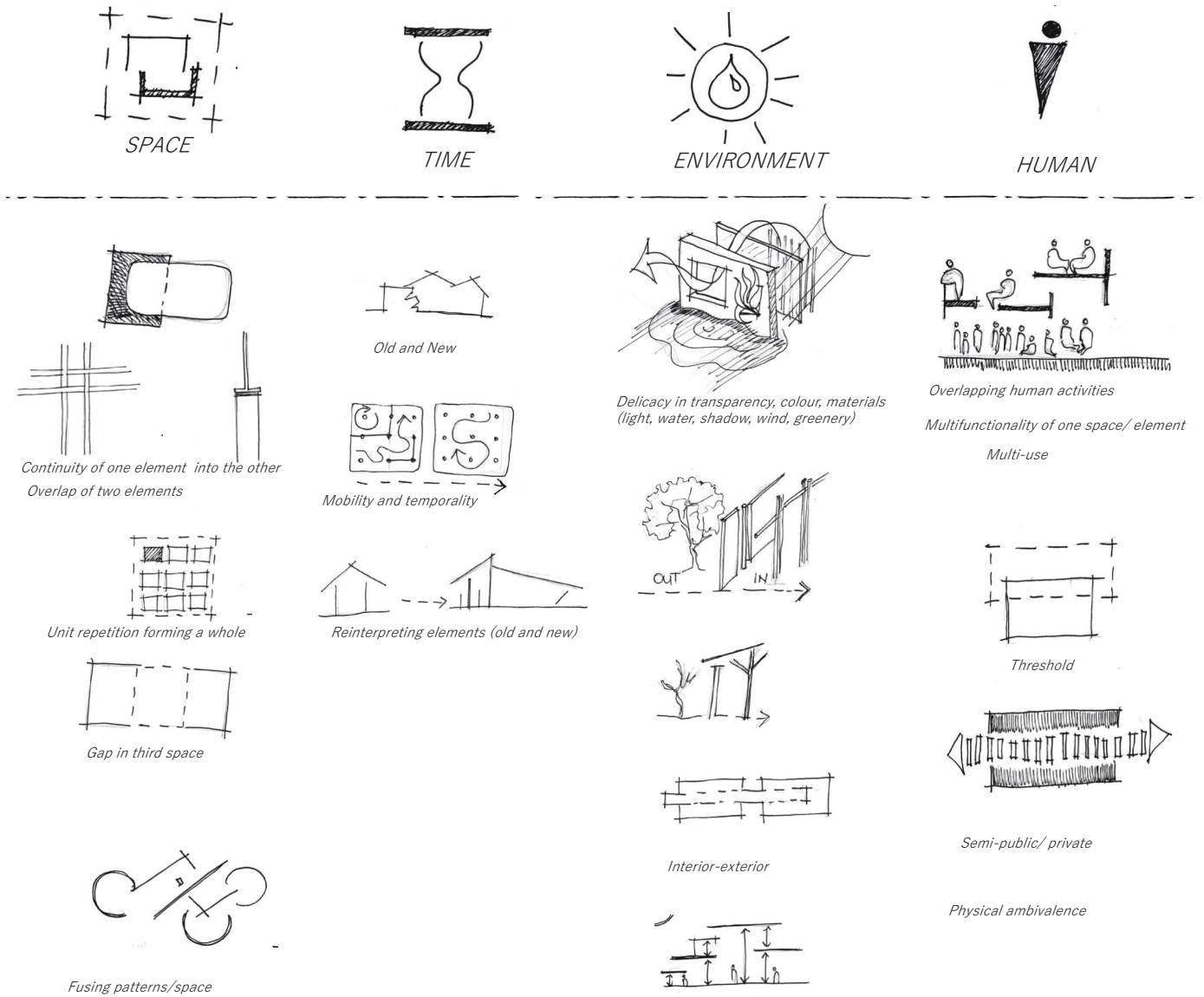


Figure *7.1: The dimensions of the in-between (including the Twin phenomena) as observed on the works of Aldo van Eyck and Kisho Kurokawa (Author 2021)*

SHAPING THE "DIS-POSITIF(S)"

"So start with this: make a welcome of each door, and a countenance of each window. Make of each a place, a bunch of places of each house and each city"

(Aldo van Eyck's 1960 in Potentially···Unravelling and reconnecting Aldo van Eyck in search of an approach for tomorrow 2012: 58)

The dissertation has currently positioned one way to initiate design through the process of anchoring networks into a place by means of architecture as 'dispositif'. The previous set of sections offered an insight of possibilities on recreation, its agency, the networks it can link and a diversity of devices to articulate such a space. The smaller grain of the outreach precinct thrives on the consensus that the intervention should constantly connect and reveal places, activities and processes which either ignite curiosity or invite people to celebrate the different endeavours of the community around the site and the greater ecomuseum spine.

With the number of actors retained, activities and series of 'microsites', the focus lies on finding the right synergy and balance to connect and unleash the maximum potential of the precinct from a conceptual premise to a technical one.

Thus, various factors have to be taken into consideration to fully achieve a meshed network that transcends into built form and responds to the need, sustainable responsibility and requirements

for the retained 'actors'. The previously identified role of the landscape as a connector also leads to a high regard for proper ecological responses which can be explored into tectonics, services (stormwater management and sewage) and site management; therefore, integrating the polyvalence of infrastructure into the narrative of recreation. Instead of being perceived as separate provisions, they can form part of the articulation of recreational devices, fundamentally contributing to the whole. In this case, the whole as the neighbourhood with environmental and educational agency.

The upcoming sections are a refining process to give better clarity and order to the recreational environment's multi-layered character and create a space which constantly balances poetry, play and the scientific by attempting to further mesh the parts and whole of the precinct.

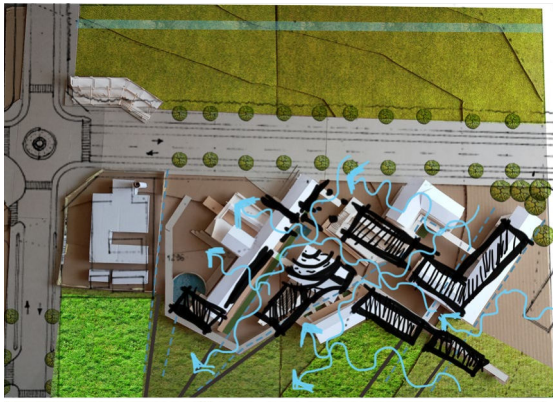
The technology investigation is followed with a series of spatial devices. While the twin-phenomena and the in-between "frame(s) of mind" (Lammers 2012:50, 88) can be ambiguous in nature, the advantage lies in their focus away from specific architecture renditions and allows for the principles to be shaped through contextual and cultural cues; indeed, even some of the precedents exhibited certain application of these notions (Figure 7. 1). These design perspectives can mitigate the move from a general city scale into architectural elements and structure, which is relevant to the subsequent realisation of spatial and technological intent.

7- FROM THE PARTS

7.1 STREET AS A LANGUAGE AND WAYFINDING: ADDRESSING ACCESSIBILITY, SAFETY AND SECURITY

One can stress that the street is a device closely related to matters of democracy and values and involves the socio-cultural aspects necessary for the future city (Hertzberger 1991: 48-54). The prior investigation's internal streets were not fully developed; hence, this section begins with the street elaboration as a departure point to properly configure paths as animated theatres for the everyday. In townships, the fact that children play in the streets can be interpreted as a sign of infrastructure deficit or streets as extensions of homes as previously iterated. Thus, these events can be re-imagined in the intervention as an opportunity. Although the street can be semiotic with equality, certain unsafe components such as cars and other dangerous situations set it back.

The terms 'outreach precinct' suggests a level of freedom (i.e., reaching out to people). Thus, the precinct loosely follows the idea of a park with pavilions; each slightly different from the other . The first approach is to reduce the number of paths, articulate the proximity of built forms while forming habitable thresholds (i.e., transitional spaces and niches); mentally reducing distances between parts, and creating visibility and framing from the street (Figure 7.2) . In tandem, the pavilions' footprints were minimised to lower the risk of negative environmental impact, and avoid the



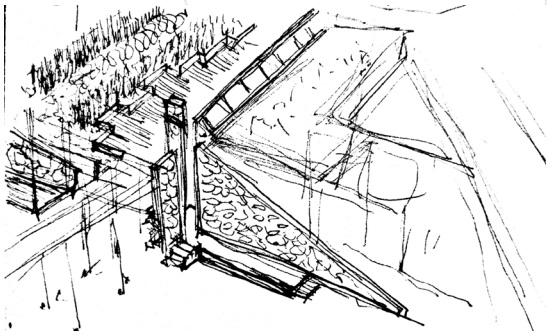
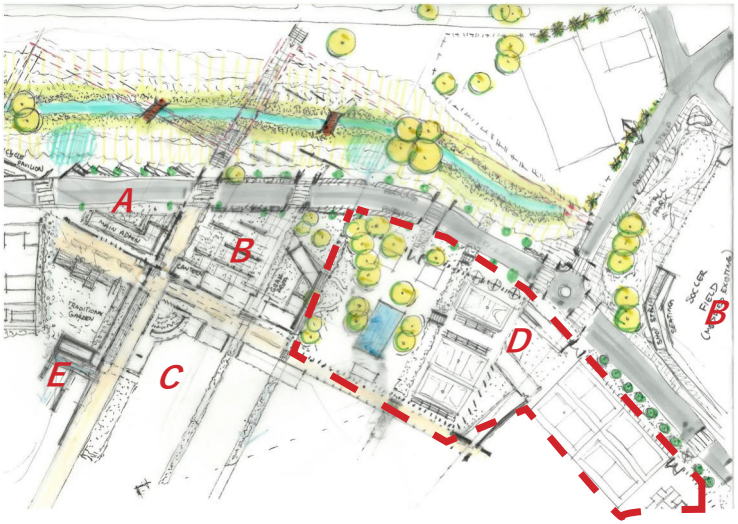


Figure *7.2: Condensing the whole (Author 2021)*

Figure *7.3: Paying attention to the natural landscape and its regeneration (Author 2021)*

Figure *7.4: Landscape and architectural elements for wayfinding - gabion towers 'arrows' (Author 2021)*



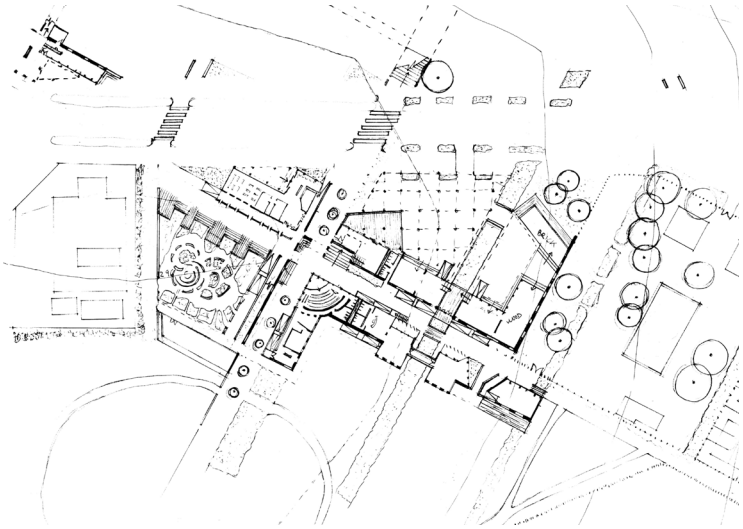


Figure *7.5: Condensing the whole (Author 2021)*

Figure *7.6: Paying attention to the natural landscape and its regeneration (Author 2021)*

obstruction of the natural drainage lines of the site (Figure 7.3).

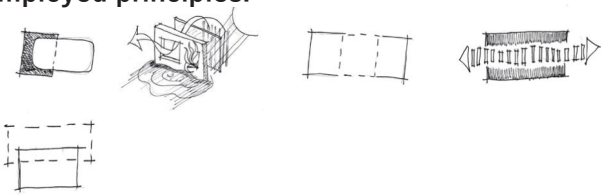
When mimicking the neighbourhood's streets, adapted by the residents, the built forms begin to appear less as big buildings housing every function but more like sequences of events (Figure 7.3-7.6). A layering strategy functioning as an interface between indoors and outdoors, plays with levels of transparency and porosity while promoting security tightness as one progresses through the layers of the buildings. These layers follow the principles of 'invisible security' (Figure 7.6). Each building is responsible for its own security with the exception of the gym area (Block D figure 7.5) having the option to form a smaller precinct at night. There's also an attempt to place 24 hours surveillance in the form of caretakers and small shops at key points throughout the rest of the precinct.

To add clarity to the overall movements and tie the precinct together, the main administrative/hot desking programmes (receptions areas, bicycle and sports pavilions) act as internal nodes while plazas act as outdoor nodes. These points are linked through materials in the landscape such as continuous and rhythmic lines of gabion walls attached to the specific buildings hosting these activities (Figures 7.4-7.8). These walls are found along the major axes (as wayfinding anchors, acoustic devices and vegetation hosts) while bioswales and other environmental process run perpendicularly and in parallel (Figure 7.3-7.6). When paired with pergolas, they also serve to delimit zones and entrance on the axes. Some specific moments such as the double-facing amphitheatre and shops appear at key decision-making nodes to animate the area, provide social wayfinding queues and open up

corners (Figure 7.6-7.8). These areas also function as points for universal access and central circulation; along with bicycle routes, they stitch nodes and trails together.

The pavilions' orientation makes the interventions act as compasses or directing devices but also is an environmental response for passive design (inclusive of thermal comfort and lighting) (Figure 7.8-7.9).

Employed principles:



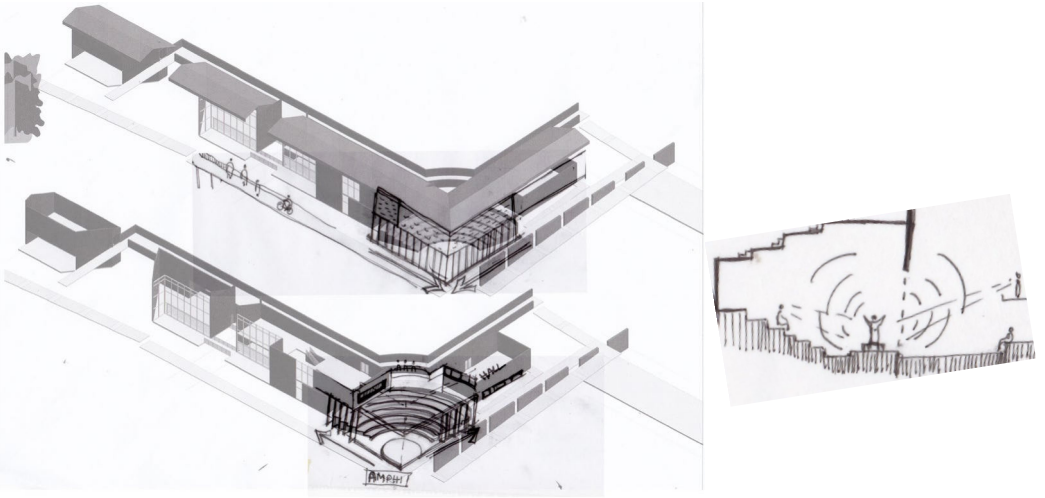


Figure *7.7: Testing the amphitheatre as part of the street corner (Author 2021). (Top) closed for private performances and (bottom) open for public performances and (right) sound experience*

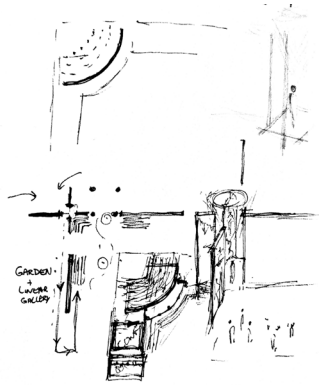


Figure *7.8: Gabions as directional device and space creation (Author 2021).*

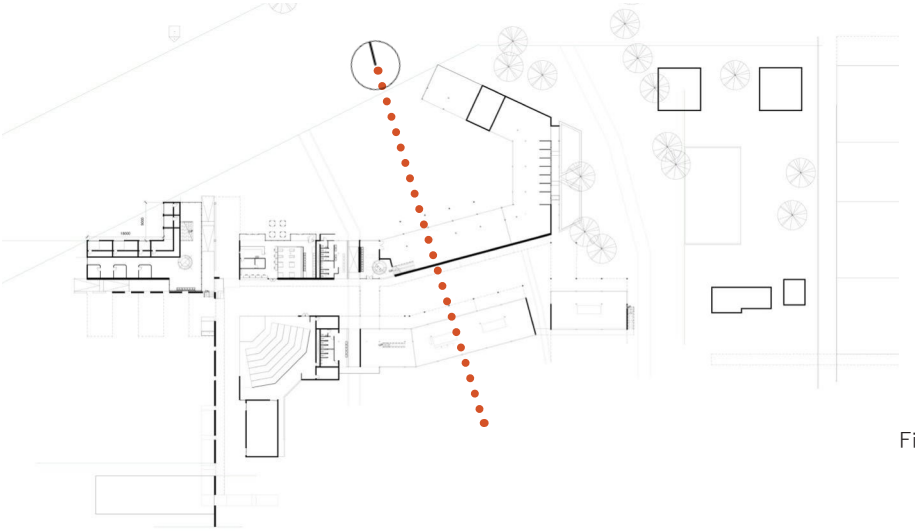


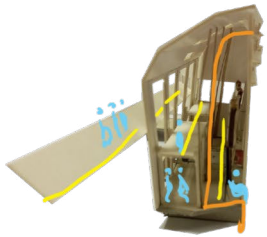
Figure *7.9: Reformed plans with building facing north (Author 2021)*

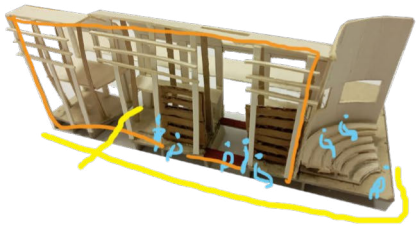
7.2 MICROSITES: ADDRESSING DIVERSITY, MULTIFUNCTIONALITY, LAND-USE AND ACTIVITIES

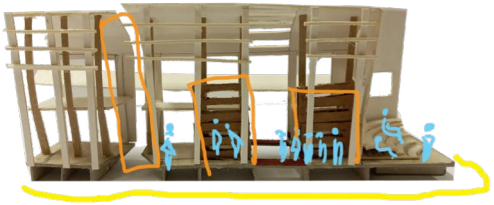
While the paths lead people to specific destinations, they can also aim to satisfy curious users by the creation of 'microsites'. The upcoming explorations embrace variety and the multiple facets of space use while considering their 'affordance'. Each pavilion established in the precinct carries an identity through its programmes, placement and relation to neighbouring buildings, eventually affecting the character of their immediate surroundings (Figure 7.10). The device employed here is the deep and polyvalent thresholds at the doorsteps of the buildings. The success of 'microites' depends on the right grouping of 'dispositifs' or activities at certain points of the journey to form interesting dynamics or advertise the inner functions of the buildings (Figure 7.10-7.11). The stoep's occupation can also occur independently of the indoor schedules, thus, becoming a space that the building generously lends to the street.

In sum, these thresholds also act as the first few layers that visitors occupy and pass through as an introduction to the pavilions. Therefore, the building blocks get 'peeled-off' as layers to host them (Figure 7.10). Instead of being inert, façades and in-betweens become educational devices, showrooms or informal performance stages (Figure 7.10-7.12). Any actor can occupy these spaces for any of the prior-mentioned activities. Often, showrooms act as displays to invite people in however, one could consider extending them to the outer skin and into the public realm creating miniature exhibitions or furthermore interactive

Figure *7.10: Pavilion maquettes depicting occupation of 'microsites' thresholds - movement, niches and sustainable services incorporated into the design (i.e., raiwater harvestiong, planters etc). Design devices include: stairs, corridors, stoeps, roofs, change of levels*







display spaces (Figure 7.11). Storage facilities that do not have any prerequisite (such as specific light or temperature) could be considered a type of showroom and consequently be integrated on edges as displays. To accommodate such idiosyncrasies, the street can slightly meander and even be continued on the next floor while the boundary walls of buildings step in and out and create gaps allowing the streets to penetrate spaces (Figure 7.10). The pavilions were also organised to have two 'faces' in order to 'breath in and out' when the twin phenomena in buildings reciprocate human nature (Figure 7.12). This allows for both frontal and back 'streets' to be activated.

The multifunctional use of space is continued indoors where the interior spaces function as free plans (when non-detrimental to safety and security) and acoustically-sound partitions can bisect zones or be removed or doors opened to create 'internal streets' connecting interior spaces as promenades (Figures 7.6 and 7.10).

As an actor, vegetation is included as part of the ecosystem of a public open space and for its educational value. Due to the distance between sites in Mamelodi such as the Magaliesberg mountain range, the Mothong African Heritage Village and the current neighbourhood, creating and incorporating local vegetation as a part of a miniature botanical garden as well as thresholds to facilitate small excursions closer to the residents (Figure 7.2-7.6, previous section). Plant diversity (types, systems, vertical and horizontal spreads) allows for distinctive atmospheres as an addition to wayfinding and the appropriate vegetation can assist in noise reduction, cooling effect

(i.e.,evapotranspiration), thus, reducing heat urban island effect, thermal, dust and air quality control (Falkenberg 2011:24). These solutions can also improve indoor environments (paired with wind direction).

Therefore, vegetation is yet another 'dispositif' also capable of defining 'microsites' and can be further used to re-establish a connection with the Pienaars river's tributary in the form of an off-stream diverted wetland addressing the floodplain's bare ground of the YMCA (see site analysis section). The future wetland adds another layer to the scheme while possibly working in conjunction with the water management of the site.

Employed principles:

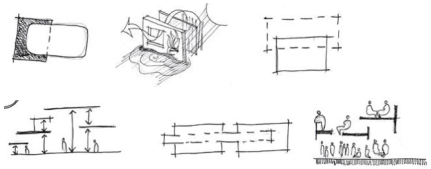


Figure *7.11: Shop-front threshold, local stones and storage as display (Author 2021)*

Figure *7.12: The threshold that "breaths"*

7.3 'COLLECTIVE ACTION' AND CULTURE: ADDRESSING SOCIAL DYNAMICS, ANCHORAGE AND IDENTITY

The last set of factors explored are social dynamics, anchorage and identity. Just as the gleaned precedents, public places require people to form a certain level of attachment with these places. The aim of the intervention is to explore a way to foster the relationships between people (users, visitors and local entrepreneurs) and place.

One important medium to establish these relations other than the street and 'microsites' is through materials. The socio-economic chain provided (Figure 7.14) combines some of the most common materials found in Ward 23 while considering current and future skills sets and programmes (Mr J, verbal communication 2021; Mrs K verbal communication 2021; SOS focus group 1 2021; Thandanani focus group 1, 2 2021). The chart follows a timeline starting from when materials are collected, transformed and used for the construction and/or as products for income generation. Certain 'actors' (entities, schools, the elderly, families) are able to collect materials such as glass bottles and plastic bags, while others are entrepreneurs (i.e., the collection and/or making of materials such as glass bottles or bricks form part of their daily income-generating endeavours. The project can support local recyclers and brick producers by purchasing their products. During the post-construction phase, the relationship between client and supplier is left between local entrepreneurs and the workshops (maker's space).

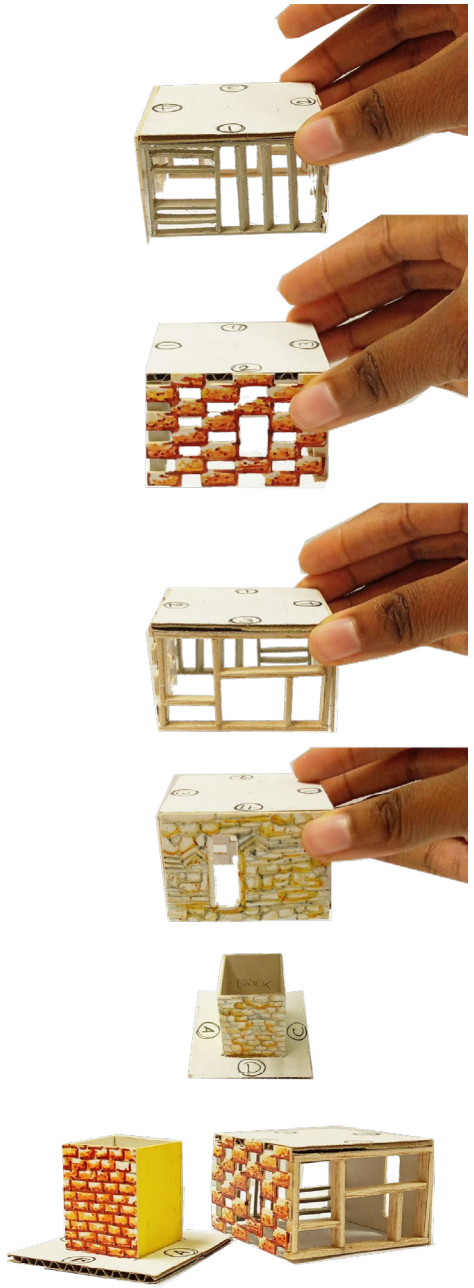


Figure *7.13: Material experimental cube, testing transparency, colour and shading as devices (Author 2021)*

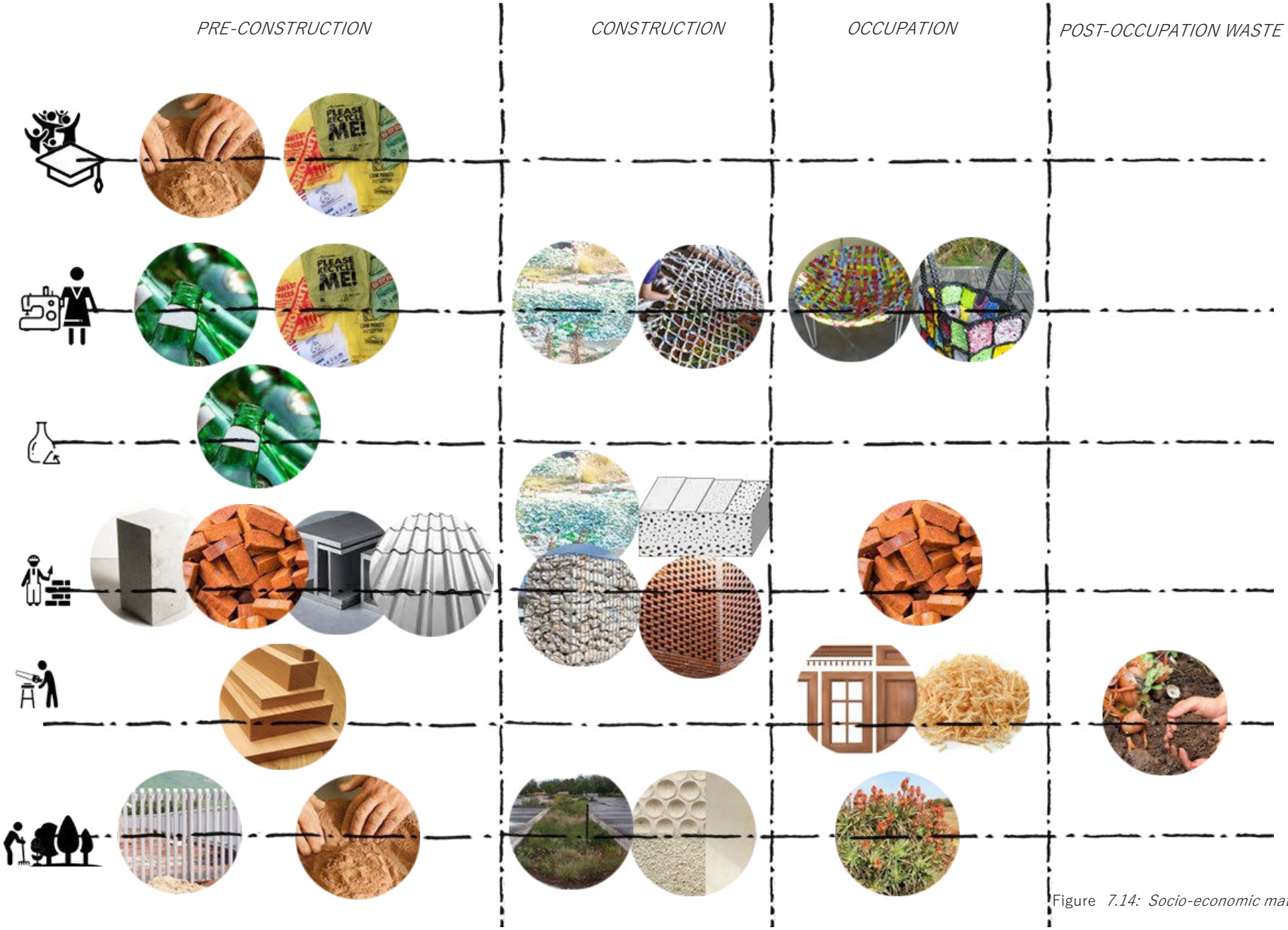
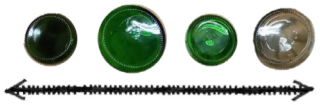


Figure *7.14: Socio-economic material palette*

Diameter sizes



Light Transmittance (from dark green to transparent)

Figure *7.15: Comparing bottles' colour and heights (Author 2021)*

The project, thus, incorporates clay bricks as both a socio-economic sustainable act and a reminiscence to the clayey soil present on site. Considering craftsmanship, the malleability of pottery clay and the ceramic and glass knowledge present in the community, there lie an opportunity to produce sensory artefacts for the construction of the precinct and convey the participation of the community (Figure 7.14-23). These pieces can shape recreational moments and also contribute to the environmental strategy of the building or the wayfinding system (Figures 7.20-7.23). A short experiment was conducted (Figures 7.15-7.19) to internalise the construction potential of glass bottles (i.e.s insulation , strenghts and more).

By engaging with both traditional building materials and recycled ones, the aim is to create a network between actors by the strengthening or connecting existing ones. Thus, the design is driven by a 'collective action'; making use of accessible and mundane materials with the objective to ignite familiarity and promote the craft that will be made as part of the programmes (Figures 7.14-7.23). Traditional materials, concrete and bricks, are curated for their reliable structural and thermal performances . Timber, although more susceptible to fire and weathering is used as a contrasting element, as an attractive medium, a means to reconnect indoors and outdoors spaces while contributing to the versatility of 'microsites.'

Figure *7.16: Bottle modules in relation to other traditional construction materials (Author 2021)*

Its relatively lower price and theft value, multitudes of assemblies and renewability factor (supporting the right supliers) make it a good material to be used to articulate the 'dispositifs' at the thresholds.

The material palette is further expanded with the inclusion of natural elements such as light, vegetation and water. Colour and transparency are also factors considered to add character, visibility and further the differentiation of spaces (Figure 7.13).

Employed principles/dimensions:

Options to test

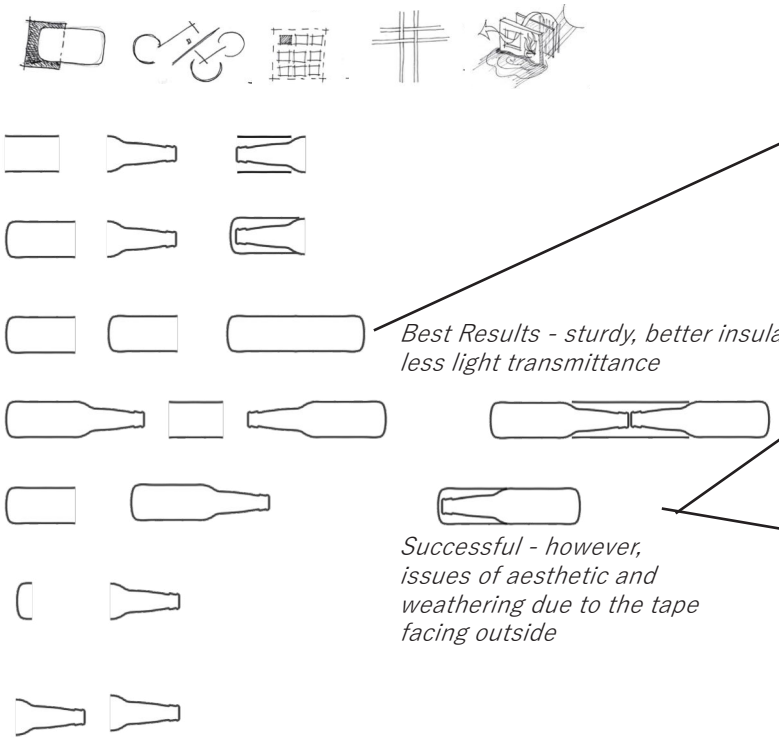


Figure *7.17: Testing bottle combinations in relation to cuts, colour and sizes (Author 2021)*

Figure *7.18: Building experiment, miniature bottle walls , mortar, brick and DIY glass bricks (Author 2021)*

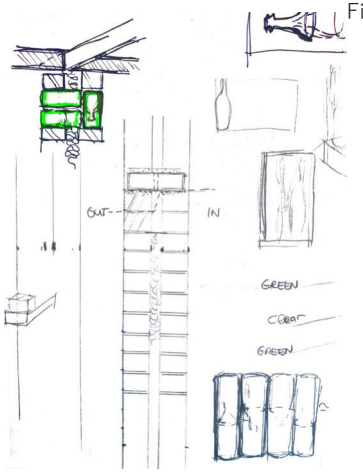
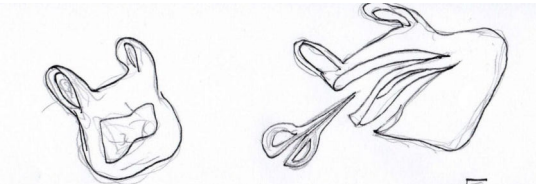
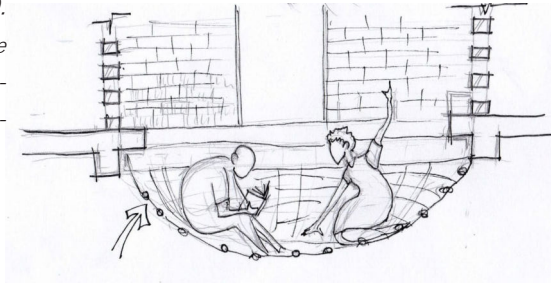
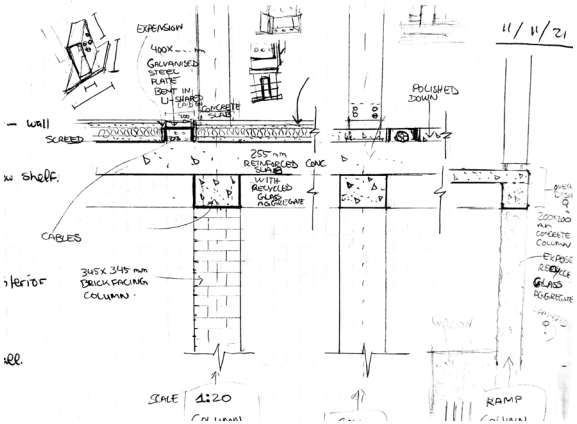
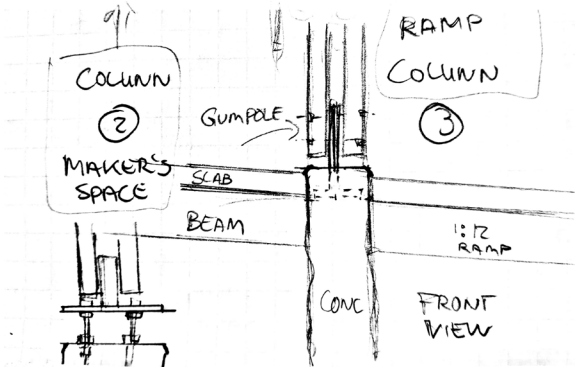


Figure *7.19: Sketches exploring glass in construction: 1) glass brick, 2) light device, 3) glass aggregate (Author 2021). Research found that the use of green glass in concrete can and reduce the risk of alkali-silica reaction when glass is used in concrete (Afshinni 2019). Using glass aggregate may reduce the need for a big quantity of portland cement, thus a more sustainable option to explore.*









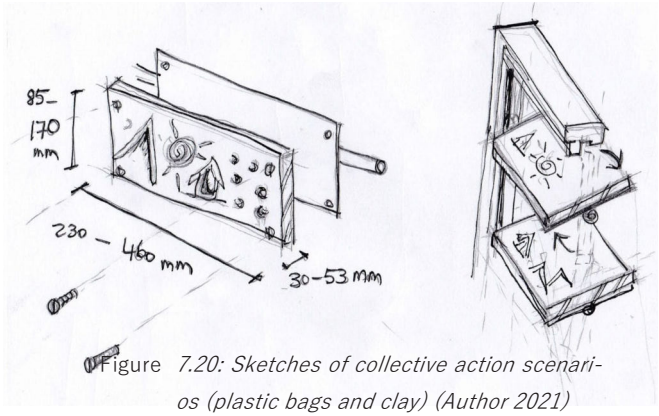


Figure *7.20: Sketches of collective action scenarios (plastic bags and clay) (Author 2021)*

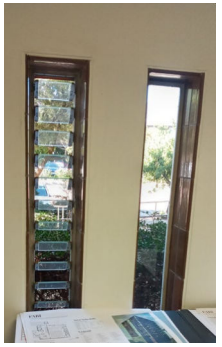


Figure *7.21: Recycled plastic hammock*

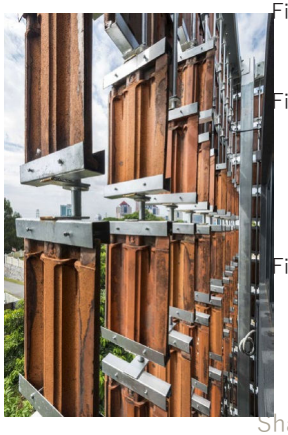


Figure *7.22: Glass louvres example (Boukunde) for recycled glass montage (Author 2021)*

Figure *7.23: Recycled clay tiles (). Example of shading device*

8- TO THE WHOLE: SYNTHESIS

Following the empirical investigation of the parts, this section aims at exploring the whole as an ensemble of technology, structure and services resulting into sets of 'dispositifs'. The technological role of the intervention is to bring together the diversity of the parts as a legible whole capable of expressing the notion of 'social fabric as infrastructure'.

This approach allows for the representation of a holistic design for recreation, as well as a representation of the multitude of processes taking place in streetscapes which are often inconspicuous (all the infrastructures that they handle). The technological resolve incorporates twin-phenomena and the in-between conditions by internalising the principles employed in sections 7.1- 7.3 of the dissertation; meshing them vertically and horizontally, in three dimensions.

8.1 STRUCTURAL INTEGRITY

The structural integrity of buildings is often broken into primary, secondary and tertiary structures. For this intervention, the structure has been organised and will be explained in terms of planes (layers): primary structure (first plane), secondary structure (second plane), tertiary structure (third plane) and finally the addition of a fourth plane. The "planes" shape the building; each fulfilling a role ranging between structural and infill.

//General Ordering Intentions

One can simply explain the structural ordering as the weaving of planes through the continuation of materials from one space to another celebrating vertical and horizontal transitions especially around thresholds. The structure aims to make use of traditional materials especially bricks as the loadbearing and infill elements while the fourth plane's materials are curated to standout contrasting and complimenting the bricks. The common plan arrangement comprises of 6x9 meters bays divides in their 9 m depth into 3:6 respectively. The aim is to maximise the use of off-the-shelf materials and the ease of transportation.

Externally, stones, leftovers or damaged bricks act as the main physical wayfinding elements, working in tandem with the vegetation, (heaviness of stones and planting as anchorage with minimal to no negative environmental impacts)

//First plane (Space Dimension)

The first plane is composed of reinforced raft foundations to sustain the weak clay soils of the site. These are then complimented with brick columns with reinforced concrete infills forming the basis of the loadbearing components on the ground floor. This plane is synonymous with ground, anchorage and projection. When this plane occasionally meets with the fourth plane, it acquires the additional dimension of time (Figure 8.1).

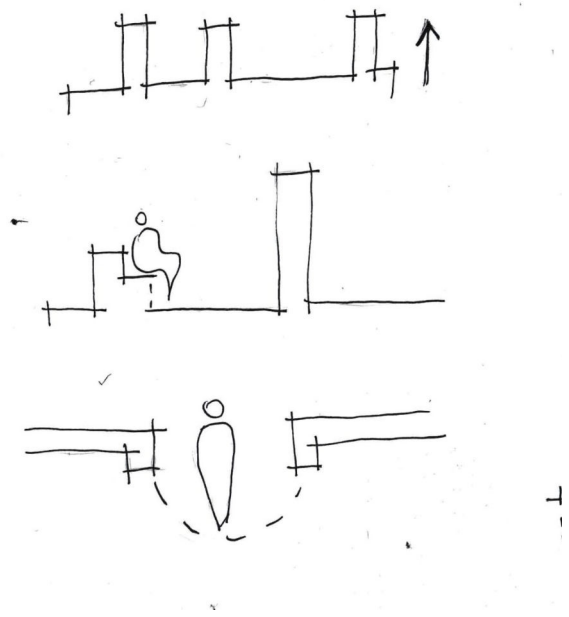


Figure *8.1: First plane (Author 2021)*

//Second Plane (Space Dimension)

The second plane consists of the brick infill (insulated cavity walls) of the buildings, traditional and thermally efficient. Similar to the first plane, this plane interacts with the fourth plane and acquires the time dimension. However, in this case, the relationship is much more dynamic and interactive for the users as it is an easier plane to modify and best implement their identities (Figure 8.2).

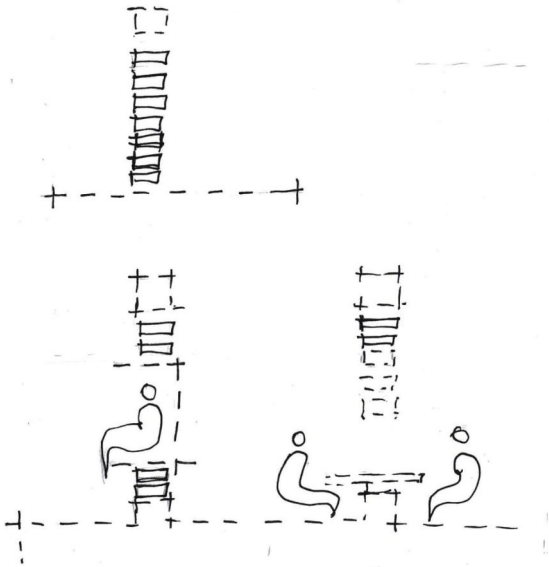


Figure *8.2: Second plane (Author 2021)*

//Third Plane (Space and Environment Dimensions)

The third plane encompasses the roofs, varying from mono-pitched, double-pitched and extensive green roofs. Their relationship lies with naturals processes: light, ventilation, water management including storm-water attenuation and water harvesting. When this plane interacts with any other planes, it adds or enhances the space and environment dimension in the relationships (Figure 8.3).

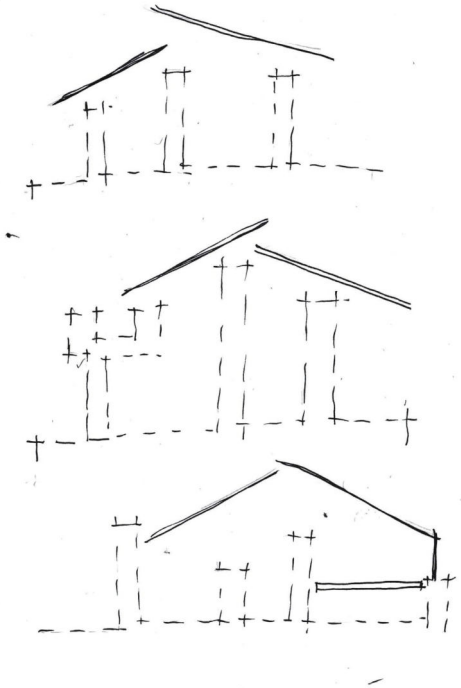


Figure *8.3: Third plane (Author 2021)*

//Fourth Plane (Human and Environment Dimensions)

This plane is meant to contrast and compliment the other planes and is characterised as a dynamic infill. This merging of planes best exemplify the twin-phenomena: opposite yet shaping the same part of the whole: the wall, the ground or the roof. By encompassing the in-between's notions of environment dimension and especially the human dimension, the fourth plane adds vitality and colour to the other planes ' dimensions. This fourth plane is the most versatile as it is made from crafted materials (glass bottles, timber and plastic bags) and vegetation. Their detailing remains fairly simple for ease of construction, use and interchangeability. However, it is in their assembly and pairing where one can perceive the identity of thresholds and microsites. The elements forming the fourth plane serve as displays, afterimages or traces of actors' skills or occupation. Although this plane is not loadbearing, it contributes to the sustainable aspect and legibility of the precinct through its overall socio-cultural and economic contribution as well as its involvement in environmental mitigation: solar shading, air quality and light transmittance. The "dispositifs" for this include light wells, light shelves, louvres, screens, planters and vents most of which double up as other useful components (Figure 8.4).

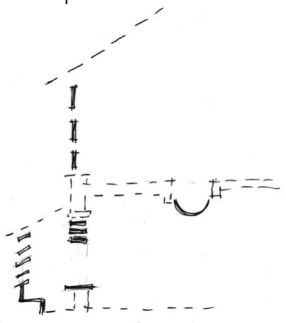
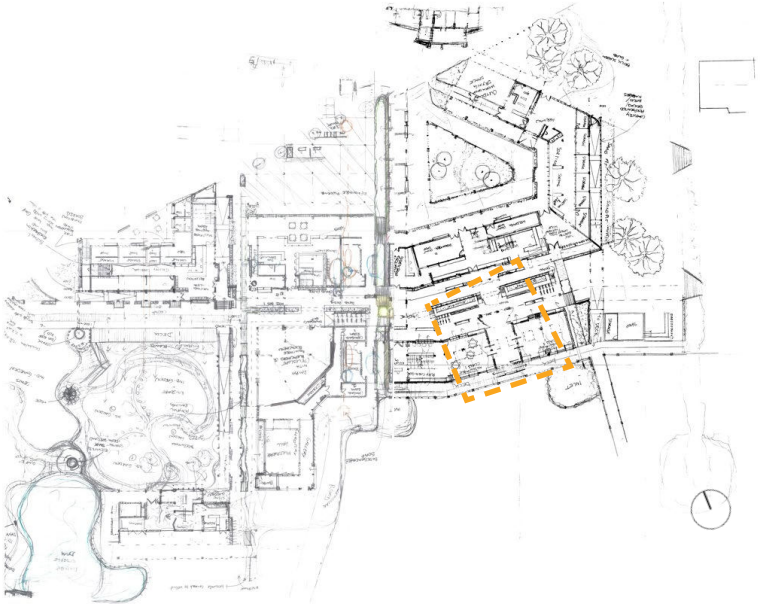


Figure *8.4: Forth plane (Author 2021)*



Model section zone

Figure *8.5: Sketch plan Ground Floor at 1:200 (Author 2021)*

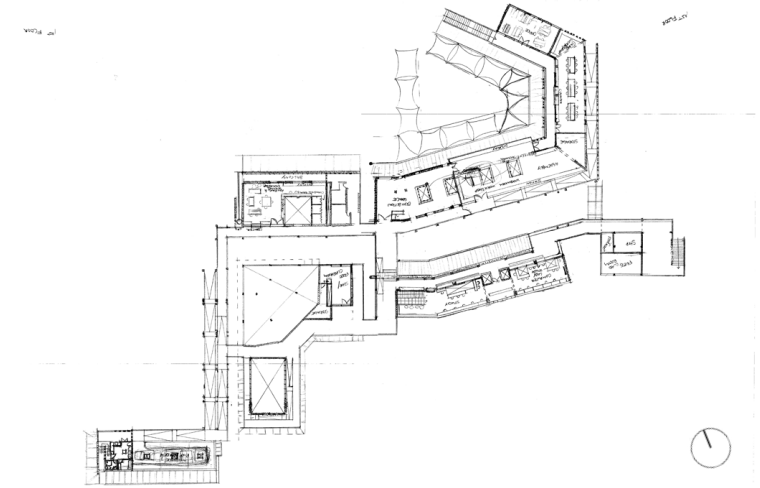


Figure *8.6: Sketch plan First Floor at 1:200 (Author 2021)*

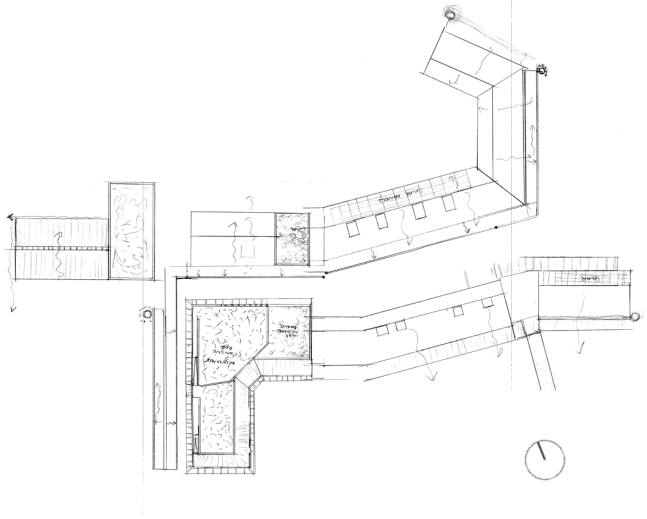


Figure *8.7: Sketch plan Roof level at 1:200 (Author 2021)*

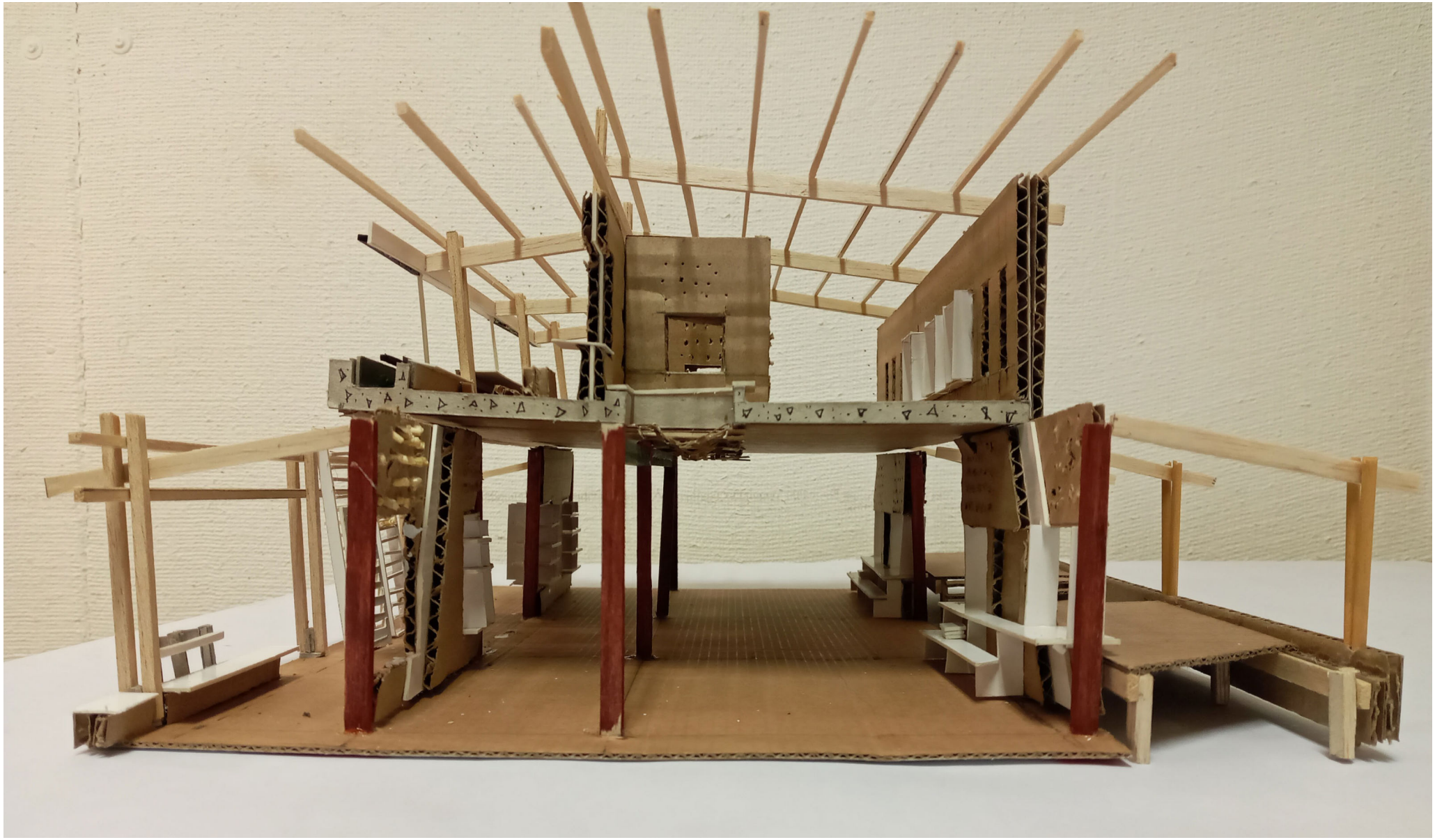


Figure *8.8: 1:50 section model through afterschool centre (Author 2021).*
Brick columns, timber, glass bricks

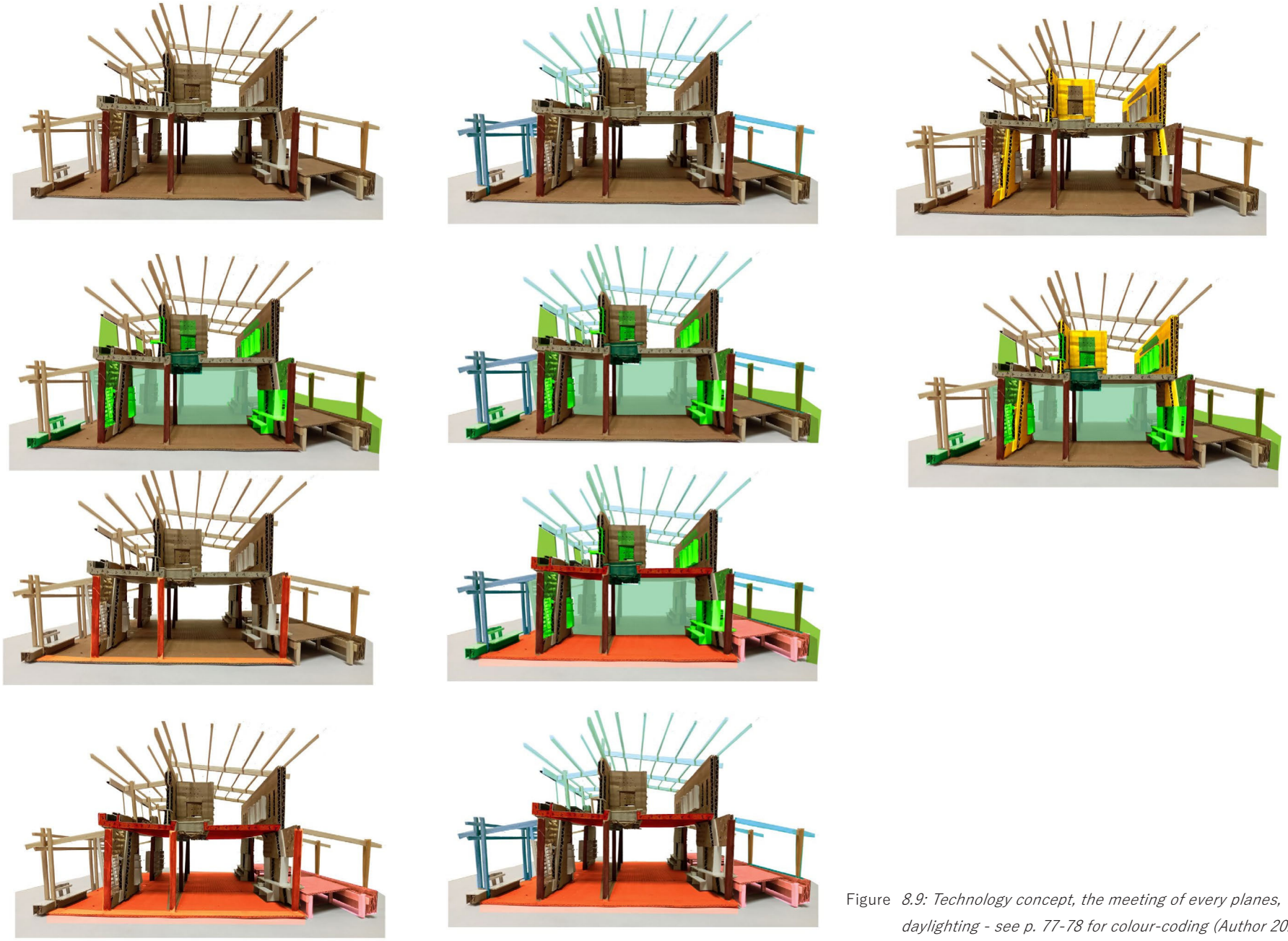
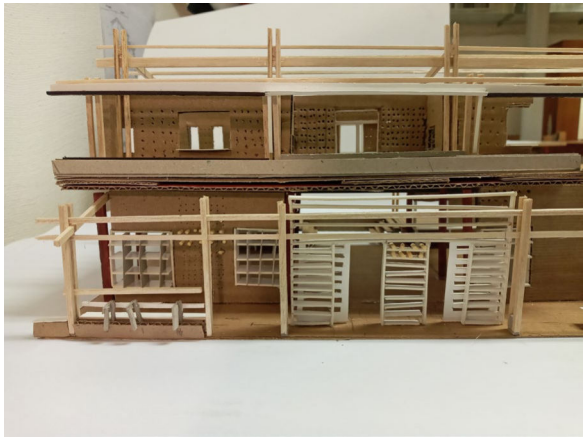
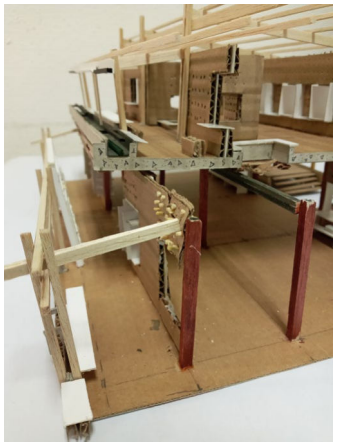
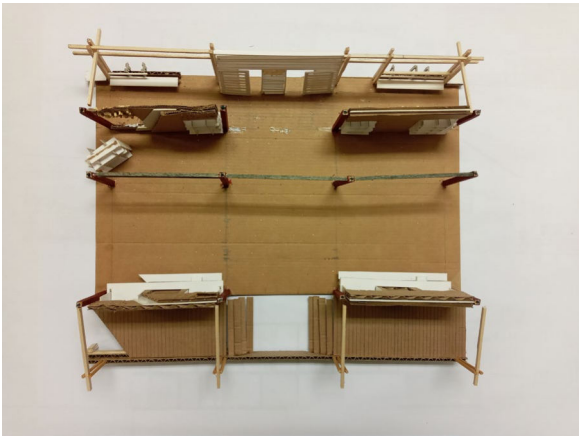
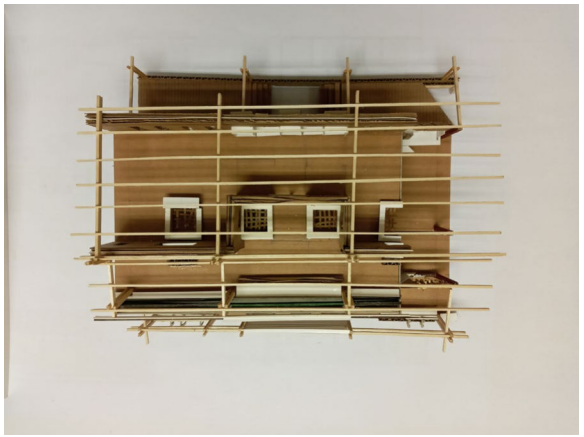
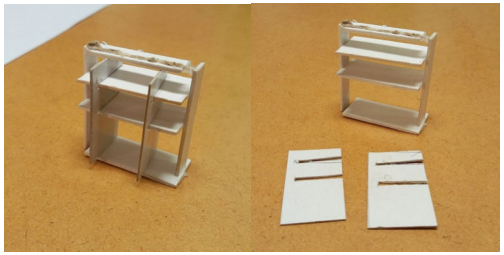


Figure *8.9: Technology concept, the meeting of every planes, ventilation and daylighting - see p. 77-78 for colour-coding (Author 2021)*



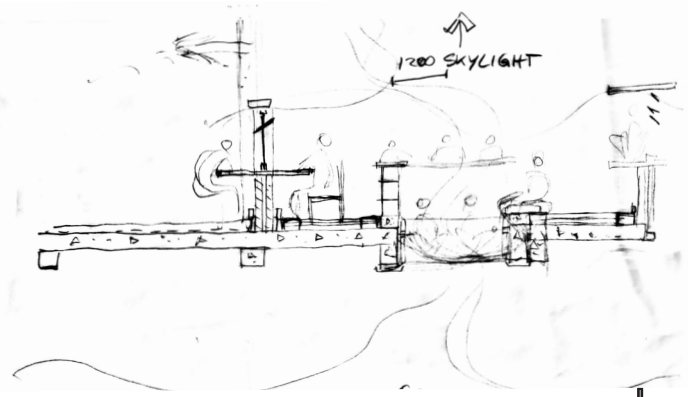


Figure *8.10: Collage exploring the parts of the model: detached façade, outdoor rooms, shelf-windows, light-wells, bottle in walls, hammocks, boardwalks as architecture(Author 2021)*

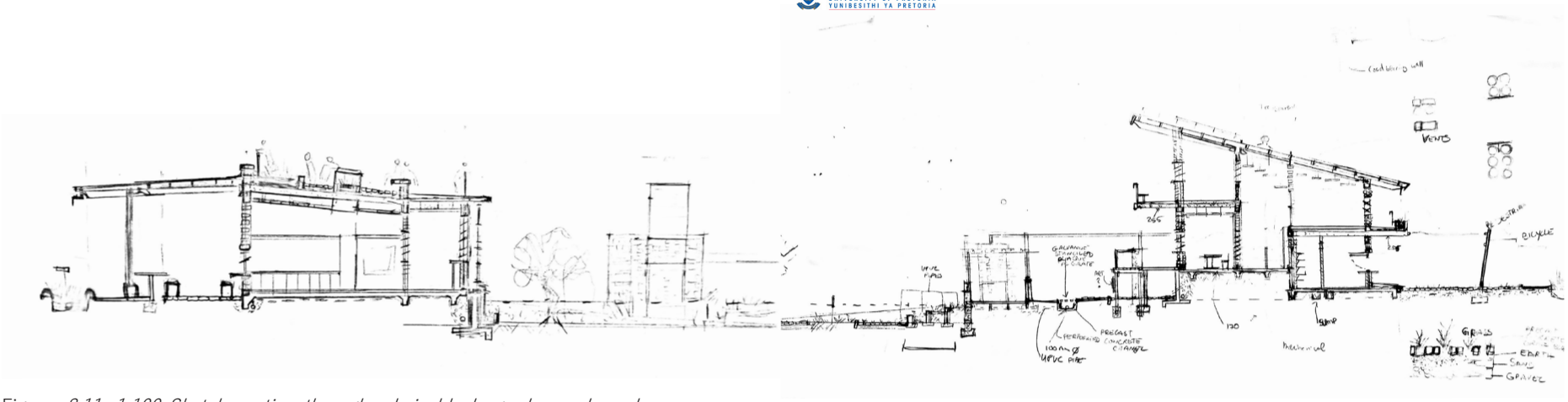


Figure *8.11: 1:100 Sketch section through admin block, garden and seed bank (Author 2021)*

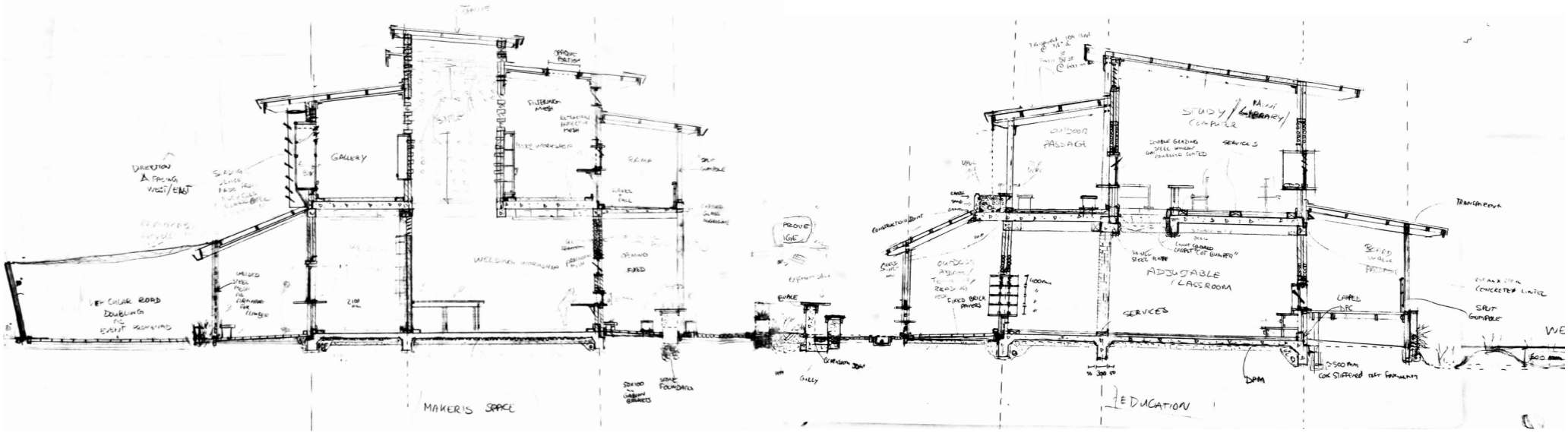


Figure *8.12: 1:50 sketch section through Maker's space and afterschool centre (Author 2021)*

8.2 FULL ENVIRONMENTAL STRATEGY

The environmental objective of the precinct is to set a precedent for the integration of a balanced ecological and rehabilitation scheme into a recreational space. Once again, the twin-phenomena and the in-between theories are applied by constantly considering the environmental potential or role of the architecture's parts.

The primary strategy consists of the management of the site itself and its resources such as existing constructions, soil and vegetation by making use of best practice strategies (see previous ections). It is firstly about acknowledging the responsibilities that any intervention has towards its site, by either preserving or bettering the existing ecosystem; turning injured site into a healthier one (Calkins 2012). Additionally, attention should be placed on the positive and negative impacts that the development could have beyond the site's boundaries (Calkins 2012).

The secondary strategy is concerned with passive design; in particular daylighting, ventilation and thermal comfort provided by the built form allowing for reduced energy consumption (Figures 8.8-8.12). These are primarily explored for the maker's space, the consultation pavilion and the educational pavilion. Daylighting scenarios are tested for the maker's space keeping up with the lighting demands for such spaces (Figure 8.13) (Muller 2013: 372-377). Acoustics and air quality will not be addressed in this paper, nonetheless, it is understood that a good envelope and ventilation design will consequently play a role towards their application (Brophy 2011). In continuation with the conceptual approach of twin-phenomena and sustainable practice, lighting and passive ventilation are considered in conjunction to one another shaping openings and wells (figure 8.18). Because each building differs, the technological approach was adjusted accordingly while keeping passive design principles.

Finally, the third environmental contribution is the water management incorporating several systems and services which will be detailed in the next section.

TESTING DAYLIGHTING IN THE MAKER'S SPACE

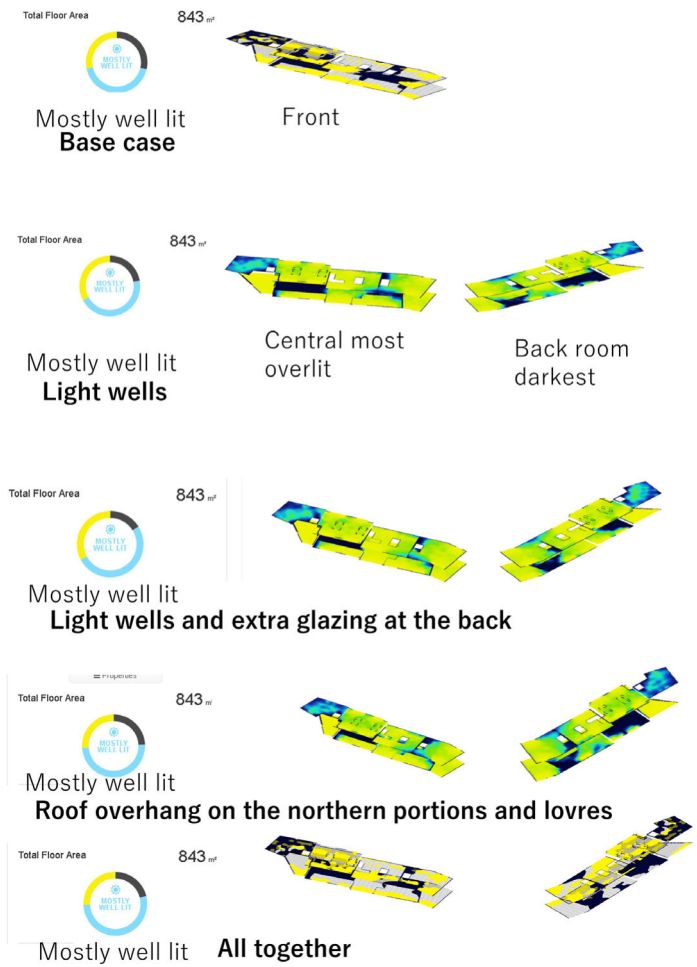


Figure *8.13 : Sefaira daylight speculations (Author 2021)*

8.3 SERVICES (THIRD ENVIRONMENTAL STRATEGY)

The main objective for the precinct's services is to present a way for these to also shape the space, raise awareness amongst the users and to be able to perform in a manner that caters for the future city while adding value to the open public space (figure 8.19). Figure 8.20 is a reminder to the hydrology of the site along with its climatic data. As the intervention sits in a former floodplain, the scheme proposes a change to the concrete channelled tributary in the park as the first step to achieve the rehabilitation of the natural hydrology and vegetation systems of the sites. Secondly, the scheme aims to explore opportunities for water harvesting and onsite treatment stormwater and greywater. Figure 8. presents the full water strategy for the precinct while figures 8.22 to 8.23 diagram their spatial implications.

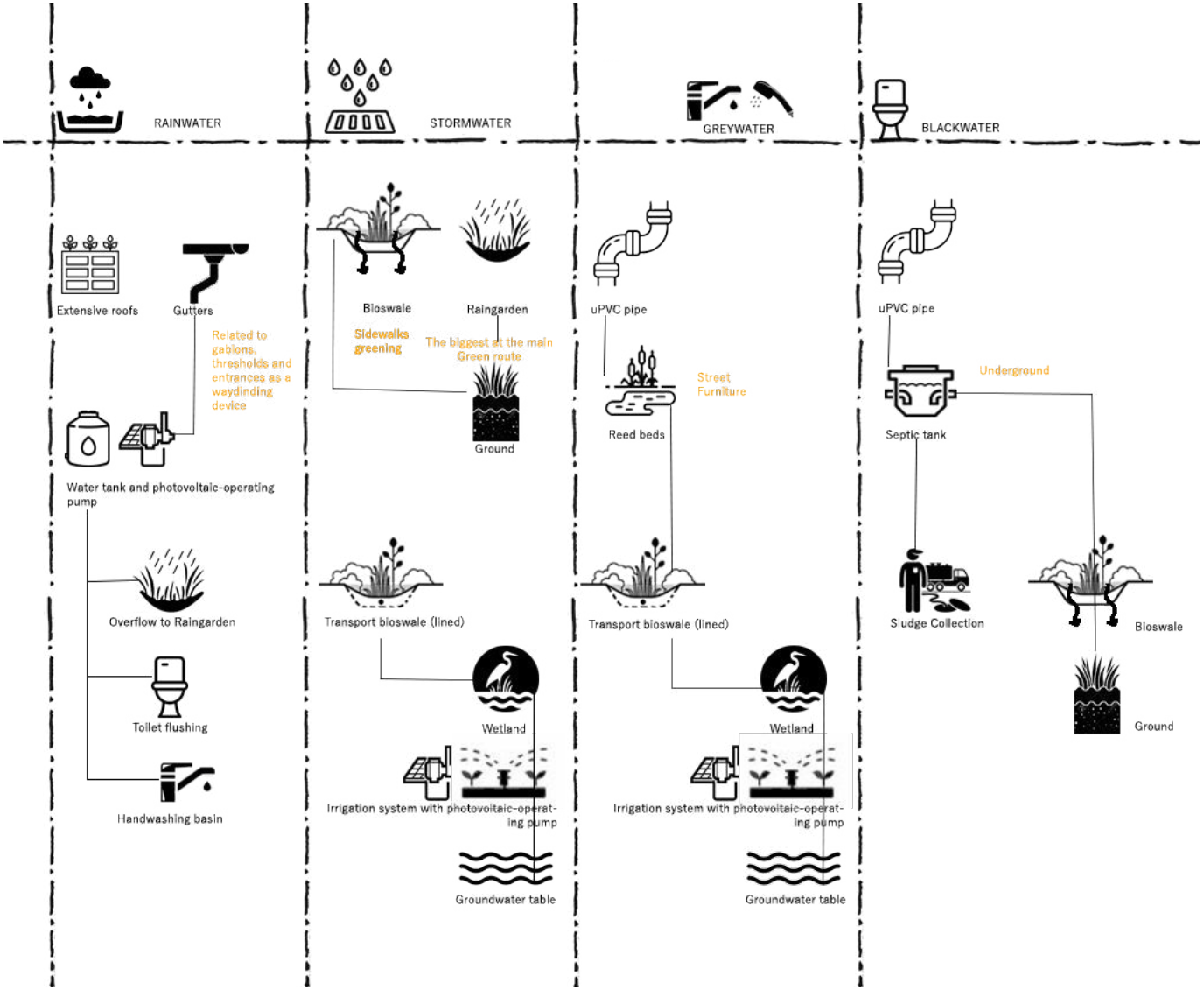


Figure *8.14: Water strategy diagram (Author 2021)*

//SuDs and wetland ecology (figures 8.23- 8.25)

The objective of the series of systems is to alleviate the load on the municipal sewerage system, stormwater channels and prevent the penetration of unhealthy stormwater into the Pienaar's River downhills. SuDs systems (bioswales and raingardens) and the constructed wetland designed on the southern area of the precinct are primary actors in the water management strategy. It was found that the area has the right soil condition and slope to establish such a system, thus artificially restoring the ecology between the stream and flood plain.

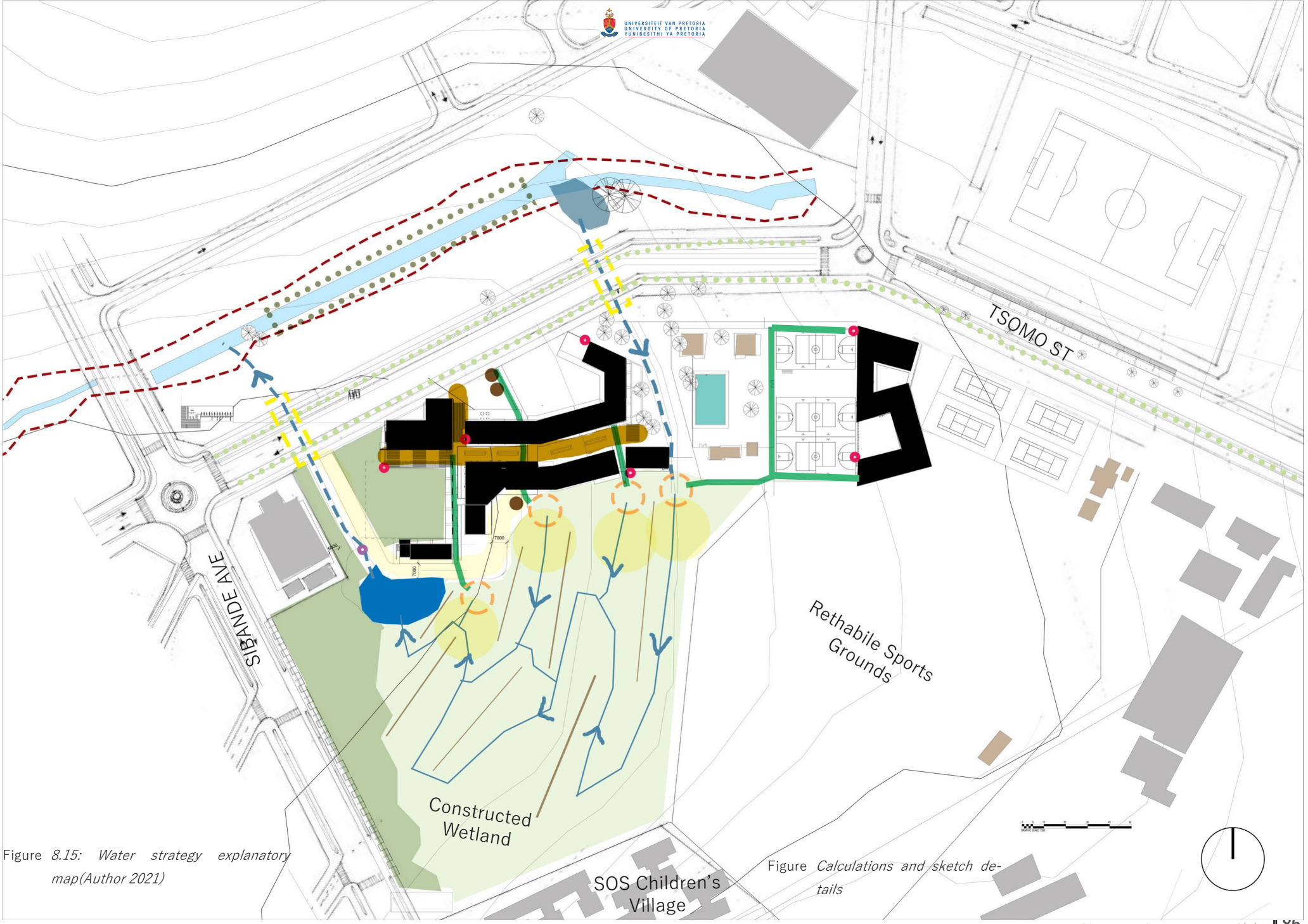


Figure *8.15: Water strategy explanatory map(Author 2021)*

Figure *Calculations and sketch details*

LEGEND

Existing buildings

Pool

Reused existing buildings for intervention

1:50 years Flood line

Box culverts zone under street

Diversion dam constructed with gabions and weirs (designed for a 2/3 stream flow towards transport bioswale)

1/3 stream flow, vegetated zone. Naturalised riparian stream with flood control (gabions and vegetation)

Stream transport bioswale

Meandering berns

Wetland Inlet zones

Septic tanks zones for blackwater and washing machines

Macrophyte zones

Storage dam tank for irrigation with overflow to stream transport bioswale

Includes man hole with ball valve and Pump towards tank

Rainwater harvesting tank with outflow to bioswales/ gravel trenches

Lined bioswales

Indigenous garden

Gravel trenches and Event bioswales

Street raingardens

Service access road, permeable stone paver

Storage dam

LAWS &REGULATIONS

EIA
WULA water use license
National Water Act under section 21 (c) and 21 (i)
Feasibility of the stream modification

Steam deviation ratio 2/3 towards wetland (Personal communication 2021)

WATER DEMANDS AND STORAGE SUMMARY (see appendix J)

//Rainwater Harvesting

Another integrated service is rainwater harvesting. Water collected from the roofs are either stored for use inside the buildings in case of shortages or directed to bioswales where tanks cannot be installed. Stormwater and greywater are both treated through bioswales and the wetland. The water is then stored in a featured dam and pumped in a tank for irrigation purposes. The controlled outflow is guided back to the stream. In general, because irrigation forms one of the highest waters demands and the site is wide, most water collected will be used for it to alleviate the need for municipal water.

Appendix J indicates the harvesting potential, water demands and finally the storage requirements for collector roof. All bioswales and channels are considered as outflow zones.

//Greenstar Rating [1]

The main sustainable categories that the project aims to achieve are: water, materials, land use/ ecology, innovation and transport. The management, indoor environment quality (IEQ) and emission categories were only filled when criteria were addressed by the scheme such as: site precautions, ecology education, daylighting and thermal comfort.

The results indicate that the scheme has the potential to already achieve a 3-star rating only with the above categories. Land use and ecology reached a very high score. One can conclude that if all categories were to be considered, the project could perhaps achieve a higher rating.

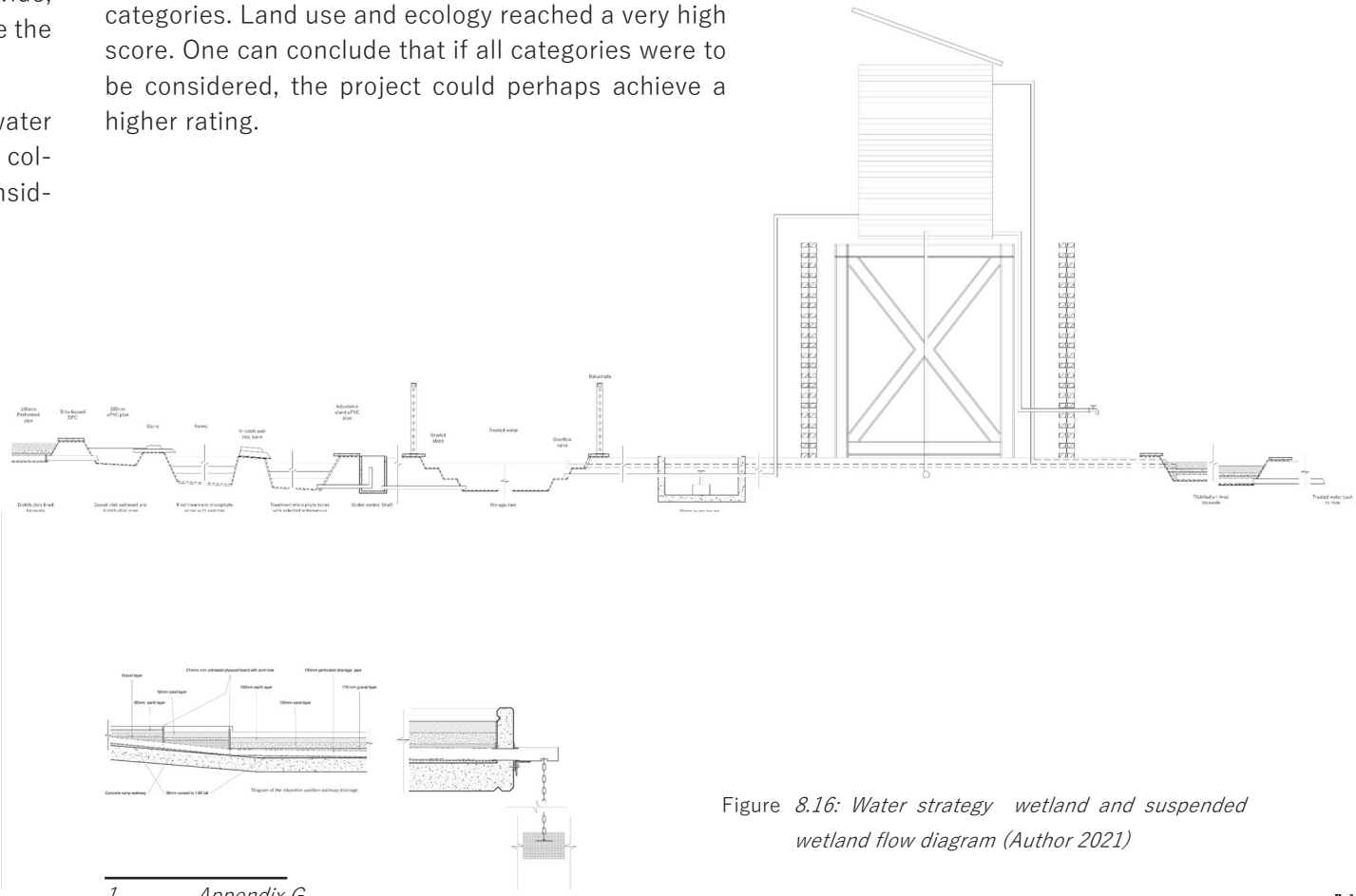


Figure *8.16: Water strategy wetland and suspended wetland flow diagram (Author 2021)*

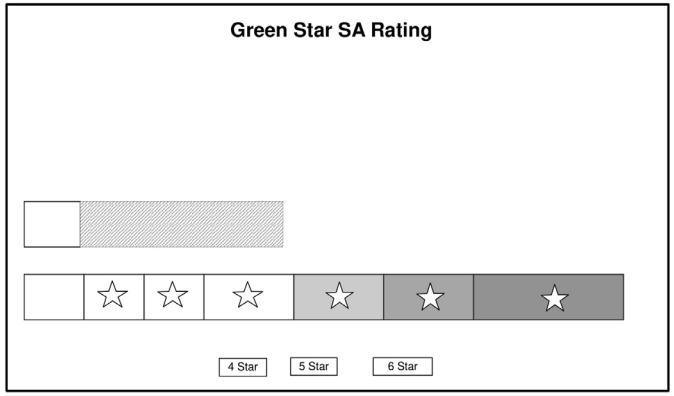
1 *Appendix G*

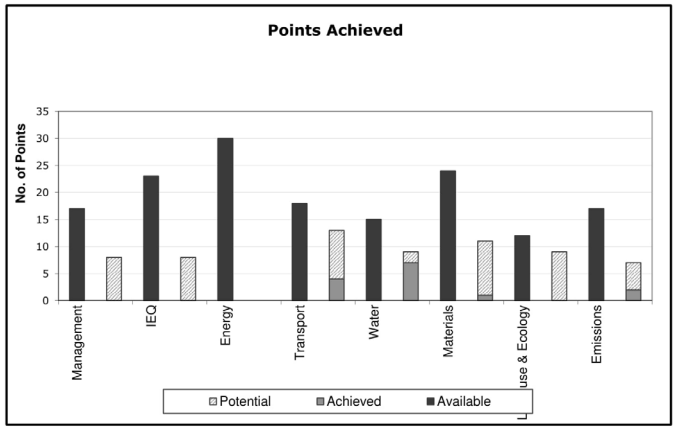
Green Star SA - Public & Education Building v1

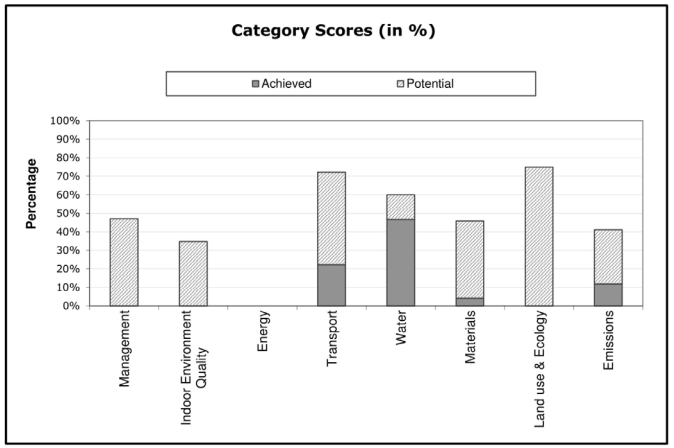
Graphical Summary

Summary for:

Official GBCSA certification NOT permitted. The Project must achieve a minimum final point score of 45 weighted points for certification







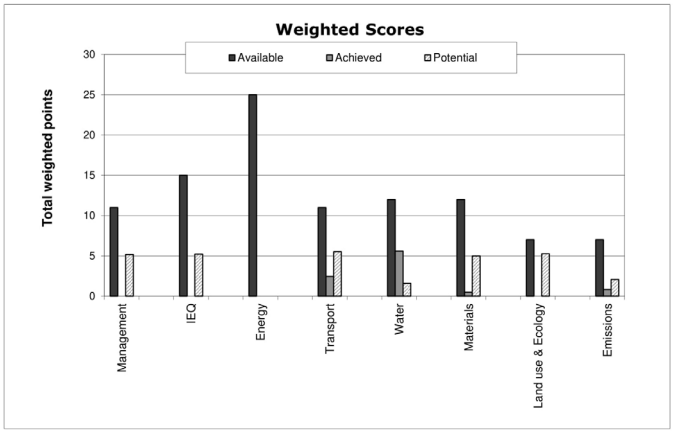


Figure *8.17: Green Star summary report (Author 2021)*

9- DESIGN RESOLVE

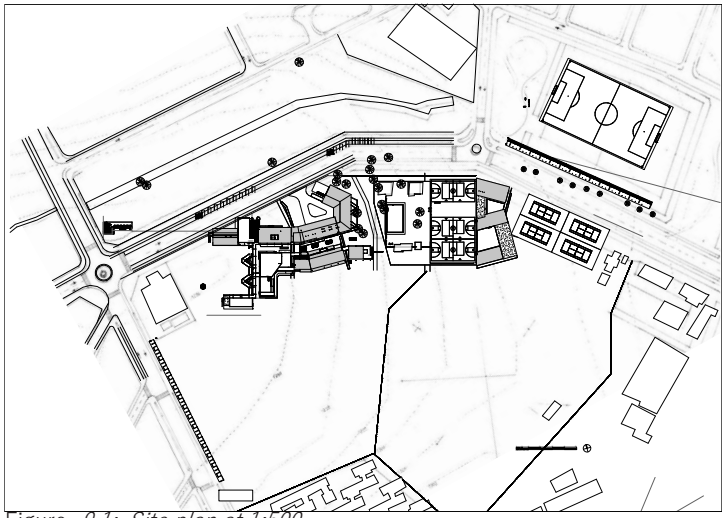


Figure *9.1: Site plan at 1:500*

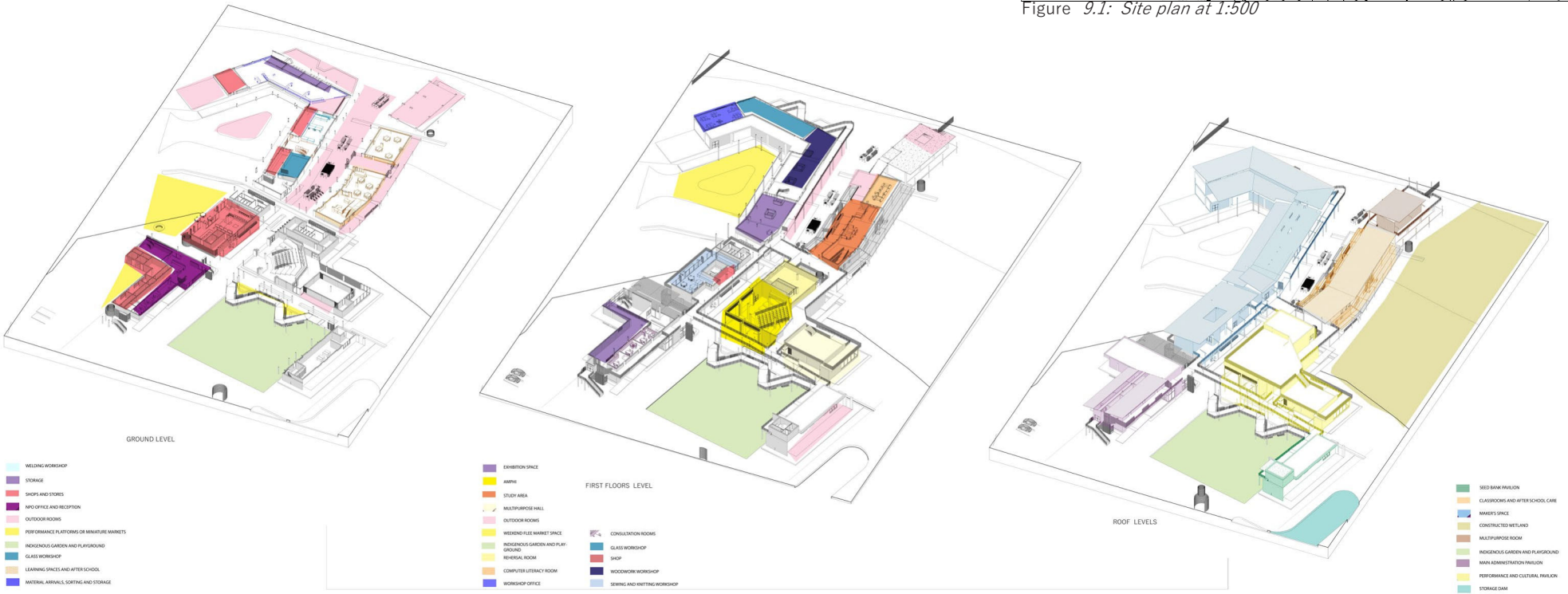


Figure *9.2: Programme layout 3D (Author 2021)*

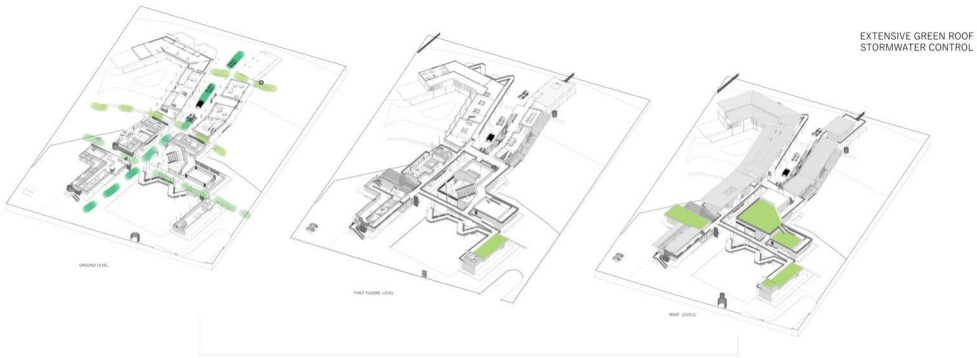


Figure *9.3: Greenscaping (Author 2021)*

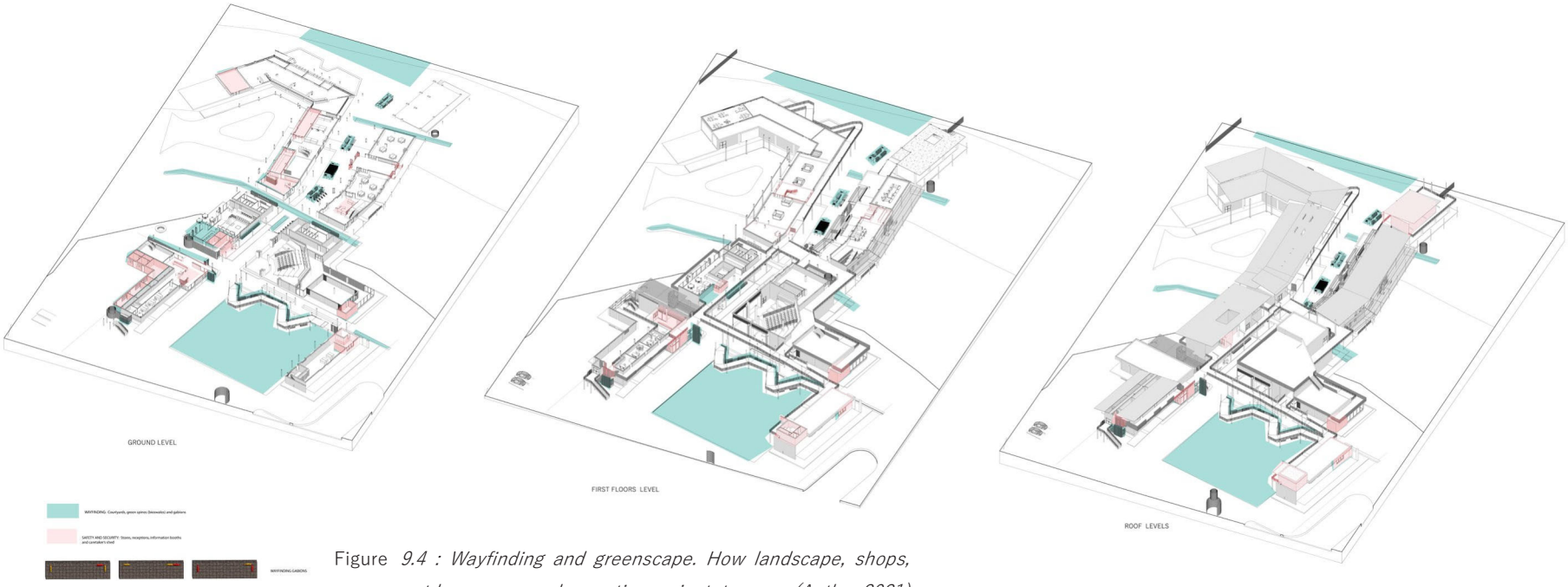


Figure *9.4 : Wayfinding and greenscape. How landscape, shops, outdoor rooms and receptions orientate users (Author 2021)*

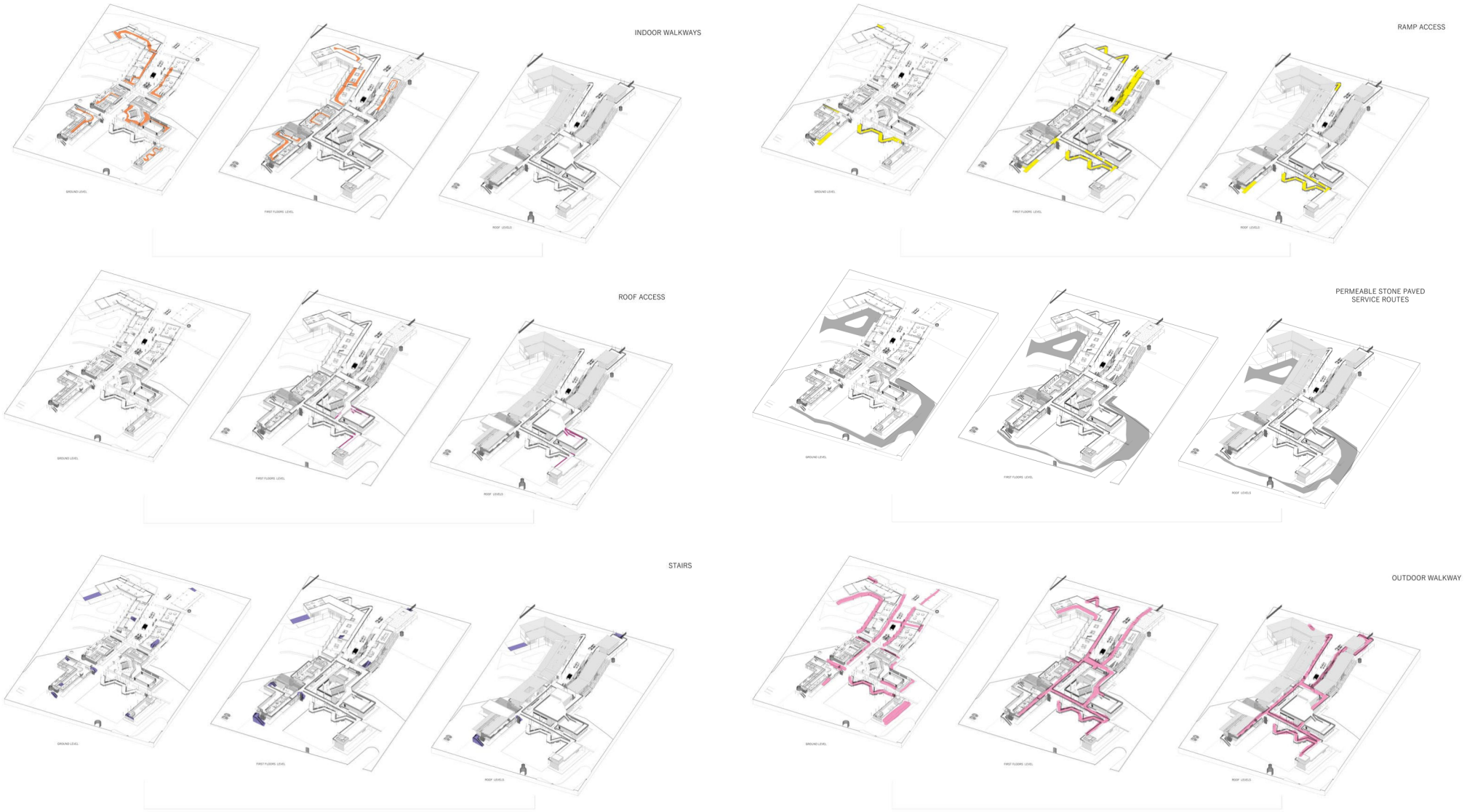


Figure *9.5: Parts of the precinct (Author 2021)*

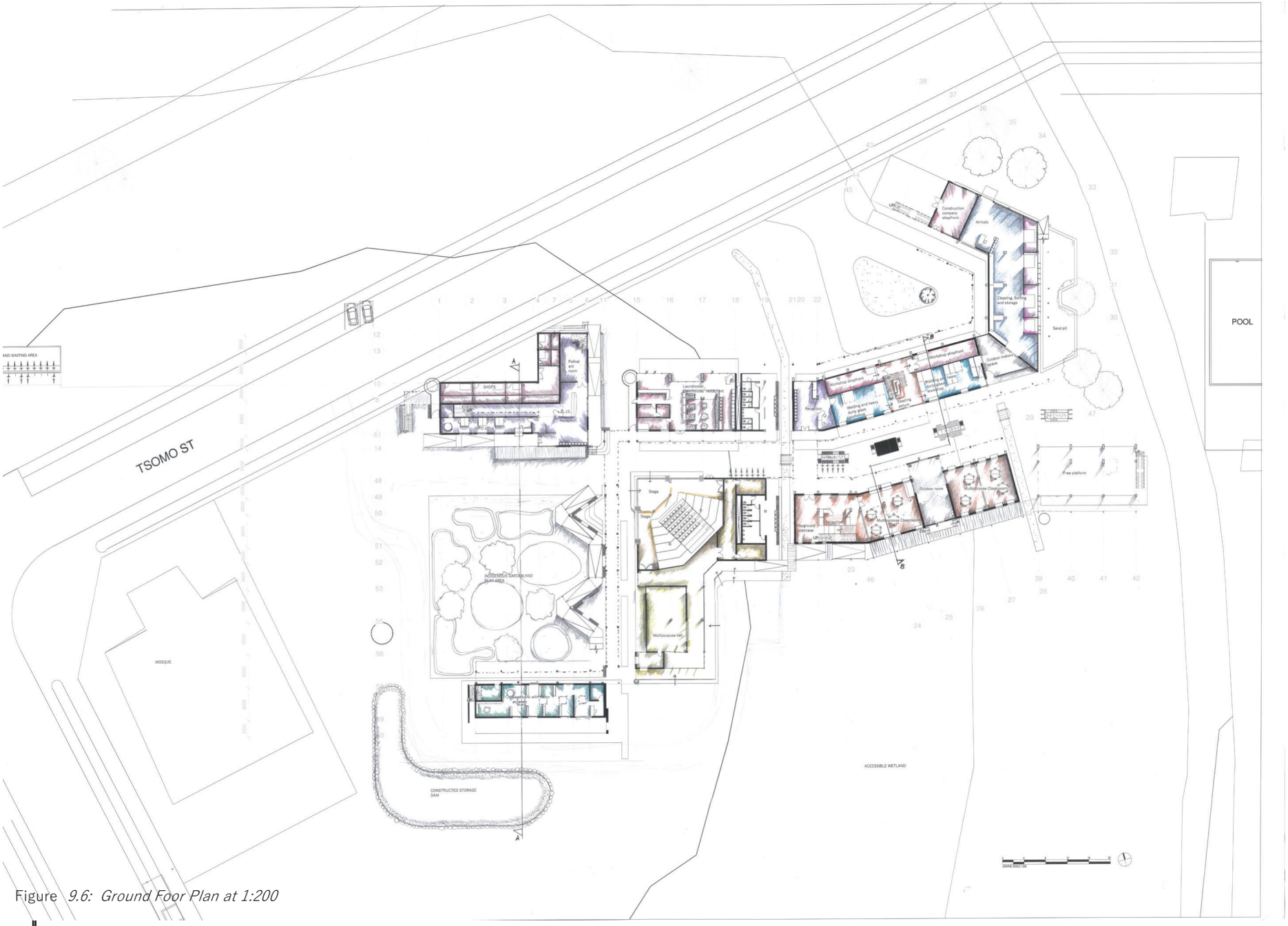


Figure *9.6: Ground Foor Plan at 1:200*

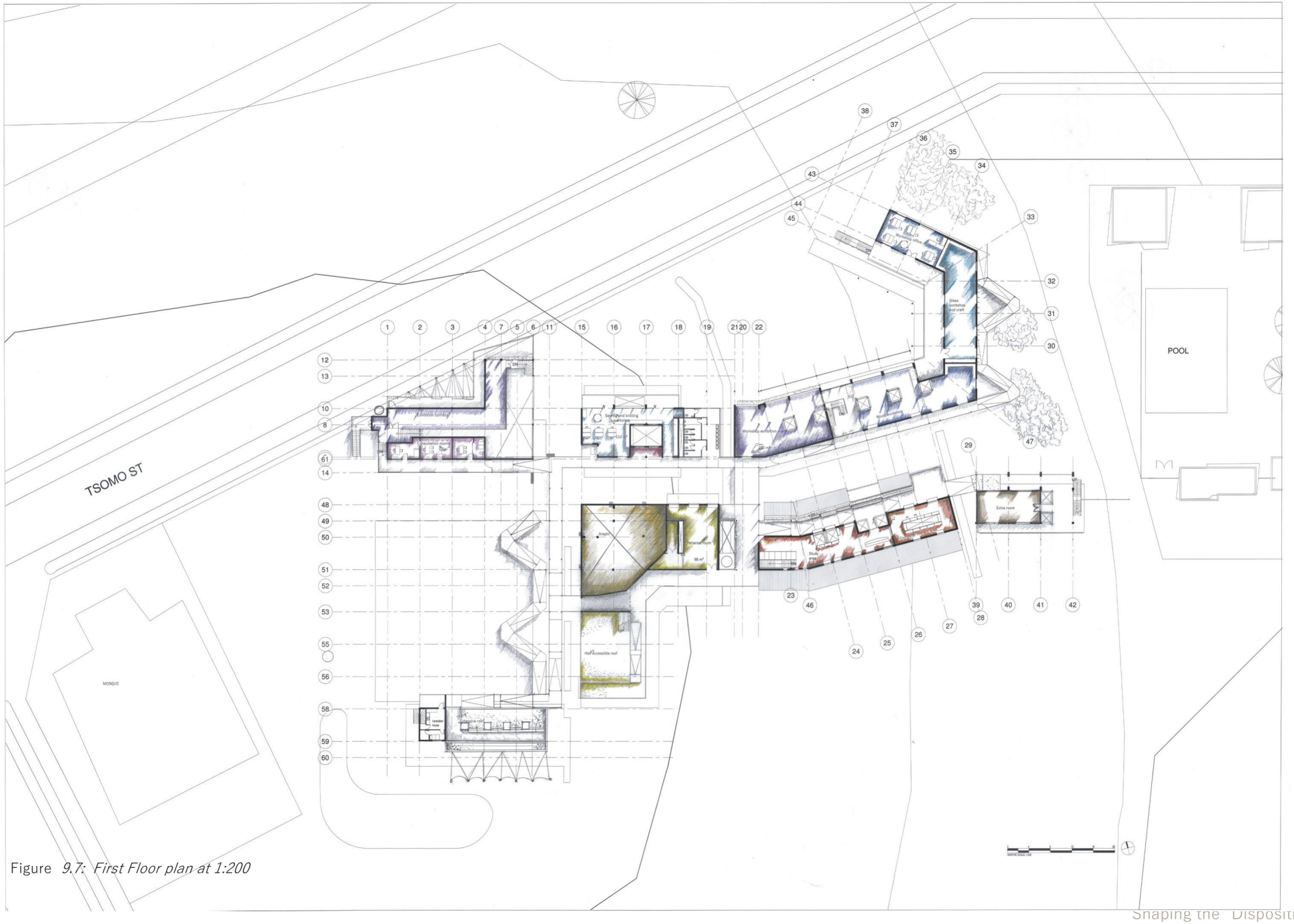


Figure *9.7: First Floor plan at 1:200*

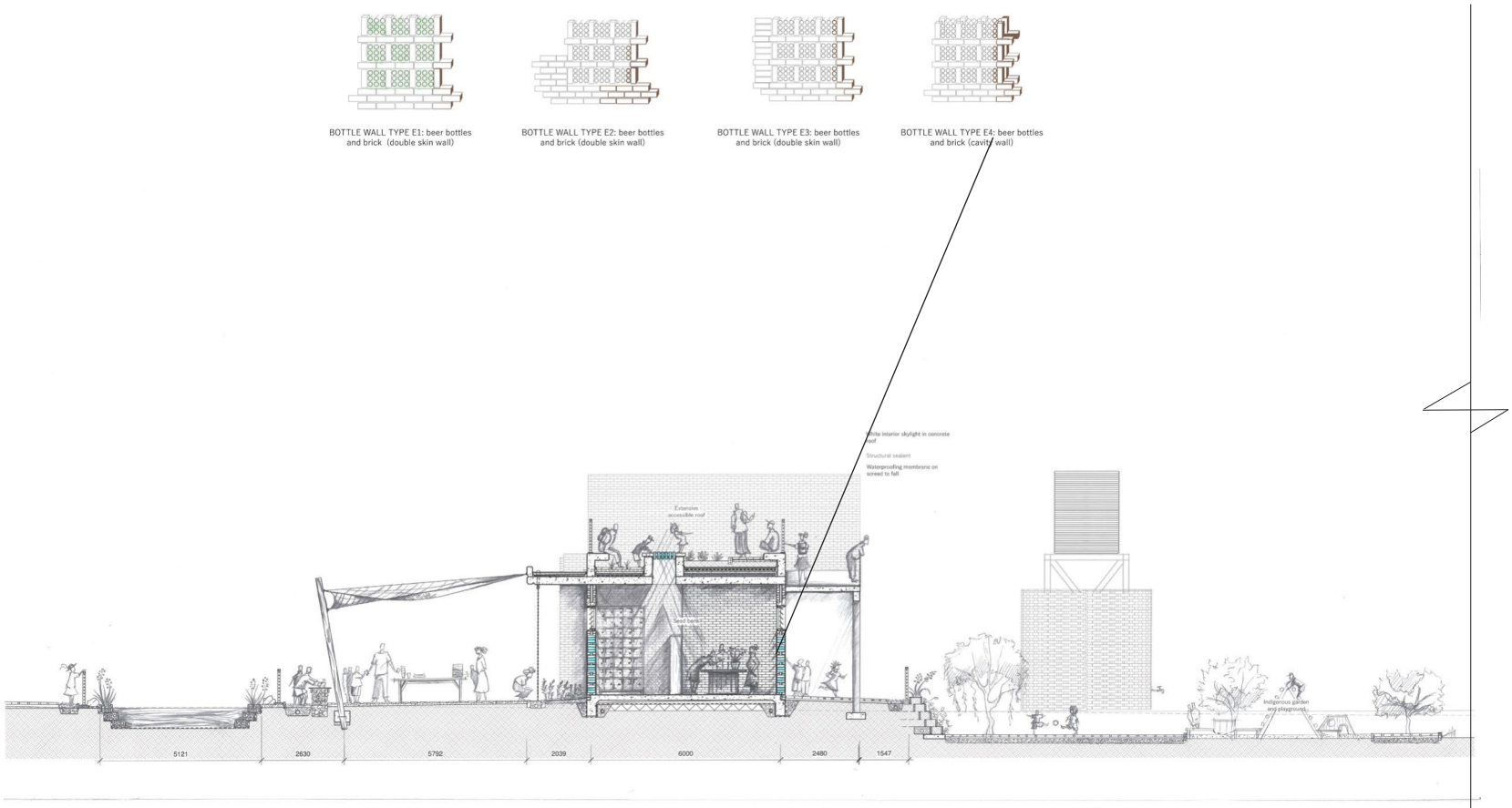
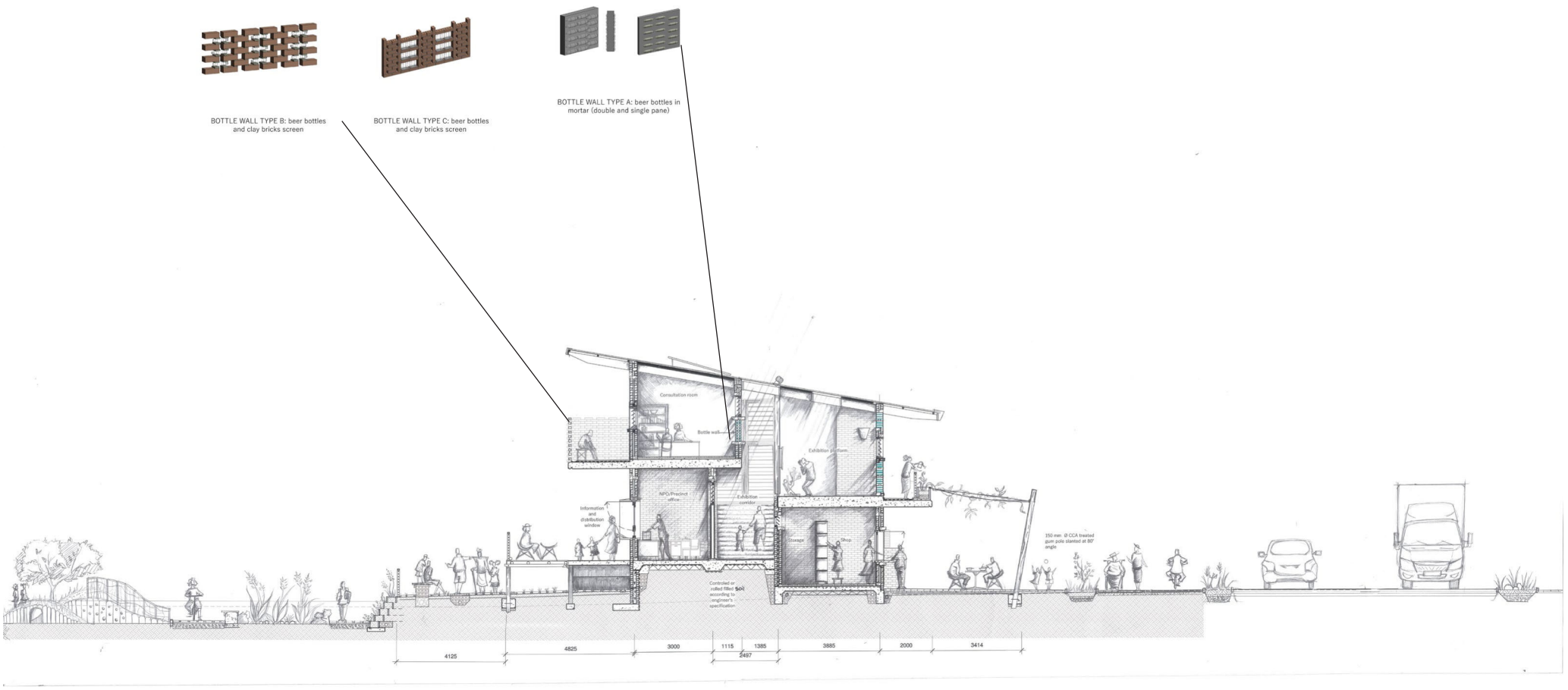


Figure *9.8: Section AA at 1:50*



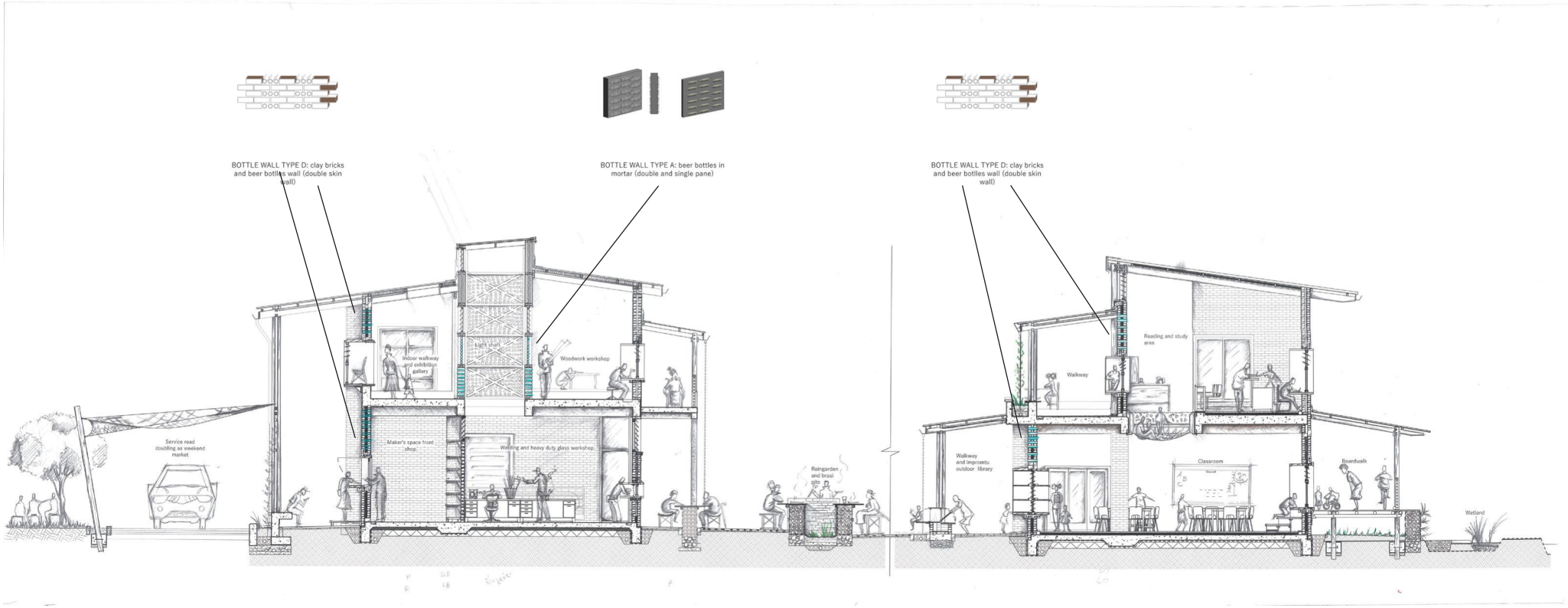


Figure *9.9: Section BB at 1:50*

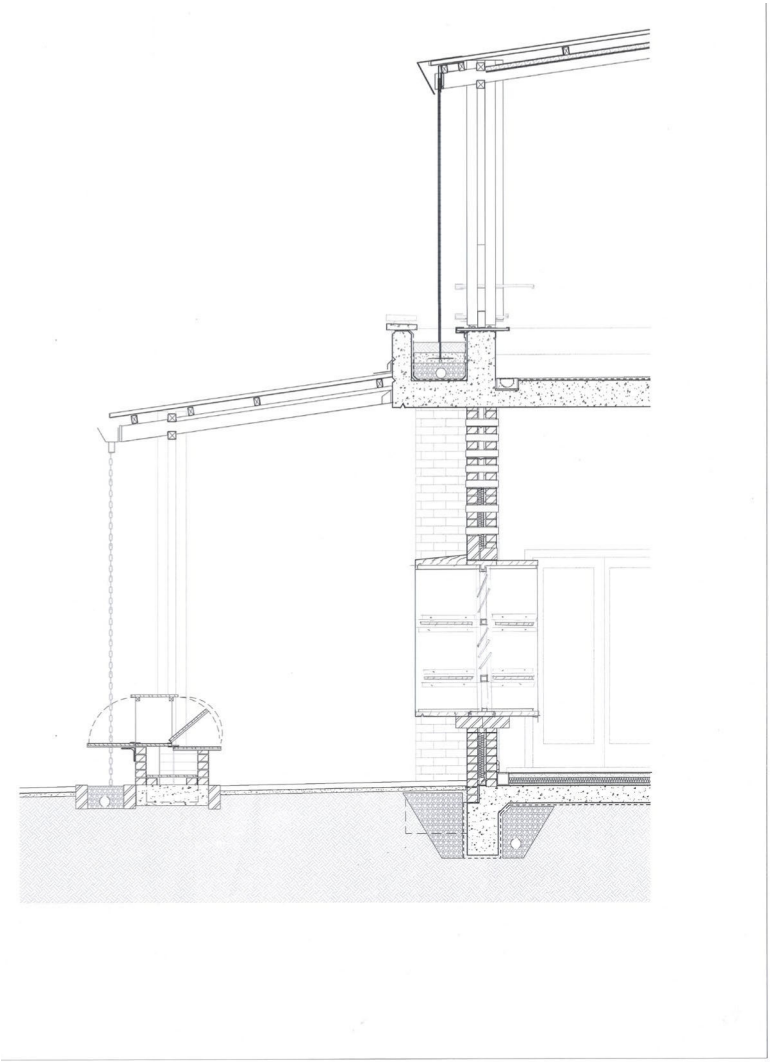


Figure *9.10: Section 1: 20 of afterschool centre*

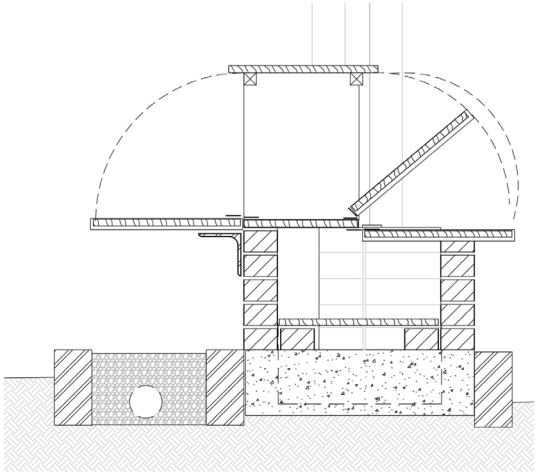


Figure *9.11: Detail library seat at 1: 10*

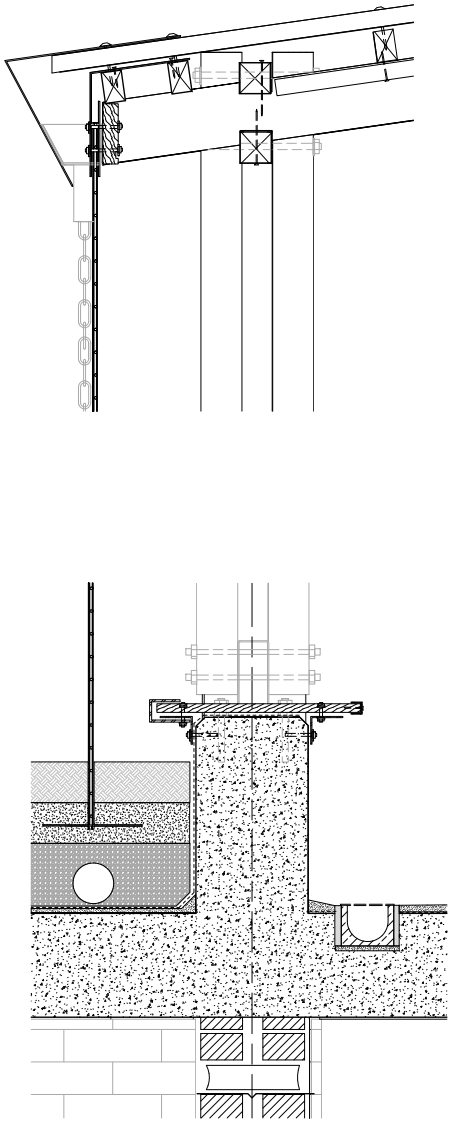


Figure *9.13: Detail eave and planter seat at 1:5*

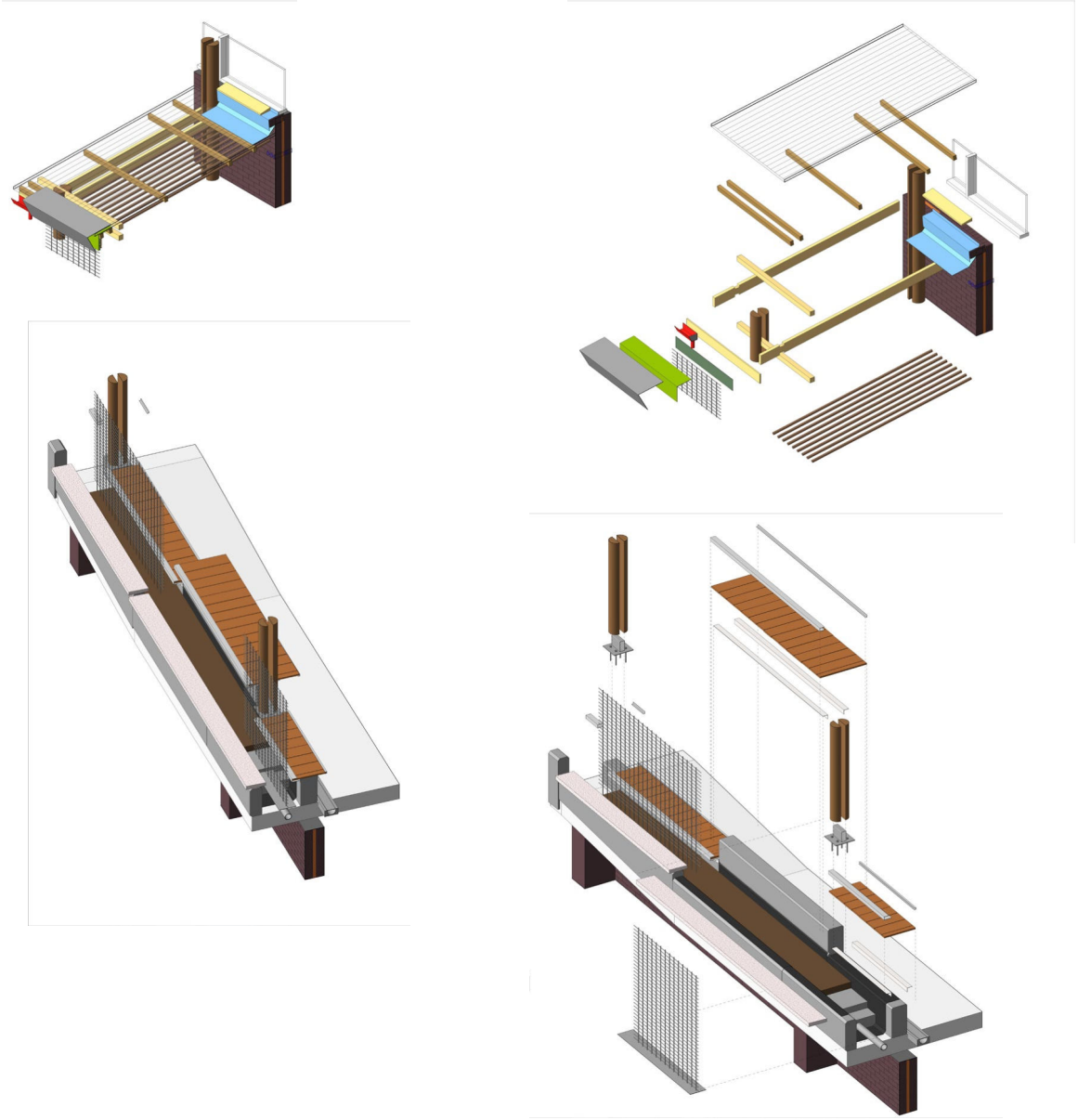
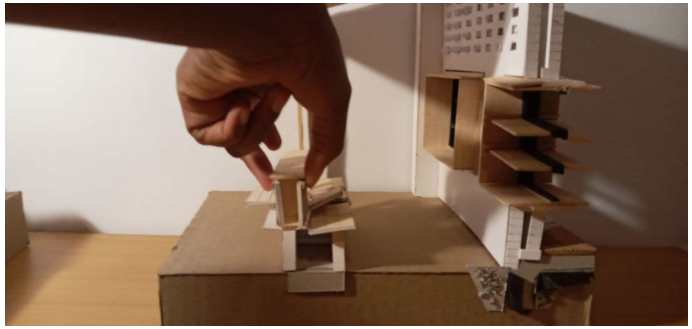
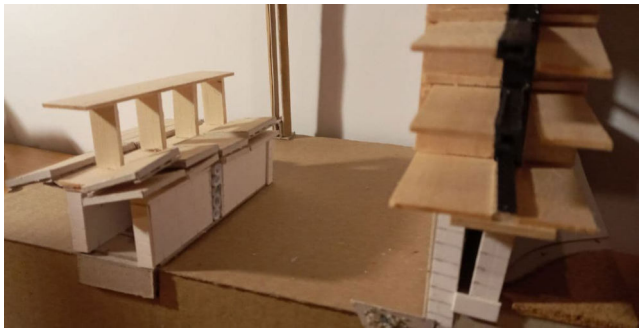


Figure *9.14: 3D details of afterschool walkway elements*

Figure *9.15: Section model 1:20, the urban room*





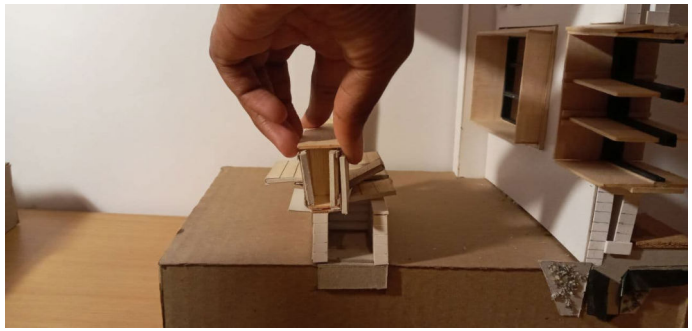
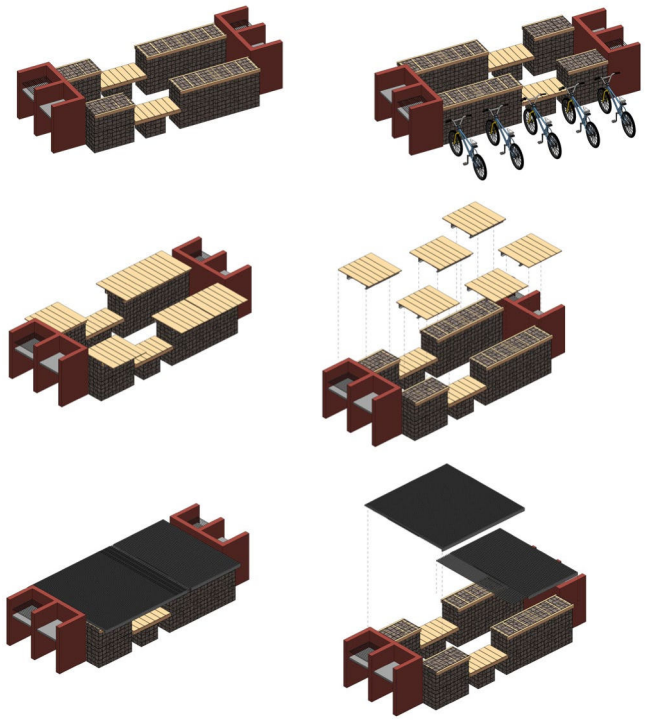
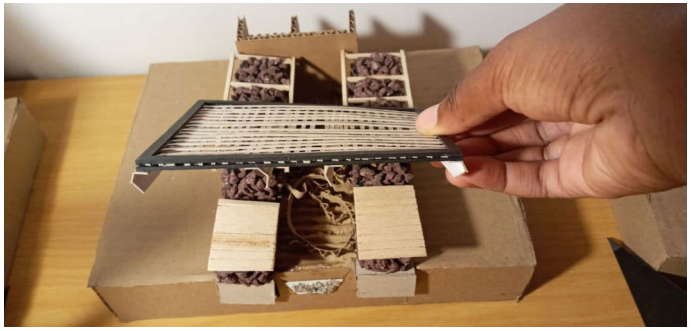
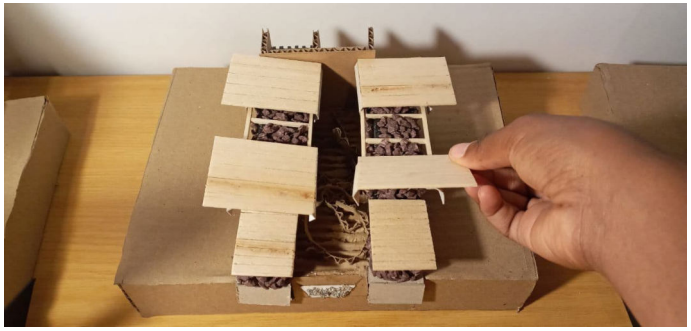
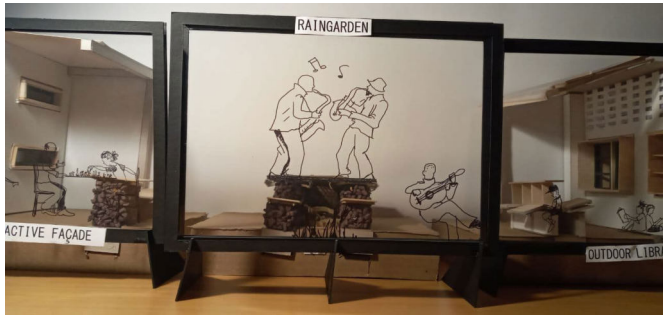


Figure *9.16: Section model 1:20, the outdoor library*









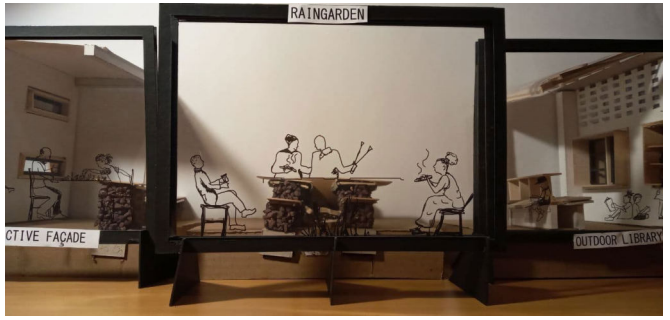


Figure *9.17: Section model 1:20, the raingarden/ braai*

Figure *9.18: Section model 1:20, Maker's space stoep*

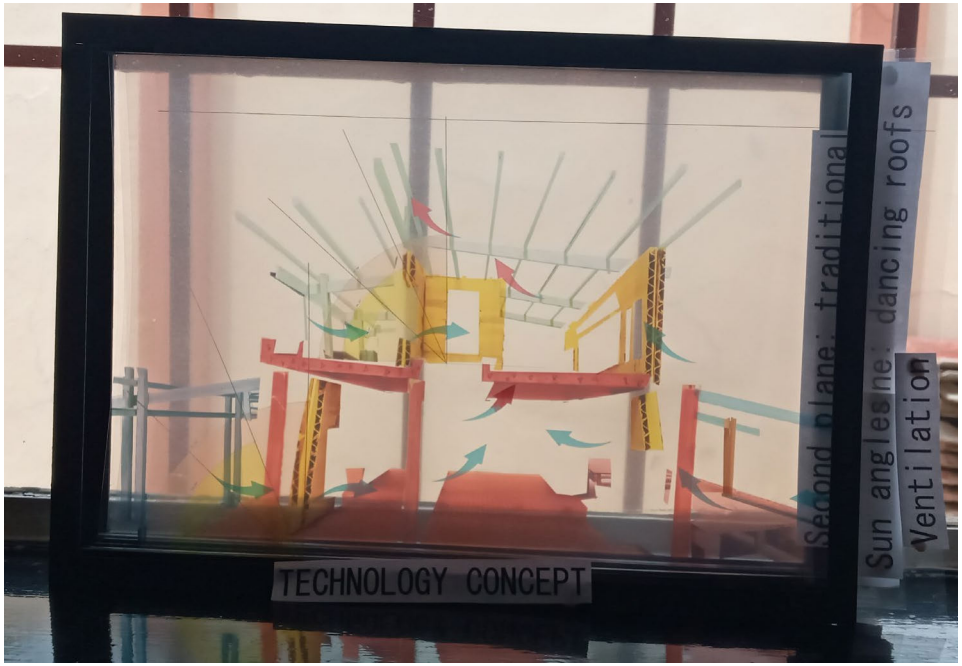


Figure *9.19: Diaporama concept, technology planes, ventilation and day-lighting*

Figure *9.20: Inside the Afterschool centre (Author 2021)*

Figure *9.21: Afterschool centre outdoor room (Author 2021)*

Figure *9.22: Maker's space's east façade - ramp and sandpit playground with view into storage (Author 2021)*

Figure *9.23: Afterschool centrefirst floor passage*