

ANNEXURE A
DRAFT TERMS OF REFERENCE

Draft Terms of Reference (TOR)

Re-evaluate Overhills UISP and identify suitable land in Kleinmond to address housing backlog

1. BACKGROUND

During 2010 and 2011, 410 subsidised houses were constructed for qualifying beneficiaries from the Kleinmond area. The beneficiaries were sourced from the waiting list for Kleinmond and included both backyard dwellers and families from the Overhills informal settlement. This development only accommodated a portion of the families in need of housing opportunities and Kleinmond therefore still remains with a housing backlog as there are still a great number of backyard dwellers as well as families remaining in the informal settlement.

During 2012 an application was submitted to DoHS to undertake planning of another housing project in Kleinmond, which was for the upgrading of the Overhills informal settlement, specifically targeting those families remaining in the Informal Settlement. Approval was issued for planning of 378 sites, in terms of the number of people in the informal settlement at that time. An Environmental Due Diligence Investigation and a Geotechnical Investigation was undertaken as part of the planning process and will be further discussed under Section 2. The recommendations from these studies were that due to the environmental- and geotechnical constraints on the site and the high costs of the proposed mitigating measures, the project should be abandoned (These reports are available on request from the Municipality).

As a result of the need to upgrade the conditions in the informal settlement as well as to address the housing need for the backyard dwellers the Department of Human Settlements (DHS) was approached by the Overstrand Municipality to provide assistance with regard to identifying suitable land for housing development in Kleinmond.

2. PROBLEM STATEMENT

2.1) Existing Overhills Informal Settlement

According to the IDP (Fourth Review of 2012/2017 Cycle dated 25 May 2016) there are approximately 379 informal dwellings in the Overhills informal settlement. The area covered by the informal settlement is approximately 2.2 ha and it is densely populated.

The afore-mentioned Environmental Due Diligence Investigation and a Geotechnical Investigation was undertaken as part of the planning and both these investigations identified the site as being sensitive in terms of environmental considerations as well as stormwater and groundwater drainage from the site. The development of the site will therefore require certain engineering solutions, including terracing, groundwater drainage systems and certain construction / foundation solutions.

Taking all these constraints into consideration as well as the size of the informal settlement (+/-2.2ha) it was also evident that not all the families currently residing there could be accommodated once the area was formalised. Hence, two alternative areas, namely "Site 1 and 2", measuring approximately 2.4 ha and located adjacent to the existing informal settlement were investigated (See attached locality plan). But both the afore-mentioned studies indicated that the identified portions had the same constraints as the existing informal settlement. In terms of the outcome of the investigations, the specialists recommended that the project be abandoned due to the environmental and geotechnical constraints of the sites and the mitigations required and that an alternative area be identified to accommodate the informal area.

2.2) Proteadorp/Poppedorp - backyards - size and problems

The current waiting list for Kleinmond contains a total of approximately 428 families / households. The demand of these families in terms of the type of housing required is unclear. There is no real data available showing in which housing programme, these families can be categorised under, such as BNG, FLISP or GAP.

A Socio-Economic Study for the broader Overstrand area is being undertaken by DoHS in conjunction with the Municipality, appointing the PRT, Aurecon. The information gathered during this study should be sourced to determine the need/demand of these backyard dwellers and better understand their challenges, in respect to sanitation, health etc. This will enable the Municipality to not merely address the housing need in the greater Kleinmond, but also, where relevant focus on improving the living conditions of those residing in backyards.

3. PURPOSE OF THE PROJECT

To holistically address the housing demand for Kleinmond by:

- Identifying suitably located land to accommodate both overflow residents from this informal area as well as backyard dwellers and persons registered on the waiting list, and
- Re-assessing the existing Overhills informal area to determine the development potential of that area.

4. APPROACH

4.1) Assessment of real backlogs

Information to determine the real backlog must be obtained from the socio-economic study that is currently been undertaken. This should give a better understanding of the need of not only Overhills and Proteadorp in terms of rental, UISP, BNG, FLISP and GAP and also provide solutions to address the sustainable housing need in the broader area.

Assessment of need in terms of upgrading/suitably located land - current and future

- An evaluation of the existing Overhills informal area to determine the development potential of that portion to what extent the existing informal dwellers can be accommodated in the existing area and what the maximum allowable density would be if it was upgraded.
- The informal settlement forms part of Overstrand Growth Management Strategy, where proposals are made with regard to the upgrading and development of this settlement. These proposals need to be re-evaluated, as the proposals at the time did not consider upgrading possibilities, but rather focussed on formal development.
- All the previously compiled studies, relevant planning documentation as well as any other additional information (e.g. the Environmental Due Diligence Report (April 2014) and Geotechnical Assessment (February 2014), will have to be re-evaluated to determine the way forward. A list of documents is included in this TOR and is available from the Municipality. In terms of this review, it is proposed that the services of an expert in the field of Upgrading of Informal Settlements be sourced as this will purely be an evaluation of the existing situation and proposals on upgrading of the settlement.
- In terms of identifying suitably located land, all land possible for development should be evaluated under specific categories such as conservation value, environmental sensitivity, goal of densification strategy, cost of bulk services, etc.
- The Spatial Development Framework, Growth Management Strategy, Environmental Management Frameworks as well as any other relevant planning documentation and policies will have to be evaluated and considered. This also includes aligning to the Provincial Informal Settlement Support Plan (ISSP) which is currently been developed. The Environmental Management Framework should speak to not only the physical development footprint of structures, but also take into account the long term extended footprint caused by natural human behaviour. Sensitive biodiversity areas must be considered for the long term impact on human migration.
- Should a portion of the existing informal area be suitable for development, proposals will also have to be made to accommodate the rest of the families as the existing area will not be able to accommodate all of them.

4.2) Environmental assessment of proposed land

- An Environmental expert will have to re-evaluate the environmental implications of all the previous proposals made thus far.
- New alternatives for land to develop will also have to be identified and environmental assessments will also have to be done on the new identified alternatives.
- The Environmental expert will have to assess what other studies will be required in terms of the Environmental and other Legislation.

4.3) Assessment of Bulk services -civil and electrical

- The existing services available in the informal settlement should be assessed and determined what bulk services is required should the informal settlement be upgraded. The informal settlement was electrified during the 2015/2016 financial year by the Municipality. This must be taken into account once proposals for upgrading are made and designs should be done incorporating the existing infrastructure, as far as possible.
- All proposals and considerations for the sites identified must take into account the existing services, what is available and what will have to be provided in terms of bulk infrastructure and electricity.

4.4) Assessment of Stakeholder Engagement

- Due to the nature and sensitive location of the identified sites community engagement will form a critical component in the land identification process. Various levels of engagement may be required during this feasibility study, which should be communicated to all interested and /or affected groups to allow an opportunity to stakeholders to provide inputs.

5. DELIVERABLES

The assessment will comprise of two components as reflected below. These findings must be consolidated into one report with recommendations to holistically address the housing backlog in Kleinmond:

Deliverable 1: Evaluate all identified sites as per the attached locality plans to identify suitably located land to accommodate backyard dwellers and overflow from informal area:

Activity	Work to be Performed
Environmental Management Services	Prepare a high-level Screening Report that describes the environmental and heritage resources that may be affected by proposed development comprising of the following components: <ul style="list-style-type: none"> • The environmental constraints & limitations that may have relevance to the project. This must include a map clearly depicting "developable" vs "non-developable areas from an environmental scan perspective. • Identify legislative requirements for development rights and clarify the various authorisations that may be required before development commences, as well as the processes to be followed to obtain the
Responsible Person:	

Environmental Planner	<p>necessary authorisation.</p> <ul style="list-style-type: none"> • Arrange pre-application meetings with DEADP, Cape Nature and other relevant role players. • Prepare and submit a pre-application checklist to DEADP as this may also guide the outcome of the assessment. • Undertake a comparative assessment of all sites investigated to highlight "pros and cons" from a development perspective. • The report must be concluded with recommendations on the way forward from an environmental management perspective. • Where relevant, collate and review all relevant studies undertaken.
Geo-technical services Responsible Person: Geo-technical Expert	<ul style="list-style-type: none"> • Undertake a preliminary desktop geo-technical assessment and determine any flooding risks. • Undertake a comparative assessment of all sites investigated to ultimately highlight "pros and cons" from a development perspective. • Where relevant, collate and review recent studies undertaken.
Bulk and Internal Services Analysis Responsible Person: Civil/Electrical Engineer	<ul style="list-style-type: none"> • Assess and report on available bulk engineering services i.e. roads, access, storm water, water, waste water treatment, electricity and preliminary costs for upgradings to meet the anticipated demand after development and determine the impact downstream. • Identify link services and determine financial implication associated with providing such services • Evaluate the sites in accordance with bulk services planning (master planning) • Where relevant, collate and review recent studies undertaken.
Planning Analysis Responsible Person: Town Planner & Urban Designer	<ul style="list-style-type: none"> • Property Characteristics: Determine and verify land ownership, extent, zoning, servitudes, title deed restrictions, etc. • Discuss the planning context in relation to SDF, Overstrand Growth Management Strategy (OGMS), IDP, as well as other relevant planning documentation and policies. • Discuss the spatial relation between the sites and socio-economic amenities by determining the distance and access to the various sites and public transport. • Undertake a high-level visual impact assessment with recommendations, taking into consideration proposals from the OGMS. • Consider relevant proposals in the Environmental and Heritage Overlay Zones for the affected areas. • Incorporate findings from the socio-economic study to provide a clear picture of current and future housing needs for Kleinmond to guide possible housing typologies that can be considered. • Prepare a high level bubble diagrams to reflect the main road hierarchy and potential land use. • Due to the character of the area and the location of the sites to be assessed, a town planner with urban design expertise is recommended to undertake this task. It will be important to promote the integration of mixed land use and typologies that fits in best with the surrounding area. • Inputs from the afore-mentioned disciplines must be considered by the town planner to guide the conceptual diagram. • Where relevant, collate and review recent studies undertaken.

Deliverable 2: Re-evaluate the existing Overhills Informal Settlement and recommend an upgrading plan to enable the municipality to proceed with a project application:

In order to determine the development potential of the existing informal area and the maximum allowable density the following actions have been identified to assist the municipality to take the project forward:

- Determination of developable areas – the outcome of the environmental due diligence and geotechnical investigations should be spatially represented on GIS to show the preliminary developable and non-developable areas in order to highlight constraints and depict the various development options, including any other encumbrances such as servitudes etc.;
- High level assessment of the availability of bulk services;
- All previous studies and reports must be re-assessed as the focus has changed from the provision of full services and top structures to prioritising in-situ and incremental upgrading;
- Assessment of development constraints and opportunities which includes:
 - Interim options i.e. improving existing conditions;
 - Options for upgrading;
 - Improved service delivery;
 - Human settlement options; and
 - Financing options.
- Compile a report depicting the results of all works done as well as plans in support of the result. This must also include a final series of plans depicting the various development options with a recommendation, analysis and motivation on a preferred development options.
- Despite reviewing existing policies and planning documentation, the baseline information from the Rapid Appraisal Process and the Informal Settlement Support Plan (ISSP) must also be interrogated to guide the assessment.

Deliverable 3: Final Report

The findings from deliverable 1 and 2 must be consolidated into a draft report. It must propose innovative upgrading options that will unblock the Overhills informal area and optimise the remaining developable portion. Furthermore the report must indicate which land parcel/s is the most suitable for mixed-use development and recommend future actions required by the Municipality to take matter forward. This town level approach vs planning projects in isolation may demonstrate to the affected community that the Municipality does not only prioritise the upgrading of informal areas, but also acknowledges the housing need of the broader community.

The summarised proposal must be communicated to all stakeholders to sensitise them of the outcome to allow opportunity to interested and affected parties to provide inputs for future consideration and to acquire a level of acceptance.

6. TIMEFRAMES AND REPORTING

- The oversight of the process will be jointly between the Municipality and DoHS,
- At least two (2) progress meetings will need to be held between Service Provider, Municipality and DHS. Other organs of state such as DEADP may also need to be pulled in, as and when required
- Report on full programme with milestones and process which must be agreed to by all parties.
- Progress report as agreed.
- The Service Provider will be responsible for undertaking all administrative work with respect to the project. This will include preparations for any meetings, preparing agenda's, minute taking, and other related logistical arrangements (such as catering and securing of venues).
- The Service Provider will also be expected to distribute progress reports to the DHS: Municipal Planning and the Overstrand Municipality.

7. PAYMENTS

- The Service Provider must submit invoices with evidence of work completed to the Municipality as per project plan subject to achievement of the relevant milestones and sign off by team.
- Reports to be jointly reviewed by both the Municipality and Province. If deliverables are met as outlined in "Section 5", the Municipality can claim payment from Province as per the Memorandum of Agreement and conditions included in IPW milestones.

8. DATE OF COMPLETION

The final deliverables must be delivered within 6 months of appointment.

9. GENERAL CONDITIONS

Service Provide should work closely with the Overstrand Municipality, particularly the Housing, Town Planning, Technical Services and the project team must be approved by the Municipality.

It will be important that the expertise appointed understand the human settlement environment, including human settlement policy and planning within the Western Cape.

10. PROPOSAL / BID STRUCTURE

Service providers are to include the following in their bid / proposal:

- CVs of team members and identification of project leader
- Relevant previous experience, including two contactable references
- Demonstrated understanding of the motivation and project objective
- Clear methodology and proposed approach to the assessment
- Project plan/programme with time frames and level of effort at each stage of the project, with clear milestones and deliverables
- Budget with payment schedule indicating of man-hours and detailed costing (hourly rates etc.) in accordance to the milestones and deliverables

11. LIST OF ATTACHMENTS

The following documentation is available during the assessment process and can be acquired from the Municipality:

- Status Report by Gibb containing the Revised Environmental Due Diligence Report for the Proposed Formalisation of the Existing Kleinmond Informal Settlement, Overstrand Municipal District, Prepared by Withers Environmental Consultants, 09 April 2014
- Overstrand Phase I Geotechnical Investigation undertaken by Messrs 7 Sea Geosciences, February 2014
- Overstrand Integrated Development Plan 2015/2016 Review

ANNEXURE B

LIST OF AVAILABLE BASELINE DOCUMENTS

LIST OF AVAILABLE BASELINE REPORTS

1. Overstrand Municipal Growth Management Strategy (2010)
2. A Study into the Needs and Demand of Affordable Housing in the Overstrand Local Municipality (2017)
3. Gazetted Overstrand Zoning Scheme Regulations (2013)
4. Kleinmond Zoning Scheme (2014)
5. Western Cape Provincial Spatial Development Framework (2013)
6. Overberg District Municipal Spatial Development Framework (2014)
7. Overstrand Municipal Wide Spatial Development Framework (2006)
8. Overstrand Municipality By-Law on Municipal Land Use Planning (2013 and amended 2015 and 2016)
9. Environmental Management Overlay Zone Regulations (2016)
10. Gibb/Whithers/UDWC Report on Two Development Sites West and East of Overhills Informal Settlement (2014)
11. Technical Report: Land Identification for Subsidized Housing:
Report 1: Public Owned Properties (UDWC 2004)
12. Technical Report Land Identification for Subsidized Housing:
Report 2: Privately Owned Land (UDWC 2004)
13. Overstrand Housing Development: Kleinmond Low Cost Housing Development: Environmental Due Diligence Report on Proposed Development of Kleinmond Low Cost Housing in the Overstrand Municipal District (Whithers 2011)
14. Environmental Due Diligence Report for Proposed Formalization of the Existing Kleinmond Informal Settlement (Whithers 2013)
15. Geotechnical Report by 7 Sea Geosciences (covering site southwest of Transfer Station and Overhills Informal Settlement and Adjacent Areas) (2014)
16. Sewer and Water Masterplans completed by GLS for Overstrand Municipality
17. Overstrand LED Strategy (2007)
18. Upgrading of Kleinmond Channel: Preliminary Design Report (Feb 2018)

ANNEXURE C
STATUS QUO REPORTS

- C1 - URBAN DESIGN CONTEXTUALISING REPORT**
- C2 - ENVIRONMENTAL DRAFT DUE DILIGENCE REPORT**
- C3 - ENGINEERING STATUS QUO REPORT**
- C4 - PRESENTATION TO PSC MEETING, 05 DECEMBER 2017**

ANNEXURE C1
URBAN DESIGN CONTEXTUALISING REPORT

KLEINMOND HOUSING INVESTIGATION

CONTEXTUAL ANALYSIS DOCUMENT
DECEMBER 2017



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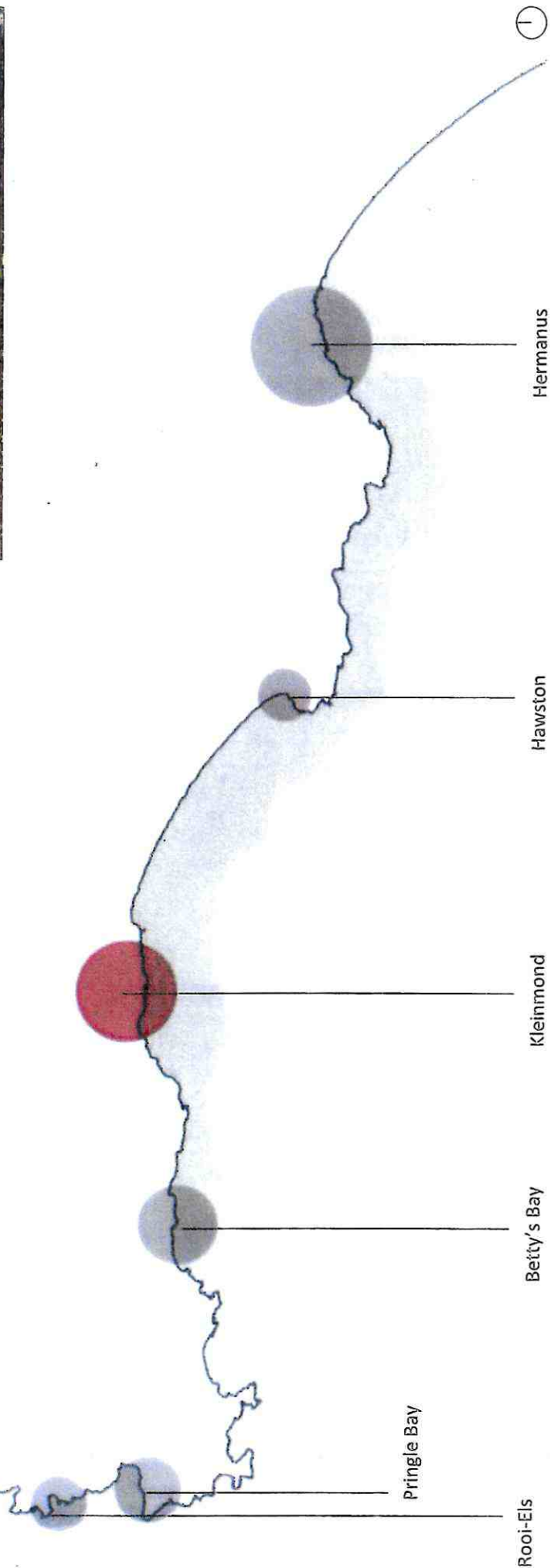
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A. INTRODUCTION

Kleinmond is located along the west coast of the Western Cape within the Overstrand Municipality, about 13km from Betty's Bay and 33km from Hermanus. The town functions as a low density residential area with the majority of dwellings used as holiday or retirement homes. It also serves as the higher order commercial and service centre for the surrounding small towns of Rooi Els, Pringle Bay and Betty's Bay towards the west of the town.

Kleinmond is a predominantly quiet town with residential dwellings for retirement and holiday homes with single storey medium-high income residents. An informal settlement exists to the north-west boundary of the town. The R44, linking Kleinmond to its neighbouring coastal towns, slows down as it reaches the town and forms a mix of use Main Street. A golf course exists to the north east of the town with a number of gated retirement estates and upmarket housing developments.



1. OUR BRIEF

We see our method being driven by the high-level process over two phases as described in the draft terms of reference document. The first phase focuses on developing a rationale for intervention in the broader development strategy for the town, the subsequent identification of development quick wins and the testing thereof. One of the sites tested in this phase would be the Overhill informal settlement which will be done in more detail than the rest. Phase two is then seen as the phase for statutory approvals processes and the set of tasks for project implementation.

2. DEFINING THE PROBLEM + OVERRIDING PHILOSOPHY

The process of developing the proposition herein is based on a method of engagement with the pragmatic concerns of the client and negotiating ways in which to bring urban design logic to the table. The process by nature requires trade-offs and will not represent a monosyllabic representation of the "urban ideal". What does transpire though, is a plan that's more readily implementable with urban design principles ingrained into its reasoning. Our work challenges the perception that urban design is a purist exercise or that its only for the public realm.

A further notion supported in the development of this framework is that it represents a robust set of simple principles that allows for reinterpretation over time. It is not static nor a fixed view of what the development should be in 20 years' time but is intended to allow for many hands to shape its changing nature as socio-political, economic drives and pragmatic needs shift. The time allocation for completing this task was challenging and the method of determining the urban form is by its nature not exhaustive. The principles therefore require interpretation by the rest of the team adding layers to give the place deeper meaning in its context [time and space]. The final proposition was driven by the commercial realities of the client which requires the design to be pragmatic, achievable and financially feasible.

Over and above the ideas previously mentioned, our approach is governed by humanistic ideals translated into pragmatic solutions. Key high level principles that guide our approach are:

- 01 *Places Matter Most* > places are much more important than individual buildings or traffic volumes. We will create attractive and interesting places that is shaped by human scale, qualitative [phenomenological] and functional organization on the site that will enliven the physical experience of the development by both its occupants and passers-by. The rich potential of the broader site already provides key qualitative principles from which to draw inference.
- 02 *Craft is King* > attention to the grain and texture of the making of public places and urban form must be complemented by the crafting of the making of the place. All too often commercial developments are associated with crass built forms shaped by reductive technocratic solutions.
- 03 *People and Space Integration* > we will encourage a positive relationship to the existing morphology and integrate it with its genius loci. The sense of place includes the relationship of people, their activities and cultural practices and should ultimately reflect their character in its making.
- 04 *Community over Time* > Systems thinking and incremental development will allow opportunity for the development to shape its form and character over time. Sustainability [social, economic, environmental, resource] is be treated as a matter of course. Furthermore, we argue that the development should allow for flexibility in accommodating a changing program that may be influenced by changing needs over time.

The design problem is interpreted as the attempt to find the balance between compact and vibrant urban environments and the pragmatic demands of the context and client's needs.

The purpose of this document is to:

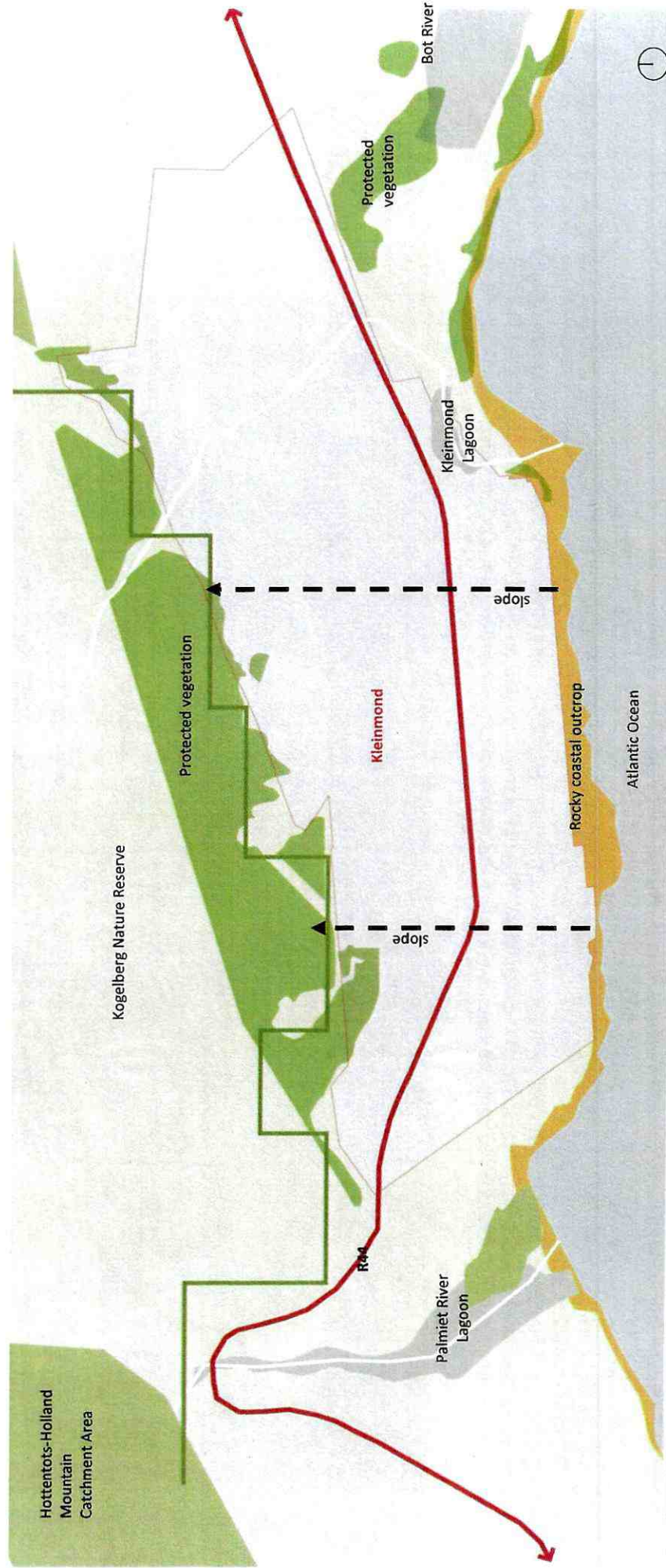
- o Develop a Spatial set of arguments and a rational for the way in which the site is to be developed;
- o Negotiate and guide the design development process that responds to generally accepted urban design principles and urban design policies;
- o and, To be used as a tool for the approval authorities to measure the development proposal.

B. READING THE CONTEXT

1. Nature vs. Urban

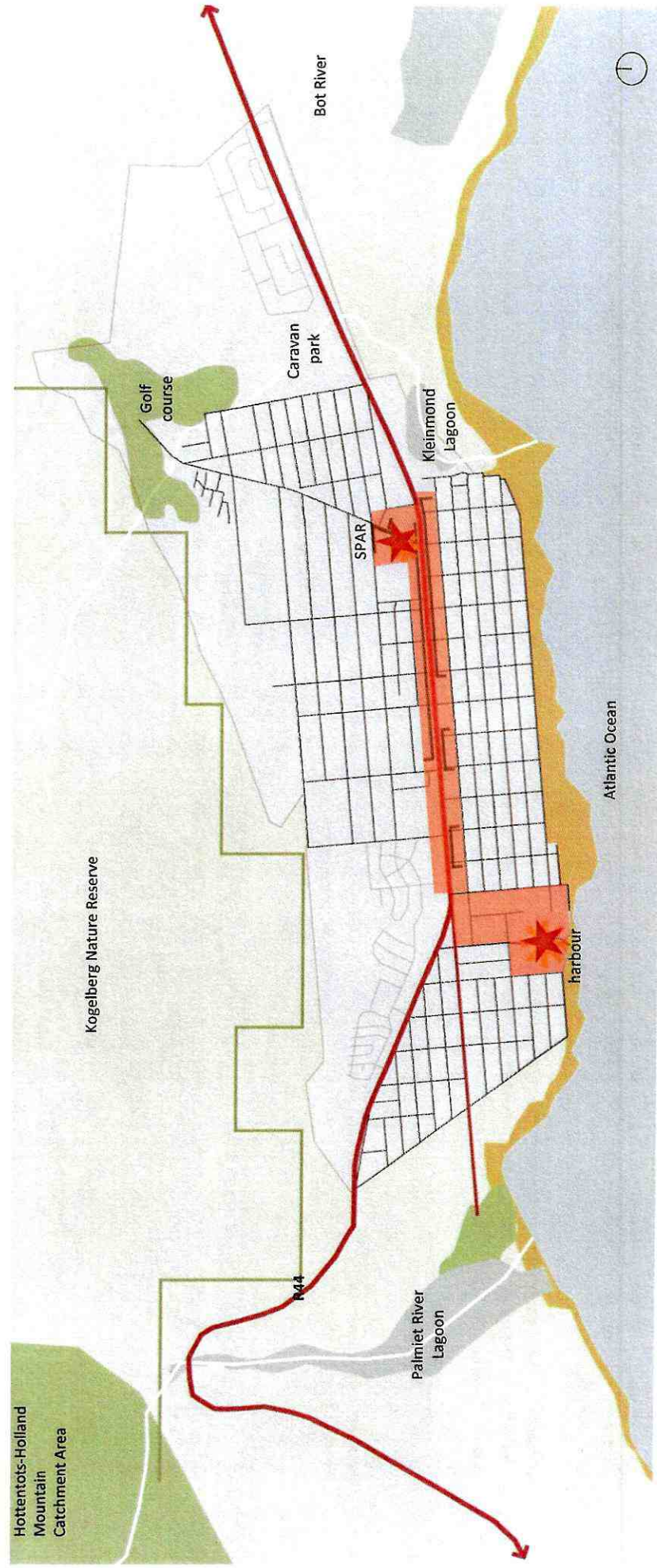
Kleinmond is accessed from the R44, which links it to its neighbouring coastal towns through natural landscapes of indigenous coastal fynbos and mountains regions. The town is confined between 4 major natural features, the Palmiet River Lagoon to the west, the Kogelberg Nature Reserve to the north, the Botrivier Lagoon and Rooisand nature reserve to the east and the Atlantic Ocean to the south.

The town forms an orthogonal grid falling from the mountain slope to the coastal plateau. These natural elementals form the foundation for the structure of the town and its growth. The slope of the mountains maintains the urban edge and the rocky coastal edge creates a predominantly fine grained built form. The built environment responds to the natural landscape well, maintaining the cultural landscape of the area. The Palmiet River Lagoon to the west and Kleinmond Lagoon to the east of the town provides recreational amenities.



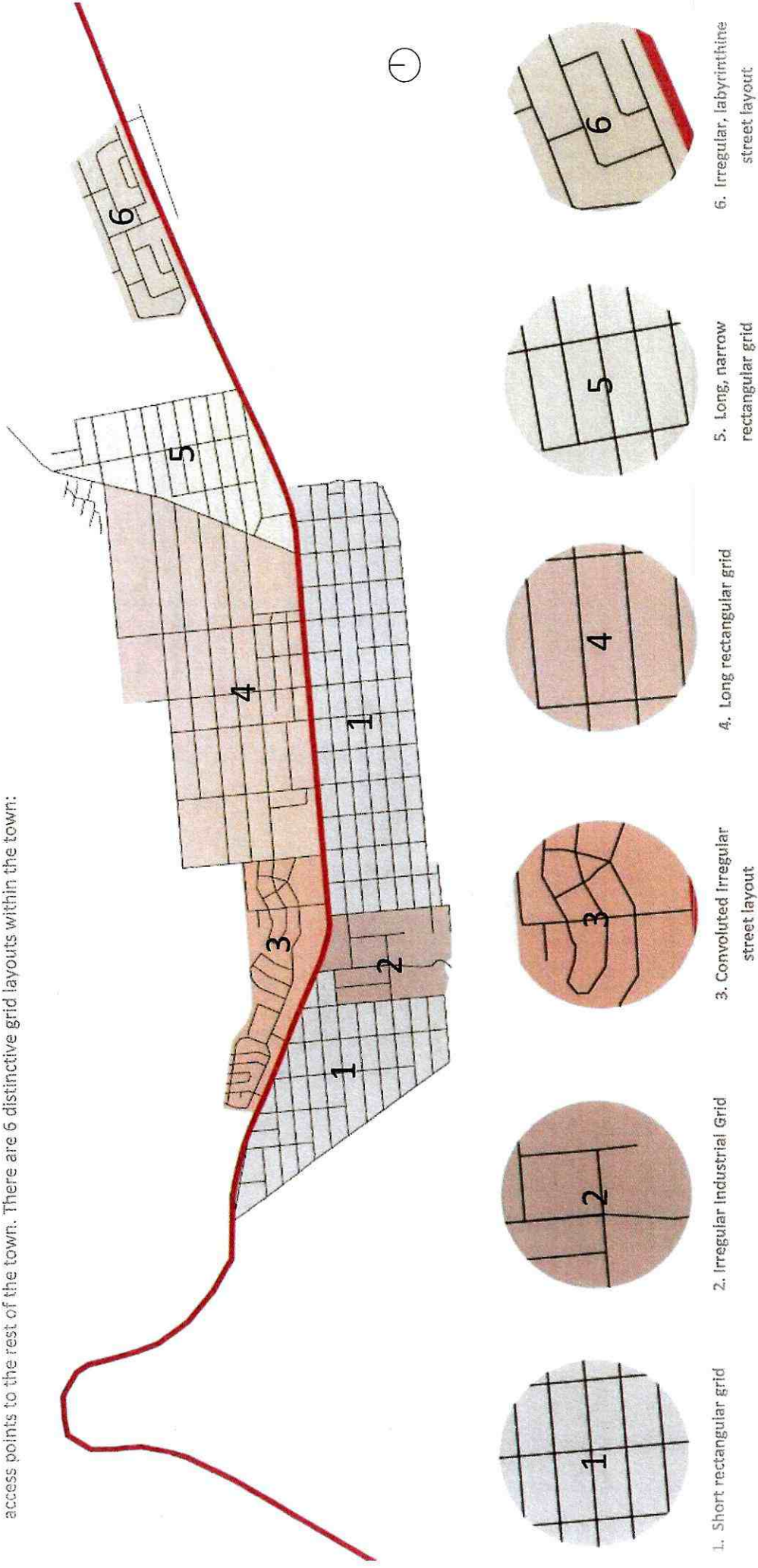
2. Town Structure

The town is structured in a linear fashion, nestled between the mountain and the sea and along a grid structure up towards the mountain and down towards the coast from the R44 running through the middle of the town consists of a ribbon of predominantly retail and service functions for local residents. The town is characterised by a regular grid pattern that caters mostly to the middle-high income residents of the town, and is distinctly separated from the low-income residents from the town, living in an area characterized by a convoluted grid pattern towards the north east of the town. The main road in the centre of the town has some activity on the ground floor, terminating in an inward looking Spar to the east, which draws foot traffic off the Main Road. The original town industrial area and harbour site on the coast has been transitioning into a tourist retail hub in recent years with good quality landscaping and views. A golf course exists between the built settlement and the mountain offering a buffer on the urban edge.



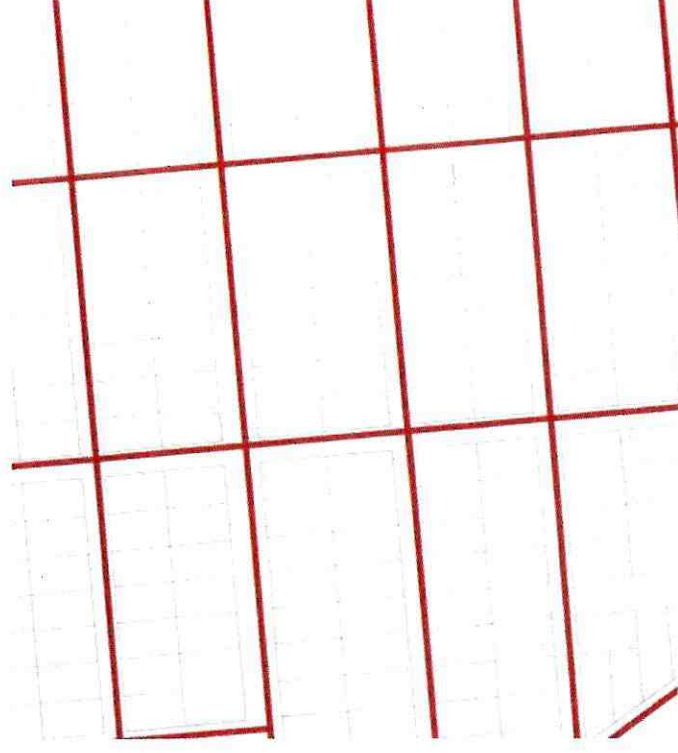
4. Grids and Convolution

The majority of the settlement is characterized by a regular rectangular grid system of slightly varying sizes that enable permeability and logical movement across most of the town. The new areas of the town, also home to most of its low-income residents is designed along a definitively separate and convoluted grid structure that allows limited access points to the rest of the town. There are 6 distinctive grid layouts within the town:



a. Short rectangular grid

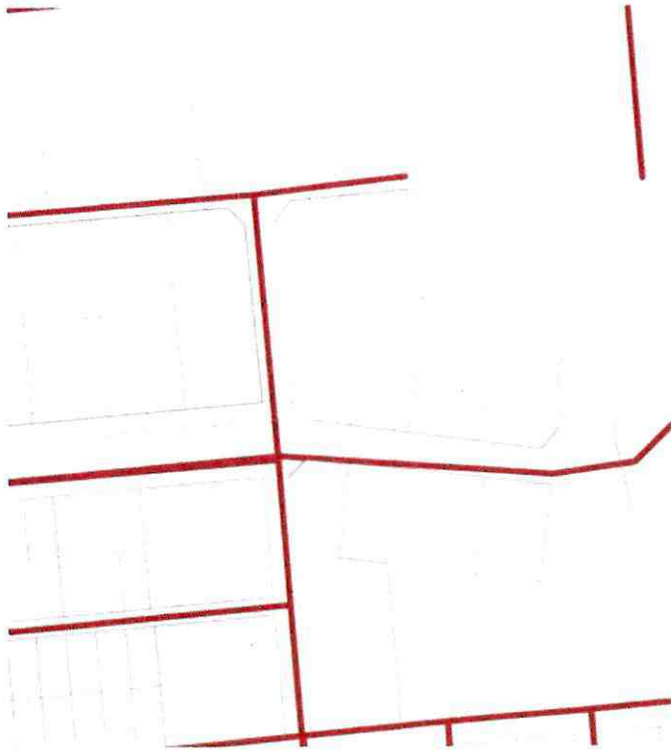
The short rectangular grid in the north-south direction and to the south of the Main Road towards the coast facilitates permeability from the main road to the coasts whilst capitalizing on views to the mountain and the sea. This grid predominantly functions as a fine-grained, medium income residential area. The single and double storey homes are well defined within an individual and rectangular erf with lush green garden spaces and stoeps facing the street. The area is characterised by neat homes facing the street with low walls maintaining passive surveillance and a positive interface with the street. Most streets lack a formal pavement edge, which contributes to the countryside suburban character of the area.



b. Irregular industrial grid

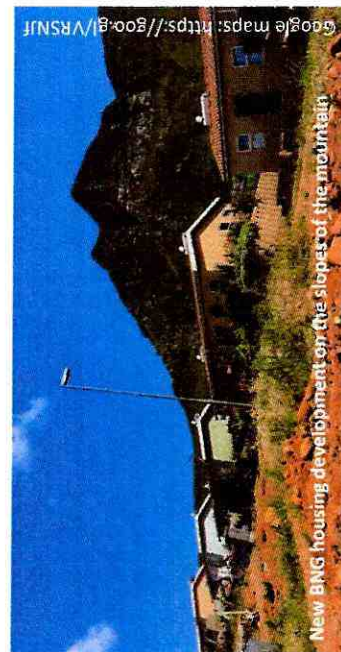
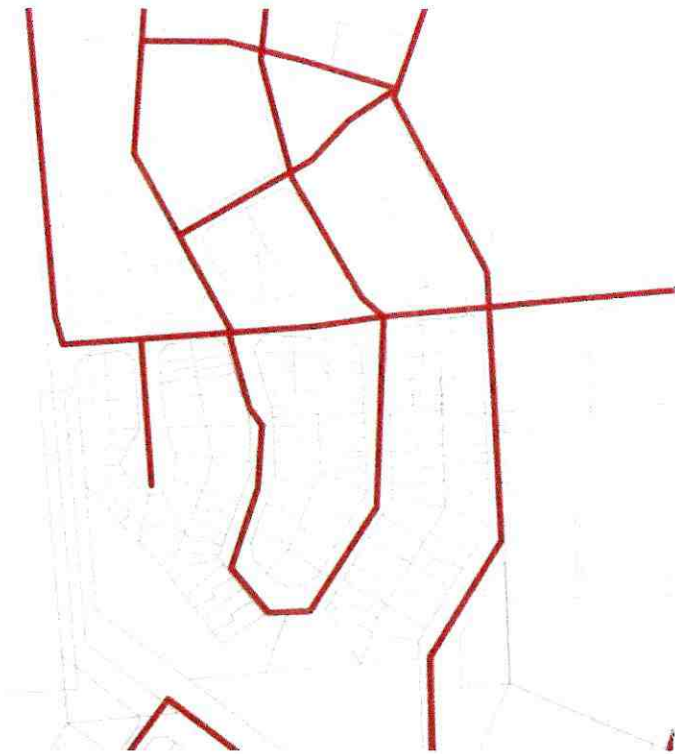
The irregular industrial grid connects the R44 to the harbour through a larger grained system that accommodates single storey warehouse and light industrial functions. The quality of the street landscape is lower than that of the residential area. Brick storefronts face the streets with large shop fronts and vehicular entrances. The wide paved sidewalks functions as parking spaces with little priority given to the pedestrian.

The function of this area transitions from light industrial to a high quality tourist destination towards the harbour. In recent years large amounts of investment has gone into upgrading the pedestrian walkways with special paving, trees and seating adjacent to restaurants and retail opportunities with some residential apartments facing the ocean in an attempt to create a tourist hub at the harbour.



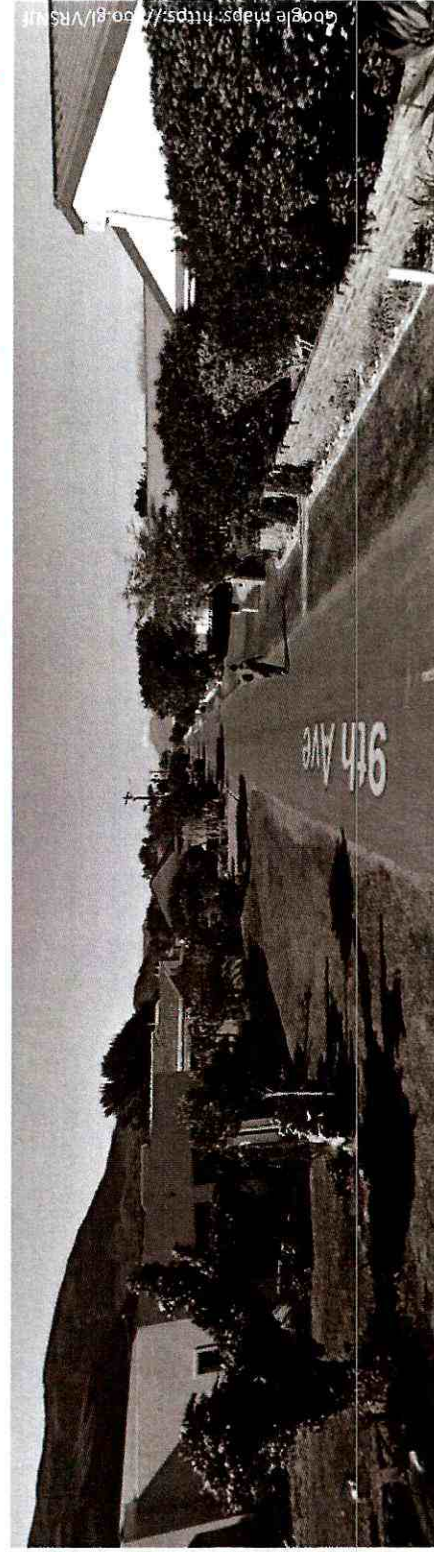
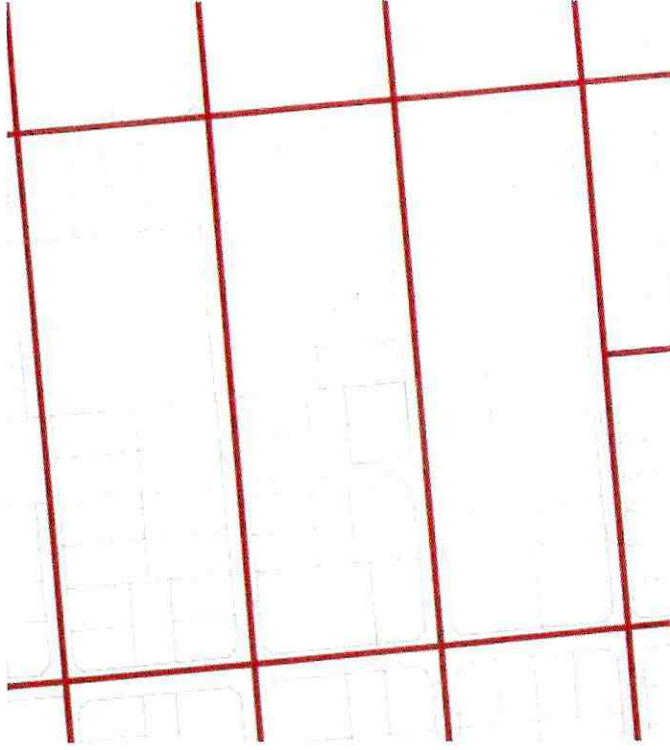
c. Convoluted Irregular street layout

This meandering street layout to the north western boundary of Kleinmond is distinctly separate from the rest of the town in structure. It bears no resemblance to the logical grid layout of Kleinmond and has very limited access to the rest of the town. The inefficient, winding layout has resulted in irregular erf sizes, shapes and orientation and this area is significantly less permeable. This area consists of largely low-income residents, with significantly diminished quality landscaping. The single storey houses are small and constructed of mainly cement blocks with corrugated roof sheeting and many have added informal backyard dwellings on site made of corrugated sheeting. There is a fairly new BNG housing development to the north of this area and a capped dump site to the far west which has been occupied by an informal settlement.



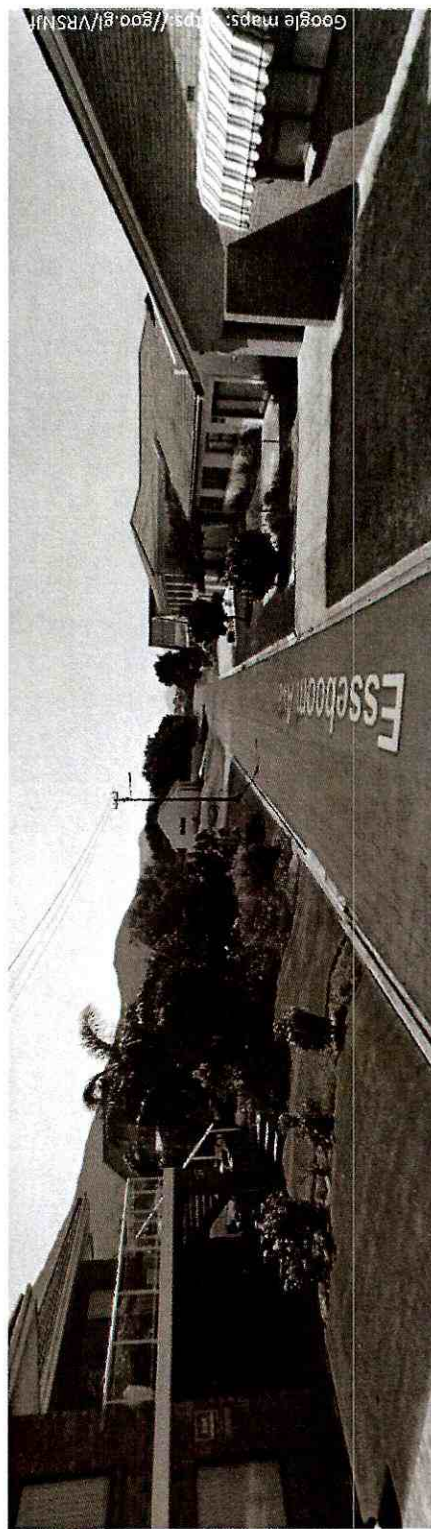
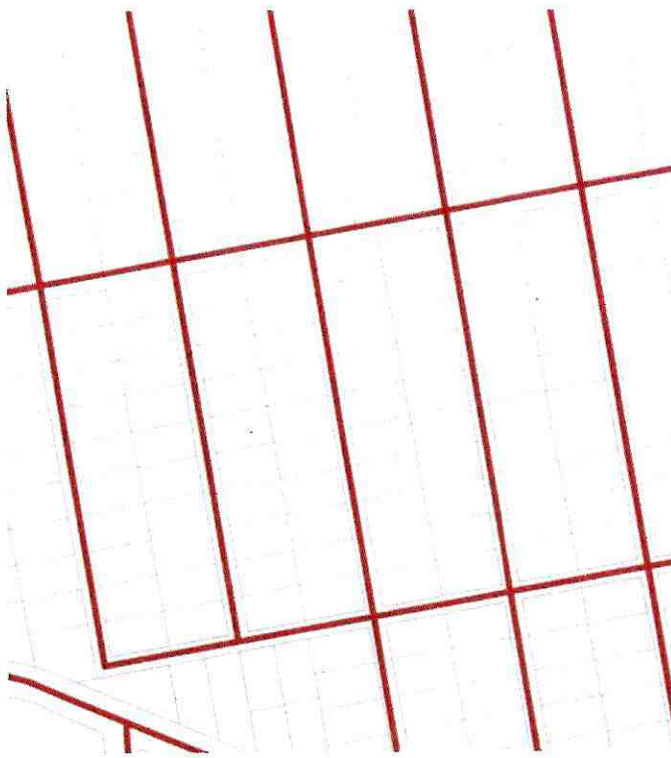
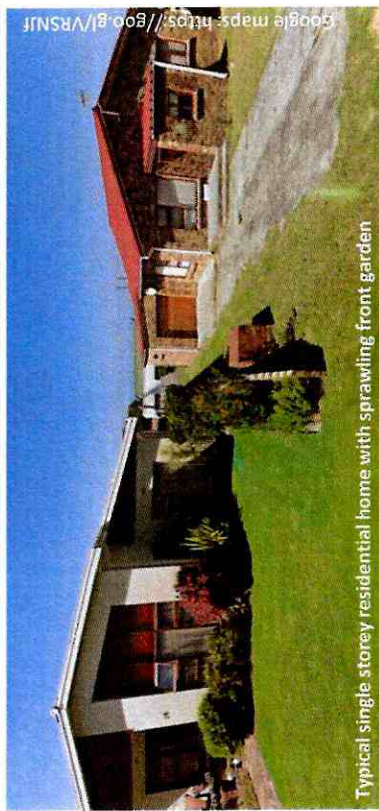
d. Long rectangular grid

The rectangular grid to the north or the main Road towards to mountain is characterised by long, narrow blocks with larger erf sizes that accommodates a medium-high income residential neighbourhood with large gardens and a lower density of dwelling units. The area feel distinctly green, neat and suburban with a low-density village-like quality. The street pavements are well defined and the homes face the street with either a low steep wall or no boundary fence at all, allowing the private garden to sprawl out to the street edge. There is a diversity of mature trees on either side of the streets and good views up towards the mountains and down towards the coast.



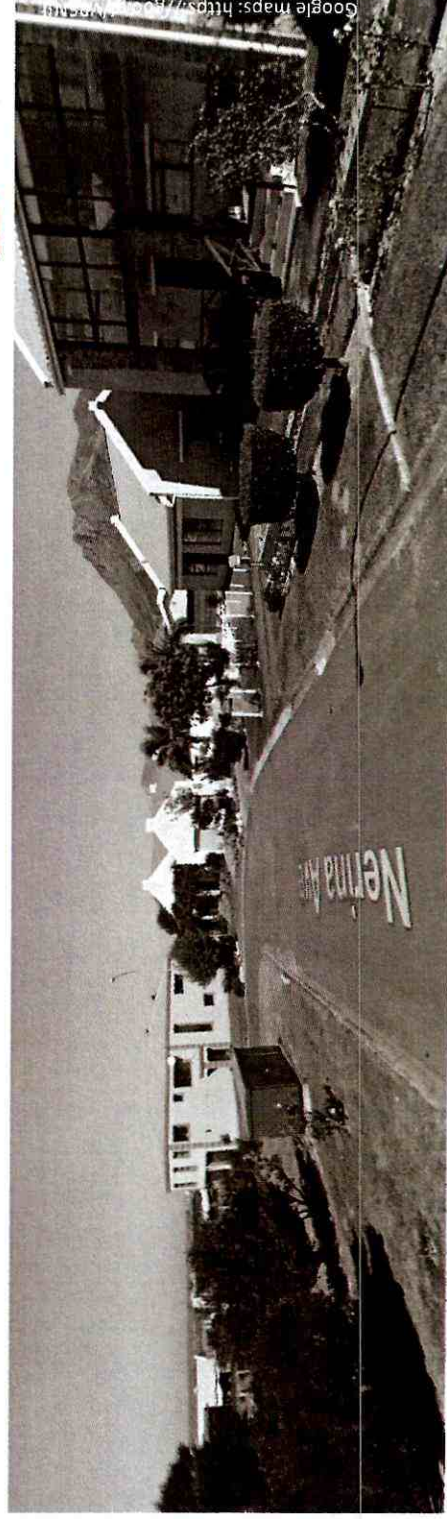
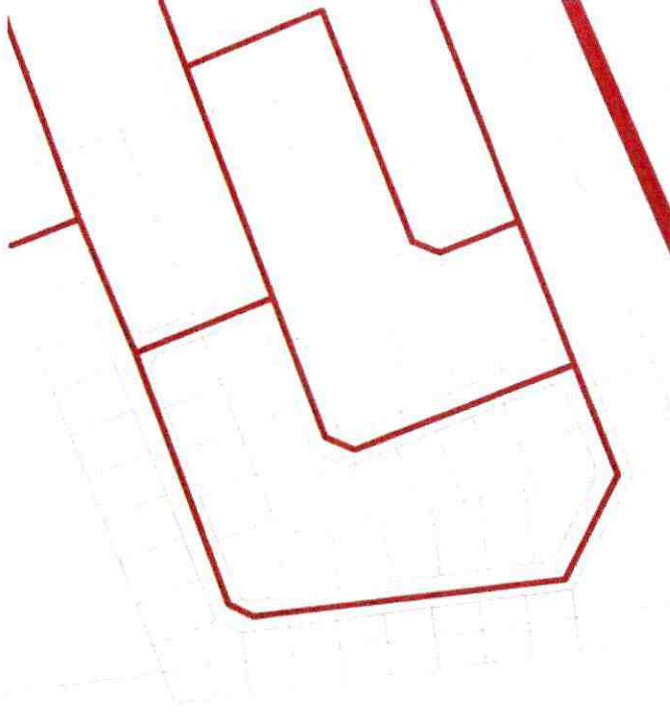
e. Long, narrow rectangular grid

The neighbourhood blocks in this area are long, narrow and oriented at an angle to the typical Kleinmond grid. It abuts the typical Kleinmond grid along Botrivier Road, which runs diagonally from the Main Road to the mountain and separates it from the less dense, higher income neighbourhood to the west. The area consists of a fine-grained, single-double storey residential development which is nestled between a residential neighbourhood to the west, a golf course and retirement village to the north, a caravan park to the east and sports precinct to the south.

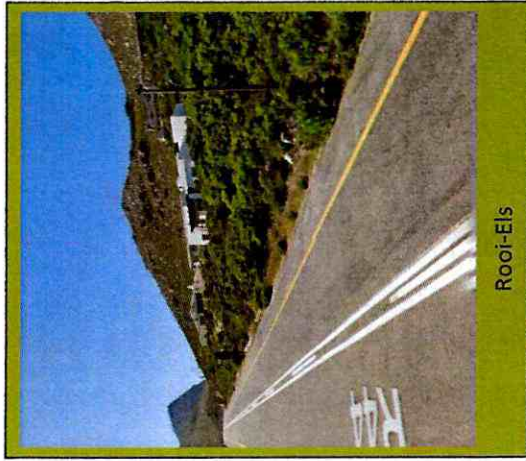


f. Irregular, labyrinthine street layout

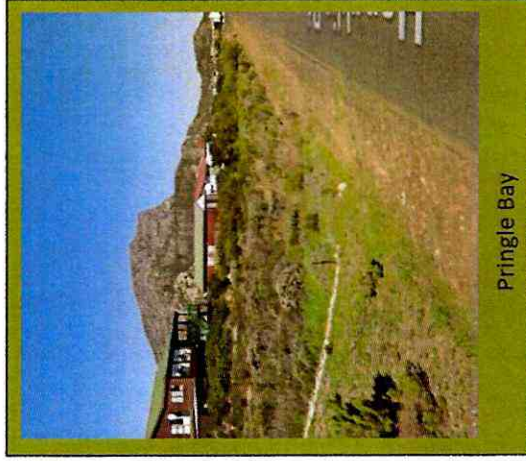
This neighbourhood is separated from the larger town by the caravan park. The grid pattern is atypical of the town as it lacks a regular north south rectangular grid in favour of winding streets featuring less permeability and options for movement. The neighbourhood is populated by mostly single storey residential dwelling of regular erf sizes with generous and sprawling front gardens.



5. The Main Road



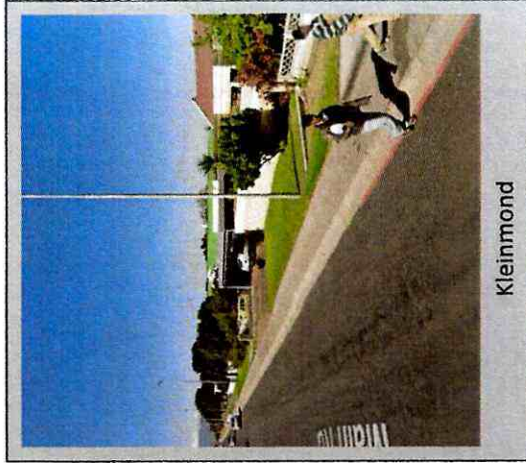
Rooi-Els



Pringle Bay



Betty's Bay



Kleinmond



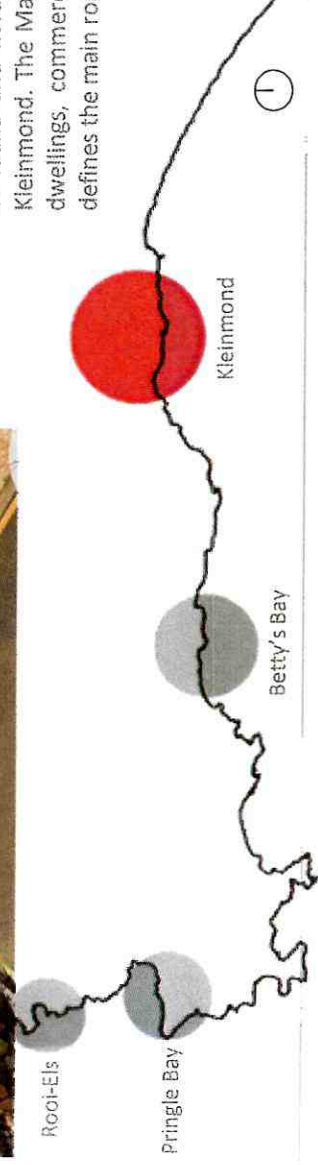
Rooi-Els

Pringle Bay

Betty's Bay

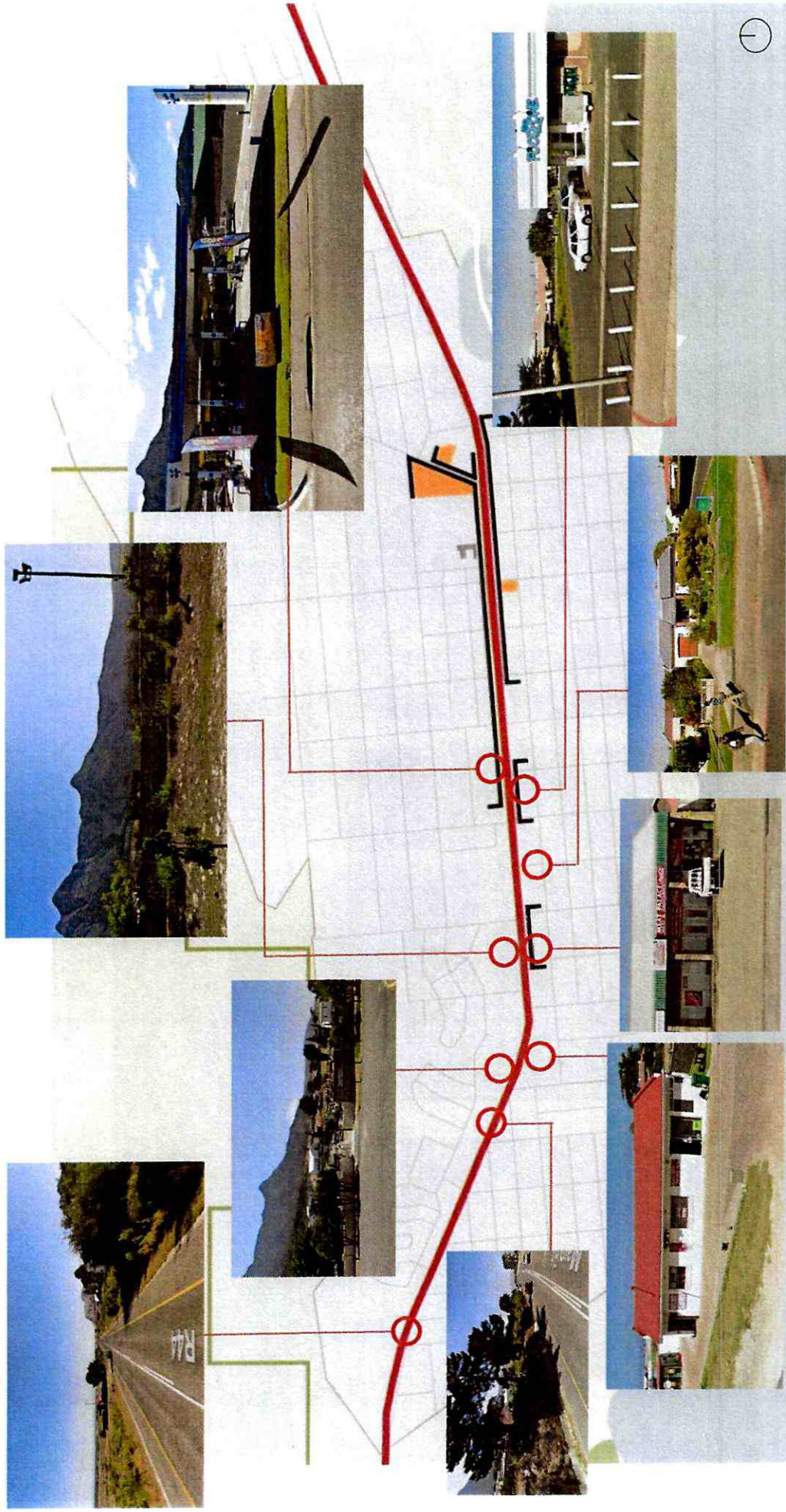
Kleinmond

The R44 scenic route links multiple small towns along the coast along a winding road that is comfortably located and designed within its context between the mountain and the sea. The road connects multiple small, seaside towns, passing through the edge of the town as opposed to running through it, slowing down, and forming a main road as it does for Kleinmond. The R44 running past the town leading up to Kleinmond possesses a distinctly nature dominant, scenic drive appeal, emphasised by the natural sandstone from the mountain used to build the retaining edges of the road. This unique character of landscapes of fauna and flora is suddenly morphed into a confused main road as it runs through Kleinmond. The Main Road takes on the form of a mixture between low density residential dwellings, commercial, retail and education use with no focal point or logic that clearly defines the main road.

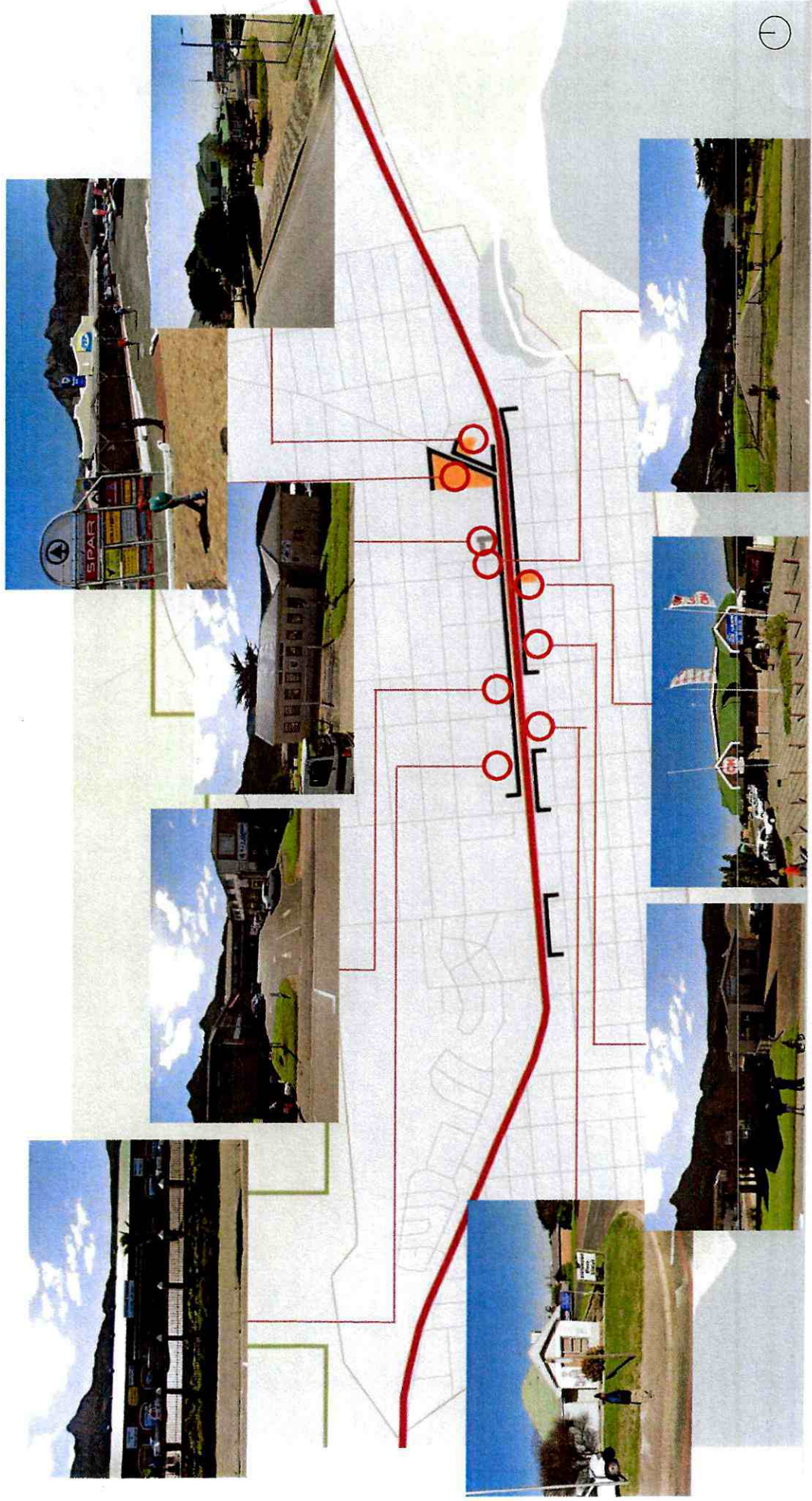


5. The Main Road

The main road through the town is relatively well defined and easily accessible from most parts of the towns grid leading off it towards the mountain or the coast. The road contains a mix of uses such as residential, service, and retails.

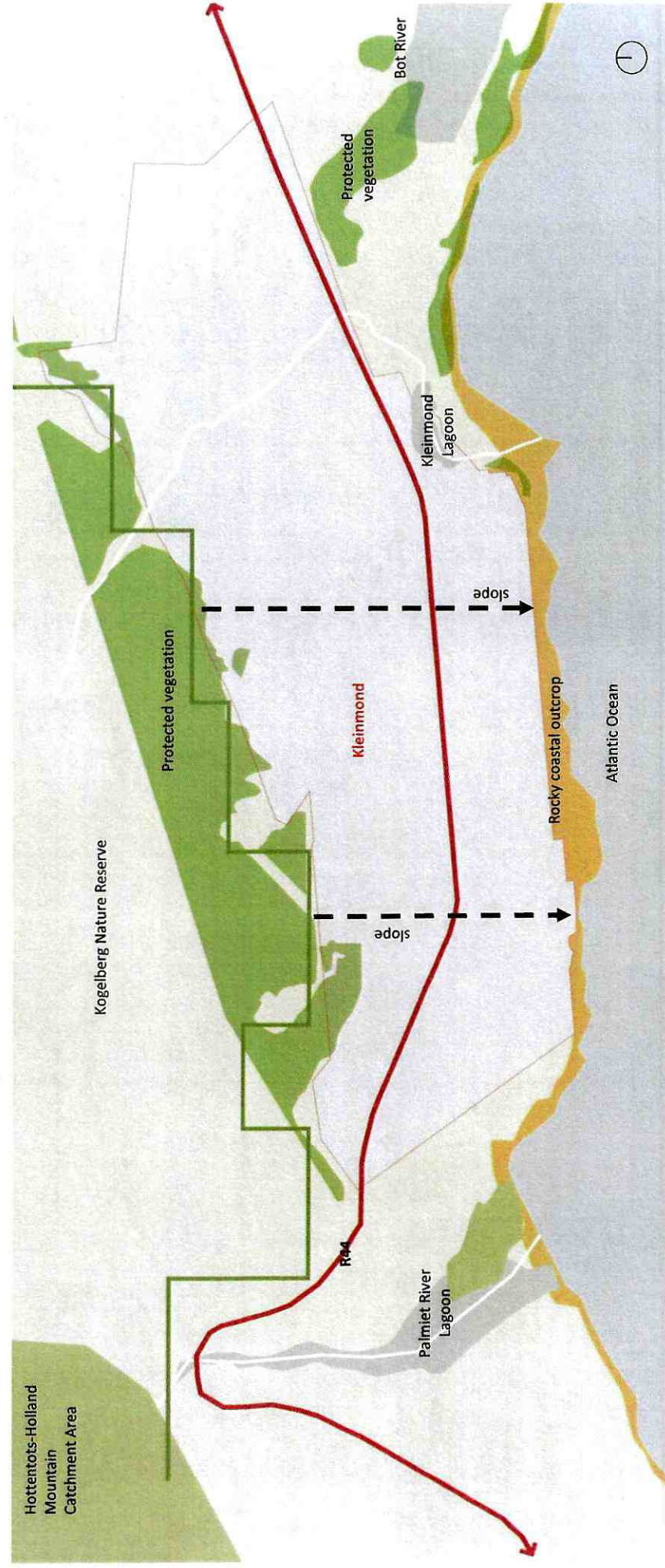


5. The Main Road



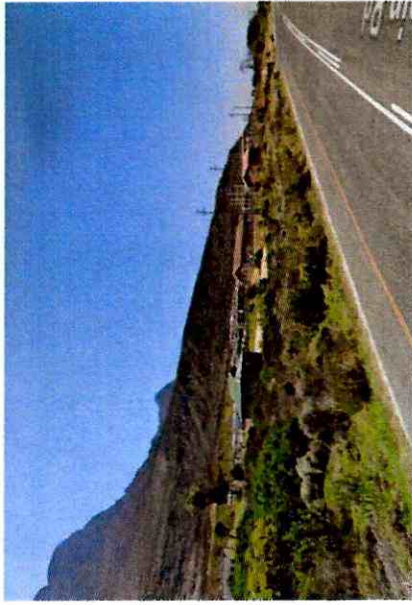
6. Landscape and Nature

The natural landscape is the most prominent structuring element of the town. The built form is nestled between four major natural elements: the mountain, the coast and two water bodies to the west and east. The slope of the land from the mountain to the ocean forms the plateau upon which development is ideal, whilst facilitating rain water catchment from the mountain slopes.



6. Landscape and Nature

Entrance from R44 to town



Protected Nature



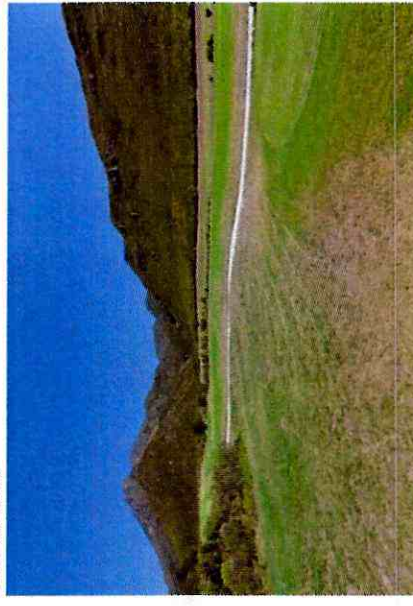
Built coastline



North built edge



Golf Course

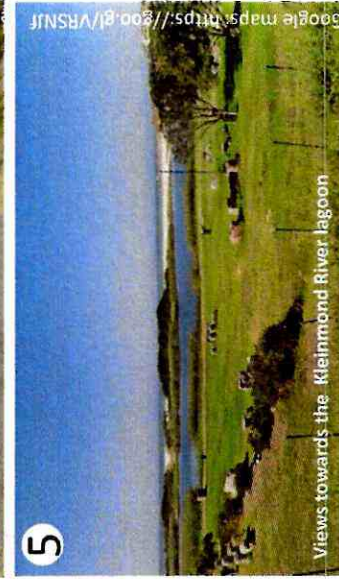
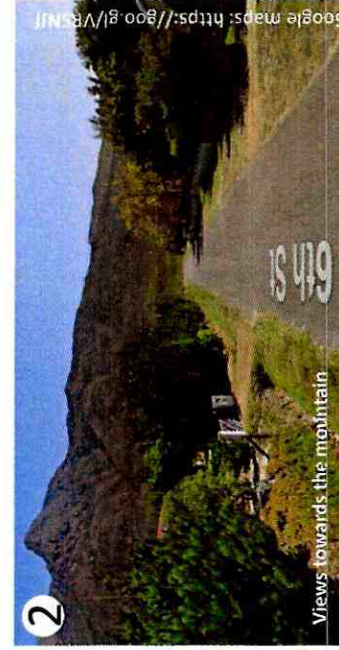
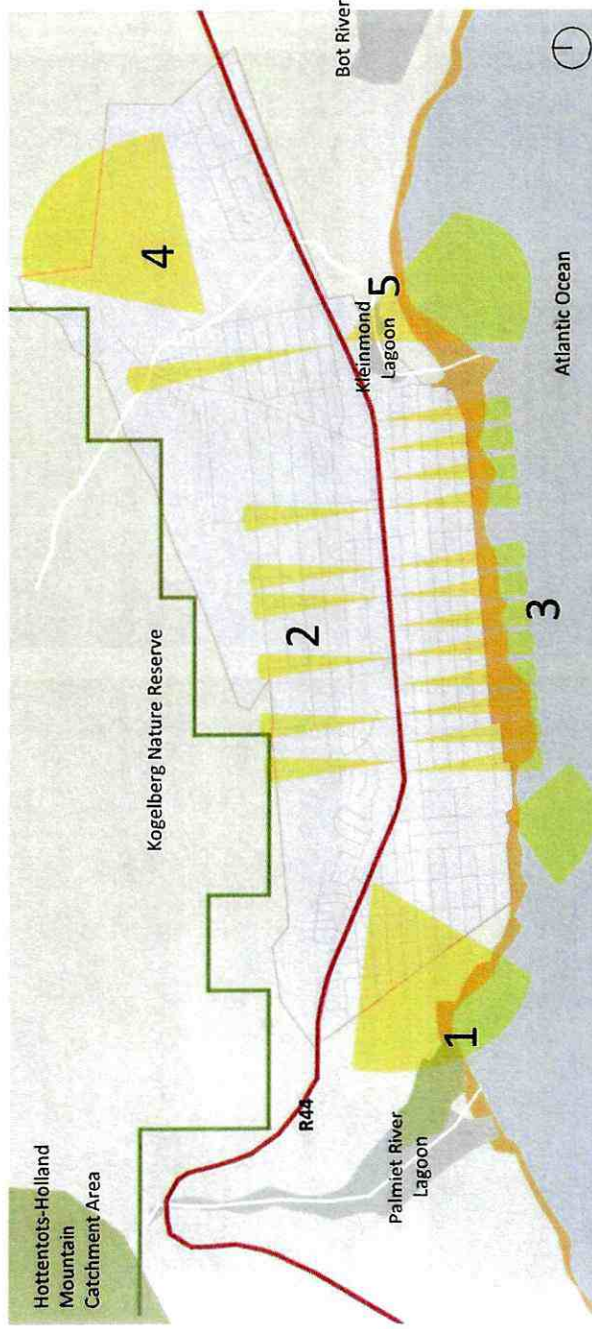


Typical built landscape



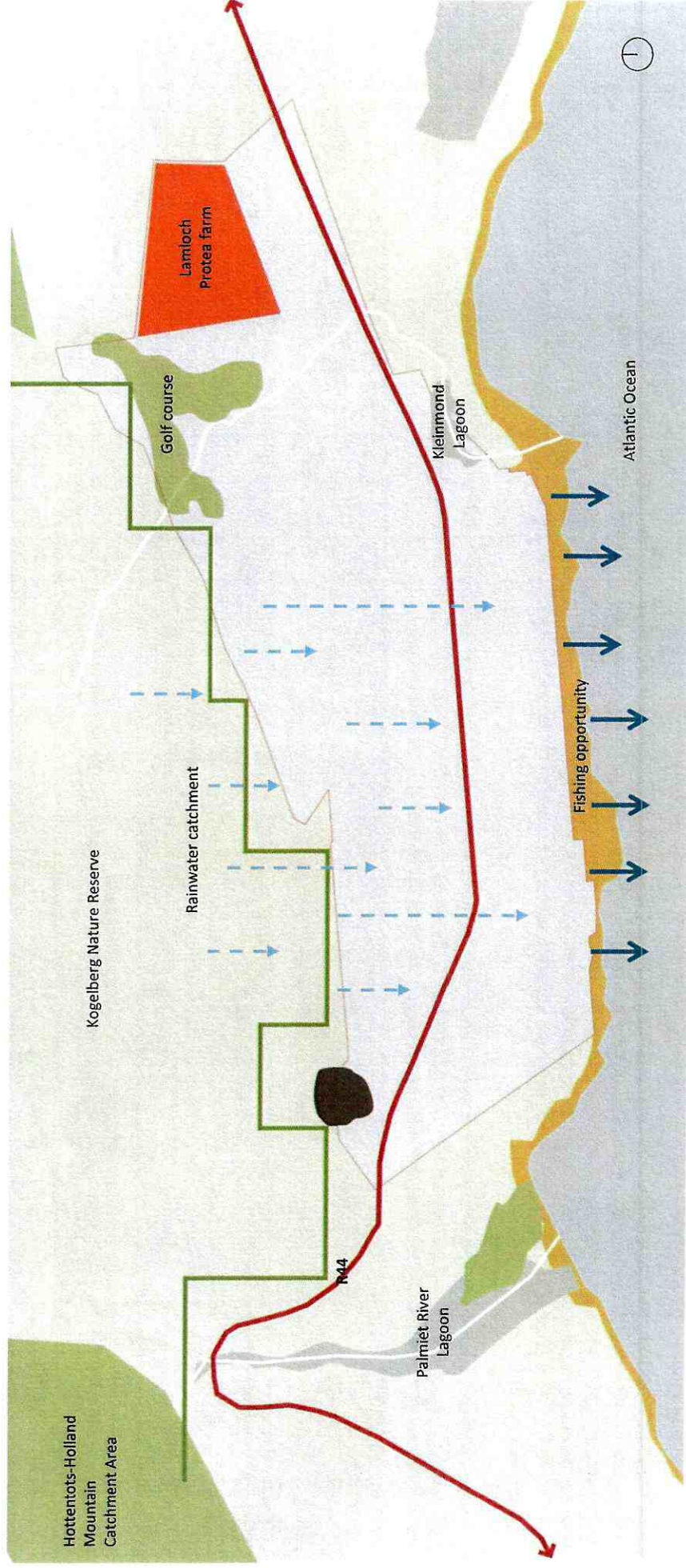
7. Views to Nature

Visual and physical access to and close proximity of nature is one of Kleinmond's most valuable assets. The slope of the land from the mountain to the coast, together with the north-south grid layout, capitalised on these views from almost any point within the town.



8. Working Landscape: Proteas and Fishing

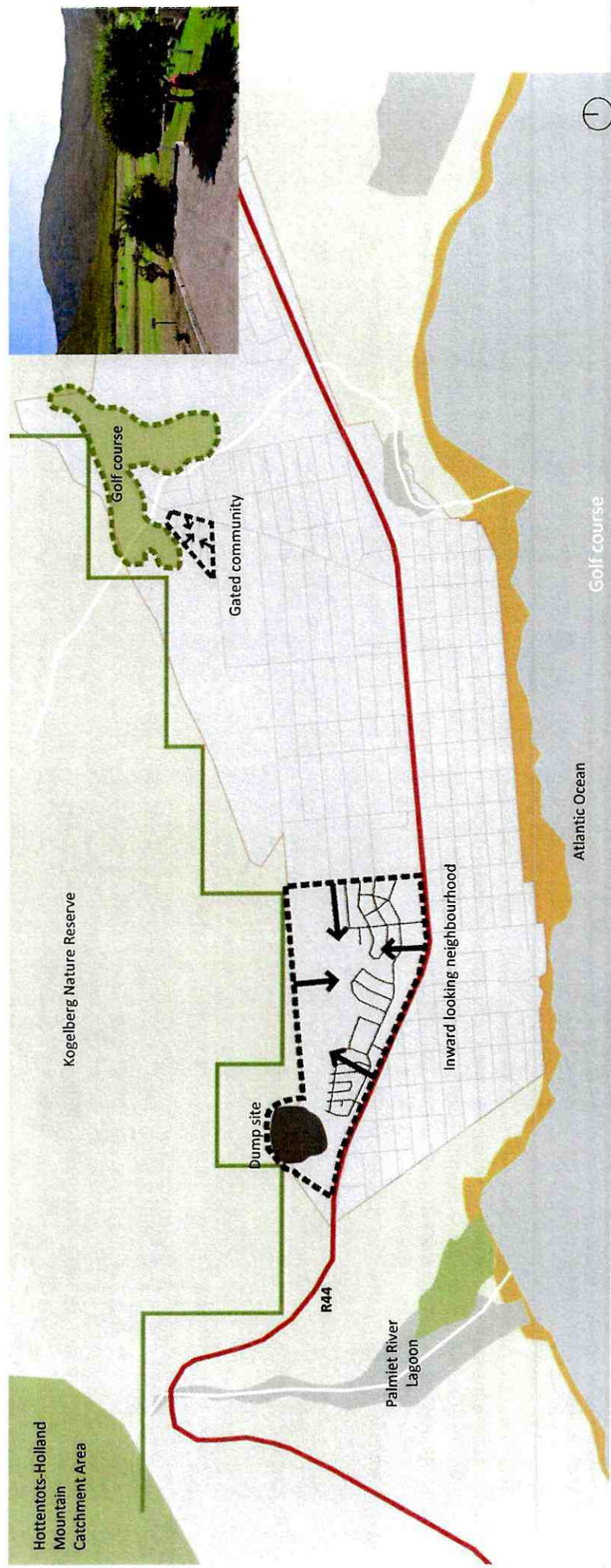
The natural landscape is one of Kleinmond's most valuable assets, some of these have been productive as a source of livelihood in the town for over 100 years. Fishing along the coast is the most historic form of productive landscapes, although on the decline in recent years, the establishment of the town has its origins in fishing off the rocky coast. The Lamloch Protea Farm to the north east of the town is another form of productive landscape dating back to the origins of the town and its first formal land owners. The entire surface of the town from the slopes of the mountain to the ocean forms a rainwater catchment area for freshwater accessible to the town.



9. Landscape of Exclusion: Golf Course and Gated Communities

Within the socio economic realities, it is important to recognize that the spatial configuration was driven by an apartheid planning mind set of control, fear of "the other" and exclusion played out in spatial terms. Kleinmond still have clearly defined "rich" and "poor" neighbourhoods, identified on a map as sharply isolated from its neighbours. Neighbourhoods of varying economic status's have few linking roads between them and access from the poor neighbourhood to the north west of town has significantly fewer options of access roads linking it to the main road. This is apparent when comparing it to the numerous roads linking wealthier neighbourhoods to each other and amenities across the town. This is emphasised by a landscape of exclusion apparent within the town characterised by informal settlements, isolated urban form, limited social and economic opportunity.

An increasing landscape of fear is also becoming apparent in Kleinmond, tangible in the form of a plethora of boundary walls and fences, separation of functions, featureless/anonymous roads and spatial character. In addition to this, a landscape of control is taking hold of parts of Kleinmond, spatialized by the separation of low-income neighbourhoods with minimal access points and links, as well as an increasing number of gated communities.



9. Landscape of Exclusion: Golf Course and Gated Communities

Gated Estates



High walls with electric fencing



Palisade fencing



Vibrecrete fencing



High walls with fencing and greenery

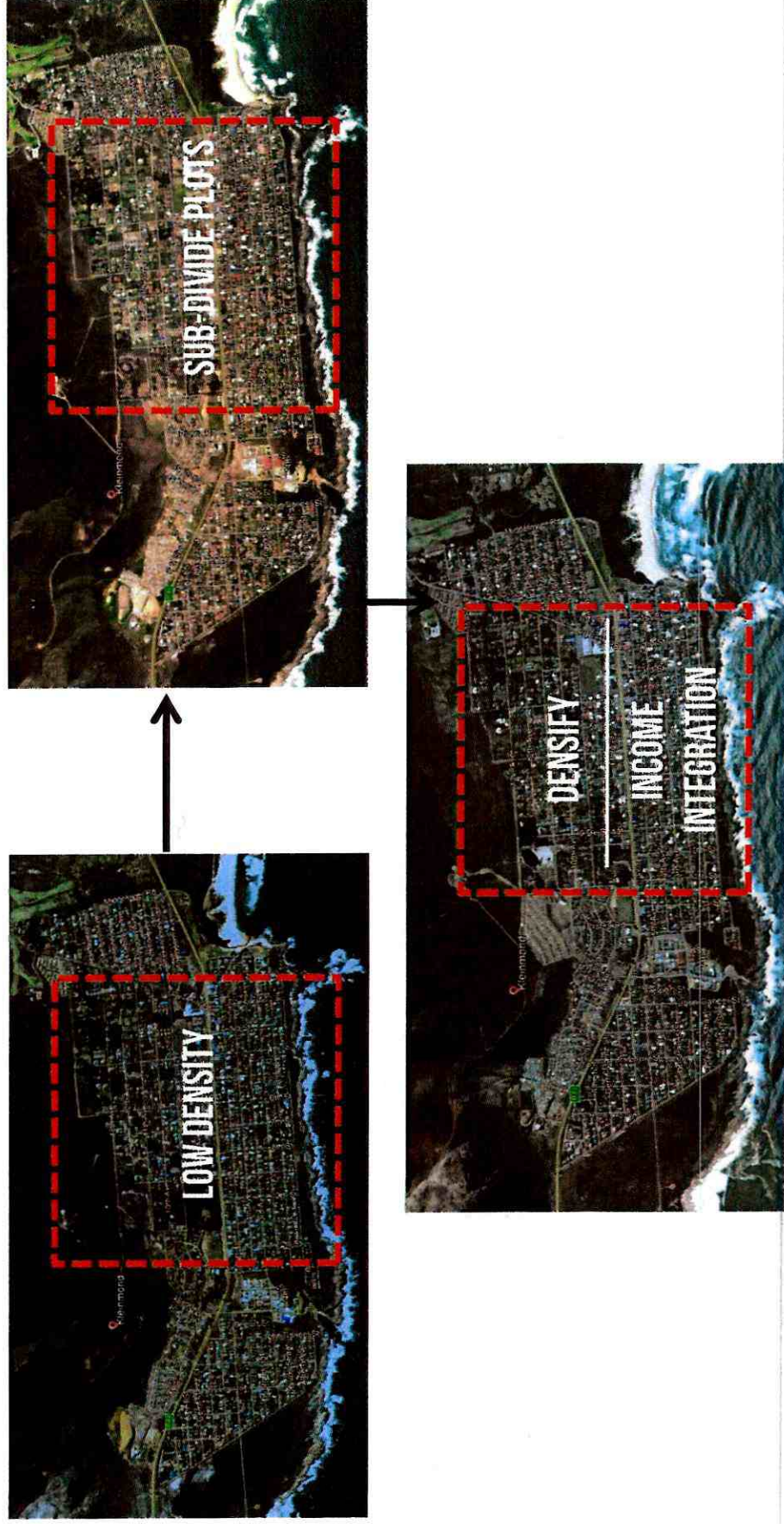


Vibrecrete fencing



10. Transition

Kleinmond has been slowly densifying over time, the majority of the densification is across the centre of the town within middle and high income neighbourhoods, especially to the north of the main road where residential plots were originally large to accommodate small holdings. In recent years as small-scale farming within the centre of Kleinmond declines, these plots have been sub-divided and sold to the private market, densifying the neighbourhood with more middle-high income families in some of the most well located parts of town. There is potential for this rapid densification to have an impact on income integration across the town, by bringing multiple typologies across the affordable housing spectrum to the centre of town.



3.1.1. Great Places

Kleinmond has a multitude of natural assets, which has been the main attraction to the town for residents and holiday makers. Mountains, freshwater rivers and pristine beaches are some of the most notable. The town lacks many great places within its built form. There are few attractions in this area with the exception of the recently developed new harbour area, which caters to tourists and middle-high income residents of the town.

Palmer River lagoon



Protected Nature



Kleinmond Lagoon



Coastal Walkway



Kleinmond Beach



New harbour



ANNEXURE C2
ENVIRONMENTAL DRAFT DUE DILIGENCE REPORT

ENVIRONMENTAL DUE DILIGENCE TO INFORM THE KLEINMOND HOUSING SITES AND OVERHILLS UPGRADES, KLEINMOND, WESTERN CAPE.

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Date: 28 September 2018

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1. ENVIRONMENTAL DUE DILIGENCE

This due diligence was undertaken to determine the applicability of the investigation into Kleinmond housing sites and Overhills upgrades in terms of the Environmental Impact Assessment Regulations (GN R. No. 983, GN R. No. 984 and GN R. No. 985 [4 Dec 2014, as Amended 07 April 2017]) under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), which replaced the 2010 Regulations (GN R No. 543, GN R No. 544, GN R No. 545 and GN R. No. 546) on the 8th of December 2014.

Kleinmond is currently experiencing a tremendous housing shortage which has resulted in increased pressure from the Kleinmond community. The Overstrand Municipality and Provincial Department of Human Settlements are in the process of investigating possible locations for further housing sites in order to increase the housing and related infrastructure supply in Kleinmond.

The following sites were identified during the investigation process and hence all the identified sites will be taken into account in this report. Please refer to Table 1 below for the property description of the identified areas.

Table 1 Property Description of the Identified Areas in Kleinmond

Identified Areas	Property Number	Location	Size
Area 1	Re/Erf 5462 & Erf 5453	Located to the West of the existing Overhills Informal Settlement, to the North of the R44 (Main Road), Kleinmond	6.860 Ha
Area 2	Re/Erf 5462	Located along the footslopes of the Palmiet mountain; to the West of the new Protea Dorp residential housing area.	1.401 Ha
Area 3	Erf 6862	Located approximately 80 metres North of Main Road.	0.435 Ha
Area 4	Erf 6936	Located directly North of the R44 (Main Road).	0.666 Ha
Area 5	Re/Erf 5462 & Erf 6090	Located directly North of the R44 (Main Road).	0.539 Ha
Area 6	Erf 6742	Located directly South of the R44 (Main Road).	1.291 Ha
Area 7	Erf 8640	Located to the South of the R44 (Main Road); in the Kleinmond Industrial Area.	0.557 Ha
Area 8	Erf 6186; 8636; 8637; 8638; and 8639	Located to the East of the Kleinmond Industrial Area.	0.843 Ha

Area 9	Re/Erf 5462 and Erf 6582	Existing Sport Field located to the North of the R44 (Main Road).	2.476 Ha
Area 10	Erf 8168	Property located to the North of R44 (Main Road).	2.788 Ha
Area 11	Erf 5772; 5773; 5774; 5775; 5776; 5777; 5779; and 5780.	Property located to the North of Area 10; North of the R44 (Main Road).	0.777 Ha
Area 12	Erf 4822; 8014; 8015; 8016; 8017; 8018; 8019; 8020; 8021; 8022; 8023; 8024; 8025; 8026; 8027; 8028; 8029; 8030; 8031; 8032; 8033; 8034; 8035; 8036; 8037; 8038; 8039 and 8040.	Property located to the North of Area 11; North of the R44 (Main Road).	1.782 Ha
Area 13	Re/Erf 4754	Property located to the North of Area 12; North of the R44 (Main Road).	4.447 Ha
Area 14	Re/Erf 5462	Property located along the footslopes of the Palmiet Mountain; located to the North of 13 th Avenue.	6.067 Ha
Area 15	Re/Erf 5462	Property located along the footslopes of the Palmiet Mountain; located to the West of 15 th Avenue.	2.899 Ha
Area 16	Portion 8 of Farm 563	Property located to the East of the Kleinmond golf course.	35.80 Ha
Area 17	Re/ Portion 10 of Farm 563	Property located to the East of the entrance to Kleinmond; North of the R44 (Main Road).	8.735 Ha
Area 18	Portion 12 of Farm 563	Property located along the East of Kleinmond; South of the R44 (Main Road).	16.815 Ha
Area 19	Re/Farm 562	Property located to West of Kleinmond; South of the R44 (Main Road).	31.152 Ha
Area 20	Servitude on Re/Erf 5462	Area refers to registered servitude in the existing Overhills area.	0.457 Ha

The aim of this Due Diligence is to assess the environmental constraints and viability of the identified sites in order for the housing and infrastructure backlog to be addressed in Kleinmond; as well as

assess the environmental law related, statutory processes required, in order to ensure lawful commencement of construction activities on the mentioned sites. This due diligence is a broad scaled overview of the proposed development site from a biophysical perspective.

1.1 Proposed Kleinmond Housing Due Diligence

The proposed developments and the subsequent possible need for assessments were screened by GNEC in terms of the following legislation:

- The Environmental Impact Assessment Regulations (GN R. No. 983, GN R. No. 984 and GN R. No. 985 [4 Dec 2014, as amended on 07 April 2017]) under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), which replaced the 2010 Regulations (GN R No. 543, GN R No. 544, GN R No. 545 and GN R. No. 546) on the 8th of December 20140.
- National Heritage Resources Act, 1999 (Act No. 25 of 1999);
- National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003);
- National Veld and Forest Fire Act, 101 (Act No. 101 of 1998);
- National Water Act, 1998 (Act No. 36 of 1998);
- Mountain Catchment Areas Act, 1970 (Act No. 63 of 1970); and the
- Protected species – Provincial Ordinances.

1.2 Important Definitions to consider

For this due diligence, it is important to understand some of the definitions (in terms of NEMA and other relevant legislation) in order to better understand the applicability of the legislation on this property development situation.

Expansion is defined by NEMA as follows:

"Expansion" means the modification, extension, alteration or upgrading of a facility, structure or infrastructure at which an activity takes place in such a manner that the capacity of the facility or the footprint of the activity is increased.

Development is defined by NEMA as follows:

"Development" means the building, erection, construction or establishment of a facility, structure or infrastructure, including associated earthworks or borrow pits, that is necessary for the undertaking of a listed or specified activity, including any associated post development monitoring, but excludes any modification, alteration or expansion of such a facility, structure or infrastructure, including associated earthworks or borrow pits, and excluding the redevelopment of the same facility in the same location, with the same capacity and footprint.

Development footprint is by NEMA as follows:

"development footprint" means any evidence of physical alteration as a result of the undertaking of any activity.

Agri-industrial is defined by NEMA as follows:

"Agri industrial" means an undertaking involving the beneficiation of agricultural produce.

Industrial complex is defined by NEMA as follows:

"Industrial complex" means an area used or zoned for industrial purposes, including bulk storage, manufacturing, processing or packaging purposes.

A watercourse is defined by NEMA as follows:

"Watercourse" means –

- (a) a river or spring;
- (b) a natural channel or depression in which water flows regularly or intermittently;
- (c) a wetland, lake or dam into which, or from which, water flows; and
- (d) any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse as defined in the National Water Act, 1998 (Act No. 36 of 1998) and a reference to a watercourse includes, where relevant, its bed and banks;

A "wetland" means land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.

Indigenous vegetation is defined by NEMA as follows:

"indigenous vegetation" refers to vegetation consisting of indigenous plant species occurring naturally in an area, regardless of the level of alien infestation and where the topsoil has not been lawfully disturbed during the preceding ten years.

1.3 Environmental Impact Assessment Process

It should be noted that the NEMA allows for two (2) different EIA processes. These processes are discussed below and the process flow for these assessments are indicated in Figure 1 and Figure 2 below.

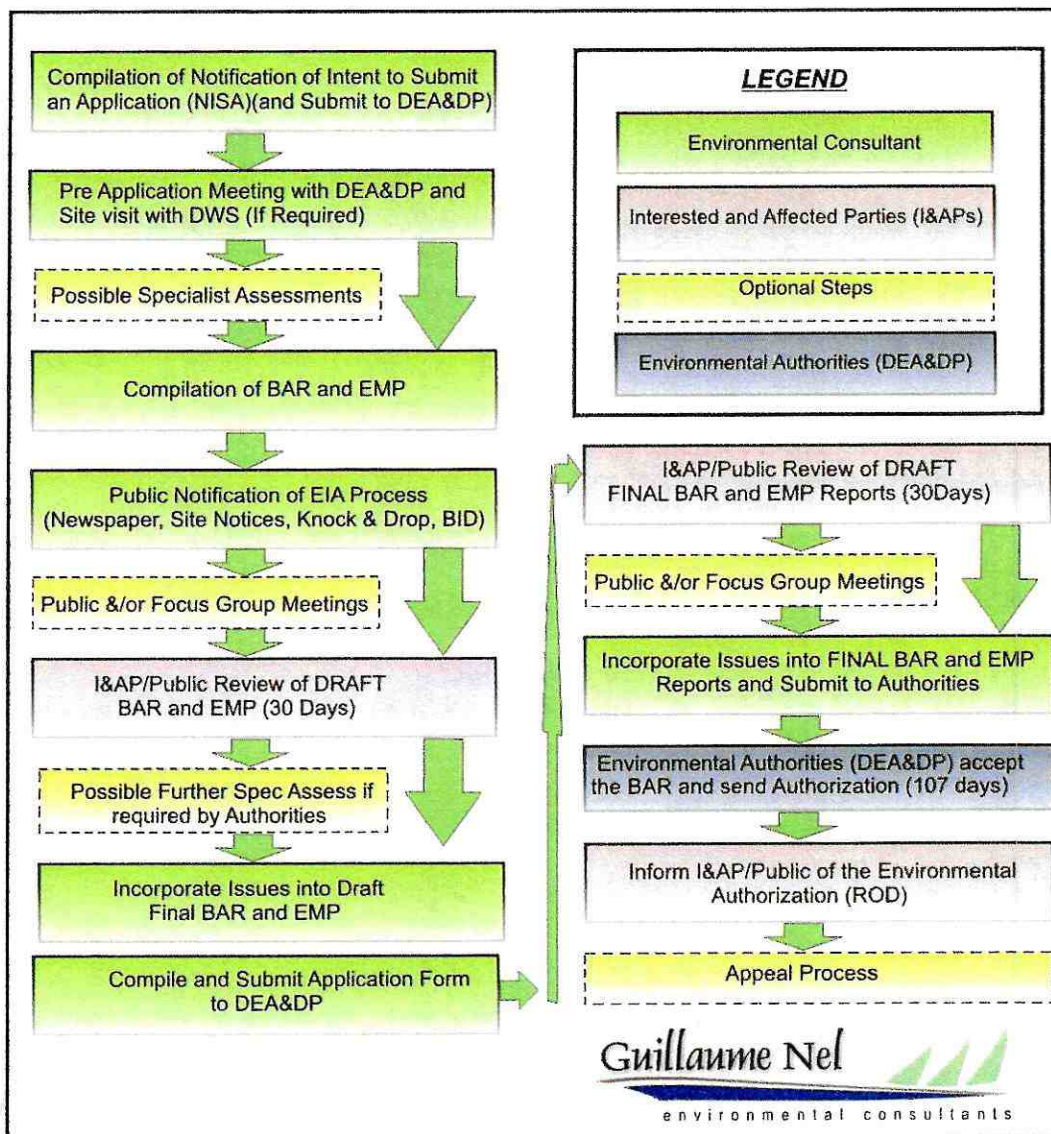


Figure 1 The Basic Assessment Process

This process will have to be followed if activities in terms of the Environmental Impact Assessment Regulations GN R. No. 983 and GN R. No. 985 under NEMA are triggered by a proposed development.

The time period for these assessments can be between 6 and 9 months (depending on specialist assessments, the availability of bulk services for the proposed development, possible public and/or December holidays during the process as well as possible delays due to review periods of the Reports by the authorities).

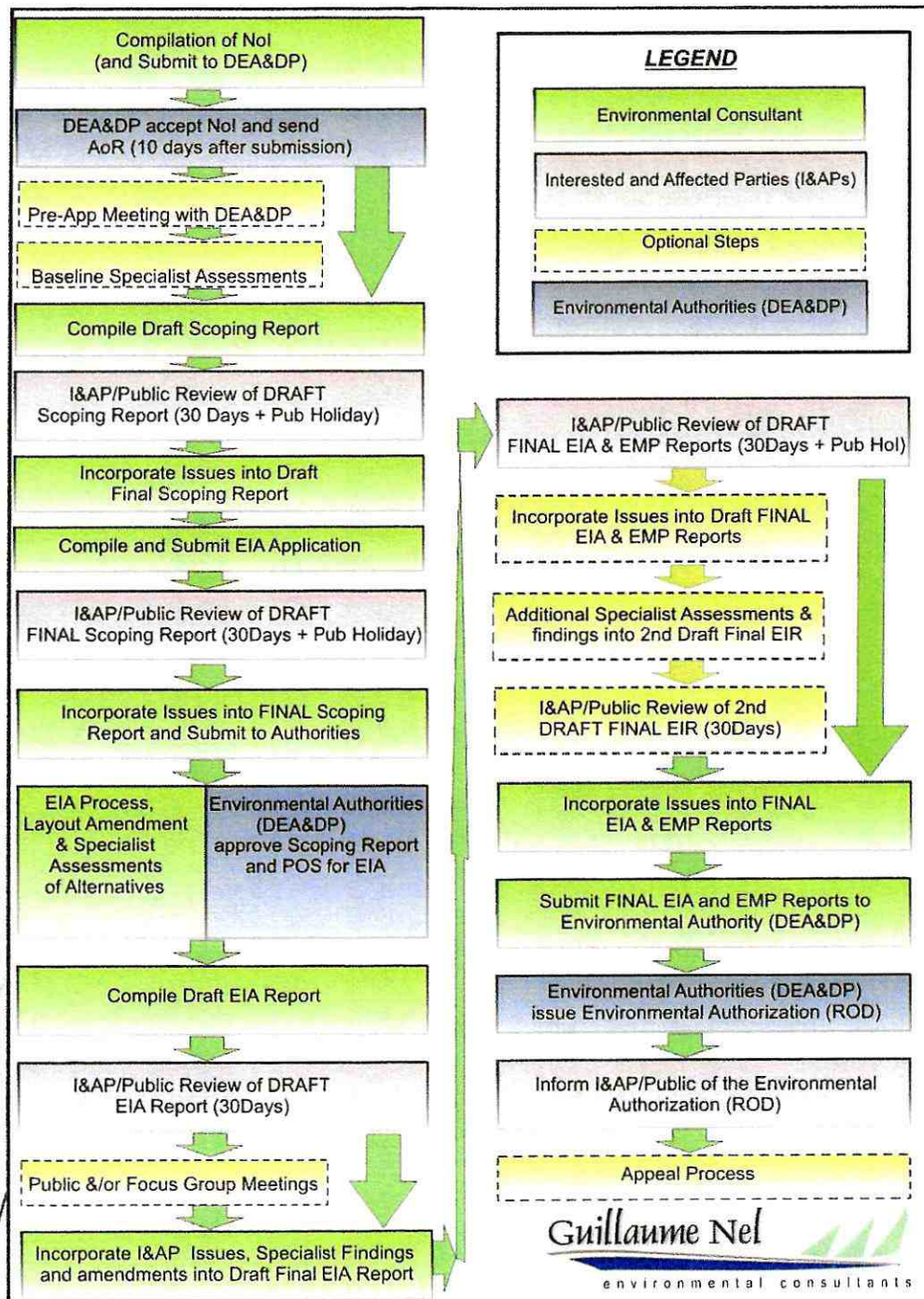


Figure 2 The Full EIA Process

This process will have to be followed should activities in terms of the Environmental Impact Assessment Regulations GN R. No. 984 under NEMA be triggered.

The time period for these assessments can be between 12 and 16 months (depending on specialist assessments, the availability of bulk services for the proposed development, possible public and/or December holidays during the process as well as possible delays due to review periods of the Reports by the authorities.

2. ASSESSMENT OF THE IDENTIFIED SITES

In this due diligence, projects where:

Assessments and authorizations is still required, will be highlighted in **red**;

Areas where no additional *authorizations* will be required, will be listed in **blue**;

Areas where additional authorizations may be required, subject to additional information, will be listed in **orange**.

The identified areas one and two are investigations into possibly expanding the current Overhills informal settlements; while the remaining alternatives are investigations into new development locations.

Initially, twenty land parcels have been identified by the project team as possible areas where development can take place. The twenty land parcels have been identified for different land use purposes; hence this due diligence assesses development in a general sense and does not specify specific land uses per identified land parcel.

It should be noted that the identified Area 20 refers to the current electrical servitude registered in the identified Area 1 land parcel. Hence, the assessment of Area 20 will be similar to the assessment of Area 1. Please refer to Section 2.1 to 2.7 below for the assessment of Areas 1 and 19.

Please refer to Figure 3 below for the twenty (20) land parcels as identified by the project team.

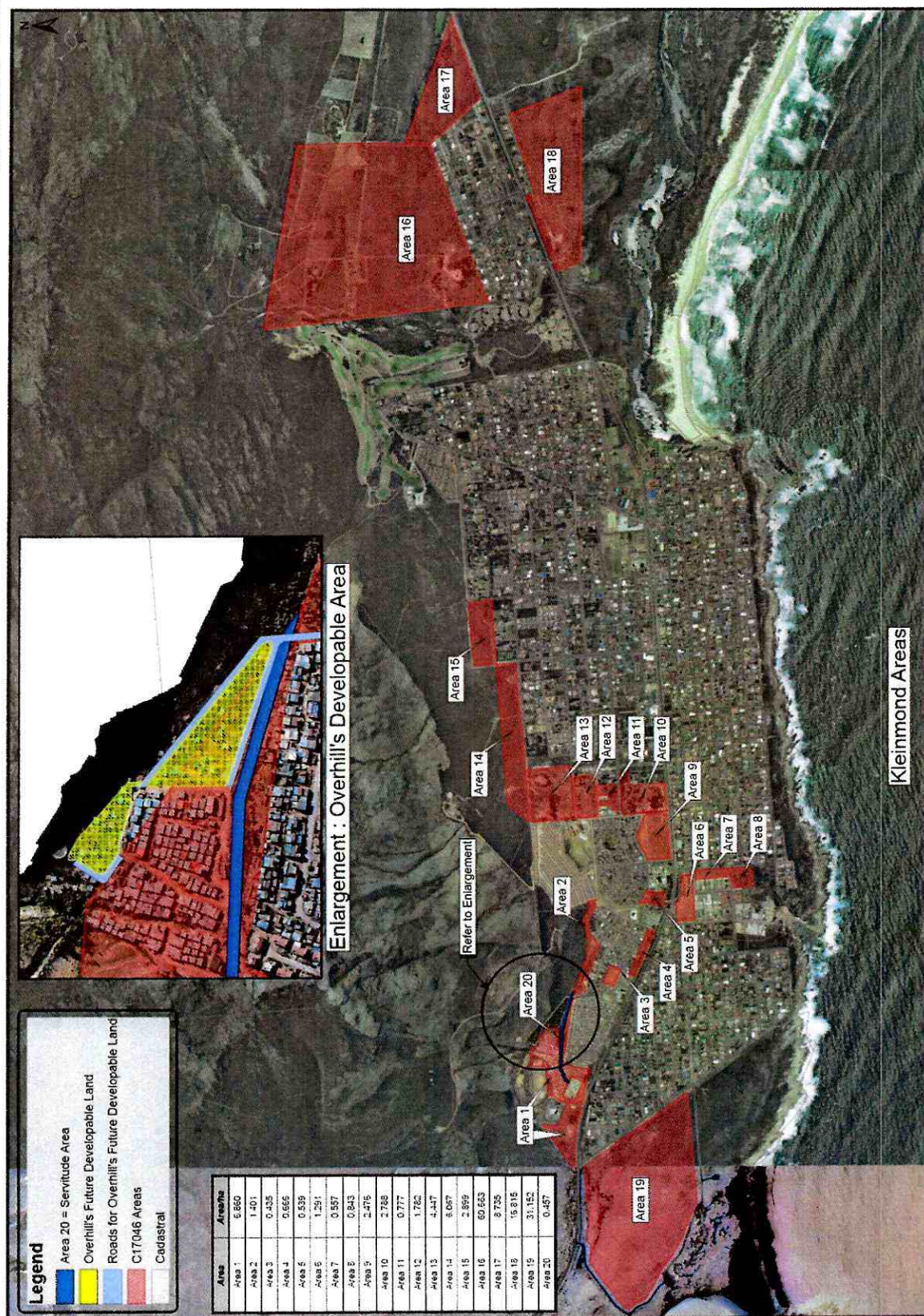


Figure 3 Identified Areas 1 to 20 proposed for future development, Kleinmond

2.1 Environmental Assessment of the Sites

2.1.1 Location

Kleinmond is a coastal town situated within the Overberg region of the Western Cape. Kleinmond is located approximately 110 kilometres from Cape Town, located in a south eastern direction. Hermanus is located approximately 35 kilometres to the East of Kleinmond; with Betty's Bay located roughly 11 kilometres to the West of Kleinmond. Kleinmond falls within the jurisdiction of the Overstrand Municipality.

Please refer to Figure 4 below for the Locality Map of Kleinmond.

2.1.2 Topography

Kleinmond is surrounded by the Palmiet Mountain Range to the North, and the Atlantic Ocean to the South. This has resulted in a natural slope across the town, from North (high point) to South (low point). Sections of Kleinmond located along the Northern outskirts of town are characterised by very steep slopes.

Please refer to Figure 5 below for the Topographical Map of Kleinmond.

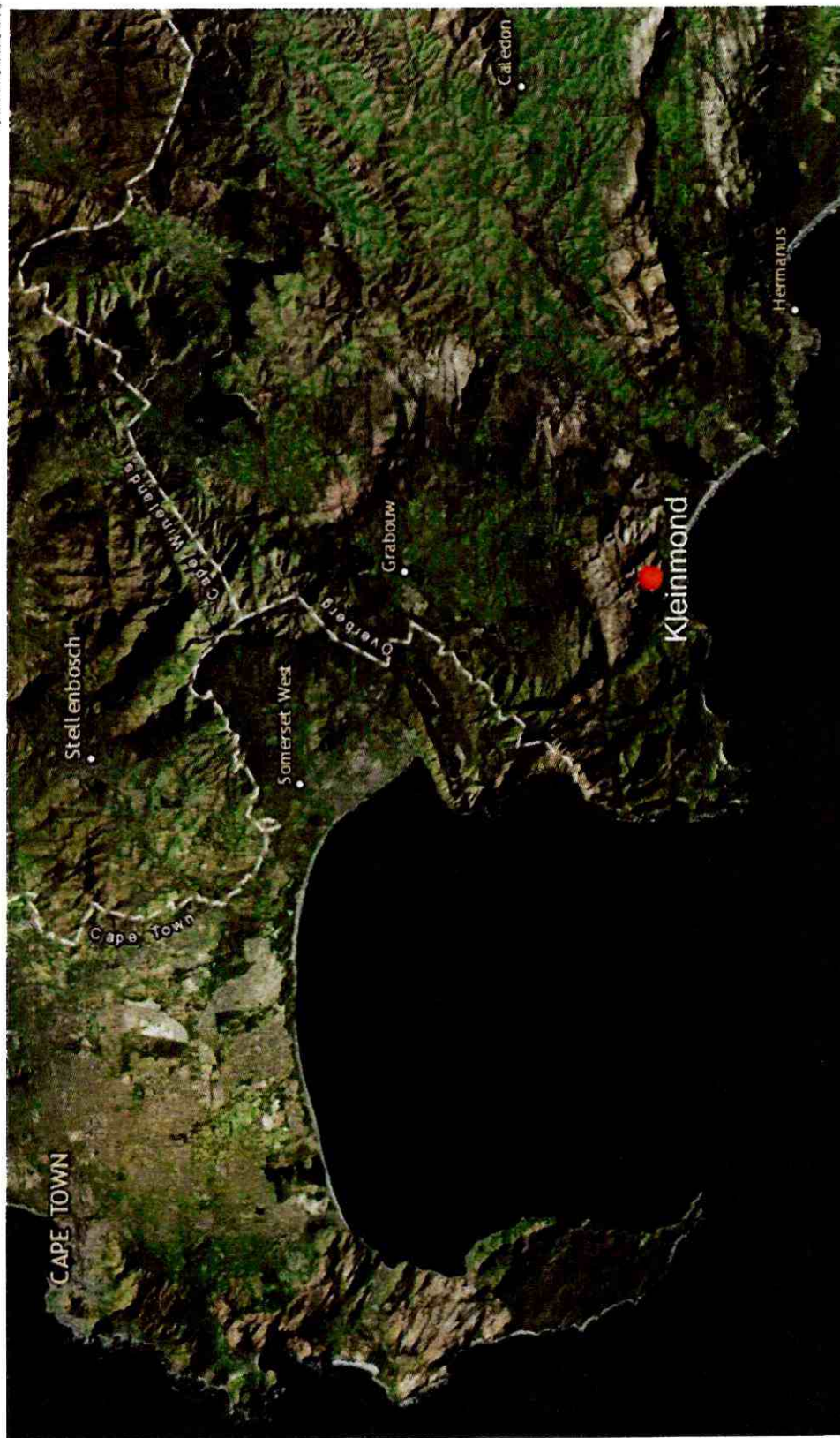
2.1.3 Underlying Geology

The soils along the northern reaches of Kleinmond, along the Palmiet Mountain Range, are characterised as the Ic85 land type. The soils are furthermore characterised by miscellaneous land classes being very rocky with little or no soils. Furthermore, the geology is quartzitic sandstone of the Peninsula Formation and of the Goudini and Skurweberg Formation, separated by shale of the Cedarberg Formation, Table Mountain Group (Cape Farm Mapper, 2016).

The vast majority of Kleinmond is characterised by the Gb4 land type, including soils with a diagnostic ferrihumic horizon, predominantly shallow (Houwhoek form). The geology is colluvial and alluvial sand (Cape Farm Mapper, 2016).

Lastly, a small portion to the West of Kleinmond is characterised by the Hb 27 land type. The soils are predominantly grey regic sands. The geology consist of recent coastal sand and dunes with slight occurrence along the coast of shale of the Bokkeveld Group and sandstone of the Peninsula Formation, Table Mountain Group (Cape Farm Mapper, 2016).

Please refer to Figure 6 below for the geology map of Kleinmond.




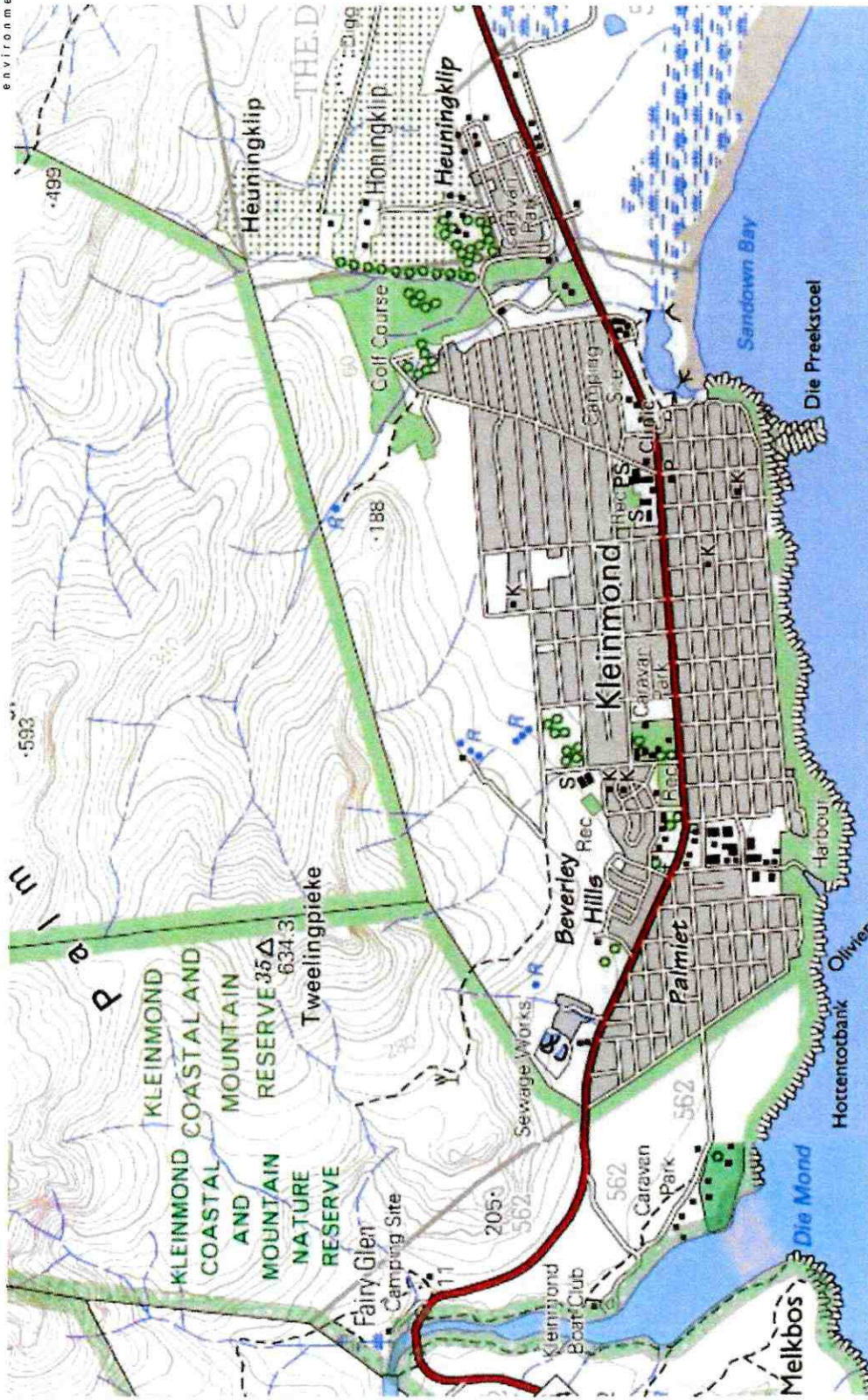
<p>Locality Map of Kleinmond, Western Cape</p>	<p>Source: Cape Farm Mapper</p>	<p>Gnillaume Nel environmental consultants Tel: (021) 870 1874 Fax: 086 6933 802 Cell: 072 1571 321</p>	

Figure 4 Locality Map of Kleinmond



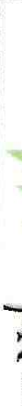

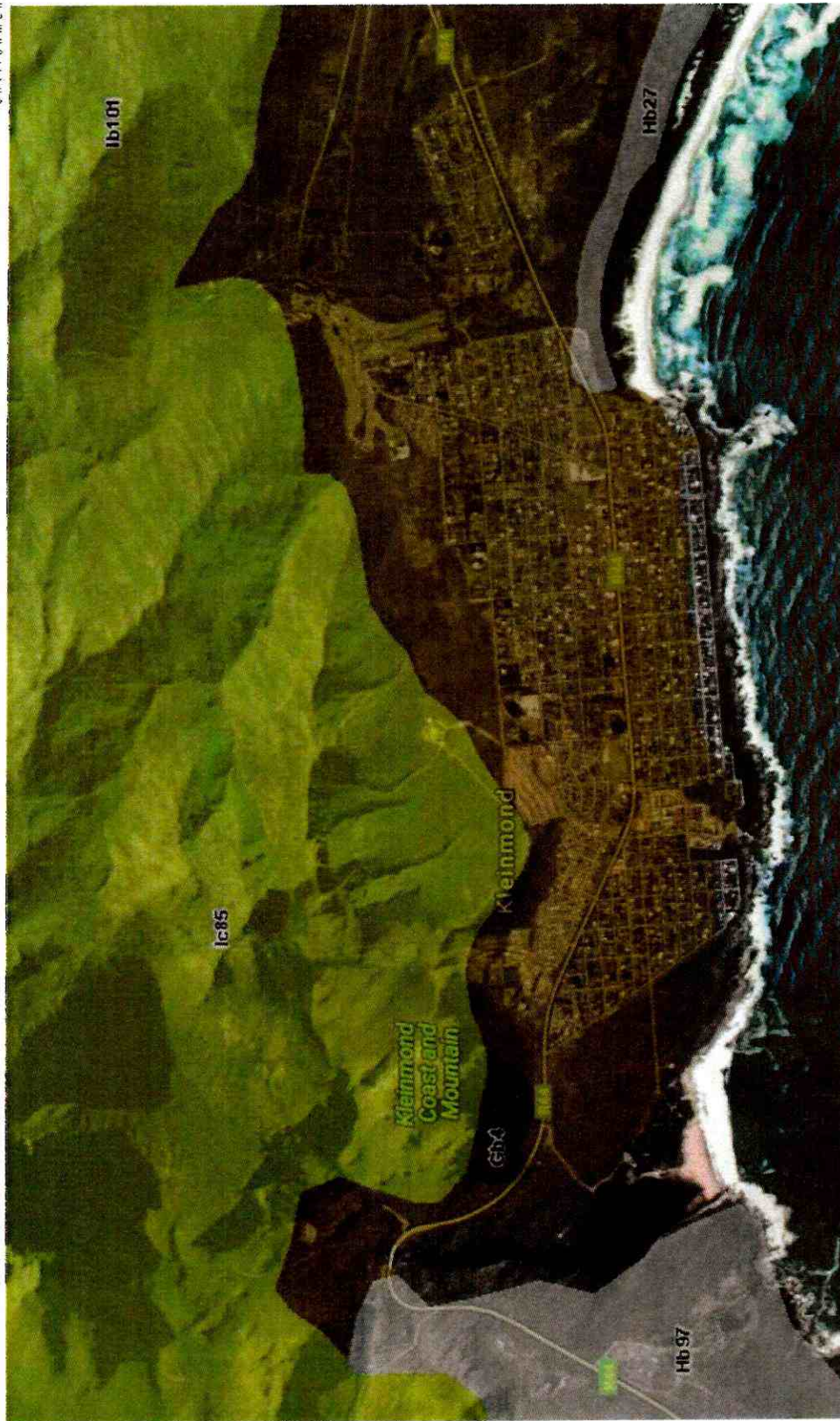
Topographical Map of Kleinmond, Western Cape		 Guillaume Nel environmental consultants		
Source: Cape Farm Mapper		Tel: (021) 870 1874	Fax: 086 6933 802	Cell: 072 1571 321

Figure 5 Topographical Map of Kleinmond





Soils & Geology (ENPAT) Map of Kleinmond, Western Cape	 Tel: (021) 870 1874 Fax: 086 6933 802 Cell: 072 1571 321	
Source: Cape Farm Mapper		

Figure 6 Soils & Geology (ENPAT) Map of Kleinmond

2.1.4 Conservation

The vegetation along the northern reaches of Kleinmond is characterised as Kogelberg Sandstone Fynbos (FFs11). The vegetation type is species rich and grows on high mountains with steep to gentle slopes, and undulating plains and hills of varied aspect. The conservation status of Kogelberg Sandstone Fynbos is Critically Endangered. Large sections of the vegetation type is conserved in the Hottentots Holland and Groenlandberg Nature Reserves and especially in the Kogelberg Biosphere Reserve (including the Kleinmond Coast and Mountain Reserve and the Kogelberg Nature Reserve) (Mucina and Rutherford, 2006).

The vast majority of Kleinmond is covered in the Hangklip Sand Fynbos (FFd6) vegetation type. The vegetation type predominantly grows on sand dunes and sandy bottomlands supporting moderately tall, dense ericoid shrubland. The conservation status of Hangklip Sand Fynbos is Vulnerable, with roughly 20 % conserved in the Table Mountain National Park and Kogelberg Nature Reserve. The vegetation type has been disturbed between Pringle Bay and Hermanus, due to, amongst other factors, the construction of sewerage farms, golf courses, and graveyards (Mucina & Rutherford, 2006).

A small band of Western Coastal Shale Band Vegetation (FFb2) covers the north western section of the Palmiet Mountain Range. The vegetation type is a narrow 80 – 200 meter linear feature, which is smooth and flat in profile compared to the surrounding areas. The band supports diverse renosterveld and fynbos shrubland. The conservation status of the vegetation type is Least Threatened and the conservation target of 30 % has been reached due to statutory and local authority reserves (Mucina and Rutherford, 2006).

The vegetation type that occurs along the western boundary of Kleinmond is characterised as Cape Lowland Freshwater Wetlands (AZf1). The vegetation occurs predominantly on flats and landscape depressions with extensive tall reeds of *Phragmites australis* and *Typha capensis*. The vegetation is found in temporarily or permanently flooded restioids, sedgeland and rush-beds as well as macrophytic vegetation embedded in permanent water bodies. The conservation target of the vegetation type is 24 %, with 14 % statutorily conserved in National Parks, including the Cape Peninsula and Agulhas National Parks (Mucina and Rutherford, 2006).

Overberg Dune Strandveld (FS7) vegetation type is also found along the western section of Kleinmond. The vegetation type is found on scattered patches from Rooiels to the Cape Infanta at the mouth of the Breede River. The conservation status of the vegetation type is Least Threatened with a conservation target of 36%. Roughly 30 % is statutorily conserved in the De Hoop, Walker Bay and De Mond Nature Reserves (Mucina and Rutherford, 2006).

Lastly, Cape Seashore Vegetation (AZd3) vegetation type is found along the western coast line of Kleinmond. The vegetation type predominantly occurs along beaches, coastal dunes, dune slacks and coastal cliffs of open grassy, herbaceous and also dwarf-shrubby vegetation. The conservation status of the vegetation type is Least Threatened with a conservation status of 20%. The vegetation type is statutorily conserved in the West Coast, Peninsula, Agulhas and various smaller National Parks (Mucina and Rutherford).

Please refer to Figure 7 below for the vegetation type map of Kleinmond.

2.1.4.1 Critical Biodiversity Area

Due to the sensitive nature of the vegetation surrounding Kleinmond, cognisance should be taken regarding the Critical Biodiversity Areas surrounding the town.

Please refer to Figure 8 below for the Critical Biodiversity Areas Map of Kleinmond.

2.1.4.2 Kogelberg Biosphere Reserve

Biosphere reserves can be described as “*areas of terrestrial and coastal ecosystem that are internationally recognised within the framework of the United Nations Education, Scientific and Cultural Organisation’s (UNESCO’s) Man and Biosphere programme*” (Kogelberg Biosphere Reserve, 2013). The aim of the Kogelberg Biosphere Reserve (KBR) is therefore to investigate more sustainable use of natural resources, such as sustainable fishing, plant harvesting, sewerage alternatives, and many more. The KBR covers an extensive area amounting to 100 000 Hectares. The KBR hosts the most complex biodiversity in the world, with 1 880 different plant species found in the KBR (Kogelberg Biosphere Reserve, 2017).

The entirety of Kleinmond is located within the Kogelberg Biosphere Reserve; furthermore Kogelberg Nature Reserve also borders Kleinmond and hence the boundary of the Kogelberg Nature Reserve should be taken into account.

Please refer to Figure 9 below for a map of the Kogelberg Biosphere Reserve.

2.1.4.3 Botanical Specialist Study

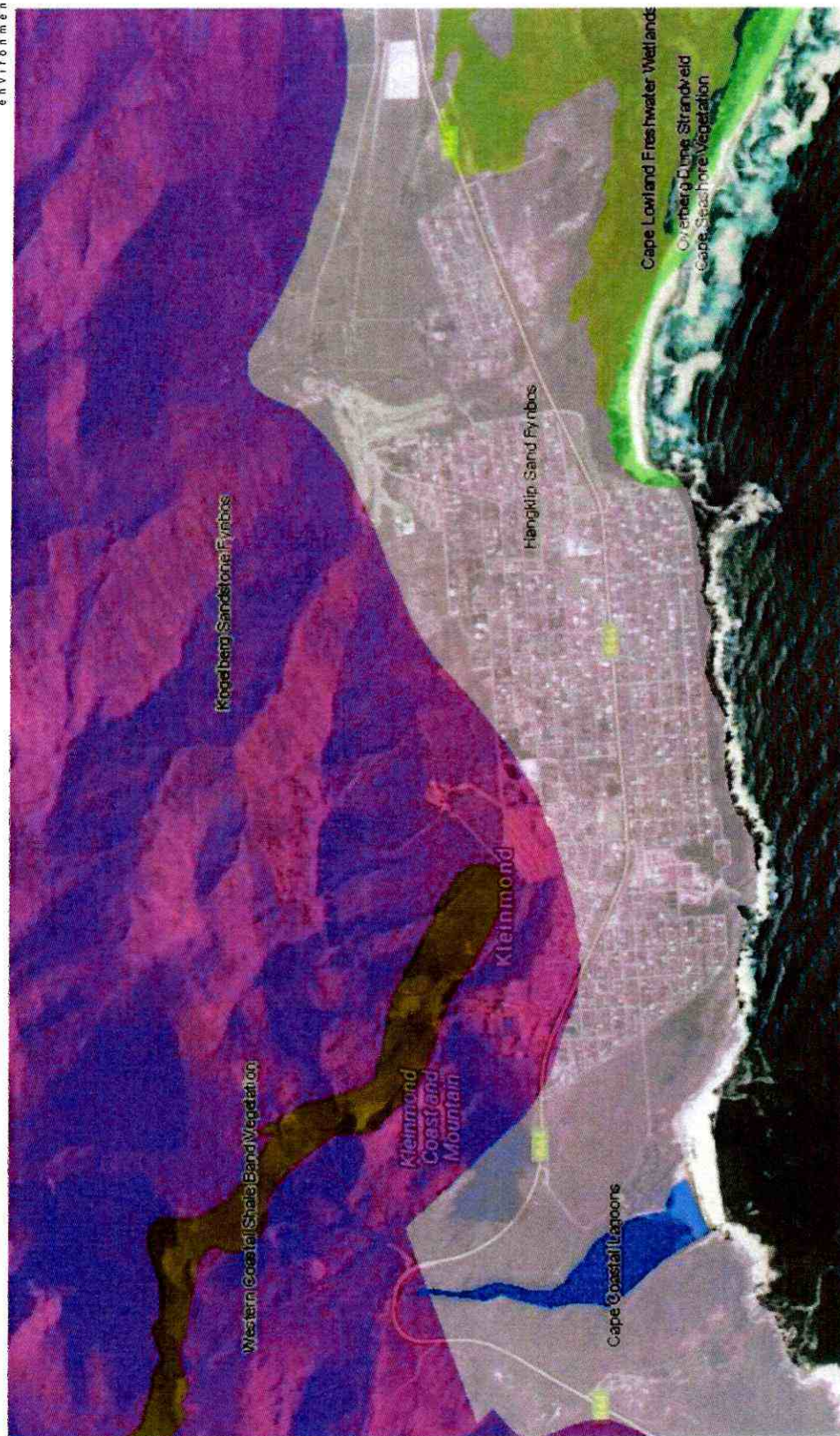
Bergwind Botanical Surveys & Tours (cc) were appointed by Guillaume Nel Environmental Consultants (GNEC) in order to conduct a botanical survey of the identified Areas 2, 14, 15, and 19 in Kleinmond. GNEC is still awaiting the formal botanical survey report; and the below summary is based on the response received from Dr McDonald both verbally and electronically (via e-mail).

Dr Dave McDonald, botanical specialist, conducted a site visit of the identified **Area 2**. He confirmed that the area supports the Kogelberg Sandstone Fynbos vegetation type. Dr McDonald noted rare species in the area, but also confirmed that the area has been subject to a lot of disturbance and invasion by Australian myrtle (*Leptospermum laevigatum*). It is Dr McDonald’s opinion that a limited amount of development can take place in this area, but not higher than the 70 meter above mean sea level contour.

Dr McDonald conducted an extensive site visit of **Areas 14 and 15**. He confirmed that the vegetation type present in Areas 14 and 15 are Kogelberg Sandstone Fynbos (Critically Endangered) and Hangklip Sandstone Fynbos (Endangered) and that a transition between the vegetation types exist. Transition zones (also referred to as ecotones) are areas where a high diversity of plant species are present and hence supports important ecological processes. Dr

McDonald noted that the vegetation at Areas 14 and 15 are very sensitive and of very high conservation value. Areas 14 and 15 are mapped as Critical Biodiversity Areas.

Lastly, Dr McDonald conducted a site visit of the identified **Area 19**. Dr McDonald confirmed that Area 19 supports undisturbed Hangklip Sand Fynbos vegetation type, with a wetland present across the property in a North-West to South-East direction. Dr McDonald indicated that Area 19, from an ecological point of view, is highly sensitive and not suitable for development.





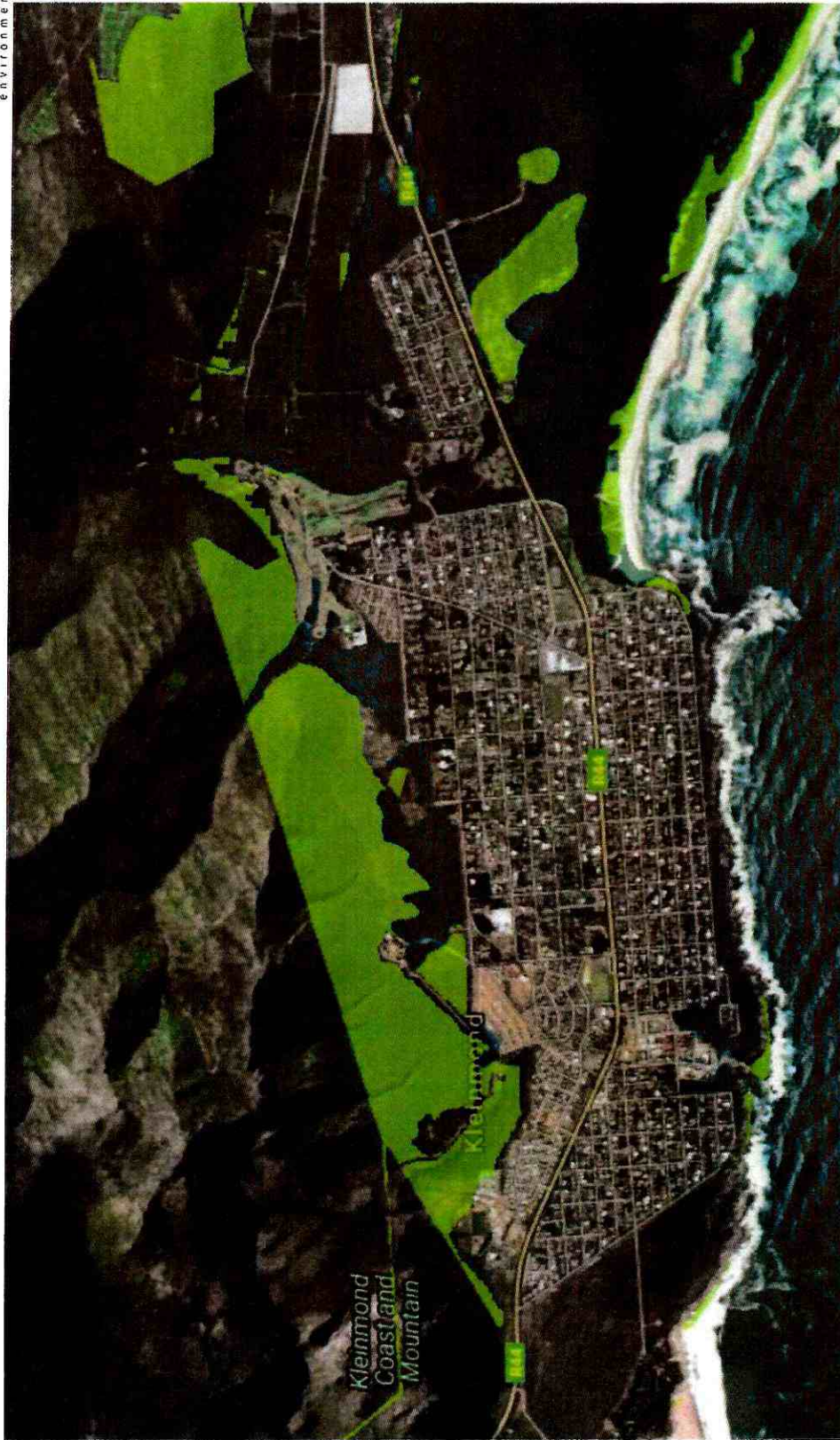
Vegetation Map of Kleinmond, Western		 Tel: (021) 870 1874 Fax: 086 6933 802 Cell: 072 1571 321	
Source: Cape Farm Mapper			

Figure 7 Vegetation Map of Kleinmond





Critical Biodiversity Areas Map of Kleinmond, Western Cape	<div> Guillaume Nel environmental consultants</div> <div>Tel: (021) 870 1874 Fax: 086 6933 802 Cell: 072 1571 321</div> <div></div>
Source: Cape Farm Mapper	

Figure 8 Critical Biodiversity Areas Map of Kleinmond

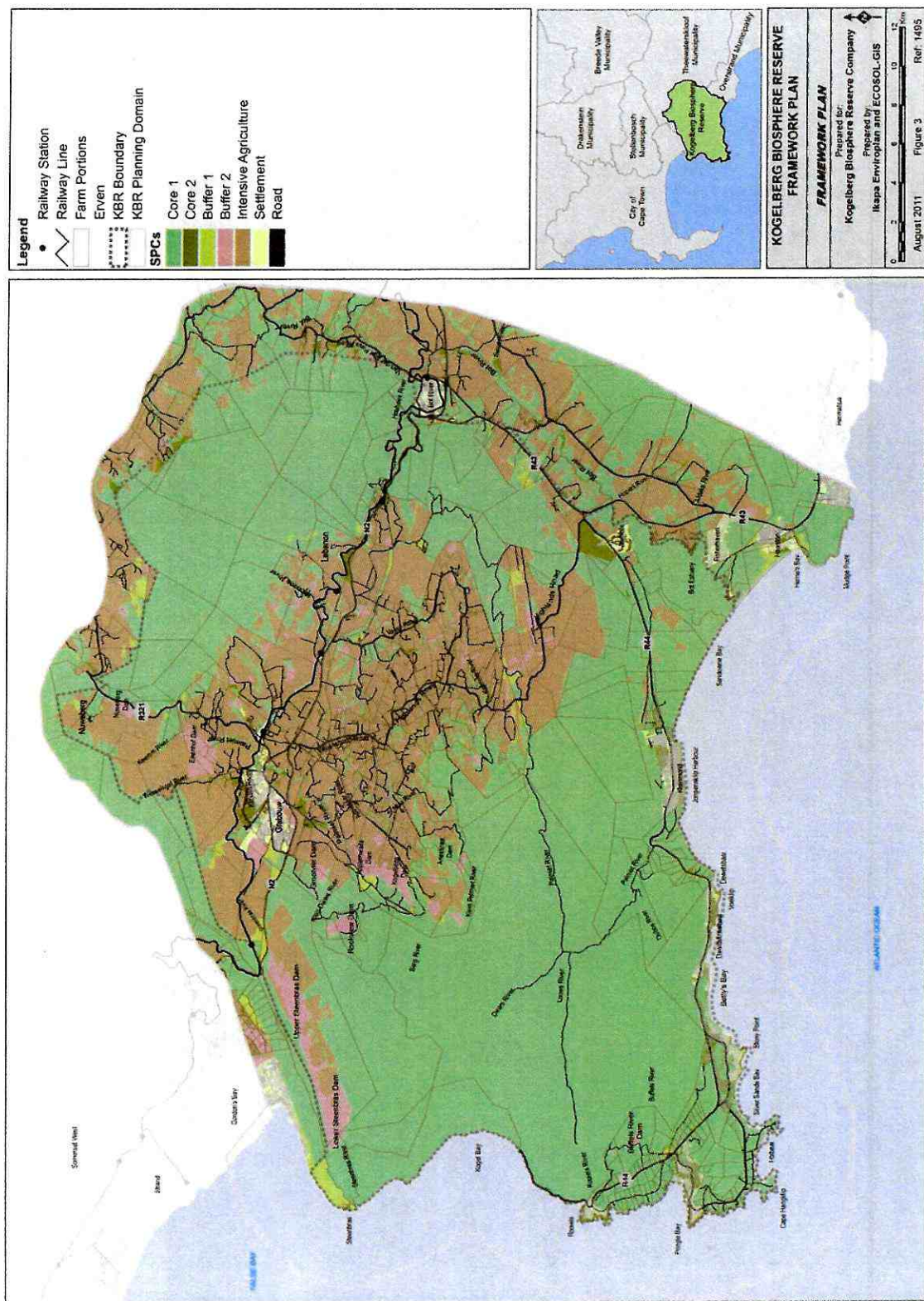


Figure 9 Map of Kogelberg Biosphere Reserve (KBR, 2011)

2.1.5 Freshwater Resources

Numerous water sources surround Kleinmond. Firstly, the Atlantic Ocean is the southern boundary of Kleinmond. Furthermore, the Palmiet River is located to the West of Kleinmond, and is categorised as a stream of order 2. Furthermore, numerous wetlands are scattered across Kleinmond and the constraints of these wetlands should be taken into account.

Please refer to Figure 12 below for the Freshwater Resources Map of Kleinmond.

2.1.5.1 Freshwater Specialist Study

As a result of the wetness regime of the Western corner of Area 1A and 19, Scientific Aquatic Services (SAS) were appointed by Guillaume Nel Environmental Consultants (GNEC) to conduct a freshwater constraints analysis for the identified Areas 1 and 19 in Kleinmond.

SAS confirmed that a depression wetland is located within the south western portion of **Area 1** with an extent of 0.38 hectares. It was furthermore noted that the wetland appears to be in a largely degraded state. The degraded state was ascribed to the edge effects associated with the waste disposal sorting facility and associated infrastructure located within the eastern portion of Area 1. Illegal dumping of building rubble and general waste was also noted within the northern portion of Area 1A. An excavated channel was furthermore identified along the northern portion of Area 1A. SAS noted that *"the site could be further investigated for development provided cognisance is taken of the depression wetland and that this system [wetland] be included within any potential development plans along with suitable mitigation measures"*.

Please refer to Figure 10 below for the constraints and opportunities map of the identified Area 1A. Development of Area 1 may be considered with the appropriate mitigation measures such as constructing a cut-off drain where overland flow can be redirected to the adjacent area.

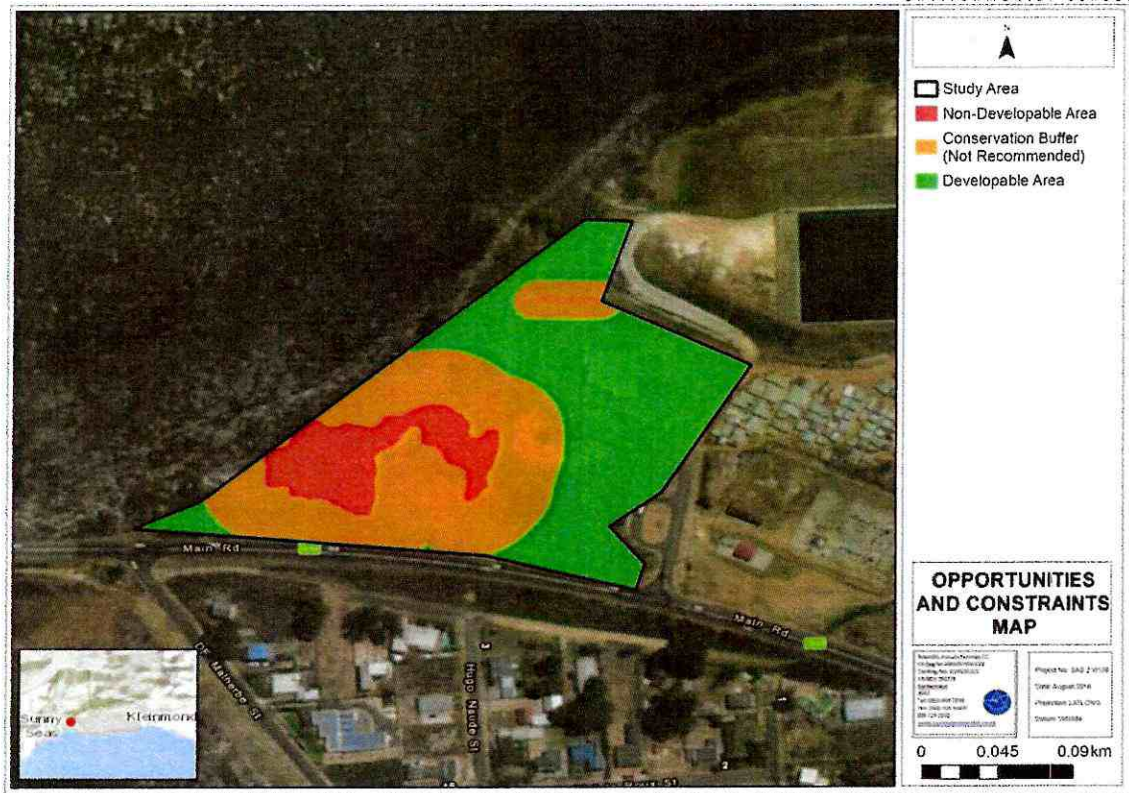


Figure 10 Freshwater Map indicating the sensitive areas of Area 1A located West of the Waste Transfer Station, Kleinmond (Marais, 2018)

SAS also conducted the freshwater constraints analysis for the identified **Area 19**, amounting to approximately 33 hectares. SAS confirmed the presence of a large humic-based Unchannelled Valley Bottom Wetland to an extent of 30 hectares. The wetland is defined as a peat wetland; and it appears that the wetland is largely in a Natural State. Peatlands are known for their ability to mitigate global climatic impacts and hence there are international initiatives to preserve remaining peatlands. The wetland was delineated by SAS and should be regarded as a No-go area for future development. SAS noted that "[d]ue to the protection status of [Area 19], which falls within the Kleinmond Coast and Mountain Nature Reserve as well as the largely natural state of the wetland within the site, it is the opinion of the freshwater specialist that the site is considered to be fatally flawed from a freshwater resource management and conservation due to the high ecological importance and sensitivity as well as the ecoservice provision of the Unchannelled Valley Bottom Peat Wetland".

Please refer to Figure 11 below for the constraints and opportunities map of the identified Area 19. The green areas may be considered as developable areas in the future. However, the red sections should be avoided as far as practically possible.

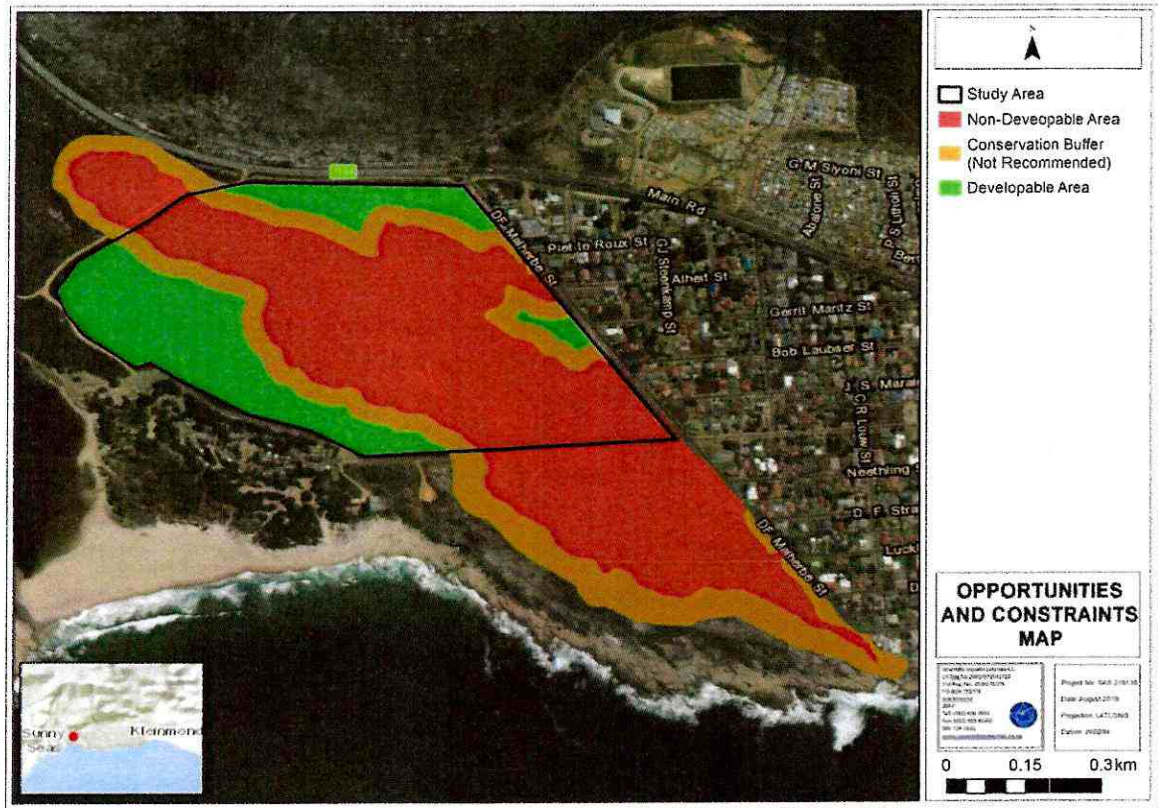


Figure 11 Freshwater Map indicating the sensitive areas of Area 19, Kleinmond (Marais, 2018)

2.1.5.2 Previous Authorisation – Heuningklip Farm

During 2007, application was made for a residential development on Portion 8 of Farm 563, Heuningklip, the identified Area 16, located along the Eastern boundary of Kleinmond. Due to the wetness of the property, a Freshwater Impact Assessment was conducted as part of the application. The results of the Freshwater Impact Assessment was the following:

“Much of Heuningklip Farm can be classified as “wetland”, as defined in the Water Act (No. 36 of 1998). The quality of wetland habitat varies across the site, depending on the extent of soil and vegetation modification that has occurred” (Snaddon, 2007: 4).

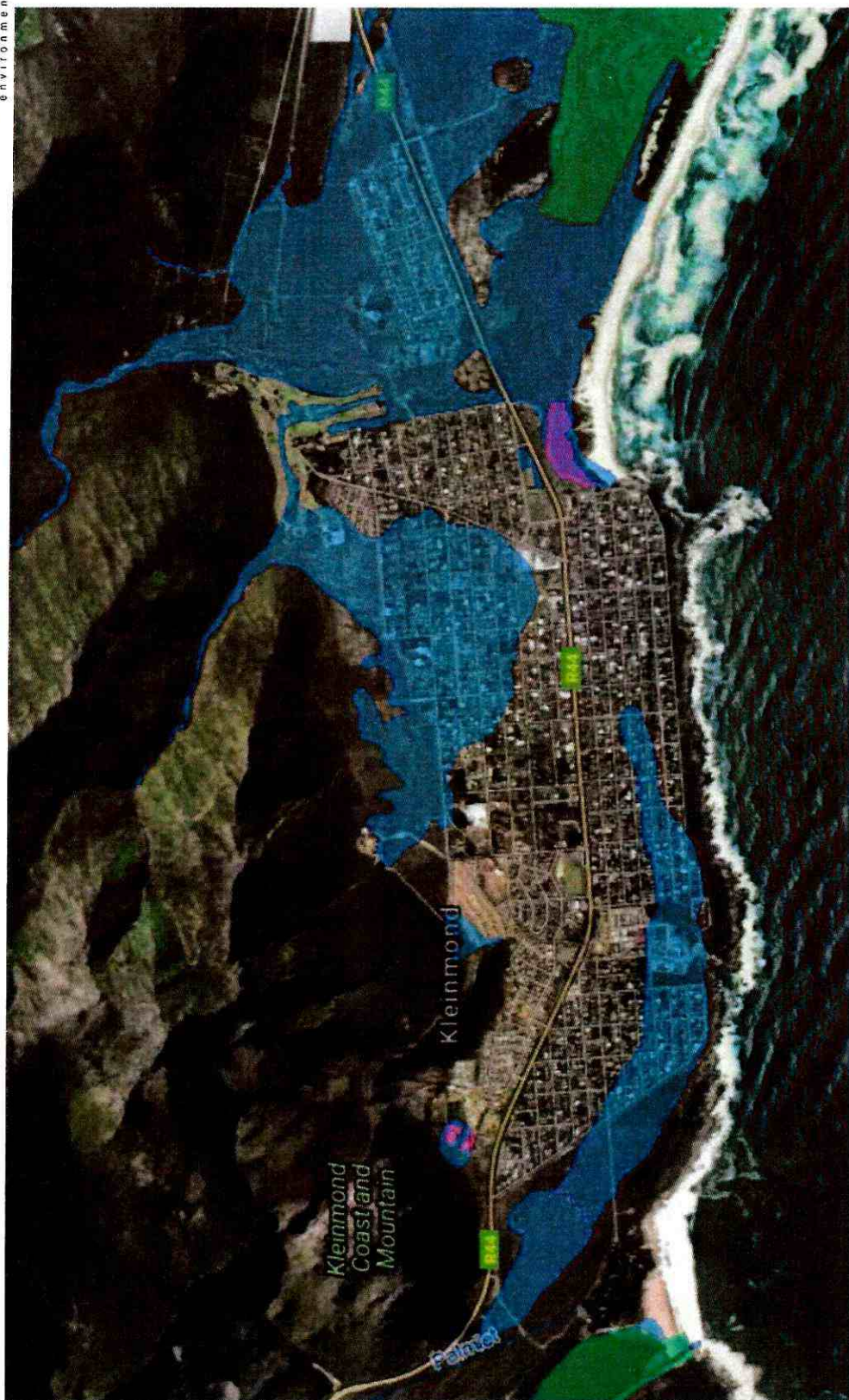
“Two rivers / streams were included in [the] assessment. A small, probably season stream enters the study area at its north-eastern corner, from where it flows in an easterly direction before crossing the site in a southerly direction” (Snaddon, 2007: 4).

“A perennial, typical foothill river forms the western boundary of the study area” (Snaddon, 2007: 4).

The conclusion of the Freshwater Impact Assessment conducted by Snaddon (2007) were as follows:

*"In terms of conservation importance, the perennial river is considered to be of **high conservation importance**. Similarly, the seasonal stream is also accorded **high conservation importance**. Both of these riverine systems must be conserved, and a suitable buffer, recommended to be at least 30 m for the river, and 20 m for the stream (less where it becomes a furrow) from the top of both banks, should be established and conserved. These areas are not suitable for development. Both the river and the stream are important in terms of the provision of ecological corridors for the movement of flora and fauna up and down the slopes of the Palmietberge, and even down into the coastal areas. The preservation of these systems and their riparian buffer zoned will conserve and possibly improve this function. The wetlands located on the property vary in terms of conservation importance, influenced largely by the extent of soil modification. The type of wetland characteristic of the study area – acid soils, ecologically sensitive, generally seasonal wetlands dominated by plants such as *Berzelia* spp. – is of great regional importance, due to the uniqueness of such habitats, and also their threatened status. Several such wetlands were found on site – wetlands 1, 5 and 6 – and were thus found to be of **high conservation importance**. These areas are not suitable for development, and the wetlands should be protected by buffers of at least 30m".*

Portion 8 of Farm Heuningklip No. 563, amount to 35.8 Ha in size. In 2007, the total developable area for the residential development that was proposed in 2007 amounted to 13.9 Ha. Therefore, the environmental constraints of Area 16, especially pertaining to freshwater resources, should be taken into account.



Water Resources Map of Kleinmond	<div data-bbox="1191 592 1277 984"> </div> <div data-bbox="1293 449 1332 1154"> Tel: (021) 870 1874 Fax: 086 6933 802 Cell: 072 1571 321 </div>	
Source: Cape Farm Mapper	<div data-bbox="1191 287 1332 449"> </div>	

Figure 12 Freshwater Resources Map of Kleinmond

2.1.6 Agricultural Potential

The identified areas are mostly unsuitable for agricultural purposes due to firstly, some of the sites being environmentally sensitive, and secondly due to a number of the sites being located within the urban edge of Kleinmond. Therefore, Areas 16, 17 and 18 are the only sites which are used for agricultural purposes. However, Area 16 is located within the urban edge of Kleinmond and is therefore earmarked for development. Furthermore, Area 17 is currently utilised as a grazing area for game; while Area 18 is not currently being utilised for agricultural purposes.

It is therefore clear that development of Areas 16, 17 and 18 will not result in a significant loss of agricultural resources; and will not have an impact on the agricultural potential of the area.

2.1.7 Environmental Conditions Conclusion

As discussed in Section 2 of this report, Kleinmond is surrounded by various sensitive ecosystems pertaining to critical biodiversity areas, as well as freshwater resources. These environmental constraints should be taken into account for all future residential (and related) developments in Kleinmond. It is GNEC's opinion that the results of the botanical and freshwater specialist surveys be adhered to. The boundaries of the Kogelberg Nature Reserve and Kleinmond Coast and Mountain Reserve should also be taken into account.

2.2 Environmental Impact Assessment Regulations

The Table below indicates whether or not development on the identified Areas 1 to 19 will have to undergo an EIA Process. Should an EIA be required, the possible listed activities will be discussed in the tables below.

2.2.1 National Environmental Management Act, 1998 (Act No. 107 of 1998)

The listed activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) were reviewed in order to determine whether the proposed operations will trigger any activities listed in terms of GN R. No. 983 (Listing Notice 1); GN R. No. 984 (Listing Notice 2); and GN R. No. 985 (Listing Notice 3); of December 2014 (as amended on 07 April 2017).

The type of development on the property will influence the listed activities that will be triggered in terms of the National Environmental Management Act, 1998 (Act 107 of 1998). The below listed activities are therefore a collection of possible activities that may be triggered through development of the sites.

Table 2 Possible Listed Activities according to GN R. No. 983 (Listing Notice 1)

Act	Description	Relevance to this development	Possibility of Trigger and Possible Process
9	<p>The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water –</p> <p>(i) with an internal diameter of 0.36 metres or more; or</p> <p>(ii) with a peak throughput of 120 litres per second or more;</p> <p>excluding where-</p> <p>(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or</p> <p>(b) where such development will occur within an urban area.</p>	<p>Any development of infrastructure for the transportation of water and storm water (according to the specified thresholds) located within the identified Areas 1 to 19 will however not trigger this listed activity should the property be located within the urban area of Kleinmond.</p> <p>This activity may therefore be triggered by the development of the areas located outside of the urban area, being the following areas:</p> <ul style="list-style-type: none"> • 14 • 17 • 18 • 19 	Possible Trigger
10	<p>The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes –</p> <p>(i) with an internal diameter of 0.36 metres or more; or</p> <p>(ii) with a peak throughput of 120 litres per second or more;</p> <p>excluding where-</p> <p>(a) such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or</p> <p>(b) where such development will occur within an urban area.</p>	<p>Any development of infrastructure for the transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes (according to the specified thresholds) located within the identified Areas 1 to 20 will not trigger this listed activity should the property be located within the urban area of Kleinmond.</p> <p>This activity may therefore be triggered by the development of the areas located outside of the urban area, being the following areas:</p> <ul style="list-style-type: none"> • 14 • 17 • 18 • 19 	Possible Trigger

12	<p>The development of-</p> <p>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or</p> <p>(ii) infrastructure or structures with a physical footprint of 100 square metres or more;</p> <p>where such development occurs –</p> <p>(a) within a watercourse;</p> <p>(b) in front of a development setback; or</p> <p>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; -</p> <p>excluding –</p> <p>(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbor;</p> <p>(bb) where such development activities are related to the development of a port or harbor, in which case activity 26 in Listing Notice 2 of 2014 applies;</p>	<p>Any development of infrastructure with a physical footprint of 100 square metres or more, located within a watercourse, or within 32 metres of a watercourse, taking place within the identified Areas 1 to 20 will not trigger this listed activity should the property be located within the urban area of Kleinmond.</p> <p>This activity may therefore be triggered by the development of the areas located outside of the urban area, being the following areas:</p> <ul style="list-style-type: none"> • 14 • 17 	<p>Possible Trigger – Area 14</p> <p>Triggered – Area 17, 18 and 19</p>
	<p>(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</p> <p>(dd) where such development occurs within an urban area;</p> <p>(ee) where such development occurs within existing roads, road reserves or railway line reserves; or</p> <p>(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.</p>	<ul style="list-style-type: none"> • 18 • 19 	

19	<p>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse –</p> <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving –</p> <ul style="list-style-type: none"> (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 of this Notice, in which case that activity applies; (d) occurs within existing ports or harbours that will not increase the development footprint; or (e) where such development is related to the development of a port or harbor, in which case activity 26 in Listing Notice 2 of 2014 applies. 	<p>The presence of wetlands and overland flow across the identified areas, results in this activity being triggered. Hence, a Basic Assessment application process should be followed in order for development, regardless of the type of the development, to lawfully commence on the following sites:</p> <ul style="list-style-type: none"> • 1 • 2 • 8 • 13 • 14 • 15 • 16 • 17 • 18 • 19 	Triggered
27	<p>The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –</p> <ul style="list-style-type: none"> (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan. 	<p>The presence of natural vegetation surrounding Kleinmond, results in this activity being triggered. Hence, a Basic Assessment application process should be followed in order for development, regardless of the type of the development, to lawfully commence on the following sites:</p> <ul style="list-style-type: none"> • 1 • 2 • 14 • 15 • 17 • 18 • 19 	Triggered

45	<p>The expansion of infrastructure for the bulk transportation of water or storm water where the existing infrastructure –</p> <ul style="list-style-type: none"> (i) has an internal diameter of 0.36 metres or more; or (ii) has a peak throughput of 120 litres per second or more; and (a) where the facility or infrastructure is expanded by more than 1 000 metres in length; or (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more; <p>excluding where such expansion –</p> <ul style="list-style-type: none"> (aa) relates to transportation of water or storm water within a road reserve or railway line reserve; or (bb) will occur within an urban area. 	<p>Any expansion of infrastructure for the bulk transportation of water and storm water (according to the specified thresholds) located within the identified Areas 1 to 19 will not trigger this listed activity should the property be located within the urban area of Kleinmond.</p> <p>This activity may therefore be triggered by the development of the areas located outside of the urban area, being the following areas:</p> <ul style="list-style-type: none"> • 14 • 17 • 18 • 19 	Possible Trigger
46	<p>The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes where the existing infrastructure –</p> <ul style="list-style-type: none"> (i) has an internal diameter of 0.36 metres or more; or (ii) has a peak throughput of 120 litres per second or more; and (a) where the facility or infrastructure is expanded by more than 1 000 metres in length; or (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more; <p>excluding where such expansion –</p> <ul style="list-style-type: none"> (aa) relates to the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes within a road reserve or railway line reserve; or (bb) will occur within an urban area. 	<p>Any expansion of infrastructure for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes (according to the specified thresholds) located within the identified Areas 1 to 19 will not trigger this listed activity should the property be located within the urban area of Kleinmond.</p> <p>This activity may therefore be triggered by the development of the areas located outside of the urban area, being the following areas:</p> <ul style="list-style-type: none"> • 14 • 17 • 18 • 19 	Possible Trigger

Table 3 Possible Listed Activities according to GN R. No. 984 (Listing Notice 2)

Act	Description	Relevance to this development	Possibility of Trigger and Possible Process
15	<p>The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for –</p> <ul style="list-style-type: none"> (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan. 	<p>This activity will be triggered should indigenous vegetation of an area of 20 hectares or more be cleared. Area 19 amounts to a total of 31.152 Ha. Therefore, a full EIA process will have to be followed should indigenous vegetation exceeding 20 hectares in extent be removed from Area 19.</p>	Possible Trigger

Table 4 Possible Listed Activities according to GN R. No. 985 (Listing Notice 3)

Act	Description	Relevance to this development	Possibility of Trigger and Possible Process
12	<p>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes in accordance with a maintenance management plan.</p> <p>i. Western Cape</p> <ul style="list-style-type: none"> i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans; iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister. 	<p>The sensitivity of Kleinmond's biophysical environment has been noted. Critical Biodiversity Areas (CBA's) surround the town on all sides. Therefore development of the following sites may trigger this activity:</p> <ul style="list-style-type: none"> • 1 • 2 • 14 • 15 • 17 • 18 • 19 	Possible Trigger

14	<p>The development of –</p> <p>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or</p> <p>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</p> <p>where such development occurs –</p> <p>(a) within a watercourse;</p> <p>(b) in front of a development setback; or</p> <p>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</p> <p>i. Western Cape</p> <p>i. Outside urban areas:</p> <p>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</p> <p>(bb) National Protected Area Expansion Strategy Focus areas;</p> <p>(cc) World Heritage Sites;</p> <p>(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(ee) Sites or areas listed in terms of an international convention;</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(gg) Core areas in biosphere reserves; or</p> <p>(hh) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined.</p>	<p>Any development of infrastructure with a physical footprint of 10 square metres or more, located within a watercourse, or within 32 metres of a watercourse, taking place within the urban area of Kleinmond will not trigger this activity. However, development of the following sites may trigger this activity:</p> <ul style="list-style-type: none"> • 14 • 17 • 18 • 19 	Possible Trigger
15	<p>The transformation of land bigger than 1 000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010.</p> <p>f. Western Cape</p> <p>i. Outside urban areas; or</p> <p>ii. Inside urban areas:</p> <p>(aa) Areas zoned for conservation use or equivalent zoning, on or after 02 August 2010;</p> <p>(bb) A protected area identified in terms of NEMPAA, excluding conservancies; or</p> <p>(cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act as adopted by the competent authority.</p>	<p>Kleinmond is known for the nature conservation areas surrounding town. Therefore, development of area 14 (Special Zone) and area 19 (Open Space Zone 1: Nature Reserve) located outside of the urban area will trigger this activity.</p>	Triggered

2.2.1.1 EIA Regulations Conclusion (2014 EIA Regulations)

It is GNEC's professional opinion that development of the following identified areas will result in listed activities being triggered in terms of Listing Notice 1 (GN Reg. No. 983) and Listing Notice 3 (GN Reg. No. 985) which will therefore require a Basic Assessment Process to be followed. The sites include **Areas 1; 2; 8; 14; 15; 16; 17; and 18**. Furthermore, the development of **Area 19** may trigger activity 15 in terms of Listing Notice 2 (GN Reg. No. 984); in which case a full EIA process will have to be followed. However, should the development of Area 19 not result in more than 20 hectares of indigenous vegetation to be removed, development of Area 19 will trigger activities in terms of Listing Notice 1 (GN Reg. No. 983) and Listing Notice 3 (GN Reg. No. 985) which will therefore require a Basic Assessment Process to be followed. Lastly, development of the following areas may possibly trigger activities in terms of Listing Notice 1 or 3 based on the proposed development, as well as the interpretation of the Department of Environmental Affairs and Development Planning (DEA&DP). It is therefore recommended that an Applicability Checklist be submitted to DEA&DP to determine whether development of **Areas 4; 5 and 13** will trigger any listed activities.

A Basic Assessment will take approximately 12 months to complete, should the necessary consent from the Heritage Western Cape (HWC), the Department of Water and Sanitation (DWS) and the Overstrand Municipality be obtained. Furthermore, a Full EIA process will take approximately 16 months to complete, should the necessary consent from the abovementioned State Departments be obtained.

2.2 National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003)

The purpose of this act is to provide for the protection and conservation of ecologically viable areas representative of South Africa's Biological diversity and its natural landscapes and seascapes; for the establishment of a national register of all national, provincial and local protected areas; for the management of those areas in accordance with the national norms and standards; for intergovernmental co-operation and public consultation in matters concerning protected areas.

According to the NEMPAA, 2003, the system of protected areas in South Africa consist of the following kinds of protected areas:

- "9 (a) special nature reserves, nature reserves (including wilderness areas) and protected environments;*
b) world heritage sites;
d) specially protected forest areas, forest nature reserves and forest wilderness areas declared in terms of the National Forests Act, 1998 (Act No. 84 of 1998); and
e) mountain catchment areas declared in terms of the Mountain Catchment Areas Act, 1970 (Act No. 63 of 1970)".

It should be noted that the Kleinmond Coast and Mountain Nature Reserve; the Hottentots-Holland Mountain Catchment Area; and the Kogelberg Nature Reserve borders Kleinmond to the West; North-West and North respectively. The abovementioned natural areas are registered in

terms of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) as protected areas.

The identified Area 19 is located within the Kleinmond Coast and Mountain Nature Reserve. Hence, the section of the property proposed for development should be de-proclaimed as a nature reserve in terms of the NEMPAA, 2003. The de-proclamation process is stipulated in the NEMPAA as follows:

"24 (1) A declaration under section 23(1) may only be withdrawn –

- a) in the case of a declaration by the Minister, by resolution of the National Assembly;*
- b) in the case of a declaration by an MEC, by resolution of the legislature of the relevant province; or*
- c) in terms of subsection (2).*

(2) If the Minister or MEC, or the other party to an agreement, withdraws from an agreement referred to in section 23(3), the Minister or MEC must withdraw the notice in terms of which the land in question was declared a nature reserve or part of an existing nature reserve".

Please refer to Figure 13 below for the boundaries of the nature protected surrounding Kleinmond.



Kleinmond Protected Areas i.t.o. NEMPAA, 2003 (Act 57 of 2003)	<div data-bbox="1176 461 1266 990"> <p>Guillaume Nel environmental consultants</p> </div> <div data-bbox="1266 461 1313 1153"> <p>Tel: (021) 870 1874 Fax: 086 6933 802 Cell: 072 1571 321</p> </div>	
Source: Department of Environmental Affairs		

Figure 13 Kleinmond Protected Areas in terms of the NEMPAA, 2003 (Act No. 57 of 2003)

2.3 National Veld and Forest Fire Act, 1998 (Act No. 101 of 1998)

The purpose of this act is to combat veld and forest fires throughout the republic of South Africa.

Special focus on Sections:

- Formation of Fire protection associations
- Duties of fire protection associations
- Fire Danger Ratings
- Duty to prepare and maintain fire breaks
- Requirements of fire breaks
- Actions to fight Fire

No activity is triggered by the proposed development.

2.4 National Water Act, 1998 (Act No. 36 of 1998)

The National Water Act guides the management of water in South Africa as a common resource. The Act aims to regulate the use of water and activities, which may impact on water resources through the categorization of 'listed water uses' encompassing water extraction, flow attenuation within catchments as well as the potential contamination of water resources, where DWS is the administering body in this regard. The aim is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account amongst other factors:

- (a) Meeting the basic needs of present and future generations;
- (b) Promoting equitable access to water;
- (c) Facilitating social and economic development;
- (f) Providing for the growing demand of water use;
- (g) Protecting aquatic and associated ecosystems and their biological diversity;
- (h) Reducing and preventing the pollution and degradation of water resources;
- (j) Promoting dam safety; and
- (k) Managing floods and droughts.

Due to the presence of freshwater resources at numerous identified areas, application will have to be made to the Department of Water and Sanitation in terms of Section 21 c and i of the National Water Act (Act No. 36 of 1998) for the following identified areas:

- Area 1;
- Area 8;
- Area 14;
- Area 15;
- Area 16;
- Area 17;
- Area 18; and
- Area 19

Please refer to Table 5 below for a description of the Water Uses for which application will have to be made for a Water Use Authorisation in terms of the National Water Act, 1998 (Act No. 36 of 1998)

Table 5 Description of Water Uses for which application will be made for a General Authorisation in terms of the National Water Act (Act 36 of 1998)

	<i>Description of Water Use</i>
Section 21 (c)	Impeding or diverting the flow of water in a watercourse;
Section 21 (i)	Altering the bed, banks, course or characteristics of a watercourse.

Additionally, development of the following areas may result in a Water Use Authorisation to be required in terms of the National Water Act, 1998 (Act No. 36 of 1998). These include **areas 2; 5 and 13**. It is however unclear at this stage whether a Water Use Authorisation is required for the specified areas due to the interpretation of the NWA by the Department of Water and Sanitation (DWS) varying from time to time. It is therefore recommended that the DWS be consulted regarding whether a Water Use Authorisation is required for the development of areas 2; 5 and 13.

2.5 Mountain Catchment Areas Act, 1970 (Act No. 63 of 1970)

The purpose of the Mountain Catchment Areas Act is to provide for the conservation, use, management and control of land situated in mountain catchment areas, and to provide for matters incidental thereto.

No activity is triggered by the proposed development.

2.6 Protected species – Provincial Ordinances

Provincial ordinances were developed to protect particular plant species within specific provinces. The protection of these species is enforced through permitting requirements associated with provincial lists of protected species. Permits are administered by the Provincial Departments of Environmental Affairs.

No activity is triggered by the proposed development.

2.7 National Heritage Resources Act, 1999 (Act No. 25 of 1999)

The National Heritage Resources Act legislates the necessity for cultural and heritage impact assessment in areas earmarked for development, which exceed 0.5 ha. The Act makes provision for the potential destruction to existing sites, pending the archaeologist's recommendations through permitting procedures. Permits are administered by the South African Heritage Resources Agency (SAHRA).

In terms of Section 38 (1) of the NHRA (1999), the following activities may be triggered by the development.

Table 6: Listed Activities according to the NHRA

CATEGORY OF DEVELOPMENT (Section 38 (1))	Triggered
1. Construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier over 300m in length	Possible
2. Construction of a bridge or similar structure exceeding 50 m in length	No
3. Any development or activity that will change the character of a site–	
a) exceeding 5 000 m ² in extent	Yes
b) involving three or more existing erven or subdivisions thereof	No

c) involving three or more erven or divisions thereof which have been consolidated within the past five years	No
4. Rezoning of a site exceeding 10 000 m ²	No

Any development on the property exceeding 5 000 m² will require an application to be submitted to Heritage Western Cape in terms of Section 38 of the NHRA. Furthermore, the possible construction of linear infrastructure over 300 metres in length may also be triggered, and will be included in the application should it be triggered. It is possible that HWC may request that a Heritage Impact Assessment; as well as a Visual Impact Assessment be conducted. This will be determined after the submission of the NID to HWC.

Development of the following sites will require an NID to be submitted to HWC due to the size of the site exceeding 5 000 m²:



- Area 1;
- Area 2;
- Area 4;
- Area 5;
- Area 6;
- Area 7;
- Area 8;
- Area 9;
- Area 10;
- Area 11;
- Area 12;
- Area 13;
- Area 14;
- Area 15;
- Area 16;
- Area 17;
- Area 18; and
- Area 19.



Furthermore, should the development of Area 3 result in the construction of linear infrastructure with a length exceeding 300 metres; then a NID application should also be submitted to HWC before development of area 3 commences.



3. Summary of Identified Area




The results of this Due Diligence are summarised in Table 7 below. The aim of the summary is to list whether development of the respective sites will result in an application process to be followed in terms of the National Environmental Management Act, 1998; the National Water Act, 1998; and the National Heritage Resources Act, 1999.

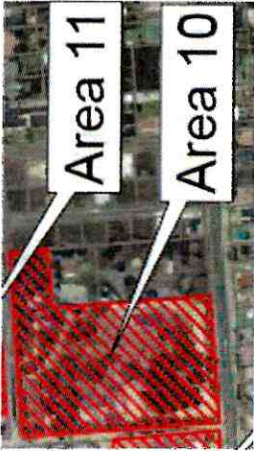
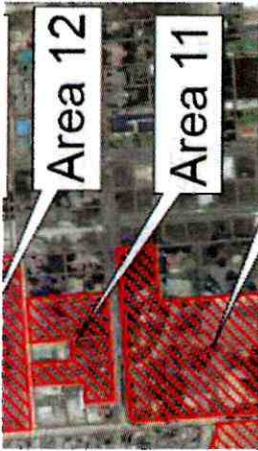

Table 7 Summary of Identified Areas


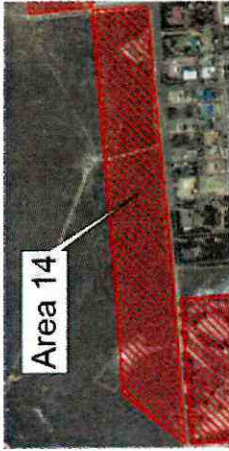
Identified Area	Graphic Representation	NEMA, 1998	NWA, 1998	NHRA, 1999
1		Basic Assessment Required	Due to the presence of freshwater sources on site, a Water Use Authorisation should be obtained before construction may commence on site.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .
2		Basic Assessment Required	Due to the presence of freshwater sources in close proximity to the site, the DWS should be consulted in order to determine whether a Water Use Authorisation should be obtained.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .




3		No Environmental Authorisation required.	No Water Use Authorisation required.	A NID should be submitted to HWC if development of Area 3 results in the construction of linear infrastructure exceeding 300 metres in length.
4		Development of Area 4 may trigger an EIA application process to be followed due to the possible presence of the sensitive Hangklip Sand Fynbos vegetation type. It is recommended that an Applicability Checklist be submitted to DEA&DP to determine the need for a Basic Assessment process to be followed.	No Water Use Authorisation required.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m².



5		<p>Development of Area 4 may trigger an EIA application process to be followed due to the possible presence of the sensitive Hangklip Sand Fynbos vegetation type.</p> <p>It is recommended that an Applicability Checklist be submitted to DEA&DP to determine the need for a Basic Assessment process to be followed.</p>	<p>Due to the presence of freshwater sources in close proximity to the site, the DWS should be consulted in order to determine whether a Water Use Authorisation should be obtained.</p>	<p>NID to be submitted to HWC, due to the size of the site exceeding 5000 m².</p>
6		<p>No Environmental Authorisation required.</p>	<p>No Water Use Authorisation required.</p>	<p>NID to be submitted to HWC, due to the size of the site exceeding 5000 m².</p>

7		No Environmental Authorisation required.	No Water Use Authorisation required.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .
8		Basic Assessment Required	Due to the presence of freshwater sources on site, a Water Use Authorisation should be obtained before construction may commence on site.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .
9		No Environmental Authorisation required.	No Water Use Authorisation required.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .

10		No Environmental Authorisation required.	No Water Use Authorisation required.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .
11		No Environmental Authorisation required.	No Water Use Authorisation required.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .
12		No Environmental Authorisation required.	No Water Use Authorisation required.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .

13		<p>Development of Area 13 may trigger an EIA application process to be followed, due to the mapping of the wetland along the northern reaches of the property.</p> <p>It is recommended that an Applicability Checklist be submitted to DEA&DP to determine the need for a Basic Assessment process to be followed.</p>	<p>Due to the presence of freshwater sources in close proximity to the site, the DWS should be consulted in order to determine whether a Water Use Authorisation should be obtained.</p>	<p>NID to be submitted to HWC, due to the size of the site exceeding 5000 m².</p>
14		<p>Basic Assessment Required</p>	<p>Due to the presence of freshwater sources on site, a Water Use Authorisation should be obtained before construction may commence on site.</p> <p>The wetness regime was confirmed by Dr Dave McDonald with the presence of wetland related vegetation species.</p>	<p>NID to be submitted to HWC, due to the size of the site exceeding 5000 m².</p>

15		Basic Assessment Required	Due to the presence of freshwater sources on site, a Water Use Authorisation should be obtained before construction may commence on site. The wetness regime was confirmed by Dr Dave McDonald with the presence of wetland related vegetation species.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .
16		Basic Assessment Required	Due to the presence of freshwater sources on site, a Water Use Authorisation should be obtained before construction may commence on site.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .
17		Basic Assessment Required	Due to the presence of freshwater sources on site, a Water Use Authorisation should be obtained before construction may commence on site.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .

18		Basic Assessment Required	Due to the presence of freshwater sources on site, a Water Use Authorisation should be obtained before construction may commence on site.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .
19		Basic Assessment or Full EIA process required depending on the area to be developed.	Due to the presence of freshwater sources on site, a Water Use Authorisation should be obtained before construction may commence on site.	NID to be submitted to HWC, due to the size of the site exceeding 5000 m ² .

4. Conclusion and Recommendations

Kleinmond is known for its natural attributes; with large portions of the town being earmarked for nature conservation purposes. Furthermore, Kleinmond is located within the Kogelberg Biosphere Reserve (KBR) which is classified as a UNESCO World Heritage Site. Despite the sensitive natural environment, Kleinmond has been subject to growth with an increased number of people permanently residing in town. The local infrastructure has not been able to successfully accommodate the growing number of residents and as a result investigations were made into sites where potential future developments can take place.

Guillaume Nel Environmental Consultants (GNEC) have been appointed in order to conduct a due diligence investigation into the biophysical constraints of the identified sites for future development in Kleinmond.

It is anticipated that the development of the following sites (regardless of the type of development) will result in an Environmental Impact Assessment (EIA) (Basic Assessment) process to be followed in terms of the EIA Regulations. These sites include identified areas **1; 2; 8; 14; 15; 16; 17; 18 and 19**. It should however be noted that development of Area 19 may trigger a Full EIA process to be followed; should the development result in more than 20 hectares of indigenous vegetation to be cleared. Additionally, it is recommended that an Applicability Checklist be submitted to the DEA&DP in order to determine whether a Basic Assessment process should be followed for the development of identified areas **4; 5; and 13**.

Application should also be made to the Department of Water and Sanitation (DWS) in terms of the National Water Act (Act 36 of 1998) for a Water Use Authorisation before the development of the identified areas **1; 8; 14; 15; 16; 17; 18 and 19** commences. Furthermore, due to the presence of freshwater sources in close proximity to the sites, the DWS should be consulted in order to determine whether a Water Use Authorisation should be obtained for the identified areas **2; 5; and 13**.

In addition to the above, an application in terms of Section 38 of the National Heritage Resources Act will also be triggered by the development of the sites should the development be larger than 5 000 m² in size; the site be rezoned (exceeding 10 000 m²) or linear infrastructure be constructed (exceeding 300 metres in length). There is therefore a high possibility that Heritage Western Cape (HWC) will request a Heritage Impact Assessment and Visual Impact Assessment to be conducted once the scope of the development has been determined.

GNEC cannot foresee any other possible constraints at this stage.

Please do not hesitate to contact me should you require any additional information or should you wish to discuss the matter.

Yours sincerely

Carina Nel

For GNEC

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