bubbles of exclusivity

bursting the bubble around private development in Umhlanga, Durban

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Bubbles of Exclusivity: Bursting the bubble around private development in uMhlanga, Durban

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MDLVAH002

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ABSTRACT

All around the world, cities are making a move towards a more inclusive city, while smaller towns like uMhlanga, Durban are speeding into the world of exclusion. Durban itself continues to be developed along the lines of exclusion, with the previously racially motivated segregation being supplanted by economic division. The road infrastructure which consists of major arterial routes has alienated and separated the very development sectors that they are meant to link. Large-scale private developments are emerging at a rapid rate, further dividing the town into these bubbles which do not interact with one another. The reliance on private investment and development has resulted in developers having the power to decide who is included and who is not. Government and municipal leaders are buying into these developments as promises of pushing the economy upwards are their biggest priority. In contrast, developments of these exclusive natures should not be considered at all. The design component of this research aims firstly, to identify the effects of a specific development on a context and identify the levels of exclusion present. Secondly, to achieve a connection between the different areas within the neighbourhood that currently operate in isolation. Thirdly, to explore how the site could be used otherwise, and how taking a more inclusive approach to design can result in a more suitable and accessible space for a larger group of users. There is a dire need for collaboration between the private sector and the public sector to tackle issues facing our cities and communities. The increase in urbanisation has opened a door for the private sector to help address the challenges of rapid urbanisation through partnering with different levels of government, communities, and academia to develop and deliver sustainable urban developments in our cities.

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01 INTRODUCTION

1.1 Introduction

The shift of movement from rural to urban on the African continent has opened the door for the private sector to help address the challenges of rapid urbanisation. This should result in the urgent need for collaboration between the private and public sector to address the issues facing our communities and cities (Nolan and Ryan, 2017). Instead, the fashionable terms of 'new urbanism', 'smart cities' or 'eco-cities' (Watson, 2013) are often used as a possible solution to problems being faced, primarily by the private sector, and are resulting in developments popping up around the continent with an exclusive nature.

Within South Africa, many cities around the country are still dealing with the after-effects of apartheid spatial form where social and economic exclusion caused by apartheid planning is evident in the long distances that many travel from where they live to where they work (Moodley, 2018). Much of the government's resources are aimed at addressing these inequalities but are ultimately focused on very specific areas, leaving other locations vulnerable to economic division through private development (Nomico and Sanders, 2003).

The private sector is very much needed in South Africa as it drives economic growth and employment (Ramaphosa, 2022), but it is inherently political and holds and exercises an element of power. Power which allows deliberate decisions to be made when questions about who should be included and who should not come about (Turok and Visagie, 2018).

The central focus of this research project is private developments which are commercial driven, ignore economic equity and are growing along the lines of exclusion. Particularly where the developments have positioned themselves in urban environments and have prioritised growing inwards, creating a lack of linkage between development and context.

This research project argues that there is need to punctuate these private developments which isolate themselves from the immediate context creating fragmentation within the urban fabric (Nomico and Sanders, 2003).

There is an opportunity for urban spaces to be the location where private and public investment can truly partner together to improve our cities and create a public realm where a mix of people can share a space.

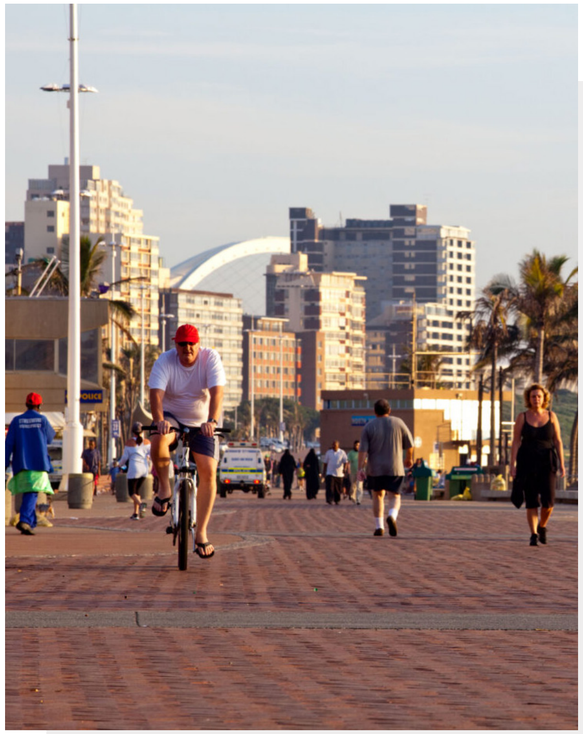


Figure 1.1 Public shared space between pedestrian, cyclists and cars on Durban North Beach Promenade. One of the few spaces within Durban that is completely public and well located.
Source: Zunga, 2021

1.2 Research Rationale

uMhlanga, once a small seaside town is now considered one of the fastest-growing urban nodes in South Africa (Moodley, 2018). The pattern of businesses moving from the CBD to uMhlanga resulted in an assortment of amenities made up of retail, commercial, residential, medical, leisure, and entertainment within a 400-metre radius of each other.

These amenities are situated on land that was once sugar cane farms owned by Tongaat-Hulett. Their majority stake in land holdings resulted in little resistance from the municipality to object to certain developments as well as little competition which gave them the power to plan developments as they desired (Kitchin, 2012). The case of uMhlanga is unique as it involves one, major and powerful property developer and was enabled by large extents of underdeveloped land.

Today, uMhlanga is now covered in private developments which have had an exclusionary effect on residents, workers, and visitors to the area. The establishment of exclusive spaces has left little room for public open spaces to be formed as economic value is seen as the top priority for developers and the municipality (Sanders, 2003). Not only are these individual developments excluding users but there is a shift in infrastructure development being changed to adapt to the developments that are emerging such as large road infrastructure investments to accommodate private car users.

The obsession with economic value needs to be altered so that developments can move away from the current urban experience of exclusion and allow a public and private partnership to take place. There is an opportunity to create spaces that share private and public development and create a connection between existing neighbourhoods, all while making economic sense.

1.3 Research Question

How can breaking the mould of private development in uMhlanga lead to a more inclusive city?

1.4 Research Process and Initial Focus

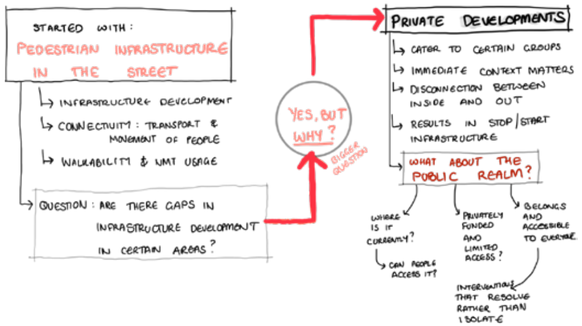


Figure 1.2 Mind map of research process.
Source: Author

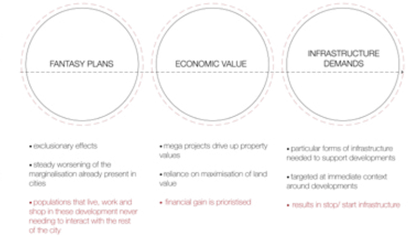


Figure 1.3 Summary of effects of large-scale developments
Source: Author

1.5 Research Aims

- To promote private and public partnerships in urban developments that can generate economic value as well as increase neighbourhood value.

- To explore opportunities that have the potential to link areas of isolation together through public spaces.

- To investigate how a public open space can be the opportunity for private developers and public entities to work hand-in-hand to create an inclusive environment.

1.6 Themes

Investment in eThekwini Municipality

1. Focus Areas of Public Investment
2. Areas of Majority Private Investment
3. Private investment

From the City to the Street

Exclusion
1. Live/work
2. Economic
3. Transportation & its infrastructure

Inclusion
1. Social exclusions
2. Urban exclusion

1.7 Research Positionality and Methodology Process

The development of the research manifesto was a turning point within this research project. The manifesto revealed two sides of a debate, a vision that represents an ideal world to some and the reality faced by the masses. My position as a researcher was somewhat clouded in the beginning by my historical and emotional attachment to the context. The research manifesto guided me away from my preconceived views and ideas of the context to a different position which enabled me to determine the research aims and move forward with the research development.

The term positionality describes the individual's view of the world as well as the position they choose to adopt within a research project (Foote & Bartell 2011, Savin-Baden & Major, 2013 and Rowe, 2014). The positionality of the researcher influences how the research is conducted, its results, and its outcomes. Understanding the term positionality helped me reevaluate my views and approach to this research by limiting my interpretations of the context and prioritising research participants' views, most of which were people who did not live in the area.

The manifesto unlocked the question of 'what is the middle ground?'. The space and place between private residential buildings, which are meant to be exclusive, and large-scale mixed developments, which are intentionally exclusive. Where is the middle between private and public that could potentially make the inclusive development?

Figure 1.4 Research manifesto was based on the word of 'experiencing'. Different users experience different worlds and poses the question of what is the middle ground? The place that lies in the middle and that can exist for the majority.
Source: Author

02 METHODOLOGY

2.1 Qualitative Techniques

The information for this research project was collected through qualitative techniques such as base mapping, desk research, fieldwork, non-participant observations, interviews, and data analysis.

a) Base mapping

Base mapping through Geographic Information Systems (GIS) and aerial images was done before visiting the context and the specific site. This was completed as the first step to investigate what existing information had already been mapped, to obtain information that could not be established on-site such as transportation routes, zoning, and ownership data, and to obtain information on areas that were not accessible.

b) Desk research

Desk research was conducted through information obtained from secondary sources such as newspaper and online articles. The site of interest is well known in Durban and is often reported on due to its controversial developer, which resulted in information being gathered for this research project which would not be easily obtained otherwise.

c) Fieldwork

Various site visits were done around Durban including, the Durban CBD, uMhlanga Town Centre, and the uMhlanga Village to ground the mapping that was initially done. The site visits were done by cycling around the areas, driving past, and walking through to investigate activity nodes within the spaces, infrastructure conditions, and relationships between urban form and human scale.

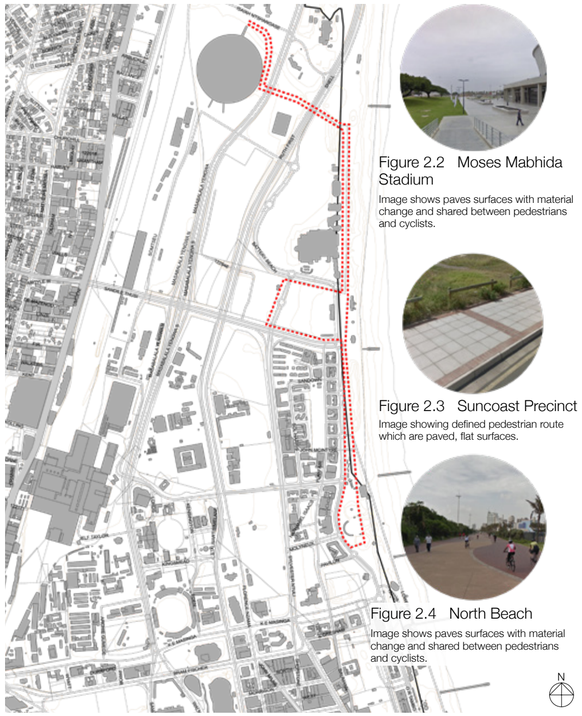


Figure 2.2 Moses Mabhida Stadium
Image shows paves surfaces with material change and shared between pedestrians and cyclists.

Figure 2.3 Suncoast Precinct
Image showing defined pedestrian route which are paved, flat surfaces.

Figure 2.4 North Beach
Image shows paves surfaces with material change and shared between pedestrians and cyclists.

Figure 2.1 Durban CBD. Cycle route done from Moses Mabhida Stadium to North Beach
Source: Author

Figure 2.6 uMhlanga Rocks Drive.
Taxi stop, informal economic activity and defined NMT space.

Figure 2.7 Intersection of Herrwood and Campbell Drive.
Image shows common resting point and footprint indentation of people waiting for taxis

Figure 2.5 Herrwood Drive, uMhlanga. Cycling through uMhlanga neighbourhood using Herrwood Drive as main route.
Source: Author

d) Non-participant observation

This method of observation was used to gain insight into the social and community systems without taking an active part. The type of non-participant observation was structured, meaning I looked for certain patterns of behaviour such as users purposely avoiding walking on a certain side of the street or gathering points which I identifies through base mapping. Multiple photographs were collected from walking around the area and will be used along with the information gathered from the fieldwork.

Figure 2.8 Informal Traders on Lagoon Drive, uMhlanga. Traders have located themselves on sidewalks near hotels were there is tourist foot traffic.
Source: Author

Figure 2.9 Whalebone Pier on uMhlanga Beach. A landmark and destination point for tourists and residents.
Source: Author

Figure 2.10 Lagoon Drive in uMhlanga Village. Poor road conditions between two large scale mixed-use developments, Oceans Mall and Pearls of uMhlanga
Source: Author

e) Interviews

Roughly 9 people were interviewed at various locations, with interviews being conducted in English and all were informed of the research project taking place as well as their right not to participate at any point.

Two types of users were identified through interviews, the resident and the commuter.

The resident

- Makes use of the private car
- Most will only make use of NMT in Umhlanga Village (less chaotic/ traffic/ walkable streets/ generally safe)
- Recreational cycling early in the morning to avoid competition with motor vehicles for the road
- Neighbourhood walking is non-existent, prefers driving to promenade and walking there
- Considers uMhlanga Beach one of the only open public spaces

The commuter

- Travels in from inland suburb (Mostly via Taxi)
- Only interacts with the street in the mornings (7/8:30am peak time) and evenings (5-8pm)
- Walking distance after arrival at transport hub is 2/3km into neighbourhoods
- Most expressed walking conditions are not ideal but it is the most affordable option
- Takes an additional 30-40mins to/from transport hub

f) Data analysis

Data collected through the different qualitative methods was visually represented and interpreted through w, GIS data was compiled on QGIS version 3.10, mapping, and written form. Data was extracted from policy reviews such as Precinct Plans, SDF, and IDP's that were relevant to the topic.

Figure 2.11 Mapping and fieldwork data compiled onto a pinboard highlighting main travelling routes and informal transport hubs in uMhlanga Town Centre.
Source: Author

2.2 Limitations

The COVID-19 pandemic had presented certain limitations such as interviews but was carried out with caution and followed all protocols and restrictions at the time.

Due to the specific site being private property and under construction, no direct engagement with the property developers or staff on the site had taken place.

The construction taking place on the site resulted in certain roads and areas being inaccessible which resulted in a lack of understanding and photographs of certain locations.

Site observations had been carried out and examined in a personal manner and only displayed a short time frame of activities.

03 STUDY AREA

3.1 Context

This study is focused on uMhlanga in the city of Durban, the third biggest city in South Africa which possesses about 200km of coastal frontage. Settlement first occurred around The Port of Durban (now called The Durban Harbour) and spread inland establishing the central business district (CBD). The harbour is one of the busiest ports in the country due to its geographical location in the world (PropertyWheel, 2016) and its proximity to the CBD.

With the coastal edge being a prime tourist area and the popularity of the harbour, many economic activities established themselves there. As the land continued to be developed, businesses and residents preferred to remain by the coast due to the proximity to the harbour and higher land value, rather than moving inland. Therefore, development continued along the coastline in a Northerly direction and the town of uMhlanga was established.

In the 1980s, development increased and started expanding inland. The town, historically a small village east of the M4 highway and known for its beds of reeds growing along the marshlands of the Olanga River (The Crest Magazine, 2010) became a story of an abundance of hotels and shopping centres.

Within the last decade, uMhlanga has emerged as a prominent destination for mostly private capital injections in the commercial sector which resulted in a wealth of new private developments burgeoning across its landscape. uMhlanga has become a hub of business activity, with many businesses relocating to the town from the Durban CBD. A similar pattern is present in Ballito, which is further north, and the establishment of the airport has made the area quite sought-after.

Durban also has a system of freeway and dual arterial metropolitan routes, which connect the sprawling suburbs that lie to the north, west, and south of the city.

Figure 3.1 uMhlanga in 1965 vs 2015, multiple large-scale developments made up of hotels, residential towers and shopping malls emerged along the coastline within 5o years.
Source: Tallyho Leisure 'n Style advertisement of uMhlanga, 2015

Figure 3.2 A postcard of uMhlanga Main Beach from the mid 1970s.
Source: Chemaly, 2021

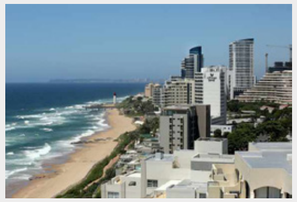


Figure 3.3 uMhlanga Main beach looking towards Durban showing an increase in development over 45 years.
Source: Kjonstad, 2021

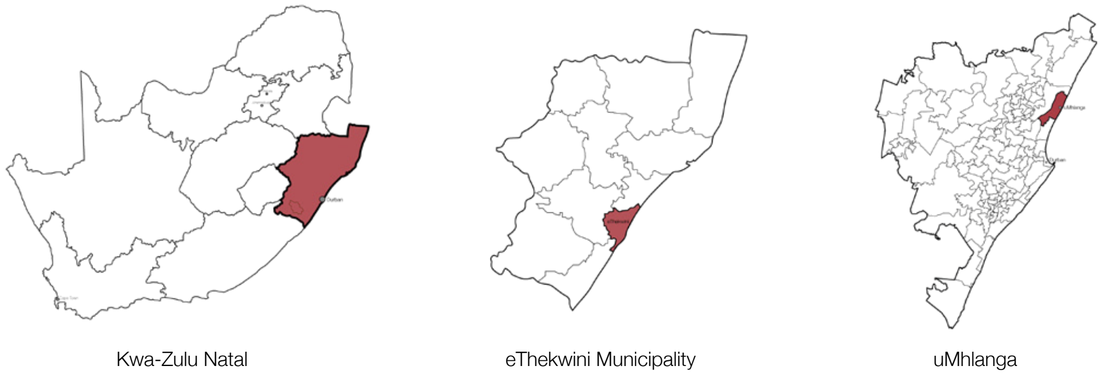


Figure 3.4 This research project explores the exclusive nature of private developments in uMhlanga, Durban.
Source: Author

Figure 3.5 Context map of Durban showing location of Durban CBD, uMhlanga and Ballito in relation to each other.
Source: Author

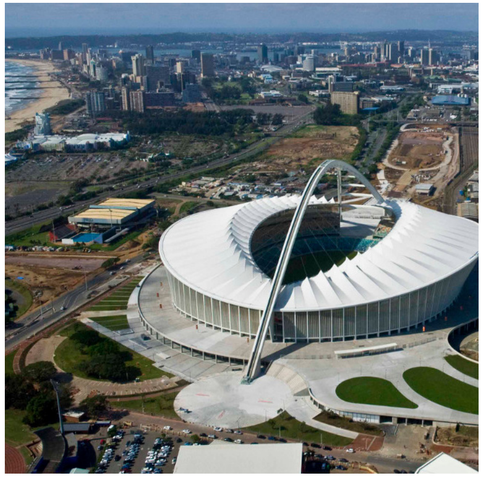


Figure 3.6 Moses Mabhida Stadium looking towards Durban CBD.
Source: South African History Online, 2011

Durban Central Business District

The Durban CBD attracted several large businesses due to its proximity to the harbour, the availability of public transport, and easy access to outer-lying areas however, over the last couple of years, the inner city has deteriorated (Ngcobo, 2022).

Many businesses have relocated to uMhlanga due to the booming commercial activity present there but a majority had run away from the CBD due to the high levels of crime, streets lined with litter, and overflowing sewage drains. The overall state of decay of the inner city is killing the commercial sector.

Figure 3.7 uMhlanga Main Beach with private developments existing and upcoming in the background. Source: Britz, 2021

uMhlanga Village

uMhlanga has transformed into hub of business activity, with commercial activities relocating to the town from the Durban CBD citing safety and location being unmatched in comparaison to the CBD. Other than the commercial sector, the residential phase of the town has grown exponentially. The area is covered in gated communities and luxury estates matching the rate of development of private retail and commercial spaces near the coastline.

The town has become dominated by private developments of an exclusive nature near the coastline as it holds high value.

Figure 3.8 Ballito Village seen from above, with sprawling stores and restaurants located near the beach. Source: Anderson, 2021

Ballito

Following the opening of King Shaka International Airport in 2010, Ballito is now a sought-after investment destination. Various security or gated estates have been constructed on land that was once sugar cane, as well as the construction of many private schools. Hotels and resorts have opened on the beachfront properties drawing in tourists to the quiet town in the North.

04 LITERATURE REVIEW

4.1 Introduction

The prioritisation of the motor vehicle has resulted in NMT transport being improvised (Guitink, 1995) rather than carefully planned to fit into Durban's transportation network. Currently, Durban transport network caters mostly to road and rail users (Sibiya, 2019) who travel long distances, especially from the sprawling suburbs inland to the coastal areas where opportunities lie and completely ignores the pedestrian and non-motorised transport user.

The establishments of multiple private developments around Durban has resulted in selected portions of infrastructure investments (around the immediate site context) creating an environment of stop/ start pedestrian and NMT infrastructure along the routes that many travel.

There is a need to carefully plan and implement NMT infrastructure within residential areas where linking the pedestrian to areas of interest and allowing easy access especially if NMT use is to be encouraged in the future. NMT needs to be prioritise in order to meet the travel needs of all users and to promote spatial integration within the transportation network.

This study looks at legislative frameworks that highlights public infrastructure investment ,particularly which priority areas have been identified and whether investment should be directed elsewhere. It will also include the framework underpinning NMT development in eThekwini Municipality and the challenges encountered during the planning stage.

The study will review literature on the movement of people from the periphery of the city to the city centre and the current relationship those users have with private developments they encounter. The literature also investigates the value of land regarding private developments and how shifting the value to the users may benefit the city regarding inclusivity.

4.2 (Infrastructure) Investment

The Durban CBD was initially the largest node with in the city but as time went on the establishment of Umhlanga and Ballito moved economic activity north and people soon followed the opportunities. While the CBD is still a hub of activity, its demise began with the rise of illegal activities and is now considered the third most unsafe place in Durban behind the townships of uMlazi and KwaMashu (Nxumalo,2018). Despite multiple cash injections in recent years and the introduction of the Durban point development, Durban's inner city doesn't appear to benefitting much from the urban revival.

Begging and theft occur throughout the area and people are accosted everywhere by dwellers hoping to make a quick buck. Most of the public money spent on Durban's CBD revival undeniably seems to follow to where tourists go (Sanderson, 2019).

While the multiple frameworks aim investment towards the CBD and the 'tourist areas' within the city, it is the people that commute/ work and live in the CBD that are being overlooked. Insufficient or poor infrastructure limits citizens' access to markets, opportunities and services such as clean water, communications, education, health and transportation (Kumo, 2012).

Infrastructure investment consists of two components:
1. General government economic infrastructure investment and economic infrastructure
2. investment by public corporations

While an NMT plan has been developed to capture the City's so-called commitment towards NMT, gives importance and acknowledges NMT as an integral part of the City's overall transport system (Cele, 2018).
The short term focus will be to identify key nodes within the eThekwini Municipality and provide mixed-used NMT facilities that connect these key nodes into the surrounding area. As the demand for NMT grows, the objective is to then expand the growing network into the wider areas surrounding the key nodes (Ethekwini Municipal Spatial Development Framework, 2022-2023).
While some significant areas in the CBD will benefit from being upgraded, the issue that stands is what about all the other areas in Durban? Investment is still directed at the CBD yet other economic nodes have emerge further north and serve a large majority of Durban residents. Public investment seems to only has a focus on the CBD while in other nodes like Umhlanga are targeted by private investment which are localised to specific areas to cater for certain demographics with the end goal of making a return on investment and economic growth. Consideration needs to be made for commuters travelling to areas other than the CBD and how they commute once they exit motorised transport.

Information extracted from eThekwini Economic Growth Framework highlights the target areas of public infrastructure investment in Durban. The budgets are mostly targeted towards the CBD and outlying areas where backlog of infrastructure is needed to be address. This leaves areas like uMhlanga to rely on mostly private investments. These private investments are aimed at profits rather than addressing needs. When the door to investment is left open the city, private companies jump at the chance to make a turn over and therefore have the power to make decisions on what is valuable.

4.3 City to Street

South African cities are widely known as sprawling cities, this makes large transport networks necessary to connect from the periphery to the city centre. These large transport networks have its issues such as unmaintained infrastructure, theft and high demand. The challenges associated with motorised transport has brought awareness to policy makers that keeping up with the population growth and the increase of people on the periphery would require huge investments in infrastructure for public transportation which is slowly increasing in price as household incomes decrease. Many users cannot afford to spend large amounts of their income on transportation which means they can only afford to walk or use NMT transport. Specifically, Durban relies heavily on the transportation network as roads are used to isolate areas rather than connect them. As larger developments are situated in areas, the increase in road infrastructure emerges to support those making use of the developments.

A large majority of Durban's work force are living in the periphery and generally won't want to cycle the entire journey there and back which makes motorised transport needed but only to a certain stage. Acknowledging that transportation is becoming unaffordable means that other options need to be considered once users get into the city via rail or road (Khisty, 2003). Prioritising exploring NMT planning and implementation may be a major step in creating a sustainable and affordable transport network (Rastogi, 2011).

4.4 Street to Site

As much as pedestrian movement is commonly used, it is not as much of a priority as the motor vehicle. With the increase in car prices and petrol, the future might see many vehicle owners wanting to move to public transport and then incorporate walking into their lives. But the infrastructure doesn't support the current users and will not be able to handle an increase. Pedestrian movement needs to work together with other modes of transport to have a movement network. The mono-functional settlement (Uyentenbogaardt, Dewar and Todeschini, 2000) will not support this idea as the separation of activities requires far distances to be travelled and for most it is an inconvenience.

We often speak of the most vulnerable, these are the low-income groups which rely on public transport as vehicle ownership is not an option for many. Movement should not as be seen as a separate element, which is the current reality for some areas in Durban. The inability to move seamlessly from one model of transport to the other due the lack of maintenance, incomplete or non-existent infrastructure and inaccessibility is present in many areas around the country including Durban CBD and Umhlanga Town Centre.

While a transportation hub connects the different modes, but it can also serve as place of opportunity (Uyentenbogaardt, Dewar and Todeschini, 2000) such as economic activity (informal and formal), parking (to aid in the flow of one transport method to the other) and residential.

Once a user leaves the vicinity of the transportation hub, they are presented with little to no infrastructure which supports NMT movement (Sibiya, 2019). Uyentenbogaardt, Dewar

and Todeschini speak of low-order local streets which must accommodate pedestrian activity, which is currently lacking in Durban. Neighbourhood streets are current designed to accommodating the car, with large stretches of straight roads which facilitate fast movement. I believe that these low-order street have to most impact on a pedestrian as it is usually the start or end of their daily journey and therefore could have the most benefit of properly accommodating the pedestrian and other NMT users.

NMT infrastructure just outside the transportation hub radius are in poor condition but some people have no choice but to try and make use of them. Walking can be seen as a necessary activity (Gehl, 1996) and needs to occur no matter the conditions. While that is the reality, priority needs to shift to encourage NMT usage rather than having to do it.

4.5 Exclusion

Public investment may be prominent on the metropolitan scale as well as the integration of NMT usage but the micro nodes where private investment peaks is problematic. Watson speaks to the fantasy plans emerging around Africa as the starting point for inequality and marginalisation.

Much like the road network excludes NMT users, private developments are willingly choosing to exclude individuals based on their economic standing. The preference of high market-rate developments over inclusionary facilities promote segregation which is based on land values rather than need.

Exclusionary effects of developments run to the work and living factors of the majority residents of the city which are living on the living on the periphery and working near the coast but are unable to live where they work due to high land values. Private investment is continuously driving up land values leaving many residents no option but to live on the periphery, travel via motorway then walk to their destination.

4.6 Inclusion

The Durban CBD's investment strategy is aimed at rejuvenating the CBD while making it a desirable place to live. Public investment is pooled into this area while smaller economic nodes such as uMhlanga move further away from inclusive despite a large proportion of the work force travelling to the town for employment. There is a need for private developers to prioritise inclusive developments which can cater for all people while still generating a return on investment.

4.7 Conclusion

Durban has transport systems to connect from inland to the coast. There are public transport network that can travel high speeds and long distances but the problem comes in at neighbourhood scale.
What happens when people are close to their destination but have to walk or cycle? In Low order local street, there is not proper infrastructure to enable comfortable walking and cycling due to the lack of sidewalks, no pause spaces, no bicycle routes, no shade and minimal lighting.
Part of the lack of infrastructure is from private developments which catered from the immediate surroundings only. The road infrastructure is constantly invested in due to the demand travelling by private car leaving the majority to travel far distance either by car or walking.
The design intervention of this project would be to integrate and balance public and private investment in a site that is walkable, connects into the context and is inclusive.

05 CASE STUDIES

5.1 Introduction

The case study approach allows exploration of intricate issues in a real-life setting. It is useful to utilise this method when there is a need to gain a detailed comprehension of an event, issue or phenomenon in its real-life context (Crowe, Cresswell, Robertson, Huby, Avery & Sheikh, 2011).

The following case studies are examples of successful open public spaces in large-scale built-up areas within cities, that relate to the context and specific site in this research project:

5.2 the New York High Line
New York, New York

A highly successful infrastructure conversion project, the public park offers New Yorkers a break from the chaos of the city streets in an elevated space with never-ending views of the city skyline and the Hudson River.

Once the former West Side industrial railway, now an elevated 2.33km linear park. Plants and trees started growing naturally along the tracks and how now been integrated into the vegetation design of the park.

Simultaneously with the linear structure of the long park, further increases the biodiversity in the area. The High Line had a catalytic effect on neighbouring areas, as commercial and cultural projects are being initiated and developed along and around the park.

Figure 5.1 the New York City High Line, New York. Source: Archdaily

Figure 5.2 the New York City High Line, New York. Source: Archdaily

Figure 5.3 View from the New York City High Line, New York. Source: Archdaily

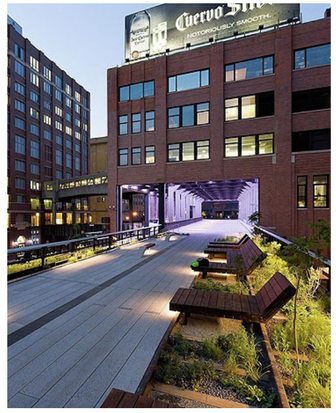


Figure 5.4 the New York City High Line, New York.
Source: Archdaily

5.3 The Nueva Costanera lake promenade

Villa Carlos Paz, Argentina

A project to return a city back to its roots, the Nueva Costanera lake promenade in Villa Carlos Paz, Argentina has developed a 2km linear promenade.

Built on access roads and landfills along the shores of the lake, where controversial, mixed-use private developments once were, the publicly owned land had been leased to many recreational and sports clubs that had direct access to the water's edge.

Recently, recreation, leisure, and sports are the top priority of the area and the scale and flexibility of its design allow for different events to occur (Schoulund and Landman, 2018).

The continuous urban transformation of the site has led to upgrades taking place such as new bars, restaurants, and other mixed-use developments situated on the edges of the park.

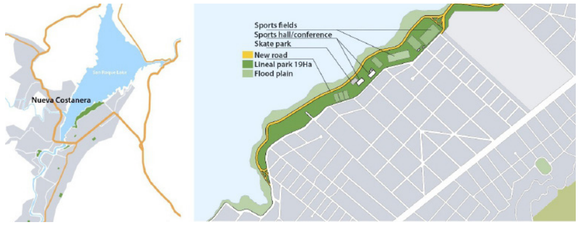


Figure 5.6 Location and plan of the Nueve Costanera, the largest green space in the city. Source: Schoulund and Landman, 2018

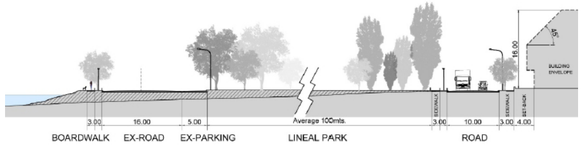


Figure 5.7 Diagrammatic section of the promenade and lineal park.
Source: Schoulund and Landman, 2018

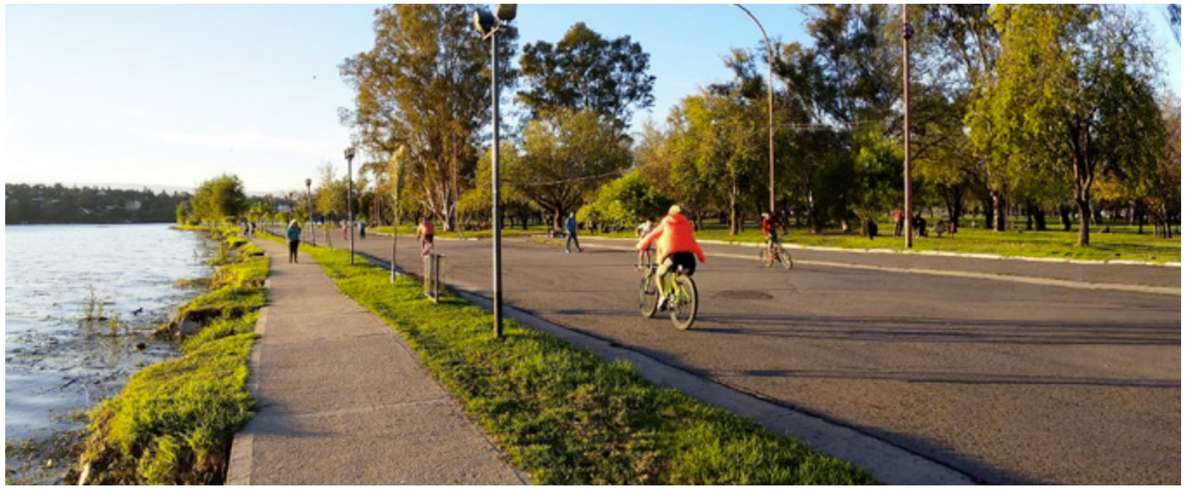


Figure 5.5 The Nueva Costanera lake promenade.
Source: Schoulund and Landman, 2018

06 CONTEXTUAL ANALYSIS

6.1 Contextual Analysis at Metro Scale

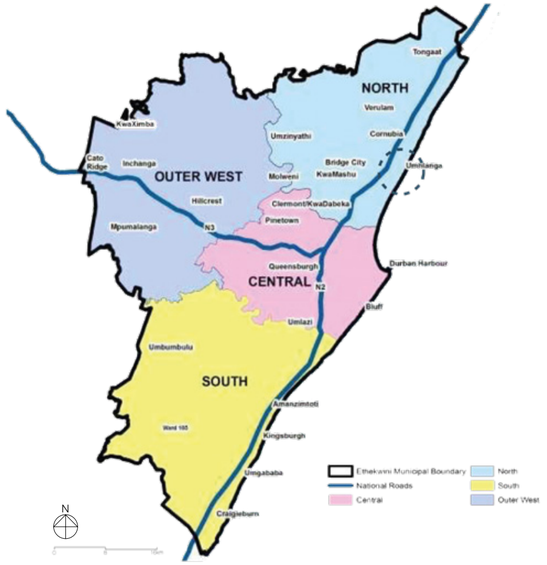


Figure 6.1 Spatial Regions
Source: Strategic Spatial Planning Branch, 2017

Spatial Regions

eThekwini is divided into four municipal planning regions defined by the uMgeni River, uMlazi River and Kloof Ridge.

The northern municipal planning region has substantial residential, commercial and services that specialise in recreation and tourism.

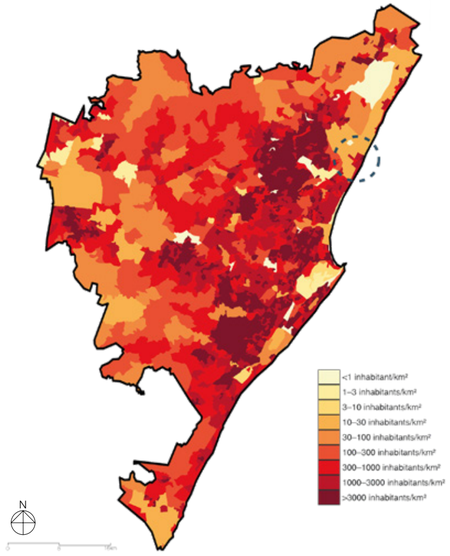


Figure 6.2 2011 Population density map
Source: Wikimedia Commons, 2013

Population density

The map shows population density at the metro scale, large amounts of the populations reside inland with less density along the coast. Areas such as uMhlanga have medium density.

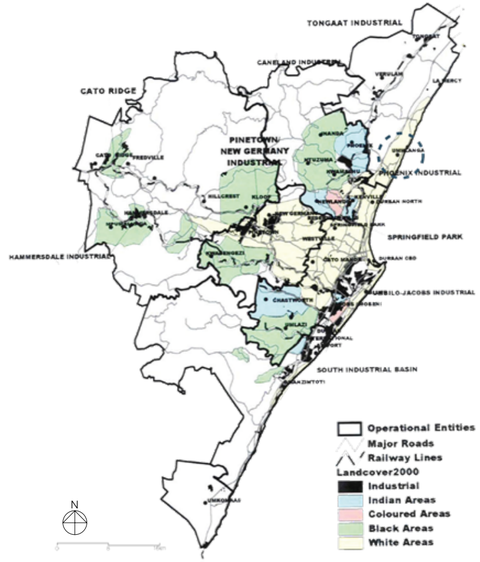


Figure 6.3 Racial distribution of the population
Source: The Planning Initiative, 2020

Racial distribution of the population

The map shows a segregation of races within the metro, with people of colour situated on the outlying areas and white areas on the coastal edge.

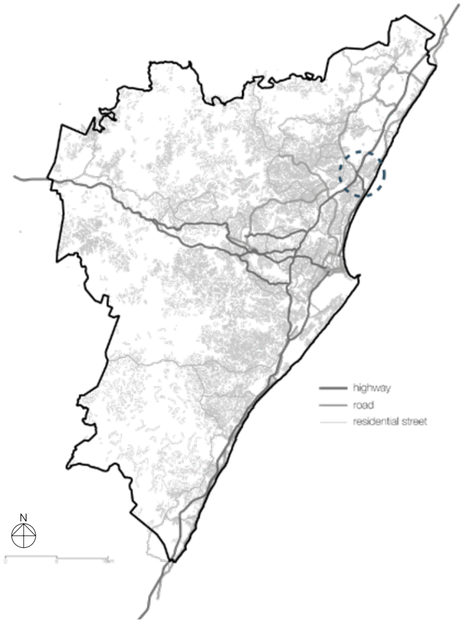


Figure 6.4 Road network
Source: Author

Road network

eThekwini is reliant on its road network to travel far distance as many residents live inland and travel to the coastal edge for work. The main highways run from North to South following the movement of economic nodes. uMhlanga is well connected to the road network with the M4 and N2 highways running through the town.

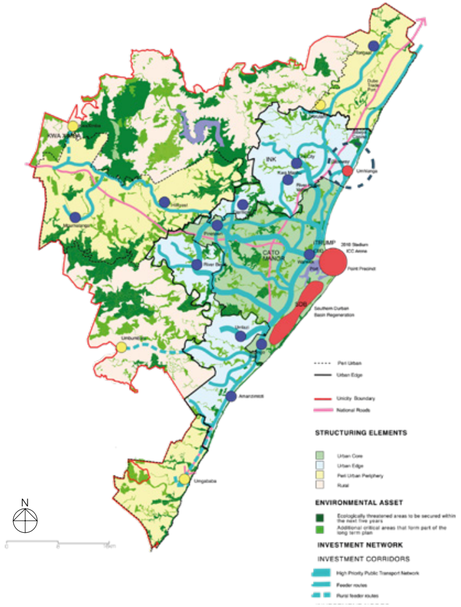


Figure 6.5 eThekwini Municipality Metropolitan Area Spatial Development Framework
Source: eThekwini Municipality IDP, 2010

Spatial Development Framework

While the SDF identifies uMhlanga as a major economic investment node on the urban edge, the CBD is still considered the main area for investment within the eThekwini Municipality.

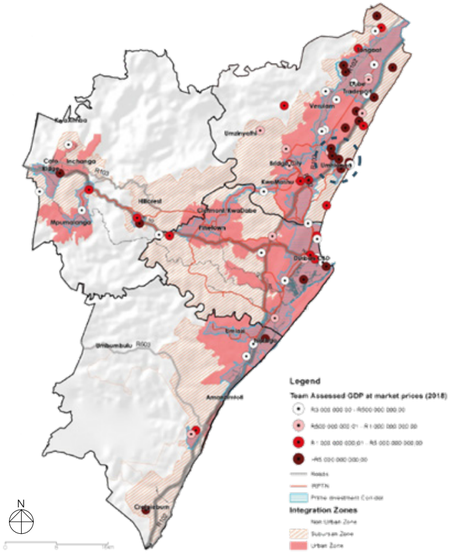


Figure 6.6 Proposed Development Projects in eThekwini
Source: The Planning Initiative, 2020

Proposed development projects

The map above shows the locations of investment and catalytic projects within eThekwini with a range of market prices. It is evident from the data that uMhlanga has the most development projects higher than R5 000 000 000 and all are situated in the suburban zone.

6.2 Contextual Analysis at uMhlanga Scale

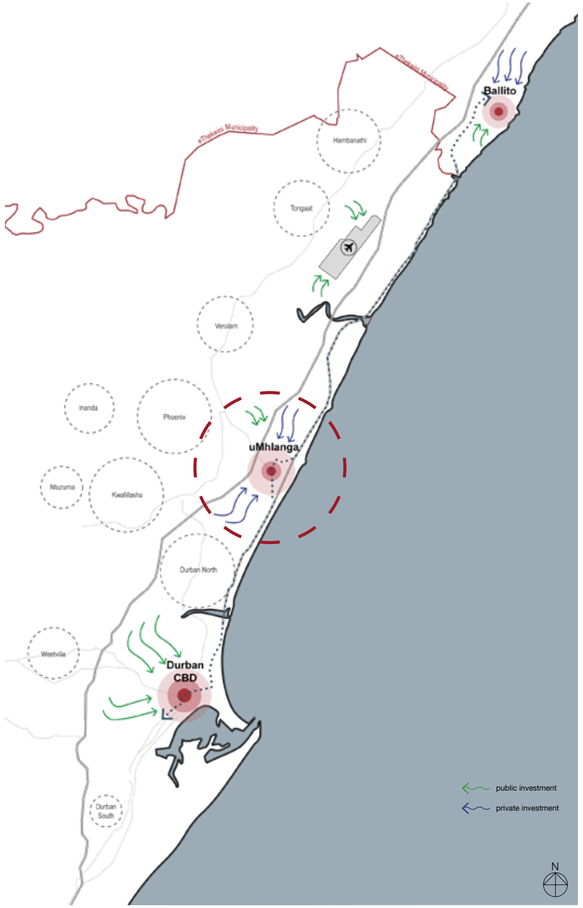


Figure 6.7 eThekwini at metropolitan scale showing the relationship between nodes and private and public investment. Source: Author

This research project focuses on the town of uMhlanga which sits in the eThekwini Municipality. uMhlanga has transformed over the years from a tourist town to one of the biggest economic nodes in eThekwini, but the majority of the developments are private entities with the power to decide to who the developments should be catered.

The area relies on private vehicular transport to move around as public transport is not frequent and unreliable and the topography is steep making walking a difficult task. The large motor vehicle infrastructure that supports the demand divides the area creating bubbles of isolation from residential, commercial, and natural elements, not only in uMhlanga but also in other areas of Durban.

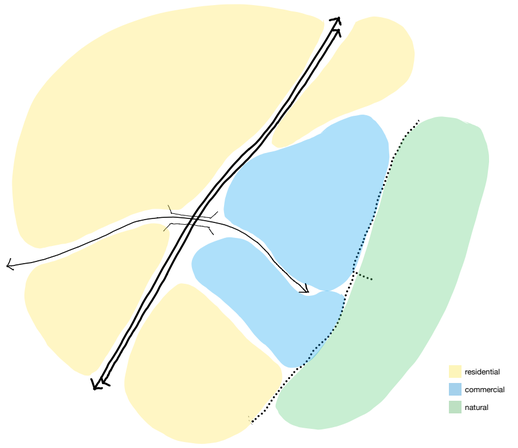


Figure 6.8 Bubbles of isolation present around Durban.
Source: Author

Figure 6.9 shows an aerial image of uMhlanga, the town has two major economic areas referred to as uMhlanga Town Centre, which is where most of the retail sector is situated as well as transportation hubs and uMhlanga Village, the area has a range of activities such as shopping malls, hotels, offices, restaurants, residential and most importantly access to the beach.

The specific site chosen for this research project is situated in uMhlanga Village as most of the recent private developments in uMhlanga have been constructed in that area due to its higher land value and proximity to the beach. Many of the private developments that exist are very similar to one another, they all contain malls with similar stores and are generally marketed towards the higher economic bracket.

Figure 6.9 Aerial photograph of uMhlanga
Source: Cape Farm Mapper, 2021

Figure 6.10 zooms into the uMhlanga Village context and identifies the specific site. The map shows the multiple destination points with the context that drives movement, both vehicular and pedestrian movement.

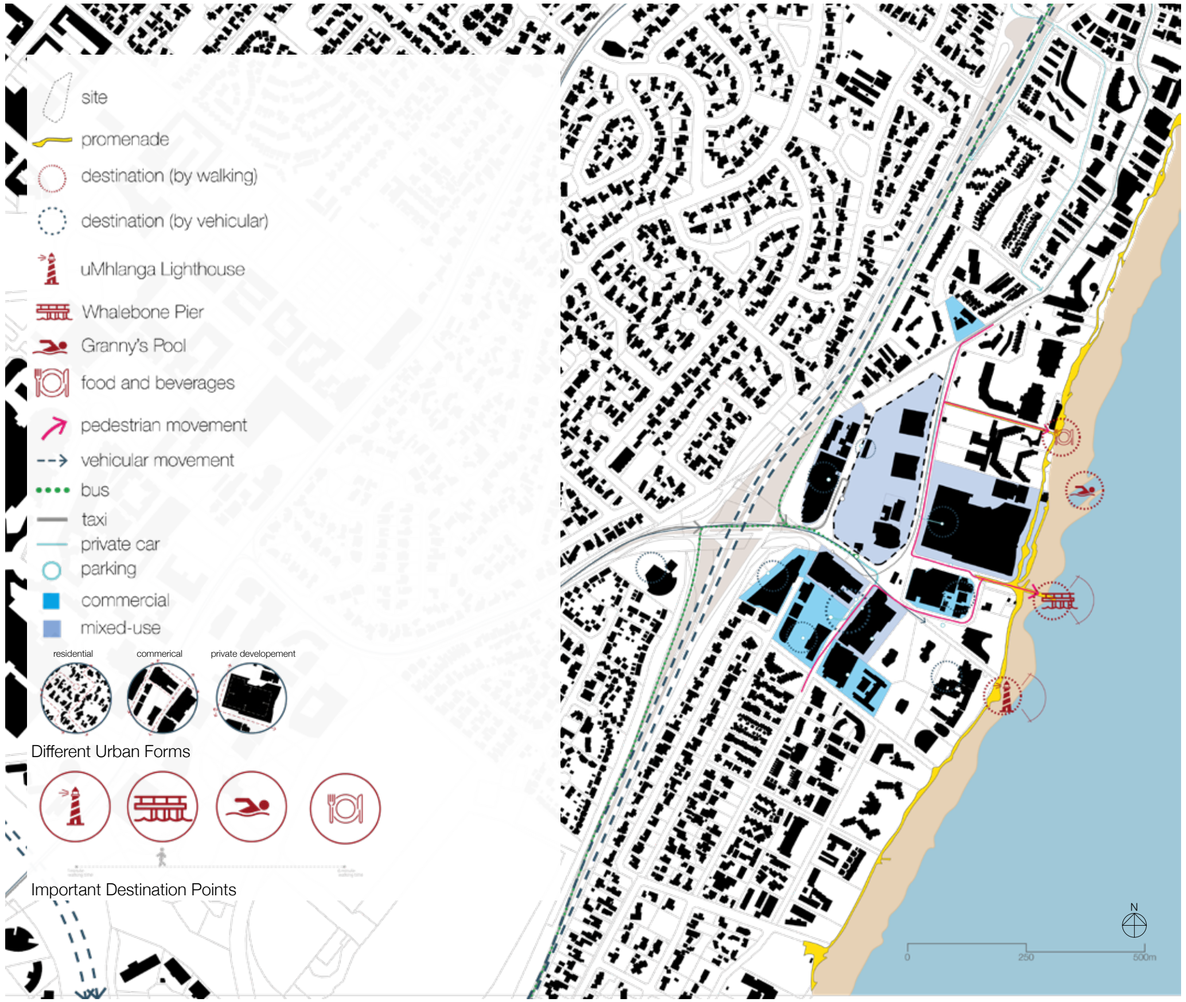


Figure 6.10 uMhlanga Village coastal analysis. Source: Author

Figure 6.11 shows the green open spaces and natural assets across uMhlanga Village. Other than the coastline there is very few green spaces which are open to the public.

The chosen site is one of the few undeveloped parcels of land within uMhlanga. It is a large site that is located extremely well within the context which made it desirable to private developers.

Figure 6.11 uMhlanga Village green layer. Source: Author

Figure 6.12 Accessibility in uMhlanga Village. Source: Author

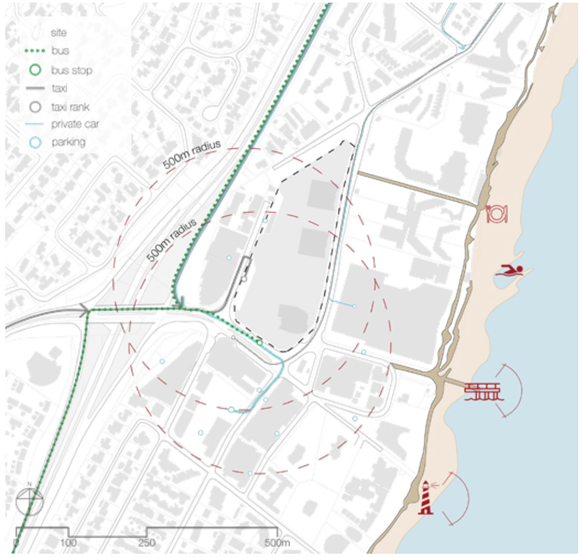


Figure 6.13 Transport present in uMhlanga Village. Source: Author

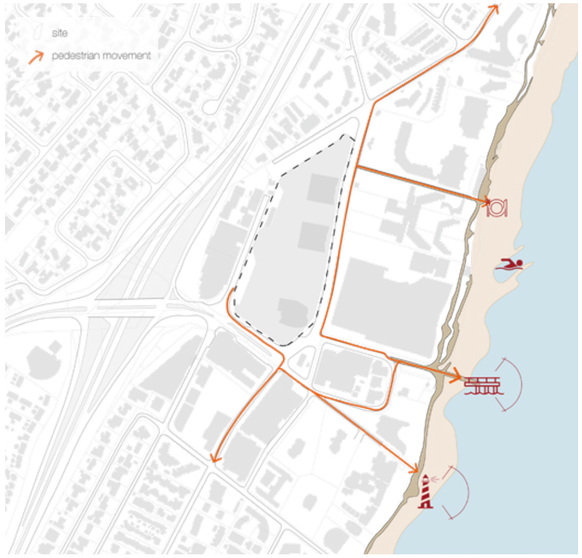


Figure 6.14 Pedestrian movement. Source: Author

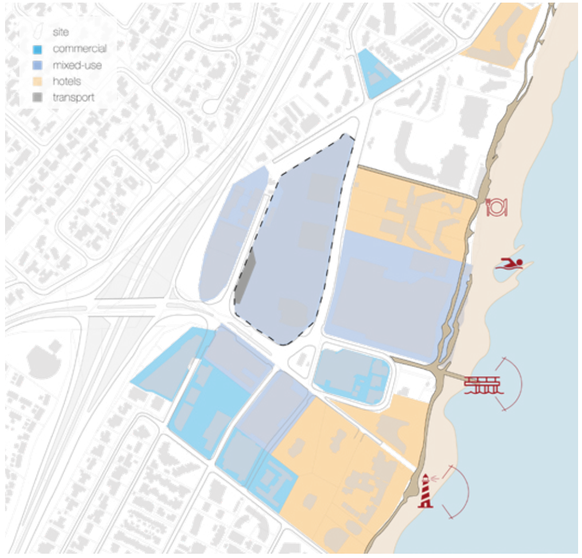


Figure 6.15 Land use. Source: Author

Figure 6.16 Public open space. Source: Author

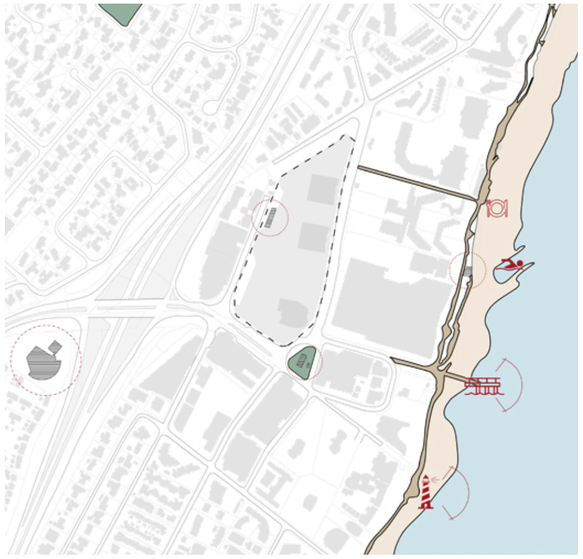


Figure 6.17 Public facilities. Source: Author

Figure 6.18 Topography and greenery. Source: Author

Figure 6.19 Existing activity. Source: Author

Figure 6.20 Morning shadows. Source: Author

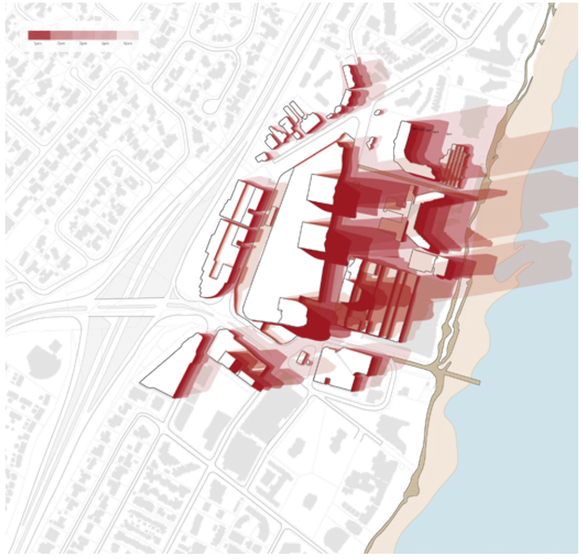


Figure 6.21 Afternoon shadows. Source: Author

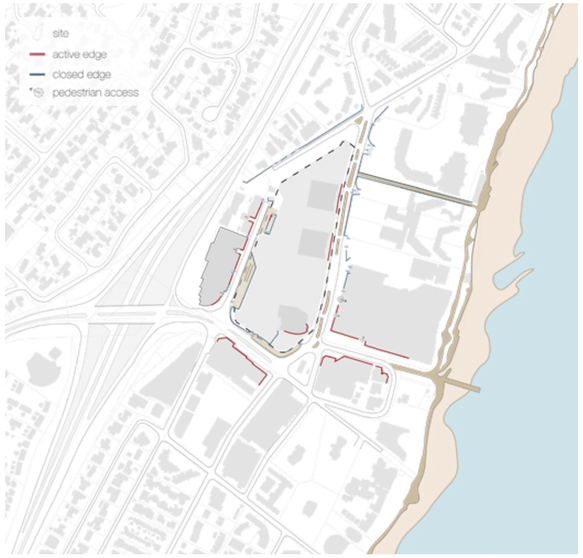


Figure 6.22 Active and closed edges. Source: Author

6.3 Contextual Analysis of Site

The aerial image below zooms in on the site where the private development by KwaZulu-Natal tycoons Vivian Reddy and Rob Alexander named Oceans uMhlanga has been established. The development has an estimated investment value of R4.2 billion with contributions of R150 million coming from the city and the remainder being privately invested.

Figure 6.23 Aerial image of the chosen site where the Oceans uMhlanga Development is located.
Source: Cape Farm Mapper, 2021

The site is well located, it is within walking distance of the beach and existing retail activities. It currently houses both a taxi rank and a bus stop which is heavily relied on by workers in the area. Also on the site is the uMhlanga Post Office which is an important landmark for the workers in the area as it is a SASSA Grant collection point. There are two direct pathways from the beach to the site, one is extremely narrow and steep and the other runs on a congested roadway.

Figure 6.24 This map outlines the site, the transport hubs and pedestrian movement patterns.
Source: Author

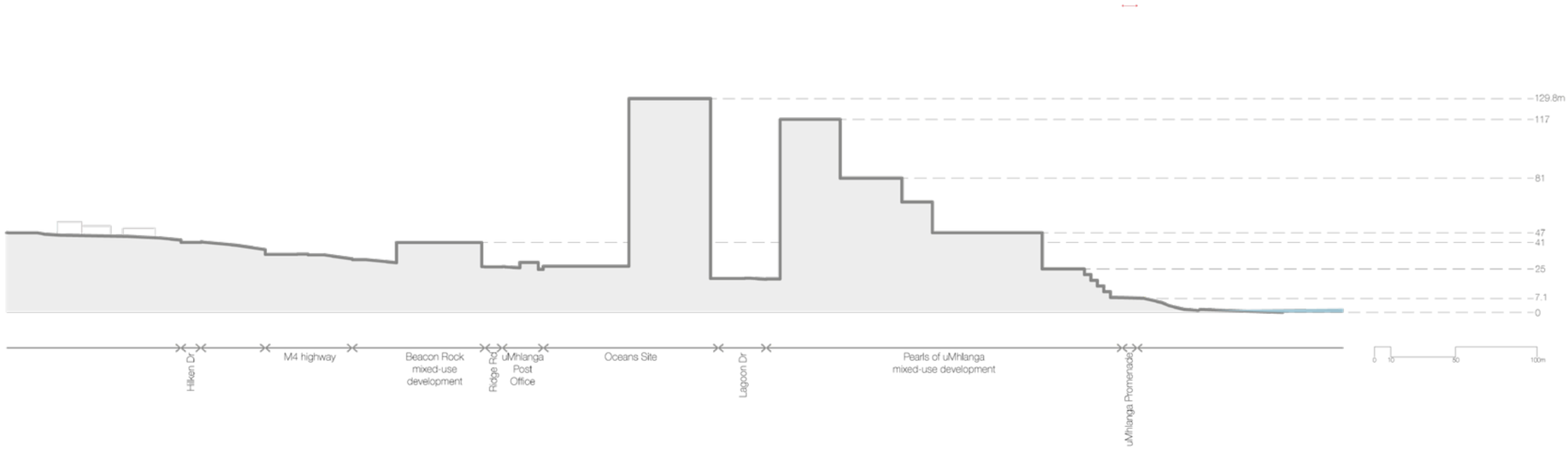


Figure 6.25 Section 1 is from Hilken Drive in a residential area to the ocean.
Source: Author

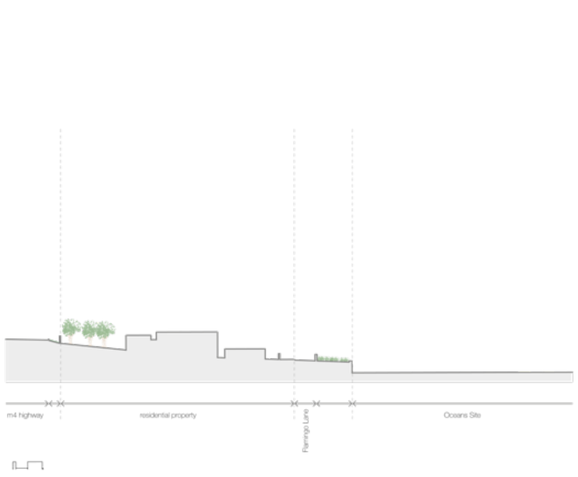


Figure 6.26 Section 2 from the M4 highway to the Oceans uMhlanga site.
Source: Author

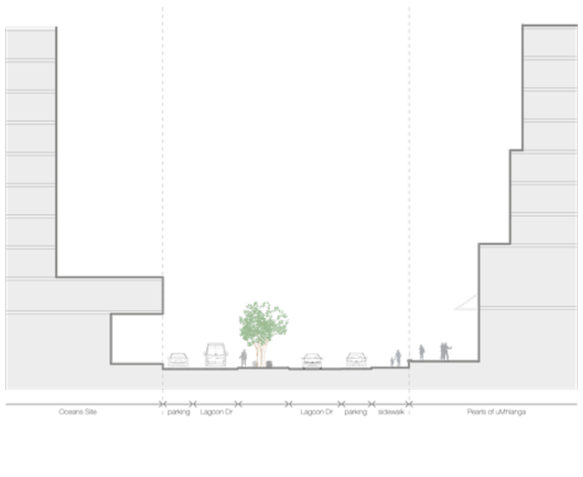


Figure 6.27 Section 3 through Lagoon Drive
Source: Author

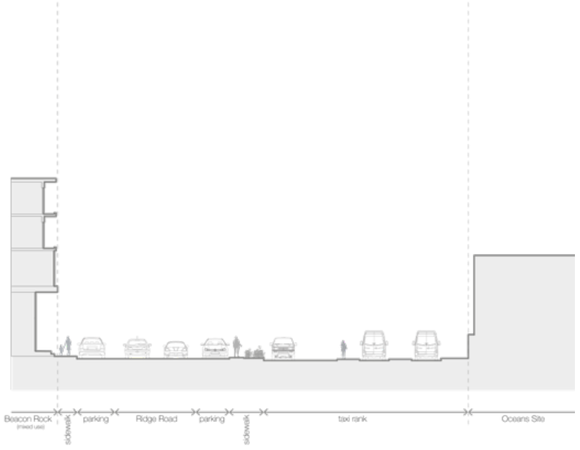


Figure 6.28 Section 4 through Ridge Road.
Source: Author

Figure 6.29 Map showing section lines.
Source: Author

6.4 Current Proposal for Site by Developer

Figure 6.30 2002 aerial image of the site with community-centered facilities.
Source: Google Earth, 2002

In 2002, this site was home to community-based facilities such as the uMhlanga Post Office and Library, uMhlanga Country Club with accessible tennis courts, and small retail outlets such as Telkom and the council offices. By 2010, the land had been sold to the current developers and by 2015 everything on the site was demolished or relocated and construction began soon after on yet another exclusive that does not add much value to the community.

The development sites are on a podium structure which is only accessible on the eastern side of the site resulting in the rest of the site being inaccessible. This is the main factor that leaves the site enclosed and allows activity to take place internally rather than with the street.

The hotel and residential towers cast a huge shadow on the context which can also represent its power and value compared to the surrounding structures.

Figure 6.31 2021 aerial image of the site with new private development.
Source: Cape Farm Mapper, 2021

Figure 6.32 Radisson Blu Hotel, the first tower of the Oceans uMhlanga development.
Source: Radisson Hotel Group, 2022

Figure 6.33 An early render of Ocean's uMhlanga towering over the neighbourhood.
Source: PropertyWheel, 2016

Construction started in 2017 and was put on hold multiple times due to cash flow problems, the COVID-19 pandemic, construction mafia interference, and construction issues. The Oceans development sits on what was once one of the last pieces of municipal-owned land but was sold to the developer.

The development is categorised as mixed-use and includes a mall, hotel, and residential towers. The development's mall is within the podium structure with 36 000m² of retail, there is 90 000m² of structured parking, a five-star hotel, and 250 apartments per tower (Naidoo, 2022). The site measures around 250m long, the development is extremely large compared to the surrounding context and is said to be exclusive contain retail stores such as Louis Vuitton, Gucci, Burberry and car dealerships Aston Martin and Bugatti.

"the most likely outcome of these fantasy plans is a steady worsening of the marginalisation and inequalities that already beset these cities."

(Watson, 2013, p. 215)

Figure 6.34 A model showing the Oceans uMhlanga developement scale in relation to the surround buildings.
Source: Author

6.5 uMhlanga 2007 Precinct Plan

A precinct plan was prepared for the uMhlanga Node in 2007 by ASM Consortium. A requirement for the precinct plan was to provide a framework for informing and coordinating public and private investments in the area and guiding the physical development that would deliver an integrated pedestrian-friendly that was safe for residents, visitors and tourists. The purpose of developing a new precinct plan was to assess the suitability of the existing planning scheme and respond to new demands from the market.

Figure 6.36 Proposed edge treatment of Lagoon Drive.
Source ASM Consortium, 2007

Figure 6.35 Locality map from the 2007 uMhlanga Node Precinct Plan.
Source: ASM Consortium, 2007

Figure 6.37 Intensification diagram.
Source: ASM Consortium, 2007

The proposed precinct plan never materialised in the context, instead, the private developers took over the site with the singular mass. The precinct plan investigation was a helpful step in the right direction towards design development as it outlined what the possibilities could have been for the site as well as a proposed scale that seems more appropriate than what the private developers have proposed. It also shows possible edge treatments and conditions that interact with the streets and people and overall a more community-friendly design as well as a more valued scheme.

Figure 6.38 Physical model of the block masses proposed in the precinct plan.
Source: Author

07 DESIGN DEVELOPMENT

7.1 Establishing the Scenario

The development currently consists of the podium level and the hotel tower, with the two residential towers to be completed over the next two years. This project involves looking at the relationship between private and public investment and how collaboration between the two could lead to a more inclusive design that has greater value to the wider community.

Before the design process can begin, the scenario of the existing development needs to be discussed and established. This can be considered the first approach to the site and what spaces can be established that incorporate a mix of private and public facilities.

Testing with a model was used to investigate variations of the scheme that would establish the scenario used in the design process.

It has been previously noted that the podium structure of this development is a cause for concern. The first step in establishing the scenario is removing the podium.

Figure 7.1 Focus area
Source: Author

Figure 7.2 Empty site

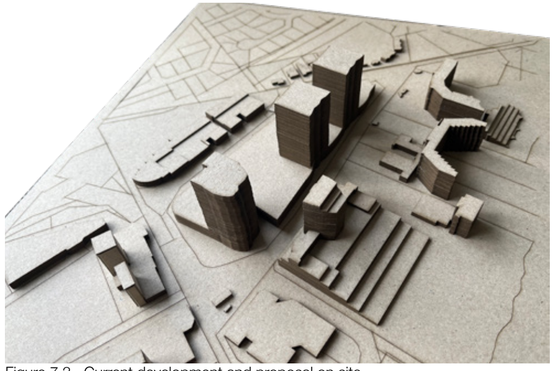


Figure 7.3 Current development and proposal on site

Figure 7.4 Scenario 1 - removal of just the podium

Figure 7.5 Scenario 2 - removal of the podium and the middle residential tower

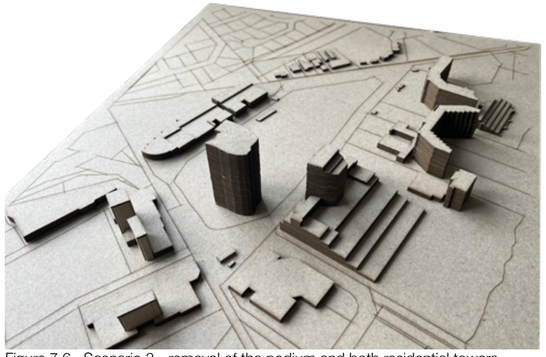


Figure 7.6 Scenario 3 - removal of the podium and both residential towers

Figure 7.7 The chosen Scenario 4 - complete removal of the podium and one residential. Reduce the height of the one existing tower to half its original size

7.2 Understanding the Scale

Once the chosen scenario was established (scenario 4), the next step was to gain an understanding of the size of the site. This was done using a model and cutouts of standard-sized blocks and fields that are familiar and relatable in terms of walking distance, size, and mass.

Test 1 was done using rugby fields of 68 x 120m and inserting them into the site. Four rugby fields are able to fit in the site giving some idea of how a recreational space could be incorporated into the site.

Test 2 was done to see how many city blocks could fit on the site. A Durban inner city block measures 90 x 150m. The blocks are quite large and it was found that 3 Durban blocks could fit in the site and divided the site into three parts that could be walkable.

Test 3 was done using a Cape Town city block which measures 60 x 60m. It is the most relatable grid system in terms of familiarity and walking distances. 9 Cape Town city blocks fit into the site which displays the large scale of the site within the context, where multiple city blocks can fit one site that has been designed as one mass.

This is the point where questions of development were brought up. Is development really needed on the site? Can the existing facilities in the surroundings meet the demand of residents, commuters, and visitors? Perhaps the site needs to accommodate a facility that is not well served.

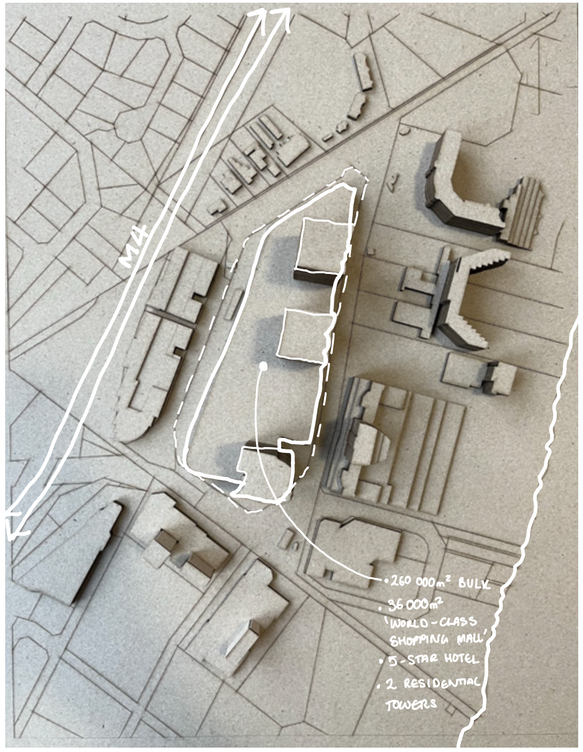


Figure 7.8 Existing development size on site.
Source: Author

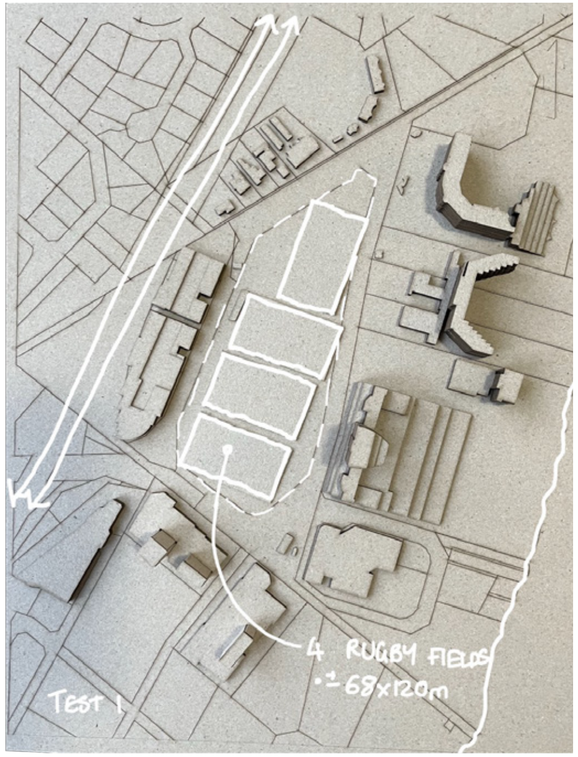


Figure 7.9 4 Rugby fields on the site.
Source: Author

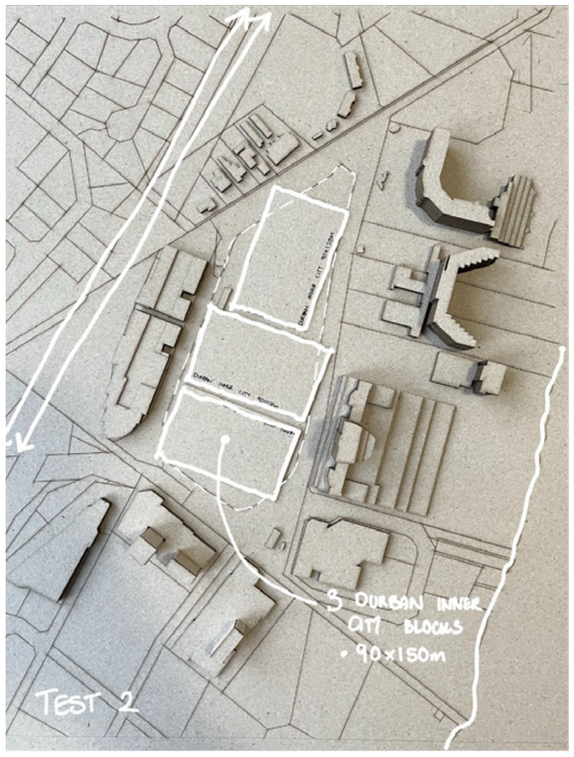


Figure 7.10 3 Durban inner city blocks on the site.
Source: Author

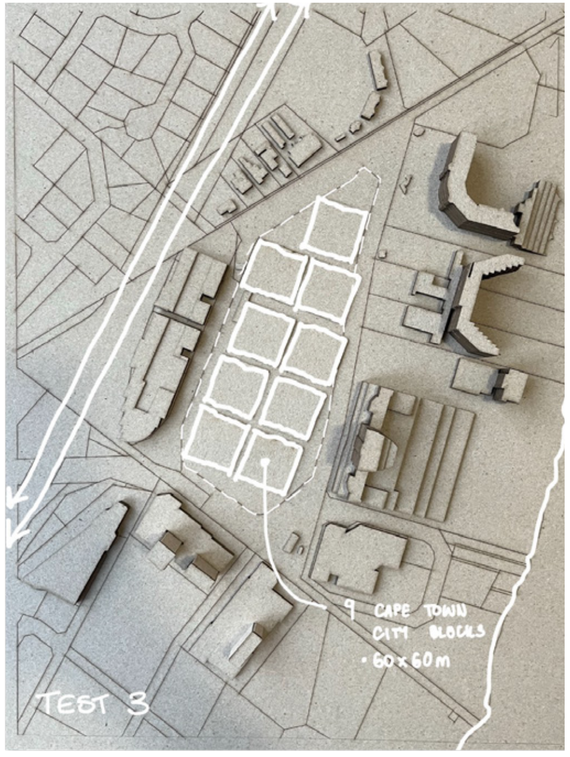
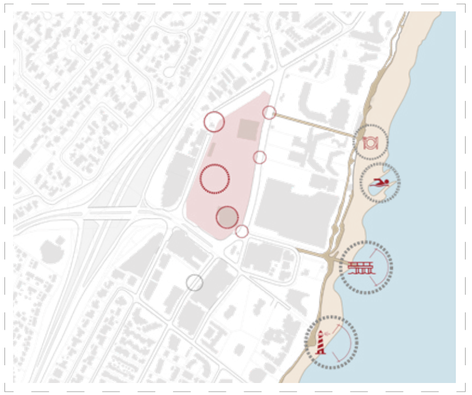


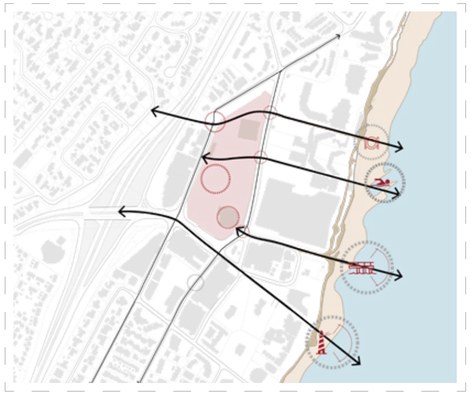
Figure 7.11 9 Cape Town city blocks on the site. Source: Author

7.3 Design Principles



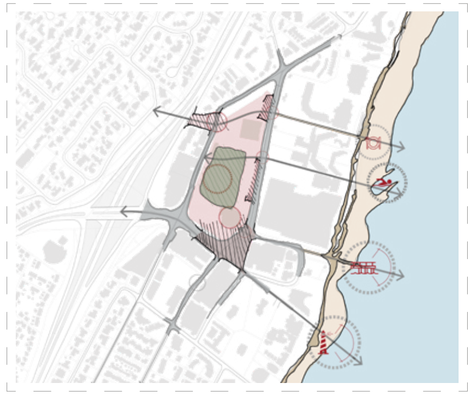
01 DESTINATIONS

- linking potential to existing destinations
- creating spaces for people to go
- encourage movement through the space to get to desired destination



02 ACCESSIBLE ROUTES

- east-west movement through the space to get to desired destination
- accessible and walkable routes for pedestrians
- pedestrian environments that facilitate and encourage walking



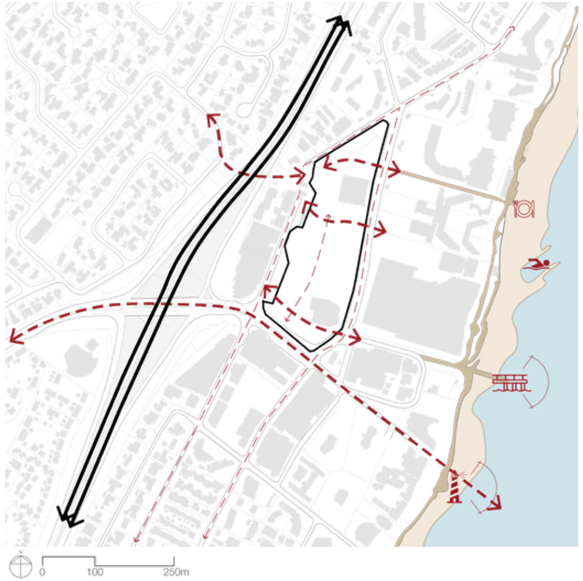
03 DEVELOPING PUBLIC SPACE AND STREET

- spaces where all users have access to the same level of services and opportunities
- prioritising the pedestrian by designing spaces that are safe and comfortable

Figure 7.12 Design principles
Source: Author

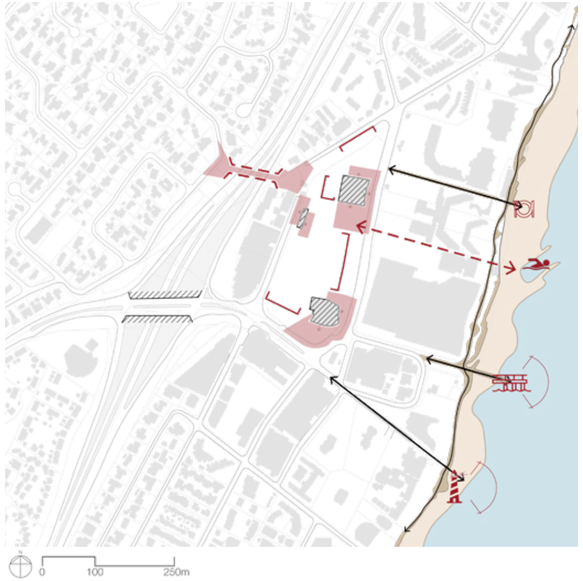
7.4 Spatial Strategies

01 **BREAKING** THROUGH THE BARRIERS



Strategy 1 involves breaking through the hard barriers that exist within the site and the context, such as the mass of the development as one piece which doesn't allow movement from one side of the site to the other, and the barrier of the highway which divides the neighbourhood.

02 **LINKING** EXISTING AND PROPOSED



Strategy 2 presents the chosen scenario with the opportunity to incorporate the existing and proposed while creating partnership between private and public.

03 **UTILISING** THE SPACES IN BETWEEN

Strategy 3 involves using the spaces in between with intensification around the edges of the site, there is substantial space in the middle of the private developments to implement a public feature that can increase land value as well as community value.

04 **HARNESSING** EXISTING ACTIVITY

Strategy 4 carries through the existing activity by creating interventions that can generate similar highs of activity.

Figure 7.13 Spatial strategies
Source: Author

7.5 Design Framework at uMhlanga Scale

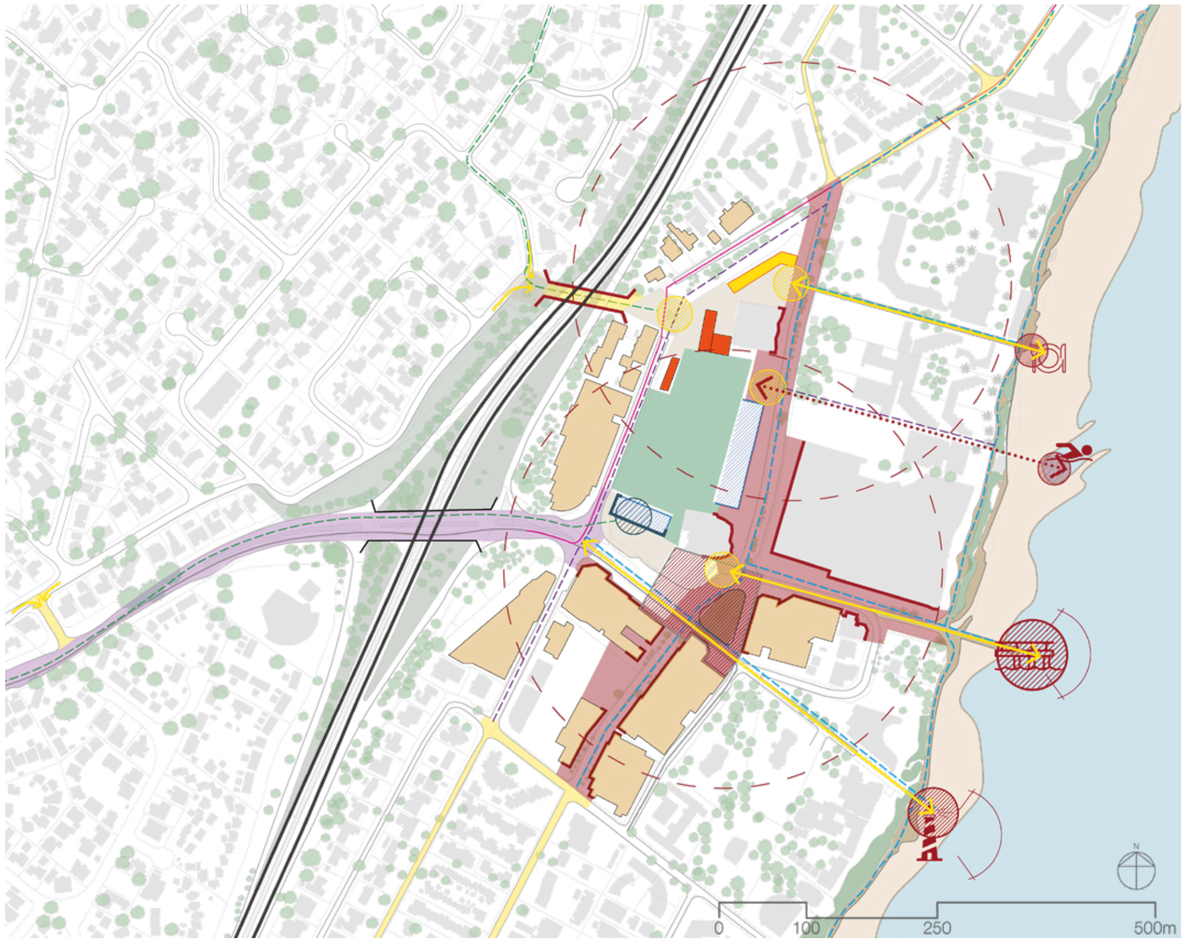


Figure 7.14 The framework above focuses on areas and points where old and new infrastructure can be incorporated with private and public facilities to promote inclusivity.
Source: Author

The frameworks look at connection between the coastline, the site and the surround neighbourhood by introducing new infrastructure that bridges across the highway create direct access into precinct where there are proposed forecourts that are gateways into the site. There is the proposed transport edge on the more commercial edge of the site and proposed housing on the residential side with the in between spaces housing interaction between existing and proposed private commercial, green spaces and community facilities. The surrounding sites ideal for mixed use intensification running along the activity corridor which priorities the pedestrian and allows vehicular movement along the proposed route.

7.6 Design Development - Oceans uMhlanga Site

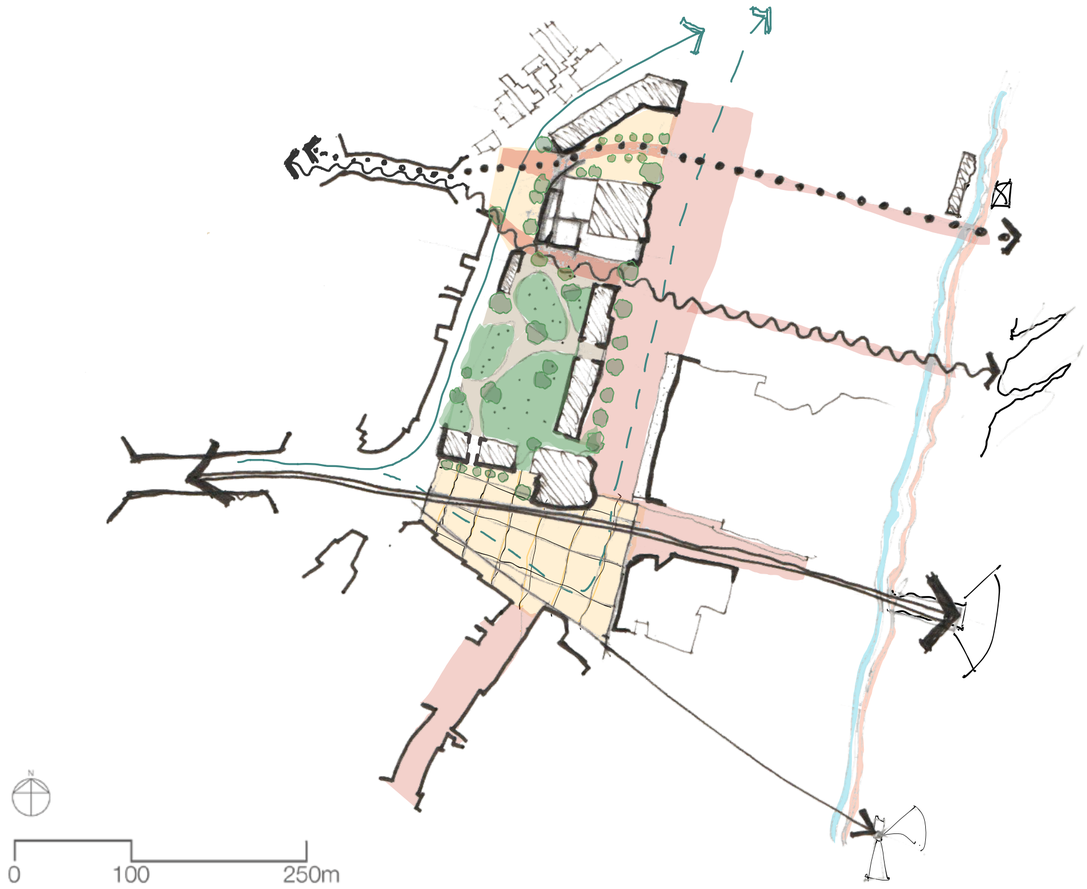


Figure 7.15 The development of the precinct design began with the notion of the lack of green spaces present in uMhlanga besides the beach, so green public open spaces was a priority, east-west movement from the beach to the streets as well as more organic movement on the micro scale through the site and active interfaces which looked inside towards the site and out towards the street.
Source: Author

Figure 7.16 Green spaces
Source: Author

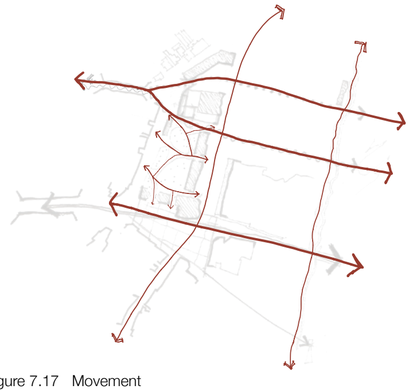


Figure 7.17 Movement
Source: Author

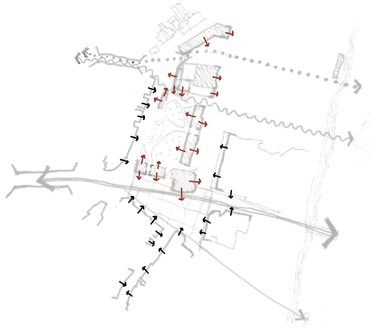


Figure 7.18 Active interfaces
Source: Author

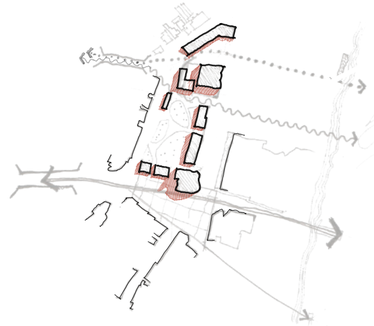


Figure 7.19 Morning shadows
Source: Author

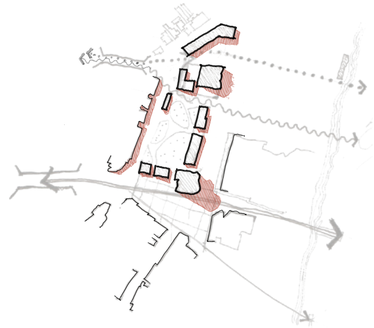


Figure 7.20 Afternoon shadows
Source: Author

7.7 Precinct Design

The design develops into creating squares and plazas that allowed arrival into the site from the existing and proposed movement corridors. The first is the village square which allows some vehicular movement but prioritises the pedestrian, which leads into the lighthouse plaza, where the transportation hub and commercial activities are located to support and initiate activity.

The big landmark of the existing Radission Blu Hotel is an anchor on the site and the movement of people filter through into the internals of the site in the village green where commercial activities have active edges facing the green and front onto Lagoon Drive.

On the northern precinct, there is the existing residential tower with commercial activity along the edges, close to the residential tower lies the proposed library, workspace, and workshop facilities that open onto the plaza where there is proposed housing that connects to the residential neighbourhood through the new bridge.

1. The Village Square
2. uMhlanga community clinic
3. Lighthouse Plaza
4. Radission Blu Hotel
5. commercial facilities
6. transport hub
7. commercial facilities
8. The Village Green
9. commercial facilities
10. community facility
11. new walkway and cycle path to beach
12. Lagoon Plaza
13. co-working space
14. Oceans residential tower
15. uMhlanga Library
16. community workshop space
17. Ridge Plaza
18. walkway to beach
19. events plaza
20. inclusionary housing
21. new bridge linking uMhlanga Ridge and Village

Figure 7.21 Precinct proposal
Source: Author

These existing and proposed activities are grouped into nodes within the precinct, being the commercial node of transport, commercial and hotel, the green space as the heart of the precinct, and the community node which consist of the existing social facility and proposed.

Figure 7.22 Focus areas within the precinct
Source: Author

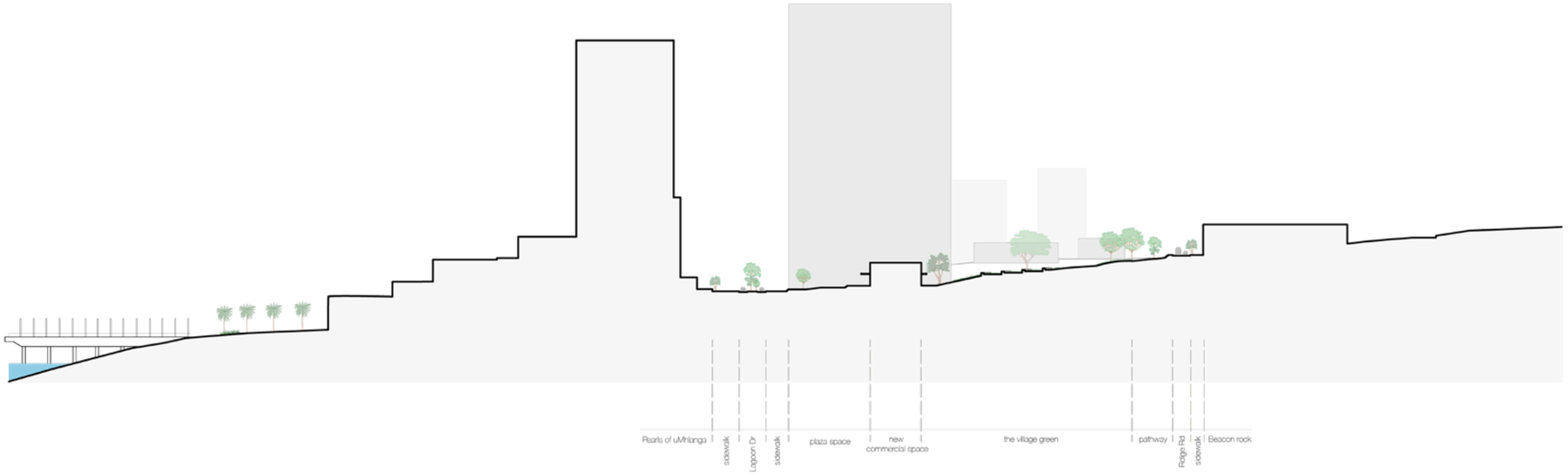


Figure 7.23 Section A-A
Source: Author

Figure 7.24 Section B-B
Source: Author

The design intention was to use the natural slope of the site that can encourage movements towards the ocean and bear in mind of the surrounding buildings scale with proposed building being 3-4 stories to relate to human scale.

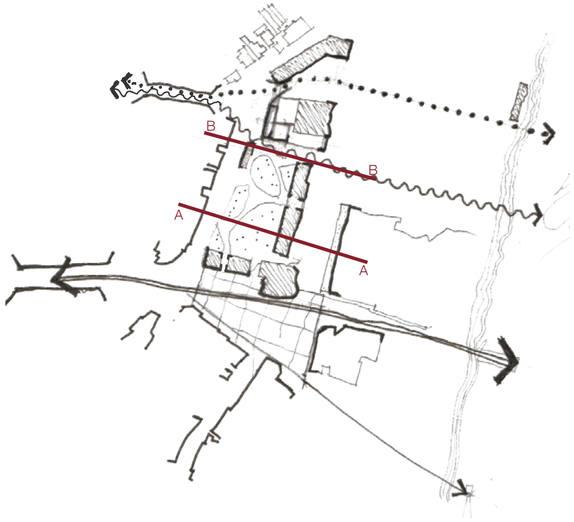


Figure 7.25 Section lines
Source: Author

Figure 7.26 Focus area - green space
Source: Author

Figure 7.27 Focus area - community node
Source: Author

The green spaces terraces down allowing spaces for people to stop and gather while sitting in the sun and allowing the commercial activity to spill out onto the greens as well as overlook it.

The community node has trees placed around it to provide shading as well as street furniture where people can wait as large lines usually form for the social facility so keeping in mind to accommodate that activity previously existed and the new activities that are proposed.

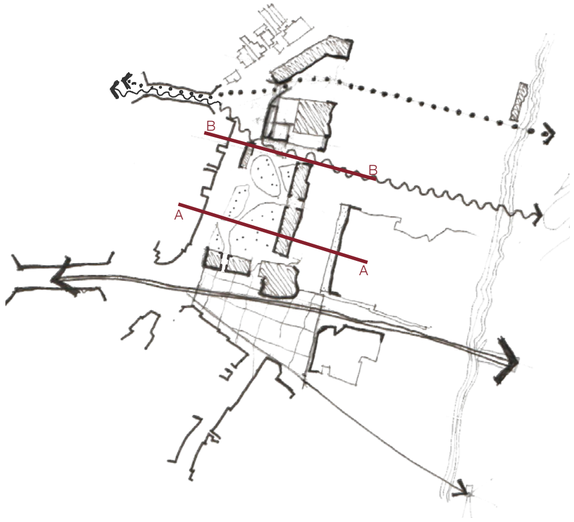
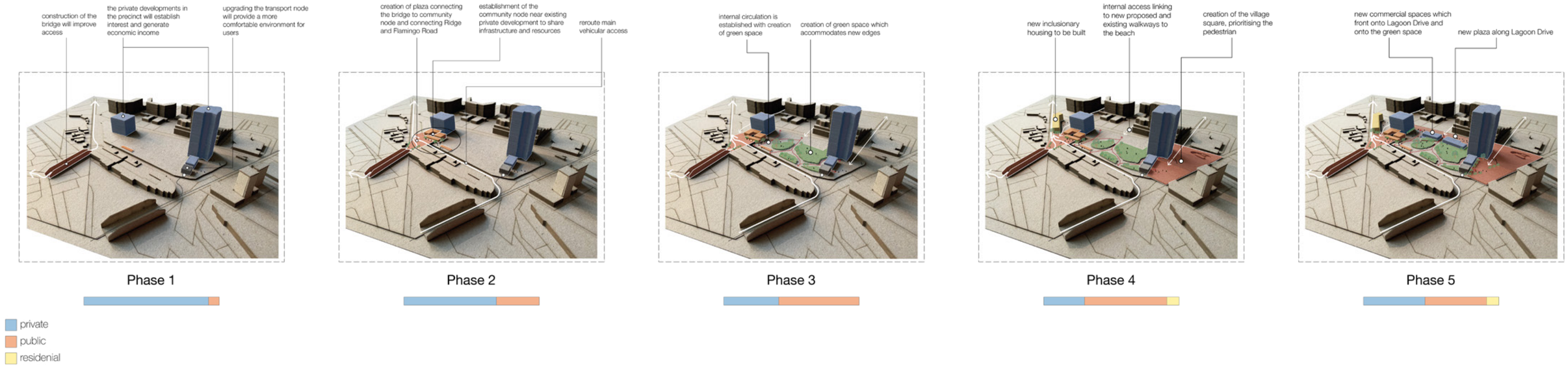


Figure 7.28 Section lines
Source: Author

7.8 Phasing Plan



Phase 1 will begin with construction of the new bridge to improve direct access into the precinct as well the upgrading of the transport node.

Phase 2 looks at establishing the community facilities near the existing infrastructure and there is already existing commercial activity on the site to generate income.

Phase 3 and 4 is the implementation of the in between spaces, such as the village green to create internal circulation and linking into existing movement patterns. Housing to be accommodated as well as the creation of the public squares so mostly public facilities.

Phase 5 includes the new commercial spaces along Lagoon Drive which facilitates new activity along that street that links into the existing activity.

Figure 7.29 Project phasing. The phasing plan looks at achieving a balance of private and public though the different phases.
Source: Author

08 ETHICAL CONSIDERATIONS

All spatial data for this research project was obtained from publicly available sources and domains.

Ethical considerations were made such as interviews are voluntary and will be done with the consent of research participants and individuals can choose not to be distinguished due to their personal choice.

All site photos and site visits were done without compromising any individual.

Furthermore, all research participants had the right to remain anonymous and the information that was disclosed is confidential.

09 CONCLUSION

Throughout the project, my awareness of the injustice of public space has increased. I have come to the realisation that just because a development is built and existing does not mean it should be there. A closer look has been taken at social and community values within these large-scale developments which are often overshadowed by economic value and gain.

My current proposal looks at how private and public partnerships can be established all while achieving economic gain and increasing the value to all users. Instead of focusing on the maximum bulk that can be achieved, there needs to be a shift towards including the existing community rather than developing for tourists.

The proposal of this precinct looks to create a link between residential, existing commercial, and the natural. The site sits centrally within the context making it an ideal opportunity to be the space that connects the neighbourhood to the context that allows free movement, generates income and has community value.

But with developments like these emerging, we are moving away from the inclusive cities we desire to the exclusive bubbles which isolate and divide us. Achieving and proposing the middle ground between private and public is the way to bursting the bubble.

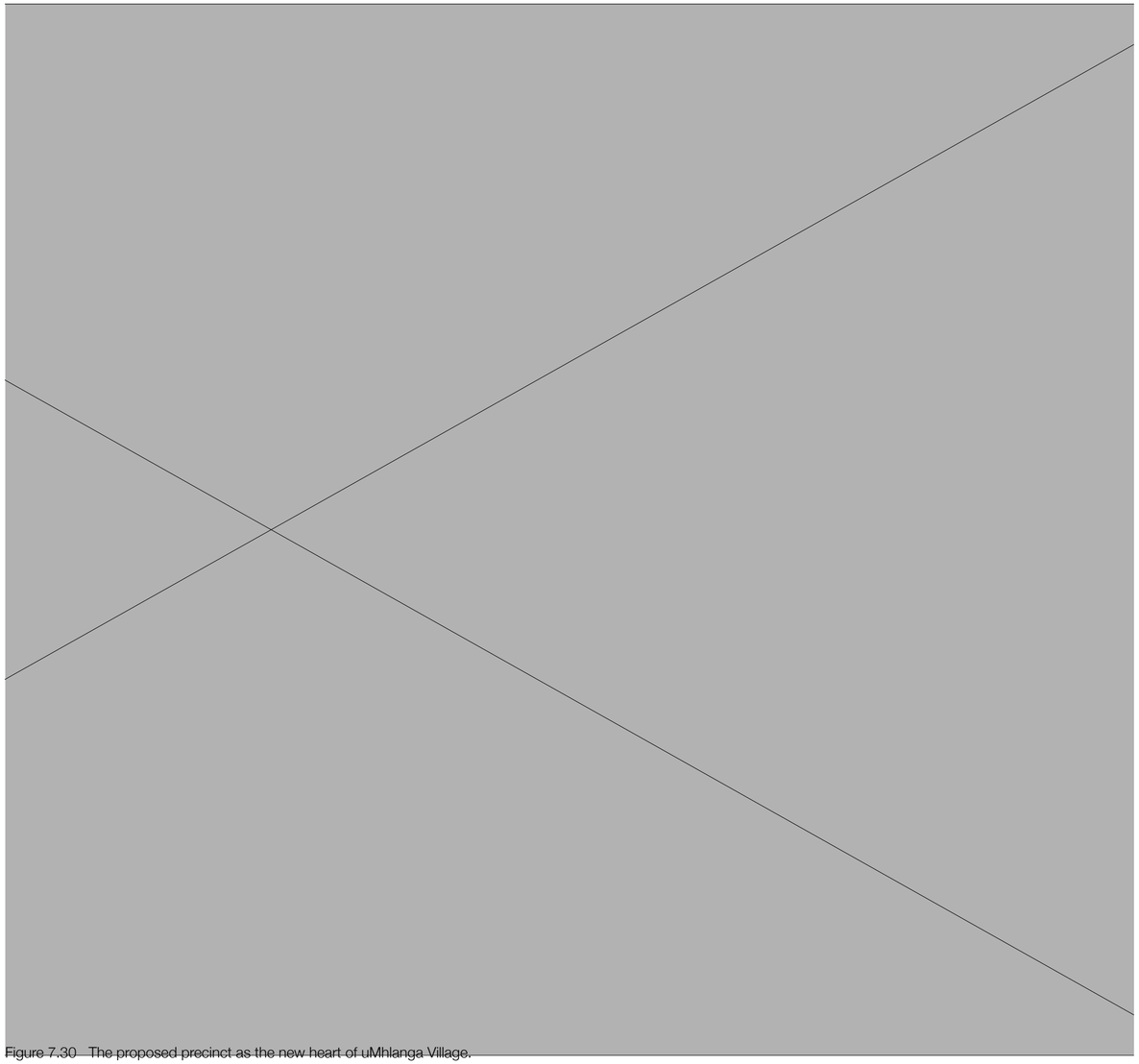


Figure 7.30 The proposed precinct as the new heart of uMhlanga Village.
Source: Author

BIBLIOGRAPHY

Albers, Patricia & Wright, Caradee & Olwoch, Jane. (2010). Developing a South African pedestrian environment assessment tool: Tshwane case study. South African Journal of Science. 106. 1-8. 10.4102/sajs.v106i9/10.187.

Amis, P (1999) Urban economic growth and poverty reduction, Theme Paper 2, Urban Governance, Partnership and Poverty, University of Birmingham, Birmingham

Bechstein, E. (2010). CYCLING AS A SUPPLEMENTARY MODE TO PUBLIC TRANSPORT: A Case Study of Low Income Commuters in South Africa.

Broughton, T. (2022, October 15). Zuma Pal Vivian Reddy's high-end r4bn Umhlanga project under threat with new lawsuit. Fin24. Retrieved October 25, 2022, from https://www.news24.com/fin24/companies/zuma-pal-vivian-reddys-high-end-r4bn-umhlanga-project-under-threat-with-new-lawsuit-20221015

Byerley, M (2000) Durban Metro - A city facing up to the housing challenge, Paper presented at the Illustrative Cities Seminar, Hangzhou, China, 19-23 October 2000

Casale, D and Thurlow, J (1999) Poverty, inequality and human development in the Durban Metropolitan Area, Report prepared for the Economic Development Department, Durban Metropolitan Council, Durban

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. BMC Medical Research Methodology, 11(1). https://doi.org/10.1186/1471-2288-11-100

Cox, P. 2010. Moving people. Cape Town: University of Cape Town Press.

Darwin Holmes, A. G. (2020). Researcher positionality - a consideration of its influence and place in qualitative research - a new researcher guide. Shanlax International Journal of Education, 8(4), 1–10. https://doi.org/10.34293/education.v8i4.3232

EThekwini Municipality (2002b) eThekwini Municipal Area Development Profile: Changing Durban for good Urban Strategy Department, eThekwini Municipality, Durban

Felin, B. (2017). Fortaleza and São Paulo Experiment with Street Transformations |. TheCityFix. Retrieved 28 February 2022, from https://thecityfix.com/blog/fortaleza-and-sao-paulo-experiment-with-street-transformations-bruno-felin/.

Gallery of the new york high line officially open - 11. ArchDaily. (n.d.). Retrieved October 25, 2022, from https://www.archdaily.com/24362/the-new-york-high-line-officially-open/1677788389_dsr-highline-09-06-5384?next_project=no

Gehl, J., & Gemzoe, L. (1996). Public spaces, public life: Copenhagen 1996. Copenhagen: Danish Architectural Press and the Royal Danish Academy of Fine Arts, School of Architecture.

Goldberg, D. (2018). Portland's Street Design Experimentation Creates a Redrawn Paradigm. Sightline Institute. Retrieved 28 February 2022, from https://www.sightline.org/2018/08/09/portland-street-design-complete-streets-greenways/.

Govender, H. (2019). <Govender _ Hivanie _2019.pdf>

Guitink, P. 1996. Strategic Planning for Non-motorised Mobility. The world Bank, Transport NO. OT-4, 01-07.

Heurkens, E. (2012). Private Sector-led Urban Development Projects: Management, Partnerships & Effects in the Netherlands and the UK.

Khisty, C. 2003. A Systemic Overview of Non-Motorised for Actionfor Developing Countries: An Agenda for Action. Journal of Advanced Transportation, Vol. 37 No. 3, pp. , 273-293.
Komanoff, C. A. 1993. The environmental benefits of bicycling and walking: Bicycling and Walking Case study No 15. USDOT

Labuschagne, F., & Ribbens, H. (2014). Walk the talk on the mainstreaming of non-motorised transport in South Africa. http://hdl.handle.net/10204/8246

Marx, C (2002) South Africa's experience in the privatisation of its water and sanitation services Case study of Durban, Unpublished report, WaterAid, London

Moodley, S. (2018). Why Do Planners Think That Planning Has Failed Post-Apartheid? The Case of eThekwini Municipality, Durban, South Africa. Urban Forum, 30(3), 307-323. https://doi.org/10.1007/s12132-018-9357-0

Moses Mabhida Stadium. Moses Mabhida Stadium | South African History Online. (n.d.). Retrieved October 25, 2022, from https://www.sahistory.org.za/place/moses-mabhida-stadium

Ncube, M., Shimeles, A., & Verdier-Chouchane, A. (2014). South Africa's Quest for Inclusive Development. In International Development (pp. 697-713). https://doi.org/10.1093/acprof:oso/9780199671656.003.0042

Nomico, M., & Sanders, P. (2003). Dichotomies of urban change in Durban. URBAN DESIGN International, 8(4), 207-222. https://doi.org/10.1057/palgrave.udi.9000102

Priscila Izar & Tatu Mtwangi Limbumba (2021) A matter of value: assessing the scope and effects of Tanzania's national housing corporation's development strategy on Dar es Salaam's urban neighbourhoods, International Journal of Urban Sciences, 25:sup1, 195-217, DOI: 10.1080/12265934.2020.1810105

PropertyWheel. (2016, December 20). Umhlanga Rocks – interesting facts. Property Wheel. Retrieved October 25, 2022, from https://propertywheel.co.za/2016/12/umhlanga-rocks-interesting-facts/

Rall, S.-A. (2022, October 19). In pics: A look at Durban's decaying CBD. Independent Online. Retrieved October 25, 2022, from https://www.iol.co.za/news/south-africa/kwazulu-natal/in-pics-a-look-at-durbans-decaying-cbd-4db71f77-f31e-4667-b90f-c018aa49ce11

Rastogi, R. 2011. Promotion of non-motorised modes as a sustainable transportation option: policy andplanning issues. Current Science, Vol. 100, No. 9, 1340-1348.

Roger Behrens (2005) Accommodating walking as a travel mode in South African cities: Towards improved neighbourhood movement network design practices, Planning Practice & Research, 20:2, 163-182, DOI: 10.1080/02697450500414686

Ryan, E., & Nolan, M. (2017). A public-private recipe for sustainable urban development. GreenBiz. Retrieved 7 September from https://www.greenbiz.com/article/public-private-recipe-sustainable-urban-development

Tak, R., & Hirandas, L. (2020). Design elements to rejuvenate Indian Streets: A case of Bellasis Road, Mumbai. WRI INDIA. Retrieved 28 February 2022, from https://wri-india.org/blog/design-elements-rejuvenate-indian-streets-case-bellasis-road-mumbai.

Turok, I. V., Justin. (2018). Inclusive Urban Development in South Africa: What Does It Mean and How Can It Be Measured? IDS Working Papers, 512.

Spatial mapping of proposed development projects in Ethekwini. Lumec. (n.d.). Retrieved October 25, 2022, from http://www.lumec.co.za/portfolio/spatial-mapping-of-proposed-development-projects-in-ethekwini/

Uytenbogaardt, & Dewar, & Todeschini, Fabio. (2000). Uytenbogaardt, R.S., Dewar, D., Todeschini, F. (2000) “A Framework for Settlement Making” Chapter 2 in CSIR (ed) Guidelines for Human Settlement Planning and Design, , ISBN 0-7988-5498-7, Pretoria, pp 1-7..

Watson, V. (2013). African urban fantasies: dreams or nightmares? Environment and Urbanization, 26(1), 215-231. https://doi.org/10.1177/0956247813513705

Zhao, Chun-Li & Yang,. (2012). Design of Staying Space & Emergence of Public Life—The Study on Jan Gehl’s Theory for Public Space Design (Part 2). 28.199. 44.

APPENDIX 1

Ethics Application Form

Application for Approval of Ethics in Research (EiR) Projects
Faculty of Engineering and the Built Environment, University of Cape Town

ETHICS APPLICATION FOR

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: htt ://www.ebe.uct.ac.za/ebe/research/ethics1

APPLICANT'S DETAILS

Name of principal researcher, student or external applicant		Vahira Moodley
Department		Architecture, Planning & Geomatics
Preferred email address of applicant:		vahiramoodley@icloud.com
If Student	Your Degree: e.g., MSc, PhD, etc.	Master of Urban Design
	Credit Value of Research: e.g., 60/120/180/360 etc.	60
	Name of Supervisor (if supervised):	Kathryn Ewing
If this is a researchcontract, indicate the source of funding/sponsorship		N/A
Project Title		Connecting into a broken network

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.

	Full name	Signature	Date
APPLICATION BY			
Principal Researcher/ Student/External applicant	Vahira Moodley		17/05/2022
SUPPORTED BY	Full name	Signature	Date
Supervisor (where applicable)			
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).	Nancy Odendaal		24 May 2022
Chair: Faculty EIR Committee For applicants other than undergraduate students who have answered YES to any of the questions in Section 1			