[Sample from "The Great Dictator" (1940) movie – Charlie Chaplin:]
Don't give yourselves to these unnatural men–
Machine men with machine minds and machine hearts!
You are not machines, you are not cattle, you are men!
You, the people, have the power to make this life free and beautiful,
To make this life a wonderful adventure!

6

Design Development

6.1   Introduction to Design

The role of the architect in these conditions are to celebrate and reveal the potential that already exists, and through that realise what is called for in the situation. The strength of architecture in the informal context lies in its ability to empower and aid in the development of others.
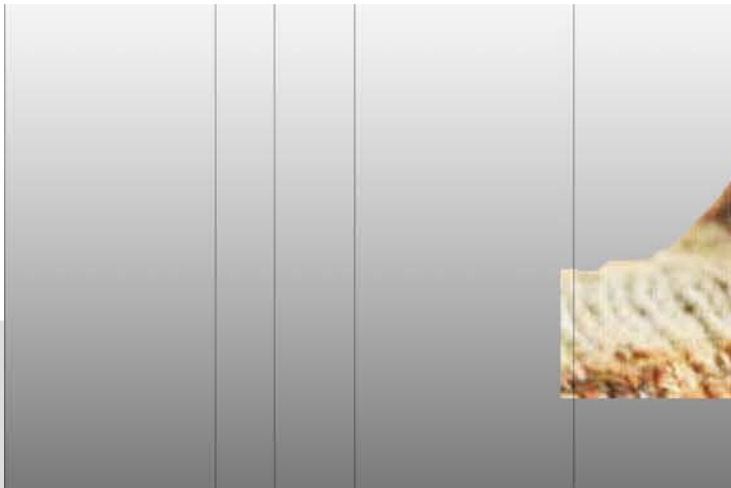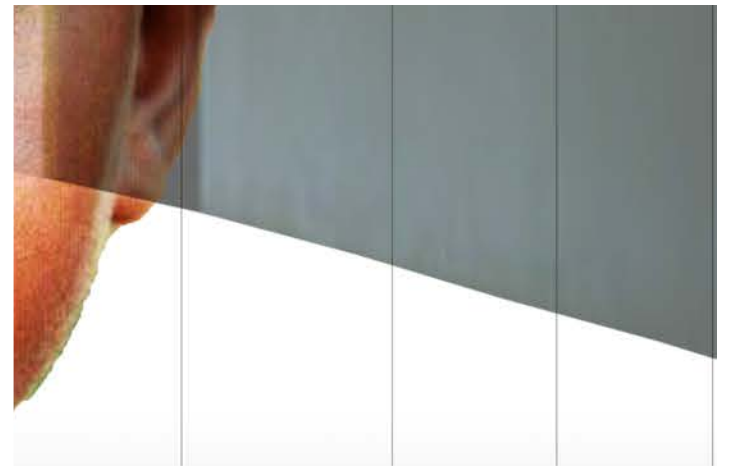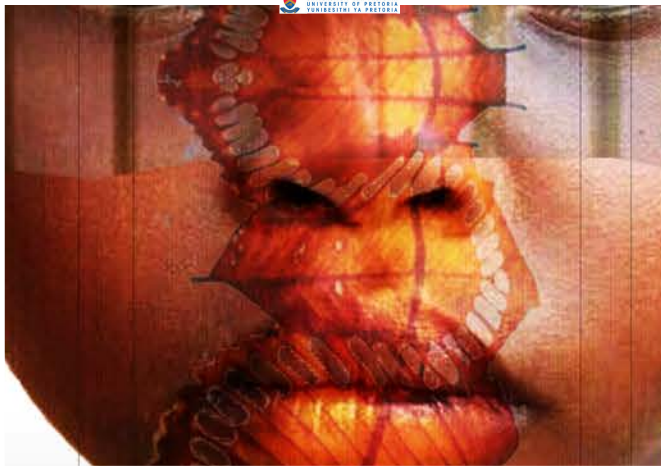
Figure 79 :   *Parti development, Drawings and models, Author (2015)*

6.2   *Reflection:*

The proposed design developed as a response to various informants, as discussed in earlier chapters, namely:

- The lack of place for the remaining networks of children and elderly dependents
- The amorphous space between Greenview station and Phomolong settlement
- The daily ritual of the working class migrating to and from the train station
- A place for the community to share their collective thoughts and memories, and the passing on of existential knowledge to younger generations.
- The highly active and public route between the informal settlement and the train station.
- A lack of formal institutions for children, as expressed by the community leaders, during an informal interview.
- And the informal horticulture seen scattered throughout the informal settlement.
- **Most importantly, the creation of a place of belonging for The Forgotten children and elders of Phomolong. A place which they could call their own and share a collective memory.**

6.3   Other considerations included:

How can architecture become a system of empowerment?
The experience of an architectural space is strongly influenced by how we arrive in it. Hence a series of levels for different areas of interaction and surveillance were explored from the entrance points into the proposed spaces. The barrier between the public and private realms blurred to accommodate a larger variety of users. The intermediate spaces and the experience of the pedestrians upon the series of thresholds were considered through level changes. This adds to the different experiences and announcements of thresholds. Overhead planes in the form of shading structures and pergolas announce the main circulation routes.

The design attempts to convey the re-establishing of the connection of humanity with nature. This is proposed through exposure to how fresh produce is grown and cultivated. This was attempted through varying platforms of observance and engagement. The senses become enticed through the child's freedom to smell, feel, see and taste what is being cultivated around them.

The design has undergone numerous iterations, each iteration through a different theorethical and pragmatic lense, in search of the perfect equilibrium of space serving vastly differing age groups. This approach was greatly due to the contextual development. As well as coming to terms with how the conceptual and realistic issues around the programmatic response should react and be proposed.

Different lenses were applied, such as ground manipulation, the concept of the matriarchal space and a series of thresholds. All the different applications led to the design either being overly complex or overly simplistic in its result. The ground floor level of the proposal was heavily explored because of the overlaying of different functions and places of interaction. It was only through the technical investigation regarding materiality choice that the design started to grow three dimensionally and volumetrically.
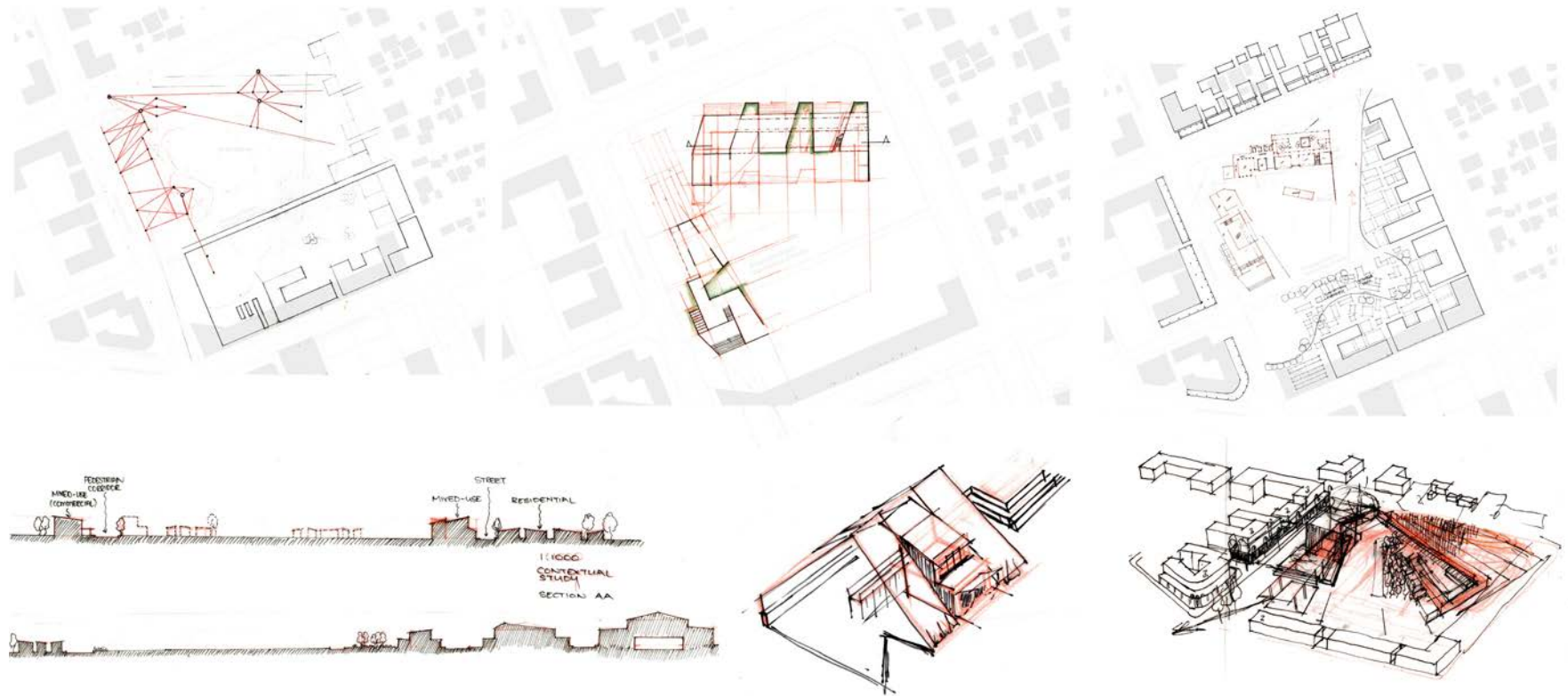
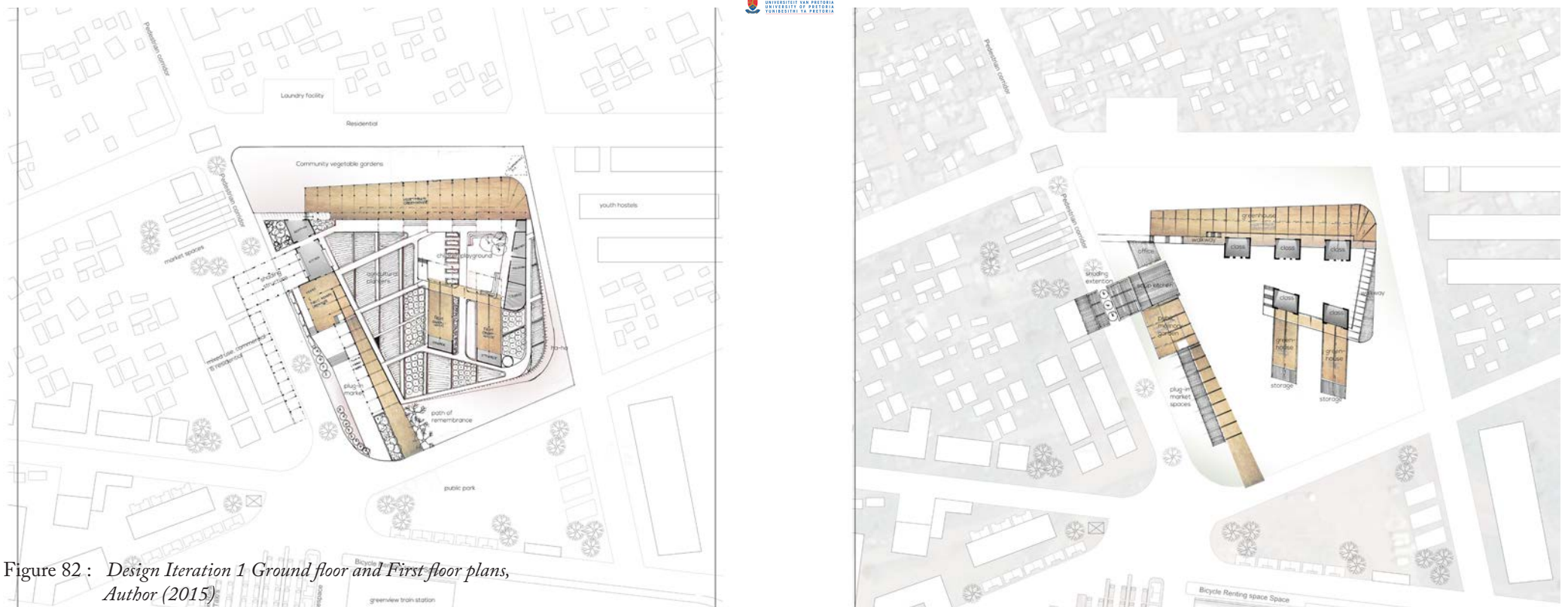Figure 81 : *Design Development in Context, Author (2015)*

Figure 82 : *Design Iteration 1 Ground floor and First floor plans,*
Author (2015)

6.4.1 Design iteration 1:

The design focused largely on the resolution of the public interface on the Western edge of the site. From a human scale market interface the structure grew to a landmark scale, and then reverted back to a human scale. The kitchen on the public edge was the main space where ecotones could overlap spreading over the road, to link the formalised shops on the other side to the kitchen area.

The design focused on the collective space where Catharsis could take place, a greenhouse structure on the Western edge with a pool of reflection, introducing the concept of Biophilia to the public, with a route of remembrance which would exit into the public park.
The Western edge showed control but however lacked permeability. There was a lack of attention paid to the permanent users, the children and the elderly caretakers and their daily rituals and routes.
The design considered a control point and the public realm as one leg of the design and the crèche as another leg of the design, separating the two. There was however a lack of control over the edges and response to context.

Terraces

Important areas of interaction

Classroom plug-in

Linked spaces

Interlocking spaces

Rythm

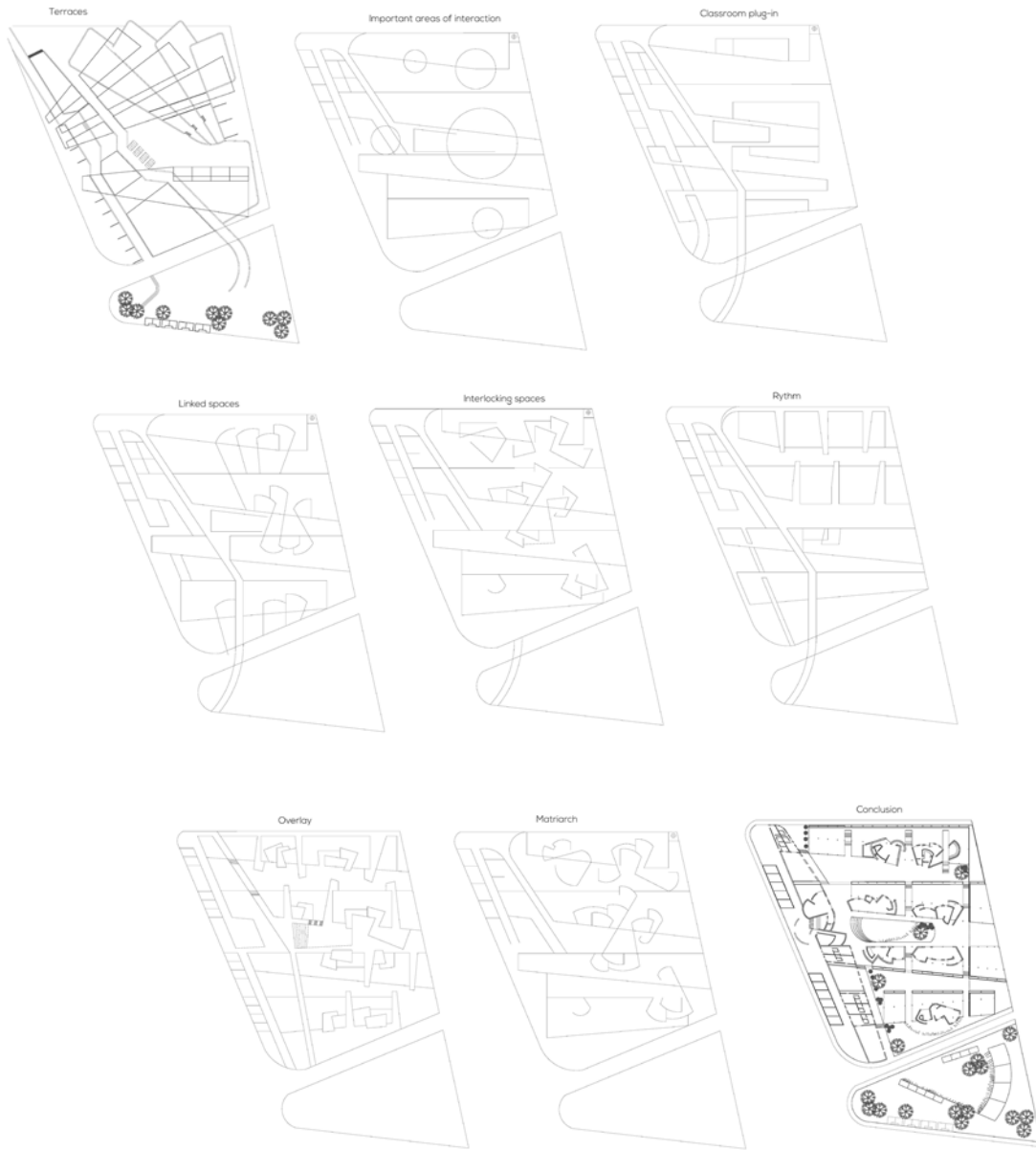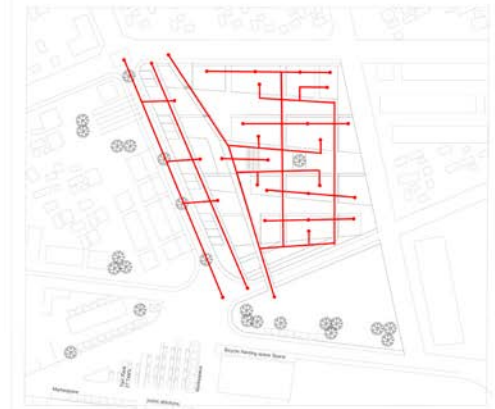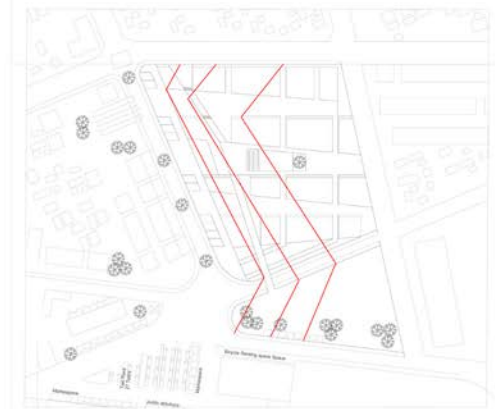Overlay

Matriarch

Conclusion

Figure 83 : *Development diagrams, Author (2015)*

movement

threshold spaces

externalisation of intention

Figure 84 : *Movement diagrams, Author (2015)*

Figure 85 :   *Green and Educational spaces on site, Author (2015)*

6.4.2 Design iteration 2:

The design tried to further develop the matriarchal space, yet it lacked control and spaces were too dispersed for children to be able to navigate successfully.

The proposed classrooms, offered interesting spaces for the children and were inserted into the greenhouse structures as a method of introducing the children to natural spaces, which made it a forced and uncomfortable solution, with no clear hierarchy of space.

The exaggerated greenhouse structures were dominating and foreign. The circular structures were merely extrusions of the plan and were not designed volumetrically.

The Western edge allowed for interesting social ecotone activity, by creating a courtyard space next to the kitchen, were collective activities could take place, but lacked thresholds and human scale consideration.
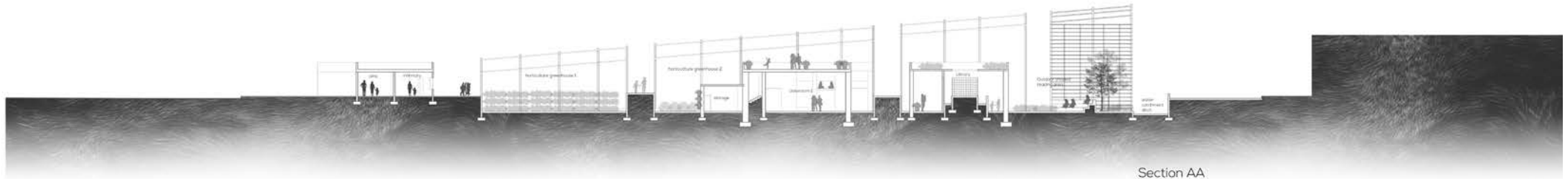
Section AA
West-East through Library
1:200

Section BB
North-South through classrooms
1:200
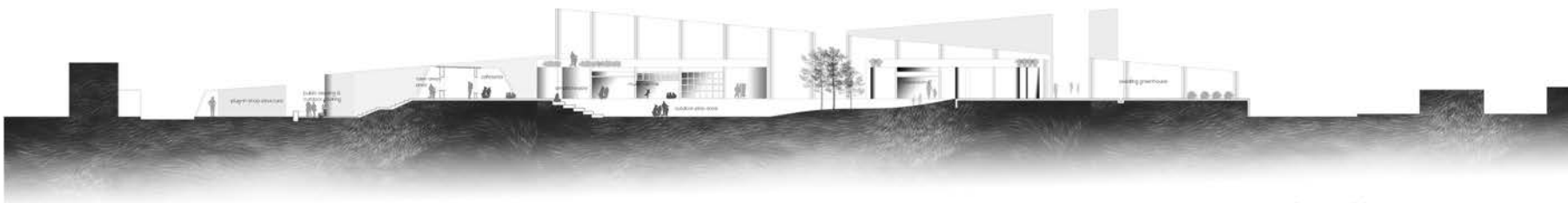
Section CC
West- East through play area
1:200

Figure 86 :   *Sections of Design Iteration 2, Author (2015)*
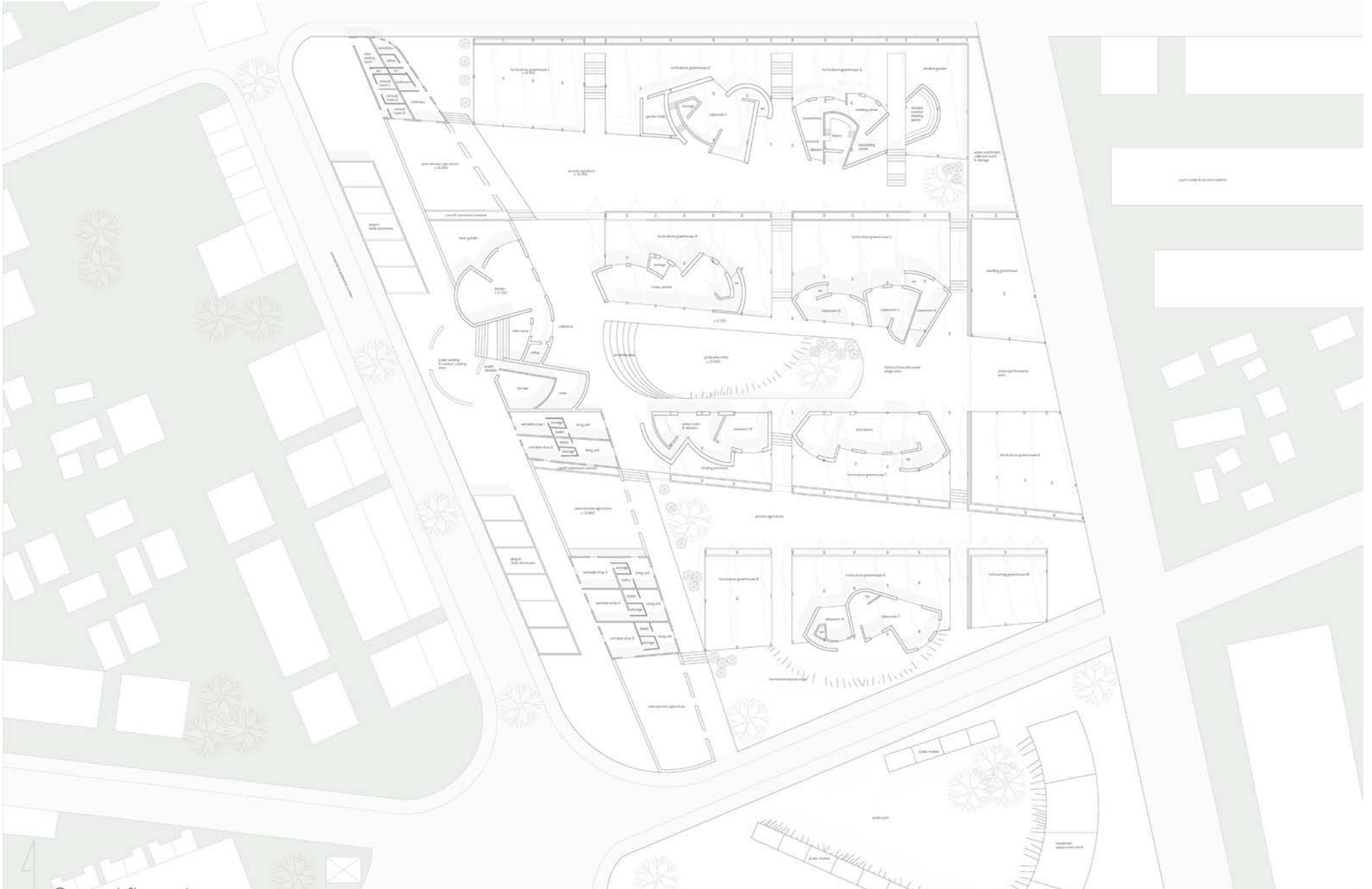
Figure 87 : *Ground floor plan of Design Iteration 2, Author (2015)*
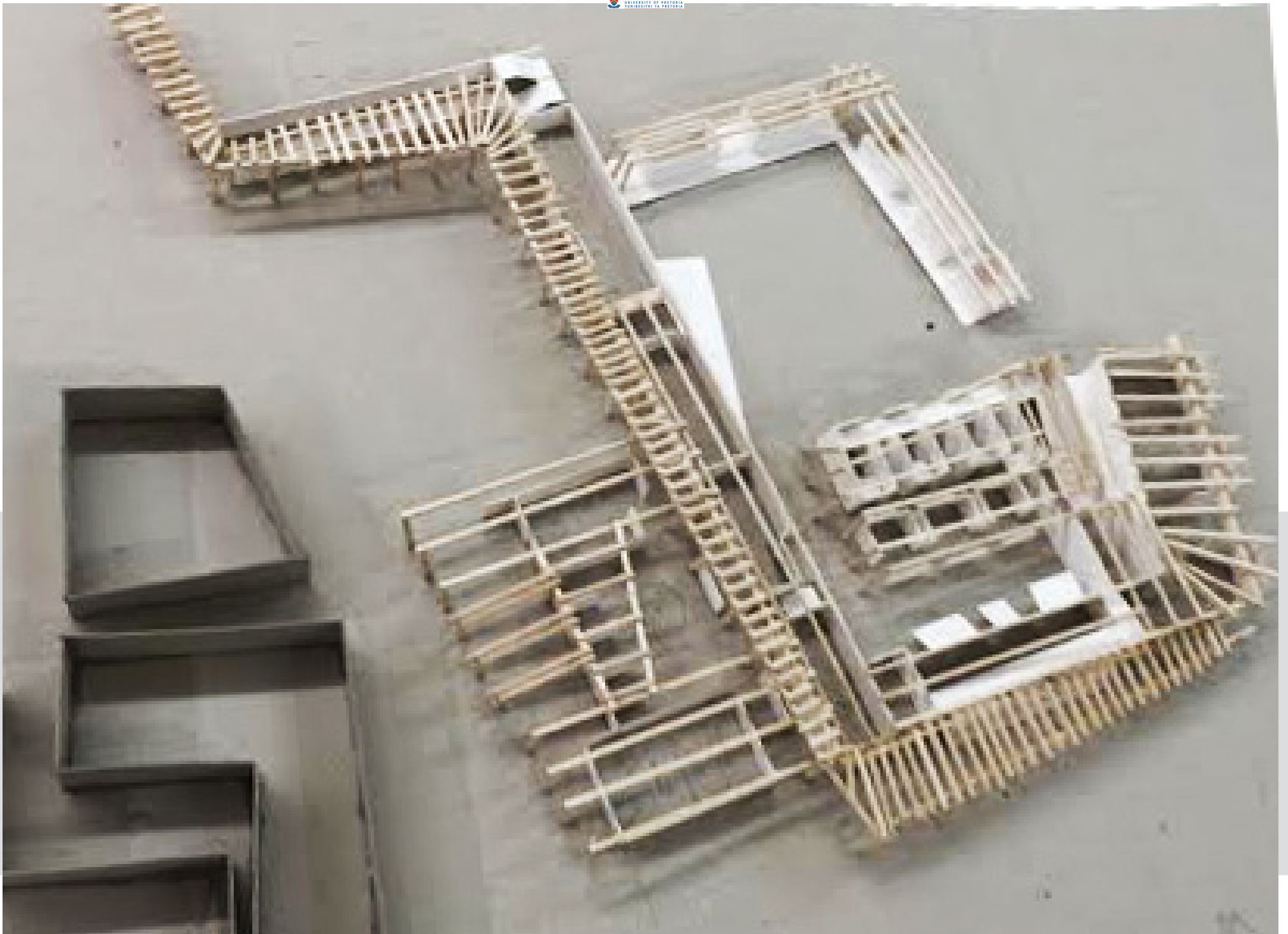
Figure 88 : *Model of Design Iteration 3, Author (2015)*
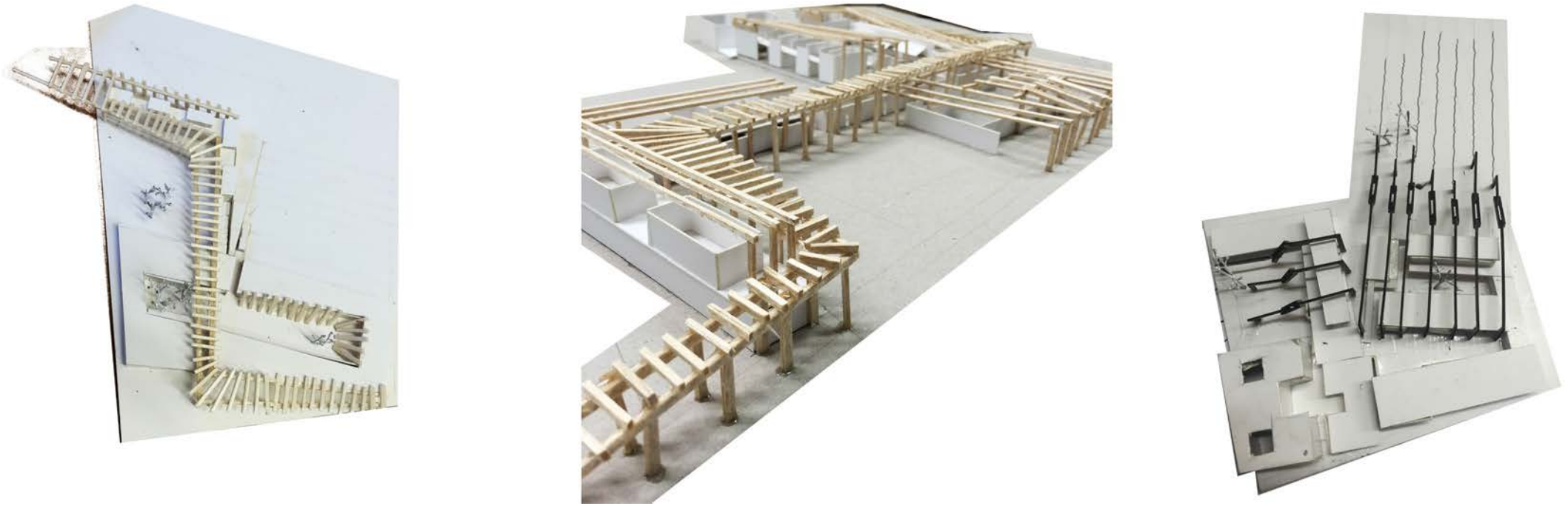
Figure 89 : *Model of Design Iteration 3, Author (2015)*

6.4.3 Design iteration 3:

During this iteration, the proposed context was adapted and the movement through space became the main driver of the design. The investigation led to the different thresholds and social spaces, thus the definition between Public, semi-private and private realm started to become more controlled. The design started to consider architecture as a flow of social systems creating ecotones and the public square started to become more controlled.

Access and control from the public to private realms still needed greater consideration as well as certain placements of programmes were not appropriate. And the design became very removed the Biophilic concept, with very small play areas for the children. The design also lacked ground manipulation and level changes to emphasize threshold activity. This led to the structure as a very static object instead of a living system adding to the social collective.

service road

Proposed Horticulture fields

Horticulture Walkway

Compost

Biodigester

Taxi drop-off & parking

Shop
Shop
Shop
Shop
Shop
Shop

wc
wc
Hairsalon
Internet cafe
Tavern
Female wc
Male wc

shop & kitchen refuse

Market stalls
Market stalls
Market stalls

Children's Horticulture

pre-schoolers
pre-schoolers
pre-schoolers

hwb

Inner sanctum

water harvesting

Children's Library

reading room
study corners
reading room

Public Library

hwb
toddlers
toddlers
toddlers

M
admin wc
scullery
office
office
Reception
Babies
soup kitchen
Traditional Healers

Semi-public courtyard

Market edge

playground

wc
M

nurse
lockers
hwb
infirmary
studio/ adult literacy
class
class

Clinic
Clinic wc

Dispensary
Consult
Consult
Consult
waiting area

Public seating

A

A

Figure 90 :   *Ground floor plan, Design Iteration 3, Author (2015)*

Figure 91 : *First floor plan, Design Iteration 3, Author (2015)*

Commercial
Precinct

Semi-public
courtyard

Market stalls   Traditional Healers   Soup Kitchen

Children's
ablution   Toddlers

Children's
Library

Public Library

Water
harvesting

Civic
Precinct

Section *AA*
1:200

Studio/
Adult literacy

Pergola structure

Playground

Toddlers

Inner
Sanctum

Pre-schoolers

Children's
Horticulture

Production
Horticulture

Residential
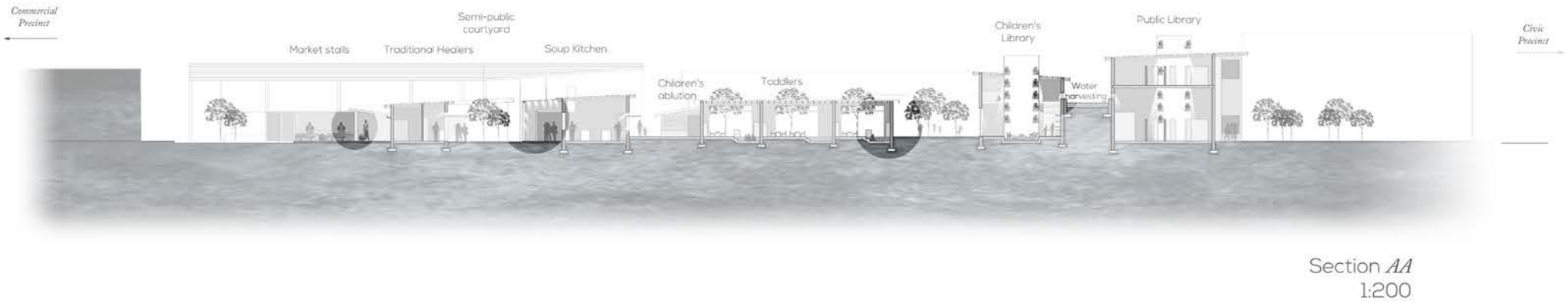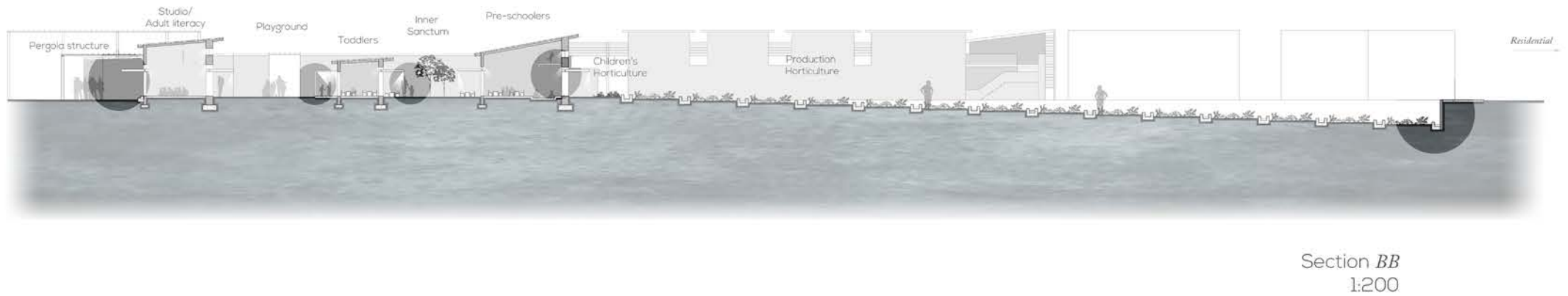
Section *BB*
1:200

Figure 92 :   *Sections, Design Iteration 3, Author (2015)*

[Circulation] [Permeability] [Services] [Irrigation]
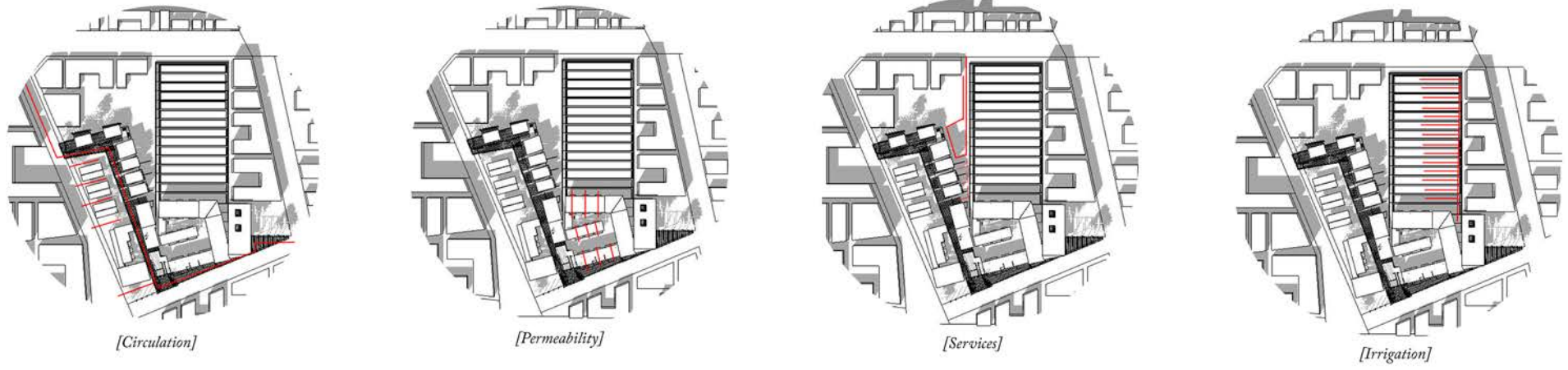
Figure 93 : *Movement Diagrams, Design Iteration 3, Author (2015)*

[Movement through Healing Threshold] [Exit onto southern edge] [Inner Sanctum] [Aerial Perspective of Intervention]
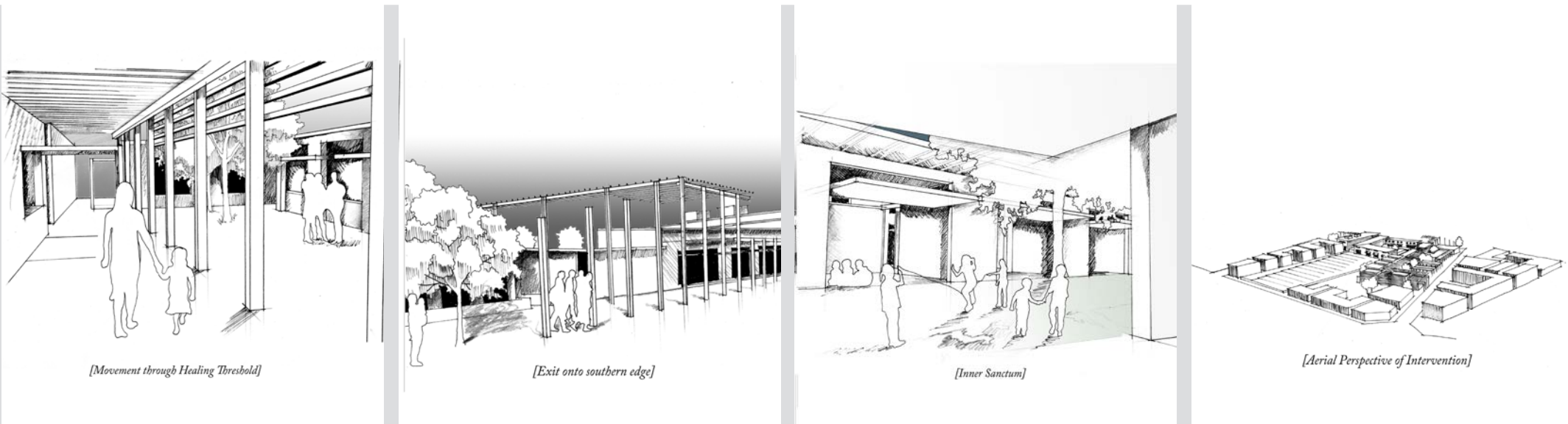
Figure 94 : *Perspectives, Design Iteration 3, Author (2015)*

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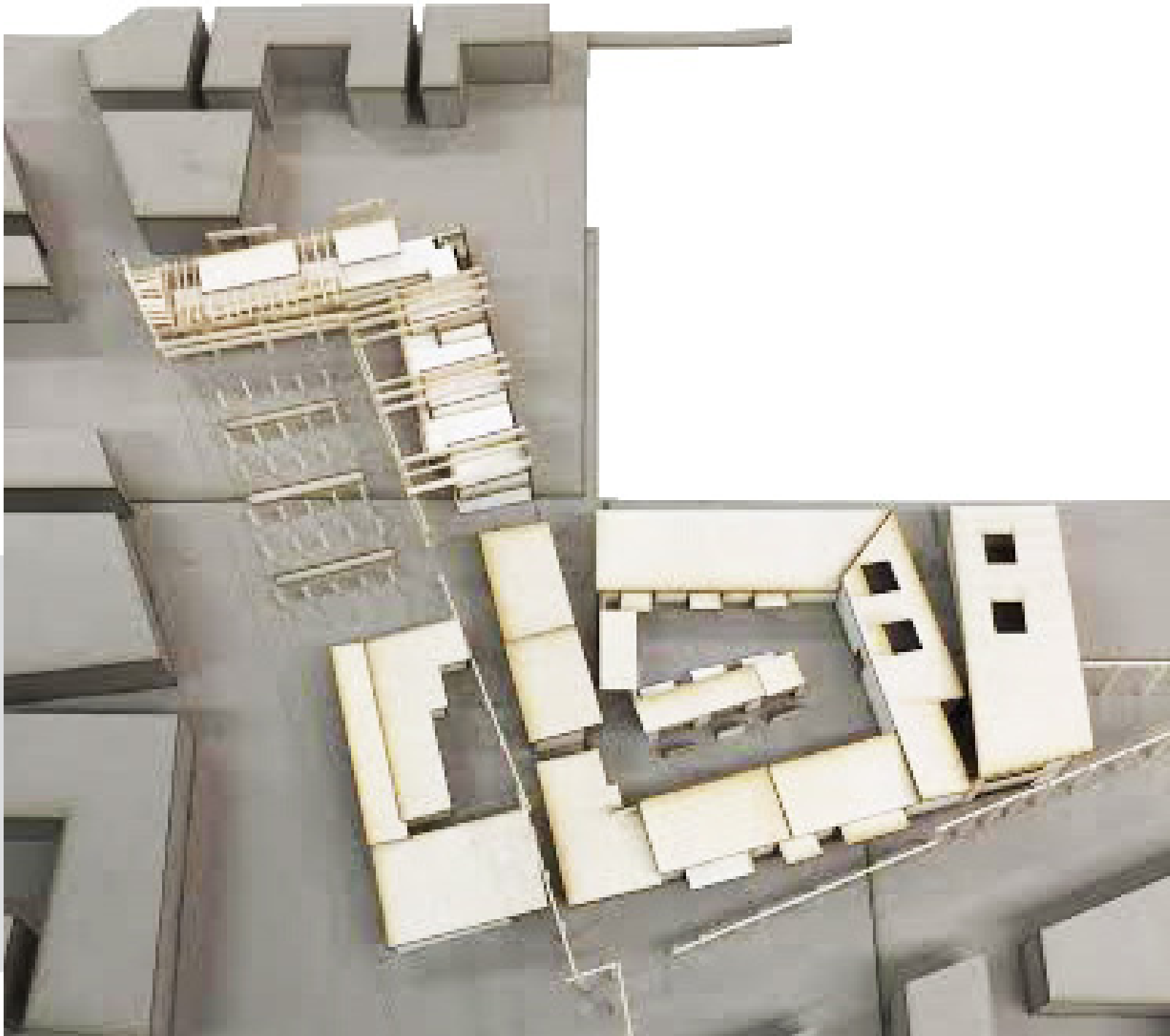
Figure 95 : *Model, Design Iteration 3, Author (2015)*

GROUND FLOOR PLAN - 1:200

1. SPAZA SHOP
2. TAVERN
3. HAIRDRESSER
4. PUBLIC W.C.'s
5. TOY LIBRARY
6. PUBLIC LIBRARY
7. RECEPTION
8. ADMINISTRATION OFFICE
9. CLINIC
10. INFANT CRECHÉ
11. CHANGING ROOM
12. INFIRMARY
13. STORAGE
14. WC.'s
15. LOCKER ROOM
16. ARTISTS' STUDIO
17. DANCE STUDIO
18. CLASSROOM
19. TODDLER CRECHÉ
20. GREEN HOUSE
21. COOLING TOWER
22. KITCHEN
23. HORTICULTURE
24. PLAYGROUND
25. WETLAND SYSTEM
26. SERVICE ROAD

Figure 96 :   *Ground floor plan, Design Iteration 4, Author (2015)*
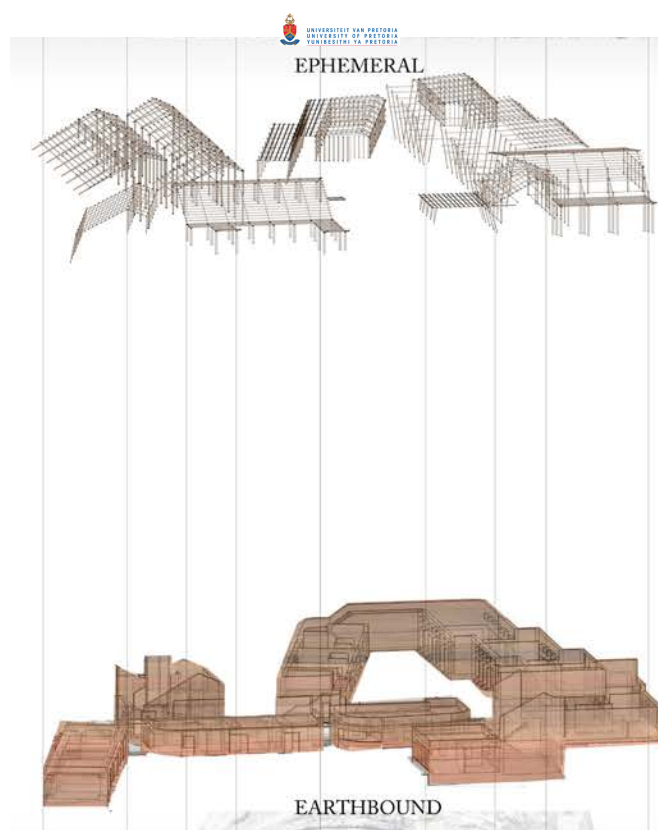
EPHEMERAL

EARTHBOUND

Figure 97 : *Exploded Axonometric of main elements, Design Iteration 4, Author (2015)*

6.4.4 Design iteration 4:

The proposed design addresses the lack of a collective memory space for the community, through the creation of a public square which is surrounded by formalized shops and public services.

A new meeting place with enough resonance (memory) of the types of shops surrounding the previous meeting space (the Apollo light). The square becomes the public interface of the scheme. Areas of passive surveillance include the shop owners, and the kitchen area from the public space. The public user's route becomes a celebrated edge condition, where one can buy fresh produce, commute and interact with other residents on a daily basis. Hence a communal place is created, which has the possibility to strengthen the collective memory.
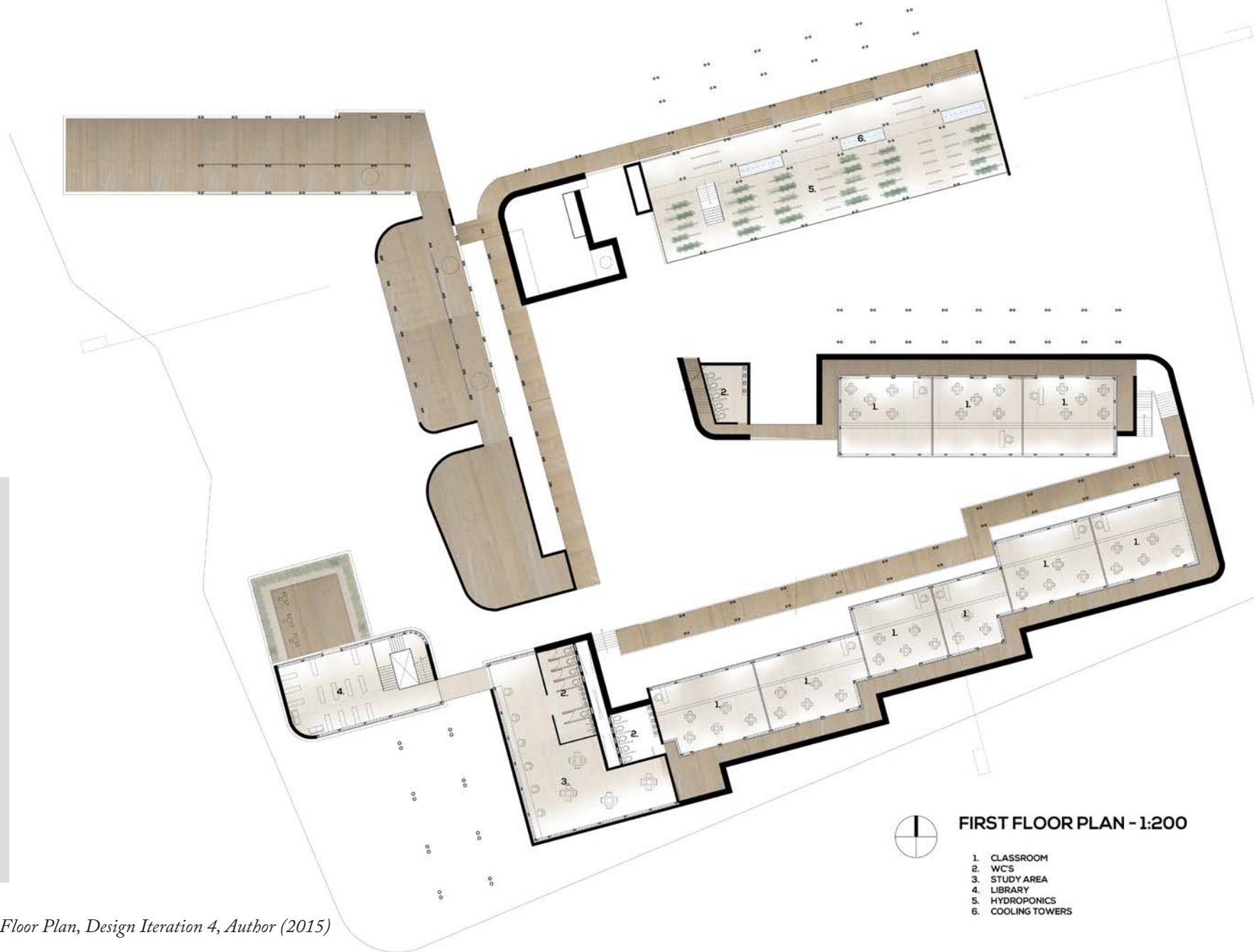
FIRST FLOOR PLAN - 1:200

1. CLASSROOM
2. WC'S
3. STUDY AREA
4. LIBRARY
5. HYDROPONICS
6. COOLING TOWERS

Figure 98 : *First Floor Plan, Design Iteration 4, Author (2015)*

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Mothers would enter the proposed structure into a smaller square, surrounded by a Toy Library, Administration block and the Nurse's rooms. And mothers would exit again on route to the train station. Therefore the different ecotone for the semi-private space became clearly defined.

Children enter the structure through the same route as the mothers but then go through the last threshold into the nurture space. Passing the nurse, for a daily check-up and entering into the children's realm. The Private realm developed more with more space for children to play and a better connection to the Public realms became apparent.

The Kitchen is directly connected to the horticulture fields and greenhouse, with a dual public and private interface. It is proposed that children receive two meals a day and that surplus produce and food gets sold to the public, this adds to the public becoming aware of the growth and cultivation cycle on a tangible level.
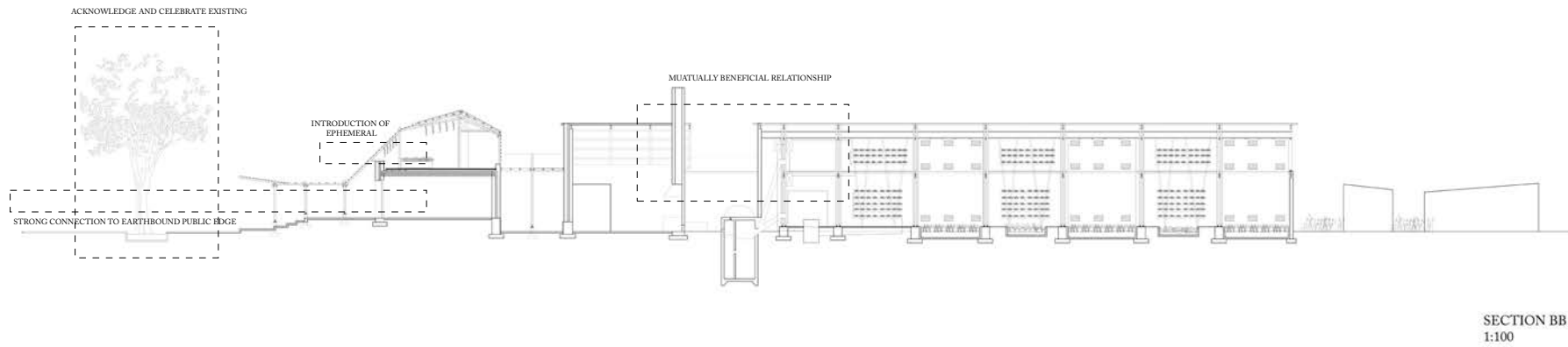
SEMI PUBLIC INTERFACE
VISUAL CONNECTION OF
EPHEMERAL TO
EARTHBOUND

EARTHBOUND BECOMES
EPHEMERAL

TANGIBLE EPHEMERAL

CONNECTION OF EPHEMERAL TO COMMUNITY EDGE

EPHEMERAL
SHELTERS

CONTINUOUS CONNECTION

CONTINUOUS CONNECTION

SECTION AA
1:100

EARTHBOUND URBAN EDGE

ACKNOWLEDGE AND CELEBRATE EXISTING

MUATUALLY BENEFICIAL RELATIONSHIP

INTRODUCTION OF
EPHEMERAL

STRONG CONNECTION TO EARTHBOUND PUBLIC EDGE
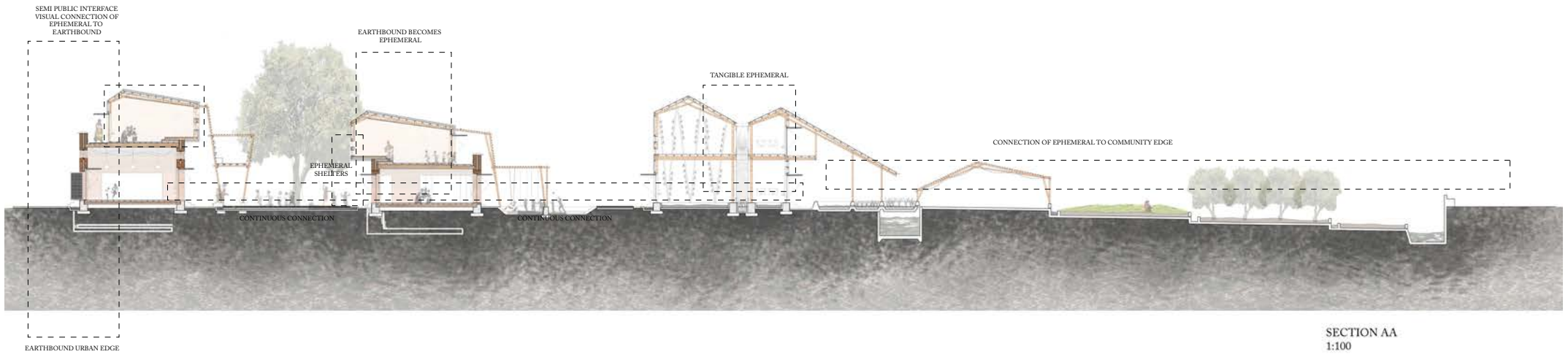
SECTION BB
1:100

Figure 99 :   *Sections, Design Iteration 4, Author (2015)*

The kindergarten design is a series of different classroom and courtyard conditions, which relate to one another through materiality and recognizable attributes. The design grows from the urban edge on the southern side, towards a more natural space on the Northern edge. Ramps and walkways lead children to and from the different classrooms. This allowed for spontaneous connections of human to nature to develop. Thus the definition between nurture and natural spaces.

This allows children to experience the spaces from different perspectives.
Children get to experience the urban edge from a safe space and to interact with the horticulture through participation. This allows for the passing of existential knowledge through observation and participation. The classroom placements were influenced by the different age categories of the users. The toddlers placed in the middle classrooms, able to exit and run around at any time whilst being watched by teachers.

Figure 100 : *Perspective of Public Square, Design Iteration 4, Author (2015)*

The Earthbound ground floor, allows children to experience soil in a different state, and the lighter ephemeral first floor, seemingly floating above. The light and dynamic ephemeral structure, the inverse of the monolithic and static earthbound structure. The ephemeral condition relates to the growth out of the current condition and the possibilities of the imagination spreading its branches.

Circulation spaces and thresholds are articulated to allow for the external spaces to become extensions of the interior spaces. Doors also serve as secondary thresholds, shading devices or light-shelves. The different conditions of the roof was also explored, becoming more than the sheltering element. The roofs become a landscape of its own, as an extension of the light structure, flowing down towards the ground, acknowledging the sky and the ground. The use of the roof in this way allowed for it to become a structural element for the ramps, or an extension of the playground and shading for the horticulture. The roof aids in the creation of human scale intermediate spaces between the external and the Earthbound.

Figure 101 : *Perspective of Entrance to Daycare, Design Iteration 4, Author (2015)*

6.5   Conclusion to Design:

Informants are all around us. The opportunities present themselves when one sees past the diversions of chaos. Peer into the essence of the composition of place, and acknowledge it. Make the binding agent's beauty and intrigue visible to all. Thereby residual deposits start to merge and integrate with their surroundings, becoming part of what had already been. The reintroduction to different states of the Earthbound condition acknowledging the transient nature of the surroundings, thereby becomes an extention of Biophilia through architecture. Natural materials in new conditions, celebrating their flawed characteristics.

By celebrating the ordinary it becomes extraordinary. And through the participation of the celebration a cultural manifestation takes ownership, acknowledging the existence of *The Forgotten* and thereby establishing a sense of belonging.

The *Forgotten*, become co-creators and participants in the place-making, and thereby they start to cultivate a cultural collective memory of skills and knowledge to pass on. This also allows for different levels of social ecotones to overlap and to form dynamic didactic spaces which nurture and develop the surrounding on a human scale.

Figure 102 : *The Nature of the Mind II*, *Collage, Author (2015)*