

FLEXING THE FLUX

RE-APPROPRIATING MUIZENBERG BEACHFRONT
AS A RESPONSE TO CONTEXTUAL DYNAMISM



MICHAL DU PLESSIS

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In partial fulfilment of
requirements for the degree of
Master of Landscape Architecture
APG 5052S Dissertation 2018
120 credits

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ACKNOWLEDGEMENTS

MUIZENBERG LOCALS

First and foremost, the people that lie at the heart of my dissertation project are you, the beautiful people of Muizenberg. I would like to thank you for sparking an interest in studying an area that you call home. To the surfers, skateboarders, beach-goers, residents, visitors, activists, the youth, the elderly and all other people from all walks of life. It is you that define Muizenberg Beachfront, and it is you who will continue to shape it into the future. I thank you all for lending me a hand and for your patience and passion about your home through our various interactions.

UCT STAFF

I would firstly like to thank the course convenor of the MLA programme - Clinton Hindes. Thank you for running the various aspects of the MLA programme with professionalism and always being available in the midst of a 'crisis'. You are the first person that I interacted with (at my application interview for studying at UCT) and have since always been there to lend a hand when it is most needed.

I'd also like to thank Julian Raxworthy for everything he has done at his tenure at UCT. You are a brilliant mind that captivated me during our interactions at the university and on field trips. Thank you for your time in South Africa and your immense contributions in catapulting the discipline of Landscape Architecture into what it is today not only nationally, but globally.

CLASS MATES

To all my fellow classmates and friends at UCT. This would not have been possible without you. Thank you Aphelele, Jess Met, Jess McC, Maria, Jacquie, Phillipe, Alex, Lesego, Mapula, Mark, Dirk, Lunga, Joshua, Luke, Nabilah, Charleen & Jayati. You made me feel comfortable and accepted as part of your class and really pushed me to work to the best of my abilities. I have learnt a lot from all of you.

SUPERVISORS

To my supervisor, my mentor and (at times) my boss, Adam Van Nieuwenhuizen, I would like to thank you for everything you have accompanied me through. You have taught me a lot there is to know about the importance of landscape architecture in the contemporary built environment, and it was only an honour to have you as my supervisor for this dissertation project.

I would like to thank all of the other MLA supervisors as well - Kathryn Ewing, Tarna Klitzner, Julian and Clinton. Thank you for your moments (albeit short) of guidance. Your advice helped me shape this project tremendously.

FRIENDS

To all my friends that have been there for me along the way, I sincerely thank you. With my family all being out of reach and residing in another province, you are my support base here and thus, my Cape Town family! Thank you Roux, Scott, Chelcie, Jason, Kaylin, Alex, William, Maria, Fione, Lauren, Chad, Katha, Nadim, Rudi and Avro. All of you have collectively been there at times and for various reasons. You are all true inspirations of compassionate human beings!

FAMILY

I would like to thank my father, Hiki du Plessis, for his tremendous patience. You have always believed that I could do it, and you were right. Nou is ek uiteindelik klaar!

I would like to thank you my dear mother, Maria du Plessis, for the endless support and kind words. At times of despair, I turn to you and you know how to comfort me and put me back on track. Dankie mamma!

To my brother, Jean du Plessis, thank you for keeping me motivated, even whilst you currently are going through a dissertation of your own. Your visit at the middle of my dissertation was just what I needed, too. Thank you for giving me the reason to step back for a moment and enjoy life.

EXECUTIVE SUMMARY

My dissertation in landscape architecture seeks to apply responsive landscape strategies in the design of a beachfront landscape.

The chosen area of Muizenberg Beachfront was identified as an appropriate space for the investigation to unfold. The area is a popular urban beachfront in Cape Town, catering for various ocean-orientated recreational activities. The landscape is also host to a multitude of ecological wonders, including sand dunes, an ocean, two river systems, mountains, fauna and flora.

A problem identified in the landscape is that the keen interest of man's desire to make use of the space, has left the local ecology in a drastically altered and arguably unhealthy state. This is especially apparent in the most dynamic (or seasonal) ecological systems, such as that of the sand dunes and the rivers.

An investigative study formed part of developing a narrative for the dissertation process. The study sought to explore the notion of how man impacts and alters the dynamic nature of coastal landscapes. The study, to be presented in the pages following on from here, acts as a stand alone artefact but also as an intuitive guide for the design process.



1

THE STUDY

Abstract

Form + Formation



ABSTRACT



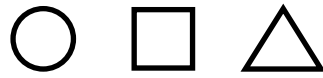
The Study

The study took place in order to gain an intuitive understanding of the physics that govern the movement of beach sand, and thereby, the formation of sand dunes.

The experiment included placing a series of objects on a stretch of beach in Cape Town, and were observed over five days. The forms chosen represent the impact of man on the beach - specifically the physical alterations that man makes to this landscape typology. The presence of objects on the beach in turn, has visible impacts on the manner in which sand is transported and settled by meteorological components. These resultant configuration of the surrounding landscape was documented in detail and alludes towards how the endeavours of mankind impact the nature of coastal landscapes.

The study acts as an entry point into contemplating how responsive design approaches may apply to beachfront landscapes. The process is thus used as a catalytic guide for the dissertation that follows.

FORM + FORMATION

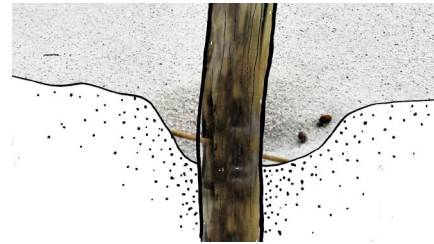


PRIMARY SHAPES

[ORIGINAL PLACEMENT OF FORMS]



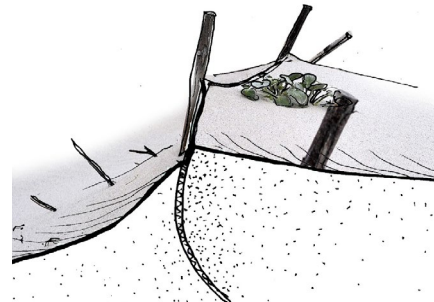
[TIME + SAND FORM RELATIONSHIP]



① SHORT TERM

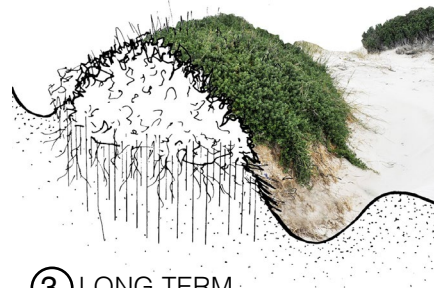
The images to the left depict short, medium and long term effects that meteorological elements impose on dune sand formation.

① The effect of light rain on sand when an upright stick was placed in the ground



② MEDIUM TERM

② Man-made dune stabilization through addition of sand-catching fences



③ LONG TERM

③ Natural dune stabilization through growth of coastal vegetation

13 AUGUST 2018

10 / 14°C
PARTLY SUNNY

NW
5-10 KT

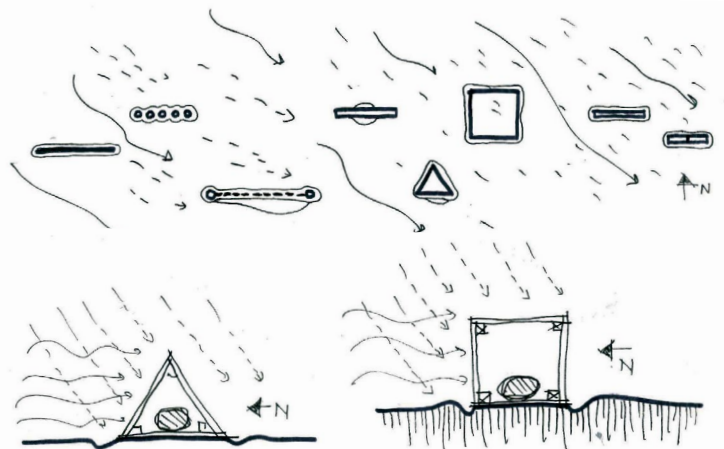
Objects placed at the experimentation site at Witsands Beach

14 AUGUST 2018

7 / 16°C
PARTLY CLOUDY

NE
3-6 KT

Existing elements at the beach are observed - see the images and descriptions to the right



15 AUGUST 2018

6 / 17°C
PARTLY CLOUDY

NNW
2-5 KT

1st Visit - Very subtle changes are noticeable in the surrounding beach sand

16 AUGUST 2018



17 AUGUST 2018



2nd Visit - Drastic changes are evident after the stormy weather of the previous day. The strong NW winds have scoured a lot of sand adjacent to the various objects.

18 AUGUST 2018

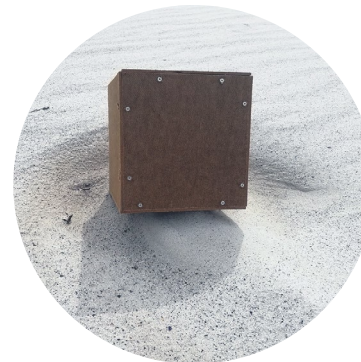


3rd Visit - Not much has changed since the visit the day before. Light winds, along with damp sand have left the adjacent sand-scape fairly unchanged. The resultant images displayed to the right are from this visit

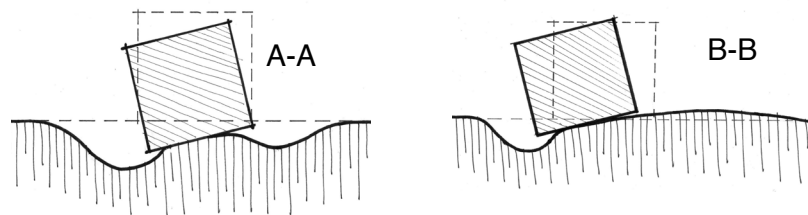
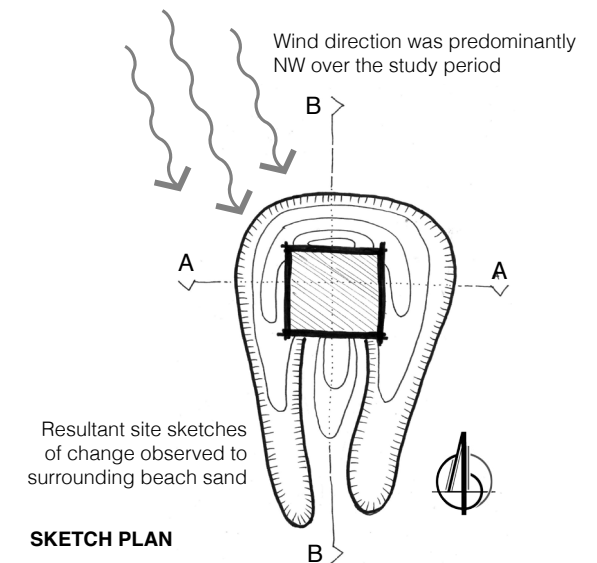
[RESULTANT DE-POSITIONING OF PLACED FORMS]



[ANALYSIS OF THE CUBE]



Resultant effects of the 20 x 20 x 20cm cube after five days



SKETCH SECTIONS

ABSTRACT



Dissertation

The dissertation project in landscape architecture seeks to investigate how responsive landscape design strategies may accentuate both the social and ecological performance of a beachfront landscape.

The project pin-pointed the urban beachfront of Muizenberg as a suitable landscape typology to test out the above-mentioned strategies. The chosen landscape, which caters for ocean-orientated recreational purposes, is characteristic of a landscape contrasted between the static and dynamic processes. In its current state, the beachfront has been engineered for efficiency, to the detriment of local ecology. This is due to the popularity of the space as a destination ocean lovers, which allowed for a highly urbanised space to evolve.

The project further seeks to investigate the fluctuating nature of recreational interest in the area, which is believed to be largely due to the dynamics of ecological characteristics that the different seasons bring to the area.

The final design thereby proposes as re-appropriation of a landscape where ecological fluctuations are brought into public awareness, along with finding appropriate design responses to the intrinsically linked nature of social dynamics of Muizenberg Beachfront.

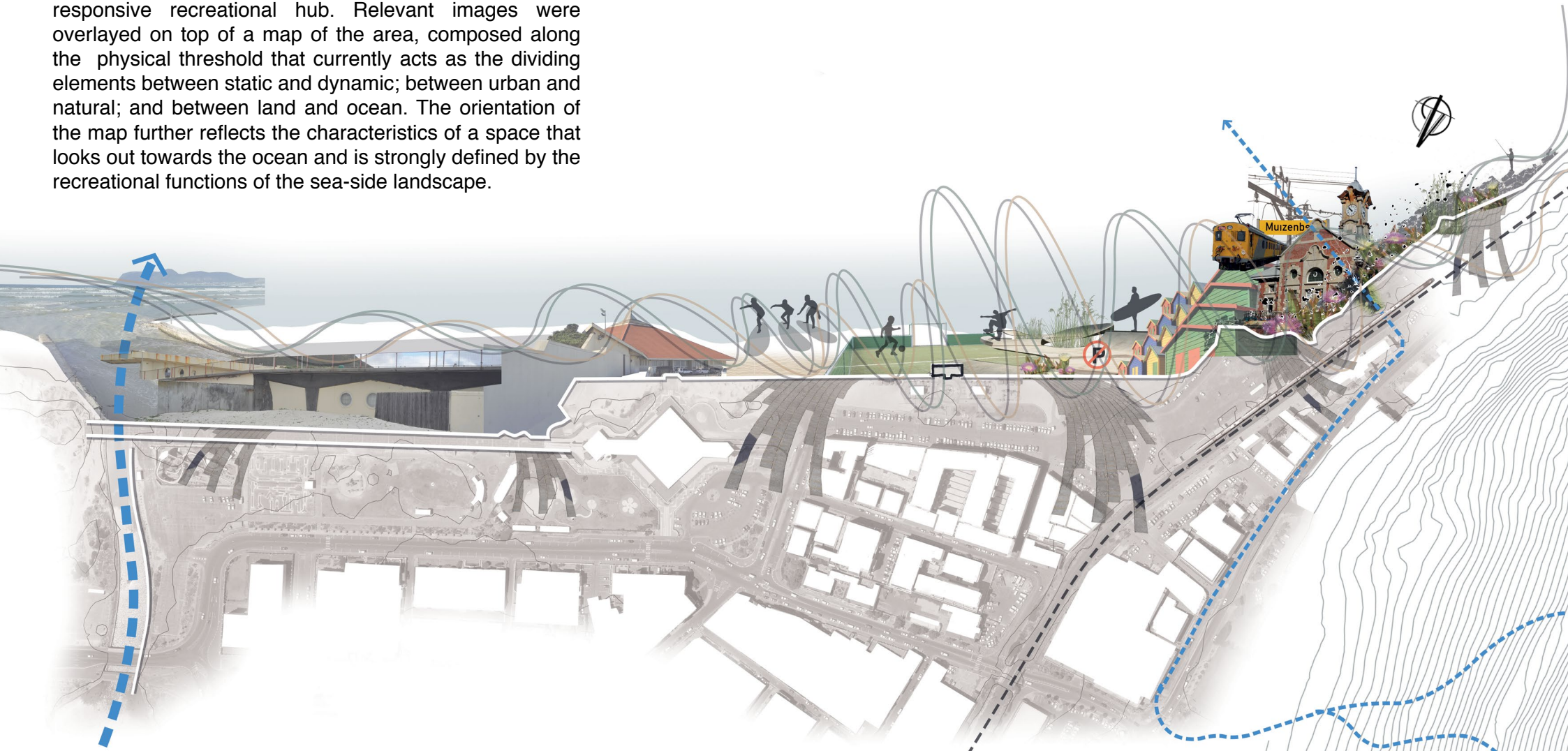
[THEORY]
[TYPE]
[SITE]

HOW CAN **RESPONSIVE LANDSCAPE DESIGN**
ACCENTUATE THE **RECREATIONAL QUALITIES**
OF **MUIZENBERG BEACHFRONT** ?

SETTING THE SCOPE

“Setting the Scope” was the first deliverable (Product 1) during the MLA Dissertation process. The aim of this task was to initiate the thought process around the chosen topic and/or study area.

For this assignment, a photo-collage was created comprised of imagery relating to Muizenberg Beachfront’s existing site conditions, the static and the dynamic, as well as the desired vision for the space as a socio-ecologically responsive recreational hub. Relevant images were overlaid on top of a map of the area, composed along the physical threshold that currently acts as the dividing elements between static and dynamic; between urban and natural; and between land and ocean. The orientation of the map further reflects the characteristics of a space that looks out towards the ocean and is strongly defined by the recreational functions of the sea-side landscape.



BACKGROUND

Flexing the Flux is interested in discovering how the Muizenberg Beachfront may be re-appropriated in a manner that responds towards the fluctual (or dynamic) attributes of the space.

Muizenberg is a popular coastal destination within the Metropolitan of Cape Town and caters for various forms of ocean-orientated recreation - based around a diverse sub-culture of “board riding”. The area further contains a unique blend of ecological functions due to its situation at an overlapping junction between mountains, ocean, rivers and sand dunes.



McLagan, J. (2006) *Guinness World Record attempt*

The beachfront is chosen as a study area for this dissertation due to a keen interest in exploring how the performative aspects of the space may be further enabled through a deeper understanding of the functional dynamisms of this coastal environment. The project will hereby culminate in a responsive landscape design that is rooted in an informed understanding of the various socio-economic and ecological function and fluctuations of this unique space within the metro.

OBJECTIVE

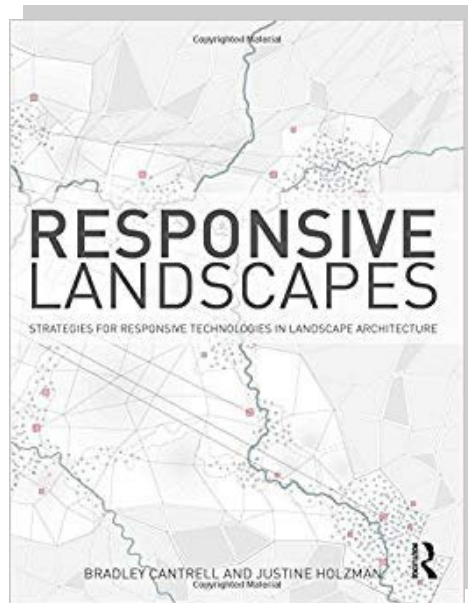
The project aims to development a landscape design of the Muizenberg Beachfront that further empowers the space an ocean-orientated, recreational space. The design of the landscape intends to incorporate responsive design-thinking as an approach at accentuating the presence of the various fluctual characteristics that define the Muizenberg Beachfront. The design will thereby focus specifically on the dynamic nature in which various socio-economic and ecological functions unfold in this ocean-orientated public space.

HYPOTHESIS

Muizenberg Beachfront holds vast potential in being re-appropriated as a space which accentuates and celebrates the dynamic nature of the landscape. The beachfront already acts fairly successfully with regards to its inherent ability in providing ocean-orientated recreation, yet it may be argued that its current physicality still inhibits the true performative potential of both the recreational qualities and ecological functions that define the landscape.

It is hereby hypothesised that the social and ecological performance of Muizenberg Beachfront may be further empowered through incorporating innovative landscape design strategies that respond to a variety of fluctual characteristics that define the landscape.

THEORY



Cantrell, B; Holzman, J [2017]
'Responsive Landscapes: Strategies for Responsive Technologies in Landscape Architecture' New York : ROUTLEDGE.

Responsive Landscapes

As a brief introduction, the term Responsive Landscape refers to contemporary ideas in landscape architecture regarding *"the interaction between environmental phenomena and architectural space"* (Cantrell et. al, 2017).

The book discusses various approaches & methodologies that land artists and landscape designers have used to accentuate the presence of ecology in the built environment. The authors acknowledge that technological innovation has given us the tools to design responsive and interactive architectural spaces. (Cantrell et. al, 2017)

The key point to be made is that this innovative way of thinking about design may further enable the interconnection of man and space, where responsive technologies allow for sensory experiences of the fine environmental intricacies that were previously imperceptible by humans. (Cantrell et al, 2017)

RESPONSIVE LANDSCAPES

PHENOMENA
FUNCTION
EXPERIENCE

**HI-TECH
FLUX ACCENTUATION**

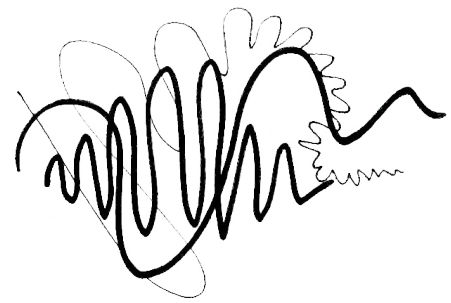
VS.

**LOW-KEY
FLUX ACCENTUATION**

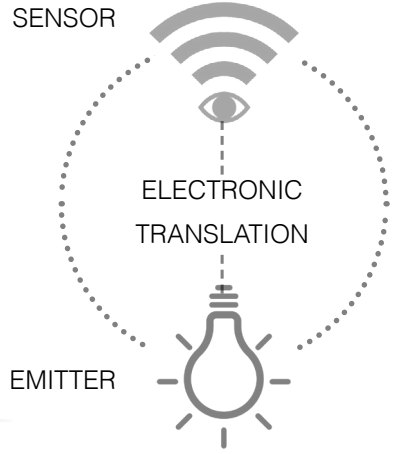
FLUCTUAL
MOMENT



FLUCTUAL
MOMENT

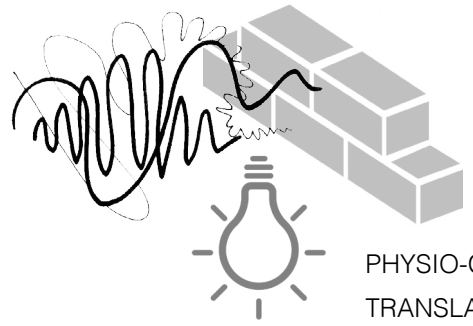


SENSOR



ELECTRONIC
TRANSLATION

EMITTER



PHYSIO-GRAPHIC
TRANSLATION

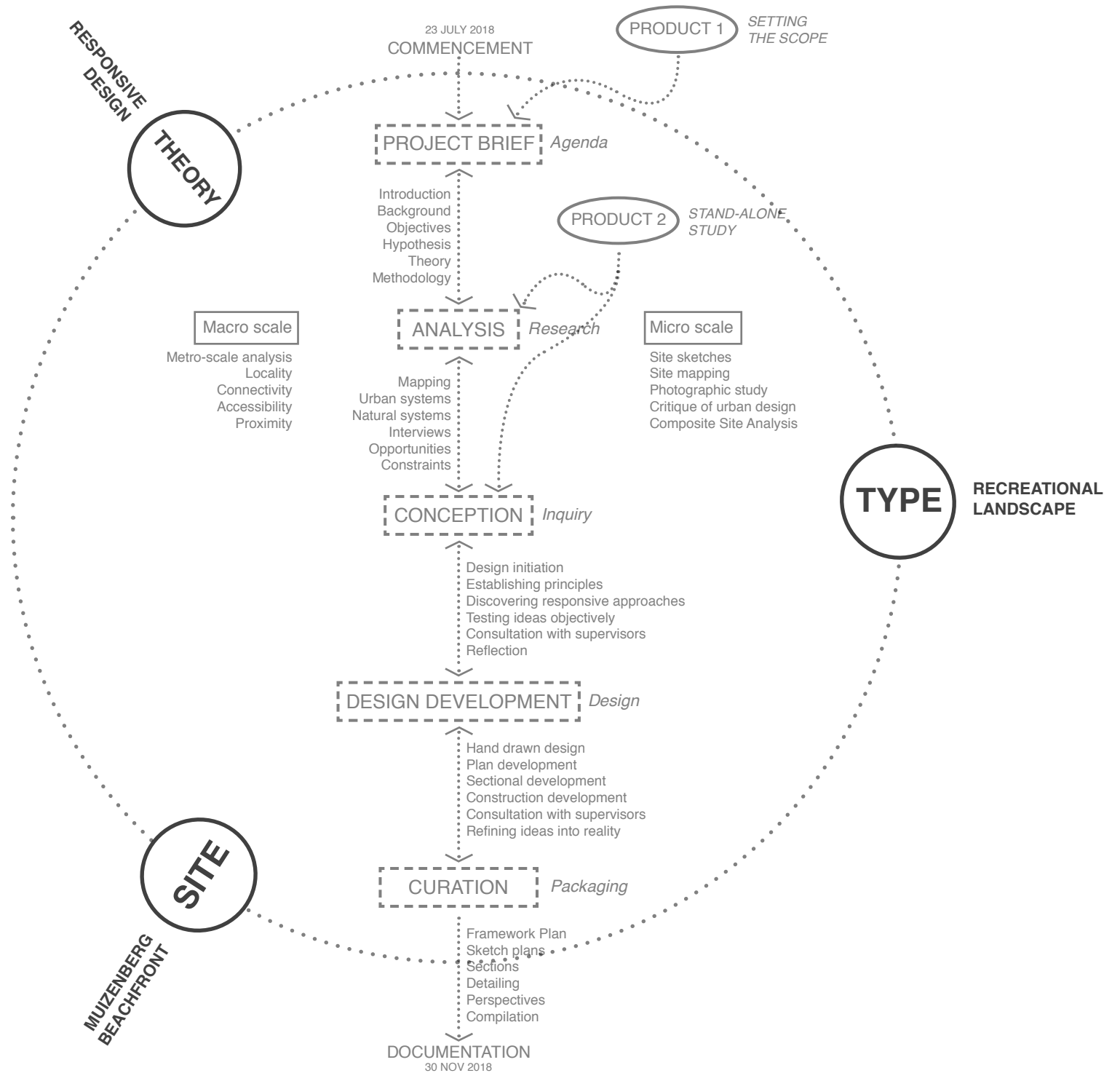


PERCEIVED



PERCEIVED

METHODOLOGY





3

CONTEXTUAL ANALYSIS

Metro-scale Informants

Study Area

Site Photography

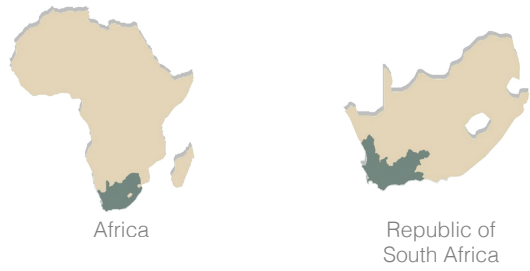
Site Mapping

Public Participation

Urban Design Critique

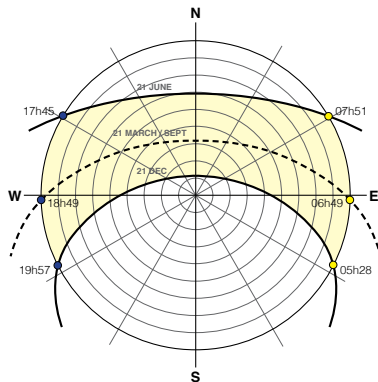
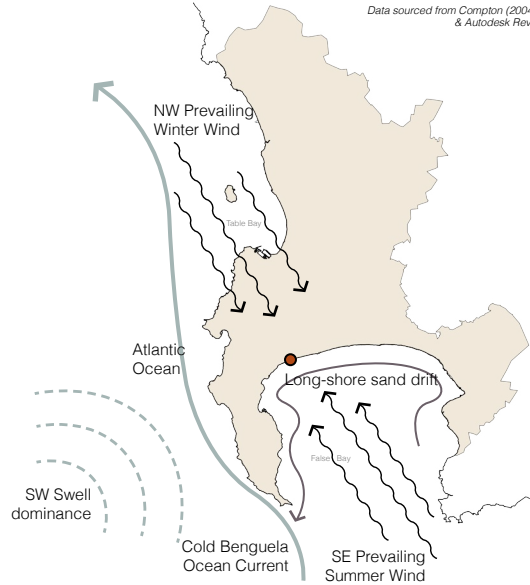
Composite Site Analysis

METRO-SCALE INFORMANTS

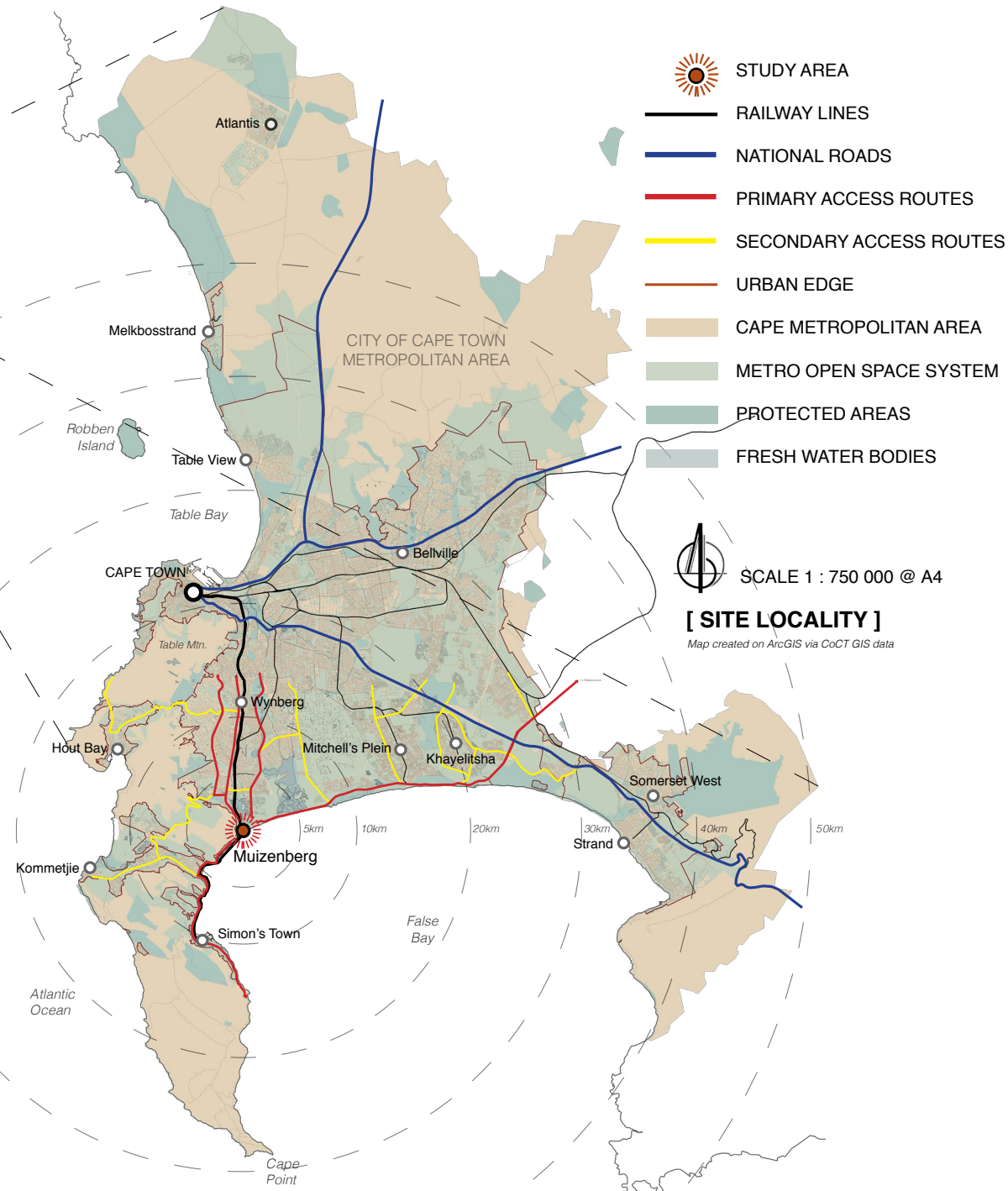


[METEOROLOGY]

Data sourced from Compton (2004) & Autodesk Revit



[SOLAR PATH]



- STUDY AREA
- RAILWAY LINES
- NATIONAL ROADS
- PRIMARY ACCESS ROUTES
- SECONDARY ACCESS ROUTES
- URBAN EDGE
- CAPE METROPOLITAN AREA
- METRO OPEN SPACE SYSTEM
- PROTECTED AREAS
- FRESH WATER BODIES

SCALE 1 : 750 000 @ A4

[SITE LOCALITY]
 Map created on ArcGIS via CoCT GIS data

STUDY AREA



Image taken from Google Earth

SITE PHOTOGRAPHY



i Historically significant beach-side cloak rooms



ii Muizenberg Community Hall / Pavilion building



iii View over False Bay towards Cape Point



iv Sandstone boulders scattered at the foot of the Muizenberg Mt.



v Interface between beach sand and hardscaping



vi Sidewalk along Restaurant interface



vii Muizenberg train station

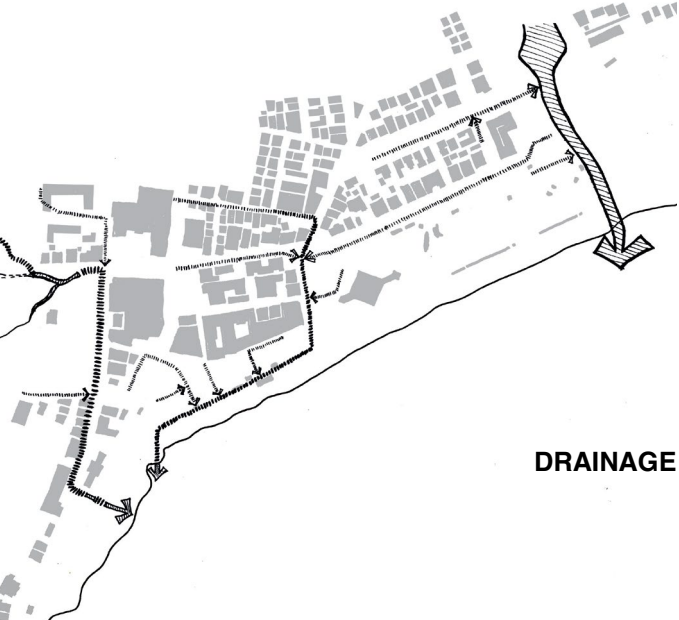


viii Muizenberg Mountain towards the western end of the beachfront

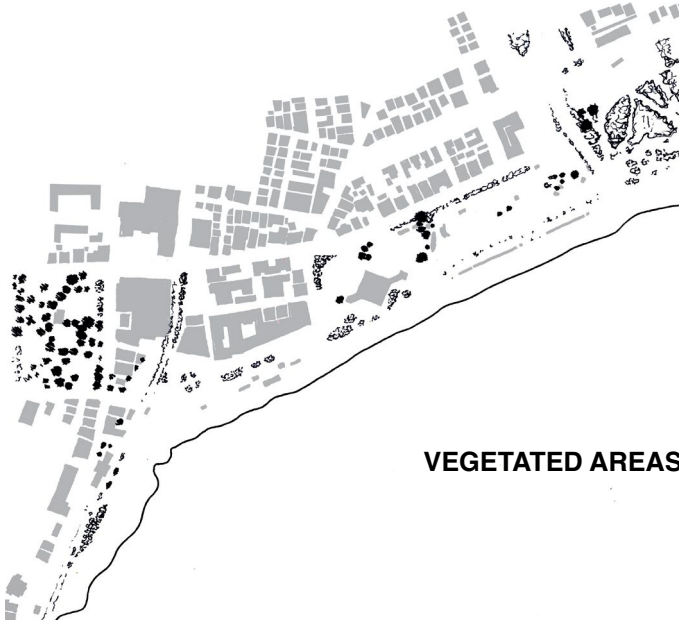
** Please refer to Composite Site Analysis to see location of these viewpoints*

SITE MAPPING

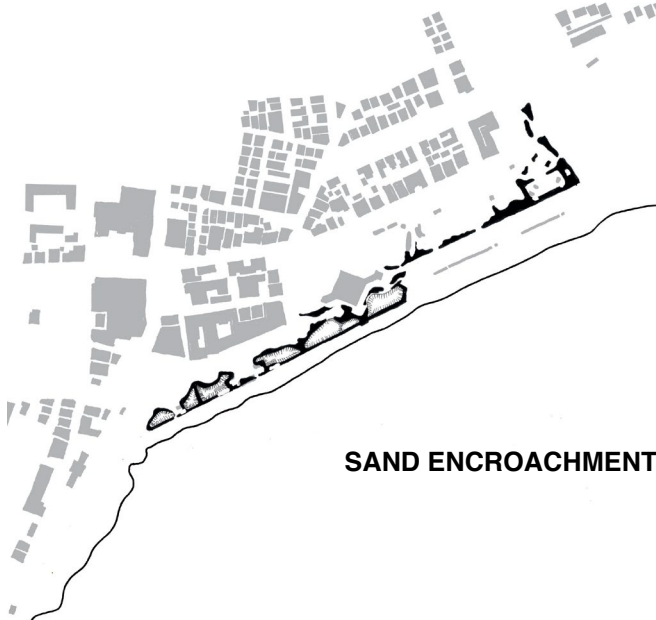
[MAPPING ECOLOGY]



DRAINAGE

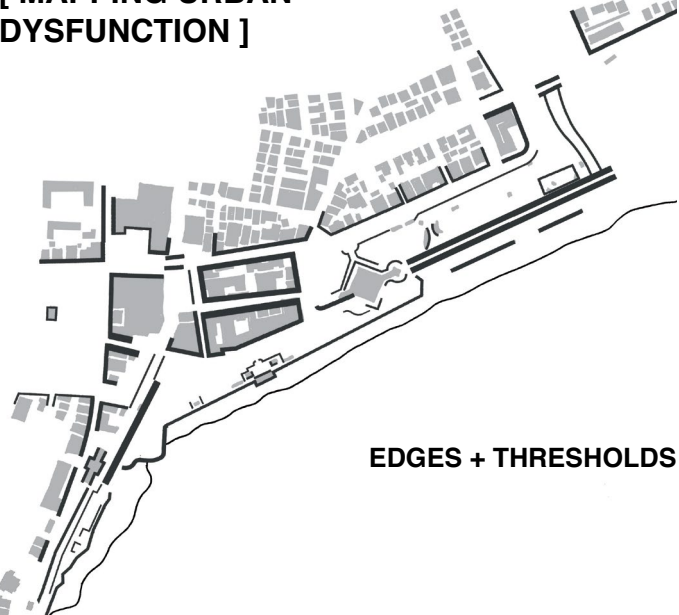


VEGETATED AREAS

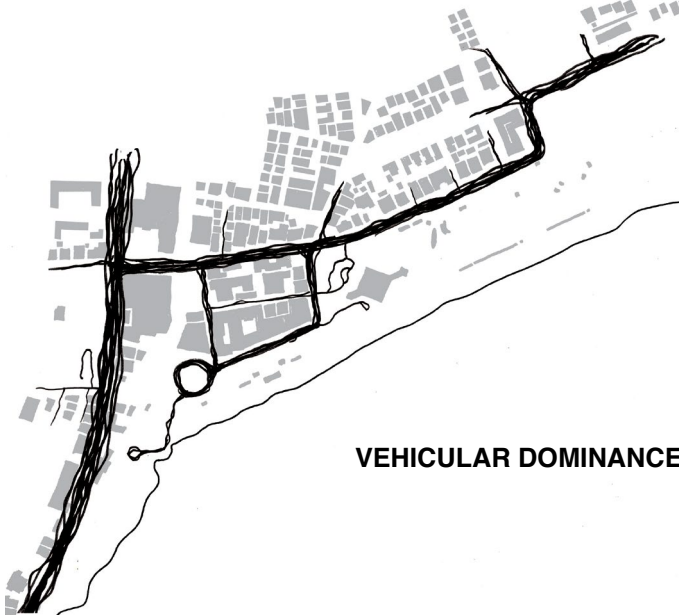


SAND ENCROACHMENT

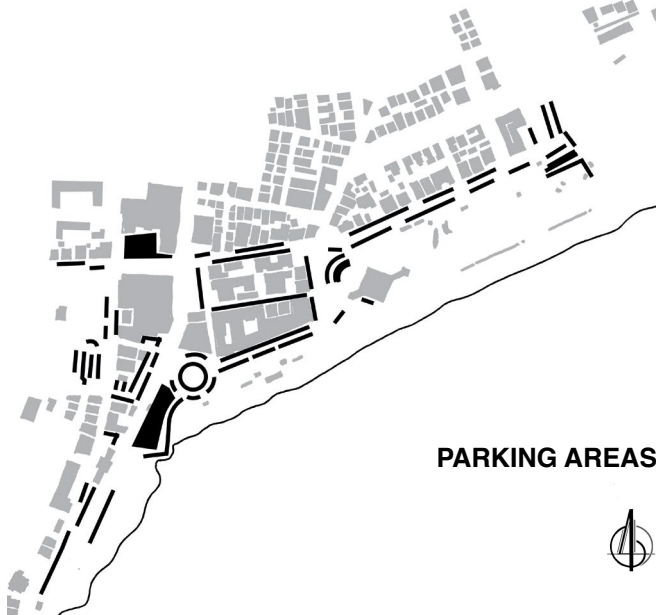
[MAPPING URBAN DYSFUNCTION]



EDGES + THRESHOLDS



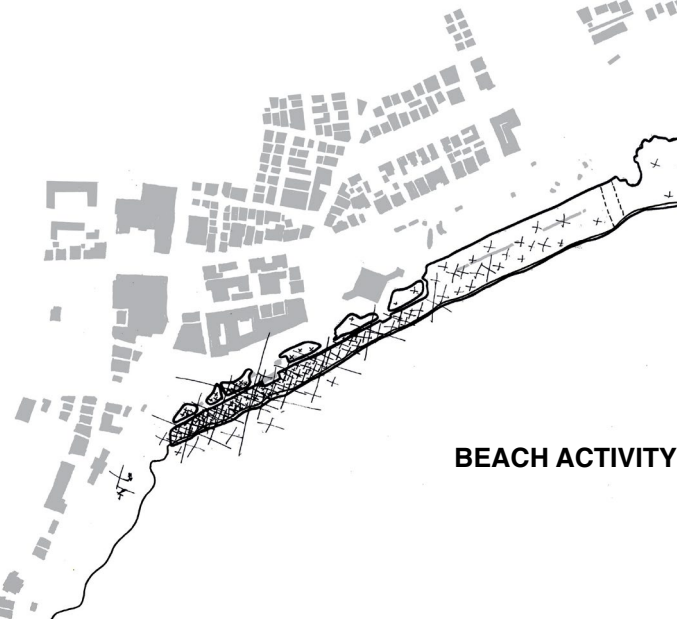
VEHICULAR DOMINANCE



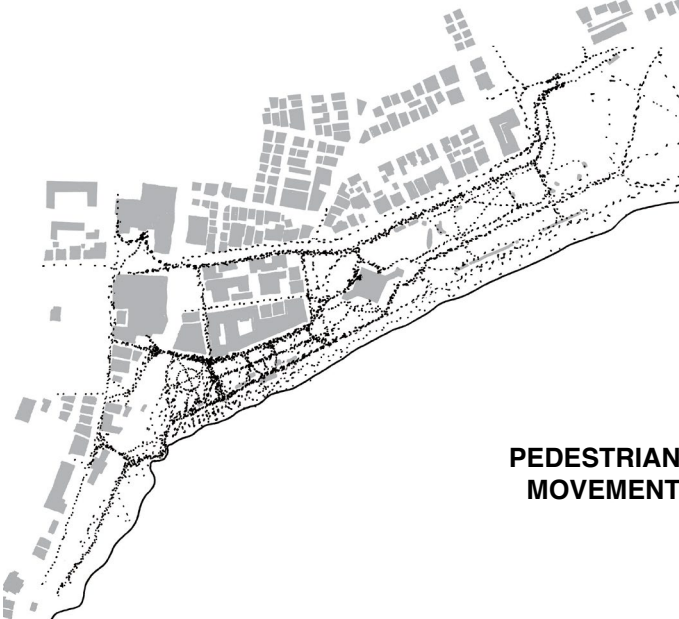
PARKING AREAS



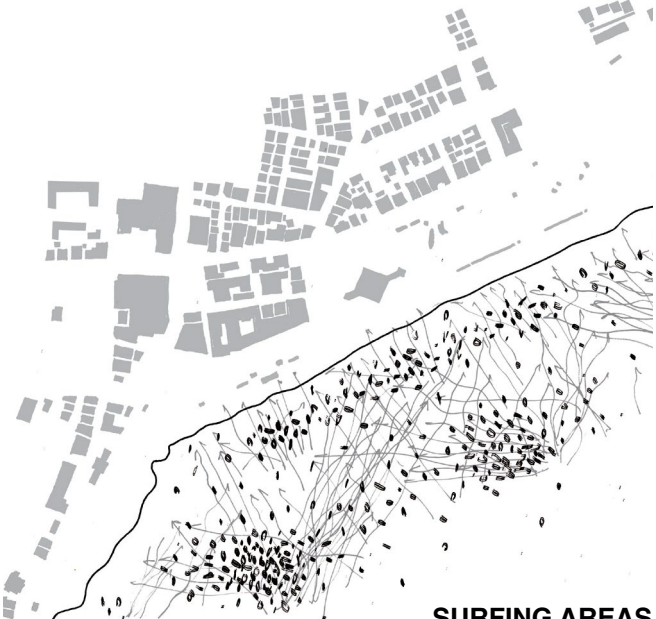
[MAPPING RECREATION]



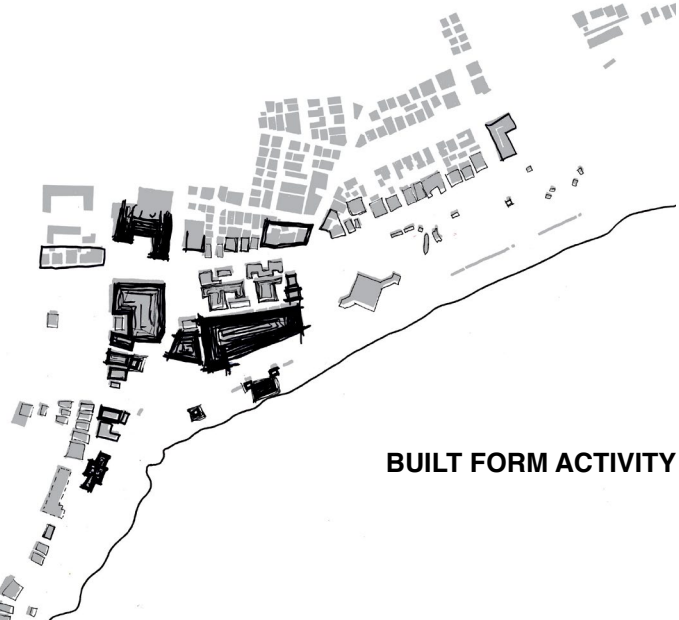
BEACH ACTIVITY



PEDESTRIAN MOVEMENT



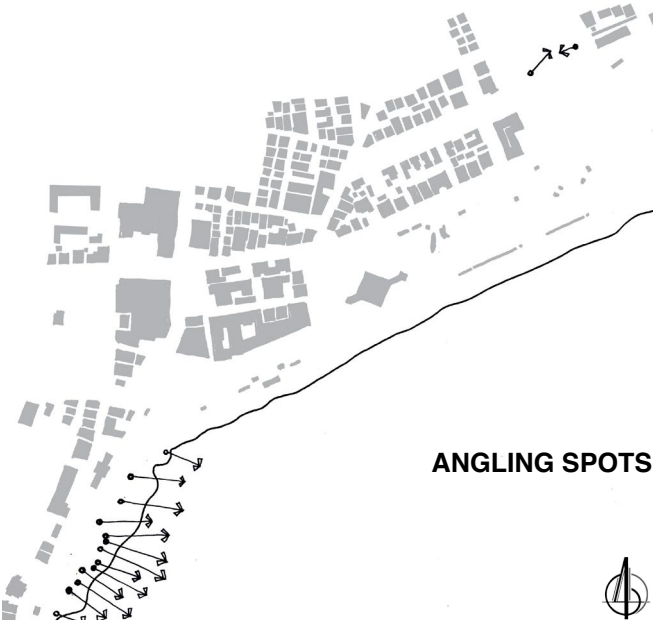
SURFING AREAS + DIRECTIONS



BUILT FORM ACTIVITY



SKATEBOARD ROUTES



ANGLING SPOTS



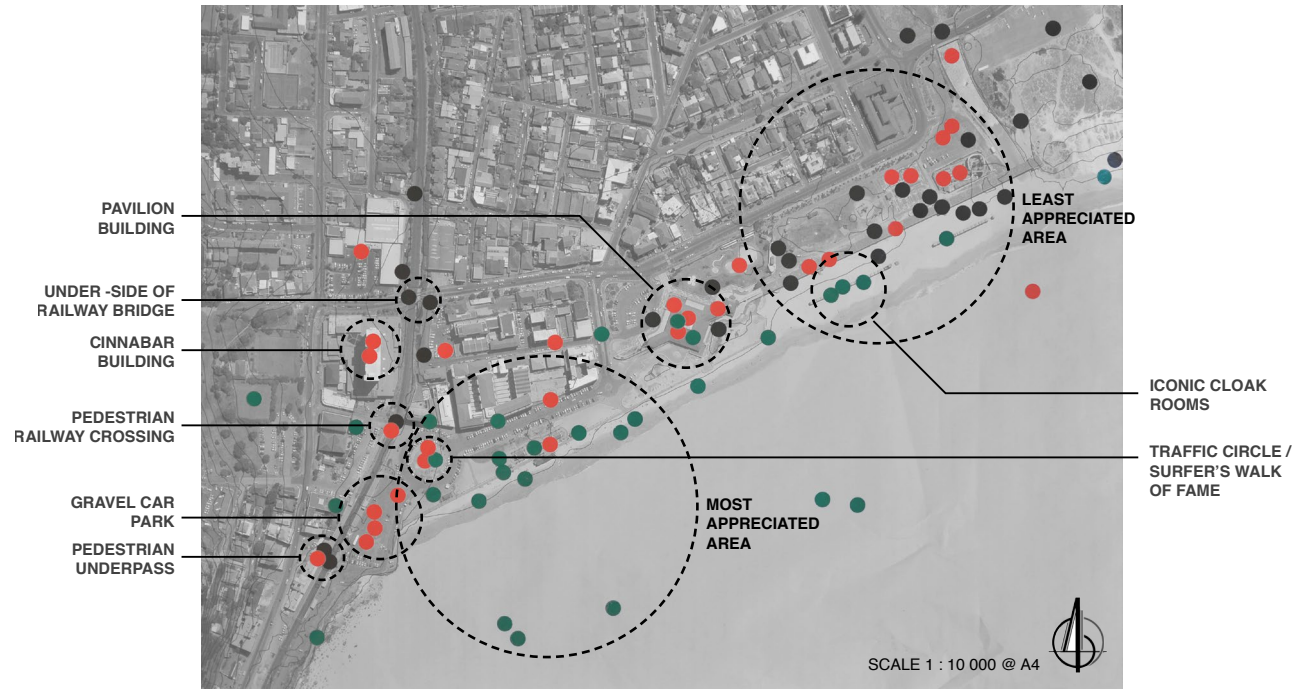
PUBLIC PARTICIPATION

An integral part of designing in a responsive manner, is taking into account the opinions of local users of the space intended for intervention. The following images represent the opinions of a survey pool of 30 people, that were asked a series of questions related to their experiences at the Muizenberg Beachfront.

QUESTIONS ASKED:

- [A] WHICH PART OF THE BEACHFRONT DO YOU LIKE THE MOST?
- [B] WHICH PART OF THE BEACHFRONT DO YOU LIKE THE LEAST?
- [C] WHERE DO YOU FEEL MOST UNCERTAIN ABOUT YOUR SAFETY?
- [D] WOULD YOU ENJOY SEEING MORE PLANT LIFE IN THE AREA?
- [E] HAVE YOU NOTICED MORE THAN ONE RIVER IN THE AREA? (I.E. OTHER THAN THAT OF THE ZANDVLEI ESTUARY)
- [F] PLEASE LIST UP TO THREE (3) ACTIVITIES THAT YOU EITHER TAKE PART IN OR HAVE TAKEN PART IN AT MUIZENBERG BEACHFRONT.
- [G] PLEASE LIST UP TO THREE (3) FACILITIES THAT YOU BELIEVE SHOULD BE CONSTRUCTED AT THE MUIZENBERG BEACHFRONT.

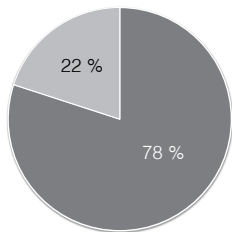
**Questions A - C were answered by individuals placing stickers on a site map*



- [A] MOST-LIKED SPACE
- [B] LEAST-LIKED SPACE
- [C] SPACES OF UNCERTAINTY

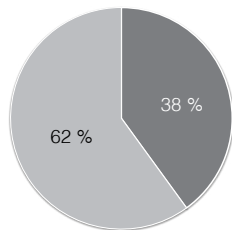
PUBLIC CONSULTATION MAP

The adjacent map is a scaled photo-copy of an A1 print out of the site, which was used by respondents on site to place stickers relating to their relevant answers.



QUESTION [D]
PERCENTAGE OF RESPONDENTS THAT WOULD ENJOY SEEING MORE PLANT LIFE INCLUDED AT THE SITE

- YES
- NO

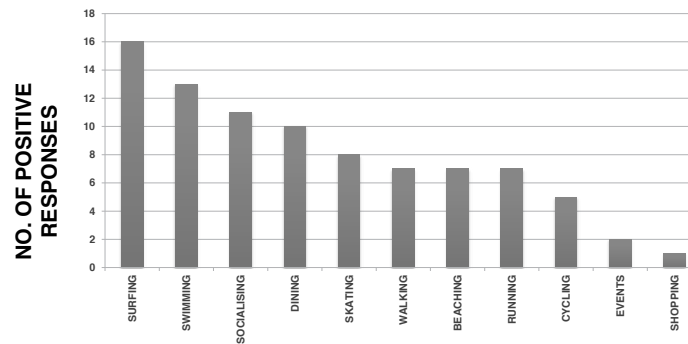


QUESTION [E]
PERCENTAGE OF RESPONDENTS THAT HAVE NOTICED MORE THAN ONE RIVER SYSTEM AT THE SITE

- YES
- NO

QUESTION [F]

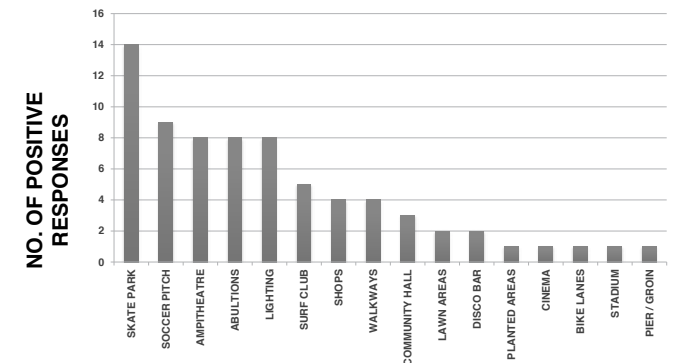
BAR GRAPH SHOWING A TALLY OF ACTIVITIES THAT RESPONDENTS EITHER TAKE PART IN OR HAVE TAKEN PART IN AT MUIZENBERG BEACHFRONT



TYPES OF ACTIVITIES

QUESTION [G]

BAR GRAPH SHOWING A TALLY OF TYPES OF FACILITIES THAT RESPONDENTS BELIEVE SHOULD BE CONSTRUCTED AT THE



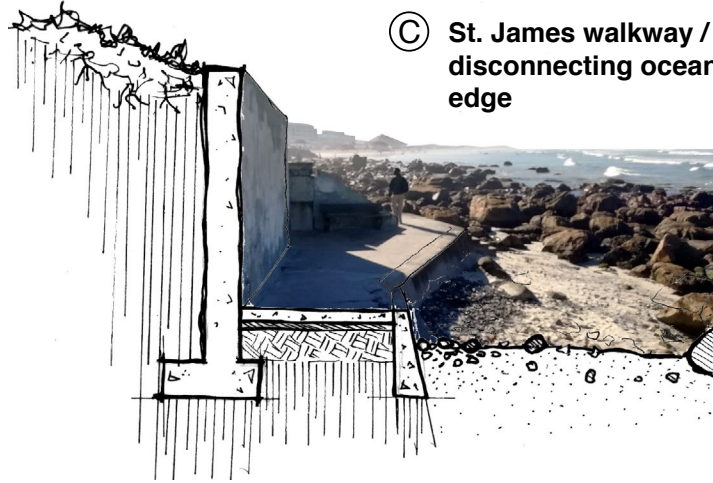
TYPES OF FACILITIES

URBAN DESIGN CRITIQUE



(A) Stormwater outlet of Muizenberg Stream

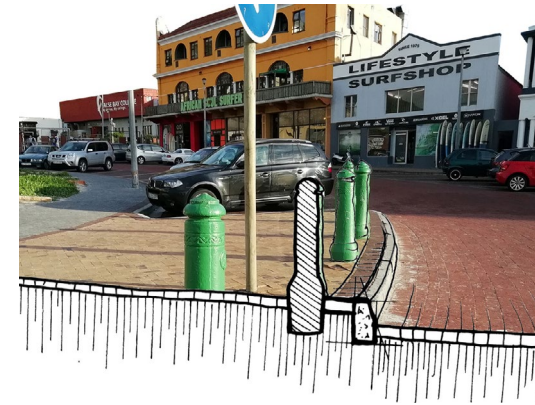
Missed socio-ecological opportunities in the existence of the stream as an underground waterway



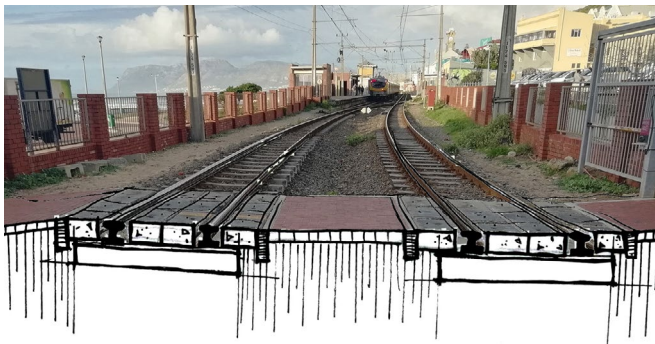
(C) St. James walkway / disconnecting ocean edge

Rigidity and massiveness of retained coastal edge cuts off ecological processes and creates a daunting space for a pedestrian using the walkway

(E) Level changes

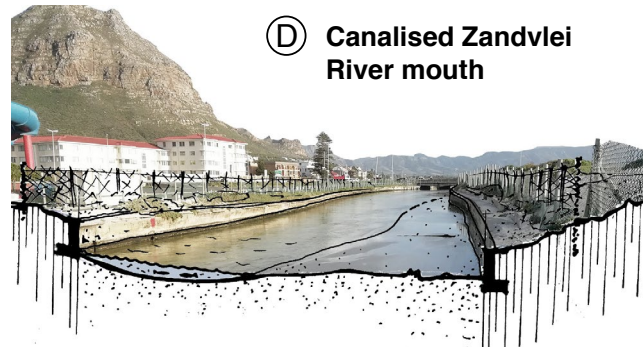


Various level prevent skateboarders from full mobility across the landscape



(B) Level railway crossing at Surfer's Corner

Pedestrian flow is obstructed by having a level railway crossing



(D) Canalised Zandvlei River mouth

The canalisation of the Zandvlei River has destroyed the estuarine nature of its previous existence and requires constant maintenance of sand encroachment

(F) Muizenberg Promenade



Photograph sourced from 'Villa D'Algarve'

The Muizenberg Promenade is perceived a threshold between ocean and land. This does, however, inhibit sand encroachment into the urban area

COMPOSITE SITE ANALYSIS

Map created via sketch mapping, CoCT GIS & Google Earth data





4

CONCEPTUAL DEVELOPMENT

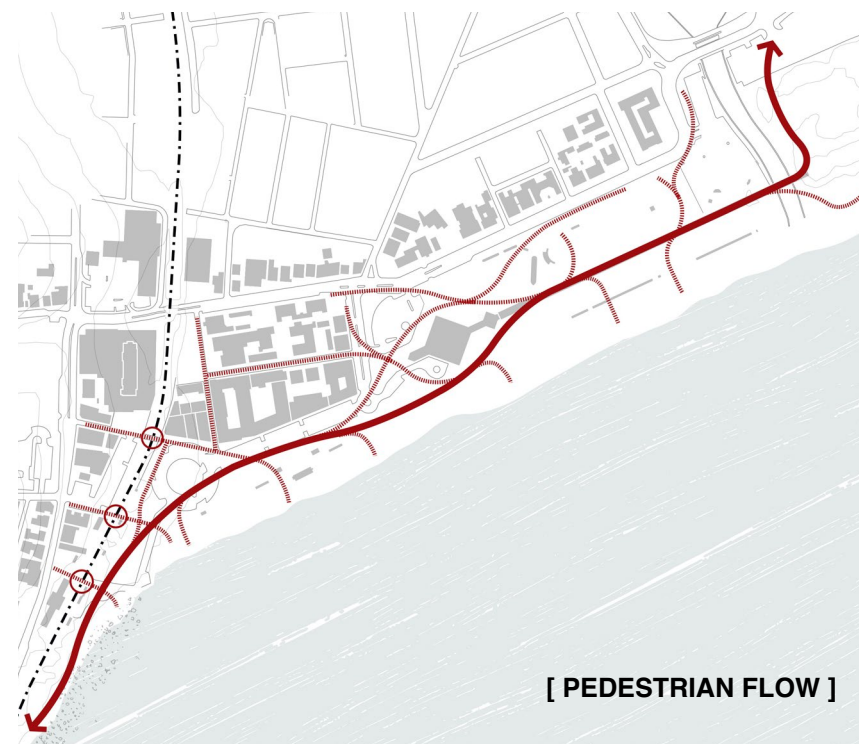
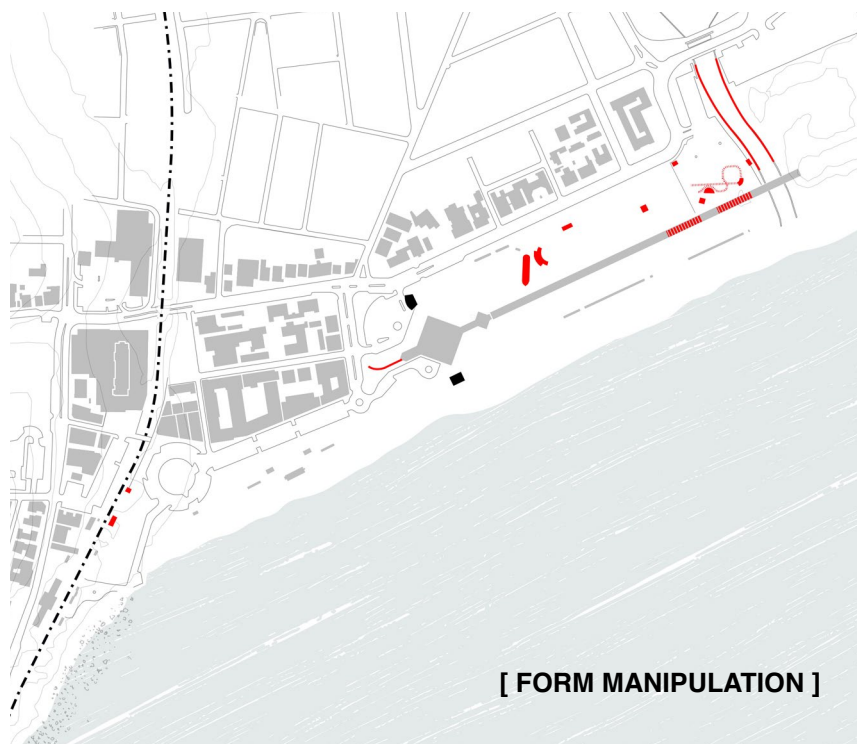
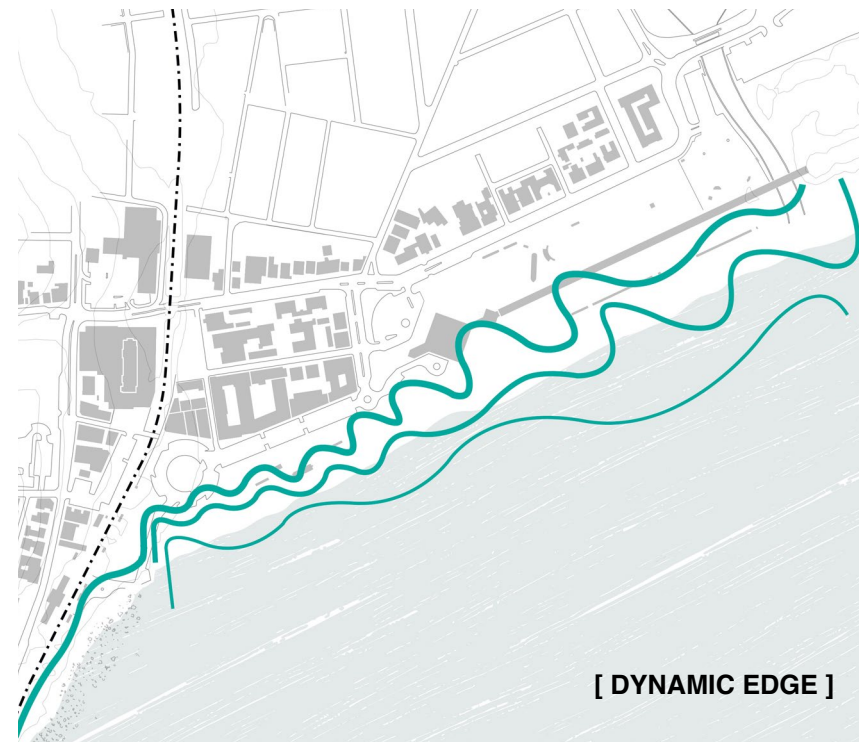
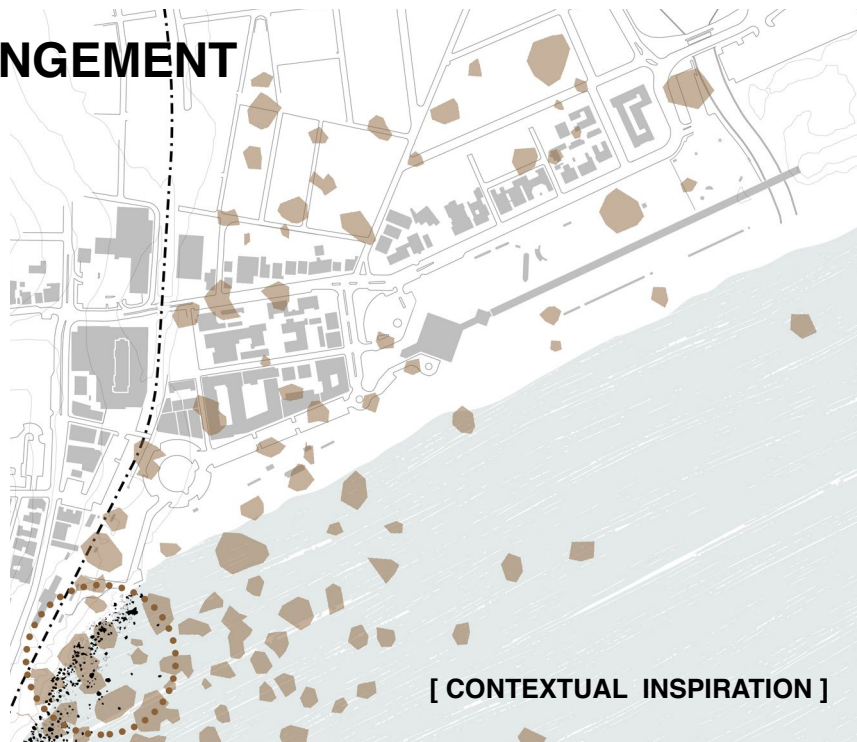
Spatial Arrangement Layers

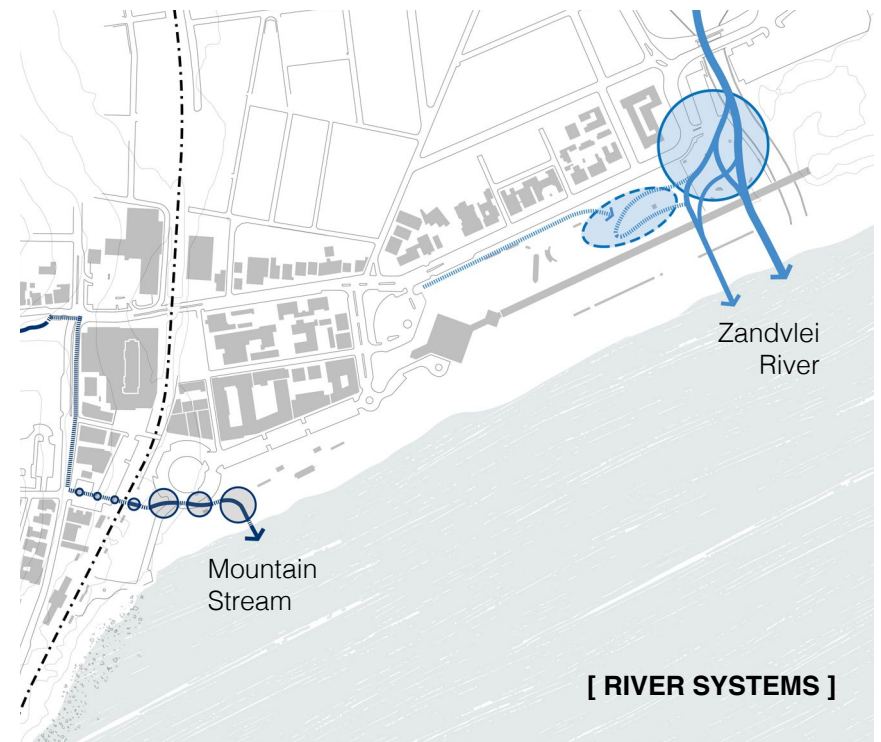
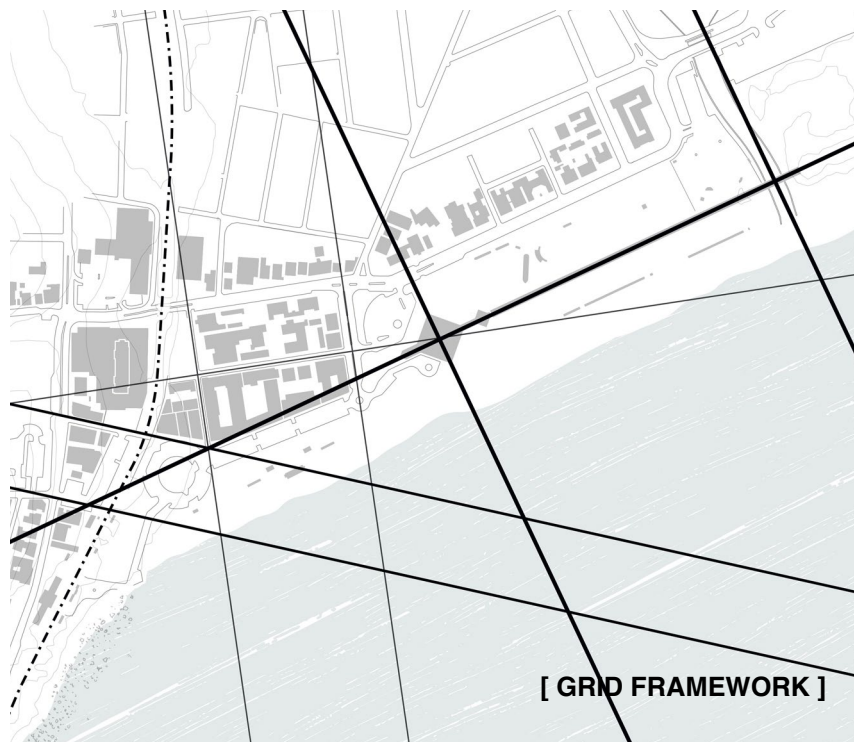
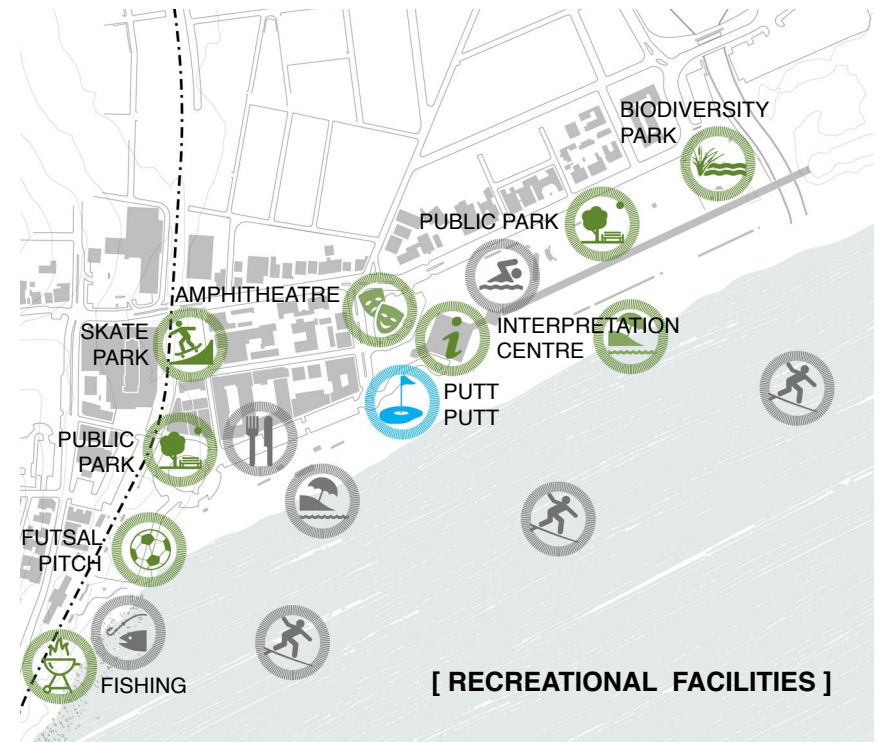
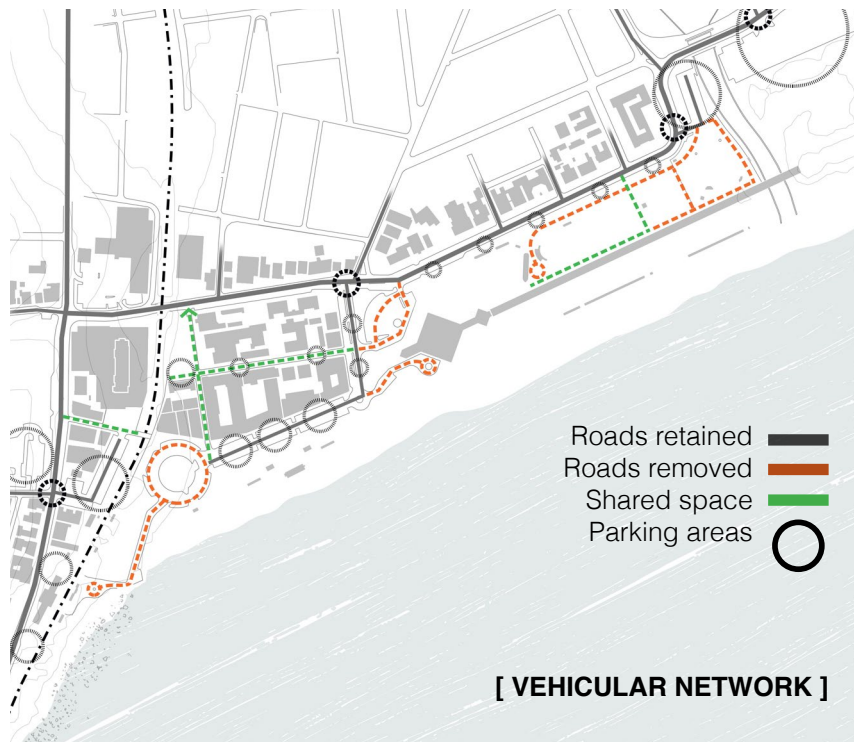
Composite Spatial Arrangement Plan

Concept Plan Development

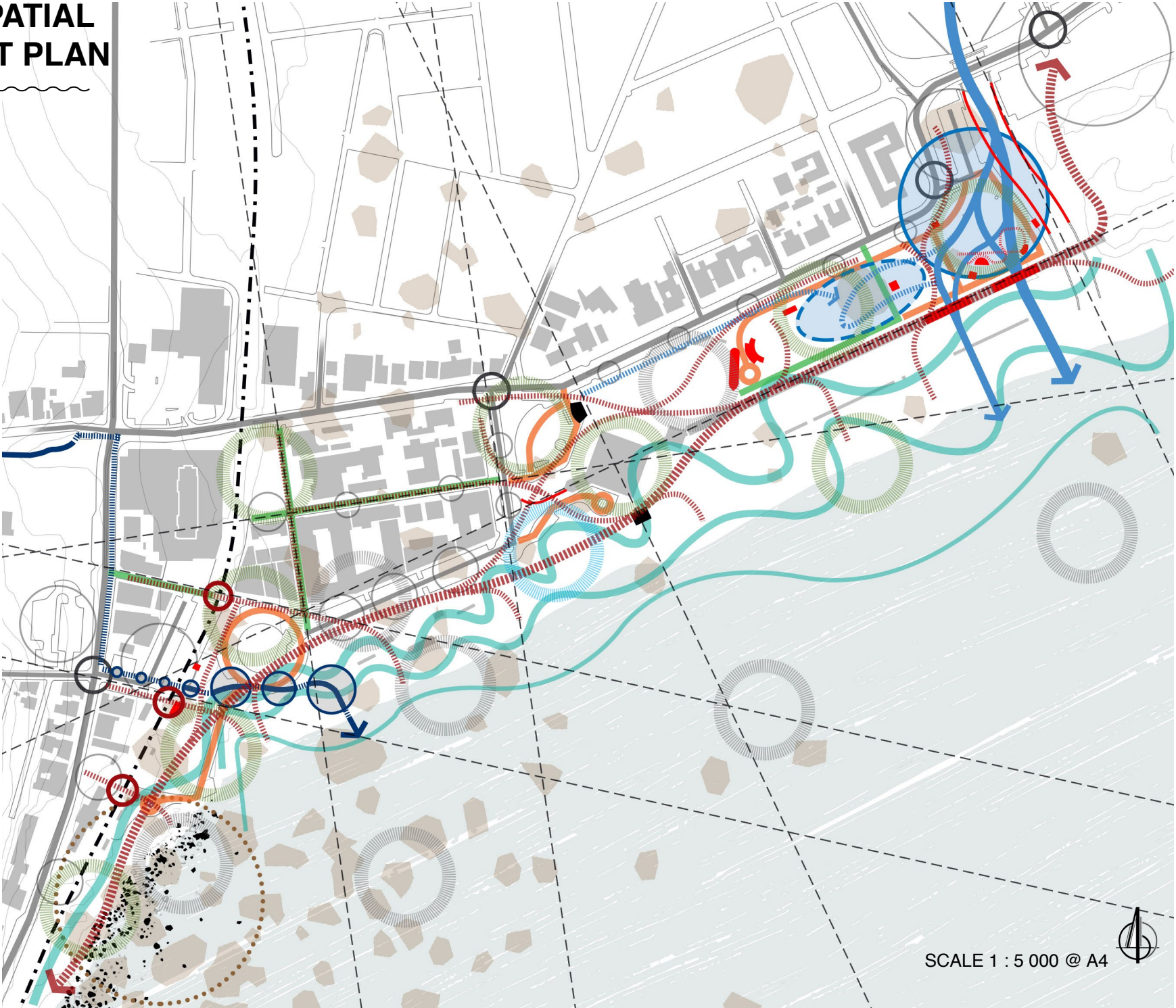
Sketch Sections

SPATIAL ARRANGEMENT LAYERS





COMPOSITE SPATIAL ARRANGEMENT PLAN



SCALE 1 : 5 000 @ A4



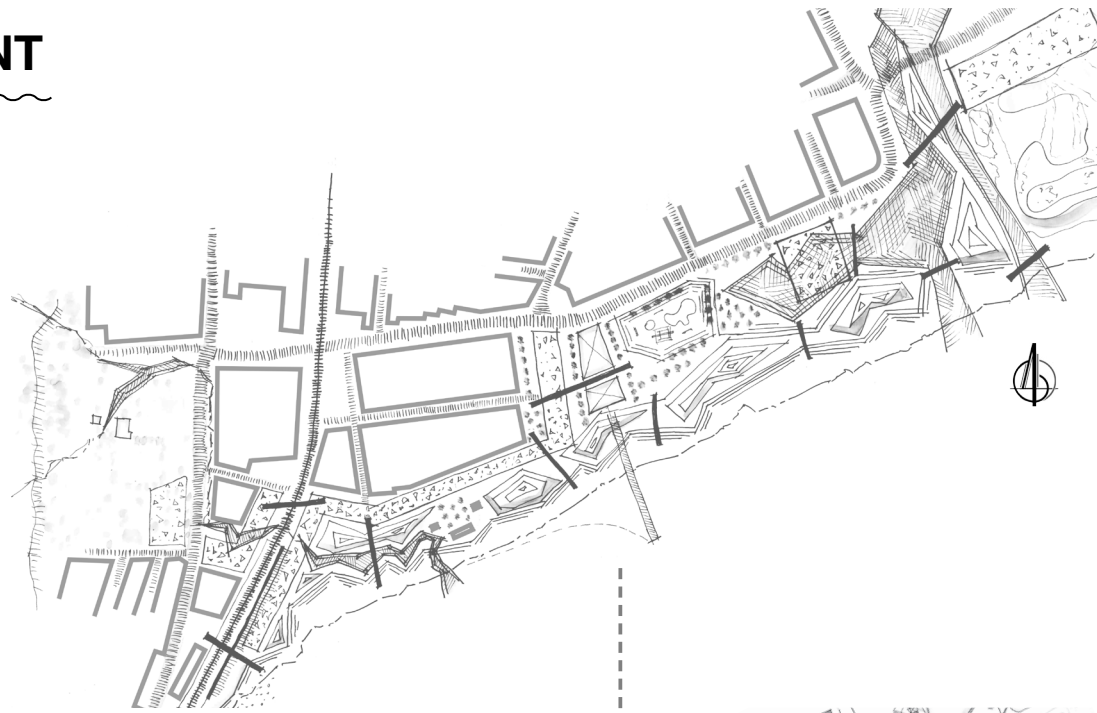
CONCEPT PLAN DEVELOPMENT

[FIRST DRAUGHT CONCEPT PLAN]

Ideas regarding responsive landscapes are spatialised through abstracted geometry.

The removal of the Pavilion Building is proposed

The inclusion of a groin is proposed.



[SECOND DRAUGHT CONCEPT PLAN]

Drawn in more detail than previous plan.

Abstracted geometries refined and applied more directly to existing landscape elements.

An addition of new buildings, adhering to the urban grid, is proposed.

The proposed groin is re-positioned slightly.

Attention given to heightening the presence of the two river systems in the public domain.



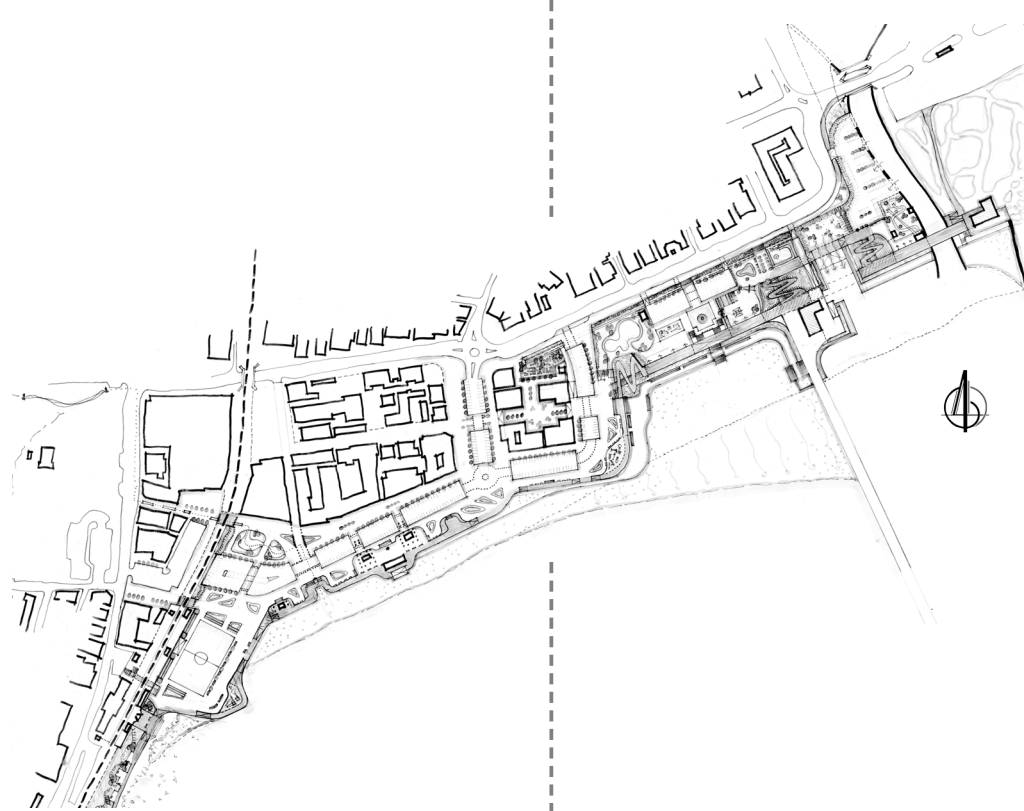
[THIRD DRAUGHT CONCEPT PLAN]

Abstracted geometries are further refined to adhere to natural flow across the landscape.

Positioning of new buildings are further developed.

The proposed groin is re-positioned closer to Zandvlei River, in an attempt at incorporating a passive means for sediment management.

Recreational facilities proposed through public participation are located in desirable areas on the site.

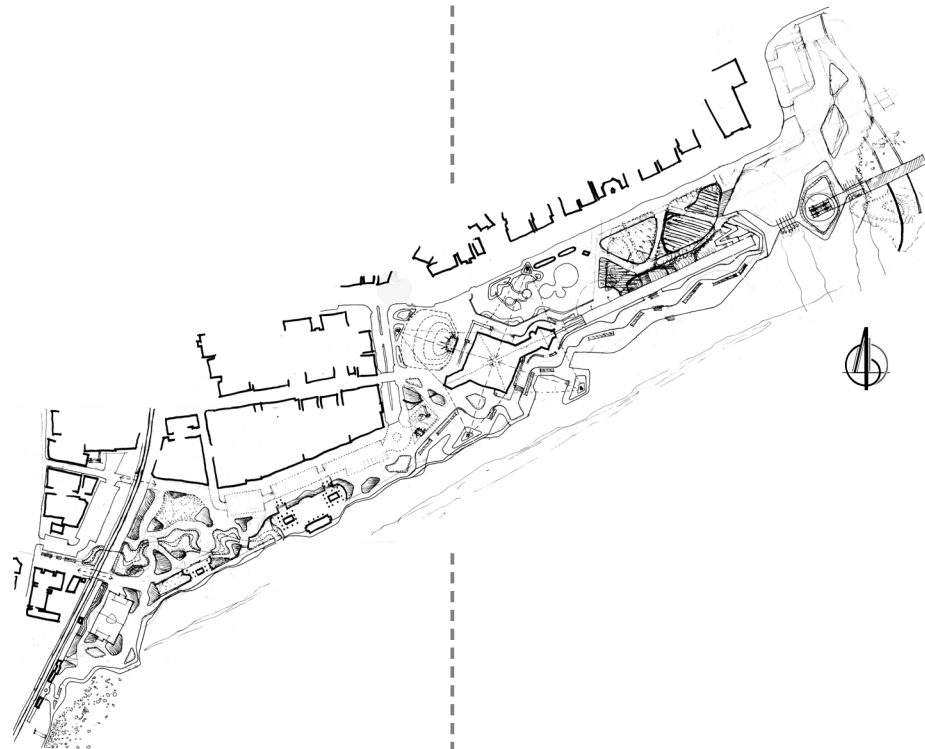


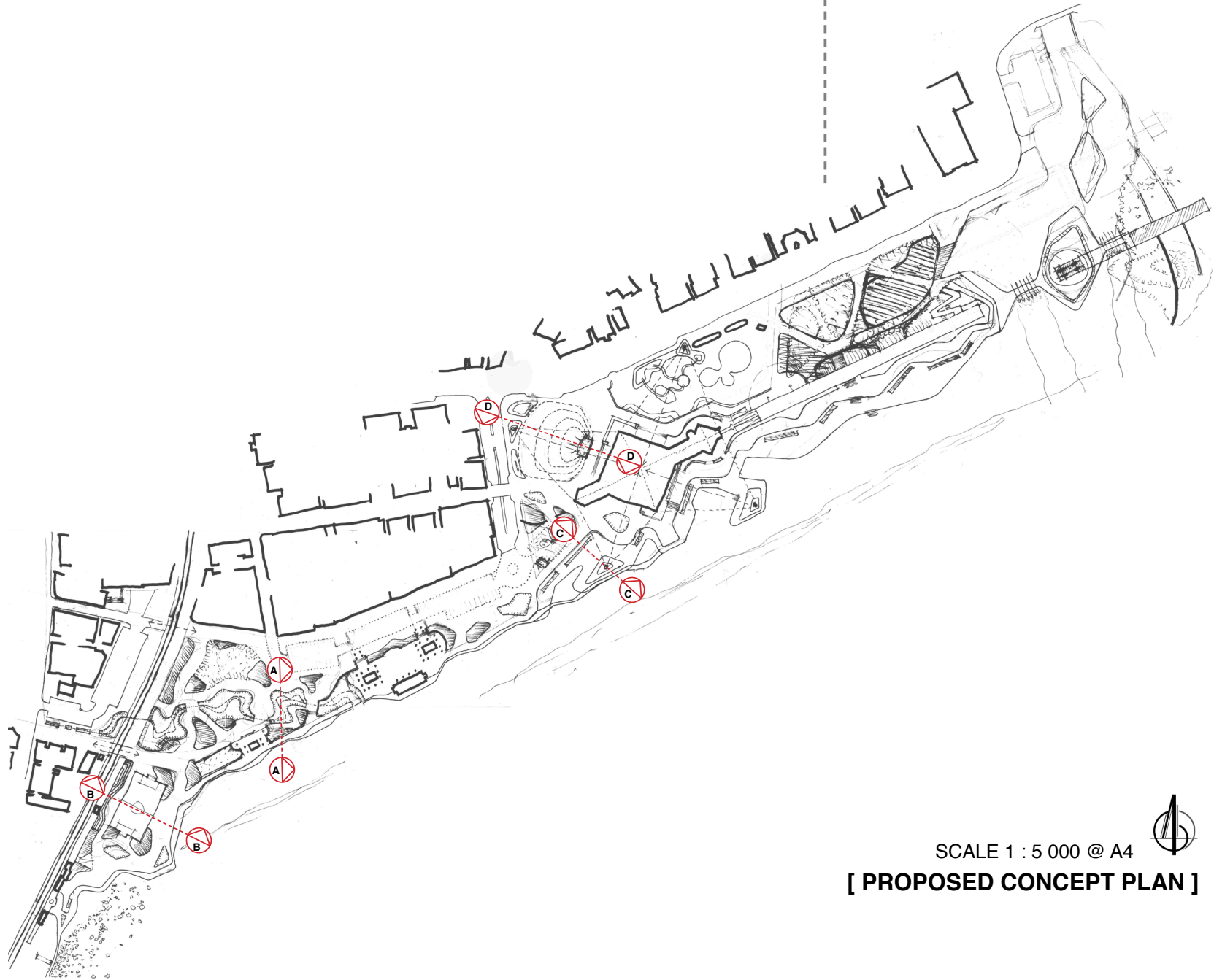
[FOURTH DRAUGHT CONCEPT PLAN]

Proposed groin removed, after further research into sand deposition in False Bay. Discovered that a groin at Muizenberg will be problematic to local ecology.

Pavilion Building deemed , through public participation, to be iconic in the area. Removal proposed previously deemed problematic.

The proposed functioning of the two river systems in the area are further refined.



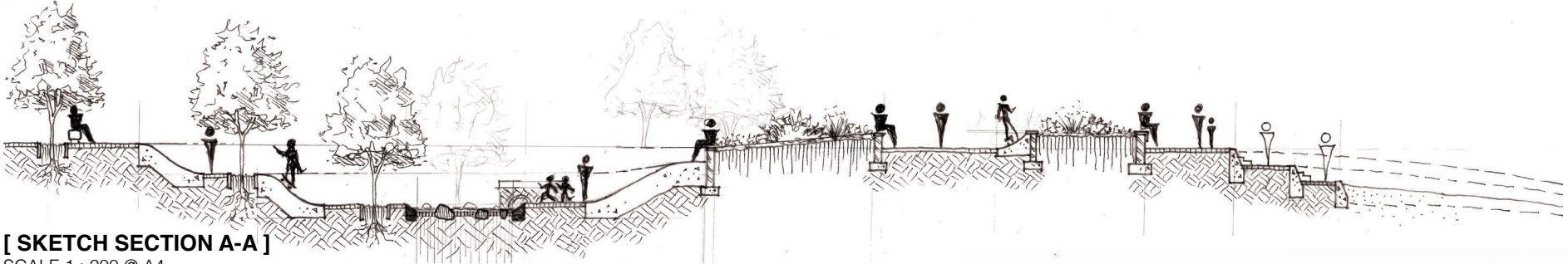


SCALE 1 : 5 000 @ A4
[PROPOSED CONCEPT PLAN]



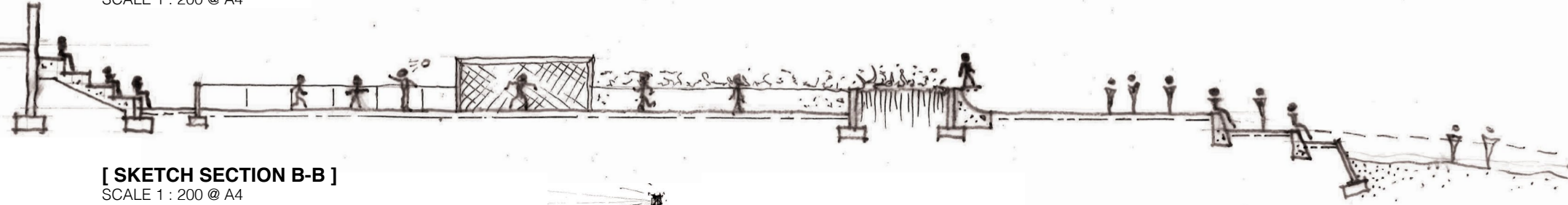
SKETCH SECTIONS

* Please refer to section lines on the 'Proposed Concept Plan' (previous page)



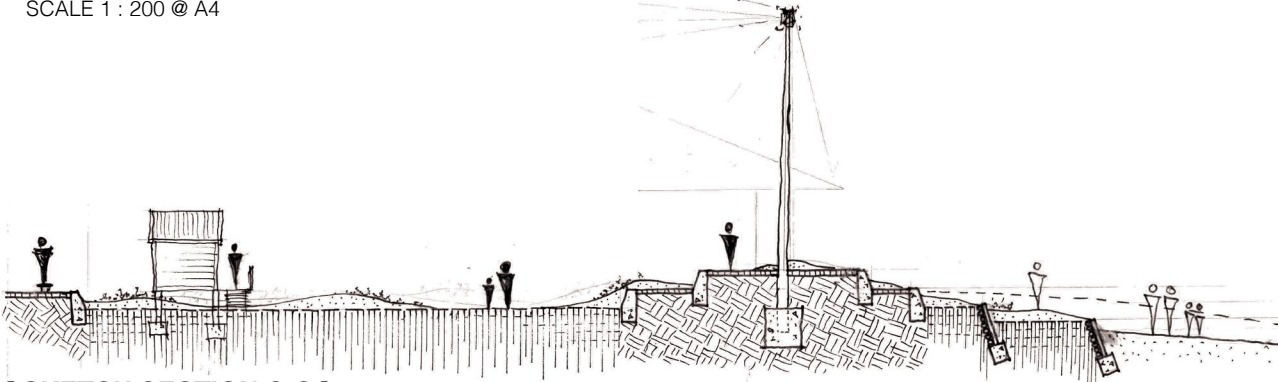
[SKETCH SECTION A-A]

SCALE 1 : 200 @ A4



[SKETCH SECTION B-B]

SCALE 1 : 200 @ A4



[SKETCH SECTION C-C]

SCALE 1 : 200 @ A4



[SKETCH SECTION D-D]

SCALE 1 : 200 @ A4

A decorative background featuring a dashed line that meanders across the top of the page. Along this line are several organic, brown-toned shapes that resemble topographical contours or abstract landforms. The shapes are layered, with some appearing as solid brown areas and others as white outlines, creating a sense of depth and movement.

5

DESIGN CURATION

Site Framework Plan

Sectional Perspectives

Landscape Plan

Details

Perspectives

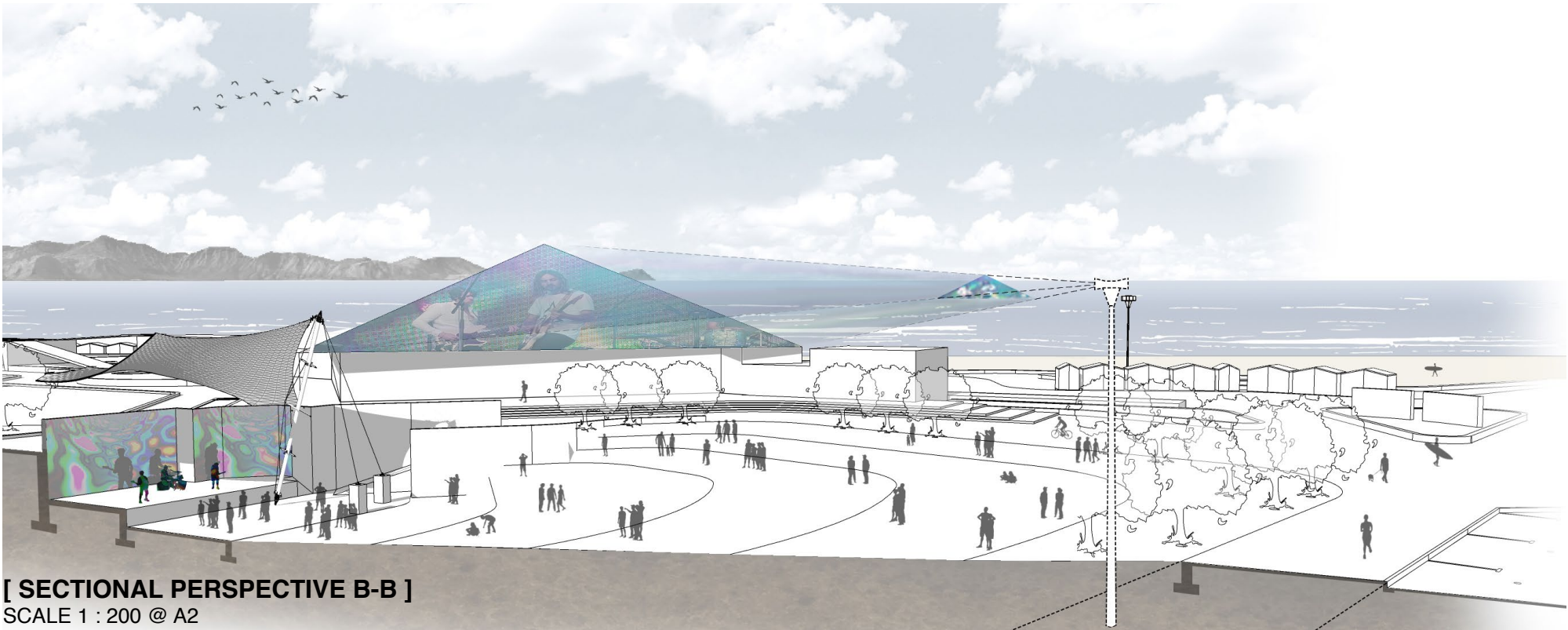


SCALE 1 : 750 @ A0 
[SITE FRAMEWORK PLAN]

* Please refer to section lines on the 'Site Framework Plan' (previous page)

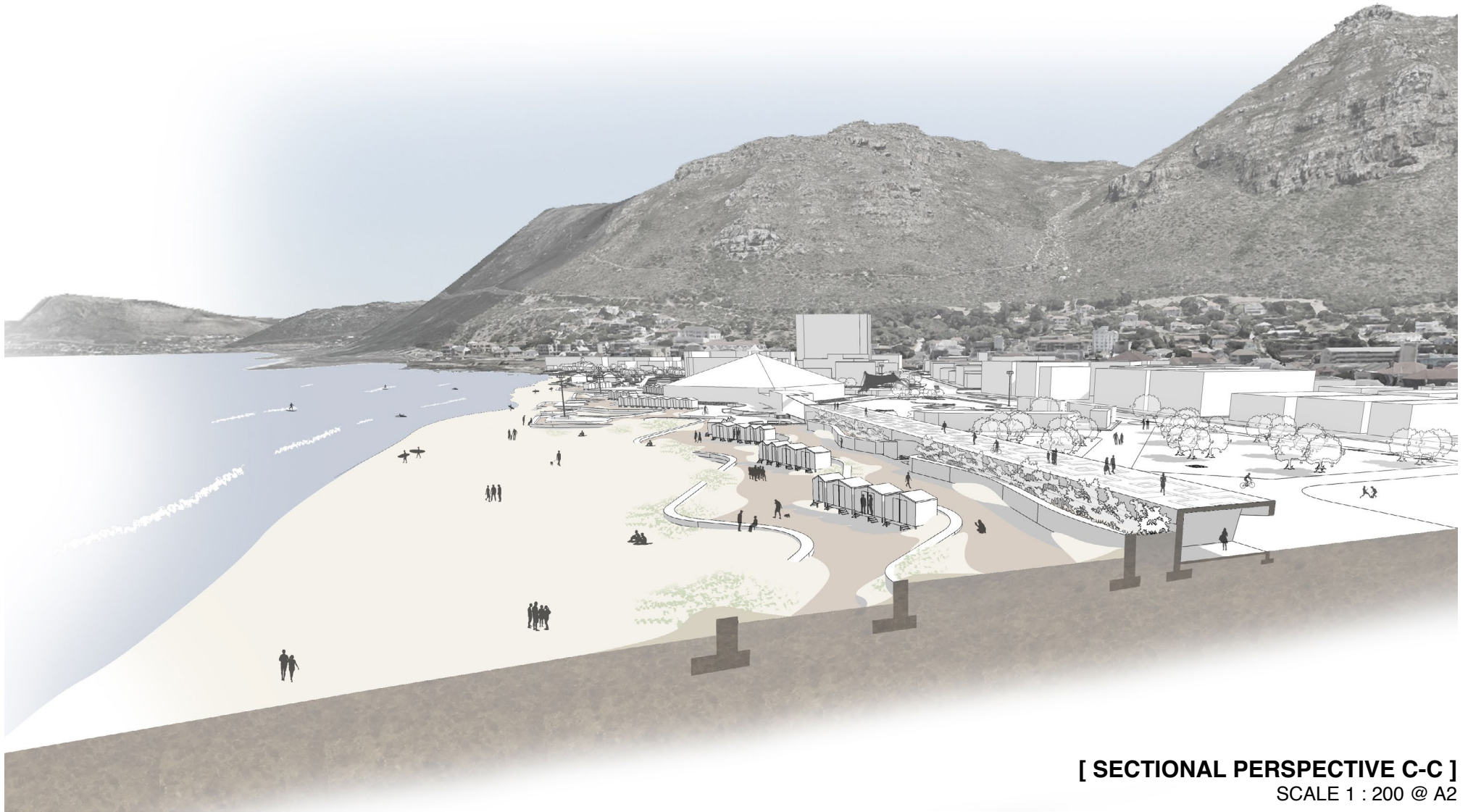


[SECTIONAL PERSPECTIVE A-A]
SCALE 1 : 250 @ A2



[SECTIONAL PERSPECTIVE B-B]
SCALE 1 : 200 @ A2

** Please refer to section lines on the 'Site Framework Plan'*



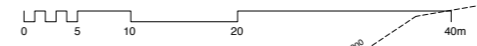
[SECTIONAL PERSPECTIVE C-C]
SCALE 1 : 200 @ A2

LANDSCAPE PLAN



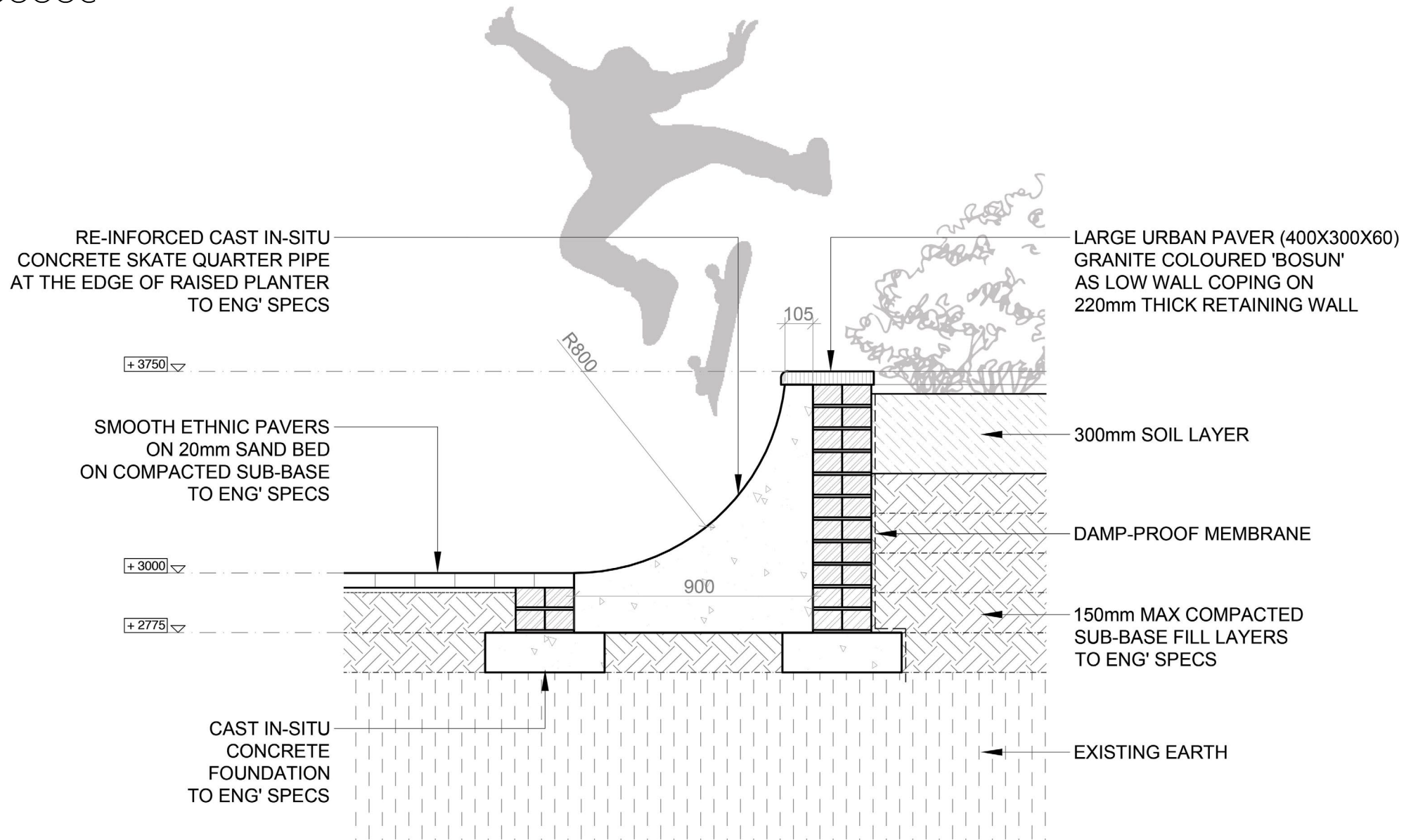
- HARD LANDSCAPING**
- Smooth Ethnic Grey Pavers 'Bosun' (200X150X55) STRETCHER BOND
 - De Hoop Red Pavers 'Corobrik' (200X98.5X50) STRETCHER BOND
 - Cape Stormberg Pavers 'Corobrik' (200X98.5X50) HERRINGBONE BOND
 - Worcester-stone Interlocking
 - Exposed Aggregate Pavers (200X98.5X50)
 - Compacted Laterite
 - Grass block pavers (600X400X100)
 - Cast in-situ Concrete
 - Maroon-coloured
 - Asphalt
 - Beach sand
- SOFT LANDSCAPING**
- Existing tree to remain
 - Existing tree to be removed
 - Proposed evergreen tree
 - Proposed deciduous tree
 - Low 'Coastal' Full-sun Mix
 - Medium 'Strandveld' Full-sun Mix
 - Tall 'Fynbos' Full-sun Mix
 - Low-Semi-shade Plant Mix
 - Lawned area

SCALE 1 : 250 @ A0



DETAILS

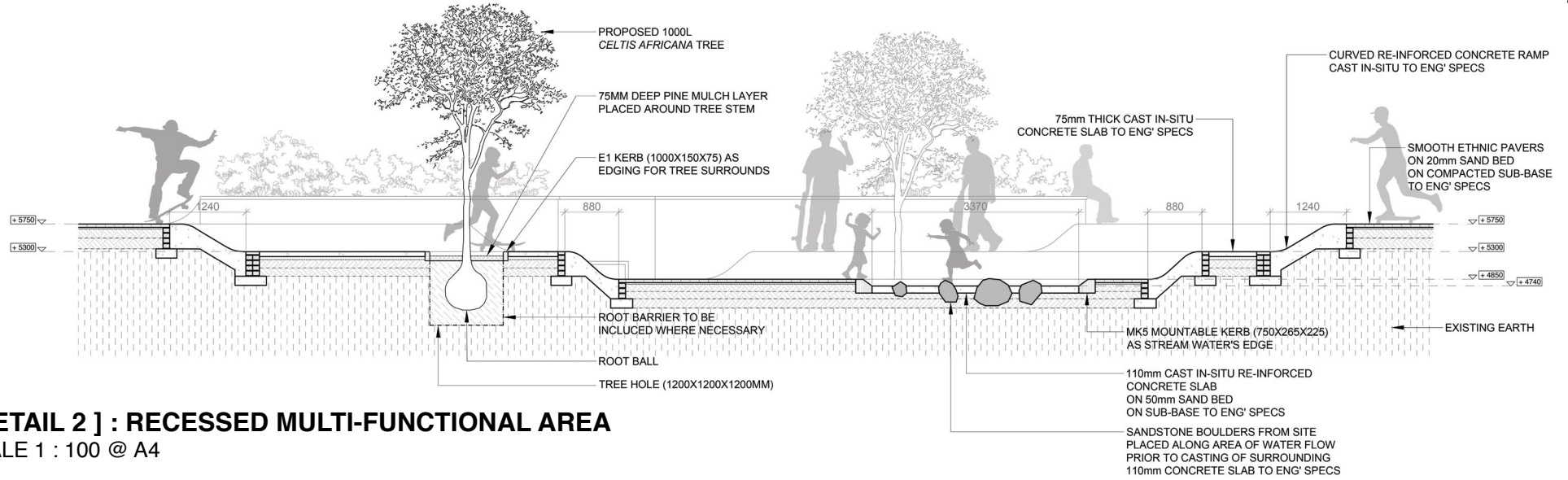
* Please refer to section lines on the 'Landscape Plan' (previous page)



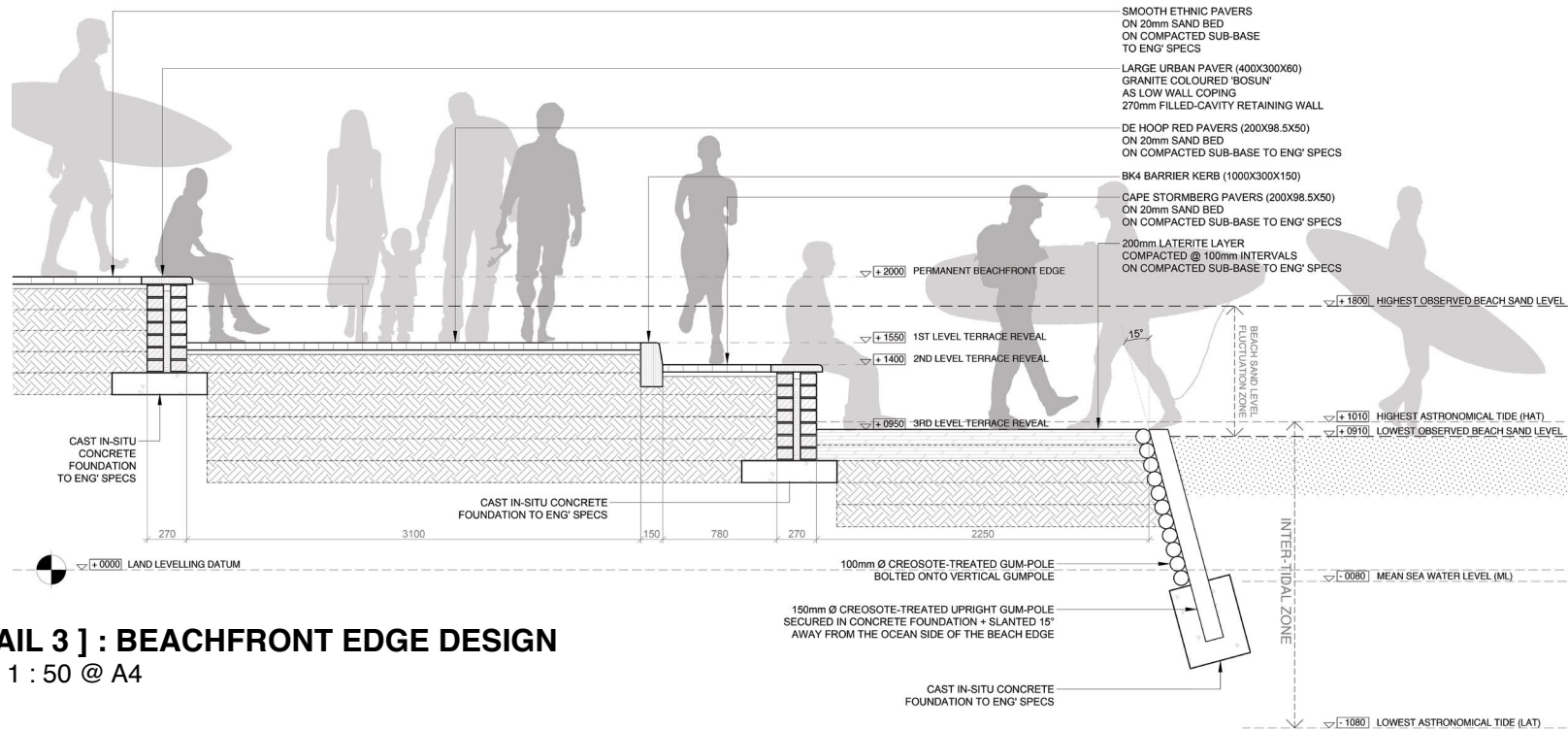
[DETAIL 1] : SKATE-ABLE RAISED PLANTER EDGE

SCALE 1 : 20 @ A4

* Please refer to section lines on the 'Landscape Plan'



[DETAIL 2] : RECESSED MULTI-FUNCTIONAL AREA
SCALE 1 : 100 @ A4



[DETAIL 3] : BEACHFRONT EDGE DESIGN
SCALE 1 : 50 @ A4

PERSPECTIVES



[OVERHEAD PERSPECTIVE OF DESIGN PROPOSAL]









6

ANNEXURES

Declaration of Free Licence

Plagiarism Declaration

Ethics in Research Approval

Surveys & Consent Forms

References

Bibliography

DECLARATION OF FREE LICENSE

I, ...**MICHAL DU PLESSIS**..., student number ...**DPLMIC019**..., 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 the 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

- 1. I know that plagiarism is wrong. Plagiarism is to use another’s work and pretend that it is one’s own.
- 2. I have used the Harvard convention [or insert appropriate] for citation and referencing. Each contribution to and quotation in this project from the work(s) of other people has been attributed and has been cited and referenced.
- 3. This project is my own work.
- 4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

Signature

Signed by candidate

Date:.....**27 / 11 / 2018**.....

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Exposed Signatures

SURVEYS & CONSENT FORMS

[SURVEY SHEETS]

QUESTIONS:	① NAME: ALEX AGE: 27	② NAME: LAUREN AGE: 27	③ NAME: EMI AGE: 24	④ NAME: RAYO AGE: 30	⑤ NAME: REBECC AGE: 20	⑥ NAME: ILLORI AGE: 21
1. When was your FIRST VISIT to the Muzenberg Beachfront?	2015	2017	2005	MY WHOLE LIFE	WHOLE LIFE	5 YEAR OLD
2. Where is your MOST FAVOURITE area of the Muzenberg Beachfront?	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP
3. Where is your MOST FAVOURITE area of the Muzenberg Beachfront?	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP
4. Please list up to THREE RECREATIONAL / SPORTING ACTIVITIES that you enjoy doing / have done before at Muzenberg Beachfront?	WALKING SWIMMING CLIMBING	WALKING RUNNING BIKING (SHORTLY)	SKATE PARK SURFING SNEAKERS	SWIMMING WALKING BEACHING	BEACHING DIPPING SOCIALIZING	SWIMMING DIPPING SOCIALIZING
5. Are there any ADDITIONAL "BUILT" FACILITIES you would add to the beachfront? Please list up to three of them.	YES / NO LAWN PHANTOM SURF CLUBS SWIM BUNNY	YES / NO LAWN BIKE LAMP MORE LIGHTING SWIMMING	YES / NO SURFING PHOTING SEATING	YES / NO SURFING SOCCER PATCH MUSIC AREA	YES / NO SURFING SOCCER PATCH SKATE PARK	YES / NO SURFING MUSIC AREA TRAMPOLINE
6. What is, in your opinion, the MOST IMPORTANT USE of the space?	SWIMMING	SWIMMING	SWIMMING	SWIMMING	BEACHING	SWIMMING
7. Is it important to include more GREENERY / PLANT LIFE in the area?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
8. How do you reduce the TWO RIVER SYSTEMS that flow into the ocean here?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
9. Where do you feel MOST UNSAFE along the Muzenberg Beachfront?	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP
10. Please voluntarily comment about any other CONCERNS that come to mind regarding the Muzenberg Beachfront?	SWIMMING STRONG IN SEASON SOMEONE TO GET OUT OF WAY GUARDS FROM CAR GUARDS AND OTHER COMMONLY OBSERVED	CAR GUARDS LIVE ADE ON DRIVE				

QUESTIONS:	⑦ NAME: ZOEY AGE: 24	⑧ NAME: LIELE AGE: 20	⑨ NAME: LARA AGE: 18	⑩ NAME: JEMMA AGE: 19	⑪ NAME: FRANZ AGE: 45	⑫ NAME: ADAM AGE: 39
1. When was your FIRST VISIT to the Muzenberg Beachfront?	2017	2011	2009	2002	30 YEARS +	WHOLE LIFE
2. Where is your MOST FAVOURITE area of the Muzenberg Beachfront?	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP
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4. Please list up to THREE RECREATIONAL / SPORTING ACTIVITIES that you enjoy doing / have done before at Muzenberg Beachfront?	SWIMMING SEATING CLIMBING	SWIMMING RATS WALKING	TANNING TANNING BEACH SWIMS	TANNING CYCLING RUNNING	SWIMMING CYCLING SWIMMING	SWIMMING SWIMMING EVENTS
5. Are there any ADDITIONAL "BUILT" FACILITIES you would add to the beachfront? Please list up to three of them.	YES / NO SKATE PARK SHOPS SEWER	YES / NO SKATE PARK SEWER LIGHTS	YES / NO WALKWAYS SHOPS BEACH TOILETS	YES / NO LIFELINES STAGE (CONCERT) SHOPS	YES / NO THEATRE LIGHTS SKATE PARK	YES / NO THEATRE EVENTS LAWN AREAS
6. What is, in your opinion, the MOST IMPORTANT USE of the space?	SWIMMING	SWIMMING	BEACHING	BEACH	SWIM CULTURE	PEOPLE / SOCIAL
7. Is it important to include more GREENERY / PLANT LIFE in the area?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
8. How do you reduce the TWO RIVER SYSTEMS that flow into the ocean here?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
9. Where do you feel MOST UNSAFE along the Muzenberg Beachfront?	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP
10. Please voluntarily comment about any other CONCERNS that come to mind regarding the Muzenberg Beachfront?			N/A			

QUESTIONS:	⑬ NAME: SIPP AGE: 35	⑭ NAME: GIBBY AGE: 74	⑮ NAME: THANDO AGE: 29	⑯ NAME: JOHN M. AGE: 25	⑰ NAME: DILLAN L. AGE: 23	⑱ NAME: ZOLANI AGE: 35
1. When was your FIRST VISIT to the Muzenberg Beachfront?	2015	1990s	2012	1993 - 1998	WHOLE LIFE	2008 w/ son
2. Where is your MOST FAVOURITE area of the Muzenberg Beachfront?	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP
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4. Please list up to THREE RECREATIONAL / SPORTING ACTIVITIES that you enjoy doing / have done before at Muzenberg Beachfront?	WALKING DIPPING SWIMMING	WALKING SEATING N/A	SWIMMING WALKING DIPPING	SWIMMING BEACHING DIPPING	SWIMMING DIPPING LONGBOARDING	CHILLING w/ FRIENDS SWIMMING SOMETIMES
5. Are there any ADDITIONAL "BUILT" FACILITIES you would add to the beachfront? Please list up to three of them.	YES / NO MOBI SHOP SURF PATCH TENNIS	YES / NO MOBI SHOP SHOPS	YES / NO SKATE (WALKWAY) LIGHTS - SEATING BIKE STATION	YES / NO SKATE PARK SEATING	YES / NO SKATE PARK SEATING	YES / NO SURF CLUBS SKATE PARK AMPHITHEATRE
6. What is, in your opinion, the MOST IMPORTANT USE of the space?	SWIMMING	RECREATION	SWIMMING	SWIMMING	SURFING	SURFING
7. Is it important to include more GREENERY / PLANT LIFE in the area?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
8. How do you reduce the TWO RIVER SYSTEMS that flow into the ocean here?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
9. Where do you feel MOST UNSAFE along the Muzenberg Beachfront?	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP
10. Please voluntarily comment about any other CONCERNS that come to mind regarding the Muzenberg Beachfront?			N/A	N/A	N/A	

QUESTIONS:	⑲ NAME: PETE AGE: 62	⑳ NAME: ZOLLI AGE: 78	㉑ NAME: NANCY AGE: 51	㉒ NAME: SHIRE AGE: 33	㉓ NAME: GRANT AGE: 29	㉔ NAME: WILL AGE: 25
1. When was your FIRST VISIT to the Muzenberg Beachfront?	1930's	LAST YEAR	2010 w/ son	2011	WHOLE LIFE	1994's
2. Where is your MOST FAVOURITE area of the Muzenberg Beachfront?	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP
3. Where is your MOST FAVOURITE area of the Muzenberg Beachfront?	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP
4. Please list up to THREE RECREATIONAL / SPORTING ACTIVITIES that you enjoy doing / have done before at Muzenberg Beachfront?	WALKING PARTYING CYCLING	SWIMMING	SWIMMING BEACHING SWIMMING	SWIMMING CYCLING SWIMMING	SKATE MUSIC PLAYLIST DIPPING	SWIMMING SOCIALIZING DIPPING
5. Are there any ADDITIONAL "BUILT" FACILITIES you would add to the beachfront? Please list up to three of them.	YES / NO PERFORMANCE SPACE SURF CLUB BEACH COMM. LAMP	YES / NO SKATE PARK SOCCER PATCH	YES / NO LIGHTING COMMUNITY SPACE ART SPACE	YES / NO AMPHITHEATRE BEACHWARD WALK SPACE ...	YES / NO PARTY SPACE SOCCER SKATE PARK	YES / NO YES / NO SKATE PARK SOCCER PATCH AMPHITHEATRE
6. What is, in your opinion, the MOST IMPORTANT USE of the space?	TOURISM SURF CULTURE	SWIM	TOURISM	TOURISM	SWIMMING BEACH	PEOPLE COMING TO BEACH
7. Is it important to include more GREENERY / PLANT LIFE in the area?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
8. How do you reduce the TWO RIVER SYSTEMS that flow into the ocean here?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
9. Where do you feel MOST UNSAFE along the Muzenberg Beachfront?	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP
10. Please voluntarily comment about any other CONCERNS that come to mind regarding the Muzenberg Beachfront?						

QUESTIONS:	㉕ NAME: SAMUEL AGE: 47	㉖ NAME: PHILIP AGE: 18	㉗ NAME: SANE AGE: 27	㉘ NAME: ROBIN AGE: 66	㉙ NAME: MADAM AGE: 28	㉚ NAME: MICHAEL AGE: 23
1. When was your FIRST VISIT to the Muzenberg Beachfront?	1950's	2012 w/ son	1960's	1950's w/ child	2012	2009
2. Where is your MOST FAVOURITE area of the Muzenberg Beachfront?	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP	PLEASE PUT A GREEN STICKER ON THE MAP
3. Where is your MOST FAVOURITE area of the Muzenberg Beachfront?	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP	PLEASE PUT A RED STICKER ON THE MAP
4. Please list up to THREE RECREATIONAL / SPORTING ACTIVITIES that you enjoy doing / have done before at Muzenberg Beachfront?	SWIMMING SWIMMING BUNNING	BEACHING CYCLING	SWIMMING WALKING SOCIALIZING	SWIMMING SWIMMING LIFESAVING	SWIMMING SWIMMING HAVING A BEER w/ FRIENDS	SWIMMING SKATE SWIMMING
5. Are there any ADDITIONAL "BUILT" FACILITIES you would add to the beachfront? Please list up to three of them.	YES / NO GOLF / PIER SHOWERS STADIUM	YES / NO	YES / NO BETTER ADVERTISEMENTS LIGHTING PERFORMANCE SPACE	YES / NO SURF CLUBS SKATE PARK FOR THE ELDS SOCCER FLD.	YES / NO YES / NO	YES / NO SKATE PARK SOCCER PATCH AMPHITHEATRE
6. What is, in your opinion, the MOST IMPORTANT USE of the space?	TOURISM	SWIMMING	BEACHING	SWIMMING	TOURISM	SWIMMING
7. Is it important to include more GREENERY / PLANT LIFE in the area?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
8. How do you reduce the TWO RIVER SYSTEMS that flow into the ocean here?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
9. Where do you feel MOST UNSAFE along the Muzenberg Beachfront?	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP	PLEASE PUT A BLACK STICKER ON THE MAP
10. Please voluntarily comment about any other CONCERNS that come to mind regarding the Muzenberg Beachfront?						

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Exposed Signatures

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Exposed Signatures

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