

# BRICOLAGE OF TIME AND SPACE

A JOURNEY TROUGH THE TRANSFORMATION OF THE MOLENPOORT



P5 PRESENTATION  
URBAN ARCHITECTURE STUDIO  
TU DELFT

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JULY 2021

# BRICOLAGE

DEFINITION

"Construction (as of a sculpture or a structure of ideas) achieved by using whatever comes to hand."

Merriam-Webster (n.d.)



Illustration of the book Robinson Crusoe  
(De Foe, Pujol & Paget, n.d.)





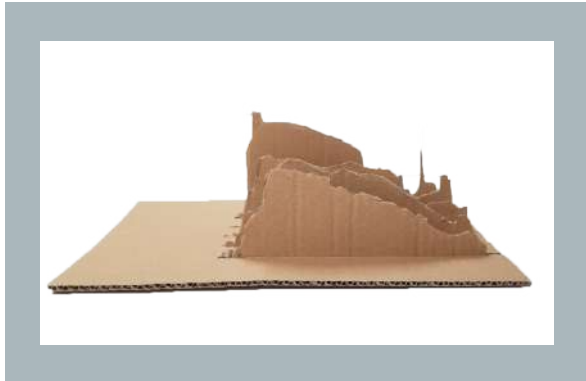
Perpetuo Socorro Church, Danli, Honduras.  
(AlejandraFerreraArchitects, 2020)



Vitroaluminio colective bathrooms, Tegucigalpa, Honduras.  
(AlejandraFerreraArchitects, 2019)

# BRICOLAGE

DRAWINGS AND MODELS



Design methods, models and materials  
Pictures taken by the author



# ARCHITECTURE

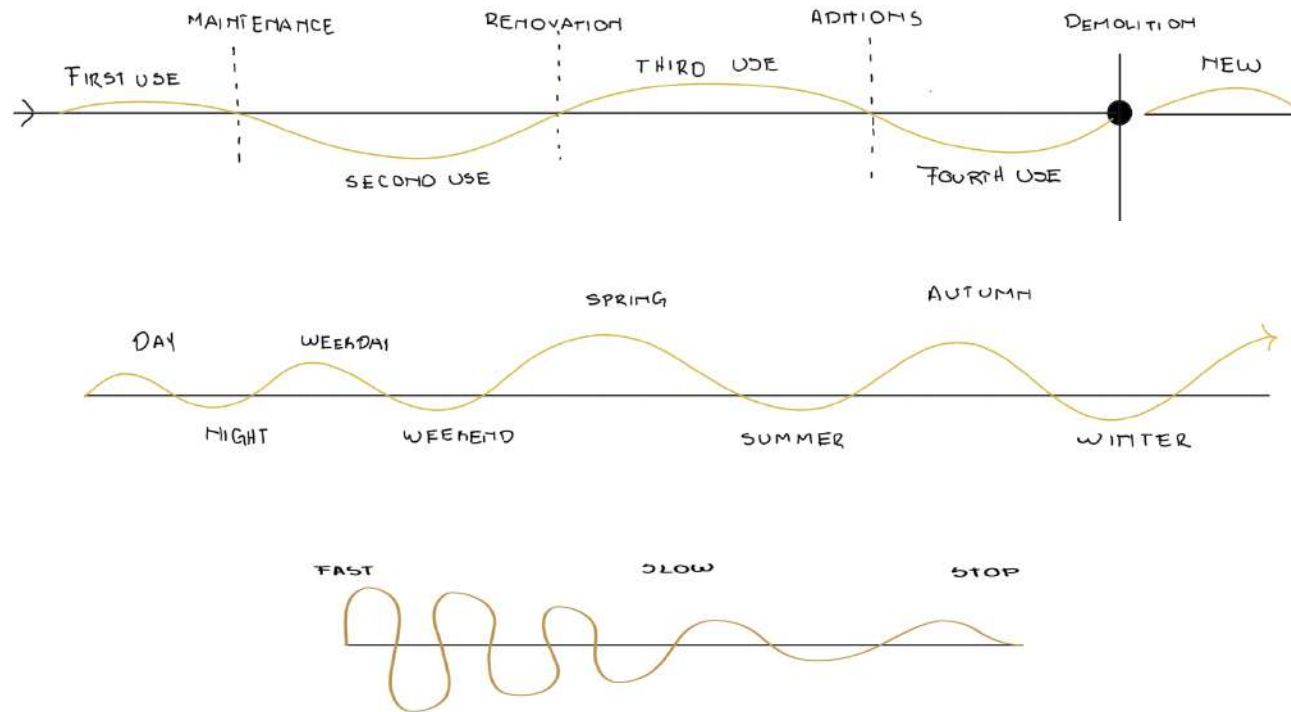
*"Reviewing the last years, I have been through many transformations. For the future, I wonder what my identity will be then, who will I be in the future? Will I be passing my characteristics to my ancestors as well?"*

The church | What time is this place group movie



Shapes of St Petruc Canisious Church over time  
Drawing by the author

# TIME



*"Time is the fourth perspective that moves architecture from a static product (noun) to a dynamic process (verb)."*

Schmidt III & Austin (2016)  
Adaptable architecture: Theory and practice



# TIME



The city  
Source: What time is this place group movie

# TIME



The city  
Source: What time is this place group movie



# TIME



The city  
Source: What time is this place group movie

# TIME



The city  
Source: What time is this place group movie



# TIME



The city  
Source: What time is this place group movie

# TIME



The city  
Source: What time is this place group movie

# TIME



The city  
Source: What time is this place group movie

ARCHITECTURE - TIME - BRICOLAGE  
SPACE



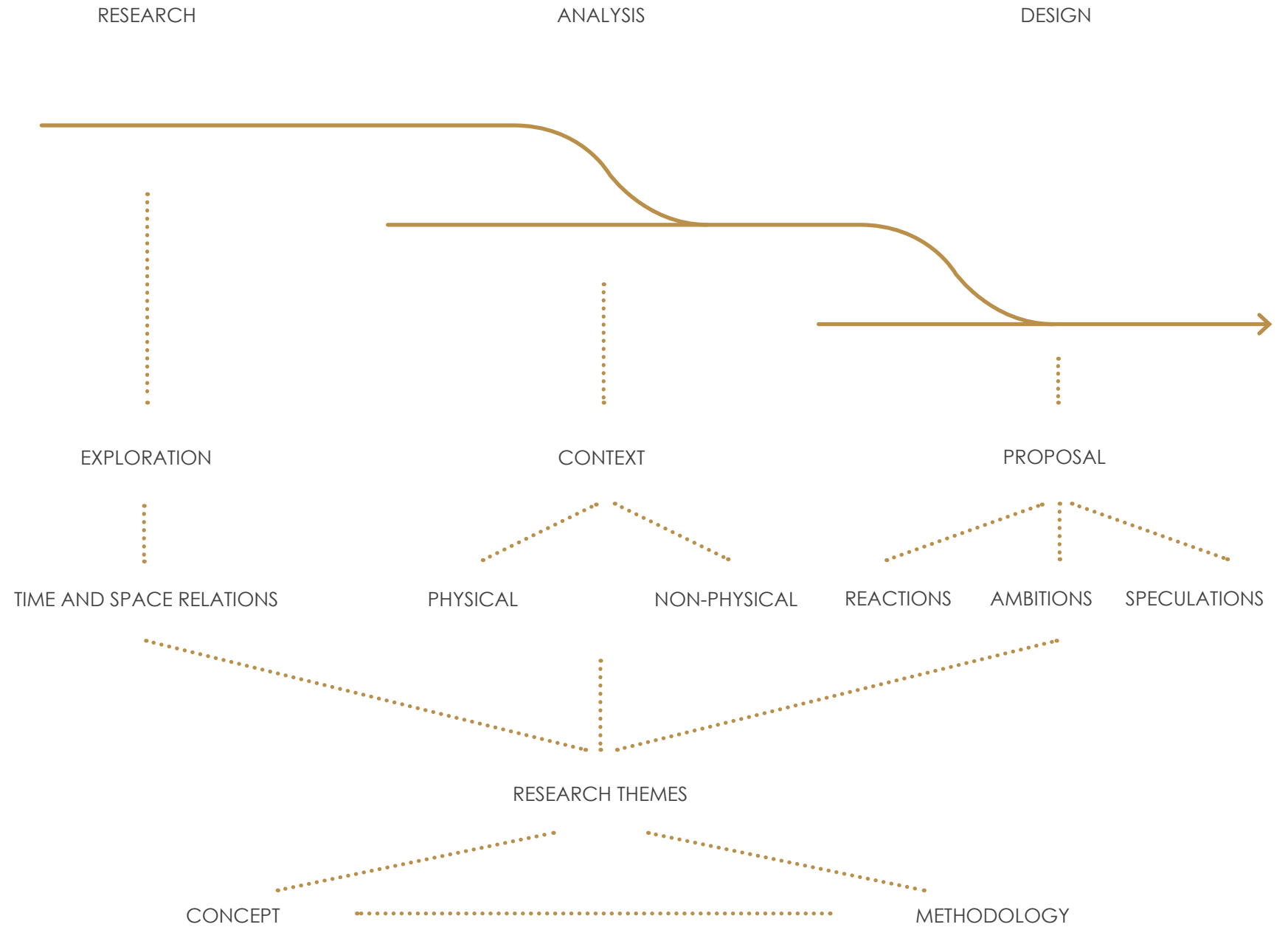
PART 1:  
FROM RESEARCH TO CONCEPT



PART 2:  
FROM CONCEPT TO SPACE

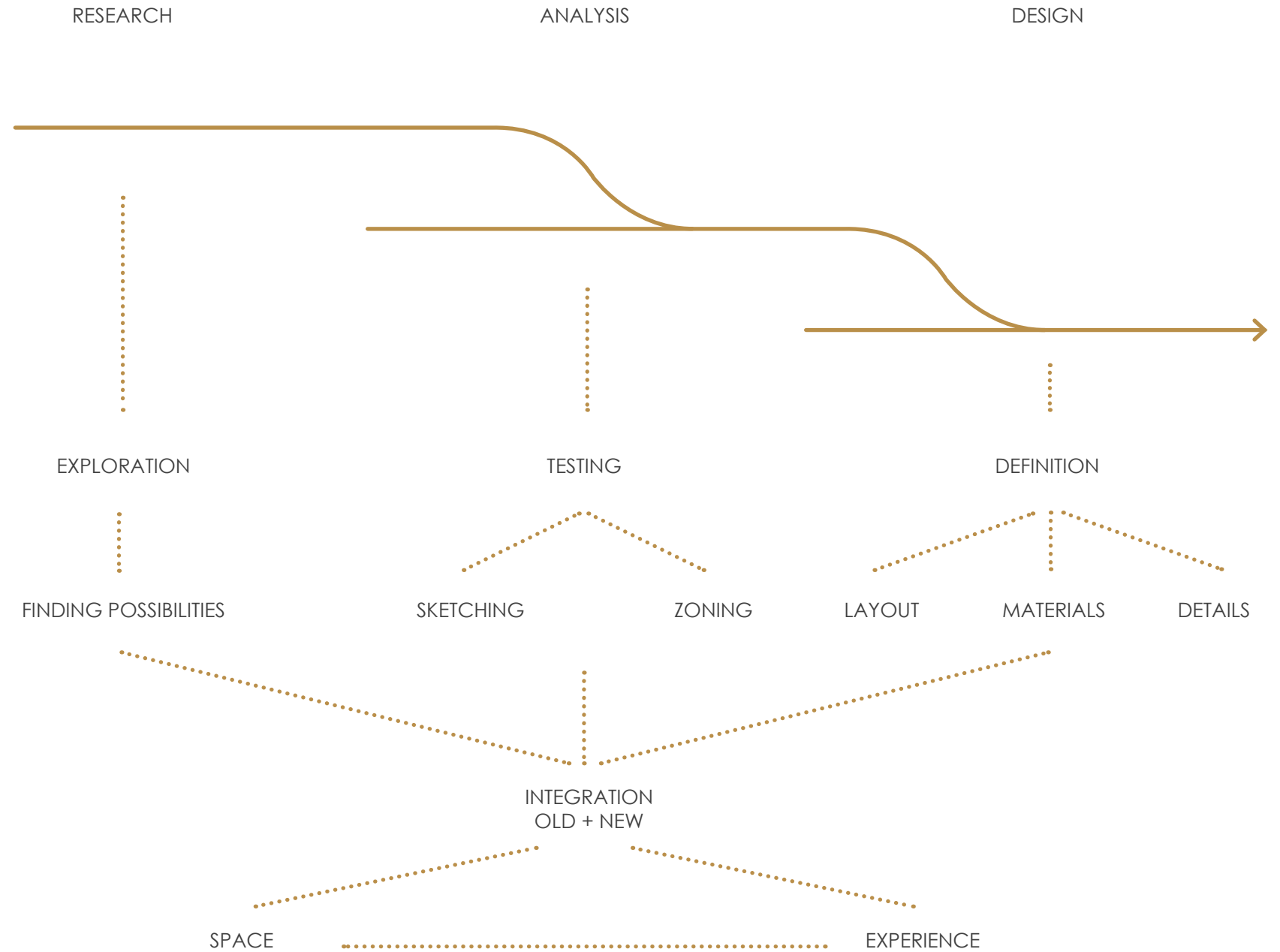
# METHODOLOGY

FROM RESEARCH TO CONCEPT



# METHODOLOGY

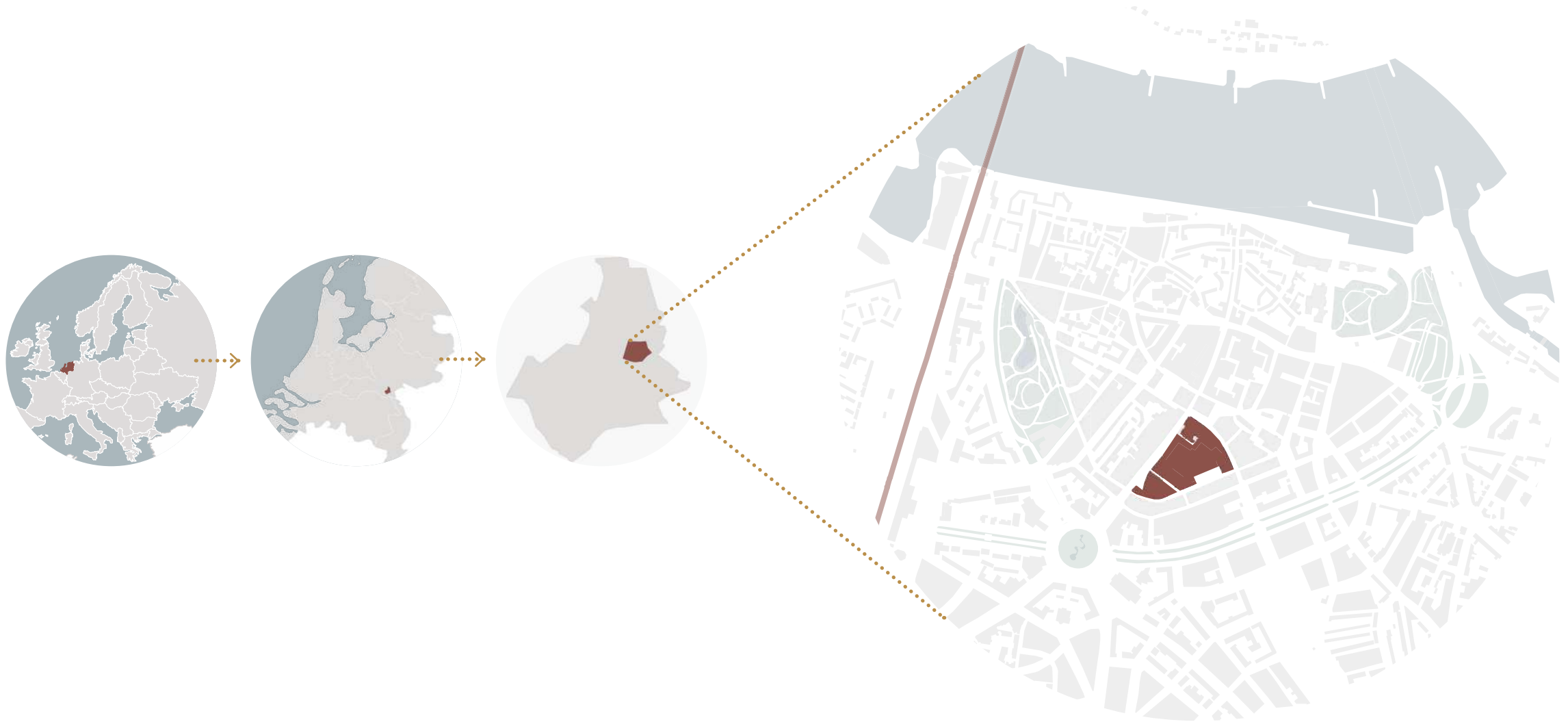
## PART 2: FROM CONCEPT TO SPACE



# PART 1

FROM RESEARCH TO CONCEPT

# LOCATION





## LOCATION



Arriving to Nijmegen (06,2021)  
Pictures by the author

## LOCATION



Arriving to Nijmegen (06,2021)  
Pictures by the author

## LOCATION



Arriving to Nijmegen (06,2021)  
Pictures by the author



## LOCATION



Arriving to Nijmegen (06,2021)  
Pictures by the author



## LOCATION



Around Nijmegen (06,2021)  
Pictures by the author

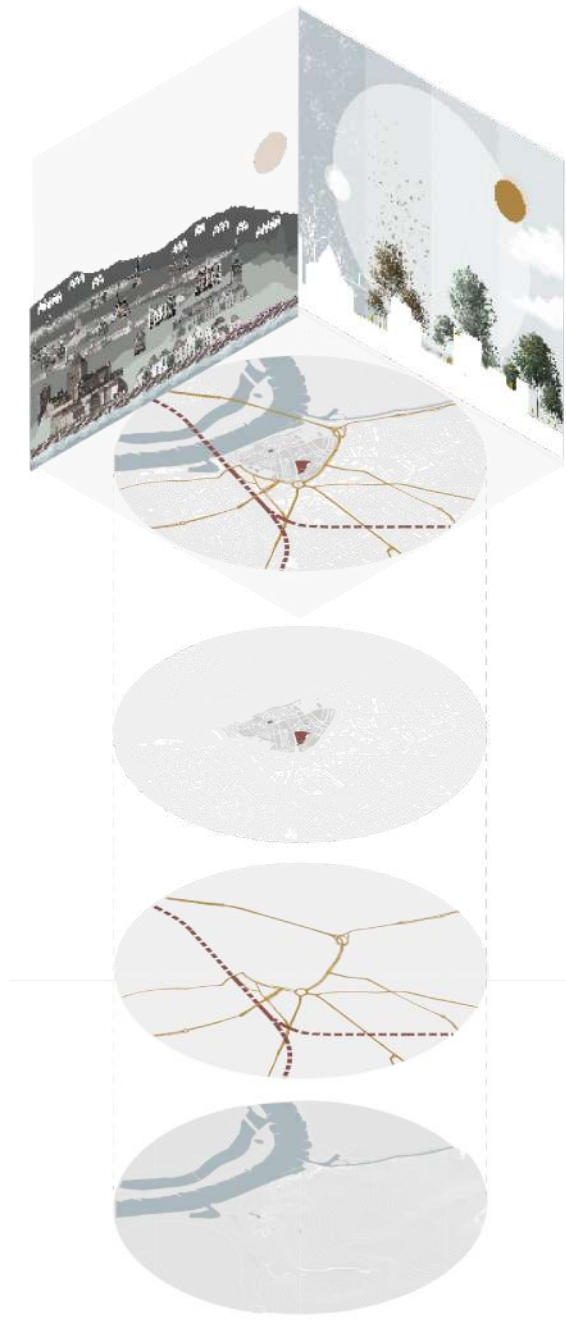


# MOLENPOORT

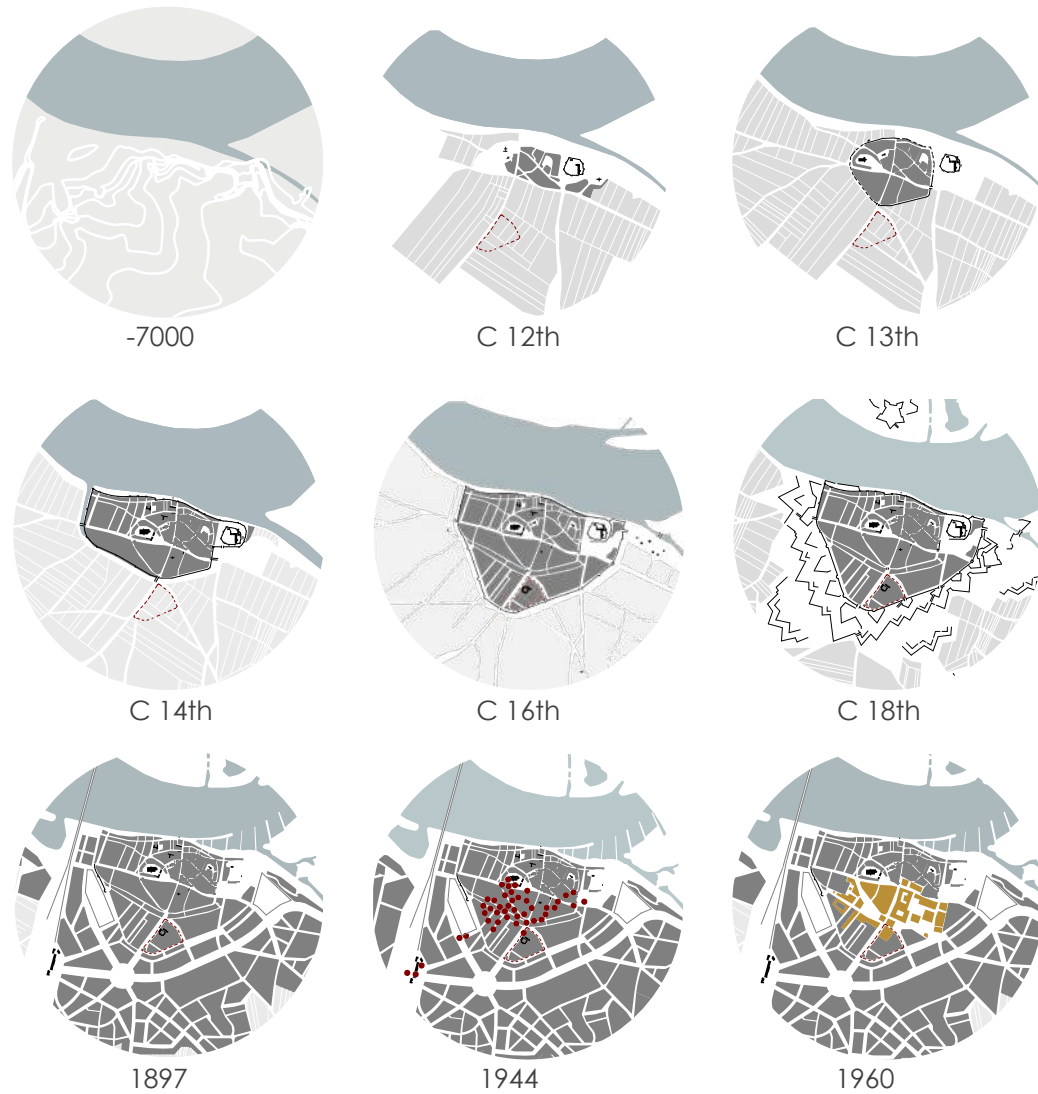


Arriving to The Molenpoort (06,2021)  
Pictures by the author

# DECOMPOSITION OF TIME AND SPACE



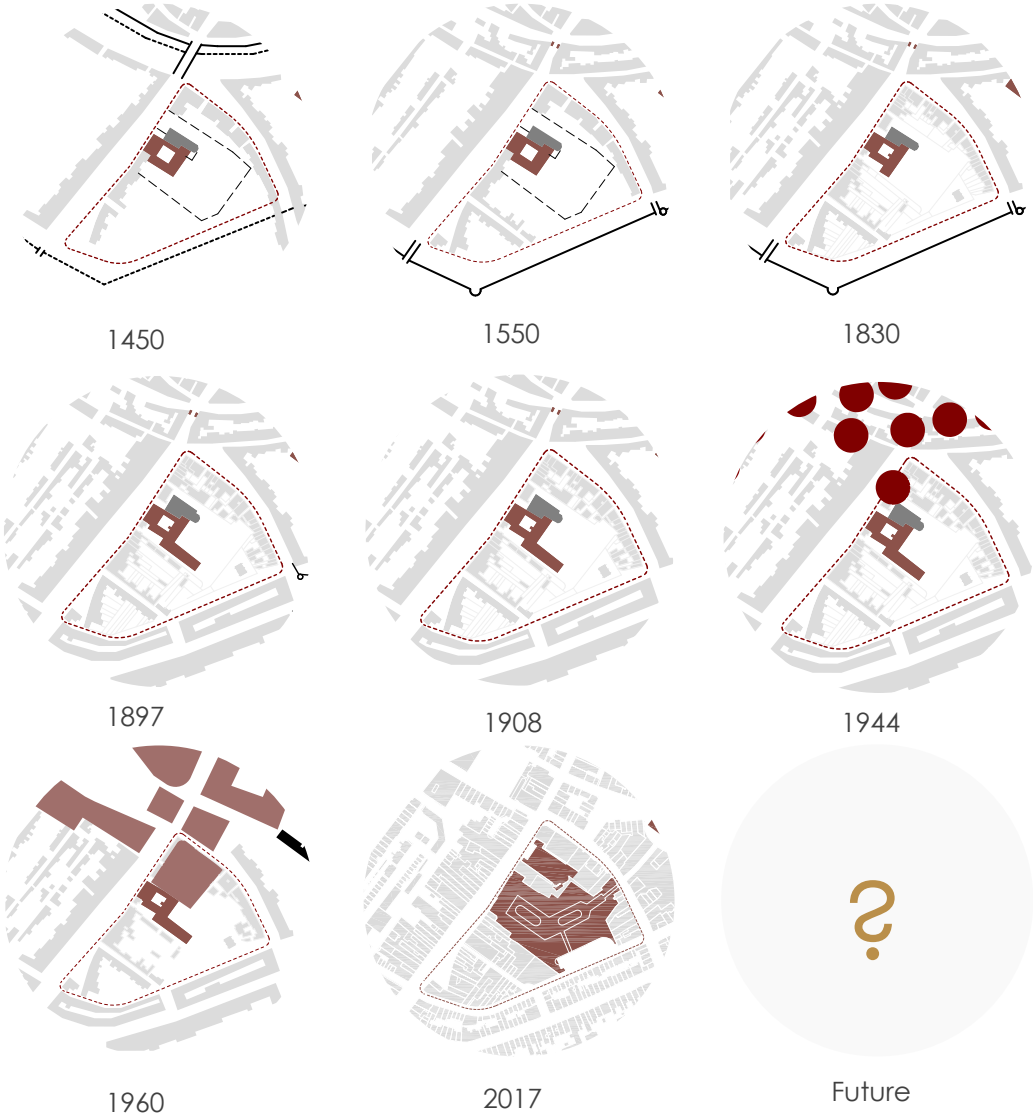
# HISTORICAL EVOLUTION OF THE CITY



Evolutions of the city over time  
Source: Nijmegen Atlas  
Drawing by the author.



# HISTORICAL EVOLUTION OF THE SITE



Evolutions of the plot over time  
Source: Nijmegen Atlas  
Drawing by the author.

# HISTORICAL EVOLUTION OF THE SITE



C14th



C19th



C20th



C20.5th



C20th

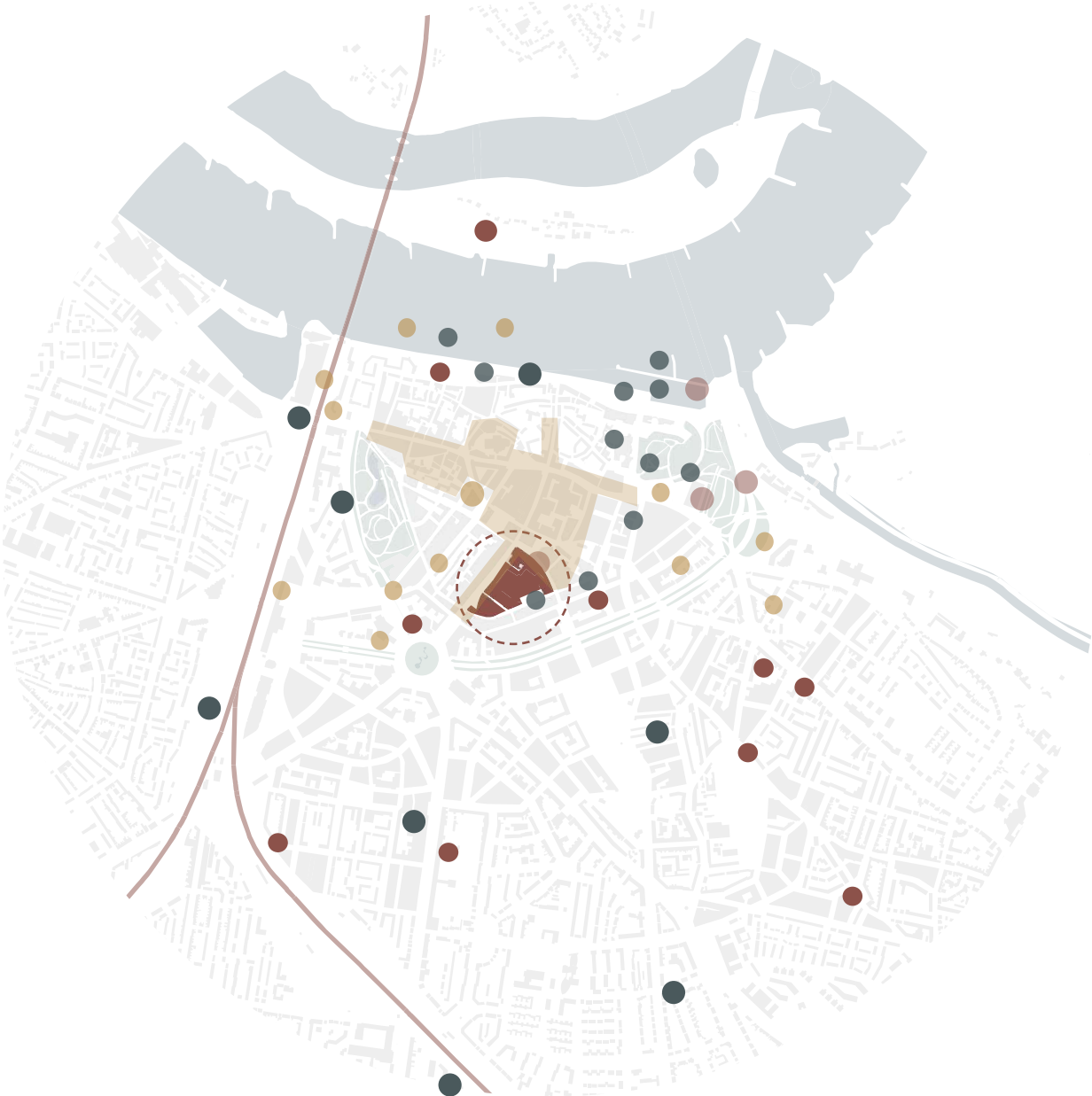


C20.5th

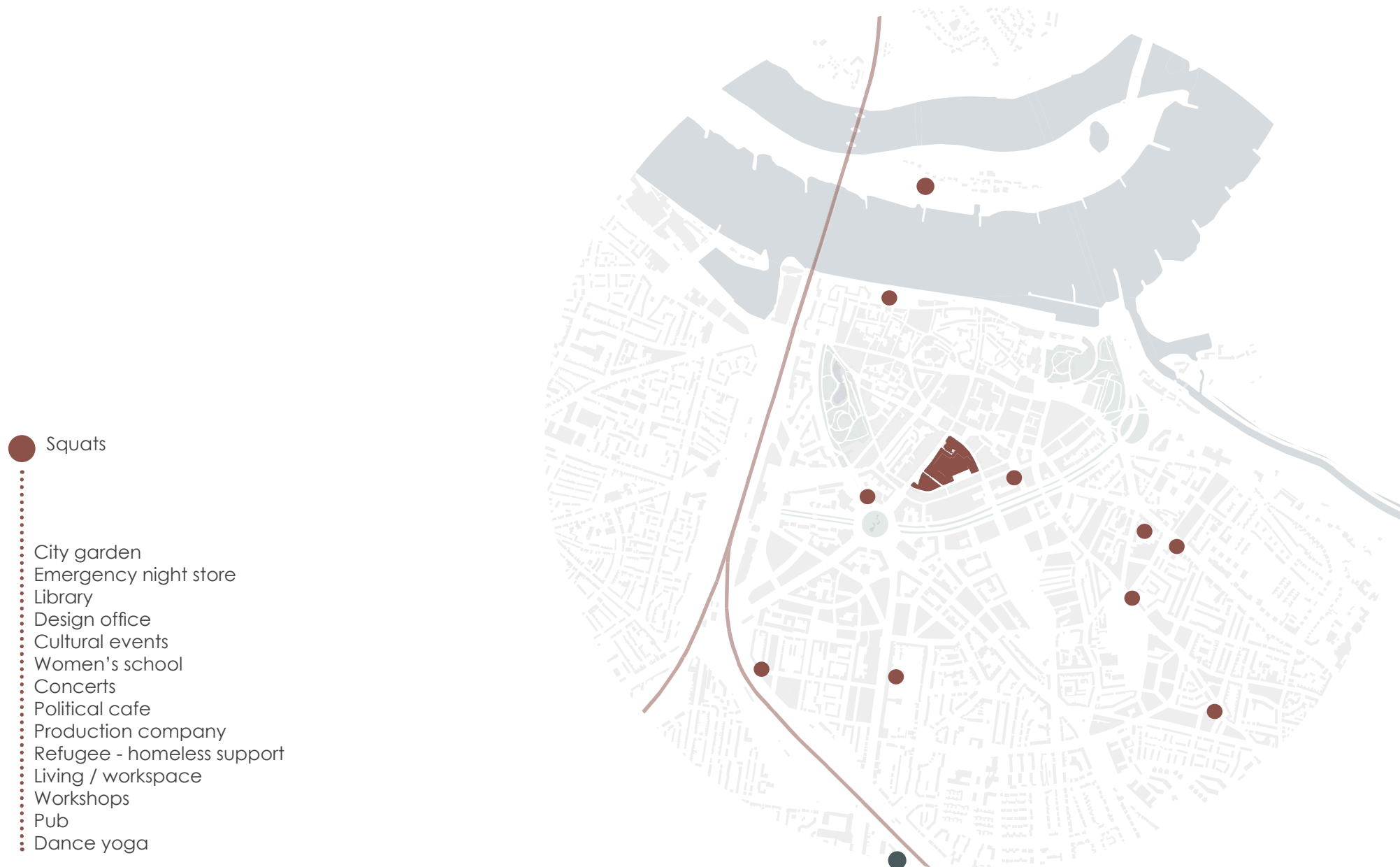
Evolution of Molenstraat  
Source: Nijmegen archive

WHAT IS THERE?

- Plot
- Water
- Buildings
- Pedestrian area
- Monuments/museums
- Education
- Parks
- Parking
- Train station
- Bus station
- Squats



## WHAT IS NEEDED?



## WHERE AND WHY?



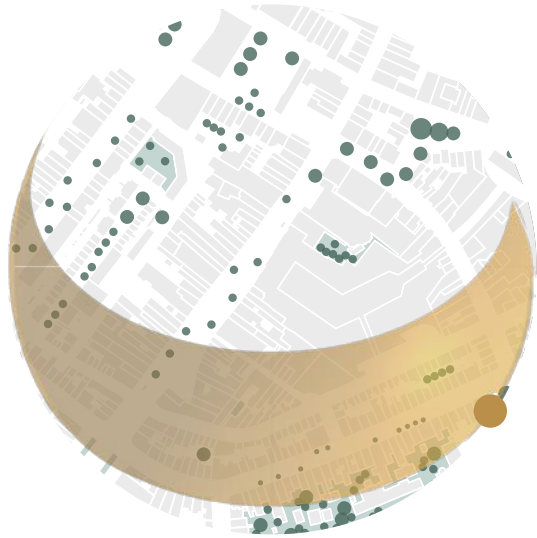


## GETTING CLOSER TO THE SITE





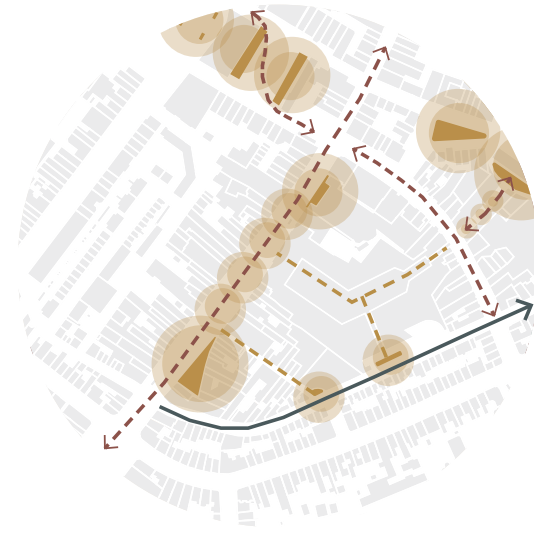
# ANALYSIS



Nature and climate



Age and qualities



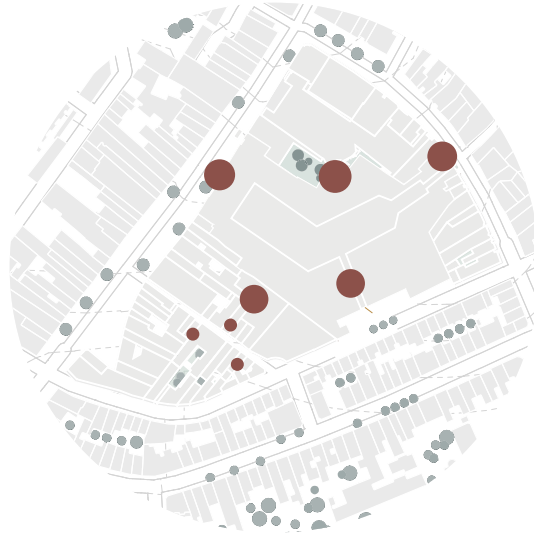
Circulation and permanency

Site Analysis  
Drawings by urban plan group

# CURRENT SITUATION



Molenpoort plot



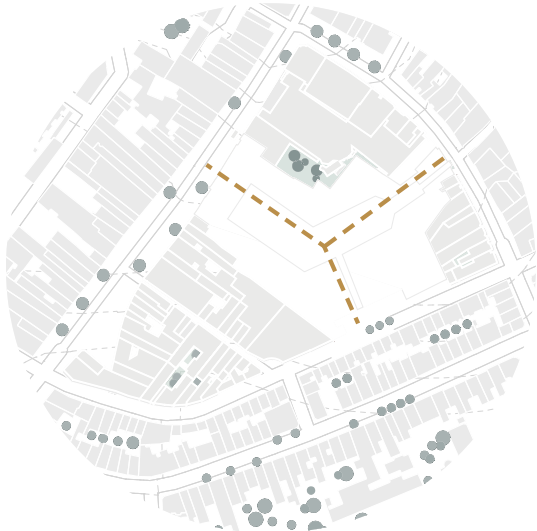
Problematic spots



Unclear paths

Site Analysis  
Drawings by urban plan group

## FINDING POSSIBILITIES



Break the plot



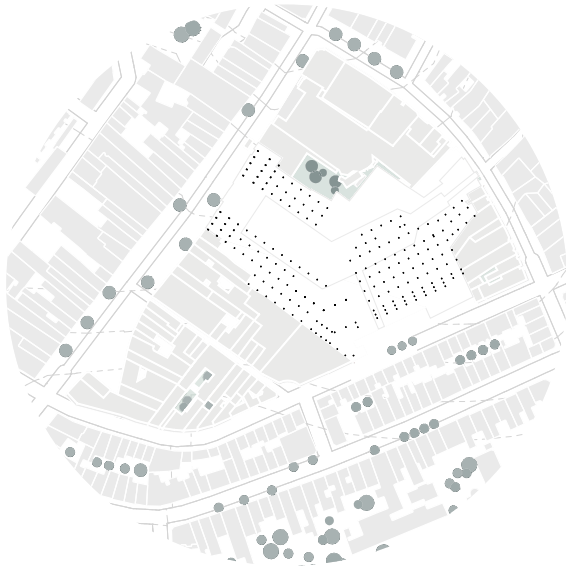
Free the church



Define circulation

Site Analysis  
Drawings by urban plan group

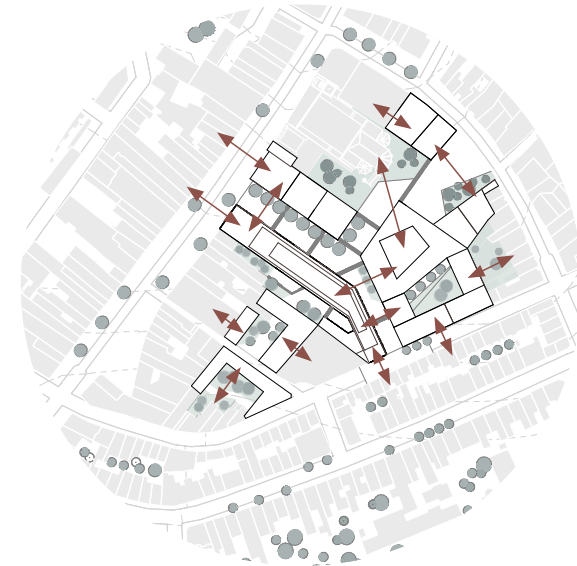
# SHAPING THE SITE



Structural grid



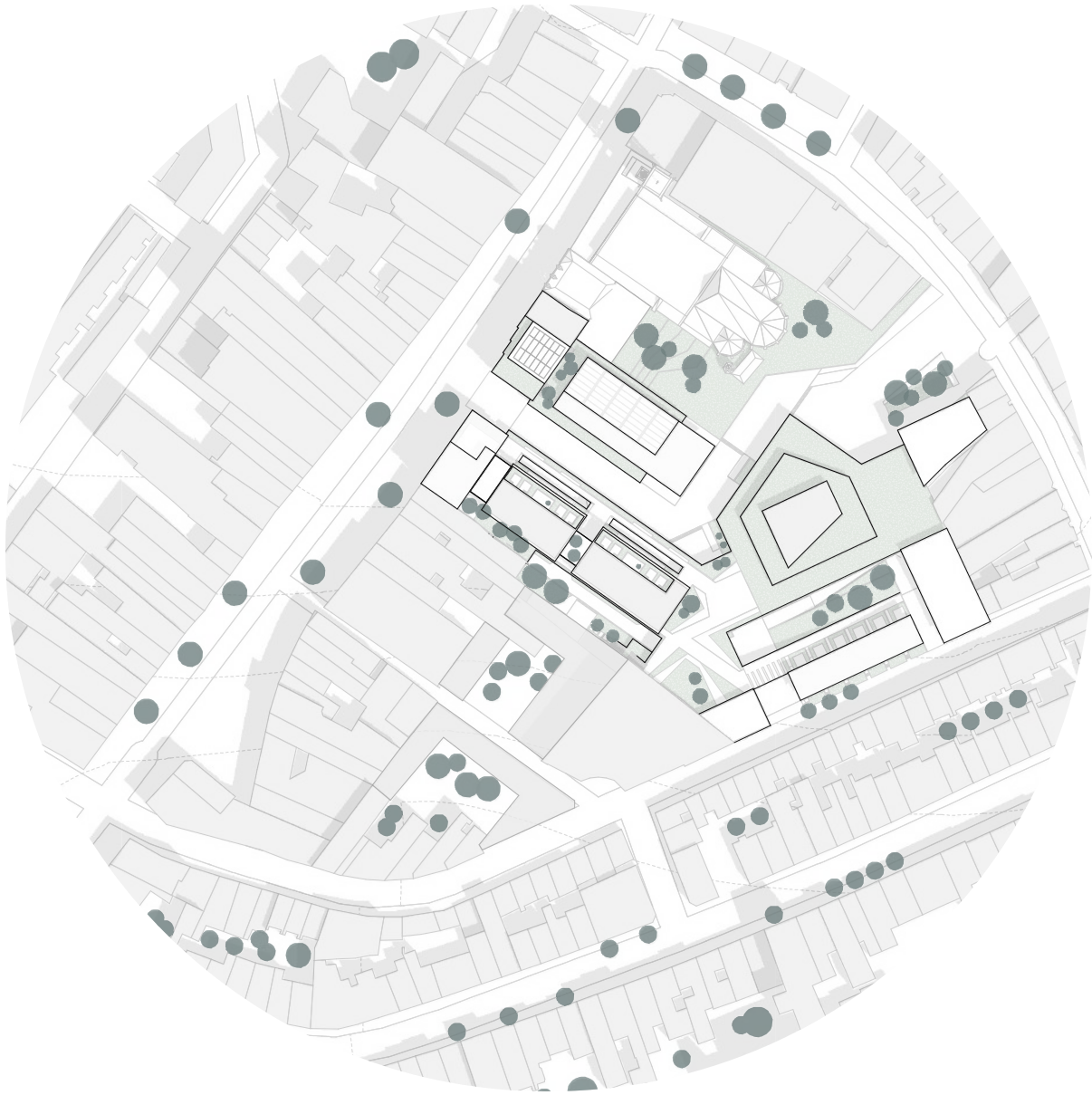
Building shapes



Height relations

Site Analysis  
Drawings by urban plan group

# URBAN PLAN





BUILDING RELATIONS

Existing



New





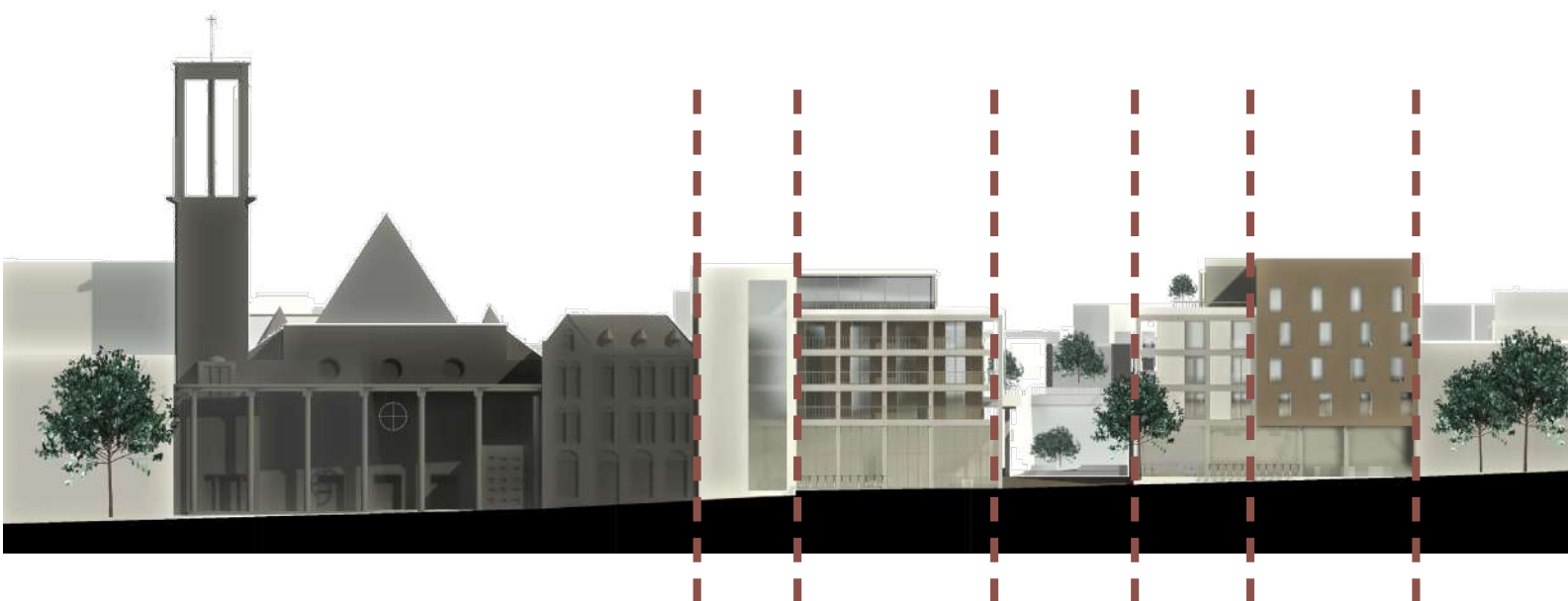


BUILDING RELATIONS

Existing



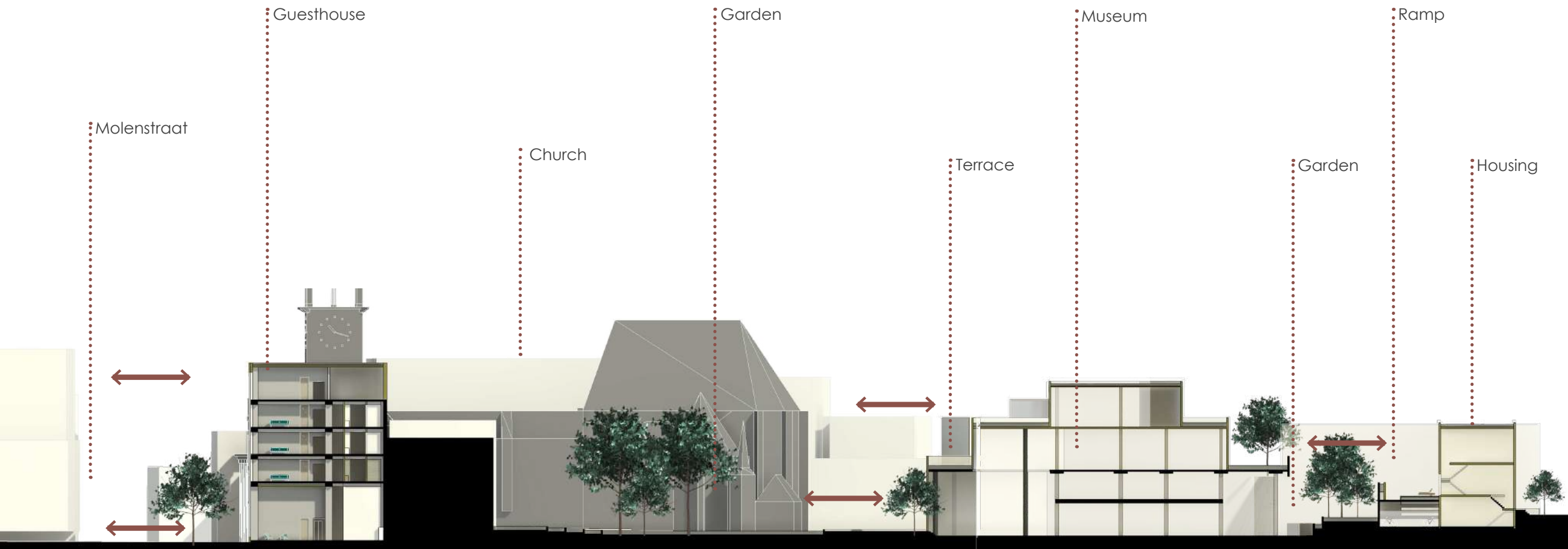
New





# BUILDING RELATIONS

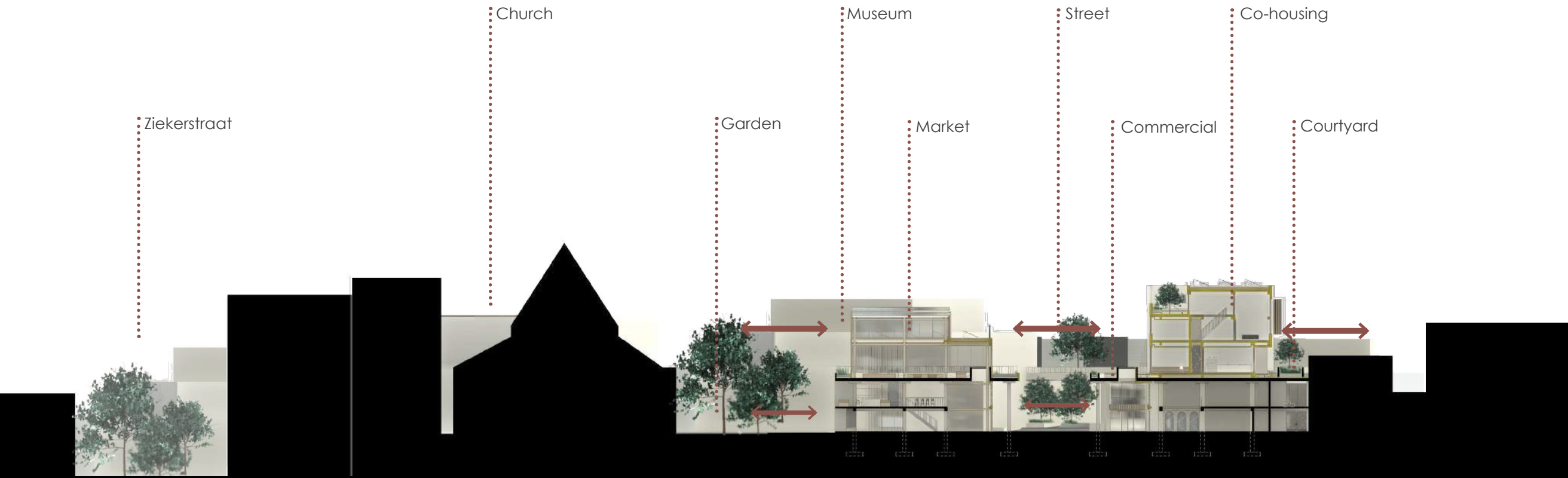
## SECTION A





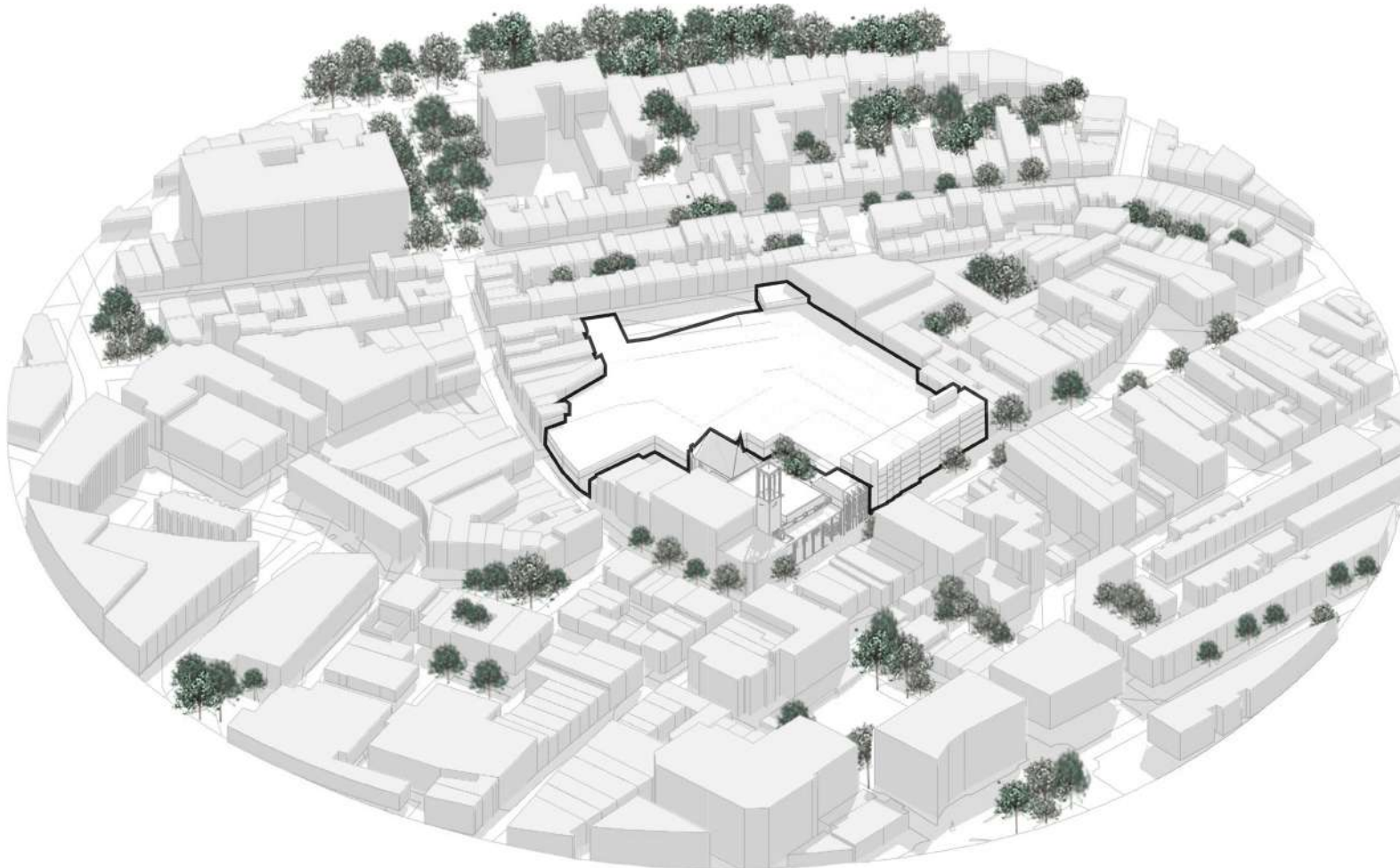
# BUILDING RELATIONS

## SECTION B



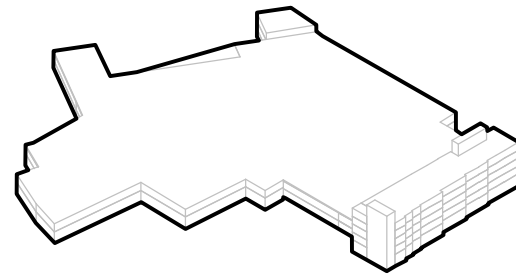
# BUILDING LIFE CYCLE

## INTEGRATION



# BUILDING LIFE CYCLE

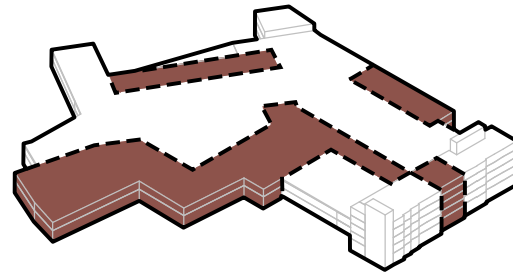
## CURRENT SITUATION





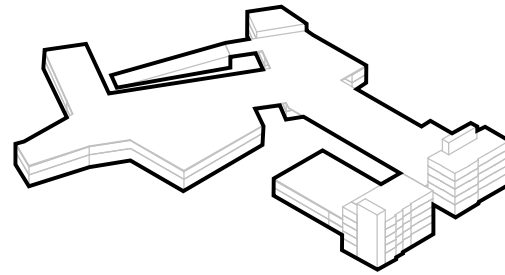
# BUILDING LIFE CYCLE

## DEMOLITION



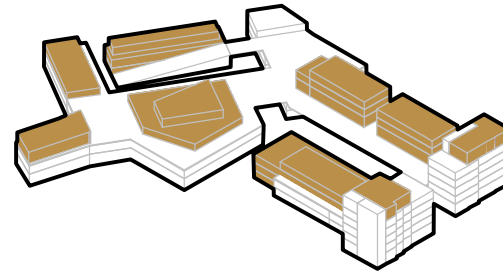
# BUILDING LIFE CYCLE

PRESERVED



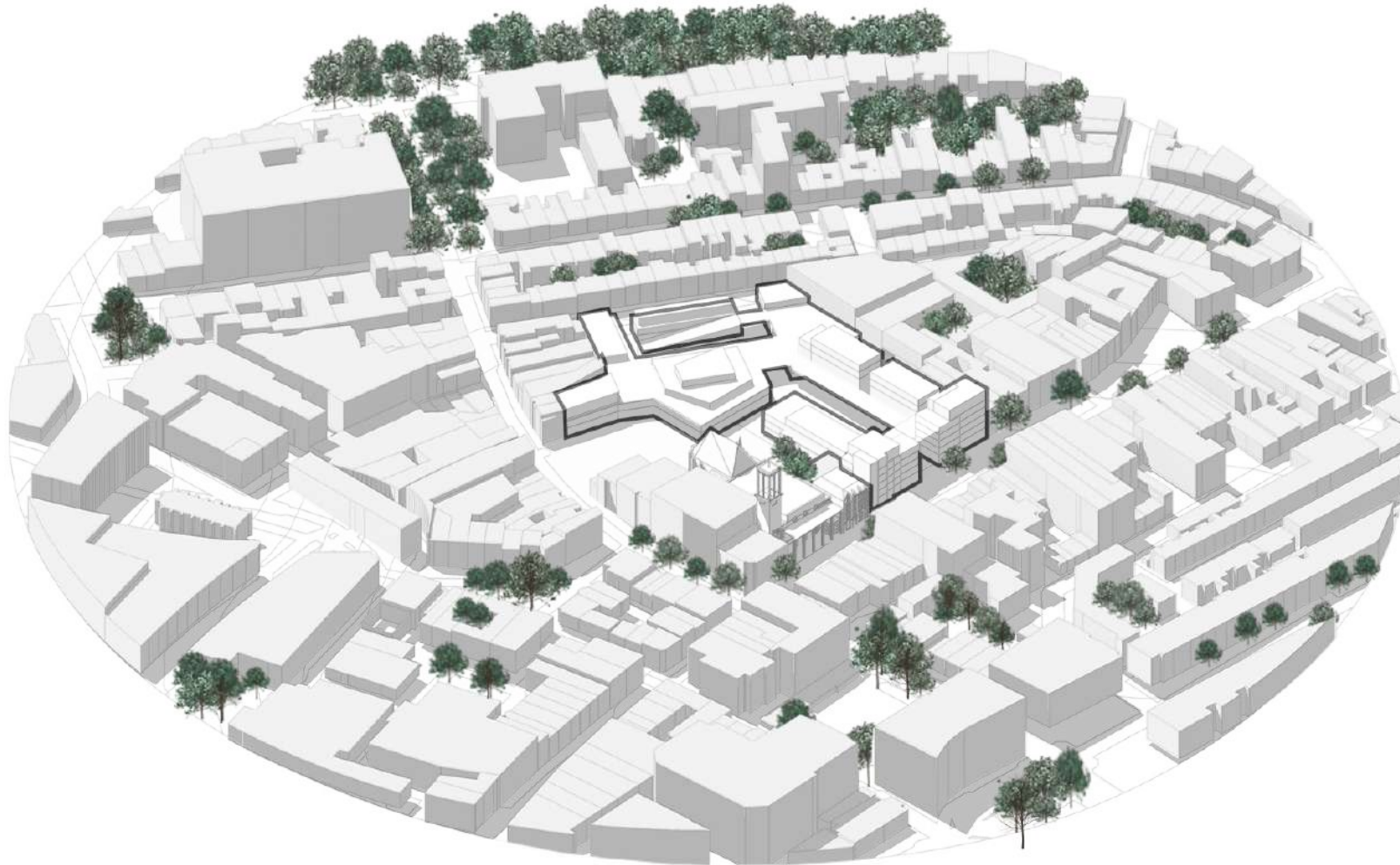
# BUILDING LIFE CYCLE

## ADDITIONS



# BUILDING LIFE CYCLE

## INTEGRATION

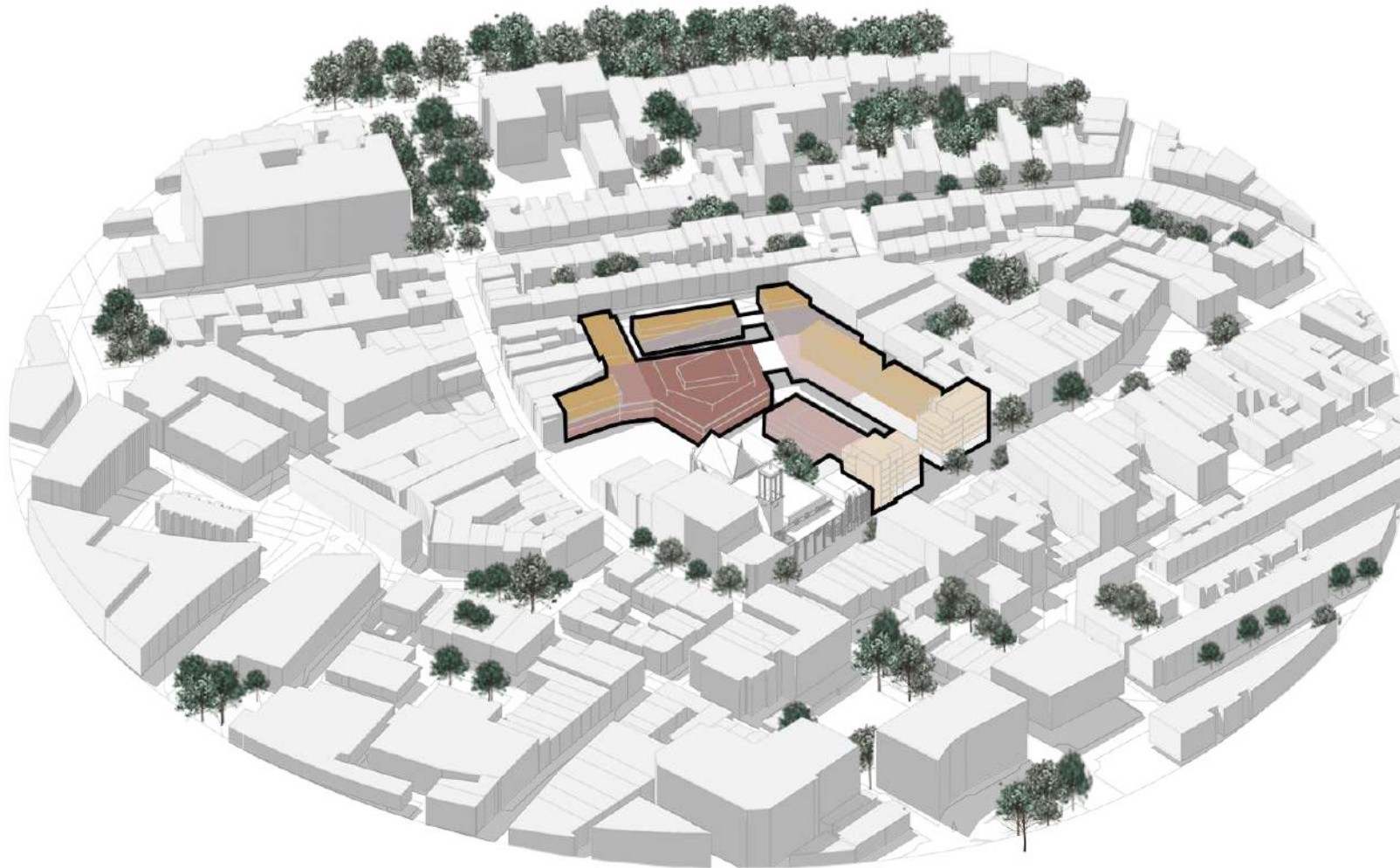




# BUILDING LIFE CYCLE

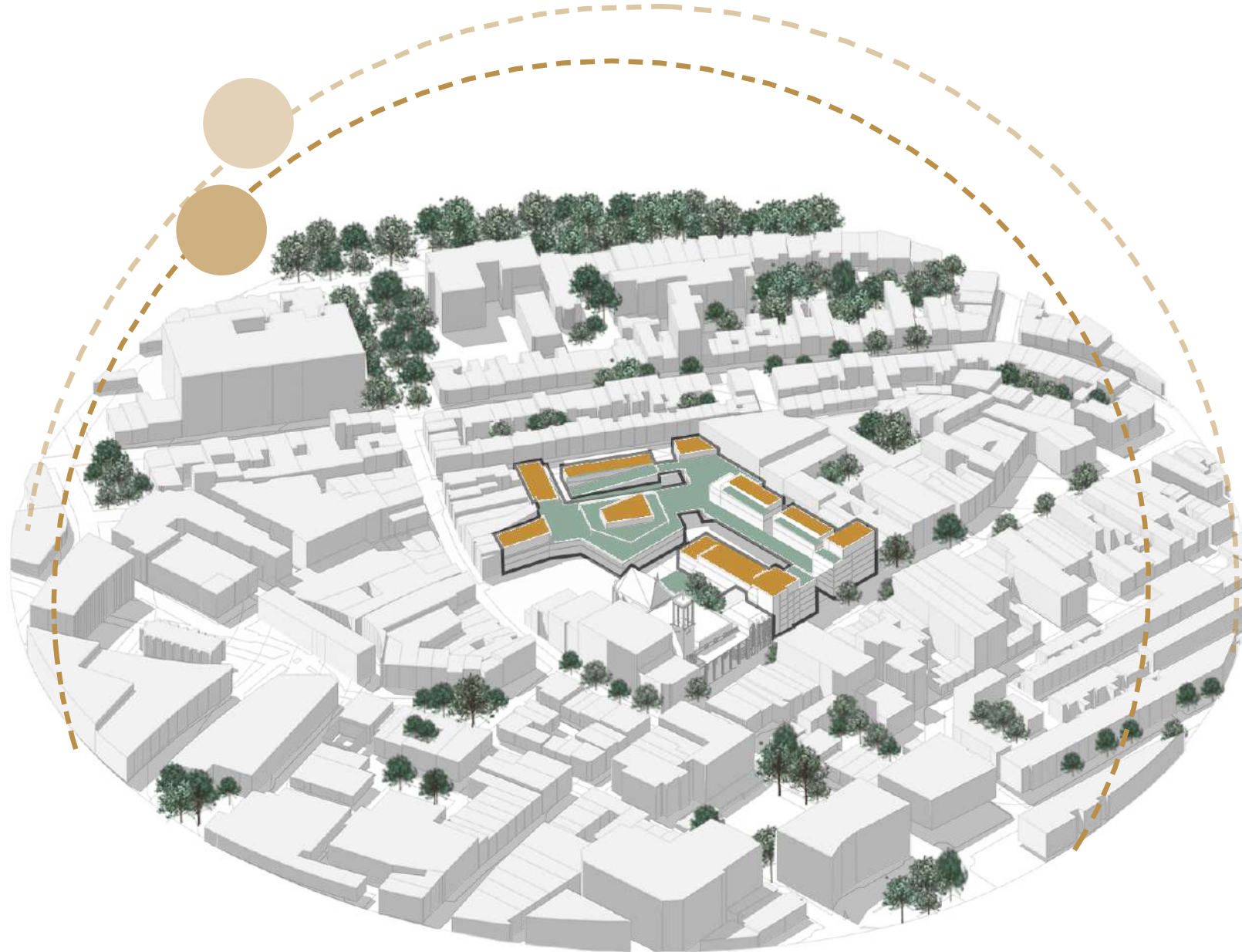
FIRST USE

- Gallery
- Atelier
- Market
- Co-working
- Housing
- Co-living
- Student Housing
- Shelter Housing
- Services

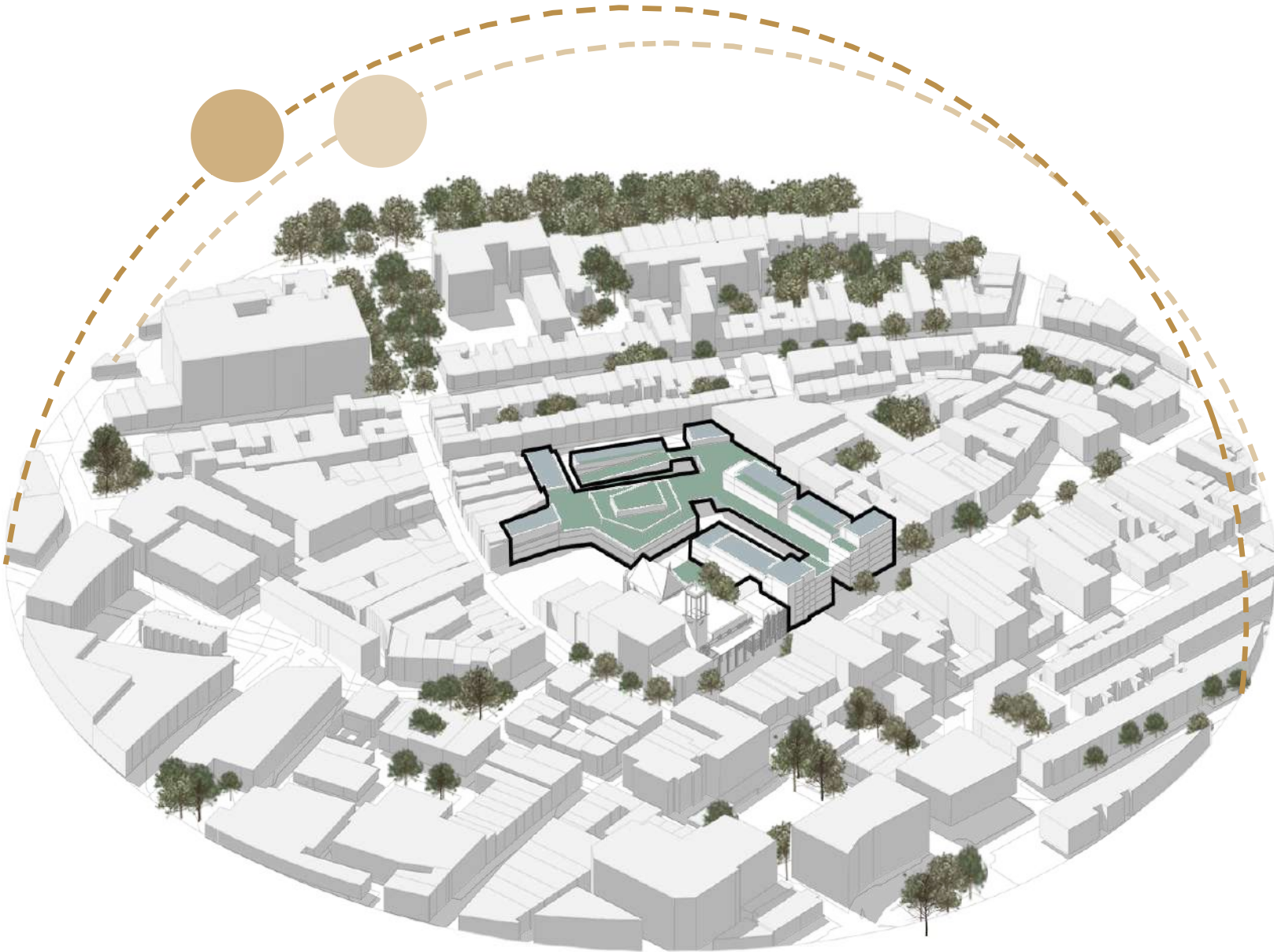


# BUILDING LIFE CYCLE

SPRING - SUMMER



BUILDING LIFE CYCLE  
FALL - WINTER





# THE EXPERIENCE OF SPACE

Route A



Route B



Route C



Summer morning  
10:00 am

A





Summer night  
10:00 pm

A



Early fall evening  
6:00 pm

A





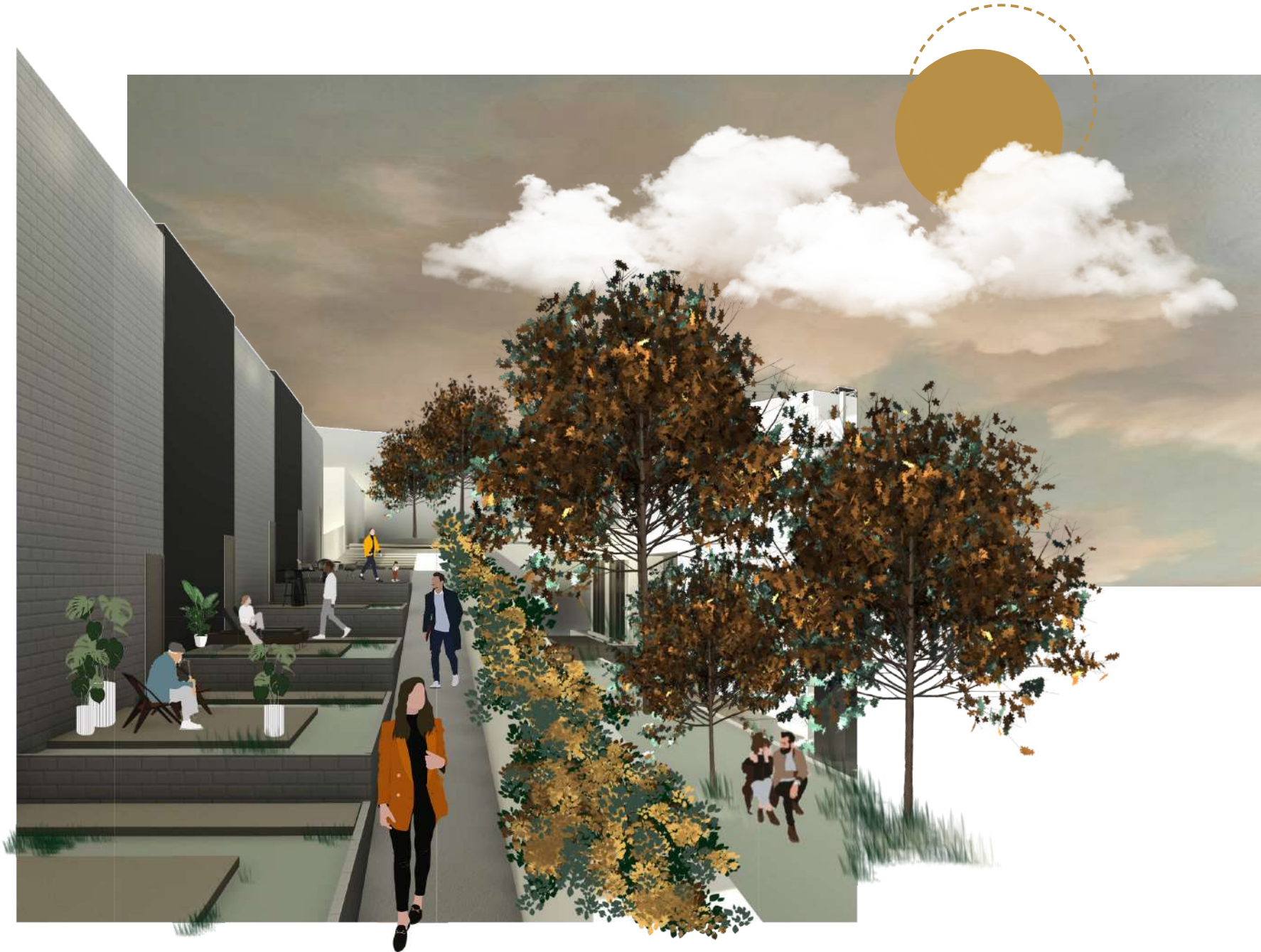
Autumn morning  
10:00 am

C



Autumn morning  
10:00 am

B





Spring noon  
10:00 am

B



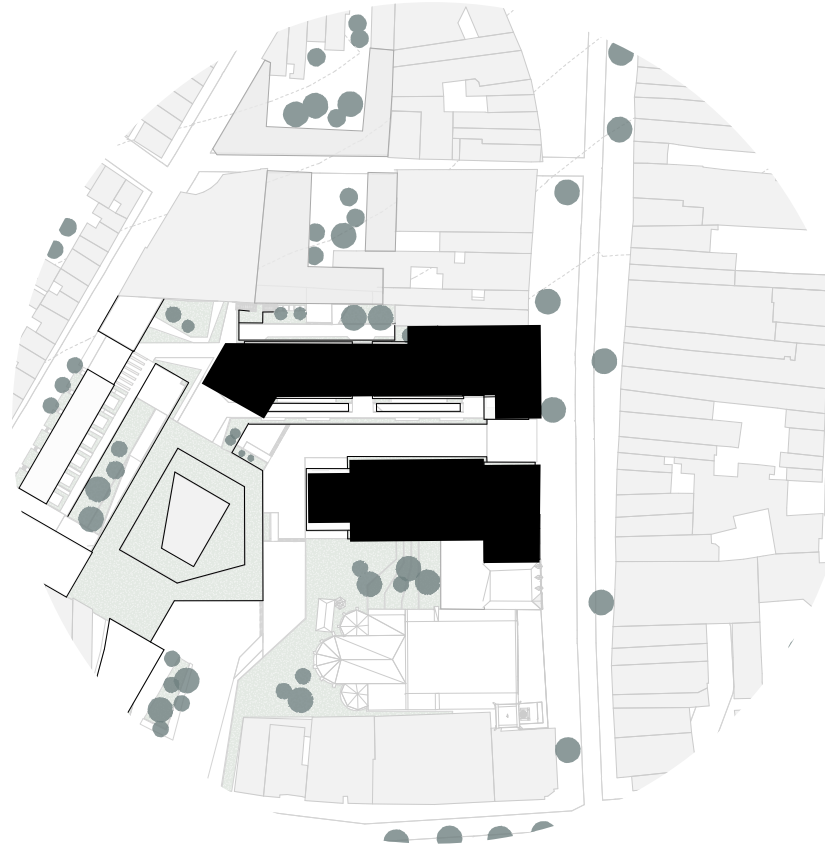


# PART 2

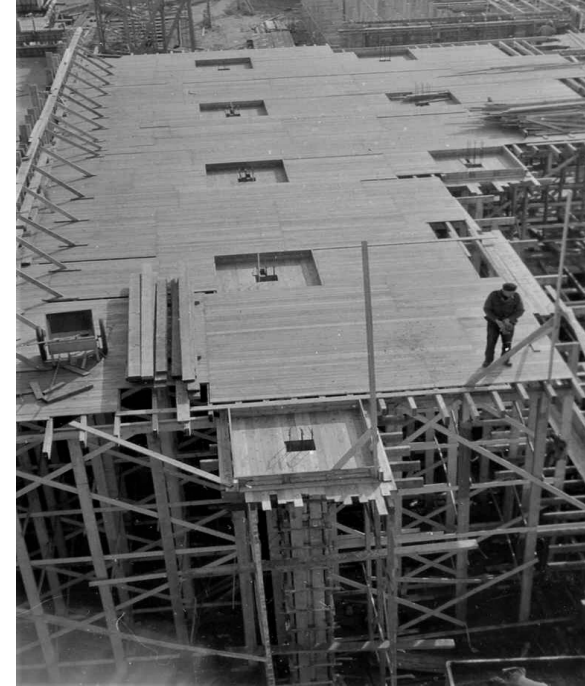
## FROM CONCEPT TO SPACE



## INTERVENTION AREA



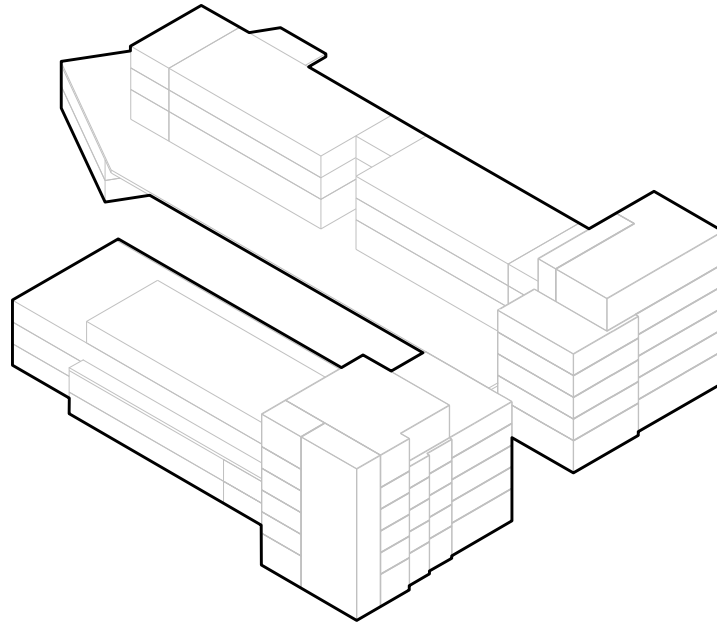
# MOLENPOORT





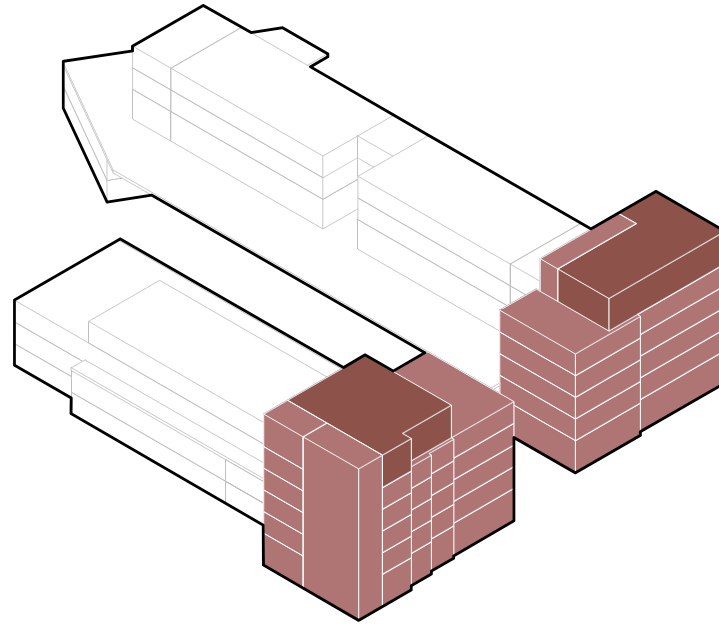


## INTERVENTION



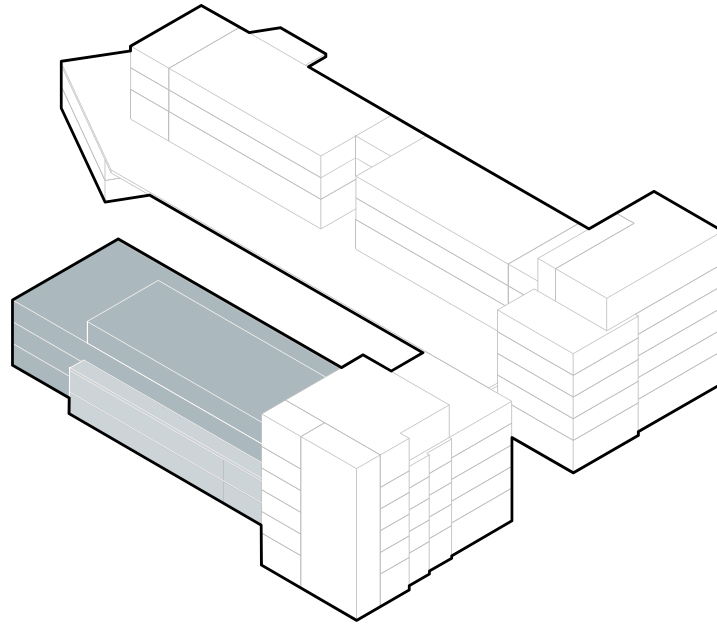
## INTERVENTION

### REFURBISHMENT AND RETROFITTING



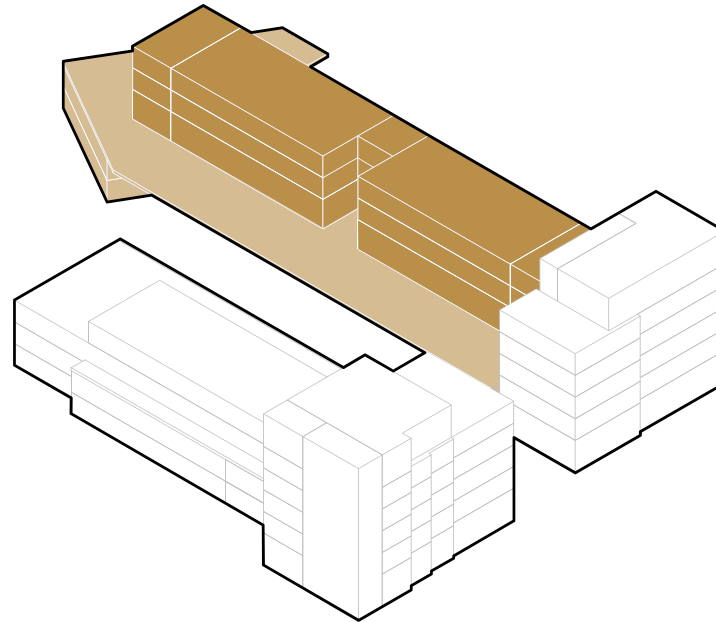
## INTERVENTION

### CONTRAST AND INTEGRATION



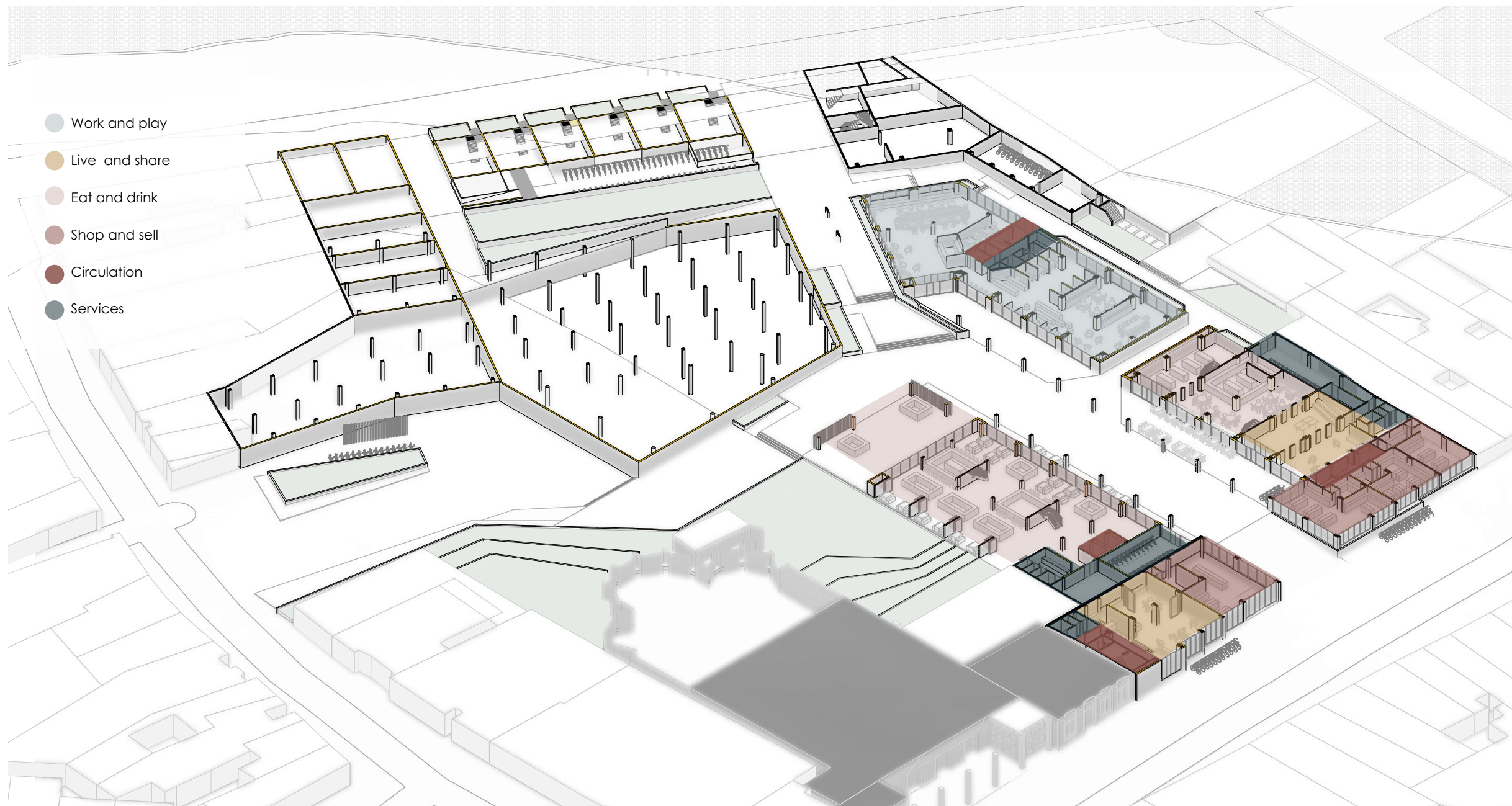
## INTERVENTION

### ADDITIONS AND RENOVATIONS



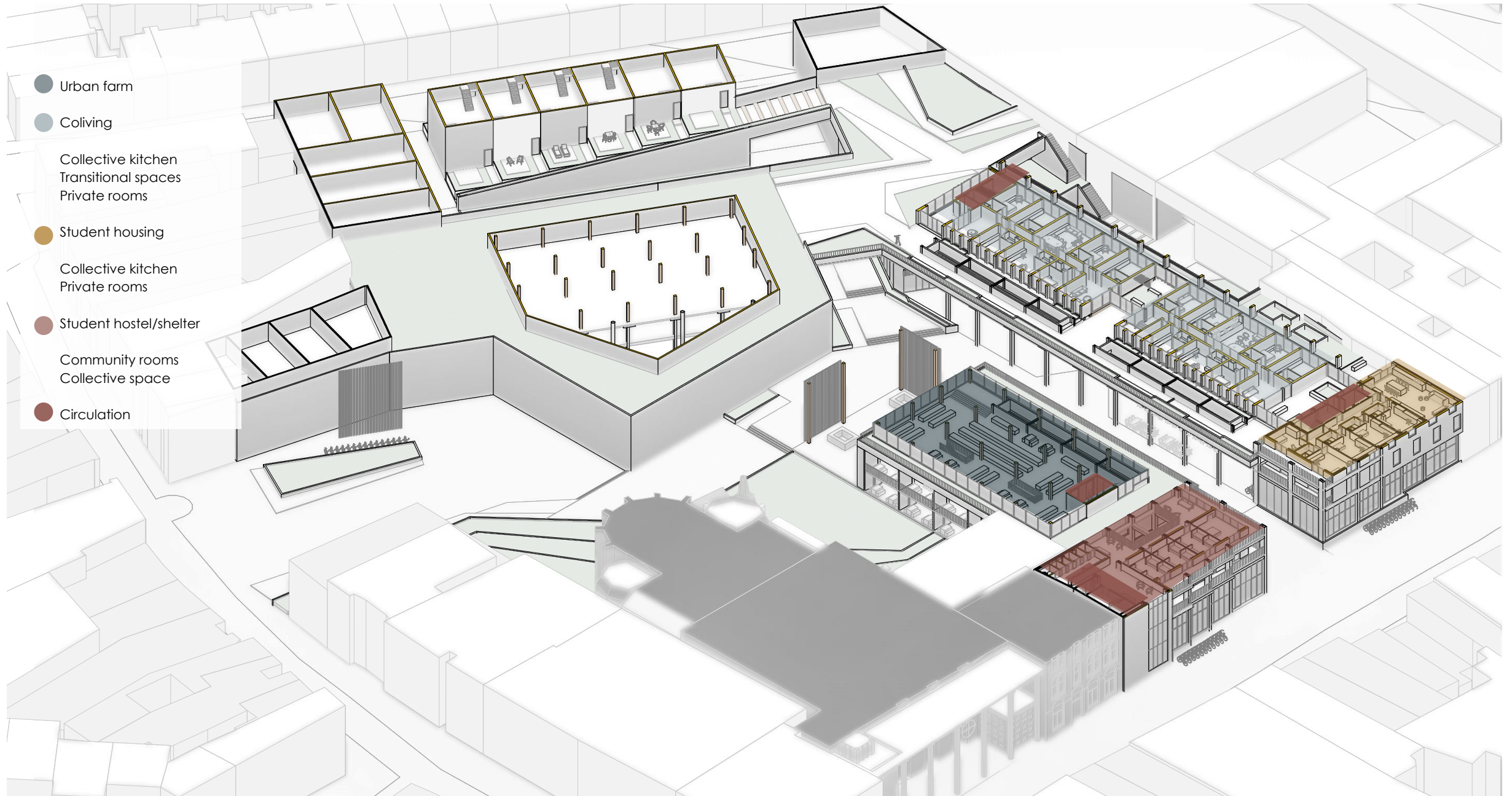


# PROGRAM

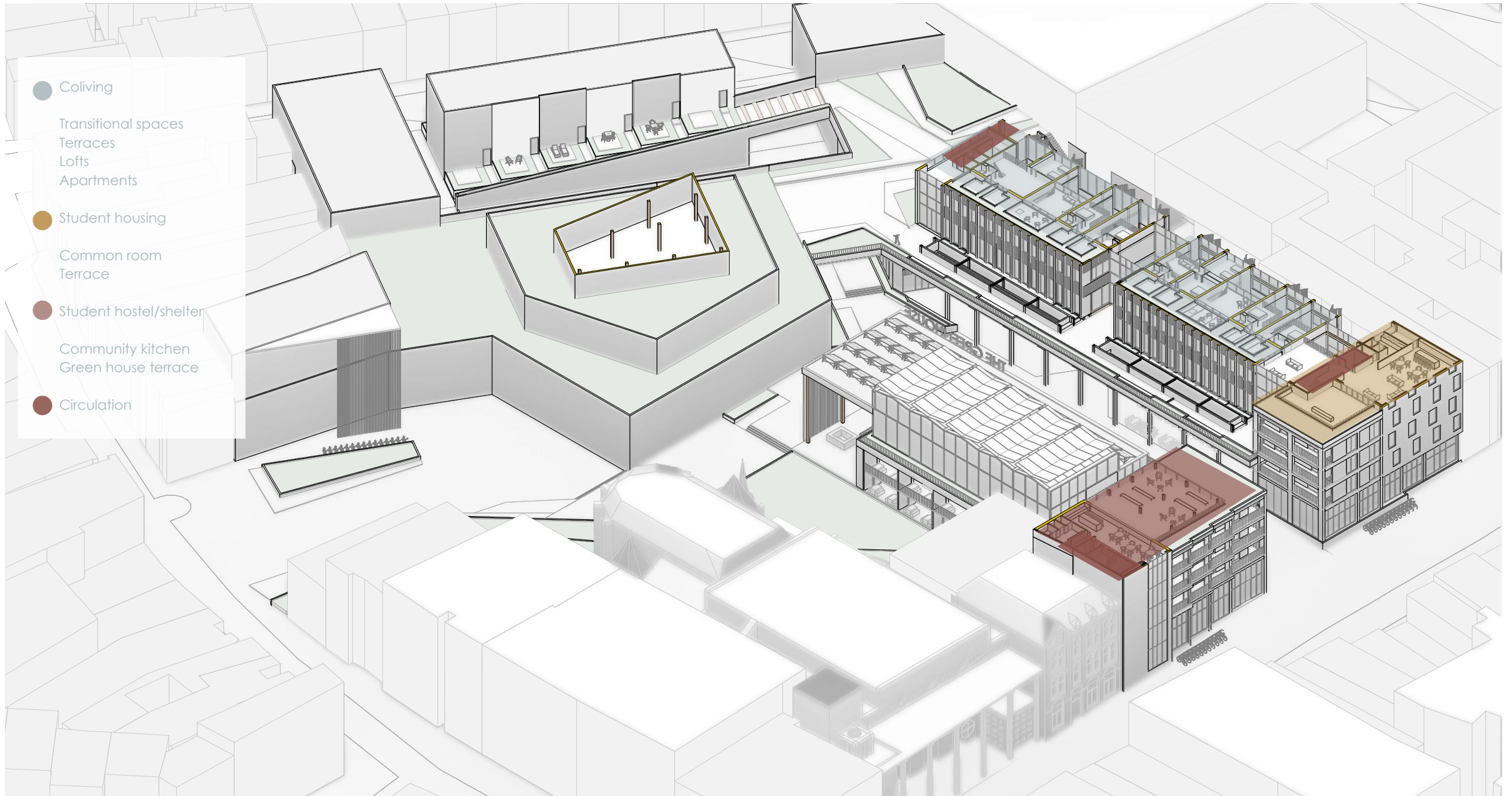




# PROGRAM

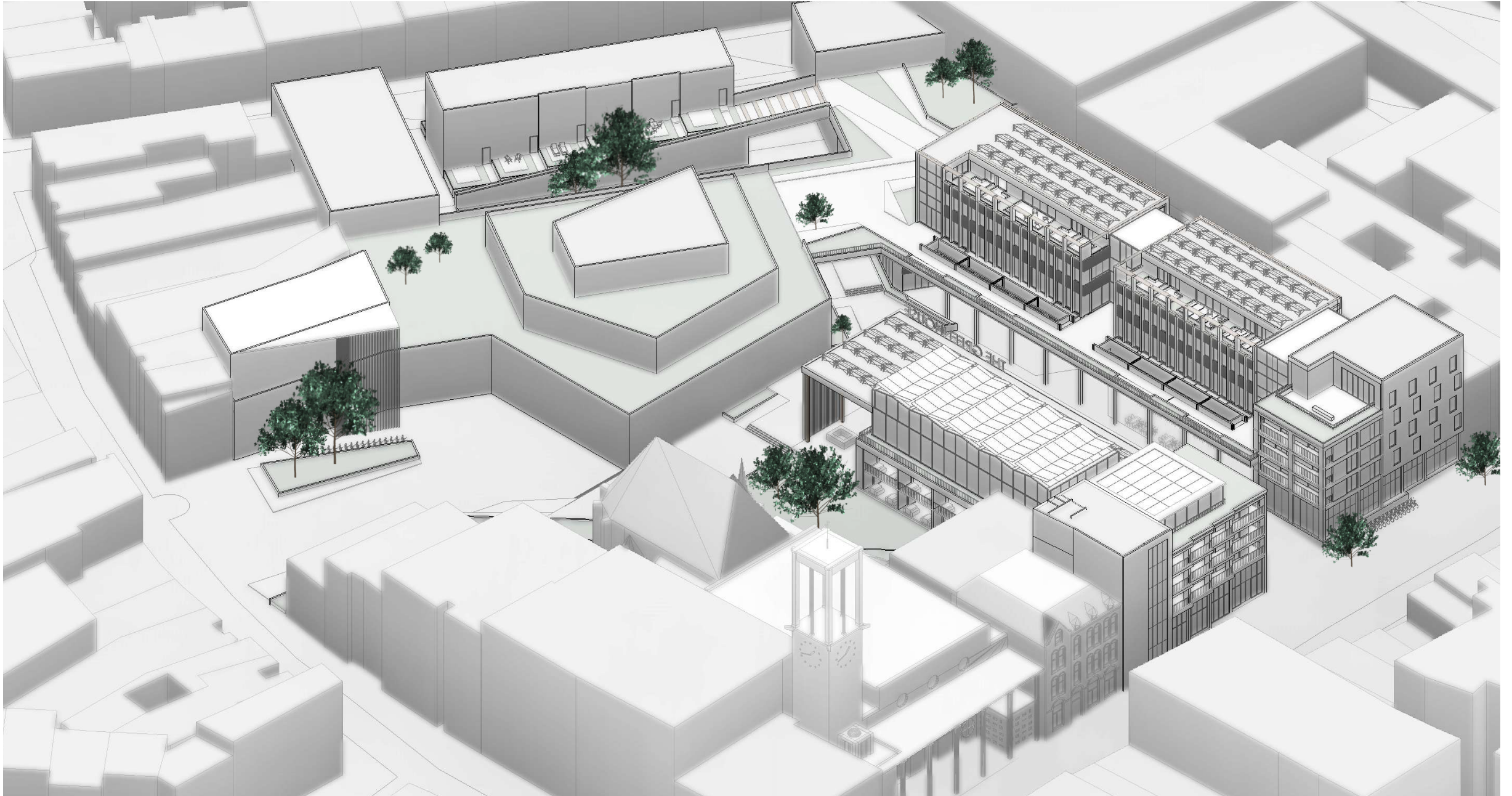


# PROGRAM





## AXONOMETRIC VIEW





## WALKING THROUGH THE STREET



Summer morning  
10:00 am

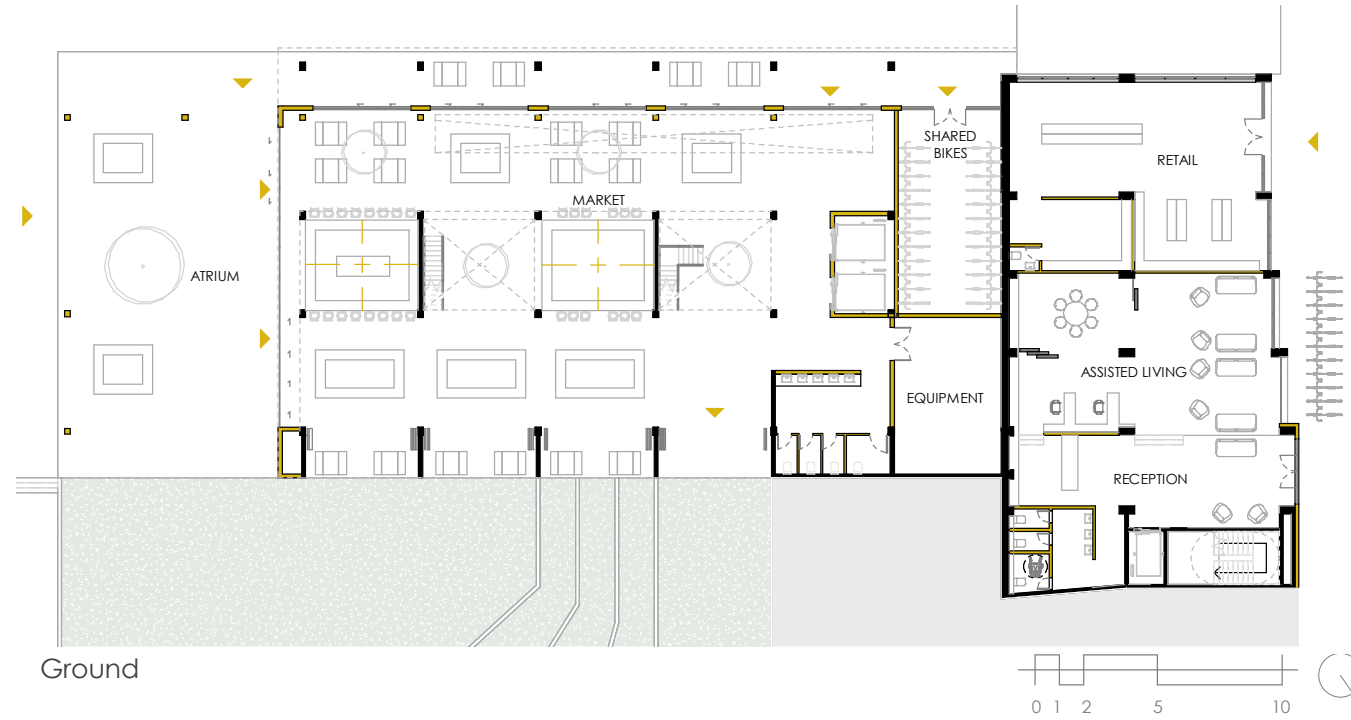
## THE MARKET AND THE SHELTER



## THE MARKET AND THE SHELTER

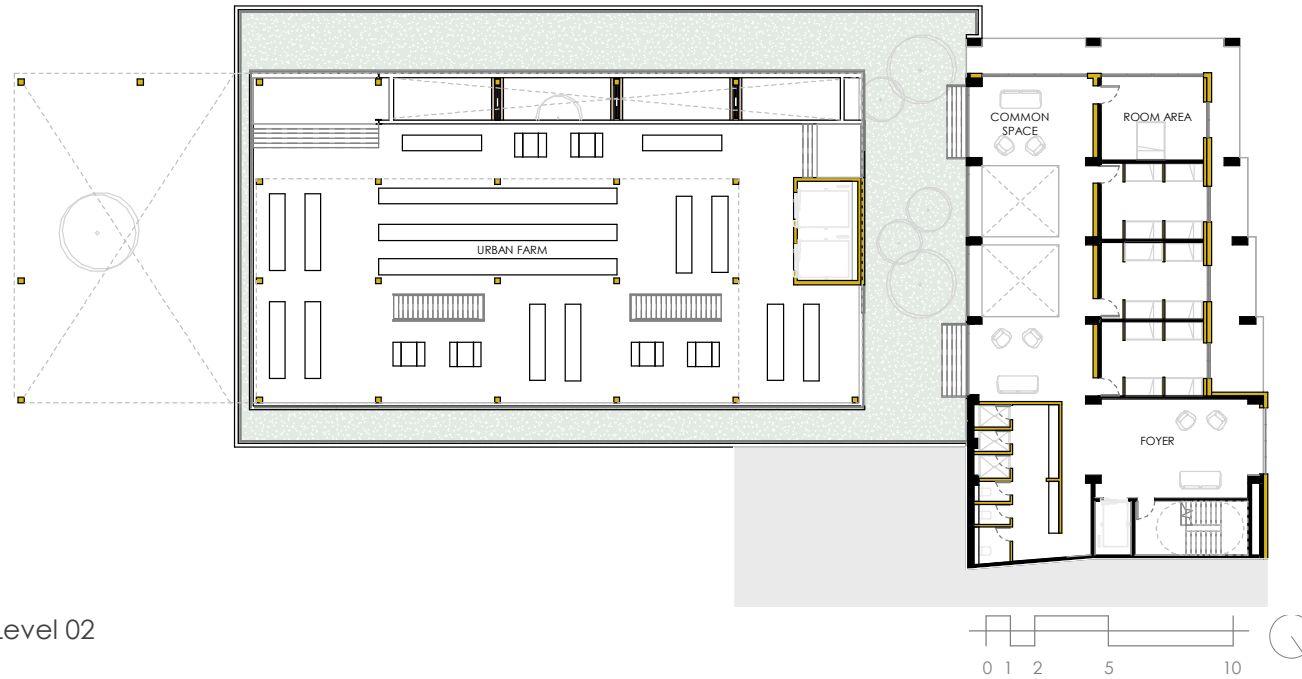


## THE MARKET AND THE SHELTER





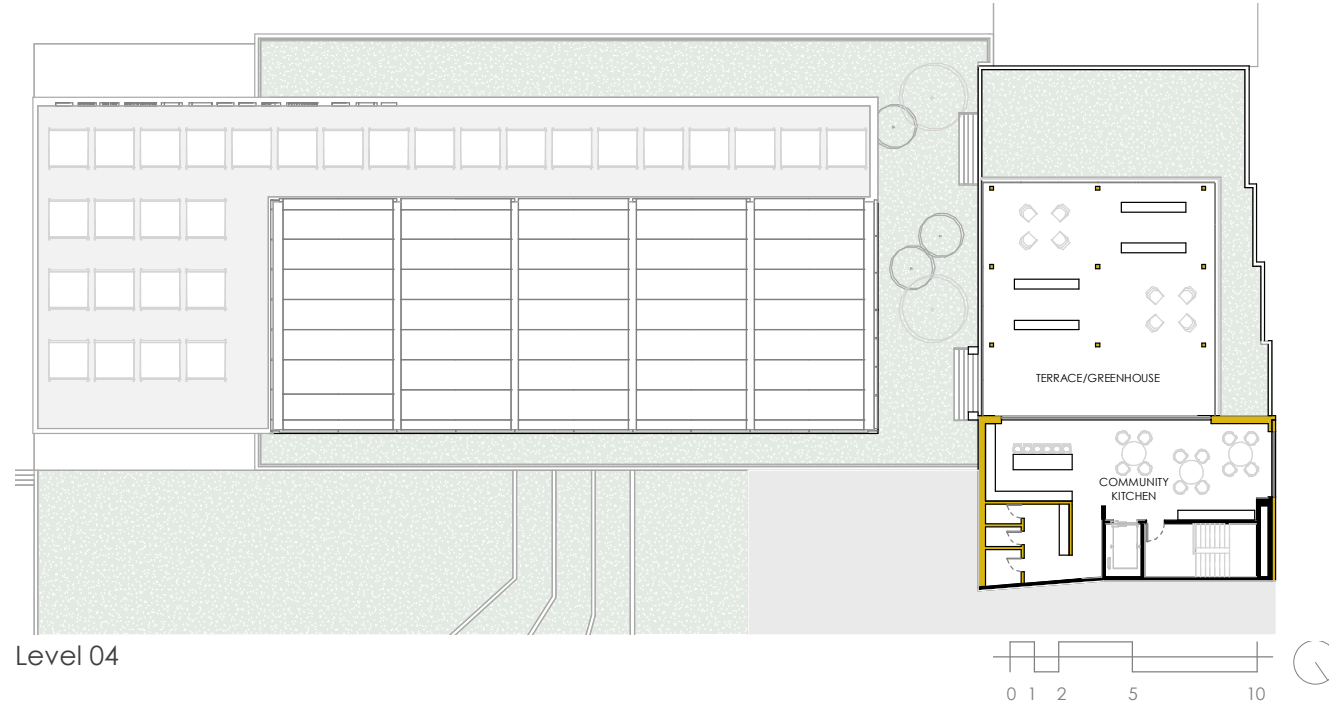
## THE MARKET AND THE SHELTER



Level 02



## THE MARKET AND THE SHELTER



## CONTRAST OF TIMES





## CONTRAST OF TIMES

New

Existing

Previous intervention

Reused

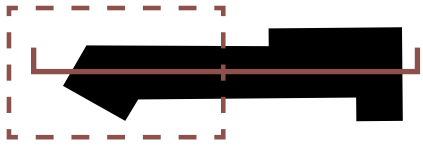




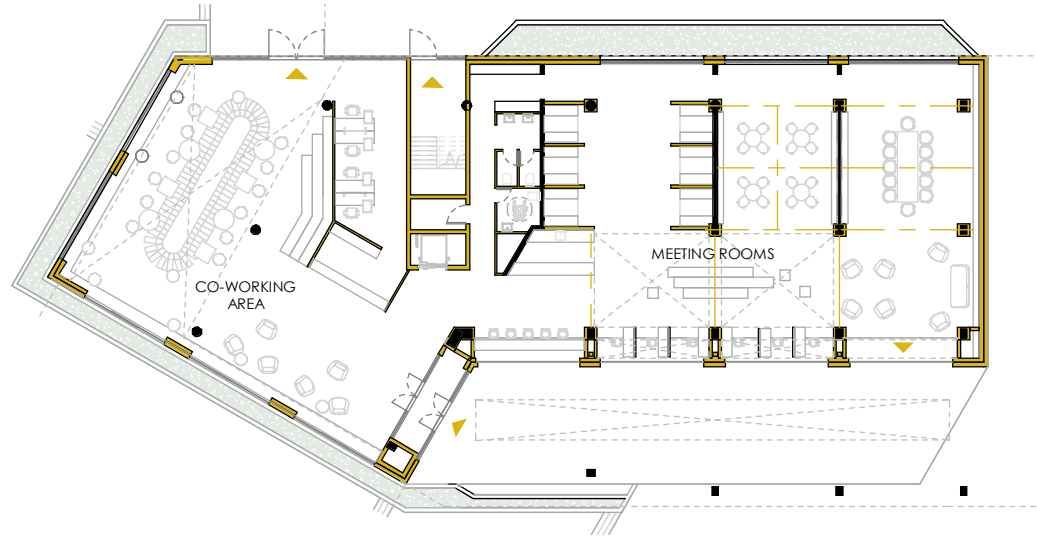


## CO-WORKING AND CO-LIVING

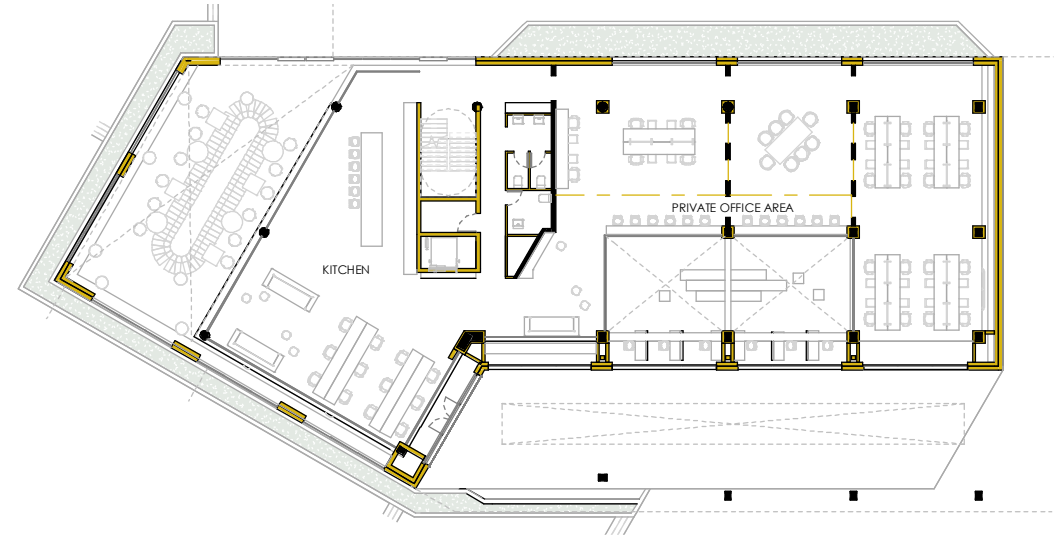




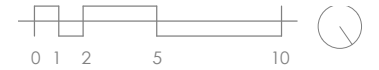
# CO-WORKING



Ground

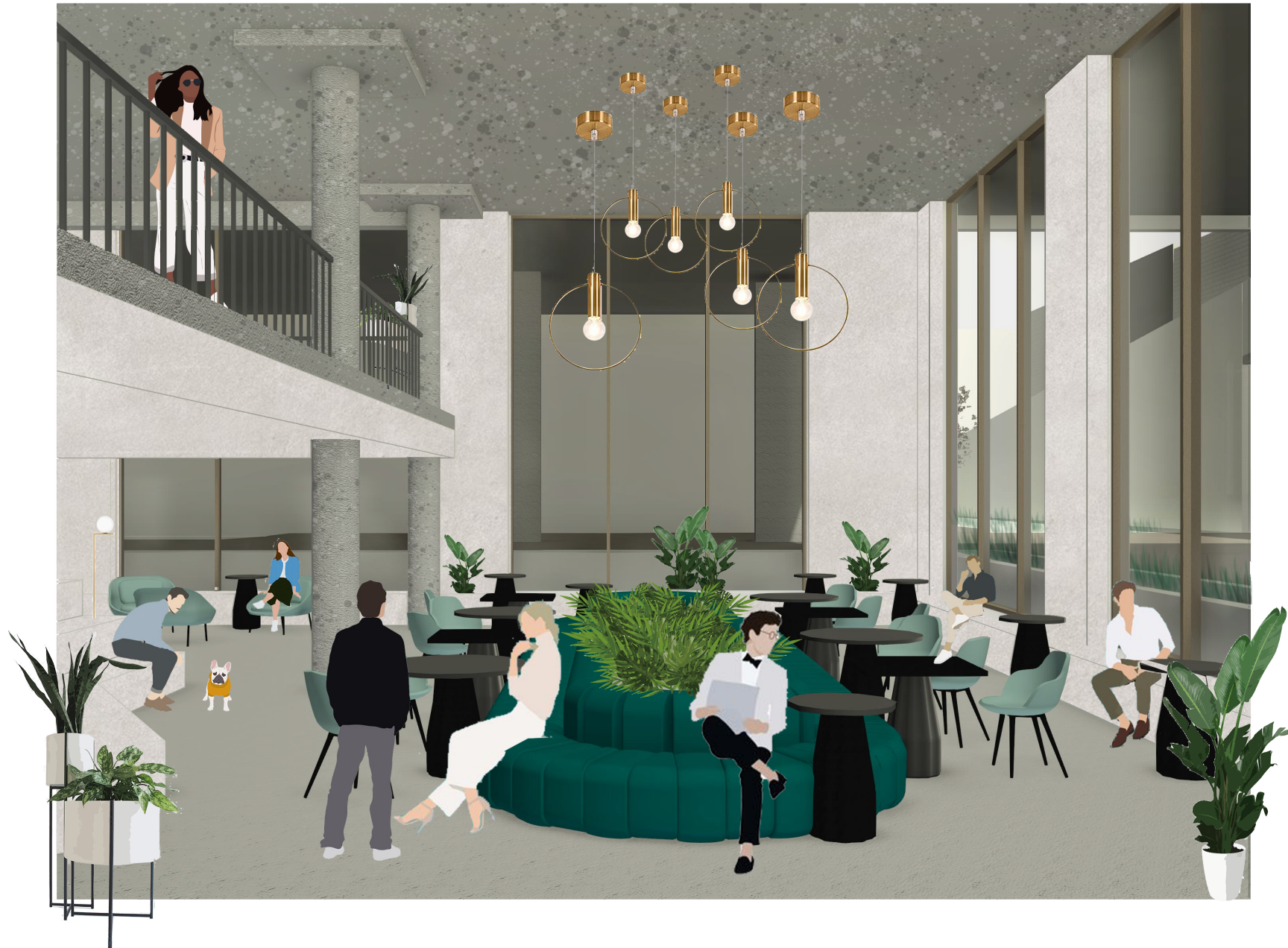


Level 01



## CO-WORKING

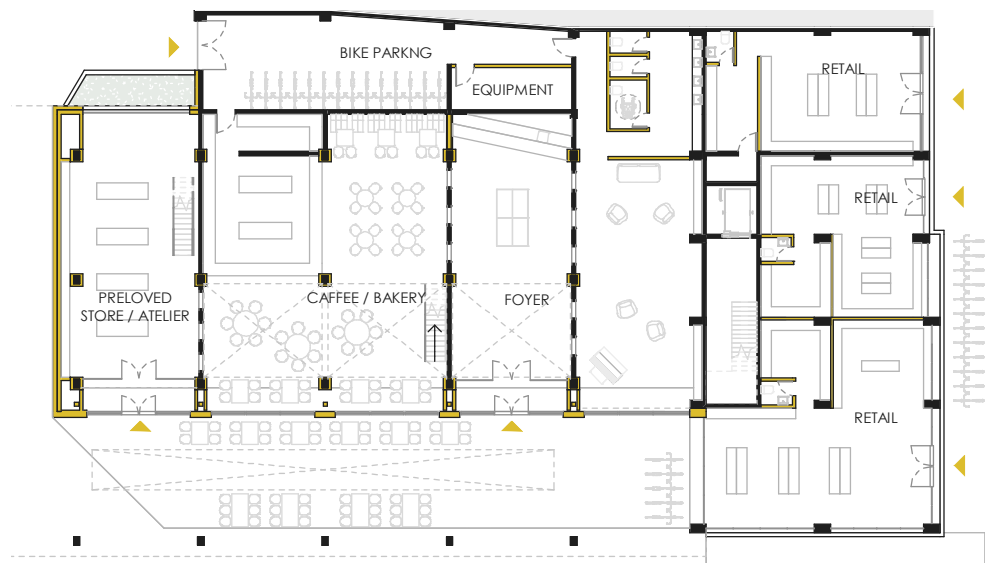
Weekdays in the office  
8:00 am +



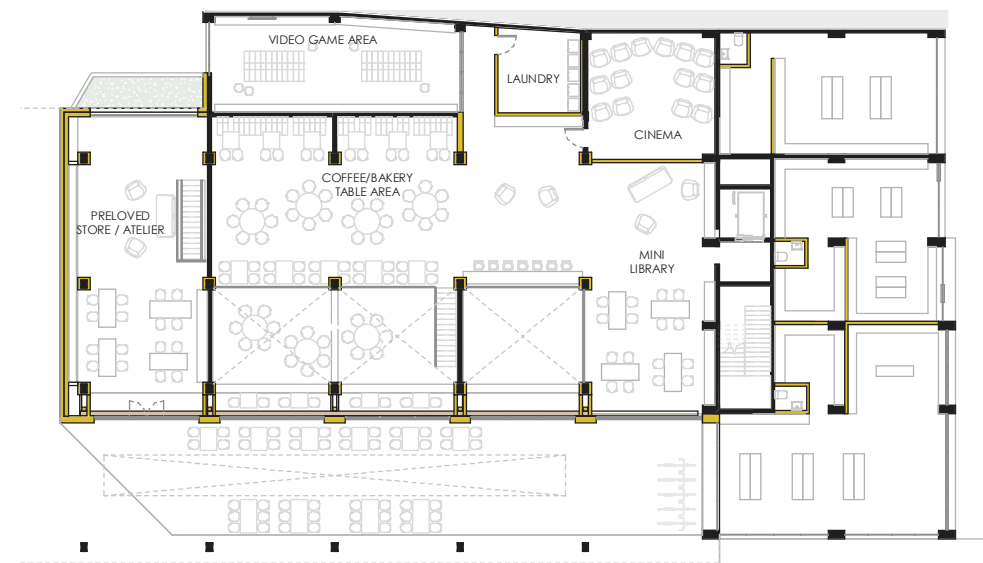




# CO-LIVING



Ground



Level 01





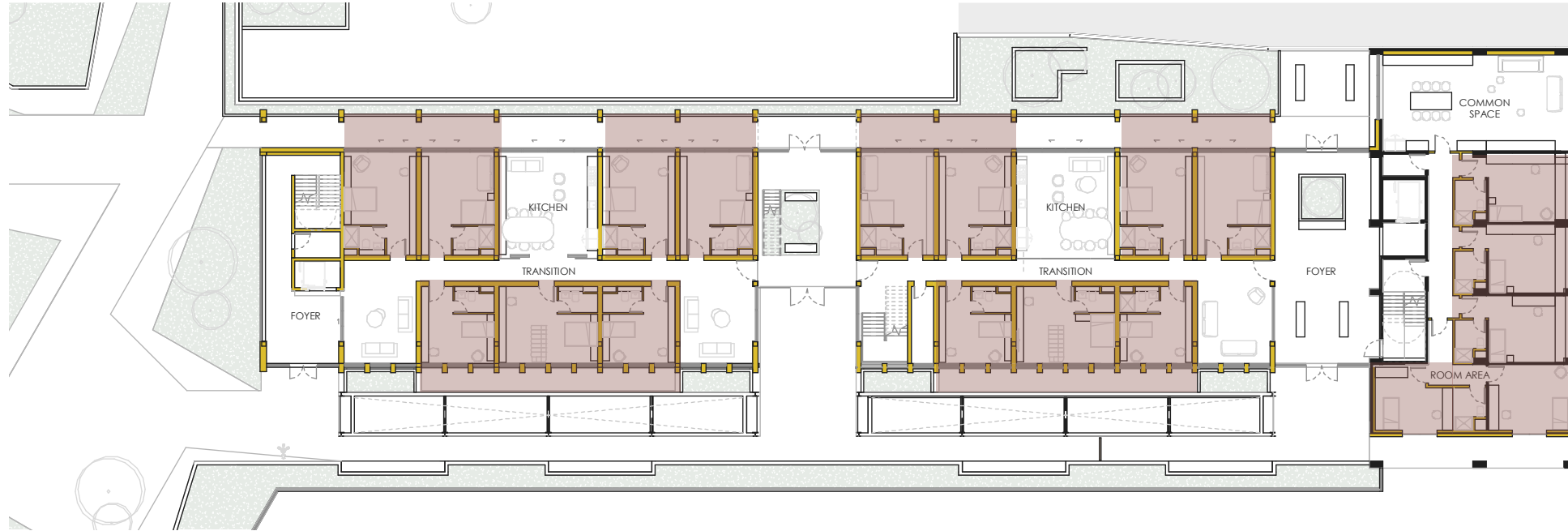
## CO-LIVING

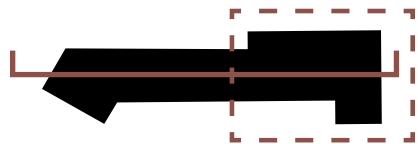


Morning coffee  
6:00 am +

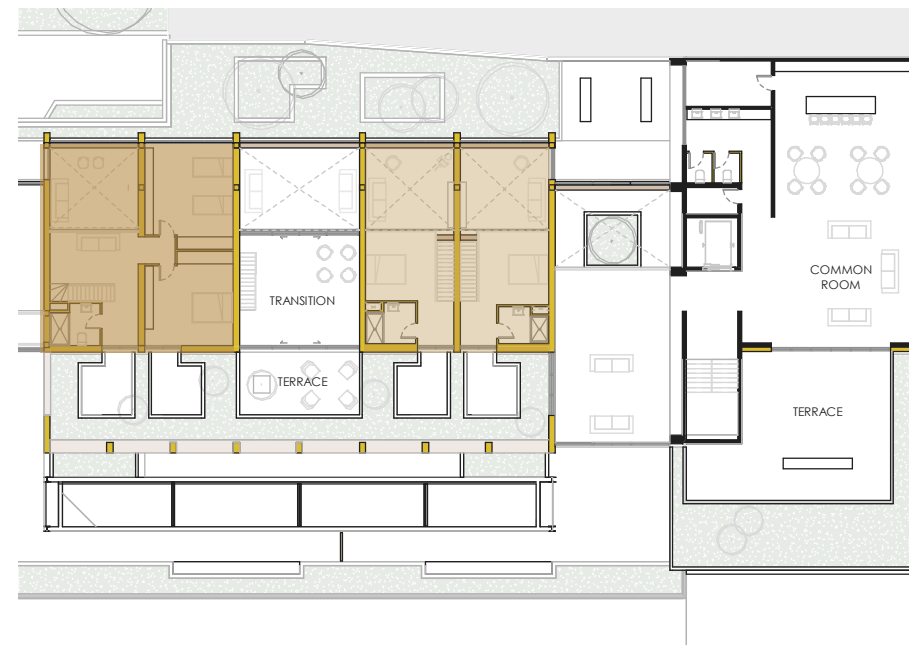
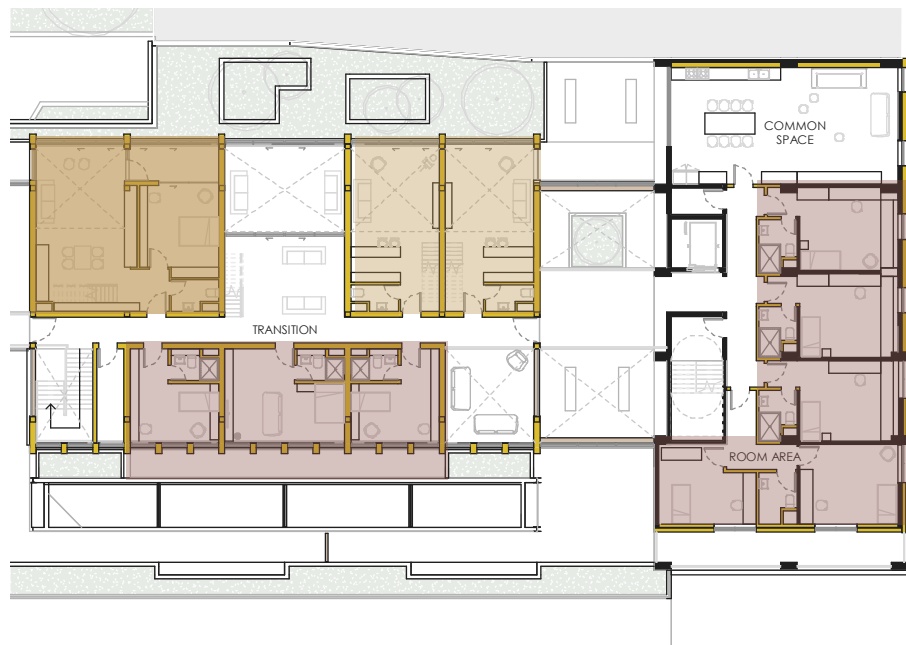


# CO-LIVING



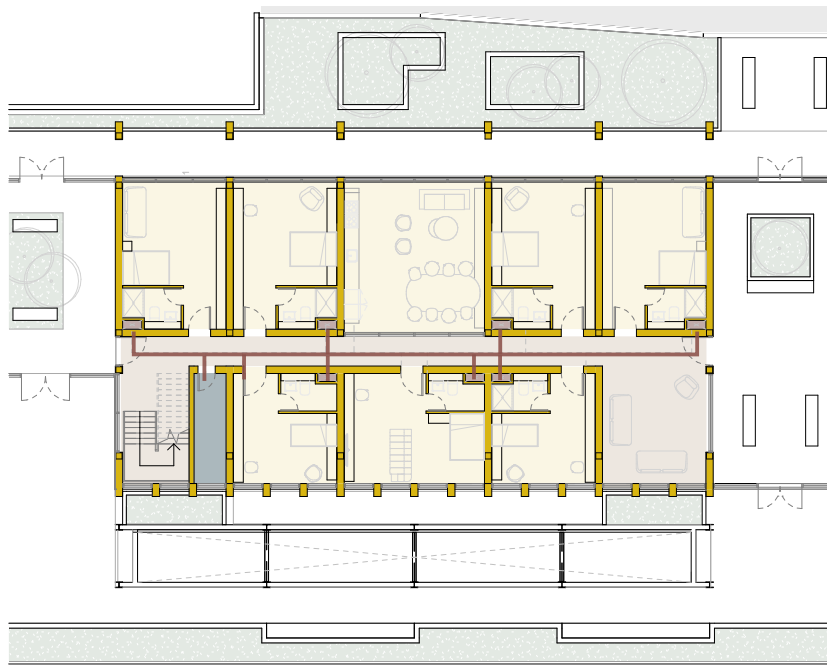


# CO-LIVING

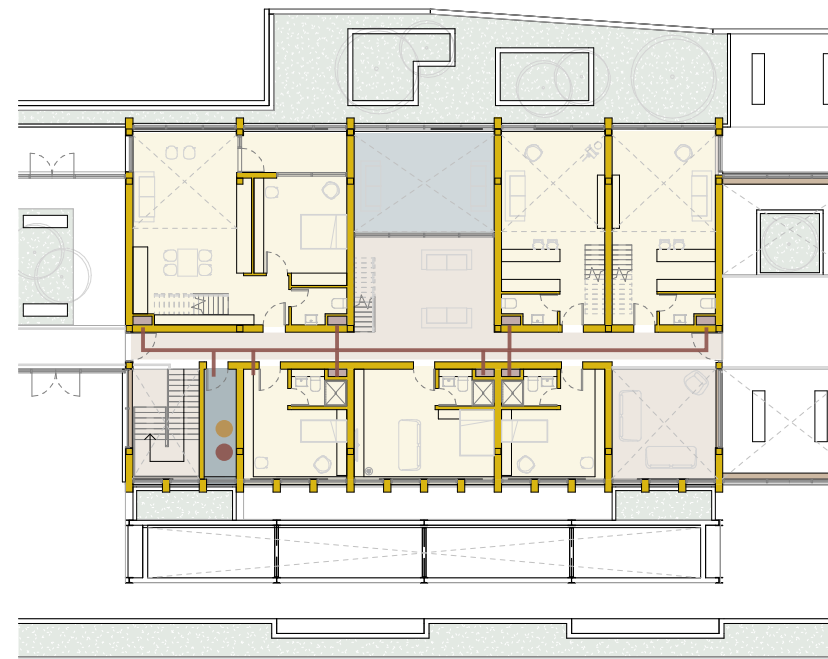




# SPACES IN TRASITION



Level 2



Level 3

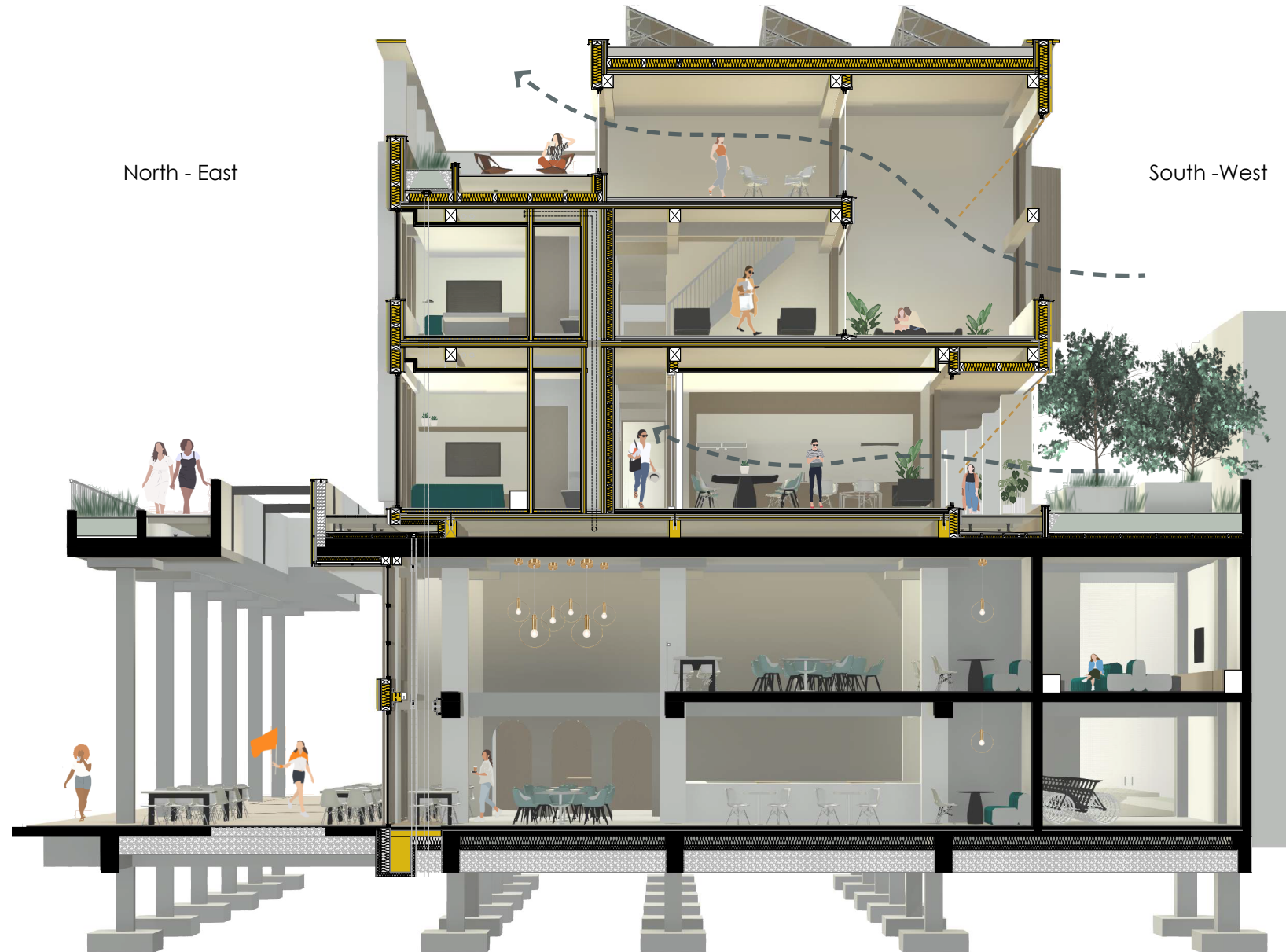
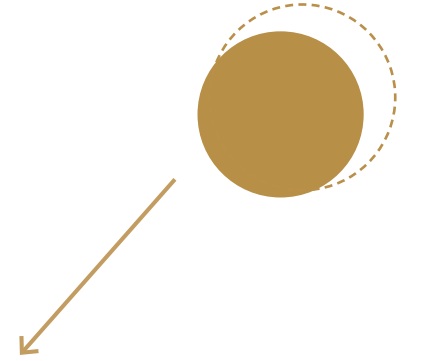
- Climatized
- Transition
- Terrace/Green house
- Shaft
- Mechanical room
- Heat exchanger
- Heat pump
- System distribution





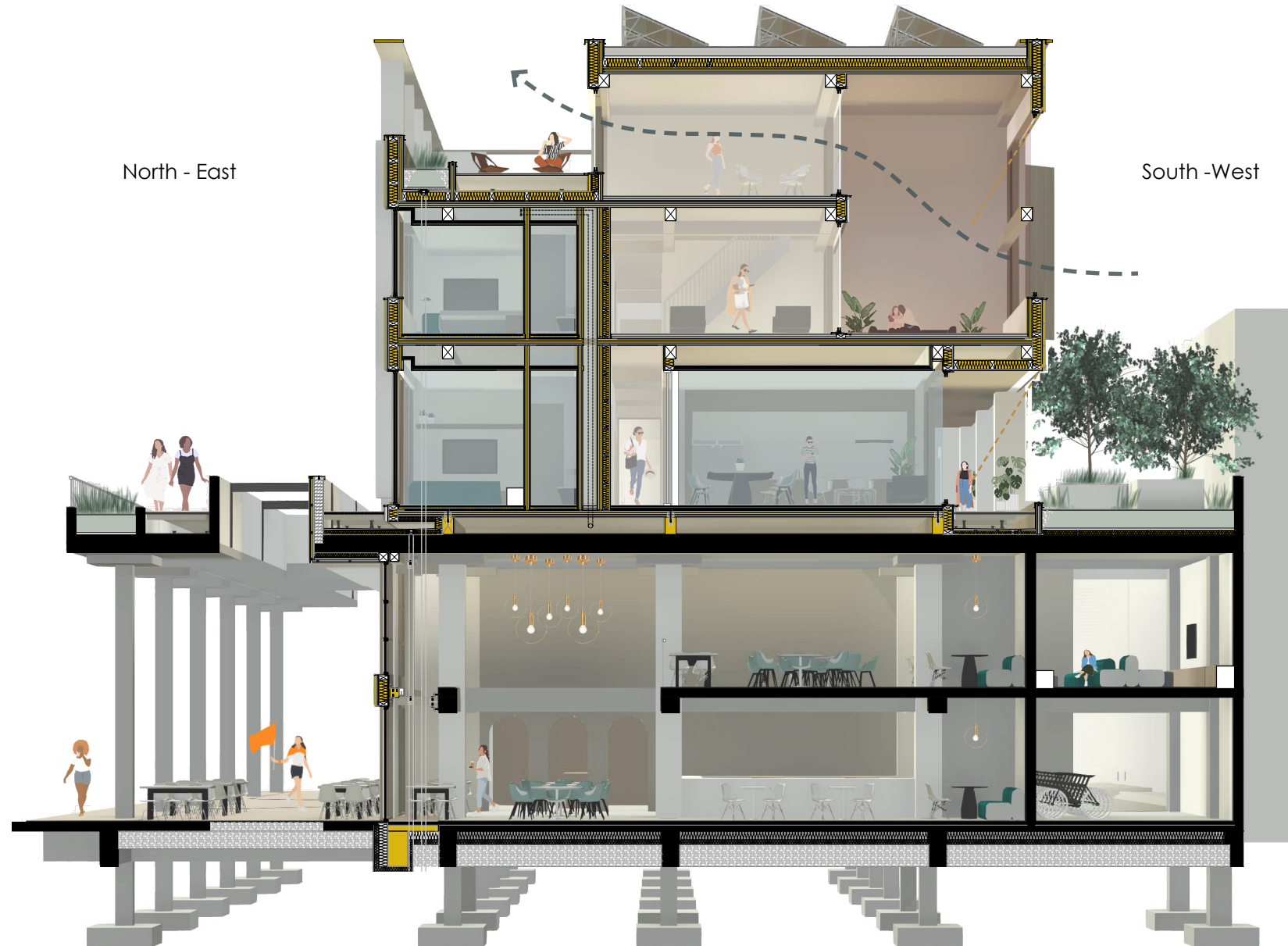
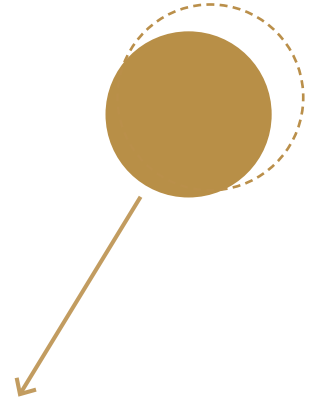


LATE SPRING - EARLY FALL



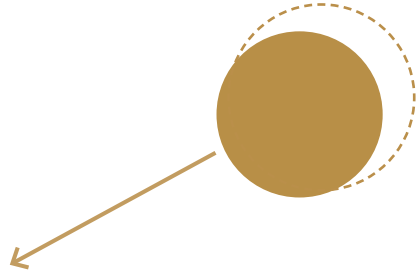


SUMMER





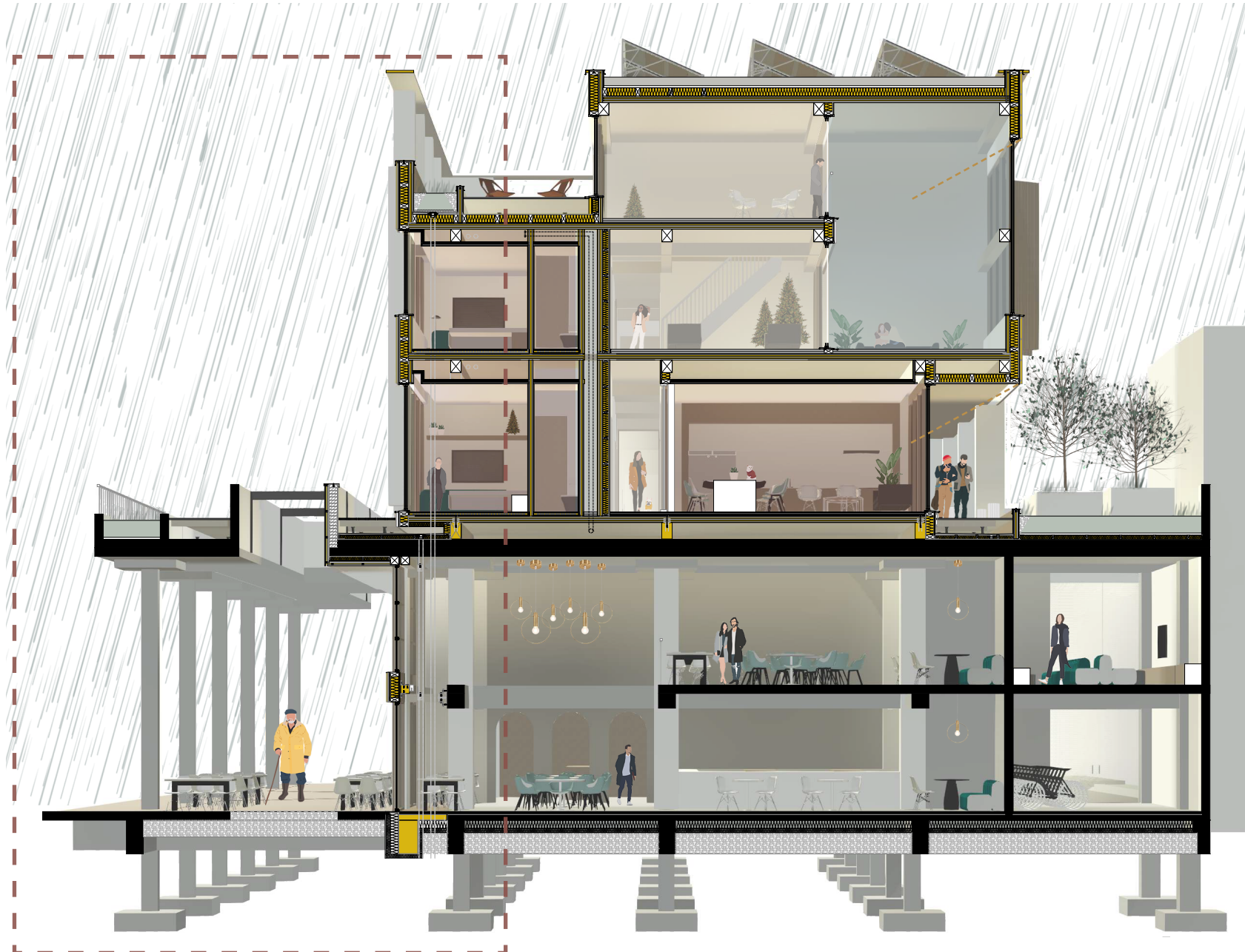
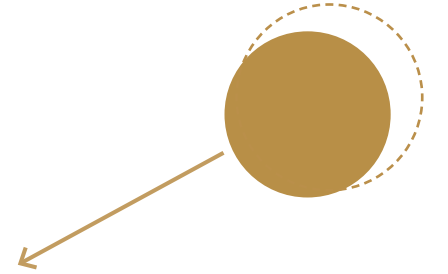
WINTER





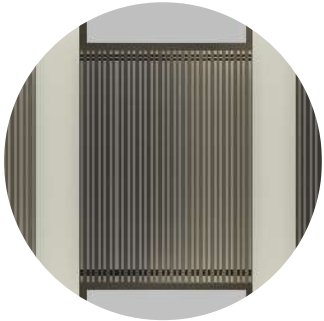
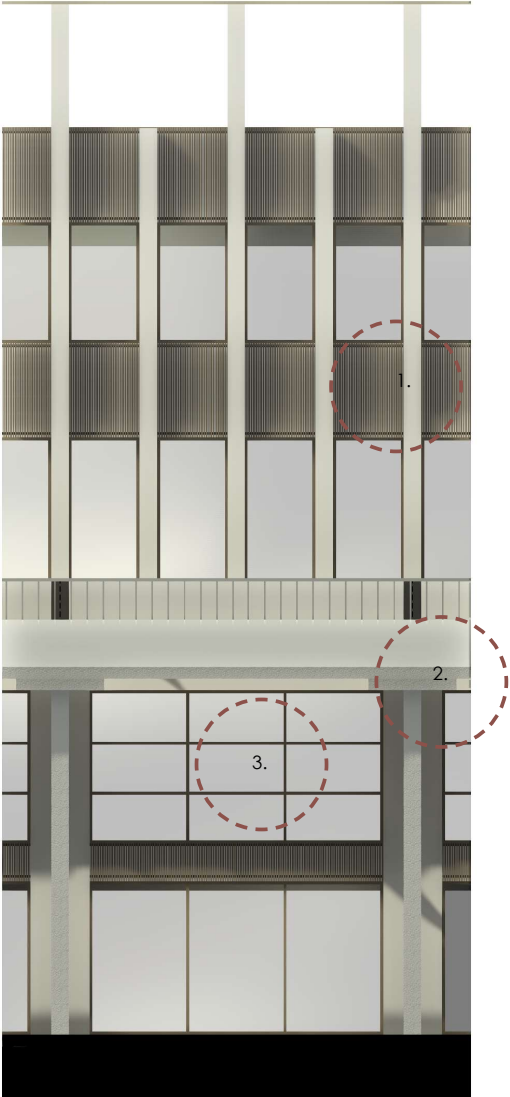


WINTER





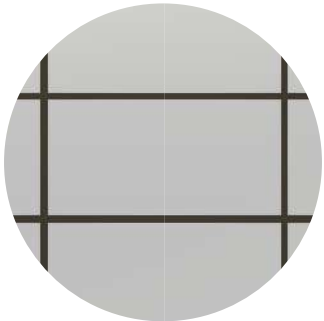
FACADE FRAGMENT



1. Wooden cladding

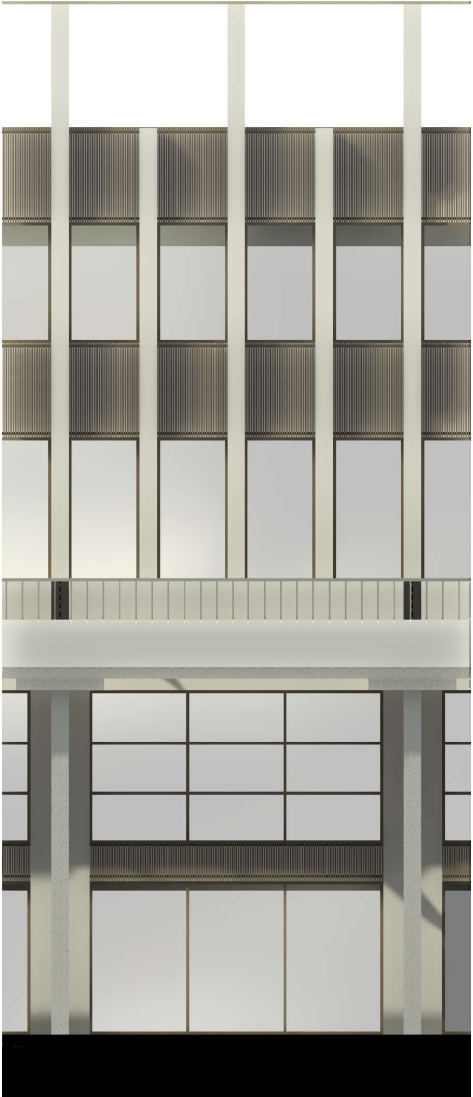
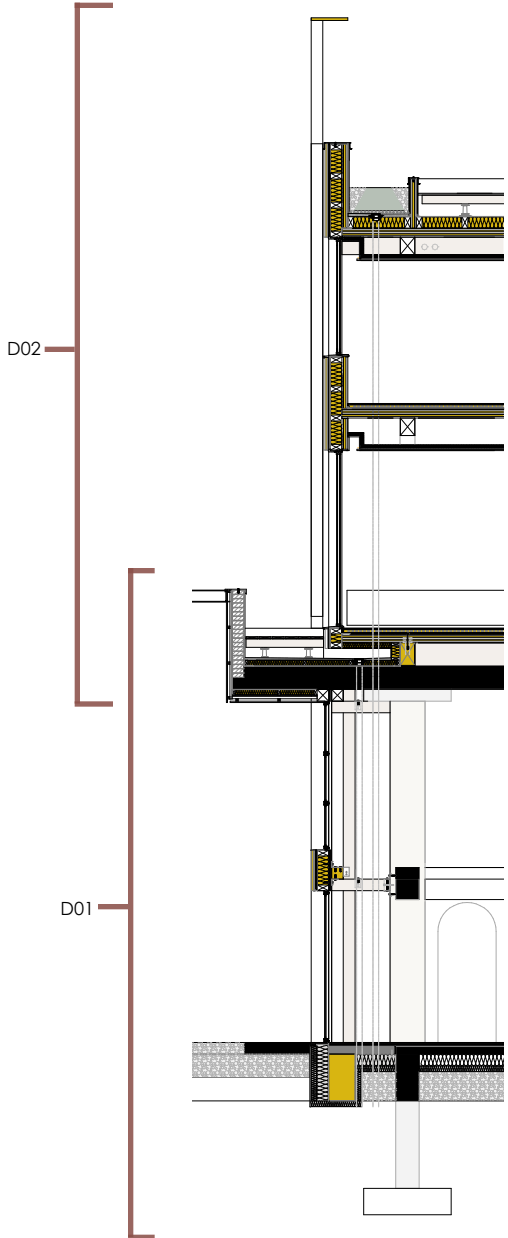


2. Existing columns



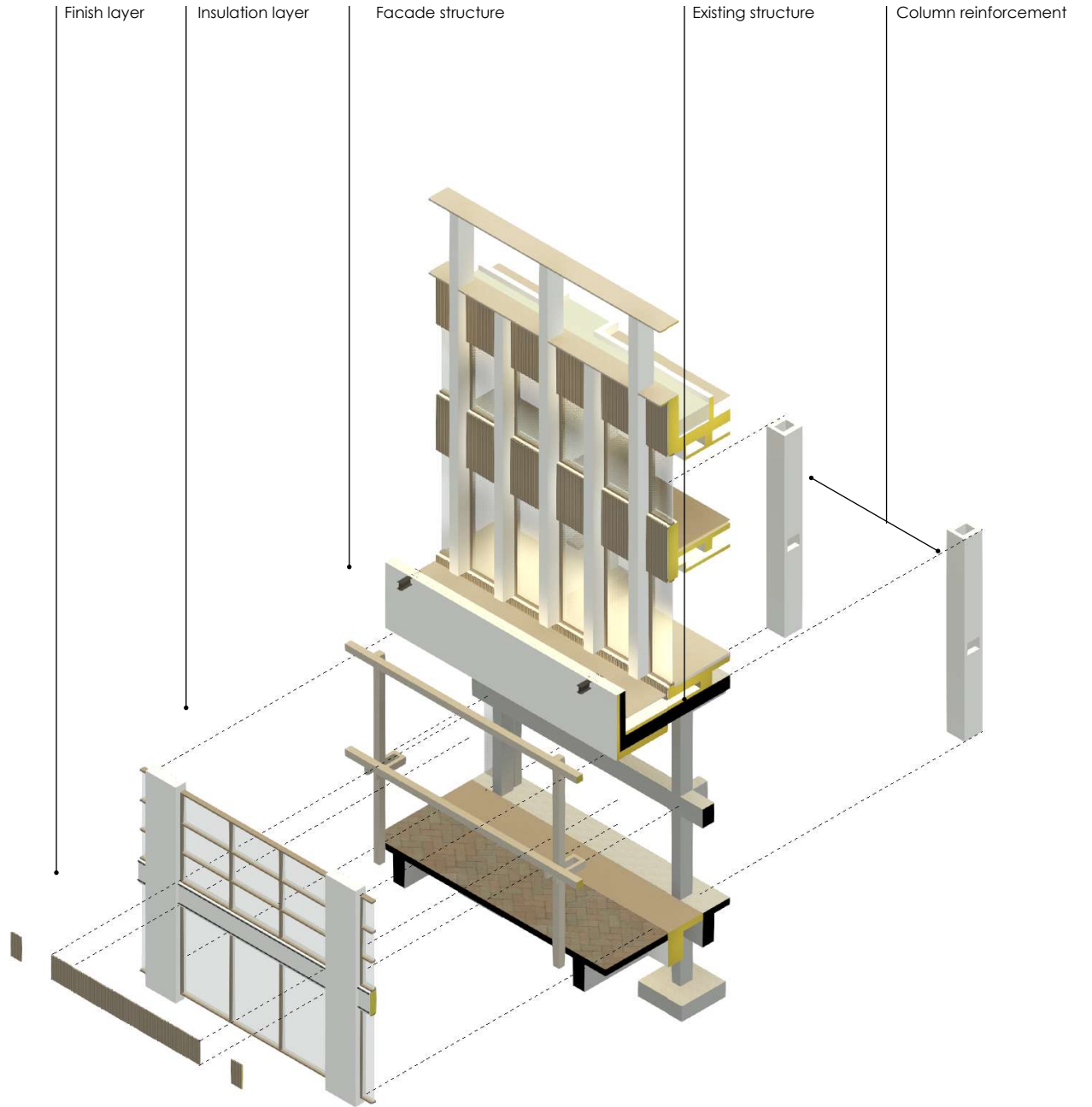
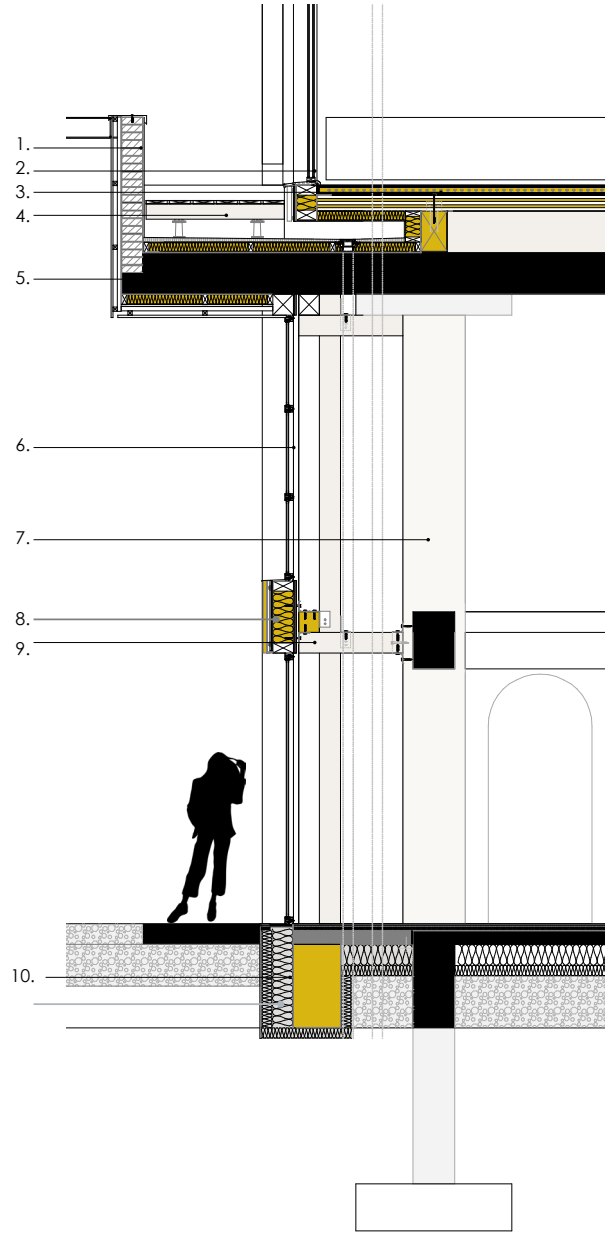
3. Reused windows

FACADE FRAGMENT



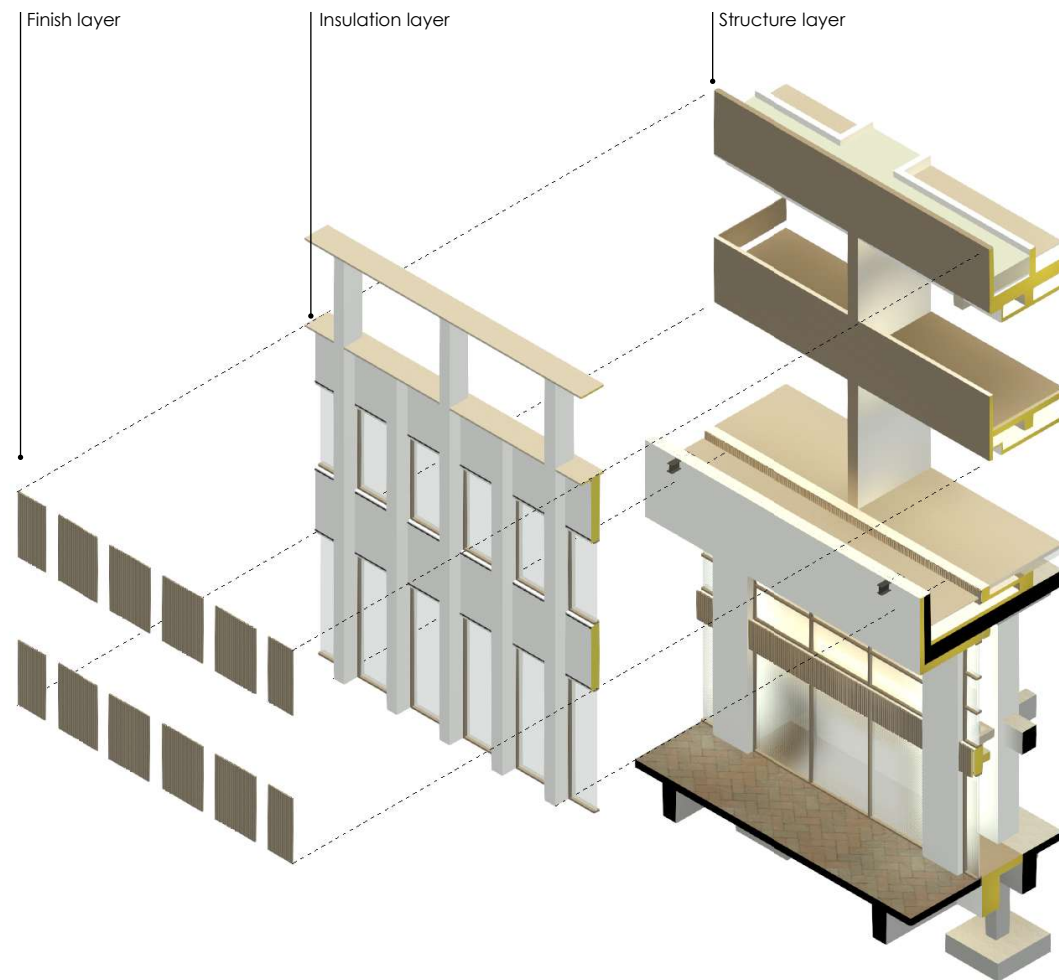
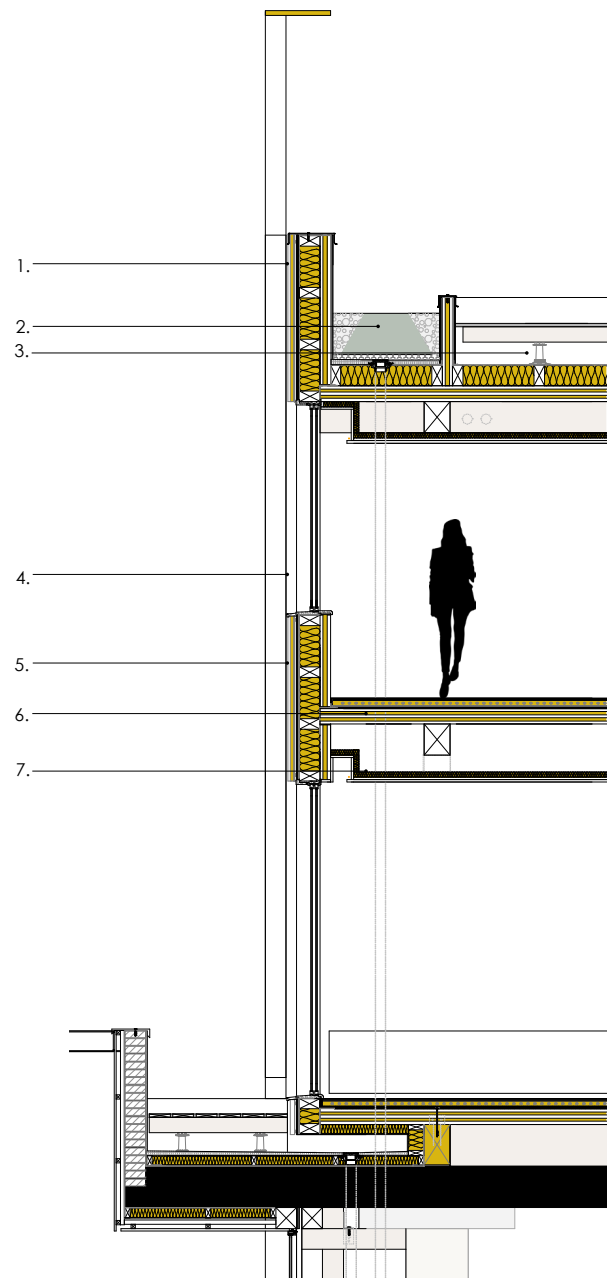
# DETAIL 01

1. Wall:  
Existing brick wall  
Existing metallic frame  
Waterproof layer  
Soft-board  
Wood cladding structure  
Wooden cladding
2. Windows  
Double glass sliding window  
Timber frame
3. Floor:  
Packet finish  
Pipe heating system  
Wool insulation  
Moisture Protection  
CLT slab  
Systems space
4. Deck:  
Wood structure  
Suspensor  
Waterproof layer  
Wool insulation
5. Existing concrete slab  
Wool insulation (1.50m)  
Wood cladding structure  
Wood cladding
6. Reused window
7. Reinforced column
8. Frame:  
Softboard finish  
Moisture Protection  
Wool insulation  
Waterproof layer  
Softboard  
Cladding support  
Wooden cladding
9. Timber facade structure
10. Facade foundation  
800x500 foundation beam  
Wool insulation  
Waterproof layer  
Protection board



DETAIL 02

1. Wall:  
Softboard finish  
Waterproof layer  
CLT bearing wall  
200mm Insulation structure  
Waterproof layer  
Softboard  
Cladding support  
Wooden cladding
2. Garden  
400 mm earth  
Gravel  
Rubber filter  
Rubber drain  
Waterproof layer  
Wool insulation  
CLT slab
3. Deck:  
Wood structure  
Suspensor  
Waterproof layer  
Wool insulation
4. Double glass sliding window
5. Wall:  
Softboard finish  
Waterproof layer  
CLT bearing wall  
200mm Insulation structure  
Waterproof layer  
Softboard  
Cladding support  
Wooden cladding
6. Floor:  
Packet finish  
Pipe heating system  
Impact sound insulation  
Moisture Protection  
CLT slab  
Systems space
7. Ceiling:  
Systems space  
Cooling system  
Ceilling structure  
Sound insulation





## REFLECTION

*"The architects work is just the beginning, establishing a framework for a long slow-moving process."*



Winter morning  
10:00 am

WHAT'S NEXT?



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GRACIAS!  
THANK YOU!  
DANK U!

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GRACIAS!

THANK YOU!

DANK U!

OBRIGADA

TEŞEKKÜR EDERİM

MULTUMESC