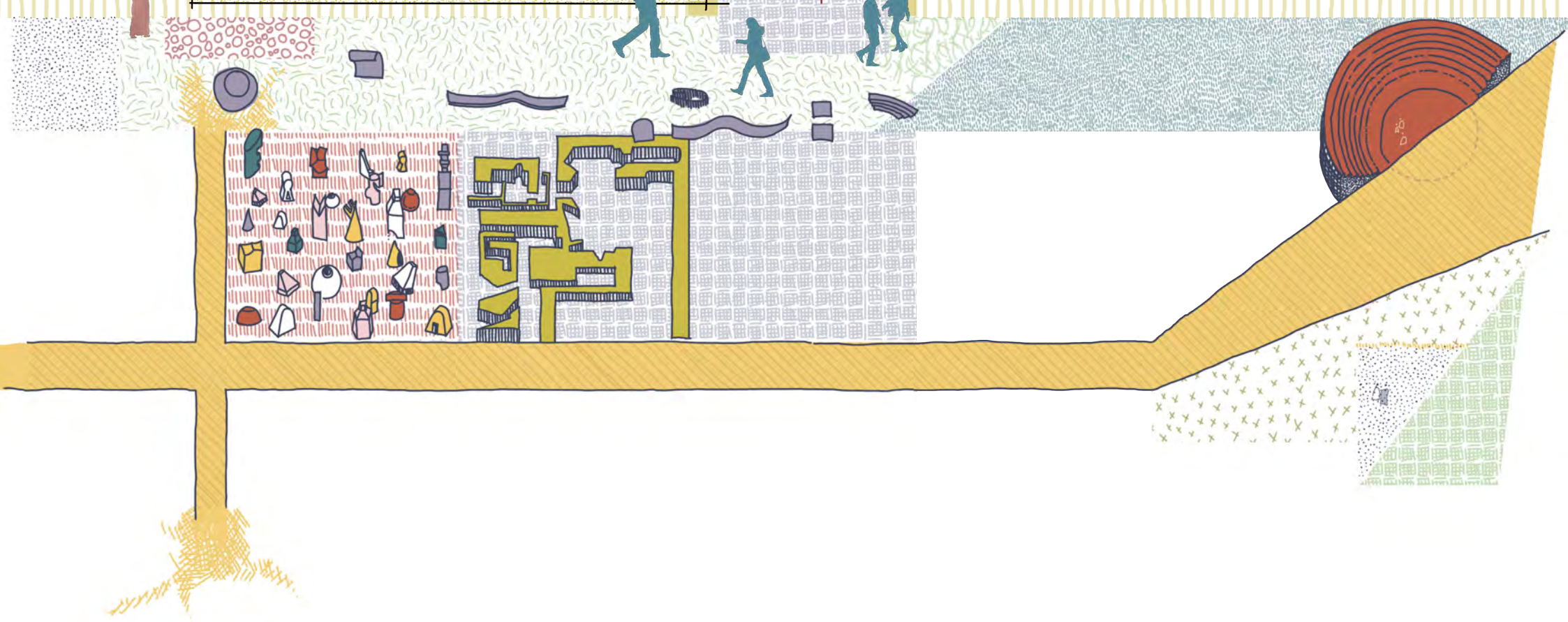
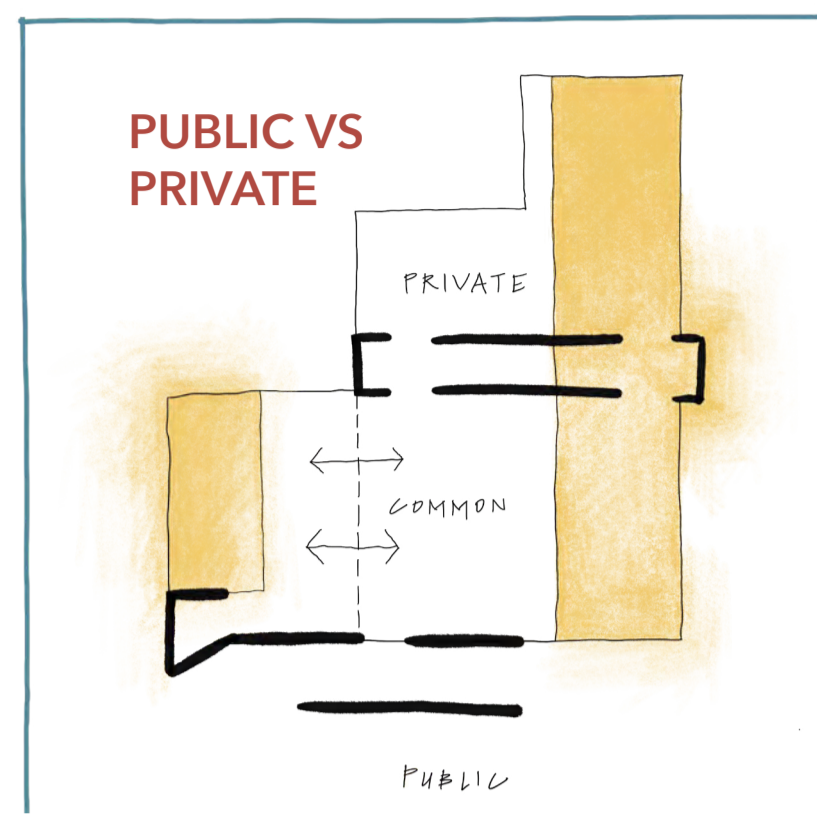


# Guidelines Development

RE-IMAGINING THE DENSIFICATION OF SUBURBIA

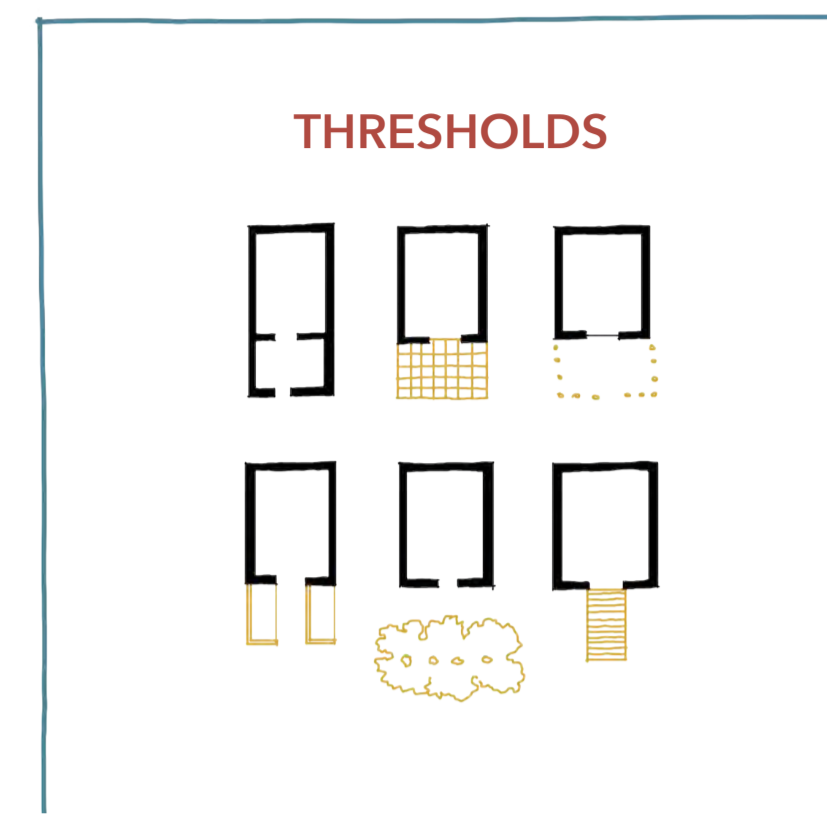


## DESIGN GUIDELINES



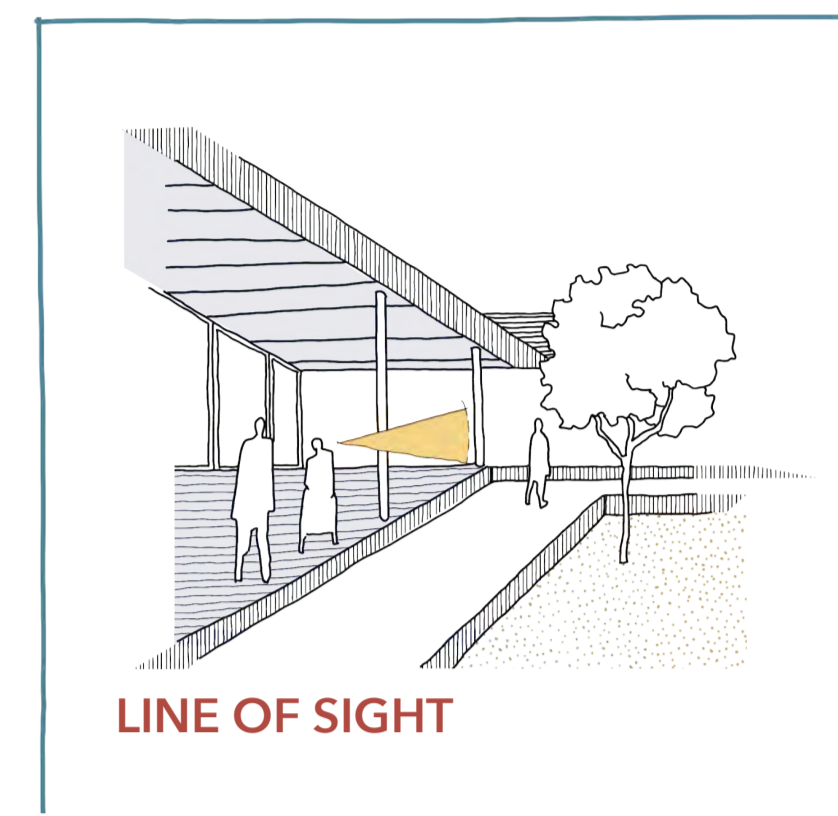
GUIDELINE 1

Blurring the line between public and private areas.



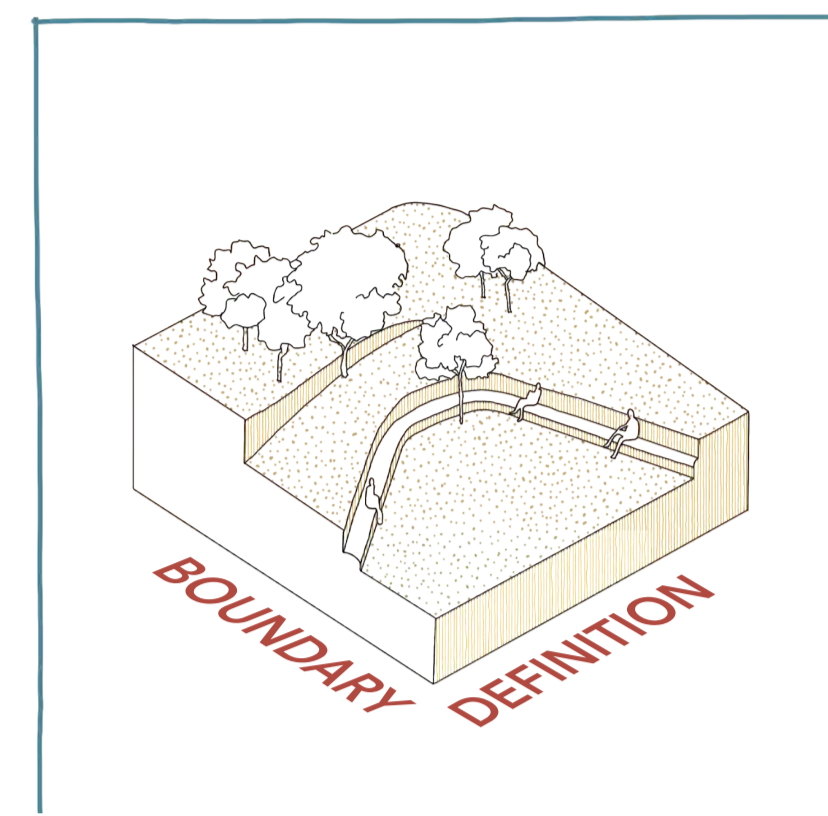
GUIDELINE 2

Emphasis on defining thresholds between spaces.



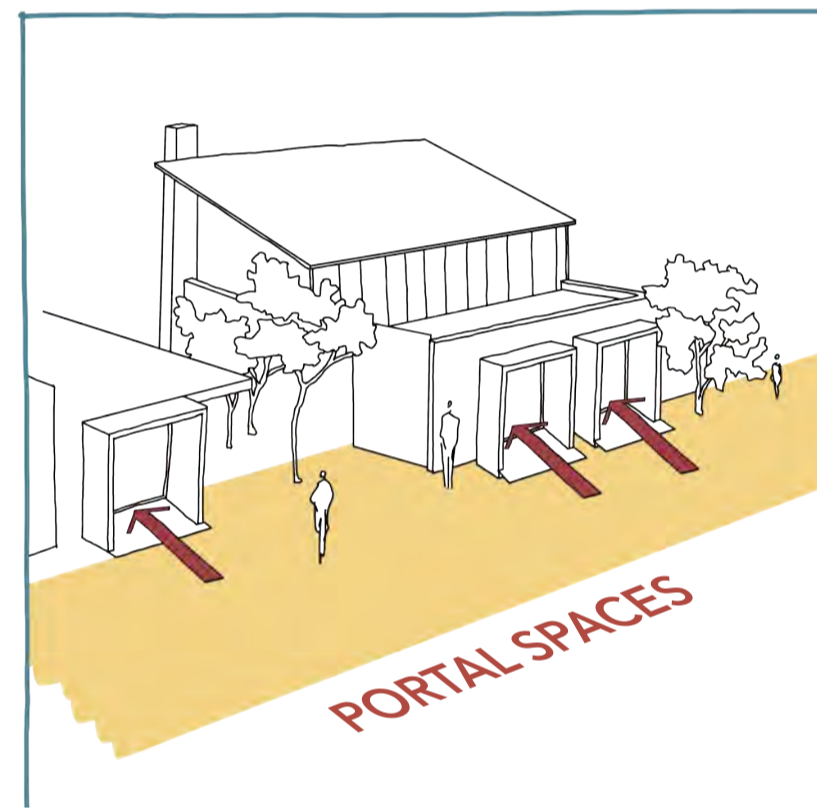
GUIDELINE 3

Consideration of visual lines of sight for user orientation.



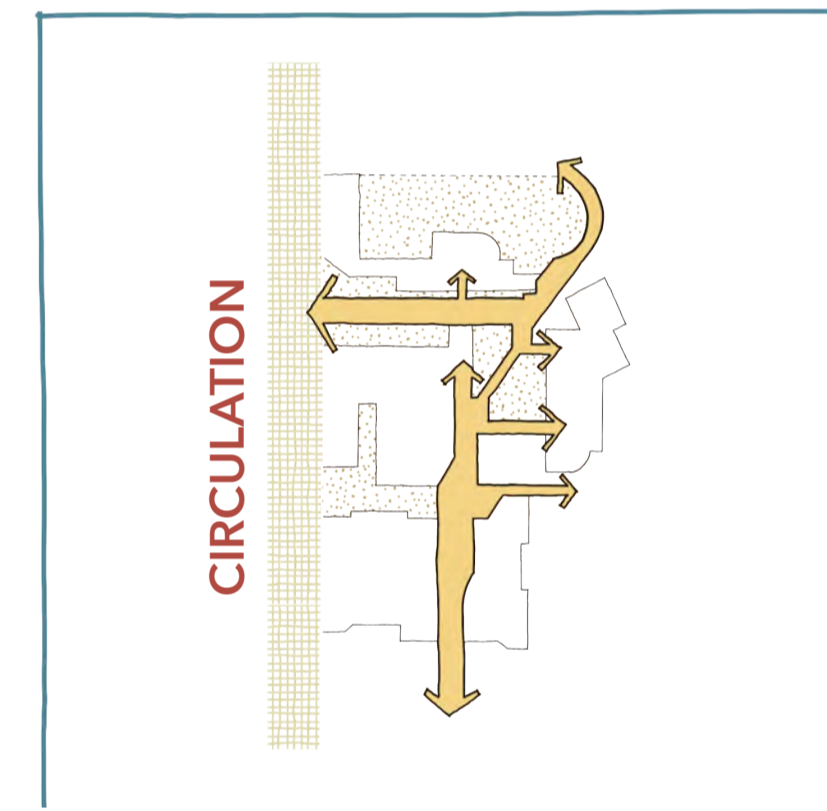
GUIDELINE 4

Boundary definition, not limited to applications of brick walls.



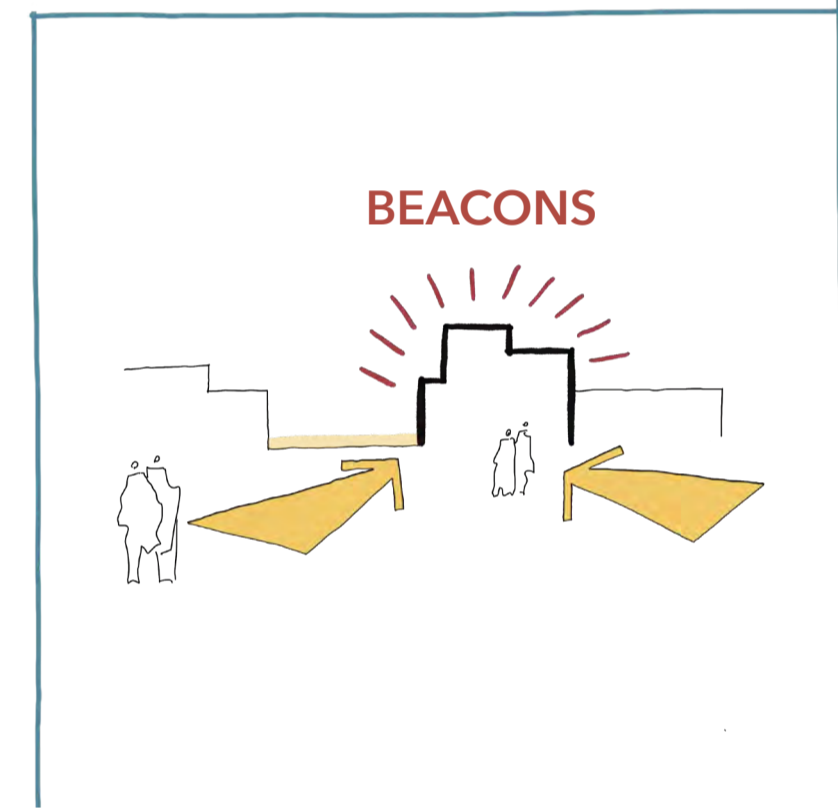
GUIDELINE 5

Creation of portal spaces.



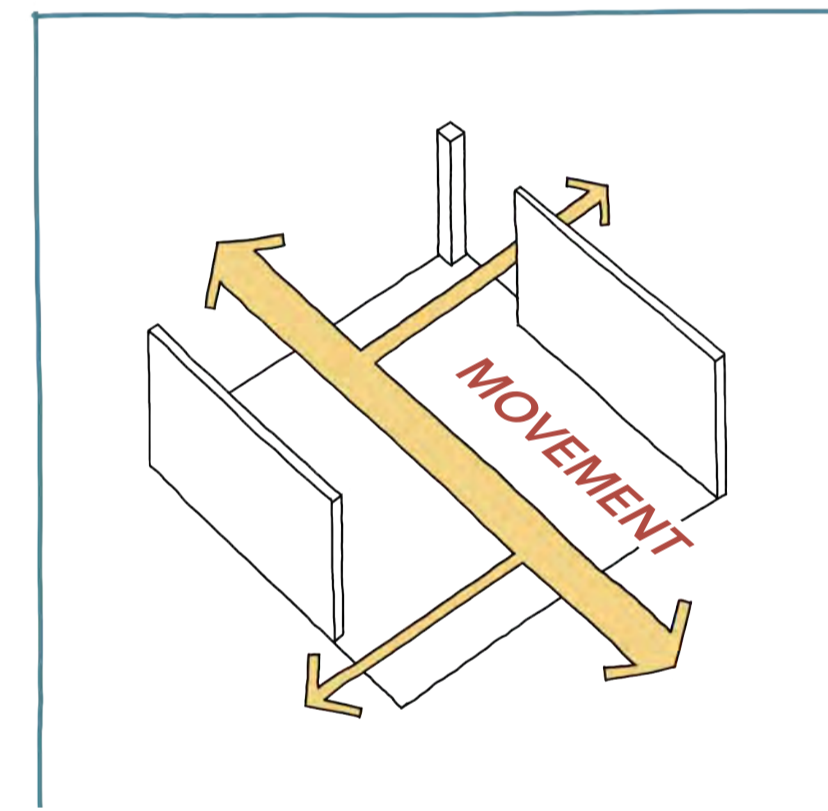
GUIDELINE 6

Efficient circulation within corridors, connecting to the existing surroundings.



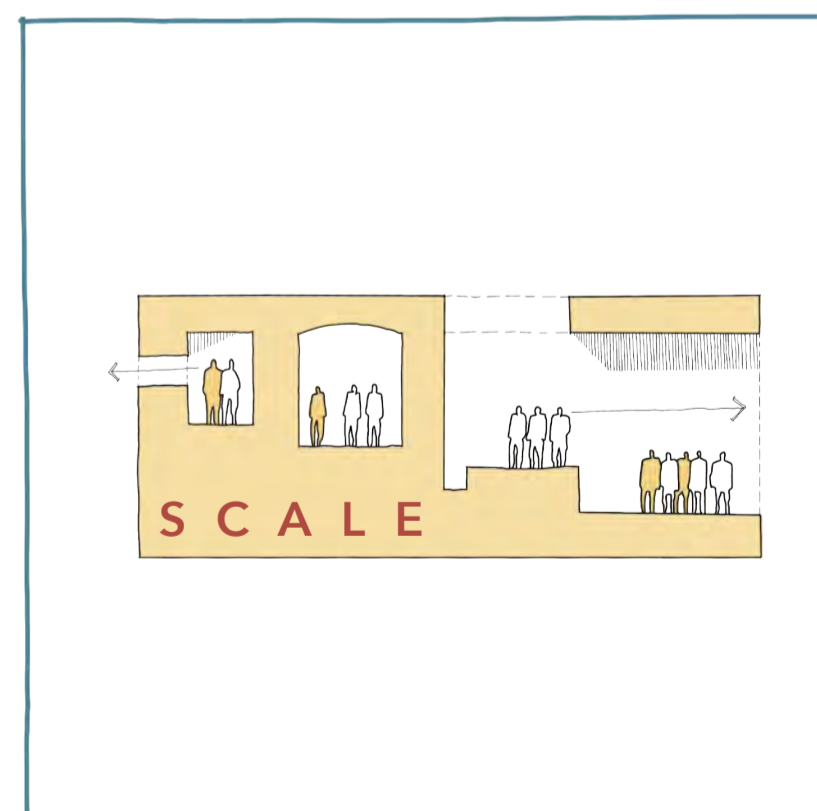
GUIDELINE 7

Enhancing legibility to avoid monotony and provide landmarks.



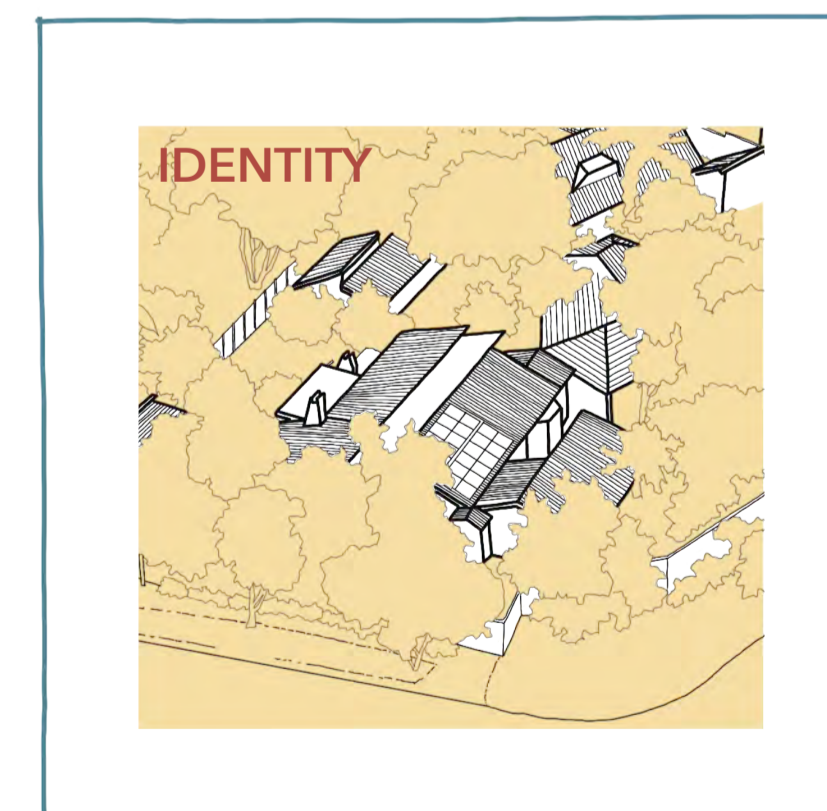
GUIDELINE 8

Focus on pedestrian movement patterns within internal corridors.



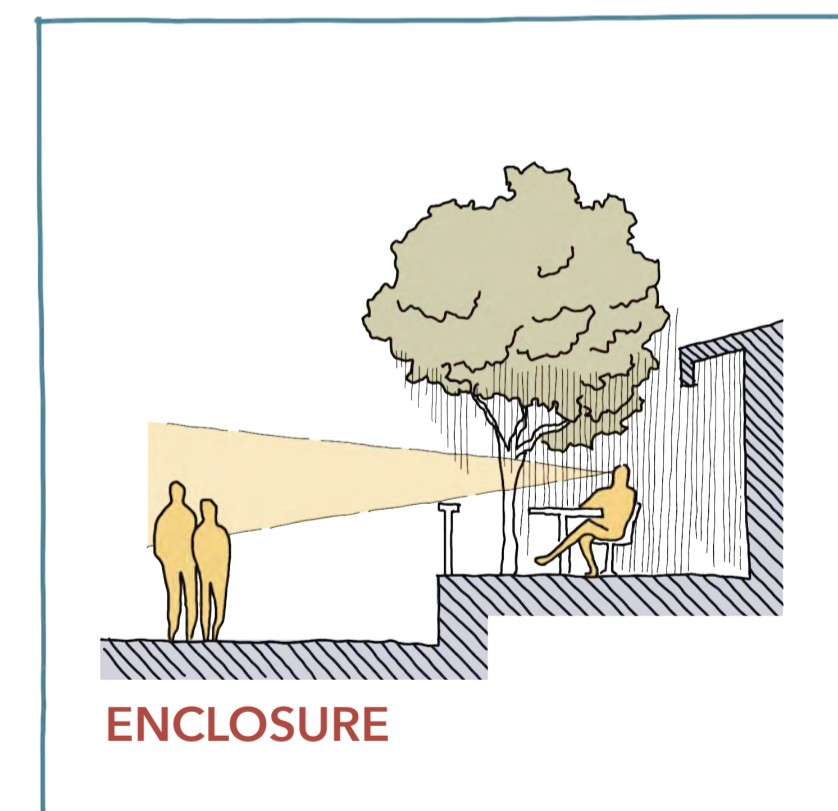
GUIDELINE 9

Scale - elements of known within visual context of a plane, aids in perception of size & scale.



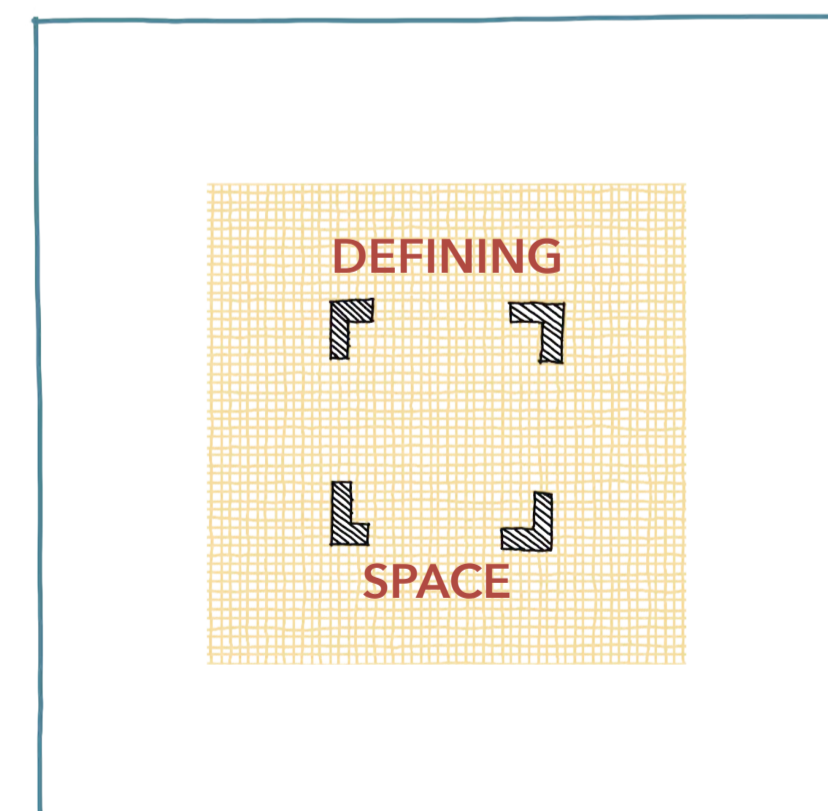
GUIDELINE 10

Recognising the identity of Menlopark as a suburb, going beyond mere building structures.



GUIDELINE 11

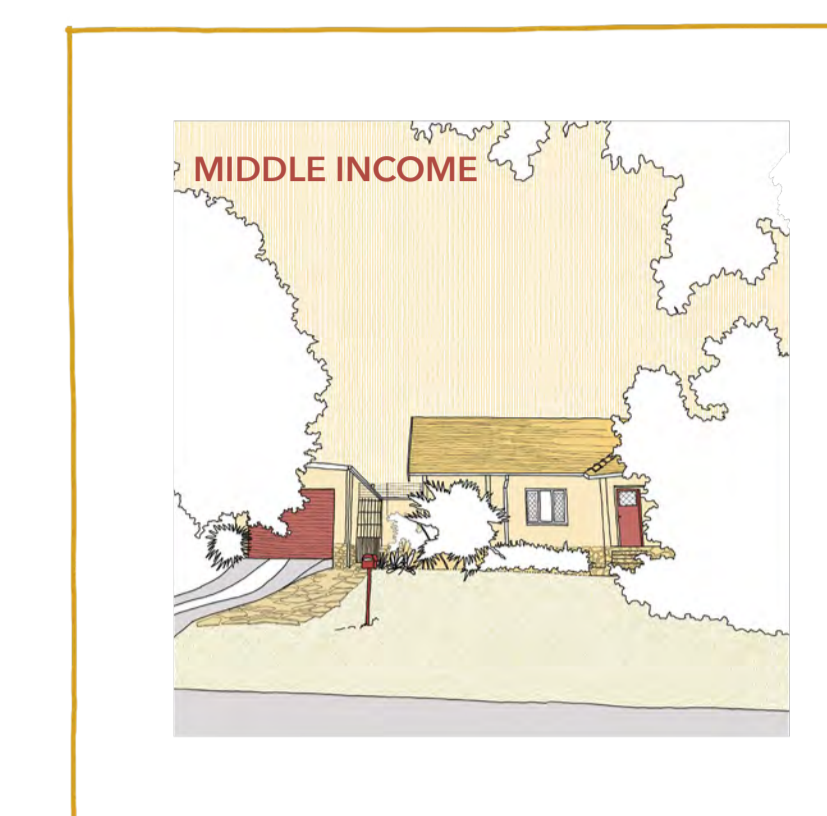
Prospect and Refuge: enclosure + screening to provide a sense of refuge.



GUIDELINE 12

African space definition: public until defined as private.

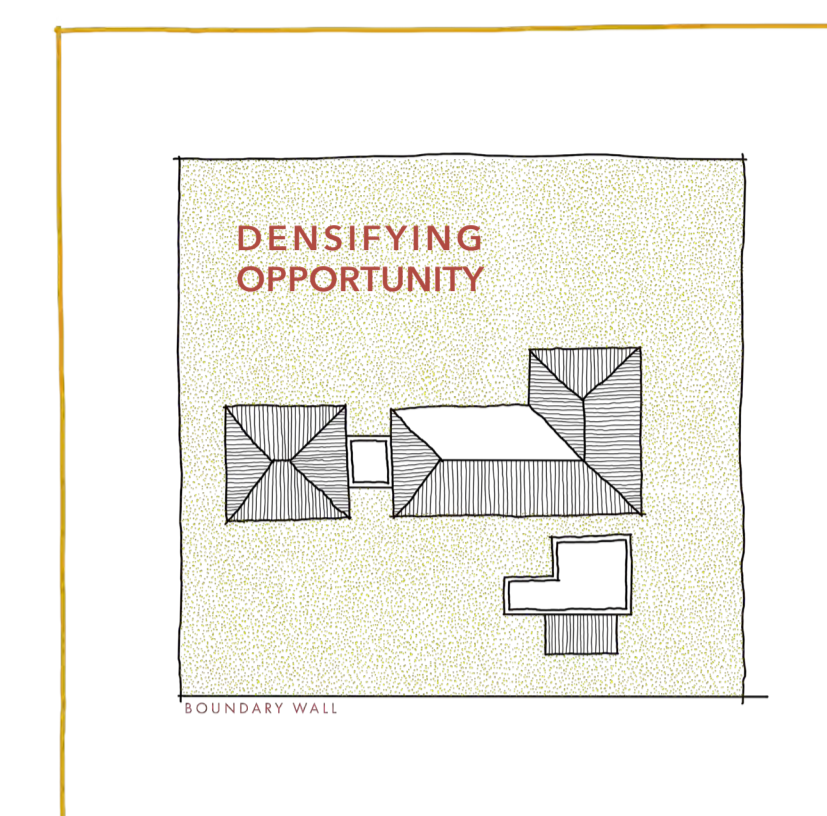
## SITE SELECTION CRITERIA



GUIDELINE 1

middle income earning neighbourhood

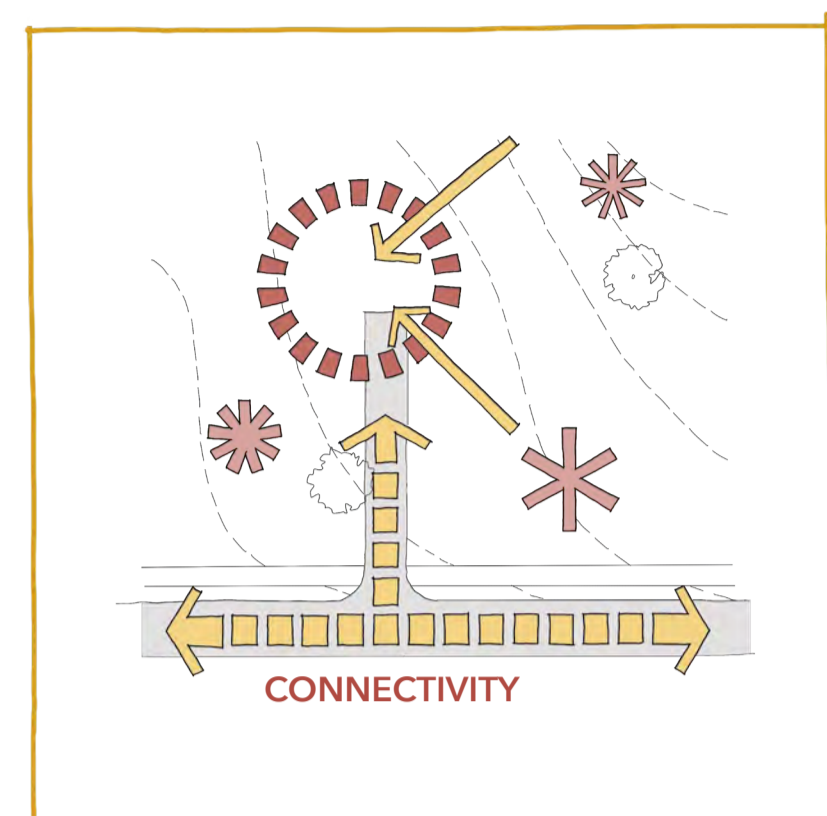
The location should be situated in a middle-income neighbourhood predominantly inhabited by families.



GUIDELINE 2

larger residentialerven

The residential properties must have ample space around the primary single-family dwelling to accommodate up to two additional interventions. The residential blocks will be better suited if they are not fully geometric.



GUIDELINE 3

centrally located + well connected

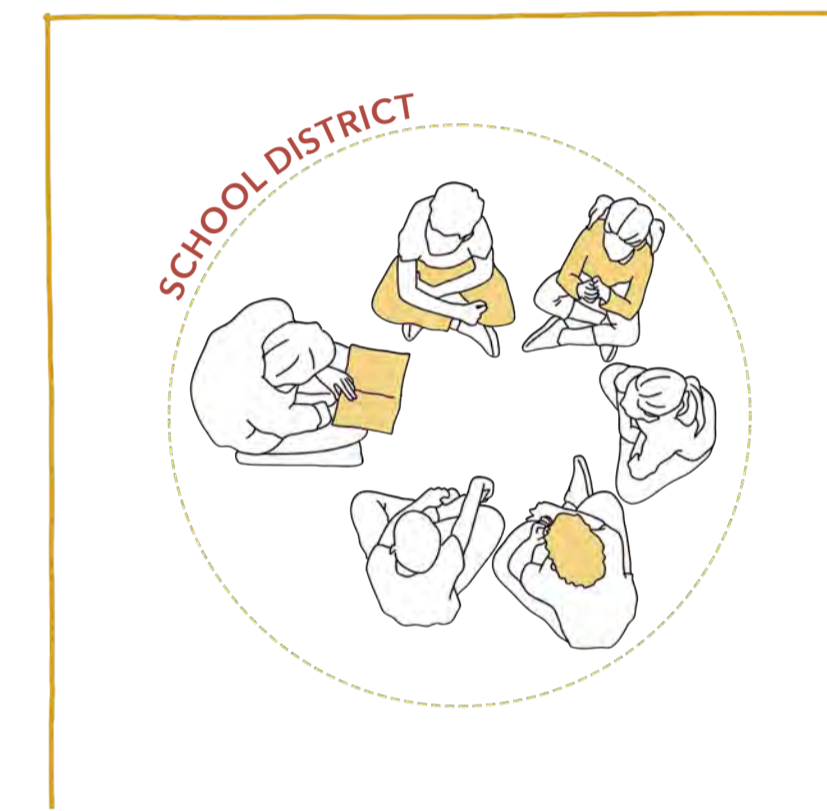
Convenient access to transportation routes, including public transport and vehicular routes.



GUIDELINE 5

medium to large residential block

The chosen residential block must be of medium to large size to facilitate the integration of a finer-grained pedestrian corridor.



GUIDELINE 6

located within a school district

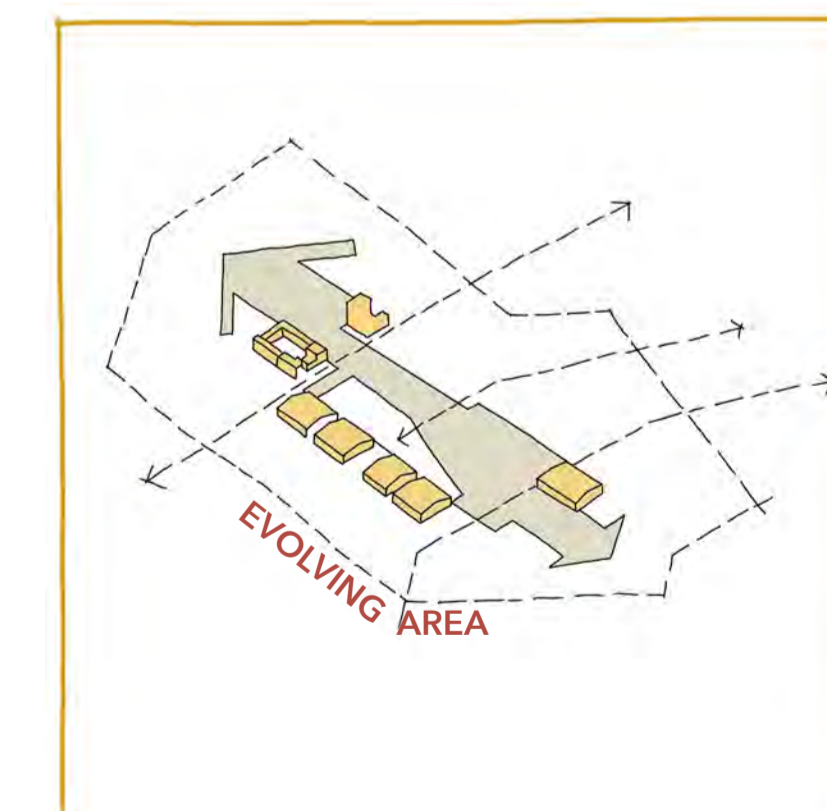
There's a perception that residing within a school district ensures safer and quieter streets, fostering a sense of community.



GUIDELINE 7

close to public green spaces

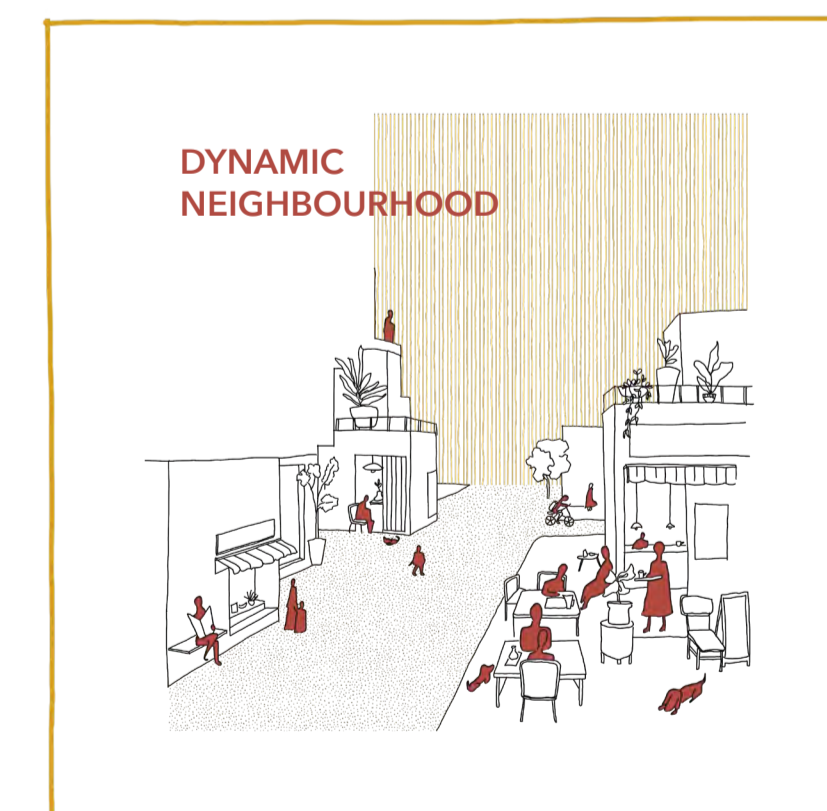
In proximity to green spaces, whether restricted or open-access. The new development should serve as a link between the existing green areas.



GUIDELINE 4

within an area undergoing change

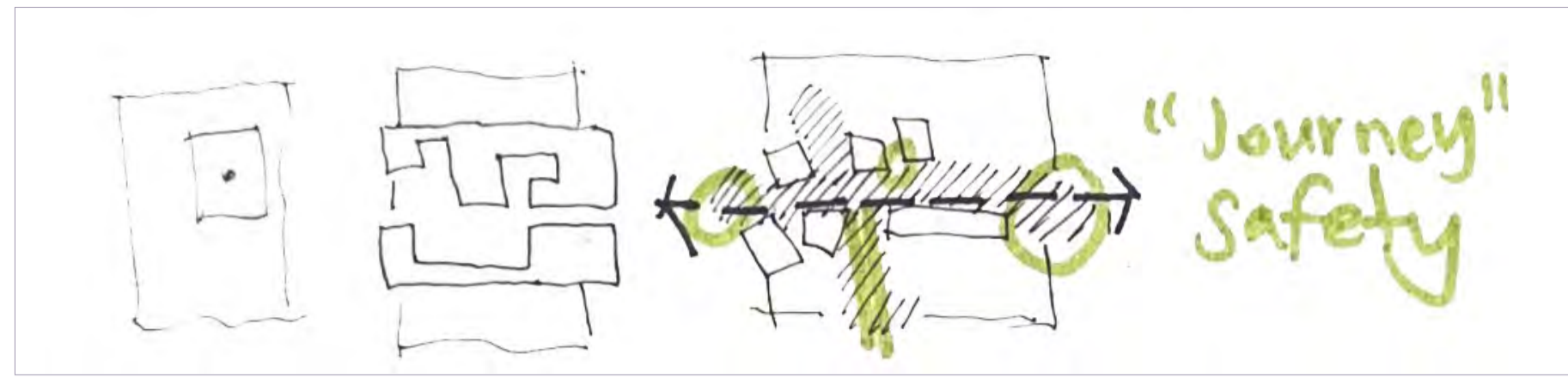
Close proximity to existing / evolving commercial activities in the area.



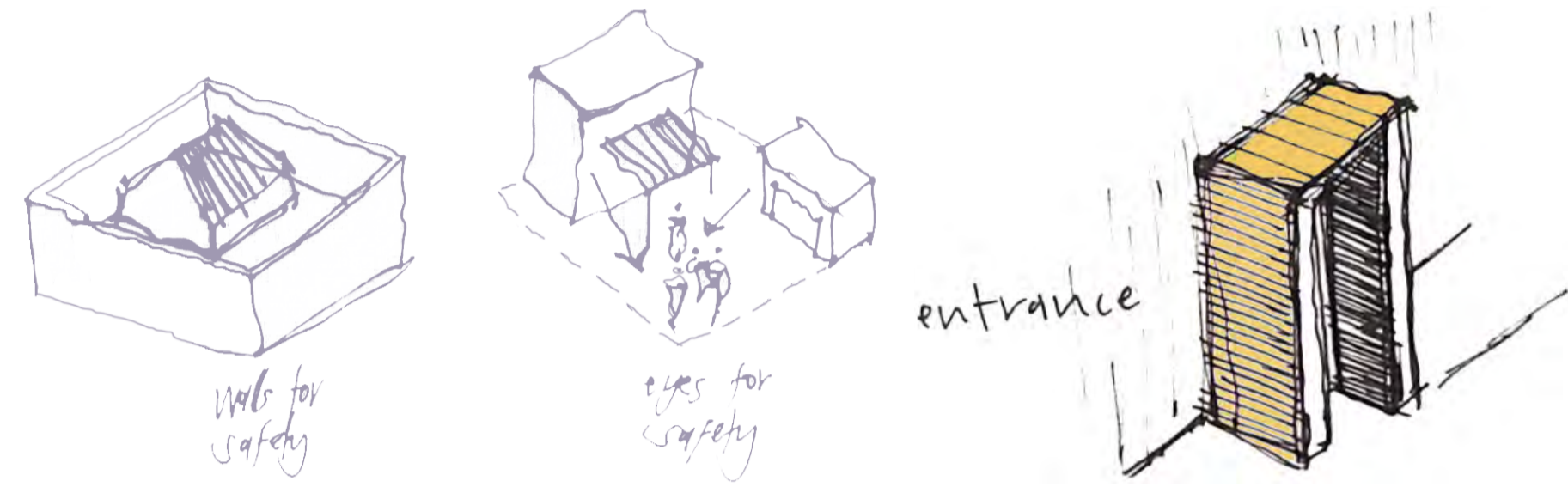
GUIDELINE 8

within an evolving neighbourhood

A suburb on the verge of transitioning into a mixed-use area, ripe for new ways of development.

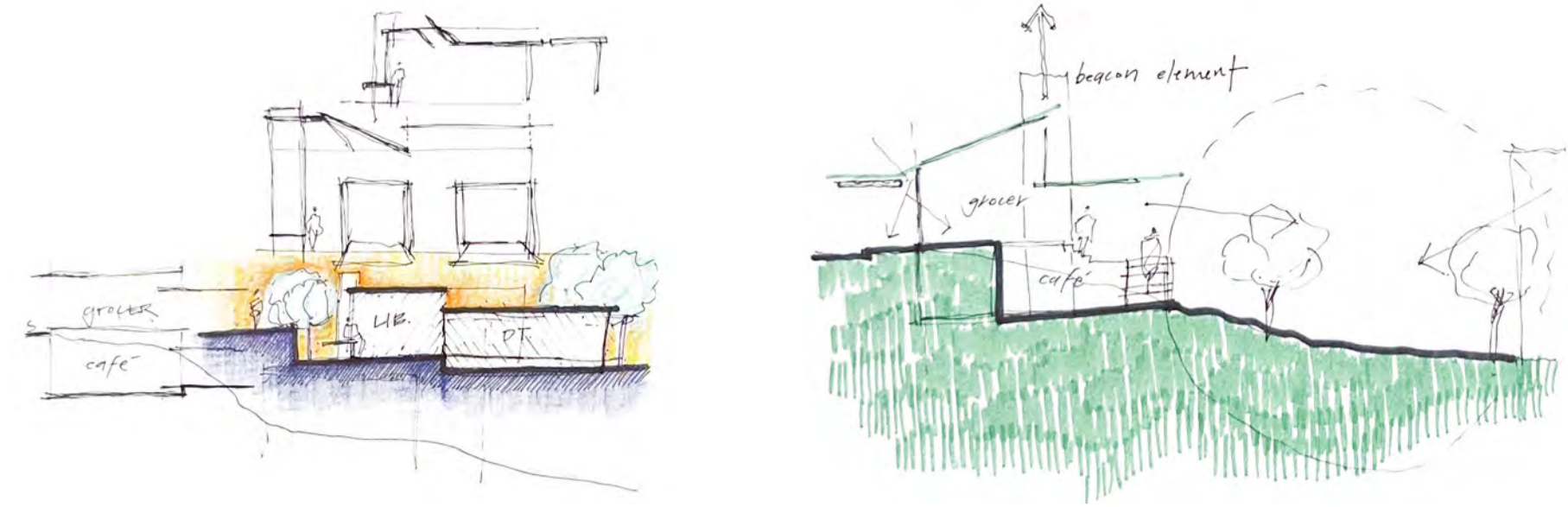


In the process of refining the safety concept, multiple iterations were undertaken to meticulously craft building forms that would best serve the overarching goal. The primary aim is to create an environment where safety is paramount, offering users a clear and easily navigable path. This involves designing spaces with unobstructed sightlines, allowing individuals to see through the area and have a comprehensive understanding of their surroundings as they traverse the space. Every aspect, including building edges, overhead planes, and interstitial spaces, undergoes careful consideration to prevent any elements that might contribute to a sense of alienation for users as they move through the project. This thorough approach ensures that the safety concept is not only a theoretical consideration but a tangible and integral part of the project's design.



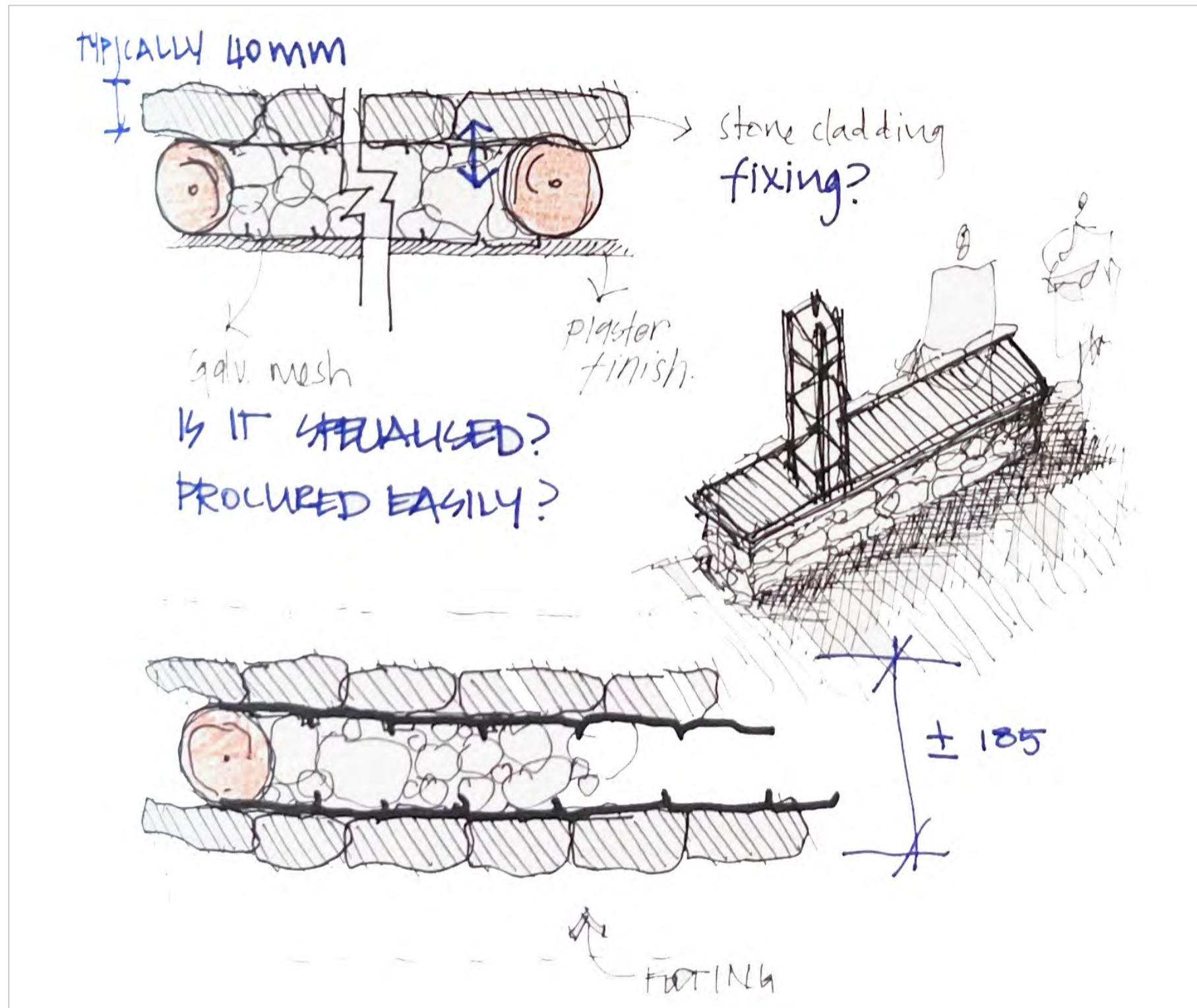
The difference in creating a sense of safety; walls versus passive surveillance.

The sketch shows the development of the portal spaces.

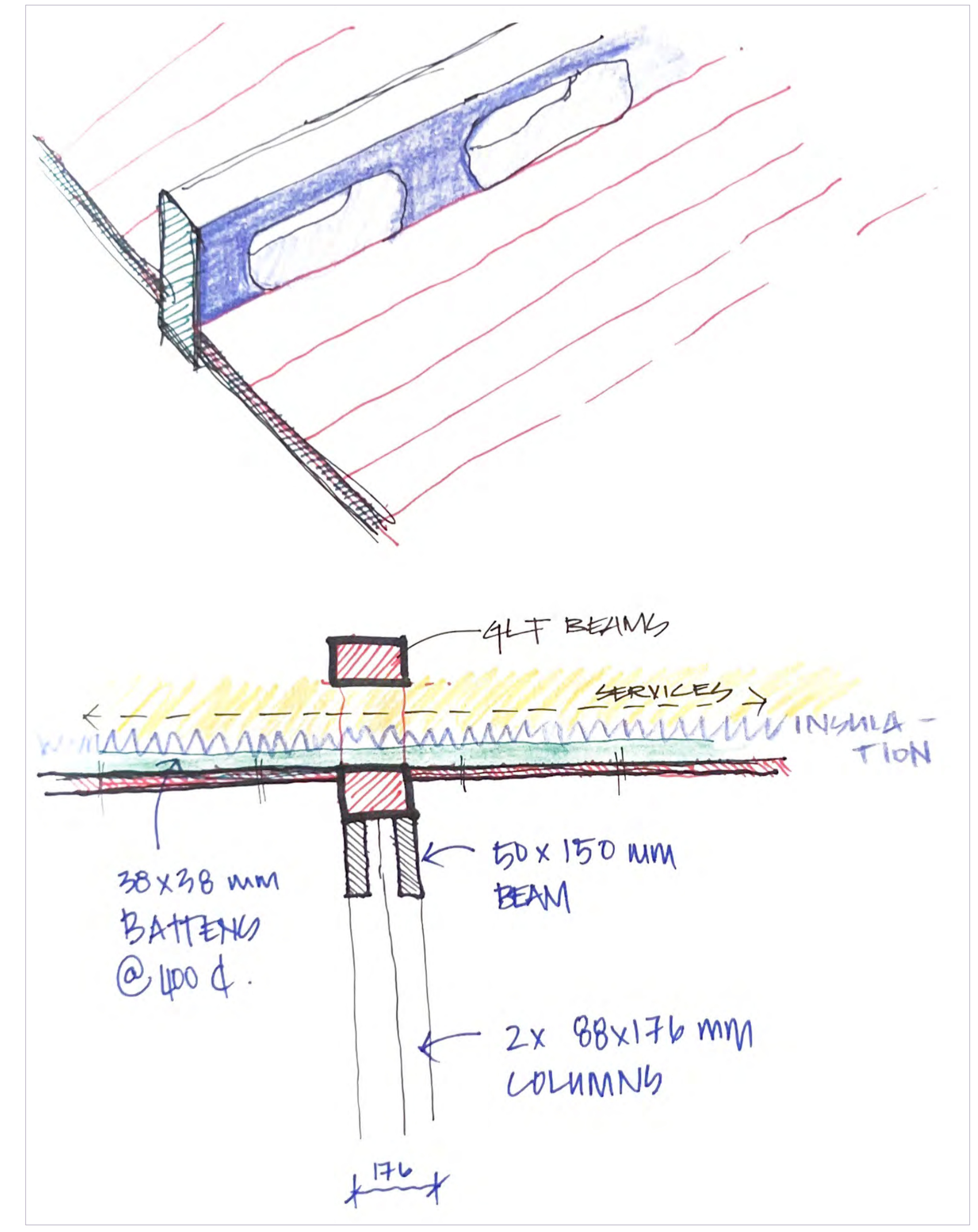
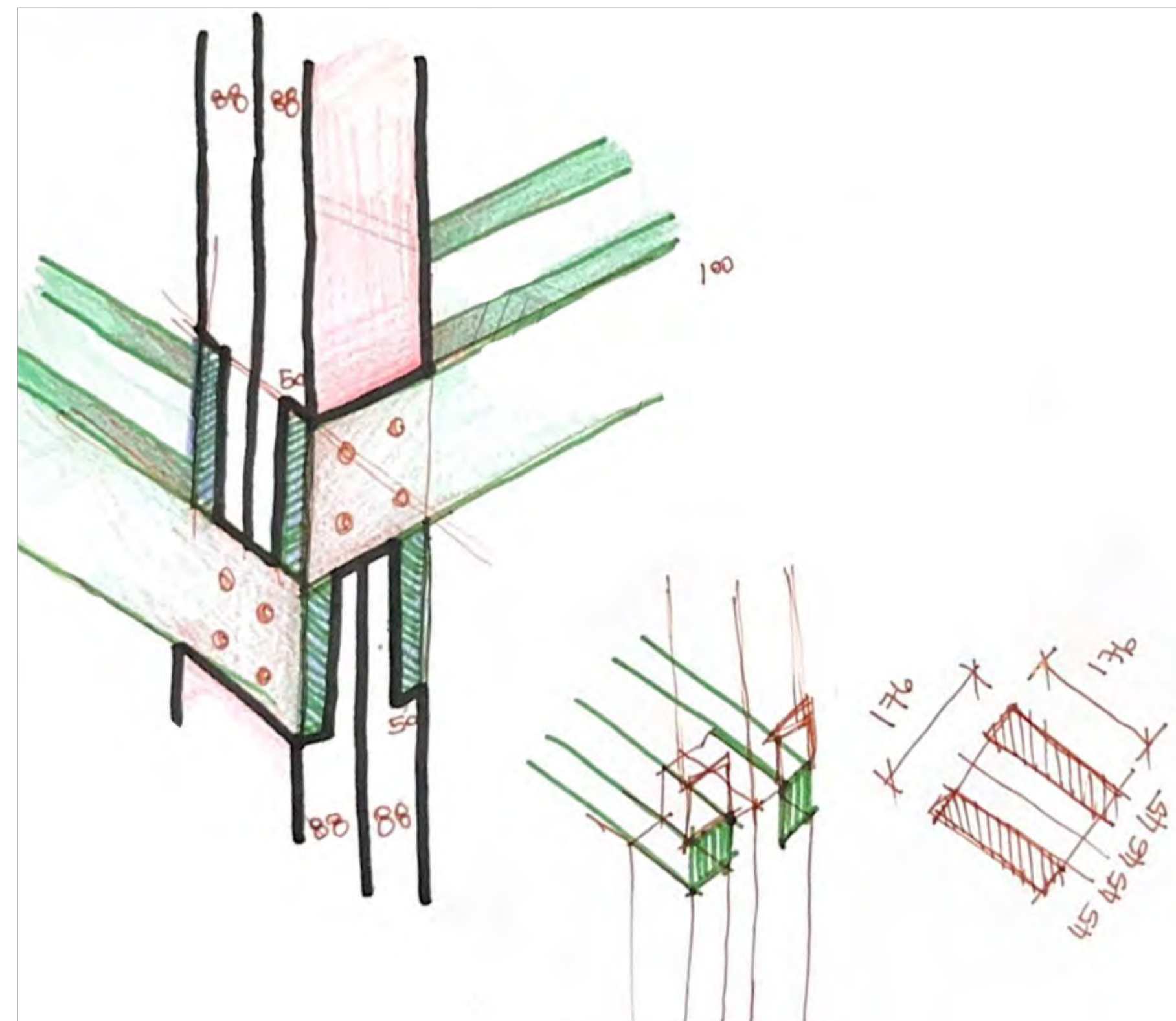
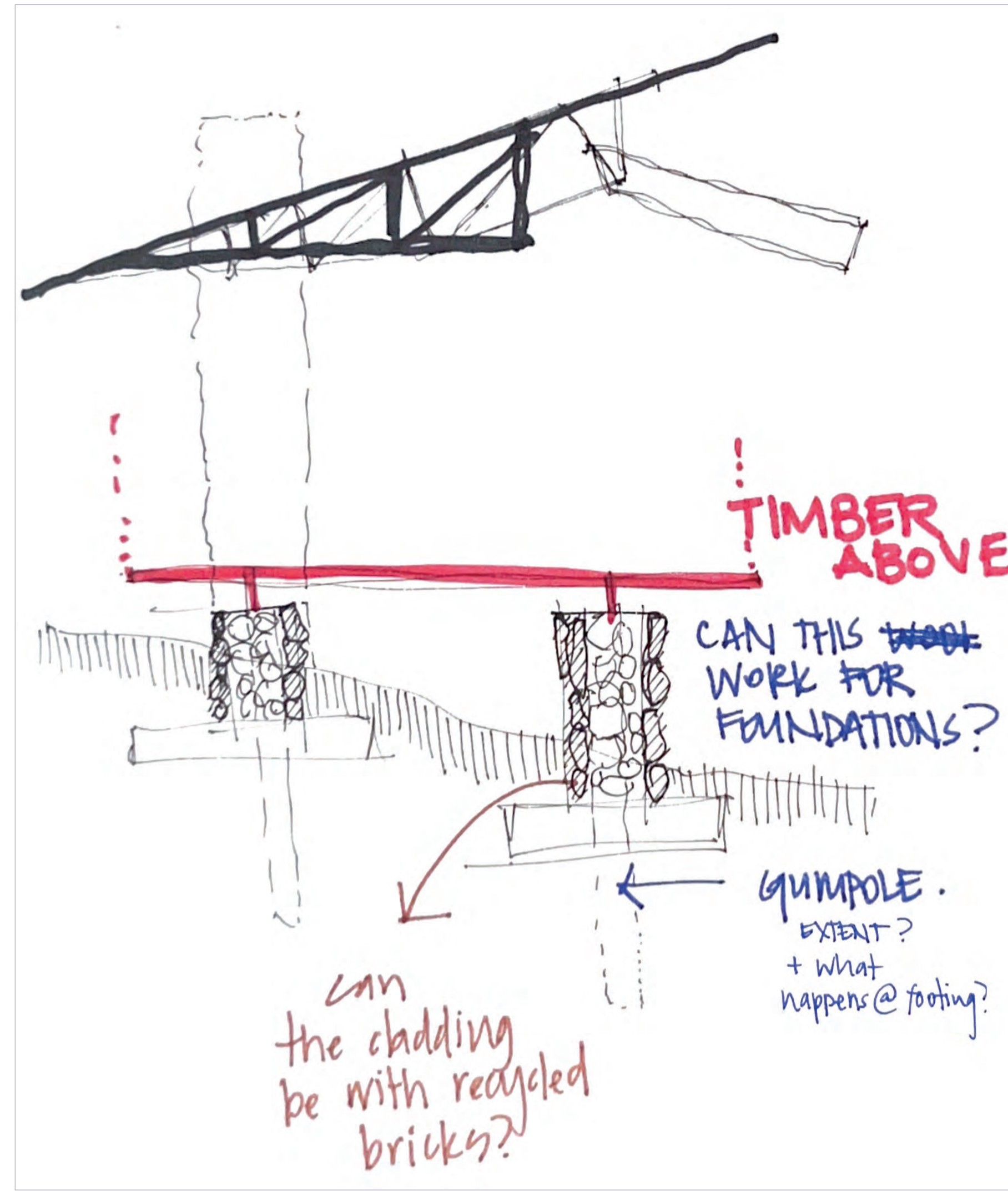
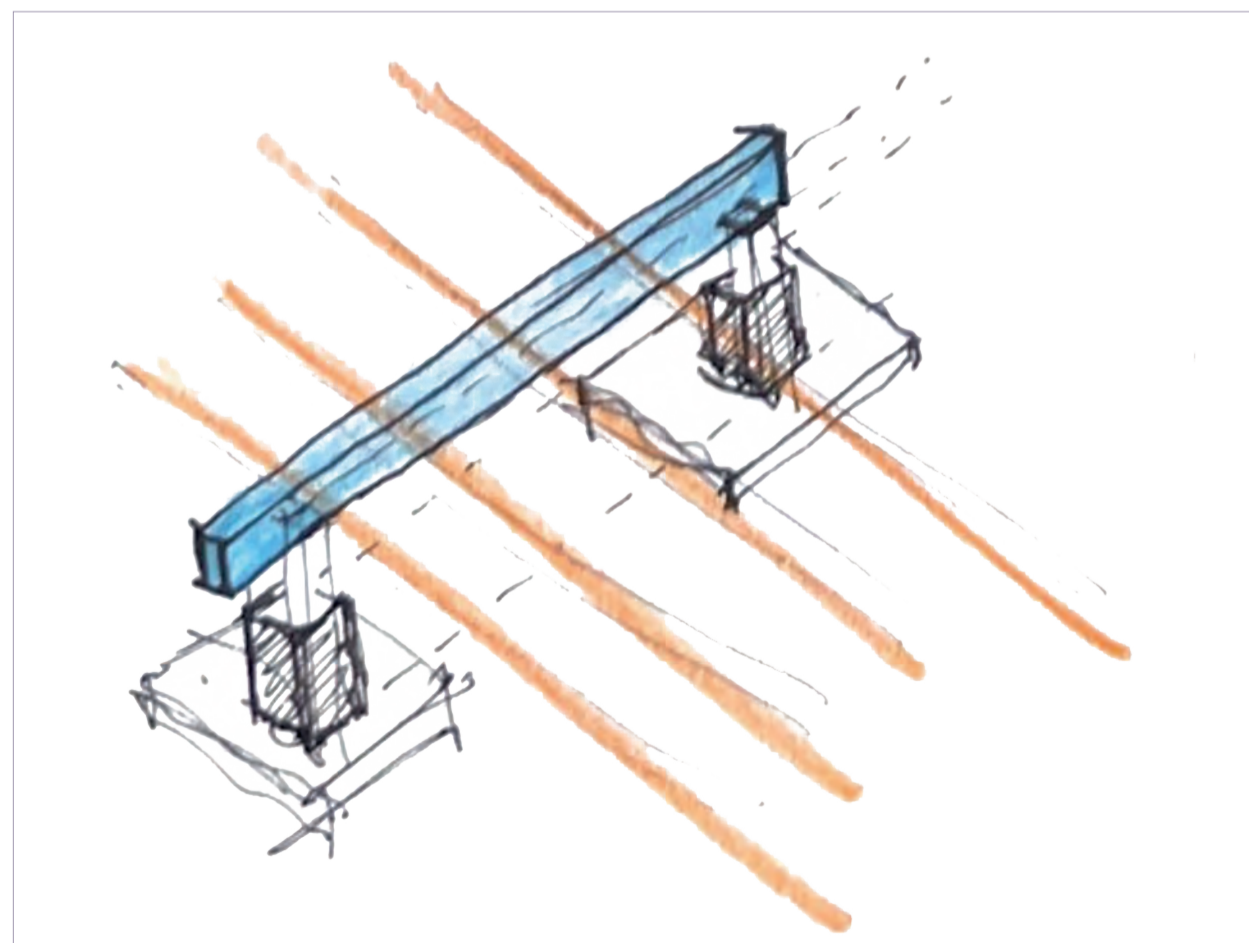


This early sketch explored the relationship between the buildings along the slope of the existing landscape. It also starts considering the blocked portal features which will be used as a design language throughout the development.

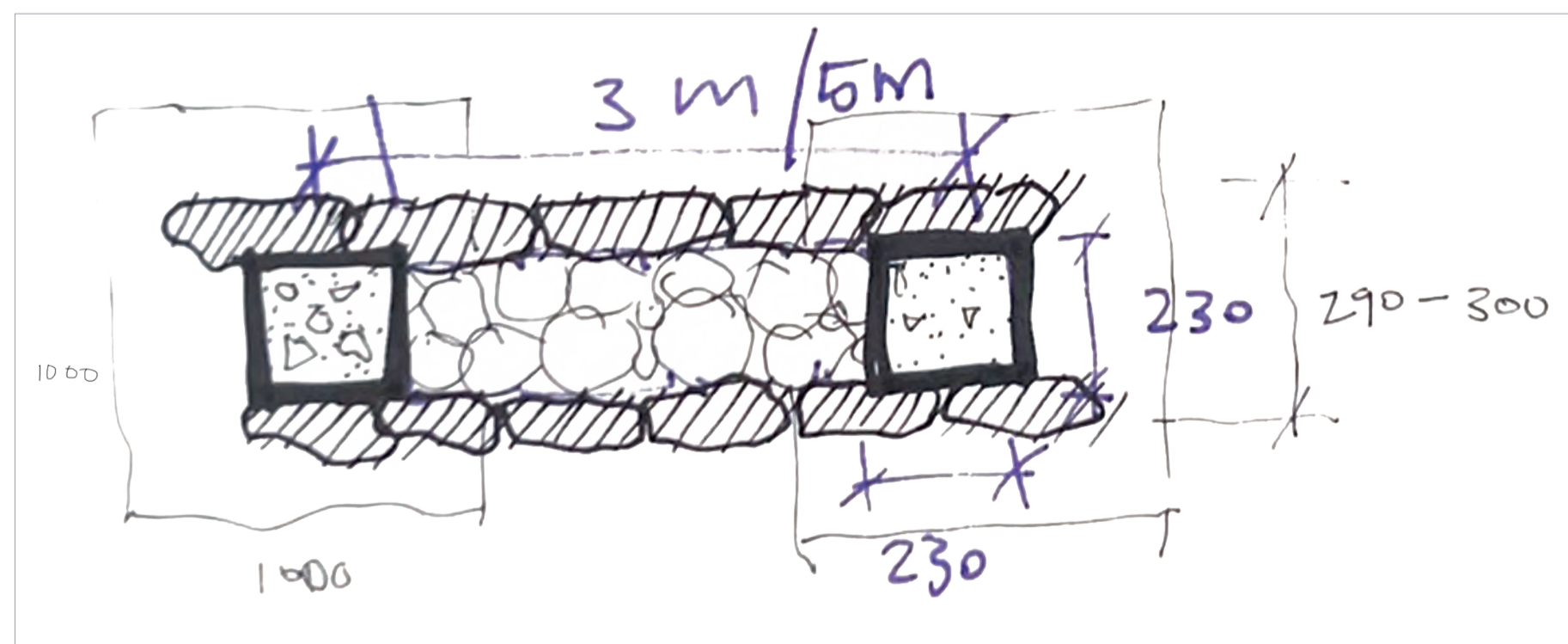
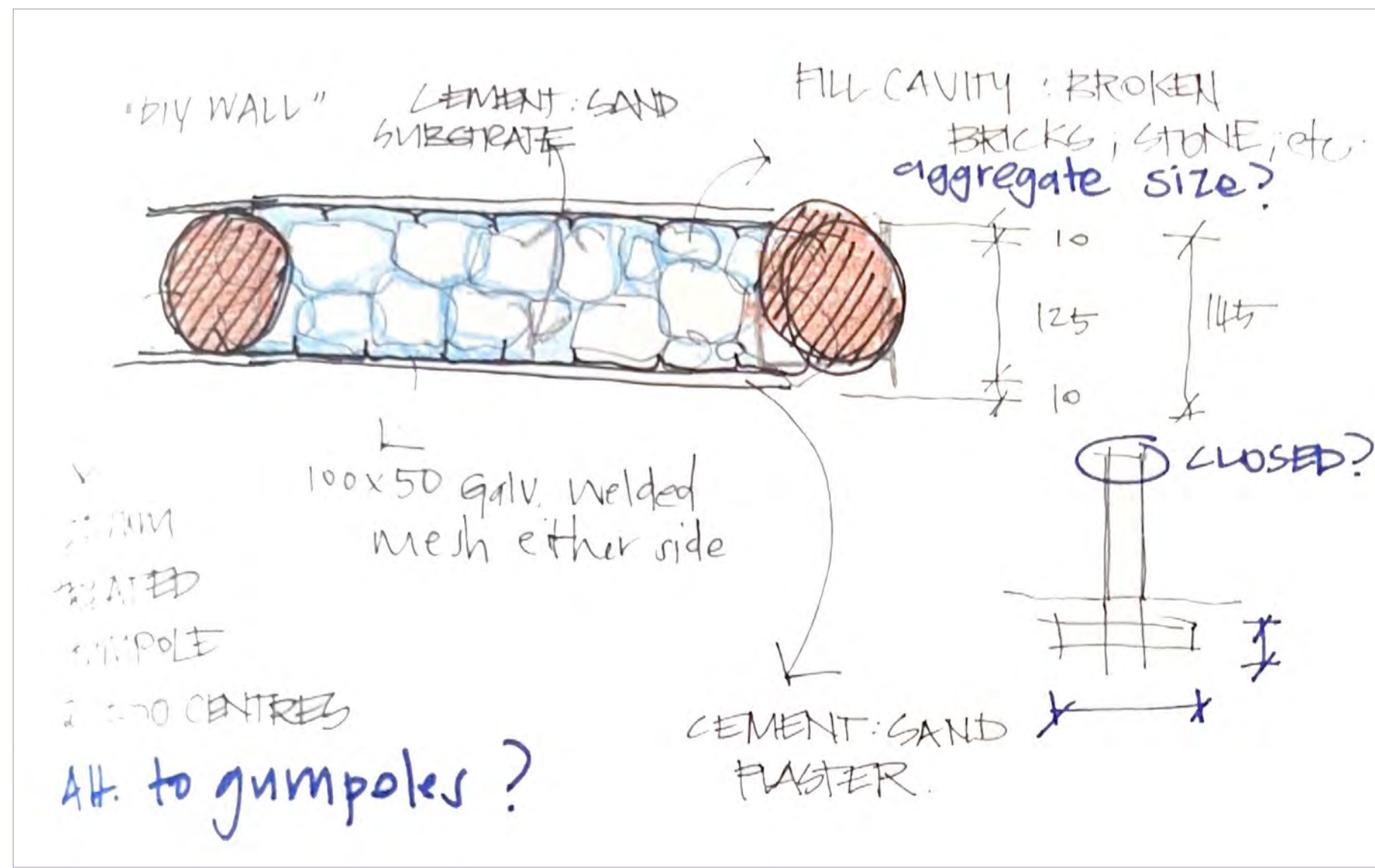
This early sketch explored the relationship between the buildings along the slope of the existing landscape. The sketch communicates the considerations of vertical elements to aid user navigation throughout the pedestrian corridor.

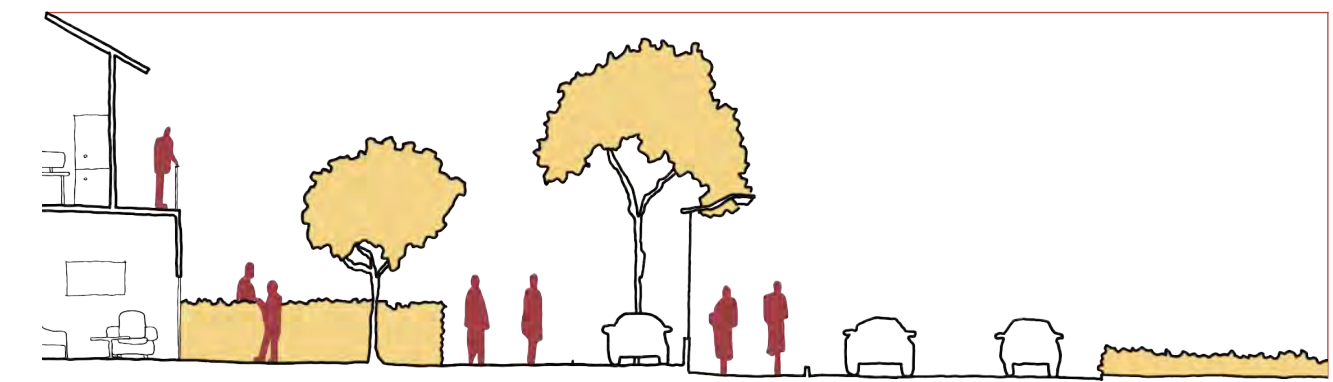
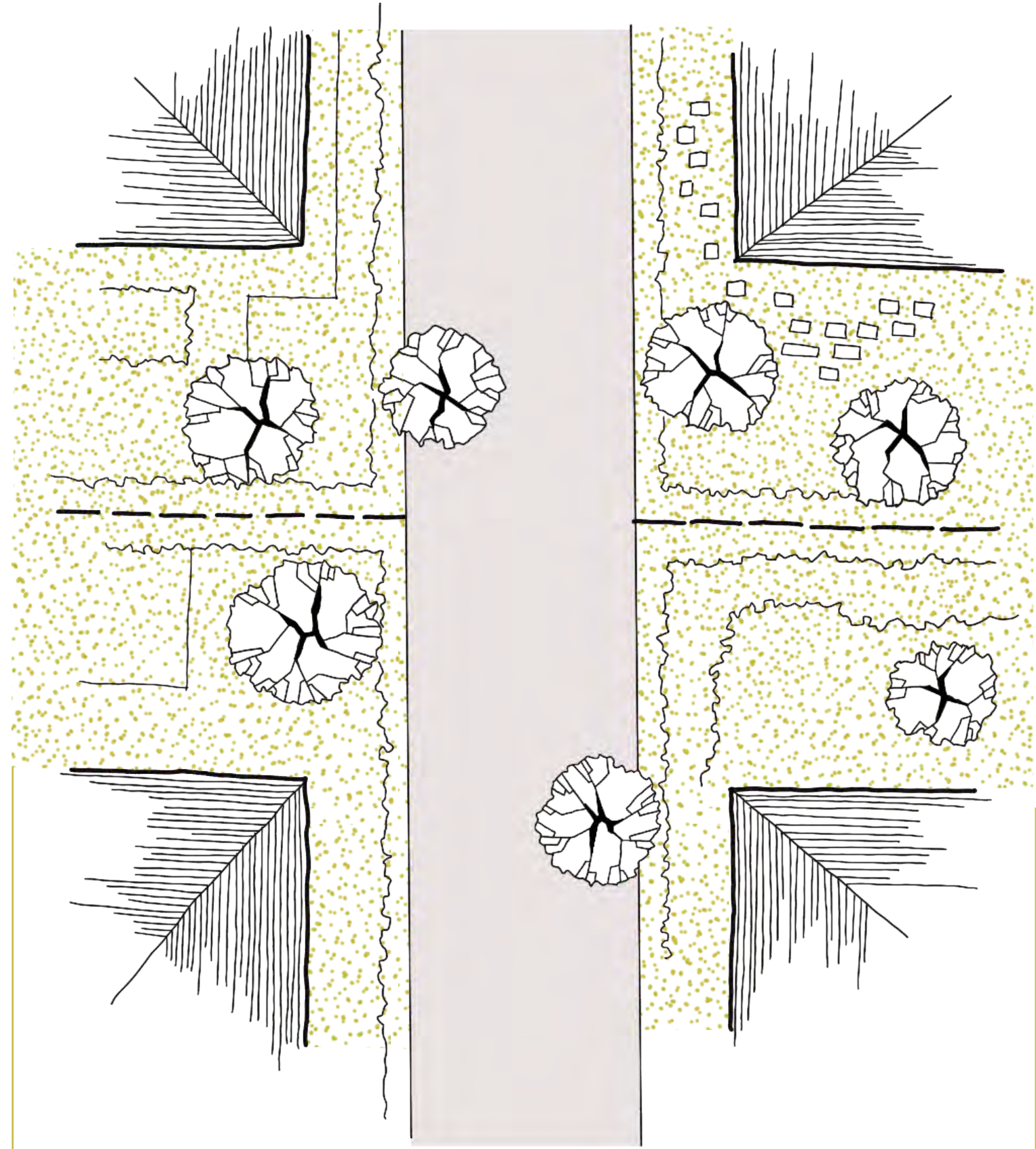


Illustrating the construction strategies employed for the interventions. The left sketch depicts the layering of the timber framing structure, with columns constructed from two identical 88 x 88mm SAP laminated timber sections. The construction approach avoids overly complex timber techniques to ensure ease of replication during the densification process. Beams, measuring 50 x 100mm and 50 x 150mm SAP sections, are arranged in a lattice grid configuration for structural stability. The right sketch explores ways to repurpose materials from demolished masonry boundary walls. Brick rubble could be utilized as filling materials, creating small walls within the landscape to define the living street condition in the pedestrian spine. Additionally, the option to use gum poles for structural stability in the interventions is considered.

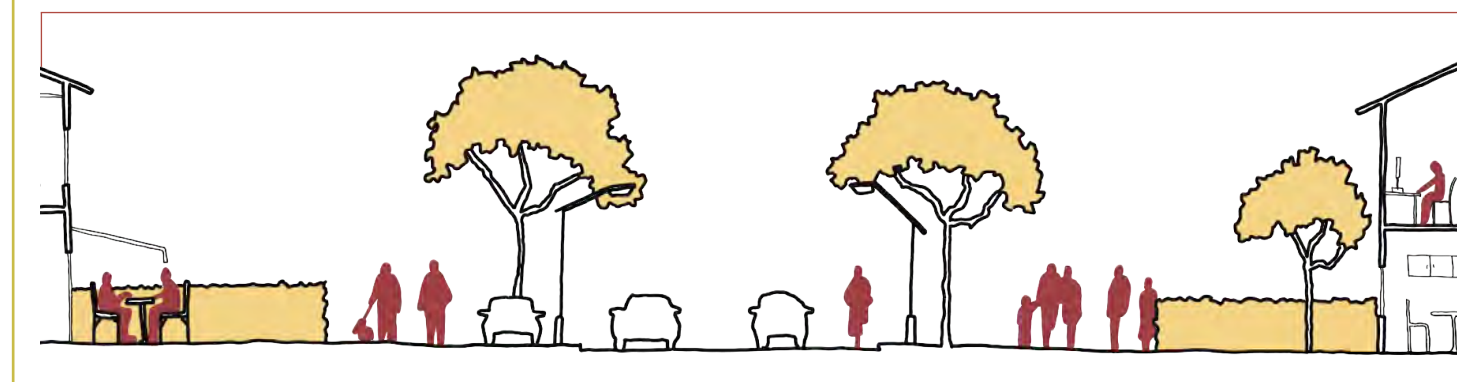
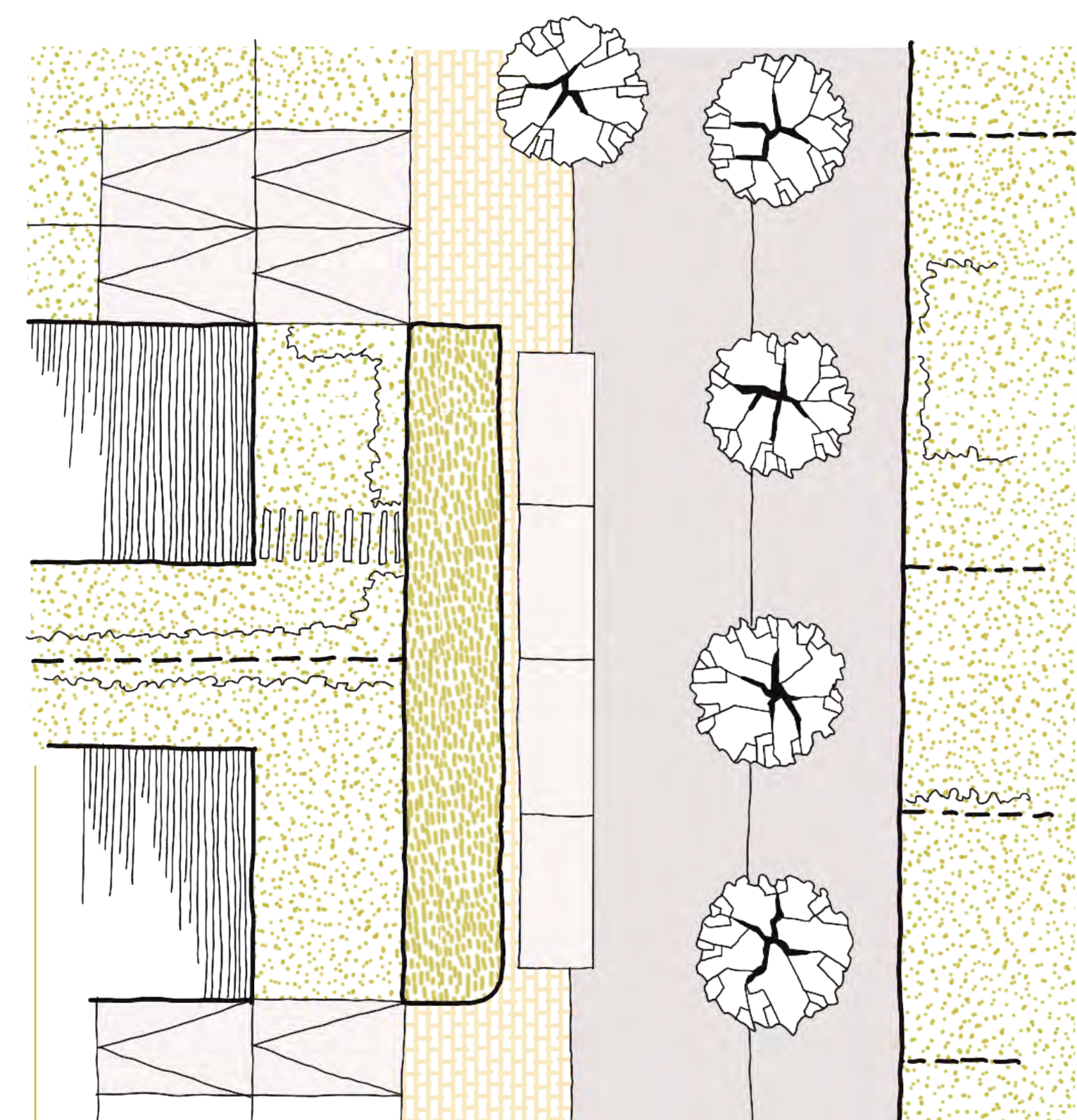


The office spaces demanded thoughtful planning for adaptability and service provisions. To address this, a strategic choice was made to incorporate structural beams that have been cored. This not only accommodates the necessary space for service reticulation and insulation installation but also enhances the aesthetic appeal of the roofing system when viewed from below.

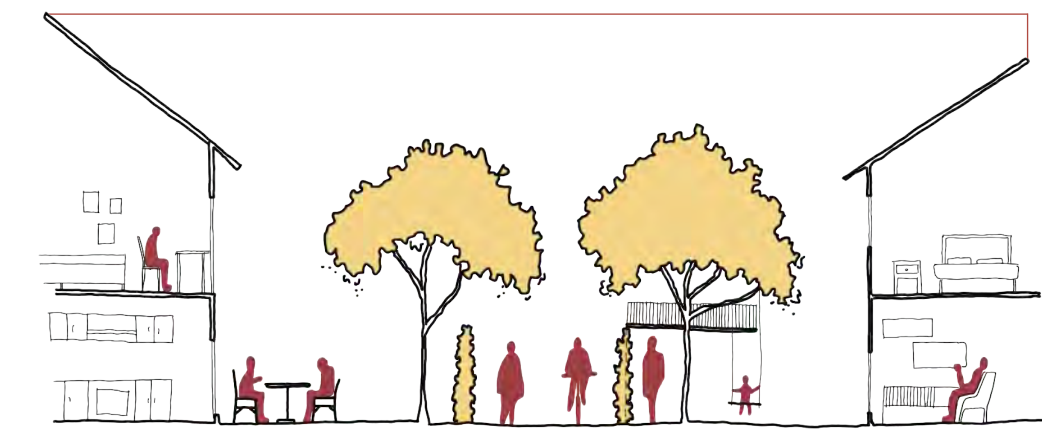
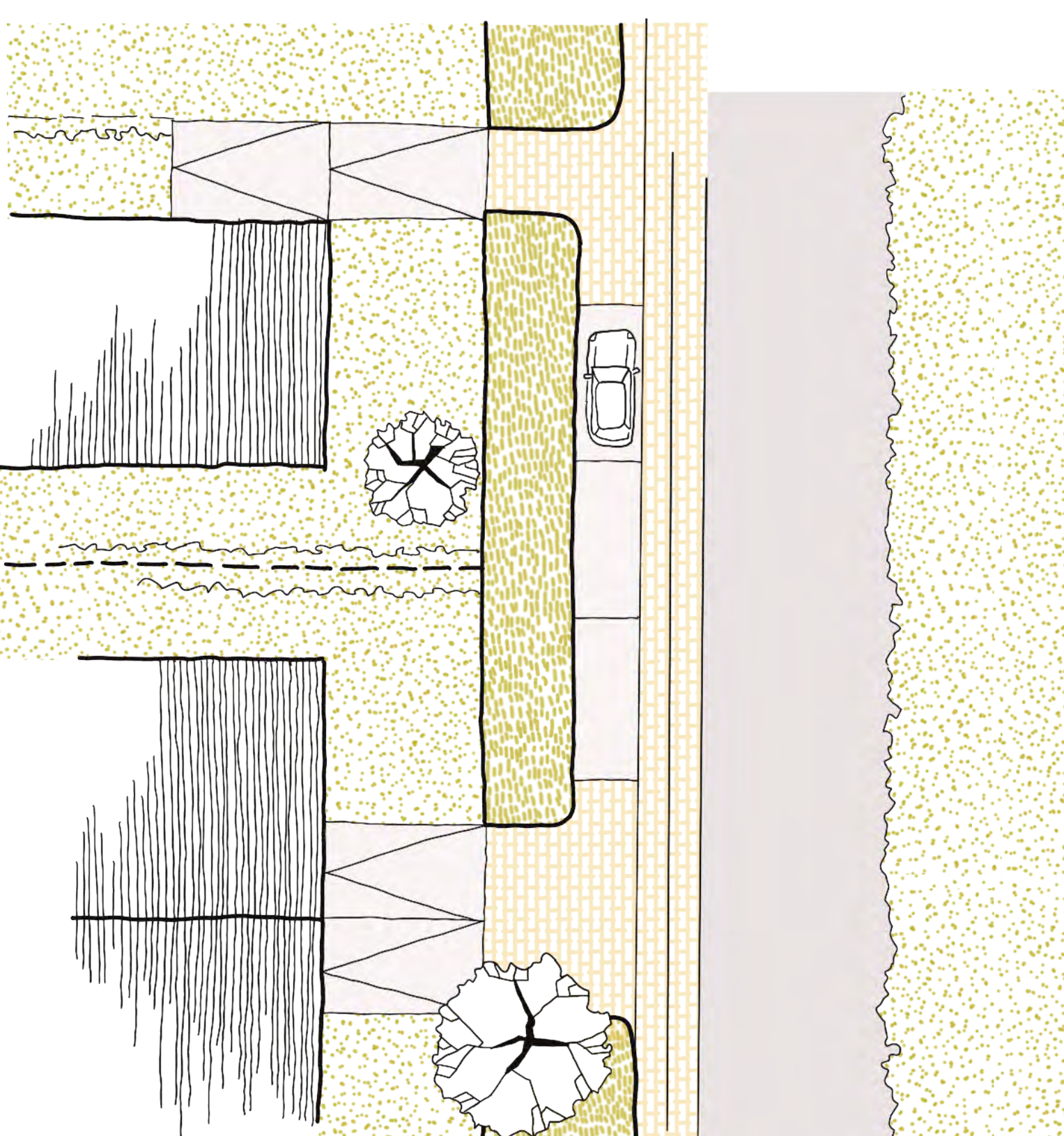




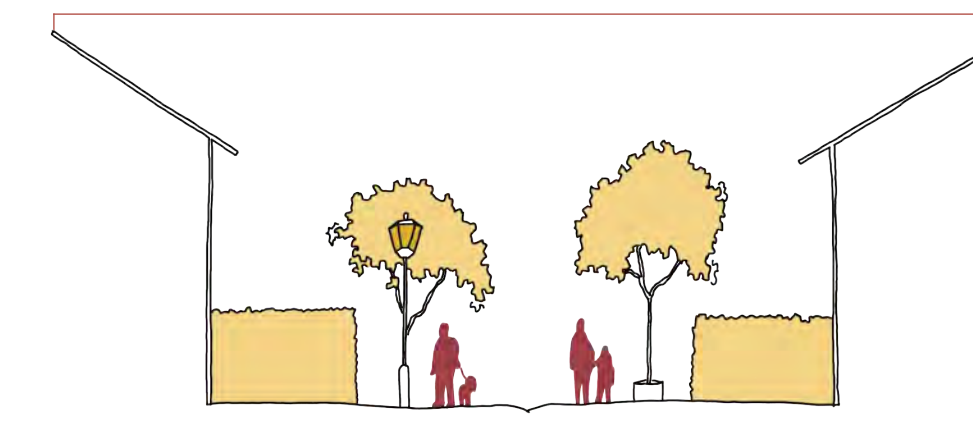
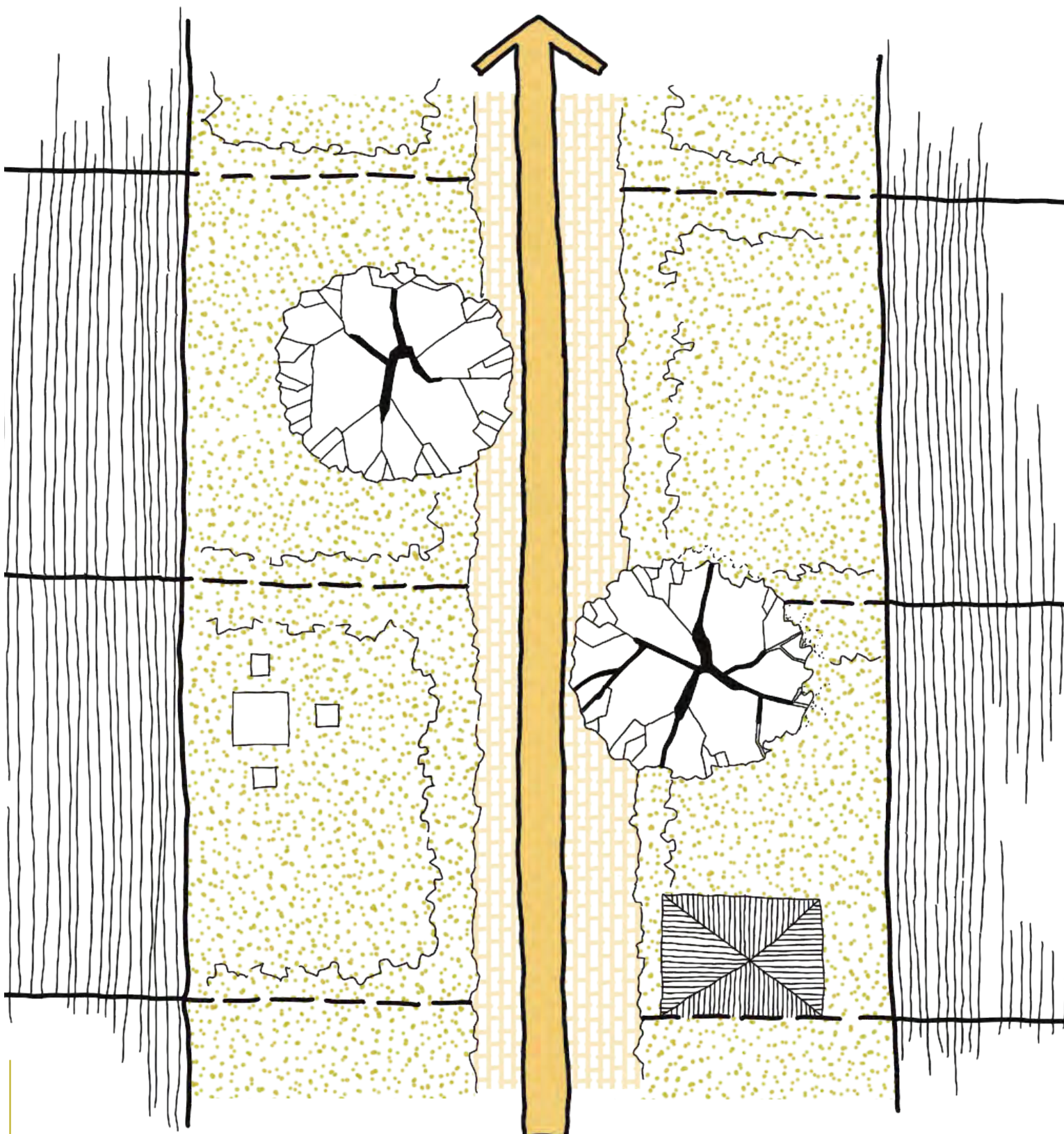
Street Section - showing the different transition zones from the street to the building



Street Section - showing the different transition zones from the street to the building



Street Section - showing the different transition zones from the street to the building



Street Section - showing the different transition zones from the street to the building

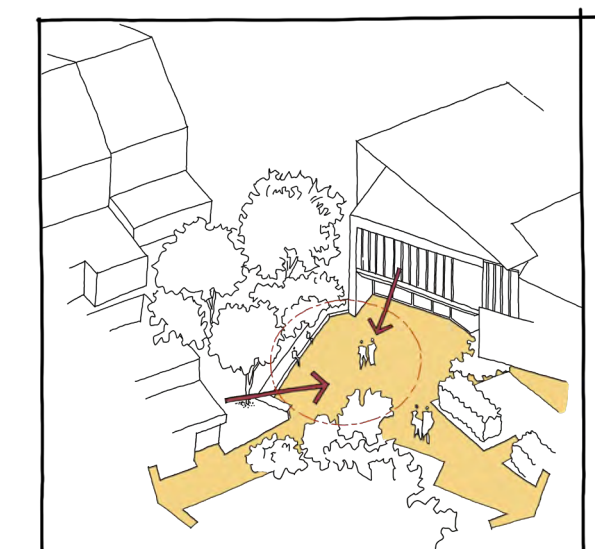


Diagram 1: pedestrian environment overlooked by surrounding buildings

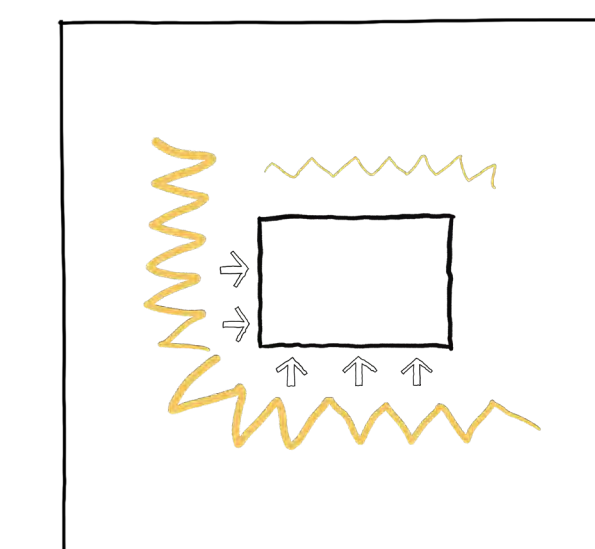


Diagram 2: multi-sided experience of the building, no inactive frontages

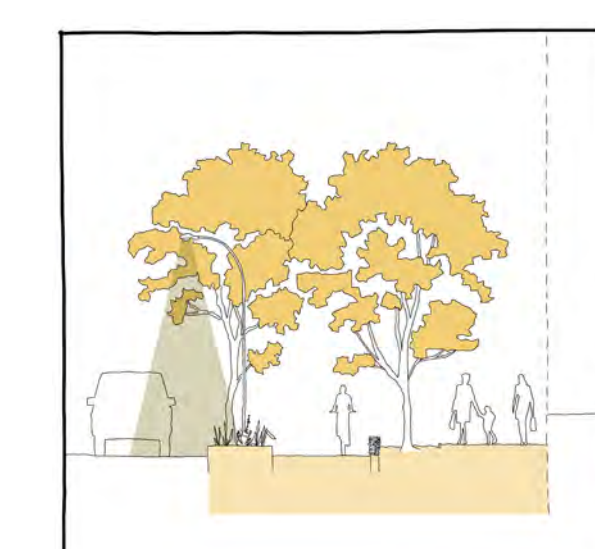


Diagram 3: lighting requirement to ensure visibility for pedestrian movement

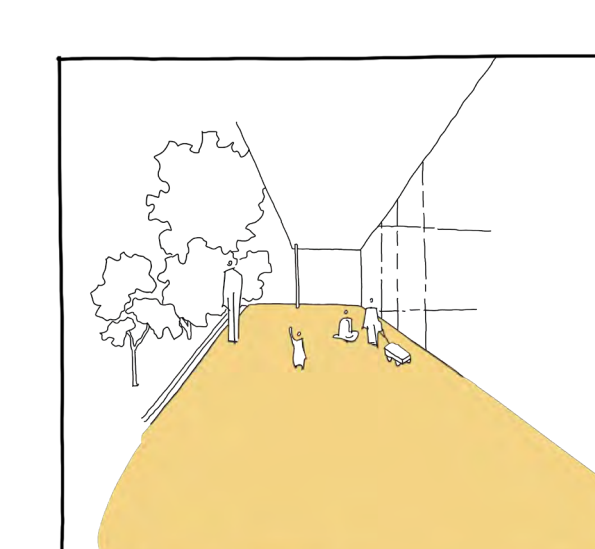


Diagram 4: overhead transitional element to identify owned spaces

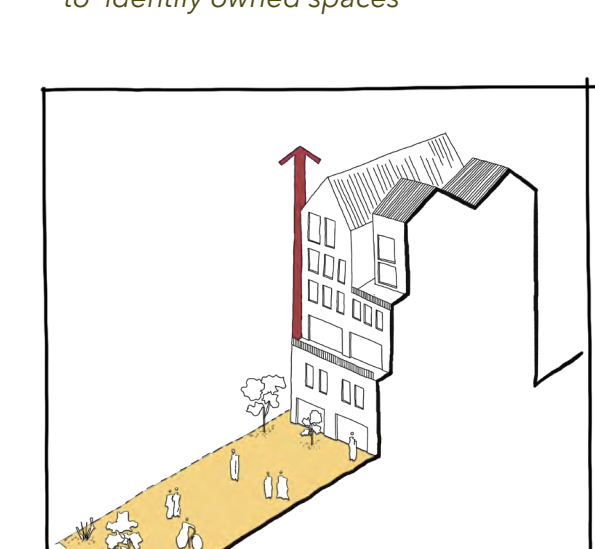


Diagram 5: non-identical design language to allow user to orientate themselves

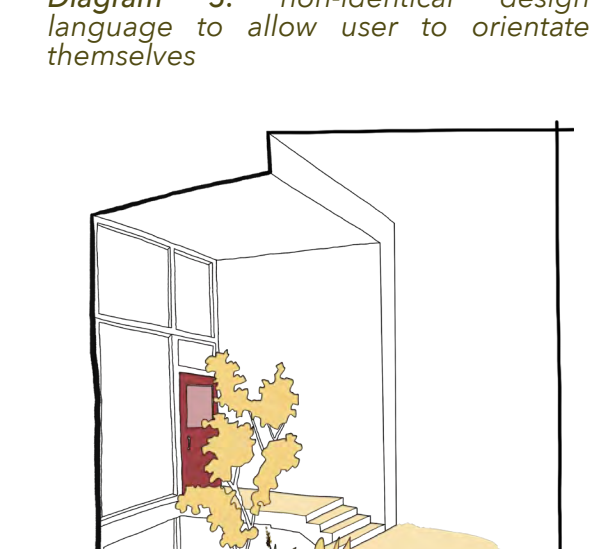


Diagram 6: residential units having front doors accessible from the communal open green spaces is important

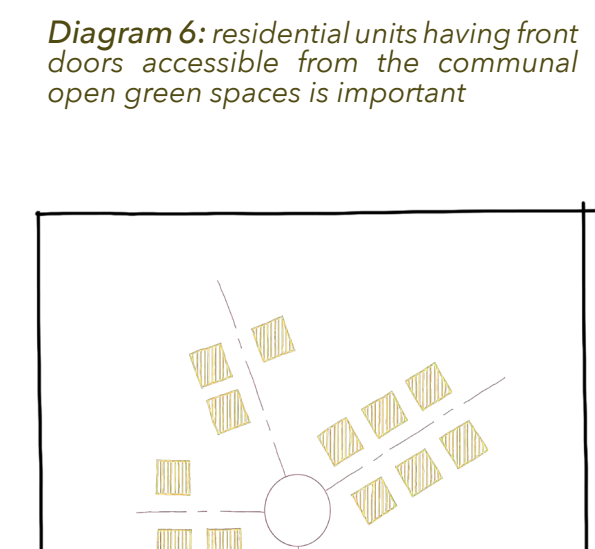


Diagram 7: radial arrangement allows for more variety within the buildings in the context

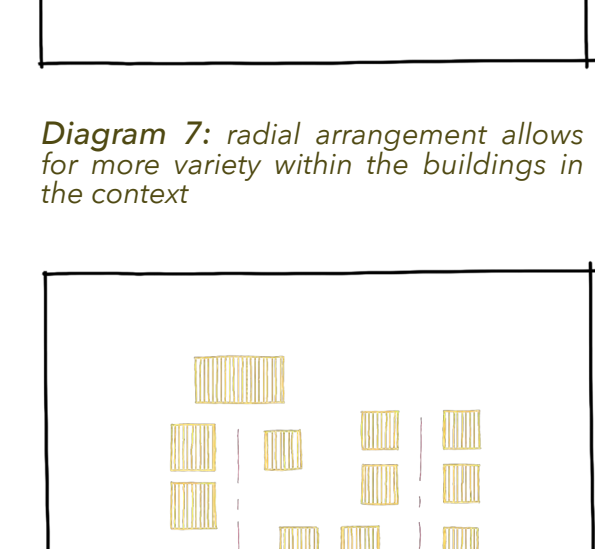
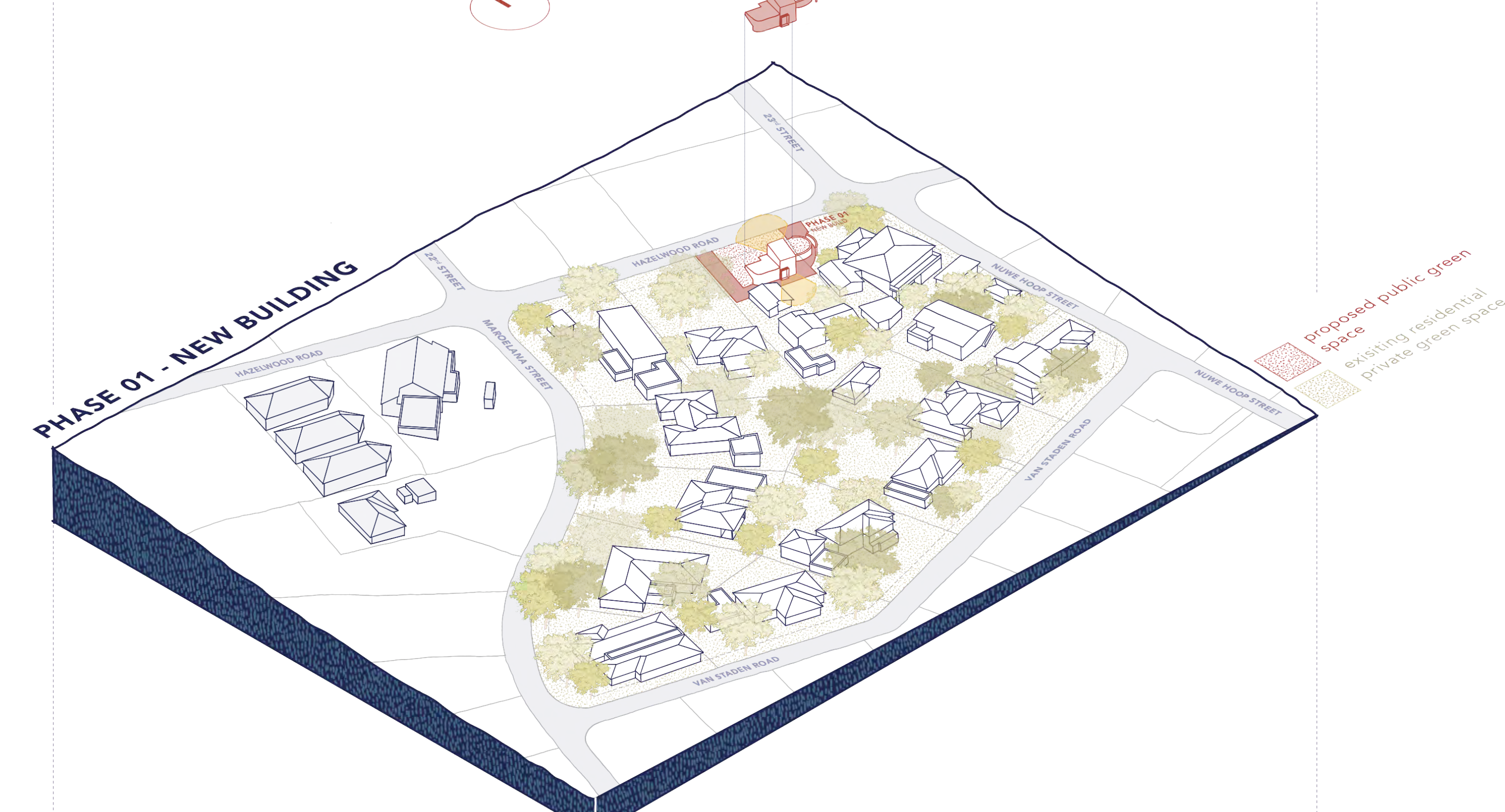
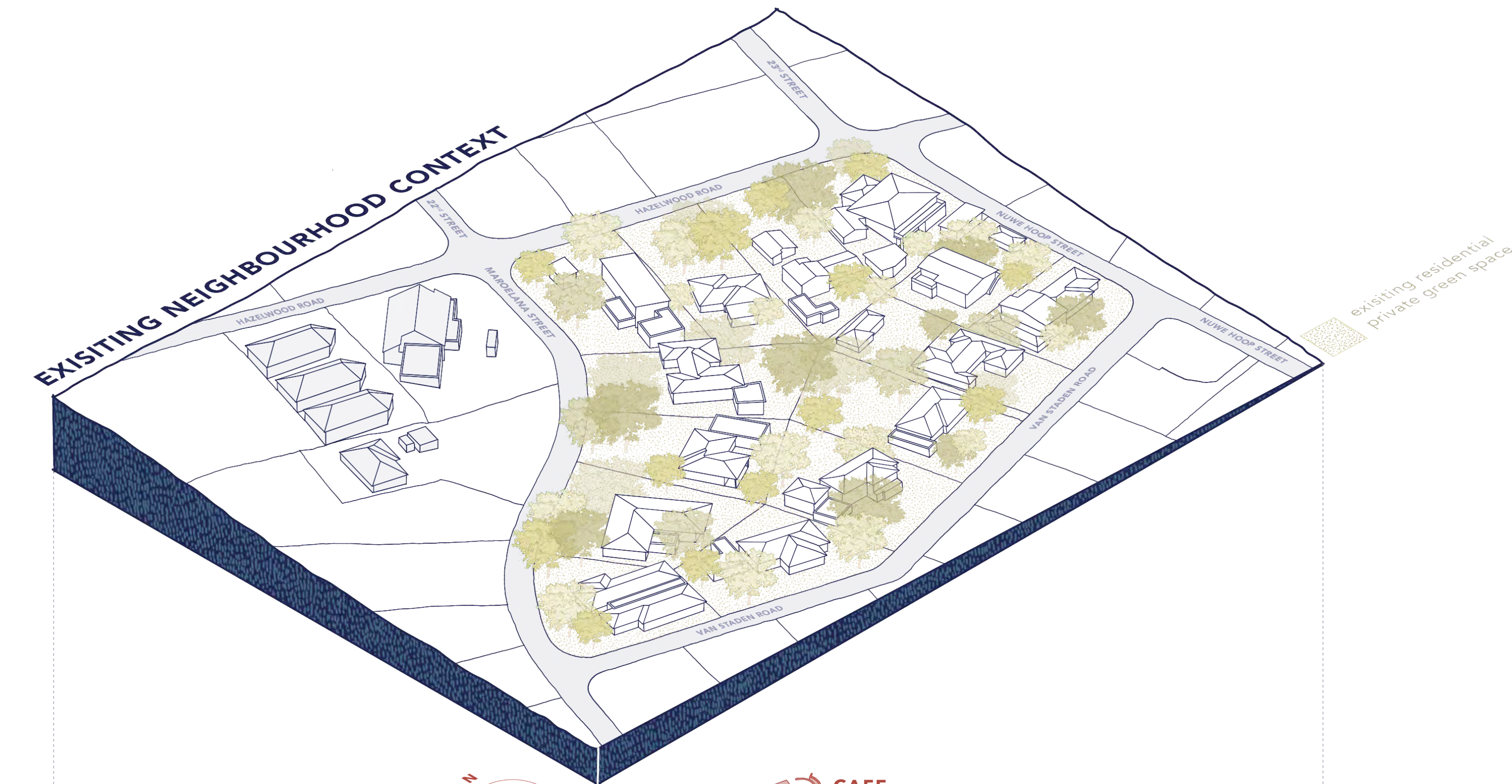
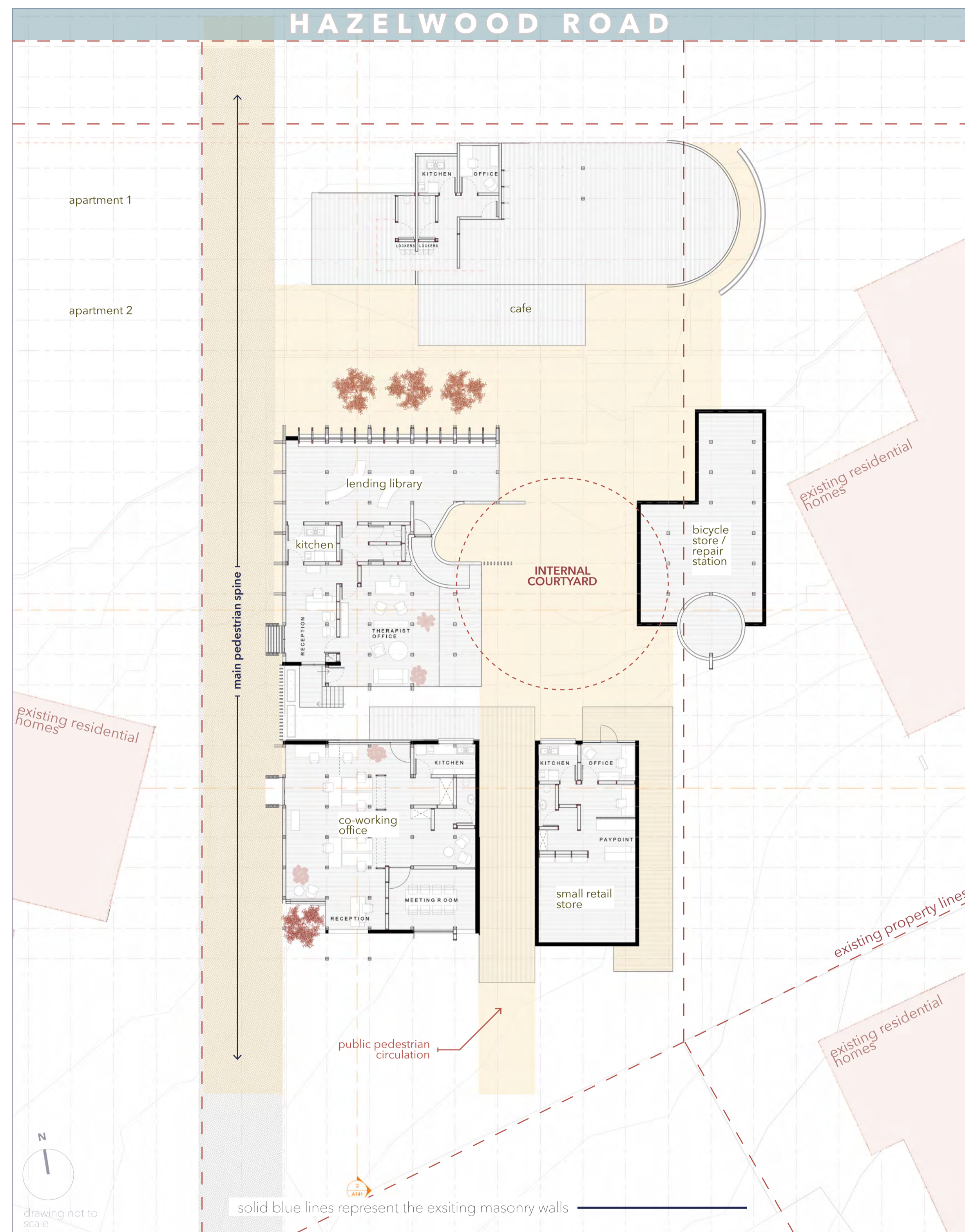


Diagram 8: linear axial arrangement of buildings allow easy navigation for users



These amendments aim to create a more supportive and conducive regulatory environment for facilitated self-builders, empowering individuals, and communities to actively participate in the construction of their environments.



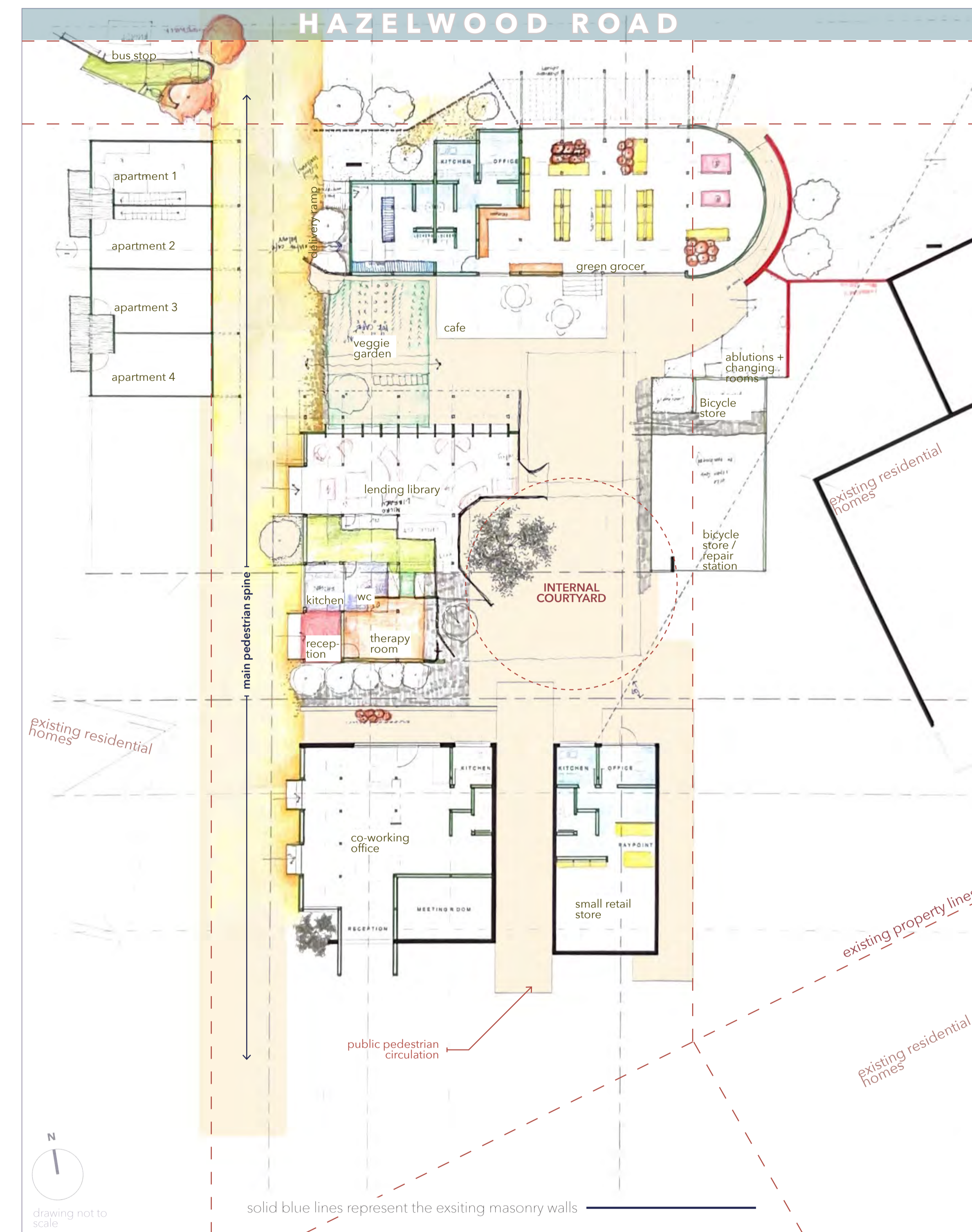
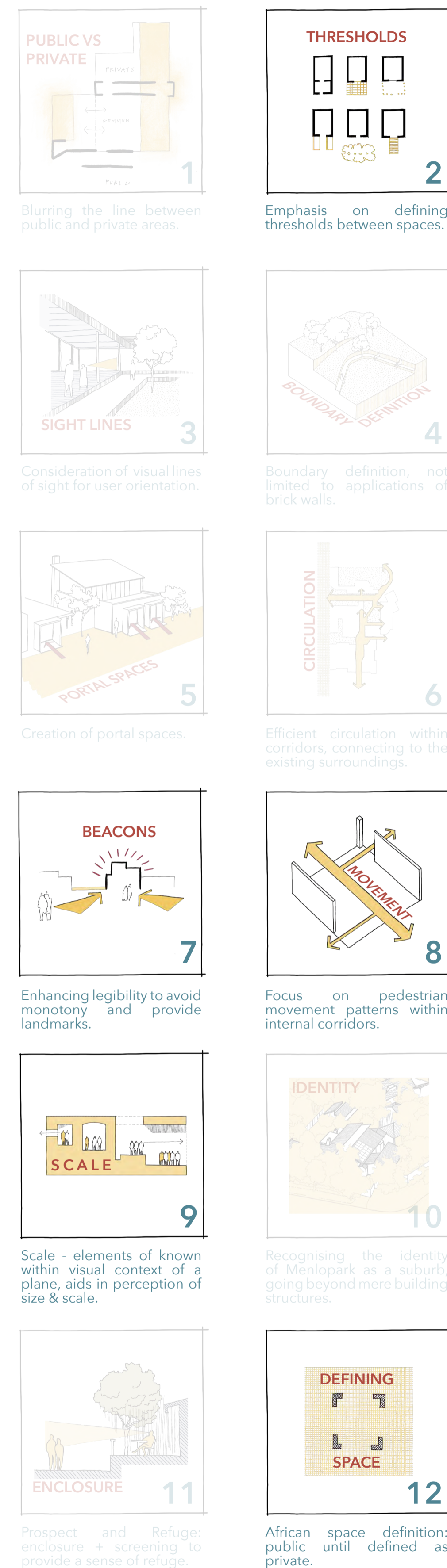
## ITERATION 2

a conservative approach to altering the existing residential buildings - the existing footprints were largely retained.

The second iteration of the ground plane involved analysing the footprint of the existing residential buildings. The proposed new building, situated to the north and designated for the green grocer, is the only entirely new construction in the study area. This placement was chosen to ensure easy access during the construction process and because it represents the initial building to be constructed in the first phase of densification.

The four other buildings already exist within the block and will be modified to accommodate various programs, including a counseling center, a bicycle repair workshop, co-working office space, an intimate lending library, and a small retail store. These buildings' foundations and some masonry walls are retained during the alteration process. These programs were chosen to encourage the celebration of daily life, as they involve activities that users can engage with on a regular basis. Additionally, they support the shift towards more active transportation methods, such as cycling. The bicycle repair workshop, in particular, provides options for bicycle storage and changing rooms for those commuting to work by bicycle.

## DESIGN GUIDELINES



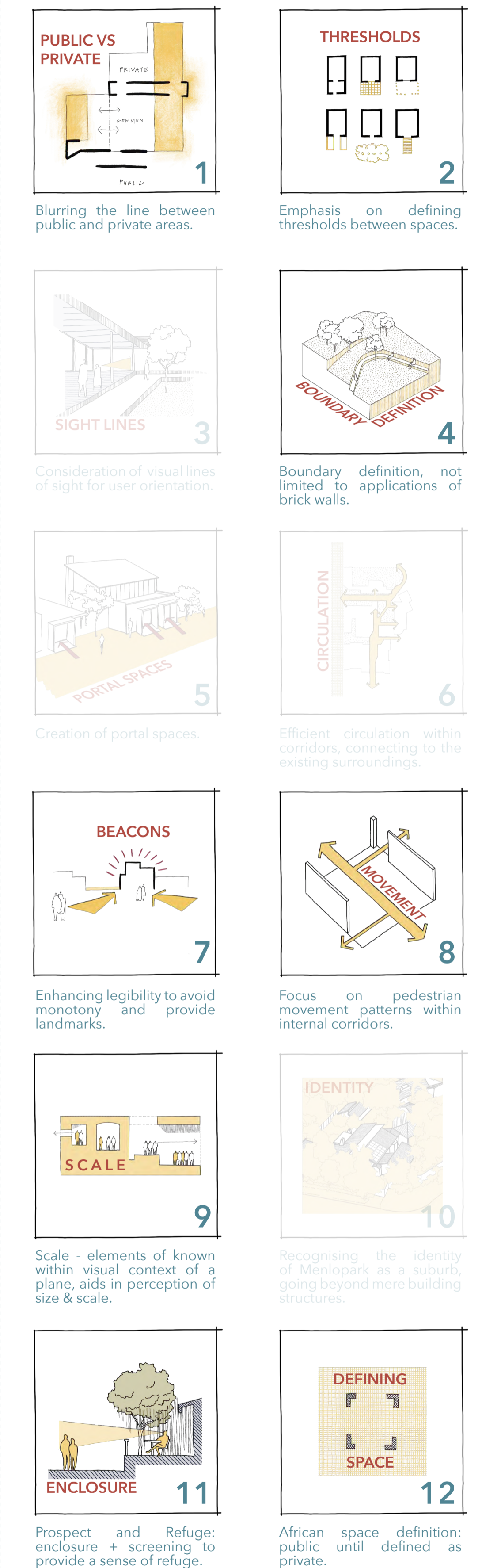
## ITERATION 3

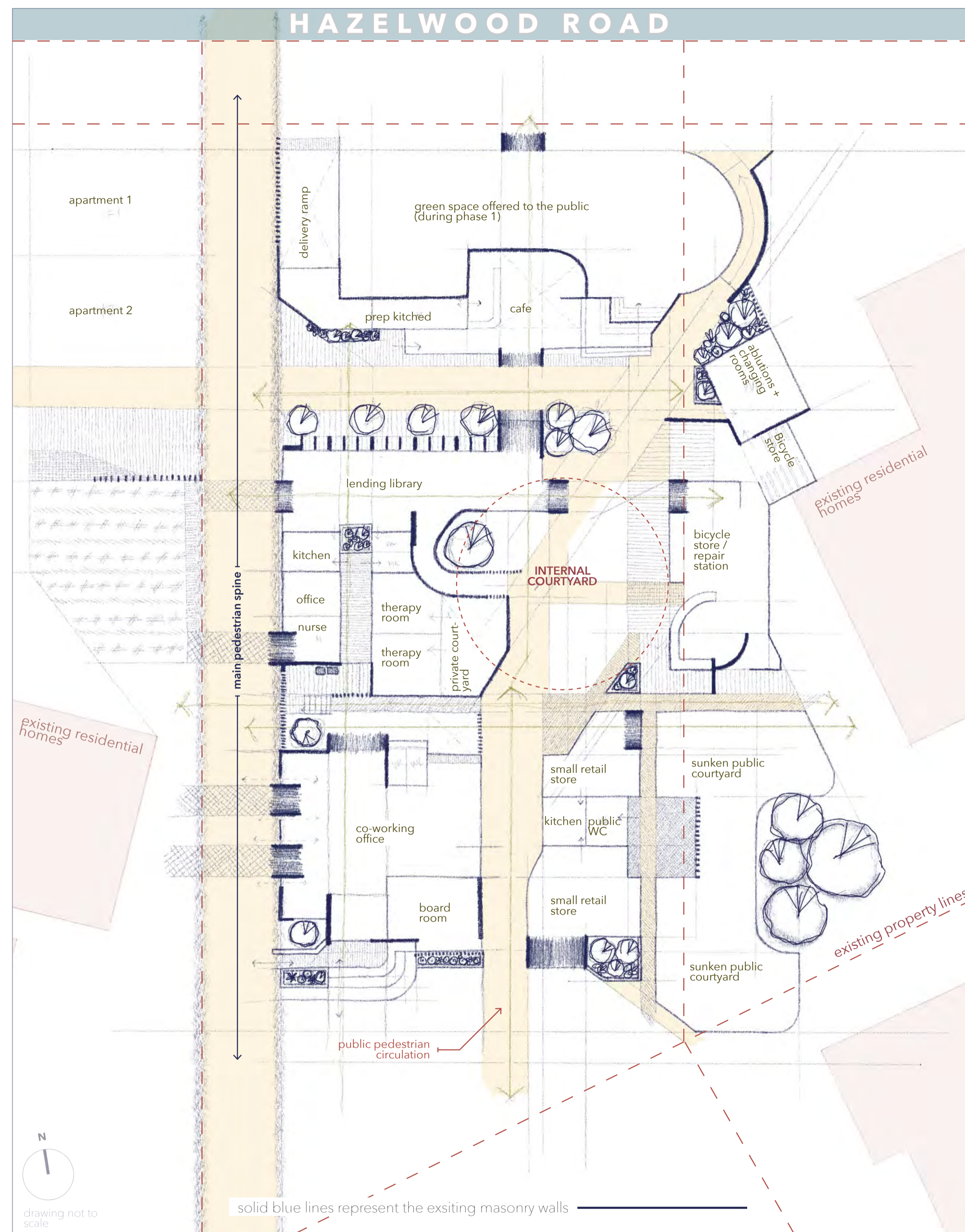
Iteration three adopted a more assertive approach to enhancing the environment

The third iteration revisited the design guidelines established during the initial research phases of the project. The audit revealed a need for increased emphasis on blurring the lines between public and private spaces, along with exploring opportunities presented by incorporating existing foundations and some masonry walls. Iteration three adopted a more assertive approach to enhancing the environment, with the spaces created in this version designed to be more intimate than those in the previous iteration.

The addition of a bus stop at the northern junction point of the pedestrian corridor and the vehicular road aimed to establish an activity point that could further encourage users and passers-by to enter the development and engage with the programs housed within. While this iteration demonstrated improvements in alignment with the design guidelines compared to the previous one, there remains a need for further refinement in circulation, visual lines of sight, and the careful creation of portal spaces. These portal spaces play a crucial role in mediating the transition between public and private spaces within the buildings.

## DESIGN GUIDELINES





### ITERATION 4

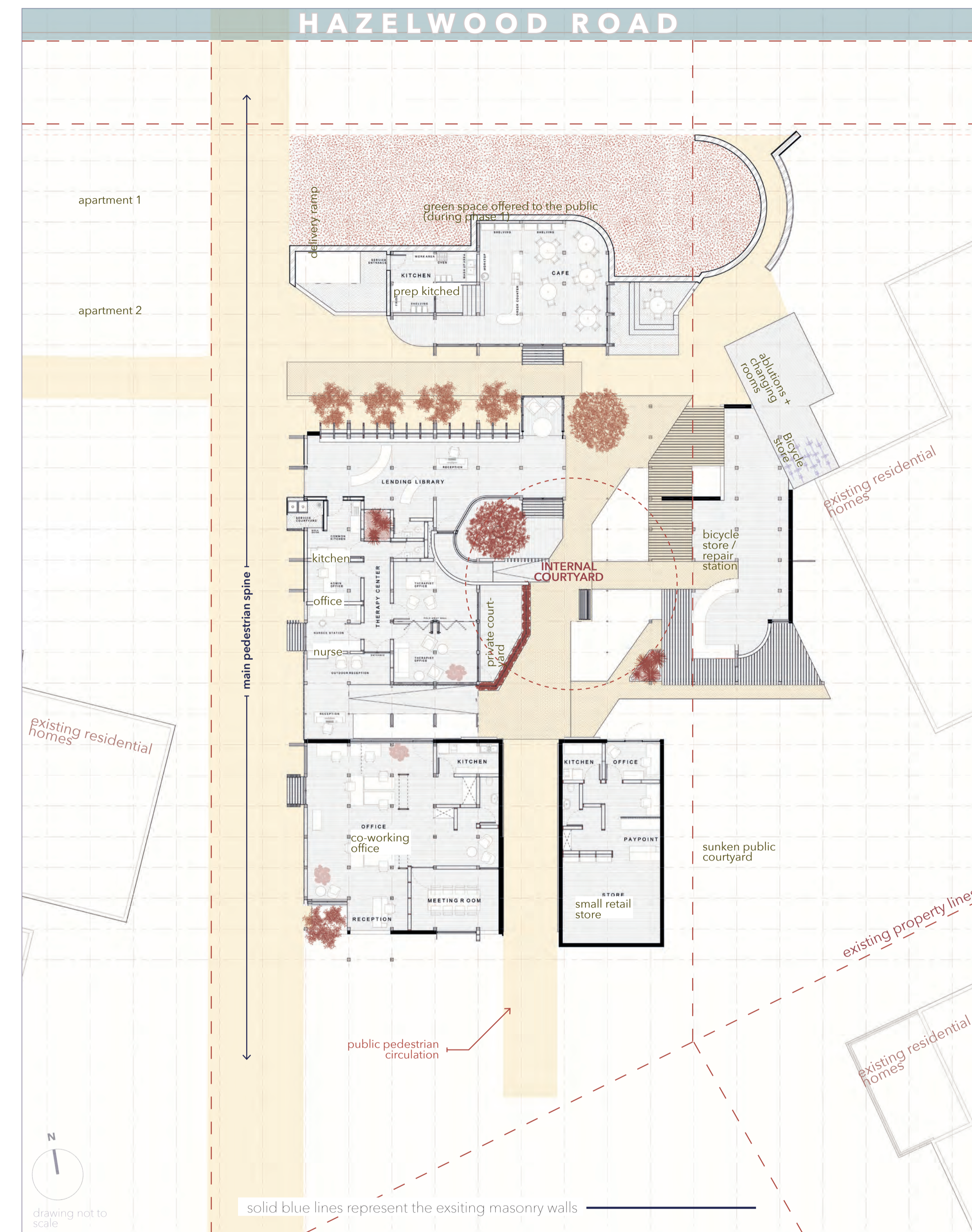
In this iteration, emphasis was placed on the pedestrian experience and how the ground plane would be perceived.

In the fourth iteration, a more refined approach to project phasing was adopted. The decision was made to introduce the cafe, located beneath the green grocer, as the initial addition in the first phase of densification. Positioning the cafe as the first addition serves as a catalyst, attracting users to the densified area. The space earmarked for the future green grocer is dedicated to the public realm, providing a green space for social exchanges. The curved ramp facilitates a deliberate entrance for users directly from the street, descending into the prospective internal courtyard.

This iteration successfully enhanced visual connection lines throughout the project, realizing the concept of internal corridors on a smaller scale and improving the overall user experience. Further consideration was given to the scale of the space created. The project's goal of populating the pedestrian corridor with small-scale interventions facilitating more intimate interactions was achieved in this iteration. For instance, the therapy centre was subdivided into two smaller therapy rooms, a nurse's station, and an additional office, utilizing the available space more effectively. Similarly, the retail store was divided to accommodate two small retail stores or kiosks, contributing to the better realization of the economy of scales aspect of the project.

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 Blurring the line between public and private areas.
- THRESHOLDS** 2  
 Emphasis on defining thresholds between spaces.
- SIGHT LINES** 3  
 Consideration of visual lines of sight for user orientation.
- BOUNDARY DEFINITION** 4  
 Boundary definition, not limited to applications of brick walls.
- PORTAL SPACES** 5  
 Creation of portal spaces.
- CIRCULATION** 6  
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- BEACONS** 7  
 Enhancing legibility to avoid monotony and provide landmarks.
- MOVEMENT** 8  
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- SCALE** 9  
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- IDENTITY** 10  
 Recognising the identity of Menlopark as a suburb, going beyond mere building structures.
- ENCLOSURE** 11  
 Prospect and Refuge: enclosure + screening to provide a sense of refuge.
- DEFINING SPACE** 12  
 African space definition: public until defined as private.



### ITERATION 5

This approach challenges Western spatial norms imposed on African cities and promotes flexible spaces.

The intention of this proposed plan is not to impose large-scale architecture that would overshadow the modest scales of the current residential surroundings. Instead, it incorporates vertical beacon elements to help users visually navigate pedestrian corridors. Throughout the iterative design process, the focus was on maintaining ongoing physical integration to keep the local residents receptive to the alterations in the residential area and to foster a sense of ownership among them. The goal is to establish a closely integrated network of small architectural improvements that benefit the community and add socio-cultural diversity to the otherwise uniform suburbs.

To enhance suburbia, a crucial aspect is reimagining open spaces between buildings, transforming them into dynamic, socioculturally enriched areas integral to urban life. This approach challenges Western spatial norms imposed on African cities and promotes flexible spaces with "sanctioned impermanence," encouraging diverse social uses, communal ownership, and cultural integrations.

### DESIGN GUIDELINES

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