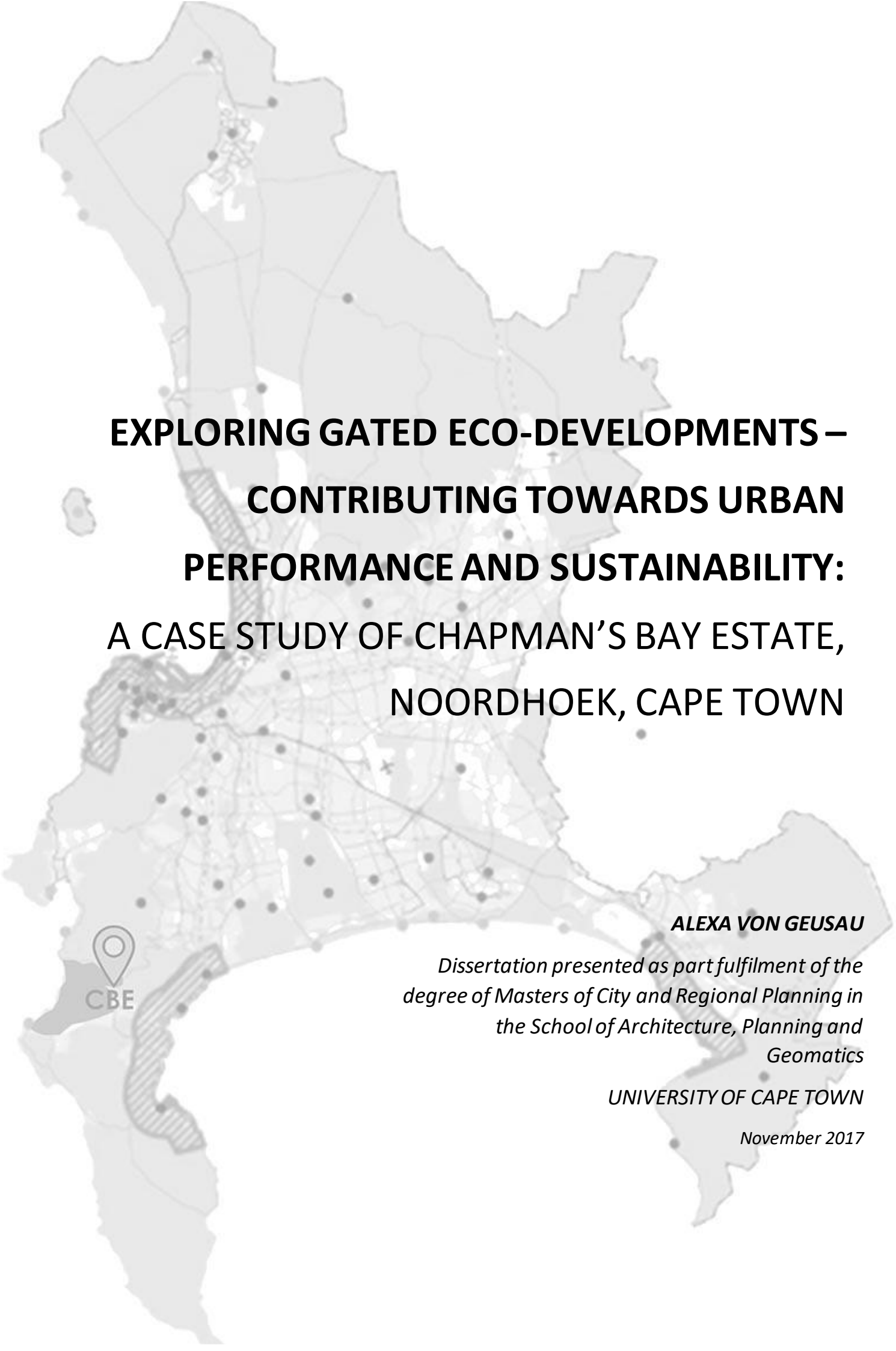


EXPLORING GATED ECO-DEVELOPMENTS – CONTRIBUTING TOWARDS URBAN PERFORMANCE AND SUSTAINABILITY:

A CASE STUDY OF CHAPMAN'S BAY ESTATE, NOORDHOEK, CAPE TOWN

ALEXA VON GEUSAU

Dissertation presented as part fulfilment of the degree of Masters of City and Regional Planning in the School of Architecture, Planning and Geomatics

UNIVERSITY OF CAPE TOWN

November 2017

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

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

University of Cape Town

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only. Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

ALEXA VON GEUSAU

DECLARATION OF FREE LICENSE

I hereby:

i. grant the University free license to reproduce the above thesis in whole or in part, for the purpose of research;

ii. declare that:

iii. the above thesis is my own unaided work, both in conception and execution, and that apart from the normal guidance of my supervisor, I have received no assistance apart from that stated below;

iv. except as stated below, neither the substance or any part of the thesis has been submitted in the past, or is being, or is to be submitted for a degree in the University or any other University.

v. I am now presenting the thesis for examination the thesis for examination for the Degree of Master of City and Regional Planning.

Alexa von Geusau

Signed by candidate

ALEXA VON GEUSAU

ACKNOWLEDGEMENTS

First and foremost I would like to thank my parents, for without their support, love and encouragement since day one, I would not be where I am today. Their moral guidance drives me in pursuit of social and ecological justice.

I would like to thank my research supervisor, Tania, for her generosity, wisdom and academic guidance throughout this dissertation journey. Her consistency and passion has made this a rewarding process.

To the MCRP lecturers and Centlivres staff, thank you for your guidance these past two years and ensuring our work space has been a comfortable one.

Thank you to my MCRP classmates who have been a constant source of laughter, intelligence and support these past two years.

To my sister and loved ones, thank you for your support.

ALEXA VON GEUSAU

ABSTRACT

South African cities maintain an apartheid legacy through their spatial layout, which is characterised by sprawl, fragmentation and separation. These characteristics have devastating implications for spatial justice, which cannot be isolated from urban performance and sustainability. Yet, the proliferation of gated developments and eco-estates is becoming an increasingly popular form of development both internationally and within South Africa. Often the sustainability debate allows for the glossing over of issues of social justice. These exclusive enclaves act as a microcosm for broader issues of social polarization and ecological fragmentation.

This dissertation explores the complexities of this radical urban form and its implications for urban performance and sustainability. Through an understanding of the drivers and consequences of gating, it explores the conflict in which planners often find themselves: between the ideals of an integrated, accessible city and the contextual realities. This study of gated developments has been founded upon a theoretical debate as well as a case study analysis of Chapman's Bay Estate in Noordhoek, Cape Town, South Africa. This included a spatial and legislative analysis of the CoCT's Gated Development Policy as well as relevant spatial plans, through the lens of Chapman's Bay Estate.

The research has revealed the perpetuating nature of gated developments in the urban realm. Furthermore, it has exposed gaps between the visions, goals and objectives of planning and the outcomes in practise. Additionally, it has revealed fragmentation between policies, plans and built environment professionals.

Through this dissertation, I seek add to the current debate regarding gated developments and their implication on urban form. Furthermore, I address these findings through a review of the City of Cape Town's Gated Development Policy, as well as the harmonization and integration of relevant policies and plans.

ACRONYMS AND ABBREVIATIONS

ANC: African National Congress

CBE: Chapman's Bay Estate

CoCT: City of Cape Town

CPPNE: Cape Peninsula Protected Natural Environment

CTSDF: Cape Town Municipal Spatial Development Framework

DA: Democratic Alliance

Du/ha: dwelling units per hectare

EIA: Environmental Impact Assessment

LUPO: Land Use Planning Ordinance

LUPA: Land Use Planning Act

MEC: Member of the Executive Council

NEAG: Noordhoek Environmental Action Group

NEMA: National Environmental Management Act

NMT: Non-motorized transport

NRPA: Noordhoek Ratepayers Association

PPAB: Provincial Planning Advisory Board

SANParks: South African National Parks

SAPS: South African Police Services

SDF: Spatial Development Plan

SDP: Southern District Plan

TDA: Transport and Urban Development Authority

TMNP: Table Mountain National Park

GLOSSARY

ACCESSIBILTIY: easily reached or approached by various means of transport, through-movement and open-access

ANGLO-AMERICAN: informed by a European origin

BROWNFIED: is the redevelopment or reuse of a previously developed property.

BUFFER 1: Only *essential utility services* (infrastructure) to be located here (CoCT, 2012c).

CAPITALISM: economic system based on private ownership and production of profit

CLIMATE CHANGE: weather patterns changing over an extended period of time

COMPACT URBAN FORM: a city of short distances, relatively high densities and mixed land uses – enables an efficient public transport system.

CORE 2: Significant protection zones: where possible, all new utility infrastructure, services and structures should be located outside of these areas (CoCT, 2012c).

CUMULATIVE IMPACT: the additive effect or impact of similar or diverse impacts that may appear to be insignificant in itself

DENSITY: occupational density allowed, usually expressed in dwelling units per hectare (du/ha)

DUALISM: the binary between humans and natural systems

ECO-ESTATE: defined as developments in an unspoilt area where the natural environment of flora and fauna can flourish

EDGE-CITY: development of urban centres outside of original city centre

ENCLAVE: a distinct area of resident who are culturally or ethnically similar

ENVIRONMENTAL CORRIDOR: a connected area which links natural of open systems

EQUITY: fairness between social groups or between humans and nature

FEEDBACK LOOPS: explain how one component of a system influences another, either neutralizing or reinforcing, or perpetuating it.

FORTIFICATION: a defensive construct

FRAGMENTATION: physical separation between society or natural systems

GATED DEVELOPMENT: [in this dissertation] an enclosed residential community

GREEN WASHING: marketing that uses green imagery and terminology to promote a perception that the establishment and its aims and policies are environmentally friendly

GREENFIELD: undeveloped land

HABITAT III: United Nations Conference on Housing and Sustainable Urban Development

INTEGRATION: inclusivity of social groups as well as a mix of activities

LIVEABLE CITIES: cities which are performing well in terms of catering for the lives of its inhabitants, particularly the urban poor

MICROCOSM: situation which encapsulates the characteristics of something much larger

MIXED LAND USE: a blend of residential, commercial, industrial, cultural uses in urban development

PERIPHERY: edges of an urban area

PLACE-MAKING: planning, designing and management of public spaces in order to strengthen the connection between people and the places they share

SINGLE LAND USE: single use land zoning (opposite of mixed-land use)

SLOW VIOLENCE: [Nixon, 2011] the gradual damaging effects on people and the environment

SOCIAL JUSTICE: fair and just relations between members of society

SUSTAINABLE DEVELOPMENT: concept is concerned with ensuring present development patterns do not compromise future generations

SYSTEMS THINKING: interdisciplinary study of the interrelated parts of a system

TOWNSHIP: [in South Africa] underdeveloped areas, as a result of Apartheid legacy.

URBAN EDGE: demarcates the boundary of which no further urban development may occur

URBAN EFFICIENCY: when all performance qualities of a city are suitably met: particularly energy reduction.

URBAN FORM: the spatial pattern of a city

URBAN FRABRIC: the physical aspect of urbanism: streetscapes, thoroughfares

URBAN METABOLISM: the through-puts of a settlements

URBAN PERFORMANCE: the totality of a city's liveability

URBAN PERMEABILITY: extent to which urban form permits movements of people

URBAN SPRAWL: low density, inefficient expansion of a city

URBAN SUSTAINABILITY: planning and designing cities that do not have to have an excessive reliance on the surrounding hinterland as this maintains a lower ecological footprint

URBAN VITALITY: the idea of creating vibrancy in urban spaces, through small blocks, high residential density and mixed land use

WESTERN: [ideas and theories] originating from Europe or the United states

FIGURES & TABLES

Fig. no.	Caption	Pg. no.
Fig. 1	Map of the Cape Peninsula, locating Chapman's Bay Estate, Noordhoek (Image sourced from CoCT Draft MSDF, 2017; modified by Author, 2017)	3
Fig. 2	Map of Ward 69 displaying the proximity of Masiphumelele and Ocean View townships to luxury Chapman's Bay Estate on the border of Noordhoek (Google Maps, 2017)	6
Fig. 3	Location of greenfield development, photo taken from Google Earth prior to the start of development (Hepworth, 2011; modified by Author, 2017).	7
Fig. 4	Method Diagram produced by Author (2017). This represents the iterative research process. Yellow arrows represent the back-and-forth process between sections in the dissertation.	13
Fig. 5	Picture by Natacha Pisarenko for The Guardian (2014) displaying the aerial view of the boundary between an informal settlement and a gated development in Buenos Aires (Michael & Blason, 2014).	24
Fig. 6	Picture by Johnny Miller (2016) for his photography project, Unequal Scenes, of a wetland separating gated estate, Lake Michelle, and township, Masiphumelele. This is in ward 69 (the context of Chapman's Bay Estate) which will be discussed in Chapter 3.	24
Fig. 7	Motives and consequences for gated communities in Latin American cities (Coy & Pohler, 2002.	36
Fig. 8	Visual summary of the non-linear, self-perpetuating nature of gated communities. Largely informed by Landman (2007) and other lessons learnt in the literature review. Synthesized and produced by Author (2017).	40
Fig. 9	Spatial context of Chapman's Bay Estate (CBE) in relation to the Cape Town Metropolitan Area. Red area depicts Ward 69 and yellow icon depicts CBE. Image sourced from CoCT Draft SDF (CoCT TDA, 2017) and modified by Author (2017)	43
Fig. 10	Map depicting the location of Ward 69 in the Southern District, labels display the locations of Masiphumelele, Ocean View, Noordhoek and Chapman's Bay Estate (CBE) (Google Maps, 2017; CoCT TDA, 2017; modified by Author, 2017)	47
Fig. 11	Layout of Chapman's Bay Estate as provided for on their website, (CBE, 2017; modified by Author, 2017)	48
Fig. 12	Figure 1: Comparison of maps taken from CTSDF (2012) and Southern District SDP (2012) representing the urban edge, which appears to differ between plans (CoCT, 2012b; CoCT, 2012c; modified by Author, 2017)	49
Fig. 13	Timeline displaying the chronological order of the application process for Chapman's Bay Estate, produced by Author (2017)	52
Fig. 14	Map from the Cape Town Bioregional Plan (CoCT Environmental Resource Management Department [CoCT ERMD], 2015), modified by Author (2017) to show vegetation surrounding CBE.	56
Fig. 15	Map depicting the location of Chapman's Bay Estate and the relevant details of the site, including: buffer 1, core 2, urban edge, Ou Kaapse Weg and the wetland area	57

	(CoCT, 2012c; modified by Author)	
Fig. 16	Figure 16: comparison: (left) Street view of the location of the current CBE estate entrance, prior to development in 2009: informal traders along Ou Kaapse Weg (Google Imagery Streetview, 2009; modified by Author, 2017) vs (right) aerial view of CBE entrance as it is currently (2017): gated, monitored, controlled without any form of trade (Google Earth, 2017; modified by Author, 2017).	58
Fig. 17	Organigram depicting departments in the CoCT, locating the Development Management Department in which the Gated Development Policy is currently applied in development applications (Produced by Author, 2017; informed by CoCT web, 2017; TDA, 2017)	65
Fig. 18	Entrance to Chapman's Bay Estate, image supplied on their website (CBE, 2017).	68
Fig. 19	Gated Development Policy's visual explanation of acceptable gated development layouts: in order to prevent the disruption of natural corridors or movement networks (CoCT DP&BDM, 2007: 13).	69
Fig. 20	Gated Development Policy visually explains an acceptable public-private interface for gated developments (CoCT DP&BDM, 2007: 17)	70
Fig. 21	Layout plan of Chapman's Bay Estate, as provided on their website (CBE, 2017; modified by Author, 2017)	72
Fig. 22	Map depicting the location of Chapman's Bay Estate and the relevant details of the site, including: buffer 1, core 2, urban edge, Ou Kaapse Weg and the wetland area (CoCT, 2012c; modified by Author).	73
Fig. 23	Schematic diagram representing the policy environment in which the Gated Development Policy is currently situated. Informed by CoCT Urban Design Policy (CoCT DP&BDM, 2013) and modified by Author (2017).	74
Fig. 24	Flow diagram representing the process of a development application and where the policy is applied at the department level. Informed by the CoCT Urban Design Policy (CoCT DP&BDM, 2013) and modified by Author (2017).	75
Fig. 25	Potentially developable land, as designated in the Southern District SDF & EMF (CoCT, 2012c; modified by Author, 2017)	79
Fig. 26	Developable land, as determined in the 2012 CTSDF reveals that the CBE site was not designated as developable urban land, in the medium nor long term (CoCT, 2012b; modified by Author, 2017)	80
Fig. 27	Map taken from 2017 Draft Review CTSDF showing that there are no foreseeable plans for an integrated transport network for the ward 69 area (CoCT TDA, 2017; modified by Author, 2017)	81
Fig. 28	Steenberg Estate neighbouring Pollsmoor Maximum Security Prison in Tokai, Cape Town. (Google Earth, 2017; modified by Author, 2017)	84
Fig. 29	Planning legislative framework (WC DEA&DP, 2017)	90
Fig. 30	Options for high-density development, as provided in the in CoCT's Densification Policy (CoCT, 2012a)	92

Fig. 31, 32, 33	Generic ideas for block layouts from CoCT's Densification Policy (CoCT, 2012a).	92
Fig. 34	Density guidance provided by the CoCT's Densification Policy (CoCT, 2012a)	92
Fig. 35	Organigram produced by Author (2017) depicting additional guiding legislation and policies for the amendment of the Gated Development Policy	95
Fig. 36	A positive example of a more acceptable form of a gated development: Medium density, buildings frame the public realm (public street and park area), no larger than a residential block, pedestrian on-street access to each unit, unobtrusive access point for cars. Sourced from CoCT's Urban Design Policy (CoCT, 2013) and modified by Author (2017).	97
Fig. 37	Gated development buffered from street by means of single residential properties, as endorsed in the existing Gated Development Policy (CoCT, 2007: 16)	100
Fig. 38	Building orientation onto abutting public road and visually permeable boundary creates positive interface and streetscape, as endorsed in the existing Cape Town Urban Design Policy (CoCT DP&BDM, 2013: 10) and maintained in the Gated Development Policy amendments.	100
Fig. 39	Aerial image of a precedent for an acceptable gated development, according to the vision of the amended Gated Development Policy (Google Maps, 2017; modified by Author, 2017).	102
Fig. 40	Access point for cars (Author, 2017)	102
Fig. 41	Communal parking area and access to open space (Author, 2017)	102
Fig. 42	Pedestrian access to street, semi-detached units (Author, 2017)	102
Fig. 43	Public-private interface open and visible (Author, 2017)	102

Table no.	**Caption**	**Pg. no.**
Table 1	Table providing guidance as to the actions required in the amendment of the Gated Development Policy and who is responsible for the amendment (Author, 2017)	107

CONTENTS

CHAPTER 1: INTRODUCTION AND METHOD 1
1.1 Introduction to chapter 1 1
1.2 Normative position 4
1.3 Spatial justice 5
1.4 Implications of gated developments to sustainability 8
1.5 Motivation for study and objectives 9
1.6 Aims 9
1.7 Interventions 10
1.8 Main research questions 11
1.8.1 Subsidiary research questions 11
1.9 Methods and Techniques of research 12
1.9.1 Research Techniques and Analytical 'Tools' 14
1.9.2 Study scope (time and space) 15
1.9.3 Study limitations 15
1.9.4 Ethical considerations 16
1.10 Guide to dissertation structure 16
CHAPTER 2: LITERATURE REVIEW 17
2.1. Introduction to chapter 2 17
2.2 Eco-estates and Gated Communities 18
2.3 Sustainable Development 20
2.3.1 *Urban Sustainability* 25
2.3.2 *Exploring Spatial Justice* 32
2.3.4 *Eco-estates and Greenwashing* 33
2.4 Important Considerations for Spatial Planners and Policymakers Regarding Gated Communities 34
2.4.1 *Planning visions oppose practise* 34
2.4.2 *Inequality* 34
2.5 Possible Gated Futures: Considering the Latin and Northern American Example 34
2.6 Planning responses to gated communities, locally and internationally 37
2.7 Conclusion of the literature review 38
CHAPTER 3: THE CONTEXTUAL ANALYSIS OF CHAPMAN'S BAY ESTATE 41
3.1 Introduction to chapter 3 41
3.2 The current paradigm 44
3.3 South African contextual history 44
3.4 Exploring Chapman's Bay Estate in its local context 46
3.4.1 Chapman's Bay Estate 46
3.4.2 Application process 50
3.4.3 Civic and environmental opposition 53
3.4.4 The CoCT's responsibility 59

3.4.5 Pro-development perspective 59
3.4.6 Contextualizing Ward 69 61
3.4.7 Noordhoek community 62
3.5 Spatial and legislative analysis of Chapman's Bay Estate 64
3.5.1 CoCT's Gated Development Policy through the lens of Chapman's Bay Estate 64
3.5.1 Alignment to spatial plans 76
3.6 Conclusion of the contextual analysis 82
CHAPTER 4: HARNESSING AND REDIRECTING THE POTENTIAL OF THE CoCT'S GATED DEVELOPMENT POLICY 85
4.1 Introduction to chapter 4 85
4.2 Intervention recommendations 87
4.2.1 Legislative context and legal mandate 88
4.2.3 Outcome and objectives 96
4.2.4 Conventional and alternative security measures 96
4.2.5 Assessment Criteria 96
4.2.6 Procedural requirements and institutional arrangements 103
4.2.7 Commencement and implementation 103
4.3 Conclusion of chapter 4 103
CHAPTER 5: IMPLEMENTATION AND EVALUATION OF THE AMENDED GATED DEVELOPMENT POLICY 105
5.1 Introduction to chapter 5 105
5.2 Implementation 105
5.2.1 Timeframe guidance 105
5.2.2 Responsibility guidance 106
5.3 Monitoring and Evaluation for Review 110
5.4 Conclusion of chapter 5 111
CHAPTER 6: CONCLUSION 112
6.1 Key themes 112
6.2 Key literature findings 112
6.3 Key analysis findings 113
6.4 Key interventions 113
6.4.1 A renewed vision for gated developments 114
6.5 Addressing the limitations: flagging areas for future research 114
6.6 A personal reflection 114
REFERENCES 116

CHAPTER 1: INTRODUCTION AND METHOD

1.1 Introduction to chapter 1

"*Secure, with sweeping views of mountain and sea, surrounded by fynbos, endless beaches and sky, and all just 40 minutes' drive from Cape Town. It is here that you can enjoy the very best of both worlds"* (Chapman's Bay Estate [CBE], 2017). This is the developer's promise for the luxury new development, Chapman's Bay Estate in Noordhoek, Cape Town, which acts as the case study for this dissertation.

South Africa, and the rest of the world, has seen an explosion of gated residential estates in the last 30 years, as well as literature relating to it (Bannister & Fyfe, 2001). Each project has a varying experience in the gating process. However, common to all experiences, is the resultant social and ecological fragmentation and exclusion. Such estates' popularity has been fuelled by an increase in, and fear of, crime (Bannister & Fyfe, 2001). Generally, gated developments meet their promise of crime defence, but this is often at the expense of the greater social and ecological urban fabric and sustainability (Danielson & Lang, 1997).

Cities are meant to be places where diversification is celebrated in public spaces, such as on and off the streets (Bannister & Fyfe, 2001). However, with private developers taking control of a substantial part of the urban housing market, the social and ecological (spatial) fabric of cities is under threat, with an increase in polarisation and social exclusion (Bannister & Fyfe, 2001; Landman & Schonteich, 2002).

The current pattern of development does not ensure the future wellbeing of all citizens, but rather an isolated, exclusive few. Economic growth is often the prioritised form of development (Katzschner, 2016), supported by the illusion there will be a 'trickle down' effect that will improve the quality of life for all (Klein, 2015; Katzschner, 2016). In reality, we are compromising the functioning of natural systems and human wellbeing by relying on profit as the solution to social and ecological injustice (Katzschner, 2016; King, 2009).

A form of gated developments, eco-estates, are becoming an increasingly niche market for developers. Eco-estates are defined as developments in an unspoilt area where the natural environment of flora and fauna can flourish (Sherriff-Shuping, 2015: 37). In this dissertation, I discuss residential gated developments in general, and eco-estates in particular due to the nature of this dissertation's case study, Chapman's Bay Estate.

Space is a major principle in gated developments, particularly eco-states, therefore densities (dwelling units per hectare) are generally low. Chapman's Bay Estate does not have 'eco' in the name, but it is certainly marketed as such: "World-renowned environmental impact specialists, ecologists and fynbos experts are working together to build an intricate ecosystem which will become home to the flora and fauna endemic to the area" (CBE, 2017). Such estates' sustainability is, however, questionable, because sustainable development essentially refers to development that aims to remedy social inequities *and* environmental damage, while maintaining a sound economic base (Sherriff-Shuping, 2015). This is discussed further in the sub-section of Chapter 1, *1.4 Implications of gated developments to sustainability*.

With regard to gated developments, the integrity of planners is often challenged, with them finding themselves in conflict between achieving planning principles and the visions of private developers (Grant, 2005). The goals of integration and accessibility, which planners seek to achieve (Landman, 2012), are often at odds with the exclusive nature of gated developments. This exposes the inherent tensions that exist between the ideals of planning and practise (Landman, 2012).

Noordhoek, in ward 69 of the Southern District of Cape Town (figure 1 & 2), is considered one of Cape Town's most treasured locations due to its setting, surrounded by ocean and mountain views. It is known for its unique rural village feel, and its proximity to the Table Mountain National Park (TMNP). It attracts many nature lovers and people seeking a quiet life within the CoCT (Noordhoek Tourism, 2017). The Southern District is set apart from the rest of Cape Town by the Steenberg Mountains, which is traversed by the Ou Kaapse Weg mountain pass, connecting the Southern Suburbs of Cape Town to the Fish Hoek Valley. This pass has experienced increasingly high volumes of traffic as it is often used as an alternative to the main road. On the slopes of Noordhoek, as one descends Ou Kaapse Weg, it is hard to miss the gated development reaching the end-stages of construction called 'Chapman's Bay Estate' (Baigrie & Ernston, 2017). This is one of many exclusive estates in Cape Town, the characteristics of which are common to many such developments throughout the country.

I am using Chapman's Bay Estate to highlight the social and environmental impact of such gated 'eco' estates as well as the disconnect between policy and planning that often occurs.

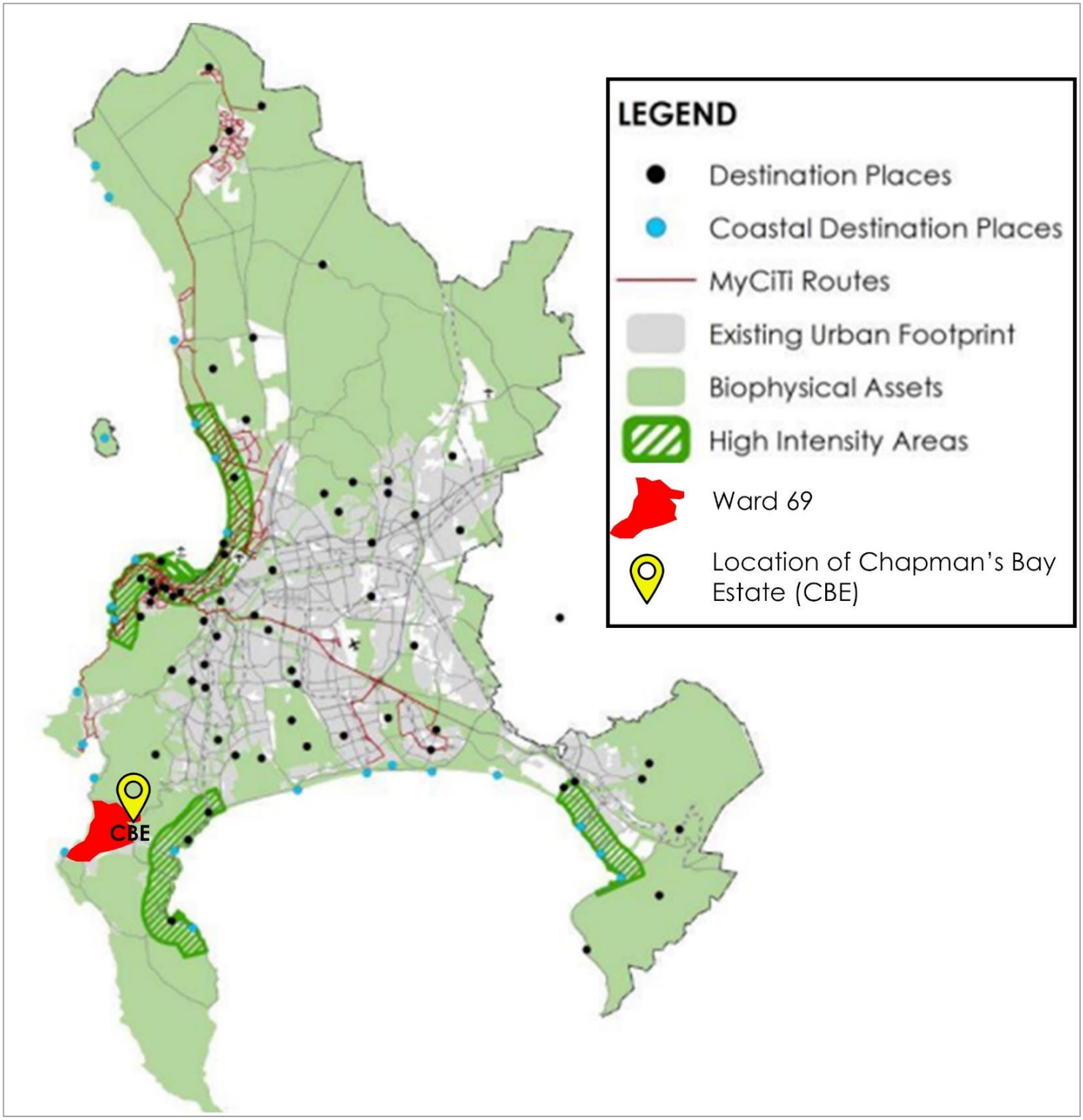


Figure 1: Map of the Cape Peninsula, locating Chapman's Bay Estate, Noordhoek. Image sourced from CoCT Draft CTSDF (CoCT Transport and Urban Development Authority [TDA], 2017) and modified by Author (2017).

1.2 Normative position

My position with regard to the natural environment and my role as a (future) planner is constantly evolving. The most recent and profound impact on shaping and developing my worldview, has been Naomi Klein's (2015) book, *This Changes Everything* and the subsequent literature it has lead me to discover, including Val Plumwood's (2009) *Nature in the Active Voice* (von Geusau, 2017). Perhaps the principal realisation I have had in the process of developing my worldview is that we require a complete overhaul of the current system of greed (von Geusau, 2017). For this reason, I consider it important to delve into the ironies of the current state of planning and development, and the questions we all ought to ask regarding the existing system of players which enable certain developments, such as gated (and eco) estates. Due to the nature of this research I deem it appropriate to write in first person to convey my position.

The main concept being explored in my research is social and ecological justice and urban sustainability based on the Chapman's Bay Estate case study. It is a conflicting topic for me, despite a strong pull toward my own bias this bias being that this type of development *is* unsustainable. The conflict arises from the fact that I understand the attraction of such places, due to my own anxiety associated with crime. On the other hand, I consider the concept of gated developments to be unsustainable and unjust due to their exclusivity and cumulative impact on urban form. In a sense, this dissertation explores my frustrations with current development patterns and the reactive nature of this form of development. I consider this reactive behaviour to be due to a lack of understanding, and perhaps a misunderstanding, of the implications that gated developments have on the social and ecological well-being of cities. Having studied environmental science, with an interest in design, I appreciate the concept and need of 'green' development; however, I strongly oppose using these characteristics for the sole purpose of profit.

As a (future) professional I am motivated by my belief that the current system of planning needs a rethink (von Geusau, 2017), as said by Albert Einstein, "The significant problems we have cannot be solved at the same level of thinking with which we created them." Obsession with economic growth is masking the link between infinite growth and deteriorating environments (Hansen, 2016). With specific reference to my research, I am driven by rejecting the pattern of exploiting nature for profit. This manifests spatially in the privatisation of the commons, such as the development of 'communal forests' and 'eco-estates' (Klein, 2015).

Furthermore, I am motivated by the recognition that a planning rethink requires the realisation of the interdependencies between humans and nature. Since colonialism, we have created an inflated dualism (fragmentation) between the human and non-human world (Plumwood, 2009). This way of thinking, which has become entrenched in the global framework (von Geusau, 2017), can be traced back to the fact that colonialism was largely founded upon the devastation of natural systems (Plumwood, 2009; Escobar, 2015). This exploitation of nature supports the ideals of capitalism, which perpetuates slow violence to social and ecological wellbeing (Nixon, 2011). Slow violence, a term used by Nixon (2011), describes the gradual but significant degradation of social and ecological systems. This is relevant to my dissertation due to its significance on the cumulative impact of gated (and eco) developments to urban form and sustainability.

As professionals in the field of natural resource management and development planning, I feel it is increasingly our responsibility to act ethically through practise and research.

1.3 Spatial justice

The concept of spatial justice encompasses a number of meanings, which have social and ecological connotations. It is based on respect for the natural environment, equity of access, dignity and a contribution to reducing spatial inequalities. These concepts will be explored further in *Chapter 2: The Literature Review*.

In terms of the concept's relevance to this dissertation, gated developments in general, and the Chapman's Bay Estate in particular, have social and ecological complexities which will be explored throughout the research process.

South Africa, 23 years into its democracy, maintains a legacy of social and spatial exclusion. The Group Areas Act, the title of three acts proclaimed by the apartheid government of South Africa, assigned different racial groups to different residential and business sections in urban areas (Findley & Ogbu, 2011). In effect, it excluded 'non-whites[1]' from living in the most developed areas. 'Townships' or 'locations' refer to the underdeveloped parts of urban areas, generally on the periphery, which still exist as a legacy of the Group Areas Act. Ward 69 (figure 1 & 2) is the sub-council in which the case study, Chapman's Bay Estate is located. The area has been described by Kretzmann (2016) , a Western Cape - based writer, as a microcosm of the Western Cape, due to the large contrasts between rich and poor. Similarly, Blakely and Snyder (1997) refer to gated developments as a microcosm of the larger spatial pattern of segregation and separation.

Masiphumelele, isiXhosa for 'let us succeed' (Homes for Kids in South Africa [HOKISA], 2017), and Ocean View are the townships situated near Noordhoek (figure 2). In Masiphumelele, a large population of black Africans[2] (estimates of over 38 000) live in informal, high-density environments (Masicorp, 2014). A lack of services exposes people to higher risk of flooding, fire and cold winter conditions (HOKISA, 2017). Furthermore, unemployment and crime rates are extremely high (HOKISA, 2017). A few kilometres down the road is Ocean View, which was originally established as a township settlement for coloured[3] people who had been forcibly removed from so-called 'white areas' by apartheid legislation (Living Hope, n.d.). These areas and their contextual histories will be discussed in further detail in *Chapter 3: The Contextual Analysis of Chapman's Bay Estate.*

Just 3, 6 km down the road from Masiphumelele, is the luxury greenfield development of Chapman's Bay Estate, entrenching the apartheid geography (Baigrie & Ernston, 2017). As so aptly said by Baigrie and Ernston (2017), the "apartheid geography [is] preserved behind a concern for the environment" (Baigrie & Ernston, 2017).

[1] **Non-whites:** an offensive term used in government policy during the Apartheid Era.

[2] **Black African**: A race group of African origin. The term may refer to South African's or people from other regions in Africa. This term is relevant due to the social and spatial marginalisation experienced by black African people during colonialism and Apartheid the legacy of which still exists in South Africa.

[3] **Coloured**: South African people originating from the Khoi-San Group. This term is relevant due to the social and spatial marginalisation experienced by people of colour during colonialism and Apartheid, the legacy of which still exists in South Africa.

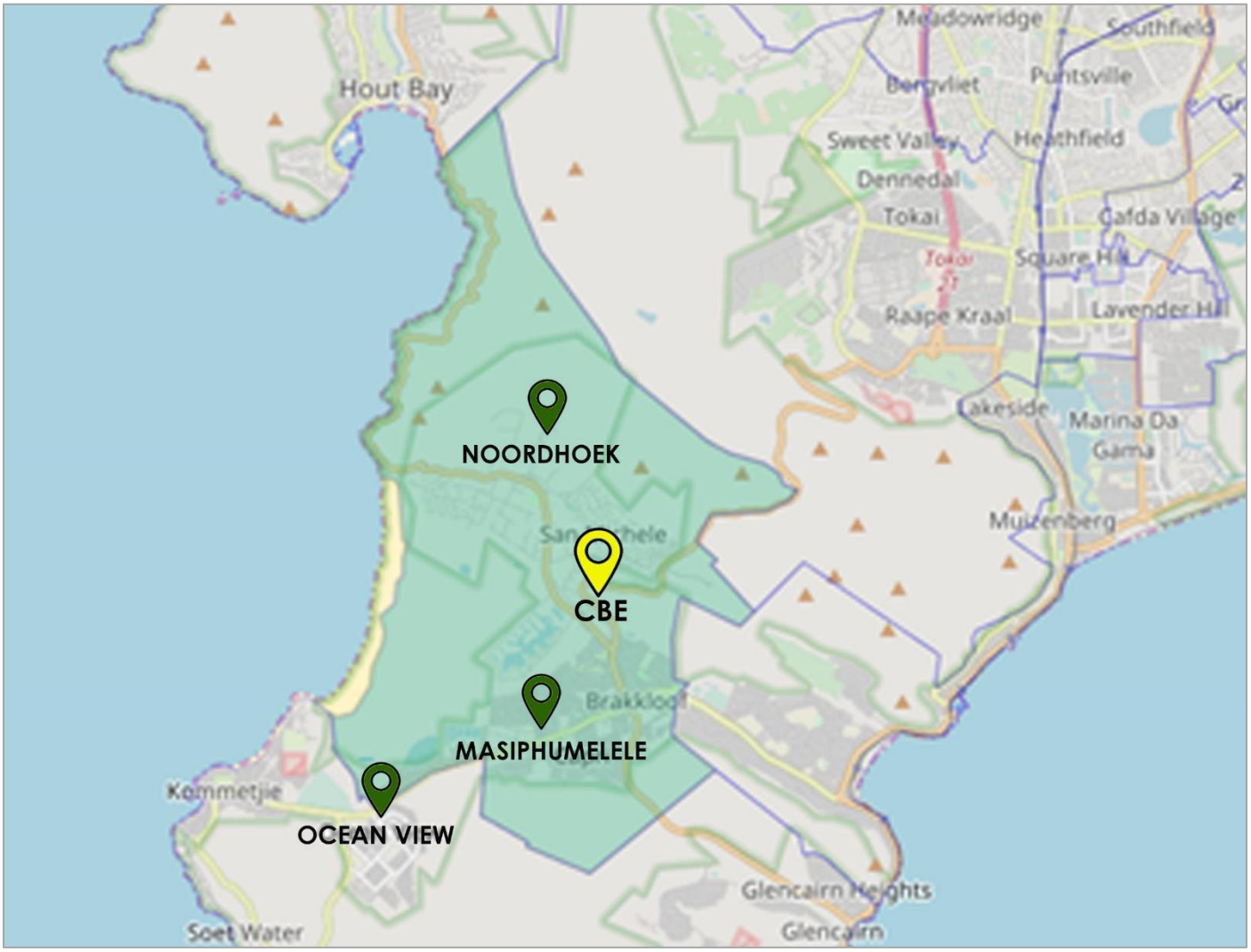


Figure 2: Map of Ward 69 displaying the proximity of Masiphumelele and Ocean View townships to luxury Chapman's Bay Estate on the border of Noordhoek (Google Maps, 2017)

The Chapman's Bay Estate development application was originally known as the Dassenberg Residential Estate, and has been met with controversy since the beginning of its application process (Baigrie & Ernston, 2017). It was first opposed by both civic and environmental groups in 1997. The reasons for concern include the fact that the site falls into the conservation-worthy land, *then* known as Cape Peninsula Protected Natural Environment (CPPNE)[4] (Baigrie & Ernston, 2017), as well as the fact that the infrastructure including roads, water and sewerage systems in the southern district are already under pressure from the growing population (Hepworth, 2011). The developer appealed the application in 2008, claiming it would be 'carefully planned' and completed in an 'environmentally sensitive manner' (Hartdegen, 2010). The development, now known as Chapman's Bay Estate, was controversially approved by former

[4] **CPPNE**: Prior to the establishment of the Table Mountain National Park (TMNP), a 30 000 hectare area of conservation-worthy land on the peninsula was identified as the Cape Peninsula Protected Natural Environment (CPPNE). Currently the TMNP includes 25 000 hectares of the CPPNE and it is SANPARKS goal to incorporate the remaining 5 000 hectares into the Park (South African Naitonal Parks [SANParks], 2017).

African National Congress (ANC) Member of the Executive Council (MEC), Pierre Uys, in April 2009 in the dying days of his term of office (Baigrie & Ernston, 2017). Figure 3 provides an aerial view of the site before construction began.

Figure 3: Location of greenfield development, photo taken from Google Earth prior to the start of development (Hepworth, 2011; modified by Author, 2017).

This has led residents to question the integrity of the planning process, council and regional authorities, as they feel that due process was ignored and people were kept in the dark with regard to the status of the application (Hepworth, 2011).

The type of development that is occurring is a damaging development pattern which perpetuates environmental and social injustices. Sustainability, the balance of social and ecological integrity, is consistently discussed as a paramount goal of the nation, right down to the CoCT level. However, this type of development has adverse social and ecological impacts. Increasingly low-density design goes against what the CoCT's Densification Policy (2012a) encourages: increased densities in the name of sustainable urban design (CoCT, 2012a). The cumulative impact of low-density design leads to the expansion of the urban boundary. Development on greenfield sites is increasing the CoCT's footprint, but with a low, unsustainable density (Baigrie & Ernston, 2017). The CoCT Densification Policy (2012a) claims that low density development is harmful to sustainable development, due to it creating long travel distances and therefore making public transport unviable. This negatively affects the poor, increases CO_2 emissions from road based transport, damages place-making qualities of vibrant neighbourhoods, consumes valuable protected or agricultural

land beyond the urban edge[5], and increases infrastructure costs and economic fragmentation (CoCT, 2012a). The CoCT Densification Policy is discussed further in *Chapter 3: The Contextual Analysis of Chapman's Bay Estate*. Regardless of this policy, the Chapman's Bay Estate boasts to be a spacious development, with 145 units on a 45-hectare plot (Baigrie & Ernston, 2017). This equates to only 3, 2 du/ha or 13 people per hectare. Compare this figure to Masiphumelele, where approximately 416 people live per hectare (HOKISA, 2017). A more reasonable urban density would be medium density, which is between 25-80 dwelling units per hectare (Tonkin, 2008). However, the language of sustainability enables a glossing over of any social justice argument (Baigrie & Ernston, 2017). This reveals the issues of market forces reproducing what the Group Areas Act did (Baigrie & Ernston, 2017).

Additional to the density concern, is that while marketing the natural vegetation, it is conveniently ignored that removing natural habitats and indigenous vegetation is necessary in order for the development to take place (Baigrie & Ernston, 2017). Masiphumelele, however, still gets continuously criticised for encroaching on the wetland while the nearby luxury Lake Michelle Estate surrounds the heart of the wetland and Chapman's Bay Estate encroaches and surrounds part of a wetland too (Baigrie & Ernston, 2017).

It is important to question what processes are occurring to allow such development to take place. In the case of Chapman's Bay Estate, both civil society and environmental activism groups opposed the development. I discuss this application process in further detail in *Chapter 3: The Contextual Analysis of Chapman's Bay Estate.*

These development processes do not occur by chance, but are enabled through a system of players, agencies and institutions such as banks, built environment professionals, environmental consultants, municipalities and government. Through research, I seek to piece together the environmental and development policies that are in place and identify the gaps between policy and practise. Through this, I will work towards enhancing the CoCT's Gated Development Policy[6]. This research will be informed by the Noordhoek case study, but with the hope that it will be of relevance to other estates and their associated challenges countrywide.

1.4 Implications of gated developments to sustainability

The green and safety credentials of gated developments and eco-estates are boasted about, and typically used as a major selling point by developers (Baigrie & Ernston, 2017). The marketing of Chapman's Bay Estate is similar to that of Boskloof and Springerbaai 'Eco-Estates', both of which are located in the Western Cape Province. Boskloof Eco Estate markets harmony with nature, careful design and a presence of indigenous vegetation, their slogan being "Your Exclusive Nature Estate" (Boskloof Eco Estate, 2017). Similarly, Springerbaai Eco-Estate claims to be the perfect home for anyone who longs to be at one with nature (Springerbaai, 2014). This raises the theoretical question: can nature be exclusive, bounded and bordered?

[5] **Urban edge:** a demarcated line defining the outer limits of urban development for the medium to long-term (CoCT, 2012c).
[6] **Gated Development Policy**: This refers to the CoCT's 2007 Gated Development Policy.

Even if 'eco' is not in the name, it is often implied in the marketing. In the case of Chapman's Bay Estate, slogans such as, "work in the CoCT, live in the great outdoors" and boasting qualities such as, "surrounded by fynbos" are used to market the estate (CBE, 2017). This represents a broad issue of marketing nature for the production and consumption of land for elite consumers, pitching conservation against land rights (Ballard & Jones, 2011). Emphasis is placed on indigenous landscaping as a way of reconnecting people with nature; however, they exacerbate social divides by arguably excluding a large majority of the indigenous population. In this post-apartheid South Africa, gated communities gesture to protect two different sets of 'vulnerable assets'; the (mostly white) elite minority and botanical diversity (Ballard & Jones, 2011).

The language, also known as 'greenwashing' of these estates, markets the indigenous landscaping as a key feature. Greenwashing is defined as "marketing that uses green imagery and terminology to promote a perception that the establishment and its aims and policies are environmentally friendly" (Sherriff-Shuping, 2015: 11). Through this, a sort of metaphor emerges whereby these estates exclude 'problematic' plants *and* people. After all, the over-riding motivation for gated communities is a fear of crime, a type of geographical escapism whereby residents are able to live in a highly selected environment. Through marketing these spaces as eco-estates or boasting their use of indigenous landscapes, it creates the sense of consumers becoming stewards of the environment through 'politically correct' landscaping (Ballard & Jones, 2011). However, this 'greening' in South Africa is disjointed because it does not translate to wider spatial justice issues in a highly unjust society. This resonates with my normative position, as set out in section *1.2 Normative Position,* which is driven by recognition of the mind-set of social-ecological fragmentation. Gated communities result in fragmentation and social exclusion, preserving the apartheid geography (Landman, 2004). For example, in the case of Chapman's Bay Estate in Noordhoek, residents of the local townships, Masiphumelele and Ocean View, are living in situations where violence, poor sanitation and shelter due to poverty are everyday issues facing the people. These urban residents are the members of society who are blamed for environmental degradation, rather than the elites who are removing vegetation and stretching the urban edge in the name of profit and exclusion (Baigrie & Ernston, 2017; Ntongana, 2017).

1.5 Motivation for study and objectives

The sheer number of these types of development in Cape Town suggests that they are unlikely to decrease in the immediate future. However, I feel that by engaging in more responsible policy and development practises one can contribute towards better spatial justice and sustainability. It is becoming increasingly clear that the state and planning authorities need to play a proactive role in reversing the apartheid spatial legacy. The objective of this research is to making a positive contribution to current and future urban form and gesture towards overcoming spatial legacies in Cape Town, South Africa. This would require recommending ways in which to engage gated and surrounding communities more responsibly, considering the fact they are an increasingly popular form of development.

1.6 Aims

Overall, this research will aim to reimagine existing development patterns through an understanding of the current system of actors which enable such development. It will aim to ensure urban development contributes to a more

sustainable and well-performing urban environment, in such a way that sustainability and ecology are tightly wedded to social justice (Baigrie & Ernston, 2017). Specifically, it will aim to provide recommendations to enhance and amend the existing Gated Development Policy and its harmonisation and integration to relevant legislation. This will allow for them to be better aligned with planning objectives and visions as well as with local and national policies of integration and environmental sustainability.

The 3 subsidiary aims:

- **Explanatory aim**: Understanding the impact of gated developments on the urban environment, with particular reference to Chapman's Bay Estate, Noordhoek, Cape Town.
- **Exploratory aim**: Deepen my understanding regarding the Gated Development Policy and its disjuncture with planning ideals, with particular reference to Chapman's Bay Estate, Noordhoek, and Cape Town.
- **Normative aim**: Identifying possible recommendations for the existing Gated Development Policy in order for planners and policy makers to address the disjuncture in planning ideals and practise.

1.7Interventions

The interventions section of this dissertation, *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy,* will recommend amendments to the CoCT's existing Gated Development Policy, and its application, in order to address the cumulative impact of gated developments and their contribution to a well performing, sustainable urban environment.

There are many existing development strategies, policies and guidelines, which emphasise integration as a key goal. The post-apartheid government of South Africa has shown a clear commitment (through policy) to the transformation of South African socio-spatial characteristics in such a way that integration and development are key concepts in current policies (Johannes, 2012). The Urban Development Strategy (1995) proposed a set of strategic goals: it envisioned cities to be the centre of economic and social opportunity, free from racial segregation. The Development Facilitation Act (1995) was one of the only acts to implement this strategy. It aimed to prevent sprawl and encourage mixed land use, which are key principles based on the idea of an integrated city (Johannes, 2012). Neither of these principles is adhered to in the Chapman's Bay Estate development: it is a single-use, low density residential development.

The South African Human Rights Commission did not find gated communities to be unconstitutional, but does not support their development due to their contribution to social division, dysfunctional cities and society polari sation (CoCT Department of Planning and Building Development Management [CoCT DP&BDM][7], 2007: 2). Therefore, the Gated Development Policy was established. The policy was due for a review a year after its approval in 2007. This, however, has yet to happen. Marco Geretto (personal communication 2017, October 23), a senior urban designer for Urban Integration in the CoCT's Transport and Urban Development Authority (TDA), stated that a review is in order

[7] **CoCT Department of Planning and Building Development Management [CoCT DP&BDM]:** the name of this department is outdated, but is nevertheless relevant in this dissertation as it developed the 2007 Gated Development Policy.

and that the CoCT needs to be clearer about its application. *Chapter 3: The Contextual Analysis of Chapman's Bay Estate,* will discuss this policy's success and downfalls further, with reference to Chapman's Bay Estate.

Cities are usually open places where people are free to move and socialise. Gated developments result in the fragmentation of this urban fabric. The Gated Development Policy (CoCT DP&BDM, 2007: 1) states,

> As a responsible land use regulator, the CoCT promotes development of open, inclusive, integrated and equitable societies, generally discourages gated developments and will only consider such forms of development if a developer or community can clearly illustrate that it is constitutionally justifiable and won't have any adverse impacts or that such impacts will be sufficiently mitigated.

The recommendations section will seek to use this statement to strengthen the existing Gated Development Policy.

Several pieces of guiding legislation and polices inform the Gated Development Policy. However, several gaps in the guiding legislation and policy have been addressed. This is essential in ensuring the application of the policy. Therefore, in the interventions chapter, *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy,* I work on reviewing and seeking to enhance and amend the existing Gated Development Policy, and harmonise the application of current and additional guiding legislation and policies.

Furthermore, I will flag intersections for further research where relevant in *Chapter 4* and *Chapter 6: The conclusion*.

1.8 Main research questions

How can planners better engage in the issues and contradictions of gated communities through enhancing the existing Gated Development Policy, in order to address the current disjuncture between planning ideals and practise, based on the case of Chapman's Bay Estate in Noordhoek, Cape Town?

1.8.1 Subsidiary research questions

- What can be learnt from the international experience of gated developments?
- Are gated developments currently contributing towards urban sustainability and performance?
- Is the CoCT's Gated Development Policy contributing to ensuring gated developments are realizing the goals, visions and objectives of the CoCT?
- Is there a disjuncture between the CoCT's goals, visions and objectives and the outcomes in the case of Chapman's Bay Estate?
- If so, what are the cumulative impacts of these disjunctures on urban performance and sustainability?
- What are the reasons for this disjuncture in planning ideals and planning outcomes, in terms of the gaps in policy and application?
- How can gated developments contribute to better performing and sustainable urban environments?
- How can the lessons learnt in theory and the case of Chapman's Bay Estate be used in developing interventions?

1.9 Methods and Techniques of research

This dissertation has been studied and written in a circular process. The research has been completed according to a structured timeline; however, the nature of the research has required the process to be an iterative one. Throughout the process of this dissertation, I have found gaps in my own knowledge, as well as in literature, that has required that I work between chapters in an iterative way. Furthermore, as I delved into the contextual analysis which involved many interviews, conversations and following up between different people and pieces of writing, it lead me to discover unexpected findings, which required further reading and discussion in the literature review. I believe this has given the dissertation more depth as it has allowed for the freedom to learn outside of the boundaries originally set by the research questions. See method diagram (figure 4) for a visual description of the iterative research process.

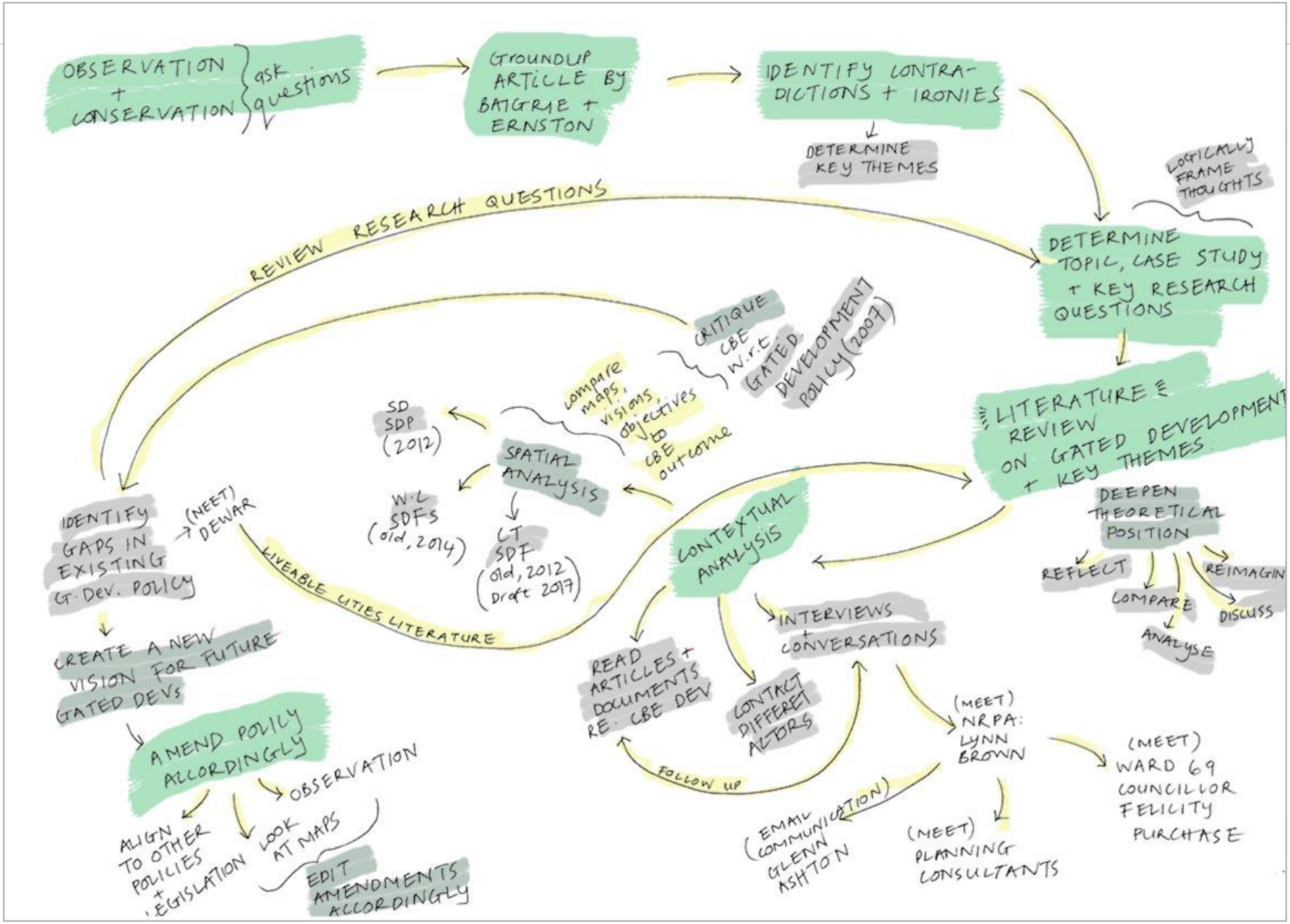


Figure 2: Method Diagram produced by Author (2017). This represents the iterative research process. 'CBE': Chapman's Bay Estate; Yellow arrows represent the back-and-forth process between sections in the dissertation

This research will make use of the case study method. The case study in this dissertation is the Chapman's Bay Estate in Noordhoek, Cape Town. This method is valuable as it allows for a deep exploration of complex issues (Zainal, 2007). It will allow for me to apply my theoretical understanding of gated developments (established in *Chapter 2: The Literature Review)* as a lens in which to assess Chapman's Bay Estate. In the case of my research, it will enable an exploration of concepts such as spatial justice, social exclusion, urban sustainability, and the disjuncture between planning ideals and practise to be considered in a realistic manner. This can assist in explaining how theory manifests spatially.

Furthermore, the case study method enables an iterative process of discovery and research to occur which can lead to unexpected findings.

In terms of the advantages of the case study method in research, it allows for the examination of findings in the context of its use (Zainal, 2007). With regard to this dissertation, which will explore the application of various policies to the Chapman's Bay Estate, the case study method is therefore suitable. Additionally, another advantage is that the case study method can assist in explaining the complexity of real-life circumstances as opposed to theory (Zainal, 2007).

There are also disadvantages to this research method. These include the possibility of the researcher's bias influencing the findings (Zainal, 2007). Additionally, using a single case study makes it difficult to establish generalisations. The disadvantages of the case study method will be addressed in section *1.9.3: Study Limitations*.

1.9.1 Research Techniques and Analytical 'Tools'

1.9.1.2 Open-ended (one-on-one) interviews

Open-ended interviews refer to interviews in which answer options are not provided. This provides the respondent with the freedom to answer as they choose, and therefore provide in-depth qualitative data for my research.
This informs an important part of the contextual analysis. Open-ended interviews allow for spontaneity of conversation to lead to unexpected findings and questions. This technique is considered most relevant to my topic because of the nature of my research.

At the time of the interviews I felt it was most appropriate to take notes instead or recordings, due to the casual nature of the conversations. Each interviewee has given permission for me to use their words and names, which has enabled honest insights into the perspectives and intentions of interviewees. These conversations and the paraphrasing of conversations provide evidence for claims I make in this dissertation. Furthermore, the interviews are necessary to gain professional insight into the recommendations and implementation section of this dissertation.

I am aware that this method can be limited through the views and information people are willing to expose. However, the advantages of this form of research include detailed responses and the freedom to respond as the interviewee wishes. Furthermore, my bias is reduced in an open-ended interview because I do not guide the responder in their answers. On the other hand, there are also disadvantages to the open-ended research method. These include the challenge of interpreting answers or use of my own bias in the interpretation. Additional disadvantages include the

collection of unusable information that is of no relevant to the research. The response to the limitations of this technique is discussed in section *1.9.3 Study Limitations.*

From my interviewing experience, I found the interviewees very helpful in directing me to new and interesting people and pieces of writing.

1.9.1.2 Spatial Analysis

This is necessary due to the nature of the research. In terms of the spatial analysis of Chapman's Bay Estate, I look at relevant maps to draw conclusions about the appropriateness of this development. Furthermore, a spatial analysis of relevant (temporal and spatial) Spatial Development Frameworks (SDFs) and local district Spatial Development Plans (SDPs) such as the Cape Town SDF (CTSDF) and Southern District SDP, provides a spatial understanding of the context in which Chapman's Bay Estate is developed. Older SDFs are also looked at in this section in order to determine if anything changed specifically to allow for the development of Chapman's Bay Estate. The CoCT's 2007 Gated Development Policy is discussed in relation to the Chapman's Bay Estate, which informs how the policy was applied as well as the gaps in the policy and its application. This assists in informing the interventions in *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy*. Relevant information for the spatial analysis includes the urban edge, threatened ecosystems and comparisons of living densities.

1.9.1.3 Desktop and library research

This technique is used throughout the dissertation. The literature review only makes use of this technique, while other chapters make use of a combination of research techniques. The desktop and library research enables delving into literature regarding similar development patterns elsewhere. It also allows for research into existing policies which are relevant to gated developments.

1.9.2 Study scope (time and space)

In terms of scope, the temporal scope of this research is based on the case study, Chapman's Bay Estate. It uses the time frame of this development's application process to determine which policies are relevant for the scope of this dissertation. The actual production of the dissertation is defined to approximately four-and-a-half months, wherein the theory, analysis and recommendations have been produced.

Spatially, this dissertation is confined to the context of the case study in Noordhoek, Cape Town. This includes the national and metropolitan context which has implications on the local context. The literature review will discuss examples and implications of gated developments from elsewhere, both nationally and internationally.

1.9.3 Study limitations

The limitations of this dissertation include both limitations to the research method and techniques, as well as limitations in terms of time. With regard to the research method, the case study method, it is difficult to make generalisations and the findings are limited to the scope of the case study – in this case, Chapman's Bay Estate. I have addressed this limitation by reviewing literature with regard to gated developments from both local and international

sources, which has enabled a greater perspective of the implications of gated developments to urban performance and sustainability. Furthermore, at times in the dissertation, I briefly mention similar cases in South Africa to emphasise my point. Additional limitations of the case study method include bias. This was mentioned in section *1.9: Methods and techniques of research,* as a possibility that the researcher (myself) will influence research through personal bias. I address this limitation by attempting to speak to multiple people to gain a range of perspectives, however, this is limited to only the people who are willing or unwilling to engage.

Open-ended interviews have limitations too, as discussed in section *1.9.1.2 Open-ended interviews*. These limitations include the possibility of the interviewee misinterpreting questions, as well as the possibility of the interviewee discussing irrelevant, unusable points. This is addressed in my research by aiming to be clear with my questions through using maps and figures to refer to in questions. Furthermore, I deem the limitations of open-ended-interviews to be outweighed by what can be gained from them. This includes learning unexpected findings as well as being pointed in new directions for further conversations or reading.

The four-and-a-half month period of research and writing is also a limitation. Further research is always possible with a topic of this nature, because I am constantly learning and being directed to new issues within the broader system of actors. This will be addressed in the intervention chapter, *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy* and *Chapter 5: The Conclusion*, where I flag issues for future research.

1.9.4 Ethical considerations

I am acutely aware of the ethical issues and I will use information thoughtfully, responsibly and with integrity. I will not betray confidentiality, compromise any of the sources or quote out of context. I will engage in ethical research by requesting permission to use excerpts of the interviews/dialogue as direct quotations in my questions. I will respect my interviewee's decision as to the level of permission granted. I recognise and acknowledge that my own subjectivities will invariably influence my research therefore I will position myself in such a way that seeks to be as objective as possible.

1.10 Guide to dissertation structure

This dissertation will adhere to the following structure. After this introduction chapter, *Chapter 2: The Literature Review* will discuss existing theory regarding the topic – without being confined by the case study. The dissertation will then lead on to *Chapter 3: The Contextual Analysis of Chapman's Bay Estate*, which will discuss the case of Noordhoek more specifically. This will include a spatial and legislative analysis of Chapman's Bay Estate, and a thorough analysis of the Gated Development Policy's application to Chapman's Bay Estate. It will then proceed to the main section of the dissertation, the interventions in *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy* and the implementation in Chapter 5: *Implementation and evaluation of the amended Gated Development Policy*. These chapters are informed by the initial research and analysis. Chapter 6: The Conclusion, will reflect on the key lessons and contributions of this dissertation, as well as making recommendations for further research.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction to chapter 2

The purpose of this literature review is to ground my topic within the existing literatures and academic debates regarding gated developments and eco-estates, as well as gain an understanding of how they are understood in theory and their relationship with spatial planning. Particular attention will be focussed on literature in the spatial planning field and domain.

It is also important to consider how literature, both local and foreign, can begin to inform an enquiry into the South African context of gating (Landman, 2004).

The aim of the literature review is to explore the theory on gated developments and eco-estates in a context that is broader than the locality of the case study of Chapman's Bay Estate in Noordhoek, Cape Town. The debate of contestations and approaches elsewhere in the world will provide the conceptual and theoretical tools, and understanding necessary for *Chapter 3: The Contextual Analysis of Chapmans Bay Estate*. Exploring the literature regarding the varying planning responses to gated developments and eco-estates around the world will contribute significantly to the interventions and implementation sections of this dissertation (chapters 4 and 5).

This literature review will discuss the key themes scholars have addressed in their research regarding gated communities and eco estates, as well as gaps in existing literature. It will begin by engaging important concepts relevant to the study of gated developments and eco-estates with their drivers and implications being of particular importance. It will then turn to a review of the literature regarding sustainable development, with the focus on urban sustainability, spatial justice and liveable cities theory. This will contribute towards an understanding of the meaning and implication of gated communities and eco-estates in relation to sustainable, positive and regenerative development. Furthermore, it will contribute to the later debate in *Chapter 3: The Contextual Analysis*, whereby the appropriateness of the case study, in terms of urban sustainability, will be explored. This, in turn, will also contribute to informing the necessary amendments to the Gated Development Policy, in *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy*.

The literature review will then turn to a discussion and exploration based on Latin American and North American literature regarding gated developments. Due to the parallels shared by South Africa and Latin America, in terms of its complex social fabric, this section of the literature review is deemed valuable when searching for lessons regarding the future of South African cities.

The final section of the literature review will focus on a discussion regarding local and international planning responses to gated communities. This has been noted as a gap in the existing literature.

The literature review will conclude by reflecting on the findings and debates in existing literature.

2.2 Eco-estates and Gated Communities

For the purpose of this literature review, the term 'gated community' or 'gated development' will refer to both eco-estates and gated estates, unless when differentiation is necessary. Eco-estates are generally a sub-category of gated-communities, and are referred to as such when they have been designed or marketed as 'green' or 'eco.'

Much of the literature regarding the implications of gated communities is based on Latin American, North American and South African research (Atkinson & Blandy, 2006). More recently, scholars have begun to question their impact in Britain and Europe too (Atkinson & Blandy, 2006). Most of the literature regarding gated communities is critical of this specific form of development (enclosed and exclusive), apart from the economic perspective which is in favour of it due to the profitability it offers (Landman, 2004). It may be profitable, but as Grant (2005) asks, is it sustainable?

Since the beginning of human settlements, walled cities have existed in differing shapes, sizes and forms (Landman, 2004). The driving force for these enclosures were similar to what they are today – safety, security and the fear of crime (Landman & Badenhorst, 2012). Many authors, including Bannister and Fyfe (2001), have suggested gated communities are as much, if not more, a reaction to the *fear* of crime as to crime itself. In a sense, *spatial* control has become a way of enforcing *social* control, through developing safe, utopian spaces within a broader context of multi-culturalism and its associated conflicts (Harrison, Todes & Watson, 2008; Landman & Badenhorst, 2012).

Landman (2007) uses a systems thinking approach to develop a framework upon which to assess the impact of gated communities on urban sustainability. Systems thinking is the process of looking at the overall patterns established by the separate parts of a system (Landman, 2007). Applying this approach to gated developments, she looked at the pressures which create a demand for gated communities, as well as the implications of gated communities on urban sustainability. With this understanding, she explained the system through the lens of feedback loops (Landman, 2007). Feedback loops explain how one component of a system influences another, either neutralizing or reinforcing, or perpetuating it. In the case of gated communities, Landman (2007) explains the pressures, or driving forces, to be spatial, social, economic and political. Similarly, the implications are spatial, socio-economic, environmental and institutional (Landman, 2007). She explains the feedback loop as follows: the problem (crime) influences the action of gating. In the immediate area, crime is reduced (Landman, 2007). Therefore citizens and civil authorities feel less compelled, or pressured, to address the fundamental issues which cause crime initially: inequity, unemployment, low levels of opportunity and segregation (Landman, 2007). The failure to implement the necessary fundamental changes leads to an increase or return of the crime issue (Landman, 2007). As Roberts (2013) and Landman (2007) state, fortification does not take into account that criminals will just change their tactics over time in order to penetrate fortification and protecting ones-self from crime is still the responsibility of the resident. Therefore, this system is reinforced or perpetuated by gated developments (refer to flow diagram, figure 8). This is an important lesson for its influence on urban sustainability.

There are a range of types of gated developments, and each type has differing implications on urban form. Enclosed neighbourhoods are existing neighbourhoods that have been closed retrospectively. Security villages are private

developments, either residential or office parks (Landman, 2004). This dissertation focuses on residential security estates, or gated communities, some of which are marketed or labelled using 'eco' terminology (eco-estates). These types of housing developments restrict public access through a variety of security measures and are characterised by legal agreements of collective property-management responsibility (Atkinson & Blandy, 2006: 4). Atkinson and Blandy (2006) deem it necessary to balance this form of development through public intervention, in order to prevent urban social relations from degrading even further.

Atkinson and Blandy's (2006) book, *Gated Communities: International Perspectives* compiles the debates of various authors that have arisen regarding gated communities. As stated in this book, a view which is commonly agreed upon is the fact that this form of development is a "radical urban form" (Atkinson & Blandy, 2006).

There are a number of reasons for the proliferation of gated communities. As listed in Atkinson and Blandy's (2006) book, the driving factors include fear of crime as well as privacy and investment potential. Similarly, Landman and Badenhorst (2012), and Coy and Pohler (2002), address the fear of crime as a reason for the proliferation of gated communities. Some authors, including Landman and Badenhorst (2012) and Grant (2005), argue that the popularity of gated communities is due to local government's failure to supply services and protection to its citizens. Landman and Badenhorst (2012) go on to discuss how this has led to the establishment of neighbourhood associations which result in residents maintaining control over their neighbourhoods. Therefore, as Landman (2004) notes, residents of gated communities claim to enjoy the efficient service provision which is managed by the residents association, as opposed to public authorities. In addition, Grant (2005) states people feel they cannot rely on public regulations and political processes to protect their neighbourhoods. In effect, portions of urban areas become privately controlled (Landman & Badenhorst, 2012).

Levitas (2010) is an experienced South African property investor with a background in marketing and finance, and he discusses the lucrative returns for investors who buy into estate living. Similarly, Coy and Pohler (2002), refer to the high capital return which is attractive to developers and investors. As urban areas become increasingly dense, land becomes increasingly scarce (Levitas, 2010). Therefore, open space and wilderness areas are becoming more and more a privilege for the fortunate. Gated communities offer these types of protected spaces to those who can afford to invest in them (Levitas, 2010). Additionally, crime has deterred many homeowners from owning freehold property in many cities around the world and has encouraged investment in secure estates. As Levitas (2010) mentions, the eco-aspect has also crept into these types of developments, due to the increasing environmental consciousness of consumers. Estates that market themselves using 'eco' or 'green' terminology have been shown to sell faster, at a premium price (Levitas, 2010).

Quite simply, demand is leading to the supply of this sort of development (Sherriff-Shuping, 2015), and has McKenzie (cited in Sabatini & Salcedo, 2007: 585) argues, supply may be as relevant as demand.

There are a number of reasons why cities allow the proliferation of gated communities. One is to maintain the tax base that the wealthy represent (Landman, 2004). The property tax that wealthy residents pay contributes a large amount to a city's revenue. Landman (2004) found through her research that many wealthy residents claim they would not still be living in South Africa if it were not for gated communities. Therefore, by authorities allowing this form of development, it maintains the tax base supplied by the wealthy (Landman, 2004).

These contrasting perspectives reveal the ironies of this form of development: it appears authorities are led to support, while simultaneously not support, gated developments. Authorities are pressured from both angles to attract investment, while also promote equitable urban forms (Low, 2001).

Sherriff-Shuping (2015) wrote a Master's dissertation for the University of South Africa (UNISA) and focussed her research on the development of residential estates which market and/or label themselves as 'eco'. By definition, eco-estates are developments in unspoiled areas, where the natural environment of flora and fauna flourish (Sherriff-Shuping, 2015). 'Unspoiled' generally refers to areas unmarred by development. Space is a major principle in such developments, with fewer properties resulting in a low-density living environment.

Common to most of the literature regarding gated communities, is the desire to exclude the unwanted (Atkinson & Blandy, 2006). Ballard and Jones (2011), in their discussion of eco-estates, use indigenous plants as a metaphor for social issues. With this, they describe the way people tailor their landscaping preferences, the same way that they determine the demographics of their neighbours (Ballard & Jones, 2011).

In an attempt to remain unbiased and pragmatic, it is important to understand the reality behind the demand for gating as well as to seek examples of positive forms of gated development.

For example, as mentioned by Landman and Badenhorst (2012), townhouse complexes can be positive, as they are medium density developments. This can contribute to densifying the spinal areas, which act as structuring movement or transport corridors (Landman & Badenhorst, 2012).

The literature review will now turn to a discussion of an important theme, sustainable development.

2.3 Sustainable Development

Sustainable development, and its many components, is a key theme in the discussion of gated developments. Gated developments have implications which influence an urban areas' contribution to the sustainable agenda. This is for a number of reasons. Firstly, gated developments have spatial implications which influence how people move through a city – by non-motorized transport, motor car or public transport. The spatial pattern of gated developments therefore implicates the viability of these movement options. This, in turn, has implications on the health of the natural environment due to its influence on fossil fuel and land consumption. Secondly, the social sustainability of cities is influenced by social cohesion, access to opportunities and the health of the natural environment. The *performance* of urban areas is measured by these qualities – which will be discussed further in section *2.3.1.3: Liveable cities*. This

section will introduce the concept of sustainable development before turning to a focus on urban sustainability. This discussion will include exploration of urban form, compact cities, liveable cities and an assessment of gated developments. It will then turn to an exploration of spatial justice before focussing on 'eco-estates' and greenwashing.

The modern meaning of the term 'sustainability' emerged in the 1970s in response to a growing consensus that contemporary development practise was leading to global environmental and developmental crises. The term's literal meaning is centred on 'upholding' or 'preserving' the existing state of things, but conceptually the term has much deeper meanings. The concept has to do with Western culture's attitude towards the natural environment (Wheeler, 2013). For millennia, humans have been interacting with the non-human world and altering the pre-existing ecological system in order to create human settlements (Wheeler, 2013). However the Industrial Revolution (late eighteenth / early nineteenth century) brought about far more dramatic environmental degradation (Wheeler, 2013).

The meaning of sustainable development is commonly defined using the concept derived from the report by the World Commission on Environment and Development, *Our Common Future*, issued in 1987 (also referred to as the "*Brundtland Report*"). This concept is concerned with ensuring present development patterns do not compromise future generations, with particular emphasis on meeting the needs of both the disadvantaged sectors of society and environmental limits (Jenks & Burgess, 2000; WC Department of Environmental Affairs and Development Planning [DEA&DP], 2013a). The term, however, has been overused and remains too broad (Dewar, forthcoming). As Girardet (2013) puts it, sustainable development has been made out to be the solution to all problems for the past 25 years. Nevertheless, sustainability holds great importance for settlement planning and design (Dewar, forthcoming).

Unsustainable development patterns globally have, in a large part, been driven by economic growth that promotes overconsumption, and exploitation of people and resources which leaves wealth in the hands of only a few members of society (Wheeler, 2013). In this discussion of growing inequity, Wheeler (2013) mentions the increasing pattern for affluent and gated enclaves to exist within short distances from impoverished communities (see figures 5 and 6).

Biologist Garrett Hardin's theory (1968), *the tragedy of the commons*, describes a condition of society. The theory explains how the private interests of large corporations and individuals triumph over the common good (Wheeler, 2013). This is due to a lack of collective responsibility.

The theory is based on the metaphor of a common (shared) pasture: each herdsman will attempt to keep as many cattle as possible on the common land (Hardin, 2009). This situation can exist reasonably for centuries because wars, poaching, and disease will maintain the cattle numbers at a manageable carrying capacity (Hardin, 2009). However, as Hardin (2009) states, eventually the goal of social stability will become a reality and the functioning logic of the commons will degenerate into tragedy. This occurs because of human nature, which drives each herdsman to maximise his or her own interests. The attitude of each herdsman is to think that adding only one more animal to his or her herd will cause no significant difference to the condition of the common pasture (Hardin, 2009). This action has one negative and one positive component. The positive component is that the herdsman will receive the full proceeds

of the sale of an additional animal, and the negative component is the overgrazing caused by that animal (Hardin, 2009). However, the negative effect of the single animal on the common pasture can be divided by all animals, therefore it cannot be traced back to the herdsmen who added their cattle (Hardin, 2009). Consequently, the herdsman, a rational being, resolves to add more cattle to make more profit because if he or she does not, someone else will. The fundamental issue that the tragedy of the commons explains is that humans are locked into a tragic system whereby they seek to increase their own gains without limit in a world that has limits (Hardin, 2009). As Hardin (2009: 3) states: "Freedom in a commons brings ruin to all".

In terms of its relevance to this dissertation, Wheeler (2013: 12) has used this theory to explain how human behaviour manifests in the production of space:

> Developers build on every available piece of land at the urban fringe, landowners feel it is their right to seek maximum economic return from 'their' property, owners of factories and motor vehicles each contribute their pollution to the metropolitan air shed, and developers often produce buildings with little thought to the streetscape and public environment that is being created.

This quote from Wheeler (2013: 12) resonates with a key theme that this dissertation deals with: the cumulative effect of gated developments on urban performance and sustainability.

Furthermore, these private interests have been institutionalised by laws, policies, and other structuring elements of society which perpetuates the triumph of individualistic attitudes (Wheeler, 2013). Essentially, these forces make it difficult for sustainable planning to occur, but addressing this situation is a core requirement (Wheeler, 2013).

The meta-term, sustainability, has ecological, social and fiscal meanings (Dewar, forthcoming). These relate to natural systems, livelihoods and capital and operational costs respectively (Dewar, forthcoming). A fundamental aspect of sustainability is metabolism: this refers to the throughputs of a settlement, which ultimately aims to maintain a low ecological footprint and optimised resource flow with minimal waste (Dewar, forthcoming). The term has implications for working harmoniously with nature such as recognition of interdependencies, avoiding hazards and protecting resources and designing with nature.

Rock, Kusterer & Weaver (1997) book explores development theory beyond the debate of economic development and towards broad-based sustainable development (BBSD). BBSD incorporates the following pillars: equity, participation and environmental sustainability. Their research encourages an interdisciplinary approach when considering the role of cities in BBSD. They look to Jane Jacob's (American activist known for her influence on urban studies) idea of great cities: complex, resilient and creative, producing healthy societies (Rock, Kusterer & Weaver 1997).

With regard to the idea of resilience, there is much debate in literature. One such debate is that of Kaika (2017), a professor of urban, regional and environmental planning, whereby she criticises the Habitat III Conference's New Urban Agenda for acting only as 'immunology'. This analogous debate states that a paradigm shift within an old framework acts to vaccinate citizens to accept larger doses of inequality and degradation through merely mediating

the effects of global socio-environmental inequality rather than acknowledging the indicators of what urgently needs to be addressed (Kaika, 2017). Furthermore, Katzchner (2016) builds on this argument in her discussion regarding the urgency to 'listen' and seek answers, beyond reactionary solutions.

According to Girardet (2013), when considering sustainability we need to consider the questions: how long, what scale and for whom? The debate surrounding sustainable development evaluates whether it can happen under the principles and values of capitalism (Girardet, 2013) - these values being based on an ideology of private ownership and consumerism. This is relevant to the gated community discussion, because of the role that their natural setting often plays into their success, due to it being commodified.

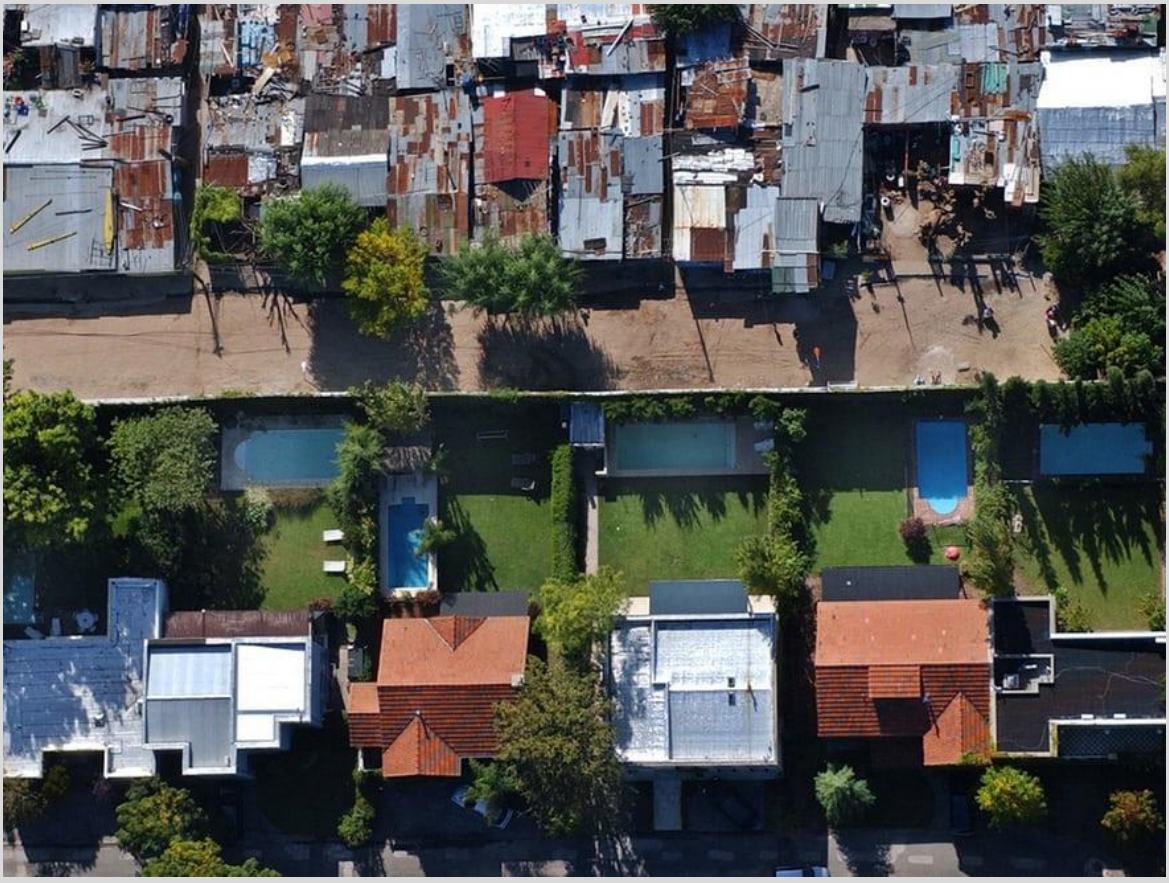


Figure 5: Picture by Natacha Pisarenko for The Guardian (2014) displaying the aerial view of the boundary between an informal settlement and a gated development in Buenos Aires (Michael & Blason, 2014).

Figure 6: Picture by Johnny Miller (2016) for his photography project, Unequal Scenes, of a wetland separating gated estate, Lake Michelle, and township, Masiphumelele. This is in ward 69 (the context of Chapman's Bay Estate) which will be discussed in Chapter 3.

2.3.1 *Urban Sustainability*

There is a wealth of literature on urban sustainability and sustainable development. However, for the purpose of this dissertation, the literature review will now turn to focus on the important literature relevant to the gated development debate.

The focus on *urban* sustainability is rooted in the fact that cities have the potential to have large adverse effects on the natural environment, due to the countryside being overturned for agriculture, the flooding of valleys for dams, and growing landfill sites (SIEMENS, 2010). The concept of urban sustainability is: planning and designing cities that do not have to have an excessive reliance on the surrounding hinterland as this maintains a lower ecological footprint (SIEMENS, 2010; Dewar, forthcoming). Therefore, in a TED Talk presented by Peter Calthorpe (2017), a San Francisco-based architect, urban designer and planner, he discussed the urgency of planning cities correctly. He believes that if we do not focus on building better cities, we will not address climate change appropriately (Calthorpe, 2017). This stems from his understanding that designing cities appropriately, can shape citizens behaviour, which is the root of climate change (Calthorpe, 2017). In short, he believes that the way we shape cities, is the way we shape humanity (Calthorpe, 2017).

The United Nations Development Programme has described Sustainable Human Development as development that focuses on people's *choices* and *capabilities* in an equitable manner that does not marginalise men or women (Landman, 2004).

Grant (2005) notes that planners often find themselves in conflict between achieving planning principles and the desires of developers. One such planning principle is urban sustainability. Sherriff-Shuping (2015) believes that based on the concept of sustainability, gated communities should focus equally on economics (profit), people *and* the natural environment. Landman (2000) writes about the powerful influence that gated developments may have on the long-term sustainability of the urban realm in the 21st century.

Harrison, Todes & Watson (2008: 168), address the issue of gated communities with regard to sustainable development, stating:

> *There is a growing fashion for eco-estates of various kinds, including golf estates, but it is doubtful that the construction of large gated estates, with poor access by workers, high levels of class separation and which are dependent on transport by motor car, can be seen as a model for sustainable development.*

Similarly, Landman (2000) claims that all forms of development should be considered in relation to the dimensions of urban sustainability. She has therefore used the framework of urban sustainability indicators to assess the sustainability of gated communities according to six indicators (Landman, 2000), this is discussed in section *2.3.1.3 Urban Sustainability Indicators with regard to Gated Developments.*

Jenks and Burgess's (2000) book discusses the debate around sustainability in cities of the developing world. *Compact Cities: Sustainable Urban Forms for Developing Countries* is the third book in a trilogy. They build on research from their first two books, which reveal that there is no single way to achieve urban sustainability, but rather a variety of urban forms that can be applied according to ranging contexts (Jenks & Burgess, 2000). Inclusive planning processes were found to be of high importance in achieving sustainable urban forms (Jenks & Burgess, 2000). The book reviews the debates regarding sustainable development and the compact city, and questions the appropriateness of the argument for compaction (Jenks & Burgess, 2000).

Cities have been found to be the source of much of environmental and social degradation. Problems often associated with cities include failing infrastructure, poverty, crime and high consumption patterns which lead to high ecological footprints. It has been observed that it is not necessarily the cities themselves that are problematic, but rather poor urban governance (Jenks & Burgess, 2000). It is expected that over half of the world's population will live in urban areas by 2030 (Jenks & Burgess, 2000), hence the demand to plan sustainable urban forms. Therefore it is essential to understand the implications of gated developments with regard to sustainable urban form.

Lee Breckenridge (2017*)*, a professor specialising in environmental and natural resource law in the USA, states that an interdisciplinary approach is necessary in the planning and designing of sustainable urban systems. Furthermore, policy is an important way of addressing urban sustainability due to its ability to touch on every aspe ct of the interaction between people and the urban environment (Herring, 2017). But as Fitzgerald, a professor of law and public policy states, policy is implemented in a fragmented way which hinders its success (Herring, 2017).

2.3.1.1 *Urban Form*

Urban form as important implications on urban sustainability and performance. Tsai (2005) discusses four variables which can be used to measure urban form, these being urban size, activity intensity, the degree of activity distribution, and the extent to which high-density areas are clustered. These spatial patterns influence the way in which people interact and move through space. This is important to consider with regard to social sustainability. Furthermore, urban form has ecological sustainability implications through its influences on factors such as motor vehicle use, sprawl and ecological corridors. With regard to gated developments, they influence urban form, especially when cumulated.

The majority of the literature regarding gated developments discusses the impact gated community developments have on urban form and social cohesion, while fewer address the issue of environmental justice. What is clear is that the agglomeration of gated communities is particularly problematic in terms of urban form, due to the resultant traffic displacement, congestion, fragmentation and social exclusion (Landman, 2004).

Susan Fainstein (1994: 1), a political theorist and scholar in urban planning, comments on the influence of large developments on urban form:

> *[by forming] contours which structure social relations, causing commonalities of gender, sexual orientation, race, ethnicity, and class to assume spatial identities. Social groups, in turn, imprint themselves physically on*

the urban structure through the formation of communities, competition for territory, and segregation-in other words, through clustering, the erection of boundaries, and establishing distance.

Due to the damaging implications of gated developments, which many scholars have discussed, Grant (2005) addresses possible planning responses to gated developments. From a Canadian perspective, she discusses the implications of a proliferation of gated communities. Her research reveals that gating, in fact, promotes the fear of crime rather than reduces it, as well as promoting further segregation in terms of age, class, and ethnicity.

Coy (2006) considers the relationship between the proliferation of fortification and the decline of public space in urban areas. This is a consequence of the private and exclusive nature of gated developments. Large walled areas result in portions of land being enclosed. Therefore, spaces such as streets and open spaces that are meant to be public spaces become privatised (Coy, 2006). This is the antithesis of an accessible city.

Landman (2004) has written from a South African perspective, on the relationship between spatial planning and gated communities in particular. She has written this paper with a view that gating could have a long-term impact on urban sustainability. Through using six urban sustainability indicators, she discusses the relevance of gated communities to the urban sustainability discussion. This is discussed further in section *2.3.1.3 Urban Sustainability Indicators with regard to Gated Developments.*

2.3.1.2 a) Compact cities

Compact cities are a type of urban form. To begin the argument for compact cities, it is necessary to locate the discussion in the context of the urban sprawl debate. Calthorpe (2017) states that the villain of bad urban planning and design is sprawl. This is not only because it is characterised by low density development on the periphery of urban areas, but largely because it isolates people (Calthorpe, 2017). According to Girardet (2013), sprawl is typical of affluent places, where people have a desire for space. People become isolated in sprawling cities through the development of economic enclaves and land use enclaves; they are separated from nature; and there is little 'cross-fertilization' between social groups (Calthorpe, 2017). The antidote to this form of development is mixed-use, integrated, and compact environments (Calthorpe, 2017; Dewar, forthcoming). This, states Maxwell (2004), is what planners seek to promote in communities.

Dewar (forthcoming) highlights integration as a critical factor in South African cities due to their nature of sprawl, fragmentation and separation. Much of this separation is related to class groups, which in South Africa, is highly correlated to race (Dewar, forthcoming). The term 'integration', has urban, natural, social and cultural meanings and is concerned with settlements in which there is a mix of activities, incomes, land use and age and class groups (Calthorpe, 2017; Dewar, forthcoming). As stated by Sherriff-Shuping (2015), urban sustainability requires building on brownfield sights, as opposed to greenfield sites[8]. This is a form of urban densification.

[8] **Greenfield and brownfield development**: greenfield land is land that is undeveloped either in urban or regional development, due to being preserved for either agricultural or conservation purposes; brownfield development is the redevelopment or reuse of a previously developed property.

Furthermore, reducing sprawl can play a significant role in addressing climate change. This is due to the fact that a sprawling city layout cannot support a well-functioning, viable transport system. Therefore, Marshall (2008) suggests that urban design is an undervalued opportunity for influencing urban form. This can influence the transport network, and in turn influence carbon emissions. Higher densities, and more compact urban form, mean that destinations are generally closer, and transport options are greater (Marshall, 2008), which can reduce the amount of emissions originating from motor-car travel.

Many authors, including Ricketts and Imhoff (2003), Radeloff, Hanmer & Stewart (2005) and Mcdonald, Kareiva & Forman (2008) have written papers regarding the effects of urban sprawl on biodiversity. All three papers regard urban sprawl as a cause for conservation concern. Radeloff, Hanmer & Stewart (2005) sought to quantify urban sprawl in the U.S. Midwest and relate it to ecological fragmentation. They found that ecological fragmentation was generally more destructive on previously un-altered sites, than on brownfield sites. Similarly, Ricketts and Imhoff (2003) studied the areas where human threats and biodiversity coincide, and found that regardless of urban density, conservation should receive equal attention in both low density and high density sprawl areas. In addition, Mcdonald, Kareiva & Forman (2008) focused their attention on the threat of urban sprawl to protected areas, based on current population and urbanisation trends. As King (2009) states, the most significant contribution humans can make to ecological protection, is maintaining the continuity of habitats. These various arguments led to a debate which warrants attention – planning for compact cities.

The debate regarding compact urban form, according to Jenks and Burgess (2000), is rooted in preserving resource consumption (fossil fuels, land, soil, biodiversity). Burgess (2000) explains that as living standards increase, so do consumption patterns. As a result, the demand for land increases. Clearly, as populations increase, planning needs to respond accordingly. By turning to a compact urban form, the consumption of land can be managed. There are many questions surrounding the compact cities debate, including to what scale the idea of compaction should be applied and whether this urban form should apply to new or old settlements (Jenks & Burgess, 2000).

With regard to gated communities, this debate is relevant due to the proliferation of low density gated developments on the edges of cities, what Coy and Pohler (2002: 355) refer to as "edge-city-like projects". Therefore, the theory on compact cities can inform decision makers on appropriate development form. This will be discussed further in *Chapter 3: The Contextual Analysis of Chapman's Bay Estate*, which explores the low density development.

2.3.1.2 *Liveable cities*

Liveability is both a product of and prerequisite for sustainable urban forms, as this literature review aims to demonstrate. The concept of liveability is a process, as opposed to an end goal, similar to the concept of sustainability. The performance qualities are closely linked to the urban sustainability indicators in which Landman (2004) evaluates the performance of gated communities, as discussed in the following section *2.3.1.3, Urban Sustainability Indicators with regard to Gated Developments.*

"In their essence, settlements are places of interaction," as stated by Dewar (forthcoming: 11). Therefore, while planning and designing settlements that are safe and secure is a valid concern, this should not be pursued obsessively, as Dewar (forthcoming) discusses in his chapter *Liveable Cities: The Case of Cape Town, South Africa* for the forthcoming book, *Liveable Cities from a Global Perspective*. Obsessive focus on settlement security, such as gated developments, destroys essential dimensions of urban life such as spontaneity and vitality (Dewar, forthcoming).

The term 'liveable cities' refers to cities which are performing well in terms of catering for the lives of its inhabitants, particularly the urban poor (Dewar, forthcoming). Central to the concept of liveability, is the quality of public space (Dewar & Winkler, forthcoming). Emerging literature, as discussed by Ho and Douglass (2008), explores how liveable cities support the mental well-being and social environments of its citizens, which is further reinforced by Dewar and Winkler (forthcoming) who state that the liveability of cities influences the dignity of the people. The liveability of cities is determined by performance qualities, which are contributed to by spatial principles (Dewar, forthcoming). Each city has different performance requirements, and these should ideally be informing urban decision-making in South African towns and cities, as stated by Dewar (forthcoming). However, according to Ho and Douglass (2008), different interests within the state working at odds with one another, over matters such as urban policy, prevents the manifestation of liveable cities.

Place-making is a principle dimension of liveability, says Ho and Douglass (2008). It is a multi-faceted approach to the planning, designing and management of public spaces in order to strengthen the connection between people and the places they share (Project for Public Spaces, 2009). Place-making has largely been an urban designer's concern, but it is the responsibility of all professionals to be accountable for the outcome of urban space. As Dewar (forthcoming) notes, working in silos in urban decision-making contributes significantly to negative outcomes in the urban realm. Therefore successful place-making is the result of constructive inter-disciplinary planning.

Places which lack a sense of place have been described by James Howard Kunstler, as the "geography of nowhere" (Wheeler, 2013). This refers to places which could exist anywhere, such as malls, due to their lack of character. This can have troubling implications for society, as Wheeler (2013) notes, because the physical nature of cities and towns has the potential to influence their social capital.

Dewar (forthcoming) states that existing literature argues that the required performance qualities for cities and their neighbourhoods, should be determined from four main sources: emerging international tendencies; planning theory; the law; and a contextually specific development filter (Dewar, forthcoming).

Some emerging international tendencies are more relevant, depending on the location that is being discussed (Dewar, forthcoming). I will discuss emerging international tendencies, which have proven relevant to South Africa in *Chapter 3: The Contextual Analysis of Chapman's Bay Estate*. Understanding global dynamics is important for spatial planners (Dewar, forthcoming) for quantitative and qualitative purposes. For example, population figures are important for many reasons, but for spatial planners they are imperative in order to plan services and infrastructure accordingly.

Additionally, understanding the economic dynamics of a location (Dewar, forthcoming) and their international influences is essential for planning purposes. This is due to the role spatial planners play in providing citizens with access to opportunities in both the informal and formal economy. Additionally, there are dynamics such as climate change, which are relevant worldwide due to cities' roles as a source and driver of greenhouse gas emissions, as well as the implications climate change has for urban development (Grimmond, 2007; Dewar, forthcoming). Greenhouse gas emissions can be sourced primarily back to fossil-fuel driven cars (Grimmond, 2007), with dependence on them worsened by sprawling urban form (Dewar, forthcoming; Dewar & Winkler, forthcoming). This is relevant to the gated development conversation as they are often built on the peripheries or edges of cities. Understanding these global dynamics, and their impact in other contexts, allows planners to determine which innovative solutions are required.

In terms of planning theory, there has been much literature over the years, which attempts to inform positive settlement performance (Dewar, forthcoming). Some of the better-known authors include Jane Jacobs (1961), Kevin Lynch (1981), and David Crane (1960). This theory has attempted to establish the importance of performance qualities in the planning and design of human settlements. However, Crane (2007) believes urban design has been downgraded to a minor aspect of the planning process whereas it should be a primary aspect.

The overriding performance qualities that have been deemed important by planning theorists include efficiency, sustainability, equity and social justice, integration, dignity, sense of place, sociability and privacy, safety and security, and aesthetic appeal (Dewar, forthcoming). With reference to the case study, Chapman's Bay Estate, these performance qualities will be integrated into a discussion of its performance in *Chapter 3: The Contextual Analysis of Chapman's Bay Estate*.

Efficiency is a term used when all other performance qualities are suitably met. However, in its narrower meaning, it measures the efficiency of a settlement in terms of minimising energy spent on movement. For this to be achieved, the settlement is required to be accessible and permeable, predominantly by non-motorized and public transport, as opposed to private vehicles. Additionally, efficient urban forms promote compact development, as discussed in section *2.3.1.2 Compact cities*. This decreases the total movement required, increases densities and therefore assists in the viability of public transport. Mixed-use development is also promoted to increase convenience and polycentric urban form.

Sustainability has already been discussed prior to this section. In terms of performance quality, it requires the settlement's ecological footprint be kept to a minimum (SIEMENS, 2010; Dewar, forthcoming), and that humans and nature function together in harmony with nature in various different ways.

Fainstein (2010) and Dewar (forthcoming) promote the importance of spatial justice for a well-performing city. Spatial justice forms an important part of this literature review (*section 2.3.2: Exploring Spatial Justice*) due to its relevance in the gating debate. Through the social exclusion and ecological exploitation that often manifests from gating, questions regarding spatial justice are raised. Furthermore, the issue of spatial justice holds a place of particular importance in

South African settlements due to the high level of inequity faced by the urban poor. In terms of urban performance, this issue requires that accessibility be maintained as a primary concern for all inhabitants of a settlement.

Dewar (forthcoming) has flagged integration as a critical issue in the performance of South African settlements due to the pattern of sprawl, fragmentation and separation that dominates land-use, social, race and class aspects of cities and towns (Dewar & Winkler, forthcoming). This is highly relevant to gated communities due to the physical separation between people and the fact that they are generally single-use residential.

Dignity is the first constitutional right of all people in South Africa (RSA Department of Justice, 1996). The relevance here to spatial planning is that all settlements are required to create an environment where all people, regardless of their income, have equal rights. In contexts where there are high levels of poverty, public space is essential for providing dignity spatially (Dewar, forthcoming). Gated estates enclose areas such as roads and open space which should act as public spaces of interaction.

Sense of place is measured by the appropriateness of a settlement's form to the landscape (Dewar, forthcoming). This is a result of a collection of qualities and characteristics which provide meaning to a location (Hsiao, 2012). In terms of liveability, sense of place contributes to providing people with dignity in the spaces they share. Gated communities, if not carefully considered according to their context, can adversely affect the sense of place (Low, 2015) by producing an overly uniform landscape (Dewar, forthcoming).

A concern for safety and security is a considerable factor in urban settlements. However, as already stated, this should not be pursued obsessively (Sabatini & Salcedo, 2007; Dewar, forthcoming) as is the case with gated developments. This can result in increased fear and mistrust between social groups due to decreased interactions. This can adversely affect the quality of urban life.

I will now turn to a discussion concerning the urban sustainability indicators with specific regard to gated developments.

2.3.1.3 Urban Sustainability Indicators with regard to gated developments

With reference to Landman's (2000) six indicators of urban sustainability, the sustainability of gated communities will now be discussed. These indicators are namely: a sense of community; safety and security; social exclusion; urban fragmentation and separation; urban planning and management and financial implications (Landman, 2000: 3). Landman (2000) considers these indicators in terms of their long term effects.

- **Sense of community**: There are arguments both for and against gated communities contributing to a greater sense of community. Some residents indicated that the drive to support or reject the development of gated communities sometimes resulted in conflict between residents (Landman, 2000). Another argument regarding sense of community, is that fact that there is an increased sense of community within the gated development, but a reduced sense between the residents outside of the walls (Landman, 2000; Sabatini & Salcedo, 2007). A reduced sense of security contributes negatively towards urban sustainability (Landman, 2004).

- **Safety and security**: there are mixed reviews regarding security and gated communities. Some authors argue that walls are not 'impenetrable' by criminals (Landman, 2000; Coy, 2006). Others argue that gated communities can also displace crime to other surrounding areas (Landman, 2000). Furthermore, the spatial arrangement of gated communities can result in response times for emergency personnel being affected. This impacts on long-term urban sustainability considering the goal of public safety for all (Landman, 2004). Furthermore, Jane Jacob's (1961) model of vibrant cities and Dewar (forthcoming) discuss the essential element of *vitality* in urban environments. Dewar (forthcoming) states that high levels of security pose a risk to this.
- **Urban fragmentation and separation**: as mentioned above, the spatial arrangement of gated communities influences the urban form and functioning (Landman, 2000; Coy, 2006). This is in the form of creating physical barriers, which enhance social exclusion. Additionally, gated communities, generally low density, encourage increased car use (Landman, 2004), which contributes both to increased pollution and decreased opportunities for a viable public transport system to develop, or be maintained (CoCT, 2012a). Additionally, Landman (2004) raises the issue of gated communities encouraging the occurrence of sprawl. In the long term, this pattern of suburban sprawl is unsustainable – as discussed in section *2.3.1.2 a: Compact cities*.
- **Urban planning and management:** issues of planning and management are affected because the traditional role of local authorities becomes blurred. The management of traditionally municipal-run services such as roads, waste removal, water and electricity meter readings becomes complicated with the introduction of gated communities (Landman, 2000). Another service traditionally run by the municipality is security. With the introduction of gated communities, private security companies take charge. This, in the past, has led to homeowner associations lobbying for tax rebates (Landman, 2000). This has an impact on long-term urban sustainability both in terms of urban governance and in terms of economic sustainability (Landman, 2004).
- **Financial implications:** the privatisation of services has the potential to have harsh implications on urban sustainability through reducing the opportunity for cross-subsidisation (Landman, 2004).

I will now turn to an exploration of spatial justice, and its connection to the gated development debate.

2.3.2 *Exploring Spatial Justice*

Spatial justice informs and important part of this dissertation. As Dewar and Winkler (forthcoming: 1) state, spatial justice cannot be considered in isolation from other desirable performance qualities such as sustainability. Spatial justice incorporates both ecological and social justice. Components of this include generative power, equity of access, liveability, choice and equity of access to resources (Dewar & Winkler, forthcoming). In terms of the natural environment, Landman and Badenhorst (2012) address the issue of gated developments often occurring on urban peripheries. This pattern of developing on the urban edge threatens the integrity of agricultural land and the goal of urban compaction (discussed in section *2.3.1.2 a: Compact cities*). Furthermore, gating transforms areas through converting traditionally public open spaces to privately controlled spaces (Landman & Badenhorst, 2012).

Environmental justice has been addressed by Dixon and Ramutsindela (2006, 129), by defining it as "the fair treatment and meaningful involvement of all people – regardless of race, colour, national origin or income – in development, implementation and enforcement of environmental laws". Therefore, environmental justice and social justice are united in their concern to promote equitable distribution of well-being through structures and institutions which breed and perpetuate equality (Dixon & Ramutsindela, 2006). As discussed by Dixon and Ramutsindela (2006), the divide between social and environmental justice theory contributes to the divide in practise. For example, natural science remains biased toward preserving the physical environment, while social science remains biased towards protecting the human environment (Dixon & Ramutsindela, 2006). In practise, this results in conflicts of interest. Spatial planning, in theory, aims to combine the knowledge of the two, through recognition that their influences are inseparable (Dixon & Ramutsindela, 2006).

A 2008 United Nations Review of World Cities found that South African cities are the most inequitable in the world, and the urban poor are the most disadvantaged particularly due to the structure and form of the cities (Dewar, forthcoming). Discriminatory practises in the housing market over many decades has created a sharp contrast between the neighbourhoods which promote human and ecological well-being, and those that do not (National Academies of Sciences, 2016). Spatial justice is a principal concern when considering the performance of a settlement, and therefore cannot be considered in isolation to other performance qualities (Dewar & Winkler, forthcoming). Primarily, it is related to accessibility to opportunities within a settlement (Dewar, forthcoming). Ideally, the most equitable situation is when people have access to all their daily needs by foot or non-motorised transport (NMT), or where this is not possible, by public transport (Dewar, forthcoming).

Spatial justice can be devastatingly affected by the form of a city, such as situations where sprawl, fragmentation and separation dominate (Dewar & Winkler, forthcoming). This is the case in South African cities, which will be further discussed in C*hapter 3: The Contextual Analysis of Chapman's Bay Estate.*

A notable gap in the literature of gated developments is *processes* and *responses* which serve to contribute to the realization of spatial justice.

2.3.4 *Eco-estates and Greenwashing*

Sherriff-Shuping's (2015) study explores the actual residential sustainability of eco-developments, through a series of 14 case studies. Her findings show that despite developments claiming to focus on environmentally sensitive design features, they generally were not enough to be considered sustainable. Therefore, the marketing and selling of the natural features offered by such developments, appears to be less of a concern for the natural environment, and more of a form of greenwashing. As defined by Sherriff-Shuping (2015: 11), greenwashing is "marketing that uses green imagery and terminology to promote a perception that the establishment and its aims and policies are environmentally friendly".

As already discussed in section *2.3. Sustainable Development*, Harrison, Todes & Watson (2008: 168) have questioned the sincerity of sustainability claims in the marketing of eco-estates and gated developments. Recognition that this is generally a way to promote profit, through exploiting the environmental conscious buyers (Levitas, 2010), casts doubt upon the sincerity of the 'eco' claims.

2.4 Important Considerations for Spatial Planners and Policymakers Regarding Gated Communities

2.4.1 *Planning visions oppose practise*

Much of the literature regarding gating and spatial planning addresses the conflicts facing spatial planners and urban authorities. Landman (2004) introduces the challenge for city planners to enable the pre-conditions for well-performing urban areas, while gated communities contradict this goal. Maxwell (2004) and Grant (2005) also discuss the inappropriateness of this development type where cities seek to enhance liveability and integration. Similarly, Lemanski (2007) writes about cities attempting to be global cities, while also attempting to address domestic socio-economic redistribution. As put by Landman and Badenhorst (2012: 43), "on the one hand planners are driven by the vision to promote integration and accessibility and open up urban opportunities for the poor, but on the other hand they are faced with challenges to promote safer urban environments". These agendas often tend to oppose one another in practise, as conflict between planning ideals and contextual realities arise (Landman & Badenhorst, 2012).

2.4.2 *Inequality*

Lemanski (2007) discusses the problem with the global city model being based on an Anglo-American perspective. This results in authorities restructuring cities to align to the global economy with the goal of attracting foreign investment. This deepens existing segregation, at the expense of poor populations. As put by Scott et.al (2001), "at one extreme…massive poor communities living in [informal settlements], and at the other the more spacious and well-equipped communities of the middle-class and the rich". This image is accurately portrayed in the figures 5 and 6, provided in section *2.3: Sustainable Development.* Furthermore, it is descriptive of the case study which is explored in *Chapter 3: The Contextual Analysis of Chapmans Bay Estate.*

As stated by Landman and Badenhorst (2012), the form of the CoCT reveals characteristics of a wider society. In South Africa, this is embodied by an apartheid legacy, which provides the groundwork for inequality (Lemanski, 2007).

2.5 Possible Gated Futures: Considering the Latin and Northern American Example

Much of the literature available and studied for this dissertation regarding gated developments is grounded in the Latin and Northern American experiences. This is understood to be due to the prevalence, and growing popularity, of this form of development in these regions. While gated developments are proliferating across the globe (Webster, Glasze & Frantz, 2002), I will focus particularly on the Latin and Northern American experience. This is due to the fact that the North American debate is well established (Webster, Glasze & Frantz, 2002) and, with reference to the Latin American experience, there are many lessons to be learnt for South Africa due to its Latin American parallels. These

include social and spatial disparities. Landman (2004) notes that less research has been done in the African context, but considering existing challenges in Africa's urban areas, it is imperative to examine the challenges gating imposes on the future of African cities. Therefore, as planners and policymakers, it is beneficial to identify the consequences of gating, in order to respond appropriately.

Coy and Pohler (2002) attribute gated developments, or *fortification*, in Brazil and Argentina, to the intensification of social disparities and spatial fragmentation in an increasingly divergent, globalised world. Interestingly, Coy (2006) notes, is that the proliferation of gated developments coincided with the development of the first shopping centres. This is significant because it reveals a time in history where the consumption patterns of the elite and middle class were transformed (Coy, 2006).

We cannot ignore the connection between the aforementioned social disparities and increasing crime rates. Below, the diagram (figure 7) developed by Coy and Pohler (2002), summarises the case of Latin American gated developments, in terms of social and economic motives, as well as the consequences for society and urban form. The reference to suburban edge-city type gated communities is relevant to this dissertation. Social motives include self-segreation, lifestyle, and a fear of crime – echoing the words of Landman and Badenhorst (2012). The economic motive for gated developments according to Coy and Pohler (2002), follows from what Levitas (2010) states is the motivation for developers and investors, including profit interest (Coy & Pohler, 2002). The consequences for society, reiterate the concerns mentioned in section *2.4: Important considerations for spatial planners and policy makers regarding gated communtiies*, such as social fragmentation. It also raises a new concern, relevant to South African cities, which is the promotion of low-income employment (Coy & Pohler, 2002). The consequences to city structure are an additional concern of gated communities in Latin America, as shown in figure 7. City structure is implicated by fragemntation, decreasing significance of public space and uncontrolled suburbanisation (Coy & Pohler, 2002).

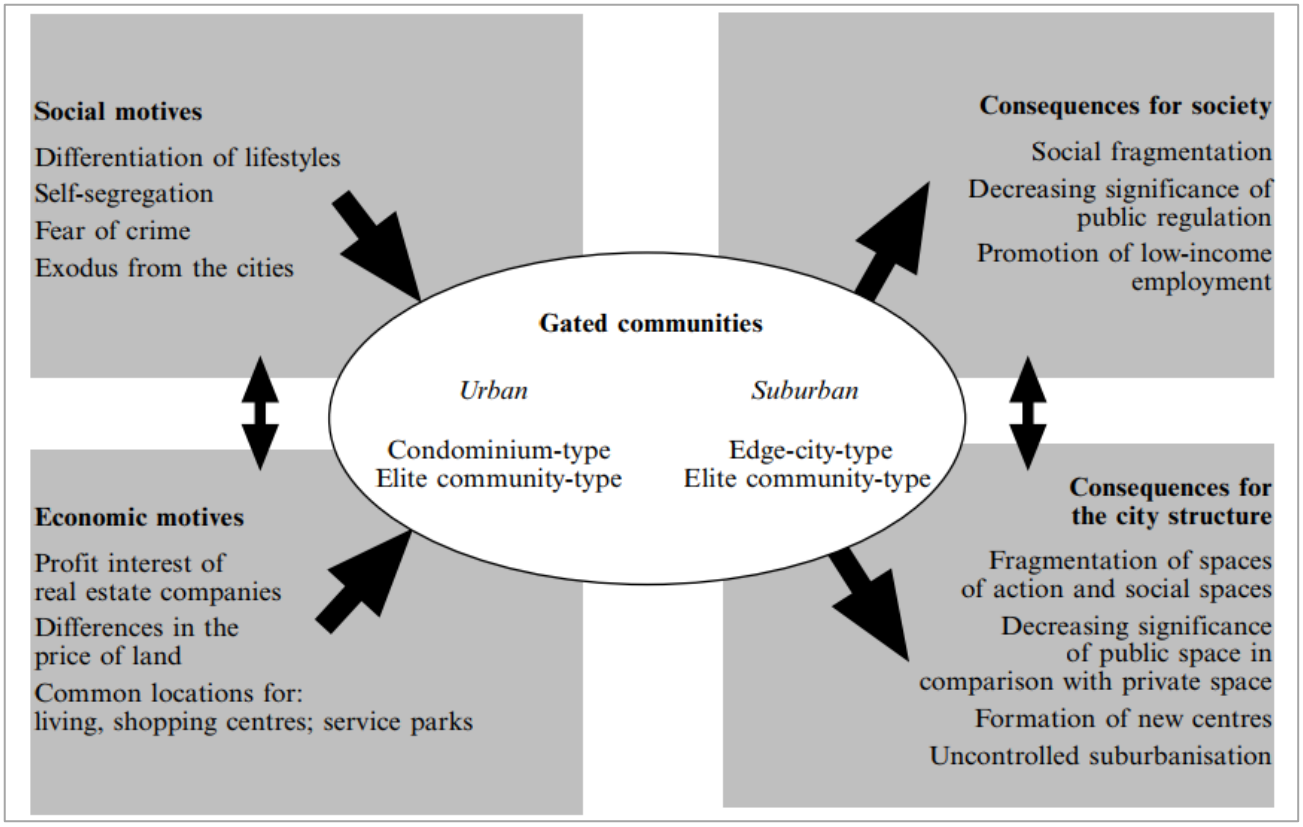


Figure 3: Motives and consequences for gated communities in Latin American cities (Coy & Pohler, 2002.

Coy and Pohler (2002), similar to Jenks and Burgess (2000), believe that gating is the consequence of poor governance and the resulting desire for more secure forms of living. Coy and Pohler (2002) have found that a common marketing strategy of gated developments in Brazilian and Argentinean cities includes features such as 24/7 security, privacy, peacefulness, closeness to nature, a high standard of living, a high quality of infrastructure and good accessibility to the CoCT (Coy & Pohler, 2002). This form of marketing and project execution resembles that of the North American case (Coy, 2006).

To summarise their interpretation of the Latin American case, fortification represents the basic state policies of neoliberalism, deregulation and the decrease of state investment.

This resonates with the North American experience of gating, which has been attributed by Webster, Glasze & Frantz (2002) to economic restructuring which creates new class structures. This, in turn, creates polarization of society which has lead Webster, Glasze & Frantz (2002: 18) to interpret gated developments as the physical manifestation of a dual economy of *the elites* and *the excluded*. Similarly, Blakely and Snyder (1997) have also associated the increase in gated developments with a dramatic demographic change in North American cities, which can be attributed to foreign immigration and a growing 'underclass'. Furthermore, the growth in popularity of gated developments in North American cities has also been attributed to a lack of attention being paid to community structure – therefore focus on reviving communities is considered an important step towards reducing their demand (Blakely & Snyder, 1997).

The following section will discuss local and international planning responses to gated communities, incorporating responses.

2.6 Planning responses to gated communities, locally and internationally

There is limited literature regarding the planning responses to gated communities, therefore this has been noted as a gap in the existing literature. Landman (2004) debates the several approaches that local councils can take to regulate the development of gated developments and their counter-parts, eco-estates. She acknowledges that the challenge for planning and land use management, from a local government perspective, is the lack of guidance as to how to respond to the growing concerns associated with their development (Landman, 2004).

There is recognition in the literature, as mentioned in section *2.2: Eco-estates and Gated Communities*, that gating is mostly due to a fear of crime. Therefore, the gating response does not address the root cause, but rather addresses a symptom of social decay (Culwick, 2015). As Grant (2005) points out, gating defeats the purpose of planning, as planning seeks to enhance a community.

Landman (2004) acknowledges the important role of policymakers in the outcome of gated developments. This is due to the fact that gated developments can only be established with the consent of planners, and consent is based on the guidelines set out in policies.

Only one author, Grant (2005), has written a paper dedicated to the planning *responses* to gated communities in Canada. Another author, Landman (2004), discusses the challenges regarding gated communities for planners in South Africa. These two papers are the main pieces of literature found to be relevant to the planning response section of this literature review. This reveals a gap in the existing literature.

Grant (2005) mentions that there is growing recognition that gated developments are likely to increase in number, despite the fact that many communities have policies which discourage gating. This leads Grant (2005) to question whether planners and policymakers are ready to respond.

Landman (2004) engages with the question of how gated communities should be regulated in South Africa in order to address the associated concerns. She reviews several approaches that local councils can take in response to gating. The three responses are namely a proactive stance, a pragmatic approach or a laissez-faire approach. As described by Landman (2004: 166), the three approaches are as follows:

- Proactive: authorities hold a strong position either for or against gated developments. This position would be based on existing policies and frameworks.
- Pragmatic: this approach is more neutral. Authorities would acknowledge both the arguments *for* and *against* gated developments, and then manage their development accordingly.
- Laissez-faire: this approach is the opposite of a proactive approach – it is a non-interference approach whereby it allows the free market to determine development.

These differing approaches for local councils make it difficult for planners to have a clear sense of direction regarding gated development policy. It would be more beneficial to determine a single, agreed-upon approach in the context of pressing issues (Landman, 2004). Landman (2004) suggests acting boldly, by reconsidering gated communities all together. This resonates with the words of Dewar (forthcoming), who states that bold and innovative planning is imperative at a time of significant urban challenges.

Coy (2006) discusses one response that attempts to influence the proliferation of gated development. This is the 'correcting city' approach which seeks to reduce urban expansion. This approach, according to Coy (2006), can be seen in an increasing number of Latin American cities. The idea behind this approach is that it allows civil society and public authorities to become more aware of urban problems. Through this awareness, it's believed that it is more likely that locally adapted solutions will be generated. In Latin America, these solutions often develop through integration of the informal city (Coy, 2006). This response may therefore be applicable in the case of South African cities, due to the reality of informality. However, Coy (2006) does acknowledge that the 'correcting the city' approach depends primarily on good urban governance which, as previously discussed, may be idealistic. Nonetheless, the guideline is beneficial for the planning and development of future cities (Coy, 2006).

The small amount of literature devoted to planning responses to gated developments generally discuss potential design features that could contribute to lessening the negative impacts of gating, arguably mitigation approaches. For example, Grant (2005) mentions policies such as limited fencing heights, restricting screening along public roads or creating permeability requirements. In fact, Grant (2005) believes that planning policies may be some of the weakest tools municipalities have to discourage or manage gating. This is because, in the view of Coy (2006), public authorities are becoming increasingly powerless in the context of growing social disparities and market controlled urban transformation.

Grant (2005) attempts to respond to the issue of impermeable, agglomerated development through suggesting that gated communities should be well distributed. This can contribute to ensuring that transport and pedestrian routes are not hindered. The importance of permeability connects to the desire for walkable cities, as well as the importance of accessibility for emergency vehicles. Therefore in Grant's (2005) opinion, if gating must occur, small developments are better than large ones.

2.7 Conclusion of the literature review

This literature review has revealed that literature related to gated developments and eco-estates is largely grounded in North America, Latin America and South Africa, with a growing debate in Europe and Britain. The literature is largely critical of this form of development, with a lot of reference to fear and poor urban governance being a driving force. A factor which has been highlighted as an additional driving force is the potential profit for investors and developers. Some of the literature has proved that having an 'eco' status is becoming an increasingly good selling point; however, this eco status is questionable, according to Sherriff-Shuping (2015) and Harrison, Todes & Watson (2008).

A discussion on sustainable development introduced the issue of the term being too broad and undefined, yet of central importance to settlement planning and design (Dewar, forthcoming). Furthermore, it gestured to question its compatibility with capitalism. The literature review then turned to discuss sustainability at the urban scale and began integrating gated communities into the discussion of sustainability. This was done by incorporating Landman's (2004) evaluation of gated communities against a backdrop of six sustainability indicators. This revealed that generally, gated communities are an unsustainable form of development.

The literature review then turned to a discussion of the important considerations regarding gated communities for planners. The literature explored the complexities of a planner's roll in the urban space. Planners often find themselves in conflicting roles; one being to seek to achieve particular visions, while another is managing political agendas and developer's goals. Much of the literature considers the stark inequalities produced by gated communities, in much of the world. It also goes on to question the impact of gated communities on urban form and function, with a large focus on social cohesion and a lesser focus on environmental justice – despite the intertwined nature of the two.

A visual summary (figure 8) largely informed by Landman (2007), as well as an incorporation of other lessons learnt in this literature review, provides a simple explanation of the non-linear, complex and perpetuating nature of gated communities. The figure explains how the inherited (colonial, segregation and apartheid) structure of the city: segregated and inequitable, leads to a fear of crime and crime itself, a fear of the 'other', and therefore the polarization of society (Landman, 2007). This leads to fortification, or gating, which both implicates the nature of existing neighbourhoods and increases the level of segregation and fragmentation in the city. This reinforces the desire to live in gated communities, which in turn leads developers to seek opportunities to develop gated communities for higher profits. Increased gating leads to decreased urban liveability and sustainability, which furthermore leads to increased inequity, and the cycle perpetuates itself.

Additionally, compact vs sprawling cities were discussed, as well as this in connection with developing on greenfield and brownfield sites.

Literature grounded in the Latin and Northern American context was then discussed in order to consider the possible future of South African cities if planning responses are not established, one such explanation from Coy and Pohler (2002: 358) being "islands of wealth in an ocean of poverty." This literature made visible the similarities between the gating proliferation worldwide, including their marketing and project execution.

To end the literature review, a discussion of the international and local planning responses to gated communities provided possible theories to work with, but mainly proved to be a gap in the literature of gated developments.

Coy (2006) has referred to a democratic city as "a city without walls". In light of this goal, the literature review has exposed the urgent need for a clear, agreed upon approach, which is needed in local councils to address the proliferation of gated developments.

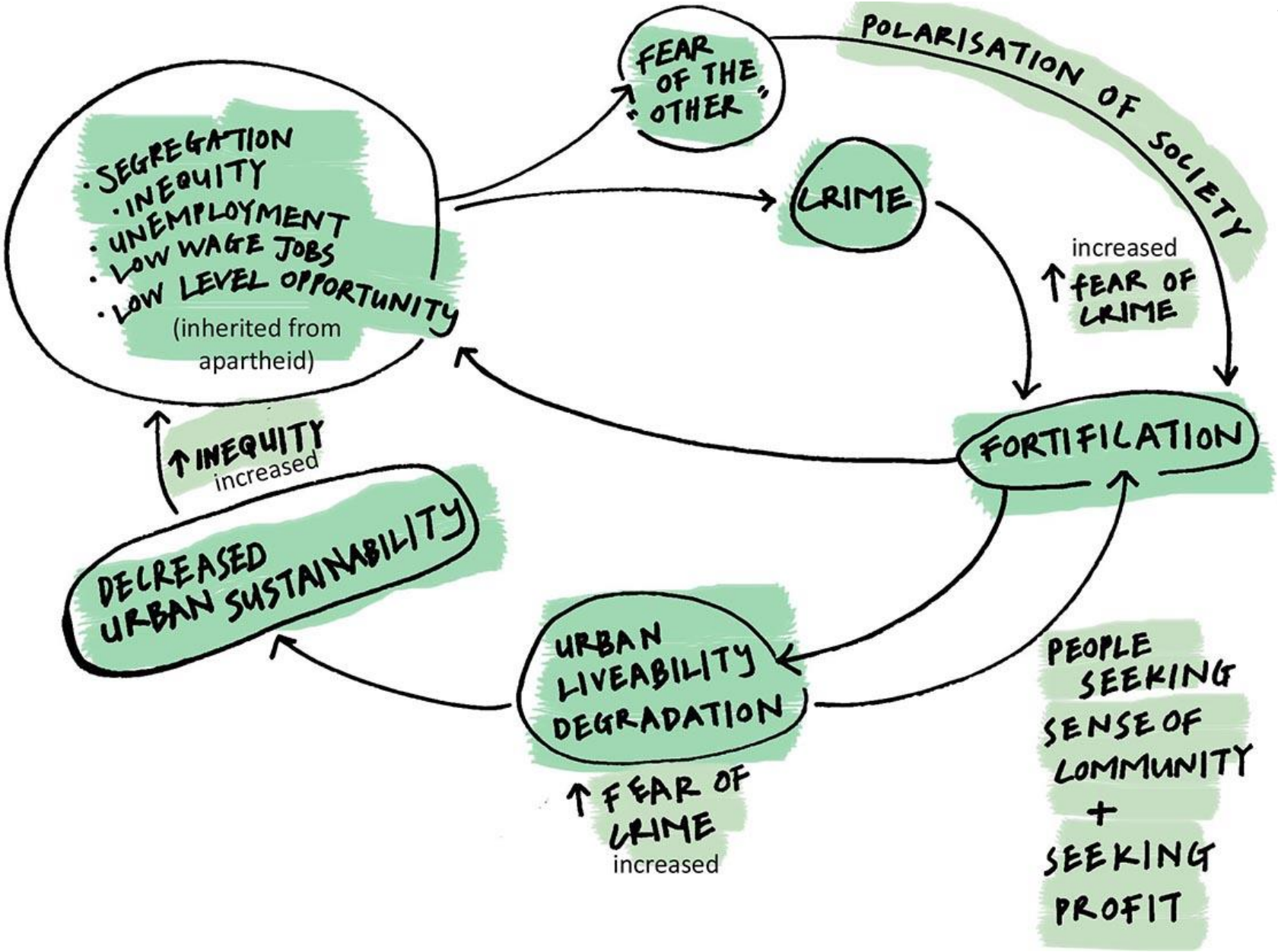


Figure 4: Visual summary of the non-linear, self-perpetuating nature of gated communities. Largely informed by Landman (2007) and other lessons learnt in the literature review. Synthesized and produced by Author (2017).

CHAPTER 3: THE CONTEXTUAL ANALYSIS OF CHAPMAN'S BAY ESTATE

3.1 Introduction to chapter 3

This chapter introduces the Chapman's Bay Estate case study, following from the theoretical context laid out in *Chapter 2: The Literature Review*. It seeks to provide a contextual description of various aspects of the estate and the surrounding area that enables the reader to engage with the issues and themes explored and pertinent to this dissertation.

Initially I will begin by locating the case study in the current (2017) paradigm, of climate crisis and related suffering, social upheaval and a lack of vision and foresight.

I will then begin the study of Chapman's Bay Estate, locating it within its broader and immediate context. It is necessary to locate the case study within its social and political history, as this provides context to the existing tensions. Furthermore, it reveals the urgency to plan appropriately in the context of great inequity. It will begin at the scale of South Africa, incorporating a brief history of relevant segregation and apartheid policies in South Africa, which cannot be separated from current contestations. It will then zoom into the metropolitan context of the Chapman's Bay Estate case study, being Cape Town. It will look at its challenges and complexities, particularly the legacy of the apartheid city.

The contextual analysis will then turn to discuss, in detail, the Noordhoek location, by depicting what information is drawn from interviews with various people. Throughout the chapter, I use findings from interviews alongside research reports and policy documents, to answer various subsidiary research questions regarding the context of Chapman's Bay Estate. In an effort to make this section legible, it will be structured accordingly: an introduction to Chapman's Bay Estate, the development application process, the opposition and concerns regarding the development, the responsibility of the CoCT, and the pro-development perspective. By providing this detailed understanding of Chapman's Bay Estate, I then turn to discuss the surrounding area, Noordhoek within ward 69, and its historical context.

In order to locate the site in its current and future position, I then turn to a spatial analysis of Chapman's Bay Estate, with reference to the Cape Town Spatial Development Framework (CTSDF), and the Southern District Plan (SDP) which considers the southern part of the Cape Peninsula. This will assist in understanding how the development does, or does not, align to these frameworks. Both outdated and recent documents are considered relevant as they would have informed the development application, which began in 2008.

I will then turn to an essential part of this dissertation, the analysis of the CoCT's Gated Development Policy, with specific reference to the Chapman's Bay Estate. This will include locating the policy in its legislative environment and where it is applied in the development application process. This discussion and analysis is an important informer of the following chapter, *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy*.

Throughout the chapter, I seek to answer the main and subsidiary research questions, as set out in Chapter 1, section *1.8: Main research questions.* The main research question being: *How can planners better engage in the issues and contradictions of gated communities through enhancing the existing Gated Development Policy in order to address the current disjuncture between planning ideals and practise, based on the case of Chapman's Bay Estate in Noordhoek, Cape Town?*

To end the chapter, I will comment on what the contextual analysis reveals about the current system and Gated Development Policy, including challenges and opportunities, and what guidance it provides for the next section: *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy*.

In order to spatially contextualise the case study, a figure of the Cape Town Metropolitan Area and the location of Chapman's Bay Estate is provided (figure 9) below.

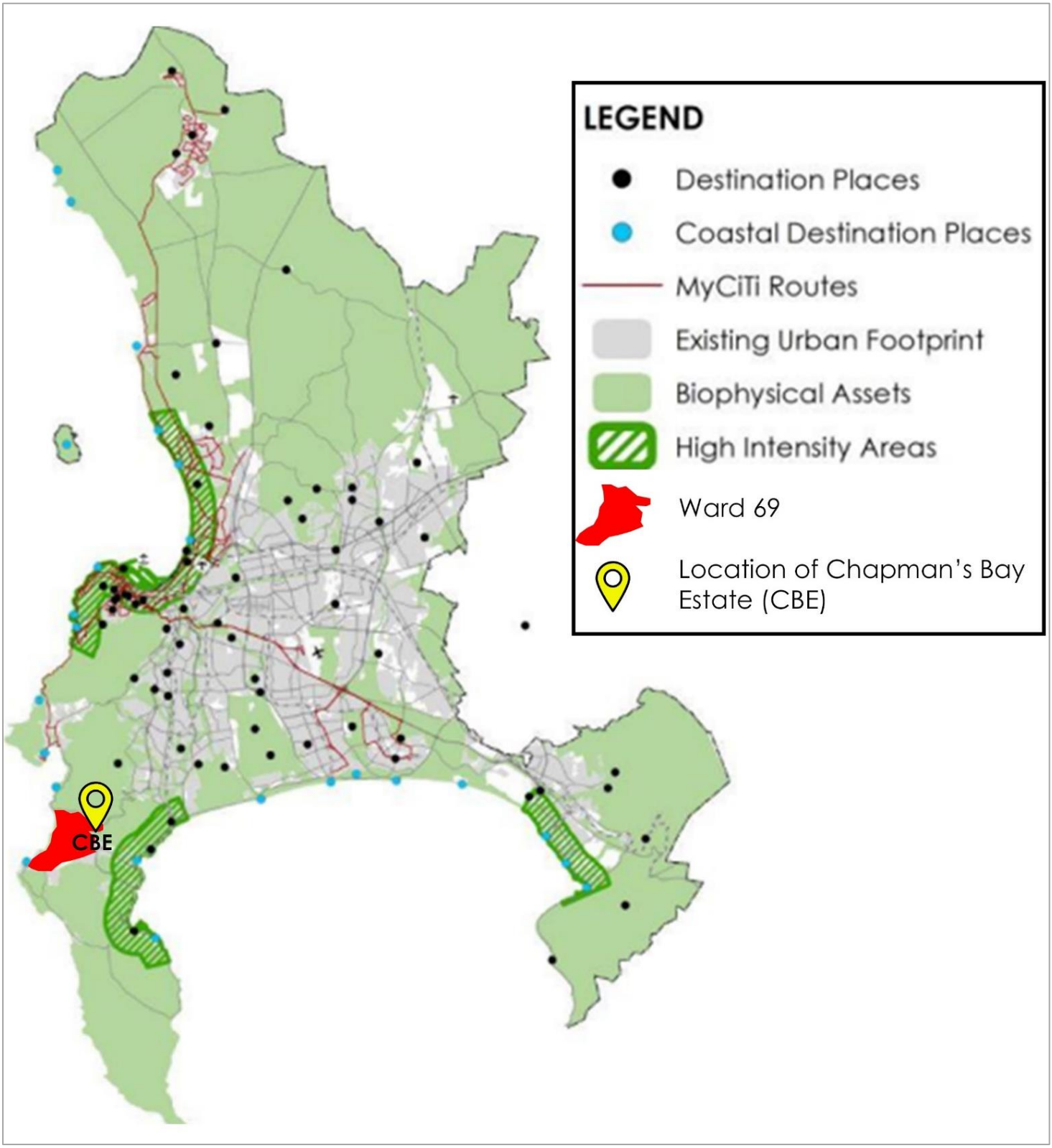


Figure 5: Spatial context of Chapman's Bay Estate (CBE) in relation to the Cape Town Metropolitan Area. Red area depicts Ward 69 and yellow icon depicts CBE. Image sourced from CoCT Draft SDF (CoCT TDA, 2017) and modified by Author (2017)

3.2 The current paradigm

We are currently at a time of significant change and uncertainty (Katzschner, 2016). Ecological uncertainties have brought about recognition that we, as humans, can no longer practise dualistically with nature, and this requires reimaging our current mode of practise. In Cape Town, South Africa, we are currently in the midst of the worst drought in over a century (van der Merwe, 2017). This has far reaching socio-economic and environmental implications (van der Merwe, 2017). Internationally, 2017 has been a year of unprecedented hurricanes in the United States Gulf Coast, with climate change being considered the main culprit for the increased intensity of the storms (Sneed, 2017). Furthermore, extreme flooding in India has led to concerns that children will never return to school without prioritization in relief efforts (Siddique, 2017). The climate crisis is deeply wedded to social upheaval and therefore, the surge of refugees worldwide is the greatest in decades. This is likely to increase with globalization, social upheaval and environmental degradation (King, 2017).

We, as a global community, are in this position due to the decisions of elites that benefit few, at the expense of many (King, 2009). As planners, recognizing this current paradigm is an essential way forward in seeking innovative and bold solutions (Dewar, forthcoming).

I will now turn to an exploration of the South African context.

3.3 South African contextual history

In order to locate current tensions in a contextual history, I will briefly discuss South Africa's segregation and Apartheid history. South Africa has a long history of segregation and apartheid, imbedded in a history of land dispossession (South African History Online [SAHO], 2016). By 1860, domination of African people in the Cape (Cape Town) had been achieved (SAHO, 2016). This was achieved through systematic segregation in the colonial era, followed by the Apartheid Era. Apartheid was not purely a political construct, but largely enabled through architecture and spatial planning, the legacy of which still exists today (Findley & Ogbu, 2011).

Apartheid was officially introduced in 1948 under the leadership of the Nationalist Party (Dubow, 1989); however, this was merely a solidification of an existing segregation framework that had been in place since the beginning of the 20th century (Dubow, 1989; SAHO, 2016). Dubow (1989) argues that segregation, particularly in South Africa, is integrally linked to the process of industrialization and the development of capitalism, whereby Africans were socially reproduced as the exploited labour force.

The segregation policy that had already been in place formed an ideological and political framework for the establishment of apartheid. The segregation policy attempted to define authority in a fragmented society (Dubow, 1989). Essentially, segregation attempts to maintain and entrench white supremacy at every level of the social and political system (Dubow, 1989).

Arguably, the 1913 Natives Land Act was fundamental in generating and growing the current land tensions present today in South Africa. At the time of the Act, the Union of South Africa had recently been established (Feinberg, 1993).

Whites, who had control over political and economic decisions, dominated the government despite the overwhelming majority of the population being African. There are various hypotheses as to why this Act was passed, including: to prevent squatting by Africans on white owned land, to promote agricultural labour, to stop land purchase by Africans, and to promote segregation (Feinberg, 1993). Perhaps the most important feature of the Act, in Feinberg's (1993) opinion, was that African's could no longer buy, lease or acquire land outside of a specified area.

The 1950s Group Areas Act established a system whereby people were only allowed to live in specified areas, based on their racial group (Findley & Ogbu, 2011). Black and coloured people were prohibited from owning or living on land classified as 'white only' (CoCT TDA, 2017). Non-white South Africans were relocated to peripheral locations, typically underserviced and segregated by race. This segregation was often enforced by hard infrastructure which enforced the marginalization of these communities (CoCT TDA, 2017). An additional effect of this, was the increased spatial footprint of the CoCT due to urban sprawl (CoCT TDA, 2017).

As a result of these segregation and apartheid policies, white and middle class South Africans, commonly began residing in the suburbs of South African cities, in the second half of the 20th century. Resource allocation favoured the suburban areas and this legacy has been maintained in post-apartheid South Africa (SAHO, 2016). The present spatial layout, as a consequence of apartheid spatial planning, is characterized by high-density, poorly serviced former black and coloured areas, contrasted with low density, high opportunity and highly serviced former white areas (CoCT TDA, 2017). This creates a mismatch between residential densities and economic opportunity, placing the burden of the CoCT's unsustainable urban form on the urban poor (CoCT TDA, 2017).

Additionally, new forms of segregation have emerged through property markets, transportation and taxation systems (Mabin, 2005), amplifying divisions. For example, the state regulates private land development in such a way that it directly impinges on the social fabric. This reveals the lack of consciousness between the relationship of the state and private developers, which in turn directly affects the distribution of resources (Mabin, 2005).

The reversal of the apartheid's spatial legacy, which limits movement, access and integration within and around South African cities is a key aspect of the CoCT's Integrated Development Plan (IDP) and the CTSDF (CoCT TDA, 2017). The IDP is the overarching framework in which the CoCT aims to realize its vision, by building on five pillars: "a caring city, an opportunity city, an inclusive city, a safe city, and a well-run city" (CoCT web, 2017). The CTSDF forms part of the IDP, as the spatial and structural informant (CoCT TDA, 2017). The CTSDF will inform part of the spatial analysis of Chapman's Bay Estate in section 3.5 of this chapter: *Spatial and legislative analysis of Chapman's Bay Estate.*

This divisive colonial and apartheid history has left us with a city that is fragmented both socially and ecologically, and therefore producing tremendous inequality. This will become apparent through the exploration of the case study and its surroundings.

3.4 Exploring Chapman's Bay Estate in its local context

This section of the contextual analysis will delve into an exploration of the Chapman's Bay Estate. Based on research through open-ended interviews, email correspondence, online documents and articles, as well as concerned civil society's comments online, I aim to communicate facts and concerns regarding this development. By working through by own, as well as others, bias and subjectivity, I seek to communicate my findings honestly to the readers of my dissertation, and therefore portray a truthful picture of this development.

3.4.1 Chapman's Bay Estate

Chapman's Bay Estate is located in Noordhoek, Cape Town, north of Sun Valley and Hazelwood Park residential areas. The site is bounded by Ou Kaapse Weg on the Northern and Western edges and to the north of the site is the TMNP, previously the CPPNE. The boundary of the TMNP runs throug the North-Eastern portion of the site. The land above this boundary will not be development, according to the Construction Environmental Management Plan (EMP) for Chapman's Bay Estate. A layout plan is provided in figure 11.

This greenfield property was previously known as the Dassenberg Estate[9], the applicant being the Dassenberg Property Development Trust, made up of three developers (CBE, 2017). The development has received much criticism from civic society and therefore is often referred to as a controversial development. The research surrounding the specifics of this estate and its application process will be now be presented.

At the time of writing this dissertation (2017), Chapman's Bay Estate, is in the final stages of its construction, with some residents having already moved onto the property.

The controversy surrounding this development appears to be based on the principle of the development, occurring beyond a 'blurred' urban edge, rather than focussing on compact, densified development (Consultant A, personal communication 2017, September 15). With reference to this statement, which refers to the urban edge as 'blurred' – this is made visible in the disjuncture between the CTSDF (2012b) and the Southern District SDP (2012c), as well as maps throughout the Southern District SDP, which contrast to each other in respect of the urban edge (refer to figure 12). According to Fouche (2011:1), who wrote for the False Bay People's Post, community leaders referred to the CoCT as 'spineless' for not following through on legal action to prevent the development.

[9] **Dassenberg Estate**: the initial name of this development; however, it is now named the Chapman's Bay Estate. For simplicity I will now refer to it as Chapman's Bay Estate, despite the fact that documents elsewhere may refer to it as 'Dassenberg Estate'.

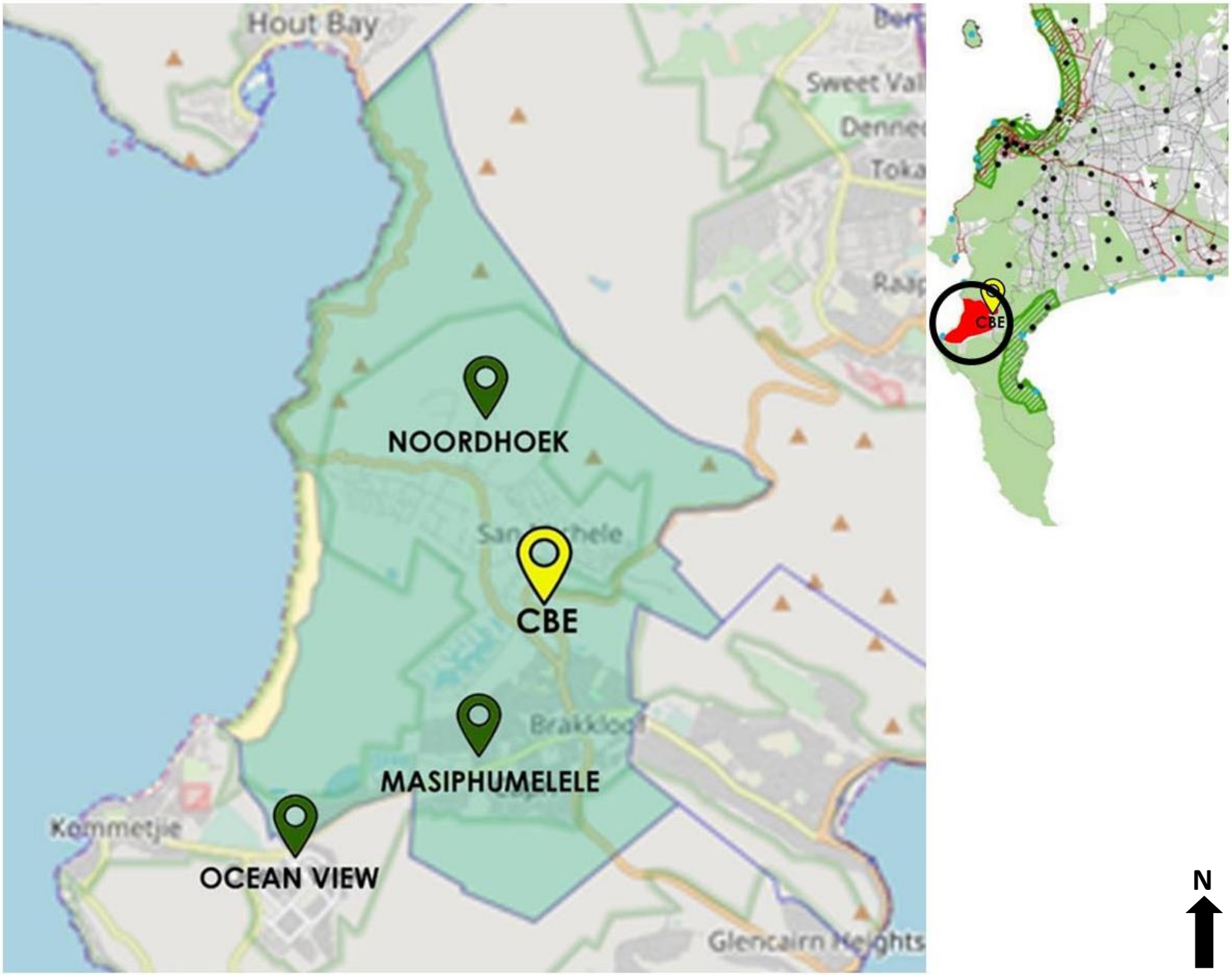


Figure 6: Map depicting the location of Ward 69 in the Southern District, labels display the locations of Masiphumelele, Ocean View, Noordhoek and Chapman's Bay Estate (CBE) (Google Maps, 2017; CoCT TDA, 2017; modified by Author, 2017)

Alexa von Geusau

Alexa von Geusau

Figure 7: Layout of Chapman's Bay Estate as provided for on their website, (CBE, 2017; modified by Author, 2017)

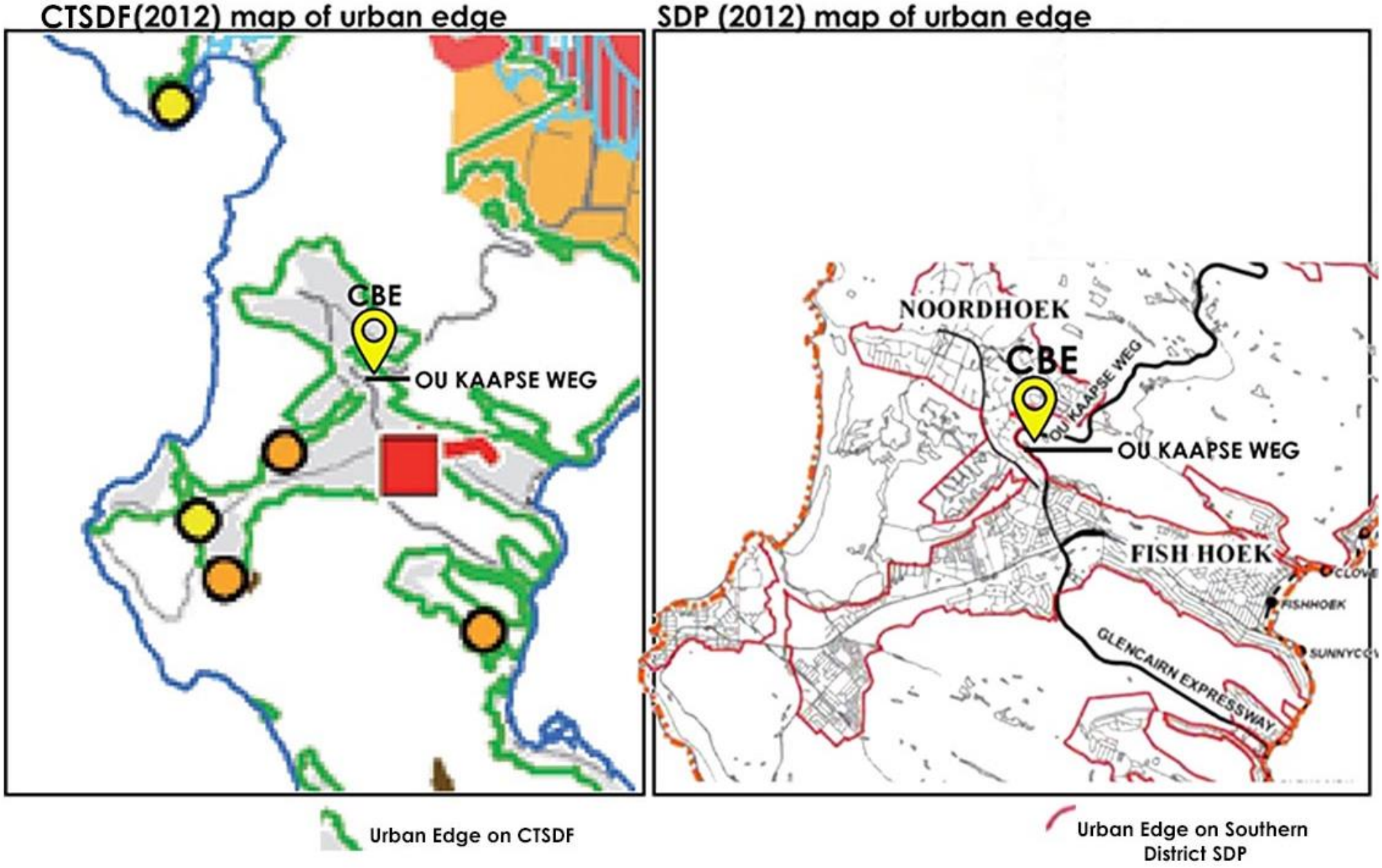


Figure 8: Comparison of maps taken from CTSDF (2012) and Southern District SDP (2012) representing the urban edge, which appears to differ between plans (CoCT, 2012b; Alexa von Geusau CoCT, 2012c; modified by Author)

3.4.2 Application process

A timeline of the application process has been provided in figure 13.

Prior to 1997: The land was zoned as agricultural before residential development was first proposed in 1997 (Fouche, 2011: 1; Consultant A, 2017)**.**

Post 1997: Post-1997 a battle between the applicant, Bakoor (Pty) Ltd., and the Cape High Court (CHC) ensued in objection to its approval. This was based on the fact that the applicant had failed to adhere to certain requirements, such as considering alternatives provided in the Environmental Impact Assessment (EIA) (Fouche, 2011:1).

2002: In 2002, the CHC overturned the approval on these grounds (Fouche, 2011:1).

2008: The applicant reapplied to the CoCT for subdivision in **2008**, but the CoCT denied the subdivision application. The applicant then appealed this decision to the (then) MEC of the ANC Provincial Department of Environmental Affairs and Development Planning, Pierre Uys (Fouche, 2011:1).

2009: In April of 2009, Uys passed Environmental and rezoning approvals for the development, according to NEMA regulations, only 5 days before elections, in which the ANC lost (Fouche, 2011:1). As Sunny Dale Rate Payers Association member, Simon Leill-Cock (personal communication 2017, September 12), suggested, the election brought about a change in political will. In conversation with Felicity Purchase (personal communication 2017, September 6), sub-councillor of ward 69, she stated this was a political move and that there were rumours of the applicant being connected to people in province at the time. Then in October of 2009, the CoCT lodged an appeal with the CHC against the decision of the former Environmental Affairs and Development Planning MEC, Pierre Uys, on the grounds that he did not follow due process as well as concern over mounting pressure on infrastructure in the area. Purchase stated that the ward 69 sub-council was concerned that not all information had been taken into account (Fouche, 2011:1). In the words of Purchase (2017), this development was a 'political hot potato'.

2009 – 2011: At some stage between 2009 and 2011, the CoCT received legal opinion to drop the case, which it did. However, according to Fouche (2011:1), the CoCT did not inform the broader community of this decision. I will return to the issue regarding a lack of transparency in section *3.4.4: The CoCT's responsibility*.

2011: In April of **2011**, the *newly* appointed DA Environmental Affairs and Development Planning MEC, Anton Bredell, upheld the developer's appeal and approved the subdivision of the Chapman's Bay Estate, despite the quasi-independent Provincial Planning Advisory Board (PPAB) advising that the development should be drastically scaled down from a proposed 130 unit development to only 57 units (Fouche, 2011:1; Yeld, 2012). The development is now 145 units (see layout plan, figure 11). According to Yeld (2012), the PPAB said if McHargian sieve maps[10] had been used, the layout would have been more visually sensitive and it would have avoided steep slopes and important

[10] **McHargian sieve maps**: a process whereby analytical maps are overlaid to summarise parts of the property that are suitable for development.

ecological functioning areas. The development is located within a core 2[11] and buffer 1[12] (see figure 15) zones which point to them being important ecological functioning areas, this will be discussed in section *3.5: Spatial and legislative analysis of Chapman's Bay Estate*. The PPAB went as far as to say that the law the proposal relied upon was a 'repugnant piece of Apartheid legislation' (Yeld, 2012). This advice was not taken into account due to technicalities: the Provincial Department of Environmental Affairs and Development Planning stated that altering the sub divisional layout at that stage would be indefensible as the former MEC (Uys) effectively committed himself to the relevant proposed layout plan (figure 11 or 21) in terms of NEMA and LUPO (Yeld, 2012). In South Africa, the NEMA (1998), embodies environmental justice, by stating that access to natural resources must be equitable and human well-being pursued (Dixon & Ramutsindela, 2006).

Essentially, the Provincial MEC, despite not being the competent authority for the decision, took the final decision regarding the development. The CoCT should have been responsible for rezoning of the property, but according to Ashton (2017) the CoCT was eventually forced to allow certain development under Uys's ruling and anyone who badmouthed him was threatened. Furthermore, the controversy surrounding Uys approving the development in the final days of office in 2009, was not unique to the Chapman's Bay case (Ashton, 2017). He was also reported to have approved the Luxury Lagoon Bay Estate in George, Western Cape, located in an environmentally sensitive area, around the same time (Hartdegen, 2011). Other luxury developments approved by Uys in his final days of office include Roodefontein Golf Estate in Plettenberg Bay, Western Cape and luxury homes in Gordon's Bay, outside of Cape Town ("Estate planning", 2009). In all the mentioned cases, civic and environmental organizations, rate payers associations, Cape Nature and SANParks expressed opposition to the developments based on scientific reports showing they were undesirable in terms of environmental protection and town planning principles ("Estate Planning", 2009). Even more concerning, Uys's own department showed concern regarding these developments, yet these concerns were ignored ("Estate Planning", 2009). Furthermore, throughout my research of Chapman's Bay Estate's application process, there was no mention of its adherence to the Gated Development Policy, or the point in which it was applied. Therefore, I do my own spatial analysis of the development's adherence to the policy, in section *3.5 Spatial and legislative analysis of Chapman's Bay Estate*.

[11] **Core 2**: Only *essential utility services* (infrastructure) to be located here (CoCT, 2012c)**.**

[12] **Buffer 1**: Significant protection zones, new utility infrastructure, services and structures should be located outside of these areas. (CoCT, 2012c)

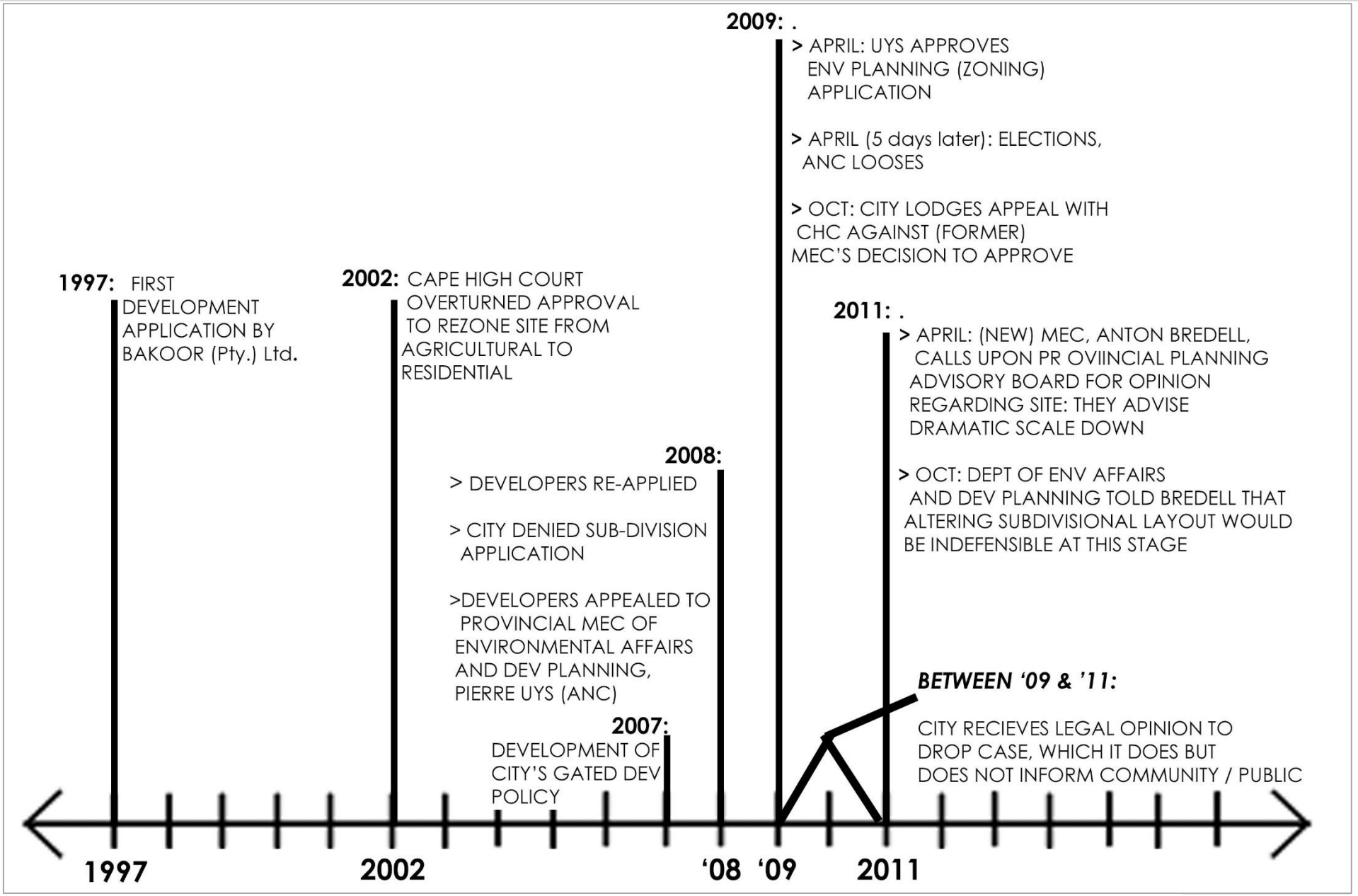


Figure 13: Timeline displaying the chronological order of the application process for Chapman's Bay Estate, produced by Author (2017)

3.4.3 Civic and environmental opposition

To gain insight into the concerns regarding the case of Chapman's Bay Estate, I met with ward 69 sub-councillor, Felicity Purchase; Consultant A, a resident of Noordhoek and professional planner; Consultant B, a professional planner; Lynn Brown, a Noordhoek Rate Payers Association (NRPA) member, as well as email correspondence with Glenn Ashton of the Noordhoek Environmental Action Group (NEAG) who was involved in the drafting of official objections to the proposal. I also used sources such as online articles, comments in response to articles and comments on the Chapman's Bay Estate Facebook page, which gave insight into civil society's feelings toward the development.

With regard to the concerns Chapman's Bay Estate, Fouche (2011:1) states that the entrance to the estate (refer to figure 11 or 21) was one of the primary heritage concerns expressed by the surrounding community. To address this, the developer has built a turning lane for motorists. Furthermore, the CoCT's opposition was based on concerns over mounting pressure on infrastructure and the fact that a portion of the property is located outside of the urban edge, previously known as the Cape Peninsula Protected Natural Environment (CPPNE) (Leill-Cock, 2017). The greater community also felt that the issue with the development was a matter of principle, due to the urban edge not being defined at Ou Kaapse Weg as it should have been (Leill-Cock, 2017; Purchase, 2017). The precedent to this was set when a company got hold of land on the northern end of Ou Kaapse Weg. The result is that both ends of this scenic route now have large gated developments forming their gateway's (Ashton, 2017).

Ground Up, an online news agency, reports news for the public interest with a focus on human rights and vulnerable communities. Comments in response to a Ground Up article by Baigrie and Ernston (2017) revealed that members of the surrounding community were angry at the CoCT regarding this development. They stated it was clear that civil society (Ashton, 2017; Baigrie & Ernston, 2017) was objecting to these 'modern bastions of apartheid' (Baigrie & Ernston, 2017) and that the public participation process was no more than a rubber stamp process (Baigrie & Ernston, 2017).

Surrounding residents have shown further resentment to this development for the loss of public access to the natural area and wetlands, which are now fenced in (see layout, figure 11 or 21) (Baigrie & Ernston, 2017). These wetlands host the endangered Western Leopard Toad and other wildlife, and through having development on the border of this wetland, the ecological corridor is interrupted (Ashton, 2017). According to both the CTSDF (2012b) and the Southern District SDP (2012c) the Chapman's Bay Estate land is made up of Core 2 and Buffer 1 zones (see figure 15 or 22). The Southern District SDP and Environmental Management Framework (2012c, 35) defines buffer 1 as, "Rural areas, game and livestock farming areas and other natural vegetation areas that do not form part of the core areas, but are recognised as areas that could provide opportunities to establish biodiversity offsets. Essential utility service infrastructure may be located in buffer 1 areas" and core 2 as, "Ecological corridors; critical ecological support areas; significant coastal and dune protection zones, major river corridors and water bodies excluding waste water treatment works." This tells us that the site is actually not appropriate for residential development due to biodiversity constraints.

The Far South Community Forum is a platform for the joint voice of several civic, community and environmental member organizations in the Far South Peninsula (Far South Peninsula Community Forum, 2016). Frustration with uncontrolled development has mounted so much so that the Forum launched a petition for the CoCT in 2016. This is in response to a lack of attention being paid to infrastructure, particularly in the Ocean View and Masiphumelele areas. They feel that development is being allowed in areas not previously zoned for development, much like Chapman's Bay Estate, and that this is leading to the destruction of the mountain and coastal topography that the region relies on for tourism and recreation, not to mention biodiversity (Far South Peninsula Community Forum, 2016). Based on Facebook comments from a member of the public ('Facebook user') on Chapman's Bay Estate's Facebook page, there was also concern regarding the perimeter fence possibly resulting in habitat fragmentation for endangered animals (Facebook user, 2016).

With regard to the Chapman's Bay Estate EMP, the area is a transition zone for a number of different vegetation types, making it complex in terms of biodiversity (Doug Jeffery Environmental Consultants (Pty) Ltd, 2012). The vegetation types that occur in this area include Peninsula Sandstone Fynbos, Hangklip Sand Fynbos, Cape Flats Dune Strandveld (see figure 14) as well as a lot of alien invasive vegetation (Doug Jeffery Environmental Consultants (Pty) Ltd, 2012). Cape Flats Dune Strandveld makes up the highest proportion of vegetation on the site, between 30 and 40% (Doug Jeffery Environmental Consultants (Pty) Ltd, 2012). What is concerning is that Cape Flat Dune Strandveld is a severely threatened vegetation type and is regarded as endangered due to the few areas where it remains (University of the Western Cape [UCW], 2013). Furthermore, this vegetation type is important for stabilizing sand dunes and supporting a high biomass of fauna. The site, before development, had a huge invasive alien plant problem (Doug Jeffery Environmental Consultants (Pty) Ltd, 2012). The EMP warns that disturbance of vegetation associated to development poses an increased risk for more alien plants to invade, therefore the home owners association and developers must prevent this. However, the EMP also states, "[the applicant] has repeatedly been advised and requested to initiate alien clearing across the site and has failed to do so, in spite of legislation that requires lan downers to clear invasive alien vegetation on their land" (Doug Jeffery Environmental Consultants (Pty) Ltd, 2012).

Additionally, mentioned by two experienced planners, Consultant A (2017) and Consultant B[13](2017), is the fire concern. As said by Consultant B, the estate has marketed itself for its 'green' credentials and indigenous landscaping, but this raises the question of fire. Fire is part of the life cycle of fynbos, meaning that fynbos requires fire every 10-15 years (Jacobs & Jangle, 2008). According to the Chapman's Bay Estate EMP produced by Doug Jeffrey Environmental Consultants (Pty) Ltd, controlled fires in the estate would not be suitable and therefore the fynbos will transform into a coastal thicket due to the absence of periodic fires which is necessary in its lifecycle. The EMP states that this transformation is not necessarily a bad thing, except for the fact that it may affect fauna species which are dependent on the fynbos (Doug Jeffery Environmental Consultants (Pty) Ltd, 2012). According to the Fynbos Ecosystem Management Plan for the Western Cape (2008), fire recycles precious nutrients and therefore there is consensus that

[13] **Consultant A & B**: Cape Town – based planners, working in the private sphere.

fire should not be excluded from fynbos ecosystems (Jacobs & Jangle, 2008). Moreover, by having a residential development in a fire-prone area, there is concern that fire-fighter's efforts will be concentrated only on protecting the few residents inside the gates of the estate (Baigrie & Ernston, 2017). With reference to section *3.2: The current paradigm*, there are many climate-related uncertainties which include an increased fire hazard.

In terms of social impact, the Chapman's Bay Estate EMP states that the development will increase job opportunities through a formalized Black Economic Empowerment structure. They also mention that the development will 'plough' money back to the disadvantaged communities via and Empowerment Trust structure (Doug Jeffery Environmental Consultants (Pty) Ltd, 2012). In terms of employment opportunity, it is interesting to compare and contrast the entrance to the estate now, post development, to 2009, prior to development (see figure 16). I came across this image coincidentally when using Google Earth Imagery (streetview) to view the site. It had not been updated for this particular location since 2009, therefore providing imagery of the street-side prior to the development of the estate. It shows self-employed people selling wood on the side of the road in 2009, compared a new road and electric fencing as it is currently. In my opinion, opportunities for informal trade, such as this, should be protected in the context of South Africa where there is high unemployment and poverty rates.

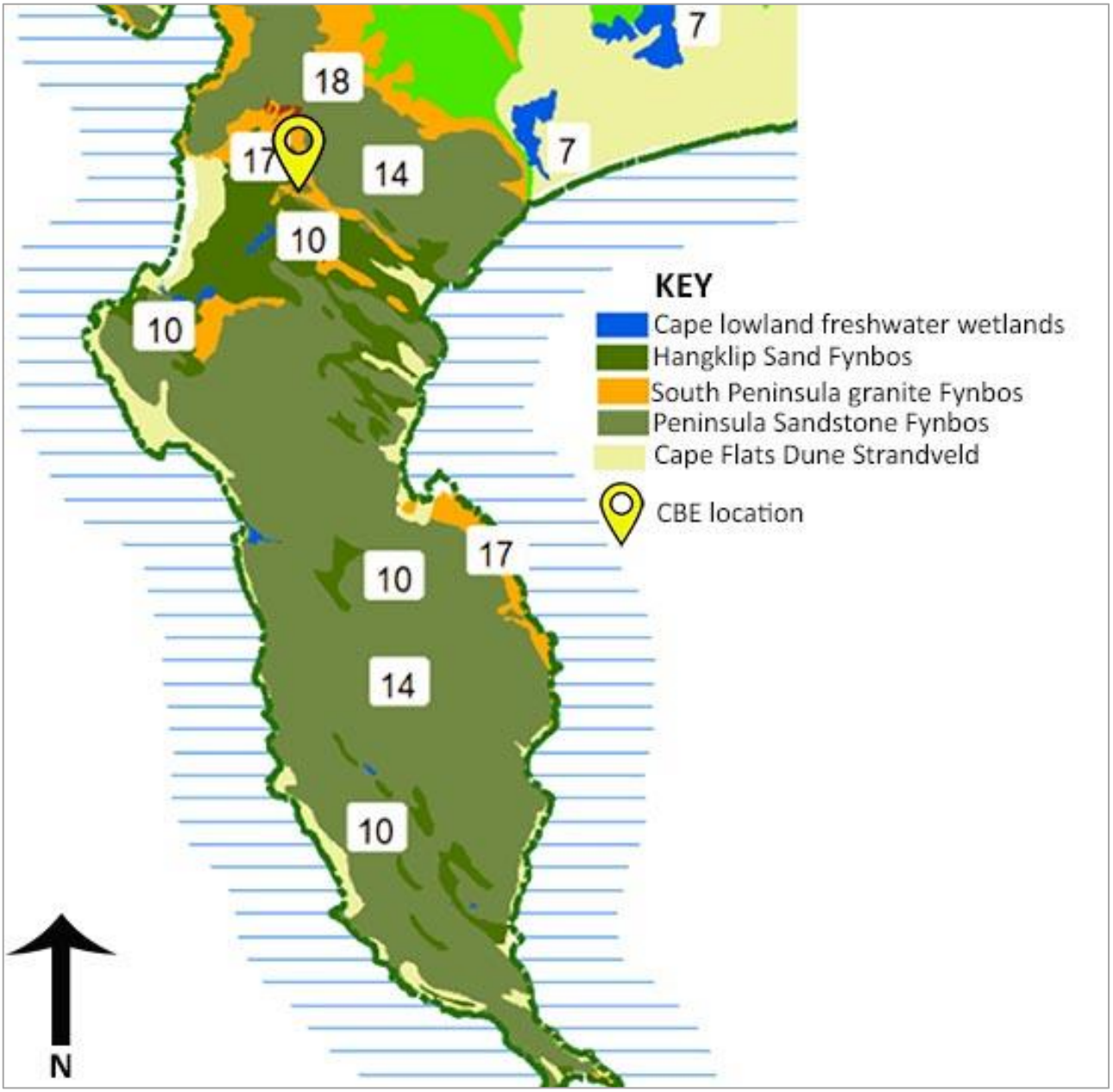


Figure 14: Map from the Cape Town Bioregional Plan (CoCT Environmental Resource Management Department [CoCT ERMD], 2015), modified by Author (2017) to show vegetation surrounding CBE.

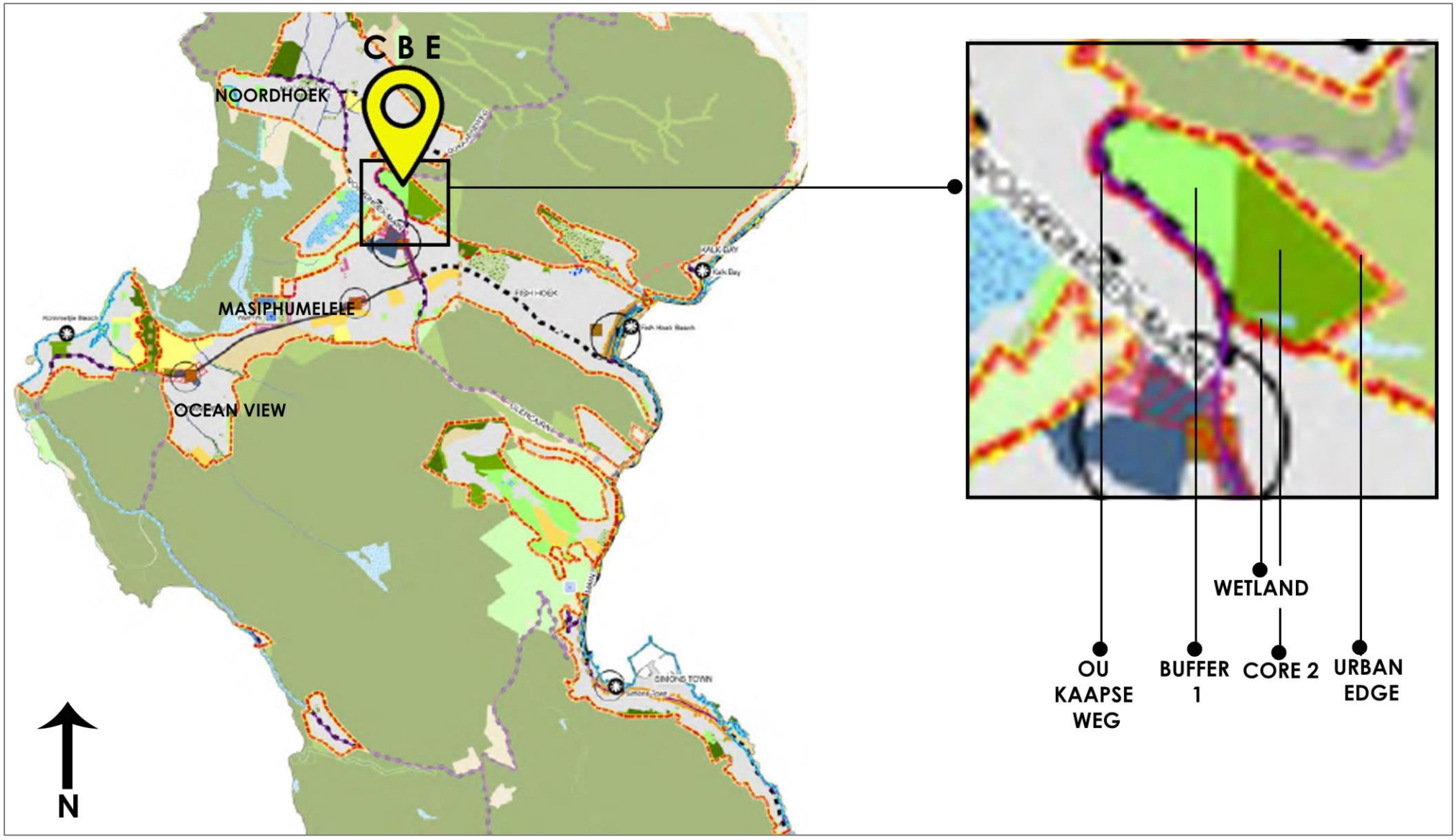


Figure 15: Map depicting the location of Chapman's Bay Estate and the relevant details of the site, including: buffer 1, core 2, urban edge, Ou Kaapse Weg and the wetland area (CoCT, 2012c; modified by Author)

Figure 16: Comparison: (left) Street view of the location of the current CBE estate entrance, prior to development in 2009: informal traders along Ou Kaapse Weg (Google Imagery Streetview, 2009; modified by Author, 2017) vs (right) aerial view of CBE entrance as it is currently (2017): gated, monitored, controlled without any form of trade (Google Earth, 2017; modified by Author, 2017).

3.4.4 The CoCT's responsibility

The application process, discussed in section 3.4.2, revealed that between 2009 and 2011 the CoCT dropped the case based on legal advice, however, according to Fouche (2011:1), it did not inform the broader community of this decision. With regard to this, Rory Sales of the now defunct Noordhoek Conservancy and Ashton of the NEAG feel that the CoCT is making important development decisions behind closed doors and undermined its authority by dropping this case (Fouche, 2011:1). Additionally, as both Leill-Cock (2017) and Consultant A (2017) state, the development is in contrast to the Cape Town Spatial Development Framework (refer to *section 3.5: Spatial and legislative analysis of Chapman's Bay Estate*) and does not align to its long-term vision, therefore undermining it. This aligns to a subsidiary research question: *What is the disjuncture between the CoCT's goals, visions and objectives, and the outcomes in the case of Chapman's Bay Estate?* The disjuncture will be explored further in the spatial analysis.

The relevant SDFs, according to Leill-Cock (2017), did not assign that portion of land to development (see 15 or 22 & 24 & 25). Furthermore, Leill-Cock argues that it shows an unwillingness on behalf of the CoCT to consider the urban edge. Before the development of the site began, Leill-Cock stated, "If [Chapman's Bay Estate] is developed, it will stand as a monument to urban sprawl and toothless officialdom" (Fouche, 2011:1). This responds meaningfully to a statement I made in section *1.2: Normative position* which states that I feel it is increasingly our responsibility, as professionals in the built environment, to act ethically through practise – I believe this includes abiding by the goals, visions and objectives established by the CoCT.

3.4.5 Pro-development perspective

Developments, such as this, form part of a wider machinery, as stated by Baigrie and Ernston (2017). The developers of Chapman's Bay Estate declined assisting with this dissertation; therefore, I am unable to discuss the perspective of the developers specific to this case.

On the one hand, there is the argument that these types of developments are reproducing apartheid geographies (Baigrie & Ernston, 2017), while on the other hand, there is the perspective of the residents and developers which see this form of development for its demand and value, otherwise known as market forces (Baigrie & Ernston, 2017).

The CoCT can benefit from this form of development by means of generating income from high rates (Ashton, 2017). As Purchase (2017) states, the CoCT does not have enough resources to deal with enough environmental work. Therefore, by passing on the responsibility of polluted wetlands and alien invasive plants to developers or homeowner associations, it relieves the pressure from the CoCT, as is the case with Chapman's Bay Estate (Purchase, 2017). In conversation with Purchase (2017), she mentioned that some of the support surrounding the development existed due to members of the public wanting the area to be cleaned up of 'alien invasive plants' and shacks. In my opinion, this reveals a lack of compassion and a disconnection between different members of society. It aligns to the discussion in the literature review which states that fortifying neighbourhoods further polarizes members of society (Webster, Glasze & Frantz, 2002).

Ashton (2017), expressed his concern regarding the CoCT and Province's close relationship with property developers and the problem of the property developers being an essential source of funding. According to Ashton (2017), this sort of funding amounts to institutional bribery. Furthermore, Ashton (2017) believes that the CoCT is doing everything in its power to marginalize civil society from property decision making at every step. These issues in the development system is a product of the CoCT's growth policy, according to Ashton (2017) which is in pursuit of rates growth, to fund various capital projects and cross subsidisation.

Purchase (2017) discussed the demand for gated communities from her perspective as a ward councillor. She believes that there is a growing tendency that they *should* have gated communities because people are feeling vulnerable. Furthermore, Purchase (2017) states that there needs to be an effort to promote these types of development for the poor as well, because of the crime issues they face. I feel this approach is perpetuating the reactionary nature of development (refer to section *2.6: Planning responses to gated developments, locally and internationally)*, and represents a systemic lack of foresight, imagination, and an unwillingness to act boldly at a time of challenge in South Africa (refer to section *2.7: Conclusion of the literature review*). Furthermore, when asked her opinion of the Gated Development Policy, she stated she has not read it for a while, but that in her opinion, people like to have a sense of community and a perception that they, as well as their possessions, are safe (Purchase, 2017). In light of these findings, I will address educating ward councillors and city officials about the Gated Development Policy and its importance in terms of the principles of a liveable city, in *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy*. The analysis of the policy will be in section *3.5, Spatial and legislative analysis of Chapman's Bay Estate*.

Specific to Noordhoek, investments in estates can be attributed to the fact that the area has been largely cushioned from the economic slump due to location and demand. The value of properties in the estate sector has continued to increase, mainly due to demand for eco-estates, according to Sotheby's Realty (Lew Geffen Sotheby's International Realty, 2017). This means that without strict regulation, developing estates in the area of Noordhoek and its surrounds is likely to continue due to the investment attraction.

According to an article in Estate Living, one of the developers of Chapman's Bay Estate said that they recognised the project would be challenging considering the environmental considerations but they saw it as an opportunity to develop prime real estate while at the same time rejuvenating derelict land (Estate Living , n.d.). From a different perspective, Ashton (2017) believes that the developers and architects plans look attractive and low impact on paper, but in reality, they are very high impact due to the civils and infrastructure works that sprawl far beyond the footprint of the actual houses. He believes that this is a common reality of developments, which are labelled as 'eco-estates' (Ashton, 2017). In defence of the CoCT's Environmental Management Department, Ashton (2017) states they have done fairly well in standing up for environmental pressures, however it is the CoCT's planning that has proven to be extremely pro-development. The application of the Gated Development Policy is currently done by the Development Management Department, of the CoCT's TDA. Therefore, in terms of addressing this pro-development stance, *Chapter*

4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy will address the application of the policy to ensure it aligns to appropriate forms of development. This seeks to ensure that the pro-development approach is managed responsibly.

3.4.6 Contextualizing Ward 69

Ward 69 (refer to 10) of the Cape Town Metropolitan Area is run by the Democratic Alliance (DA). In the broader Cape Town Metropolitan Area, frustration regarding the practise of the DA stems from the feeling that they are only selectively transparent (Kretzmann, 2016). While there is controversy surrounding the DA's approach to governing the greater Cape Town area, the DA sub-councillor of ward 69, Purchase, claims to have no political agenda in her approach (Kretzmann, 2016). Ward 69 (refer to 10) compromises of a range of areas including the leafy suburbs of Noordhoek, Sun Valley, Capri, Kommetjie, and townships Ocean View and Masiphumelele. As mentioned in the introduction to this dissertation, Kretzmann (2016) has described ward 69 as a Western Cape microcosm, where a chasm between the rich and the poor is growing. This perspective comes in response to the fact that these areas contrast significantly from suburban to industrial, to rural in character, all in a matter of kilometres from one another (Ntongena, 2017). The areas are further contrasted by the levels of wealth and opportunity that they represent (Kretzmann, 2016). To better illustrate the inequalities of this ward, the 2011 census revealed that 17, 081 people (recently dramatically updated to 38, 000 by local NGO, Masicorp) were crammed into the one square kilometre which makes up Masiph umelele, and 13, 569 in Ocean View, which are the 2 smallest residential areas in the ward (Kretzmann, 2016). This makes up 82.4% of the population, while the other 17.6% is spread over approximately 40 square kilometres (Kretzmann, 2016).

The township areas, namely Masiphumelele and Ocean View, have witnessed a number of protests and destructive fires. Both the fires and the protests have highlighted the increasingly overcrowded and undignified liv ing conditions, particularly in Masiphumelele where industry, wetlands and the main road prevent its growth. Additionally, anger and frustration in these areas revolves around the lack of services and high rates of violent crime. Members of the public appear to feel that the CoCT addresses such issues in a reactive, rather than proactive approach. This is noticeable in the 2017 Draft CTSDF which makes no mention of these areas.

During the time of writing this dissertation, violent protests began anew in Ocean View. The protests erupted in response to the high level of drug abuse and gangsterism, which plagues the area (Fisher & Brandt, 2017). In 2017 alone, there have been over 20 murders in Ocean View, and recently murders have been occurring on a weekly b asis (Fisher & Brandt, 2017). In a video interview with the Ocean View community leader, he aimed to send a message to the public to explain the plight of the community. The community leader expressed anger towards to national government and South African Police Service (SAPS), stating that they are in crises and that the government has failed the "so called 'coloured people'" of Ocean View (Robb, 2017). The community wants political leaders and police services to ensure that residents of Ocean View get their rights back because innocent people are being killed in gang turf wars (Robb, 2017; Fisher & Brandt, 2017). Currently, the Ocean View community shares a police station with Masiphumelele, which also has high levels of crime to deal with (Ntongena, 2017). Despite this, there appears to be a

lack of empathy from surrounding middle and upper class communities who are 'inconvenienced' by road closures at a time when their neighbours are suffering. Based on a comment in response to a news article, there is recognition that little effort is made by politicians, residents and police services to get to the root of the community's adversity (Fisher & Brandt, 2017) – revealing systemic problems in the application of the CoCT's goals, visions and objectives.

According to an interview (2017) with Brown of the NRPA, Masiphumelele has been a political issue from the start of its formation. Initially, it was developed as an industrial area for job creation, meant only for people to work and not live (Brown, personal communication 2017, August 29; HOKISA, 2017). When residential infrastuructre was put in place for the industrial workers in Masiphumelele, it was named 'site 5' and intended to house only 500 people – not the current estimates which range between 17 000 and 38 000. It was renamed 'Masiphumelele' when more people began settling in the area during the unravelling of apartheid in the 1990s (HOKISA, 2017). With regard to the perception that there is a lack of transparency in the CoCT, it has created mistrust and a disjuncture between the CoCT's authorities and community leaders, making it difficult for sustainable solutions to emerge (Kretzmann, 2016). For example, open land to the north and northwest of Masiphumelele appeared to be a suitable location for its expansion. Upon meeting with believed owners of the land, SANparks, community leaders were informed that the CoCT has in fact owned the land since 2004 (Kretzmann, 2016). Paddy Gordon, park manager for TMNP, claimed that the portion of land was sold to the CoCT in order to accommodate Masiphumelele's development demand (Kretzmann, 2016). According to Kretzmann (2016), the non-transparency of the CoCT is due to its fear of the land becoming 'invaded'. These imbalances of land development connect to the theme of spatial justice, explored in *Chapter 2: The Literature Review*.

These growing and urgent issues require the CoCT's attention in terms of creative and innovative planning solutions (Kretzmann, 2016). According to Kretzmann (2016), Purchase stated that Masiphumelele and Ocean View 'are heavily subsidised by their middle and upper class neighbours'. Again, this reveals a lack of imagination in development planning, which allows for the perpetuation of unequal development on the basis of cross-subsidization. This connects back to a statement I made in section *1.2: Normative position*, which states, "Economic growth is often the prioritised form of development, supported by the illusion there will be a 'trickle down' effect that will improve the quality of life for all".

A few kilometres north of Masiphumelele and ocean View is the Chapman's Bay Estate (see figure 10) on the border of Sunny Dale and Noordhoek.

3.4.7 Noordhoek community

An interview with NRPA member, Brown, assisted in gaining an understanding of how the Noordhoek community functions. The NRPA has taken planning foresight into their own hands and created a 2030 vision for the area through public participation of residents and various interest groups. In Brown's (2017) opinion, the most successful thing about the participation was the way it gave people a chance to see things differently and therefore "psychologically shifted the community" (Brown, 2017). A significant shift is owed to comparing issues between surrounding

communities, such as Noordhoek, Masiphumelele and Ocean View. In Brown's (2017) opinion, this can act as a reality check for some, where crime rates are significantly different, as well as employment rates, land security and education levels (Brown, 2017).

With regard to urban development in general, Brown (2017) says that local and metropolitan SDFs discuss balanced development, in terms of economic growth, too much in terms of a European model rather than one contextually specific to South Africa. This implies that our current process of assessing development potential is based too much on economic terms, as opposed to other factors such as social and environmental circumstances. Again, this connects to recognition that economic growth often takes priority over spatial justice.

With regard to the surrounding community of Noordhoek's feeling towards gated developments, she said that the NRPA is of the opinion that they can either use legislation to their advantage or 'tough luck' because one would need to actively change policy as the other alternative (Brown, 2017). Therefore, the NRPA's philosophy is to influence where possible, rather than totally oppose applications, due to their understanding that development is inevitable (Brown, 2017). This feeling, of the NRPA, is relevant as it reveals that resident's opposition to projects is likely to be ignored, and that legislation is somewhat designed to favour developers. Furthermore, it reveals that public participation is flawed if existing communities are unable to successfully oppose developments.

In discussion regarding Chapman's Bay Estate in particular, Brown (2017) feels it does create fragmentation on the outside, even though there may be cohesion inside the gates. This resonates with findings in the literature review, section *2.3.1.3 Urban Sustainability Indicators with Regard to Gated Developments*. The NRPA did attempt to influence, rather than prevent, the development, by encouraging green space between clustered homes to maintain the rural atmosphere (Brown, 2017). It also rejected a solid wall. Brown (2017) says the term 'previously disturbed land' is one of the favourite terms amongst developers and residents but she believes this is a copout because disturbed land can be restored. Furthermore, there is the issue of balancing development needs with wants. In the case of Chapmans Bay Estate, it can create jobs (as discussed in the EMP), both in the long and short term. However, development also attracts new residents to the surrounds, especially Masiphumelele and Ocean View, based on the premise that more jobs are becoming available. This creates a demand for more schools, clinics, hospitals and public transport. In Brown's (2017) opinion, more quantitative research is needed to determine whether the overarching, cumulative result of such developments is positive or negative, or in other words, is development resulting in more overcrowding or more job creation? Perhaps it creates both, but we need to determine what this means for planners, to avoid a purely reactive approach (Brown, 2017). The cumulative impact of exclusive, gated forms of development is explored further in the section *3.5 Spatial and legislative analysis of Chapman's Bay Estate*.

Essentially, Brown (2017) says, the issue is around land. In Noordhoek, the San people originally lived there. There is physical evidence of this, in the form of a skeleton that was found on the beach, other artefacts, as well as bush paintings (Brown, 2017). However, these facts are not actively publicized (Brown, 2017). In the 1950s, there was physical relocation of people and due to ownership technicalities (by-the-book): the San descendants did not own the

land, even though in terms of history, the land was originally theirs (Brown, 2017). These people were moved to Ocean View, where their decedents now live (Robb, 2017).

3.5 Spatial and legislative analysis of Chapman's Bay Estate

A spatial analysis of the case study is necessary in order to explore how policies are, or are not, being applied spatially. This section will be assessed according to informing policies such as the CoCT's Gated Development Policy and the alignment to the CTSDF and the Southern District SDP. It is important to note that the spatial policy and plans environment is a dynamic one, with reviews taking place every few years. This can make it complicated when assessing a past project, such as the Chapman's Bay Estate, because it can be unclear which plan was relevant at the time of approval. However, decision makers would be aware of draft policies or policy reviews that are occurring during the time of an application process so should be taking such documents into account when making decisions.

3.5.1 CoCT's Gated Development Policy through the lens of Chapman's Bay Estate

This section will discuss the CoCT's Gated Development Policy and explore its application, or lack thereof, to the Chapman's Bay Estate. Through this exploration, I will work towards determining the gaps in the policy and its application and look for opportunities to strengthen the policy and its harmonization with other policies. This will inform the intervention in the following section, Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy.

The implementation of the policy commenced on the 1st of February, 2008 (CoCT DP&BDM, 2007). This is the same year that Chapman's Bay Estate's re-application process was initiated (Fouche, 2011:1; Purchase, 2017), therefore the policy should have been applied in the approval process. The scope of the policy is all areas under the jurisdiction of the CoCT (CoCT DP&BDM, 2007).

The policy is a Land Use Management Policy which aims to better regulate all forms of gated development (CoCT DP&BDM, 2007). This means that the policy aims to give guidance to developers and decision makers in the CoCT's Development Management Department for the planning and assessment of development proposals (CoCT DP&BDM, 2007). Therefore, in terms of its application, it is to be applied in the assessment of development applications, as well as in the formulation of appropriate conditions (see figure 24) (CoCT DP&BDM, 2007). The Gated Development Policy states that the South African Constitution, Act 108 of 1996, designates land use management as a function and competency of local government. This aspect of the constitution was not abided by in the case of Chapman's Bay Estate when the provincial MEC approved the application, as learned in section *3.4.2: Application Process*.

As stated by Rubin (2008), who reported on Urban Land Management in Johannesburg, an issue with Land Use Management in South Africa, is the vast amount of legislation (Rubin, 2008). This, she states, makes the Land Use Management policy setting 'uninviting', despite having the noblest of intentions (Rubin, 2008: 13). This is due to a lack of innovative thinking and practise which hinders the betterment of society, particularly for the poor (Rubin, 2008). Land Use Management is the first step in a project process. In Cape Town, it is the mandate of the Development

Management Department, who's vision is to "*be a leading, dynamic and relevant built environment regulatory authority in South Africa,*" as stated by the Director, Cheryl Walters (CoCT web, 2017). The Development Management Department resides within the department of Urban Development and Planning, which is within the CoCT's TDA (see figure 17). Land Use Management is guided by the CoCT's Municipal Planning By-Law, which has replaced the role of the Land Use Planning Ordinance (1985) since the implementation of the Western Cape Land Use Planning Act (LUPA) (2014) in terms of enabling planning legislation (CoCT web, 2017). This by-law states that the applicant is responsible for facilitating public consultation with abutting communities (CoCT web, 2017). This is part of the CoCT's effort to be an inclusive city (CoCT web, 2017).

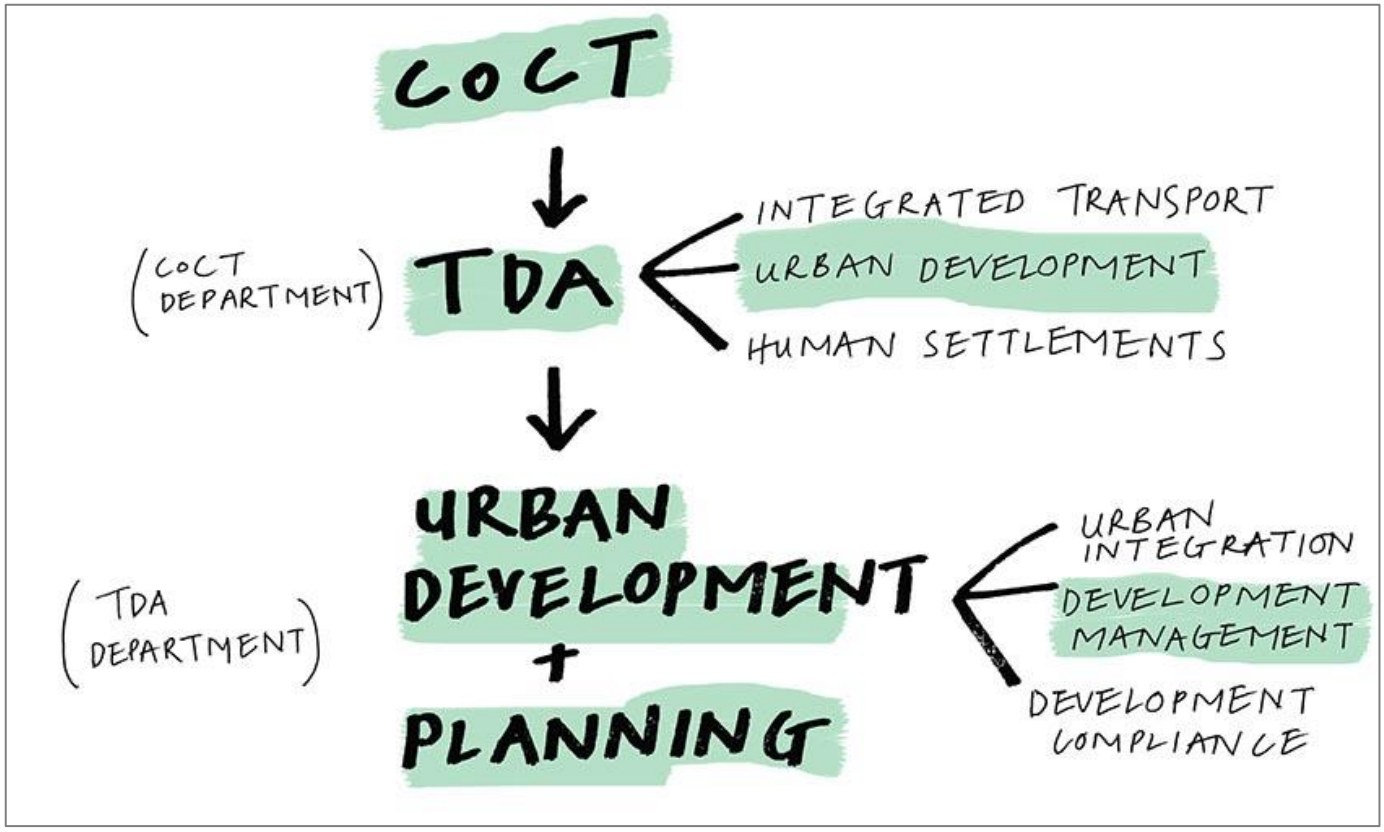


Figure 10: Organigram depicting departments in the CoCT, locating the Development Management Department in which the Gated Development Policy is currently applied in development applications (Produced by Author, 2017; informed by CoCT web, 2017; TDA, 2017)

The Gated Development Policy (CoCT DP&BDM, 2007: 1) states,

> *As a responsible land use regulator, the CoCT promotes development of open, inclusive, integrated and equitable societies, generally discourages gated developments and will only consider such forms of development if a developer or community can clearly illustrate that it is constitutionally justifiable and won't have any adverse impacts or that such impacts will be sufficiently mitigated*.

This language is vague and ambiguous. There is no guidance as to who determines what an adverse impact is, nor to whom it is adverse.

The Gated Development Policy states that the South African Human Rights Commission concluded that it does not find gated communities unconstitutional but it does not *support* such forms of development, due to the constitutional dilemma created by the right to freedom of movement versus the right to security (CoCT DP&BDM, 2007). Initially, this type of development was being approved on an ad-hoc basis which was not suitable in the long-term (CoCT DP&BDM, 2007). Therefore, in order to regulate the popularity of this form of development in an appropriate manner, the Gated Development Policy was developed. Furthermore, the policy was developed in recognition of there being an absence of standard policy, which led to increasing requests for the approval of gated communities. The Gated Development Policy states that their cumulative impact, extent and size are the main concerns regarding their increasing popularity (CoCT DP&BDM, 2007).

The policy defines gated developments as, "a physical area or development that is walled or fenced off from its surroundings and where general public access is monitored, controlled, restricted or prevented in any way, often by means of gates or booms at specific points(s)" (CoCT DP&BDM, 2007: 26). Prior to the policy, there was recognition that there is a need to ensure developments conform to an acceptable standard in order to prevent such developments from compromising the CoCT's functionality and sustainability (CoCT DP&BDM, 2007). Again, 'acceptable standard' has not been defined in the policy. Cities are usually open and accessible places where citizens can move freely, and gated communities can result in an exclusionary environment through fragmentation and segregation of the urban and social fabric of the CoCT (CoCT DP&BDM, 2007).

Guiding policies, provided in section 2 of the existing policy: *Legislative context and legal mandate,* include the National Environmental Management Act (NEMA) (1998), which sets the requirement for an environmental and social assessment that considers all impacts; the Developments Facilitation Act (1995); the South African Constitution (1996); the Western Cape Provincial Spatial Development Framework (2005) and the Cape Town Policy on the management of Council's immovable property (2006). Legislation important for the implementation of this policy include LUPO (1985) (now LUPA); the Roads Ordinance (1976); Cape Town By-Law for management and administration of immovable property (2003), and Cape Town by-law for streets, public places and nuisances prevention (2007) (CoCT DP&BDM, 2007). An organigram has been created in figure 23, to explain the legislative context of the Gated Development Policy.

The Gated Development Policy aims to mitigate or minimise adverse impacts to the CoCT's social, visual and functional amenities and infrastructure, and guard against over-exclusiveness, separation and inward orientation through providing an assessment framework and criteria. Further objectives include supporting the CoCT's Integrated Development Plan (IDP) objectives, which include 'Building strong communities' and being a 'safe and caring city'. Additionally, the policy seeks to recognise the uniqueness and diversity of individual areas, while reasonably balancing the ideals of the broader public, such as integration and equity (CoCT DP&BDM, 2007). It is unclear how the Chapman's Bay Estate has taken these concerns into account. In isolation, the gated development may promote a strong and safe community but it fragments the community from integration with the broader community of ward 69. This is type of

fragmentation is not in accordance with the principles of a liveable city, discussed in the literature review, section *2.3.1.2: Liveable cities*.

The policy is not restricted to residential developments, but also office parks and enclosed neighbourhoods. However, for the purpose of this dissertation, I will be discussing parts of the policy relevant only to Chapman's Bay Estate which is a residential security estate with private internal roads and spaces, and full access control. This type of development is entirely private, purpose built, and is subject to all policy criteria (CoCT DP&BDM, 2007).

The Gated Development Policy states that there is a wide variety of security measures available as an alternative to gating, such as boundary walls, domestic alarms, lighting and burglar bars. Further measures include community groups, neighbourhood crime prevention strategies such as community forums (CoCT DP&BDM, 2007). Due to the developers and planning consultants of the Chapman's Bay Estate being unwilling to discuss the circumstances of the application, it is unclear whether alternatives to gating were considered, however the fact that it is a greenfield development suggests not.

The CoCT states in the Gated Development Policy that it takes a cautious approach with proposals involving gated communities, and that it will only consider proposals that have complied with strict criteria (CoCT DP&BDM, 2007). It will become clear in section *3.5.1.1, Assessment Framework and Criteria through the lens of Chapman's Bay Estate*, that the development was approved despite much of the strict criteria not being complied to.

I will now turn to discuss sections *7.2: Assessment framework* and *7.3: Assessment criteria* of the Gated Development Policy and discuss it according to its application to Chapman's Bay Estate.

3.5.1.1 Assessment Framework and Criteria through the lens of Chapman's Bay Estate

3.5.1.1 a) Conventional and alternative security measures

In terms of security, the Gated Development Policy states that decisions must be made with a long term perspective in mind (CoCT DP&BDM, 2007). Therefore, in the case of Cape Town's safety and security issues improving, gated developments should be built in such a way that their gated aspects could be reversed, according to the Gated Development Policy. Chapman's Bay Estate would not be an easily reversible project, due to it being isolated from the surrounding urban fabric by its location between an important movement route, Ou Kaapse Weg and the urban edge (see figure 11 or 21), and its large, imposing entrance that visibly sets it apart as its own entity (see figure 18).

Figure 11: Entrance to Chapman's Bay Estate, image supplied on their website (CBE, 2017).

3.5.1.1 b) Access monitoring and control

Chapman's Bay Estate only has one access point (as is depicted in the layout plan in figure 11 or 21), despite the fact that it compromises access to a natural resource: wetlands (see figure 11 or 21 & 15 or 22). This means that public access to this natural open space is hindered, which has been mentioned as a primary concern of the surrounding public, as discussed in section *3.4.3: Civic and environmental opposition*. This is not in compliance with the policy, which says that monitored complexes *must* ensure direct and easy access to public spaces (CoCT DP&BDM, 2007).

3.5.1.1 c) Location and scale

With regard to scale, large scale gated communities can have a detrimental impact on city connectivity and form, according to the policy (CoCT DP&BDM, 2007). Some security estates take the form of mini-suburbs and this policy states that it sets out to avoid that type of development (CoCT DP&BDM, 2007). Therefore, it suggests that the size of developments should be broken into smaller parcels to ensure the development of a gated community does not fragment an existing area (CoCT DP&BDM, 2007). However, the policy does not specify what would be considered a large scale gated development, leaving it up to the interpretation of decision makers. Chapman's Bay Estate does not adversely impact on existing form or movement networks, because it is located between a movement route and the urban edge on a greenfield site (see figure 11 or 21 & 15 or 22). However, it is an extensive development, composing of 145 units (CBE, 2017), which results in it forming a separate, and arguably fragmented neighbourhood which is also undesirable in terms of Metropolitan and Local District spatial objectives, as well as the principles of liveable cities (CoCT, 2012b; CoCT, 2012c & Dewar, forthcoming). As mentioned in chapter 1, the Chapman's Bay Estate development is a low density one (approx. 3.2 du / h) which does not contribute to efficient land development. This is despite the fact that it states in the Gated Development Policy's section 2: *Legislative context and legal mandate* that this policy

must comply with the national Development Facilitation Act, which requires policy to "promote efficient and integrated land development" (CoCT DP&BDM, 2007: 2).

Furthermore, the Gated Development Policy states that a gated development may not be located in an area in which certain services, amenities, and infrastructure are located within its boundaries. Of relevance to Chapman's Bay Estate, is "mobility, public transport, strategic routes or scenic drives" (CoCT DP&BDM, 2007: 13). Chapman's Bay Estate is located on Ou Kaapse Weg, an important mobility route linking the Southern District with the rest of Cape Town. Its location on Ou Kaapse Weg also at the gateway the important scenic route (Ashton, 2017), as discussed in section 3.4.3. Although this is not within the boundary of the property, it is of significant importance in the application. Additionally, in terms of amenities, the Gated Development Policy (DP&BDM 2007: 14) states that gated developments may not be located within "Regional / district parks, nature / riverine areas or extensive open spaces forming part of the MOSS network (including areas providing access to, linking with or forming part of a nature reserve / mountain / coastline / river corridor / estuary / wetland or any other natural resource)". In fact, the policy states that a proposal is further considered unacceptable if it would compromise the continuity of biodiversity networks or ecological corridors (figure 19 below). Chapman" Bay Estate is both within a biodiversity network (core 2 and buffer 1), and it encloses a wetland area (see 11 or 21). As already mentioned in section 3.4.3, the Southern District SDP and EMF (2012c, 35) defines buffer 1 as, "Rural areas, game and livestock farming areas and other natural vegetation areas that do not form part of the core areas, but are recognised as areas that could provide opportunities to establish biodiversity offsets. Essential utility service infrastructure may be located in buffer 1 areas" and core 2 as, "Ecological corridors; critical ecological support areas; significant coastal and dune protection zones, major river corridors and water bodies excluding waste water treatment works."

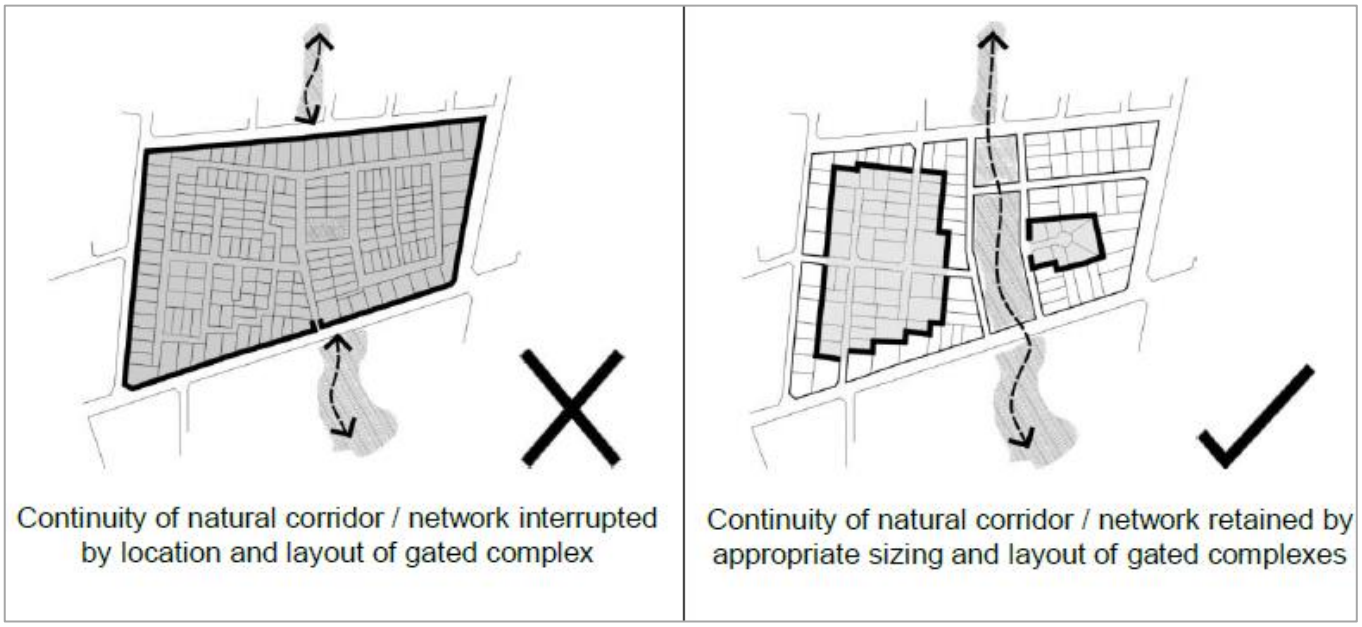


Figure 12: Gated Development Policy's visual explanation of acceptable gated development layouts: in order to prevent the disruption of natural corridors or movement networks (CoCT DP&BDM, 2007: 13).

Additionally, the Gated Development Policy states that gated developments should not be located in areas which create huge wealth disparities, as it is likely to encourage higher and stronger enclosures (CoCT DP&BDM, 2007). Chapman's Bay Estate is located only 3, 8 km from the township of Masiphumelele and 7 km from the township of Ocean View (see figure 10) which are vastly different from Chapman's Bay Estate in terms of wealth, facilities and services.

3.5.1.1 d) Layout

In terms of the internal layout of a gated community, the Gated Development Policy considers this a fundamental aspect. Therefore, detailed layout plans are required in a project application. The layout of Chapman's Bay Estate has been provided in figure 11 and 21. The policy states that the layout should not be designed in such a way that it creates a hostile effect onto the property interface, this can be done by ensuring houses do not back the road, solid walls are avoided for at least 50% of the perimeter, or a that a buffer is set between the roads and houses (refer to figure 20 below). Chapman's Bay Estate does comply with this section of the policy by having a clear perimeter fence, as opposed to a solid wall.

A helpful aspect of the policy, which does not apply to Chapman's Bay Estate, but which is relevant and considered significant in the following chapter, *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy*, is the focus on the relationship between the development's building and the property interfaces which have a direct relationship with adjacent public spaces and streets (CoCT DP&BDM, 2007). Chapman's Bay Estate is only surrounded by natural vegetation and Ou Kaapse Weg which is more of a mobility route than a public street (figure 11 or 21 & 15 or 22). Therefore, it is not applicable to Chapman's Bay Estate but nevertheless provides something to work with in terms of encouraging the types of gated communities that should be allowed.

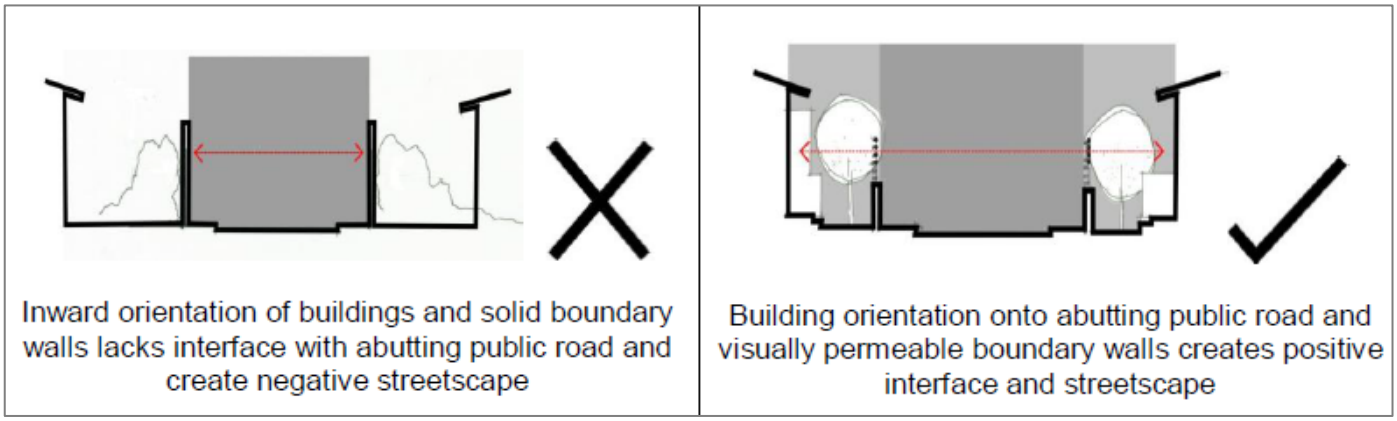


Figure 13: Gated Development Policy visually explains an acceptable public-private interface for gated developments (CoCT DP&BDM, 2007: 17)

In order to further avoid the feeling of exclusion, the Gated Development Policy does not permit structures at entrances that are architecturally imposing, dominating or unproportioned to their surroundings. The Chapman's Bay Estate entrance is a very large entrance which makes a statement, as seen in figure 18. This makes the estate distinct from the neighbouring communities, which further isolates it as its own, closed neighbourhood.

The layout, according to the policy, should be designed to facilitate natural surveillance[14] (eyes on the street) over public spaces. This is only somewhat relevant to Chapman's Bay Estate because the property is surrounded by open space which supports natural systems and may be used for public recreation, but it is also isolated from an urban environment where there is social activity and a concentration of public spaces such as streets, parks and squares. However, Chapman's Bay Estate is not designed at all in a way that encourages natural surveillance. As is visible in the layout plan, figure 21 below, and CBE website, which displays dwelling units facing onto the site's private vegetation. The wetland area, however, has natural surveillance by means of the townhouses (figure 21 below) which face on the wetland open space. This area is, however, fenced off from the public and therefore the natural surveillance does not serve as natural surveillance for public open space, only private open space. Creating natural surveillance through the design of gated developments will form a significant section of the next chapter, *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy.*

Although the Gated Development Policy states that it should be reviewed on a regular basis, it has not been amended since 2007. Hence why, Geretto (2017) stated in email correspondence that it is due revision.

[14] **Natural surveillance**: a mechanism used for crime prevention. It is used in Crime Prevention Through Environmental Design (CPTED) models which is based on influencing behaviour (Welsh & Farrington, 2004).

Figure 14: Layout plan of Chapman's Bay Estate, as provided on their website (CBE, 2017; modified by Author, 2017)

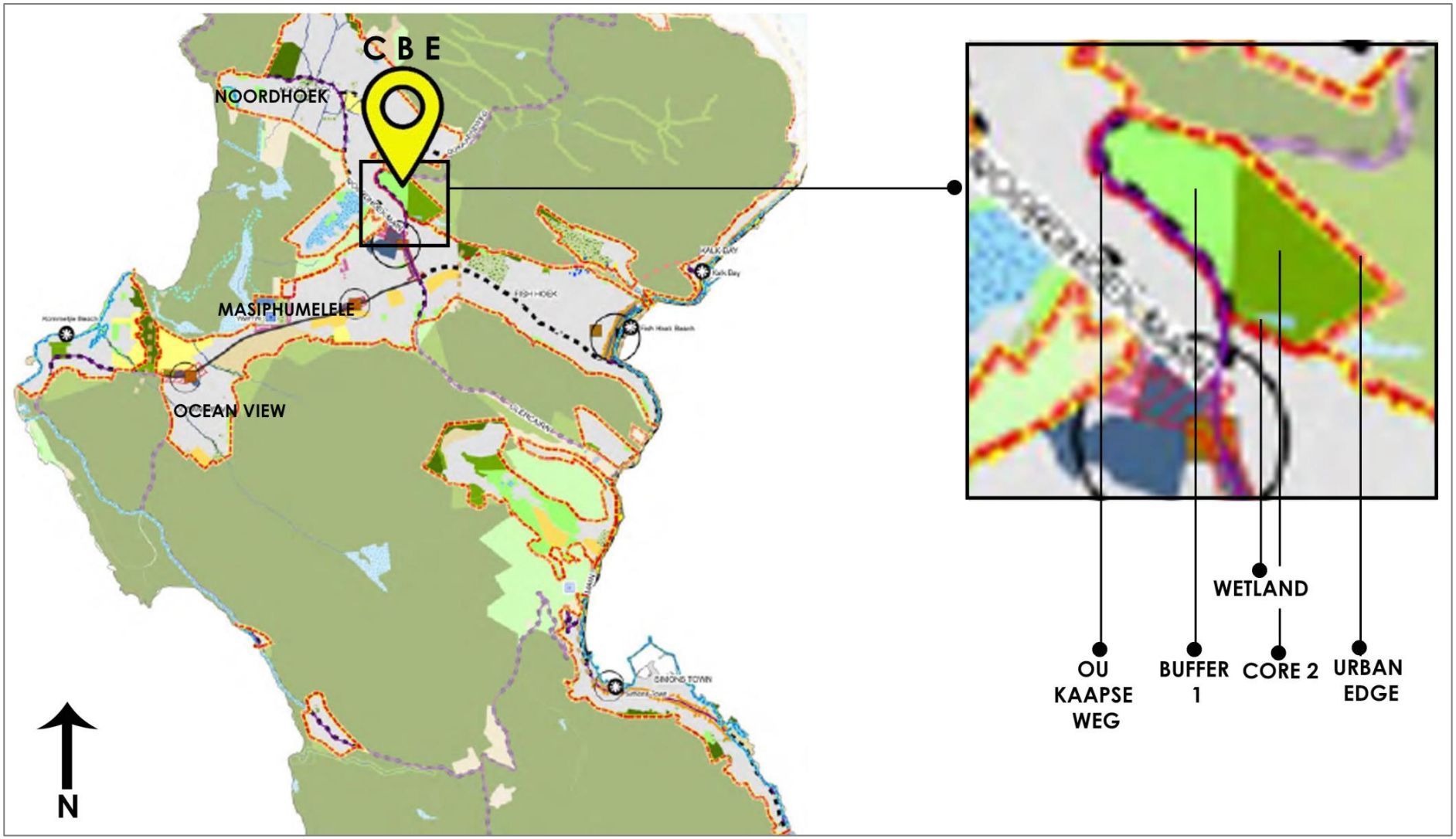


Figure 15: Map depicting the location of Chapman's Bay Estate and the relevant details of the site, including: buffer 1, core 2, urban edge, Ou Kaapse Weg and the wetland area (CoCT, 2012c; modified by Author)

3.4.4.2 Application of the Gated Development Policy

Figure 23: Schematic diagram representing the policy environment in which the Gated Development Policy is currently situated. Informed by CoCT Urban Design Policy (CoCT DP&BDM, 2013) and modified by Author (2017).

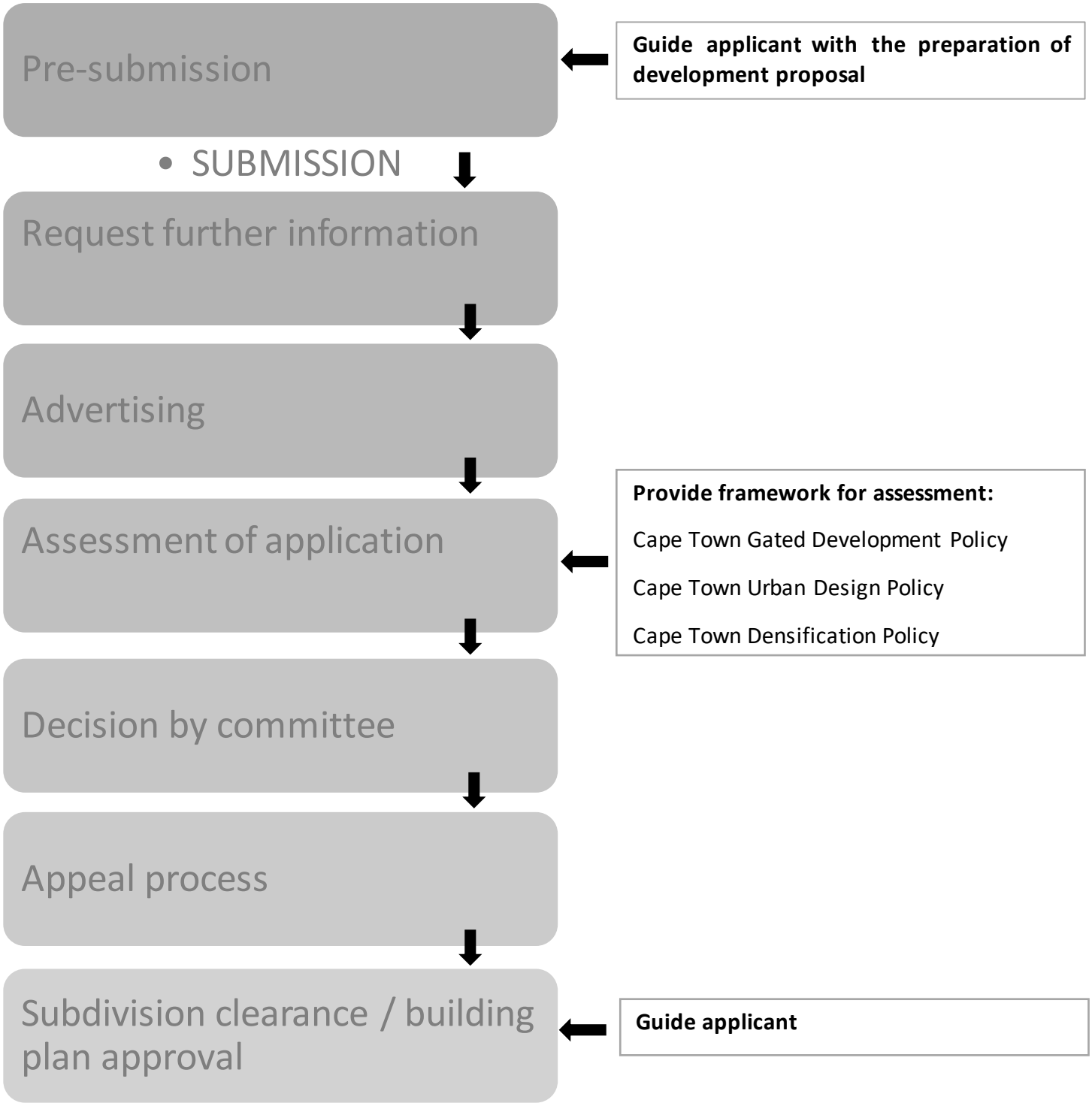


Figure 24: Flow diagram representing the process of a development application and where the policy is applied at the department level. Informed by the CoCT Urban Design Policy (CoCT DP&BDM, 2013) *and modified by Author (2017).*

3.5.1 Alignment to spatial plans

This section looks at the alignment of Chapman's Bay Estate to relevant spatial plans, namely: the 2012 CTSDF, the 2017 Draft Review CTSDF and the Southern District SDP & EMF. For the purpose of this dissertation, and in an attempt to be concise, I will only refer to sections of these plans which are deemed relevant to my topic.

The purpose of the CTSDF is to establish a spatial realization of the CoCT's five-year Integrated Development Plan (IDP). The Southern District SDP & EMF is guided by the CTSDF and its purpose is to guide medium term (+/- 10 years) development processes within the district. The EMF in integrated into the Southern District SDP, as well as acting as an informant to the SDP. This section aims to analyse Chapman's Bay Estate's alignment to the city's goals, strategies, principles and aim in order to address the subsidiary research question: *What is the disjuncture between the CoCT's goals, visions and objectives and the outcomes in the case of Chapman's Bay Estate?* Furthermore, it assists in recommendations for future studies.

The Minister of Local Government, Environmental Affairs and Development Planning of the Western Cape Provincial Government is responsible for approving the CTSDF (CoCT, 2012b) in terms of LUPA, which has recently replaced the Land Use Planning Ordinance (LUPO[15]). It also requires approval by the Council of the CoCT as a component of IDP (CoCT, 2012b).

The aim of the CTSDF is a long term (+/- 20 year) guide to manage public and private development to ensure the best possible outcome for the CoCT's inhabitants, while acknowledging the inevitable growth and change because of development pressures. It is a tool for evaluating land use rights applications. A key component of the report is balancing competing land use demands in such a way that the development path is one of sustainable future growth that is adaptable and flexible to unpredictable dynamics. In an attempt to manage the ever-changing realities of the CoCT, the CTSDF is updated and reviewed every decade, and the urban edge is reviewed every 5 years. As mentioned in the introduction, the purpose of the urban edge is to demarcate the boundary of which no further urban development may occur. It is significant for managing urban sprawl and protecting valuable land and resources. In the case of Chapman's Bay Estate, local opposition against its development was due to the principle of it occurring in an area in which people felt the urban edge was being abused (Leill-Cock, 2017). Throughout a range of documents and maps within documents, the urban edge alternates between Ou Kaapse Weg and surrounding the Chapman's Bay Estate, hence why people feel it is 'blurred'. Refer to figure 12 which shows a map on the Southern District SDP & EMF compared to a map on the 2012 CTSDF, each with a differing urban edge.

[15] **Land Use Planning Ordinance 1985 (Ordinance 15 of 1985) (LUPO)** has since been replace by the Land Use Planning Act, 2014 (Act 3 of 2014) (LUPA). At the time of the case study's and CTSDF's approval, LUPO was still in place; therefore, this dissertation will be referring to LUPO even though it is outdated.

The initial point of departure for the CTSDF is determining a long-term vision to guide the development of Cape Town. It seeks to provide direction and inspiration for decision makers and residents of Cape Town (CoCT, 2012b). The latest vision established for the CoCT, in the Draft Review CTSDF for 2017-2022 is:

> *The CoCT is intent on building a more inclusive, integrated and vibrant city that addresses the legacies of apartheid, rectifies existing imbalances in the distribution of different types of residential development, and avoids the creation of new structural imbalances in the delivery of new services. Key to achieving this spatial transformation is transit orientated development (TOD) and associated diversification and densification.*

This vision has a lot of relevance to the case of Chapman's Bay Estate in ward 69 due to its spatial imbalances, as discussed throughout section *3.3: South African Contextual History* and *3.4: Exploring Chapman's Bay Estate in its local context.* Furthermore, it makes particular reference to rectifying the imbalances of residential development, which I have drawn attention to, with particular reference to gated developments, throughout this dissertation.

The vision statement established specifically for the sub-district of the Southern District: The Far South, in which the Chapman's Bay Estate is located is:

> *An area renowned for its natural and cultural beauty, with a well-defined and protected natural environment, and recognised for its collection of areas of distinct sense of place and urban character, vibrant tourism and service orientated economy, and with world class natural amenity areas accessible to all city inhabitants.*

This statement is relevant to the case Chapman's Bay Estate due to the access to the natural wetland amenity which has been disrupted, as discussed in section *3.4.3 Civic and environmental opposition.* Furthermore, if the approval of this development on core 2 and buffer 1 zoned-land (see figure 22), acts as a precedent for future development applications, the cumulative effect to ecological systems will damaging. Additionally, as discussed in section *2.3.1.2: Liveable cities* and *2.3.1.3: Urban sustainability indicators with regard to gated developments*, gated developments do not contribute to a sense of place within an area, particularly if they are cumulated.

From a spatial perspective, the CoCT seeks to achieve sustainability and equity (CoCT, 2012b). In order to achieve a sustainable development path, the CTSDF (2012b) emphasises the need to be inclusive in order to reduce the growing income gap between the rich and the poor, as well as enhance the quality and functioning of the biodiversity networks. The CoCT's definition of equity is that people have similar access to opportunity, resources and amenities, otherwise referred to as life equality. This requires public interests superseding private interests, as stated by the CoCT (2012b). The CoCT recognises the important role spatial planning plays in sustainability and equity principles, in terms of managing development in an integrated fashion. In terms of this statement, I question why the Gated Development Policy is currently applied in isolation from other valuable CoCT policies, such as the CoCT Densification Policy (2012a) and the CoCT Urban Design Policy (2013). Furthermore, with a vision that seeks to reduce the gap between the rich

and the poor, I question how a development such as Chapman's Bay Estate, which isolates people from one another, contributes to this vision.

Some of the Spatial Development Principles, that are relevant to this dissertation, follow from national legislation. This includes (CoCT, 2012b: 9):

- Work harmoniously with nature, reduce the CoCT's ecological footprint, and introduce sustainable disaster risk reduction measures.
- Improve urban efficiency, and align planned growth with infrastructure provision.
- Create safe, high-quality living environments that accommodate a range of lifestyles and offer a vibrant mix of land uses.

The 2012 CTSDF acknowledges the need to deal with the reality of climate change and unsustainable resource consumption, while at the same time managing high levels of poverty and service delivery backlogs (CoCT, 2012b). In terms of unsustainable resource consumption, I argued the importance of encouraging compact urban form in section *2.3.1.2 a: Compact cities* of the literature review (chapter 2). Chapman's Bay Estate is a low density development (approx. 5 du / ha), therefore not contributing to effectively conserving land sustainably. According to a map provided in the 2012 CTSDF (see figure 26), as well as a map provided in the Southern District SDP & EMF (see figure 25), the Chapman's Bay Estate land was not designated for medium, nor long term urban development. Furthermore, in terms of Chapman's Bay Estate, the site consists of buffer 1 and core 2 zones (refer to figure 22), which are significant in terms of ecological concerns.

In terms of public transport, the 2012 CTSDF and the 2017 Draft Review CTSDF emphasise the need to shift towards public-transport orientated development routes. However, with reference to the case study, it is clear in the 2017 Draft Review CTSDF, that there are no foreseeable plans to extend public transport to the ward 69 area (see figure 27).

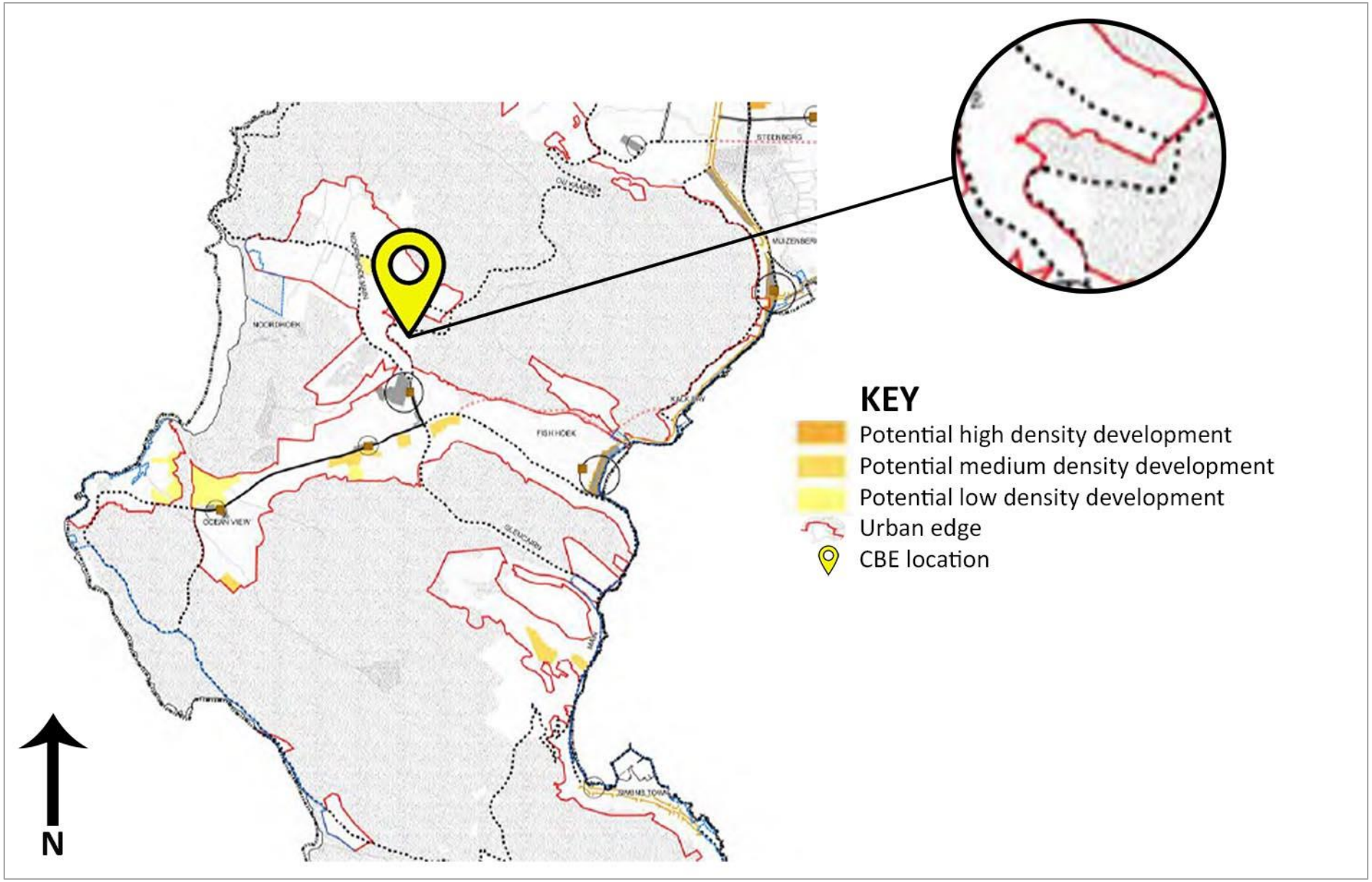


Figure 25: Potentially developable land, as designated in the Southern District SDF & EMF (CoCT, 2012c; modified by Author, 2017)

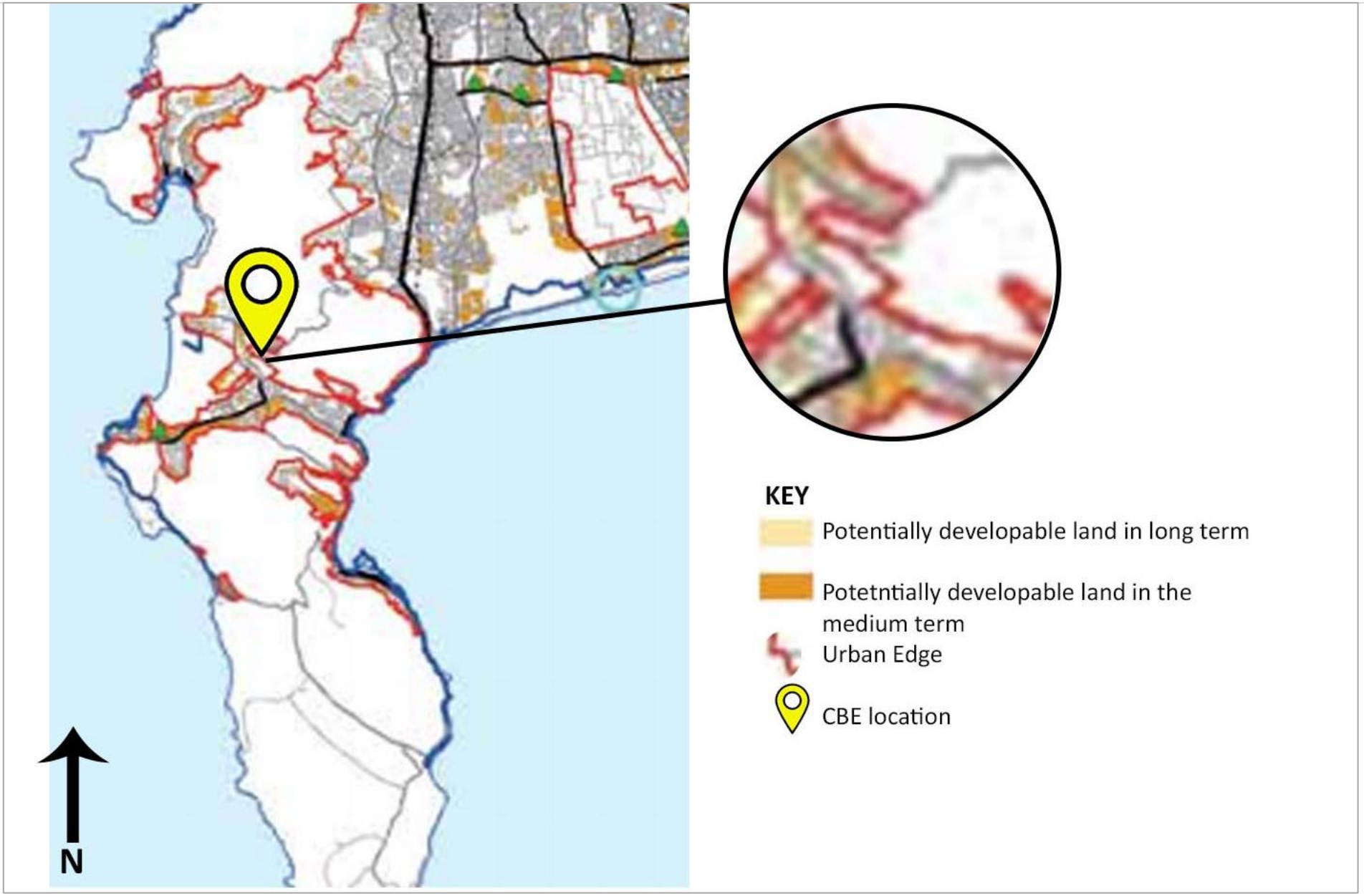


Figure 26: Developable land, as determined in the 2012 CTSDF reveals that the CBE site was not designated as developable urban land, in the medium nor long term (CoCT, 2012b; modified by Author, 2017)

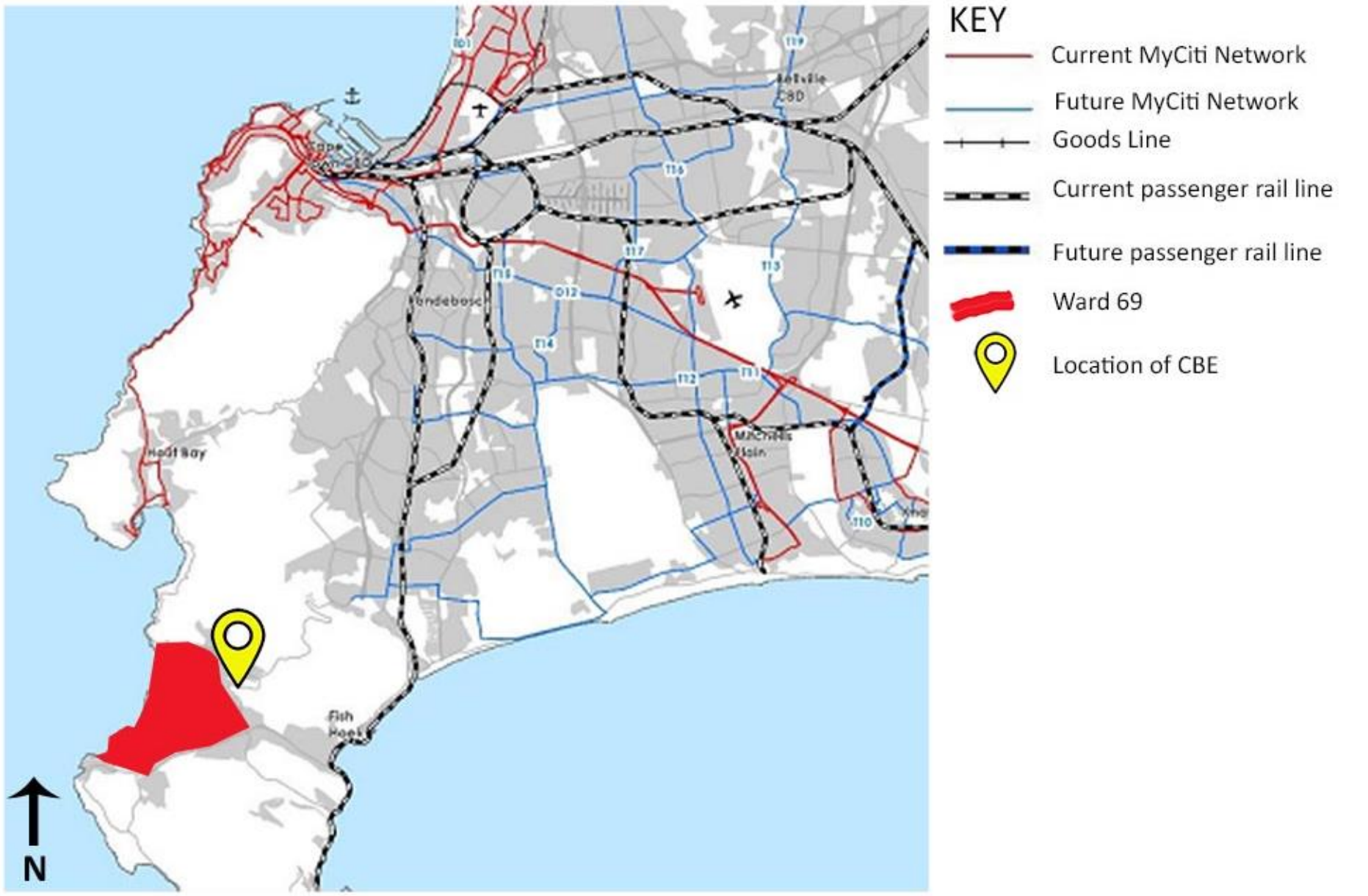


Figure 27: Map taken from 2017 Draft Review CTSDF showing that there are no foreseeable plans for an integrated transport network for the ward 69 area (CoCT TDA, 2017; modified by Author, 2017)

Alexa von Geusau

3.6 Conclusion of the contextual analysis

The contextual analysis of Chapman's Bay Estate has provided a lens to study the functioning of the development application process within the CoCT and the views of civil society. The development of Chapman's Bay Estate in Ward 69 acts somewhat as a microcosm (Kretzmann, 2016) of the Western Cape Province. Large inequalities in resource and opportunity distribution exist, which are evident in the protests seen in both Masiphumelele and Ocean View over the years, as well as the growing demand for higher levels of security, which manifest into exclusionary living environments such as gated estates.

A discussion of the current paradigm and historical context of South Africa, as well as the contextual realities of ward 69, has aimed to reveal the urgency to act boldly in a time of great climate uncertainty and inequitable land and resource distribution.

This chapter has aimed to reveal the irony of the goals and visions of the CoCT and the Southern District, in comparison to the development practise. The visions and goals include the protection of sensitive biodiversity areas through appropriate development planning. At a local scale, the Southern District Plan states that greenfield development should be avoided in areas where there is impact to biodiversity, specifically wetlands, Noordhoek being flagged as one of the sensitive areas (CoCT, 2012c). Furthermore, the metropolitan vision seeks to establish Cape Town as a city where integration, inclusivity and opportunity are key objectives and the gap between the rich and the poor is reduced (CoCT, 2012b). Spatially, the CoCT seeks to enable this through promoting sustainability and equity. Essentially, the CTSDF claims that public interests should supersede private interests. These goals and visions have not been reflected in the development of Chapman's Bay Estate, therefore providing an opportunity to make recommendations that seek to improve the current application of spatial policies.

Furthermore, in terms of Chapman's Bay Estate being a peripheral, greenfield development, the 2013 Western Cape Provincial Spatial Development Framework (WCSDF), explains the significance of this. It states that brownfield developments are more complex and therefore simpler, peripheral, greenfield developments are being favoured in poor planning decisions due to the quick profits they offer. However, as stated in the WCSDF, municipalities pick up the tab for their long-term operating costs (WC DEA&DP, 2013a). This is significant to this case study, as it points to a lack of imagination and willingness to act boldly in development decisions, as discussed in section *3.4.5: Pro-development perspective*.

Section 3.4 discussed Chapman's Bay Estate and its immediate context, including mention of the many objections and concerns regarding the specific development. Concerns and objections range in scale, from neighbouring communities, environmental action groups, to role players such as the sub-councillor of ward 69, Purchase and the CoCT. These concerns were valid, including the role of the area as a gateway to Ou Kaapse Weg, the impacts to sensitive biodiversity, as well as public access to natural amenities such as the wetlands which are now enclosed by the gates of Chapman's Bay Estate. Furthermore, there was mention of the insincerity of 'eco-estates' and their exclusive nature. Despite this, the eventual sum of the application process was its approval, even with recognition that

it was a political move by the former Provincial MEC, Pierre Uys (Baigrie & Ernston, 2017; Purchase, 2017). Hence, by not defending itself, the CoCT has been accused of being 'spineless' (Fouche, 2011:1) and undermining the CTSDF. The gap here is that capital and property developers are able to overwhelm the poorly resourced civil society, in terms of funding and legal resources (Ashton, 2017). According to Ashton, this points to the need for a well-resourced opposition in order to hold the CoCT and Western Cape Provincial Government accountable to the relevant SDFs and SDPs and other policy documents (Ashton, 2017).

There is also the pro-development perspective that was discussed in section 3.4.5, but this discussion was limited due to the unwillingness of the developers and the planners to discuss the Chapman's Bay Estate development. Perhaps this reveals something in of itself. Demand for secure living and market forces produce this form of development, but as Ashton (2017) states, there are also more pressing demands in Cape Town, such as mixed income housing development. Mixed income housing development is the type of development Cape Town needs, and in Ashton's (2017) opinion. Furthermore, by building barriers and creating isolating communities, Ashton (2017) believes we are ironically reducing the safety and security of our city. The example of the luxury Steenberg Estate in Tokai, Cape Town which neighbours Pollsmoor Maximum Security Prison (see figure 28), is symbolic of a highly fractured society that perpetuates crime, as discussed in section *2.7: Conclusion of the literature review* (chapter 2).

By analysing the CoCT's Gated Development Policy through the lens of Chapman's Bay Estate, it revealed many shortfalls within the policy, as well as the application of the policy. The main aim of the Gated Development Policy is to uphold the sustainability and functionality of Cape Town and prevent the establishment of exclusionary environments (CoCT DP&BDM, 2007). The Chapman's Bay Estate is the antithesis of these goals; in fact, this type of development perpetuates an exclusive city (Ashton, 2017). My interpretation that the Gated Development Policy is lacking in terms of its application was reinforced in interviews with Purchase (2017) and Consultant A (2017), who admitted to being unfamiliar with the document (Consultant A, 2017; Purchase, 2017). This is concerning considering their role in decision-making and the planning and design processes. Furthermore, a large amount of the Gated Development Policy's assessment criteria was ignored in the development of Chapman's Bay Estate, revealing either a misinterpretation of the policy or a lack of enforcement. This has provided an opportunity for a review of the Gated Development Policy, through the lens of Chapman's Bay Estate's shortfalls. These shortfalls are considered largely in terms of their cumulative impact if this sort of development is to act as a precedent for future development practise in Cape Town.

The case study analysis has raised the question: how are such developments contributing to achieving the goals and visions set out by the CoCT? Even if this case study appears to be one merely of principle, it is the cumulative impact of this pattern of development that has a long term effect on the spatial performance and efficiency of the CoCT.

In the words of Ashton (2017), the planning process is fundamentally flawed in the way it is heavily biased towards development. The problem of environmental consultants being hired by developers means that the most successful

consultants are the ones that are able to get a project passed by authorities (Ashton, 2017). This issue provides an opportunity for improving the development application and approval process.

This leads me to believe that the CoCT needs to focus on reducing the demand for exclusive, gated developments, by addressing the root issues of poverty, gangsterism, wealth disparities and the legacy of segregation. Addressing these systemic issues, is outside of the scope of this dissertation, however, I will address them when I flag future studies in the conclusion of this dissertation. Furthermore, focusing on improving the existing Gated Development Policy, can contribute to reducing the demand for exclusive living by redirecting and reimaging the concept of gating. This is explored in the following chapter, *Chapter 4: Harnessing and redirecting the CoCT's Gated Development Policy*.

Figure 28: Steenberg Estate neighbouring Pollsmoor Maximum Security Prison in Tokai, Cape Town. (Google Earth, 2017; modified by Author, 2017)

CHAPTER 4: HARNESSING AND REDIRECTING THE POTENTIAL OF THE CoCT'S GATED DEVELOPMENT POLICY

4.1 Introduction to chapter 4

"In order to maintain a dynamic equilibrium it is therefore necessary to focus on the overall performance of the whole, not the optimisation of individual parts" (CoCT DP&BDM, 2013: 6). This quote, taken from the Cape Town Urban Design Policy (2013), establishes the importance of understanding the cumulative impact of a development or activity. In terms of EIA regulations, cumulative impacts refer to the additive effect or impact of similar or diverse impacts that may appear to be insignificant in itself (WC DEA&DP, 2013a). This understanding is essential in the amendments of the existing Gated Development Policy.

For clarity, for the rest of this chapter, I will now refer to the current policy as 'the *existing* Gated Development Policy', this is in reference of the CoCT's 2007 Gated Development Policy. When discussing 'the *amended* Gated Development Policy', this is in reference to the policy with all my recommended interventions taken into account. Furthermore, in speaking of its amendments, I am referring to the entire document, including the sections which refer to its guiding legislation.

In order fulfil the CoCT's vision of establishing a safer and more sustainably city, I will propose interventions and redirection of the existing Gated Development Policy. This requires imagination and the formation of a vision of a more appropriate form of gated developments. Viewing Chapman's Bay Estate within its location of Ward 69 in Cape Town's Southern District, provides an opportunity to envision how amendments to the existing Gated Development Policy would contribute to that vision. Although the amendments are not directly aimed at Chapman's Bay Estate, they are informed by the issues identified in the development and its approval. Further, the amendments are developed in response to the contextual history and realities of ward 69 and South Africa, which reveals the urgency to guide responsible development in Cape Town. This vision seeks to challenge the existing concept of a gated community and the contents of the existing policy, as well as its application and integration with informing policies.

It is important to state upfront, that systemic changes, beyond amending the Gated Development Policy, are necessary. Revitalizing the commons and neighbourhoods which breed crime due to spatial injustices, need commitment from all levels of governance. Influencing the Gated Development Policy is a small part of broader system of actors which polarize society.

VISION: *The overarching vision is to enable gated developments which contribute to improved neighbourhoods. This provides developers and residents with a common responsibility for common spaces, such as public streets and open spaces. Gated developments should contribute to neighbourhoods that are defined by their surrounding natural vegetation and open space systems, to prevent development from further sprawling. The application of performance qualities to new gated developments would contribute significantly to breaking down the barriers to integration. Spatially, this would manifest as small, medium density gated developments, embedded in street blocks, with a positive public-private interface. In terms of scale, a suitable gated development would be one that does not compose of an area larger than a small suburban block (approx. 0, 2 – 1 ha). This type of development would enable the prevention of sprawl through compact urban form, efficiency and support of a viable public transport system. Houses facing onto the street, with permeable boundaries, and pedestrian access from public streets can promote natural surveillance (or Crime Prevention Through Environmental Design (CPTED)) and a sense of community through the promotion of active interfaces. To address the gating concern, a single, or multiple, access point(s) can provide residents with access to a communal parking facility which provides residents with security in terms of arriving to, or leaving, their properties.*

The aim of this contribution by gated developments, is to reduce the demand for more gated developments in the community in the future, due to the contribution of a reduced perception and fear of crime through the natural surveillance. Furthermore, in terms of encouraging mixed use settlements, by only allowing small gated developments it prevents extensive areas from being used solely for residential use. It is with this vision that I will enhance and amend the current 2007 Gated Development Policy and affirm its application, in order to strive for more social and ecological wellbeing. A precedent is provided in section 4.2.5 g), Assessment Criteria: Precedent.

The contextual analysis was studied through the theoretical lens of a desirable, sustainable urban form and social, ecological and spatial justice. A recurring theme has been the challenge that planners face in practice, due to their integrity often being tested by conflicting demands, desires and needs. These come in the form of policies, visions and market forces. The contextual analysis assisted in identifying the reasons which drive the demand for estate living, which is essential for planners to understand when seeking to intervene. Additionally, the controversial nature of the projects such as the Chapman's Bay Estate case study, as well as others, raises the concern regarding how properties are being approved. It has revealed that the relationship between planning and governance leads to inconsistences in space, and therefore innovative thinking often falls short because the links between policies and frameworks are insufficient.

Post-apartheid policies and plans have shown a clear commitment to the transformation of the socio-spatial characteristics of urban spaces, but their application often proves to be lacking due to an over emphasis on the economy without a connection as to how it will manifest spatially. This interventions section will work with the CoCT's statement as written in the existing Gated Development Policy (CoCT DP&BDM, 2007: 1),

> *As a responsible land use regulator, the CoCT promotes development of open, inclusive, integrated and equitable societies, generally discourages gated developments and will only consider such forms*

of development if a developer or community can clearly illustrate that it is constitutionally justifiable and won't have any adverse impacts or that such impacts will be sufficiently mitigated

In terms of urban sustainability theory (section *2.3.1: Urban sustainability*) and the spatial analysis of the Chapman's Bay Estate case (*section 3.5: Spatial and legislative analysis of Chapman's Bay Estate*), it is certain that this form of development requires intervention. This is due to the recognition that gated developments are being approved in isolation, rather than being viewed for their cumulative impact. The form of these types of developments in the future must be positively influenced in order to encourage settlements which contribute to a better performing city. I consider it our role as planners to work towards a vision where such exclusive developments are no longer desirable. This vision is one of neighbourhoods that have active public-private interfaces which assist in strengthening a sense of community, and safety through natural surveillance.

The literature review (chapter 2) and contextual analysis (chapter 3) has revealed that issues with gated communities and their associated socio-spatial fragmentation are embedded in a wider system, but it is not within the scope of this dissertation to address all of these issues, so the focus will be on improving the existing Gated Development Policy and its application. Nonetheless in the conclusion of the dissertation (chapter 6), and where relevant in this chapter, I will point to flag future related studies and intersections that require further research.

This chapter will propose amending the existing Gated Development Policy, including the legislative context and legal mandate which forms part of the policy. This seeks to enable the vision provided earlier in the introduction of the chapter. The interventions I propose have been generated through a spatial analysis of the case of the Chapman's Bay Estate; however, they aim to influence the cumulative impact of gated communities in the future, in all areas under the jurisdiction of Cape Town.

4.2 Intervention recommendations

The previous chapter, *Chapter 3: The Contextual Analysis of Chapman's Bay Estate*, discussed the existing Gated Development Policy with reference to Chapman's Bay Estate. This assisted in establishing what is required in terms of amending the policy in such a way that it would serve to improve the policy's contribution to a better performing, sustainable city. Additionally, as the literature review discussed, gating creates exclusionary spaces for the purpose of keeping crime out of residential areas (Culwick, 2015). This addresses the symptom of badly-performing communities, rather than the root cause (Culwick, 2015). The amendments to the policy will seek to address both the cause and the symptom.

This section, which discusses the proposed amendments for developing an amended Gated Development Policy, is structured in such a way that it follows the order (not numbering) of sections in the existing policy. Some sections are excluded from this discussion either because they are deemed acceptable to remain as they are, or they are irrelevant to the scope of this dissertation. Initially, the chapter will explore adding and updating section 2 of the existing Gated Development Policy: *Legislative Context and Legal Mandate*. This aims to assist in the policy's application by modestly

suggesting the coordination of new policies that are deemed relevant to influencing the outcome of gated developments. It will then turn to amending gaps in section 5 of the existing Gated Development Policy: *Outcomes and Objectives*. Integrating the principles of a liveable city will then be incorporated into section 6 of the existing Gated Development Policy: *Conventional and Alternative Security Measures,* as well as section 7.3 of the existing Gated development Policy: *Assessment Criteria*. Focus in the assessment criteria will be applied to security measures, location and scale, layout and their visual impact and interfaces. This will be structured in the same way that the existing Gated Development Policy has been structured (in terms of headings), for the purpose of legibility. This section will address areas of the policy that could be enhanced or changed entirely.

In terms of the proposed amendments, I maintain that gated developments are an undesirable form of development due to their cumulative impact on urban form, performance and sustainability. However, in cases where gated developments do occur, the amendments attempt to motivate that they not only mitigate adverse cumulative impacts, but also contribute to the urban performance of an area and an overall sustainable urban form. This means that the amendments will put in place guidelines that will allow gated development applications to be approved *if* they contribute to densification, integration, and brownfield development. This will contribute to the qualities of a liveable city, discussed in chapter 2 and 3, and therefore the aim will be to eventually reduce the demand for gated developments. The attempt to reduce demand is through reinventing the impact of gated communities in an area: contributing to safer streets and active public-private interfaces which aims to reduce demand by contributing to citizen's (outside of gated developments) desire for safer living environments and a sense of community. If they do not contribute to these goals, I urge for them not be approved.

The existing policy speaks about the desirable qualities of cities that can be adversely impacted by gated developments. These qualities include accessibility, interaction and other forms of activity. The amendments seek to maintain these qualities and enhance them by means of strict regulations as to the type of developments that are allowed.

It is important to understand and be familiar with the vision provided in the introduction of this chapter, in order to understand the purpose behind the following proposed interventions.

4.2.1 Legislative context and legal mandate

Since the existing policy has not been reviewed or amended since 2007, the legislative context is out of date. Therefore in terms of amendments to the legislative context, I will propose adding and updating certain policies and frameworks which set principles and guidelines for the Gated Development Policy, this will be done with the intention of better integrating and harmonizing other legislation relevant to gated developments. An organigram is provided in figure 35 to explain the existing guiding legislation and policies, as well as the proposed additions and amendments.

4.2.1.1 Amending the application of current guiding legislation in the existing Gated Development Policy

4.2.1.1 a) South African Constitution

With reference to the first guiding document which is already in the existing policy, the South African Constitution, Act 108 of 1996, it states that there is a "constitutional dilemma created by the right to freedom of movement versus the right to security" (CoCT DP&BDM, 2007: 2). The type of development deemed appropriate in the gated development vision (section *4.1: Introduction to chapter 4*) aims to disallow gated developments from causing that dilemma. This will be avoided by addressing the right to freedom of movement, by only allowing these types of developments to be built within street blocks, or sections of street blocks. Therefore, they will be embedded within the urban fabric, preventing the existing permeability of neighbourhoods from being impacted, and therefore preventing the freedom of movement from being adversely affected. This will disallow excess social division.

4.2.1.1 b) NEMA

NEMA, Act 107 of 1998, is another guiding piece of legislation currently in the existing policy (CoCT DP&BDM, 2007). It requires that development must be socially, environmentally and economically sustainable. This aspect of NEMA needs to be applied more specifically to the *cumulative* sustainability of this type of development. Cumulative sustainability is best explained by the National Academies of Science, Engineering and Medicine (2016: 27), "localities that develop an island or walled-city perspective, where sustainability is defined as only activities within the CoCT's boundaries, are by definition not sustainable." The case of Chapman's Bay Estate illustrated that it would not be socially, environmentally nor economically sustainable if it were cumulated. The low density development on a greenfield property which contributes to sprawl, the social and biodiversity fragmentation and the impact on the natural system through input of infrastructure is not in line with urban sustainability theory and urban performance criteria, explored in section *2.3.1: Urban Sustainability*. Therefore, the future application of NEMA to this policy needs to be better applied in accordance with the principles of a sustainable, liveable city. This will be addressed through integrating the principles into new assessment criteria in section 4.2.5 of this chapter.

4.2.1.1 c) LUPA

With regard to policy implementation, LUPO, No 15 of 1985 has been repealed and replaced by the Western Cape Land Use Planning Act (LUPA), 2014. The means that all land use planning applications will now be processed in terms of the CoCT's Municipal Planning By-Law on Municipal Land-Use Planning (WC DEA&DP, 2017). This needs to be reflected throughout the amended Gated Development Policy. Figure 29 below provides a helpful organigram depicting the planning legislative framework from national to municipal level.

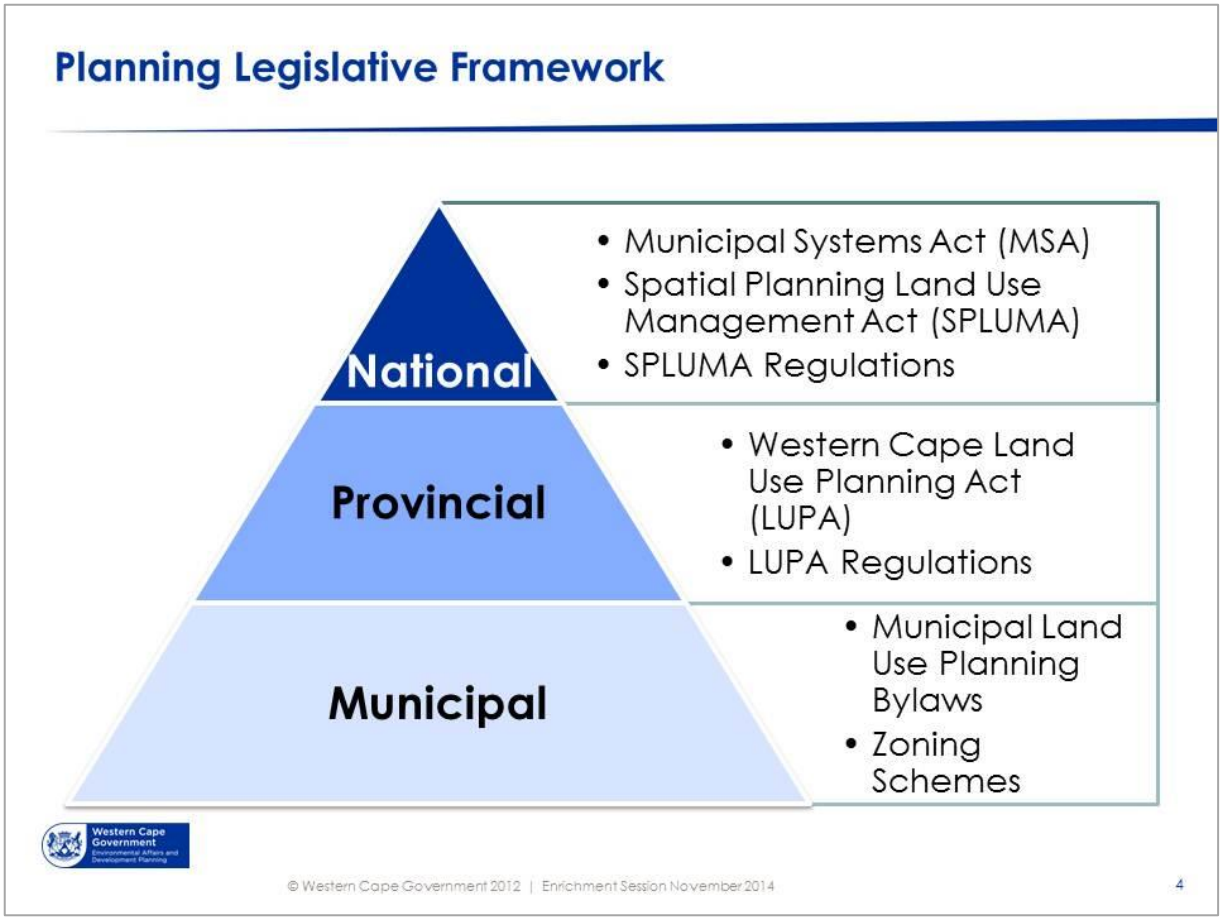


Figure 29: Planning legislative framework (WC DEA&DP, 2017)

4.2.1.2 Guiding legislation and policies to be added to the amended Gated Development Policy

Additional guiding legislation that has been identified as relevant to add to the amended version of the Gated Development Policy, is the relevant CTSDF, the relevant local district Spatial Development Plan (SDP), the Cape Town Densification Policy (2012a), the Western Cape Guideline on Need and Desirability (2013) and the CoCT's Urban Design Policy (2013). I will now turn to discuss the relevance of adding these pieces of legislation to the amended Gated Development Policy.

4.2.1.2 a) CTSDF and local district SDP

The 2005 WCSDF is currently the only guiding SDF for the existing Gated Development Policy (CoCT DP&BDM, 2007). The policy should be amended to state that the *relevant* provincial SDF *at the time of a development application* should be considered in making decisions whether an application is approved or not. Furthermore a reasonable amendment would be to add both the relevant (in terms of time) CTSDF, and the relevant (in terms of time and area) local district SDP must be used. This amendment would occur in section 2.1 of the existing policy, *Legislation and policies providing the mandate for and guiding this policy*. If this were already the case, it technically should have prevented the Chapman's Bay Estate from being approved due to its zoning as core 2 and buffer 1, as discussed in section *3.5: Spatial and legislative analysis of Chapman's Bay Estate.*

4.2.1.2 b) Cape Town Densification Policy

The have already addressed the importance of a dense urban environment for urban performance and sustainability. The long-term sustainability of Cape Town is threatened by low-density development which characterises current development trends (CoCT, 2012a). This is a key variable in the spatial objectives and challenges of the current (2017) Draft CTSDF for the CoCT (CoCT TDA, 2017). A low density form of development is negative for a number of reasons, including the fragmentation of land uses which makes it difficult to support a viable public transport system. This encourages further dependence on private car use and subsequent greenhouse gas emissions (CoCT, 2012a). Low densities also contribute negatively to place-making qualities and urban vibrancy (CoCT, 2012a). Biodiversity, agriculture and scenic open spaces are threatened by patterns of sprawl (CoCT, 2012a). For this reason, densification is considered a necessary step in the long-term sustainability of Cape Town (CoCT, 2012a).

A number of documents prepared by different spheres of government support the need for densification, such as the Constitution of the Republic of South Africa (1996), the Development Facilitation Act (1995), the Provincial Spatial Development Framework (2014), and the Cape Town Spatial Development Framework (2012) (CoCT, 2012a), all of which are guiding documents in the existing Gated Development Policy and the amendments that this dissertation puts forward.

The CoCT Densification Policy informs the CTSDF and district level Spatial Development Plans (SDPs) in terms of areas of land use intensification. The policy states that densification is a process of improving the sustainability and vitality of a city, not an end goal (CoCT, 2012a). Classic forms of densification include tower blocks, row housing, and perimeter blocks enclosing open space, parking or a courtyard (see figure 30). The gated development vision provided in section *4.1: Introduction to chapter 4,* is somewhat a combination of row houses and the perimeter block: the housing layout encloses an area for parking or open space within a street block (see figure 33). When used appropriately with the CoCT's Urban Design Policy (2013), this policy can contribute to the safety and place-making qualities of urban environments (CoCT DP&BDM, 2013). The CoCT Densification Policy states that densification can occur on greenfield or brownfield sites (CoCT, 2012a). However, in terms of its application the amended Gated Development Policy, it should only be applied to brownfield sites and the amended version states that gated development applications should only be approved on greenfield sites.

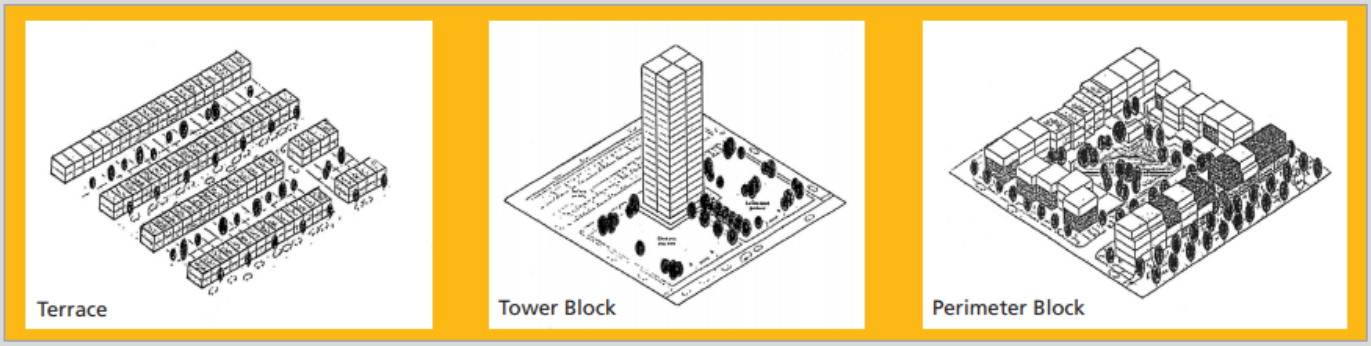
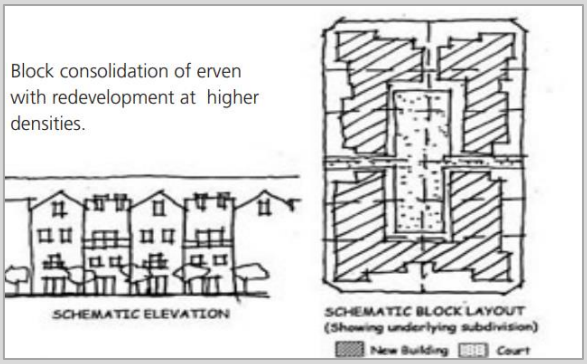
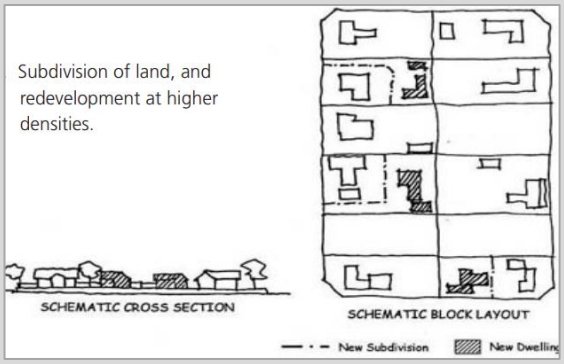


Figure 30: Options for high-density development, as provided in the in CoCT's Densification Policy (CoCT, 2012a).





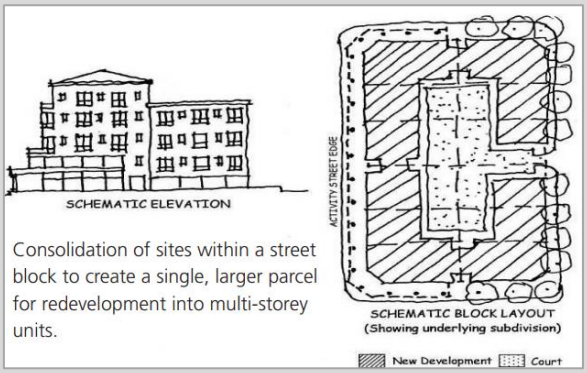


Figure 31, 32, 33 (clockwise): Generic ideas for block layouts from CoCT's Densification Policy (CoCT, 2012a).

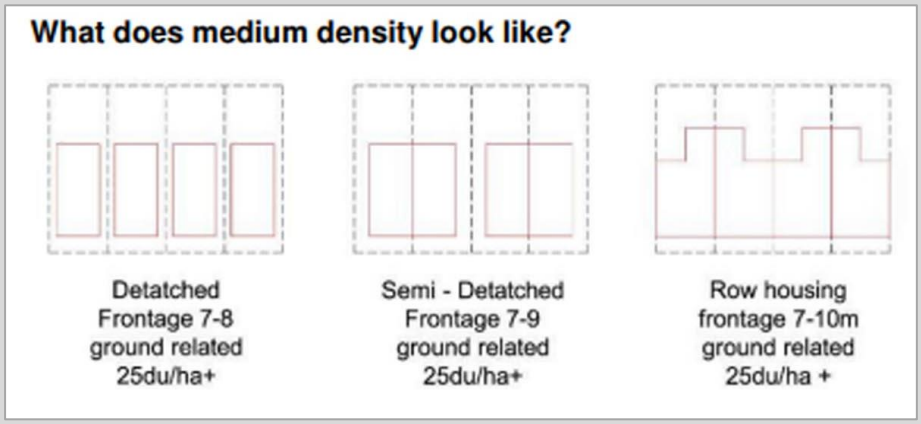


Figure 3416: Density guidance provided by the CoCT's Densification Policy (CoCT, 2012a)

By incorporating this policy into the guiding legislation of the amended Gated Development Policy, it is not to say that an area such as the location of Chapman's Bay Estate should be medium to high density. Such areas should not be developed at all. Rather, it aims to align development decisions, particularly gated developments, with the goals of densification. It would encourage applicants and decision makers to *only* allow gated developments in circumstances where they *contribute* to the CoCT's goals of densification and the prevention of urban sprawl. The aim of adding this policy to the guiding legislation of the Gated Development Policy is to ensure it happens in a context specific manner. The CTSDF provides the guidance as to what densities are appropriate to specific areas. If this policy was considered in the application of Chapman's Bay Estate, it would not have been approved as it is a low density development (approx. 3.2 du/ha), on a greenfield site, in an area containing important natural features such as wetlands and endangered vegetation, and it perpetuates the reliance on private car use, as discussed *in section 3.5: Spatial and legislative analysis of Chapman's Bay Estate* of Chapter 3, The Contextual Analysis.

For further research, I recommend flagging the Cape Town Densification Policy to add mention of gated communities and cross reference the amended Gated Development Policy in future amendments. This will assist in the harmonization and integration of policies.

4.2.1.2 c) Western Cape Guideline for Need and Desirability (2013)

This policy is aimed at guiding the Environmental Impact Assessment (EIA) stage of an application process. It states that the guideline must be read in conjunction with NEMA, EIA regulations and relevant Specific Environmental Management Acts (SEMAs) and their regulations. The policy would be a beneficial amendment to add to the guiding legislation in the amended Gated Development Policy, as it highlights the importance of considering the cumulative impacts of similar or diverse activities when assessing a development application (WC DEA&DP, 2013a). This emphasises the importance of considering the impact of an activity beyond itself, or its own boundaries. It states that cognisance of climate change, food security, sustainable natural resource supply and ecosystem services must be taken into account.

Furthermore, it acknowledges the importance of the cumulative *contribution* of projects, by stating that what is needed and desired for an area must be strategically and democratically determined beyond the spatial extent of EIAs. These needs and desires are informed by sustainable development goals, objectives, visions, strategies and the plans of the municipal IDP. In the case of Chapman's Bay Estate, this guideline would have been beneficial for taking the needs and desires of the wider area, ward 69, into account. This would have assisted in determining that a luxury low density, estate in an ecologically sensitive, and socially polarized area, is not appropriate. It states that *individual projects* must contribute to achieving the *overall goals* of the provincial, metropolitan and district-level SDFs and the municipal IDP (WC DEA&DP, 2013a).

Essentially, this guideline assists in informing development decisions by viewing the sum of the impacts holistically, therefore addressing to my aim of *contributing* to urban performance and sustainability (WC DEA&DP, 2013a).

4.2.1.2 d) Cape Town Urban Design Policy (2013)

As mentioned before in section 2.3.1.2 of the Literature Review, *Liveable Cities*, urban-decision making occurring in silos is not conducive to the development of well-performing cities. Working across disciplines is better in many respects, as it promotes place-making qualities to be considered in planning functional communities. Urban Design principles provide a practical way to implement high-level policies and objectives at the local scale. The discipline of urban design overlaps with architecture, spatial planning, landscape architecture and environmental planning and design, all of which are highly relevant to development applications, specifically gated developments. The CoCT's Urban Design Policy (2013) was developed with the aim of addressing the segregated nature of the CoCT, as well as making it safer, more inclusive and environmentally sustainable. Therefore, this policy is deemed necessary to add to the guiding legislation of the amended Gated Development Policy as it would assist in ensuring that gated developments are aligned to urban design principles, and therefore contribute to a well performing city.

Furthermore, this policy seeks to achieve many of the objectives that the Gated Development Policy amendments seek to achieve, and aligns well with the Western Cape Guideline for Need and Desirability. This includes improving the quality of spaces, through inclusivity, particularly in the public realm and providing the criteria upon which decision makers can assess the desirability of a development application. In fact, the policy was developed in recognition of the negative cumulative impact that badly conceptualized developments were having on the public realm in Cape Town. Amendments to the existing Gated Development Policy are particularly aimed at ensuring that future gated developments do not impact negatively on their surrounding communities and public-private interfaces. Therefore this policy is pivotal in guiding the development proposals and decisions.

The departments responsible for the utilization and application of the Urban Design Policy is the CoCT's Environmental Management Department and the Development Management Department within the TDA (CoCT DP&BDM, 2013). In its application to gated developments, the Development Management Department will use the policy to comment on gated development applications (see figure 24 in section *3.4.4.2 Application of the Gated Development Policy)*.

I will use the principles of urban design, as set out in the CoCT's Urban Design Policy (2013), as well as other sources Dewar's (forthcoming) *Liveable Cities: The Case of Cape Town, South Africa*, to influence amendments to the assessment criteria section of the existing Gated Development Policy.

Similarly to the Cape Town Densification Policy, I recommend flagging the Cape Town Urban Design Policy to add mention of gated communities and cross reference the amended Gated Development Policy in future amendments. This will assist in the harmonizing and integration of policies will the aim of better application.

Figure 35: Organigram produced by Author (2017) depicting additional guiding legislation and policies for the amendment of the Gated Development Policy

4.2.3 Outcome and objectives

The existing Gated Development Policy lists the desired outcomes as: better regulation of gated developments and a contribution to a more integrated and accessible society (CoCT DP7BDM, 2007: 7). I feel it would be beneficial to amend this section by adding emphasis to the objective of *contribution*. Contribution in the amended Gated Development Policy aims to provide neighbourhoods with the qualities citizens seek (see section 4.2 and 4.2.5.d) when they move into gated developments, thereby reducing demand. Furthermore, a recommended amendment to this section would be to state that this policy seeks to redirect and reinvent the existing way in which gated developments manifest in space as well as their influence to the urban performance and sustainability of Cape Town.

4.2.4 Conventional and alternative security measures

The existing policy has a section dedicated to assisting property owners and community groups in addressing security concerns. It is intended to provide an alternative to developing full gated communities. The suggestions relevant to residential developments include lighting, boundary walls and fences, alarm systems, patrols, and CCTV and guard surveillance. However, the section lacks guidance for developing safer communities by means of natural surveillance. This is considered a necessary addition in the amendment of the existing Gated Development Policy.

4.2.5 Assessment Criteria

This section of the chapter is deemed the most important in terms of amendments, because it establishes specific criteria to ensure that the guiding policies, objectives and visions of the Gated Development Policy are applied in project proposals.

The assessment criteria in the existing Gated Development Policy were prepared for a range of gated development types, but for the purpose of this dissertation, only aspects relevant to entirely private, purpose built developments will be discussed because it has been informed by Chapman's Bay Estate. Amendments to the policy in terms of other forms of gating will be flagged for further research.

4.2.5 a) Conventional and alternative security measures

In terms of the assessment criteria regarding conventional and alternative security measures, the existing Gated Development Policy states that a long term perspective should be taken into account when assessing development applications (CoCT, 2017). Furthermore, it states that there should be an evaluation of the impacts on the wider community. The wider community is not defined so it is unclear whether this refers to the street, the neighbourhood or the greater metropolitan community. It also does not mention the time scope of the wider community in terms of current and future needs and desires. Furthermore, it does not provide evaluation tools and therefore leaves it too ambiguous for decisions makers, as to what cumulative impacts would be of concern and to whom. In the amendments it would be helpful to provide tools for evaluating the impact of security measures and exactly what scale (time and scope) of 'community' is being referred to.

4.2.5 b) Access monitoring and control

This is relevant to entirely private estates, such as Chapman's Bay Estate. The existing Gated Development Policy states that full access control is permitted in these types of estates (CoCT DP&BDM, 2007). It would be helpful to amend this and say it is permitted but *strongly discouraged*. According to the vision provided for the amended version of the Gated Development Policy (section *4.1: Introduction to chapter 4*), access monitoring would only be for car access into the communal parking area and open spaces. See figure 36 below for visual description.

Figure 36: A positive example of a more acceptable form of a gated development: Medium density, buildings frame the public realm (public street and park area), no larger than a residential block, pedestrian on-street access to each unit, unobtrusive access point for cars. Sourced from CoCT's Urban Design Policy (CoCT, 2013) and modified by Author (2017).

4.2.4 c) Location and scale

Scale

The existing Gated Development Policy *does* state that large scale gated developments that take the form of mini-suburbs can be detrimental to city form and connectivity and therefore should be avoided. However, it does not specify what is considered 'large scale.' Furthermore, by stating that they 'should be avoided' (CoCT DP&BDM, 2007: 13) does not rule them out. In this amendments section, I encourage more decisive language. Therefore a statement such as this should be amended to say, '*must* be avoided'.

In this section's amendments, it would be helpful to state that the scale of gated developments must be kept to a minimum by only approving development applications which propose embedding them in existing blocks, on

brownfield sites. Furthermore, the amended Gated Development Policy should not allow gated developments from building along the urban edge, as was the case in the Chapman's Bay Estate because it risks isolating the development as a distinctive, separate neighbourhood. This is undesirable in terms of integration objectives. These scale and location amendments assist in preventing new gated developments from being developed on expanses of greenfield sites – as was the case in the Chapman's Bay Estate. It would also be helpful to state a specific property size will be allowed in the amended Gated Development Policy, as the size of existing street blocks can be vastly different, allowing the policy to be misapplied. For example, the size of a block in the wealthy, residential suburb of Bishopscourt (approx. 52 000 m^2) is generally much bigger than the size of a block in the lower-to-middle income, mixed use neighbourhood of Saltriver (approx. 10 000 m^2) (Google Maps, 2017), due to the historical legacy of the areas. The specific size that is deemed appropriate should be flagged for further studies, but as a guideline a small block or a portion of a small block would allow for gated developments to be between 2000 m^2 - 10 000 m^2 (0,2 ha – 1 ha). This amendment would require a subsequent amendment: the removal of the statement (CoCT DP&BDM, 2007: 15),

> *Subject to detailed engineering investigations (and while recommendations in an accepted TIA / TIS in this regard would prevail), gated developments or enclosed areas consisting of more than 250 individual units must have more than one vehicular entrance or must have access to an alternative escape route*

considering it allows for a much greater amount of units than the amended Gated Development Policy considers appropriate (25-55 du/ha mentioned below).

The existing Gated Development Policy does address the size of the development by suggesting that large developments should be broken up into smaller parcels to avoid neighbourhood fragmentation. This is ambiguous as it could allow a single developer to build on several adjacent blocks. As an amendment to the policy, this should not be allowed as it could create a monotonous feel in a neighbourhood and it could create a blurred public-private realm in the public streets. To avoid this from happening, an amendment to the existing policy could be to refuse gated development applications that are proposed adjacent to existing gated developments.

Depending on the context, the number of floors, and the details of the CTSDF or district level SDP, an acceptable density should range between 25-55 du/ha, a medium density development. Already mentioned in the discussion regarding the addition of the Cape Town Densification Policy (section 4.2.1.2.b), it would be beneficial to flag further research into amending the existing Cape Town Densification Policy to include mention of gated communities. This would assist in harmonising and aligning existing policies that are currently addressed in a fragmented approach.

Location

With regard to location, the existing Gated Development Policy states that gated developments *may not* be located on main routes or roads (CoCT DP&BDM, 2007). However if future gated developments are developed to align to the vision (section 4.1) and precedents provided (section 4.2.5.g. *Precedent*), they could contribute to viable densities required to support public transport on main movement routes. This would also contribute to reducing reliance on

cars. Therefore, in amending the policy, it would be beneficial to state that gated developments *must contribute* to the viability of public transport routes within an area as well as the vibrancy and natural surveillance of a public roads.

In this section it would be helpful to amend the existing Gated Development Policy by providing precedents of appropriate developments. A suitable precedent is provided in section *4.2.5.g: Precedent*.

4.2.5 d) Layout

The existing Gated Development Policy states that layout is a fundamental aspect of gated developments. The amended version maintains this. As stated in the CoCT's Urban Design Policy (2013), the structure of a development is important because it is an *enabling* tool. It can enable natural surveillance, social interaction and aesthetically pleasing public-private interfaces. Furthermore, the layout can determine its level of permanence or reversibility in terms of gating and enclosure (CoCT DP&BDM, 2013).

Currently, the existing Gated Development Policy states that gated developments should be located within street blocks in the sense that single residential properties buffer them from the road, as illustrated below (figure 37). However, this would not be necessary if the visions and precedents for the amended Gated Development policy are abided by, because the interface between the development and the street would be contributing positively to the public realm through its orientation and building guidelines (figure 38).

These guidelines contribute towards natural surveillance. The contribution of natural surveillance by gated development is deemed essential in the amendments of the existing Gated Development Policy. This is an attempt to reduce the demand for further gated estates in a community, by reducing the potential opportunity for crimes to occur, as well as reducing the perception and fear of crime, which is a main driving factor in the proliferation of gated communities, as discussed in *Chapter 2: The Literature Review*. Therefore, a proposed amendment is to promote and elaborate on natural surveillance further in the amended Gated Development Policy.

One of the key objectives outlined in the CoCT's Urban Design Policy (2013) is ensuring that developments contribute to the creation of safe and secure communities. This is well aligned to the objectives of the amended Gated Development Policy. Natural surveillance addresses this through locating doors, windows, balconies and terraces on the street-side of properties to create a positive public-private interface (see figure 38). This is promoted in the vision, whereby it stipulates that houses in gated developments should have on-street pedestrian access (see figure 36) to maintain activity and therefore natural surveillance. This also meets a second objective in the Cape Town Urban Design Policy, ensuring 'enclosure and positive interfaces onto the public realm' (CoCT DP&BDM, 2013: 13) which states that access from streets is important for activating the streetscape.

The conclusion of this dissertation (chapter 6) will address flagging future research in addressing systemic issues, which drive the demand for gated development, thereby aiming to reduce the demand.

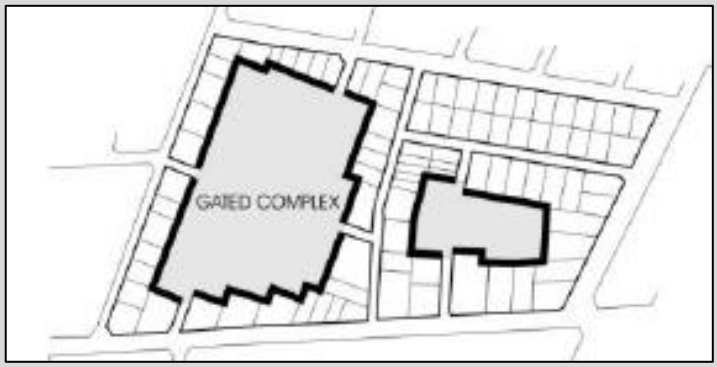


Figure 3717: Gated development buffered from street by means of single residential properties, as endorsed in the existing Gated Development Policy (CoCT, 2007: 16)

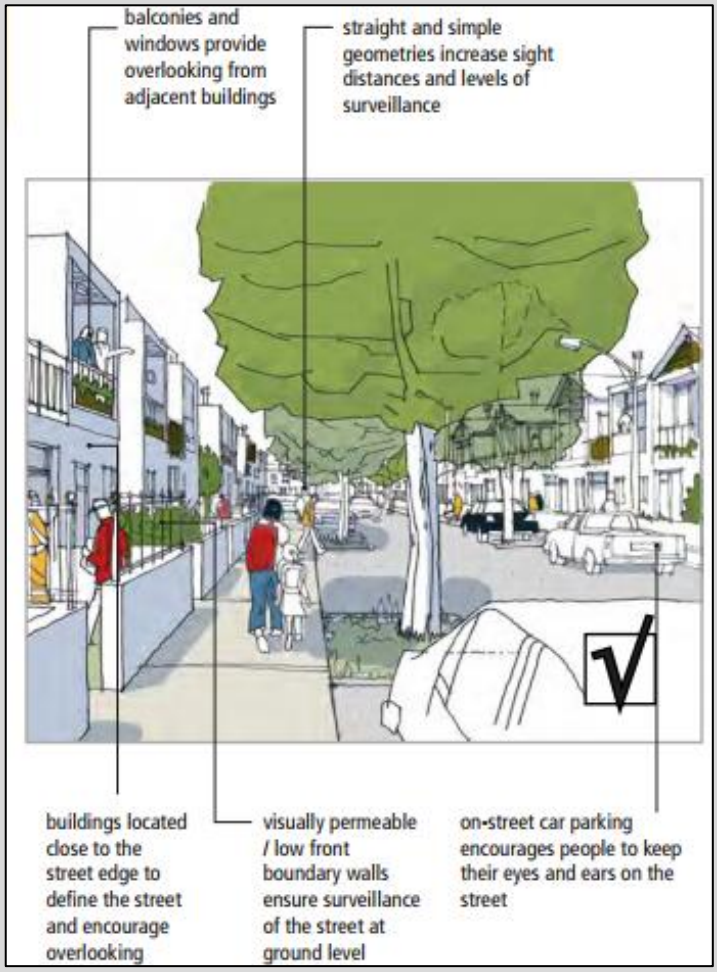


Figure 38: Building orientation onto abutting public road and visually permeable boundary creates positive interface and streetscape, as endorsed in the existing Cape Town Urban Design Policy (CoCT DP&BDM, 2013: 10) and maintained in the Gated Development Policy amendments.

4.2.5 e) Visual impact and interfaces (edges)

Again, this section focusses on mitigating and reducing potential adverse visual impacts of gated developments. In accordance with the gated development vision and precedent provided, a helpful amendment to the Gated Development Policy would be to attempt to *contribute* to a positive visual impact in the surrounding neighbourhood, not only *mitigate*. To enable this contribution, high walls should *not* be allowed, only visually permeable fences or low walls (figure 38, 42 & 43). The existing Gated Development Policy states that at least 50% of the development should have visually permeable boundaries, but this should be amended to at least 70%. The visual impact guidelines in the existing policy encourage interaction and activity by promoting active interfaces. However, this is not decisive enough. It leaves the option open to the developers. Amendments to the policy need to state that homes along public streets *must* ensure an active interface. Furthermore, in terms of visual impacts, the access point can significantly influence the feeling of exclusion or dominance created by the development. Therefore the access gate or boom and guard hut (where applicable) must be understated in order for the access point to visually blend in with surrounding home's access gates.

4.2.5 f) Services and infrastructure

This section of the existing policy deals with a gated development's impact on existing services and infrastructure and access to pedestrian and service lanes. It is more relevant to developments, which are extensive in scale or on greenfield sites, as they are more likely to influence the existing functioning of services or infrastructure. Therefore, this section should become somewhat redundant with the amended Gated Development Policy. With the adoption of a new vision for gated developments, as explained in section *4.1: Introduction to chapter 4* and in the precedent provided in section 4.2.5 g: *Precedent*, the type of gated development allowed in the amended Gated Development Policy, would prevent the impact on existing routes and services, because development would only occur on brownfield sites.

4.2.5 g) Precedent

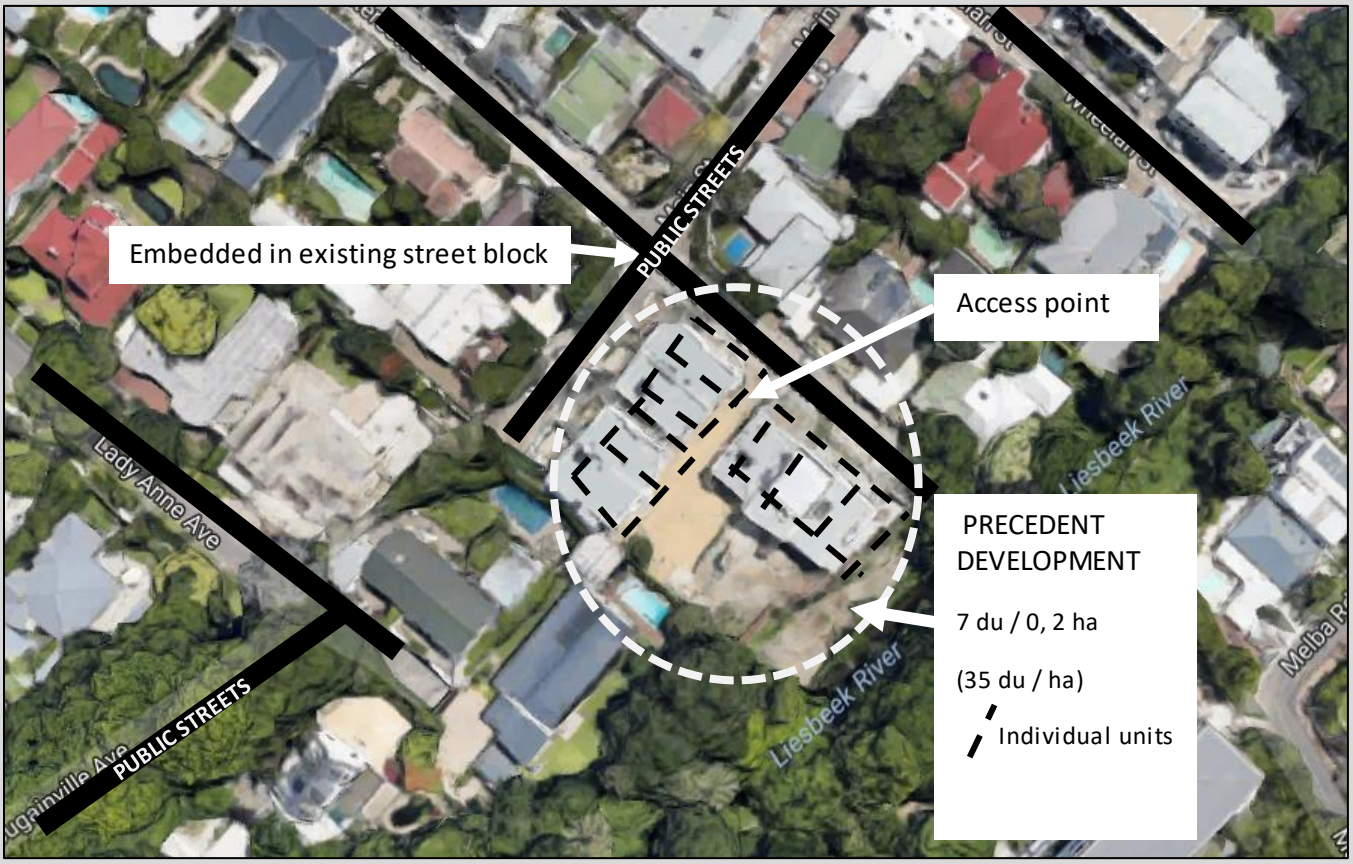


Figure 39: Aerial image of a precedent for an acceptable gated development, according to the vision of the amended Gated Development Policy (Google Maps, 2017; modified by Author, 2017).

This precedent is in the upper-income area of Newlands Village, in Cape Town, South Africa. Although the precedent does not represent all income groups, it provides a suitable example for internal layout and its response to the surrounding neighbourhood. It is also at a suitable density: 35 du / ha (in this case it is a 0, 2 ha property with 7 units).

Housing units face onto the street, each with a pedestrian entrance. Cars use one access point for a communal parking area and shared open space. The development does not compromise the existing urban fabric, as it is embedded within existing street blocks.

Figure 40 (far left): Access point for cars (Author, 2017)

Figure 41 (2nd from left)): Communal parking area and access to open space (Author, 2017)

Figure 42 (2nd from right): Pedestrian access to street, semi-detached units (Author, 2017)

Figure 43 (far right): Public-private interface open and visible (Author, 2017)

4.2.6 Procedural requirements and institutional arrangements

With regard to the application procedure for gated developments, there is currently no separate procedure for gated development proposals (CoCT DP&BDM, 2007). They are integrated with existing land use and property management procedures (CoCT DP&BDM, 2007). This was considered as a possible amendment. However, this was decided against because of the attempt to integrate new gated developments better into the existing urban fabric. This is an attempt to prevent the department responsible, Development Management within the TDA, from practising in a separate silo to another department designated to approving gated developments. This could cause further fragmentation in the system, than what exists already. Rather, those responsible for assessing proposals need to be well educated of the amended Gated Development Policy. This will be addressed in *Chapter 5: Implementation and evaluation of the amended Gated Development Policy* in section *5.2: Implementation*.

4.2.7 Commencement and implementation

Implementation will be discussed in its own section, but with regard to amending the existing Gated Development Policy, the existing policy allows conditions of approval to be set on development proposals. However, it does not state who is responsible for the conditions of approval. To amend this statement, the policy should insist that the record of decision is only complete if it assigns responsibilities for setting conditions. As a recommendation, I propose that the local ward councillor in conjunction with a council appointed urban designer who has an understanding of the local context, is involved in this process. This would only be successful if the local ward councillor is well informed regarding the potential impacts and contributions of gated developments. This will be addressed in Chapter 5: *Implementation and evaluation of the amended Gated Development Policy*, section *5.2: Implementation* to ensure that the principles of a liveable city are being complied to.

Furthermore, this section of the existing Gated Development Proposal, states that council may determine the applicable extent to which policy may be deviated from. As learned in the case of Chapman's Bay Estate, this allowed the development to be approved, despite the fact that it did not comply with many of the existing Gated Development Policy assessment criteria, and relevant spatial legislation (section *3.5: Spatial and legislative analysis of Chapman's Bay Estate* of chapter 3). Therefore, in amending this policy it would be helpful to strictly define what deviation would be allowed, if at all.

4.3 Conclusion of chapter 4

This chapter has built on the foundations set in *Chapter 2: The Literature Review*, which set a theoretical understanding of gated developments both internationally and locally, as well as *Chapter 3: The Contextual Analysis of Chapman's Bay Estate*, which explored the CoCT's existing Gated Development Policy in detail, with specific reference to the context of Chapman's Bay Estate. It also aimed to address the following subsidiary research questions set out in Chapter 1:

- Are gated developments currently contributing towards urban sustainability and performance?

- Is the CoCT's Gated Development Policy contributing to ensuring gated developments are realizing the goals, visions and objectives of the CoCT?
- Is there a disjuncture between the CoCT's goals, visions and objectives and the outcomes in the case of Chapman's Bay Estate?
- If so, what are the cumulative impacts of these disjunctures on urban performance and sustainability?
- What are the reasons for this disjuncture in planning ideals and planning outcomes, in terms of the gaps in policy and application?

This initial research provided an opportunity upon which to determine appropriate and necessary amendments to the existing Gated Development Policy and its guiding legislative context.

The amendments proposed in this chapter aim to address the concerns raised in *Chapter 2: The Literature Review*, and the gaps identified in *Chapter 3: The Contextual Analysis of Chapman's Bay Estate*. They aim to focus particularly on the cumulative impact of gated developments in Cape Town, and ensuring that their potential to contribute to the performance of an area is harnessed. Furthermore, the amendments aim to gesture towards transforming and redirecting the concept of gated developments in Cape Town, through making them less *gated, controlled* and *policed* and more *porous*, *unimposing* and *integrated* into the urban fabric - yet safer through natural surveillance and active interfaces.

This led to intervention section (section *4.2: Intervention recommendations*) which included updating outdated policies and adding new and relevant policies to the *Legislative Context and Legal Mandate* of the CoCT's existing Gated Development Policy. New legislation, which I have suggested is added to the amended Gated Development Policy, includes the CTSDF and relevant local district SDPs, the CoCT Densification Policy (2012a), the CoCT Urban Design Policy (2013) and the Western Cape Guidelines on Need and Desirability (2013). These additions aim to better align and coordinate existing policies relevant to the development of gated communities. The amendments section then turned to propose more decisive assessment criteria, as well as additional assessment criteria to align development outcomes with the vision provided in the introduction of this chapter.

I will now turn to a discussion regarding the implementation and evaluation of the amendments.

CHAPTER 5: IMPLEMENTATION AND EVALUATION OF THE AMENDED GATED DEVELOPMENT POLICY

5.1 Introduction to chapter 5

The need to work across disciplines is considered essential for a well performing, sustainable and flourishing urban environment. This has been discussed throughout the dissertation, based on a theoretical and contextual analysis of gated developments. Therefore, in the previous chapter regarding interventions, *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy,* recommendations to amend the existing policy as well as the harmonization and synchronisation of additional and existing guiding legislation, and their application, was addressed. Furthermore, cross-linkages between legislation were recommended in order to acknowledge the interdependencies of systems and legislation.

The amendments to the policy and its guiding legislation aims to provide a framework to promote important urban performance criteria in Gated Developments under the jurisdiction of the CoCT.

This chapter provides guidance for the implementation of the recommendations articulated in the previous chapter, *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy*. I seek to take the recommended interventions and make them implementable in practise, by providing guidance regarding who is responsible for the recommended actions and providing thoughts regarding a timeframe and prioritization. I consider this guidance regarding implementation a crucial point of departure as it sets the interventions in motion

The chapter begins with a discussion regarding the recommended timeframe for the implementation of recommended actions. It then goes on discuss responsibility, providing a table summary (table 1) of the actions recommended in the previous chapter, *Chapter 4: Harnessing and redirecting the potential of the CoCT's Gated Development Policy*. The chapter then goes on to section *5.3: Monitoring and Evaluation* which is necessary in order to determine if the amended policy is fulfilling its objectives, and the objectives and desired outcomes of its guiding legislation and policies. Furthermore, it is important to monitor and evaluate the effectiveness of the policy's amendments for the purpose of the policy's reviews.

5.2 Implementation

5.2.1 Timeframe guidance

In terms of a timeframe and prioritization, the existing Gated Development Policy was meant to be reviewed a year after it was implemented in 2007. This review has still not happened (Geretto, 2017) and therefore I recommend the review and amendment process begins with *immediate effect*. I recommend within a year from now, the amendments should be finalized. The final review and amendment approval needs to be done through the CoCT Mayoral Committee Member via the Councillor for Transport and Urban Development. The education and training process should begin with immediate effect after the amendments are made and should continue with the input of new employees responsible for the assessment of gated development applications in the Development Management Department of the TDA. This process should take no longer than a year-and-a-half to complete. In the interim, education regarding

the importance of the policy should take place and as a *minimum*, attention should be drawn to enforcing the existing Gated Development Policy.

5.2.2 Responsibility guidance

In terms of responsibility, the existing Gated Development Policy was co-developed in 2007 by the CoCT's Department of Planning and Building Development Management: Strategy and Planning and the Department of Spatial Planning and Urban Design (Geretto, 2017). These departments now reside in the TDA, under new names (Geretto, 2017; TDA, 2017). The two departments within the Urban Development and Planning Department of the TDA, of relevance to the policy, are called the Development Management Department and Urban Integration Department (TDA, 2017). This is explained in an organigram (figure 17) in *Chapter 3,* section *3.5.1: CoCT's Gated Development Policy through the lens of Chapman's Bay Estate*. The Gated Development Policy is used when the development application is assessed, as shown in figure 24 in Chapter 3, section *3.4.4.2: Application of the existing Gated Development Policy*.

Therefore, the driver of the implementation of this policy's review and amendments has been assigned to the director of the Development Management Department. This should be done in coordination with the director of the Urban Integration Department and the director of the Urban Development Compliance Department (all within Urban Development and Planning Department of the TDA) (TDA, 2017). It is important that these departments are involved in the review process due to the nature of these three departments bringing together the core of the urban development functions of TDA (TDA, 2017).

Responsibility for amending the policy and its guiding legislation in the following table is mainly assigned to the Development Management Department within the TDA. This was decided due to its role in using the policy in assessing gated development applications. It was therefore deemed appropriate that this department is responsible for amendments. For some of the amendments, I have recommended coordination with other departments in order to assist in the harmonization of department roles. Furthermore, for some of the actions I recommend council-appointed professionals to provide professional guidance or research.

ACTION / AMENDMENT	DEPARTMENT / PERSON RESPONSIBLE / INVOLVED
1. **Initiating amendment process**	• Initiate through the **Development Management Department of the TDA**, via the **Director**, to the **Mayoral Committee** via Councillor for Transport and Urban Development.
PROPOSED: UPDATING, INTEGRATING AND HARMONIZING GUIDING LEGISLATION	
2. **Application of the South African Constitution** in the Gated Development Policy	• CoCT > TDA > **Development Management Department > Director**
3. **Application of NEMA** in the Gated Development Policy: add focus on the cumulative impact of gated developments to the natural and social environment	• CoCT > TDA > **Development Management Department > Director**
4. **Update LUPO to LUPA** throughout policy	• CoCT > TDA > **Development Management Department > Director**
5. **Add CTSDF** to the *Legislation and policies providing the mandate for and guiding this policy* section in the Gated Development Policy	• CoCT > TDA > **Development Management Department**
6. **Add local district SDP** to the *Legislation and policies providing the mandate for and guiding this policy* section in the Gated Development Policy	• CoCT > TDA > **Development Management Department** • And CoCT > TDA > Urban Development and Planning > **Development Integration**
7. **Add Cape Town Densification Policy** to the *Legislation and policies providing the mandate for and guiding this policy* section in the Gated Development Policy	• CoCT > TDA > **Development Management Department**

(and flag mention of gated developments to be added to densification policy for synchronization)	
8. **Add Western Cape Guideline for Need and Desirability** to the *Legislation and policies providing the mandate for and guiding this policy* section in the Gated Development Policy	• CoCT > TDA > **Development Management Department** • And Western Cape Government > **Department of Environmental Affairs and Development Planning > Director of Planning and Policy Coordination**
9. **Add Cape Town Urban Design Policy** to the *Legislation and policies providing the mandate for and guiding this policy* section in the Gated Development Policy (and flag mention of gated developments to be added to the urban design policy for synchronization)	• CoCT > TDA > **Development Management Department**
10. **Update wording** in the *Legislation and policies providing the mandate for and guiding this policy* section to include 'relevant to year and area of development proposal'	• CoCT > TDA > **Development Management Department**
PROPOSED POLICY AMENDMENTS	
11. **Amend wording** through policy to be less ambiguous and vague, and more **decisive**.	• CoCT > TDA > **Development Management Department**
12. **Integrating principles of liveable cities** into the *Assessment Criteria* section of the Gated Development Policy Amendments to: security measures, access control, scale and location, layout, visual impact and interfaces, services and infrastructure	• CoCT > TDA > **Development Management Department > Head of Building Development Management** • And council-appointed Urban Planner and Urban Designer for guidance on urban design

	principles and specifications such as densities, scale, location and services
13. **Adding a section on precedents** to the *Assessment Criteria* section in the Gated Development Policy	• CoCT > TDA > **Development Management Department (Land Use Management Section *and* Building Development Management Section)** • And council-appointed Urban Planner and Urban Designer
14. **Removal or statements / criteria** irrelevant after the amendments to the existing Gated Development Policy are made	• CoCT > TDA > **Development Management Department > Director**
15. **Determine *who* is responsible for setting conditions of approval** and add to section *Commencement and Implementation* of the Gated Development Policy	• CoCT > TDA > **Development Management Department > Director** • Assisted by council appointed urban designer who has an understanding of the local context
16. **Define what deviations from the Gated Development Policy are allowed** and add to section *Commencement and Implementation* of the Gated Development Policy	• CoCT > TDA > **Development Management Department > Director**
17. **Add clarity regarding how the policy is applied,** in a user-friendly approach	• CoCT > TDA > **Development Management Department**
18. **Addition of evaluation and monitoring section**	• CoCT > TDA > **Development Management Department (Land Use Management Section *and* Building Development Management Section)** • Assisted by professional council-appointed Urban, Environmental and Transport Planners

	and Urban Designers in determining evaluation tools (discussed in following section, *Monitoring and Evaluation for Review*)
PROPOSED ACTIONS	
19. **Information sharing/training sessions with ward councillors, built environment professionals and development proposal assessors and staff,** regarding the amended Gated Development Policy as well as the principles and theories supporting the amendments	• CoCT > TDA > **Development Management Department > Manager of Operations (South and East and North and Central)** • Assisted by professional council-appointed Urban, Environmental and Transport Planners and Urban Designers for theoretical and practical application
20. **Review of Policy:** determining criteria and time-frame	• CoCT > TDA > **Development Management Department > Director**

Table 1: Table providing guidance as to the actions required in the amendment of the Gated Development Policy and who is responsible for the amendment (Author, 2017)

5.3 Monitoring and Evaluation for Review

The monitoring and evaluation of the Gated Development Policy is essential, as it must remain relevant to the relevant Municipal Integrated Development Plan (IDP) and the goals, visions and objectives of the relevant Cape Town Metropolitan Spatial Development Framework (CTSDF). The CTSDF is reviewed every 5 years and therefore this would be a suitable length of time to assess the success and outcomes and reassess the visions, goals and objectives of the Gated Development Policy.

The evaluation of its success on each review can be measured against the form of new gated developments, in terms of their contribution to their surroundings and their reversibility. This will reveal whether ward councillors, city officials and developers are abiding to new policy amendments. Other signs of success include the number of submissions, which should assist in demonstrating whether demand is decreasing or not. The number of applications which do not comply with the policy will reveal whether the policy provides enough clarity or not. Additionally, success of the amendments can be measured by the regularity of requests for further information by city officials and applicants in order to determine whether the information supplied by the policy is sufficient or not. Success can also be measured by feedback from the Development Management Department manager, ward councillors and district managers.

The objective of the policy's interventions (*Chapter 4: Harnessing and Redirecting the potential of the CoCT's Gated Development Policy*) included promoting gated developments to contribute towards the better performance and sustainability of Cape Town, as well as reducing the demand for gated developments in the future by contributing to the qualities that citizens seek in neighbourhoods such as safety and a sense of community. This is difficult to evaluate and monitor due to it being a gradual process. This could be assessed through qualitative research via conversations in public participation processes for developments in the area, as well as the use of performance indicators, as discussed in chapter 2: section *2.3.1.2: Liveable cities*.

5.4 Conclusion of chapter 5

This chapter has aimed to provide guidance as to how the proposed interventions can be implemented. It has recommended that this review process begin with immediate effect due to the recognition that Cape Town is currently on a path of entrenching inequity, fragmentation, weak environmental sustainability and a lack of social cohesion.

The majority of the implementation has been assigned to the responsibility of the Development Management Department of the TDA, due to its role in establishing the policy initially (then called the Department of Planning and Building Development Management). Additionally, their role in leading the responsibility is considered relevant due to its role in using the policy for assessing gated development applications.

Turning to a discussion regarding monitoring and evaluation, has provided guidance as to what needs to be considered in the periodic review of the policy. This highlighted the importance of the policy remaining relevant in terms of visions, goals and objectives.

I will now turn to a conclusion of the dissertation process and reflect on what has been learnt and achieved through research and furthermore, what requires further research in the future.

CHAPTER 6: CONCLUSION

6.1 Key themes

This dissertation explores the gated development phenomenon through the lens of Chapman's Bay Estate in Noordhoek, Cape Town. This development drew particular attention to the niche market of eco-estates, which are becoming increasingly popular due to their apparent concern for environmental sustainability. Through a foundation of academic theory and a contextual analysis of Chapman's Bay Estate, this dissertation has aimed to answer the overriding research question: *How can planners better engage in the issues and contradictions of gated communities through enhancing the existing Gated Development Policy in order to address the current disjuncture between planning ideals and practise, based on the case of Chapman's Bay Estate in Noordhoek, Cape Town?* Furthermore it provides valuable information for future policy development and for identifying areas to be flagged for further research.

The dissertation begins by introducing the key themes that this research explores, as well as mention of the case study and the various tensions present in South Africa, such as crime, violence, social and ecological fragmentation and exclusion. The important themes addressed throughout this dissertation are spatial justice, urban sustainability, liveable cities and the greenwashing phenomenon. Furthermore, it addresses the integrity of planners which is often challenged when considering gated developments, due to the inherent tensions between the ideals of planning and exclusive nature of gated developments. It highlights the pattern of private interests often disregarding the common good, which Hardin (2009) explains as a tragic system whereby humans seek to increase their own gains without limit in a world that has limits.

It then turned to develop research questions, methods and techniques which paved the way forward for the research process.

6.2 Key literature findings

The overall aim of this research has been to ensure gated developments contribute to urban sustainability and performance. This is a somewhat paradoxical task, however my aim lies in disrupting their contribution to urban performance and sustainability. In order to ensure gated development contribute to positive development, I explored theory in *Chapter 2: The Literature Review*, which informs an understanding of the academic debate surrounding gated developments, as well as the literature regarding the key themes.

The literature review reveals the complex, interrelated nature between aspects of sustainability, spatial justice and urban form which reinforces the fact that we cannot fragment these concerns in practise. Therefore, the harmonization and integration of policies is established as a key concern in this dissertation. Furthermore, this theoretical understanding provides a lens through which to assess the urban sustainability of gated developments, which was largely informed by Landman's (2000) six indicators of urban sustainability.

The exploration of spatial justice in the literature review, *section 2.3.3: Exploring Spatial Justice,* emphasises the separation between a concern for ecological justice and a concern for social justice. Furthermore, it highlights ironies

planning visions vs practise, which are later revealed in the contextual analysis, regarding the perpetuation of spatial injustices. The leading irony is in the realization that spatial justice is devastatingly affected by dominant patterns of sprawl, fragmentation and separation (Dewar & Winkler, forthcoming), yet Chapman's Bay Estate perpetuates this urban form.

By reviewing literature grounded in the Latin and Northern American experience of gated developments, it enabled me to draw lessons imperative in determining the challenges Cape Town faces in terms of a possible increasingly gated future. This includes a breakdown by Coy and Pohler (2002) which explains the social and economic motives of gated developments, as well as the consequences for society and city structure.

In order to search for precedents regarding the response to gated developments, I explored literature which considered the international responses to gated developments. This was an attempt to seek precedents of good practise elsewhere in the world. However, this proved to be a gap in the existing literature. Therefore, due to a lack of precedents, I relied on the initial literature exploring the gating phenomenon and its related themes, as well as the contextual analysis of Chapman's Bay Estate to inform my responses.

6.3 Key analysis findings

Turning to *Chapter 3: The Contextual Analysis of Chapman's Bay Estate*, this provided an opportunity to view gated developments through an actual development. It also provided the chance to gain insight into civil society's perspectives towards gated developments, as well as the shortfalls in the planning and development management system. A key finding was the lack of familiarity with the CoCT's Gated Development Policy amongst professionals and city officials. Furthermore, studying the application process of this development provided insight into the development application process. Locating Chapman's Bay Estate within its local context of ward 69 in Cape Town, enabled an exploration into the tensions of land and its associated inequalities in Cape Town as well as the rest of South Africa. I then turned to a spatial and legislative analysis of the site with regard to the CoCT's Gated Development Policy, the CTSDF (2012 and 2017 Draft Review), and the 2012 Southern District SDP & EMF. This analysis exposed gaps between plans, visions and practise, as well as the issue of vague and indecisive language in the Gated Development Policy. Furthermore, it provided an opportunity to determine a possible way forward, in terms of ensuring the cumulative effect of gated developments on urban performance and sustainability is more positive in future developments.

6.4 Key interventions

This led to the intervention chapter, *Chapter 4: Harnessing and Redirecting the CoCT's Gated Development Policy*, which seeks to improve the application of the policy and its harmonization with other relevant policies, as well as amend shortfalls in the policy's assessment criteria. Furthermore, this chapter points towards reducing the demand for gating by focusing on the impact gated developments have on surrounding neighbourhoods and ensuring they provide natural surveillance and the qualities of a liveable urban environment.

6.4.1 A renewed vision for gated developments

These suggested amendments were done through a vision process, which established a description of a more suitable form of gating, as well as providing a precedent for a suitable layout. A key intervention was to reduce the ambiguity and vagueness of the existing Gated Development Policy as well as reducing the size and location of gated developments that should be considered acceptable in development applications.

The final chapter of this dissertation, *Chapter 5: Implementation and Evaluation of the Amended Gated Development Policy,* articulates the way forward in terms of implementing the interventions discussed in the previous chapter. This is considered essential effecting action in terms of achieving the objectives of the policy. The amendments to the policy and its application have largely been assigned to the department responsible for the Gated Development Policy, the Development Management Department within the TDA. Furthermore, the chapter also explores the evaluation and monitoring of the amended Gated Development Policy, to ensure its effectiveness.

6.5 Addressing the limitations: flagging areas for future research

In order to address the limitations of this research, including time and scope, I have identified areas of research outside of the scope of this dissertation that require future research. These areas of research include an exploration into the systemic issues which drive the demand for gated developments, including: social cohesion, inequality, public safety, reclaiming the commons and urban governance. These issues cannot be solved in isolation from one another, but rather require an integrated approach. Additionally, this dissertation has only explored the amendments to the policy relevant to private, purpose built residential estates, but future research is required for other forms of gating as well. Furthermore, this dissertation has not explored the input of mixed-affordability in gated developments, but this could form a suitable area of research due to its relevance in the South African context.

6.6 A personal reflection

My normative position, as set out in chapter 1, section *1.2: Normative Position* has been strengthened throughout this dissertation and therefore my understanding that the current system of planning requires reimagination, has been reinforced. Furthermore, my opposition against exploiting nature for profit has been strengthened through the study of eco-estates which use natural assets to greenwash consumers.

Initially, when beginning this research process, I did not expect gated developments to be such a complex topic. I have learnt a great deal about the far-reaching consequences of development on both the urban and social fabric of cities. This encourages me to act boldly in my role as a built-environment professional, as well as an active citizen.

I hope that in the future, the demand for gating will be reduced, through addressing the policy as well as the areas flagged for further research. The interventions addressed in this dissertation seek to manage this form of development in the interim – will the broader system issues are addressed.

I hope that through this research I have successfully communicated the idea of Calthorpe (2017), who said that the way we shape cities, is the way we shape humanity. Furthermore, I hope that this dissertation will urge others to act ethically and boldly in development decisions at this time of great uncertainty.

Alexa von Geusau

I am driven by the words of Coy (2006) which state, that a democratic city is “a city without walls”, therefore, by reimagining the concept of a gated development, I hope to have positively contributed to the academic debate regarding the implications of gated developments on the urban performance and sustainability.

REFERENCES

1. Ashton, G. 2017. Email communication with Glenn Ashton on 24 September 2017. (Email and consent in possession of Author).
2. Atkinson, R. & Blandy, S. Eds. 2006. Gated Communities: International Perspectives, Oxon: Routledge.
3. Baigrie, B. & Ernston, H. 2017. Noordhoek eco-estates protect the rich from the reality of Masiphumelele. *Ground Up*. 23 January. Available: https://www.groundup.org.za/article/noordhoek-eco-estates-protect-rich-reality-masiphumelele/ [2017, 31 October]
4. Ballard, R. & Jones, G. 2011. Natural neighbors: indigneous landscapes and 'eco-estates' in Durban, South Africa. *Annals of the Association of Amerian Geographers.* 101(1):131-148.
5. Bannister, J. & Fyfe, N. 2001. Introduction: Fear and the City. *Urban Studies.* 38(5-6):807-813.
6. Blakely, E.J. & Snyder, M.G. 1997. Divided We Fall: Gated and Walled Communities in the United States. In *Architecture of Fear.* N. Ellin, Ed. New York: Princeton Architectural Press. 85-99.
7. Boskloof Eco Estate. 2017. *Boskloof Eco Estate.* Available: http://www.boskloof.co.za/ [29 June 2017].
8. Brown, L. 2017. Personal communication with Lynn Brown on 29 August 2017. Noordhoek, Cape Town. (Notes and consent in possession of Author)
9. Calthorpe, P. 2017. *7 principles for building better cities.* [Video file, April 2017]. Available: https://www.ted.com/talks/peter_calthorpe_7_principles_for_building_better_cities [2017, September, 4]
10. Chapman's Bay Estate. 2017. *Chapman's Bay Estate [CBE].* Available: http://www.chapmansbay.co.za/ [6 July 2017].
11. City of Cape Town. 2012a. *Cape Town Densification Policy.* Cape Town: City of Cape Town.
12. City of Cape Town. 2012b. *Cape Town Spatial Development Framework: Statutory Report.* Cape Town: City of Cape Town.
13. City of Cape Town. 2012c. Southern District Plan: Spatial Development Plan & Environmental Management Framework. Cape Town: City of Cape Town.
14. City of Cape Town Environmental Resource Management Department. 2015. *The Cape Town Bioregional Plan.* Cape Town: Department of Environmental Resource Management.
15. City of Cape Town's Transport and Urban Development Authority. 2017. *Draft Cape Town Municipal Spatial Development Framework.* Cape Town: City of Cape Town's Transport and Urban Development Authority.
16. City of Cape Town. 2017. *Planning portal: Applications and submissions.* Available http://www.capetown.gov.za/Work%20and%20business/Planning-portal/Applications-and-submissions/Land-use-management-application-documents [11 October 2017].
17. City of Cape Town. 2017. *City connect: Planning building and development.*
18. City of Cape Town Department of Planning & Building Development Management. 2007. *Gated Development Policy,* Cape Town: City of Cape Town Department of Planning and Building Development Management.
19. City of Cape Town Department of Planning & Building Developmnent Management. 2013. *Urban Design Policy.* Cape Town: City of Cape Town: Department of Planning & Building Developmnent Management.

20. City of Cape Town. 2017. *Five-year Integrated Development Plan: 2017-2022: Executive Summary.* Cape Town: City of Cape Town.

21. Consultant A. 2017. Verbal communication with Noordhoek resident and experienced planner on 15 September. Newlands, Cape Town. (notes and consent in position of author)

22. Coy, M. 2006. Gated communities and urban fragmentation in Latin America: the Brazilian experience. *GeoJournal.* 66(1):121-132.

23. Coy, M. & Pohler, M. 2002. Gated communities in Latin American megacities: case studies in Brazil and Argentina. *Environment and Planning B: Planning and design.* 29(3):355-370.

24. Culwick, C. 2015. Why gated communities threaten democratic cities. *Future Johannesburg*. 7 April.

25. Danielson, K. & Lang, R. 1997. Gated communities in America: Walling out the world? *Housing Policy Debate.* 8(4):867-899.

26. Dewar, D. forthcoming. Rethinking the Meaning of Liveabe Cities: The Case of Cape Town South Africa. In *Livable Cities from a Global Perspective.* F. Wagner & R. Caves Eds. Farnham, UK: Ashgate Publishing.

27. Dewar, D. & Winkler, T. forthcoming. Spatial Justice in Southern Africa. In *Urban Design Companion: A Sequal.* T. Banerjee & A. Loukaiton-Sideris, Eds. London, New York: Routledge.

28. Dixon, J. & Ramutsindela, M. 2006. Urban Resettlement and environmental justice in Cape Town. *Cities.* 23(2):129-139.

29. Doug Jeffery Environmental Consultants (Pty) Ltd. 2012. *Chapman's Bay Estate: Construction Environmental Managment Plan (EMP).* Noordhoek, Cape Town: Doug Jeffery Environmental Consultants (Pty) Ltd.

30. Dubow, S. 1989. *Racial Segregation and the Origins of Apartheid in South Africa. 1919–36*. Springer.

31. Escobar, A. 2015. Degrowth, post development, and transitions: a preliminary conversation. *Sustainability Science.* 10(3):451-462.

32. Estate Living. n.d. *Chapman's Bay Estate.* Available: http://www.estate-living.co.za/news/chapmans-bay-estate/ [2017, September 10].

33. Estate planning. 2009. Cape Times. 8 May. Available: Pressreader [2017 August, 25].

34. Facebook user. 2016. *Chapmans Bay Estate: A bird's eye view of the site taken last week.* [Facebook update comment, 22 August]. Available: https://www.facebook.com/Chapmansbayestate/ [2017 September, 20].

35. Fainstein, S. S. 1994. *The city builders: Property, politics and planning in London and New York.* Blackwell, United Kingdom: Oxford.

36. Fainstein, S. S. 2010. *The just city.* Cornell University Press.

37. Far South Peninsula Community Forum. 2016. *Round and About: Glencairn to Simons Town and Beyond: Far South – Sign the "Gatvol" Petition Now!* Available: https://roundandaboutsouth.wordpress.com/2016/04/01/far-south-sign-the-gatvol-petition-now/ [2017 September, 20].

38. Feinberg, H.M. 1993. The 1913 Natives Land Act in South Africa: Politics, race, and segregation in the early 20th century. *The International Journal of African Historical Studies*, *26*(1):65-109.

39. Findley, L. & Ogbu, L. 2011. *South Africa: From Township to Town* [Blog, November]. Available: https://placesjournal.org/article/south-africa-from-township-to-town/ (2017 October, 25).
40. Fisher, S & Brandt, K. 2017. Ocean View protests enter third day. *EWN.* 21 September. Available: http://ewn.co.za/2017/09/22/ocean-view-protests-enter-third-day [2017 September, 25).
41. Fouche, D. 2011. Dassenberg Disgust. *False Bay People's Post*, 19 April: 1.
42. Geretto, M. 2017. Email communication with Marco Geretto on 23 October. (Emails and consent in possession of author).
43. Girardet, H. 2013. Sustainability is unhelpful: we need to think about regeneration. *The Guardian*, 10 June. Available: https://www.theguardian.com/sustainable-business/blog/sustainability-unhelpful-think-regeneration [2017, October 3].
44. Grant, J. 2005. Planning responses to gated communities in Canada. *Housing Studies.* 20(2):273-285.
45. Grimmond, S. 2007. Urbanization and global environmental change: local effects of urban warming. *The Geographical Journal.* 173(1):83-88.
46. Hardin, G. 2009. The Tragedy of the Commons. *The Journal of Natural Resources Policy Research.* 1(3):243-253.
47. Harrison, P., Todes, A. & Watson, V. 2008. *Planning and transformation: Learning from the postapartheid experience*. Routledge.
48. Hartdegen, P. 2010. Dassenberg community not gated – yet. *Property24*. 17 November.
49. Hepworth , R. 2012. Dassenburg Development - What is going on here? *Cape Point Chronicle*, 19 April.
50. Herring, A. 2017. The Very Big Issue of Urban Sustainability. *Northeastern Magazine*. Available: https://www.northeastern.edu/magazine/the-very-big-issue-of-urban-sustainability/ [2017, August 3].
51. Ho, K. and Douglass, M. 2008. Globalisation and liveable cities: Experiences in place-making in Pacific Asia. *International Development Planning Review*. *30*(3):199
52. Homes for Kids in South Africa. 2017. HOKISA*: History of Masiphumelele.* Available: http://www.hokisa.co.za/about/history-of-masiphumelele/ [2017, June 29].
53. Hsiao, A. 2012. Why Sense of Place is Worth Caring About. *Planetization.* 17 April. Available: https://www.planetizen.com/node/56165 [2017, October 17].
54. Jacobs, J. 1961. *The Death and Life of Great American Cities*. New York: Random House.
55. Jacobs, K. & Jangle, R. 2008. *Fynbos Environmental Management Plan: Western Cape.* Cape Town: Unpublished: The Nature Conservation Corporation.
56. Jenks, M. & Burgess, R. Eds. 2000. *Compact Cities: Sustainable Urban Forms for Developing Countries.* Routledge.
57. Johannes, L. 2012. Gated communities in South Africa: The Case of Featherbrooke. University of the Witwatersrand.
58. Kaika, M., 2017. 'Don't call me resilient again!': the New Urban Agenda as immunology … or … what happens when communities refuse to be vaccinated with 'smart cities' and indicators. *Environment and Urbanization.* 29(1):89-102.

59. Katzschner, T. 2016. Planning Perspectives: Values, Ethics and Responsibilities. In *Hydraulic Fracturing in the Karoo: Critical Legal and Environmental Perspectives.* J. Esterhuyse & S. Esterhuyse, Eds. Cape Town: Juta. Chapter 18.

60. King, N. 2009. *Ensuring Development Provides Net Benefit to Society - Changing Impact Assessment to Contribution Assessment.* Accra

61. Kretzmann, S. 2016. Ward 69: Fragmented by apartheid era planning. *Ground Up*. 1 February. Available: https://www.groundup.org.za/article/ward-69-fragmented-apartheid-era-planning/ [2017 September 2].

62. Klein, N. 2015. *This changes everything: Capitalism vs. the climate*. Simon and Schuster.

63. Landman, K. 2000. Gated communities and urban sustainability: taking a closer look at the future.

64. Landman, K. 2004. Gated communities in South Africa: The Challenge for Spatial Planning and Land Use Management. *Town Planning Review.* 75(2):151-172.

65. Landman, K. 2007. The storm that rocks the boat: the systemic impact of gated communities on urban sustainability. *Cybergeo: European Journal of Geography.*

66. Landman, K. 2012. Gated communities in South Africa: Tensions between the planning ideal and practice. *Stads-en-Streeksbeplanning = Town and Regional Planning, 2012.* (61):1-9.

67. Landman, K. & Badenhorst, W. 2012. *The impact of gated communities on spatial transformation in the Great Johannesburg area.* Johannersburg: University of the Witwatersrand.

68. Landman, K. & Schonteich, M. 2002. Urban Fortresses: Gated Communities as a reaction to crime. *African Security Review.* 11(4):71-85.

69. Leill-Cock, S. 2017. Email correspondence with Simon Leill-Cock on 12 September 2017. (Emails in possession of author).

70. Lemanski, C. 2007. Global Cities in the South: Deepening social and spatial polarisation in Cape Town. *Cities.* 24(6):448-461.

71. Levitas, L. 2010. Ultimate Lifestyle or Inconveniant Eco Embarrassment? *SA Golf Estates*, 31 August.

72. Lew Geffen Sotheby's International Realty. 2017. *Demand driving Noordhoek eco-estate boom,* 20 January. Available: http://www.sothebysrealty.co.za/news/demand-driving-noordhoek-eco-estate-boom/ [2017 August, 14].

73. Living Hope. n.d. *Ocean View.* Available: http://www.livinghope.co.za/about/communities/ocean-view/ [2017 October, 24].

74. Low, S. 2001. The Edge and the Centre: Gated Communities and the Discourse of Urban Fear. *American Anthropologist.* 103(1):45-58.

75. Mabin, A. 2005. Suburbanisation, segregation, and government of territorial transformations. *Transformation: Critical Perspectives on Southern Africa*. *57*(1):41-63.

76. Marshall, J. D. 2008. Energy-efficiant urban form. *Environmental Science and Technology. 42(9):*3133-3137.

77. Masicorp. 2014. About Masiphumelele. Available: http://www.masicorp.org/aboutmasiphumelele.html [2017 October, 10]

78. Maxwell, D. K. 2004. Gated Communities: Selling the Good Life. *Plan Canada.* 44(4):20-22.

79. Mcdonald, R. I., Kareiva, P. & Forman, R. T. T. 2008. The implications of current and future urbanization, for global protected areas and biodiversity conservation. *Biological Conservation.* 141(6):1695-1703.

80. Michael, C. & Blason, J. 2014. 'For your protection': gated cities around the world – in pictures. *The Guardian*, 5 May. Available: https://www.theguardian.com/cities/gallery/2014/may/05/for-your-protection-gated-cities-around-the-world-in-pictures [2017 October, 20]

81. Miller, J. 2016. *Unequal Scenes.*

82. National Academies of Sciences, Engineering, and Medicine. 2016. *Pathways to Urban Sustainability: Challenges and Opportunities for the United States*. Washington, DC: The National Academies Press. https://doi.org/10.17226/23551.

83. Nixon, R. 2011. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press.

84. Noordhoek Tourism. 2017. *Welcome to Noordhoek.* Available: http://www.noordhoektourism.co.za/index.php [2017 July 10].

85. Ntongana, T. 2017. Blocked toilets make life unbearable for Masiphumele Residents. *GroundUp*, 12 May. Available: https://www.groundup.org.za/article/blocked-toilets-make-life-unbearable-masiphumelele-wetlands-residents/ [2017 September, 17]

86. Plumwood, V. 2010. Nature in the active voice. *Climate change and philosophy: transformational possibilities*.32-47.

87. Project for Public Spaces. 2009. *What is Placemaking?* Available: https://www.pps.org/reference/what_is_placemaking/ [2017 October, 18].

88. Purchase, F. 2017. Personal communication with Felicity Purchase on 6 September 2017. Fish Hoek Cape Town. (Notes and consent in possession of Author).

89. Radeloff, V. C., Hanmer, R. B. & Stewart, S. I. 2005. Rural and Suburban Sprawl in the U.S. Midwest from 1940 to 2000 and its Relation to Forest Fragmentation. *Conservation Biology.* 19(3):793-805.

90. Republic of South Africa: Department of Justice. 1996. *The Constitution of the Republic of South Africa,* Pretoria: Department of Justice.

91. Robb, A. 2017. Ocean View 20 September 2017 [Video File]. Available: https://www.youtube.com/watch?v=jUMPyKymras [2017 September, 25].

92. Ricketts, T. & Imhoff, M. 2003. Biodiversity, Urban Areas, and Agriculture. *Urban Sprawl. 8(2).*

93. Roberts, J. 2013. Buying into a gated community. *Property 24*, 4 September. Available: https://www.property24.com/articles/buying-into-a-gated-community/18372 [2017 August, 20].

94. Rock, M. T., Kusterer, K. & Weaver, J. H. 1997. *Achieving broad-based sustainable development.* Connecticut: Kumarian Press.

95. Rubin, M. 2008. *Land Management and Democratic Governance in the City of Johannesburg: Synthesis Report.* Johannesburg: Centre for Urban and Built Environment Studies (CUBES).

96. Sabatini, F. & Salcedo, R. 2007. Gated communities and the poor in Santiago, Chile: Functional and symbolic integration in a context of aggressive capitalist colonization of lower-class areas. *Housing Policy Debate.* 18(3):577-606.

97. Southern African Legal Information Institute (SAFLII) 2011. *Lagoon Bay Lifestyle Estate (Pty) Ltd v Minister of Local Government, Environmental Affairs and Development Planning of the Western Cape and Others.* Available: http://www.saflii.org/za/cases/ZAWCHC/2011/327.html [2017, August 15].

98. South African Naitonal Parks, 2017. Table Mountain National Park Park History. Available: https://www.sanparks.org/parks/table_mountain/about/history.php [2017 June, 29].

99. Scott, A., Agnew, J., Soja, E. W. & Storper, M. 2001. Global City-Regions: An Overview. In *Global City Regions.* Oxford: Oxford University Press: 11-30.

100. Sherriff-Shuping, R. 2015. *Buying into residential eco-estates: perception and reality of "green living" in eco-estates in Gauteng, South Africa.* Dissertation. University of South Africa.

101. Siddique, H. 2017. South Asia floods kill 1,200 and shut 1.8 million children out of school. *The Guardian*, 31 August. Available: https://www.theguardian.com/world/2017/aug/30/mumbai-paralysed-by-floods-as-india-and-region-hit-by-worst-monsoon-rains-in-years [2017 October, 25]

102. SIEMENS, 2010. *Sustainable Cities: Sustainable Development for Urban Infrastructures*

103. Sneed, A. 2017. Was the Extreme 2017 Hurricane Season Driven by Climate Change? *Scientific American*, 26 October. Available: https://www.scientificamerican.com/article/was-the-extreme-2017-hurricane-season-driven-by-climate-change/ [2017 October, 25)

104. South African History Online. 2016. A Land Dispossession History 1600s-1990s. *South African History Online*, 9 March. Available: http://www.sahistory.org.za/article/land-dispossession-history-1600s-1990s [2017 October, 15]

105. Springerbaai. 2014. *Springerbaai your African coastal eco getaway.* Available: http://www.springerbaai.co.za/ [2017 June 29].

106. Transport and Urban Development Authority. 2017. *Urban Development Planning.* Available: https://www.tda.gov.za/en/urban-development-planning/ [2017 October 23].

107. Tonkin, A. 2008. Sustainable medium-density housing: A resource book. Cape Town: Development Action Group (DAG).

108. Tsai, Y.2005. Quantifying Urban Form: Compactness versus 'Sprawl'. *Urban Studies ,* 42(1):141-161.

109. van der Merwe, M. 2017. Water, water nowhere: Update on the Western Cape's drought interventions. *Daily Maverick*, 25 October. Available: https://www.dailymaverick.co.za/article/2017-10-25-water-water-nowhere-update-on-the-western-capes-drought-interventions/#.WfmQnWiCyxk [2017 October, 27].

110. University of the Western Cape. 2013. Cape Flats Nature Reserve. Available: https://www.uwc.ac.za/Faculties/NS/Cape_Nature_Reserve/Pages/CAPE-FLATS-NATURE-RESERVE.aspx [2017 November, 2]

111. von Geusau, A. 2017. Theory Paper: Natural Resource and Landuse Management. University of Cape Town.

112. Western Cape Department of Environmental Affairs & Development Planning, 2013a. *EIA Guideline and Information Document Series: Guideline on Need and Desirability.* Cape Town: Western Cape Department of Environmental Affairs & Development Planning.

113. Western Cape Department of Environmental Affairs & Development Planning. 2013b. *Western Cape Spatial Development Framework: Draft for Public comment.* Cape Town: Western Cape Department of Environmental Affairs & Development Planning.

114. Western Cape Department of Environmental Affairs & Develoment Planning. 2017. *LUPA Portal.* Available: https://www.westerncape.gov.za/eadp/lupa-portal [2017 August, 24].

115. Webster, C., Glasze, G. & Frantz, K. 2002. The global spead of gated communities. *Environment and Planning B: Planning and Desgin.* 29:315-320.

116. Welsh, B.C. and Farrington, D.P. 2004. Surveillance for crime prevention in public space: Results and policy choices in Britain and America. *Criminology & Public Policy*. *3*(3):497-526.

117. Wheeler, S. M. 2013. *Planning for Sustainability: Creating livable, equitable & ecological communities.* New York: Routledge.

118. Yeld, J., 2012. Board Slams Dassenburg Plan. *Cape Argus*, 9 Jan.

119. Zainal, Z. 2007. Case study as a research method. *Jurnal Kemanusiaan.* 5(1).

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

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/usr/ebe/research/ethics.pdf

APPLICANT'S DETAILS		
Name of principal researcher, student or external applicant		Alexa von Geusau
Department		Architecture, Planning and Geomatics
Preferred email address of applicant		alexa.vongeusau@gmail.com
If a Student	Your Degree e.g., MSc, PhD, etc.	MSc. City and Regional Planning
	Name of Supervisor (if supervised)	Tania Katzschner
If this is a researchcontract, indicate the source of funding/sponsorship		Self-funded
Project Title		Exploring gated communities – towards more social-ecological wellbeing. A case study of Chapmans Bay Estate, Noordhoek, Cape Town.

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.

SIGNED BY	Full name	Signature	Date
Principal Researcher/ Student/External applicant	Alexa von Geusau		**23 Jun 2017**

APPLICATION APPROVED BY	Full name	Signature	Date
Supervisor (where applicable)	Tania Katzschner		23.06.2017 Click here to enter a date.
HOD (or delegated nominee) Final authority for all applicants who have answered NO to all questions in Section1, and for all Undergraduateresearch (Including Honours)	Click here to enter text.		Click here to enter a date.
Chair : Faculty EIR Committee For applicants other than undergraduate students who have	G. SITHOLE Click here to enter text.		31 JULY 2017 Click here to enter a date.

answered YES to any of the above questions			