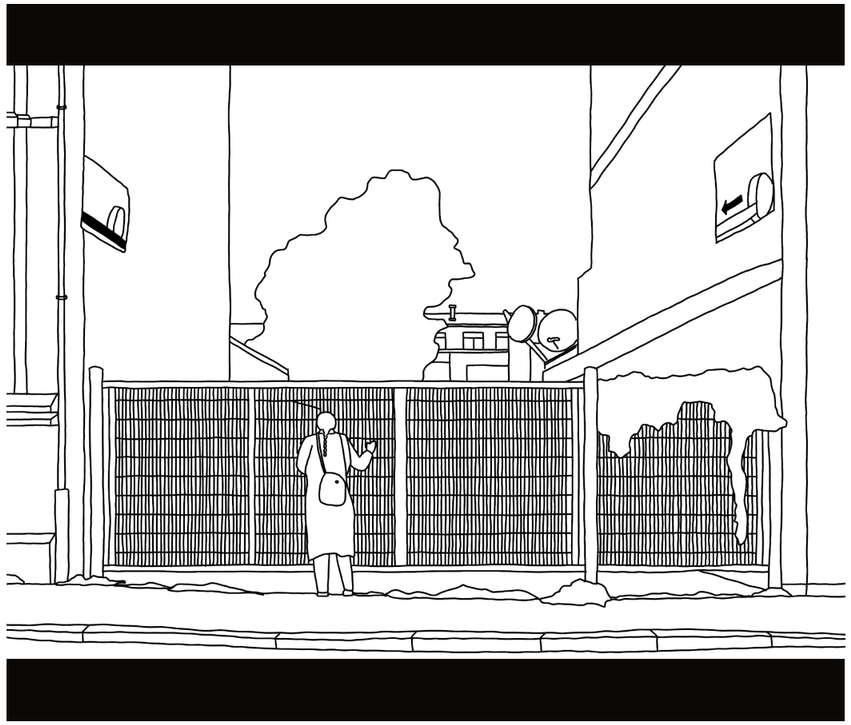
THE URBAN INVERSION:

VOID AS VOLUME AND NEW INTERIOR TO THE NEIGHBOURHOOD



[URBAN VOIDS]

an urban element possess a liberating potential, a possibility of moving beyond established social values

[O]

MANIFESTO

VOICE FOR THE URBAN VOID

We reject,
voids being inconspicuous,
emptiness being treated as a threat.

Architecture is about interweaving in-between
matters and spaces.

Positive and Negative. Interior and Exterior.
Public and Private.

The focus of architecture today has shifted
to the form and space of the building,
neglecting the existence of voids. The moment
of interaction between negative and positive
vanishes, coming along with a detached
neighbourhood.

Here we are,
to ***VOICE OUT FOR THE URBAN VOID***.

[1]

FORGOTTEN SPACE

DEFINITION OF

URBAN VOIDS

‘EVERY CITY HAS THEM; SCATTERED, RANDOM UNUSED PARCELS OF LAND OF VARYING SIZE AND SHAPE’ (GREENBERG ET AL., 1990)

PHENOMENON OF EMPTINESS

EXTERNAL

ABSENCE OF VALUES

NOT PRODUCTIVE IN URBAN FABRIC

A SPACE NOT CONCEIVED THROUGH PLANNING AND DESIGN

INTERNAL

UNRECOGNISABLE ROLE

MULTIPLE PRESENCES OF CODES

A SENSE OF MARGINALITY

SPONTANEOUS / SELF-INITIATIVE / INDETERMINATE / UNINTENDED / LIBERATED / DERELICT

POTENTIAL?

NEIGHBOURHOOD SCALE - DISPERSED NEIGHBOURHOOD

Intangible / Tangible Social Perspective



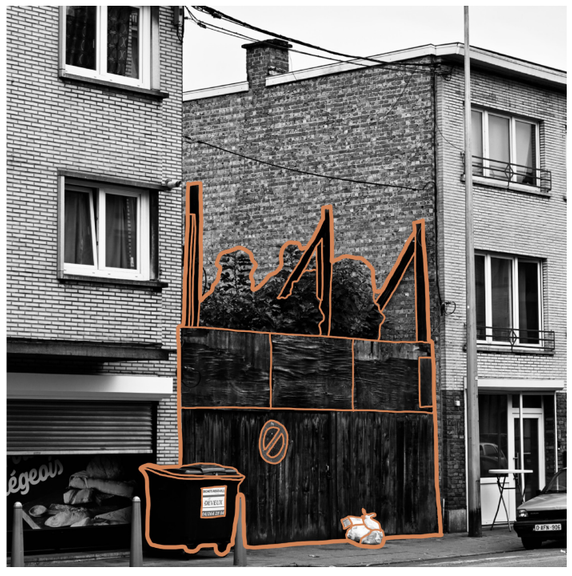
Double Fences



Frontyard Full of Rubbish



Shutter Screen for Open-ing



Voids as Urban Segregation Elements



Fragmented Building Blocks



Incoherent Facade

[garbage?]



[abandoned?]



[mysterious?]



[publicness?]



[improvised?]



[industrial?]





Drohixe

Breesoux

URBAN VOIDS

Bressoux

“INTERNAL TO THE CITY YET EXTERNAL TO ITS EVERYDAY USE”(SOLA DE MORALES, 1995)

BY PRODUCT OF POSITIVE SPACE

URBAN SEGREGATION ELEMENT

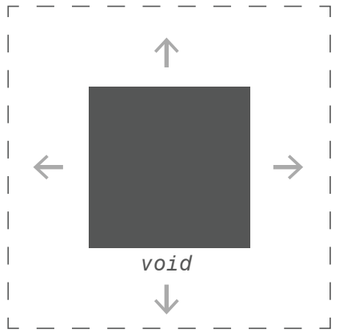
DISCONNECTION WITH THE CITY

CONTRADICTORY URBAN FABRIC

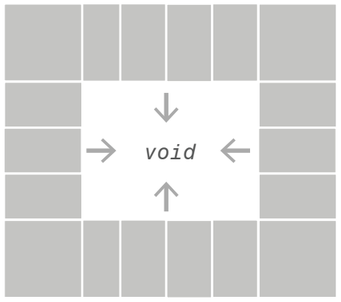
DISSIMILAR CITY IMAGE

SITE SELECTION - COLLAGE CITY

MODERNISM URBAN FABRIC



TRADITIONAL NEIGHBOURHOOD PATTERN





FROM A FORGOTTEN SPACE



TO SPACE OF LONGING



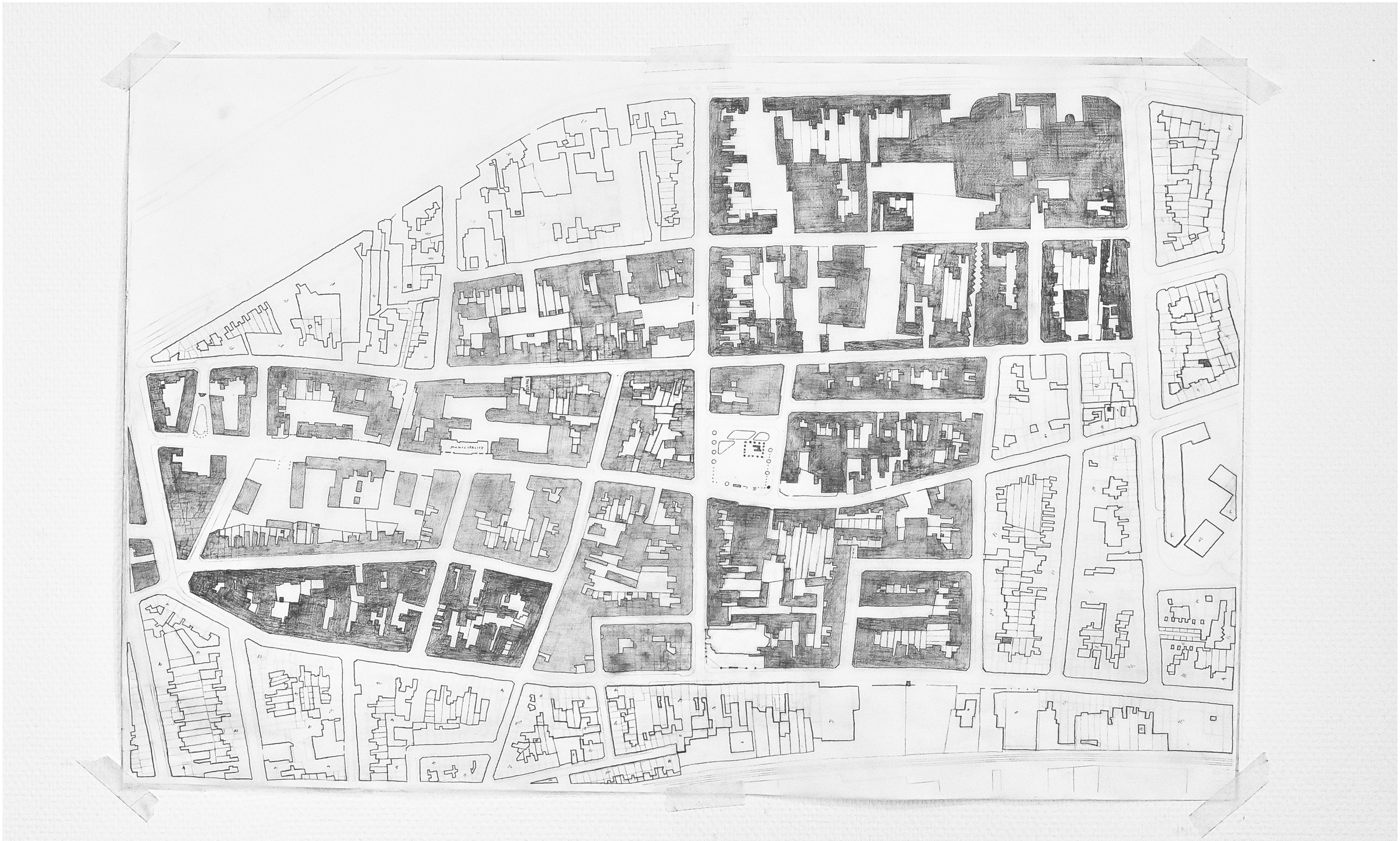
How can urban void endow the neighbourhood of Bressoux with urban significance?

[2]

RE-VISUALIZING THE EMPTINESS

VOIDS IN BRESSOUX NEIGHBOURHOOD

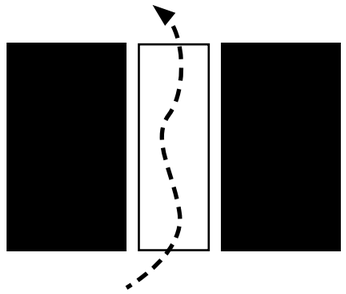
Nolli Mapping - Boundaries - Accessibility



VOIDS IN BRESSOUX NEIGHBOURHOOD

Configuration - 1

PASSAGE

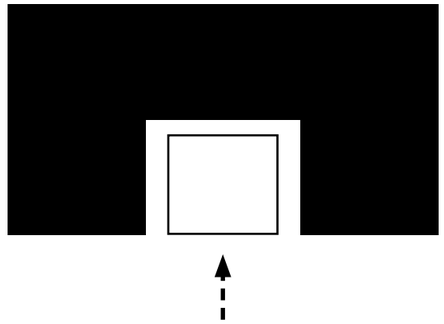


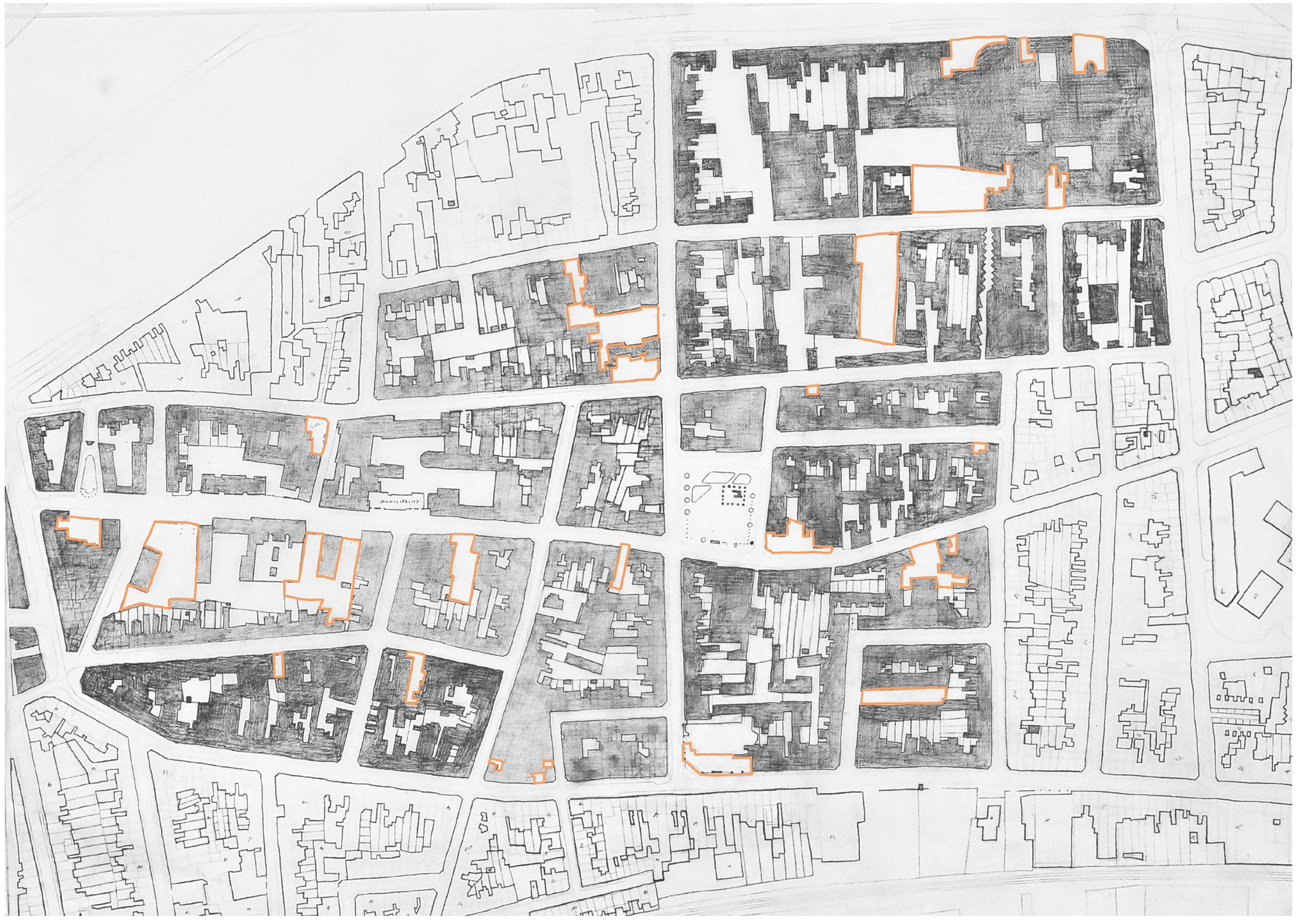


VOIDS IN BRESSOUX NEIGHBOURHOOD

Configuration - 2

POCKETSPACE

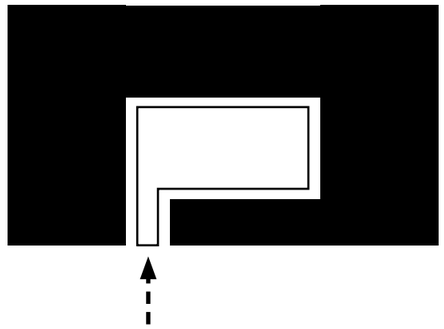




VOIDS IN BRESSOUX NEIGHBOURHOOD

Configuration - 3

HIDDEN POCKETSPACE

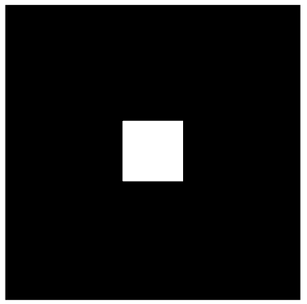


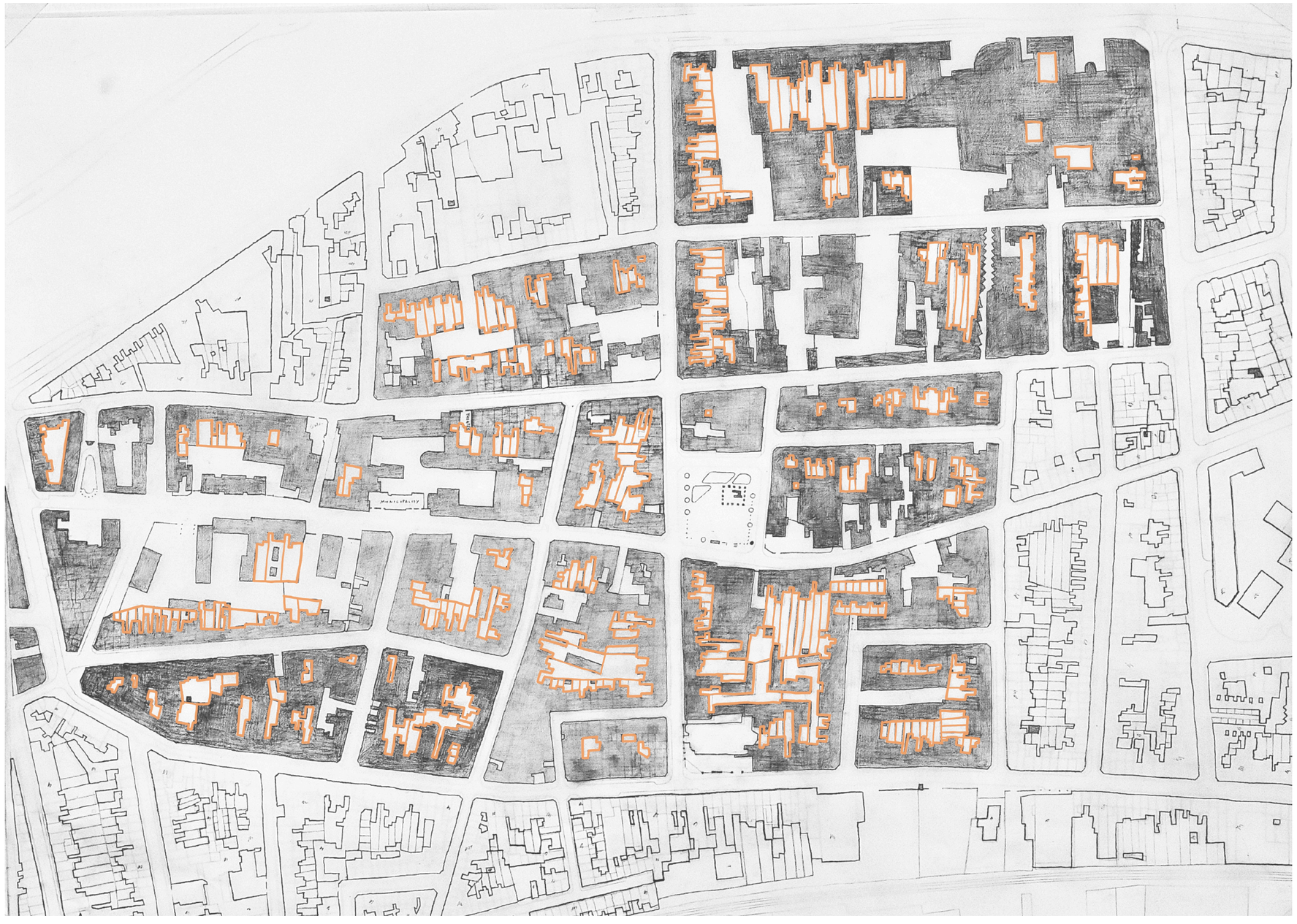


VOIDS IN BRESSOUX NEIGHBOURHOOD

Configuration - 4

BACKYARD





RE-VISUALIZING VOIDS IN A TANGIBLE FORM

Inverting the positive and negative space



ROW HOUSE



ROW HOUSE + NEIGHBOURHOOD AMENITIES + INDUSTRIAL



ROW HOUSE + APARTMENT BUILDING



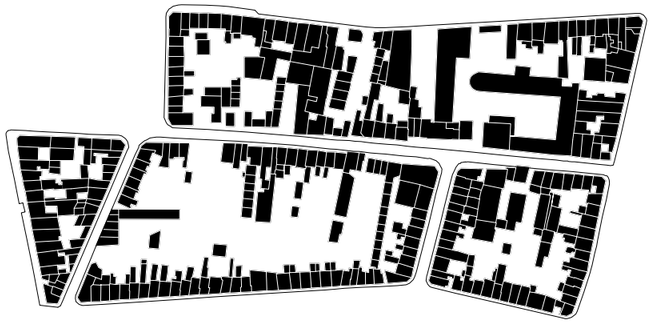
ROW HOUSE + ABANDONED + INDUSTRIAL

SOLID VOID AS AN INSPIRATION





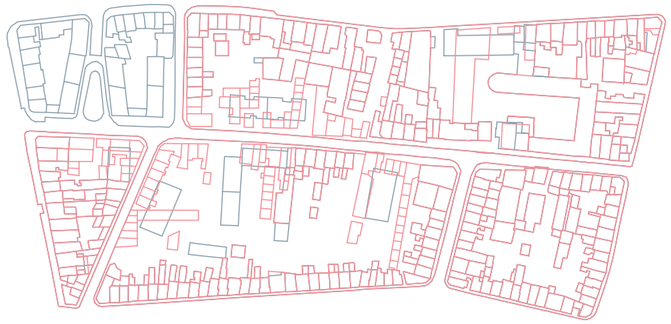
URBAN BLOCK CHANGE OVERTIME



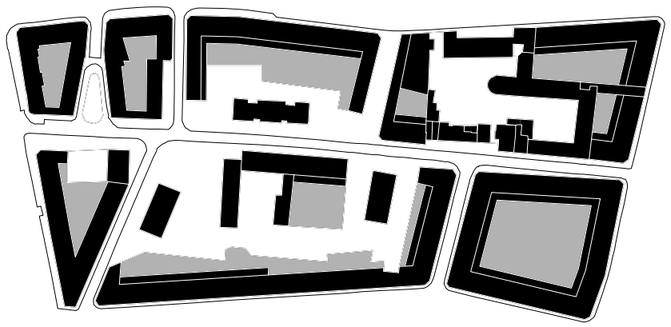
1956



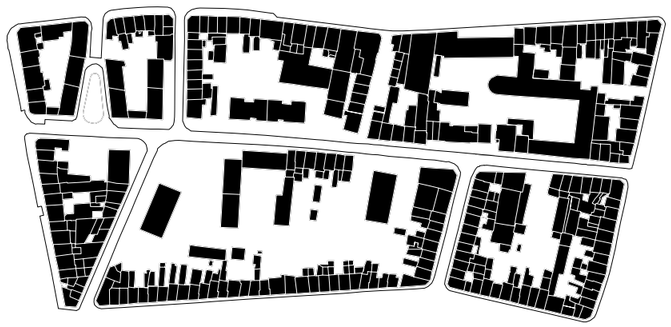
1972



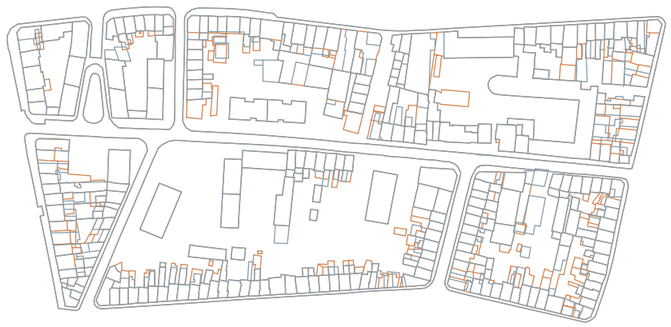
1956
1972



URBAN VISION



2022

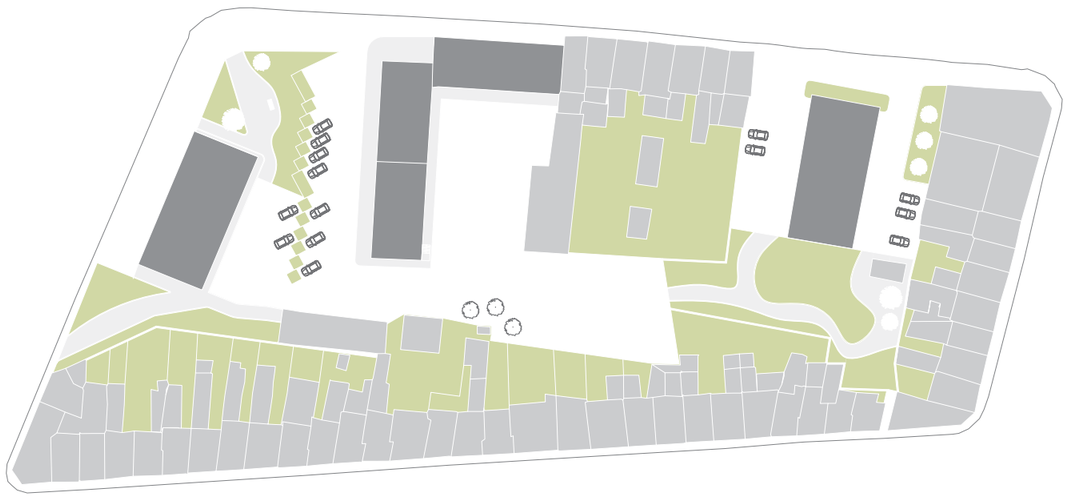


1972
2022

VOIDS CHANGE OVER TIME - BOUNDARY

2009

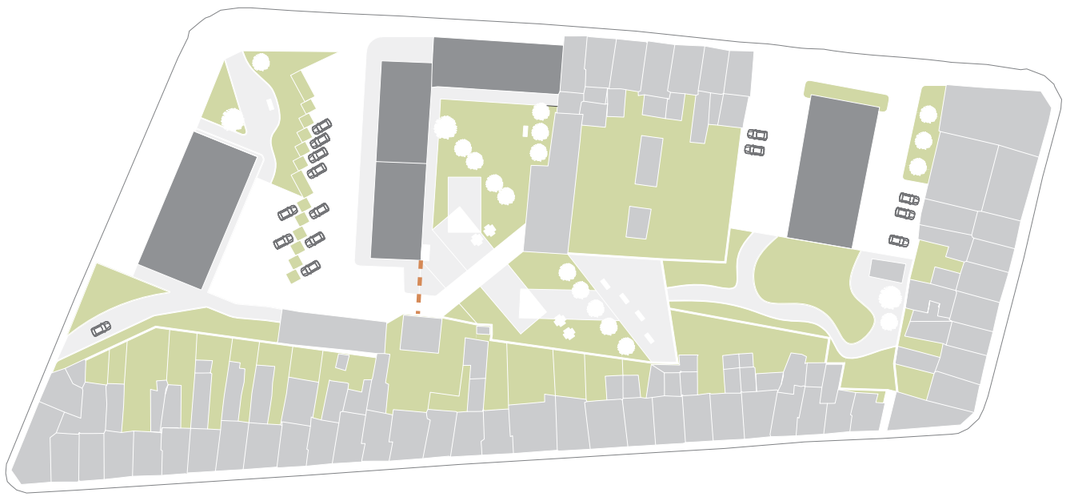




Traditional Houses
Modernism Apartment Building
Greenary Pavement / Courtyard
Pedestrian Pavement

2016



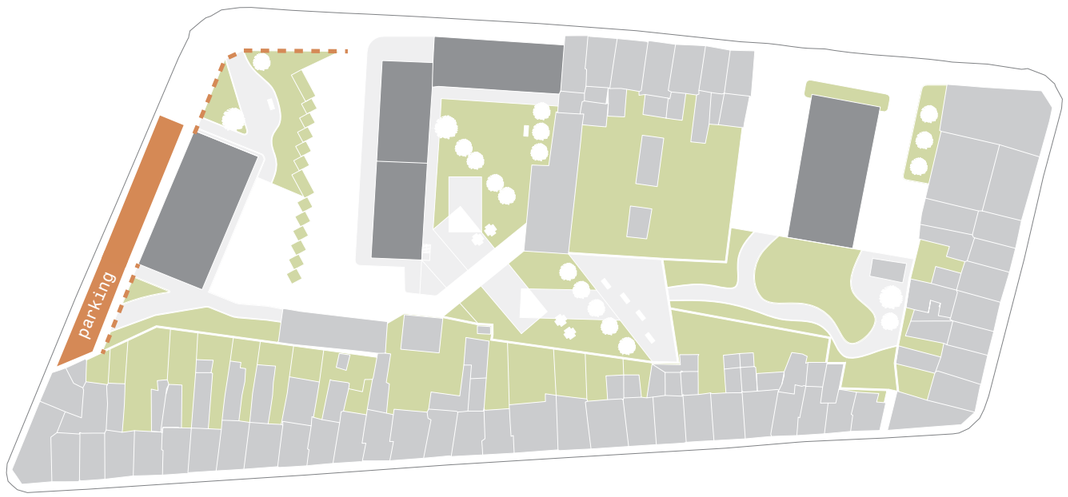


Boundary Added
Traditional Houses
Modernism Apartment Building
Greenary Pavement / Courtyard
Pedestrian Pavement

VOIDS CHANGE OVER TIME - BOUNDARY

2020





Boundary Added

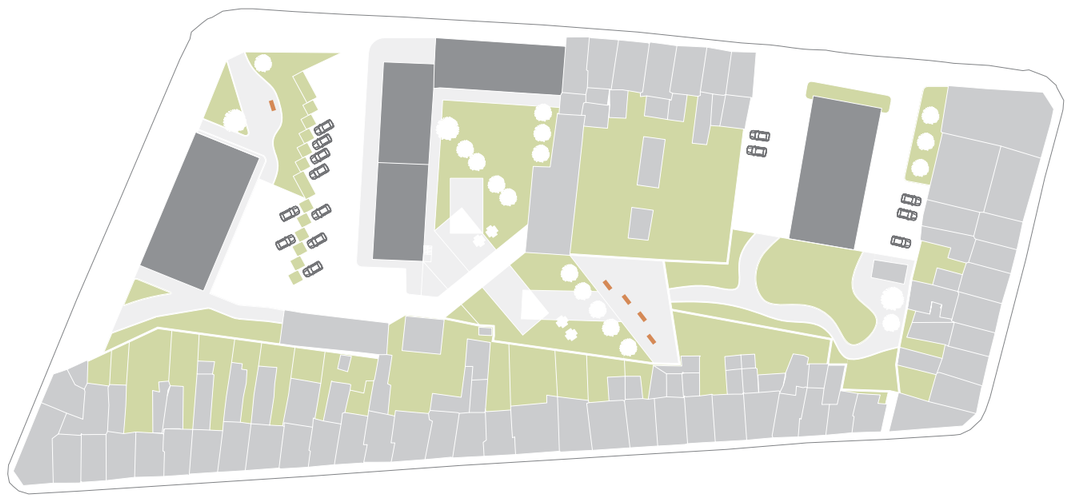
Traditional Houses

Modernism Apartment Building

Greenary Pavement / Courtyard

Pedestrian Pavement

2022



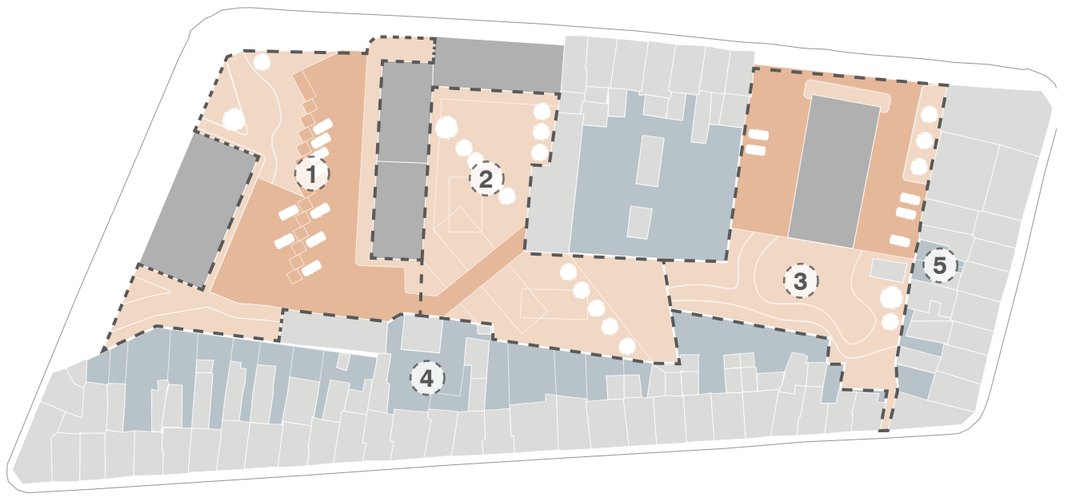
Demolished

Traditional Houses

Modernism Apartment Building

Greenary Pavement / Courtyard

Pedestrian Pavement



Traditional Houses

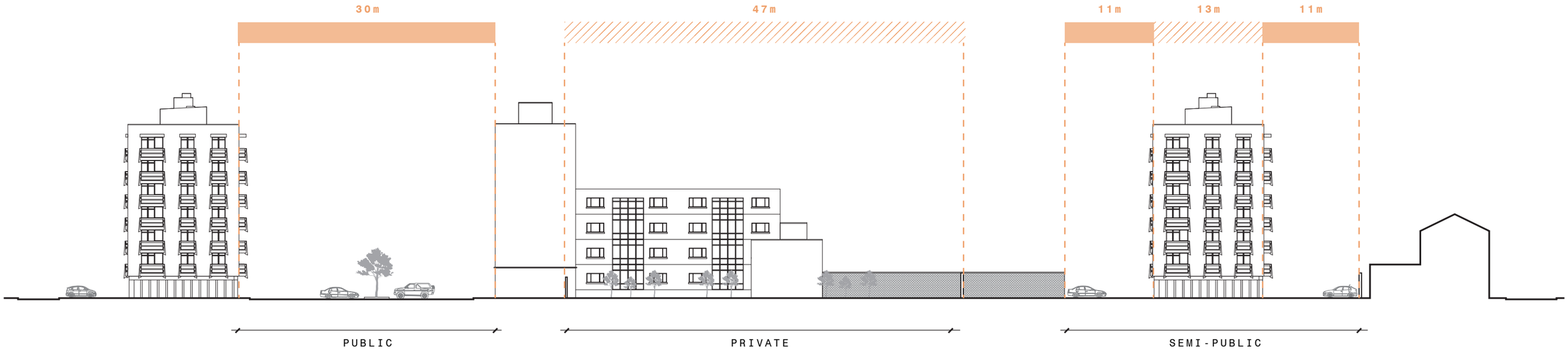
Modernism Apartment Building

Private Courtyard for Houses

Leisure Zone for Apartment Building

Parking Zone for Apartment Building

THE THREE VOID IN THE EXISTING URBAN BLOCK



0 1 2 4 6 10 20

OPEN VIEW

BLOCKED

VOIDS ACT AS SEGREGATION ELEMENT BETWEEN THE TWO HOUSING TYPOLOGY

Passage to Deadend













HOW TO DESIGN FOR ‘EMPTINESS’?

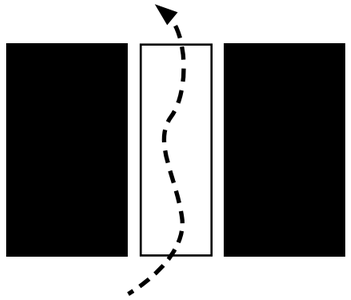


[3]

FROM PASSIVE TO ACTIVE

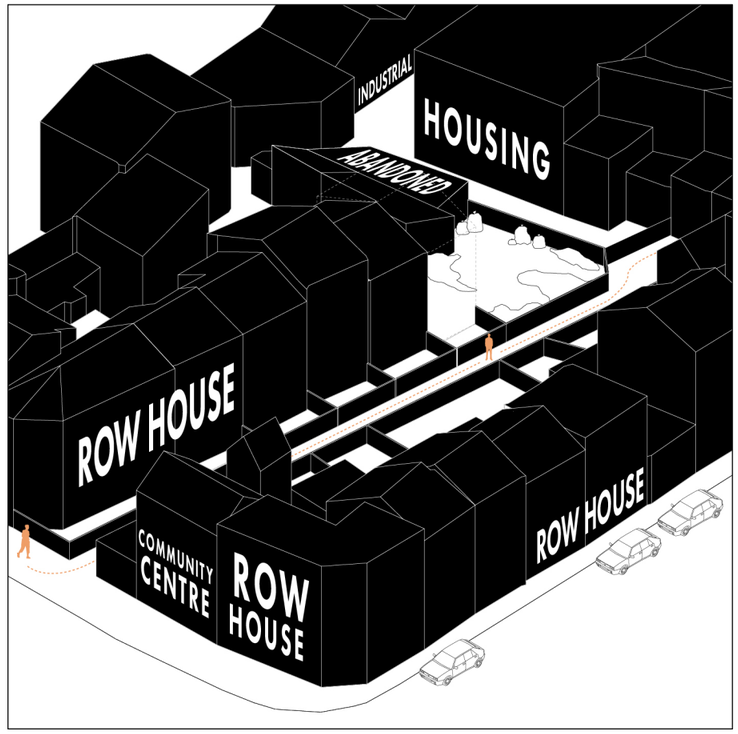
CASE STUDY 1

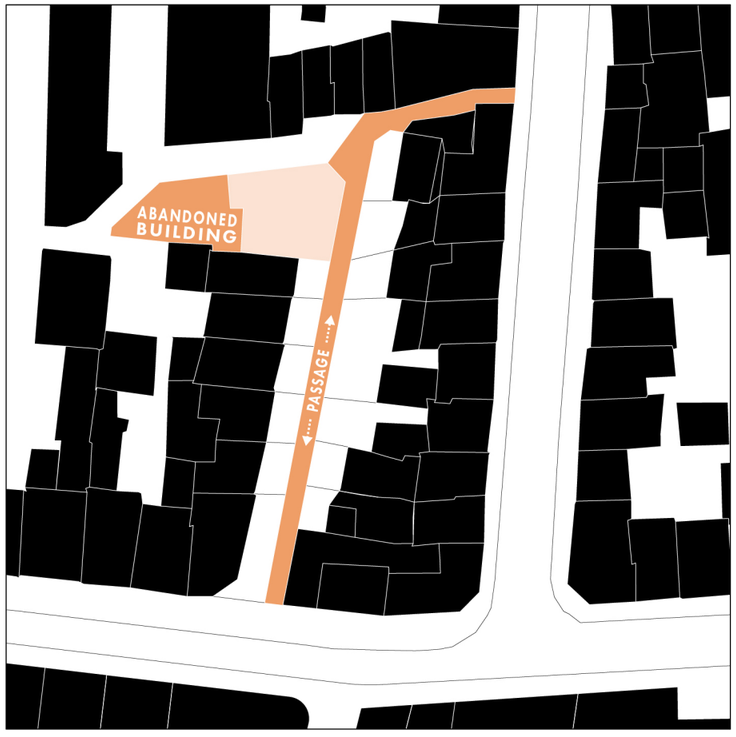
VOID AS PASSAGE



Abandoned Building - Derelict
Located inside the alley of urban block

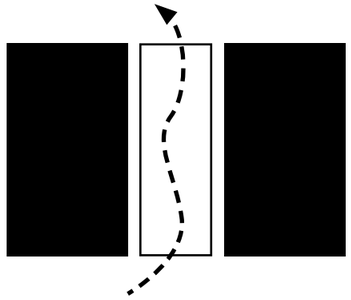






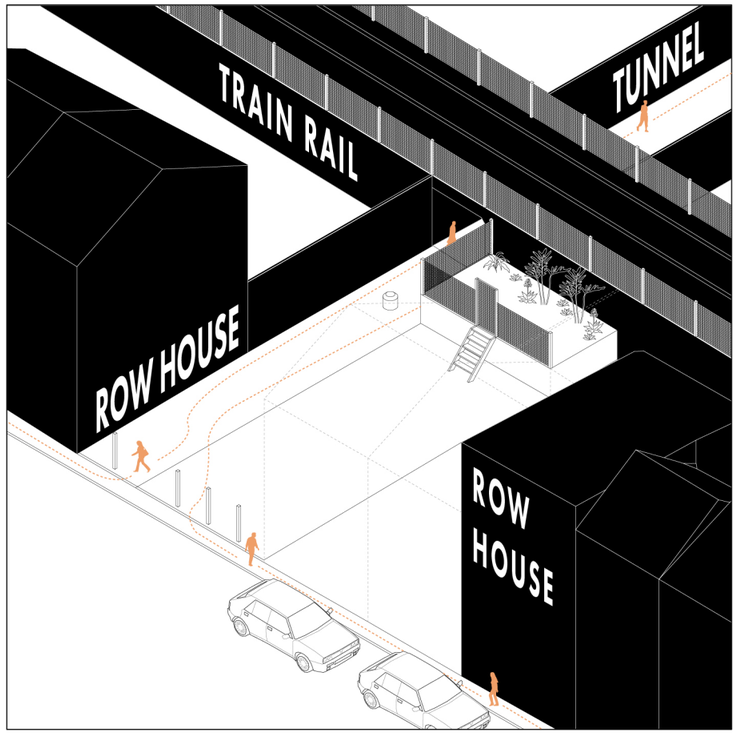
CASE STUDY 2

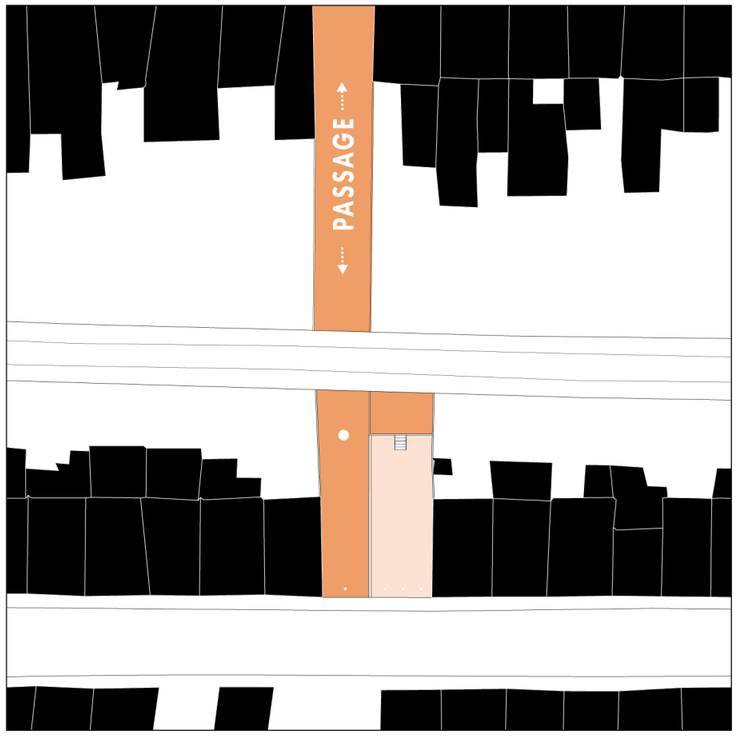
VOID AS PASSAGE



Train Rail - Spatially Empty
Located next to the tunnel

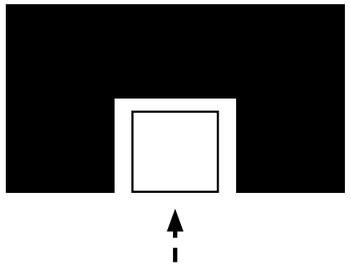






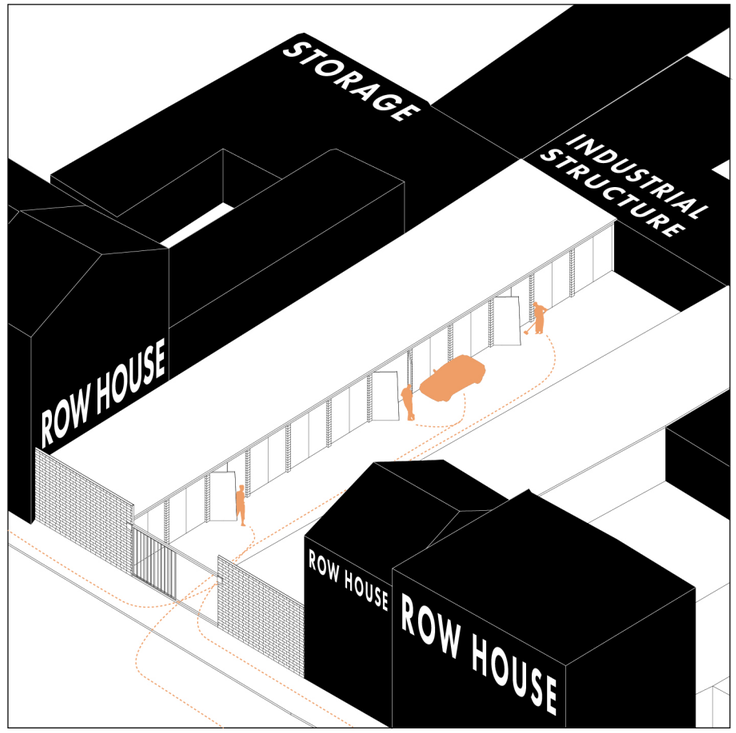
CASE STUDY 3

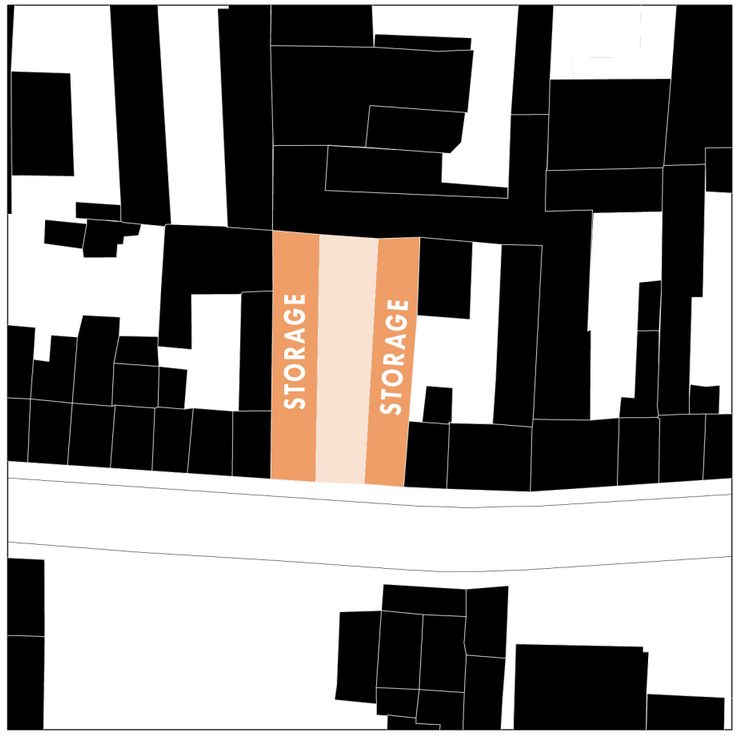
VOID AS POCKET SPACE



Storage- Underutilized
Located between industrial structure and residential

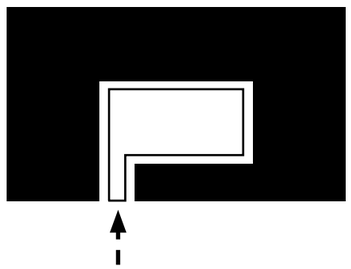


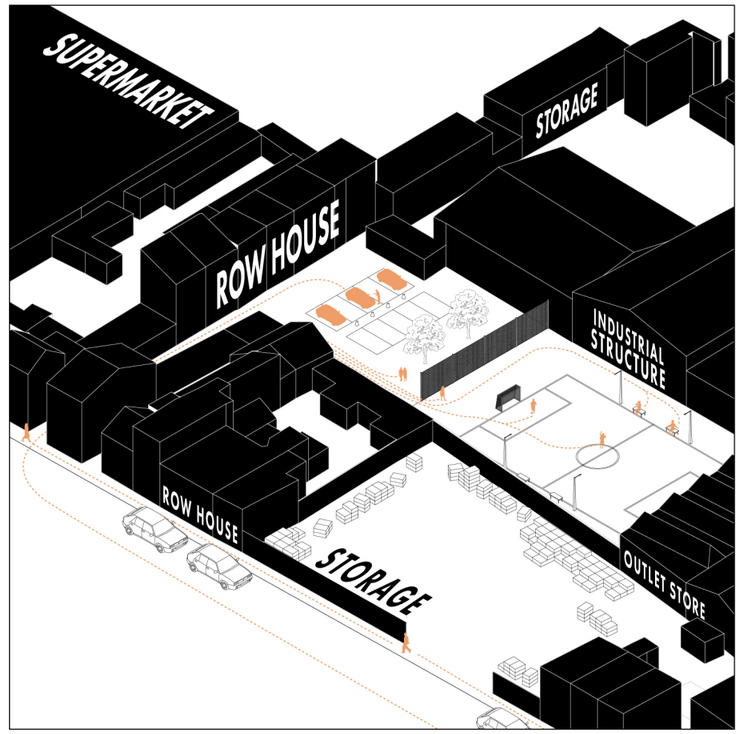




CASE STUDY 4

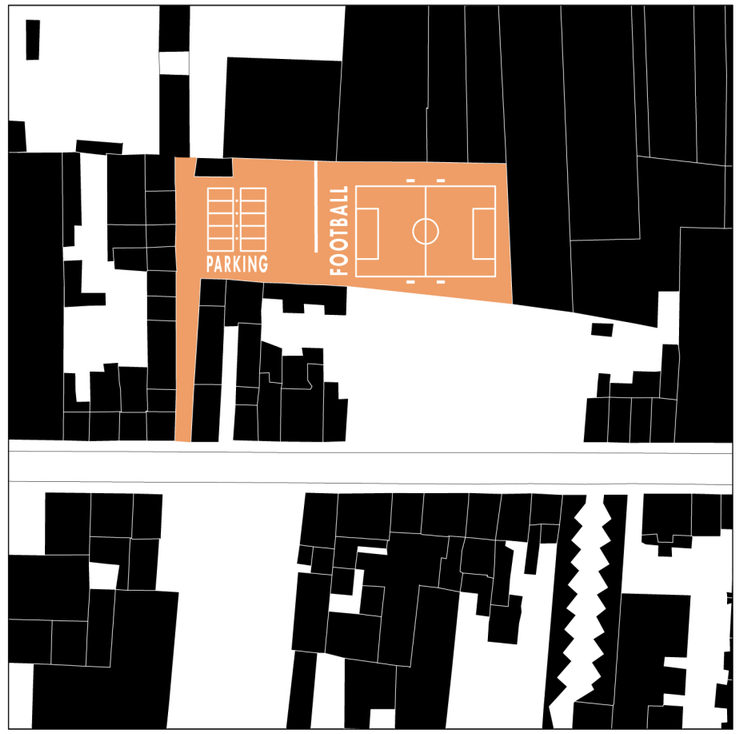
VOID AS POCKET SPACE





Parking- Football Court - Hybrid
Located between outlet store, industrial structure and residential





DESIGN & RESEARCH LINKAGE

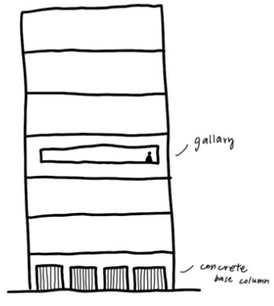
URBAN SEGREGATION ELEMENT (Passive Role) ----► **BOTTOM UP INGRIDIENT** (Active Role)

COLLAGE CITY: GROWTH OF ARCHITECTURE



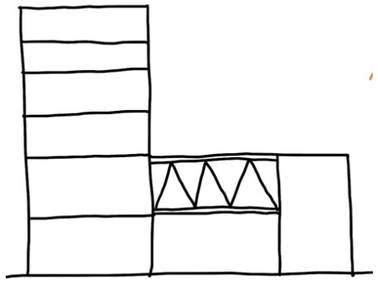
1956

ROW HOUSE LIVING



1972

MODERN SOCIAL HOUSING



2023

HYBRID LIVING

FUTURE?

MERGING

SOCIAL INTERACTION

PUBLIC COMMUNITY CLUSTER

BRESSOUX NEIGHBOURHOOD

REPAIR CAFE (CENTER)

BOOK CAFE

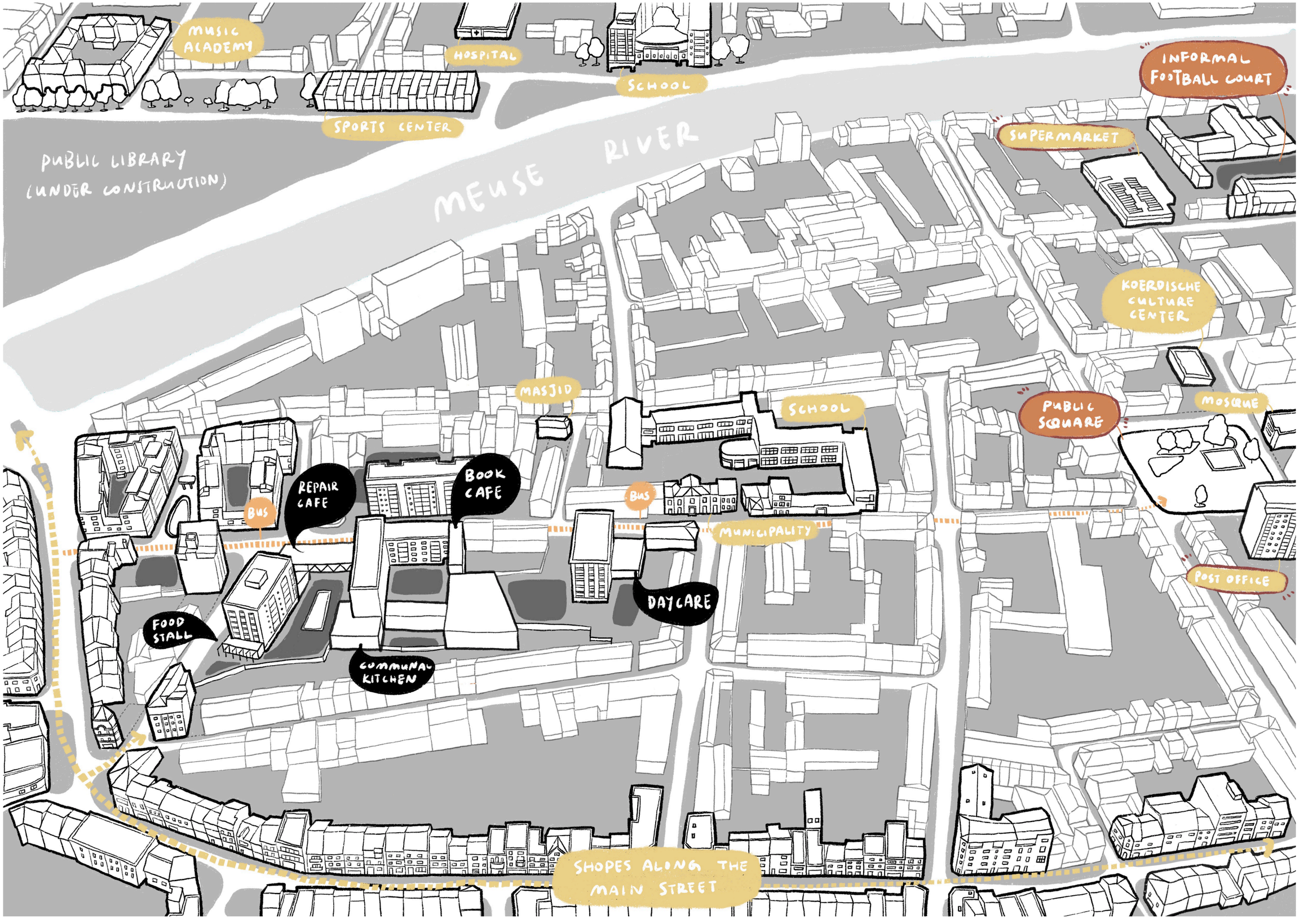
ADJACENT URBAN BLOCK

DAY CARE CENTER

RESIDENTS WITHIN THE URBAN BLOCK

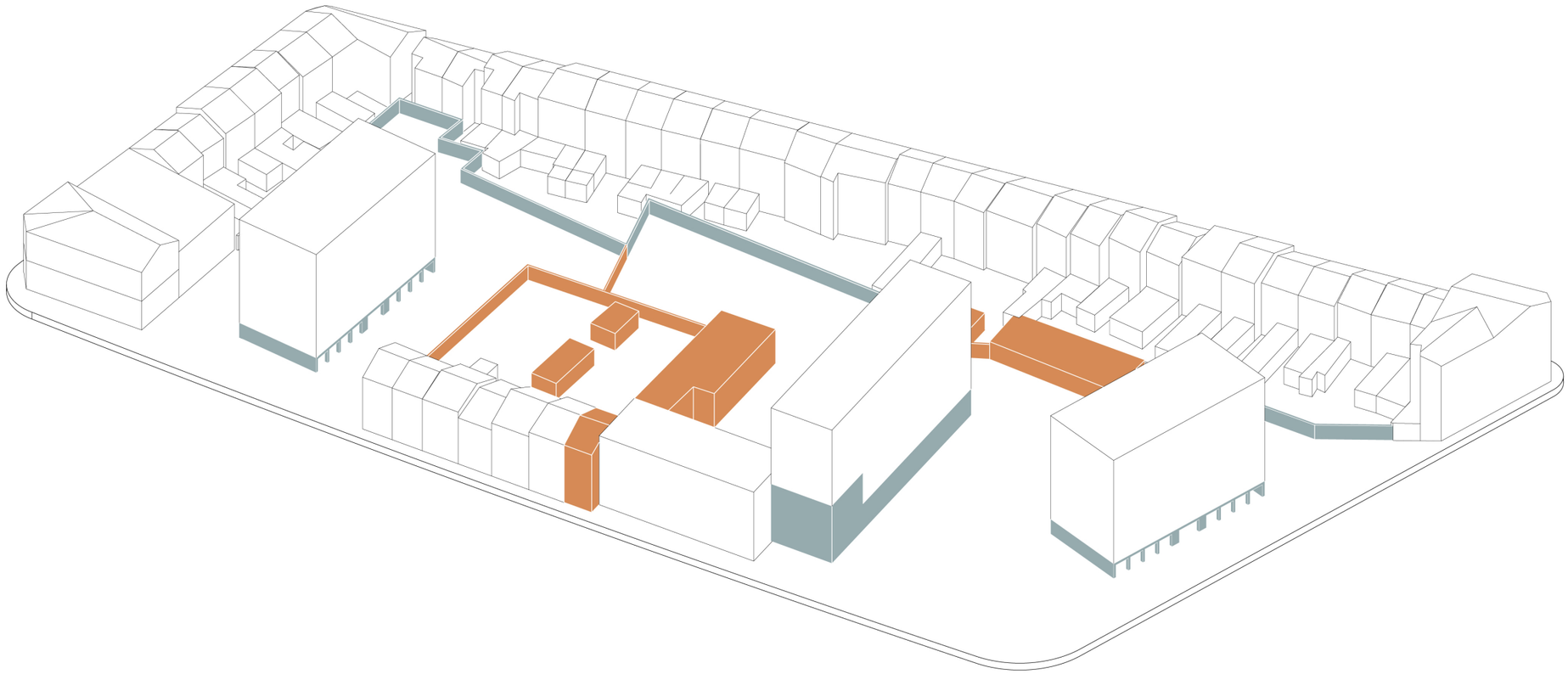
COMMUNAL KITCHEN

LAUNDRY ROOM


MUSIC ACADEMY
HOSPITAL
SCHOOL
SPORTS CENTER
PUBLIC LIBRARY
(UNDER CONSTRUCTION)
MEUSE RIVER
INFORMAL FOOTBALL COURT
SUPERMARKET
KOERDISCHE CULTURE CENTER
MASJID
SCHOOL
PUBLIC SQUARE
MOSQUE
BUS
REPAIR CAFE
BOOK CAFE
BUS
MUNICIPALITY
DAYCARE
POST OFFICE
FOOD STALL
COMMUNAL KITCHEN
SHOPES ALONG THE MAIN STREET

URBAN PROPOSAL: VOIDS AS A MENDING TOOL

Demolition Diagram

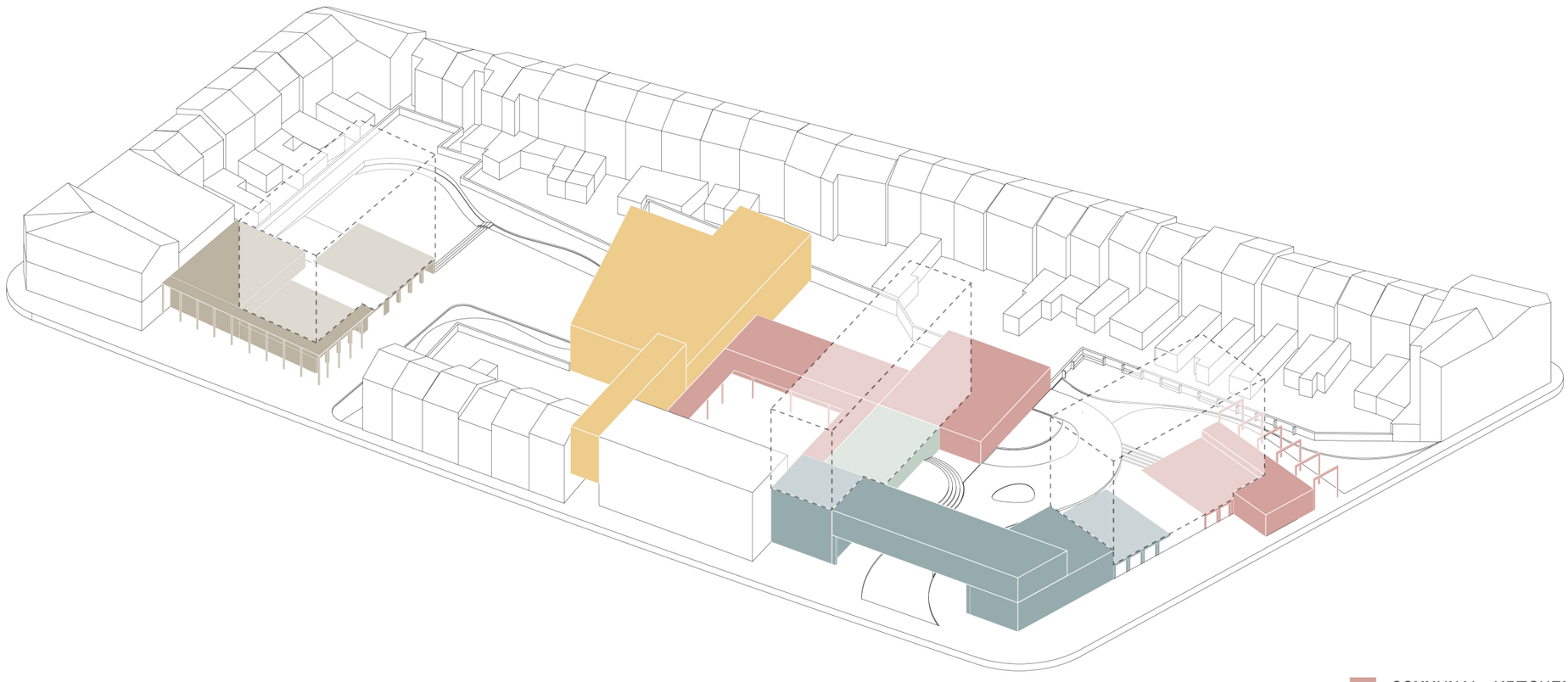


REDESIGN

TO BE DEMOLISHED

URBAN PROPOSAL: VOIDS AS A MENDING TOOL

Program Location Diagram



COMMUNAL KITCHEN AND FEASTING ZONE

REPAIR CAFE

LAUNDRY ROOM

BOOK CAFE

DAY CARE CENTER

FORMATION OF HIGHSTREET



(1) DAY CARE CENTER

(2) BOOK CAFE

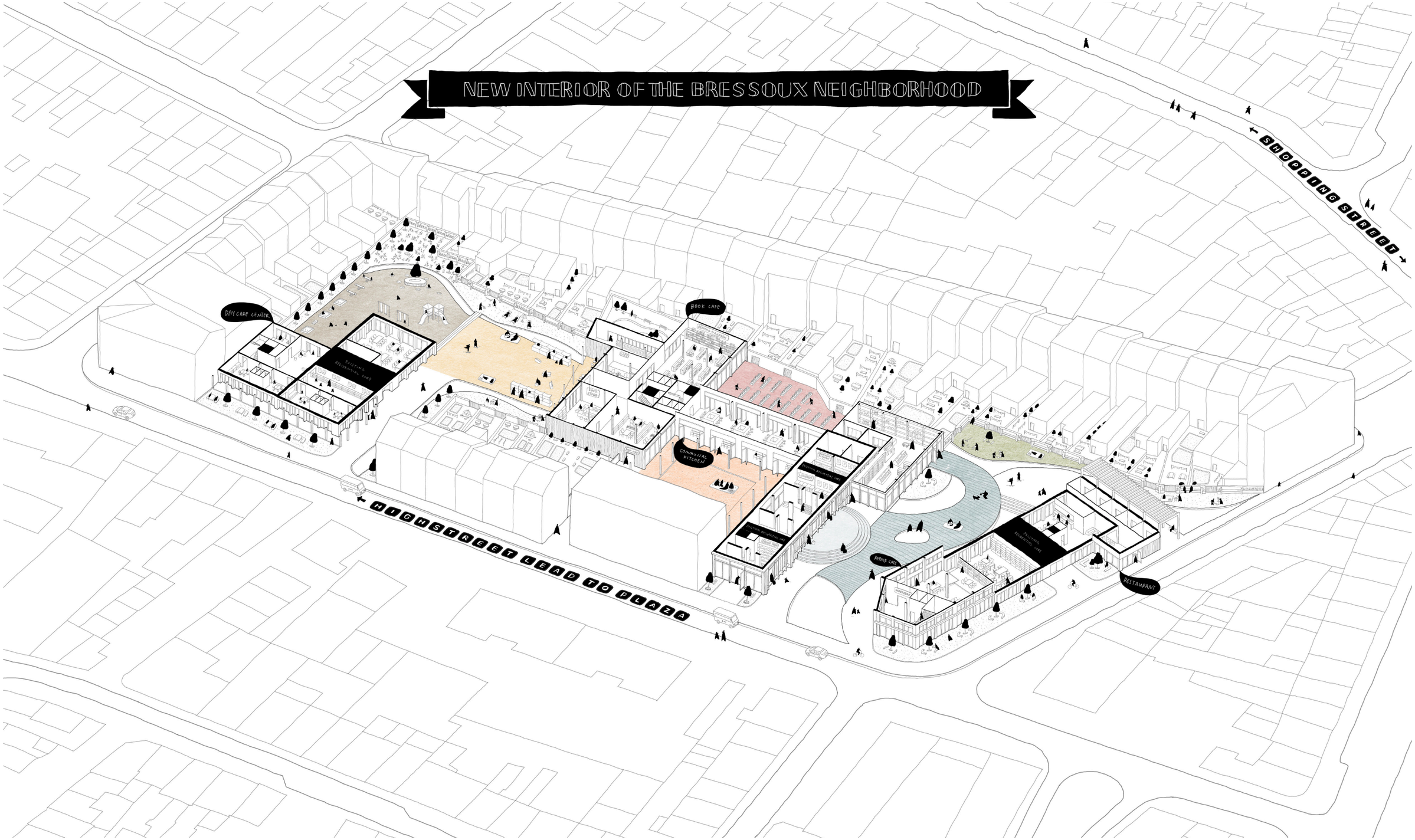
(3) REPAIR CAFE

AFTER



BEFORE

VOID AS A NEW INTERIOR TO THE NEIGHBOURHOOD

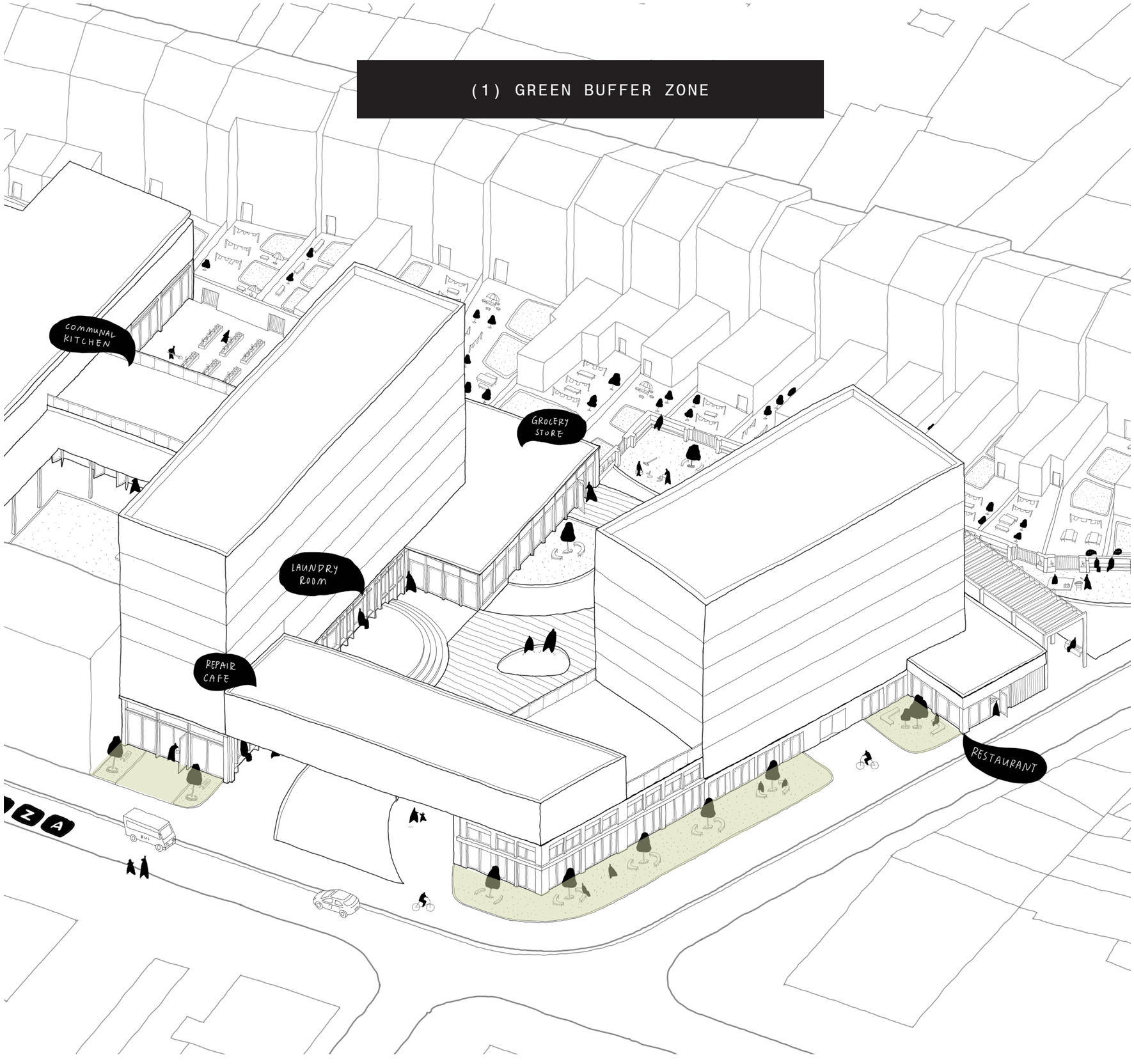


[4]

AN ALTERNATIVE PUBLIC SPACE

MASTER PLANNING OF THE URBAN BLOCK

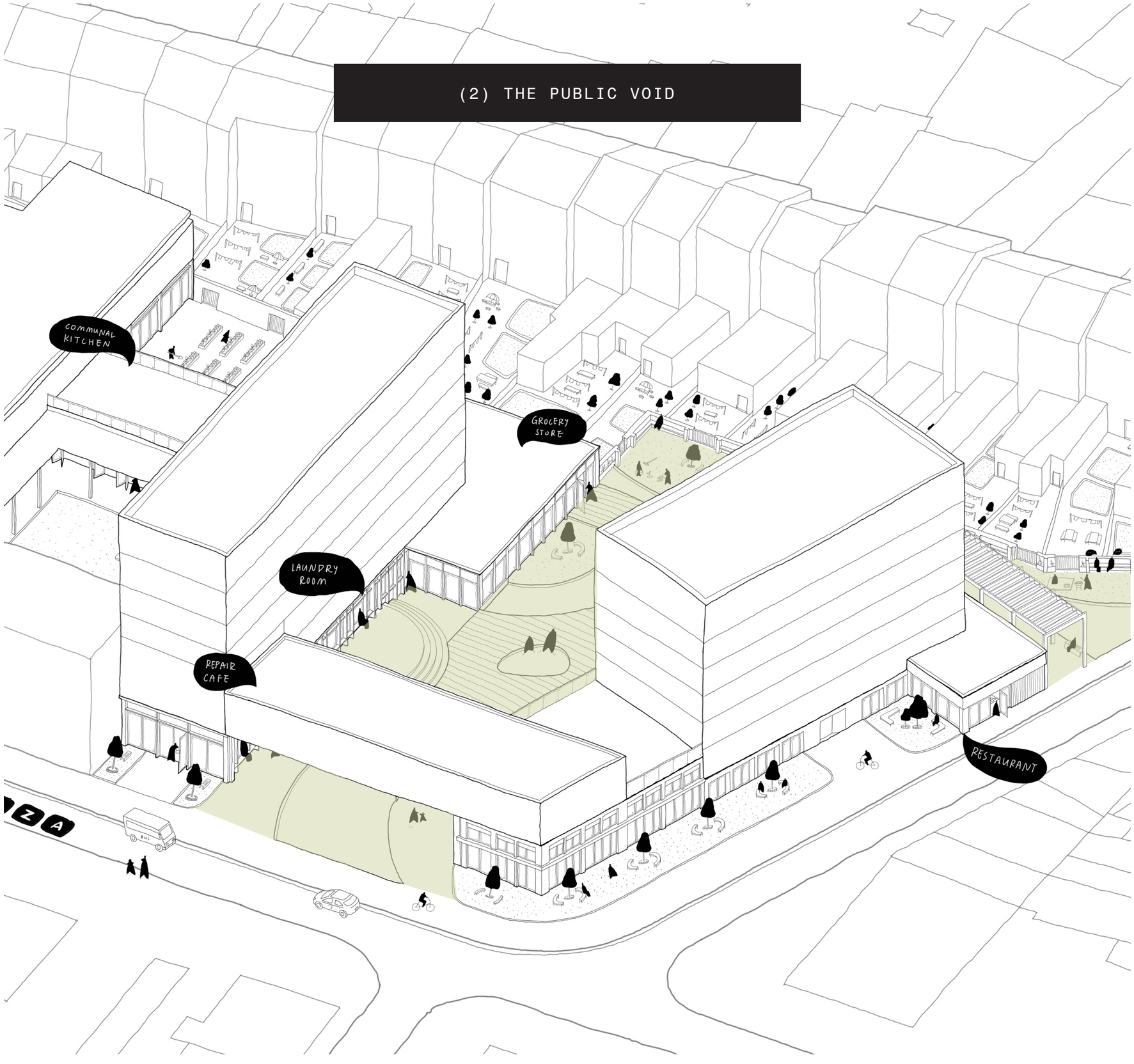



(1) GREEN BUFFER ZONE
COMMUNAL KITCHEN
GROCERY STORE
LAUNDRY ROOM
REPAIR CAFE
RESTAURANT

GREEN BUFFER ZONE - 24/7 ACCESS



(2) THE PUBLIC VOID

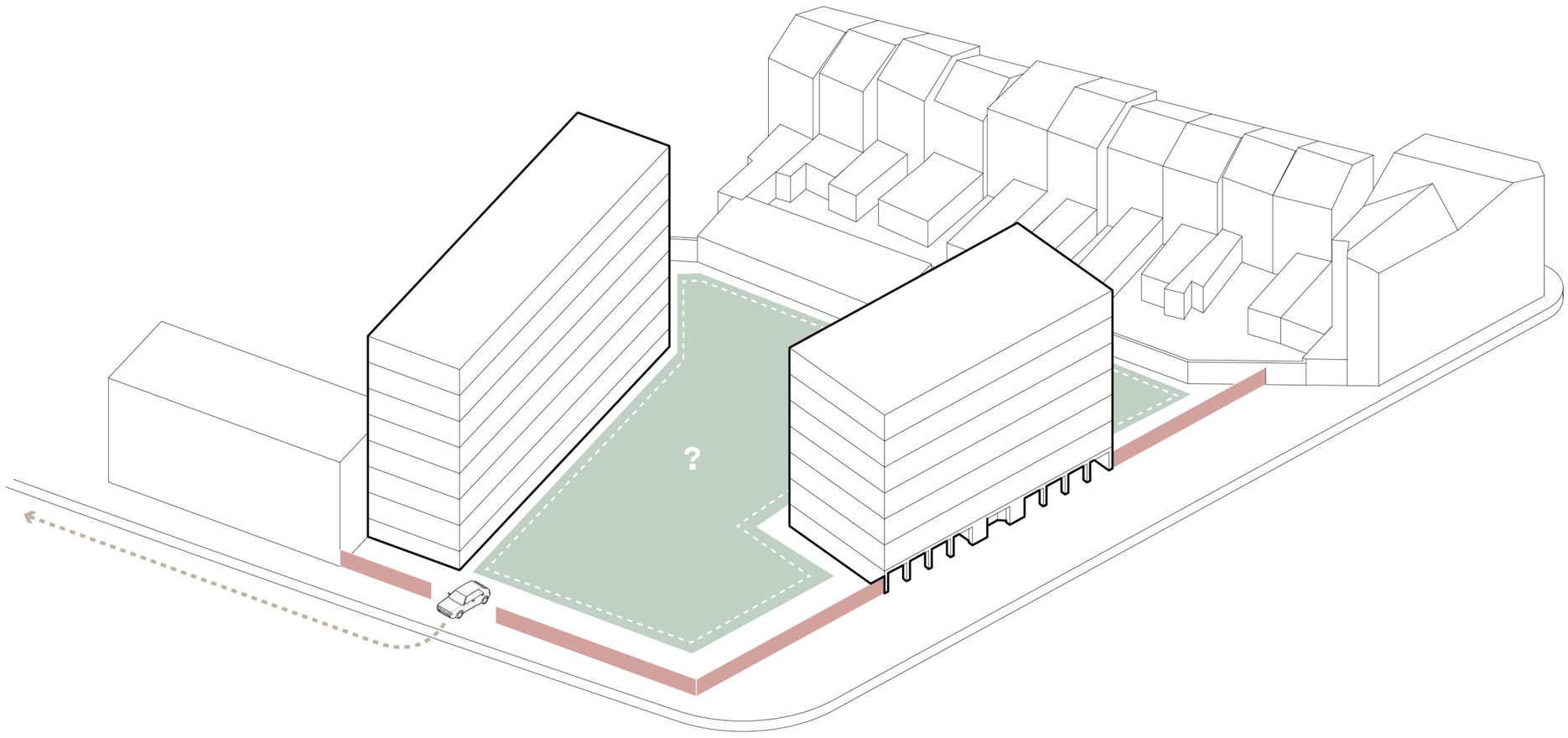


THE PUBLIC VOID- CONNECTING - WATER - PLATFORM



EXISTING SITE CONDITION

Disconnection between:
(1) the two social housing apartment
(2) middle void space and street

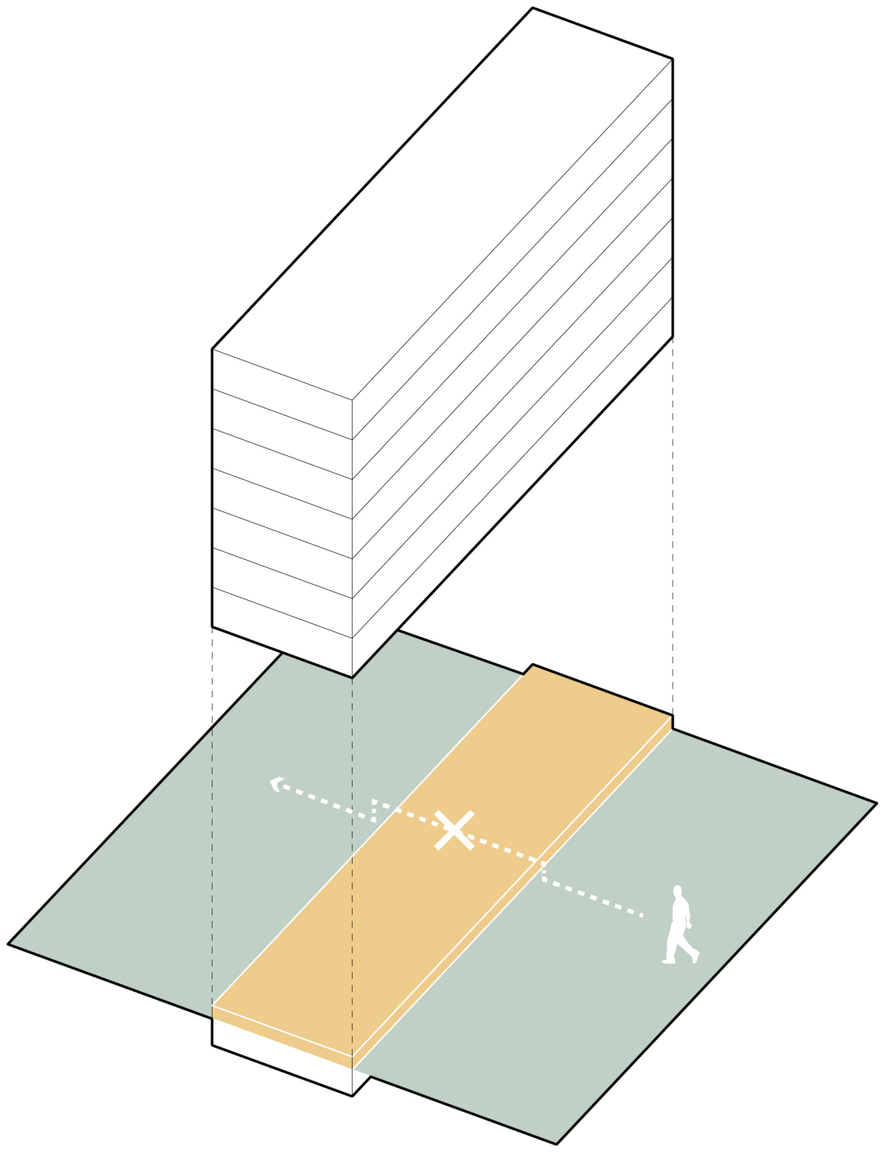


AMBIGUOUS VOID SPACE

MESH FENCES

EXISTING SITE CONDITION

Different level between interior and exterior

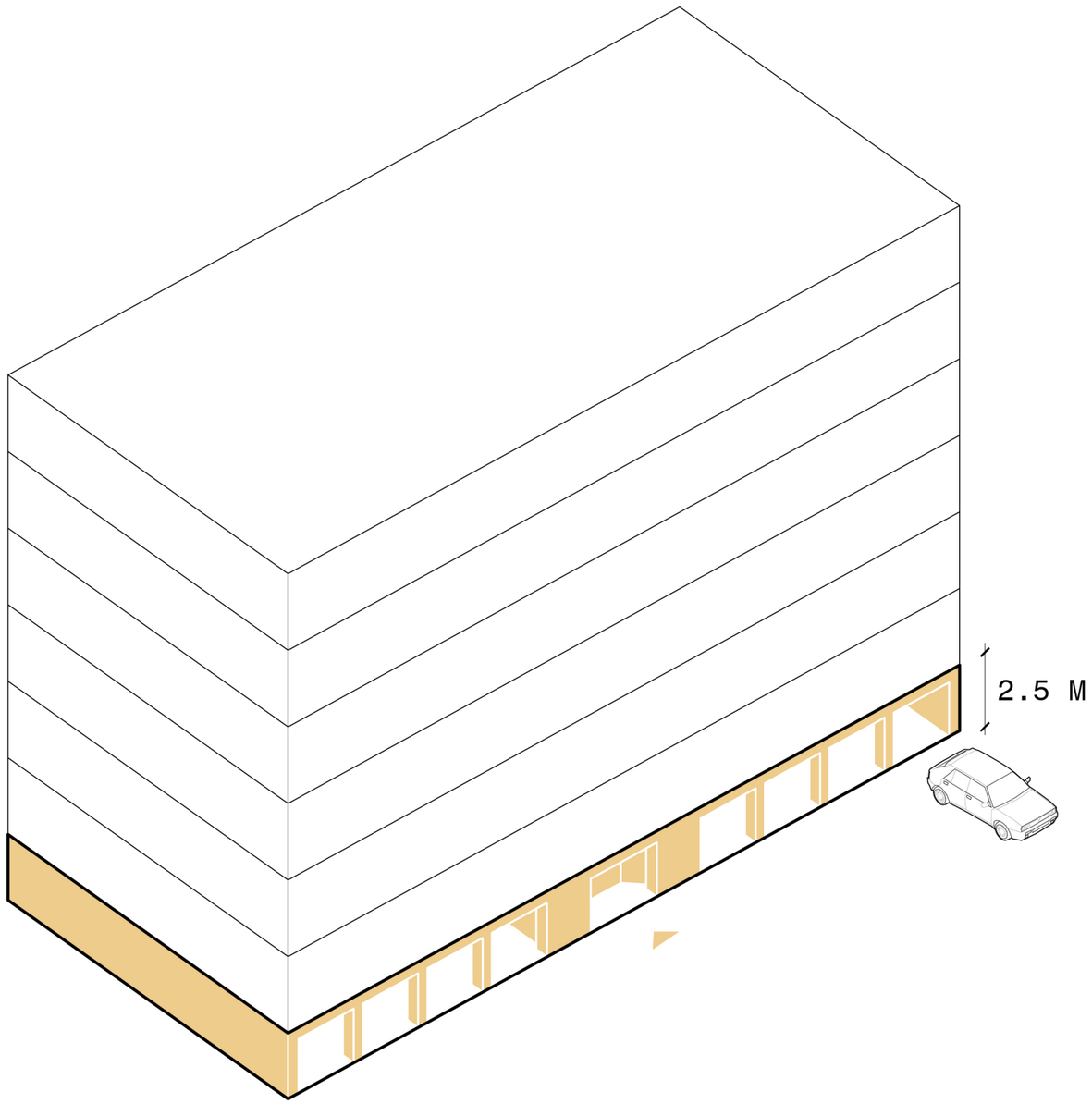


OUTDOOR GROUND LEVEL

GROUND FLOOR IN BUILDING

EXISTING SITE CONDITION

Low head room due to former car storage function

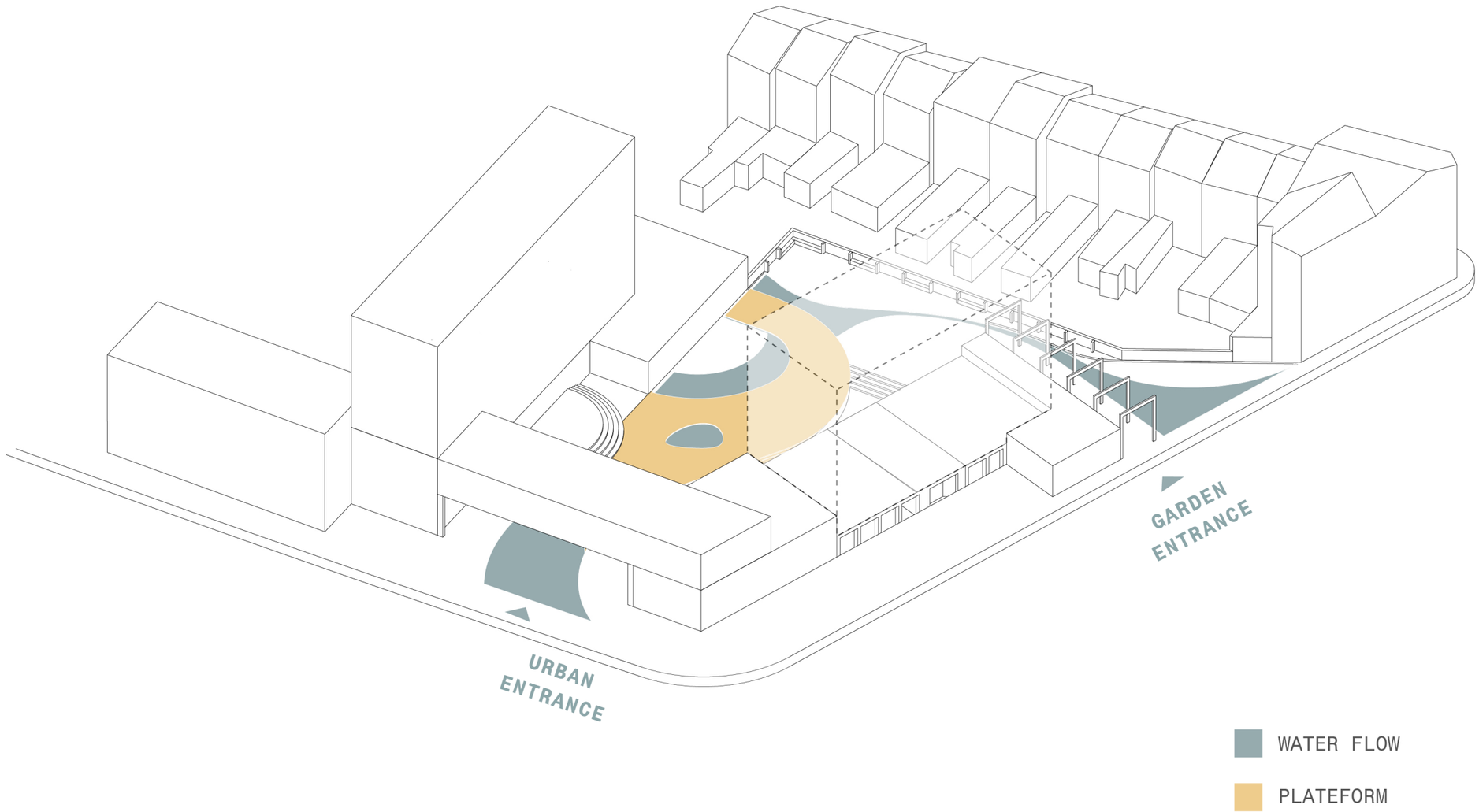


DESIGN CONCEPT

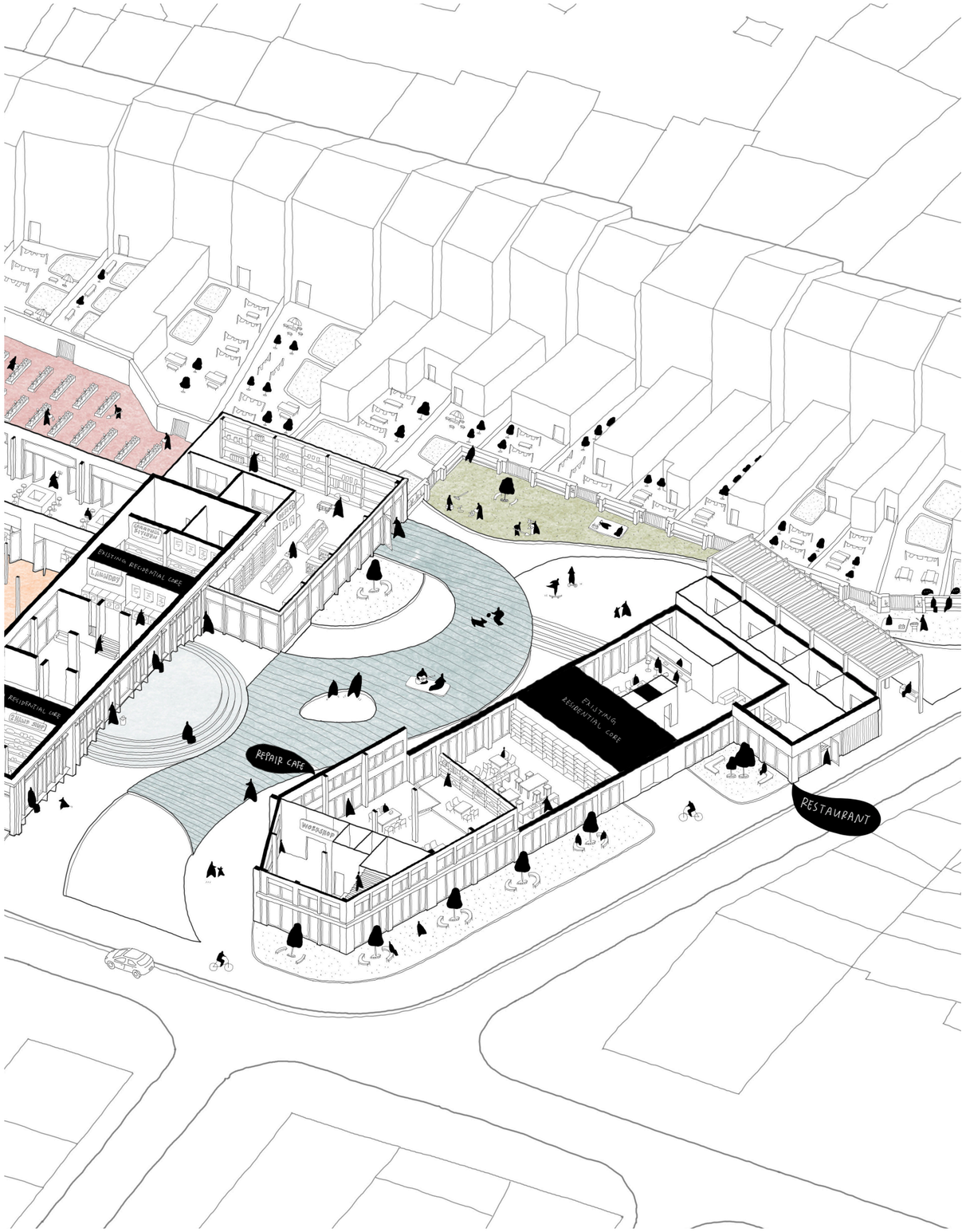
(1)Introduce **WATER** *as connection between the two housing typology*

(2) Void as **VOLUME** *and sequence of movement, design a* **NEW INTERIOR** *in the urban fabric*

(3) Void as a solution to tackle the issues discovered from the existing site condition

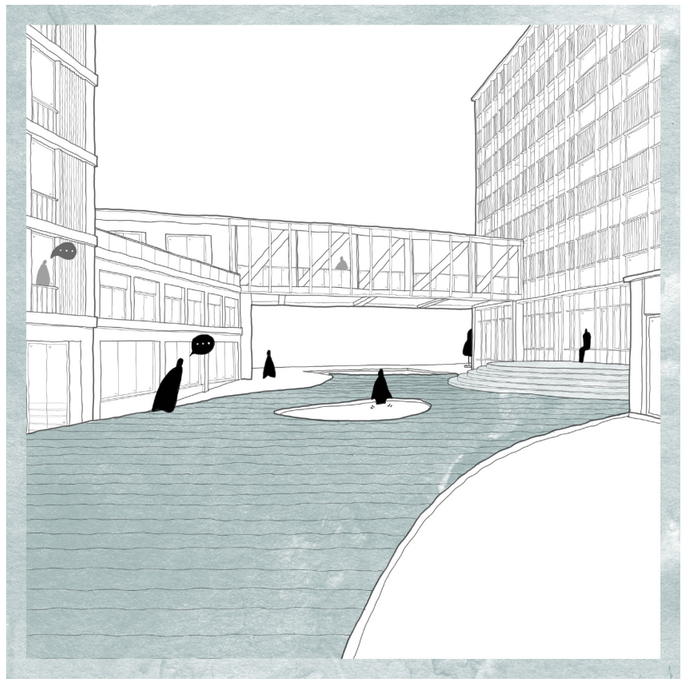


PUBLIC VS PRIVATE DOMAIN





Small Green Island for the Row House Residents



Platform as a New Gathering Space

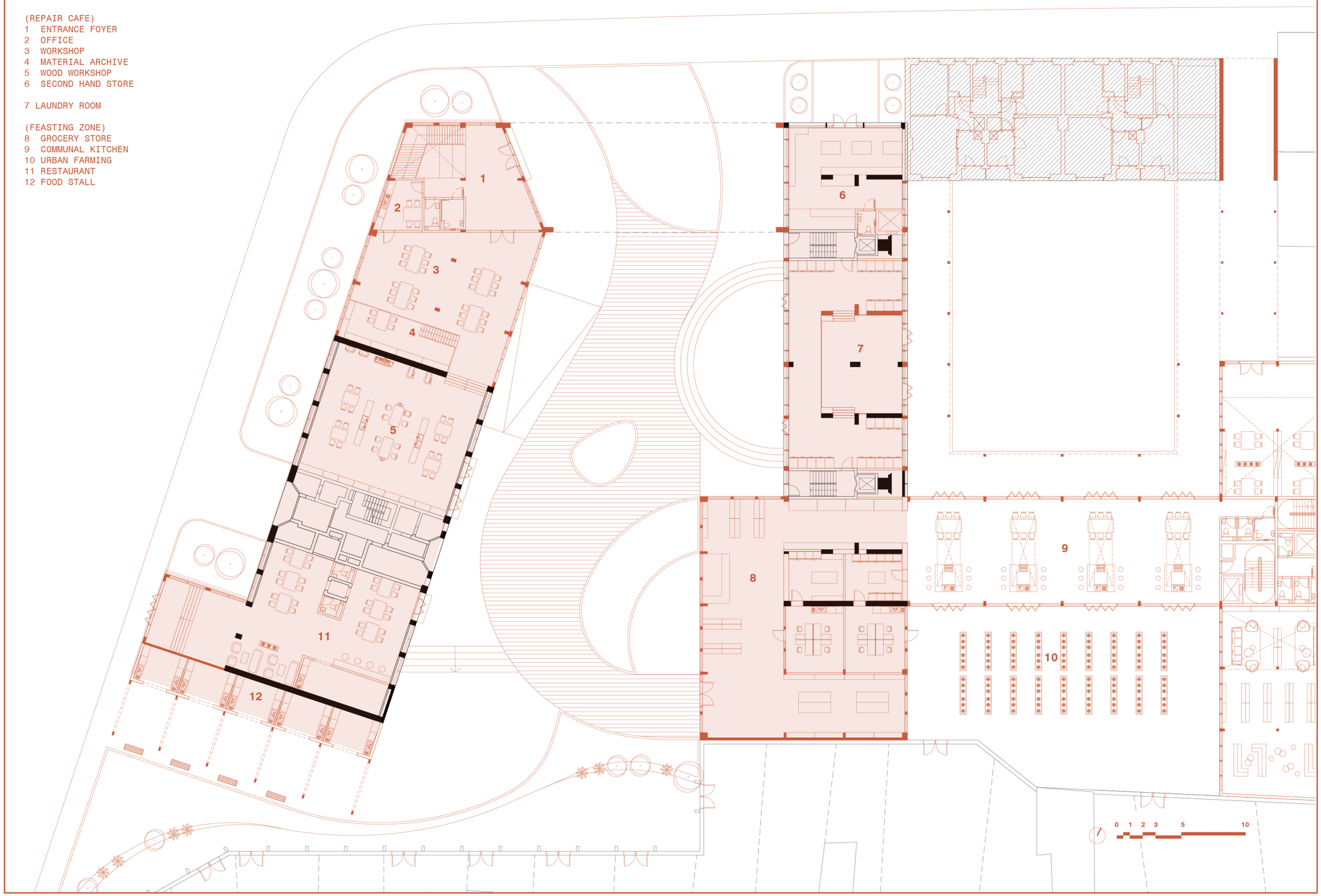
REPAIR CAFE - LAUNDRY ROOM - FEASTING ZONE - GROUND FLOOR PLAN

GROUND FLOOR PLAN

(REPAIR CAFE)
1 ENTRANCE FOYER
2 OFFICE
3 WORKSHOP
4 MATERIAL ARCHIVE
5 WOOD WORKSHOP
6 SECOND HAND STORE

7 LAUNDRY ROOM

(FEASTING ZONE)
8 GROCERY STORE
9 COMMUNAL KITCHEN
10 URBAN FARMING
11 RESTAURANT
12 FOOD STALL



REPAIR CAFE - LEVEL 1 PLAN

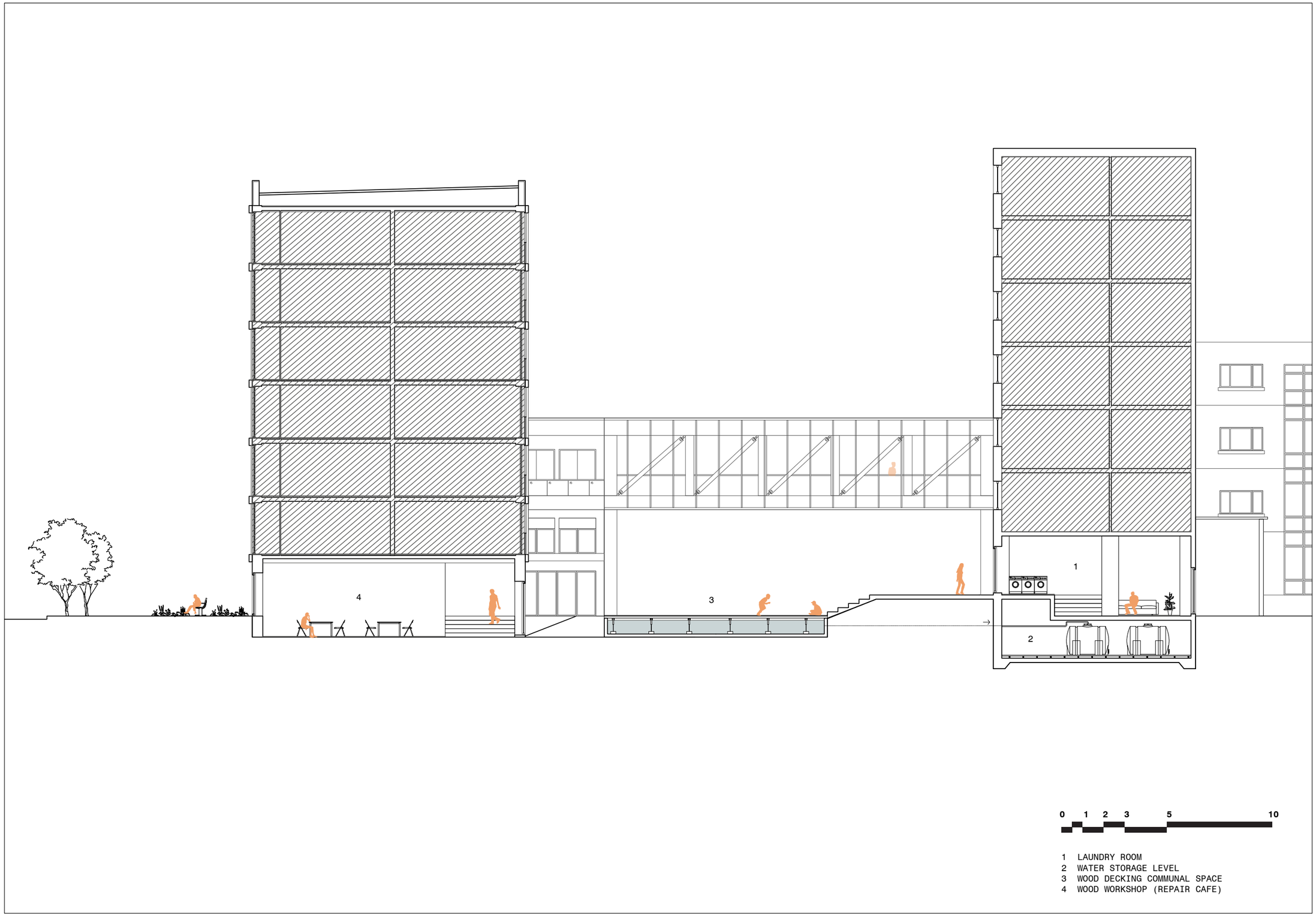
FIRST FLOOR PLAN

(REPAIR CAFE)
1 OUTDOOR CAFE AREA
2 TEACHING WOKRSHOP ROOM
3 CAFE
4 SECOND HAND SHOP

(FEASTING ZONE)
5 ROOFTOP FARMING



FORMATION OF PUBLIC VOID



0 1 2 3 5 10

1 LAUNDRY ROOM
2 WATER STORAGE LEVEL
3 WOOD DECKING COMMUNAL SPACE
4 WOOD WORKSHOP (REPAIR CAFE)

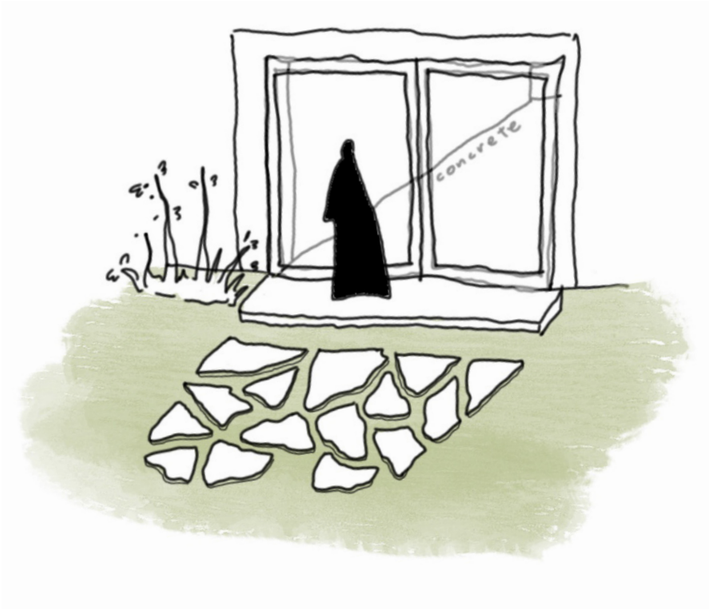
PLATFORM AS NEW GATHERING SPACE



FRAMING THE URBAN ENTRANCE WITH BRIDGE



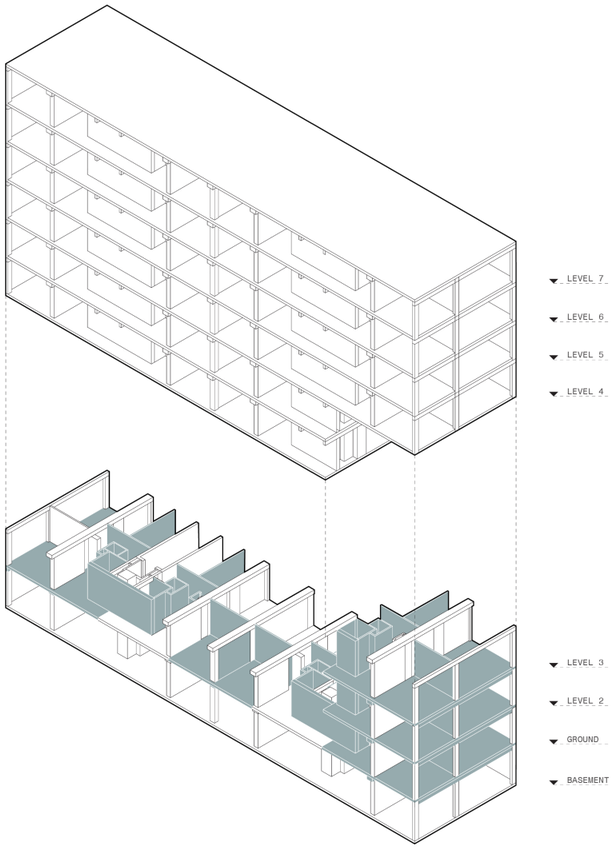
MATERIALIZATION OF PAVEMENT





INTERWEAVING BETWEEN THE NEW AND OLD

PHASE 1



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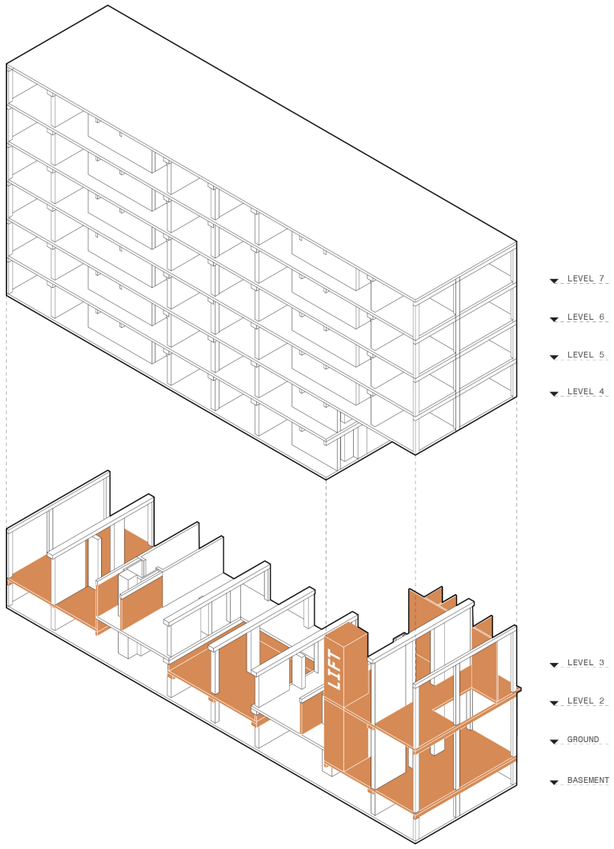
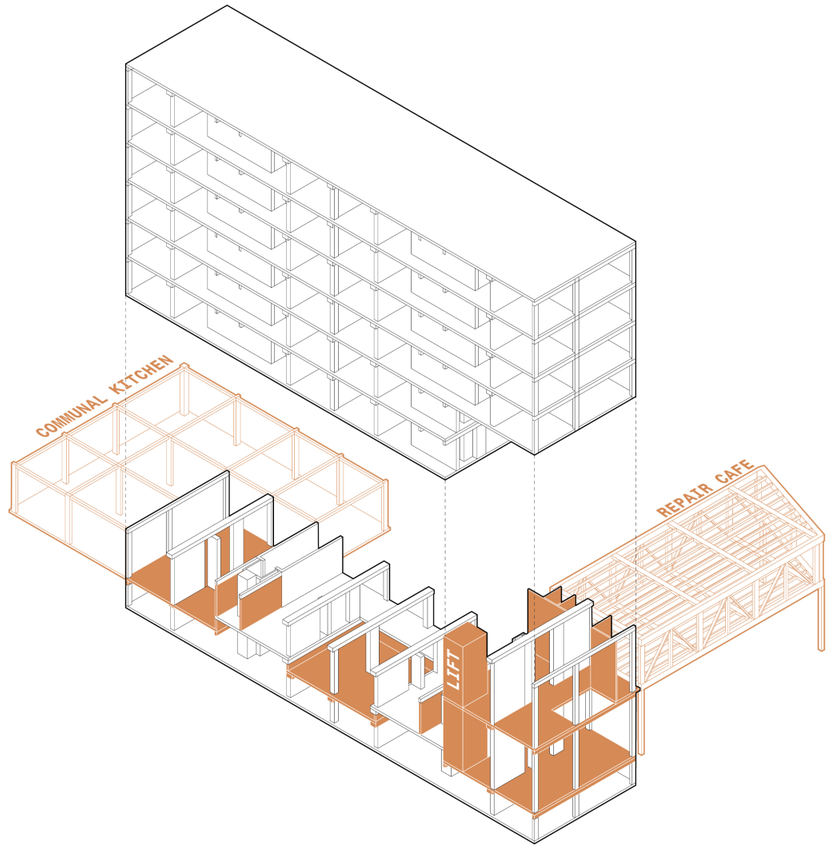


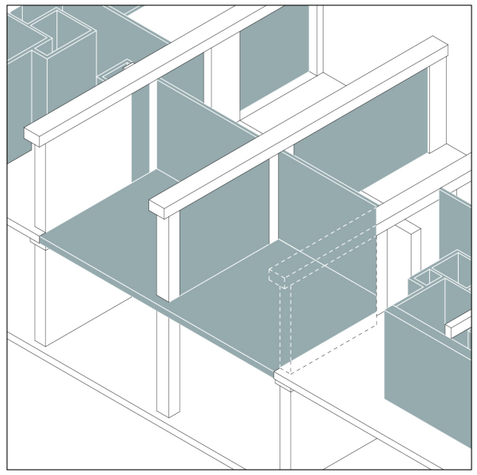
PHASE 3

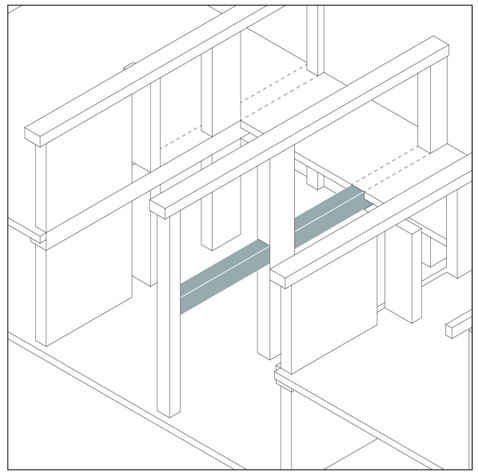


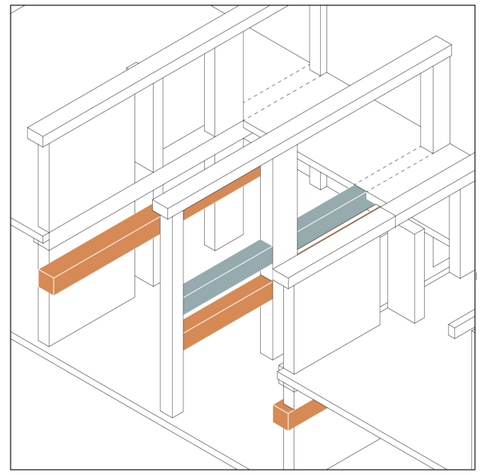
EXISTING

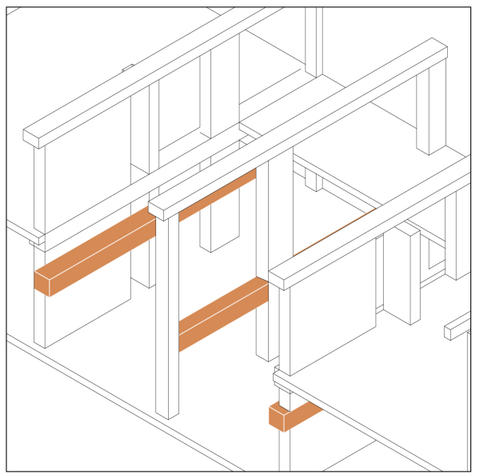
NEW BUILT

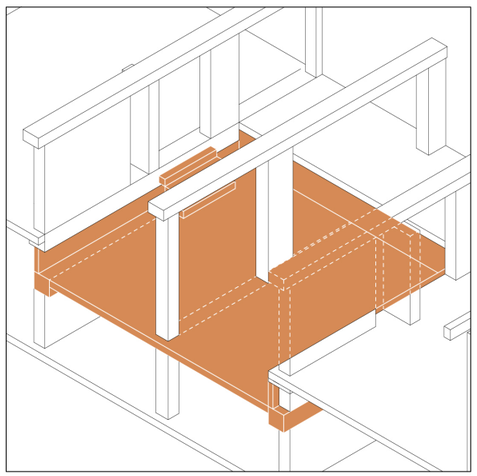
INTERWEAVING BETWEEN THE NEW AND OLD











EXISTING

NEW BUILT

RETAINING THE CHARACTERISTIC OF MODERNISM

THE GALLERY





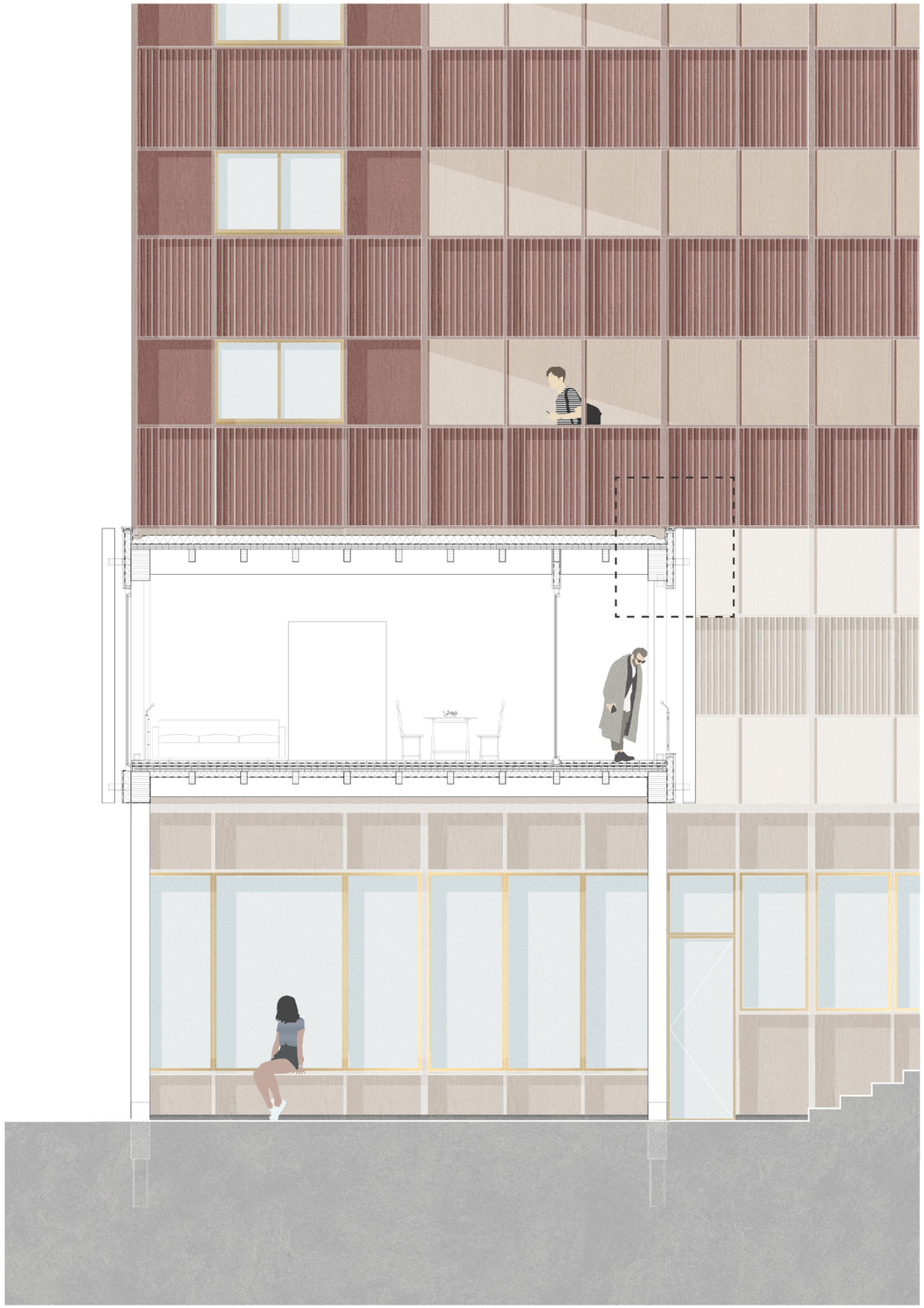
RETAINING THE CHARACTERISTIC OF MODERNISM

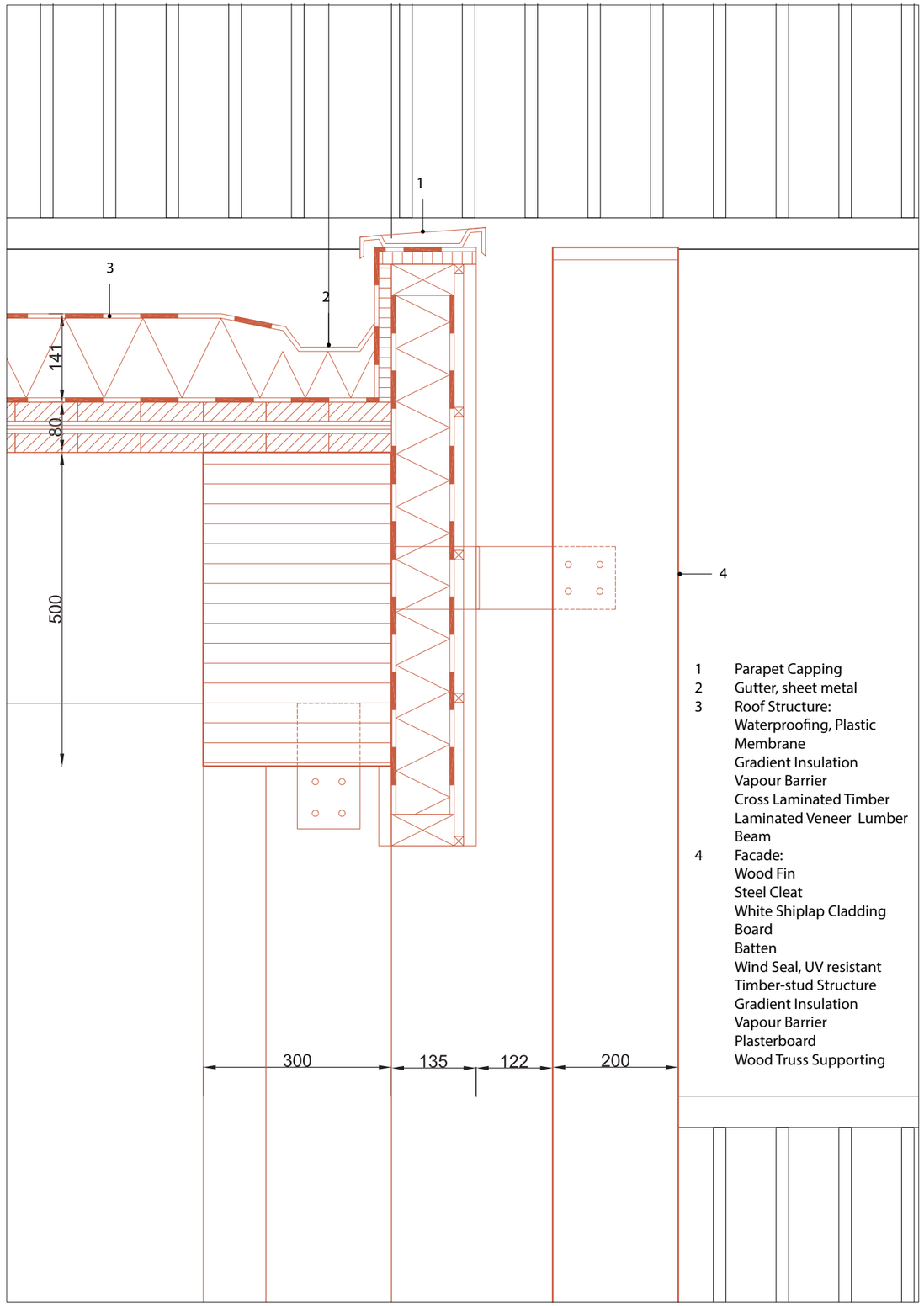
THE CONCRETE COLUMN



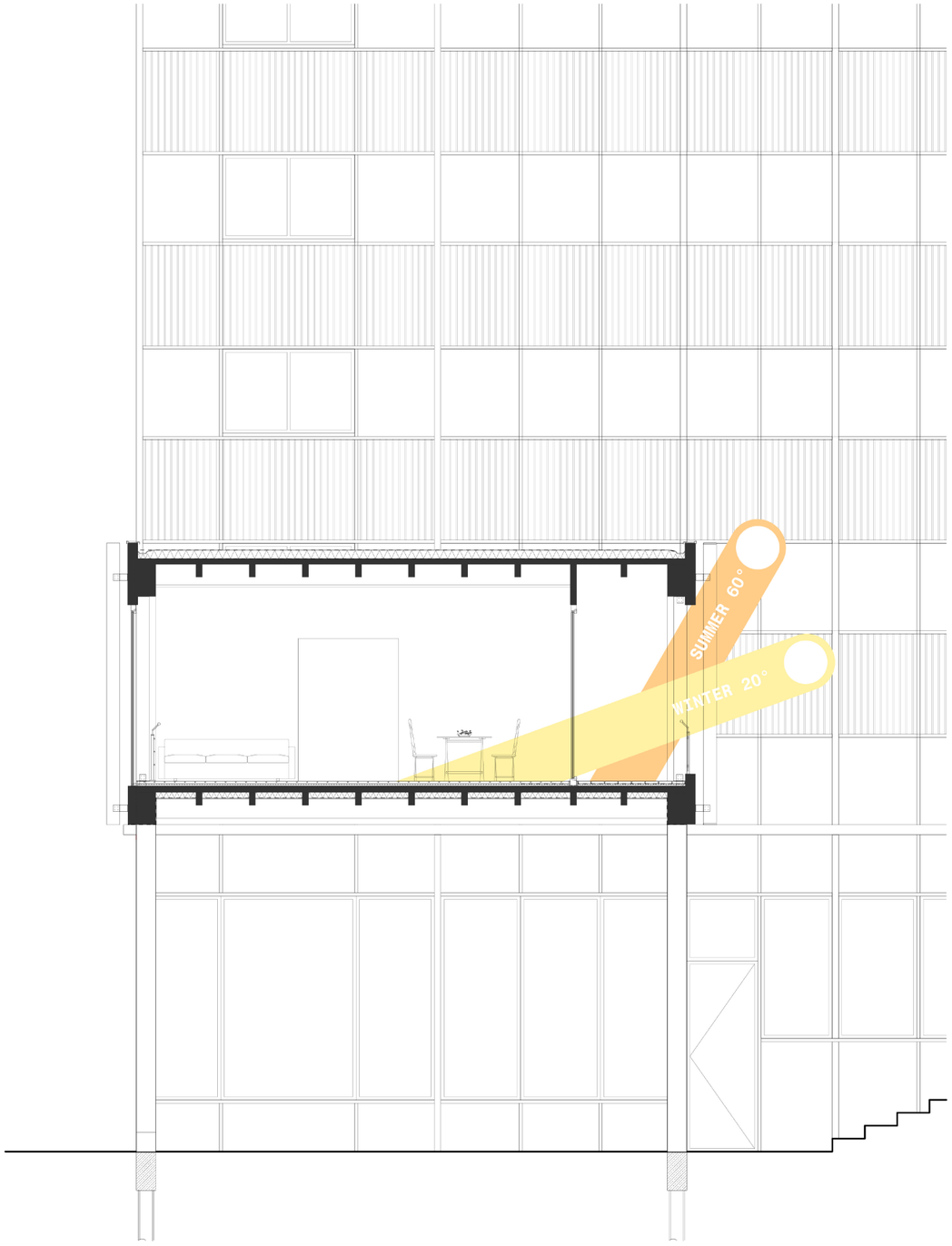


FACADE AS THE WALL OF VOID

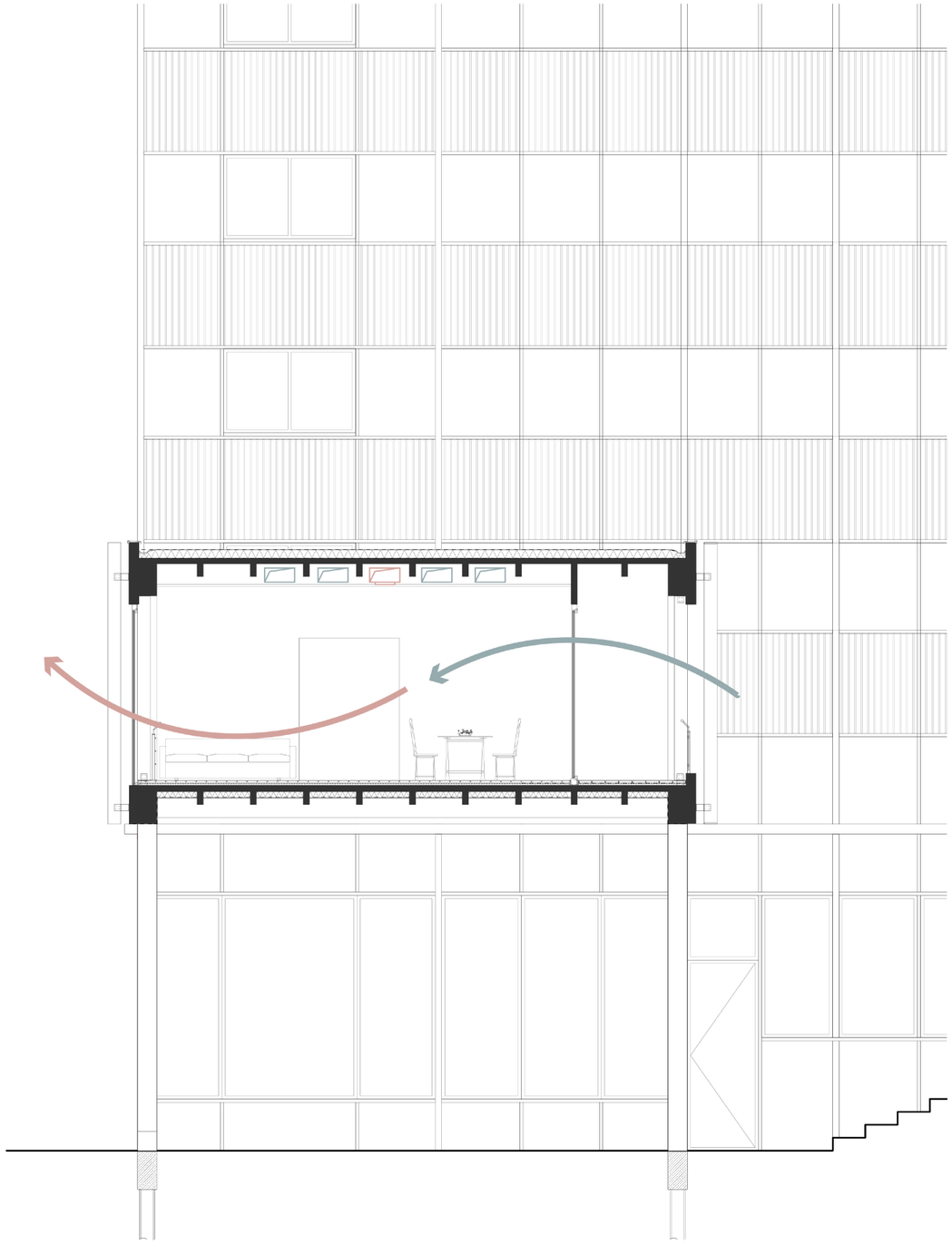




CLIMATIC DIAGRAM FOR THE BRIDGE

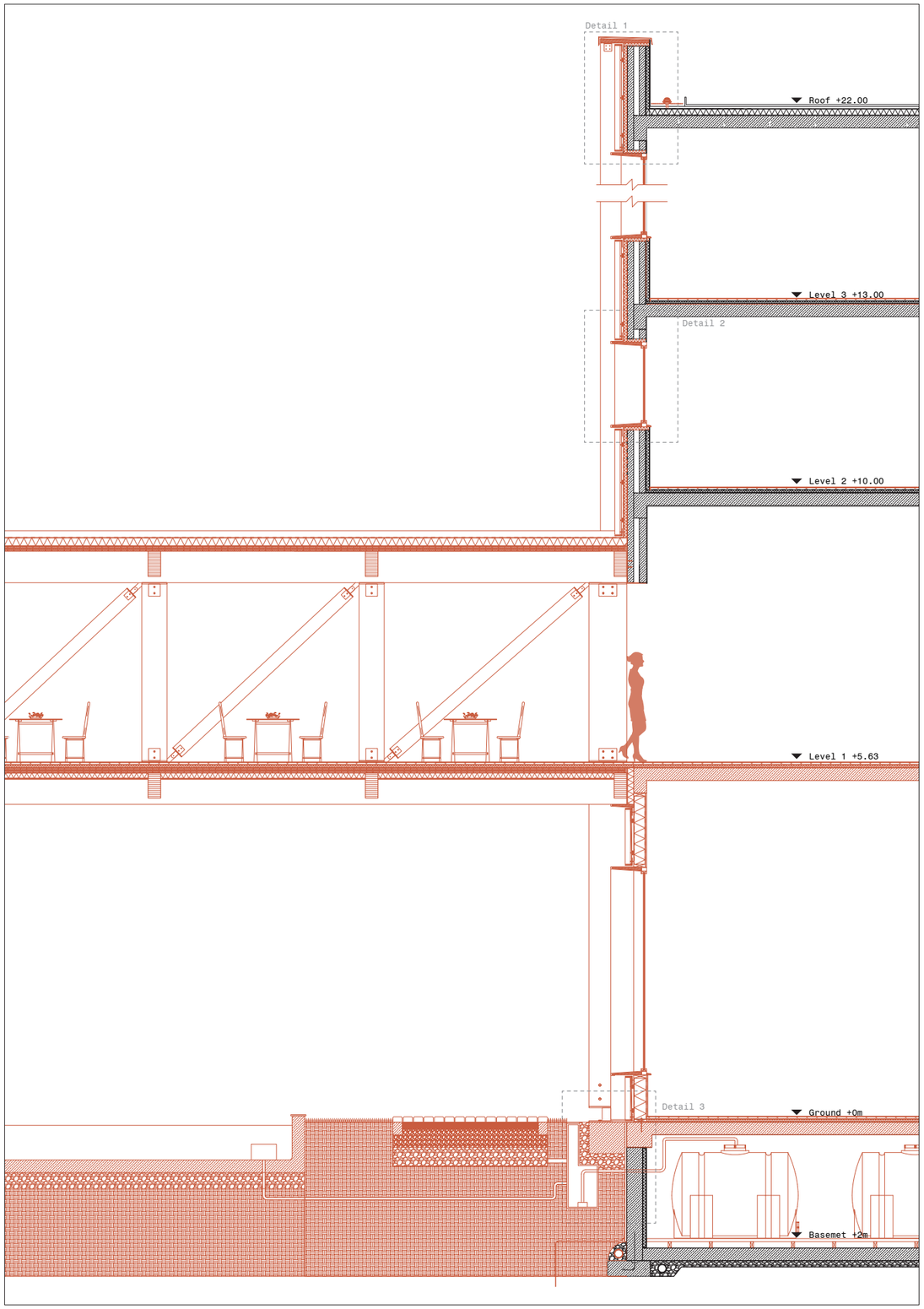


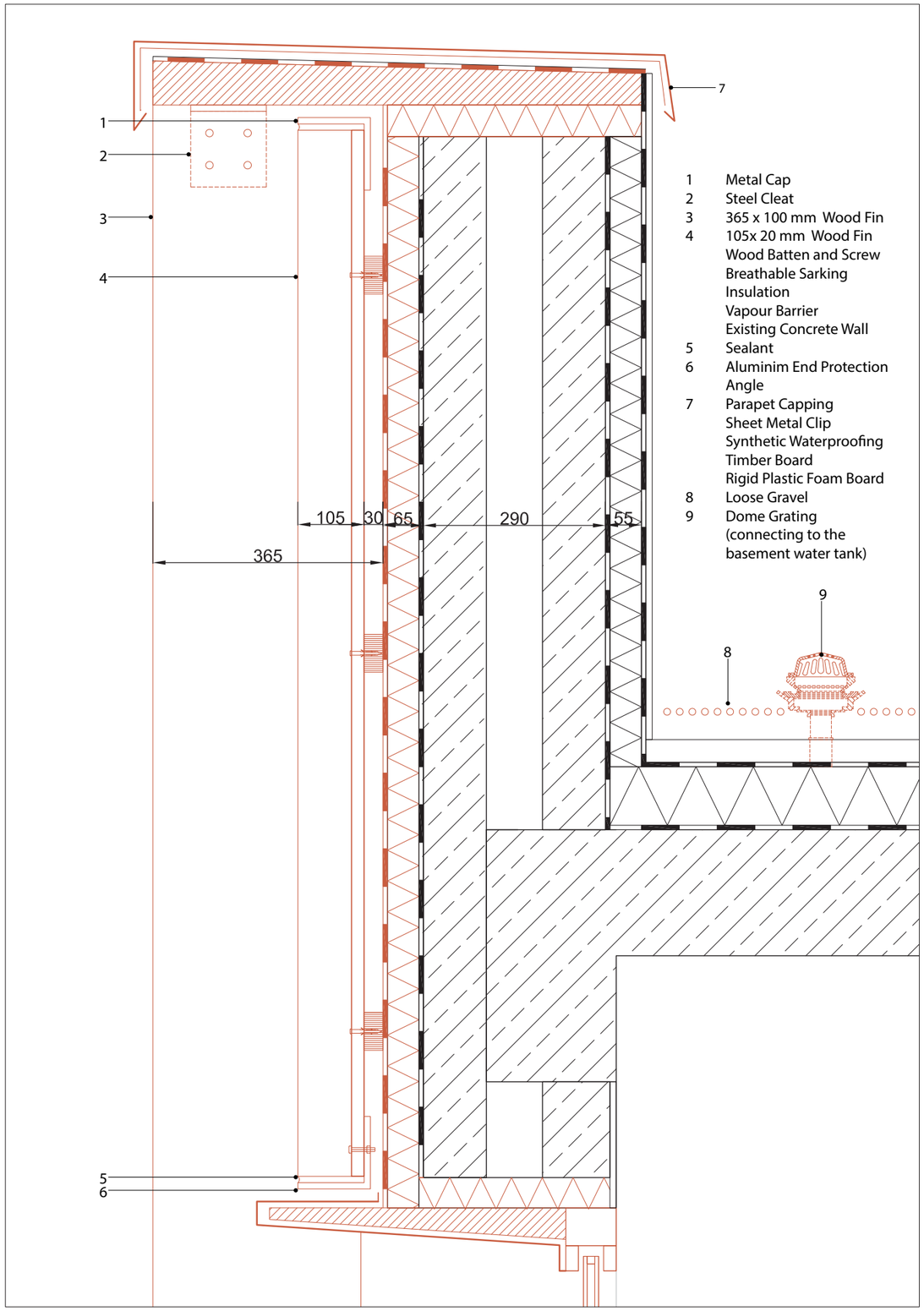
Balcony as sun shading buffer zone



Cross Ventilation in summer situation

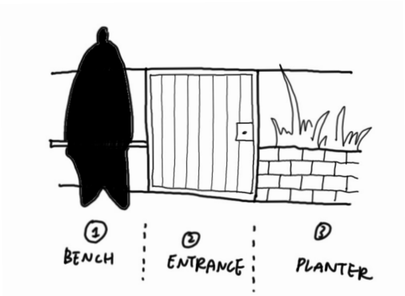
DETAIL

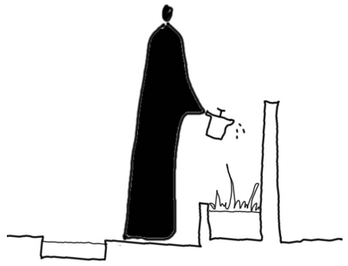


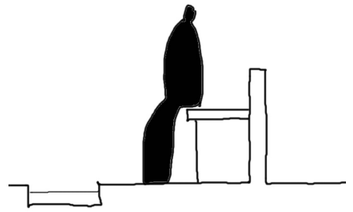


1 Metal Cap
2 Steel Cleat
3 365 x 100 mm Wood Fin
4 105x 20 mm Wood Fin
Wood Batten and Screw
Breathable Sarking
Insulation
Vapour Barrier
Existing Concrete Wall
5 Sealant
6 Aluminim End Protection Angle
7 Parapet Capping
Sheet Metal Clip
Synthetic Waterproofing
Timber Board
Rigid Plastic Foam Board
8 Loose Gravel
9 Dome Grating (connecting to the basement water tank)

ENTERING THE VOID FROM THE GARDEN ENTRANCE

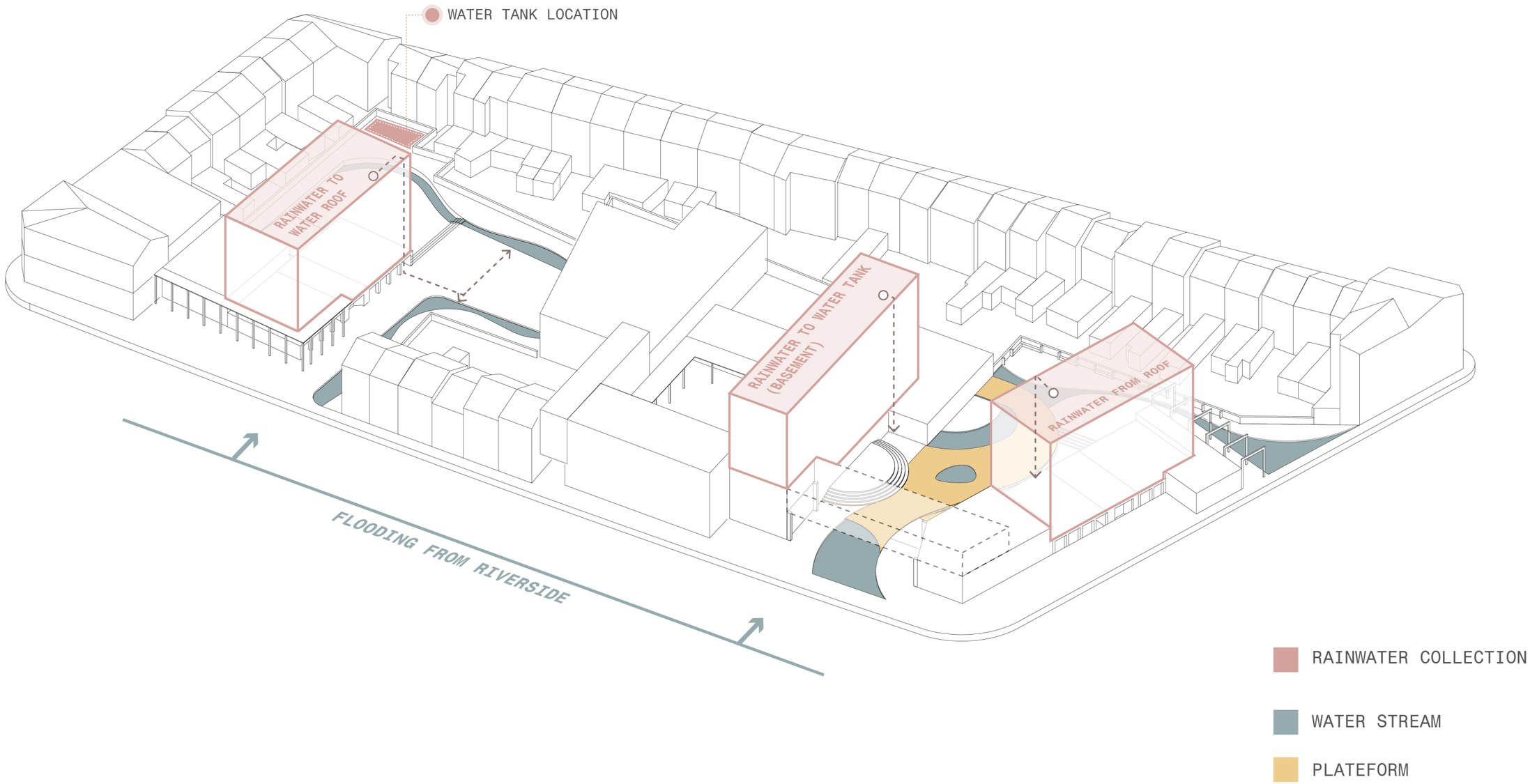




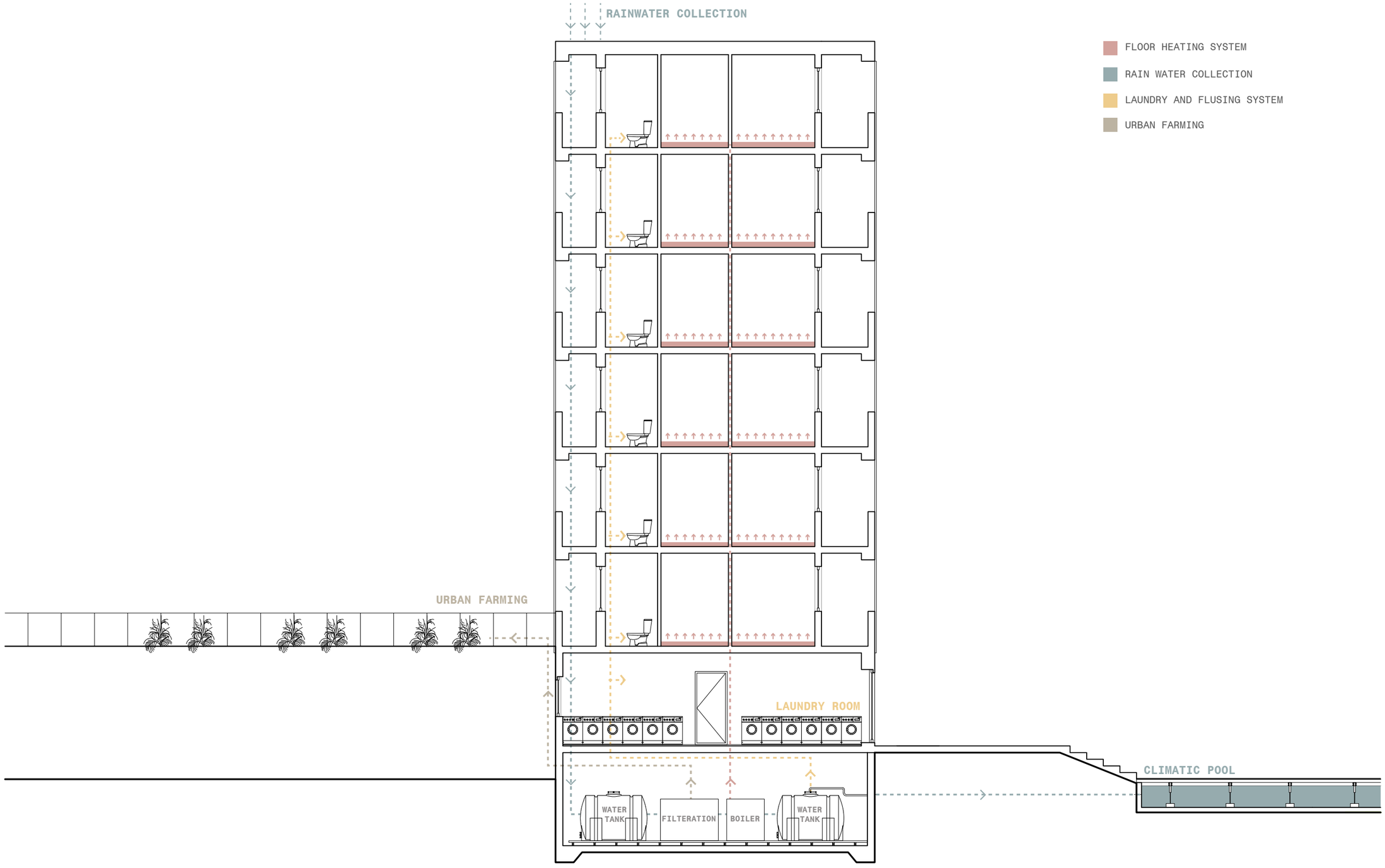




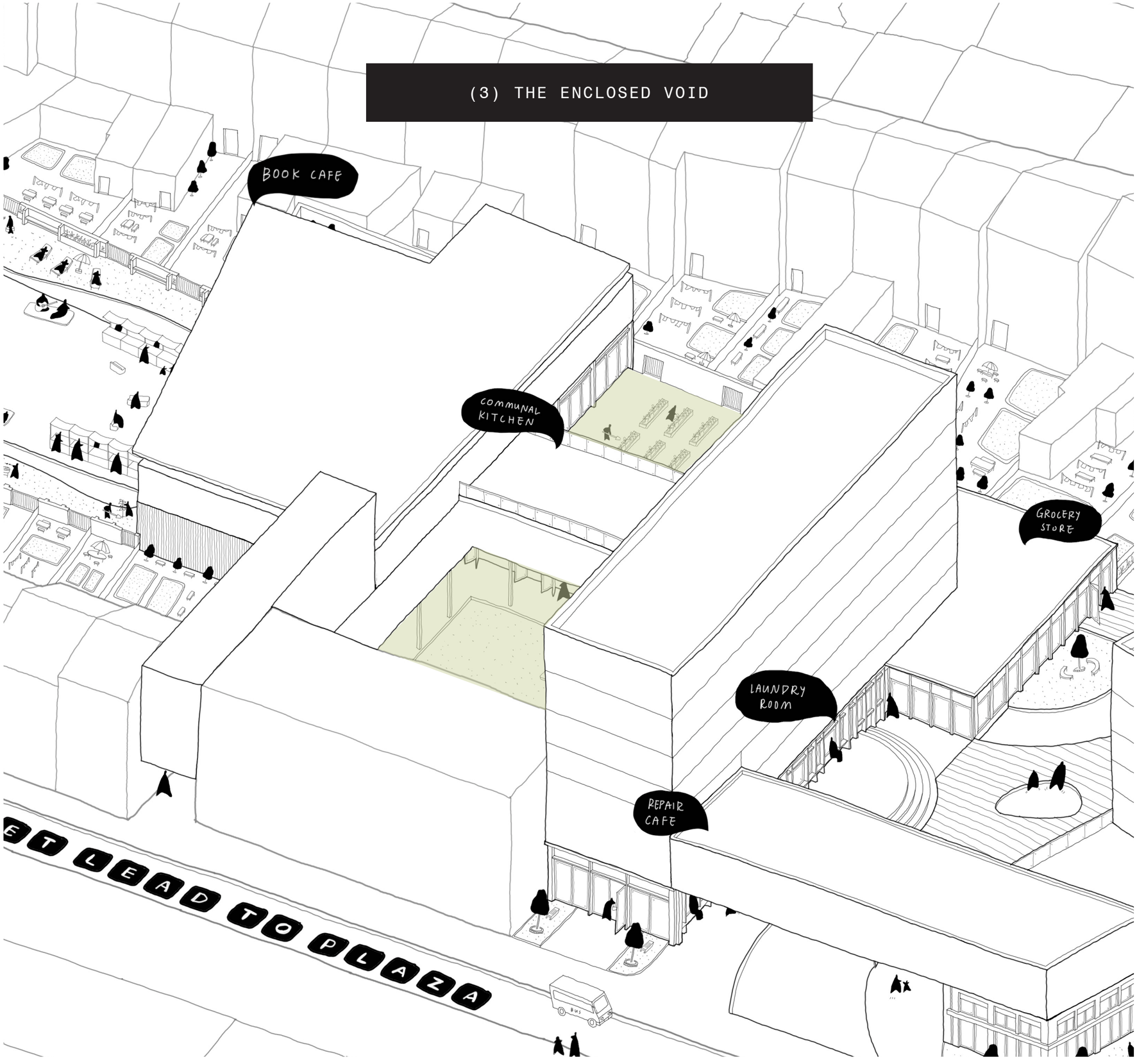
RAIN WATER COLLECTION DIAGRAM



WATER USAGE DIAGRAM



(3) THE ENCLOSED VOID

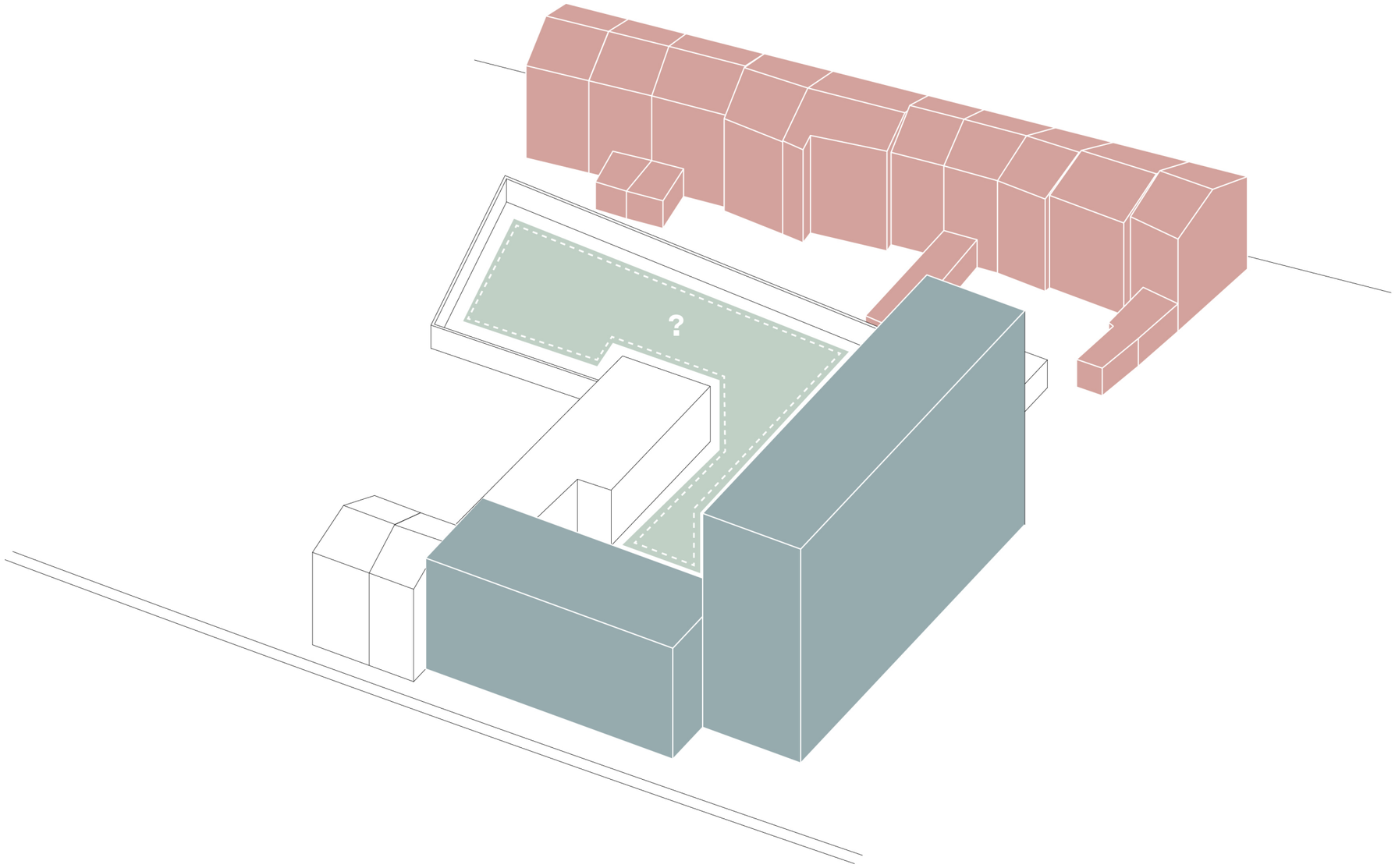


THE ENCLOSED - CONNECTING RESIDENTS FROM TWO HOUSING TYPOLOGIES



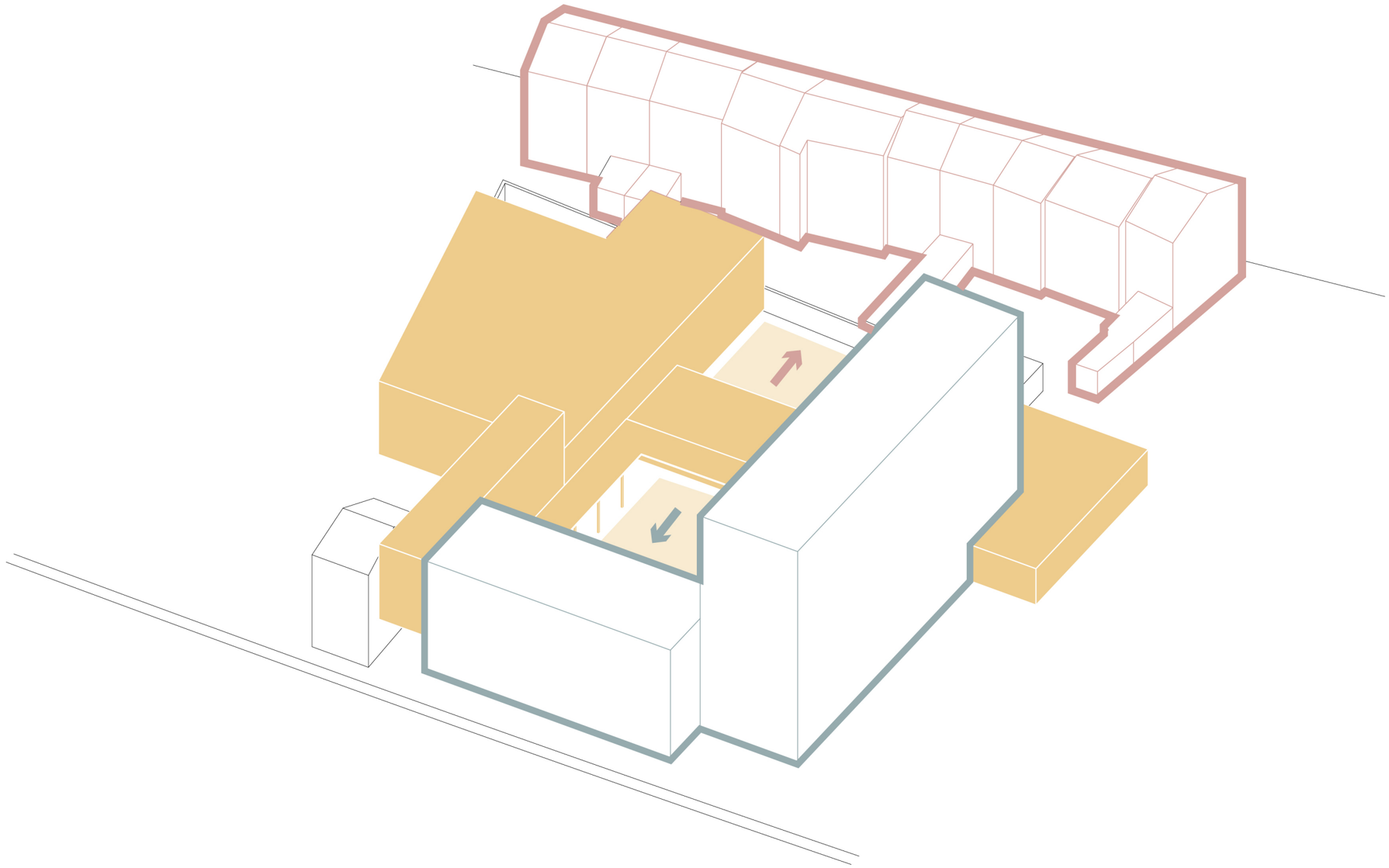
EXISTING SITE CONDITION

(1) Void in the middle act as segregation
(2) Unfriendly access since the residents could not go to the void from ground level



DESIGN CONCEPT

(1) Break the HARD BOUNDARY between the two housing typology and foster social interaction
(2) Communal Kitchen become a connector between the two type of residents, yet they could also have their own void space.

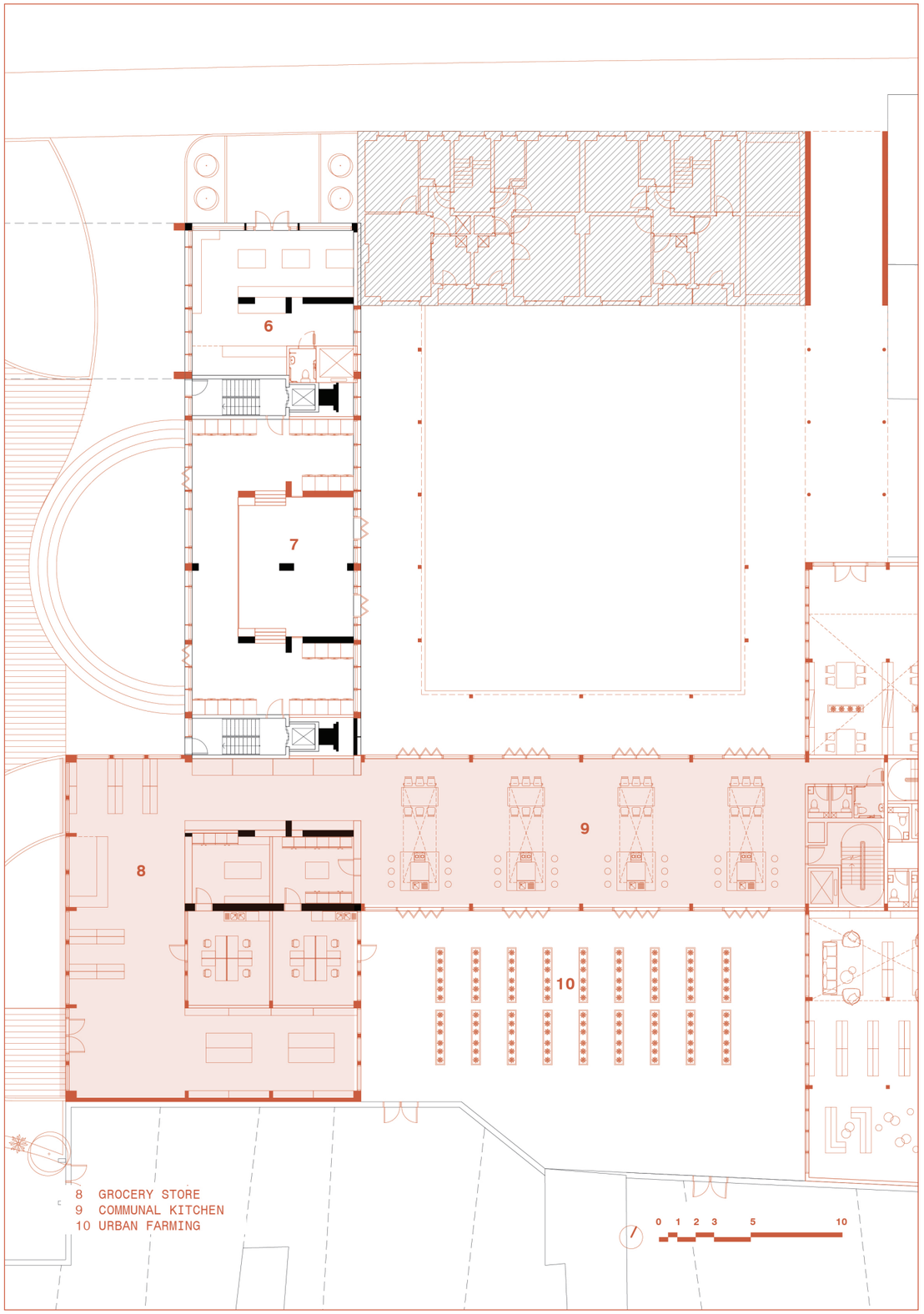


APARTMENT HOUSING

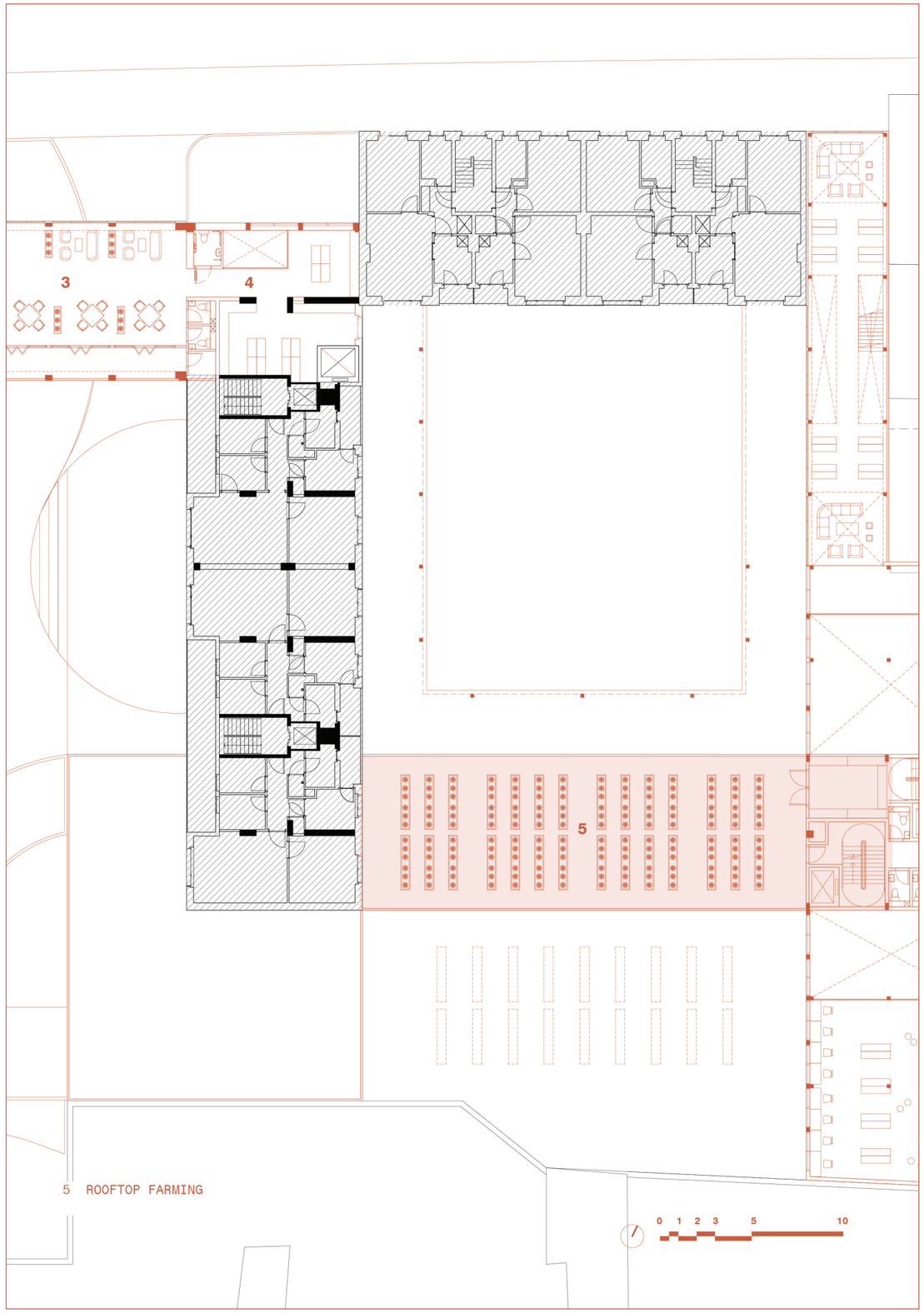
ROW HOUSING

COMMUNAL CENTER CLUSTER

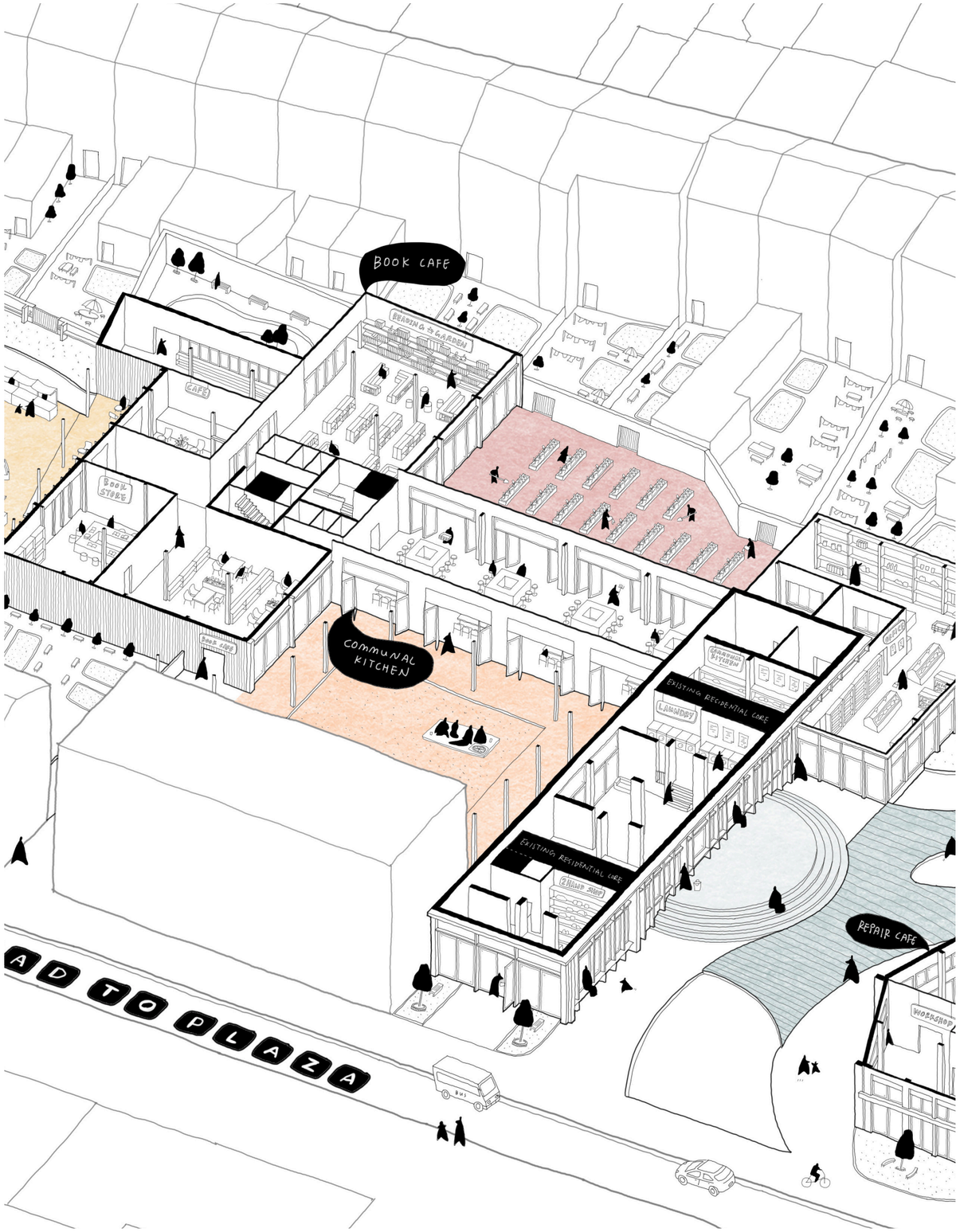
COMMUNAL KITCHEN - GROUND FLOOR PLAN

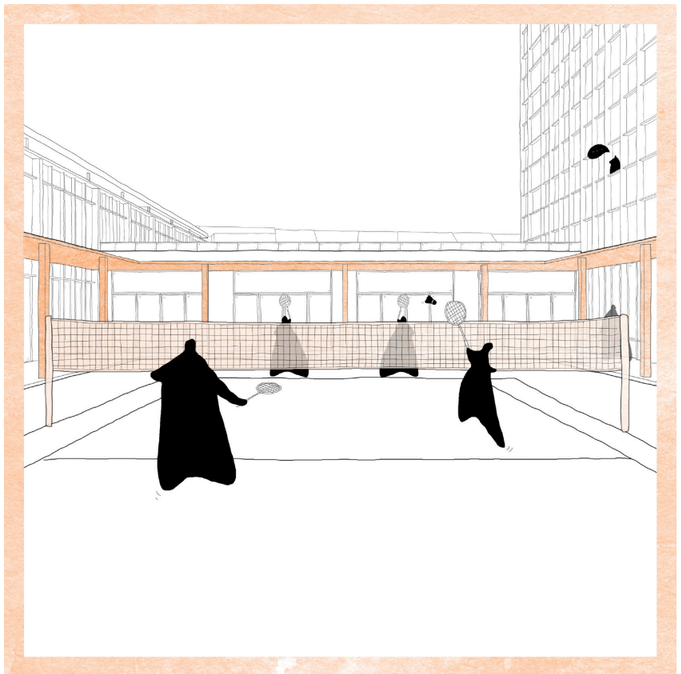


COMMUNAL KITCHEN - FIRST FLOOR PLAN

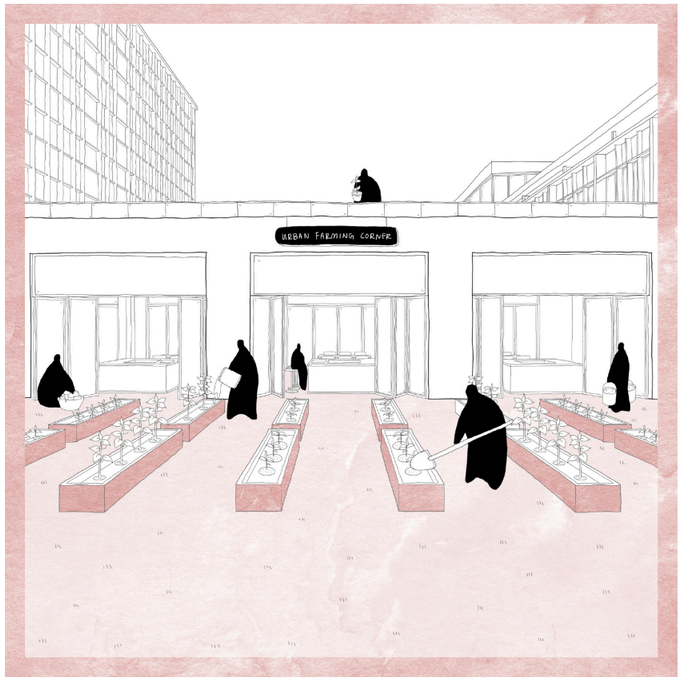


BLURRING THE BOUNDARY BETWEEN INTERIOR AND EXTERIOR





Void as individual space

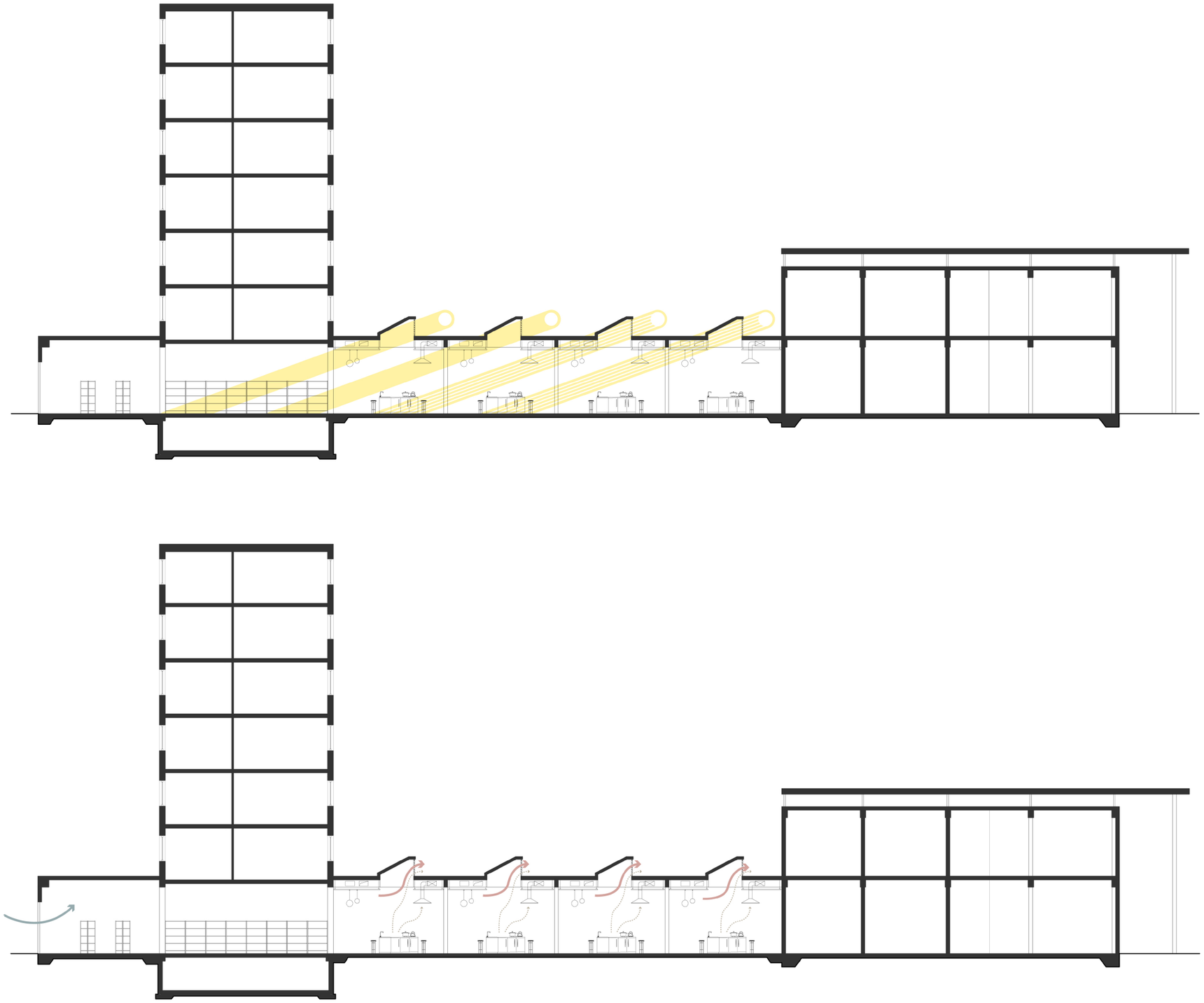


Void as extension from the interior program

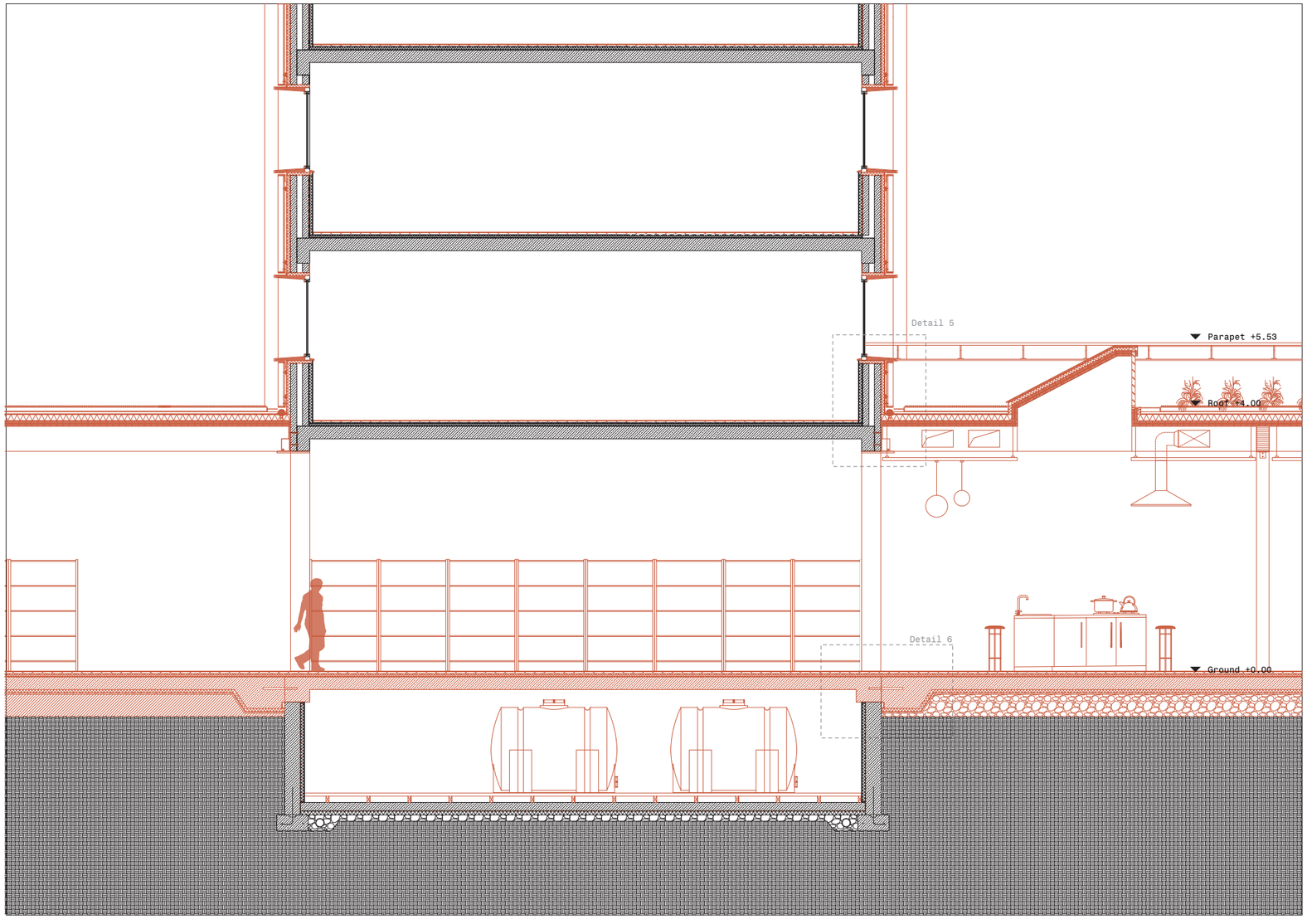
BLURRING THE BOUNDARY BETWEEN INTERIOR AND EXTERIOR



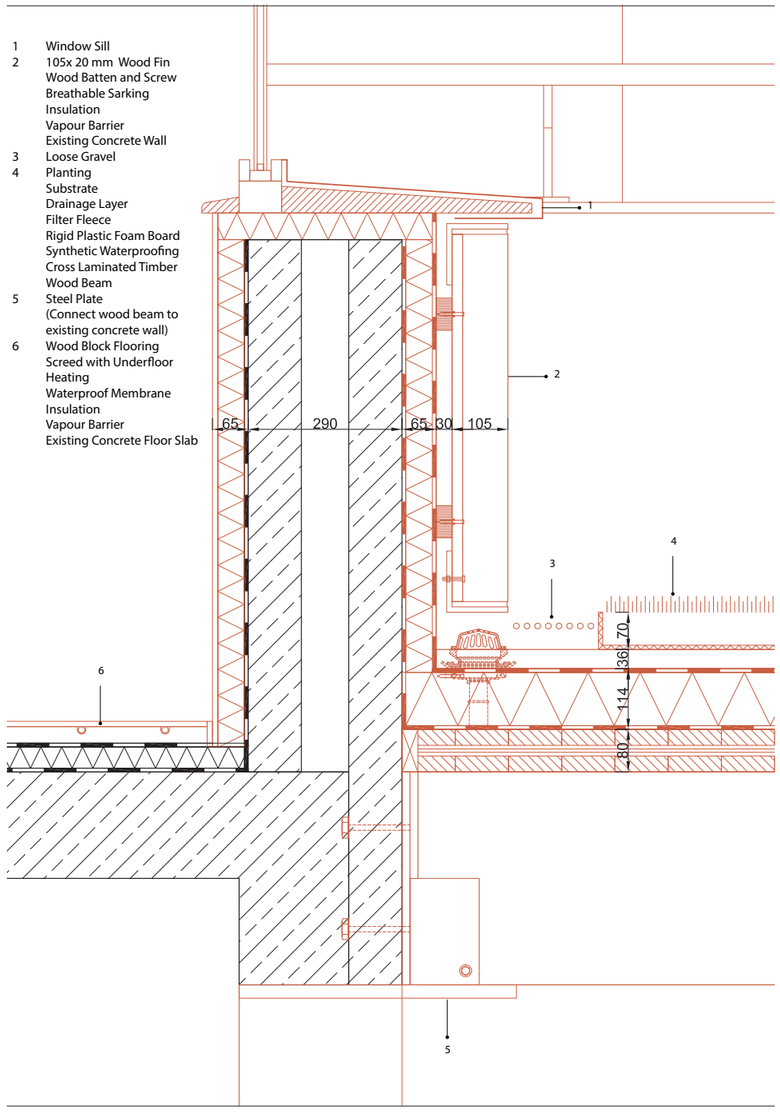
CLIMATIC DIAGRAM - ARCHITECTURE IN BETWEEN



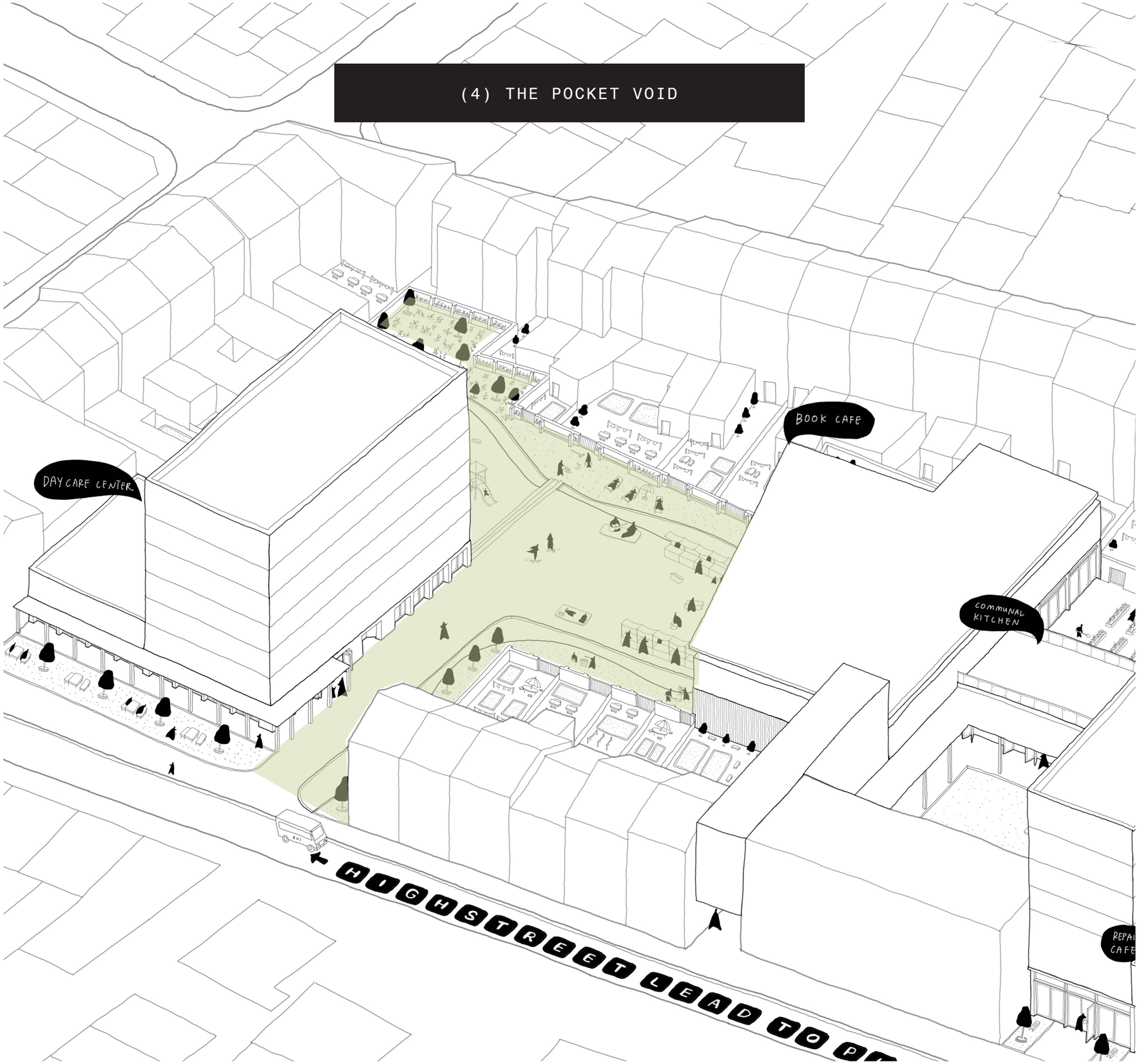
DETAIL SECTION - NEW & OLD



1 Window Sill
2 105x 20 mm Wood Fin
Wood Batten and Screw
Breathable Sarking
Insulation
Vapour Barrier
Existing Concrete Wall
3 Loose Gravel
4 Planting
Substrate
Drainage Layer
Filter Fleece
Rigid Plastic Foam Board
Synthetic Waterproofing
Cross Laminated Timber
Wood Beam
5 Steel Plate
(Connect wood beam to
existing concrete wall)
6 Wood Block Flooring
Screed with Underfloor
Heating
Waterproof Membrane
Insulation
Vapour Barrier
Existing Concrete Floor Slab



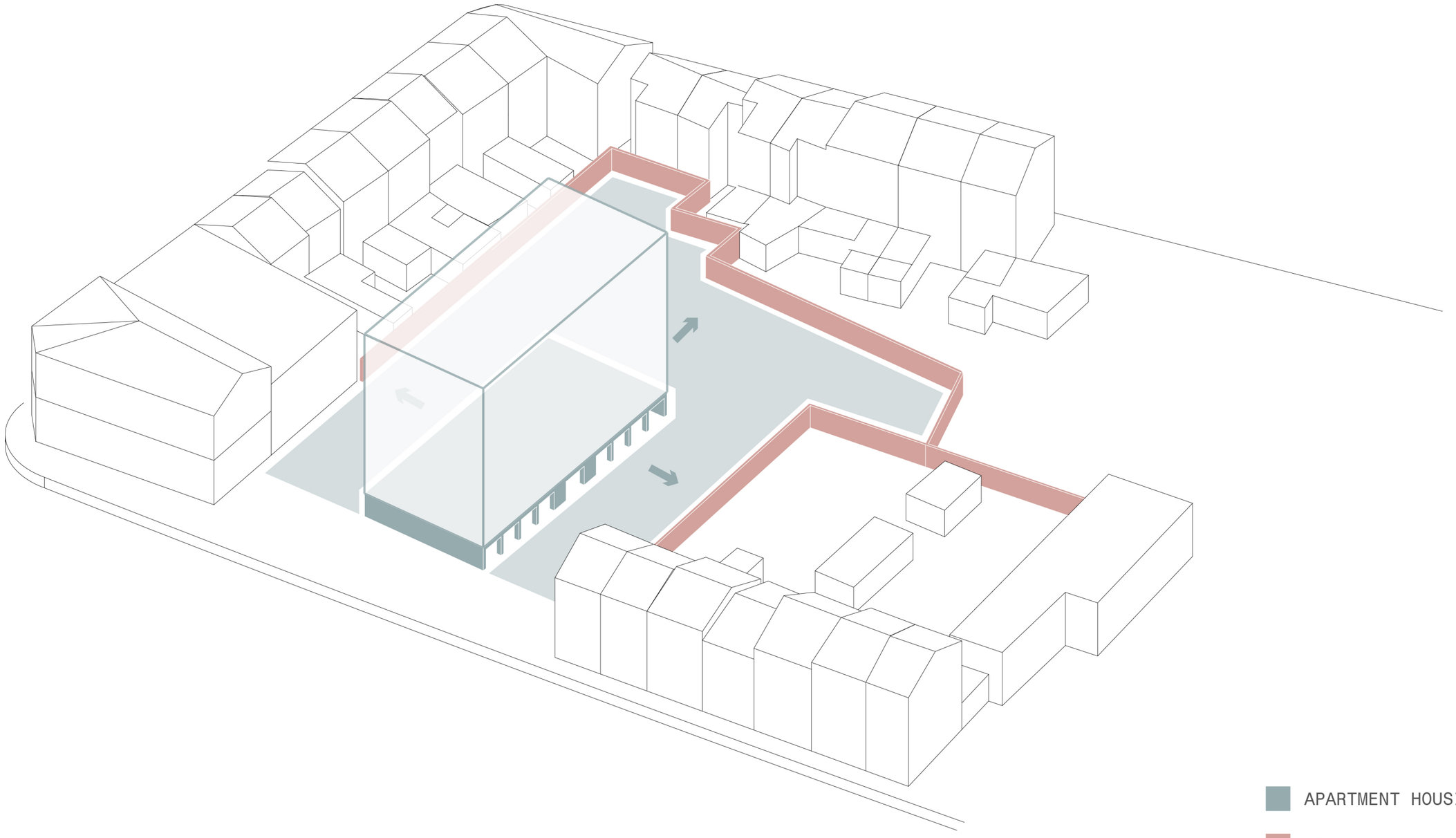
(4) THE POCKET VOID





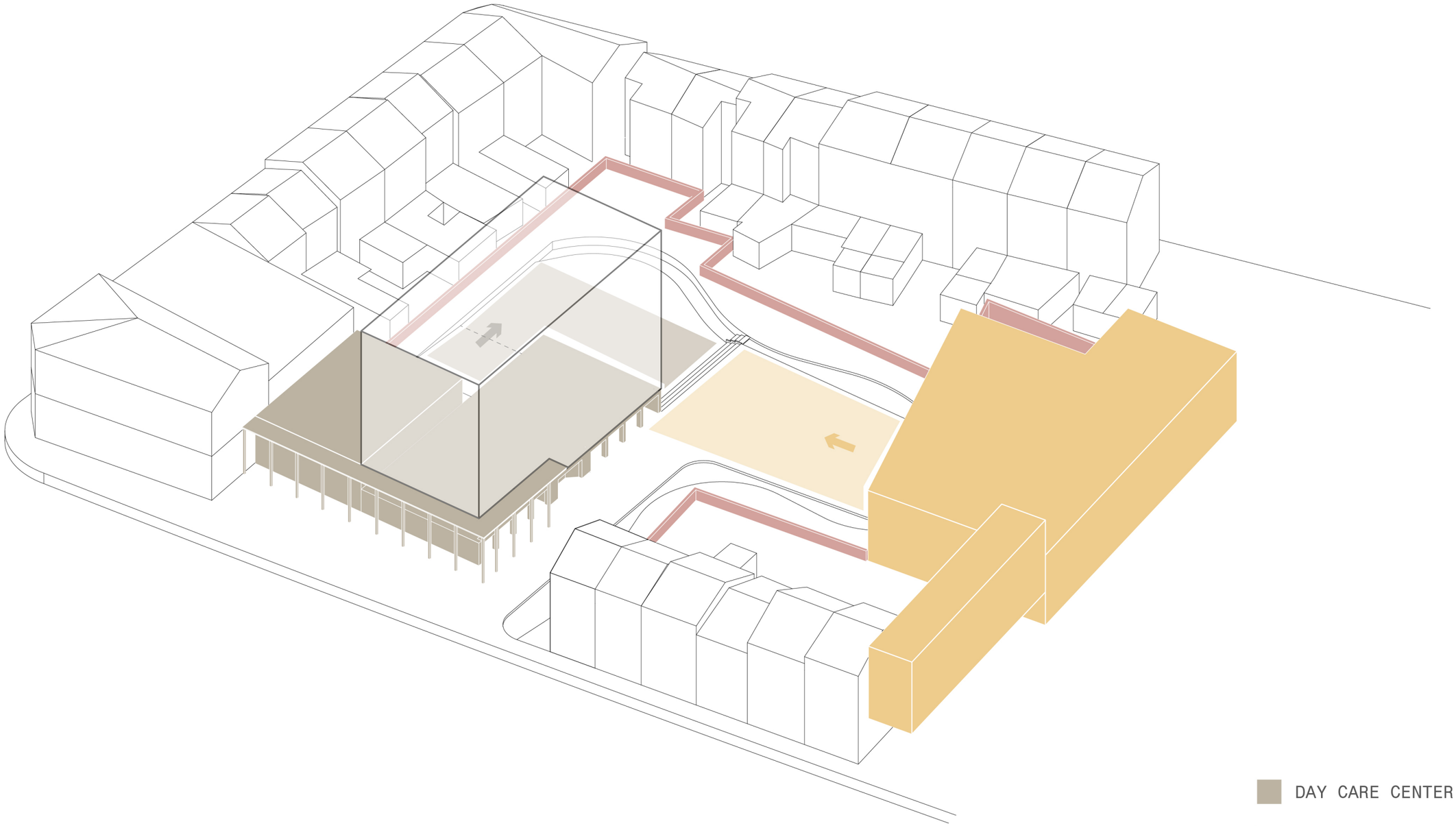
EXISTING SITE CONDITION

*(1) Social Housing stand alone and surro*und by the boundary wall
(2) The back part of the void is blocked, people seldom notice and walk into the green leisure space locate in the back.

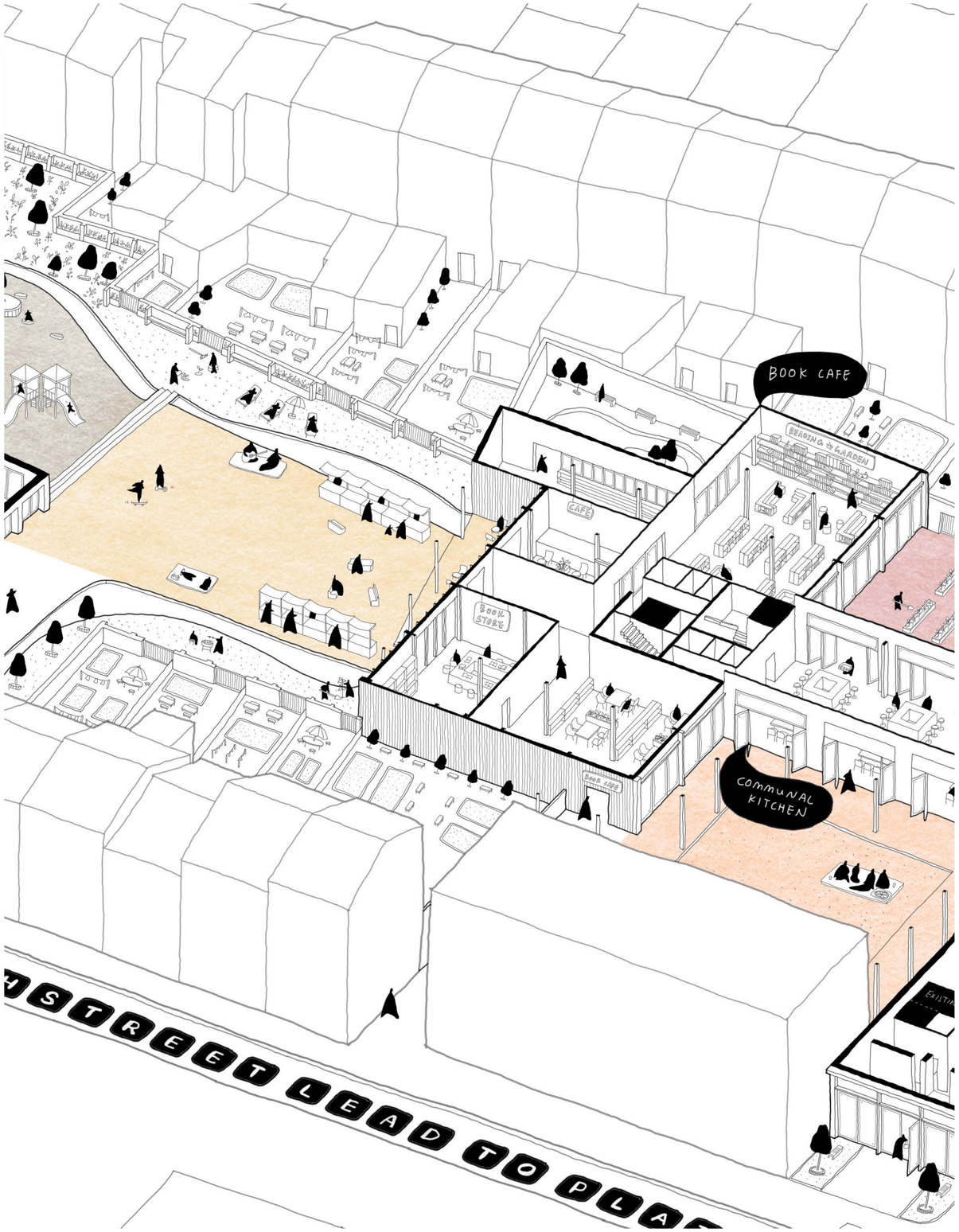


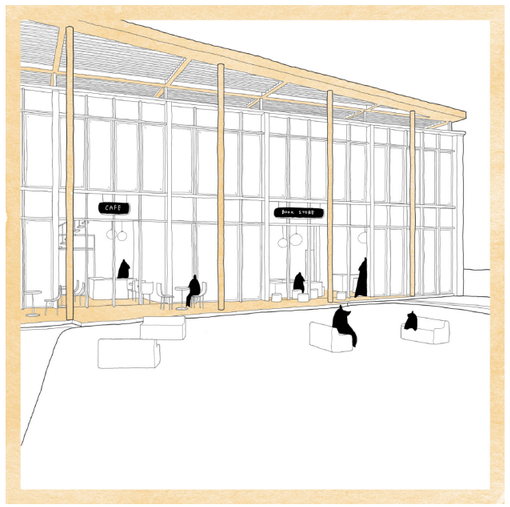
DESIGN CONCEPT

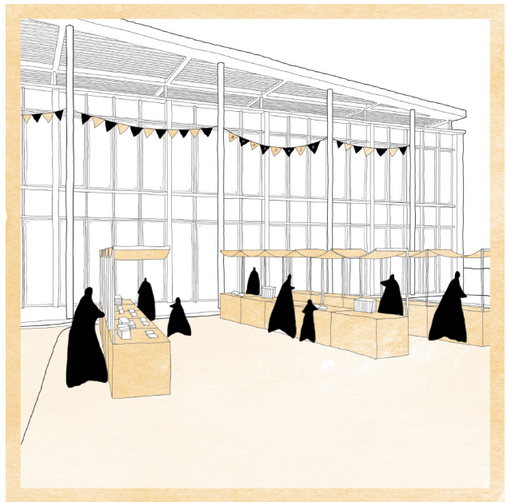
(1) Adding communal program (book cafe and day care centre) to enhance the variety in the urban block and foster human activities
(2) The void is splited into two parts through level difference to carter the two different public program

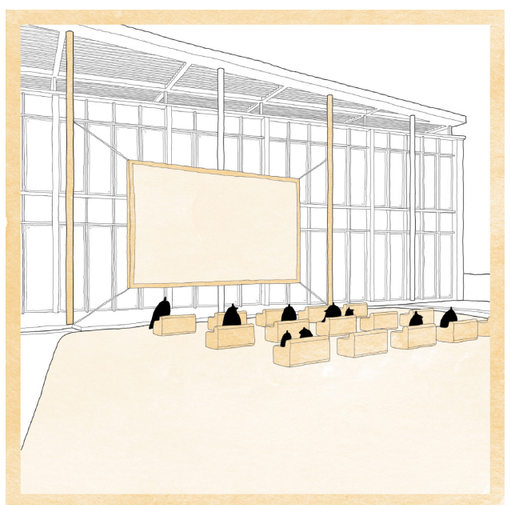


VARIOUS SOCIAL ACTIVITIES OCCUR IN THE POCKET VOID









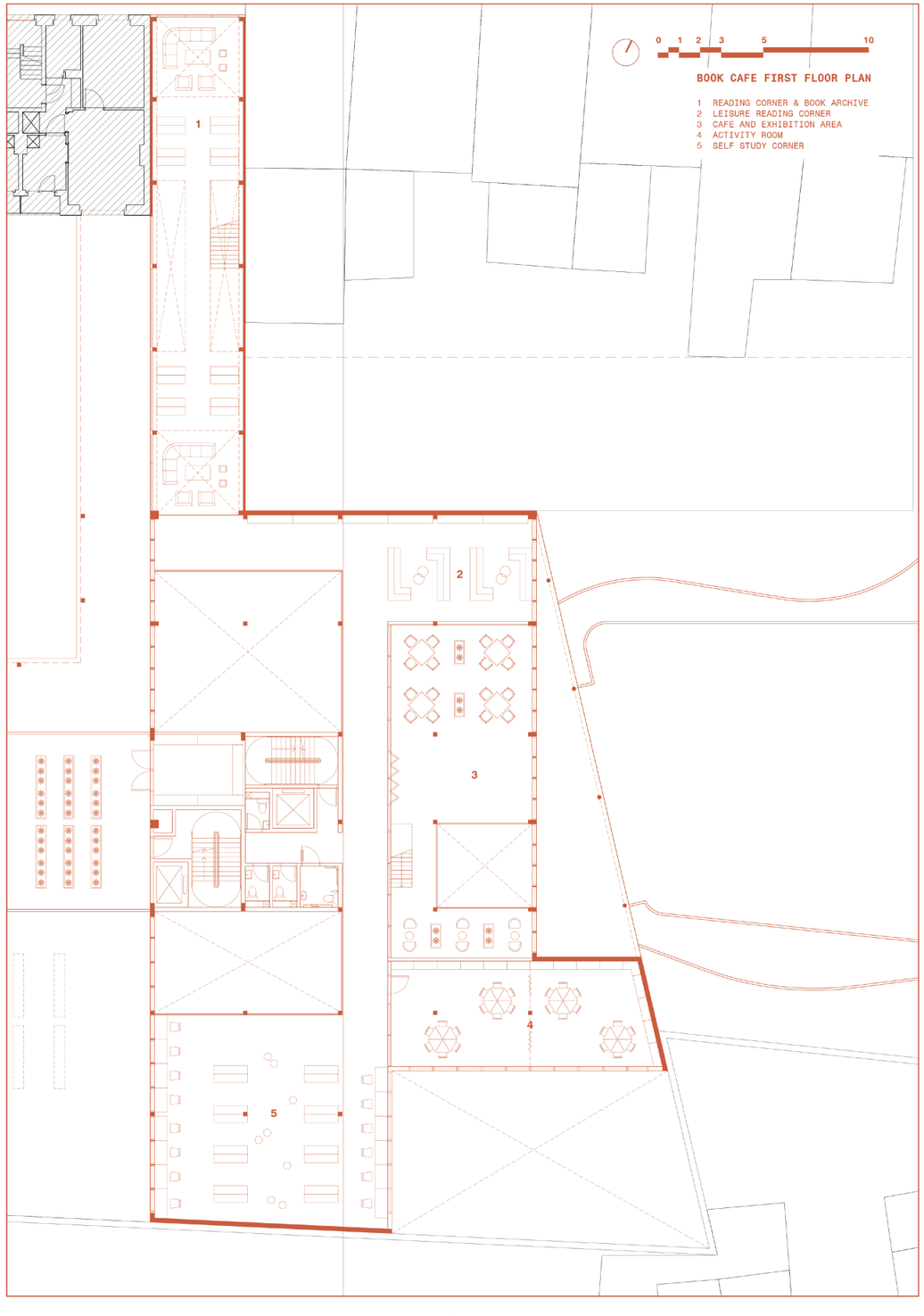
EYES ON THE PLAZA



BOOK CAFE - GROUND FLOOR PLAN



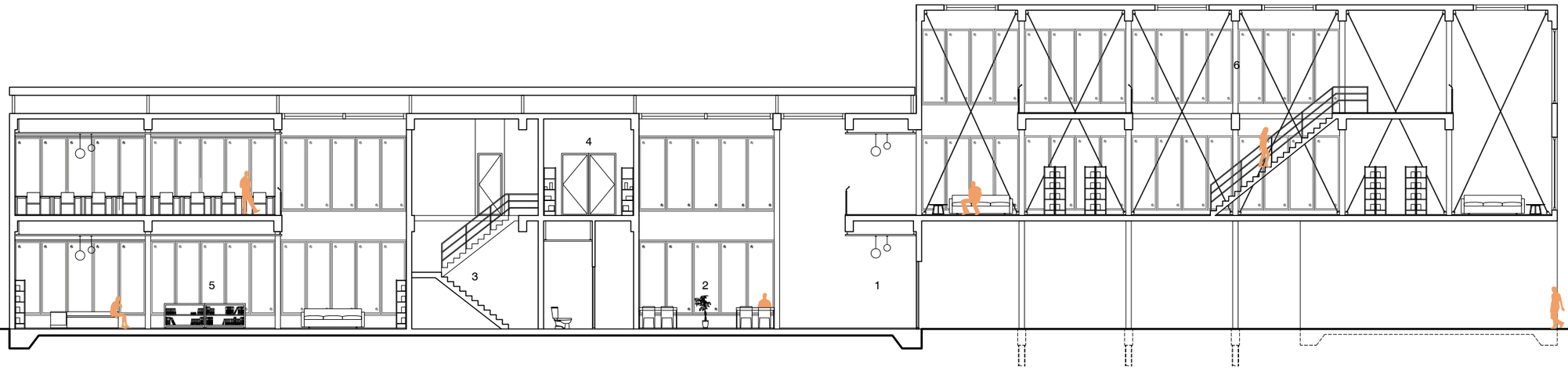
BOOK CAFE - FIRST FLOOR PLAN



VOIDS IN THE BUILDING -INNER COURTYARD



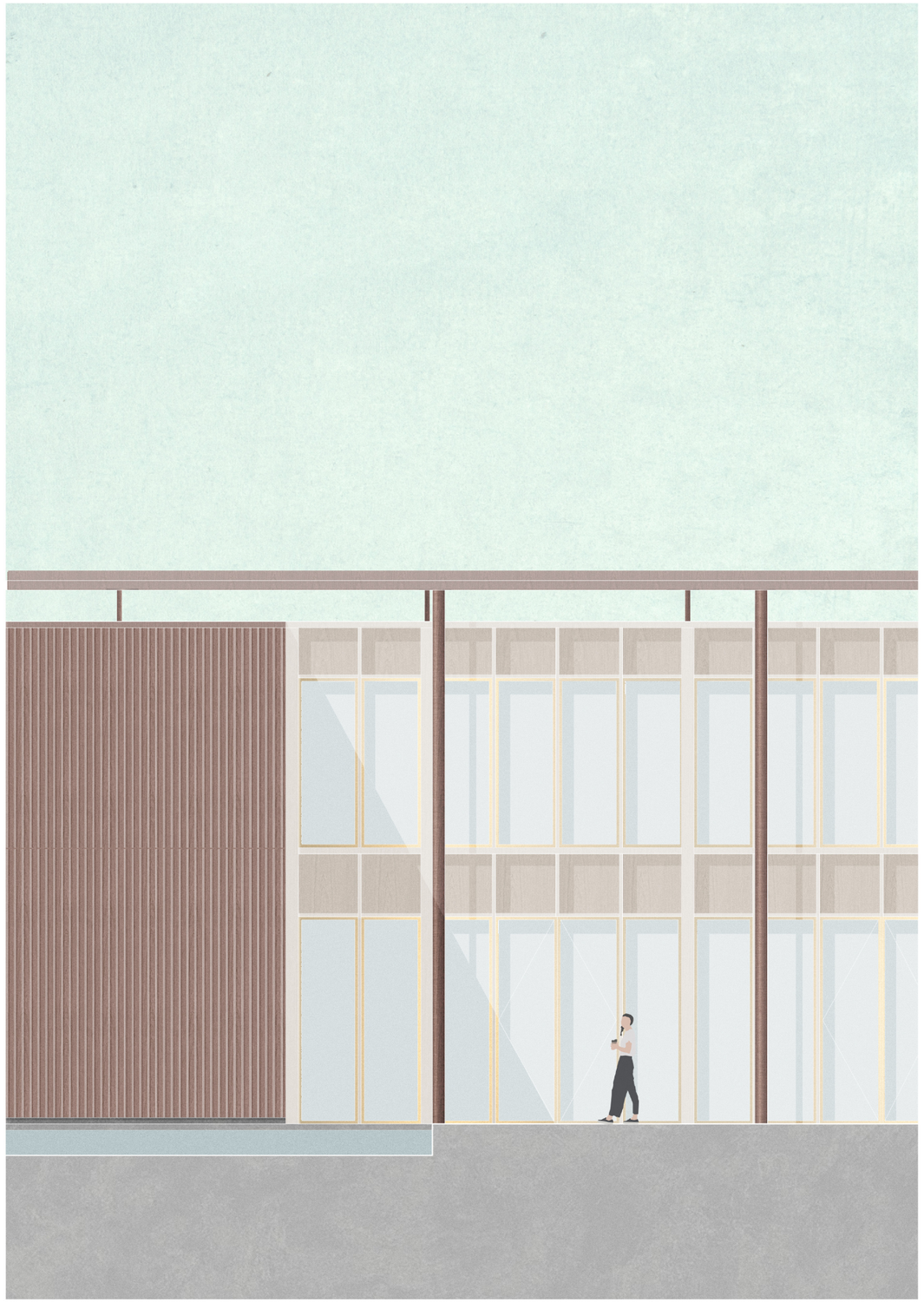
SOLID VOID IN THE BUILDING

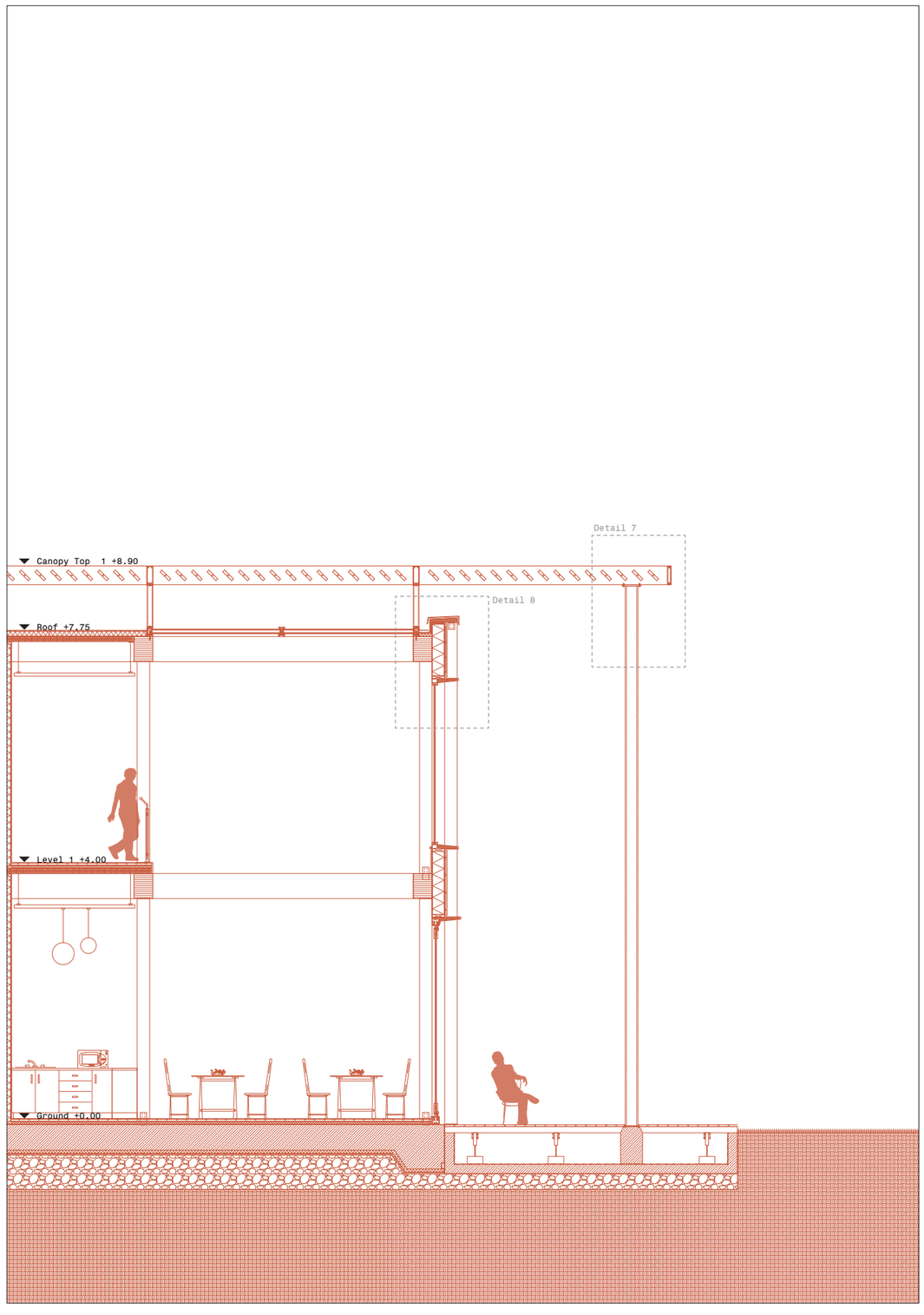


0 1 2 3 5 10

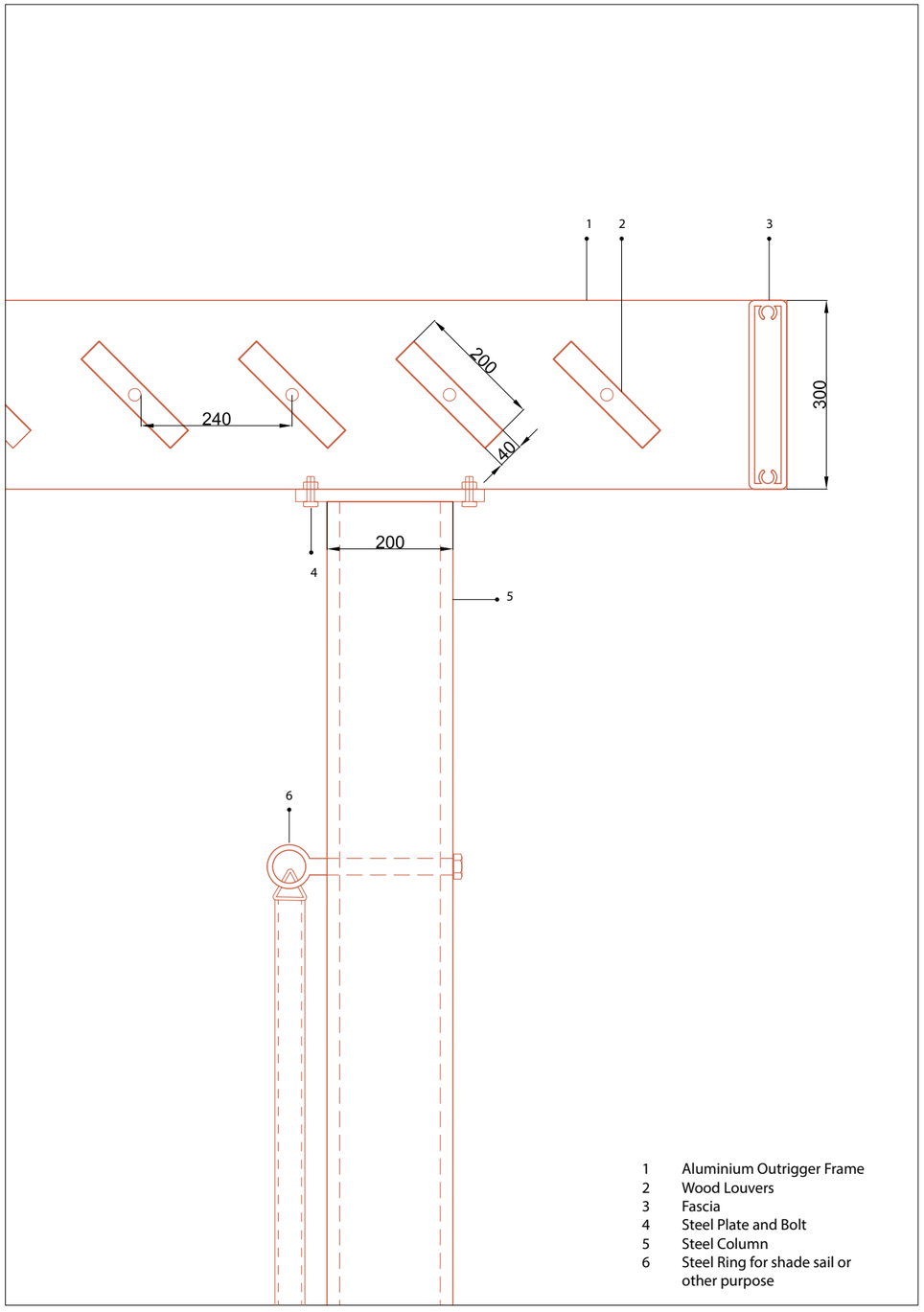
1 ENTRANCE HALL
2 SELF STUDY CORNER
3 CORE (COMMUNAL KITCHEN)
4 STORAGE ROOM (COMMUNAL KITCHEN)
5 READING CORNER (FACING TOWARD INNER COURTYARD)
6 READING CORNER & BOOK ARCHIVE

CANOPY AS BUFFER ZONE



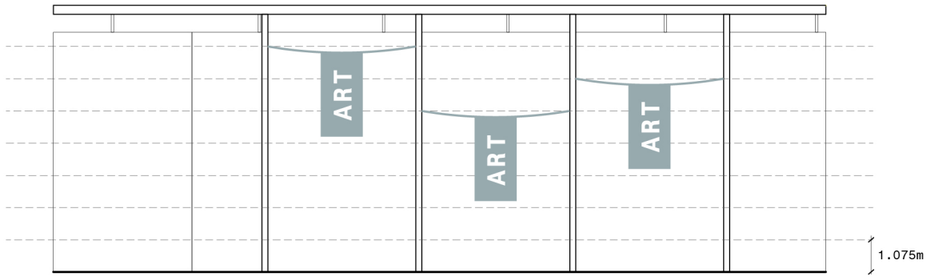


CANOPY AS A FRAMEWORK

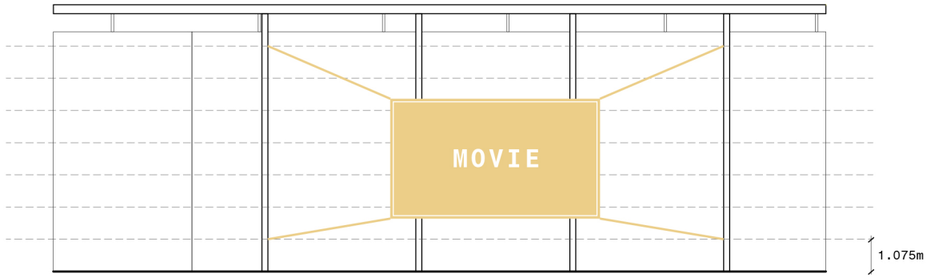


1 Aluminium Outrigger Frame
2 Wood Louvers
3 Fascia
4 Steel Plate and Bolt
5 Steel Column
6 Steel Ring for shade sail or other purpose

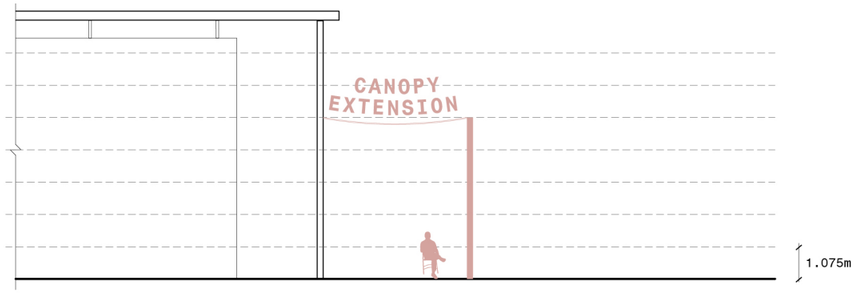
Scenario 1 : Exhibition



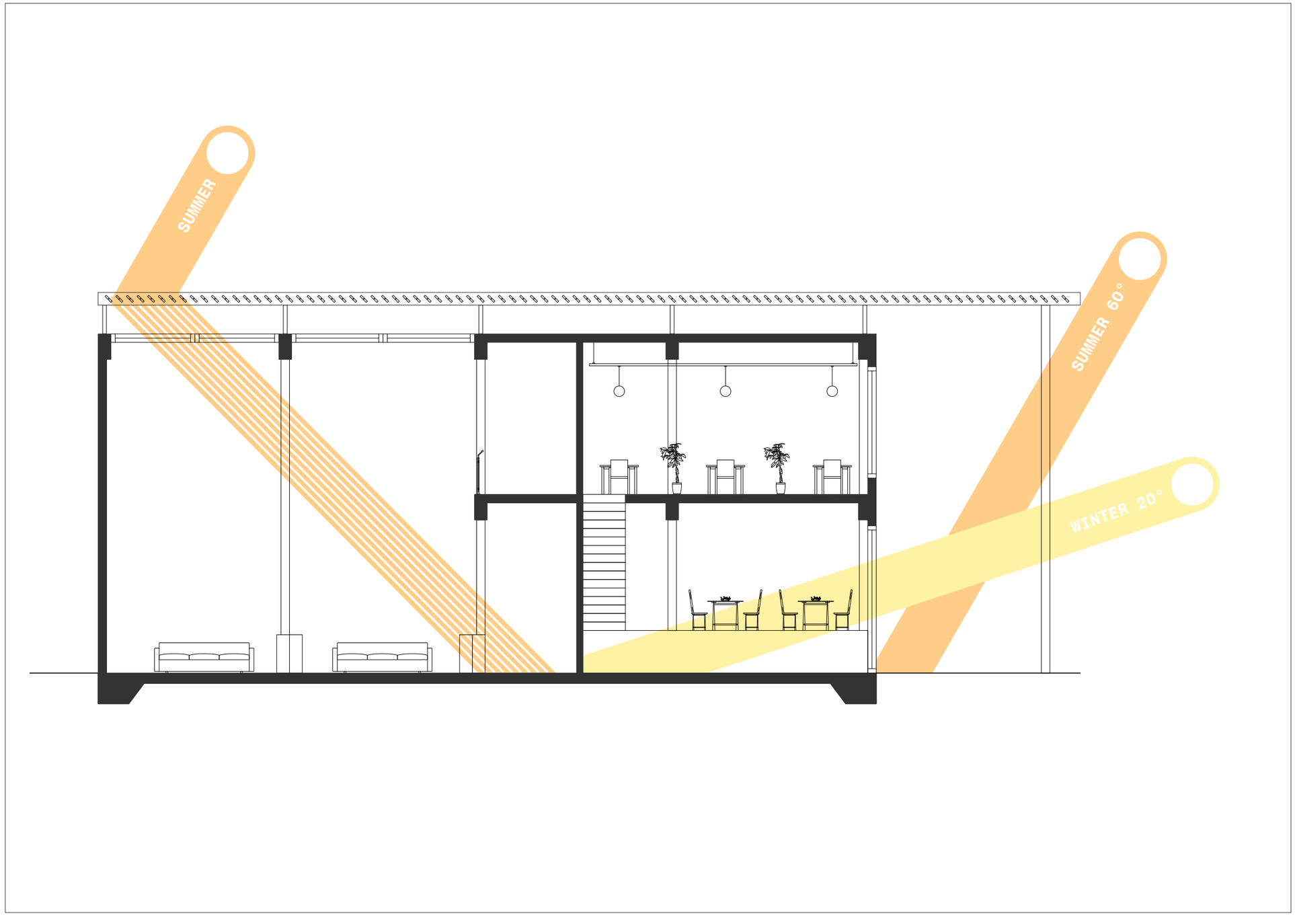
Scenario 2 : Movie Screening



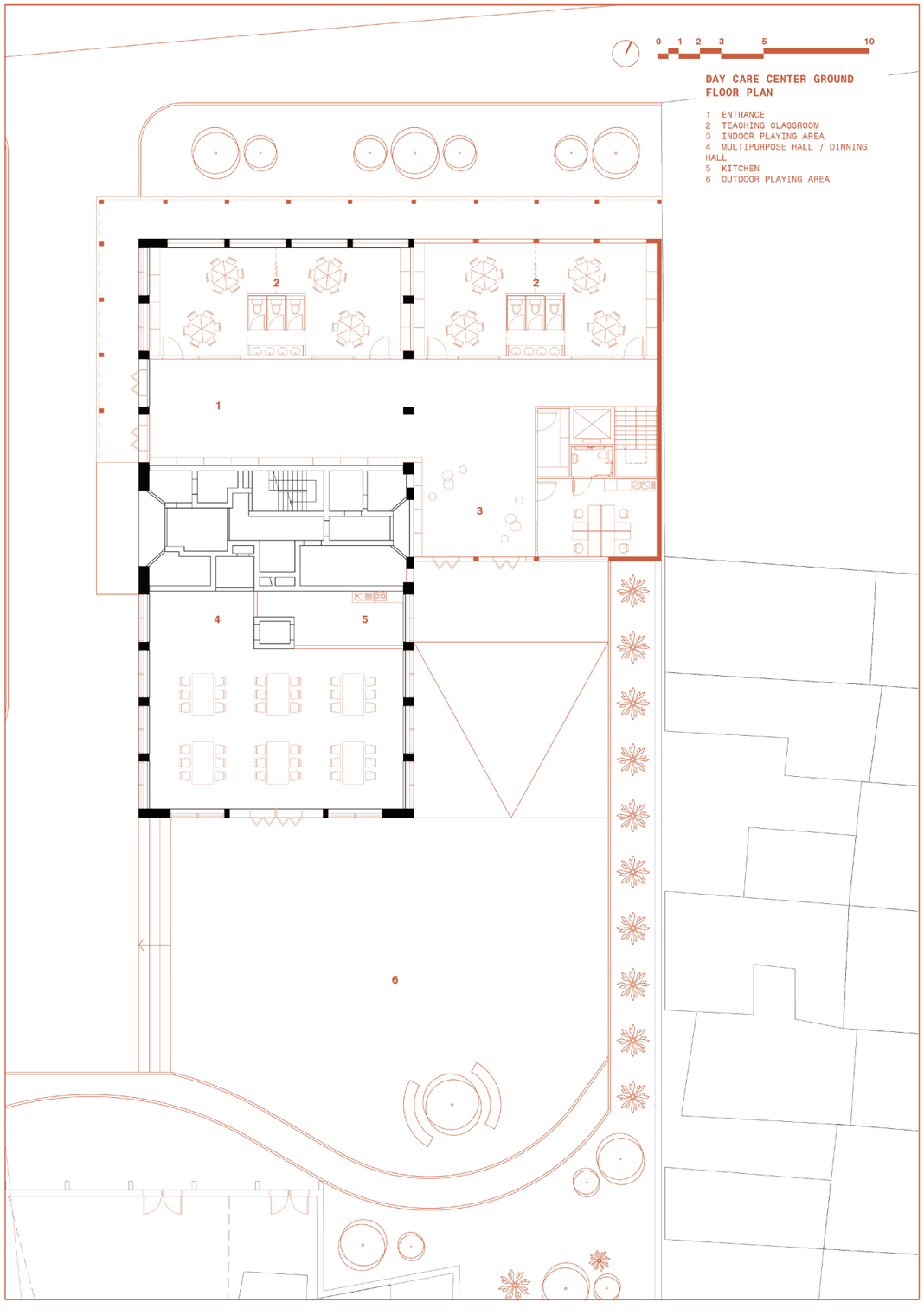
Scenario 3 : Canopy Extension



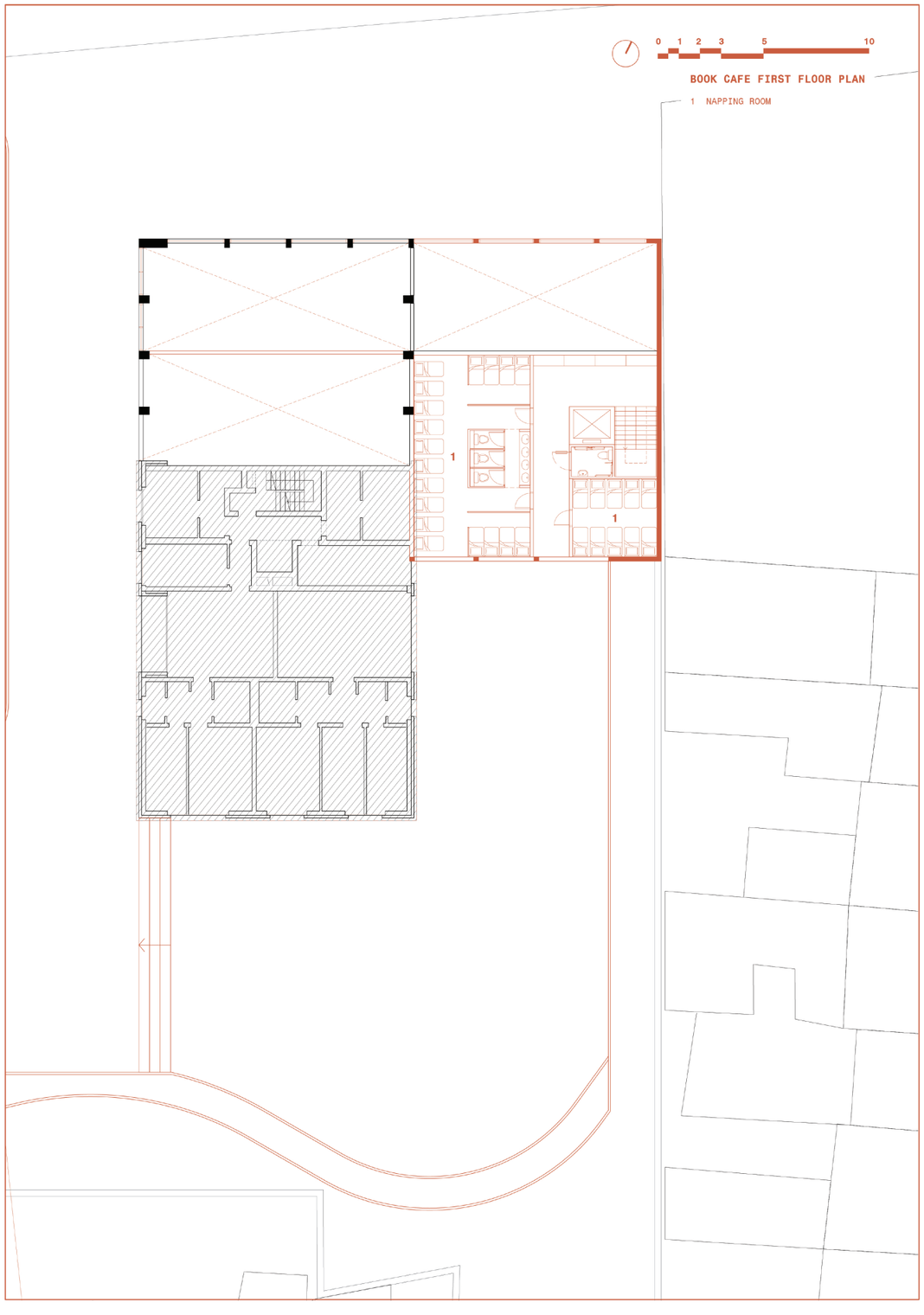
CANOPY AS SUN SHADING DEVICE



DAY CARE CENTER - GROUND FLOOR PLAN



DAY CARE CENTER - FIRST FLOOR PLAN



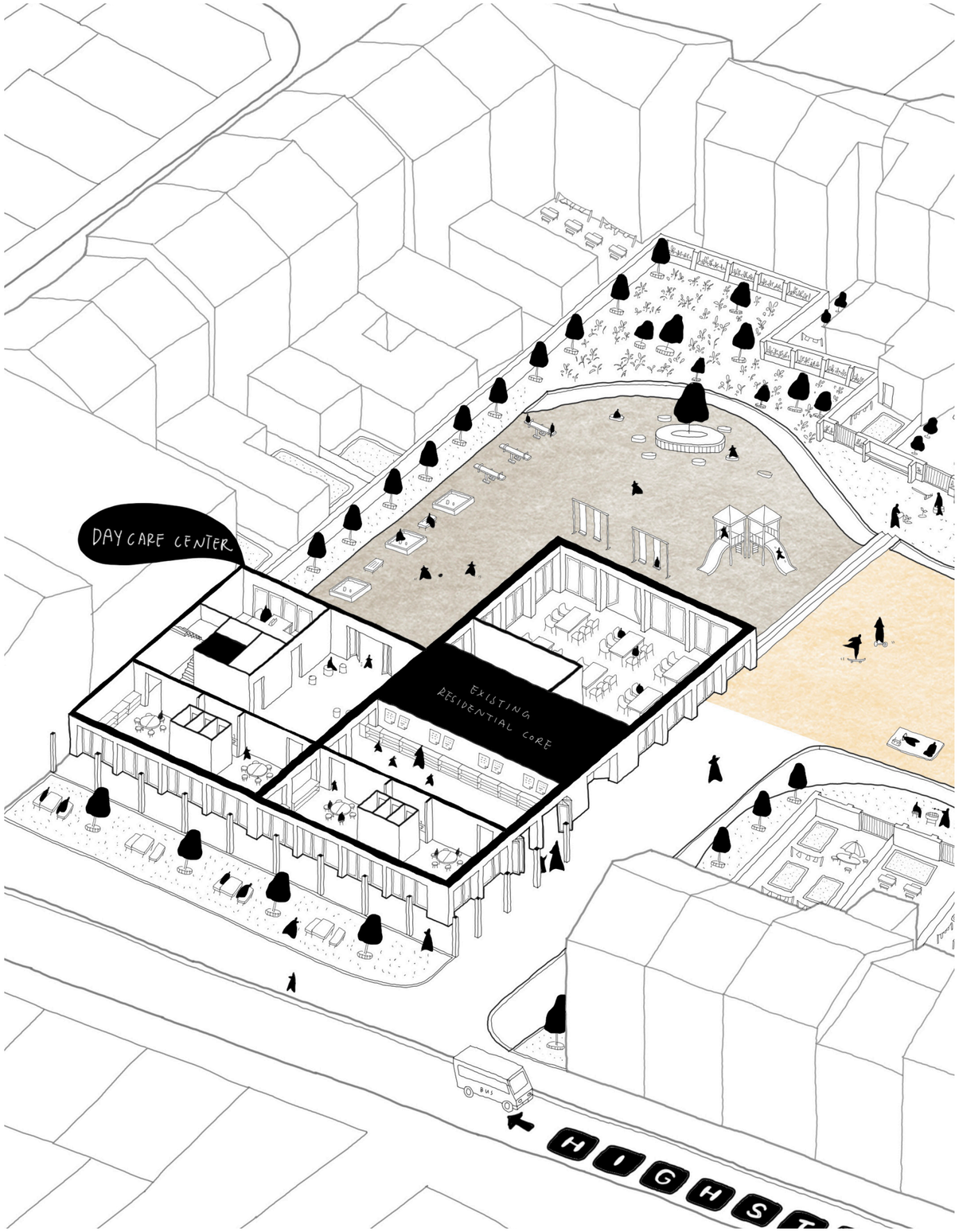
LEVEL DIFFERENCE IN THE VOID

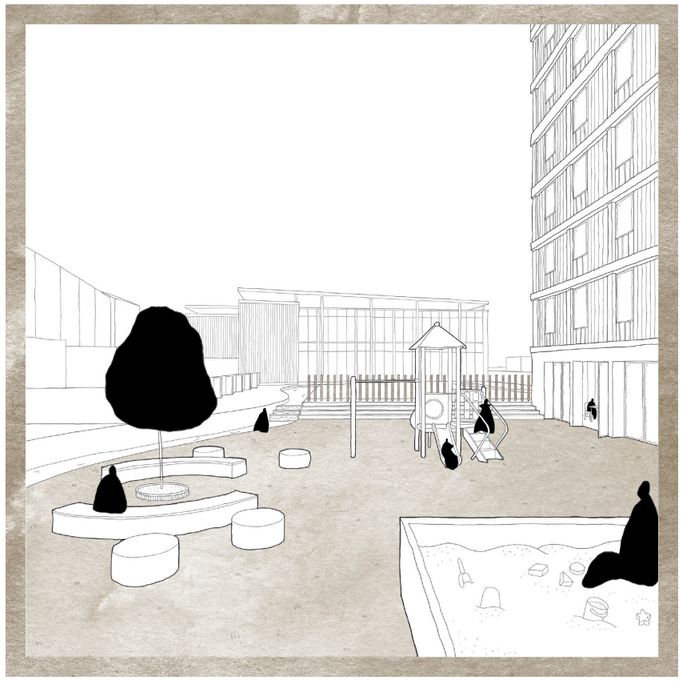


0 1 2 3 5 10

1 NAP ROOM
2 TEACHING CLASSROOM
3 OUTDOOR PLAYGROUND

TRANSITION OF THE PLAYGROUND THROUGH TIME





Weekday Situation: private outdoor area for the day care center



Weekend Situation: public playground area for the Bressoux neighbourhood

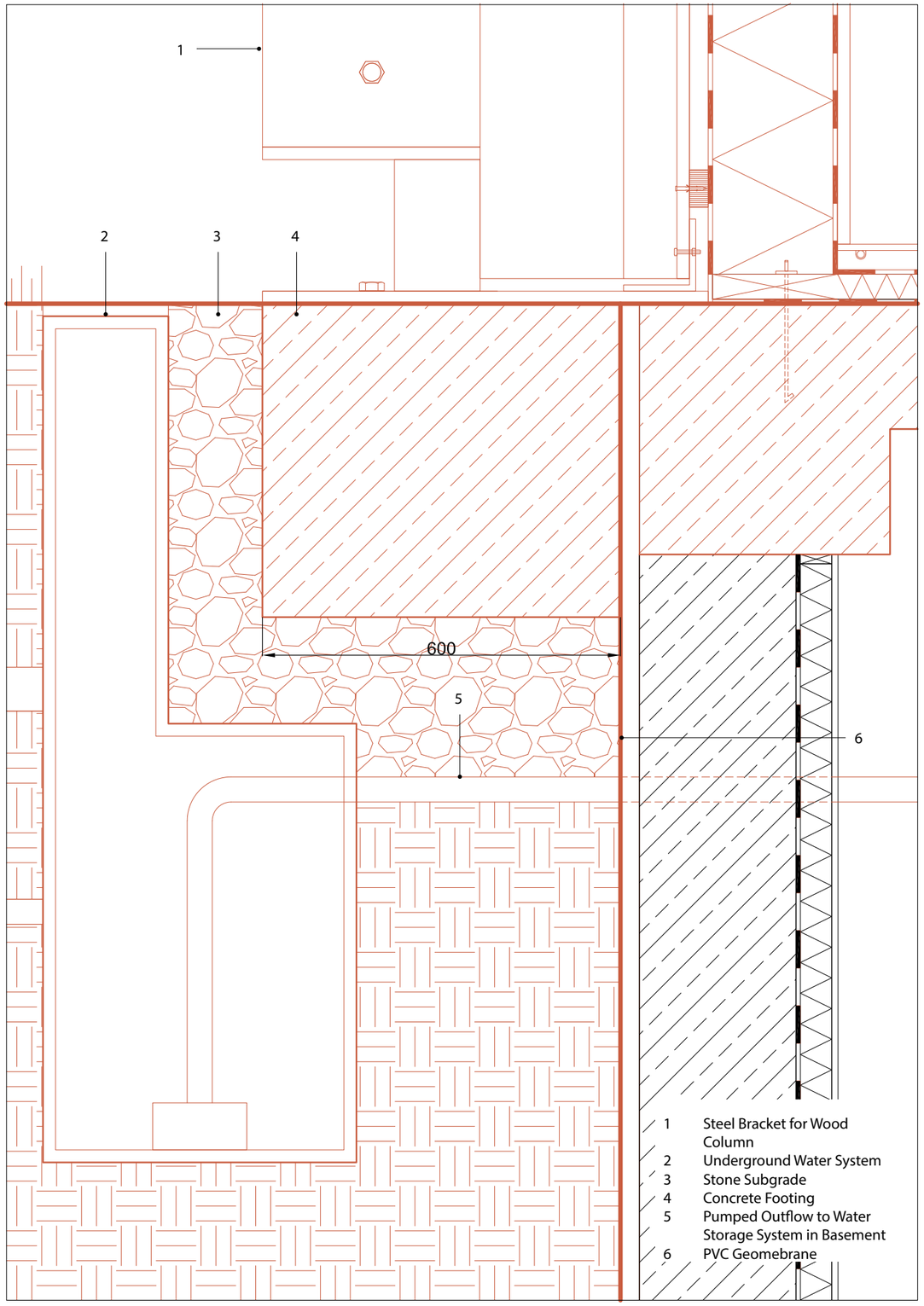
CONCLUSION



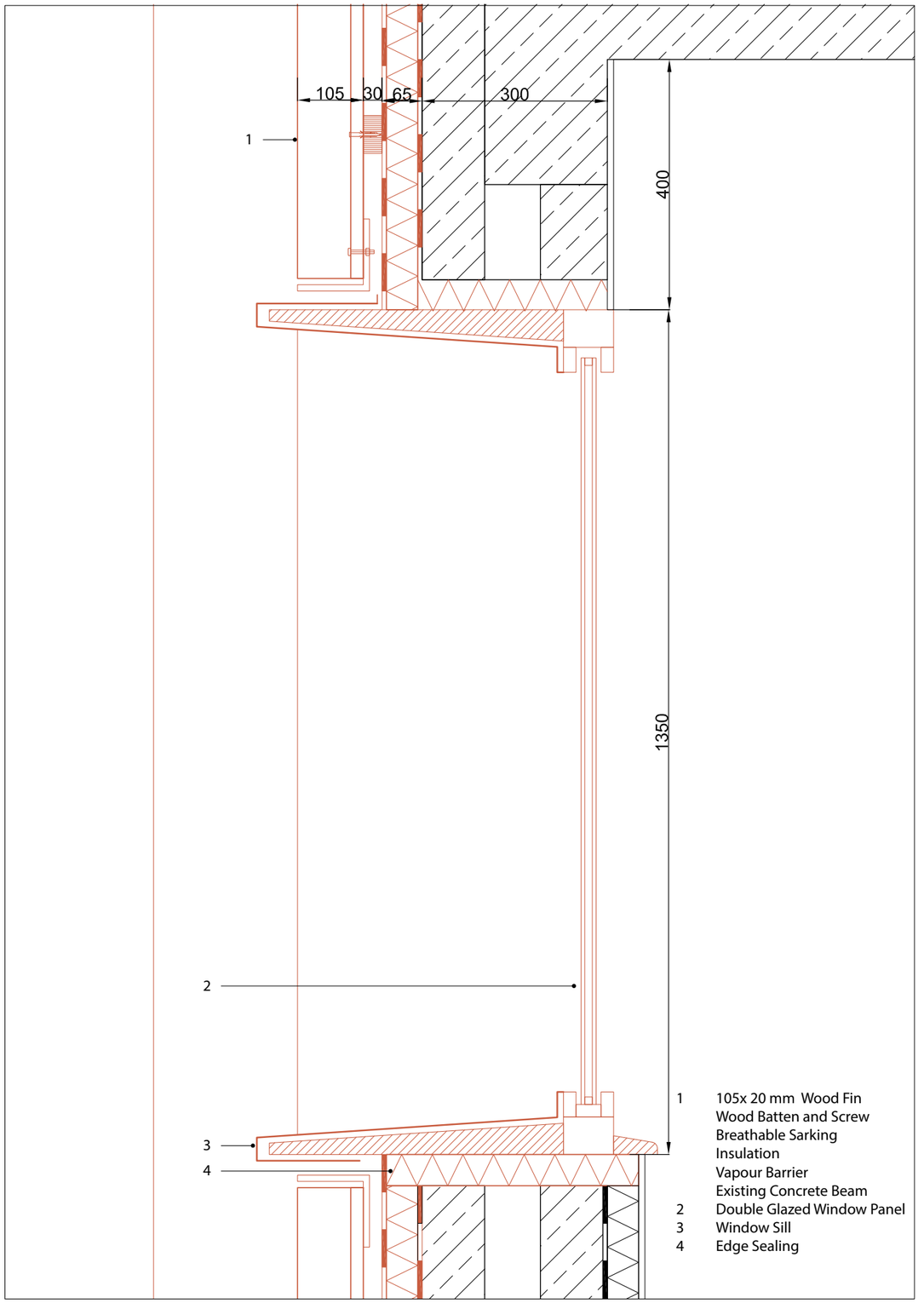
EMBRACE THE EMPTINESS OF THE VOID, YET FILLED UP WITH A VIBRANT SOCIAL LIFE


THANKS!

REPAIR CAFE DETAIL

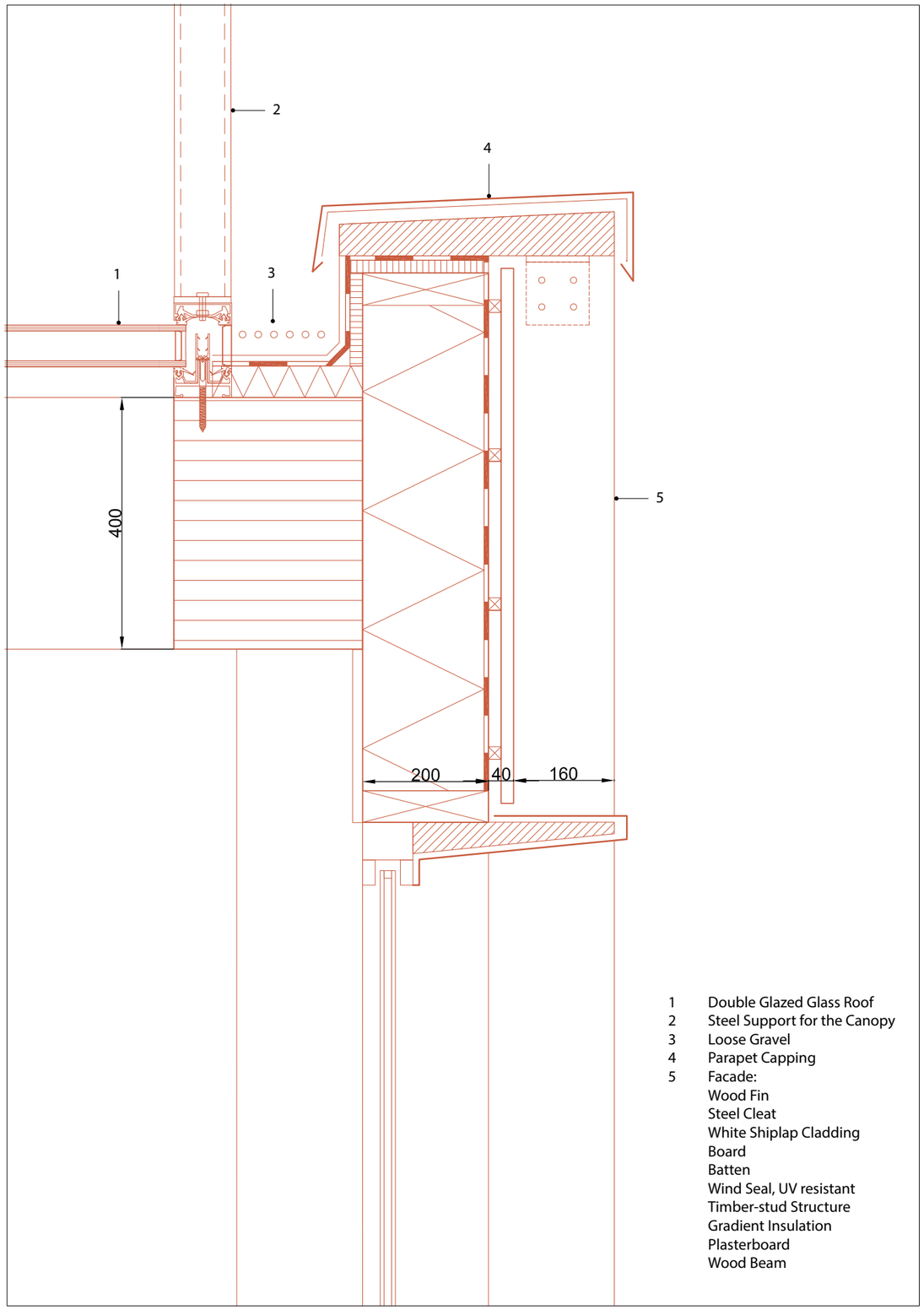


1 Steel Bracket for Wood Column
2 Underground Water System
3 Stone Subgrade
4 Concrete Footing
5 Pumped Outflow to Water Storage System in Basement
6 PVC Geomebrane



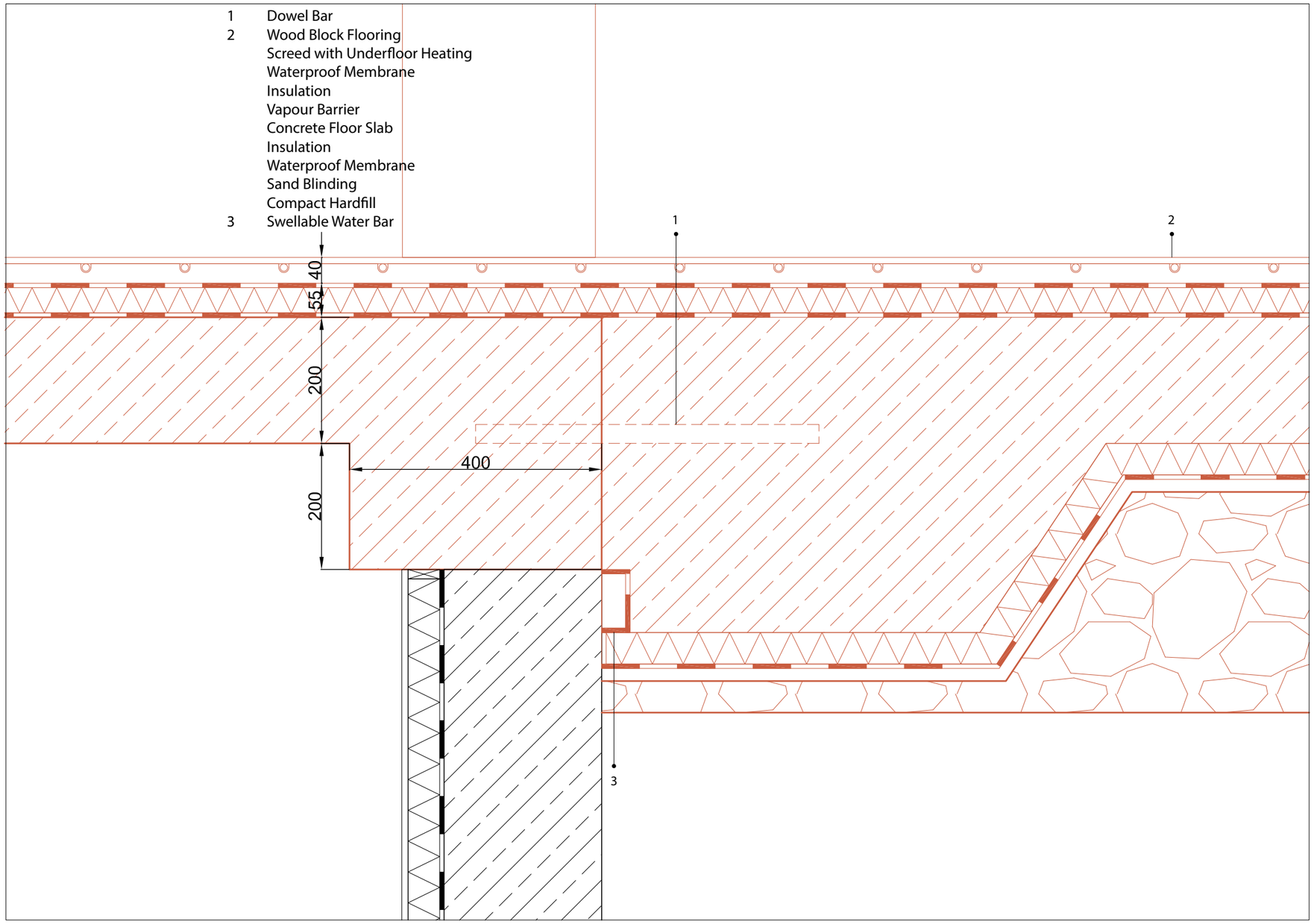
1 105x 20 mm Wood Fin
Wood Batten and Screw
Breathable Sarking
Insulation
Vapour Barrier
Existing Concrete Beam
2 Double Glazed Window Panel
3 Window Sill
4 Edge Sealing

BOOK CAFE DETAIL

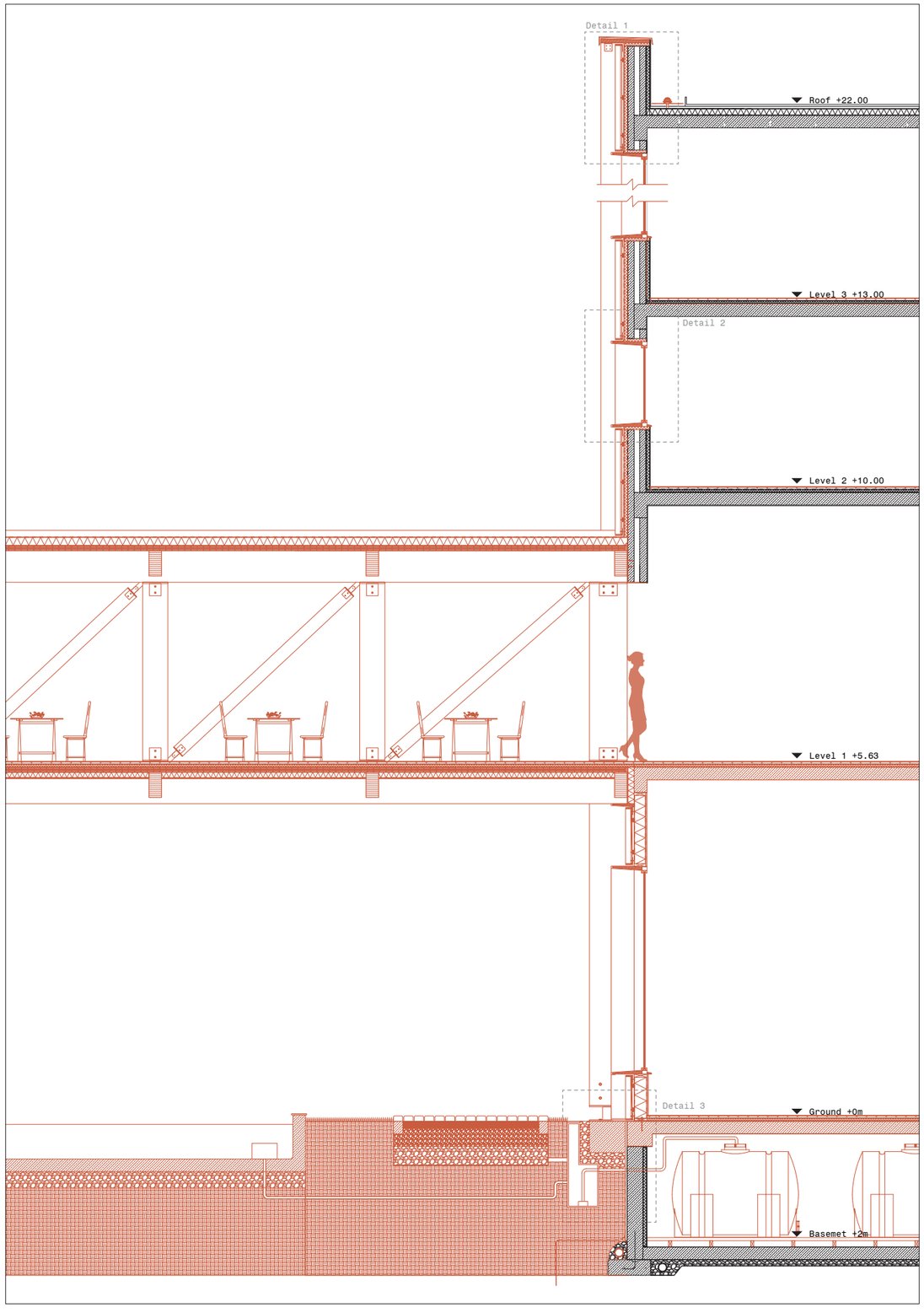


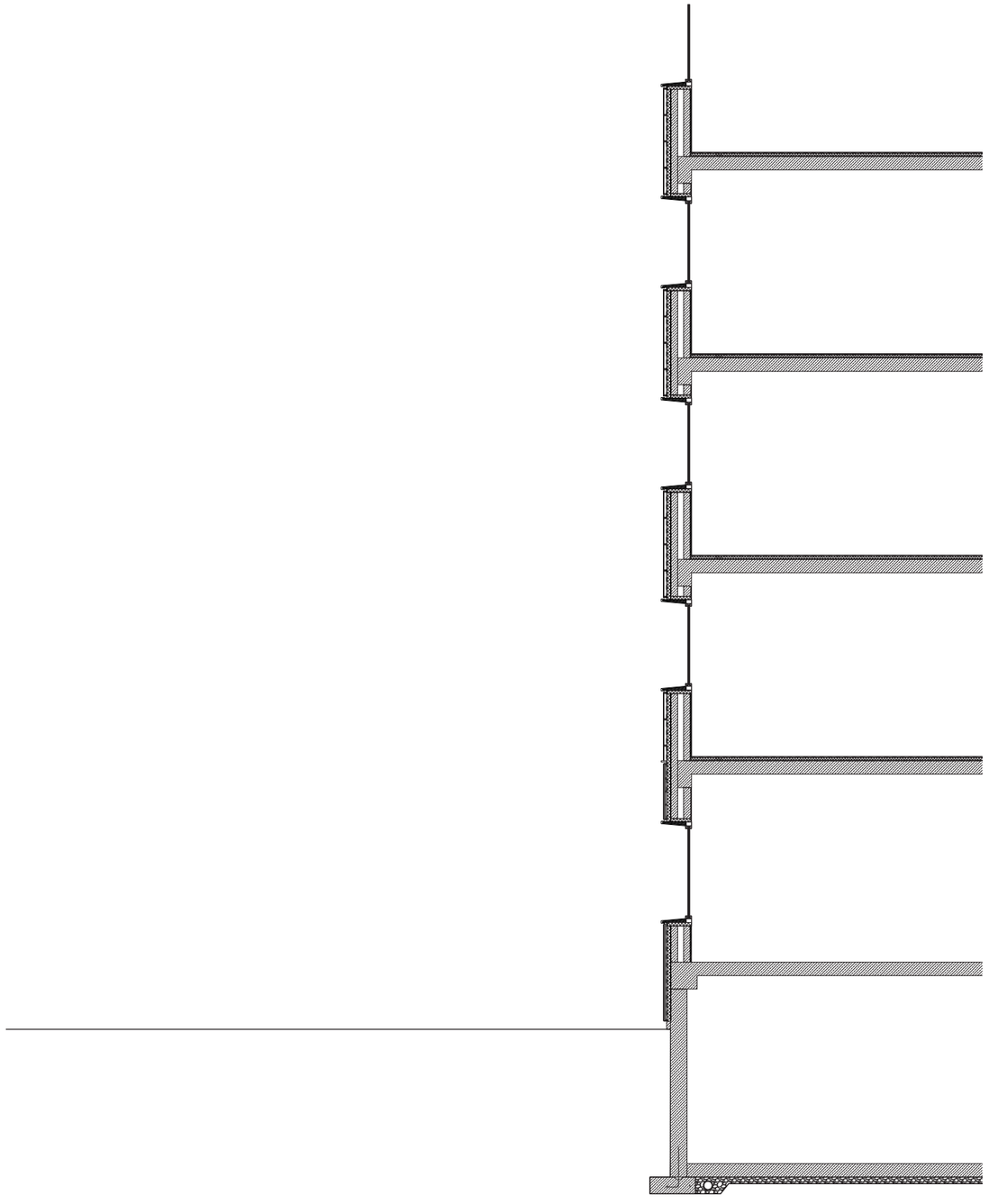
1 Double Glazed Glass Roof
2 Steel Support for the Canopy
3 Loose Gravel
4 Parapet Capping
5 Facade:
Wood Fin
Steel Cleat
White Shiplap Cladding
Board
Batten
Wind Seal, UV resistant
Timber-stud Structure
Gradient Insulation
Plasterboard
Wood Beam

COMMUNAL KITCHEN DETAIL

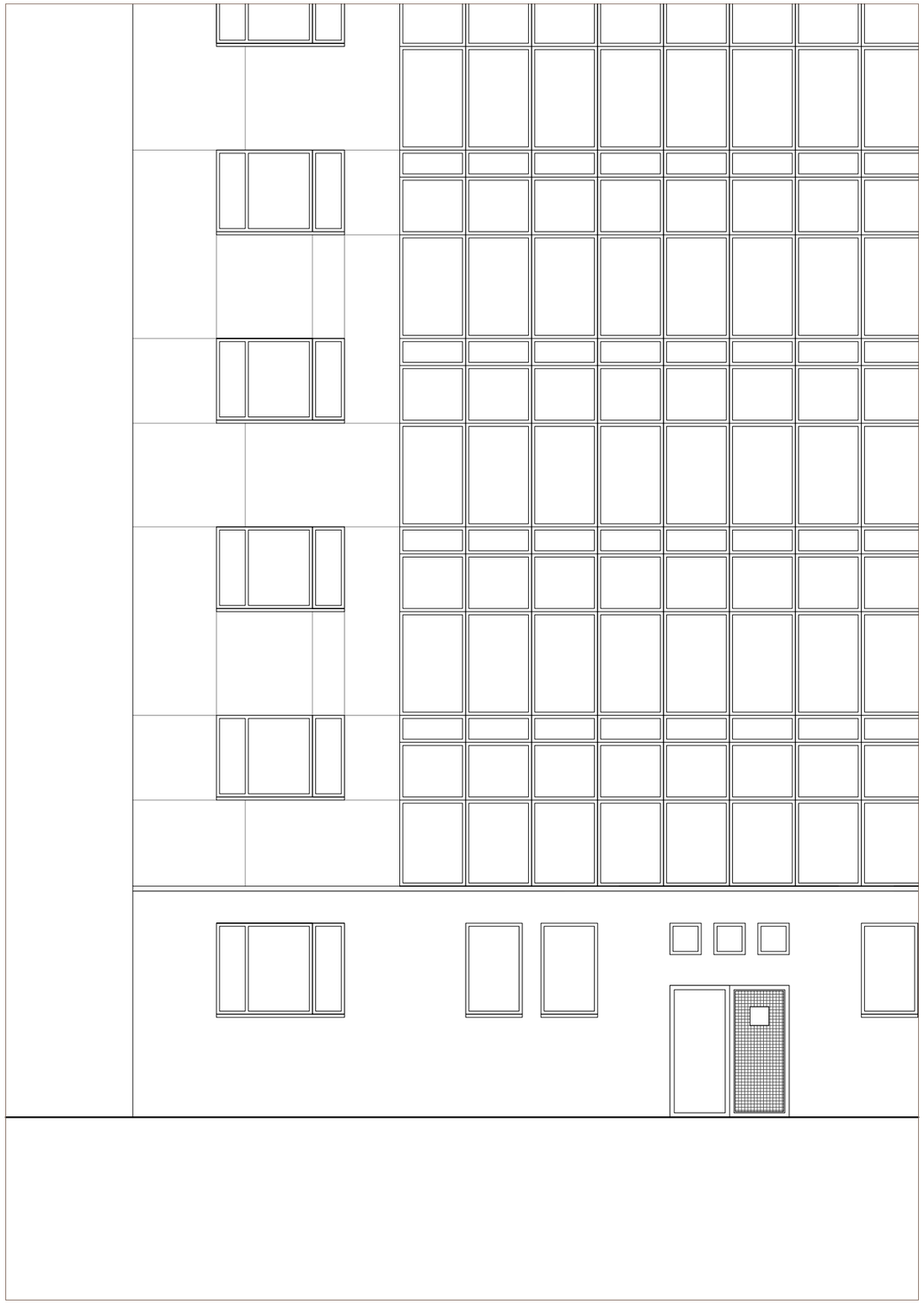


EXISTION SECTION





COMMUNAL KITCHEN DETAIL

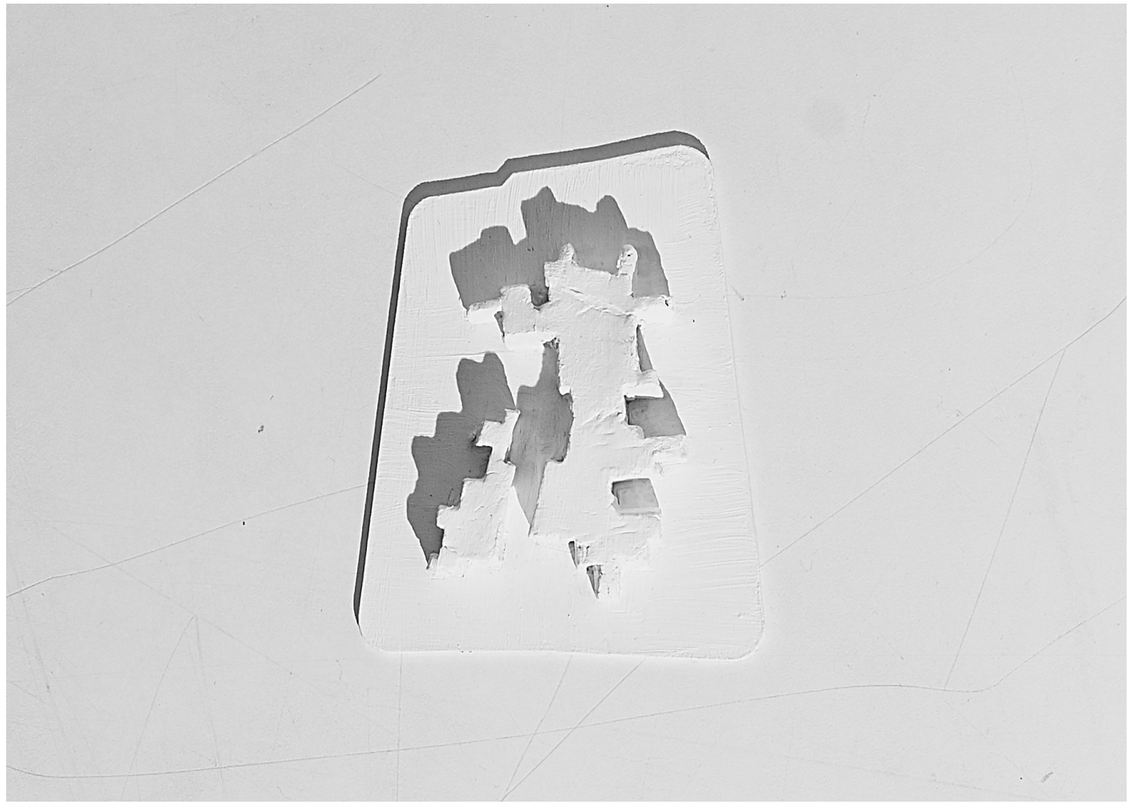


EXISTING FACADE



RE-VISUALIZING VOIDS IN A TANGIBLE FORM

Density of Activities

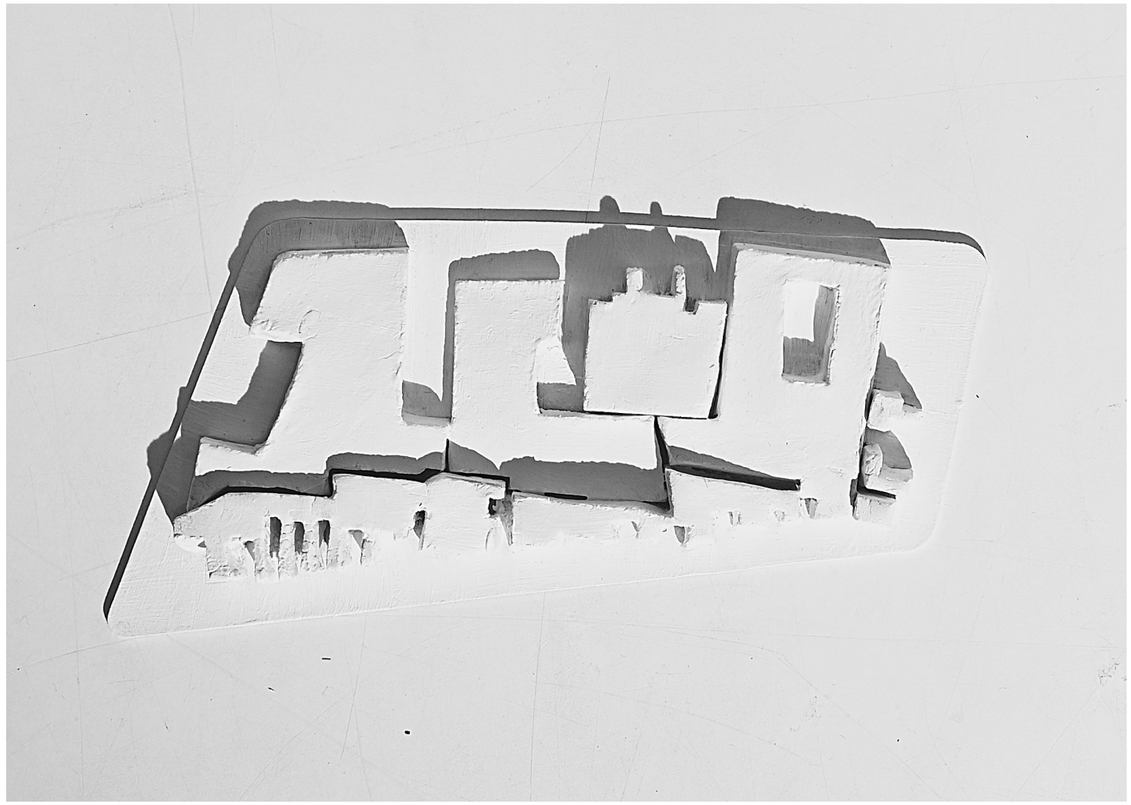


ROW HOUSE

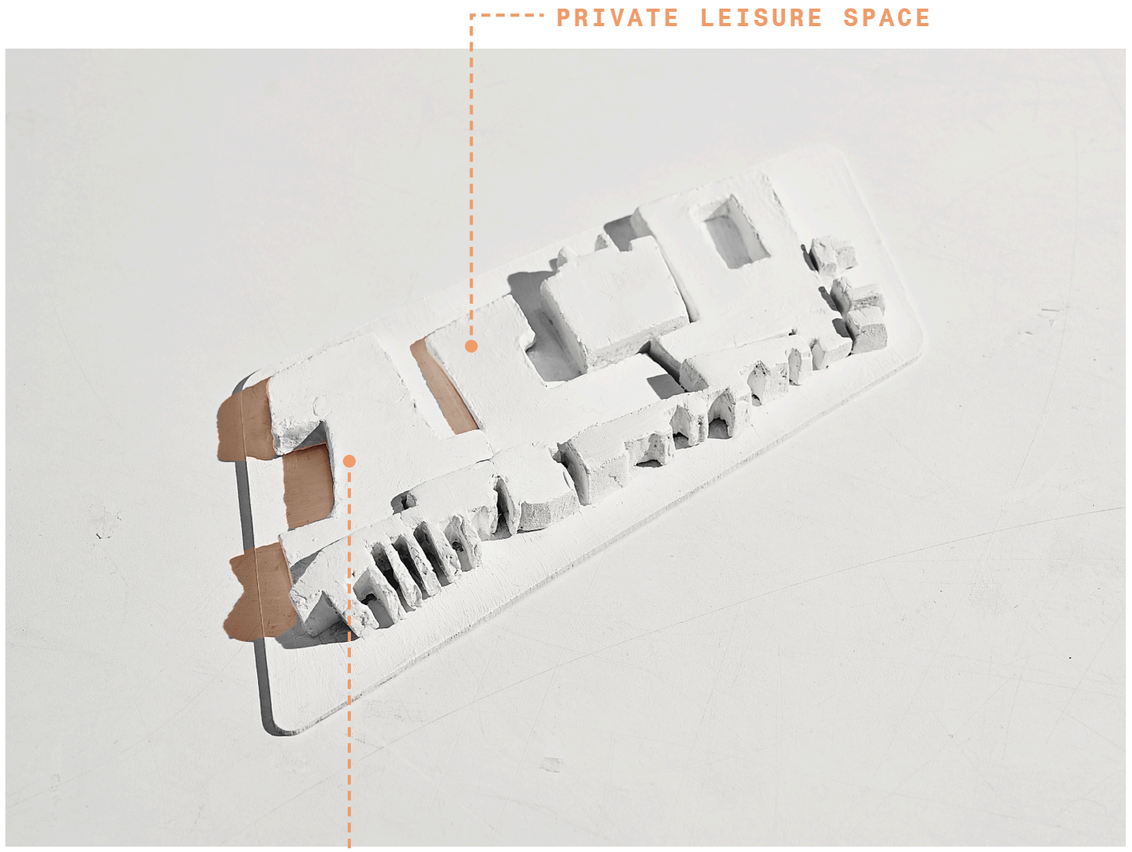


RE-VISUALIZING VOIDS IN A TANGIBLE FORM

Density of Activities

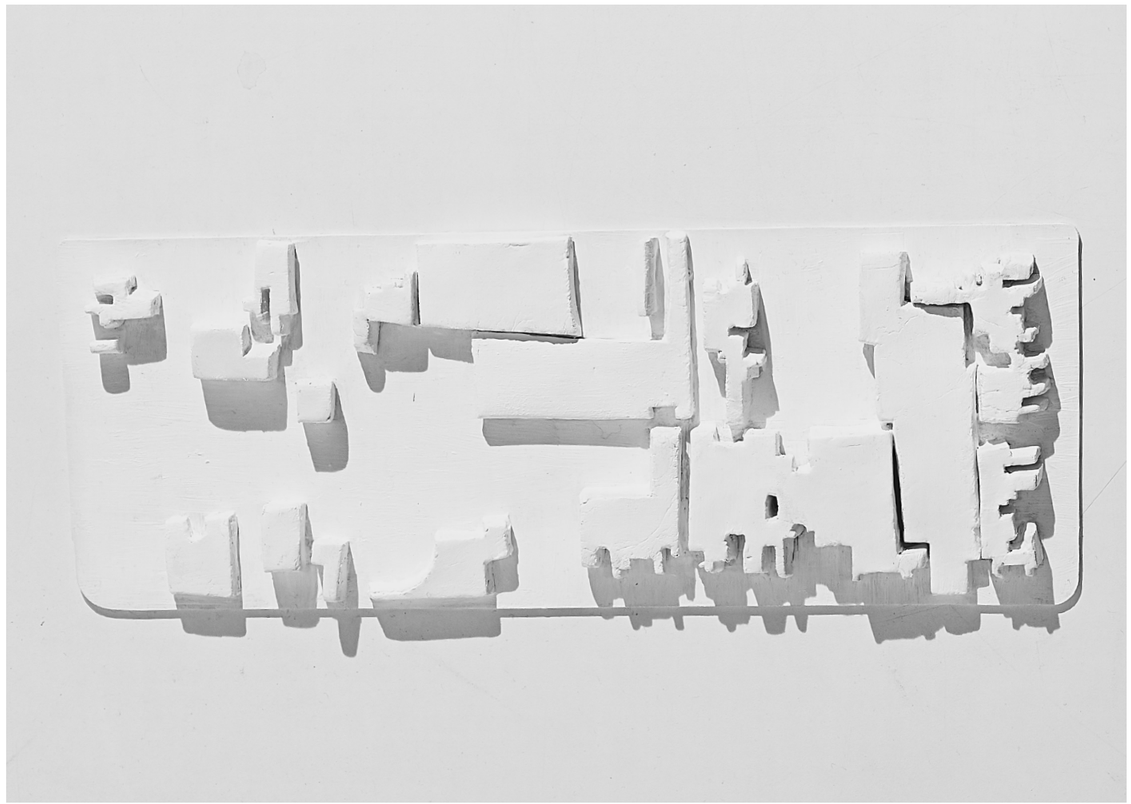


ROW HOUSE + APARTMENT BUILDING

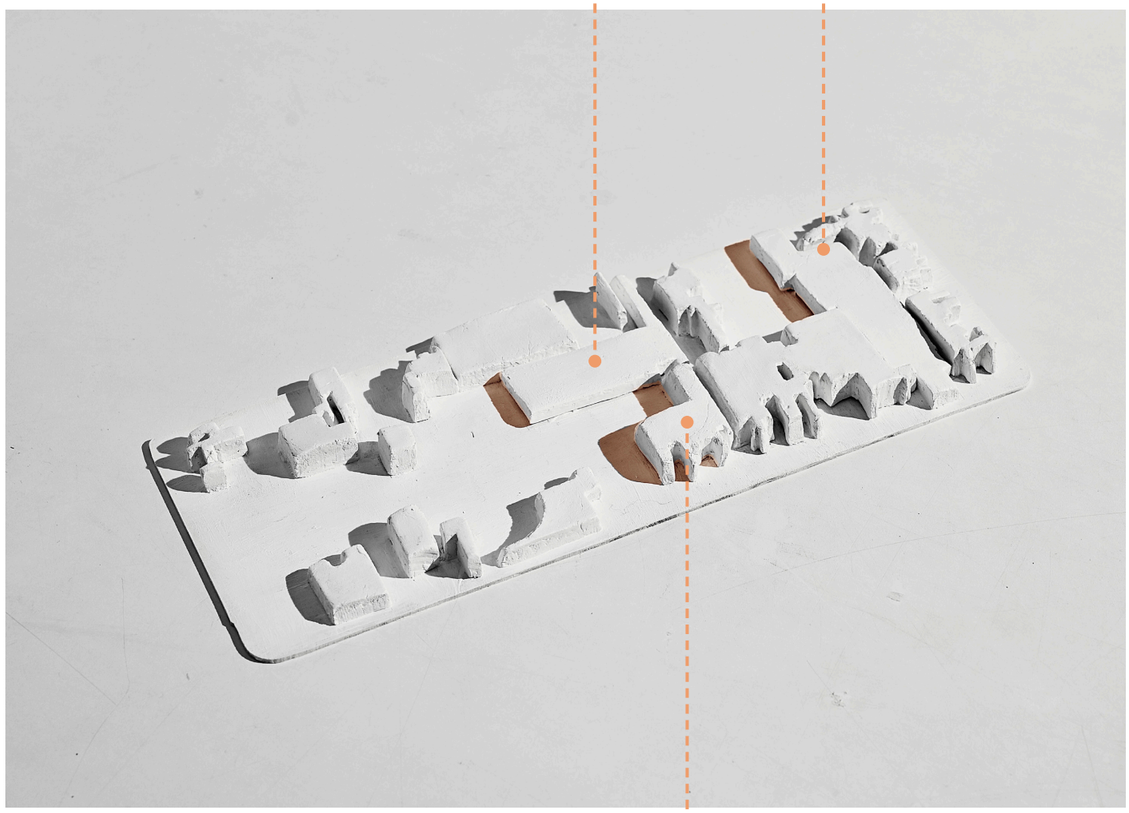


RE-VISUALIZING VOIDS IN A TANGIBLE FORM

Density of Activities

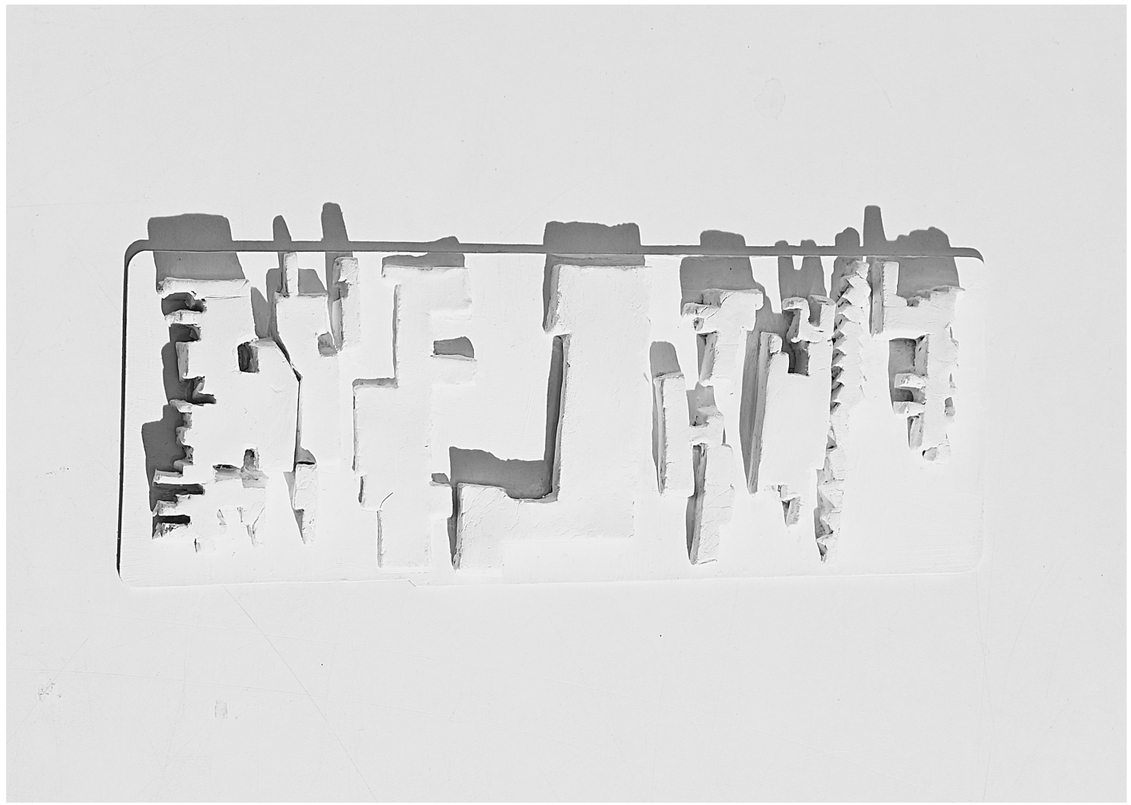


ROW HOUSE + NEIGHBOURHOOD AMENITIES + INDUSTRIAL



RE-VISUALIZING VOIDS IN A TANGIBLE FORM

Density of Activities



ROW HOUSE + ABANDONED + INDUSTRIAL

