



urban LIVELIHOOD

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UNIVERSITY OF CAPE TOWN

Faculty of Engineering & the Built Environment
School of Architecture, Planning and Geomatics

Rondebosch, Cape Town, 7701
Telephone 1: +27 (0)21 650 2362
Telephone 2: +27 (0)76 484 2417
Fax: +27 (0)21 689 94666

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(60 Credits)
In the School of Architecture, Planning and Geomatics

STUDENT: Carl William Schmidt
STUDENT NUMBER: SCHCAR076
DISSERTATION TITLE: URBAN LIVELIHOOD

University of Cape Town, December 2021

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EXECUTIVE SUMMARY

Problem statement

The CBD of Cape Town is found within the walled-in mountainous valley, commonly referred to as the City Bowl. Market forces are pushing small-scale businesses/craftsperson's from this economically vibrant area with very few affordable retail / workspace opportunities on offer. The residential component of the CBD has a similar set of problems with market forces. There are too few housing opportunities for the middle- and lower-income groups. Market forces perpetuate the narrative of developing housing opportunities for these income groups on the periphery of the metropole, far from economic activity.

The Research Question

How can underutilised state-owned properties along a key movement route in the Cape Town City Bowl be reimaged to promote economic diversity and inclusion?

Proposed Goal

Titled "Urban Livelihoods", this project sets out to reimagine the economic centre of Cape Town, with inclusive, well-located housing and economic opportunities.

Proposed Solution

This project explores how we can stitch new designs into the existing fabric of the City Bowl of Cape Town, using well-located parcels of land and available buildings. Key well located state-owned sites are identified within economically vibrant neighbourhoods. These sites will be reimaged to envisage inclusive residential and economic opportunities within the CBD of Cape Town.

Methods

The researcher gathered information from interviews, site visit observations, mapping and sketching the CBD. This information was curated and formed the basis for the designs that followed.

Design Conclusion

The creative element of this project inspires an urban design framework to reinvigorate stagnant land or buildings and strategies to harness the productive energies of a city. Through these mechanisms, vibrant spaces will open and foster thriving communities. If these frameworks and strategies can be achieved, maintained, and yield inclusive growth then the project is a success.

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01 INTRODUCTION



AFRICA
Figure 1.1



REPUBLIC OF SOUTH AFRICA
Figure 1.2

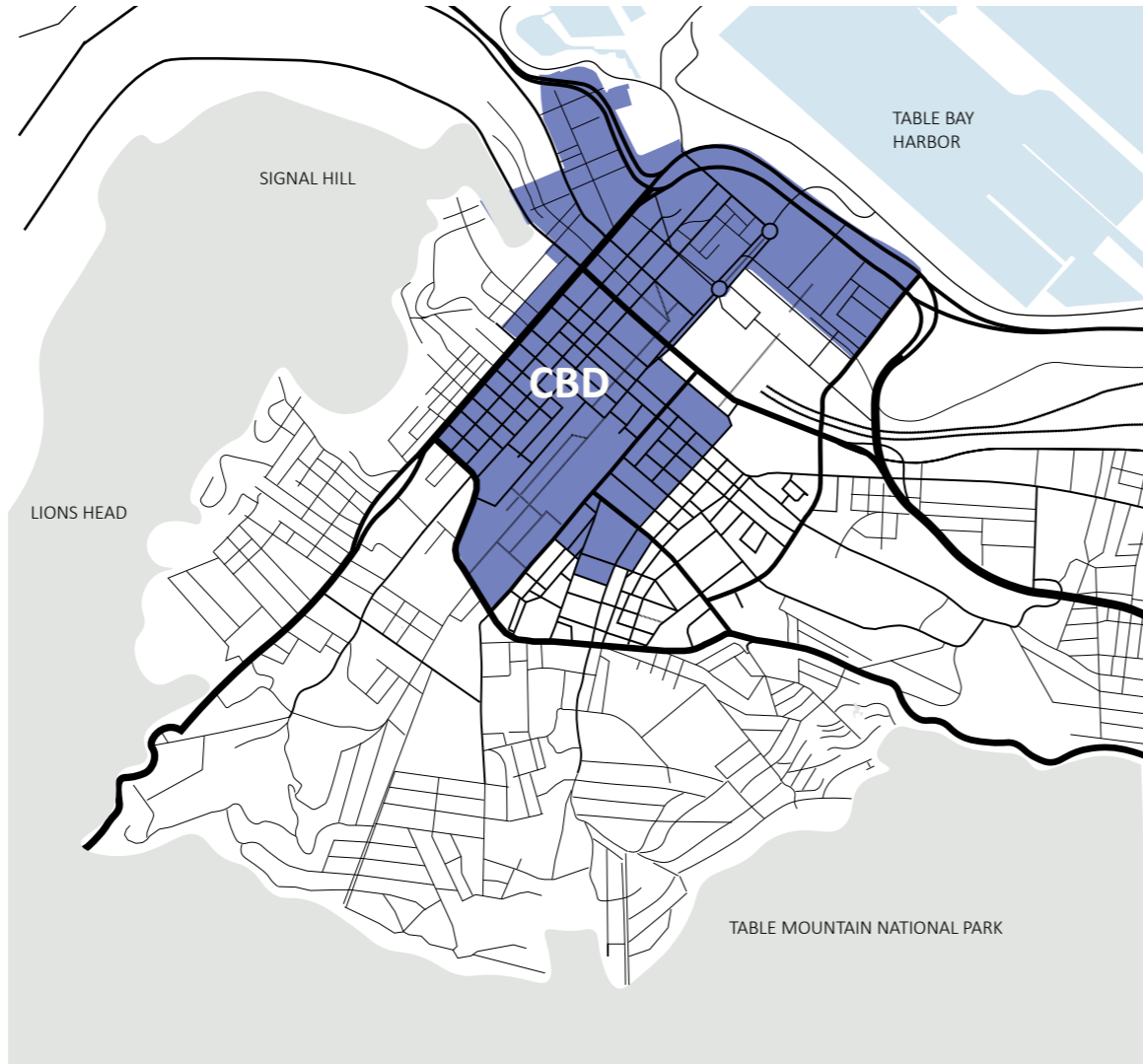


WESTERN CAPE PROVINCE
Figure 1.3



CBD
(Central Business District)

CITY OF CAPE TOWN
Figure 1.4



CBD OF CAPE TOWN NESTLED IN THE CITY BOWL
scale 1:40 000
Figure 1.5

CITY OF CAPE TOWN LABOUR FORCE

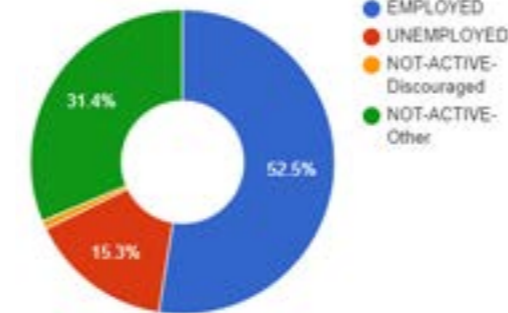


Figure 1.6

NATIONAL LABOUR FORCE

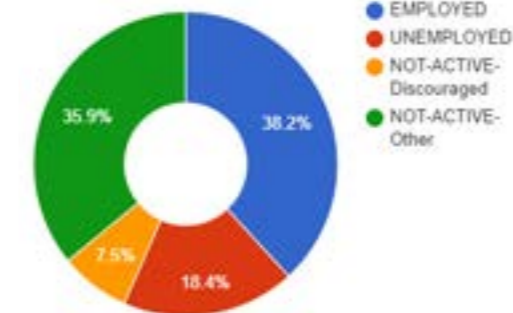


Figure 1.7

1. INTRODUCTION

Cape Town is a city of contrasts, with a wonderful natural biosphere wrapping the metropole, contrasted with a fractured urban system within that requires repair. The fractures can be traced to long before Apartheid spatial planning was ratified, however, this was also responsible for the rip that split our city apart.

The goal of this urban design research project, Urban Livelihoods, is to break the cycle of providing housing on the periphery, and reimagine the economic centre of Cape Town, the CBD, and the city bowl in a way that offers inclusive, well-located housing and economic opportunities for those that are marginalised.

At the foot of Table Mountain stands the Central Business District for the City of Cape Town. This is where the urban development started first as a small village of settlers, displacing local people from the beginning.

This CBD is economically active, yet due to market forces, opportunities are not easily accessible to small-scale businesses. This CBD has a residential component, but due to market forces, it is expensive, and not accessible to most people.

Today as the nation seeks to solve the housing crisis, this urban design research project, Urban Livelihoods, examines how we as designers can create a new vision, activate inclusive housing and economic opportunities next in the CBD of Cape Town.

The urban design research project, Urban Livelihoods, explores how we can stitch Cape Town back together, using well-located parcels of land and available buildings. Market forces always push the poor to the periphery, and it is the purpose of this project to design a framework for inclusive growth. The project, Urban Livelihoods, identifies key state-owned sites which are well located within economically vibrant neighbourhoods. These state-owned

sites will be evaluated in the design to envisage inclusive residential and economic opportunities within the CBD of Cape Town. The aim is to stitch these interventions into the existing neighbourhoods and create an even better urban fabric.

1.1 AVAILABLE LAND

The apartheid spatial planning coupled with modernist urban theory practices arranged the cities of South Africa in a disconnected urban form and land use was separated. Large tracks of land were positioned for future growth across the metropolitan. These very land parcels have created hostile and sterile environments. Today these land parcels present an opportunity for inclusive development. Good urban design principles can be deployed to ensure the monotony and sterility will be broken.

1.2 AVAILABLE BUILDINGS

Functional requirements change over time, as organs of state move or merge, leaving behind buildings or land that can be used to fulfil another critical role. Vacant buildings present an opportunity.

1.3 CONTEXTUAL ASSESSMENTS

As a city grows and develops, actively used state-owned properties (open unused land, car parking lots, and buildings) in well-located areas should always be assessed and valued for position and spatial efficacy in con-

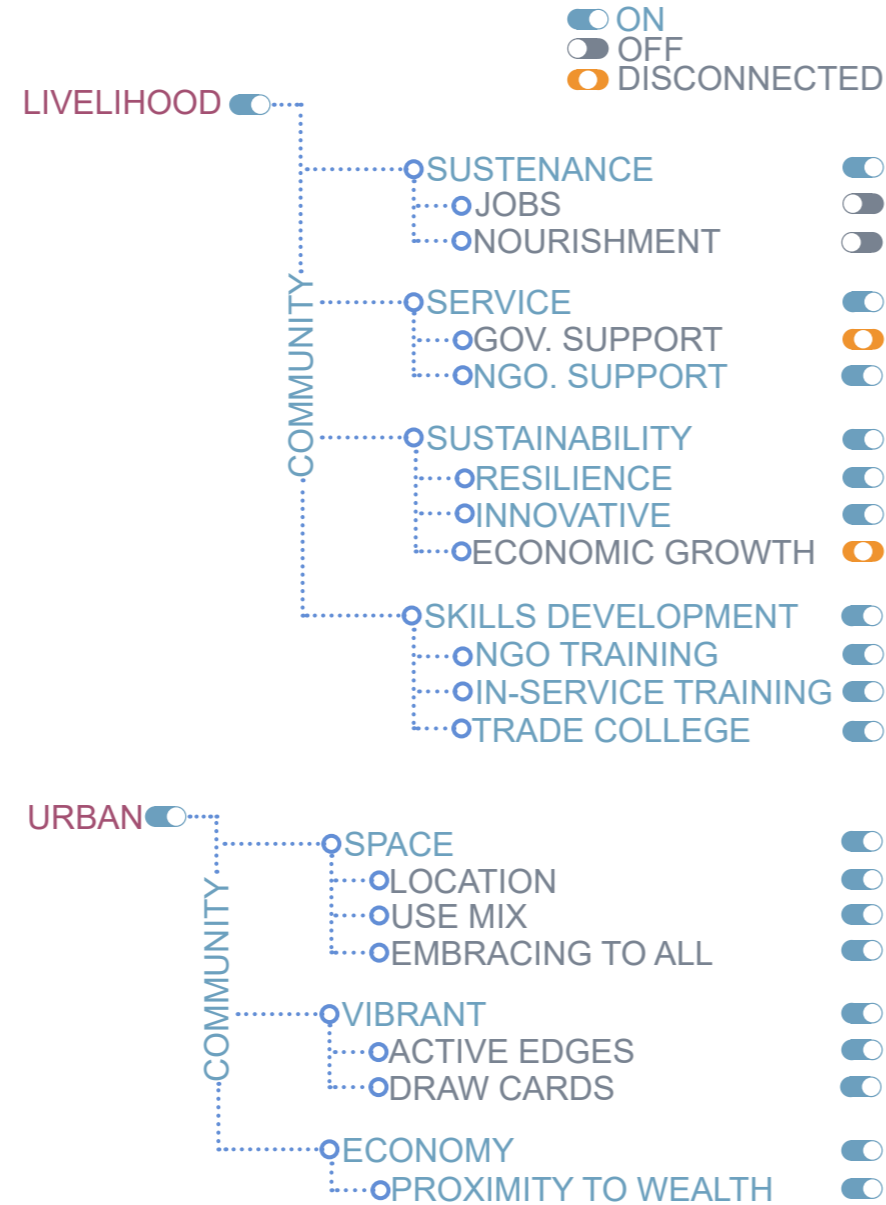
text. Well-located properties present opportunities for inclusive mixed-use developments.

1.4 INWARD GROWTH AND EQUITY

In 2018 the City of Cape Town adopted a radical development shift in urban policy, the Municipal Spatial Development Framework of 2048, encouraging inward growth, and choosing density over the urban sprawl. (CityofCapeTown, 2018) This will enable the city to allocate its resources optimally. The poor and marginalised also stand to benefit, as pressure is now on state agencies to start developing unused land in well-located areas, closer to employment, education, and state-provided services. The benefits also include less travelling times for the commuting population and provide more time for family, secondary employment, or night school. The environment also stands to benefit, as traffic congestion could be reduced.

1.5 RESILIENCE / SELF SOLUTIONS

The unemployment rate in South Africa currently stands at 34.4%. (Reuters, 2021) thus creating social and economic strain on society. (Davies & Thurlow, 2010) The informal sector contributes between 18-20% of GDP



UNPACKING THE PROBLEMS AND OPPORTUNITIES
 Figure 1.8

in Cape Town. (City of Town, 2003 and Battersby, 2012 as cited in Oldfield, 2014) There are harsh realities to face in life, and especially in the urban context, where sustenance comes via a commodity.

There are debates as to how to define “informal” (Chen et al., 2004, as cited in Oldfield, 2014) and how to the distinction between “informal” and “entrepreneurial”. It is not the goal of this design by research to establish a definite term of reference for the categories of informality, however, when designing with purpose, one item that should be considered is the lack of uptake of those entering the informal marketplace. The South African informal market is noticeably smaller when measured against other nations of similar economics. (Maloney, 2004; Schneider, 2002 as cited in Davies & Thurlow, 2010) The smaller market may be attributed to the harsh realities of setting up and sustaining a small business in South Africa. These realities include working in economically dire neighbourhoods, insecure and fluctuating incomes, and having no access to bank loans. (Oldfield, 2014) Additionally “high crime levels” are seen as a hindrance to informal traders. (Ranchhod, 2006 as cited in Davies & Thurlow, 2010, p. 437)

For this urban design research project, Urban Livelihoods, the goal is to provide an inclusive framework from

which the informality can be accommodated and operated.

Whether legal or illicit, home base enterprises (HBE) are often the only economic opportunity people have. A fundamental shift in Planning (and other sectors) needs to take place to harness the energy marginalised people exert in surviving day by day to an actual sustainable long-term entrepreneurial livelihood. (Charman et al., 2020)

1.6 URBAN WEALTH

The prosperity and poverty wealth gap will not close when cities are divided. Strategic positioning of livelihoods is vital in creating a regenerative city. Urban designers should consider economic inclusivity and wealth accumulation when designing urban spaces.

1.7 REIMAGINING THE CITY

This project sets out to re-imagine the city’s available state-owned land and inside state-owned buildings. The goal is to harness the resilience of small business owners and provide well-located platforms for living and livelihood.

1.8 POLICY

The National Development Plan of South Africa states that “New spatial arrangements could fundamentally transform job and livelihood prospects. Spatial transformations will reduce travel time and cost between home and work and increase mobility for poor households to access better jobs and education opportunities. This, in turn, will reduce poverty and inequality.” (National Development Plan: Vision for 2030, 2011, p. 292)

02

RESEARCH POSITION + QUESTION

Rapid Urbanisation in Cape Town from rural South African and future afield has led to people living on the periphery of the city with little to no means to make a livelihood. Parcels of well-located yet underutilised state-owned properties litter the landscape but are overtly protected from formal/informal development. A new dialogue has commenced to reconcile our cities and accommodate the growing population within these well-located areas. We as urban designers should set out frameworks to best create a spatially efficient city and allow it to economically thrive for all.

The city of Cape Town's housing list currently stands at 347 000 people. (Serra, 2021)

1.1 RESEARCH QUESTIONS

How can underutilised state-owned properties along a key movement route in the Cape Town City Bowl be reimagined to promote economic diversity and inclusion?

2.2 RESEARCH AIMS

Three important strategic lenses need to be applied when researching towards finding the design of this project.

A) High Streets. A high street will bring the feet that will create economic opportunities.

B) Vacant and Underutilised public/state-owned land on or close to these High streets. Public / State-owned land will mitigate the high cost of land in well-located areas. High cost is normally the very reason projects are pushed to the periphery where land is cheaper.

C) Areas / Neighbourhoods that can accommodate fine-grained mixed-use developments.



View over the CBD of Cape Town

Figure 2.1

03

LITERATURE REVIEW

1.1 BASELINE

Cities should evolve incrementally and organically from settlements, growing as the population grows. Forced political interferences in this evolution during apartheid, coupled with modernist theories on planning in South Africa have created systems of separate developments, with vast sterile tracks of land in-between as buffer zones. These systems broke down the natural vibrancy and collective growth, creating a fractured city.

1.2 RAPID URBANISATION

South African cities are not immune to the international trend of urbanisation. The urban mirage of wealth drawing people away from rural settings under false illusions creates a displaced poverty trap, or “Urbanising poverty” a term used by Edgar Pieterse. (Pieterse, 2011) Rapid rural to urban migration has added additional strain on the already struggling metropolitan infrastructure.

As an effect of globalization and capitalism, economic opportunities in rural areas are drying up. People living

in abject poverty are moving into urban contexts under the promise of a better life, but this new world only greets them with the harsh reality of urban poverty. (Pieterse, 2011)

1.3 TRANSPORT

The fractured city has created cumbersome commuting for those living on the periphery of the city. Single-direction commutes of up to 40km between work and home are the lived experience of many. (Dewar, 2015) People living far from work have to migrate daily between various “worlds”. (Pieterse, 2011) These transitions in Cape Town are exacerbated by the transport sector. The urban poor is dependent on largely unreliable and expensive public transport systems including both formal buses and informal taxis.

1.4 COSTLY TO THE POOR

The contrast that the financially marginalised have to commute the furthest, (Dewar, 2015) speaks to the spatial injustice of Cape Town. These transport costs further exacerbate structured inequity and the lack of

generational wealth accumulation, which are both major factors in understanding the poverty experienced in South Africa. Transport costs can be drastically reduced when people are given a choice on where to live. An urban framework designed for densification and efficiency will go a long way in providing living opportunities closer to work.

3.5 RIGHTS TO THE CITY

Due to the fractured state of Cape Town, not everyone has an equal footing in this city. Edward Soja argues, in the paper titled “Beyond Postmetropolis” that when we spatially understand the concepts of “accumulating inequalities, injustices, and oppression of the contemporary world,” there is the potential to envision strategic urban opportunities and solutions. (Soja, 2011, p. 464)

3.6 DENSITY

The goal of this design research project is to reimagine the existing fractured city, starting from the economic hubs, and develop frameworks that can support organic urban infill developments. The reimagining is to take place on the plentiful state-owned land parcels that are scattered around the city. There is no logical reason for organs of state to hold onto well-located surplus land parcels. (Parnell & Pieterse, 2010) These land parcels are either vacant or occupied, with functions that could move to make way for an

efficient and inclusive growing city.

As the urbanisation migration continues, spaces are contested, and livelihoods are threatened. New markets will open however it is down to careful planning to ensure the dovetailing of these new markets with new populations. The competition will drive growth, so contestation will be encouraged, as the unrelenting hold of poverty needs to be broken.

Normally townships struggle to get clinics and social facilities built in their neighbourhoods as the densities are not high enough to support such budget allocations. For the City Bowl, the roles are reversed, the facilities are built, and the land lays in wait for social justice developments to be built.

When density increases activity, this changes the viability when planning public services and transport. (Dewar, 2015) People also feel safe in areas where others are around to watch as this act has observational security.

3.7 ECONOMIC PLATFORMS

Small businesses must start somewhere, and start-up capital is not always available. In striving for a more inclusive economy, informal entrepreneurs need to be accommodated. Informally small business starts with their base operations within the home. These home industries are an important livelihood sustaining form of

URBAN LIVELIHOOD

income generation across Africa. (Lawanson & Olanrewaju, 2012) Humans are resilient and will eke out a living to sustain a family. Using the home base as a base for livelihood generation is most often the only option an unemployed person has. They can apply their trade from home, producing goods and services, which can be transported when the product is ready for market.

With the cost of living at an all-time high, a single-income household is not viable. Families with children cannot always afford a child-minder. An adult family member needs to dovetail their child-minding duties with a home-based industry task, to generate an income. (Hiralal, 2010)

(Hiralal, 2010), offers an insight into the lives of entrepreneurial women who work from home. Their self-perception is of being invisible and unemployed yet form a key element to the informal sector. Looking after children is dovetailed with production tasks like weaving or baking. Often poverty would force people to live with extended family to spread the burden of costs.

3.8 HOME INDUSTRY CONCERNS

(Strassmann, 1987) outlines the need for easing regulations to allow for more autonomy on residential sites. Other cautionary items are addressed, such as health and safety concerns as well as labour rights that could be hidden from view.

The red tape of formal business should be assessed, as many informal businesses operate on ‘no-mans-land’ and therefore fall in a precarious grey area. The book “Township Economy” has highlighted the disadvantaged position business are put into when land rights and other issues create administrative hurdles. In many cases agency was not afforded to the business operators because of bureaucratic bugles over land ownerships or in some cases zoning rights. (Charman et al., 2020) As home industries remove the immense reliability of citizens on the state, they should be able to slip into a government-aided stream for start-up entrepreneurs.

Both the readings of (Lawanson & Olanrewaju, 2012) & (Tipple, 2006) caution against home-based industries being used by big corporates wishing to offload production work onto home-based workers, for cheap labour, zero factory rent and hidden from view of the authorities.

3.9 URBAN DESIGN

The two themes of livelihood and housing can be intertwined to form a wholistic new built environment.

The CBD of Cape Town has a network of crisscrossing high streets that attract pedestrian users. Various streets puncture further than the immediate CBD and venture further into neighbouring areas. These

streets are mobilised by pedestrians who arrived at the Cape Town transport hub and others that live and work in the City Bowl. High Streets with strong pedestrian movement patterns are optimal when seeking vibrant edges to place income-generating shops etc. These street edges, shop fronts, and doors need to be dynamic and interesting to keep the visual pedestrian wanting more, and returning. There is a direct correlation between the number of doors you have into shops along a street edge and the population dynamics on the sidewalk. Varied entrances and mixes bring energy to the street realm. (Gehl, 2001)

The mere visual porosity to see into a shop or onto restaurant tables outside draws people closer, with the ultimate goal of spending their money. (Gehl, 2001) It is important to keep the high street active at all times of the day as this promotes a sense of security, and this can be achieved with a good mix of functional building uses. Streets that attract more people are safer from “vandalism and crime”. (Gehl, 2001, p. 127)

Inclusive

Public space can bring people from all walks of life to an equal territory to rub shoulders if not also interact, these “integration-orientated” (Gehl, 2001, p. 101) planning imbue an inclusive dynamic that would be great

to bring into Cape Town City Bowl / CBD.

The uses

A compact city with mixed uses will foster a busy public space at all hours and therefore create a safer place to walk alone for long periods of the day and night. An active street is a defended street. (Jacobs, 1992) This will have an accumulative effect, the desire to partake in a safe public realm will draw in more people and this will positively grow the local economy.

3.10 THEORETICAL CONCLUSIONS

Reimagining the city into a new century, the principles of social justice blended with good urban design theory should be assessed in existing neighbourhoods.

URBAN LIVELIHOOD

04 CASE STUDIES



PHOTO OF BRICKFIELDS DEVELOPMENT
Figure 4.1

4.1 BRICKFIELDS – GAUTENG, SOUTH AFRICA

Category: Residential

Site: New Works

Typology: 4 – 9 walk-ups (mixed)

Units: 742

Population: 1600

Critic: Whilst the development provides an injection of people living in the city, the pedestrian experience on the edges of the site is bleak and do not engage with the street. The edges could also have been activated as interims of retail, providing a platform for small home industries to interface with pedestrians/clients/customers.



PHOTO OF VICTORIA YARDS
Figure 4.2



AERIAL PHOTO OF VICTORIA YARDS
Figure: 4.3

4.2 VICTORIA YARDS – GAUTENG, SOUTH AFRICA

Category: Retail / Events Space

Site: Existing Factories. The light industrial area bordering a residential area

Typology: Various

Units: 76 Businesses

Critic: Re-purposing these industrial buildings and providing a platform for small businesses seems to have been successful. The scale and grain of the development seem to be within keeping of the area, and from what it seems the area was ripe for investment. The edges seem porous and inviting for visitors or pedestrians walking past.



BEFORE PHOTO OF INACTIVE EDGE
Figure 4.4

4.3 BUILDING EDGE ACTIVATION – CAPE TOWN CBD, SOUTH AFRICA

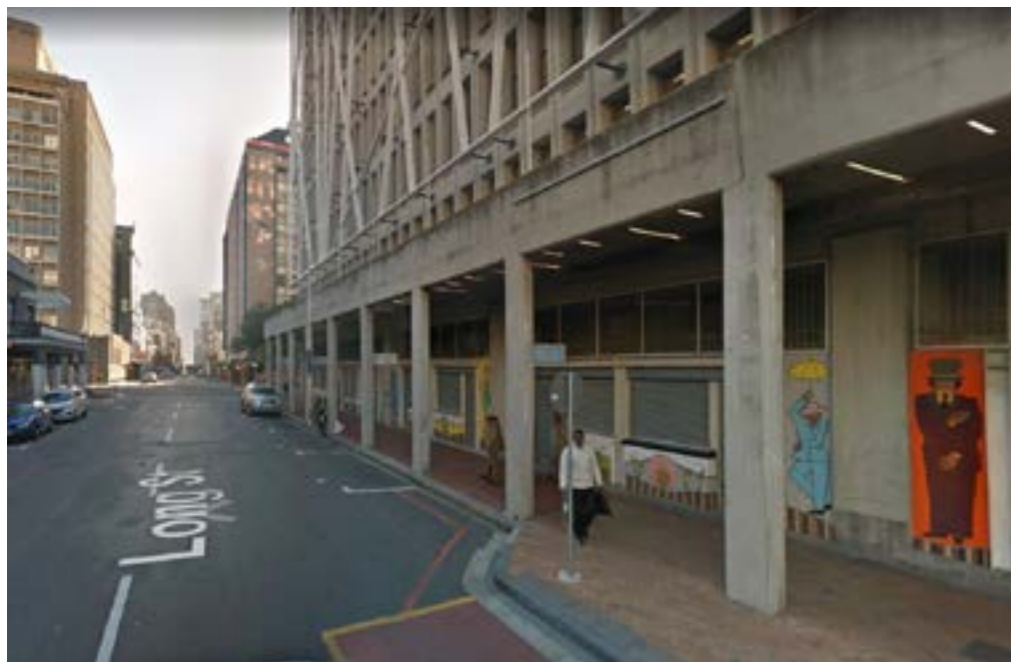
Category: Urban Design – Dead edges activation

Site: Existing blank facade on Provincial Administration building

Typology: Small Shop Fronts

Units: 10 Shops / Stalls

Critic: Responding well to the passing foot trade, this activation brings to life a previously unimaginative building edge. These permanent trading stalls activation provided a smaller trading platform for smaller businesses. The roller shutter provides an easier life for the trader, who can leave his goods on in-situ freeing up the normal packing up nightly ritual. The extra time gained can be



AFTER PHOTO OF ACTIVATED EDGE
Figure 4.5

05 RESEARCH METHODS

5.1 Research Aims

The aim is to untangle the multi-layered complexities and create an urban interventional framework for an accumulative Urban Livelihood.

5.2 Research Approach

Qualitative research will be the best process to actively research urban livelihoods. Day-to-day livelihoods of the poor and marginalised need to be approached with a level of sensitivity. Every person's lived experience and process of living is unique. The research will dissect deep into issues under the lens of creating a livelihood in the urban context in the hope of getting to an understanding of the complexities.

5.3 Methods

5.3.1 Lens:

Through the process of developing this project, the lived reality of people's livelihoods and daily struggle become a reoccurring theme. This will be the lens to process the research required to develop a framework for the design component of this course.

5.3.2 Active Analyses:

Understanding what makes the urban fabric work and where the misgivings are is critical. Urban analyses by way of walking on site, photos and note taking. These notes are mapped, and sketches made. The Pedestrian realm was a key focus as this adds to the vibrancy of an area, which is good for economic prosperity. These sketches have been placed in Chapter 10 of this project.



PHOTO OF SIMBARASH'S FRUIT & VEG STALL
Figure 5.1

5.3.3 Interviews:

Interviews have been conducted with various stakeholders and role players.

Informal Fruit and Vegetable Trader:

Interview Number: 08-102021-01

Site: Adderley Street

Name: Simbarash

Interviewing a successful fruit and vegetable seller in Adderley Street, it was interesting to uncover a few schedules. He runs the shop on his own. Every morning he heads to the city bowl with his truck already packed and ready with some produce. On days that he needs to go to the farmers market in Epping, he asks the adjacent formal shopkeeper to keep an eye out over his table. He prefers to go and handpick his stock, as the delivery service does not give him that option, resulting in him receiving expired produce. He is permitted to use a loading bay throughout the day where he can store his truck. The only hassle he has is when the loading bay adjacent to his table is not available when he needs to offload. These problematics s can lead to small frustrations. However, having his truck allows him to also collect produce for nearby restaurants which he has agreements with and is allowing him to expand his business.

Design: Simbarash has a great relationship with the shop he is positioned in front of. There is also a captive audience of passing trade. Perhaps a permanent roof or table could be designed.



PHOTO OF RHAMEEZ AND HIS CRAFTS
Figure 5.2

Local informal crafts persons 1:

Interview Number: 07092021-01

Name: Rhameez

Site: Zonnebloem

Support Base: Streetscapes NGO

Ramees is a convivial person, a self-taught carpenter, who is not shy to share the ups and downs of living life on the economic edge. He has drifted from being homeless in the Gardens area of the City Bowl to building up his own business from a car garage shop where is also slept. He fell on personal hard times and lost the space. Through personal connections with caring NGOs, he has been able to pull himself up and is living in a co-share house for displaced persons. Raw materials are bought in the form of old wooden pallets and off-cut timber flooring from Albert Carpets warehouse near his workshop. Ramees currently has pockets of storage spaces in the garden sheds of the Streetscapes NGO. These storage spaces allow him to handpick the nicest materials and store them for when he has a suitable project.

Design: Ramees explained that it was extremely difficult to find a place to work from, store his raw materials and find a place to abode. When he was homeless, the City's Law Enforcement office would often confiscate their raw materials and personal items. A business like his would require roughly 3 containers in size. 1 for living, 1 for storage, and one for operations.

Dignity should be the main driver when designing spaces for people living on the fringe of society.

Local informal crafts persons 2:

Interview Number: 15102021-01

Name: Lester

Site: Wesley Street, Gardens

Support Base: Verbal permission to sleep in a private alley next to the building.

Lester was very keen to meet up with us and described his livelihood of craft-ing made-to-order carpentry items. He is currently homeless and has made a shelter next to a vacant building in Gardens Cape Town. He crafts his wares on the sidewalk outside his shelter. He used to work in collaboration with Rameez (Local informal crafts persons 1) He is unable to stockpile handpicked materi-als, and only purchases old pallets and offcut wood when required.

Design: Lester’s requirements would be the same as Rameez, to live and work in dignity.

Formal Economy

Interview Number: 01102021-01

Name: Jacqui Biess

Site: Charley’s Bakery, East City District, Cape Town

Support Base: Self-supporting private business.

This quirky and vibrant bakery always knows how to have fun and bring cheer into people’s lives. People from all ages have for years flocked to have a bite into something new and exciting.

The bakery hires and trains staff in-house. Each staff member is equipped to run a certain task along the production line.

Covid has impacted the food and entertainment industry in Cape Town. With income at an all-time low, due to lockdowns, Jacqui is doing her best to retain staff and keep the shop running. Red tape and inefficiencies render most state support unobtainable during the Covid1-19 pandemic. Perhaps the only posi-tive side to this pandemic is that staff have been equipped with other skills to fill in for staff who are in mandated quarantine on certain days.

National Government

Interview Number: 08092021-01

Name: Mark Allard

Agency: Department of Trade, Industry, and Competition (the DTIC)

Uncovering that the state has national intervention for economic growth, but these tend to be gestured towards the international pull. In the interviews with a person from the DTIC, it was made clear that their focus was on “Special Eco-nomic Zones” which saw new areas being developed, with little intervention to the fine grain economy that could latch onto such developments.

One positive boost for small businesses was the department’s program of tak-ing small businesses on overseas roadshows.

Policy Documentations

the DTIC

A guide to incentive schemes 2021 / 21.

Local Government- Invest Cape Town

Interview: Not Granted

The city has a department of investments, called INVEST CAPE TOWN, where the focus is linked to cutting red tape for foreign investments and formal sector job creation.

Policy Documentations and Media

<https://www.investcapetown.com/>

<https://www.iol.co.za/technology/techsperts/make-future-ready-cape-town-your-base-10ef6ea3-9e4b-4e6d-9998-cc5207fb481a>

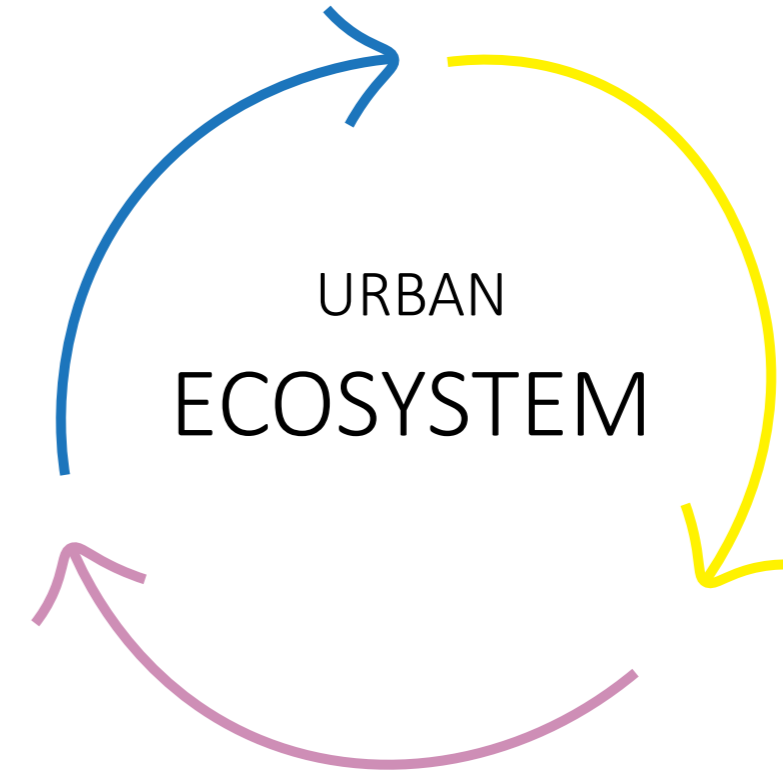


PHOTO OF LESTER’S SIDEWALK WORKSHOP
Figure 5.3

06

DESIGN PROCESS

LIVELIHOOD
IDENTIFYING LIVELIHOOD
DIFFICULTIES THROUGH
INTERVIEWS.



CONTEXTUAL LEVERAGE
MAPPING / SKETCHING ANALYSIS TO
THE SOLUTION FOUND IN THE UR-
BAN ENVIRONMENT

URBAN IMAGINATION
TAILORING THE URBAN DESIGN

LIVELIHOOD

STRIVING FOR DIGNITY



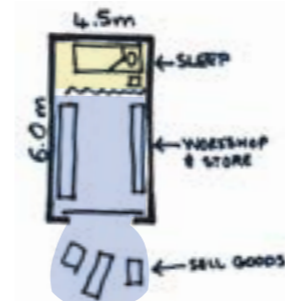
A - TENT NEXT TO CHURCH



B - TREE



C - MOBILE HOUSE

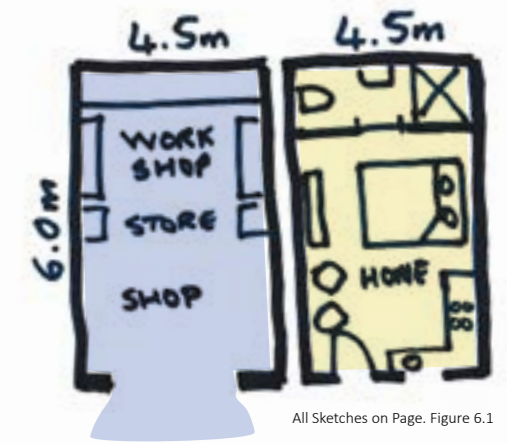


PLAN
D - WORKING AND LIVING IN GA-



SECTION
All Sketches on Page. Figure 6.1

BASIC REQUIREMENTS



All Sketches on Page. Figure 6.1

Rhameez, is a self-taught craftsman and entrepreneur, shared the ups and downs of being homeless and running a business with no savings or start-up capital. His story is about striving for a place to call home and to live in dignity. He has had various home structures taken away from him by the cities Law Enforcement agency. When Rhameez grew tired of living in a tent next to the church on Roeland Street, he built a treehouse home. Law enforcement removed the treehouse. He then built a mobile structure on wheels; law enforcement dismantled the moveable structure. A pivotal point of progress for Rhameez was when he was able to secure a garage space to live and work from, at the active edge next to Gardens Shopping Centre. This arrangement came to an end because of personal struggles, and with no support structures, he was back on the streets having to start from scratch. Today he co-shares a space to work from, however, it is not ideal. The space lacks electricity and storage space

which constrains his ability to flourish. He currently lives in a co-share house run by an NGO. His story is not isolated, there are other people like Rhameez, unable to afford the expensive start-up capital required to rent a workspace in the CBD.

MYRTLE STREET ACTIVATED
(GARDEN CENTRE ECONOMIC HUB)



2009
PHOTO RESIDENTIAL GARAGES
Figure 6.2



2017
PHOTO GARAGE WORKSPACE
Figure 6.3

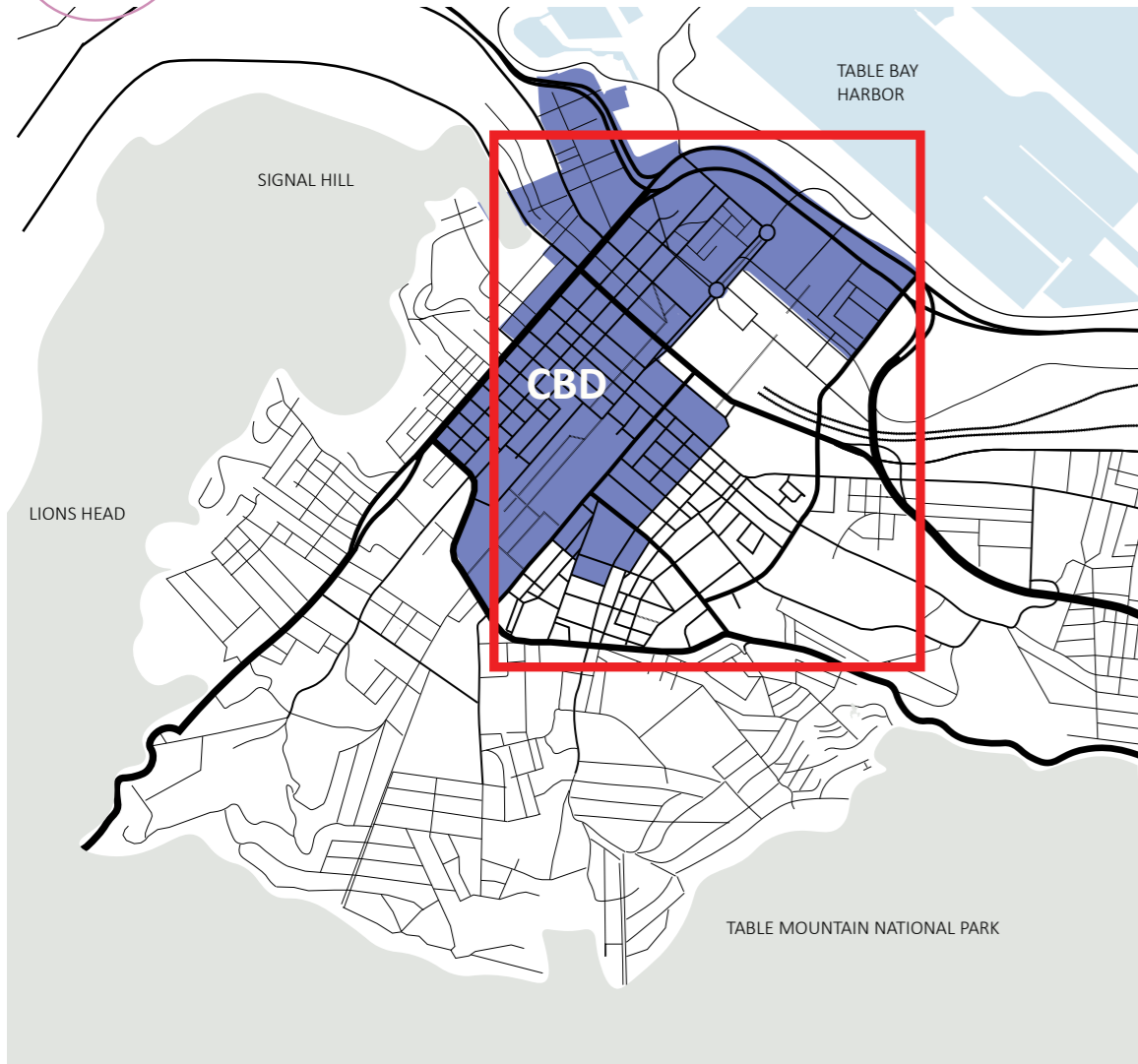


2021
PHOTO OF VIBRANT STREET EDGE
Figure 6.4



2021
PHOTO OF VIBRANT STREET EDGE
Figure 6.5

CONTEXT: the neighbourhood



CBD OF CAPE TOWN NESTLED IN THE CITY BOWL
scale 1:40 000
Figure 6.6

Contextual leveraging is the process of determining what opportunities the context has to offer. For this project, walking mapping and sketching the CBD was used to determine what could be leveraged from the context.

- a) Main pedestrian routes within the city bowl have been mapped. This highlighted where the active edges are. These edges would be the best location for new economic opportunities.....
- b) Minibus taxi commuter routes are very similar to (a). The minibus taxi driver allows people to hop- on hop off anywhere. This dynamic is a great tool to lure customers out of the taxi and spend their money.....
- c) Open land is viewed as an opportunity when located on or near an active route. These parcels of land can be used as catalytic sites along the spine. (Buitenkant Street).....
- d) This route had an untapped tourism potential. Hotels are located near the southern gateway (near Gardens Shopping Centre) and tourist attractions are found along the spine. (Buitenkant Street) The tourist attractions include The District 6 Museum, the Desmond and Leah Tutu Museum and the Castle of Good Hope at the northern gateway to the spine.....

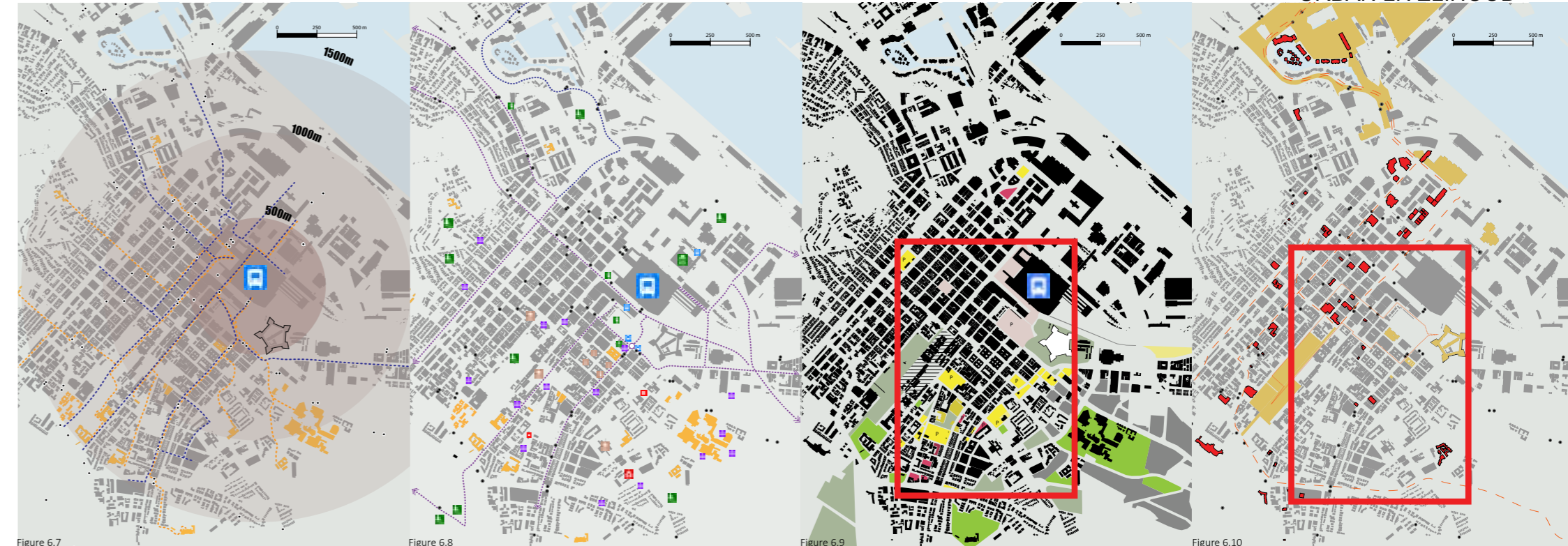


Figure 6.7 a) ACTIVE PEDESTRIANS Figure 6.8 b) ACTIVE COMMUTERS Figure 6.9 c) SITE OPPORTUNITIES Figure 6.10 d) TOURIST MOVEMENTS



CONTEXTUAL LEVERAGE

CONTEXT: the neighbourhood & the street (spine)

EXISTING SPINE AS A SUSTAINING FORCE FOR VIBRANCY

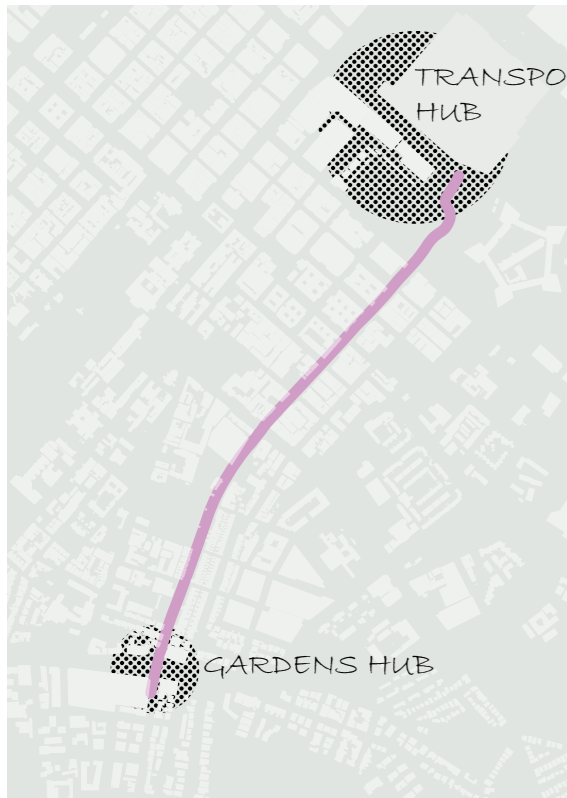


Figure 6.11 Buitenkant Street is identified as a vibrant pedestrian street with 2 key bustling nodes on each end that conduct an energy of feet in both directions, this foot traffic opens up economic opportunities along the route.

EXISTING PUBLICLY OWNED LAND & BUILDINGS CATALYST OPPORTUNITIES

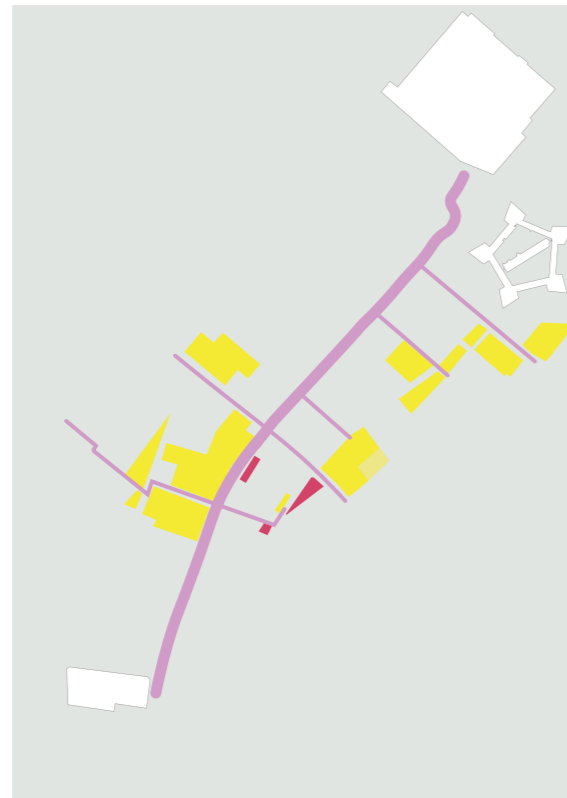


Figure 6.12 A plethora of vacant and underutilized public owned land has been identified along or near to this route. These properties present opportunities for inclusive development.

THE EXISTING MIX OF USE & GRAIN OF THE BUILT ENVIRONMENT IDEAL FOR INTERVENTIONS

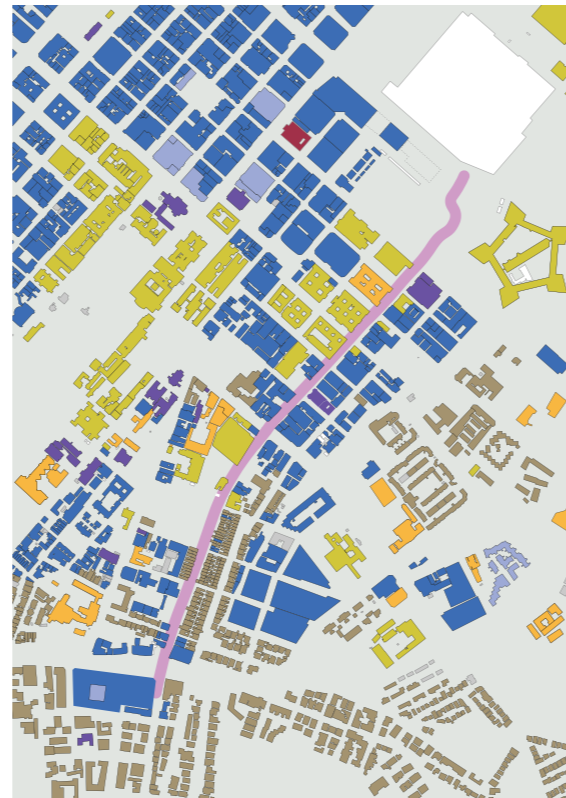
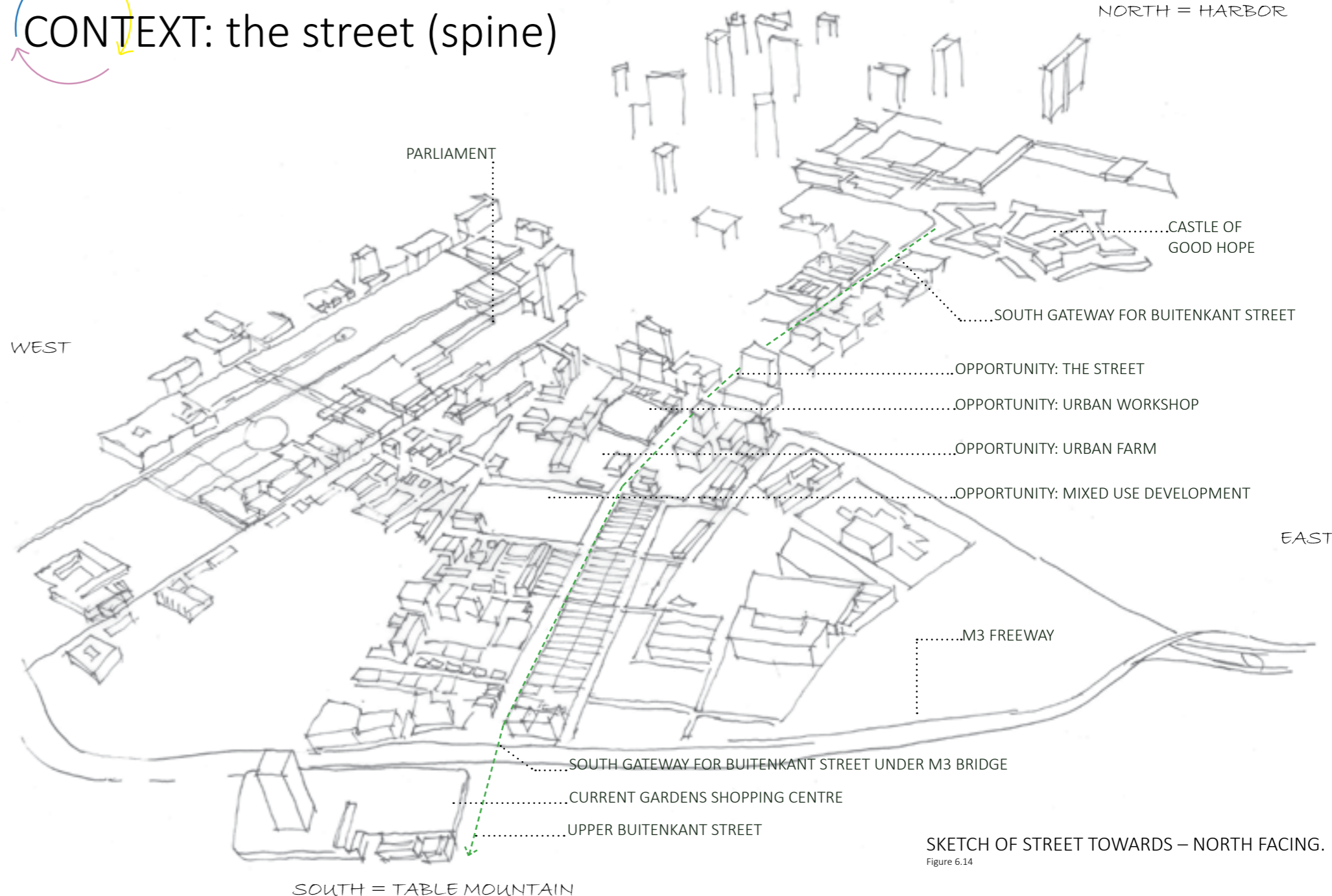


Figure 6.13 A lower order / subservient network can connect these connect these disconnected opportunities with the spine.

CONTEXT: the street (spine)



SKETCH OF STREET TOWARDS – NORTH FACING. Figure 6.14

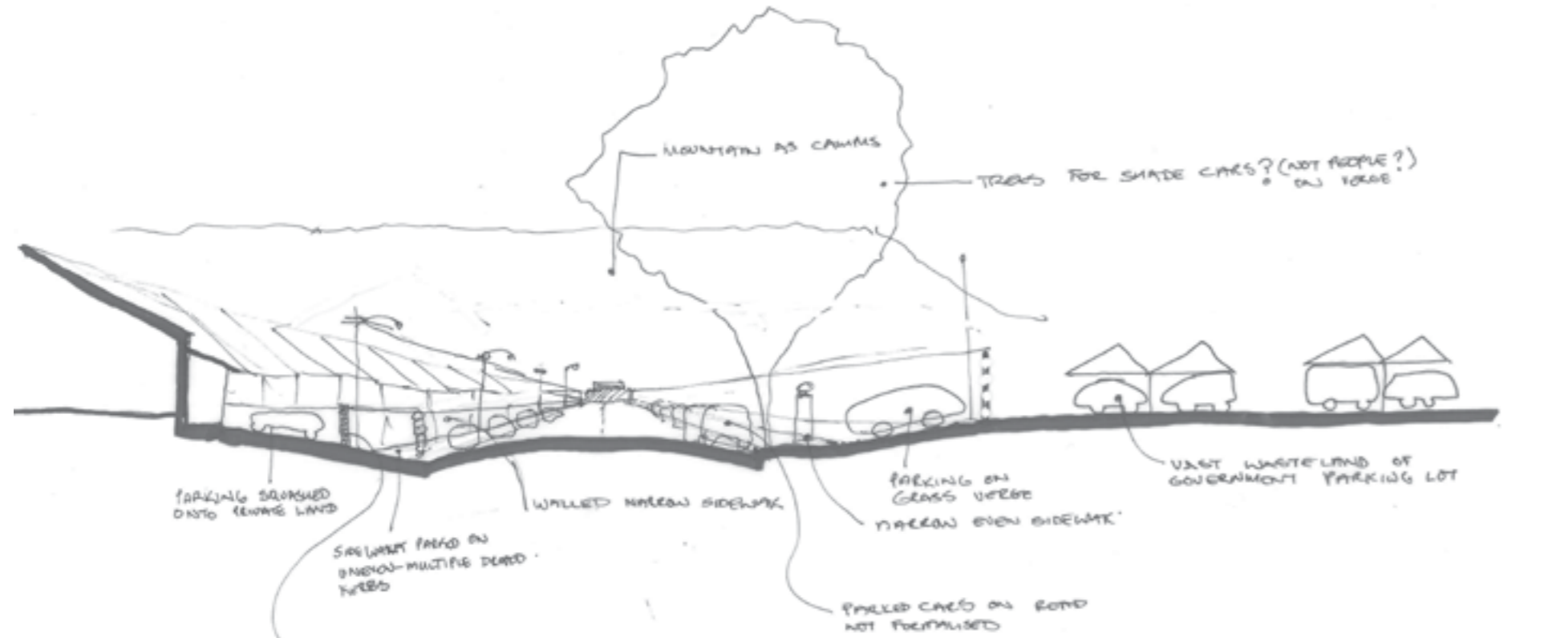


ABOVE SOUTH GATEWAY BUITENKANT STREET, LOOKING TOWARDS THE CBD FROM GARDENS CENTRE (BEFORE PROPOSALS)
FIGURE 6.15



SKETCH OF NORTHERN GATEWAY INTO STREET – LOOKING SOUTH (BEFORE PROPOSALS)
FIGURE 6.17

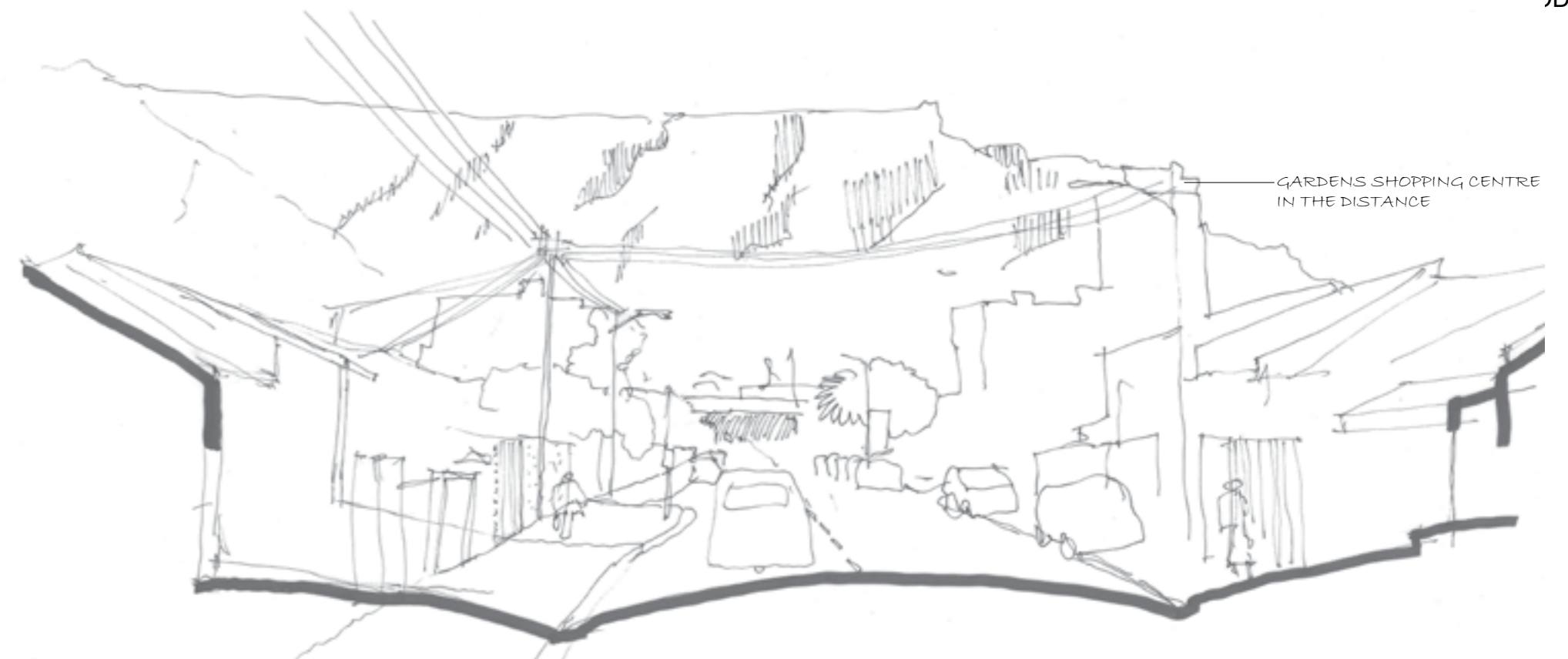
SKETCH KEY
FIGURE 6.16



SKETCH SECTION THROUGH PARKING LOT EDGE – LOOKING SOUTH (BEFORE PROPOSALS)
Figure 6.19



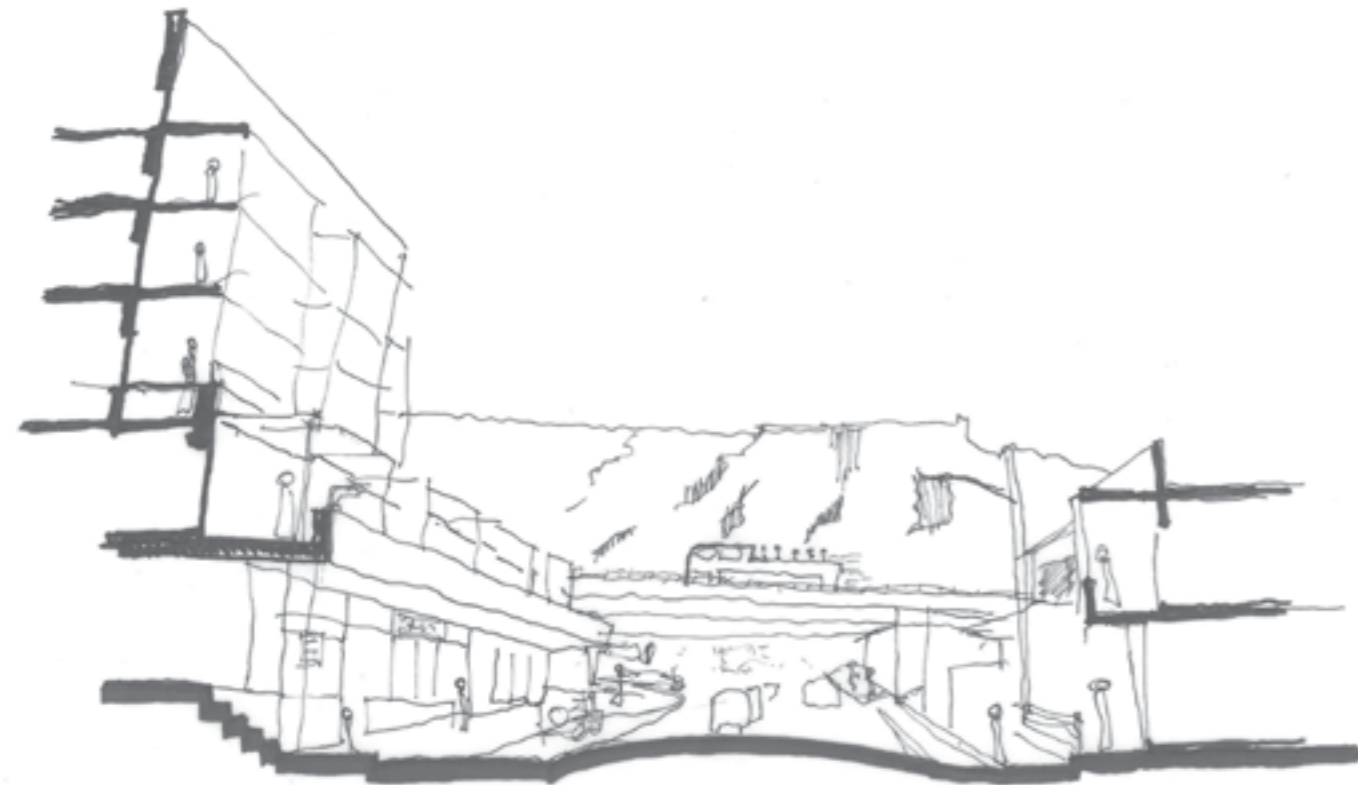
SKETCH KEY
Figure 6.18



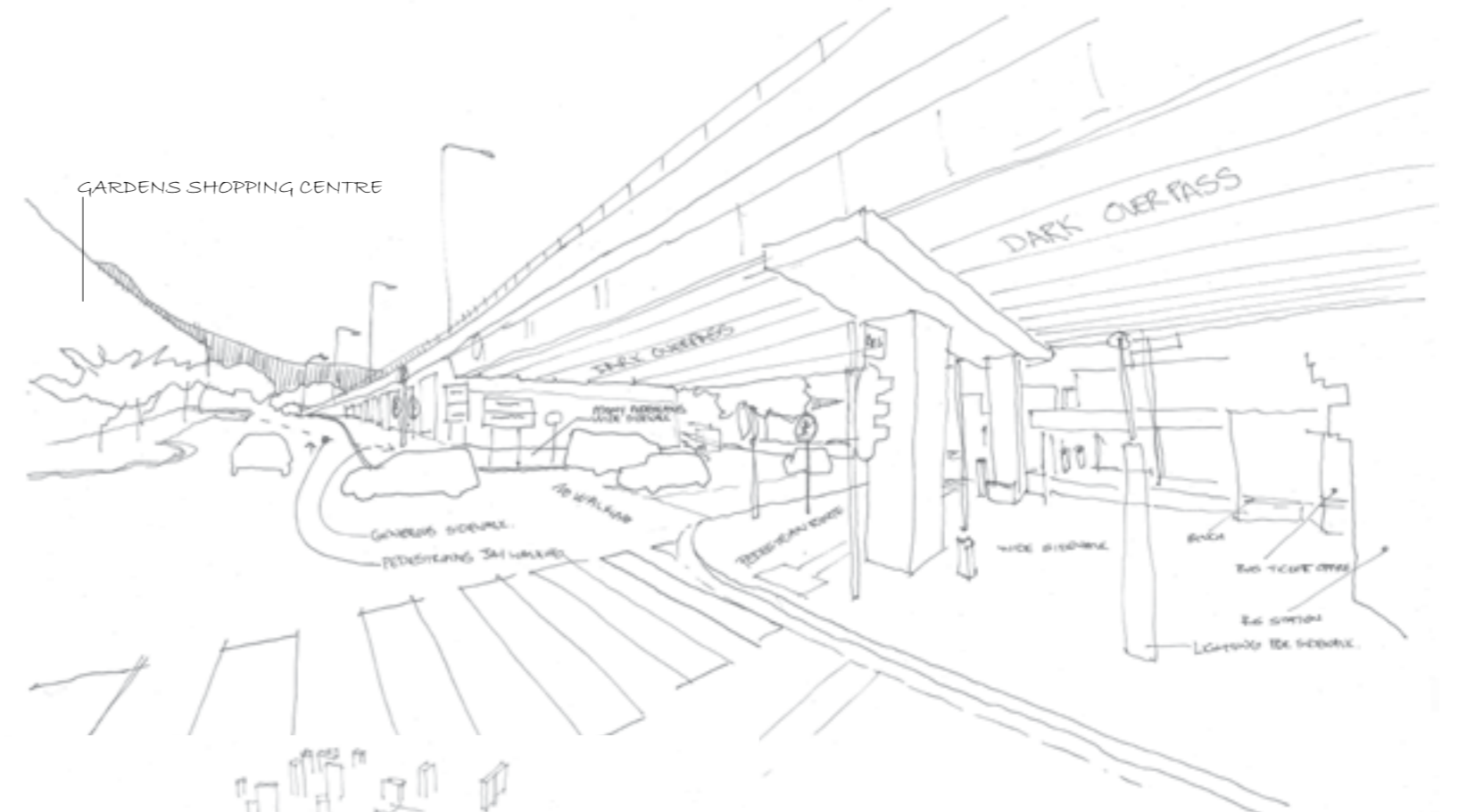
SKETCH SECTION THROUGH LOW RESIDENTIAL EDGES – LOOKING SOUTH (BEFORE PROPOSALS)
Figure 6.21



SKETCH KEY
Figure 6.20



SKETCH OF SOUTHERN GATEWAY – LOOKING SOUTH FROM SMALL ECONOMIC HUB (BEFORE PROPOSALS)
Figure 6.23

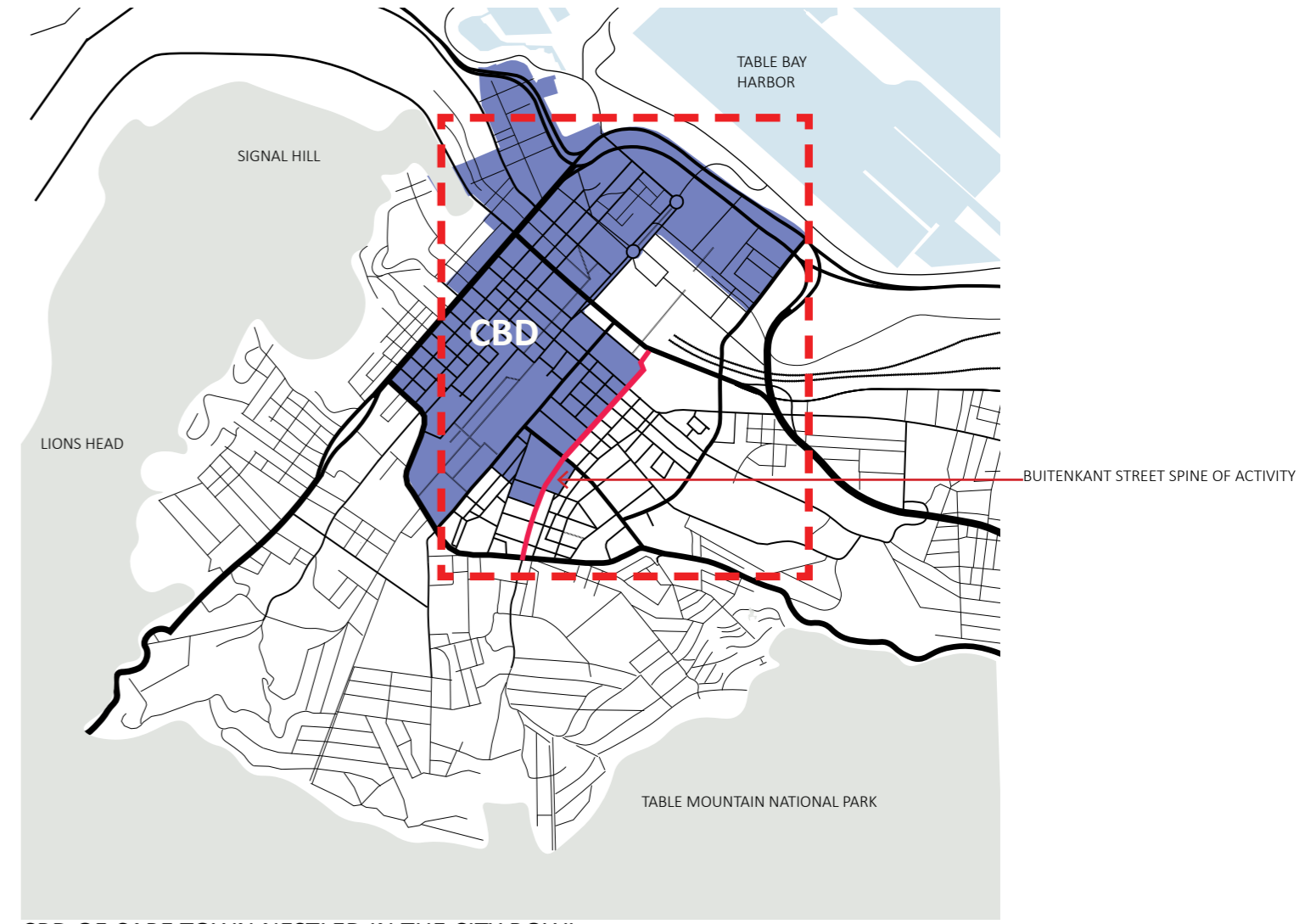


SKETCH OF SOUTHERN GATEWAY AT GARDEN CENTRE BRIDGE – LOOKING WEST (BEFORE PROPOSALS)
Figure 6.25

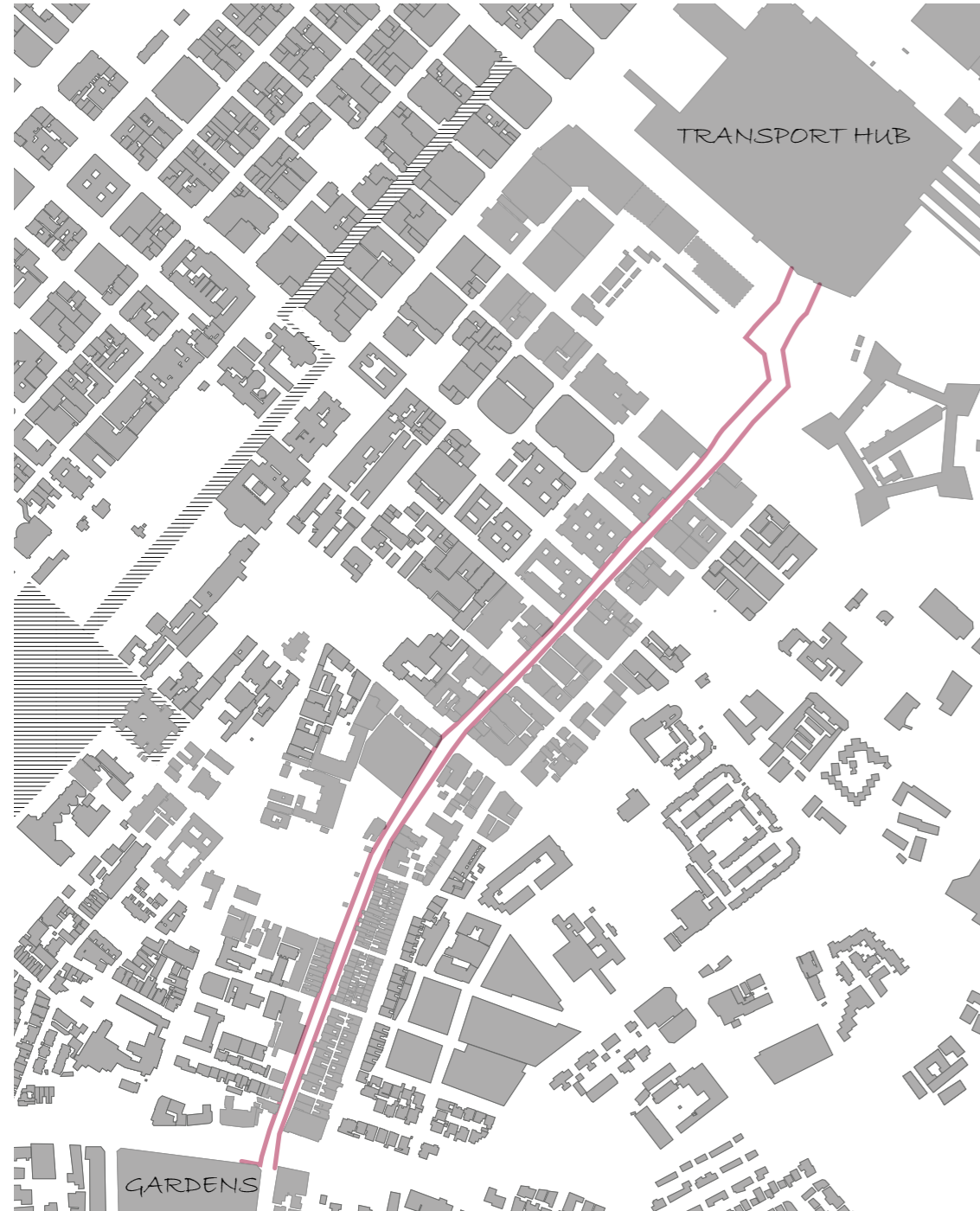


SKETCH KEY
Figure 6.24

IMAGINATION: the spine



CBD OF CAPE TOWN NESTLED IN THE CITY BOWL
scale 1:40 000
Figure 6.6



PEDESTRIAN ACTIVATION



Figure 6.27

REMOVING PEOPLE FROM THE INSULATED CAPSULE OF THEIR CARS WILL CREATE VIBRANT STREETS



Figure 6.28

INTEGRATION OF PEOPLE FROM VARIOUS SECTORS MINGLE IN THE SHARED SPACES OF THE STREET

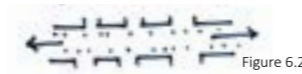


Figure 6.29

STREETS ARE THE LINEA FLOW OF PEOPLE



Figure 6.30

PEDESTRIAN SIDEWALKS MUST BE PRIORITIZED. CARS ARE THE GUEST IN THIS REALM.



Figure 6.31

PARKING BAYS WILL BE REMOVED FROM THIS SPINE



Figure 6.32

INTERESTING CONTACT SURFACE, WILL DRAW A CROWD. MONOTONOUS EDGES WILL REPEL PEOPLE.

LEGEND

- PRIORITISED PEDESTRIAN SIDEWALKS ON SPINE (BUIENKANT STREET)
- MOTOR TRAFFIC CALMING SURFACE
- PEDESTRIAN ONLY STREET
- PUBLIC OPEN SPACE- SQUARE / PLAZA
- BOLLARDS ON EDGES

PEDESTRIAN MAP scale 1:10 000 Figure 6.26



BICYCLE INFRASTRUCTURE

AN INCREASE TO THE SPINE ACTIVITY WILL OPEN UP ECONOMIC OPPORTUNITIES

CONNECTIONS TO METROPOLITAN BICYCLE LANES IN THE FUTURE



Figure 6.34

REPLACING PARKING WITH BICYCLE LANES HAS NO NEGATIVE CHANGE IN SALES INCOME FOR ADJACENT BUSINESS MUNICIPALITIES SHOULD THEREFORE PROCEED TO INVEST IN THESE MEASURES. (Volker & Handy, 2021)



Figure 6.35

CYCLE LANES OPEN UP SAFE PASSAGE FOR OTHER ECONOMIC LIVELIHOOD MOVEMENT PATTERNS

LEGEND

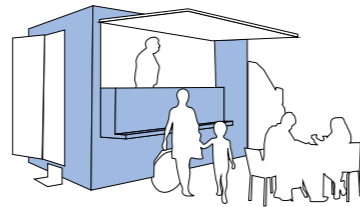
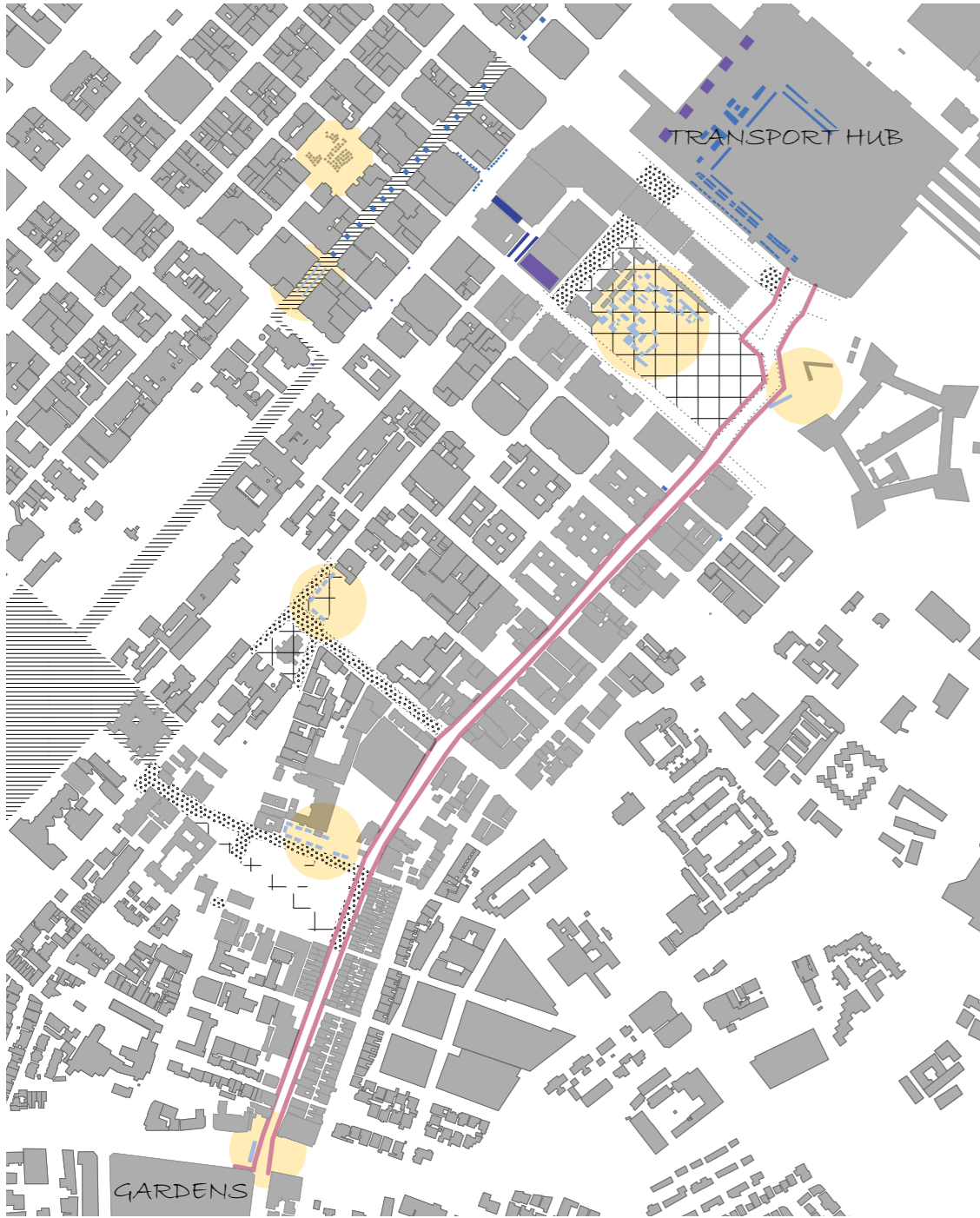
- PRIORITISED PEDESTRIAN SIDEWALKS ON SPINE (BUIENKANT STREET)
- MOTOR TRAFFIC CALMING SURFACE
- PEDESTRIAN ONLY STREET
- PUBLIC OPEN SPACE- SQUARE / PLAZA
- BOLLARDS ON EDGES
- BICYCLE LANES
- BICYCLE RENTALS

BICYCLE LANE MAP scale 1:10 000 Figure 6.33

CREATING ECONOMIC NODES

SMALL, MEDIUM AND MICRO-ENTERPRISE

NODES OF INTEREST CONNECTED WITH AN ACTIVATED PEDESTRIAN NETWORK ALONG AND OFF THE MAIN SPINE WILL ENCOURAGE GATHERING SPACES THAT VENDORS CAN HARNESS FOR ECONOMIC GAIN.



MOBILE VENDOR
Figure 6.36

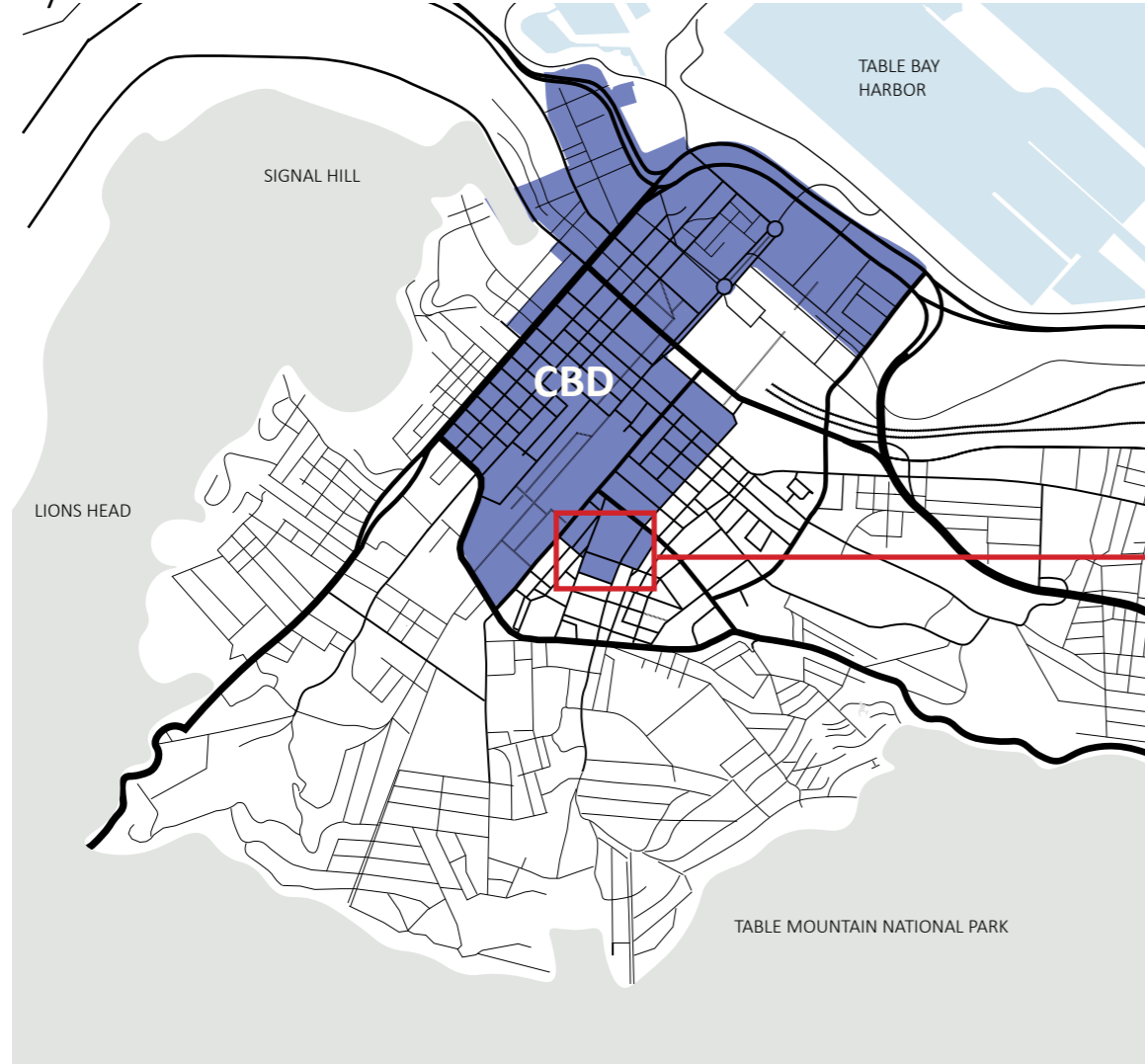


KERBSIDE STATIC VENDOR
STRUCTURE TEMPORARY
Figure 6.37

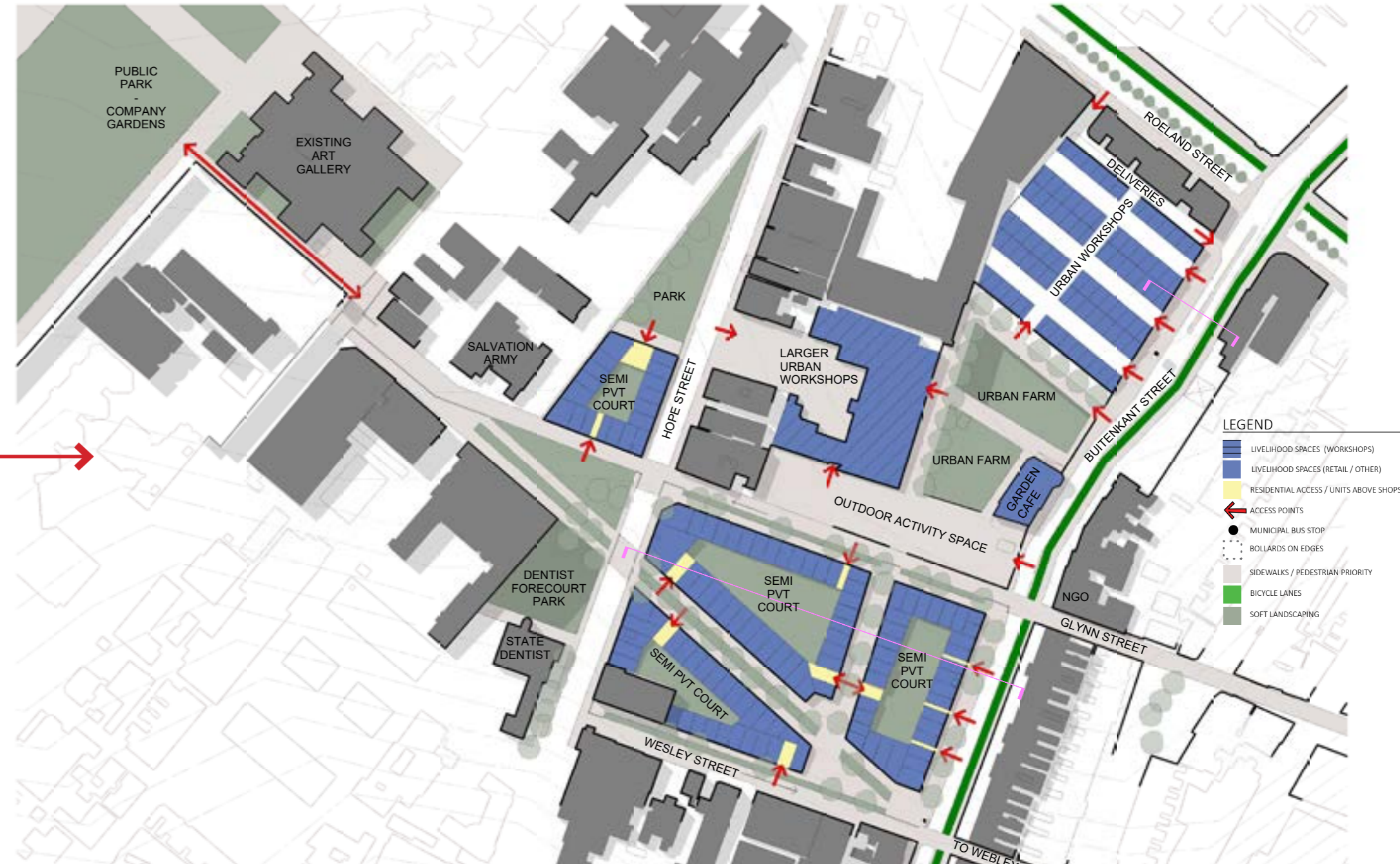
LEGEND

- PERMANENT OUTDOOR / KERB SIDE TRADERS
- TRADERS INSIDE BUILDINGS LOBBY
- TRADERS / FOOD TRUCKS (SET MARKET DAYS)
- TOURIST TRADING
- NODE FOR INFORMAL
- PRIORITISED PEDESTRIAN SIDEWALKS ON SPINE (BUITENKANT STREET)
- MOTOR TRAFFIC CALMING SURFACE
- PEDESTRIAN ONLY STREET
- PUBLIC OPEN SPACE- SQUARE / PLAZA
- BOLLARDS ON EDGES

IMAGINATION: the catalyst node



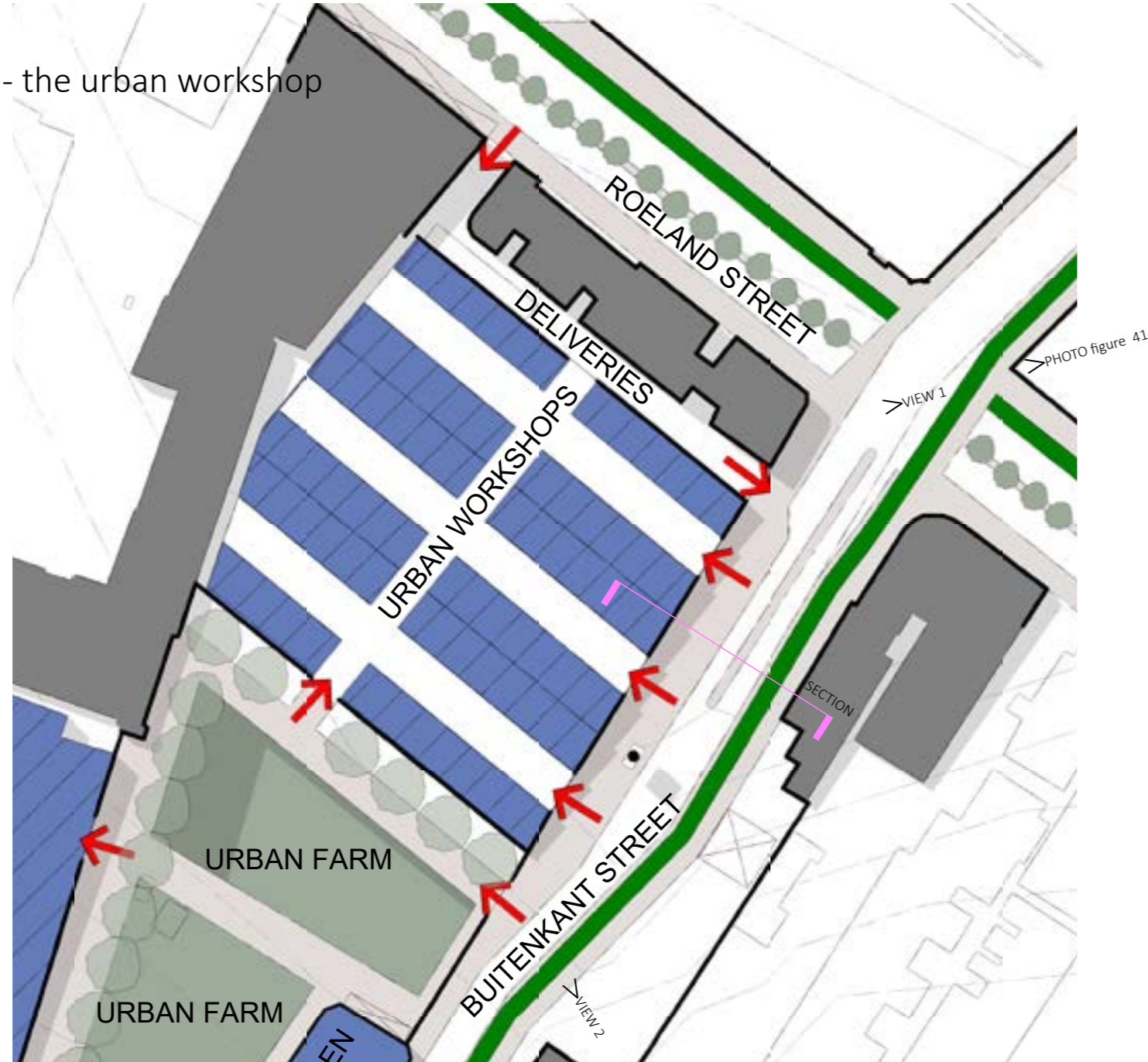
CBD OF CAPE TOWN NESTLED IN THE CITY BOWL
scale 1:40 000
Figure 6.38



PLAN OF CATALYST NODE SCALE 1:20 000

Figure 6.39

IMAGINATION: catalyst node- the urban workshop

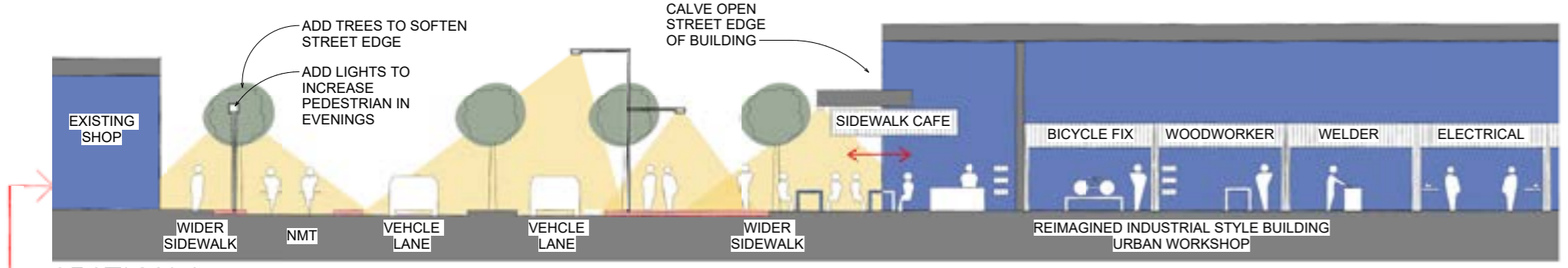


PLAN OF URBAN WORKSHOP
1:10 000
Figure 6.40



ROELAND & BUITENKANT INTERSECTION (BEFORE)

Figure 6.41



SECTION A
1:200
Figure 6.42



KEY- PROPOSED SECTION
Figure 6.43



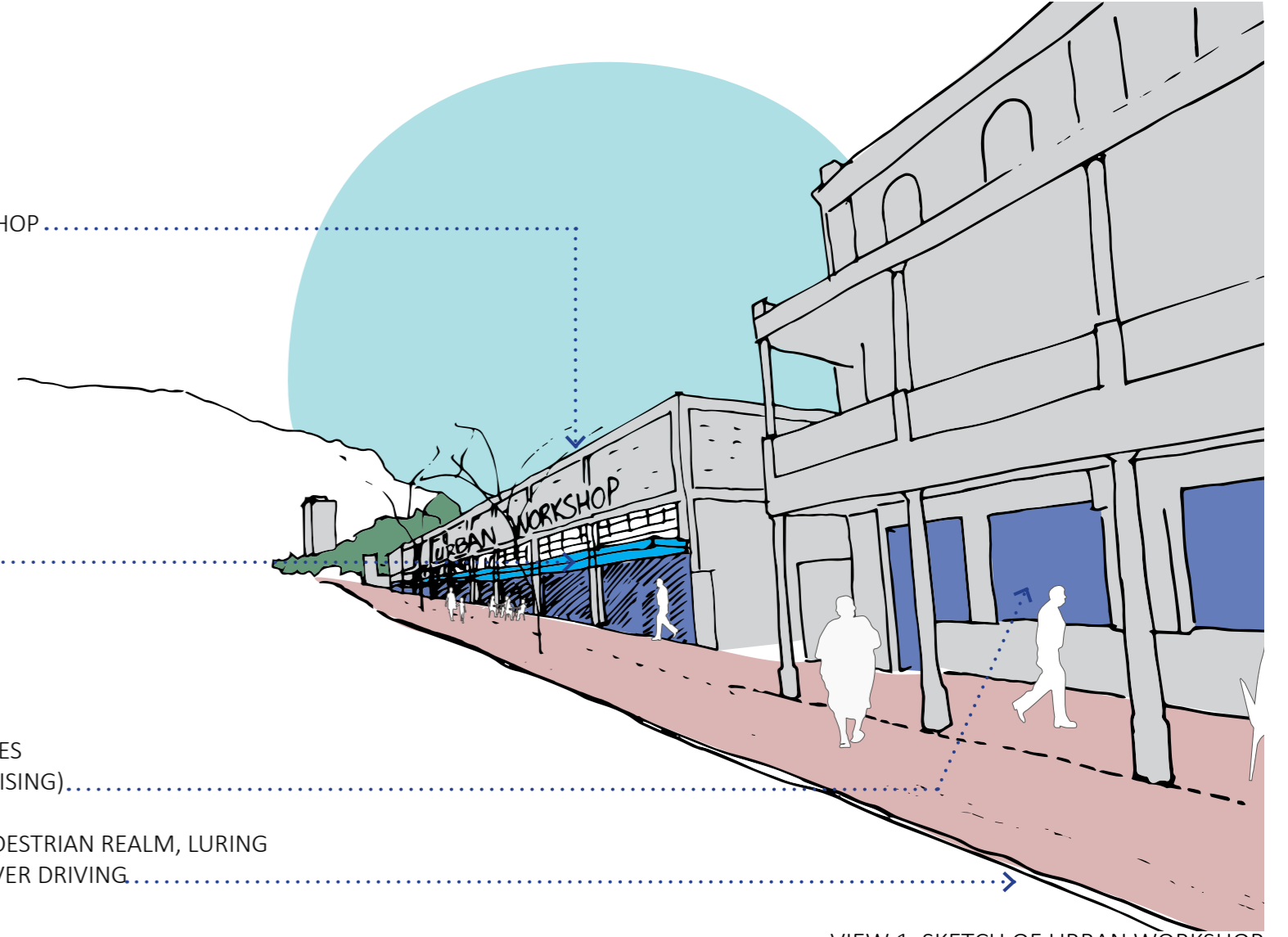
KEY- EXISTING SECTION
Figure 6.44

RE-PURPOSE GOVERNMENT WORKSHOP.....

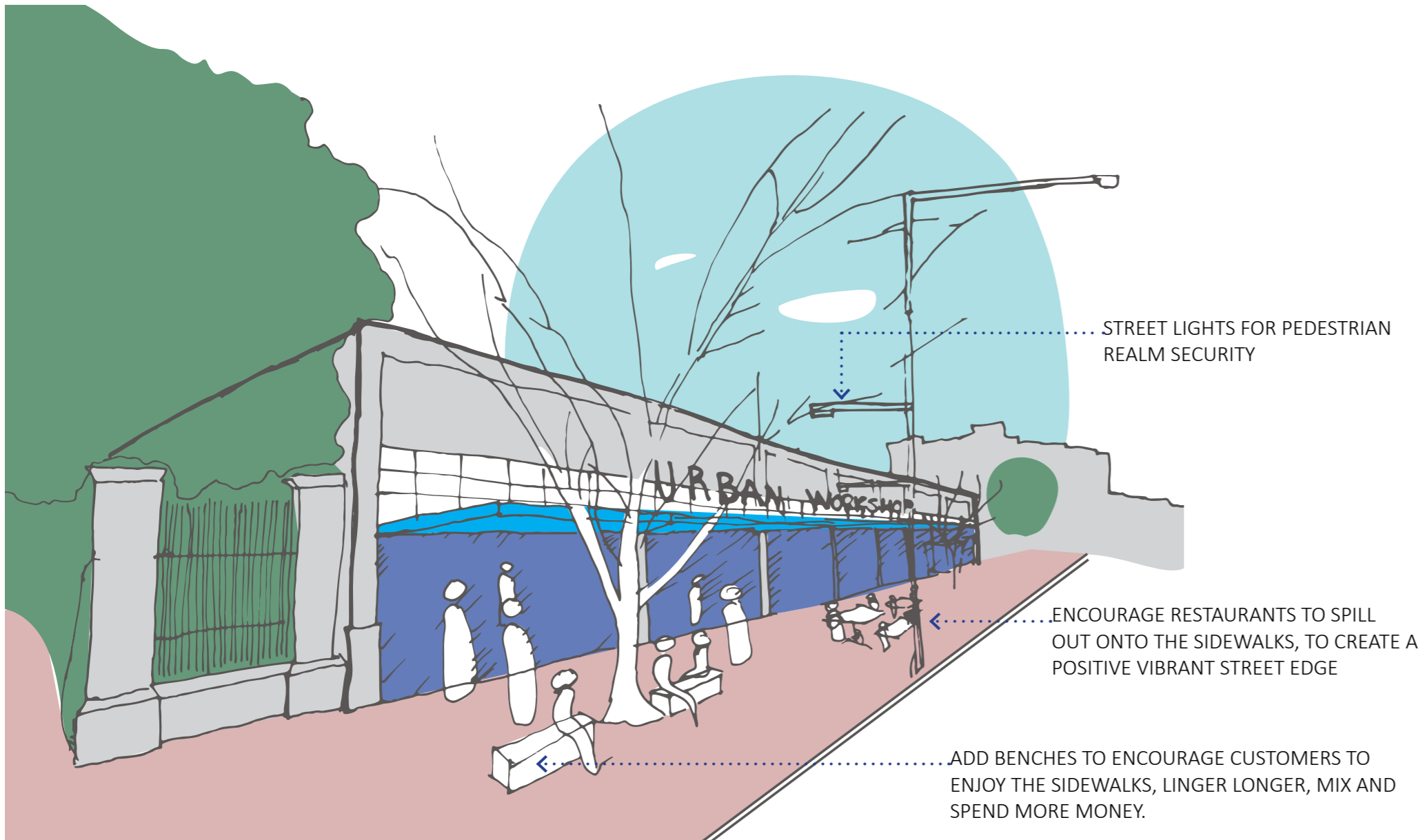
ADD APRON CANOPY TO REDUCE THE EDGE SCALE TO A RELATEABLE HUMAN SCALE.....

ENCOURAGE OPEN AND ACTIVE EDGES (CURRENTLY BLOCKED WITH ADVERTISING).....

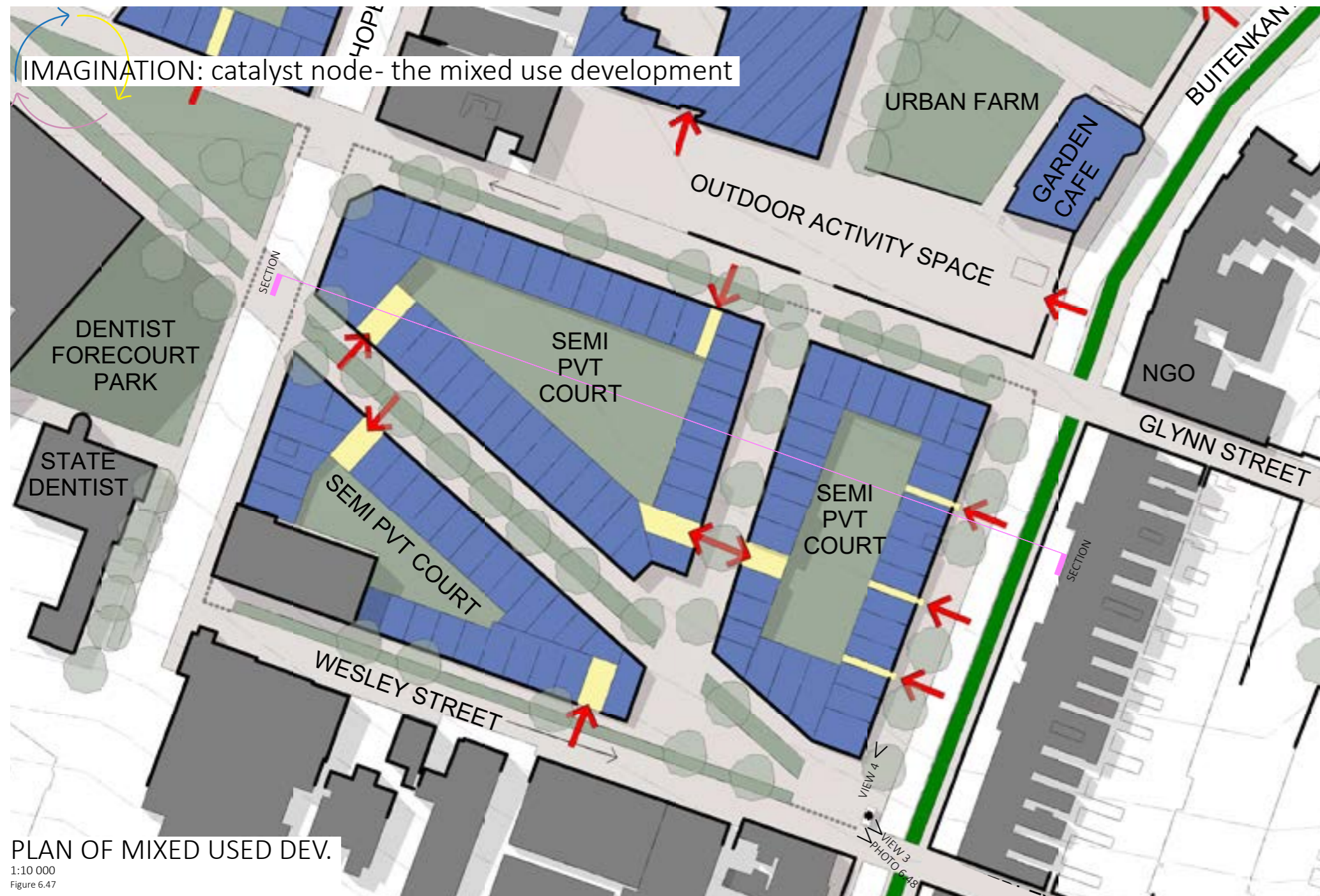
WIDEN SIDE WALKS TO IMPROVE PEDESTRIAN REALM, LURING MORE PEOPLE OPT FOR WALKING OVER DRIVING.....



VIEW 1 SKETCH OF URBAN WORKSHOP
Figure 6.45



VIEW 2- SKETCH OF URBAN WORKSHOP
Figure 6.46



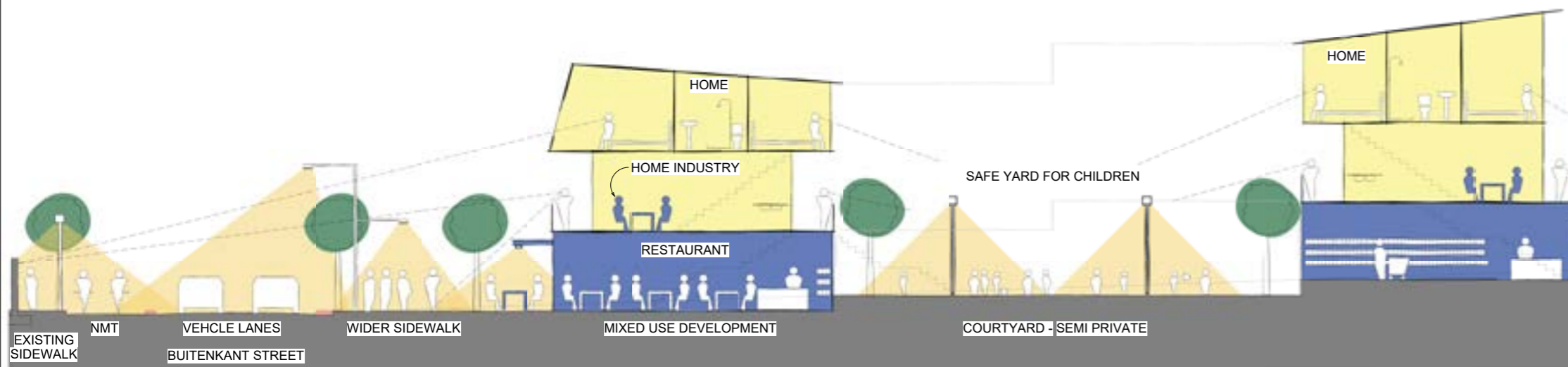
BUITENKANT & WESLEY STREETS INTERSECTION (BEFORE)

Figure 6.48



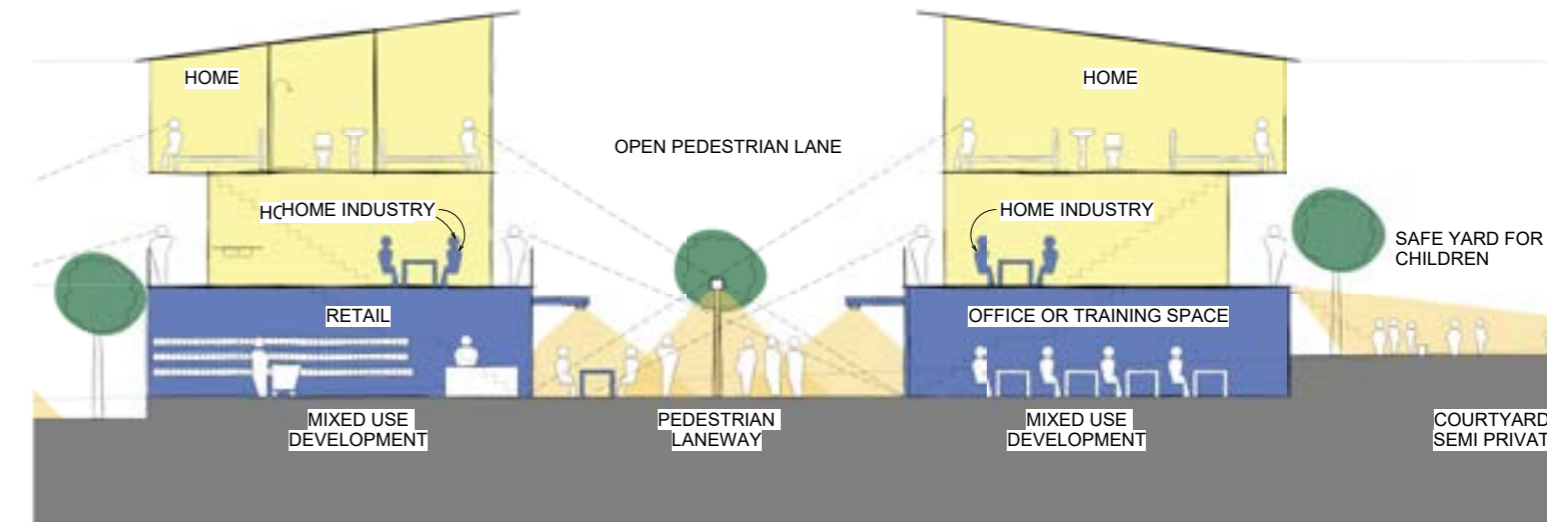
GOVERNMENT PARKING LOT (BEFORE)

Figure 6.49



SECTION B1

1:200
Figure 6.52



SECTION B2

1:200
Figure 6.53



KEY- PROPOSED SECTION

Figure 6.51



KEY- EXISTING SECTION B

Figure 6.50

HOUSING OPPORTUNITIES ABOVE.....

ADD APRON CANOPY TO REDUCE THE EDGE SCALE TO A RELATEABLE HUMAN SCALE.

ENCOURAGE OPEN AND ACTIVE EDGES

ECONOMIC OPPORTUNITIES BELOW (ON THE ACTIVE EDGES).....

ENCOURAGE RESTAURANTS TO SPILL OUT ONTO THE SIDEWALKS, TO CREATE A POSITIVE VIBRANT STREET EDGE.



VIEW 4
Figure 6.54

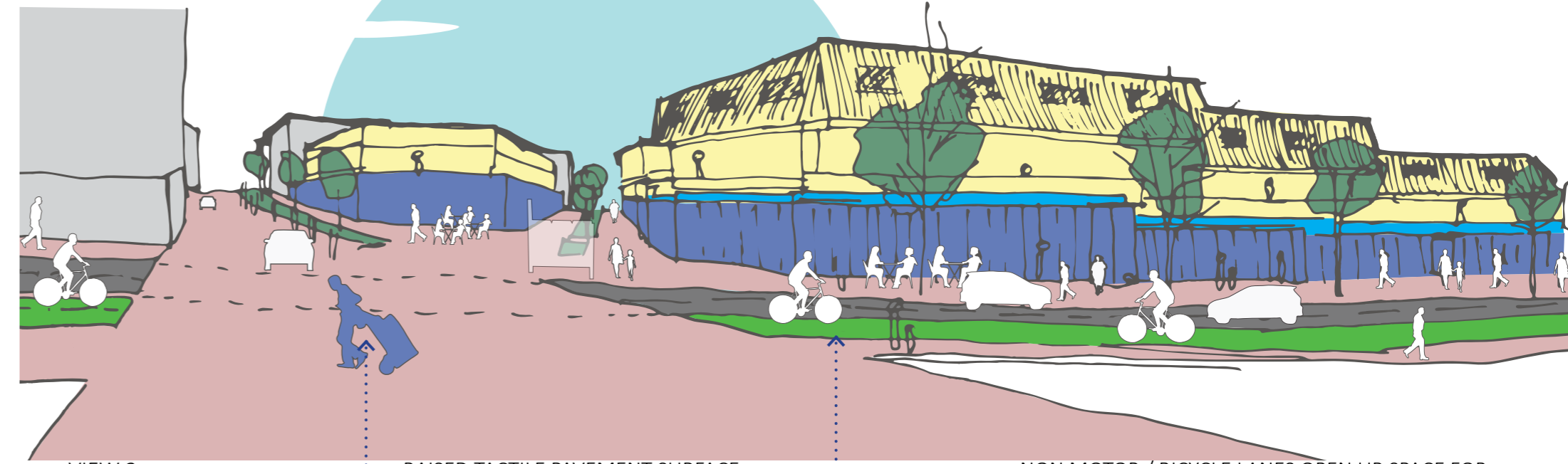
STREET LIGHTS FOR PEDESTRIAN REALM SECURITY.....



SURVEILLANCE IS OPTIMIZED WHEN PEOPLE CAN SEE INTO THE STREET. A STREET WITH THE A SENSE OF SAFETY IS A VIBRANT STREET. Jacobs. (1992).

Figure 6.54

LIGHTING CAN BE PRIORITIZED FOR THE PEDESTRIAN, SUSPENDED FROM A LOWER LEVEL. GOOD LIGHTING WILL ENCOURAGE A NOCTURNAL VIBRANCY.



VIEW 3
Figure 6.56

.....RAISED TACTILE PAVEMENT SURFACE, INFORMING MOTOR VEHICLES THEY ARE A GUEST IN THE PEDESTRIAN REALM.

.....NON MOTOR / BICYCLE LANES OPEN UP SPACE FOR OTHER ECONOMIC ACTIVITIES. (VENDORS / RECYCLING CARTS)

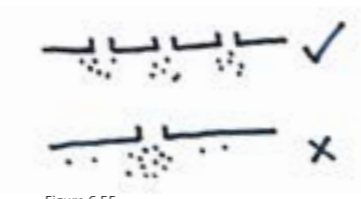


Figure 6.55

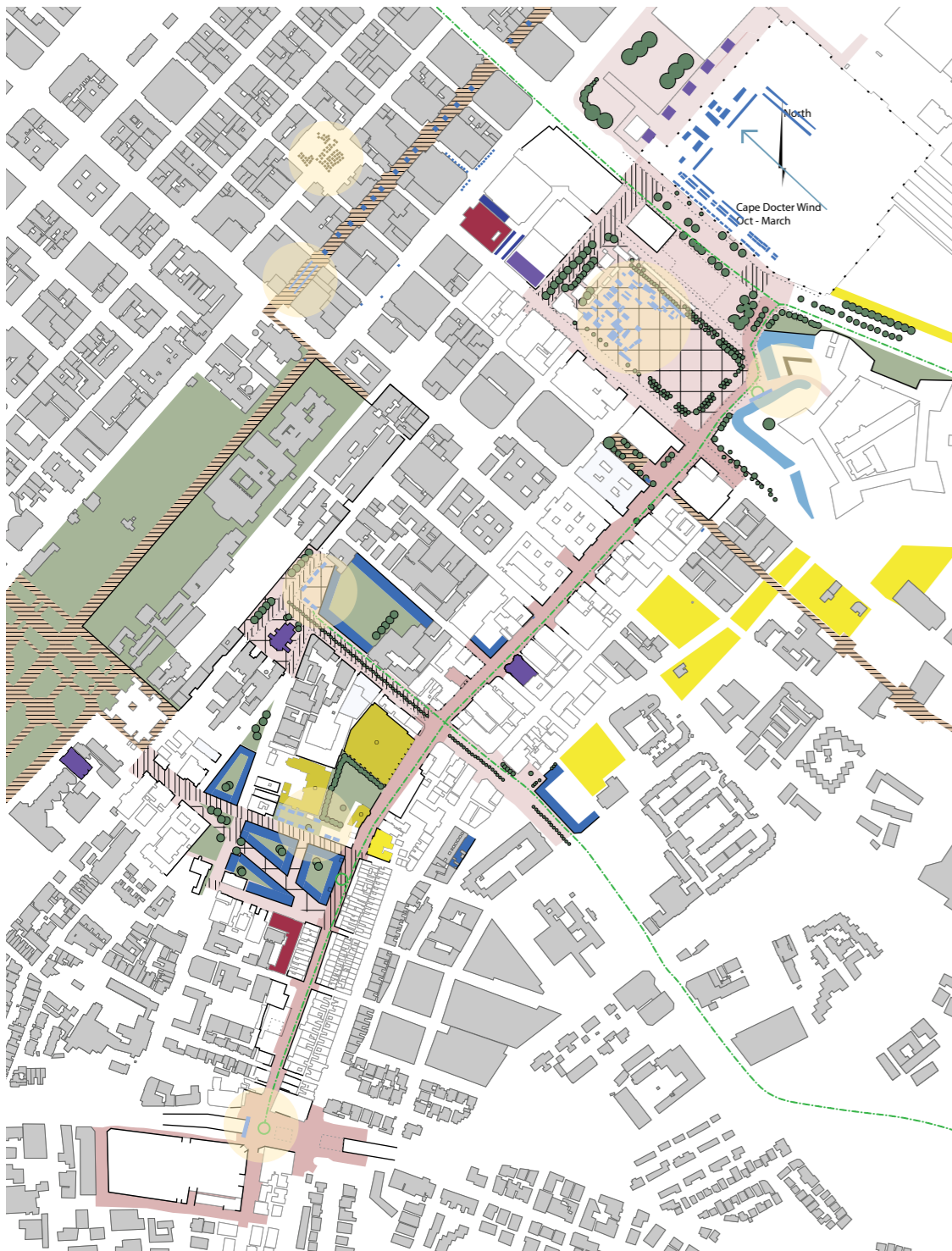
MULTIPLE ENTRANCES ALONG AN EDGE ALLOW A CONTINUOUS FLOW OF VIBRANCY. Gehl. (2001).

A SINGLE ENTRANCE CREATES A MONOTONOUS AND BORING EDGE. Gehl. (2001).



Figure 6.57

A COMFORTABLE TOWN 'SQUARE' HAS EDGES VISIBLE TO THE HUMAN EYE. Gehl. (2001).



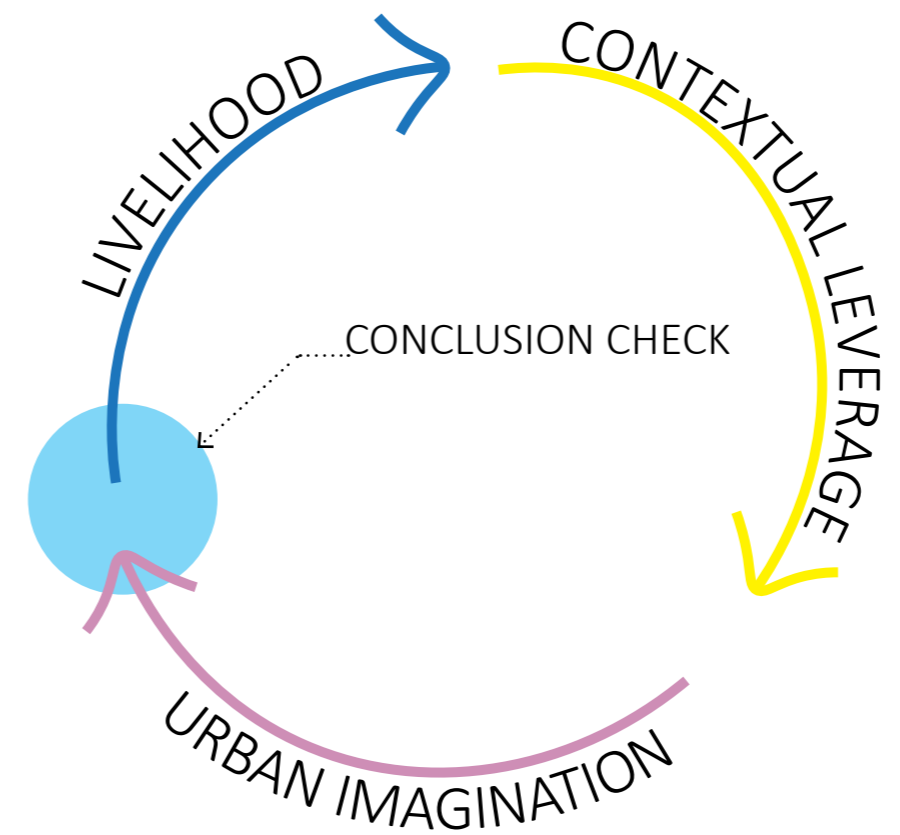
IMAGINATION: consolidated framework

LEGEND

- LEARNERS WALKING ROUTES
- OTHER PEDESTRIAN WALKING ROUTES
- EDUCATION BUILDINGS / FIELDS
- PUBLIC OPEN SPACE- PARK
- BUILDINGS
- PERMANENT OUTDOOR / KERB SIDE TRADER
- TRADERS INSIDE BUILDINGS LOBBY
- TRADERS / FOOD TRUCKS (SET MARKET DAYS)
- TOURIST TRADING
- NODE FOR INFORMAL
- LIVELIHOOD SPACES (WORKSHOPS)
- LIVELIHOOD SPACES (RETAIL / OTHER)
- RESIDENTIAL ACCESS / UNITS ABOVE SHOPS
- ← ACCESS POINTS
- MUNICIPAL BUS STOP
- BOLLARDS ON EDGES
- SIDEWALKS / PEDESTRIAN PRIORITY
- BICYCLE LANES
- SOFT LANDSCAPING

CONSOLIDATED FRAMEWORK PLAN
1:2 500
Figure 6.58

07 CONCLUSIONS



The conclusion brings the design full circle on the Urban Ecosystem Diagram. There will always be rhetorical questions pertaining to the final design and the ongoing nature of the process. Have the initial problems been resolved and formulated into achievable objectives? Have these urban interventions resolved some of the difficulties experienced by those living on the edge of the economy, unable to find affordable workspaces to rent? Are there affordable housing offerings closer to people's places of employment? Can we solve the housing crisis? Will the new narratives in social justice plot a different trajectory in space making in Cape Town? Can we reimagine the spaces in our city to be economically inclusive?

This main purpose of this project was to create an urban design framework that would use available publicly owned land (state and community land) within the well-located pockets of affluence for people to build better livelihoods for themselves. Well placed urban design strategies should harness the productive energies of a city and create vibrant spaces that will translate to thriving communities. If this can be achieved and maintained, then the project is a success.

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09

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1.2 Republic of South Africa, adapted from original, source: South African Vector Map: <https://freevectormaps.com/south-africa/ZA-EPS-01-0003?ref=atr>

1.3 Western Cape Province, adapted from original, source: Province extracted from: South African Vector Map: <https://freevectormaps.com/south-africa/ZA-EPS-01-0003?ref=atr>

1.4 Location of CBD in the Metropole of Cape Town. Source: City of Cape Town Open Data Portal <https://odp.capetown.gov.za/datasets/subcouncils/explore?location=-33.915485%2C18.654750%2C10.39>

1.5 CBD of Cape Town nestled in the City Bowl. Authors own, adapted from Source: Author Drawing, parts extracted from <https://odp.capetown.gov.za/datasets/official-planning-suburbs/explore?location=-33.923870%2C18.442809%2C13.765485%2C18.654750%2C10.39>

1.6 City of Cape Town Labor Force, Authors own, information sourced from States SA Estimate Q1 2021

1.7 City of Cape Town Labor Force, Authors own, information sourced from States SA Estimate Q1 2021

1.8 Unpacking the problems and opportunities diagram. Authors own.

2.1 View over the CBD of Cape Town. Authors Photograph.

4.1 Photo of Brickfields development. Image Source: <https://savagedodd.co.za/Portfolio/brickfields/>

4.2 Photo of Victoria Yards. Image Source: <https://www.victoriayards.co.za/vy-before-after>

4.3 Aerial photo of victoria yards. Image Source: Google Earth Pro.

4.4 Before photo of inactive edge. Image Source: Google Earth Pro.

4.5 After photo of activated edge. Image Source: Google Earth Pro.

5.1. Photo of Simbarash's fruit & veg stall. Authors Photograph.

5.2 Photo of Rhameez and his crafts. Authors Photograph.

5.4 Photo of lester's sidewalk workshop. Authors Photograph.

6.1 Sketched by Author.

6.2 Photo of residential garages. Image source: Google. (2009). Streetview of Myrtle Street, Orjanezicht, Cape Town. Retrieved from <https://www.google.com/maps/@-33.9349982,18.4182337,3a,75y,2.77h,88.79t/data=!3m7!1e1!3m5!1snx3PhIG1xrky-FQnUmiDrw!2e0!5s20091001T000000!7i13312!8i6656>

6.3 Photo of garage workspaces. Image source: Google. (2017). Streetview of Myrtle Street, Orjanezicht, Cape Town. Retrieved from https://www.google.com/maps/@-33.9349926,18.4182589,3a,75y,8.29h,75.14t/data=!3m7!1e1!3m5!1sNHGkdmZ48-_MJ34tmKL-5g!2e0!5s20170801T000000!7i13312!8i6656

6.4 Photo of vibrant street edge. Authors Photograph.

6.5 Photo of vibrant street edge. Authors Photograph.

6.6 Key Map, duplicate of Figure 1.5

6.7 Active Pedestrian Map. Authors own interpretations. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.8 Active Commuter Map. Authors own interpretations. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.9 Site Opportunities Map. Authors own interpretations. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.10 Tourist Movements Map. Authors own interpretations. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.11 Vibrancy Map. Authors own interpretations. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.12. Cataylst Map. Authors own interpretations. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.13. Use & Grain Map. Authors own interpretations. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.14 Sktech of Street Towards – Looking South. Image Source: Author rough traced of Google Earth Pro image satalitie photography.

6.15 Above South Gateway. Authors Photograph.

6.16 Sketch Key. Refer to figure 6.14.

6.17 Sketch of Nothern Gate way into street. Image Source: Author rough traced over Google. (2017). Streetview of Buitenkant Street, Cape Town. Retrieved from <https://www.google.com/maps/@-33.9258264,18.4255985,3a,75y,257.52h,86.8t/data=!3m6!1e1!3m4!1sPhkCfCw5ToENw21t!Dxag!2e0!7i13312!8i66563>

6.18 Sketch Key. Refer to figure 6.14.

6.19 Sketch section through parking lot edge. Image Source: Author rough traced over Google. (2017). Streetview of Buitenkant Street, Cape Town. Retrieved from <https://www.google.com/maps/@-33.9308255,18.4205133,3a,75y,194.36h,92.27t/data=!3m6!1e1!3m4!1sZfYYSw1kGrKWPgkehcskDA!2e0!7i13312!8i6656>

6.20 Sketch Key. Refer to figure 6.14.

6.21 Sketch Section. Image Source: Author rough traced over Google. (2017). Streetview of Buitenkant Street, Cape Town. Retrieved from <https://www.google.com/maps/@-33.9319683,18.4200054,3a,52.3y,207.58h,94.8t/data=!3m6!1e1!3m4!1sa8i6xFeO-v2KAFIPG2HyOA!2e0!7i13312!8i6656>

6.22 Sketch Key. Refer to figure 6.14.

6.23 Sketch of Southern Gatway. Image Source: Author rough traced over Google. (2017). Streetview of Buitenkant Street, Cape Town. Retrieved from <https://www.google.com/maps/@-33.9334344,18.4193208,3a,75y,194.36h,92.27t/data=!3m6!1e1!3m4!1sH NjwapkINyS8TQdVISNxcA!2e0!7i13312!8i6656>

6.24 Sketch Key. Refer to figure 6.14.

6.25 Sketch of Southern Gatway. Image Source: Author rough traced over Google. (2017). Streetview of Buitenkant Street, Cape Town. Retrieved from <https://www.google.com/maps/@-33.9341798,18.4192685,3a,90y,324.99h,79.85t/data=!3m6!1e1!3m4!1sNbx9x-YokopiKgY2Uo3tMQ!2e0!7i13312!8i6656>

6.26 Pedestrian Map. Authors own interpretations. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.27 Pedestrian sign. Image Source: vecteey.com

6.28 Intergration diagram. Authors own.

6.29 Linea flow diagram. Authors own.

6.30 Cars are the guest diagram. Authors own.

6.31 Parking sign. Image Source: vecteey.com

6.32 Contact surface diagram. Authors own.

6.33 Bicycle lane map. Authors own interpretations. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.34 Cyclists sketch. Authors own.

6.35 Vendor cyclist sketch. Authors own.

6.36 Vendor trailer / truck sketch. Authors own.

6.37 Photo of kerbside static vendor with tempory stucture. Authors own.

6.38 Key Map, duplicate of Figure 1.5

6.39 Plan of Catalyst node. Authors own designs. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.40 Plan of Urban Workshop. Authors own designs. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.41 Photo of Roeland and Buitenkant intersection. Authors own.

6.42 Section Drawing. Authors own.

6.43 Section Drawing. Authors own.

6.44 Section Drawing. Authors own.

6.45 View 1 - Sketch of Urban Workshop. Image Source: Author rough traced over Google. (2017). Streetview of Buitenkant Street, Cape Town. Retrieved from https://www.google.co.za/maps/@-33.9294254,18.4214976,3a,90y,242.66h,85.8t/data=!3m7!1e1!3m5!1sA8FS9VqPxCb_RWji3Ruaxg!2e0!6shhttps:%2F%2Fstreetviewpixels-pa.googleapis.com%2Fv1%2Fthumbnail%3Fpanoid%3DA8FS9VqPxCb_RWji3Ruaxg%26cb_client%3Dmaps_sv.tactile.gps%26w%3D203%26h%3D100%26yaw%3D36.59854%26pitch%3D0%26thumbfov%3D100!7i13312!8i6656

6.46 View 2 - Sketch of Urban Workshop. Image Source: Author rough traced over Google. (2017). Streetview of Buitenkant Street, Cape Town. Retrieved from <https://www.google.co.za/maps/@-33.9300881,18.4209569,3a,90y,343.4h,91.08t/data=!3m6!1e1!3m4!1sc9FXizJaakGszUcNM3Ko9A!2e0!7i13312!8i6656>

6.47 Plan of mixed use dev. Authors own designs. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

6.48 Photo of Roeland and Buitenkant intersection. Authors own.

6.49 Photo of Government parking Lot. Authors own.

6.50 Section Drawing. Authors own.

6.51 Section Drawing. Authors own.

6.52 Section Drawing. Authors own.

6.53 Section Drawing. Authors own.

6.54 Sketch. Authors own.

6.55 Sktech. Authors own.

6.56 Sktech. Authors own.

6.57 Sktech. Authors own.

6.58 Consolidated Framework Plan. Authors own designs. Open-source information gathered from <https://odp-cctegis.opendata.arcgis.com>

10 APPENDIX

ETHICS

UNIVERSITY OF CAPE TOWN
Faculty of Engineering and the Built Environment
ETHICS APPLICATION FORM

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

APPLICANT'S DETAILS	
Name of principal researcher, student or external applicant	CARL WILLIAM SCHMIDT
Department	ARCHITECTURE, PLANNING AND GEOMATICS
Preferred email address of applicant:	carl@live.co.za
If Student	Your Degree: e.g., MSc, PhD, etc.
	Credit Value of Research: e.g., 60/120/180/360 etc.
	Name of Supervisor (if supervised):
If this is a researchcontract, indicate the source of funding/sponsorship	N/A
Project Title	URBAN LIVELIHOOD

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

APPLICATION BY	Full name	Signature	Date
Principal Researcher/ Student/External applicant	CARL WILLIAM SCHMIDT		09 / 06 / '21
SUPPORTED BY	Full name	Signature	Date
Supervisor (where applicable)	DR KATHRYN EWING		11/06/2021

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

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iii. I am now presenting the thesis for examination for the Degree of Master in Urban Design.”

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Carl William Schmidt

Signed by candidate

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Signature:

Carl William Schmidt

Signed by candidate

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UNIVERSITY OF CAPE TOWN

Faculty of Engineering & the Built Environment
School of Architecture, Planning and Geomatics

Rondebosch, Cape Town, 7701
Telephone 1: +27 (0)21 650 2362
Telephone 2: +27 (0)76 484 2417
Fax: +27 (0)21 689 94666

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Master of Urban Design
(60 Credits)

In the School of Architecture, Planning and Geomatics

STUDENT: Carl William Schmidt
STUDENT NUMBER: SCHCAR076
DISSERTATION TITLE: URBAN LIVELIHOOD

University of Cape Town, December 2021

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