



REBUILDING ALEPPO

ARCHITECTURE OF RECOVERY IN A WAR-TORN CITY

P5 CONTENT

INTRODUCTION

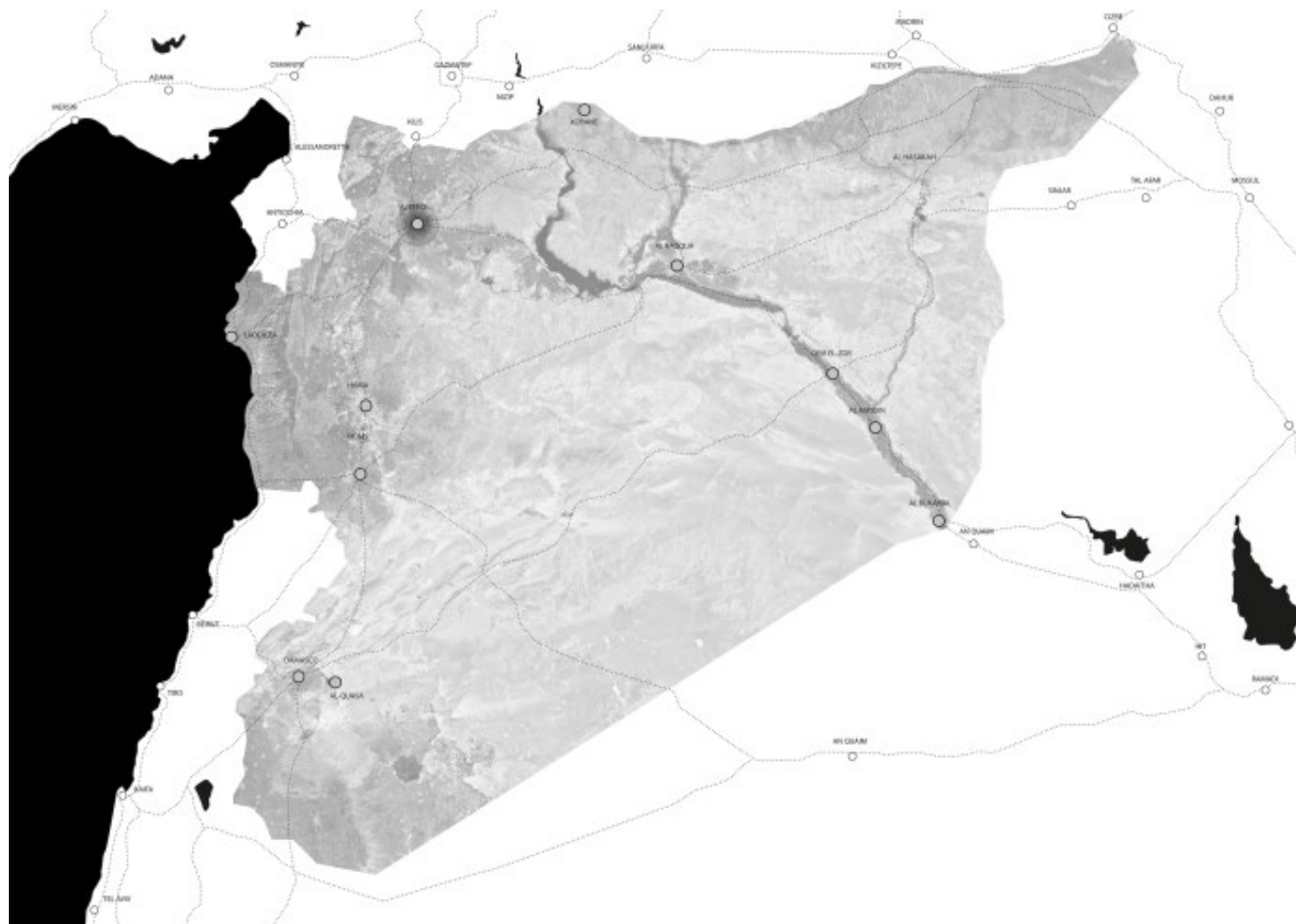
RESEARCH FINDINGS

SITE

DESIGN

RESEARCH-DESIGN REFLECTING THROUGHOUT PRESENTATION

INTRODUCTION



TERRITORIAL OVERVIEW OF THE CITY OF ALEPPO
BY FLAVIO MENICI



OUTLINE OF THE CITY OF ALEPPO, IN HIGHLIGHT THE HISTORICAL CENTER
BY FLAVIO MENICI



FASCINATION

GRADUATION TOPIC

post-war
reconstruction

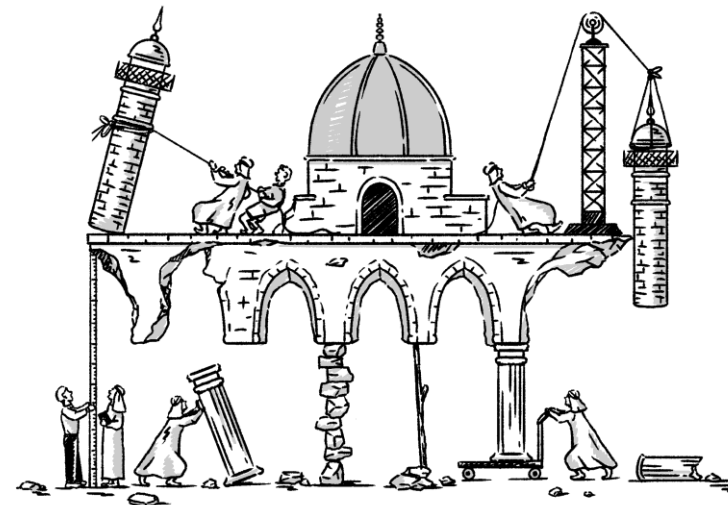
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merely constructing
new buildings on top
of where the
destroyed ones lay

'That is not Syrian
architecture'

'We don't want that'

*Locals on very modern 'glassy'
design renders for a
neighbourhood in Damascus*



URBAN IDENTITY

**POST-WAR
RECONSTRUCTION**

How can Aleppo's urban identity be preserved in post-war reconstruction, particularly in the design of public spaces?

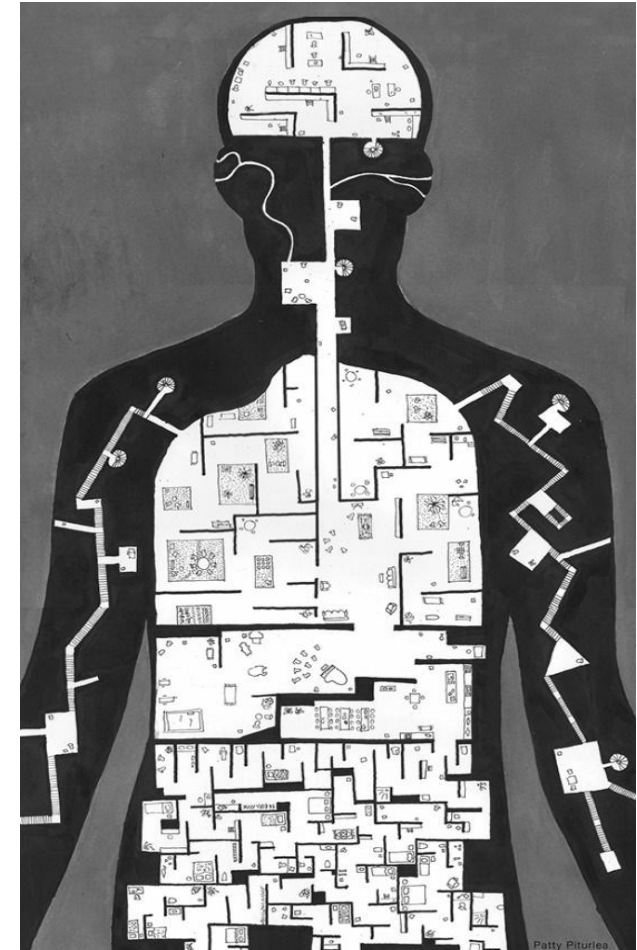
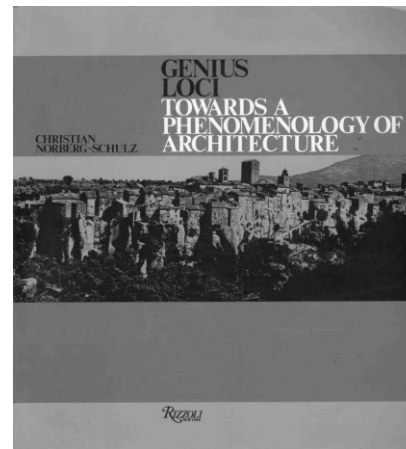
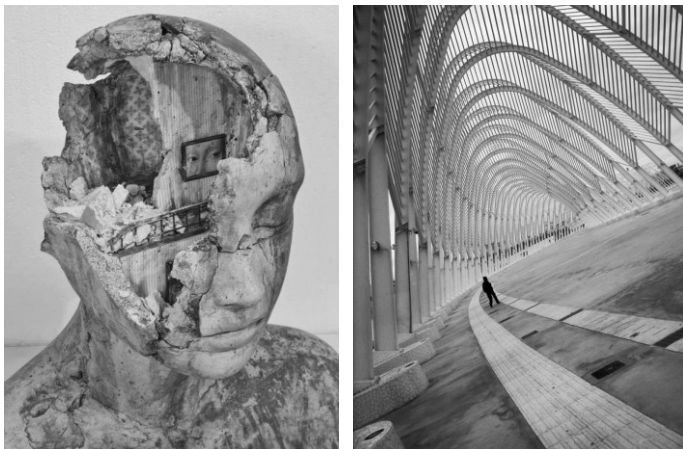
‘How can Aleppo’s **urban identity** be **preserved** in **post-war reconstruction**, particularly in the **design** of **public spaces**?’

URBAN IDENTITY

GENIUS LOCI

'The spirit of a place'

every location has its own unique essence, character, and identity, shaped by a combination of natural, architectural, historical, and cultural factors.





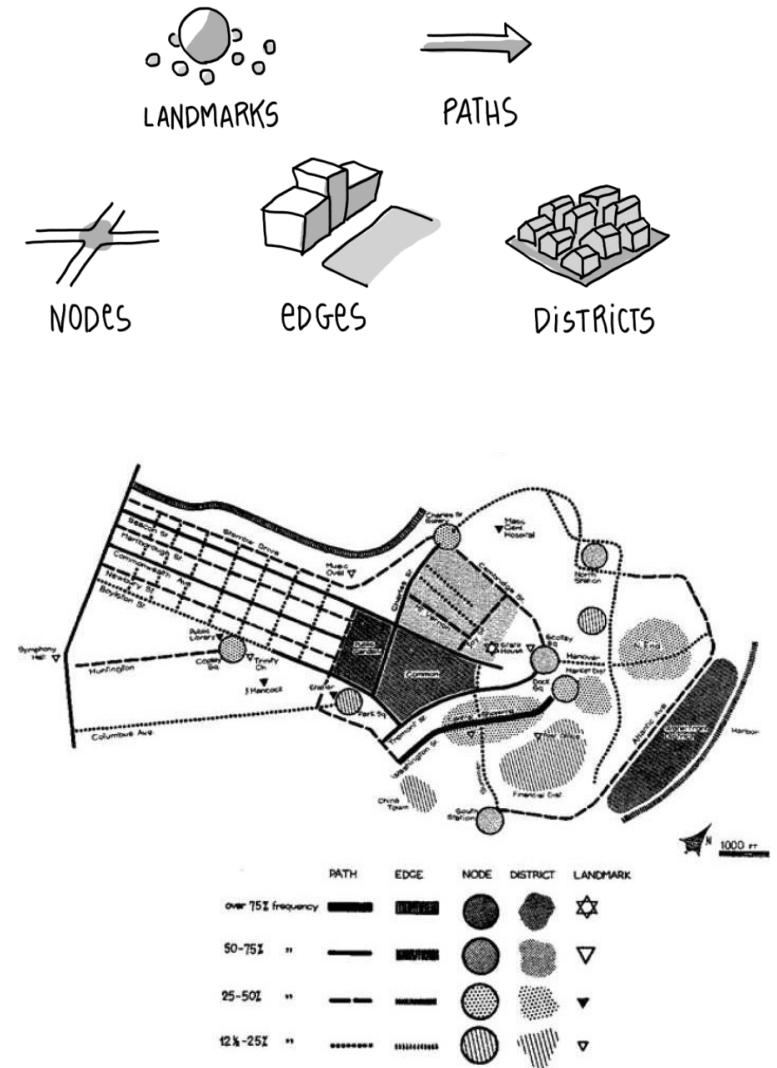
SITE ANALYSIS

THE KEVIN LYNCH MAP

'The image of the city is a combination of physical reality and mental organization.'

The physical arrangement of a city has a profound impact on how we perceive and navigate through it.'

KEVIN LYNCH

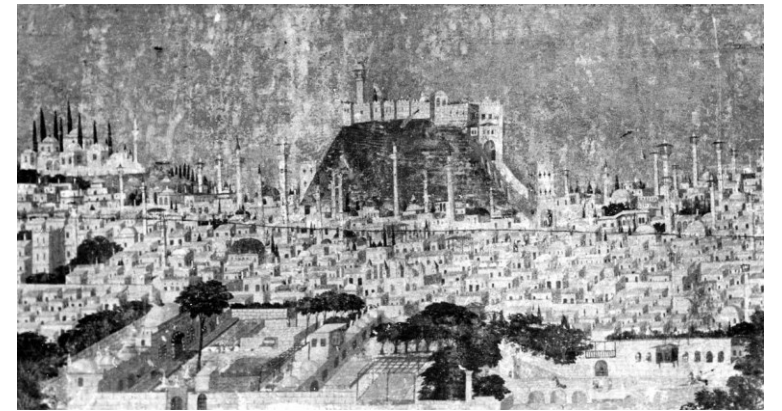


Which elements define Aleppo's urban identity?



URBAN GENIUS LOCI

The element of the path in the Old City of Aleppo comes in the form of a labyrinthine-like street network with organic patterns. The dense urban fabric has lots of narrow alleyways. In Aleppo, landmarks such as the serve as both practical waypoints and cultural key points.



MATERIALITY AND DETAIL

The Aleppine limestone's warm tones help in reflecting sunlight. Its durability and insulating qualities fit the local climate as well. Craftsmanship of the Old City of Aleppo's architecture can be seen in the detailed stone carvings and ornamentation that are for example on facades, arches, and doorways. These elements often have geometric patterns, arabesques, and floral motifs, which shows the artistic traditions and technical skills that were passed down through generations, mostly from the Ayyubid rule to the Mamluk rule.





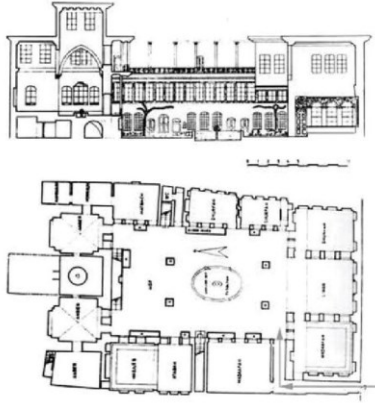
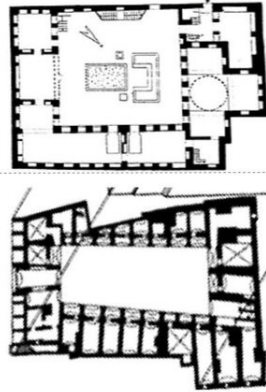
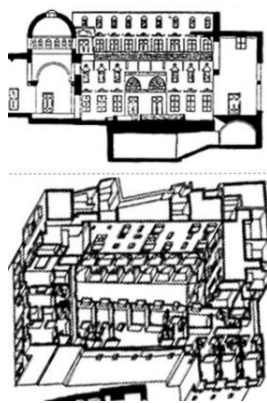
THE MASHRABIYA WINDOW

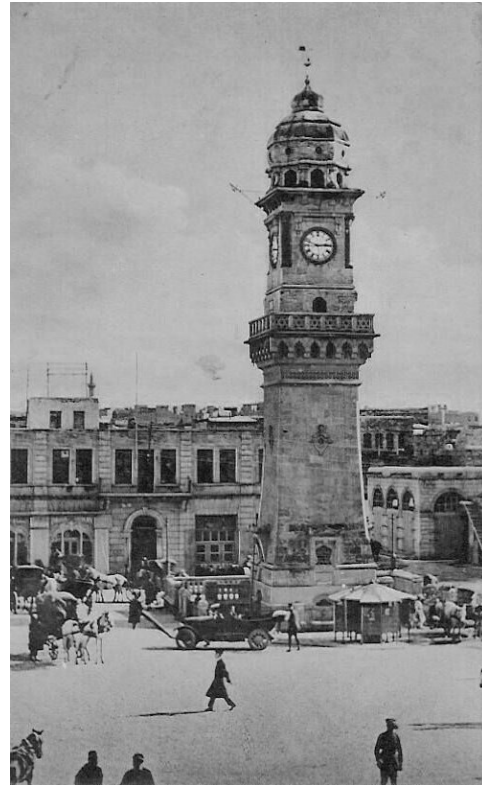
The mashrabiya is a traditional architectural feature that can be found in many of Aleppo's historic buildings, particularly in the Old City and its traditional courtyard houses. It is a wooden lattice window or sometimes comes in the form of a balcony, often enclosed and projecting from the façade, which has both a functional and aesthetic purposes.

In Aleppo, mashrabiya were commonly seen in Ottoman-era houses they played an important role in climate control, privacy, and social customs. The wooden screens allow for natural ventilation, helping cool interiors during the hot summers by allowing airflow while keeping the sun out. They also provide privacy, particularly for women in traditional households, allowing them to observe the street without being seen.

COURTYARD TYPOLOGIES

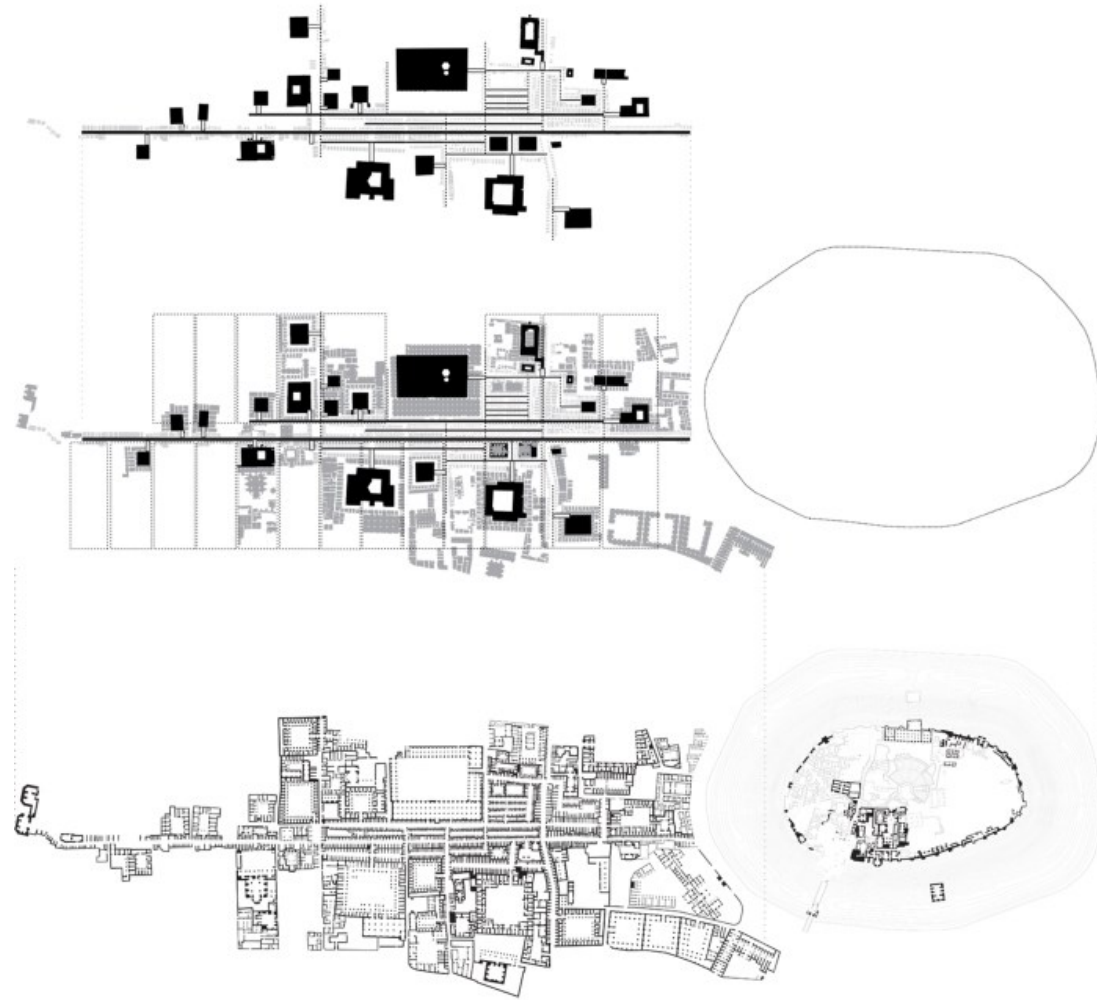
Courtyard houses, an integral part of Aleppo's residential urban fabric, especially in the Old City are designed with a balance of privacy and communal living while addressing the climatic needs of the region. These houses are typically inward-facing, with rooms organized around a central courtyard. The courtyards often include elements such as a fountain, trees, or seating areas, creating microclimates that help regulate temperature in the hot environment.



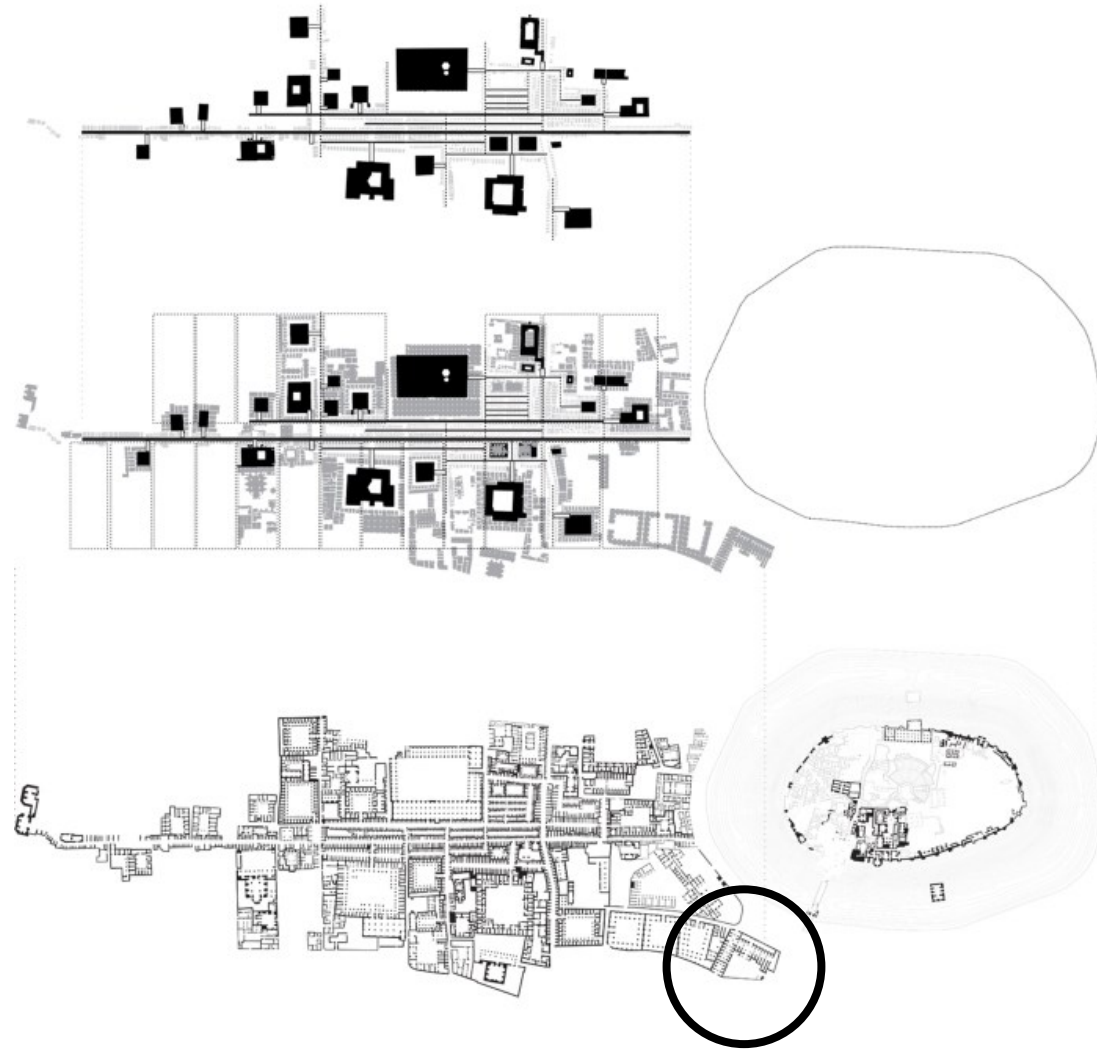


PUBLIC SPACES AND SPATIAL ORGANIZATION

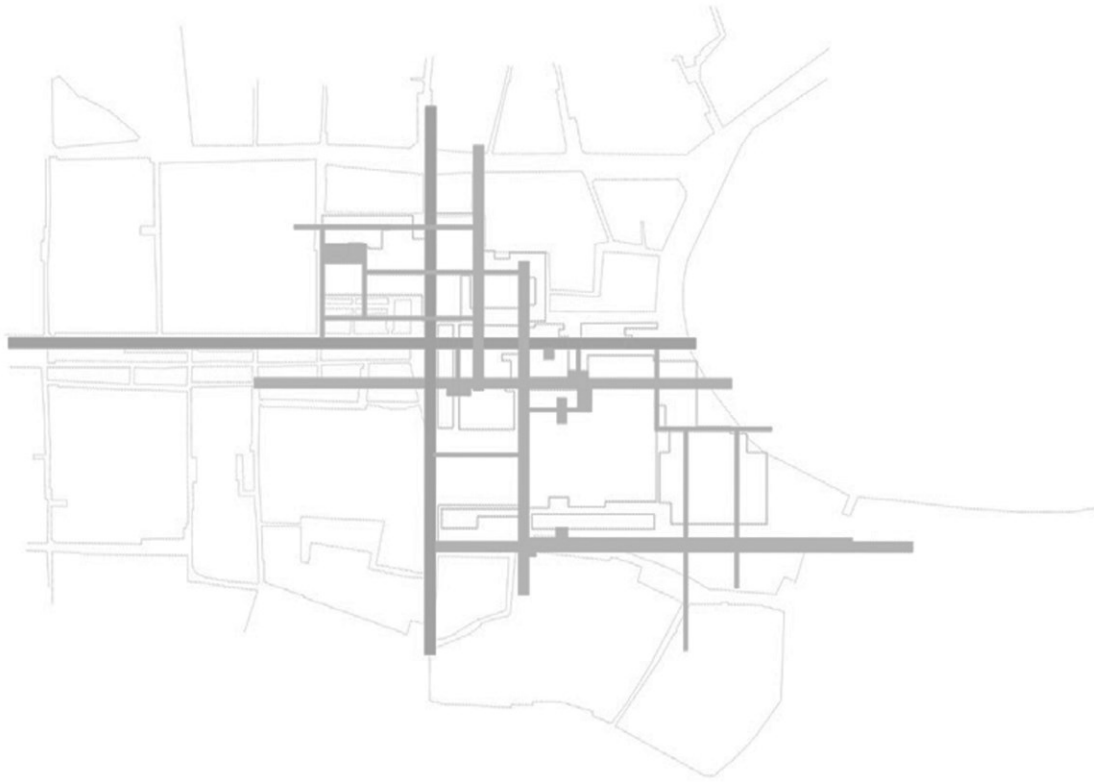
Aleppo's urban fabric is characterized by a dense network of organic, narrow streets, particularly in the Old City. This spatial organization promotes human interactions and provides natural shading, which reflects the city's adaptation to its environment. Traditional neighborhoods (haras) were organized around communal or public spaces, such as mosques or small markets, which also encourages a strong sense of community. Al-Madina Souk, one of the world's largest covered markets, connects to various districts as well and leads to landmarks such as the Citadel



SOUK STRUCTURE
BY FLAVIO M.

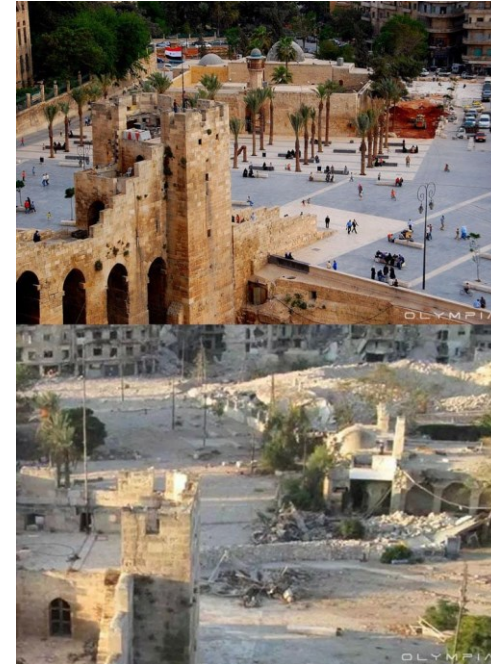
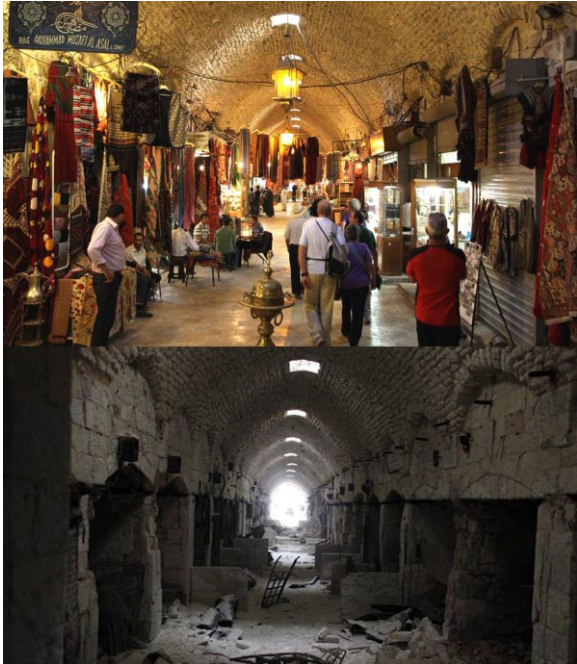


SOUK STRUCTURE
BY FLAVIO M.



CONTINUING ALEPPO'S TYOLOGIES
LINEAR SOUK STRUCTURE & COURTYARDS

How has the war impacted the site's urban fabric?



BEFORE VERSUS AFTER PHOTOGRAPHS ALEPPO CITY CARLON CITADEL HOTEL, GREAT MOSQUE, ALEPPO SOUK, MIXED USE STREET BLOCKS SOUTH OF THE CITADEL, DAR AL IFTA

Tourism activity (half of pre-crisis employment) had **stopped**

The **destruction** and **looting** of the souq, the degrading condition of the archeology, and the **lack of trade** threatened **future recovery**

Remaining population during the war were almost totally **jobless**

Many of the **school buildings** in the area have been damaged. This is important as the university of Aleppo is the second biggest of Syria, having around **60.000 students**

More than a **100 cultural buildings** (houses, mosques, churches, Khans, markets and monuments) have been reported as **damaged**

Shops had gotten **burned** or **looted**, and most of the city services and infrastructure got damaged

In total, almost 80% of the old city population had fled from the center



WAR DESTRUCTION ON A TERRITORIAL AND URBAN SCALE
BY CHIZZONITI, D.



Stated from the article Ancient handicrafts about to vanish in Syria's Aleppo (North Press Agency, 2021):

'The retired teacher from the ancient city of Aleppo Mansour Qabbani believed that it is not only the war that affected the city, but also the government negligence and policies.

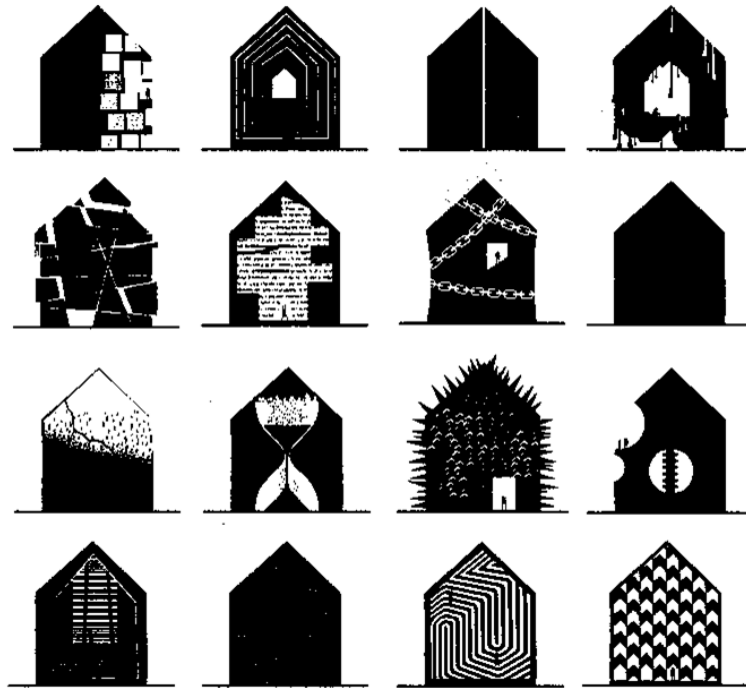
The government is not concerned about reviving and supporting handicrafts and so far they have neither rehabilitated workshops nor serviced the ancient markets. Moreover, there is no supportive program for craftsmen in order to encourage them to back to their professions, according to Qabbani.'

"Pre-war time, when we were walking inside these markets, we saw fathers teaching their sons about work secrets and skills, but unfortunately, most of the handicrafts were lost and some others are about to vanish," Qabbani recalled.

"Heritage and handicrafts of Aleppo should be revived because they are not only a civilizational legacy of its people but also a humanitarian one," he added.'

Which role can public architecture play in preserving Aleppo's cultural memory and supporting community recovery during times of political instability?

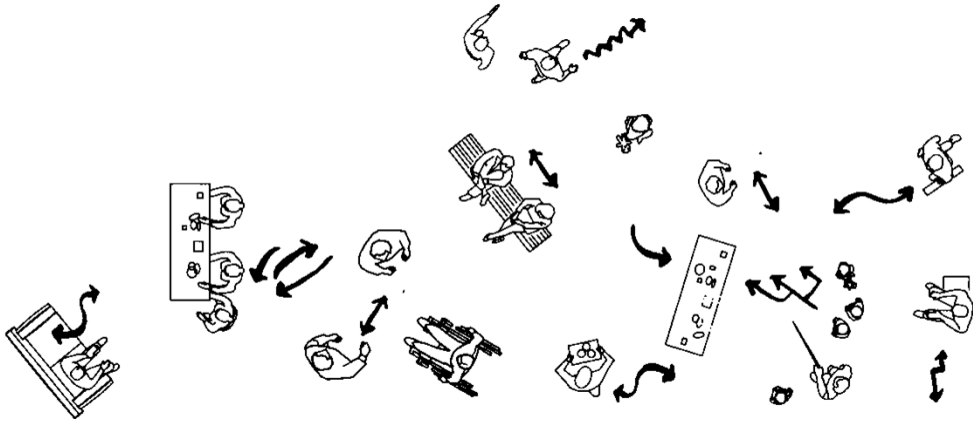
PRESERVING CULTURAL MEMORY THROUGH PUBLIC ARCHITECTURE



PUBLIC ARCHITECTURE AS A SPACE FOR COLLECTIVE HEALING

Public buildings can, especially in a city that has been divided by war, serve as spaces for healing. Spaces with functions such as schools, community centers, souqs, or cultural institutions can be designed to bring people together and strengthen the unity. Public architecture can include for example memorials or exhibitions, which do acknowledge the city's war-experiences while emphasizing its resilience. An example of this is the Hiroshima Memorial Park. Such a space provides opportunity for reflection and dialogue, which can help communities process their shared experiences.

SUPPORTING COMMUNITY RECOVERY THROUGH PUBLIC ARCHITECTURE



REBUILDING SOCIAL FABRIC

Public architecture plays an important role in rebuilding the social fabric of a city. Schools and libraries, for example, can serve as spaces for learning but also cultural preservation. Having cultural programs in these spaces, such as workshops or maybe history lectures, can strengthen sense of community and at the same time help younger generations reconnect with the city's history and traditions.

SUPPORTING COMMUNITY RECOVERY THROUGH PUBLIC ARCHITECTURE



PUBLIC ARCHITECTURE AS SOCIAL AND ECONOMIC HUBS

Markets, cultural institutions, and other public buildings can act as important places for both economic recovery and social cohesion. For example, the rebuilding a souq like the Al-Madina Souk (which is already taken place!) would not only restore an important part of Aleppo's identity but would also provide economic opportunities for the local artisans, traders, and small businesses.

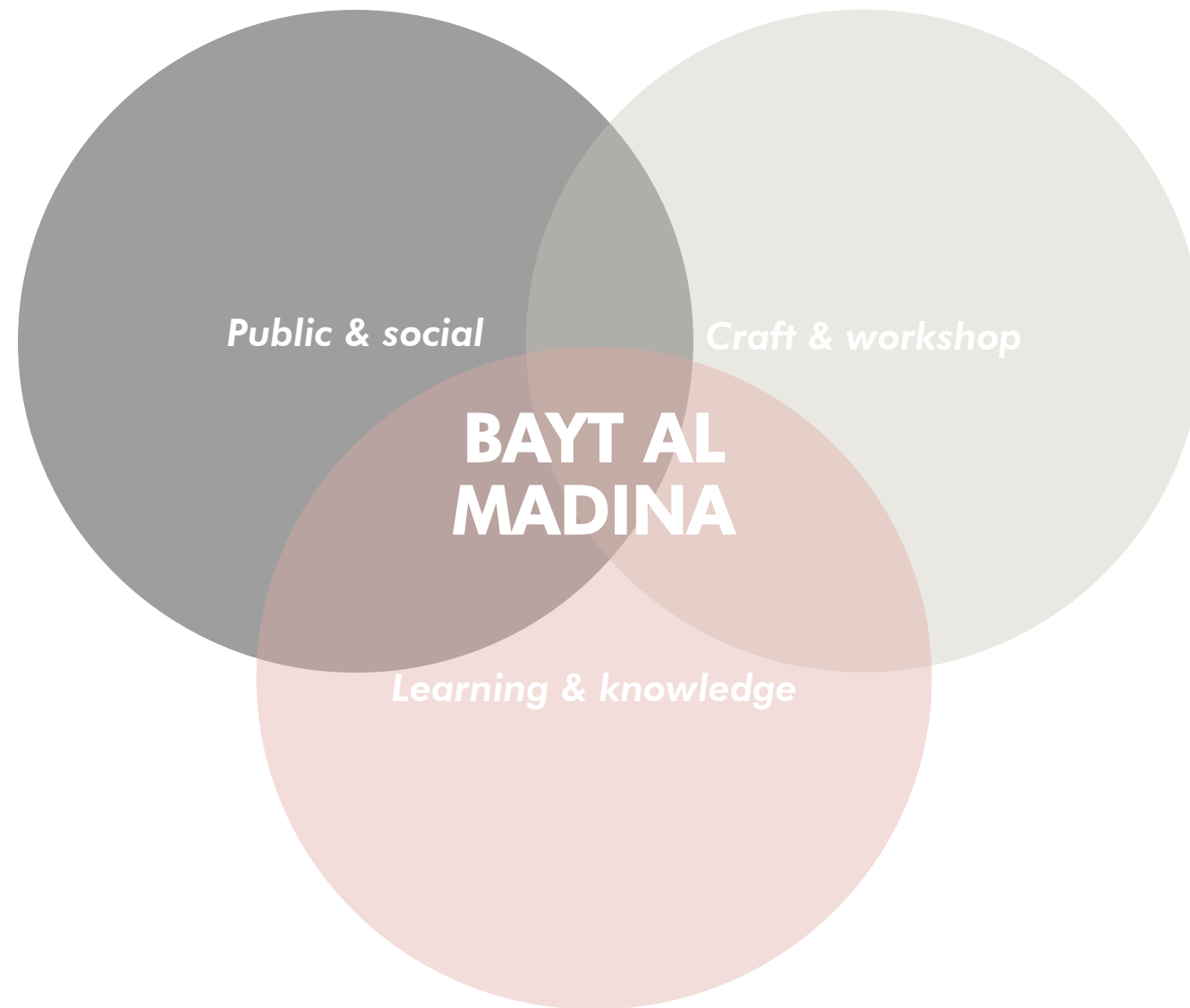
AN INTERSECTION POINT



DESIGN

Bayt al Madina,

بيت المدينة



Why a knowledge/learning/workshop/craft hub?

What makes it ideal for Aleppo and suitable in the context of the site?

Revives traditional crafts and skills

Aleppo has historically been a center of knowledge, trade, and craftsmanship, making this kind of hub a continuation of its historical role

This is not an imported concept, like a Western-style cultural center, but it's rooted in Aleppo's identity as a city of learning

Provides neutral spaces for learning and gathering

It focuses on education and skills applicable to all, avoids religious, political functions that might provoke tensions - a unifying space, fostering community interaction

Addressing post-war needs: economic and knowledge-based recovery

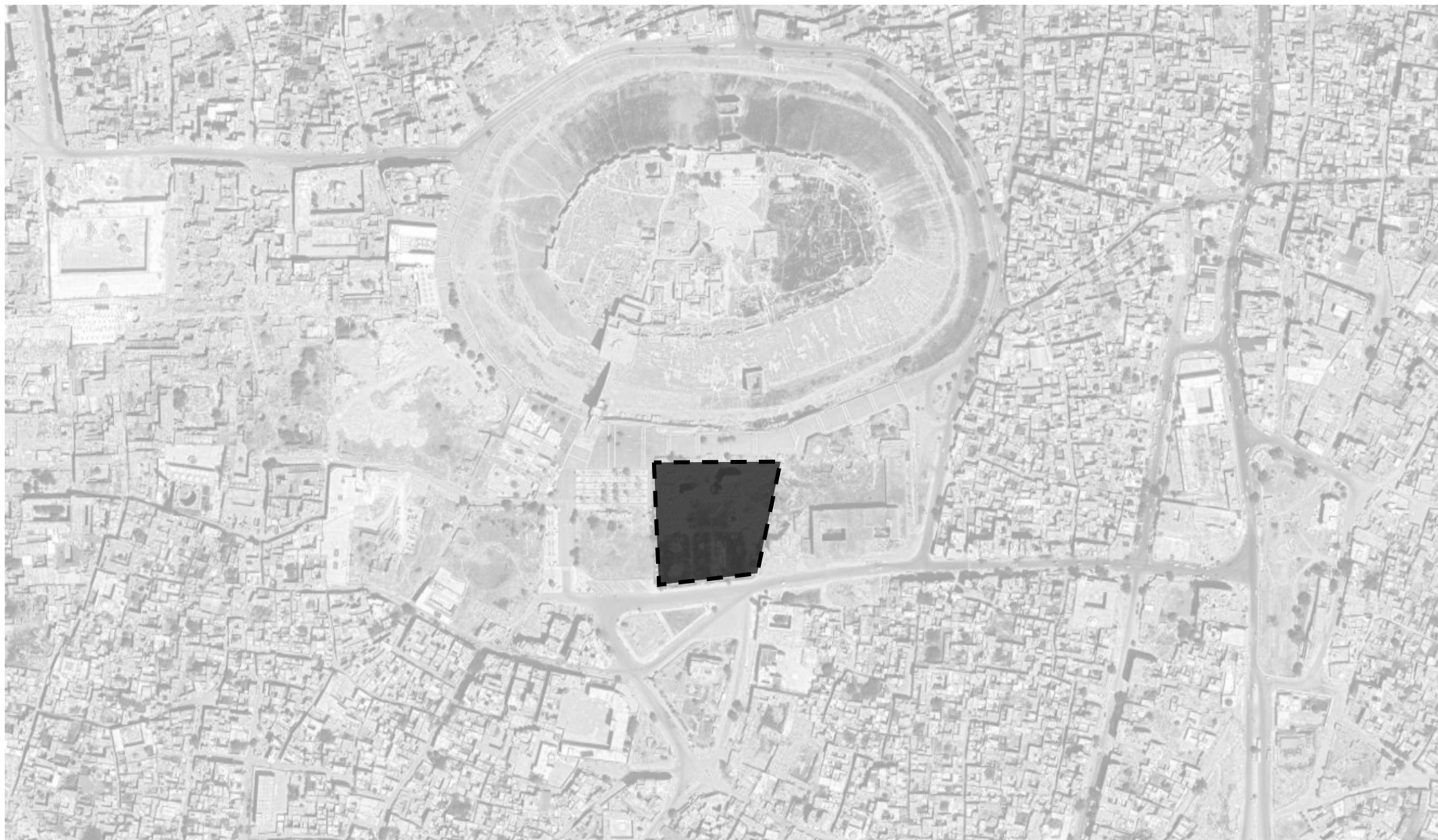
Honors Aleppo's heritage by reinterpreting its historic functions (Grand Serail) into a public, multi-functional design

Fills gaps left by destroyed educational and cultural institutions while avoiding repetition with souqs or purely civic buildings.

The building can serve as a hybrid, multifunctional design

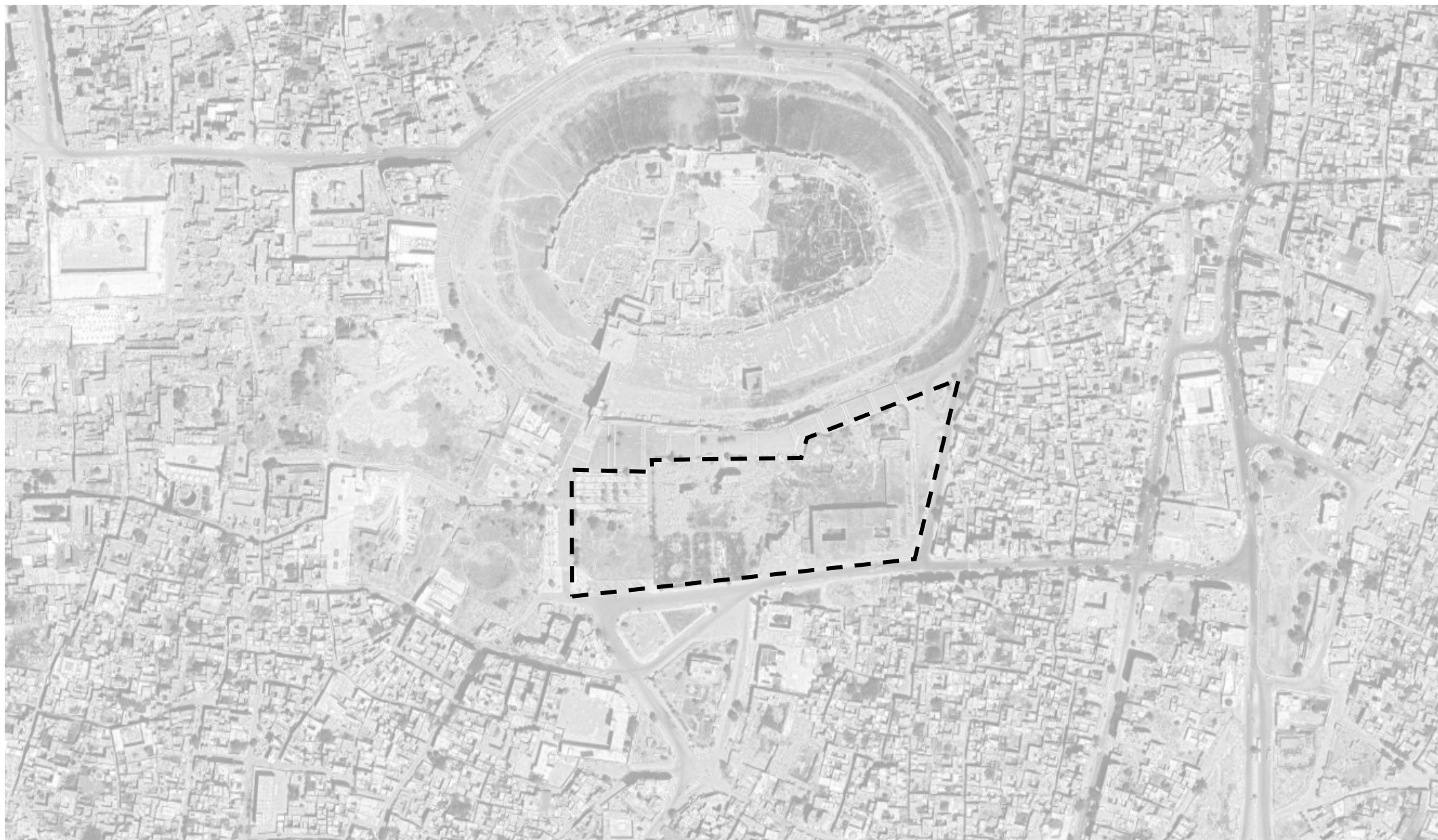
It compliments the Citadel, a symbol of Aleppo's resilience, by focusing on the city's future resilience through education and community recovery

SITE



PLOT
11.000 M2





STREET BLOCK
SITE



Hammam Yalbugha

Sultaniyeh mosque

Other buildings from the street block

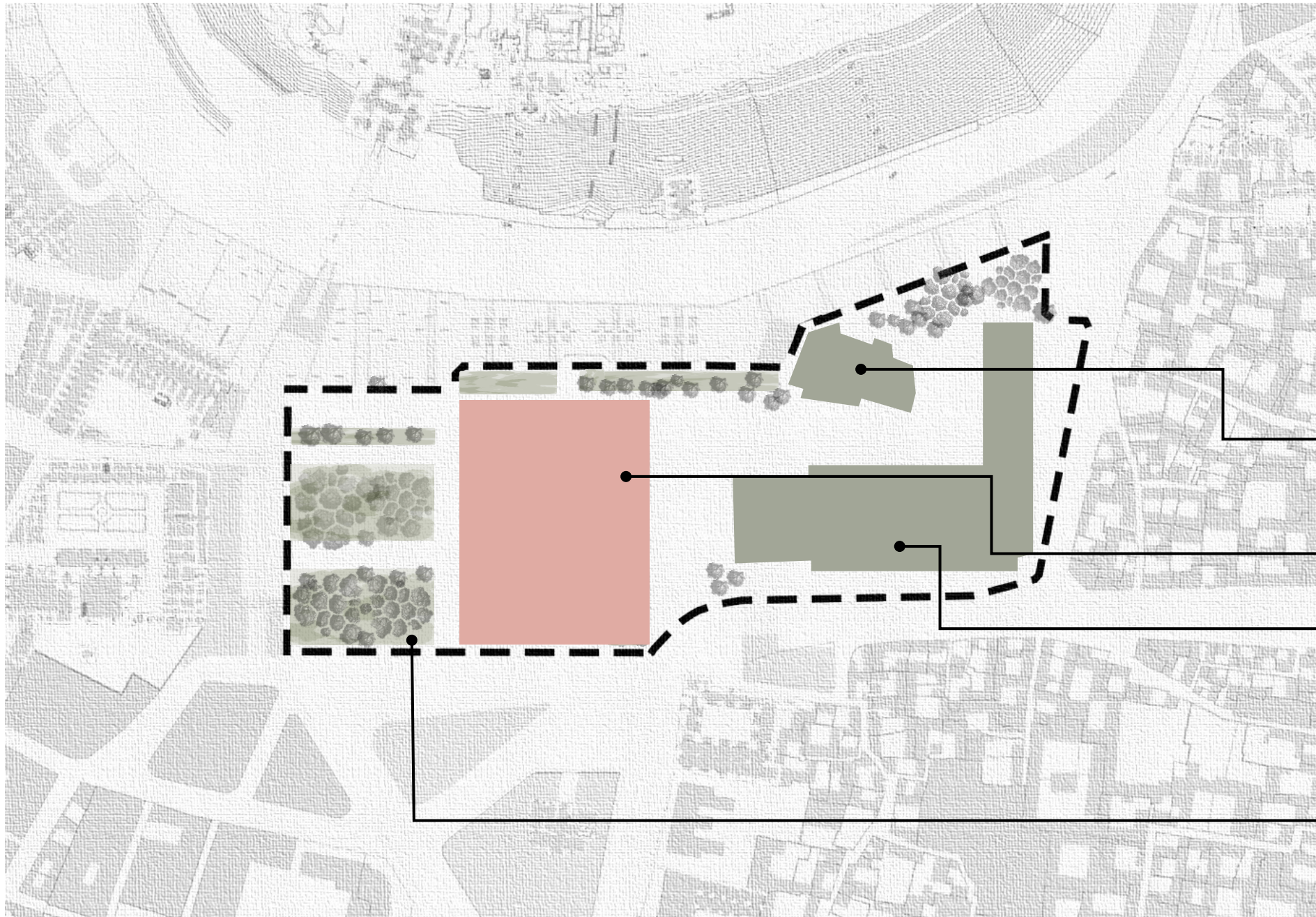


VIEW FROM CITADEL ON STREET BLOCK
2024

PLAN

SCHEMATIC OVERVIEW BAYT AL MADINA

- NEW STRUCTURES
- EXISTING STRUCTURES



HAMMAM YALBUGHA

BAYT AL MADINA

COURT HOUSE

PARK

SCALE 1:1000





GRAND SERAIL
BEFORE THE WAR



Bayt al Madina
1:500



AL SABIL PARK

PUBLIC PARK

SAADALLAH AL JABRI SQUARE

AL HATAB SQUARE

BAB AL FARAJ SQUARE

ALEPPO CITADEL

MOST IMPORTANT PUBLIC SPACES ACCORDING TO LOCALS
MAINLY PARKS AND SQUARES



2x times park

2 times non-green open space

AL SABIL PARK

PUBLIC PARK

SAADALLAH AL JABRI SQUARE

AL HATAB SQUARE

BAB AL FARAJ SQUARE

ALEPPO CITADEL

'the parks are nice but there are not enough'

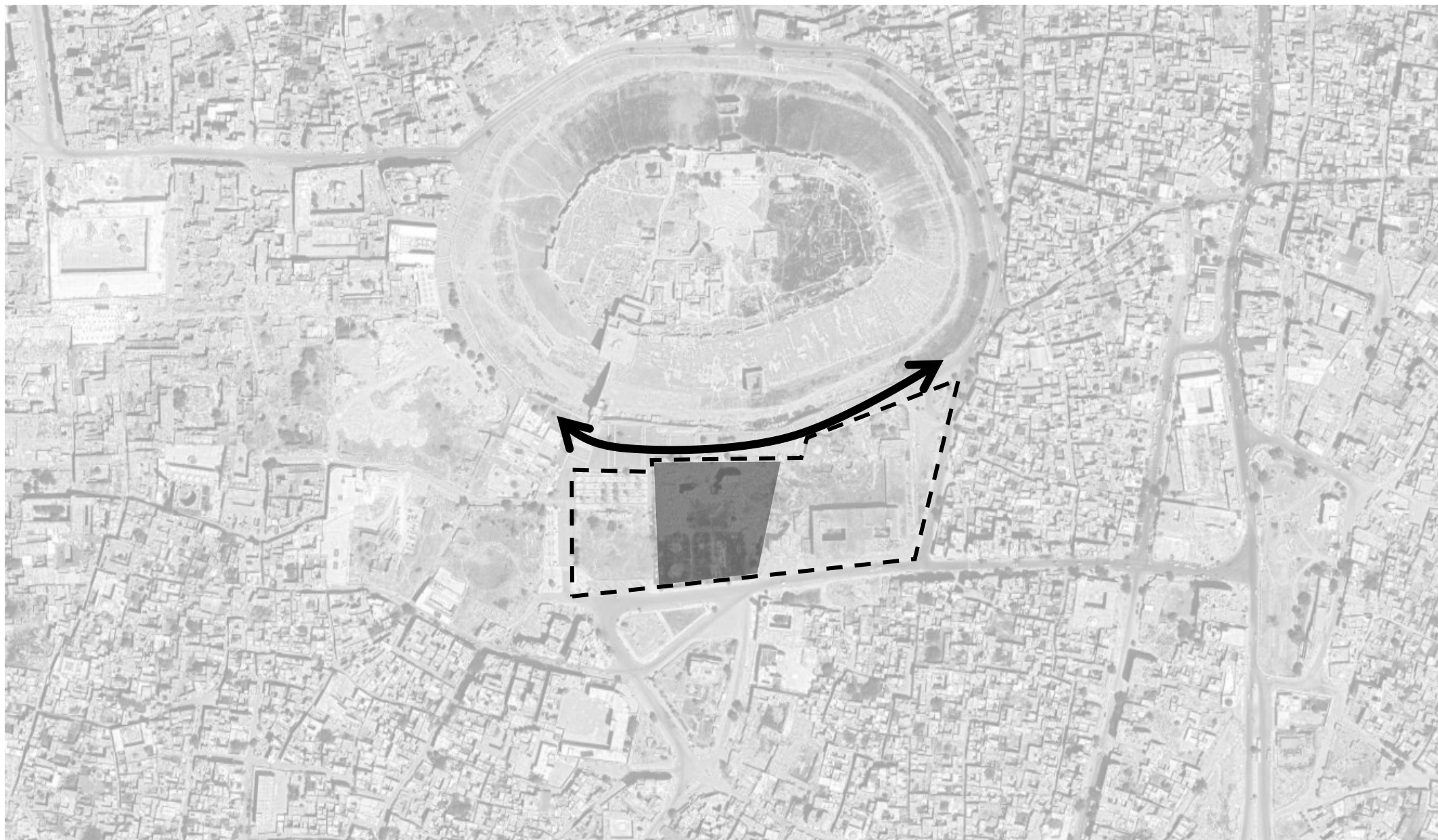
'the spaces do not have much functions'

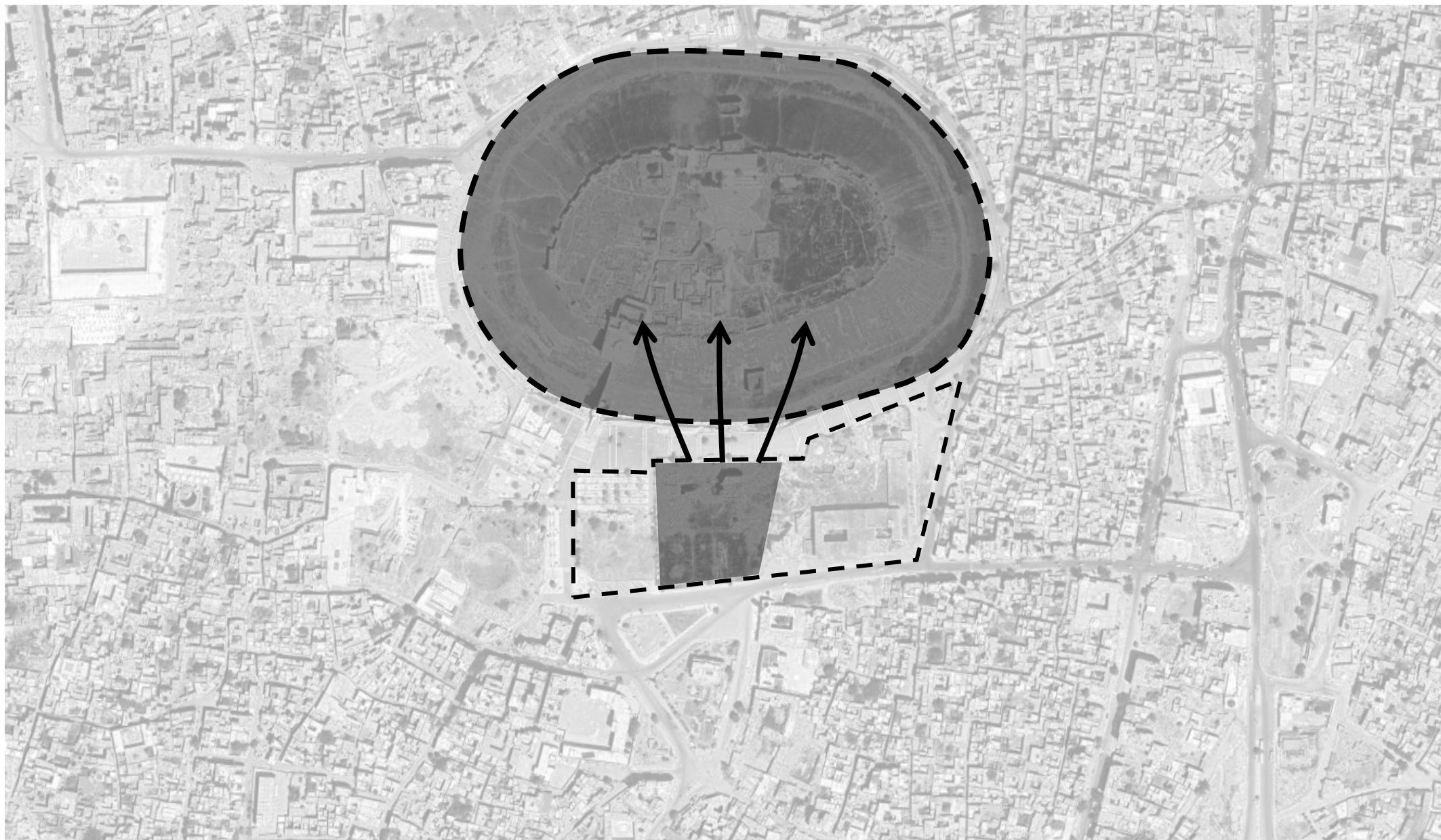
- Locals on their favorite public spaces in the city

MOST IMPORTANT PUBLIC SPACES ACCORDING TO LOCALS
MAINLY PARKS AND SQUARES

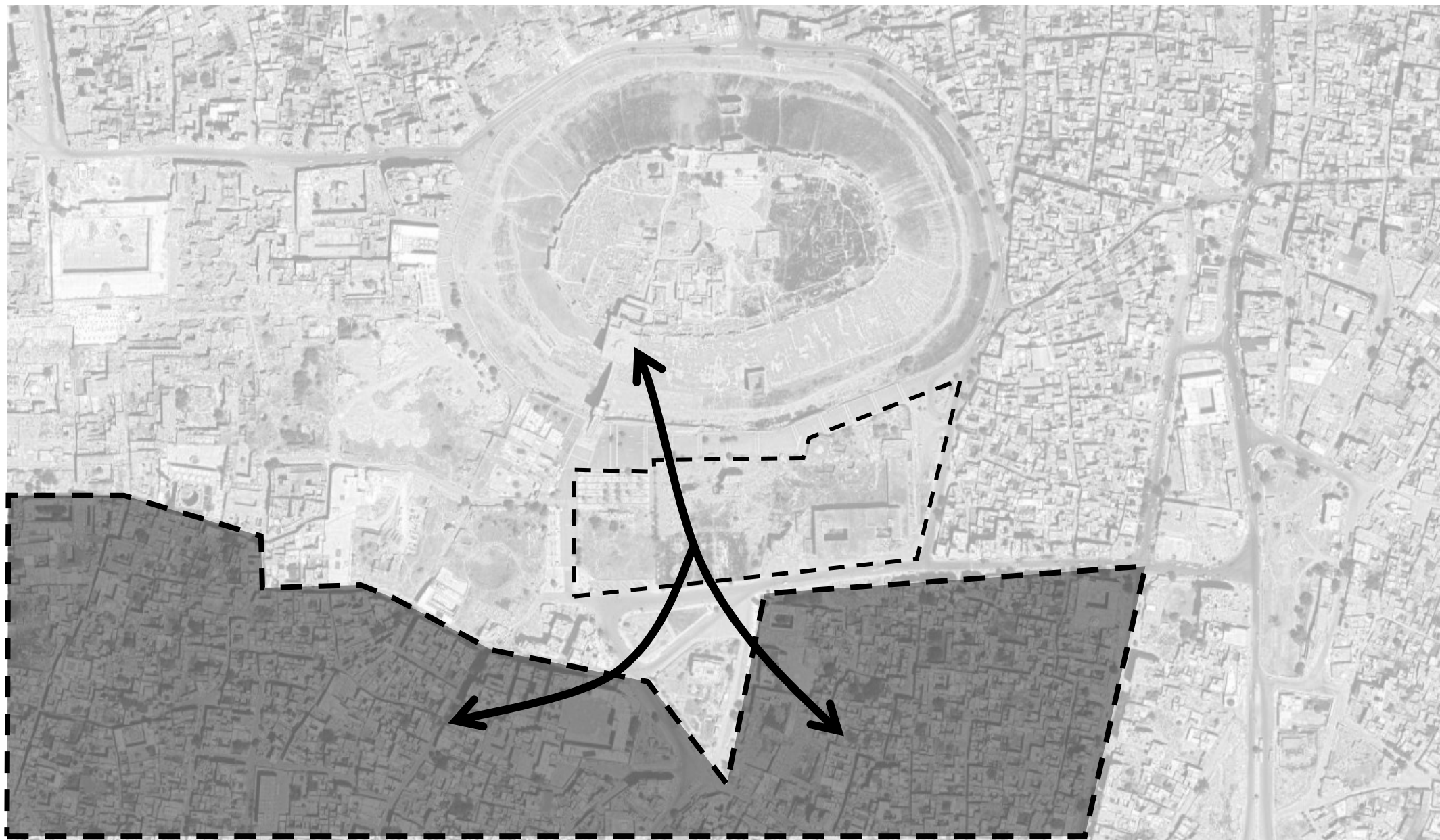


CITADEL PERIMETER
BEFORE THE WAR





COMPLIMENTING THE CITADEL
SITE CONTEXT



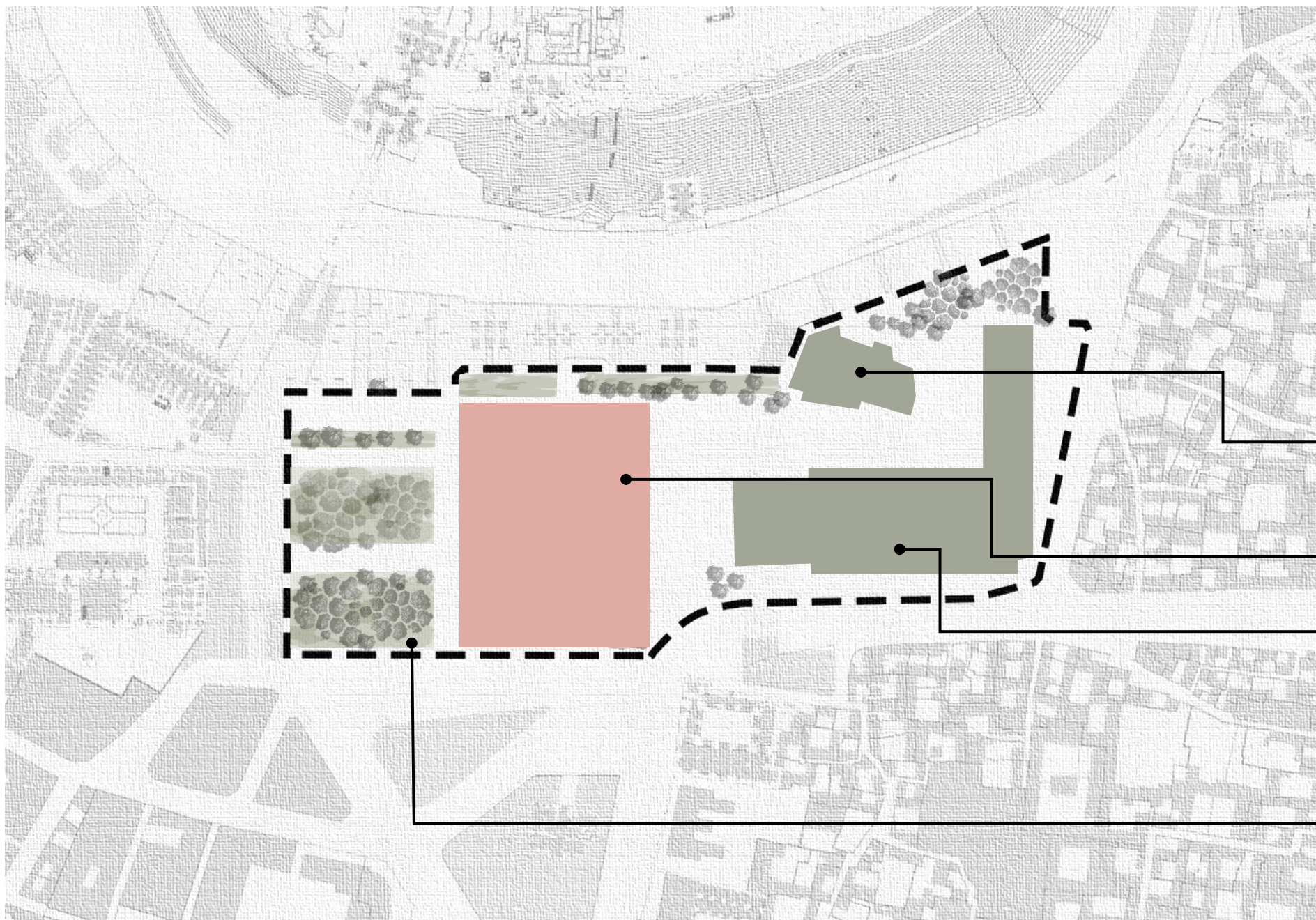
A TRANSITIONAL BLOCK
SITE CONTEXT



GRAND SERAIL
BEFORE THE WAR

SCHEMATIC OVERVIEW BAYT AL MADINA

- NEW STRUCTURES
- EXISTING STRUCTURES



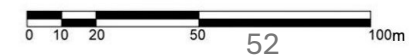
HAMMAM YALBUGHA

BAYT AL MADINA

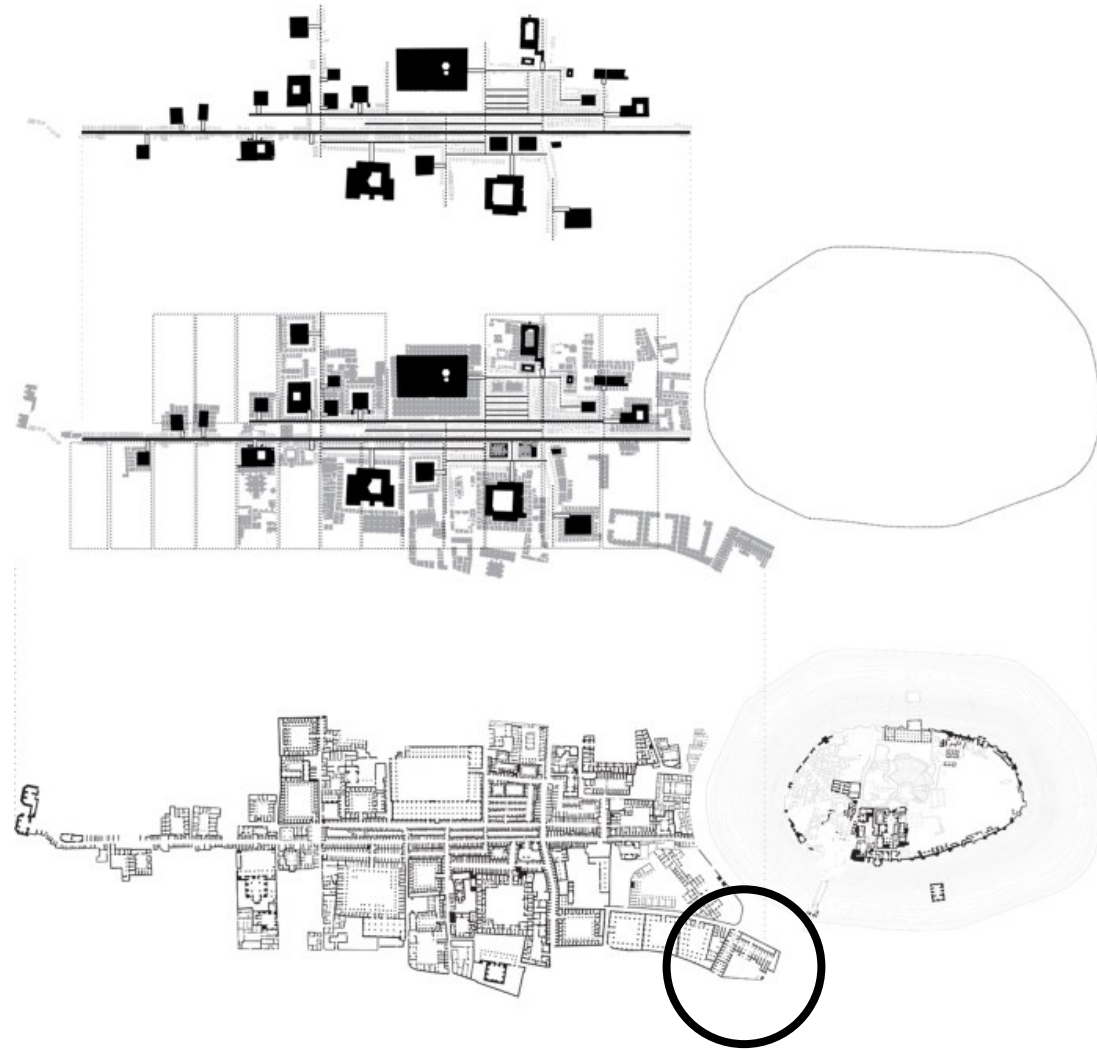
COURT HOUSE

PARK

SCALE 1:1000



52



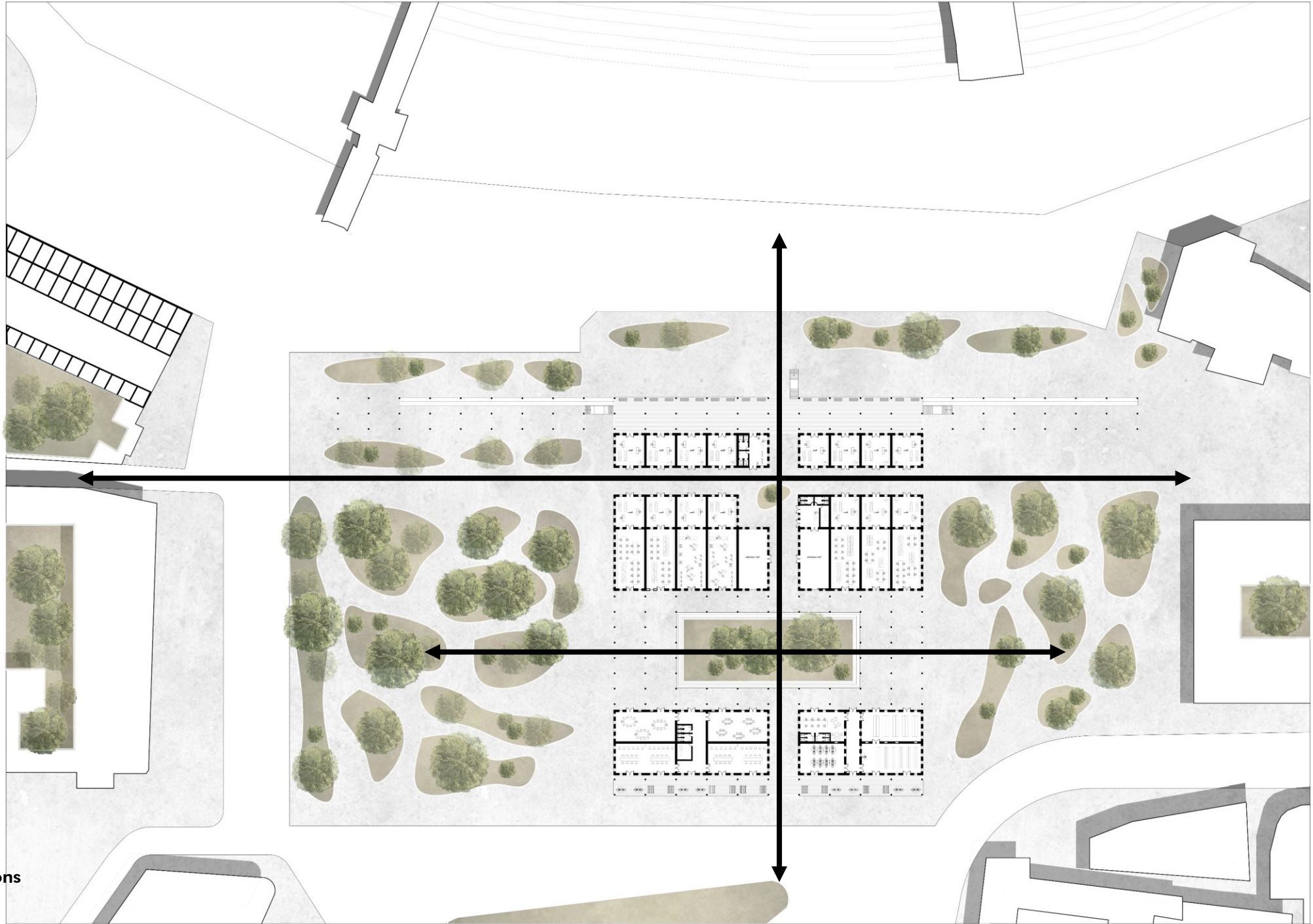
SOUK STRUCTURE
BY FLAVIO M.



Site plan
1:500

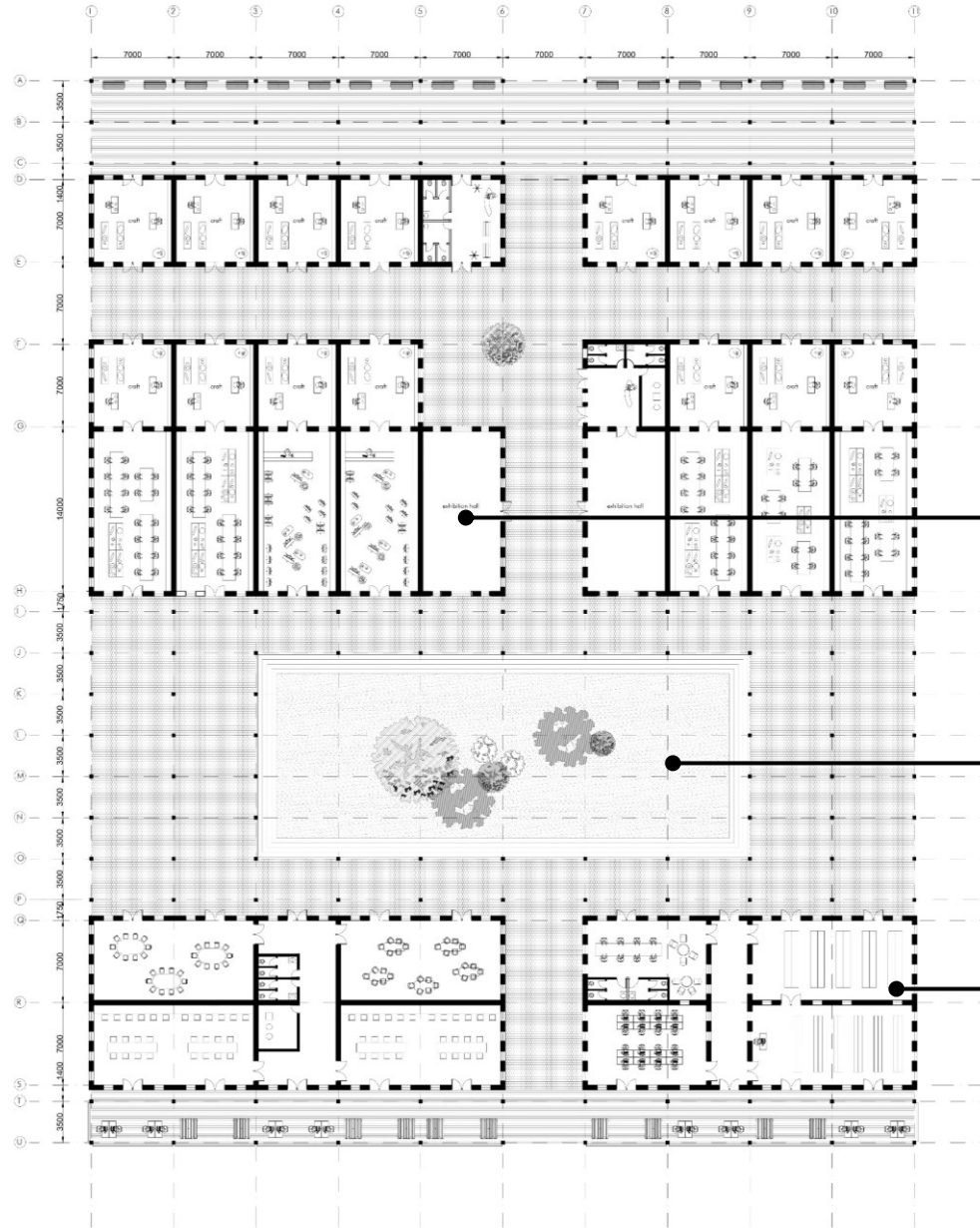


Urban connection
Souk – Bayt al Madina - Hammam



Urban connections
Other connections

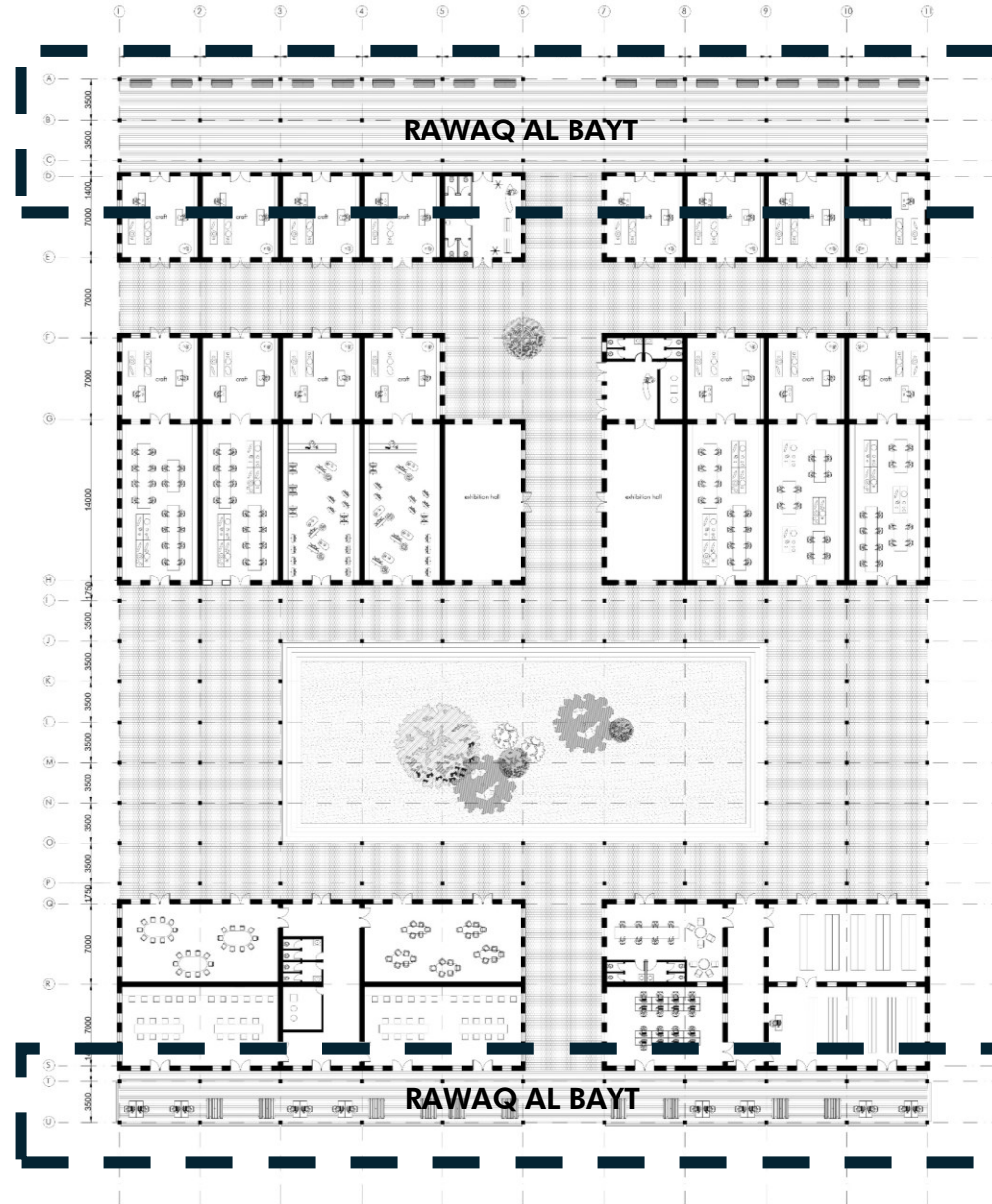




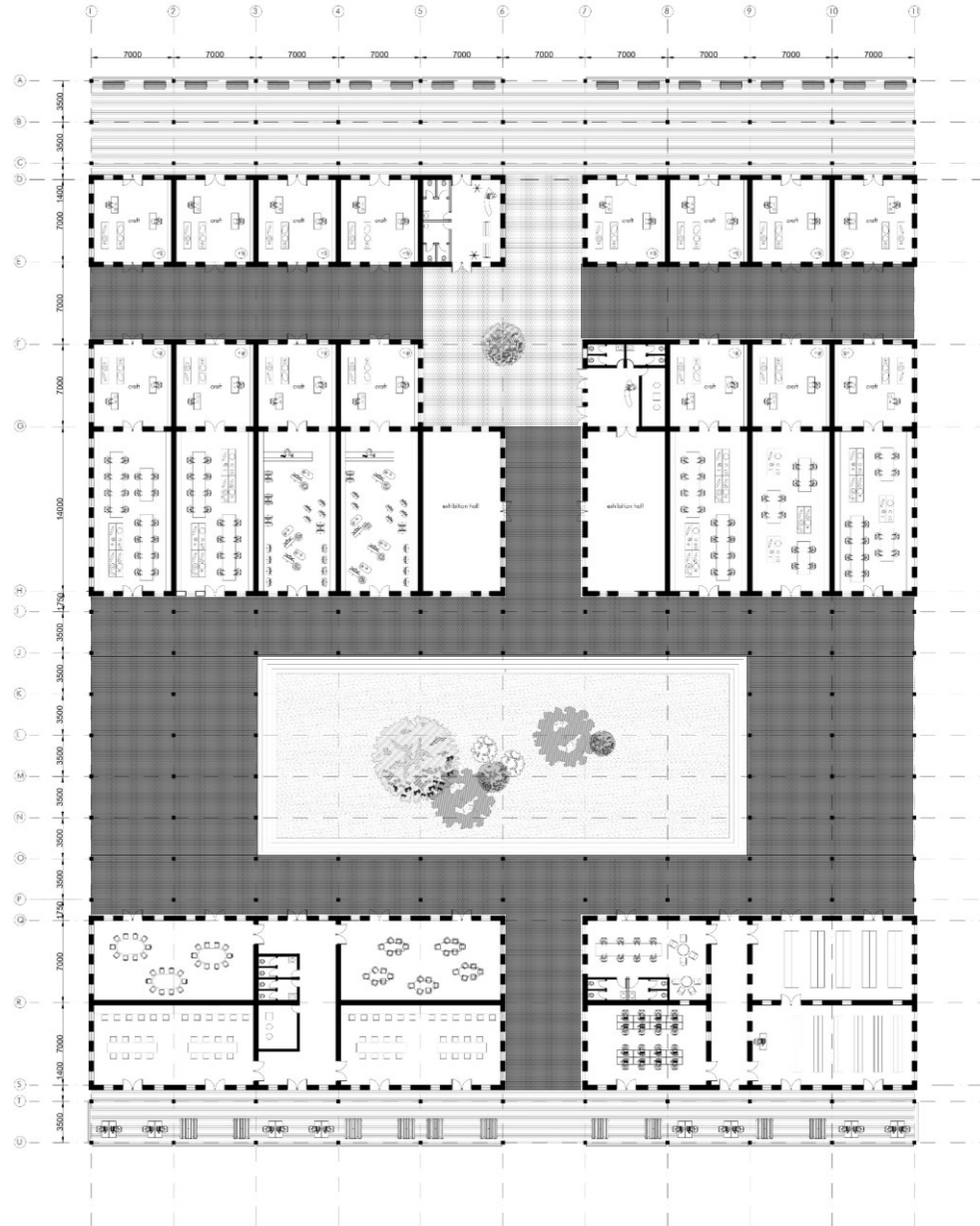
CRAFT/WORKSHOP

COURTYARD/HOFJE

LEARNING/KNOWLEDGE

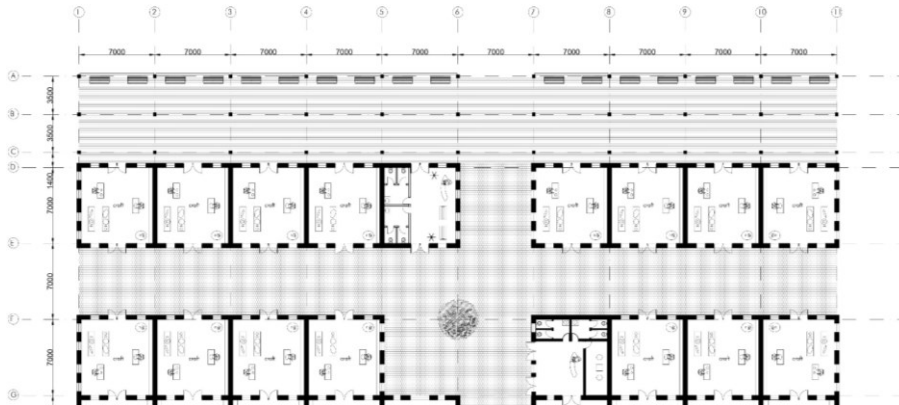


The 2 Rawaq al Bayt zones
1:200

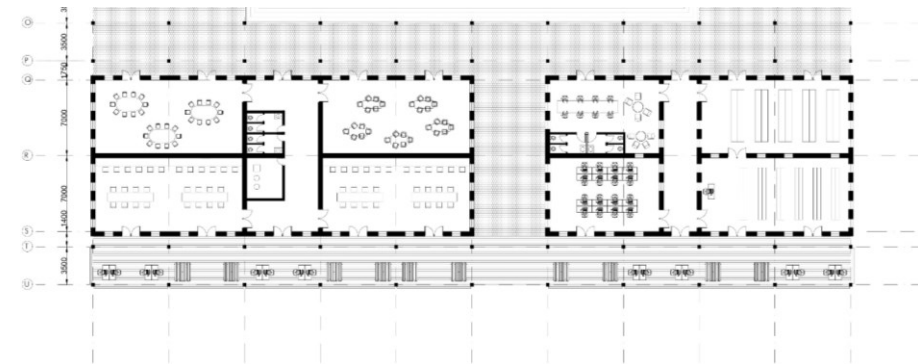


Non Rawaq al Bayt parts
Semi-open roof like the Rawaq al Bayt

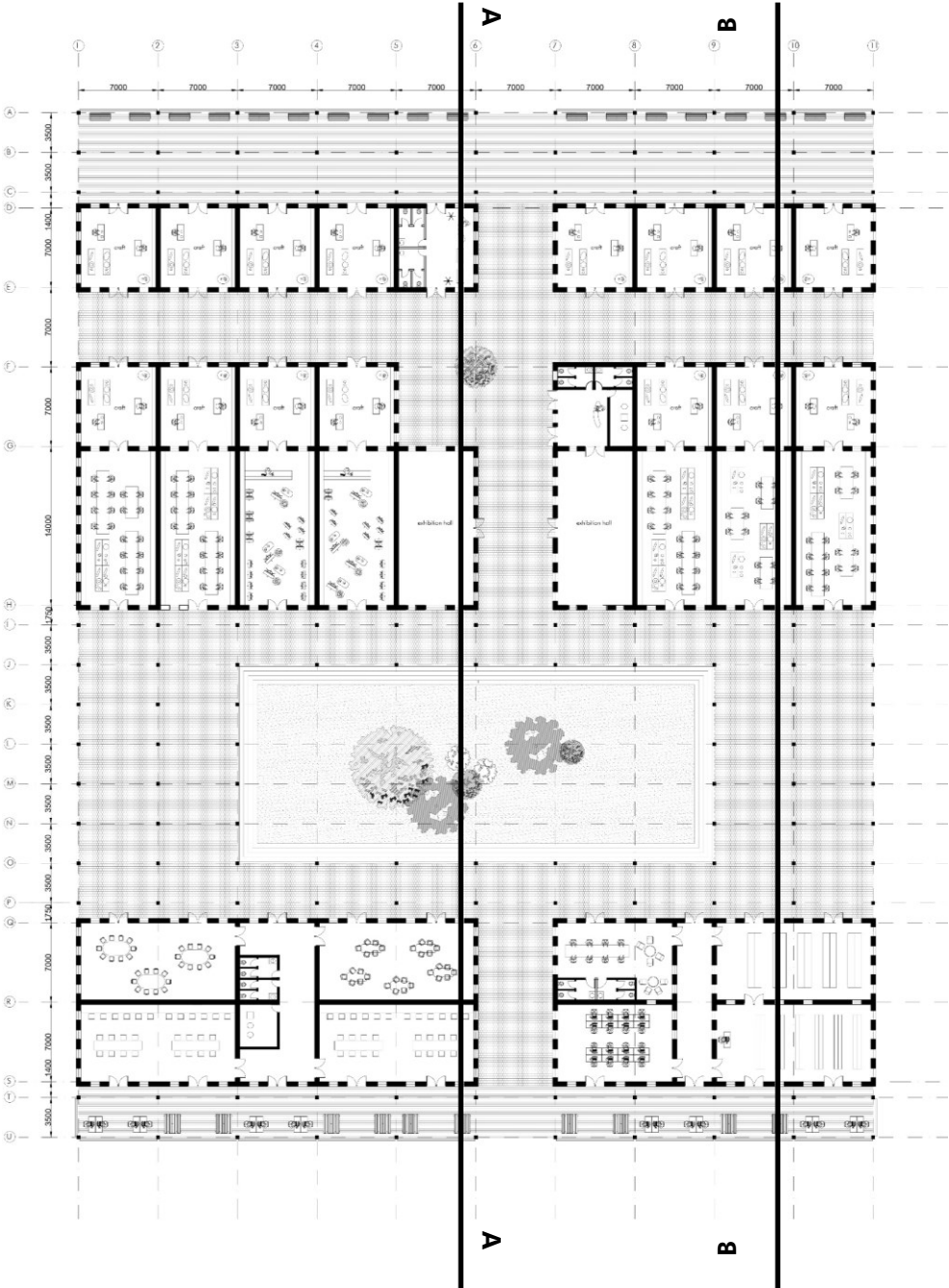
REFERENCE IMPRESSIONS RAWAQ AL BAYT PARTS



North side Rawaq al Bayt
Workshop/craft zone



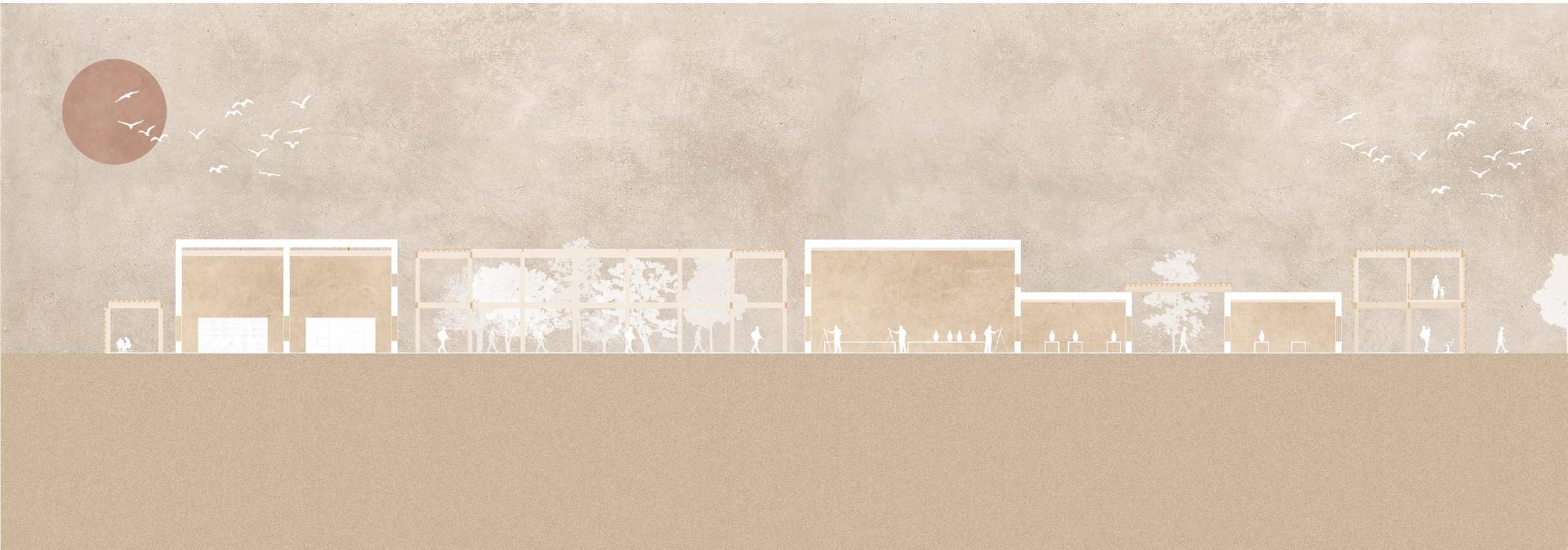
South side Rawaq al Bayt
Learning/knowledge zone

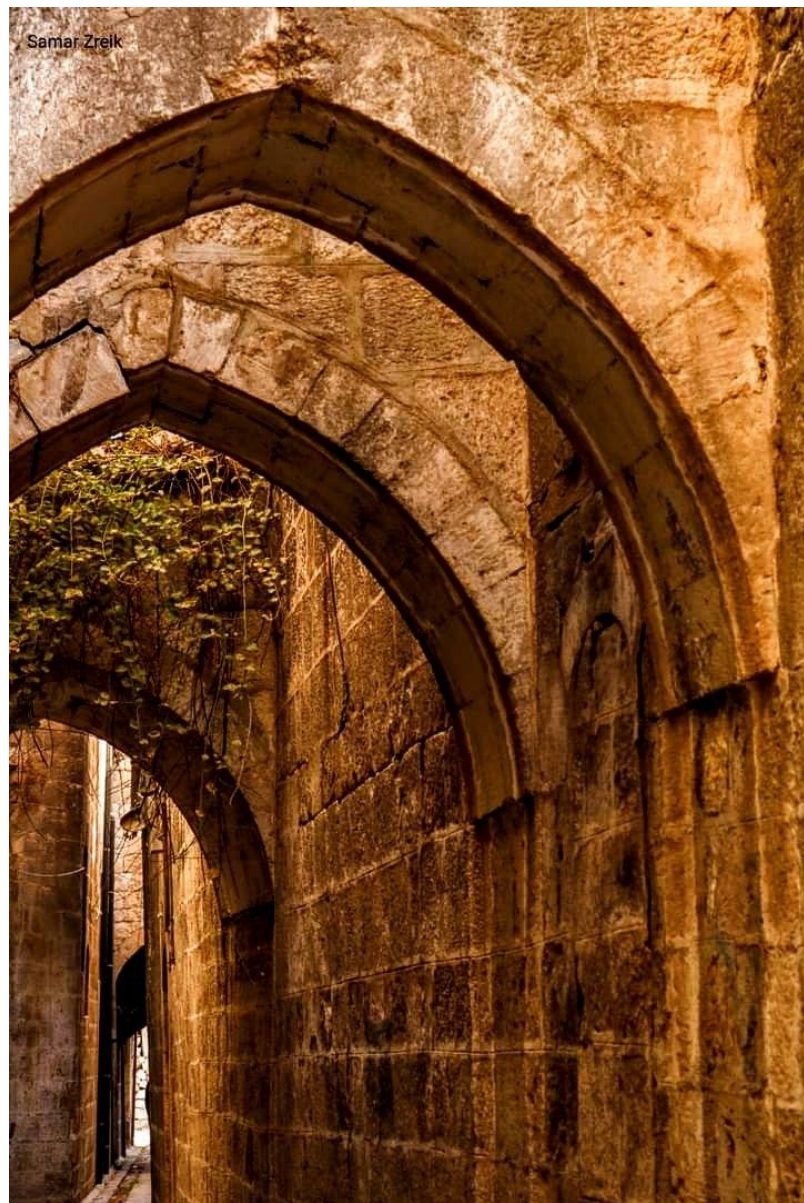


SECTION AA
BAYT AL MADINA



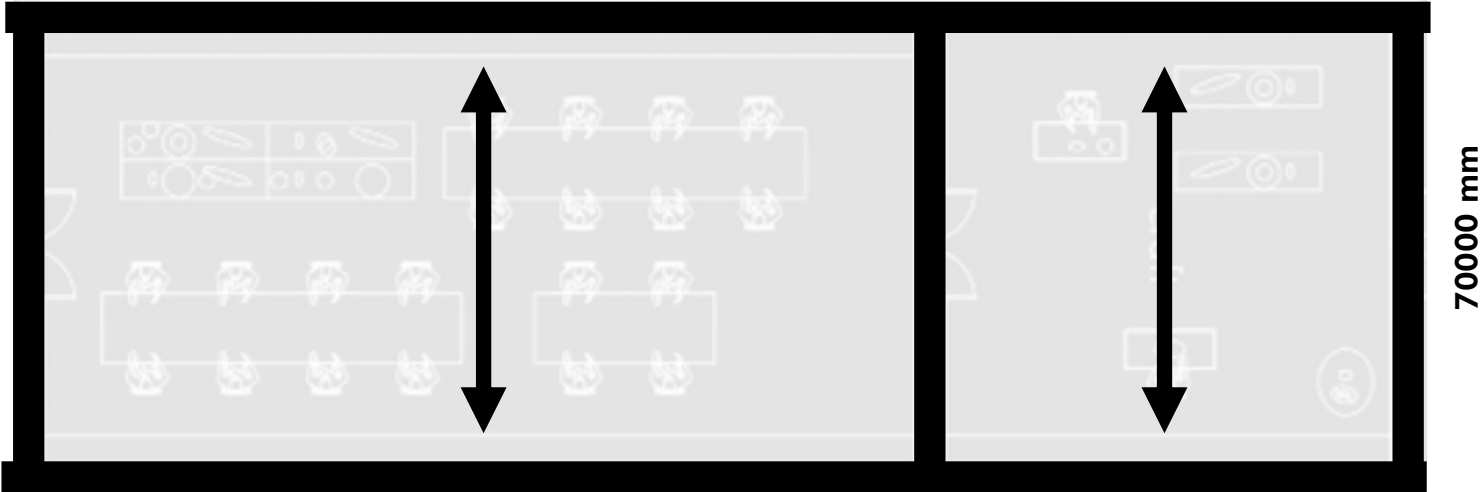
SECTION BB
BAYT AL MADINA





Materiality
Limestone and wood

PRIMARY SPAN



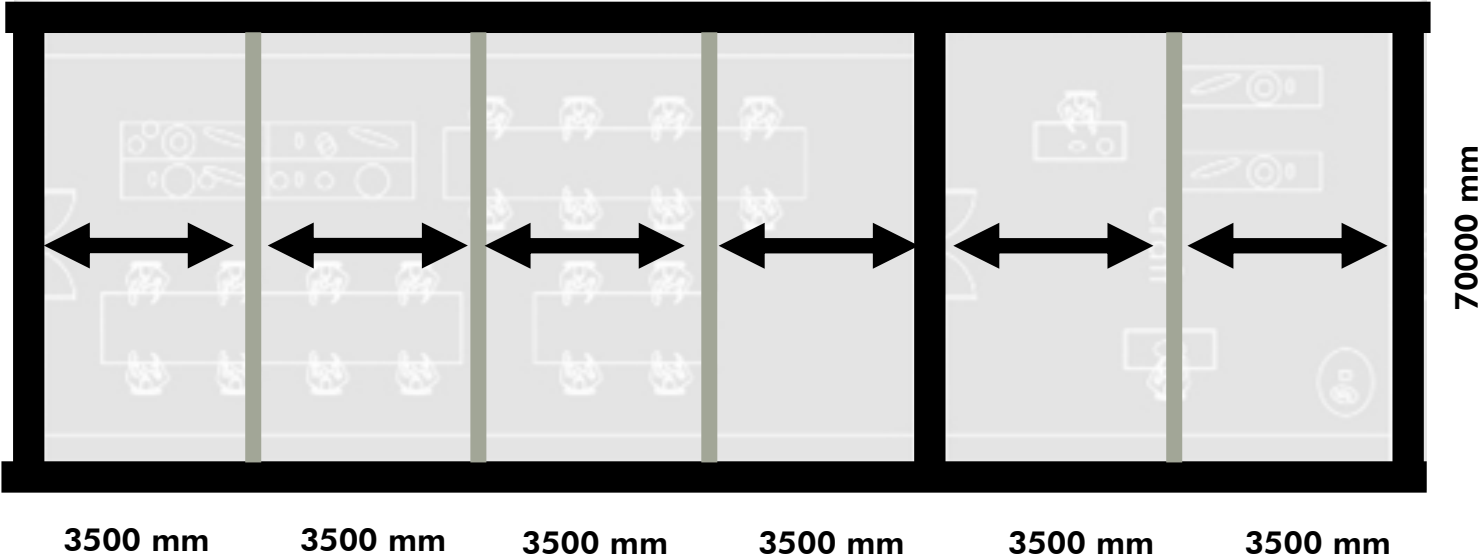
PRIMARY SPAN

Cross beams on limestone wall

15x40 cm – span 7000 mm



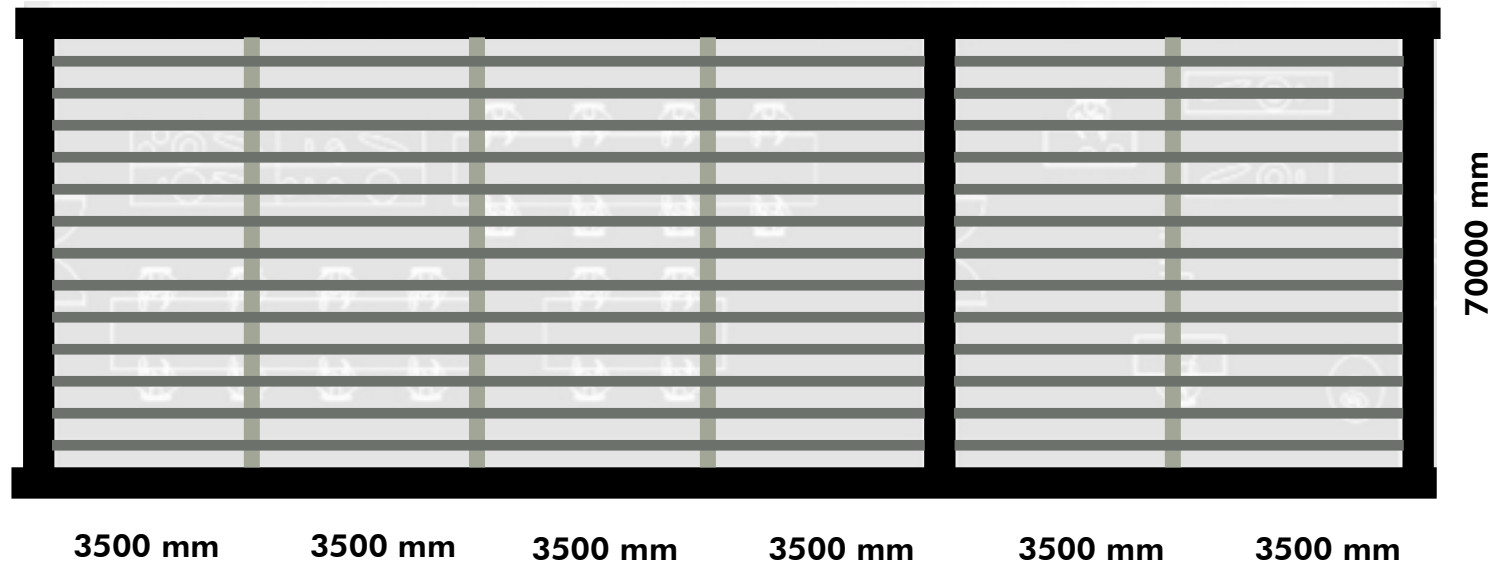
SECONDARY SPAN



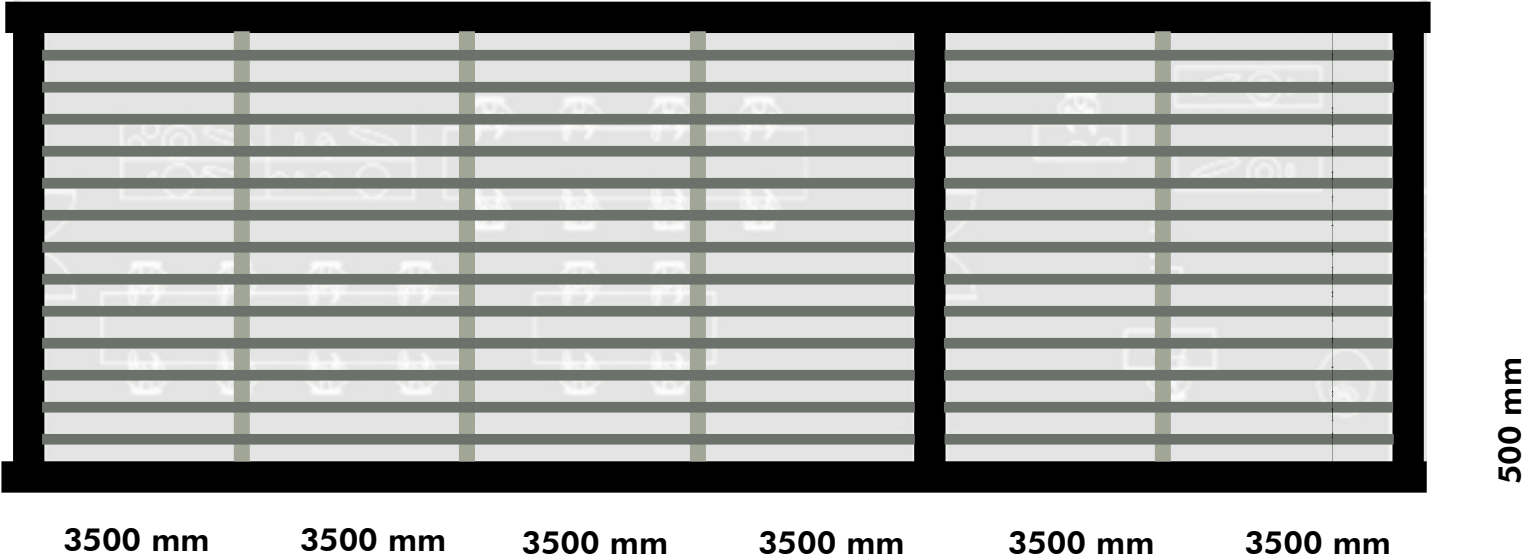
SECONDARY SPAN

Wooden beams on limestone wall and cross
beams

7X20 cm – span 3500 mm



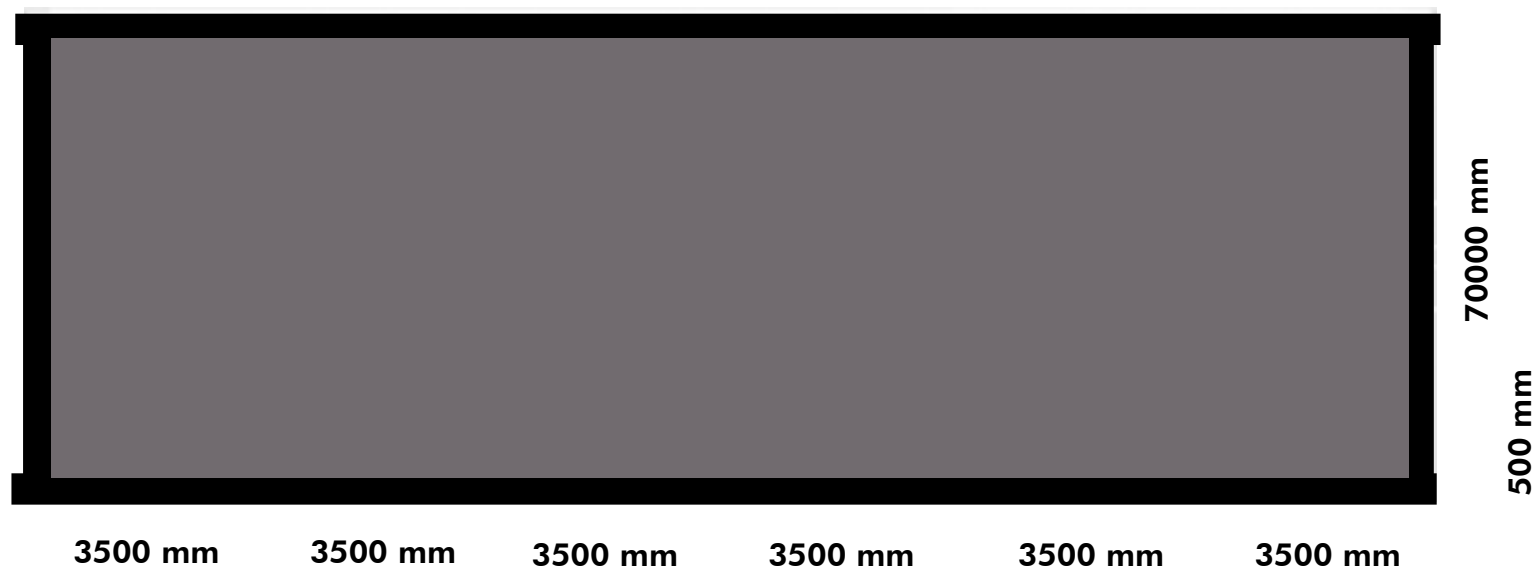
TERTIAIR SPAN

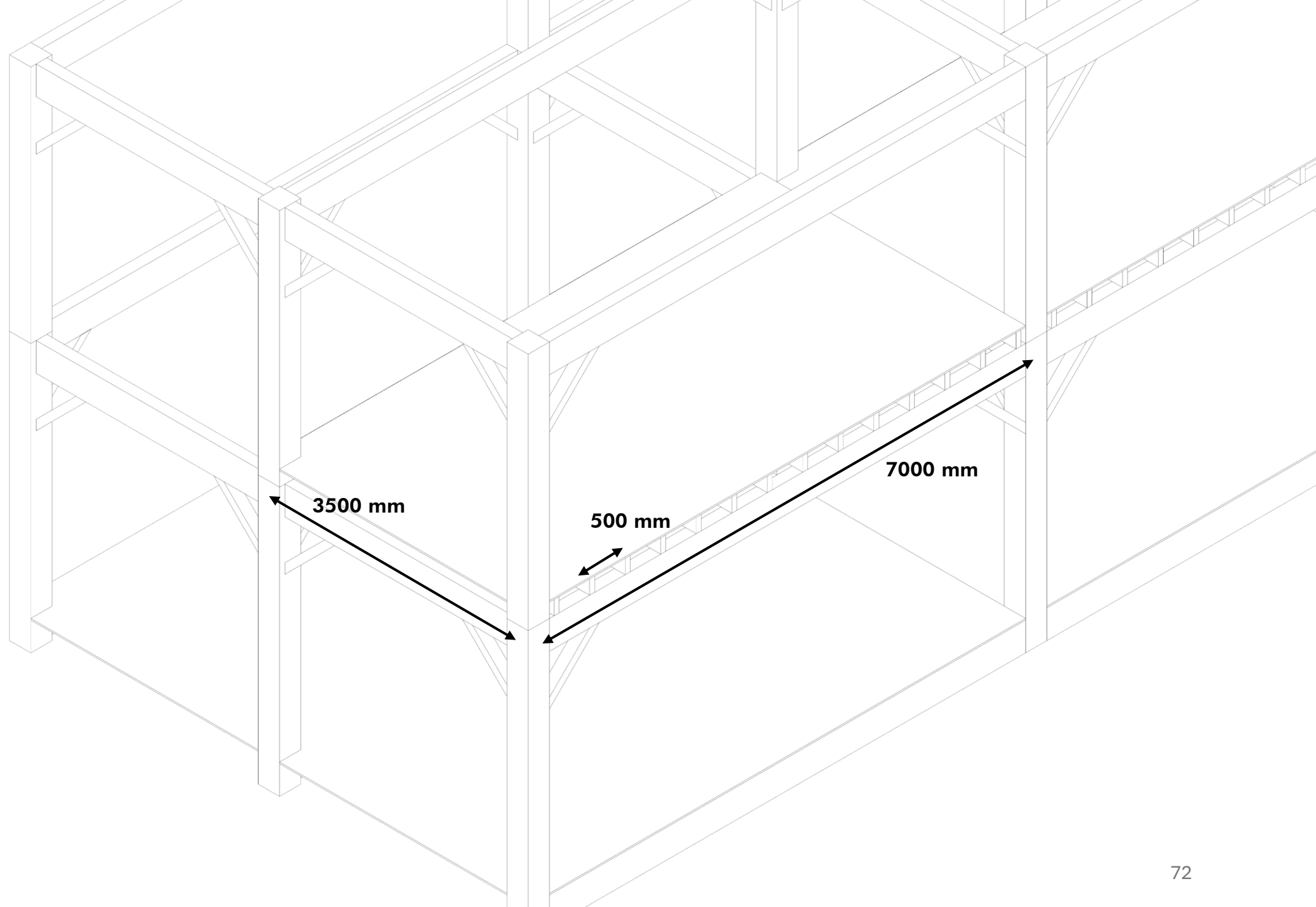


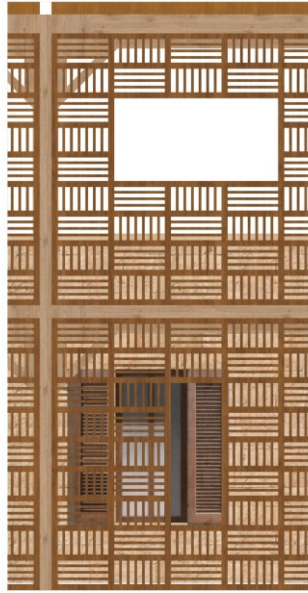
TERTIAIR SPAN

Wooden planks on beams, flooring

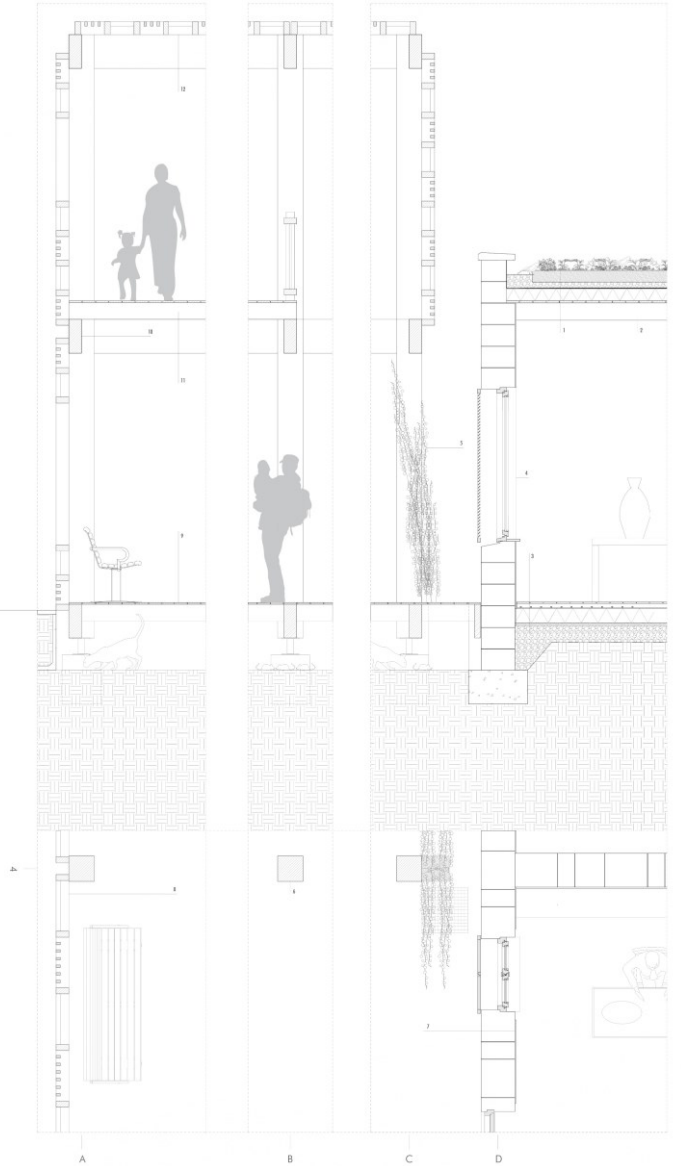
span 500 mm

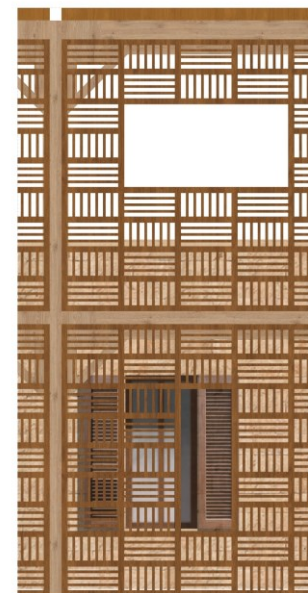
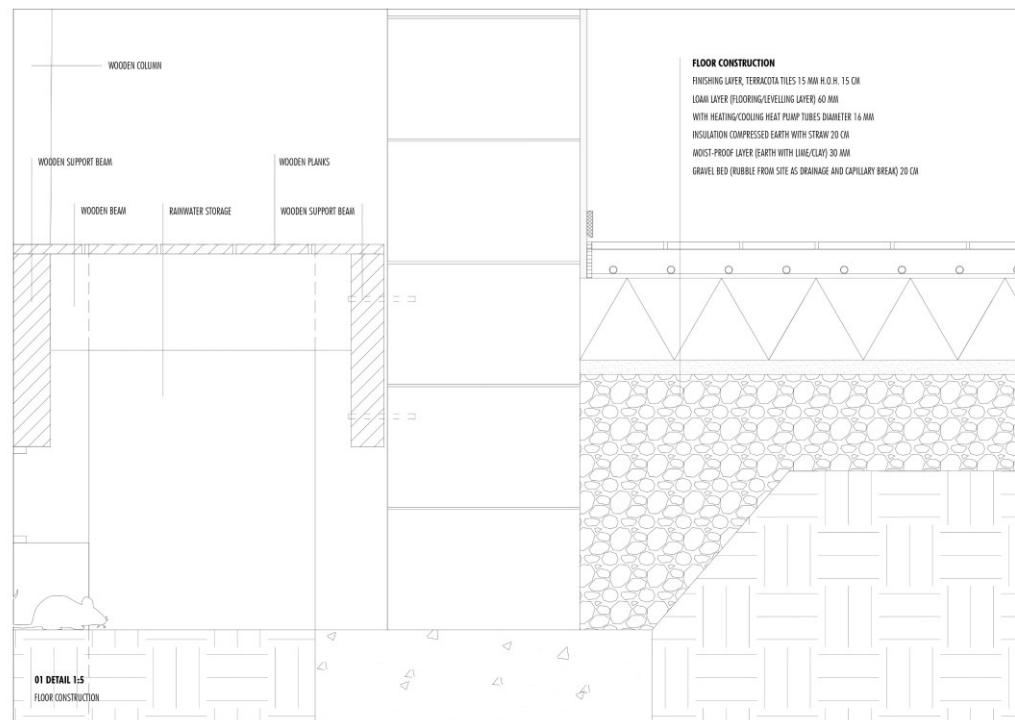




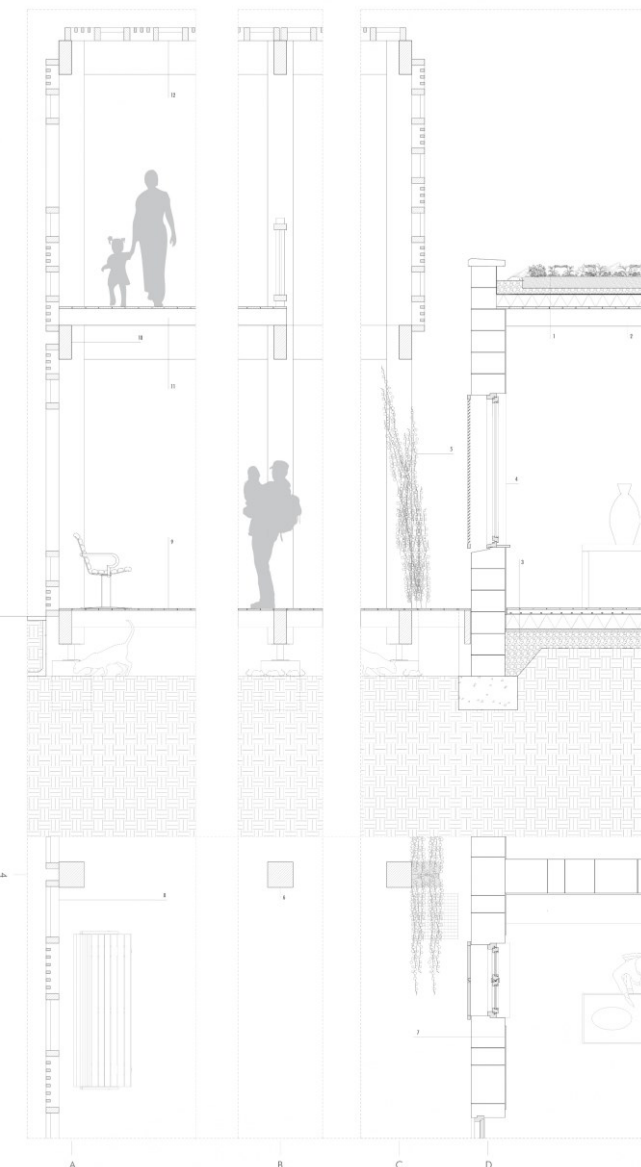


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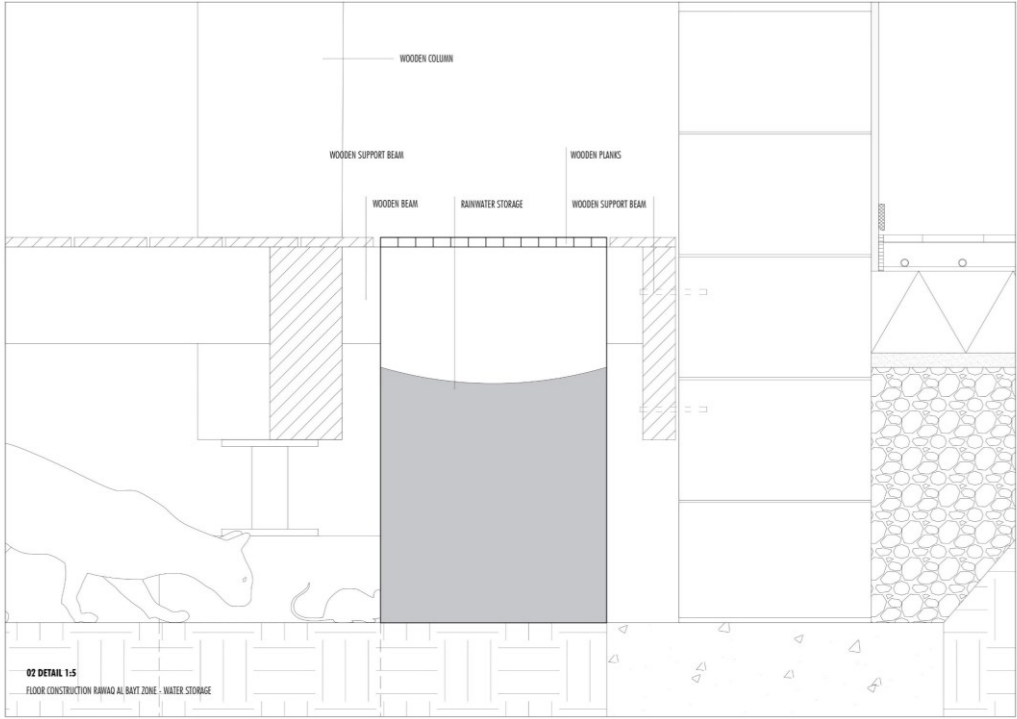




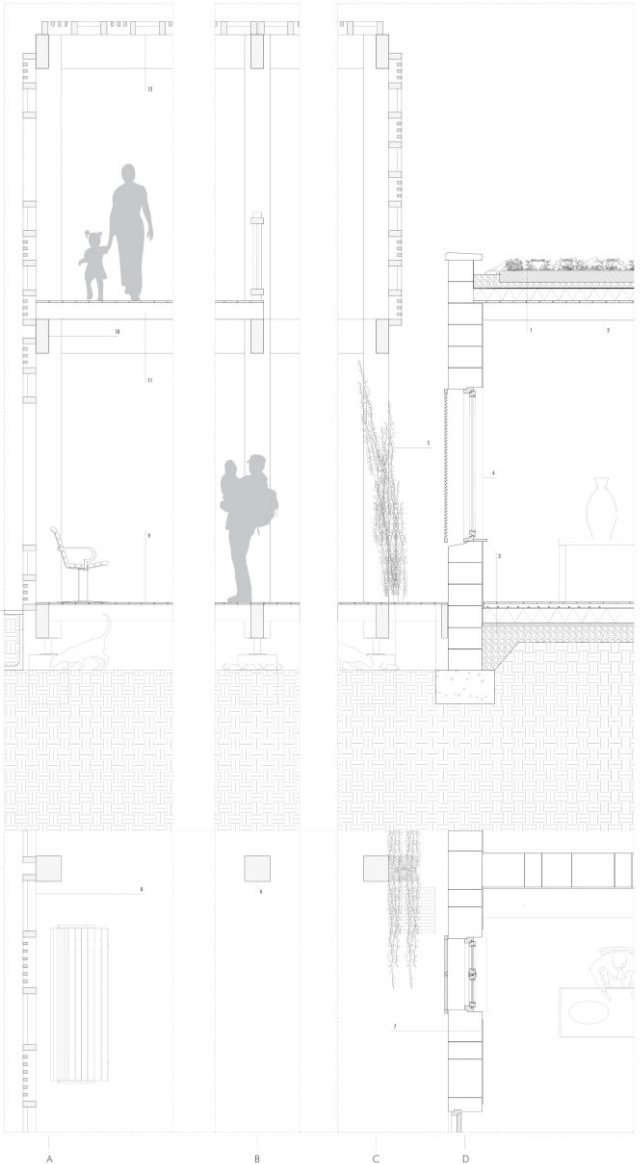
1. ROOF CONSTRUCTION
 ROOFING
 INSULATION LAYER, RUBBER FROM SITE 15 CM
 DRAINAGE LAYER, SAND 15 CM
 FINISHING LAYER, TERRACOTA TILES 15 CM
 INSULATION COMPRESSED EARTH WITH STRAW 20 CM
 MOIST-PROOF LAYER (EARTH WITH LIME/CLAY) 30 MM
 GRAVEL BED (RUBBLE FROM SITE AS DRAINAGE AND CAPILLARY BREAK) 20 CM
2. WOODEN BEAM
 40 CM DEEP, 10 CM HIGH, 10 CM WIDE
 TYPICAL - 10 CM H.O.H. 10 CM
 RAIL - 10 CM H.O.H. 10 CM
3. FLOOR CONSTRUCTION
 FINISHING LAYER, TERRACOTA TILES 15 CM H.O.H. 15 CM
 LOAN LAYER (FLOORING/LEVELLING LAYER) 60 MM
 WITH HEATING/COOLING HEAT PUMP TUBES DIAMETER 16 MM
 INSULATION COMPRESSED EARTH WITH STRAW 20 CM
 MOIST-PROOF LAYER (EARTH WITH LIME/CLAY) 30 MM
 GRAVEL BED (RUBBLE FROM SITE AS DRAINAGE AND CAPILLARY BREAK) 20 CM
4. WOODEN
 WOODEN PLANKS 15 CM H.O.H. 15 CM
 WOODEN BEAM 10 CM
5. WOODEN PLANK
 40 CM DEEP, 10 CM HIGH, 10 CM WIDE
 TYPICAL - 10 CM H.O.H. 10 CM
 RAIL - 10 CM H.O.H. 10 CM
6. COLUMNS
 WOODEN COLUMN, 10 CM H.O.H. 10 CM
 10 CM H.O.H. 10 CM
7. RAILWAY CONSTRUCTION
 INSULATION LAYER, RUBBER FROM SITE 15 CM
 DRAINAGE LAYER, SAND 15 CM
 FINISHING LAYER, TERRACOTA TILES 15 CM
8. RAILWAY AL BAPT HOUSE
 WOODEN PLANKS, 15 CM H.O.H. 15 CM
 15 CM H.O.H. 15 CM
9. RAILWAY AL BAPT HOUSE
 WOODEN PLANKS, 15 CM H.O.H. 15 CM
 15 CM H.O.H. 15 CM
10. SUPPORT BEAMS
 40 CM DEEP, 10 CM HIGH, 10 CM WIDE
 TYPICAL - 10 CM H.O.H. 10 CM
 RAIL - 10 CM H.O.H. 10 CM
11. BEAMS
 WOODEN BEAM, 10 CM H.O.H. 10 CM
 10 CM H.O.H. 10 CM
12. RAILWAY AL BAPT HOUSE
 WOODEN PLANKS, 15 CM H.O.H. 15 CM
 15 CM H.O.H. 15 CM

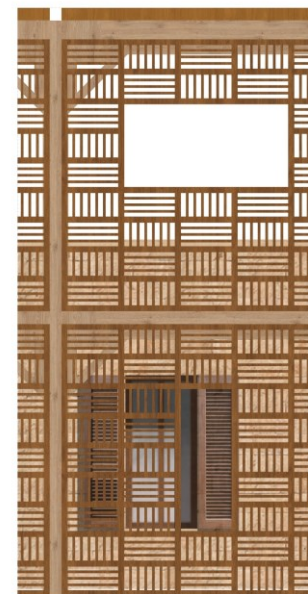


Details

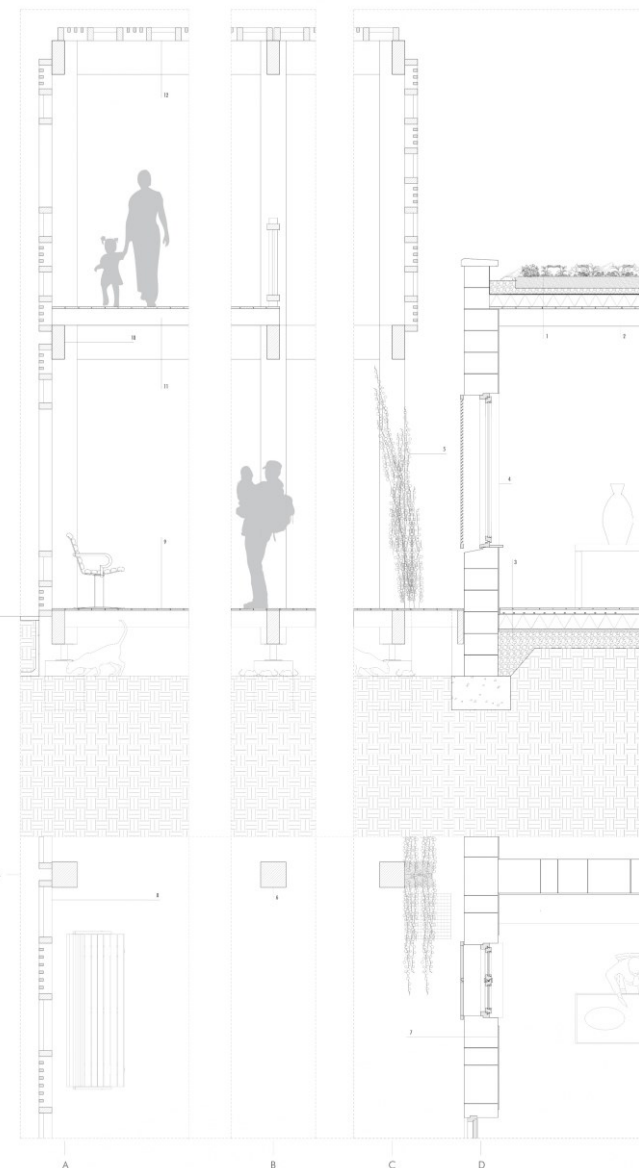


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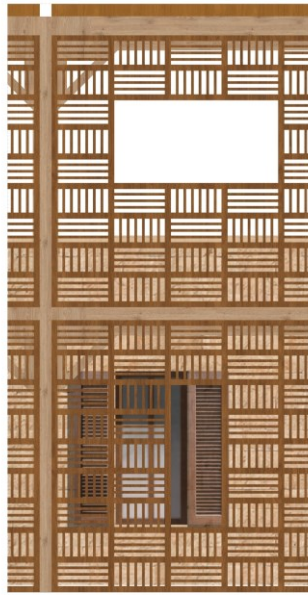
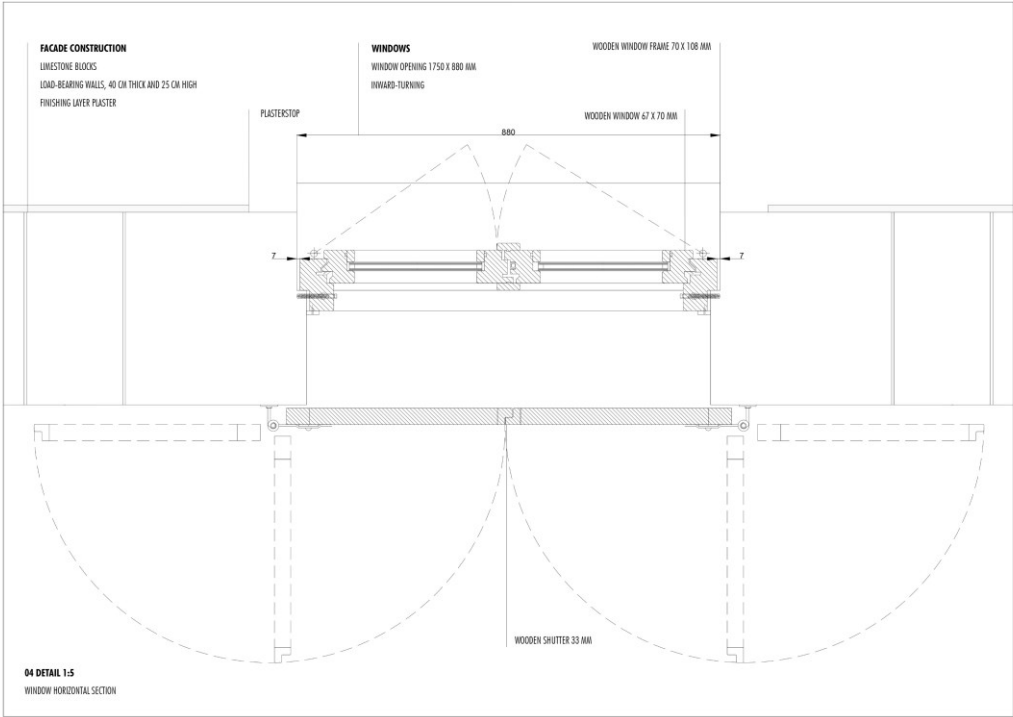




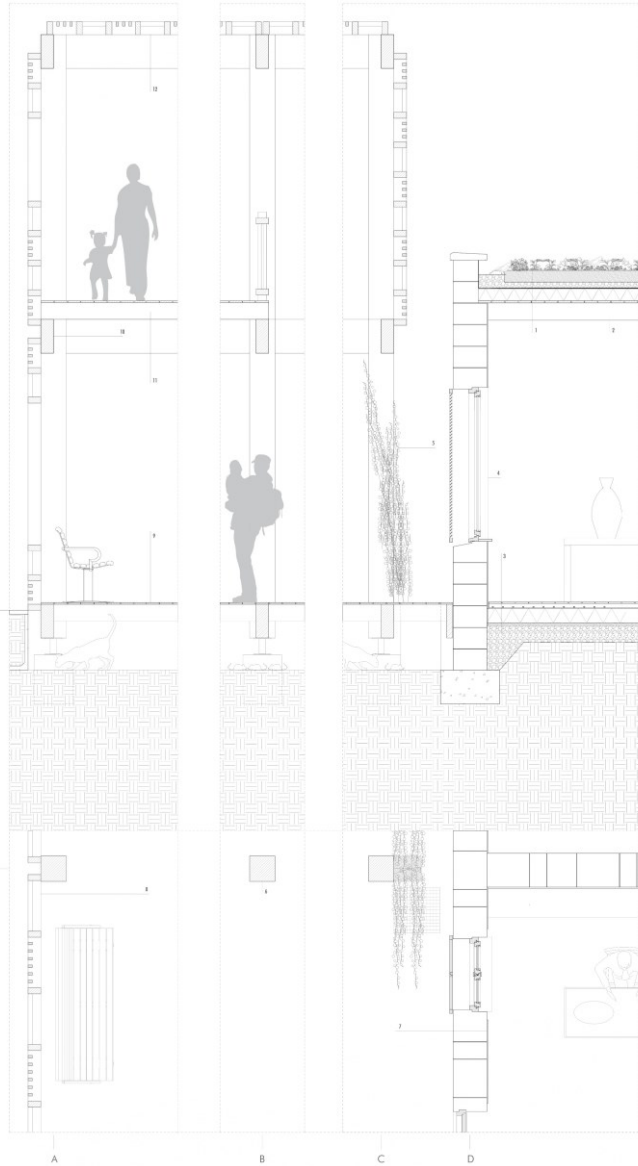
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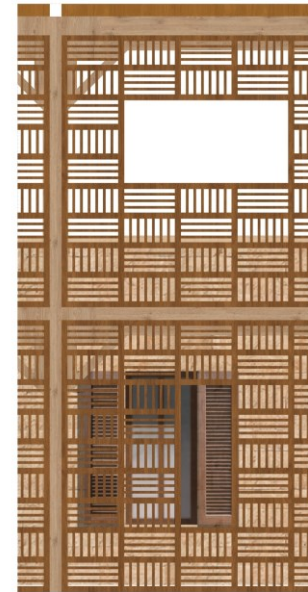
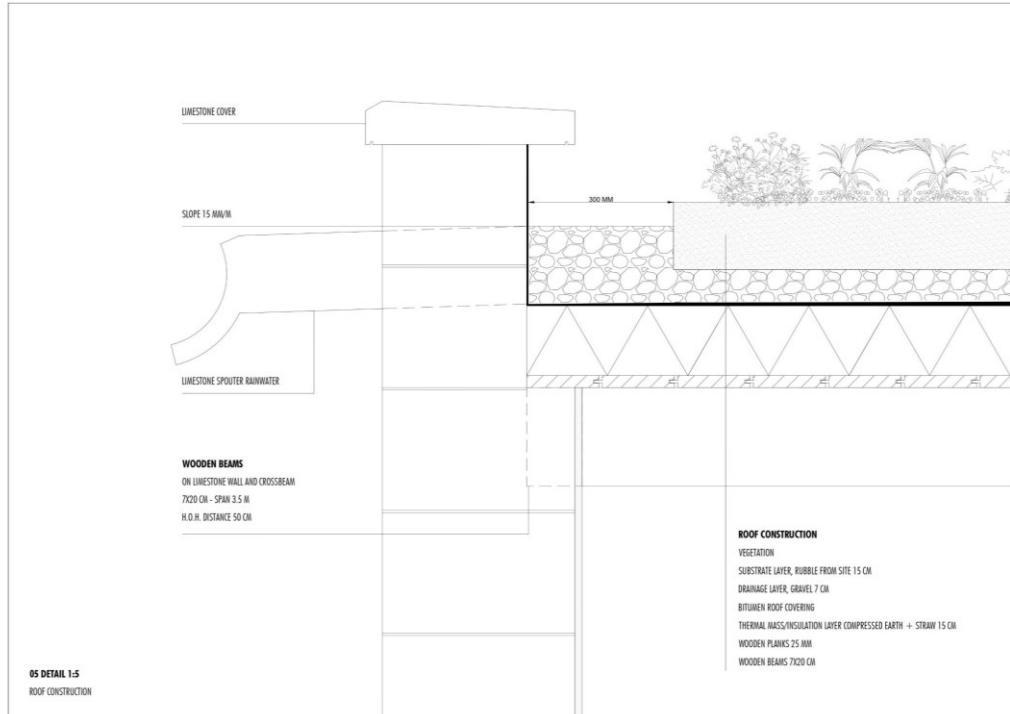


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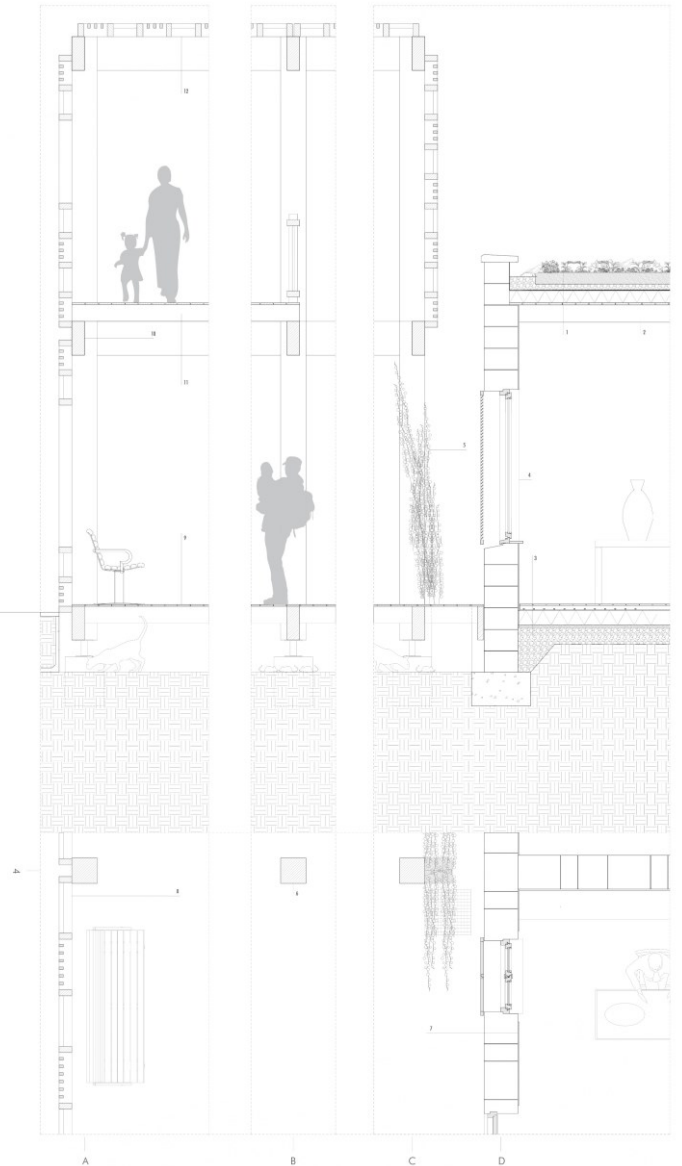


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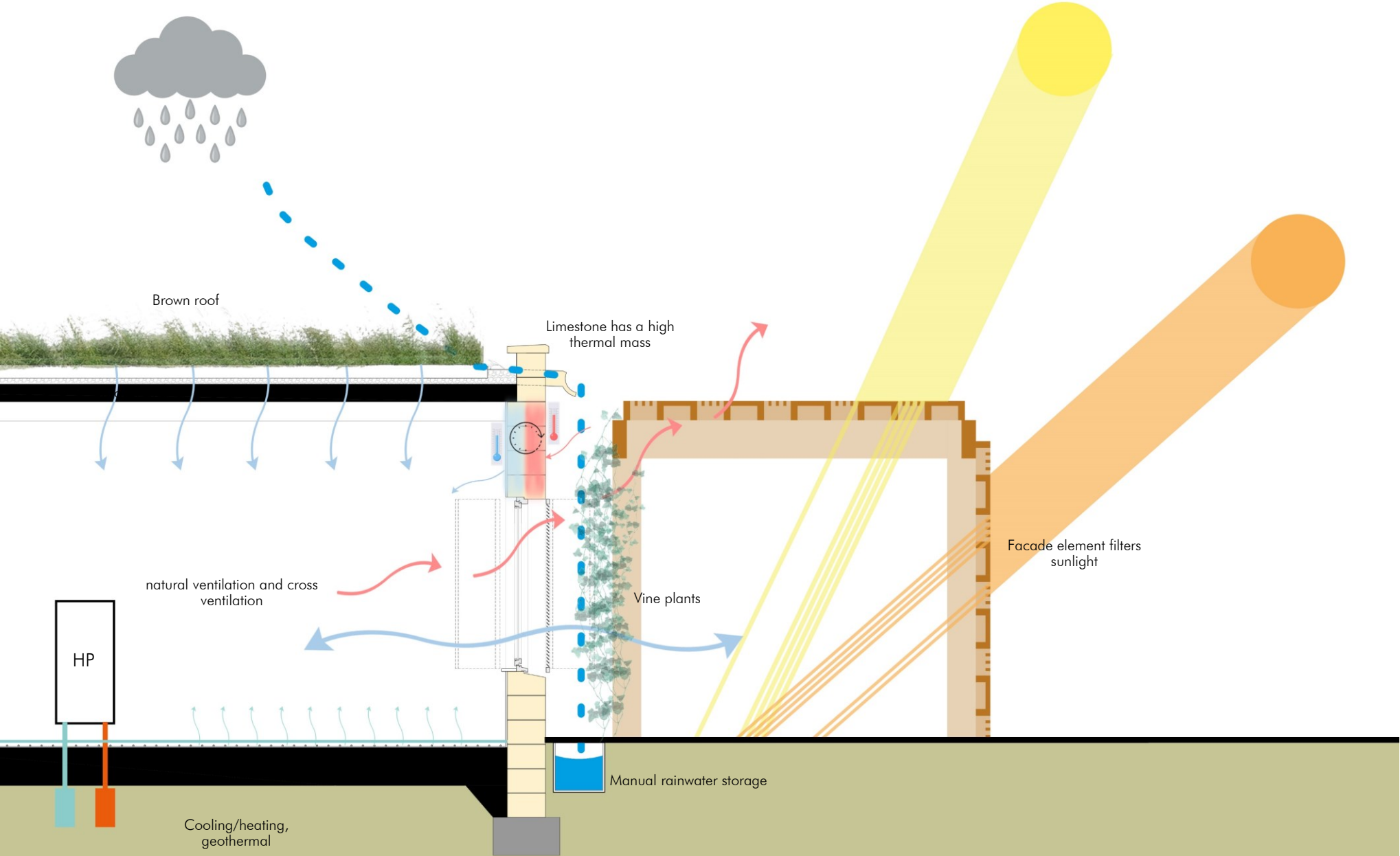


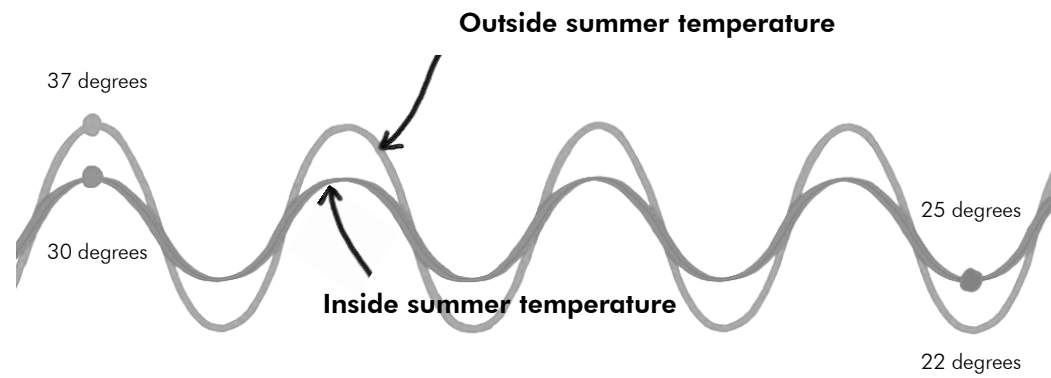
1. **ROOF CONSTRUCTION**
VEGETATION
SUBSTRATE LAYER, RUBBLE FROM SITE 15 CM
DRAINAGE LAYER, GRAVEL 7 CM
BITUMEN ROOF COVERING
THERMAL MASS/INSULATION LAYER COMPRESSED EARTH + STRAW 15 CM
WOODEN PLANKS 25 MM
WOODEN BEAMS 7X20 CM
2. **WOODEN BEAMS**
ON LIMESTONE WALL AND CROSSBEAM
7X20 CM - SPAN 3.5 M
H.O.M. DISTANCE 50 CM
3. **FLOOR CONSTRUCTION**
WOODEN FLOOR, 15 CM THICK
CONCRETE SLAB, 15 CM THICK
DRAINAGE LAYER, 15 CM THICK
VEGETATION LAYER, 15 CM THICK
WOODEN PLANKS 25 MM
WOODEN BEAMS 7X20 CM
4. **WOODEN BEAMS**
ON LIMESTONE WALL AND CROSSBEAM
7X20 CM - SPAN 3.5 M
H.O.M. DISTANCE 50 CM
5. **WOODEN PLANKS**
ON LIMESTONE WALL AND CROSSBEAM
25 MM THICK
WOODEN BEAMS 7X20 CM
6. **WOODEN PLANKS**
ON LIMESTONE WALL AND CROSSBEAM
25 MM THICK
WOODEN BEAMS 7X20 CM
7. **WOODEN PLANKS**
ON LIMESTONE WALL AND CROSSBEAM
25 MM THICK
WOODEN BEAMS 7X20 CM
8. **WOODEN PLANKS**
ON LIMESTONE WALL AND CROSSBEAM
25 MM THICK
WOODEN BEAMS 7X20 CM
9. **WOODEN PLANKS**
ON LIMESTONE WALL AND CROSSBEAM
25 MM THICK
WOODEN BEAMS 7X20 CM
10. **WOODEN PLANKS**
ON LIMESTONE WALL AND CROSSBEAM
25 MM THICK
WOODEN BEAMS 7X20 CM
11. **WOODEN PLANKS**
ON LIMESTONE WALL AND CROSSBEAM
25 MM THICK
WOODEN BEAMS 7X20 CM
12. **WOODEN PLANKS**
ON LIMESTONE WALL AND CROSSBEAM
25 MM THICK
WOODEN BEAMS 7X20 CM

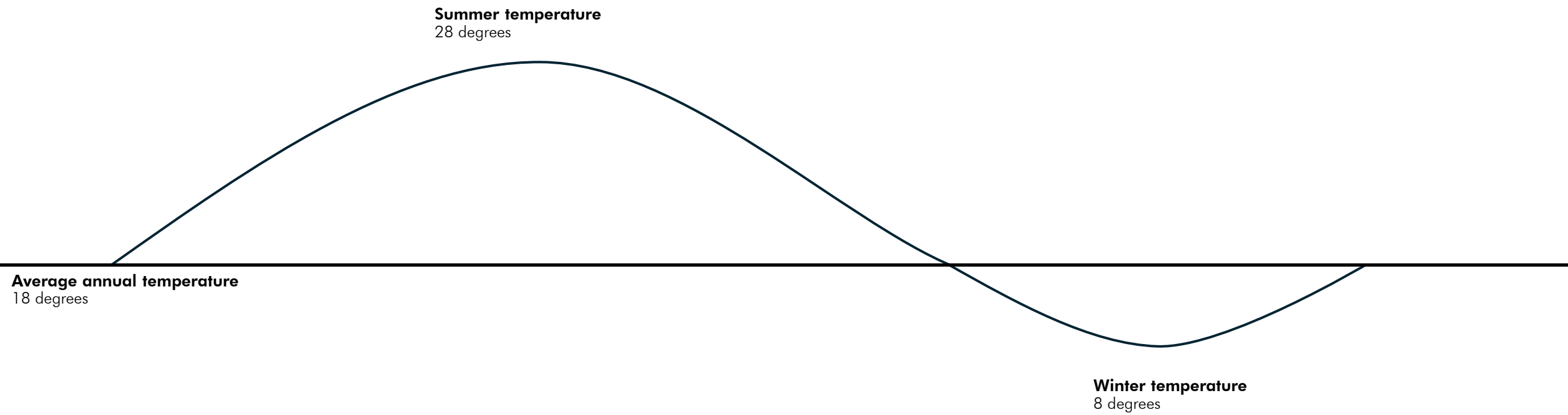


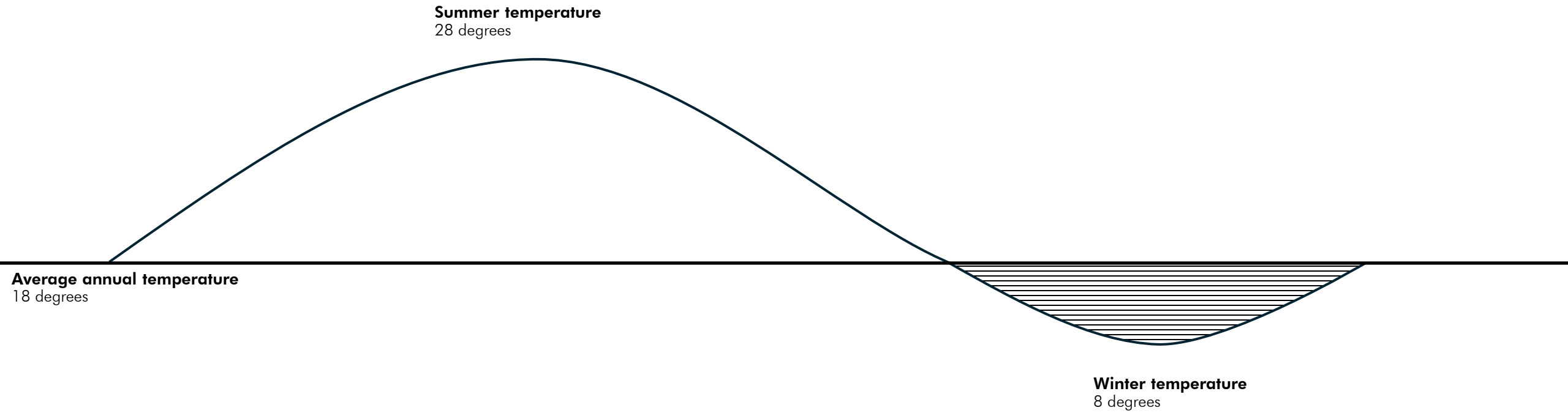


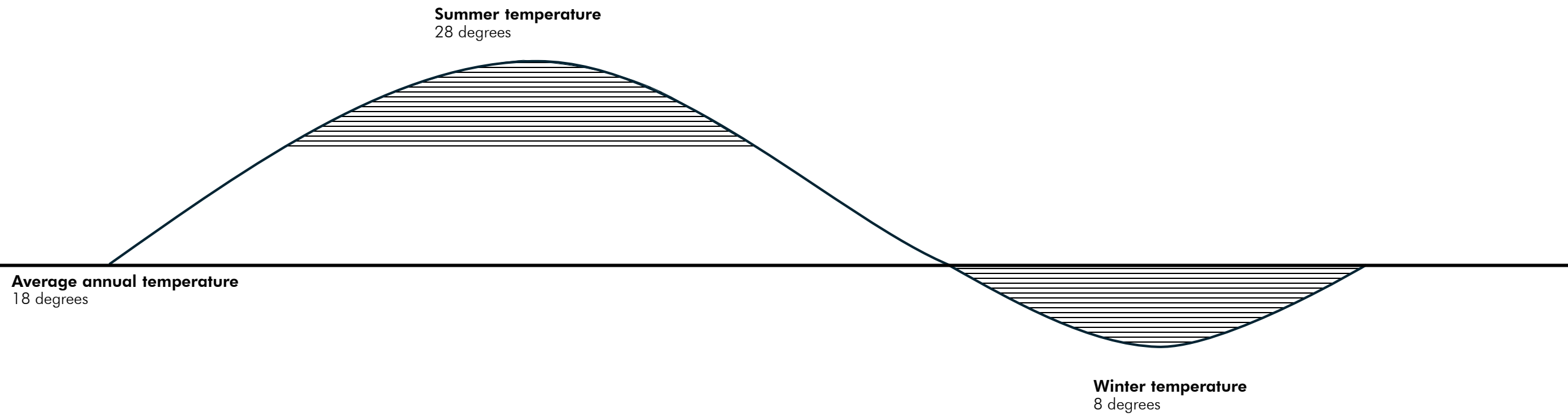
VIEW FROM CITADEL ON STREET BLOCK
2024











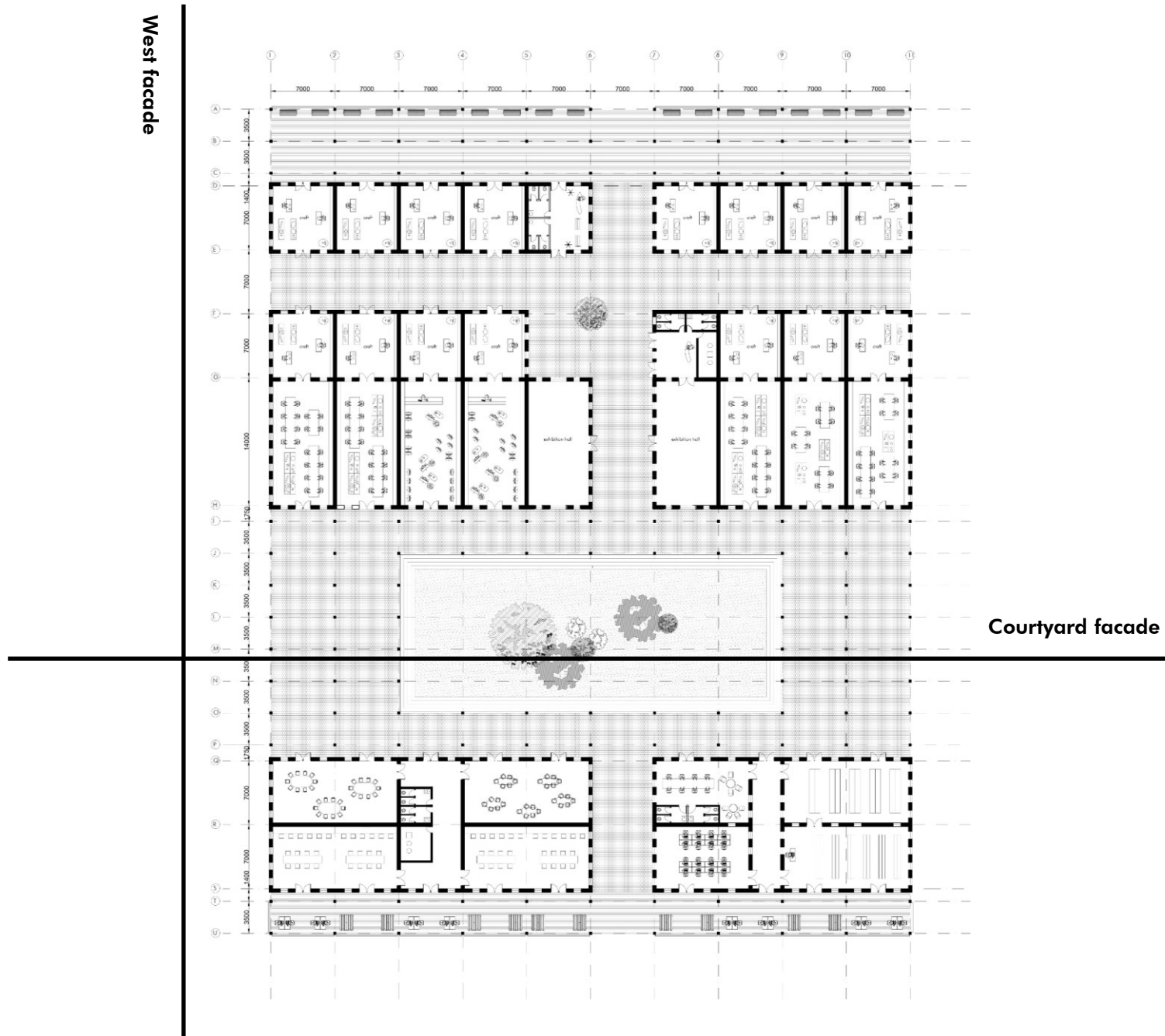




Rawaq al Bayt
Impression



Rawaq al Bayt
Impression

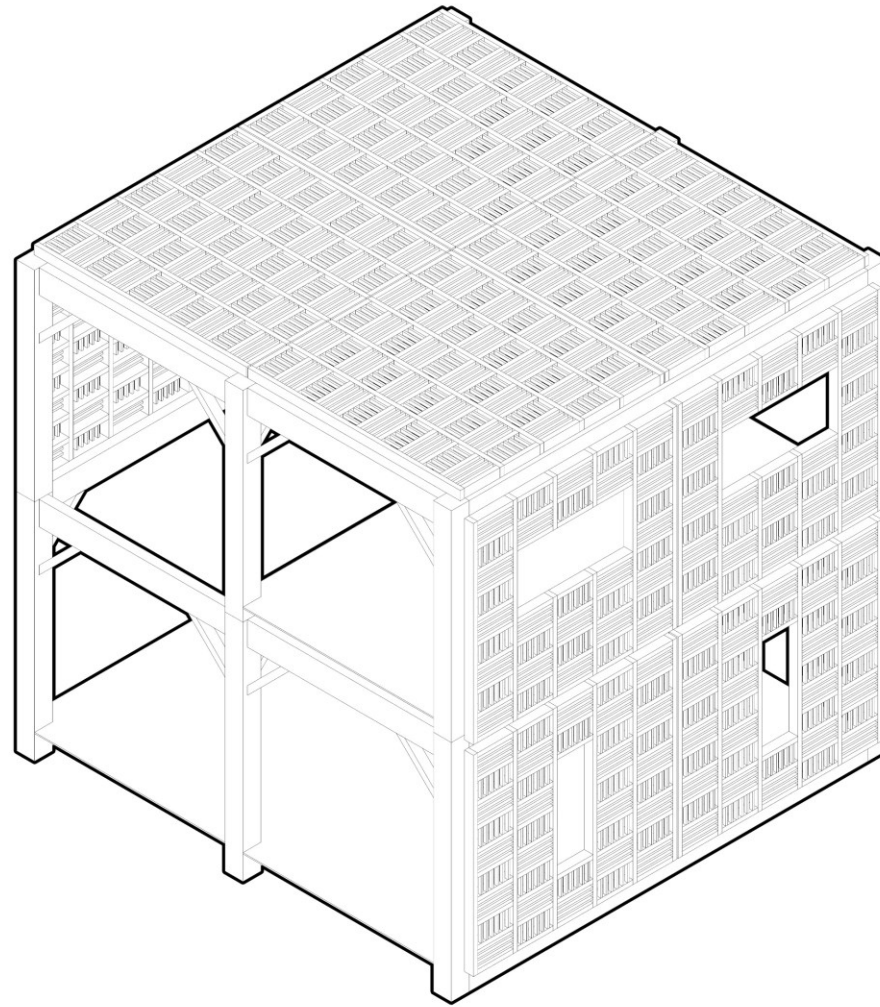


COURTYARD FACADE
BAYT AL MADINA

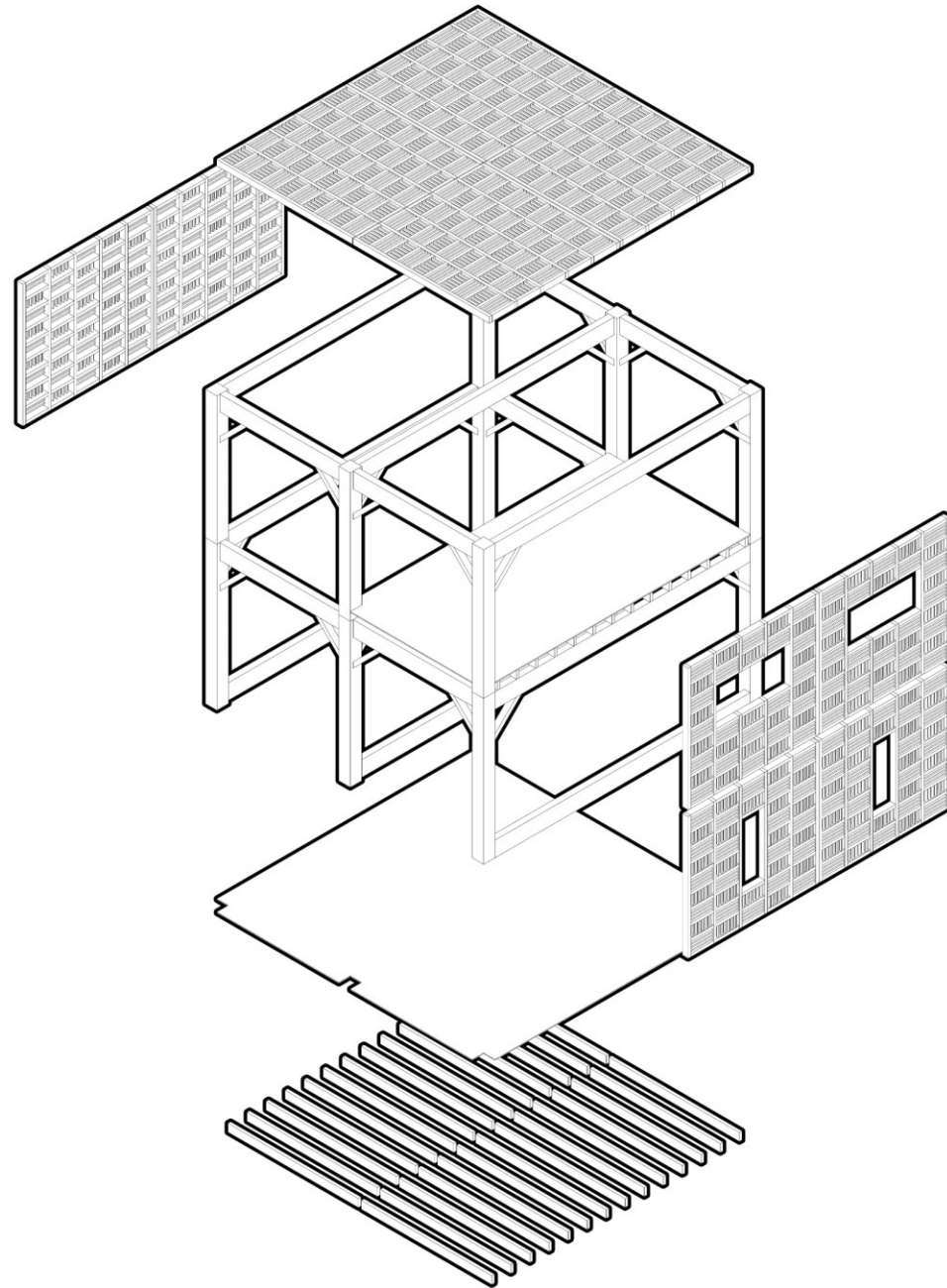


WEST FACADE
BAYT AL MADINA

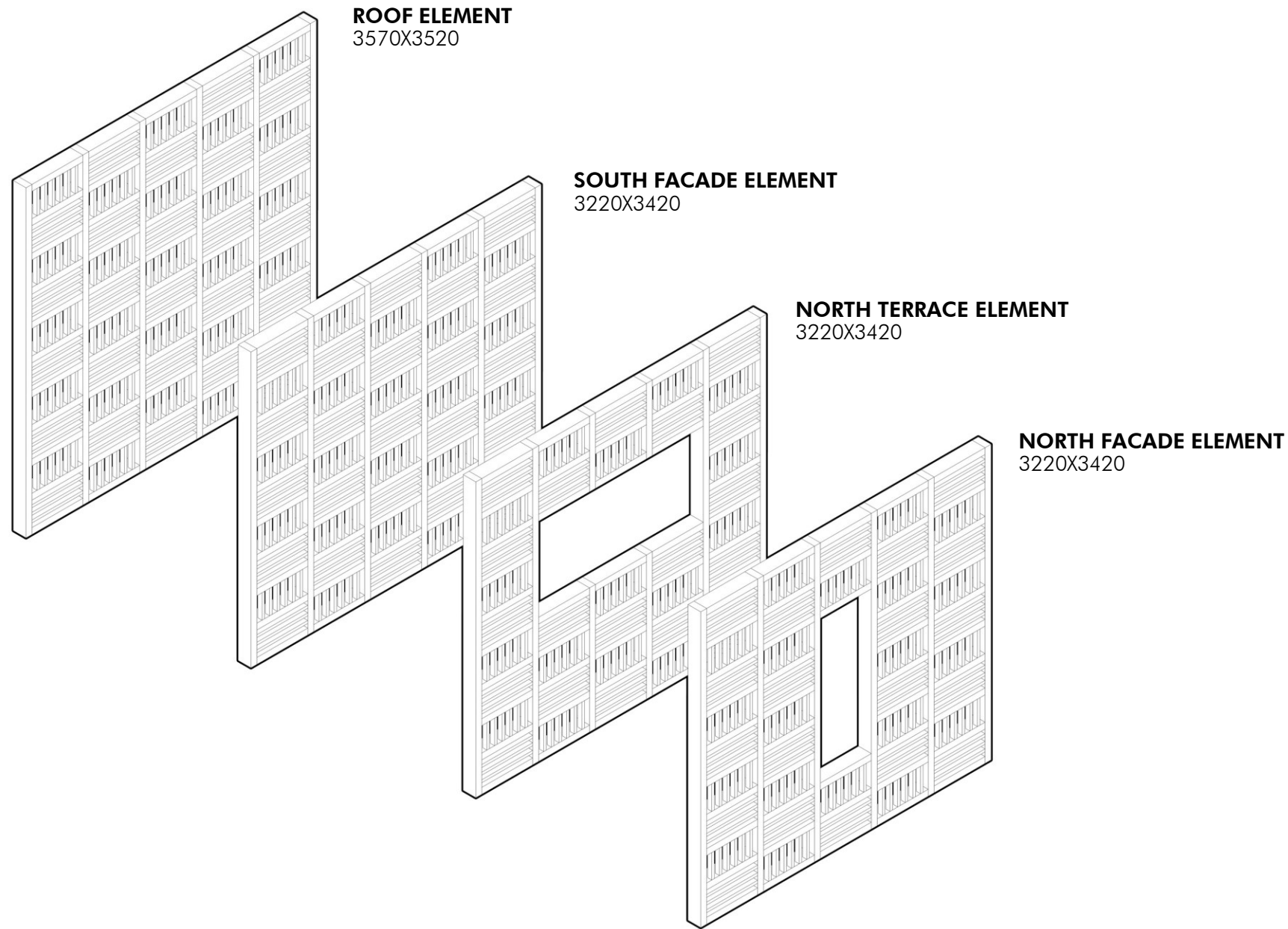


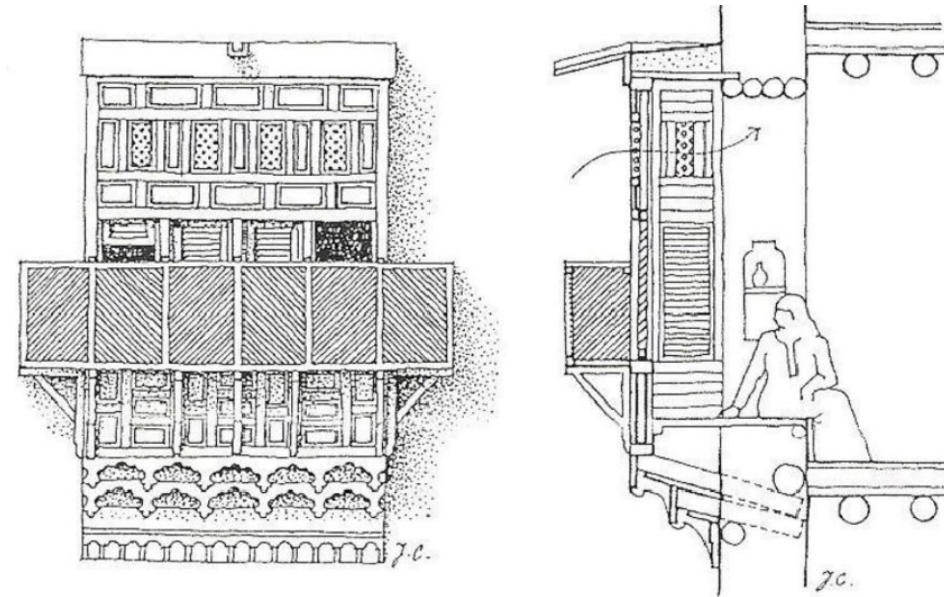


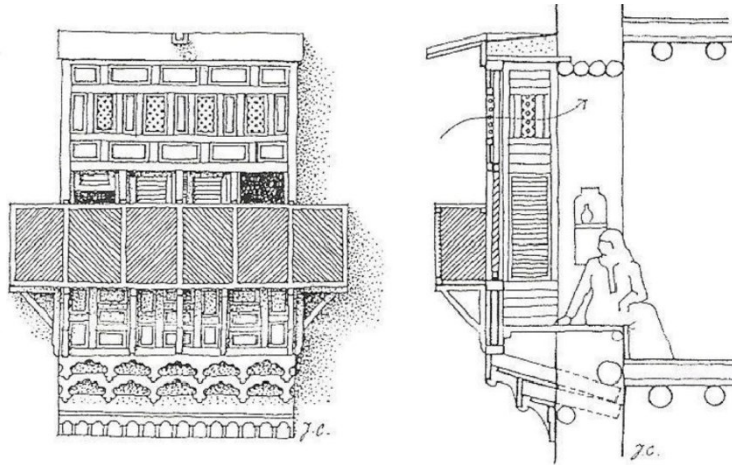
Part of the building between the 3 columns
Rawaq al Bayt zone



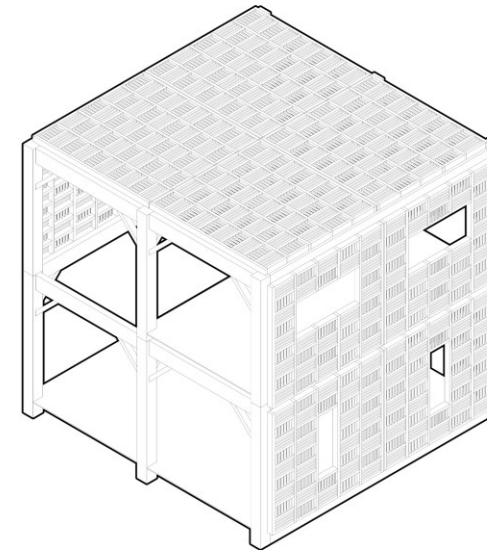
Its different elements
Rawaq al Bayt zone



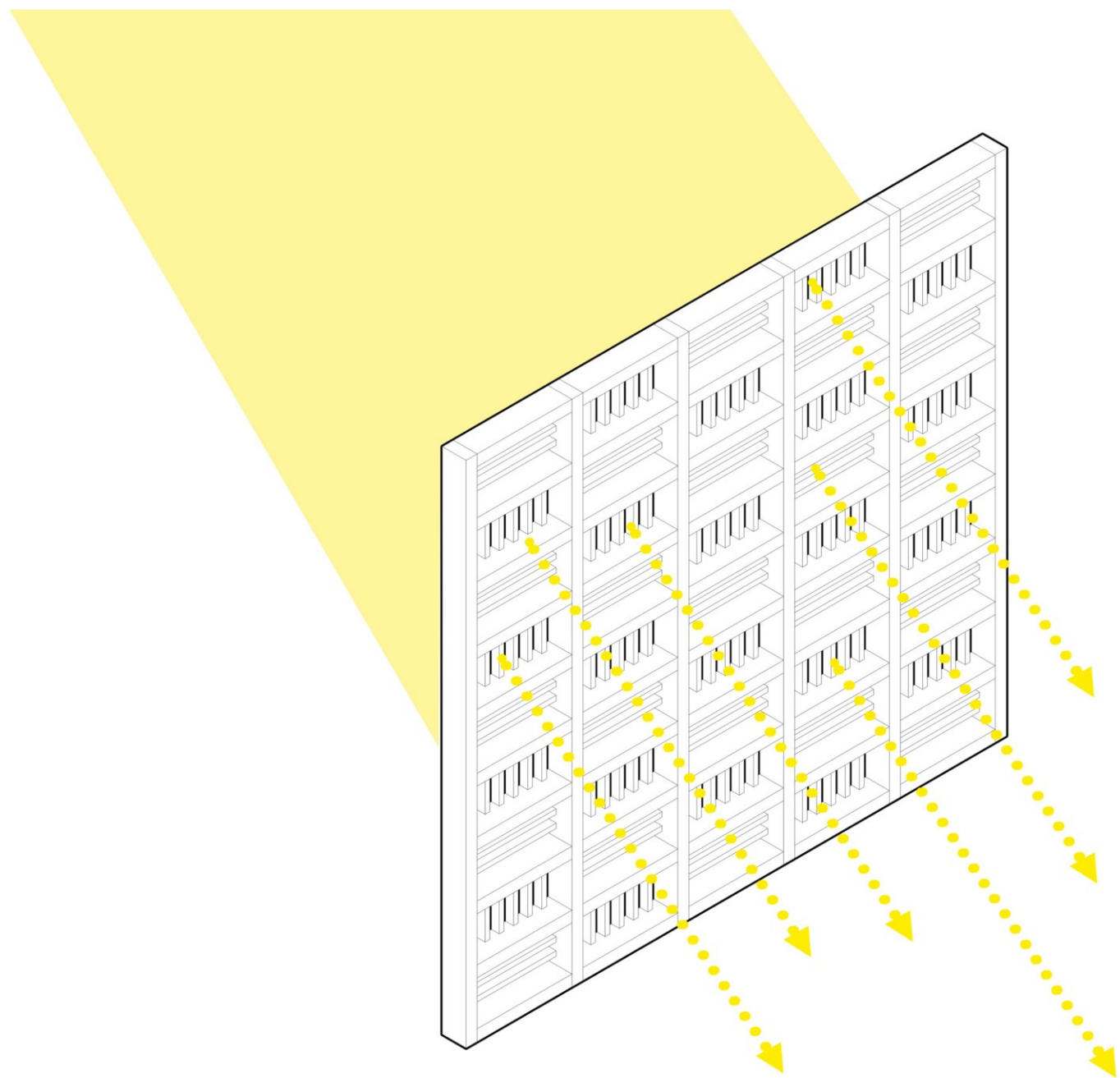




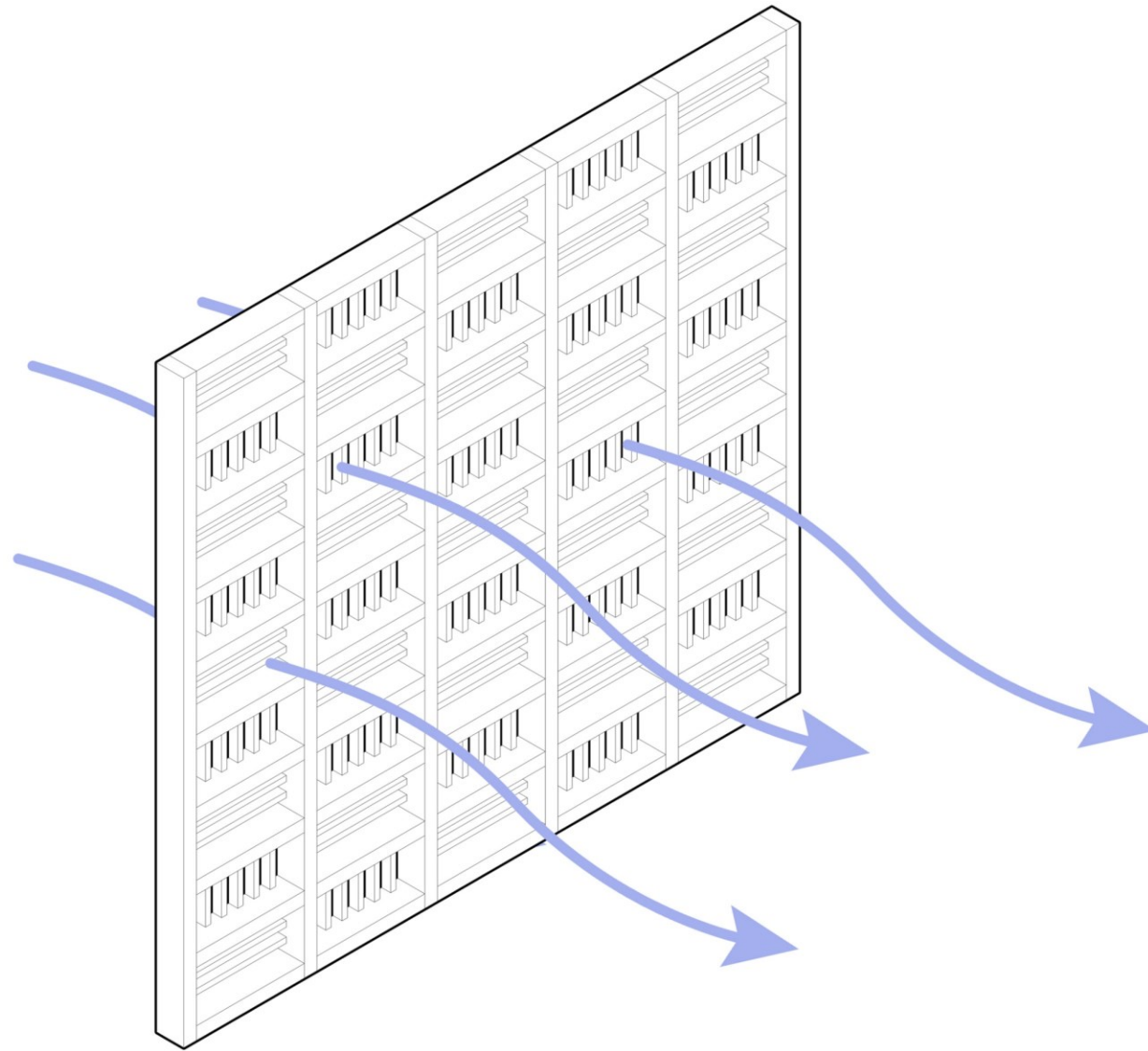
Extended element within the house on the second floor
Domestic only
Private closed space

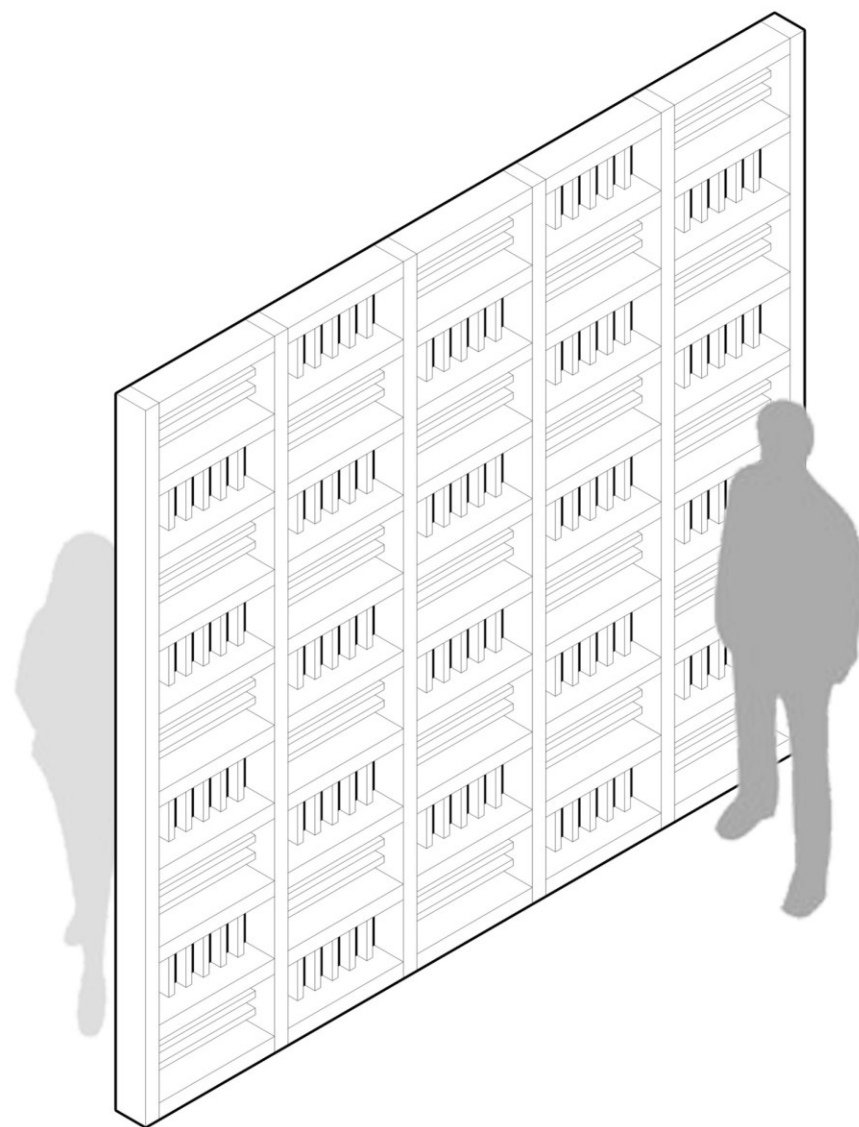


A separate own space
Public
Open



Filtering sunlight
Facade element







An open façade for public functions
Facade element



Surrounded by four walls
Fountain or trees inside
Same level as building



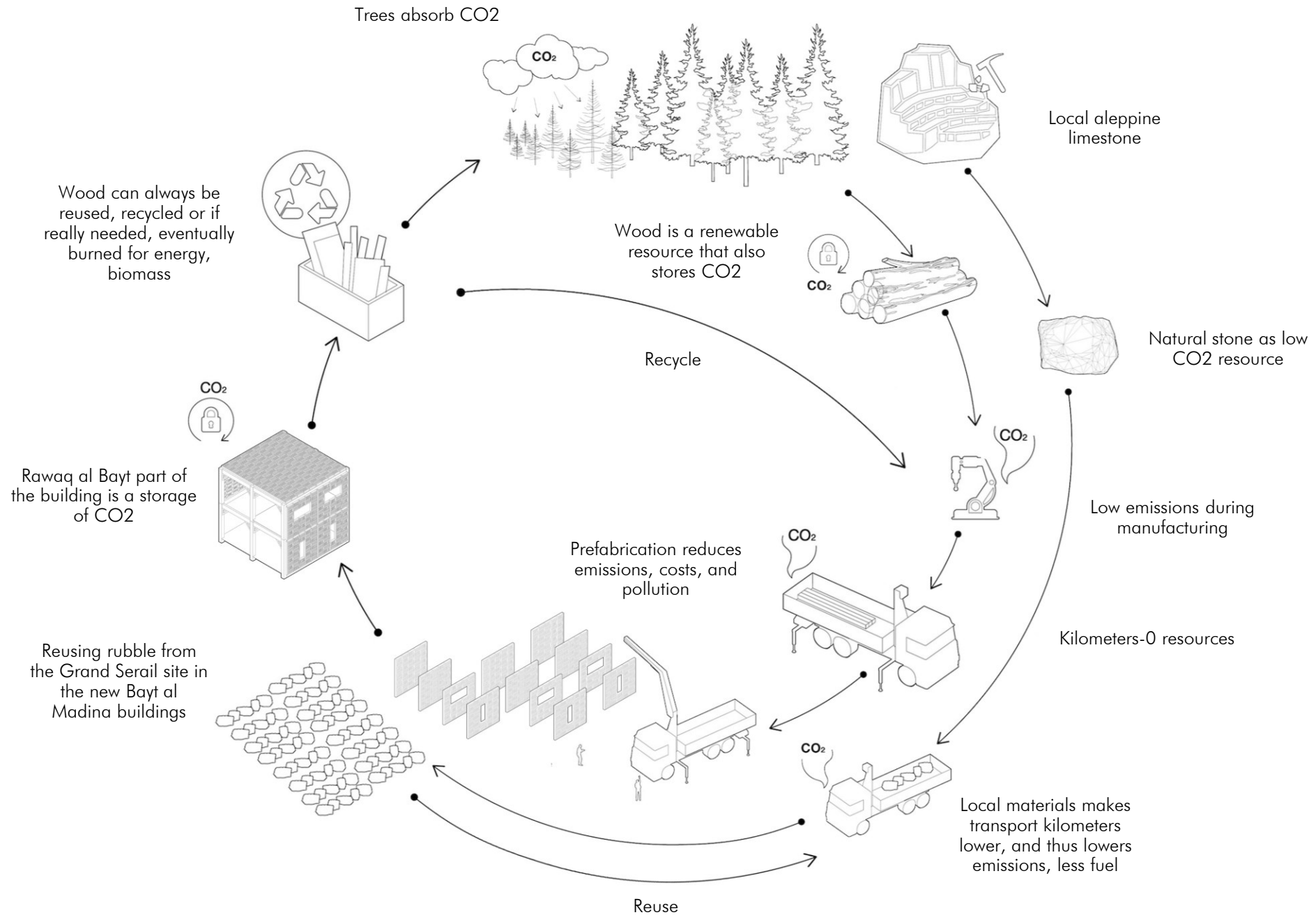
A separate own space, surrounded by a wood construction
Green structure inside
Almost a meter lower than surroundings



Either open or closed roof
 Surrounded by shops
 Closed souks have domes
 Path according to the Lynch method

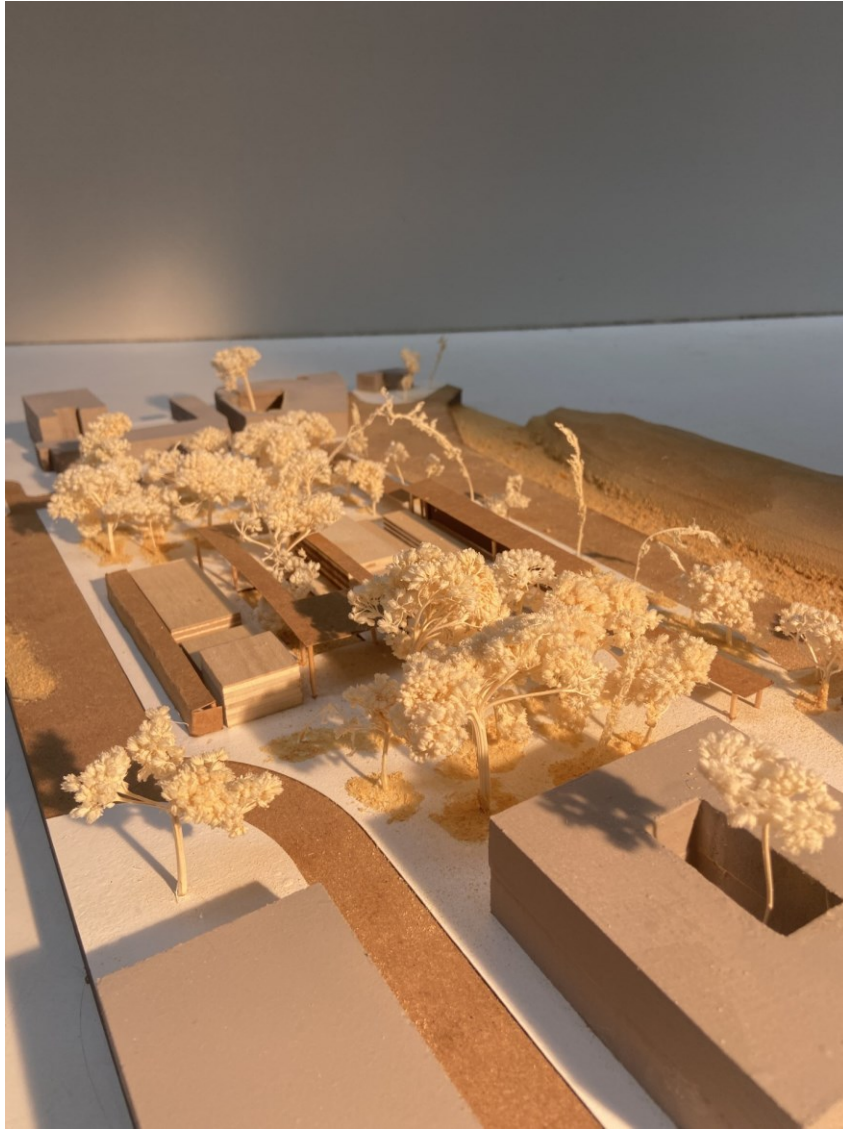


Semi open roof with facade
 Craft hub
 Terrace looking at the citadel
 Both a path and an urban node











Site model
urban connection



REBUILDING ALEPPO
ARCHITECTURE OF RECOVERY IN A WAR-TORN CITY