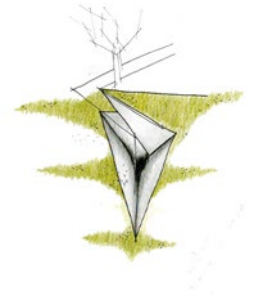


MLA DISSERTATION 2018

[Apart] space

Valuing community: Focused on incidental  
Learning and wayfinding thresholds  
Lunga Sithole – STHLUN011



University of Cape Town

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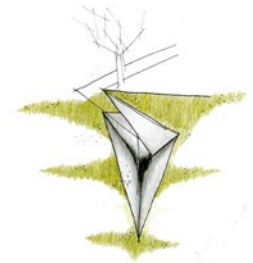
School of Architecture, Planning and Geomatics

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Project logo sketched by author:  
Capturing the ideology of a transformed  
Landscape

## [Apart] space

Valuing community: Focused on incidental  
Learning and wayfinding thresholds

Submitted in partial fulfilment of the Master of  
Landscape Architecture degree  
(120 credits)

**Author: Lunga Sithole**

Thesis supervisor: Kathryn Ewing

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STHLUN011

December 2018



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## Acknowledgements

### UCT Staff members

I would first like to take this opportunity to thank all of the members involved in the UCT Master of Landscape architecture programme. The dedication and tireless attempts to educate and listen to our objections have not gone unnoticed. The first encounter I've had with the programme traces back to June 2014 ILASA event which had been held in the Pink room with than 2nd year MLA studio projects exhibited around the room and a public lecture by Johan-Nel Prinsloo. I walked around the room amazed by the projects, but it had not ended there. The crucial moment, which marked the night, was an encounter I had with **Dr. Julian Raxworthy**. I can still remember the exact words. He had greeted me with a **welcoming smile**, glass of wine in hand and asked as to my involvement in the field of Landscape Architecture. I responded I'm currently studying at the Cape Peninsula institution of technology, enrolled in the Landscape technology course. He response to this was one which added hope as he addressed me and stated that **we need YOU in this course**. To cut a long story short he also informed me of funding into the course, which had been offered, and how I could go about aligning myself with those funds. The interaction alone for me held high energy, and further anchored my determination to complete my Masters in the field.

This determination lead me to the point where I am today seated in the planning lab, typing this piece. To **Mr Clinton Hindes** your sober mind, **illustrative, detailed articulation of ideas** has always resulted in an sound design concept in my regard and your attempts to always calm me before every presentation have not never gone undetected. To all of our supervisors this past semester a great thanks for always been willing to help and a Special thanks to **Dr Kathryn Ewing**. I **highly admire** the dedication you had shown and **never let go spirit** you had shown to me, even though the light had seemed to be diming at the end of the tunnel you were always keen to assist and address issue affecting the dissertation highly appreciated.

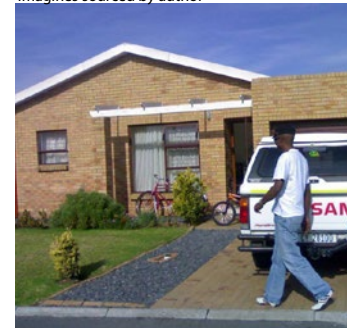
### Bursary Holders

I thank the Department of Public works ZA, having seen potential in me and funded me from the year of 2014 till 2018 offering me with an opportunity to develop my mind and become someone. Thanks to Mr Xolani Landule and current the Minister Thulas Nxesi. I hope one day, I will also have the resources to fund others.

### Inner circle:

Xaba Nonkosi Shwabade, I truly would love to thank every hopeful spirit that has ventured with me through this journey. I truly am nothing without you, the more tangible beings. I would love to thank my Mother **Nobuntu Sithole**, father **Patric Sithole**, my one true brother/sister, friend **Buntu Sithole** and **Hazel Negota**. You always understood and lifted my spirit.

Imagines sourced by author



Special thanks to dad for always reminding me of how far I've come.



Mom thanks for always shining the beam of hope and wisdom upon me.



To the MLA class of 2018 we have made it.



To my day ones...

## Executive summary:

The study aims to reimagine and intervene in the space of Khayelitsha. The intentions are to integrate and alter current smart parks designs by the City of Cape Town. To offer social empowerment to the surrounding context, residents by tempting to provide a detailed design which could offer a space of economic generative platforms/facilities within the landscapes. I've tasked the study also with the aim to uplift all age groups and a target of providing a safety spine moving to and from space, providing a network of movement spaces. The incorporation of pillars aimed at learning by attempting to go into detail with the design of outdoor educational learning spaces intended at structuring the youth mind-set to the current workspace paradigm linked to the forth-industrial revolution.

The learning pillars to be triggered in space are Visual, verbal, social, physical, aural and Solitary. The space aims to provide a link for the youth to young professionals in the spaces where they will be facilitated for in the container spaces. To start-up new businesses, allowing for an innovation hub which could generate an ideal cosmos for networking and offer a pulse to activate the green corridor. There will also be the exposure to 24/7 video tutorials in the space allowing for a link to stimulate the mind to future career paths in the global market. The issue of crime in the space is also one I wish to engage with by providing a street language by reading into the literature of street DNA (Simpson,2018) coupled with human desirability links along walkways to best attract the highest amount of foot traffic in space to

allow for the safety in numbers approach. The ideas of adding WI-FI hotspots along space and assessing the current desire lines of space for the best accommodation of the masses.

The title 'Apart-space', disassembled links the "apart" to the Apartheid ideology denoting on the spatial formation of the township of Khayelitsha, hinting at how it was formed as an influx zone with no much spatial planning for recreational use taken into account. The dash composing the ideology of transformation in post-apartheid South Africa. The "space" denoting to the green corridor (lost space) that had been left as buffer zones by the planners of the time in the spaces.



**Site locality map**



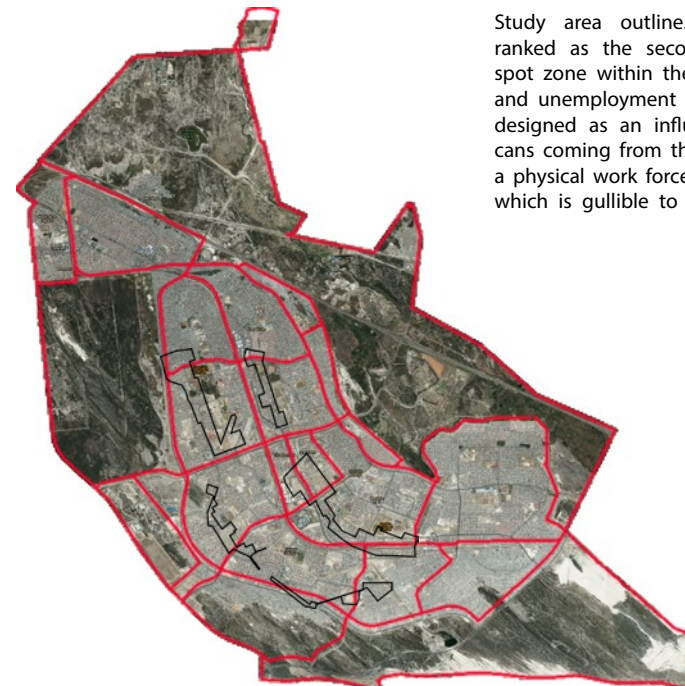
South Africa footing on the continent of Africa

Imagines sourced from 'google'



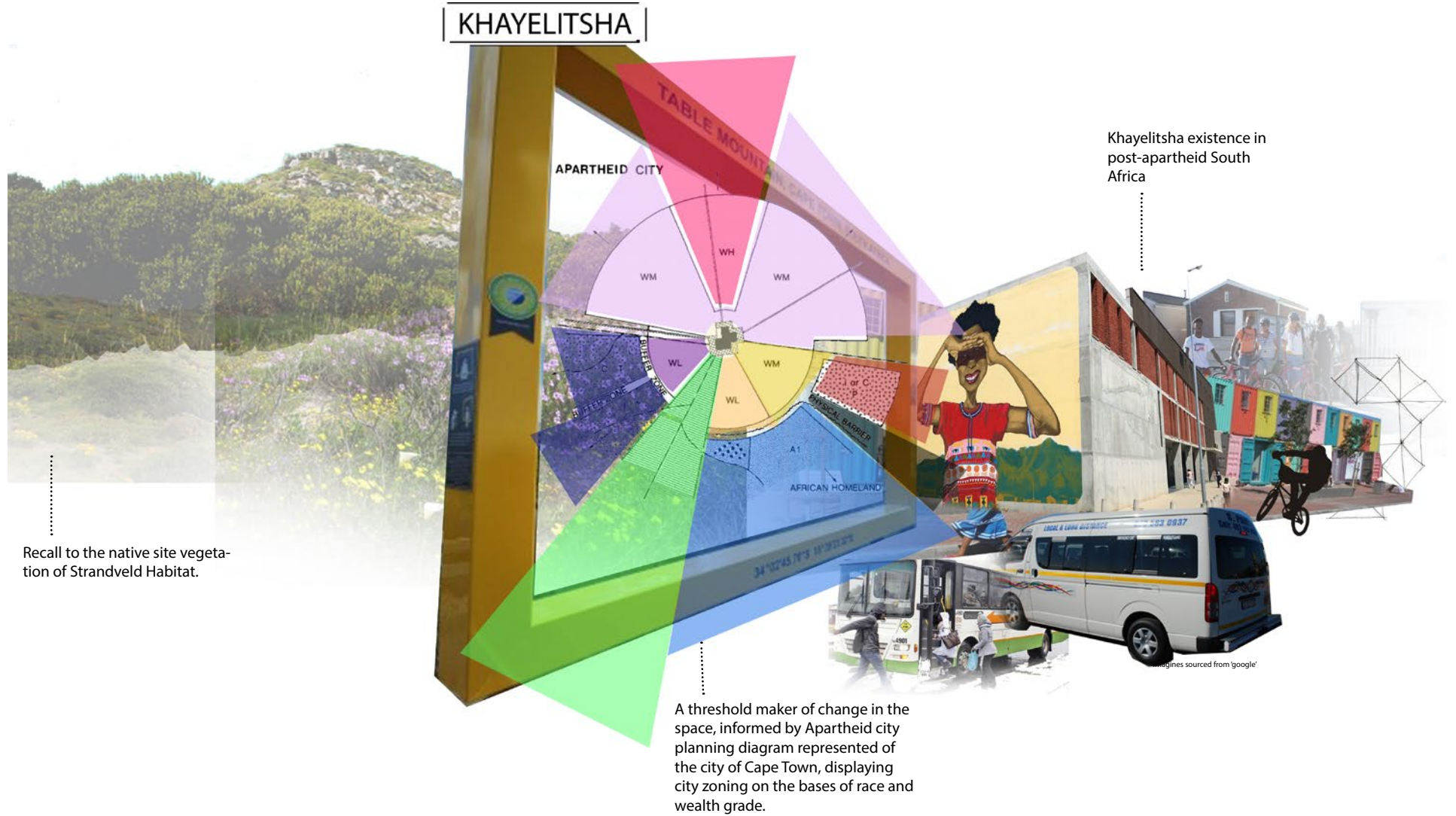
Western Cape outline map with the space of intervention highlighted in red.

Arial imagine sourced from Arch.gis



Study area outline. Khayelitsha currently ranked as the second highest crime hot-spot zone within the Western Cape district and unemployment on the raise. The space designed as an influx zone to house Africans coming from the Eastern Cape to offer a physical work force. The area youth is one which is gullible to lot of negative activity.  
(Van der Spuy, 2016)

### Site process photomontage



Recall to the native site vegetation of Strandveld Habitat.

Khayelitsha existence in post-apartheid South Africa

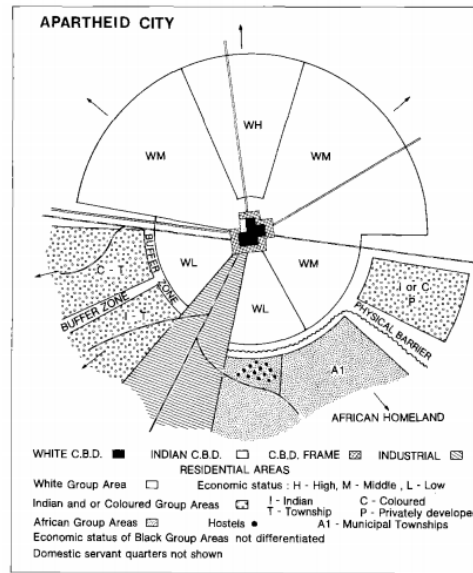
A threshold maker of change in the space, informed by Apartheid city planning diagram represented of the city of Cape Town, displaying city zoning on the bases of race and wealth grade.

Key issues on site

- Large vacant spaces allowing for rubbery to take place.
  - Need for educational spaces
  - Crime,
  - Unemployment,
  - The need of self-pride,
  - Deprived in Communal ownership
- Objectives: Linking adjacent housing with streets, allowing pedestrian affordance, designing a public space accommodative to the surrounding context, allow for an innovation hub addressing youth difficulties, analysis of African & landscape architectural ordnances for culture and trading to take place.



Arial imagine sourced from Arch.gis



(Davies, 1981)

Fig 8 Model of an Apartheid city.



1 Village 1 north space offers a semi wetland space with large vacant plots with areas that incorporate space such as Velokhaya life cycling academy, Rands Grill place and mul tiple schools surrounding site.

Identified lost space on the area of khayelitsha



3 The Harare space has been reserved as a water runoff area with high potential to be converted to a beautiful generative landscape.

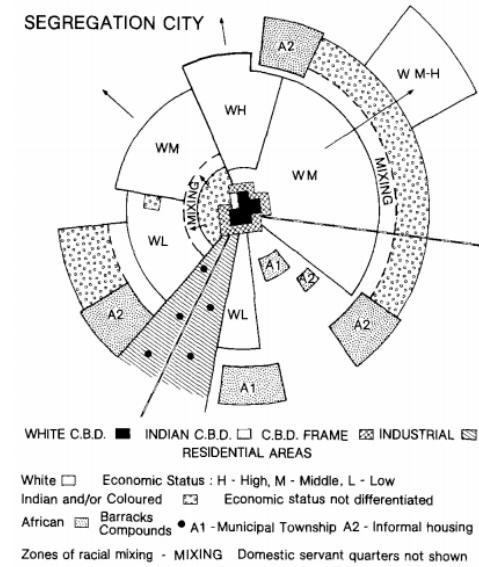


Fig 2 Model of a Segregation City.



2 Village 2 north space offers a semi-formal linkage route between the residential areas with a bus terminal along side.



4 A lot of commercial activity surrounds the Mandela Park space

## Demarcated Green corridor

The aim is to activate this green corridor/lost space, by finding knitting/connecting routes on the site. Developing these route with means of offering a street language (street DNA) that could be recognized by the masses and offer the space as a high foot traffic zone which can allow for safety along paths.



Images sourced from 'google'

The pulse space, which is currently the smart park is to be seen as a area which offers learning, recreational entities which offer life lessons and most importantly as a hub to network, information space which spills out to the highlighted zones on site therefore connecting Khayelitsha. This a plan I aim to offer for the other four green corridors within Khayelitsha for future plans to offer a safer space.



Trading opportunity seen by the surrounding society, selling braaied meat from the back of their bakkies.



Home owners adjacent to site, opening up snack shops next to the park.



Cattle roaming the space next to the park.



Taxi drivers not allocated space to drop-off their passengers.



Fruit and vegetables store open on the park edge.



Signage to surrounding context not taken into consideration.



Neglected integrating footpaths to site.



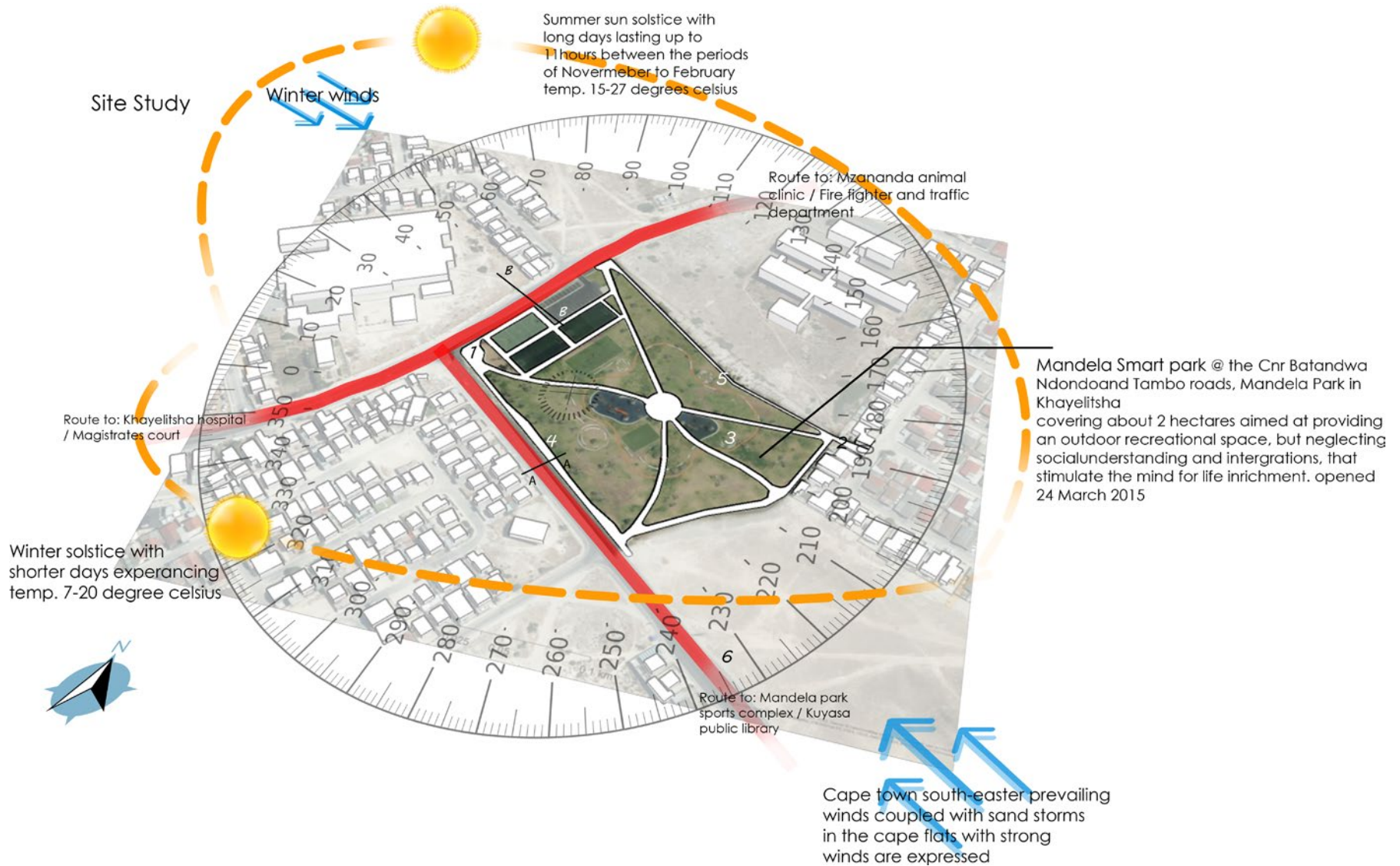
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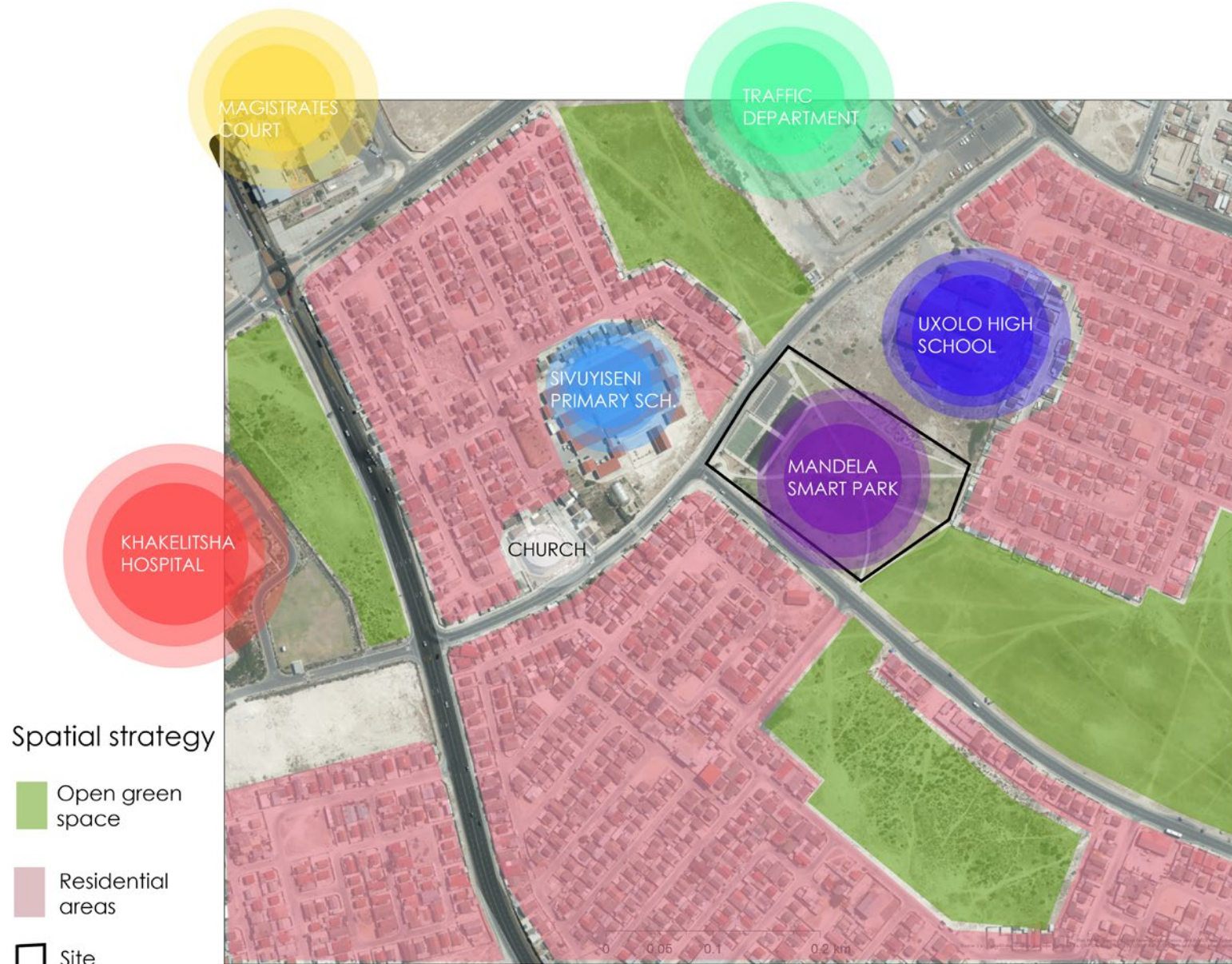
## Immediate site analysis

The analysis of site to highlight site conditions, review what working or not successful on site, covering site visit images, thoughts derived from site such as the economic opportunity the space offers and you engagement spaces needed with the view of current walkways.

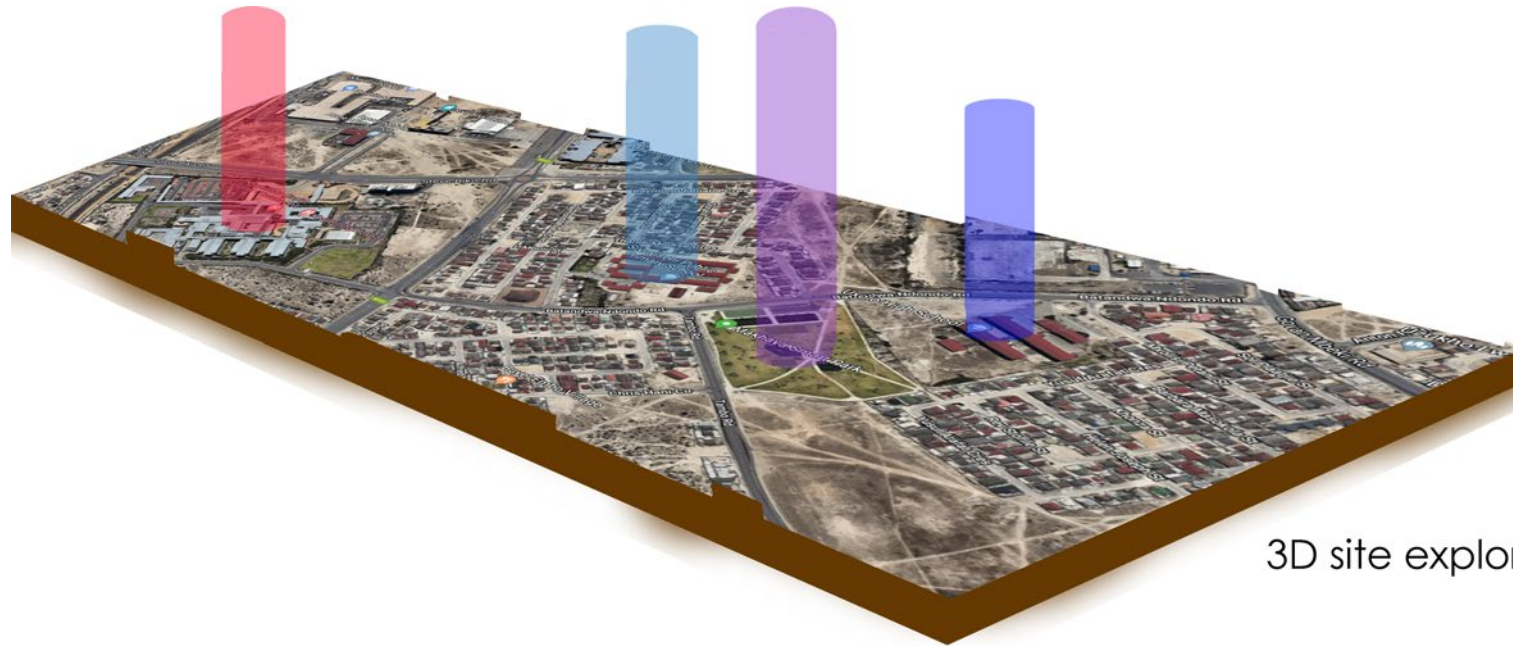


Aerial image sourced from google earth

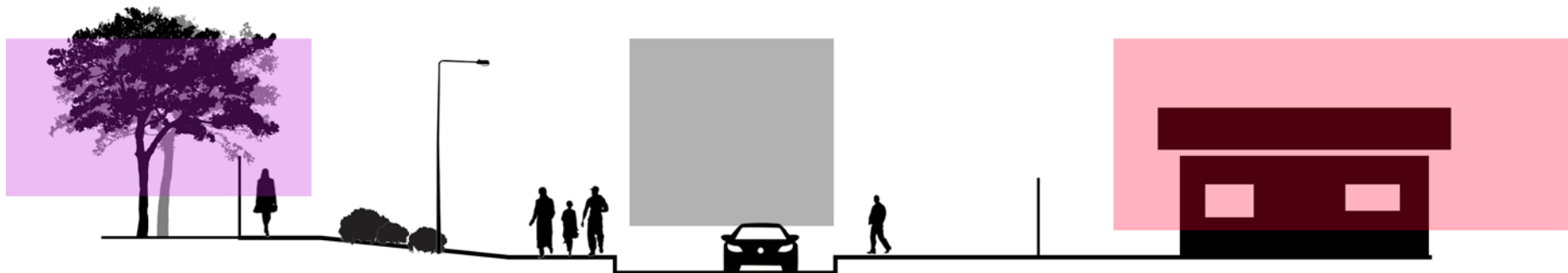




Scale proportion @ 1/2000 A2  
sourced: Cape farm mapper

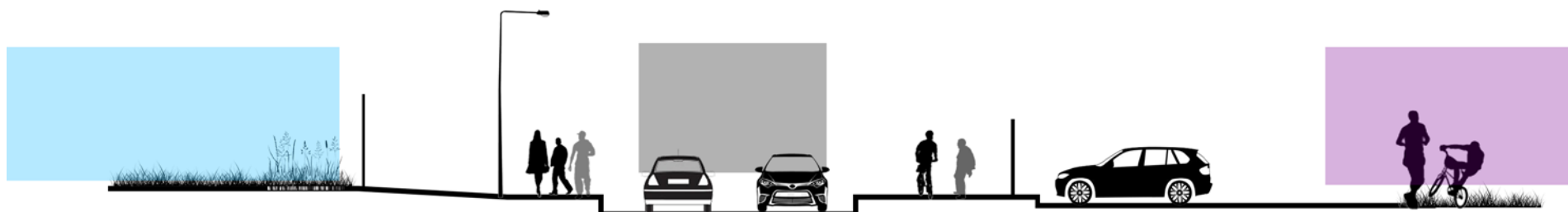


3D site exploration



### Section A-A

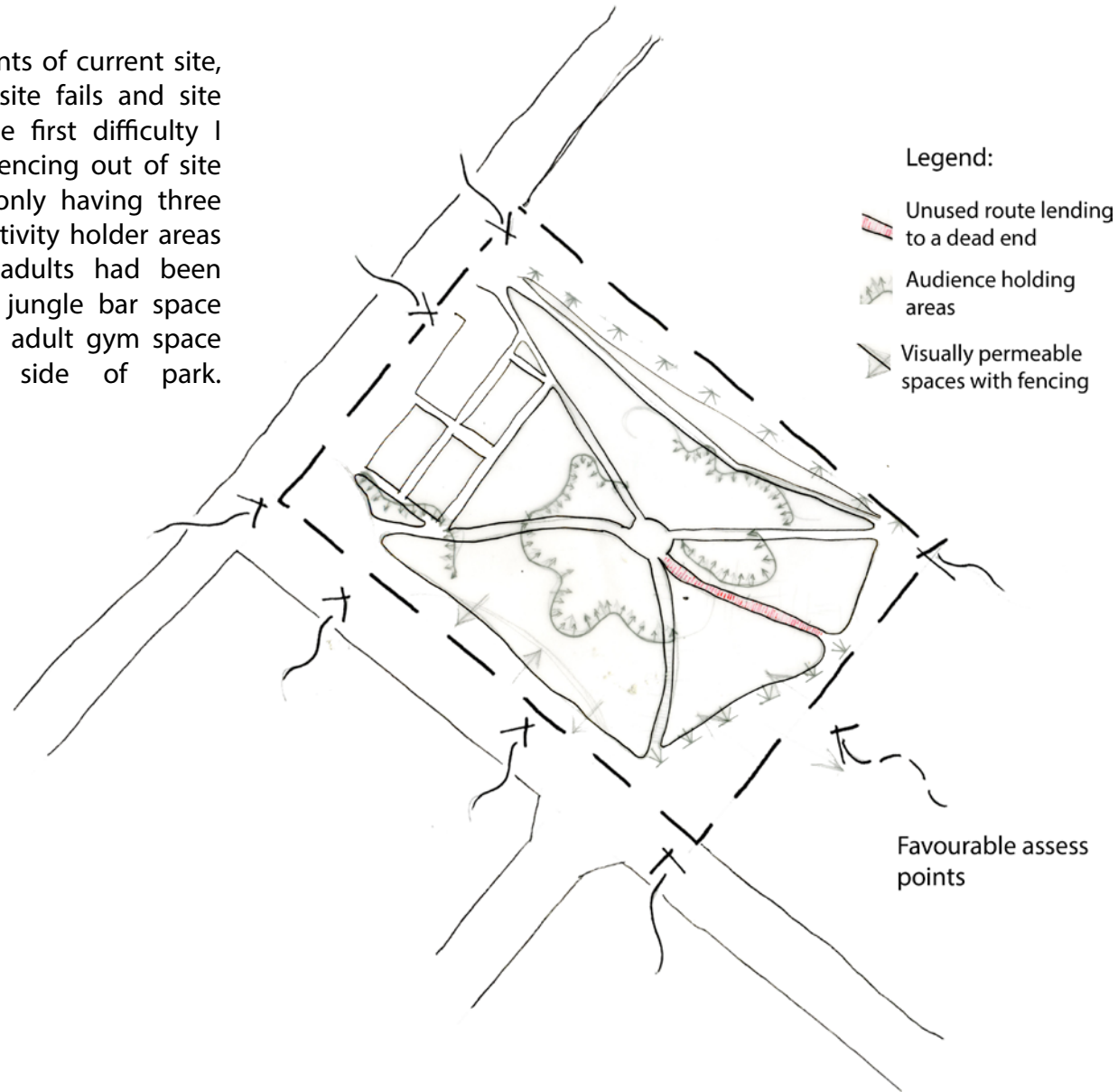
Site study of current site sections, displaying disconnections of site to surrounding context and the lack of connectivity between the road way, park and residential space.



### Section B-B

# Site study

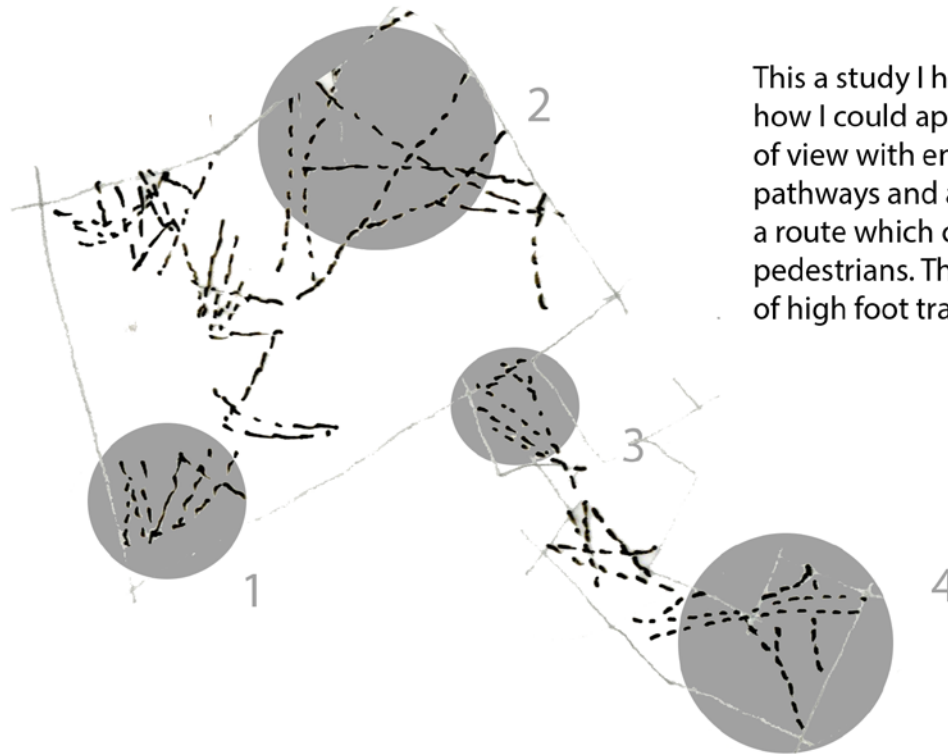
This study covers access points of current site, and reviews of where the site fails and site audience holder spaces. The first difficulty I found on the site was the fencing out of site from surroundings with it only having three entry/exit points. The site activity holder areas central and children and adults had been separated with the swings, jungle bar space in the center and the more adult gym space on the far north-west side of park.





Current site  
Desire lines display

**Using desire lines to inform design and allow for site understanding to offer dominate linking pedestrian routes which can accommodate the highest number of people.** (Luckert, 2013)



This a study I had undergone to assess the site, studying how I could approach design from a bottom up point of view with entities of understanding site foot pathways and assessing how I can best provide a route which could be convenient for most of the pedestrians. The spaces focused on are the ones of high foot traffic.



The first being the space linking Khayelitsha mall (k.mall) to the train stations.



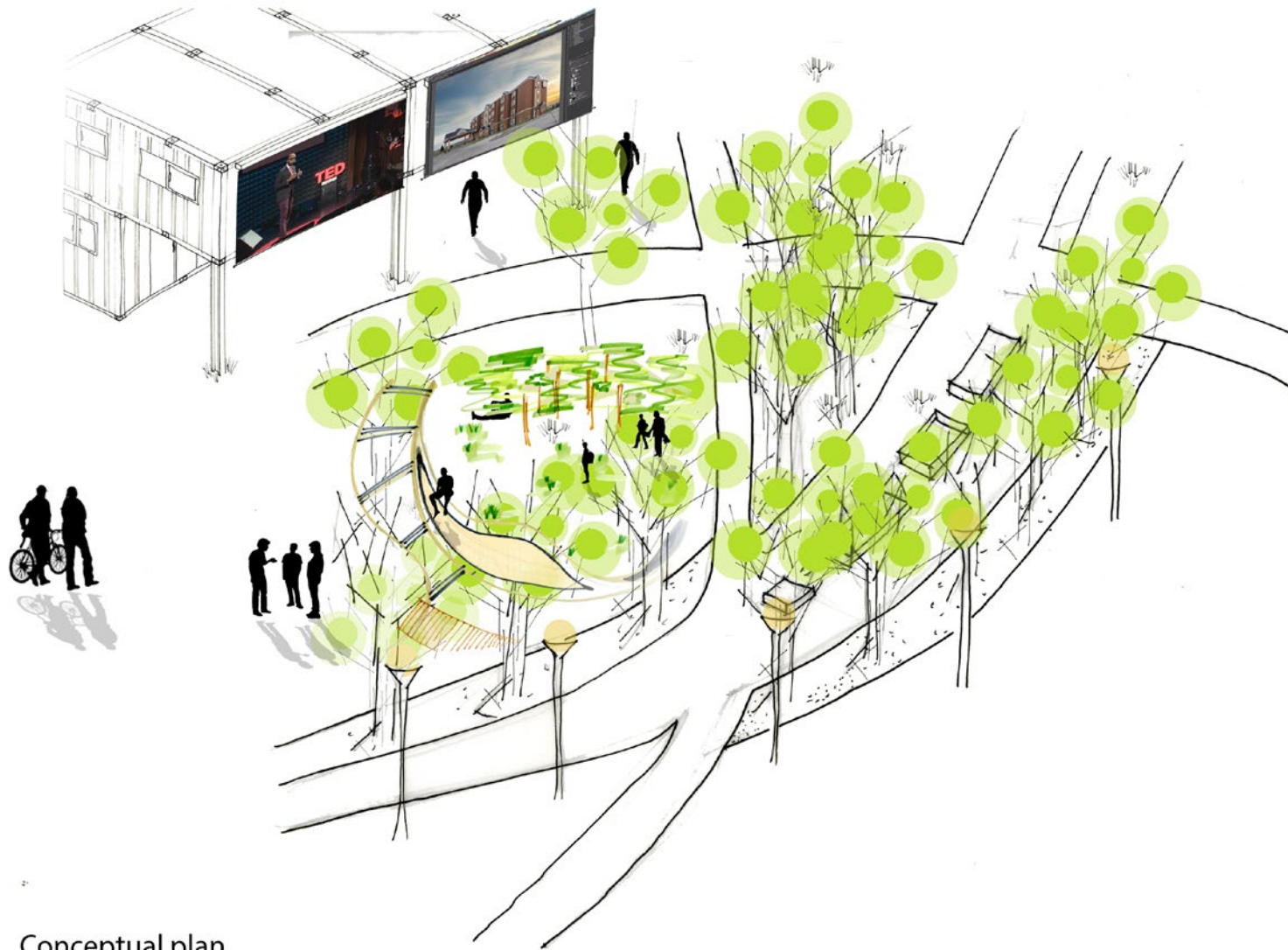
The second mapped area link of K.mall to the Pool area and Magistrate court.



The 3rd being the Mandela Park area linking to the Mandela Sport complex area.



The 4th being the commutes adjacent to the sports complex.



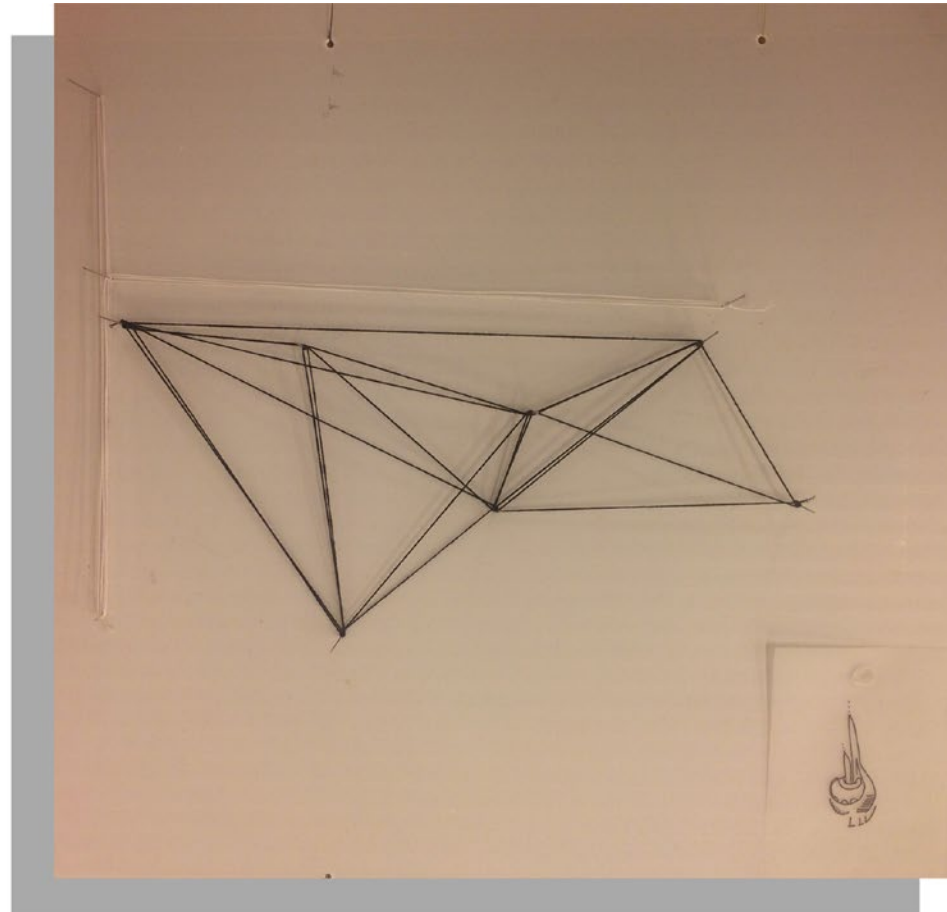
Conceptual plan



Proposed connectivity of site to surrounding context

## Abstract site manipulation/analysis artefacts

### Project way finding



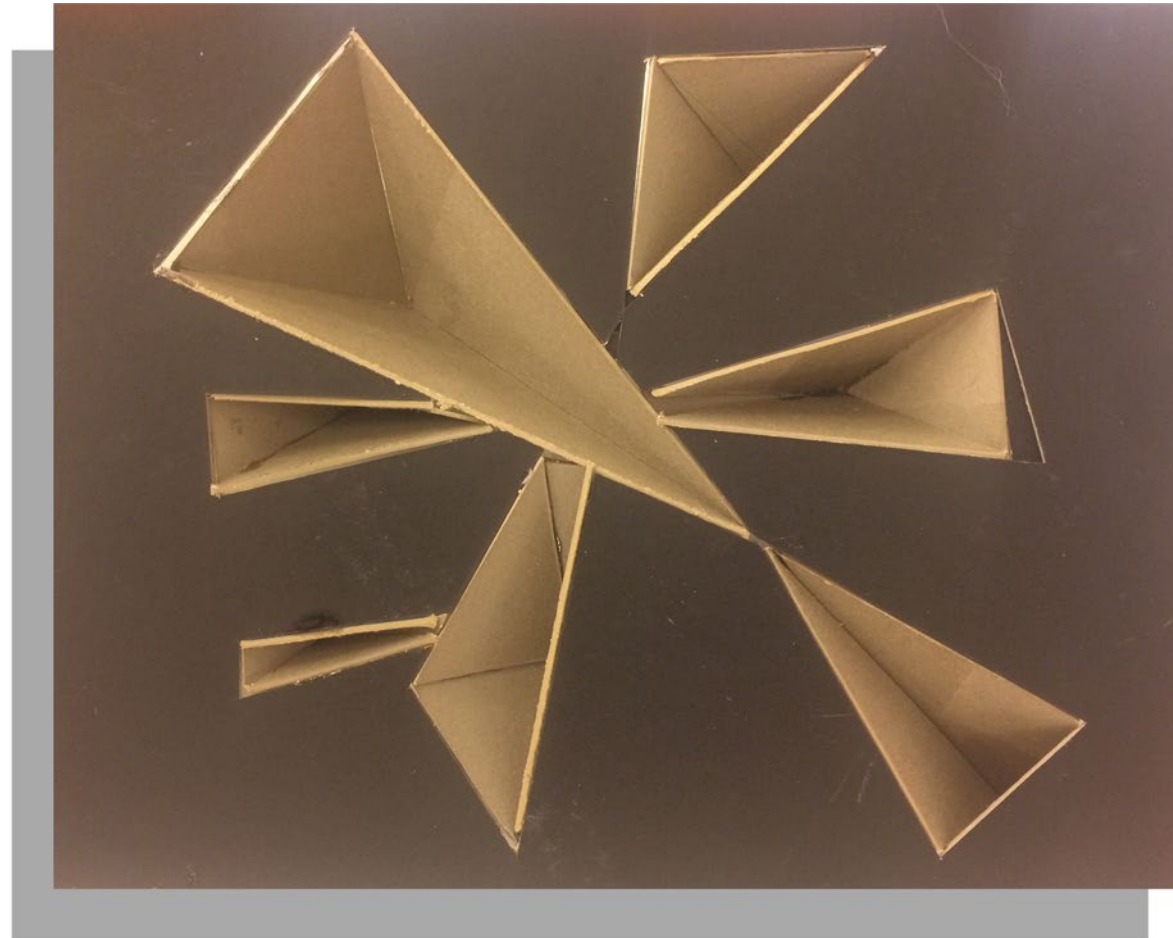
1. The first abstract study covering a reading of site desire lines & boundaries information consumed from the area aerial map. This is aimed at the understanding of site by means of mapping of desire lines also enhancing the reading of site context.



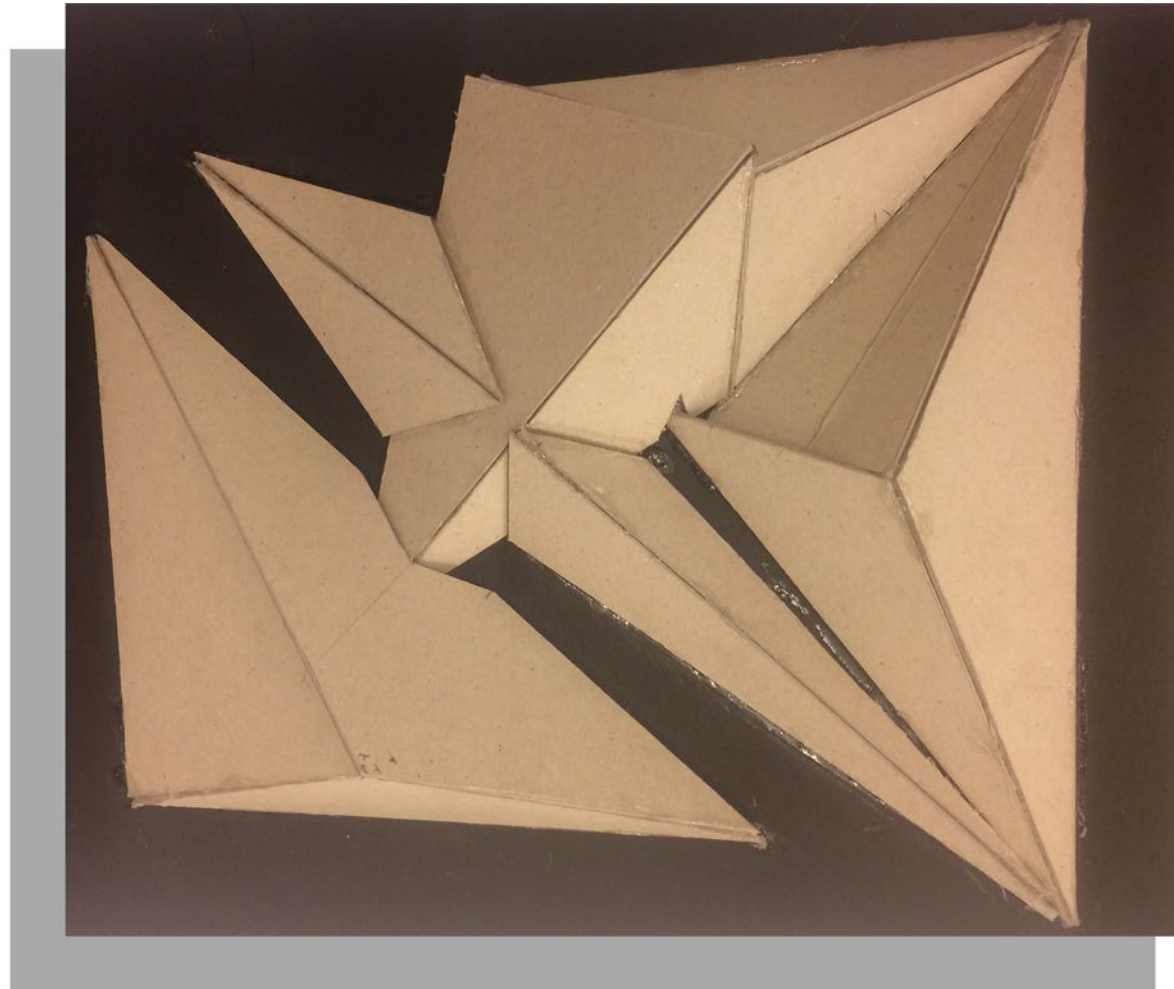
3. The model focused on reading the street DNA of site, with regard's to everyday use of the space and how portions of site have been linked to specify uses.

Treads and purpose:

White: Representing the park user extent. Orange: Mapping of students movement on site  
Red: Movement to and from work places. Black: Mapping of facilitative movement focused on the main infrastructure of the area e.g. shopping malls, schools, magistrate court & etc

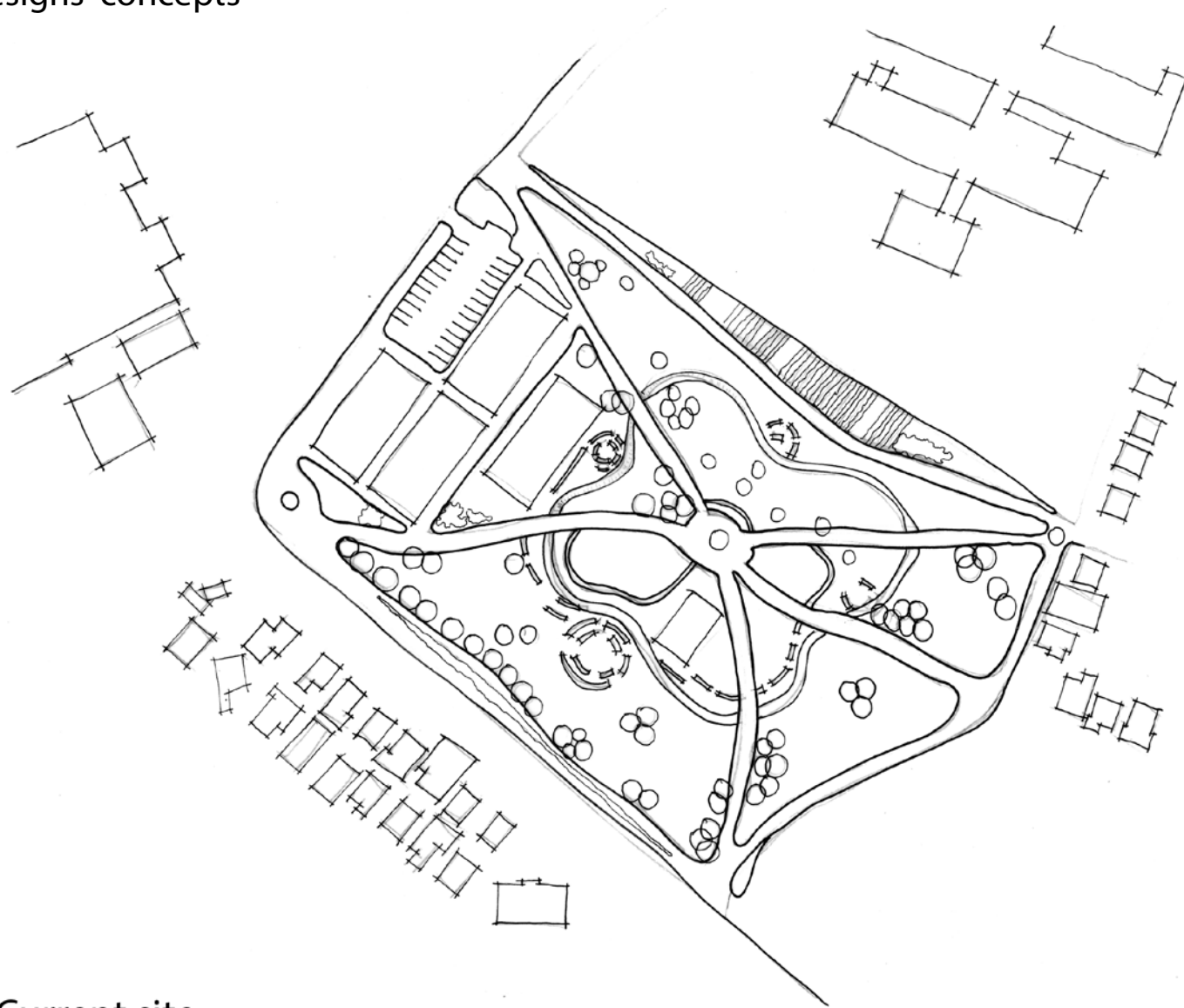


2. The abstract interpretation of site assessment focuses on how the first diagram has taken context from the desire lines of site, the model studies how it considered on a model for conceptual use and means of platform making.



4. The model seeks to display terrain modelling informed by street DNA to assist in the development of land art notions which could provide for a playful platform, which would be linked to the reading and understanding of site mapping and may lead to augmented reality out falls.

# Site abstract designs concepts



Current site:

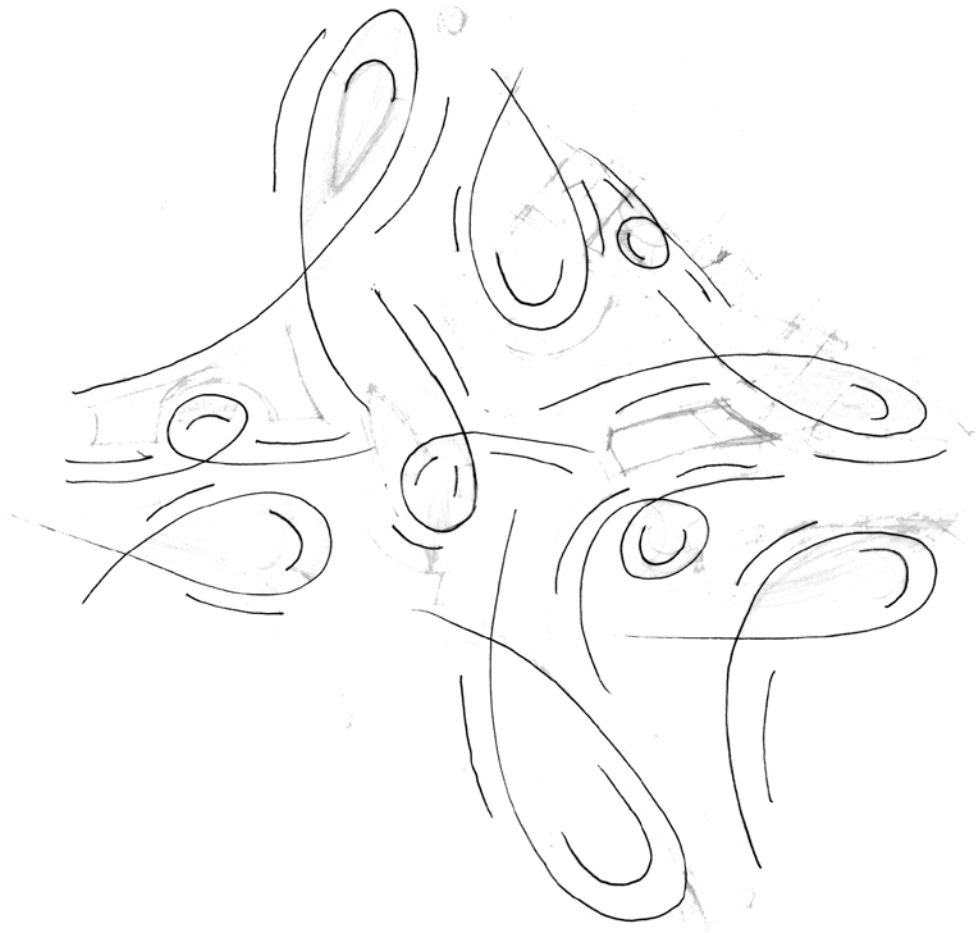


Fig.1 Assessing movement channels along site which could work to be most dynamic on site allowing max use of site with the least taken steps. The concept was aimed at hydrological drainage movement mimicking patterns.

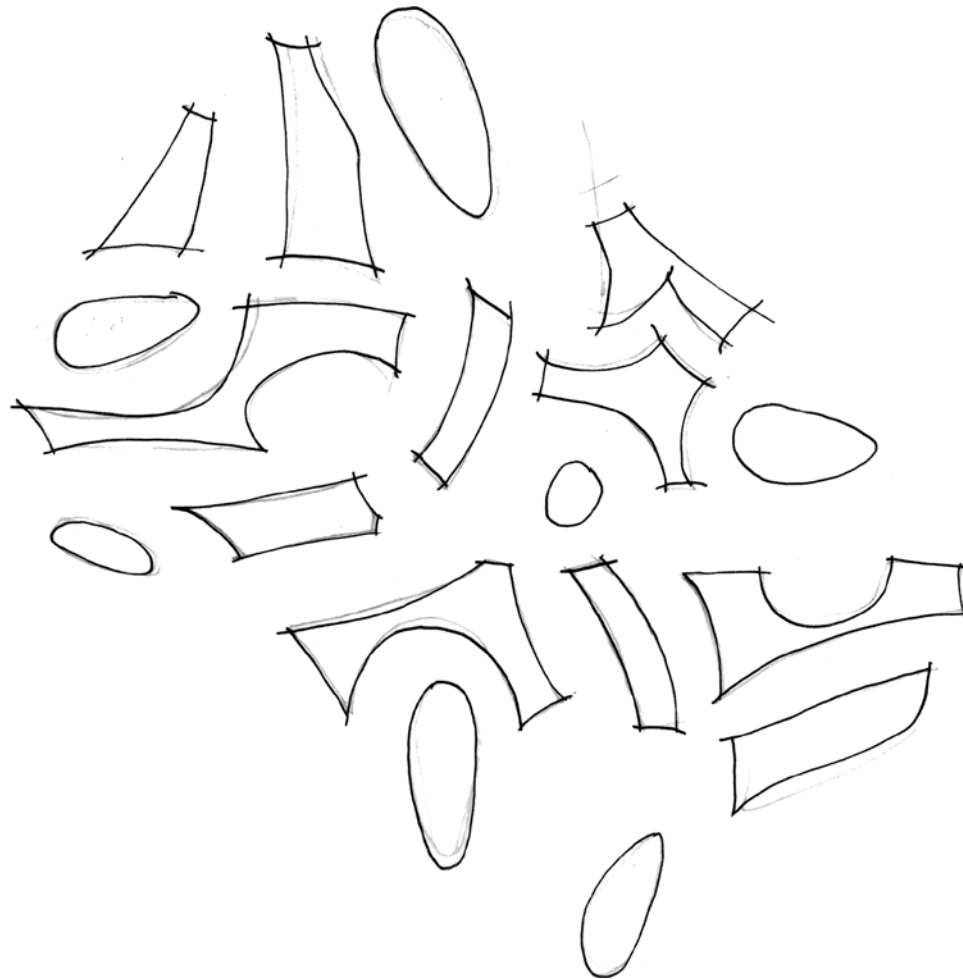
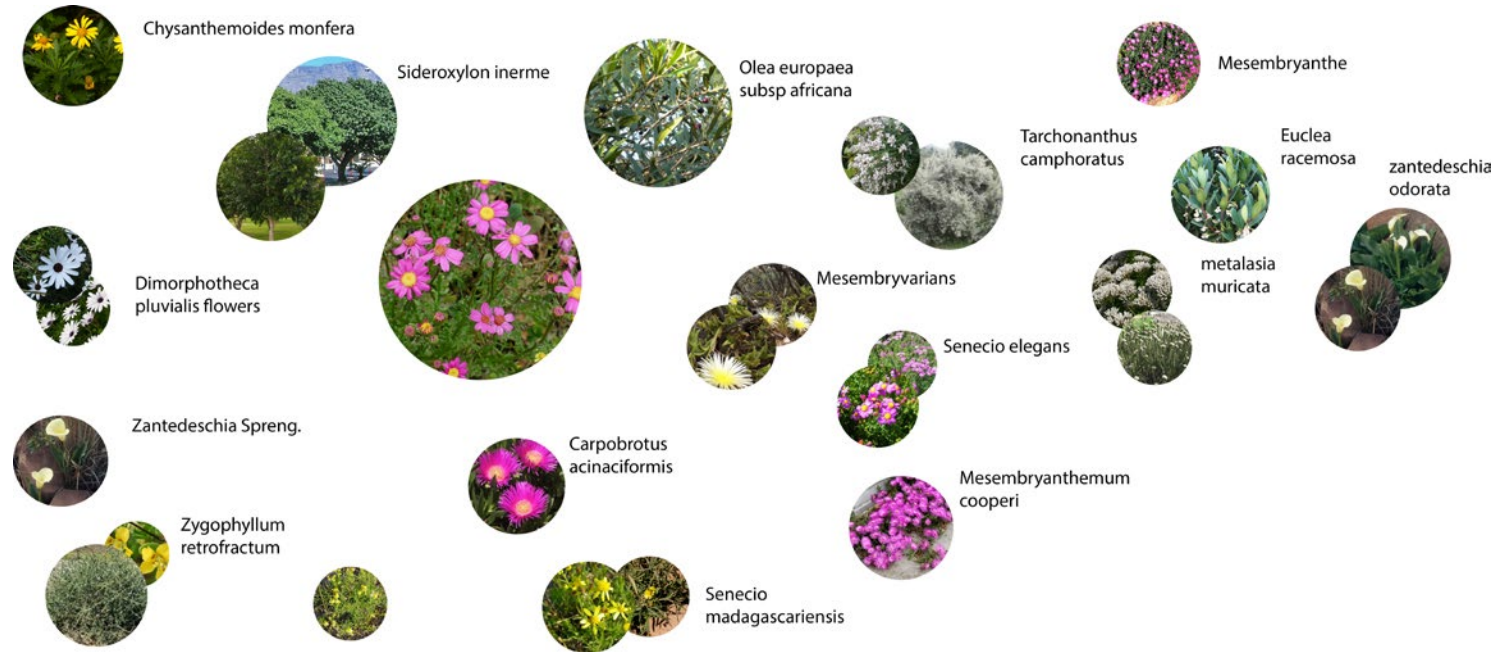
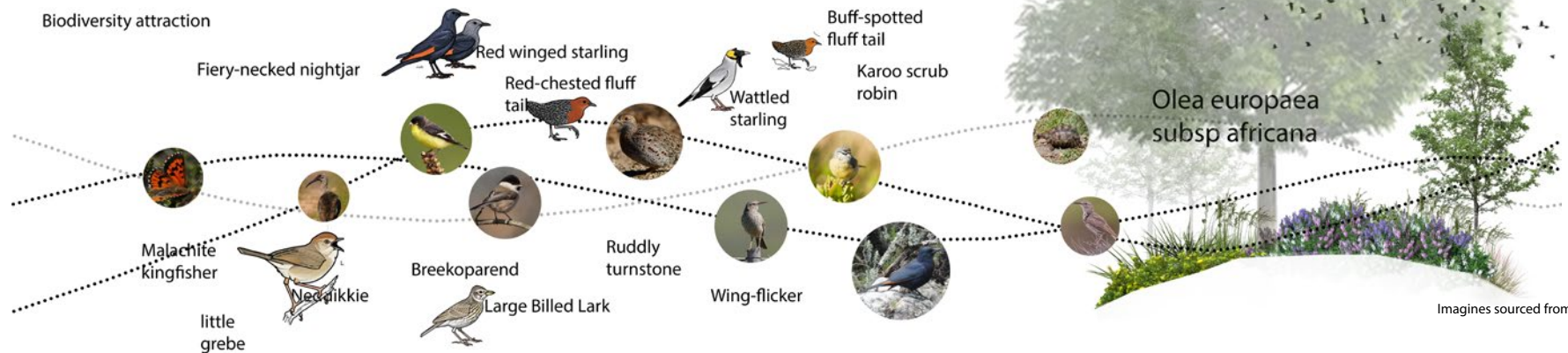


Fig.2 this aimed at offering landing surfaces for these movement patterns.

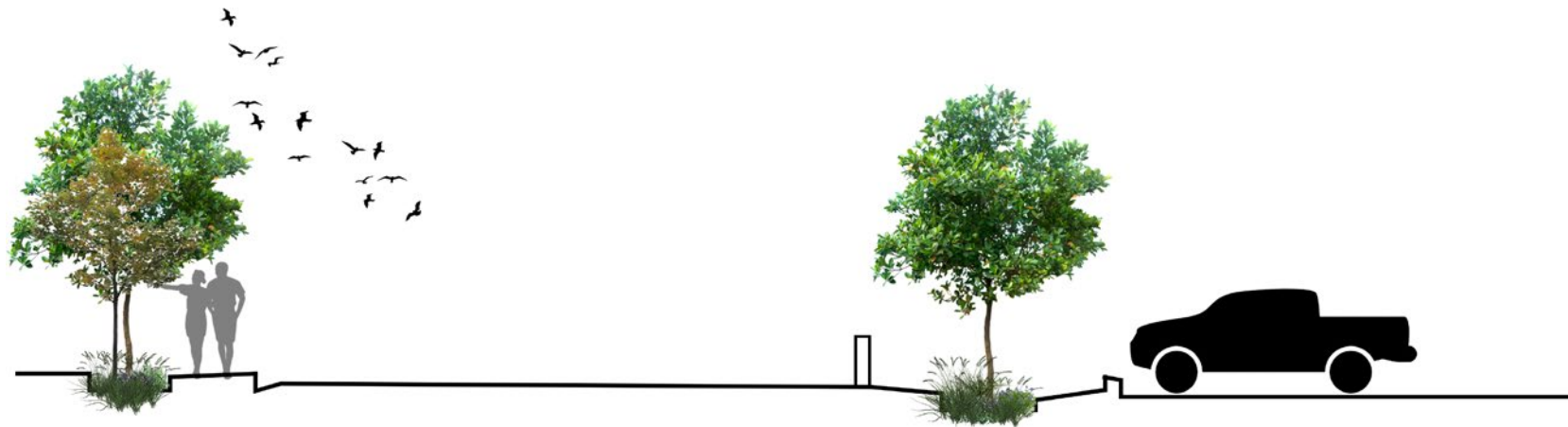
# Strandveld Habitat Restoration



Strandveld habitat study to enhance native sense of place on the site and allow for an sustainable plant selection process which could also offer a water sensitive space and allow for native biodiversity to take place.



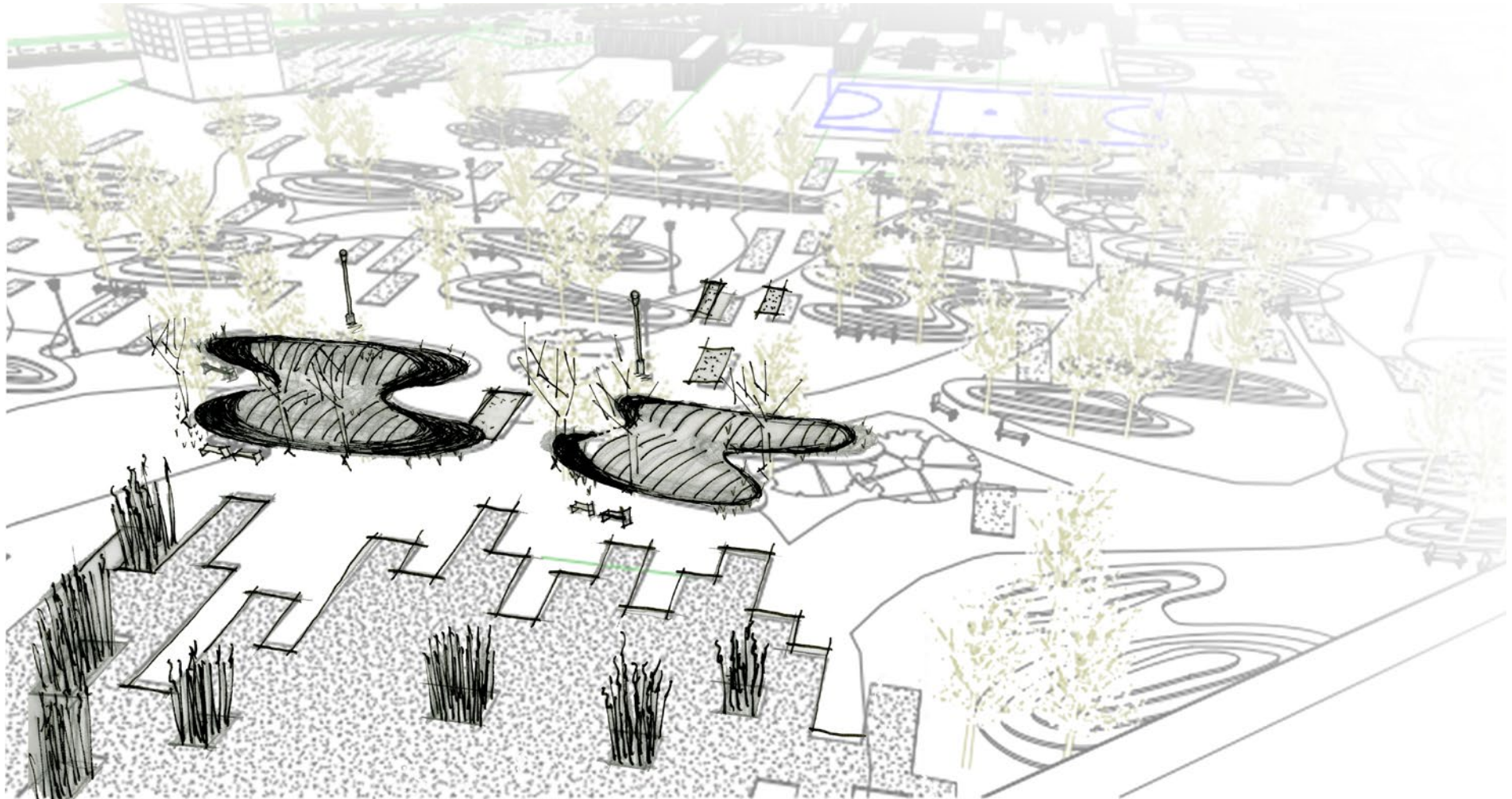
Images sourced from 'google'



*Planting layout exploration to enhance the sense of place*



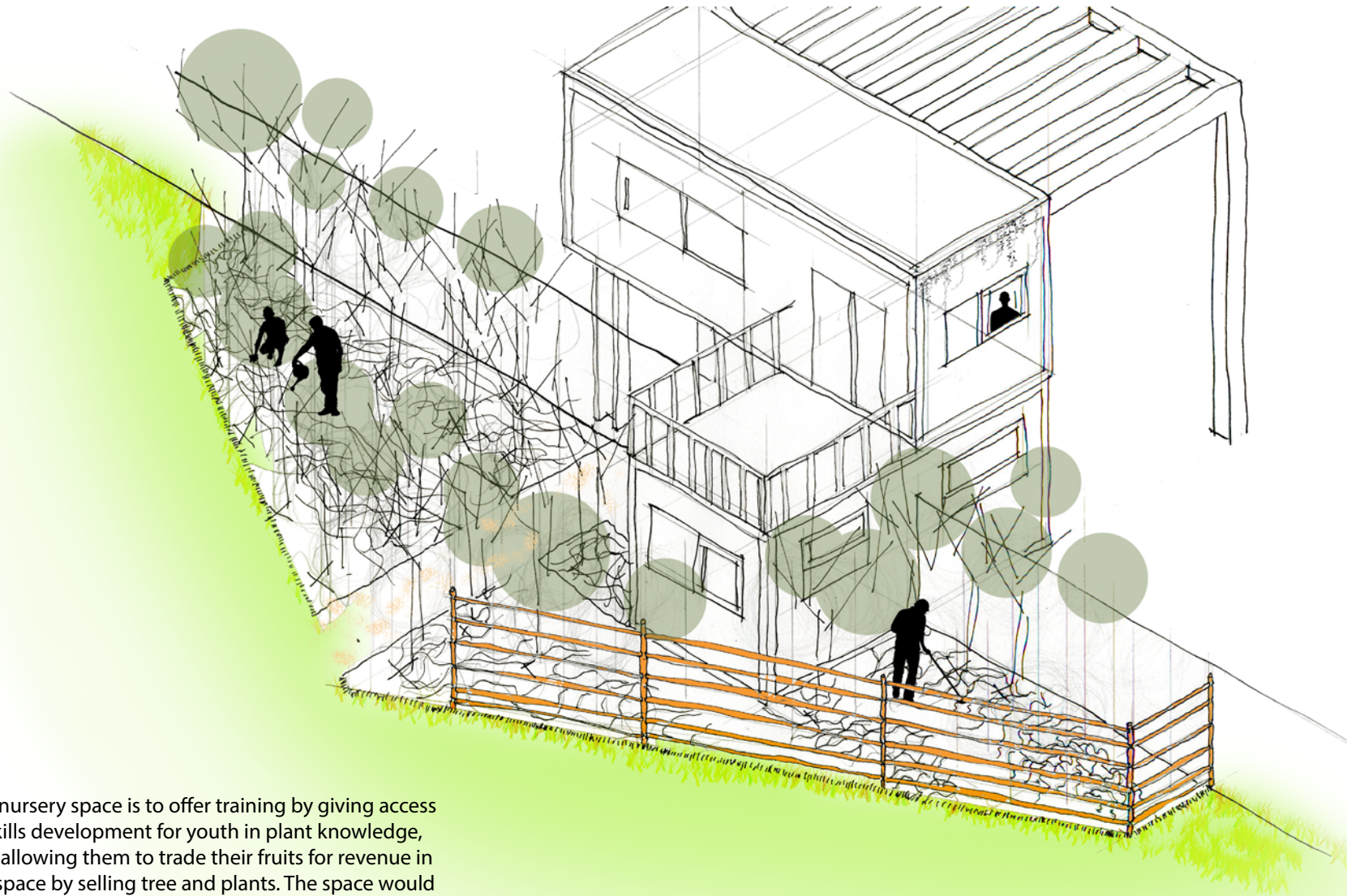
## ***Envisioned vegetation perspective***





Fragrance garden geared for the elderly in space and for horticultural knowledge with plant identification markers and allowing for an experience in space.

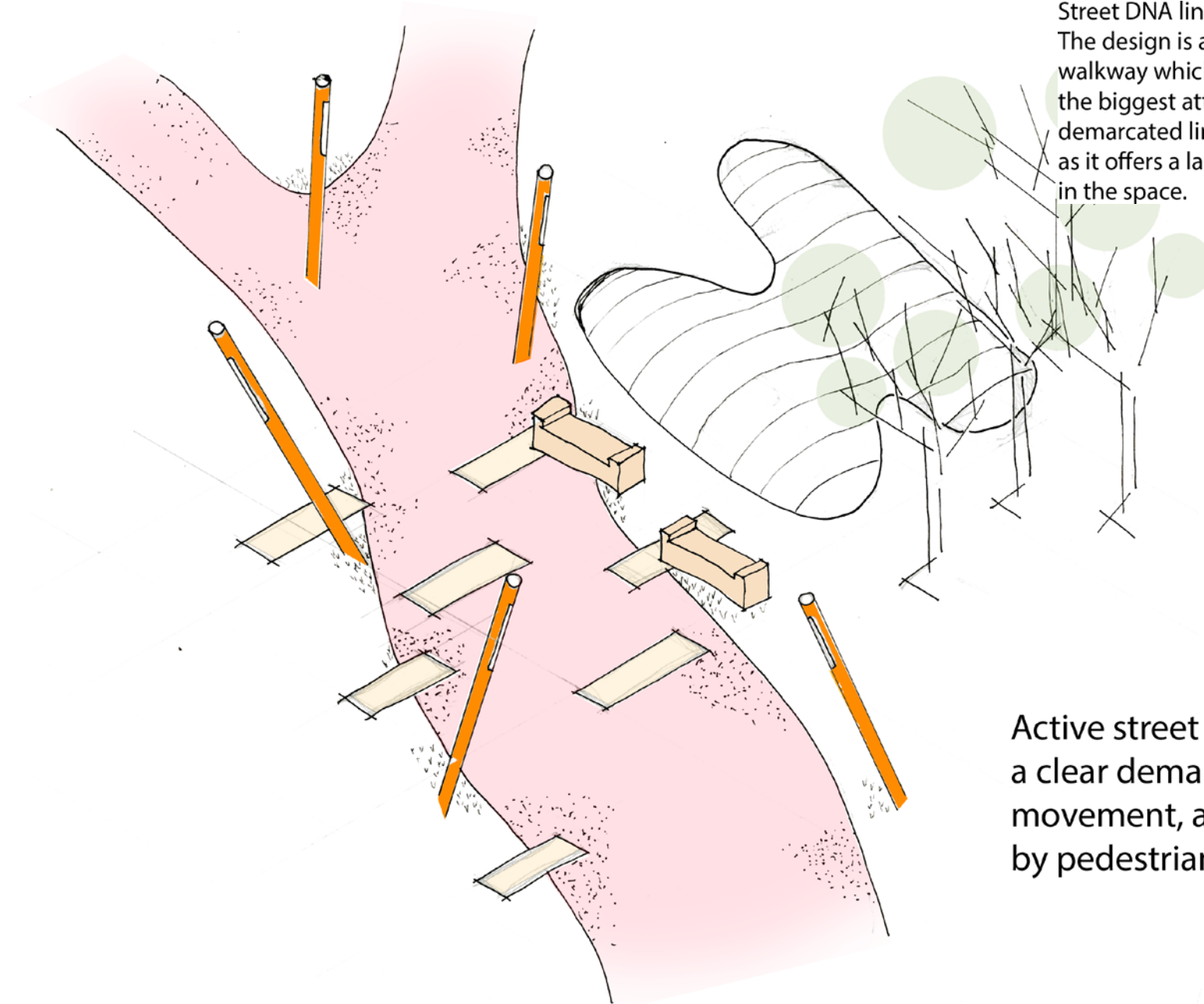
Fragrance garden



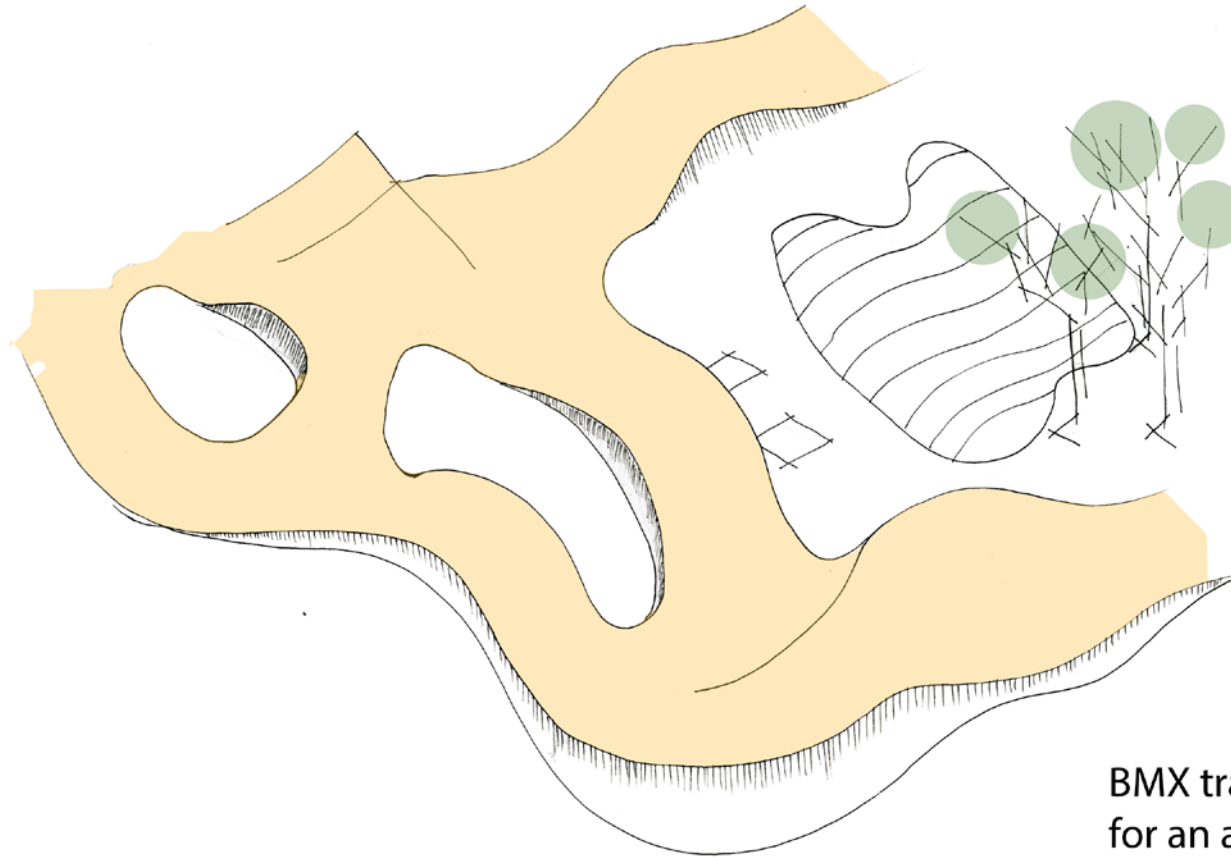
The nursery space is to offer training by giving access to skills development for youth in plant knowledge, also allowing them to trade their fruits for revenue in the space by selling tree and plants. The space would also be linked to the adjacent high school (Uxolo high).

The Park own Nursery space for plant knowledge engagement.

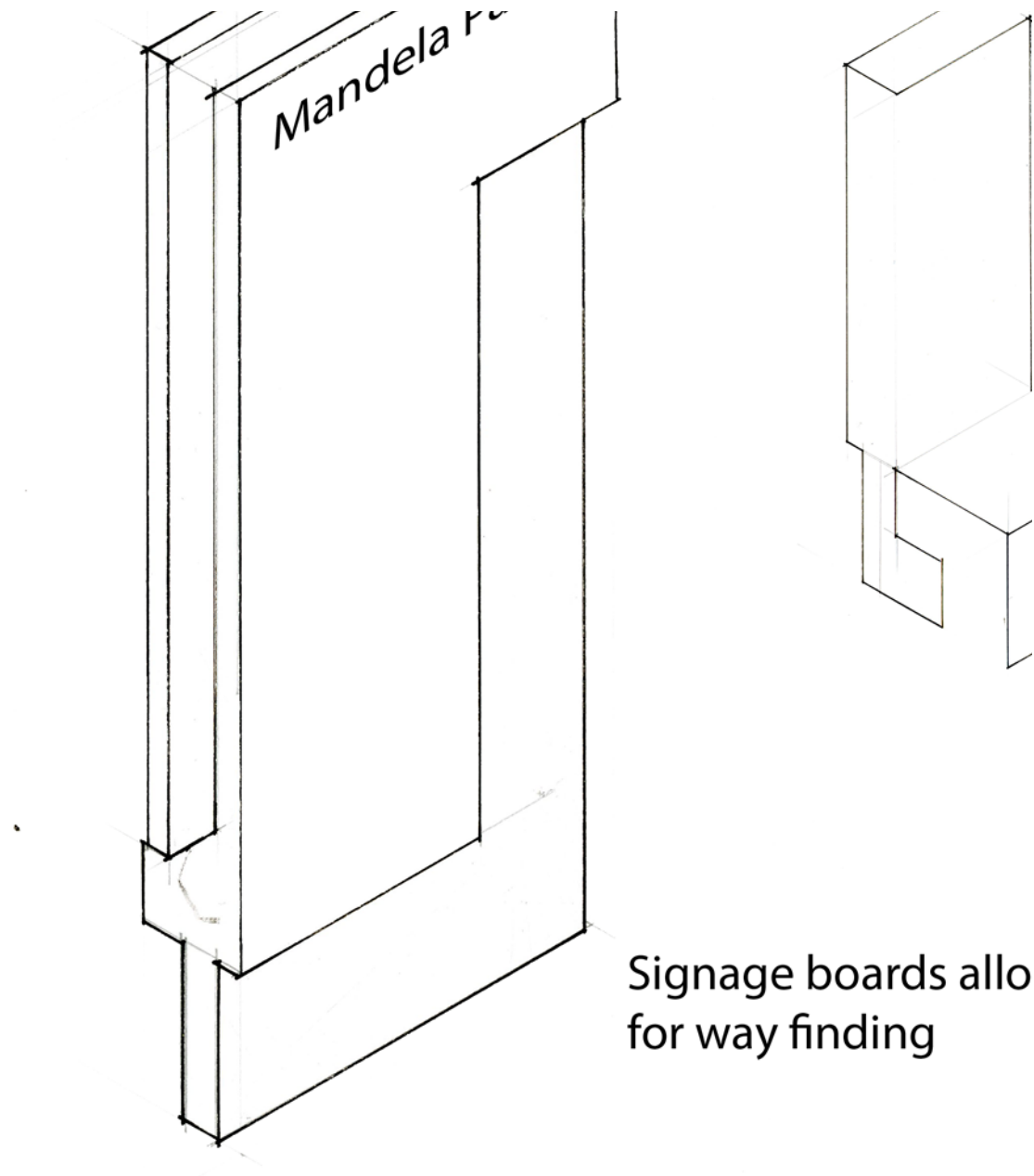
Street DNA linkage pathway design aims: The design is aimed at offering a dominate walkway which offers wifi links, lighting and the biggest attribute of all being a clear demarcated linkage path which offers safety as it offers a large group of people to move in the space. (Simpson, 2018)



Active street safety spine to set as a clear demarcated space for movement, allowing for max use by pedestrians



BMX trail spaces to allow the youth for an active way of learning offering with physical body movement.



Signage boards allow for way finding

## Precedent



Dublin Grand canal square: this a 1hactare site space which offers an exciting urban space where people are found enjoying the movement through space and way finding is offered in the space and its seen as an arrival point. Martha Schwartz design team first looked at the historical values of site and what had been offered on the site and had let that influence design. The site also working with desires in the space, with land art markings of bright paint s urfaces offering way finding in the space.



Velokhaya (cycling with a purpose): This an Academy offered within the township of Khayelitsha offering educational means for the people living in the area. The space first started out as an Social development project focused on youth upliftment by offering an BMX trail space with a bicycle repair shop which gave the youth skill and opportunities to enter into cycling competitions around the world. The space than later offered an world class ICT area and an Life skills centre.



Groova park experience: This an urban landscape, which has grown to be very successful amongst the youth in Khayelitsha which offers a park-in experience that, allows gathering of friends in a safe outdoor space. The site located along Spin road was initially started by a few homeowners along the road who saw it fitting to convert the direction at which their homes had faced, by opening up their back yards to the road and activating it with vending opportunities.



This an youth activist space which offers an facilitate space for events such as weddings, poetry slots, African outfits fashion show and host parties.

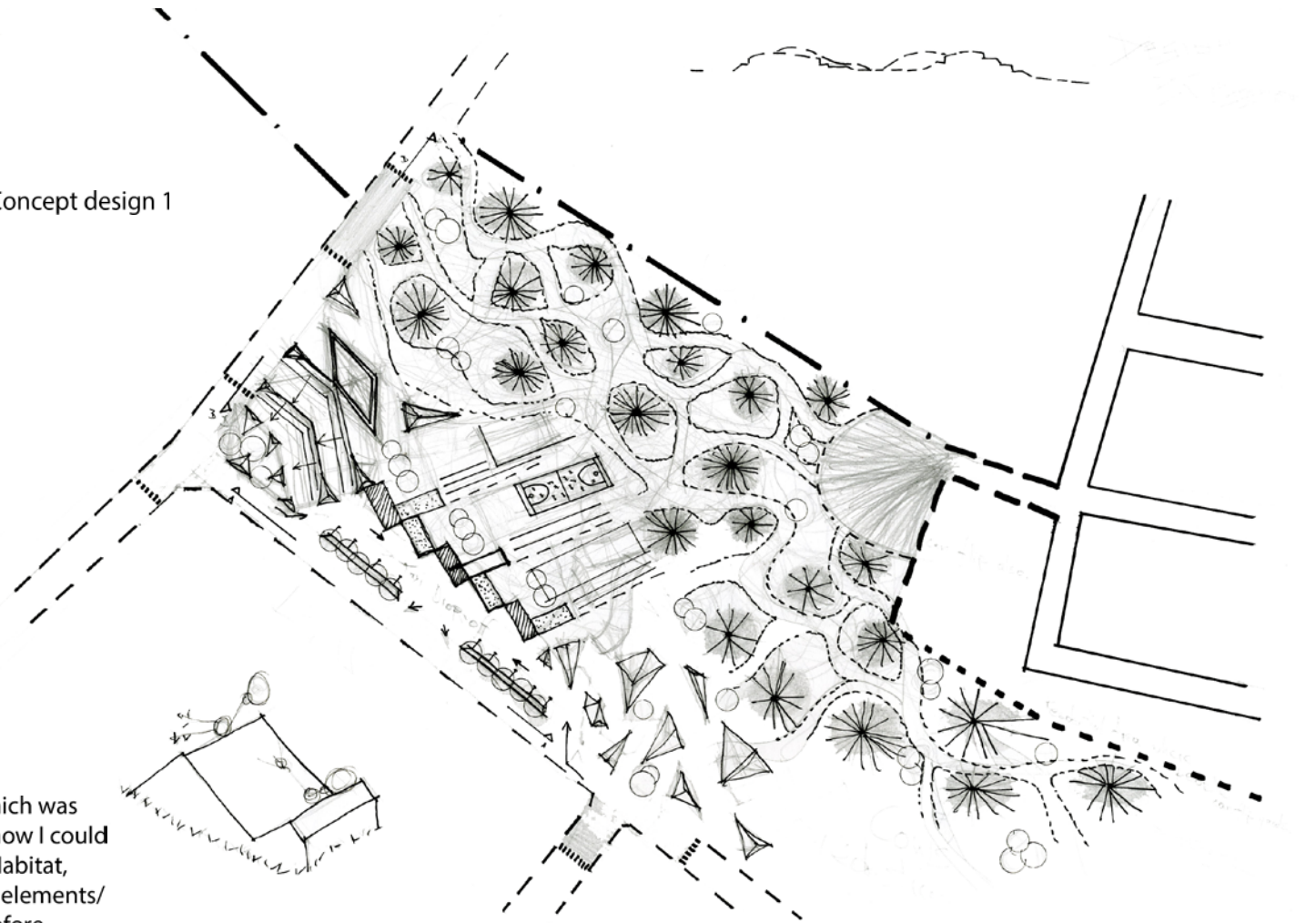
# Design Development

Design development influenced by elements of context reading from what the site offers with its movement patterns marked and reading into how a dominant structure could be designed, taking from the influence of current site by what the site with holds and introduction of playful thinking along the way.



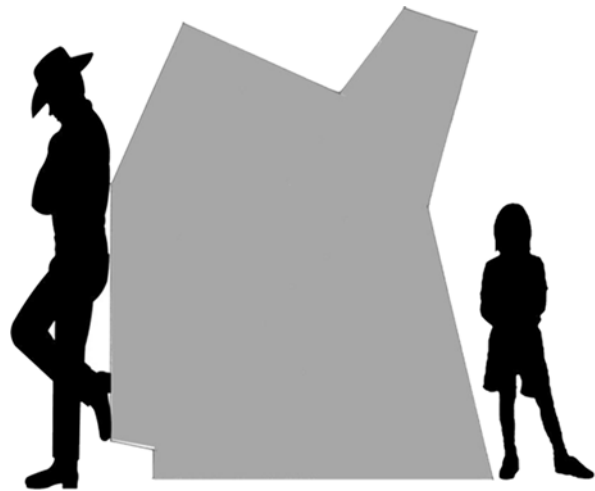
Cape flat Dune Strandveld

Concept design 1



The ideology behind the site concept was one, which was taken from the historical layout off site, studying how I could take the endangered Cape Flat Dune Strandveld Habitat, which once resided on site to inform these robust elements/ landscape I would be designing for the site. I therefore started by mimicking in my layout plan the shape of the dune Strandveld thicket in aerial view to allow that to inform my site movement, layout off the containers and also wind inspired.

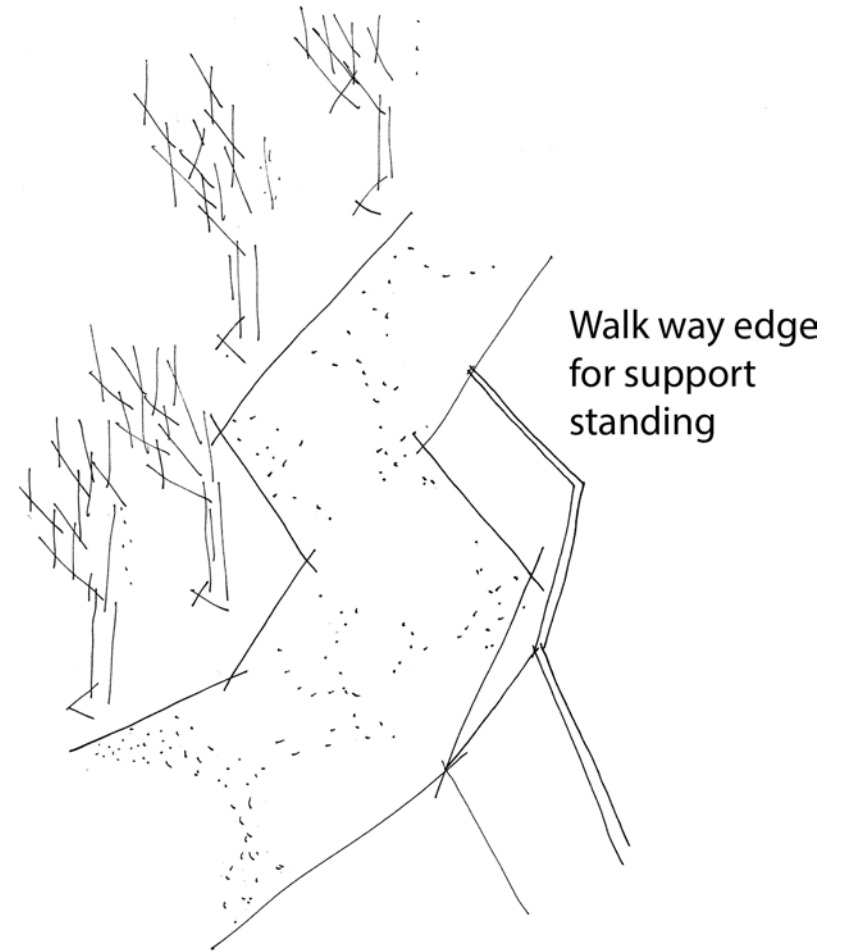
This piece highlights my study of Embodied cognitive science. The understanding influenced the arrangement of sitting on site with the adjustment to provide support standing in the space, reading from the work of Erik Rietveld, covering how the office of 2025 should look. This thinking in my came with the reading of having bermed spaces on site which could allow for support standing as proven by health doctors sitting affects one health.

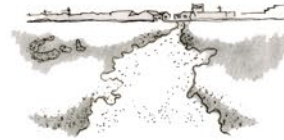
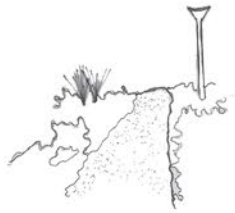


SUPPORT STANDING

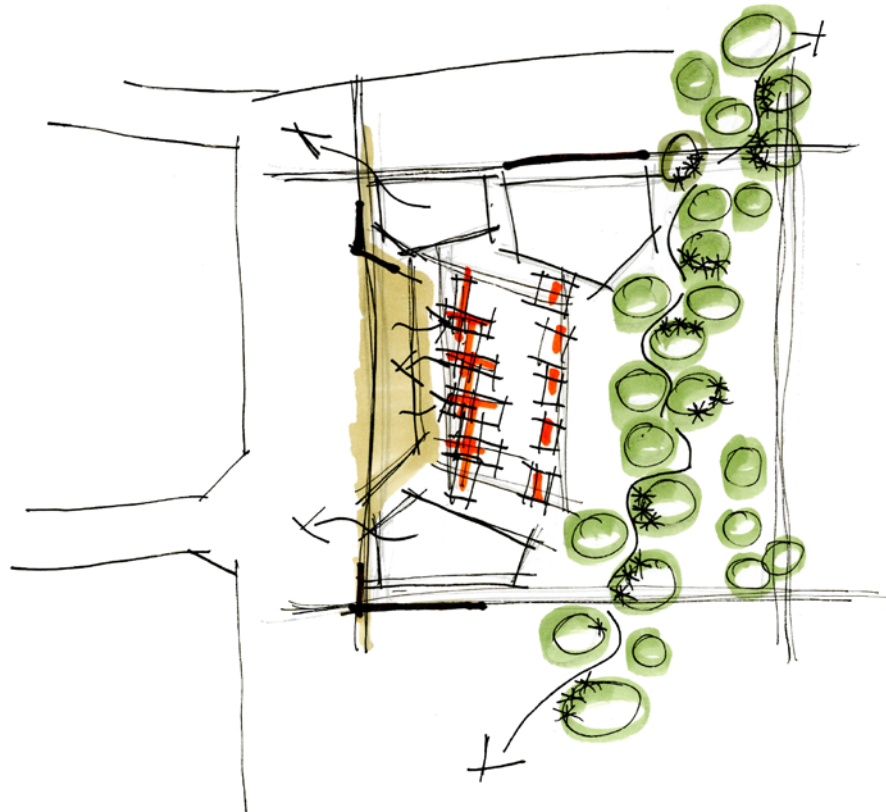


(Google.co.za, 2018)

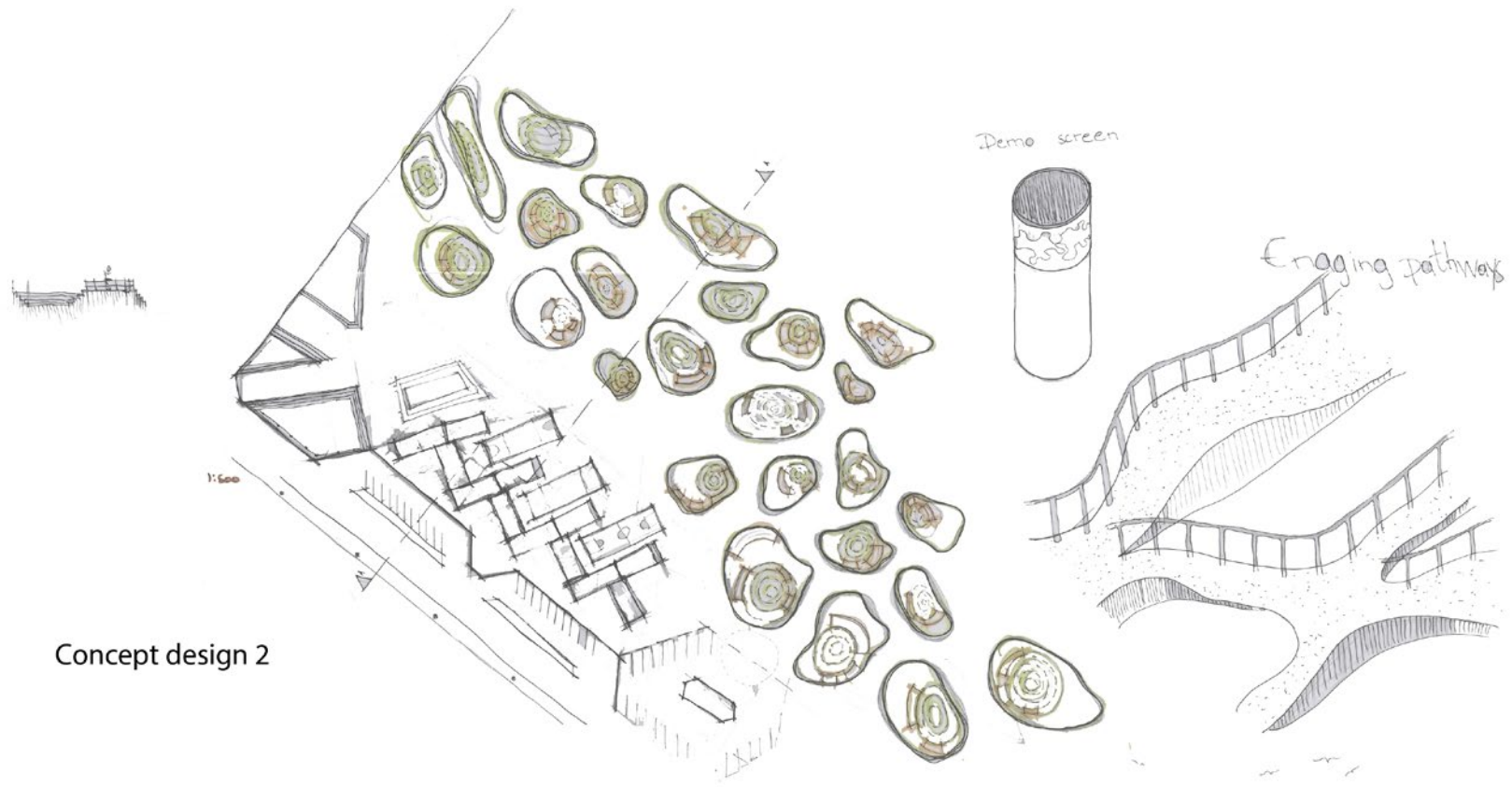


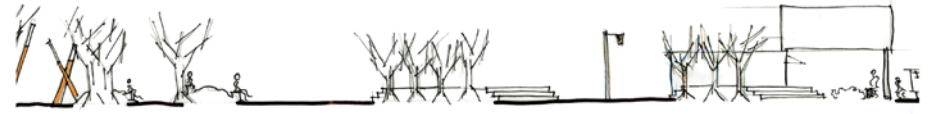


The sketches above show the current scenarios on site



◀ The above concept diagram shows the thinking of site layout with regards to fitting all the components had in the space and also for me keeping the idea in mind of a of street DNA and view the park as a pulse to this lost space. So the site always had to be bleeding people out off the park.





B



C

Section displaying aimed street activation process with lighting, wifi assess and entailing the berms in the space for support standing.

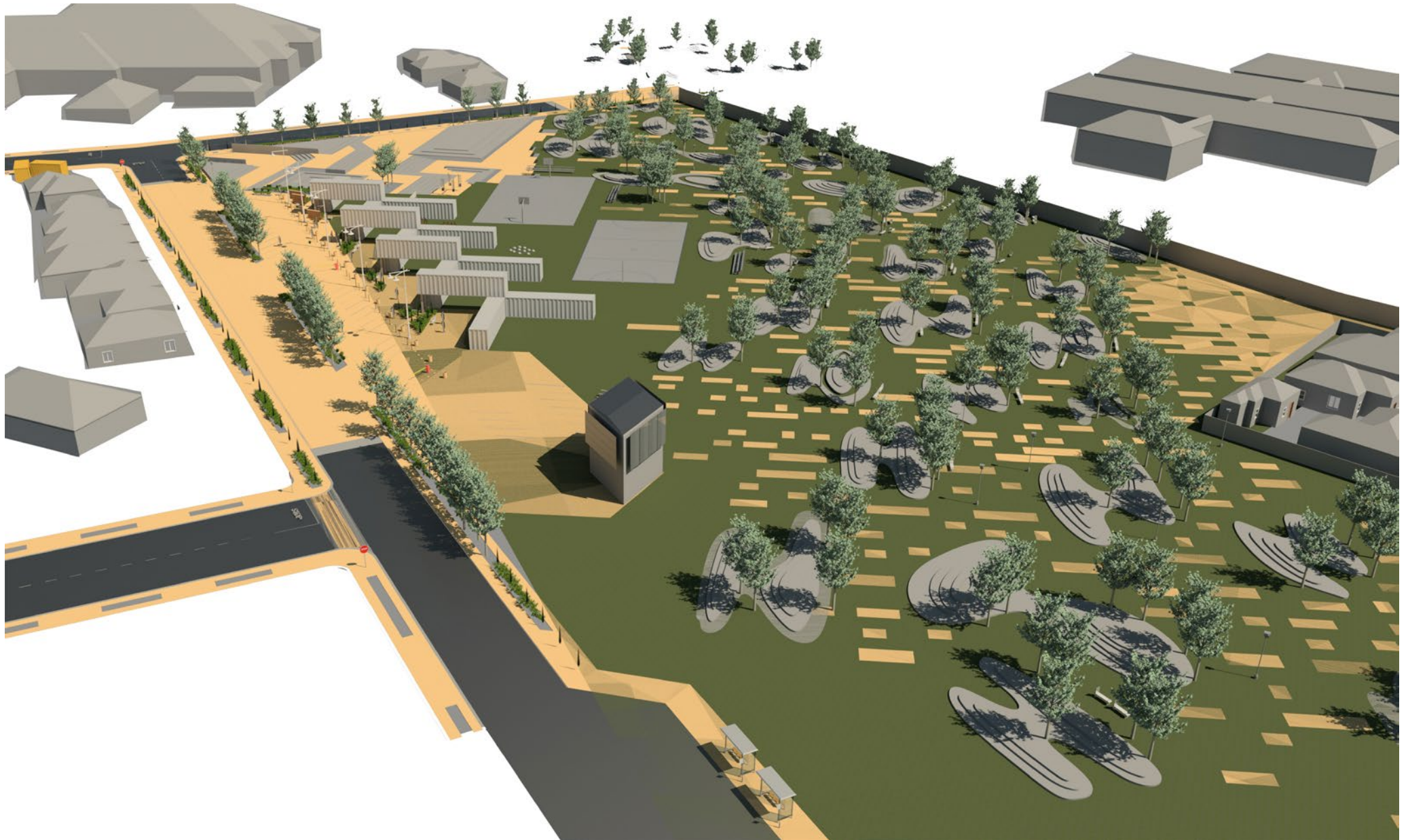


A-A



Concept design 3

**Final proposed perspective**





## Proposed Surreal imagery site:



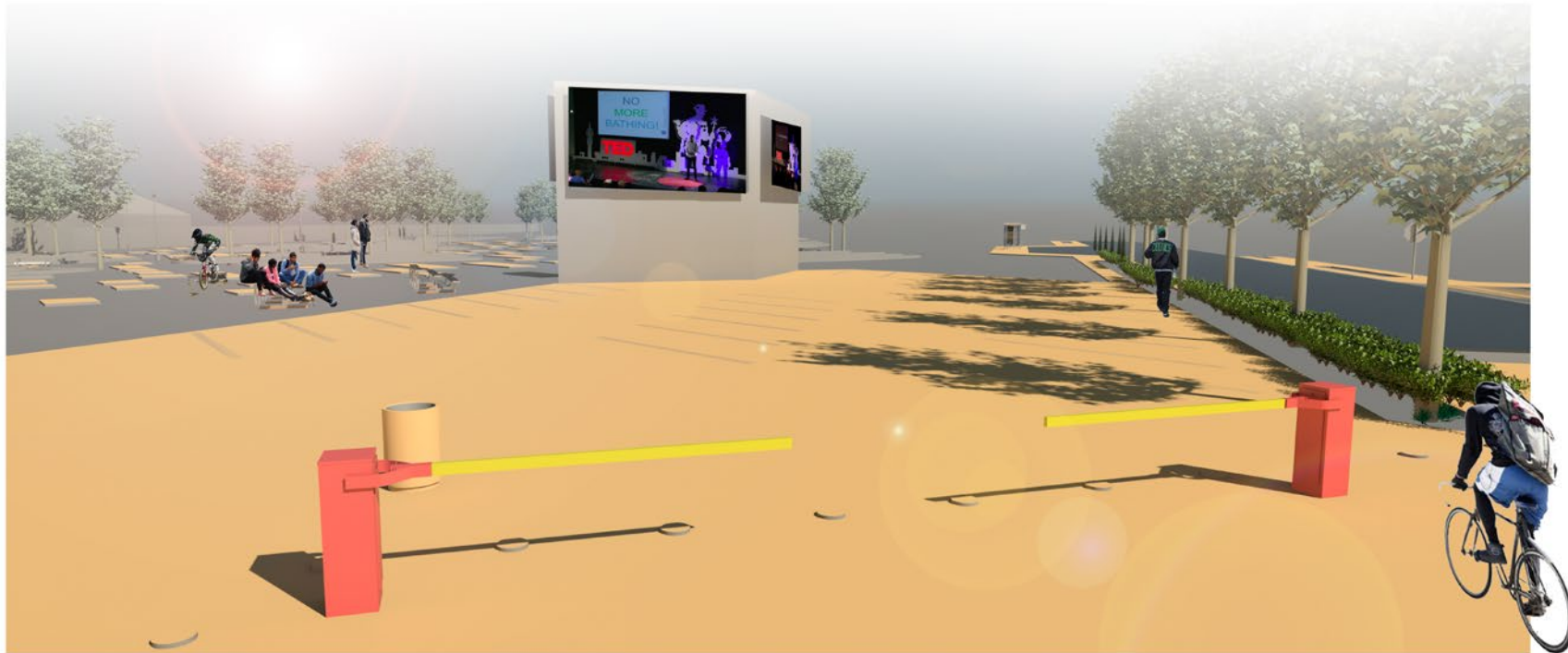
- A** The space acts as the park "Porte cochere" with the omissions of an overhead structure, consisting of a community wall which aims to incorporate the community current thoughts at present with the aims of addressing issues with in the space before they topple into unmanageable means (such as strikes, mob justices or increase number of robberies). The space also incorporates the park semi-formal vending spaces, with drop-off point and planting regenerative side works.



**B** The inner space of the park covered with netball patches and areas that provide learning for different age groups starting with the container space which facility for young business professionals in the space of khayelitsha with focus on business incubates and accommodations of business in the area. The overhead projecting screens which are aimed for an audience on the exterior part of the containers interacting with the public, which is engaged with the other means on the exterior part. Providing a means for incidental learning in the space.



**C** The space provides for vending and the park drop and go zones with aims of providing locational business with showcase space with interaction with the youth in teaching them about economical means.



**D** The Drive/walk in cinema space serves as a multipurpose space which offers a diversity space with entities looking at encouraging the youth to better opportunities available in the world. The space will also serve as a advertising for new educational means which the area youth can interact with late night cinema space for not just enjoyment but providing surveillance to the site.

## Model of site as imagined



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APPLICANT'S DETAILS		
Name of principal researcher, student or external applicant	Lunga Sithole	
Department	Architecture, Planning and Geomatics	
Preferred email address of applicant:	Lungasithole47@gmail.com	
If Student	Your Degree: e.g., MSc, PhD, etc.	Master of Landscape Architecture
	Credit Value of Research: e.g., 60/120/180/360 etc.	120
	Name of Supervisor (if supervised):	Clinton Hindes
If this is a research contract, indicate the source of funding/sponsorship	No	
Project Title	'Apart-space' Valuing community: Readjusting social notion through design in landscape for Khayelitsha	

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SIGNED BY	Full name	Date
Principal Researcher/ Student/External applicant	Lunga Sithole	17 Jul 2018

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