

HEALED

WOMXN

EMPOWERED

CREATING HEALING SPACES FOR WOMEN IN
PLACES OF CONFLICT IN NYANGA



(Author, 2020)

Kazeka Talisa Mbekeni
Supervisor: Amy Thompson
2020

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

Healed. Womxn. Empowered.:

CREATING HEALING SPACES FOR WOMEN IN PLACES OF CONFLICT IN NYANGA

KAZEKA TALISA MBEKENI
MBKKAZ001

SUPERVISOR: AMY THOMPSON

Submitted in partial fulfilment of the Master of Landscape Architecture Degree

120 Credits

I further state that no part of this dissertation has already been or is currently being submitted for any such degree, diploma or other qualification.



Cape Town, South Africa
December 2020

DECLARATION OF FREE LICENSE

I, Kazeka Talisa Mbekeni, student number MBKKAZ001, hereby:

a) Grant the University free license to reproduce the above thesis in whole or in part, for the purpose of research.

b) Declare that:

1. The above thesis is my own unaided work, both in composition and execution, and that apart from the normal guidance of my supervisor, I have received no assistance apart from that stated below;
2. Except as stated below, neither substance nor any part of the thesis has been submitted in the past, or is being, or is to be submitted for a degree in the university or any other University.
3. I am now presenting the thesis for examination for the Degree of Master of Landscape Architecture.

PLAGIARISM DECLARATION

I, Kazeka Talisa Mbekeni , student number MBKKAZ001, hereby acknowledge that;

1. Plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.
2. I have used the APA 7th edition convention for citation and referencing.
3. Each contribution to and quotation in, this thesis proposal from the work(s) of other people has been attributed, and has been cited and referenced.
4. This thesis proposal is my own work.
5. I have not allowed, and will not allow, anyone to copy my work.

Signature:

Signed by candidate

Date: 18.12.2020



ACKNOWLEDGEMENTS |



THANK YOU TO MY FAMILY, FRIENDS, COLLEAGUES (WHO ARE ALSO FRIENDS) AND LECTURERS FOR THE CONSTANT LOVE AND SUPPORT THROUGHOUT THIS JOURNEY.

ZEN FOR GOING THROUGH IT WITH ME.

LEE FOR ALL OF THE MOTIVATION AND ENCOURAGEMENT AND ADVICE. YOU HAVE KEPT ME GOING ESPECIALLY THIS PAST YEAR.

JIMMY FROM HAPPY BY NATURE FOR WELCOMING ME INTO YOUR SPACE, WALKING ME THROUGH MEDICINAL PLANT SPECIES AND FOR ALL THE TEA. IT KEPT ME GOING.

FINALLY, THANK YOU TO MY SUPERVISOR, AMY THOMPSON, FOR CONSTANTLY PUSHING ME WHEN I NEEDED IT AND BEING PATIENT WITH ME.

- KTM

CONTENTS |

Abstract5
Glossary6
Context and Research7-22
Introduction	
Positionality	
Aims	
Research question + relevance	
Site	
Literature Review	
Methodology23-39
Observations and Mapping	
Material Exploration	
Framework	
Design Study40-56
Ethics57
Bibliography58-59



(Author, 2020)



ABSTRACT |

Gender-based violence (GBV) is a profound and widespread issue for women in South Africa, and this was demonstrated on the 4th of September, 2019 when womxn marched together to end GBV in South Africa after the death of local UCT student Uyinene “Nene” Mrwetyana. GBV is a significant obstacle for gender equality and female empowerment in South Africa and also has long-lasting psychological effects on the women who survive these events as well as those around them; altering the way they see themselves and others in relation to the world. There is a need for healing spaces for womxn in South Africa. Spaces that make women feel safe (physically and mentally) and empowered.

The current healing spaces are mostly found in private clinics/hospitals patient-use (private space) and they are usually focused more on physical health (with the use of medicinal plants) but not centred around improving mental health. Retaining healing spaces in these sorts of environments (private spaces) makes them inaccessible. This project aims to contribute to the field of landscape architecture (and other space-makers) mainly focused on mental health and to encourage that these spaces be made more accessible, an essential part of our everyday lives, and implemented as a design solution for environments that could be detrimental to our mental health.

This thesis carefully unpacks the issues around gender-based violence in South Africa (such as safety, representation and memorialization of local women, female empowerment, and mental health) and theories such as ecotherapy and ecopsychology to understand how the landscape can be used to provide a safe and healing environment for local women. Healing typically consists of cognitive restructuring (changing ideas around self-worth) and, in this study, it is explored at two levels. The one, empowerment is looked at more as a visual practice that takes place within the public realm whilst the other, inward-looking, self-discovery and meditative practice is looked at more as an experiential practice that takes place in the private realm.

The chosen area of study is Nyanga (located in Cape Town, South Africa) which has been known to be the murder capital of South Africa. This area has also been identified as one of the top 30 GBV hotspots in South Africa with abuse and murder of women and children queer people in South Africa amongst the highest in the world. Zooming in on the Nyanga taxi Interchange precinct as the area that local women in Nyanga occupy most and unpacking the conditions of these used spaces and the key activities within this area which will inform the project and; majority-female informal trade taking place, the day clinic, the vegetable garden, and the under-utilized private land; to properly understand how these could be strategically integrated to create healing spaces for everyday use.

(Author, 2020)

GLOSSARY |

Terms used and explored in this study

PLACES OF CONFLICT |

This refers to a physical place. Environments that expose people to violence or high stress/anxiety. This also refers, largely, to mental state (i.e. space in the mind occupied by thoughts and emotions). Understanding the mind as a place which can be occupied (by thoughts and emotions). The trauma that has scarred women; changing their ideas and thoughts on self-worth/ the way they see themselves and the way they see others, feeding their anxiety, depression and feelings of isolation. This trauma, therefore, makes the mind a place of conflict.

HEALING SPACES |

Safe spaces that are focused mainly on the psychological healing of the users of the spaces. Spaces that allow users (women) to process and improve their mental state through their relationship with nature.

WOMXN |

This is an alternative term to the words "women" or "woman" which, in the standard spelling, contain and are derived from the words "men" or "man" respectively. This term is not aimed at silencing men or seeing them as lesser beings but rather tackles the imbalance within society that dictate that "women" need men to exist. This is an empowering feminist term which breaks the idea that women need men to find their voices or strength.



(Author, 2020)

RESEARCH & CONTEXT |

Introduction |

Gender-based violence (GBV) is a pressing issue for women in South Africa. These events (i.e. sexual abuse, physical abuse and even emotional or verbal abuse) have lasting psychological effects. Women who have been scarred by these events in the past can develop mental illnesses that are linked to the way they act, the way they see themselves, others, and the world as well as the way they process and react to future events. Some women turn to a life of violence and crime, abusing their abusers or others in an attempt to regain their power, or they abandon their children (who are now left vulnerable with a lowered sense of self-worth). This depreciation in the mental state is heightened when they feel isolated or that they do not have a support system to help them work through some of these issues (Artz, Hoffman-Wanderer, and Moulit, 2012). Ecopsychology is one of the ways that designers can create spaces that help women heal. This theory was first discussed by Theodore Roszak and is the integration between natural systems and human psychology. However, this theory is poorly acknowledged and used in practice and so there are limited studies and precedence related to this concept (Summers & Vivian, 2018) and even less to draw from, in this regard, within the South African context. This interrelation that exists between ecosystems and human psychology - referred to as ecopsychology - could be the key to healing the mental state of people who have experienced traumatic events (Summers & Vivian, 2018).

There are a few factors that stand in the way of this healing process and that is largely related to the human relationship with and perception of nature. Nature is often given a value based on the resources it is able to produce (such as freshwater or food) and other benefits and qualities of nature are often overlooked or seen as unimportant (Summers & Vivian, 2018). This way of thinking has created distance between people and nature, with technology evolving and taking its place in our lives. People have developed a codependency with technology rather than nature, making people more distant from one another and less emotionally available to other humans (Summers & Vivian, 2018).



(Author, 2020)



(Author, 2020)



(Author, 2020)



(Author, 2020)

Positionality |

WOMAN | SAFETY

I am a woman who has spent her entire life living in South Africa and as such, I understand the issues around safety for women within the public (and sometimes private) realm. I always carefully consider the safety level of a space before entering and am constantly having to think of ways I can make spaces safer for myself (i.e. being accompanied by a friend(s), sharing my live location and constantly letting people I trust know where I am). It is emotionally, mentally and physically taxing to prepare myself or a space before entering it. Hearing about women who have had their safety compromised builds on existing fears and complexes and makes it difficult to occupy a space.

HEALING |

Apart from education, my family has always stressed the importance of helping and caring for others; to the point that almost all of my relatives have gone into their careers with the hopes of “helping people” and making a positive change. I come from a family of doctors. My grandfather, grandmother, aunts, mother and father are all in the medical field, and so, I have been charged by notion of “healing”.

HEALING THE LANDSCAPE | LANDSCAPES THAT HEAL

During my undergraduate degree (Bachelor of Architectural Studies-UCT), I came across works by Aldo Van Eyck. He had designed hundreds of playgrounds after World War 2. The sites for some of these public spaces were areas strewn with debris after the war (refer to image 1). I was fascinated with the idea of healing the landscape and how he was able to create joy in these scarred spaces within the urban landscape (refer to image2). This also inspired my notions of play in design.



*Image 1: Aldo Van Eyck's Playground
Before*



*Image 2: Aldo Van Eyck's Playground
After*

<https://i.pinimg.com/originals/48/8c/0d/488c0df3395711fe04b5cd2f9c6a341a.jpg>

Aims |

This project aims, primarily, to create healing (psychological) landscapes for womxn. These spaces are aimed largely to aid in the healing process of GBV survivors but it is also accessible to other womxn who feel that they may need the space. These spaces should make womxn feel safe and empowered, improve mental health and connect people to nature.

This project also aims to highlight the importance and urgency in creating safe spaces for women in South Africa, highlight mental health and encourage that it be considered when designing space, unpack the ideas around ecopsychology in landscape architecture and how they can be applied in the South African context



(Author, 2020)



(Author, 2020)



(Author, 2020)

The making of this model was not about the final product but rather the process and the narrative told in this way. The cubes alongside represented the women. The pieces of lead were broken (this represented the breaking of old ideas and habits) and were then placed in the resin (which represented the rebuilding of these ideas that women have of them selves and ideas around self-worth and with the aim of healing and empowering these women). The image alongside is a monument-type representation of these, now, empowered womxn.

The figure alongside represents a shelter. This shelter protects the women and gives them a safe space for the healing process to take place. It shields them from the outside world and; because of the type of materials used (the clear resin for the women and the mesh) there is this idea of the women hidden in plain sight.

The manifesto was drawn from this initial model. The mesh is gold and this is inspired by the Japanese art of Kintsugi, where broken pottery is mended with gold. Through this the cracks, which are usually the weakest part of the material, are now the strongest and add value to the pottery. I set have set out to do a similar act with my intervention (which is represented in the gold mesh in the figure alongside). The aim of the project is to create a place that allows women to heal and, at the same time, is able to empower them, where their cracks or trauma do not define or break them but rather show their strength in all they have endured.

This model uncovered a new way of working through ideas and thoughts using the “process of making”. This making process would be used throughout the project and would form part of the methodology and experimentation.

How can the landscape be used to create spaces that improve the mental state of women in South Africa?

Looking at ideas developed around ecopsychology (the link between ecology and psychology) and investigating how this theory can be applied in the real world and, specifically, the South African context.

Sub-questions

How does one create safe spaces for women in South Africa?

- Looking into how these spaces look and sit within the South African context and what characteristics make them safer for women.

Can one create public healing spaces?

- Looking into whether or not it is possible to make healing spaces public and to what degree these types of spaces can be made accessible while also fulfilling their role of functioning as a healing space.

Can form follows function logic be used, in design, to create healing spaces?

- Looking into form follows function logic used in design and how this could be used to create spaces that serve the function of healing.

How does one connect people with nature?

- Looking at the tools and techniques used to develop a bond between people and nature.

Relevance |

WHY PSYCHOLOGY |

In 2001, the World Health Organisation predicted that, by 2020, mental health disorders will be the second largest contributors to disease burden worldwide. This highlights that there is a need to make spaces that respond more to people's mental health and that this should also be guiding the design. They also noted that stigma, discrimination and neglect prevent care and treatment from reaching people with mental disorders.

WHY WOMEN |

GBV and safety for women has been a growing concern in South Africa (with our country having one of the highest rates of femicide in the world. Less than a year ago, women in South Africa, marched together to speak out against GBV. The GBV marches highlighted the need for more safe spaces for women in South Africa, the traumas faced by women in this country and the psychological effects of these events on the women involved as well as people around them.

gbv

so you want to talk about
**SEXUAL ASSAULT
AWARENESS MONTH**

control

so you want to talk about
intent vs. impact

anxiety
trauma
scarring

isolation

so you want to talk about
Depression

support

meditation

psychoanalysis

so you want to talk about
mental health

repression
ecopsychology
ecotherapy

sanctuary

safe spaces

so you want to talk about
unlearning

healing
self-worth
empower

womxn

This graphic shows my understanding of the journey of the womxn who would be using this space from stories shared in the news, documentaries and social media.

Looking at GBV and the psychological impact it has on the women. The healing space becomes a space for them to rebuild; unlearning and breaking from previous ideas of self-worth as part of the healing process and leaving as empowered womxn.

(So You Want To Talk About, 2020)
<https://www.instagram.com/soyouwanttotalkabout/>
and aadapted by author

Relevance |

Be our authentic selves.
Reply

show affection to a woman i'm in a romantic relationship with so i don't get hate crimed
Reply

Hold my gfs hand in public
Reply

Walk through the mall without comments or looks from men about my body
Reply

Overall feel safe when I leave the house.
Reply

Go on a photography excursion in all the quirkiest parts of my city
I love urban settings
Reply

Probably camp ,and take a walk at night wearing what I want
Reply

I'd do whatever i want without the fear of being judged.
Reply

Feel safe.
Reply

share my story without fear of shame or discrimination
Reply

I'd be free to share my political opinions without being told that it's invalid
Reply

go to a party wearing what i want without fear
Reply

Explore my surroundings on foot without the fear of being ambushed or followed.
Reply

Leave my home without glancing over my shoulder ever five seconds
Reply

Feel safe for the first time in years
Reply

live without fear
Reply

ditch my pepperspray
Reply

Run late at night
Reply

Take a walk outside with my headphones on
Reply

walk at night
Reply

Go for a run or walk alone
Reply

Walk around my neighborhood... sounds silly but I've been wanting to for a while now
Reply

Go for a jog, take walks at night, go to the mall alone, I wouldn't have to watch my back whenever public pl
Reply

Watch the sun set while going on a jog, wearing headphones, blasting my favorite songs in my ear.
Reply

Go for a jog at 8pm
Reply

Go for a walk alone
Reply

Go for a walk
Reply

actually go on a walk without fearing for my life
Reply

i would live with no fear and go walking outside without looking behind me
Reply

walk around my town
Reply

go for a late afternoon stroll around the neighborhood
Reply

we asked our female followers this question.
women of SA, what would you do if there were no men around for 24 hours?
Type something...
we received hundreds of replies, each more disheartening than the next.
let's unpack this.

go to the beach at midnight and skate on the roads during sunset
Reply

Go to the bathroom alone
Reply

Take a walk at night, or even during the day, alone.
Reply

Walk around busy parts of the city and take photos!!! I love cities at night so much.
Reply

Go to the botanical gardens alone and just walk around and enjoy the scenery
Reply

a walk!! a really long walk everywhere w whatever I wanna wear on and my music playing
Reply

Go to the beach alone
Reply

go shopping alone
Reply

go to the beach alone
Reply

Relevance |

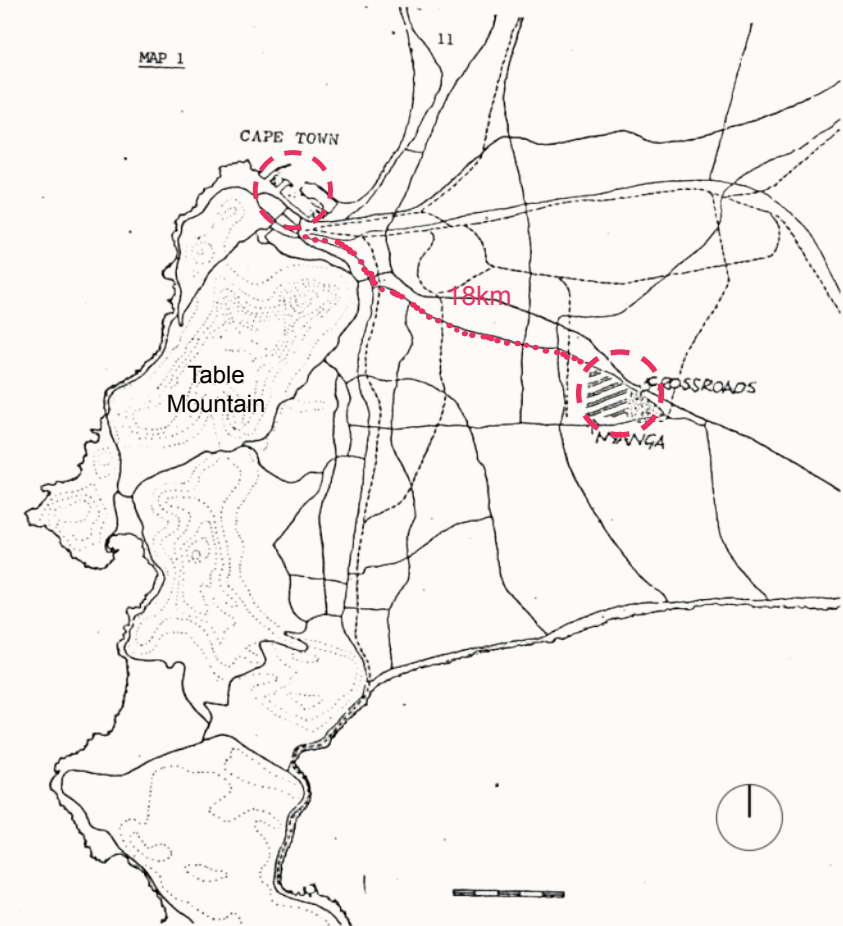
The image on the preceding page is taken from an Instagram poll which was conducted by @zerojusticezeropeace, an account which aims to bring awareness on important and pressing issues. The poll asked female followers in South Africa what they would do if men were not around for 24 hours. This poll was conducted just after women's month. It came about as a result of the increase of GBV cases in South Africa during the national lockdown (implemented by President Cyril Ramaphosa as a response to spreading of COVID-19) leaving many women in South Africa locked in with their abusers. All of the answers that came from this poll show that women do not feel safe or comfortable around men with most women expressing simple wishes like the ability to take a walk or jog alone. This poll also demonstrated that women find it difficult to exist in public spaces and that women are constantly trying to find ways to make public spaces safer for themselves.

This shows the need for public spaces for women, which are safer and address more of their needs. This also shows that women need space to heal to address some of their anxiety and fear linked to men and space. Lastly, this shows that a dialogue needs to take place between men and women. In the built environment men and women need to rethink public spaces and how they can be redesigned to allow women exist. In society, as a whole, women and men need to speak more about these issues so that change can start to happen.

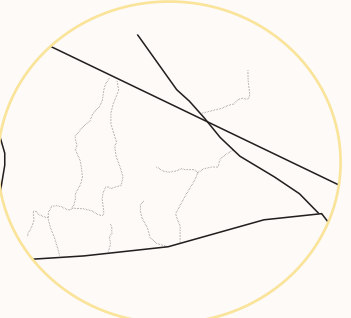
Nyanga, the area of study, is an informal settlement within the Cape Flats (which also holds Gugulethu, Phillipi, Mitchell's Plain, some of the most of the disadvantaged neighbourhoods in Cape Town). Nyanga is situated just south of the Cape Town International Airport and is about 18km east of the Cape Town city centre. The first residents of Nyanga settled as a result of the Migrant Labour Laws (which formed part of Apartheid legislation). These were male migrant labourers originating from the Eastern Cape province with most (if not all) of the residents predominantly Xhosa-speaking. Hostels were developed for these workers to live during their time of employment (Seleoane, 1985). Although Nyanga was originally developed for male labourers, over the years, more and more women occupy this area but the spatial planning has remained the same even though the migrant labour laws have long fallen. This has resulted in unequal spaces throughout Nyanga where women occupy very few public spaces.

Nyanga has also been highlighted as one of most dangerous areas in Cape Town and, at one point, considered to be the murder capital of South Africa. This area has also been identified as one of the top 30 GBV hotspots in South Africa with abuse and murder of women and children queer people in South Africa amongst the highest in the world.

Nyanga has, largely for the problems discussed above, been identified as a place of conflict in need of more spaces for women and in need of healing spaces for the women of Nyanga.



*(Seleoane, 1985)
adapted by author, 2020.*



(Author, 2020)



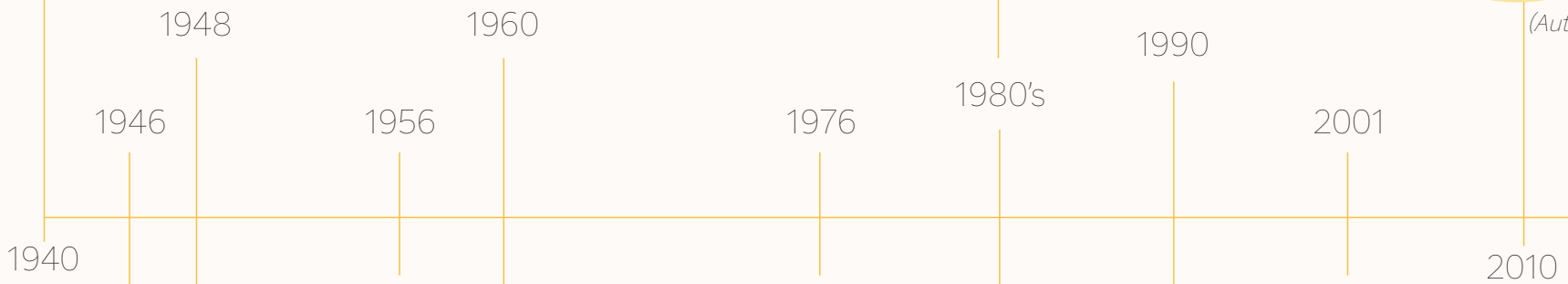
(Author, 2020)



(Author, 2020)



Map showing location of Nyanga. (Google Earth) earth.google.com/web/. adapted by author 2020



1940
Nyanga was established with 210 houses for migrant labour predominantly from the Eastern Cape.

1946

Black migrants were forced to settle in Nyanga as Langa became too small.

1948

1948
Was enlarged to include the Nyanga Transit Camp and the settlement of Mau Mau

1956

Residents of Nyanga were active in joining a national call to protest against the apartheid laws passed in 1960

1960

1976

1976
Later they were active in the 1976 student uprisings against the use of Afrikaans as first language in schools.

1980's

1980's
Nyanga became notorious for its Black on Black faction violence that was perpetrated by the police

1990

1990
It had a population of 58,452 of whom 99.54% were African and 50% of the housing units (13,734) were informal dwellings. unemployment was estimated at around 56%

2001

2010



(Author, 2020)



(Author, 2020)



(Ubuntu, 2018)

Healing Spaces |

There are many beautiful parks around South Africa which have a calming effect and are able to bring joy (such as the Green Point Urban Park and Kirstenbosch National Botanical Gardens in Cape Town) however; this is not a consistent experience. These gardens can not always be used as healing or calming spaces because the activities of these gardens do not support all of the methods of healing or calming down. Practises such as meditation require a level of stillness and quiet and some people may prefer privacy which is hard to achieve in these gardens as they have spaces which look over one another, multiple points of entry spaces and loud activities (such as gatherings and events) taking place which can disrupt the healing process. These gardens have clearly not been made to function as calming spaces but rather for recreational use.

The role of functionalism is to address issues and needs of the people the spaces are designed for (Herrington, 2016). With this logic in mind, a design, whose form is not driven by the core functions of the space, can lead to a poor performing space. The different activities taking place in the space should support one another. Therefore, the form of a healing space should be driven by its function, with the activities taking place in one part of the space, supporting and respecting the role of the activities taking place in another part of the space.

When looking at a simple Japanese Zen Garden, one can see that the forms give users a sense of privacy and isolation in the space through the use of densely vegetated green edge and in some cases, just the use of a high wall. This sense of isolation frees the user of the space from distractions which could disturb the healing process. The space uses simple forms in certain parts of the garden and organic and fluid forms in order to calm the mind. A simple and limited colour palette is chosen for vegetation and materials to prevent from over-stimulating the mind. The Zen garden has been created mainly to function as a meditative space and the form of this garden clearly supports this.

Operative functionalism is one type of functionalism whose logic could be used in the development of this project. It is useful because it acknowledges that different people are attracted to different things and so forms are created to hold different functions (Herrington, 2017) within the larger design, catering to different people's needs for a well functioning healing space.

Connecting People with Nature |

There is a language which exists in landscape architecture which is translated to people through the layering of materials, form and space. This language can be used to bring forward, old memories and even unlock memories we didn't know existed, either within our own individual subconscious or memories of a place or community (Herrington, 2017). In this way, the landscape can begin to teach of our past so that we can learn important parts of our history and ourselves which have been forgotten which connect us to nature. In this way we can start to rebuild our relationship with natural environment

Memories.

Memories are our recollection of past events, although individual memories can often fade and distort over time if they are not recorded. Collective memory is memories that are shared and passed down in communities and these are the memories that determine how we are socialized and the traditions that we carry forward (Barthel, Folke, and Colding, 2010). These sorts of memories can be traced back thousands of years. However, these traditions (or collective memory) is what society or a community have chosen to be relevant and important and so, some of the memories (which have an effect on the people we become) are lost in our minds but can still live within us memory symbols (Barthel, Folke, and Colding, 2010).

The landscape also has memory, and this is shown by the way the land has been formed by past events. These memories come to us in the form of the waterbodies (such as rivers, streams and lakes), mountains and the flora and fauna. The latest layer being built fabric which shows human settlement patterns. The landscape maintains these memories even though the landscape is always changing. There is a layering that takes place in the landscape and the past can be uncovered and seen through the landscape.

Symbiosis between Land and People

The Cape Town landscape was once occupied by the San who were very connected to land. They relied on the land for sustenance and learned the patterns of the natural environment and stayed connected to the earth (Anderson, and O'Farrell, 2012). The San respected the land. Because they were nomadic, they would make temporary changes in the landscape and then move, giving patches that they had altered (through grazing of cattle) time to heal (Anderson, and O'Farrell, 2012).

The Shifting Perception – People over land

When human settlement began, our perception and relationship with nature began to change. The ideas that the San had about maintaining balance between people and nature and respecting the land became a lost narrative. People no longer sought to live in harmony with the landscape but rather saw nature as a resource which could be exploited for our benefit (Anderson, and O'Farrell, 2012). The landscape was altered for people to live and the natural environment was carved to make living easier for people. Instead of going to natural resources like the San had before them, they altered the landscape to make the natural resources easily accessible (Anderson, and O'Farrell, 2012). This shift created a detachment between people and nature.

Using Memory and Space to heal the landscape

Using ideas around memory and space, we can use the landscape to reinterpret forms, and practices from the past in order to regenerate and reveal lost memories and address current issues. The land recognizes the practices used by the San and we can use these practices and memories to reconnect the people of today with nature. This could also begin to rehabilitate the lost fauna and flora in different patches around South Africa but especially under-utilized and abandoned pieces of land.

Representation | Empowerment



Perception of Women |

In an attempt to try to understand why GBV takes place I started looking at how women have been represented in public spaces. The collage on the preceding page, has some of the more recognised monuments/statues of women in South Africa. Some of these monuments, such as the statues of female freedom fighters at Union Buildings, are inaccessible and so the visual of powerful women is not accessible to the public. The “Long Walk to Freedom” Exhibition in Century City shows women such as Winnie Mandela, Albertina Sisulu with their husbands (Ishmail, 2019). These women played a monumental role in the fight for freedom as well as the fight for equal rights for women and this representation (the women holding their husbands’ hands) downplays these women’s role in the struggle and shows them in a more supportive role rather than their individual strength (Fourie, 2020). The National Women’s Monument in Bloemfontein has a large obelisk (which could be seen as a phallic symbol), with the statue of a woman and child at a much smaller scale, being dwarfed by the obelisk (Fourie, 2020).

There are not enough images of empowering women in the South African context (for females to look up to and enough for men to view women as powerful beings) (Davis, 2015). There is still a huge gap in the way that women and men are represented in the public realm (Groot, 2020). The memorialisation of people is also outdated and has largely been controlled by men (Groot, 2020).

The ideas around representation and memorialisation of women ties into ideas, previously mentioned, around female empowerment as something that takes place in the public realm. This exploration helped identify gaps in the public spaces

Female Empowerment |

The South African artist Sthembile Msezane has, over the past few years, experimented with new ways of memorialisation (TEDTalks, 2017), and shifted the idea that statues need to be permanent to be remembered through living sculpture and live performance. These living statues show women in a more realistic and relatable form and have the ability to make one feel seen, recognized, understood and empowered (TEDTalks, 2017). The natural form, soft medium of the skin and fabric and human scale of these living statues make it easier for people to connect to what is being represented. The old ideals of how statues should be made and look (large, dominant figures made with hard metals) creates a disconnect between the viewer and the subject matter.

Living in the age of social media, the digital realm has also played a large role in the preservation of the living sculptures which exist in the physical realm only momentarily but live on within the digital space. Statues are often vandalised and their initial meaning is lost over time. In the digital realm, these living sculptures and the initial thoughts behind them continue to exist together and so the meaning and significance of the work is not lost (Groot, 2020).

These ideals should be brought into public space to form more meaningful connections within the context they are intended. This can bring new energy into places and be used as a tool to change the societal views of womxn and make womxn feel seen and empowered. These ideas can also initiate a much needed dialogue within society about issues of gender inequality, GBV and trauma (both in womxn and men) making room for healing to take place.

METHODOLOGY



(Author, 2020)

Observations & Mapping I

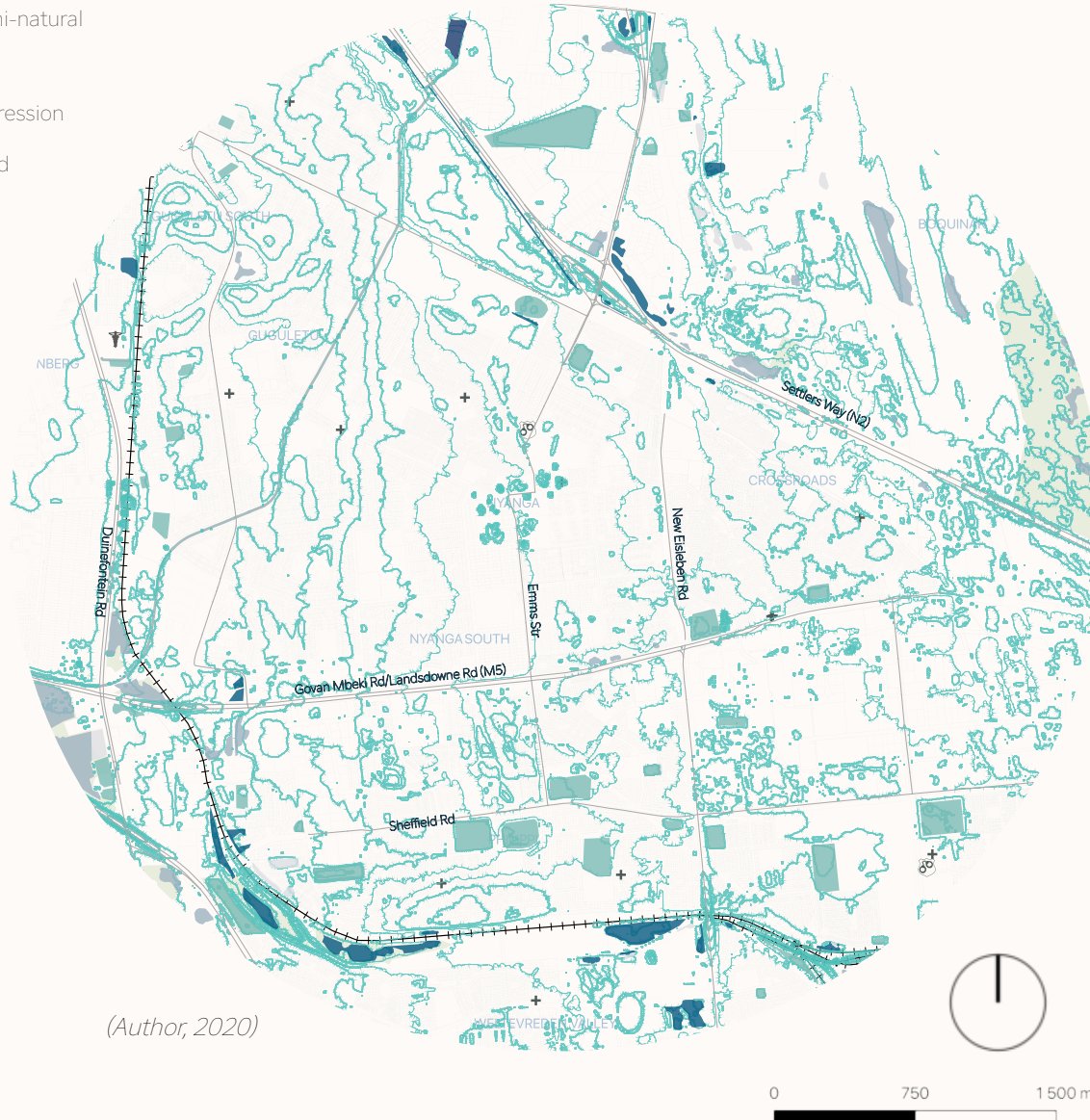
This project aims to create safe spaces for womxn for healing to take place. South Africa has one of the highest rates of Gender-based Violence (GBV) and crime in the world. Many women do not feel safe being in public spaces.

Areas of crime/conflict/unsafe areas around Nyanga (as it is one the biggest contributors to crime and GBV in South Africa) have been identified and mapped. Once these spaces had been identified on a larger scale, they were then interrogated at a much finer scale to understand the quality of some of the spaces, the activities taking place around some of the crime hotspots and the public spaces that women in Nyanga occupy.

Once these areas had been interrogated, a primary “place of conflict” was identified and investigated, unpacking some of the site characteristics that are contributing to crime, and in turn, some of the key issues that would have to be resolved in order to make this a safe space, understanding the needs of the women occupying the space and how the space works and doesn't work for them.

Mapping | natural

- Effluent Pond
- Irrigation pond
- Natural and Semi-natural
- Quarry
- Stormwater depression
- Stormwater pond
- Transformed



(Author, 2020)

This map looks at the natural elements which exist in the area. Understanding water around the area and the movement of water in and around the area and the remnant vegetation.

It is argued that the sensory qualities of wild nature increase humans' mental and physical health. Within landscape design; James Corner argues that many designs focus more the visual representation of nature rather than the entropic qualities of nature. He says that the processes that take place in nature (the sensory experience or the "sensation of nature") are the elements that bring people closer to nature. Rather than trying to design nature, landscape architects should rather focus on the processes of nature. This will bring people closer to nature, increasing their well-being as well as increasing the health of the ecosystems (Ebbensgaard, 2017).

These natural elements and the processes could be used in the design to create a sensory experience (using a medium that is familiar to the people in the area) to draw women to the healing spaces and start the healing process as well as improve the natural ecosystems.

The main flow of water is through the canal which starts up north and drains south in the Zeekoevlei Dam. The landscape is quite flat and so the boundaries of the river are artificially defined. The drainage patterns in the Cape Flats area is largely undefined, with seasonal wetlands scattered across the area (which can be seen on the map) which dry up in the summer months. Some of the wetlands have been altered to assist in some of the urban interventions which have been introduced into the area. The wetland in the south had the last patches of indigenous vegetation in Gugulethu. The original Lotus river was extended and canalised to deal with run-off. The river is not well kept. There is a lot of congestion due to rubbish dumping.

Aquifer:

The Cape Flats is considered to be a major aquifer. The water sits about 3-5m below ground level with ground water recharge potential between 100-200mm. The water is noticeably salty with 150-370mS/m (Electrical conductivity) (Western Cape Department of Agriculture, 2019)

Soils:

The area consists of range of aeolian sand. The soils in the area as a whole are greyish, sandy excessively drained soiled. These soils have limited pedological development. (Western Cape Department of Agriculture, 2019)

Vegetation:

Cape Flats Dune Strandveld which is an endangered vegetation type. It stabilises sand dunes. There is very little remnant vegetation. Indigenous vegetation on the site would be preserved. (Western Cape Department of Agriculture, 2019)

Mapping | The Node



Street View of Nyanga Taxi Interchange
(Google Earth) earth.google.com/web/.

The **Nyanga Taxi Interchange** is the main transport node in the area. During peak hours, commuters, buses and taxis fill this space. Throughout the day informal traders (mostly female) occupy this space, using the area covered by the canopy as an informal market space. The area is also filled with shipping containers used for trade activity.

Emms Drive is one of the main roads in Nyanga and is used to get to the main node (around the taxi interchange) and one of the main vehicular routes out and into the city. This road is also considered to be the most dangerous road for pedestrians with lots of violence taking place.



Street View of Abalimi Bezekhaya.
(Google Earth) earth.google.com/web/.

This is one of the sites of **Abalimi Bezekhaya**. This is a non-profit organisation that intervenes in impoverished communities by creating micro-farms and teaching them how to grow and harvest plants to source food.

Zolani Centre (CS Studio Architects, 2002)



The **Zolani Centre** is the main community centre in Nyanga and is located across the Taxi rank with a high amount of informal trade activity taking place along its fence. This is a multi-purpose space used for sporting activities, cultural activities as well as administrative work where residents are able to claim and receive pensions and grants.

Map showing location of Nyanga Family Recreational Park.(Google Earth) earth.google.com/web/.



The **Nyanga Family Recreational Park** is the main recreational space in the area. It has a spray park and play space for children as well as sports facilities. There is also a large amount of under-utilised /undefined land which can make this space dangerous to in .

Sithandatu Ave is the main activity spine in Nyanga with high amounts of informal trade activity taking place along the road. This is an area that women in Nyanga occupy the most, where almost all of the traders identified along this spine being female.



Street View of Nyanga Day Clinic
(Google Earth) earth.google.com/web/.

The **Nyanga Community Health Centre** is a day clinic and the only medical facility located in Nyanga. This is another space that women occupy in Nyanga. The services available at this clinic are TB, HIV and STI care, childcare and family planning (CoCT).



(Author, 2020)



NYANGA TAXI INTERCHANGE

John Pama Primary School

Zolani Centre

Shell Petrol Station



Oscar Mpetha High School

Map showing location of Nyanga Taxi Interchange. (Google Earth) earth.google.com/web/. adapted by author 2020

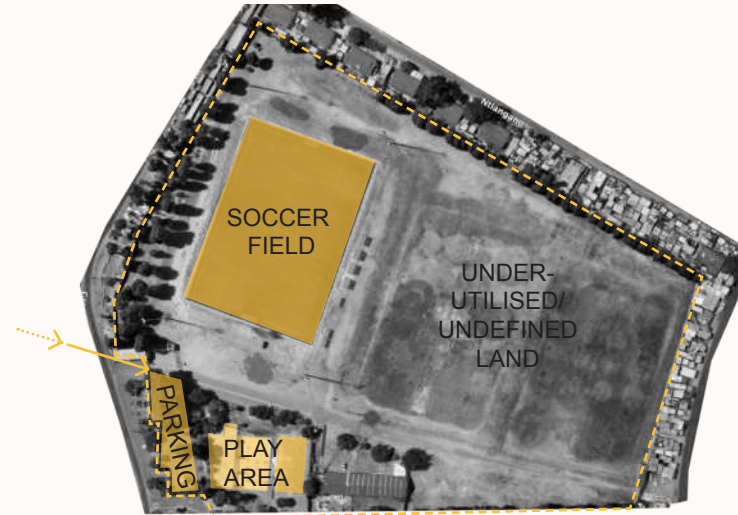
The Nyanga Taxi Interchange functions both as a commercial and transport hub. It therefore generates a lot of foot traffic and has many vehicles (mainly public transport systems such as taxis and buses) moving through the space. The area is mostly free flowing and open and so, it is easy for people in the space to see what is happening around the site. There are two canopy structures (informal trade and covered taxi parking) in the space. This type of structure works well in the space as it protects people from the elements while still allowing for visual and physical permeability. The spaces between the commercial and container zones can be unsafe as the structures created moments of obstructed views.

NYANGA FAMILY RECREATIONAL PARK

Nyanga Police Station

Hostels

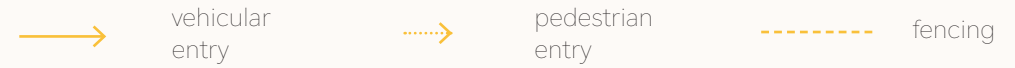
Residential



Zolani Centre

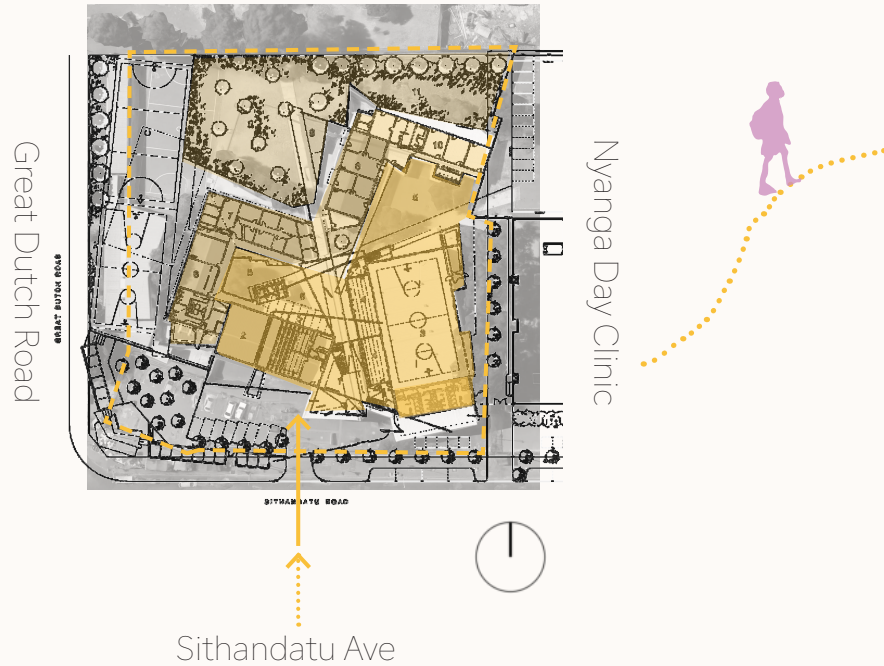
Map showing location of Nyanga Family Recreational Park. (Google Earth) earth.google.com/web/. adapted by author 2020

The Nyanga Family Recreational Park is a large area with very few defined spaces. The area is also fenced off with one main access point into the site which limits access to the space. There is a soccer field with floodlights and spectator seating as well as parking for visitors of the space. There is play space and spray park (which was introduced as a fun way of educating children about water) and netball court but these spaces have been vandalised and some of the equipment is not usable. The rest of the site consists of undefined space. This spaces have little to no activity and with little activity bringing people to the space, there is not a lot of surveillance throughout the day, making the area unsafe.



ZOLANI CENTRE

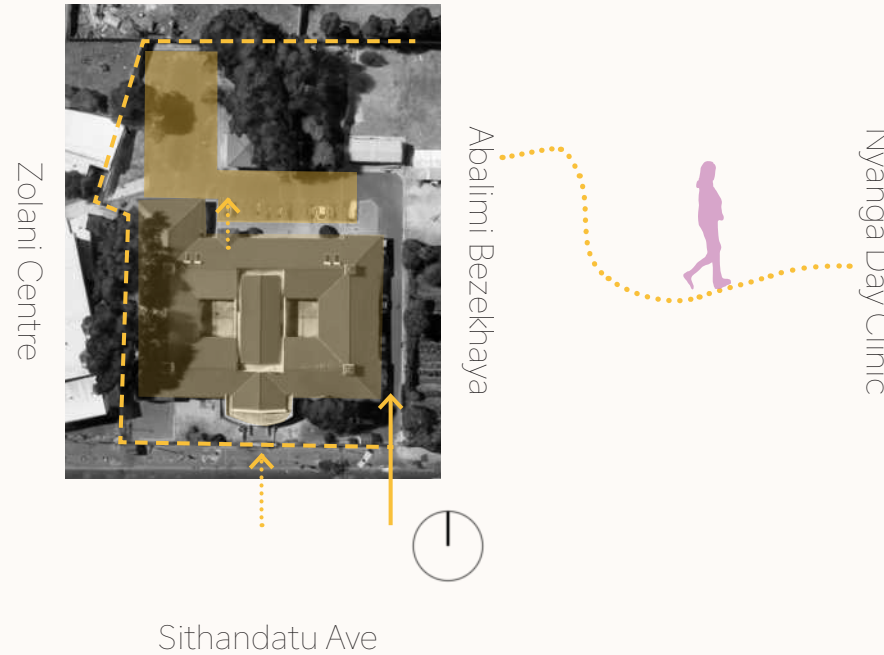
Nyanga Family Recreational Park



Map showing location of Zolani Centre (Google Earth) earth.google.com/web/. adapted by author 2020

NYANGA DAY CLINIC

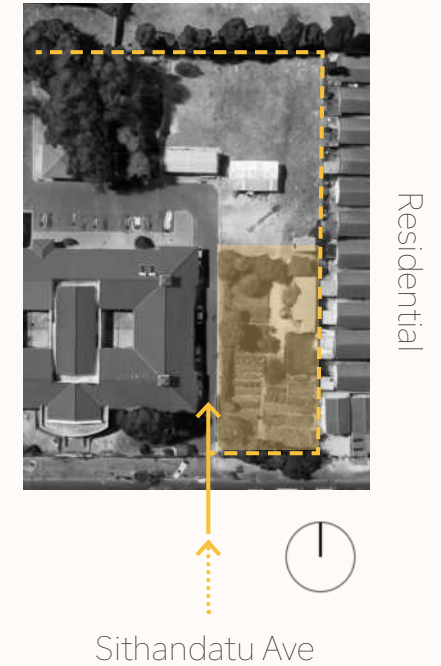
Nyanga Family Recreational Park



Map showing location of Nyanga Day Clinic (Google Earth) earth.google.com/web/. adapted by author 2020

ABALIMI BEZEKHAYA

Nyanga Family Recreational Park



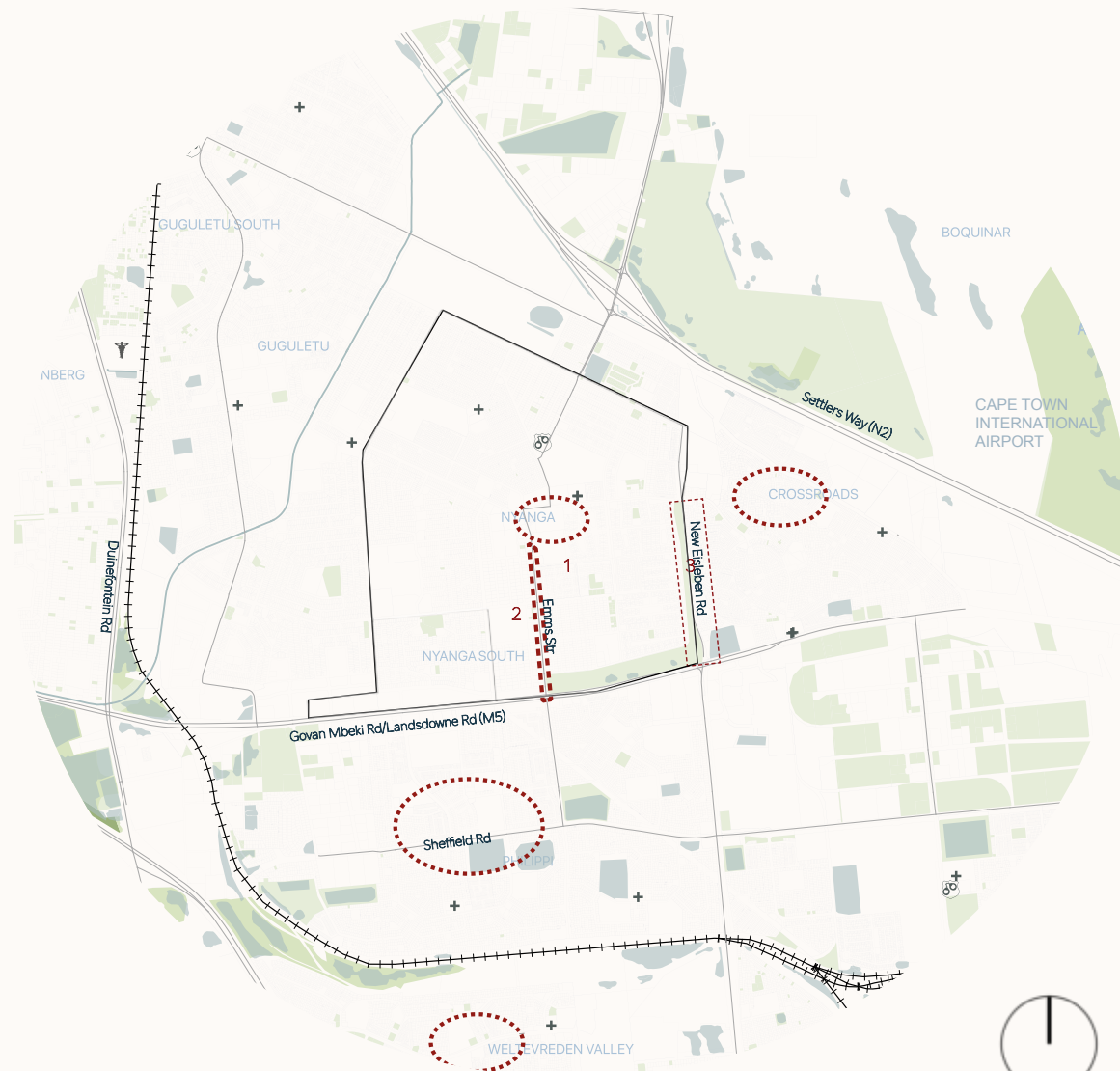
Map showing location of Abalimi Bezekhaya (Google Earth) earth.google.com/web/. adapted by author 2020

The Zolani Centre is a mix-use facility which has private office space for administrative workers and public spaces which can be used by the community. The indoor public facilities (which includes the basketball court, theatre space and open meeting/gathering areas) are located closest to the main street edge (Sithandatu Ave). The public outdoor facilities (such as the garden space and netball court etc) are located closest to the Nyanga Family Park. This site is fenced off which limits access to the community to the spaces which have been made for them. This fence and the parking also takes up space which can be used by the informal traders just outside the fence.

The Nyanga Day Clinic is the only medical facility in Nyanga and is an area the women occupy. Female informal traders set up their stall along either side of the entrance and almost act as guardians to this space, watching who goes in and out of the clinic. This intense surveillance makes this space safe for women to move through. There is parking north of the clinic which is used by staff members. The clinic also shares this property with the Abalimi Bezekhaya site. There is a fence around the property to restrict access and keep the property safe.

The Abalimi Bezekhaya site is located on the same property as the day clinic and the two spaces share an access point. This site is fence off to restrict access to the area and helps to keep the produce safe (from looting). The main micro-farming garden space is clearly defined and populated by plants but the rest of the site is not being used. This farming activity could be extended to help grow and supply my food for the community.

Mapping | Crime Hotspots



(Author, 2020)

In creating a safe space for women it was important to note and map of the unsafe spaces in the area. These spaces could make it difficult for women to occupy these spaces or make access to nearby spaces harder.

When looking at issues around safety in the area as a whole, there are three crime hotspots which have been located in Nyanga. These are spaces where cases of aggravated robbery and murder occur more frequently (Edelstein, Arnott, and Faull, 2020).

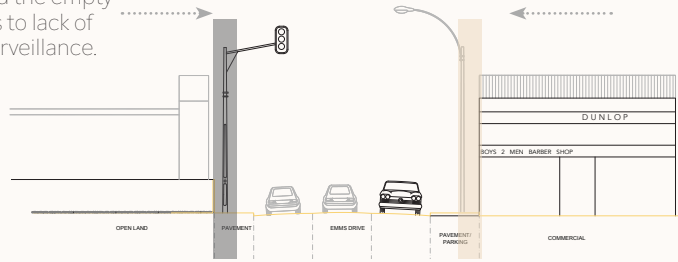
Hotspot 1 is the area in and around the Nyanga taxi interchange and is located very close to the police station. Originally, the police station was assumed as an element that would add a layer of safety to the site but in mapping the crime hotspots, it was made clear that this was not the case. Upon further investigation it was noted that the police in Nyanga are afraid to patrol the area even during the day because of the high levels of crime (Safetylab, 2013).

Hotspot 2 is Emms Drive which has been identified by residents as the most dangerous road for pedestrians which high amounts of gang violence taking place along this spine (Safetylab, 2013).

Hotspot 3 is along New Eisleben Rd. This area is a large string of empty land nestled between a main road and a residential road. The lack of activity along the empty piece of land layered with the adjacent, vehicle dominant road are what make this strip unsafe for pedestrians. There is no surveillance and so people walking through this space alone or in a small group are left exposed to aggregated theft and murder.



Dead edge:
Fencing and the empty plot leads to lack of activity/surveillance.

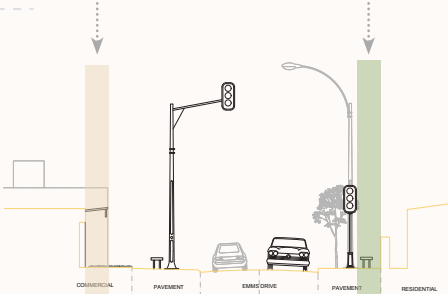


Active edge:
Commercial activity spills out onto the street which adds surveillance.

(Author, 2020)

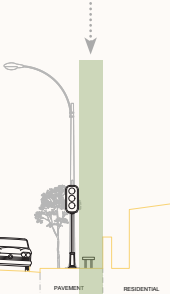
Emms Drive (highlighted in red below) is one of the main roads leading up to the area of focus. It is considered to be the most dangerous roads, nicknamed "the red carpet" by the locals because of the bloodshed from stabbings and shootings leading to severe injuries or murders taking place there (Safetylab. 2013). The road has little surveillance with the houses having high boundary walls and being stepped back far from the street. There are areas with open/empty plots of land. The lack of surveillance along this road makes the area unsafe, where people can easily commit crime and escape without anyone seeing. Few people can be found along this road and women are usually accompanied when moving along this road. Emms Drive gives clues as to what is not working in the area and is a good informant for the type of edge conditions and spaces that women do not feel safe and won't occupy.

Active edge:
Spaza overhang gives the pavement a human scale & level of comfort

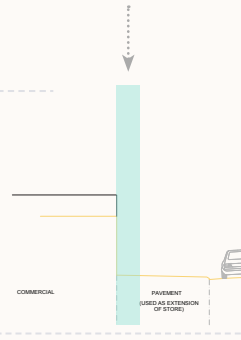


(Author, 2020)

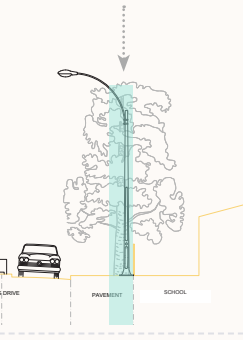
Medium edge:
High wall of residence limits views but house faces street.



Dead edge:
Tall building with dead facade leads to lack of activity along the edge.



Dead edge:
High fencing and school looks inward (away from street).



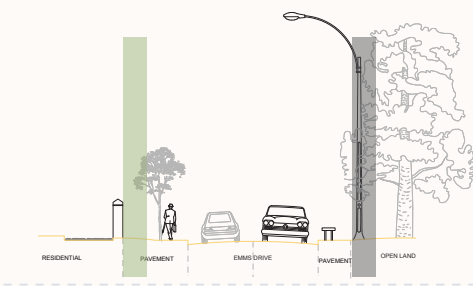
(Author, 2020)



(Author, 2020)

Medium edge:
High wall of residence limits views but house faces street.

Good edge:
No fencing on house + house facing street adds surveillance



Medium edge:
High wall of residence limits views but house faces street.

Dead edge:
Empty plot leads to lack of activity/surveillance

(Author, 2020)



(Author, 2020)

Spaces for Women | activity



Street View showing Great Dutch Street (Google Earth) earth.google.com/web/. adapted by author 2020

There are trade facilities which have been added along Great Dutch Street (which is the road between the Nyanga Family park and the police station). Surveillance is added through the activity from the police station as well as the foot traffic moving north towards hostels/residential zone. There are female trading stalls which have developed here due to this activity.



Street View showing Ntlangano Cres. (Google Earth) earth.google.com/web/. adapted by author 2020

The activity taking place along Great Dutch Street creates moments of safety around this zone. The image above show one of those zones. There is a spaza shop and a liquor store which pull from the energy taking place on Great Dutch Street at certain times of the day and make this zone safe to pass through.

The Department of Home Affairs and the Nyanga Environmental Health Offices are both located in the area pictured on the right. The activity generated by these facilities add surveillance to the space and so more women can be found here. There are a few female traders, as well as female trash collectors who move along this street.



Street View showing Nyanga Environmental Health Offices (Google Earth) earth.google.com/web/. adapted by author 2020

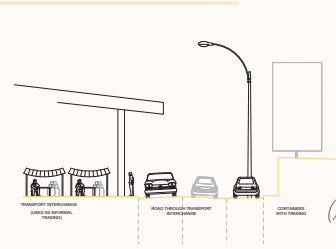
The image below shows Nyanga Day Clinic (situated along Sithandatu Ave which is a road that is mostly occupied by women) and the way women occupy this space. The female traders act as an extension to the entrance of this space. Unlike the other examples of spaces occupied by women explored on this page, the women along this street and especially along the clinic's entrance actually hold and guard the space. This is more than just a space that they are able to occupy/exist..



Street View showing Nyanga Day Clinic (Google Earth) earth.google.com/web/. adapted by author 2020



The area with the interchange and community centre has trade taking place on both sides of the road. The interchange sheltering structure is occupied only by traders (mostly women). There is a lot of activity around this area with people constantly moving through the space.



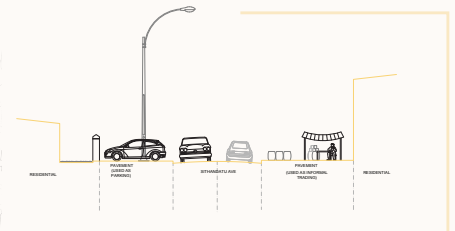
(Author, 2020)



(Author, 2020)

This study shows the spaces that women occupy in Nyanga and how they move through this space. The trade activity taking place along Sithandatu Avenue (highlighted below) is female dominated. They have informal trading stalls along the pavement and in the taxi interchange. There are containers with salons and food stalls that are owned and operated by women around the taxi interchange. Trade takes place on both sides of the road but the areas where the residential buildings are, trade takes place only along the one side of the street, but still densely packed, and the other side is used mostly as parking.

Women occupy this space due to the high activity taking place and the constant surveillance in the area. The taxi interchange (labelled below) contains a high number of female traders even though it has been highlighted as a crime hotspot however, most of this crime takes place due to the extremely high movement of people in the early morning and is reduced after peak hour.

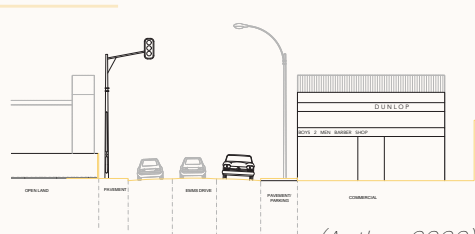


(Author, 2020)

The area along Sithandatu Avenue where the houses and hostels are on either side of the road only has trade on one side of the road (the side where the hostels are). Many of the houses have fencing/a clear boundary and the hostels on the south side have been defined by the trade taking place along the pavement. These stall structures seem more permanent than the stalls closer to the interchange.



The small slip street with the taxi interchange has informal trade happening under the shading structure and trade taking place in metal containers. These containers hold a lot of the salons in the area as well as a few food vendors. Although this area is meant to serve as a taxi interchange, it seems that many of the taxis and buses stop along Sithandatu Avenue rather than the slip street within the interchange.



(Author, 2020)

There is a more formalised trade activity taking place in this area with a mix of shipping containers and built form for some of the other spaces. This contains a few of the salons and a few other stalls. There aren't any informal trading stalls along this area and this activity mostly happens along the main road.



(Author, 2020)

The Stalls | typology

The types of stalls in and around Sithandatu Avenue have organically developed according to the type of activity taking place close by; and form clusters of trade activity (which can be observed on the street plan below).



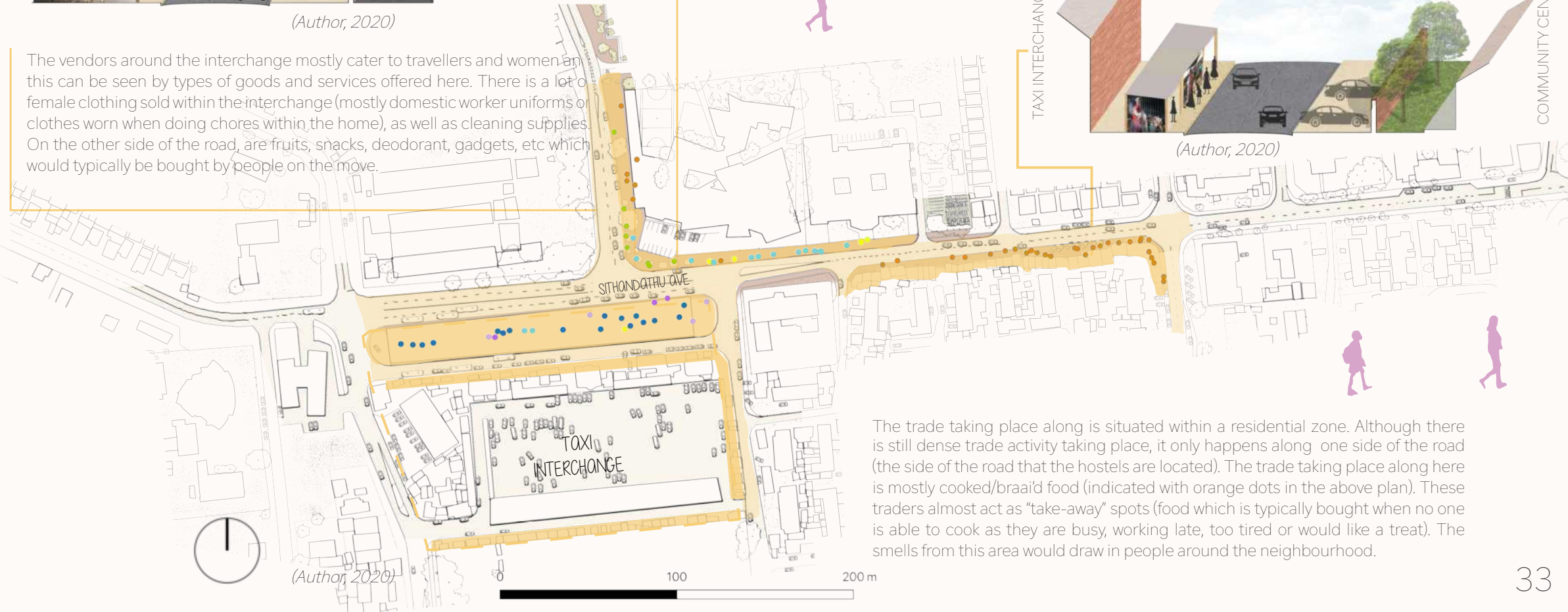
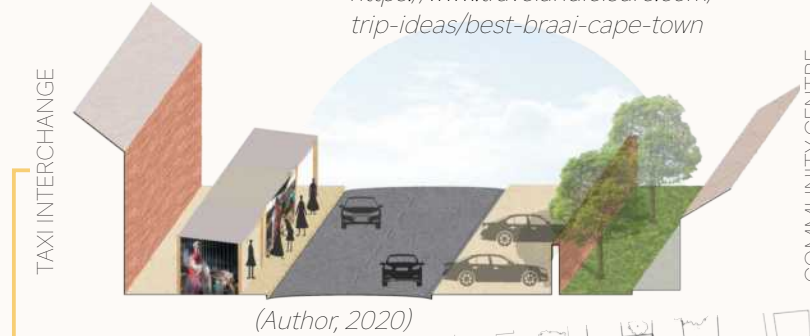
The vendors around the interchange mostly cater to travellers and women and this can be seen by types of goods and services offered here. There is a lot of female clothing sold within the interchange (mostly domestic worker uniforms or clothes worn when doing chores within the home), as well as cleaning supplies. On the other side of the road, are fruits, snacks, deodorant, gadgets, etc which would typically be bought by people on the move.



The trade still takes place on both sides of the road but there is a slight shift in trade taking place moving east towards the residential area. The vendors are still mostly catering to travellers but this begins to merge with the needs of the local residents. The goods sold are mostly the same with the clothing sold (mostly on the side of the road with the community centre) now including casual clothing for children, men and women.



(Hemis / Alamy, 2018)
<https://www.travelandleisure.com/trip-ideas/best-braai-cape-town>



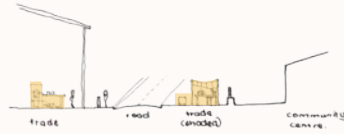
The trade taking place along is situated within a residential zone. Although there is still dense trade activity taking place, it only happens along one side of the road (the side of the road that the hostels are located). The trade taking place here is mostly cooked/braai'd food (indicated with orange dots in the above plan). These traders almost act as "take-away" spots (food which is typically bought when no one is able to cook as they are busy, working late, too tired or would like a treat). The smells from this area would draw in people around the neighbourhood.

The Stalls | conditions

The stalls are mostly made of materials found around the site or are located within existing sheltered areas.

The taxi interchange has a shaded structure, underneath there are tables arranged around the surface for traders to set up stalls each day.

On the other side of the road are fenced facilities and the trade takes place along that edge, with some vendors assembling and disassembling shelters each day or setting up a blanket and displaying goods on here (sitting on the floor or the wall and using the nearby trees for shading).



(Author, 2020)



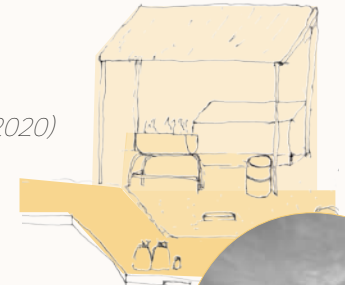
(Author, 2020)



Street Views showing Sithandatu Ave Trade Stalls (Google Earth) earth.google.com/web/.

The stalls closer to the hostels look like they have been made by the stall-owners with materials found around the area. These include cardboard, steel, fabric, plastic and timber. Some of these materials were explored in order to understand how they could be used, and sourced and also to understand the conditions that the women work under. The stalls along these edge seem more permanent. The structure is left at the end of the day and so one can see where trade would be taking place, unlike in the east where the traders define their spaces each day.

(Author, 2020)



Meat is slaughtered and cooked on site (in the stalls). Due to lack of slaughtering facilities, the waste from the meat will be thrown along the edge of the street and is either taken by collectors or eaten by stray dogs. This waste makes the area untidy and blocks the stormwater drainage on the street (Niyobuhungiro, 2017).



(Author, 2020)



(Author, 2020)



The trade taking place along here consists mainly of cooked food and traditional African beer but hardly any handmade goods, clothes. There are many homes nearby and so residents at home or on their way home would buy from these stalls.

Street Views showing Sithandatu Ave Trade Stalls (Google Earth) earth.google.com/web/. adapted by author 2020

The Stalls | needs assessment



The images on the right highlight a few issues but primarily speak to the lack of disposing facilities in the area where traders leave rubbish along the edge of the street (making the area untidy).



The image above primarily speaks to the method of cooking used in the trading stalls. The traders use and open flame which is kept alight throughout the day (Niyobuhungiro, 2017). This is not sustainable and a lot of time it wasted to keep the fire going and a lot of money spent on wood. This highlights the need for a new method of cooking or more economical ways of sourcing fire wood.

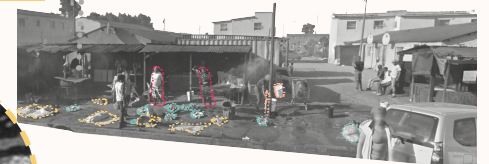
The image above highlights the issues in the trading stalls with regard to lack of seating for vendors. This is an issue that is constant throughout the trading node.



The images on the right highlight the need for water for cleaning supplies and workspace as well as the need to seating for vendors who trade in the space throughout the day.



The images on the right highlight the issues around lack of slaughtering facilities, where animals are slaughtered along the street edge and the waste scattered around the area.



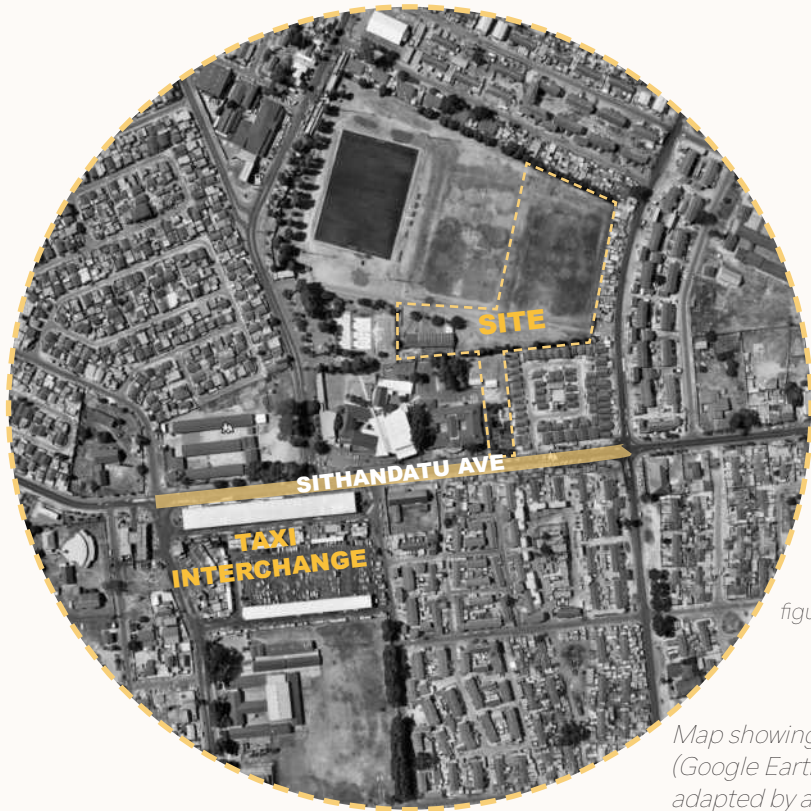


figure 1: Locality map

Map showing location of Nyanga Node
(Google Earth) earth.google.com/web/.
adapted by author 2020

This materials study looks at these “self-build” materials and the way that they have been re-used and re-purposed to create the stalls. This sheds lights on the type of materials that are easily accessible around the area and conditions of the spaces the women occupy in Nyanga.

For the study, the type of materials found on site were sourced and tested to gain an understanding of the nature and performance of these materials. This will be discussed later in the study.

These materials are:

1. Polypropylene (which has been used as a shading/covering element as seen in figure 2)
2. Timber (which has been used as a structuring element as seen in figure 4)
3. Steel (which has been used mostly for its ability to hold/withstand fire as well as a structuring and covering element as seen in figure 6).

In order to understand the material and how it performs on the site, a few tests were conducted on sample materials. These tests were based on the conditions experienced the site such as: heat exposure from the sun, heat exposure from fire (as fire is used in and around the stalls for cooking), friction and bending (as these are harsh conditions, these materials have many forces exerted upon them and there are many people moving through the space).

Street Views showing Sithandatu Ave Trade Stalls
(Google Earth) earth.google.com/web/.
adapted by author 2020



figure 2: Polypropylene on site

POLYPROPYLENE

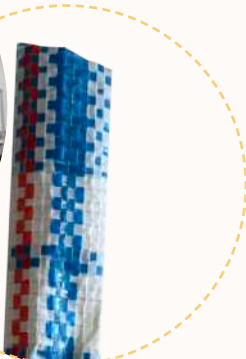


figure 3: Polypropylene sample
(Author, 2020)



figure 4: Timber on site

TIMBER



figure 5: Timber sample
(Author, 2020)



figure 6: Steel on site

STEEL



figure 7: Steel sample
(Author, 2020)

Materials Study | polypropylene

SOURCING



Street View showing Sithandatu Ave Trade Stalls
(Google Earth) earth.google.com/web/.
adapted by author 2020

(Author, 2020)

HOW IT IS SOURCED ON SITE:

This is a packaging material and is used to package potatoes and onions etc and so it could sourced from the commercial hub. Polypropylene bags (used for packing/travelling) are also sold in the transport hub. This material could also be sourced from nearby trash cans/junk collection points around the area.

NATURE AND PERFORMANCE



figure 12: burning and melting plastic



figure 13: cooled and hardened plastic
(Author, 2020)

BURNING

This material insulates heat and so it will not transfer the heat from the sun. This means that the conditions in the stalls could actually be cooler. This material however, has a low melting temperature of about 250–290 °C. The temperature of the simple flame of a candle is about 1000 °C and so it will begin to melt when exposed to fire. This material can also catches fire quickly and easily. This is a hazard as the fire will quickly and easily move through the area. The fire does not stop burning until the material has completely melted.

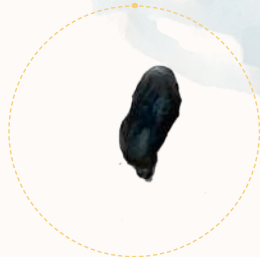


figure 14: hardened plastic



figure 15: bent and broken plastic
(Author, 2020)

BENDING

When presented as a woven plastic sheet, as found on site, this material has no real structure of its own and will bend in any direction easily and without breaking. If the material were to be heated, melted and remoulded to create new forms it would harden and become a lot more rigid (as shown alongside). In this form however, the material becomes brittle and will break more easily.



figure 17: frayed edges of plastic

(Author, 2020)

FRICTION

When the material is exposed to friction (either by the materials moving against each other or people stepping on or moving against it) it will begin to fray. The polypropylene found and used on site is woven and so, it will begin to unravel as it begins to age making it not very durable.

SOURCING

Street View showing Sithandatu Ave Trade Stalls
(Google Earth) earth.google.com/web/.
adapted by author 2020



(Author, 2020)

HOW IT IS SOURCED ON SITE:

Timber planks look as though they have been sourced from the hostels in the background. Many of the washing lines have been made using the same type of timber used in the support structure of the stalls and so some of these lines may have been dismantled to make the stalls. This is also the same timber pole used on the electric and telephone poles which may have been chopped and carried to site. The timber may have also been taken from fencing used in the house nearby or from trash around the area.



figure 24: dismantled washing line



figure 25: fencing



figure 26: washing line



figure 28: abandoned timber/trash

NATURE AND PERFORMANCE



figure 19: timber set alight



figure 20: burned wood and ashes

(Author, 2020)

BURNING

This material insulates heat and so it will not transfer the heat from the sun. This means that people will not burn when they touch the material on hot days. This material has a burning temperature of about 300-600°C and so it will begin to combust when exposed to fire. This material can catch fire however, a weak fire can easily die without spreading very far. The presence of wind can reignite the flame and give it strength and it would spread across the area.



figure 21: timber straight after bending

(Author, 2020)

BENDING

This material can bend with a lot of force exerted and it will eventually break. This is relatively strong material and is very difficult and, depending on its size, can be impossible to break without machinery. When bent (before it reaches its breaking point) it will immediately return to its original form.



figure 22: timber shavings from friction

(Author, 2020)

FRICION

When the material is exposed to friction it begins to wear down and become smaller and weaker. This is force would have to be very intentional in order to cause a lot of damage quickly and so this material has the ability to last a long time if treated and maintained well.

SOURCING

Street View showing Sithandatu Ave Trade Stalls
(Google Earth) earth.google.com/web/.
adapted by author 2020



(Author, 2020)

HOW IT IS SOURCED ON SITE:

The braais have been made from steel barrels (these are usually used as bins in the area). The braai stands have been made from the frames of tables which could have been taken from the nearby schools and community facilities. The poles (used as structuring elements) look like they have been taken from signage around the area.

Street Views showing materials found around Site
(Google Earth) earth.google.com/web/.
adapted by author 2020



figure 32: steel bin in residential area



figure 33: steel poles



figure 34: abandoned steel trash pile

NATURE AND PERFORMANCE

BURNING

This material conducts heat and so it will transfer the heat from the sun. This means that touching this material during a high temperatures would burn humans. This material however, has a very high melting temperature of about 1371-1540 °C. The structure of this material would not change when exposed to fire. This material could be used as a container for fire but would not do well an element that people would have to touch (such as seating, exposed structuring elements etc).

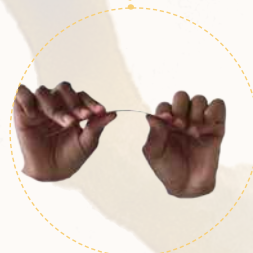


figure 30: bending of metal

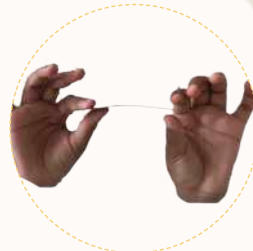


figure 31: bent metal. does not revert to original shape.

BENDING

When bent, the material will not revert to the original shape, instead it will take on a new shape. It needs to be manipulated in order to get it back to its original shape (either by putting pressure on both sides in order to get it to be straight again, beating/hammering it or bending it back in the opposite direction).



figure 30: minor shavings from intense friction

FRICITION

When the material is exposed to friction it might retain a few scratches. When exposed to extremely high friction, the material could begin shaving off a little. However it would be difficult and would take time without machinery.

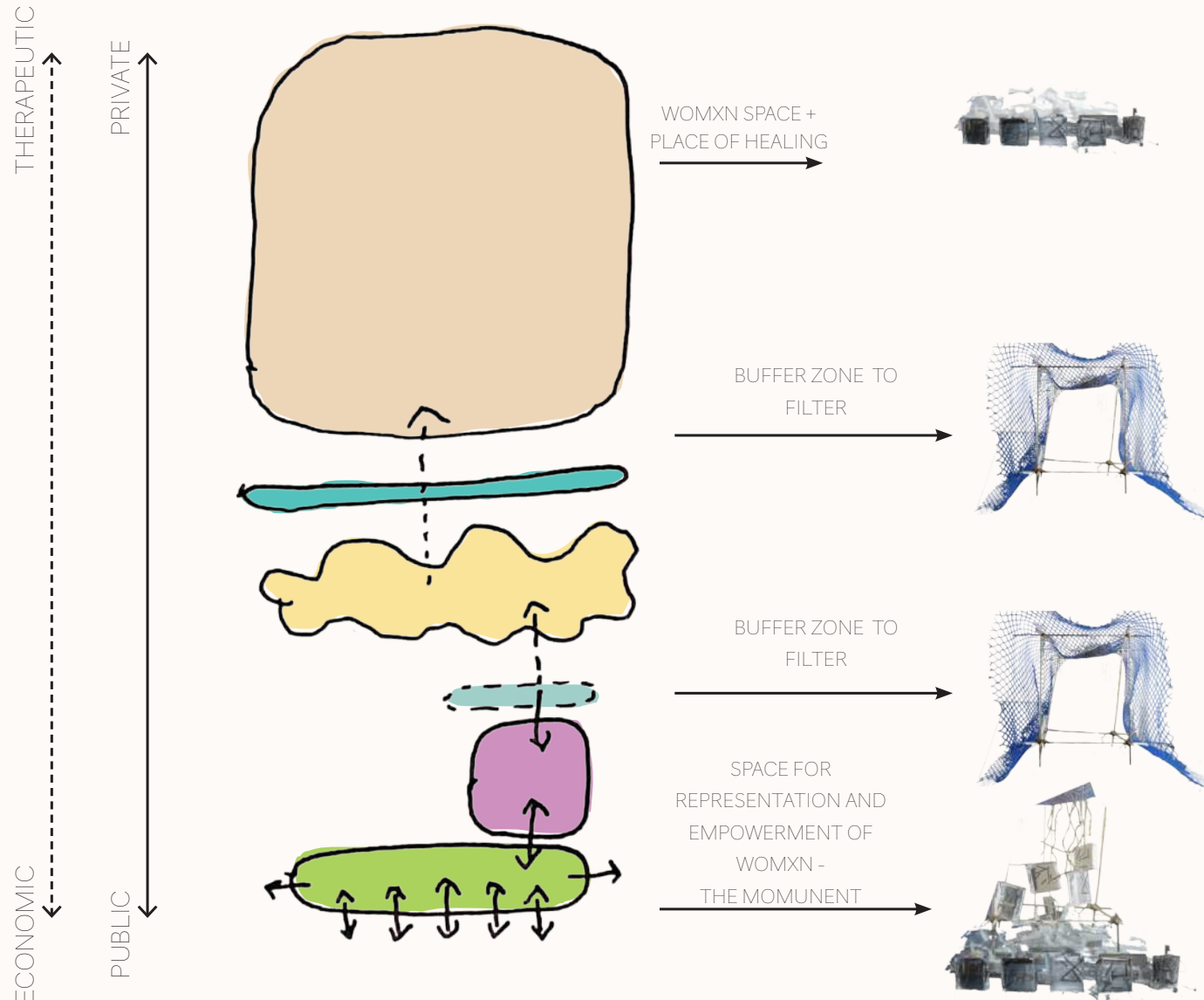


figure 29: flame to steel with no effect to structure. Did not catch fire.



(Author, 2020)

DESIGN STUDY |



(Author, 2020)

The image alongside is a concept diagram which shows the progression of space starting from the street (Sithandatu Avenue) which is a completely public space. These spaces can be used as spaces of empowerment seeing as this is a visual practice which takes place within the public realm and is completely accessible (both physically and visually). This then moves into the vegetable garden (Abalimi Bezekhaya) which acts as a pseudo-public space (pink area). This space has some of the qualities of a public space such as the ability for anyone to move in and out of the space but it has one point of entry. This act of garden in this space begins to become a method of calming and healing however, in this zone the economic benefits of the food supply is the main focus.

The two next spaces (indicated in light blue and yellow) become a buffer zone and can be referred to as a state of liminality. The zone starts to restrict movement and filter the types of people using the space where more women occupy the next space than men. This zone is still considered part of Abalimi but would have edible indigenous and endemic plant species. This is a semi-public space where the act and processes of garden is a form of healing.

The turquoise space becomes the next important threshold/buffer zone which restricts access to the next space further.

The last space the most private and therapeutic zone. In this space there will be more introverted activities for healing such as meditation, prayer, small group sharing circles where women can process their emotions and have space to think begin to heal. The plants in this space are more medicinal plants harvested for and by women as they need. The space will have plants which can be used to make calming teas as well as medicinal plants which can be used to help with bruising and pain. In this space mental and physical healing are at play. This is a sensory space where the processes of nature connect people to nature and act as a healing agent.

Framework Plan | Opportunities and Constraints

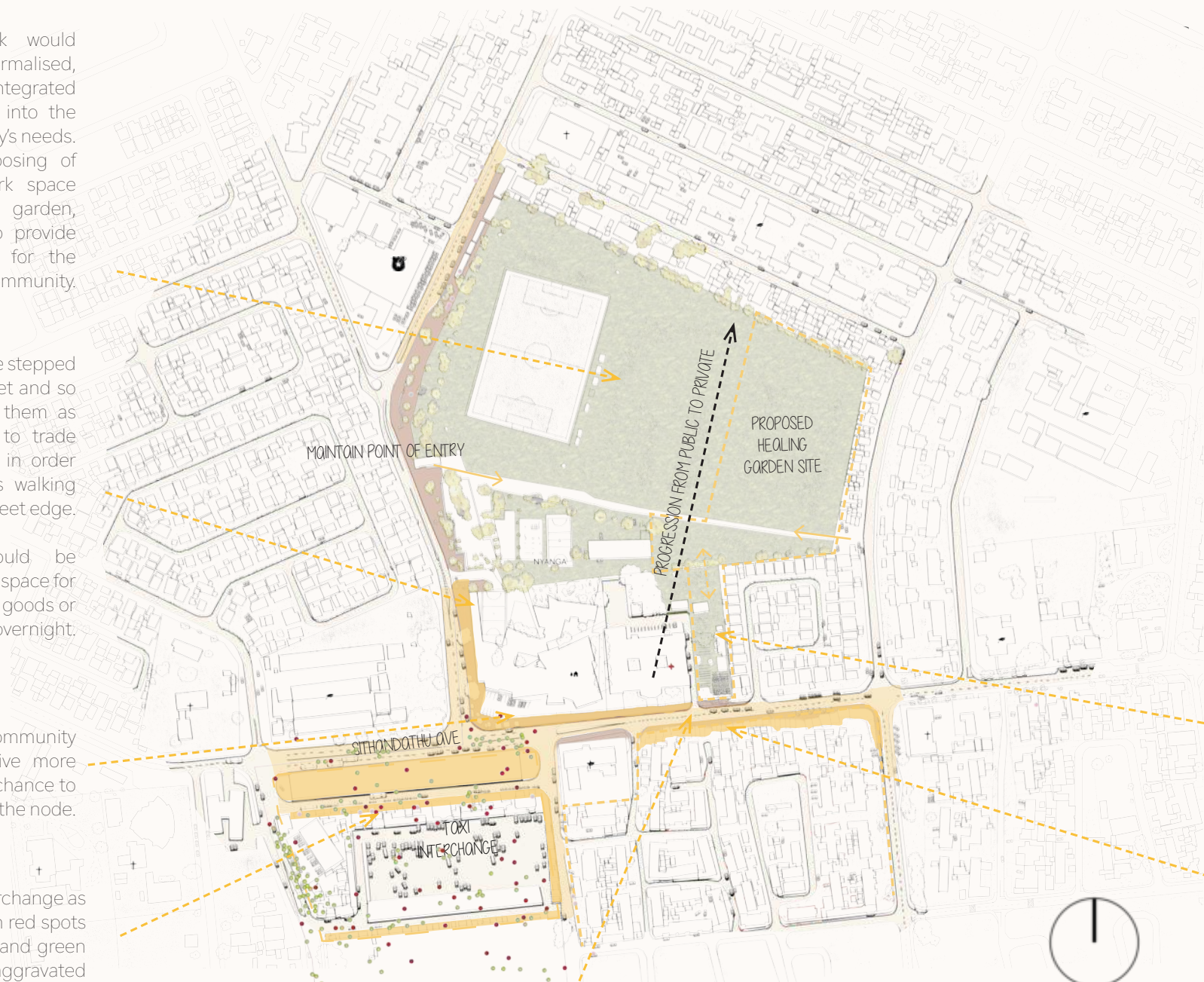
This family park would need to be formalised, introducing well integrated spaces that feed into the community's needs. With the re-purposing of some of the park space for the healing garden, it is important to provide improved spaces for the community.

These stall spaces are stepped too far from the street and so traders do not use them as much. They prefer to trade closer to the street in order to catch consumers walking along the street edge.

These spaces could be converted to storage space for traders to leave their goods or equipment overnight.

Removal of community centre fence to give more women a chance a chance to trade within the node.

Noting the Taxi Interchange as a crime hotspot with red spots indicating murders and green spots indicating aggravated robberies. (Edelstein, Arnott, and Faull, 2020).



Introducing a pedestrian intersection to create stronger economic link along the street.

(Author, 2020)

TOOLS



Low vegetation to ensure visibility.



Trees used as shading in gathering areas. Adds legibility



Change of road texture to pedestrianise the street and connect activities.

(Author, 2020)

Expansion of Abalimi to give more women opportunities for employment, food sourcing and growth of businesses.

Restructuring the stalls to create a better flow + adding facility for slaughter activity.

1. TRADERS MARKET
2. TRADERS STORAGE
3. PROTEST WALL
4. ODE TO WOMXN
5. FORMALISED FOOD TRADING STALLS
6. SLAUGHTER FACILITIES
7. GOODS DROP-OFF ZONE
8. ABALIMI (WITH EXPANSION)
9. ABALIMI (INGENIOUS)
10. ADDITIONAL PARKING
11. FAMILY PARK
12. HEALING GARDEN



(Author, 2020)

The image on the preceding page is the final framework plan.

TRADERS AND ECONOMIC EMPOWERMENT (EAST)

The fence of the Zolani Community Centre has been taken down with bits of the lower brick wall remaining to act as seating for traders in the market space. The old Zolani Centre parking lot will be used as a market space. Vendors from Great Dutch Street can now move down into the main trade node and trade within the market space. The old trade stalls will be converted to storage space for vendors to put equipment and goods overnight (this will make their morning/evening commute to work easier as they will have less to transport each day). Parking has been added (behind the day clinic) to replace the parking removed from the Zolani Centre and a pathway between the clinic and community centre will connect them.

TRADERS AND ECONOMIC EMPOWERMENT (WEST)

The trade stalls on the west will be rebuilt and formalised. The former structuring elements will be re-used to create an artwork within the healing garden. The introduction of slaughter facilities behind the stalls would also be needed to ensure that the slaughter activities do not disturb the trade activity taking place along the main spine. The drop-off zone will be used for delivery of sheep, chicken and offal cooked on-site.

MOVEMENT HIERARCHY AND CONNECTIVITY

Cobble-paved intersections would be introduced to slow down traffic and pedestrianise the main road. These intersections would allow for interconnectivity between the trade stalls; making it easy for consumers to move between the different stall types and linking food traders with the farming activity taking place in the Abalimi Gardens. Different types of paving will be used for the trader zones and the pedestrian walkways to limit disrupted movement and activity between the pedestrians and vendors.

MONUMENTS AND WOMXN EMPOWERMENT

The Zolani Centre facade facing the Taxi Interchange would be turned into a protest wall. Art related to GBV events taking place within and around the community would be painted or projected on this wall. This would encourage discussions within the community around GBV issues taking place.

A skeleton-dome structure will be added as a shading structure for women waiting for doctors' appointments. This structure will have figures representing local womxn (create by a local artists) which would eventually be covered by creeping plants.

ABALIMI FOOD PROVISIONING AND BUFFER ZONES:

The Abalimi gardens would be extended to give more womxn the opportunity to trade and source food for their families. Currently, Abalimi uses well/borehole water to irrigate the plants and so more water would be needed for this activity. This would be done by introducing groundwater recharge interventions in and around the space.

Some of the extension would include edible indigenous and endemic plant species. Cape Fynbos plant species can survive on normal rainwater cycles and so little to no additional water would need to be provided for this area.

The farming and gardening activity in Abalimi would add surveillance and a layer of safety to the entrance of the healing garden (much like the entrance of the day clinic which is almost guarded by female traders along the space).

FAMILY PARK: TAKING AND GIVING BACK TO THE COMMUNITY:

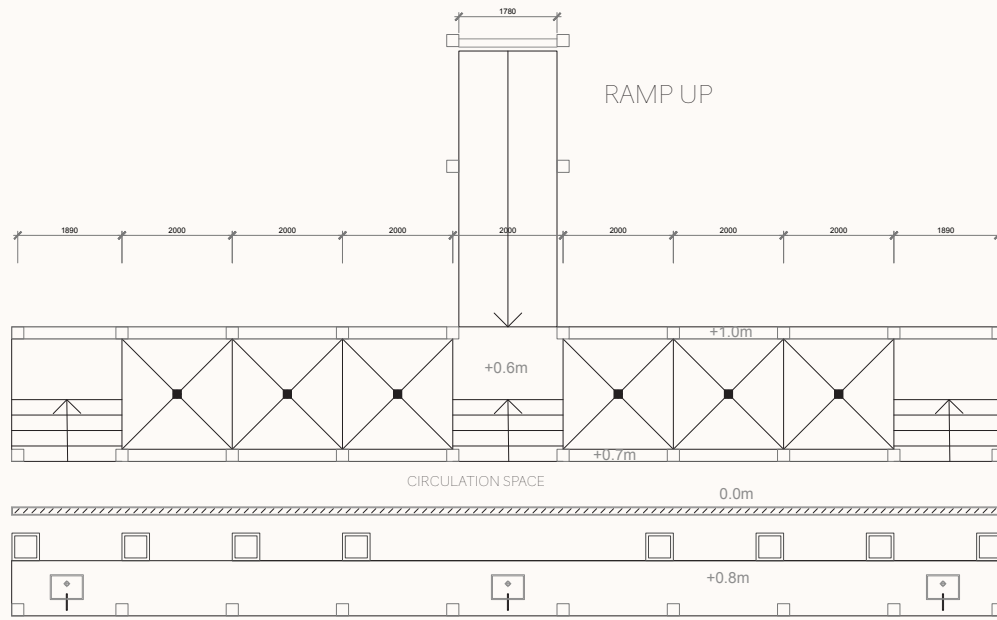
Some of the family park space would be used to introduce the introverted healing garden for local womxn in Nyanga. To balance this, additional spaces would be added to the remaining family park in order to make this area more functional and safer for the community to use.

There would be covered gathering/picnic areas for families to use. These would overlook four 5-a-side soccer fields for community soccer players and leagues to use as practice space, play areas for smaller children which would join to the existing play spaces. The road family park would be pedestrianised and cars would be left in the existing parking lot.

THE HEALING GARDEN: THE SPONGE

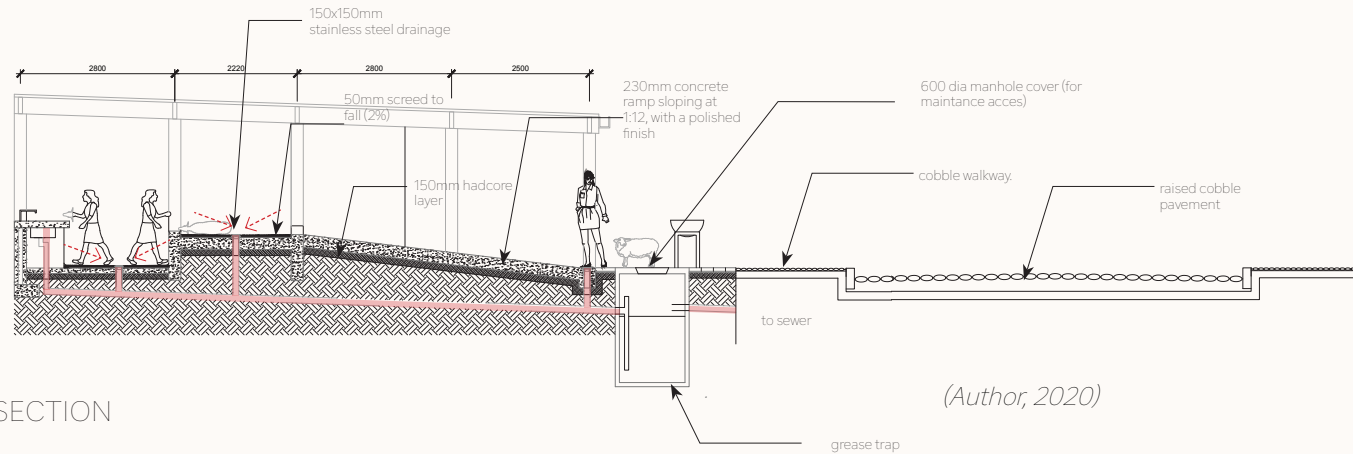
The healing garden would act as a sponge for Nyanga, with the introduction of SUDS such as bioswales, wetland systems, planting and permeable paving. This would cleanse the rainwater and also encourage aquifer recharge to balance the farming activity and water-use in the Abalimi Gardens.

The Stalls | slaughter facilities



PLAN

(Author, 2020)



SECTION

(Author, 2020)

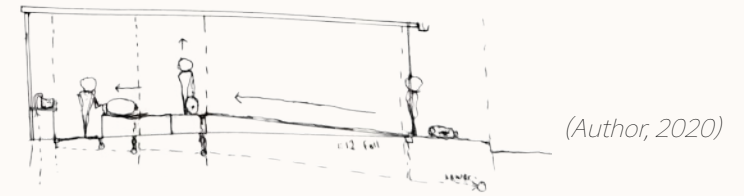
All water drained within this zone would be contaminated (from slaughter activity) and would need to be directed to the sewer system after passing through a grease trap.

This area would need to be covered to avoid mix of stormwater and contaminated water.

UNDERSTANDING NEEDS FOR THE SPACE

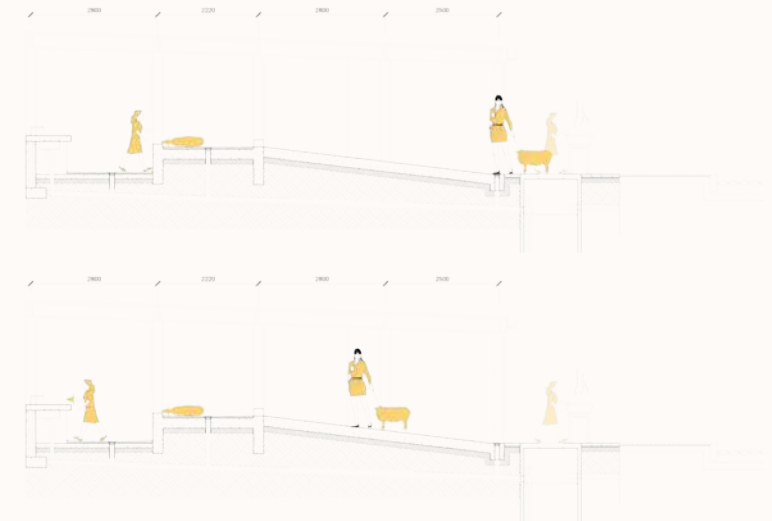


(Author, 2020)



(Author, 2020)

To assist with some of the slaughter activity need, a minor slaughter activity could be introduced. The surfaces would be polished concrete to allow for quick and easy clean and limit any waste and contaminants sticking to the space. Bins would be provided for each section to encourage a clean work space. A ramp would be used to carry the animals into the space. Municipal water would be needed to clean the space and use would need to be monitored.

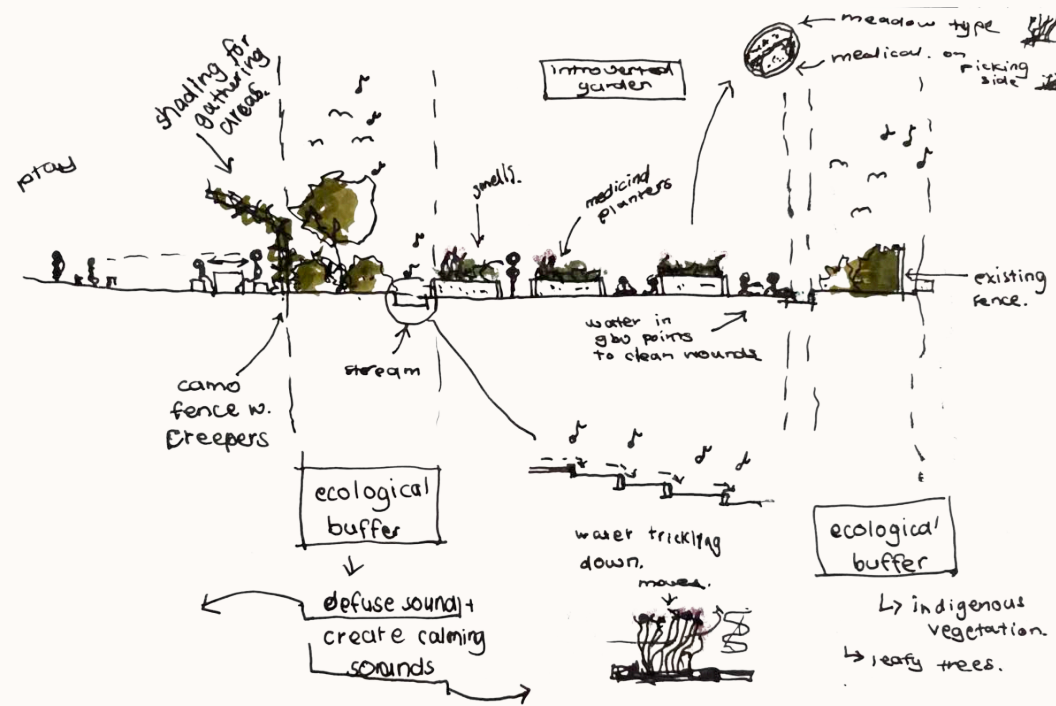


DIAGRAMS SHOWING SLAUGHTER-ZONE USE AND CONNECTION TO STREETS

(Author, 2020)

The healing garden | Concept

This garden would make use of a lot of soft landscaping (planting) and organic forms to mimic the features of the female form. Earthy tones (clay reds and light sandy browns) would be used for the hard landscaping to give garden a more natural feel. Vegetation would play an important role and patches of medicinal and endemic plant species would be used in the space to guide draw certain users to specific spaces. Lower vegetation would be used for the middle zones and higher vegetation along the edges to act as a buffer from surrounding activities.



CONCEPTUAL SECTION

(Author, 2020)

FORMS AND TEXTURES



Untitled (Women's Day)
(Sethembile Msezane, 2014)
<http://www.sethembile-msezane.com/projects>
adapted by author 2020



CONCEPTUAL MODEL

(Author, 2020)

The healing garden



GREEN HOUSE

(Author, 2020)

1. ENTRANCE AND INFORMATION BOARDS
2. PODIUM
3. GATHERING AREA
4. PAUSE AREA
5. TEEN AREA
6. ELDERS AREA
7. MIDDLE-AGED WOMXN/TRADERS AREA
8. GBV AREA
9. TRADITIONAL HEALERS AREA
10. CHILDREN AREA
11. GREENHOUSE
12. ARTWORK



(Author, 2020)



(Author, 2020)

ENTRANCE + PODIUM CHILDREN

This is an experiential garden consisting of meandering routes (to allow for reflection and contemplation), smelling, tasting and harvesting (gardening activity) of medicinal plants, gathering zones with spaces for discussions (linking womxn with similar life events and experiences together so that they can begin to support one another) as well as art created by the womxn to reflect their journey of healing in the space.

The entrance of the space has information boards about the plants, their uses and where to find them and the different meeting areas.

The healing garden would have space for different types of womxn and uses. The more "every-day" spaces for elders, teenagers and middle-aged womxn and traders would be closer to the entrance with planting directed to their needs. Some of the womxn using these spaces may not have care-takers for their children and so a zone has been allocated for them. This space would be between close to the other zones so that the guardians can address issues related to each zone (i.e. everyday teen issues or issues faced by traders/middle-aged womxn and elders) whilst still looking over their children. There would be larger gathering areas for local womxn to meet and discuss community matters collectively as well as minor pause spaces.

There would be spaces community traditional healers to meet as well as breakaway spaces for them the meet with and assist local womxn.

A green house would be introduced to help with propagation of medicinal plants harvested in the area.

Podiums would be introduces at three point of the site (the beginning, middle/greenhouse zone and the end of the journey). These would be vantage points for womxn to look over the entire garden. When on these podiums, the womxn would also become living sculptures for a moment.

The healing garden | GBV Spaces



BREAKAWAY SPACE

BREAKAWAY SPACE

BREAKAWAY SPACE

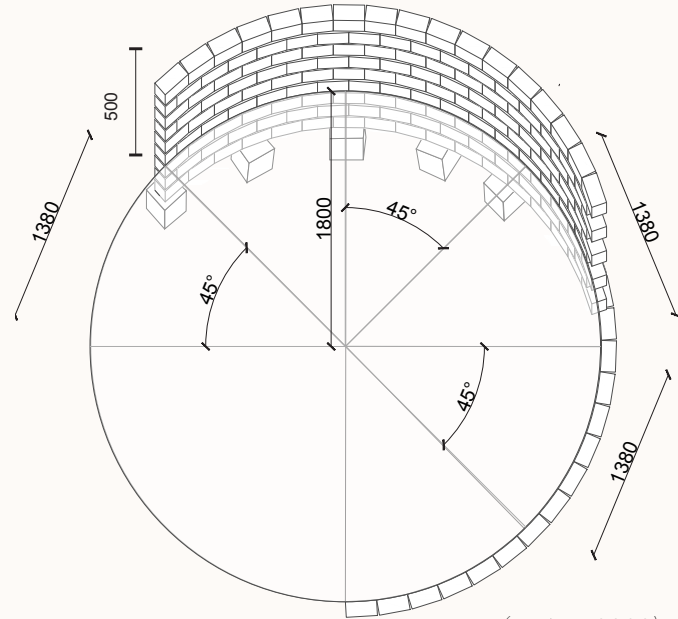
BREAKAWAY SPACE

BREAKAWAY SPACE

MAIN AREA

KIDS

INFO WALL



BREAKAWAY SPACE AXONOMETRIC

The area for womxn who have experienced gender-based violence in the community would have a main area for minor group discussions and counselling. The wall around this area would have information and steps to take when dealing with GBV events (i.e documentation, opening cases and reporting of the event).

This area would also have breakaway spaces for private meetings, meditation or prayer, and consultations for these womxn (these can be seen on this and the preceding page).

Lastly the area would have a space for children to stay in while these other activities take place. The planting around this area would mostly be directed at healing of wounds and aiding with mental health (such as the Cancer Bush which helps with anxiety and depression).



PERSPECTIVE OF BREAKAWAY SPACE WITH HELICHRYSUM ODORATISSIMUM IN THE FOREGROUND AND LESSERTIA FRUTESCENS AND TECOMARIA CAPENSIS IN THE BACKGROUND.

The healing garden | Artwork



PERSPECTIVE OF CHAOTIC ARTWORK

(Author, 2020)

There would be an artwork created by the local womxn using the old structuring elements of the food stalls which would represent the healing process. Starting with a chaotic assembling of the elements to show the initial mental state and need for support (with the structures leaning on one another for support) and then ending with an army of these structuring elements standing on their own, independent and empowered.



SECTION A SHOWING THE CHAOTIC ARTWORK

(Author, 2020)



SECTION B THROUGH PODIUM SHOWING THE EMPOWERED ARTWORK

(Author, 2020)



The healing garden | Gradient mapping

These are not the only uses of the plants but the main use in each space/reasons for allocations.

DAY-TO-DAY (STORE):



Uses:
Wash sheep skin

PLECTRANTHUS FRUTICOSUS



Uses:
Swelling of legs (standing long hours)

AGATHOSMA CRENULATA (BUCHU)



Uses:
Colds

SALVIA AFRICANA (BLUE SAGE)

TRADITIONAL HEALERS:



Uses:
Calming incense

HELICHRYSUM ODORATISSIMUM (IMPHEPHO)



Uses:
Healing properties

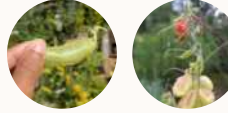
LESSERTIA FRUTESCENS (CANCER BUSH)

DAY-TO-DAY (ELDERS):



Uses:
Joint pain, bruises, swelling

HELICHRYSUM NUDIFOLIUM (WILD EVERLASTING)



Uses:
Inflammation, backache, calming

LESSERTIA FRUTESCENS (CANCER BUSH)

DAY-TO-DAY (TEEN):



Uses:
Menstrual cramps, cold

ERIOCEPHALUS AFRICANUS (WILD ROSEMARY)



Uses:
Regulate menstrual cycle, bladder infections

GERANIUM INCANUM (CARPET GERANIUM)

MENTAL HEALTH:

Uses:
Anxiety and depression



LESSERTIA FRUTESCENS (CANCER BUSH)

Uses:
Calming incense



HELICHRYSUM ODORATISSIMUM (IMPHEPHO)

Uses:
Calming tea



TECOMARIA CAPENSIS (CAPE HONEYSUCKLE)

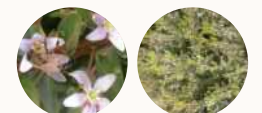
WOUNDS:

Uses:
Bruises, swelling



HELICHRYSUM NUDIFOLIUM (WILD EVERLASTING)

Uses:
Heal slow-healing wounds



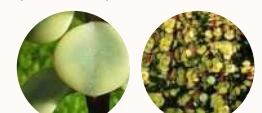
AGATHOSMA CRENATA & BETULINA (BUCHUS)

Uses:
Antiseptic, soothing, healing



CAROBROTUS EDULIS (SOUR FIG)

Uses:
Antiseptic, soothing



PORTULACARIA AFRA (SPEKBOOM)

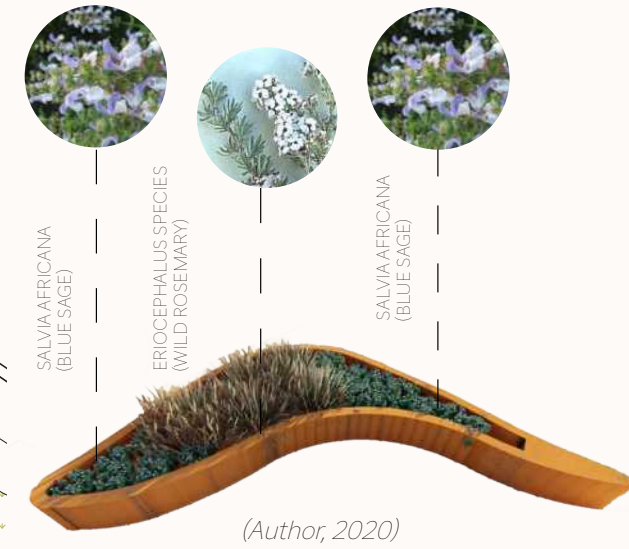
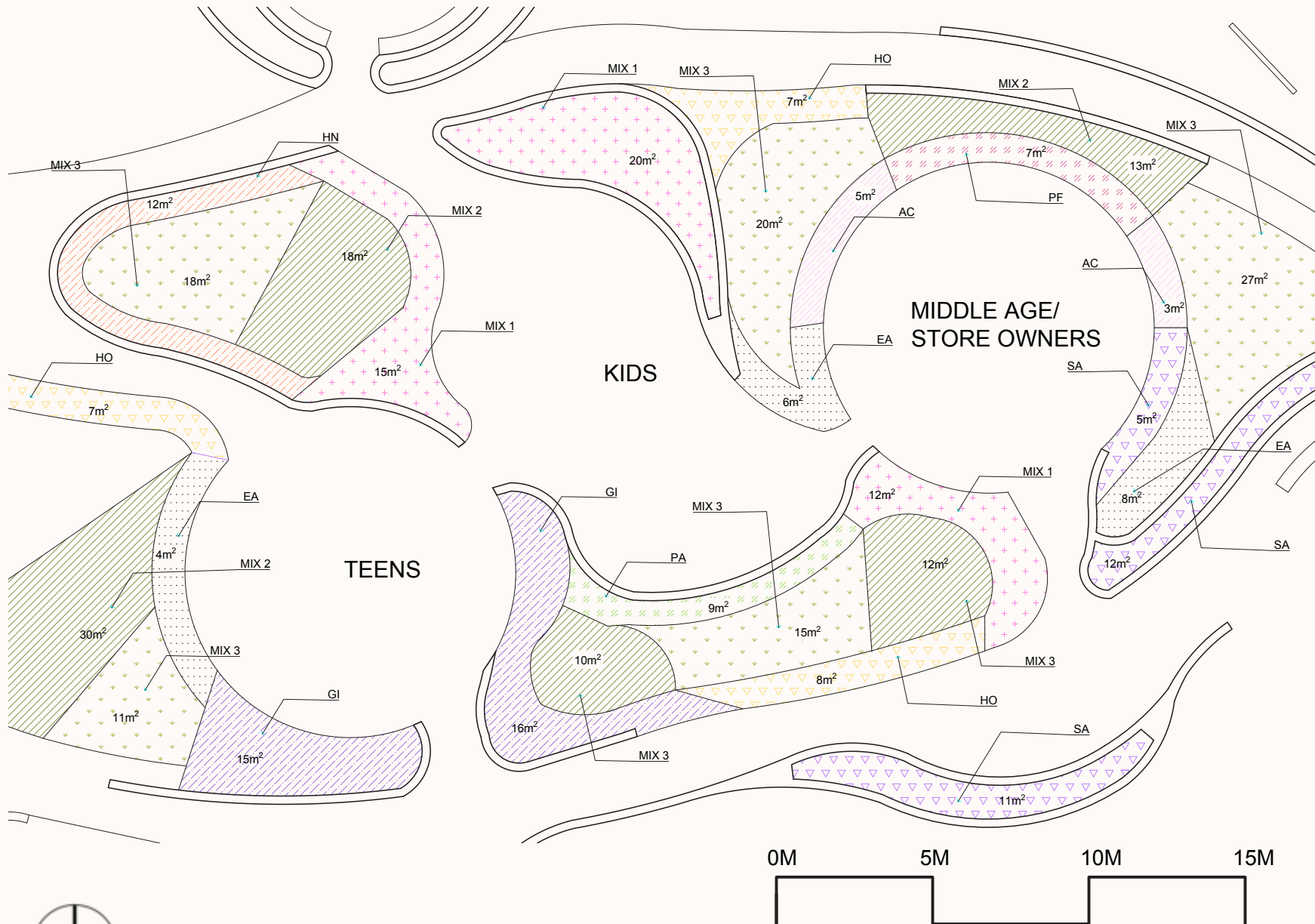
WATER PLAY:

Uses:
Flower used for play by children near waterbodies (floating, racing games)



(Author, 2020)

Planting plan and Plant uses



(Author, 2020)

The planting would be low to medium height planting (maximum 1.2m-1.5m) in the centre of the site and that is indicated by the lighter colours used in the garden's gradient plan with the higher vegetation along the edges to acts a visual buffers from the adjacent activities and buildings.

Specific plants would be used around different zones to tackle issues that those womxn could be facing. Around the teen area would mostly be plants like the Geranium incanum and the Eriocephalus species which are known to help with menstrual cramps in irregular cycles, while the plants in the elders area would help with joint pains, colds and coughs, the area for the middle aged womxn/store owners would have plants they can use to clean sheep skin (which can be used to make a carpet or resold) and plants to help with body aches from day-to-day tasks.

Plants which help with mental health would be scattered around the zone and could found in each zone but would be found in bulk around the GBV area (where womxn have experience trauma) as well as plant for wounds.

(Author, 2020)

Planting plan and Plant uses

Planting List																		
Key	Name	Uses	J	F	M	A	M	J	J	A	S	O	N	D	Total Area (m2)	Size	Density (Units/m2)	Quantity
Mix 1	Salvia africana-caerulea Eriocephalus africanus	sore throat, voice loss coughs, cold, colic, inflammation													47	4kg	4	188
Mix 2	Felicia filifolia Cliffortia obcordata	endemic species - stabilises dunes, improves soil quality													61	4kg	4	244
Mix 3	Athanasia dentate Pelargonium betulinum Tarconanthus camphoratus	endemic species - stabilises dunes, improves soil quality													113	4kg	4	452
HN	Helichrysum nudifolium	bruises, swelling, rheumatic joints													12	4kg	4	48
HO	Helichrysum odoratissimum	calming													22	4kg	4	88
AC	Agathosma crenulata	rheumatism, kidney, indigestion, bladder													8	4kg	4	32
PF	Plectranthus fryticosus	wash sheepskin & cotton garments													7	4kg	4	28
EA	Eriocephalus africanus	coughs, cold, colic, inflammation													18	4kg	4	72
SA	Salvia Africana-caerulea	sore throat, voice loss													28	4kg	4	112
PA	Portulacaria afra	sores, spots, stings													9	4kg	4	36
GI	Geranium incanum	regulate menstruation, bladder infections													31	4kg	4	124

(Author, 2020)

The healing garden | Recharge

OXYGENATION

SEDIMENTATION

MAIN RECHARGE



FACTOR OF SAFETY (FOS) CALCULATIONS FOR GABION RETAINING WALL

$$K_a = \frac{1 - \sin(\phi \text{ of soil})}{1 + \sin(\phi \text{ of soil})}$$

$$= \frac{1 - \sin(30)}{1 + \sin(30)}$$

$$= 0,5 / 1,5$$

$$= 0,3$$

$$P_a = K_a \times \gamma \times H$$

$$= (0,3 \times 16 \text{ kN/m}^3) \times 1,5 \text{ m}$$

$$= 7,2$$

$$M_d = \frac{1}{2} P_a \times H \times \frac{1}{3} H$$

$$= \frac{1}{2} \times 7,2 \times 1,5 \text{ m} \times \left(\frac{1}{3} \times 1,5 \text{ m}\right)$$

$$= 5,4 \times 0,5$$

$$= 2,7$$

$$M_R = W_{\text{gab}} \times d$$

$$= (2 \times 1) \times 21 \times 0,5$$

$$= 21$$

FOS ACHIEVED

$$P_a = K_a \times \gamma \times H$$

$$= (0,3 \times 16 \text{ kN/m}^3) \times 1,5 \text{ m}$$

$$= 7,2$$

$$M_d = \frac{1}{2} P_a \times H \times \frac{1}{3} H$$

$$= \frac{1}{2} \times 7,2 \times 1,5 \text{ m} \times \left(\frac{1}{3} \times 1,5 \text{ m}\right)$$

$$= 5,4 \times 0,5$$

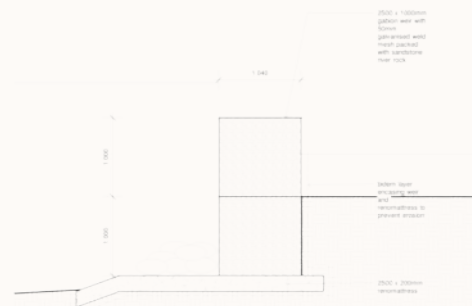
$$= 2,7$$

$$M_R = W_{\text{gab}} \times d$$

$$= (2 \times 1) \times 21 \times 0,5$$

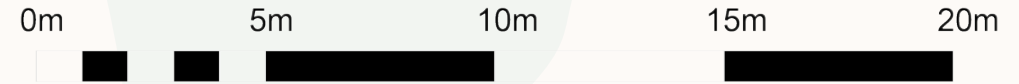
$$= 21$$

FOS ACHIEVED



(Author, 2020)

Section F
(Author, 2020)



As previously discussed, this site would act as a sponge to recharge aquifer water used for irrigation in the Abalimi gardens and this would consist of 3 phases.

Images showing farming activity by local womxn in the Abalimi gardens.
(Abalimi Bezekhaya, 2019)
<http://abalimibezekehaya.org.za>

The healing garden | Recharge

THE BIOSWALE:

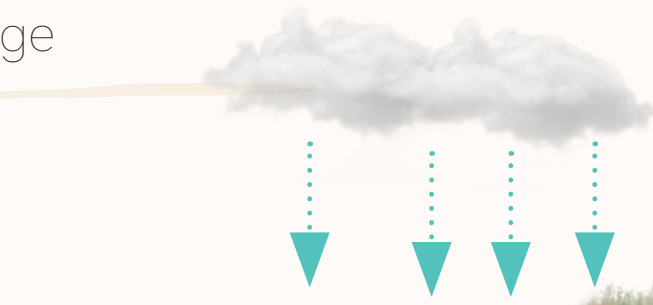
This would have a stone-covered sloped bottom/base (which would carry water down the site with limited erosion) and plants (such as the *Mentha longifolia*) along the edges.

THE FOREBAY:

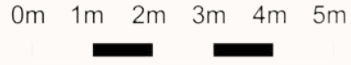
This would have a stone-covered flatter bottom/base to allow water to slowly filter through into the ground. The water would stand and fill up before spilling into the last waterbody. This would allow for the sediments to drop.

THE WETLAND:

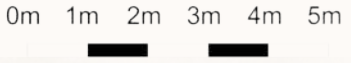
This would be a depression within the landscape that would collect runoff from the site and slowly release it into the aquifer.



Section C



Section D



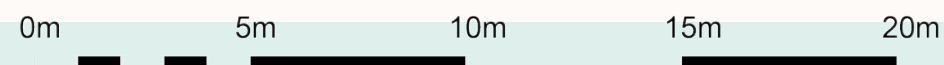
SEDIMENTATION

MAIN RECHARGE



(Author, 2020)

AQUIFER



Section E

ETHICS APPLICATION FORM

Please Note:

Any person planning to undertake research in the Faculty of Engineering and the Built Environment (EBE) at the University of Cape Town is required to complete this form **before** collecting or analysing data. The objective of submitting this application *prior* to embarking on research is to ensure that the highest ethical standards in research, conducted under the auspices of the EBE Faculty, are met. Please ensure that you have read, and understood the **EBE Ethics in Research Handbook** (available from the UCT EBE, Research Ethics website) prior to completing this application form: <http://www.ebe.uct.ac.za/ebe/research/ethics1>

APPLICANT'S DETAILS		
Name of principal researcher, student or external applicant	Kazeka Talisa Mbekeni	
Department	APG	
Preferred email address of applicant:	mbkkaz001@myuct.ac.za	
If Student	Your Degree: e.g., MSc, PhD, etc.	MLA
	Credit Value of Research: e.g., 60/120/180/360 etc.	120
	Name of Supervisor (if supervised):	Christine Price
If this is a research contract, indicate the source of funding/sponsorship	N/A	
Project Title	Creating Healing Spaces for Women in Places of Conflict	

I hereby undertake to carry out my research in such a way that:

- there is no apparent legal objection to the nature or the method of research; and
- the research will not compromise staff or students or the other responsibilities of the University;
- the stated objective will be achieved, and the findings will have a high degree of validity;
- limitations and alternative interpretations will be considered;
- the findings could be subject to peer review and publicly available; and
- I will comply with the conventions of copyright and avoid any practice that would constitute plagiarism.

APPLICATION BY	Full name	Signature	Date
Principal Researcher/ Student/External applicant	Kazeka Talisa Mbekeni	Signed by candidate	15/06/2020
SUPPORTED BY	Full name	Signature	Date
Supervisor (where applicable)	Christine Price	Signature Removed	15/06/2020

APPROVED BY	Full name	Signature	Date
HOD (or delegated nominee) Final authority for all applicants who have answered NO to all questions in Section 1; and for all Undergraduate research (Including Honours).			
Chair: Faculty EIR Committee For applicants other than undergraduate students who have answered YES to any of the questions in Section 1.	R Behrens	Signature Removed	04 Sep 2020

Bibliography |

- Abramson, D. (2020). Make History, Not Memory History's Critique of Memory. Harvard Design Magazine. Accessed on: <http://www.harvarddesignmagazine.org/issues/9/make-history-not-memory>
- Anderson, P. and O'Farrell, P. (2012). "An ecological view of the history of the City of Cape Town." In *Ecology and Society* 17(3).
- Artz, L., Hoffman-Wanderer, Y. and Moul, K. (2012). *Hard Time(s): Women's Pathways to Crime and Incarceration*. Cape Town: GHJRU, University of Cape Town. <http://detentionjusticeforum.org.za/wp-content/uploads/2013/09/GHJRU-Hard-Times-Report-on-Women-in-SA-Prisons.pdf>
- Barthel, S., Folke, C., and Colding, J. (2010). Social-ecological memory in urban gardens—Retaining the capacity for management of ecosystem services. *Global Environmental Change* 20 (2010) 255–265
- Brotchie, A. (1991). *A book of surrealist games*. London: Redstone Press.
- Burton, A. (2014). Gardens that take care of us. *The Lancet*, 13. doi:[http://dx.doi.org/10.1016/S1474-4422\(14\)70002-X](http://dx.doi.org/10.1016/S1474-4422(14)70002-X)
- Christopher A, S. I., Murray Silverstein. (1977). *A Pattern Language Towns, Buildings, Construction*. New York: Oxford University Press.
- CS Studio Architects. (2002). Zolani Multi Purpose Centre. Retrieved from <http://csstudio.co.za/Xolani.html>
- Davis, R. (2015). OPINION: In the realm of SA statues it's still a man's world [Press release]. Retrieved from <https://ewn.co.za/2015/03/20/OPINION-Rebecca-Davis-In-the-realm-of-SA-statues-its-still-a-mans-world>
- Dee, C. (2001). *Form and Fabric in Landscape Architecture: A visual introduction*. London: Spoon Press.
- Diepsloot, V. H. (2018). Collecting and using data to help victims of gender violence. Retrieved from <http://www.vimbadiepsloot.co.za>
- DuBose, J., MacAllister, L., Hadi, K. and Sakallaris, B. (2018). Exploring the Concept of Healing Spaces. . *HERD*, Vol. 11(1), 43-56. Retrieved from <https://doi.org/10.1177/1937586716680567>
- Ebbensgaard, C. L. (2017). 'I like the sound of falling water, it's calming': engineering sensory experiences through landscape architecture. *Cultural Geographies*, Vol. 24(3), 441-455. doi:10.1177/14744474017698719journals.sagepub.com/home/cgj
- Ebrahim S and Huang J. (2020). Space and Memory. HATLA II: Spatial Practices Seminar.
- Edelstein, I., Arnott, R., Faull, A. (2020). Hotspot policing for murder and robbery: A Cape Town case study. Retrieved from <https://www.africaportal.org/publications/hotspot-policing-murder-and-robbery-cape-town-case-study/>
- Fourie, R. (2020). Once we, the women of South Africa, were warriors [Press release]. Retrieved from <https://www.iol.co.za/news/opinion/once-we-the-women-of-south-africa-were-warriors-44423220>
- Freud, S. (1910). The Origin and Development of Psychoanalysis. *American Journal of Psychology*. Vol. 21(2), 181-218. Retrieved from <https://doi.org/10.2307/1413001>
- Gontsana, M.-A. (2015). Slaughterhouse proposed for Nyanga, following SPCA complaint [Press release]. Retrieved from https://www.groundup.org.za/article/proposed-slaughter-site-nyanga_3226/
- de Groot, S. (2020). Not having enough statues of iconic women is a monumental oversight [Press release]. Retrieved from <https://www.timeslive.co.za/sunday-times/opinion-and-analysis/2020-08-02-not-having-enough-statues-of-iconic-women-is-a-monumental-oversight/>
- Herrington, S. (2016). *Landscape Theory in Design*. London: Routledge.
- Hewson, D. (n.d.). Sethembile Msezane. Retrieved from <https://artafricamagazine.org/december-2014-sethembile-msezane/>
- Isaacs, L. (2018). Tensions High in Nyanga Following Triple Murder of Taxi Officials [Press release]. Retrieved from <https://ewn.co.za/2018/10/22/tensions-high-in-nyanga-following-triple-murder-of-taxi-officials>
- Ishmail, S. (2019). PHOTO ESSAY: Exhibition brings statues of Struggle heroes and heroines to Cape Town [Press release]. Retrieved from <https://www.iol.co.za/capeargus/news/photo-essay-exhibition-brings-statues-of-struggle-heroes-and-heroines-to-cape-town-37360936>
- Jones, L. V. (2014). Black Feminisms: Renewing Sacred Healing Spaces. *Journal of Women and Social Work*, Vol. 30 (2), 246-252. doi:10.1177/0886109914551356
- Kent, J. L. (2015). Therapeutic landscapes: an evidence-based approach to designing healing gardens and restorative outdoor space. . *Australian Planner*, Vol. 52(3), 242-243. Retrieved from <https://doi.org/10.1080/07293682.2014.897638>
- Kim Miller, B. S. (2017). *Public Art in South Africa: Bronze Warriors and Plastic Presidents*. Indiana University Press. Retrieved from <https://www.jstor.org/stable/j.ctt20060c0.1>

Bibliography |

- Krog, S., R. (1983). Creative Risk-Taking. *American Society of Landscape Architects*. Vol. 73(3), 70-76. Retrieved from <https://www.jstor.org/stable/44666665>
- Lekekela, B. (2019). Green Door: Information Booklet. In. Johannesburg: Green Door.
- Magazi, T. (2016). Jailed for 'bag theft'. Retrieved from <https://www.vukaninews.co.za/news/jailed-for-bag-theft>
- Mahlakoana, T. (2020). Nyanga, Khayelitsha, Diepsloot, Alex among 30 GBV Hotspots in SA – Cele [Press release]. Retrieved from <https://ewn.co.za/2020/09/22/nyanga-khayelitsha-diepsloot-alex-among-30-gbv-hotspots-cele>
- Maroga, K. (2017). The Poetics of Remembrance as Resistance: The Work of Sethembile Msezane. Retrieved from <https://artthrob.co.za/2017/02/27/the-poetics-of-remembrance-as-resistance-the-work-of-sethembile-msezane/>
- Mehrotra, K. V. a. S. T. (2007). 'Shall We Go out?' Women's Safety in Public Spaces in Delhi. *Economic and Political Weekly*, Vol. 42(17), 1542-1548. Retrieved from <https://www.jstor.org/stable/4419521>
- Msezane, S. (2015). SETHEMBILE MSEZANE. Work. Retrieved from <http://www.sethembile-msezane.com>
- Niyobuhungiro, R. V. (2017). Investigation of the Applicability of a Cleaner Production Approach to Road Side Catering in Urban Africa. (Doctor of Philosophy). The University of Cape Town, Cape Town.
- Ntseku, M. (2019). 16 Days of Activism: Triangle Project host event in Nyanga to combat GBV, hate crimes [Press release]. Retrieved from <https://www.iol.co.za/capeargus/news/16-days-of-activism-triangle-project-host-event-in-nyanga-to-combat-gbv-hate-crimes-37963709>
- O'toole, S. (2016). Speaking truth to statues [Press release]. Retrieved from <https://www.timeslive.co.za/news/south-africa/2016-07-19-speaking-truth-to-statues/>
- Olin, L. (1988). Form, Meaning, and Expression in Landscape Architecture. *Landscape Journal*, Vol. 7(2), 149-198. Retrieved from <http://www.jstor.com/stable/43322829>
- Pertsovsky, N. (2017). This is probably the list of artworks UCT has removed [Press release]. Retrieved from <https://www.groundup.org.za/article/probably-list-artworks-uct-has-removed/>
- Polyco. (2016). What are Polyolefins. Retrieved from <https://www.polyco.co.za/about-polyco/about-polyolefins/>
- Rabeneck, A. (1969). Form Follows Fiction. *Design Quarterly*(73), 21-31. Retrieved from <http://www.jstor.com/stable/4047355>
- The Centre for the Study of Violence and Reconciliation (Producer). (2016). Gender-Based Violence (GBV) in South Africa: A Brief Review. Retrieved from <http://www.csvr.org.za/pdf/Gender%20Based%20Violence%20in%20South%20Africa%20-%20A%20Brief%20Review.pdf>
- Rompetrol. (2008). Propylene - Material Safety Data Sheet. In. Constanta: Rompetrol.
- Roszak, T. (1992). The Voice of the Earth: An Exploration of Ecopsychology: Phanes Press.
- SaferSpaces. (2017). Gender-based violence in South Africa. Retrieved from <https://www.saferpaces.org.za/understand/entry/gender-based-violence-in-south-africa#GBVinSouthAfrica>
- Safetylab. (2013). Nyanga. Retrieved from <https://www.youtube.com/watch?v=iJ4UXgLOOBg>
- Seleoane, M. (1985). Nyanga East Men's Hostel: The Condition of Migrant Workers. The University of Cape Town, Cape Town.
- Siyo, A. (2020). Justice Desk's Mbokodo Club transforming GBV victims into 'victors' [Press release]. Retrieved from <https://www.iol.co.za/capetimes/news/justice-desks-mbokodo-club-transforming-gbv-victims-into-victors-276e232d-165f-4c9f-940b-6ac260f56aab>
- Sompeta, S. (2017). Nyanga: A lesson in our history [Press release]. Retrieved from <https://www.news24.com/news24/SouthAfrica/Local/City-Vision/nyanga-a-lesson-in-our-history-20170614>
- Sternberg, E. (2009). Healing Spaces: The Science of Place and Well-being: Belknap Press.
- Summers, J.K., and Vivian, D.N. (2018). Ecotherapy – A Forgotten Ecosystem Service: A Review. *Frontiers in Psychology*. 9:1389. Available on: <https://doi: 10.3389/fpsyg.2018.01389>
- TED. (Producer). (2017). SETHEMBILE MSEZANE: Living sculptures that stand for history's truths.
- Team, T. D. V. (2018). The Place Of Sara Baartman At UCT [Press release]. Retrieved from <https://www.thedailyvox.co.za/the-place-of-sara-baartman-at-uct/>
- Thivant, L. (2018). UNICEF: Child Friendly Cities and Communities Handbook. Retrieved from New York:
- Ubuntu. (2018). Historical Topographic Maps of Cape Town. Retrieved from <https://htonl.dev.openstreetmap.org/50k-ct/#10/-34.0000/18.5000/c1940>
- Vivian, J. K. S. D. N. (2018). Ecotherapy – A Forgotten Ecosystem Service: A Review. *Frontiers in Psychology*, 9(1389). doi:doi: 10.3389/fpsyg.2018.01389
- Weisman, L. K. (1992). Discrimination by Design: A Feminist Critique of the Man-made Environment: University of Illinois Press.
- Western Cape Department of Agriculture. 2019. Cape Farm Mapper. Cape Town. Retrieved from <https://gis.elsenburg.com/apps/cfm/>
- Writer, S. (2019). Crime Stats/ Why Nyanga remains SA's murder capital – CPF chairperson [Press release]. Retrieved from <https://www.iol.co.za/capetimes/news/crime-stats-why-nyanga-remains-sas-murder-capital-cpf-chairperson-32850148>
- Wu, J. (2013). Landscape sustainability science: ecosystem services and human well-being in changing landscapes. *Landscape Ecology*(28), 999-1023.