

International urban & architectural design competition
Master plan “Campus”:
Constructing new student residences and rehabilitating the existing ones

KEEPING THE FOOTPRINT SMALL

A proposal for Qyteti Studenti

landscape architecture, architecture

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CORE OF THE PROJECT

Adding floors, adding views. Preserving the green and continuing the history

The proposal aims at creating a campus with international standards but with a specific Albanian identity. To reach this goal the proposal considers the campus not as a tabula rasa but as a peculiar urban area that is deeply nestled in the collective memory of contemporary Albania, as well as it has to embody its future.

The proposal is in fact based on the full acknowledgment of the several fine qualities that already benefit Qyteti Studenti.

The site of the campus is indeed privileged: it is resting on a hill that is gently inclined and that allows to embrace in one single view the city center to the south-west, the wooded hills to the south, and the mountains to the east.

This trilogy of views establishes a link with the near and the far surroundings, thus realizing a long lasting (and lovely) modernist dream: to infuse to the inhabitants a full sense of place, something that becomes particularly meaningful in the case of students.

On the other hand, from the point of view of the history of urban planning and of architecture, Qyteti Studenti shows an amazingly intriguing translation of mid-twenty century international modernist culture into the conditions of the site as well as into the local building techniques. This translation results in a varied, balanced and correct relationship between buildings and open areas.

The proposal thus aims at enhancing the existing qualities of Qyteti Studenti.

The design would be based on a threefold strategy:

First, the proposal focuses on the students' private and common rooms by creating a number of different accommodation solutions based on international comfort standards.

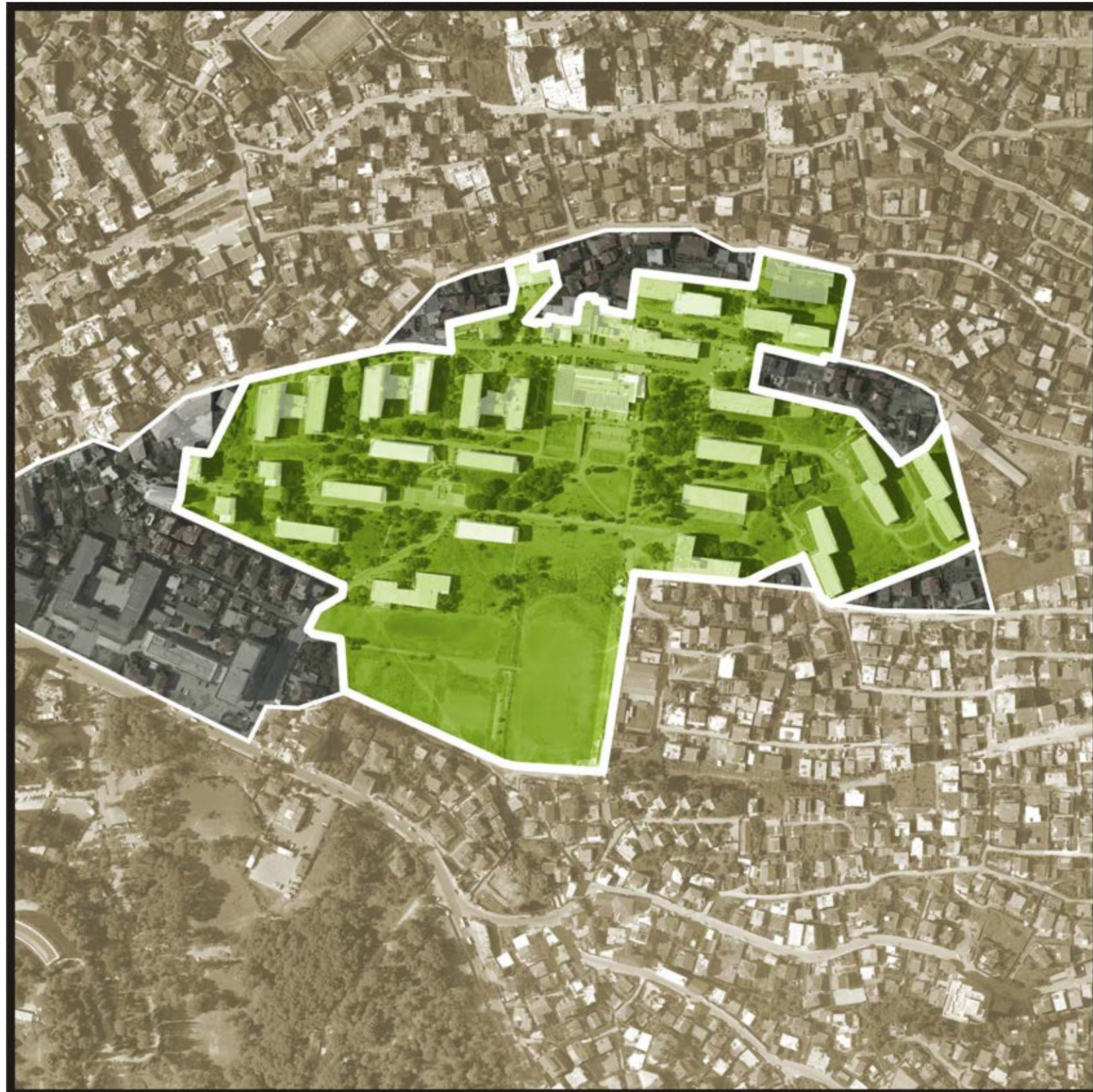
Second, the proposal would overcome the opposition between renovation and new building by adding floors and/or balconies to the existing buildings. These latter would be improved in quality and insulation and they would benefit of the same internal improvement of the new floors. Also the facilities would be hosted in a building built above/within the existing boiler house. In this way the valuable ratio between open areas and the footprint of buildings would not be modified, and the atmosphere of the campus would not be distorted. Moreover the new floors would include common terraces that would enhance the "sense of place" that already benefits the campus.

Third, as to the open spaces, the proposal individuates a smaller but well recognizable and defendable boundary for the campus emending rather than radically modifying the current distribution and rhythm of streets, squares, passages.

Relying on these principles, the new/renovated Qyteti Studenti might become a meaningful portion of the Tirana urbanscape.

GROUND(S) OF THE PROJECT/1

making the campus smaller



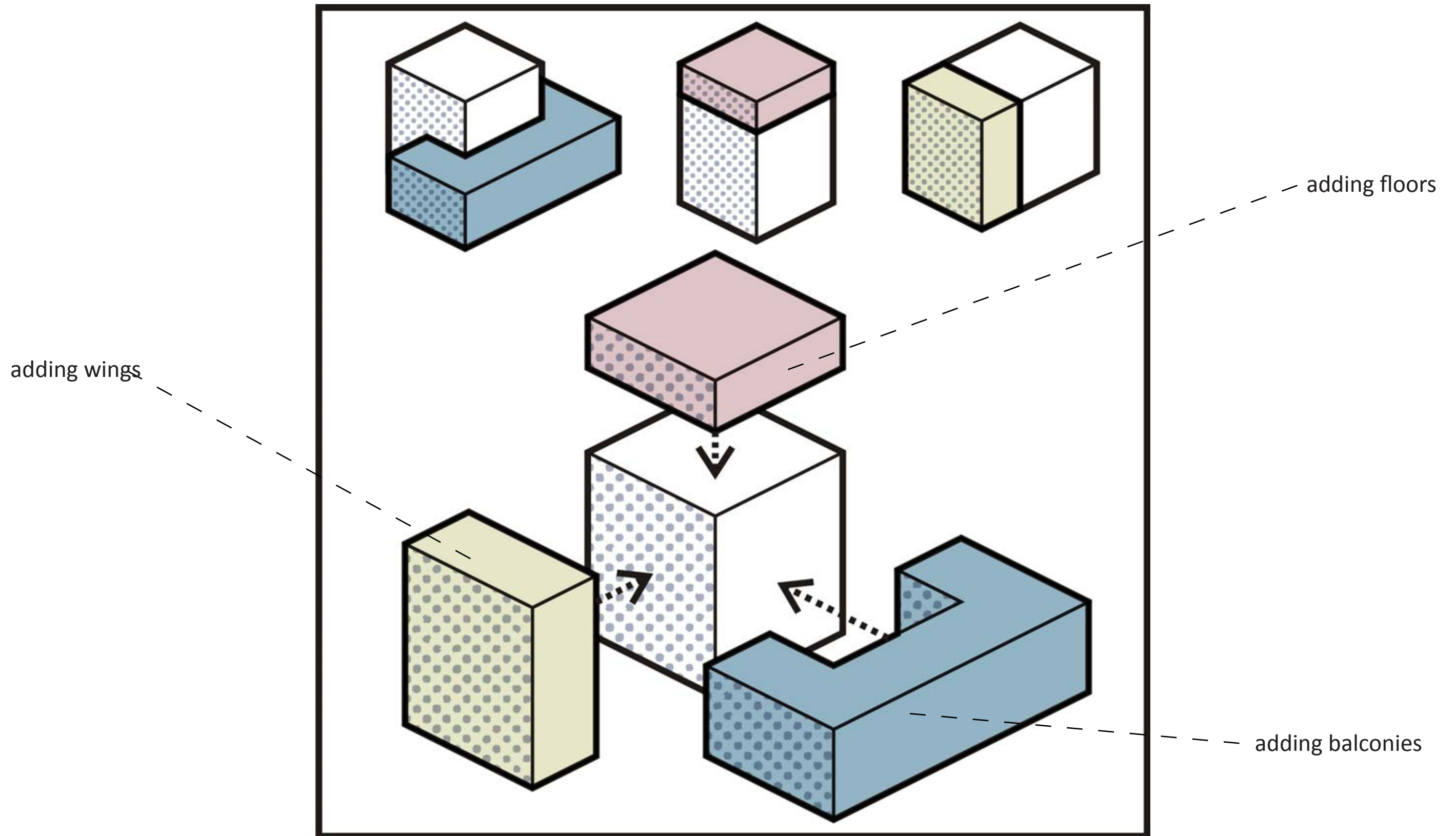
GROUND(S) OF THE PROJECT/2

but clear, recognizable and defensible



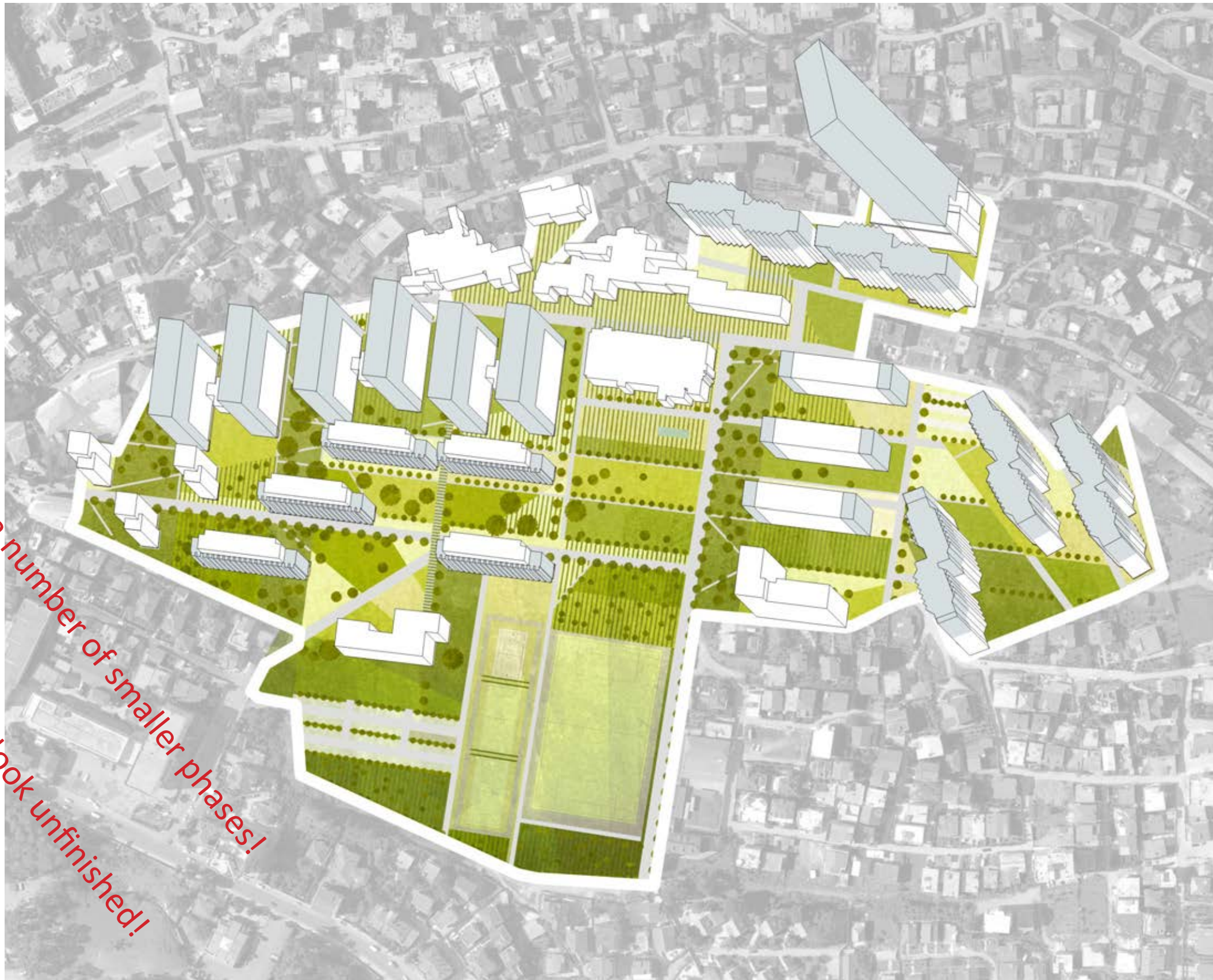
GROUND(S) OF THE PROJECT/3

strategies for implementing the existing buildings



GROUND(S) OF THE PROJECT/4

implementation of all buildings



easy to be splitted in a number of smaller phases!
and would never look unfinished!

ADDING FLOORS OR DEMOLISHING AND REBUILDING

Existing buildings would be fully renovated in the layout as well as in the envelope.

The new floors would follow the same layout and would rely on an independent structure.

This strategy would allow to have small building sites and to build only when needed and when possible.

Also the strategy of demolishing a building and building a new higher one on the same footprint might work.

See the zoom/schemes in following pages:

DESIGN PROPOSAL

TASK: DOUBLE THE AREA OF THE BUILDING BY ADDING STORIES ON TOP OF THE EXISTING BUILDING

ALTERNATIVE 1: DEMOLITION OF EXISTING BUILDING AND CONSTRUCTION OF A NEW ONE

PROS AND CONS

- +
- 1. LOWER DESIGN EFFORT
 - 2. MORE FLEXIBLE TOWARDS ARCHITECTURAL REQUIREMENTS

-
- 1. INTERRUPTION OF FUNCTION OF THE BUILDING
 - 2. LONG CONSTRUCTION TIME (NEW FOUNDATIONS, 10 NEW STORIES)
 - 3. INSIGNIFICANT COST BENEFIT

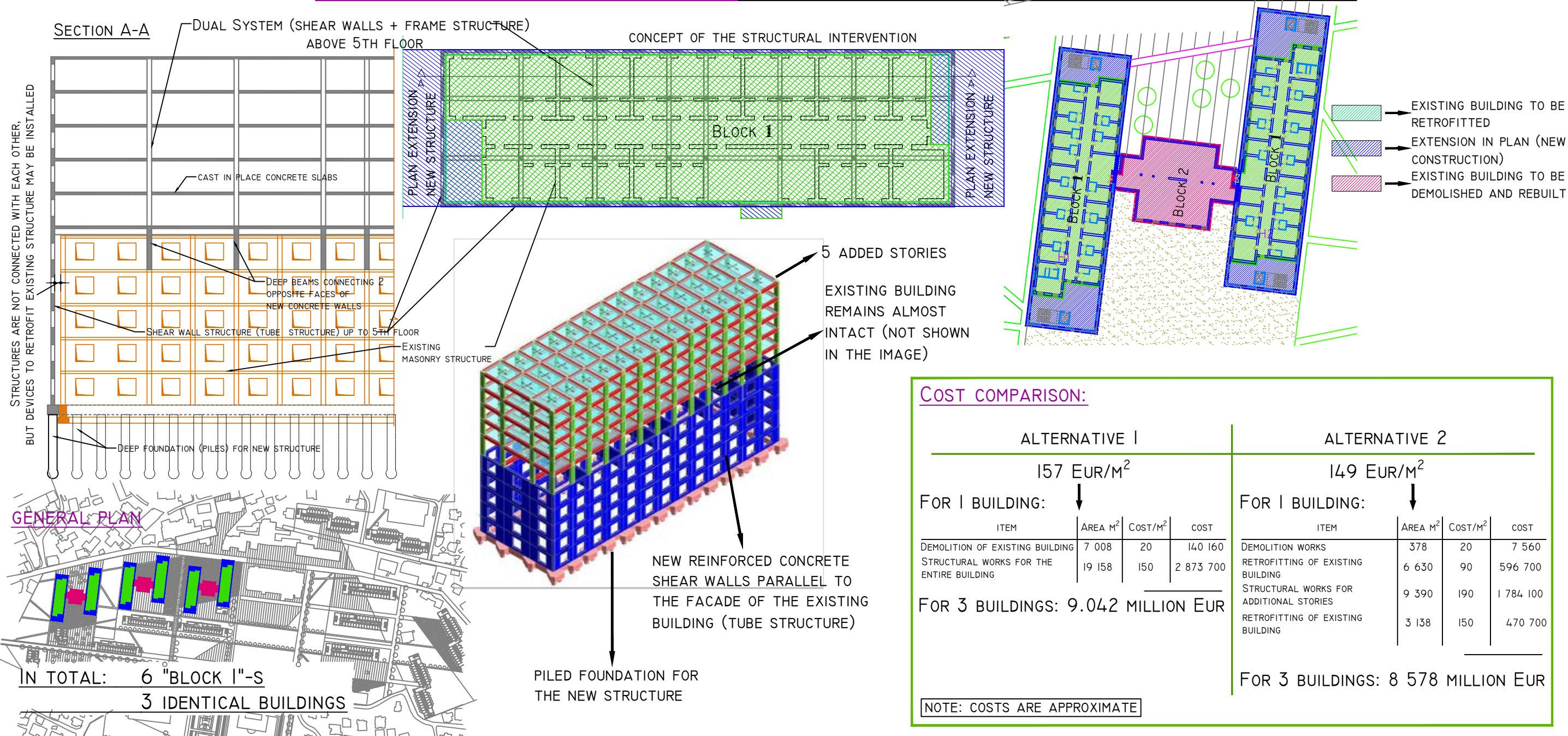
ALTERNATIVE 2: RETROFITTING OF EXISTING BUILDING AND ADDITION OF NEW STORIES

PROS AND CONS

- +
- 1. HISTORY OF THE BUILDINGS IS PRESERVED
 - 2. INTERRUPTION OF FUNCTION FOR ONLY A SHORT TIME
 - 3. COST EFFECTIVE, ESPECIALLY IN TERMS OF THERMO-INSULATION.

-
- 1. GREATER DESIGN EFFORT
 - 2. LESS FLEXIBILITY TOWARDS ARCHITECTURAL REQUIREMENTS

OUR PREFERRED AND RECOMMENDED SOLUTION: RETROFITTING OF EXISTING BUILDING AND ADDITION OF NEW STORIES



COST COMPARISON:

ALTERNATIVE 1				ALTERNATIVE 2			
157 EUR/M ²				149 EUR/M ²			
FOR 1 BUILDING:				FOR 1 BUILDING:			
ITEM	AREA M ²	COST/M ²	COST	ITEM	AREA M ²	COST/M ²	COST
DEMOLITION OF EXISTING BUILDING	7 008	20	140 160	DEMOLITION WORKS	378	20	7 560
STRUCTURAL WORKS FOR THE ENTIRE BUILDING	19 158	150	2 873 700	RETROFITTING OF EXISTING BUILDING	6 630	90	596 700
FOR 3 BUILDINGS: 9.042 MILLION EUR				STRUCTURAL WORKS FOR ADDITIONAL STORIES	9 390	190	1 784 100
				RETROFITTING OF EXISTING BUILDING	3 138	150	470 700
				FOR 3 BUILDINGS: 8 578 MILLION EUR			

NOTE: COSTS ARE APPROXIMATE

DESIGN PROPOSAL

TASK: DOUBLE THE AREA OF THE BUILDING BY ADDING STORIES ON TOP OF THE EXISTING BUILDING

ALTERNATIVE 1: DEMOLITION OF EXISTING BUILDING AND CONSTRUCTION OF A NEW ONE

PROS AND CONS



- 1. LOWER DESIGN EFFORT
- 2. MORE FLEXIBLE TOWARDS ARCHITECTURAL REQUIREMENTS



- 1. INTERRUPTION OF FUNCTION OF THE BUILDING
- 2. LONG CONSTRUCTION TIME (NEW FOUNDATIONS, 10 NEW STORIES)
- 3. ALMOST NO COST BENEFIT

ALTERNATIVE 2: RETROFITTING OF EXISTING BUILDING AND ADDITION OF NEW STORIES

PROS AND CONS



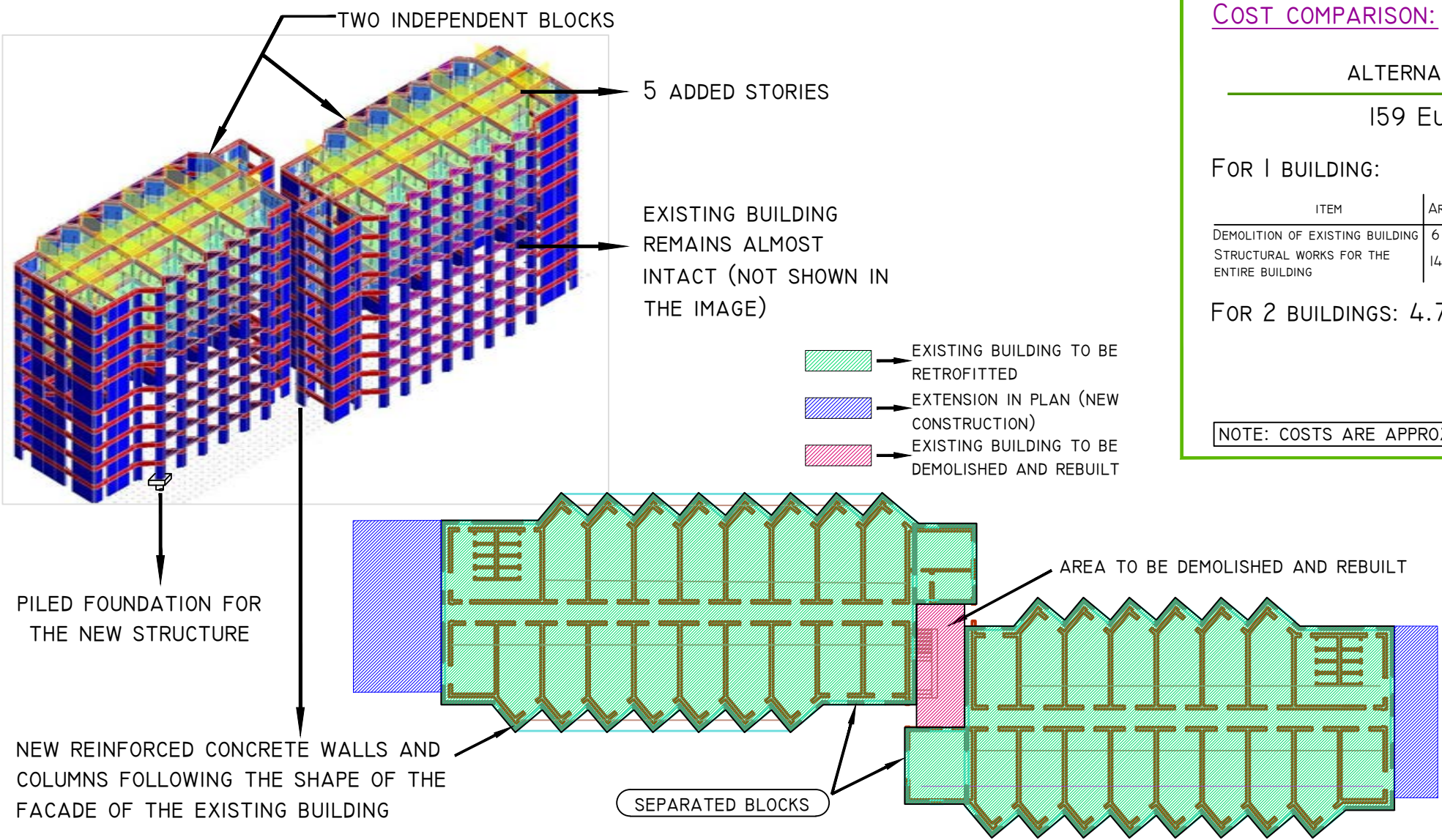
- 1. HISTORY OF THE BUILDINGS IS PRESERVED
- 2. STRUCTURAL REGULARITY IS ACHIEVED
- 3. INTERRUPTION OF FUNCTION FOR ONLY A SHORT TIME
- 4. COST EFFECTIVE, ESPECIALLY IN TERMS OF THERMO-INSULATION.



- 1. GREATER DESIGN EFFORT
- 2. LESS FLEXIBILITY TOWARDS ARCHITECTURAL REQUIREMENTS

OUR PREFERRED AND RECOMMENDED SOLUTION: RETROFITTING OF EXISTING BUILDING AND ADDITION OF NEW STORIES

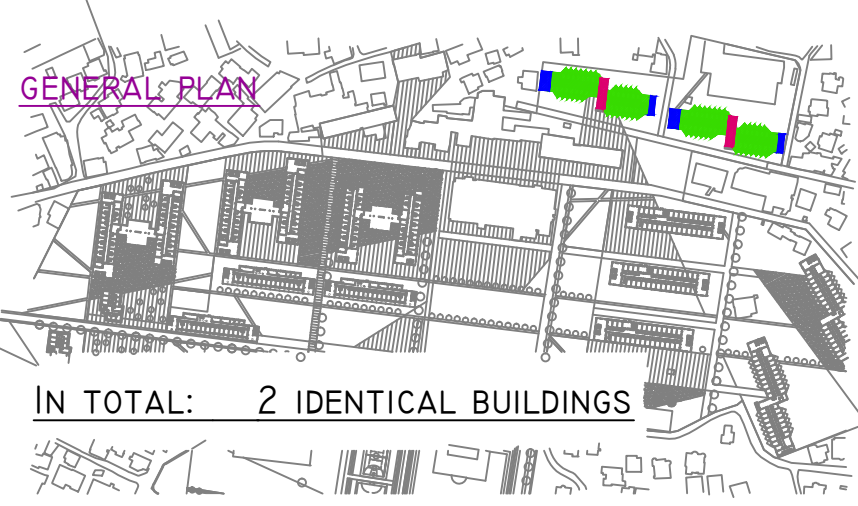
ADDITIONAL MEASURE: PARTIAL DEMOLITION OF THE CENTRAL BLOCK, TRANSFORMING THE BUILDING INTO TWO INDEPENDENT BLOCKS



COST COMPARISON:

ALTERNATIVE 1				ALTERNATIVE 2			
159 EUR/M ²				151 EUR/M ²			
FOR 1 BUILDING:				FOR 1 BUILDING:			
ITEM	AREA M ²	COST/M ²	COST	ITEM	AREA M ²	COST/M ²	COST
DEMOLITION OF EXISTING BUILDING	6 765	20	135 300	RETROFITTING OF EXISTING BLDG.	6 180	90	556 200
STRUCTURAL WORKS FOR THE ENTIRE BUILDING	14 880	150	2 232 000	DEMOLITION OF CENTRAL PART	585	20	11 700
FOR 2 BUILDINGS: 4.735 MILLION EUR				CONSTRUCTION OF CENTRAL PART AND PLAN EXTENSION	1 260	150	189 000
				STRUCTURAL WORKS FOR THE ADDITIONAL STOREYS	7 440	200	1 488 000
				FOR 2 BUILDINGS: 4 490 MILLION EUR			

NOTE: COSTS ARE APPROXIMATE



PROXY COST ANALYSIS OF TWO TYPOLOGIES

Alternative 1: Demolition of existing building and construction of a new one

Item	Area (m ²)	cost/m ²	Cost
1 Demolition of existing building	7.008	20 €	140.160 €
2 Structural works for the entire building	19.158	150 €	2.873.700 €
Total for one building (2 x Block 1 + Block 2)=			3.013.860 €
Cost per unit area (€/m²)			157 €
Total for three buildings =			9.041.580 €

Alternative 2: Retrofitting of existing building and addition of new stories

Item	Area (m ²)	cost/m ²	Cost
1 Demolition works	378	20 €	7.560 €
2 Retrofitting of existing building	6.630	90 €	596.700 €
3 Structural works for additional stories (including new foundations and vertical elements)	9.390	190 €	1.784.100 €
4 Structural works for new structures	3.138	150 €	470.700 €
Total for one building (2 x Block 1 + Block 2)=			2.859.060 €
Cost per unit area (€/m²)			149 €
Total for three buildings =			8.577.180 €

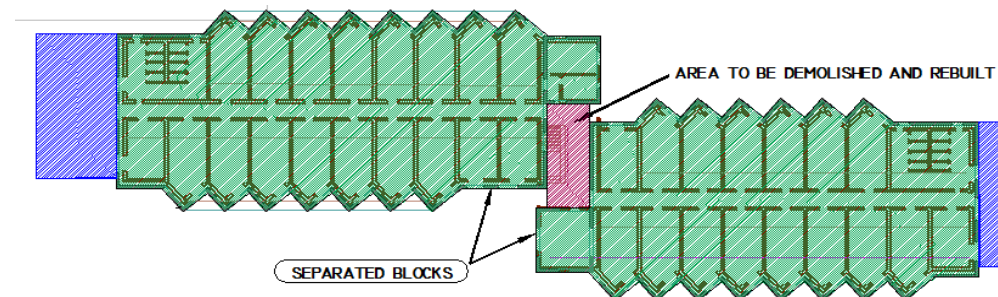


Alternative 1: Demolition of existing building and construction of a new one

Item	Area (m ²)	cost/m ²	Cost
1 Demolition of existing building	6.765	20 €	135.300 €
2 Structural works for the entire building	14.880	150 €	2.232.000 €
Total for one building =			2.367.300 €
Cost per unit area (€/m²)			159 €
Total for two buildings =			4.734.600 €

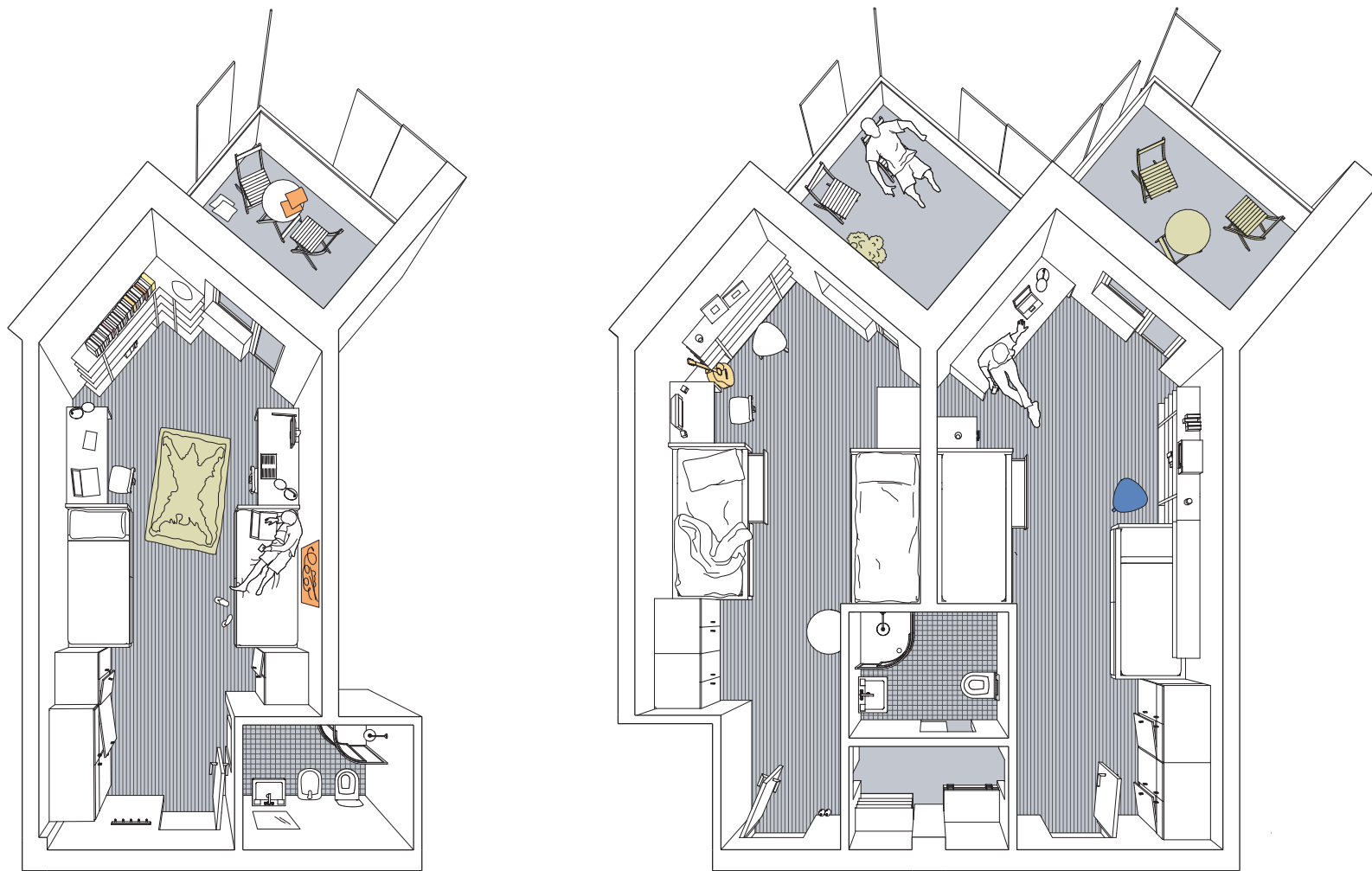
Alternative 2: Retrofitting of existing building and addition of new stories

Item	Area (m ²)	cost/m ²	Cost
1 Retrofitting of existing building	6.180	90 €	556.200 €
2 Demolition of central part	585	20 €	11.700 €
3 Reconstruction of central part and construction of 5 stories of the plan extension	1.260	150 €	189.000 €
4 Structural works for the additional storeys	7.440	200 €	1.488.000 €
Total for one building =			2.244.900 €
Cost per unit area (€/m²)			151 €
Total for two buildings =			4.489.800 €



BUILDINGS ARE MADE OF ROOMS

the layout and quality of the rooms (private and common) is thus fundamental:
the proposal is based on the design of each room as the crucial stage of the daily life of students



Zoom on a private room



Zoom on a common area

QUANTITIES

The proposal is based on a principle of maximum flexibility.

Due to the fact that it can be splitted in many phases, the masterplan could follow the increasing demands of quantities and of standards of Qyteti Studenti.

If completely built the proposal would increase to 7102 the capacity of the dorms, basing on a layout of two beds per room.

The rooms are flexible, so that they can be modified to a single bed or to a three beds.

The possible combinations are numerous and maybe.

As an example, by adding a third bed to half of the rooms of the added floors, the total capacity would increase to 8877.

In any case the proposal assumes that a number in the region of 8.500 is the maximum recommendable to keep a good quality of the public open spaces.

For details see in particular panel 3

QUALITIES OF THE PUBLIC SPACES

the current general plan is based on sound mid 20th century principles
The proposal is to emend some axes, improve the green and keep the central square as the social core of the campus



social core

A NEW/OLD FACILITY CORE

following the principle of building above/within buildings a new facility core could be built on the site of the boiler house

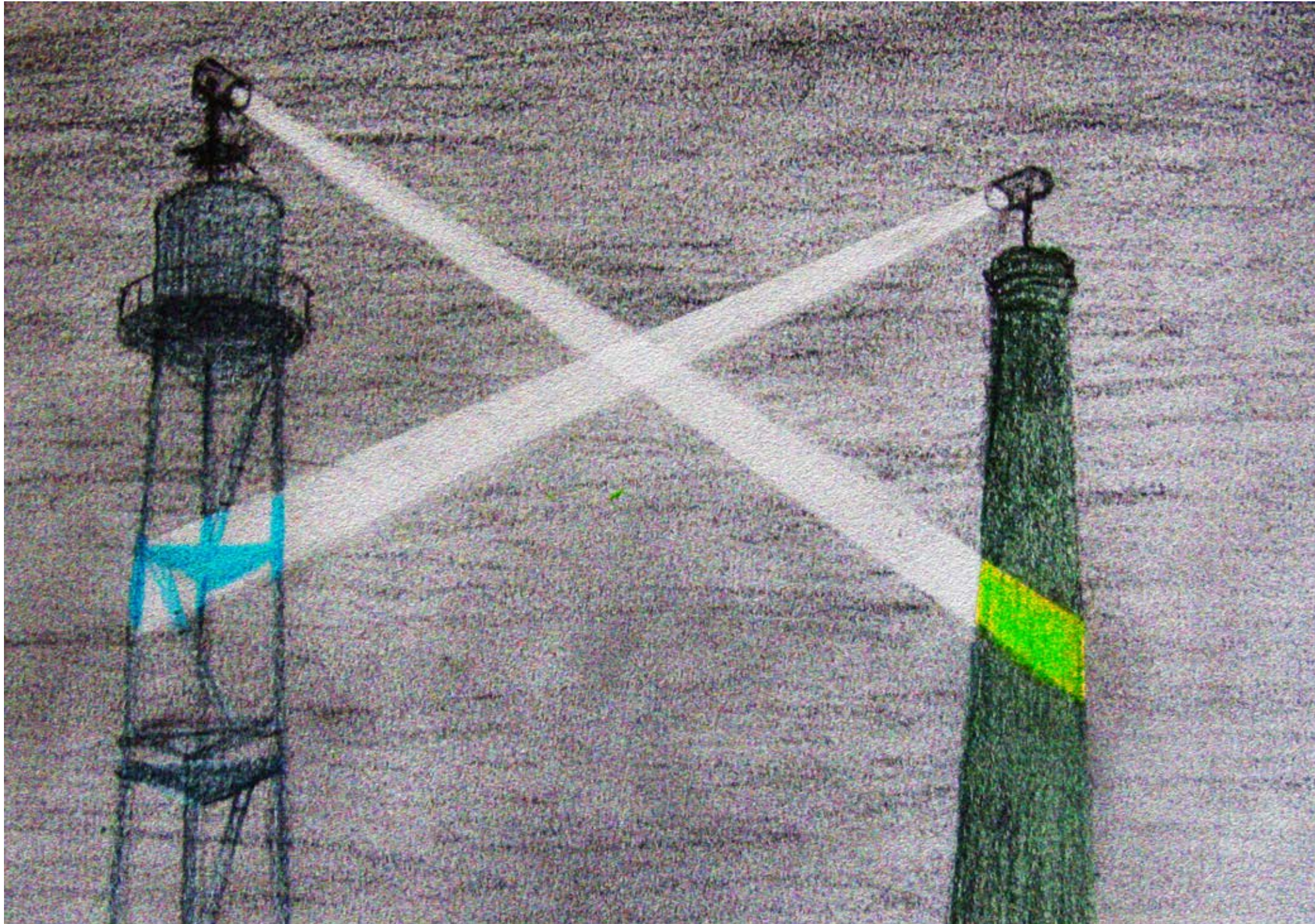


this building might aspire to some monumentalism and would function also as an
inhabitable gate of the campus.

ART INSTALLATION

Dialoguing chimney and water tower

(by Hilario Isola)



At the end/top of the main pedestrian axis, the chimney and the water tower would establish a colourful dialogue.

They would become questioning (land)marks for the new campus. (See panel 1)

PANELS /1



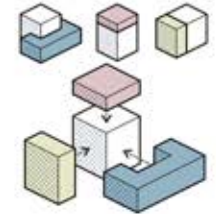
1. Reducing and redefining the boundaries



2. Keeping the footprint



3. How to do it: strategies of addition to existing buildings



4. Detailed layout with same footprint



PANELS /2

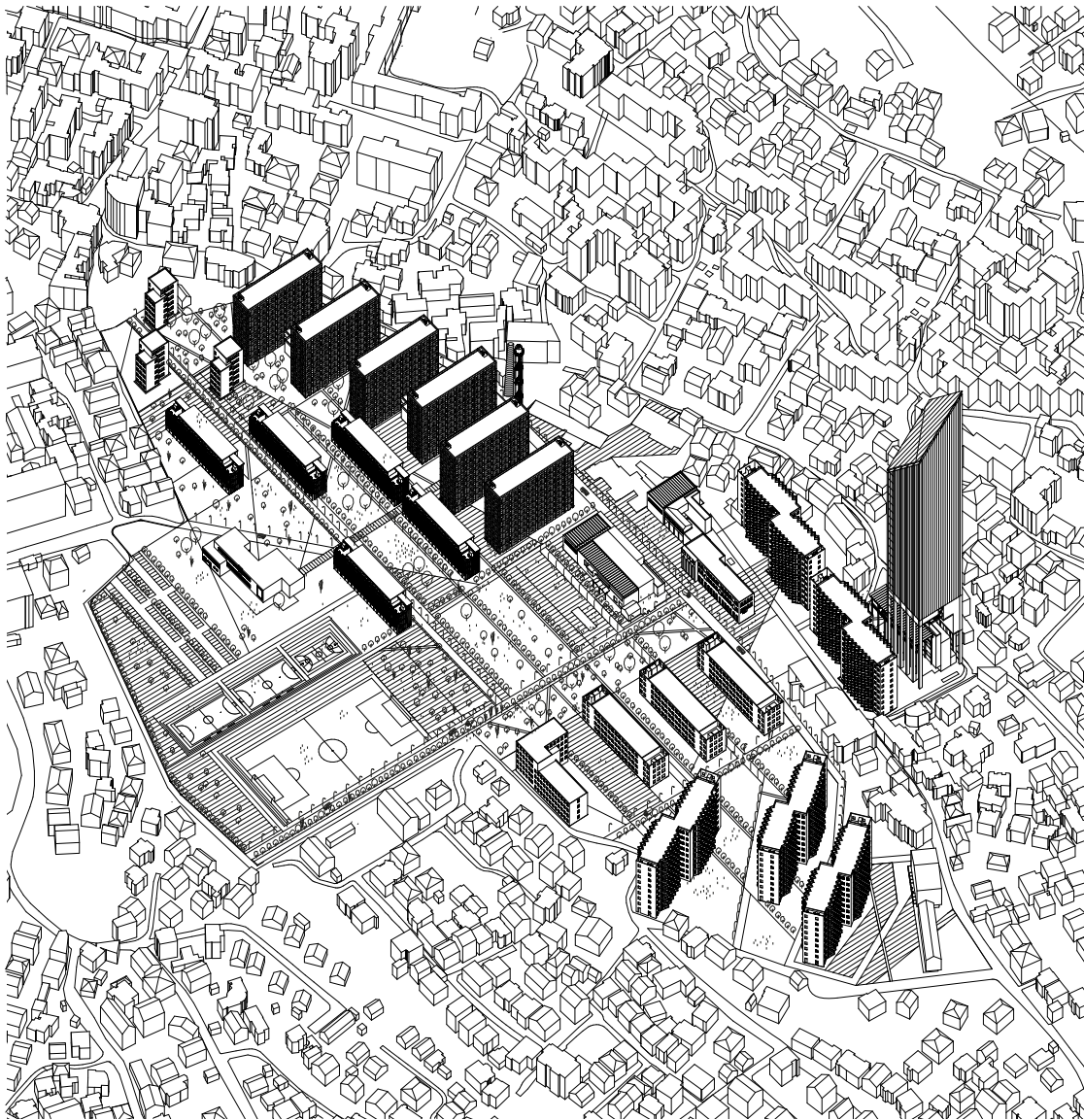


PANELS /3





Campus and landscape



Campus and city



Balconies on the park



Vertical green in the common terraces at the edge of the buildings



New facility center above/within the boiler building, also functioning as a densified gate for the campus

