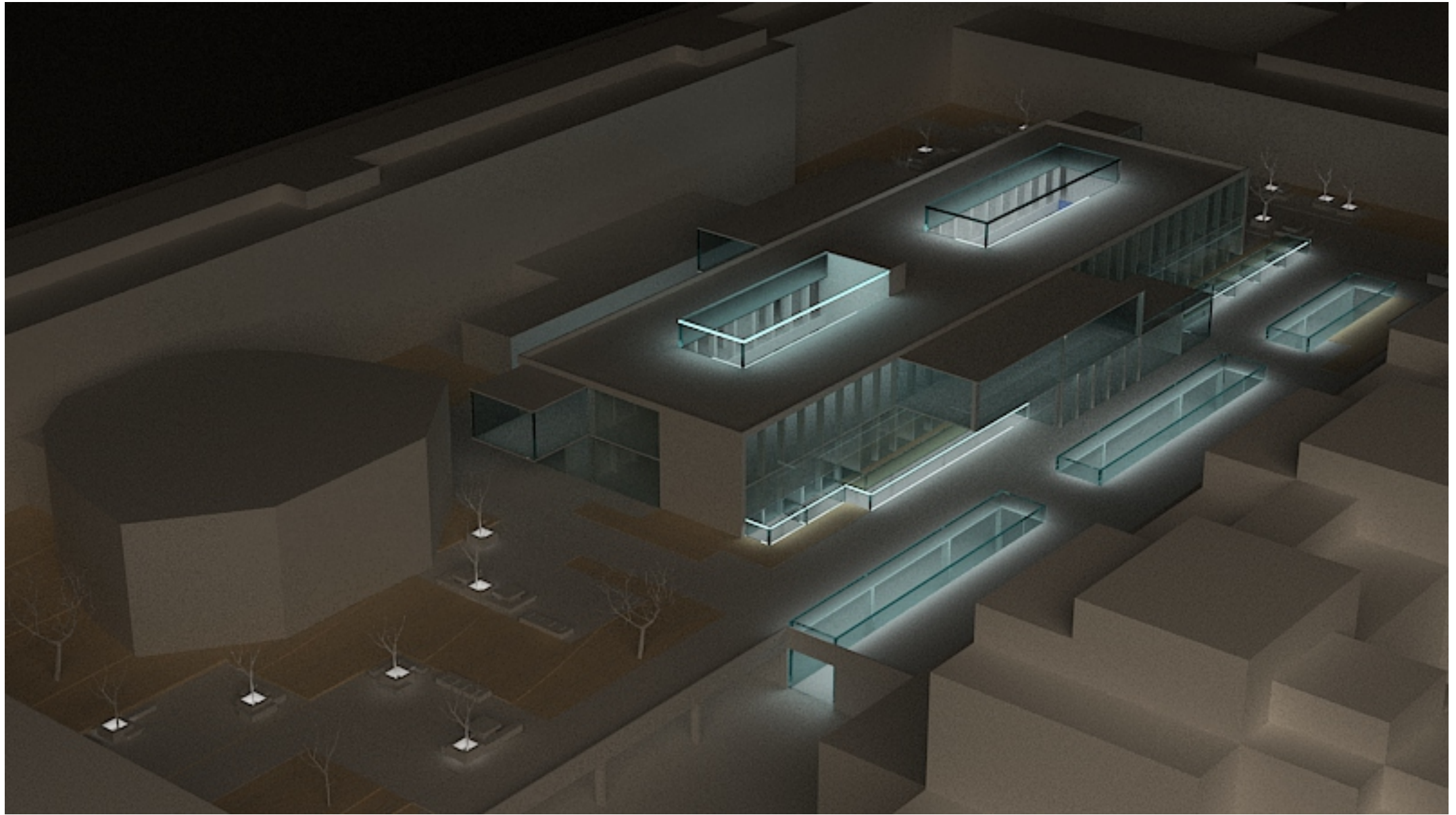


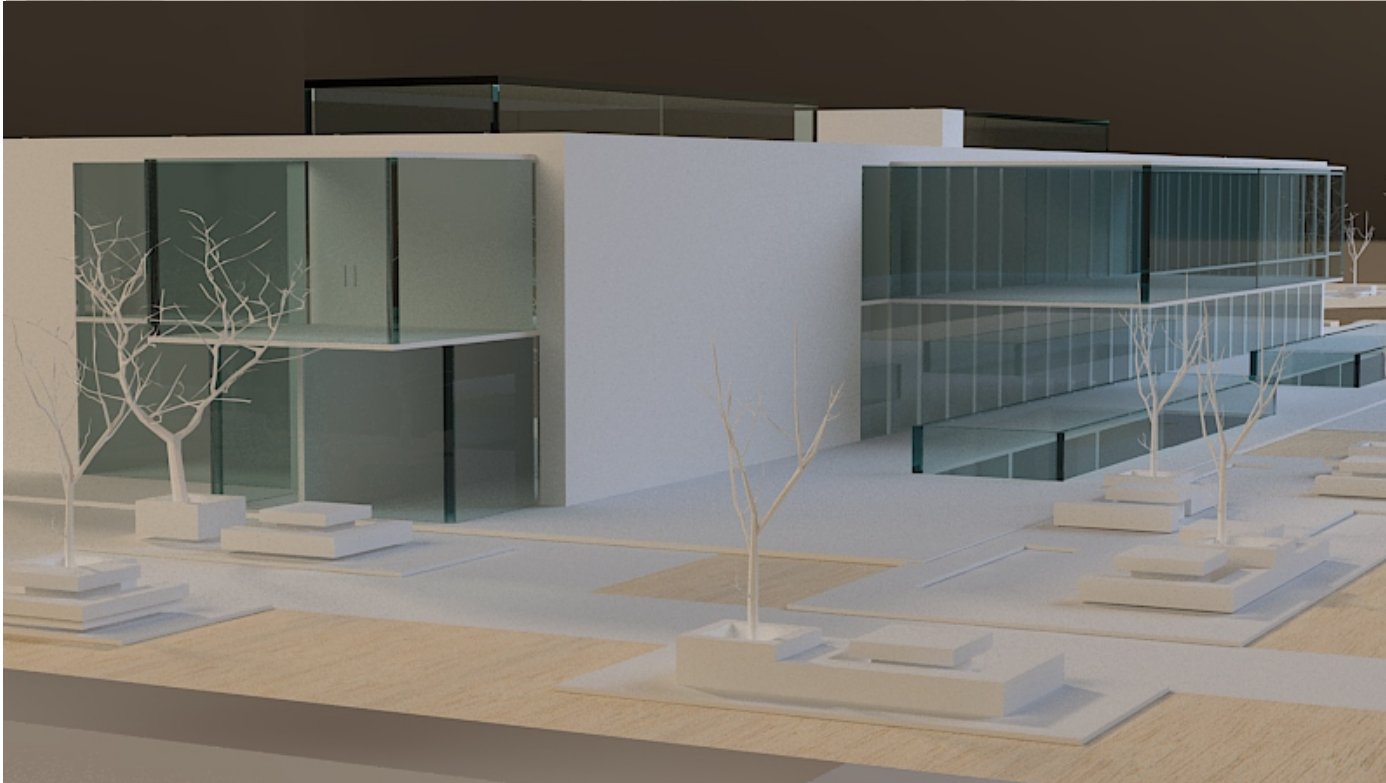
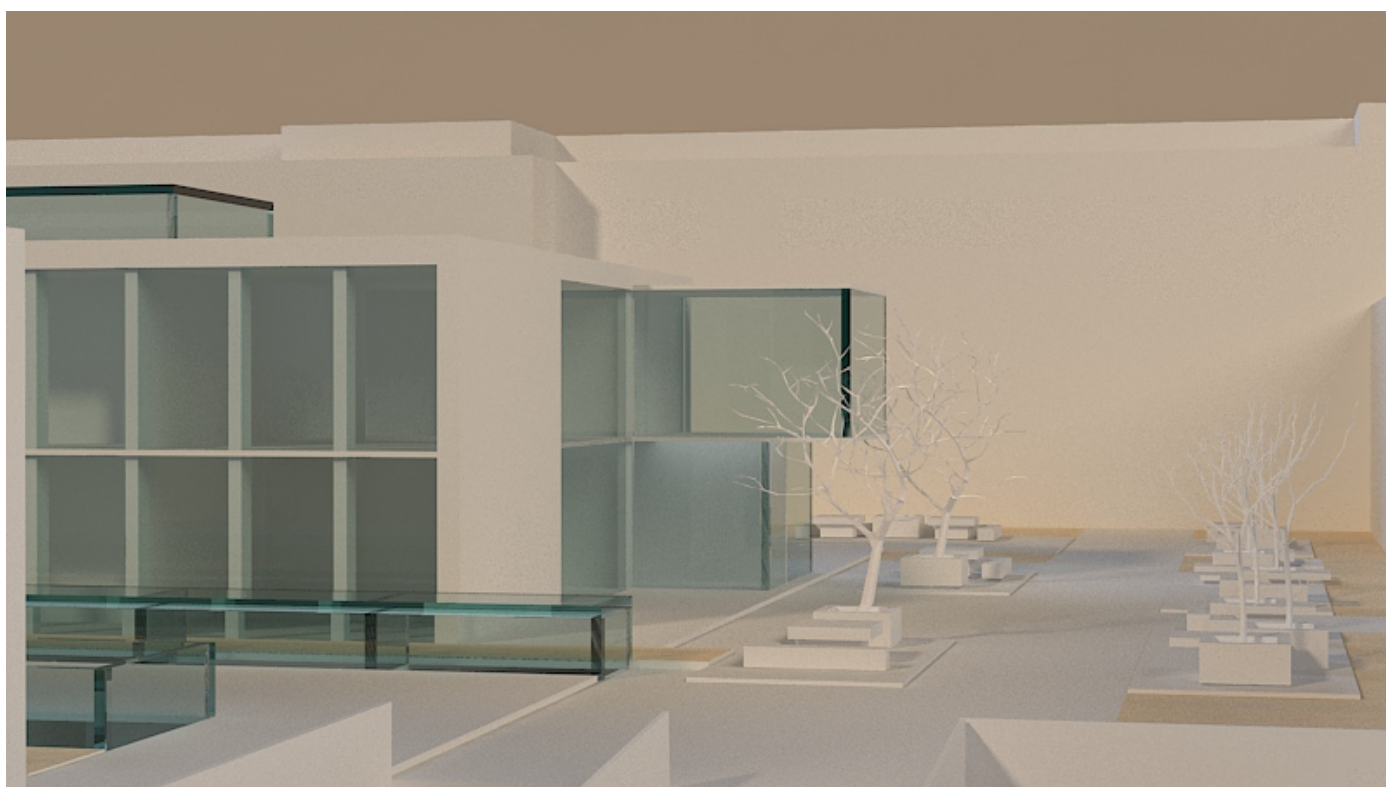
MODEL

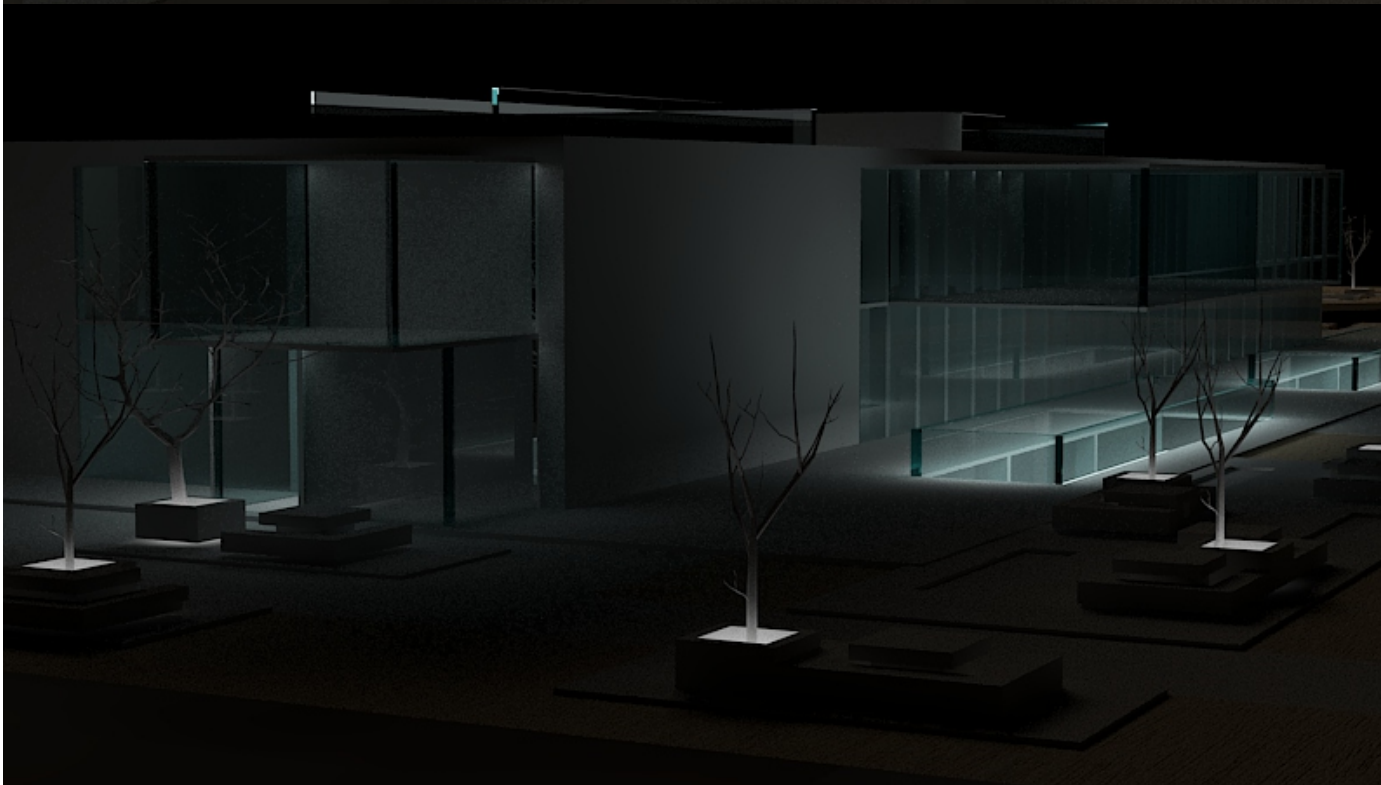
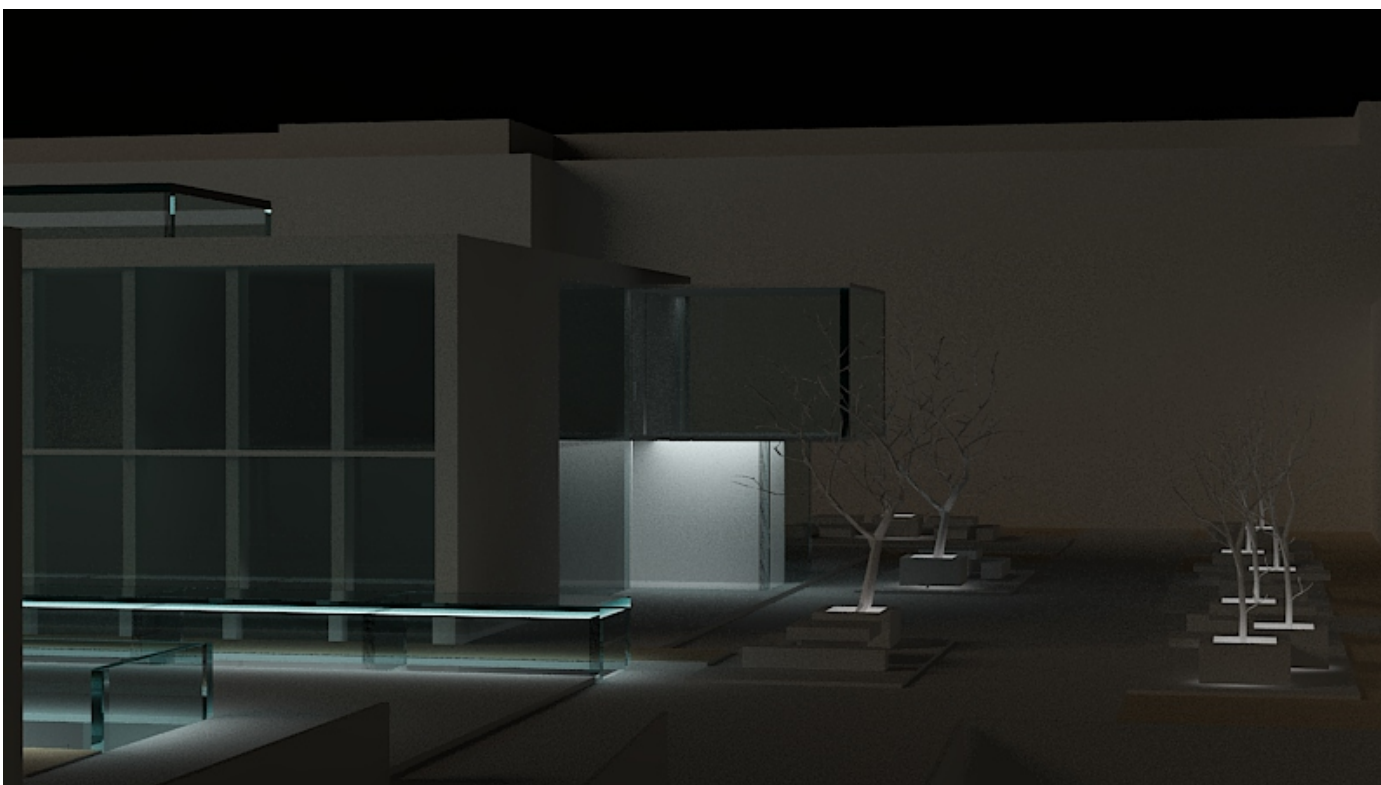


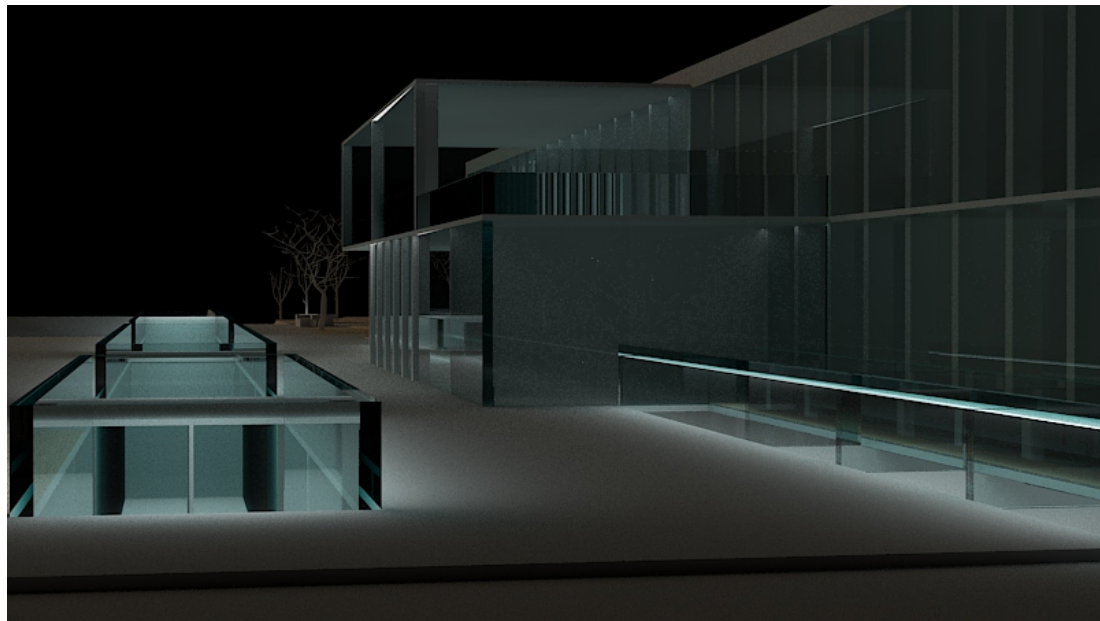
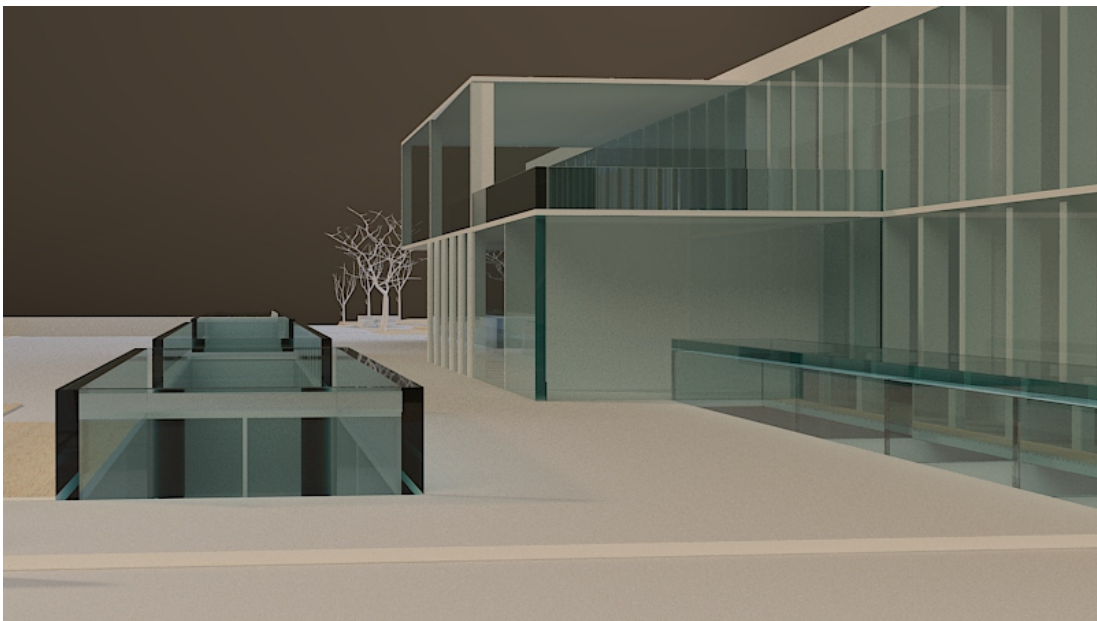














RENDERS



















