

URBAN



MICHAEL ZIHAN XU 徐子涵

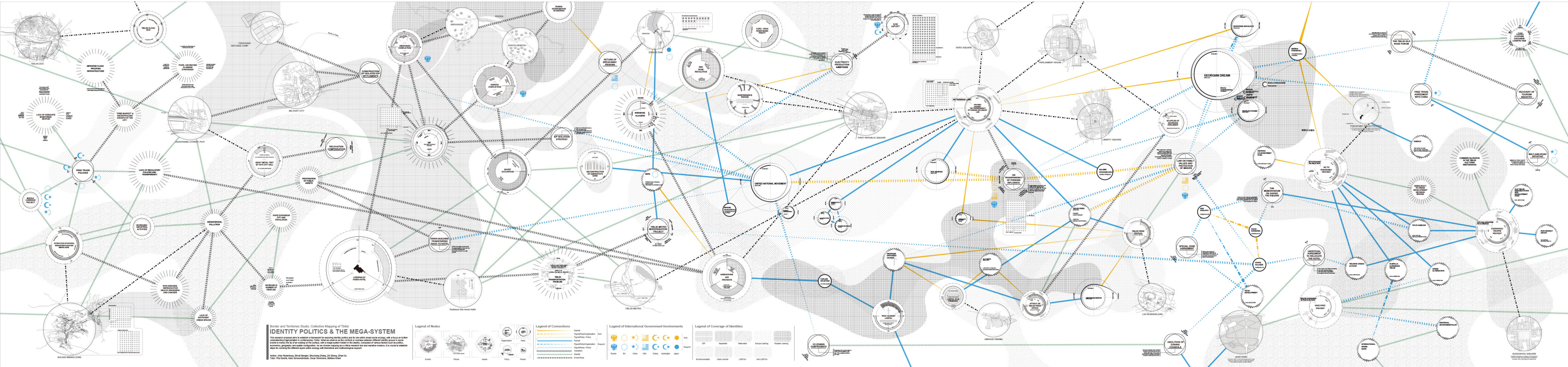
P'5 PRESENTATION

2026.06.25

PROLOGUE

THE PRODUCTION OF SPACE

THEORETICAL FRAMEWORK



***'THE SOCIAL WORLD IS NOT A PRE-EXISTING ENTITY BUT IS CONTINUOUSLY BEING ASSEMBLED
AND REASSEMBLED THROUGH THE INTERACTIONS OF A DIVERSE RANGE OF ACTORS'***

-BRUNO LATOUR *REASSEMBLING THE SOCIAL* , 2007-



NOVEMBER POLITICAL DEMONSTRATION IN FRONT OF PARLIAMENT HOUSE



THE PURSUIT OF JOINING EU



GEORGIAN DREAM & IVANISHVILI:DEMORACY OR OLIGARCH?

***'SPACE IS NOT MERELY A NEUTRAL OR PASSIVE CONTAINER FOR HUMAN ACTIVITIES
BUT IS ACTIVELY PRODUCED BY SOCIAL PROCESSES'***

-HENRI LEFEBVRE *THE PRODUCTION OF SPACE*, 1974-







SOVIET INDUSTRIALISATION

1920s Electrification
1928-1932 First Five-Year Plan (Stalin's "Revolution from Above")
1933-1937 Second Five-Year Plan
1940s-1950s Post-WWII Reconstruction and Continued Industrialization



KHRUSHCHEV ERA AND MASS HOUSING CONSTRUCTION

Widespread adoption of prefabricated panel-block apartment buildings and the creation of micro-districts (microrayons)



Проект застройки жилого района Багеби, Арх. Б. Маминишвили, при участии П. Дзидзигури, Т. Зеделашвили, Н. Кикачелишвили, Н. Кошадзе
Construction project of Bagebi residential district. Architect B. Maminaishvili with P. Dzidziguri, T. Zedelashvili, N. Kikacheishvili, N. Koshadze participating

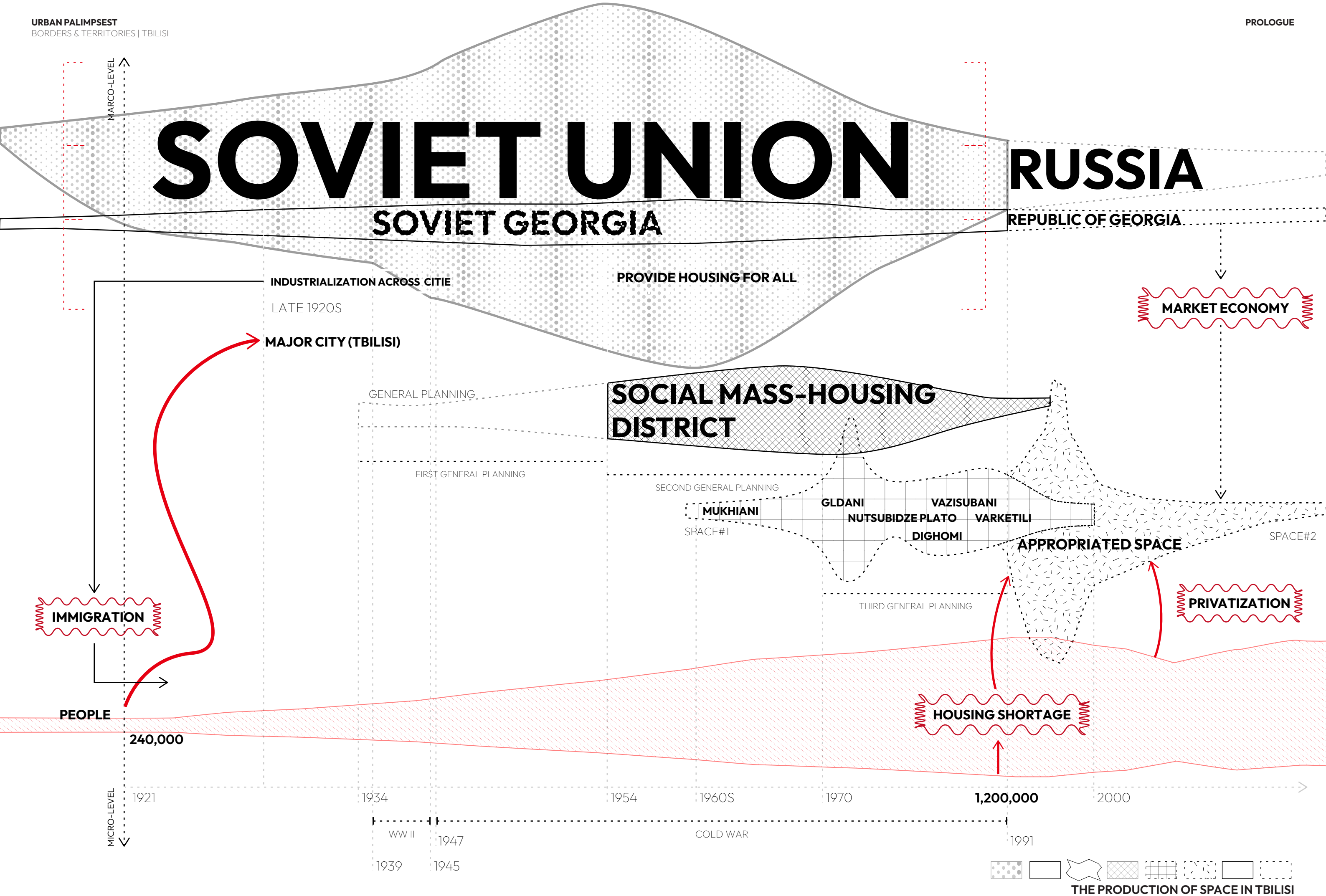
MICRO-DISTRICT CONCEPT

Aimed for utopian masterplanning, but resulted in a pragmatic, albeit imperfect, solution to a massive housing crisis



KAMIKAZE LOGGIA
APARTMENT BUILDING EXTENSION (ABE)

Self-construction since the late Soviet era to accommodate growing needs





LATE SOVIET ERA (LATE 1980S)

The Soviet government in Georgia officially introduced the concept of apartment building extensions (ABEs) in the late 1980s. This was an attempt to address persistent housing shortages and allow citizens to increase their living space.



POST-SOVIET COLLAPSE

"DO-IT-YOURSELF"
This was a period of "architecture without architects," where residents, driven by necessity, adapted their living spaces in an entirely informal and self-organized manner.



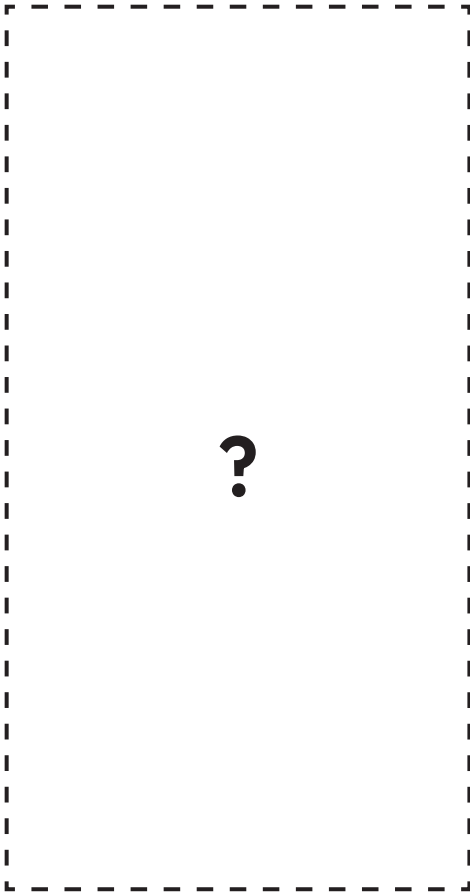
EARLY TO MID-2000S

Attempts were made by local governments to regain control over urban development. This included efforts to legalize existing extensions (often requiring fines) and to prevent new unauthorized construction.



MID-2000S TO PRESENT

The construction of new, unauthorized apartment building extensions was largely banned in the second half of the 2000s.



FUTURE...

What can ABE be reused and reimagined.

***'CONTRARY TO APPROACHES THAT TREAT CITIES AS "TABULA RASA"—BLANK CANVASES FOR
NEW INTERVENTIONS—URBAN SPACES EMBODY THE HISTORICAL AND CULTURAL SEDIMENT
OF THEIR SPECIFIC PLACES'***

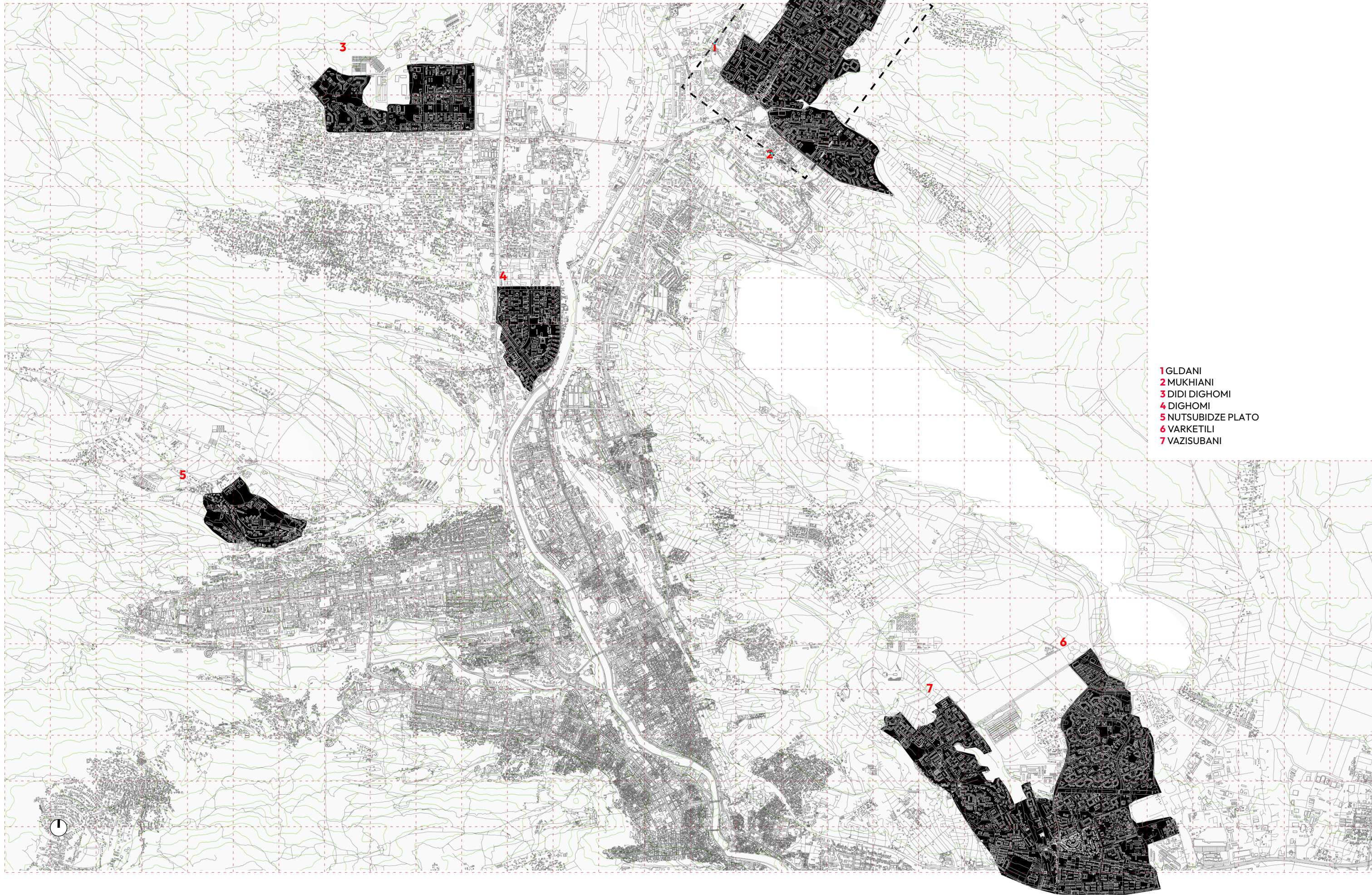
-ANDRÉ CORBOZ *THE LAND AS PALIMPSEST*, 1983-

***HOW CAN PLANNERS AND DECISION-MAKERS IMPLEMENT REGENERATION
STRATEGIES THAT ARE BOTH SUSTAINABLE AND SENSITIVE TO THE CULTURAL AND
EMOTIONAL SIGNIFICANCE OF THESE URBAN ENVIRONMENTS***

EXPLORATION

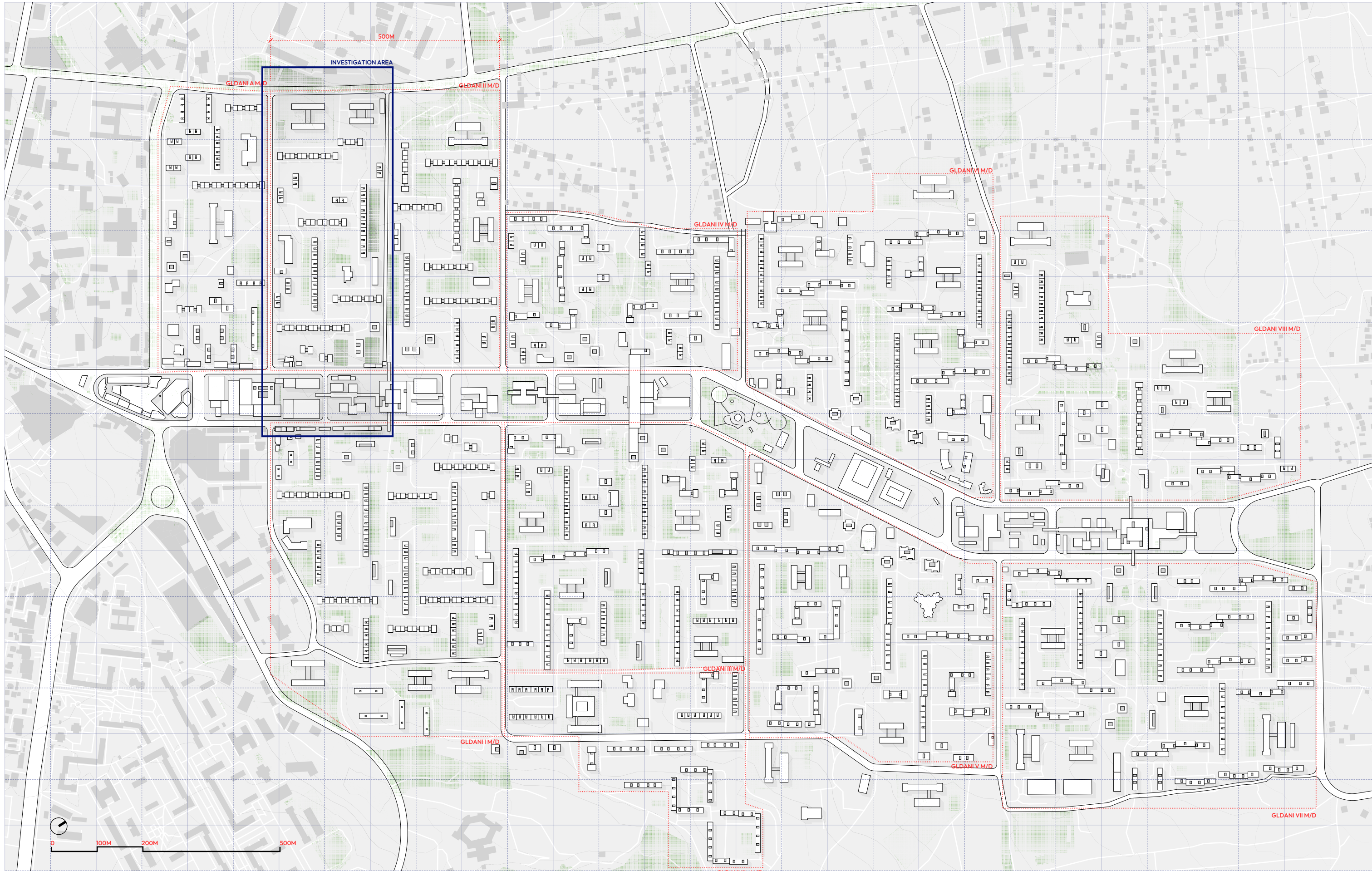
GLDANI MICRO-DISTRICT

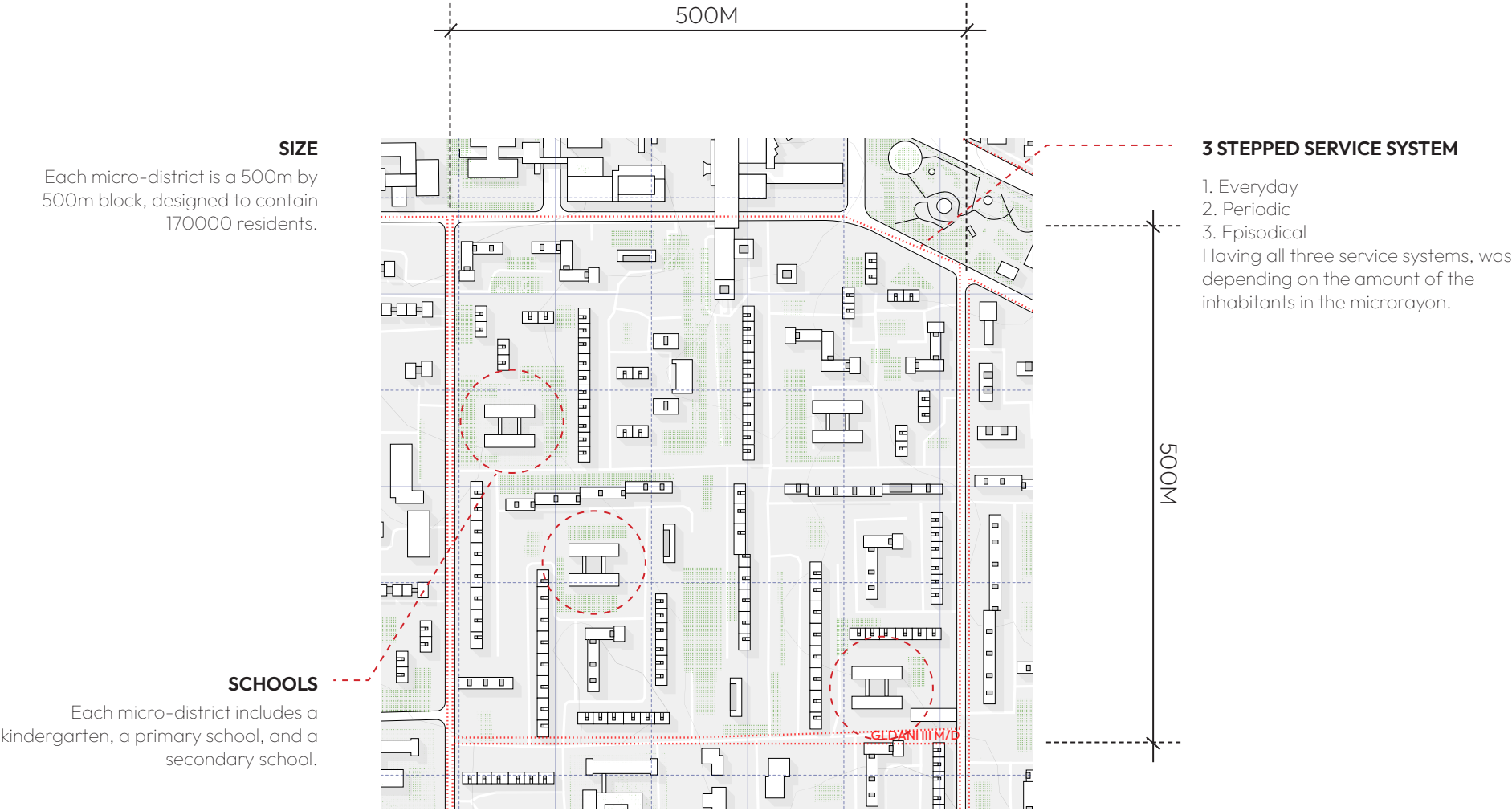
CASE INVESTIGATION



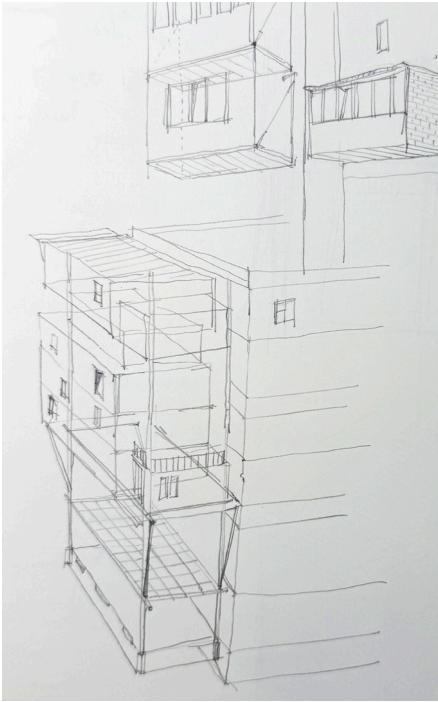
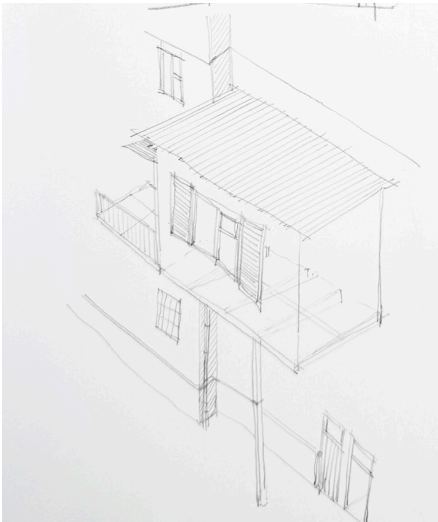
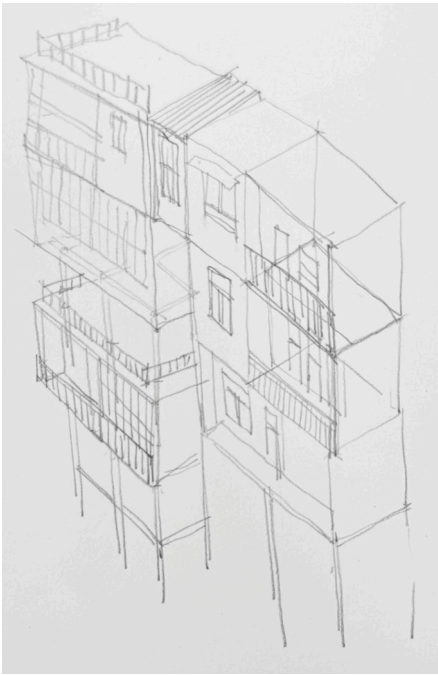
MAJOR MICRO-DISTRICTS IN TBILISI











- SOVIET BUILDING BLOCK
- SELF-BUILT GARAGE
- APARTMENT BUILDING EXTENSION (ABE)
- CENTRAL AXIS
- SPORTS FIELD

DIY GARAGE

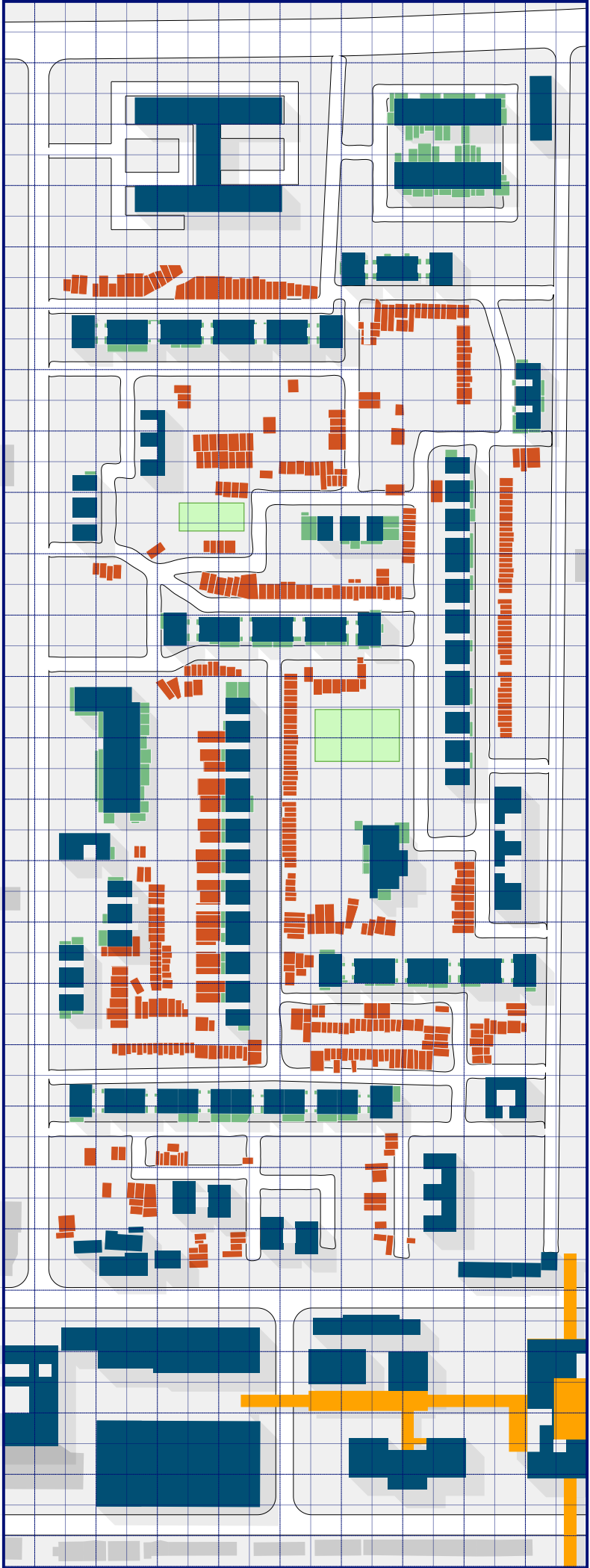


Over time, residents have informally modified this rigid system, most notably by constructing individual garages at ground level, often attached to housing blocks or adjacent spaces.

APARTMENT BUILDING EXTENSION



Ad-hoc architecture to accommodate the need for residential.



SPORT FIELD



Some leftover spaces were redeveloped into sports fields.

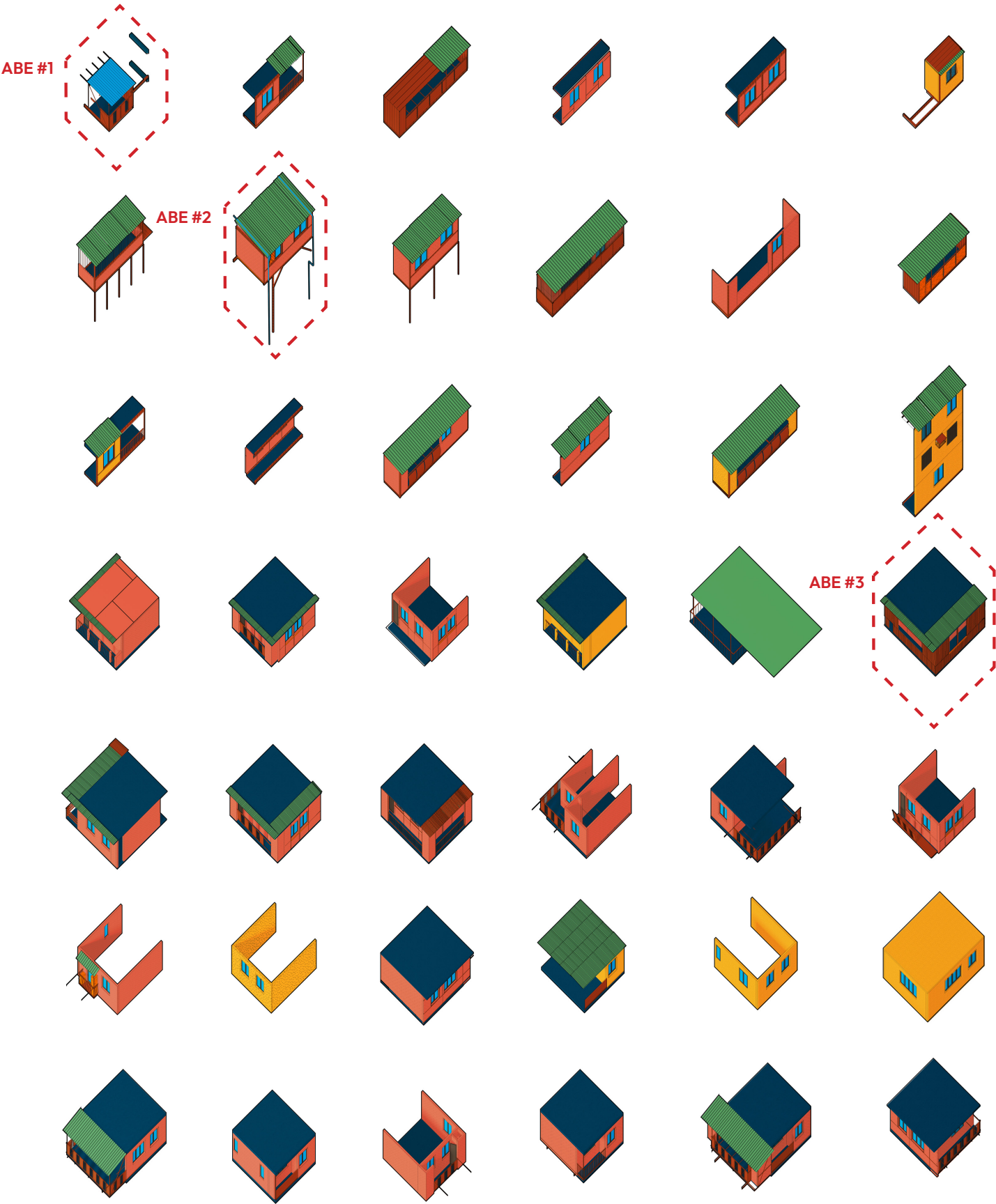
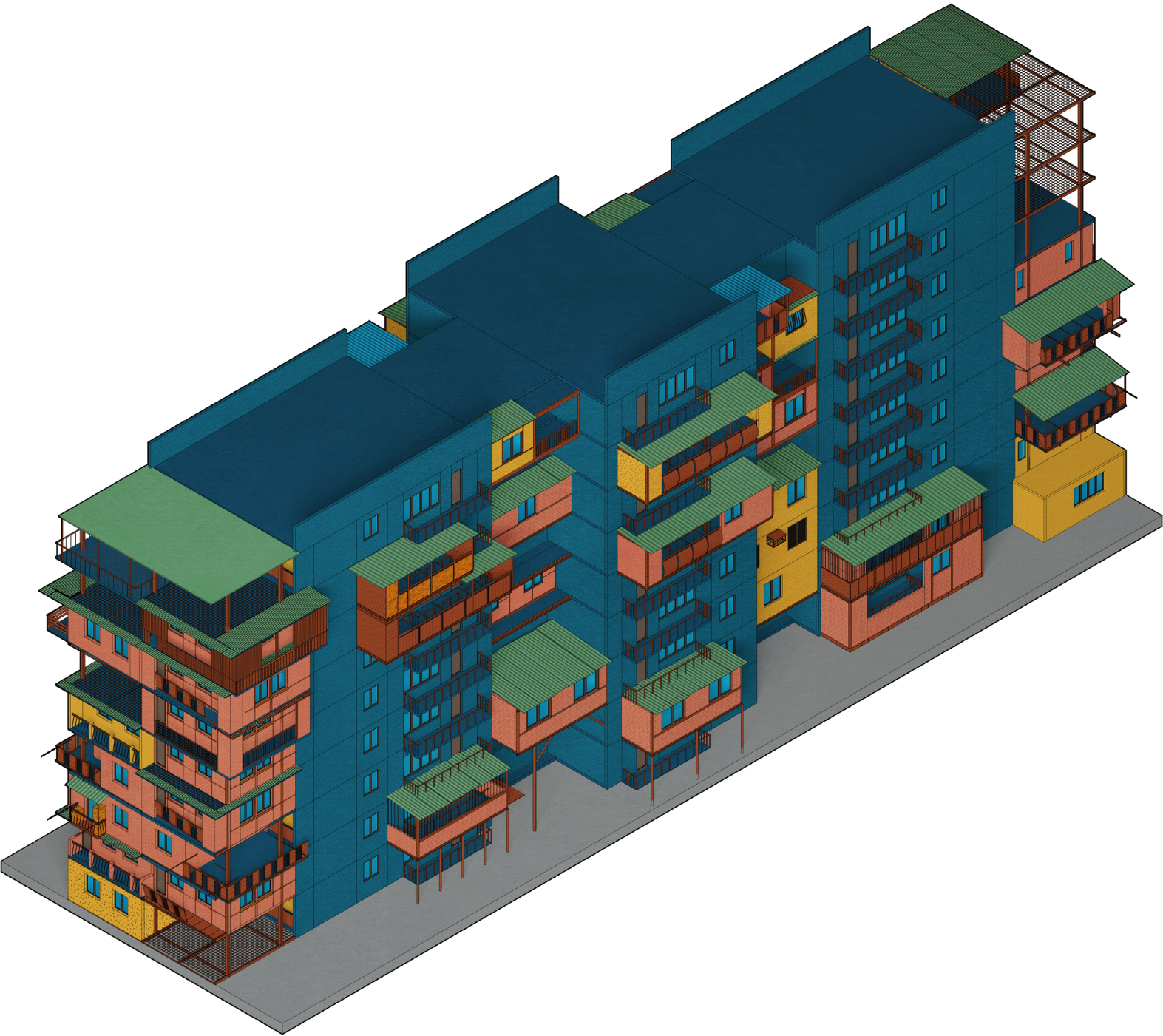
CENTRAL AXIS



Ideally a pedestrain pathway to connect all the micro-districts.

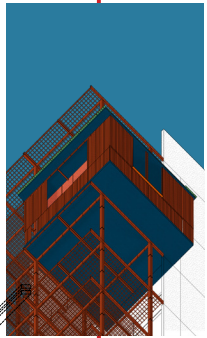
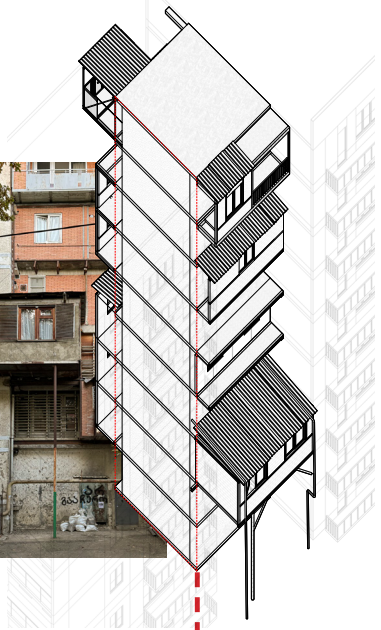
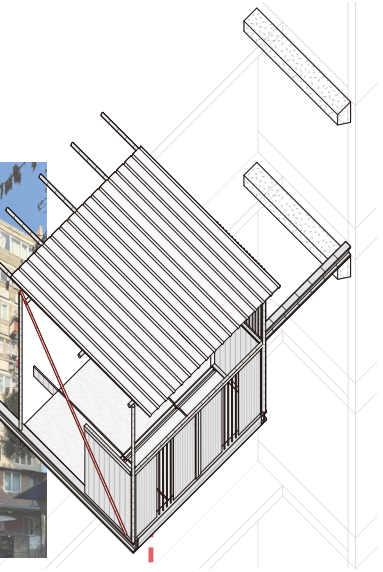
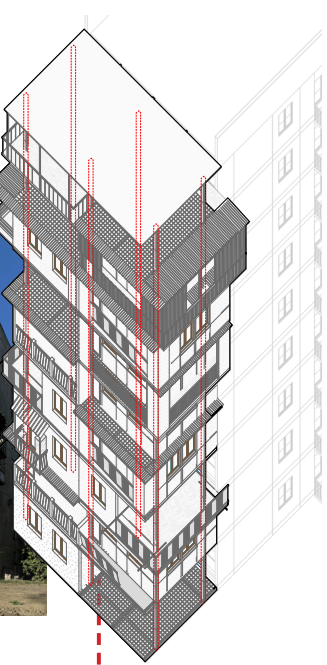


COLLAGE OF APARTMENT BUILDING EXTENSION

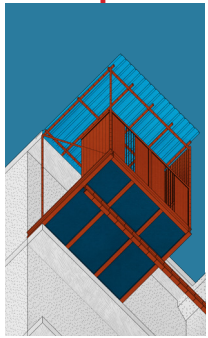


TYPICAL BUILDING

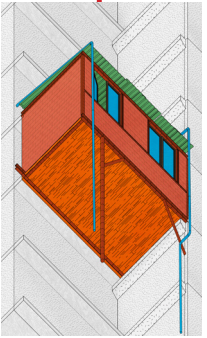
TYPES OF ABE



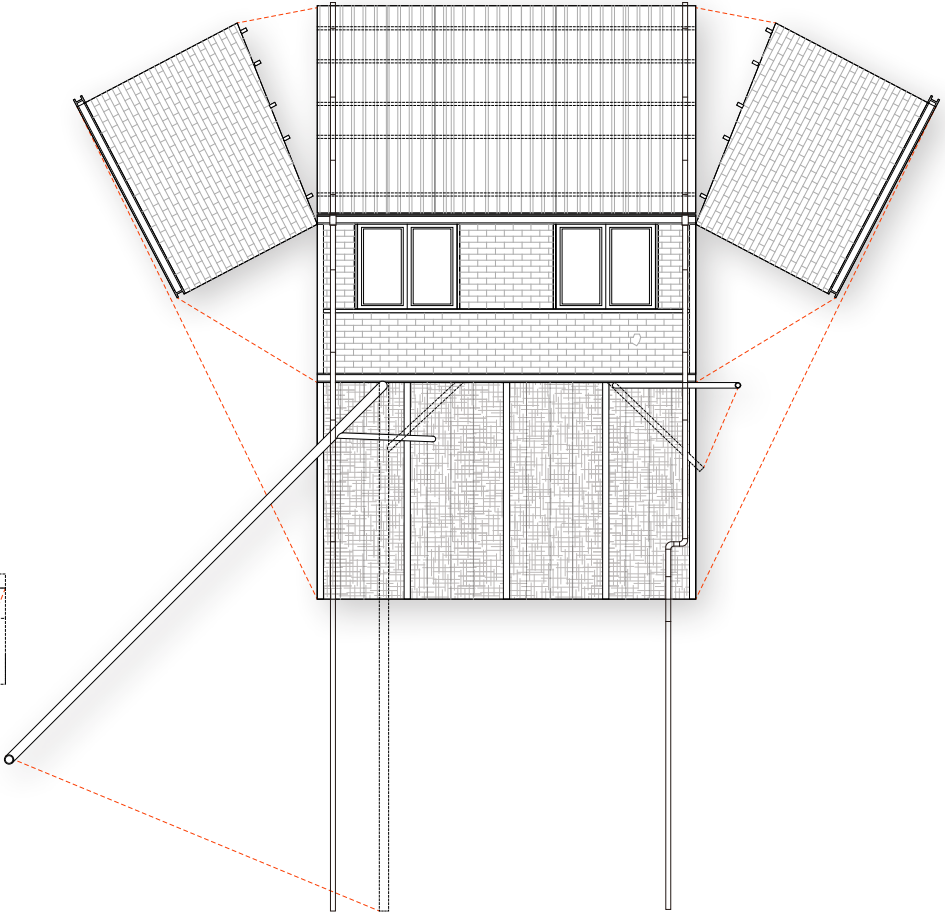
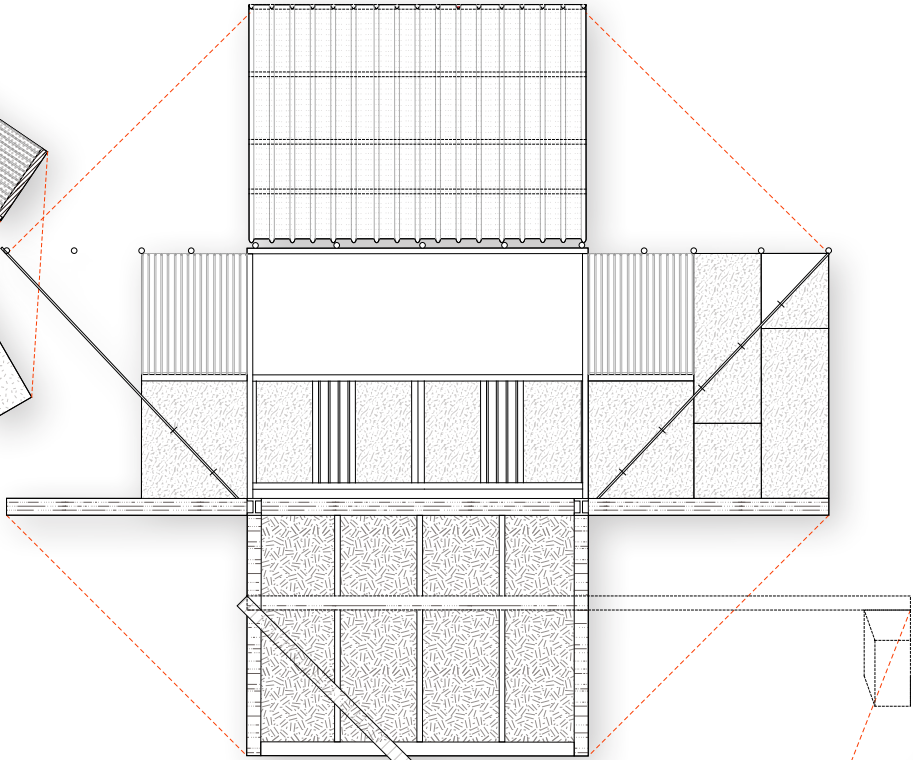
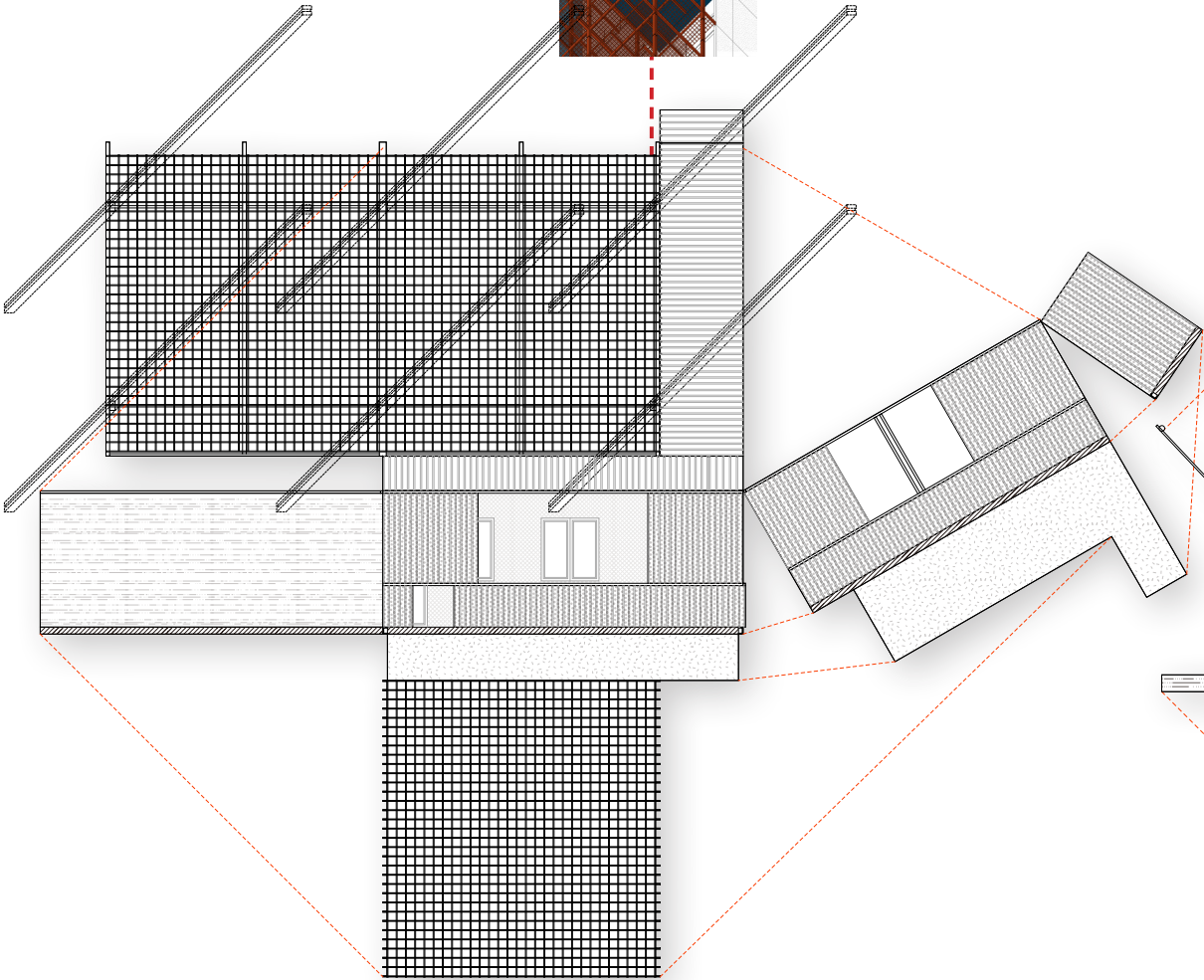
ABE #3
STACKING

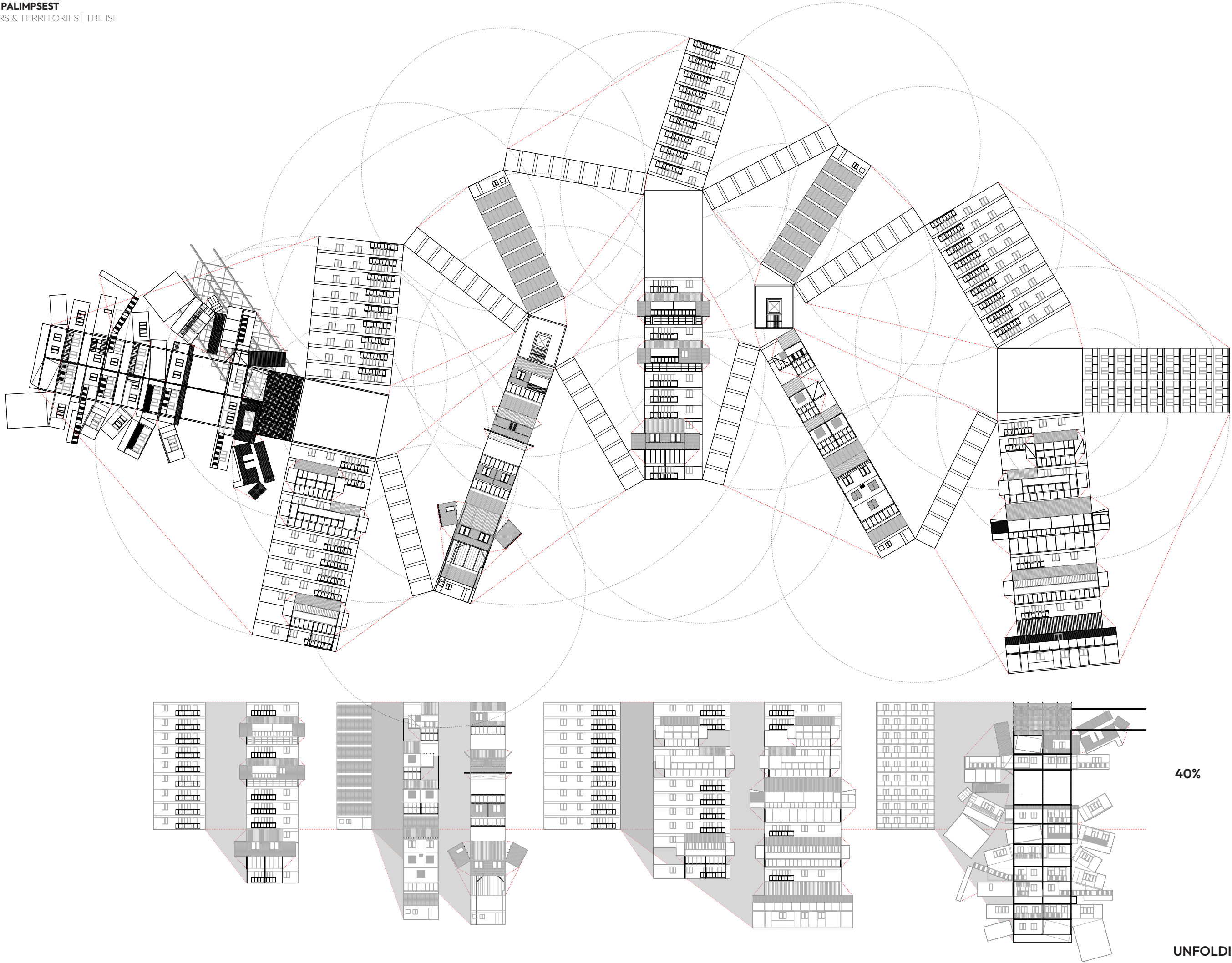


ABE #1
SUSPENDING



ABE #2
POLING





40%

UNFOLDING THE SURFACE

THE DIFFERENCES OF THE
PRODUCTION OF SPACE

The convergence between the top-down institutional approach and the bottom-up self-construction approach in the production of space

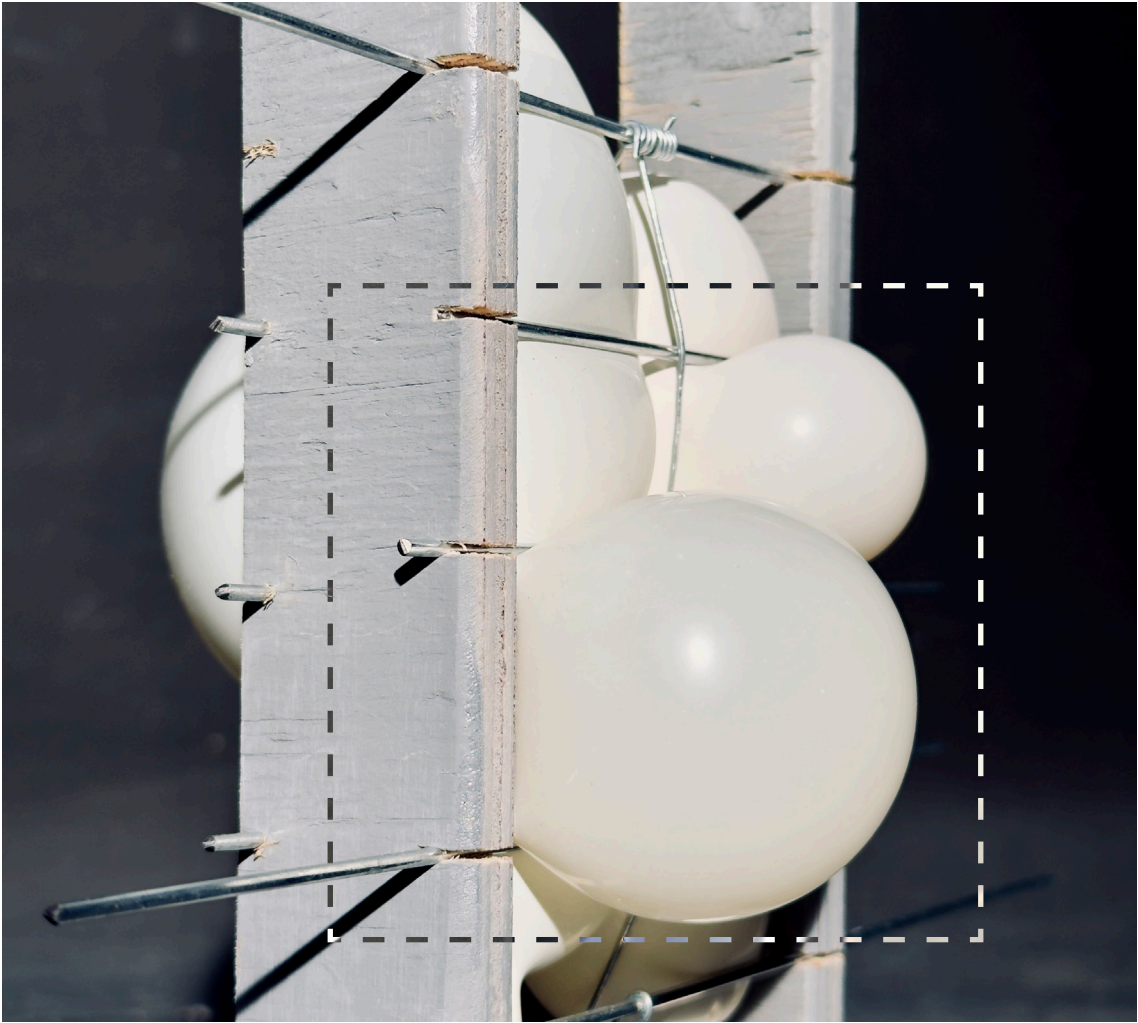


ADD-ON & IT'S SITE

The emergence of add-ons, like a population of parasites, often occurs in strategically suitable locations.

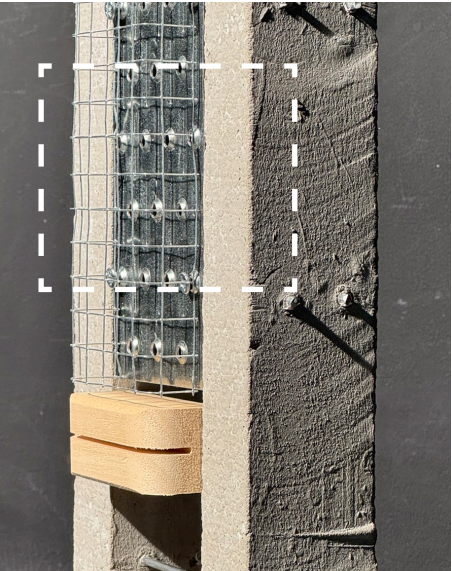
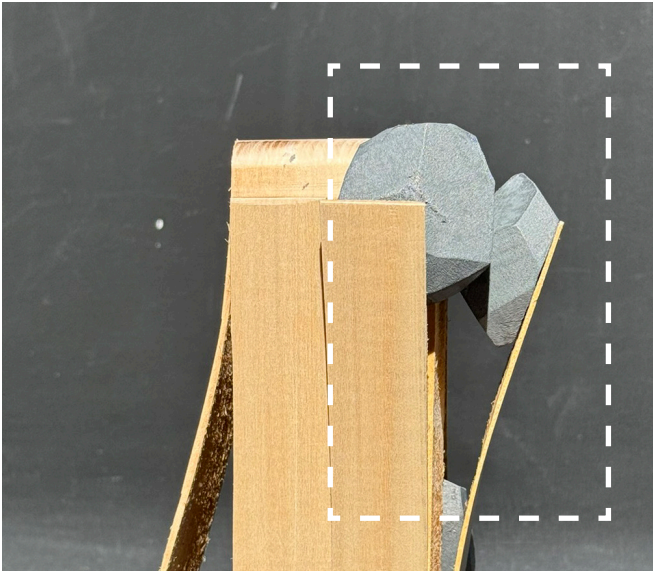
EXPENSION

The permanence of the structure and the organic growth of its extensions.
The soft, yielding surfaces of the balloons contrast sharply with the hard, industrial lines of the holding structure.



TENSION

A tension emerges between the extension and the existing structure, unveiling a dynamic equilibrium.



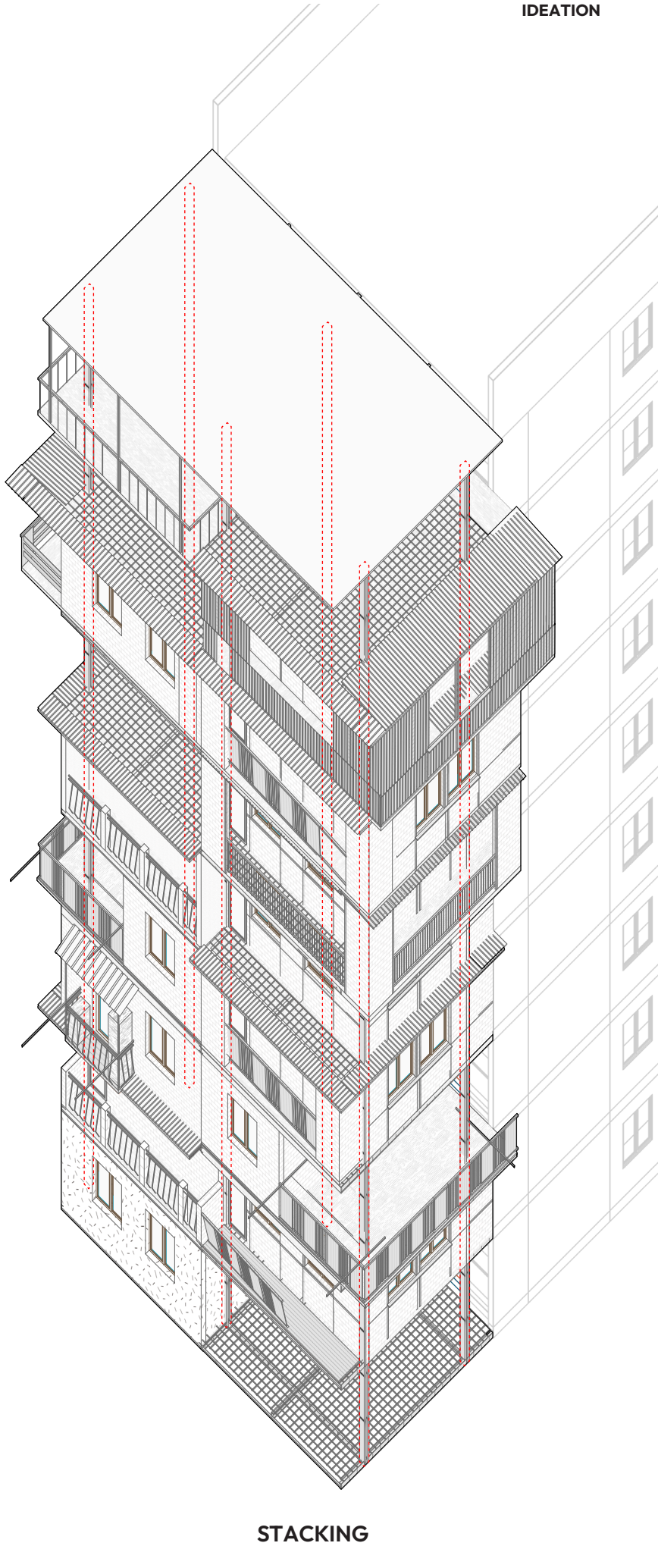
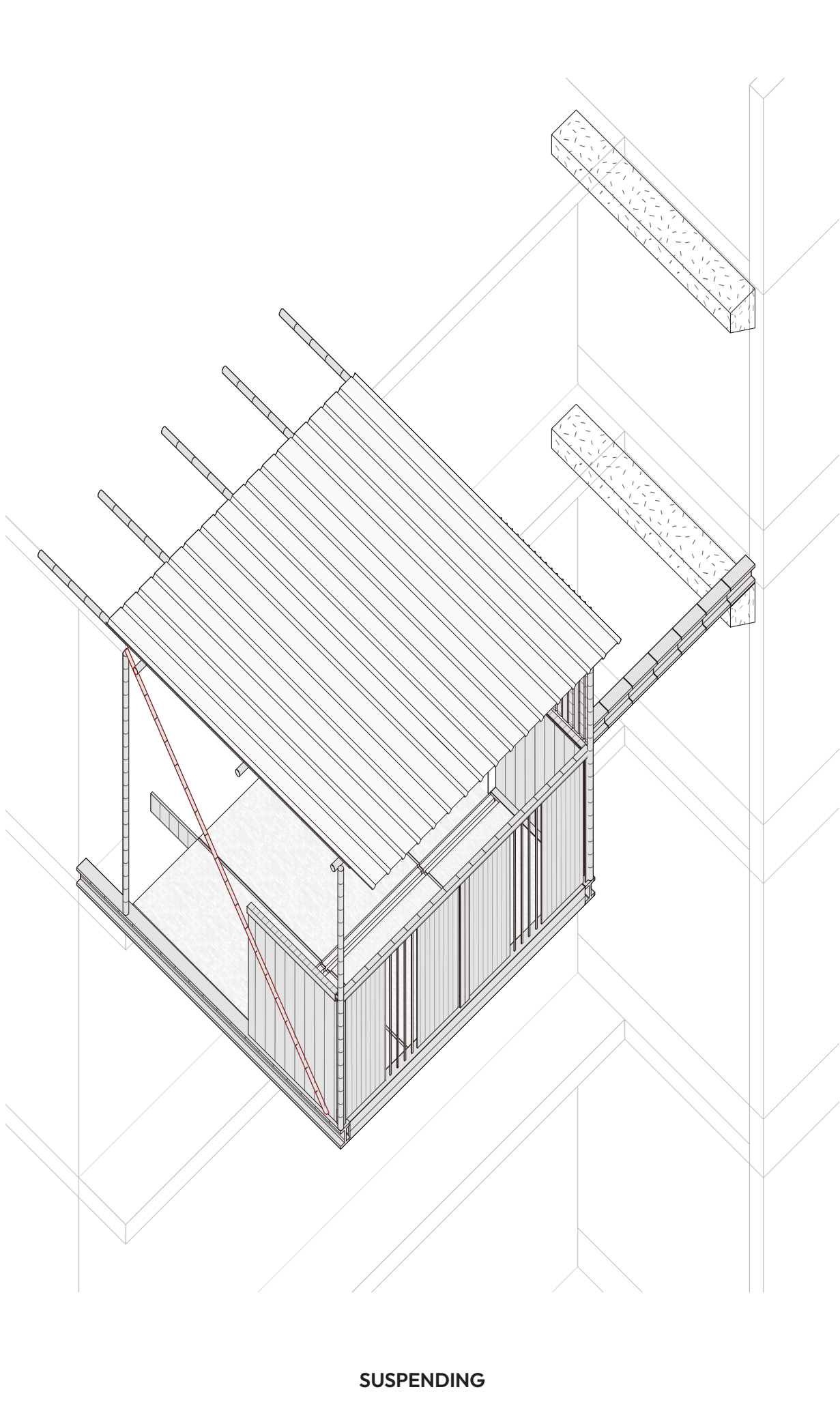
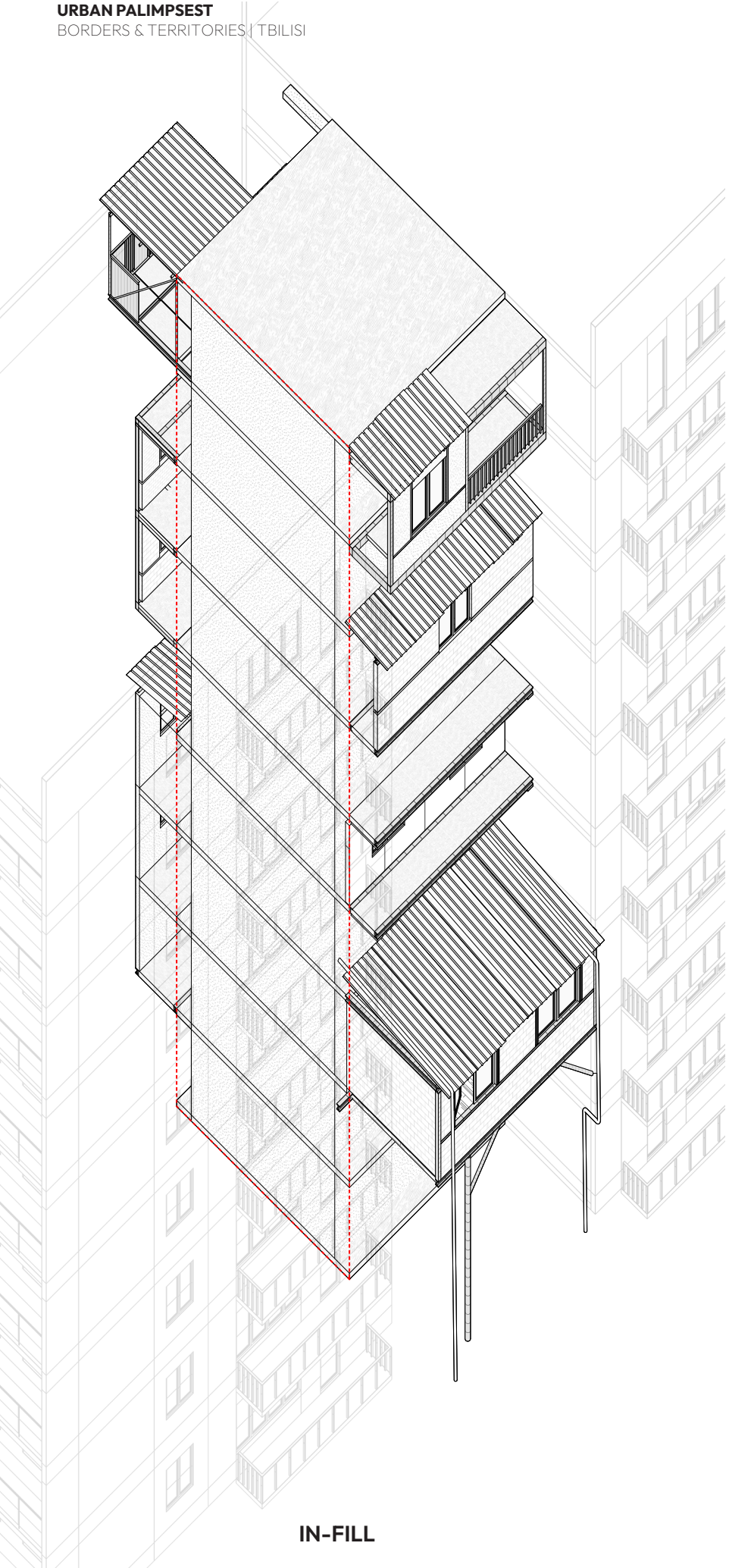
COMPARISON

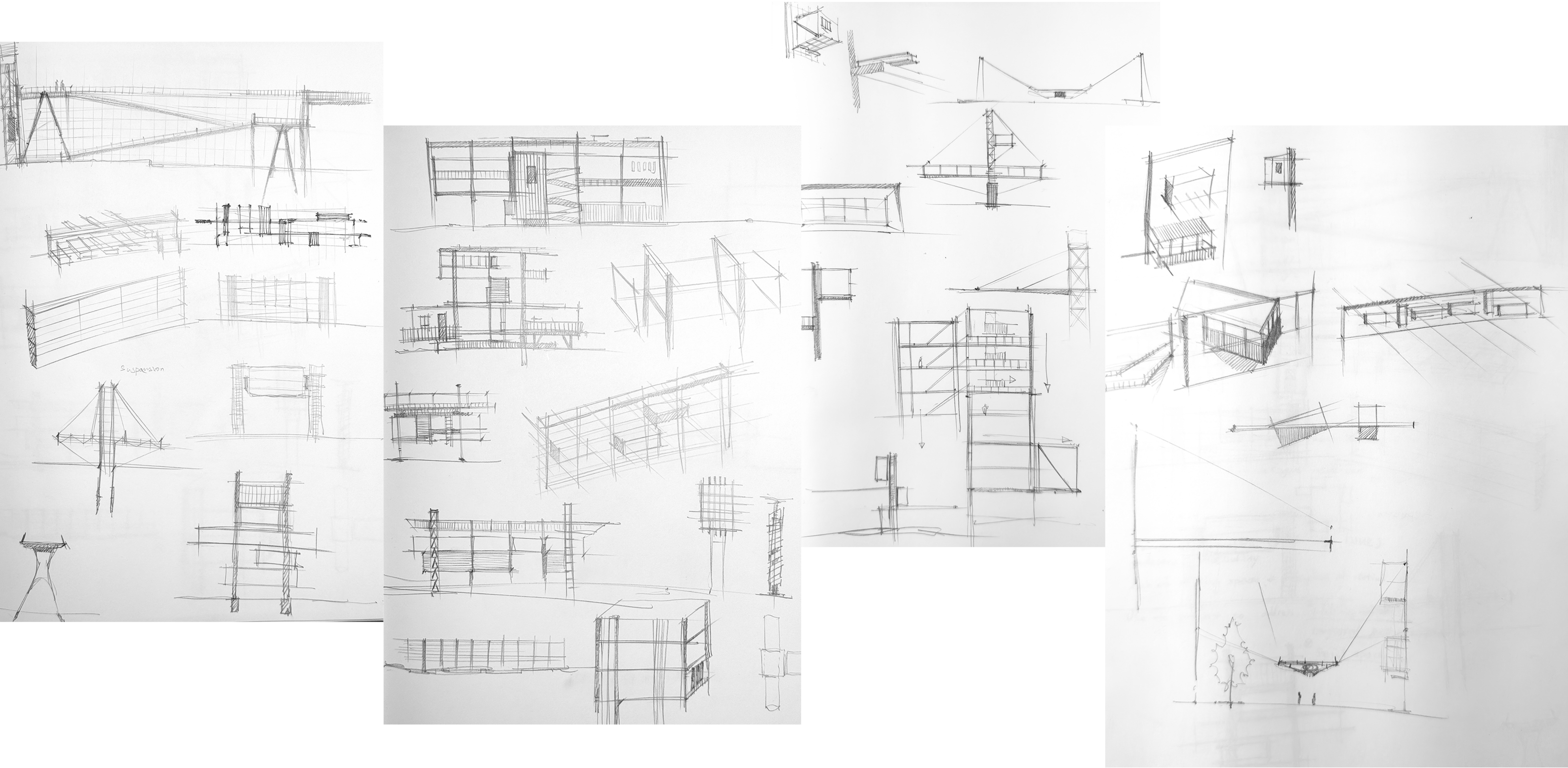
The structural element and the add-on exhibit a clear material contrast.

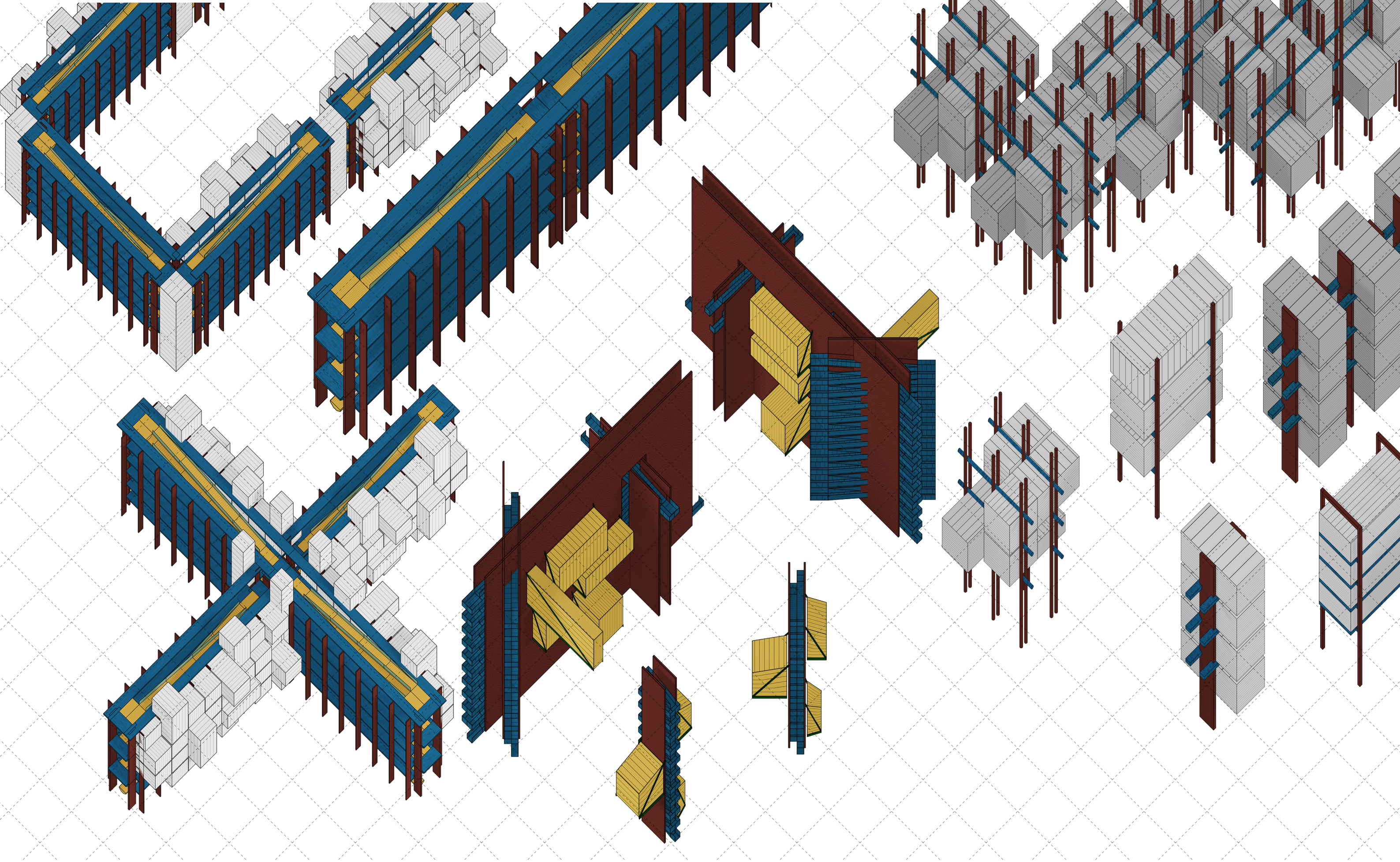
IDEATION

REVITALIZATION OF ABE

DECONSTRUCTING & PROTOTYPING



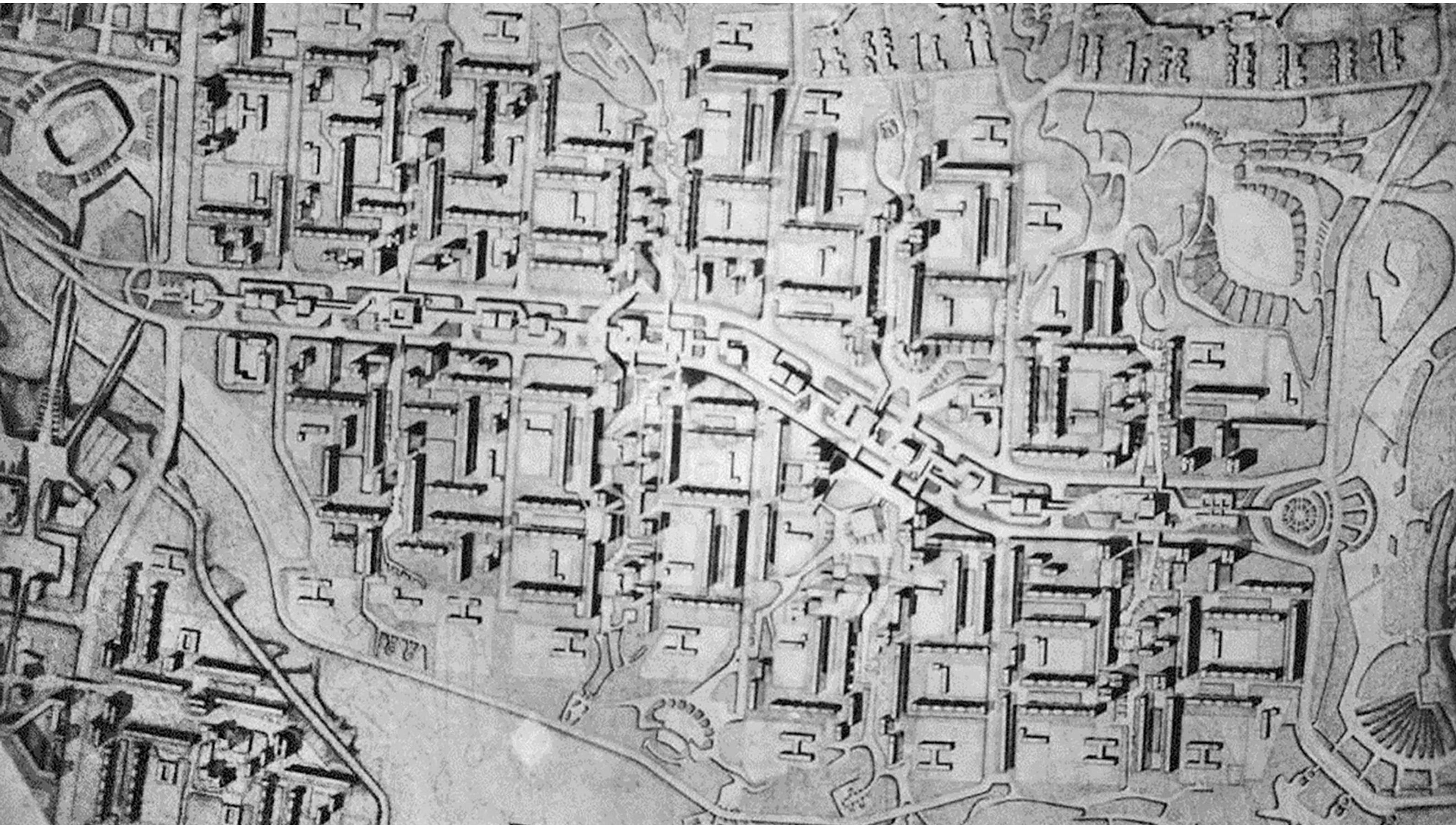


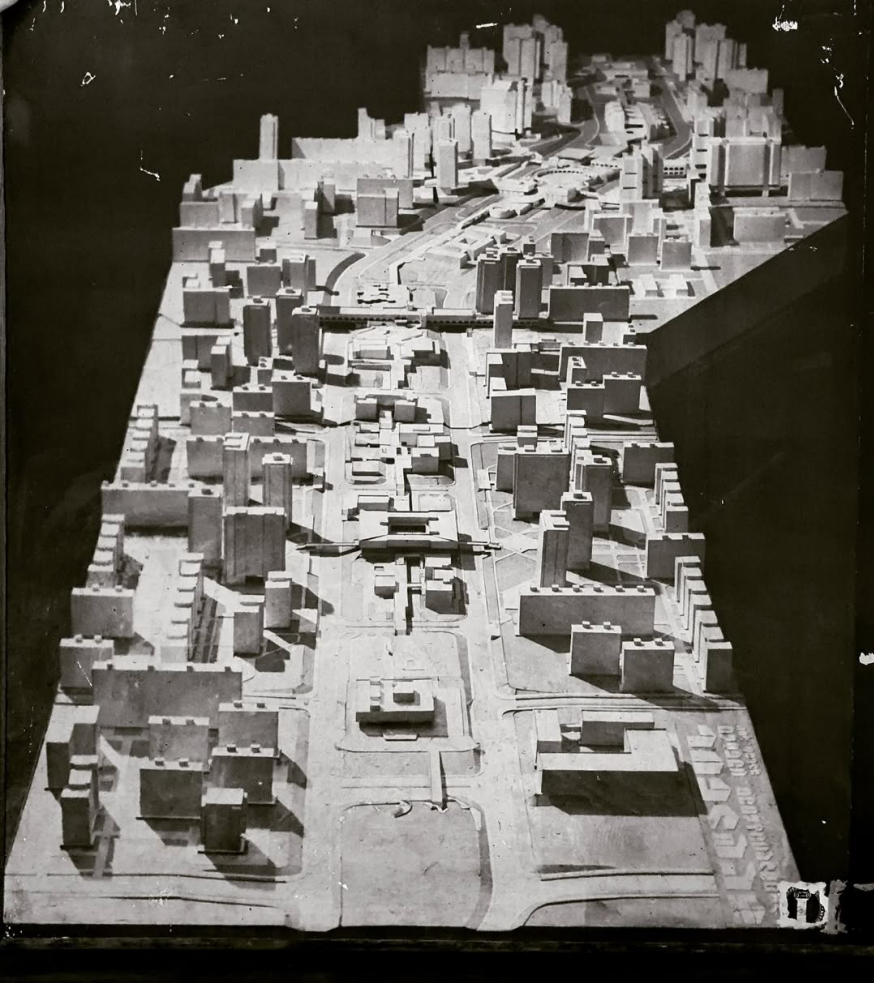


PRESENTATION

GLDANI CENTRAL AXIS

RENOVATING POST-SOVIET RESIDENTIAL DISTRICT





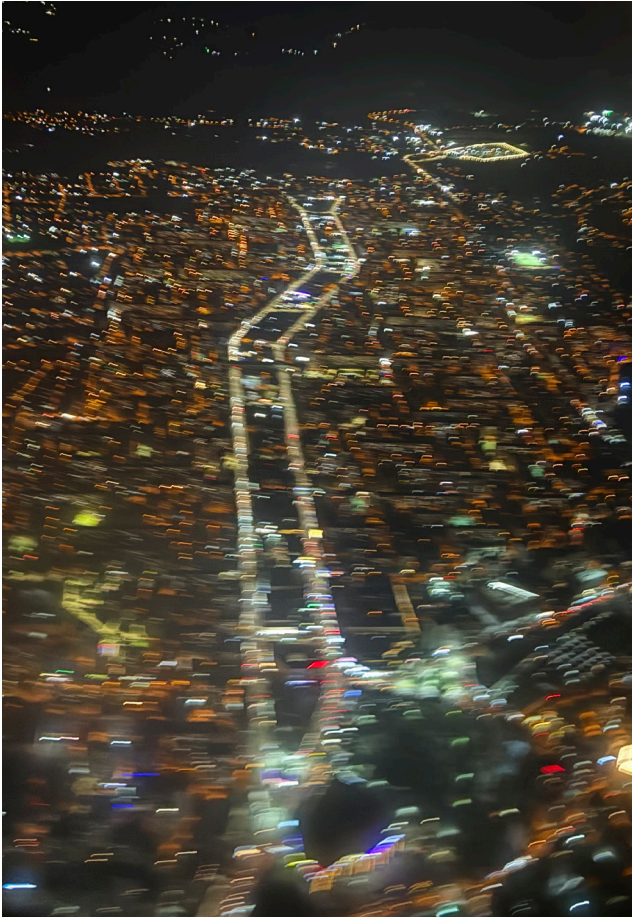
ORIGINAL DEISGN SCHEME,
TEMUR BOCHORISHVILI, 1968



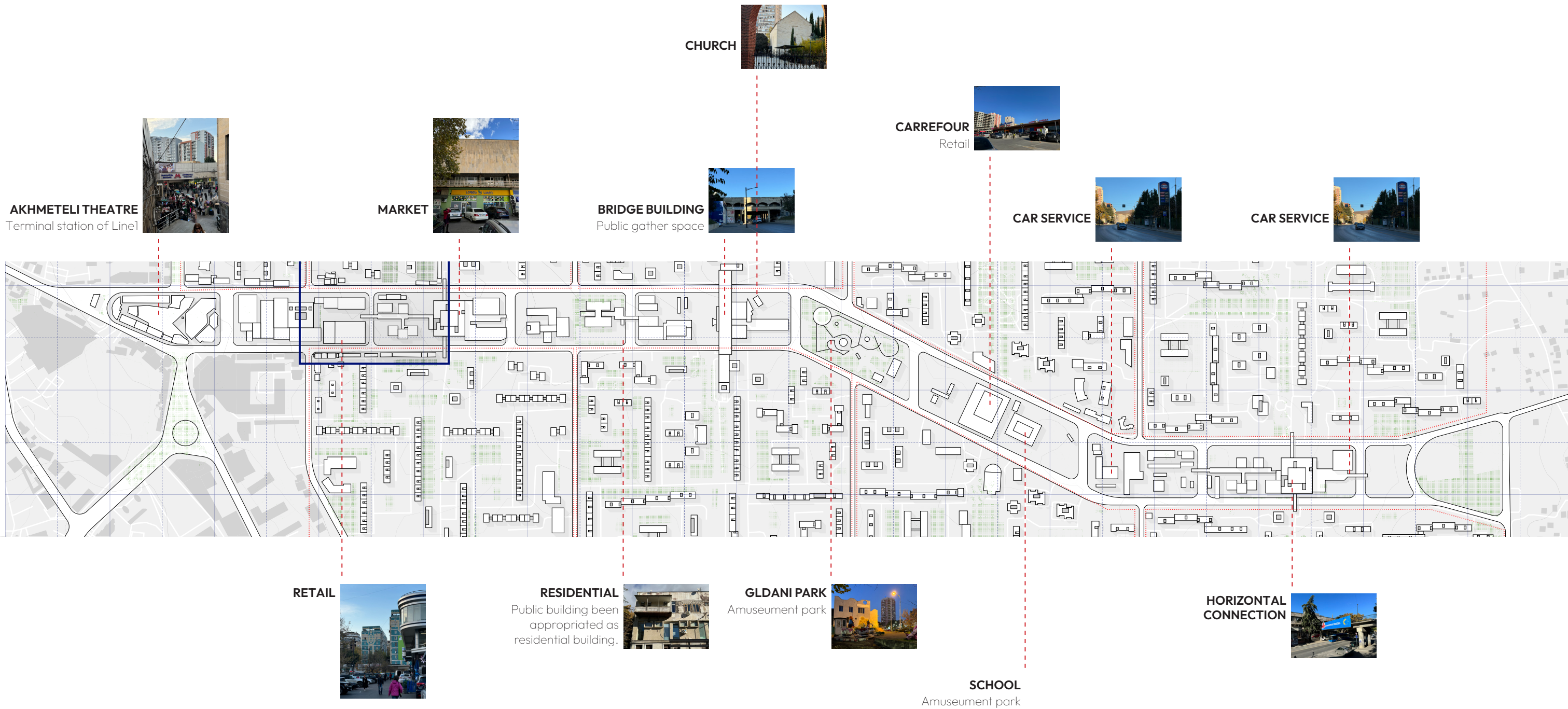
GLDANI 1981



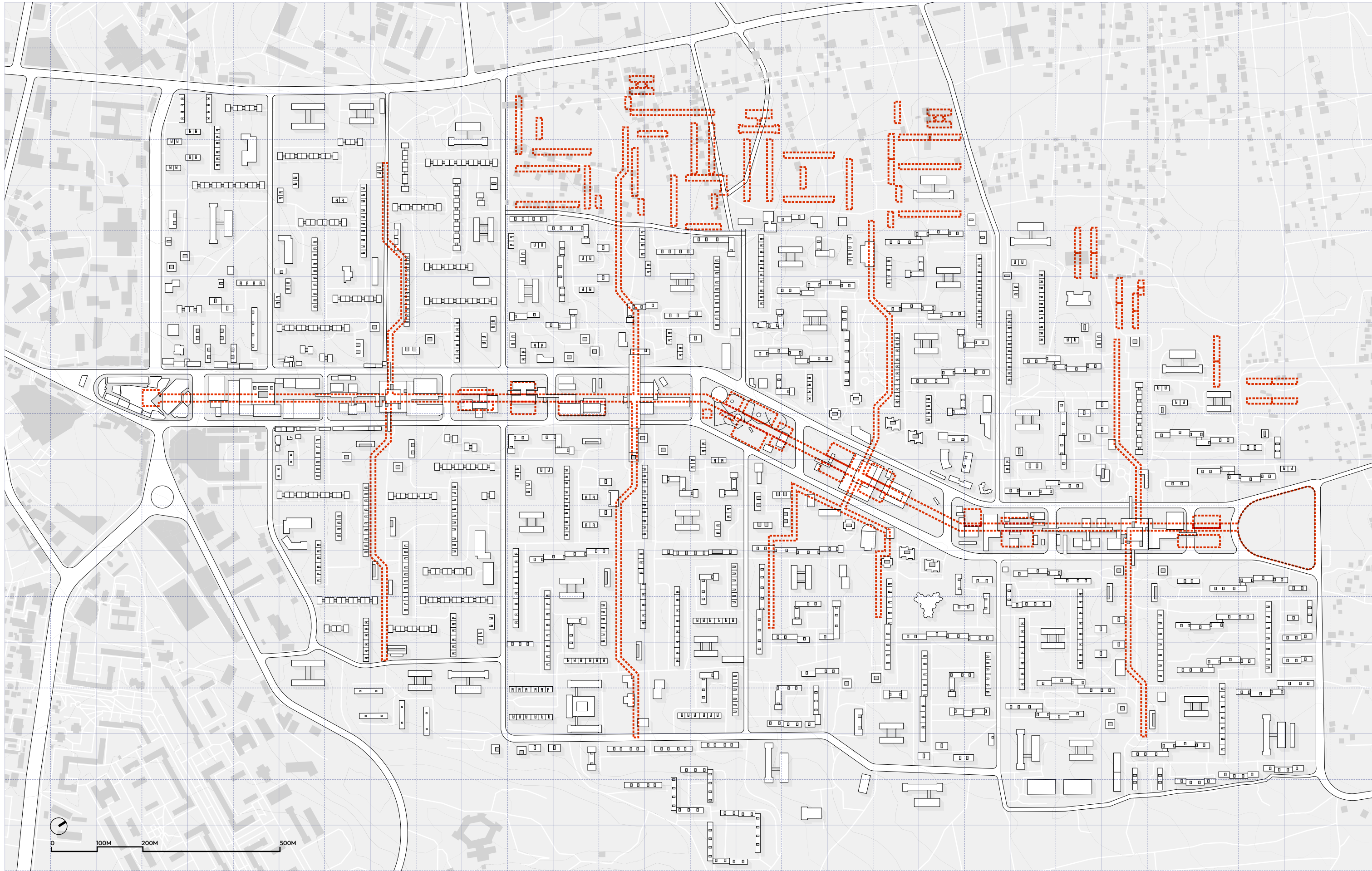
GLDANI 2008

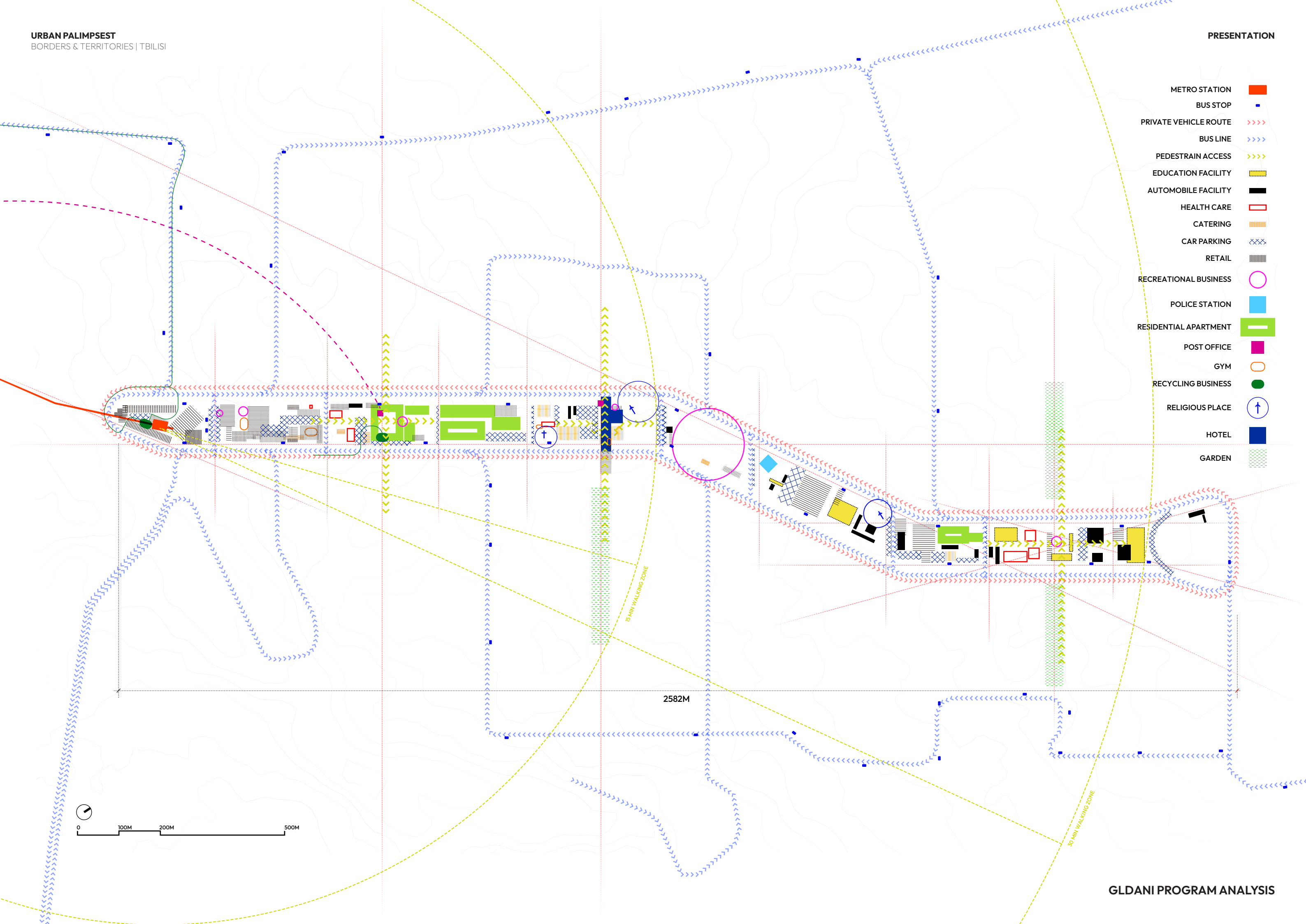


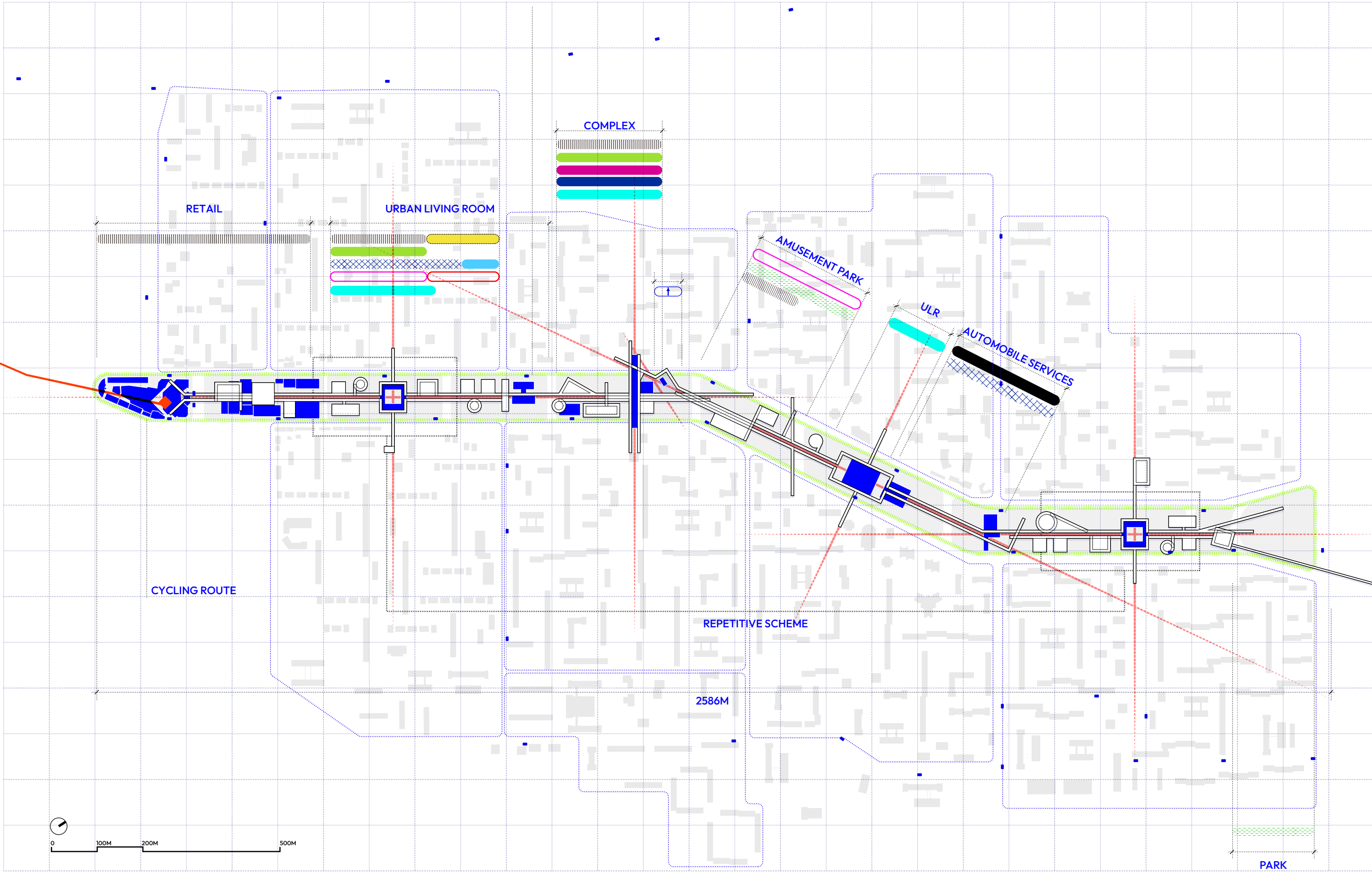
GLDANI 2024

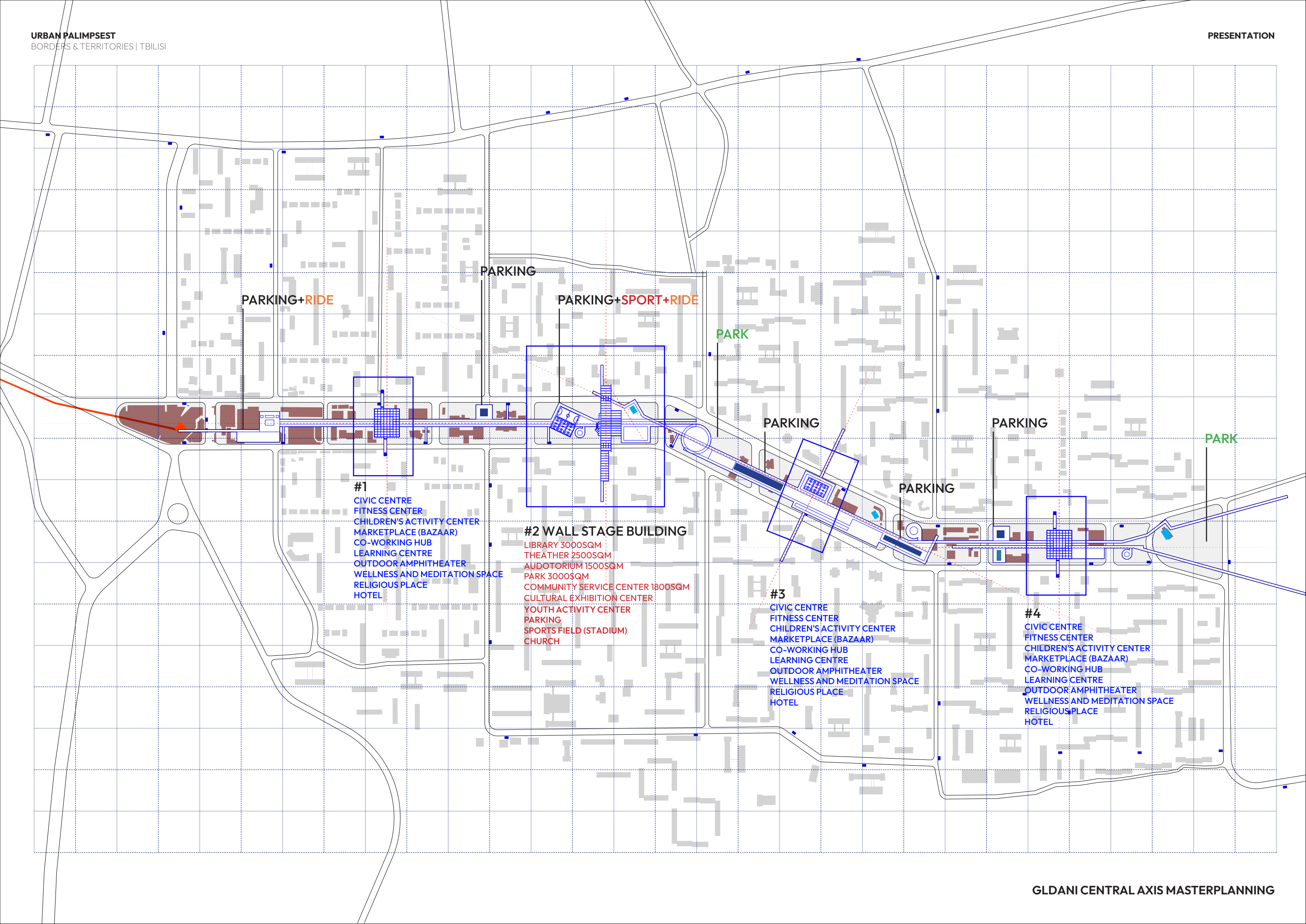


GLDANI CENTRAL AXIS CURRENT SITUATION





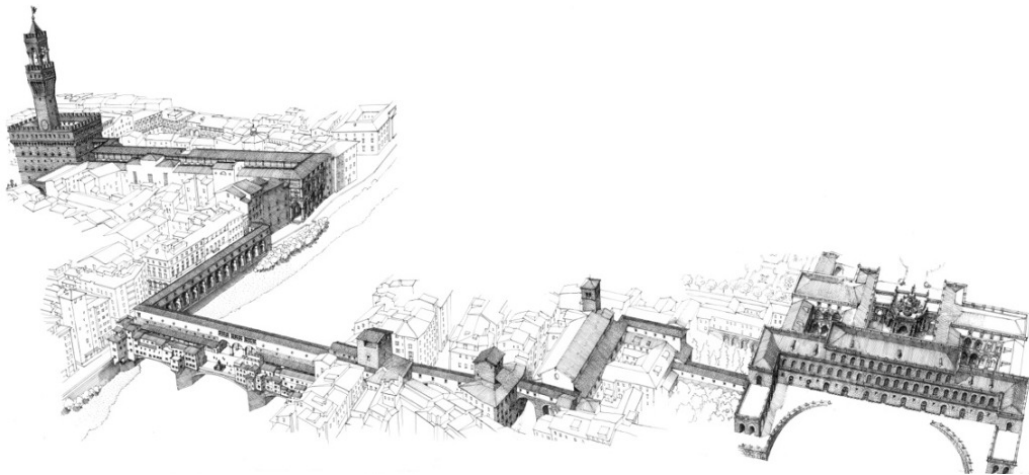




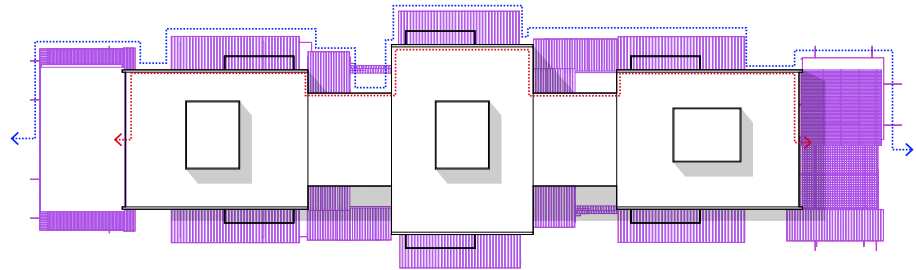
PRESENTATION
WALL STAGE BUILDING
PHASE I PROJECT OF GLDANI CENTRAL AXIS



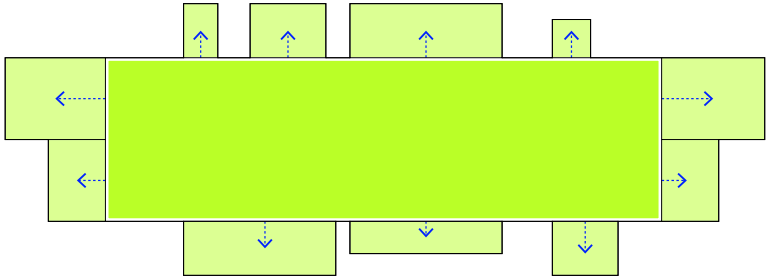
GLDANI CENTRAL AXIS ISLAND 5, PUBLIC CENTER BETWEEN M/D III & IV, 1987



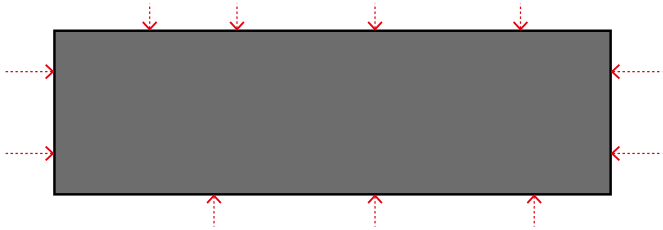




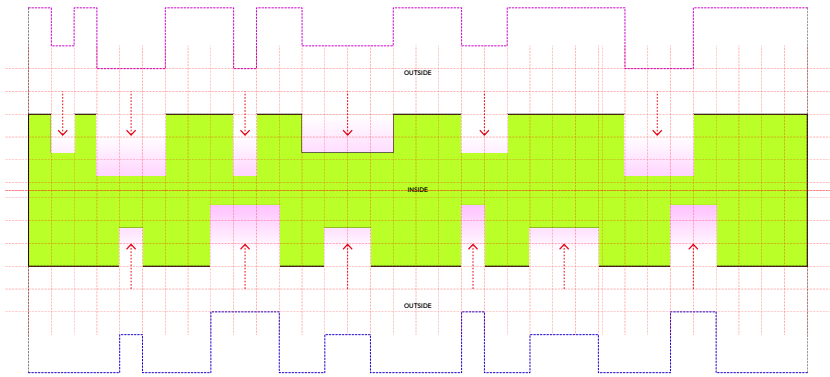
A APPROPRIATION OF SPACE



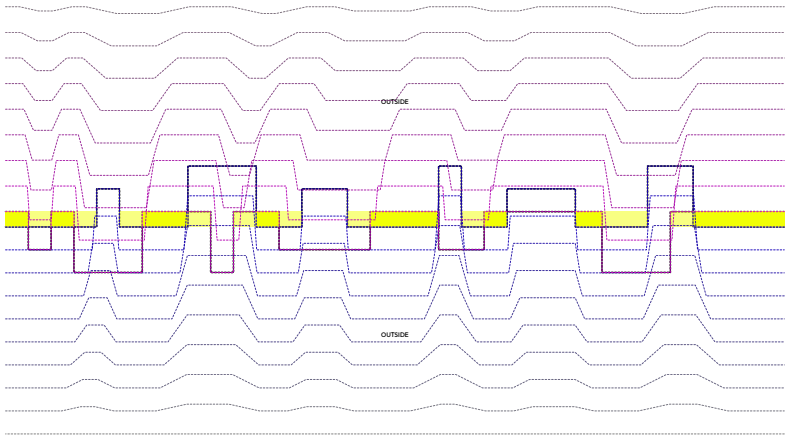
B EXISTING: PRIVITE INTO PUBLIC REALM



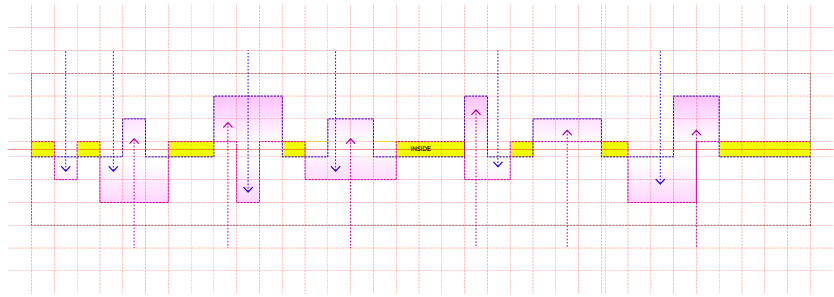
C PROPOSAL: PUBLIC INTO PRIVITE REALM



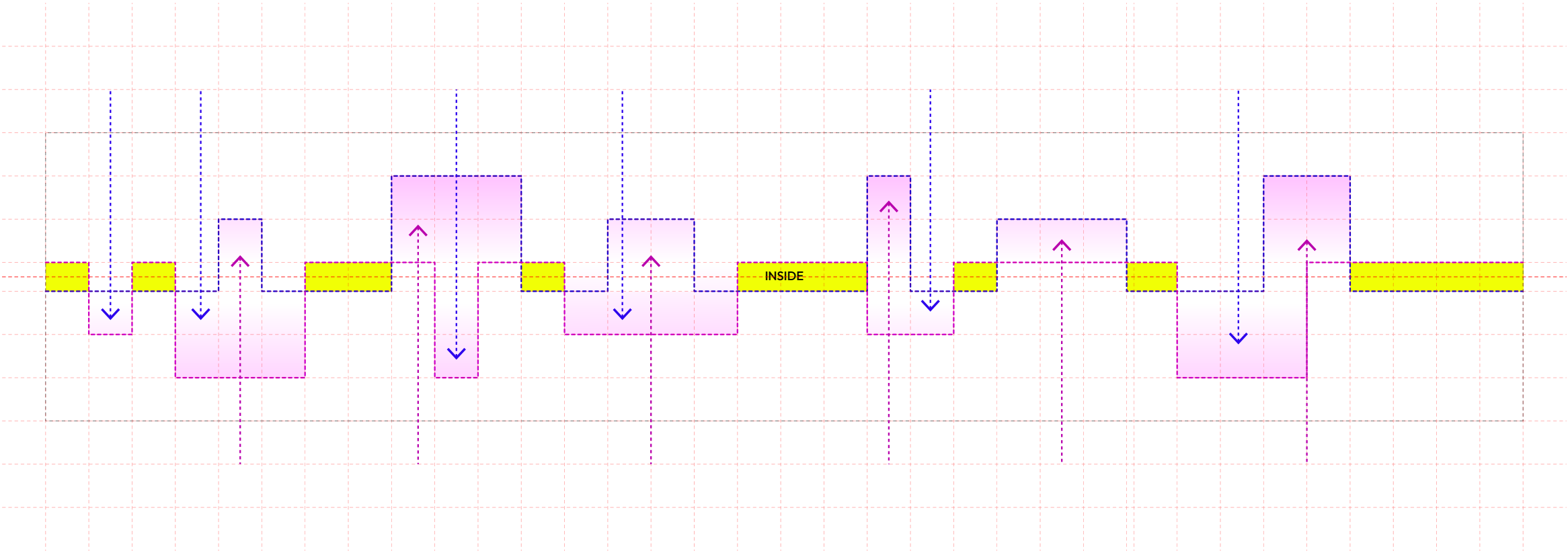
D RECESSED WALLS MOVING TOWARDS THE INTERIOR

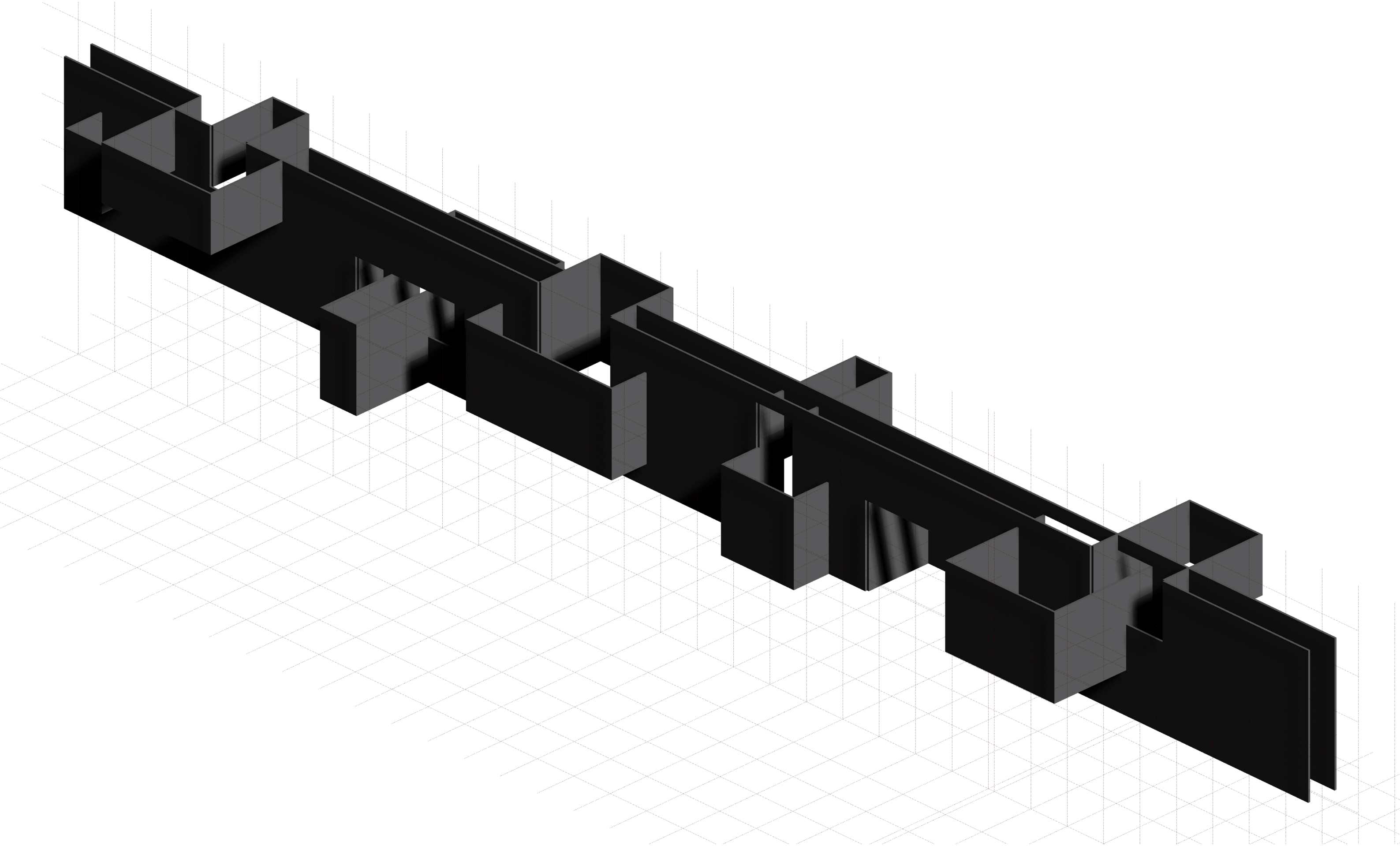


E TWO WALL WOVEN INTO SPACES

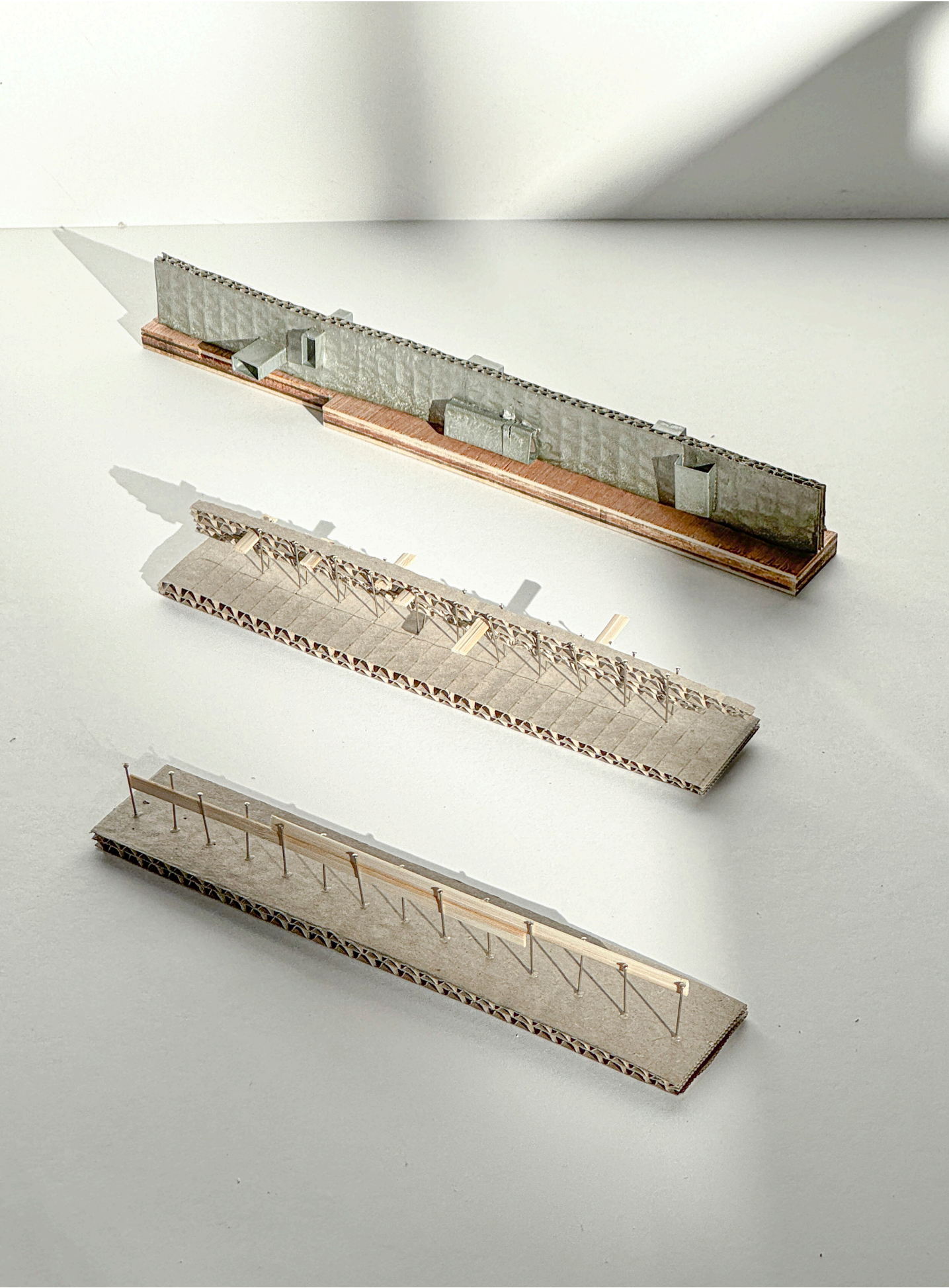
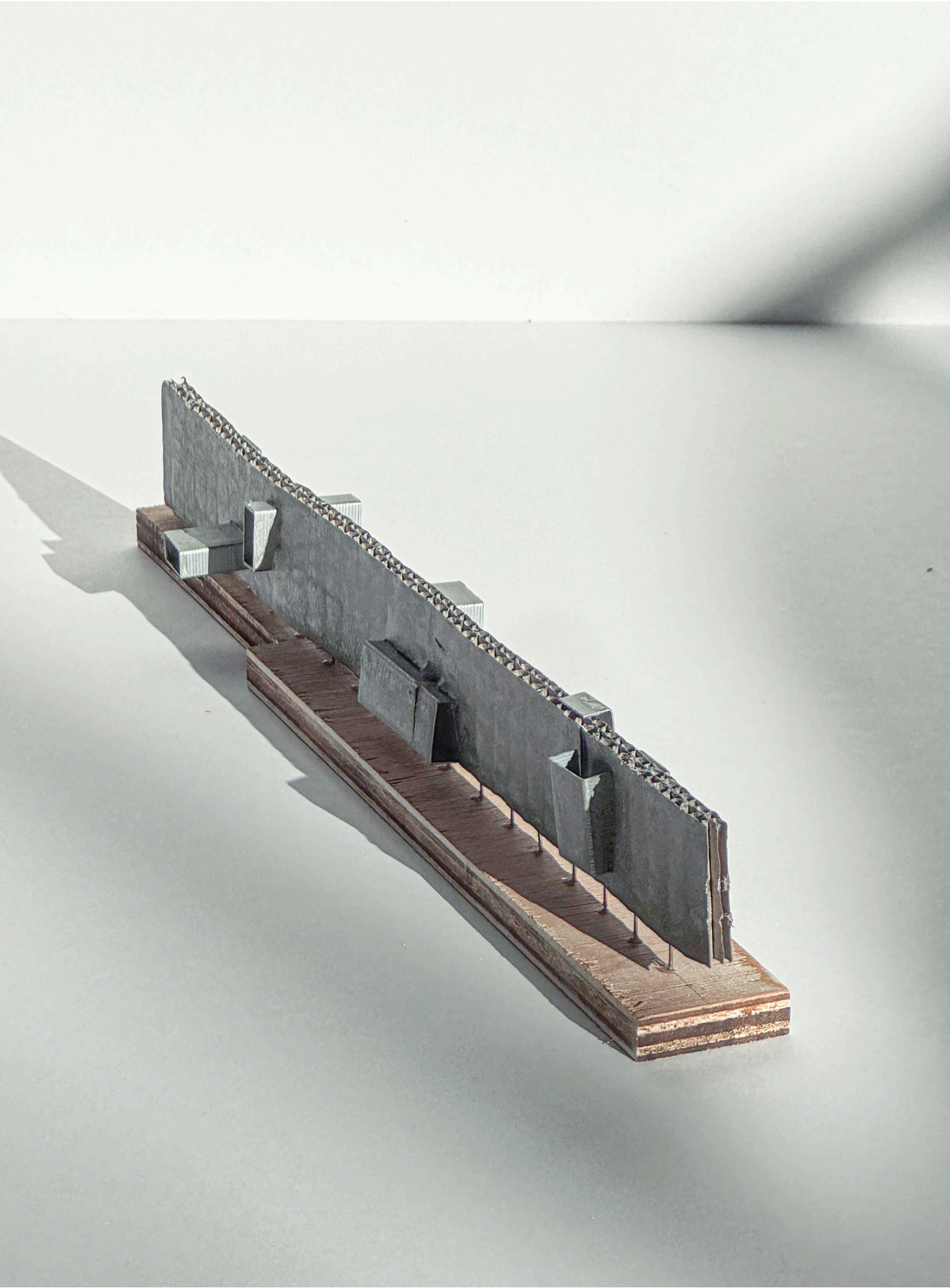


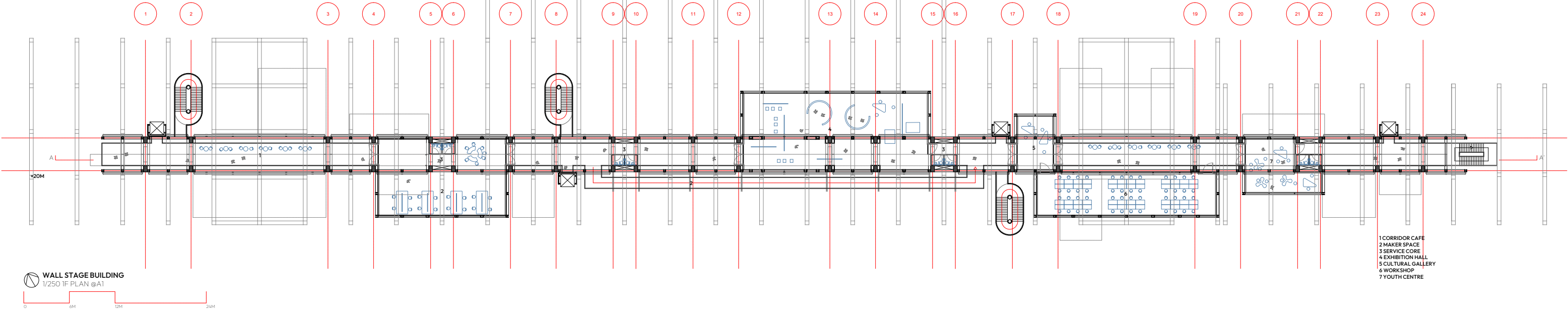
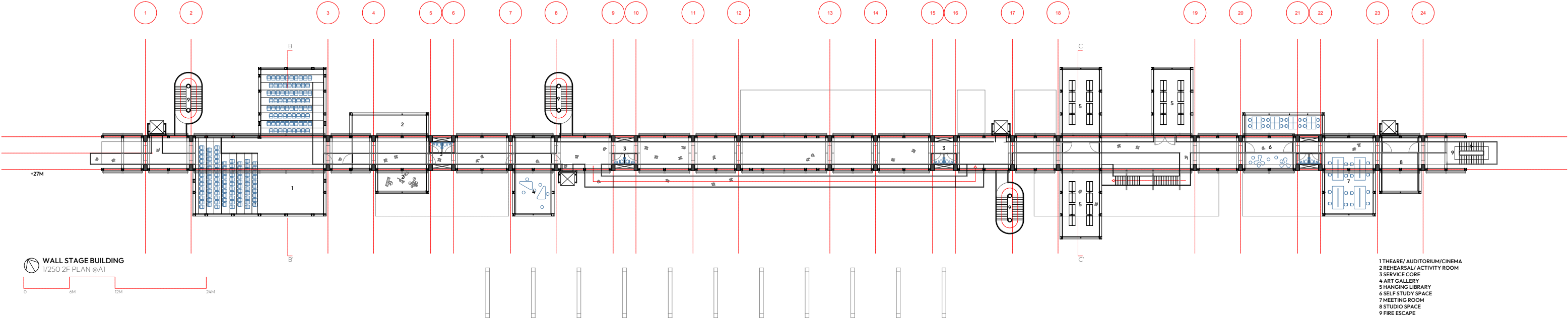
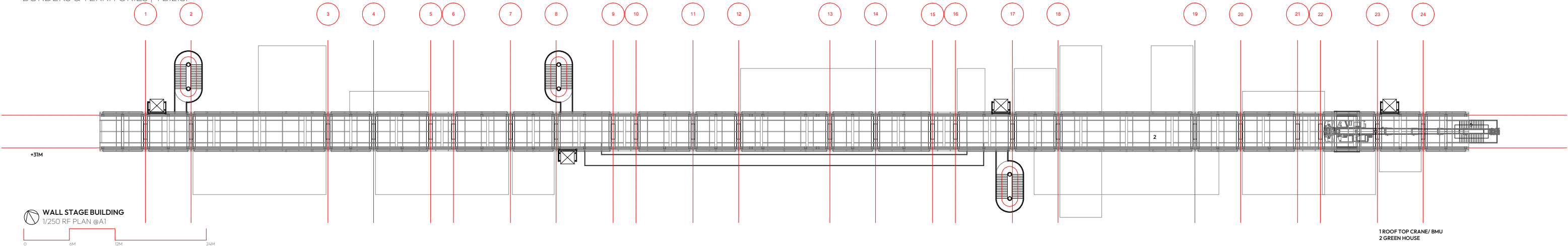
F MINIMUM CORE FUNCTION+ADD-ON PROGRAME

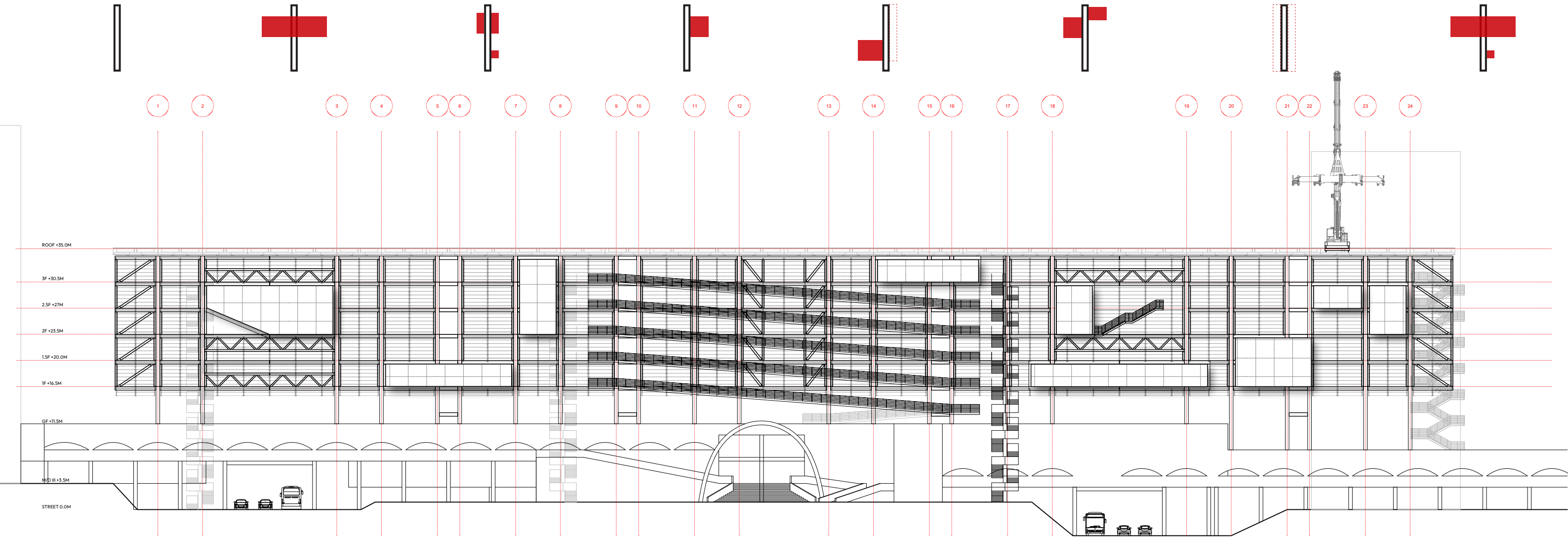
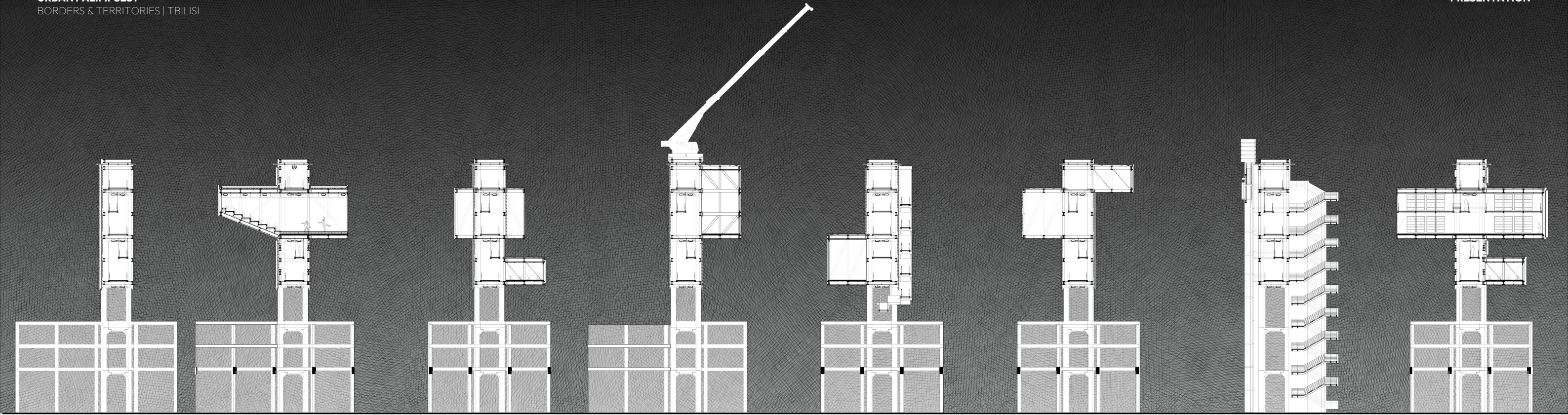


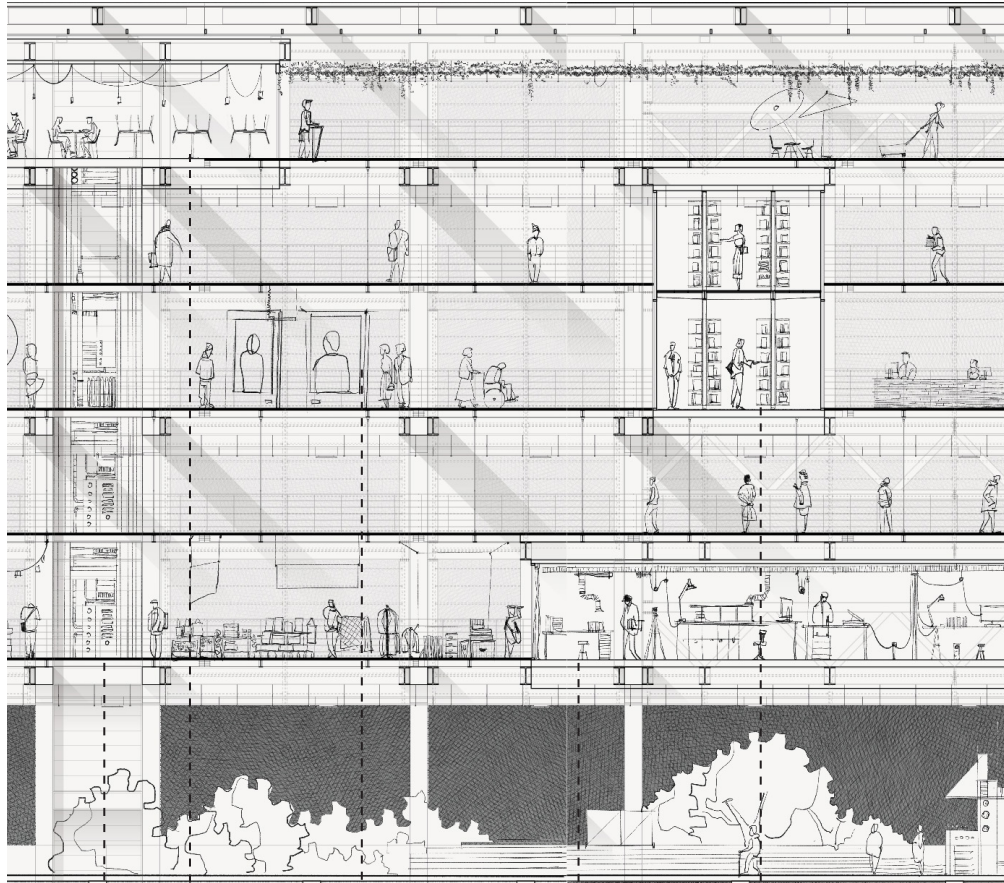
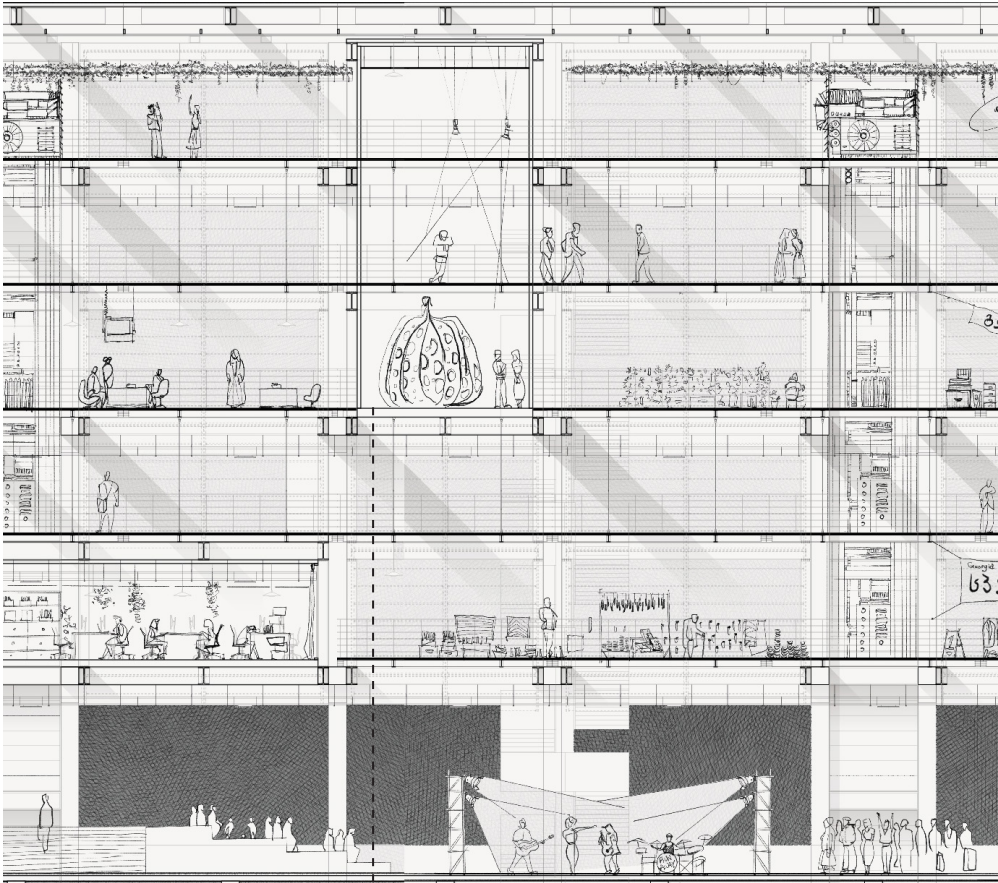
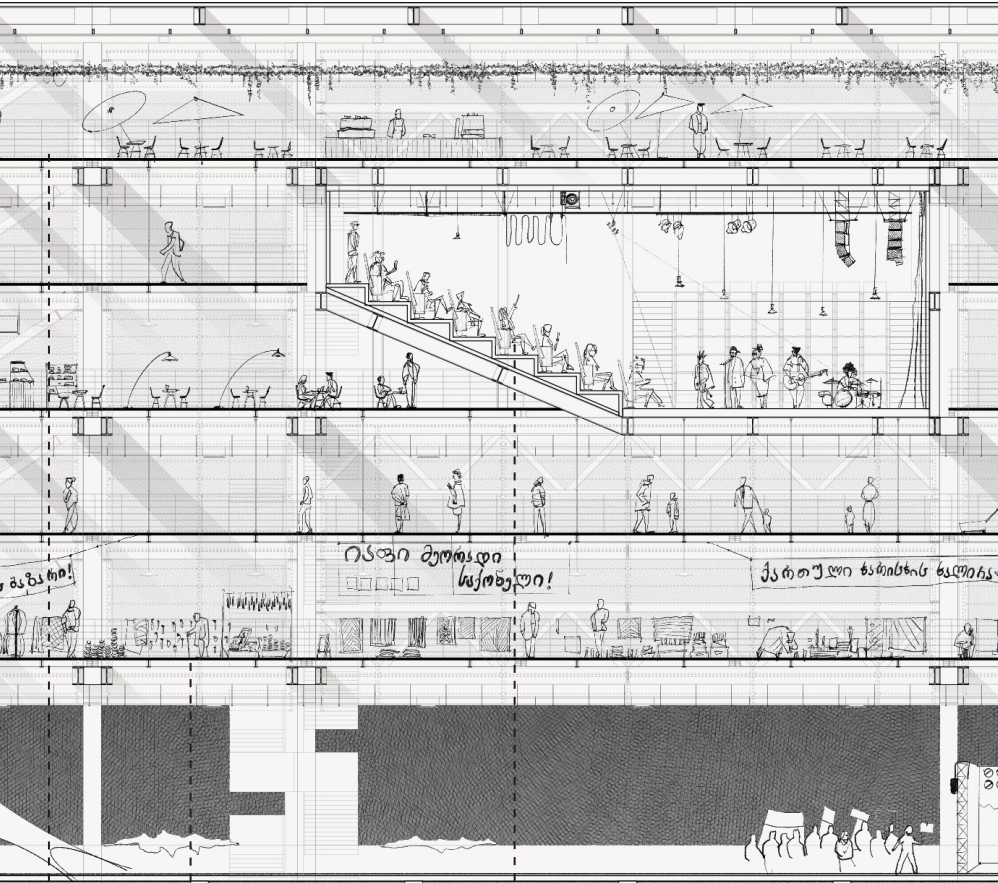
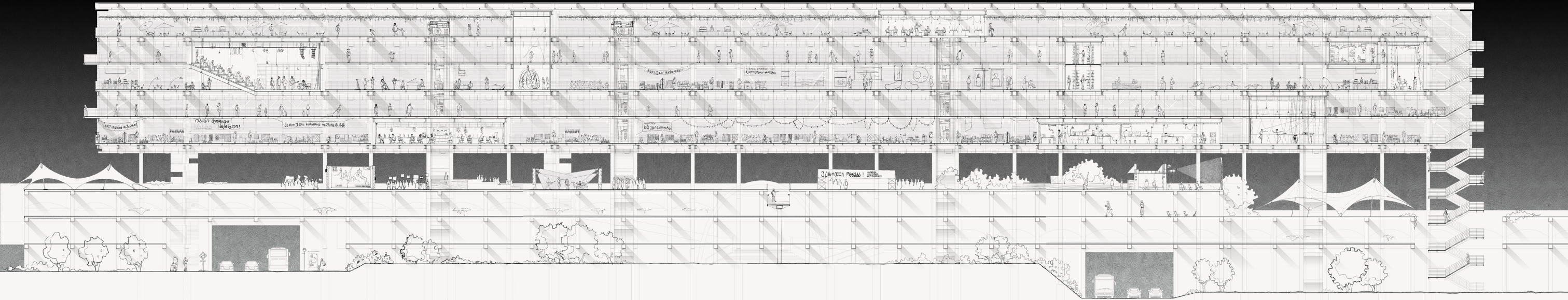












CORRIDOR MARKET

ROOF GARDEN/ CAFE

THEATRE/ CINEMA

EXHIBITION HALL

OUTDOOR PLAZA

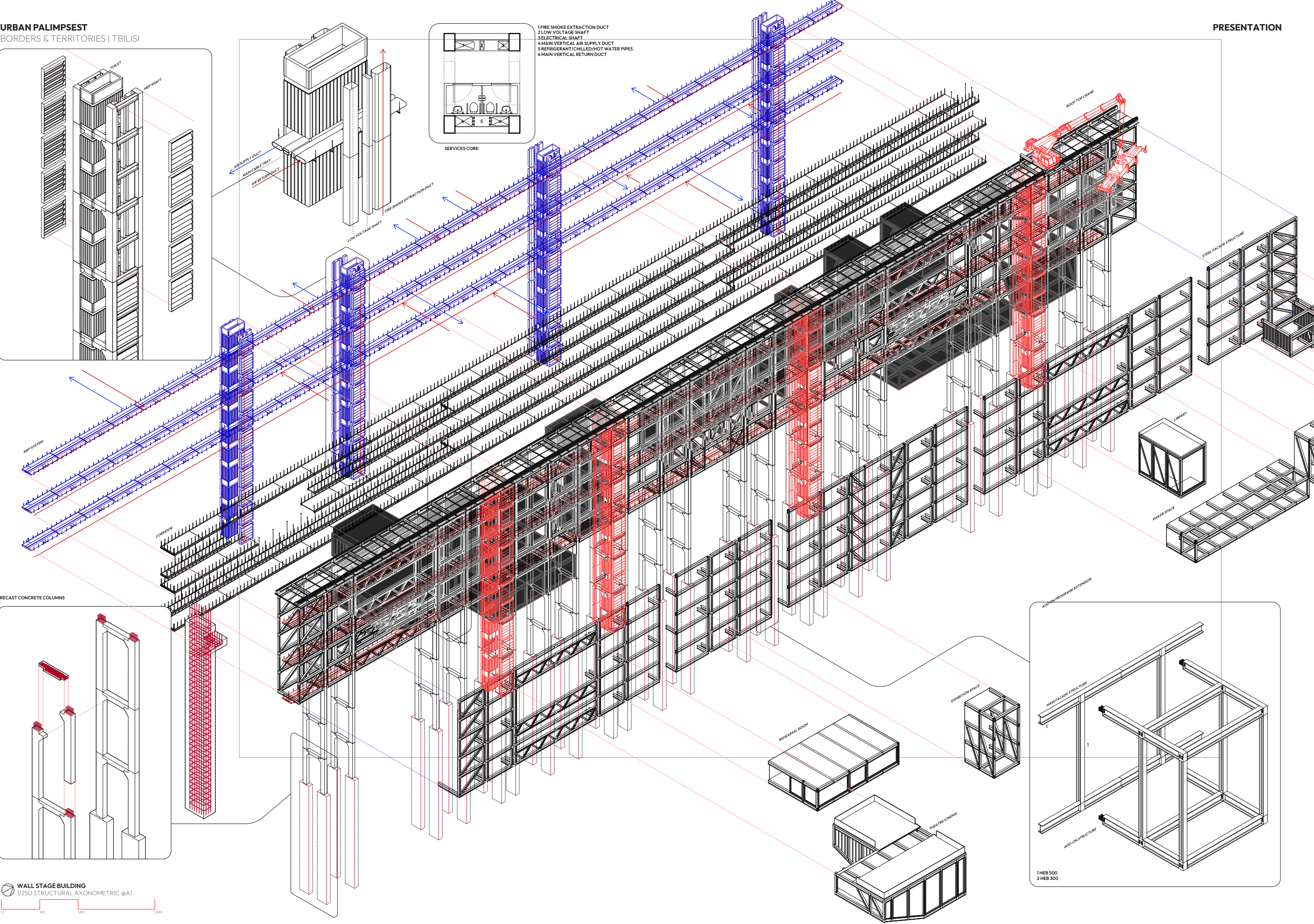
RESTAURANT

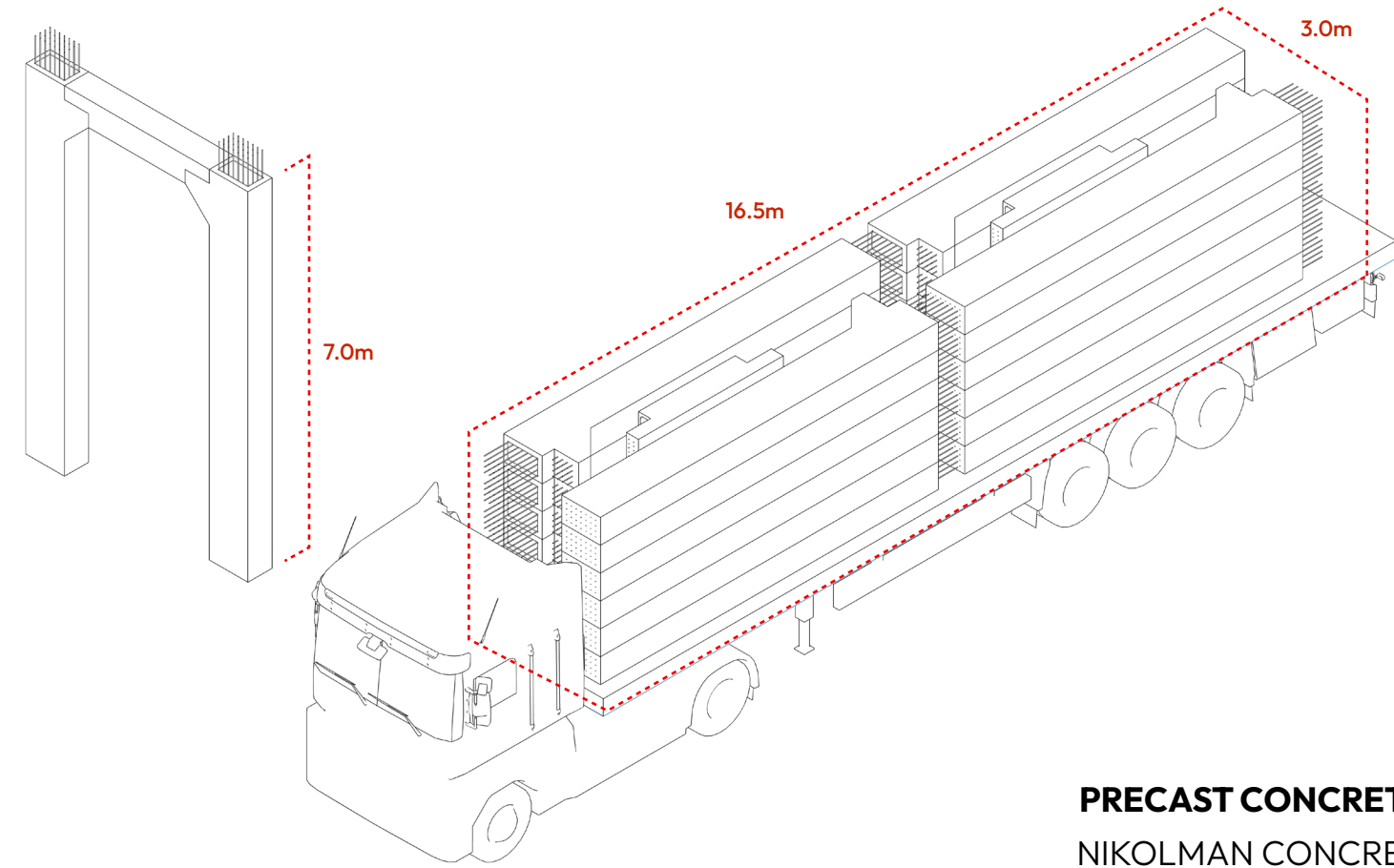
MAKER SPACE

SERVICE SHAFTS

CORRIDOR GALLERY

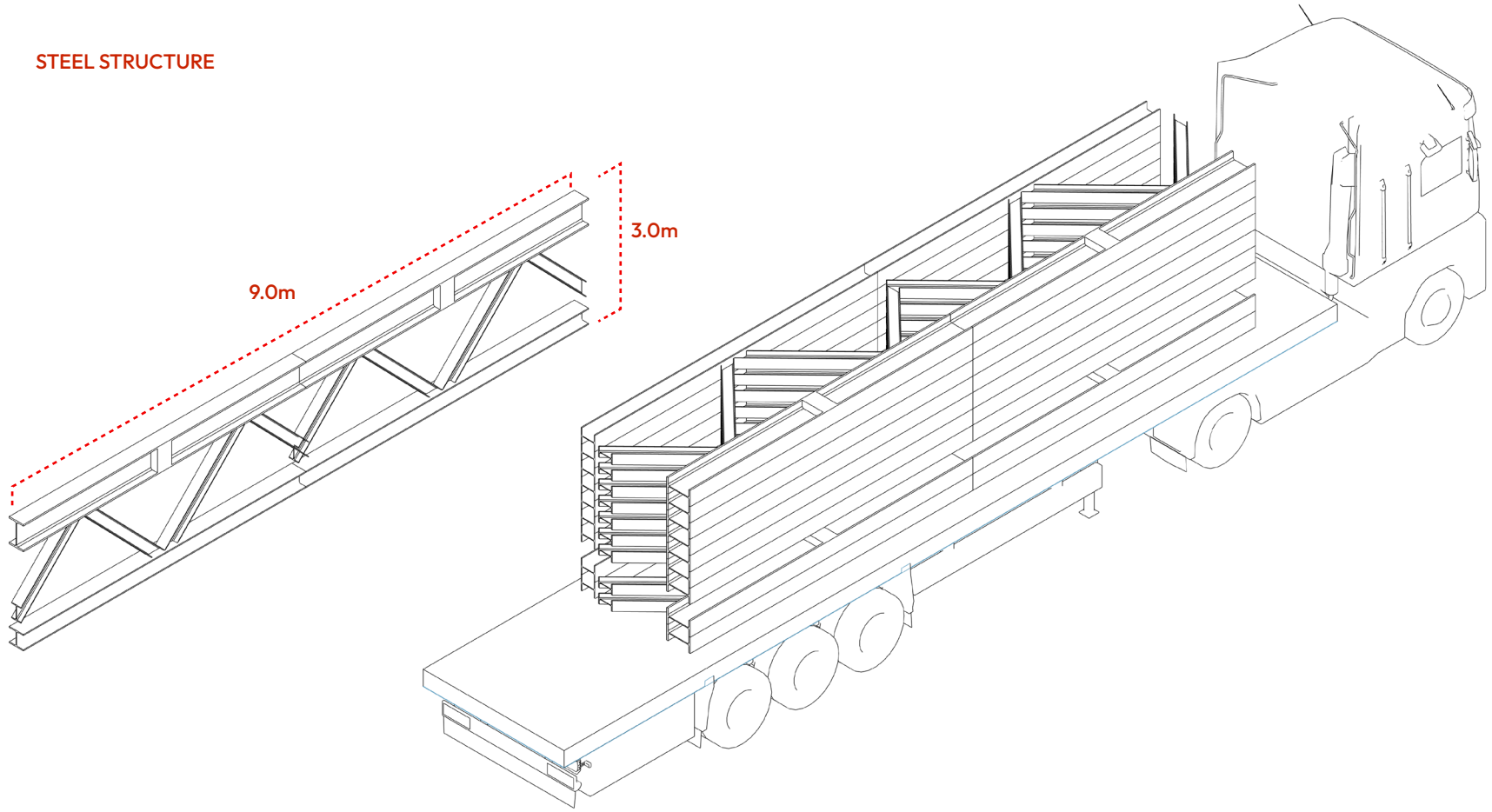
LIBRARY





PRECAST CONCRETE COLUMN

PRECAST CONCRETE COLUMN
NIKOLMAN CONCRETE PREFABRICATION PLANT
TBILISI 15KM
ESTIMATED CO₂ EMISSION: 1.5 KG CO₂ PER TON (BY TRUCK)



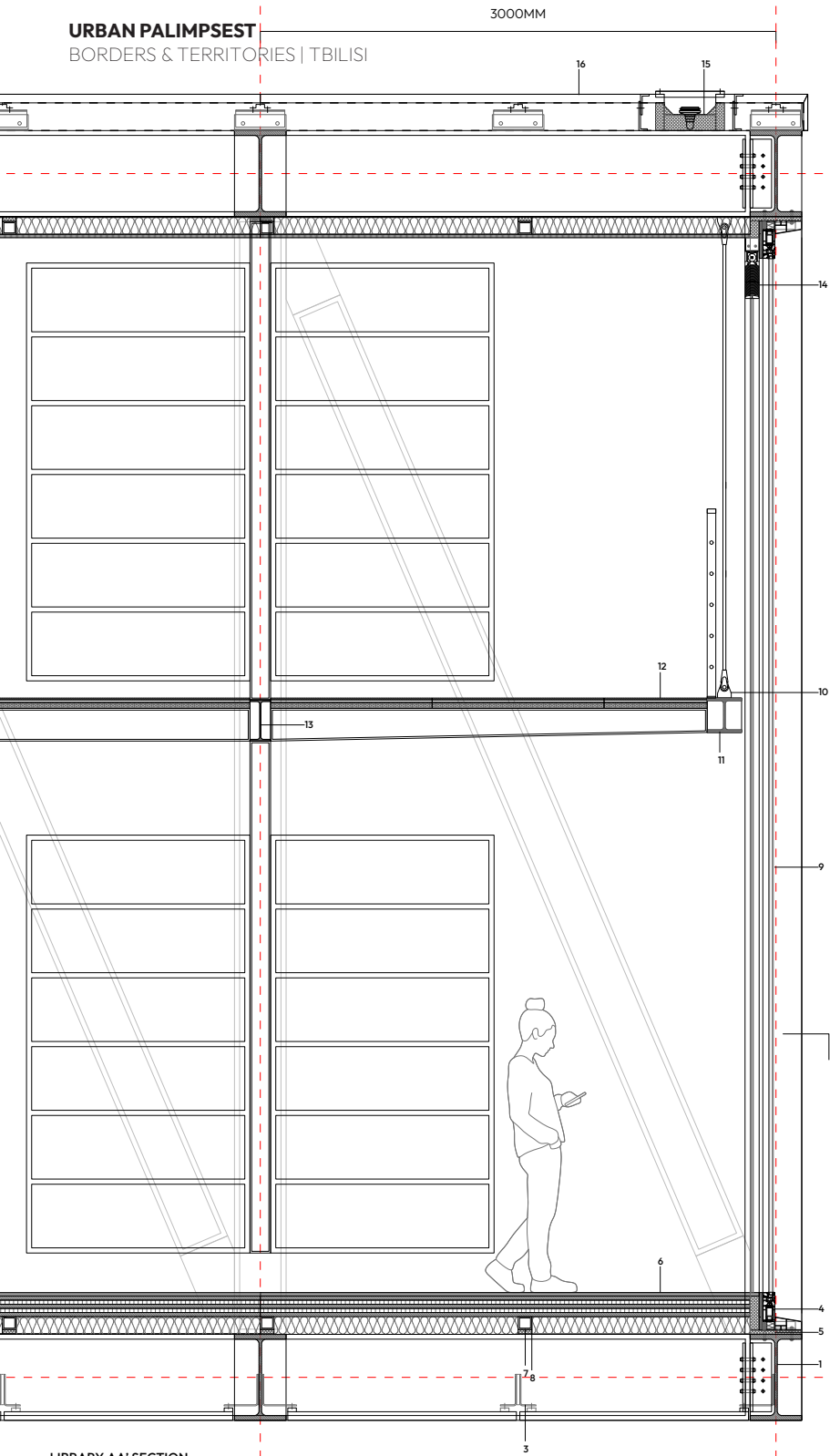
STEEL STRUCTURE

GLASS CURTAIN WALL SYSTEMS
ARCHTRADE
TBILISI 10KM
ESTIMATED CO₂ EMISSION: 1.0 KG CO₂ PER TON

GLDANI, TBILISI

TIMBER / WOOD COMPONENTS
ESS LLC
TSILKANI 25KM
ESTIMATED CO₂ EMISSION: 2.5 KG CO₂ PER TON

STEEL STRUCTURE
RUSTAVI METALLURGICAL PLANT
RUSTAVI 30KM
ESTIMATED CO₂ EMISSION: 3.0 KG CO₂ PER TON



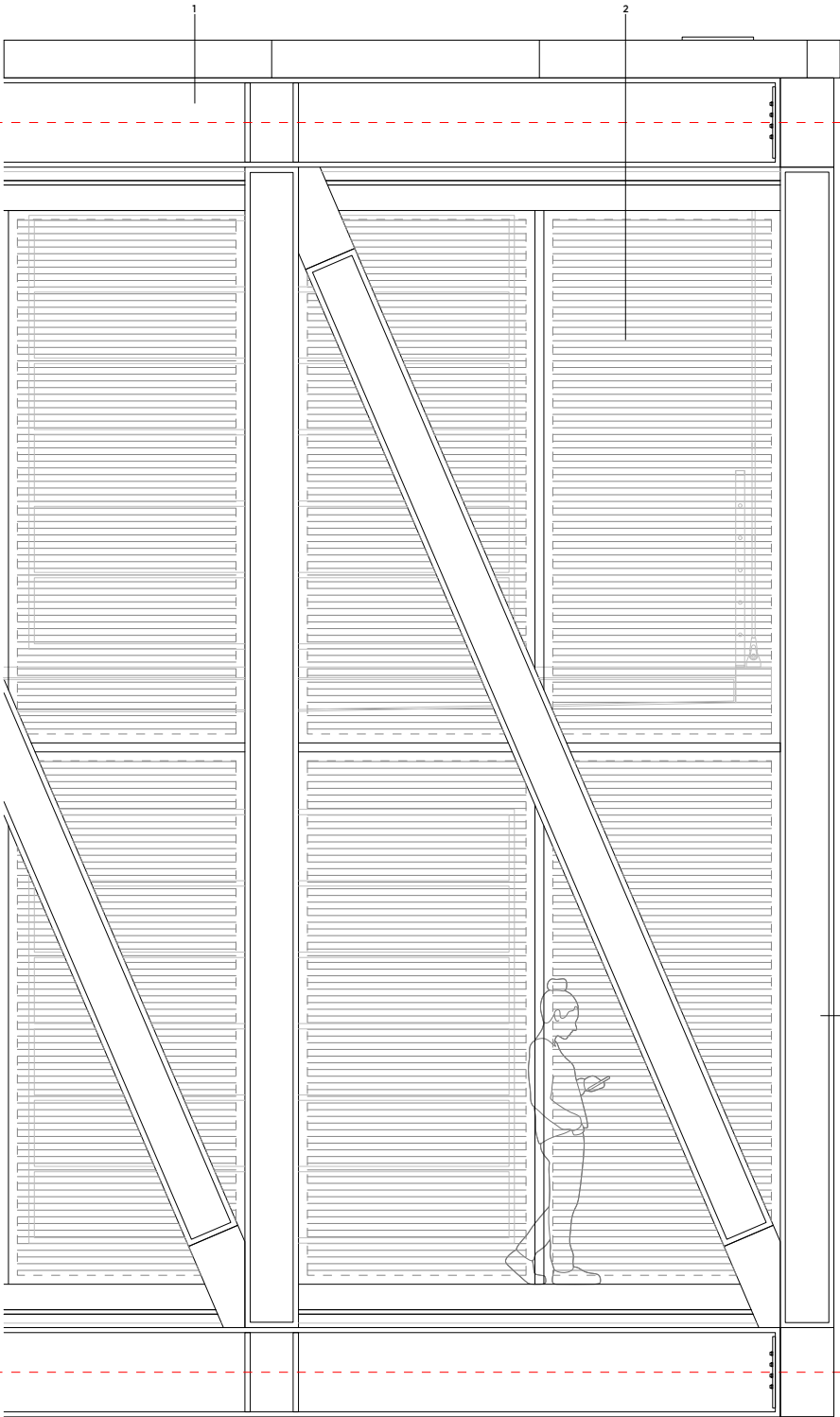
LIBRARY AA' SECTION

- 1 HEB 300 STEEL BEAM
- 2 ANODIZED ALUMINUM SHEET
- 3 L PROFILE BRACKET 200*200*6MM
- 4 WINDOW FRAME WITH THERMAL BREAK
- 5 FOAMGLAS® THERMAL PAD
- 6 FLOOR COMPOSITION:
20MM GARNISH FLOORING
120MM CLT PANEL
100MM INSULATION
2MM METAL SHEET
WATER BARRIER
- 7 75*75MM SQUARE STEEL SECONDARY STRUCTURE
- 8 THERMAL PAD
- 9 GLAZING:
6MM+14MM CAVITY+8MM LAMINATED SAFETY GLASS
- 10 STEEL SUSPENSION ROD
- 11 HEB 300 STEEL BEAM
- 12 MEZZANINE FLOOR COMPOSITION:
20MM GARNISH FLOORING
50MM LIGHTWRIGHT CONCRETE
- 13 IPE 240 STEEL BEAM
- 14 CURTAIN
- 15 GUTTER
- 16 STAINLESS STEEL PANEL

WALL STAGE BUILDING
1/250 GF PLAN @A1



0 1M 2M 4M



LIBRARY LEFT ELEVATION

- 1 HEB 500 STEEL BEAM COATED WITH PU PAINT
- 2 SOLAR SHADE

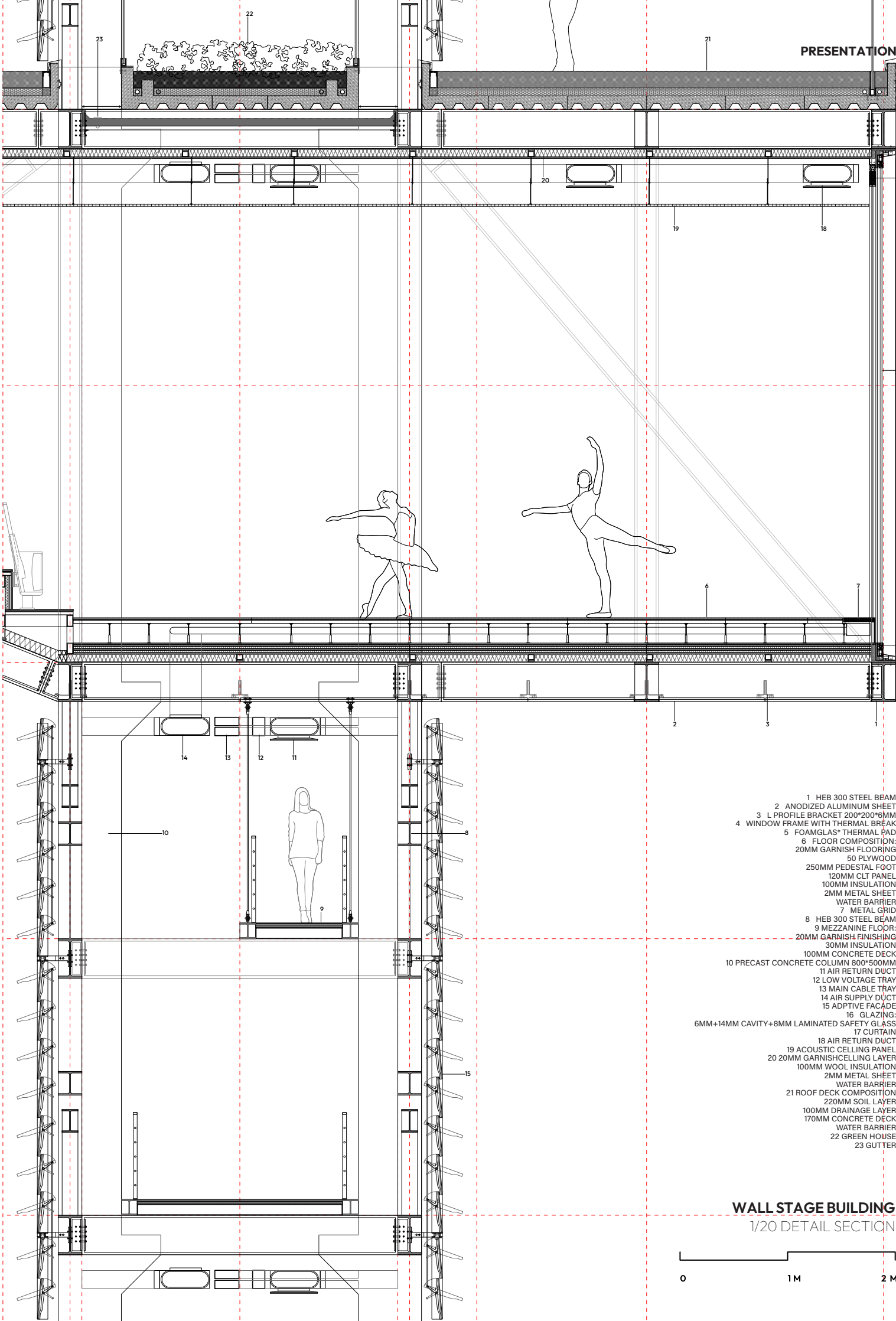
- 1 HEB 300 STEEL BEAM COATED WITH PU PAINT
- 2 STAINLESS STEEL COULMN CAP
- 3 FOAMGLAS® THERMAL PAD



LIBRARY BACK VIEW



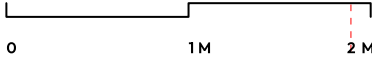
FRONT VIEW



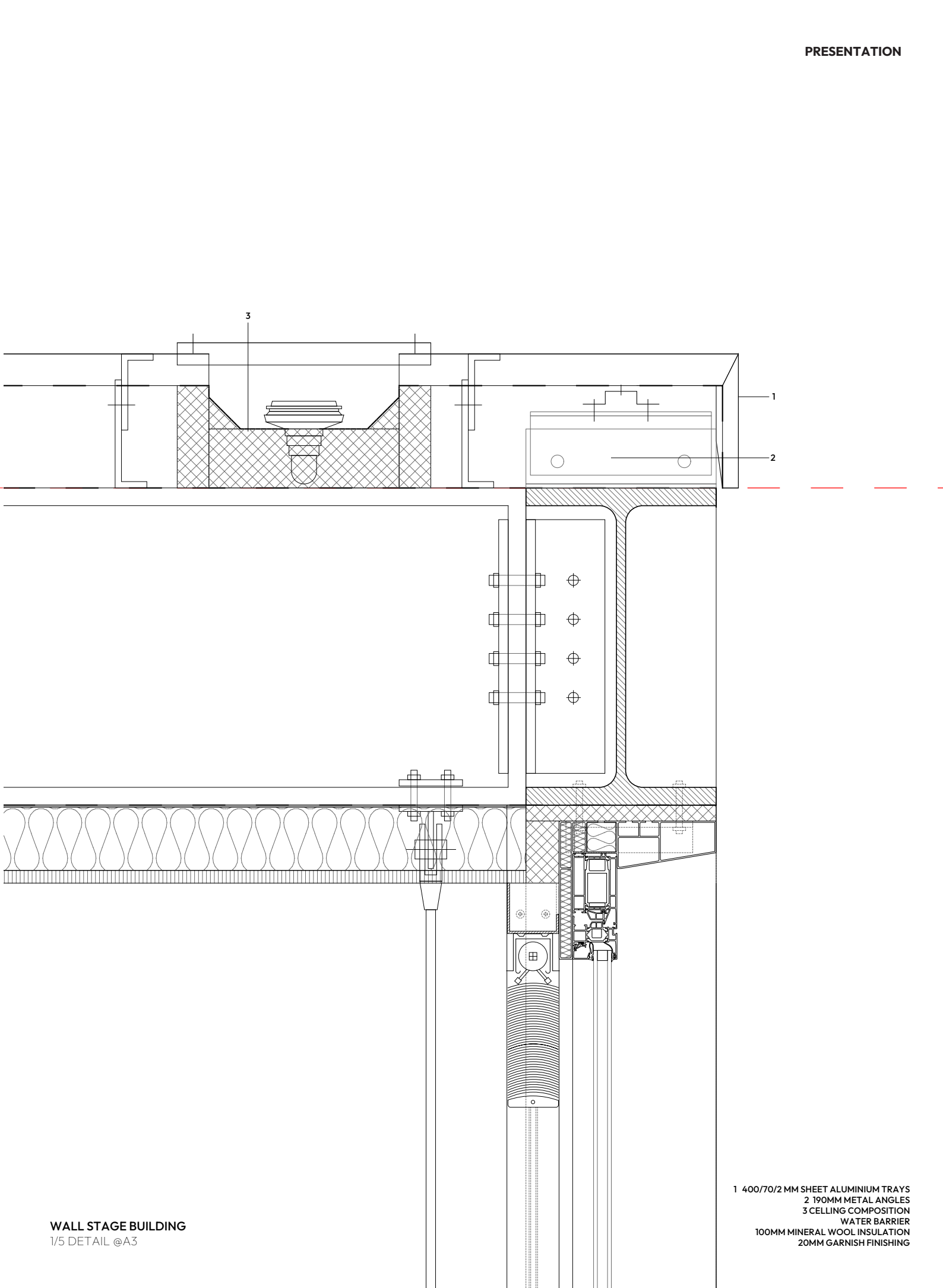
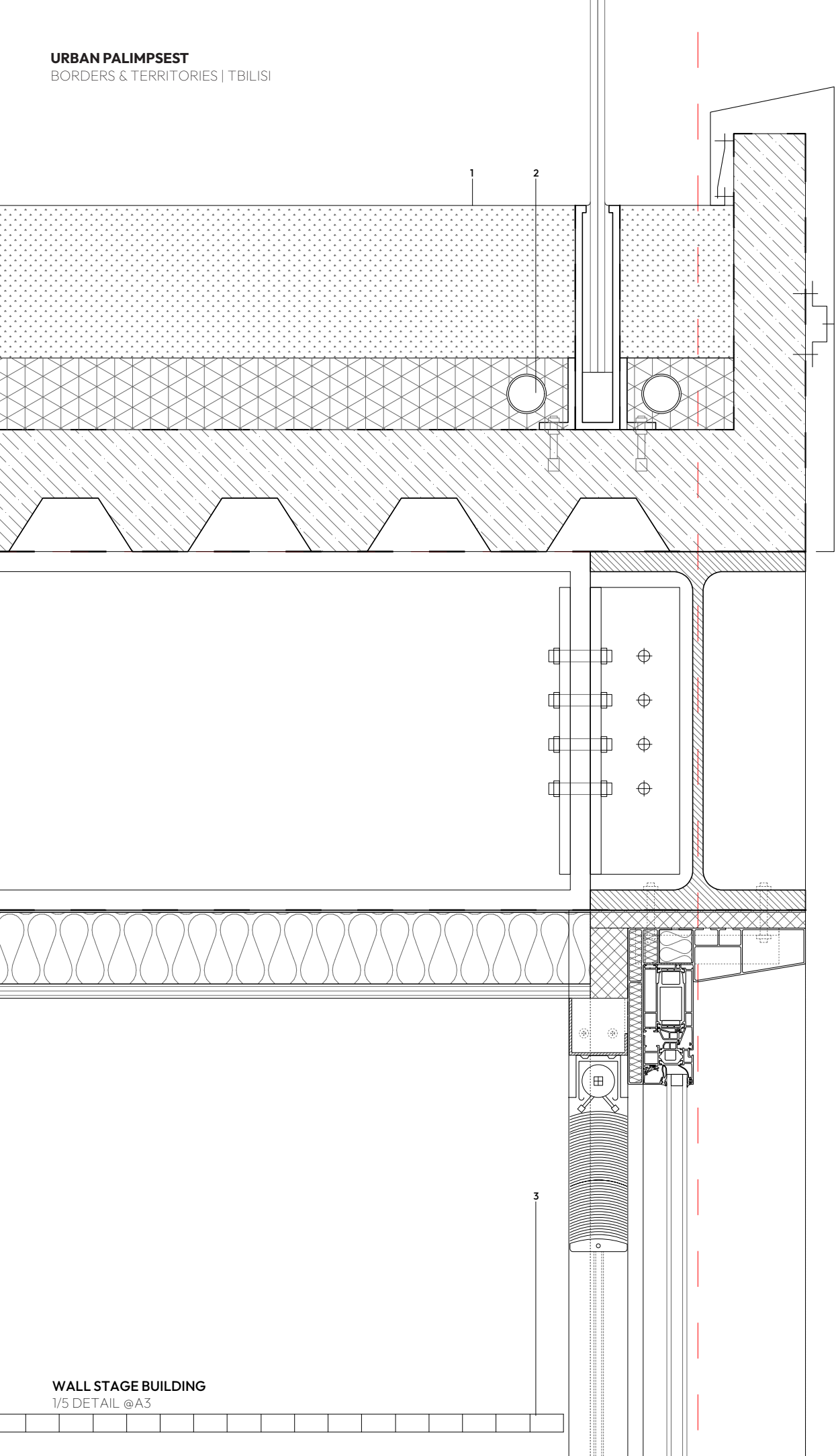
PRESENTATION

- 1 HEB 300 STEEL BEAM
- 2 ANODIZED ALUMINUM SHEET
- 3 L PROFILE BRACKET 200*200*6MM
- 4 WINDOW FRAME WITH THERMAL BREAK
- 5 FOAMGLAS® THERMAL PAD
- 6 FLOOR COMPOSITION:
 - 20MM GARNISH FLOORING
 - 50 PLYWOOD
 - 250MM PEDESTAL FOOT
 - 120MM CLT PANEL
 - 100MM INSULATION
 - 2MM METAL SHEET
 - WATER BARRIER
 - 7 METAL GRID
- 8 HEB 300 STEEL BEAM
- 9 MEZZANINE FLOOR:
 - 20MM GARNISH FINISHING
 - 30MM INSULATION
 - 100MM CONCRETE DECK
- 10 PRECAST CONCRETE COLUMN 800*500MM
- 11 AIR RETURN DUCT
- 12 LOW VOLTAGE TRAY
- 13 MAIN CABLE TRAY
- 14 AIR SUPPLY DUCT
- 15 ADPTIVE FACADE:
 - 6MM+14MM CAVITY+8MM LAMINATED SAFETY GLASS
 - 17 CURTAIN
 - 18 AIR RETURN DUCT
 - 19 ACOUSTIC CELLING PANEL
 - 20 20MM GARNISHCELLING LAYER
 - 100MM WOOL INSULATION
 - 2MM METAL SHEET
 - WATER BARRIER
- 21 ROOF DECK COMPOSITION:
 - 220MM SOIL LAYER
 - 100MM DRAINAGE LAYER
 - 170MM CONCRETE DECK
 - WATER BARRIER
- 22 GREEN HOUSE
- 23 GUTTER

WALL STAGE BUILDING
1/20 DETAIL SECTION





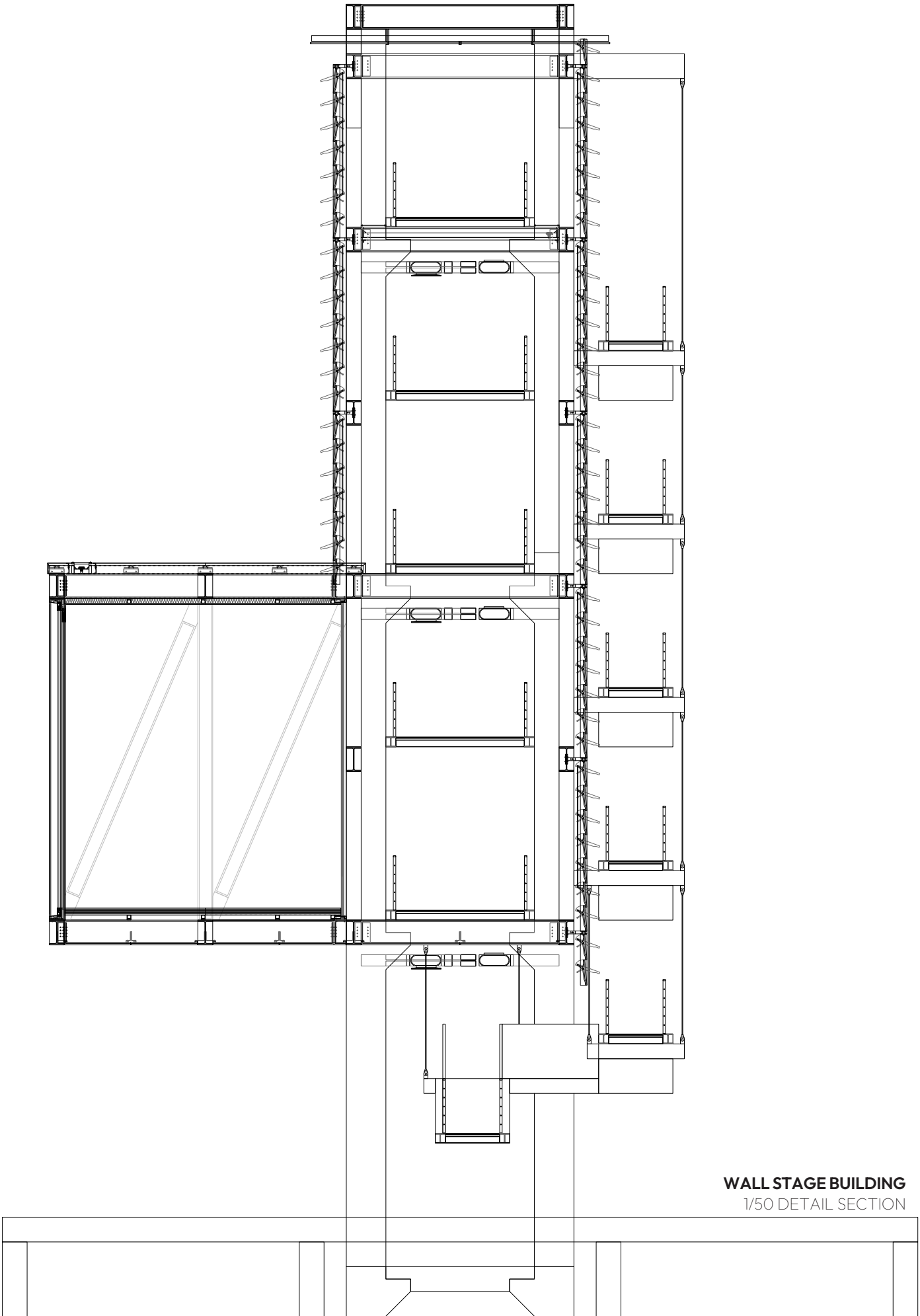




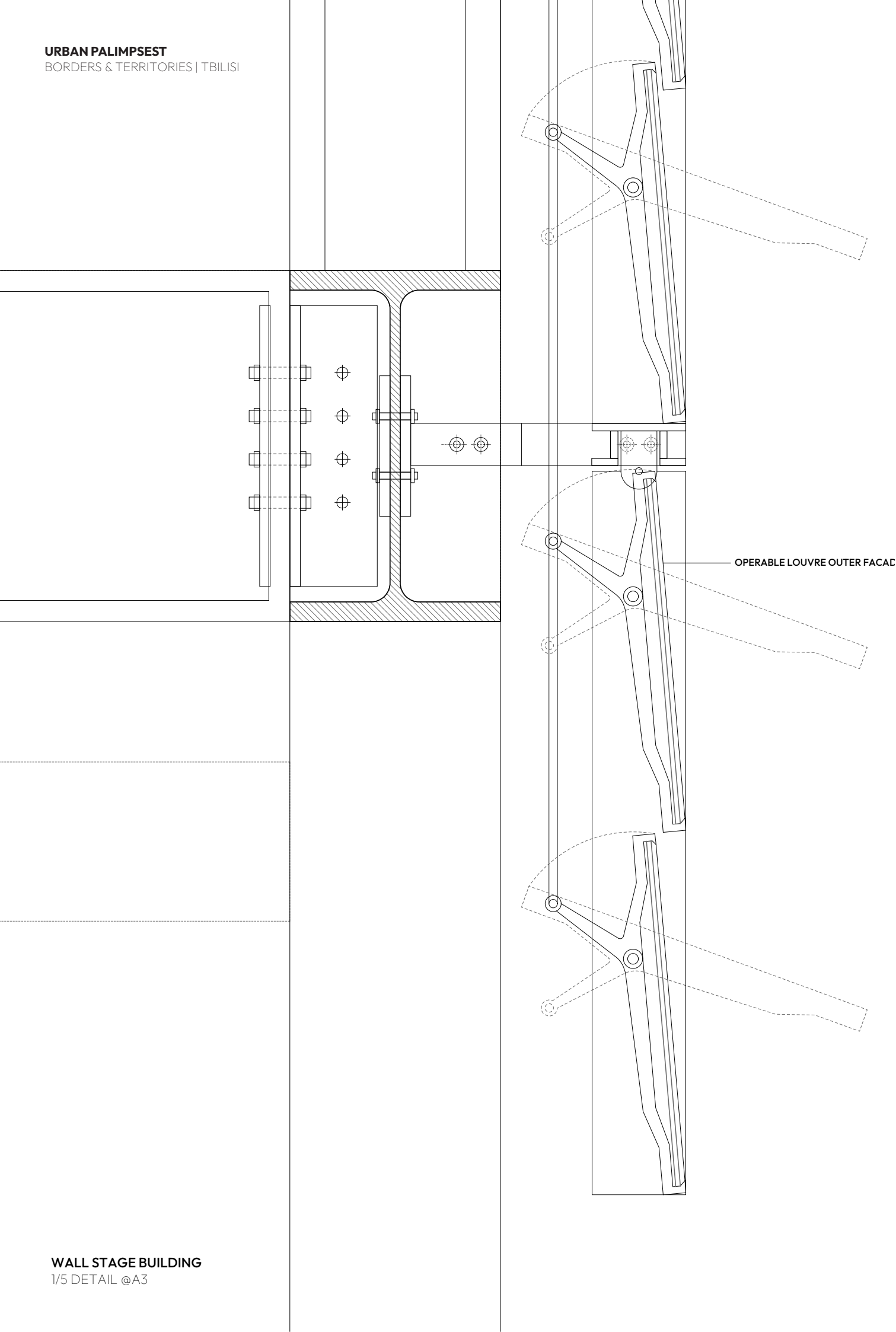
FRONT VIEW



FRONT EXTERNAL RAMP



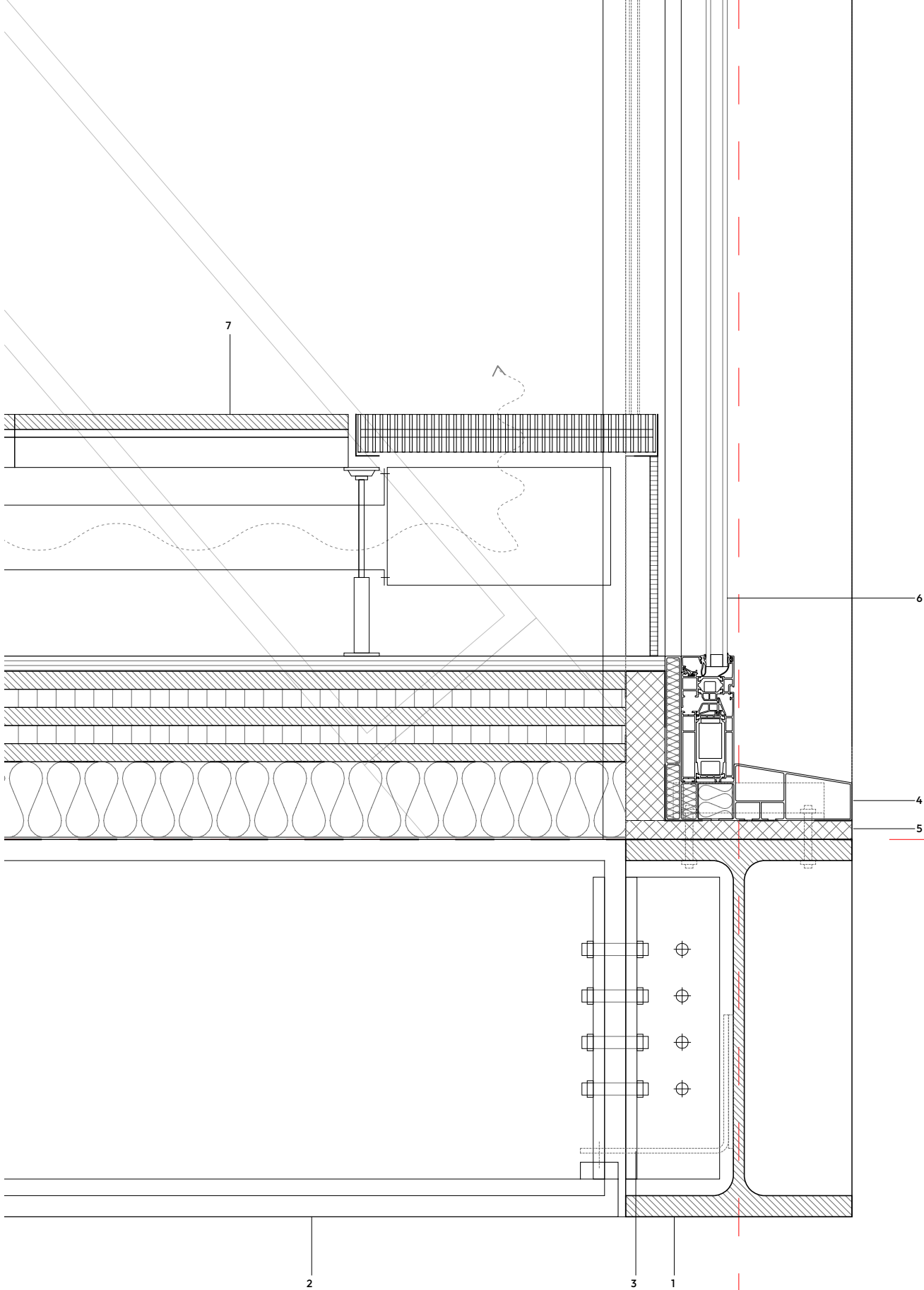
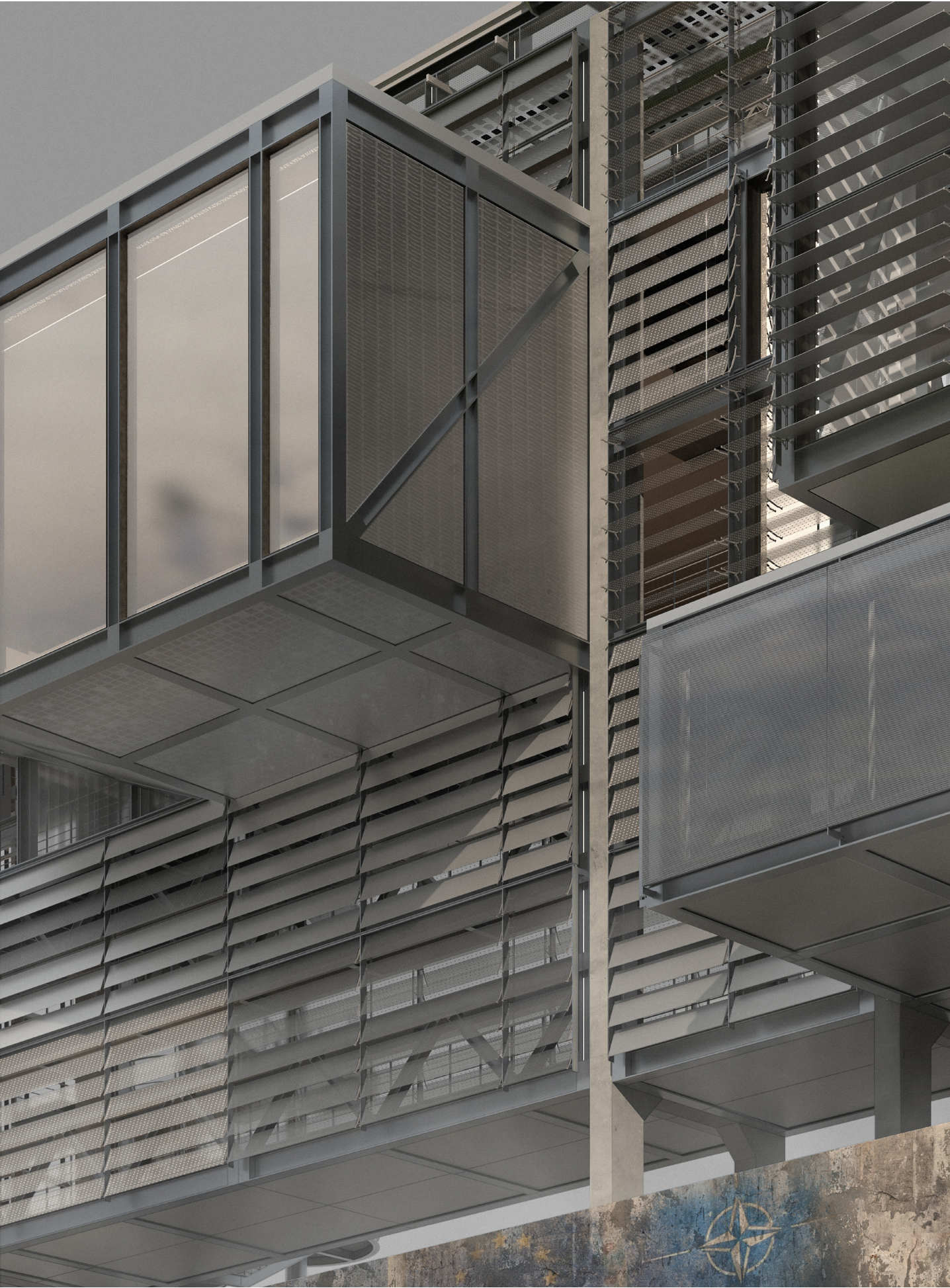
WALL STAGE BUILDING
1/50 DETAIL SECTION



WALL STAGE BUILDING
1/5 DETAIL @A3



EXTERNAL RAMP VIEW



- 1 HEB 300 STEEL BEAM
- 2 ANODIZED ALUMINUM SHEET
- 3 L PROFILE BRACKET 200*200*6MM
- 4 WINDOW FRAME WITH THERMAL BREAK
- 5 FOAMGLAS® THERMAL PAD
- 6 GLAZING:
6MM+14MM CAVITY+8MM LAMINATED SAFETY GLASS
- 7 FLOOR COMPOSITION:
20MM GARNISH FLOORING
120MM CLT PANEL
100MM INSULATION
2MM METAL SHEET
FACED BRICK

WALL STAGE BUILDING
1/5 DETAIL @A3

ADAPTIVE FACADE



CORRIDOR MARKET VIEW



ROOF GARDEN/ CAFE VIEW



FIRE ESCAPE VIEW



○ 41
ქართული ოცნება

მხოლოდ
მშვიდობით
ღირსებით
კეთილდღეობით
ეპროპიკავს





RIGHT SIDE VIEW









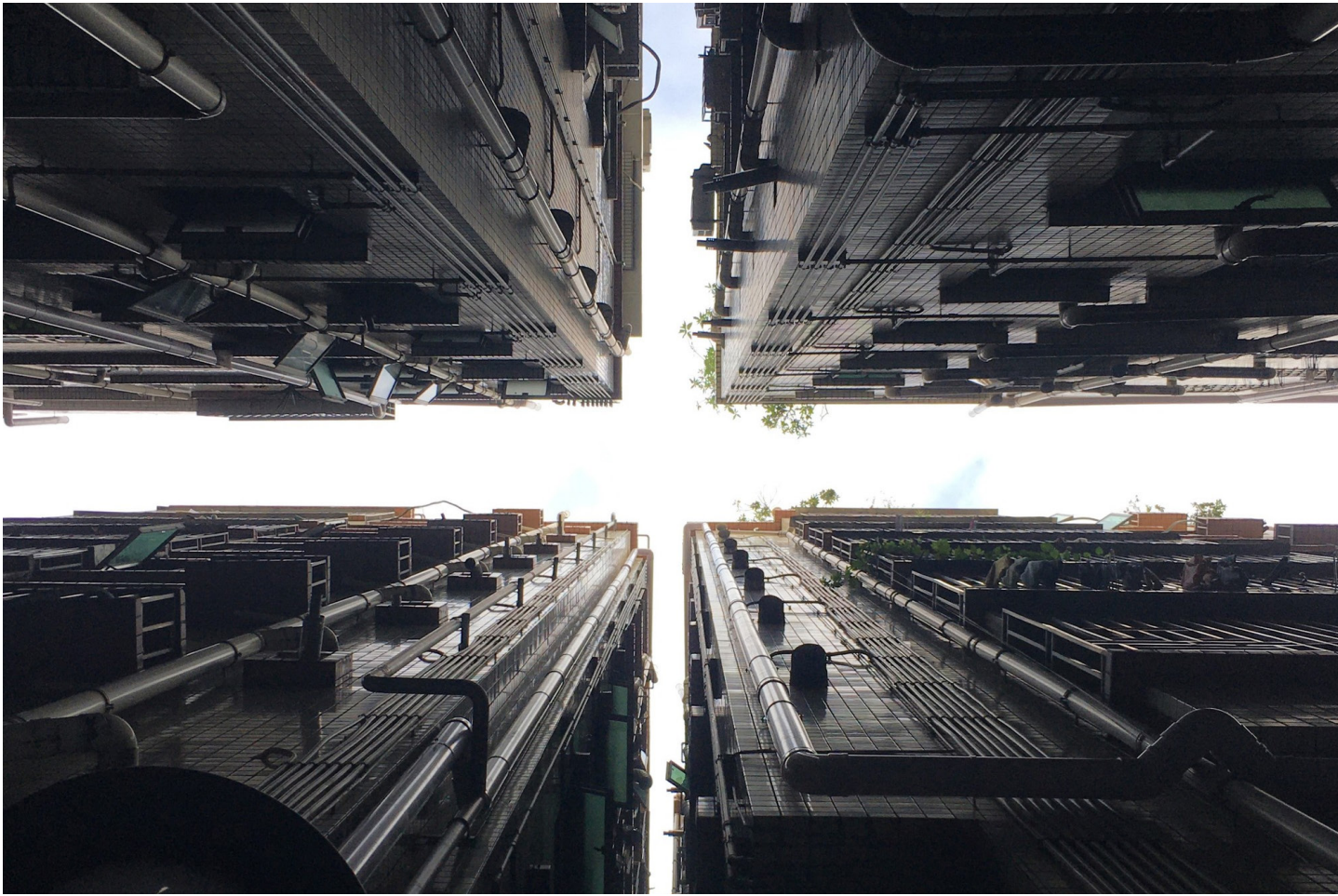




REFLECTION

CALL BACKS?...

FROM GLDANI TO FUTIAN



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THANK YOU