

TITLE: KLAPMUTS NORTH LOCAL SPATIAL DEVELOPMENT FRAMEWORK (LSDF) – DRAFT REPORT			
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TABLE OF CONTENTS

REPORT STRUCTURE	4
ABBREVIATIONS AND ACRONYMS.....	5
PROJECT TEAM	5
1. PURPOSE AND SCOPE	7
1.1. Terms of Reference and Scope of Work.....	7
1.2. Study Area	9
1.3. Structure of the LSDF Document	10
2. STRATEGIC ISSUES AND VISION	12
2.1. Vision.....	12
2.2. Strategic Issues.....	13
2.3. Regional Role and Sector Opportunities	15
2.4. Policy Directives and Guidelines	16
2.5. Drakenstein Municipal Directives and Guidelines	19
3. SPATIAL TOOLS AND STRUCTURING ELEMENTS.....	21
3.1. Spatial Development Goals and Objectives	21
3.2. Principles of Growth and Development	22
3.3. Guidelines	24
3.4. Illustrative Development Framework	25
4. SPATIAL DEVELOPMENT STRATEGIES.....	27
4.1. STRATEGY 1: Economic Feasibility and Development.....	27
4.1.1. Outputs for Klapmuts Spatial Development Plan	31
4.1.2. Summary	34
4.2. STRATEGY 2: Growth Management	36
4.2.1. Growth Pressure.....	36
4.2.2. Land Availability and Capability.....	36
4.2.3. Edge Options	36
4.2.4. Outside the Edge	37
4.3. STRATEGY 3: Land Development	40
4.3.1. Movement.....	40
4.3.2. Land Use and Built Form	49
4.3.3. Rural Development.....	57
4.4. STRATEGY 4: Infrastructure and Facilities Delivery	60
4.4.1. Electricity.....	60
4.4.2. Bulk Water and Waste Water Infrastructure	60
4.4.3. Solid Waste.....	62
4.4.4. Storm Water Management	62
4.4.5. Roads.....	62
4.5. STRATEGY 5: Urban Management	63
4.6. STRATEGY 6: Business and Community Development	65
4.6.1. Business Development Strategy.....	65
4.6.2. Community Development Strategies	65
5. LAND DEVELOPMENT MANAGEMENT	66
5.1. Land Use Management.....	66
6. PHASING.....	73
7. INSTITUTIONAL ARRANGEMENTS	75
7.1. SEZ Programme Provisions	75
7.2. LSDF Approval.....	77
7.3. IDP and Budget Alignment.....	78



8. RECOMMENDATIONS	79
9. REFERENCES.....	80

MAPS

Map 1 Study Area	9
Map 2 Alignment Issues.....	14
Map 3 Klapmuts Future Growth	15
Map 4 Drakenstein Catalytic Zones	20
Map 5 Klapmuts Conceptual Framework	26
Map 6 Existing edge and growth pressures.....	36
Map 7 Edge Options	39
Map 8 Movement Key Network	43
Map 9 Public Transport Network.....	45
Map 10 Movement Key Network	48
Map 11 Klapmuts Development Framework: Nodal development.....	51
Map 12 Spatial Perspective: Land use classification.....	67
Map 13 Development Phasing.....	73

FIGURES

Figure 1 Report Structure.....	31
Figure 2 Klapmuts Vision.....	6
Figure 3 Legislative Alignment	7
Figure 4 Chapters of the Local Spatial Development Framework Report.....	10
Figure 5 LSDF Report Structure	11
Figure 6 Policy Implications.....	18
Figure 7 Example of design standards.....	23
Figure 8 Ten Spatial Development Principles.....	25
Figure 9 Edge Right Sizing	37
Figure 10 Examples of Agri-Tourism	Error! Bookmark not defined.
Figure 11 Proposed movement network and design guidelines... Error! Bookmark not defined.	
Figure 12 Different Road Classes.....	44
Figure 13 Examples of pedestrian areas and sidewalks	46
Figure 14 Walkable Areas.....	49
Figure 15 Mixed land use examples for a “High Street”	50
Figure 16 Development Concepts	52
Figure 17 Examples of various density units	53
Figure 18 Scale and Place Making Elements	56
Figure 19 Application of a tourism strategy.....	58
Figure 20 Strategies for future urban management response.....	63
Figure 21 LSDF Approval Procedure.....	77
Figure 22 IDP Process	78



REPORT STRUCTURE



Figure 1 Report Structure



ABBREVIATIONS AND ACRONYMS

Capex	Capital Expenditure
CBO	Community Based Organisation
CEF	Capital Expenditure Framework
CID	City Improvement District
CPF	Community Policing Forum
CSIR	Council for Science and Industrial Research
DC	Development Contributions / charges
GBA	Gross Building Area
GLA	Gross Lettable Area
GVA	Gross Value
IDP	Integrated Development Plan
IDZ	Industrial Development Zone
ITC	Information Technology and Communication
IUDF	Integrated Urban Development Framework (2016)
LED	Local Economy Development
LITP	Local Integrated Transport Plan
LOA	Level of Access
LSDF	Local Spatial Development Framework
LUPA	Western Cape Land Use Planning Act
MFMA	Municipal Finance Management Act
MOE	Metropolitan Owned Entity
NGO	Non-Governmental Organisation
RSDF	Regional Spatial Development Framework
RUMP	Regional Urban management Plan
SDF	Spatial Development Framework
SEZ	Special Economic Zone
SPLUMA	Spatial Planning and Land Use Management Act
SPV	Special Purpose Vehicle
SROI	Social Return on Investment
SROI	Social Return on Investment
TOD	Transit Oriented Development
UM	Urban Management

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What if Klapmuts was ...

CONNECTED

Activity centres; with a comprehensive, efficient public transport system and pedestrian routes and technology that support sustainable growth and development.

ATTRACTIVE

Quality areas that are well maintained; new developments which comply with high design standards, clean and safe environments; and well-preserved heritage and natural areas.

SUSTAINABLE

Resources that are well managed and planned for; viable and cost-effective service provision; and where the environment is valued as a vital resource and meaningful open space is provided for all.

MANAGED

Development decisions are predictable, fair and cost-effective; partnerships are developed; planning takes place on a continuous basis; formal systems for data collection are in place, and data is used to support and improve planning.

CARING

Where clustered social facilities and interventions cater for the vulnerable people in society, specifically children, women, youth, and the elderly.



Figure 2 Klapmuts Vision

1. PURPOSE AND SCOPE

1.1. Terms of Reference and Scope of Work

BEAL was commissioned by the Drakenstein Municipality to compile a Klapmuts North Local Spatial Development Framework (LSDF).

Figure 3¹ illustrates the legislative alignment that is required in the compilation of the Klapmuts LSDF.

The main objective of the project is to create a credible LSDF that meets at least the required standards and compliance with The Spatial Planning and Land Use Management Act (SPLUMA), 16 of 2013, the Western Cape Land Use Planning Act (LUPA), 3 of 2014 as well as the Drakenstein Municipality Land Use Planning Bylaw, 2015.

In terms of the above, the main deliverables were agreed to be, in summary, the following components of the LSDF:

- a) Provide detailed spatial planning guidelines;
- b) Provide more detail in respect of a proposal provided for in the municipal spatial development framework;
- c) Meet specific land use planning needs;
- d) Provide detailed policy and development parameters for land use planning;
- e) Provide detailed priorities in relation to land use planning
- f) and, in so far as they are linked to land use planning, biodiversity and environmental issues; and
- g) Guide decision-making on land use applications.

¹ Western Cape Government presentation, June 2015

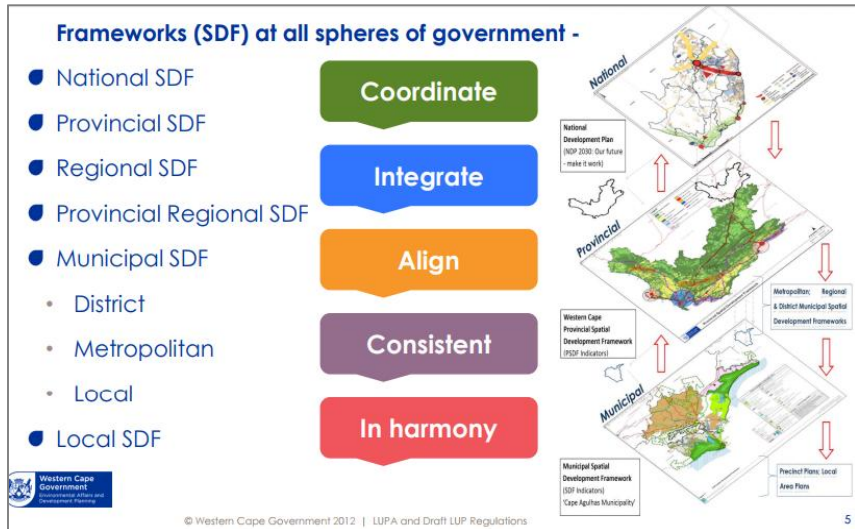


Figure 3 Legislative Alignment

In addition to the legislative requirements, the LSDF should also address the following:

- a) Klapmuts is identified as a new regional node - therefore the context of Klapmuts in terms of the greater region must be investigated;
- b) The vision for the study area as stated in the Drakenstein Integrated Development Plan 2013-2018 (IDP) ;
- c) Klapmuts is identified as a " Big Move" in terms of the Drakenstein Municipality's IDP - how to unlock opportunities;
- d) Be based on planning principles to promote integration, revitalization, densification and beautification of the study area in a sustainable manner;
- e) Reflect a clear understanding of the spatial environment, social and economic systems of the whole study area into one high level precinct plan;

- f) Provide guidance for developers, businesses, investors and other government departments (provincial and national);
- g) Provide general guidance for the land use management system of the municipality;
- h) Avoid twin developments, as stated in the Greater Cape Metro Regional Spatial Implementation Plan. In other words, the character of land uses should differ significantly between Klapmuts South and Klapmuts North;
- i) Investigate possibility of proclaiming the Klapmuts Region a Special Economic Zone (SEZ)/Industrial Development Zone (IDZ) in order to access government funding;
- j) Engagement and alignment with Stellenbosch Municipality's Special Development Area (SDA) Framework Plan for Klapmuts South and Drakenstein's Klapmuts North Local Spatial Development Framework (LSDF) Plan. The spatial plans of Stellenbosch Municipality and Drakenstein Municipality for the Klapmuts Area must be linked and indicate synergy, challenges, recommendations to optimally tap into the potential of the broader Klapmuts Area;
- k) Master infrastructure services plan to be compiled and run concurrently with the compilation of the Klapmuts LSDF;
- l) Consideration of urban edge (research to be done to determine whether the status quo should be upheld, or should consideration be given to the widening of urban edge);
- m) Implementation Plan for the phasing of unlocking the potential of the Klapmuts area;
- n) Investigate an Economic Value Assessment Model/Capital Investment Framework
- o) Capital budget to be calculated for infrastructure (civil and electrical) and maintenance; and

- p) The LSDF should take into account and plan for strong connection between different modes of transport, with specific reference to transport over the N1 highway.



The first phase of the project consisted of the issue of the Status Quo Report. This document addressed the identification of strategic issues from Drakenstein Vision 2032. The Draft LSDF Report will address the role of Klapmuts in the realization of the vision.

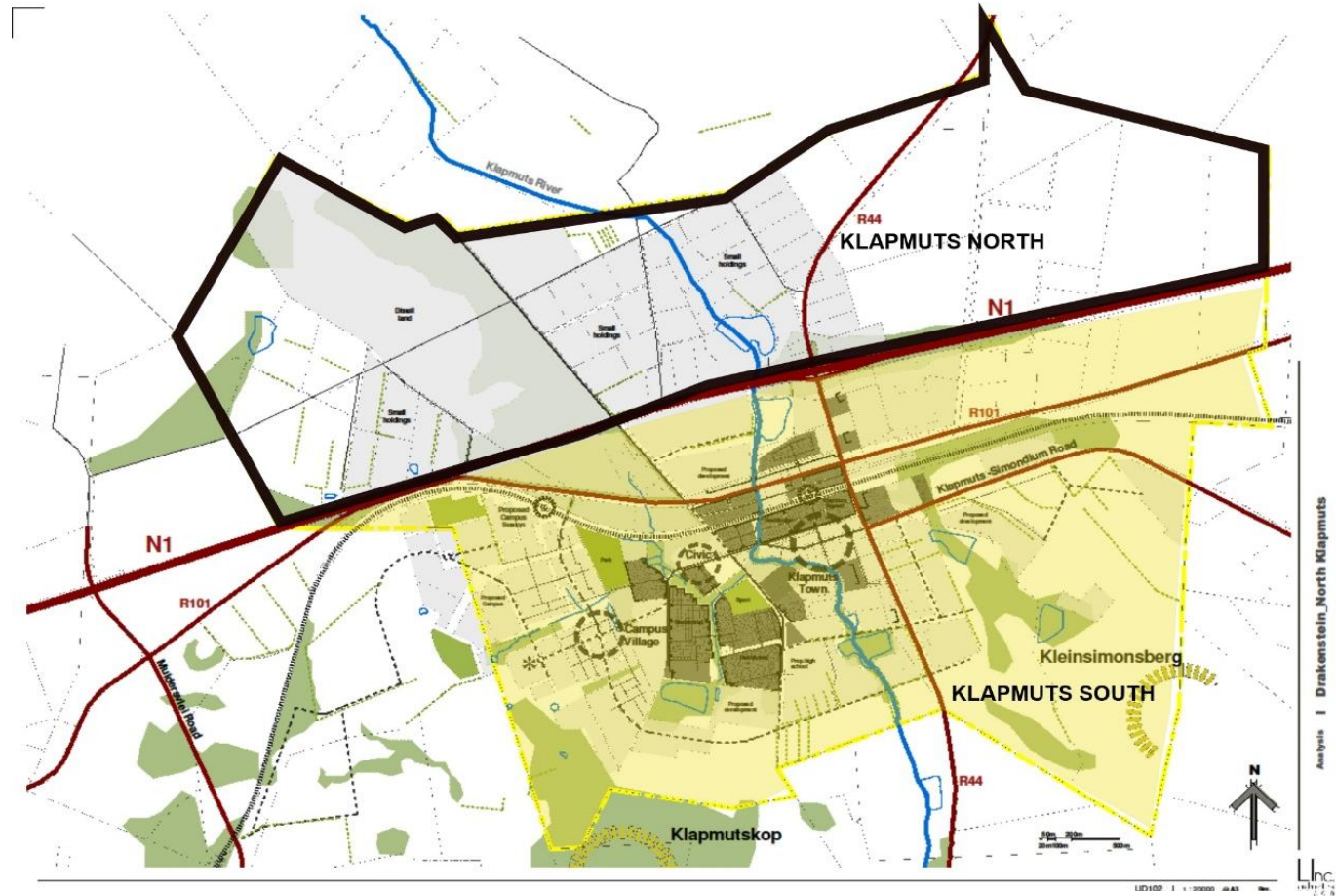
1.2. Study Area

Klapmuts North is currently a predominantly low density rural area with a number of transitional activities. The area is located adjacent to the N1 freeway and the Klapmuts on and off ramps. This strategic location places pressure on the area from a range of activities including small holdings, tourism venues, light manufacturing and logistics enterprises.

It is important to recognise that the current and future development of Klapmuts North is intrinsically connected to Klapmuts south. For this reason, the document will, where appropriate, discuss Klapmuts north within the context of Klapmuts south.

There is also a clear notion that Klapmuts North and South should be viewed as one functional area that, over time, develop as an important regional node.

In order to determine whether the status quo should be upheld, or should consideration be given to the widening of the Urban Edge, it was decided to extend the study area for the Klapmuts North LSDF as indicated on Map 1: Study Area.



Map 1 Study Area

1.3. Structure of the LSDF Document

The intention is to arrange development activities and the built form in such a manner that the ideas and desires of people to work, live, and use or develop resources are accommodated without compromising the natural environment and the way services are delivered. In doing this, it is important to recognise the following:

- National direction-giving policies and strategies, and the implication of these in the local context.
- Regional (provincial and district) policies and strategic direction.
- The current regional and local resources base and developmental pressures

In preparing a Local Spatial Development Framework (LSDF), it is critical to recognise the role of spatial planning in the coordinated and integration use of resources during implementation, and this should be a key outcome of the SDF process.

The development of the Klappmuts North LSDF cannot occur in isolation. It has been clearly established that the area has an important role to play in ensuring that National, Provincial and City policies are implemented at a local level - for the good of the City and its communities over the long term.

The framework aims to initiate an approach that will keep the plan alive and ensure its ability to respond to future changes and pressures. For this reason, the project methodology that has been adopted focuses on:

- Strategically assessing regional and local conditions and policy requirements
- Creating a comprehensive understanding through community and conditional surveys
- Providing implementation guidelines and applications at a precinct level
- Ensuring a comprehensive engagement process.

The structure of the rest of the document is illustrated on the next page and includes:

- Strategic issues and vision
- Spatial tools and conceptual development framework
- Spatial development strategies
- Development and land use management
- Institutional arrangements

1. PURPOSE AND SCOPE	2. STRATEGIC ISSUES AND VISION	3. SPATIAL TOOLS AND STRUCTURING ELEMENTS	4. SPATIAL DEVELOPMENT STRATEGIES
1.1 TOR and Scope of Works	2.1 Vision	3.1 Spatial Development Goals & Objectives	4.1 Strategy 1: Economic Feasibility & Developments
1.2 Study Area	2.2 Strategic Issues	3.2 Principles and Growth Management	4.2 Strategy 2: Growth Management
1.3 Structure of the LSDF Document	2.3 Regional Role & Sector Opportunities	3.3 Standards	4.3 Strategy 3: Land Development
	2.4 Policy Directives & Guidelines	3.4 Illustrative Development Framework	4.4 Strategy 4: Infrastructure & Facilities Delivery
	2.5 Drakenstein Municipal Directives & Guidelines		4.5 Strategy 5: Urban Management
			4.6 Strategy 6: Business & Community Development

5. LAND DEVELOPMENT MANAGEMENT	6. PHASING	7. INSTITUTIONAL ARRANGEMENTS	8. RECOMMENDATIONS
5.1 Land Use Management	6.1 Phasing	7.1 SEZ Programme Provisions	8.1 Recommendations
		7.2 LSDF Approval	
		7.3 IDP & Budget Alignment	

Figure 4 Chapters of the Local Spatial Development Framework Report



Figure 5 LSDF Report Structure

2. STRATEGIC ISSUES AND VISION

2.1. Vision

In terms of the Drakenstein 2017 – 2022 Integrated Development Plan (IDP) Vision 2032 is the strategy for Drakenstein to realise the vision of being a:

“A CITY OF EXCELLENCE”

The IDP stated further that within the next fifteen years, key facets of the Vision are economic dynamism; quality of life for all; a strong, well-governed brand; and financial sustainability. Long-term strategies are required to develop, maintain and extend Drakenstein’s national and inter-national competitiveness.

Furthermore, **Klapmuts is identified as a catalytic zone** in the reviewed Drakenstein Spatial Development Framework, a Spatial Vision 2015 – 2035 Annual Review 2016/2017.

In order to ensure consistency and a clear spatial logic, the SDF noted that the development of spatial /planning proposals in the SDF are based on a set of generic spatial considerations referred to subsequent sections in this report.

As part of the development of this LSDF Report, a focus on vision elements and intent was developed in order to guide the planning and development process.

The vision elements were identified based on policy directives and developmental issues identified in the Status Quo Report.

Vision element identification is part of a strategic planning process that focuses on the medium to long term. **A vision should be realistic and credible** - based on the development realities and challenges facing Klapmuts.

The Klapmuts vision is based on 3 important elements:

- *Klapmuts as a regional service node*
- *Klapmuts beyond just the economics*
- *Klapmuts as a “clean”, high technology hub that attracts innovation*

The intention and vision of the Stellenbosch Municipality for the Klapmuts South in their Special Development Area Report (2017) is:

“To develop an innovation hub which serves the region (Drakenstein Municipality and Municipality of Cape Town included) and which attracts unique commercial and high technology (clean) industrial development that would qualify for establishment of a SEZ.”

These vision elements of Klapmuts North and South combined to development of the vision elements which are also dependant on a number of policy indicatives indicated below.

In terms of the draft Greater Cape Metro Regional Spatial Implementation Framework (GCMRSIF), Klapmuts is located within what this study indicates as the Cape Metro Functional Region. The GCMRSIF identifies Stellenbosch’s role and function in the Regional Economy as follows:

“Southern Winelands service & admin centre, tertiary education & research, agri processing, multi-national HQs, tourism destination, tech industry, very high growth potential.”

It proceeds to identify strategies for the development of the urban space economy and highlights that the development of Kraaifontein and Klapmuts as new regional economic nodes should be investigated.

One of the strategies identified for the development of its rural space economy is to develop a consolidated platform for export of processed agri-food products (e.g. inland packaging and containerisation port) in amongst others, the Paarl-Klapmuts area.

The study furthermore highlights Klapmuts as an Inter-Municipal Urban Growth Hotspot.

The **DTI's Policy on the Development of Special Economic Zones (SEZ)**, 2012, indicates that the planning approach for SEZ's include the following aspects:

- Comprehensive and looking beyond the economics;
- Focussing on host regions rather than just the designated zone;
- Comprehensive and long term; and
- Integrated and coordinated across and between all tiers of government and other critical role players

The rest of this report of the document will also take into account and map an approach to respond appropriately to a number of policy directives including the Integrated Urban Development Framework (IUDF) 2016.

2.2. Strategic Issues

The Klapmuts North Status Quo Report (2018) indicates a number of issues and dynamics that the LSDF development framework and implementation plan will have to respond to. The issues and dynamics include:

- 1) General provincial and district policy and development guidelines;
- 2) IUDF goals;
- 3) The municipality's strategic thrusts; and
- 4) Drakenstein SDF principles

The analysis that was conducted highlight a number of general issues including:

- Provide directional input for spatial development decisions within the Klapmuts North area;
- Offer a direct comparative outcome for considered development paths;
- Economic impact, employment impact, social and community endowment are primary contributing outputs;
- Integration of land use types informed by capital expenditure and infrastructure requirement (capacity);
- Fit required with a realistic development path to unlock potential for direct public and private sector investment;
- Demonstrate potential of land development for different uses over time by applying a development path scenario; and
- Change key inputs to reflect changes in the core development path.

The IUDF is more specific and indicated that in order to achieve a transformative vision, four overall strategic goals should be addressed:

- **Spatial integration:** To forge new spatial forms in settlement, transport, social and economic areas.
- **Inclusion and access:** To ensure people have access to social and economic services, opportunities and choices.
- **Growth:** To harness urban dynamism for inclusive, sustainable economic growth and development.
- **Governance:** To enhance the capacity of the state and its citizens to work together to achieve spatial and social integration."

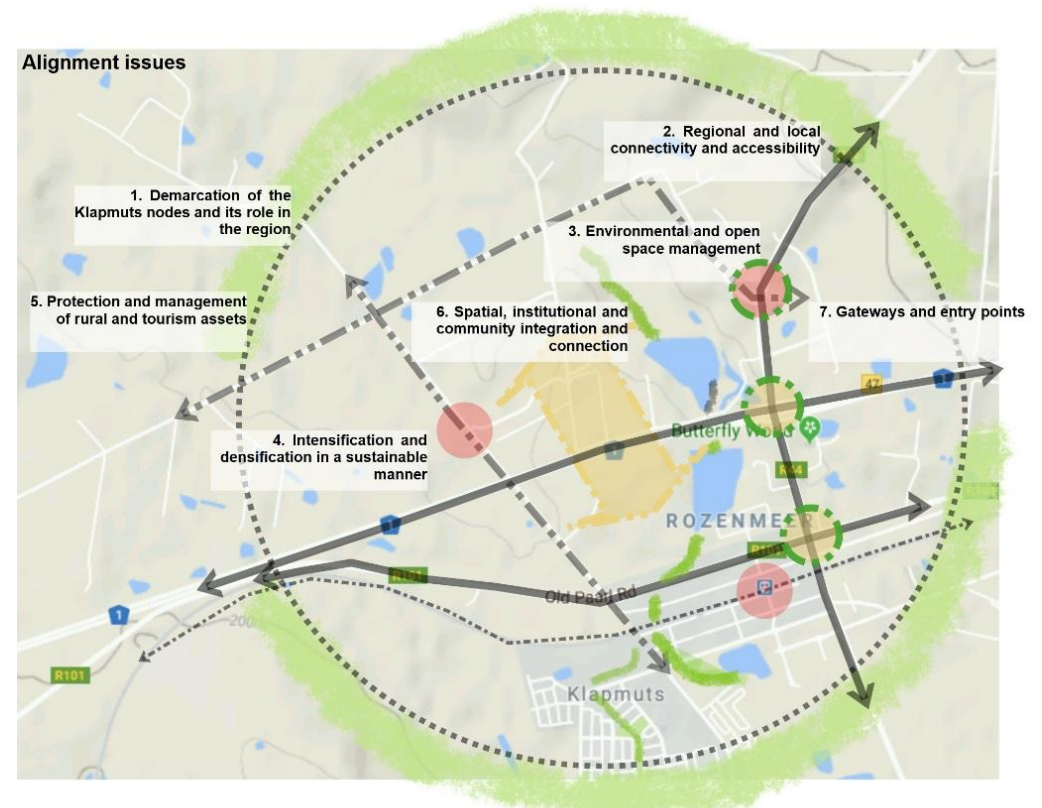
It is also understood that, as a response to the mission of the municipality is comprised of eight strategic thrusts to propel our economic and social progress, as follows²:

1. Protecting and enhancing of the quality of life of our residents and the unique environment of our area;
2. Providing efficient and effective delivery of services which is responsive to the community's needs;
3. Promoting the principles of access, equity and social justice in the development of services;
4. Delivering an effective organisational culture which strives for service excellence;
5. Exercising regulatory functions of Council consistently and without bias;
6. Encouraging community participation in the processes of Council by consulting widely on its activities and policies;
7. Creating an enabling environment for economic growth, job creation and the alleviation of poverty; and
8. Promoting a future-oriented approach to planning.

The Drakenstein SDF² also identified a set of interrelated spatial development to guide the formulation of the focus area proposals and the future development of the Drakenstein Municipality. These ten principles are as follows:

- 1) Continuity of green;
- 2) Establish well defined and designed development;

- 3) Protect and enhanced the rural character;
- 4) Enable strategic densification;
- 5) Enable and promote mixed use;
- 6) Protect and enhance heritage resources;
- 7) Ensure connectivity between settlements and hierarchy of nodes and connectivity within settlements;
- 8) Promote spatial integration;
- 9) Establish an accessible hierarchy of public facilities and
- 10) Cluster social facilities



Map 2 Alignment Issues

² Drakenstein 2017 – 2022 Integrated Development Plan (IDP)

2.3. Regional Role and Sector Opportunities

In terms of policy statements regarding the development of Klapmuts, it is clear that Klapmuts North and South are primed to play a much bigger role in the region - focussing (as indicated by the Special Economic Zone (SEZ) policy) on a host region rather than just the designated zone of Klapmuts.

From a policy point of view, Klapmuts' regional role is underpinned by provincial as well as municipal statements and investment decisions should therefore be taken within the context of the existing situation in Klapmuts, as well as its future role.

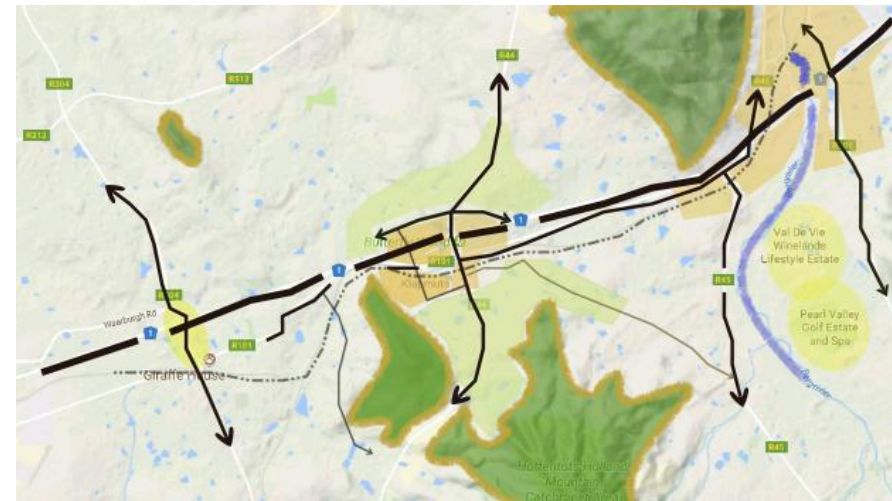
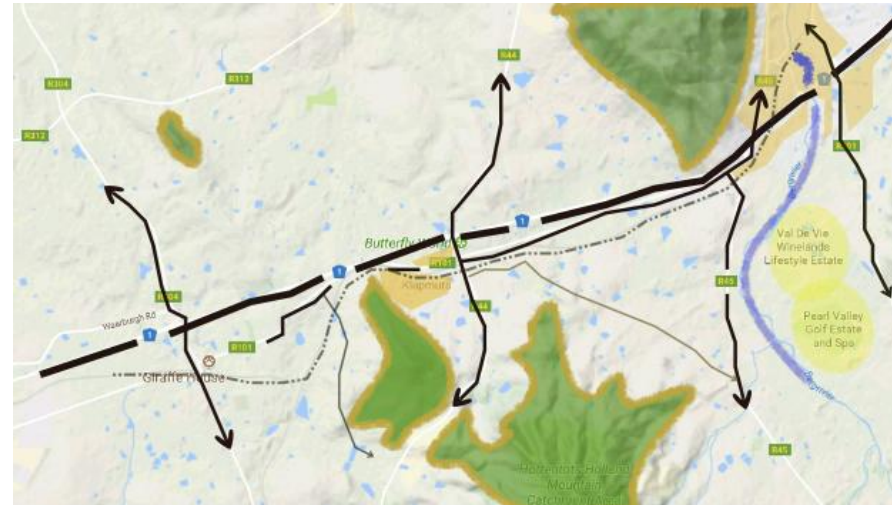
It was also clear through the analysis and interviews that Klapmuts will both grow and develop as a well-planned, managed and functioning node that benefits its communities, businesses and a wider region - or as an incoherent collection of development activities based on ad hoc applications.

To ensure that the latter does not occur, a specific process was followed, including:

- Conducting a scenario planning exercise;
- Providing a visual of a possible future; and
- Developing several diverse strategies and implementation plans that integrate the economic, social and physical development of Klapmuts.

It is important to note that the planning for the potential growth and development of Klapmuts, North and South is, to a large degree, a scenario planning exercise (see Map 3 as an example) and not only a forecasting or trend analysis process. The Klapmuts scenario planning exercise needs to be combined with certain statistical evidence and trends with social, technical and policy dynamics. The reason for this is:

- The changing role and function of Klapmuts;
- The current development cycle that Klapmuts is in; and
- A number of possible futures depending on socio-political dynamics, investment decisions and partnership developments.



Map 3 Klapmuts Future Growth

It is recognised that development for an urban area such as Klapmuts cannot be based on a qualitative development planning perspective only. However, it should also be accepted that the future development of the area cannot be determined by quantitative forecasting and trend analysis based on existing data and extrapolations of base data only.

A need existed to quantify and determine value deficit/surplus (which includes fund flows) growth paths and adjusts the growth paths for indirect impacts and probabilities of occurrence.

Various principles underpin the dynamism of developing a model that determines a current value deficit or surplus to inform a future development path. These principles are as follows:

- Provide directional input for spatial development decisions within the Klapmuts area;
- Offer a direct comparative outcome for considered development paths;
- Economic impact, employment impact, social and community endowment are primary contributing outputs;
- Integration of land use types informed by capital expenditure and infrastructure requirement (capacity);
- Fit required with a realistic development path to unlock potential for direct public and private sector investment;
- Demonstrate potential of land development for different uses over time by applying a development path scenario; and
- Change key inputs to reflect changes in the core development path.

There is not one strategy that can ensure or guide the successful development and growth of Klapmuts. The future growth and development of Klapmuts is therefore not only about scenarios, but also about which development considerations and strategies need to be taken into account regarding specific investment choices and decisions.

The development of Klapmuts North and South will require political commitment, partnership formulation and an empowered and active community.

2.4. Policy Directives and Guidelines

South Africa has a well-established legislative framework which defines the institutional context of urban governance at local government level. The role of policy and legislation has been illustrated earlier in this section. The following key pieces of legislation create the 'playing field' within which urban governance is practiced:

Constitution of South Africa, 1996: Defining the powers and functions of the three spheres of government. Aspects that are critical to urban development and urban governance are designated as local government functions, including land use planning and basic service delivery.

Municipal Structures Act, 117 of 1998: Defining municipal categories / types and establishing the institutional structures of municipalities, including electoral procedures, role of traditional leaders, and appointment of political and administrative office bearers.

Municipal Systems Act, 32 of 2000: Defining many of the critical systems necessary for the realisation of developmental local government. The Act includes sections on municipal powers and functions, public participation, integrated development planning, performance management, local public administration and human resources.

Municipal Finance Management Act, 56 of 2003: Defining the key aspects of financial management by municipalities. The Act includes sections pertaining to the municipal finances including revenue, budgeting, intergovernmental cooperation and debt

Intergovernmental Relations Framework Act, 13 of 2005: Establishes institutional mechanisms for intergovernmental relations (National, Provincial and District Intergovernmental Forums) and regulated the conduct of intergovernmental relations and dispute resolution.

Division of Revenue Act (annual): legislates the share of the national fiscus allocated to specific government entities including local municipalities during the specific financial year.

Spatial Planning and Land Use Management Act, 16 of 2013 (SPLUMA): Regulates the spatial planning system, including spatial principles, spatial plans, land use management and development management. This Act will in the short to medium term have a major impact on urban governance, as it clearly specifies the role and responsibilities of local government in respect of content and focus of spatial planning, as well as the role of land use management in promoting development.

Important to note in respect of urban governance is the following:

SPLUMA legislates for the link between development principles and planning instruments and processes that form part of the spatial planning system.

Municipal Spatial Development Frameworks (SDFs) are identified as a critical lever to achieve spatial transformation. SDFs have to play the role of an integration/coordination mechanism, not only being the link between development principles and implementation, but also between different spheres of government, between different sector plans and sector requirements, as well as budgeting and investment. The Municipal SDF is framed as a central, direction-giving and coordination mechanism, as opposed to a “sector plan” that should form part of the Integrated Development Plan.

The municipal SDF, and related LSDFs, are also a powerful governance tool to guide and direct implementation by all spheres of government in a specific space / territory.

The **National Development Plan (NDP)** sets the broad policy context for spatial planning and considers various issues impacting on spatial planning and development, including governance.

Challenges pertaining to governance are among the main hindrances to creating sustainable settlements identified in the NDP.³ Weak spatial planning and governance capabilities are identified as issues, with the complex division of powers and functions between the spheres of government contributing to this issue. One of the key governance challenges, i.e. the lack of coordination in the spatial planning system, has since been addressed by the Spatial Planning and Land Use Management Act of 2013 (discussed in following section). It is also noted that municipal integrated development plans vary in quality and that inefficiencies in processing planning applications have sometimes deterred job-creating investment. Additional difficulties pertaining to the planning system are also identified:

- Ambiguity and contest around the developmental role of traditional authorities
- Poor cross-boundary coordination
- Autonomous transport systems
- Lack of municipal powers to acquire and swap land parcels
- Disparate funding streams, which complicate integrated development
- Planners lack understanding of economic principles, market forces and commercial realities to negotiate better outcomes.
- Overarching principles for spatial development

³ NDP Chapter 8: Sustainable Human Settlements

The NDP recommends that all spatial development should conform to normative principles of spatial justice, sustainability, resilience, quality and efficiency.

The **Integrated Urban Development Framework of 2016 (IUDF)** is government’s policy position to guide the future growth and management of urban areas.

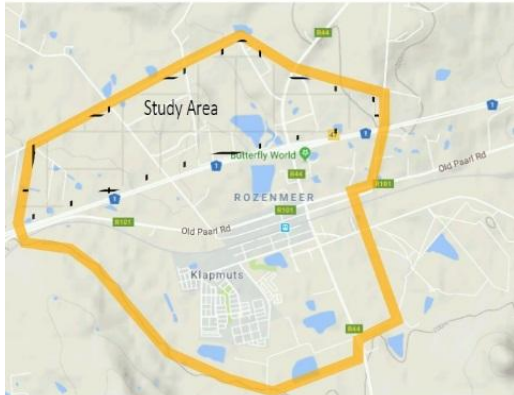
It is stated: “The IUDF’s overall outcome – spatial transformation – marks a New Deal for South African cities and towns, by steering urban growth towards a sustainable growth model of compact, connected and coordinated cities and towns. Informed by this outcome and the NDP’s vision for urban South Africa, the IUDF aims to guide the development of inclusive, resilient and liveable urban settlements, while directly addressing the unique conditions and challenges facing South Africa’s cities and towns.

As such, the vision has to be interpreted and pursued in differentiated and locally relevant ways. To achieve this transformative vision, four overall strategic goals are introduced:

- **Spatial integration:** To forge new spatial forms in settlement, transport, social and economic areas.
- **Inclusion and access:** To ensure people have access to social and economic services, opportunities and choices.
- **Growth:** To harness urban dynamism for inclusive, sustainable economic growth and development.
- **Governance:** To enhance the capacity of the state and its citizens to work together to achieve spatial and social integration.”

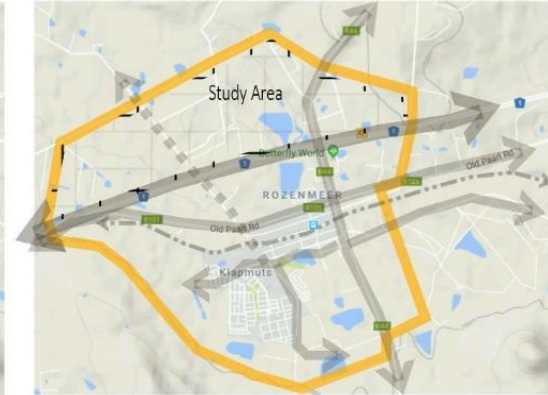
Figure 6 illustrates the implications of the IUDF policy statements on the development of Klapmuts North and South.

Integrated urban planning to achieve integrated development in “Klapmuts”



Klapmuts should be viewed as one “functional” area with a sequence of policy actions and services agreements where appropriate.

Integrated transport planning that integrates development in “Klapmuts”



Optimise the use of existing road hierarchy, rail and implement a diverse modal strategy.

Targeted investments : Infrastructure, roads and intersections, facilities, environment and land preparation and release.



Diversified and inclusive economy with well located high intensity areas with an empowered community

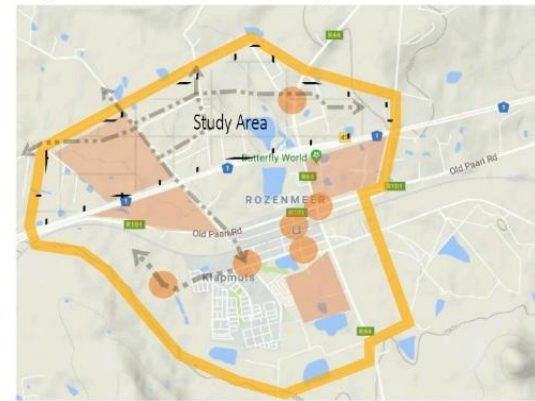


Figure 6 Policy Implications

2.5. Drakenstein Municipal Directives and Guidelines

In terms of the Drakenstein 2017 – 2022 Integrated Development Plan (IDP) Vision 2032 is the strategy for Drakenstein to realise a vision:

To evolve into:

“A CITY OF EXCELLENCE”

The IDP stated further that within the next fifteen years, key facets of the Vision are economic dynamism; quality of life for all; a strong, well-governed brand; and financial sustainability. Long-term strategies are required to develop, maintain and extend Drakenstein’s national and inter-national competitiveness. The mission of the municipality is comprised of eight strategic thrusts to propel our economic and social progress, as follows⁴:

- a) Protecting and enhancing of the quality of life of our residents and the unique environment of our area;
- b) Providing efficient and effective delivery of services which is responsive to the community’s needs;
- c) Promoting the principles of access, equity and social justice in the development of services;
- d) Delivering an effective organisational culture which strives for service excellence;
- e) Exercising regulatory functions of Council consistently and without bias;
- f) Encouraging community participation in the processes of Council by consulting widely on its activities and policies;
- g) Creating an enabling environment for economic growth, job creation and the alleviation of poverty; and
- h) Promoting a future-oriented approach to planning.

⁴ Drakenstein 2017 – 2022 Integrated Development Plan (IDP)

Table 1 General Alignment issues between Drakenstein IDP, SDF and LSDF

IDP Vision	SDF vision
<p>“A City of Excellence”</p> <p>The long-term Strategic Plan (Vision 2032) is the strategy for Drakenstein Municipality to realise the vision of being a “City of Excellence” within the next fifteen years. Key facets of the Vision are economic dynamism, quality of life for all, a strong, well-governed brand and financial sustainability.</p> <p>Long-term strategies are required to develop, maintain and extend Drakenstein’s national and international competitiveness.</p>	<p>The Drakenstein Municipality located at the heart of the Winelands and building on its assets – its dramatic scenic landscape, precious natural and cultural heritage, quality educational institutions and sporting facilities, thriving agricultural economy and unrivalled access to the regional access and logistics network – will be a City of Excellence for all its residents.</p>
<p>The LSDF vision will have to align to both of the above vision and include:</p>	
Strategic IDP and SDF spatial elements	LSDF response
Environmental management	Natural resources, hydrology, vegetation, topography, bio-diversity and conservation
Agriculture and rural development	Urban edge, settlement patterns and rural types of development, tourism related strategies
Heritage and culture	Resource management, participations, enabling environment for community events etc.

Strategic IDP and SDF Spatial Elements	LSDF Response
Connectivity and green logistics	Logistics, bio-regions, green technologies and innovation
Sport and recreation	Resource management, participations, enabling environment for community events etc.
Settlements and communities	Settlement patterns, configuration and character, availability and nature of community facilities, population number and densities, Infrastructure availability and capacities, transport: local connectivity and availability of public transport

Accept for responding to the Strategic IDP and SDF spatial elements, the LSDF promotes economic development and Drakenstein’s competitiveness through appropriate land use identification and ensuring sustainable development of the area.

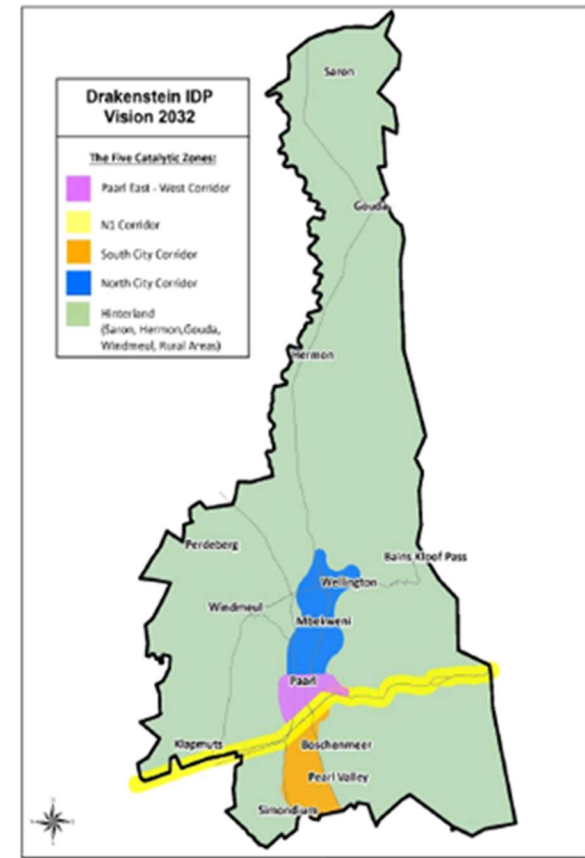
Furthermore, Klapmuts is identified as a catalytic zone in the reviewed Drakenstein SDF⁵.

In order to ensure consistency and a clear spatial logic, the SDF noted that the development of spatial /planning proposals in the SDF are based on a set of generic spatial considerations. These are:

1. The central spatial principles that have informed the framework proposals for each focus area

2. An expansion of the principles and their implications for the approaches to the SDF Proposals
3. A common set of elements making up the spatial frameworks (i.e. the components of the framework)

These considerations are important inputs and requirements for the Klapmuts North LSDF.



Drakenstein catalytic zones

Map 4 Drakenstein Catalytic Zones

⁵ Drakenstein Spatial Development Framework A Spatial Vision 2015 – 2035 Annual Review 2016/2017

3. SPATIAL TOOLS AND STRUCTURING ELEMENTS

3.1. Spatial Development Goals and Objectives

In order to ensure that economic value is enabled and nurtured, benefit should be inclusive and based on a “whole” development approach. For this reason, a framework is proposed that promotes the development of a thriving and resilient Klapmuts North, ensuring that Klapmuts North:

Is connected – with more people enjoying the benefits of flourishing activity centres where shops, jobs, services, and recreation are within walking and travelling distance of their homes; with fast and reliable travel to and from local centres and regional opportunities; with a comprehensive, efficient and networked public transport system and pedestrian routes and technology that support sustainable growth and development.

Is attractive – with quality areas that are well maintained; new developments which comply with high design standards, clean and safe environments; and well-preserved heritage and natural areas.

Is sustainable – with resources that are well managed and planned for; viable and cost-effective service provision; and where the environment is valued as a vital resource and meaningful open space is provided for all.

Is well managed – where development decisions are predictable, fair and cost-effective; partnerships are developed; planning takes place on a continuous basis; formal systems for data collection are in place, and data is used to support and improve planning.

Is caring – where social facilities and interventions cater for the vulnerable people in society, specifically children, women, youth, and the elderly.

KLAPMUTS LSDF

Goals and objectives

CONNECTED

Activity centres; with a comprehensive, efficient public transport system and pedestrian routes and technology that support sustainable growth and development.

ATTRACTIVE

Quality areas that are well maintained; new developments which comply with high design standards, clean and safe environments; and well-preserved heritage and natural areas.

SUSTAINABLE

Resources that are well managed and planned for; viable and cost-effective service provision; and where the environment is valued as a vital resource and meaningful open space is provided for all.

MANAGED

Development decisions are predictable, fair and cost-effective; partnerships are developed; planning takes place on a continuous basis; formal systems for data collection are in place, and data is used to support and improve planning.

CARING

Where clustered social facilities and interventions cater for the vulnerable people in society, specifically children, women, youth, and the elderly.

3.2. Principles of Growth and Development

The following **general principles** are integral to the manner in which the Klappmuts North feasibility study and plan should be implemented. They will help to shape the area and **guide decisions on planning, transport, social and infrastructure investment.**

The principles are as follows:

Collaboration: Engage and empower people to participate in the economy and the development of the area. Ensure people driven development is also an overall government outcome.

Walkability: Creation of a pedestrian-friendly living environment. This requires a full range of services e.g. retail shops, social services, cultural activities, entertainment, public open spaces etc. within a 15-minute walking distance.

Ease of movement (pedestrian and vehicular): Create new circulation patterns to match the proposed land use patterns and intensity. The densities proposed also provide direct support for public transport-oriented development. Encourage an interconnected street grid network to disperse traffic, enable walkability and encourage bicycling.

Urban management: Ensure sufficiency in the capacity supply for the future development proposals, taking into consideration that the successful growth and development of the area depends largely on infrastructure availability and maintenance. Further, maintenance and operational issues should be monitored as part of the Region's urban management function.

Encourage local business growth: Promote local business growth, also encourage new enterprises and improving the local business investment climate. A suitable approach towards informal trading should make provision for appropriate facilities per trader specialisation groups to ensure that facilities are used efficiently.

Sense of place: There is a need to create gateways and landmarks within the area in order to turn the Klappmuts North Precinct into a destination. This may include the use of open spaces and the activity areas into the node.

KLAPMUTS LSDF PRINCIPLES

Collaboration

Walkability

Ease of movement

Urban Management

Encourage business growth

Sense of place

Flexible development options

Mixed development and housing types/options: Enhance residential component of the Precinct, making provision for various housing needs. These entail a mix of dwelling types, e.g. family unit, three or four-storey walk-ups amongst others, allowing for diverse groups of residents in terms of age, income levels, races and cultures.

Quality architecture and design: A good combination of architecture and urban design can create beautiful places in which to live and essentially improve the identity and legibility of the Precinct.

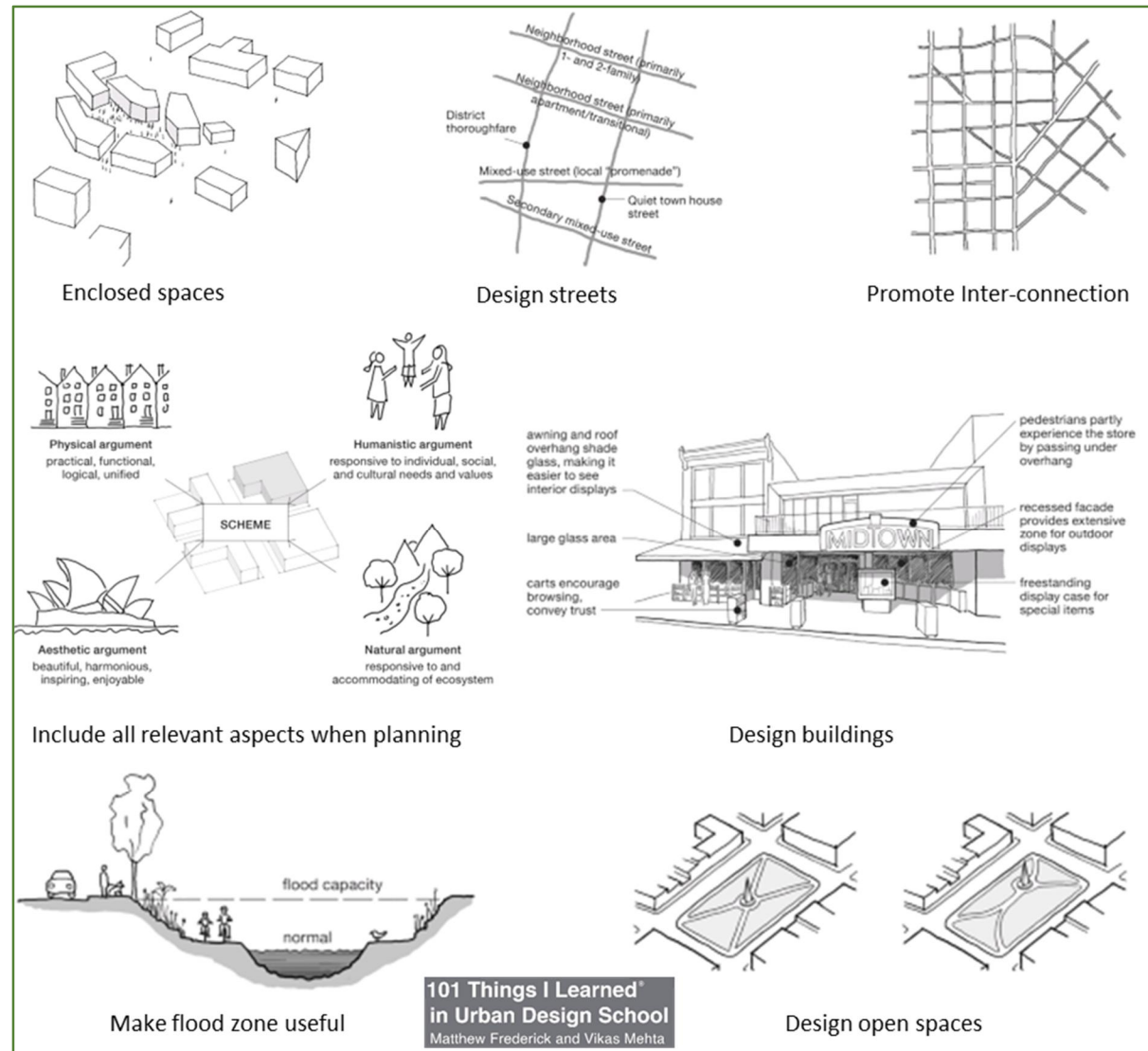


Figure 7 Example of design standards

3.3. Guidelines

The following set of guidelines are proposed to assist with decisions in respect of development options or choices for Klapmuts North and include the following:

- Small block and fine grain development is preferred (in high intensity areas) to large footprint, fenced-off developments.
- Promote compactness that capitalise on the immediate and collateral benefits of closeness, contiguity and concentration.⁶
- Organise local communities and businesses to participate in public-private-community partnerships based on mutual beneficial relationships.
- Celebrate small changes and initiatives at a local level.
- Highlight the role of local NGO's, churches or businesses in caring for vulnerable members of the communities or stimulating local culture and community activities.
- Facilitate development based on the set of principles and utilise land use controls as design features as more than just a set of permissions.
- Ensure the provision of social and community facilities in terms of land use budgets.
- Open space is a resource that should be protected and utilised for appropriate community and place-making activities e.g. community gardens.
- Community facilities (schools, community halls, churches etc.) should be supported as places of social innovation and place-making.
- Promote complexity of many interactions between community members, activity and collective benefits.
- Support the adaptability of a place which is the ability of a system to adapt itself efficiently and fast to changed circumstances.
- **Signage and legibility** – all signage to form part of an integrated design so that legibility within the precinct is improved and the character of the area is

established. It is important for the signage in Klapmuts North be designed to enhance the established identity of the suburb.

- **Graffiti and vandalism** – facades of buildings and public spaces to be kept clean and maintained at all times. Damage is to be fixed within a fixed time period so that the civic quality of the public spaces is maintained.
- **Guidelines for residential uses** – Minimum of 20% of all development within the walkable nodes, as proposed, to be residential.
- **Guidelines for commercial** – minimum of 30% of all development within the walkable nodes, as proposed, to contain commercial facilities including retail with active frontage to the streets. To be linked by pedestrian friendly routes with a strong focus on safety points and well policed precincts.
- **Guidelines for public space** – Minimum of 5% of all development within the walkable nodes as proposed to contain spaces for public use and amenities. These areas shall form boundaries around public spaces and consist of various scales from compact to large spaces.
- **Guidelines for Public Transport** – The design should strive to achieve 85% of all built areas within 400m walkable distance of a potential public transport (bus) stop. Public transport stops must be provided from the outset so as to inculcate sound passenger and Public Transport operator behaviour patterns.
- **Design for pedestrians** – Street and sidewalk design with priority for pedestrian safety, comfort and convenience for which wide sidewalks and amenities are provided. Landscaping and urban elements are important in establishing the street character. Pedestrian safety is prioritised by incorporating raised intersections, adequate night lighting and active fronts for eyes on the street.

THE SPATIAL TOOLS AND CONCEPTS ARE ILLUSTRATED BY WAY OF A CONCEPTUAL FRAMEWORK IN THE NEXT SECTION.

⁶ <http://www.massivesmall.org/>

3.4. Illustrative Development Framework

The illustrative framework (see Map 5) depicts the strategic intent, objectives, principles and standards, as discussed, in a visual way. Identifying e.g. walkable thresholds where appropriate, a high-level movement network and areas of suitable and intense activity.

Together with the above considerations, the reviewed Drakenstein SDF also identified a set of interrelated spatial development to guide the formulation of the focus area proposals and the future development of the Drakenstein Municipality. These ten principles are as follows:



Figure 8 Ten Spatial Development Principles

The framework is based on the intended intensity of activity in the area. The benefits of development intensity that have been researched and include for example:

- Higher levels of interaction between people, establishments, and institutions;
- Economic growth and development;
- Greater energy efficiency; and
- Promoting efficient public transport.

The intensity framework for Klapmuts North includes the following:

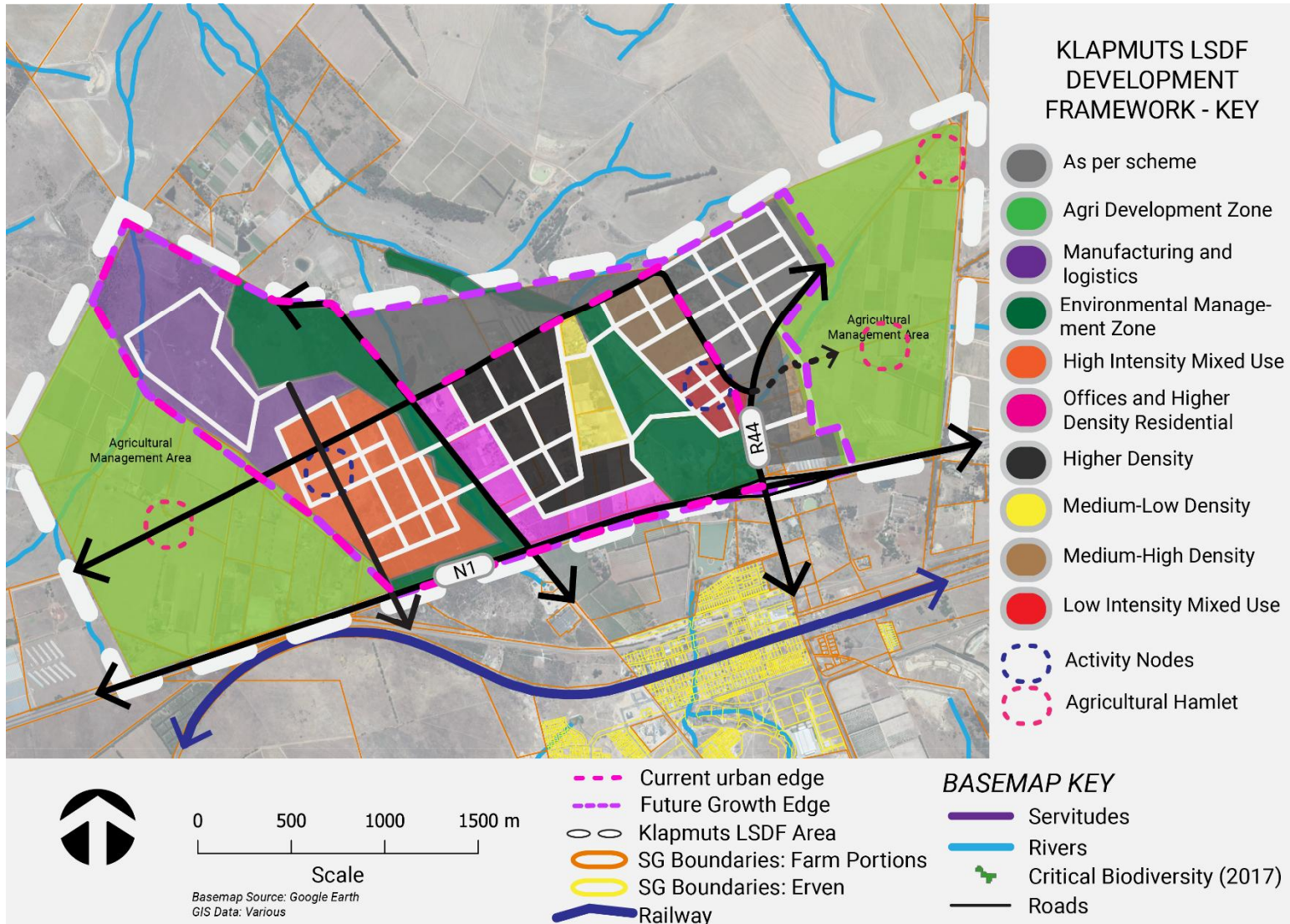
- Klapmuts North urban nodes with prominent and landmark buildings;
- Klapmuts North mixed-use areas with typical 3 to 4 storey buildings;
- Klapmuts North Destination retail;
- Klapmuts North medium to higher density residential;
- Klapmuts North single residential; and
- Klapmuts North light industrial and services activities.

The intent is that Klapmuts North should put daily needs, including, transportation, within walking distance.

Map 5 indicates the illustrated future development of Klapmuts North.

The illustrative framework depicts the objectives and principles in a visual way. Identifying e.g. walkable thresholds where appropriate, a high-level movement network and areas of suitable activity.

The Klapmuts North LSDF development framework **OBJECTIVES, PRINCIPLES** and **STANDARDS** reflect the Drakenstein Spatial Development Framework principles.



Map 5 Klapmuts Conceptual Framework

4. SPATIAL DEVELOPMENT STRATEGIES

4.1. STRATEGY 1: Economic Feasibility and Development

This section discusses the economic financial value and assessment of the illustrated framework.

It should be noted that the information in this section is based on indicative figures and final results depend on the approval of land use rights and development decisions made by investors e.g. Distell.

Unlocking land-use proposals for the Klapmuts area of the Drakenstein Municipality cannot be considered in isolation and therefore a requirement exists for a quantified and holistic focus that entails social, economic and environmental perspectives. What could be termed “below-the-line” impacts of a future development path or growth trajectory, are often misunderstood and therefore a need exists to quantify and determine a Value deficit/surplus for these impacts (which includes fund flows) and adjust the same for indirect impacts and probabilities of occurrence.

The analysis is conducted for development on the Klapmuts portions of the Drakenstein Municipal area applying the Place Marker model discussed below. An analysis using the same approach was also prepared for the Klapmuts portions that fall within the Stellenbosch Municipal area as part of the Stellenbosch Urban Development Strategy.

Although the same approach and parameters were used for modelling the Drakenstein (Klapmuts North) and Stellenbosch (Klapmuts South) portions, adjustments were required to reflect the charges and other figures that differ between the municipalities. The affected parameters were the following:

- Development charges;
- Property rates; and
- Employment figures.

The outcomes of the analysis are two-fold:

1. To apply the Place Marker model to development in Klapmuts North that reflects the envisaged Spatial Development Plan (SDP) of the Drakenstein Municipality for the area; and
2. To consolidate the outputs from the application of the model to development anticipated in the SDP for Klapmuts North and Klapmuts South (Stellenbosch Municipal area) in order to reflect a view of the Klapmuts as a node, irrespective of the Municipal demarcation or land designation.

MODEL COMPONENT INPUTS

The primary input for the model is land availability and associated allocation and designation for development that is influenced by and in certain cases subject to the following:

- Demand for land by use;
- Existing urban edge and amendments thereto;
- Policy and planning directives (e.g. NDP, SPLUMA, LUPA);
- Environmental Constraints;
- Heritage constrains;
- Economic sector focus with reference to land use allocation of the potential land available for development includes housing, commercial (offices and retail), industrial (e.g. manufacturing), community and social facilities and special uses such as tertiary education, schools etc.
- Current infrastructure capacity (e.g. utilities, etc.) related to surplus or backlog;
- Future infrastructure requirement based on selected development path;
- Development Contributions (DCs) payable by the private developer;
- Social Development and Community facility requirements driven by population growth;
- Waste Management implications driven by household (dwelling) growth;



- Future climate change probabilities;
- Property rates income;
- Infrastructure maintenance expenses;
- Community facility maintenance;
- Economic impact (indirect contribution from direct public and private sector investment in infrastructure and superstructure);
- Social impact (employment); and
- Land values (if applicable)
- The current development cycle that Klapmuts North is in; and
- Several possible futures depending on socio-political dynamics, investment decisions and partnership developments.

Development for an urban area such as Klapmuts North cannot be based on a qualitative development planning perspective only. Unlocking proposals, cannot be considered in isolation and therefore a requirement exists for a quantified and holistic focus that entails social, economic and environmental perspectives.

A need existed to quantify and determine value deficit/surplus (which includes fund flows) growth paths and adjusts the growth paths for indirect impacts and probabilities of occurrence.

Various principles underpin the dynamism of developing a model that determines a current value deficit or surplus to inform a future development path. These principles are as follows:

- Provide directional input for spatial development decisions within the Klapmuts North area;
- Offer a direct comparative outcome for considered development paths;
- Economic impact, employment impact, social and community endowment are primary contributing outputs;
- Integration of land use types informed by capital expenditure and infrastructure requirement (capacity);
- Fit required with a realistic development path to unlock potential for direct

public and private sector investment;

- Demonstrate potential of land development for different uses over time by applying a development path scenario; and
- Change key inputs to reflect changes in the core development path.

The “Bottom-line” result from the application of a development path is an economic value deficit or surplus.

Above the bottom-line are various items that reflect the direct flow of funds by embarking on a certain development path. Constraints in terms of infrastructure, funding and land availability (e.g. leases constrain development on public land) are considered in terms of aligning the funding requirement with the available land.

Adjustments to the “Bottom line” are made for the following to reflect a value deficit or surplus:

- Economic impact
- Employment impact
- Climate change
- Social impacts

The outcome is a quantification of a selected development path over the next 20 years using the stated inputs.

DRIVERS OF FUTURE GROWTH

The model has several explicit drivers that influence the future development path.

The **FIRST DRIVER** is Capital Expenditure (CAPEX) associated with potential mix of land-uses for development in Klapmuts North as reflected in the applied constraints such as:

- Policy directives (SPLUMA)
- Environmental constraints
- Municipal infrastructure constraints (funding or physical constraints)



- Strategic positioning (from an economic-growth perspective) — for instance, “What should Klapmuts North reflect in 20 years from a spatial-economic and development perspective?”;
- Economic focus (what is the “focus” sector(s) and what sub-sectors should be the complementary/supplementary drivers of the growth path?);
- Quantitative comparison (application of the Place-Marker model to assess the funds-flow outcomes of a selected growth trajectory);
- Current realities (existing infrastructure capacity, planned infrastructure, resource allocations, political context);
- Investor/developer confidence (developer pressure, requirements, incentives and turn-around time), and
- Economic and development growth trajectory (development potential curve, unlocking potential, land release (public-owned land), pace or “phasing” of development and alignment with socio-economic realities).

Table 2 provides an indication of the land available for development. The land use mentioned is unpacked and the development potential is determined by applying several parameters such as coverage, take-up, and allowances.

Table 2 Gross land sizes for different uses including farm portions and erven

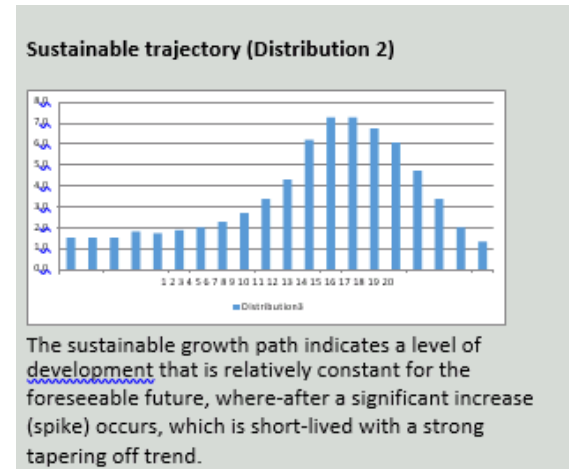
Zoning	Ha	m ²
Agri development zone	292.87	2928726.93
Environmental management zone	93.12	931173.43
High intensity mixed use	66.48	664827.59
High to medium density	63.91	639070.58
Higher density	42.40	423976.71
Low intensity mixed use	29.41	294063.39
Manufacturing and logistics	74.72	747224.16
Medium - low density	56.05	560492.76

⁷ Planning processes are not considered in the model.

Offices and higher density residential	29.09	290935.09
Total	748.05	7480490.63

The **SECOND DRIVER** is the **Selected Growth Trajectory** that depicts the application of a development scenario over a period of 20 years.

To this end, a mathematical curve (growth trajectory) is fitted to the expected land utilization as reflected in the SDP for Klapmuts North over the next 20 years. Capital expenditure and infrastructure spend mimic the rollout of the potential volume of development in the future (expressed in m²). Several curves representing a trajectory are illustrated below and applied to the capital and infrastructure capital spend calculated from the demand by land use for commercial space (GBA), or number of residential units. Distribution 2: **Sustainable growth trajectory** is applied to Klapmuts. Note that these curves could represent the commencement of a phase in the current property and/or construction cycle and should therefore not be considered as having started from a zero base.



The growth trajectory has three building blocks that are sequenced to unlock development of an area or location⁷:

- External infrastructure and bulk services aligned with constraints,
- Internal bulk services provision (site specific), and

- Superstructure (construction of buildings in terms of land-use and zoning regulations, i.e. top structures).

The same curve is applied to the provision of both external and internal infrastructure, as well as superstructures. The curve can, however, be modified to reflect a slow or accelerated introduction of bulk services from a municipal perspective, independent of the trajectory associated with the introduction of internal services and top structures. External infrastructure is introduced first, and is assumed to take a year. During the second year, internal services are introduced on the site and construction of top structures commences in Year

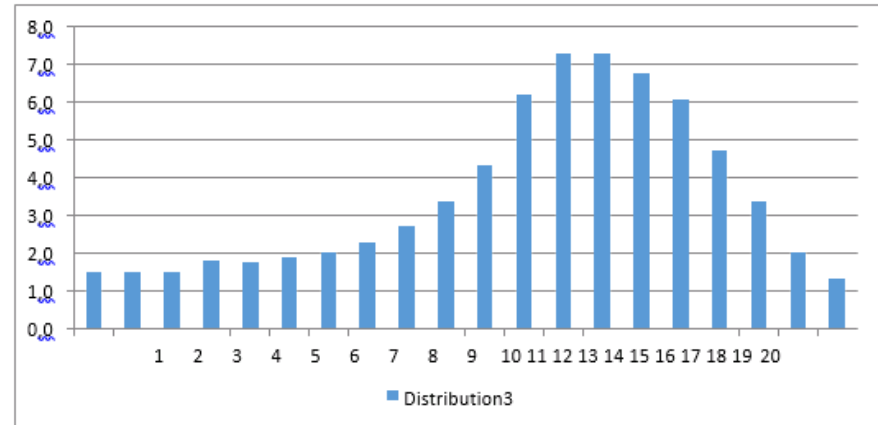
3. The rollout of bulk services, site infrastructure and top structures follows the curve of the growth trajectory consistently, i.e. it is not phased and there is no step-up to reflect peaks or troughs of development (nor in demand for land) over time.

The preferred path

The applied growth trajectory adjusts the variables mentioned above according to derive funds-flow outcomes. In order to compare the outputs of different economic-growth scenarios, the following approach was adopted:

- The Place-Marker model is applied to Klapmuts North, i.e. the Drakenstein land portions of Klapmuts that fall within its jurisdiction; and
- The growth trajectory reflected below for Klapmuts was predetermined in terms of a positioning strategy adopted by the Stellenbosch Urban Development Strategy with specific reference to Klapmuts and refers to a SUSTAINABLE TRAJECTORY.

The sustainable growth path indicates a level of development that is relatively constant for the foreseeable future, where after a significant increase (spike) occurs, which is short-lived with a strong tapering off trend.



In order to understand the outcome from the application of the growth trajectory and the economic-growth scenarios in current terms as reflected in the flow of funds for each year of the 20-year assessment period, the Value surplus/deficit is discounted to a current value. The results from the application of the growth trajectory to the economic-growth scenarios are discussed on the next page.

The indicative scope of development to which the growth trajectory is applied, covers the following:

Nature and scope development component		Units or bulk m ²
Group Residential on erven of larger 250 m ²		1 949 units
Medium Density Residential on erven larger than 250 m ²		2 356 units
High Density Residential □ flats		12 051 units
Commercial □ Office		912 354 m ² (Bulk)
Commercial – retail		187 839 m ² (Bulk)
General light Industrial		370 120 m ² (Bulk)

Source: Akanya Development Solutions and Beal Africa (2018)

Note: Bulk square metres refer to the gross building area (GBA) of a building

A total of 16 356 residential units are envisaged comprising group, medium-density and high-density (flats). Office and retail development entails a gross building area of 1 100 192 m² which translates to gross lettable area of 913 160 m². Light industrial is also envisaged with a scope of 370 120 m² of bulk, which translates to 307 200 m² of GLA.

The figures for the size of residential units included in the modelling are as follows: 125 m² group residential, 140 m² for medium density residential and 85 m² for flats. Quantity Surveyor estimates for building costs are used for the determination of the capital expenditure per property type.

4.1.1. OUTPUTS FOR KLAPMUTS SPATIAL DEVELOPMENT PLAN

4.1.1.1. NET FUNDS FROM DEVELOPMENT AND OTHER INVESTMENT ACTIVITIES

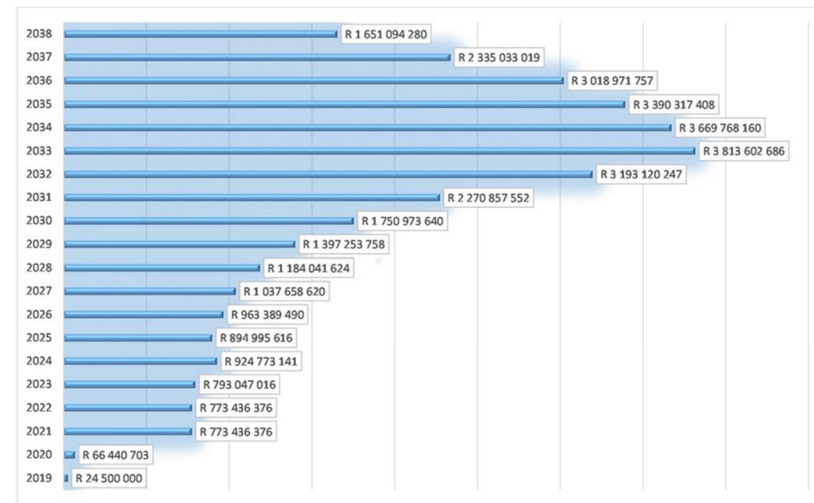


Figure 9

Net Funds from development and other investment activities includes the cost related to external infrastructure requirements (equates to the development charges payable by the private party), internal bulk service requirements (private party), superstructure (construction of top structures on the serviced land) and investment in community and social facilities.

Figure 9 indicates the Net Funds from development and other investment activities per annum for Klappmuts North in terms of the SDP over the 20-year period. Based on the application of the sustainable growth trajectory to the development envisaged as part of the SDP, the Net Funds from development and other investment activities over the 20 years is estimated at R33 926 million (Stellenbosch: R1 480 million)⁴ based on 566 ha (Stellenbosch: 41 ha) of development area.

The direct investment based on the mix of development envisaged in the SDP is 32 441 million. Note that no escalation is applied to the construction rates per m2 over the 20 year period. It is not possible to gauge building cost inflation over the period, which is affected by economic conditions, growth and supply and demand factors.

4.1.1.2. DEVELOPMENT CHARGES

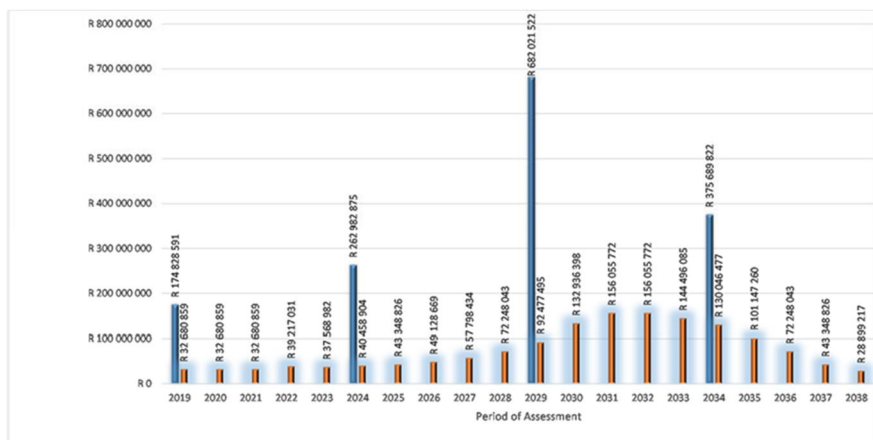


Figure 10

The Development Charges (DCs) are levied from the private party to enable the Municipality to provide the bulk or external services. The DC contributions based on the sustainable growth trajectory calculated over the period is R1 495 million (Stellenbosch: R227 million) in nominal terms. Using the five-year increments as a guide, the Municipality should achieve the following prepaid development contributions if the roll-out of the development path is mimicked by the growth trajectory:

- Year 1 (2019): R174 million (Stellenbosch: R26 million)
- Year 5 (2024): R263 million (Stellenbosch: R40 million)
- Year 10 (2029): R682 million (Stellenbosch: R104 million)

- Year 15 (2034): R376 million (Stellenbosch: 57 million)

Figure 2 indicates the annual contributions and the contributions prepaid for five-year intervals across the 20-year period of assessment.

4.1.1.3. PROPERTY RATES INCOME

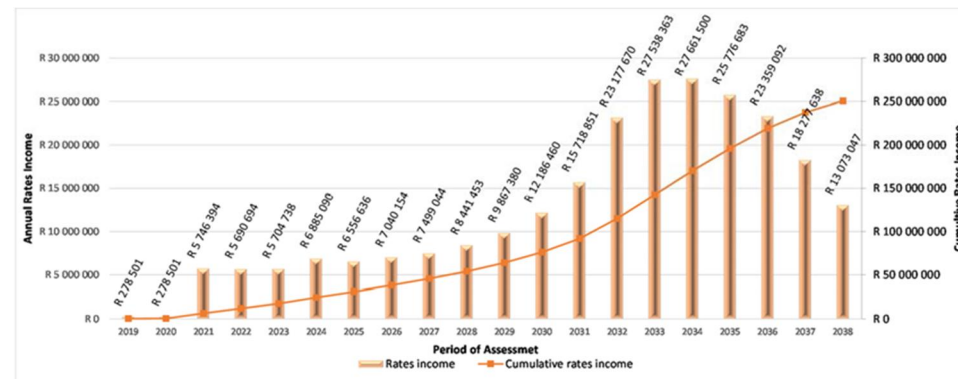


Figure 11

The Property Rates income is levied on the market value of the property as determined by the Municipality every four years. The rates applied allude to residential and non-residential properties and are applied based on the 2018/2019 financial year and kept constant for the remainder of the assessment period. The Property Rates income based on the sustainable growth trajectory calculated over the period is R250,8 million (Stellenbosch: R61,4 million) in nominal terms. **Figure 11** indicates the annual Property Rates income and the cumulative income from property rates over the 20-year period of the assessment.

Property rates are not escalated on an annual basis as there are various elements that impact any future property rate increases, such as the budget of the municipality and the value of the property, which in turn will indicate the applicable tariff.

4.1.1.4. ANNUAL AND CUMULATIVE NET FUNDS FLOW

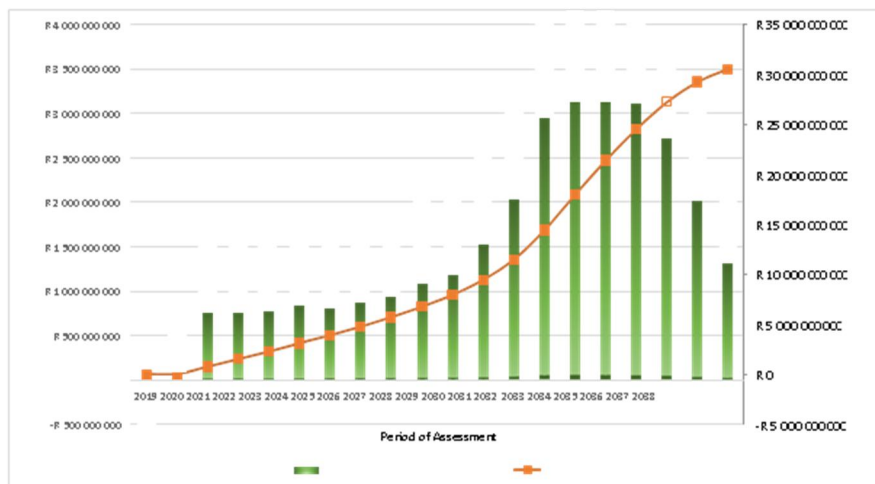


Figure 12

The Net Funds Flow surplus or deficit includes the following items: direct investment, investment in social and community facilities, other investment activities, operating income and operating expenses. Note that for the purposes of the Net Funds Flow calculation, the Development Charges and the external (bulk) infrastructure requirements are netted off, which reflect a cash inflow and outflow, i.e. the effect is zero. However, from an economic impact perspective, the infrastructure (bulk) services is capital expenditure and is therefore treated as a direct investment into the economy. The Net Funds Flow surplus calculated over the period is R30 564 million (Stellenbosch: R2 005 million) in nominal terms. **Figure 12** indicates the annual and cumulative Net Funds Flow over the period of 20 years.

4.1.1.5. VALUE SURPLUS/DEFICIT

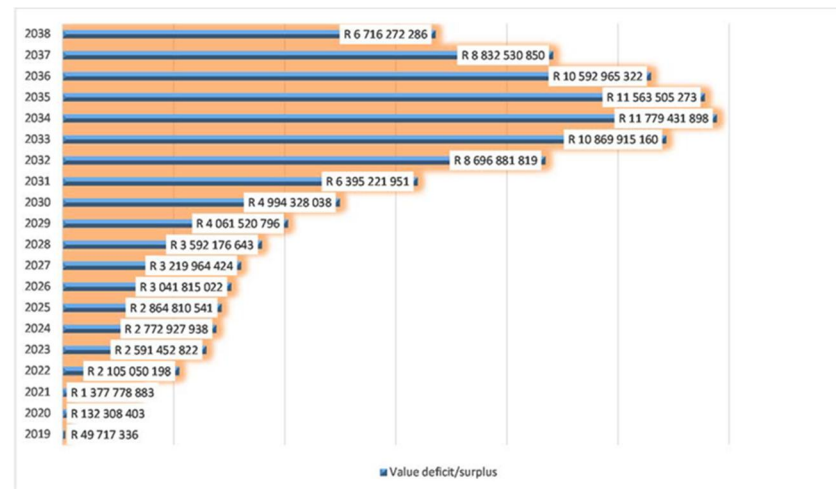


Figure 13

The Value surplus/deficit is calculated as the Net Funds Flow surplus or deficit (see Section 3.2.4) adjusted for economic benefits represented by the value addition to GVA, job creation quantified using the minimum monthly wage (adjusted for inflation at 6%), and climate change represented by a probability of occurrence. The Value surplus/deficit calculated over the period is R106 256 million (Stellenbosch R7 140 million) in nominal terms. **Figure 13** indicates the Value surplus/deficit per annum over the period of 20 years as reflected by the growth trajectory.

4.1.1.6. ECONOMIC IMPACT

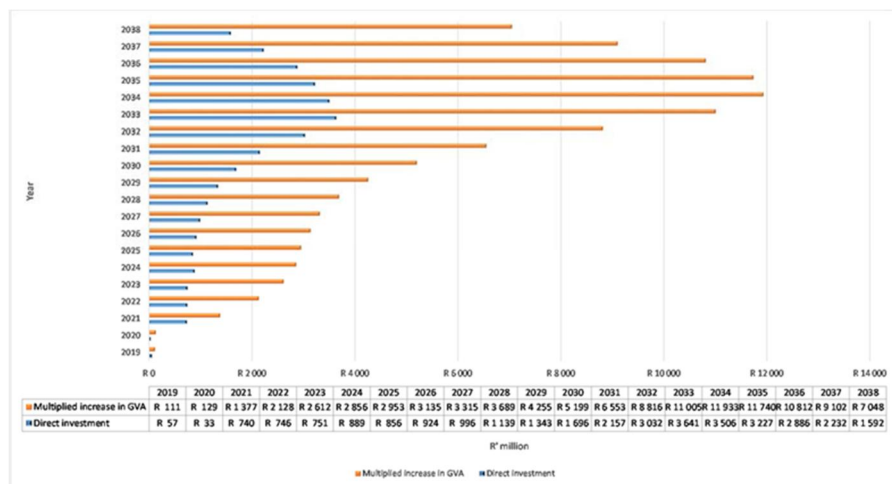


Figure 14

The economic impact is reflected by a direct investment of funds and the subsequent effect of multiplying those funds through the economy. The combined economic impact (direct and indirect) as a consequence of a development path over 20 years associated with a sustainable growth trajectory, is R108 766 million (Stellenbosch R7 535 million), with the direct investment contributing R32 441 million (Stellenbosch: R2 359 million) and the indirect impact R76 326 million (Stellenbosch: R5 176 million). Also note that the direct investment impact considers the inter-regional effects and backward and forward linkages that exist between the Drakenstein economy, Cape Town Metropolitan Area, the rest of the Western Cape and South Africa. **Figure 14** illustrates the direct (private sector investment) and indirect economic impact per annum for the development path over 20 years.

4.1.1.7. EMPLOYMENT

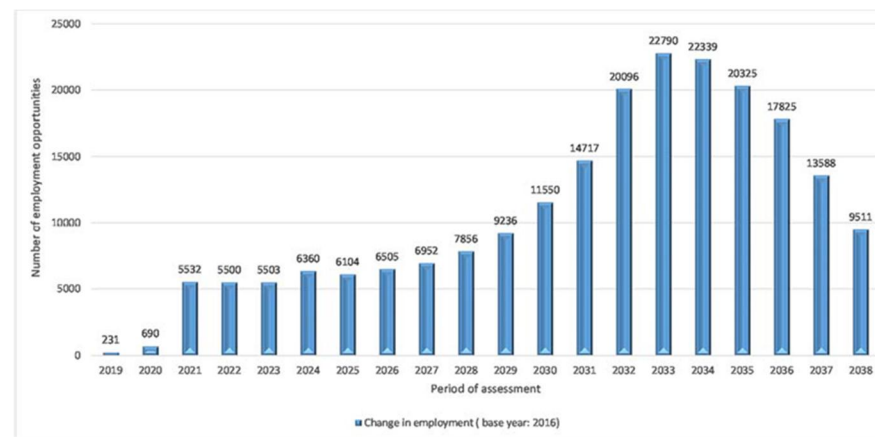


Figure 15

Employment generated by the application of the sustainable growth trajectory is based on a ratio of GVA per employee. The baseline employment from which the change is calculated, is 2016 (being the latest available figure). Employment based on the investment associated with the application of the sustainable growth trajectory, is 35 500 persons (Stellenbosch: 1567) on average per annum across the Drakenstein economy if the multiplier effect is considered and 24 900 job opportunities (Stellenbosch: 1098) if the multiplier effect is ignored. **Figure 15** illustrates the employment created per annum based on the extrapolation of the GVA per employee trend for the Drakenstein economy and is the change per annum (defined as the difference between the multiplied increase in employment due to the investment and increase in employment without the application of the multiplier to the investment) using 2016 as the base employment number.

4.1.2. SUMMARY

The following table summarises the development potential of Klappmuts based on the demand and take-up of land in Klappmuts South and the Klappmuts North based on the proposed SDP over a 20 year development rollout horizon.

Table 3

Item	Value (R' million)	Description
1. Total hectares (ha)	566	Land extent earmarked for development
2. Direct investment	R30 790	Direct private sector investment
3. Net Funds from development and investment activities	R33 926	Bulk services, internal infrastructure, capital expenditure and community facilities
4. Development charges	R1 495	Per the Drakenstein DC policy
5. Property rates income	R251	Per Drakenstein Tariffs Policy (2018/2019)
6. Net Funds Flow	R30 564	Net funds (3) plus Operating Income (property rates) less Operating Expenses (waste management, infrastructure maintenance)
7. Value surplus/deficit	R106 256	Net funds flow (6) less Climate Change probability plus Employee wages + Indirect economic impact)
8. Employment	24 900	On average per annum; dependant on capital expenditure roll-out
9. Present value of Value surplus/deficit (current terms)	R30 407	Value of surplus/deficit over 20 years in current terms
Notes: No annual escalations applied to building cost, property rates, DCs, only to wages and salaries at 6% per annum Development roll-out over a period of 20 years based on a sustainable growth trajectory		

It is clear that Klappmuts North, should the SDP be adopted, offers significant development potential. The Drakenstein land portions of Klappmuts offer a canvas for unlocking development potential.

4.2. STRATEGY 2: Growth Management

4.2.1. Growth Pressure

Both Stellenbosch and Drakenstein Municipalities have identified Klappmuts as a prospective sub-regional urban node along the N1. Residential and industrial development opportunities have been identified north and south of the N1, and the area has also been identified as having potential to serve as a regional freight logistics hub.

The transition from a municipal node to a sub-regional urban node will result in a number of growth tensions that will manifest on the edges of the existing developed areas. Tension zones are illustrated on Map 6 and include:

A – With the increase of traffic along Protea Road due to proposed Distell developments, properties along Protea will experience development pressure.

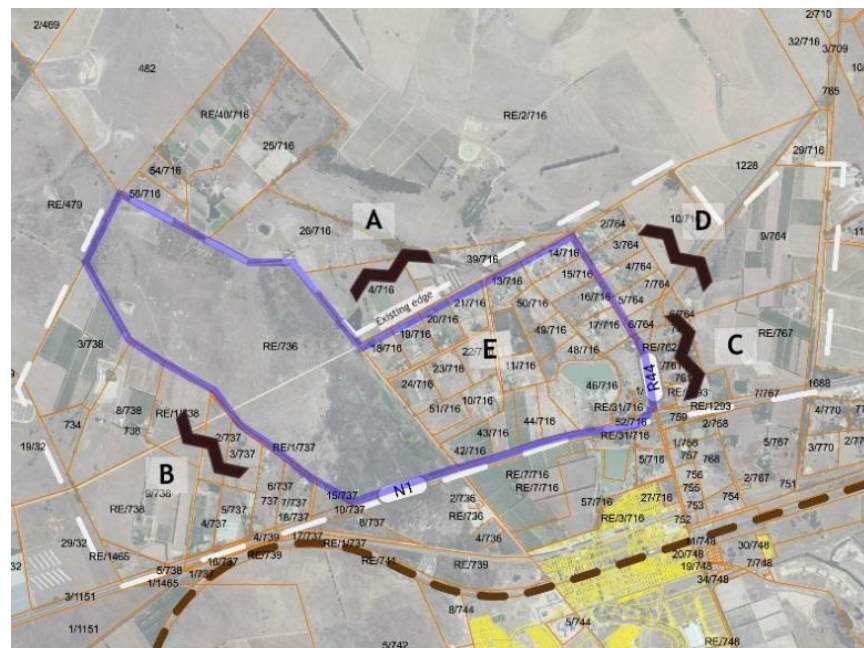
B and C – Due to the notion of “corridor” development along the N1, pressure will arise for commercial, logistics and processing activities. Issues that need to be taken into account is infrastructure availability and the impact on surrounding tourism and agriculture related activities.

D – The R44 towards Wellington carries large volumes of traffic that will increase in future. The area is currently predominantly rural in nature and the Drakenstein SDF earmarks the area for rural type developments.

4.2.2. Land Availability and Capability

Land availability and capability are some of the key factors that need to be taken into account. Map 6 indicates that land sizes in Klappmuts North.

As can be seen, most of the 20 ha and below sites are inside of the current edge (D) with some outside in the D and C pressure areas. Due to their location abutting Protea Road and the R 44, there is motivation to include these properties in the proposed urban edge.



Map 6 Existing edge and growth pressures

4.2.3. Edge Options

To manage the growth of Klappmuts North, the following principles should be adhered to:

- Infrastructure capacity should be augmented and upgraded to ensure compact urban form and infill development;
- Where spare capacity exists, consolidation and intensification of existing urban development is most efficient;
- A balance should be struck between investment in new infrastructure and the upgrading / refurbishment of existing infrastructure;

- New infrastructure should be provided in areas, which are linked, or can be linked directly to the movement network;
- Medium to high-density residential development in strategic locations is promoted to make for optimal use of infrastructure; and
- Public and private investment in marginalized areas is essential to spur development and create an economic base.

Taking the future and illustrated vision for Klapmuts North, the economic value assessment and land capability into account, it is clear that the existing urban edge requires right-sizing.

Figure 8 illustrates the result when growth management factors and principles, s mentioned above, are rated in terms of their application to the area. The results are compared to a “right-sizing” scale i.e. limited, moderate and substantial. In the Klapmuts North context, the rating results points to a **moderate** change to the existing edge. It should be noted that the above method is only indicative and other institutional issues should be taken into account e.g. existing policy directives, participation inputs etc., as well as prevailing market and investment conditions.

Map 7 Indicates the urban edge with agriculture management areas.

The illustrated future and economic value in Klapmuts North will normally have to be achieve with the right sizing of the existing urban edge. It is however important to note that the right sizing should be assessed in terms of the regional development role as well as the existing development context and infrastructure availability.

It is therefore proposed to keep the current urban edge and to conceptually, indicate a future growth boundary. The short term development objectives can be achieved by intensifying land uses within the current edge.

To protect the abutting agriculture land, agriculture management areas are proposed to clearly indicate that the land is earmarked for extensive agriculture

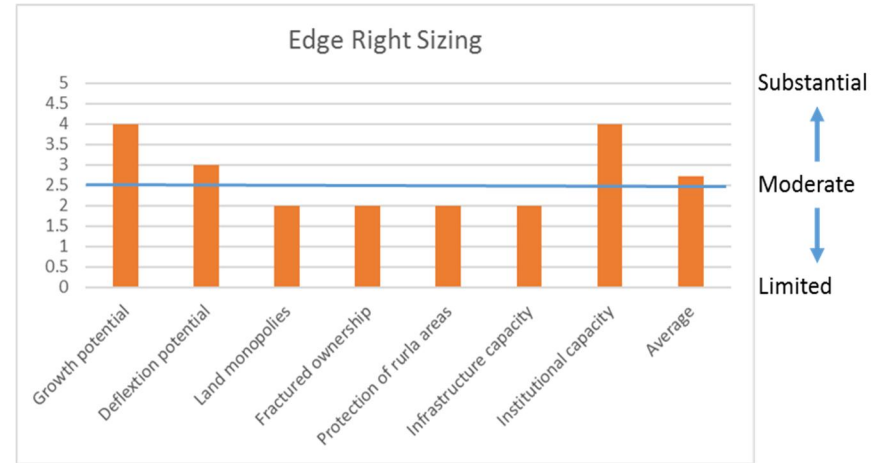


Figure 17 Edge Right Sizing

and tourism related activities. These proposals will be discussed in the next section.

4.2.4. Outside the Edge

It is important to also deal with areas outside of the urban edge. The proposed edge and growth management plan is to include an Agri-management zone on the edge as a transition between urban and rural activities. The intension is to increase the value of the area by promoting high intensity agriculture and tourism related activities.

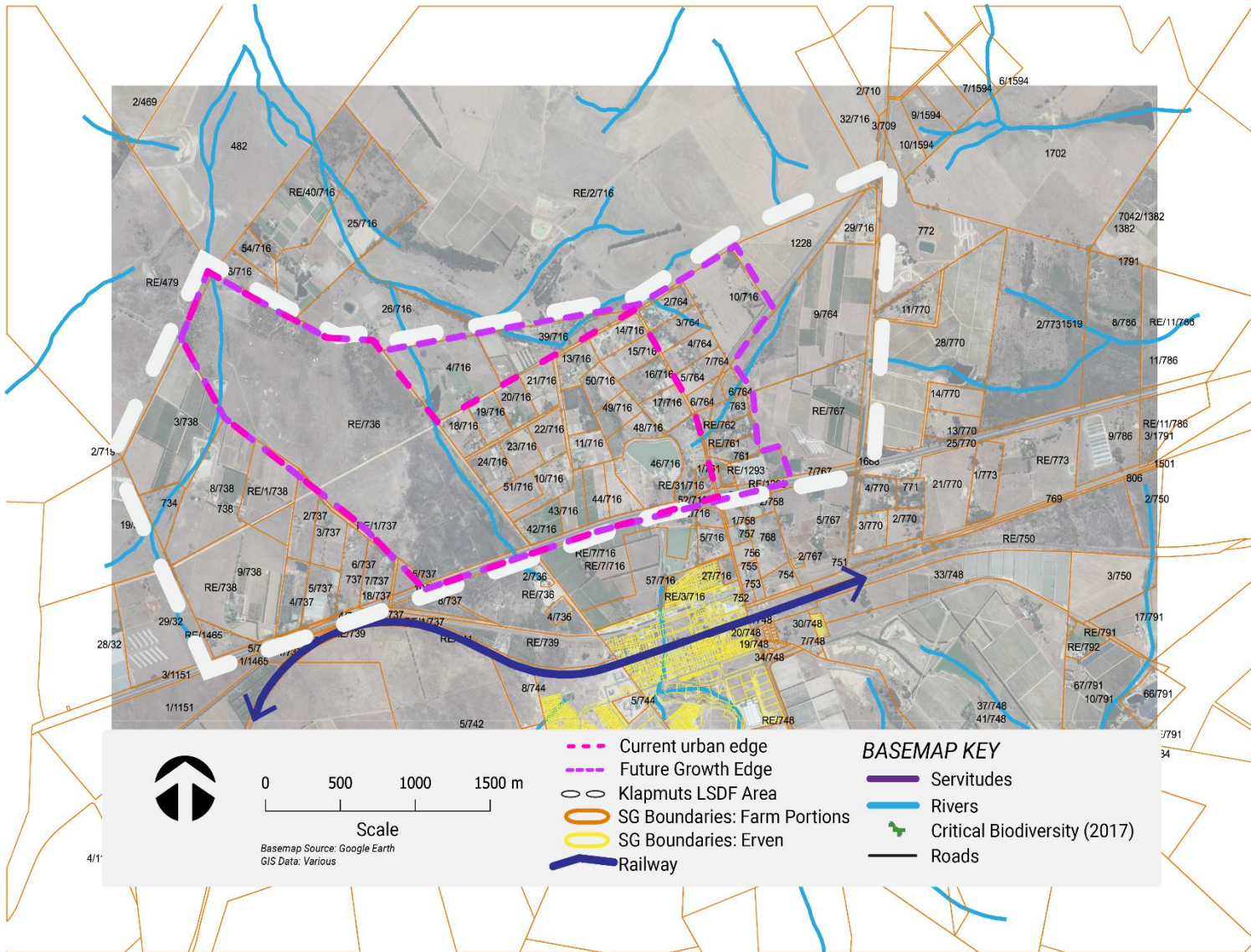
- No subdivisions should be allowed but development should be managed in line with the Agri Zone requirements in the Zoning Scheme By-Law as proposed.
- Integrating change at the urban/rural edge while preserving rural character and community values;

- Empowering rural communities to actively participate in the decision-making processes affecting land use and community well-being;
- Making room for new production and processing technologies (like renewable energy from agricultural waste) and ensuring the environmental and economic health of a region;
- Defining regional character, based on ecological systems and relationships between large and small rural towns and communities;
- Mediating social conflict between farm dwellers and non-farm dwellers over land use; and
- Containing unmanaged change in land uses due to, for example, demographic shifts, economic pressures, spot rezoning, and the experienced⁸.

Areas indicated between the current urban edge and the proposed growth edge must be evaluated in terms of the overall objectives of the LSDF. Where appropriate, uses should be confined to existing zoning as per scheme.



⁸ Thorbeck, Dewey. Rural Design: A New Design Discipline (Kindle Locations 2888-2902) Taylor and Francis. Kindle Edition.



BASEMAP KEY

- Current urban edge
- Future Growth Edge
- Klapmuts LSF Area
- SG Boundaries: Farm Portions
- SG Boundaries: Erven
- Railway
- Servitudes
- Rivers
- Critical Biodiversity (2017)
- Roads

Scale

0 500 1000 1500 m

Basemap Source: Google Earth
GIS Data: Various

Map 8 Edge Options

4.3. STRATEGY 3: Land Development

The following strategies are proposed:

- Support an efficient movement system;
- Develop appropriate mixed of use and urban form;
- Implement Place-making measures; and
- Promote efficient urban management measurements.

The spatial strategies and built form guidelines should create an enabling environment (providing facilities and accessibility) for businesses and communities to prosper. These strategies will be discussed in more detail in the following sections.

4.3.1.Movement

For the purpose of this document, movement includes:

- Vehicular modes;
- Pedestrian and bicycle modes; and
- Public transport modes e.g. taxi's, busses and train.

4.3.1.1. VEHICULAR MOVEMENT

In order help ensure that future and current developments are encouraged, it is important to ensure accessibility, legibility, and ease of movement is created through well-integrated roads and movement systems within Klappmuts North.

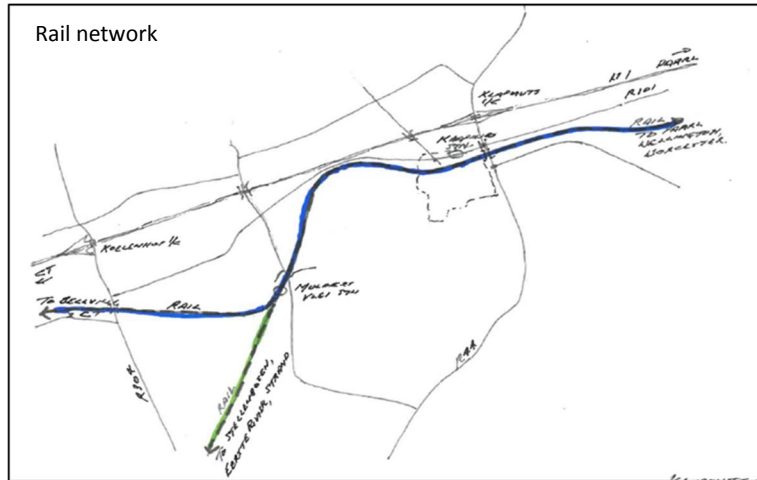
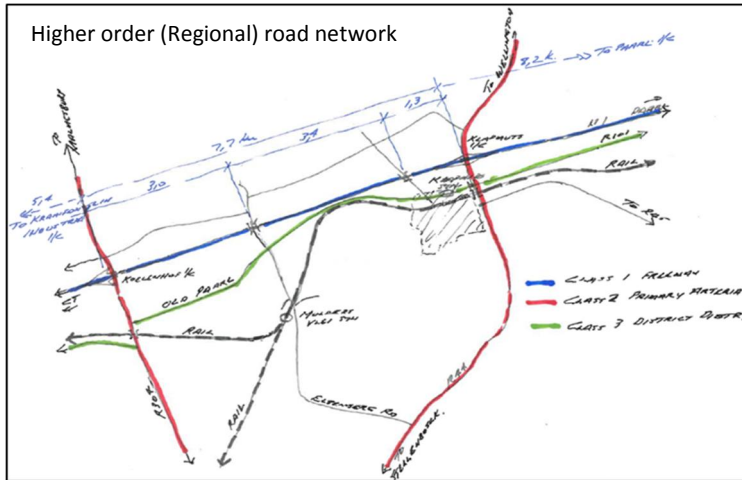
The existing movement system and network serves as a positive feature, but this needs to be strengthened, specifically in terms of its capacity to deal with the pressure of the proposed increase in activities and densities within the area.



Table 4 Klapmuts North Movement Routes

Type	Functioning principles
Primary arterial routes R 44 and future upgrade of Protea road (Class 2)	<ul style="list-style-type: none"> • Primary arterial routes providing longer distance regional & sub-regional vehicular mobility & connectivity; • Particularly relevant to the movement of heavy vehicles & goods distribution; • Characterised by urban route continuity & design standards that facilitate mobility; • Will have no direct property access except where access conforms with intersection spacings; • These roads serve as regional / metropolitan structuring elements serving a mobility function connecting places of economic significance; • Could ultimately accommodated a BRT or LRT type public transport operation; • Can accommodate NMT movement, which should preferably be physically separated from the higher speed vehicular movement; • Future upgrade of Protea Road must take into account that it will traverse through future urban areas.
District distributors / integrators Upgrade of Groenfontein Road (Class 3)	<ul style="list-style-type: none"> • District distribution routes provides vehicular mobility, and to main public transport (including BRT type) operations; • These roads serve an important urban integration function within activity corridors, with route continuity of significance in supporting public transport; • Vehicular access to properties & on-street parking is restricted in support of public transport & NMT operations; • Forms part of secondary road network in the region / extended metropolitan area;
Collector / integrator Routes (Class 4)	<ul style="list-style-type: none"> • Minor arterial / collector road serving as internal vehicular circulation road within Klapmuts Precinct; • Important as feeder or community public transport service routes giving connectivity to main public transport routes and to local destinations; • These roads have a greater balance between vehicular mobility and property access, with increased emphasis on NMT movement; • The roads serve the internal circulation of the precinct as well as the relatively few vehicle trips by those wishing to travel through the precinct; • Distributes traffic to and from Class 2 & 3 to Class 5 Roads; • Provides access to community facilities & characterised by local route continuity.
Residential Streets (Class 5)	<ul style="list-style-type: none"> • Provide direct access to properties; • Provides for other non-vehicle-related uses; • Defined as local streets; • These roads are mainly utilised as access routes with little mobility.

The following sketches introduce movement concepts applicable to Klappmuts



The illustrative framework depicts the objectives and principles in a visual way. Identifying e.g. walkable thresholds where appropriate, a high-level movement network and areas of suitable activity.

There must also be an acceptance of a mobility hierarchy that places pedestrian first, and private cars as being of the lowest priority;

- Pedestrians** – together with persons with special categories of need
- Buses** – where an IPTN is operational
- Metered taxi** – as supplementary / complimentary to the bus operations
- Cyclists** – with the emphasis on certain user categories
- Trucks** – relevance to economic sustainability & development
- Cars** – as an alternative mode of personal transport.

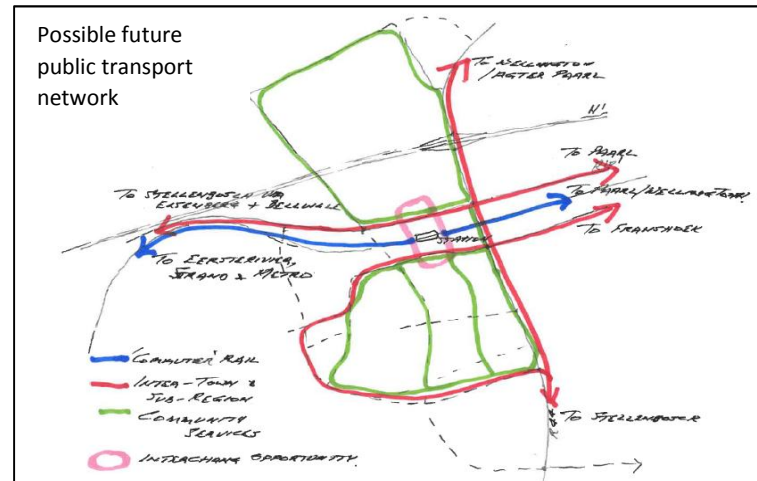
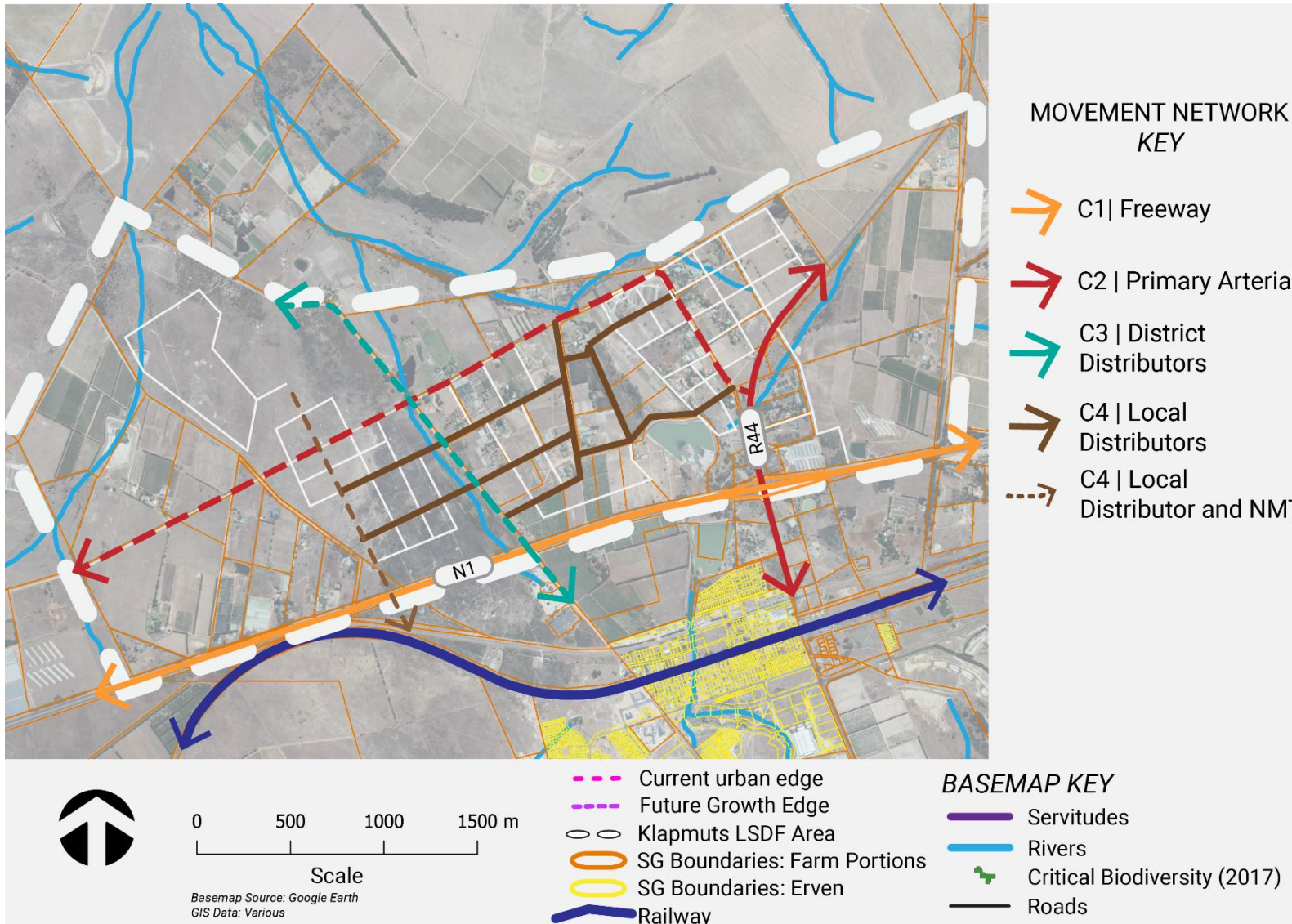


Figure 20 Proposed movement network and design guidelines. The illustrative framework depicts the objectives and



Map 10 Movement Key Network

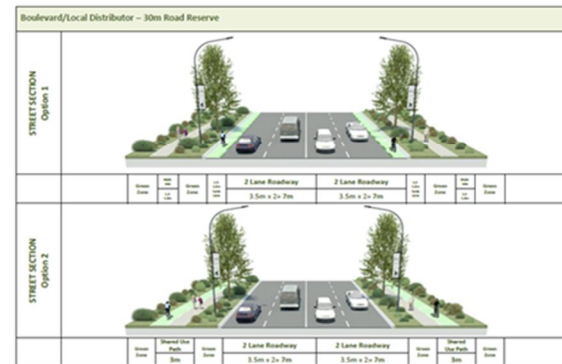
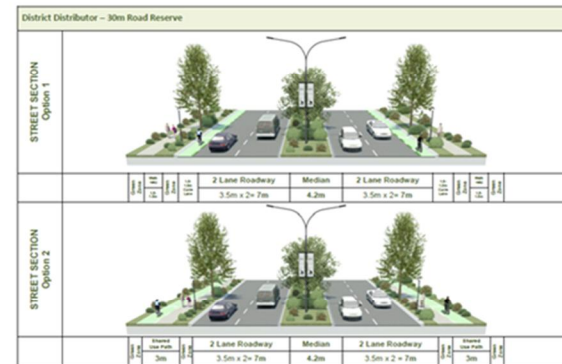
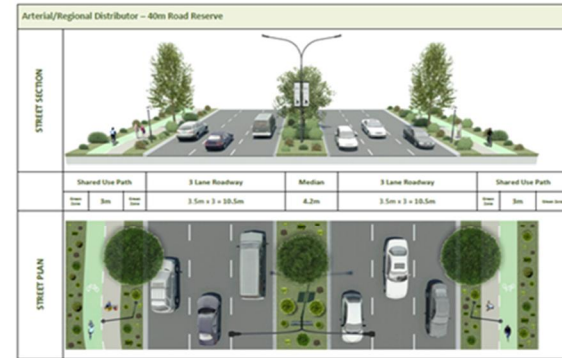
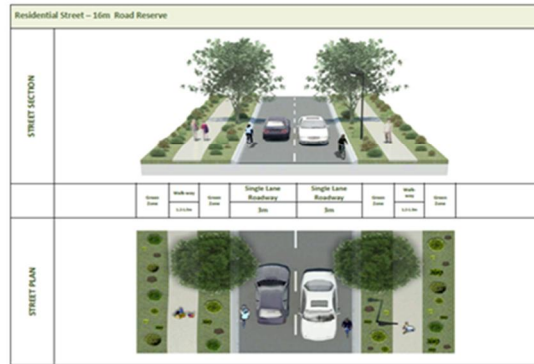
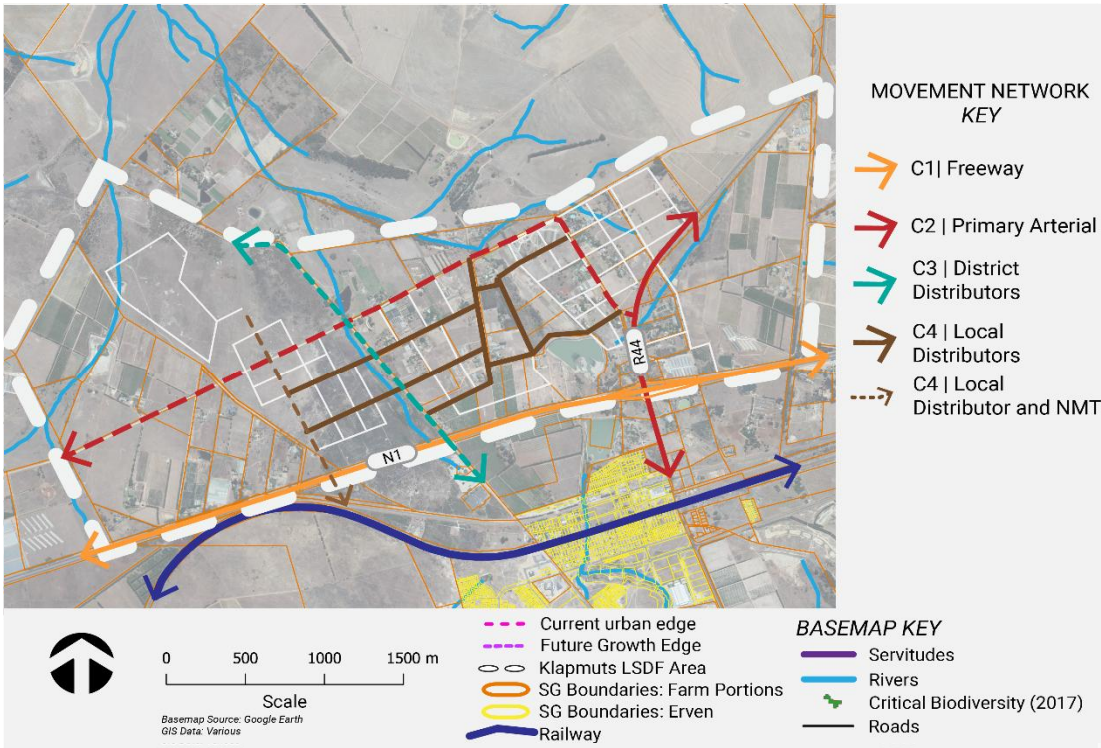


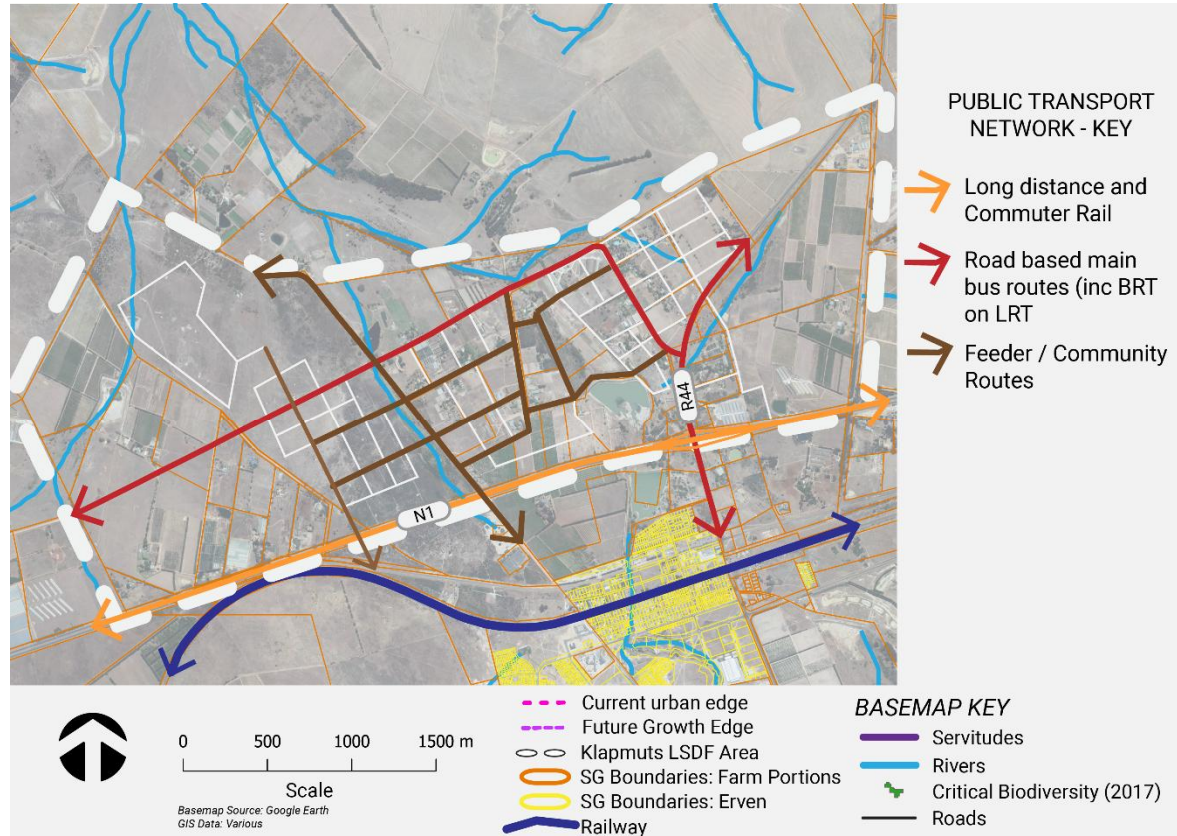
Figure 22 Different Road Classes

4.3.1.2. Public Transport

Public transport is considered a transport service rendered to the public to meet a range of travel needs. The main forms of public transport in the Cape Winelands District are minibus taxis, bus and rail. Within the Drakenstein area, only minibus taxi and limited rail services are available. There is however long-distance bus services which operate an inter-municipal service⁹.

Currently, there are a large number of formal and informal public transport facilities in the Drakenstein area. The majority of these facilities are in Paarl and Wellington, with no services in the Klapmuts North area.

Map 9 Illustrates and proposed a future public transport network for the Klapmuts North area.



Map 13 Public Transport Network

⁹ Drakenstein, LITP, 2016

4.3.1.3. Pedestrians

Ideally, throughout Klapmuts North, pedestrian flows need to be prioritised and ensure that there is a balance between pedestrian and vehicle movement. There are a number of approaches to improve the pedestrian movement, which include:

- Design in terms of pedestrian thresholds and catchment areas (see figure 12)
- Enhancing pedestrian facilities, specifically sidewalks (on at least one side) along major roads and street furniture in public open spaces;
- Sidewalks and paths should be legible, smooth, uncluttered and overlooked by active land uses and have places to rest;
- Placing pedestrian streetlights to facilitate safe and secure movement at night;
- Promote the redevelopment or creation of new pedestrian links to the current movement network;
- Clearly mark pedestrian areas and crossing; to facilitate smoother transitions and flows between spaces; and
- Create pedestrian boulevards that are well connected to proposed open spaces, civic buildings or facilities and transport stations.

It is important to note that the increase in public transport usage, is dependent on the development of high standard facilities for walking or cycling. Therefore, apart from pedestrianisation around public transport points, other areas that need to be prioritised include areas around all businesses, schools and institutions, recreation facilities and at major intersections.

This should generally include: sidewalk seating, trees / vegetation and litter receptacles provided in the public domain. These facilities should be provided to allow pedestrians or cyclists the opportunity to stop and rest, have lunch, watch other people and activities. Seating areas should be incorporated particularly in



Figure 24 Examples of pedestrian areas and sidewalks

the main activity areas. These seating facilities may consist of a variety of forms, including individual units, benches, and ledges or linked with public art sculptures.

Provide comfort, safety, convenience and encourage walking;

- Should be continuous along desired lines, limiting the number of conflicts with other modes of transport;
- Must be designed to be universally accessible, especially to those with disabilities or special needs;
- Surfaces must be firm, smooth, non-slippery, and stable;
- Pedestrian-scaled lighting should be incorporated appropriate to the use of the street;
- There should be pedestrian lighting on at least one side of the road along the sidewalks.
- Handrails and landings should be provided along steep grades;
- Sidewalk width should be chosen based on surrounding land uses (higher density requires wider sidewalk);
- Other street furniture like lighting, signage and litter receptacles / bins should also be allocated;
- A shared bin/waste service should be used together with recyclable bins, which should be placed on the centre of every block on both the left and right side of the street.

In order to make the decisions in respect of sidewalks easier, the guidelines related to activity areas as follows¹⁰:

Business and commercial areas

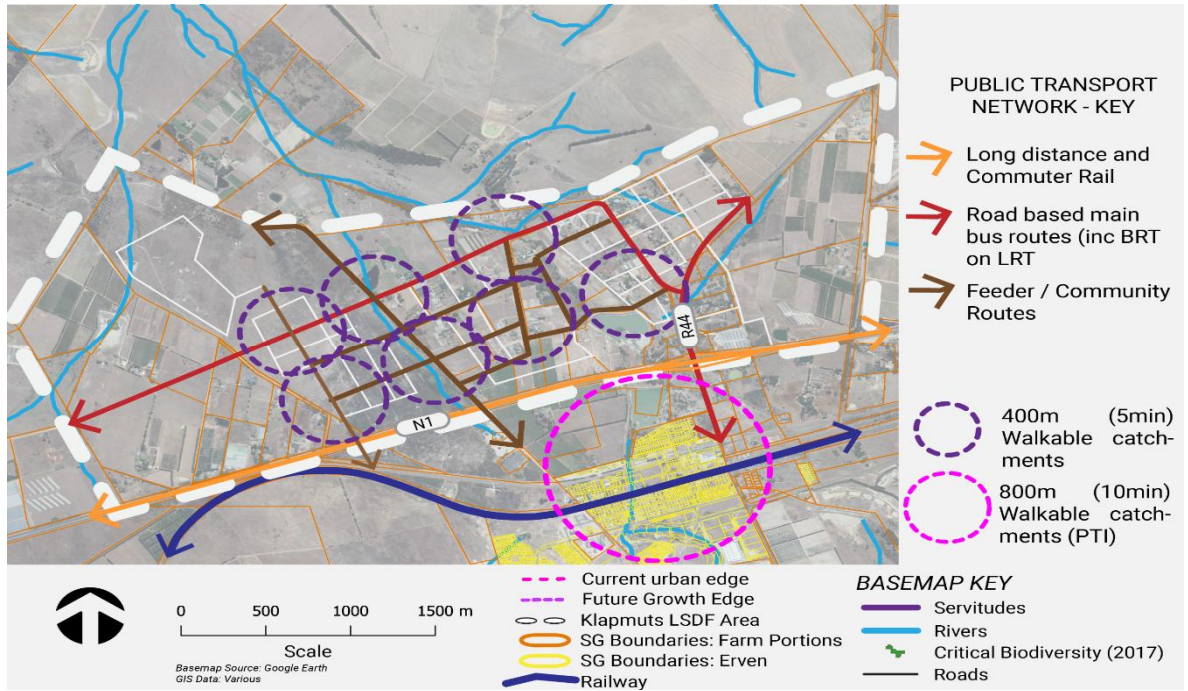
- Separated sidewalks should be a minimum 1.5m wide (all classifications);

- Sidewalks in business area along the R 101 Road should be a minimum 2.0m wide for improved pedestrian safety (1.5m permitted on residential and industrial streets);
- Sidewalks should be provided on both sides of all street classifications (including most residential and industrial areas);
- Wider (≥ 2.0 m) sidewalks should be provided along public transport routes and connections to public transport hubs;
- Promote traffic signal priority for pedestrians.

Schools and other pedestrian generating activities (e.g. community hall and taxi facility)

- Wider (≥ 2.0 m) sidewalks should be provided for connections to schools, within activity centres and near major pedestrian generators (e.g. stadiums);
- Separated sidewalks should be a minimum 1.5m wide (all classifications);
- Sidewalks should be provided on both sides of all street classifications (including most residential and industrial areas);
- Provide speed calming measures.

¹⁰ JRA, Complete Streets



Map 14 Movement Key Network



4.3.2.1. NODAL DEVELOPMENT

Nodal developments are important focal points and structural elements in the development of Klapmuts North’s mixed-use areas as indicated on Map 11 and Figure 23.

Nodes are defined as high-density multifunctional developments (see Figure 22) featuring a pedestrian-conducive environment and good public-transit accessibility¹¹.

Due to the inter-connectivity between Klapmuts south and Klapmuts North, Map 11 also indicates nodes that will have a direct impact on Klapmuts North:

- Station development area
- Civic node
- Campus node

To further strengthen the nodes, Management Overlays may be used to inform and regulate development, i.e. overlays are used in Schemes to facilitate the management of specific uses across and in addition to several underlying zonings.

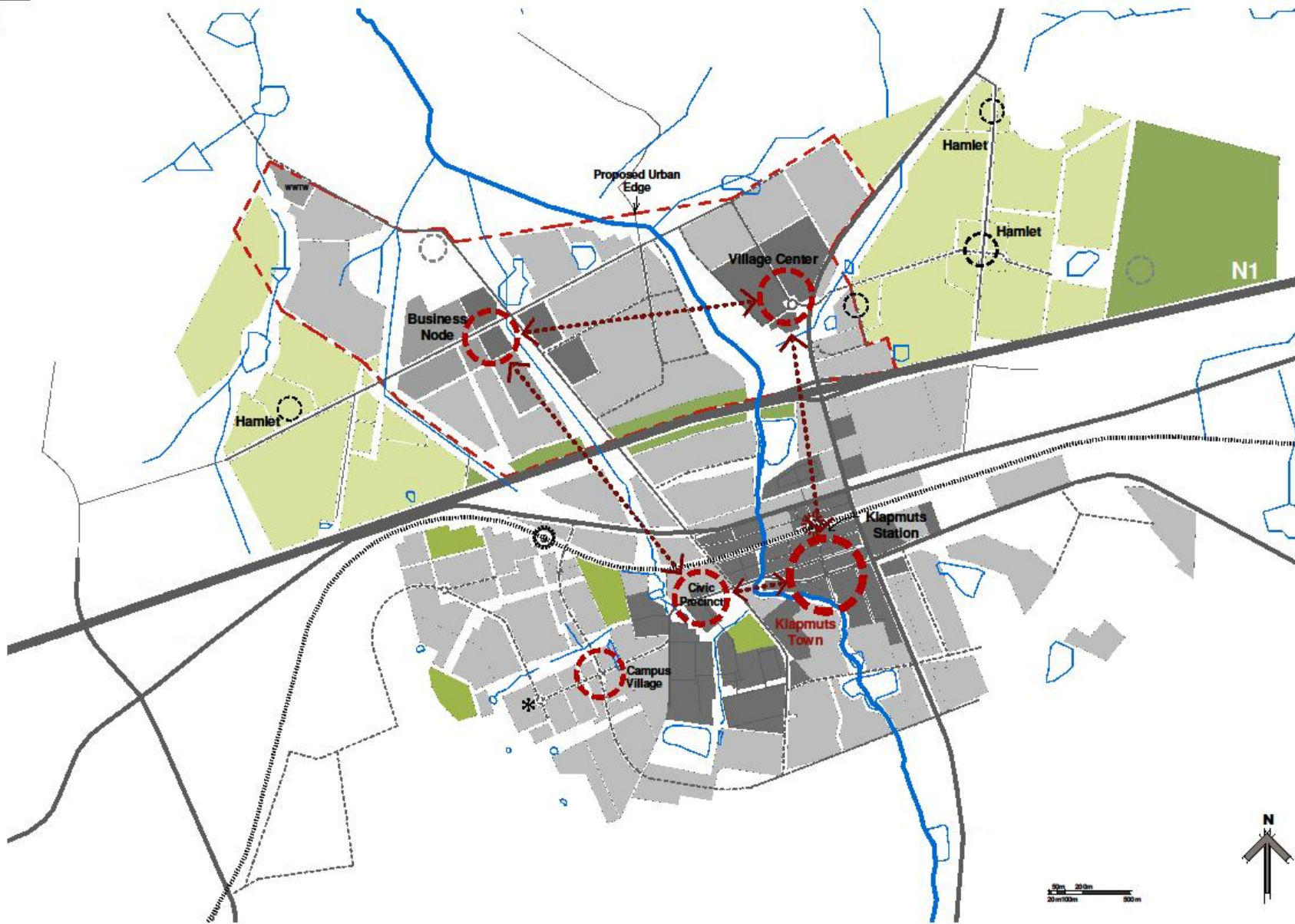
A Management Overlay applies to a defined area of land with a distinct set of intentions or policy guidelines that influence and facilitate its development in a unique or specific manner and may not have an exact cadastral boundary. Management Overlays may be shown spatially using an overlay to the Scheme Map¹².



Figure 29 Mixed land use examples for a “High Street”

¹¹ <http://journals.sagepub.com/doi/abs/10.1068/b33145>

¹² Kwazulu-Natal Land Use Management System Guidelines for The Preparation Of Schemes For Municipalities

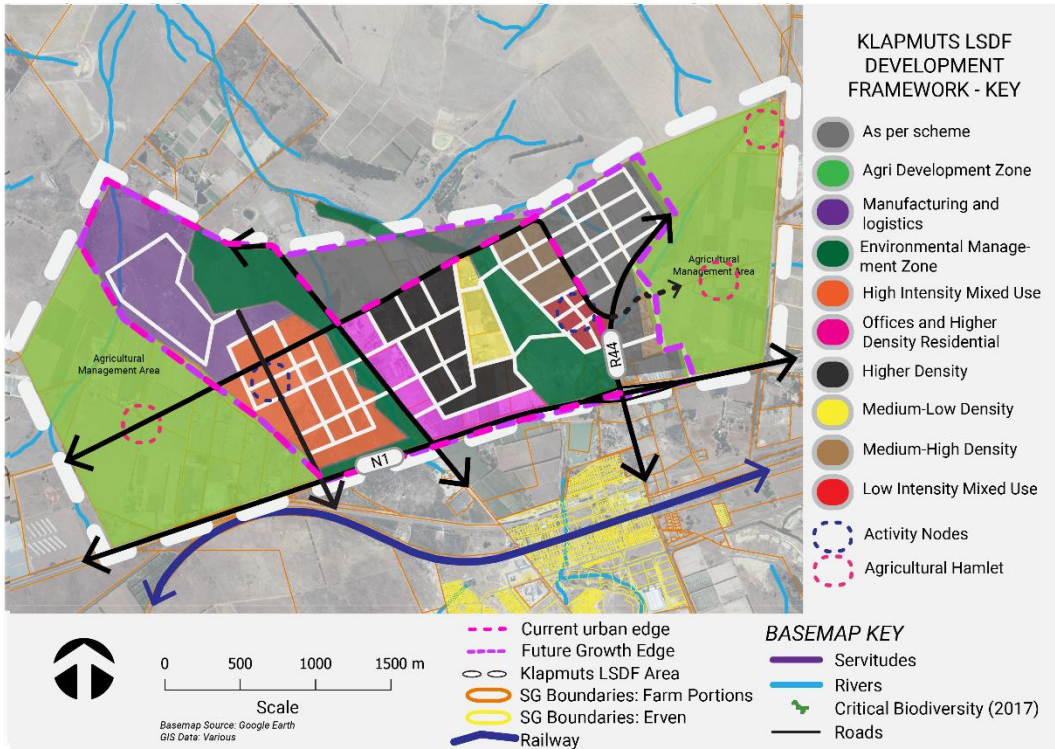


Klapmuts Connectivity | Drakenstein_North Klapmuts Framework



UD105 | 1:20000 | ©A3 | Rev.

Map 17 Klapmuts Development Framework: Nodal development



High intensity mixed use activity node



Low intensity mixed use activity node



Low intensity agri-hamlet



High intensity mixed use

Low intensity mixed use

Figure 31 Development Concepts

4.3.2.2. RESIDENTIAL DEVELOPMENT

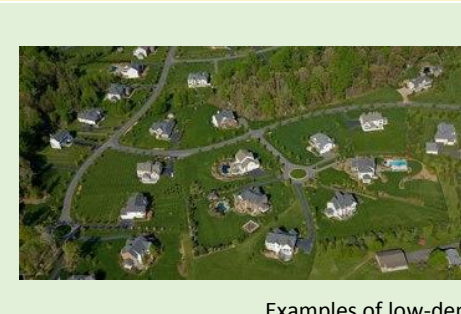
The residential design should include a range of housing options to cater for various income groups. A wider variety of housing types is encouraged; this includes family units, duplexes and triplexes, flats or apartments and where appropriate the following should be achieved¹³:

- Prioritise walking, cycling and public transport, and minimise the need to use cars;
- Deliver a quality of life which residents and visitors are entitled to expect, in terms of amenity, safety and convenience;
- Provide a good range of community and support facilities, where and when they are needed and that are easily accessible;
- Present an attractive, well-maintained appearance, with a distinct sense of place and a quality public realm that is easily maintained;
- Are easy to access for all and to find your way around;
- Promote the efficient use of land and of energy, and minimise greenhouse gas emissions;
- Provide a mix of land uses to minimise transport demand;
- Promote social integration and provide accommodation for a diverse range of household types and age groups;
- Enhance and protect the green infrastructure and biodiversity; and
- Enhance and protect the built and natural heritage.



Examples of higher density developments

Examples of medium density developments



Examples of low-density developments

Figure 34 Examples of various density units

¹³ Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas, 2009

4.3.2.3. SOCIAL FACILITIES

Social or public facilities are generally regarded as the responsibility of government, whether central, regional or local, and more often than not are provided by government institutions. However, public facilities are also provided privately, when the government-provided services are perceived to be inadequate¹⁴.

The following table provides general guidelines¹⁵ on some of the required social facilities:

Table 5 General guidelines for social facilities

Facility	Location	Access
Crèches or ECD centres Land requirement: Depends of the services provided and number of children	These are community-specific facilities, which should be within walking distance of residential developments.	Should be accessible by car and pedestrian way. Normally locates on residential collector or close to school facilities. Some of the facilities might be clustered to provide services that are more comprehensive. Close to a public transport route
Secondary Schools Land requirement: 4.8 ha	Should be located within easy reach of the local areas, which it is intended to serve.	Close to public transport routes and on district or local distributors.

Facility	Location	Access
Primary Schools Land requirement: 2.8 ha	Should be located within easy reach of the local areas, which it is intended to serve.	Close to public transport routes and on district or local distributors.
Community Health Centre Land requirement: 1,5 ha	Should be located within easy reach of the local areas, which it is intended to serve.	Close to public transport routes and on district or local distributors.
Police station Land requirement: 0.5 – 1 ha	Should be located within easy reach of the local areas, which it is intended to serve.	Close to public transport routes and on district or local distributors.
Fire station Land requirement: 0.5 – 1 ha	Should be located within easy reach of the local areas, which it is intended to serve.	Close to public transport routes and on district or local distributors.
Library Land requirement: 0.5 ha	Should be located within easy reach of the local areas, which it is intended to serve.	Close to public transport routes and on district or local distributors.
Municipal offices Land requirement: 0.3 – 1 ha	Should be located within easy reach of the local areas, which it is intended to serve.	Close to public transport routes and on district or local distributors.

¹⁴ Guidelines for human settlement planning and design, CSIR,2000

¹⁵ CSIR Guidelines for the provision of social services, 2012

Facility	Location	Access
Cemetery Land requirement: 8.8 ha	Should be located outside of urban area but still be accessible to local residents.	Close to arterials and district distributors.
Large neighbourhood park Land requirement: 1.5 ha	Should be located within easy reach of the local areas, which it is intended to serve.	Close to public transport routes and on district or local distributors.

4.3.2.4. PLACE MAKING

In order to achieve the envisaged development and planning ideals for Klappmuts North, place making interventions should be implemented where appropriate, through detailed design and aesthetically appealing elements that would promote a specific type of experience.

The way in which streetscape elements such as streets, benches, lights, signage, public furniture, landmarks, public art/sculptures, open spaces, trading spaces and private spaces are designed helps create an experience of a place. Quality public spaces filled with cultural or heritage elements as well as well-designed built environment facilitate create a good sense of place.

The introduction of gateways and landmarks has certain benefits including:

- Creation of legibility and allowing easily recognisable routes and intersections to help people find their way;
- Promotion of a network of connected spaces and routes;
- Recognisable routes and destinations can contribute to safety and security.

Important considerations that need to be taken into account in the placing and design of gateways and/or landmarks are:

- Do not try to over-design and “box” the area. The specific character of Klappmuts North and its community needs to be taken into account as people enjoy places in different ways;
- Buildings at intersections and corners can act as landmarks;
- The detail and look of a building can improve legibility and ease of movement.

Scale and Place Making Elements



Lower density



Medium density



Rural areas

Low intensity nodes

High intensity nodes

Higher density

Parks and open spaces

Figure 35 Scale and Place Making Elements

4.3.3.RURAL DEVELOPMENT

The areas outside of the urban edge have been earmarked as an agri-development zone. Although the primary use supported is for agriculture development the area can also accommodate tourism facilities and destinations. Provision has also been made for small hamlet developments.

4.3.3.1. HAMLET

A hamlet is a cluster of rural and tourism related activities on a main route. The purpose of the promotion of a hamlet development is to increase and strengthen the agriculture and rural value of areas outside of the urban edge by maintaining farming practices on the land, whilst developing compact developments with reduced footprints.

This brings food production, ecological regeneration and a healthy, liveable form of settlement together.

The main activities allowed includes:

- Agri-industries referring to buildings and infrastructure required to accommodate processing of agricultural products;
- Tourism related activities including agri-tourisms;
- High intensity agri production; and
- Very low-density accommodation activities.

The establishment of a hamlet development will have to be investigated further as there are a number of legislative requirements that will have to be fulfilled. The intention is not to allow for subdivision or sale of agriculture-zoned land.

4.3.3.2. TOURISM

According to the Cape Winelands District Municipality, the tourism industry generally spans across the economic sectors, ranging from accommodation and catering, retail and wholesale, manufacturing, business services and social services. Tourism is not an economic sector on its own (as classified by the SIC), but forms part of other sectors especially the trade, transport and finance sectors¹⁶.

An important first step to understand the tourism journey from a spatial planning point of view is to identify key points. Key points in this journey¹⁷ include:

- Gateways and entry points – access points usually in the form of airports or border posts (but could also be the entry to a destination). MLM do not have any of the normal entry points and must depend on good signage and route directions.
- Routes – tourists travel along routes to reach their destinations. They don't necessarily take the shortest and quickest route, but rather tend to balance the 'effort of getting there' with the quality of the experience and safety
- Distribution points – tourists need to travel to 'something' in a destination. The distribution point within the destination becomes a critical link.
- Destinations – destinations are usually a cluster of different nodes consisting of attractions, accommodation, amenities and support infrastructure. A destination needs to have compelling product, access and viable support infrastructure.
- Distribution points – tourists need to travel to 'something' in a destination. The distribution point within the destination becomes a critical link within the overall experience as it serves as the major source of information and direction.

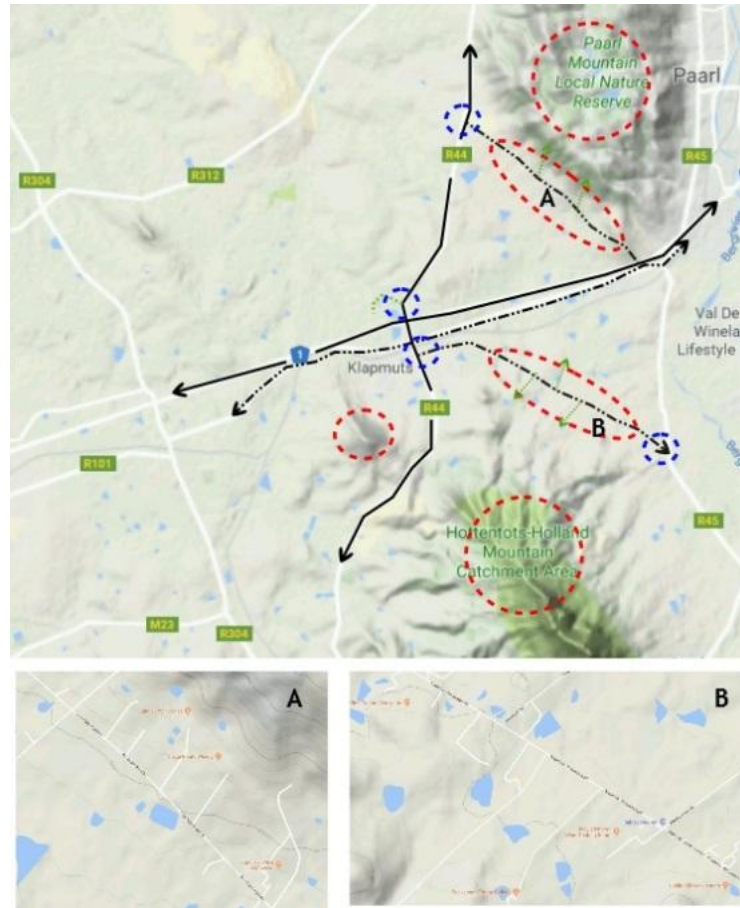
¹⁶ Cape Winelands District Rural Development Plan, 2017

¹⁷ Magaliesburg Precinct Plan, 2011.

Figure 26 illustrates the application of a tourism strategy, In the context of Klapmuts North, agri-tourism plays an important role in support of strengthening the agriculture nature of the areas outside of the edge.

Agri-tourism is defined by the Association of Agri-tourism South Africa (AASA) as a commercial business at a working farm or agricultural operation conducted for the enjoyment of visitors that generates supplemental income for the owner. It is a form of niche tourism that is considered a growth industry in many parts of the world, including South Africa¹⁸.

AASA also mentions that International studies show that between 1997 and 2007, nature and agricultural-based tourism was the fastest growing sector of the US travel and tourism industry. Rural tourism growth in Europe is three times greater than the increase in tourism in general. There is no reason for the growth of Agri-tourism, in South Africa, to be any less spectacular. South Africa cannot afford to have rural towns and communities die off. The trade must participate in rural and agricultural tourism to ensure that visitors, national and international, have the opportunity to meet the 'real' South Africa.








-  Arterial routes that provides access to destinations
-  Gateways and entry points: These should be attractive with good signage and route directions.
-  Local destination routes should be well maintained with good signage and direction to other facilities and tourism experiences
-  Tourism experience routes that provides access to other types of experience additional to the main destination point i.e. tourism facilities, walking trails, biking trails etc. They can be simple walkways so that tourists can experience village life, the natural environment, the way that people do village, communal agriculture etc.
-  A primary destination point like natural features or tourism and accommodation destinations need other and surrounding experiences and activities to be viable and sustainable.



Figure 38 Application of a tourism strategy

¹⁸ <http://www.agritourismsouthafrica.com/component/content/article/128-articles/693-sustainable-agritourism?Itemid=638>

4.3.3.3. AGRICULTURE

Although the Klappmuts North LSDF is not intended to be an economic development plan or agriculture development plan, agriculture is an important sector for the development and growth of area. The following is therefore a general discussion of the importance of agriculture and what the main component should be to support agriculture development.

Land is the main infrastructure needed for farming. In addition to its availability, the suitability of land for a specific product needs to be investigated. High potential land ought to be conserved and protected for agricultural purposes. Commonage areas plays a vital role in the provision of food at a local level and land used for this purpose should also be conserved. Where appropriate, land for small scale farmers should be made available through ownership schemes.

Water availability is a key consideration in the establishment of agricultural activities, especially in the South African Context. In terms of establishing more productive agriculture in the area, the water aspect will have to be given the same priority as land provision, whether water is provided via newly developed infrastructure or alternative measures such as rainwater harvesting.

Relevant **moveable equipment** and infrastructure such as broilers, tunnels, etc. is another focus area of support in the establishment of agriculture activities. Support of and continuation of existing CRDP interventions are therefore important.

Procurement is an area where a structured intervention in agriculture could yield results. Organizing both commonage farmers and smaller commercial farmers in the area to bargain collectively for special deals from e.g. suppliers of raw materials, feeds or fertilizers could result in cost savings.

The same applies to **technology development** or obtaining improved technology input. In the case of technology development, specific support programs offered by the state could also be accessed.

In addition to support the farms / commonage as 'farms', it would be important to also map the specific **product value chains**, in order to identify the exact point of intervention / support. E.g. the maize value chain may require an intervention in terms of establishing a co-operation for sales of product, while the weak link in the beef value chain may be transport to market.

It is therefore recommended that in addition to aspects such as land identification and water resource management, a better understanding be developed through studies of the key agricultural product value chains in the area to better focus support and interventions.

Important for the above discussion, is that all role-players, especially those responsible for agriculture, be involved. As a start, a feasibility study should be provided. It ought to specify the potential of the land, the current land use, improvements on the land and recommendations. The feasibility study should also define how the land should be used i.e. what type of grazing system, food plots systems etc. should be used. Important is that follow-up services (training, marketing etc.) are provided.

Possible projects identified by the Cape Winelands District Rural Development Plan, 2017, include:

- Agrarian reform programs
- Small scale farming on municipal commonage
- Consolidate industrial requirements for surrounding farmers and local agriculture at central processing hub for small scale production and packaging. Identify and secure municipal land
- Cape Winelands Agriparks Project: enterprise and logistics Project



4.4. STRATEGY 4: Infrastructure and Facilities Delivery

The Infrastructure delivery section comprises of the following categories:

- Electricity and Communication Infrastructure
- Bulk Water & Waste Water Infrastructure
- Solid Waste Management
- Storm Water Management
- Roads

4.4.1. Electricity

The main service provider in the Klappmuts area is Eskom.

Eskom has plans to increase the already surplus capacity for all future developments in Klappmuts (North and South). Currently, electricity infrastructure in Klappmuts is available in Klappmuts South. The increase in capacity of the substation in Klappmuts South should be adequate for the short to medium term developments planned in the region.

The Eskom Klappmuts 132/11Kv (2x40MVA) substation was constructed in 2011 to supply the greater Klappmuts area. The substation is supplied from the Muldersvlei and Safariland substations. The Klappmuts network is well below capacity at 22.1% and has sufficient capacity to supply the initial growth in the Klappmuts region. The substation currently has 123MVA free to use. In addition, Eskom have indicated that they intend on upgrading the substation in Klappmuts to 40MVA so there will not be a need for another 132/11Kv stepping down station.

The responsibility to provide electrical networks and services remains that of the developer for their developments. Eskom will allocate the construction of sections of the bulk networks (primary cables and MV switching stations) to the various developers proportional to their requirements. All completed networks will then be handed over to Eskom who will then be responsible for their operation and

maintenance. Should any hardware be installed within the development, Eskom would require access to the equipment.

Streetlights will need to be installed along all internal roads. Street lighting in all open access areas will be done according to the municipal requirements and will be handed over to them on completion.

The use of renewable energy such as solar panels, for electricity generation and heating will be encouraged for developments in the Klappmuts North Area to be in line with sustainable development principles. For small scale commercial and residential deployment, flat plate and evacuated tube collectors are the most prevalent. These technologies are very efficient and the most efficient way to save electricity for their typical applications.

4.4.2. Bulk Water and Waste Water Infrastructure

There currently exists no bulk water infrastructure in the Klappmuts area, north of the N1. The closest bulk supply passing the area is the City of Cape Towns' Wemmershoek Pipeline, which passes the Klappmuts area south of the N1.

Portions of Klappmuts North are currently serviced by boreholes. The yields of some of these boreholes are measured at 35 – 40 kl/hour, and the presence of strong groundwater in the area is generally accepted. Servicing of township developments on these properties through boreholes will evidently require storage of water, pressure boosting of the water to an acceptable standard, as well as treatment of water to conform to SANS 241 Drinking Water Quality Standards.

A new reservoir 3 zone is proposed to accommodate all the developments in Klappmuts North with a Top Water Level (TWL) of 230m. 3 booster zones are also proposed within the reservoir 3 zone. The water requirement in the long term for Klappmuts North is 25ML. Phase 1 of the Distell Development will commence with

the construction of a 7.5ML Reservoir to help unlock the development opportunities in Klapmuts North.

The proposed reservoir will have a 7.5ML capacity to supply the new future development area north of the N1 highway as part of Phase 1 (Short term) implementation plan. A new flow control valve at the bulk connection to the CoCT's bulk supply pipeline from Wemmershoek with a sump is also proposed for supply to this reservoir. Additional 7.5ML and 10ML reservoirs are proposed (medium to long term) when the Klapmuts Phase 1 reservoir reaches capacity.

The Klapmuts area north of the N1 highway currently has no bulk sewer network infrastructure. Sewerage demand for Klapmuts North according to the latest LSDF has been estimated by GLS Consulting Engineers to be 6ML/d.

The arrival of Distell brings with it an accelerated drive to have a WWTP in Klapmuts North for the immediate development plans of the group. Through consultation with the municipality and GLS, Distell will be constructing a 3.1ML/d WWTP on the north eastern side of Farm 736 which will service all of Klapmuts

Table 6 Minimum Infrastructure Requirement

Infrastructure	Rural /Agri	High Intensity Mixed use	Residential	Environmental	Low intensity Mixed use	Rural/Agri
Electricity	● ●	● ●	● ●	● ●	● ●	● ●
Water	● ●	● ●	● ●	● ●	● ●	● ●
Sewer	● ●	● ●	● ●	● ●	● ●	● ●
Public transport	●	●	●	●	●	●
Schools	●	●	●	○	○	●
Pedestrian facilities	○	●	●	●	●	○
Community hall and library	○	●	●	○	●	○
Public squares	○	●	○	○	●	○
Neighbourhood parks	○	○	●	●	○	○
Walking/biking trails	●	○	●	●	○	●
Tourism attractions	●	●	○	●	●	●
Markets	●	●	●	●	●	●
Urban agriculture	○	●	●	●	●	○
Medical facilities	○	●	●	○	●	○
Sport and recreation facilities	●	●	●	●	●	●
<ul style="list-style-type: none"> ○ No provision ● Low level provision ● "Green" alternatives ● High level provision 	Areas outside of the urban edge that require a lower level of infrastructure provision	Dense, urban development that will require a high level of infrastructure provision and detail design for public spaces	Mostly residential development at a variety of densities. Requires a high level of infrastructure provision	Mostly natural areas with a possibility to develop low density residential if flood plains allows it	Dense, urban development at a village level that will require a high level of infrastructure provision and detail design for public spaces	Areas outside of the urban edge that require a lower level of infrastructure provision

North. The WWTP will be designed to have a future capacity of 6ML/d. Drakenstein Municipality will own, operate and maintain the WWTP.

The new WWTP in Klapmuts North will be phased incrementally with a starting capacity of 1.5ML/d for Distell Phase 1 of development. The future capacity which falls outside of the Farm 736 boundary will be required to be funded by the municipality. The new infrastructure for the drainage area would need to be well designed in order to accommodate the potential flows from all Klapmuts North areas. GLS have stated that a new pump station and sewer rising main will be required to pump sewerage from the developments to the east of the proposed

WWTP location. The 95l/s pump station and rising mains are required to unlock development opportunities in the short term in the east of Klapmuts North.

In line with the principles of sustainable development, the re-use of water should be promoted for developments in the area through on-site sewage treatment and recycling of treated effluent for irrigation purposes. This concept will significantly lower the demand for potable water.

Table 5 provides general guidelines of a minimum level of infrastructure that should be provided in the different development zones.

4.4.3. Solid Waste

There are currently no Waste sites in Klapmuts North with the only transfer station being located in Klapmuts South. The current solid waste site in Klapmuts North on Farm 738 has been decommissioned and identified in the Drakenstein SDF (Aug 2015) for a Green industry incubator park.

Drakenstein Municipality would benefit from using the Stellenbosch Waste Transfer facility as no short to medium term waste strategy exists in the municipality. The promotion of recycling cooperatives and private waste companies should also be promoted as a short-term waste management solution to suit the development needs of Klapmuts North.

4.4.4. Storm Water Management

Storm Water Management will need to be investigated for each development depending on the catchment areas it lies within. Typically, the storm water will need to be collected and transported on the roads network in the area which leads to a series of underground pipe networks. Typical road infrastructure will collect the water and direct it to collection points such as kerbs, inlets etc. Erosion on drainage lines must be avoided during minor and major storm events through investigated means by each developer during their EIA process.

4.4.5. Roads

There is currently no developed road network and the provision of roads should be in terms of the proposals in Strategy 3: Movement.

Both Protea Road as well as Groenfontein Road are currently classified as Class 4 type roads with 20m road reserves. In order to accommodate the growth in the Klapmuts North area, they would have to be reclassified as Class 2 District Distributors with road reserves greater than 25m. A road reserve of 25m is sufficient for 4 lane divided roadway but considering the requirement to have non-motorised transport to accommodate the Klapmuts workforce in Klapmuts South, non-motorised transport, services as well as landscaping, a road reserve of 40 - 45m would be preferred.

The widening of the road reserves will need to be looked at in detail by specialists and through the Drakenstein LSDF or proclamation. There is also a need for discussions between the Drakenstein Municipality as well as provincial and national roads authorities regarding the following:

- The geometric alignment of the larger arterials (namely Groenfontein where the S-Bend exists)
- Road widths and future status; including the possible requirements to upgrade the N1 linkages to the subject road network
- Authorisation of the contemplated intersection between the roads
- Detailed look at what happens to the land between Groenfontein and the wetland.

4.5. STRATEGY 5: Urban Management

The proposed future urban management response is based on three strategies (see Figure 20):

- Effective Planning
- Effective Service Delivery
- Effective Communication

Without the relevant information available, proper service delivery and maintenance planning will always happen in a void. This would be an extremely weak position to be in for the municipality. An appropriate information and monitoring system will assist the municipality with **effective planning** and management of the urban management process and can act as an early detection system of opportunities and threats that arise during the ongoing growth and development of Klapmuts North.

Monitoring ought to be wider than just what and where services gaps occur, potholes and uncut grass, and must provide the Municipality with management information and trends that will allow them to respond, not only operationally, but also strategically to make Klapmuts North work better.

As and where necessary, amendments can then be made to either the:

- Urban management process and approach
- Levels and standards of service delivery
- Organisational strategies and mechanisms

Effective service delivery will be done through the following mechanisms:

- Having an area-based delivery approach
- Development of operation and action plans
- Frequent inspections
- Special operations

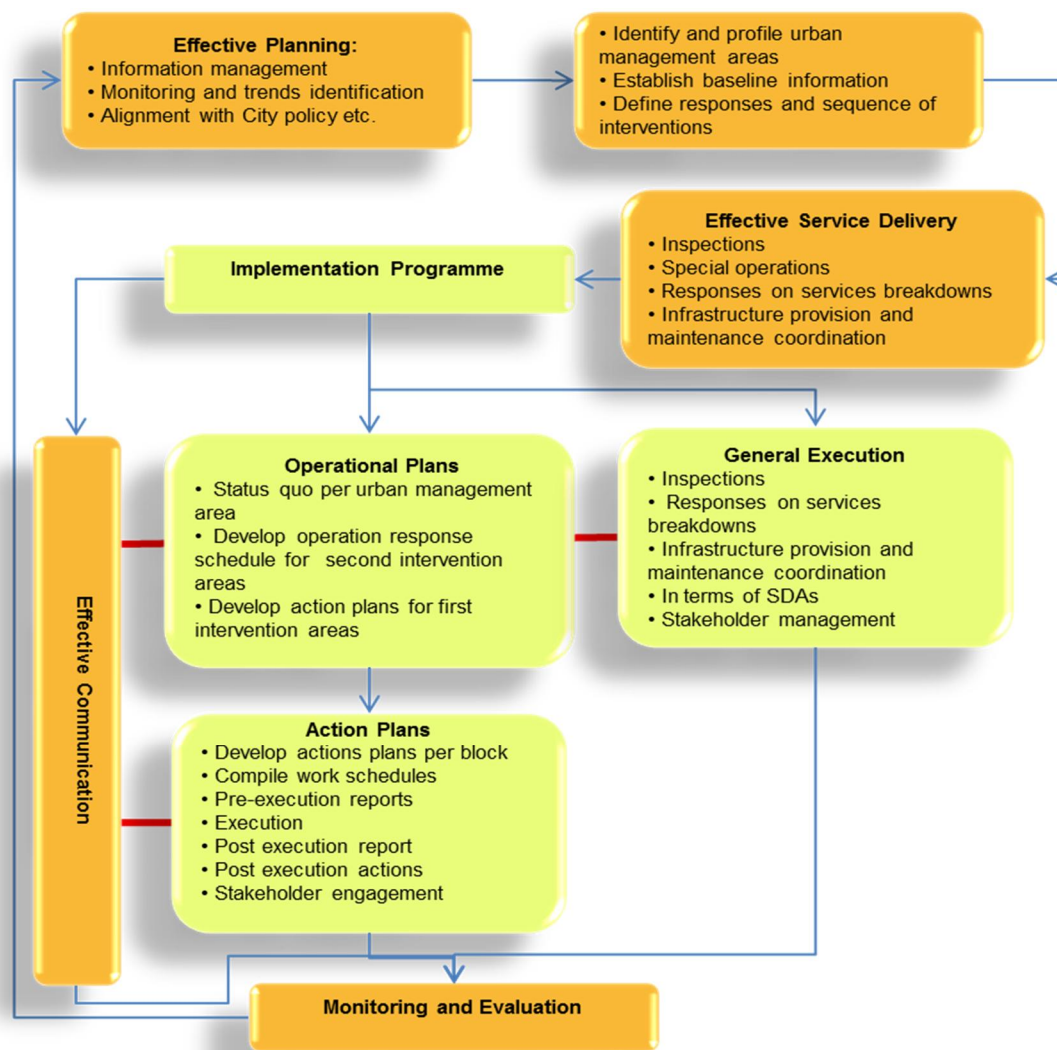


Figure 41 Strategies for future urban management response

In order to address the issues, goals and strategies as identified, it is important to define the desired conditions that ought to be reached in specific areas. Urban management relates predominantly to the physical environment and the discussion in this section will to a large extent focus on geographic area types. Mention will be made of policy and non-physical interventions that will be needed to reach the desired state: clean, green and safe.

One of the key steps in the above process is to identify geographical urban management areas. These will act as common management areas with the following benefits:

- Assisting with the identification of commonalities and grouping issues across Klapmuts North;
- Recognition of unique approaches required for each area or issue;
- Facilitation of linkages to other planning processes e.g. SDF precinct planning initiatives;
- Integration and co-ordination of inputs from various processes;
- Comparison of “wish lists” and budget realities is possible.
- Identification of short term catalytic initiatives;
- The management area can act as a basic measurement unit for monitoring of service failures, responses to services requests and trends in services requirements.



4.6. STRATEGY 6: Business and Community Development

4.6.1. Business Development Strategy

The Business and Economic development programme comprise of the following elements:

- Promote business-to-business communication and interactions;
- Promoting a more efficient business environment in respect of e.g. energy efficiency, waste management etc.;
- Investigating the establishment of new business and enterprises e.g. waste management, urban farming etc.;
- Supporting a process where a platform is created to allow businesses to support community development efforts as per the proposals in the previous section; and
- Creating an environment where businesses support the Region's effort of a clean and safe Klappmuts North.

This element of the development framework is to a large degree dependent on the spatial structuring strategies and the Urban Management proposals.

4.6.2. Community Development Strategies

The success of the Klappmuts North Social Development programme depends to a large degree on:

- Promoting and enabling the development of Klappmuts North in line with the spatial structuring strategies to ensure accessibility and availability of adequate and well-located community and social facilities;
- Creating a safe and clean environment through the support of the Klappmuts North Urban Management proposals;
- Protecting and supporting vulnerable members of the community e.g. children and the aged;
- Provide universal access to facilities;
- Developing capacity and skills to promote employability;
- Promote and support community and place-making events and activities;
- Promote and support recreation and sports activities;
- Support safety and security interventions; and
- Putting in place a dedicated investment and support programme.



5. LAND DEVELOPMENT MANAGEMENT

5.1. Land Use Management

In terms of guiding land use management in the Klappmuts North LSDF, the following should be noted:

- Nothing in the Scheme prohibits the use of land in any use zone for small-scale urban horticulture, provided that the extent and nature of the activity will remain compatible with the primary land uses in that zone in the sole opinion of the Municipality.
- The installation of apparatus on roofs to generate solar energy for any on-site consumption is permitted in any zone in this Scheme, provided that the Municipality may regulate the visual appearance of such apparatus in accordance with the provisions of the Scheme.
- Installation of wind power generation on roofs for any on-site use is only permitted with the permission of neighbours.
- When granting any new use rights in terms of the Scheme, the Municipality may require measures to improve resource conservation and efficiency, including, but not limited to rainwater harvesting, grey water recycling, waste recycling, renewable energy use for domestic, business, industrial and agricultural uses, and any other such similar sustainable practices.

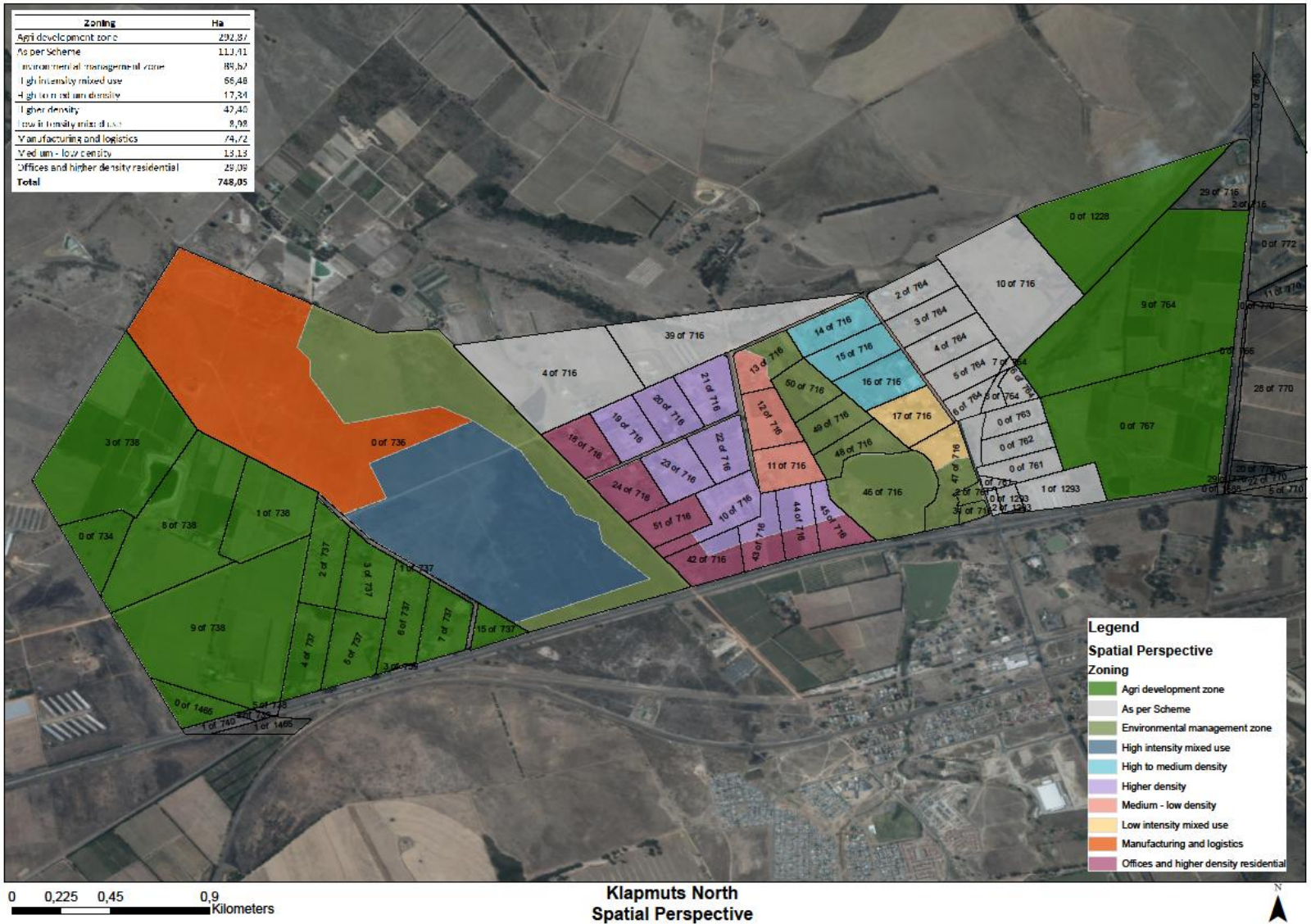
There is a clear indication that a scheme cannot be a set of land use categories only but that it should start to respond for example to specific spatial typologies in terms of conditions, categories and schedules. Spatial typologies that are mentioned in the act include for example environmental management areas, informal settlements, special zones etc. The link between the municipality's SDF,

IDP and scheme can therefore be strengthened to a much larger degree than previously possible in that the act states that the SDF should determine the purpose, desired impact and structure of the scheme.

From an administrative and institutional point of view there are also more flexibility and responsiveness built into schemes. The Act talks about incremental introduction of regulations, shortened provisions in certain areas, promotion of incentives and providing provisions that can respond to the application of policy and priorities. Together with the flexibility and responsiveness, there is also a stronger emphasis on provisions to allow a municipality to enforce a scheme.

The Act places emphasis on renewed inter-governmental relations and has embedded this principle by including a number of sector-related deliverables that can be consolidated based on the spatial plan. These include housing delivery, environmental issues, incremental upgrading and infrastructure provision, inclusionary housing etc. Although there is therefore pressure to add more sector information and identify and analyse relevant interrelationships, the new Act also places responsibility on all other sectors to start interacting with a spatial plan in a far more appropriate and proactive manner – and in doing so, it creates opportunities for real collaboration. Although legislative “relationships” do not guarantee real interaction and engagement, they do open the door for discussions revolving around spatially-focussed solutions.

See Map 12 for a spatial perspective/illustration of the specific framework uses.



Map 18 Spatial Perspective: Land use classification

Table 6 a guideline on the rights allocated to the framework zones. In certain instances, some of the consent rights have been excluded e.g. light industry, warehousing. A final decision on uses on a specific property will be in terms of the approved Drakenstein Municipal Zone By-Law.

Table 8 Rights allocated to Framework Zones

Framework Key	Properties			Zoning description		
				Primary uses	Consent uses	Additional uses
<u>Agri development Zone</u> The areas defined as an agri-development zone should be preserved for commercial agriculture with viable farming units or alternative high intensity agriculture.	Parcel	Portion	Farm name	<ul style="list-style-type: none"> • Agriculture • Dwelling house • Second dwelling house • Employee house • Agricultural buildings 	<ul style="list-style-type: none"> • Animal care facilities • Special use 	<ul style="list-style-type: none"> • In a dwelling house, second dwelling unit or any additional dwelling units in this zone: <ul style="list-style-type: none"> ○ Business ○ Visitors' accommodation ○ Lodging accommodation ○ Community residential • Green infrastructure
	1228	0	WORTEL RUG			
	738	3	UITKYK			
	738	8	UITKYK			
	738	1	UITKYK			
	734	0	MULDERSVLEI ANNEXE			
	738	9	UITKYK			
	1465	0	FARM1465			
	767	0	FARM 767			
	737	3	FARM 737			
	737	6	FARM 737			
	737	7	FARM 737			
	737	15	FARM 737			
	737	5	FARM 737			
	764	9	FARM 764			
737	2	FARM 737				
737	4	FARM 737				
<u>Environmental Management Zone</u> is a combination of the natural environment zone and conventional housing zone	Parcel	Portion	Farm name	<ul style="list-style-type: none"> • Dwelling house • Conservation • Open space 	<ul style="list-style-type: none"> • Special use 	<ul style="list-style-type: none"> • Visitors' facilities • Monument • Green infrastructure
	716	49	GROENFONTEIN ANNEX			
	716	50	GROENFONTEIN ANNEX			
	716	13	GROENFONTEIN ANNEX			
	716	48	GROENFONTEIN ANNEX			

Framework Key	Properties			Zoning description		
				Primary uses	Consent uses	Additional uses
	716	46	GROENFONTEIN ANNEX			
	716	47	GROENFONTEIN ANNEX			
	716	31	GROENFONTEIN ANNEX			
<u>High Intensity Mixed use</u>	Parcel	Portion	Farm name	<ul style="list-style-type: none"> • Business • Community residential • Community care facility • Hotel • Apartment building • Dwelling house (including 2nd and 3rd dwelling unit) • Group housing • Informal trading • Public institution • Indoor sport • Place of assembly • Place of instruction • Health care facility • Place of entertainment • Visitors' accommodation • Lodging accommodation • Mortuary • Sale of liquor 	<ul style="list-style-type: none"> • Fuel retail • Parking garage • Vehicle services • Vehicle sales • Passenger transport facility • Special use 	<ul style="list-style-type: none"> • Utility service • Non-motorised transport facilities (NMT) <p>From a dwelling house, subject to section 107:</p> <ul style="list-style-type: none"> • Visitors' accommodation <ul style="list-style-type: none"> ○ Lodging accommodation ○ Community residential • Business • Place of instruction
<u>Low Intensity mixed use</u> (Neighbourhood business)	Parcel	Portion	Farm name	<ul style="list-style-type: none"> • Business • Apartment building • Place of assembly • Place of instruction • Community residential • Community care facility • Public institution • Indoor sport 	<ul style="list-style-type: none"> • Business >1000m2 • Hotel • Adult services • Free standing mast • Place of entertainment • Fuel retail • Vehicle sales • Special use 	<ul style="list-style-type: none"> • Informal trading • For a dwelling house: <ul style="list-style-type: none"> ○ Business ○ Visitors' accommodation ○ Lodging accommodation ○ Community residential ○ Place of instruction • Utility services
	716	17	GROENFONTEIN ANNEX			
	764	5	FARM 764			
	764	7	FARM 764			
	764	8	FARM 764			
	764	6	FARM 764			

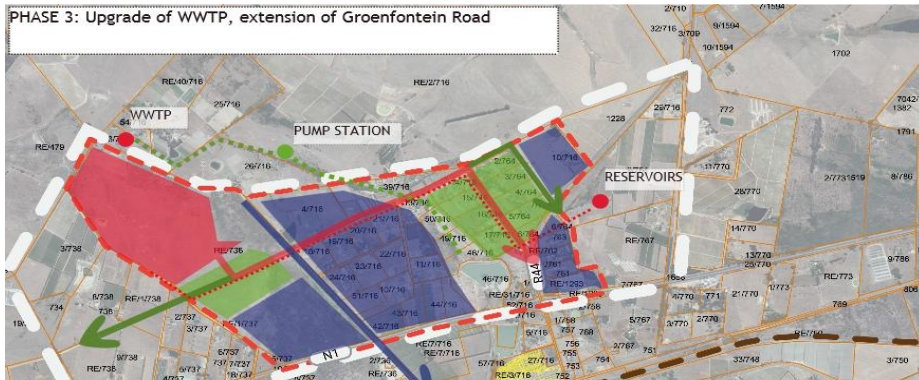
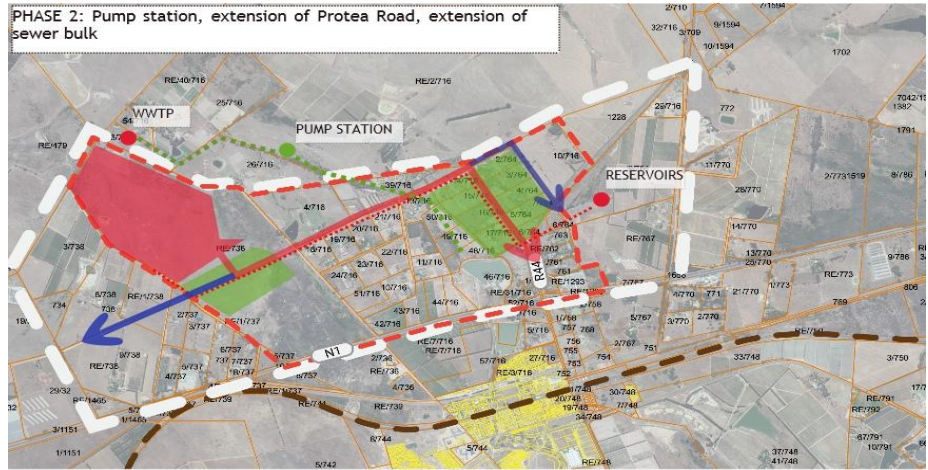
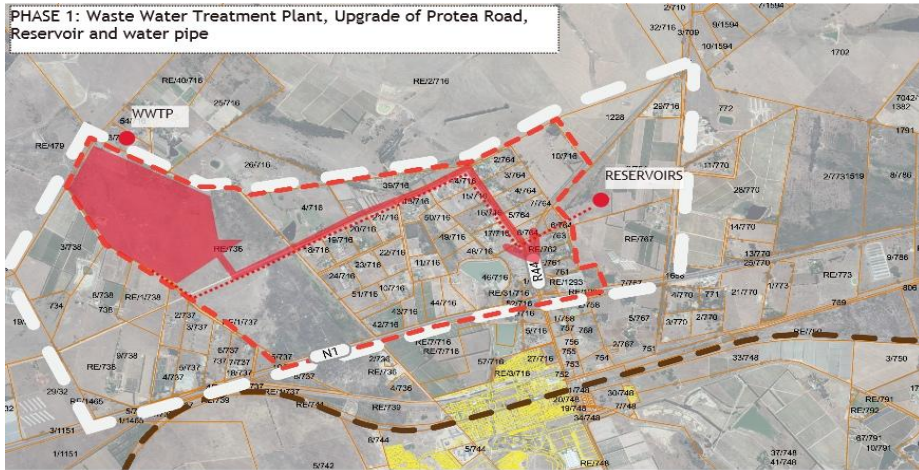
Framework Key	Properties			Zoning description		
				Primary uses	Consent uses	Additional uses
	1293	1	TBC	<ul style="list-style-type: none"> Outdoor sport Dwelling house (including 2nd and 3rd dwelling unit) Visitors' accommodation Lodging accommodation Mortuary 		
	761	2	FARM 761			
	761	1	FARM 761			
	1293	2				
	763	0	FARM 763			
	716	47	GROENFONTEIN ANNEX			
<u>High to medium density</u>	Parcel	Portion	Farm name	<ul style="list-style-type: none"> Community residential Apartment building Group housing Dwelling house (including 2nd and 3rd dwelling unit) Visitors' accommodation Lodging accommodation 	<ul style="list-style-type: none"> Restaurant or shop on the ground floor Informal trading Utility services For a dwelling house, subject to section 107: Business Visitors' accommodation Lodging accommodation Community residential Place of instruction 	<ul style="list-style-type: none"> Place of instruction Place of assembly Hotel Office Special use
	716	14	GROENFONTEIN ANNEX			
	716	16	GROENFONTEIN ANNEX			
	716	15	GROENFONTEIN ANNEX			
	761	0	FARM 761			
	763	0	FARM 763			
	762	0	FARM 762			
	Higher density					
	Parcel	Portion	Farm Name			
	716	21	GROENFONTEIN ANNEX			
	716	20	GROENFONTEIN ANNEX			
	716	23	GROENFONTEIN ANNEX			
	716	10	GROENFONTEIN ANNEX			

Framework Key	Properties			Zoning description		
				Primary uses	Consent uses	Additional uses
	716	22	GROENFONTEIN ANNEX			
	716	44	GROENFONTEIN ANNEX			
	716	19	GROENFONTEIN ANNEX			
	716	42	GROENFONTEIN ANNEX			
	716	45	GROENFONTEIN ANNEX			
	716	43	GROENFONTEIN ANNEX			
<u>Medium to low density</u>	Parcel	Portion	Farm Name	<ul style="list-style-type: none"> • Dwelling house • Second dwelling unit • Third dwelling unit 	<ul style="list-style-type: none"> • Third dwelling >30m2 • Visitors' accommodation • Group housing • Special use 	<ul style="list-style-type: none"> • From a dwelling house: <ul style="list-style-type: none"> ○ Business ○ Visitors' accommodation ○ Lodging accommodation ○ Community residential ○ Place of instruction
<u>Offices and higher density residential</u>	Parcel	Portion	Farm name		<ul style="list-style-type: none"> • Restaurant or shop on the ground floor • Informal trading • Utility services • For a dwelling house, subject to section 107: <ul style="list-style-type: none"> • Business • Visitors' accommodation • Lodging accommodation • Community residential • Place of instruction 	<ul style="list-style-type: none"> • Place of instruction • Place of assembly • Hotel • Office • Special use
<u>Logistics and manufacturing</u>	Parcel	Portion	Farm name	<ul style="list-style-type: none"> • Business <ul style="list-style-type: none"> • Industry • Light industry • Warehouse • Freight 	<ul style="list-style-type: none"> • Hotel • Informal trading • Public institution • Indoor sport • Place of assembly 	<ul style="list-style-type: none"> Employee housing unit Private Road Freestanding mast Utility services

Framework Key	Properties	Zoning description		
		Primary uses	Consent uses	Additional uses
		<ul style="list-style-type: none"> • Transport • Facility <ul style="list-style-type: none"> • Service station • Fuel retail • Vehicle services • Vehicle sales • Utility plant • Utility services • Green infrastructure • Open space • Conservation 	<ul style="list-style-type: none"> • Place of instruction • Health care facility • Place of entertainment • Sale of liquor • Parking garage • Energy generation • Recycling facility • Abattoir • Container depot • Vehicle depot • Adult services • Big-box retail • Freestanding mast • Service depot • Recycling facility 	Utility plant

6. PHASING

The sketches below are a conceptual representation of the possible phasing of the development in Klapmuts North



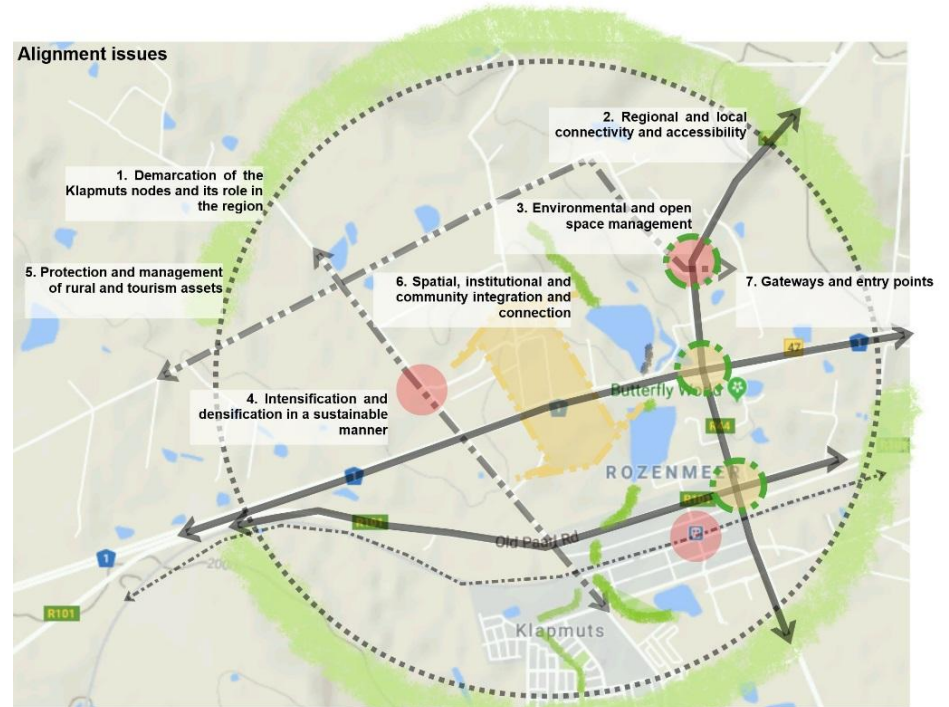
Map 21 Development Phasing

Map 22 Development Phasing



It is also important to take note of the development in Klapmuts South. Development in Klapmuts South will be triggered by development in Klapmuts North.

Alignment issues as identified in the Status Quo document must guide the overall development and phasing of the development of Klapmuts North and South.



Map 2 Alignment Issues

Figure 43 LSDF Approval Procedure Map 2 Alignment Issues

7. INSTITUTIONAL ARRANGEMENTS

The next section deals with the following institutional arrangements:

- Special Economic Zone (SEZ) process
- Approval of the Local Spatial Development Framework (LSDF)
- Integrated Development Plan (IDP) and budget alignment

7.1. SEZ Programme Provisions

The South African Government's Industrial Development Zone (IDZ) programme was established to attract Foreign Direct Investments (FDI) to South Africa and to export value-added commodities. The weaknesses in the IDZ programme led to the establishment of the Special Economic Zone (SEZ)¹⁹ programme in 2007. The SEZ policy thus not only address the challenges of the IDZ programme but also provides a framework for the development, operations, and management of SEZ's. The Department of Trade and Industry (DTI) is the custodian of this programme and sets out its purpose as follows:

- "Expand the strategic industrialisation focus to cover diverse regional development needs and context;
- Provide a clear, predictable and systemic planning framework for the development of a wider array of SEZ's to support industrial policy objectives, the IPAP (Industrial Policy Action Plan) and the NGP (National Growth Plan);
- Clarify and strengthen governance arrangements, expand the range and quality of support measure beyond provision of infrastructure; and
- Provide a framework for a predictable financing framework to enable long term planning."

¹⁹ http://www.thedti.gov.za/industrial_development/sez.jsp

DTI defines a SEZ as "geographically designated areas of a country set aside for specifically targeted economic activities, supported through special arrangements (that may include laws) and systems that are often different from those that apply in the rest of the country".

Special Economic Zones may be sector-specific or multi-product and the following categories of SEZ's have been defined as per the SEZ Act No. 16 of 2014:

- "Industrial Development Zone"(IDZ) means a purpose built industrial estate that leverages domestic and foreign fixed direct investment in value-added and export-oriented manufacturing industries and services;
- "Free Port" means a duty-free area adjacent to a port of entry where imported goods may be unloaded for value-adding activities within the Special Economic Zone for storage, repackaging or processing, subject to customs import procedures;
- "Free Trade Zone" (FTZ) means a duty-free area offering storage and distribution facilities for value-adding activities within the Special Economic Zone for subsequent export;
- "Sector Development Zone" (SDZ) means a zone focused on the development of a specific sector or industry through the facilitation of general or specific industrial infrastructure, incentives, technical and business services primarily for the export market.

Long term funding can be a constraint, hence the SEZ Act (16 of 2014) encourages public private partnerships in the development and operation of SEZ's, which according to DTI, opens up different models such as:

- "Assembly of land parcels with secure title and development rights by the government for lease to private zone development groups;

- Build-operate-transfer approaches to onsite zone infrastructure and facilities with government guarantees and/or financial support;
- Contracting private management for government owned zones or lease of government owned assets by a private operator.”

The SEZ Fund became effective on 1 July 2013 and has the following objectives:

- “The primary objective is to provide capital towards bulk and related infrastructure that leverages investment from third parties, through foreign and local direct investment in both the operations of such enterprises and the infrastructure required.
- A secondary focus is to provide limited operator and investor project financial and advisory support to affirm the feasibility of such projects and for work that will measurably improve the efficiency and effectiveness of SEZ’s to improve the competitiveness and sustainability of SEZ’s and their supply chains.”

The SEZ Fund is available pre-and post-designation to:

- Applicants that are currently operating an IDZ with a valid operator permit, subject to confirmation that an investor that requires infrastructure support has been signed and the investment is in line with the programme objectives;
- Applicants in the process of setting up an SEZ subject to submission of a comprehensive business/concept proposal determining clear socio-economic benefits;
- Applicants that are Licensees in terms of Chapter 5 of the SEZ Act;
- SEZ operators in terms of the SEZ Act and;
- A registered entity in South Africa in terms of the Companies Act.

According to DTI, the following costs are excluded:

- Selected top structures;

- Customised factory buildings for investors;
- General infrastructure outside the zone;
- Social and recreational infrastructure;
- Residential buildings and office parks; and
- Operational expenditure (post designation).

The process for establishing a SEZ in Klapmuts, is broadly as follows:

- An application for designation of a zone as an SEZ in Klapmuts need to be prepared and submitted to the DTI for consideration. This application can come from the Drakenstein Municipality or a Public Private Partnerships (PPP).
- Once received, the DTI will process the application against defined criteria to enable the Special Economic Zones Advisory Board to make a recommendation to the Minister of the DTI.
- Once the identified zone has been designated and licensed and an operator permit issued, the SEZ may submit applications for funding of new infrastructure as set out in the funding guidelines. These funding applications will be assessed against the SEZ Fund qualification criteria and if it meets the strategic intent and the project is deemed viable, a recommendation will be submitted to the Adjudication Committee for approval.
- Once the applicant is approved by the Adjudication Committee for funding, the Deputy Director General (DDG): Incentive Development and Administration Division (IDAD) will enter into a Funding Agreement with the applicant followed by on-going monitoring and impact analysis on project-by-project basis.

Conclusion

Notwithstanding the above, it is proposed that Drakenstein Municipality carefully assess the viability of a Klapmuts IDZ. It is a lengthy process that goes hand-in-hand

with evaluation processes and submissions of detail evidence based applications. This might take long and lead to the dilution of the current opportunities.

7.2. LSDF Approval

National and provincial policy and legislative directives for the development of the Klapmuts North area will drive the urban development approach, inter-governmental relationships and mechanisms.

Figure 21 illustrates an overall roadmap for the Klapmuts North LSDF.

1. The Klapmuts North LSDF document need to align with the appropriate national and provincial policy requirements.
2. The approval process by the legislative and executive function of the municipality should follow the normal institutional and approval proses that include presentations to the relevant portfolio committees.
3. After approval, the Klapmuts North LSDF document should inform land use, economic, social and community development initiatives by the administrative function of the municipality. Where appropriate, interventions should be included in business plans. Business plans form important input mechanisms in the Budget and IDP planning processes.
4. The success of the development of Klapmuts North depends to a large degree on the amount of support from relevant provincial, district and neighbouring municipalities. The existing intergovernmental structures are ideal platforms where such support can be garnered.
5. Finally, the proposed impact measurement framework can allow more relevant oversight and evaluation of investments and interventions.

6. Regular reporting and feedback will be required to build momentum and ensure that the plan adds value to the municipality, community, local businesses and relevant external stakeholders.

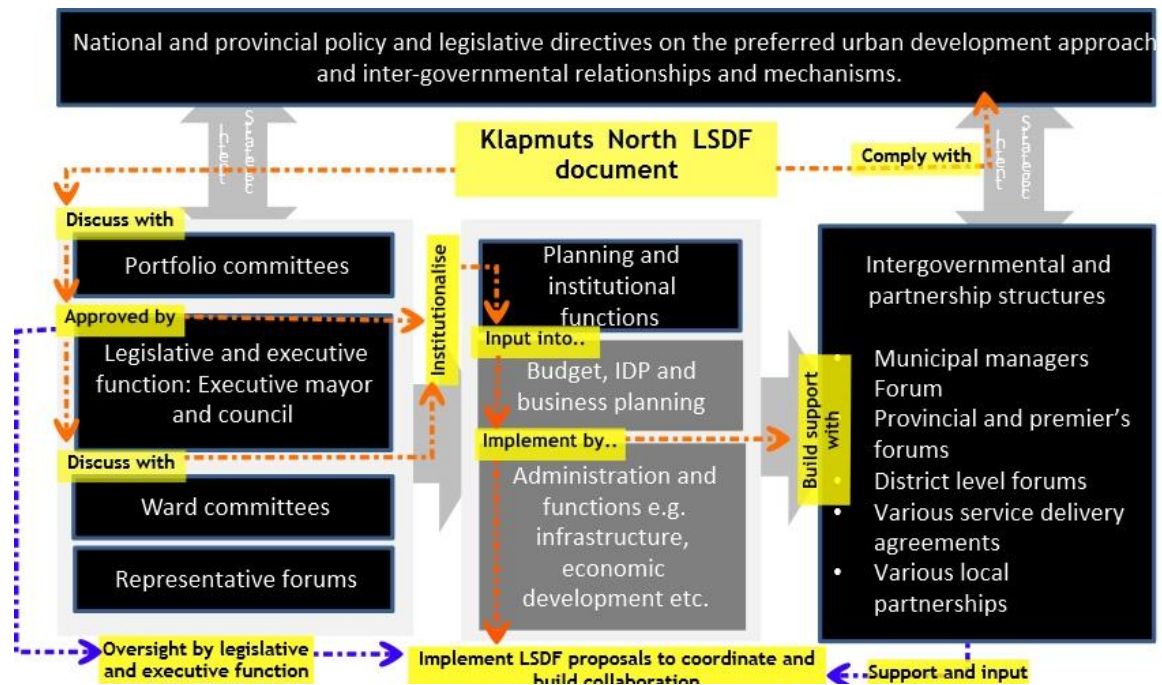


Figure 44 LSDF Approval Procedure

Figure 45 LSDF Approval Procedure

7.3. IDP and Budget Alignment

The link with the Integrated Development Plan (IDP) process is important to ensure that the SDF proposals and projects are firstly resourced and secondly go through a proper project feasibility and planning process. It is recommended that the implementation and monitoring of the SDF, as well as the revision of the SDF, be closely linked to the IDP process and the statutory reporting as required in terms of the Municipal Finance Management Act (MFMA). This is critical in order to (1) ensure integration and (2) avoid the cumbersome duplication of processes. It is also recommended that with each revision cycle, the SDF be improved as more detailed planning and sector planning is done and more information becomes available through various studies and planning processes.

Three main streams of monitoring and revision are proposed:

- 1 – **Short term (maximum 5 years) focus:** project implementation through the IDP process, monitoring and reporting of implementation.
- 2- **Long term focus:** developing of impact indicators and relevant data collection over time, five-yearly revision of the SDF based on impact assessment.
- 3- **Detailed planning and sector planning:** The development of more detailed sector plans or precinct plans for e.g. key nodal areas, will result in more information and more specific implementation guidelines. This could enrich and enhance the SDF and can be taken into account during both the annual revisions and major 5 year revision cycle.

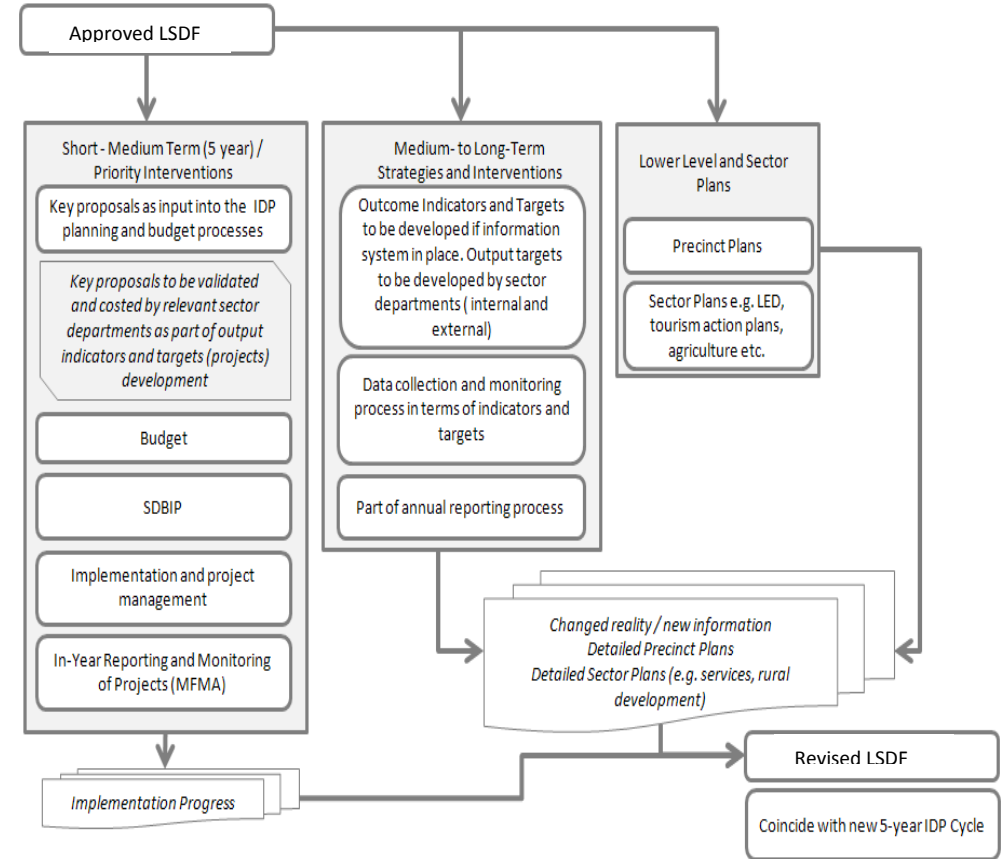


Figure 47 IDP Process

8. RECOMMENDATIONS

Section 21(1)(i) of the Spatial Planning and Land Use Management Act (Act 16 of 2013) states that a municipal spatial development framework, must identify the designation of areas, in which more detailed local plans must be developed.

Klapmuts was identified in the Drakenstein Municipal Spatial Development Framework (SDF) and Drakenstein Municipal Integrated Development Plan (IDP), as such an area.

Subsequent to this, the process in order to compile such a plan, was initiated. Sections 9 to 11 of the Drakenstein Bylaw on Municipal Land Use Planning (2015), sets out the requirements for the compilation, of such a local spatial development framework. This specific local area plan is referred to as the Klapmuts North Local Spatial Development Framework (Klapmuts North LSDF).

The Council of Drakenstein Municipality also gave notice that the draft Klapmuts North LSDF document was available for perusal and comment. Interested and affected parties were invited to submit comments, on the draft Klapmuts North LSDF, during a 30 day advertising period starting 20 September 2018.

It is therefore recommended that:

1. the Klapmuts North Local Spatial Development Framework be approved as meeting the requirements of the Spatial Planning and Land Use Management Act (SPLUMA), 16 of 2013, the Western Cape Land Use Planning Act (LUPA), 3 of 2014 as well as the Drakenstein Municipality Land Use Planning Bylaw, 2015.



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