

# Building Nurture

*Care and Protection of  
the Growing through  
the Built Environment*

Alexandra Dill



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**Building Nurture:  
Care and Protection of the Growing through the Built  
Environment**

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Design Dissertation Document (APG5079W)

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as part fulfilment of the degree Master of Architecture  
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in the School of Architecture, Geomatics and  
Planning

Faculty of Engineering and the Built Environment  
University of Cape Town

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November 2022

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fig 02: Disused  
playground in  
Vrygrond

## Acknowledgements

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*Most importantly thank you to my brothers, Andile and Oscar for not just being siblings, but my best friends, and being the inspiration behind this piece of work. I love you.*

fig 03: Oscar and Alex Dill



fig 04: Andile Mazibuko and Alex Dill



# Abstract

South Africa's tumultuous and oppressive past has given rise to a ubiquitous inequality in the country. This inequality has manifested itself in disparate access to essential needs including but not limited to adequate housing, education, sanitation, job opportunities and child care amongst others. Limited access to the aforementioned, on top of the exponential growth of South Africa's population, has left many in extremely undesirable living conditions and immense poverty.

These ubiquitous issues have not gone unnoticed and there have been many attempts to better these conditions through a top-down approach - for example, provision of housing and affirmative action through employment opportunities. However, what these top-down approaches fail to tackle is the problems at their conception. The betterment of the country lies in the nurturing of its growing communities, especially its youth. Nurturance as an attempt to care and protect that which is growing both at the community and individual scale.

This project aims to find a way in which to achieve nurturance through the built environment and tests ideas of integrative design that protects and cares for the growing impoverished population and the children that are born into it through physical intervention.

It will be an attempt to lift people out of the cycle of poverty at its root through empowerment of both impoverished communities and the children born into them. This intervention will be designed and tested in the community of Vrygrond, one of the Western Cape's oldest informal settlements, which is a prime example of a continuously growing settlement with a very large young population.

The site is located in the nucleus of the settlement as a symbolic embedding of a child-centred programme into the informal urban environment. This acknowledges the imperative need for child-centred spaces by weaving it into the pre-existing built fabric.

# Preface

When talking about the child the common anecdote of nature vs nurture will always come up. I am interested in the nurture aspect of the child experience and specifically how the built environment plays into 'nurture'. This fascination with nurture and the built has stemmed from my childhood and my two brothers.

My elder biological brother, Oscar, who is 8 year my senior is extremely outgoing and charismatic. Before he was 10 he had had 4 homes: an apartment in Gardens, a house in Hout Bay, briefly a friend's house in Hout Bay and, finally, a suburban home in an area named Edgemoor. Then there is me, who also lived in a Hout Bay but moved to Edgemoor at the age of two so, obviously, I do not recall having lived in Hout Bay. Unlike my elder brother, I am relatively reserved and soft spoken as well as suffer from anxiety in new spaces and social situations. Finally, my younger, non-biological brother, Andile, grew up constantly moving between two completely different worlds. During the week he would stay in Edgemoor with our family, as his mother, Jean, was our domestic worker; and on the weekend he would return to Imizamo Yethu in Hout Bay with Jean where his biological family lived. Andile is the most soft-spoken and reserved of the three of us, however, has a quiet but powerful confidence about him.

I wonder often how the extremely varied environments that the three of us called "home" during our formative years may have informed the varied people that we have become. Has my sheltered and quiet upbringing in suburbia sheltered me from the necessary exposure I've needed to be confident in new environments and social situations? Has Oscar's love of experiencing new things stemmed from his varied experience of the built environment? Has Andile's reservedness but unwavering confidence stemmed from his exposure to the extremes of the South African built environment?

How does the built environment shape the way in which the child will behave in adulthood and could the built environment sector aid in the empowerment of youth in South Africa?

# Contents

Declaration.....	iv
Acknowledgements.....	vi
Abstract.....	viii
Preface.....	x
Contents.....	xii
Introduction.....	1

## Part 1 : Existing State of Nurture in the Built Environment

1.1. Defining Nurture.....	6
1.2. The Child and the Home.....	8
<i>Role of Homeplace.....</i>	8
<i>Homeplace in the context of South Africa.....</i>	12
<i>Spaces of Learning as Supplement to Homeplace.....</i>	15
1.3. The Child and the Urban.....	18
<i>Exposure and Adaptation of the Urban Environment.....</i>	18
<i>Exclusion from the Urban.....</i>	23
<i>Re-introducing the Child to the Urban.....</i>	26
1.4. The Child and the Interior.....	37
<i>Learning from Schools.....</i>	37
<i>Isolation, Variation and Stimulation.....</i>	39

## Part 2 : Locating the Need for Nurture

2.1. Introduction.....	44
<i>Why Vrygrond.....</i>	44
2.2. Locating Vrygrond.....	50
<i>Location.....</i>	50
<i>History &amp; Development.....</i>	62
2.3. Spaces of Nurture in Vrygrond.....	64
<i>Care.....</i>	64
<i>Protection.....</i>	70

## Part 3: Building Nurture

3.1. Brief.....	77
<i>Care &amp; Protection.....</i>	77
3.2. Placing Nurture.....	78
<i>Locating Site.....</i>	78
<i>Spatial Densities.....</i>	82
<i>Climate.....</i>	84
<i>Unit of Nurture.....</i>	86
3.3. Programme of Nurture.....	88
<i>Case Study: iKhaya Le Themba.....</i>	88
<i>Refining Programme.....</i>	94
3.4. Building Nurture.....	96
3.5. Nurture Realised.....	98
Reflection.....	131
Bibliography.....	132
List of Figures.....	134

# Introduction

The initial interest in this line of inquiry was sparked by acknowledging South Africa's relatively young population and the need to care for and protect them in order to ensure the future of the country is left in the hands of those that were empowered in their youth. Often one will find in poverty-stricken areas, that the population is younger which calls for a greater investment in the youth. This investment in the youth is often implemented by members of the community as the powers that be tend to adopt a top-down approach when tackling the empowerment of the impoverished communities in South Africa often placing their attention on the grown population.

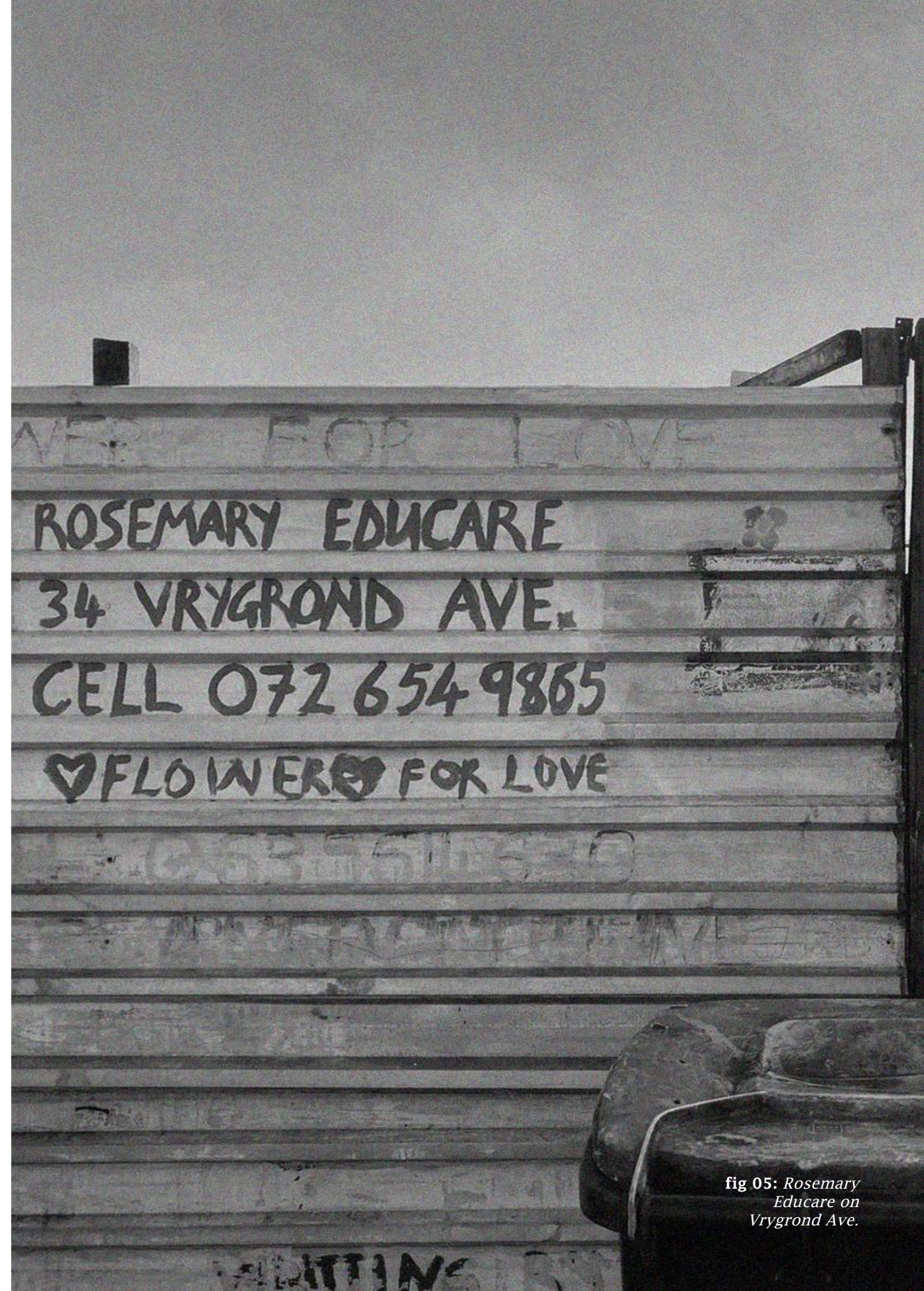
The investment in the youth is oftentimes reflected in the built fabric in impoverished areas where social infrastructure is provided by members of the community in the form of educare which provide care for children from ages 0 to 4. These carefully curated spaces of nurture, provided mostly by women in the community who want to care for children in the area as well as see it as an opportunity to earn an income (although not much) embed these spaces into the built fabric - seamlessly weaving them into a space conceived for adults.

There is a lot to be learned from these spaces of nurture that have been intuitively embedded into the built fabric as they have arisen from need and been placed

organically throughout the ever-growing impoverished communities of South Africa. The strategy encapsulates what I aim to achieve through this line of inquiry and intervention. The understanding of what the youth needs in order to be empowered and how this could be reflected in a built intervention that does not interrupt or alienate itself from spaces that have been conceived for and by the adult.

This research aims to understand, theoretically, how nurture could be provided by the built environment to the youth of South Africa by grappling with the already existing state of nurture through exploration of the child's relationship with the home, the urban and the interior. Strategies of building nurture will be placed according to need. Spaces of nurture are needed particularly in impoverished areas to assist youth in getting out of the cycle of poverty. An area that fits this description, namely Vrygrond, will be examined according to strategies of nurture as outlined in the theoretical exploration. The research will conclude with the application of these strategies of nurture through programme and intervention. A brief will be outlined that addresses needs of the youth in Vrygrond and gently weave the programme of the intervention into the preexisting built fabric that has been created by the community, integrating the needs of the child with those of the adult.

Throughout the paper, the italicized insertions indicate me recalling my own personal experience as a child which I thought necessary to include as childhood is something we've all experienced and it is difficult to remove my own subjectivities entirely from the piece. I invite the reader to join me in tapping into their own childhood experience throughout.



**fig 05:** Rosemary Educare on Vrygrond Ave.



fig 06: Homes in  
Vrygrond

## Part 1

Existing State  
of Nurture  
in the Built  
Environment

# 1.1

## Defining Nurture

Nurture is defined as the care and protection of someone or something that is growing. It can be afforded to anything during a process of growth. Nurture ensures that that which is growing is properly provided for in order to reach its full potential.

Provision of care can be achieved through ensuring that which is in its infantile state is provided with everything it needs in order to grow properly.

Provision of protection is achieved through ensuring that that which is growing is safe and secure.

Depending on what is being nurtured, this care and protection that is provided to it can manifest itself in many different forms, for instance, nurturance of a plant would be through adequate exposure to sun, healthy soil, enough moisture, the right amount of humidity, ensuring it is safe from insects etc. The provision of nurture to a human child could not be provided with the aforementioned. Therefore, it is important to acknowledge that nurture does not take on one static state but instead morphs to suit the needs of that which needs nurture.

This dissertation will be an exploration into how nurture could manifest itself in the built environment.

Due to the fact that the Republic of South Africa is still very much in its infantile state, the provision of nurture to its land and people is imperative. Given the country's tumultuous and oppressive past, the people of South Africa find themselves desperately trying to get out of the cycle of poverty. In order to assist in this process, I intend to explore how nurture could manifest itself in the built environment in a community that has been most affected by the country's oppressive past.

## 1.2

# The Child and the Home

## Role of Homeplace

To preface this study of the relationship between the child and the home, it is important to note that the home will not only be understood as the physical 'house' or 'homeplace' but also the 'home' as the broader context of South Africa which acknowledges its tumultuous and oppressive past that has produced the space in which we grow up. It is important to note here that the childhood experience is extremely varied in South Africa and this variation usually begins with the 'home'. Home encapsulates parental guidance, the locality of your house, access to amenities, access to education, security etc. This is the exact reason why the childhood experience is so varied in South Africa. There is a vast and seemingly irreconcilable class divide which will decide where and how one gets to live.

This study of the child and the home will heavily reference Bell Hooks' essay, "Homeplace (a site of resistance)" (2015). There are many poignant points made not only about the homeplace but also the role of the woman in curating it. This section of the study will draw from a multitude of writings in order to understand the importance of the role of the homeplace in the child's life.

Hooks emphasizes the importance of the home for its restorative value. It is a space that has been curated that puts forward an environment of care, comfort, and nurturing (hopefully). This is an idealistic view and not everyone's experience of their childhood 'home' but could also have been a space that they've created for themselves outside of the home, in a different environment. However, for the sake of this piece, home will refer to the house.

The home is the place in which you first experience life and the rights and wrongs of the world. Those who one is surrounded by in the home will inevitably shape the way in which one views the world. Hooks recounts a story in her essay where she is walking to her grandmother's house as a black child in a predominantly white neighbourhood. She describes the relief of reaching her grandmother's house where she is accepted and loved as opposed to just outside where she feels unsafe and alien (Hooks 2015). This brief story seemingly sums up the importance of the home as a child and more importantly as a subaltern child. As a country, it is important that we realise the urgency with which we need to empower the youth - and this will start in the homeplace. If a child is not made to believe that they are of importance in a space where they are disadvantaged because of the country's past, it is difficult to believe that they will be positive members of society.

It is theorized that as one gets older the more important it is for them to have their own space into which they can escape. David Canter wrote about this the following:

"At some stages parents are aware that their children would dearly like a room of their own. At yet other ages children may appear to create separate places

for themselves and their friends, places into which the intrusion of an adult is a profanity. To my knowledge, no researcher has attempted to trace the development from the den made with a cardboard box under the kitchen table by the three year old, to the den made at the bottom of the garden out of branches by the nine year old, to the private room of the teenager, to the study, library or den of the adult.” (Ward 1978)

Although just a theory, there is poignancy in this statement. Most might recall their need and want for their own personal space in their various stages of development and even though these spaces might vary in nature there is a still a need for it.

*When I was a child, I was quite anxious, emotional, and (at times) explosive. My mother repeatedly reminds me of a story when I was around the age of 6 that she had told me I could not go trick-or-treating on Halloween as we had to go to Gqeberha to attend my grandmother’s 70th birthday party. I threw a tantrum, stormed into my sanctuary (which was my bedroom) and isolated myself from my family. I cannot recall my thought process when in my bedroom but my mom tells me that when I had emerged, I was extremely apologetic and had come to my senses that my grandmother’s birthday party was, in fact, more important than going trick-or-treating. She told me how proud she was of me that as a six-year-old I was able to understand what was more important.*

This is an anecdote that vouches for the importance of a space of isolation for the child, where they can

retreat; return to themselves; and grow through coming to terms with their own thoughts and humanity. A child has a lot more understanding of the world than many people tend to give them credit for and many times their morality is more untainted than that of an adult.

Paul Ritter echoes this through his proposal of a “children’s house” (figure 07) for every 10 or so houses in a neighbourhood as he believed that children should be able to remove themselves from the “tight home” (Couchez 2020).

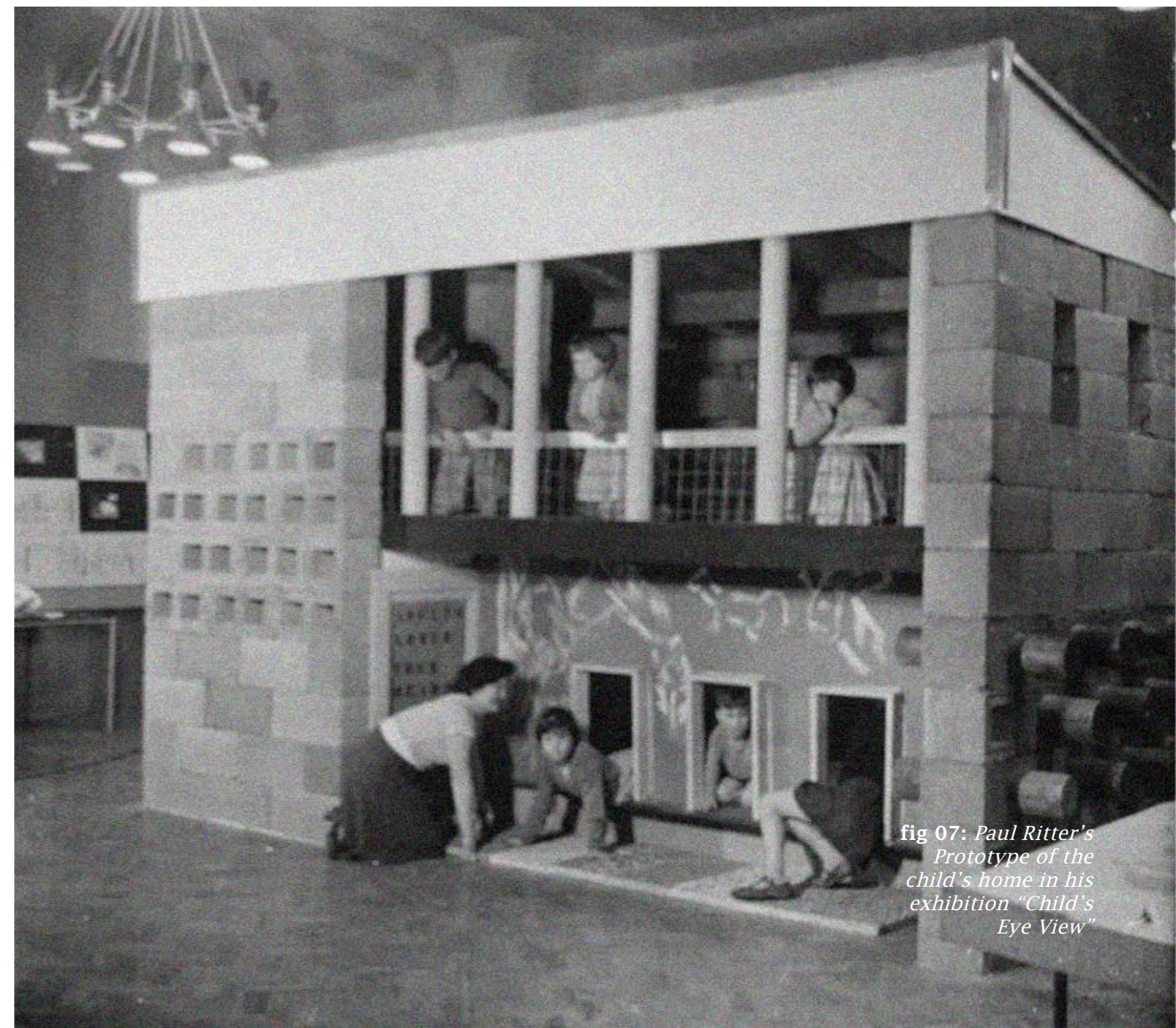


fig 07: Paul Ritter’s Prototype of the child’s home in his exhibition “Child’s Eye View”

## Homeplace in the Context of South Africa

We have now established the importance of the home as a place for restoration as well as the importance of a space to which the child can retreat and isolate. Now the focus will be turned to the way in which the homeplace is being threatened in South Africa specifically. Hooks acknowledges the way in which the apartheid government attacked the thing that was perhaps the most vital to the black and coloured communities by forcibly removing them from their homeplace. Hooks establishes the Homeplace as a site of resistance. She writes:

“It is no accident that the South African apartheid regime systematically attacks and destroys black efforts to maintain homeplace, however tenuous, that small private reality where black women and men can renew their spirits and recover themselves. It is no accident that this homeplace, as fragile and as transitional as it may be, a makeshift shed, a small bit of earth where one rests, is always subject to violation and destruction. For when a people no longer have the space to construct homeplace, we cannot build a meaningful community of resistance.” (Hooks 2015)

This piece was written during the apartheid regime, during the peak of the struggle. However, people of colour in South Africa have still not gained back what

they have lost. The apartheid government has turned housing into a contested space where in fact it is meant to be a space wherein one feels nurtured and where one’s soul can be restored. The spaces many people of colour find themselves in in South Africa are not only lacking in amenities, space, adequate infrastructure etc. Women of colour also find themselves having to face the arduous task of making “home” for their own families after having to clean up after and take care of families that are more affluent than they are with the pittance that they’ve earned from doing so.

The women of colour that work in these domestic jobs might have little or no care to give to their own domestic spaces once they have come home from a day’s work. Hooks recounts the anxiety she used to feel when her mother would leave her home which I believe is a common childhood experience. It is almost as though the mother is something that a child believes is tethered to the home but when she must split her efforts between two households, this tether might start to tear and wither. This might start to eat away at the nurturance that is afforded to one’s own home, therefore, children might have to seek out that nurturance from other spaces, for instance a school, and educare, a friend’s home etc. One will find in informal settlements, children are often more excited to attend school as they find in it a space that frees themselves from the tight home.

The apartheid regime, while stripping people of colour of the conceptual notion of the home as a restorative space, also stripped many of them of their most valuable assets without ensuring that they were empowered or educated enough to maintain a steady and healthy income to afford a home that was fit for inhabitation. Homes in informal settlements more often than not do not have a space wherein the child can retreat

to and isolate themselves. Families of four or larger very often will share one bedroom. The lack of private space for the child might affect their development as they are not able to return to themselves and think through issues that they face in a space that feels safe and restorative.

It is apparent that the attack of the home is one that is extremely personal and detrimental. Without a space wherein the child can feel empowered, safe, and nurtured; it is more likely that the people of colours' condition in South Africa might be maintained as the child was not able to develop sufficiently in the conditions in which they have grown up.

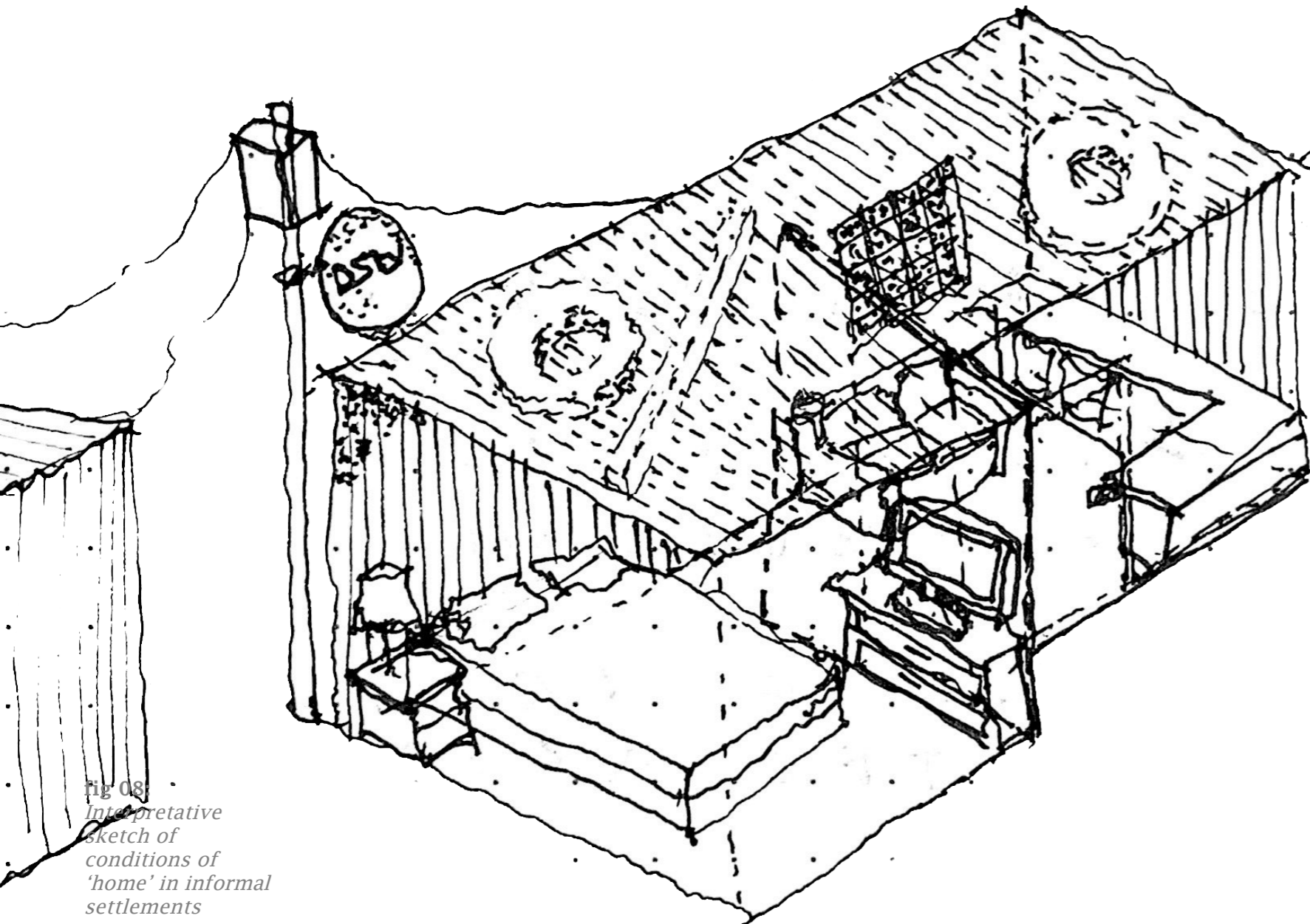


Fig 08:  
*Interpretative  
sketch of  
conditions of  
'home' in informal  
settlements*

## Spaces of Learning as Supplement to Homeplace

As aforementioned, if the homeplace is not providing sufficient nurturance for the child, the child will begin to seek out nurturance from a different space. Herein lies a potential counterattack to the attack of the homeplace. This idea was explained previously through Ritter's proposal of the children's home (Couchez 2020). Although this specific proposal might not necessarily be feasible in South Africa, there is a solution that lies in it. We need to ensure that there are spaces wherein a child can retreat to if they do not feel safe or empowered within the homeplace. This is the child's nature, but it is something that is not being adequately considered when constructing the built environment.

There are many theories which aim to address the way in which the school is constructed to create a space wherein a child can retreat, feel empowered and feel safe. In order to achieve spaces of sanctuary for the child there must be a willingness to adopt a child-like lens when curating them - an acceptance that what a child needs is oftentimes not known by the adult. The willingness to adopt the child-like lens is an acceptance of Paul Ritter's theory that society suffers from "an 'emotional illness' because it suppressed all forms of creativity". This theory was influenced by A.S. Neill who believed that all children are born good but corrupted by society and its institutions (Couchez 2020). We have

been seeing the shift in contemporary pedagogy through its attempt to encourage child-like creativity through the implementation of “rhythmic self-regulation”. Rhythmic self-regulation is an ideology that centers itself around the notion that shifts the way in which we teach from teacher-centered to child-centered learning. It encourages the child to be in control of their own development and schedule within the learning environment (Kozlovsky 2010). Rhythmic self-regulation emulates the freedom a child should feel when in their own homes. However, this idea isn’t widely implemented but it is an idea that has been widely adopted in the educare system throughout South Africa as people usually afford more freedom to these ages as we are not able to understand fully their wants and needs. Pictured in figures 09 & 10 are schedules from two educares in Delft South, where one can note the incorporation of ‘free play’ and ‘music and movement’. These activities, although scheduled, imply that the imagination and freedom of the child is encouraged in educare within the informal.

Many people have emphasized the importance of the “first 1000 days” of childhood development. This is the time wherein a child would be attending an educare. The conditions that have been outlined above, of the absence of the mother during the day to work in another’s home in South Africa, highlights the importance of these places of care within the South African context. However, these vital spaces of care are often not supported by the government. Below is a quote taken from a case study in the book “Township Economy” (Charman , Petersen and Govender 2020) where they speak of the micro-enterprise of educare as social infrastructure. Lanie, an owner of an educare in Delft South, talking about obtaining municipal compliance, states:

“These processes are very expensive and I have

no one to help me. The government needs to know how hard it is for people like us, who are so passionate about our work, to run even a small educare... as ECDs (Early Childhood Development Centres) in the Delft community, we need to stand together and help each other to fight for our children”

One can not only extract from this the difficulty of obtaining municipal compliance and, in turn, government support as a vital space of care within the informal; but also the care and compassion that is afforded to these educares by those that work in and own them.

It is clear that a way in which to counter the attack on the homeplace in South Africa could be in empowering and supporting those that are ensuring that children that do not find solace within their own homes can find it elsewhere through architectural intervention. This will not only empower children in unideal conditions but also those that work hard to make spaces of care for them.

fig 09 & 10:  
Educare Schedules  
from Delft South



## 1.3

# The Child and the Urban

## Exposure and Adaptation of the Urban Environment

Childhood is a fleeting but exciting time in most people's lives. It is a time wherein one is experiencing everything for the first time, the feeling of cracked clay on a cricket pitch, the sounds of cars driving by or birds chirping, the taste of things that are perhaps not edible, the smell of freshly cut grass. It is a time wherein things that might now seem mundane were delightful. Contemporary society, however, has excluded the child from participating in the built environment. The streets of most urban and suburban spaces in South Africa are usually devoid of children, which in my opinion can be attributed the fact that the contemporary child is sheltered from the outside as the urban has become hostile and dangerous. The dangerous nature of the street and the lack of interaction with it by the child is theorized by Jane Jacobs in her novel, 'The Death and Life of Great American Cities' where she states, "Underused sidewalks are not under suitable surveillance for child rearing." (Jacobs 1961).

Exposure to the built environment for the childhood development is imperative. The childhood experience of the world is described by Yi-Fu Tuan as, "unburdened by worldly cares, unfettered by learning, free of ingrained

habit, negligent of time..." (Tuan 1974). Lack of exposure to the urban during this time of unhindered curiosity and lack of fear could result in an unhealthy relationship with the urban as one is taught only of its perils. Even if the urban environment has not been conceived for use by the child, exposure to it and, in turn, adaptation of it by the child is extremely important in contributing to their knowledge of the world through self learning.

The idea of the child-like nature of self-learning through trial and error is exemplified by figure 11 on the following page, an image that was captured by Ann Golzen for the book "Child in the City" (Ward 1978). It's in a purely photographic chapter of the book titled "Colonising Small Spaces" in which Ann Golzen captures the ways in which children occupy spaces that were not necessarily meant to be inhabited by children. This image captures children scaling a boundary fence of some sort. The chapter reinforces the resourceful and imaginative nature of the child - how they are able to adapt surroundings in a way which can keep them entertained. Even though this image shows the way in which a child can adapt space and objects to suit them, it also raises concerns around the safety of these spaces. There's a juxtaposition that is created between the playful nature of the children and the harsh and unwelcoming nature of the space in which they find themselves. In a country like South Africa, which has an extremely young population, spaces in which children are safe and cared for are imperative. However, there is a complete lack thereof. This image also raises ideas of adaptability when designing for the child - there must be space for them to explore in a way which isn't prescribed.



fig. 11: *Children Scaling Fence*

fig 12: *Disused  
playground in  
Vrygrond*



## Exclusion from the Urban

Parents tend to shelter children from the outside due to a concern for safety which is valid. Excluding the child from the urban is not only detrimental to them but also to the urban. Jacobs explains how the reaction of urban planning to the child is to make space for parks, but she cautions against this, saying that these open spaces that are meant solely for children lack the surveillance that one can find on the ideal urban street (Jacobs 1961). This interpretation again brings up the notion that children are excluded from the urban as spaces are made for them outside of the streetscape. The fenced playground raises three main concerns; firstly, that it creates a dichotomy in the urban between what is able to be used by the child and what functions are reserved for the adult. This concern is echoed by Colin Ward where he states that, “a city that is really concerned with the needs of its young will make the whole environment accessible to them, because, whether invited to or not, they are going to use the whole environment” (Ward 1978). Secondly, it is also of major concern that the unimaginative and static nature of the playground, as we perceive it now, can be summed up by the, “four S’s of the Swing, Seesaw, Sandbox and Slide” which was described by Lady Allen of Hurtwood as “an administrator’s heaven and a child’s hell” (Kozlovsky, *The Architecture of Childhood* 2013). Thirdly, it tends to create spaces that (due to the fact that they are intended for, and almost solely used by,

children) are underutilized and lack the watchful gaze of the adult. This is echoed by Joe Benjamin in his statement that, “ideally there should be no fence; but when we reach that happy state there should be no need for playgrounds” (Ward 1978). However, this makes one wonder how we could achieve this ideal state that Benjamin speaks of. In order to eradicate the playground and reinstate the urban as a realm that is safe to occupy by both adult and child, much larger issues need to be tackled and uncovering a means by which to address these larger issues is not the intention of this particular study. Rather, the intention is to uncover a way in which to reintroduce the child into the urban through architectural intervention in the meantime.

The hindrance of the reintroduction of the child into the urban lies in their activities of adaptation of the built environment being seen as destructive or hooliganism. This idea is echoed by Patrick Geddes where he states that, “we have been stamping out the very germs of [children’s activities] by our policeman like repression, both in school and out of it, of these natural boyish instincts of self-education, however clumsy and awkward, or mischievous and destructive when merely self-restrained, as they commonly have been and still too much are. It is primarily for this lack of touch of first-hand rustic experience that we have forced young energy into hooliganism” (Ward 1978). Children are no longer afforded the freedom to adapt an adult-centered space as they are heavily policed by the watchful eye of the adult. Although the adult’s watchful gaze is imperative in ensuring the safety of the child within the urban environment, due to the fact that the urban is not intended for the child, their activities within it are deemed unsuitable and destructive by the adult. The children who occupy the urban are pushed out of their tight homes, (as discussed in the previous section

‘the Child and the Home’) into a street where they are not welcome and are not able to exercise autonomy. Therefore, they are shunned to the unimaginative and unsafe park. Children are being heavily restricted in most of the spaces they occupy and are no longer afforded the liberty of self-learning through trial & error.

## Re-introducing the Child to the Urban

If we were to reject the notion that the dichotomy in the urban that is created by the playground - one that is suited to the adult and another that is purely intended for the child - is detrimental; it would then be important to bring to the reader's attention the conception and perceived failure of the adventure playground. The adventure playground, an example of which is captured in figure 13, was conceived postwar (which was considered the golden age of playground design) and was conceptualised through the observation of children's activities in open spaces, particularly uninhabited and desolate bomb sites (Kozlovsky, *The Architecture of Childhood* 2013).

Children would make-do with the materials available to them around these sites and so the adventure playground was conceived to encourage activities similar to the ones that were observed when children were left to their own devices. This was achieved by finding an unoccupied open space, and in this open space providing children with a plethora of scrap materials and tools to allow them to conceive and construct their own playthings (Kozlovsky, *The Architecture of Childhood* 2013). Although, in theory, this may seem to be an ideal solution, especially considering all that has been discussed concerning the child's nature to adapt and, in turn, foster and nurture the child-like



*fig 13: Children in an adventure playground, constructing their own playthings*

imagination, it is of little surprise that the adventure playground was rejected by authorities. A quote in Kozlovsky's book reads, "The playground's inbuilt flexibility and interactivity introduced the element of risk into the calculations of experts: children were provided with instruments such as axes and hammers for building structures that do not adhere to safety regulations" (Kozlovsky, *The Architecture of Childhood* 2013). Adventure playgrounds were also contested due to their unsightly nature, "naturally the playgrounds

do not look too attractive and the equipment in use looks like a lot of junk" (Kozlovsky, *The Architecture of Childhood* 2013).

During this postwar perceived golden age of playground design, Van Eyck also made an attempt at fostering the imagination of the child through playground design, incorporating similar ideologies as the adventure playground, however, taking on a more static form (Stedelijk Museum 2002). Van Eyck, himself,

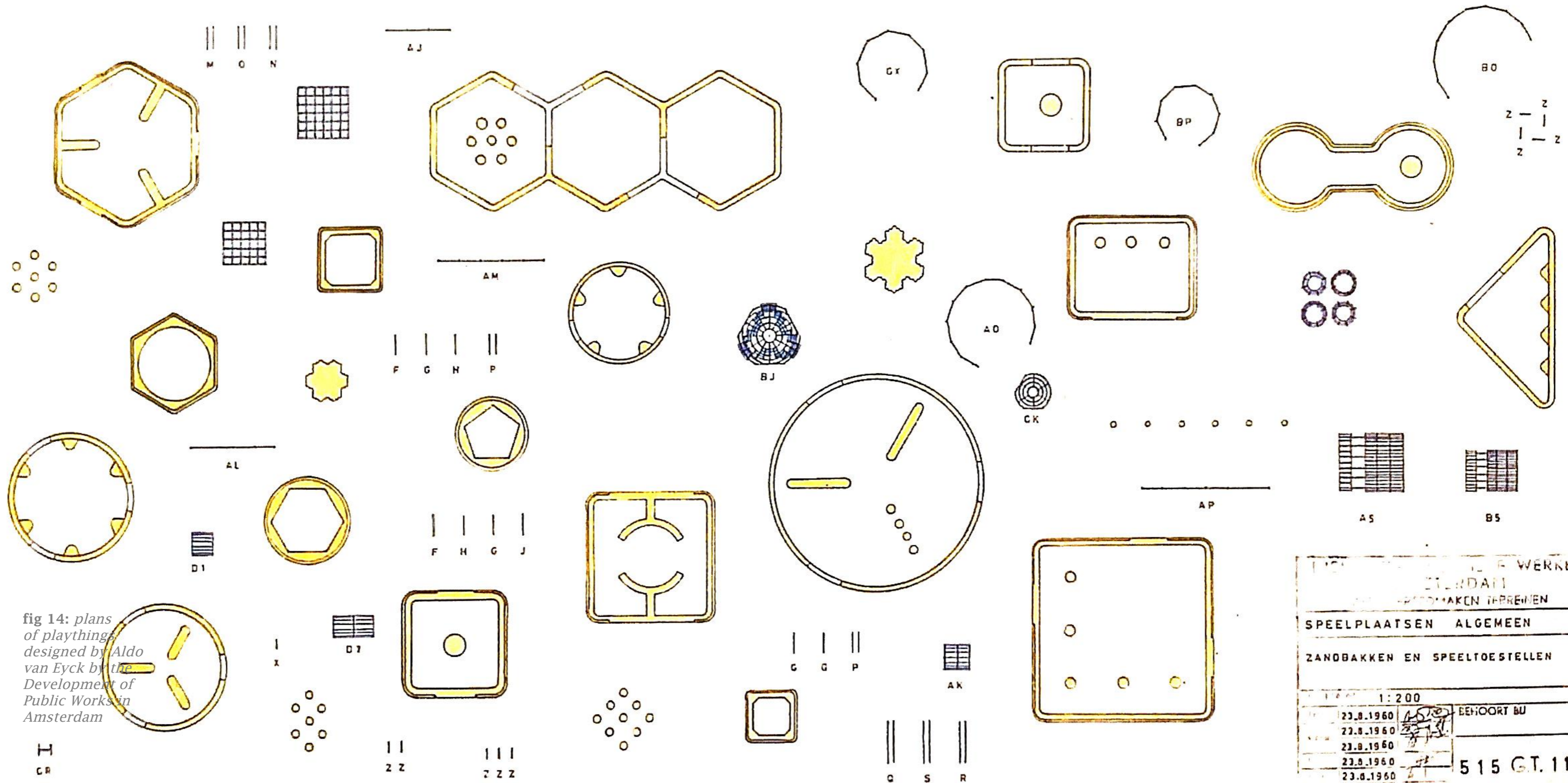


fig 14: plans of playthings designed by Aldo van Eyck by the *Development of Public Works in Amsterdam*

STAD AMSTERDAM		WERKEN	
STANDAARD		MAKEN TOEWIJZEN	
SPEELPLAATSEN ALGEMEEN			
ZANDBAKKEN EN SPEELTOESTELLEN			
1:200			
23.8.1960	23.8.1960	23.8.1960	23.8.1960
23.8.1960	23.8.1960	23.8.1960	23.8.1960
BEHOORT BIJ			515 GT.110



**fig 15:** *site in Laagte Kadijk, Amsterdam before the introduction of one of Van Eyck's playgrounds*



**fig 16:** *site in Laagte Kadijk, Amsterdam after the introduction of one of Van Eyck's playgrounds*

estimated that around 700 playgrounds “were carried out according to [his] designs in Amsterdam” (Stedelijk Museum 2002). He had developed a set of playthings that were non-prescriptive in nature that seemed to mimic built objects in the urban environment (figure 14) and, therefore, seemingly taking inspiration from the way in which children adapted the imposed urban environment. These playthings are still present in many playgrounds today and include, but are not limited to, sandpits, climbing frames, play tables, climbing mountains, somersault frames etc. These playthings had no set way in which they were intended to be used such as slides or swings do, as well as seamlessly blended into the urban landscape. Much like adventure playgrounds, the urban playgrounds developed by Van Eyck made use of the desolate, interstitial spaces that were usually scars of bombings in the urban landscape. However, he made more of an effort to integrate them with the already existing urban environment so as to not create a divide in the public realm of what is to be used by the child and what is reserved for the adult. Both adult and child occupied these playgrounds as even though the playthings were designed to be utilized by children, many of the structures doubled up as public seating spaces or squares where people could gather (Stedelijk Museum 2002). Unfortunately, majority of these playgrounds have been demolished but the playthings conceived by Van Eyck continue to populate contemporary playgrounds.

A contemporary example of an attempt to break down barriers between the child- and adult-occupied realm in the urban is VPUU's Emthonjenis, pictured in figure 18 & 19. Similarly to Van Eyck's playgrounds, the Emthonjenis conceived by VPUU were intended to seamlessly fit into the informal urban environment by being placed in interstitial spaces - such as the one in

Lotus Park captured in figure 17 - that were underused. Acting as both water-points, a space to gather as well as a space wherein children can play (VPUU 2019); the VPUU's Emthonjenis ensures continued occupation which, in turn, creates surveillance and supervision within the spaces that children occupy, fulfills a vital need within informal environments, which is the provision of water and breaks down the dichotomy of the urban realm, which is something that is usually created by the traditional playground.

The discussion in this section reveals the way in which children have been alienated from the urban environment and how this is detrimental to both the child and the adult. However, it is hopeful to see the way in which the dichotomy in the urban realm is slowly but surely being broken down by contemporary, safe, and non-prescriptive conceptions of public space that is no longer intended for use solely by the child or by the adult. There are advantages and disadvantages to all case studies discussed, however, there are lessons to be learned from all. These include, but are not limited to, ensuring easy maintenance, non-prescriptive playthings



*fig 19: Site in Lotus Park for an Emthonjeni after intervention*

that allow for imaginative and safe use by children and ensuring objects that occupy these spaces can be used by both child and adult.

From what has been discussed, one should be able to deduce that the de-alienation of the child from the urban environment lies in integrating the adult-centered and child-centered realms which will break down the dichotomy in the urban environment. This encourages an attitude of carefully weaving together of spaces for the benefit of both the child and the adult. This will be a key strategy and design informant moving forward in the design dissertation and, therefore, was further explored through the making of a conceptual model that attempt to encapsulate these ideas.

The conceptual model that was produced is shown on the following page in figure 20. The materiality choice plays on the softening of the harsh as well as the adaptation of material through occupation by weaving pieces of scrap plastic and fabric through a piece of discarded chicken mesh. I challenged myself to only make use of materials that were not being used as this captures the resourceful nature of the childlike way of making. The form is somewhat nondescript and



*fig 17: Site in Lotus Park for an Emthonjeni before intervention*



*fig 18: Site in Lotus Park for an Emthonjeni after intervention*

malleable which plays on the need for adaptable space and objects when designing for children in order to leave space for the imagination. The model aims to depict a way in which space can be softened as opposed to completely disrupted when making space for the child within the urban - the material and plastic clings onto the chicken mesh without disrupting or restricting it. This communicates the design intent of the intervention with reference to the attitude towards the urban. Spaces for the child should be carefully embedded into the urban environment so as to provide a safe sanctuaries throughout as well as to avoid interrupting the functions of the urban environment as it was conceived for the adult. The weaving of these soft spaces into the built fabric also ensures that they are occupied by both the child and the adult to ensure passive surveillance and, in turn, safety.



*fig 20: Conceptual model made with disused materials*



**fig 21:** Paul Ritter's 2,5:1 scale living room as part of his "Child's Eye View" exhibition (n.d.)

## 1.4

# The Child and the Interior

## Learning from Schools

This section will be discussing the interiority of child-centered environments. In an attempt to demonstrate the alienation of the child in the interior environment, Paul Ritter constructed a 2,5:1 scale model of the interior of the house shown in figure 27 (Couchez 2020). Viewers were confronted with the way in which the child must adapt to make use of interior space rather than it being designed to accommodate them as well as adults. It is understandable that the home is not designed to accommodate the child as in order for them to be continually catered for throughout their growth; the house would have to continually evolve and grow with them. As previously discussed, the way in which the home is not designed for the child, calls for the need for them to have a space of their own which they can adapt as they grow but as aforementioned many are not in the financial position to make this affordance for the children of the family. For this reason, I will be looking into the interiority of spaces that are specifically intended for child occupation, the most prominent of which being the school.

Schools have undergone a drastic evolution since their first conception as Sunday schools in the late 1700s by Methodists in England (Cleary 2004). The first

school models were very much utilitarian and focused on ensuring a child's conformity and obedience. Windows were above eye-level in classrooms to ensure the child would not be distracted, teachers and children had separate entrances into classrooms to reinforce hierarchy in a predominantly teacher-centered learning space, texts besides the bible were prohibited as they were of the belief that other texts would produce independently-minded children (Cleary 2004). These are just a few examples of the measures taken pertaining to the interiority of the school's workings to ensure a child's conformity at the time.

There has been much progression in the way in schools are being conceived since their initial conception as Sunday schools. Rudolph Steiner was one of the first to turn the idea of the traditional and conformist school on its head, favouring softer and more careful design principles as opposed to strategies that encouraged a child's conformity (Cleary 2004). A few of his principles included the championing of participatory design of schools (through inclusion of teachers, parents as well as children in the design process), adaptability of rooms or classrooms, making use of nearby and available resources both for teaching and the actual school construction, the inclusion of irregularly shaped classrooms that allowed for both a softer learning environment and more opportunity for adequate light and ventilation (Cleary 2004).

These principles are somewhat idealistic and not yet universally accepted. Steiner's principles are not even commonly known, therefore, making many schools that have already been designed and built and even those that are still yet to be designed and built not in line with the ideologies that he had set out.

## Isolation, Variation and Stimulation

Although there is yet to be concrete evidence that backs up these principles, many theorists agree that varied and sensory stimulating spaces for children are imperative for early childhood development. Paul Ritter argues that inadequate exposure to and stimulation by the built environment will result in a child that is not properly socialized and will struggle to cope in day-to-day situations as an adult (Couchez 2020).

Many institutions, besides from theorists such as Steiner, have set out requirements that outline a set of strategies that when implemented could improve the child's experience in a space of learning. Many postwar studies on what an educare needs to ensure a stimulating and adequate environment for children in their early stages of development note the importance of a spacious facility. The Nottinghamshire Education department acknowledged the need for spaces that are specifically allocated to utilities such as toilets, quiet and domestic areas, offices etc. but made clear the need for "space to allow for attractive, warm, homely and stimulating environment which can be exploited by teachers and children in a variety of ways." (Dudek 2000).

This emphasizes the need for varied and adaptable spaces within the learning environment which ties back into the contemporary ideology of self-rhythmic and

child-centered pedagogy in educares and schools. The need for open and adaptable space is justified through the need of three aspects listed by Mark Dudek in his Book "Kindergarten Architecture" (2000). These aspects being less conflict between children, the opportunity for children to divide into smaller groups and ensuring that children could each have enough space if they ever feel the need for privacy where they could sit and be alone. Mark Dudek remarks that ample space in educares is particularly important in urban environments where houses are not as spacious as in suburban environments (Dudek 2000). This again ties back to the need for alone space wherein a child could reflect and restore as discussed in the previous section "the Child and the Home". It echoes the point that has been made previously, that if this private space is not afforded to them in their own home due to financial constraints, they should be able to exercise this right to privacy in a space of learning - the learning environment should make allowance for a multitude of sensory varied spaces wherein children could either retreat or come together to play.

A set of strategies that can be deduced from what has been discussed in this section thus far, if we are to accept Steiner's principles, could easily be made into a summative checklist that would produce the 'perfect' environment for childhood development. Although somewhat reductionist; a distillation of these quantitative and qualitative strategies could be used to analyse schools and their attempts at ensuring an ideal space for childhood development as well as provide strategies for design.



fig 22: Houses in Vrygrond Ave.

## Part 2

Locating  
the need for  
Nurture



making' between their own homes and the ones that belong to those that employ them. Those that become domestic workers are also not adequately paid due to desperation as a result of lack of job opportunities in the country. This again trickles down to affect the children of these workers as many are not able to afford good quality schooling.

There are extremely disparate states of domesticity in South Africa - the minority is afforded most luxuries such as adequate housing and attention to the home which provides adequate nurture to the children of the home. This is represented abstractly through the collage across the page which is my reality of 'nurture'. Lawns to play on extending from white washed suburban houses, always under the watchful eye of an adult. However, this is not the reality for the majority of South Africa's youth.

Coming from a position of privilege, my experience of nurture is different to those that are born into impoverished situations. Just because these realities are

different isn't to say that one is better than the other, but rather to acknowledge that more opportunities for growth are afforded to those that come from a wealthier and more well-off background as nurture is something that can be bought through sending children to better schools, providing them with the best *care* and *protection* money can buy. The key extraction from this discussion is that capitalism has made opportunity for nurture to be bought.

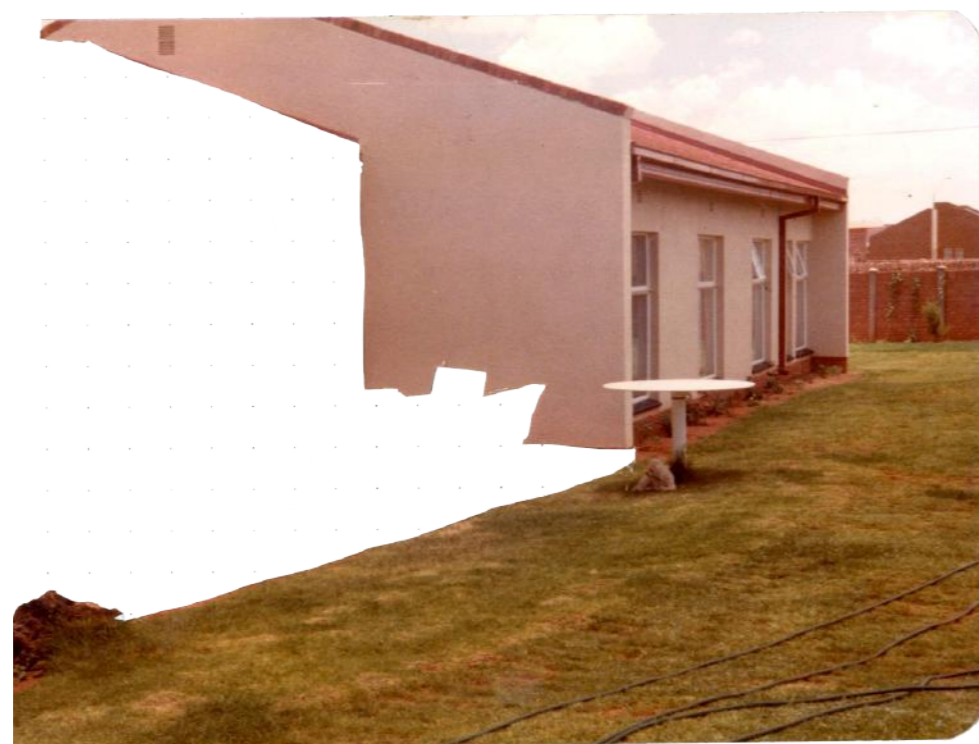
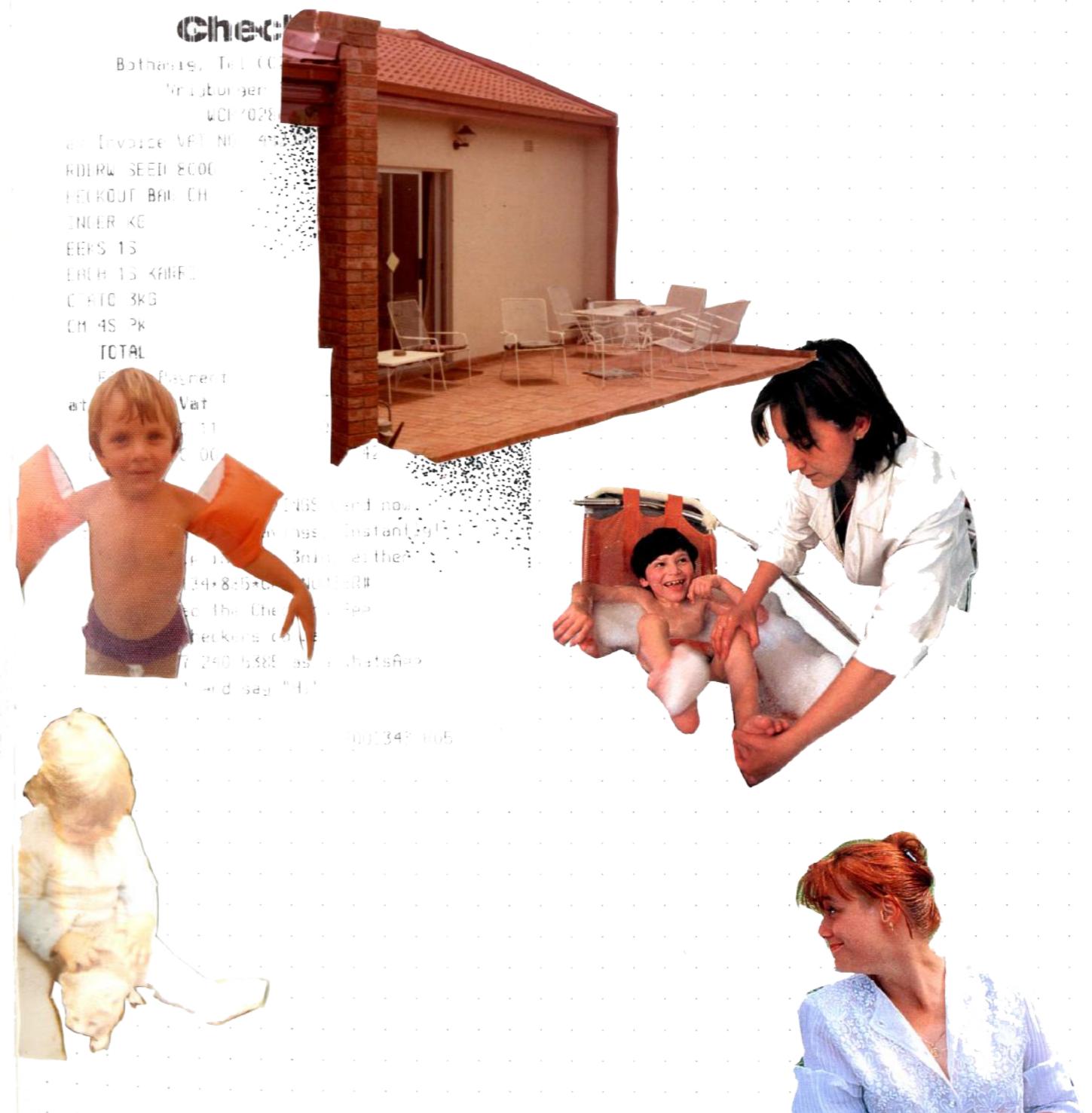


fig 24: Collage of perceived privileged state of nurture - up to interpretation



It therefore makes sense to try and tackle the issue of nurture in a space where the population cannot afford to 'buy' adequate nurture if the parents are unable to provide it as they are working full time jobs as well as have to care for their families.

As aforementioned, however, these spaces of nurture, if not provided in the home, could be supplemented through spaces of learning such as schools and educares. One will find that, which will be touched on more in-depthly in the sections to follow, informal settlements have a seemingly large amount of educares as they not only provide an essential service for the community but also provide a source of income to members of the community. Essentially the micro-enterprise of 'educare' act as social infrastructure in these communities.

What drew me to Vrygrond is the active investment in the community's educares by an NGO (Non-Governmental Organisation) called True North. True North provides services of training, assistance with administration and registration with the government, as well as aids in the provision of formal structures. This investment in youth in the area does not stop at educares, there are a few more NGOs in the area which have recognised the need for nurture in an area like Vrygrond, such as SOZO, which provides aftercare to primary school children, and the communiversity (which has relocated) which used to provide skills training to young adults that have not completed high school. The investment in nurture in Vrygrond will be expanded on sections to follow.

Despite the recognition of the need for nurture and investment in it through separate entities, the area's

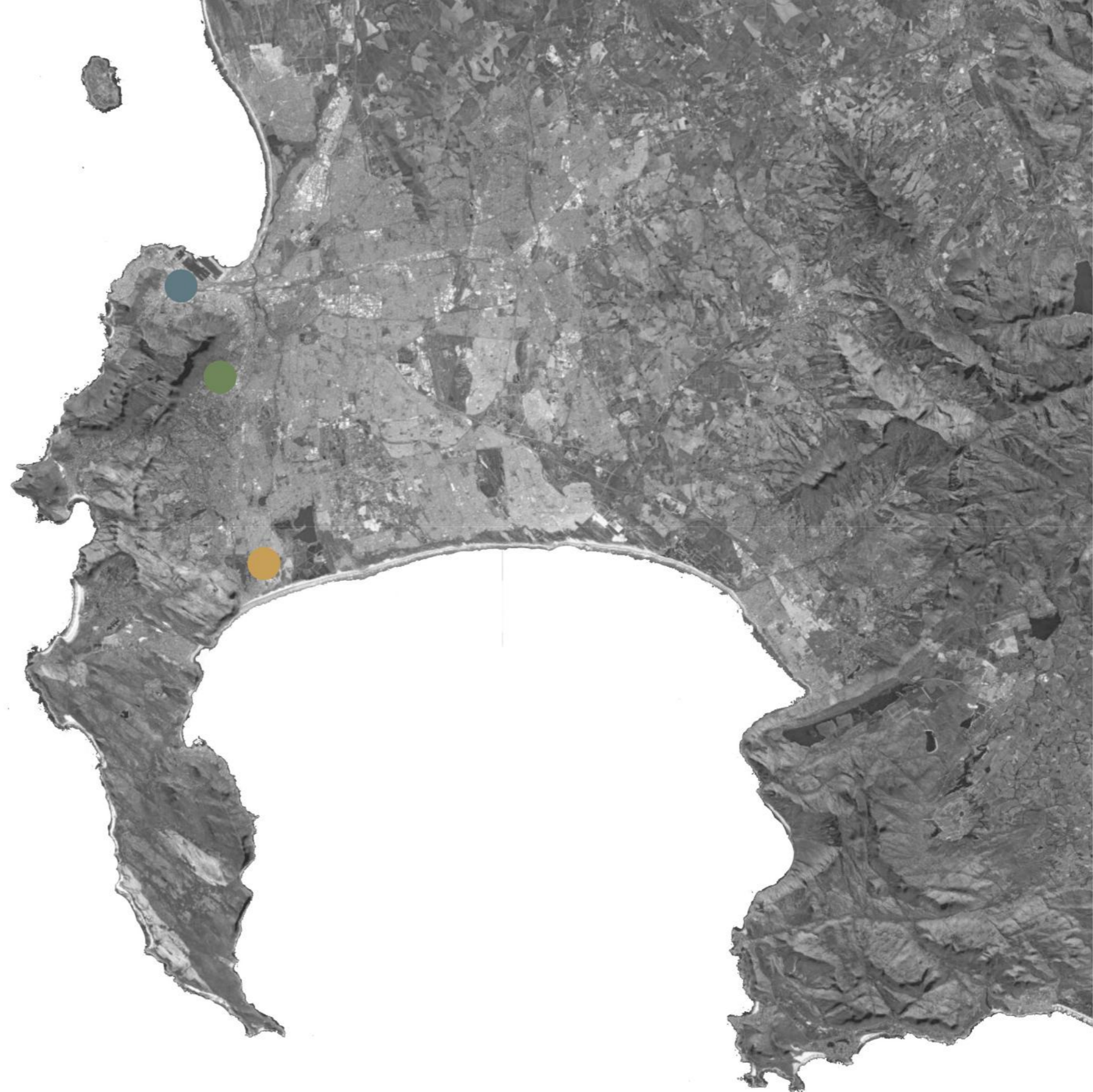
urban environment does not reflect this. It is calling for softening as it is somewhat harsh and unwelcoming. Fences line the streets where children roam as there are not many protected and surveilled spaces wherein children can play.

Through intervention, I aim to embed a space of nurture into the environment of Vrygrond without disturbing the functions it serves to the adult community. I acknowledge that architectural intervention will not solve all of the issues of the youth of the area but hopefully it will provide a space wherein children can retreat and be cared for if this care is not afforded to them in other spaces. The embedding of the intervention into the fabric of the space will also speak to the imperative nature of child-centered spaces and place it on the same plane as the functions that are reserved for the adult.

## 2.2 Locating Vrygrond

### Location

Vrygrond is located in the False Bay region of the Western Cape and is approximately 21km from the University of Cape Town. The area of Vrygrond is indicated in yellow in figure 25 adjacent.



- Cape Town CBD
- University of Cape Town
- Vrygrond

0 5 10 20km

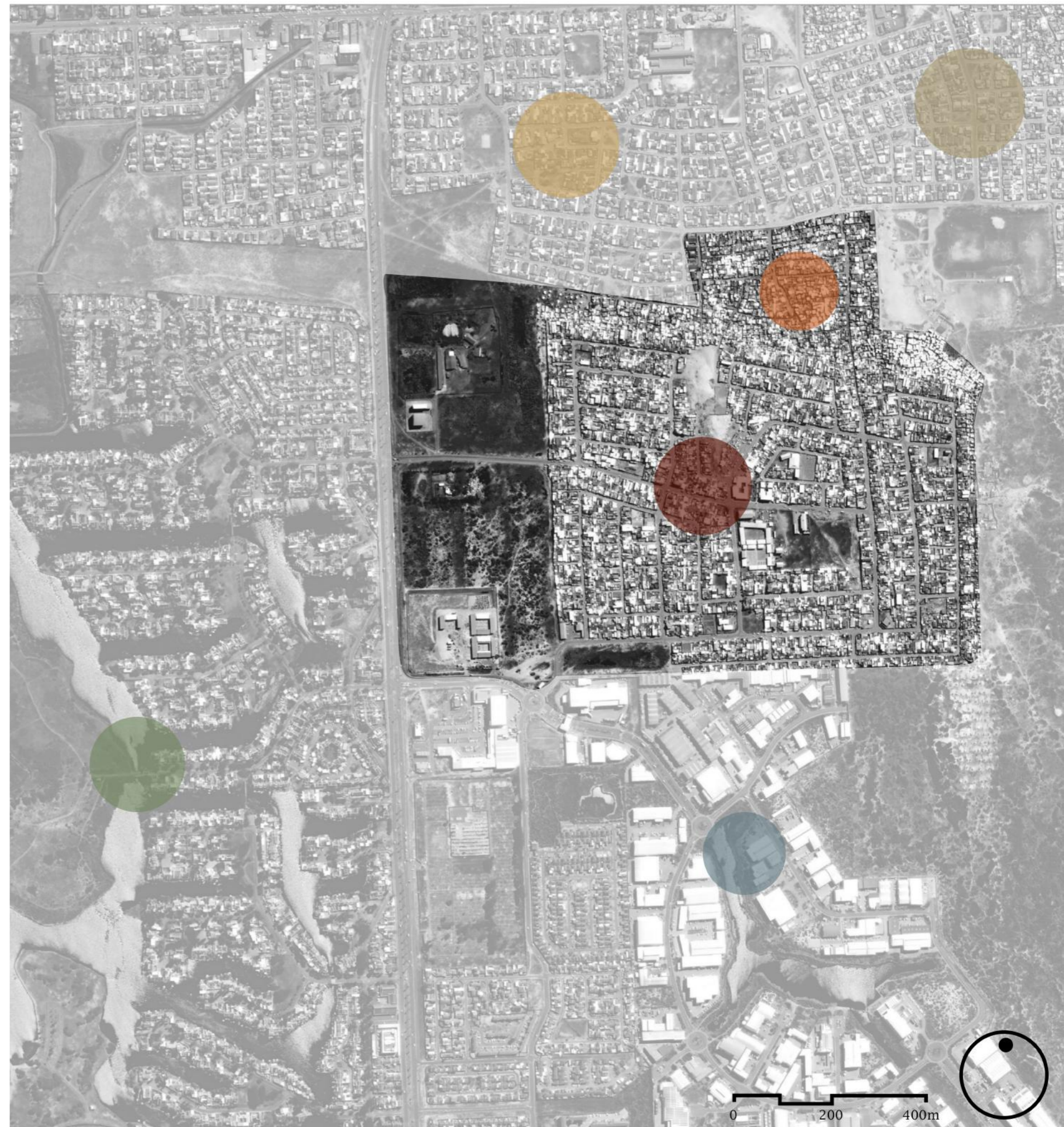


fig 25: Map  
locating Vrygrond  
in Western Cape

Vrygrond is situated along the M5 but separated from it by a large green belt. As one can note from figure 26, to the South of the area is a business park called Capricorn. South West of Vrygrond lies Marina De Gama, an affluent area built on scenic canals - the green belt that separates Vrygrond from the M5 also drives a wedge between it and Marina De Gama. This was a commonly used urban planning tool that was used to reinforce segregation in South Africa. This physical manifestation of segregation brings to light the very harsh class divide that still exists due to the country's oppressive past and makes one aware of the disparities in opportunities in the country for the subaltern and the privileged. Just south of Marina De Gama (not pictured in figure 26) lies Muizenberg; another affluent area. Just north of Vrygrond one will find Lavender Hill and Seawinds. These areas, like Vrygrond, do not have adequate access to essential amenities and are impoverished. The orange dot indicates the location of Overcome Heights. This area is considered to be apart of Vrygrond, however, the structures erected there out of a need for housing for the population of the area are on government owned land and are, therefore, strictly speaking, illegal.

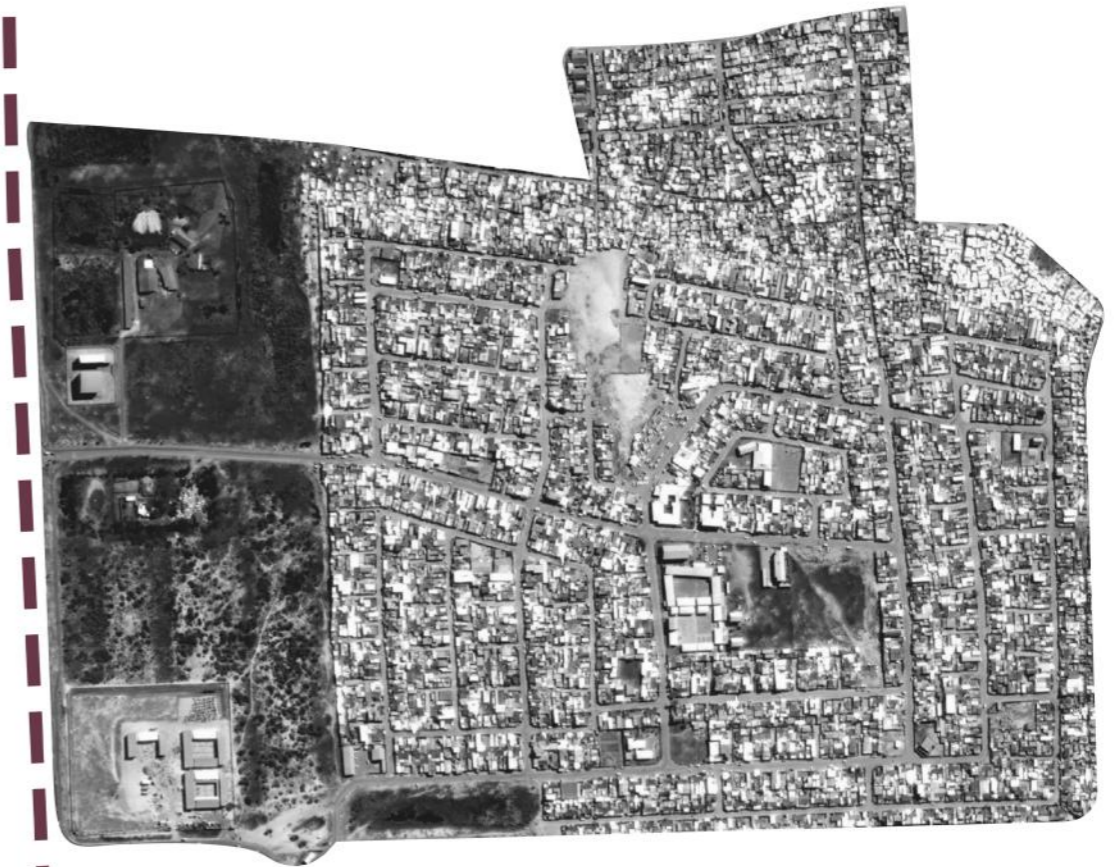
**fig 26:** Map of Vrygrond and surrounds

- Lavender Hill ●
- Seawinds ●
- Overcome Heights ●
- Vrygrond ●
- Marina De Gama ●
- Capricorn ●



The area of Vrygrond is extremely nucleated - another common tool deployed in urban planning to reinforce segregation and keep those in the settlement away from neighbouring areas - and only has two main entry points, namely Vrygrond Avenue, which cuts through the green belt, and Drury Road, which comes in from the south of the area. These planning devices heavily separate the area from its surroundings and forces it to be very much self-sufficient. Amenities in the area will be touched on in the following sections, but it is important to note here that many of the amenities in the area are found in the heart or nucleus of the area. Instead of maintaining this sort of planning as a weapon against the community, perhaps one could change it into an advantage through making proper use of the area's 'nucleus' by placing functions in it that bring to the forefront the need for nurture and embed nurture into the heart of the area.

The nucleated planning of the area creates an opportunity for a beacon of nurture in the center of the community - placing forward the imperative need for nurture in the community and acting as a recognisable space in which the youth of Vrygrond could find solace.



*fig 27: Map highlighting separation between M5 and Vrygrond*

0 200 400m



The way in which the area is planned also results in more occupation of the two roads that lead into the area - namely Drury Road which enters the area on the south and Vrygrond Avenue which takes one to the nucleus of the area. Figure 28 highlights these two roads as the ones which are the most frequented in the red dotted lines as well as others that cut through the area from north to south; namely Drury Road which is a continuation of the Drury Road on the southern most side of the area and is highlighted in figure 28 with the red dotted line on the eastern most side of the map. Due to the fact that Drury Road is one of the few streets that cuts through Vrygrond and takes one to Overcome Heights, it is well populated and surveilled. The presence of the taxi rank (indicated with the red dot in figure 28) brings a lot of traffic onto Berg street and Neville Riley Road.



**fig 28:** Map highlighting frequented routes and taxi rank

Frequented Routes .....

Taxi Rank ●

fig 29: Map of spatial densities along the most frequented roads in Vrygrond



Figure 29 highlights the built fabric around the most frequented roads in Vrygrond. Due to the populated nature of these streets one will find many informal vendors trading from their homes on the street edge or just operating on the sidewalk. The populated nature of these streets ensures safety on them through passive surveillance which harshly contrasts the dangerous nature of the green belt that separates the area from the M5. The danger of the green belt was anecdotally shared with me by an unprompted long-time resident of the area when walking through.

fig 30: Map of Vrygrond with Drury Rd, Neville Riley Rd, Berg Street and Vrygrond Ave highlighted and gateways circled

The frequented routes in the area establish two gateways (highlighted in the yellow dotted circles in figure 30) that protects the nucleus of the area. As these gateways get a lot of traffic, many people trade here which ensures continual occupation and establishes a sense of protection of the area. The gateway onto Drury Road is extended into a desire line that cuts through the green belt and connects the area to Ithemba Primary and a Pick 'n Pay.



## History & Development

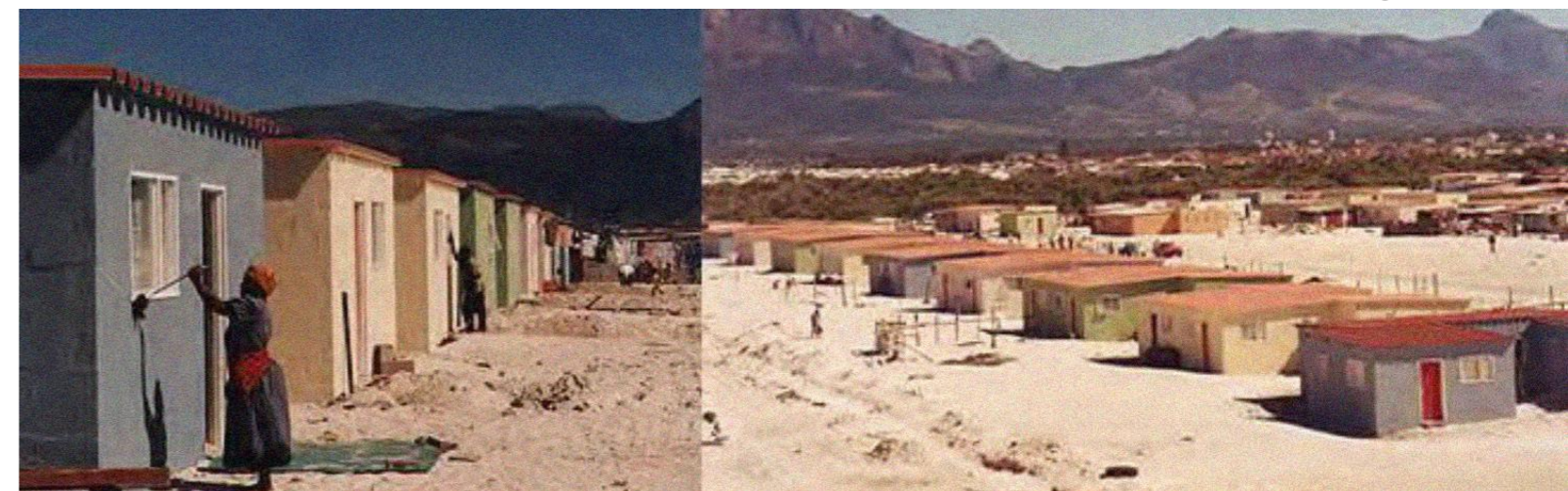
Vrygrond is thought to be one of the Western Cape's oldest informal settlements. It was first established as a fisherman's town in the 1940's so that those that worked as fishermen could live close to the coast. When it was first established it was much more dispersed, consisting of tin dwellings that extended into what is now known as Marina De Gama, Seawinds and Lavender Hill. The community has endured despite efforts from the apartheid government to remove them due to the fact that they did not own the land on which they had settled. In 1997, the Vrygrond Community Development Trust (VCDT) was established and along with it came the procurement of formalised housing between 1999 and 2002 (Davies 2014).

In the year 2000, 1600 homes were provided to the area to house approximately 8000 people (shown in figure 31). According to the 2011 census of the area, the population of Vrygrond is said to be +/- 15000 people, however, it is believed by local NGOs that the current population sits between 30000 - 60000 people. With the rapid densification of the area came problems of drugs, crime, gangsterism etc. (Davies 2014).

Craig Davies notes in his thesis that before the expansion of the population and procurement of formalised housing in the area, it was viewed by the

community as a much safer environment according to the interviews he had conducted for research. Residents recall stories of protecting one another from forced removals; ensuring that the neighbour's doors were closed if they had dozed off; keeping a watchful eye on all of the children in the community etc. Residents viewed the community as a large family. There's an ambivalence of opinion when it comes to the 'progress' of formalisation in the area as with it, it has brought violence and crime and rid the area of the social cohesion it had once boasted (Davies 2014).

Now more than ever the area calls for care. The youth are extremely vulnerable to bad influences which are rife in the community. It calls for an open sanctuary for children, to protect them from dangers of the environment and provide them with a homebase if they are lacking one of their own. It also calls for a space wherein those that care for the community and want to see it nurtured can be empowered to make change. A space wherein a sense of community can be nurtured and returned to the state it was in before the rapid densification of the area.



**fig 31:** *Initial provision of formalised housing in Vrygrond*

## 2.3

# Spaces of Nurture in Vrygrond

## Care

The map adjacent (figure 32) highlights the existing spaces of nurture for children in the area of Vrygrond. One can clearly note the concentration of larger, civic spaces of nurture - such as Capricorn Primary and the child-centered NGOs closer to the nucleus of the area. This organisation, even if not intentional, ensures ease of access and protection of these vulnerable spaces. In contrast to these larger spaces of nurture, the educares find themselves seamlessly embedded into the built fabric due to their attachment to the home which will be expanded on. There is something one can learn from the way in which spaces of care and protection such as educares weave themselves into the urban fabric. This de-alienates these child-centered spaces from the built environment - which is in stark contrast to the way in which the schools and NGOs cut themselves off from it through large green spaces and harsh boundary fences.

- High Density Spaces of Nurture
- Educares
- Primary Schools
- Child-centered NGOs
- Disused Park



fig 32: Map highlighting spaces of nurture in Vrygrond

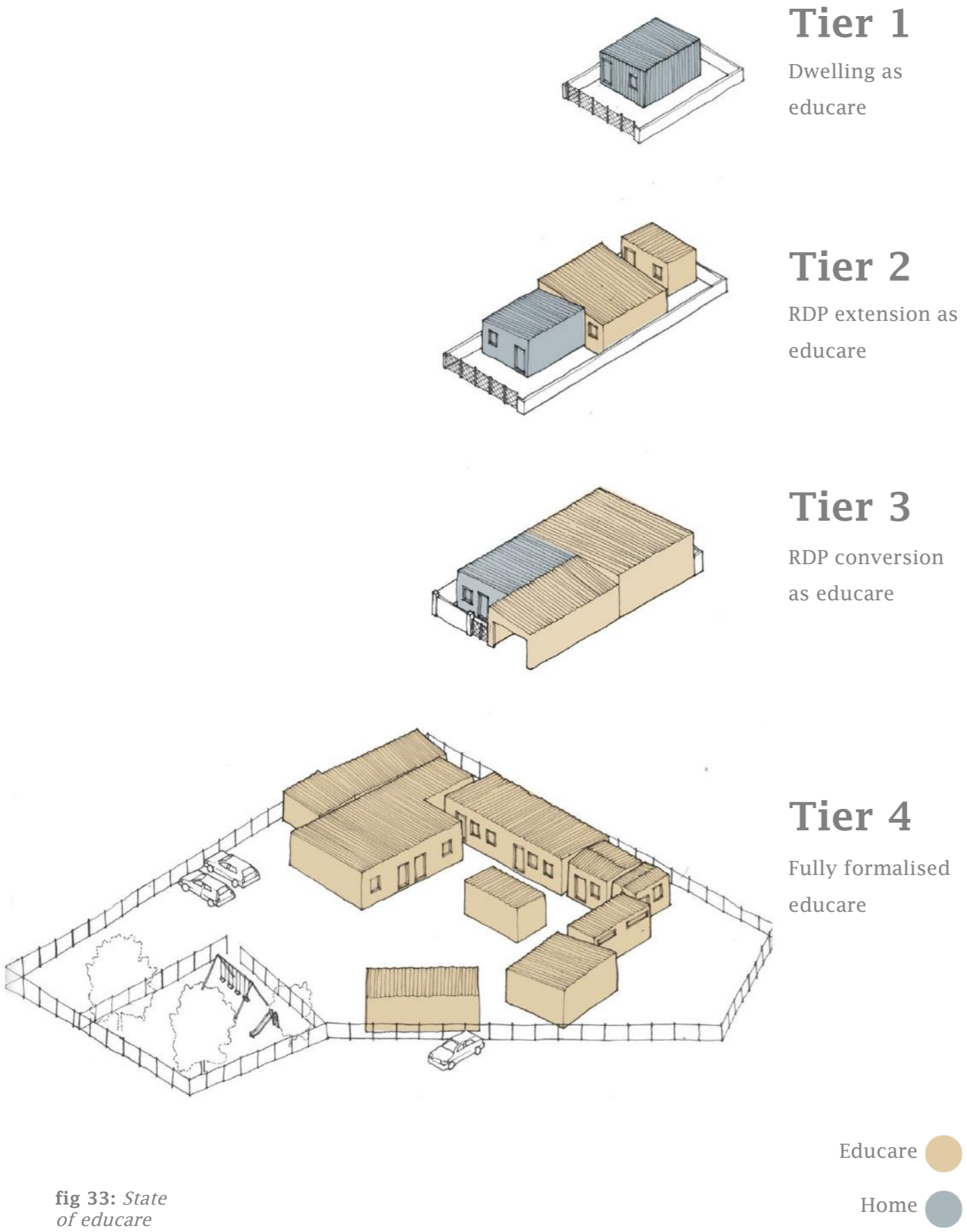


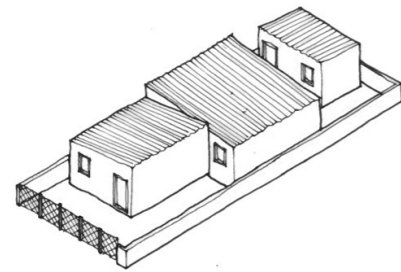
fig 33: State of educare

In the adjacent figure, the existing states of educare have been highlighted. In order to better understand the way in which educare is provided, the typical states of educare have been organised into tiers. Tier 1 depicts the dwelling as educare; where children receive familial care, staying at a relative's house while their parents are out working in the week. Tier 2 depicts the extension of the RDP to facilitate the educare as a micro-enterprise. Tier 3 is a fully converted RDP to facilitate the educare as micro-enterprise and finally tier 4 is a fully formalised educare. These are generic representations and do not represent actual educares in the area, however give the reader a sense of the existing conditions.

This dissertation aims to foster support systems for the educares that fall under tier 2 and tier 3, where women have started these educares to financially support themselves and don't necessarily receive support from the government.

It is also important to note the attachment the educare has to the home in these spaces of nurture, specifically pertaining to tier 2 and tier 3. One can start to see the connection between this provision of nurture for children that perhaps is not afforded it in their own homes. The educare essentially acts as a symbolic extension to the home in these areas - not only the one that they physically attach themselves to but also the ones that the children that attend these educares come from. As touched on earlier, the way in which these spaces of nurture seamlessly embed themselves into the built fabric further strengthens this attachment. They are not alien to the built environment as they are spaces that have been carefully conceived by community members to provide care to the youth out of necessity as opposed to being haphazardly placed in any open space like the more civic schools.

## Tier 2



## Tier 3

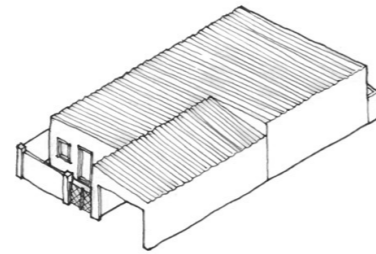


fig 34: State of educare

- Free play
- Dining
- Outdoor Play

A generic plan for educares that fall under tier 2 and tier 3 have been generated in order to try and get a sense of the way in which these spaces might have been planned to facilitate educare as an extension of home. These might not be completely accurate but gives one a sense of how much space is afforded to these spaces of care. It is clear that due to the rapid densification of areas like Vrygrond, the plots on which these educares are located do not have sufficient space for secure outdoor play for the children. This again

brings to one's attention the need for spaces that can facilitate this function as the only spaces that do are the streets of the area which are not safe or sufficiently surveilled by people that take responsibility for the children. I have previously referred to this dilemma with reference to the quote by Jane Jacobs in which states, "Underused sidewalks are not under suitable surveillance for child rearing." (Jacobs 1961). Although the sidewalks in Vrygrond are not underutilised, they are still seen as unsafe due to the crime and violence in the area. Therefore, the investment in spaces of nurture are not sufficiently reflected in the urban condition of the area of Vrygrond. Although the area has provided many spaces of nurture for children, the realm which they occupy after school hours (being the urban street due to the dense nature of the homes) does not reflect this investment. Due to the sheer amount of youth in the area, it is imperative that this change - 34% of the population of Vrygrond is under 19 years and 13% of it under 4 years of age.

There already exists an NGO called True North that provides support to those that have opened educares in the area. Their offices occupy the community centre on Berg Street opposite the taxi rank. I had the privilege of visiting this facility and talking to those that work there. Although the support that they provide is essential to the community, they take up the vital community center - a center that should be open for use by the public. It's prime location opposite the taxi rank is ideal for community meetings and gatherings but sadly, the lack of space in the area for the True North means that this center is not available for use by the public. The community center that True North occupies also does not provide space for children to occupy it. None of these issues are the fault of the NGO as they have no power to acquire alternative land for the facility.

## Protection

In order to get a sense of the streetscape of Vrygrond, I've created a collage of images taken along Drury Road, Neville Riley Road, Berg Street and Vrygrond Avenue. The numbers on the collage correlate with the numbers on the map in figure 36 to show where each of the images were taken. One can note the occupation of the two gateways along Drury Road and Vrygrond Avenue by vendors, indicated with red dots, due to the traffic these gateways receive. This occupation protects and guards the area. One can also note the



fig 36: Streetscape Collage view key



fig 35: Streetscape Collage

concentration of child-centered spaces, indicated with the yellow dots, closer to the nucleus of the area as this space is more guarded. Centralising these spaces for children, brings to one's attention their importance and need for safety. As previously explained, Jacobs explains how the reaction of urban planning to the child is to make space for parks, but she cautions against this, saying that these open spaces that are meant solely for children lack the surveillance that one can find on the ideal urban street (Jacobs 1961). There are two parks in Vrygrond, one of which is pictured adjacent which lies on Drury Road (indicated by the yellow dot labeled 3 in figure 36). This park acts as an example of why these spaces are alienating and do not provide adequate protection for the children that occupy it. It is completely fenced off from the street with only two small openings situated on the North and South side of it. The park is strewn with bits of broken glass and visibility into it is very limited due to the cumbersome nature of the fence that surrounds it. Instead of trying to integrate the realm of the child with that of the adult, the space for the child has been completely removed from the streetscape and, in turn, lacks safety through passive surveillance. Protection of the child is something that can be easily provided through cross-programming of a space; ensuring that there are adults present to keep a watchful eye on the children that occupy spaces. This strategy, however, is oftentimes ignored by urban planners due to the fact that children's activities are viewed as destructive and disruptive. An attitude that could change if a successful integration of the child and adult realm were to be achieved. Although the streets of Vrygrond are alive with activity, this isn't being taken advantage of to ensure protection of the child-centered spaces that exist in the area.



*fig 37: Disused  
Park on Drury Road*



fig 38: Rosemary Educare on Vrygrond Avenue

## Part 3

### Building Nurture



fig 39: Conceptual Brief diagram

## 3.1 Brief Care & Protection

A brief of nurture through architecture should ensure the provision of care and protection to the growing through the built environment. Therefore, the brief will be split into those two aspects. In order to achieve care through the built environment, it needs to be assured that those that are making spaces of care are empowered and supported. The networks of care that exist in a space should be brought to the public's attention through physical manifestation. The physical manifestation of these networks of care will hopefully, in turn, bring about the protection of these spaces. The brief of care and protection was explored through conceptual diagram shown adjacent (figure 39). The diagram depicts a central space of nurture that connects itself to spaces of care that are embedded in the urban environment. The embedding of an intervention of nurture into the urban environment ensures spaces of solace and protection to the child throughout the community. It softens the harsh boundaries that have been erected between the realm of the child and that of the adult. The integration of child-centered and adult-centered spaces through cross-programming could be a strategy through which to achieve protection of children that occupy the urban realm. An intervention that connects spaces of nurture to the preexisting urban environment and provides care to spaces of nurture will be explored through design.

fig 40: Map locating chosen site in Vrygrond

## 3.2

# Placing Nurture

## Locating Site

The site that has been identified (highlighted in the map with a yellow dot) is an open space that sits on Capricorn Primary's property. I've chosen this site as adding programme here will assist in the de-alienation of the child-centered spaces. Capricorn Primary sits isolated from the urban environment by means of large, open green areas that have been fenced in. Upon visiting the site it was clear to me that the space was not adequately used by the school and adding function there could soften the harsh boundary that has been created between the child-centered and adult-centered environment.

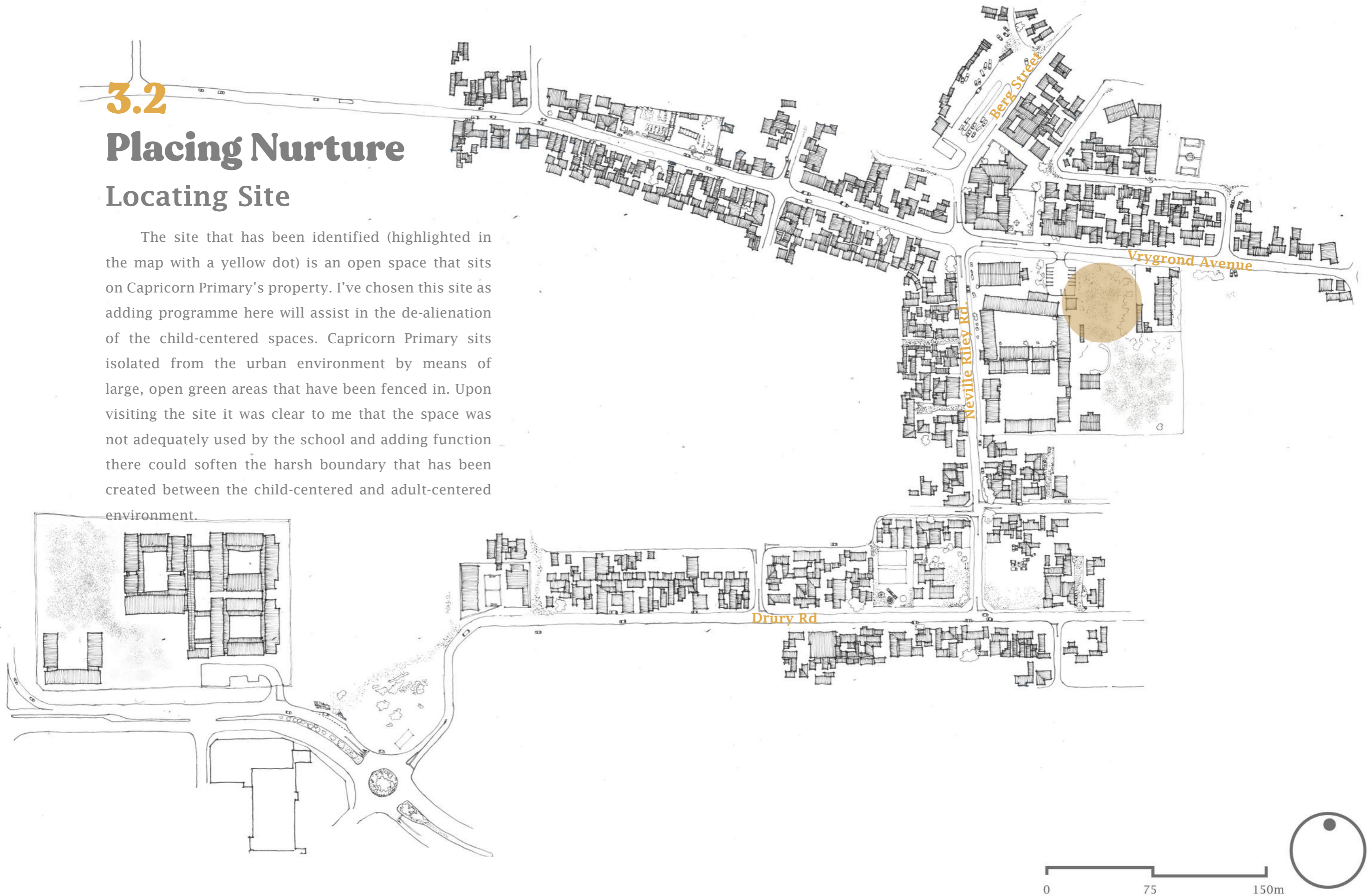
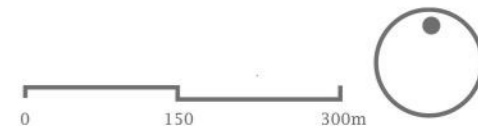




fig 41: Map  
locating chosen  
site in Vrygrond



## Spatial Densities

I've generated an axonometric drawing of the site to get a sense of the spatial densities of the immediate surroundings. It is interesting to note from the drawing adjacent the stark contrast between the space that has been afforded to the school and that which has been afforded to homes. The rapid densification of Vrygrond has seen the space afforded to the dwelling dwindle, pushing children out of their homes and into the urban environment which can sometimes be unsafe. Children play in the streets of the area wherein there is also a lot of crime and violence due to the cramped conditions the population have to endure. The amount of underutilised space that sits open in the very heart of the area calls for function to be added due to the fact that this is a very populated street and, therefore, offers the opportunity for passive surveillance to be afforded to a child-centered facility which doors could be open to children after school hours. The choice of this site opens up discussion pertaining to the way in which schools are intrinsically alienated from the urban environment as this is seen as a method of 'protection' of the vulnerable children which occupy it. However, I want to challenge this traditional method of safety by using methods of softening in order to ensure protection. Creating a boundary that is so harsh and stark suggests that the realm that children occupy should be separate to that of the adult. A method of integration will be used to afford passive surveillance to child-centered spaces.

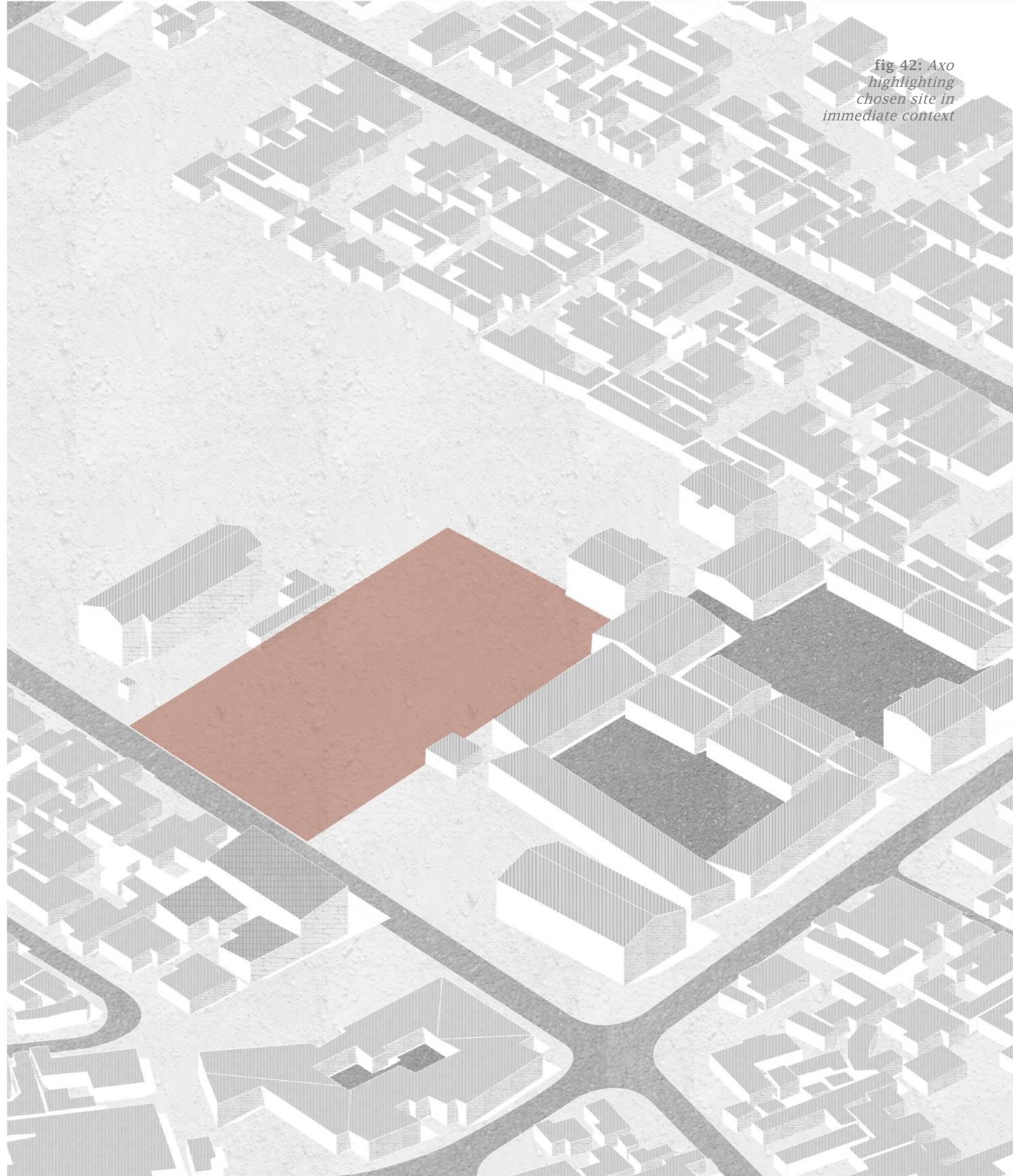


fig 42: Axo highlighting chosen site in immediate context

## Climate

The chosen site has little to no shading provided by trees and adjacent existing buildings. For this reason it is important to account for the sun path and prevailing wind direction to ensure spaces are adequately lit and sheltered from the wind. Spaces of learning need to be well lit but should, however, avoid harsh, direct sunlight as this can be distracting to children. The prevailing wind, (namely the south easter), indicated on the adjacent diagram with arrows, calls for protection of open spaces on the south eastern side as there are no buildings to provide shelter on that corner.

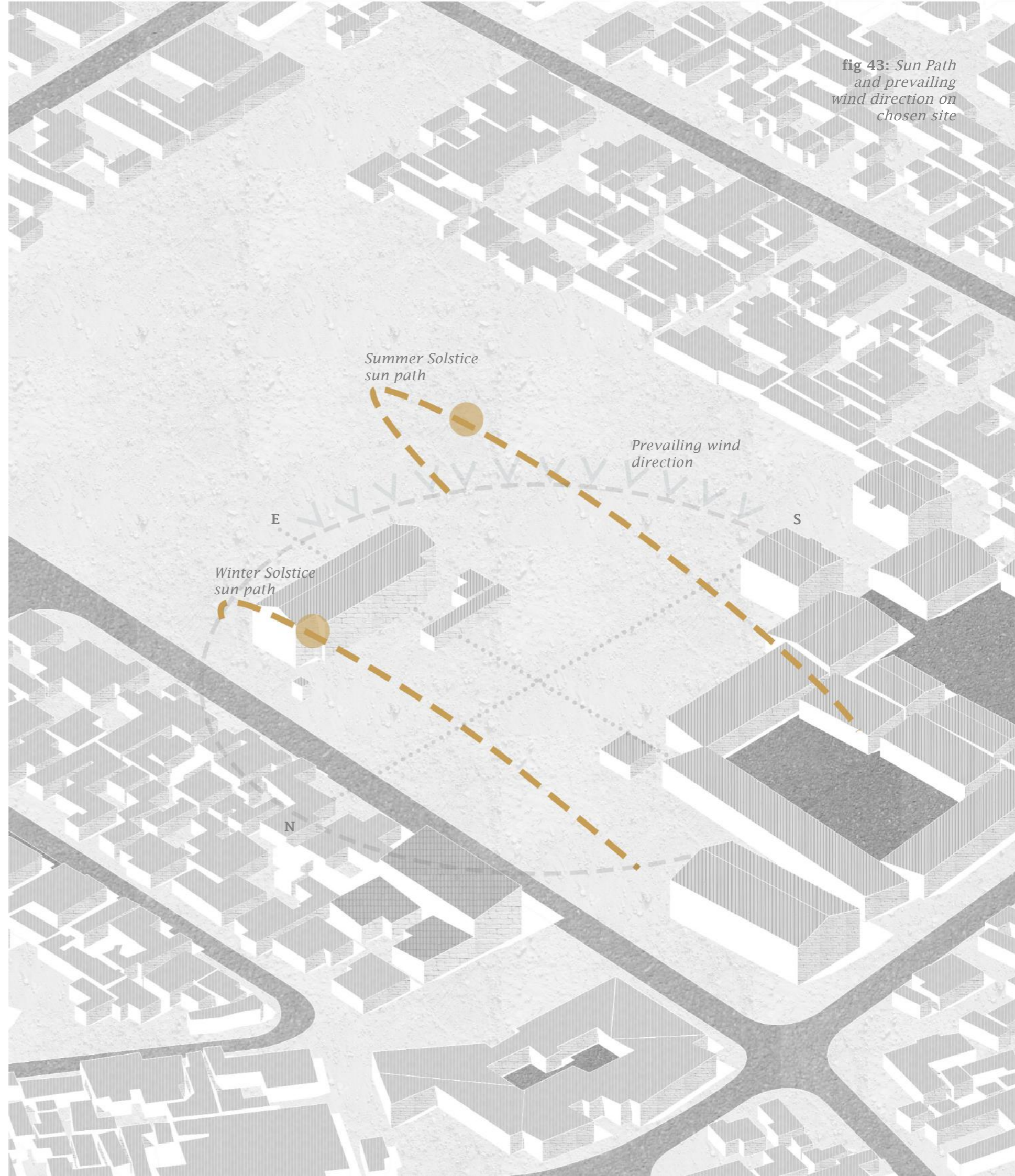


fig 43: Sun Path and prevailing wind direction on chosen site

## Unit of Nurture

As previously noted, there is a large investment in spaces of nurture in Vrygrond. There are quite a few spaces of nurture that are in the immediate vicinity of the chosen site shown in figure 44, namely, Capricorn Primary indicated in orange, a few educares indicated in yellow, True North (the building indicated in red at the bottom of the figure) and the SOZO foundation (also indicated in red on the left edge of the figure). The chosen site nestles itself on the underutilised grounds of Capricorn Primary. In placing it here, the opportunity to break down the large scale of these spaces of nurture into a unit that responds better to the urban scale presents itself. The intervention is something that could be utilised by the children that occupy all of the spaces that have been highlighted in the adjacent figure. The site also presents the opportunity to break down the harsh boundary between the child- and adult-centered realm which could assist in the de-alienation of the child from the urban. This can be achieved through inviting occupation by adults of the child-centered space by utilising the strategy of cross-programming. This will ensure protection of the children that occupy the street and intervention.




- Educares 
- Primary Schools 
- Child-centered NGOs 

fig 44: Unit of Nurture highlighted in immediate surroundings of chosen site



## 3.3

# Programme of Nurture

## Case Study: Ikhaya Le Themba

In order to realise an effective programme of nurture, it is necessary to look at an intervention that has been successful in providing it. I was lucky enough to get the opportunity to visit iKhaya Le Themba; an NGO that provides aftercare and meals to children in Imizama Yethu in Hout Bay. The facility caters for about 110 vulnerable primary school children between the ages of 6 & 13 and provides them all with lunch as well as assisting them with homework and providing them with care if they are not receiving adequate nurturance from

- Ikhaya Le Themba Classrooms
- Sakisizwe Classrooms
- Library and Hall
- Kitchen

their home environments. The facility not only provides care for the children that attend but also support to their families who are affected by poverty and HIV & AIDS (a massive problem in South Africa). Providing care that extends past the child and touches their home environment ensures that this cycle of poverty is not continued. The facility has been going for over 18 years - its maintained position in the community demonstrates the need for the facility. Tackling the issue of poverty by providing care and protection to those that are born into it has proven itself to be a successful methodology and iKhaya Le Themba acts as an exemplar of this strategy's success. iKhaya Le Themba shares its grounds with Sakisizwe, a facility of similar nature but caters to those in highschool - providing extra lessons, social gatherings as well as catering food. Many of the children that attend iKhaya Le Themba, graduate primary school and go into Sakisizwe and this shows how the space acts as a second home to children of the area as they want to stay due to the care and protection the space provides them with.



fig 45: Elevation of iKhaya Le Themba Collaged

The facility sits perched up on the South Eastern most periphery of Imizama Yethu in what seems to be a precinct of nurture. Highlighted in red in the map adjacent is iKhaya Le Themba and highlighted in yellow is an educare called Little Lambs and in orange is the High School. This creates a very child-centred environment set in lush greenery. Although iKhaya Le Themba is a successful model, the isolation of the facility does raise some concern. As it is quite removed from the dense built fabric of the settlement as well as is mostly surrounded by child-centred spaces, it may look like a very easy target. I feel as though in order for a space of nurture to be truly successful, it needs to embed itself into intrinsically adult-centered spaces to ensure that it is passively surveilled. By removing it from the built fabric of the houses by means of fences and open space, it alienates these child-centered spaces from the urban fabric when they should be integrated and carefully woven into it. With this being said, it is important to acknowledge and applaud the success of the facility and the care and protection it has provided to the vulnerable youth of Imizamo Yethu, however, the intention behind this design dissertation is to seamlessly integrate child-centered spaces of nurture into the adult-centered urban environment to bring to people's attention the importance of these spaces as well as ensure they are passively surveilled by the adult population.

fig 46: *iKhaya Le Themba in context*

- Little Lambs ECD
- Hout Bay Highschool
- Ikhaya Le Themba



iKhaya Le Themba is very intentional in its configuration. The facility seemingly creeps up the slope safeguarded by Sakisizwe's kitchen next to the western entrance and surveilled by iKhaya Le Themba's kitchen perched on the highest point of the plot on the eastern periphery. By placing the kitchens on either side of the facility, the more vulnerable functions such as the classrooms are protected. The classrooms have been placed to create a court wherein children can play in their free time, highlighted in the adjacent map by a yellow dotted line. The configuration of the classrooms safeguard this open play area from the more open southern periphery. The placement of the classrooms also ensure that this court is surveilled at all times. The court is lined with timber stands which encourage occupation and, in turn, surveillance of the area. All the classrooms face north to ensure adequate lighting but they all have a lean-to roof on their northern facades to avoid harsh, direct lighting as this is not ideal for spaces of learning. Instead of direct lighting from the facade, there are windows higher up to ensure the space is lit despite shading. The kitchen perched on top of the eastern side of the facility acts as somewhat of a beacon for the facility and ensures that the workers can constantly have their eyes on the children if they are playing outside. Next to the kitchen sits a vegetable garden, highlighted with a green dotted line, that serves both the kitchen and acts as a space of learning for children. The organisation of the facility was clearly thought out to ensure the care and protection of the vulnerable children that occupy the space.

- iKhaya Le Themba Classrooms ●
- Sakisizwe Classrooms ●
- Library and Hall ●
- Kitchens ●

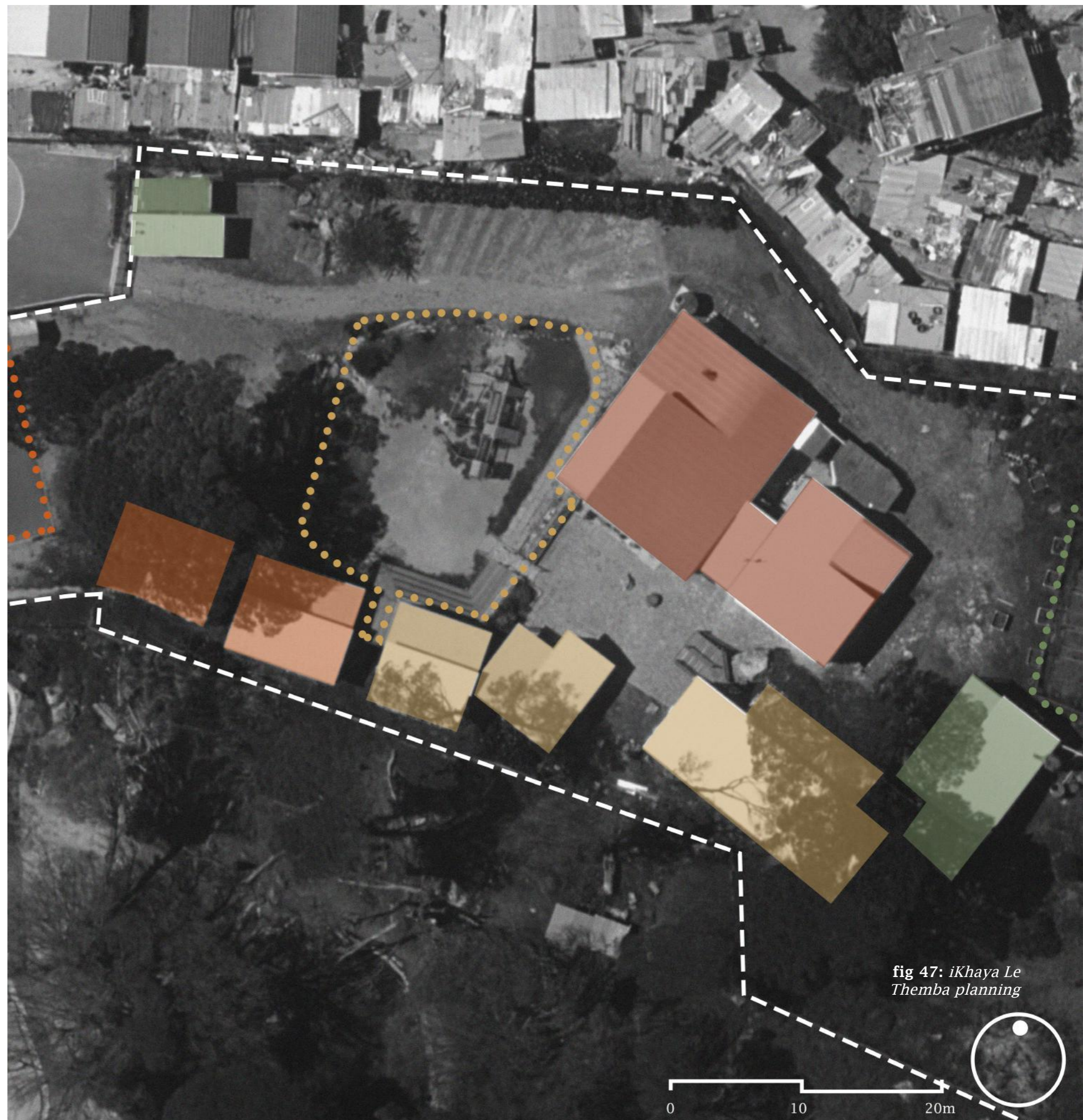


fig 47: iKhaya Le Themba planning

## Refining Programme

A programme suitable for the brief will ensure occupation by both the adult and the child to make sure that the space which the children occupy is adequately surveilled. This will be achieved through cross-programming i.e. including functions for both the child and adult. However, it is important to ensure that the programme is for the child first and foremost, therefore, most functions will be dedicated to the child. The spaces which are allocated to the adult is only to ensure the softening between the urban realm and the space for the child. Figure 48 depicts the use of space in the programme. The children's center will consist of 4 multi-purpose classrooms, a kitchen and dining area, ablutions, a pediatric consultation room, stores and staff room. The adult training centre will provide skills training for those who are unemployed and did not attend or complete high school as well as provide support and training to educate owners and teachers to empower them to continue to nurture the youth. The outdoor play area will consist of a half-court as well as vegetable gardens for learning purposes and a forecourt wherein children can play under the watchful eye of those that occupy the facility and the street. The toy library and library will be open to the users of the facility as well as contain a computer laboratory for use by those that need it.

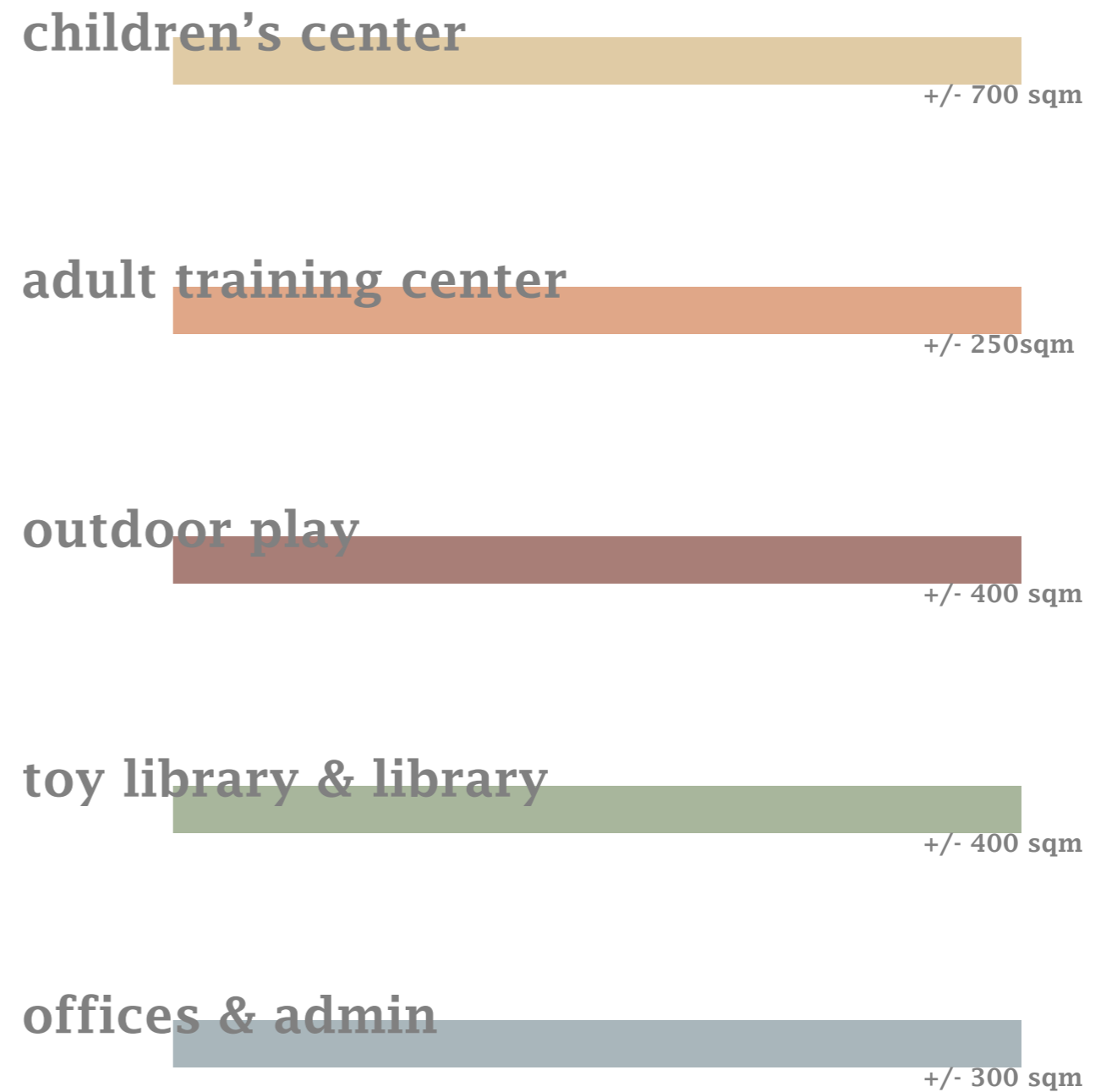
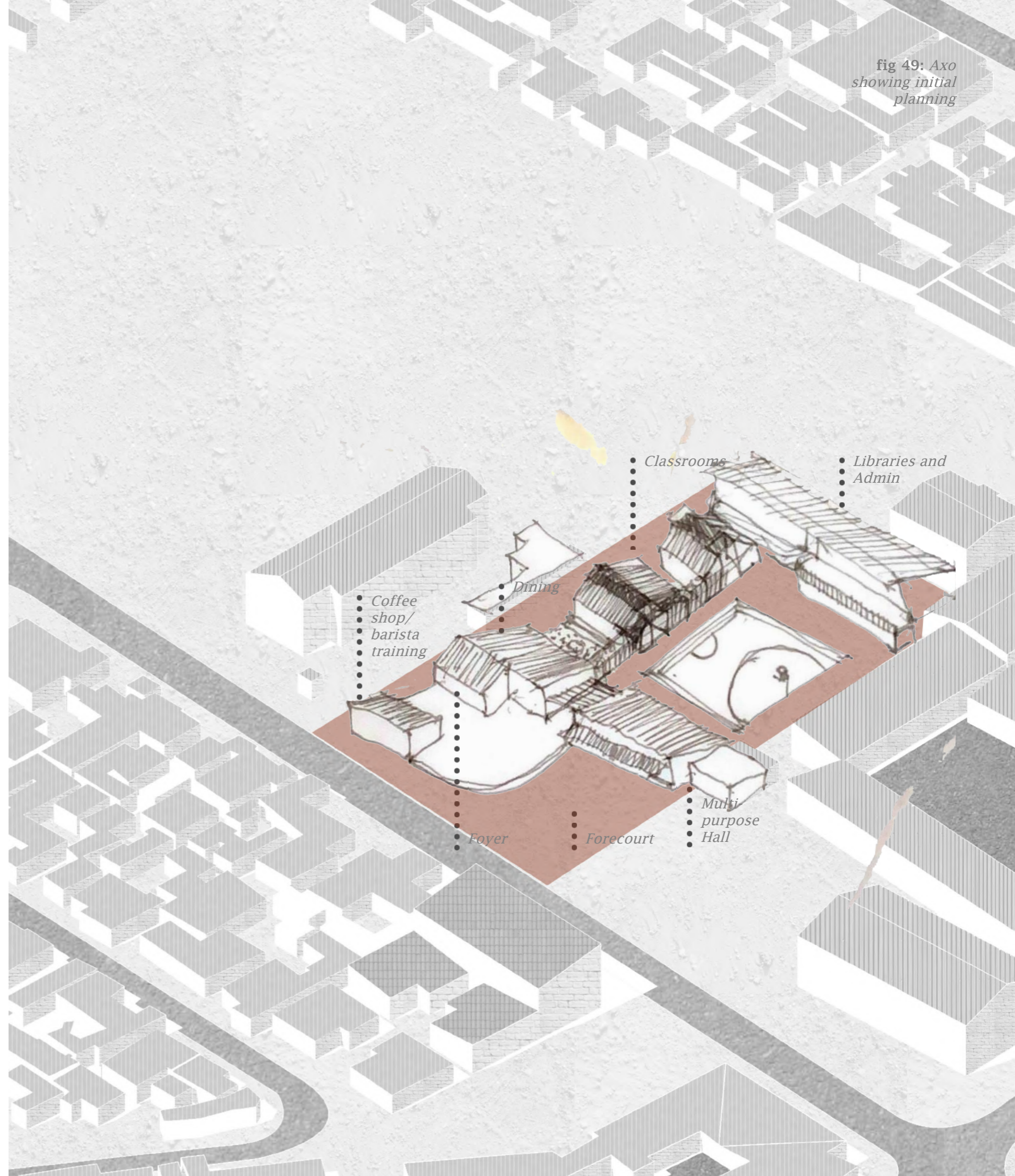


fig 48: Program diagram

## 3.4 Building Nurture

A rudimentary plan for the intervention has been established which looks mostly at the mediation between the urban and busy realm of Vrygrond Avenue and the space of nurture that is going to be created. The adjacent diagram depicts this initial exploration. There is still much that has yet to be explored and a number of issues that have to be tackled in order to ensure the care and protection of the growing in the community of Vrygrond. These include, the interior expression of the intervention and how it will create spaces of stimulation, variation and isolation for the child; the interfaces that are created between the adult-centered and child-centered realm; the way in which the building responds to light and the desired lighting conditions in each one of the spaces just to name a few. What I have begun exploring is how to break down the institutional nature of large child-centered spaces through the exploration of smaller and more broken down forms that respond to the scale of the child and have a welcoming and intimate presence.



## Fronting

I approached the process of building nurture through an attempt to navigate the fine line between protection and care. My design, at its root, aims to find a way in which to achieve safety without creating an alienating space. Therefore, techniques of passive safety were introduced.

Passive safety was achieved through ensuring that the public interface of the intervention encouraged occupation. I placed more public functions along the busy Vrygrond Ave. namely the library and cafeteria. A small café fronts the scheme in order to bring foot traffic which in turn protects the entry into the space.

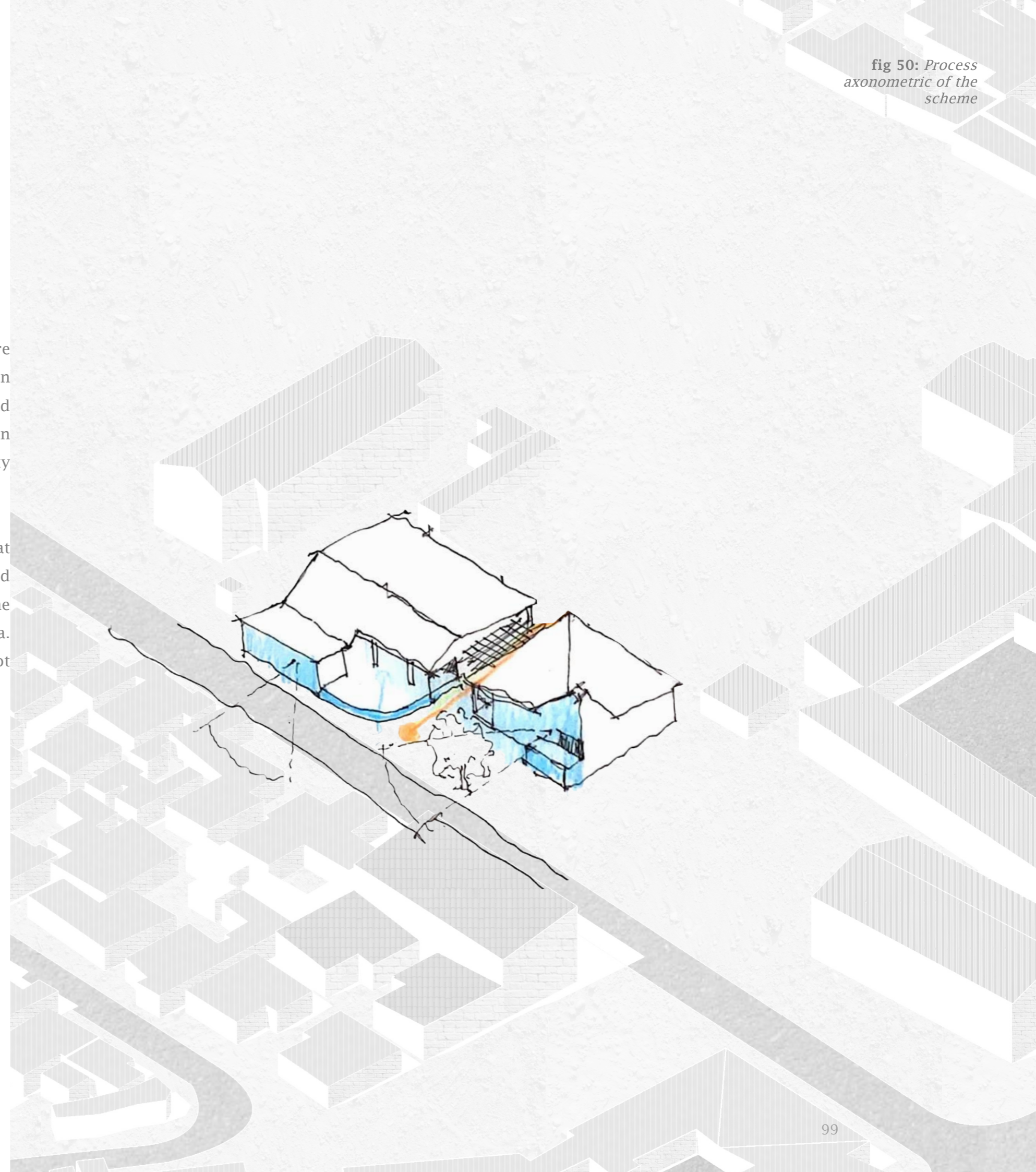
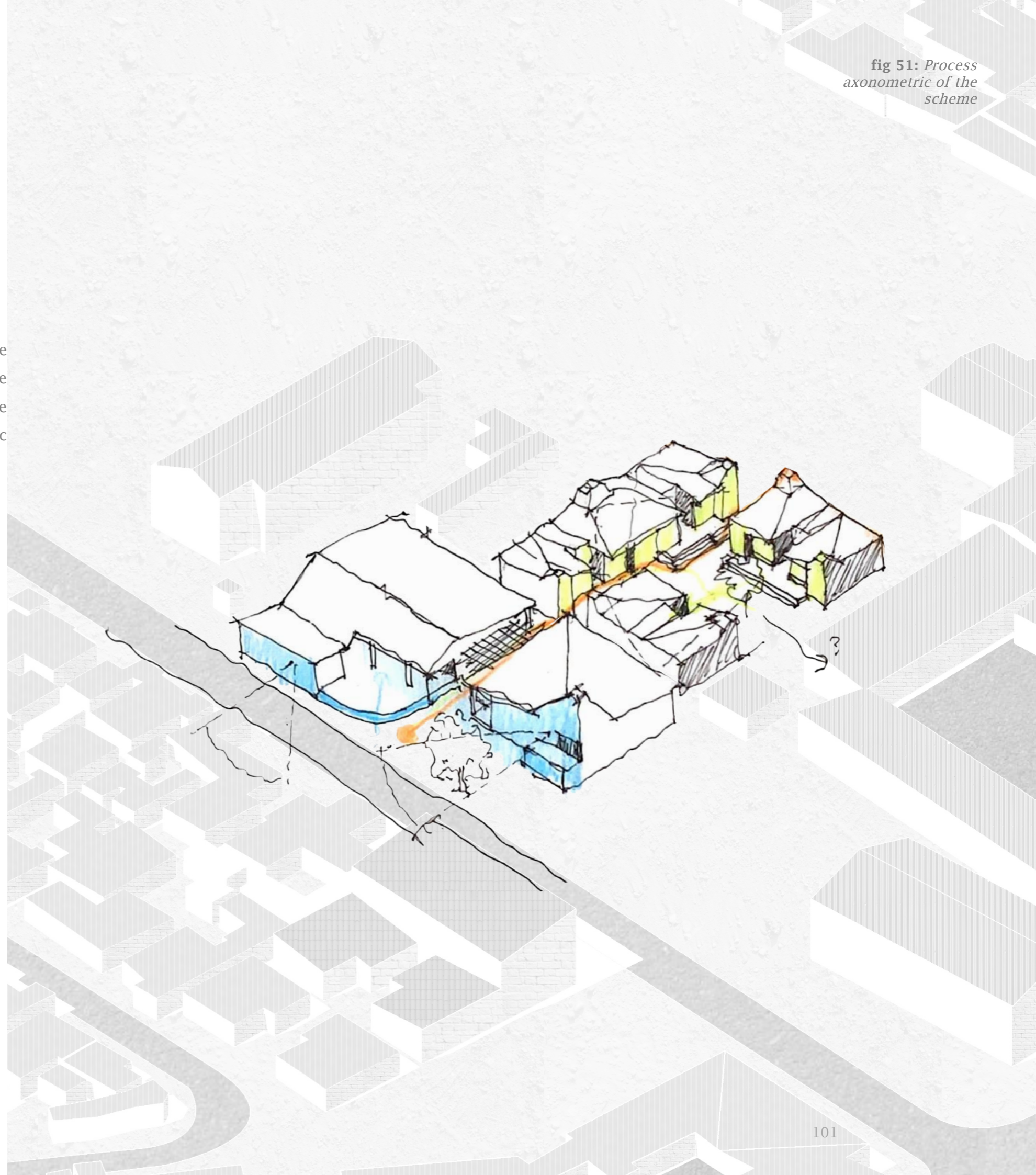


fig 51: Process  
axonometric of the  
scheme

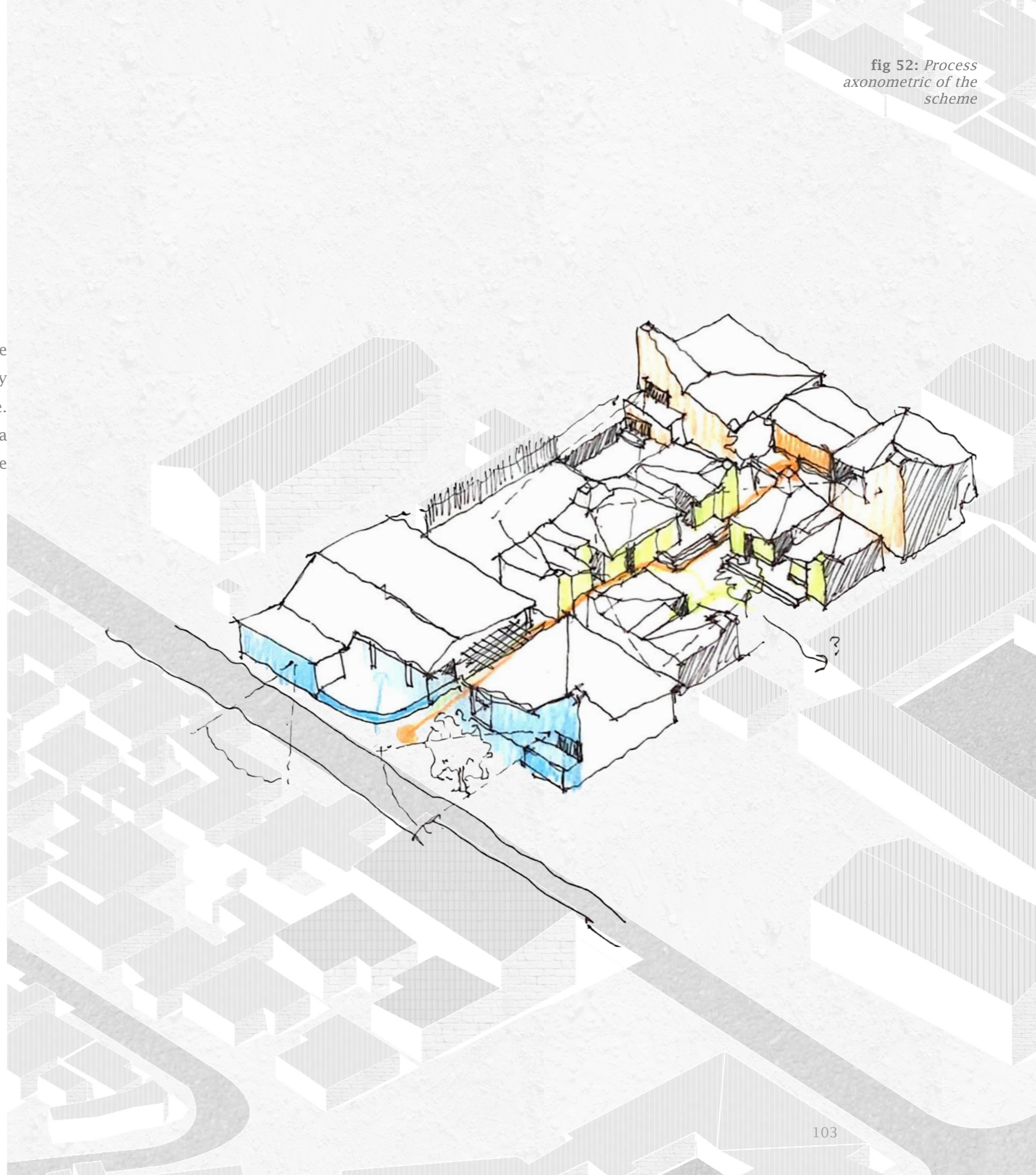
## The Heart

In order to get deeper into the site one would have to walk between the cafeteria and library to reach the classrooms. The classrooms break down the scale of the intervention and contrasts the more prominent public interface.



## Ending

Holding the South end of the site is the educare support, administrative functions and toy library catching occupants at the end of the axis of the site. Bordering the classrooms on the eastern edge is a vegetable garden which softens the eastern edge to the barren landscape of the catchment area.



## Cafeteria and Cafe

Fronting the scheme is the small café and raised stoep to encourage gathering at the entry point of the intervention to ensure safety the occupation. The cafeteria can be entered from the stoep by means of a relatively concealed doorway in order to maintain privacy or from the side of the facility. Visual connection between the cafeteria and the stoep is created by a large curtain wall on the northern edge that sits above a bench that connects the interior with the stoep. The large stoep space could be utilised for community gatherings for which the cafeteria could cater for.

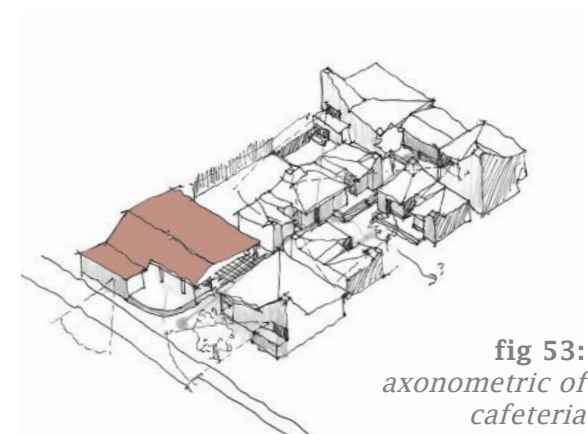
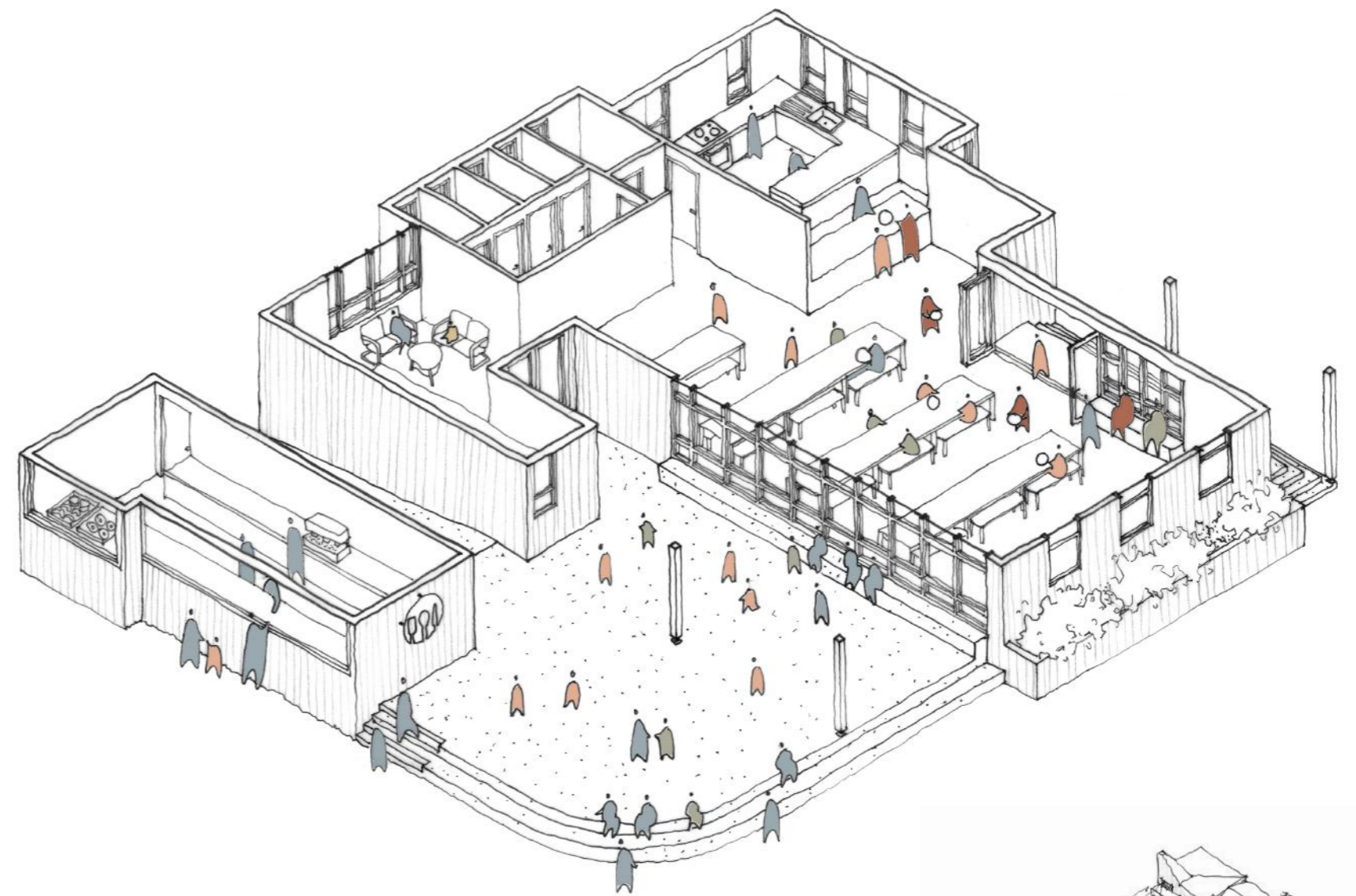


fig 53:  
axonometric of  
cafeteria

- Adults
- Teenagers (14-18)
- Intermediate Phase (9-13)
- Foundation Phase (5-8)
- Toddlers/babies (0-4)

## Public Library

Adjacent to the cafeteria sits the public library which can either be accessed by the public or the inhabitants of the facility.

- Adults ●
- Teenagers (14-18) ●
- Intermediate Phase (9-13) ●
- Foundation Phase (5-8) ●
- Toddlers/babies (0-4) ●

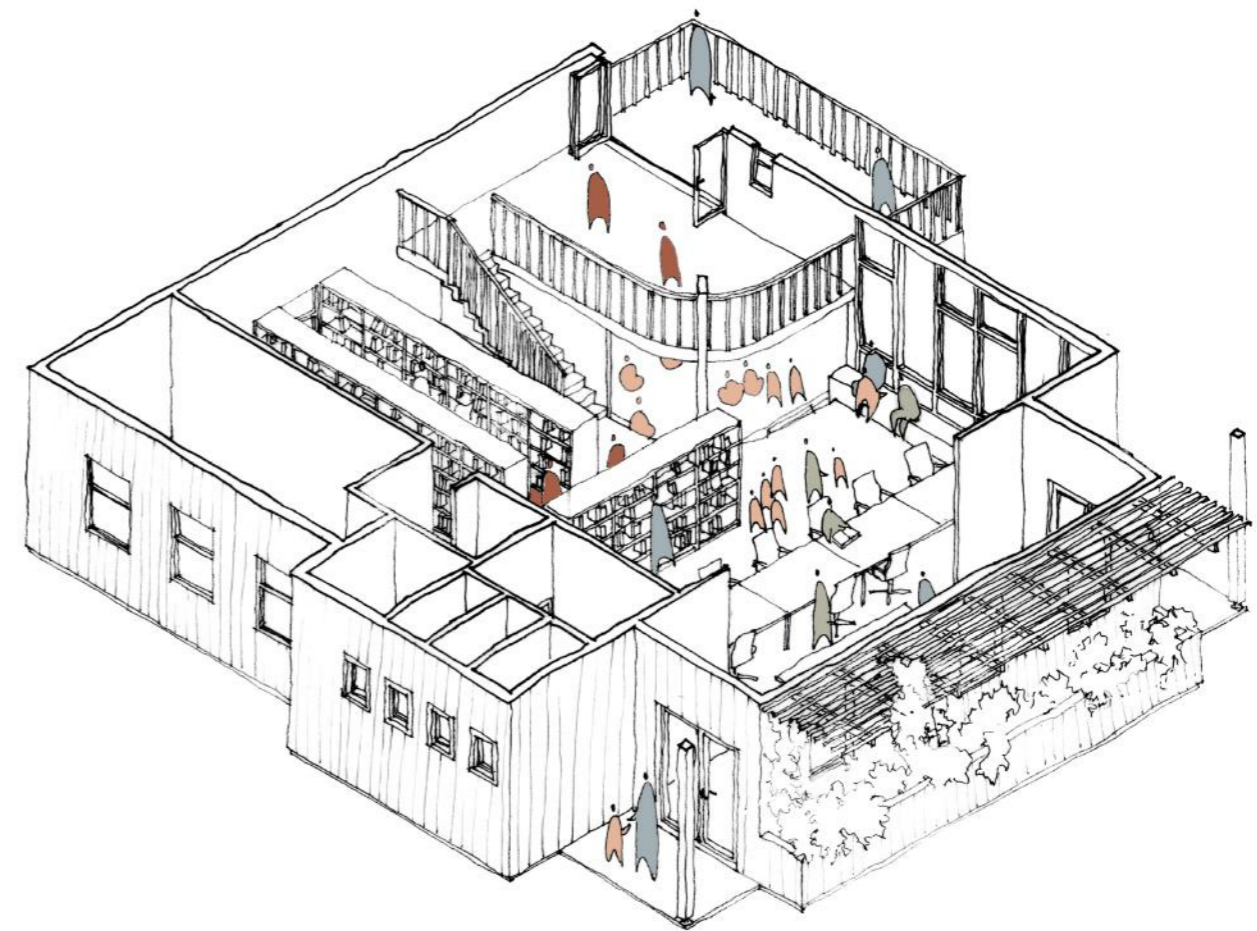







fig 54:  
axonometric of  
public library

# Classrooms

The cluster of classrooms organise themselves around a shared courtyard. It is important to note here that external play space has not been divided for children of different ages. When designing I aimed to free up as much as the ground plane as possible in an attempt to encourage children to explore the external spaces of the intervention. This will enable them to exercise their autonomy in a space that is protected and will enable them to organise themselves however they wish to without being overly controlled. Stoeps and window seats line the facades of the classrooms and define the courtyard space adding a layer of privacy to the internal spaces.

- Adults 
- Teenagers (14-18) 
- Intermediate Phase (9-13) 
- Foundation Phase (5-8) 
- Toddlers/babies (0-4) 

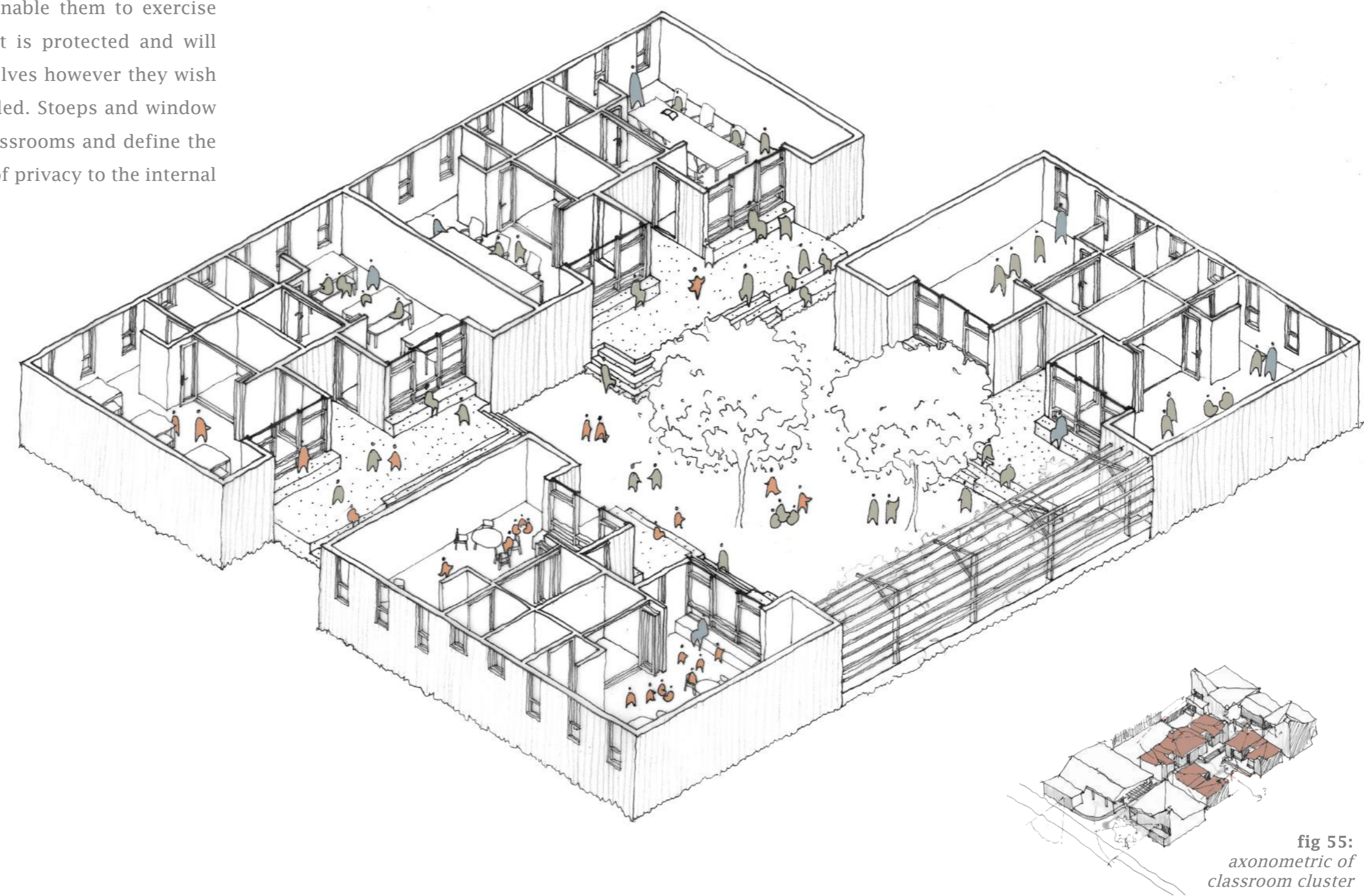


fig 55:  
axonometric of  
classroom cluster

## Educare Support Centre

On the south-western-most corner of the site sits the educare support centre which houses a small kitchen and cafeteria for toddlers, a small consultation room for children, a sleeping room and administrative functions such as meeting rooms and offices wherein women can receive support to help them run the educares that they have opened for the community.

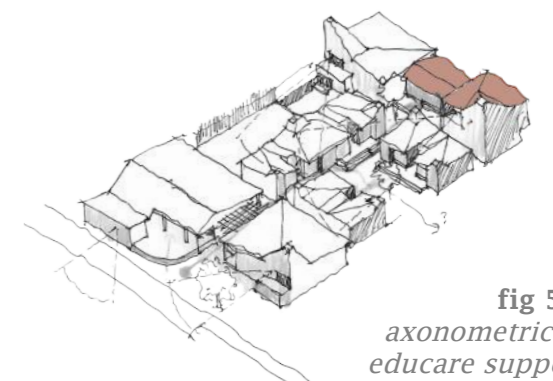
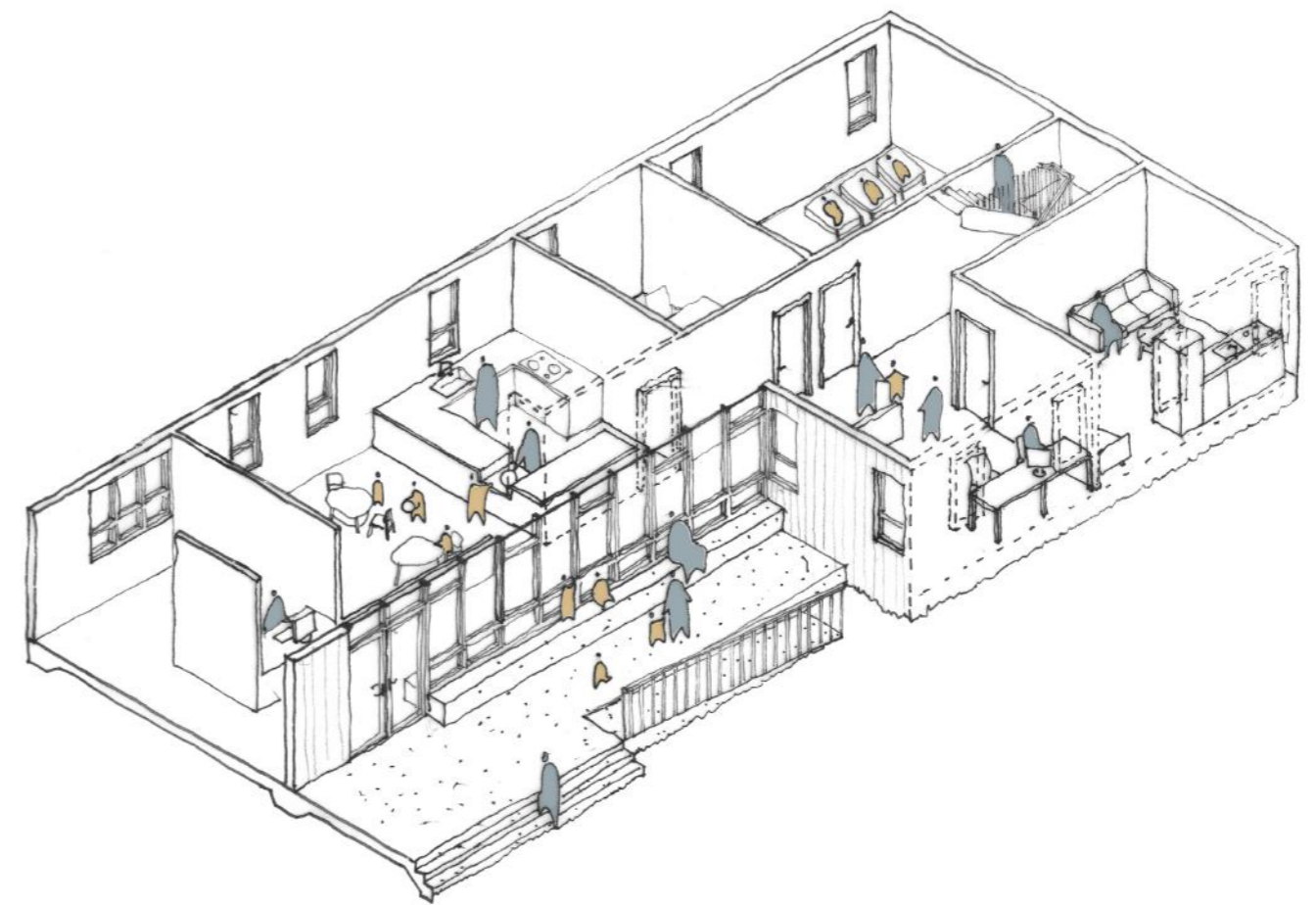
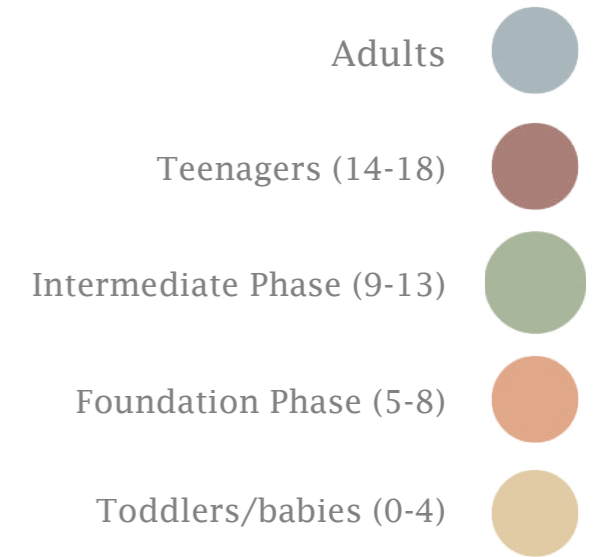


fig 56:  
axonometric of  
educare support

## Toy Library and Nursery

The toy library (which doubles as a nursery for toddlers) sits at the south-eastern most point of the site. This is a space wherein children from ages 0-4 can play while women receiving support for educare occupy the support centre. Timber has been used to create shelving that defines the internal spaces and create spaces of privacy. The toilets have been designed to the scale of the toddlers as well as have glazing to ensure that they can be watched by the adults in the toy library but are too high to be seen by the other children. The sunken playpit extends out onto an external sunken play area that separates toddlers from the primary school children – a way in which I have played with the ground plane to create varied spaces of privacy in lieu of harsh boundary fences.

- Adults ●
- Teenagers (14-18) ●
- Intermediate Phase (9-13) ●
- Foundation Phase (5-8) ●
- Toddlers/babies (0-4) ●

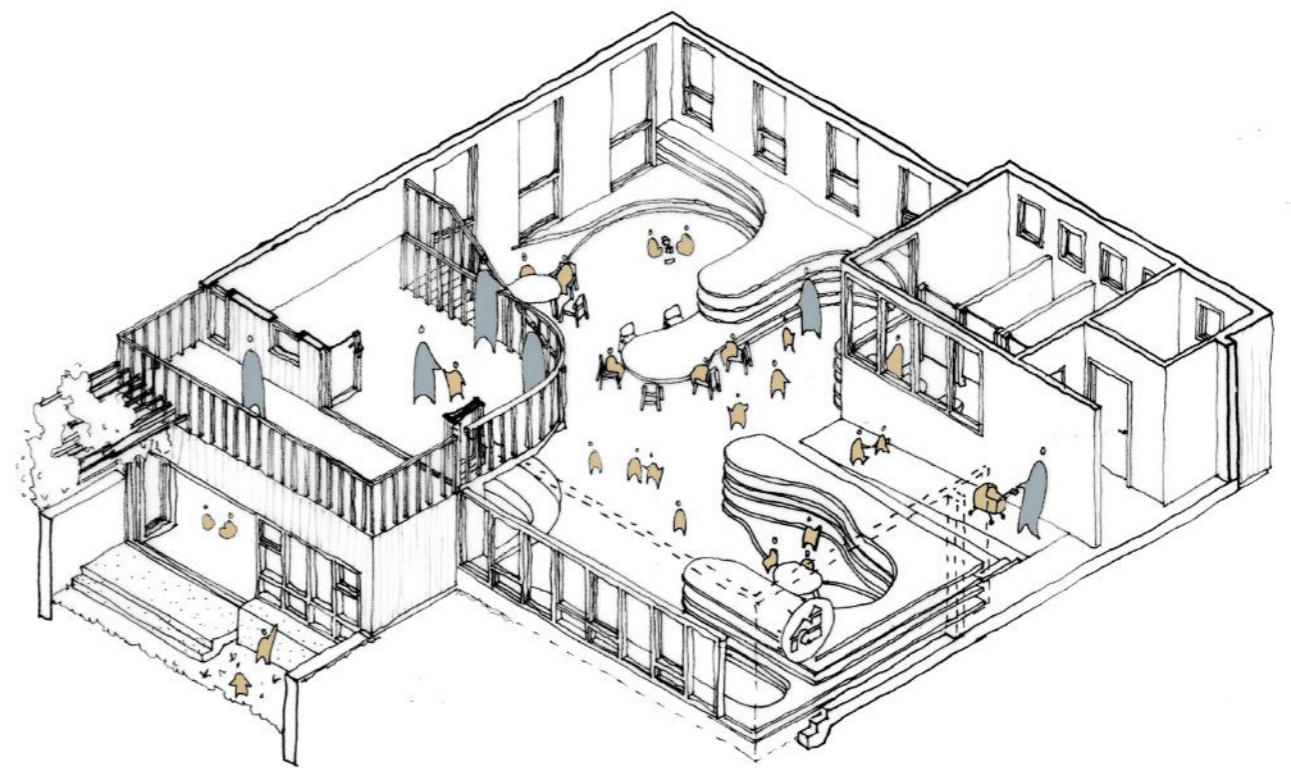


fig 57:  
axonometric of toy  
library

## Ground Floor Plan

These spaces come together on the ground floor plan, shown adjacent, which makes apparent the limited use of physical barriers within the intervention so as to let children exercise their autonomy in a space that is protected by the occupation of the entrance. A clear north-south axis is created through the spatial arrangement of the separate buildings. In making the buildings separate, it frees up the exterior ground plane which is been made into a varied space through the use of steps, stoeps, window benches, and sunken areas to create varied levels of privacy as well as spatial stimulation for children. Playing with levels to create degrees of privacy in lieu of harsh boundary fences ensures that the children occupying the space do not feel restricted.



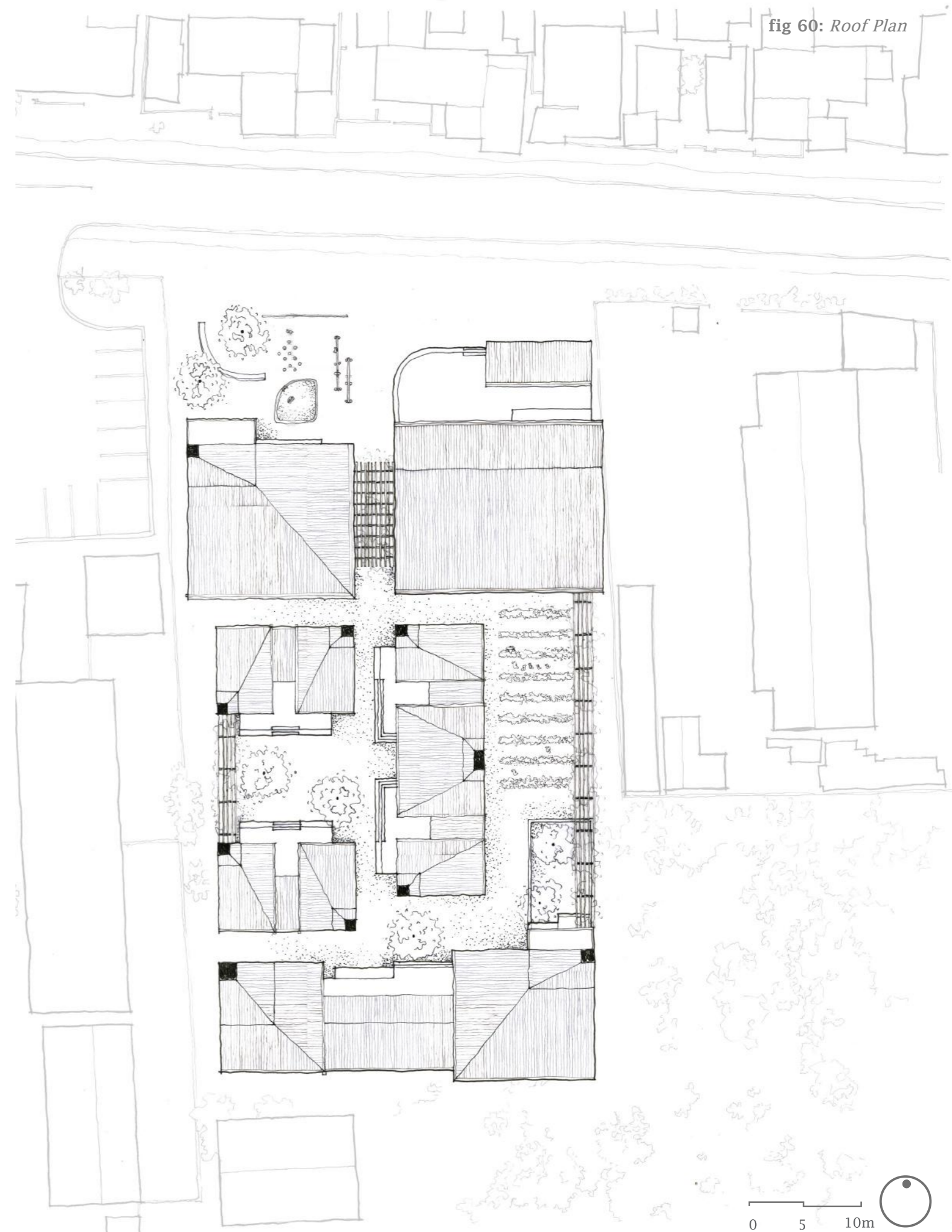
## First Floor Plan

The first floor and mezzanine levels are very limited and mostly intended for use by adults. These higher points act as beacons for the intervention as well as points of surveillance for adults. It also flips the norm of the hierarchy of space - giving the child the more expansive space and the adult the space which is more confined.



## Roof Plan

The roof plan expresses the varied nature of the roofscape both in scale and height. The roofscape contrasts that of the spaces of nurture in the vicinity of the intervention - the roofs have been broken down to create a varied and stimulating environment for the children that occupy the space which breaks up the monotony of the adjacent spaces of nurture. The intervention does separate itself from the rest of the environment through form and scale as it has been established that the existing urban environment is not adequate for the child, and they deserve a space that has been specifically designed with them in mind and breaks away from the monotony of the urban environment outside of it adding to their preexisting spatial palette.



## Northern Elevation

Illustrated below is the northern facade that fronts the busy Vrygrond Avenue. The building is constructed from cross laminated timber to ensure a stimulating and warm environment and been clad in thermally treated timber panels. The library's roof act as a beacon for the intervention but still attempts to speak to the scale of the built fabric of the community. The openness of the facade invites occupation by the adult community and the narrow, planted walkway for entry into the rest of the facility ensures guarded access.

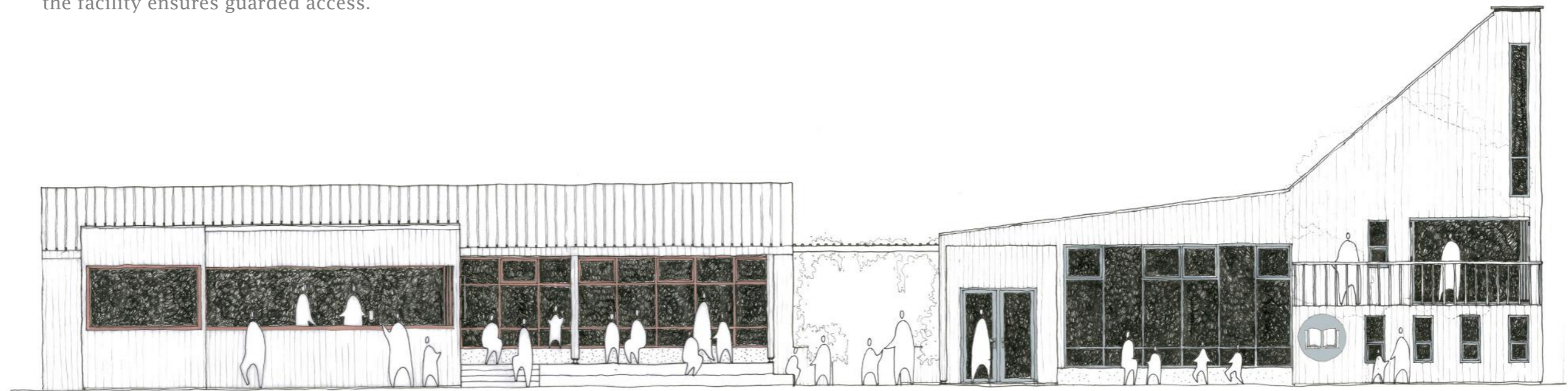


fig 61: Vrygrond Avenue Elevation



## Educare Support Elevation

The elevation of the toy library and educare support center expresses the more protected nature of the administrative functions on the right. The façade of the support center which has the entrance is pushed back to create an exterior reception point as well as catch occupants at the south end of the design's axis.

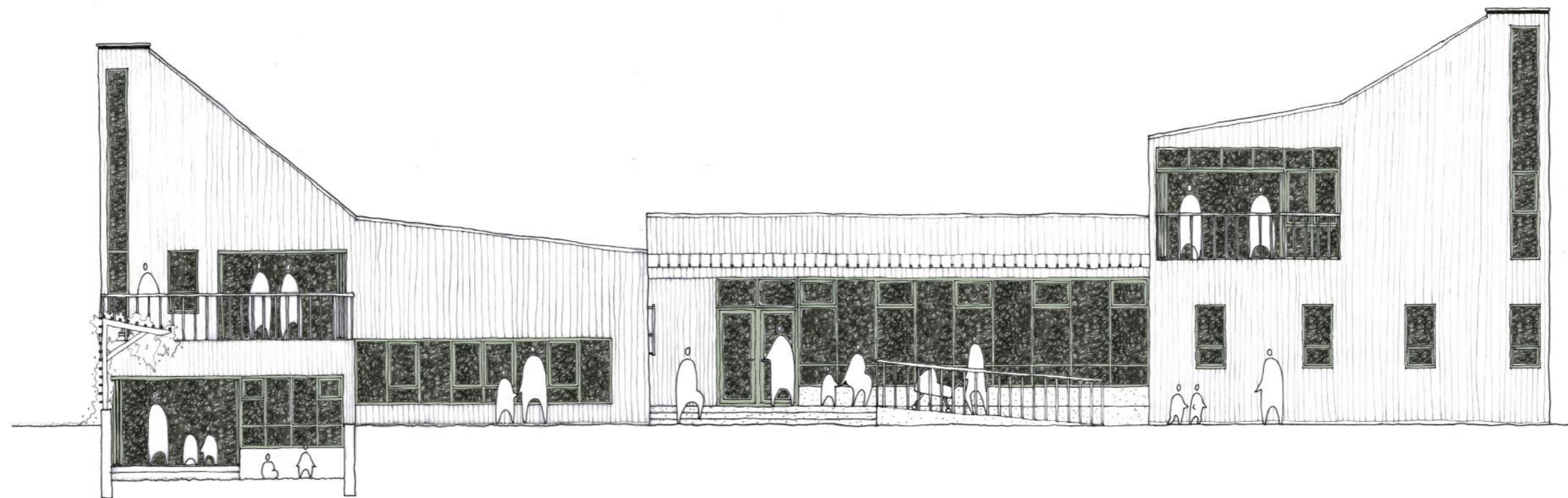


fig 62: Educare  
Support Elevation



## North South Section

Here one can see the spaces in section and the sunken spaces and mezzanine levels that play with heights to create a varied environment. They also create spaces of protection and spaces in which to retreat to for the child as well as elevated spaces of surveillance for the adult.

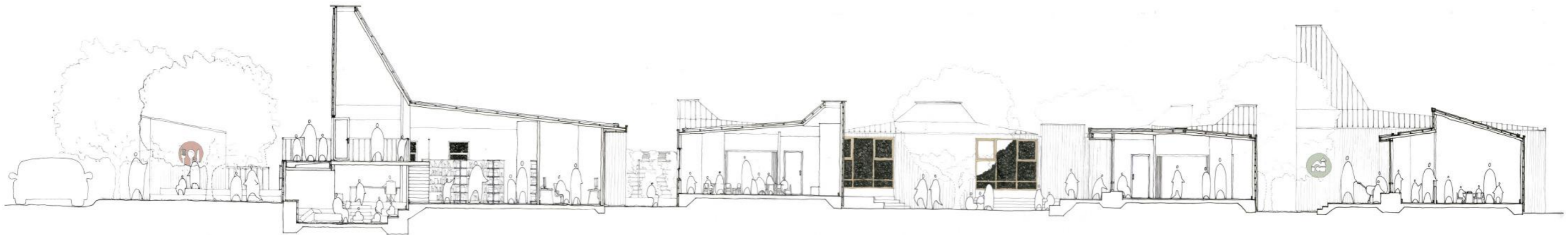


fig 63: Section



## Exploded Axonometric Section

The exploded axonometric exploration adjacent expresses the materiality of the centre which can also be seen in the collages of both the interior and external spaces on the following pages. The building is constructed from load bearing CLT panels that have been left exposed in the interior to create a warm and textured environment that is almost seamless in nature. It has been clad externally with thermally treated timber cladding to carry the warm and textured nature of the internal to the external. The timber construction and cladding contrasts the heavy nature of the concrete steps and groundwork which gives a sense of permanence and solidity which in turn gives the space a feeling of dependability for children that are perhaps not afforded that outside of the centre.

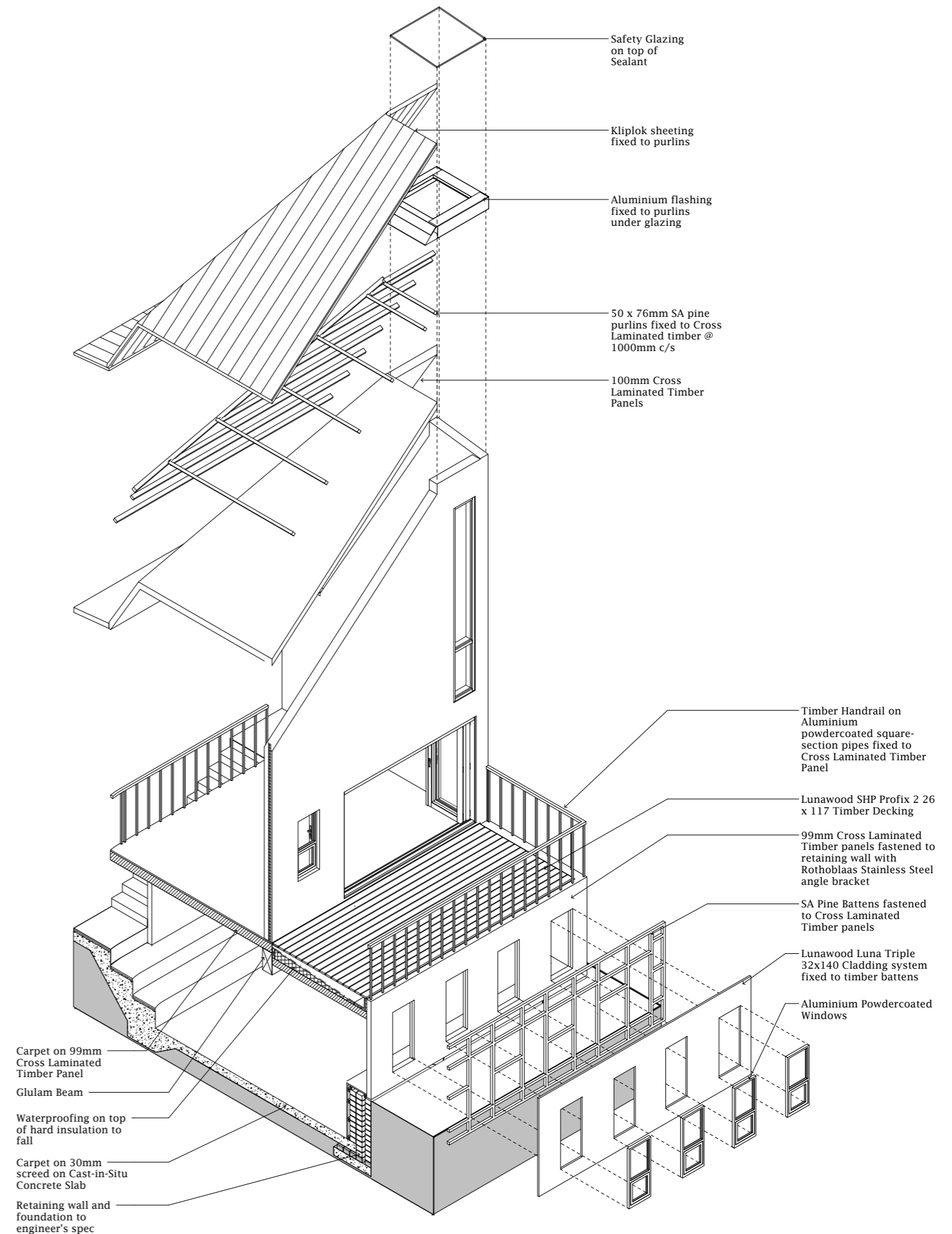


fig 64: Exploded Axonometric section

fig 65: Public Library interior perspective collage



fig 67: Classrooms exterior perspective collage



fig 66: Cafeteria exterior perspective collage

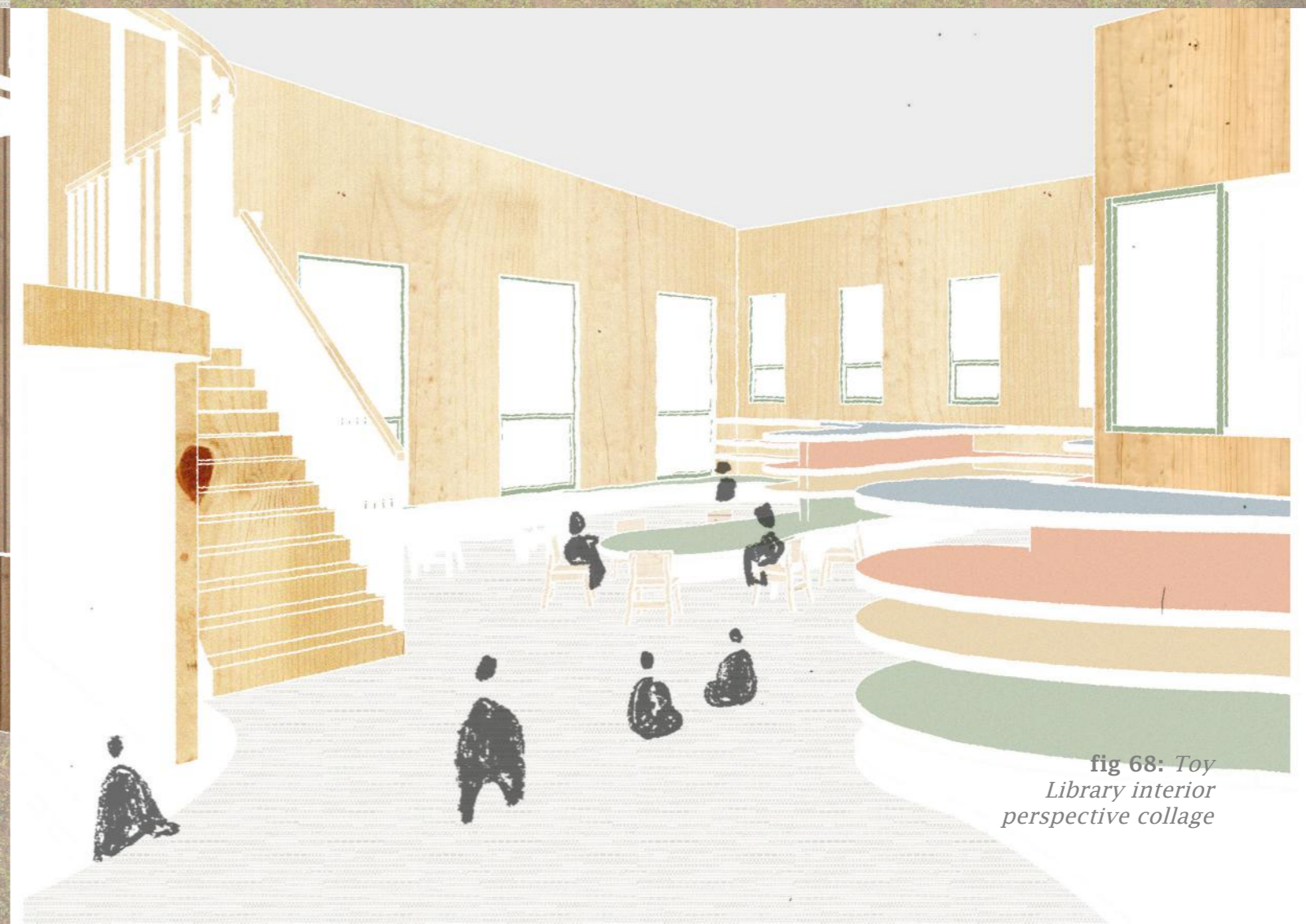


fig 68: Toy Library interior perspective collage

## Reflection

This child-centered approach to design that takes into account the children's perspective and how they interact with the built environment I feel is an imperative tool that should be adopted when designing spaces even if not meant for the child. As Albert E. Parr wrote, "Whether our urban designers like it or not, the members of our species will always have to go through childhood before growing up."



fig 69: Educare  
Support exterior  
perspective collage

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# List of Figures

- Figure 01** Collage by Author
- Figure 02** Image by Author
- Figure 03** Dill, J. Alex and Oscar Dill, 2001. Author's own familial archives.
- Figure 04** Dill, J. Andile Mazibuko and Alex Dill, 2006. Author's own familial archives.
- Figure 05** Image by Author
- Figure 06** Image by Author
- Figure 07** Author Unknown. Children's Playhouse in the Child's Eye View Exhibition, n.d., Sourced: Couchez, Elke. 2020. "The Child's Eye: Architectural Expertise and Childhood Creativity in the Writings of Paul Ritter (1925-2010)." Architecture and Culture page 264
- Figure 08** Image by Author
- Figure 09 & 10** Author Unknown. Most educarees display a wall chart of the daily programme indicating structure and discipline, n.d., Sourced: Charman, A, L Petersen, and T Govender. 2020. Township Economy: People, Spaces and Practices. Cape Town: HSRC Press. Page 256
- Figure 11** Golzen, A. The Pleasure of Climbing, n.d., Sourced: Ward, Colin. 1978. The Child in the City. London: The Architectural Press Ltd. page 85
- Figure 12** Image by Author
- Figure 13** Crawley Observer, Crawley Adventure Playground, 1955, Sourced: Kozlovsky, Roy. 2013. The Architecture of Childhood. New York: Routledge. Page 47
- Figure 14** Site Preparation Division of the Development of Public Works in Amsterdam, Drawing by the Site Preparation Division of the Development of Public Works in Amsterdam with sandpits, somersault frames, climbing frames, play tables and climbing mountains designed by Aldo van Eyck, 1960, Sourced: Stedelijk Museum. 2002. The Playgrounds and the City. Edited by Liane Lefaivre and Ingeborg de Roode. Rotterdam: NAI Publishers. Page 90
- Figure 15** Author Unknown, Laagte Kadijk, Amsterdam-Centrum 1954. Sourced: Stedelijk Museum. 2002. The Playgrounds and the City. Edited by Liane Lefaivre and Ingeborg de Roode. Rotterdam: NAI Publishers. Page 56
- Figure 16** Author Unknown, Laagte Kadijk, Amsterdam-Centrum 1954. Sourced: Stedelijk Museum. 2002. The Playgrounds and the City. Edited by Liane Lefaivre and Ingeborg de Roode. Rotterdam: NAI Publishers. Page 57
- Figure 17** VPUU, Identified site in Lotus Park for an Emthonjeni before intervention, n.d., Sourced: VPUU. 2019. "Emthonjeni Package." VPUU. March 27. Accessed April 4, 2022. [http://vpuu.org.za/safe-node-area/ecd-for-all/attachment/190327\\_vpuu-emthonjeni-package\\_final/](http://vpuu.org.za/safe-node-area/ecd-for-all/attachment/190327_vpuu-emthonjeni-package_final/)
- Figure 18** VPUU, Identified site in Lotus Park for an Emthonjeni after intervention, n.d., Sourced: VPUU. 2019. "Emthonjeni Package." VPUU. March 27. Accessed April 4, 2022. [http://vpuu.org.za/safe-node-area/ecd-for-all/attachment/190327\\_vpuu-emthonjeni-package\\_final/](http://vpuu.org.za/safe-node-area/ecd-for-all/attachment/190327_vpuu-emthonjeni-package_final/)
- Figure 19** VPUU, Identified site in Lotus Park for an Emthonjeni occupied by children after intervention, n.d., Sourced: VPUU. 2019. "Emthonjeni Package." VPUU. March 27. Accessed April 4, 2022. [http://vpuu.org.za/safe-node-area/ecd-for-all/attachment/190327\\_vpuu-emthonjeni-package\\_final/](http://vpuu.org.za/safe-node-area/ecd-for-all/attachment/190327_vpuu-emthonjeni-package_final/)
- Figure 20** Collage by Author
- Figure 21** Author Unknown. Giant figures in the Child's Eye View Exhibition, n.d. Sourced: Couchez, Elke. 2020. "The Child's Eye: Architectural Expertise and Childhood Creativity in the Writings of Paul Ritter (1925-2010)." Architecture and Culture. page 263.
- Figure 22** Image by Author
- Figure 23** Collage by Author
- Figure 24** Collage by Author
- Figure 25** Map by Author
- Figure 26** Map by Author
- Figure 27** Map by Author
- Figure 28** Map by Author
- Figure 29** Map by Author
- Figure 30** Map by Author
- Figure 31** Davies, Craig Neil. 2014. Participatory Planning and the Global South: A Case Study of Local Planning and Development in Vrygrond. Cape Town: University of Cape Town.
- Figure 32** Map by Author
- Figure 33** Drawing by Author
- Figure 34** Drawing by Author
- Figure 35** Drawing by Author
- Figure 36** Map by Author
- Figure 37** Image by Author
- Figure 38** Image by Author
- Figure 39** Drawing by Author
- Figure 40** Map by Author
- Figure 41** Map by Author
- Figure 42** Drawing by Author
- Figure 43** Drawing by Author
- Figure 44** Drawing by Author
- Figure 45** Collage by Author
- Figure 46** Map by Author
- Figure 47** Map by Author
- Figure 48** Drawing by Author
- Figure 49** Drawing by Author
- Figure 50-69** Drawing by Author

2022/09/15

EBE/02022/2022

RE: Research Ethics Committee Project Approval Letter

Dear Alexandra Dill,

Your application for ethics review of your project titled

The Child and the Urban - an Investigation into the Relationship between the Child and the Built Environment at all Scales.

has been reviewed and evaluated by the

APG:School of Architec,Planning&Geomatic Research Ethics Committee (REC).

Based on the information supplied your application has been successful and is approved.

You may proceed with your research project titled:

The Child and the Urban - an Investigation into the Relationship between the Child and the Built Environment at all Scales.

Please note that should:

- (i) any serious or adverse effects to participants occur and/or,
- (ii) aspect(s) of your current project change and/or
- (iii) any unforeseen events that might affect continued ethical acceptability of the project occur then you should immediately report this to the approving REC. You may be required to submit an amendment to this application, in order to determine whether the changed aspects increase the ethical risks of your project.

Please note the following additional conditions associated with this approval:

- (i)

Regards,

APG:School of Architec,Planning&Geomatic

Research Ethics Committee