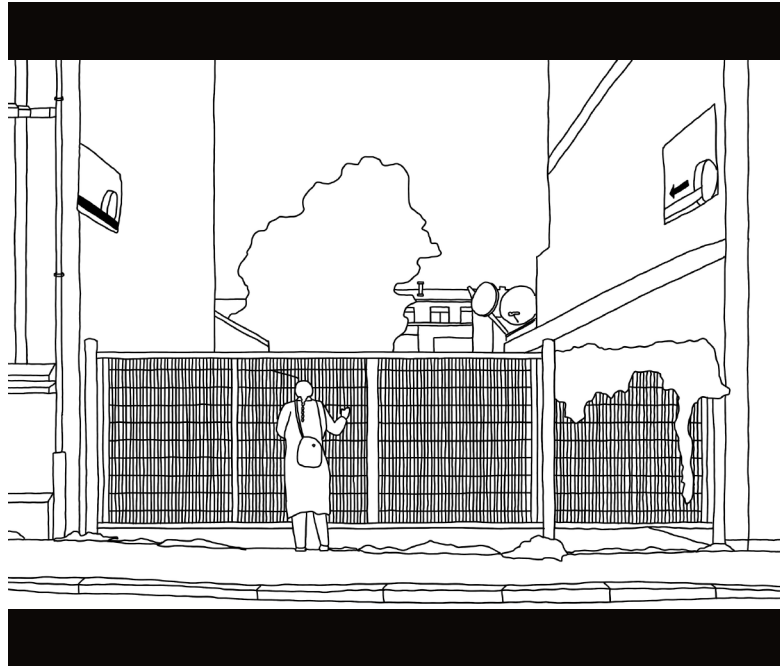


**THE URBAN INVERSION:
VOID AS VOLUME AND NEW INTERIOR TO THE NEIGHBOURHOOD**

[URBAN VOIDS]

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

CONTENT



‘the space’ in-between things, between objects and subjects,
between my house and my neighbors, between their office and mine,
is traversed by many strangers, and is not a meeting space; it has
become ‘empty’ because it plays no recognizable role

(Gust, Ghent Urban Studies Team, 1999)

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[0]

MANIFESTO

VOICE FOR THE URBAN VOID

Spontaneous
Self-initiative
Indeterminate
Unintended
Liberated
Derelict
Flexibility
Marginal
Emptiness
Lack of Values
Vagueness
Land of Potential

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

“internal to the city yet external to its everyday use”(Sola de Morales, 1995)

The formation of urban voids is mostly due to de-industrialization or urban sprawling. These unpremeditated parcels of land are situated in between our houses and everyday living, either abandoned or underutilized. Urban voids is a forgotten spaces in the city and disperse a sense of emptiness. People encounter them every day without noticing their existence. The potential and values are thereby hidden beyond it, and our work is to reveal them step by step.

THE DISPERSED NEIGHBOURHOOD

The neighborhood of Bressoux is in a phenomenon of dispersion. Tangibly, the fragmented building blocks, the incoherence of facade materials, spontaneous voids scatter in between the cluster and unidentifiable industrial structure in the settlement; these elements reveal the inharmonious urban fabric as a product of patchworking. Meanwhile, from the intangible social perspective, the shutter screen for the openings, the double fence for the entrance, and the absence of front yard in the neighborhood, convey a clear boundary between private and public domain, detaching the locals from public life. This phenomenon could relate back to the notion of ‘decomposed contemporary society’ coined by Bernardo Secchi, emphasizing urban void, which derived from the sprawled settlement pattern in the postwar era, as a notable urban element inducing missing links and inept definitions in the city. Thereby, the formation of dispersed neighborhoods and voids possess an indivisible relationship.

‘the space’ in-between things, between objects and subjects, between my house and my neighbors, between their office and mine, is traversed by many strangers, and is not a meeting space; it has become ‘empty’ because it plays no recognizable role (Secchi, 1993)

Generally, urban voids are often perceived as wastelands, depict with a negative connotation due to the nature of ‘emptiness’ and the unproductive environment. In the period from the 1960s to the mid-1990s, emptiness was always considered as a spatial and social urban problem that should be resolved, and the spatial quality in these vacant spaces was not accommodated by both the city and the public (López-Piñeiro, 2020a). Nonetheless, by considering the term alternatively, some scholars identify that the voids per se possess a liberating potential, a possibility of moving beyond established social values (Gust, Ghent Urban

Studies Team, 1999), which other parts of the city could not provide. The dichotomous identity of urban voids fascinated my interest to further investigate the hidden potential and spatial quality. In my research, I would like to explore the potential of polishing urban voids as a hidden gem, transforming it from an urban segregation element to a city reconnecting component.

[TANGIBLE]



Fragmented Building Blocks



Incoherent Facade



Voids as Urban Segregation Elements

[INTANGIBLE]



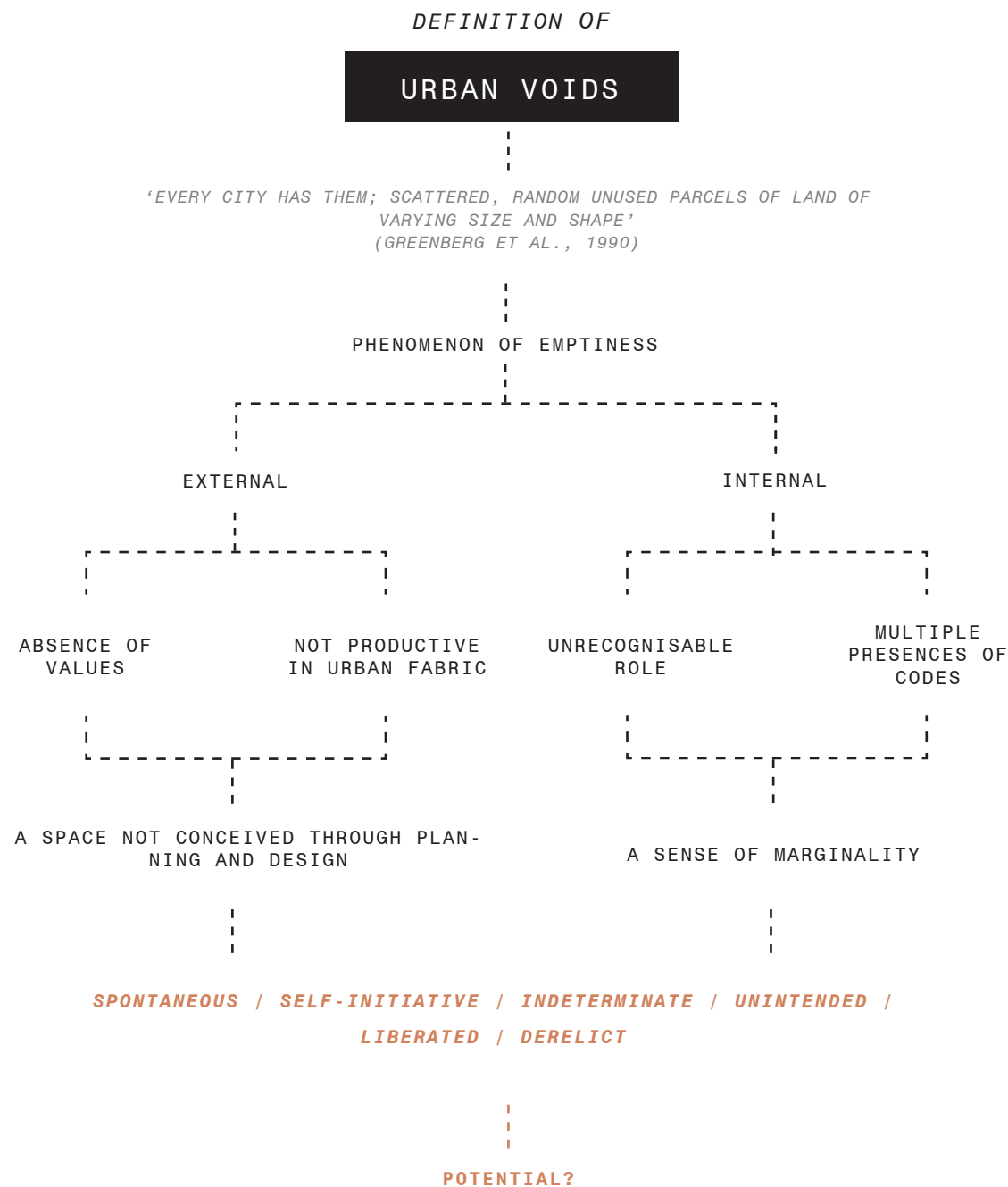
Double Fences



Frontyard Full of Rubbish



Shutter Screen for Opening



‘EMPTINESS’ AS SPATIAL QUALITY

‘Emptiness’ is a substantial nature that could be observed from the urban voids, and hence it could be embodied as a synthesis of spatial quality. The expression of void does not mean a literal vacuum, yet it is referring to the emptiness in both space and expectation (López-Piñero, 2020b). The notion of emptiness could be perceived and defined according to two layers: external level and internal level. Referring to the external level, the voids are a lack of value towards the capital, real estate value, efficacy, and production aspect (López-Piñero, 2020b). On the other hand, Stefano Boeri suggests the voids are inherent with multiple presences of codes, which leads to the superimposition of information or even clashing and destruction (Boeri, 1998). Since the void is hypocodified with an excessive number of interpretative codes, it is impossible to identify and endow a recognizable role to the space (Boeri, 1998). Thereby, these vague places reflect a phenomenon of emptiness. Nonetheless, these qualities of emptiness give rise to a sense of marginality due to the absence of values. In consequence, these voids are empowered with sensibilities and opportunities, which are also able to foster the emergence of publicness dissimilar from other orthodox public spaces.

Spontaneous / Self-initiative / Indeterminate / Unintended / Liberated / Derelict

These key terms are also part of the unique quality extracted from the urban voids, meanwhile, they are also crucial factors in provoking publicness in a public realm. Referring back to the orthodox public space, it is often expected with appropriate behaviours and activities, the space is planned and regulated that filter out the public in an arbitrary manner. The public space in the current urbanscape is less inclusive than we expect.

what makes a place public is democratic control over that space, therefore the willingness to allow a space to host sometime contentious public (Deusen & Mitchell, 2001)

The urban voids have the ability to become an alternate public space, accommodating all kinds of community and activities. Voids could be interpreted as a kind of leftover space. A certain level of openness is retained since they are not involved in the urban design pattern and absence of control from the authority. The empty space is a liberated zone, which acquires the potential to enable the emergence of true publicness. Unintended activities could happen within the emptiness. For instance, back in the 1970s - 1980s, vacant lots in New York City were transformed into community gardens via the GreenThumb program with a temporary lease (History of the Community Garden Movement: NYC Parks, n.d.). These spaces are conceived as a new typology of public space through self-organized interpretation. It is crucial to identify the nature of the urban voids, respecting the existing vacancy and thereby utilizing its potential through the design process, instead of merely filling up the gap with premeditated ideas.



[garbage?]



Grasping a sense of emptiness and their inherent characteristic through the photo collection of urban voids in Bressoux...

[abandoned?]



[inaccessible?]



[boundaries?]



[publicness?]



[improvised?]



[industrial?]



[mysterious?]



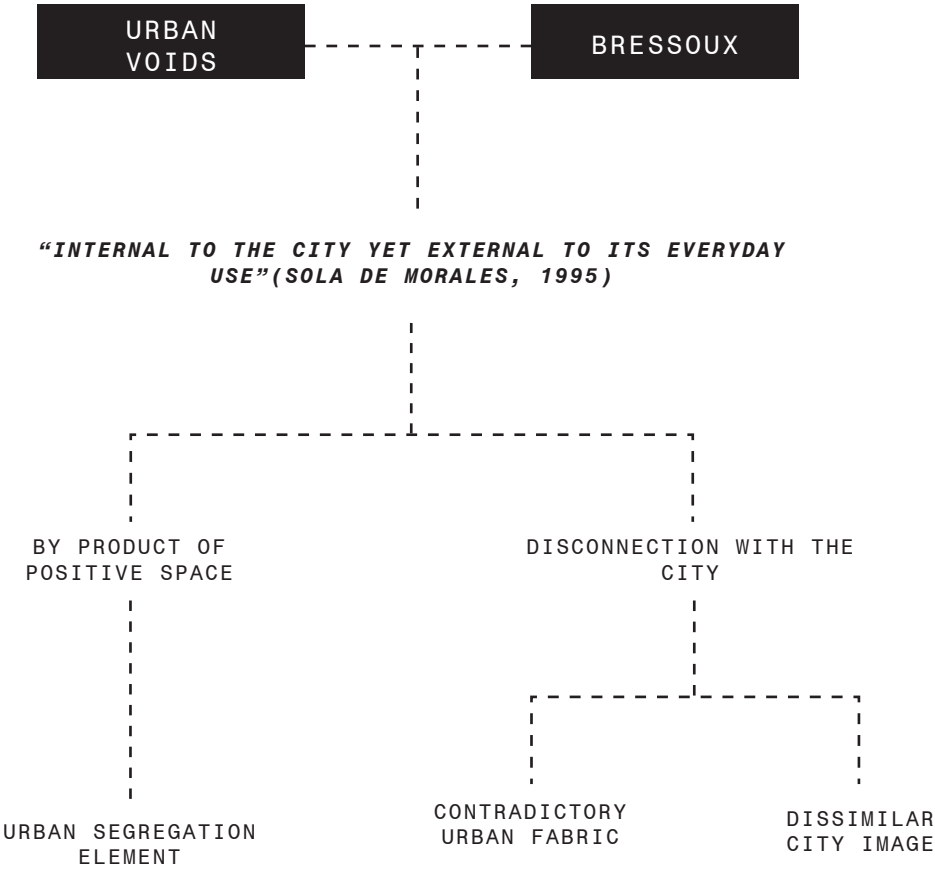
COMMON QUALITY

“internal to the city yet external to its everyday use”(Sola de Morales, 1995)

Both urban voids and Bressoux are facing the same issue - exist in the city but do not belong to it. The voids are the by-product of urban planning, and the relationship between positive space (massing buildings) and negative spaces (voids) is barely included in design consideration. Generally, these spaces are perceived as a phenomenon of emptiness, neither productive in the urban fabric nor possessing a recognizable role in the neighborhood. Therefore, they never truly integrate into the neighborhood and indeed exist as urban segregation.

Meanwhile, the cityscape of Bressoux looks dissimilar from other parts of Liege and appears out of space with the city image. On the urban scale, the contradictory urban fabric in Bressoux and Drohixie collide with each other, which induces a disconnection between the city and the neighborhood.

In my research and design, I would like to investigate how to translate emptiness as a productive concept to resolve the current issues that occur in the neighborhood. An urban void is a representational space, which is not an abstract space conceived through planning and design (López-Piñeiro, 2020a). It is a lived space that emerges within social life, which possesses a substantial correlation with the neighborhood and could be associated as a bottom-up urban ingredient. These spaces possess the potential to conceive as an alternate public space to patch up the dispersed neighborhood.



FROM FORGOTTEN SPACE

Most of the urban voids in Bressoux are forgotten spaces in the neighbourhood, however the selected site is slightly different due to its unique urban setting up. It concurrently collages with both paradoxical urban pattern - modernism and terrace houses, in which resemble as a miniature of the conflict between Bressoux and Drohix.

The identity of the in between void in the urban block is ambiguous since it is a by-product of the modernist intervention. The void is being segregated with different type of boundaries, and thereby become a forgotten space in the neighbourhood. Nonetheless, the gated greenery courtyard in the photo demonstrate a potential in this void space, and allows me to rethink whether it is also a space of longing, an alternative public space that truly belong to the community.





TO SPACE OF LONGING

Emptiness as a threat or potential?

The void looks dissimilar with the streetscape of Bressoux the tranquil environment is surrounded by coherent brick boundary wall, trees, and chirping sound of birds. These elements give a hint of the potential of the space,

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

[2]

RE-VISUALIZING THE EMPTINESS

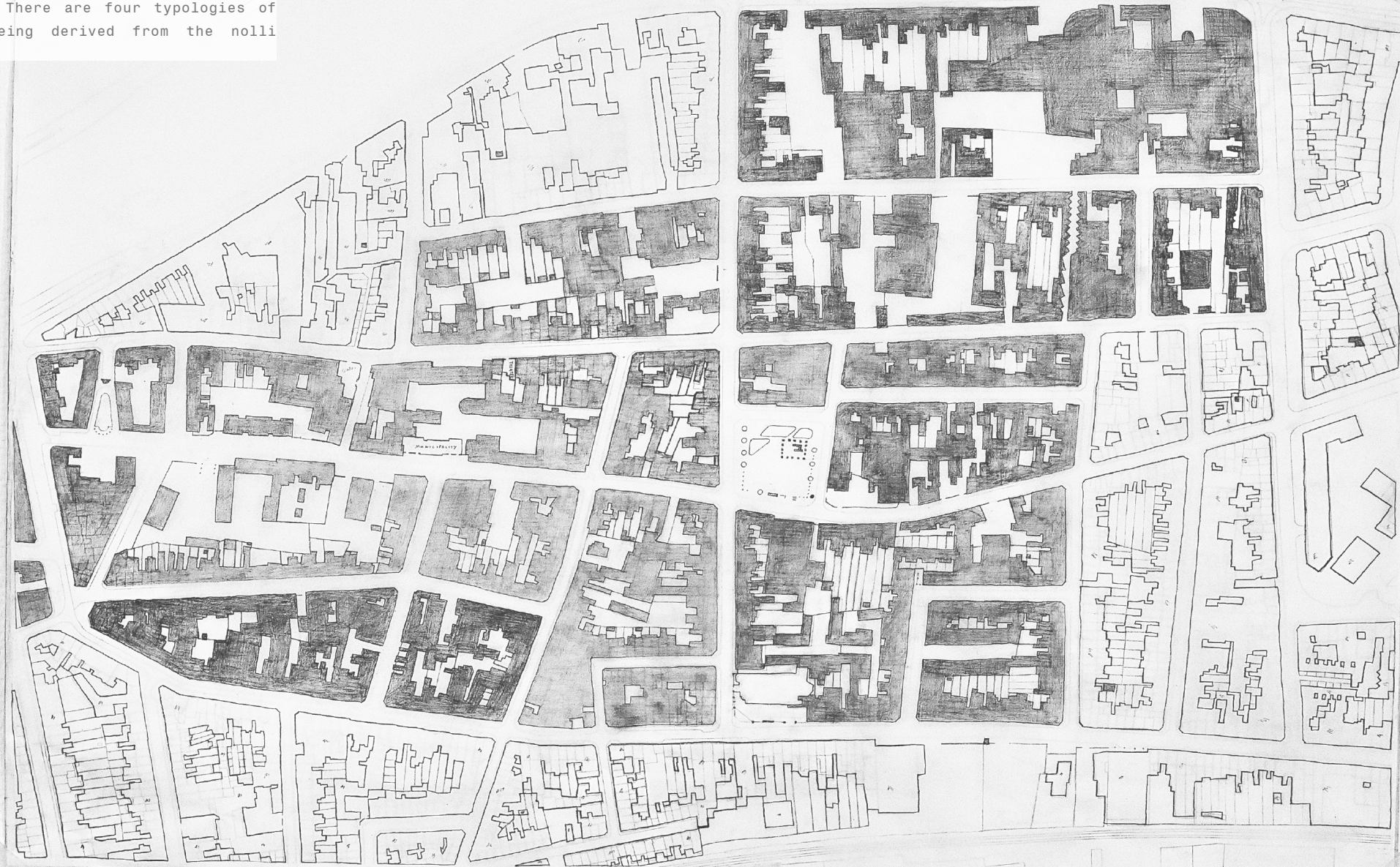
Voids are invisible.

Figure and ground, reverse casting, is the process to re-visualize urban voids in a tangible form. Each existing void is unique since they are moulded by positive massing with varying configuration, shapes, alignments, and size. The multiplicity identity of voids is also revealed by capturing the absence of space in the urban fabric. A more complex urban block environment could foster more variation in emptiness, including urban life.

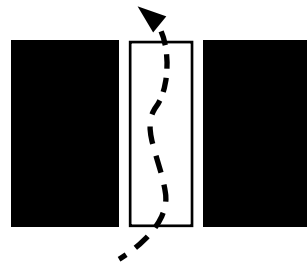
Despite that, the fact of being a by-product of positive massing limits their potential in the neighbourhood.

NOLLI MAP - THE HEART OF BRESSOUX

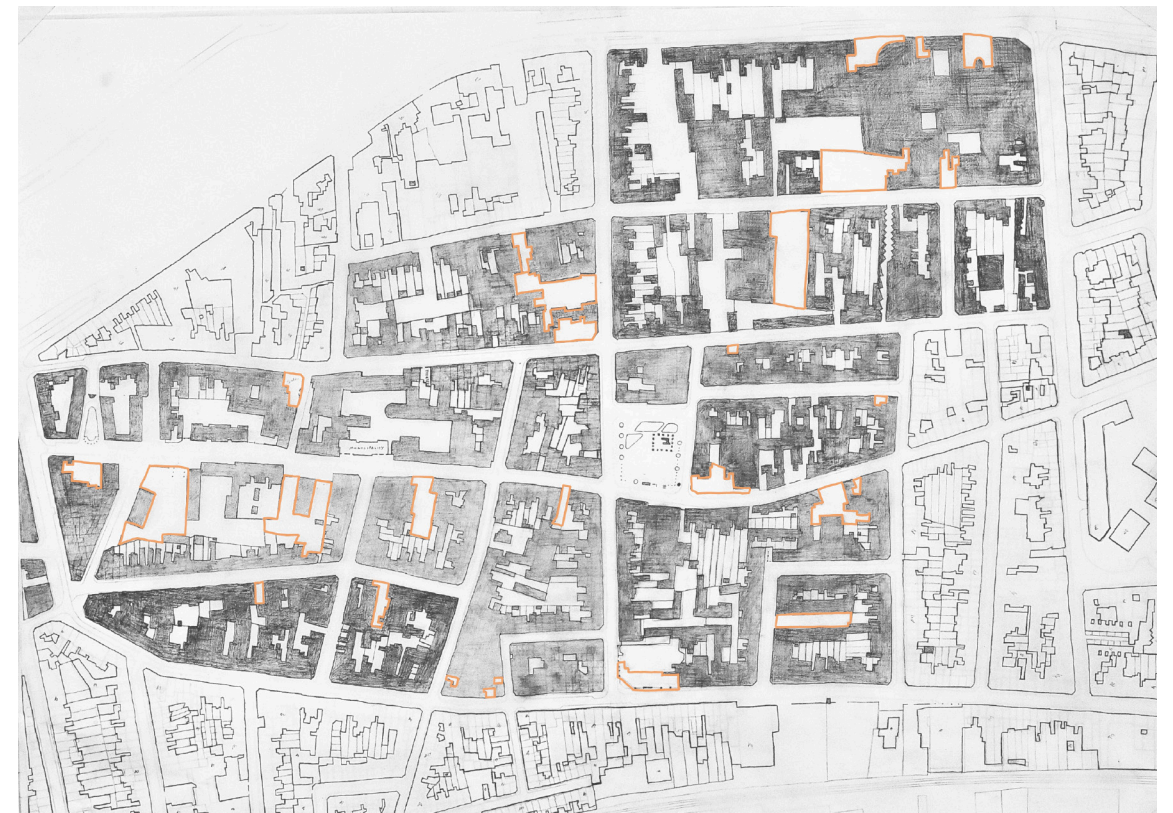
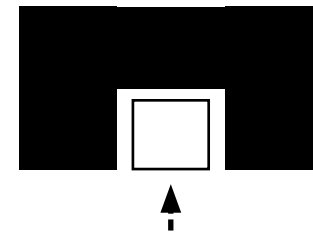
The morphology research to analyze the spatial quality of the existing urban voids. The nolli map demonstrates voids as individuals, indicating their location, boundaries in between and correlation with the adjacent positive space. There are four typologies of configuration being derived from the nolli mapping.



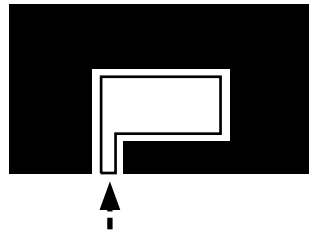
PASSAGE
[configuration 1]



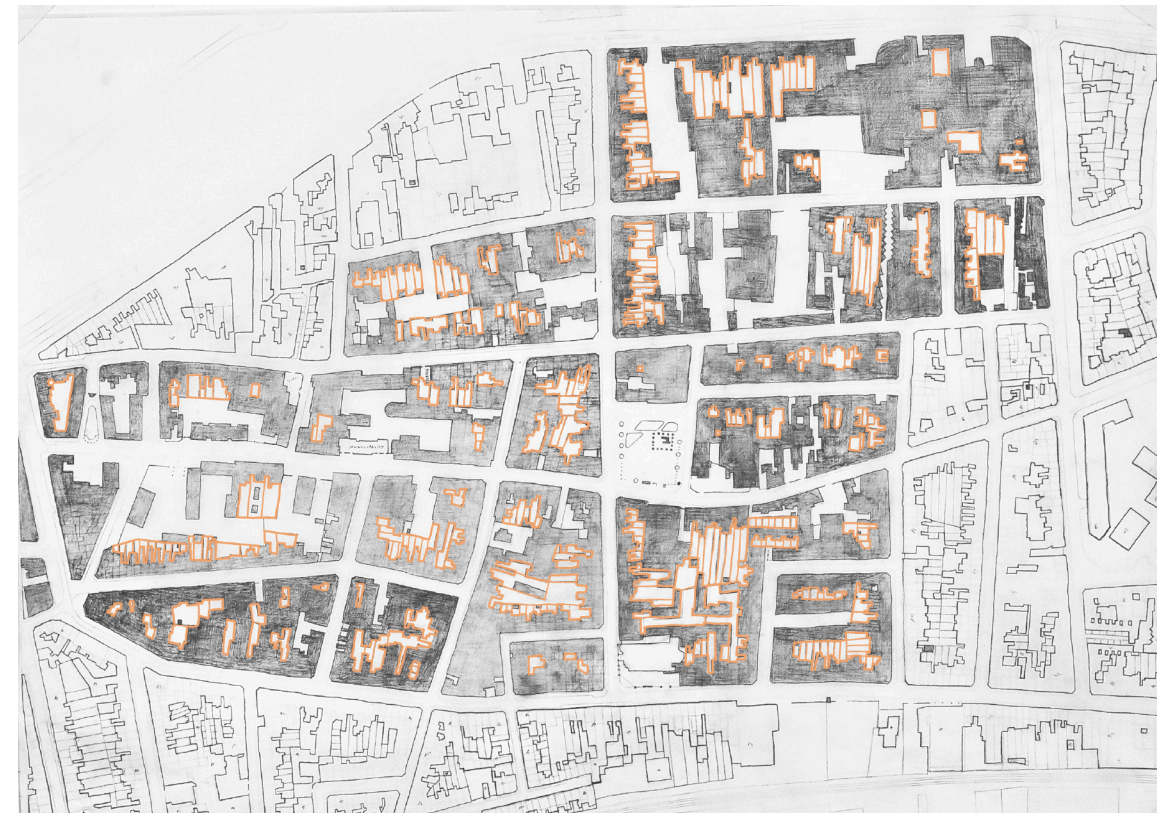
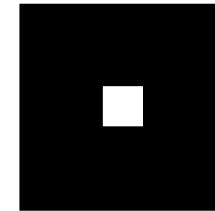
POCKET SPACE
[configuration 2]



HIDDEN POCKET SPACE
[configuration 3]



BACKYARD
[configuration 4]



REVERTING VOIDS AS VOLUME

The models invert the positive and negative space, aiming to capture the absence of space in the urban fabric as a collective component, visualizing the urban voids in a tangible form. Every voids are unique, since they are a by-product of the positive massing, they are being shaped in varying configurations, shapes, alignments, and size.



ROW HOUSE



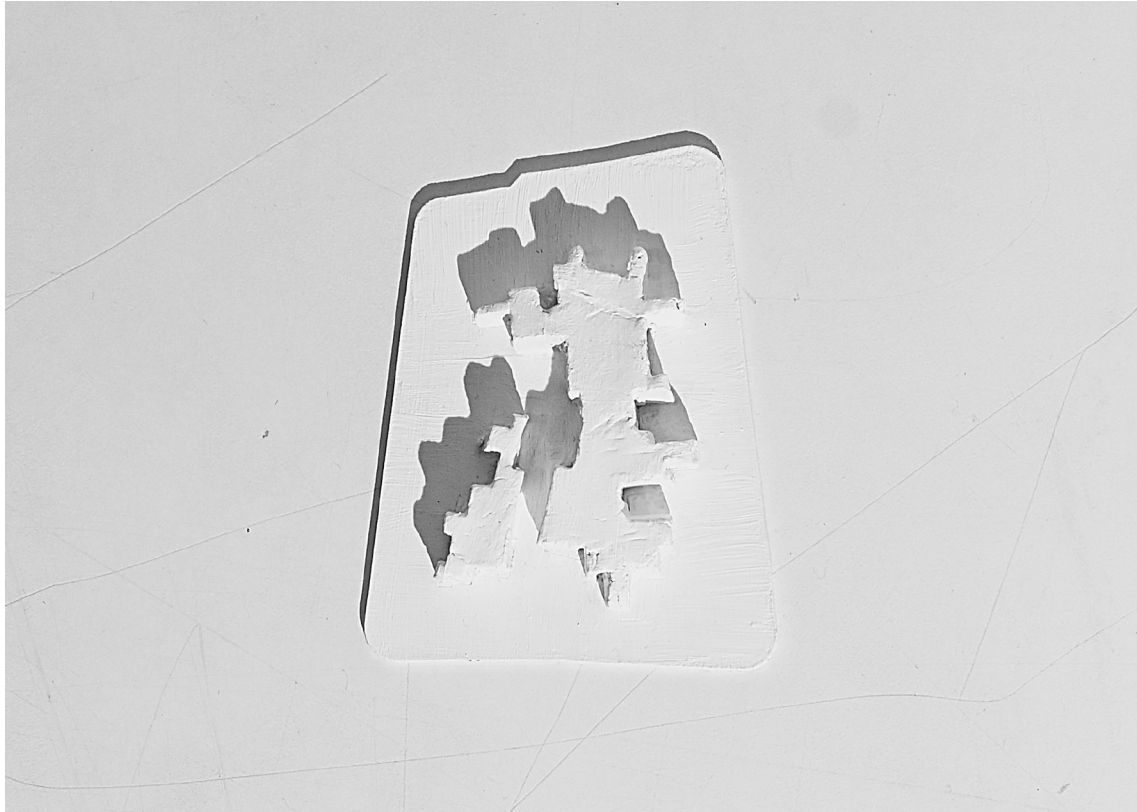
ROW HOUSE + NEIGHBOURHOOD AMENITIES + INDUSTRIAL



ROW HOUSE + APARTMENT BUILDING



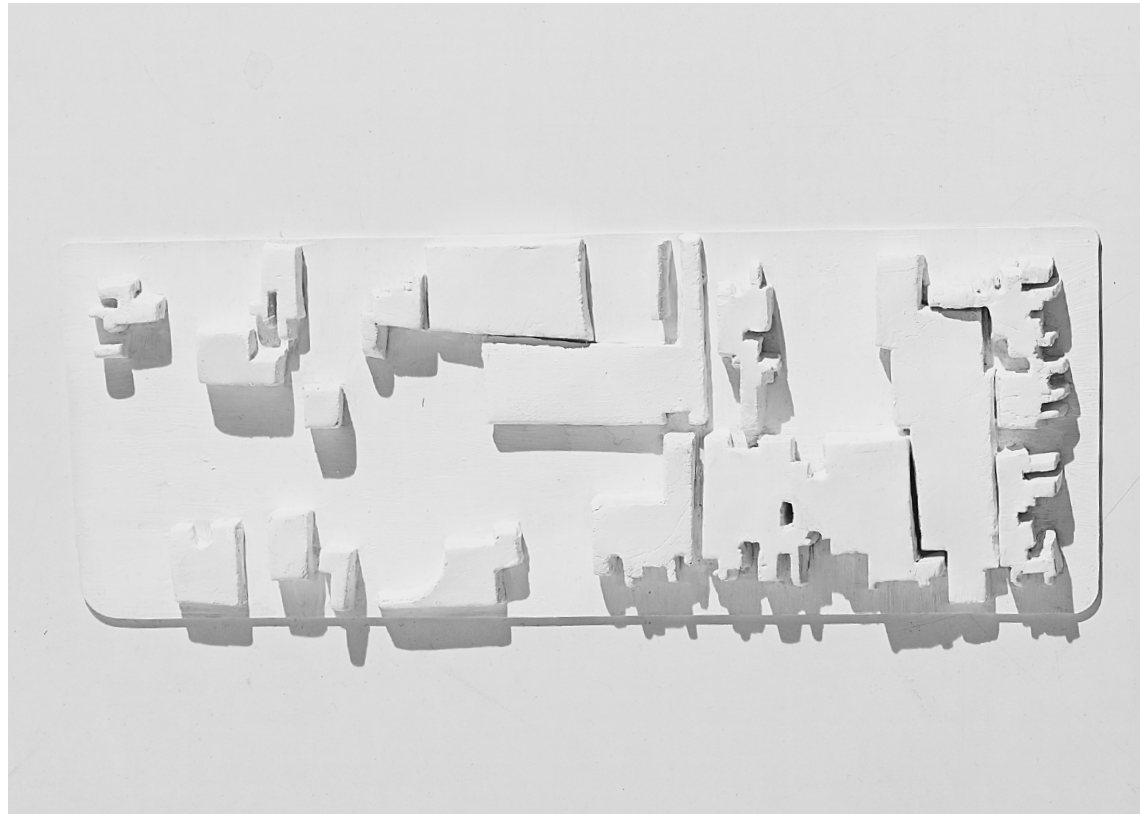
ROW HOUSE + ABANDONED + INDUSTRIAL



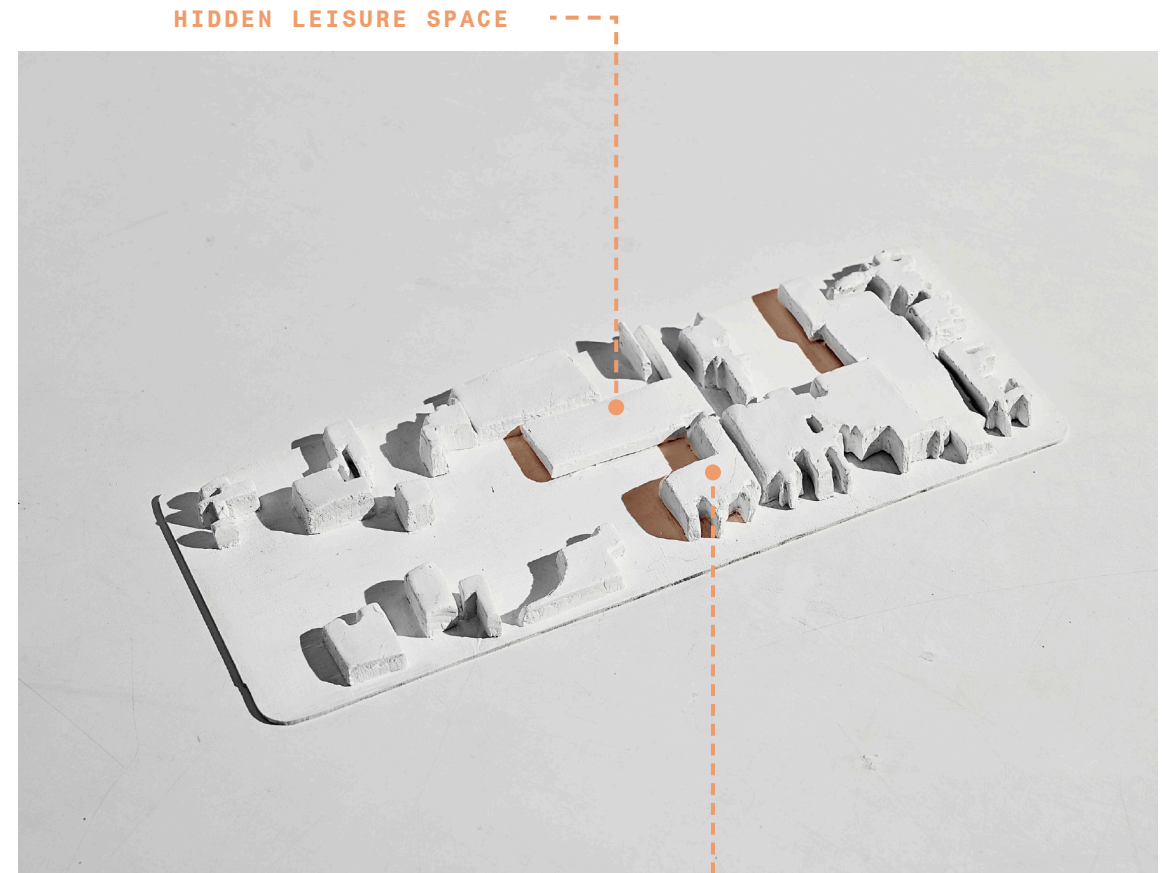
ROW HOUSE



BACKYARD VOIDS

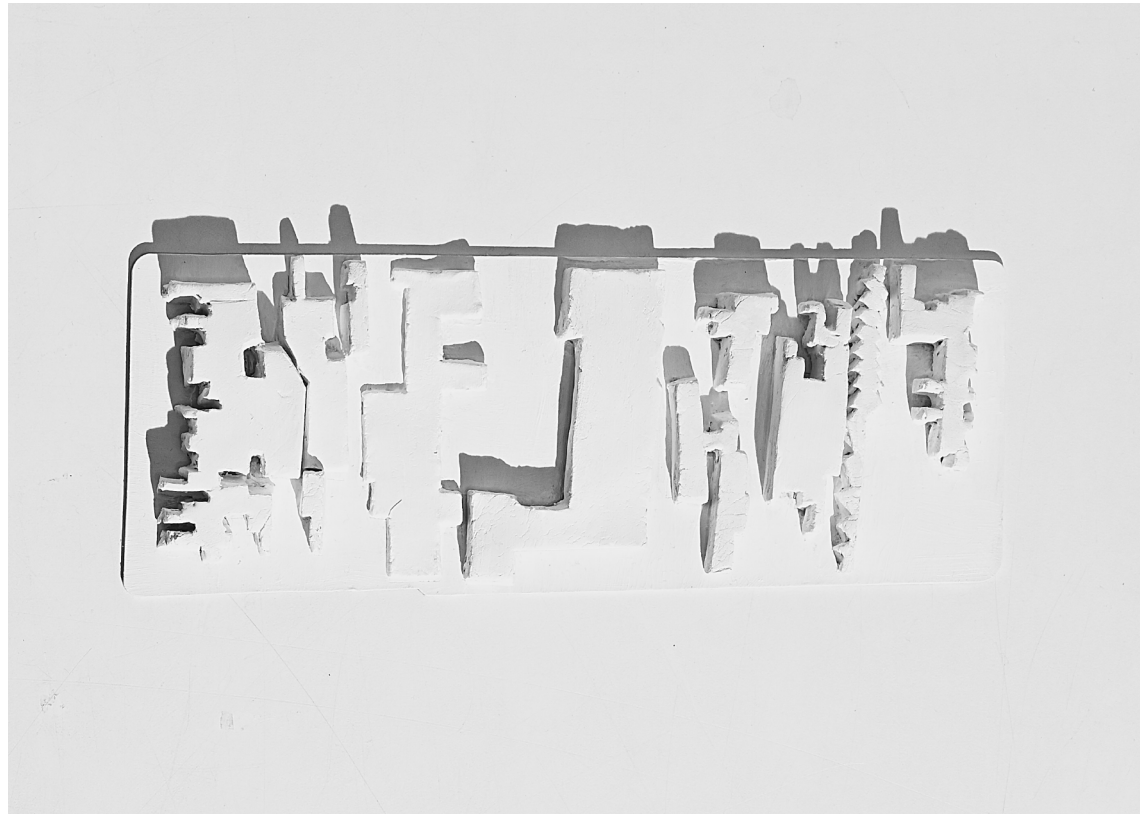


ROW HOUSE+ NEIGHBOURHOOD AMENITIES + INDUSTRIAL

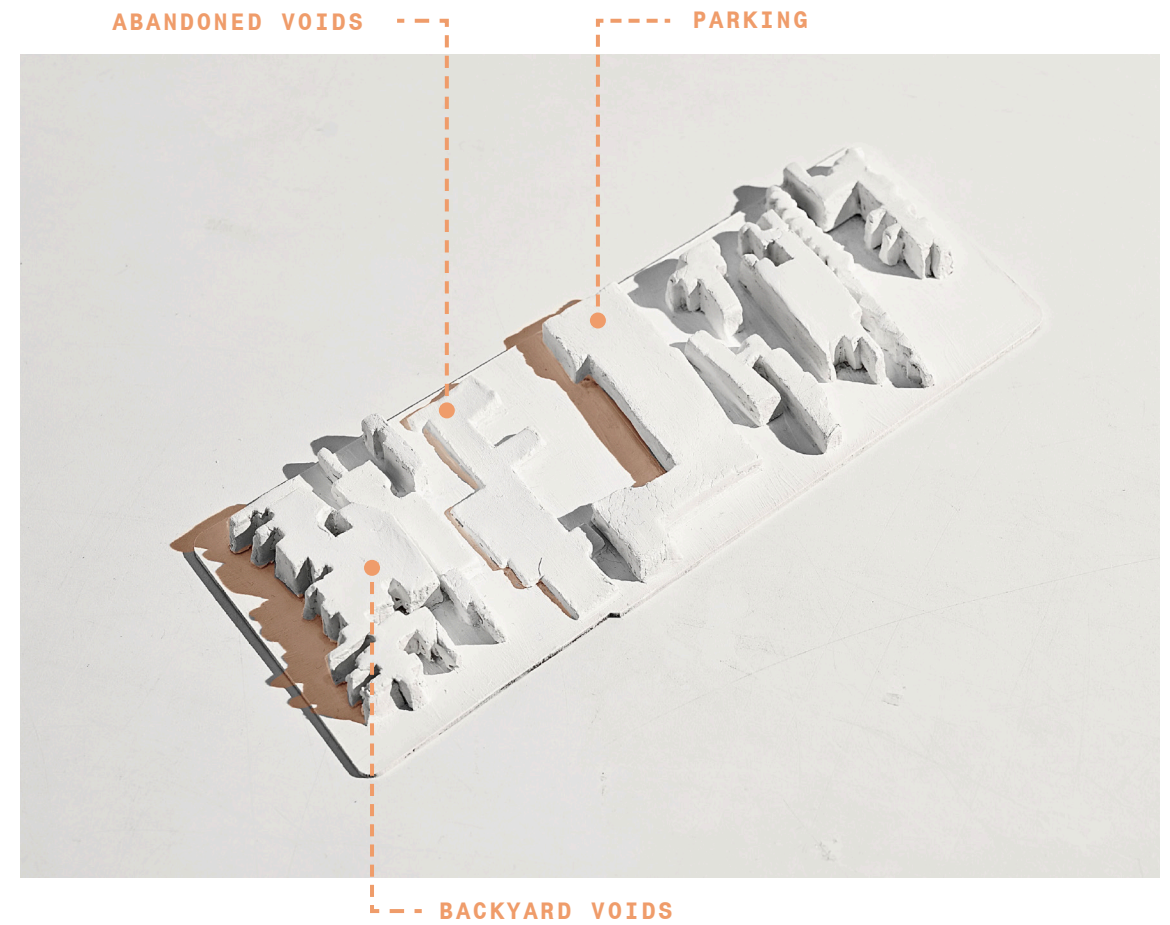


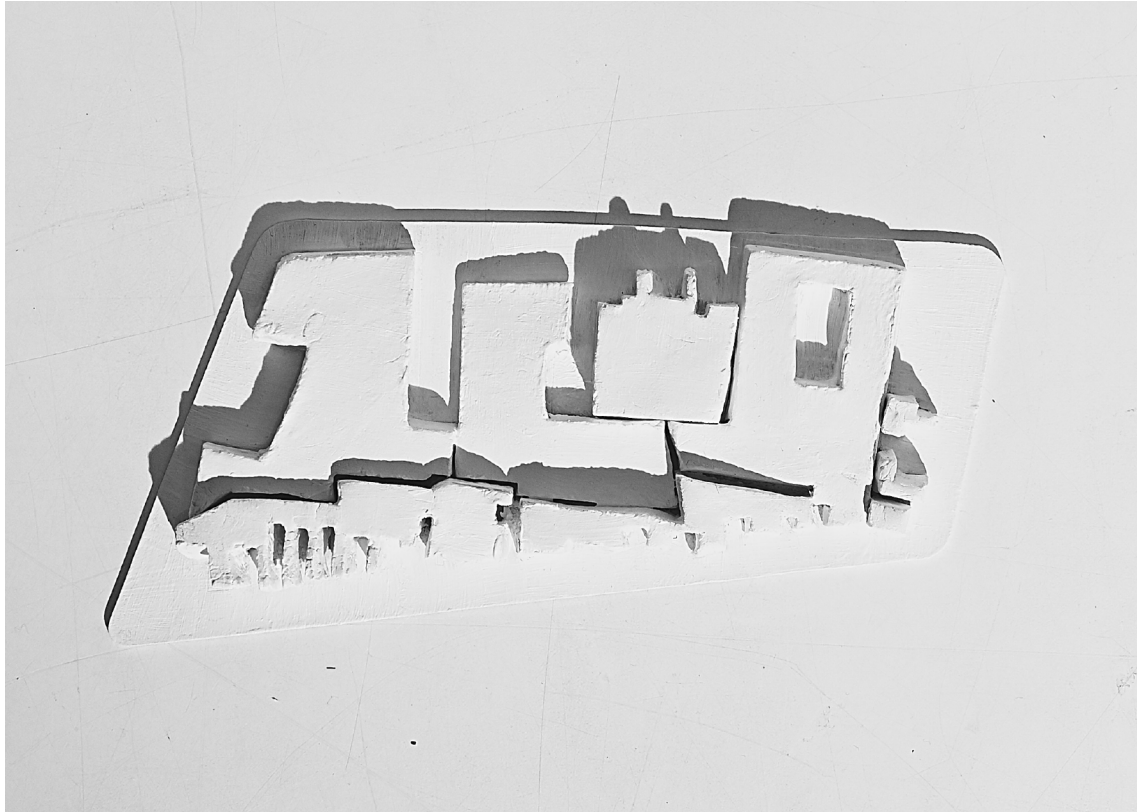
HIDDEN LEISURE SPACE

BACKYARD VOIDS

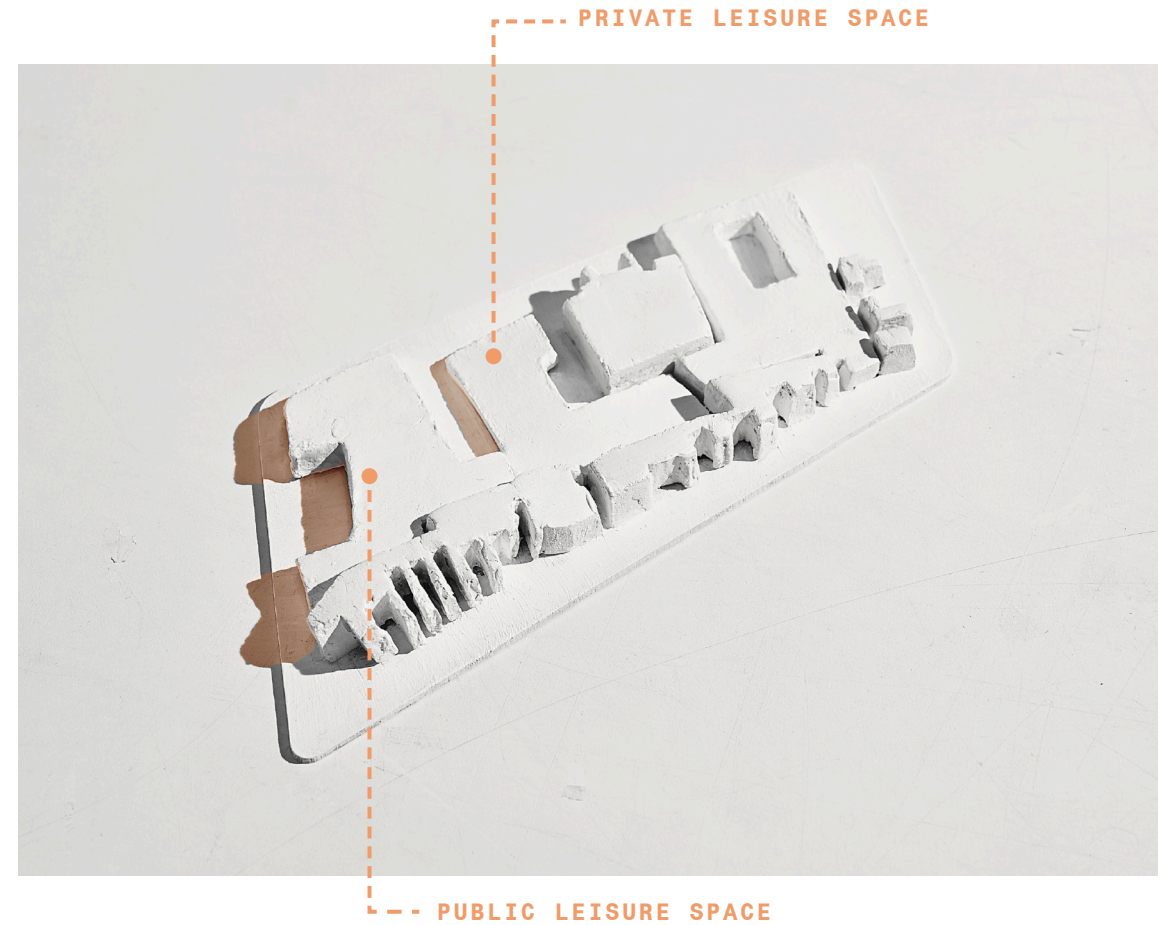


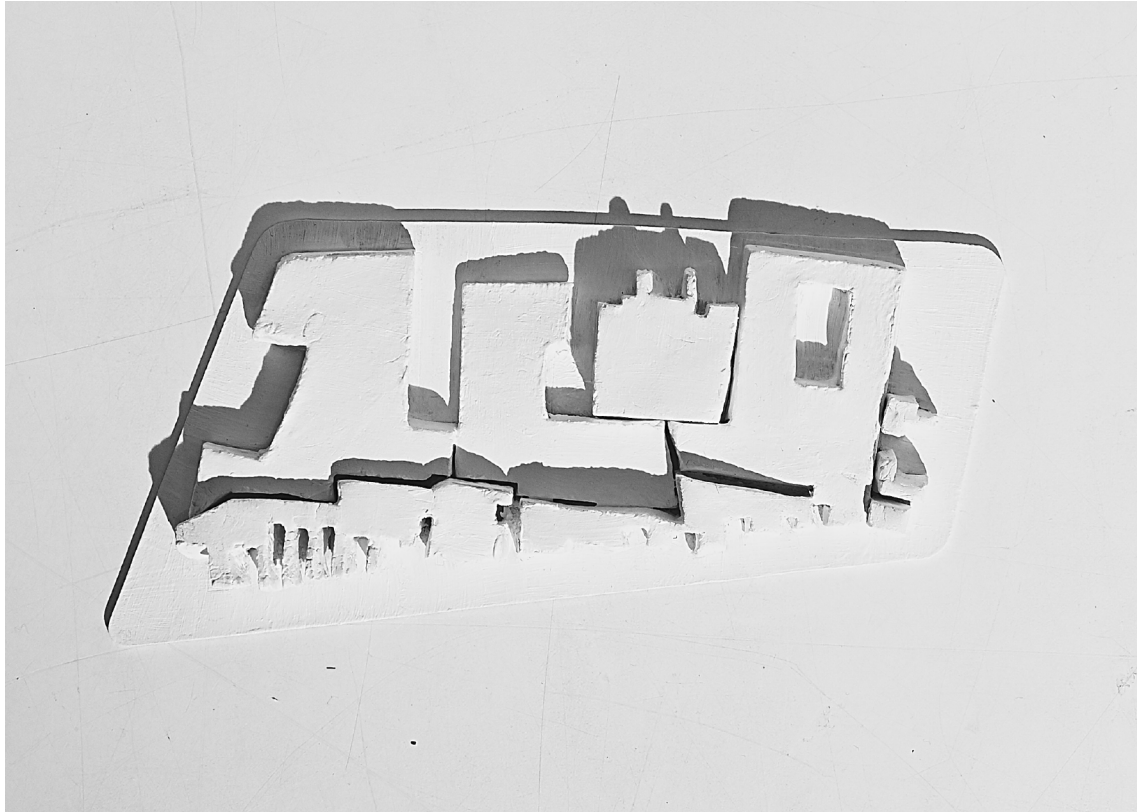
ROW HOUSE+ ABANDONED + INDUSTRIAL





ROW HOUSE+ APARTMENT BUILDING



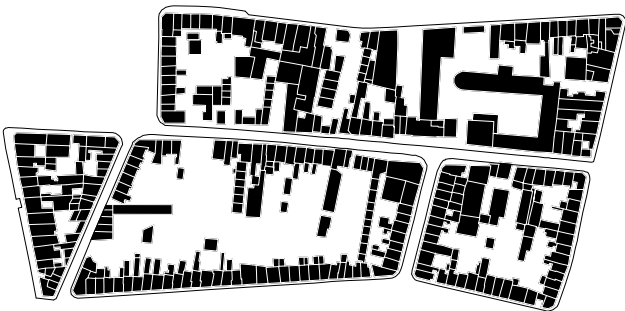


SOLID AND VOID AS INSPIRATION

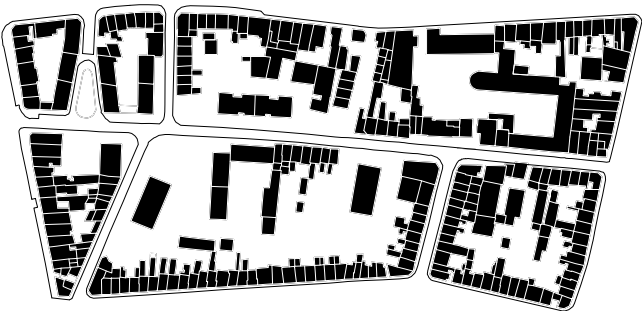
The morphology research urge me to rethink what is the position of void? What is the potential of emptiness?

What if I look at the void as volume and room, inverting solid and void. The void could be the new interior of the neighbourhood, while the enclosure are the building facade. Thereby, create a new open space system to reposition the role of void as well as connect the dispersed neighbourhood.

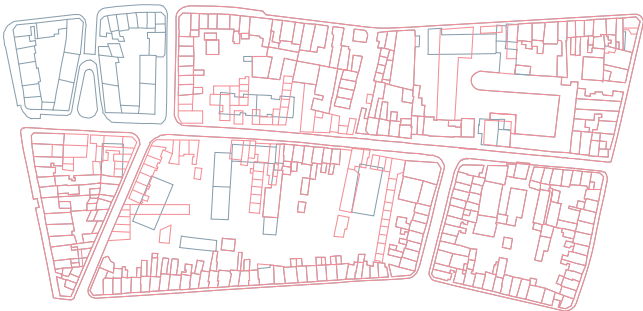
FORMATION OF THE PARADOXICAL URBAN SETTING THROUGH TIME



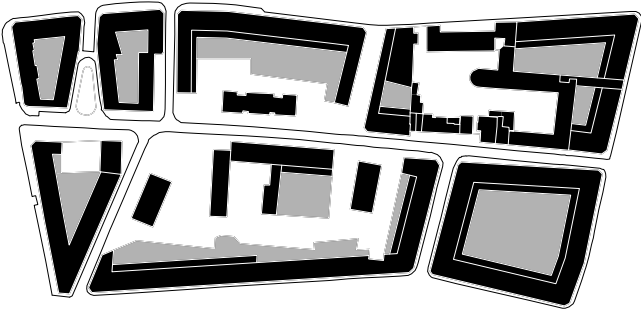
1956



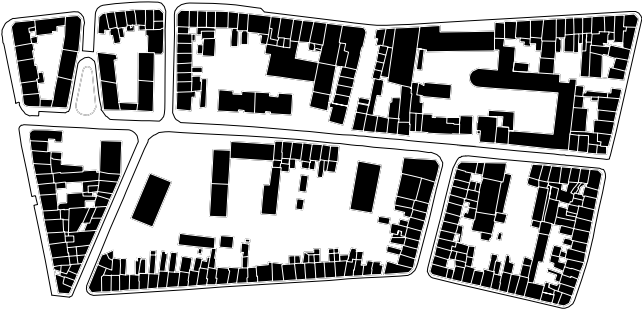
1972



● 1956
● 1972



URBAN VISION



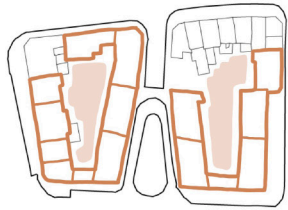
2022



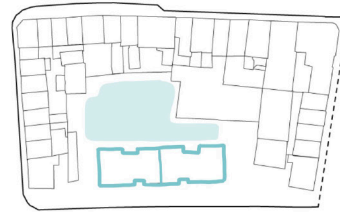
● 1972
● 2022

Understand the formation of the urban void through analysing the change of urban block through time. The urban fabric is being altered in the 70s from merely row housing urban pattern to a mix housing typology urban block to cater the increase population in Bressoux with social housing blocks.

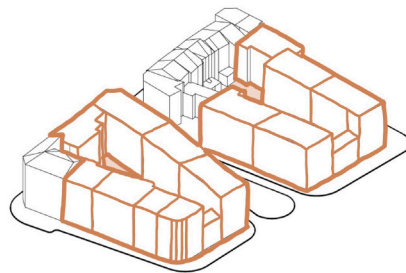
(1)



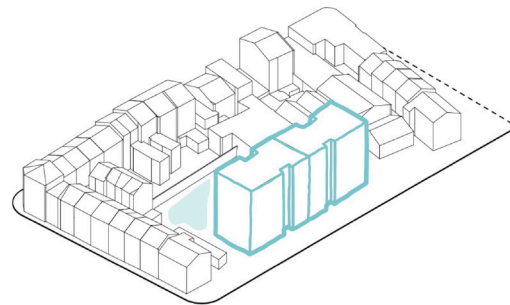
(2)



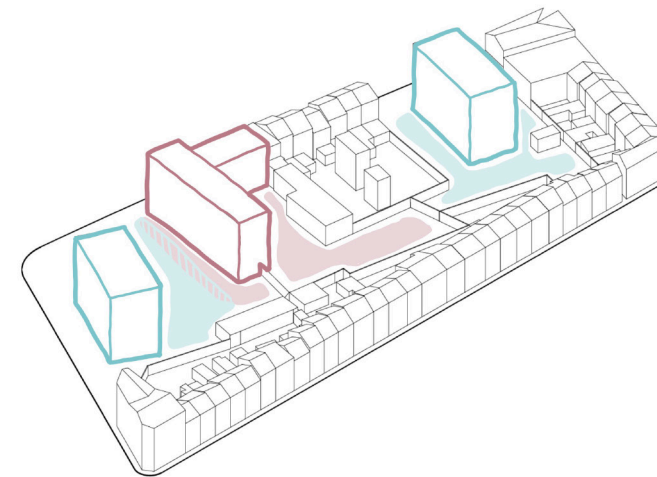
(3)



ENCLOSED



SLAB



SEMI-ENCLOSED + SLAB

THE IMPLEMENTED SOCIAL HOUSING IN THE 70S

In the 70s, urban vision on social housing apartment was being implemented into three adjacent urban block in the heart of Bressoux. Three different typology and combination of social housing was constructed: (1) enclosed courtyard, (2) slab and (3) slab & semi enclosed. The first two typology of social housing merge dwith the existing row houses urban fabric and since they co-created courtyard space in the middle of the urban block. However, the third typology induced a paradoxical urban setting due to ambiguity of the void space as well as arbitrary alignment of the social housing blocks.

2009



2016



- Traditional Houses
- Modernism Apartment Building
- Greenary Pavement / Courtyard
- Pedestrian Pavement



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

2020

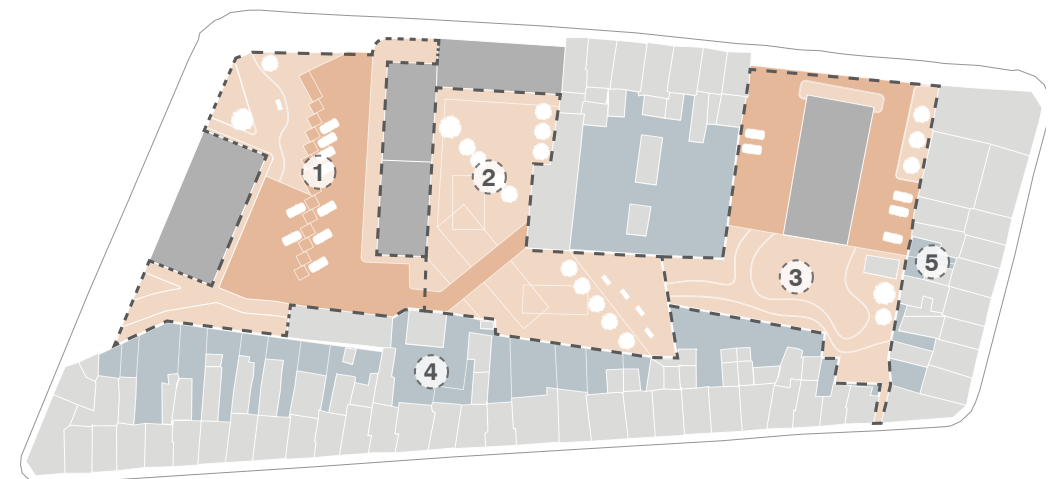


- Boundary Added
- Traditional Houses
- Modernism Apartment Building
- Greenery Pavement / Courtyard
- Pedestrian Pavement

2022

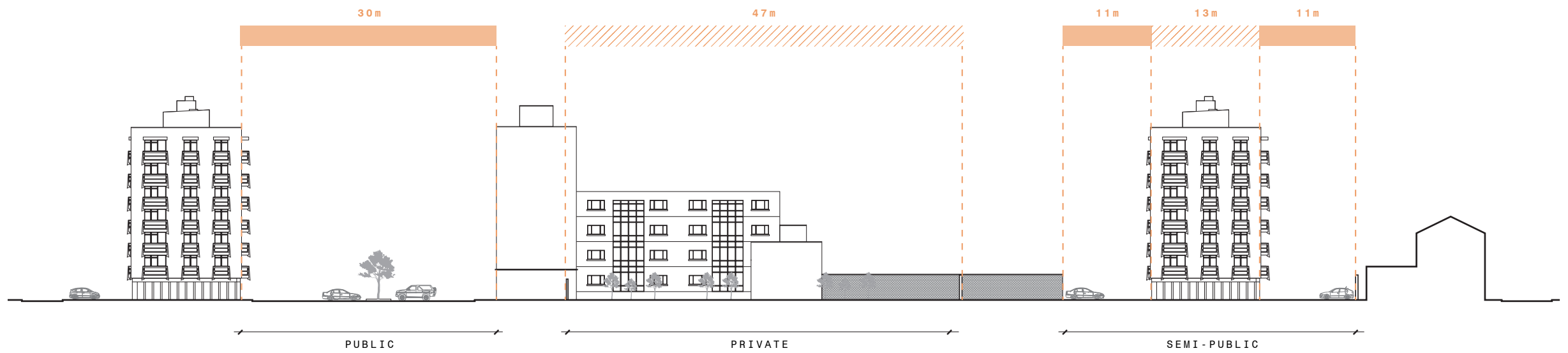


- Demolished
- Traditional Houses
- Modernism Apartment Building
- Greenery Pavement / Courtyard
- Pedestrian Pavement

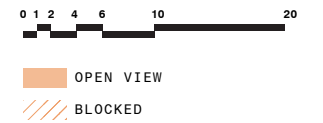


- Traditional Houses
- Modernism Apartment Building
- Private Courtyard for Houses
- Leisure Zone for Apartment Building
- Parking Zone for Apartment Building

The voids also change over time. Boundaries add in between over the period, furnitures were being demolished. Thereby, social interaction between the two housing typology is not found in the urban block.



The voids in the urban block could mainly categories into three part: (1) public, (2) private and (3) semi-public. The access entrance width, usage, pavement and the views defined the a level of publicness of these voids.





(1) PUBLIC VOID

The void situate in between the two social housing slab. Originally, there were two access entrance for the space, however, it lately transformed as a parking space and was installed a mesh wire fence as segregation. The middle part of the void is also a car parking area therefore concrete pavement is used.

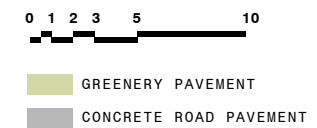
0 1 2 3 5 10

GREENERY PAVEMENT
CONCRETE ROAD PAVEMENT



(2) PRIVATE VOID

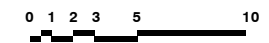
The void could only access by the resident living in the social housing apartment. It is the most well-planned void among the three void in terms of the environment. Yet, is also the lease access friendly void. A gate is added in between the public and private void, while there were no direct access of the void from the ground floor. Residents either need to access through basement or wait the gate open.





(3) SEMI-PUBLIC VOID

The void space is divided into two part, the outer space near the street is a car parking area, while the inner part is a tranquil greengage space. Nevertheless, people seldom notice the inner part since it is blocked by the social housing building and surrounded by the brick boundary wall.



GREENERY PAVEMENT
CONCRETE ROAD PAVEMENT

PASSAGE LEADING TO DEADEND





The current situation of the void is being underutilized. People only go to the place/building directly without passing through the middle void space. However, it existing quality of the space obtain the potential to transform it from a forgotten space into a space of longing for the neighbourhood.

How to design for ‘Emptiness’?

[3]

FROM PASSIVE TO ACTIVE

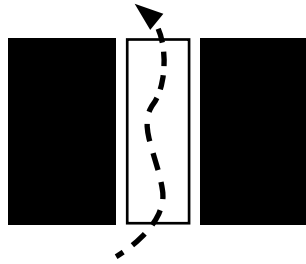
Voids today have not found their position and are generally situated in a more passive role. The negative connotation of emptiness perceived by the general public is derived from the unidentifiable role in the urban fabric.

How could we re-translate the notion of 'emptiness' as a bottom-up ingredient to endow the neighbourhood with an urban significance?

Positive and negative shall be considered mutually significant. Voids are no longer a by-product and both of the elements shall participate in an active role. The purpose of design should be to explore the potential, movement, and interaction in between, thereby stitching back the fragmented urban fabric.

Emptiness could be a ***productive concept*** in the neighbourhood.

[case study 1]
VOID AS A PASSAGE



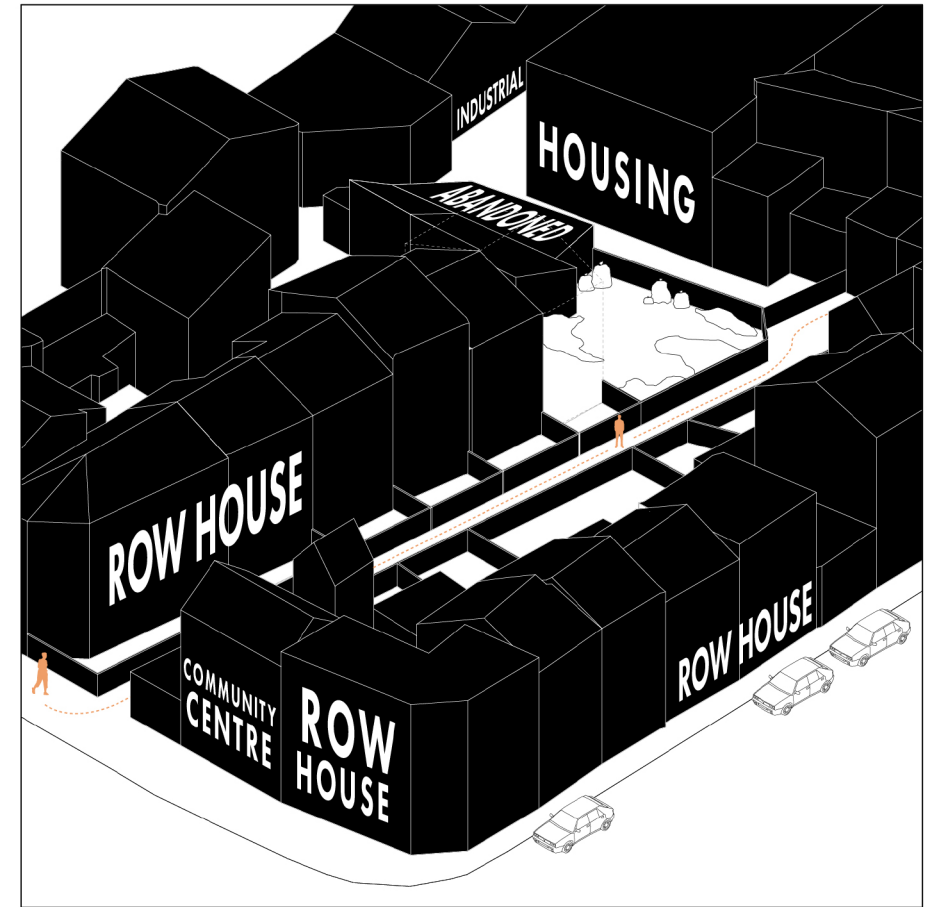
Abandoned
Building

-
Derelict

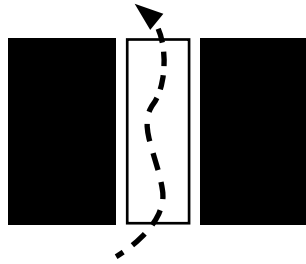
-
Located inside the alley of
urban block

The case study is located inside the alley of a residential urban block. The space is derelict, full of rubbish, and next to an abandoned house. Since it is located inside the urban block, only the residents living in this block will pass by and notice it.





[case study 2]
VOID AS A PASSAGE



Train Rail

-

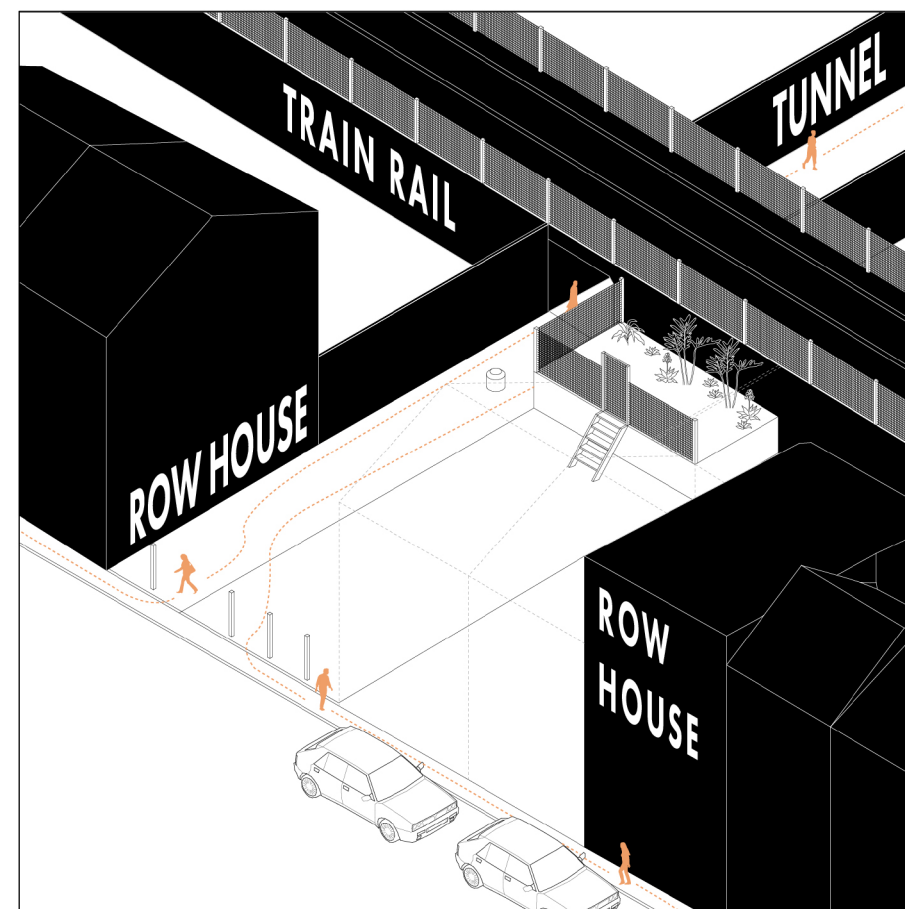
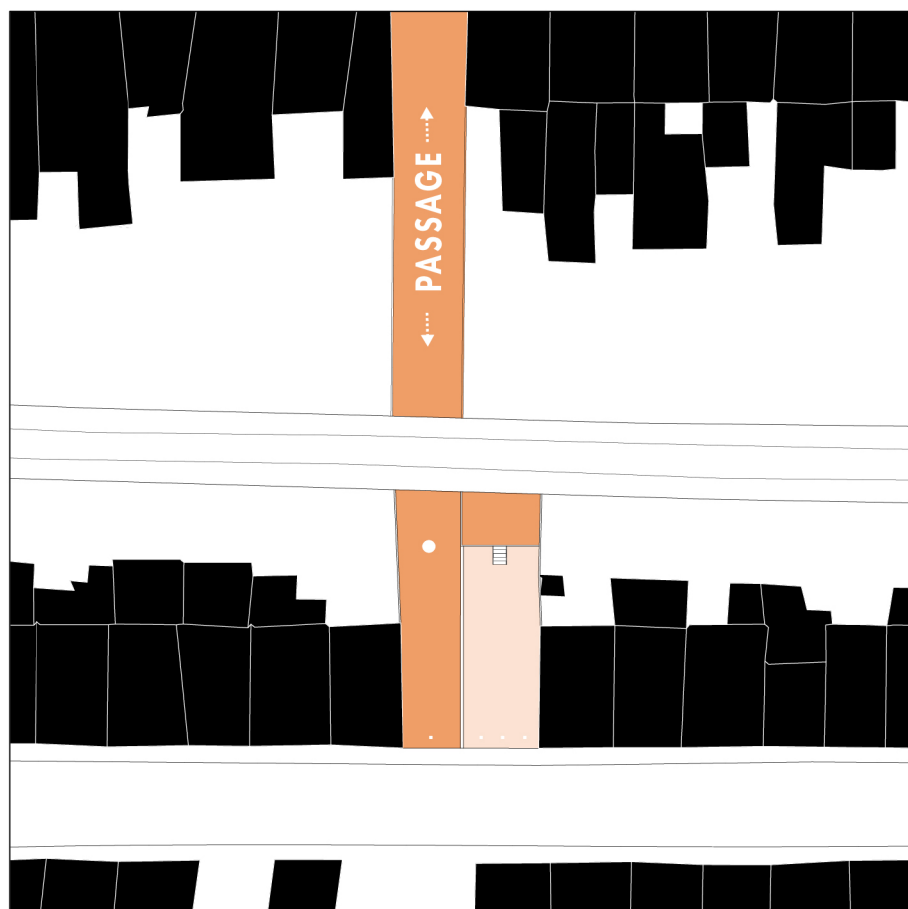
Spatially Empty

-

Located next to the tunnel

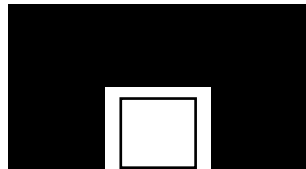
In the second case study, the void acts as a passage. It is in between train rail, residential housing, and next to a tunnel. The void is spatially empty, people will walk pass without stopping or having any kind of activities.





[case study 3]

VOID AS A POCKET SPACE



Storage

-

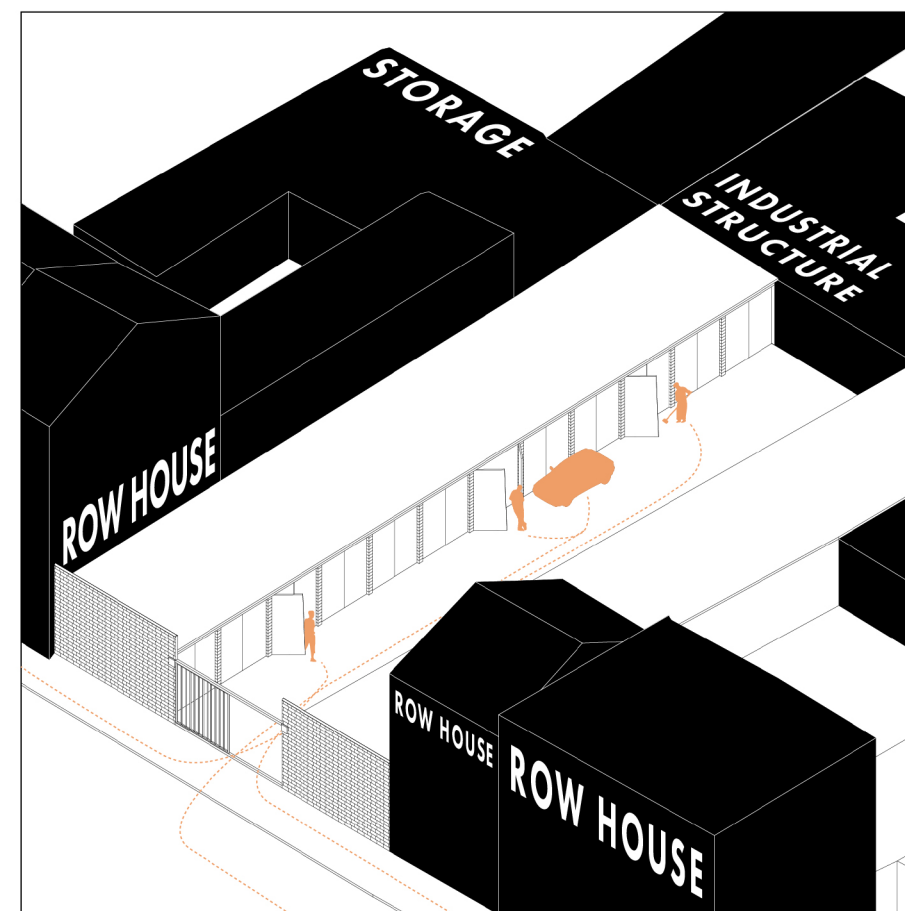
Underutilized

-

*Located between industrial
structure and residential*

The third case study belongs to the pocket space typology. It is an underutilized storage space located between an industrial structure and a residential area. It demonstrates there is a certain level of social activities occurring in the space.





[case study 4]

VOID AS A POCKET SPACE



Parking

-

Football Court

-

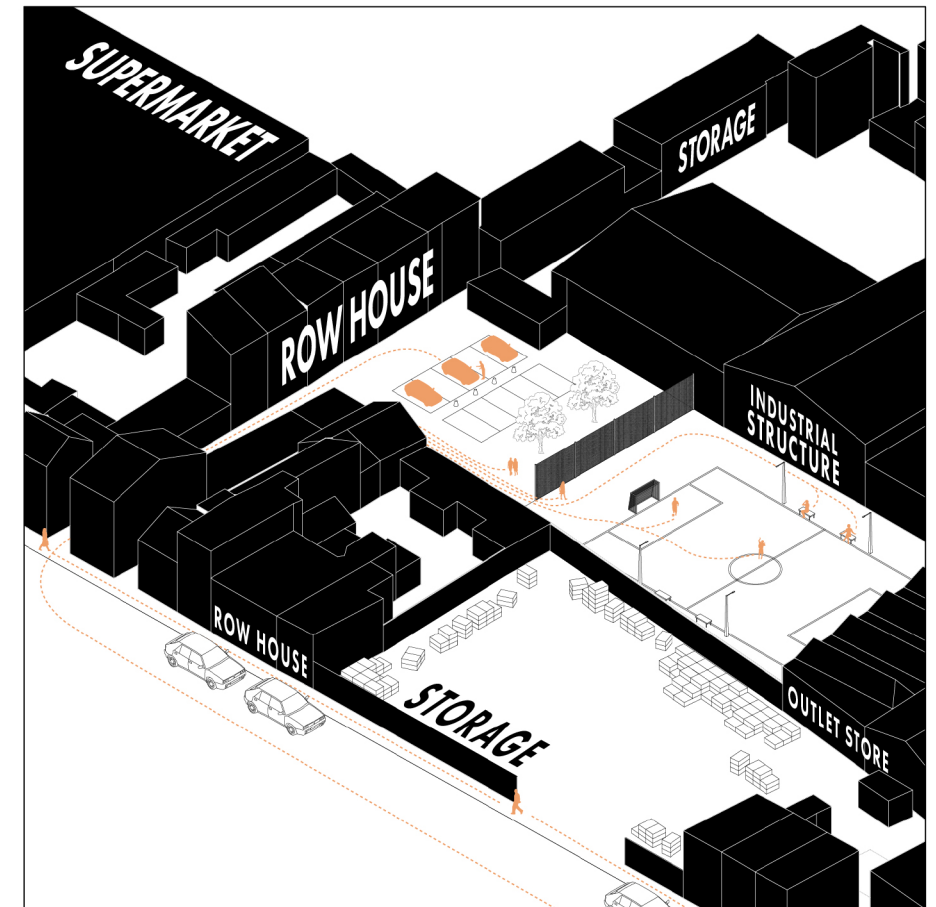
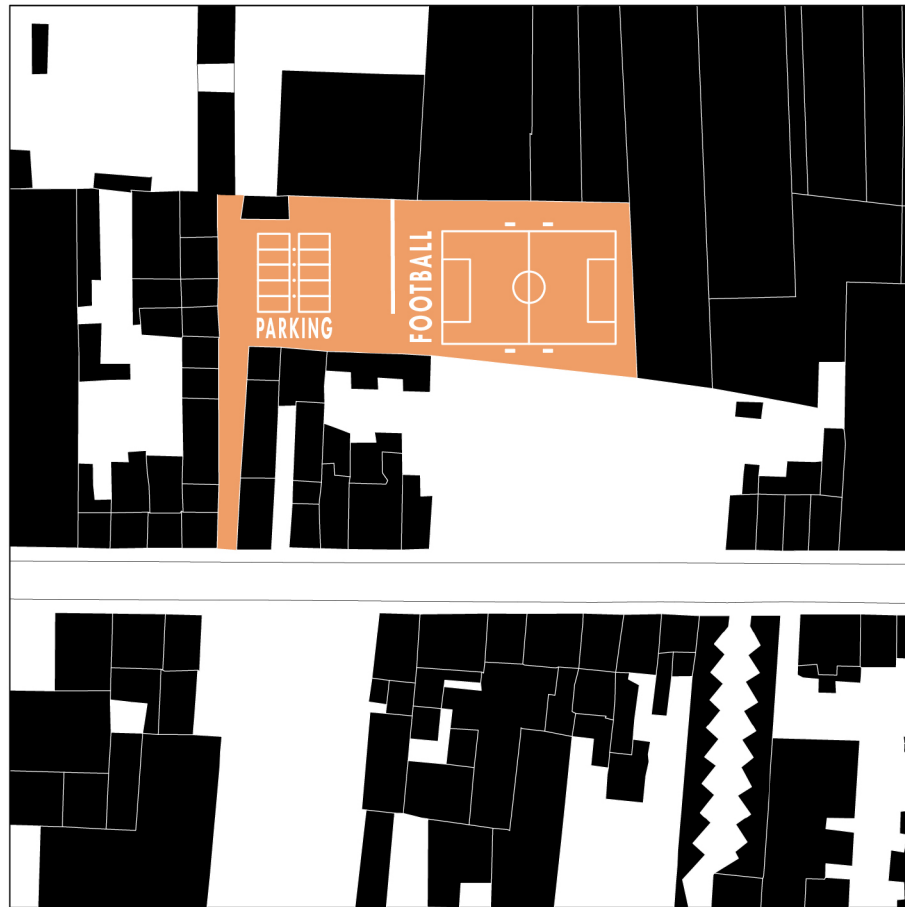
Hybrid

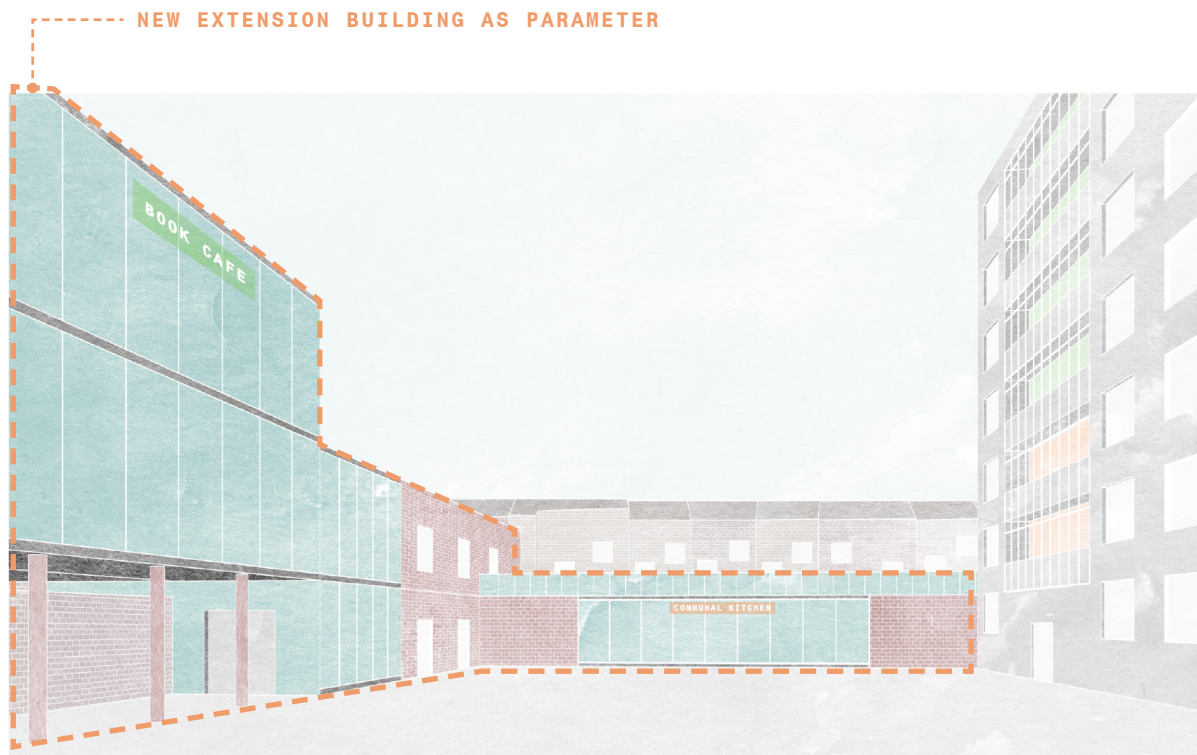
-

*Located between outlet
store, industrial structure
and residential*

The last case study belongs to the hidden pocket space typology. It is located between the outlet store, industrial structure, and residential area. The voids is being divided into two functions, parking space, and an informal football court. A certain level of publicness could be observed from the space and shows the potential of urban voids. Also, the case studies demonstrate that generally voids as a pocket space will easier to deliver a more recognizable role to the space and foster social activities.

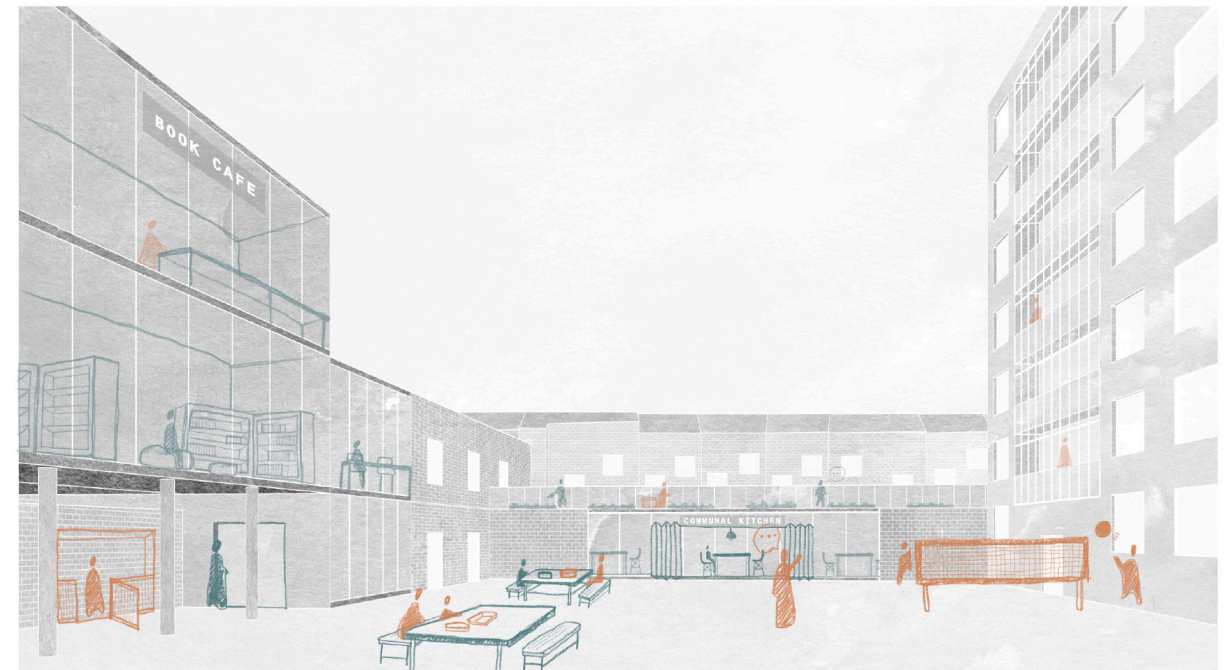






Impression of Solid - Void Concept

Using Positive Massing as a parameter for designing the Urban Voids as in different pocket space, and thereby foster social interaction in between the two housing typology. It could also create layers of void in terms of publicness and spatial quality. The voids and the massing will be considered equally important, hence the design will be exploring the potential, movement, and interaction between the negative and positive space.

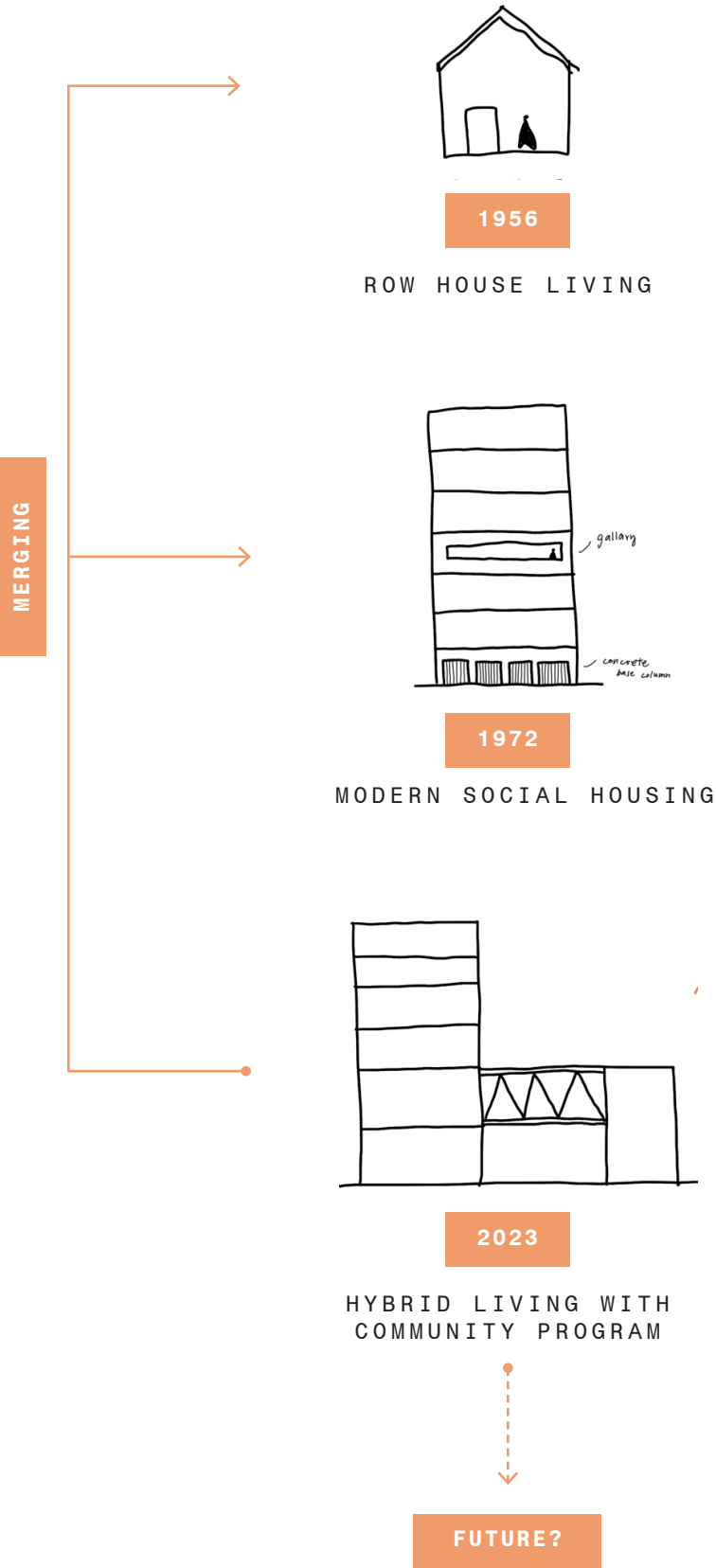


COLLAGE CITY: GROWTH OF ARCHITECTURE

The existing paradoxical urban setting in the urban block evoke the notion of the collage city.

The urban block is the evidence of the montaging different architecture and living style in each era of time, from past, present to future. The design intention is aimed to linked up the difference and enable them to co-exist coherently.

By respecting the ground floor living pattern from the row house residents, retaining the architectural language of the existing modernism social housing block (gallery and concrete column), and merging with the hybrid living with the community programs, it creates a design which suits for the living style in current era. The design will also be considering about flexibility, in which allow the architecture keep on evolving in the future, and accommodate the next generation.



URBAN PROPOSAL:
VOIDS AS A MENDING TOOL

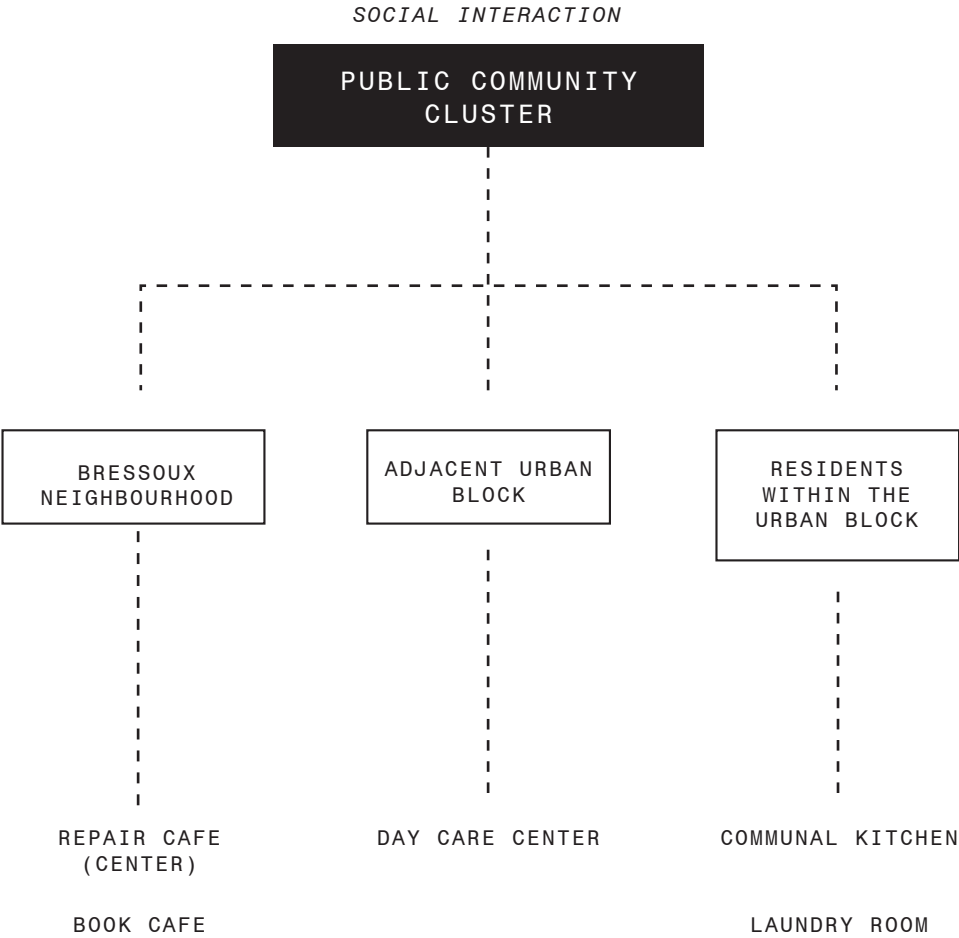
The design proposal is conceived ‘void’ as a concept to design a public community cluster, catering everyday needs of the residents and the locals, as well as offer opportunity for communal activities.

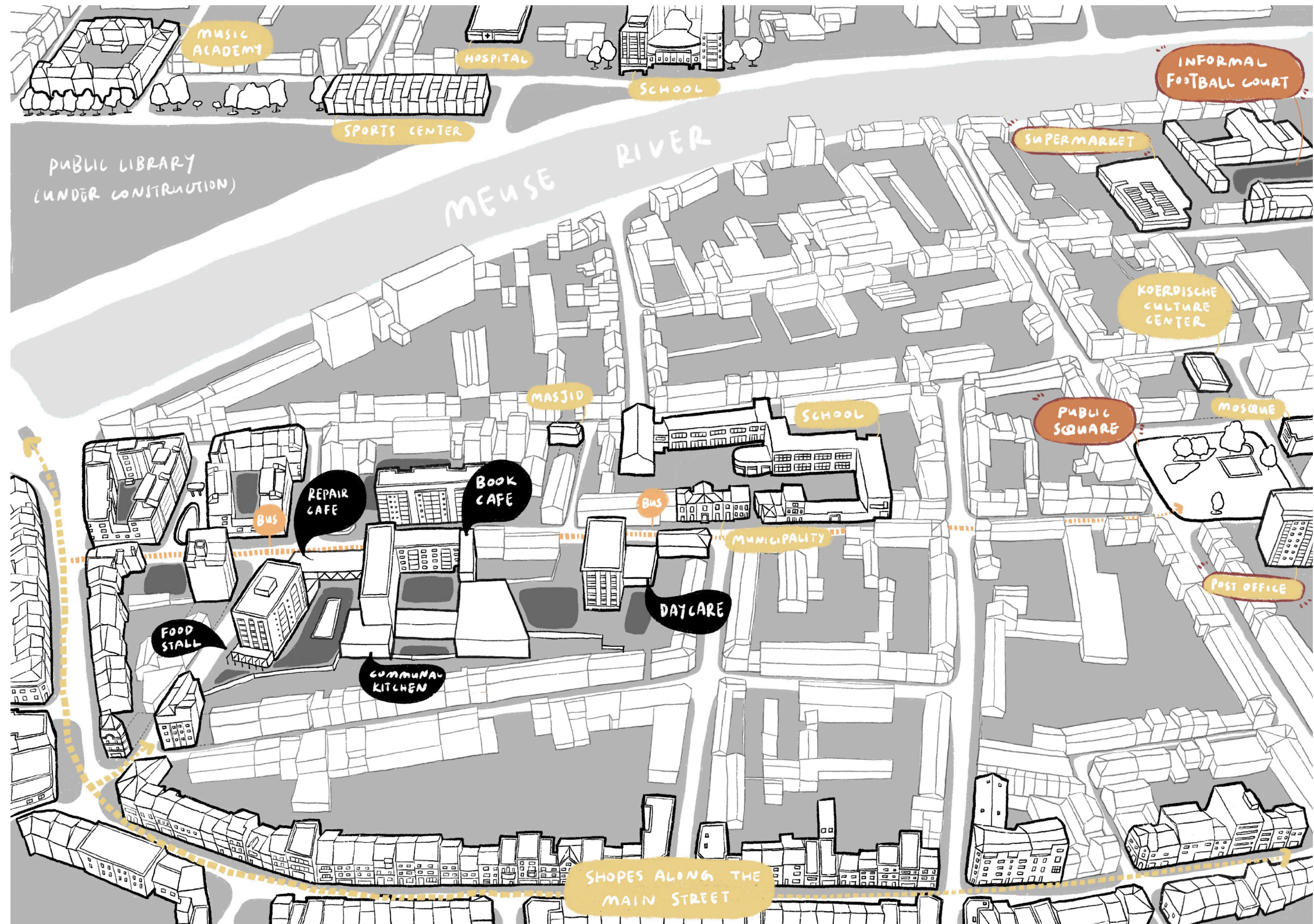
The community cluster is aimed to reconnect and foster social interaction in 3 levels: (1) Bressoux Neighbourhood, (2) Adjacent Urban Block, and (3) Residents within the urban block.

In Bressoux, many of the public amenities are facilitating specific target group, for example cultural centre and church. Also, the public square located in Bressoux is small and surrounded by car roads, in which discourage the public to stay and gather, Thereby, I designed repair cafe and book cafe to offer a new gathering space in the neighbourhood. The repair cafe is located near the bridgeside across the river, aiming to reconnect Bressoux with other part of Liege by attracting people come over to fix their appliance. The book cafe offer a more tranquil gathering environment therefore it is situated inside the urban block with a subtle entrance facing the street.

The Day cafe center is designed to connect with the adjacent urban block where a primary school situated in it. It helps the locals to lower the burden of child rearing.

Communal kitchen and laundry room are programs mainly designed for the residents within the urban block. Since there are barely any social interaction in-between the two housing typologies, the programs aimed to conceive as a connecting platform for the residents, proposing an opportunity to carry out everyday life activities together and foster a common social life.

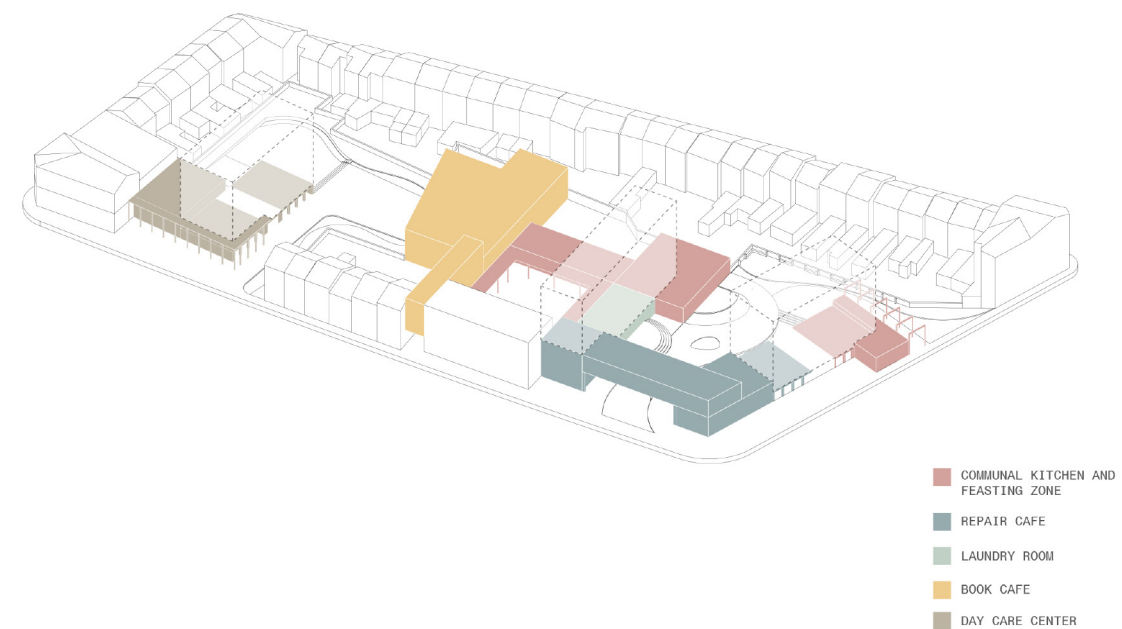
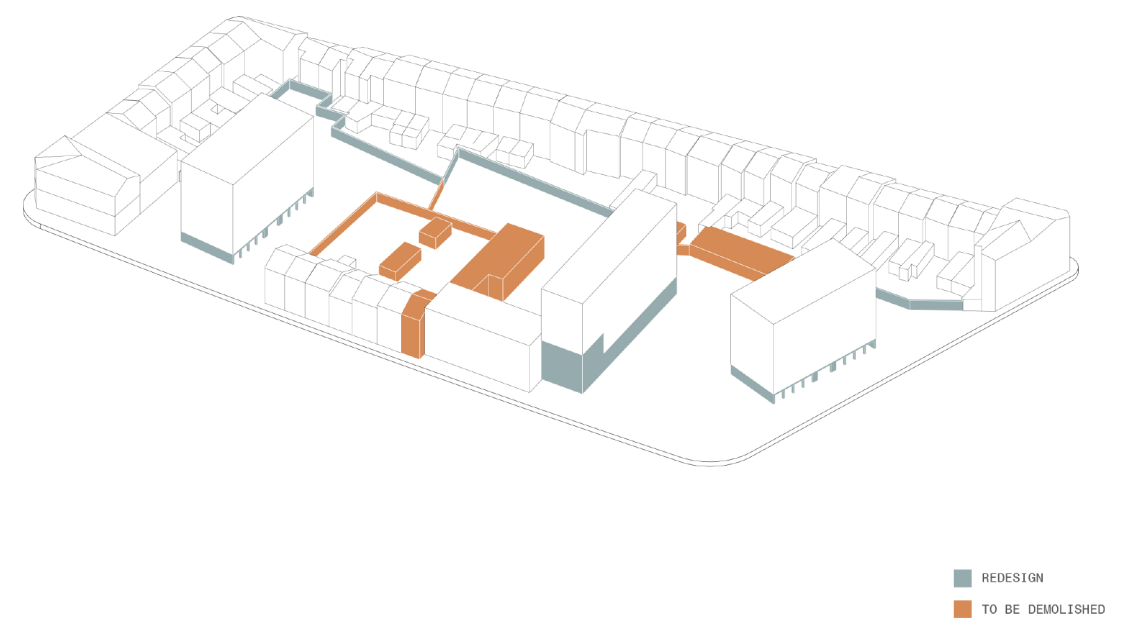




URBAN PROPOSAL:
VOIDS AS A MENDING TOOL

The diagram demonstrates the alteration proposal for the existing site. The ground floor of the social housing blocks will be adaptively reuse as part of the community programs, while the full height brick boundary wall will be redesign in order to blur the boundary between the two housing typology. The ground floor of the urban block will be redesign to open up the void through exploring the movement between interior and exterior, create various pocket space to carter different activities according time and usage.

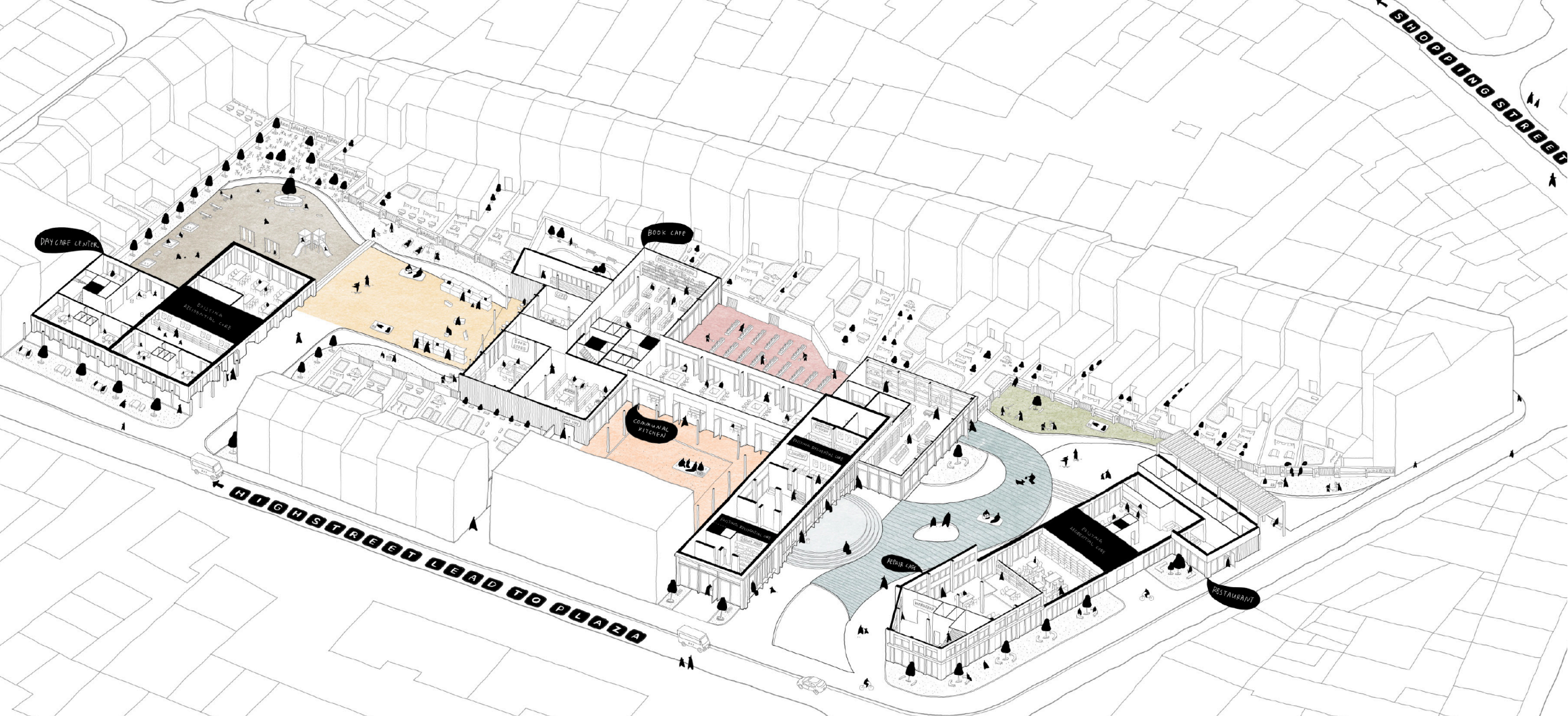
The new built massing are mainly extensions between the buildings, aiming to reform the existing configuration, fostering a stronger correlation in between buildings, voids and street.



FORMATION OF HIGHSTREET



NEW INTERIOR OF THE BRESSOUX NEIGHBORHOOD



VOID AS A NEW INTERIOR

By implementing different community programs and reforming voids in different pocket spaces, it becomes a new interior in the urban block and induce a vibrant social living and activities.

[4]

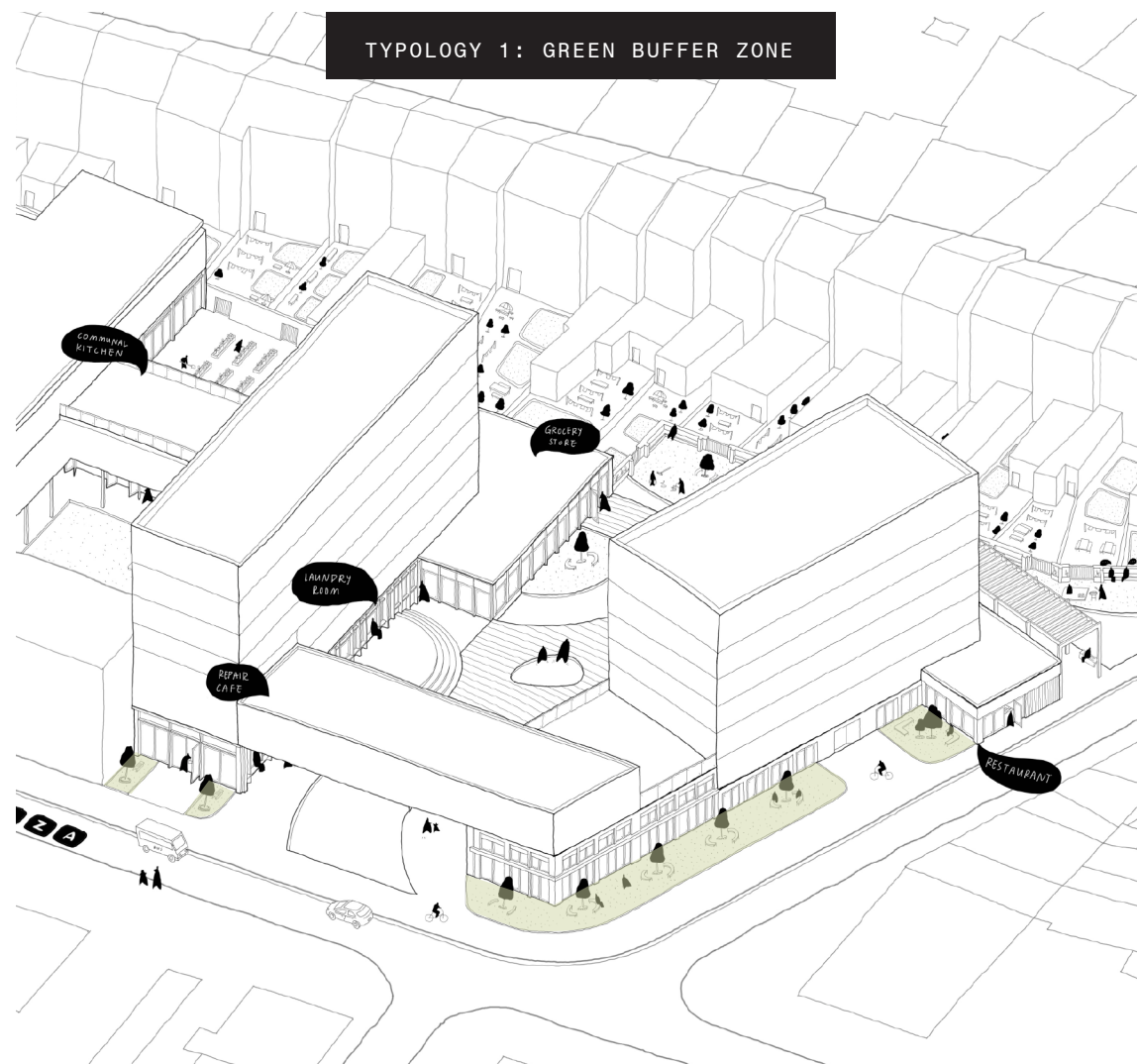
AN ALTERNATIVE PUBLIC SPACE

“Urban voids are both evidence and respite” (López-Piñeiro, 2020b)

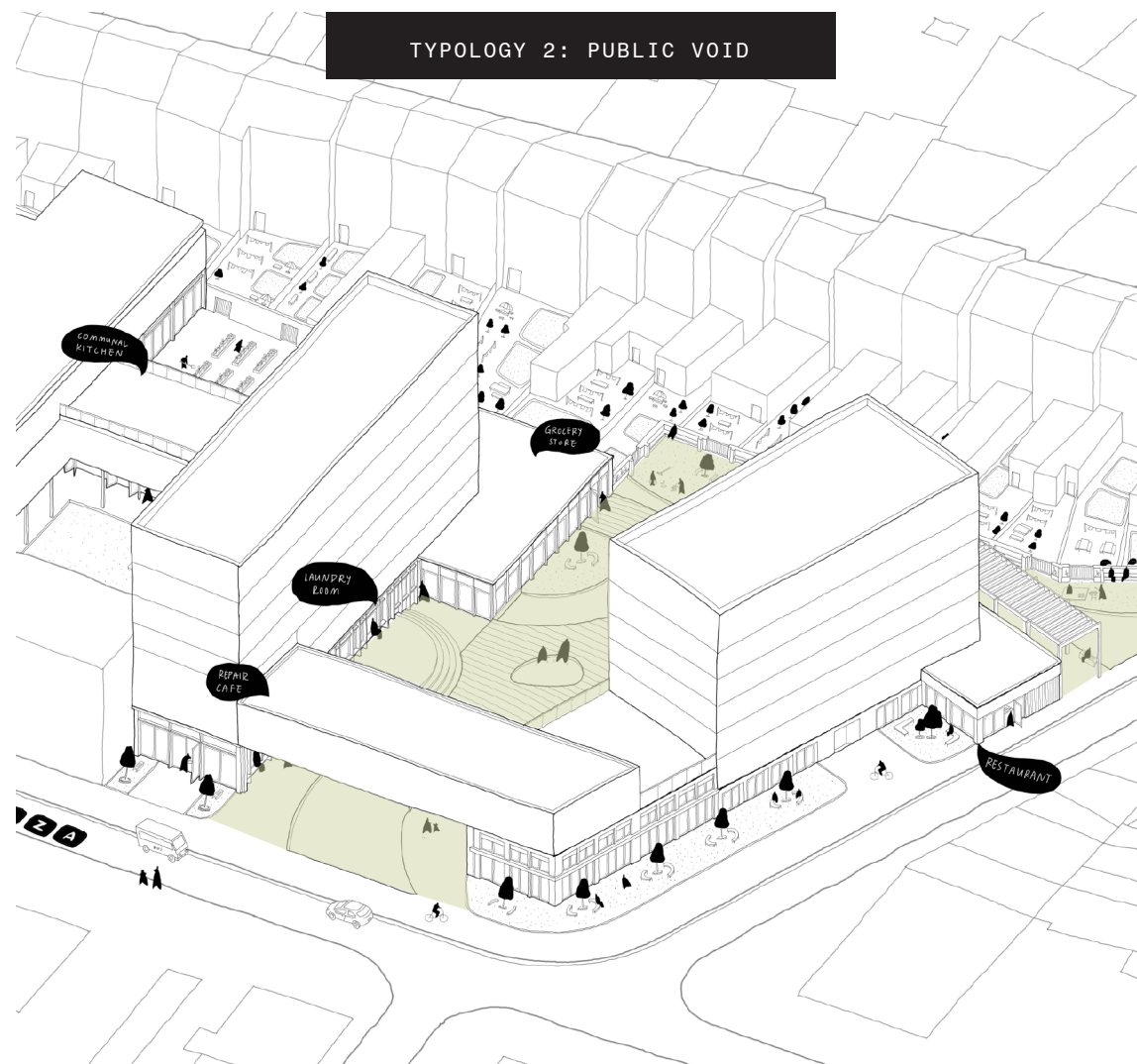
Voids is a shred of evidence, composing the trace of the past as well as the everyday living in the neighbourhood. Its liberating nature could catalyse spontaneous activities occur, and its substantial correlation with the neighbourhood enable the residents themselves to be the agent of place-making.

Emptiness could be designed as various pocket spaces to cater to different levels of privacy and usage according to time and users. The notion of urban void could be paraphrased as an alternative public space that truly belongs to the community, thereby nourishing a thriving urban life in the neighbourhood.





Since the social apartments are setted back, it allows to create a green buffer zone between the urban block and street. The space is open to public and conceived as an alternative leisure zone in the highstreet.



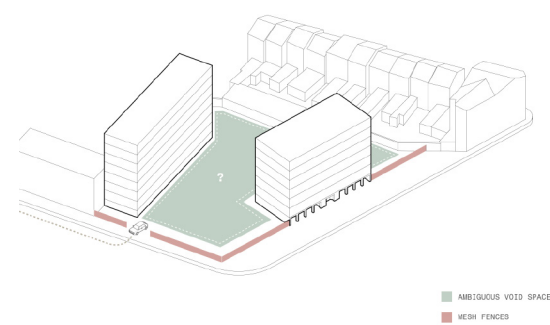
The public void acquire two access entrances, one facing the high street with transportation stops, while another situated near the main shopping street. Water and wood platform are introduced to guide the public to walk into the middle void space from the street.

EXISTING SITE CONDITION

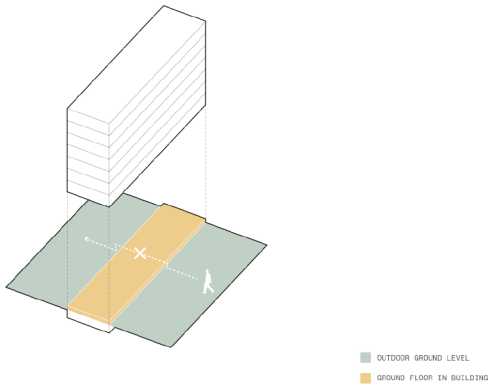
The void in between is ambiguous due to the different alignment of the social housing blocks and the unclear material pavement usage in the void. The peripheral of the voids are green space yet surrounded with mesh fence, while the inner part is a car parking lot for the residents. The space is also disconnect with the street due to the mesh fence, the entrance of the void is narrow and only car could drive in.

The second issue in the site is one of the social housing blocks acquire a higher level of ground floor compare to the exterior. People are unable to pass through the building to another part of inner courtyard due to the level difference.

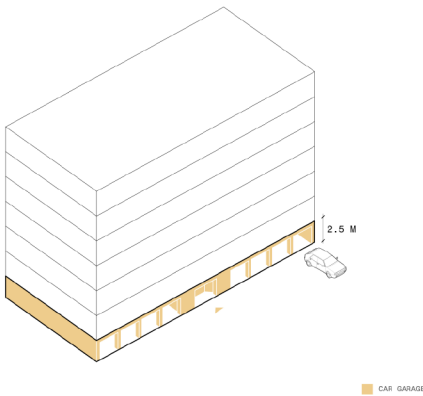
In another social housing block, the lower ground is formerly used as car storage which lead to a low ceiling height and unbeneficial to work with the communal program in the plinth.



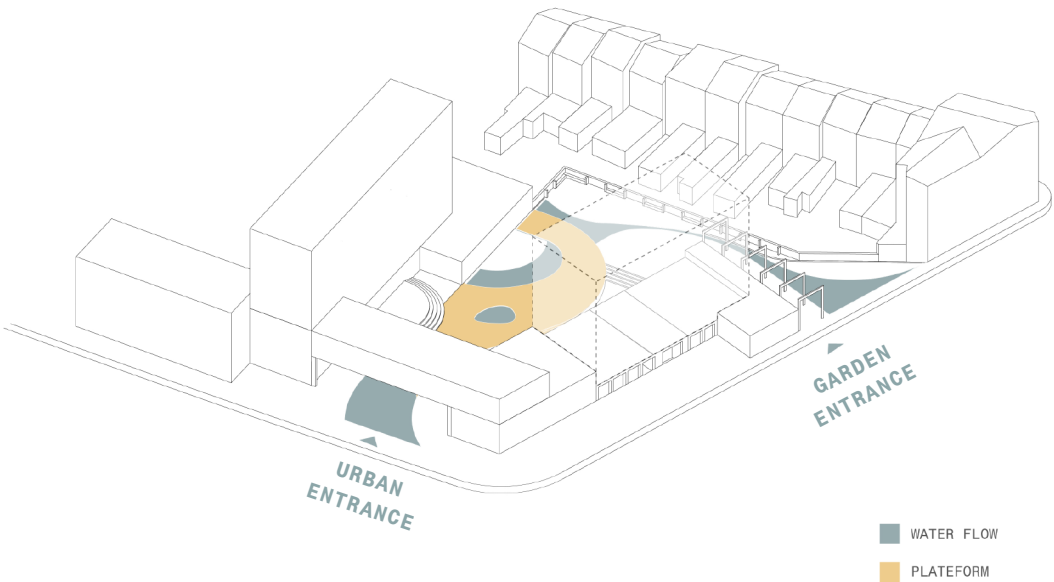
Disconnection between:
(1) the two social housing apartment
(2) middle void space and street



Different level between interior and exterior



Low Ceiling Height due to Former Car Storage Function



Design Concept:

- (1) Introduce **WATER** as connection between the two housing typology
- (2) Void as **VOLUME** and **NEW INTERIOR** in the urban fabric
- (3) Void as a solution to tackle the issues discovered from the existing site condition

GROUND FLOOR PLAN

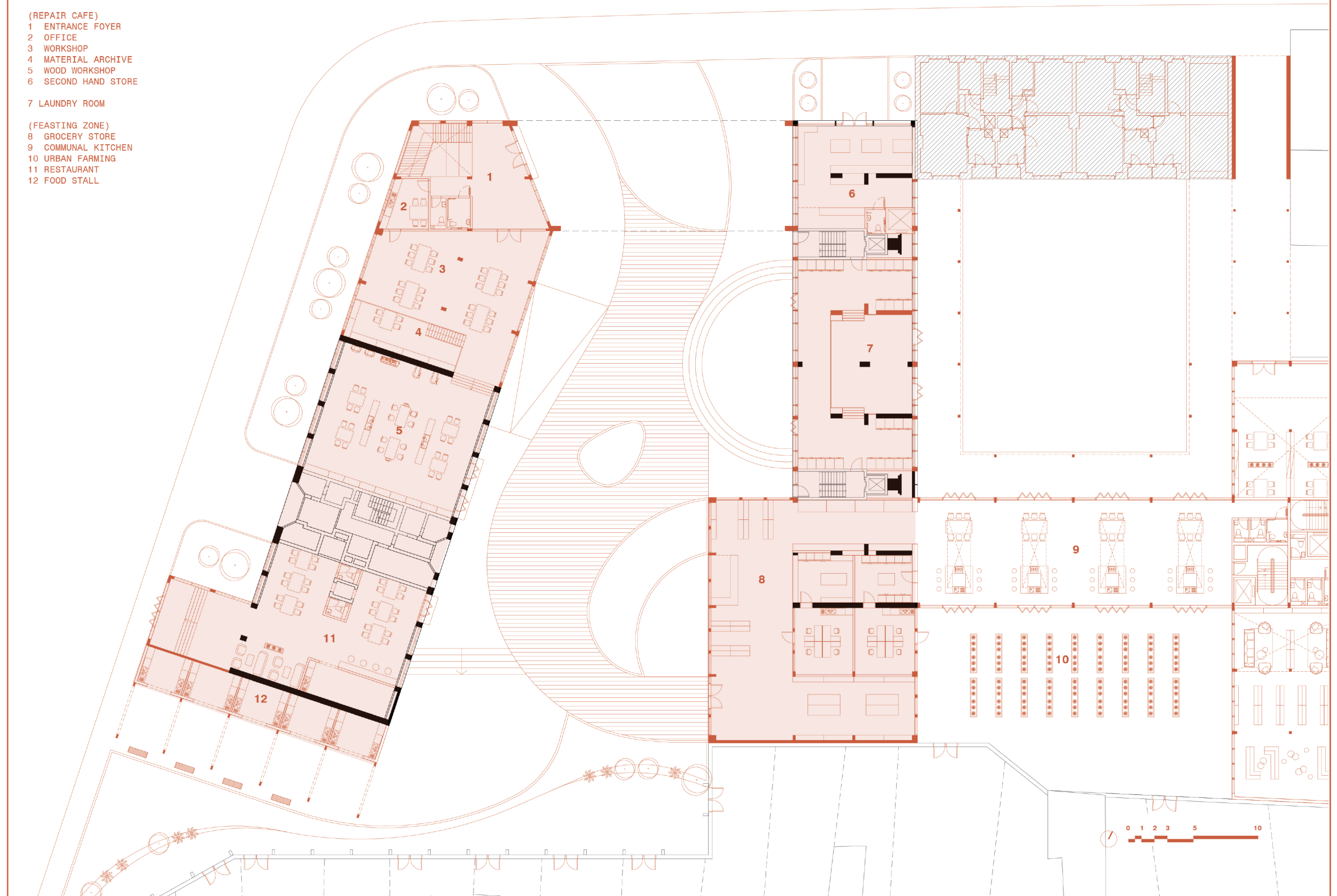
(REPAIR CAFE)

- 1 ENTRANCE FOYER
- 2 OFFICE
- 3 WORKSHOP
- 4 MATERIAL ARCHIVE
- 5 WOOD WORKSHOP
- 6 SECOND HAND STORE

7 LAUNDRY ROOM

(FEASTING ZONE)

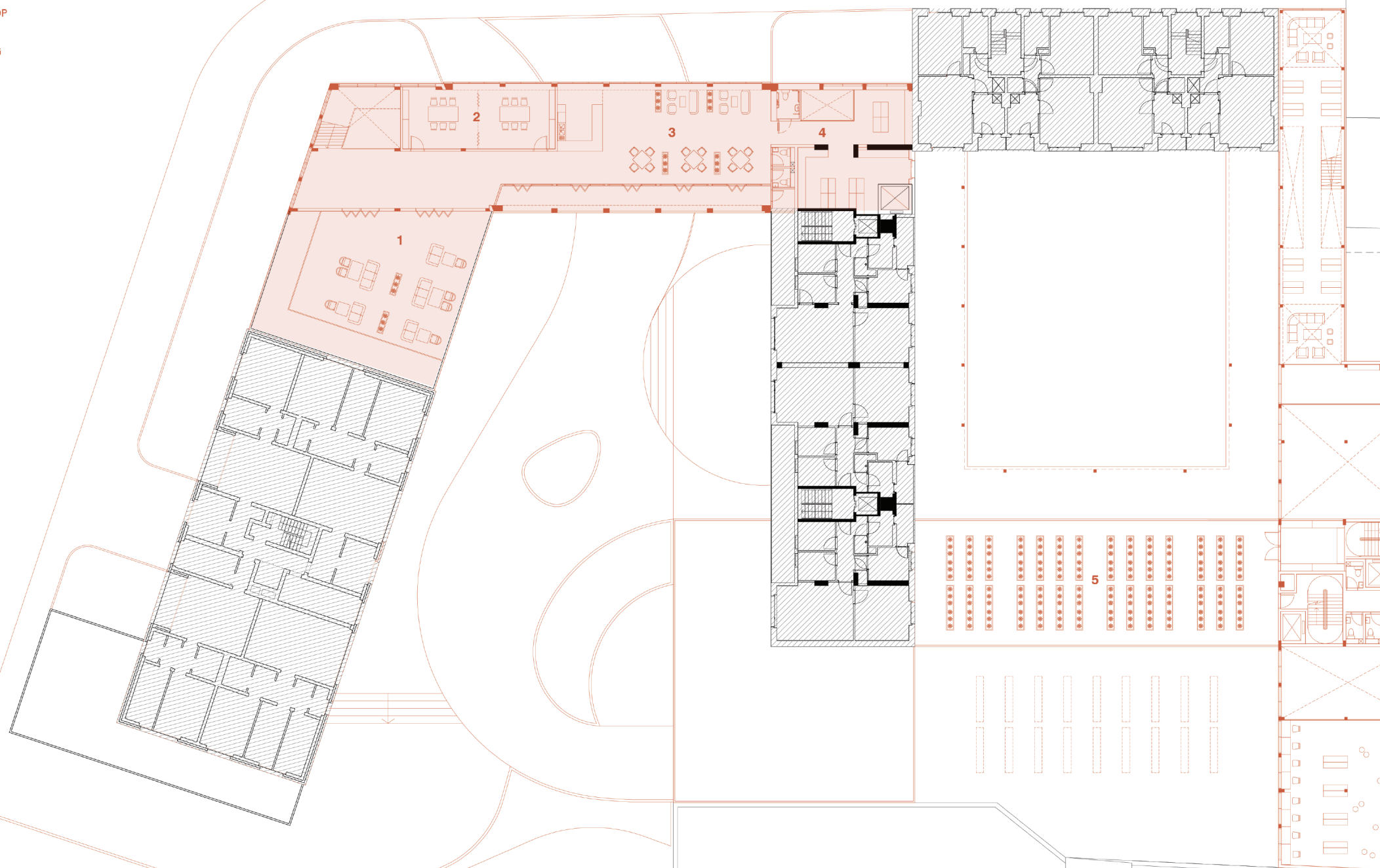
- 8 GROCERY STORE
- 9 COMMUNAL KITCHEN
- 10 URBAN FARMING
- 11 RESTAURANT
- 12 FOOD STALL



FIRST FLOOR PLAN

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

- (FEASTING ZONE)
 5 ROOFTOP FARMING



FORMATION OF PUBLIC VOID

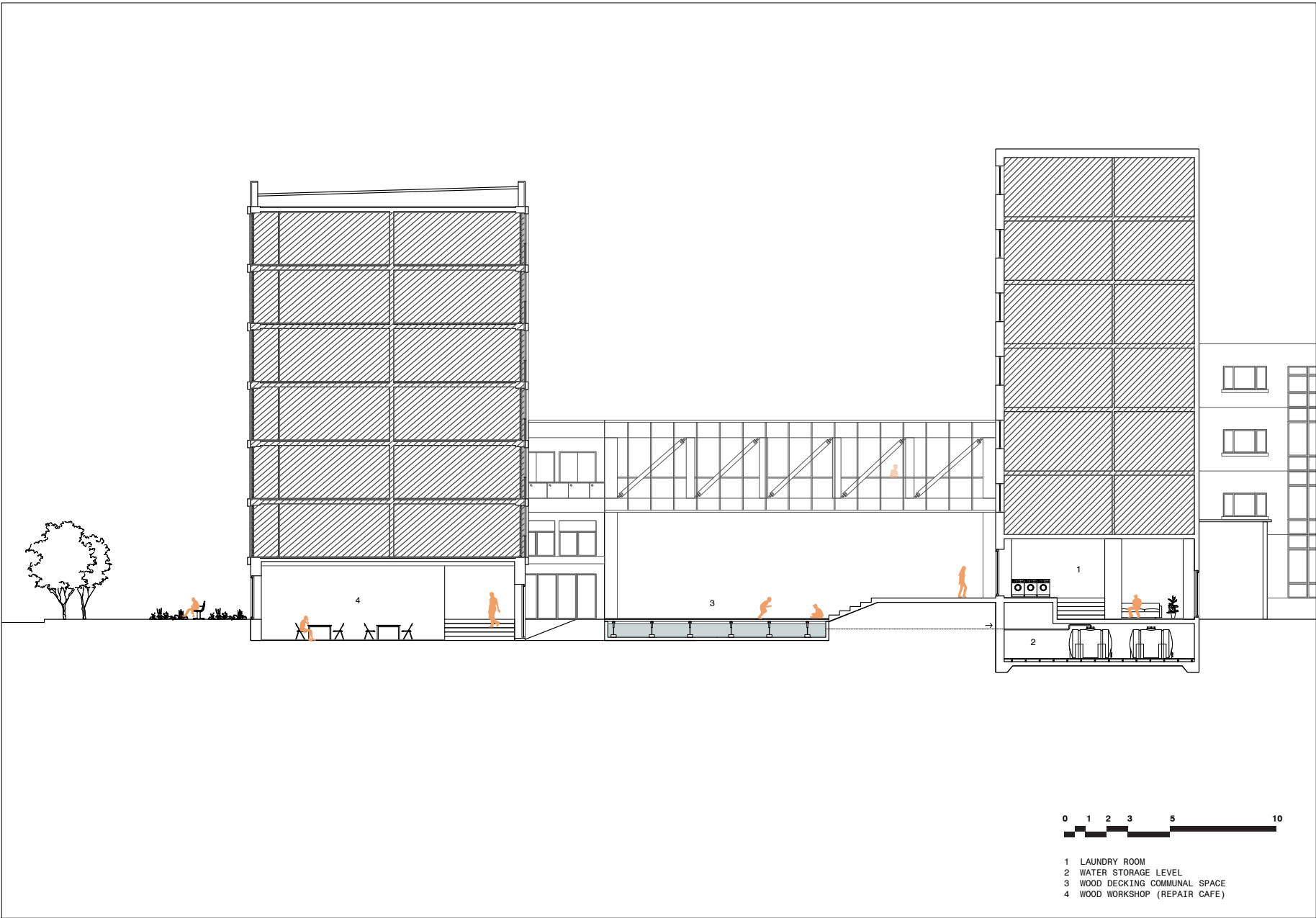
The two social housing blocks are connected by the wood decking platform in between with water pass through underneath. It is conceived as a gathering platform for the public, aiming to create an atmosphere of urban oasis through designing nature elements such as water. The section also shows the water from the pool come from the water tank in the basement, which is also a circular process of rain water collection.

Since the building in left obtain a low ceiling height, the interior ground floor is designed 1m lower to create a more comfortable headroom for workshop space.

A small stage is designed in between the wood decking and the building in the right due to the higher ground level in the interior.

The bridge in between connected the two social housing block in order to frame the space and create like a feeling of room, in which

The bridge is design as a soft boundary to define interior (void) and exterior (street), framing the space by connecting the two social housing to create a FEELING OF ROOM.



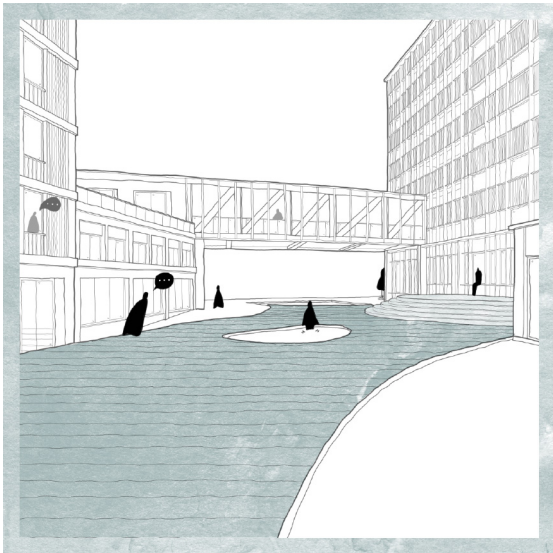
PUBLIC VS PRIVATE DOMAIN

The green diagram represent the private domain, a small green island is designed for the row house residents as a buffer zone between private and public domain. It encourages the residents to collectively design their facade of the backyard and interact with the public according to their willingness.

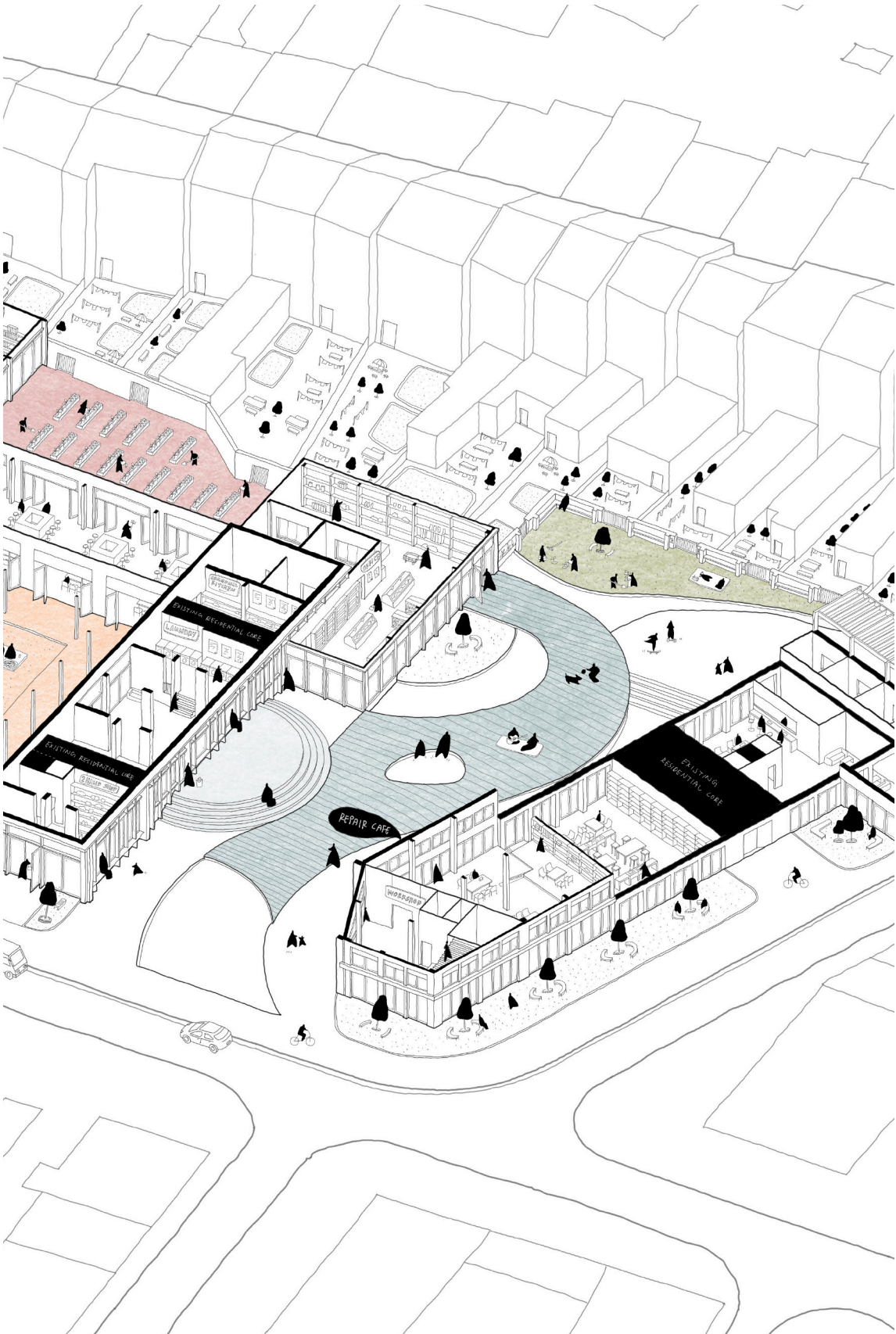
The blue diagram illustrates the platform as a new gathering space for the public and the residents from the social housing blocks. By interacting with the water flow and small stage next to the existing building block, it allows a wide range of social activities occur in this leisure zone.

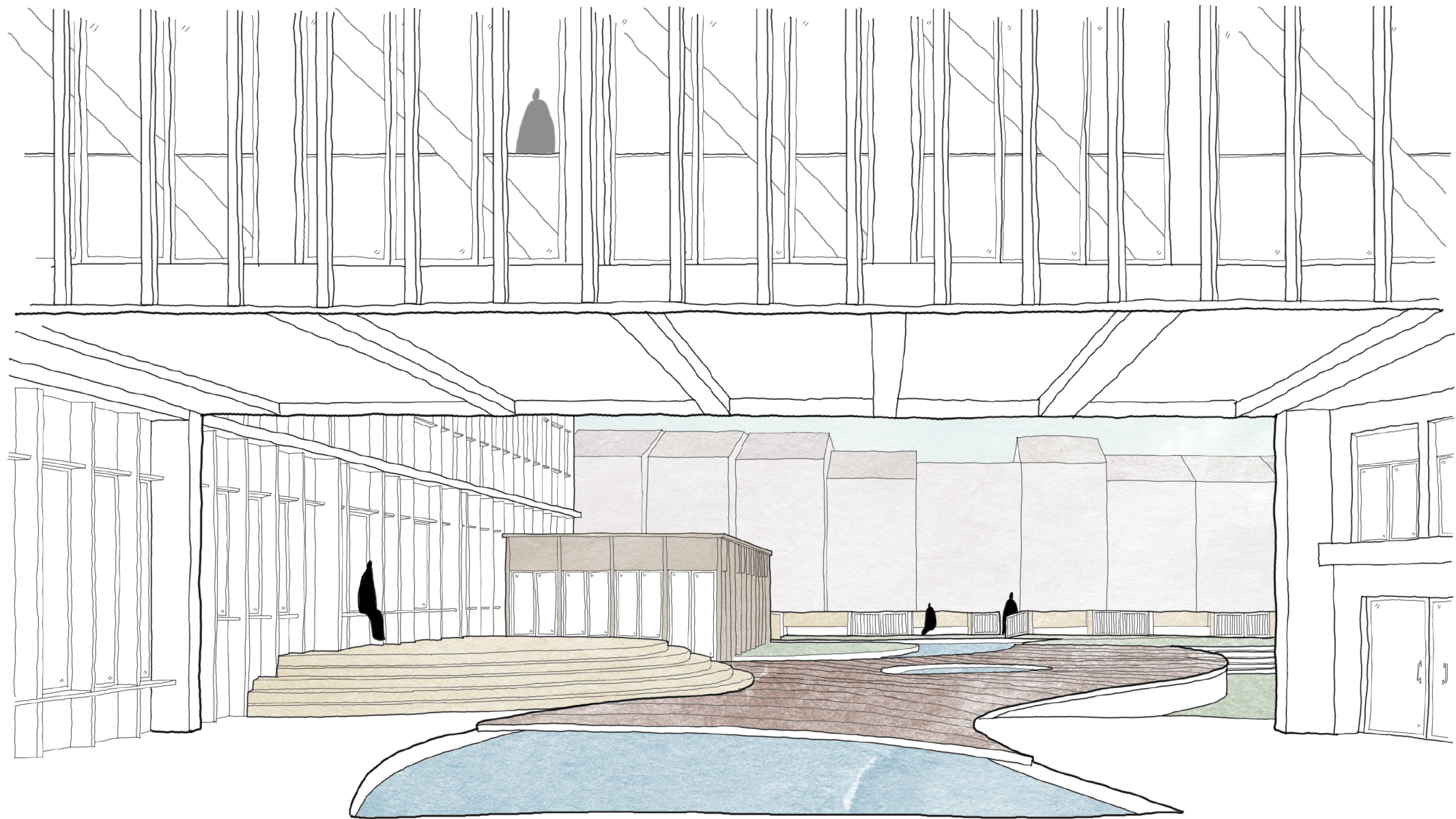


Small Green Island for the Row House Residents



Platform as a New Gathering Space



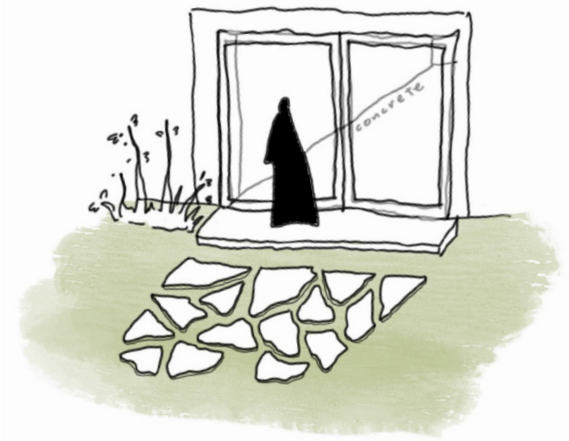


FRAMING THE URBAN ENTRANCE WITH THE BRIDGE

MATERIALIZATION OF THE URBAN ENTRANCE

The water flow facilitate as a guidance to lead the public walk into the void. Partial of the water stream is covered by the bridge, which allow the shadow of the water reflect on the bridge and create a more poetic atmosphere.

The lower part of the diagram illustrates how the materialization of the pavement leads people walk into the building and blurring the boundary between exterior and interior. The exterior adopted a green pavement with crushed concrete, which reuse the leftover material from the demolition procedure, while the interior flooring continued with concrete material.



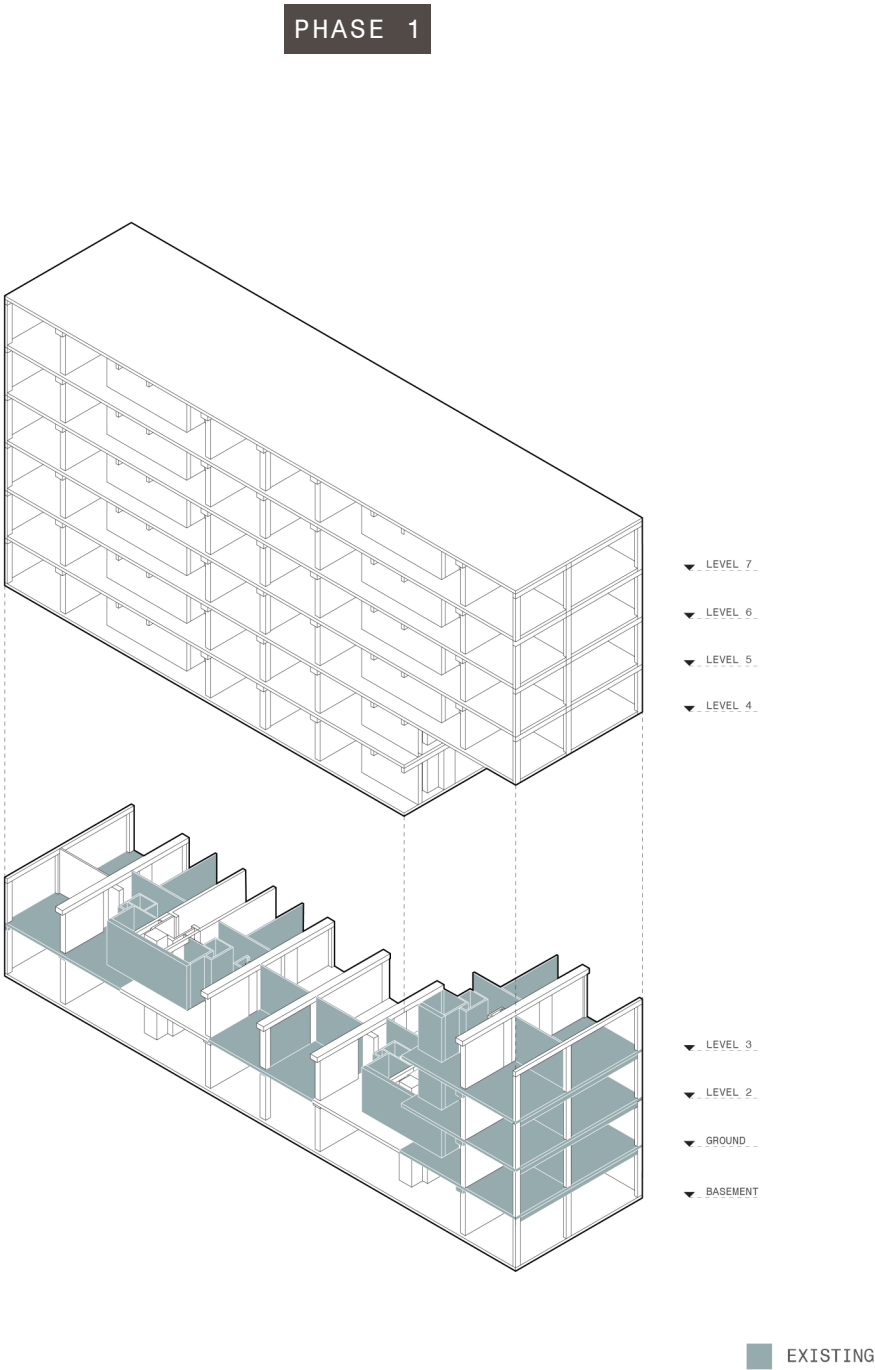
INTERWEAVING BETWEEN THE NEW
AND OLD

The diagram illustrates the demolition procedure of the social housing step by step, and it could be divided into three phrase.

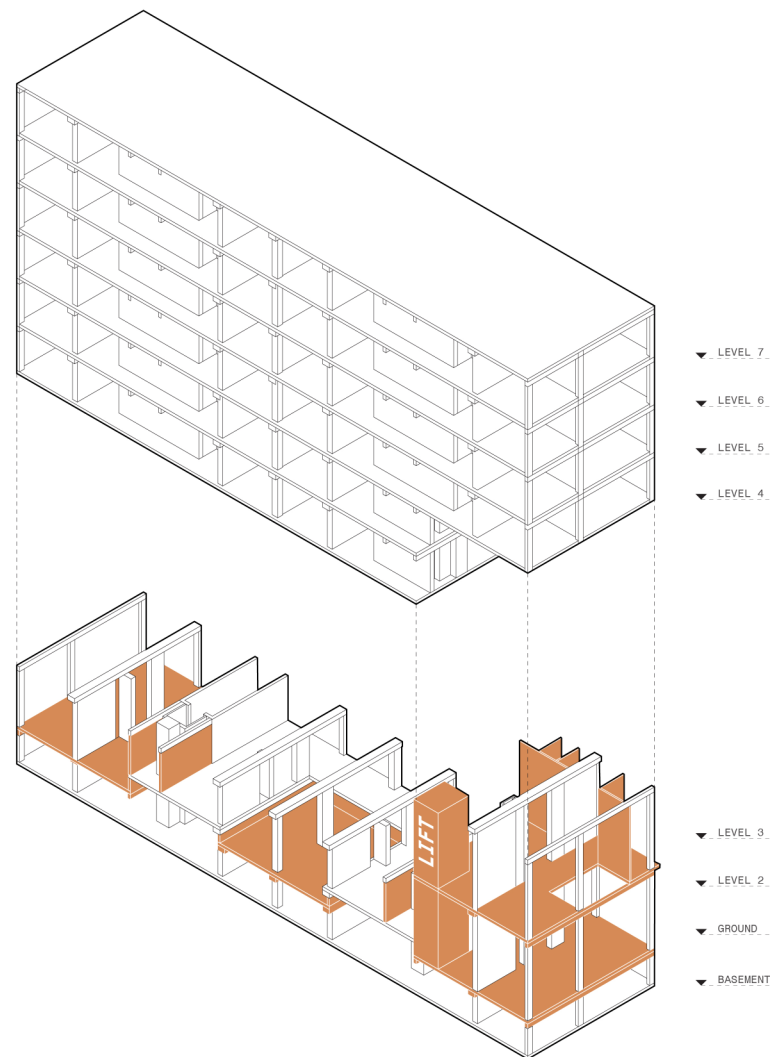
Phase (1): Demolish Unused Floor Slab to Create Larger Space for Communal Program (Repair Cafe, Laundry Room, Communal Kitchen)

Phase (2): Reconstruct Floor Slab to Connect Exterior Ground Level

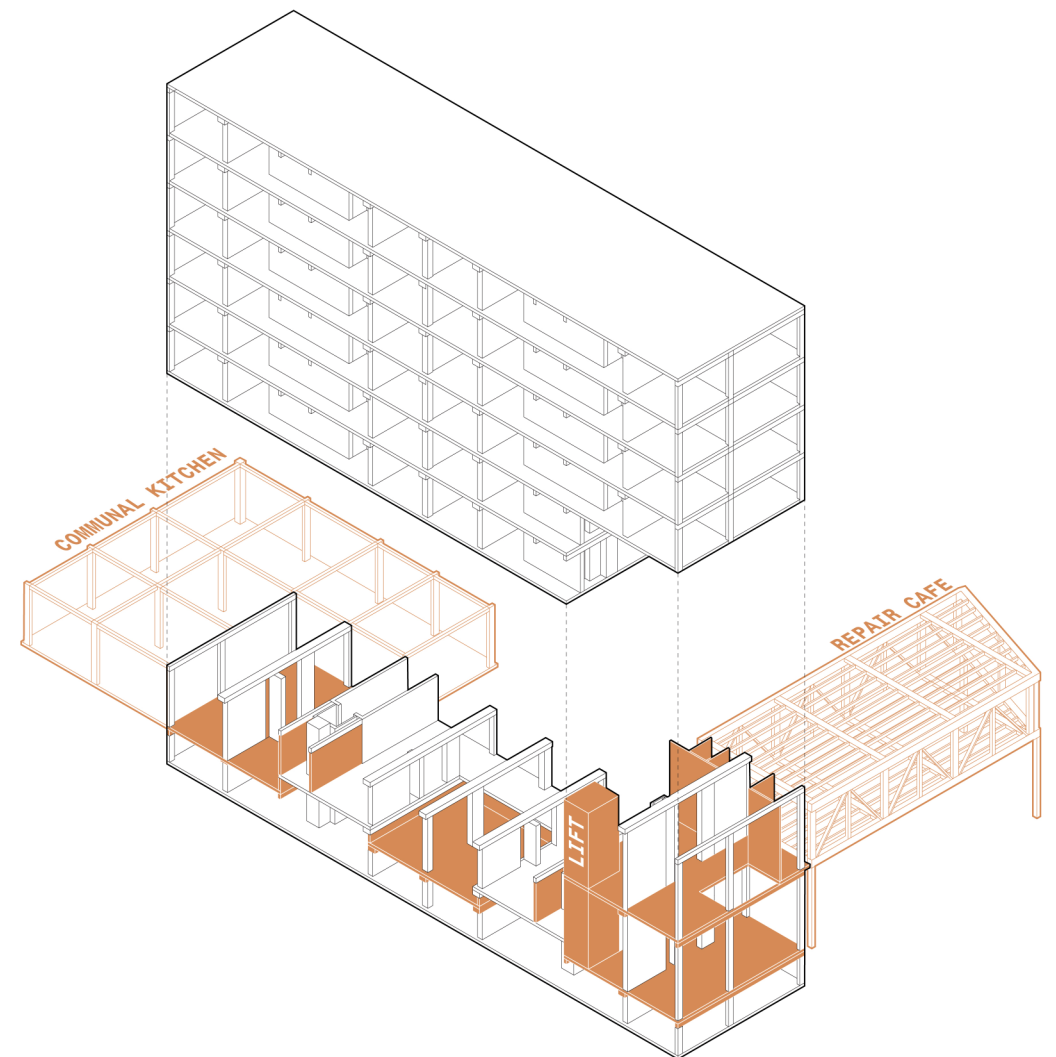
Phase (3): Add Extension to Connect the Building with the Surrounding



PHASE 2



PHASE 3

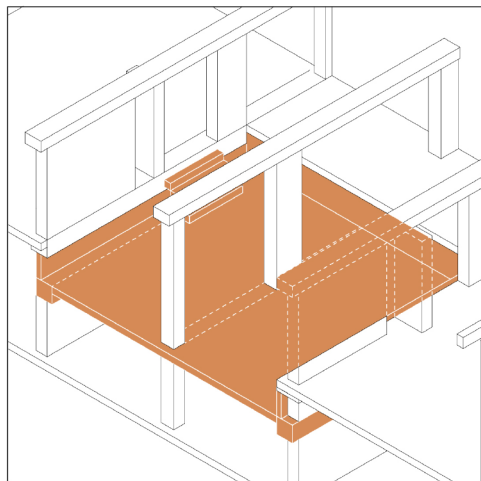
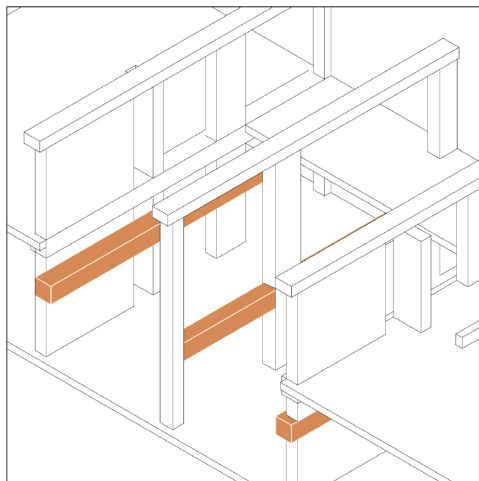
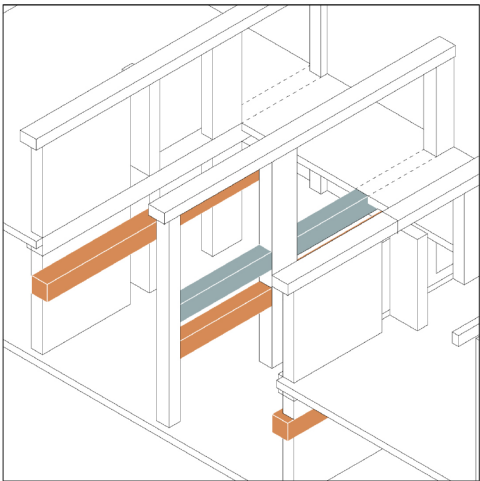
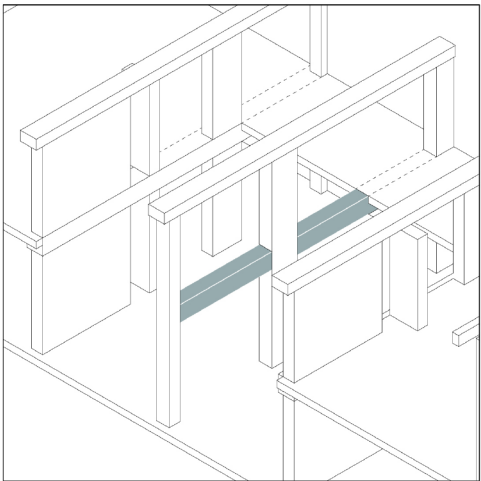
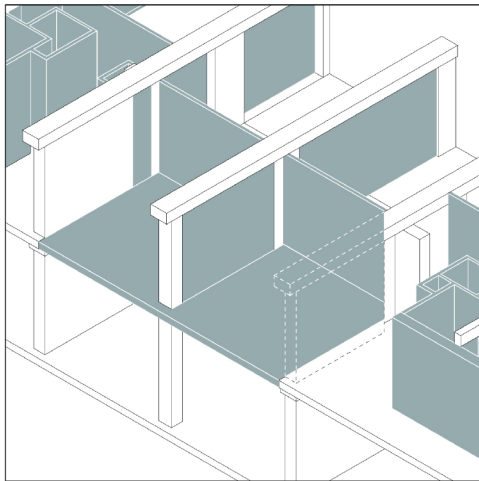


NEW BUILT

INTERWEAVING BETWEEN THE NEW
AND OLD

Since the floor slab need to rebuilt in a lower level, the diagram show the procedure on how it works out.

The original floor slab will be demolish, yet keeping the existing beam. Due to maintaining the stability of the building structure, the old beam will only be demolish after constructing the new beam, then finally build the new floor slab.



EXISTING
NEW BUILT

RETAINING THE CHARACTERISTIC OF MODERNISM

Two major characteristic of the modernism architecture - THE GALLERY AND THE CONCRETE COLUMN - are being preserved and reappear in another manners in the redesigned residential facade. It also influences and facade design for the new community cluster.

First of all, the gallery in the existing block is being amplified by removing the existing meshes, and also enable to established a stronger correlation with the public voids through visual connection.

Secondly, the form of the concrete column inspired the facade adopting vertical elements as a design guidance, dividing the longitude facade into different parts through fins.

By retaining the modernism characteristic, it aimed to achieve the notion of collage city, preserving the trace and evidence from the past.

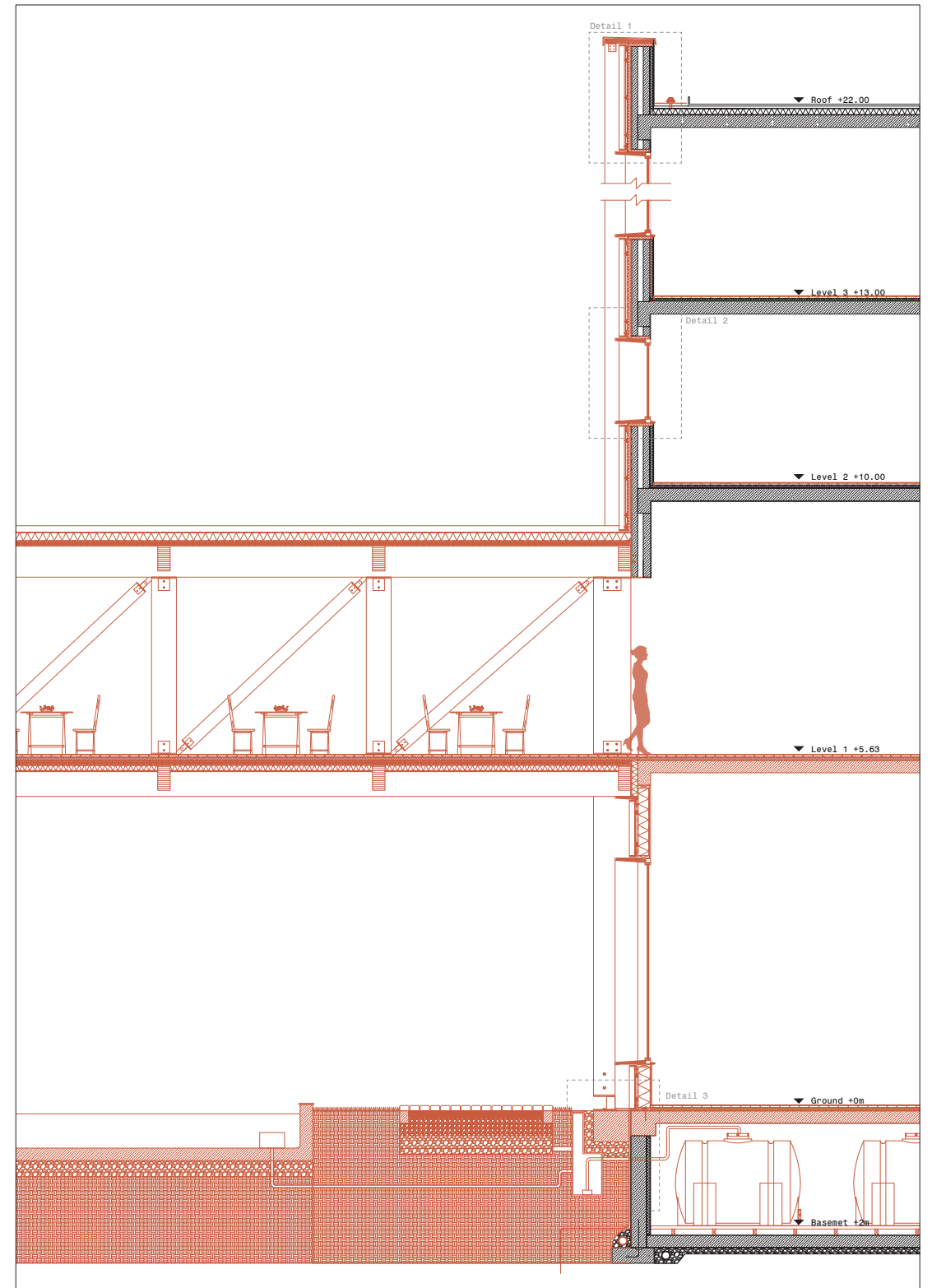


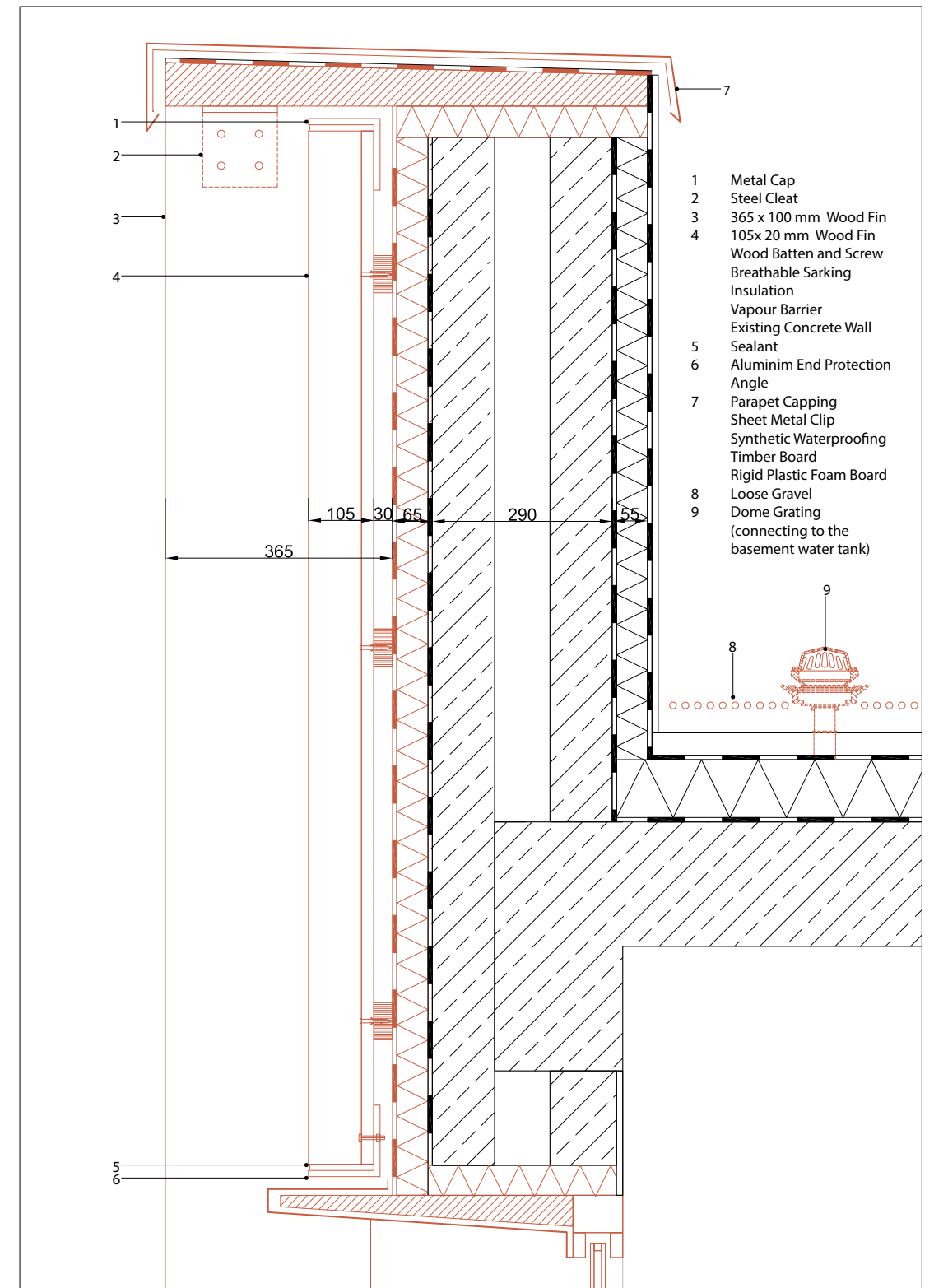
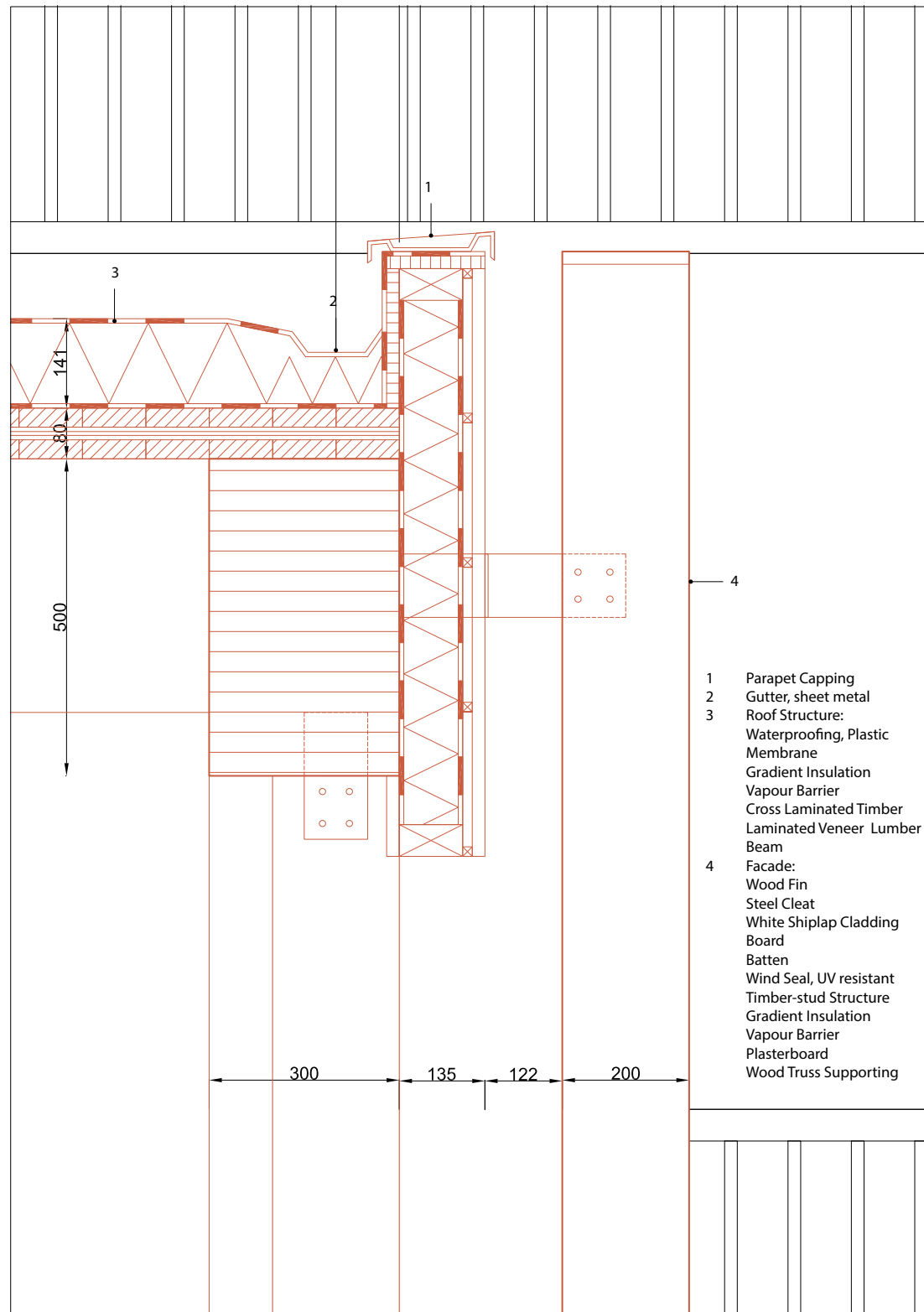
(design intention sketch)

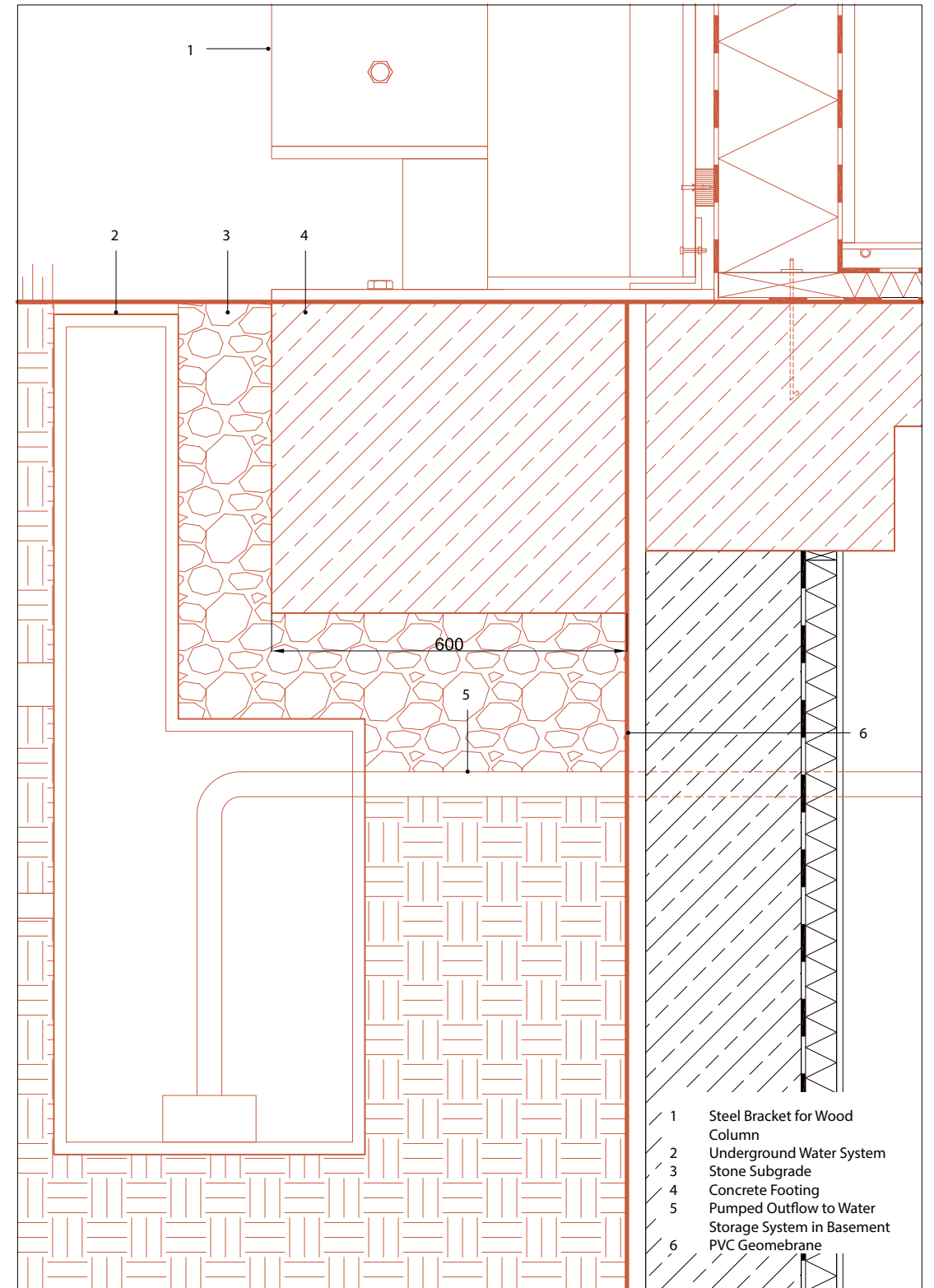
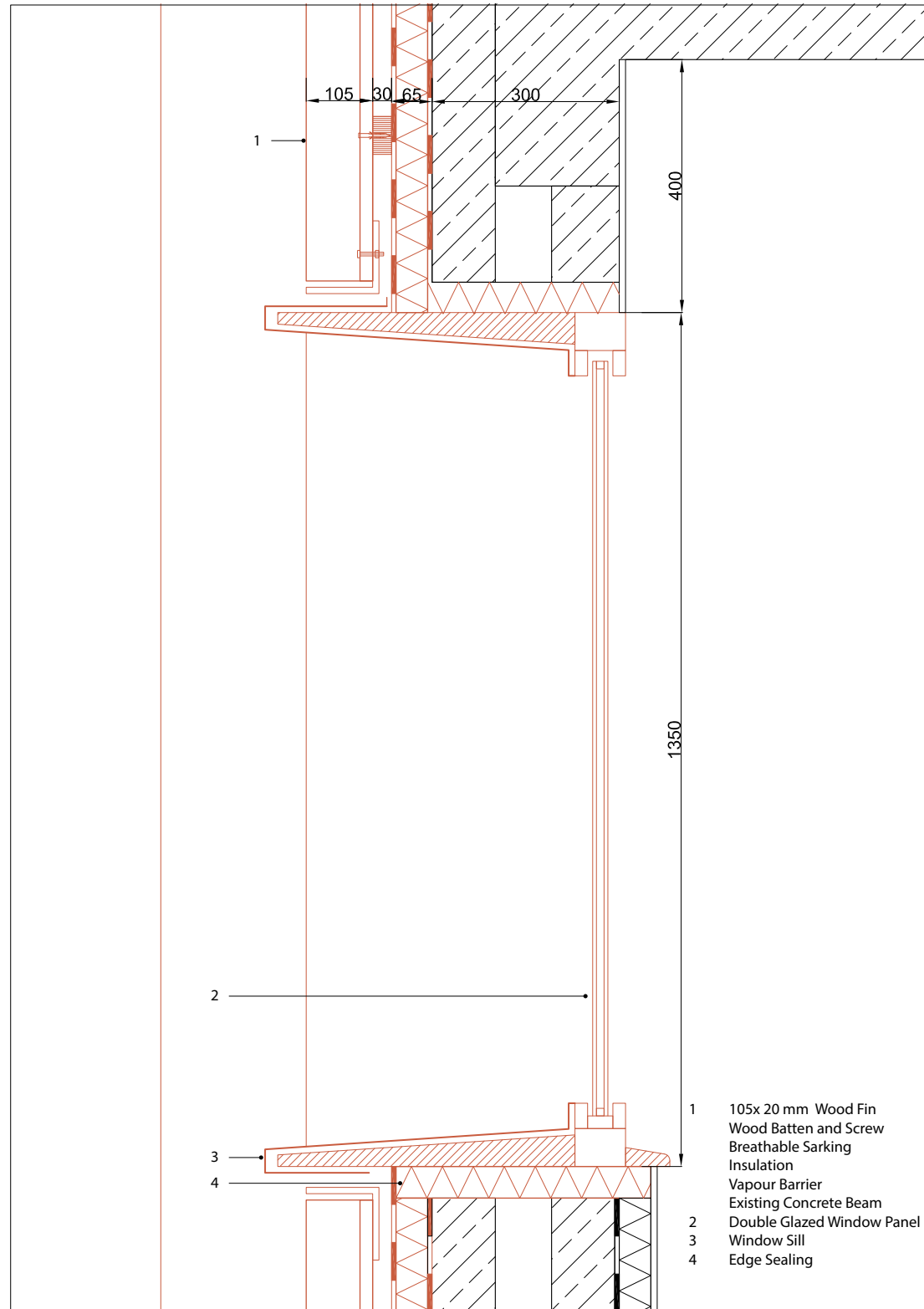


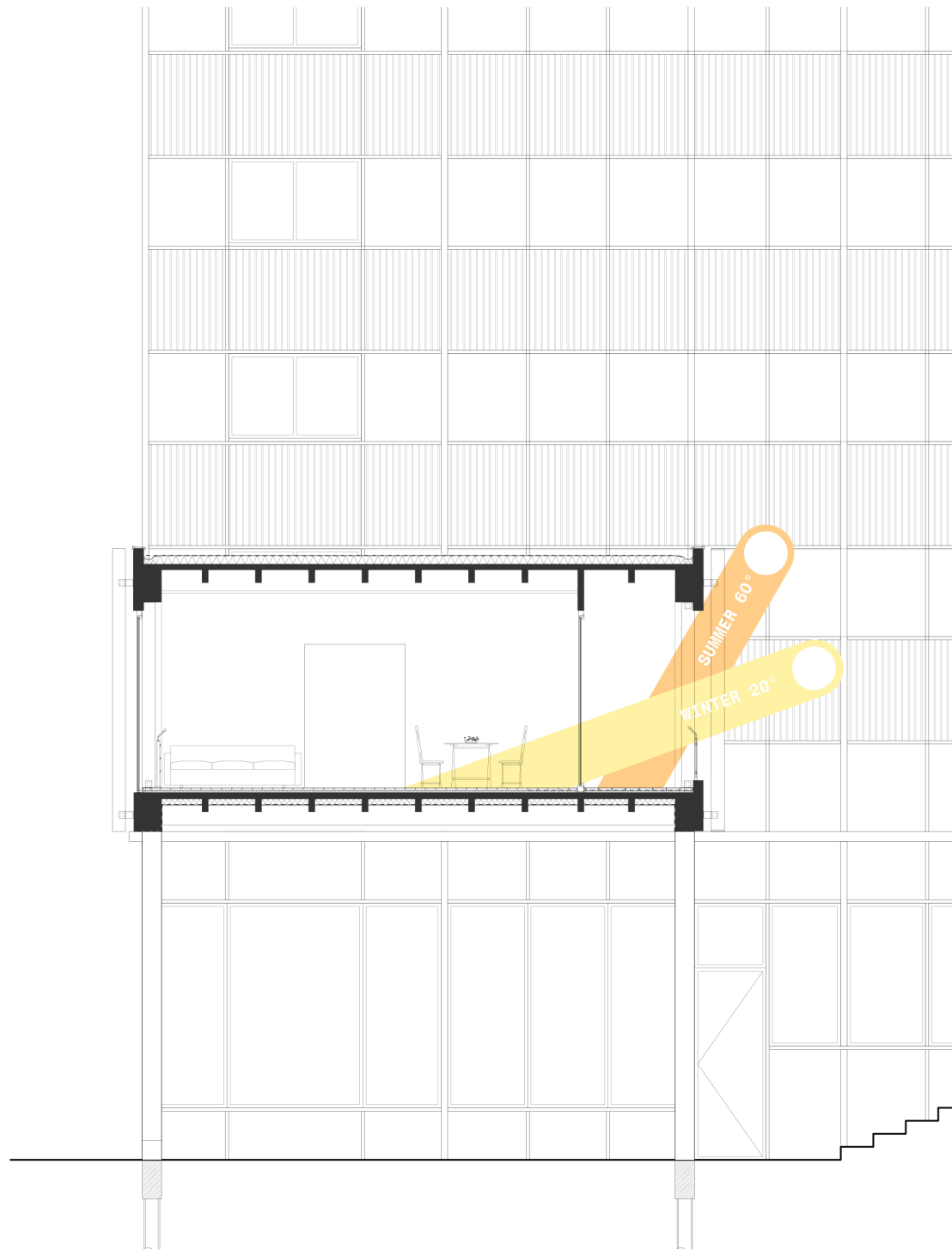
FACADE AS WALL OF THE VOID

Since the idea of the void is create an atmosphere of urban oasis, timber is adopted as facade material. Both the communal plinth and the upper residential program use wood fin to create a facade with depth, yet different color and density. The residential part use a reddish brown wood fin in order to echo with the brick material in the surrounding through color. The window frame for the ground floor create sufficient depth to let people to seat/ lean on.

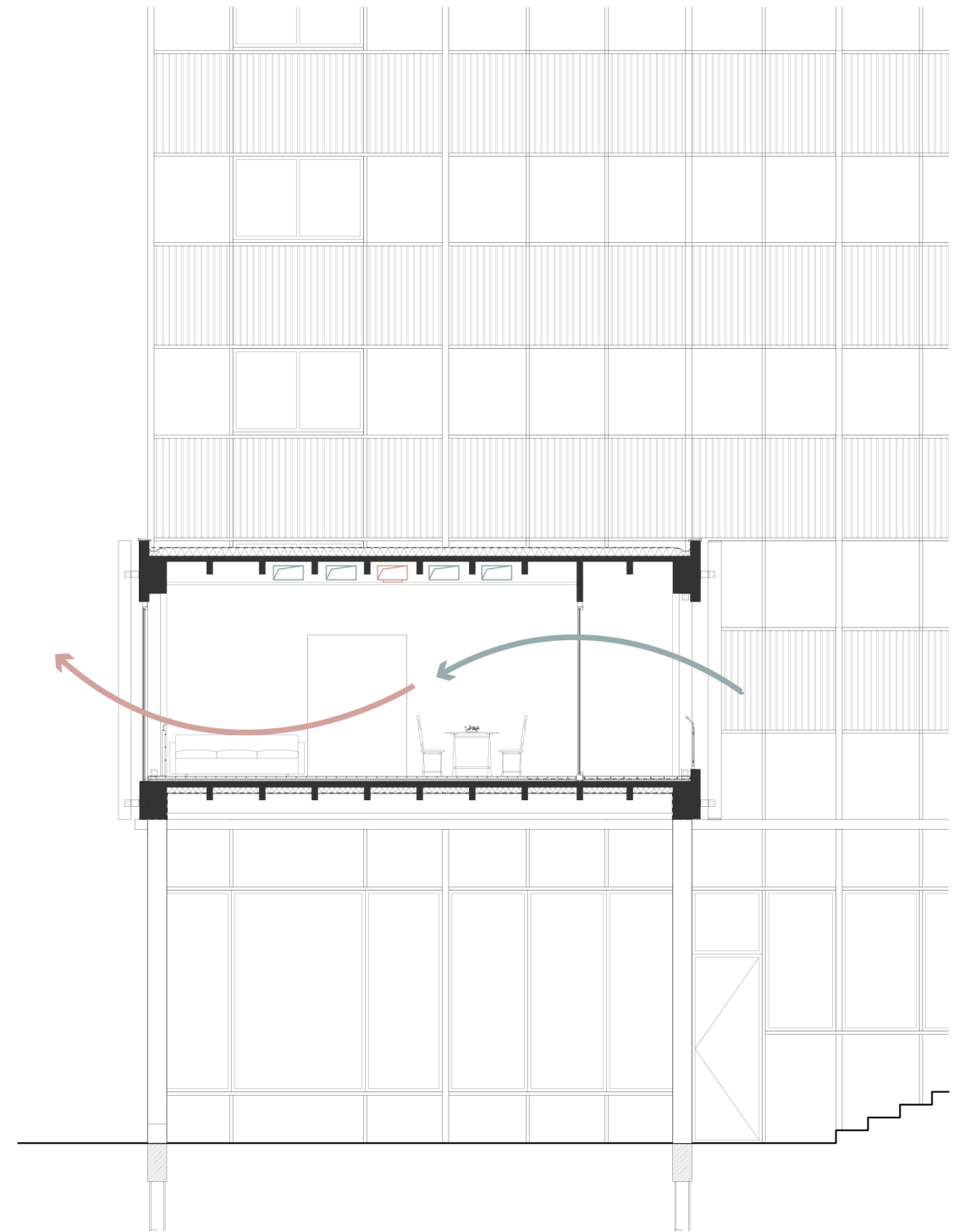








Balcony as sun shading buffer zone



Cross Ventilation in summer situation

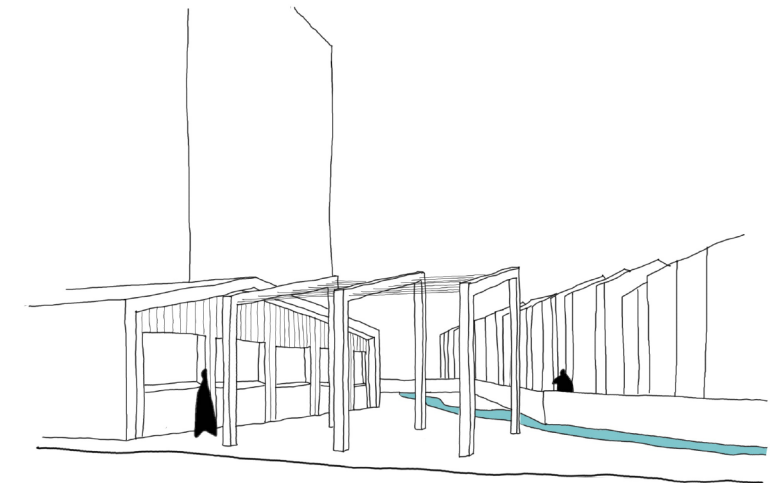
WATER AS BOUNDARY / LEADING

In the urban entrance, water facilitates as a gathering component. Nevertheless, the role of water reverse in the garden entrance, it act as a soft boundary in between the public void and the row house residents. Originally, a full height brick wall is constructed to segregate the two housing typology, which is also the one of the reason why diminish social interaction in between.

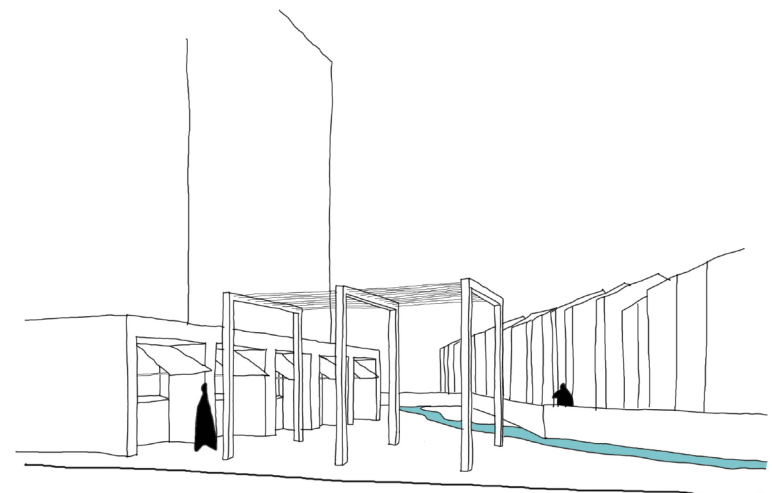
By implementing the water stream in between, a small green island is created in between for the row house residents and they could directly walk out from their backyard. The boundary wall will also be redesigned, the wall height could be reduced to 1.2m and adding bench on the wall. These design strategy enable to create visual and spatial connection, yet inaccessible for the public.



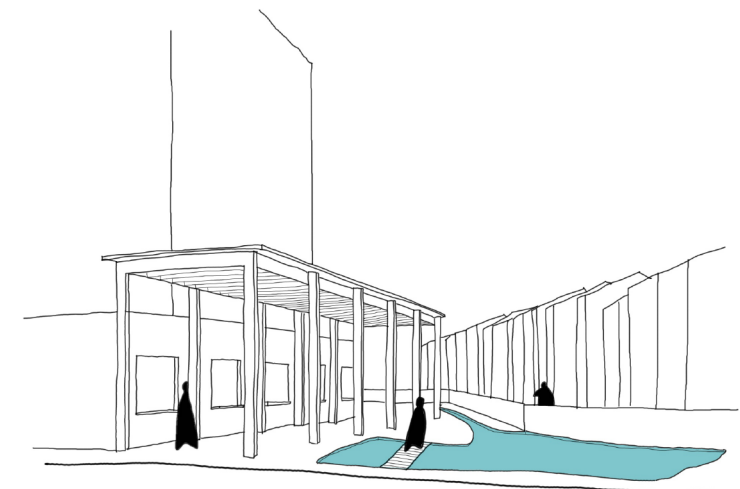
Existing boundary wall



Experimentation through perspective 1: Slanted entrance echo with the row house



Experimentation through perspective 2: Entrance following the vertical pattern on the social housign block



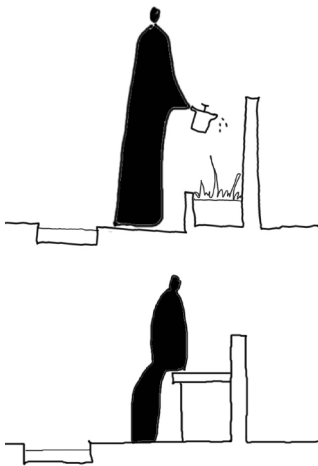
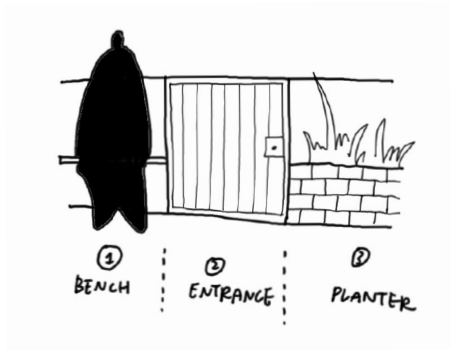
Experimentation through perspective 3: Water as boundary

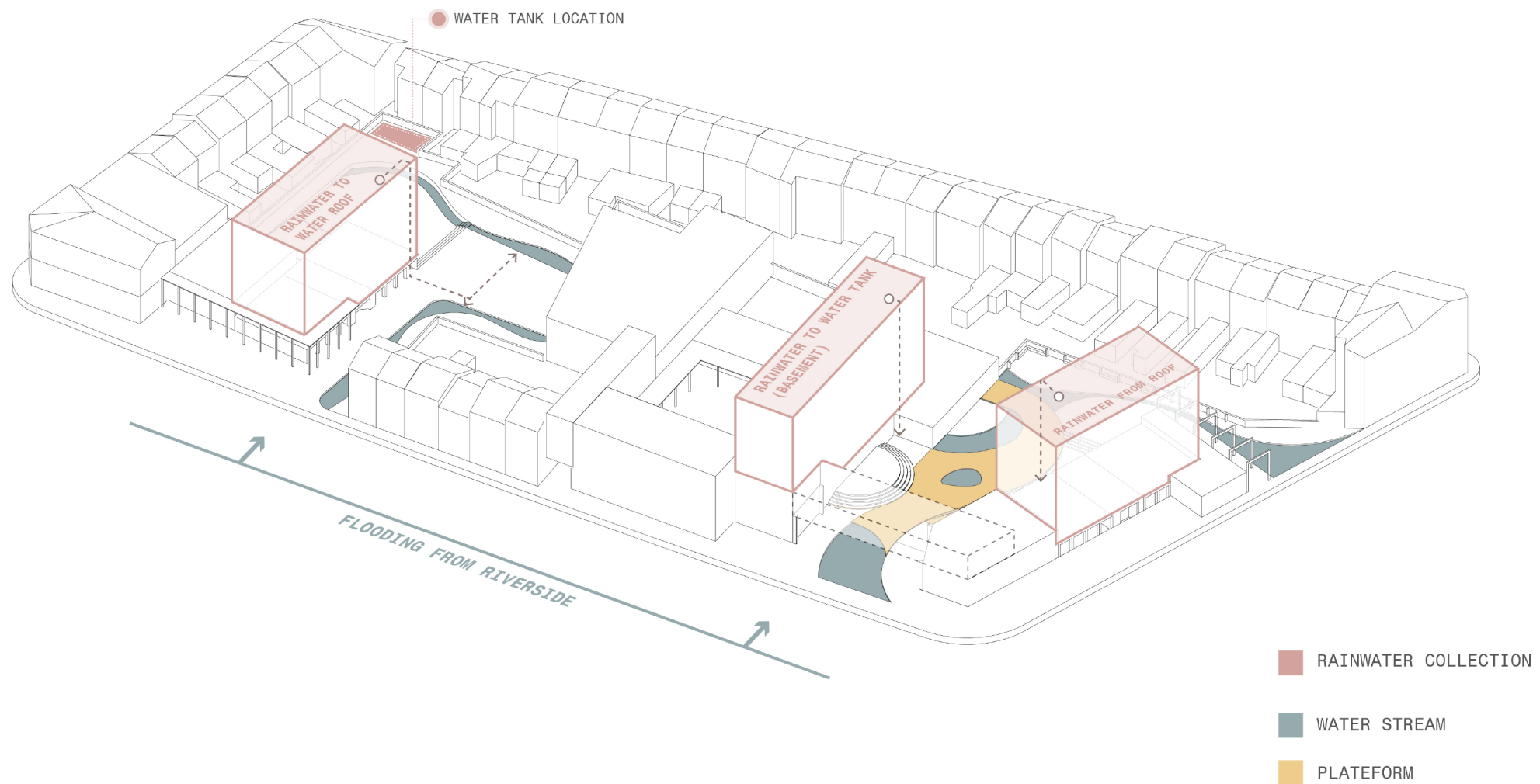


ENTERING THE VOID FROM GARDEN ENTRANCE

BOUNDARY WALL AS THE NEW INTERIOR FACADE

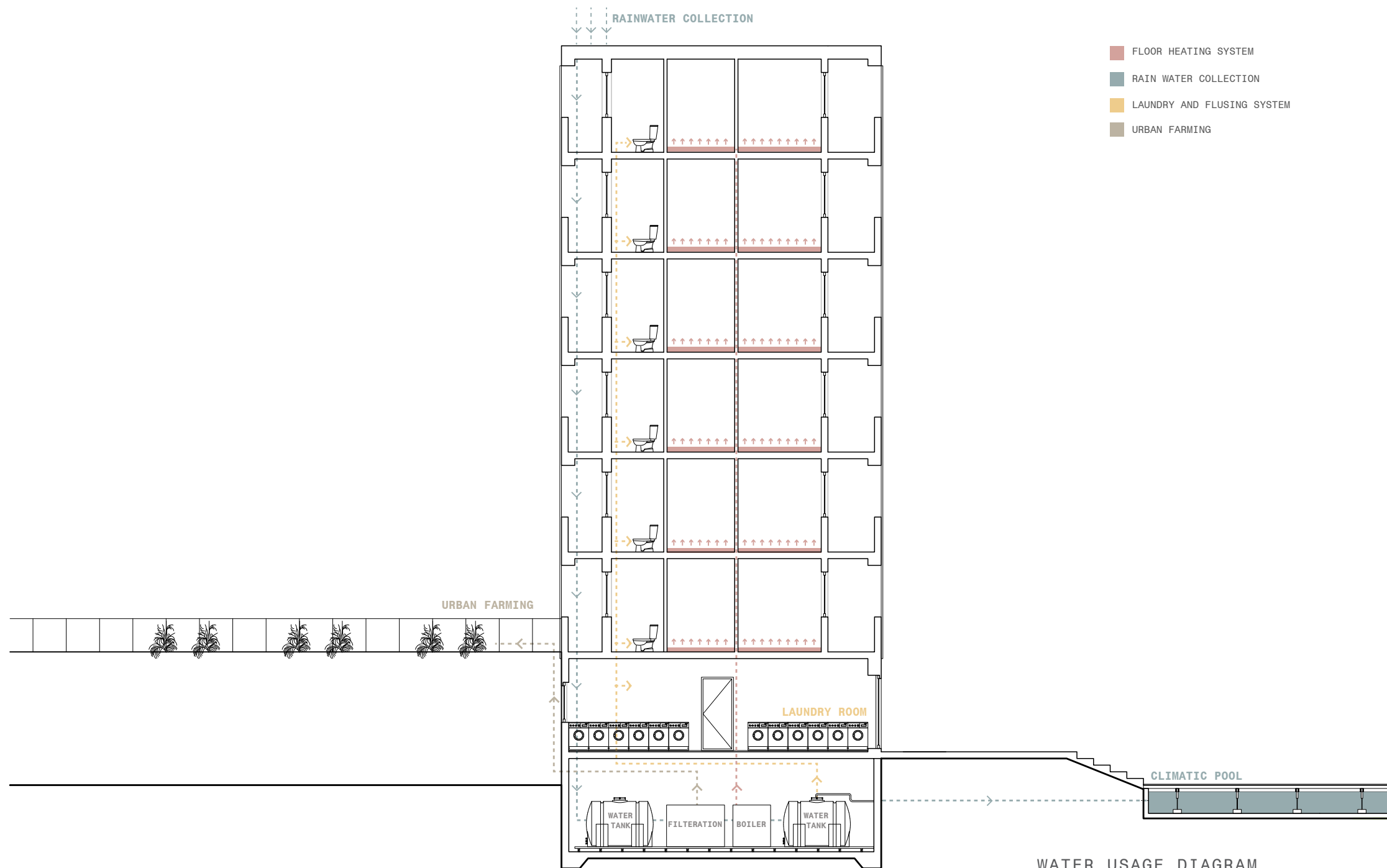
The facade of the row houses all look alike and always covered with shutter screen due to safety issue. The small green island enable to create a platform for the residents to re design the boundary wall according to their needs collectively, and also an opportunity to manifest their own individual identity.





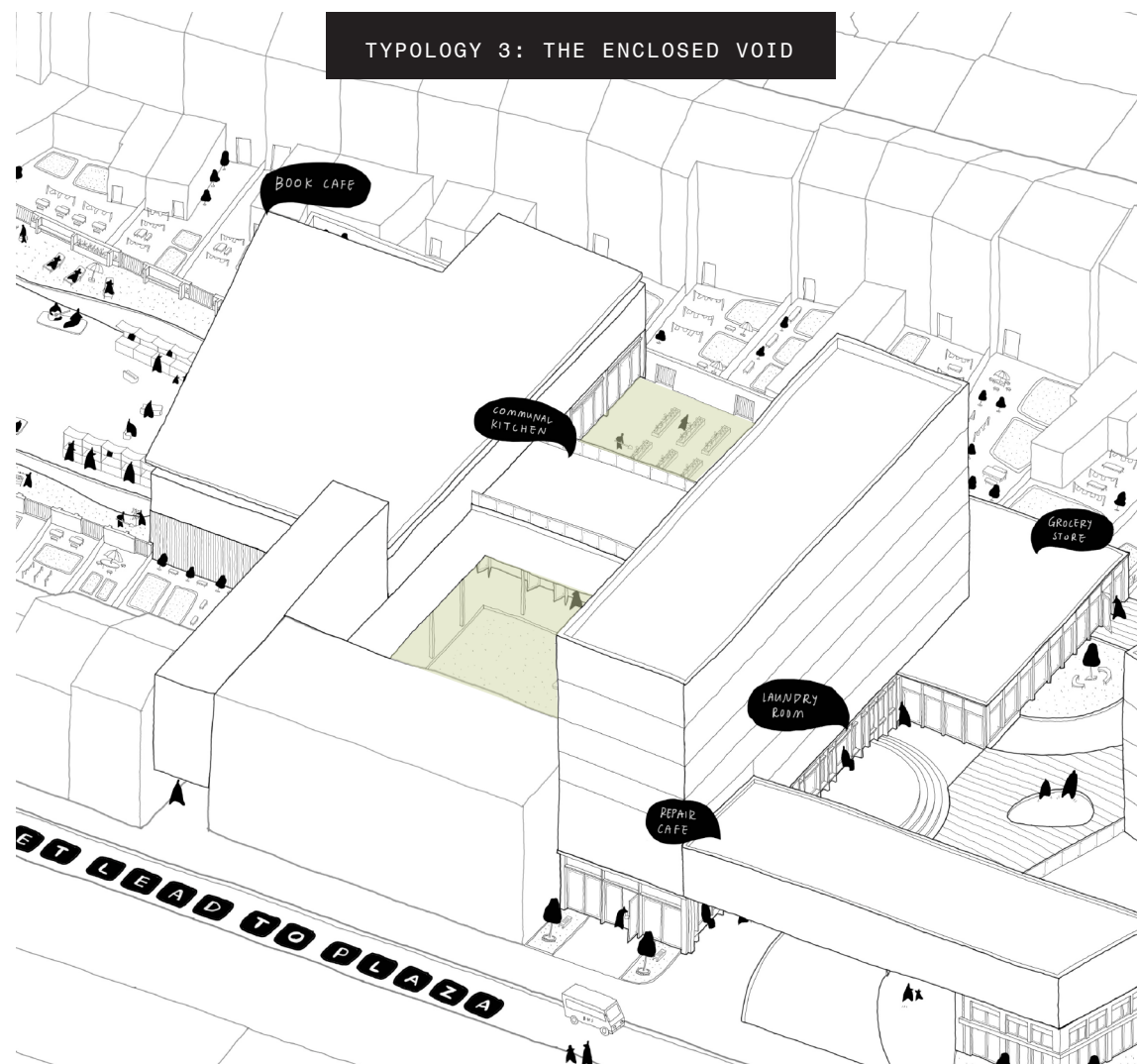
RAINWATER COLLECTION

The water stream design is also connected with the rainwater collection and act as a circular water cycle system. Rainwater will collected from the roof and pool, and thereby store in the water tank. It could also lightly minimize the burden while flooding occur in every few year.



WATER USAGE DIAGRAM

The section illustrates the collected water will be stored in the basement, after filtration / heating, it will be used in flushing system, urban farming, laundry room and also floor heating system.



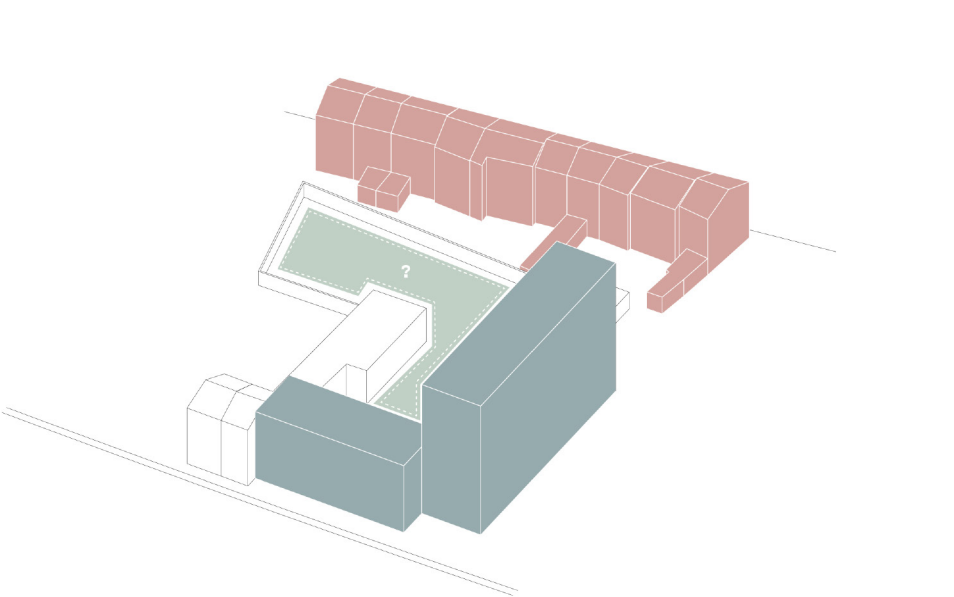
The void is enclosed by surrounding building and create a high level of privacy void for the residents. A subtle entrance from the street is designed for the book cafe and could pas through to the void, yet it will be closed during night time due to safety concern.

EXISTING SITE CONDITION

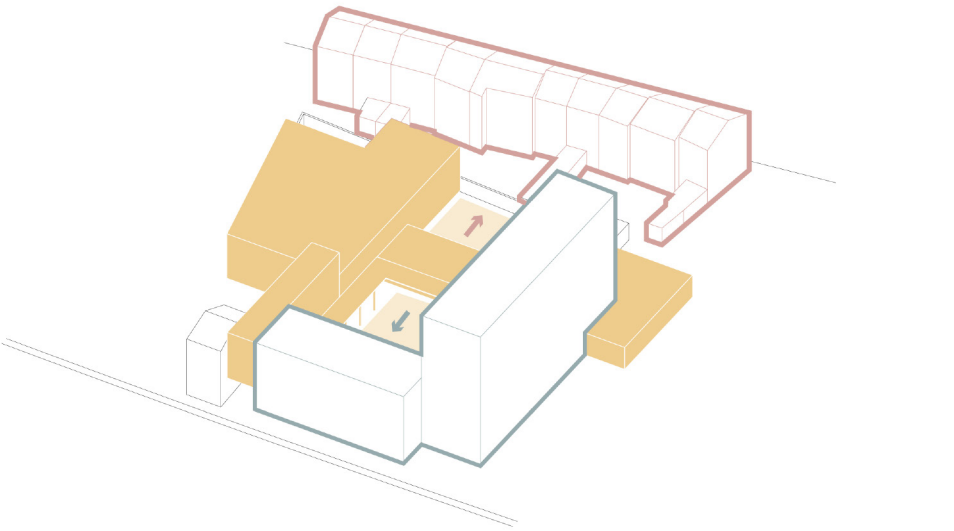
The void originally belong to the social housing block. However, it is not accessible friendly and surrounded by boundary walls, which makes the residents seldom use the space. The void in the middle is being seen as a potential to become a mending tool between the residents from the two housing typology.

Design Concept:

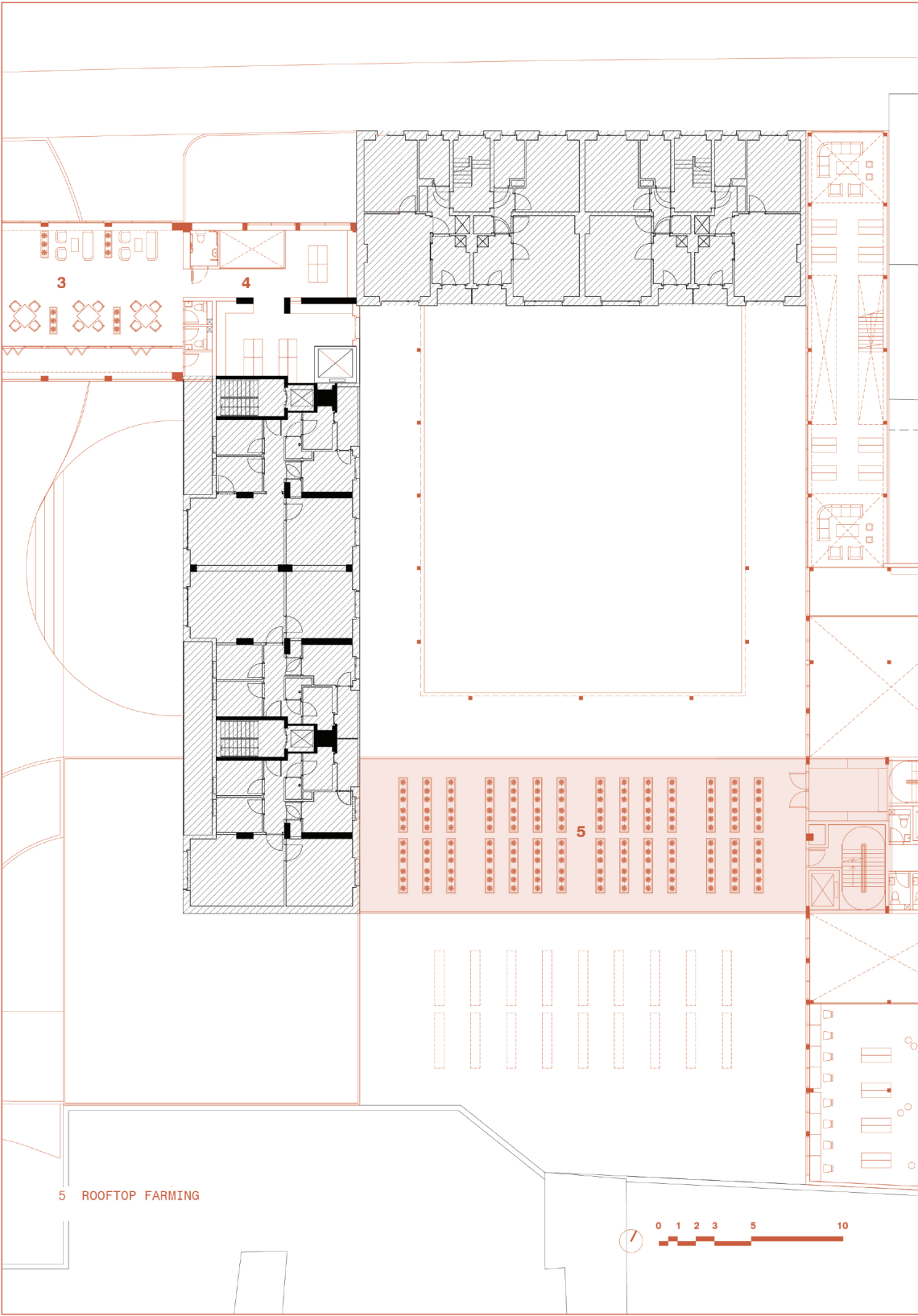
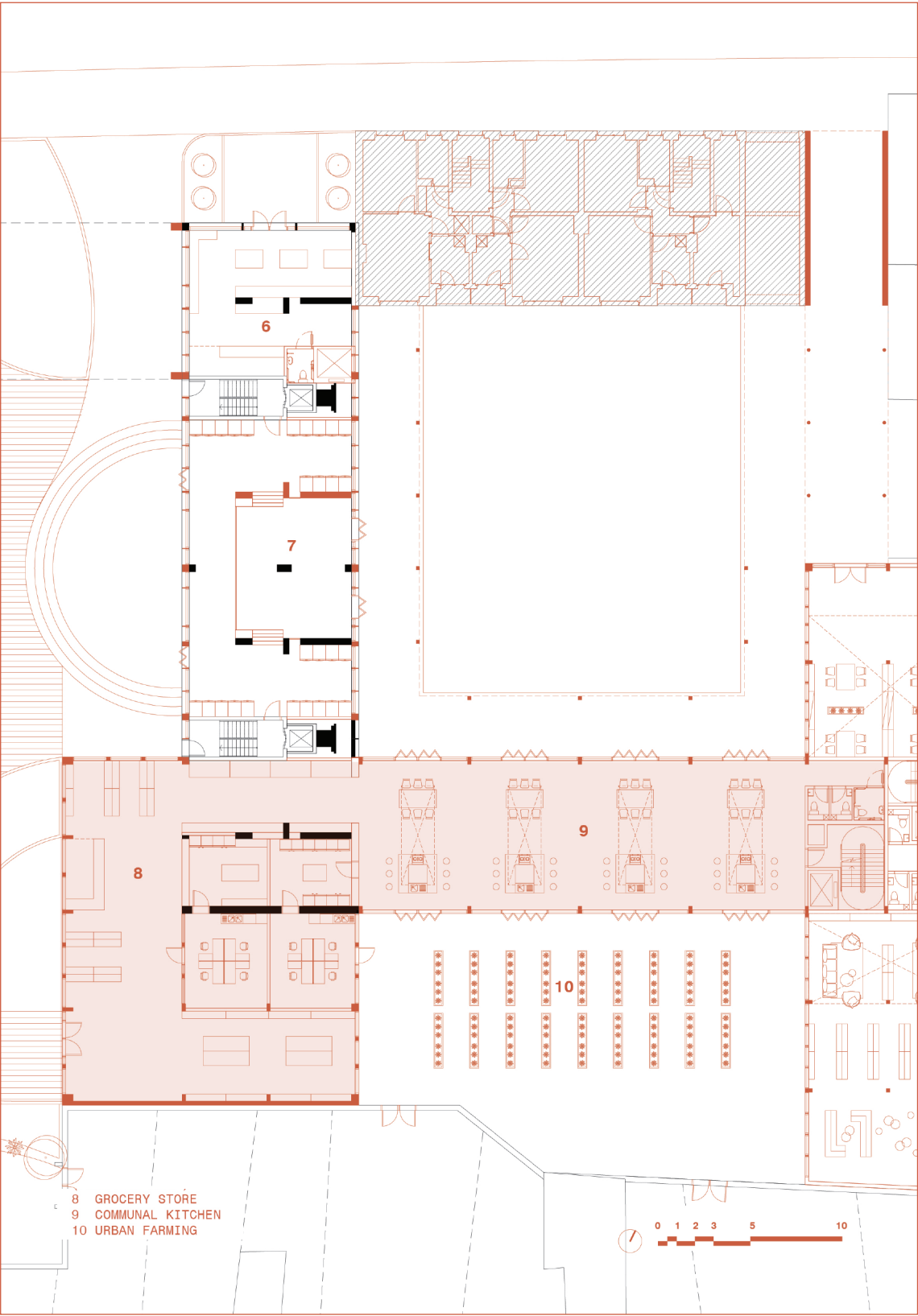
- (1) Break the HARD BOUNDARY between the two housing typology and foster social interaction
- (2) Communal Kitchen become a connector between the two type of residents, yet they could also have their own void space.



- APARTMENT HOUSING
- ROW HOUSING
- AMBIGUOUS VOID SPACE



- APARTMENT HOUSING
- ROW HOUSING
- COMMUNAL CENTER CLUSTER

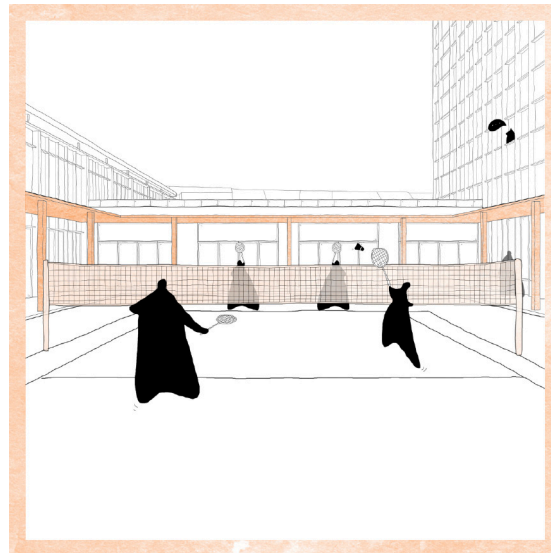


VOID AS INDIVIDUAL VS EXTENSION

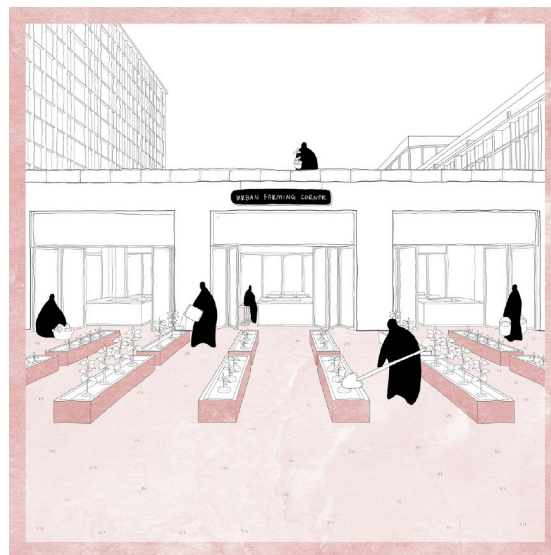
The diagrams illustrate different usage of the void as well as change of privacy when the foldable doors of the communal kitchen are opened / closed.

The orange diagram demonstrate the scenario when the communal kitchen is closed, the void is totally enclosed and only facilitating for the social housing residents, in which allow to hold more private activities, for example sports events among the residents.

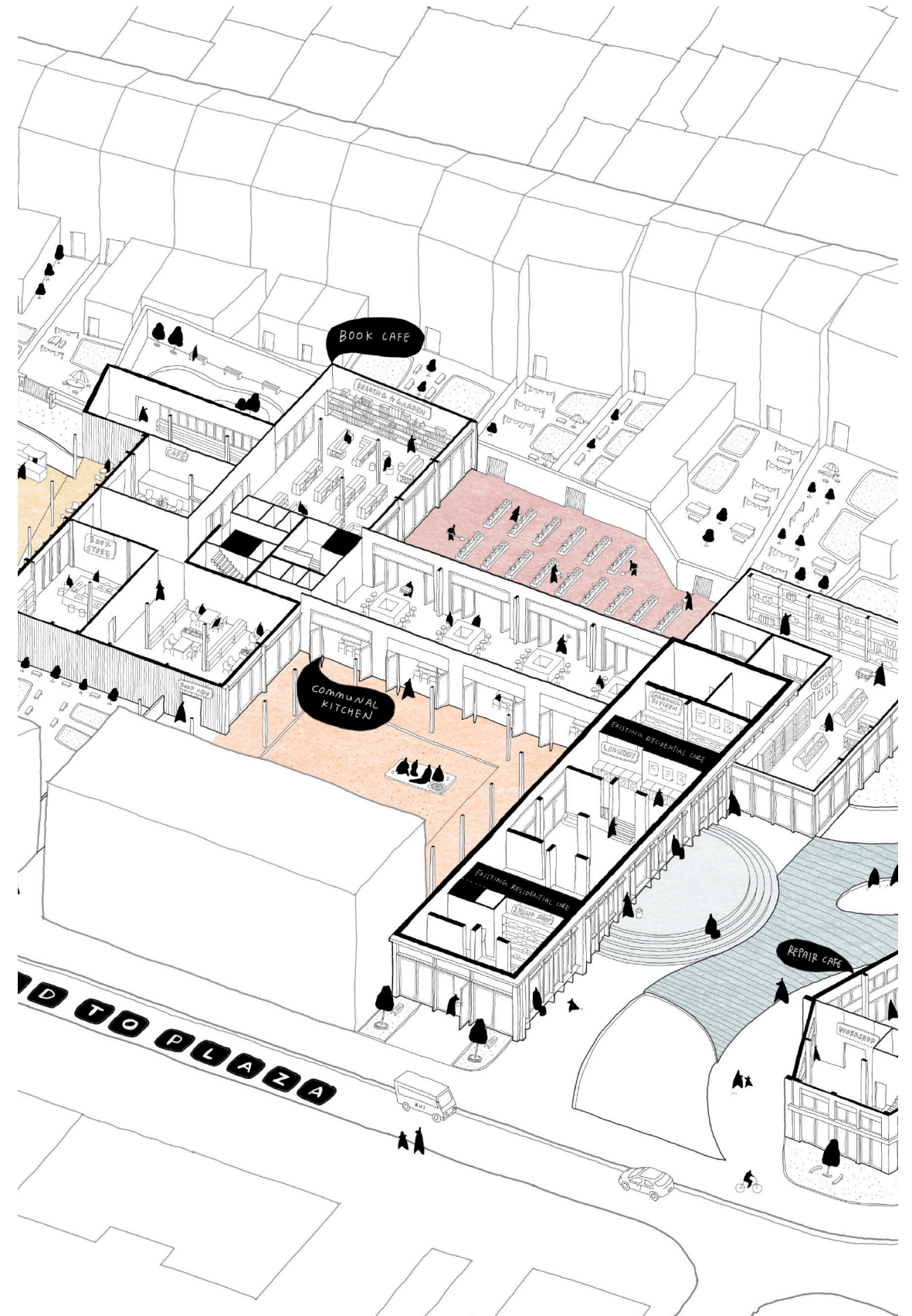
The pink diagram express the situation when the void space is connected with the communal kitchen program, a series of work-flow between farming-cooking could be observed.



Void as individual space



Void as extension from the interior program





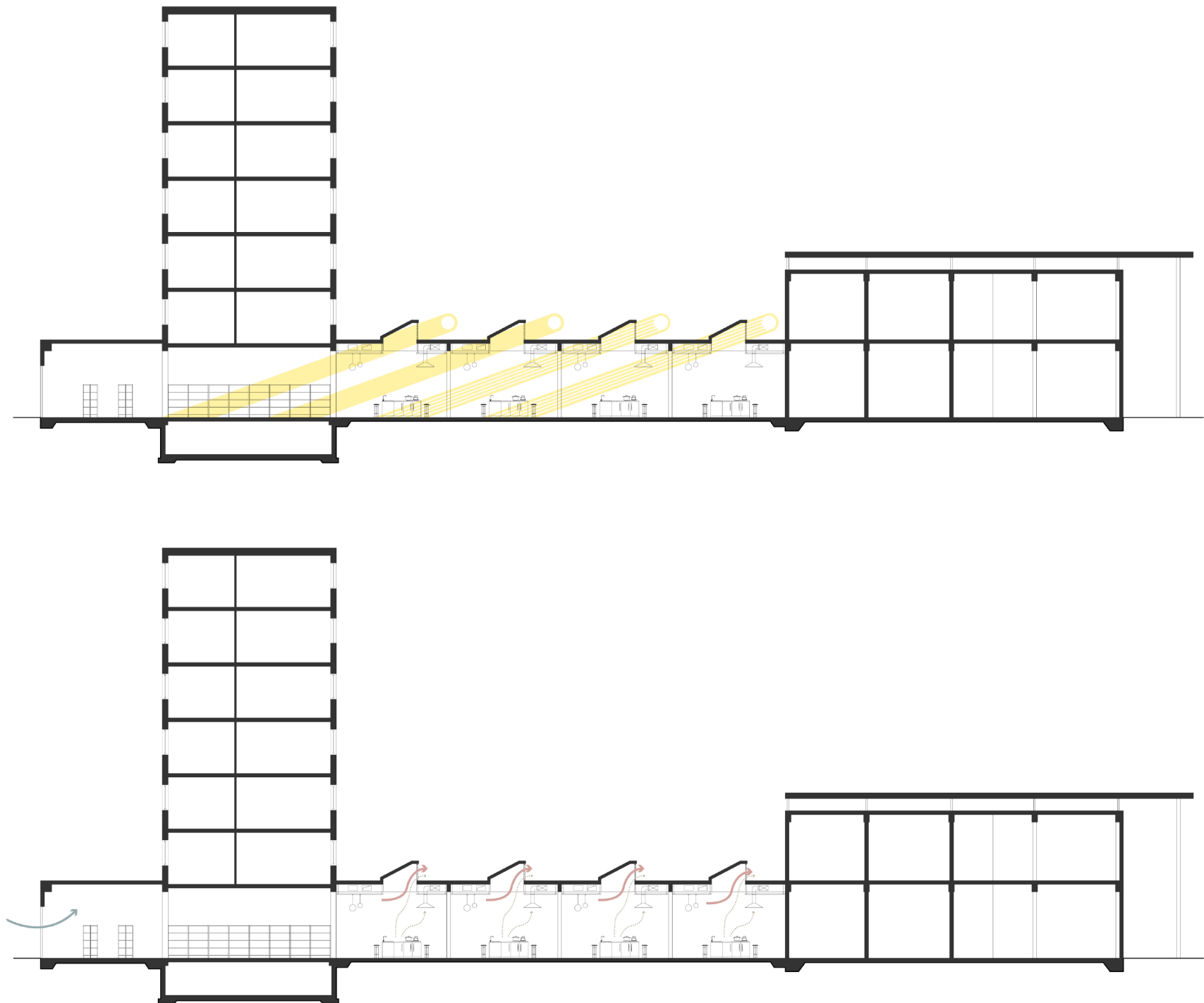
BLURRING THE BOUNDARY BETWEEN INTERIOR AND EXTERIOR

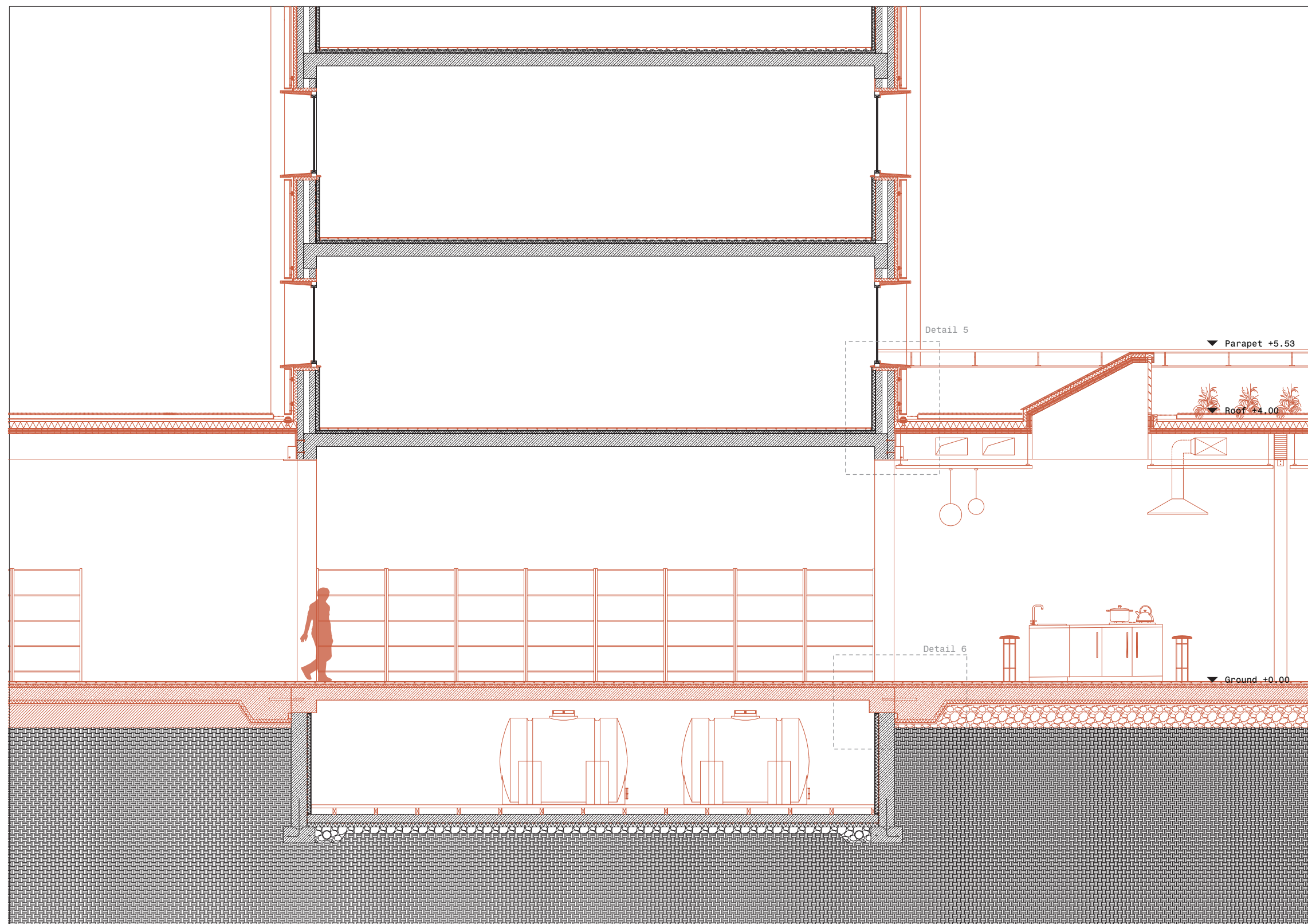


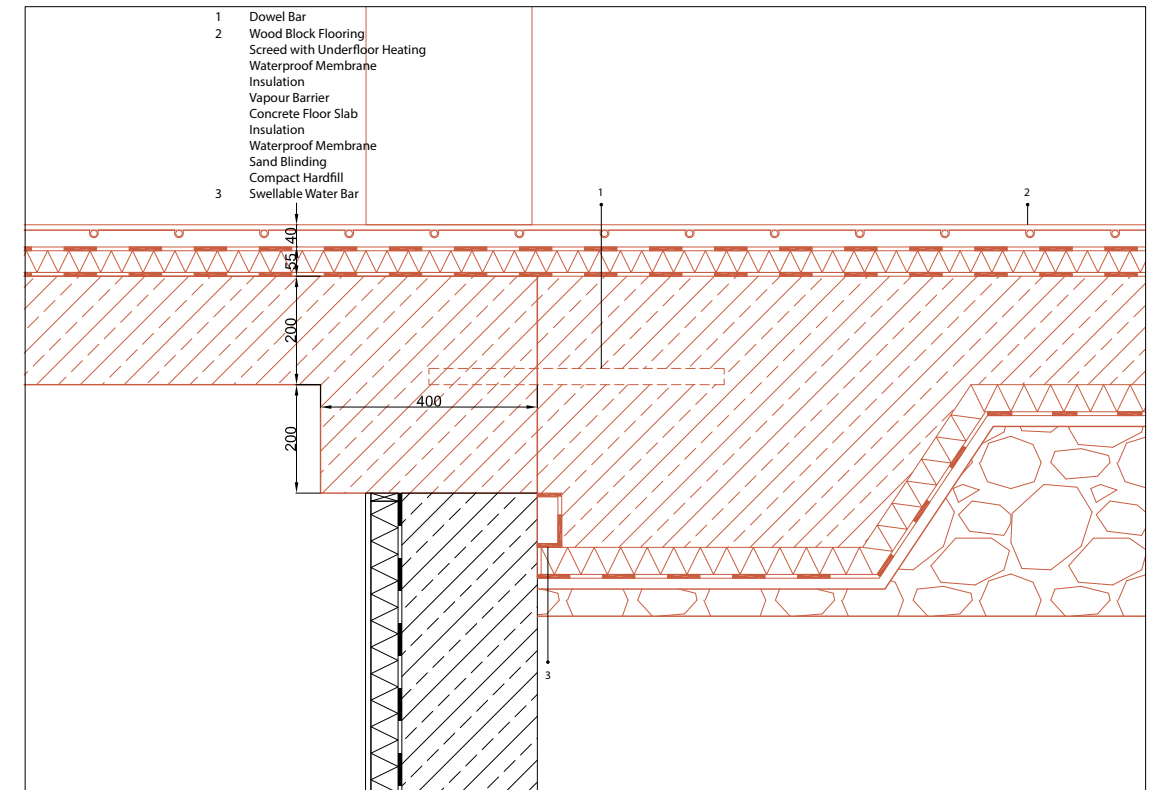
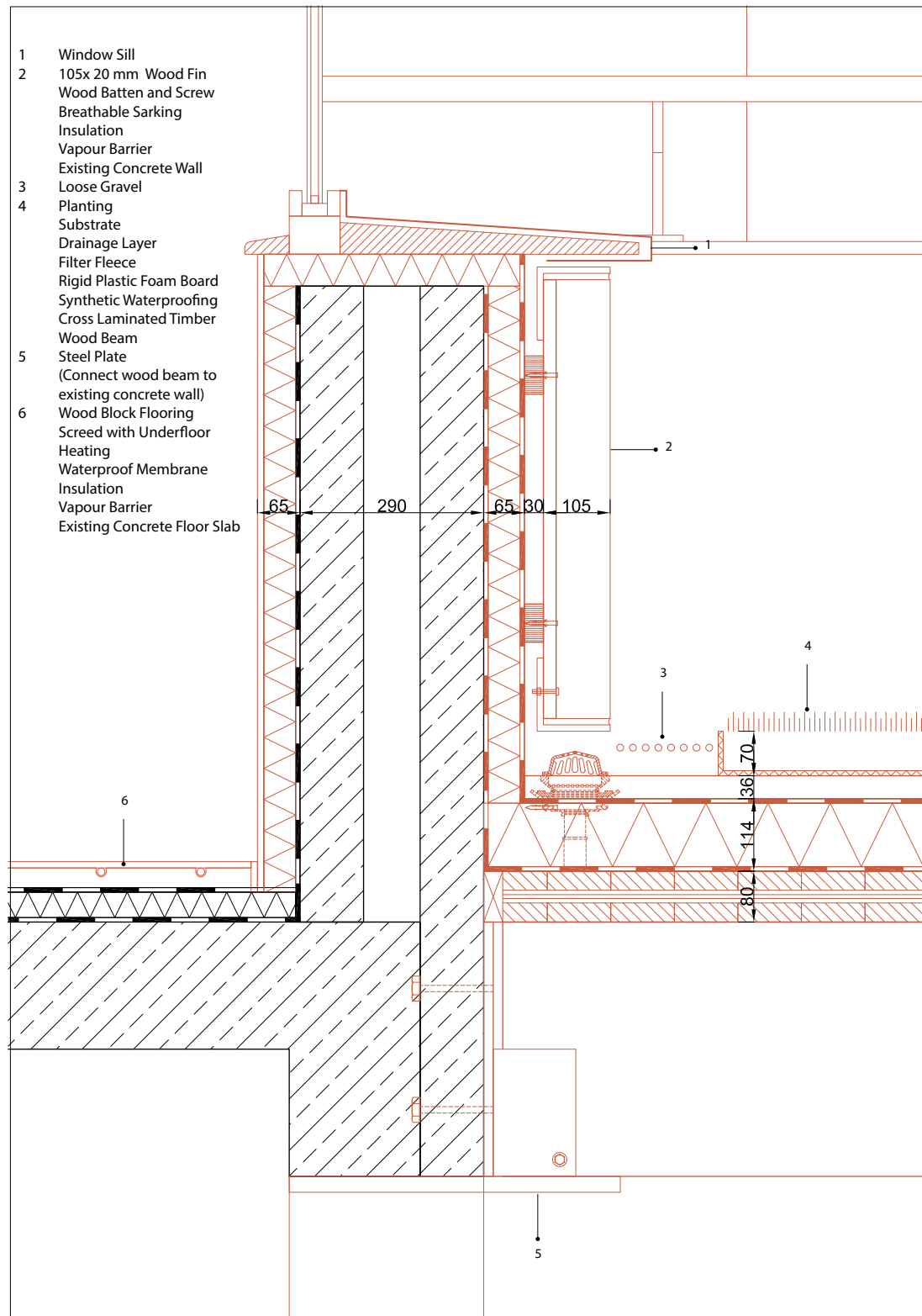
ARCHITECTURE IN BETWEEN

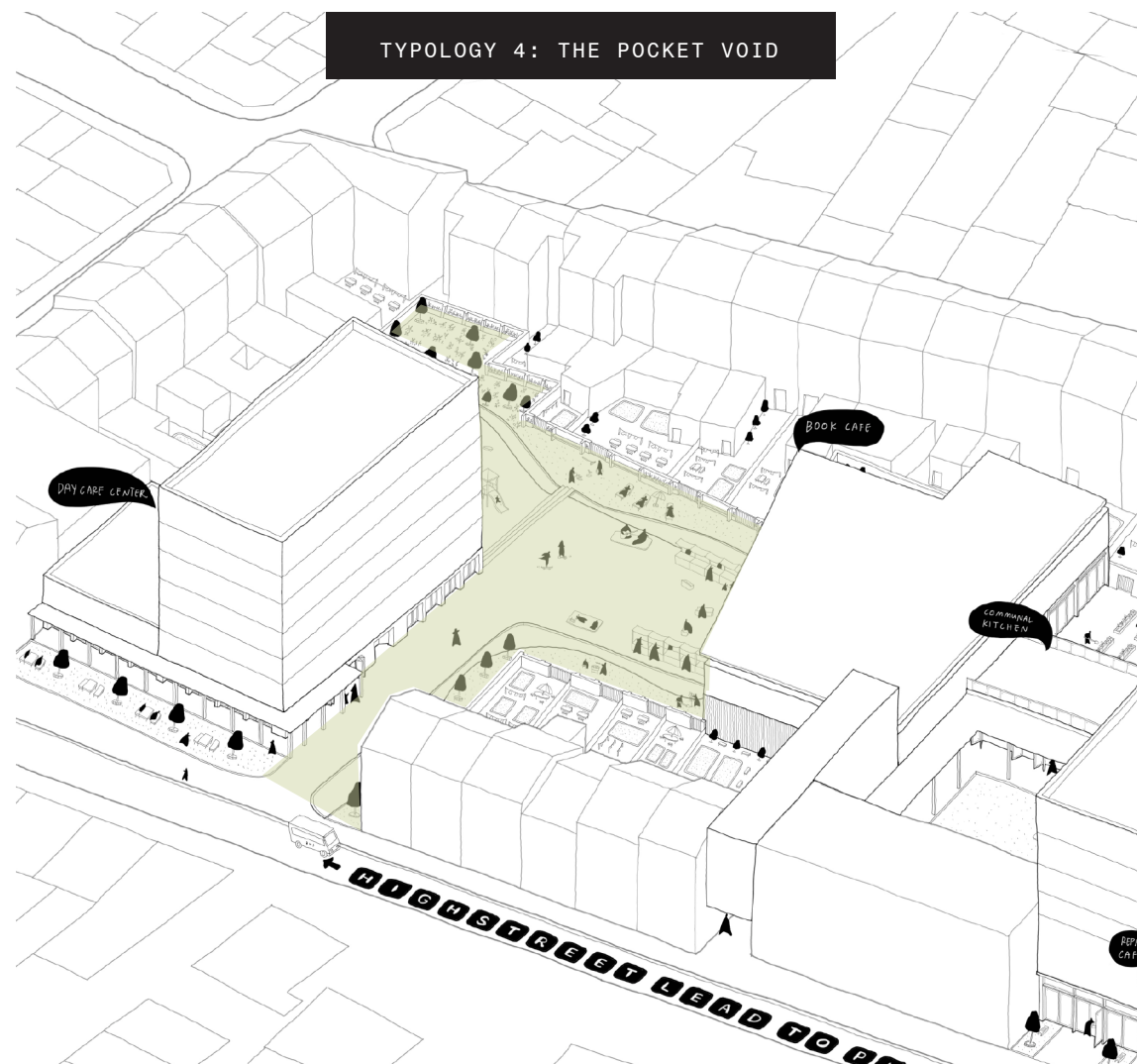
Since the communal kitchen is situated in between two buildings, the natural light penetration in this block is less undesirable. Therefore, the skylight is designed to maximize the natural absorption, the direct sunlight in the morning could also allow heat up the space in the winter.

Another function of the skylight is enable fresh air pass through and bring out the smell from the communal kitchen. A mechanical ventilation system is also implemented.









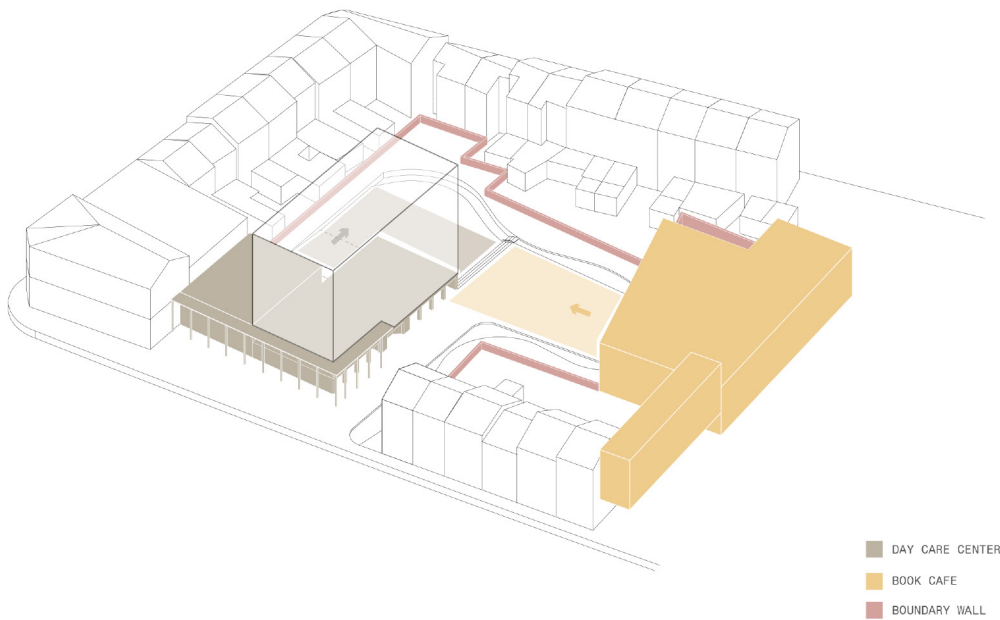
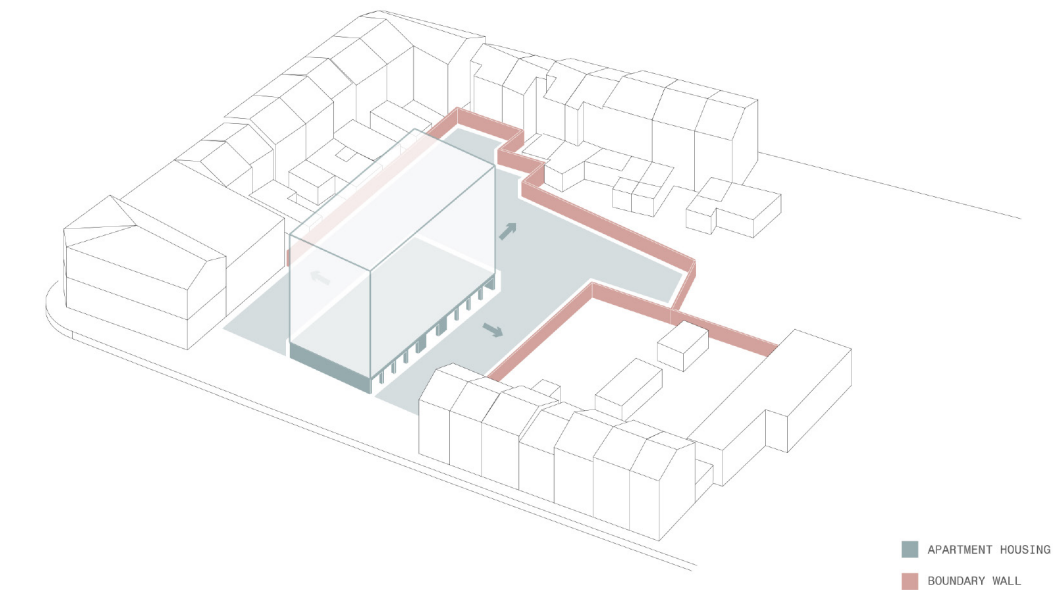
The pocket void is located inside the urban block with an entrance facing the highstreet. The water stream is facilitate as a guiding element to bring the public walking into the void and enjoy the tranquil environment in the void.

EXISTING SITE CONDITION

Originally, the social housing block stand alone and surrounded by the boundary wall with the void space in between. Since the back side of the void is blocked by the housing and there are absence of public amenities, 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



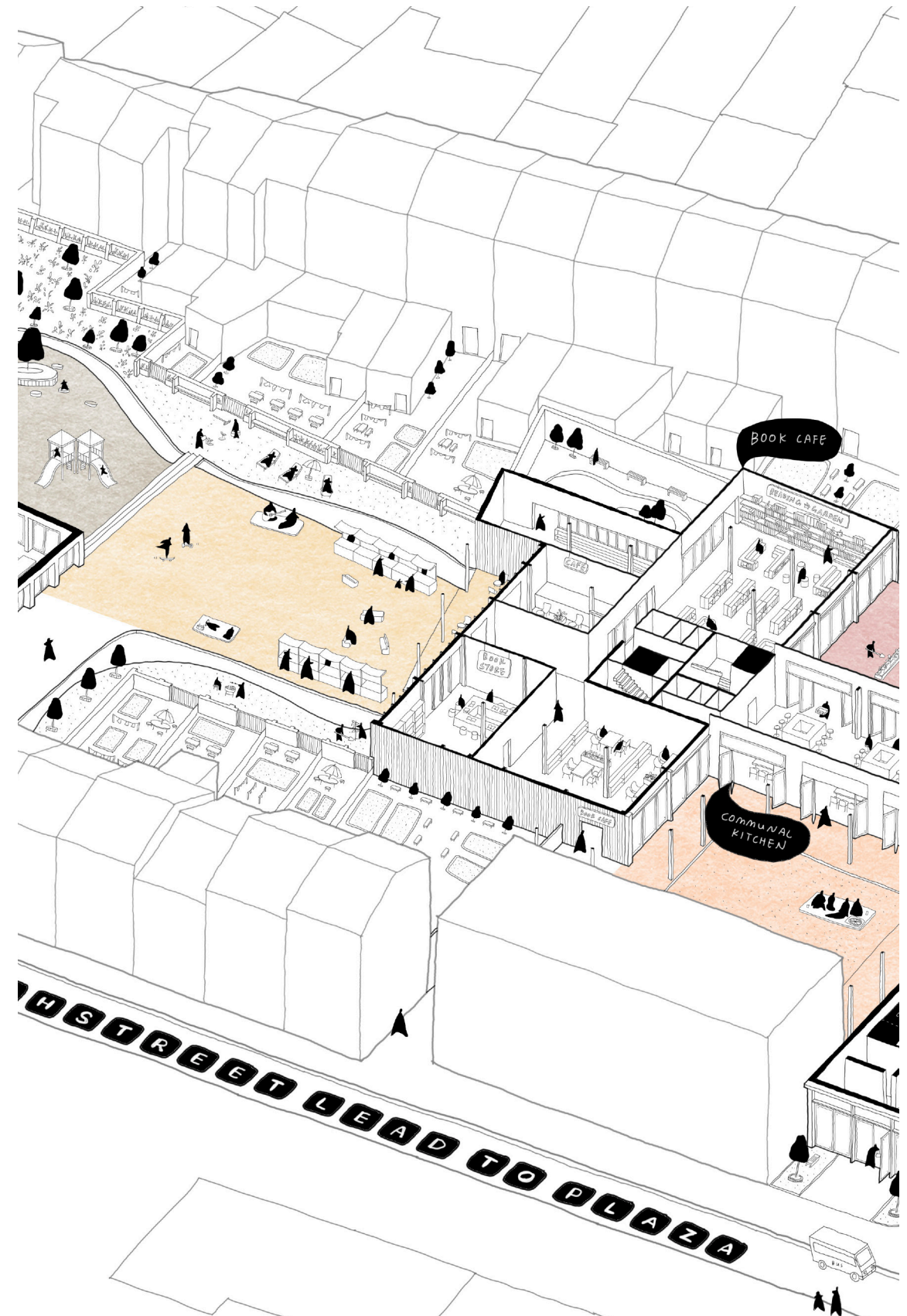
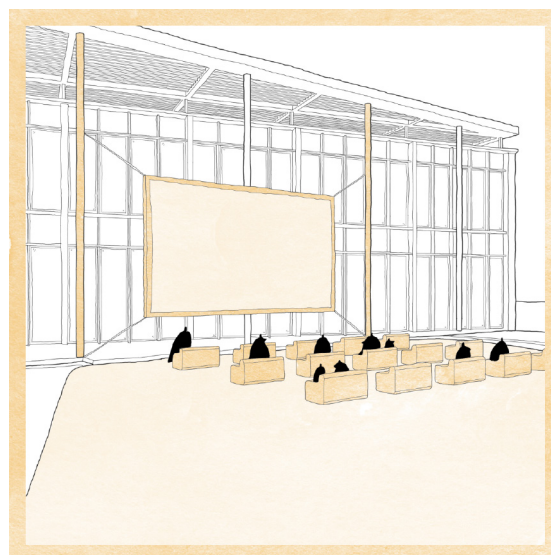
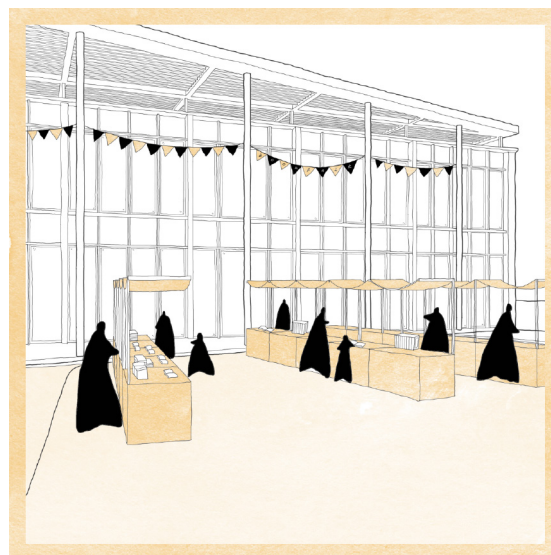
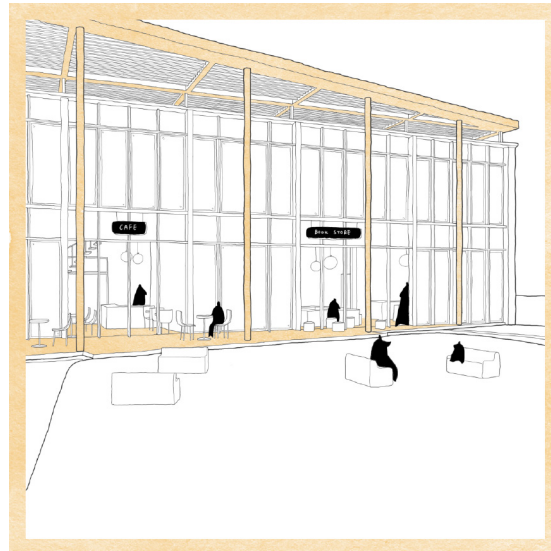
SOCIAL ACTIVITIES OCCUR IN THE POCKET VOID

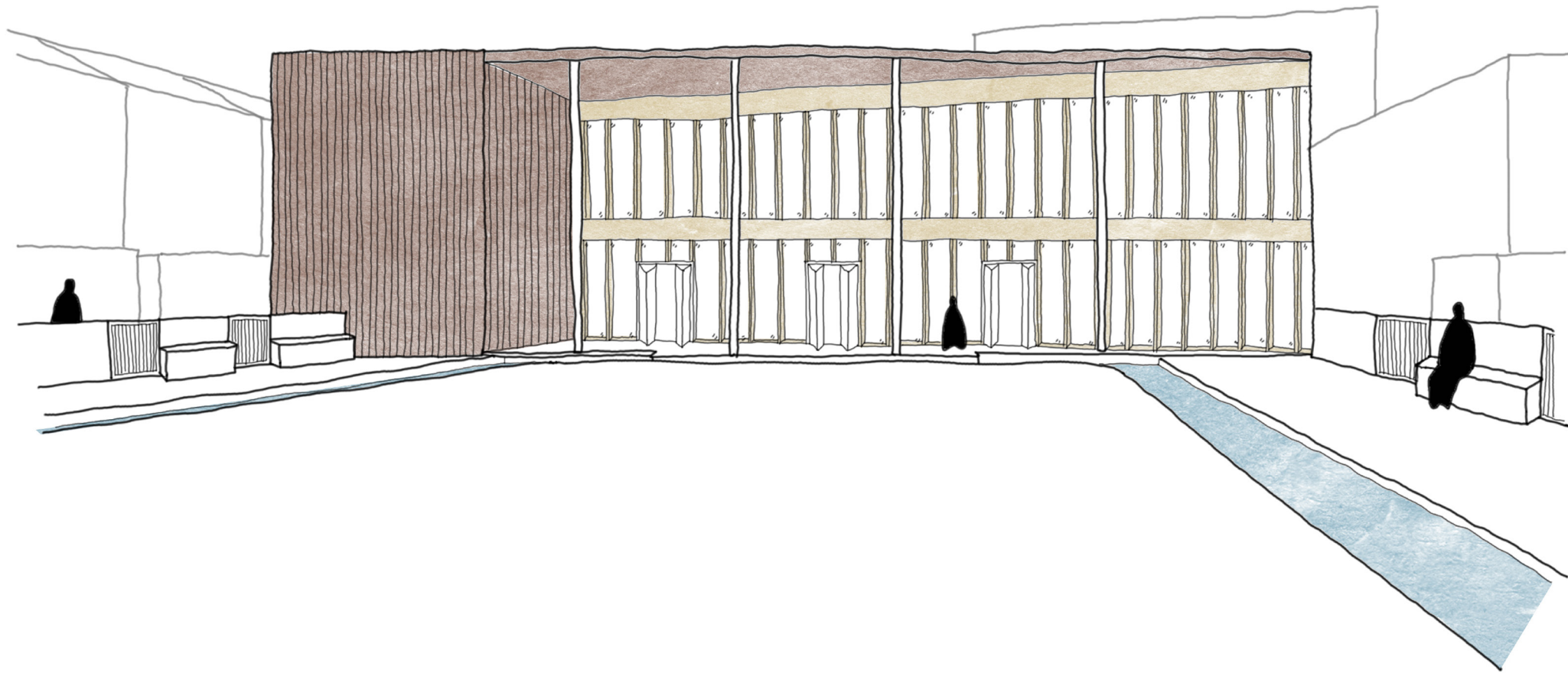
The series of the yellow diagrams demonstrate how the architecture is interacting with the pocket void and foster a various range of social activities.

The first diagram illustrates the canopy and wood decking platform create a buffer zone to allow the interior programs (cafe and book store) being extended to the exterior and have a visual connection with the general public in the plaza.

The second diagram demonstrates the plaza could be transformed as temporary book fair event during weekend and hosted by the people from the book cafe. These kinds of pop up events could also serve a gather and bonding activities among the Bressoux neighbourhood.

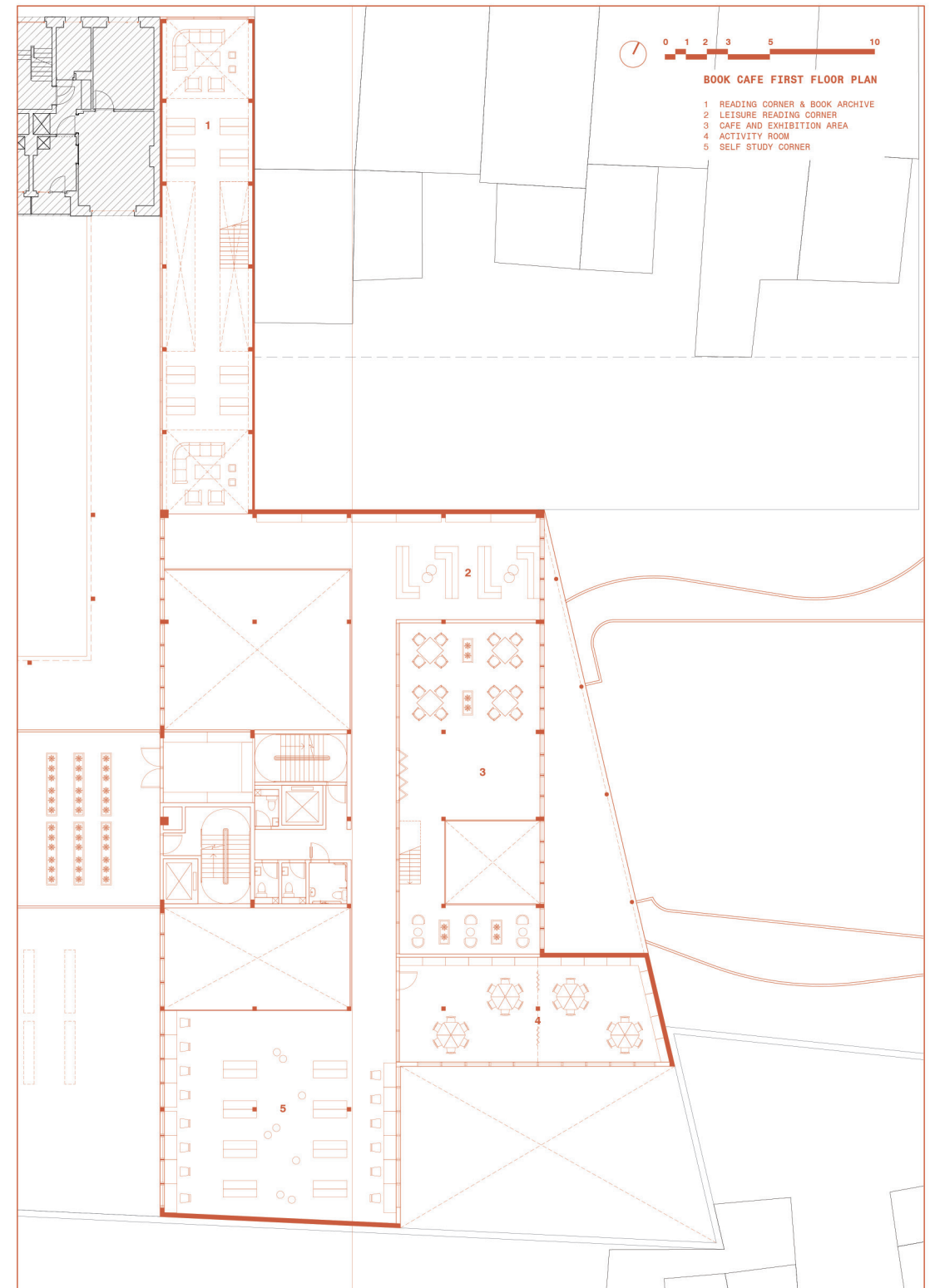
The third diagram shows the plaza could also hold movie screening event during night time. The column of the canopy not only able to hang the movie screen fabric, but the steel ring system on the column also allow to hang things in different purpose.





EYES ON THE PLAZA







VOIDS IN THE BUILDING - INNER COURTYARD

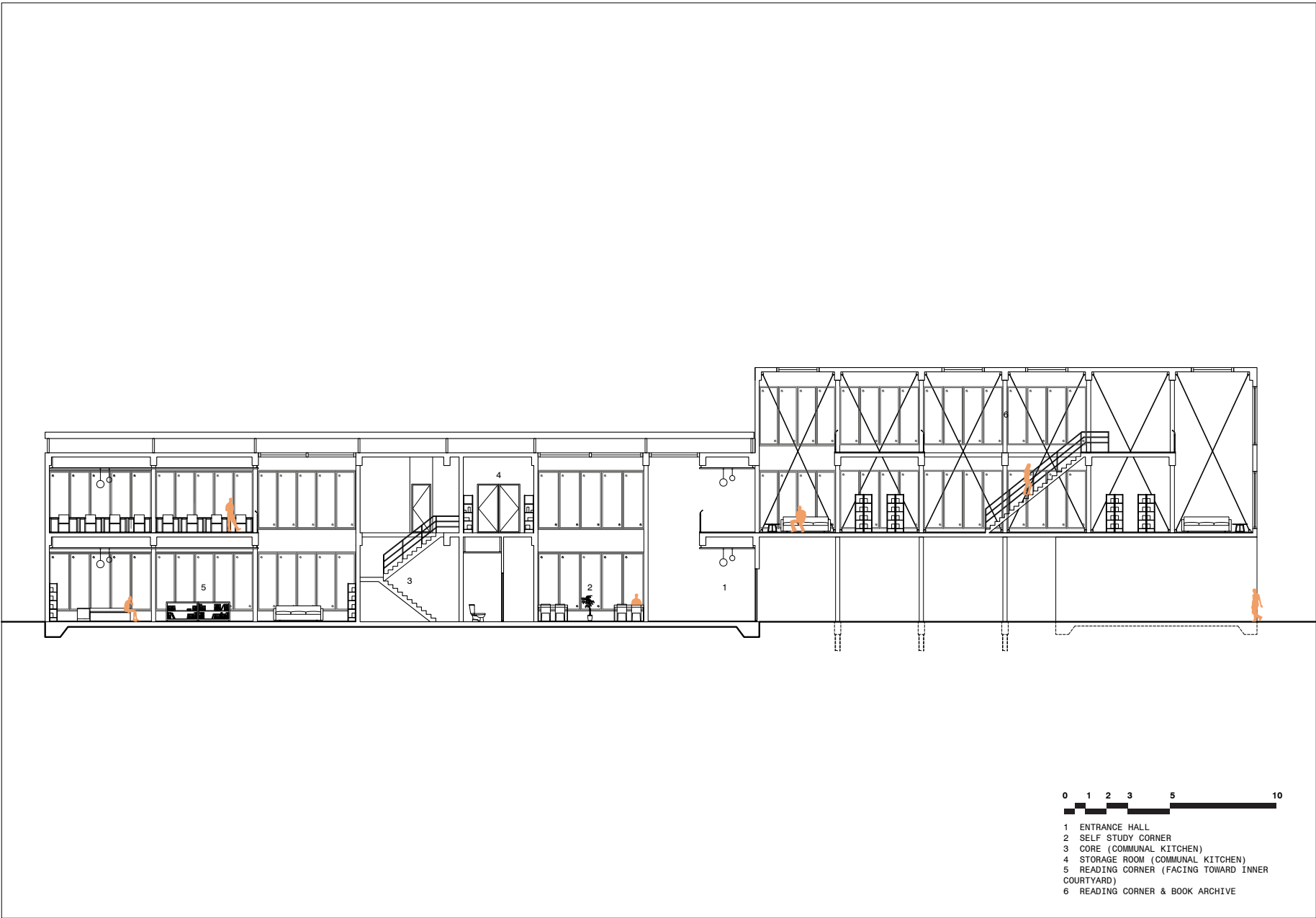


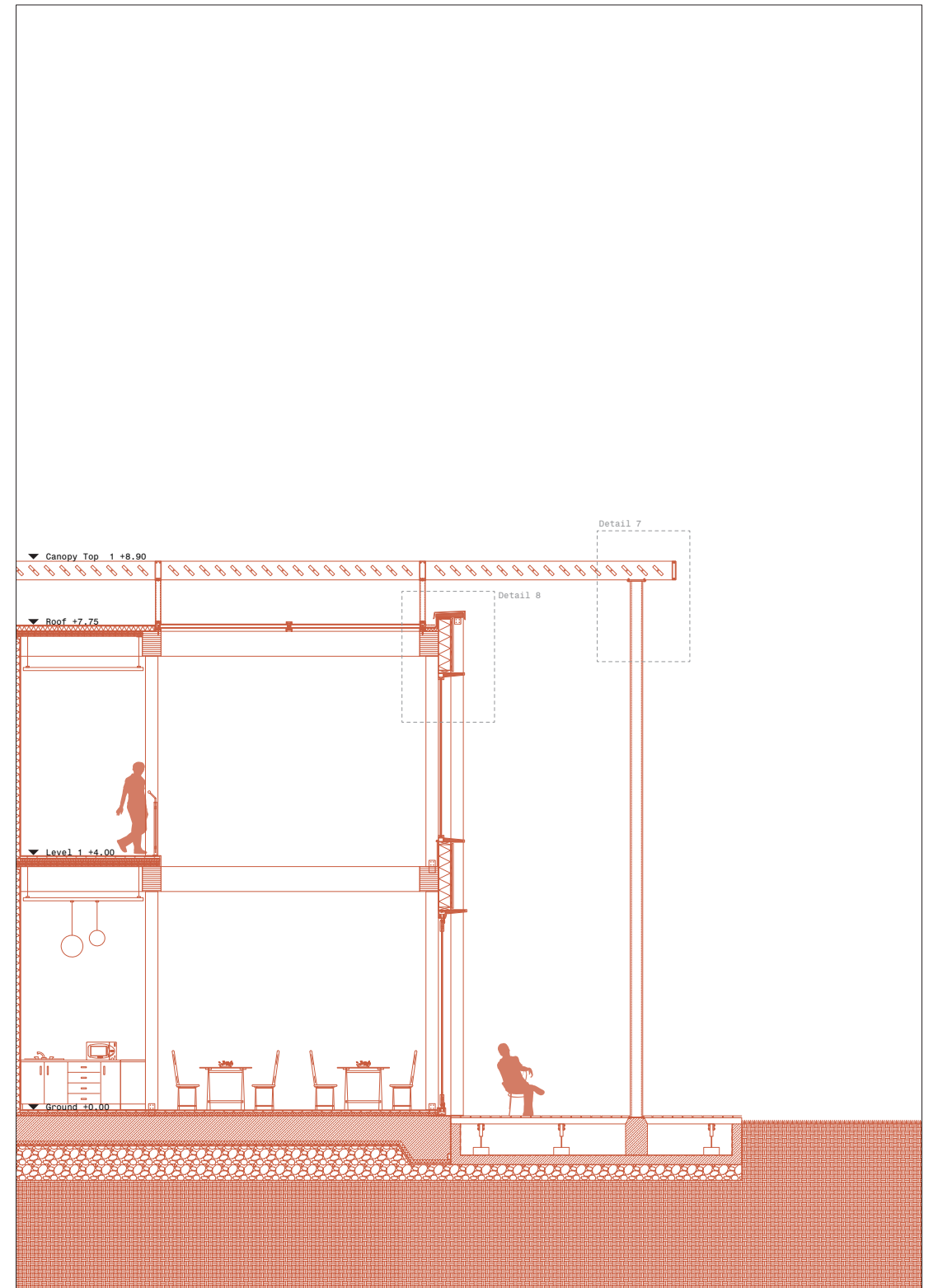
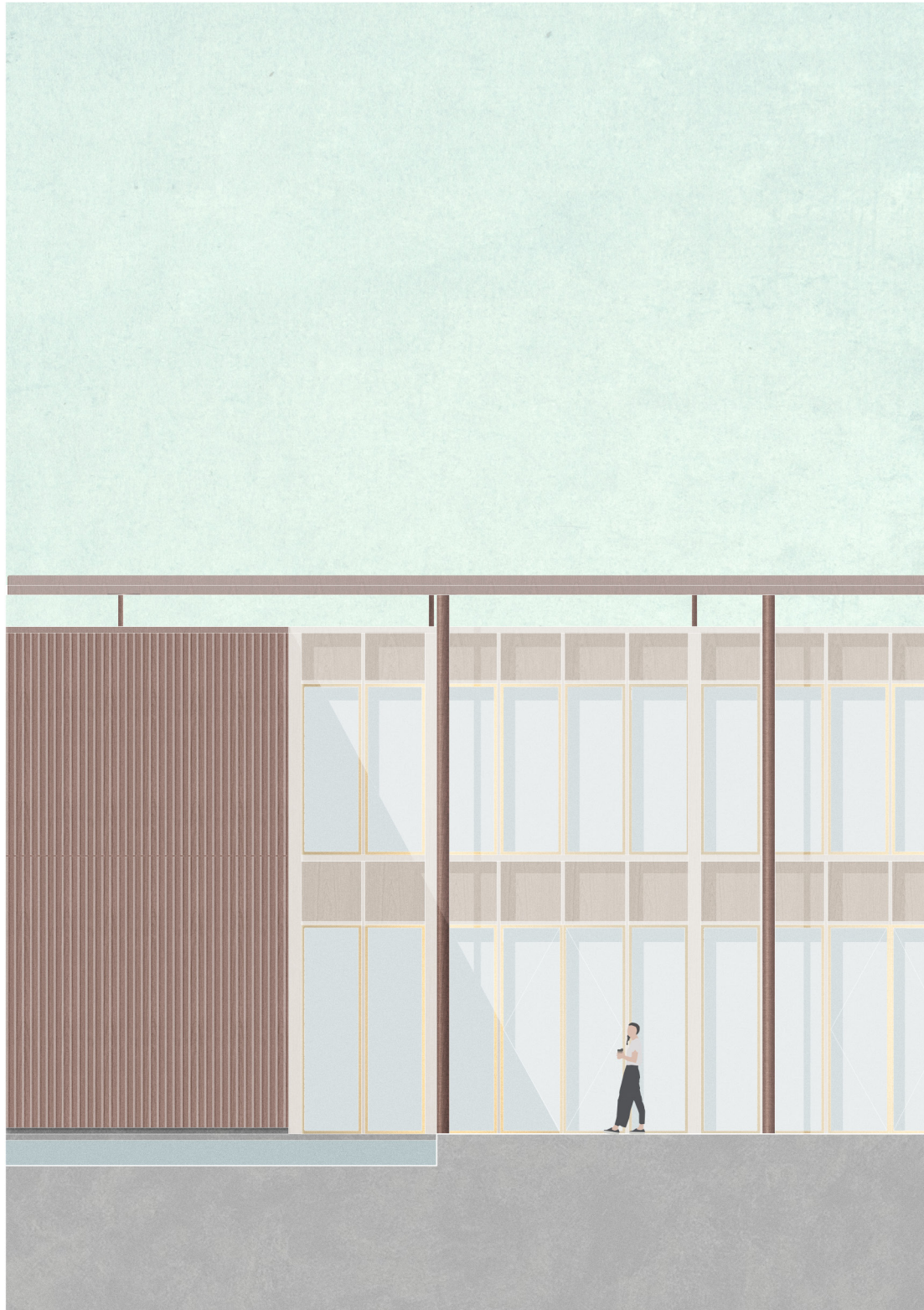
SOLID - VOID IN BUILDING

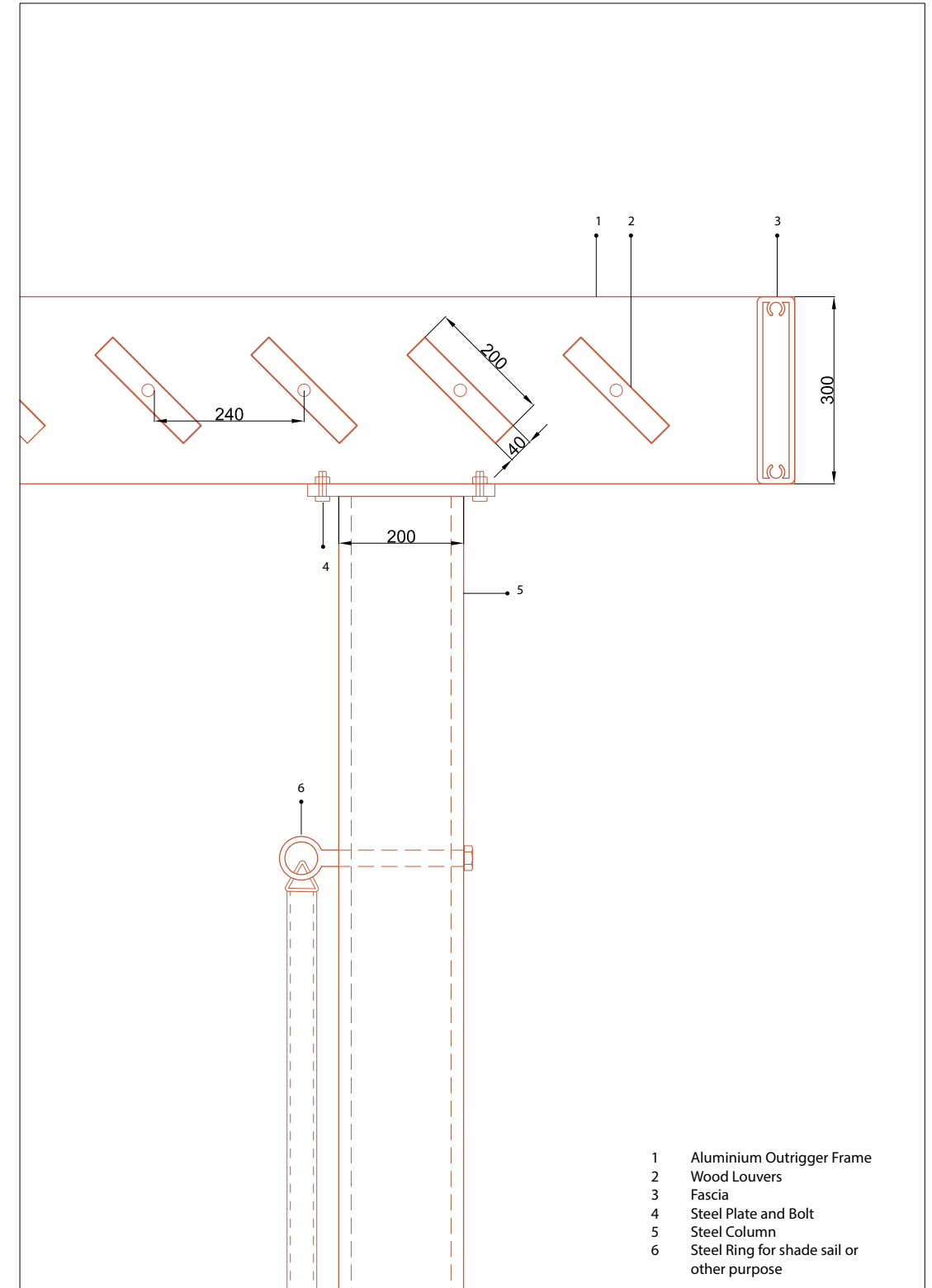
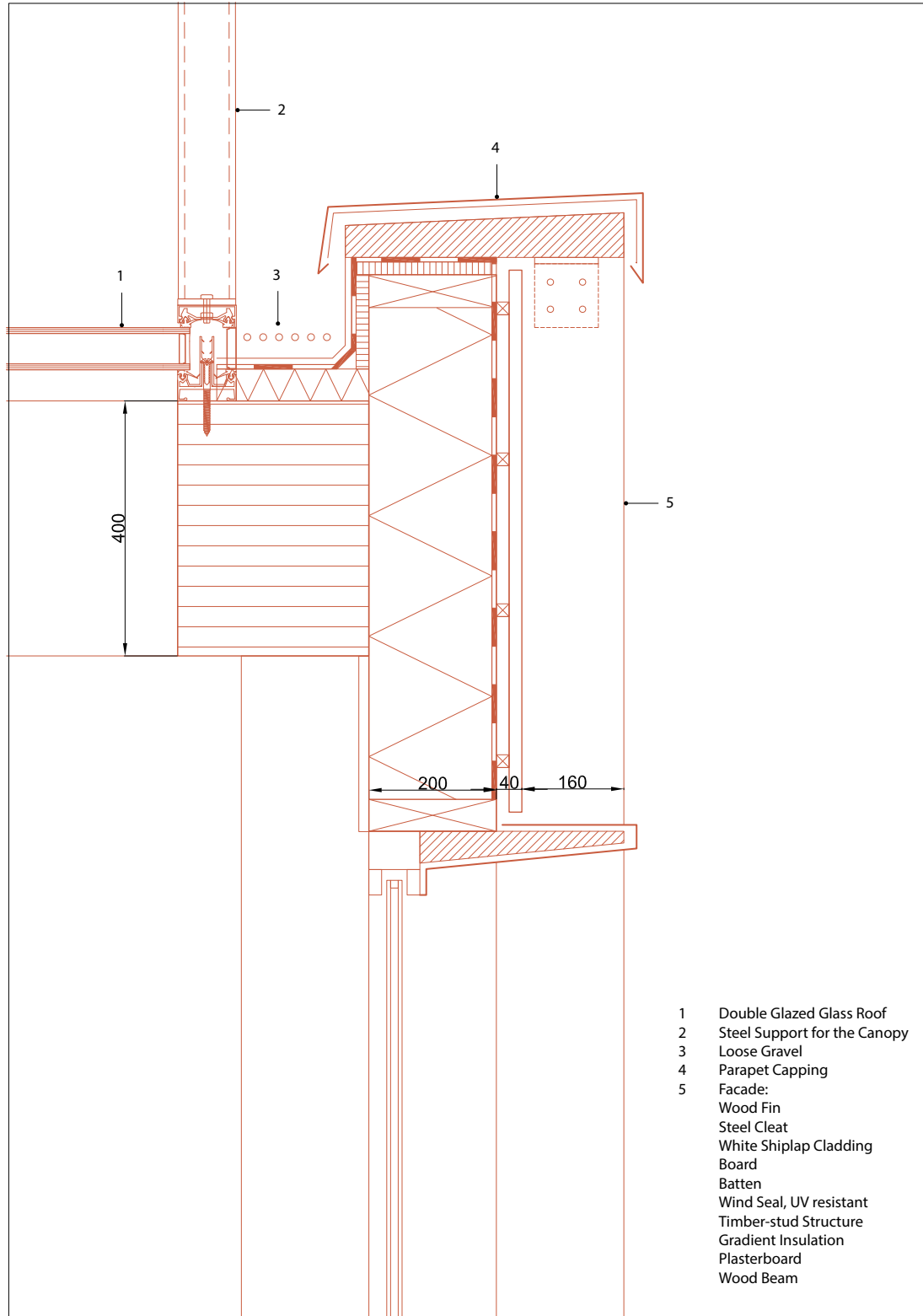
The notion of void not only appear in the landscape design, but also occur inside the building. Various type of reading corner are in the void space and allow visual connection, while the amenities such as office, cafe are enclosed and act like a solid box.

The right block is elevated and act as a subtle entrance for the book cafe. Since the block is situated in between two building, skylight is also designed to maximize natural light penetration.

For the left block, a detached canopy is designed, and the skylight is implemented where the atrium space due to climatic consideration.



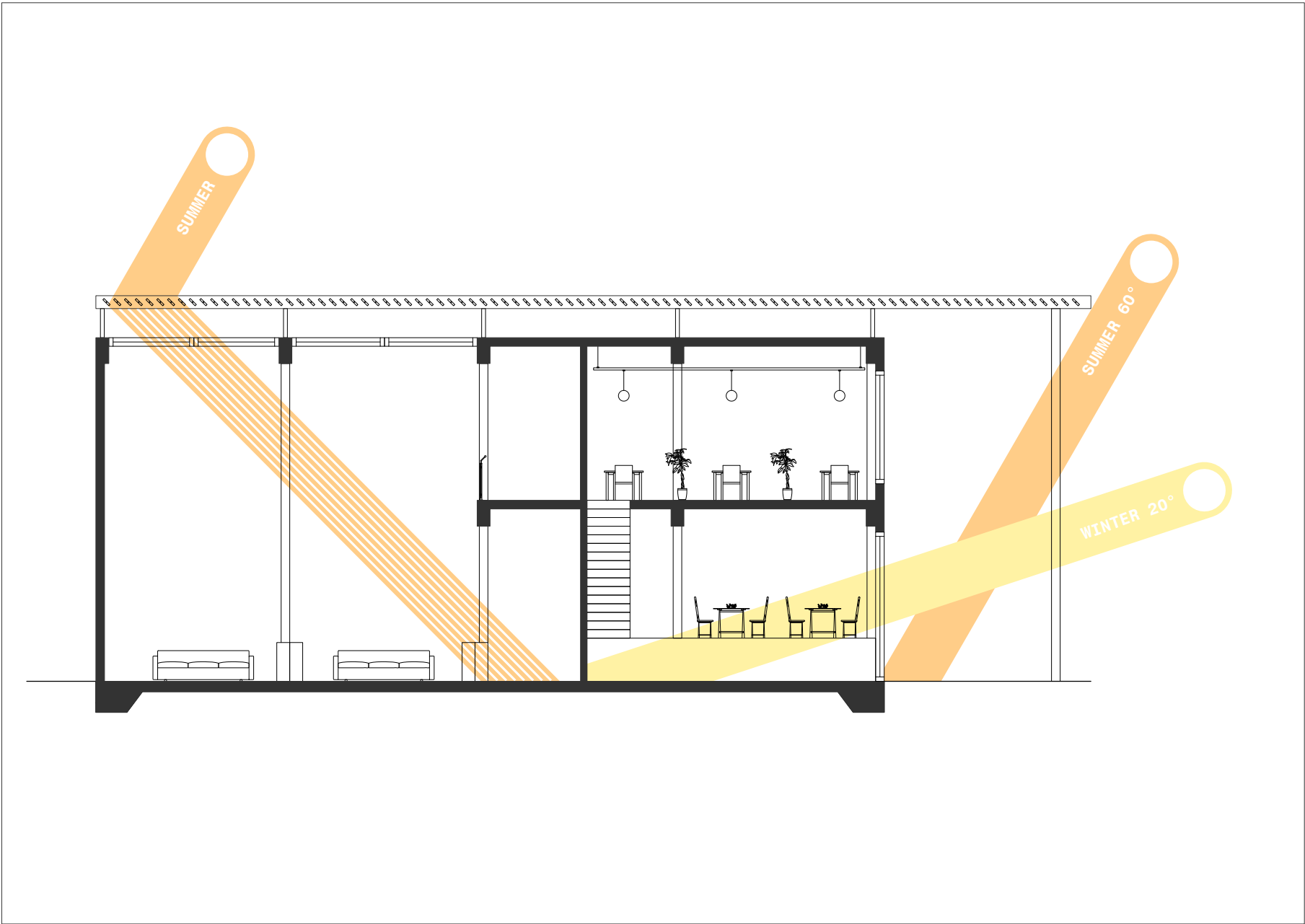


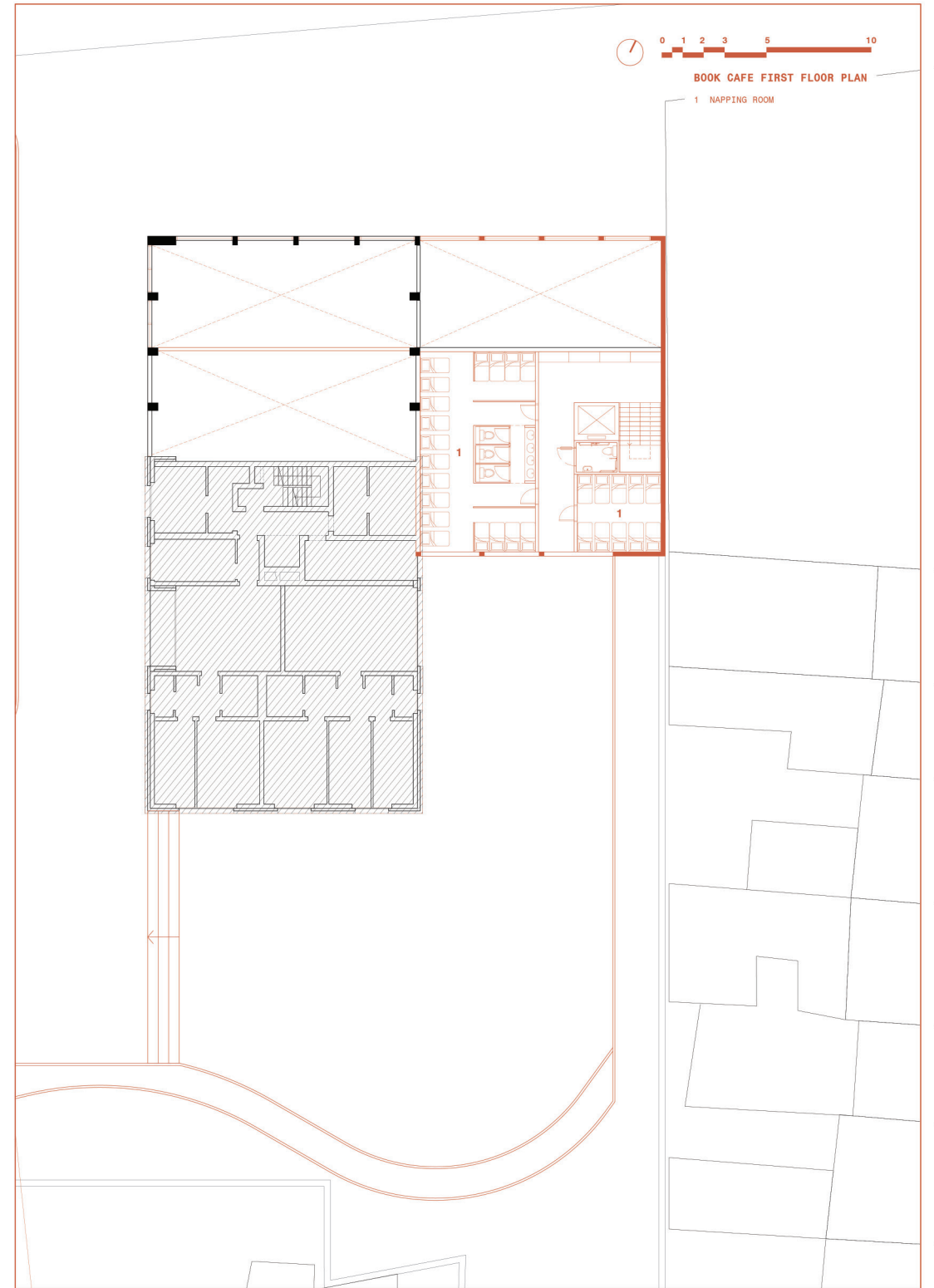
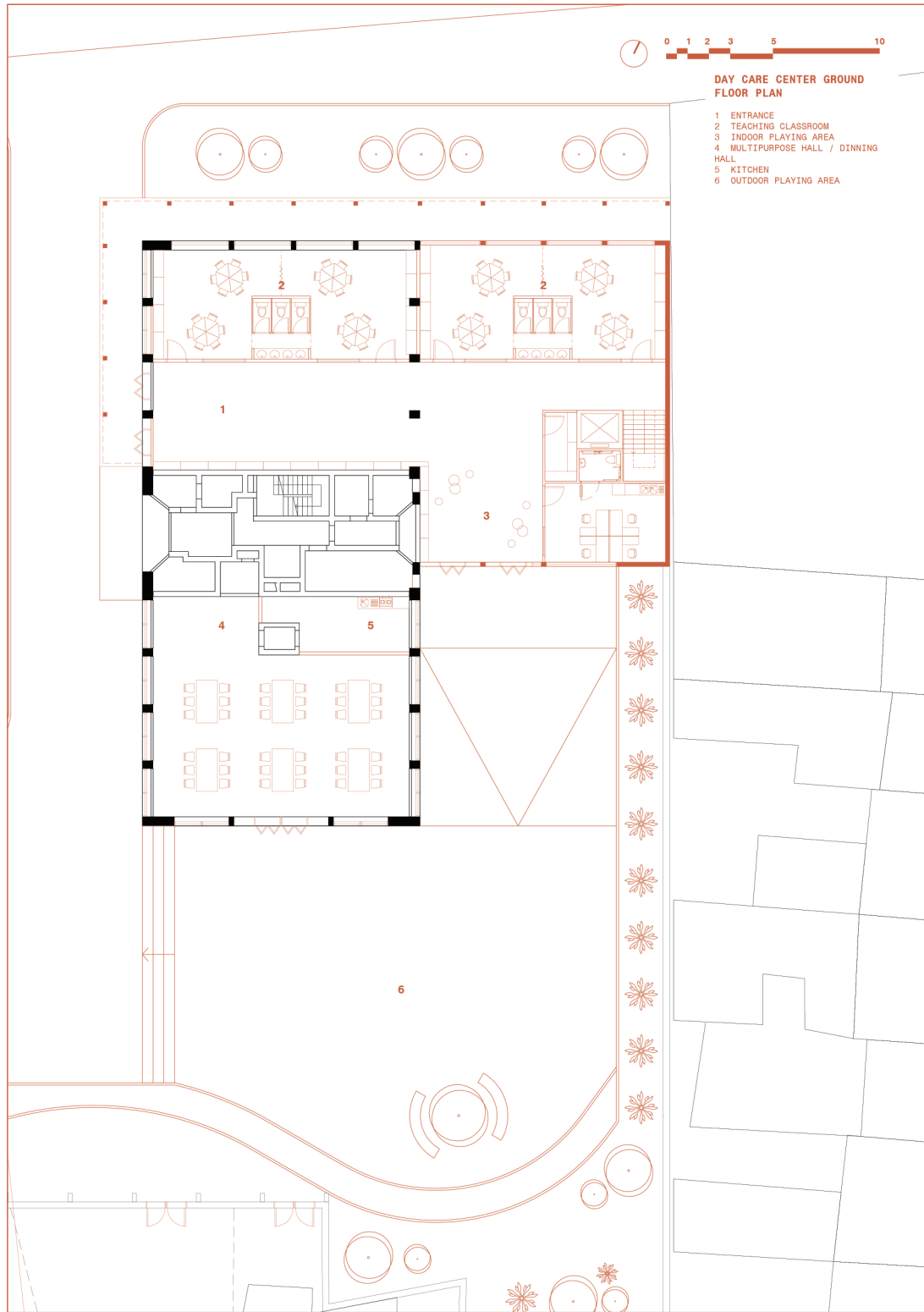


CANOPY AS BUFFER ZONE

The detached canopy is designed as a buffer zone for sun shading, it could block the summer sunlight while letting the winter sunlight to penetrate the building.

The wood louvres on the canopy enable to diffuse the direct sun light and avoid glare for the reading corner space inside.

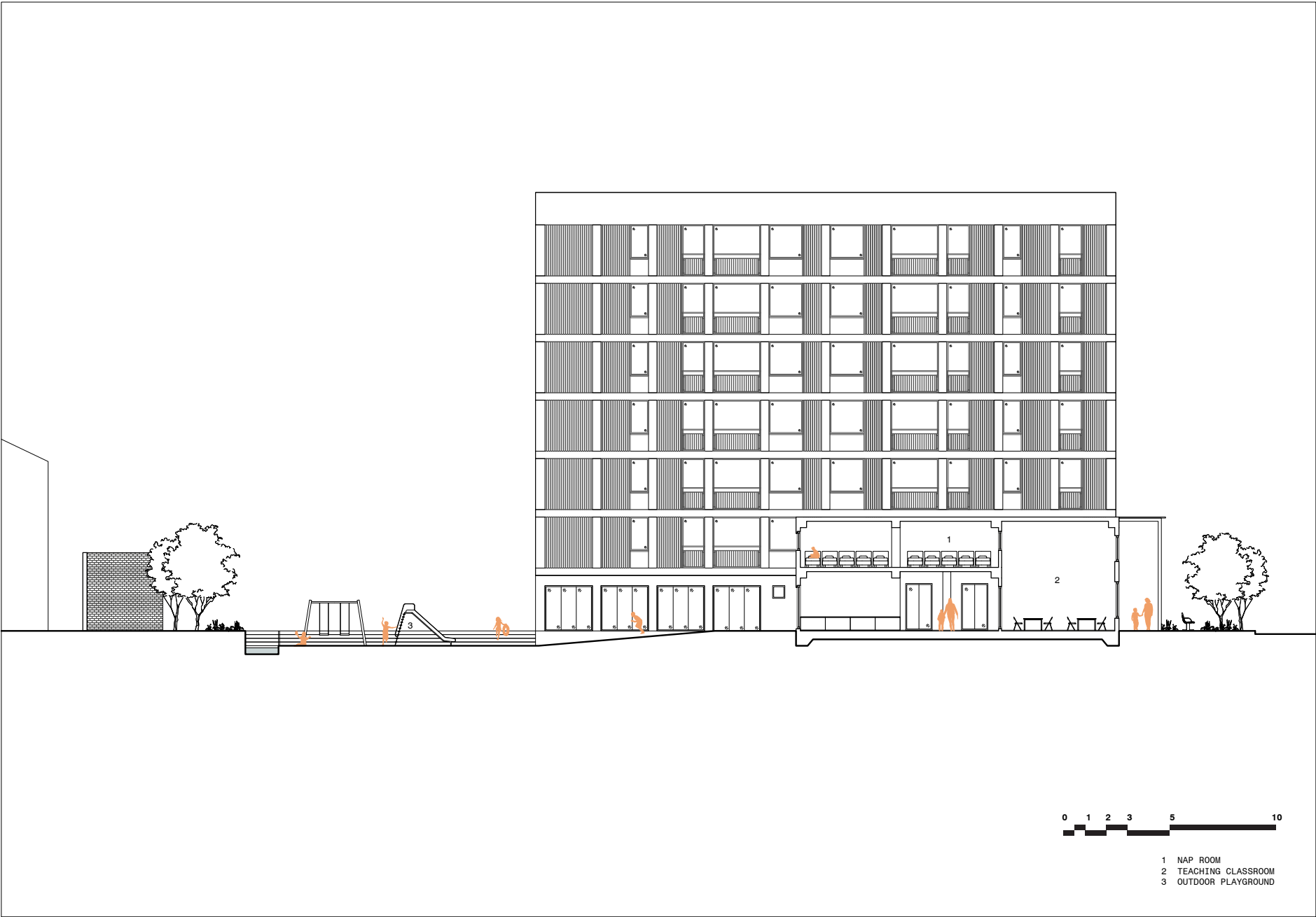




LEVEL DIFFERENCE

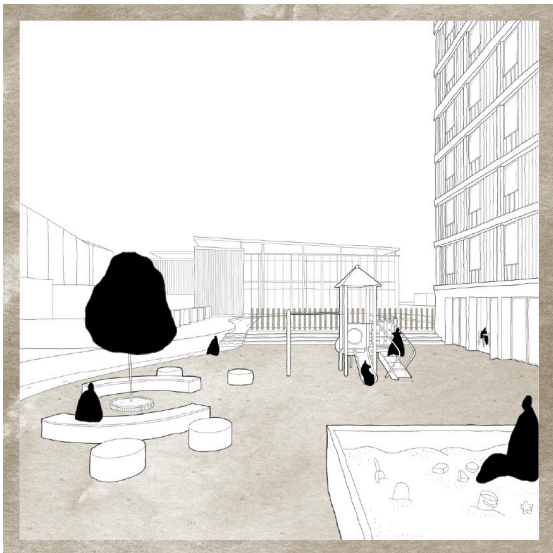
The void is 0.7m lower than the ground floor level, not only it could distinguish different usage of the void, but also tackle the low headroom issue of the exiting social housing block.

This pocket void is more enclosed compare to the one next to the book cafe since it is designed as children playing area and need to consider the safety issue.



TRANSITION OF THE PLAYGROUND
AREA DURING TIME

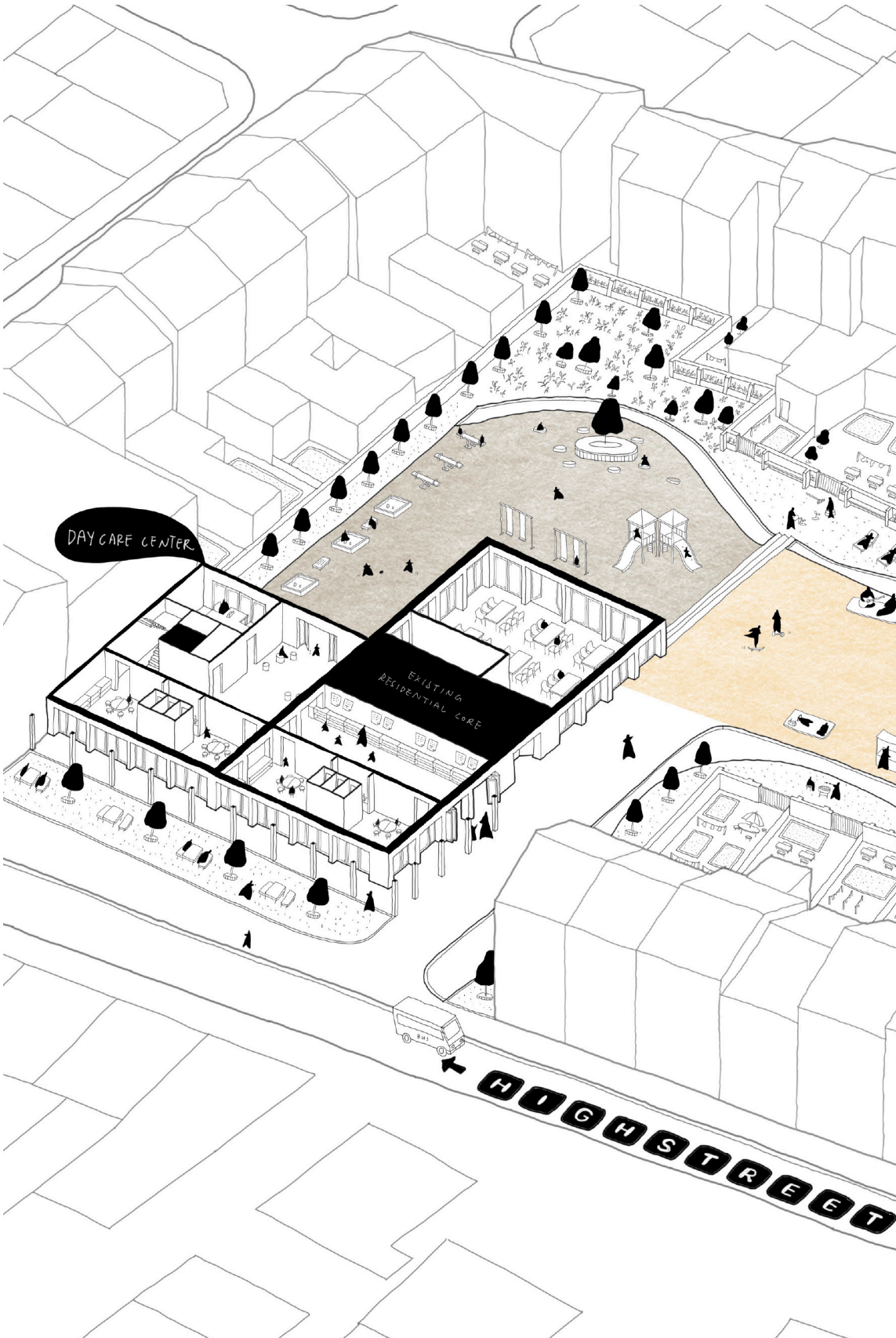
The void is facilitate as an outdoor playground for the day care center during weekdays. However, during weekend, the retractable fence could be disappeared into the ground and open up as a public playground for the Bressoux neighbourhood since there are lack of playground facilitates nearby. The general public could access the void from the street.



Weekday Situation: private outdoor area for the day care center



Weekend Situation: public playground area for the Bressoux neighbourhood



REFLECTION

Scars

‘Scar’, as the theme of urban architecture studio this year, also become a self- journey for me to explore my position to face the scars in the city. The scars are reflecting the trace of the history in the city and the result of patching working in the urban fabric, yet their existence also bring a sense of inharmonious into the neighborhood at a certain degree. So, to what extend we should conceal the scar, or shall we just simply embrace the beauty of the flaw when we are designing?

In P1, our group ‘room with a view’ researched the city of Liege as a sequence of rooms and corridors, various quality of space was seen as rooms and streets as a connecting corridor. While we were wandering around the neighborhood, voids as one of the rooms caught my attention most. The voids scattered around the neighborhood and situated in-between the urban blocks. People would always easily pass through yet seldom notice their existence. These spaces were often abandoned or underutilized, in which resemble as a forgotten space in the city. In such situation, it also reminded me voids are also a form of scar in the city, currently acting as an urban segregation element in the neighborhood.

Research

Urban voids is lived space that emerges within social life, which possess a substantial correlation with the neighborhood. Since these spaces are not conceived under planning and designed, they also possess potentials to move beyond the social values. This makes me reconsider the potential of bring these forgotten spaces back into the neighborhood with an urban significance. Therefore, in my first part of research, I explored the potential and spatial quality of urban void through literature, morphology, praxeology and historical research. The literature research aided me to understand the phenomenon of urban voids, discovering how the general public and scholars perceived the existence

of voids. This research approach was a first steppingstone for me to understand people used to perceive a negative connotation of voids due to its inherent nature – Emptiness. However, by thinking in another perspective, emptiness could be also considered as a productive concept in the urban fabric. Thereby, it inspired me to explore how to retranslate it as an alternative public space that truly belongs to the community since there are lack of public space in the neighborhood. The next research approach was to revisualize the emptiness, analyze their spatial quality and hidden value from the existing urban voids through nollí map and voids modeling. The nollí map demonstrated voids as individuals, indicated their location, boundaries in between, and correlation with the adjacent positive space. Meanwhile, the void model inverts the positive and negative space, aiming to capture the absence of the space in the urban fabric as a collective component, visualizing the urban voids as volumes. These set of morphology (solid-void) research urged me to reflect what is the position of voids. As an architect, we frequently focus on the building itself, yet neglect the potential, movement and interaction between negative and positive space. Voids are the by-product of positive space, they are situated in a more passive role with a lack of recognizable role in the urban fabric, thereby the general public would perceive them as negative component in the neighborhood. In the praxeology research, I picked four case studies to investigate the relationship between the voids and neighborhood through a social lens. The four examples illustrated a range of level of emptiness through the human activities and the appropriation of space. In the last case, an informal football court located in a pocket space, demonstrated a certain level of publicness could be foster when the space possessed a more recognizable role as well as correlated with the mix-functioned building blocks in the surrounding. The historical research was also a step helping me to choose

my site. The research demonstrated the change of urban block through time, transforming from a merely row house urban fabric into a mix housing typology due to modernist intervention in the 70s. The neighborhood was disconnected due to the boundary between the two housing typologies; however, I discovered the urban voids in between possess potential to mend the indeterminacies caused by the paradoxical urban setting. Concurrently, I also discovered the change of the voids through time, fence and gates were being added in order to segregated the street and inner part of the voids.

The first part of research gave me an overview of how the voids in Bressoux looks like and inspired me to transform voids as volume as a design approach. Nevertheless, I was being reminded that the existing spatial quality of voids in my chosen site was insufficient in the first part of research. Therefore, in order to proceed to the next phase of research, I did a series of research on investigating the voids through cutting multiples sections, exploring how the brick boundary walls, entrance, height of buildings, pavement, views affected the spatial and atmospheric quality, as well as accessibility of voids. This research approach was useful and became the linkage between my research and design. It inspired me to soften the boundaries between the voids, and thereby foster social interaction between two different housing typology and create an inner-living concept.

Design

During the design stage, I often reflect myself on how to design emptiness. It was always a challenge for me to strike a balance between actualizing architectural intervention on the urban voids and preserving the characteristic of voids simultaneously. For my design concept, I decided to make use of ‘void’ as a concept to design a community cluster in the urban block so as to foster social interaction and mend the dispersed neighborhood. My first design approach was

using massing blocks as the parameter to redefine different layers and usage of voids. By translating the results from the research, different configuration of the voids could create a various range of publicness. For instance, the most public voids obtain two entrances access, meanwhile the private void was enclosed with residential and communal center.

Later, I also decided to renovate the ground floor of the existing modernism apartment block, and thereby encouraged a more vibrant social life in the neighborhood. Since the location of the urban block was in the heart of Bressoux, most of the communal programs were facing to the main streets, in which aiming to form a highstreet in the neighborhood and became an alternative public space in this district.

Another challenge for me during design was how to use void as a solution to tackle the existing problem in the urban block. For example, the ground floor of one of the modernism building was higher than the outdoor ground level, and on the other hand, the other two modernism buildings obtained a low ceiling height due to its former car garage program.

Therefore, one of my design approaches was to create level difference in void, conceiving void as a three-dimensional space. The boundaries were the next struggle I encountered in my design process. A coherent solid brick wall was built between the housing typology, in which lead to absence of interaction between the two community. At the beginning of the design, I did suggest redesign and demolish some part of the brick wall in order to soften the boundary in between. However, I was reminded that it was crucial to respect the existing living culture in the neighborhood and embracing the existing materials from the site. The range of everyday activities occurred differently in the two housing typology, apartment buildings mainly based on the upper floor,

meanwhile row houses mostly occur on the ground floor. Therefore, merely demolish the boundary was not an ideal approach due to arousing safety concern for the row house residents. Through developing my project, I decided to introduce water as element in the void. Not only its dynamic/static nature could facilitate as a leading and gathering role in the public void, but also it could also alternatively act as a soft boundary between the public and private realm. By designing water stream as protection next to the row houses, the boundary wall could be reduced its height and create small islands as a buffer communal zone for the row house community. This approach allowed the space to obtain spatial and visual connection, yet physical inaccessible.

In the early stage of my design, I focused on designing the connection between the building block with landscape through plan. Nevertheless, I soon discovered it was an ineffective design approach since it was hard to visualize the spatial quality of the urban void genuinely. Thereby, I started drawing perspective illustrations to explore different options of urban void and its surrounding. Various combination of façade, landscapes and arrangement of pavement create different atmospheric sense of space. This design method benefited my project process a lot and it could also stimulate how people perceive the space, experimenting how to retranslate emptiness from a negative connotation to a productive concept.

In conclusion, my research and design would like to voice out for the urban void, advocating people to embrace the natural quality and hidden value of the space. In my thesis, I was experimenting an inversion in between solid and void, proposing a scheme that void as a new interior in the neighborhood, meanwhile the building facade as their enclosure. I am also inspired by our studio attitude, respecting and learning from the existing. The result of my project also echoes with my attitude toward scar in

the city. We, as an architect, should always embrace the existing flaws and retranslate it with minimal intervention to provoke opportunities and improvement. What I have learnt from this studio is trying to consider architecture from a lens of bottom up, understand what the community truly need, instead of solving the problem from the god's eye perspective. This also reminded me of architecture in Hong Kong, often a top-down approach is being implemented to solve problems in the most efficient way, neglecting the existing urban fabric and the history of the places. Voids will be filled up, and abandoned buildings will be dismantled to construct new buildings in order to match the productive image of the city. In my project, I spoke for these forgotten space in the neighbourhood, investigate the potential of using the notion of voids and emptiness to create an alternative public space for the neighbourhood, demonstrating that neglected spaces have the potential to foster better living quality in the neighbourhood, hence it could improve and evolve gradually with other existing architecture over time.

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