

# KANNALAND MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK

draft FINAL CONCEPTUAL DEVELOPMENT FRAMEWORK REPORT

30 October 2013





# **KANNALAND MUNICIPALITY**

## **draft FINAL SPATIAL DEVELOPMENT FRAMEWORK**

prepared for



**KANNALAND MUNICIPALITY**

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## LIST AND EXPLANATION OF ACRONYMS

B&Bs	Bed & Breakfast Establishments	HSP	Human Settlement Plan
BEE	Black Economic Empowerment	HWCs	Hot Water Cylinders
BNG	Breaking New Ground (new term for RDP (low income) housing)	I&APs	Interested and Affected Parties
CAPE	Cape Action for the People and the Environment	IDP	Integrated Development Plan
CARA	Conservation of Agricultural Resources Act	IEMP	Integrated Environmental Management Plan
CBA	Core Biodiversity Areas	IRPTN	Integrated Rapid Public Transport Network
CBD	Central Business District	IRT	Integrated Rapid Transport
CPITR	Consumer Price Index for Total Rural Population	IRTN	Integrated Rural Transport Network
CRDP	Comprehensive Rural Development Programme	IT	Information and Technology
DEA&DP	Department of Environmental Affairs and Development Planning	LEAP	Living Edge of Africa Project
DFA	Development Facilitation Act	LED	Local Economic Development
DME	Department of Minerals and Energy	LUMS	Land Use Management Schemes
DRDLR	Department of Rural Development and Land Reform	LUPO	Land Use Planning Ordinance (Ordinance 15 of 1985)
DTI	Department of Trade and Industry	MEDS	Micro-Economic Development Strategy
EIA	Environmental Impact Assessment	MIG	Municipal Infrastructure Grant
EMF	Environmental Management Framework	MSA	Municipal Systems Act, 2000 (MSA: Act 32 of 2000)
EPWP	Expanded Public Works Programme	MTAS	Municipal Turn Around Strategy
GAP	The term that describes the shortfall, or 'gap' in the market between residential units supplied by the state and houses delivered by the private sector	MTB	Mountain Bike Trails
GDP	Gross Domestic Product	NBSAP	National Biodiversity Strategy and Action Plan
GHG	Green House Gasses	NDA	New Development Area
GLA	Gross Leasable Area	NDPG	Neighbourhood Development Partnership Grant
GRP	Gross Regional Product, i.e. for district or local Municipality	NEMA	National Environmental Management Act, 1998 (Act 107 of 1998)
GVA	Gross Value Added	NGOs	Non Governmental Organisations
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome	NMT	Non-Motorised Transport
		NPC	National Planning Commission
		NSDP	National Spatial Development Perspective
		OECD	Organisation for Economic Cooperation and Development
		PGDS	Provincial Growth and Development Strategy
		PHC	Primary Health Care

PLAS	Proactive Land Acquisition Strategy
PLTF	Provincial Land Transport Framework
PRT	Professional Resource Team
PTP	Public Transport Plan
PV	Photo Voltaic
RDP	Reconstruction and Development Program
RIDS	Regional Industrial Development Strategy
SAPS	South African Police Services
SDF	Spatial Development Framework
SDP	Spatial Development Plan
SEA	Strategic Environmental Assessment
SIP	Strategic Infrastructure Plan
SMME	Small, Medium and Micro Enterprises
SoER	State of the Environment Report
SOEs	State Owned Enterprises
SPCs	Spatial Planning Categories
SWOT	Strengths, Weaknesses, Opportunities and Threats
WC-PSDF	Western Cape Provincial Spatial Development Framework
WWTW	Waste Water Treatment Works

# 1. INTRODUCTION

## 1.1 PURPOSE OF THIS REPORT

The purpose of this report is to provide an understanding of the state of the Kannaland Municipality (see Figures 1.1.1 and 1.1.2) and the various issues facing it in order to prepare a Spatial Development Framework to help address those issues from a Spatial Perspective.

The report is structured in the following manner:

Section 1 describes the purpose and need for an SDF.

Section 2 describes a number of national provincial, district and local guidelines, policy documents and concepts, all of which have a bearing on the SDF.

Section 3 describes the current state of the Municipality under the following subsections:

- Natural Systems;
- Built Systems; and
- Socio-economic systems.

## 1.2 BRIEF OVERVIEW OF KANNALAND MUNICIPALITY

- The Kannaland Local Municipality is a category-B municipality located in the Eden District Municipality and contains the settlements of Ladismith, Calitzdorp, Van Wyksdorp and Zoar;
- The municipality lies between two mountain ranges, the Swartberge and Anysberg and is situated about 340km north-east of Cape Town along the R62 tourism route.
- The administrative offices of the Kannaland Municipality are located within Ladismith with satellite offices located in Calitzdorp, Van Wyksdorp and Zoar.
- The municipality has the smallest population (24767 people, Census 2011) and economy in the Eden District.
- The climate of this region is ideal for the production of apricots, peaches, plums, nectarines and grapes (Kannaland IDP, 2012 – 2017).

- Well known Parmalat and Ladismith dairy products are produced in Ladismith.
- The town of Calitzdorp is known as the port-wine capitol of South Africa. The Kannaland region is also well known for the production of top wines and brandy.

## 1.3 WHAT IS AN SDF AND WHY IS IT NEEDED?

The spatial management of growth in urban and rural environments due to rapid urbanisation rates and the subsequent impact on resources was previously done through the Guide Plans and Structure plans. These took the form of rather inflexible master plans which were underpinned by the principles of discrimination and separate development.

The new democratic government, post 1994, adopted a new system of spatial planning described in the Development Facilitation Act and Municipal Systems Act. This new system had two components to it.

The first was an indicative plan or Spatial Development Framework (SDF) that was intended to show desired patterns of land use, directions for future growth, indicate the alignment of Urban Edges, and depict other special development areas.

The impact of SDFs is limited to providing policy to guide and informing land development and management. They do not change or confer real rights on land.

The second component is the Land Use Management System (LUMS). This is similar to a town planning or zoning scheme. In many instances where they have not been replaced or repealed these still take the place of LUMS. In contrast to SDF's LUMS have a binding effect on the development rights attributed to land and confer real rights on properties.

Because development in Municipalities is dynamic and responds to changing socio-economic and environmental circumstances, it is impossible to predict the exact requirements of development rights in



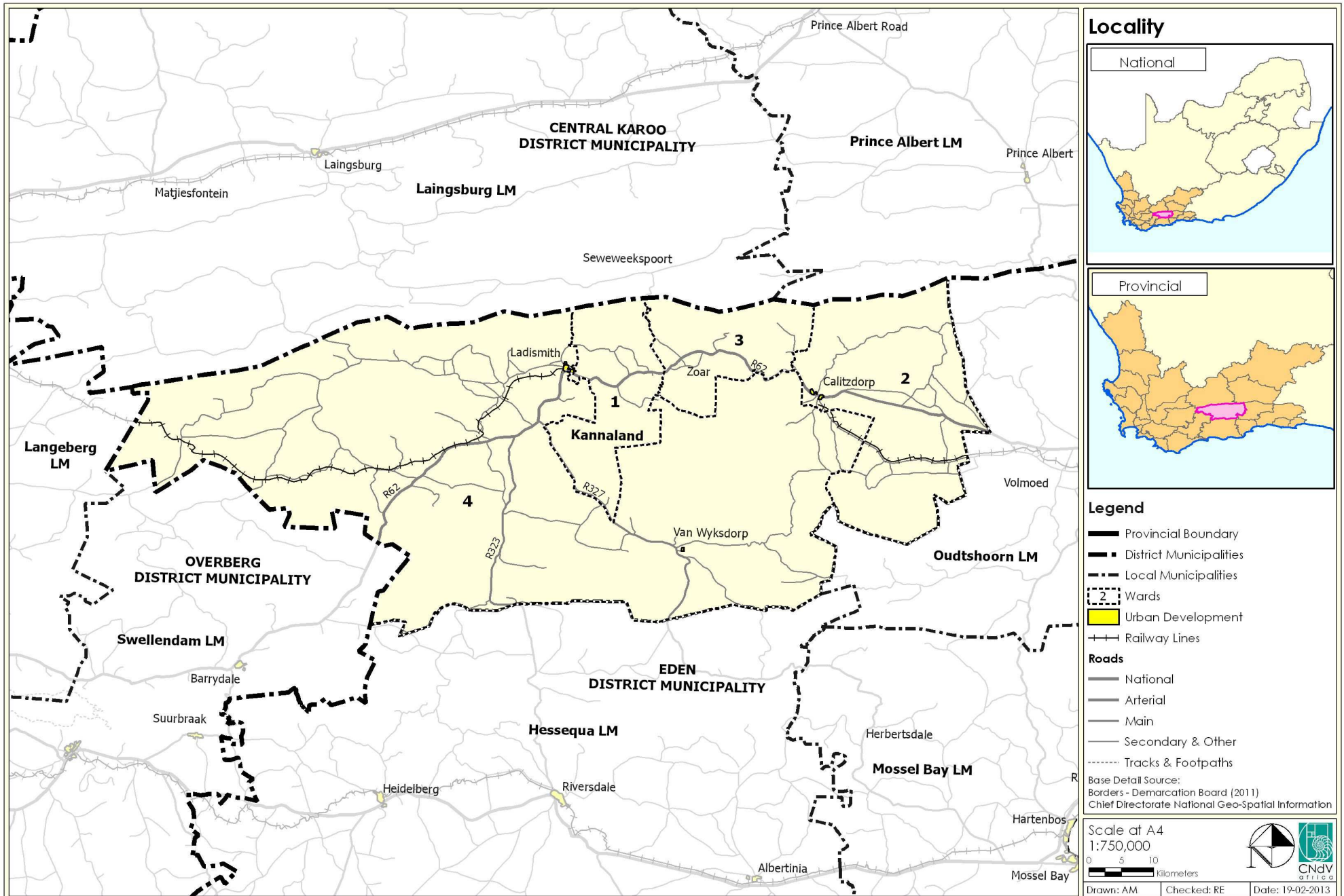


Figure 1.1.1 Study Area

every instance, therefore, LUMS may be amended from time to time to take into account these changing circumstances. This is normally achieved through the processing of rezonings, subdivisions and removal of title deed restrictions applications. It is in these instances where SDF's play an important role in guiding appropriate future change and helping to guide motivations as to the need and desirability, or not, of proposed land use changes.

Because of their guiding and informing nature SDF's also have a number of other important functions in addition to guiding LUMS.

These include:

- Giving effect to the principles contained in the Development Facilitation Act Chapter 1, see Section 2.1.1;
- Setting out objectives that reflect the desired spatial form;
- Defining strategies and policies to achieve these objectives which must indicate, amongst others:
  - the desired pattern of land use;
  - how spatial reconstruction will be addressed; and
  - providing strategic guidance in respect of the location and nature of development. (In this regard it should be noted that the SDF's should inform the investment decisions of the public **and the private** sectors.)
- Set out a capital investment framework for development programs; (this will mainly inform public sector investment priorities);
- Include a Strategic Environmental Assessment (SEA) in the compilation of the SDF;
- Identify programs and projects for development of land;
- Be aligned with neighbouring Municipal SDF's; and,
- Provide a visual representation of the desired spatial form with the Municipality in the form of a map which must indicate the following:
  - public and private land development and infrastructure investment;
  - desired and undesired use of land;
  - may delineate the Urban Edge;
  - identify areas for strategic investment;
  - where policy intervention is needed; and,
  - indicate where authority spending is required.
- Informing the spatial location of budget spending in the IDP, see Section 2.4.1.

## 1.4 LEGAL STATUS OF THE SDF

Within the limitations of a SDF as laid down by the Local Government Municipal Systems Act, 2000 (Act 32 of 2000) i.e. that it should be a guiding and informing document and does not confer real rights on land, it is intended that the SDF should be a binding document approved in terms of the Municipal Systems Act, 2000 (Act 32 of 2000). The intention is to withdraw the Calitzdorp Structure Plan in terms of Section 4(7) of the Land Use Planning Ordinance (Ordinance 15 of 1985). This is deemed necessary to ensure that there will only be one forward planning document for this town. These endorsements will assist with the processing of development applications, demonstrating compliance with different sectoral policies and motivating project funding and budgets.

## 1.5 RELATIONSHIP WITH OTHER PLANS

The SDF links the development objectives taken from the Integrated Development Plan (IDP) and the Budget of a particular municipality. Therefore, the SDF becomes the spatial presentation of the IDP objectives that guide projects funded through the budget of the local municipality. This link between the SDF, IDP and Budget is shown in Figure 1.5.1.

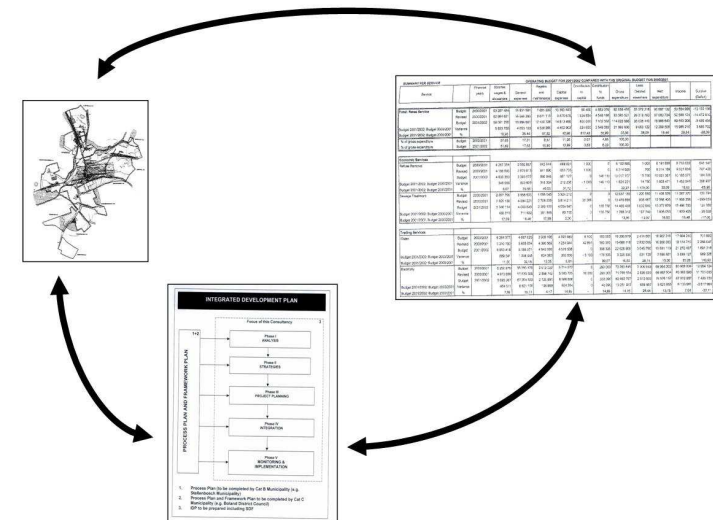
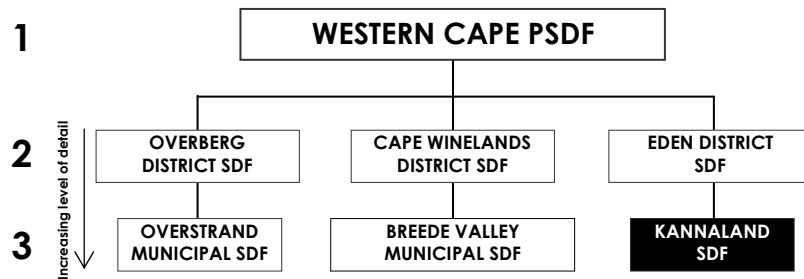


Figure 1.5.1 Link between SDF/IDP/Budget

The Kannaland Municipal SDF is further linked to other spatial policies at different levels of detail depending on their level of jurisdiction. The National Development Plan (NDP), National Spatial Development Perspective (NSDP) provides the broad national development goals, objectives and strategies. This informs the Western Cape Provincial SDF (WC-PSDF). The WC-PSDF in turn informs the Eden District Municipal SDF.

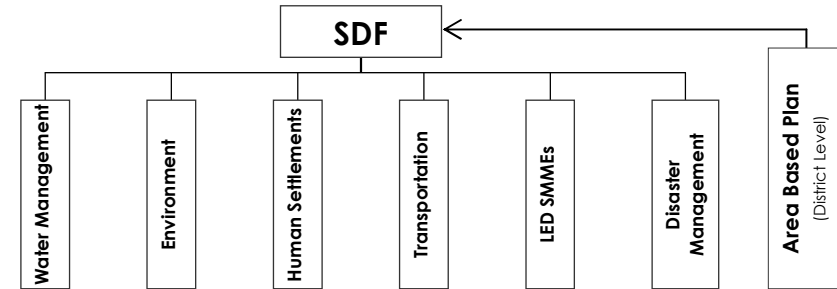
The Eden District Municipal SDF then informs the preparation of the Kannaland Municipal SDF. It should be noted that the hierarchy is not only top down but also bottom up, i.e. the lower level plans also inform the higher level plans through the updating process as a result of more local level detailed information. The lower the level of the plan the more detailed the plan becomes and vice versa. This is illustrated in Figure 1.5.2.



**Figure 1.5.2 Layers of SDF and Level of Detail**

The SDF should consider the impact of the natural environment (rivers, sensitive areas) as well as built environment aspects such as housing, infrastructure and socio-economic issues relating to economy, human development indicators, etc. The SDF must guide all of the Municipality's departments as well as national sector departments, State Owned Enterprises (SOEs), provincial sector departments and the private sector.

Therefore, the SDF is informed by and in turn informs the plans and activities of the various municipal line departments, see Figure 1.5.3.



**Figure 1.5.3 SDF relationship to sector plans**

## 1.6 CONSULTANT'S BRIEF

The consultants brief is to prepare an SDF for the Kannaland Local Municipality.

The DEADP has produced guidelines for preparing SDFs, see Figure 1.6.1.

The following products of the SDF will be produced in the different phases of the SDF as shown below in Figure 1.6.2.

The following methodology, in line with both the national and provincial guidelines for the preparation of Spatial Development Frameworks, see Figure 1.6.2, is used in this project:

Product One:	Inception Report
Product Two:	Status Quo Report
Product Three:	Conceptual Framework (draft SDF)
Product Four:	Final SDF Implementation Strategies and Programmes

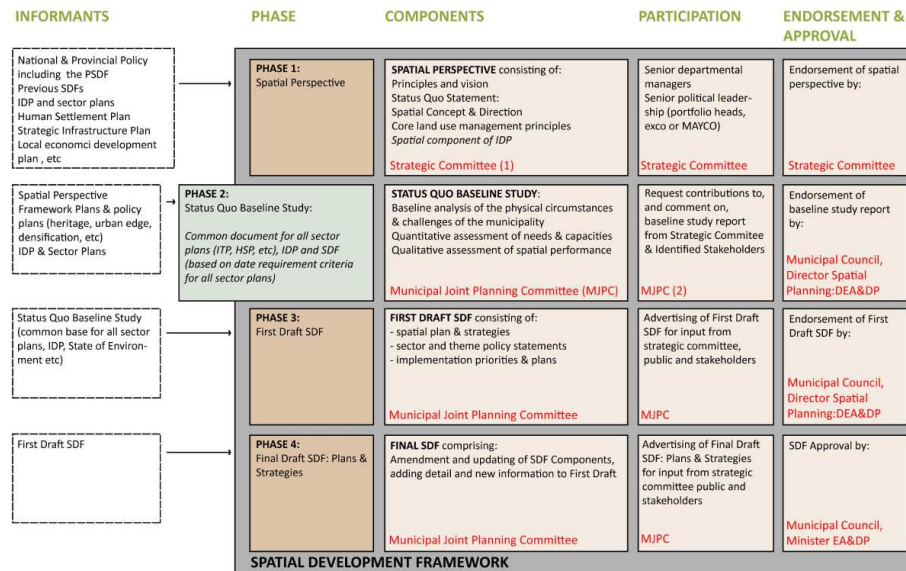


Figure 1.6.1 Guidelines for preparing SDFs (source: DEADP, 2009)

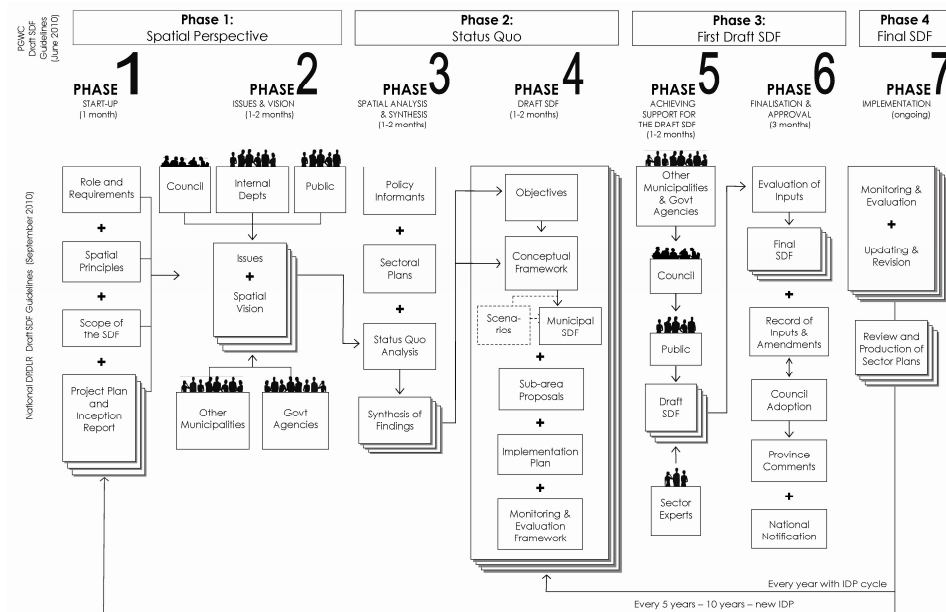


Figure 1.6.2 Phases in the process of completing an SDF (source: CNdV, 2010)

The following serves as specific foci:

### 1.6.1 CRITICAL MILESTONES AND DELIVERABLES

Milestones mark the end of each phase of the project to ensure a credible and comprehensive SDF as required by the above policy and regulation. The four products mentioned above form the milestones for this project.

It is expected that each milestone should cover several deliverables. Below is a list of deliverables for each of the four milestones.

#### PRODUCT 1 INCEPTION REPORT

The inception report should describe details pertaining to the project process (contained in a work plan). As part of this phase a project inception meeting will be conducted with the client to agree on a process forward and deliverables/products of the SDF. The starting date of the project and agreed payment schedule will also be noted in this report.

#### PRODUCT 2 SPATIAL ANALYSIS OF THE CURRENT REALITY

This section should include a **spatial analysis with maps**, and should indicate the following:

- Municipal-wide spatial issues (in relation to the needs identified) and existing project proposals (including their locality);
- The municipal investment and spending patterns. For example, are the municipality spending patterns:
  - aligned with the DFA; and,
  - biased towards urban areas or rural settlements?
- The status of a Comprehensive Rural Development Programme (CRDP) in the municipality; and how does the proposals relate spatially and economically to the adjacent settlements and towns? and,
- A review, where necessary, of the existing municipal policies, plans, resolutions and by-laws, pertaining to spatial planning, supportive of what the municipality wants to achieve in particular with regard to rural development; or do they need to be revised?



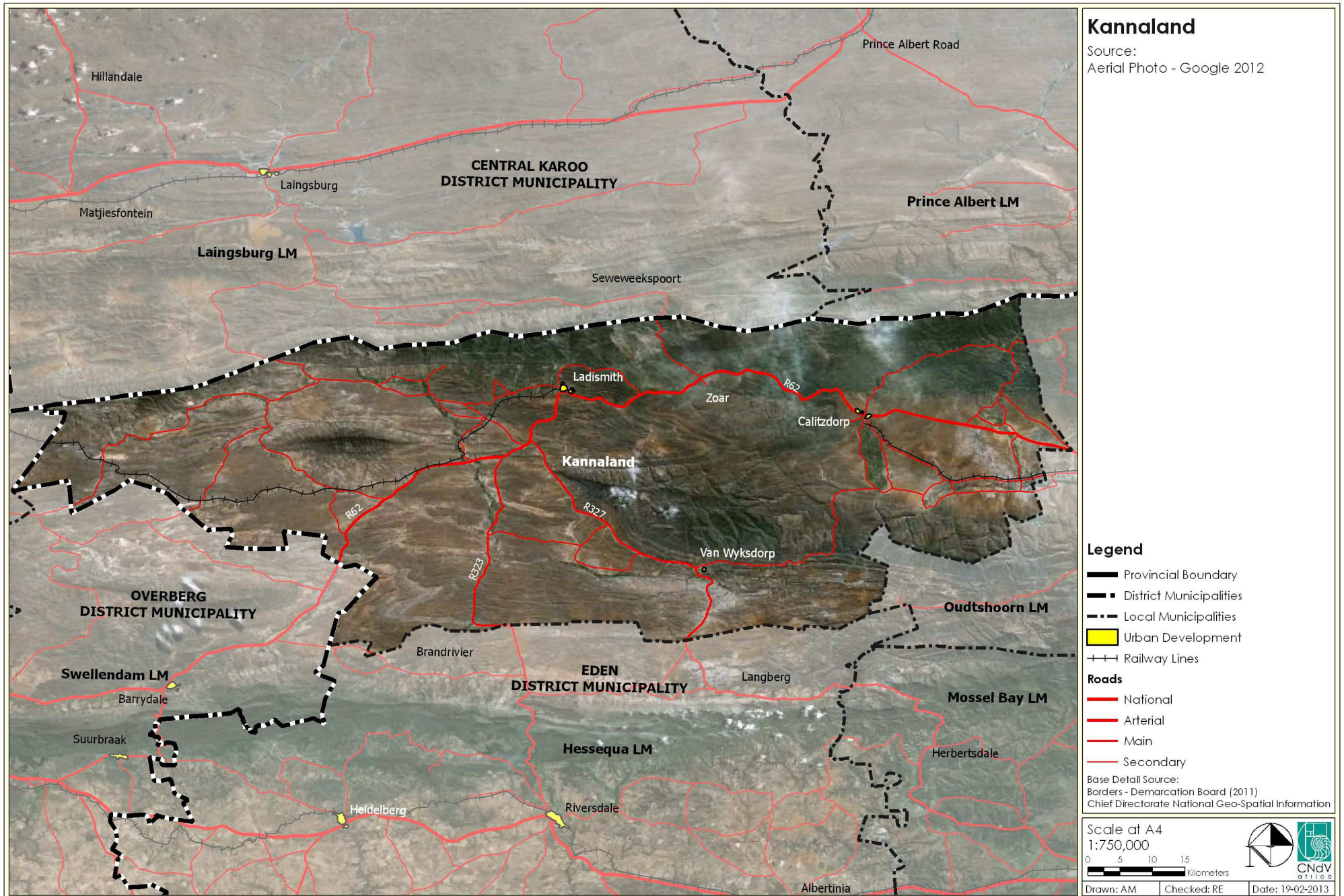


Figure 1.1.2 Aerial Photograph

- Spatial implications of applicable provincial and national plans, legislation, policies, strategies and directives including:
    - the District SDF
    - Provincial SDF
    - the Growth and Development Strategy
  - Settlement spatial patterns and dysfunctionalities including:
    - Evidence of urban sprawl, integration and spatial impacts, effects of apartheid
    - Status of the environment and its functioning as a system of eco-system services
    - Feasibility and progress with IDP proposals
  - Identification and analysis of existing nodal points indicating their:
    - Viability and sustainability for promoting economic growth
  - Identification and analysis of strategic located vacant land and land with development potential:
    - Note, only important vacant land should be described. Analysing every piece of land in the rural municipality should be avoided
  - Major structuring elements, urbanisation trends and their spatial implication in the municipality;
  - Strategic roads and transportation networks (district, provincial and municipal roads):
    - Level of functionality and contribution to the system as a whole
    - A need for new roads
    - Roads which need to be upgraded and for what reason.
    - Roads whose upgrading will boost the economic growth of the municipality, etc.
  - Location and trends of basic services and infrastructure:
    - Demand for services and infrastructure
    - Alignment with other development programs including highlighting dysfunctionalities
  - Housing (human settlements):
    - Location of BNG housing
    - Viability of locations from an economic and access point of view?
    - Existence of supporting infrastructure
  - Environmental degradation, conservation and sensitive areas and the impact which specific development may have on the environment:
    - No development areas
    - Where some development could be allowed with strict management
  - Agriculture:
    - Agricultural potential
    - Land currently affected by land claims
    - Land requirements for other purposes
  - Land reform:
    - Areas suitable for land reform purposes
    - Clarify what type of land is more suited to land reform than others
  - Sports:
    - Location of major sporting nodes or areas and status of relevant infrastructure
  - Spatial relationships between urban and rural areas:
    - Nature of urban / rural interfaces
    - Nature of relationship between the two
    - Patterns of infrastructure, deficits of poverty, welfare grants, markets thresholds, economic or cultural activities
  - The relationship between the spatial issues and the vision of the municipality:
    - Alignments or contradictions including relationships with surrounding municipalities.
- 
- **SPATIAL PERSPECTIVE OF THE IDP OF THE MUNICIPALITY**
- Because the SDF should also include a spatial representation of the IDP, understanding and interpreting the IDP spatially is seen as an important phase of the process. Therefore, this section should also include the following:
- Highlight the vision and mission of the IDP and its spatial implications;
  - Confirm the interrelationship of the municipality's vision and that of the district from a spatial planning point of view;
  - Identify key principles and strategies as contained in the IDP and how they translate spatially;
  - Delineate the municipal boundary, settlements, farms and wards; and,
  - Map the area where the main pressing needs and the proposed multi-sector project(s) are located.



This information should be summarised to determine the way forward in terms of how the municipality should be shaped from a spatial point of view.

### PRODUCT 3 CONCEPTUAL SPATIAL DEVELOPMENT FRAMEWORK

In this phase the conceptual proposals are developed. They should indicate how the spatial form of the municipality should be shaped and links with the outcomes of the two phases mentioned above.

This section should include and map the following:

- Relevant objectives and principles that will guide activities into the desired spatial form;
- The macro-conceptual framework showing the desired spatial form including how the municipality should be portrayed as to how it will function sustainably as a system;
- A micro spatial plan of key focus/growth/nodal points in the municipality;
- Horizontal and vertical alignments of the conceptual SDF with other relevant plans such as NDP, PSOs, NSDP, District SDF and District IDP, etc;
- Priority settlements for the implementation of the CRDP;
- Rural towns needing revitalisation;
- Strategic located land for agri-villages and agro-industries;
- Land to be acquired or reserved for land reform activities including land for proactive acquisition (PLAS) by the Department of Rural Development and Land Reform;
- Strategic sites for Thusong Service Centres;
- Strategic development areas and priority areas for investment;
- Viable land for housing and other economic development and supporting infrastructure;
- Viable and functional nodal points, and identify potential nodes and how they should be developed.
- Nodes without development potential. Name or identify the nodes;
- Functional development corridors and how they should be developed to support the nodes;
- Urban edges and direction for growth for any of the different areas at micro framework level and for the municipality as a whole at macro level;

- Functional and integrating municipal/district roads and public passenger transportation network;
- Proposals for upgrading of or new roads; and,
- Proposed major bulk infrastructure for the whole municipality;
- Where appropriate, include new bulk infrastructure and the relevant services;
- Environmental conservation and sensitive areas;
- Major sporting nodes as well as areas with tourism potential
- High agricultural potential and areas affected by claims which municipality needs the most for developmental purposes; and,
- Areas needing urgent policy intervention.

### PRODUCT 4 IMPLEMENTATION STRATEGIES AND PROGRAMMES

This is the most important phase of the SDF in which the ideas as conceptualised in the previous phases should be realised. For implementation to succeed it is necessary to ensure the following from the start of the process:

- There should be a strategic vision for the spatial structure of the municipality as a whole shared by councillors, all the municipal department's officials, the district in which the municipality is located, national the sector departments and the private sector;
- The development of the SDF should be consultative from the beginning until to the end of the process; and,
- There should be strategies and processes in place to involve the relevant decision-makers and stakeholders.

From this work the following deliverables should be included in the SDF:

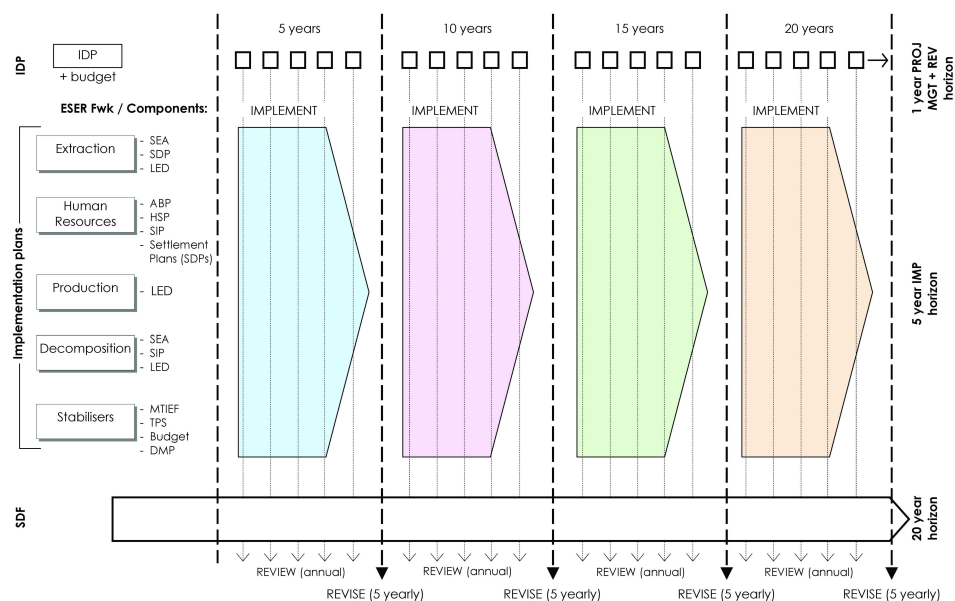
- Relevant strategies and policies to implement the framework and determine the points of intervention by the municipality; and,
- Amendments to the relevant sector plans to facilitate the implementation of the SDF.

**Note: Except for Land Use Management System (LUMS), most of the implementation of the SDF will occur via the sector implementation plans, e.g. HSP, SIP, PTP, disaster management, LED, EMF. The SDF provides the spatial guidance to all of these plans.**

Sector plans must always be aligned to advance the interests of the SDF and hence the IDP, see Figure 1.6.3.

- Land ownership with updated cadastral information that can be used by the municipality as part of a land audit;
- Guidelines for transportation, infrastructure and other sector plans, policies and plans;
- LUMS guidelines or recommendations for the formulation of a land use management scheme (not included in this brief);
- Tools (densification, infill, redevelopment, greenfields) to facilitate development in strategic areas;

- Capital Expenditure Framework for the municipality's development programmes and budget process;
- Prioritised list of developmental interventions and spatial location;
- Cost and budget estimates;
- Timing and phasing of development;
- Sources of finance;
- Implementation agent and their roles and responsibilities;
- Recommendations for the revision of existing policies or strategies, where necessary;
- Proposals on how the SDF can be used for the implementation of projects by Sector Departments; and,
- Institutional capacity recommendations.
- Review of trends and alignment with adjacent municipalities with those of the Municipality under consideration;



**Figure 1.6.3 Proposed Relationship between IDPs, Implementation Plans, including HSPs and SDFs** (source: CNdV 2010)

- Recommend strategies to facilitate linkages between rural and urban areas;
- Proposals on how to ensure the sustainability of land with high agricultural production potential; and,
- An Implementation Plan that summarises the following from the sector implementation plans:

The following general deliverables are to be included:

- Resumes of meetings;
- Powerpoint slide shows and hand-outs of presentations;
- Reports to be produced incrementally as project progresses;
  - Inception Report
  - Status Quo Report
  - Conceptual Framework Report
  - Final Spatial Development Framework (complete report)

All of these products should be compatible with national, provincial and district GIS databases.





## 2. GOVERNANCE AND LEGISLATION - IMPLICATIONS

There are a number of Acts, policies and guidelines to be considered in the preparation of the SDF. The following section spells out the more important documents in this regard.

### 2.1 NATIONAL POLICY

#### 2.1.1 DFA Principles

The Development Facilitation Act (DFA) provides an important set of overarching guidelines in the principles contained in Chapter 1 of the Act, see Figure 2.1.1.

- Promote efficient and integrated land development:
  - Integrate social, economic, institutional and physical aspects of land development;
  - Integrate land development in rural and urban areas;
  - Promote availability of residential and employment opportunities in close proximity to each other;
  - Optimise the use of existing resources;
  - Promote a diverse combination of land uses;
  - Discourage the phenomenon of urban sprawl and contribute to development of more compact towns and cities;
  - Contribute to the correction of historically distorted spatial patterns of settlement in the Republic; and,
  - Encourage environmentally sustainable land development.

**Figure 2.1.1 DFA : Chapter 1 - Land Development Principles**

Key themes contained in these principles include:

- Socio-economic integration;
- Rural and urban integration;
- Promoting high levels of access to minimise the use of private motor vehicles; and,
- Limiting urban sprawl so as to increase urban efficiencies relating to business thresholds and minimise the impact of urban growth on

agricultural land, areas of scenic beauty and areas of high biodiversity potential.

#### *Implications for Kannaland Municipality*

- The outward growth of settlements should be restricted to prevent the consumption of valuable agricultural and natural environments. This is especially a concern for Zoar and Van Wyksdorp that have vacant land in the inner parts of the settlement.
- Emphasise the creation of integrated settlements especially with regards to poorer communities.
- Create compact urban environments.

#### 2.1.2 National Development Plan 2030, November 2011

The purpose of the National Development Plan 2030 is to guide the long term development of South Africa in order to ensure a better future for all. The plan was prepared by the National Planning Commission in November 2011 (National Planning Commission, 2011).

The approach of the plan is based on the following:

- The active efforts and participation of all South Africans in their own development;
- Redressing the injustices of the past effectively;
- Faster economic growth and higher investment and employment;
- Rising standards of education, a healthy population and effective social protection;
- Strengthening the links between economic and social strategies;
- An effective and capable government;
- Collaboration between the private and public sectors; and,
- Leadership from all sectors in society.

Ultimately the plan aims to create a prosperous country where poverty, the effects of apartheid and colonial discrimination would be a thing of the past.

A total of nine central challenges were identified:

1. Too few people work;
2. The standard of education for most black learners is of a poor quality;
3. Infrastructure is poorly located, under-maintained and insufficient to foster higher growth;
4. Spatial patterns exclude the poor from the fruits of development;
5. The economy is overly and unsustainable resource intensive;
6. A widespread disease burden is compounded by a failing public health system;
7. Public services are uneven and often of poor quality;
8. Corruption is widespread; and,
9. South Africa remains a divided society.

The commission identified that increasing employment and improving the quality of education available as the highest priorities.

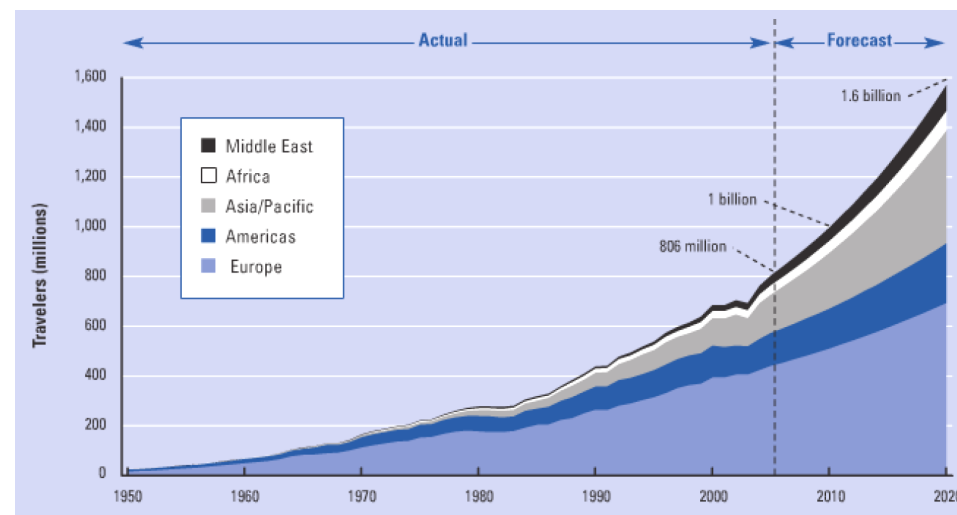
The plan identified key demographic issues which need to be taken into account in national planning:

- The number of South Africans living in rural areas has decreased by 10% resulting in about 60% of the population living in urban areas. More than half of the poor live in cities. By 2030, it is expected that about 70% of the population will live in urban areas. Gauteng, eThekweni and Cape Town are the fastest growing city-regions in the country;
- Immigration will add between 0.1 percent and 0.2 percent to South Africa's population growth per year; and,
- The HIV/AIDS infection rate has stabilized at about 10% and new infections among young people have fallen. Improved treatment has reduced the death rate and life expectancy is rising again.

External drivers of change affect South Africa's fortunes in a number of ways. These are briefly discussed below:

### 2.1.2.1 World Tourism Boom

- Expected increase of between 15-20% in tourism; and,
- Graph 2.1.2.1 shows the projected growth in global and regional international tourist arrivals between 1950 and 2020.



**Graph 2.1.2.1 Projected growth in global and regional international tourist arrivals between 1950 and 2020** (Impact Economix, 2012)

### 2.1.2.2 Population Growth and migration

Of concern is the impact of HIV/AIDS and the size of the work force (growing or declining).

### 2.1.2.3 International political and economic developments

South African policy makers did not adequately provide for the effects of the world economy on the local economy. Urbanisation and industrialization in China and India are likely to keep the demand for natural resources high for a decade or more which will broaden the opportunities for the South African economy.

### 2.1.2.4 South Africa's political-economic dynamics

- Electricity costs are likely to continue to rise;
- Green House Gasses (GHG) emissions will increase by 25% to 2014;
- After 2015 there will be oil shortages as global supply of fuel drops by 4% per annum;

- Fuel shortage will be prevalent in the smaller cities in the interior of the country and will present a strain on heavy industry and transport;
- After 2025 there will be tougher energy laws and increased fuel and food prices; and,
- By 2050 the situation will improve due to more affordable renewable energy, alternative transport, energy and waste recycling, and tourism and local food production.

### 2.1.2.5 Globalisation

Globalisation has led to increased complexity for countries and the way in which they contend with each other. South Africa should manage the risks that could develop when emerging powers may seek to exploit our vulnerabilities.

This refers to the fact that the developments in the Municipality are affected by global trends, e.g. the price of agricultural produce that is in turn affected by the international price of oil. Another factor is the fact that the Municipality can potentially play a role in the global market.

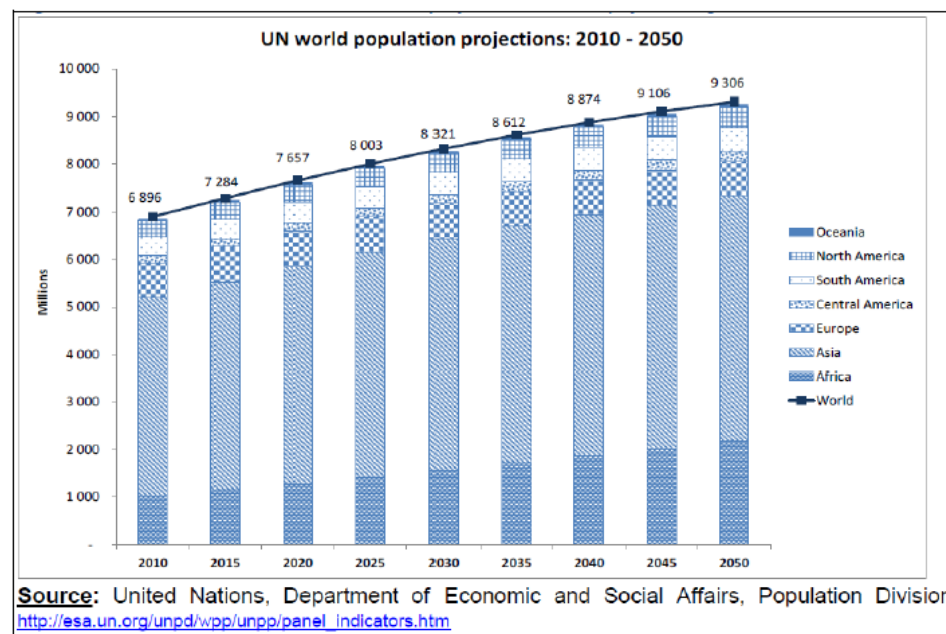
### 2.1.2.6 Africa's development

Strong economic growth on the African continent has opened up major opportunities for South African firms and industries. Nevertheless, a number of structural weaknesses must be overcome for South African firms to increase the benefits they can derive from, and the contributions they can make to, growth and development in Africa. Poor transport links and infrastructure networks, as well as tariff and non-tariff barriers, raise the cost of doing business and stifle both investment and internal trade. Weak legal institutions and, in some cases, poor governance heighten the risks of investing.

### 2.1.2.7 The Future of Africa and the world's fastest growing market

Africa has a compound annual growth rate of 2,3% (more than double that of Asia). It will have more than 2 billion people by 2044. Graph 2.1.2.2 shows the global population growth projection between 2010 and 2050.

This means that Africa is a growing market for produce. The increase in population could mean more pressure on South Africa and other better performing nations in Africa.



Graph 2.1.2.2 World Population Growth Projections 2010 to 2050 (Impact Economix, 2012)

### 2.1.2.8 Climate Change

Climate change has led to parts of South Africa becoming noticeable dryer over the last 30 years. This has mainly been due to rising temperatures and changing rainfall patterns. These directly impact on food production and water supply. In an attempt to reduce the impacts of climate change, households and industries have to reduce their negative impact on the environment. Other innovative means of combating climate change should be sought with due consideration of regional and national contexts.

Of most concern is the next 10-15 years which is called the energy interregnum, a period of generally high energy prices and major fluctuations as the world adjusts to an alternative energy scenario.

To cope Municipalities will NEED to plan for:

- Public transport and rail freight;
- Extensive use of solar water heating;
- Stringent energy conservation in business and industry; and
- Recycling of energy from waste.

### 2.1.2.9 Technological change

Technology has brought many benefits to South Africa. The commission has raised their concern regarding the cost of broadband internet connectivity to all South Africans. The plan has a number of key priority areas in addressing current development trends in South Africa:

- An economy that will create more jobs;
- Improving infrastructure;
- Transition to a low-carbon economy;
- An inclusive and integrated rural economy;
- Reversing the spatial effects of apartheid;
- Improving the quality of education, training and innovation;
- Quality health care for all;
- Social protection;
- Building safer communities;
- Reforming the public service;
- Fighting corruption; and,
- Transforming society and uniting the country.

The priority aim is to build, by 2030, a country that is fair, just, prosperous and equitable.

### 2.1.2.10 Amazing new Technologies

- Manufacturing will need fewer and more skilled workers;
- Tele-processing will reduce the need for meeting travel;
- 50% of people will work from home by 2050;
- Accelerated connectivity and economic growth of rural and urban parts of Municipalities can be expected;

- As technology continues to replace human labour and prosperity allows more people in more countries to travel, tourism is set to maintain its position as the world's biggest and fastest growing industry; and,
- This means the design of towns needs to consider these potential changes in human settlement patterns.

### **Implications for Kannaland Municipality**

- Capitalise on the economic benefits offered by the R62 tourism route to strengthen the tourism sector of the municipality.
- Towns within the municipality should develop their tourism sectors. Calitzdorp should emphasise its role as the Port wine capital of South Africa.
- Architectural styles unique to the area together with the scenic beauty of the natural landscape should be promoted to strengthen the tourism sector.
- Off-grid and alternative energy sources should be considered to reduce the rate and impact of climate change.
- The implications of climate change need to be considered not only from a disaster management perspective but also from its impact on infrastructure provision; such as buildings; agriculture; and the natural environment.
- Primary settlements are likely to experience an influx of people, e.g. Ladismith is the main settlement in the municipality and will therefore require careful planning to ensure that it is efficient and attractive and able to accommodate population growth.
- Local industries, particularly agriculture, agri-processing and tourism, should be strongly supported.
- The migration of the skilled work force from the rural areas to the metropolitan areas is experienced in the municipality. While the education statistics for the area indicate an increase in the levels of education, people are not able to locate jobs commensurate with their skills, locally.
- Potential benefits can be derived from a strong regional tourism brand, with which the Municipality should be able to leverage and support other strong regional tourism brands such as the Winelands-Port-Route, 62-Ladismith-Calitzdorp and Mossel bay (Robertson-Calitzdorp Tourism Corridor) and the Route 62.

### 2.1.3 NSDP Spatial Guidelines

The National Spatial Development Perspective (NSDP) is an effort by National Government to find the best way of allocating scarce resources in the various geographic regions in the country. The basic premise of the NSDP is that if there are not enough resources to satisfy all needs wherever they may occur then they should be allocated to where the benefits will be greatest.

The NSDP takes the form of a spatial narrative, a set of maps and a strategic response. Using these tools, the NSDP objectives are to:

- Provide a framework within in which to discuss future development;
- Act as a common reference point for national, provincial and local government for the analysis of development potentials;
- Identify areas of tensions/ priority in achieving positive spatial outcomes with government infrastructure;
- Provide governments response to the above mentioned for a given time period.

"The NSDP is unique in the sense that it proposes a mechanism that will link local, provincial and national planning in one integrated system of planning for development." (source: NSDP)

The NSDP contains five major principles:

- Economic growth is most likely to continue where it has previously occurred and therefore economic potential will be highest in these localities (NSDP, pg 24);
- Economically active people will tend to move to localities where jobs or other livelihoods are available (NSDP, pg 24);
- Efforts to address past social inequalities should focus on people and not in places where it will be difficult to promote sustainable and economic growth (NSDP, pg 24);
- It is important that people are trained and skilled to participate effectively in the economy. Because of the tendency of people to move to areas of greatest opportunity, especially when they have skills, programs in areas with low economic development potential should focus on enhancing people skills rather than the construction of fixed infrastructure. This will avoid the risk of such investment becoming

redundant if people move away or there is not sufficient demand to justify high levels of expenditure;

- Future government spending on infrastructure and development should be in localities that will not become poverty traps (NSDP, pg 25);

Figure 2.1.3.1 illustrates the principles of the NSDP Spatial Guidelines.

Centres which have existing or potential economic growth should be the priority for economic investment, i.e. fixed infrastructure such as housing, underground services and roads. Centres with low economic potential should not be priorities for fixed infrastructure. However, social capital programs such as health, adult basic education and training, entrepreneurship development, and business and technical training should be directed to wherever people may require them. In this way, should the recipients decide to move to other centres, they will, in effect, be able to take this investment with them.

Facilities for the delivery of these programs in centres or areas of low economic potential should use and share existing facilities. In many of these locations there are under-utilised school buildings, clinics, etc. which could be refurbished and used as Thusong Centres.

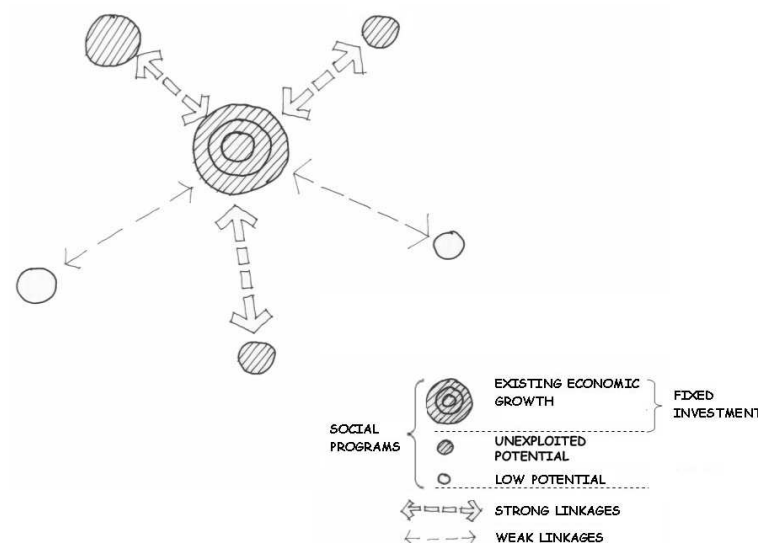


Figure 2.1.3.1 Principles of the NSDP Spatial Guidelines



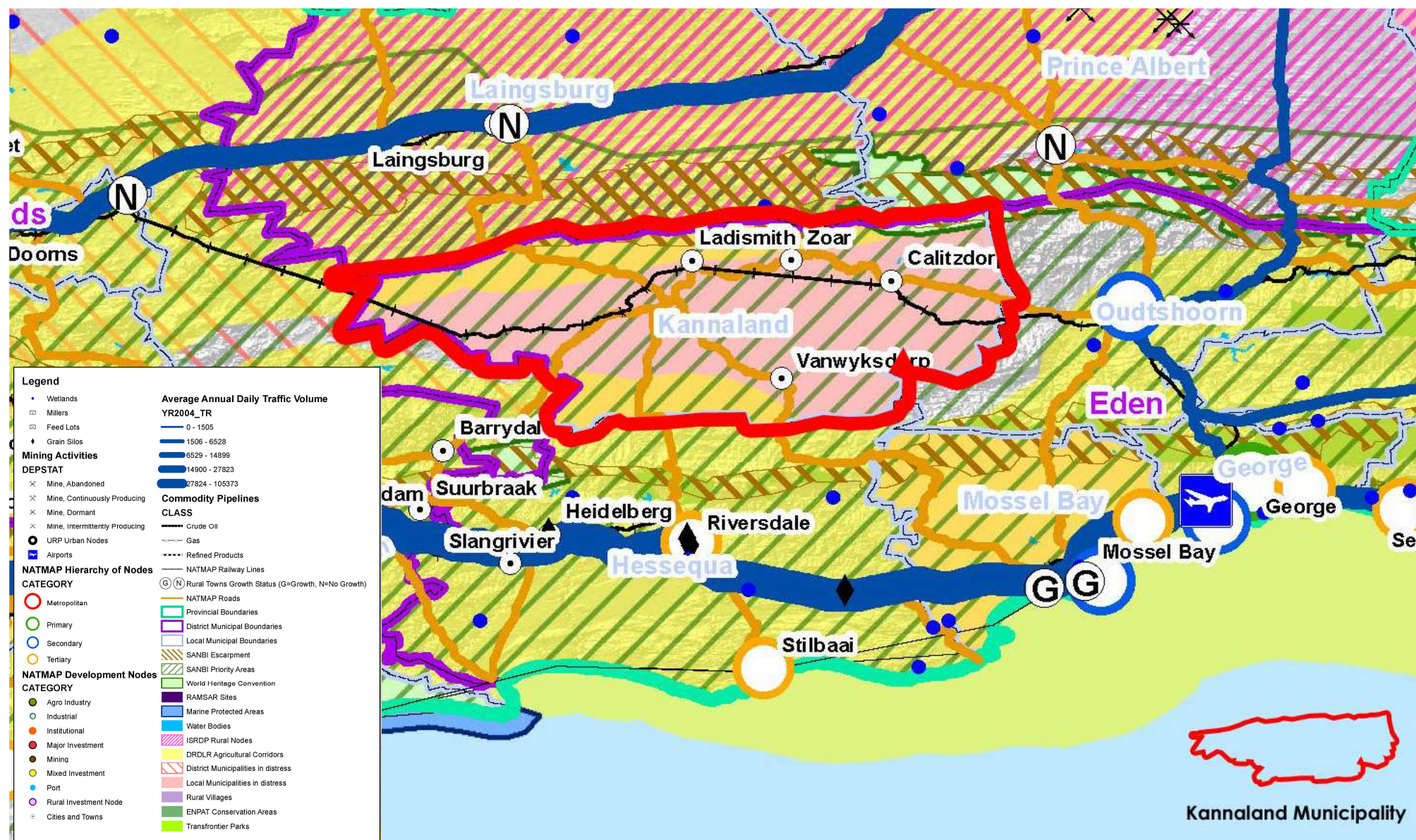
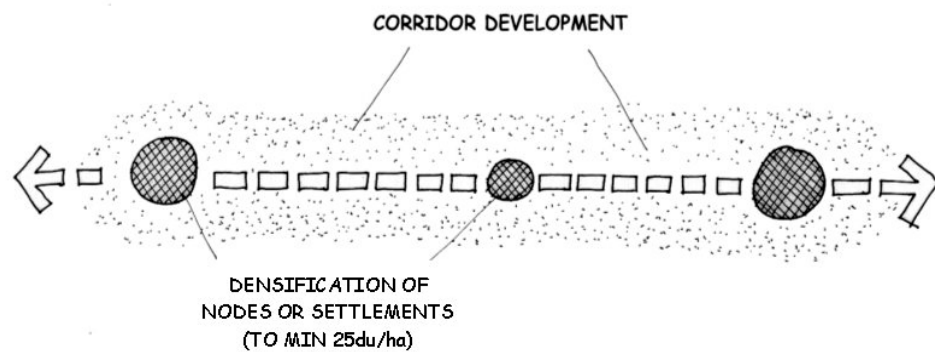


Figure 2.1.3.4 Proposed Draft National SDF (source: DRDLR, 2010)

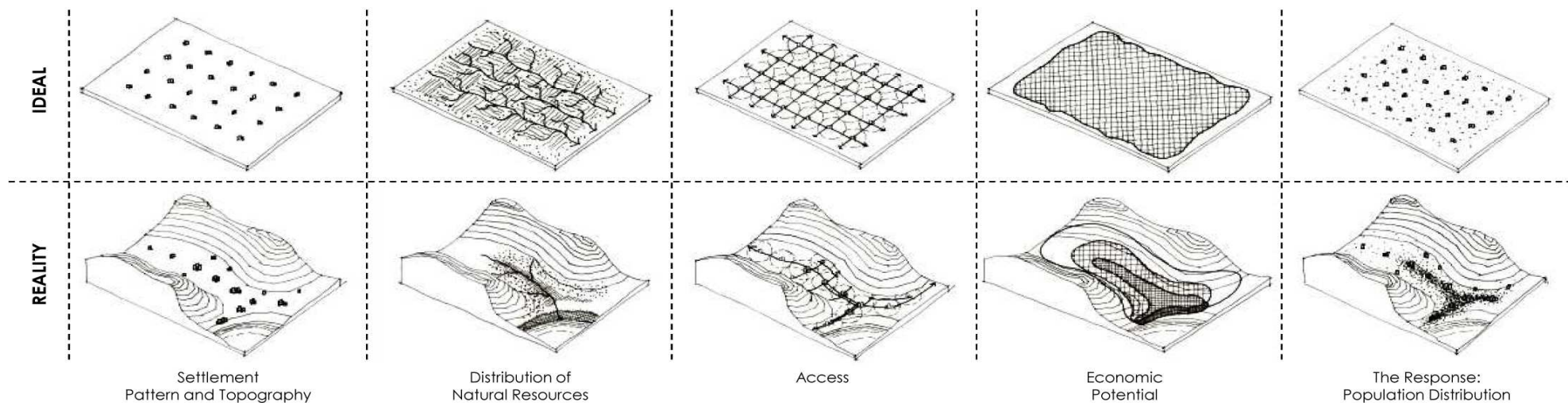


The NSDP also recognises that development potential tends to be greatest along linear corridors or axes, see Figure 2.1.3.2. This is as a result of the relationship between urban nodes of opportunity and the transport and communication routes that connect them. In some instances a river whose banks also have enhanced economic opportunities could also give rise to linear development corridors as zones of investment priority.



**Figure 2.1.3.2 Development Potential along Linear Corridors**

Figure 2.1.3.4 shows Kannaland Municipality in the context of a draft SDF for the whole country.



**Figure 2.1.3.3 Differences between Ideal and Actual Patterns of Resources and Opportunities**

As a consequence of the warping of these patterns different parts of the landscape have greater opportunities than others. This, in turn, is reflected by the uneven development of infrastructure providing access to these areas of opportunity. This leads to a similarly biased or uneven pattern of economic potential and population distribution.

It is important that the uneven pattern of these very powerful underlying forces is understood when resources are being allocated so as to minimise wastage and inefficiencies.

In summary, the NSDP aims to direct where government invests its money. It targets areas that have high economic growth potential for the infrastructural (major physical) and social investment. Other areas that do not have high economic growth potential may receive only social capital investment i.e. investing in people, in educating, empowering, and uplifting the people.

It is argued that people who are located in areas of low or no economic growth potential will most likely move to areas of higher economic growth potential and in that way the investment in infrastructure in the low economic growth potential areas will be wasted. Therefore, it is considered

more beneficial to invest in the people who can then take the skills with them. Alternatively the people may improve their current living conditions and standards in areas of low growth potential which may eventually result in their area improving its economic potential. By following this strategy government would have invested wisely and ensured the best return for public investment.

#### **Implications for Kannaland Municipality**

- The municipality has been identified as a local municipality in distress.
- Land along the northern and southern boundary is identified as a Department of Rural Development and Land Reform (DRDLR) Agricultural Corridors.
- The entire municipality has been identified as a SANBI Priority Area.
- Roads within the municipality (R62, R323 and R327) have been identified as forming part of the National Transport Master Plan (NATMAP).
- The areas of Calitzdorp and Zoar have been identified as areas of high to very high social needs, respectively, and represent a challenge in terms of prioritising capital expenditure. These areas should be the focus of social development grants.
- All the settlements in the municipality have been identified as having a low development potential. In this regard, tourism can play an important role in developing these settlements (Growth Potential of towns in the Western Cape, 2010)

#### **2.1.4 Department Of Environmental Affairs And Tourism: South Africa's National Biodiversity Strategy and Action Plan, 2005**

The Department of Environmental Affairs and Tourism prepared the National Biodiversity Strategy and Action Plan (NBSAP) "to develop a plan of action for the conservation and sustainable use of the country's biological diversity."

During the NBSAP preparation, the National Biodiversity Implementation Plan identified objectives, outcomes and activities required for the NBSAP to achieve its goals.

These objectives and targets include:

- **Strategic Objective One:** A policy and legislative framework that allows the integration of biodiversity management objectives into the economy.  
Targets:
  - South Africa is to meet its international obligations with regards to biodiversity
  - Biodiversity issues become integrated in the macro-economy, informing policy, planning, budgeting and decision making at all levels
- **Strategic Objective Two:** Ensure good governance in the biodiversity sector by enhancing institutional effectiveness and efficiency.  
Targets:
  - Biodiversity concerns occupy a significant place on the national agenda
  - Government, stakeholders and role-players work together (effectively and efficiently) to achieve biodiversity management objectives
- **Strategic Objective Three:** Integrated terrestrial and aquatic management to minimise the impacts of threatening processes on biodiversity, enhances ecosystem services and improve socio-economic security.  
Targets:
  - By focusing on programmes aimed at poverty alleviation, effective control of priority invasive species is achieved

- Meet biodiversity objectives within all biodiversity priority areas
- Produce disaster prevention and management plans incorporating wise ecosystem management principles and practices
- Genetically modified organisms which threaten biodiversity, are not to be released into the environment
- Consider biodiversity in all aspects of resource use
- **Strategic Objective Four:** Enhance human well-being and development by enhancing the sustainable use of biological resources and equitable sharing of benefits.  
Targets:
  - Economies based on the use of species and genetic resources are optimized and sustainably managed
  - Priority fish stocks recover to sustainable levels
  - No species status declines
  - National products sector contribution to GDP grows by 50%
  - With more effective and equitable resources, poverty is alleviated
- **Strategic Objective Five:** Maintain key ecological processes across the landscape and seascape.  
Targets:
  - Comprehensive biodiversity monitoring systems inform planning
  - Protected area network in marine environmental hence contribution to representation targets in priority areas
  - No further loss of endangered ecosystems
  - Establish protected environments and manage effectively

#### **Implications for Kannaland Municipality**

- There are four biomes in the Municipality (Azonal Vegetation, Fynbos, Albany Thicket and Succulent Karoo), see Figure 3.2.5.2. Special policies need to be formulated in this regard in order to protect these vegetation types.
- Terrestrial CBAs are to be effectively managed especially those identified in Figure 3.2.6.4.

### 2.1.5 Regional Industrial Development Strategy (RIDS)

The Department of Trade and Industries (DTI) Regional Industrial Development Strategy (RIDS) seeks to move South Africa's industrial development policy from the apartheid era's top-down localized approach to a bottom-up approach that treats regions as functional entities and builds on locally available skills and resources and relies on external investment. (The DTI, Draft Regional Industrial Development Strategy, June 2006, pg 16)

Therefore, it also seeks to strengthen world-class regions. These are high performance regions that contain companies or networks of companies which need to constantly upgrade so that they do not fall behind in global competition. (The DTI, *ibid*)

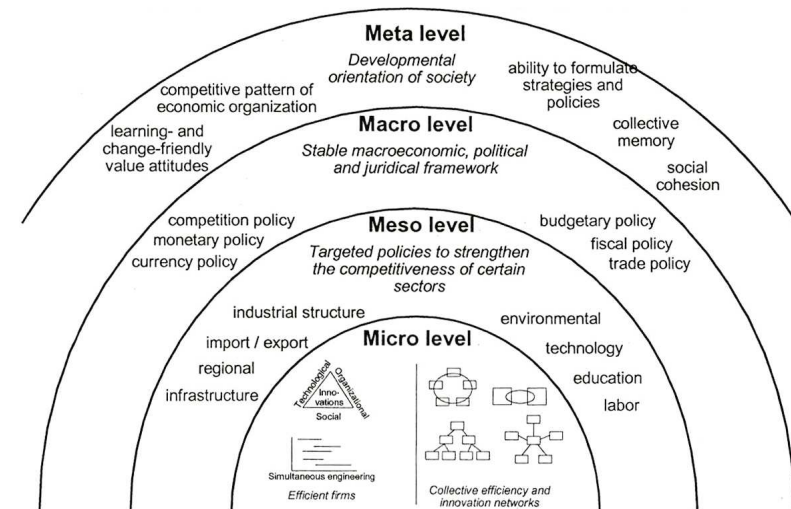
One strategy here is to concentrate a critical mass of firms in a chosen industry sector together with its upstream suppliers and service providers in a specific geographic location. Necessary support infrastructure includes transport, logistics, communications, education and training. Gauteng's Blue IQ is an example of such a regional economic development strategy.

RIDS identifies four levels that determine systematic competitiveness, see Figure 2.1.5.

National and regional industrial development policy is responsible for the Meta and Macro levels. It is at the Meso and Micro levels where district and local municipal policies can have the greatest effect.

Figure 2.1.6 indicates that the Eden District Municipality experienced high economic growth.

Figure 2.1.7 indicates that the majority of the Kannaland municipality has a gross value added (GVA) up to R5mil. Around the urban areas the GVA increases with the highest GVA producing areas being located around Ladismith and Calitzdorp. In these areas, peaks of around R30 – 90 GVA / 50km<sup>2</sup>/pa are indicated.



**Figure 2.1.5 Determinants of Systemic Competitiveness**  
(source: Draft Regional Industrial Development Strategy, DTI, 2006, pg20)

#### **Implications for Kannaland Municipality**

- Promote Ladismith and Calitzdorp as the main drivers of the Kannaland municipal economy.
- Ladismith is the main business and administrative hub of the municipality.
- Forward and backward linkages need to be developed to support economic activities.



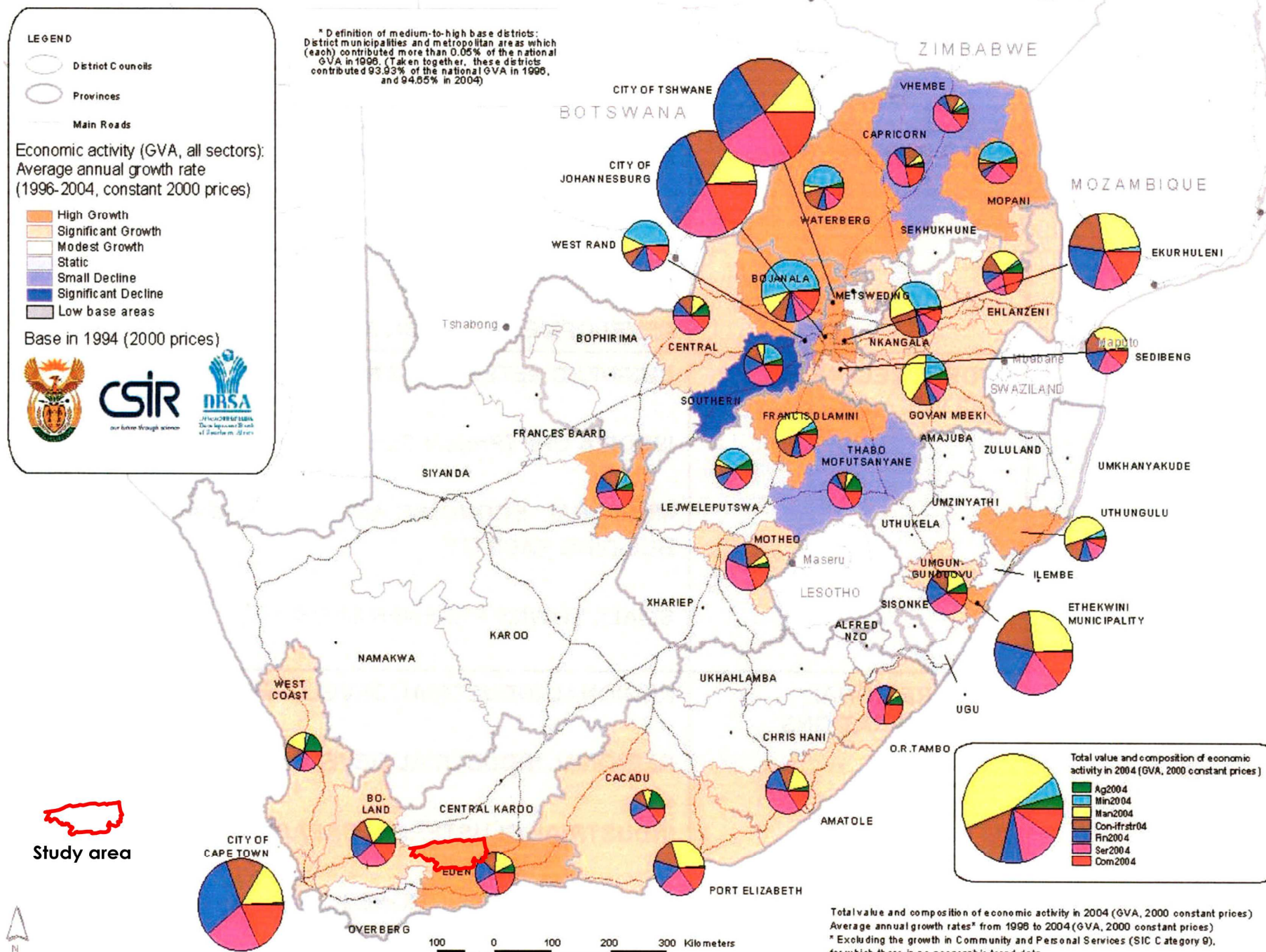
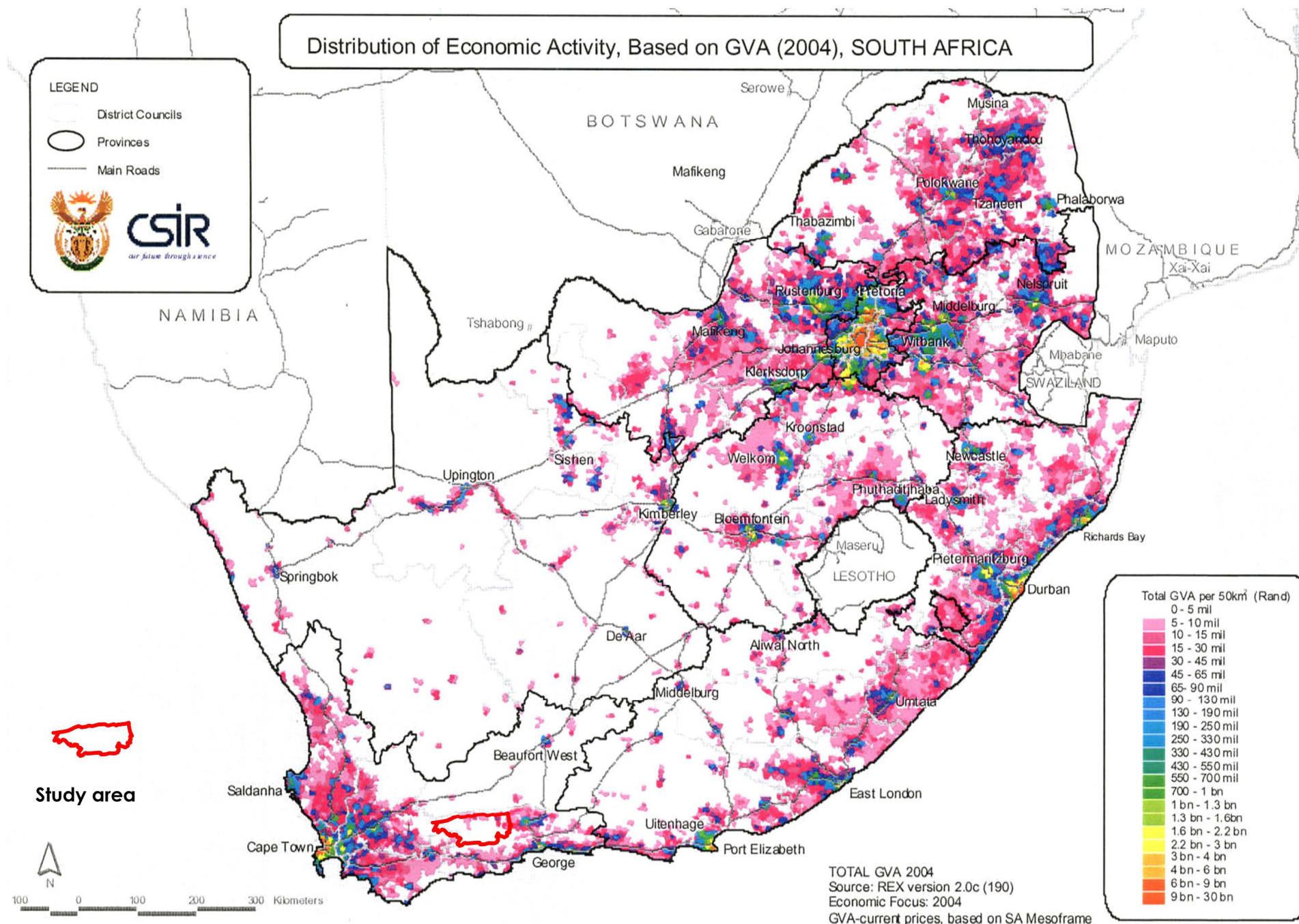


Figure 2.1.6 Medium to High Base Areas (source: CSIR, 2006)





**Figure 2.1.7 Distribution of Economic Activity, based on GVA** (source: CSIR, 2006)

## 2.2 PROVINCIAL POLICY

### 2.2.1 Western Cape Provincial Spatial Development Framework (WC-PSDF) (November 2009)

The Western Cape Provincial Spatial Development Framework was approved by the provincial cabinet in December 2009 and aims to give direction and guidance for spatial development within the Western Cape.

This policy document formulates proposals that deal with the following areas of intervention: social economic development; urban restructuring and environmental sustainability.

The WCPSDF composite map, see Figure 2.2.1.1, indicates broad spatial planning categories derived from a bioregional planning approach. These five broad spatial categories (SPCs) provide policies for development and activities in areas designated as:

- Core areas;
- Buffer areas;
- Intensive agriculture areas;
- Urban development; and,
- The Urban Edge.

It is intended that the broad spatial planning categories will be refined at a detailed level by district and local SDFs when they are prepared.

The PSDF also indicates the prioritisation of the province's urban settlements is indicated with respect to their relative levels of human need and economic potential so as to prioritise fixed investment and social capital program.

A study on the growth potential of towns outside of the City of Cape Town has informed the proposals relating to the prioritisation of locations for fixed capital investment and those which would only receive human needs programs or social investment.

With regard to urban restructuring and integration relating to urban settlements, the WCPSDF proposes that Urban Edges be defined around current urban developed areas to contain the outward growth of areas

and to increase the gross densities within those areas to an average of 25du/ha for urban settlements requiring public transport services. Smaller urban settlements attain their efficiencies at average gross densities of 15du/ha. Only resort types of development should be permitted outside of Urban Edges.

The WCPSDF is guided by the following objectives:

- Objective 1: Align the future settlement pattern of the province with the location of environmental resources for economic opportunities
- Objective 2: Deliver human development and basic need programs wherever they may be required
- Objective 3: Strategically invest scarce public sector resources where they will generate the highest socio-economic returns
- Objective 4: Support land reform
- Objective 5: Confirm and strengthen the sense of place of important cultural landscapes, artefacts and buildings
- Objective 6: Heal the apartheid structure of urban settlements
- Objective 7: Conveniently locate urban activities and promote public and non-motorised transport
- Objective 8: Protect biodiversity and agricultural resources
- Objective 9: Minimize the consumption of scarce environmental resources particularly water, fuel, burning materials, mineral resources, electricity and land.

The WC-PSDF aims to:

- "Be the spatial expression of the Provincial Growth and Development Strategy;
- Guide IDP's, SDF's and provincial and municipal SDP's;
- Help prioritise and align investment and infrastructure plans other provincial departments as well as national departments;
- Provide clear signals to the private sector about desired development directions;
- Increase predictability in the development environment;
- Redress the spatial legacy of apartheid."



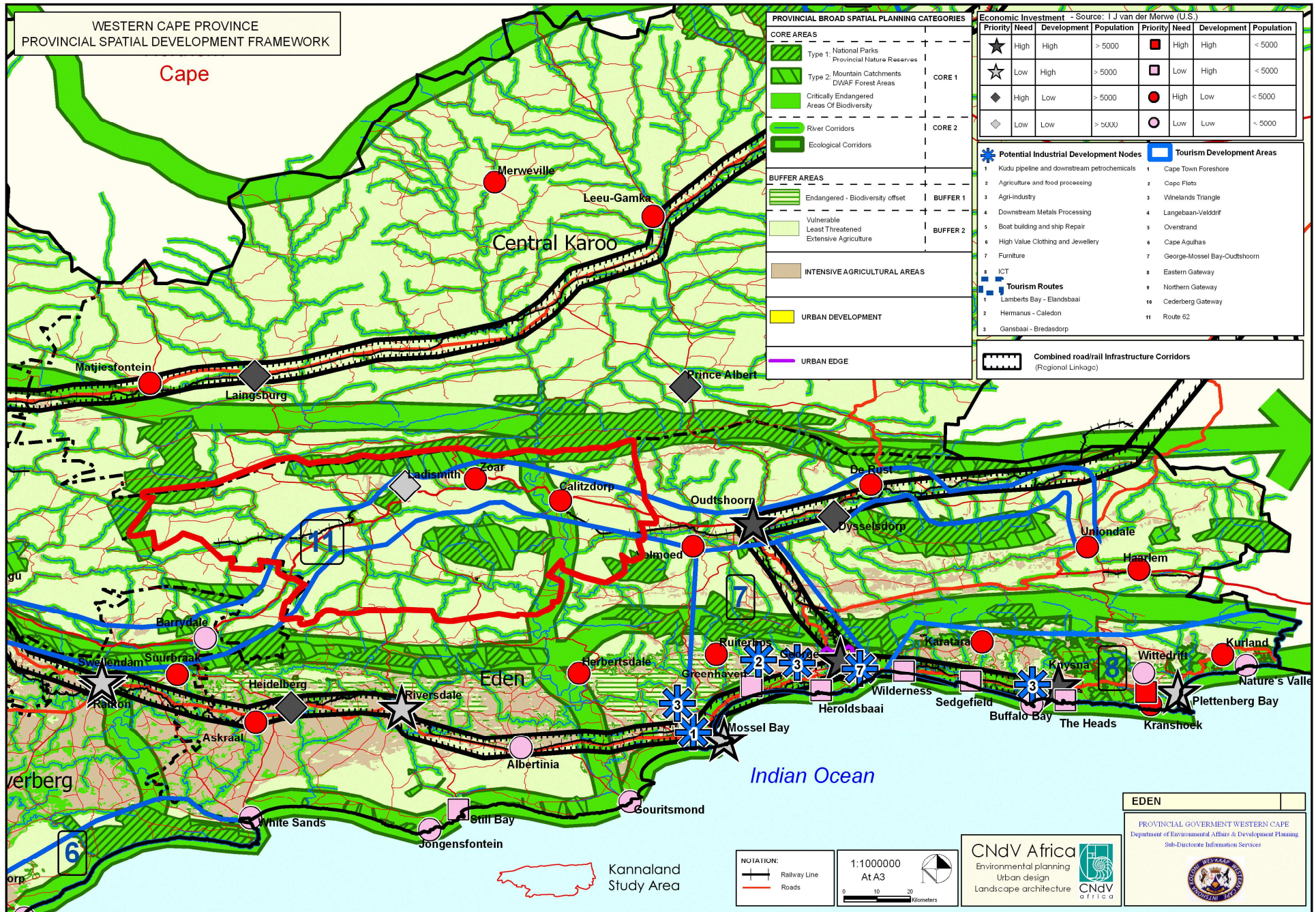
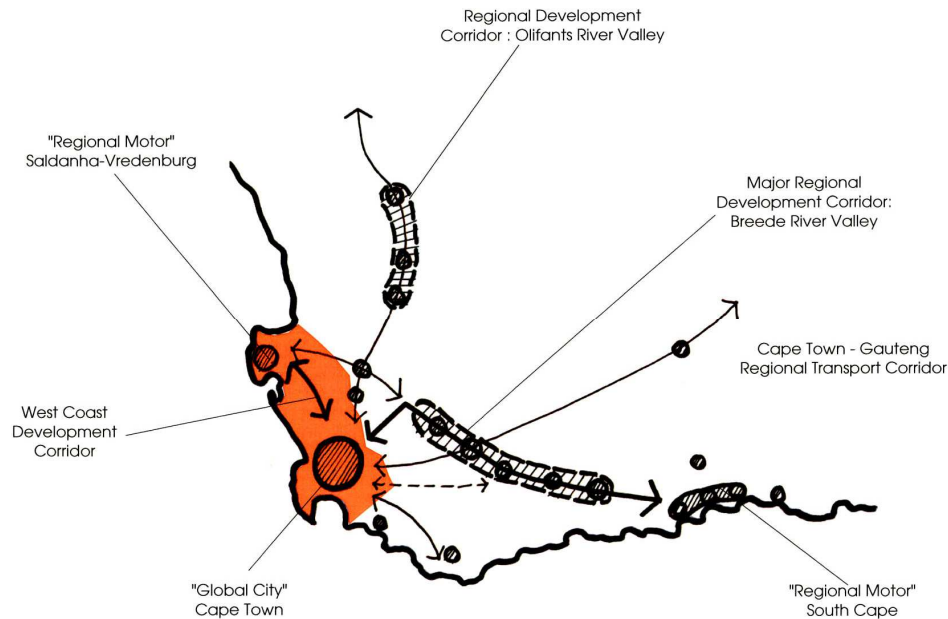


Figure 2.2.1.1 WCPSDF: Eden District (source: CNdV, 2006)





**Figure 2.2.1.2 Patterns of Economic Activity** (source: PSDF, 2006)

Figure 2.2.1.2 indicates the spatial concept of the WC-PSDF. The WCPsDF identifies the N1 Freeway and the railway line as major transport corridors with important linkage opportunities.

Some of the issues identified in the WC PSDF include:

- Arid area of depopulation;
- High percentages of human development problems although relatively few people;
- Veld management, biodiversity conservation and stock carry capacity problems;
- Need for inclusionary policy in places like Prince Albert; and,
- Desertification from the westward movement of the Karoo.

The strategies of the PSDF for the Eden District Area are:

- Increase resource carrying capacity of coastal towns through water, sewerage and energy use minimisation strategies.

- Promote urban compaction and densification in George and Mossel Bay in particular.
- Identify innovative urban development strategies to address problems created by the broken topography of Knysna with respect to efficient urban management.
- The need to develop a 24hrs/day, 7days/week, 12 months/yr economy by attracting permanent residents and moving away from a tourism/golf seasonal cycle.

#### **Implications for Kannaland Municipality**

- The order of development priority for Kannaland Municipality is as follows:
  - Ladismith;
  - Calitzdorp
  - Zoar; and
  - Van Wyksdorp
- The R62 has been identified as a tourism development area.
- Ecological corridors have been identified in a north south direction through Calitzdorp and east west through Ladismith.

### 2.2.2 Western Cape Infrastructure Framework (WCIF), 2012

The Western Cape infrastructure framework (WCIF) is intended to align the planning, delivery and management of infrastructure, provided by all stakeholders to the strategic agenda and vision for the province.

The objectives of the framework are to:

- Align existing planning processes.
- Outline strategic decisions and trade-offs that need to be made to achieve the provincial 2040 vision in a complex and changing environment.
- Identify and guide the planning and execution of major infrastructure interventions for the period 2012–2040.
- Mobilise and direct new investments.
- Facilitate partnerships and collaboration.

This framework has five focus areas:

- Energy;
- Water;
- Transport;
- Settlement; and
- Information and Communication Technology (ICT).

The following have been identified as the key transitions in the respective focus of areas:

#### Energy

- Introduce natural gas processing and transport infrastructure to make gas available as a transition fuel.
- Promote the development of renewable energy plants in the province and associated manufacturing capability.
- Shift transport patterns to reduce reliance on liquid fuels.

#### Water

- Have more stringent water conservation and demand-management initiatives, particularly at municipal level.
- Develop available groundwater resources.
- Adopt more widely the reuse of wastewater effluent as standard practice.

- Adopt large-scale desalination once it becomes the “next best” option to resolve inevitable water shortages in Saldanha, Cape Town and the southern Cape.
- Expand and diversify agriculture to increase availability of surface water but reduce the water intensity of the sector, given the limited availability of water for irrigation.

#### Transport

- Invest in public transport and non-motorised transport (NMT) infrastructure, particularly in larger urban centres.
- Prioritise general freight rail over bulk rail freight.
- Shift freight traffic from road to rail along major routes.

#### Settlement

- Continue to provide basic services to achieve national targets.
- Diversify the housing programme, with greater emphasis on incremental options.
- Integrate settlement development, prioritising public service facilities in previously neglected areas.
- About R49 billion is need till 2040 to address the housing need of about 4250 000 units
- Improve energy efficiency in buildings through design standards.
- Consolidate management of state land and property assets for optimal use.
- Distribute health and education facilities equitably.
- Innovate in the waste sector to increase recycling and reuse, including the adoption of waste-to- energy in the longer term

#### Information and Communication Technology (ICT)

Only 44% of households in the Western Cape have access to ICT. The availability broadband infrastructure network is vital to efficient communications and internet services and key to the economy.

The aim is to have all schools and government buildings connected by 2014. Also to have fibre optic connections to premises e.g. large government buildings and targeted industries in the metropolitan area by 2014.



The WCIF summarized the spatial implications of the proposals as follows (WCIF, 2013):

- “Better transport links with other provinces, Gauteng specifically.
- Greater efficiency within the Cape metropolitan functional Region through improved public transport, which will also create better linkages with Malmesbury, Stellenbosch and Drakenstein.
- The ports, in particular Saldanha Bay and Mossel Bay, are likely to become significant if LNG is adopted as transition fuel.
- Provision for development of the Saldanha Bay area as an industrial area, but the merits of the iron ore export option are debatable and water is most likely to be provided by desalination. Other mineral exports and beneficiation and industrial development is likely to cement Saldanha's status as an industrial hub.
- Continued emphasis on environmental sustainability along the coast, with the understanding of the importance of tourism and sector diversity.
- Continued support for farming in the hinterland but with increased diversity and water efficiency, on the understanding that water is a major constraint.”
- Infrastructure investment must unlock economic potential at all scales); and
- Housing allocations and public and social services facility allocations must not be planned in isolation but be aligned with infrastructure investment plans, growth areas and future development projects.

No specific proposals are made for Kannaland.

### 2.2.3 Provincial Urban Edge Guideline Manual

The following is extracted from the Provincial Urban Edge Guideline Manual dated December 2005. (ref: DEA&DP, 2005)

An Urban Edge is a demarcated line to contain, manage, direct and control the outer limits of development around an urban area. The intention of an Urban Edge is to establish limits beyond which urban development should not occur and to promote urban and environmental efficiency, effectiveness and economy in the interest of all.

The function of an Urban Edge is three-fold, namely:

- to assist with restructuring the urban areas and integrating the currently segregated social groups and urban uses;
- as one of a number of growth management tools to assist with limiting sprawl and the outward growth of urban areas, support densification and infill development, and to ensure the more efficient use of resources and land within the urban area; and
- as a conservation tool to exclude certain parts of the environment from the urban area in order to protect or preserve or to discourage development in the short and medium term while the long term implications are being understood.

Urban development includes all development of land where the primary use of the land is for the erection of structures. Residential estates on farms and golf estates would, for this purpose if located outside the Urban Edge, be defined as urban uses, albeit that the "primary use" is "agriculture" or "private open space" and the "secondary use" is residential.

Agricultural uses, open space uses, conservation areas, transport zonings (excluding public transport interchanges, ranks and stations that consist mainly of buildings) and many similar use zonings refer to the use of the land rather than buildings erected on the land in order for the use to occur. These are non-urban uses.

Smallholdings used for bona fide agricultural purposes would or should typically be excluded from the urban area by delineation of an Urban Edge.

Golf courses, polo fields and other sporting facilities with low ancillary facilities are seen as rural in nature, whereas a golf estate, i.e. a golf course with housing, is an urban use, unless it is a resort. Agricultural estates, i.e. farms with a large residential components for owners or shareholders (as opposed to bona fide labourer's residences) or for unrelated freehold or sectional title ownership are seen as urban if the density exceeds one unit per ten hectare.

The following issues, criteria and factors are regarded as informants when considering Urban Edges for the urban areas:

- Services infrastructure (barrier effect);
- Services infrastructure (capacity and reach);
- Vacant under-utilised land in urban area;
- Availability of developable land in urban area;
- Higher order roads, access routes and transport infrastructure;
- Cadastral boundaries of adjoining land units;
- Growth requirements over predetermined period;
- Land use applications for new development;
- Visual impact;
- Cultural heritage resource areas;
- Ownership of land and existing land use rights;
- Informal settlements;
- Urban agriculture and small scale farming;
- Bio-regional spatial planning categories (core and buffer); and
- Density policy for residential development in rural towns.

Given the criteria, issues and facilities for determining Urban Edges, Urban Edges should be determined to:

- Exclude prominent landforms and environmental character areas from the urban area;
- Exclude valuable soils for agricultural purposes;
- Exclude valuable soils for mining purposes;
- Exclude surface and ground water resources that could be used to produce potable water;
- Exclude surface and ground water features;
- Exclude ecological resources and establish suitable; ecological corridors to link resource areas;
- Exclude all statutorily declared, proclaimed and protected natural areas;
- Exclude high intensity use and high potential agricultural resources and

activity areas;

- Exclude scenic routes and routes of tourism significance;
- Exclude cultural and heritage resource areas and sites;
- Exclude areas that have visual sensitivity, skylines, mountainsides, ridgelines and hilltops; and
- Exclude the WC-PSDF defined core areas.

### ***Implications for Kannaland Municipality***

In the Kannaland Municipality the following elements play a critical role in delineating the urban edge (DEA&DP, 2005):

- Agricultural land: currently farmed land, high potential agricultural land, agri-processing (wine tasting facilities, restaurants and guesthouses);
- Rivers, wetlands and floodplains: 1:50 year flood plains, 1:100 year floodplains and the 30m buffer zone around river corridors;
- Heritage aspects such as landscapes, viewsheds, rural landscapes and gateways;
- Topography: Major topographical features (hills, ridgelines and focal points), visual or aesthetic quality of scenery, slopes;
- The policy plans for desired direction and pattern of growth.

## 2.2.4 Guidelines for Resort Developments in the Western Cape

The term **resort** is understood to refer to holiday and recreational resorts which carry, or require, a **resort zoning** in terms of the relevant zoning scheme. (DEA&DP, 2005)

Hotels, guest houses, holiday apartments and bed-and-breakfast establishments in urban areas, such as could ordinarily be permitted under a business, general residential or other non-resort type zoning, are also not seen to be included in these guidelines.

Given the above it is generally used as a departure point that accommodation in resorts should be aimed at temporary occupation, to give more people access to the natural resources of the Western Cape. Care should therefore be taken that resort zone applications do not become vehicles for covert, permanently inhabited township establishments, which may often be described as “*exclusively elitist*”. (DEA&DP, 2005)

As a general rule, the guidelines state, *freehold ownership associated with resort zoning* (that is, holiday housing, such consent use in a Resort Zone, or Resort Zone II, whether individual erf, sectional title, block sharing or other) *is not desirable in any area outside the Urban Edge*. (DEA&DP, 2005)

The following are the most important criteria for the location of a resort:

### • Planning Policies

The planning policies include non-spatial policies such as IDP's as well as spatial policies such as WC-PSDF, Urban Edge Guidelines, SDF's, Urban Edges, Bioregional Planning policies, etc.

### • Availability of a Resource

Resort applications outside urban areas can only be considered for approval if linked to a distinct resource (unless the area in question has already been demarcated for, amongst others, resort development in terms of an officially approved SDF or SDP). This mentioned resource relates to any amenity that results in recreation, that is, an area with special recreational attributes:

- Usually a natural feature that includes physical amenities such as a hot water spring, sandy beach, lake, lagoon or river. The latter may nevertheless, for example, only become relevant as a resource;
- Occasionally, an already existing, established, man-made feature, either within Urban Edges or in rural areas;
- Of such nature that it makes the subject property particularly favourable overall above any other in the area. (This means that it must be advantageously comparably distinguishable from surrounding properties) (ref: DEADP, 2005);
- Of high enough value for many holidaymakers to want to travel thereto from afar and spend more than one day there
- Accessible for the benefit of the general public, and
- Inseparable from the proposed resort to the extent that the permanence of access from the resort to the resource can be guaranteed. (DEA&DP, 2005)

Lastly, it must be a unique resource and the carrying capacity of the resources and surroundings must be taken into consideration. The guideline further proposes densities and floor areas:

- Small: 1-10 units - floor area not being more than 120m<sup>2</sup> per unit
- Medium: 11-30 units - floor area not being more than 120m<sup>2</sup> (or up to 175m<sup>2</sup> in sensitive natural/cultural heritage areas within the Urban Edge) per unit and total floor area of all buildings not being more than 3 600m<sup>2</sup>
- Large: 30-50 units, or, should there be less than 30 units, but the total floor area of all buildings still exceeds 3 600m<sup>2</sup> (approval of a resort of more than 50 units, though not impossible, is not considered to be the norm)

In terms of area densities the following are proposed:

		Maximum permitted number of units	
Generalized visual carrying capacity	Landscape type	Short term rental accommodation units	Units that can be individually alienated / separately allotted to individuals
High and medium	Mountains & hills	1 unit per 10ha	1 unit per 20ha
Low	Plains	1 unit per 50ha	1 unit per 100ha

Note: Local Municipalities, as part of their SDFs, or on a project basis funded by applicants, should determine and map landscape types.

**Table 2.2.4.1 Area Densities** (DEA&DP, 2005)

The maximum floor areas recommended for other buildings that may be found in resorts are as follows:

- Bed and breakfast 350m<sup>2</sup> (maximum 5 bedrooms per unit) establishments (/guesthouses)
- Farmstalls 100m<sup>2</sup>
- Businesses 150m<sup>2</sup> (shops)  
250m<sup>2</sup> (restaurants)

The following unit sizes are proposed:

	Resort Zone without holiday housing consent <sup>8</sup>	Resort Zone outside urban edges	Resort Zone with holiday housing consent <sup>9</sup> within urban edges (but still within natural, relatively sensitive areas)
Maximum unit size floor space (m <sup>2</sup> )	120m <sup>2</sup>	120m <sup>2</sup>	175m <sup>2</sup>
Maximum number of storeys	Single storey only	Single storey only	Single storey, and possible expansion of habitable space into loft
Building height	6,5m	6,5m	6,5m
Individual exclusive use area	n/a	250m <sup>2</sup>	300m <sup>2</sup>

Table 2.2.4.2 Unit Sizes (DEA&DP, 2005)

### • Environmental Opportunities and Constraints

When considering the environmental opportunities and constraints the guidelines suggest that a “resort should not be permitted in a particular location if its establishment will lead to damage or destruction of the environment. The concept of resort zone was, from the outset, based on the premise to give access to a greater number of people to areas of natural or cultural amenity value not otherwise available to them, without the potential destruction that may be associated with more formal development.” (DEA&DP, 2005)

### **Implications for the Kannaland Municipality**

- Many natural resources and areas of scenic beauty are found in the area. Areas that can be developed for resorts which would give access to these unique resources/areas should be identified. A resort development in proximity to the Seweweekspoort could be explored.

## 2.2.5 Guidelines for Golf Courses, Golf Estates, Polo Fields and Polo Estates in the Western Cape

The guidelines have been produced to help decision-makers when dealing with applications for golf courses, golf estates, polo fields, polo estates and other developments of similar scale and/or complexity and as a reference for formulating SDF's and IDP's. (DEA&DP, 2005)

The objectives of the guidelines are:

- To promote responsible development, taking into consideration the imperative for transformation;
- To protect, enhance and maintain the natural resources and unique biodiversity of the Western Cape;
- To support the implementation of sustainable development principles;
- To support and enhance the implementation of bioregional planning in the Province;
- To promote well-functioning, integrated urban settlements, and to prevent urban sprawl;
- To inform decision-making with respect to golf courses, golf estates, polo fields and polo estates in all spheres of government, based on the principle of cooperative governance;
- To provide clarity into the application and assessment process, by clarifying requirements without creating expectations; and
- To improve the effectiveness of public participation. (DEA&DP, 2005)

The purpose of the location principles is to facilitate the appropriate siting or placement of development on the landscape.

### • Urban Areas

The term “Urban Areas” refers to all land designated for urban development purposes within a demarcated Urban Edge. Developments that include golf and polo could be considered when:

- “In or immediately adjacent to the urban area, where it assists in defining an Urban Edge;
- It forms part of the municipal open space system (to be read in conjunction with the following bullet point); and,
- Where residential components are added to existing amenities in urban areas, as a form of general/overarching densification, on condition that the recreational and open space/green lung function of such amenities is not compromised and provided that:

- o The site does not fall within an area that has been identified by the relevant Municipality concerned for urban densification;
- o If the site is located within the open space system/network, access to public amenities and open spaces is not disrupted;
- o The site has not been designated as being of sufficient cultural significance by heritage authorities to warrant it a "no-go" area for development;
- o The site does not fall within an area that has been identified as being of conservation significance, within the urban context;
- o The site does not negatively affect the role, function, public enjoyment and status of open space systems/networks, designated sites of cultural significance and/or sites identified as being of conservation significance;
- o The development or part thereof will not be located within the 30m development restriction area measured from the bank of a river, stream, wetland or any other natural surface water feature or within the following 1:50 year or 1:100 year flood lines, whichever is the most restrictive;
- o The water demand for the development is in accordance with the municipality's water services plan and that there is no risk of stress being placed on the municipal water supply;
- o Where water resources are required to supply the development, that these are not considered as being stressed by DWAF and other relevant authorities;
- o The area does not fall within the coastal zone as defined by relevant legislation, policies or plans, or within 30m of the edge of a cliff located on the coastline, or within 30m of the high water mark, or on primary dunes or on dune systems that are mobile (the most restrictive criteria will apply);
- o The development will not result in the removal of traditional access used by local communities;
- o The development will not result in existing public and/or traditional access to and along the coastline being disrupted (unless acceptable alternative access has been provided);
- o The development will not result in or contribute to visually obtrusive or ribbon development along the coastline or along cliffs and ridges." (DEA&DP, 2005)

#### • **Core Areas**

Core areas include officially proclaimed nature reserves, ecological

corridors, critically endangered habitats and river corridors. No golf courses, golf estates, polo fields and polo estates should be located in core areas, as identified through the WCPSPDF's broad spatial planning categories.

#### • **Buffer Areas**

Buffer Areas include remaining natural habitat in endangered and vulnerable ecosystems, including remnants, natural habitat in less threatened ecosystems and extensive agricultural areas.

Development that includes a golf course or polo field component could occur on the border between Buffer and Urban Areas provided it:

- Results in long term Biodiversity offsets and / or heritage goals;
- Result in securing the viability of a significant agricultural unit or contribute significantly to land reform objectives;
- Limits the number of units so that secondary developments (shops, service stations, etc.) are not promoted;
- Does not entail any form of township development outside the Urban Edge;
- Is not a significant heritage area;
- Does not contribute to urban sprawl and or leapfrogging;
- Is not in an area of medium or high value agricultural land;
- Is not in an area designated for emerging farmers;
- Does not use water resources (surface and ground) that are considered stressed by DWAF and other authorities and does not pollute the natural water resource by fertilizer or treated effluent;
- Does not negatively affect the open space network;
- Is not in the coastal zone, within 30m of the edge of a cliff located on the coastline or within 30m of the high water mark, or on the primary dunes or dune systems that are mobile;
- Does not impact on habitats / ecosystems that are defined as Critically Endangered in terms of SANBI's vegetation classification system;
- Does not disrupt ecological corridors;
- Does not fall within 30m of bank of river or 1:100 year flood line;
- Does not negatively affect river, natural spring or the catchments of a dam;
- Does not derive water from rivers determined as being pristine / near pristine or stressed by DWAF and authorities;
- Does not remove traditional access, commonage etc.;



- Does not result in the inappropriate alteration of the landform (e.g. cut and fill); and
- Does not result in / contribute to visually obtrusive / ribbon development.

The following aspects must be considered in formulating development applications:

- Alternatives
- Spatial planning – compliance
- Land use – undertake a land use impact assessment
- Cultural heritage and VIA
- Biodiversity – how all biodiversity plans must be consulted
- Water resources
- Infrastructure and services
- Social impacts
- Employment and skills development
- Economic impact
- Management of planning, design, implementation and operational activities
- Social costs
- Urban Edge principles

#### • **Intensive agricultural areas**

These are areas with either agricultural potential or that are being cultivated. They are considered an important resource for food security and the agricultural economy.

No golf courses, golf estates, polo fields and polo estates should be allowed in Intensive Agricultural areas.

The SDF needs to indicate Urban Edge proposals, and should make policies to guide potential proposals for development outside the Urban Edge that could be seen as leapfrogging or urban sprawl.

#### **Implications for the Kannaland Municipality**

- The Kannaland SDF must clearly demarcate areas that can be developed as golf courses and those that may not, based on the above criteria, for example the golf course located in Ladismith and the golf course proposed in Van Wyksdorp.
- Potential golf courses should ideally use recycled water for irrigation purposes and should be located close to settlements.
- Given the low population and low income levels, golf courses may not be available in the remaining settlements in the municipality.

#### **2.2.6 Provincial Strategic Objectives (PSO), 2010**

The Western Cape Government has identified the following strategic objectives (source: Provincial Government Western Cape Draft Strategic Plan, 2010).

**PSO1** Creating opportunities for growth and jobs by reducing red tape for businesses who want to invest and to regenerate certain areas.

**PSO2** Improving education outcomes by working towards the distribution of text books to schools and to provide management training and in-school support to school management members.

#### **Targets:**

POLICY PRIORITY	PERFORMANCE AREA	CURRENT PERFORMANCE LEVELS	TARGETS			
			2010	2012	2014	2019
<b>Improved academic performance in literacy and numeracy in Grades 3, 6 &amp; 9 by testing the full cohort</b>	Literacy Grade 3	53.5%	55%	65%	75%	90%
	Numeracy Grade 3	35%	40%	50%	60%	80%
	Literacy Grade 6	44%	45%	55%	65%	90%
	Numeracy Grade 6	14%	15%	25%	50%	80%
	Literacy Grade 9	40%	45%	55%	65%	90%
<b>Improved National Senior Certificate</b>	Numeracy Grade 9	35%	40%	45%	55%	80%
	Matric pass rate	75.7%	80%	82%	84%	87%
	Matric pass numbers	34 577	36 000	39 000	43 000	50 000
	University admission rates	33.04%	34%	35%	37%	45%
	Exemption numbers	14 522	15 000	16 500	18 500	25 000
<b>Reduction in number of underperforming high schools</b>	Maths numbers	13 003	13 500	15 000	17 000	22 000
	Physical Science passes	9 690	10 000	11 500	13 500	16 000
	No of schools with <60% pass rate	74	55	20	0	0

**PSO3** Increasing access to safe and efficient transport by improving rural transport and to shift freight cargo from road to railways.

#### Targets:

The main targets for increasing access to safe and efficient transport in the Western Cape are:

- Achieving a 13% modal shift from private to public transport by 2014 (meaning a 60:40 private : public transport split into the City of Cape Town CBD), through the promotion of improved rail transport; support to integrated transport networks including the provision of rapid trunk routes for existing public transport services; and formalising the minibus taxi industry
- Shifting contestable freight haulage from road to rail by 10% by 2014
- Reducing the number of fatalities on the Western Cape Roads by 50% by 2014
- Reducing transport infrastructure maintenance backlogs by 16% by 2014.

**PSO4** Increasing wellness by providing quality care to patients and to concentrate on reducing substance and alcohol abuse.

#### Targets:

	BASLINE ESTIMATE	TARGET 2014
<b>Maternal mortality ratio [MMR]</b>		
Western Cape	98/ 100 000 live births : 2004	90/ 100 000 live births
South Africa	140–160/ 100 000 live births	100 or less/ 100 000 live births
<b>Child mortality rate [under 5 years old mortality]</b>		
Western Cape	38.8/ 1 000 live births [2007]	30 per 1 000 live births
South Africa	69 deaths per 1 000 live births	45 deaths or less per 1 000 live births
<b>TB cure rate</b>		
Western Cape	79.4% in 2009/10	80% is the target for 2012/13
South Africa	65%	85%
<b>HIV and AIDS: Decrease the HIV prevalence in the age group 15–24 years to 8% in 2015</b>		
Western Cape	15% in 2004	8%

**PSO5** Increasing safety by focussing on making our roads safer and to make safety everyone's responsibility.

**PSO6** Developing integrated and sustainable human settlements by allocating and delivering housing fairly.

#### Targets:

POLICY PRIORITY AREA	PERFORMANCE INDICATOR	TARGETS				
		2010/11	2011/12	2012/13	2013/14	2014/15
Accelerated delivery of housing opportunities	No. of serviced sites provided p.a.	18 000	26 000	30 000	30 000	31 000
	Percentage reduction of title deeds backlog	0	15%	25%	30%	30%
Optimal use of resources	Mean gross density of new human settlement developments in land-scarce municipalities	35 u/ha	40 u/ha	45 u/ha	50 u/ha	50 u/ha
	% of new projects that meet the integration and sustainability criteria	40%	50%	70%	80%	90%
	Percentage of units built using energy efficient method/ materials	10 %	15 %	25 %	30 %	40%
Inculcating a sense of ownership	Provincial government rental collection rate	15 %	17 %	25 %	40 %	45%
	Proportion of houses built under self-help People's Housing Process programme	25 %	35 %	40 %	45 %	50%
Fair allocation of housing opportunities	No. of municipalities with an accurate, up-to-date housing demand database that is synchronised with central Housing Subsidy System	0	5	15	20	25
	No. of municipalities which comply with standardised selection criteria and process	0	5	15	20	25
Coordinated approach to human settlement development	No. of municipalities with credible human settlement plans	9	12	15	20	25
	No. of municipalities with level 1 accreditation	1	0	3	0	2
	No. of municipalities with level 2 accreditation	1	0	1	0	2
	No. of municipalities with level 3 accreditation	0	0	1	0	1

#### PSO7

Mainstreaming sustainability and optimising resource efficiency by improving the management of water, pollution and waste.

#### Targets:

Climate change mitigation	<ul style="list-style-type: none"> <li><b>Energy efficiency:</b> <ul style="list-style-type: none"> <li>Reduce the current gross provincial product (GPP) to carbon emission ratio by 10% by 2014.</li> <li>Achieve a 5–10% electricity reduction in selected provincial buildings, including schools and hospitals.</li> </ul> </li> <li><b>Renewable energy production:</b> <ul style="list-style-type: none"> <li>Promote 15% of the electricity used in the province to be generated from renewable energy sources by 2014.</li> </ul> </li> <li><b>Transport:</b> <ul style="list-style-type: none"> <li>Achieve a 13% modal shift (based on the modal split inbound to the City of Cape Town CBD) from private to public transport by 2014.</li> <li>Increase tonnage freight transported by rail, rather than road, by 10% by 2014.</li> <li>Retrofit 10% of existing public buildings with respect to energy and water consumption by 2014.</li> </ul> </li> </ul>
Water management	<ul style="list-style-type: none"> <li><b>Water efficiency:</b> <ul style="list-style-type: none"> <li>Develop and implement a provincial integrated water resource management plan to improve agricultural, industrial, commercial and household water use efficiency by 5–10% by 2014.</li> <li>Achieve a 5–10% water use reduction in selected provincial government buildings, including schools and hospitals.</li> </ul> </li> </ul>
Pollution and waste	<ul style="list-style-type: none"> <li><b>Increase the percentage of waste diversion from landfill from the current 13% to 15% by 2014 (Metropolitan Municipality – City of Cape Town).</b></li> </ul>
Biodiversity management	<ul style="list-style-type: none"> <li><b>Increase the conservation status of biodiversity in the province by:</b> <ul style="list-style-type: none"> <li>Increasing the maintenance of the current 50 (64%) conservation stewardship sites to 78 (100%) stewardship sites by 2012</li> <li>Rehabilitating land infested with alien vegetation through initial clearing of 40 000 ha per annum and follow-up clearing of 98 000 ha per annum</li> </ul> </li> </ul>
Land use management and agriculture	<ul style="list-style-type: none"> <li><b>Ensure a 5% improvement in conservation farming practices by 2014.</b></li> </ul>

**PSO8 and 9** Promoting social inclusion by focussing on programmes that reduce child poverty and which prevent children from falling into a life of crime and reducing poverty through the introduction of skills training and employment opportunities in the private sector.

### Targets:

**The PGWC aims to achieve the following three outcomes in order to realise its objective of increasing social cohesion:**

1. Empowered individuals
2. Functional and bonded families
3. Connected communities that, through social capital, are bridged to one another across racial, gendered, linguistic and class divides, and feel linked with government and organisations in civil society.

Income	<ul style="list-style-type: none"> <li>• Lower the percentage of the total households in the Western Cape with a household income of less than R1 500 per month in a given year from 26.2% to 25%.</li> <li>• Decrease the number of households with a total expenditure of less than R800 per month in a given year from the current 15.5%.</li> <li>• Ensure that every person in need receives a social grant.</li> </ul>
Food security	<ul style="list-style-type: none"> <li>• Lower the percentage of underweight children under five years from the current 10.9% to under 10%.</li> <li>• Decrease the percentage of children under nine years whose intake of food is below the minimum level of dietary consumption.</li> <li>• Increase share of household expenses that is spent on food in a given month.</li> <li>• Boost the number of people with proper access to food.</li> </ul>
Health	<ul style="list-style-type: none"> <li>• Increase the average number of visits per person at primary health care facilities in a given year from 2.96 to 3.84 visits.</li> <li>• Reduce the number of people infected with TB.</li> <li>• Lower the number of people infected with HIV.</li> <li>• Decrease the percentage of children younger than five who are dying from 38.8% to 30% per 1000 for children under five.</li> </ul>
Education	<ul style="list-style-type: none"> <li>• Increase the percentage of children who are in primary education from 80.9% to 95%.</li> <li>• Boost access to no fee schools.</li> <li>• Ensure that every child who starts Grade 1 reaches Grade 5.</li> <li>• Increase the percentage of Grade 12 pupils who pass matric with exemption.</li> <li>• Increase the percentage of Grade 12 pupils who pass matric with exemption who have mathematics or science as matriculation subjects.</li> <li>• Boost the literacy rate among 15–24 year olds.</li> </ul>
Improved living environment	<ul style="list-style-type: none"> <li>• Standardise the indigent register.</li> <li>• Reduce the percentage of households living in informal settlements from 17.1% to below 15%.</li> <li>• Increase access to free basic water.</li> <li>• Decrease the percentage of households with no access to a flush toilet.</li> <li>• Increase access to free electricity and lower the percentage of households in the province that are in backyards to lower than 8%.</li> </ul>

**PSO10** Integrating service delivery for maximum impact by concentrating on better departmental communication.

### Targets:

**To ensure that government's investment is effectively coordinated in order to maximise its impact and avoid duplication and fragmentation of service delivery, the PGWC will provide:**

1. Integrated planning and budgeting by focusing on an IDP indaba, decentralised service delivery model and provincial investment plan
2. Coordinated provincial support to municipalities in the forms of an integrated bursary scheme, Provincial framework for municipal support and bulk infrastructure support plans
3. Integrated service delivery through:
  - Expansion of Thusong centres
  - Establishment of Thusong zones
  - Mobile Thusong centres (previously the Integrated Community Outreach Programme)
  - Thusong extension service
4. Coordinated intergovernmental reporting and engagement through coordinated information gathering and dissemination and coordinated intergovernmental engagement.

### PSO11

Creating opportunities for growth and development in rural areas by improving health, education, sanitation and electricity in rural areas.

### Targets:

**To support growth and development in rural areas, the PGWC will provide:**

1. A favourable environment in rural areas by focusing on and promoting:
  - Infrastructure and service delivery
  - The scientific, technical and sanitary environment
  - The regulatory environment
  - The physical environment
2. Enterprise development, by focusing on both the commercial and emerging sectors and a comprehensive rural development programme
3. Skills development
4. Institutional support

### PSO12

Building the best-run regional government in the world through constant innovation, citizens who have face to face access to the government, strong leadership, efficient and consistently high service delivery standards, a commitment to openness and accountability and by having highly capable and skilled people who deliver services.

### 2.2.7 Rural Land Use Planning and Management Guidelines, May 2009

These guidelines were prepared with the purpose of complementing the Guidelines for Rural Resorts, Golf Estates, Polo Fields and Polo Estates (DEA&DP, 2009).

The objectives of the guidelines are:

- To promote sustainable development in appropriate rural locations while ensuring that the poor share in the growth of the rural economy;
- To safeguard the functionality of life supporting ecosystem services;
- To maintain the integrity, authenticity and accessibility of farming, ecological, cultural and scenic rural landscapes and natural resources;
- To assist municipalities with the management of rural areas;
- To provide clarity on the type of development that is appropriate beyond the urban edge, as well as the scale and form of such development (DEA&DP, 2009)

The purpose of this document is to serve as a logical planning and management guideline for all types of rural land uses.

The Rural Settlement patterns in the Western Cape include:

- The farm homestead and associated outbuildings, historically enclosing a farmyard or werf;
- Workers accommodation (on-farm) i.e. labourers cottages located away from the werf;
- Villages and off-farm hamlets located along main movement routes;
- Rural residential sprawl usually located along the outskirts of urban centres;
- The change of working farms to weekend leisure destinations.

#### **Guidelines on Managing Rural Land Use Change**

- Decisions in terms of Rural Land Use applications are to be based on the following sustainable land use principles:
  - social inclusion;
  - effective protection and enhancement of the environment;
  - prudent use of natural resources;
  - the maintenance of high and stable levels of economic growth;
- Good quality and carefully sited development should be encouraged in existing settlements;
- Accessibility should be a key consideration in development decisions;

- New development in the countryside should be strictly controlled in terms of scale, height, colour, roof profile etc.;
- Prioritise the re-use of previously developed sites in preference to Greenfield sites;
- All development should be well developed and inclusive, in keeping and in scale with its surroundings, sensitive to the character of the landscape.

#### **Rural Land Use Management Guidelines: Holiday Accommodation**

- Avoid fragmentation of the cadastral unit, instead use leasehold for 3<sup>rd</sup> party ownership for holiday accommodation;
- Land for holiday accommodation should be non-alienable (i.e. rental, time-share, share block, fractional ownership);
- Resort development outside Urban Edge to not include individually alienable units;
- Precinct plans are to be provided and address the impact on agricultural activities and/or conservation and the impact of agricultural activities on the proposal;
- Development proposals to be considered on marginal farming land and land of low environmental sensitivity and significance;
- Municipalities should solicit comments of surrounding properties and consider impact on rural landscape;
- Municipalities to ensure approved precinct development plans are adhered to and enforce the building regulations;
- EIA regulations and flood line restrictions are to be enforced.

#### **Rural Land Use Management Guidelines: "On-Farm" Settlement of Farm Workers**

- Farms are to be subdivided in order to balance the interests of the farm workers and its owners;
- Subdivided portions are required to be affordable and sustainable to their beneficiaries;
- All dwellings (proposed, new and existing) are to comply with building and engineering standards;
- If right of way servitudes are required, they are to be entrenched in the title deed of the parent farm.

#### **Rural Land Use Management Guidelines: Tourist and Recreational Facilities**

- Development applications are to include:
  - tenure arrangements, with leasehold used for 3<sup>rd</sup> party operators or



- owners of facilities;
- buildings, landscaping and infrastructure provision;
- access and parking arrangements;
- nature and position of all proposed signage;
- Business Plan specifying BEE arrangements;
- Environmental, agricultural and visual impact assessments;
- Environmental Management Plan;
- Disaster Management Plan detailing search and rescue procedures.
- Consent use applications to be advertised for comment by interested and affected parties and adjoining property owner's;
- Applicable EIA regulations to be enforced by the local authorities and compliance with the approved EMP;
- Local authority to apply building regulations and ensure conditions of approval is adhered to.

#### **Implications for the Kannaland Municipality**

- Prepare policies to manage appropriate rural land use change in regard to holiday accommodation, on-farm settlements, residential and tourist and recreational facilities, where needed.

### **2.2.8 Settlement Restructuring: An Explanatory Manual (March, 2009)**

The purpose of this document is to guide government, labour, business and civil society order to create human settlements that are dignified and sustainable.

The document consists of the following:

- Land use management tools for:
  - 1) Auditing vacant and underutilised land;
  - 2) Strategies for densification; and
  - 3) Toolkits for applying tools and strategies;
- Strategies for urban integration;
- Toolkits for applying tools and strategies.

#### **Vacant and underutilised land audit:**

- The purpose of a vacant and underutilised land audit is to provide municipalities with a record of all the usable land parcels located within the urban edge. By having access to this information, a municipality is able to understand its future land use and urban restructuring opportunities;
- Land is considered vacant and underutilised if:
  - it has no identifiable land use;
  - there are no building or improvements;
  - its previous productive usage has ceased;
  - it would benefit from improvement and development.
- The following exclusion criteria is applicable to land audits:
  - high potential agricultural land and productive agricultural land;
  - land with a high biodiversity and conservation value;
  - road reserves;
  - protected nature areas;
  - 30m river corridors and 1:50 year floodplains;
  - land high in scenic value or that is visually sensitive;
  - buffer areas from hazardous services.

#### **Densification Strategy:**

- The purpose of the densification strategy is contain urban sprawl and fragmentation in order to achieve efficient, integrated and sustainable human settlements;
- Densification should be encouraged in the following manner:

- within areas with high economic potential ( provincial, district and local scale);
- along mobility routes in order to support public transport routes;
- along the periphery of open spaces in order to increase their surveillance;
- within areas that have been identified as public-sector investment areas;
- in selected areas of high private sector investment;
- The following should be mapped per settlement for which an urban edge is to be demarcated:
  - agricultural land and agricultural processing around urban areas;
  - smallholdings, rural land and small farms;
  - urban and regional open spaces and natural areas;
  - rivers and floodplains;
  - coastal zones (i.e. sea level rise);
  - landscapes that are considered to be high in value.

#### **Strategies for Urban Integration:**

- Integration is the mix of various land uses and/or income groups in specific areas which contributes to creating a whole functioning urban area;
- Physical integration includes well designed dense development which are linked to pedestrian friendly streets and a horizontal and vertical mix of uses (which includes residential, non-polluting industrial services, commercial and institutional uses);
- Integration is encouraged in 1) spaces where social integration can occur, 2) along public transport routes in order to improve access to opportunities, services and facilities and 3) where concentrations of major urban functions occur.
- Kannaland's urban settlements, Ladismith, Calitzdorp, Van Wyksdorp and Zoar should be:
  - analysed to see whether they are performing satisfactorily in terms of efficiency, equity and quality of place;
  - the relevant guidelines from these reports should be applied depending on the results of this analysis.

#### **Implications for the Kannaland Municipality**

- Ensure that proposals are prepared in accordance with the guidelines and support the aims of the restructuring guidelines.
- Establish appropriate densification targets and broadly identify areas suitable for densification.
- Prepare proposals for strategically located suitable land.
- Utilize land and its development to help achieve national policy directives, e.g. integration and restructuring.

## 2.2.9 The Provincial Land Transport Framework, Provincial Government: Western Cape Department of Transport and Public Works, April 2011

The Provincial Land Transport Framework (PLTF) sets out the longer term vision (20-30 years) for transport for the Western Cape Province in line with the directives of the WC- PSDF. The long term vision for transport is intended to support:

- A fully Integrated Rapid Public Transport Network (IRPTN) in higher order urban regions through access to opportunity, equity, sustainability, safety and multi-modal interchange;
- A fully integrated rural Integrated Rural Transport Network (IRTN);
- A safe public transport system;
- A well maintained road network;
- A sustainable, efficient high speed rail long distance public and freight transport network;
- An efficient international airport that links the rest of the world to the choice gateway of the African Continent;
- International – standard posts and logistics system;
- A transport system that is resilient to peak oil; and
- A transport system that is fully integrated with land use.

The PLTF goals and objectives are:

1. An efficient, accessible and integrated multi-modal public transport system managed by capacitated and equipped municipal authorities
  - Develop a framework for the development of safe and accessible IPTNs in district by 2014
  - Establish land-use incentives and NMT improvements around 10 underdeveloped public transport nodes of provincial significance by 2014 (Provincial Key Projects).
  - Fully implement a universally accessible and multimodal IRT Phase 1a by 2014.
  - Increase user satisfaction of public transport facilities by 25% by 2014.
  - Organise courses and seminars dealing with infrastructure management, transport planning and land-use planning for district municipalities by 2014.
  - Bring minibus taxi recapitalization rate on national level by 2016.

- Influencing parties in order to achieve a shift in contestable freight haulage from road to rail freight by 10% by 2014.
2. NMT as a pivotal part of all forms of transport planning in urban and rural areas
    - Dedicated NMT Expanded Public Works Program projects by 2014.
    - Every provincial road project in the province must include a NMT component.
    - NMT Plans must be developed and implemented for each local municipality or the Province, as a part of the mobility strategy and IPTN roll-out by 2014.
    - Dedicated cycle lanes in the Western Cape must be doubled by 2014.
  3. A well maintained and preserved transport system
    - Reduce the road transport infrastructure backlog by 16% by 2014.
    - Bring commuter rail network from D+ to a C maintenance level on A corridors by 2016
    - Introduce economic decisions support tools to facilitate decision making with regard to road investment by 2014
  4. A sustainable transport system
    - Shift in contestable freight haulage from road to rail by 10% by 2014.
  5. A safe transport system
    - Reduction of the number of fatalities on the Western Cape roads by 50% by 2014.
    - The provincial and the Cape metro incident management plan will be expanded to include lower roads by 2014.
    - Implementation of an integrated transport safety management system by 2014.
  6. A transport system that supports the province as a leading tourist destination
    - Introduce economic decision support tools to facilitate decision making with regard to road investment by 2014.

***Implications for the Kannaland Municipality***

- Ensure that there is sufficient capacity (human resources) within the municipality to manage transport requirements within the municipal area.
- Promote Non-Motorised Transport (NMT) in and between settlements.
- Ensure commuter safety on the various modes of transport within the municipality.
- Invest in transport infrastructure as a means of promoting economic growth and tourism.
- The R62 tourism route is a key driver of the Kannaland economy in terms of accessibility and a tourism perspective.



## 2.3 DISTRICT POLICY

### 2.3.1 Eden District Municipality Spatial Development Framework, 2009

The Eden District SDF was developed to guide integrated development planning in the district municipality. The SDF aims to achieve integrated, sustainable and equitable social and economic development across the district. The spatial vision for the Eden District Municipality as per the spatial development framework reads as follows:

"Eden should develop as a galaxy of distinct, successful and sustainable settlements, intertwined and encircled by a green matrix of natural and rural landscapes. Each settlement will develop as a sustainable, integrated human settlement within a distinct identify based on its competitive advantage, thereby achieving greater success and enabling it to better serve the needs of its citizens."

In order to achieve integrated human settlements the district SDF states that settlements should be characterised by the following:

- Higher densities to support public transport, social services and facilities,
- A mix of uses (economic, social and recreational) in close proximity to housing,
- Settlements that provide a variety of transport options and increase the walk-ability of that settlement,
- A mix of housing options,
- Sustainable services options,
- An open space system conserving natural environments and minimising disaster risks,
- Infill development to integrate towns with townships, and
- A mix of agricultural uses close to urban areas and opportunities for land reform and small scale farming close to markets.

The report has proposed the following policies and strategies that are to support the Natural Resource Base Framework:

- 1) the protection of agricultural resources by preventing development on valuable resources, preventing urban sprawl and supporting land reform projects;
- 2) avoiding rural development in high risk areas, which include flood prone areas, fire risk areas and coast inundation;
- 3) only land uses that are linked to rural areas should be permitted there;
- 4) proposed housing for rural areas are to be located in close proximity to various social services;
- 5) local authorities to consider rates rebates when biodiversity is conserved and alien vegetation is removed;
- 6) locating small scale farming opportunities within short walking distances of settlements, where the soil is suitable and there is access to water as well as its availability;
- 7) quarries and borrow pits may not be permitted within areas rich in biodiversity, along scenic routes and below the 1:100 year flood line;
- 8) generally, development is to not be permitted below the 1:100 year flood line (along river corridors);
- 9) no development should be permitted on the seaward side of coastal setback line;
- 10) settlement urban footprints are to be limited;
- 11) golf courses and residential lifestyle estates may only be permitted within the urban edge.

The report has proposed the following policies and strategies that are to support the Settlement and Citizens Framework:

- 1) focus population growth in locations that are able to meet social and economic needs – this enables people centered development;
- 2) increase the investment in public transport infrastructure and create an efficient, reliable and safe system;

- 3) increase the densification of development and promote infill development;
- 4) encourage population growth in the high order settlements which have been identified as Oudtshoorn, Mossel Bay, George, Knysna and Riversdale. This proposal is also in line with the principles described in the NSDP. Furthermore, subsidized housing development, commercial and industrial development should be encouraged in regional/district and major urban centers;
- 5) Government infrastructure spending should not be focused on hamlets but these hamlets should receive development to ensure integration;
- 6) All proposed development (urban and economic) is to compliment and strengthen the character of existing settlements;
- 7) Proposed housing for rural areas is to be considered in locations that meet the bulk infrastructure requirements, have access to employment opportunities, is close to reliable public transport routes and social services and facilities;
- 8) The settlements within the Eden district municipality are to be managed by means of a Heritage Management Policy;
- 9) Secondary road networks are to be upgraded and developed. These include the upgrading and development of the east-west route parallel to the N2 and the repair and upgrade of the R339 (between Uniondale and Knysna/Plettenberg Bay);
- 10) The proposed George Public Transport System is to be implemented to settlements within the district by developing a cycle route on the R407 (portion between Oudtshoorn and the Cango Caves), commence a pavement plan for Uniondale and Haarlem, repair the railway line between Knysna and Mossel Bay and provide cycle routes between George and Wilderness and Plettenberg Bay and Knysna;
- 11) Public and community services are to be provided in a clustered manner to enable the various facilities in the form of halls, libraries and sports facilities to be shared;
- 12) All retail development is to be encouraged within the existing CBD's of settlements;

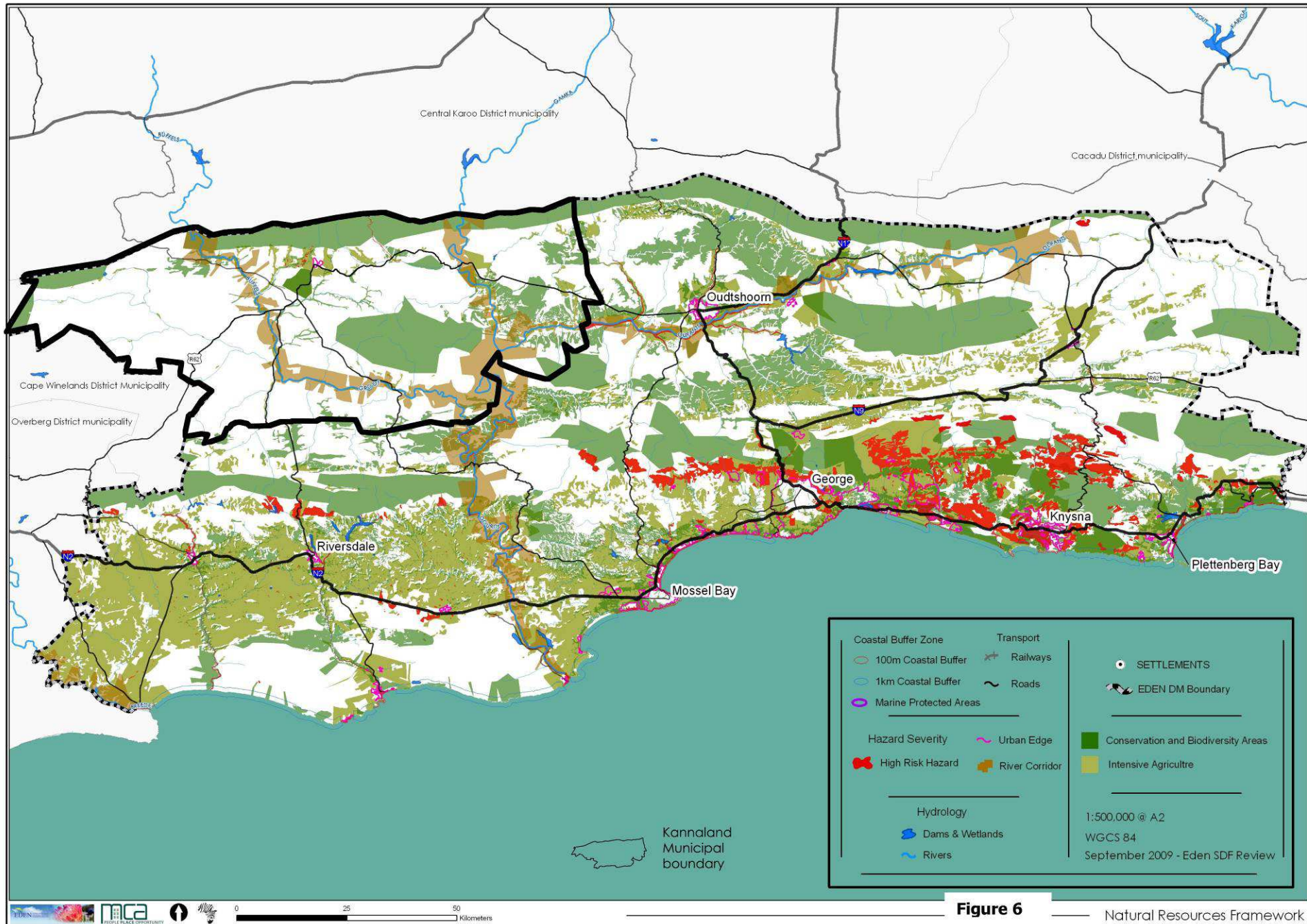
- 13) Sustainable buildings policy is to be encouraged and enforced by the various local authorities.

In terms of the district plan, Ladismith and Caltzodorp have been identified as Rural Service Centres. These settlements serve the daily needs of the local (mostly rural) populations and are key agricultural and social support centres. The plan states that housing development in these areas should be limited, but could be considered in order to create a mix of income groups.

Zoar (Amalienstein) and Van Wyksdorp have been identified as neighbourhoods or villages due to their largely residential character with little or no commercial and business opportunities. Development here is not encouraged but should be allowed to support the creation of integrated human settlements.

#### **Implications for Kannaland Municipality:**

- Conservation and biodiversity areas have been identified along the northern border of the Kannaland Municipality, south west of Ladismith, around Zoar and Calitzdorp.
- Intensive agriculture has been identified around Ladismith and north of Calitzdorp.
- The land adjacent to the Buffels River and Nels River is identified as River Corridors.
- High hazard severity areas have been identified north-west of Ladismith. Construction of built infrastructure and rural development (cultivation) should avoid these areas or appropriate mitigation should be implemented to reduce costs and risks associated with these areas.



**Figure 2.3.1** Eden District SDF (Source: MCA, 2009)



### 2.3.2 Eden District Mobility Strategy

The Eden District Mobility Strategy was prepared for the Department of Transport in 2011.

The report states that its purpose is to present concepts for a Mobility Strategy for the Eden District Municipality that can be developed, at a later stage, into a formal Integrated Public Transport Network (IPTN) plan for the area as envisaged by the National Public Transport Strategy (March 2007).

The report notes that the conceptual services proposed to provide public transport within the Eden District will require infrastructure to support their operations including:

- Infrastructure elements:
  - Road infrastructure;
  - Public transport interchanges and stops;
  - Public transport depots and parking areas; and,
  - Non-motorised transport.

The following is proposed for the Kannaland Municipality:

#### Road Infrastructure:

- Express long distance services operate on the R62. This route is noted to be in a "fair" to "very good" condition.

#### Public transport interchanges and stops

- Ladismith and Calitzdorp will require on-street facilities to cater for the services passing through and terminating in the towns

#### Public transport depots and parking areas

- Dedicated public transport depots will be required in the urban areas to support primarily the urban and inter-urban vehicle fleets that operate with more than about 20 vehicles from one location.
- Ladismith will require a secure parking area for 15 vehicles
- Calitzdorp will require a secure parking area for 10 vehicles

### Non-motorised transport

- The Eden NMT Master Plan identifies strategic NMT routes for each of the local municipalities as shown in Table 2.3.2.1.

Local Municipality	NMT Strategy	Key Roads / Areas
George	Linking outlying previously disadvantaged communities to George CBD	Sandkraal Road York/Beach Road Tembaletu Pacaltsdorp Hoekwil Heroldt
Knysna	Recreational routes Community linkages Public transport linkages	Lagoon area George Rex Waterfront Flenterbos (Concordia Road) Hornlee (Vigilance Road)
Bitou	Recreational routes Community linkages Public transport linkages	DR1770 between Harkerville and Plettenberg Bay N2 between Kwanokuthula and Plettenberg Bay MR395 to Greenvally Piesangvalley Road Marine Drive Beacon Way
Mossel Bay	Community linkages Public transport linkages	Quanoqaba (Louis Fourie Dr and Bill Jefferies Str) CBD (Marsh Str) Herbetsdale Between Friemersheim and Great Brak
Hessequa	Community linkages Public transport linkages	Panorama, Morestond and Progress Estate Between Melkhoutfontein and Stilbaai Slangrivier
Kannaland	Community linkages	Along business routes in Ladismith Zoar and Amalienstein Between Bergsig along the R62 towards the town
Oudtshoorn	Recreational routes Community linkages Public transport linkages	Between Oudtshoorn CBD and Cango Caves Bongolethu

**Table 2.3.2.1 Key NMT Routes as Identified by the Eden NMT Master Plan**





### 2.3.3 Flood Risk Assessment: Eden District

The collection and consolidation of all available flood related data was prepare for the Eden District Municipality for the Western Cape Department of Local Government during 2013.

The Consolidated Flood Data Map for the Eden District Municipality is indicated in Figure 2.3.3.1.

The aim of the project was to collect and consolidate all the available flood related spatial data for the Eden District Municipality.

The project was executed though the following phases:

1. Relevant stakeholders were identified and engaged regarding the availability of relevant flood related data;
2. All relevant flood date (spatial and non-spatial) was collected from the identified stakeholders;
3. All collected floor data was evaluated in terms of significance, metadata, quality and format;
4. After the evaluation only verifiable spatial data was consolidated into a spatial layer;
5. Identified gaps within the flood data received; and,
6. Provide recommendations on the way forward to determine a realistic flood risk assessment for the district.

#### ***Implications for Kannaland Municipality:***

- The assessment made the following recommendation:
  - Large areas of Eden are not covered by quality topographic data required for accurate flood mapping and until such time as funding becomes available for high accuracy topographic data for Eden it is recommended that the current consolidated flood data layer is used.

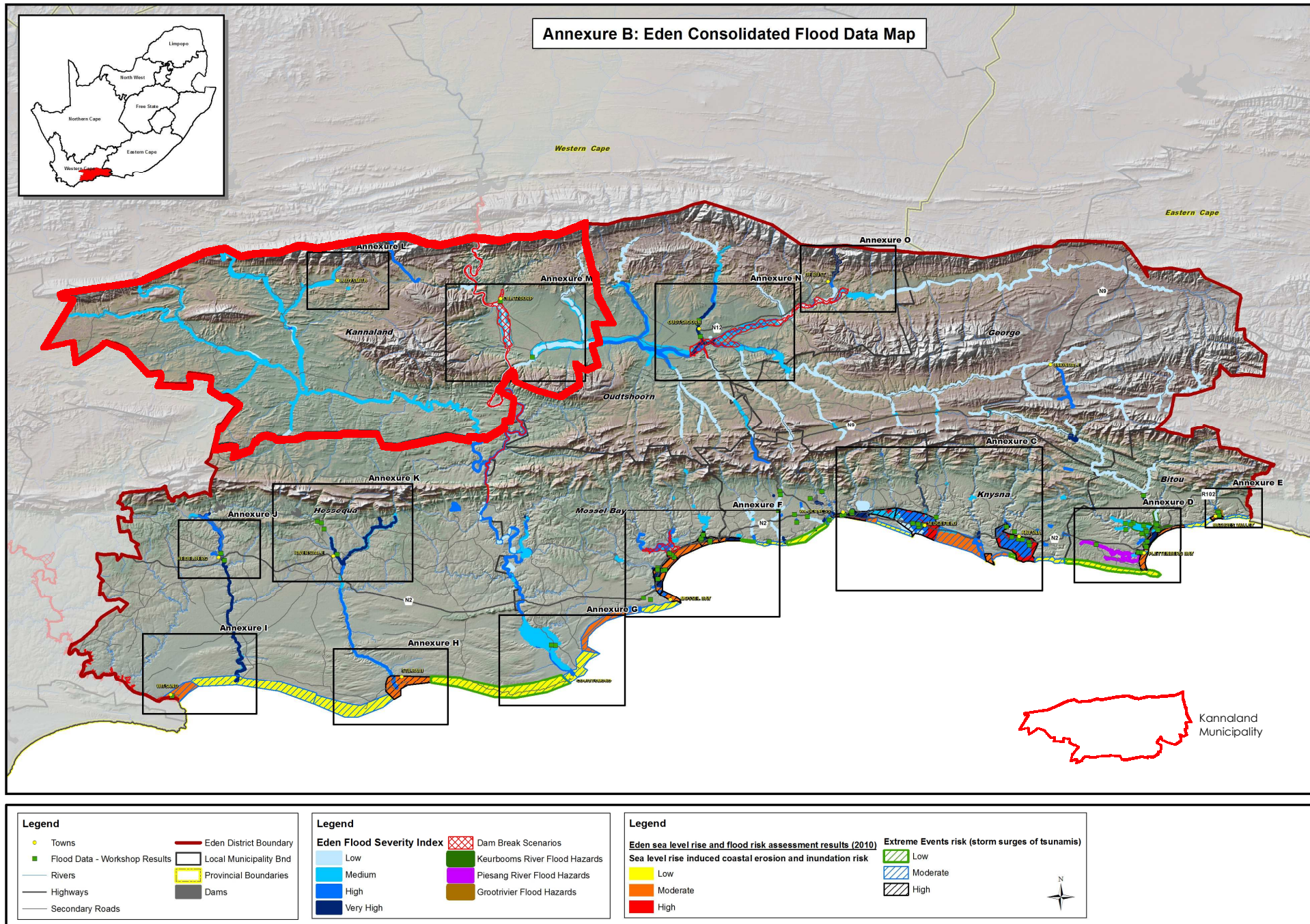


Figure 2.3.3.1 Eden Consolidated Flood Data Map

### 2.3.4 Eden & Central Karoo Drought Disaster 2009 -2011 “The Scramble for Water”

This study was commissioned by the Provincial Disaster Management Centre (PDMC) of the Western Cape, in order to provide a comprehensive review and analysis of the Western Cape drought disaster that affected the Eden and Central Karoo Districts between 2009 and 2011.

The research team was required to:

- conduct a comprehensive post-event study and analysis of the January 2009-January 2011 Western Cape drought
- produce a comprehensive written report reporting the findings of the study, including examination of technical and engineering interventions that alleviated its severity
- identify further research gaps and opportunities for studies on droughts, floods and water security, that could be incorporated into a 5-year strategic drought management plan.

The following key gaps were identified during the study:

- Operational gaps related to Provincial and District Disaster Management Centres:
  - Limited discernment of drought onset and impending water scarcity (across multiple stake-holder groups), along with definitional difficulties with accurate ‘disaster classification and declaration’.
  - Lack of functioning meteorological drought ‘warning system’
  - Lack of water risk rating/monitoring system
  - No contingency plans existed for managing advancing urban water shortages
  - Lack of monthly/quarterly drought progress monitoring templates

The assessment made the following recommendations:

- In consultation with relevant stake-holders, **develop uniform drought definitions** linked to:
  - unambiguous meteorological drought monitoring indicators (including SPI values);

- quarterly water supply risk monitoring indicators;
- municipal drought and/or escalating water scarcity contingency plans.
- Incorporate spatially-represented meteorological drought indicators in identifying drought-affected municipalities to avoid excluding towns that may be affected but fall outside the disaster-declared areas;
- Strengthen drought early warning and response capabilities by:
  - Support efforts by DWA to strengthen urban water security by:
  - Develop uniform drought monitoring templates for monitoring relief activities,
  - Support efforts by the Department of Local Government to locate skilled engineering
- Urge review of current agricultural relief assessment processes to establish methods that are more effective in identifying and supporting farms that repeatedly sustain weather and other shocks;
- Improve the effectiveness of the current agricultural relief scheme;
- Mobilise Department of Labour training schemes for farm worker support under conditions of drought duress; and,
- Urge review of technical support requirements for agricultural risk management within the Provincial Department of Agriculture.



### 2.3.5 Eden District Municipality Disaster Risk Assessment (DRA) Update 2013

The review and update of the disaster risk assessment of the Eden District Municipality (EDM) was completed in the March 2013 by Disaster Risk Management (Pty) Ltd (DMS) with the aim of providing relevant EDM disaster risk managers and municipal role-players with a working document focusing on pertinent risks in the Eden District.

The 2005 Eden Disaster Risk Assessment was evaluated against the standards as laid down in *South Africa's Policy Framework for Disaster Risk Assessment (DN654 of 2005)*, with specific reference to *Key Performance Area 2, Disaster Risk Assessment*.

The 2005 DRA indicated which risks were identified in the Eden District and with the national and provincial frameworks as basis, the Eden District Disaster Management framework was developed to address the identified risks on a strategic level within its area of jurisdiction.

This risk assessment, a scientific tool, is applied in the current 2013 report and indicates the total risk for the Eden District. Table 2.3.4.1 lists the priority hazards identified during the 2005 DRA and new hazards identified during the 2013 DRA.

#### Implications for Kannaland Municipality:

- The report noted the following key findings:
  - Eden, being a coastal municipality, will be affected by sea level rise and in this respect certain coastal development and infrastructure will be under threat of damage. Extreme sea level, estuary flooding, shoreline and tidal reach evolution modelling shows that Eden DM is vulnerable to coastal hazards induced by sea level rise;
  - Due to its physical location, topography and the climatic conditions of the district, the EDM is particularly vulnerable to the impact of climate change. Climate change is already harming food production and these impacts are projected to increase over time, with potentially devastating effects; and,
  - The future climate of the Western Cape is likely to be one that is warmer and drier than at present, according to a number of current model projections. In support of these projections, recent temperature trends reveal appreciable warming in the Western Cape over the past three decades.

2013 RISK ASSESSMENT	
Priority Hazards identified	New hazards identified
Drought	Seismic hazards
HAZMAT: Road, Rail	Petro-Chemical Fire Hazards
Fire	Alien Plant Invasion
Floods	Predator Animals
Slope Failures	Structural Integrity Old Gouritz Bridge
Road Accidents	Storm Surges
Animal diseases	Coastal Erosion (Sea Level Rise)
Dam Shedding	Service Disruptions
Human diseases	Social Disruptions

Table 2.3.4.1 EDM 2005 and 2013 identified hazards

### 2.3.6 Biodiversity Assessment of the Kannaland and Oudtshoorn Local Municipality and Eden District Management Area (Uniondale)

The Biodiversity Assessment of the Kannaland and Oudtshoorn Local Municipality and Eden District Management Area (Uniondale) was prepared by the Department of Environmental Affairs and Development Planning in August 2010.

The objectives of the assessment are stated as the following:

- The identification of biodiversity features and areas where conservation compatible land-use practices are required in order to meet nationally accepted targets for pattern and process.
- To provide a realistic picture of patterns of transformation by assessing degradation.
- To produce a conservation plan that is efficiently designed and will meet biodiversity targets in a spatial configuration that avoids conflict with non-conservation compatible land-use.

The report states that CBAs aim to guide sustainable development by providing a synthesis of biodiversity information. The biodiversity assessment was designed in a manner to identify an efficient set of Critical Biodiversity Areas and Ecological Support Areas that meet the targets for conserving the underlying biodiversity features in as small areas as possible and in areas with least conflict with other activities.

With respect to CBAs, the report noted the following:

- The CBA map is intended to act as the biodiversity's sector's input into multi sectoral plans and any assessments;
- The CBA map is aligned with current national standards for bioregional plans;
- Land use guidelines were developed for each CBA category and correspond to land use planning categories used in SDFs.

The CBA map, Figure 2.3.5.1 indicates all areas of land and aquatic features which are required to be protected in their natural state if biodiversity is to continue functioning. CBAs include:

- areas that need to be protected in order to meet biodiversity thresholds;

- areas required to ensure the continued existence and functioning of species and ecosystem, including the delivery of ecosystem services; and,
- important locations for biodiversity features or rare species.

The criteria that define the CBA categories are shown in Table 2.3.5.1.

CBA MAP CATEGORY	CRITERIA DEFINING THE CATEGORY
<b>Protected Areas</b>	<b>Formal Protected Areas</b> <b>a) Terrestrial</b> <ul style="list-style-type: none"> <li>• Nature Reserves and National Parks (protected by the National Environment Management: Protected Areas Act 57 of 2003).</li> <li>• Forest Nature Reserves (declared in terms of the National Forest Act 84 of 1998).</li> <li>• Ramsar Sites (protected by the Ramsar Convention).</li> <li>• Mountain Catchment Areas (declared in terms of the Mountain Catchment Area Act 63 of 1970).</li> <li>• World Heritage Sites (declared in terms of the World Heritage Convention Act 49 of 1999).</li> </ul> <b>b) Marine</b> <ul style="list-style-type: none"> <li>• Marine Protected Areas (protected by the National Environment Management: Protected Areas Act (57 of 2003) or Marine Living Resources Act (107 of 1998).</li> </ul>
<b>Critical Biodiversity Areas</b>	<b>Any terrestrial, freshwater aquatic or marine area required to meet biodiversity pattern and/or process thresholds</b> <b>a) Any area that is required for meeting biodiversity pattern thresholds, namely:</b> <ul style="list-style-type: none"> <li>• Remaining areas of Critically Endangered habitat types.</li> <li>• Special habitats (areas required to protect special species and habitats).</li> <li>• Listed Threatened Ecosystems in terms of the National Biodiversity Act (10 of 2004).</li> <li>• Remaining areas protected by the National Forest Act (84 of 1998).</li> </ul> <b>b) Any area that is required for meeting ecological process thresholds including:</b> <ul style="list-style-type: none"> <li>• Ecological or landscape corridors (comprising upland-lowland, river, coastal and sand-movement corridors)</li> </ul> <b>c) Hydrological process areas (estuaries, wetlands, important catchment areas).</b> <b>d) All 'best design' sites (largest, most intact, least disturbed, connected and/or adjacent) in terms of meeting pattern and process thresholds. 'Best design' refers to an identified network of natural sites that meet pattern and process thresholds in all vegetation types in a spatially efficient and ecologically robust way, and aim to avoid conflict with other activities (e.g. economic activity) where it is possible to achieve biodiversity thresholds elsewhere.</b>
<b>Ecological Support Areas</b>	<b>Supporting zone required to prevent degradation of Critical Biodiversity Areas and Protected Areas.</b> <b>a) Areas required to prevent degradation of Critical Biodiversity Areas and formal Protected Areas.</b> <b>b) Remaining catchment and other process areas (river, fire, etc) that are required to prevent degradation of Critical Biodiversity Areas and formal Protected Areas.</b> <b>c) Areas that are already transformed or degraded, but which are currently or potentially still important for supporting ecological processes e.g. transformed or alien plant infested areas that have transformed or degraded the natural buffer area of a wetland or river. These areas are a focus for rehabilitation, and the intensification of land-use should be avoided.</b>
<b>Other Natural Areas</b>	Natural areas not included in the above categories.
<b>No Natural Areas Remaining</b>	These areas include cultivated areas (intensive agriculture), afforested areas (plantation forestry), farmland (areas that have been farmed in the past), mined areas (currently or in the past), urban areas, infrastructure, dams and areas under coastal development.
Source Reference: Holness <i>et al.</i> , 2010	

**Table 2.3.5.1 Criteria defining the CBA categories** (Source: Critical Biodiversity Areas of the Overberg District Municipality: Conservation Planning Report, 2010)

Ecological Support Areas (ESAs) are supporting areas required to prevent the degradation of CBAs and Protected Areas. ESAs may be ecological process areas that connect and sustains CBAs for a terrestrial feature.



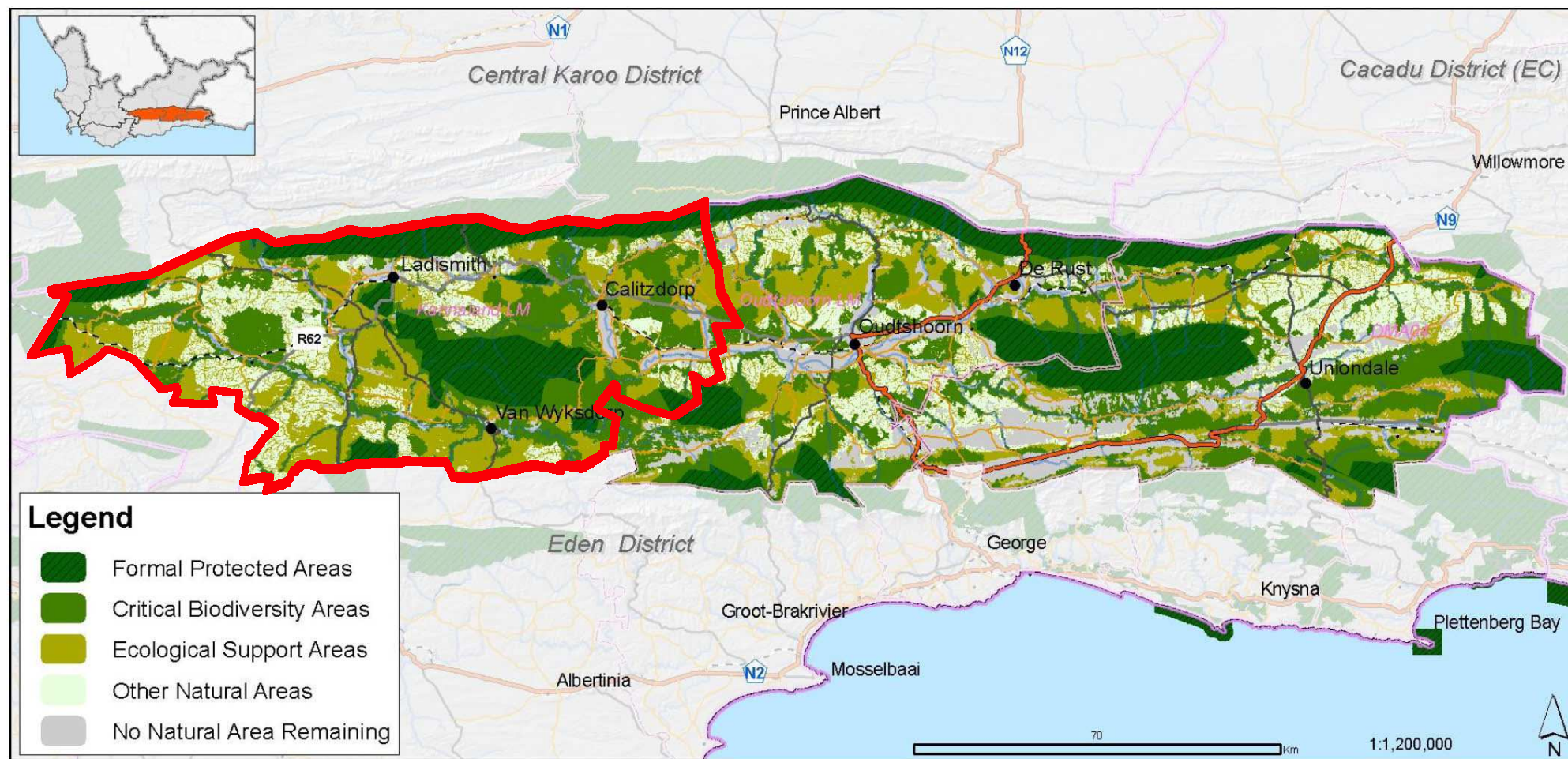


Figure 2.3.5.1 Critical Biodiversity Areas (DEA&DP 2010)



Table 2.3.5.2 below indicates the Desired Management Objective for each mapped category. Desired Management Objectives includes both the biodiversity pattern and the ecological processes.

CBA MAP CATEGORY→	Formal Protected Areas	Critical Biodiversity Areas	Ecological Support Areas	Other Natural Areas	No Natural Areas Remaining
DESIRED MANAGEMENT OBJECTIVE→	Maintain natural land. Rehabilitate degraded to natural or near natural and manage for no further degradation.	Maintain ecological processes	Sustainable Management within general rural land-use principles	Sustainable Management within general rural land-use principles. <b>Favoured areas for development.</b>	

**Table 2.3.5.2 Desired Management Objective per category** (Source: Critical Biodiversity Areas of the Overberg District Municipality: Conservation Planning Report, 2010)

The report states that only land use activities that are compatible with maintaining the Desired Management Objectives are to be encouraged. Figure 2.3.4.3 provides the recommended Biodiversity compatible land use guidelines.

Biodiversity priority areas, such as Protected Areas, CBAs and ESAs, the land use guidelines were informed based on the Desired Management Objectives noted above as well as the impact of land use activities on biodiversity.

#### **Implications for Kannaland Municipality:**

- The following protected areas are located within the Municipality:
  - Anysberg Nature Reserve (National);
  - Rooiberg Nature Reserve (National);
  - Groenfontein Nature Reserve (National);
  - Groot Swartberg Nature Reserve (National);
  - Vaalhoek Nature Reserve (National);
  - Klein Swartberg MCA (Local); and,
  - Rooiberg MCA (Local).

KEY: Biodiversity sector land-use recommendations					
<ul style="list-style-type: none"><li>• Yes = Encouraged;</li><li>• No = Discouraged;</li><li>• Restricted = Land-use possible under strict controls in order to avoid impacts on biodiversity.</li></ul>					
CBA MAP CATEGORY		Critical Biodiversity Areas	Ecological Support Areas	Other Natural Areas	No Natural Areas Remaining
DESIRED MANAGEMENT OBJECTIVE: →		Maintain natural land. Rehabilitate degraded to natural or near natural and manage for no further degradation.	Maintain ecological processes	Sustainable Management within general rural land-use principles	Sustainable Management within general rural land-use principles. <b>Favoured areas for development.</b>
PSDF SPATIAL PLANNING CATEGORY: →				Buffer 1 or 2 at the discretion of Town and Regional Planners	Intensive Agriculture and Settlement
LAND-USE ACTIVITY ↓		Core 1	Core 2		
1) CONSERVATION		Yes	Yes	REFER TO THE PROVINCIAL RURAL LAND-USE PLANNING AND MANAGEMENT GUIDELINES* FOR GUIDANCE IN IDENTIFYING APPROPRIATE LAND-USE ACTIVITIES  ALWAYS MANAGE FOR SUSTAINABLE DEVELOPMENT WHEN CONSIDERING LAND AND WATER RESOURCE USE APPLICATIONS IN NATURAL AREAS	
2a) AGRICULTURE - HIGH IMPACT : Intensive Agriculture <i>(includes forestry plantation and space extensive agricultural enterprises)</i>		No	No		
2b) AGRICULTURE - LOW IMPACT: Extensive Agriculture		Restricted	Yes		
3) HOLIDAY ACCOMMODATION		Restricted	Restricted		
4a) RURAL HOUSING: Low Density Rural Housing <i>(Consolidation of rural erven for conservation)</i>		Restricted	Restricted		
4b) RURAL HOUSING: On-Farm Workers Settlement		No	Restricted		
5a) TOURIST and RECREATIONAL FACILITIES - LOW IMPACT: Lecture rooms, restrooms, restaurants, gift shops and outdoor recreation		Restricted	Restricted		
5b) TOURIST and RECREATIONAL FACILITIES - HIGH IMPACT: Golf , polo, and housing eco-estates		No	No		
6a) RURAL BUSINESS: Place Bound		Restricted	Restricted		
6b) RURAL BUSINESS: Non Place Bound		No	No		
7) RURAL INDUSTRY		No	No		
8) SMALL HOLDINGS		No	No		
9) COMMUNITY FACILITIES and INSTITUTIONS		No	No		
10) INFRASTRUCTURE INSTALLATIONS		Restricted	Restricted		
11a) SETTLEMENT: Existing Settlements (Urban Expansion)		No	No		
11b) SETTLEMENT: New Settlements		No	No		
The purpose of these guidelines is to encourage development which avoids or has minimal biodiversity impacts, especially in Critical Biodiversity Areas and Ecological Support Areas. In general, land-uses that result in irreversible loss of natural habitat (such as cultivation, afforestation, urban development & mining) have the highest impact on biodiversity; and are considered <b>biodiversity-incompatible</b> land-use activities. Land-uses that allow for natural habitat to remain intact (such as appropriately managed grazing by either livestock or game or sustainable harvesting of natural products from the wild), have the lowest impact on biodiversity; and are therefore considered <b>biodiversity-compatible</b> land-use activities.					

**Table 2.3.5.3 Biodiversity compatible land use guidelines matrix** (Source: Critical Biodiversity Areas of the Overberg District Municipality: Conservation Planning Report, 2010)



## 2.4 MUNICIPAL POLICY

### 2.4.1 Kannaland Municipality Integrated Development Plan (2012-2017)

The Kannaland prepared the latest IDP to serve as a effective management tool with the following objectives:

- Creating a greater level of focus and improving the strategic nature of the document.
- Ensuring alignment with realities of resources (financial and human).
- Ensuring alignment with the activities of the sector departments.
- Ensuring alignment of the IDP with the various sector plans.

The IDP vision for the municipality is: "To be the place of choice".

The mission of the IDP includes the following:

- Encouraging self-reliance
- Ensure co-ordination and collaboration of various stakeholders in the delivering of development in a sustainable manner.
- Promote a healthy and vibrant community with high moral standards.
- Unlock the development potential of the area particularly tourism and indigenous knowledge and mobilising investment.
- Ensure everyone will be active in the economy and utilise technology to the advantage of the municipality.
- Attract and keep a highly skilled work force.

In order to achieve the vision, mission and goals of the IDP the following overarching objectives were developed:

- Objective 1: ensure availability of sufficient water infrastructure capacity to meet the existing and future needs of the entire Kannaland Municipality.
- Objective 2: Provide sufficient infrastructure capacity that is sustainable and reliable, meeting existing and future socio economic growth within the municipality.
- Objective 3: effective management of housing development to ensure the availability of housing to low-income groups.
- Objective 4: Create a robust and inclusive local economy that will help alleviate poverty within the municipal area of Kannaland.

- Objective 5: Contribute to the creation of a safe secure environment for all communities.
- Objective 6: Municipal initiatives respond to the national priorities in dealing with gender inequality and special attention to vulnerable groups.
- Objective 7: Promote a vibrant institution that is able to deliver the strategic objectives stated in the IDP with the available resource base.
- Objective 8: The financial capacity of the municipality reflects the efficient sourcing, allocation and control of resources with stated IDP priorities.

Table 2.4.1 contains the IDP projects identified in this IDP. The projects are also depicted in Figure 2.4.1.

IDP Projects: 2013 - 2016					
No.	Location	Project Description	2013/2014	2014/2015	Funding Source
<b>Tourism and Marketing</b>					
1	Calitzdorp	Support the local tourism bureau	R 90 000	-	-
2	Ladismith	Support the local tourism bureau	R 90 000	-	-
		<b>Sub Total</b>	<b>R 180 000</b>		-
<b>Infrastructure: Water</b>					
3	Zoar	Upgrade water reticulation	R 4 176 000	-	MIG
4	Calitzdorp	Upgrade bulk infrastructure		R 500 000	MIG
		<b>Sub Total</b>	<b>R 4 176 000</b>	<b>R 500 000</b>	
<b>Infrastructure: Sewer</b>					
5	Calitzdorp	Upgrade bulk infrastructure	-	R 1 000 000	MIG
6	Ladismith	New WWTWs	-	R 12 600 000	MIG
		<b>Sub Total</b>		<b>R 13 600 000</b>	
<b>Infrastructure: Roads</b>					
7	Calitzdorp	Access roads: farm workers housing	-	R 400 000	MIG
8	Van Wyksdorp	Provision of new roads	R 1 810 000		MIG
9	Ladismith	Upgrades to taxi route	R 2 940 000		MIG
		<b>Sub Total</b>	<b>R 4 750 000</b>	<b>R 400 000</b>	

**Table 2.4.1 Infrastructure projects** (source: IDP 2012 – 2017)

Infrastructure: Solid Waste					
10	Ladismith	Upgrades to facility	R 600 000	-	MIG
		<b>Sub Total</b>	<b>R 600 000</b>		
Community Facilities: Sports and Recreation					
11	Zoar	Rehabilitation of sports fields	R 400 000	-	MIG
12	Calitzdorp	Rehabilitation of sports fields	R 1 000 000	-	MIG
		<b>Sub Total</b>	<b>R 1 400 000</b>		
Community Facilities: Cemeteries					
13	Zoar	Provision of new cemetery	R 560 000		MIG
14	Zoar	Provision of new cemetery		R 3 585 000	MIG
		<b>Sub Total</b>	<b>R 560 000</b>	<b>R 3 585 000</b>	
		<b>TOTAL</b>	<b>R 29 751 000</b>		

**Table 2.4.1 Infrastructure projects cont.** (source: IDP 2012 – 2017)

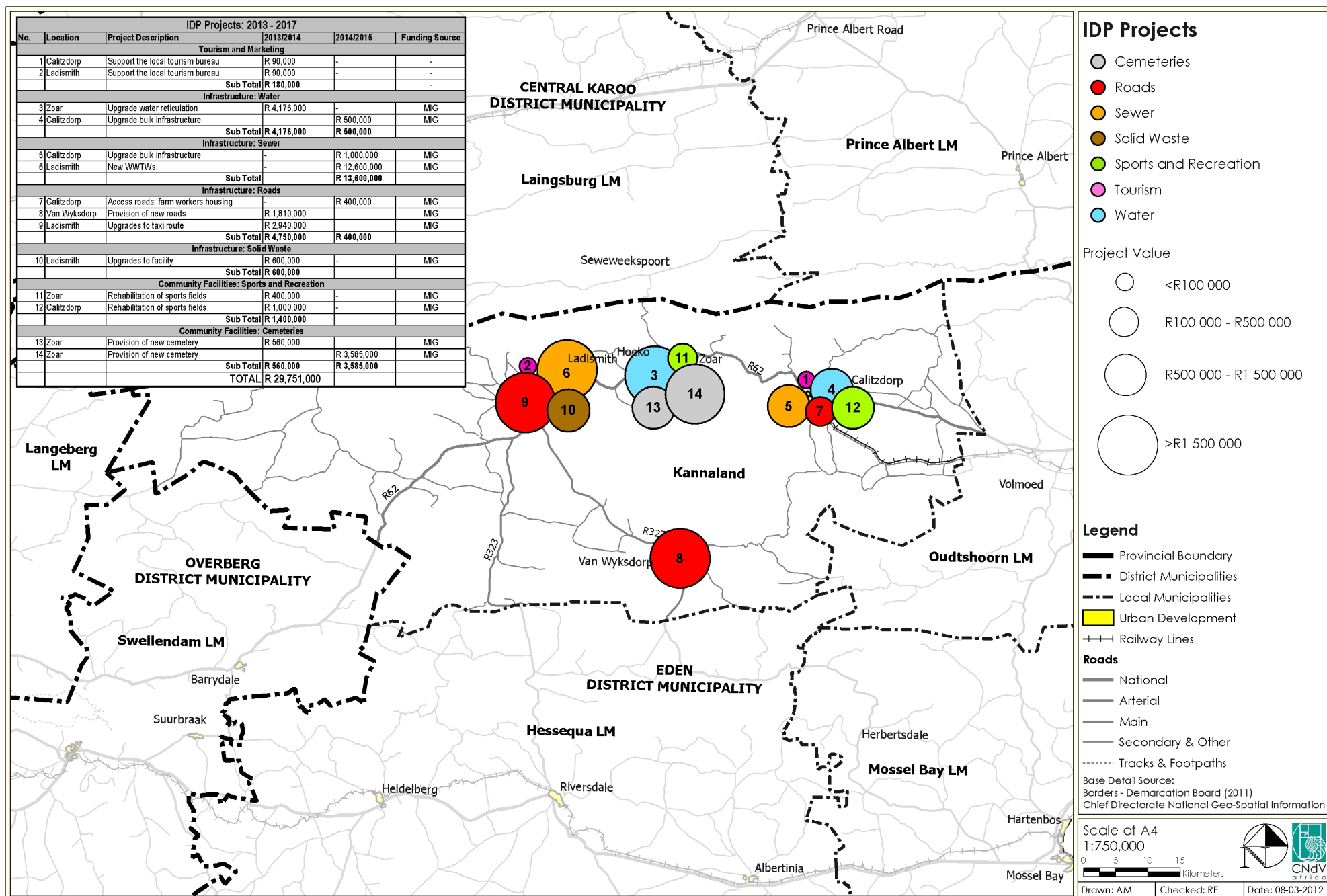


Figure 2.4.1 IDP Budget (Kannaland IDP 2012-2017)

#### 2.4.2 Kannaland Municipality Spatial Development Framework, 2009

The current Kannaland Spatial Development Framework (SDF) was prepared in 2009. The purpose of this SDF was to compile a complete inventory of the Kannaland Municipality's natural and human environment and to prepare spatial proposals that would address developmental and environmental aspects sustainable.

The SDF put forward spatial proposals for:

- Rural Areas (natural environment, agricultural areas and land reform)
- Tourism
- Urban related development

The SDF identified that the rural areas of the Kannaland Municipality should be classified per Spatial Planning Categories (SPC's). No overall figure illustrating this was however prepared. A number of strategies for general land use in the natural environment were prepared. These include:

- Indicate areas like corridors on zoning maps and other planning maps to ensure their preservation and protect these areas from undesirable land uses.
- Overgrazing should be discouraged and the eradication of alien plant species promoted.
- Environmental management plans need to be formulated as a priority.
- The Kannaland Municipality should market the proposed ecological corridors and accordingly implement land use control over these areas.

In terms of tourism the following goals are provided:

- Develop tourism in a sustainable manner for the benefit of all in the municipality.
- Promote tourism in order to create jobs.
- Increase disposable income levels of community members through increased tourism opportunities.

In terms of urban related development the following principles should be applied:

- Preserve the aesthetic quality of all towns.
- Prevent urban sprawl and channel urban growth into exiting CBD's and promote compact urban environments.
- Future urban growth should only be allowed if it contributes to the urban character and functioning of the specific area.
- Proposals as per the Provincial Spatial Development Framework (urban edges, densities and integration) should be considered.
- Employment opportunities to be provided in close proximity to residential developments, where possible.
- Mixed-use areas should be encouraged.
- Environmentally friendly and sustainable land uses should be promoted.
- Protect the natural and historical assets of the Kannaland Municipality.

In addition to the above, the SDF provided spatial proposals for the urban areas within the municipality. Areas included were Ladismith, Calitzdorp, Zoar, Van Wyksdorp and Hoeko.

No overall spatial development framework plan was prepared.

#### **Implications for Kannaland Municipality:**

- Prepare an overall spatial development concept based on existing statistics, service delivery and natural resources.
- Ensure a credible SDF is prepared which is based on the Provincial SDF Guidelines' criteria.



### 2.4.3 Kannaland Municipal Gap Analysis and Project Plan, 2012 (Built Environment Support Programme, PGWC)

The Gap Analysis and Project Plan report prepared in May 2012 identified the following gaps that have to be addressed in the next revision of the SDF in order to improve its credibility.

Gap	Objective	Required Content & Format of Product
1.1 Vacant Land Audit and Assessment	i) To identify vacant land within Kannaland's primary settlement growth areas and assess its potential to meet sustainable development and integrated settlement objectives in terms of the PSDF, BESP, SO6 and SO7 aims. ii) To inform settlement spatial concepts and urban edges. iii) To inform the HSP and SDF to be compiled.	<ul style="list-style-type: none"> <li>Stating objectives of the audit.</li> <li>Setting assessment criteria informed by objectives.</li> <li>Data sourcing and desk-top scrutiny (e.g. SG records, ownership, zoning, pending applications, etc.) to identify "potential" erven/sites.</li> <li>In-field assessment and data recording/mapping of potential erven/sites per ward for Kannaland's main growth settlements.</li> <li>Assessment of vacant erven/ sites i.t.o. potential for integrated development (i.e. accessibility, sustainability, affordability), including engineering feasibility and environmental performance.</li> <li>Compiling a summary matrix (data base) of GIS referenced individual vacant erven/sites in terms of suitability and availability for development.</li> <li>Input to sector plans (SDF and HSP) and land use management decision-making.</li> </ul> <p><u>Product Format:</u> Hard and electronic report copy. GIS-based survey matrix of vacant erven/sites.</p>
1.2 Heritage Survey and Management Framework for Urban & Rural Areas	i) To put in place heritage data to inform the protection of cultural/heritage assets in terms of NHRACT requirements. ii) To inform both local and municipal-wide protected landscapes, as	<ul style="list-style-type: none"> <li>Legal context and compliance with Provincial and National heritage statutory frameworks.</li> <li>Desk-top study of existing studies and data.</li> <li>Setting assessment criteria and categories of heritage and grading significance.</li> <li>Regional landscape overview.</li> </ul>

Gap	Objective	Required Content & Format of Product
	well as to integrate heritage informants into the SDF. iii) To identify/highlight the key protection and management issues. iv) To inform the HSP and SDF to be compiled.	<ul style="list-style-type: none"> <li>Detail landscape character assessment (natural features, built form, scenic resources) and mapping.</li> <li>Local area analysis (i.e. per ward), including the assessment and grading of structures older than 60 years.</li> <li>Database/spreadsheet of individual resources per local area (compatible with Municipal GIS System, if applicable)</li> <li>Heritage management framework.</li> <li>Conservation and development guidelines for Kannaland Municipality.</li> <li>Input to sector plans.</li> </ul> <p>Survey to include required public participatory process.</p> <p><u>Product Format:</u> Hard and electronic report copy. Database/ spreadsheet of heritage resources.</p>
1.3 Compilation of a New Kannaland SDF	i) To put in place a credible SDF in terms of both LUPO and the MSA. ii) To achieve approval in terms of both LUPO and the MSA. iii) To inform other sector plans, specifically subsequent IDP reviews and the HSP to be compiled. iv) SDF to be informed by key development targets of the 3 <sup>rd</sup> Generation IDP.	<p>Content of the SDF to be in accordance with the Provincial SDF Guideline, with an emphasis on the following:</p> <ul style="list-style-type: none"> <li>Planning principles, explicitly stated interpretation of themes (e.g. restructuring, integration, transformation, sustainability) and clearly defined achievement milestones.</li> <li>An updated status quo, translating into a clear spatial perspective and identifying key spatial challenges emanating from issues arising.</li> <li>A spatial vision unique to Kannaland Municipality, with such vision linked to a long-term timeframe.</li> <li>A comprehensive overall municipal spatial development concept unique to local conditions and underpinned by a spatial logic.</li> <li>Clearly defined development and management strategies (including</li> </ul>

Gap	Objective	Required Content & Format of Product
		<p>Act 9 Areas) that the municipality needs to pursue.</p> <ul style="list-style-type: none"> <li>• Include key objectives of the IDP and other sector plans and address their spatial implications.</li> <li>• Give attention to the spatial dimension of integration and restructuring, as well as broadening access to economic opportunity in the municipal area.</li> <li>• Conceptually illustrate the location of housing market segment accommodation, targeted towns for growth within tightly defined urban edges and new settlements required.</li> <li>• Detail the requirements (e.g. infrastructure) of areas identified for new urban and rural growth.</li> <li>• Identify resource protection areas, growth areas and district-wide corridors and linkages, informed by sustainability, integration, affordability, serviceability and restructuring, as well as reflecting a socio-economic logic.</li> <li>• Land use management underpinned by urban and rural efficiency, and reflecting best practice.</li> <li>• An implementation plan clearly outlining development parameters given municipal resources, end-user affordability and resource availability.</li> </ul> <p>Terms of reference to include capacity building within and skills transfer to the Kannaland Municipality, including training, mentorship, internship etc.</p> <p><u>Product Format:</u> Report format to meet Provincial SDF Guideline in terms of accessibility, being concise and including graphics. Hand and electronic report copy. GIS mapping of relevant components.</p>

**Table 2.4.3.1** Kannaland SDF Project Plan (source: City Think Space Consortium, 2012)



## 2.5 ABUTTING SPATIAL DEVELOPMENT FRAMEWORKS

Six local Municipalities abut the Kannaland Municipality, namely the Laingsburg, Langeberg, Swellendam, Hessequa, Oudtshoorn and Prince Albert municipalities.

### 2.5.1 LAINGSBURG SPATIAL DEVELOPMENT FRAMEWORK, DECEMBER 2011

The Laingsburg Spatial Development Framework was prepared in December 2011 and proposed the following objectives for the municipality:

- Integrate and break down sharp sense of difference between town and township.
- Increase thresholds for the support of business and community facilities in the township and town.
- Improve attractiveness of settlements, Laingsburg town and Matjiesfontein to attract people in the category LSM 7 – 10 to reside there, thereby increasing local demand, employment creation and, therefore, the size of the local economy.
- Ensure all urban residents have appropriate access to Municipal services.
- Sustain long term carrying capacity of the land and water.
- Ensure adequate infrastructure support for economy Increase access to economic activities for Historically Disadvantaged Individuals (HDI's); and,
- Promote urban and rural linkages via the local economy.

The policy document states that all land outside of Core, Intensive Agriculture and Urban Development SPCs should be used for Extensive Agriculture in terms of the Rural Land Use Planning and Management Guidelines (RLUPMG) Buffer 1 designation as this land does not occur in a matrix of patches of Intensive Agriculture but rather comprises vast unbroken expanses of Karoo veld interspersed with Extensive Agriculture. There is considerable opportunity for biodiversity conservation if proper Veld Management and appropriate Rotational Grazing methods to improve veld carrying capacity are used.

#### *Implications for Kannaland Municipality:*

- The SDF proposes a conservation corridor along the northern boundary of the Kannaland Municipality. This corridor also includes two nature reserves, the Anysberg and Groot Swartberg Nature Reserves, which have been identified as Core 1: Conservation areas. This area also includes several Core 1: River Corridors.
- The SDF proposes that the R323 from the R62 at Zoar through the Seweweekspoort be tarred (gravel at present).



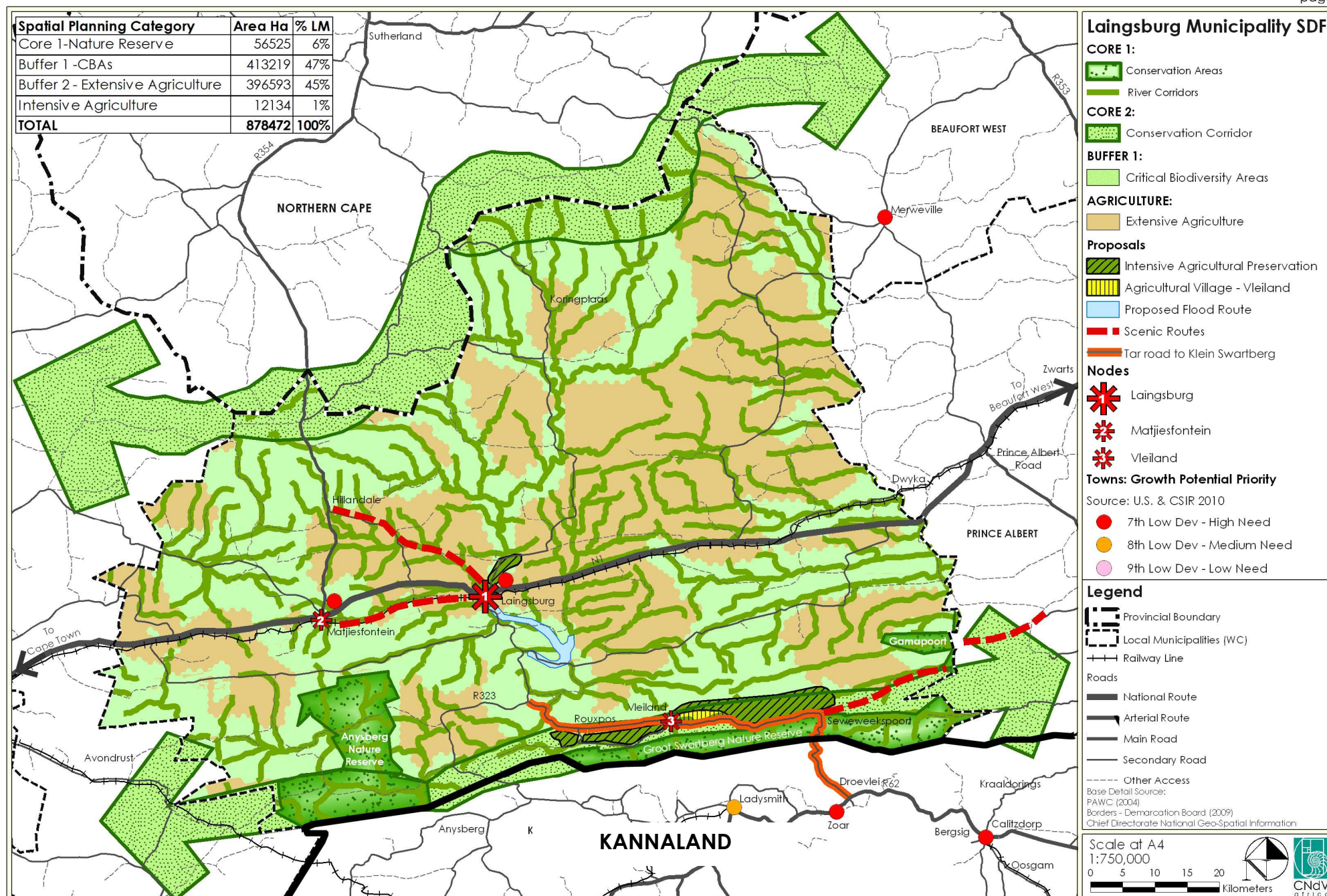


Figure 2.5.1 Laingsburg Municipality SDF (CnDv africa, 2011)

### 2.5.2 LANGEBERG SPATIAL DEVELOPMENT FRAMEWORK, 2010

This policy document was prepared in May 2010. Figure 2.5.2 indicates the Spatial Planning Categories that have been proposed by the SDF.

The western and northern portions of the Langeberg Municipality abut the Breede Valley Municipality. The Langeberg SDF has proposed that these be designated as Core Conservation Area and Buffer Area.

The SDF has noted that Core Conservation Areas are subject to strict controls and should only incorporate activities that are low impact and biodiversity friendly. Activities of this nature include:

- Conservation management activities such as alien clearing, research and environmental education;
- Low intensity eco-tourism activities such as recreation and tourism (e.g. hiking trails, bird and game watching, and visitor overnight accommodation) with limited access points; and,
- Sustainable consumptive activities: Harvesting of natural resources (e.g. wild flowers for medicinal, culinary or commercial use).

Additional controls include:

- All land uses are to be limited to low transformation levels for infrastructure development – existing infrastructure should be used where possible;
- Environmental Management Plans are to be prepared in order to ensure the protection of the environment and its biodiversity;
- Green technology and architectural design principles are to be adopted;
- Consolidation of land should be encouraged while the subdivision of land should be discouraged;
- no large scale eco-tourism developments are to be permitted.

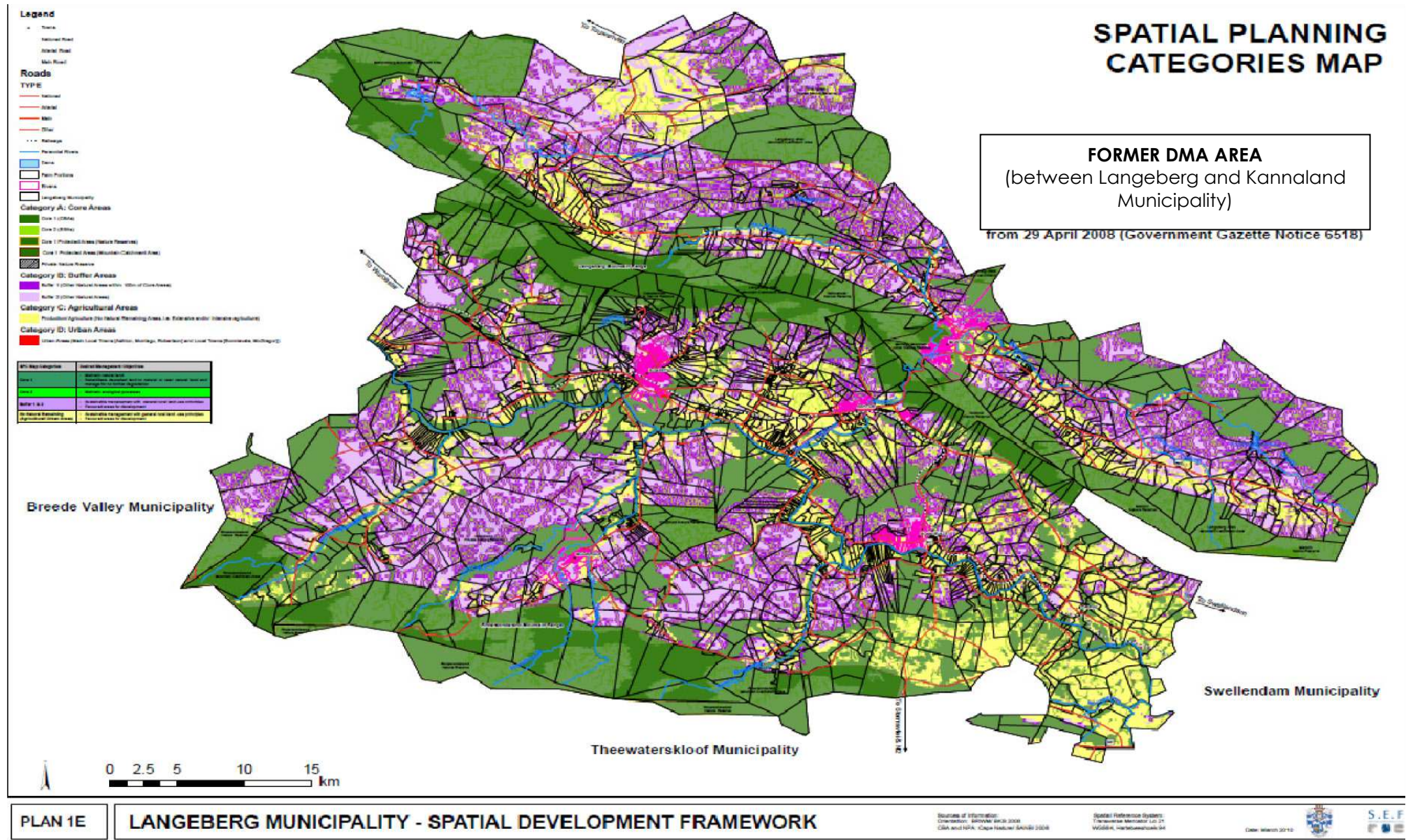
The SDF has proposed that Buffer Areas either be declared Special Management Area (SMA) with an Environmental Management Committee which should consider the impact the scale of the development would have on the environment, as well as determine mitigation measures which should be taken up should the impact be negative, or, Conservancies in accordance with the Cape Nature Conservation Guidelines should be

established which would provide the necessary inputs to the environmental processes and the compilation of Environmental Management Plans.

#### **Implications for Kannaland Municipality:**

- The section of the Langeberg Municipality adjacent to the eastern boundary of the Kannaland Municipality was formally part of a district management area (DMA). The current Langeberg SDF does not include this area and thus has no direct implications on the Kannaland Municipality.

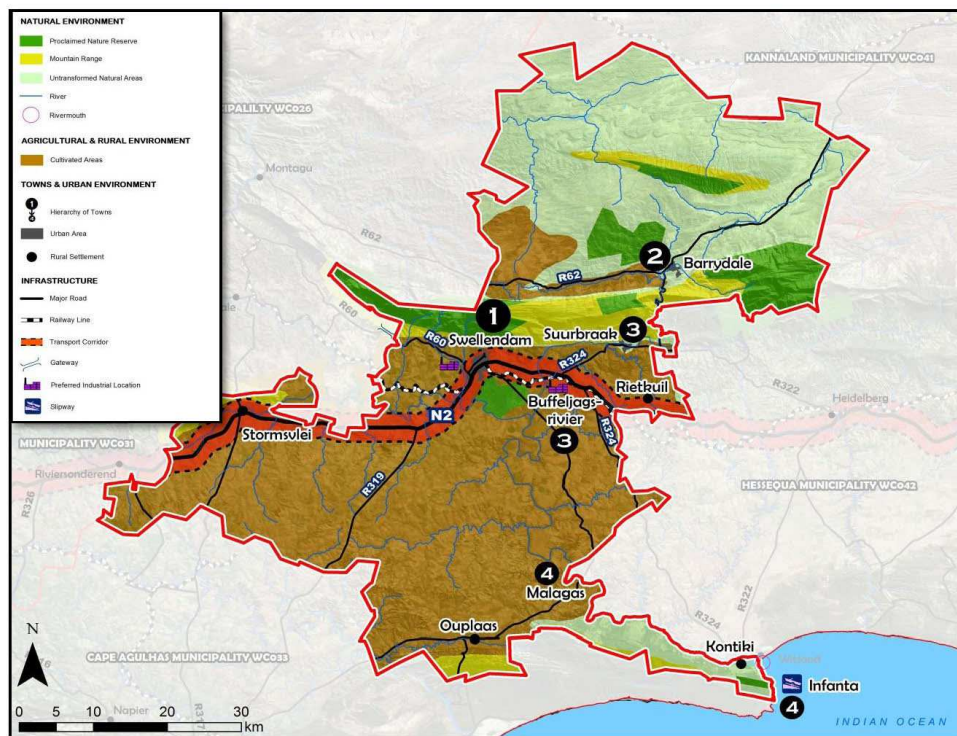






### 2.5.3 SWELLENDAM SPATIAL DEVELOPMENT FRAMEWORK, OCTOBER 2008

The Swellendam Municipality Spatial Development Framework was prepared in October 2013. The spatial concept for the SDF is indicated in Figure 2.5.3.1. The north eastern boundary of the Swellendam Municipality abuts the Kannaland Municipality.



**Figure 2.5.3.1 Swellendam Spatial Management Concept**

The primary elements which informed the proposed spatial management planning concept are:

- protection of areas of high irreplaceable value in terms of meeting targets for biodiversity conservation, areas important for the maintenance of ecological and evolutionary processes, areas critical to the provision of ecological services, and special habitats;

- integration of the river systems and coastal line as ecological corridors into the regional open space system;
- integration of the mountain ranges into the regional open space system;
- incorporating protected natural areas and areas under conservation management into the regional open space system;
- protecting high soil-based agricultural production potential areas;
- promoting urban development and growth within an established growth potential hierarchy and with due regard to the main functions, growth potential, comparative economic advantages and spatial capacity of the various urban areas;
- retaining rural settlements and their surrounding areas as focus areas for rural development initiatives based on their unique comparative advantages; and,
- Protecting scenic routes from undesirable land use and development to retain the natural and cultural landscapes that are of considerable significance.

#### **Implications for Kannaland Municipality:**

- The SDF earmarked the area abutting the Kannaland Municipality as Core 1 and 2 SPCs, see Figure 2.5.3.2.
- The SPC Core 1 could allow the following activities: Low intensity, non-consumptive, nature-based recreation (e.g. hiking trails, bird and game viewing, overnight accommodation with limited access point, harvest of natural resources on a sustainable basis, provided that such use is compatible with this area (e.g. wild flowers for medicinal, culinary or commercial use), education and research and activities necessary for conservation management (e.g. clearing alien invasive plants).
- The SPC Core 2 could allow the following activities: low intensity, non-consumptive, nature-based recreation (e.g. hiking trails, bird and game viewing, overnight accommodation with limited access points), harvest of natural resources on a sustainable basis, provided that such use is compatible with this area (e.g. wild flowers for medicinal, culinary or commercial use), education, research and activities necessary for conservation management (e.g. clearing alien invasive plants) and extensive grazing in areas where this use is current.



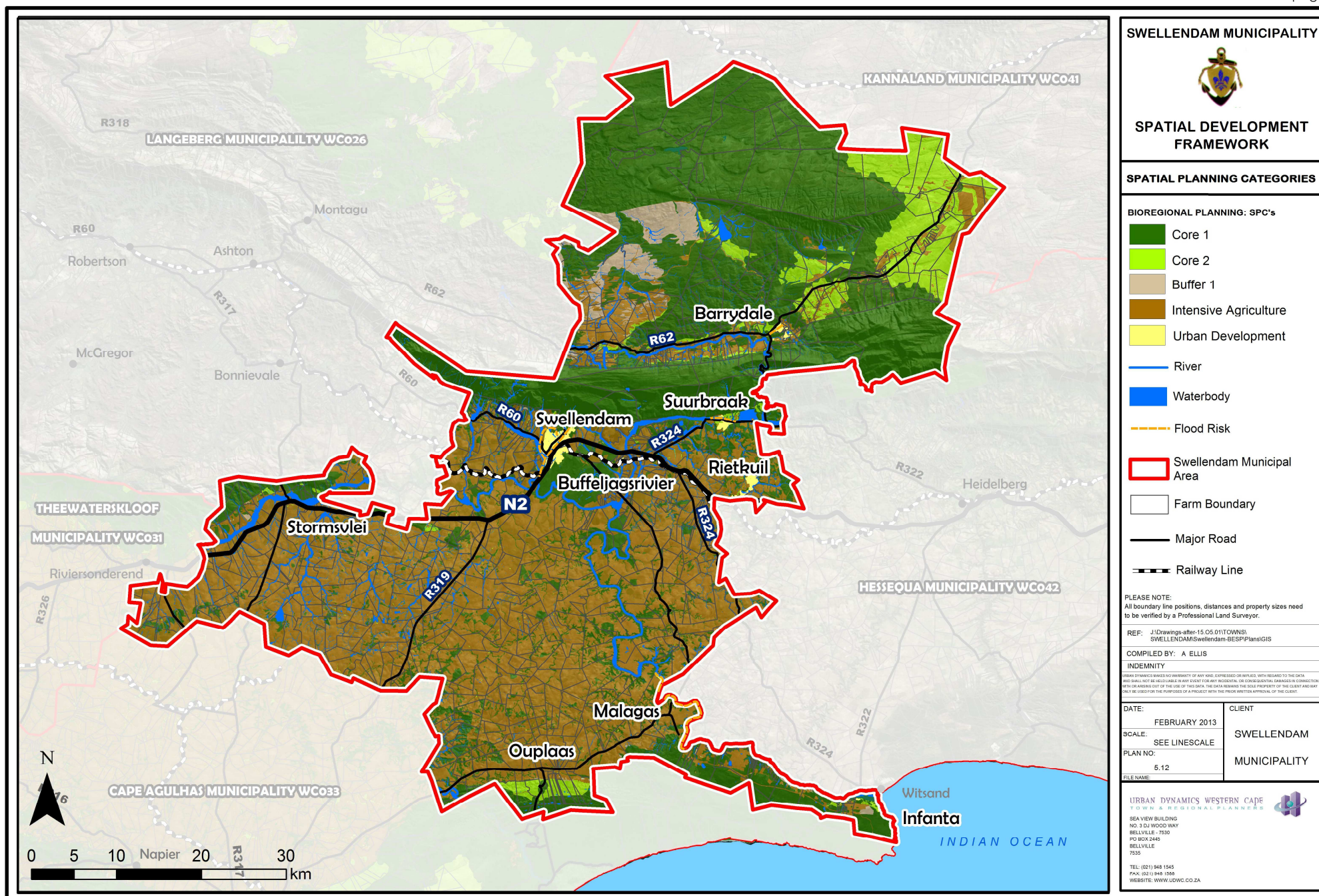


Figure 2.5.3.2 Swellendam Municipality SDF (Urban Dynamics, 2013)

#### 2.5.4 HESSEQUA SPATIAL DEVELOPMENT FRAMEWORK, 2010

The Hessequa Municipal Spatial Development Framework (SDF) was prepared in 2010 with the following vision:

"A community that works together and which reaps the rewards of a growing economy through sustainable development, the use of peoples potential and natural resources".

The following planning principles were applied in preparing the SDF:

- Ecological integrity
- Avoid risks
- Duty of conservation
- Land use integration
- Effective and integrated planning
- Ecological aspects (protect natural environments of high conservation value)
- Limit development to the carrying capacity of the natural resources
- Limit development which could negatively affect biodiversity and other ecologically sensitive areas
- Accommodate the natural and aesthetic quality of the landscape and environment.

A number of goals with supporting objectives were prepared to guide development towards achieving the vision of the municipality. The overarching goals are as follows:

- i. Develop an effective management system to develop biological diversity and eco-systems together with all stakeholders.
- ii. Develop a strong local economic basis in rural areas through the promotion of tourism and agriculture.
- iii. Protect the heritage resources in the municipality.
- iv. Ensure bulk infrastructure and roads which are environmentally and economically sustainable.
- v. Address the social needs and expectations of all Kannaland's people.
- vi. Promote protection and the sustainable utilisation of natural resources.

- vii. Ensure that development pressure and associated spatial implications are managed in a sustainable manner taking into consideration the unique character of the existing cultural landscape and place-specific character.

#### **Implications for Kannaland Municipality:**

- The Langeberg Mountains and foothills are situated along the southern boundary of the Kannaland Municipality. The Hessequa SDF proposes that this area should be preserved as a Conservation Agricultural Buffer.



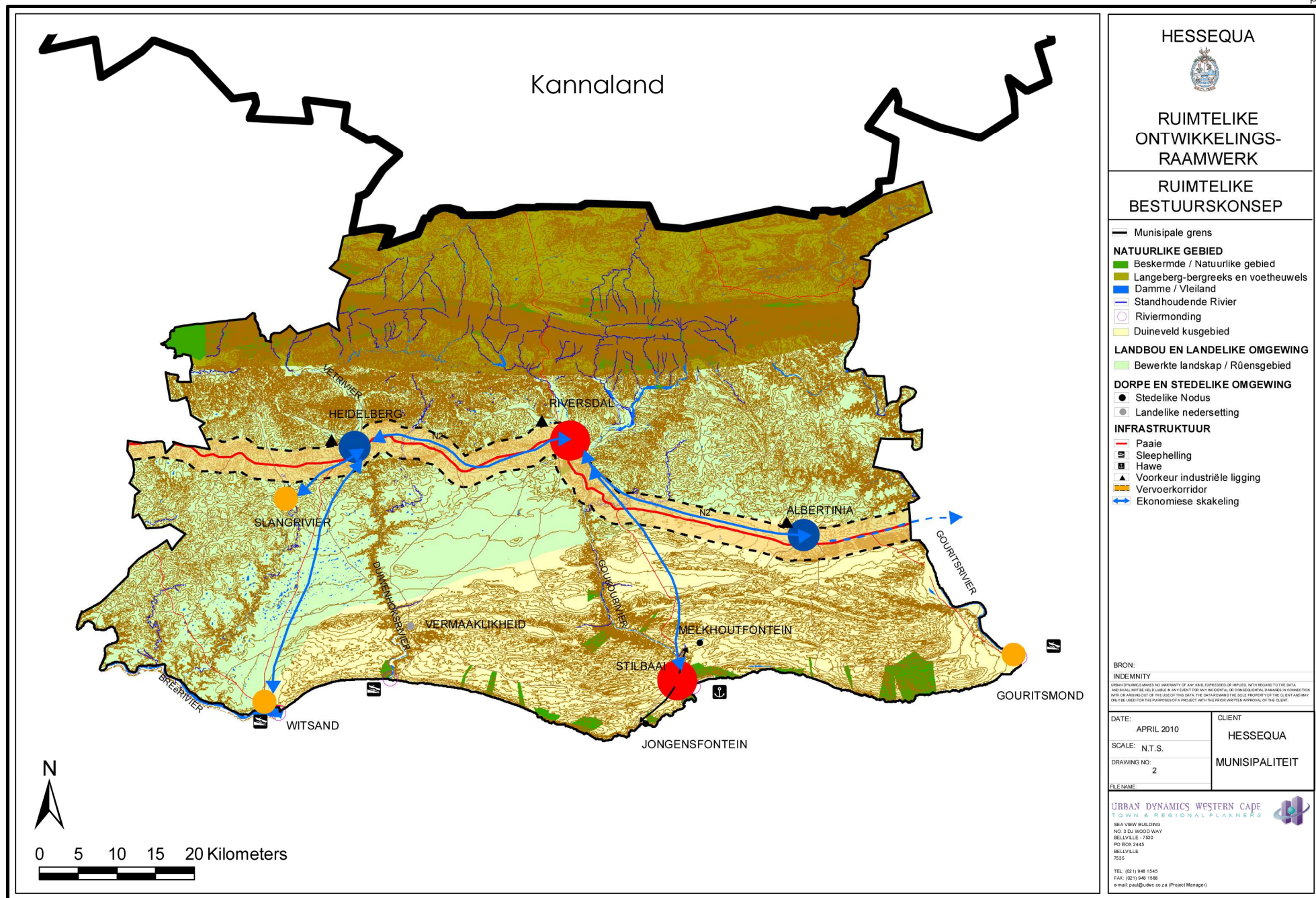


Figure 2.5.4 Hessequa Municipality SDF (UDWC, 2010)

### 2.5.5 OUDTSHOORN SPATIAL DEVELOPMENT FRAMEWORK, 2004

The Oudtshoorn Spatial Development Framework was developed in 2004. The SDF developed a number of development goals, spatial priorities and strategies. These relate to the natural environment, economy, urban form, traffic and infrastructure.

In terms of spatial proposals the SDF contains the following spatial proposals:

- **Natural Environment**

Agriculture and natural areas should be applied for the development and enhancement of tourism activities.

- **Agriculture**

Productive agricultural land should be demarcated and actively used and protected from urban development.

- **Urban form and development**

Development of the urban centres within the municipality should be in line with the hierarchy of settlements. In this regard the settlements in the Oudtshoorn Municipality have been classified as follows:

- Oudtshoorn: Main and first order town,
- Dysseldorp and De Rust: 3<sup>rd</sup> order town
- Volmoed: Rural node
- Schoemanshoek: Rural node
- Spieskamp: Settlement
- Vlakteplaas: Settlement

Furthermore, the SDF identifies the tourism potential of the Oudtshoorn Municipality. In this regard a tourism corridor is proposed along the Oude Muragie Road from the N9 to the Koos Raubenheimerdam.

The spatial planning categories identified for the Oudtshoorn Municipality is indicated on Figure 2.5.5.

#### **Implications for Kannaland Municipality:**

- Proclaimed conservation areas and large ecological corridors/areas have been identified along the eastern boundary of the Kannaland Municipality.
- Intensive and extensive agricultural areas have been identified west of Oudtshoorn (south of the R62) leading to the eastern Kannaland Municipal boundary.



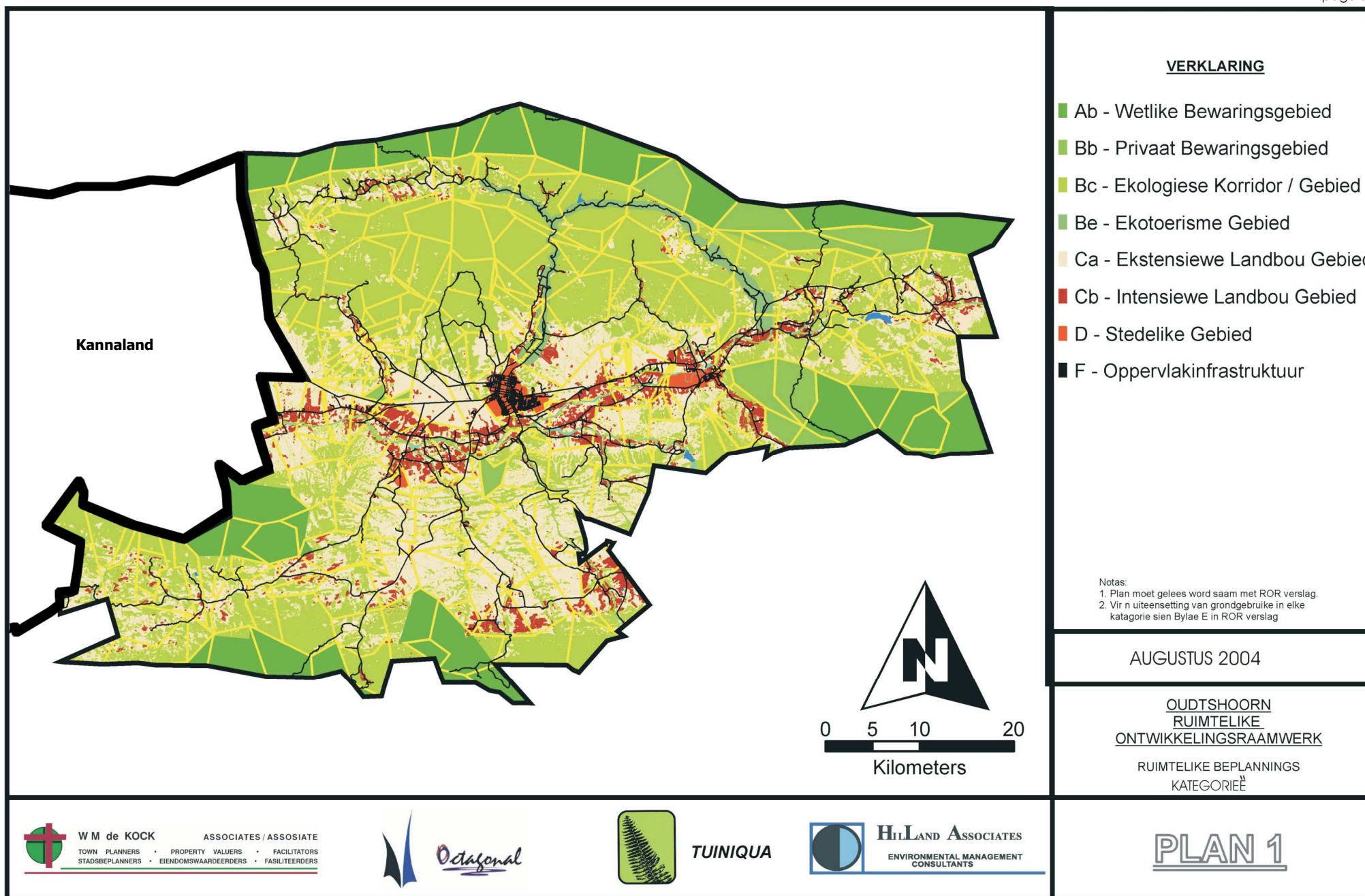


Figure 2.5.5 Oudtshoorn Municipality SDF (WM de Kock, 2004)

### 2.5.6 PRINCE ALBERT SDF, 2009

The Prince Albert Local Municipality is situated to the south west of the Beaufort West Municipality. Towns within this municipality include:

- Prince Albert
- Leeu-Gamka
- Klaarstroom
- Prince Albert Road

The purpose of the Prince Albert Spatial Development Framework is to ensure sustainability and conservation.

The spatial development framework has the following goals:

- Recognise the functionality and dynamics of towns within the municipality.
- Encourage the intensification and diversify certain land uses (tourism, agri- and eco tourism).
- Identify opportunities and problems and solve these in a sustainable manner.
- Promote integration.
- Thoroughly consider the principles of bioregional planning.

The spatial development framework provides spatial development strategies for the municipal area as a whole and for each individual town. The strategies proposed are as follows:

#### Economic Growth Strategies:

- Develop a holistic economic management plan for the Prins Albert Municipality
- Focus on developing agri-tourism and the establishment of small farming and community farming projects.

#### Tourism

- Expand the existing tourism management plan in conjunction with the economic management plan.

- Increase involvement of the Gamkaskloof Advice Committee when developing the tourism opportunities of the Gamkaskloof.
- Potentially establish a special management area to enable landowners to work with the local authority to ensure sustainable tourism opportunities.
- Offer alternative tourism attractions.
- Establish a working group to research alternative funding sources.

#### Land Reform

- District offices and government institutions to conduct an increased number of workshops to inform landowners, labourers and entrepreneurs of processes and funding options.
- Establish mentor and training programmes to transfer agricultural skills.
- Allocation of land for small farmers could be an on going project.
- Develop plans where land can be identified for small farmers and where these land portions can be evaluated in terms of a spatial development framework.

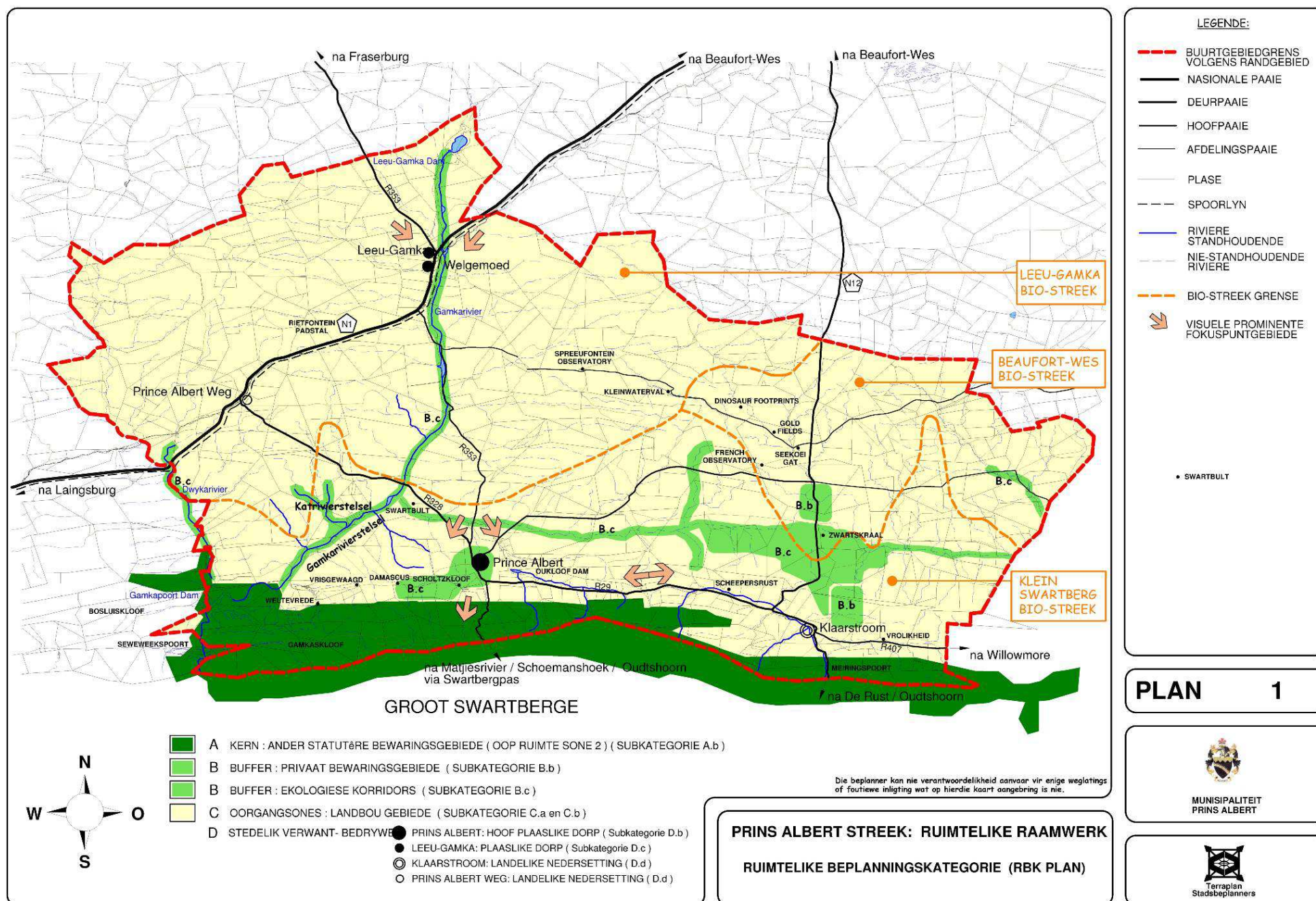
#### Housing

- Housing for farm workers is required.
- Workshops and meetings with agricultural departments are required to establish the procedures for establishing housing for farm labourers on farms.
- The Transnet land at Leeu-Gamka and Prince Albert Road could be transferred to the municipality.

#### Natural Environment

- Complete a heritage study and implement the findings of the study.
- Establish an action group to develop conservation and management plans.
- Notify farmers of undesirable agricultural practices.
- Develop an effective agricultural practices management plan.
- Promote and manage the proposed ecological corridors.





**Figure 2.5.6.1 Prince Albert Municipality SDF** (source: Terraplan, 2009)

- A proper vegetation status and ecological condition map should be prepared.
- Ensure the protection of open spaces by means of proper zoning scheme regulations.

#### Infrastructure

- Address the need for improved services at the Transnet stations.
- Develop improved information leaflets for the ESKOM self help schemes.
- Develop a maintenance plan for the repair of roads in poor condition.
- Prevent stormwater from entering the Gamka River.

In addition to the above strategies the SDF contained various proposals for the specific urban areas within the municipality.

No overall spatial development framework plan was prepared which could directly illustrate implications for the Kannaland Municipality.

#### ***Implications for Kannaland Municipality:***

- No overall spatial proposals plan was prepared for the Prince Albert Municipal SDF nor were there any spatial proposals made which could impact on the Kannaland Municipality.
- The area abutting the Kannaland Municipality is identified as Core. The SDF proposed non-destructive sustainable development be permitted within this area.





## 2.6 ALIGNMENTS

The vertical and horizontal alignment between the Kannaland Local Municipality SDF and the other planning policies affecting and affected by this SDF are illustrated below.

### 2.6.1 Vertical Alignment

The vertical alignment shows the relationship and alignment between the proposals and policies of the Western Cape PSDF, Western Cape Growth and Development Strategy and the Eden District SDF.

Of importance are the following:

- Promote Ladismith as the main settlement in the municipality.
- Promote the R62 as a tourism corridor.
- Protect the ecological corridors near Calitzdorp and Ladismith.
- Manage development along the banks of the Buffels and Nels Rivers.

### 2.6.2 Horizontal Alignment

The horizontal alignments of the relationship between the Kannaland Municipality and the abutting municipal SDF's are shown on Figure 2.6.1.

The main abutting proposals that could influence the formulation of a spatial development plan for the Kannaland Municipality are:

- Land identified for conservation purposes should be conserved and maintained as such across municipal boundaries.
- The tourism sector of Kannaland should link with initiatives along the R62 within the surrounding municipalities.
- Facilitate the preservation of conservation and agricultural areas in the surrounding municipalities.



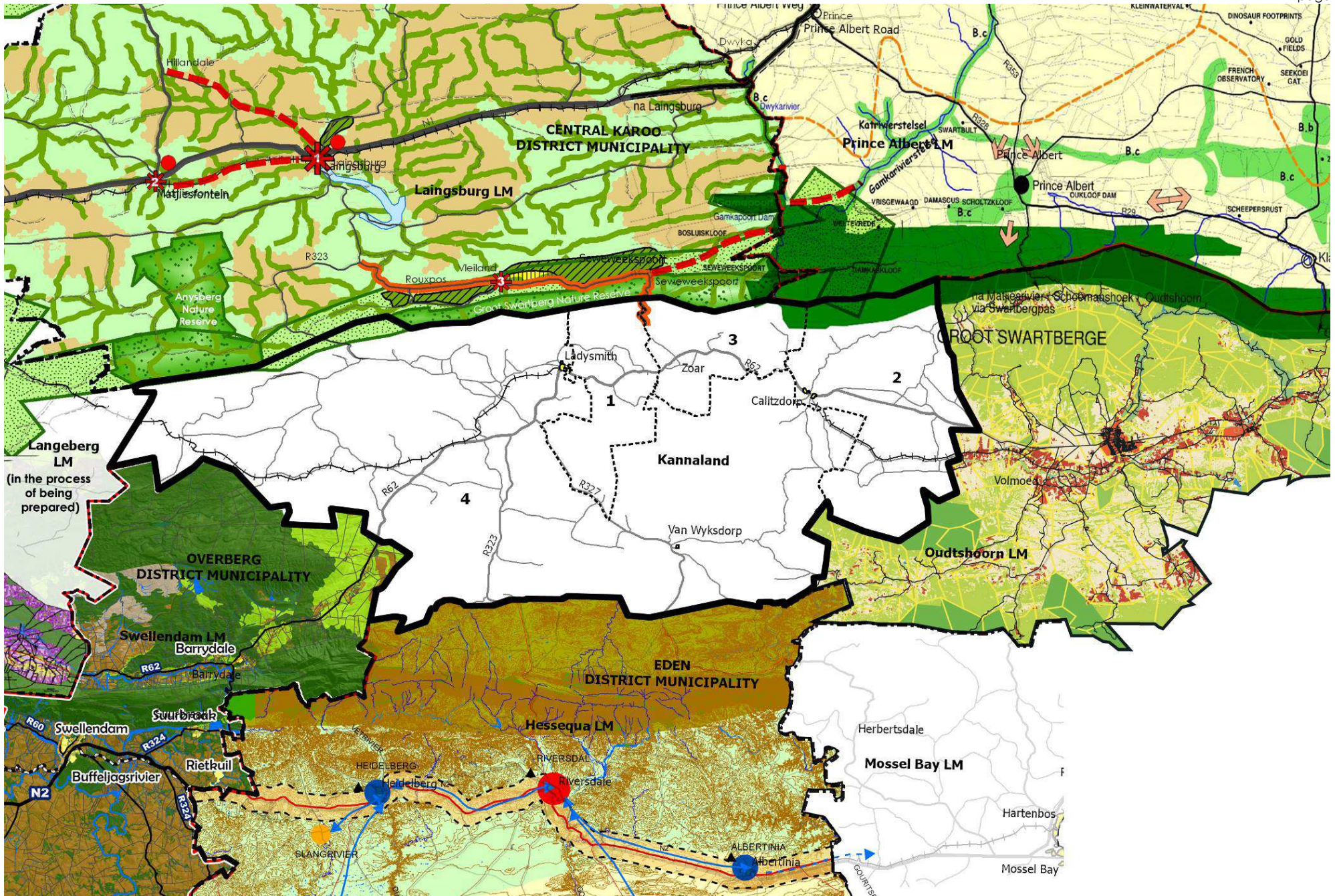


Figure 2.6.1 Kannaland Conceptual SDF showing alignment with surrounding SDFs







### 3. THE CURRENT STATE OF THE MUNICIPALITY

#### 3.1 A FRAMEWORK OF INTERRELATED SYSTEMS

There is always tension between the reality that life and all of its components function and are experienced as a single interrelated system, and the need to disaggregate these components for the purpose of research and teaching (hence the divisions at school into subjects and at university into faculties) and administration (compartmentalisation of government into departments and ministries). The last three to four decades have seen this tension emphasise separation to the extent that governments and educational institutions have become increasingly unable to address, cohesively, the various demands made of them.

However, an holistic approach can only be effective if it is carried as a golden thread through all the activities of government including background research, proposal formulation and implementation. This places a considerable challenge on the Breede Valley SDF to go beyond the traditional rational comprehensive approach to spatial planning in order to avoid compartmentalisation and to support the achievement of holistic governance. This is done in the Breede Valley SDF through the use of a "framework of interrelated systems", which recognises that activities in the Municipality occur as a multi-layered matrix in a single space - the geographical extent of the Municipality. Although there is clearly exchange outside the boundaries, e.g. imports and exports, fiscal transfers, energy transmission and cyclical and permanent migration, ultimately the Municipality depends on the resources within its boundaries.

Figure 3.1 illustrates this relationship by showing how the 26 layers of the matrix of the Municipality's analysis are all interrelated within the spatial extent of the Municipality, even though they may be separated for the purposes of research, implementation and management. At the macro level the layers can be grouped into three categories.

##### Bio-physical

Natural systems are the primary or foundational layer on which all of the others rest, acknowledging the natural capital base on which the other two set of layers must feed, in a sustainable way. Thus, geology, soils and climate form the basic geomorphological relationship which gives rise to

hydrological, topographical and biodiversity patterns. Agriculture and mining are included in this sub-set due to their close relationship with the natural environment.

##### Socio-economic

Previous research (Gasson, 1998) shows a primary correlation between population distribution and the underlying resource pattern of natural environmental distribution, rather than with the pattern of the built environment. The pattern of the built environment is a derived rather than primary relationship. It is nothing more than a reflection of how the relationship between population requirements and natural resources is resolved. Therefore, the next set of layers resting on top of the natural systems layers relates to socio-economic trends.

##### Built

The final set of layers deal with the built environment, and the analysis that follows will show that it is with these layers and the patterns they follow that most problems with resource sustainability occur.

Planning, heritage and environmental policy are seen as three golden threads that have a transverse relationship with all the layers of the framework.

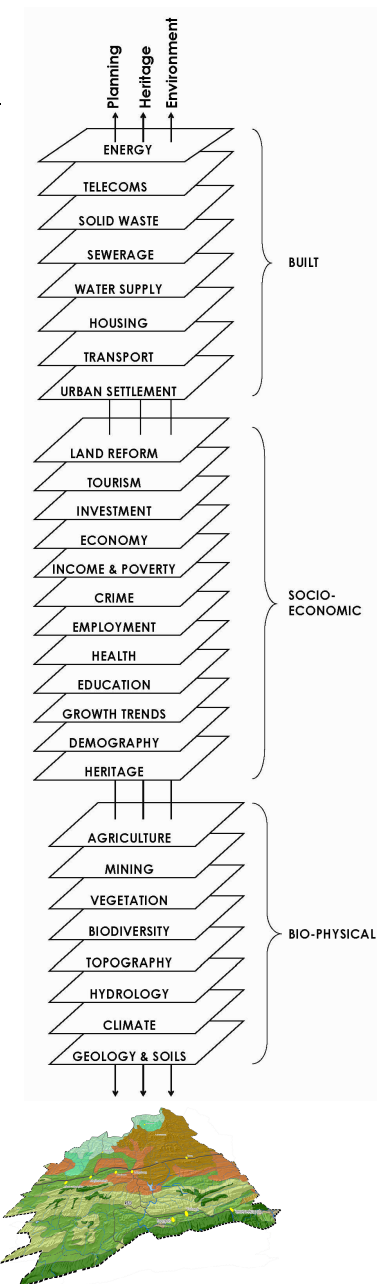


Figure 3.1.1 A Framework of Interrelated Systems

## 3.2 LAND

### 3.2.1 Geology and Soils

#### 3.2.1.1 Geology

Figure 3.2.1.1 indicates the general pattern of the geology and soils within Kannaland Municipality. The municipality comprises of four types of geological formations: Arenite, Conglomerate, Sedimentary and Shale deposits.

The majority of the municipality comprises of Arenite (located in the northern and eastern parts as well as isolated pockets in the west) and Shale (located in the southern parts).

Arenite is sedimentary rock with sand grains of a medium nature. It is usually formed by erosion of other rocks or by sand deposits.

Shale is formed through the composition of clay minerals and quartz grains and usually has a typically grey colour. Shale usually forms in very slow moving waters and are most commonly found in lakes, lagoons, river deltas and floodplains.

Conglomerate rock can be found in the vicinity of Calitzdorp. Conglomerate is a type of sedimentary rock but consist of round fragments (larger than sand) which are cemented together.

Isolated pockets of Sedimentary rocks are located in the western and eastern part of the municipality. Sediment consists of deposits of minerals and organic materials which are transported through wind, water mass movement or glaciers.

#### 3.2.1.2 Soils and Soils Depth

Figure 3.2.1.2 shows the various soil depths in the Kannaland Municipality. The central and western parts of the municipality have soil depths of less than 450mm. The areas in the vicinity of Ladismith, to the west of Ladismith and around Calitzdorp have soil depths ranging from between 450mm to 750mm. A small strip of deeper soils, more than 750mm in depth can be found south and south east of Calitzdorp.

#### 3.2.1.3 Percentage Clay

Figure 3.2.1.3 shows the percentage of clay in the soil throughout the municipal area. The majority of the municipality contains approximately 15% clay. Small dispersed areas south of Calitzdorp and along the western border have a clay content of 15% to 35%.

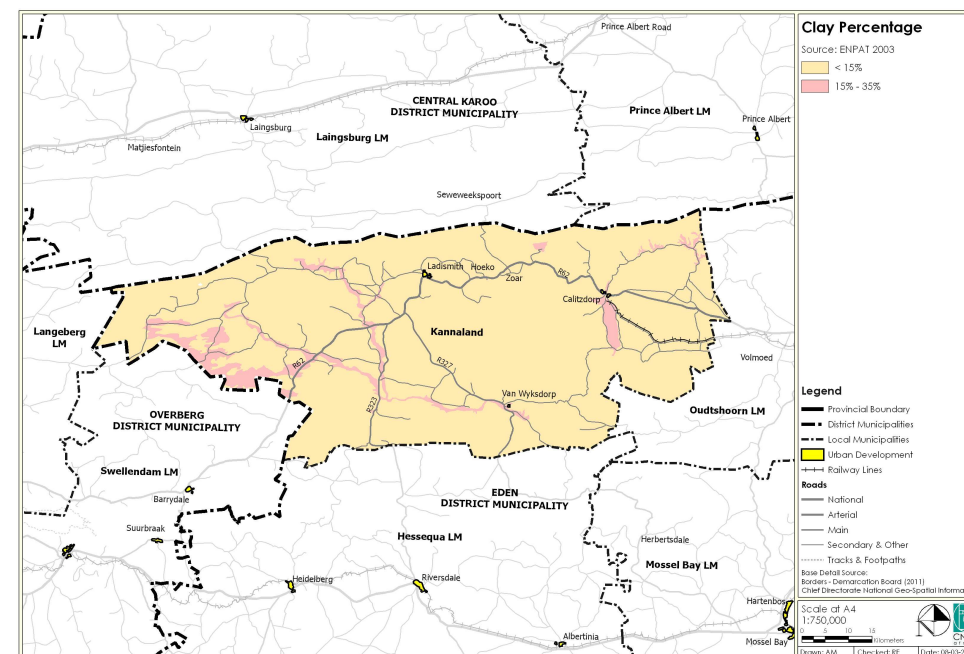
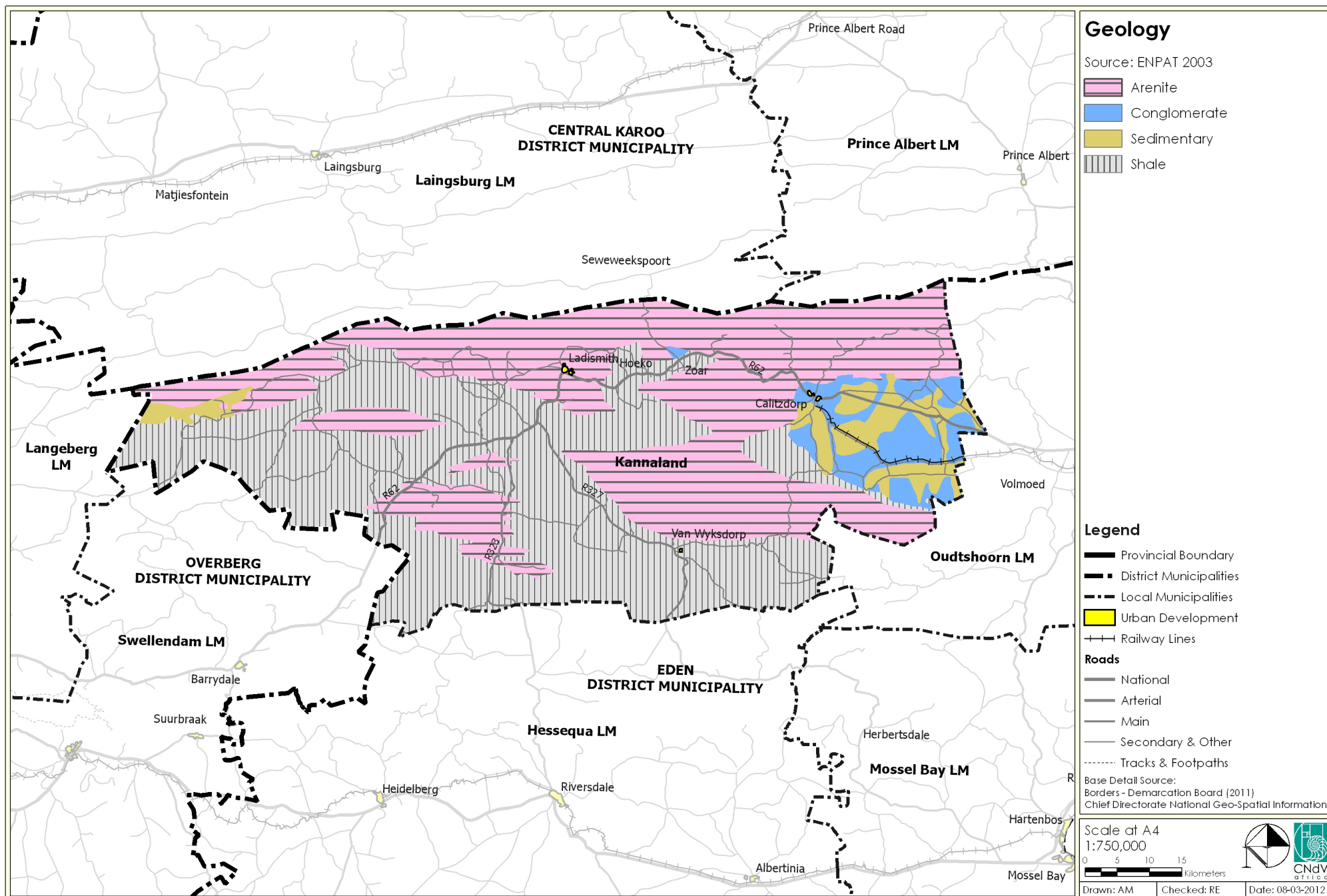


Figure 3.2.1.3 Clay Percentage

#### Implications for Kannaland Municipality

- The areas with higher clay content around Van Wyksdorp, Calitzdorp and along the western boundary of the municipality may need a geotechnical study if development is considered in these areas.
- Those areas with soil depths of more than 750mm located south and south east of Calitzdorp have the potential of being highly suitable for arable agriculture and should be treated accordingly.



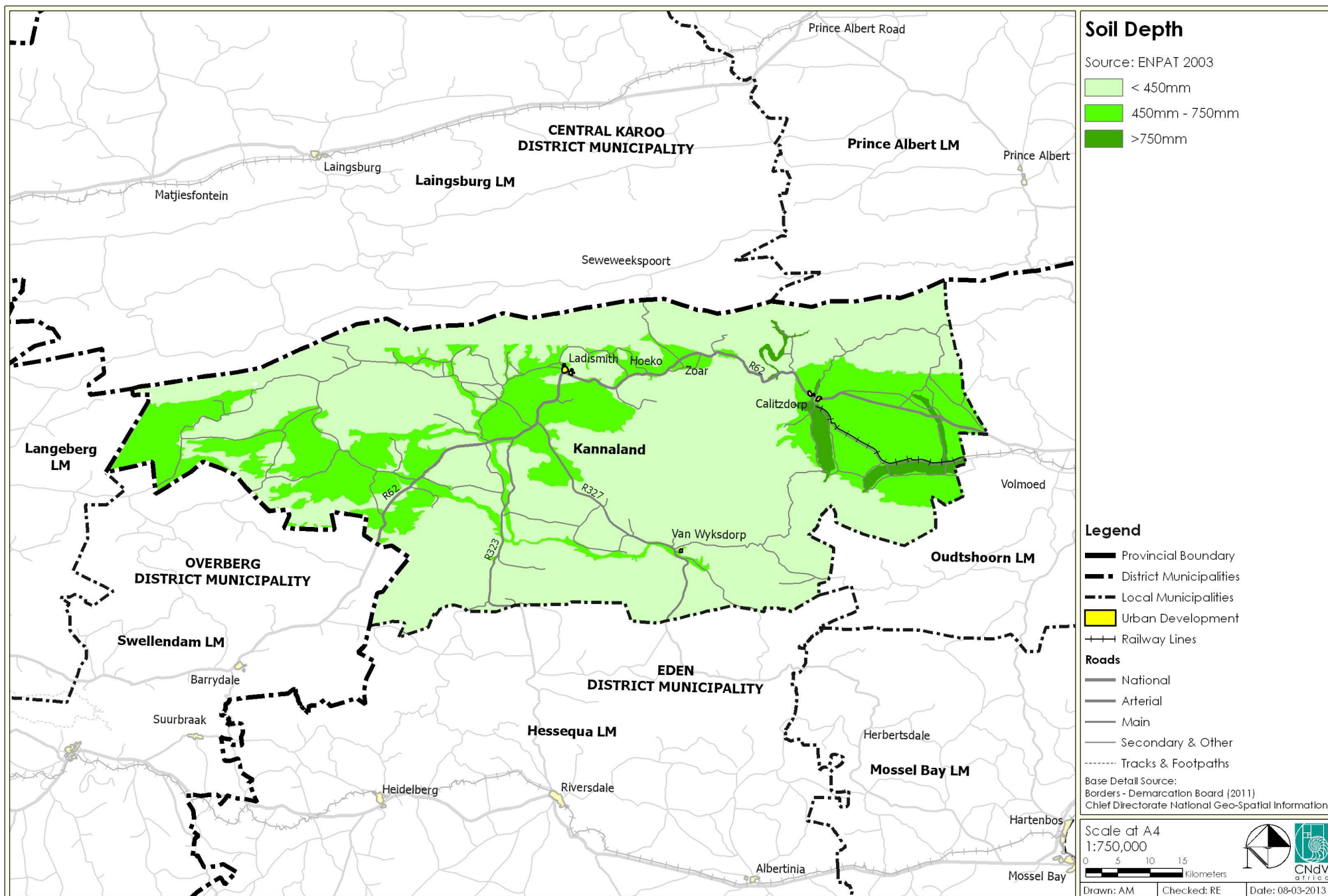


Figure 3.2.1.2 Soil Depth



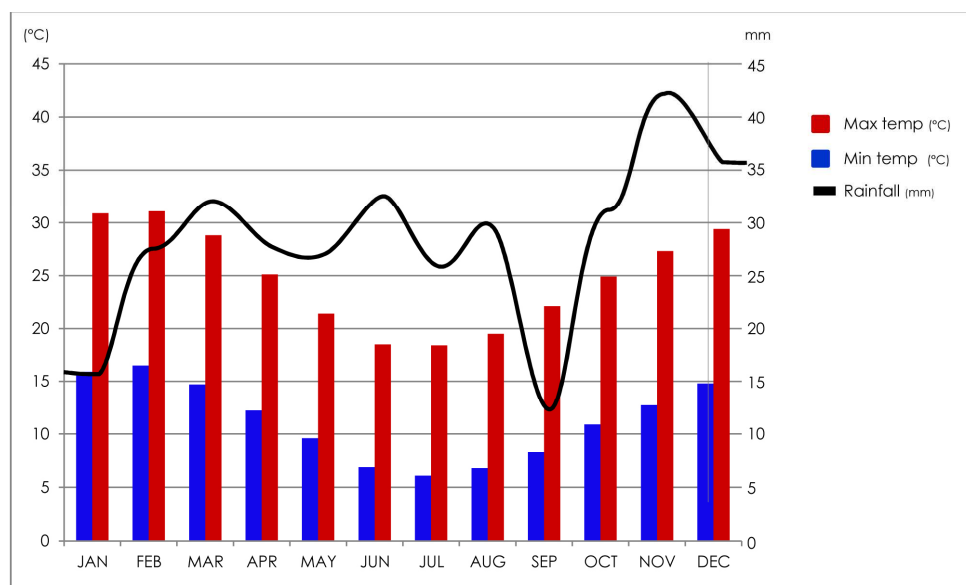


## 3.2.2 Climate

### 3.2.2.1 Temperature

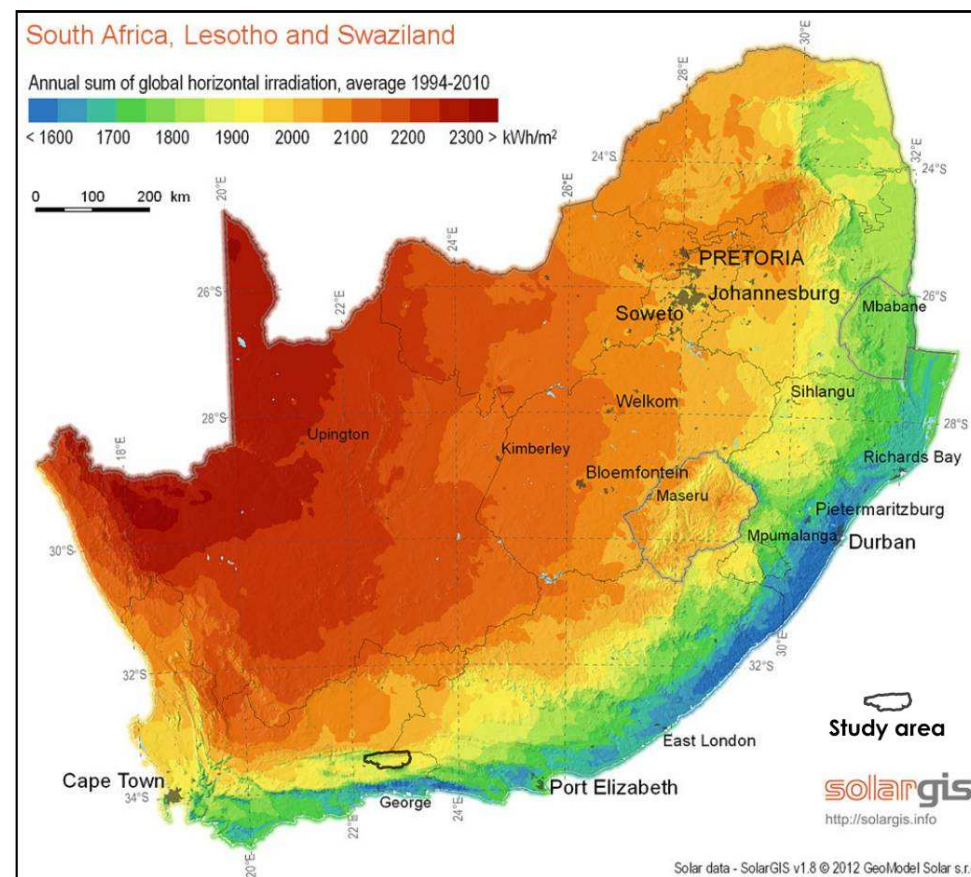
Figure 3.2.2.1a indicates the Mean Annual Temperature for the municipality. The figure shows that the majority of the municipality experiences temperatures of between 14 – 19 degrees.

Graph 3.2.2.1 indicates the mean annual temperature as well as the annual rainfall per month. The lowest temperatures are experienced during June, July and August with the highest temperatures occurring in December, January, February and March. Rainfall is the lowest in September and highest during November and December.

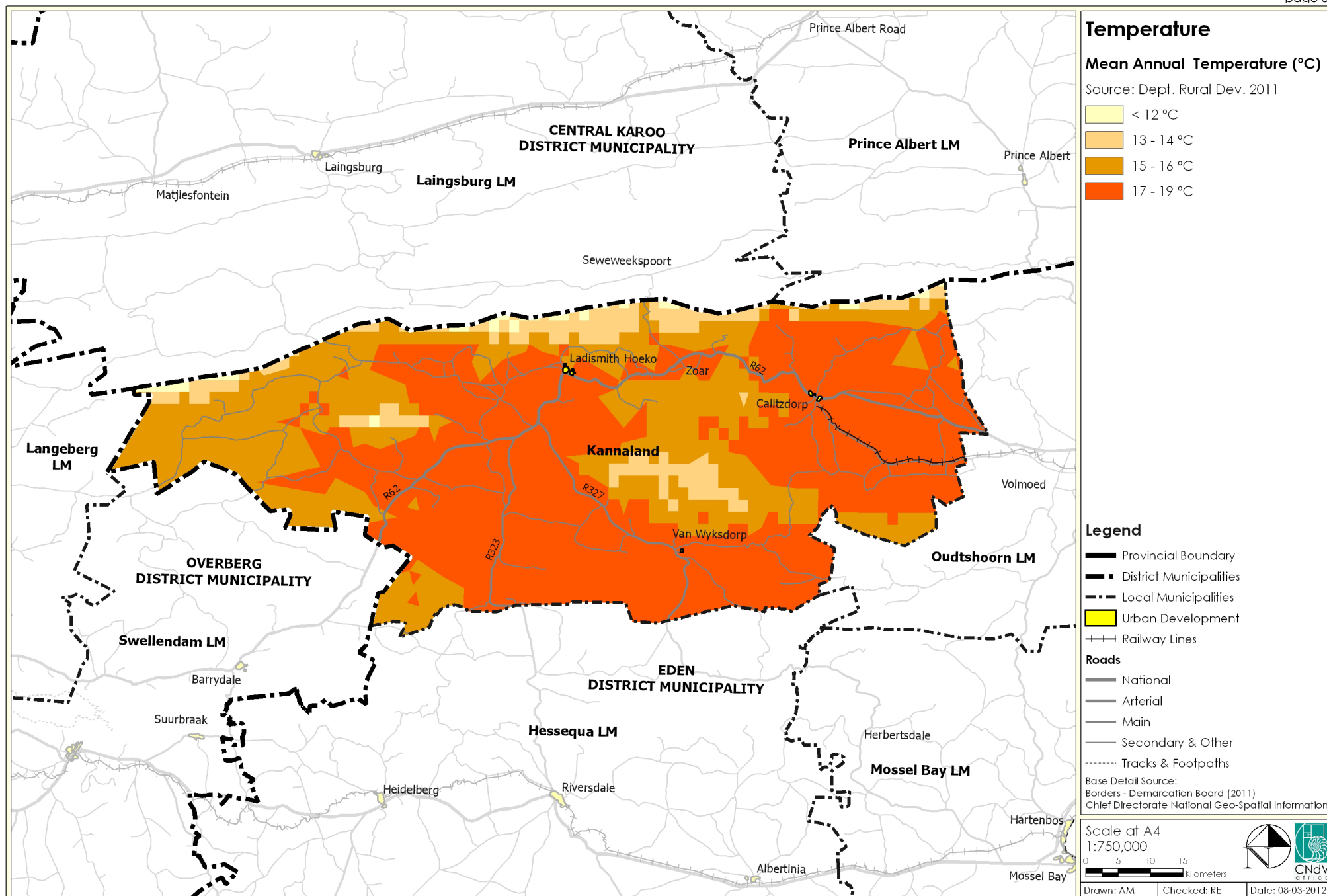


**Graph 3.2.2.1** Average Annual Temperature and Precipitation: Ladismith  
(source: Weather SA)

Figure 3.2.2.1b indicates the Annual sum of the global horizontal irradiation (1194 – 2010) for South Africa. The Kannaland Municipality falls in an area with intermediate levels estimated at between 1800 – 2000 kWh/m<sup>2</sup> (Solargis, 2012)



**Figure 3.2.2.1b** Solar radiation map for South Africa (source: Solargis, 2012)



### 3.2.2.2 Rainfall

Figure 3.2.2.2 shows the distribution of the mean annual rainfall throughout the municipality.

The figure shows that the northern areas and the area around Van Wyksdorp receive an amount of rainfall of between 400 – 600mm on average per year.

The areas in the vicinity south of Calitzdorp and south of Van Wyksdorp and receive an amount of rainfall of between 200 – 300mm on average per year.



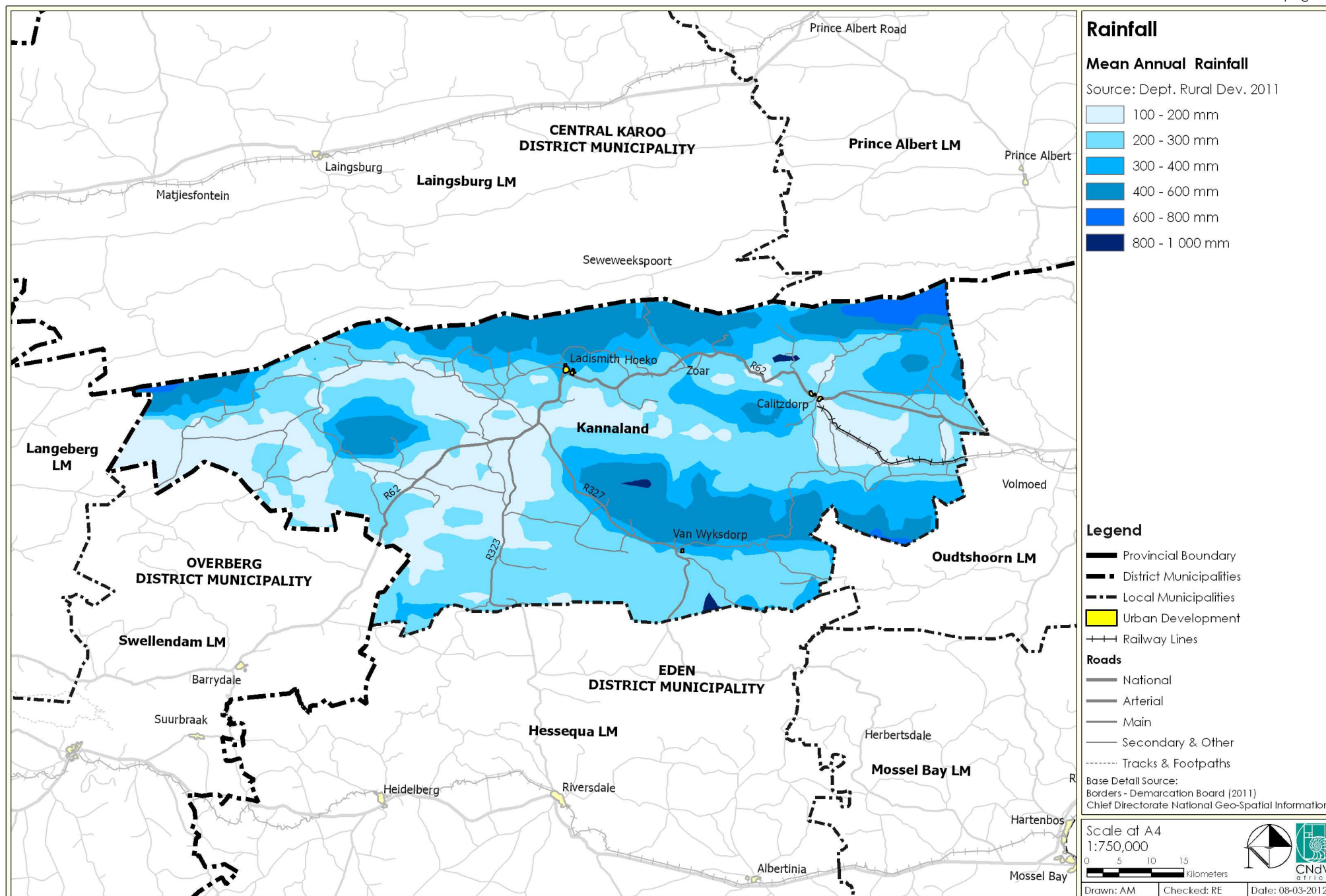
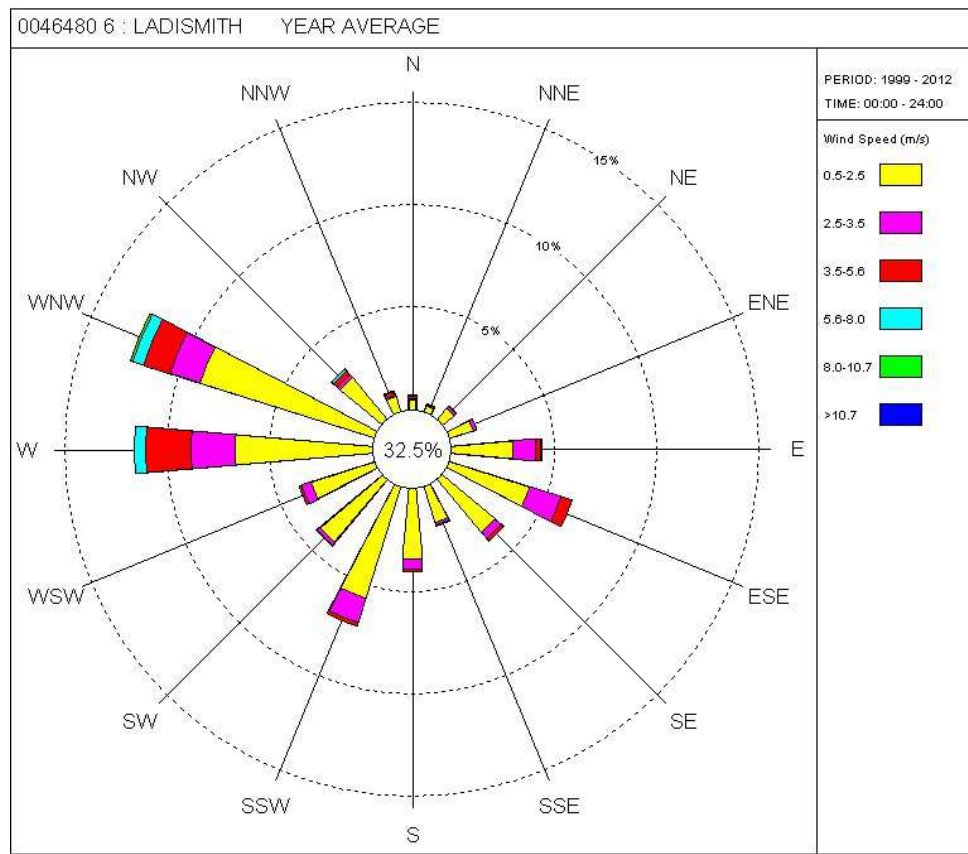


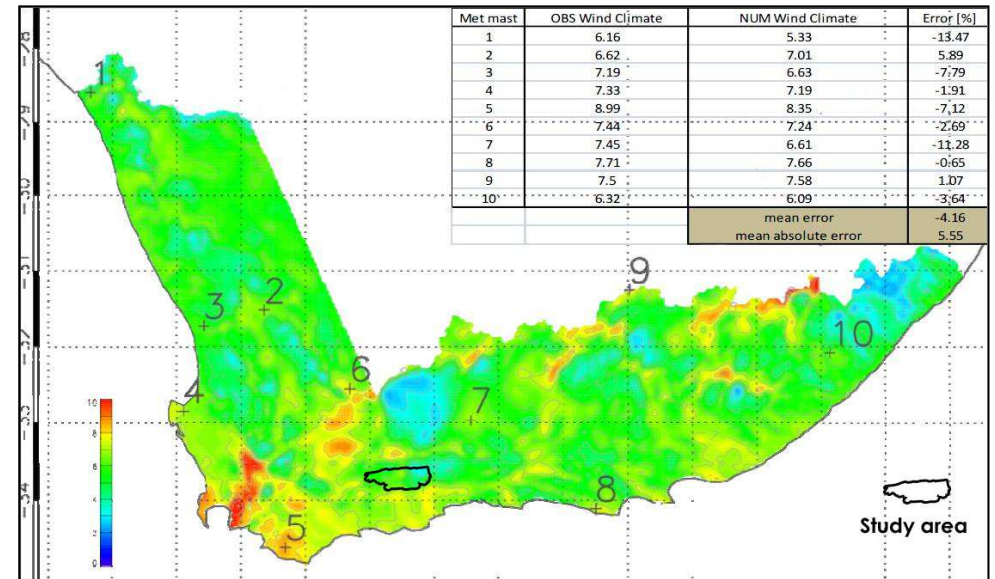
Figure 3.2.2.2 Climate: Rainfall

### 3.2.2.3 Wind



**Figure 3.2.2.3a Average Annual Wind Speed and Direction: Ladismith**  
(source: Weather SA)

Figure 3.2.2.3b indicates the estimated wind speeds for South Africa. The southern part of Kannaland Municipality is estimated to have a mean annual wind speed of 4 – 6m/s. This would give this section of the municipality some potential for providing wind generated energy.



**Figure 3.2.2.3b Estimated wind speeds for South Africa** (source: Wind Atlas for South Africa, 2012)

### 3.2.2.4 Wind and Solar Farm Siting Principles

CNdV africa prepared a Strategic Initiative to introduce Commercial Land based Wind Energy Development to the Western Cape in May 2006. The purpose of this study was to develop a regional methodology for wind energy site selection. The study provided a number of site factors for locating wind energy projects. Even though no specific reference was made to solar farm siting some of the factors could be applied to solar farms.

The report highlighted the following site factors as being important:

- **Slope**

Slope is a critical factor that influences numerous aspects of the design of wind farms. These include:

- Wind Potential – slopes up to a certain gradient that are orientated towards prevailing wind directions tend to augment average wind speeds
- Visibility – wind farms on slopes will have increased visibility

- iii. Road layout and design – slopes need to be considered in road layout to reduce the erosion potential of road run-off and rockfall and landslide potential
- iv. Tower foundation design – this needs to consider falls across the tower platform
- v. Revegetation – steep road verges and cuts will require revegetation to reduce sedimentation from run-off

### • Geology

Wind turbines impose large loads on tower foundations and hence highly stable underlying geology is essential. The existence of bedrock, subterranean voids and possible seismic activity needs to be investigated.

### • Soils

The erosion potential of wind farms sites is determined by the combination of soils and climatic factors. Soil types need to be considered as these influence road construction and re-vegetation.

### • Rainfall

Rainfall is a further factor that influences erosion and sedimentation that result in possible habitat and vegetation degradation. The rainfall of a specific site has a direct bearing on the road runoff, and runoff from steep slopes.

### • Surface Hydrology and Groundwater

The hydrology of specific sites is influenced by all the factors set out above. Hydrology must be dealt with in detail as it is a critical determinant of ecosystem health. The design of roads and the treatment of runoff from roads and disturbed surfaces must consider the reduction of sedimentation and elimination of erosion potential into any river, stream or wetland systems on the project site. Geohydrology (groundwater) is an aspect of the hydrology of a site. It influences foundation design and the retention of wetland integrity if any are associated with the site.

### • Vegetation

At the Regional Wind Plan level, sensitive vegetation types linked to valuable landscape types should ideally have been eliminated. However, at the site level, a detailed vegetation assessment should be carried out if the proposal is not in an agriculturally disturbed area (either crops or pasture land) to ensure that no rare species exist on the project site.

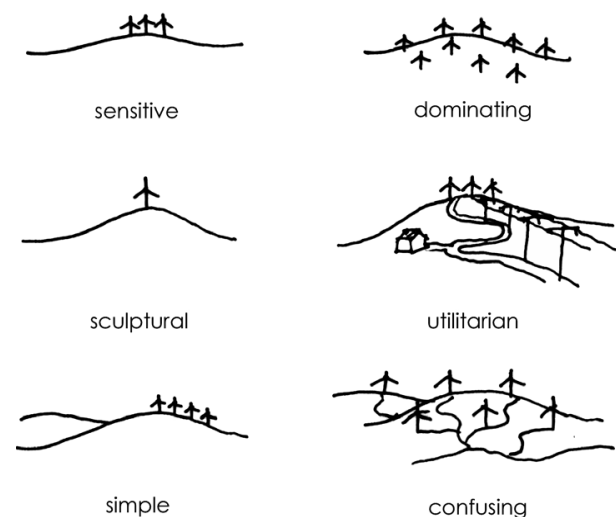
The vegetation assessment should include location and condition of:

- Extent of disturbed or alien vegetation
- Extent of any natural vegetation
- Indigenous and endemic species
- Rare and threatened species

### • Terrain Stability

Terrain stability is an important design determinant that is a function of slope, underlying geology, soil type and rainfall and usually requires specialist inputs. The design process typically has the following stages:

- i. Determination of rainfall data for the site (including extreme weather conditions)
- ii. Determination of slopes by gradient classes
- iii. Determination of natural watercourses
- iv. Determination of rocky areas
- v. Determination of soil type and permeability
- vi. Determination of areas of potential erosion
- vii. Determination of areas with high water table
- viii. Terrain stability directly influences the design of tower and transmission pylon foundations and the design of service roads. (see Figure 3.2.2.3c)



**Figure 3.2.2.3c Wind and Solar Farm Siting Principles** (source: Strategic Initiative to introduce Commercial Land based Wind Energy Development to the Western Cape, May 2006)

### **Implications for Kannaland Municipality**

- The area generally has a high average temperature. Therefore, the design of buildings needs to carefully consider insulation, orientation, materials and environmentally sensitive design linked to thermal characteristics and considerations.
- The Kannaland Municipality falls in a winter rainfall regime.
- Given the above, substantial efforts, should be made to implement rainwater harvesting not only in new development but also in existing buildings. This could help reduce water demand especially in the winter.

### **3.2.3 Climate change**

The vision for Sustainable Energy Use in the Western Cape is for the province to have a “secure supply of quality, reliable, clean and safe energy, which delivers social, economic and environmental benefits to the Province’s citizens, while also addressing the climate change challenges facing the region and the eradication of energy poverty” (White Paper for Sustainable Energy Use in the Western Cape, 2010).

The White Paper for Sustainable Energy Use in the Western Cape (2010) sets targets in respect of sustainable energy use for the province. It stipulates that 15% of electricity consumed in the Western Cape Province is to be sourced from renewable energy sources by 2014 – this has been measured against the 2006 Provincial consumption.

The policy framework recognises that in order to fulfill international commitments to sustainable development and climate change, the use of renewable energy as a source of electricity is to be promoted.

The Western Cape Climate Change Strategy (2008) identified a number of possible likely stress factors in the period 2030 – 2045 that could affect the province:

- An increase in the annual average temperature of at least 1 °C by 2050 (the Intergovernmental Panel on Climate Change (IPCC) Fourth

Assessment Report released in February this year shows an expected increase of between 3 and 5 °C by 2100);

- Possible increase in the frequency and intensity of extreme events;
- An increase in conditions conducive to wildfires (higher temperatures and increased wind velocity);
- Reduced rainfall in the western parts of the Western Cape;
- Decreased water resources;
- Reduced soil moisture from an increase in temperature coupled with a decrease in average precipitation;
- Temperature impacts on crop activities – crop burn, drought, pests and microbes resulting in yield reductions, and loss of rural livelihoods.

The goals and objectives of this strategy, with specific reference to energy is to reduce the Provincial carbon footprint by means of air quality management; household fuel replacement; cleaner fuels for transport; energy efficiency and renewable energy – maximizing benefits through stimulating and subsidizing innovation in clean and renewable technologies.

Four vulnerable systems were identified:

- Natural systems – water, biodiversity, and coastal and marine systems and resources
- Economic sectors – agriculture, tourism and fisheries
- Economic resources and infrastructure – energy, transport, health and air quality
- The built environment, livelihoods and disasters – social systems, extreme events (floods, fires).

As the rate of climate change accelerates it is expected that Breede Valley will experience an increase in temperatures and a reduction in rainfall. It is therefore important that the Municipality contributes to the efforts to reduce the emission of greenhouse gasses and thereby delay the impact of climate change. New urban development needs to be planned with this in mind. The changes in the climate along with aspects such as the prevailing wind direction requires that new buildings, be they for offices, commercial or especially residential use, be designed with a view to ameliorate these impacts.



Appropriate thermal treatment of buildings need to be applied to ensure they maximise the use of natural energy and minimise the use of electricity. Appropriate treatment could for example include:

- Insulating outer walls, ceilings and windows to prevent heat/cool air loss.
- Constructing buildings with lighter coloured reflective roofs to reduce heat absorption in summer which will reduce reliance on air-conditioning.
- Insulating geysers with thermal blankets; and
- Installing energy efficient lighting and appliances.

### Implications for Kannaland Municipality

- Building orientations, architecture and materials used must be sensitive to aspects (i.e. north facing, south facing, etc.) in order to reduce unnecessary energy consumption.
- Implement rainwater harvesting throughout the municipality especially in areas with lower average rainfall such as the eastern areas.
- Educate residents on water saving measures and waste reduction through a municipal wide climate change programme.
- Protect climate refuge areas for the colonisation of threatened species. Important areas in this regard are south facing slopes as per Figure 3.2.4.3.
- Water scarcity is a concern in the Kannaland Municipality. It s likely exacerbated by changing climatic conditions. This requires cautious planning, more so around new development that might increase the stress and withdrawals on current water supplies).
- Given the expected impact of climate change on water resources the following could be implemented:
  - artificial groundwater recharge and strict ground water management systems;
  - desalination of groundwater;
  - local water resource management and monitoring;
  - the use of grey water;
  - Tariff structures to reduce water consumption; and
  - Integrating the climate induced impact on water resources into IDP's.

### 3.2.4 Topography and Landscape Character, Slopes and Aspect

#### 3.2.4.1 Topography and Landscape Character

Figure 3.2.4.1 shows the topography of the Kannaland Municipality.

The topography of the municipality is characterised by the Kleinswart Mountains, Anys Mountains and the Grootswart Mountains along the northern boundary. The average height above mean sea level of these mountains is in the vicinity of 750m to 1500m.

There are three additional mountainous/higher lying areas in the municipality. These are: Touwsberg in the west, Rooiberg in the central parts and Bakenkop, south of Zoar.



**Photo 3.2.4.1a:** Dramatic topography along the Huisrivier Pass (R62) between Zoar and Calitzdorp.



**Photo 3.2.4.1b** The Kleinswart Mountains north of Ladismith



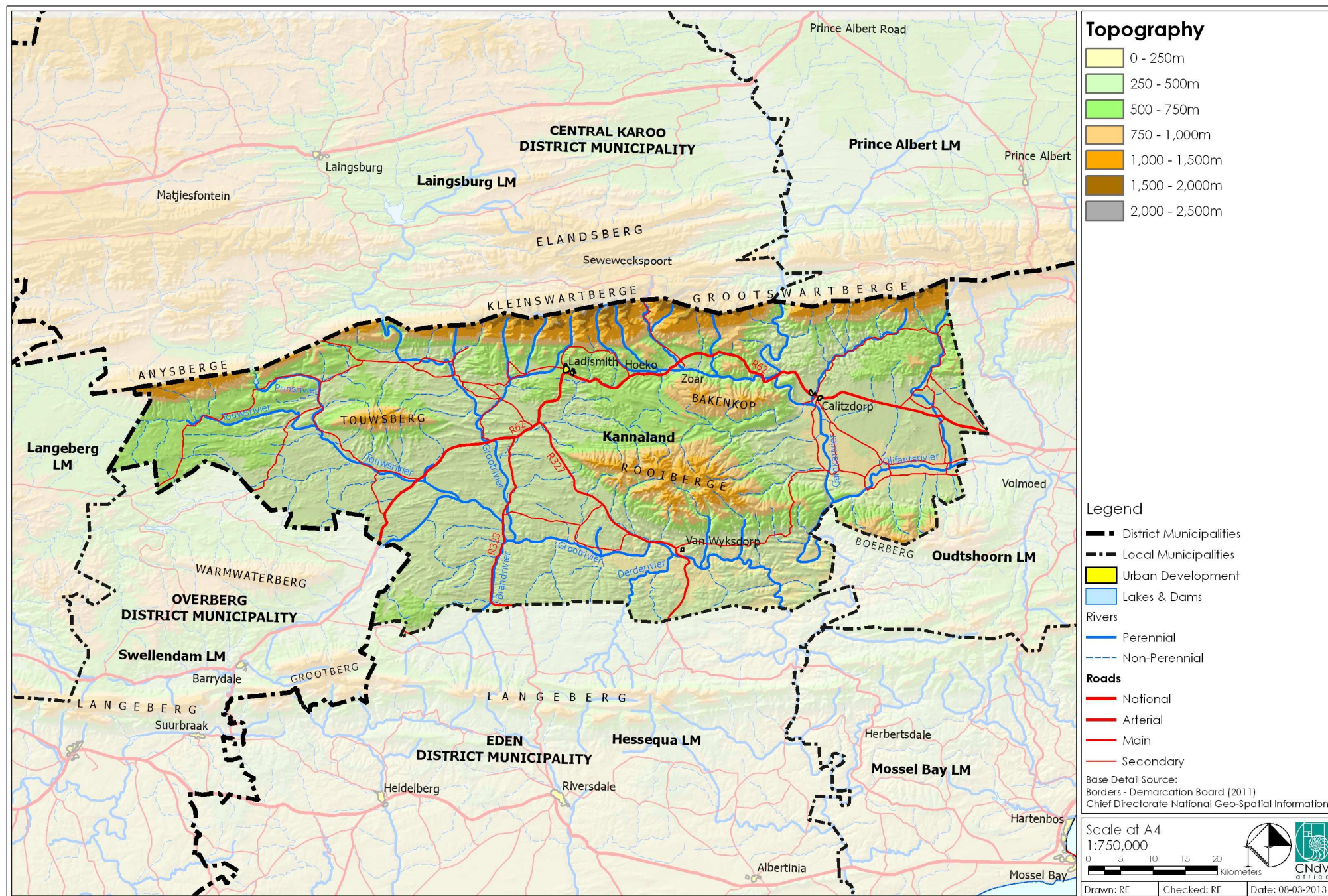


Figure 3.2.4.1 Topography



### 3.2.4.2 Slopes

Figure 3.2.4.2 shows that large parts of the municipality have slopes of more than 25% (1:4). These areas are mostly found along the mountainous/higher lying areas in the north and central parts of the municipality.

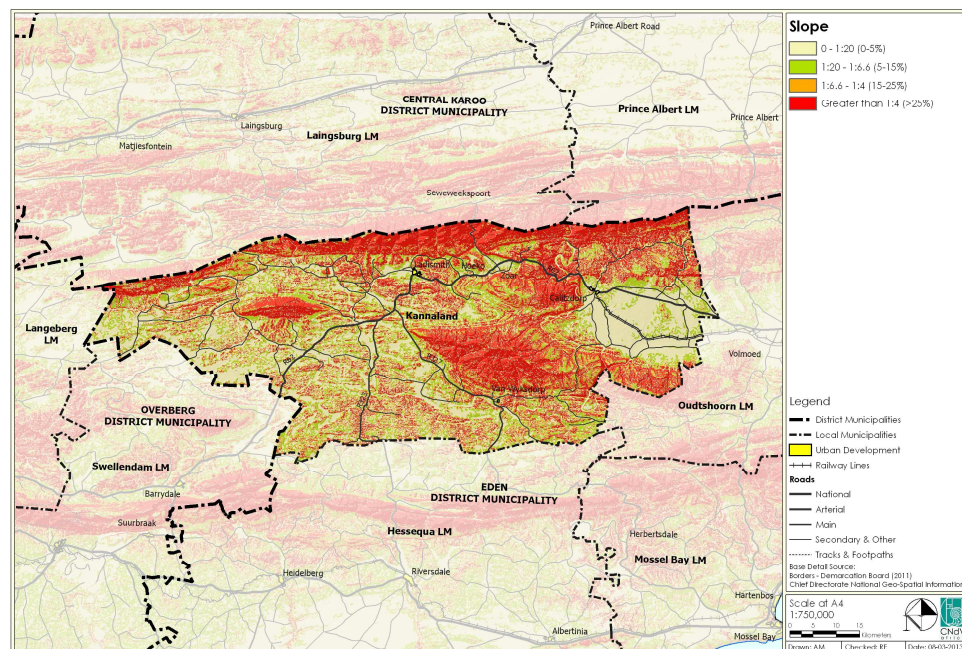


Figure 3.2.4.2 Slope

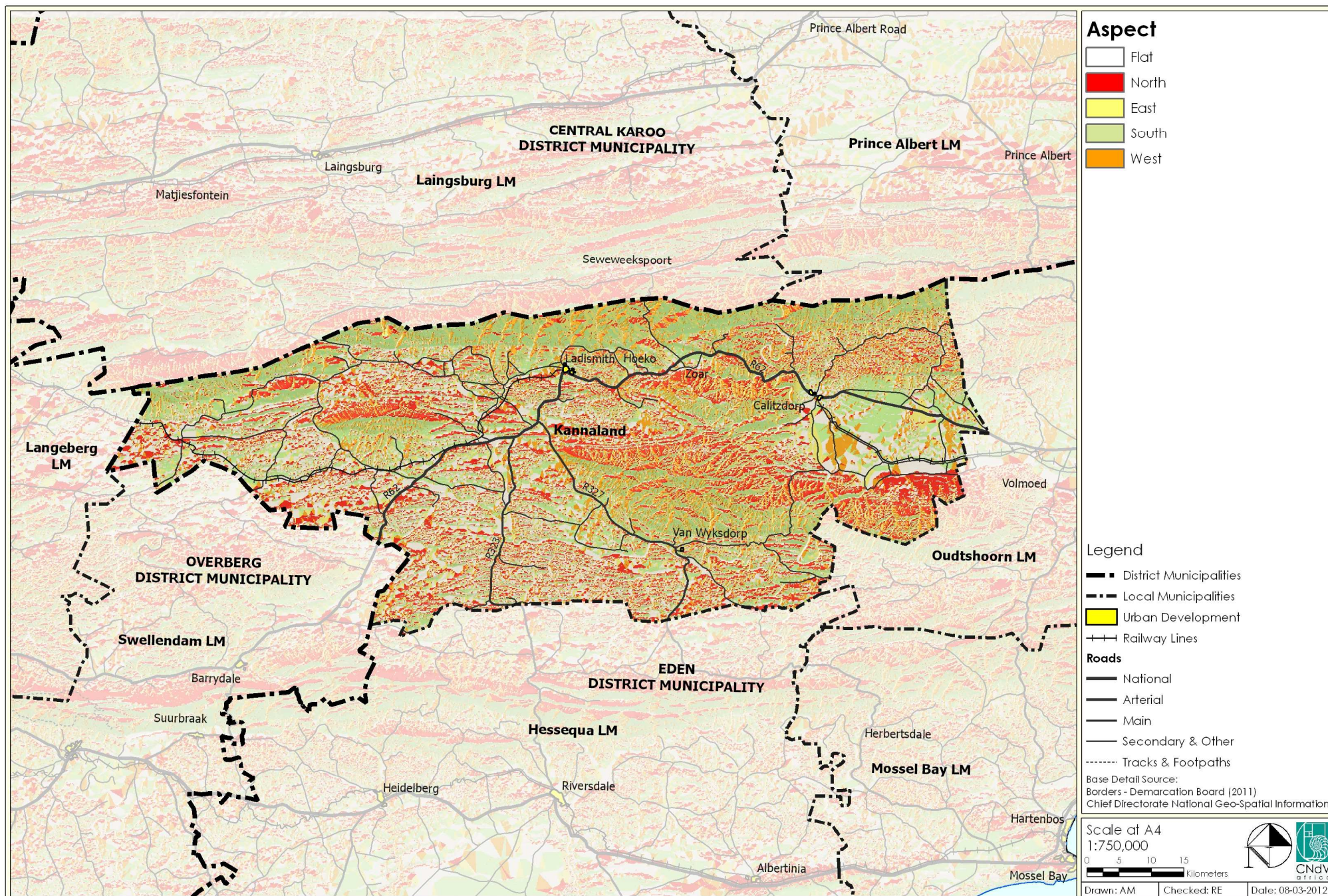
### 3.2.4.3 Aspect

Figure 3.2.4.3 shows the general aspects found within the municipality. In terms of aspect there are major variations in the aspects of the municipality. A large number of north facing slopes are however found throughout the municipality.

### Implications for Kannaland Municipality

- Given the steep slopes of some mountain ranges in the northern and central parts of the municipality settlement opportunities in the municipality should be diverted to the more level areas within the valleys, those areas with slopes of less than 1:4 as shown on Figure 3.2.4.2.
- Future urban development, particularly those for conventional Breaking New Ground, housing - subsidy/lower income housing, should preferably be located on north facing slopes. North facing slopes provide more exposure to sunlight as appose to south facing slopes, see Figure 3.2.4.3.
- It is also important from a visual impact, founding condition and building costs perspectives that no new developments be permitted on the steep slopes (>1:4) and on the ridges of mountains.
- Care should be taken to also reduce the potential negative impact of urban development along the scenic corridors. It will be important to determine the non-negotiable scenic routes or corridors.
- Ensure that changes in land use maintain the integrity, authenticity and accessibility of significant cultural landscapes (WCPSDF, 2009).
- Integrate development within the urban area to combat urban sprawl and reduce negative visual impact on the cultural landscape (SRK Consulting, 2011).







### 3.2.5 Water Resources (Hydrology)

#### 3.2.5.1 River networks

Figure 3.2.5.1 shows the distribution of the rivers and tributaries through the study area.

There are 8 major river systems that affect the Municipality (SANBI, Municipal Biodiversity Summary, 2012), the Brak, Gamka, Gourits, Groot, Kobus, Nels, Olifants and Touws Rivers.

Very few wetlands are located within the Municipality, measuring approximately 983.9ha.

#### 3.2.5.2 Water quality status of the rivers

SANBI (SANBI, 2007) defines rivers based on whether their natural conditions have been modified and their ability to contribute to the river ecosystem. Rivers that are classified Unmodified, Natural or Largely Natural with Few Modifications are considered intact and able to contribute towards river ecosystems. Previously these rivers would have been classified as Least Threatened. Modified Rivers would have been classified as Vulnerable and Largely Modified would have been Endangered. Rivers that are classified as Seriously Modified or Critically/ Extremely Modified would have been previously classified as Critically Endangered.

Figure 3.2.5.2 shows the SANBI river conservation status of the rivers in the Kannaland Local Municipality. In terms of the SANBI: National Freshwater Ecosystem Priority Areas (2007) the Groot, Olifants and Gamkwa Rivers are classified as Largely Modified.

#### Implications for Kannaland Municipality

- The SDF in the municipality needs to assist with the protection of the river systems and its immediately surrounding environment.
- The majority of the rivers in the municipality are in an acceptable state.
- The condition of the Groot, Olifants and Gamka should be improved and further degradation should be prevented.
- Appropriate policies should be formulated to achieve the above goal which specifically addresses urban and agricultural development.

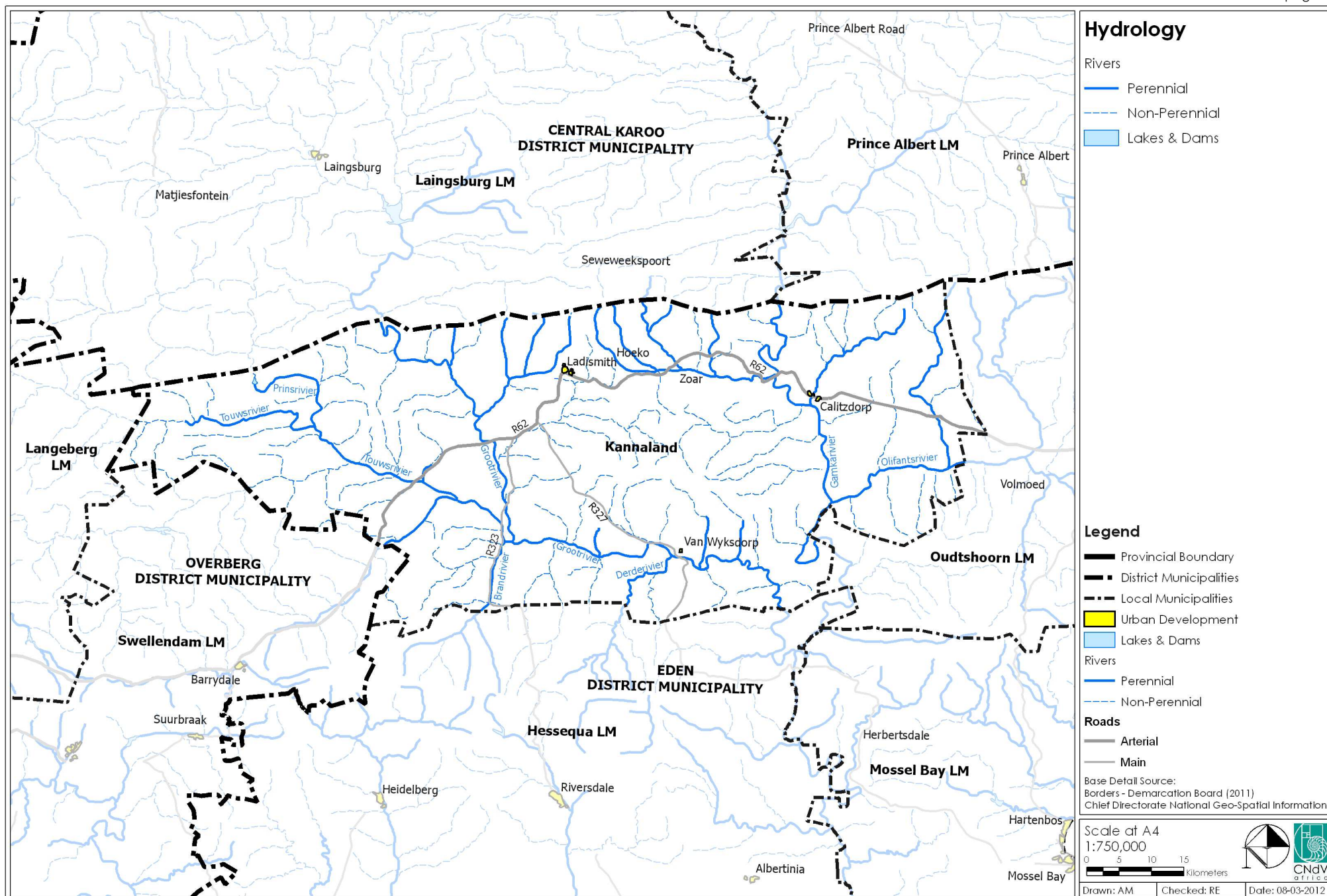
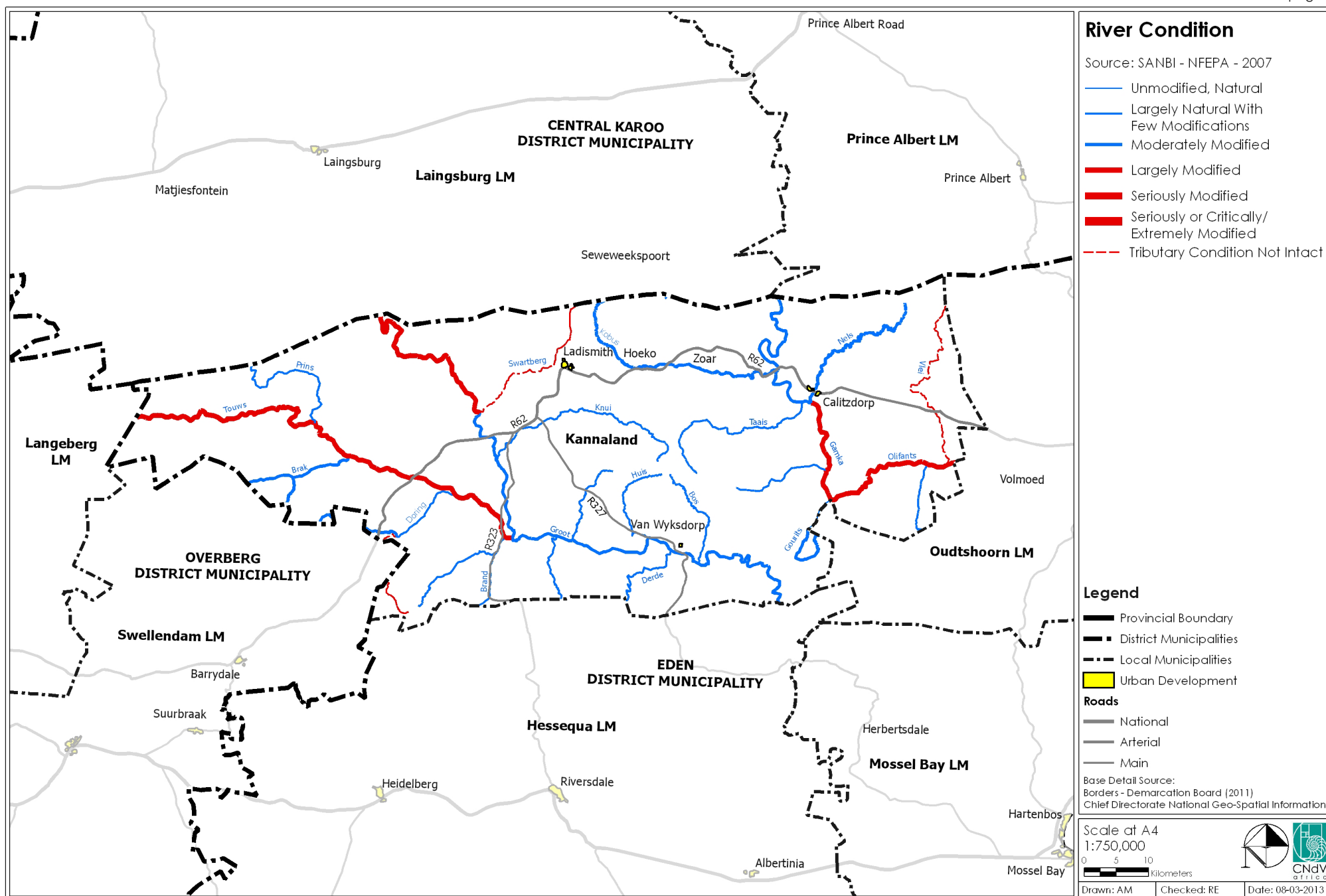


Figure 3.2.5.1 Hydrology: River Systems and Major Dams







### 3.2.6 Biodiversity

#### 3.2.6.1 Biomes

Figure 3.2.6.1 shows the different biomes that are present in the municipality. These biomes are in order of magnitude of land cover:

- Succulent Karoo Biome (53%);
- Fynbos Biome (35%);
- Albany Thick Biome (8%);
- Azonal Vegetation (3%).

Azonal vegetation is located along the rivers located throughout the municipality.

The Albany Thicket Biome can be found in the eastern parts of the Municipality, north and south of Calitzdorp.

The Fynbos Biome is located along the northern boundary of the Municipality.

The Succulent Karoo Biome is mainly found in the central and southern parts of the Municipality.

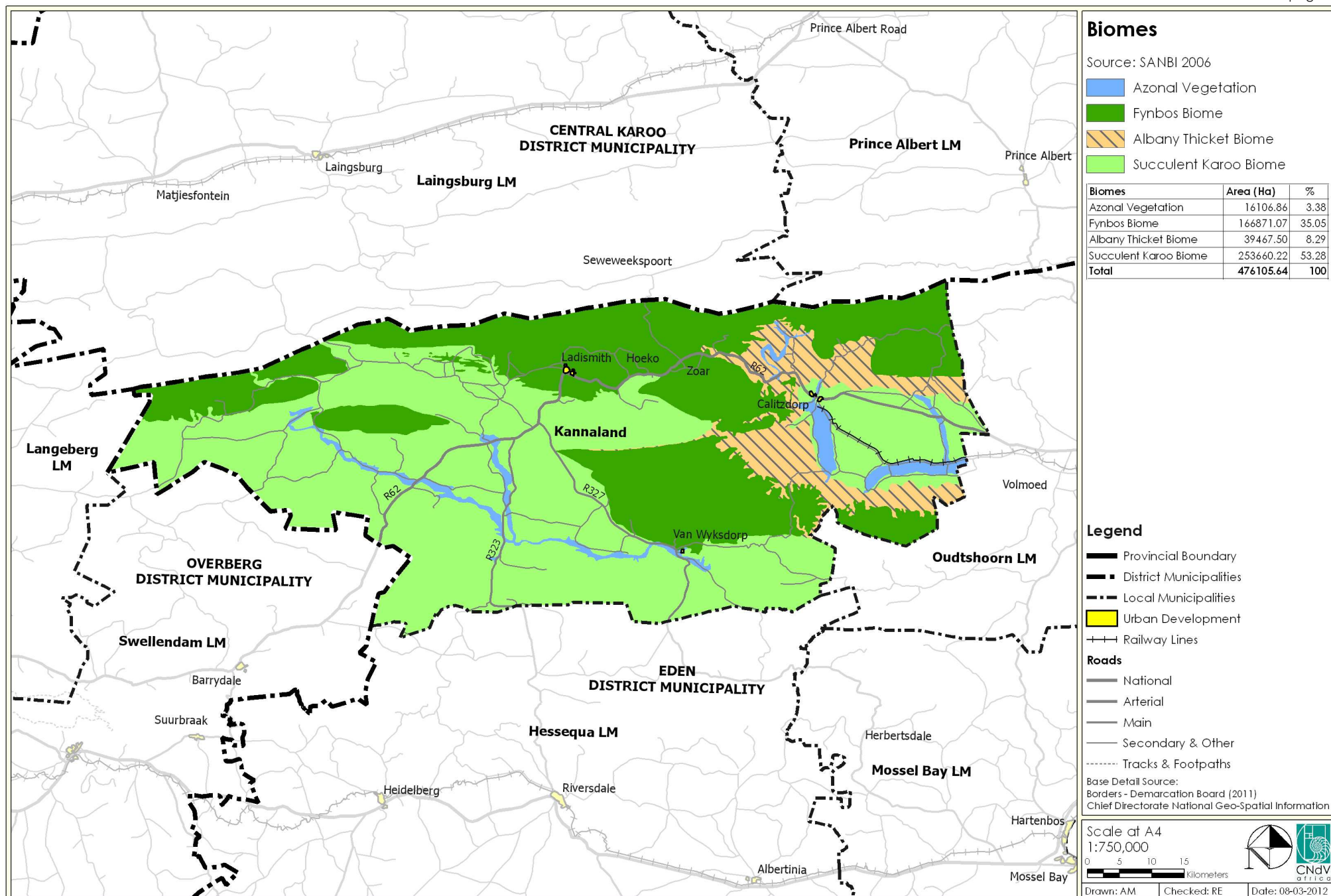


Figure 3.2.6.1 Vegetation: Biomes



### 3.2.6.2 Vegetation Types

Figure 3.2.6.2 shows the dominant vegetation types in the municipality:

- Rainshadow Valley Karoo (53%);
- Sandstone Fynbos (24%);
- Albany Thicket (8%);
- Shale Renosterveld (5.44%);
- Inland Saline Vegetation (3%);
- Limestone Renosterveld (2%);
- Quartzite Fynbos (0.8%);
- Shale Band Vegetation (0.71%);
- Shale Fynbos (0.57%).

The Inland Saline Vegetation is located along the rivers located throughout the municipality.

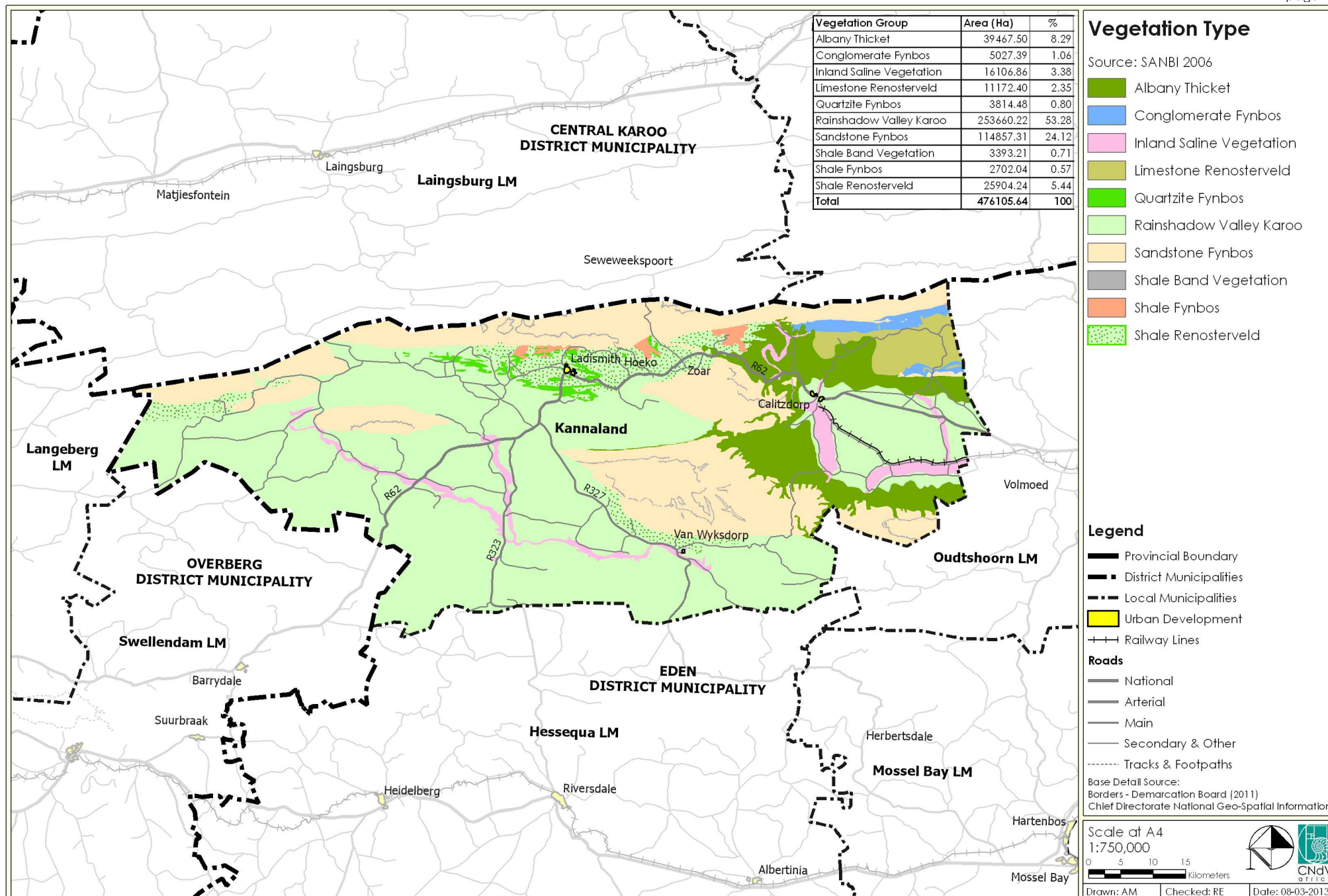


Figure 3.2.6.2 Vegetation Type

### 3.2.6.3 Vegetation status

Figure 3.2.6.3 presents the broad status of vegetation in the Municipality.

The majority of the municipality has been indicated as least threatened with the exception of the areas located along the rivers that are classified as Endangered (Inland Saline Vegetation).

No critical endangered areas are located within the municipality.

#### Implications for Kannaland Municipality

- Appropriate management of vegetation types in the municipality should be encouraged as a high priority.
- Agricultural activities should be managed to not negatively impact on natural vegetation.
- The inland saline vegetation along the Touws, Groot, Gamka and Olifants rivers has been classified as endangered.

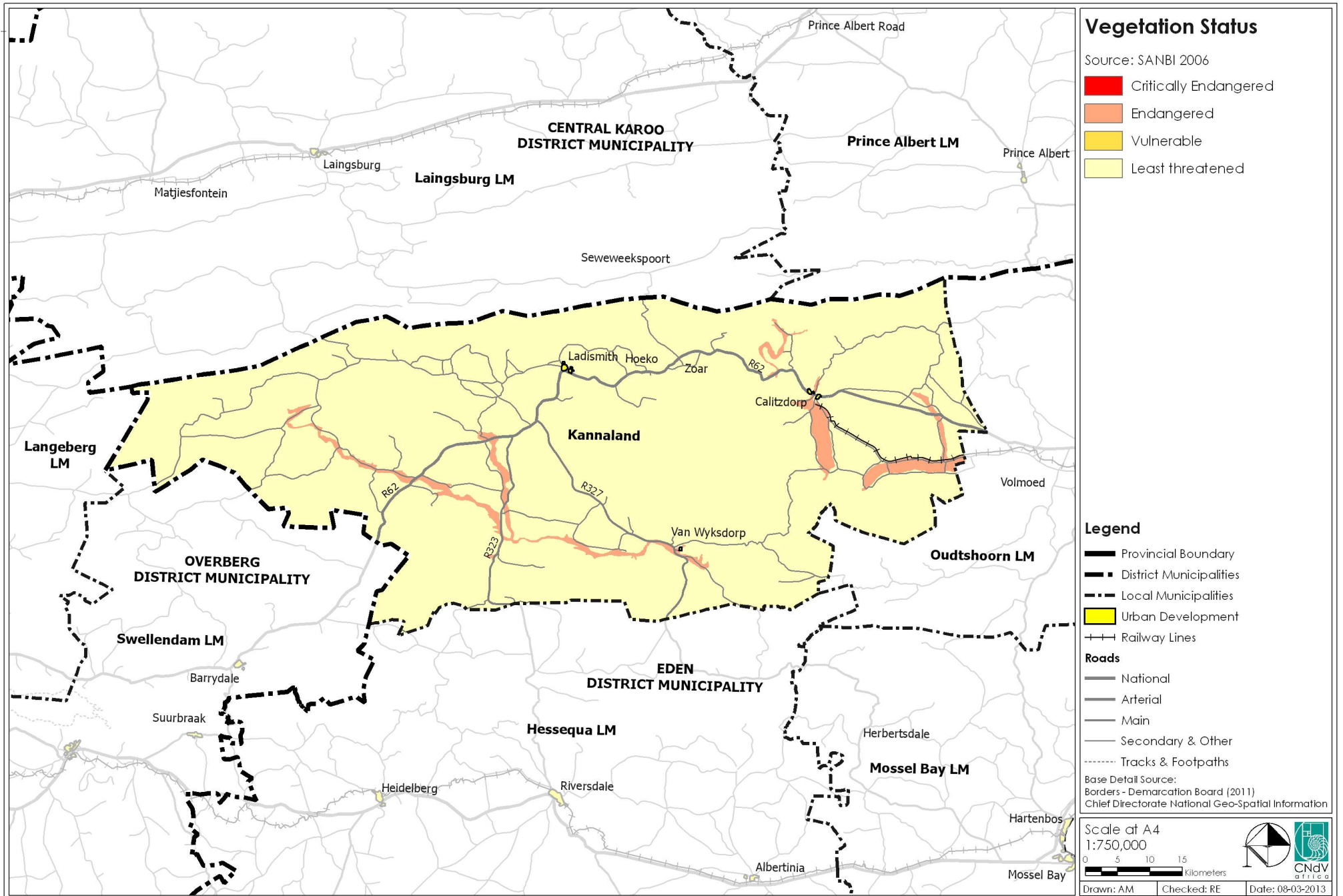


Figure 3.2.6.3 Vegetation Status

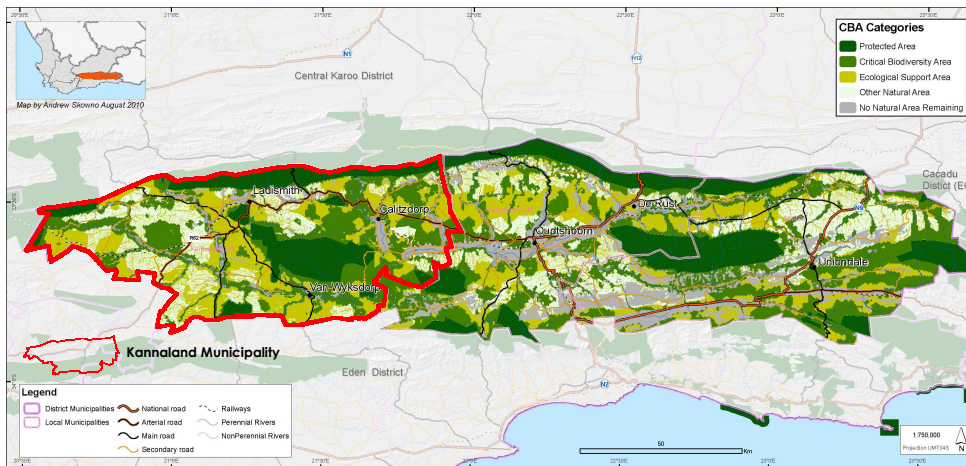


### 3.2.6.4 Critical biodiversity areas

Figure 3.2.6.4 shows the critical biodiversity areas in the Kannaland Municipality.

In terms of Critical Biodiversity, 30,34% of the municipality is regarded as important. A further 17,22% of the municipality is formally protected. A total area of 226313ha (47,56%) is thus important in terms of biodiversity conservation within the Kannaland Municipality.

Figure 3.2.6.5 indicates the critical biodiversity areas in the Eden District.



**Figure 3.2.6.5 Critical Biodiversity Areas: CBA Categories** (source: DEADP, 2010)

### Implications for Kannaland Municipality

- In general, urban development is not compatible with conserving Fynbos or any other fire-prone vegetation type. To minimise the impacts of urban development in Fynbos, houses should be clustered within a fire-free zone and protected with an appropriate fire belt. Firebreaks must be clear within the development footprint, not in adjacent veld.
- Development in close proximity or within Endangered plant species areas, inland saline vegetation, especially south of Calitzdorp, must be avoided and discouraged, see Figure 3.2.6.3.
- Strategies and management guidelines are to be developed as a priority to protect Critical Biodiversity Areas, see Figure 3.2.6.3, which receive no formal protection.
- For all types of development, footprints should be minimised. The focus should be on selecting alternatives that maximise the retention of indigenous habitats, species and ecological processes.
- Search and rescue is important for all development, especially when this may result in the irreversible loss of rare or threatened plant populations.
- If development is proposed in degraded examples of vegetation types, biodiversity offsets should be investigated where equal-sized or larger areas of the same vegetation type are secured for conservation by funding from the developers.

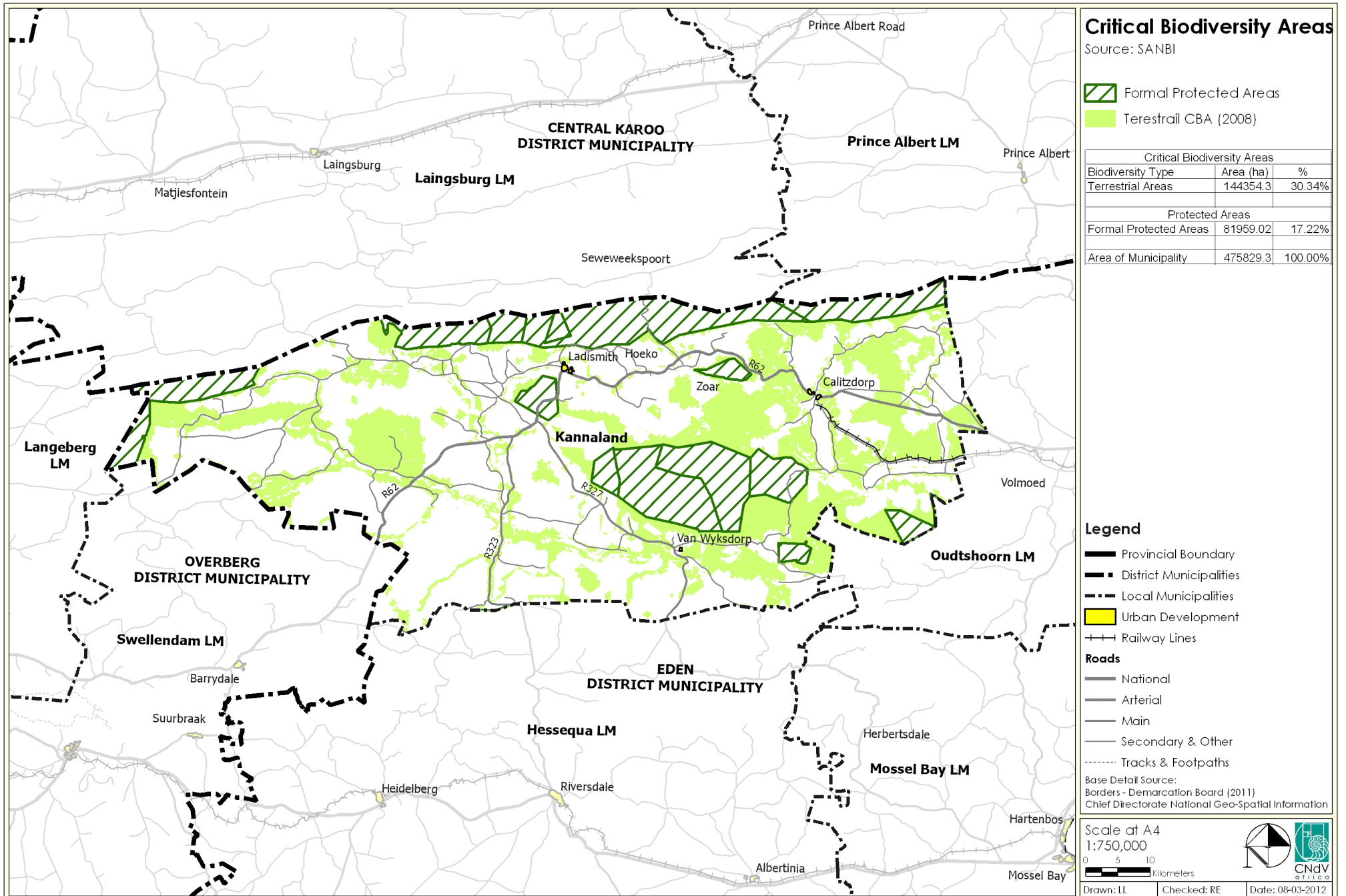


Figure 3.2.6.4 Critical Biodiversity Areas (SANBI, 2008)

### 3.2.7 Biodiversity Conservation

#### 3.2.7.1 Conservation

Figure 3.2.7.1 shows that 17.2% of the municipality is protected through mechanisms such as:

- Provincial Nature Reserves;
- Local Natures Reserves;
- Forest Act Protected Areas;
- Mountain Protected Areas;
- Informal Protected Areas.

Kannaland Municipality is home to the following parks and protected areas:

##### **Provincial:**

- Groenfontein Nature Reserve;
- Vaalhoek Nature Reserve;
- Gamka Nature Reserve;
- Anysberg Nature Reserve;
- Eyerpoort Nature Reserve.

##### **Local:**

- Ladismith-Kleinkaroo Nature Reserve.

##### **Forest Act Protected Area:**

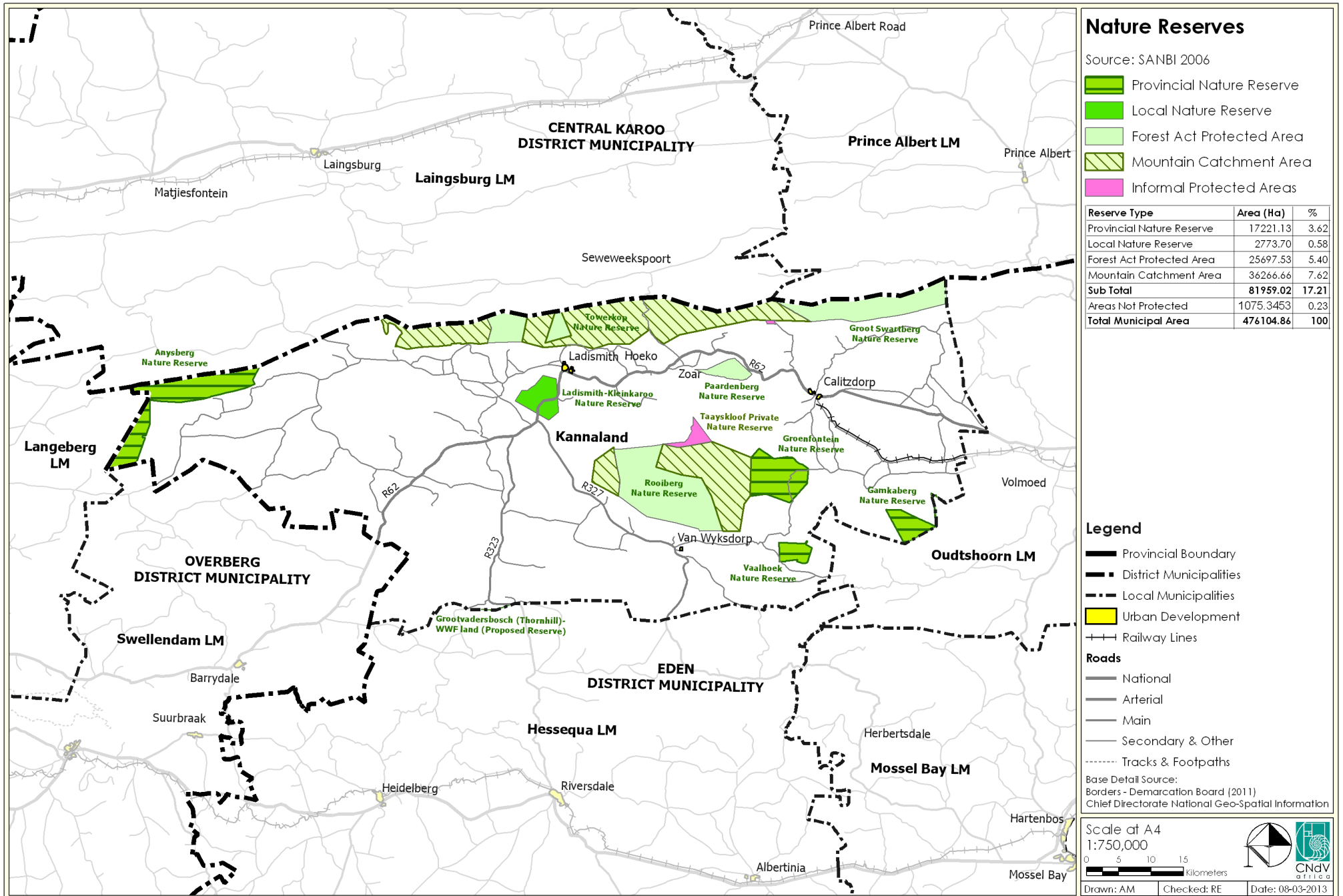
- Grootswartberg Nature Reserve;
- Rooiberg Nature Reserve;
- Towerkop Nature Reserve.

##### **Mountain Catchment Area:**

- Klein Swartberg;
- Rooiberg.

#### **Implications for Kannaland Municipality**

- Large areas of the Kannaland Municipality are formally protected.
- The SDF will need to include specific guidance on the management of these resources to ensure their longevity.





### 3.2.8 Agriculture

This section of the report focuses on the role of the agricultural sector in the economy of the Kannaland Municipality. It provides an overview of the trends in agriculture and establishes the economic value of agriculture in the municipality, particularly with regard to the pressure of an urban edge.

#### 3.2.8.1 Land Capability

Figure 3.2.8.1 shows the land capability based on the soil classification only (this does not consider water availability). This shows that soil suitable for arable agriculture are mostly located in the eastern areas of the municipality (coinciding with the Endangered Inland Saline vegetation, see Section 3.2.6.3). The largest majority of the municipality is suitable for grazing of livestock.

#### 3.2.8.2 Agricultural Land Use Pattern

Figure 3.2.8.2 shows the different types of agricultural/farming practices in the municipality. This map shows that there are very few areas of cultivated land (only 3.5% of the total area of the municipality). The majority of the municipality is covered in grass and shrub.

The nature of the agricultural activities in the Kannaland Municipality is directly derived from the type of soils in the area and the water availability, in essence the associate natural resource endowment. These two complement each other in such a way that a favourable production area is realised for different types of agricultural activities, such as planting of field crops, horticulture and livestock farming.

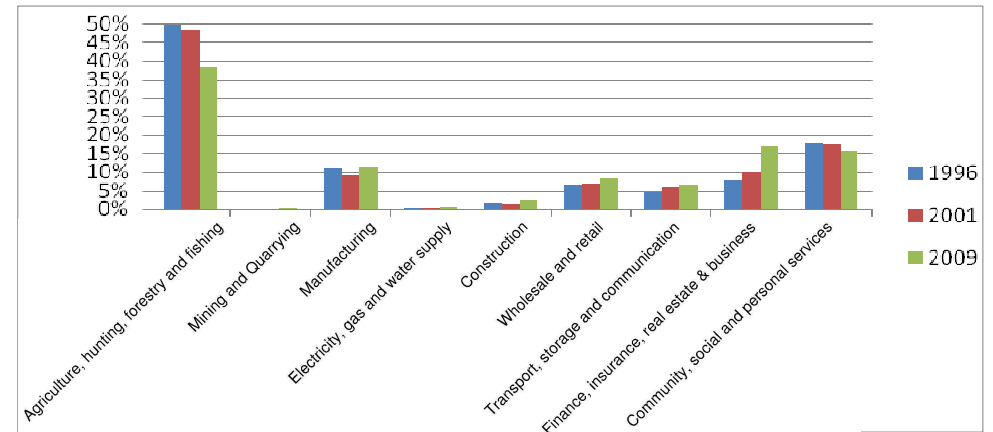
Water in the Kannaland area is one of the biggest contributors when it comes to sustainability of farming. Factors like annual rainfall, underground water, water channels and water tables are all contributing to this important resource and the use of it for production of crops.

The municipality is largely dependent on irrigation farming (76%) of total farming income. The total irrigation area comprises 7302 hectares which is managed by 10 irrigation schemes. The protection and effective management of water resources is thus of utmost importance for sustainability of agriculture which is the economic lifeblood of the district.

### 3.2.8.3 Agriculture's Contribution to GVA

Eden District contributes 14.92% to Provincial total and 3.41% to National total GVA for the "Agriculture, hunting, forestry and fishing"-sector. Kannaland local municipal area's contribution is respectively 2.07% and 0.50% to Provincial and National for the said sector.

Graph 3.2.8.3 indicates the sectors contributing to the GVA of the Kannaland Municipality.



Graph 3.2.8.3 GVA composition for Kannaland Municipality (source: OABS, 2013)

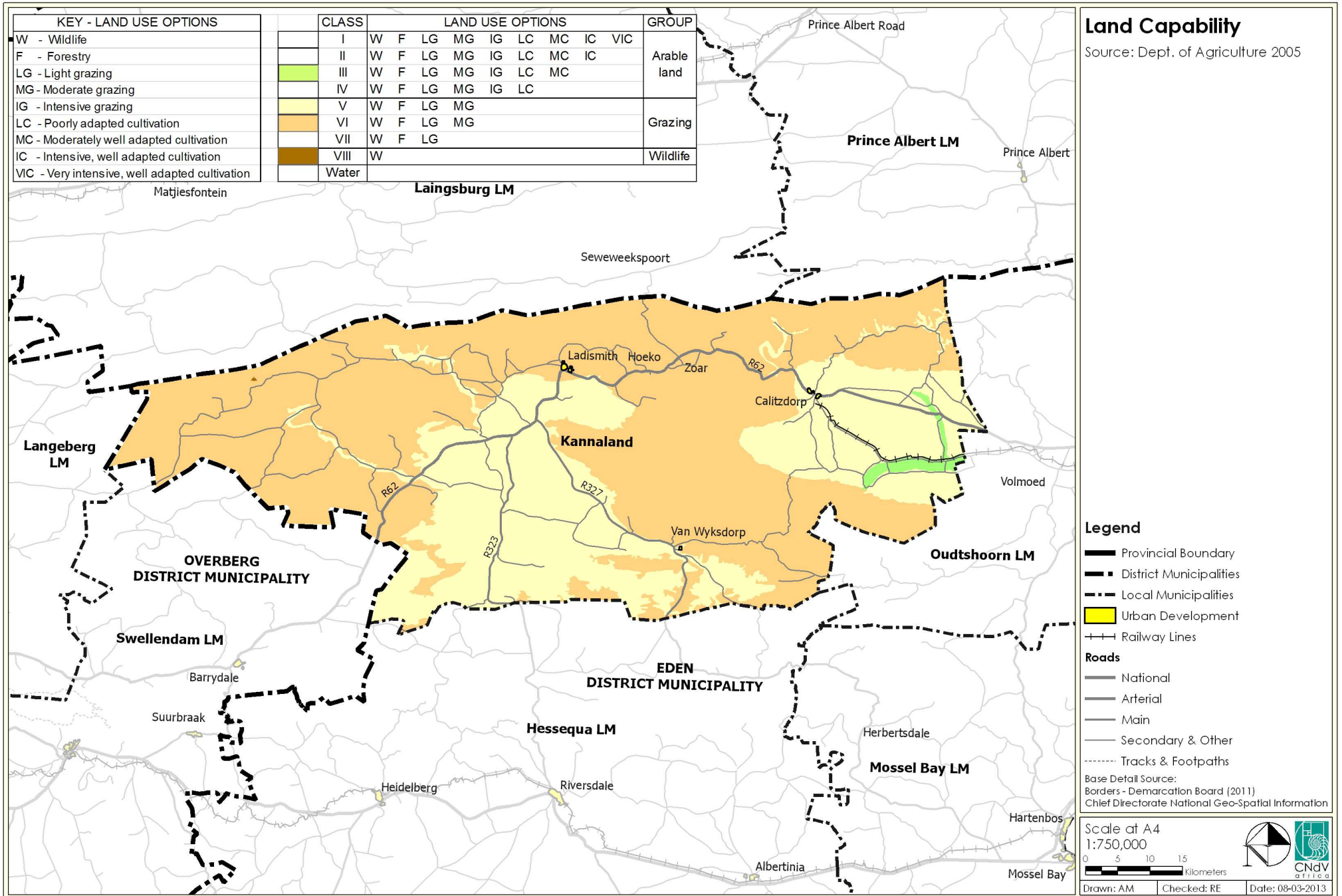


Figure 3.2.8.1 Land Capability

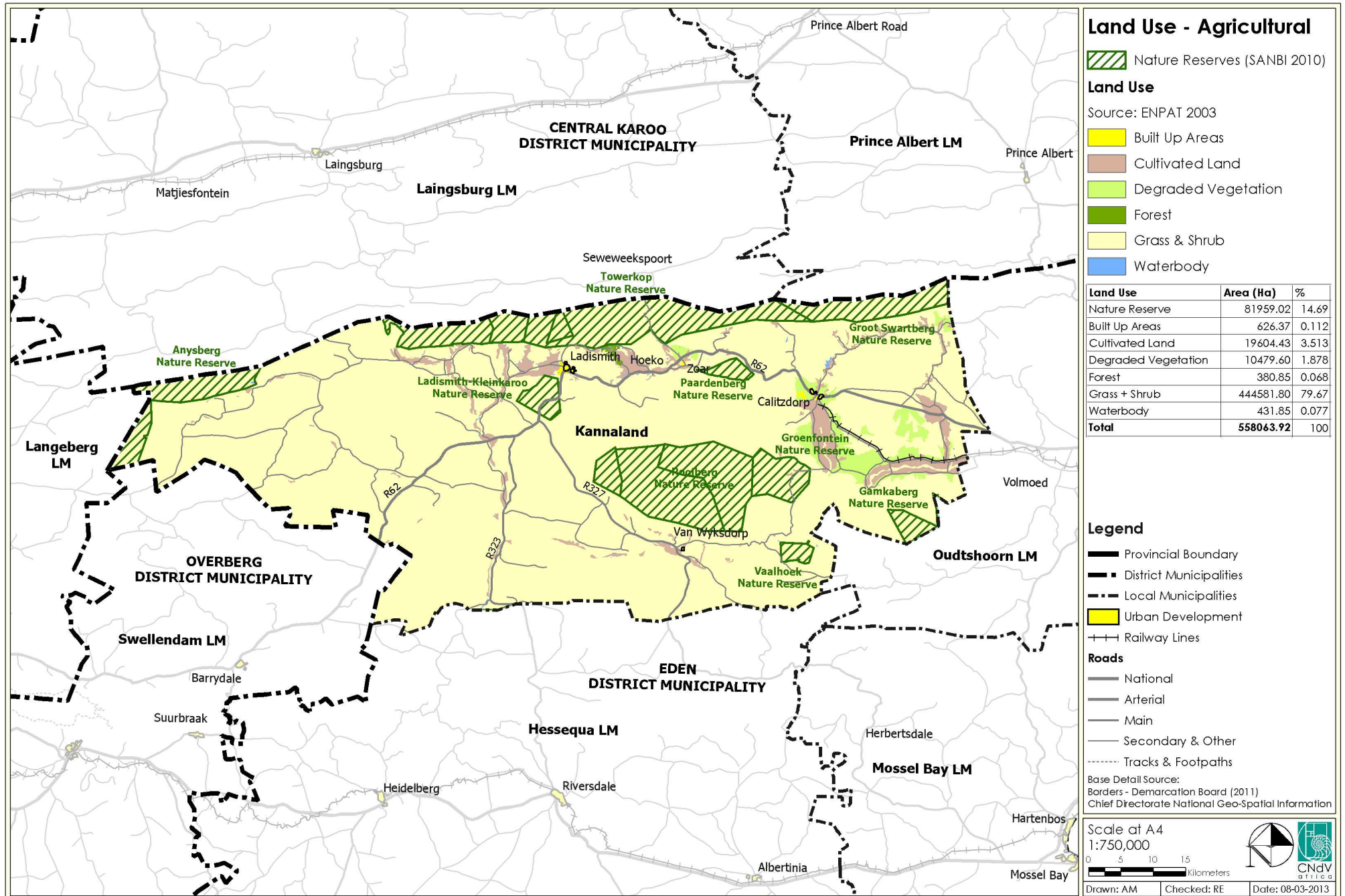


Figure 3.2.8.2 Agricultural Land Use



### 3.2.8.4 Types of Agricultural Businesses

Kannaland region has a number of agricultural businesses (input suppliers, cooperative, etc.) and related service providers and businesses directly or indirectly reliant on primary agriculture (farms) for survival. Agriculture has a huge snowball effect due to horizontal- en vertical linkages. Most of the other small businesses in town are reliant on agriculture and agri-tourism which lures visitors to the region.

The following is a list of the most significant agri-businesses operating in the Kannaland Municipality:

- Klein Karoo Kooperasie
- Klein Karoo Landmark
- Ladismith Landbou Kooperasie
- Meadow Feeds
- Parmalat
- Klein Karoo Veilings
- Ladismith Kaas Maatskappy
- Andrag Agrico
- Tiger brands
- VINPRO

The major wine cellars are:

- Ladismith Cellars
- Boplaas
- Calitzdorp Wine Cellar
- De Krans

### 3.2.8.5 Enterprise Contribution to Agricultural Production

Table 3.2.8.5a reflects the contributions of enterprises towards agricultural production income. Total agricultural production income amounts to R592-million with a gross margin of R186-million for the Kannaland municipal district. From this table it is clear that long term crops (irrigation) generate the highest income (R138,417,270) of which wine grapes is the largest enterprise (R137,289,600).

LONGTERM CROPS (IRRIGATION)	%	Hectares	Yield /ha	Unit	Price/unit [R]	GVA/ha [R]	GM %	GM/ha [R]	PI District [R]	GM District [R]
Wine grapes	38%	2 724	28	tonne	1 800	50 400	40%	20 160	137 289 600	54 915 840
Table grapes	7%	500	20	tonne	2 500	50 000	40%	20 000	25 000 000	10 000 000
Appelkoos / Apricot	9%	614	20	tonne	8 000	160 000	20%	32 000	98 240 000	19 648 000
Peaches & Nectarines	4%	300	25	tonne	8 000	200 000	18%	36 000	60 000 000	10 800 000
Peer / Pear	1%	38	31	tonne	5 500	170 500	17%	28 985	6 479 000	1 101 430
Plums	4%	288	25	tonne	7 000	175 000	20%	35 000	50 400 000	10 080 000
Lucerne	37%	2 656	20	tonne	1 200	24 000	50%	12 000	63 744 000	31 872 000
<b>TOTAL</b>	<b>100%</b>	<b>7 120</b>							<b>441 152 600</b>	<b>138 417 270</b>
CASH CROPS - (IRRIGATION)	%	Hectares	Yield /ha	Unit	Price/unit [R]	GVA/ha [R]	GM %	GM/ha [R]	PI District [R]	GM District [R]
Potatoes	11%	20	40	tonne	3 000	120 000	30%	36 000	2 400 000	720 000
Tobacco	40%	72	3	tonne	31 000	86 800	30%	26 040	6 249 600	1 874 880
Other vegetable	30%	55	20	tonne	4 000	80 000	20%	16 000	4 400 000	880 000
Summer cereals	2%	3	15	tonne	2 000	30 000	30%	9 000	90 000	27 000
Winter cereals	18%	32	8	tonne	2 800	22 400	30%	6 720	716 800	215 040
<b>TOTAL</b>	<b>100%</b>	<b>182</b>							<b>13 856 400</b>	<b>3 716 920</b>
LIVESTOCK	%	Quantity	Yield/ unit	Unit	Price/unit [R]	GVA/unit [R]	GM %	GM/unit [R]	PI District [R]	GM District [R]
Cattle	15%	6 674	70%	head	4 500	3 150	60%	1 890	21 023 100	12 613 860
Dairy	10%	2 847	70%	head	7 000	4 900	60%	2 940	13 950 300	8 370 180
Sheep	14%	20 709	90%	head	1 000	900	60%	540	18 638 100	11 182 860
Pigs	1%	216	1000%	head	800	8 000	10%	800	1 728 000	172 800
Goats	4%	6 581	100%	head	900	900	70%	630	5 922 900	4 146 030
Ostrich	55%	50 826	100%	head	1 500	1 500	10%	150	76 239 000	7 623 900
Poultry	0%	5 722	100%	head	25	25	20%	5	143 050	28 610
<b>TOTAL</b>	<b>100%</b>	<b>93 575</b>							<b>137 644 450</b>	<b>44 138 240</b>

**Table 3.2.8.5a Agricultural production income generated and gross margin per enterprise**  
(source: OABS, 2013)

Table 3.2.8.5b shows an average contribution obtainable from a typical farm.

	Total District	Average Farm
Number of farms (commercial)	169	1
Total agricultural (ha)	475 807	2 815
Total arable (ha)	7 472	44
Jobs	5 205	31
GDP contribution	R 592 653 450	R 3 506 825
Export	R 210 214 700	R 1 243 874

**Table 3.2.8.5b Average Farm Contribution** (source: OABS, 2013)



### 3.2.8.6 Farmworkers

There are about 8 880 farm employees who are employed in Kannaland's agricultural sector, of which 1 530 are fulltime employed (OABS, 2013). Yearly remunerations paid to farm labourers in the Kannaland district was calculated at R108-million, see Table 3.2.8.6.

Item	Number of Laborers	Annual Remuneration	Tot Yearly Remuneration
Full time employment	1 530	27 090	41 447 700
Part-time employment (* Assumption 33% of year)	7 350	9 030	66 370 500
<b>TOTAL</b>			<b>107 818 200</b>

**Table 3.2.8.6** Number of farm labourers employed and remuneration (source: OABS, 2013)

### 3.2.8.7 Food Security

The Kannaland local municipal area is well endowed in terms of its natural resources for the production of a number of agricultural produce and livestock farming.

In terms of food security this area is a contributor not only in terms of the local supply within Kannaland Municipality but as national and international supply base.

#### • Food and fibre sources – farm gate to shop

- The United Nations Food and Agriculture Organisation (FAO) have determined daily dietary requirements of approximately 2000 plant calories and 500 animal calories per day;
- Upper income diets can increase this intake to 7 500 to 8000 plant and 2 500 animal calories per day;
- 2 500 calories per day is adequate for a vegetarian diet.
- Land requirements for plant and animal calories are 2000 calories per m<sup>2</sup> per annum for plant foods and only 200 calories per m<sup>2</sup> per annum for animal foods, i.e. producing animal protein requirements (10 times as much land as plant protein);
  - A community of 24767 (Census, 2011) requires the following land for its food and fibre needs depending on its diet and income status, see Table 3.2.8.7.

Land required for food security					
	Diet	C/day	People	C/m²/year	Total Ha
Upper Income	Plant	8000		2000	145
	Animal	2500		200	452
	Number of People		991	Sub-total	597
Lower Income	Plant	2000		2000	868
	Animal	1000		200	4339
	Number of People		23776	Sub-total	5207
Total			24767	Total	5804
All Vegetarian		2500	24767	2000	1130

**Table 3.2.8.7** Land required for food security: Kannaland Municipality (source: Kilimakore Synergetics. A Study on the Revitalisation of Rural Towns in South Africa, May 2010)

Note: the impact of animal and plant food consumption vs an all vegetarian diet can be seen on the demand for agricultural land ( $\pm 32700\text{ha}$ 's vs  $\pm 3000\text{ha}$ 's).

- Approximately 3.5% of the land in the municipality, i.e. 19604ha is cultivated. There is also 444581 ha of grass and scrubland in the municipality, parts of which are being used for livestock farming.
- It is estimated that 5804ha of land is required for food security in the Kannaland Municipality, see Table 3.2.8.7. In terms of dietary requirements for plants, 1013ha is required and 4791ha is required for animal foods. There is thus sufficient land available to supply for the needs of the current population of the municipality.
- There are indications that the current formal food and grocery distribution network, mainly in the form of corner shops, supermarkets and shopping centres, will come under increasing pressure as a result of food inflation and decreasing purchasing power among most income groups but particularly the poor.
- A separate informal marketing channel should be developed in the form of a network of farmers' markets which could allow prices at the farm gate to increase but retail prices to drop by circumventing the agents and middlemen and formal retailers in the distribution channels, see box below indicating distribution chain issues for small growers.

## CASE STUDY: Lettuce Value Chain : Stellenbosch

Organic lettuce grown on Stellenbosch commonage:

Sold to packer at R7.15/kg	28/3/2008 prices
Packer sells lettuce to retailers	
Retailers sell lettuce at R68/kg	
Grower now sells direct at Stellenbosch market at R40/kg	

Kelly C., 2008. Value Chain in Agriculture Service Industry

- South Africa and the Kannaland Municipality cannot afford to neglect maintaining and improving infrastructure (roads, electricity supply and networks, water supply, harbours, etc). Neglecting this critical issue will lead to further logistical problems and a reduction in competitiveness.
- Since labour cost is a major contributing factor to high production costs, farmers should target labour productivity as a major strategy to counter increasing labour costs. Higher labour cost will eventually leads to less job opportunities and higher unemployment and poverty rates.
- HIV will have cost implications since in many cases skilled labour is infected.
- The importance of strategic information to enhance planning and growth in the agricultural sector cannot be over-emphasized.
- Good strategies are only good if there are efficient institutions to implement these strategies. It is therefore of paramount importance to revisit the primary mandate and objectives of all the institutions involved in the agricultural sector in the Kannaland, to enable institutional changes to adapt to a changing environment and to prevent duplication and or no actions at all.

### Implications for Kannaland Municipality

- Although the contribution of the “Agriculture, hunting, forestry and fishing”-sector to total GVA for Kannaland Local Municipal area declined for the period 1996 to 2009 from 49.9% to 38.1%, it still seems to be one of the most important contributor to the local economy and remains one of the main drivers.
- The following implications were derived from the Kannaland Agricultural Sector Overview report prepared by OABS Development(February 2013):
  - Research on climatic changes and the impact thereof should be a priority, given the dependence of this area on agricultural production.
  - The biggest constraint in expanding production is the availability of irrigation water and suitable land.
  - The Kannaland area is largely unaffected by development and contamination of natural resources and can therefore produce healthy produce.
  - It's positioning next to the R62 main road to Cape Town offers selling opportunities for produce and agri-tourism.
  - The demand and prices for most crops and animal products produced in the region are expected to remain under pressure in the short to medium term.

### 3.2.8.8 Impact of Climate Change

Given the background of the Kannaland district municipal area being predominantly dependent on agriculture as its economic base, the risks that climate change can potentially have on this agricultural production area is of great concern. The main expected features of climate change is the raise in temperature, variability in precipitation, changes in precipitation patterns, changes in the growing season, changes in rainfall pattern, etc. Therefore, the aforementioned variables will definitely impact on the availability of water, for both rain-fed and irrigated agricultural production. Water availability is the most important limiting factor for crop production in the Kannaland area. Furthermore, animal production will also be adversely affected in the light of dryer periods throughout the year. Given the extent of production in this area it could have implications in terms of food security.

In the Kannaland Municipality these trends are likely to result in the following:

- Increased competition for scarce water resources with limited scope for further water storage facilities, making irrigation of crops more costly.
- In addition, increased summer temperatures will result in crop damage.

Other more indirect impacts on rural livelihoods include:

- A loss of biodiversity and resultant loss of ecosystem services noted above (a 30% loss of species is projected in a worst case scenario);
- Increased fire (due to increased temperature, likely spread of alien vegetation and loss of biodiversity) and flood (rainfall events is likely to be fewer but heavier) risks, impacting on crops, livestock, and settlements.

#### Implications for Kannaland Municipality

- Regulate water demand especially for agricultural purposes.
- Develop more effective water management strategies.
- Improved technologies to be explored.
- The protection of ecological water reserves should be a priority.
- Monitoring biodiversity closely and eradicating alien vegetation should be undertaken.

### 3.2.9 Building Materials and Mining

Figure 3.2.9.1 shows the location of where mining takes place in the municipality.

Very little mining activity can be found in the municipality with the exception of what is mined for building materials, i.e. stone, aggregate, gravel and sand, north of Ladismith.

#### Implications for Kannaland Municipality

- Ensure that mines are rehabilitated topsoil is properly stockpiled and that the post mining platforms comply with the envisaged after mining use of the land.
- Should full-scale mining operations commence there will be economic impacts including:
  - Transport
  - Accommodation
  - Labour and maintenance
- Where possible fixed infrastructure including housing should reinforce and not dissipate existing settlements and infrastructure and road networks.

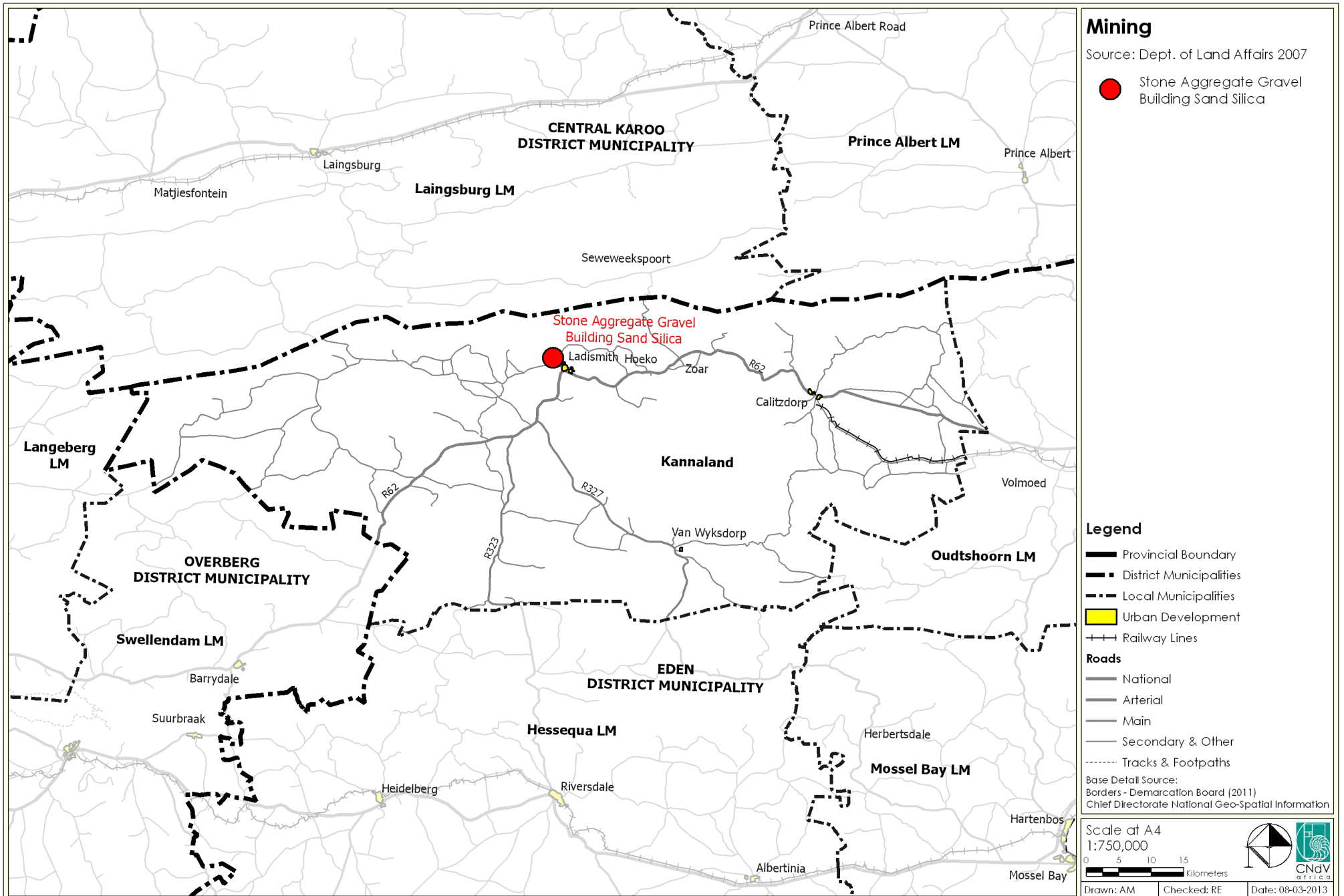


Figure 3.2.9.1 Mining





3.3 SOCIO-ECONOMIC CONDITIONS

### 3.3.1 DEMOGRAPHIC PROFILE

#### 3.3.1.1 Overall Population

Kannaland has the smallest population in the Eden District. Table 3.3.1.1 indicates that in 2001 there was a total population of 22821 and in 2011 there was a total population of 24 767 (Census 2001, 2011). This indicates an increase of 1946 individuals.

	Census 2001	Census 2011
Population	22821	24767

**Table 3.3.1.1 Summary of population data 2001 – 2011** (source: Census 2001/11, Socio-Economic Profile: Eden District, 2006)

#### 3.3.1.2 Population distribution

Figure 3.3.1.1 shows the distribution of the population, based on 2001 Census data. From this figure it is evident that the majority of the population is located along the R62 in the towns of Ladismith, Calitzdorp, Bergsig, Droëvlei and Zoar as well as in Van Wyksdorp. The municipality has an extent of 4 761km<sup>2</sup> which results in a population density of 5.2 people/km<sup>2</sup>, see Table 3.3.1.2 for a population breakdown.

Town	Population (2011)
Ladismith	7 123
Zoar	4 659
Calitzdorp	4 283
Van Wyksdorp	833
Rural	7 869
<b>TOTAL</b>	<b>24 767<sup>2</sup></b>

1. Census 2001
2. Census 2011

**Table 3.3.1.2 Population per main settlement** (source: Census 2001, 2011)

#### 3.3.1.3 Growth Rate

The annual growth rate of the population between 2001 and 2011 was 0.85%. This positive growth rate indicates that more people are settling in the municipality, but at a very slow rate. Careful planning and budgeting has to be done to ensure sustainable urban settlements within the municipality.

#### 3.3.1.4 Age Structure

Table 3.3.1.4 indicates the age structure of the population within the Kannaland Municipality. The majority of the population (63.5%), between the ages of 15 and 65, is potentially economically active.

Kannaland Municipality	AGE					Total
	0-4	5-14	15-34	35-65	>65	
2011	2452	4666	7487	8241	1921	24767
% of Total	9.90%	18.84%	30.23%	33.27%	7.76%	100%

**Table 3.3.1.4 Age Structure (2011)** (source: Census, 2011)

#### 3.3.1.5 Gender

Graph 3.3.1.5 indicates the gender and age of the population of the municipality. It reveals some interesting trends. The triangular shape with a wide base suggests high fertility and birth rates. The bulge in the 4-10 cohort (female) and 4-10 (male) suggests the municipality plays an important education role to its families with strong roots in the municipality. However, from 15-30 the opposite occurs suggesting that the young, potentially economically active, move elsewhere in search of work. Many in these cohorts represent the "lost generation" whose poor schooling make finding employment difficult. This situation changes to some extent with the older cohorts who have more experience and tend to have work, both skilled and unskilled, the latter mainly in agriculture. Relatively low life expectancy among the older middle age and elderly is reflected in the declining size of those cohorts.

About 30% of the population (male and female) is below the age of 20. Those comprising of the active economic age (20 – 64 years) make up 58% of the population and the remaining 8.5% is aged 65 and above.

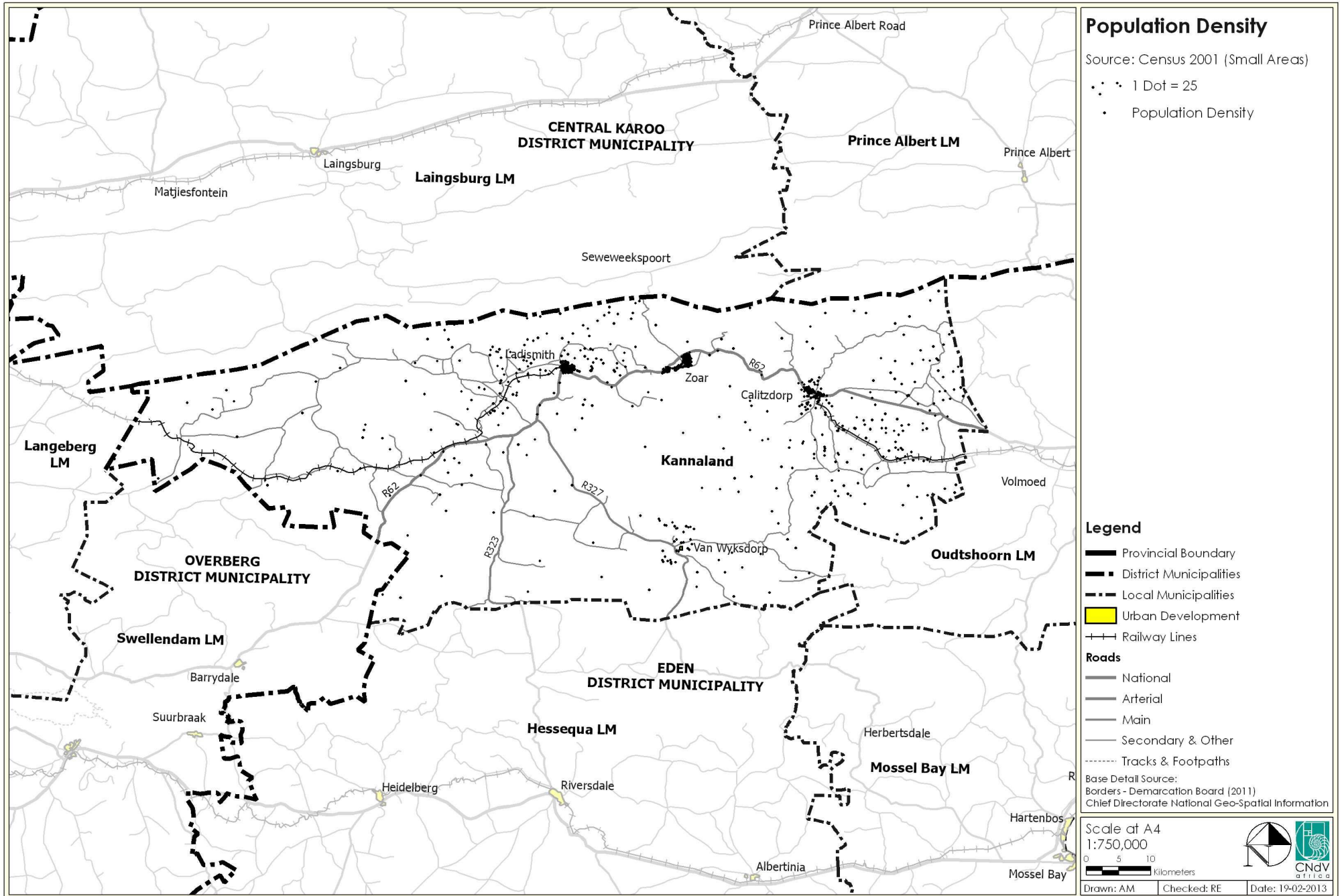
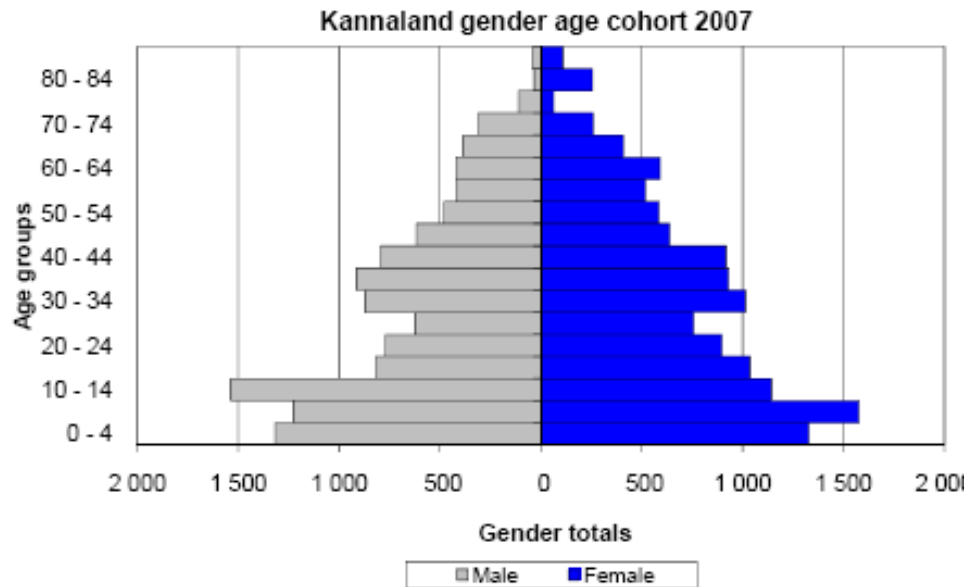


Figure 3.3.1.1 Population Density





**Graph 3.3.1.5 Kannaland Population Pyramid** (source: Socio-Economic Profile: Eden District, 2006)

### 3.3.1.6 Ethnic Groupings

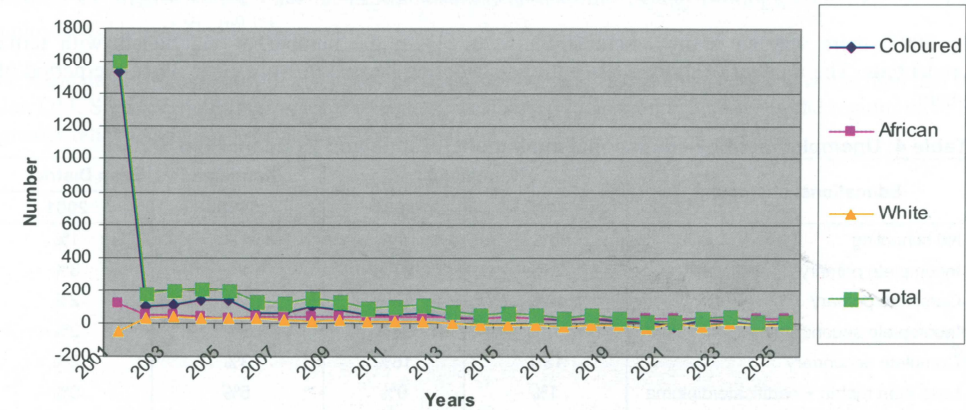
Table 3.3.1.6 indicates the ethnic make up of the population. The coloured communities make up almost 85% of the population of the municipality. Only a small number of Asian and Indian people reside in the municipality.

Kannaland Municipality	RACE (source: Census 2011)					Total
	Black	Coloured	Indian/Asian	White	Other	
2011	1156	20963	73	2448	128	24767
% of Total	4.67%	84.64%	0.29%	9.88%	0.52%	100%

**Table 3.3.1.6 Population** (sources: Census 2011)

### 3.3.1.7 Migration

Graph 3.3.1.7 indicates the projected migration for the municipality between 2001 and 2025



**Graph 3.3.1.7 Projected net migration, 2001 - 2025** (source: Socio-Economic Profile: Eden District, 2006)

In the Eden District, Kannaland was shown to be the least attractive destination for immigrants. The municipality is deemed to be a net receiver of migrants, although at very low rates. Kannaland has received a maximum of 200 people per annum from 2003 and it is expected that migration will be 0 by 2025 (Socio-Economic Profile, 2006).

### Implications for Kannaland Municipality

- There is a slow overall population growth indicating the need for a carefully balanced approach to service delivery and the provision of sustainable settlements with opportunities to cater for the needs of the population.
- The most populated area of the municipality is the region between Ladismith, Calitzdorp, Zoar as well as in Van Wyksdorp. In these areas the greatest intervention will be required to manage growth.
- The municipality has a relatively young population with major employment challenges in the 15-30 age cohorts. Municipal Initiatives should be directed at this age group.
- Migration into the municipality, albeit at a very low rate, will have an impact on the existing urban areas in the municipality which should be managed in a sustainable manner.



### 3.3.2 HEALTH

Figure 3.3.2.1 shows the distribution of health facilities within the municipality. One district hospital is located in Ladismith and a number of clinics are dispersed throughout various other towns in the municipality.

There are a total of 7 clinics located in the towns of Ladismith, Calitzdorp, Bergsig, Van Wyksdorp, Droëvlei and Zoar. One district hospital is located in Ladismith.

Table 3.3.2.1 indicates the health care conditions in the municipality (Socio-Economic Profile: Eden District, 2006).

Year	New born babies under 2.5kg	TB prevalence (per 100,000 people)	TB cure rate	Nurse Patient Ratio	Under 1 year olds with 1 <sup>st</sup> measles immunization	HIV/Aids prevalence rate	HIV/Aids related deaths
2005	27%	949	74%	38	57%	2.1%	21

**Table 3.3.2.1 Health Conditions in the Kannaland Municipality** (source: Socio-Economic Profile: Eden District, 2006)

The table indicates the following:

- The national target for new born babies below 2.5kg is less than 10%. The current figure of 27% is thus much greater than the target.
- The TB cure rate is currently 74% which is lower than the national target of 85%. The nurse/patient ratio of 34 is exactly on the national target.
- The percentage target for 1<sup>st</sup> measles immunization is at 57% in the municipality. The national target is 90%. An immense improvement is required.
- The HIV prevalence rate was at 2.1% in 2005 and was expected to increase to 2.9% in 2010. The number of HIV/Aids related deaths was at 21 in 2005 and was expected to increase to 40 in 2010. Increased measures should be developed to reduce the growing impact of HIV/Aids on the population of the Kannaland Municipality.

#### **Implications for Kannaland Municipality**

- Initiatives are required to improve the following:
  - Reduction in the number of babies born weighing less than 2.5kg.
  - The TB cure rate
  - The number of children obtaining their 1<sup>st</sup> measles immunization.
  - Reduction in the HIV infection rate.
- Ensure that new health facilities are erected in line with the NSDP principles, i.e. where there is economic growth potential and where people are located.

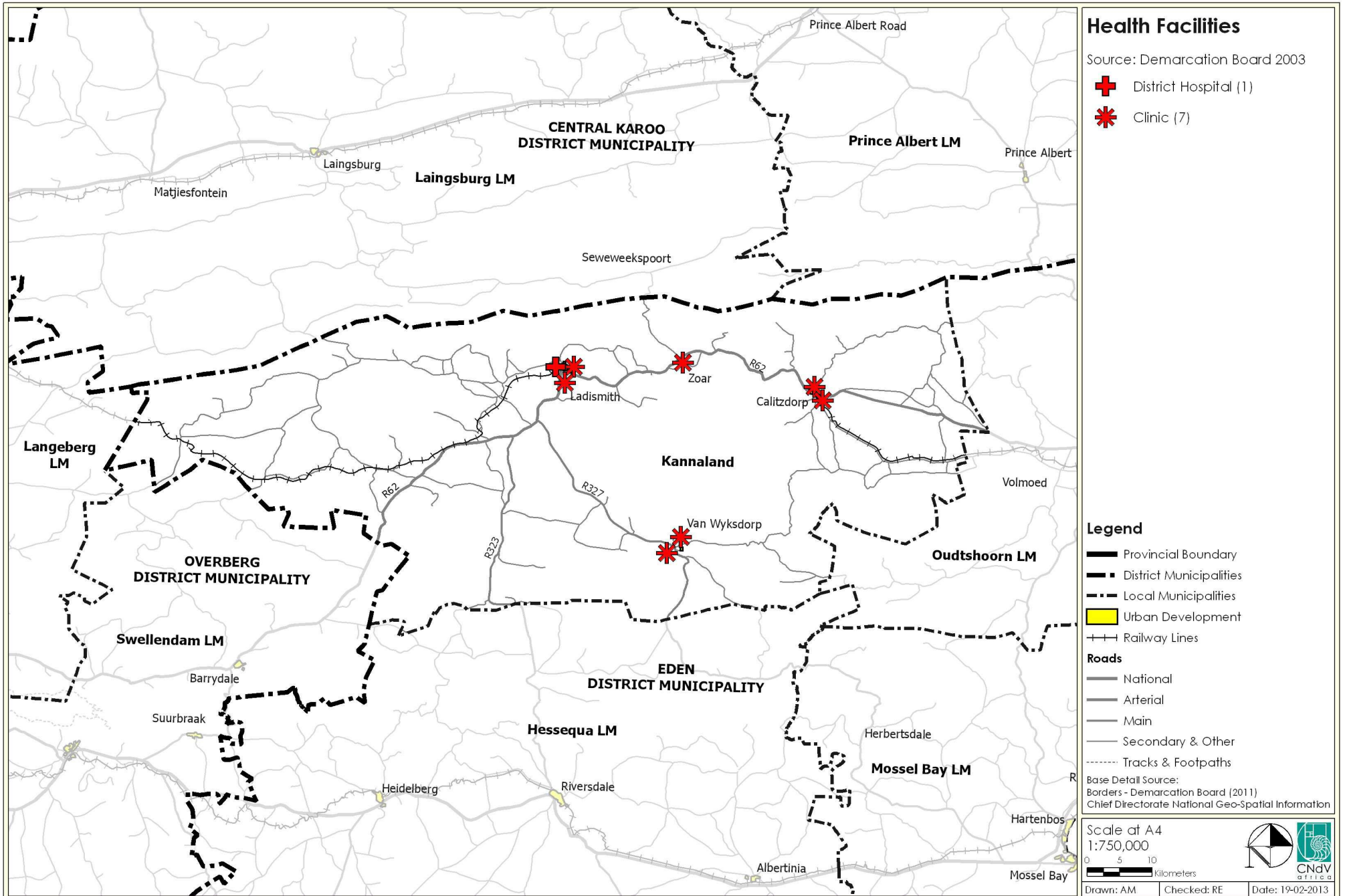


Figure 3.3.2.1 Health Facilities: Municipality



### 3.3.3 EDUCATION

Figure 3.3.3.1a indicates the educational facilities throughout the Kannaland Municipality.

Education facilities are largely clustered around the settlements of Ladismith, Calitzdorp, Van Wyksdorp and Zoar. No educational facilities are available in Anysberg and Plathuis in the west and in Kraaldorings, Badshoogte and Vleirivier in the eastern parts of the municipality.

	2001	2011
No schooling	1660	1115
Some primary	4378	7550
Completed primary	1634	2033
Some secondary	3826	7312
Grade 12/Std 10	1683	3016
Higher	766	656

**Table 3.3.3.1 Highest education level** (source: Census 2001, 2011)

Table 3.3.3.1 shows the highest education level attained by the population. Between 2001 and 2011 improvements were made in all categories, with the exception of higher education levels. Those obtaining a Grade 12 certificate increased from 1683 (2001) to 3016 (2011) which amounts to 1333 more individuals. Those obtaining a secondary education also more than doubled. There is however still a significant amount (1115) of unschooled members of the population.

Figure 3.3.3.1b indicates the location of those with no secondary education as a percentage (Census, 2001). This figure indicates that 45-65% of those residing in the main settlements of Ladismith and Calitzdorp have no secondary education. The majority of the urban areas are in the same category. In more than half of the municipality, 65% to 75% of individuals, have no secondary education.

#### **Implications for Kannaland Municipality**

- The provision of education in the rural areas should be addressed.
- An initiative is required to provide access to secondary educational facilities.
- Those members of the community with no schooling should be significantly reduced through a municipal wide initiative.
- The roads linking Ladismith and Calitzdorp may require the development of NMT plan due to the location of the schools.

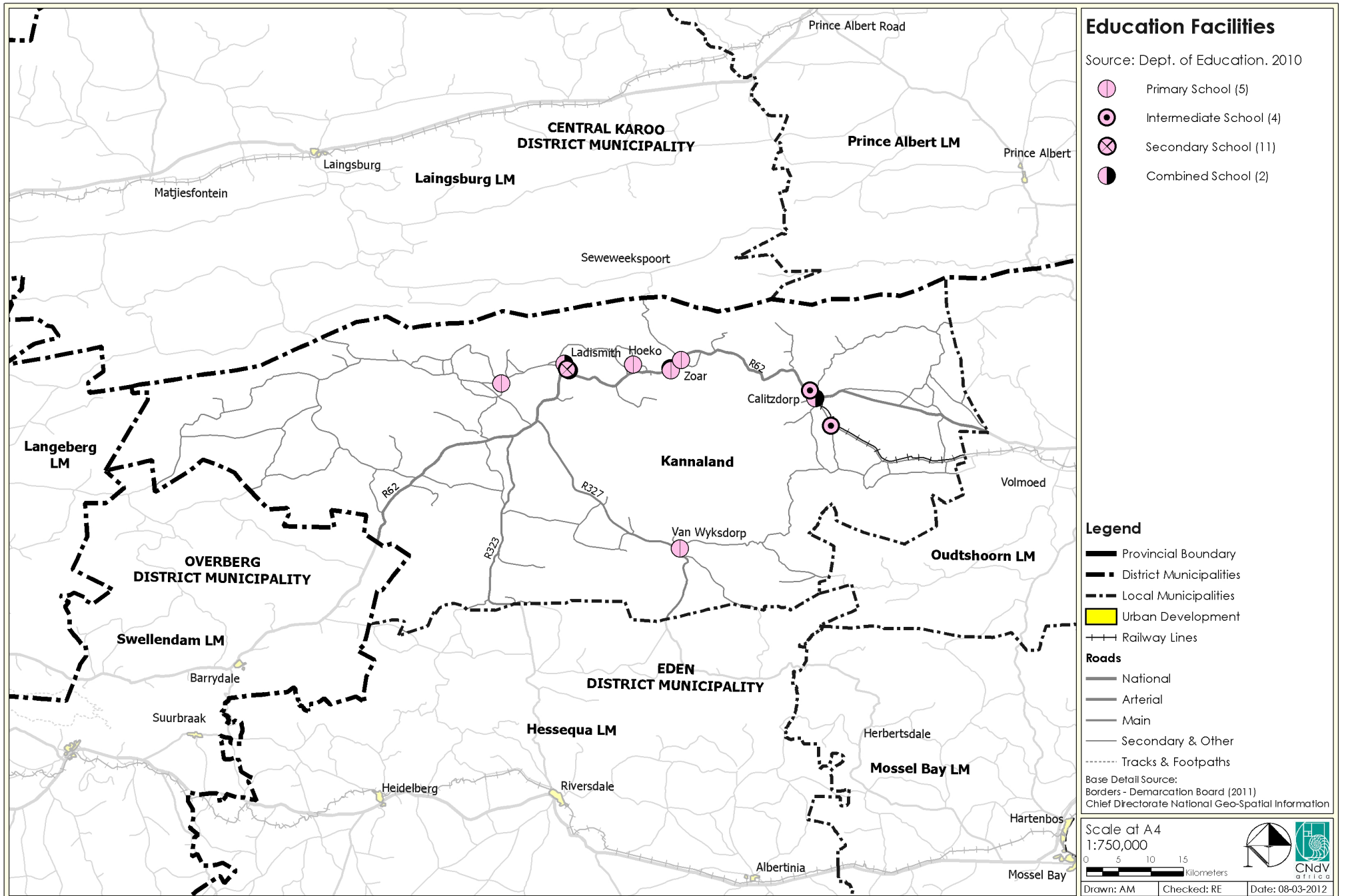


Figure 3.3.3.1a Education Facilities

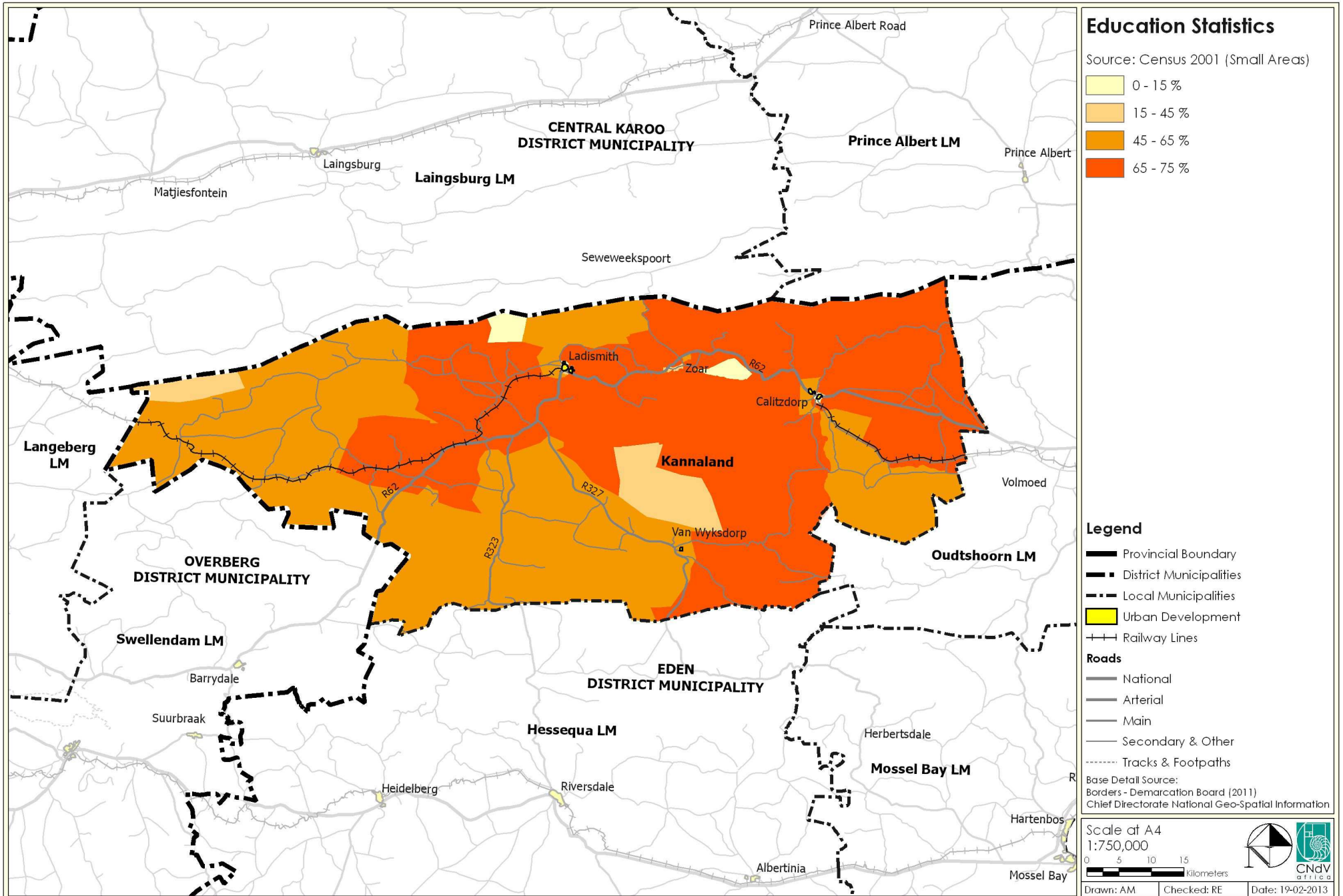


Figure 3.3.3.1b Census Education: location of those older than 20 years with no secondary education





### 3.3.4 EMPLOYMENT, OCCUPATION AND INCOME LEVELS

#### 3.3.4.1 Labour Force

Table 3.3.4.1 indicates that there has been a decrease in the labour force between 1996 and 2011 of 40. The labour force participation rate also decreased between 1996 and 2001 and then decreased to approximately 48% in 2011. This indicates that less than half of the total work force between the ages of 15 and 65 are employed or actively seeking employment.

	Total Population aged 15 - 65	Labour force	LFPR%	Employed	Unemployed	Unemployment rate (%)
1996	11909	7405	62.2	6344	1061	14.3
2001	14622	7365	50.4	6345	1020	13.8
2011	15728	7587	48.2	6271	1316	17.3

**Table 3.3.4.1 Kannaland labour market information, 1996 - 2001** (source: Socio-Economic Profile: Eden District, 2006, Census 2011)

#### 3.3.4.2 Employment

Table 3.3.4.1 indicates that there were a total of 6344 people employed in 1996. This figure increased to 6345 in 2001 and decreased to 6271 in 2011. This is noteworthy since the labour force decreased by 74 people.

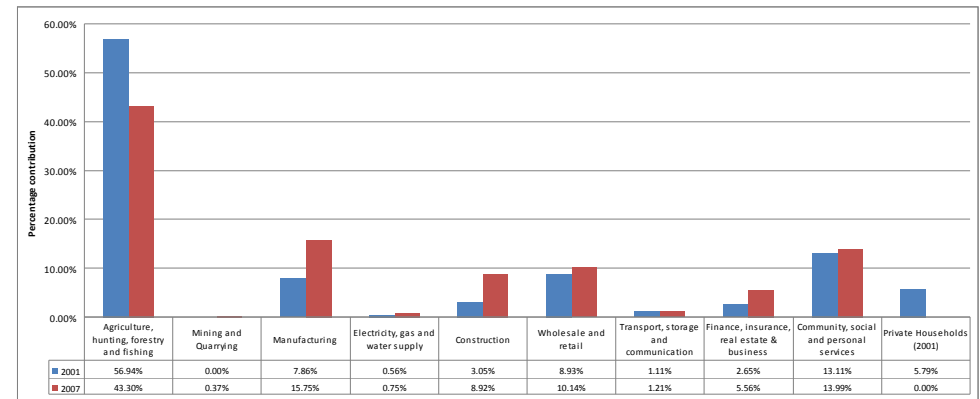
Figure 3.3.4.1 graphically depicts employment of the labour force within the municipality (Census, 2001). The figure indicates that 95% -100% of the labour force are employed all over the municipality.

87% - 100% of the labour force in Ladismith are employed (this town also has the largest population of the towns in the Municipality). 56% - 87% of the labour force in Calitzdorp and Van Wyksdorp are employed. There are about 8 880 farm employees who are employed in the agricultural sector, of which 1 530 are fulltime employed (OABS, 2012).

#### 3.3.4.3 Sector Contribution to Employment

Graph 3.3.4.3 indicates the sector contribution to employment. The graph indicates that significant contribution that the agricultural sector makes to

employment. Manufacturing, Wholesale and Retail, Community, Social and personal services also contribute a reasonable degree to employment generation.



**Graph 3.3.4.3 Sector contribution to employment (MPBS, 2013)**

#### 3.3.4.4 Unemployment

Table 3.3.4.1 indicates the unemployment rate and number of people employed from 1996 until 2011 (Census 1996, 2001 and 2011). The unemployment rate decreased from 14.3% in 1996 to 13.8% in 2001 and increased to 17.3% in 2011. Although the labour force increased rapidly, the unemployment rate decreased.

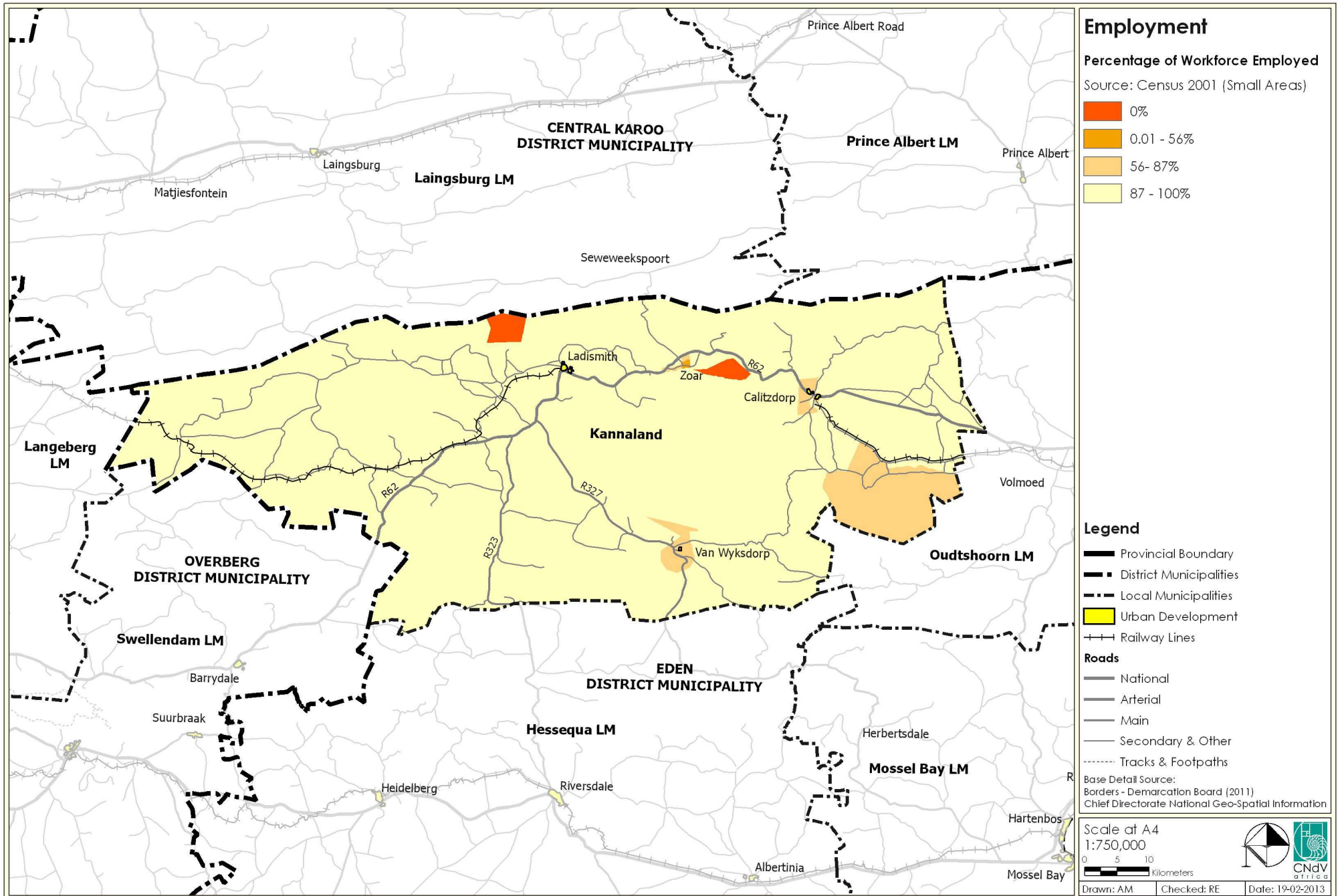


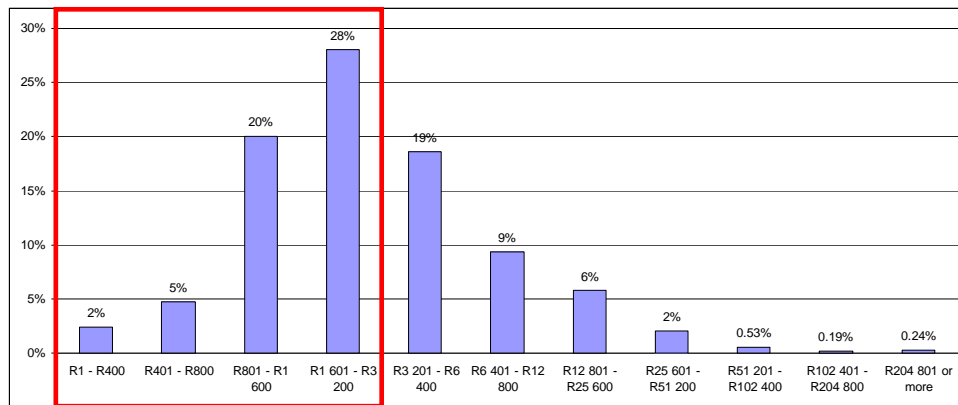
Figure 3.3.4.1 Employment

### 3.3.4.6 Individual and Household Income

Graph 3.3.4.6a below shows the household income per different income category. This indicates that approximately 55% of household earned less than R4800 per month in 2011.

Almost 67% of households in the municipality earned between R800 and R6 400 per month in 2011.

Approximately 8% of the households did not receive any form of income in 2011.



**Graph 3.3.4.6a** Income distribution by individual, 2011 (source: Census, 2011)

In general, the income levels of households are in the lower middle-income categories. The majority of households earn between R800 and R12800 per month.

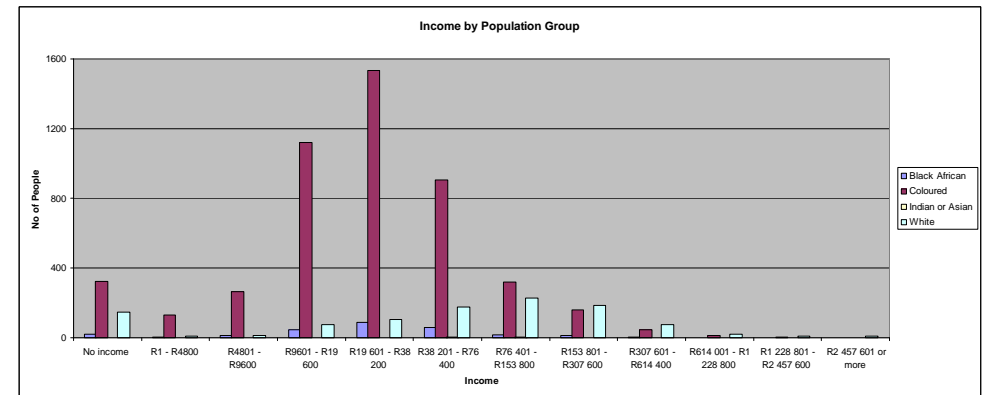
Figure 3.3.4.6 indicates that households in the north of the municipality earned more than R80 000 per annum. The rest of the municipality is split between earning less than R25 000 in the western side of the municipality and in the center and east the average income is between R25 000 and R40 000.

Graph 3.3.4.6b indicates that in 2011:

- About 70% of individuals earned below R3200/month
- About 7% of individuals earned between R3201 and R6400/month; and

- About 4% earned between R12801 and R25600/month.

Graph 3.3.4.6b indicates the income per month of the different population groups in 2011. The graph indicates that the Coloured population groups make up the largest percentage of the population and they earn between R9601 to R153800. The African population earns less, around R9601 to R76400 and the Whites earn the most, between R38201 and R614400.



**Graph 3.3.4.6b** Income (per annum) distribution by population group (source: Provincial Treasury Report, 2006)

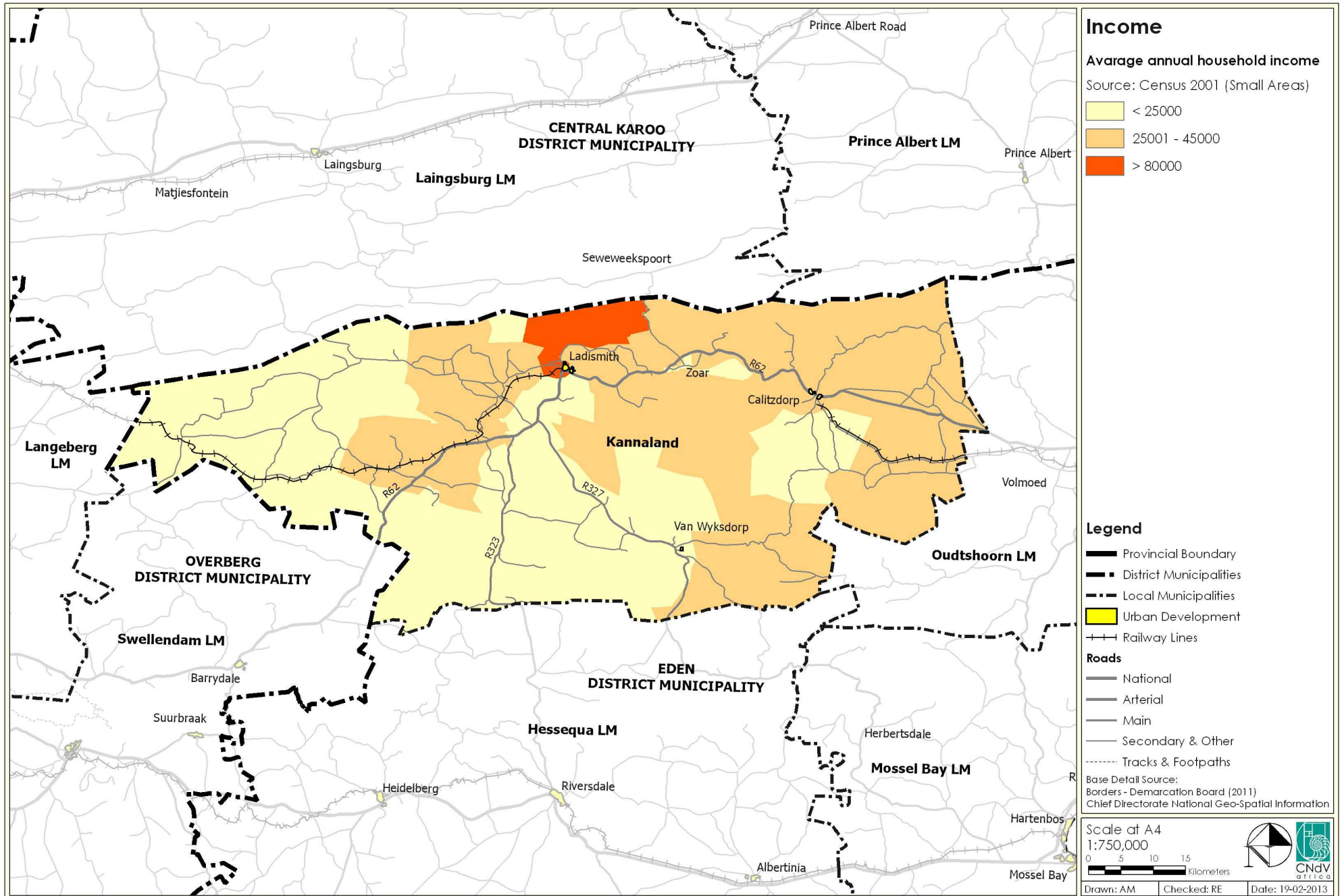
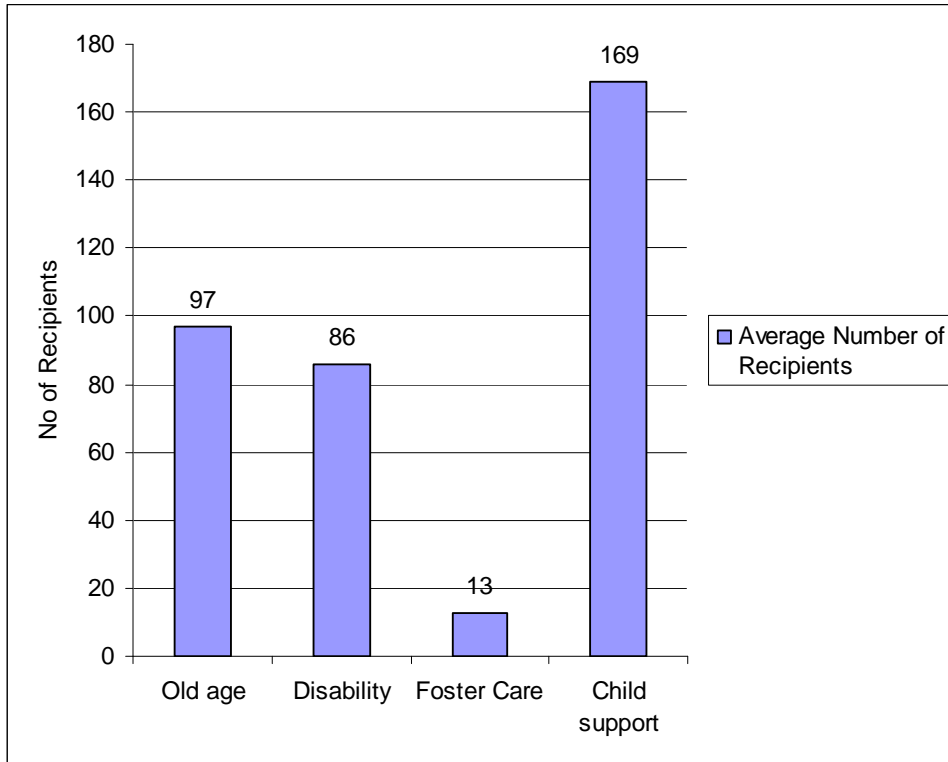


Figure 3.3.4.6 Income



### 3.3.4.7 Social Grants

Graph 3.3.4.7 shows the average number of social grants paid out in 2005 in the municipality. The largest numbers of social grants were paid out as child support.



**Graph 3.3.4.7 Social grant data** (source: Provincial Treasury Report, 2006)

The municipality was the third lowest recipient of grant assistance in the Eden district in 2005, at 8 percent. (Provincial Treasury Report, 2006)

#### **Implications for Kannaland Municipality**

- Initiatives are required to increase the labour force participation rate (LFPR) which was at 48.8% in 2011 (Census, 2011).
- The municipality experiences a shift to employment in other employment sectors, namely manufacturing, construction and finance sectors from 2001 to 2007.
- Employment generation should be prioritised in the southern and eastern parts of the municipality.
- Skills training and services should be provided to the lower income communities in the central regions of the municipality.

### 3.3.4.8 Local Economic Development

The Local Economic Development strategy for the Kannaland Municipality (undated report) noted the following strategic directives in order to achieve sustainable local economic development in the Municipality:

- **Sustainable economic growth** – a well prepared and implemented LED strategy can assist with the stimulation and growth of job creation by encouraging businesses to use more labour, induce continuous growth in productivity and ensure new ideas translate into opportunities.
- **Broad Based Black Economic Empowerment can be achieved in the Municipality by:**
  - Direct empowerment through ownership and control of enterprises and assets.
  - Management at senior level.
  - Human resource development and employment equity.
  - Indirect empowerment through: preferential procurement, enterprise development, and corporate social investment - a residual and open-ended category.
- **Partnerships** – a strong emerging investment opportunity is through public-private sector partnerships. Initiatives of this nature require input of private companies as government cannot finance them alone.
- **Education, skills development and training** – the following challenges are raised:
  - lack of coordinated information on and awareness of education and training opportunities and associated financial support.
  - Towns are largely under serviced in terms of skills development provision.
  - lack of career guidance opportunities.
  - lack of coordination between and partnering by key skills development role-players, for e.g. the Department of Labour, municipalities, training service providers and organised business (e.g. chambers of business).

- More effort and input is required by the municipality in the further development of day-care centres and youth-focused social programmes on issues such as drugs and HIV/AIDs.

- **Business support and development** – this could be generated through growing existing local firms, the intensive creation of new firms and attracting the relocation of firms to the area.

The LED strategy proposed the following developmental projects that should be implemented in the Municipality. It is important to note that the purpose of the developmental projects is to create jobs and alleviate poverty.

Project and Description	Jobs created	Skills developed
<b>Compost for Kannaland:</b> a place at sewerage centres where raw materials (manure) are converted into compost	<ul style="list-style-type: none"> <li>◦ Three entrepreneurs could be employed at each of the sewerage plants;</li> <li>◦ A total of 12 jobs could be created.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Business skills</li> <li>◦ Waste management skills</li> <li>◦ Entrepreneurial skills</li> <li>◦ Networking skills centred upon new relationships between participating private businesses, farmers and new entrepreneurs.</li> </ul>
<b>Waste for the "Poor":</b> A multi-faceted recyclable waste buy-back centre which is supported by a network of local waste managers and participating community waste entrepreneurs.	<ul style="list-style-type: none"> <li>◦ The centre in Ladismith could employ one manager with one administrative staff for support;</li> <li>◦ Several manual labourers will be required to sort, package and compact the recyclable waste;</li> <li>◦ In the smaller towns like Van Wyksdorp, Zoar and Calitzdorp two people respectively would be able to manage the project;</li> <li>◦ A team of two drivers would be required to transport the waste from the various towns and then deliver it to Oudtshoorn where it will be collected by South Cape Recycling.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Business skills</li> <li>◦ Basic waste management skills</li> <li>◦ Capacity building and community education creation skills</li> </ul>
<b>Aloe Project:</b> A small nursery where the seeds are	<ul style="list-style-type: none"> <li>◦ Sustainable jobs for 10 – 20 people</li> </ul>	<ul style="list-style-type: none"> <li>◦ Business skills</li> <li>◦ Harvesting skills</li> <li>◦ Entrepreneurial skills;</li> </ul>

germinated and the plants grown in bags could be established (possibly through the assistance of Dept of Agriculture (LandCare section). Once they have developed into small plants, these plants could then be planted in the orchards.		<ul style="list-style-type: none"> <li>o Networking skills centred upon new relationships between participating private businesses (buyers).</li> </ul>
<b>Invasive Alien Plant Species Control:</b> the control and management of invasive plant species	<ul style="list-style-type: none"> <li>o Approximately 10 permanent jobs could be created.</li> </ul>	<ul style="list-style-type: none"> <li>o Business skills</li> <li>o Harvesting skills (Cutting the Spaans Riet)</li> <li>o Entrepreneurial skills</li> <li>o Networking skills centred upon new relationships between participating private businesses (buyers) and individuals.</li> </ul>
<b>Homestay Initiative:</b> a living arrangement offered by a host or host family that involves staying in their furnished, private, shared room, house, apartment, or suite.	<ul style="list-style-type: none"> <li>o Jobs created in the local community in tourism sectors and sub-sectors and support services, e.g. drivers, security, clean-up and recreation, transport, accommodation, attraction sections, field guides, oral historians, archeology, architecture and historical buildings, mentors, trainers and teachers of skills and languages</li> </ul>	<ul style="list-style-type: none"> <li>o Business Skills</li> <li>o Networking Skills</li> <li>o Marketing Skills</li> <li>o Skills related to the service industry</li> <li>o Skills for the tourism industry</li> <li>o SALES</li> <li>o Skills for related sectors e.g. Driving and guiding</li> </ul>

### **Implications for Kannaland Municipality**

- Facilitate the implementation of the LED projects to enable job creation and alleviate poverty.
- Ensure increases in the participation of Kannaland Municipality's population in production, by means of equity, ownership, development and social pacts between government, the labour force and business.
- Consider developing policies to address inequalities from the past.
- Create partnerships to address the socio-economic challenges of the municipality.
- Set-up a skills database to ensure available skills within the municipality are used and retained.
- Set-up a data base of education services and facilities available which can be made available to members of the community in order to facilitate education and skills training.
- Develop tourism as a main component in generating economic growth within the Kannaland Municipality.
- Develop Kannaland Municipality as a brand emphasizing the municipality as a destination for eco- and adventure tourism, culture and heritage, health and wellness, the Port capital of South Africa and retirement. In order for this to be achieved, the limited health care facilities need to be addressed.

### 3.3.5 THE ECONOMY

#### 3.3.5.1 Income

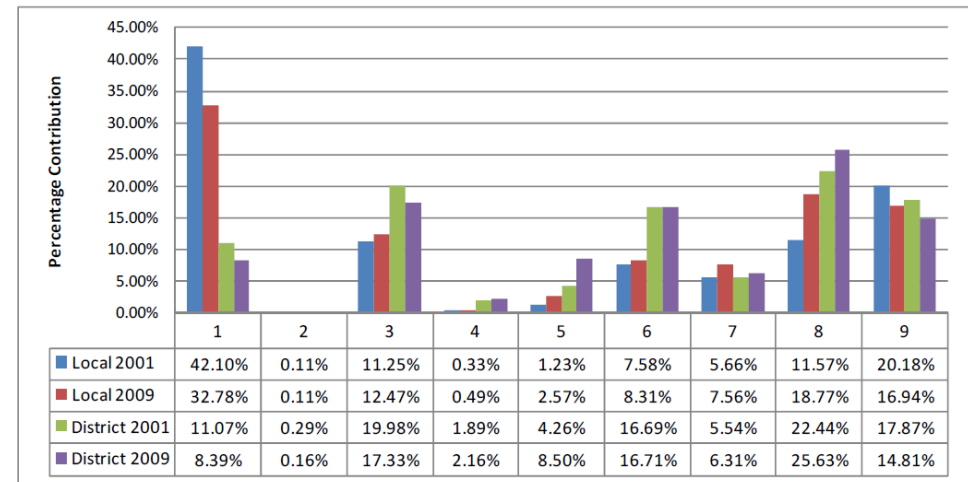
The Kannaland economy contributed approximately 3,64% to the economy of the Eden District in 2009. In terms of absolute numbers, the economy of Kannaland generated R598,7 million of Gross Value Added (GVA), when compared to R16 432,3 million for the Eden District. The GVA contribution of the Kannaland economy to the Eden District decreased slightly from 3,74% in 2001 to 3,64% in 2009. Notwithstanding, the Kannaland economy grew by 5,49% per annum from 2001 to 2009 or by 53,33% over the period.

The largest sectors of the Kannaland economy are Agriculture, Forestry and Fishing followed by Finance, Insurance, Real Estate and Business Services, and Community, Social and Personal Services. These three sectors combined contributed 68,49% to the total GVA generated by the Kannaland economy in 2009. The combined contribution of these sectors declined from 73,85% in 2001. The decrease in the GVA is attributed to a sharp decline of 22,14% in the contribution of Agriculture, Forestry and Fishing activity and a strong increase of 62,63% by Finance, Insurance, Real estate and Business Services to GVA over the period.

Over the same period, the contribution of the Manufacturing sector to GVA increased slightly from 11,25% to 12,47%. An increase in Construction activity emerged over the period with the contribution of the sector increasing from 1,23% in 2001 to 2,57% in 2009. The latter represented an increase of 9,71% per annum from 2001 to 2009 off a low base. Wholesale and Retail Trade also made a larger contribution to the GVA of the local economy in 2009 when compared to 2001 with an annual growth rate of 1,16% over the period of the analysis.

An assessment of the larger sectors suggests that the Finance, Insurance, Real Estate and Business Services sector, which contributes 18,77% to the GVA of the local economy, grew by 12,07% per annum over the period 2001 to 2009. The Wholesale and Retail Trade sector with an 8,31% contribution to the GVA in 2009, grew at a nominal rate of 6,71% per annum over the period 2001 to 2009. Manufacturing, which contributed 12,47% to the local GVA in 2009 grew at a nominal growth rate of 6,86% per annum over the same period.

Graph 3.3.5.1 indicates the contribution of each economic sector to the GVA of the Kannaland and the Eden District economy for 2001 and 2009.



**Legend:**

- 1 Agriculture, hunting, forestry and fishing
- 2 Mining and quarrying
- 3 Manufacturing
- 4 Electricity, gas and water supply
- 5 Construction
- 6 Wholesale and retail
- 7 Transport, storage and communication
- 8 Finance, insurance, real estate and business services
- 9 Community, social and personal services

Source: Adapted from Western Cape Provincial Treasury (2010)

**Graph 3.3.5.1 Sector contribution to GVA for the local and district municipal areas in 2001 and 2009** (source: MPBS, 2013)

The findings illustrated in Graph 3.3.5.1 indicate that of the nine sectors considered in the assessment, the contribution of two sectors to the GVA of the local economy showed a declined. The levels of growth in sectors that are more service orientated indicate higher annual growth rates as opposed to those that are the more labour intensive. This perceived trend does not necessarily allude to greater labour intensity but suggests concerns that are prevalent in the economic structure of the economy. A



more concerning trend is the reduction in the District of primary sector activity and manufacturing as part of the secondary sector.

These are labour intensive sectors which appear to be shrinking in terms of output and may have further consequences for the local economy due to the inter-regional movement of goods and services. The contribution of the Agriculture, Hunting Forestry and Fishing sector to the GVA of the local economy declined by 3,08% per annum from 2001 to 2009, while the same figure for the District indicates a similar decline of 3,41% over the period. The contribution of the Finance, Insurance, Real Estate and Business Services sector to the local economy increased by 6,23% per annum or 62,23% from 2001 to 2009, while a growth rate per annum of 1,68% in the sector's contribution to GVA was achieved in the District municipal area over the same period.

### 3.3.5.2 Sector Contribution to the Economy

The assessment of GVA sector contributions together with the annual and period growth rates for 2001 and 2009 are indicated in Table 3.3.5.2.

Economic sector (R'000)	Gross Value Added				Growth for Period	Annual growth	Direction of growth
	2001	% of total	2009	% of total			
Agriculture, hunting, forestry and fishing	164 384	42.10%	196 258	32.78%	19.39%	2.24%	↑
Mining and Quarrying	429	0.11%	653	0.11%	52.21%	5.39%	↑
Manufacturing	43 914	11.25%	74 659	12.47%	70.01%	6.86%	↑
Electricity, gas and water supply	1 290	0.33%	2 936	0.49%	127.60%	10.83%	↑
Construction	4 787	1.23%	15 410	2.57%	221.91%	15.74%	↑
Wholesale and retail	29 585	7.58%	49 747	8.31%	68.15%	6.71%	↑
Transport, storage and communication	22 084	5.66%	45 242	7.56%	104.86%	9.38%	↑
Finance, insurance, real estate and business	45 187	11.57%	112 409	18.77%	148.76%	12.07%	↑
Community, social and personal services	78 797	20.18%	101 412	16.94%	28.70%	3.20%	↑
Total	390 457	100.00%	598 726	100.00%	53.34%	5.49%	↑

**Table 3.3.5.2** Sector contribution to GVA in 2001 and 2009 (source: OABS, 2012)

Among the nine classified sectors, all recorded an annual increase in economic activity with the Construction, Electricity, Gas and Water Supply, and Finance, Insurance, Real Estate and Business Services achieving strong annual growth in GVA.

### Primary sector

The primary sector of the Kannaland economy includes Agriculture, Hunting, Forestry and Fishing activity. As stated above, it is estimated that sector contributed 32,89% to the GVA of the municipal area in 2009. A decline in the contribution of primary economic activity to the total GVA of

the Municipal area from 42,21% in 2001 was recorded. Mining activity contributed 0,33% to total primary sector activity in 2009.

### Secondary sector

The secondary sector of the Kannaland economy includes some Manufacturing, Construction and Electricity, Gas and Water Supply. The secondary sector contributed 12,80% to the GVA of the Kannaland economy in 2001, while the contribution to GVA increased to 15,53% in 2009. The increase is essentially attributed to the Construction Sector that increased its contribution to the sector from 9,58% in 2001 to 16,57% in 2009. In current terms it is likely that the construction sector experienced a significant decline in activity thereafter and this would cause a significant slowdown in growth rates and the contribution of the secondary sector to the economy in general. The contribution of Manufacturing to the Secondary sector activity decreased from 87,84% in 2001 to 80,27% in 2009.

### Tertiary sector

The Tertiary Sector of the Kannaland economy includes Trade, Repairs and Hospitality, Financial Institutions, Real Estate and Business Services; Community, Social and Personal Services; and Government Services. The tertiary sector contributed 44,99% to the GVA of the local economy in 2001, which increase to 51,58% in 2009.

The largest contribution to Tertiary sector activity is the Finance, Insurance, Real Estate and Business Services sector increasing its contribution from 25,72% in 2001 to 36,40% in 2009. The contribution of government services to the local economy is unknown, but it is possible to postulate that it contributes a sizable portion to the overall GVA of the local municipality and makes a relative contribution to the Tertiary Sector.

### 3.3.5.3 Input-Output Analysis

An input-output analysis is an evaluation of the economy that supports an understanding of the interaction that exists between supply and demand of commodities for each sector necessary to generate a certain level of output. This allows for an assessment of the multiplied impacts of future growth and the quantification of the input required to achieve the envisaged growth.

The economic profile of the local economy (Quantec Research, 2011 – the latest data available) is summarised in Table 3.3.5.3a below. That profile must be "translated" into an input-output (or nowadays called supply-use) framework and then linked with the usage (and costs) of production factors and consumer demand as indicated above. Eventually this process can lead to the development of a so-called Social Accounting Matrix for the town; a rather complicated policy tool that would offer substantial benefit for understanding the underlying dynamics of the Kannaland economy.

Industry/Sector	GVAR 2011 Rm	% Contribution per sector 2011	Average annual % Growth 2001-2011	% Contribution to WC sectors 2011
Agriculture, forestry and fishing	134.00	19.79	1.08	1.413
Mining	0.00	0.00	0.00	0.000
Manufacturing	144.40	21.32	6.50	0.335
Electricity and water	10.10	1.49	1.39	0.281
Construction	41.70	6.16	18.10	0.375
Wholesale & retail trade; catering and accommodation	67.30	9.94	4.51	0.176
Transport & communication	13.80	2.04	5.87	0.054
Finance and business services	167.30	24.70	9.53	0.200
Government, Community, social and other personal services	98.60	14.56	5.01	0.255
<b>Total</b>	<b>677.20</b>	<b>100.00</b>	<b>5.60</b>	<b>0.267</b>

Source: Quantec Research

**Table 3.3.5.3a Sector contribution to GVAR in 2011 for the Kannaland Municipality** (MPBS, 2013)

Due to a limitation of sector data for the Kannaland economy, certain sectors are combined and Table 3.3.5.3a is restructured as follows: Rows 6 and 7 are combined to form "Trade, Transport and Accommodation", and rows 8, and 9 are combined to form a category "Services". The adjusted Table 3.3.5.3.a is now referred to as Table 3.3.5.3b.

	Industry/Sector	GDPR 2011 Rm	% Contribution per sector 2011
1	Agriculture, forestry and fishing	134.00	19.79
2	Mining	0.00	0.00
3	Manufacturing	144.40	21.32
4	Electricity and water	10.10	1.49
5	Construction	41.70	6.16
6	Trade transport and accommodation	81.10	11.98
7	Services	265.90	39.26
	<b>Total</b>	<b>677.20</b>	<b>100.00</b>

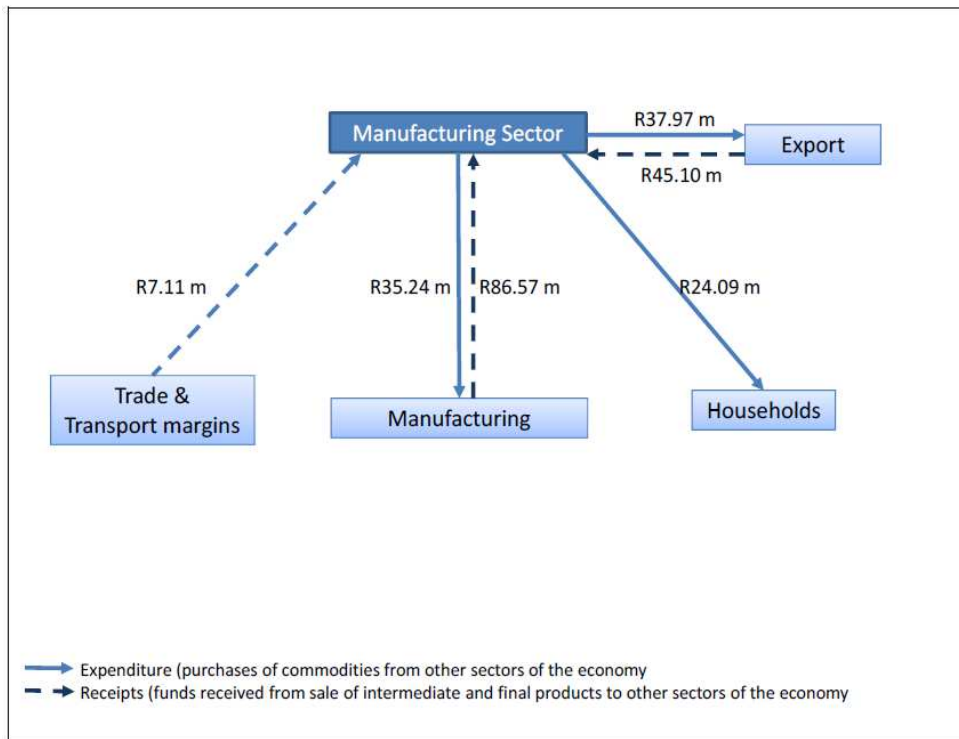
Source: Adapted from Quantec Research

**Table 3.3.5.3b: Sector contribution to GVAR of the Kannaland Municipality** (MPBS, 2013)

#### • Illustration and description of linkages between key sectors

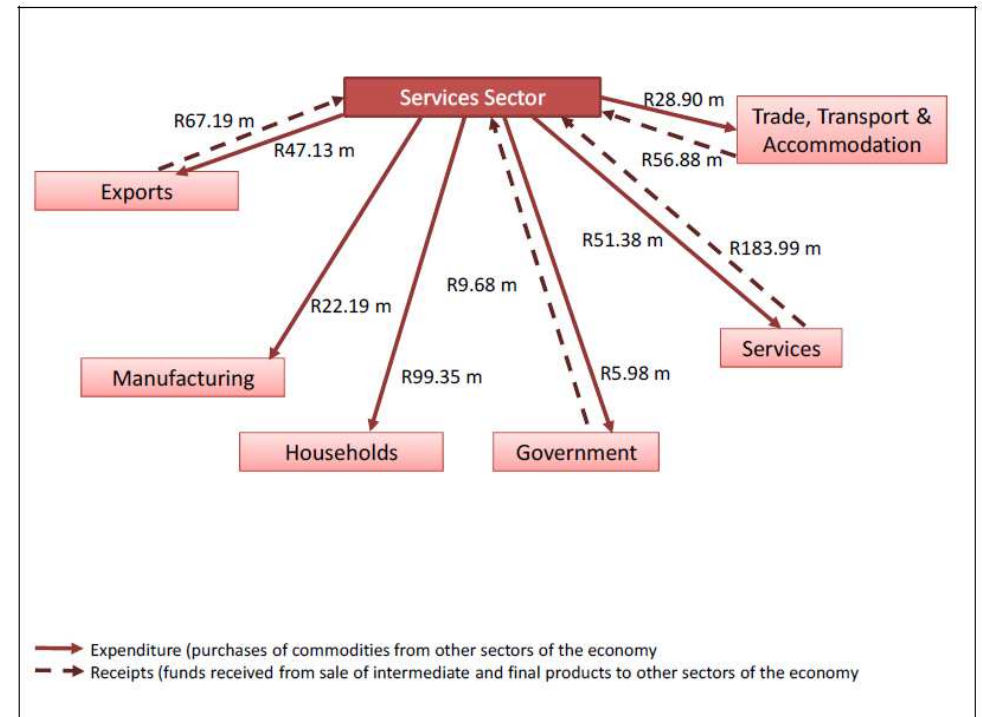
An understanding of the linkages between the sectors is required from a supply and demand side referred to receipts and expenditure respectively.

The illustration provided below is provided for the key sectors of the Kannaland Economy, i.e. Figures 3.3.5.3a, 3.3.5.3b and 3.3.5.3c illustrate the linkages between key receipts and expenditures related to the Manufacturing; Services, and Agriculture, Forestry and Fishing sectors.



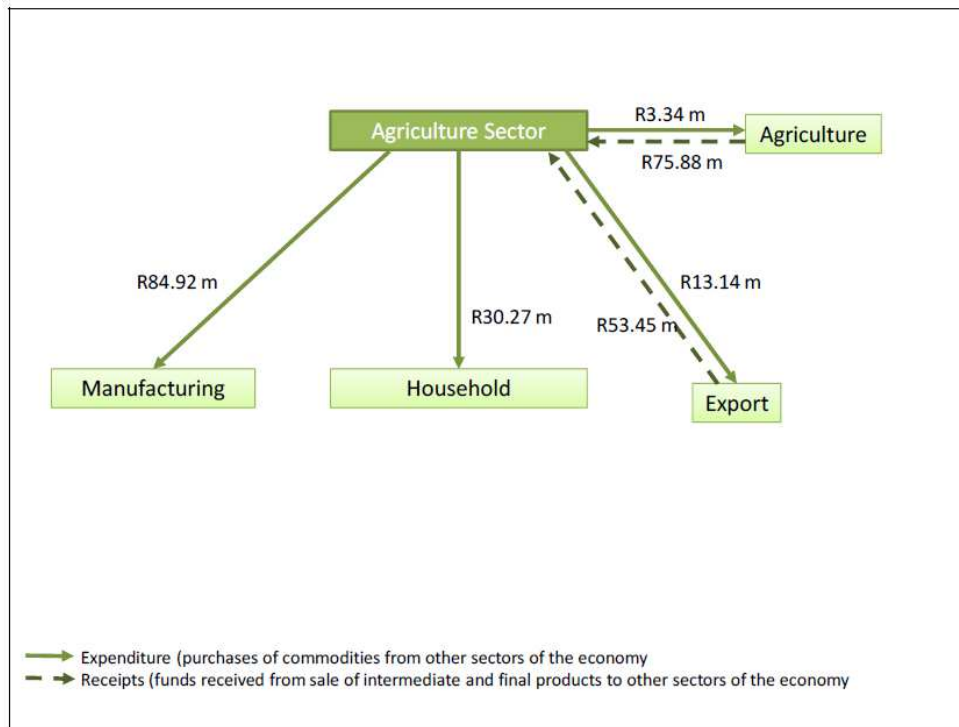
**Figure 3.3.5.3a: The linkages between key sector contributions to income (receipts-supply) and the expenditure (demand) of the Manufacturing sector. (MPBS, 2013)**

An interpretation of the data illustrated in Figure 3.3.5.3a suggests that in terms of the receipts (supply of products and services), the Manufacturing sector supplies R86.57 million to various industries within the sector and received Trade and Transport Margins of R7.11 million. Exports generated R45.10 million in receipts for the sector. In terms of expenditure (demand), R35.24 million was expended to the sector itself, while households demanded R24.09 million of goods and services. Also note that Trade and Transport Margins is not a sector per se, but reflects the mark-ups on Trade together with Transport costs paid/received by the sector in the local economy.



**Figure 3.3.5.3b The linkages between key sector contributions to income (receipts-supply) and the expenditure (demand) of the Services sector (MPBS, 2013)**

An interpretation of the data illustrated in Figure 3.3.5.3b suggests that in terms of the receipts (supply of products and services), the Services sector supplies R67.19 million to Exports, R56.88 million to Trade, Transport and Accommodation, R183.99 million to industries in the sector itself. In terms of expenditure (demand) R99.35 million is demanded from Households, R5.98 million from Government, R51.38 million from the sector itself and R47.13 million from Exports (value of goods and services leaving the municipal area).



**Figure 3.3.5.3c The linkages between key sector contributions to income (receipts-supply) and the expenditure (demand) of the Agriculture sector. (MPBS, 2013)**

An interpretation of the data illustrated in Figure 3.3.5.3C suggests that in terms of the receipts (supply of products and services), the Agriculture sector supplies R75.88 million to the industries within the sector itself, R53.45 million to Exports. In terms of expenditure (demand), R84.92 million is demanded from Manufacturing, R30.27 million from Households, R13.14 million from exports (value of goods and services leaving the municipal area) and R3.34 million from the sector itself.

#### • Input requirements to achieve the level of GRP

In order to obtain some indication of the input required to generate the output, an initial calculation is provided for the purposes of clarity. Table 3.3.5.3c should be considered as a preliminary indication of the sector inputs required to achieve the GGP (value added) indicated for the Kannaland economy in 2011.

In order to derive the input the cost to produce products and services was taken as all costs excluding Gross Operating Surplus (profit) and savings and stock changes. The latter refer specifically to the value addition and also include trade and transport margins as a cost.

	Industry/Sector	GDPR 2011 Rm	Conversion factor	Inputs required Rm
1	Agriculture, forestry and fishing	134.00	1.0061	133.19
2	Mining	0.00	0.0000	0.00
3	Manufacturing	144.40	1.1038	130.82
4	Electricity and water	10.10	1.0000	10.10
5	Construction	41.70	1.7274	24.14
6	Trade transport and accommodation	81.10	1.0050	80.70
7	Services	265.90	1.0040	264.83
	<b>Total</b>	<b>677.20</b>	<b>1.0519</b>	<b>643.79</b>

**Note:** Conversion factor refers to the value addition added to input of a sector to achieve an output

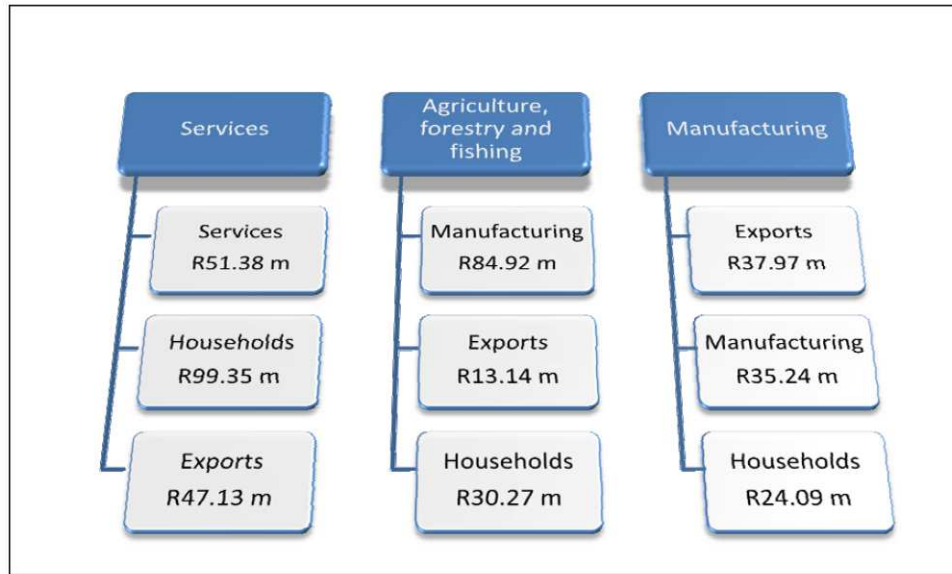
**Table 3.3.5.3c Input values required to generate the level of GRP achieved in 2011 per sector (MPBS, 2012)**

The assessment provided in this report aims to provide an understanding of the linkages between sectors of the Kannaland economy. The linkages could reflect either a receipt (funds obtained for the sector from the sale (supply) of goods and services) or an expenditure, which refers to the purchase of products and services required by the sector from other sectors in the economy, i.e. the demand. The three main sectors of the Kannaland economy in terms of GRP contributions are:

- Services,
- Agriculture, forestry and fishing,
- Manufacturing.

The three sectors mentioned above have the following expenditure (demand) linkages with other sectors of the Kannaland economy:





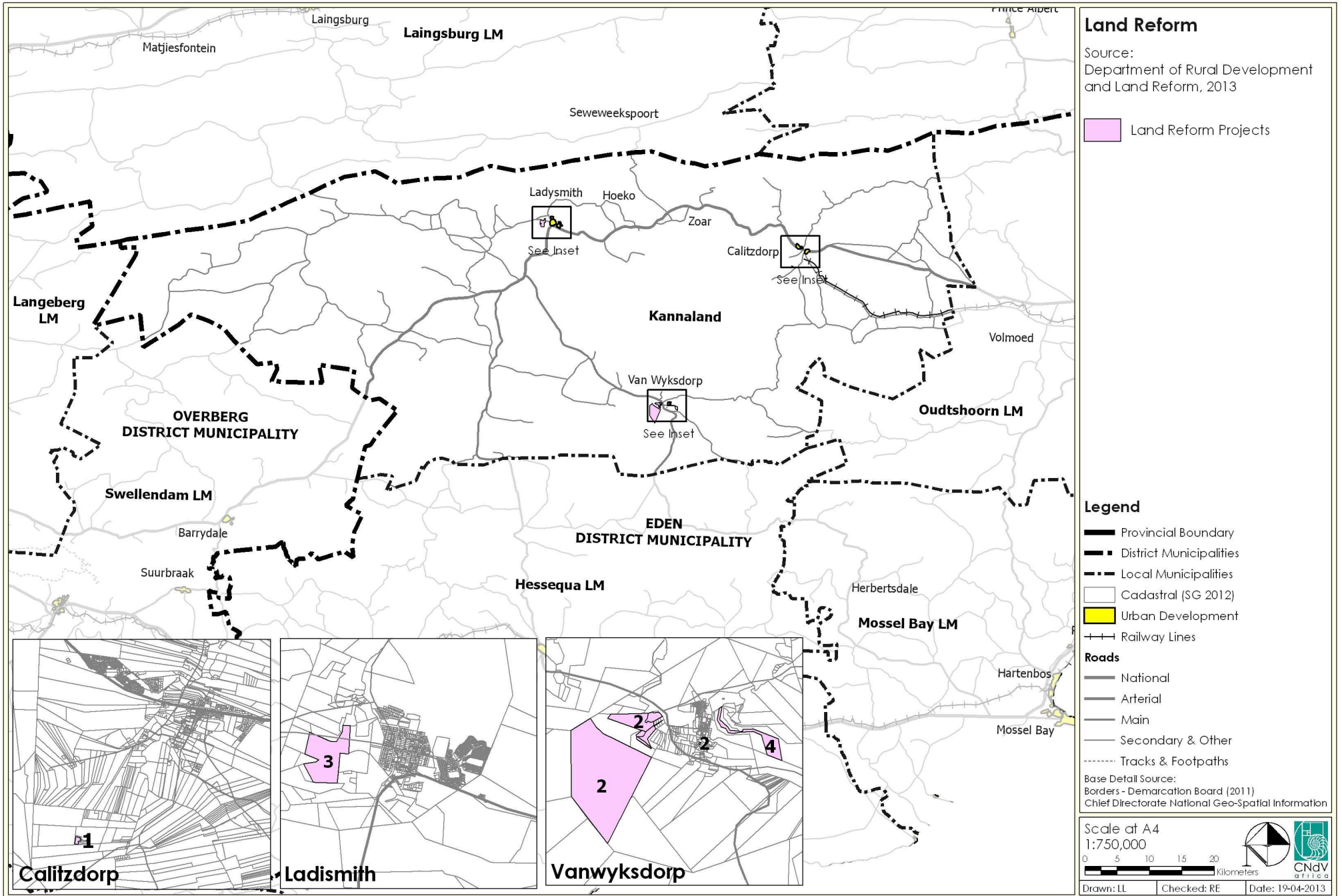
Inputs refer to the requirements of a process to produce an output (product or services). The higher the conversion factor the more value is added to the product. The assessment suggests that most of the value is added to inputs by the Services sector followed by Agriculture and Manufacturing. The focus on the development of the Kannaland economy should be informed by the platform provided by an understanding of the linkages between the sectors. Identification of key sectors is important, but not only in terms of its contribution to the GRP of the Municipal economy. A need exists to inform economic policy and strategy by developing sectors that support the key sectors and thereby limit the leakages that current exist through the export of goods and services (through expenditure – demand).

### 3.3.6 LAND REFORM

Figure 3.3.6.1 shows the location of land reform projects in the municipality. A total of 4 land reform projects have been completed, one of which, located in Zoar is still ongoing. No new projects are currently underway within the Kannaland Municipality.

No	Town	Project Name	Property Description	Size (ha)	Transfer Date	Grant Type	Enterprise and Production Type	Status
1	Calitzdorp	Die Krans	Erf 215 and Erf 1178	2.17	5 May 2008	SLAG	Single Type Production: Field Crops	Transferred
2	Ladismith	Muiskraal	Portion 15 of the farm Buffelsfontein No. 229, remainder of portion 16 of the farm Buffelsfontein No.229, remainder of portion 17 of the farm Buffelsfontein No.229, portion 148 of the farm Buffelsfontein No. 229, portion 2 of the farm Buffelsfontein No.229, portion 102 of the farm Buffelsfontein No. 229, portion of portion 20 of the farm Buffelsfontein No.229, portion of remainder of farm Buffelsfontein No.229, portion of portion 20 of the farm Buffelsfontein No.229	23.80	12 May 2000	SLAG	Single Type Production: Field Crops	Land Transferred
3	Ladismith	Ladismith Small Farmers	Portion 38 (Schoon Gezicht) Elands Valley No.95	64.22	22 Aug 2008	LRAD	Mixed Type Production: Animals (and By-Products)	Land Transferred
4	Van Wyksdorp	Van Wyksdorp	Portion 104 of Farm Buffelsfontein 229	23.80	9 Jan 2003	LRAD	Mixed Type Production: Field Corps	Shares Transferred

**Table 3.3.6.1 Kannaland Municipality: Land Reform Projects** (source: DRDLR, 2013)



### 3.3.7 CEMETERIES

Figure 3.3.7.1 indicates the location of cemeteries throughout the municipality. Cemeteries are located in Ladismith, Zoar, Calitzdorp and Van Wyksdorp.

A new graveyard is planned in Zoar (Kannaland Infrastructure Plan Draft 1, 2012).

#### ***Implications for Kannaland Municipality***

- Facilitate the ongoing maintenance of cemeteries throughout the municipality especially relating to security and fencing.

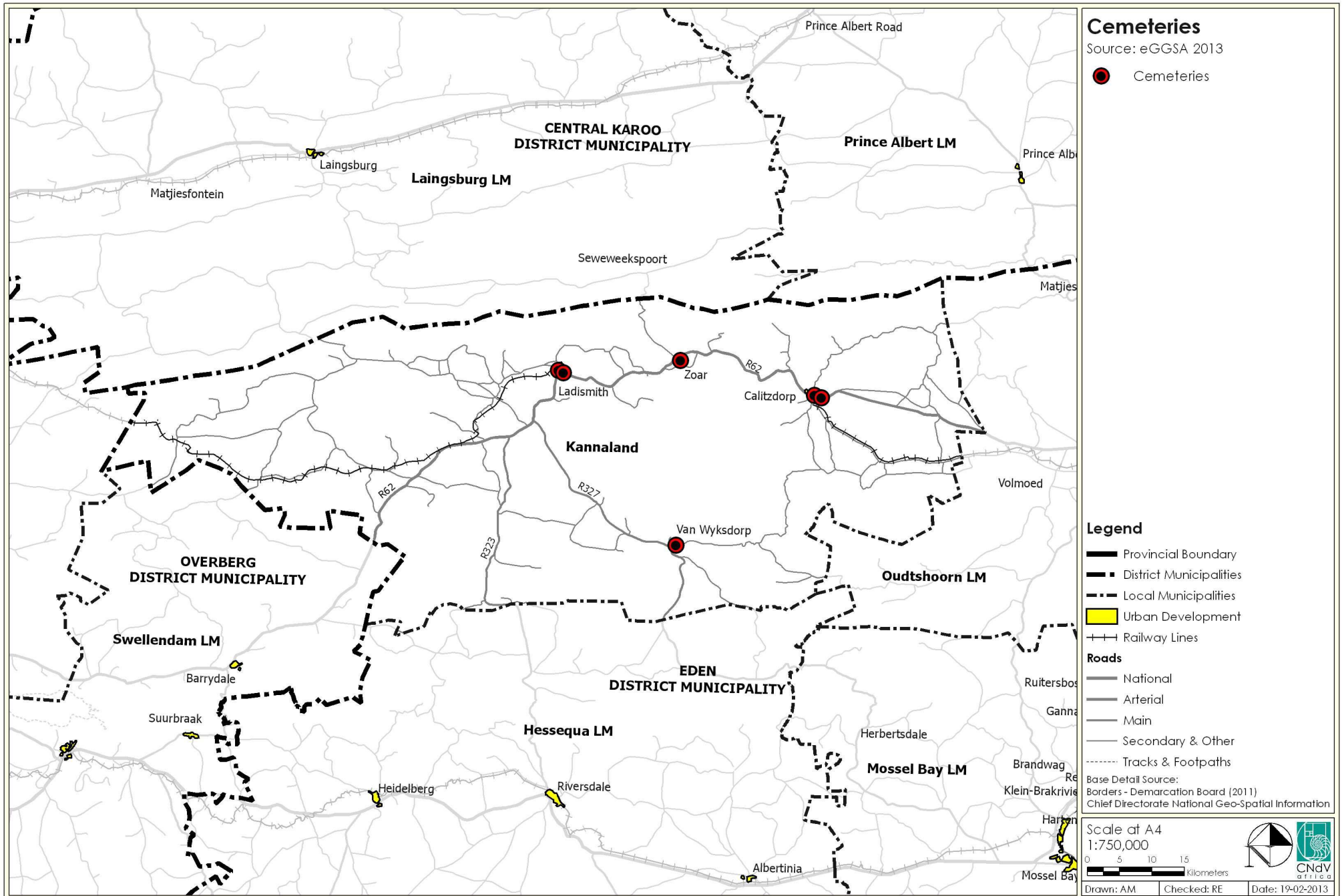
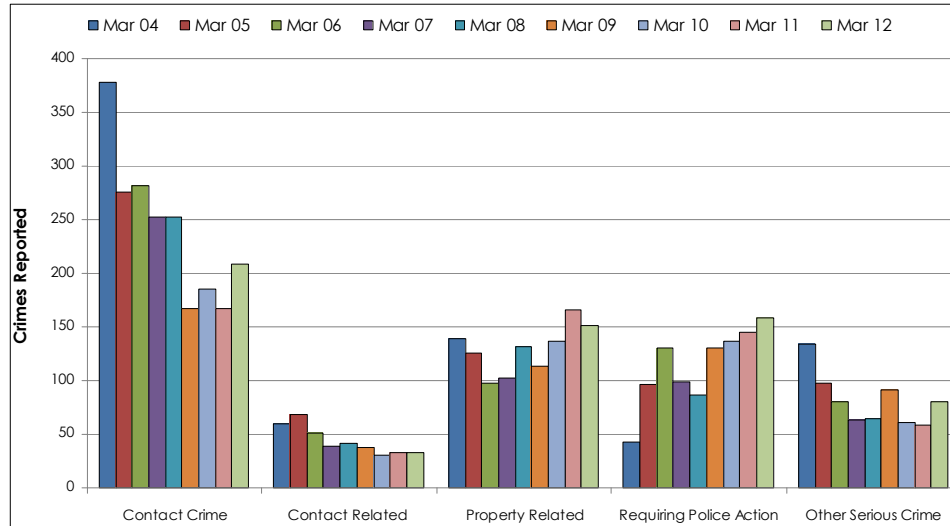


Figure 3.3.7.1 Cemeteries

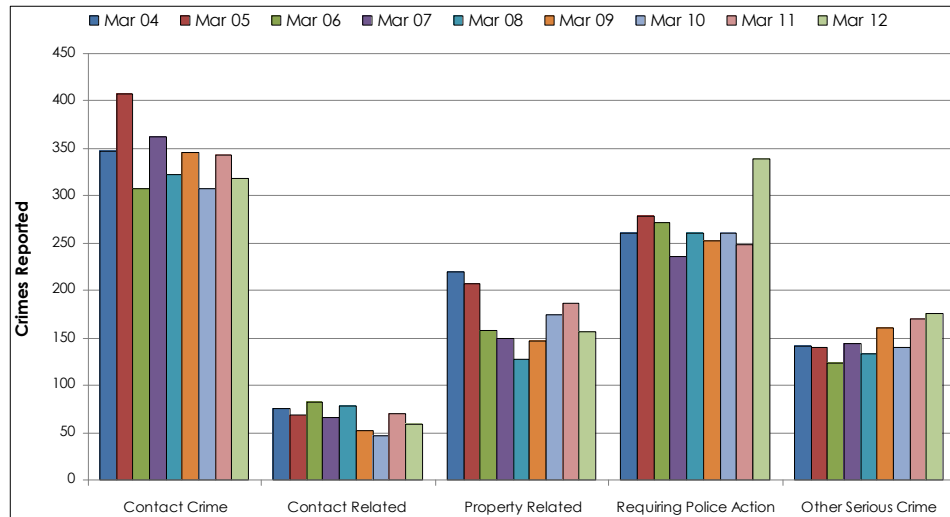


### 3.3.8 CRIME

Two police stations are located in the Municipality, one in each of the towns of Calitzdorp and Ladismith. Graphs 3.3.8.1 and 3.3.8.2 indicate the crimes reported at these respective police stations.



Graph 3.3.8.1 Crime statistics for Calitzdorp

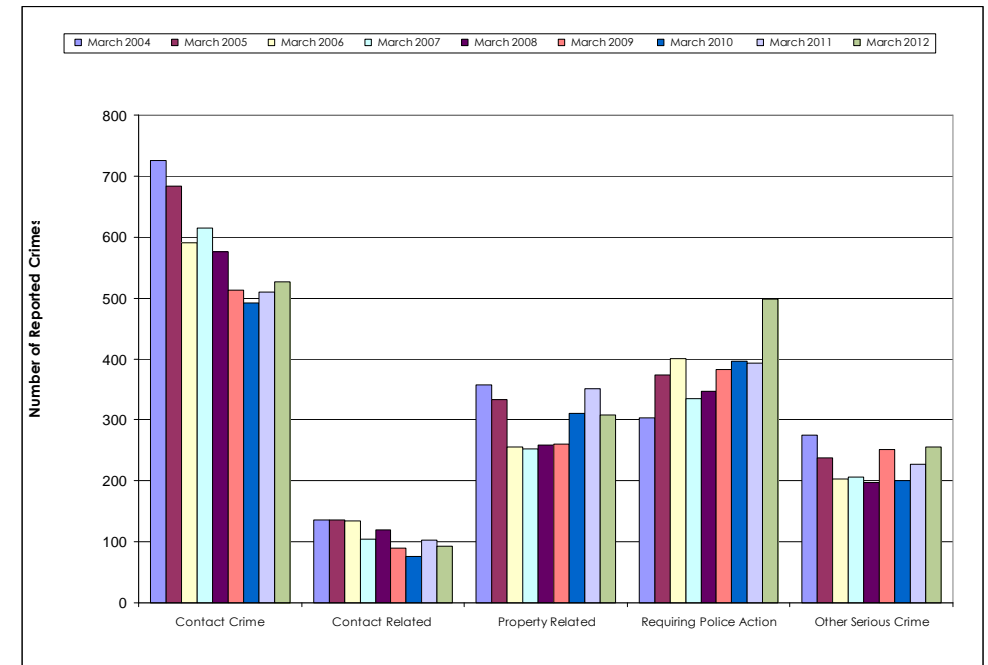


Graph 3.3.8.2 Crime statistics for Ladismith

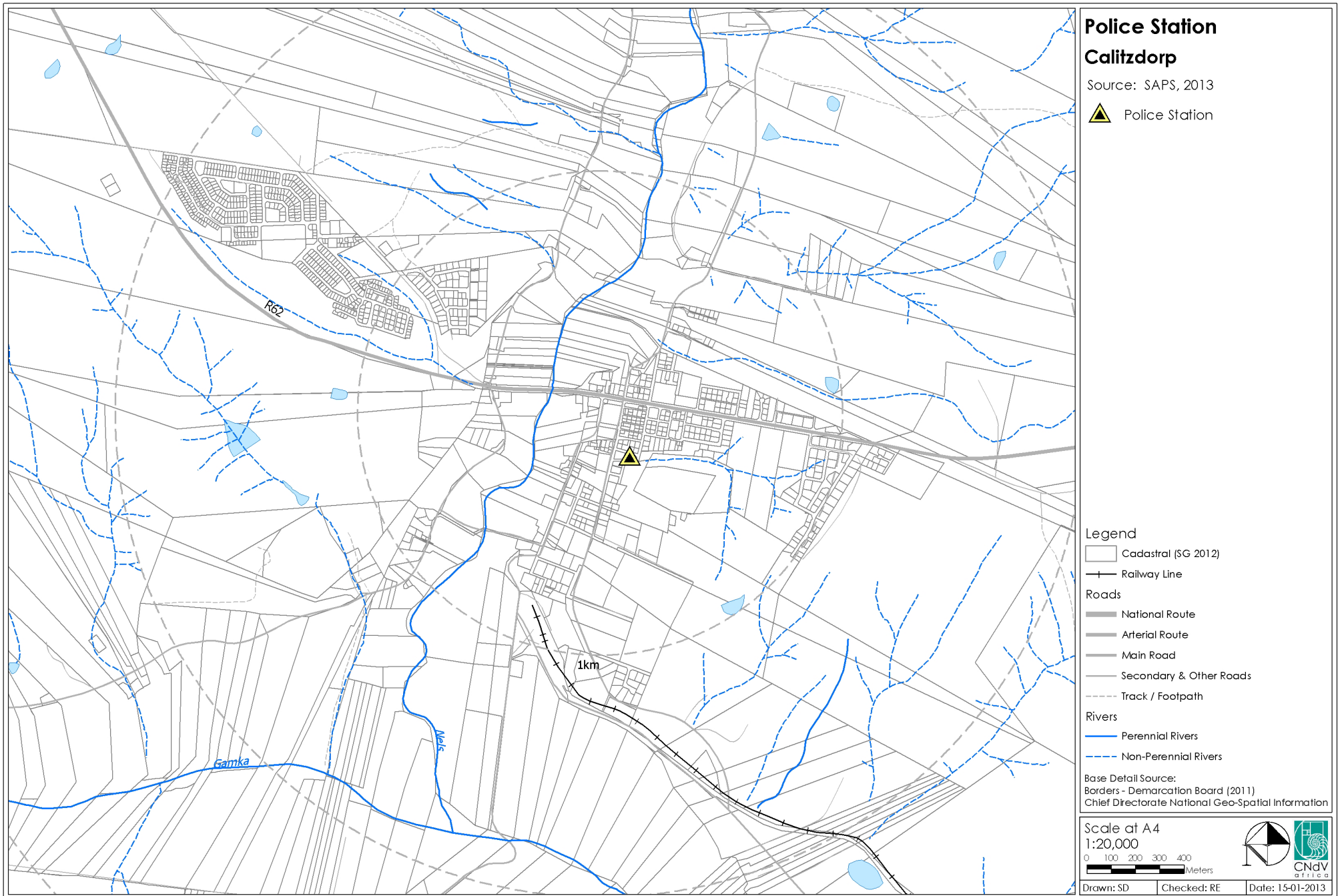
Calitzdorp experienced an increase in property related crime between 2005 and 2011. Other serious crime decreased between 2004 and 2012.

There was a steady decrease in contact related crime (murder, sexual crimes, attempted murder, common assault, assault to inflict grievous bodily harm, common robbery and robbery with aggravating circumstances) in Ladismith between 2005 and 2012. There was a sharp increase in crimes requiring police action from March 2001 to March 2012.

Graph 3.3.8.3 indicates the crime statistics for the Kannaland Municipality. The most prevalent crime is contact related crime (murder, sexual crimes, attempted murder, common assault, assault to inflict grievous bodily harm, common robbery and robbery with aggravating circumstances). There has been a rise in contact related crime incidences since 2011 but the number is still less than the number of incidences recorded in 2004. Both Ladismith and Calitzdorp have high incidences of contact related crime.



Graph 3.3.8.3 Crime statistics for Kannaland Municipality

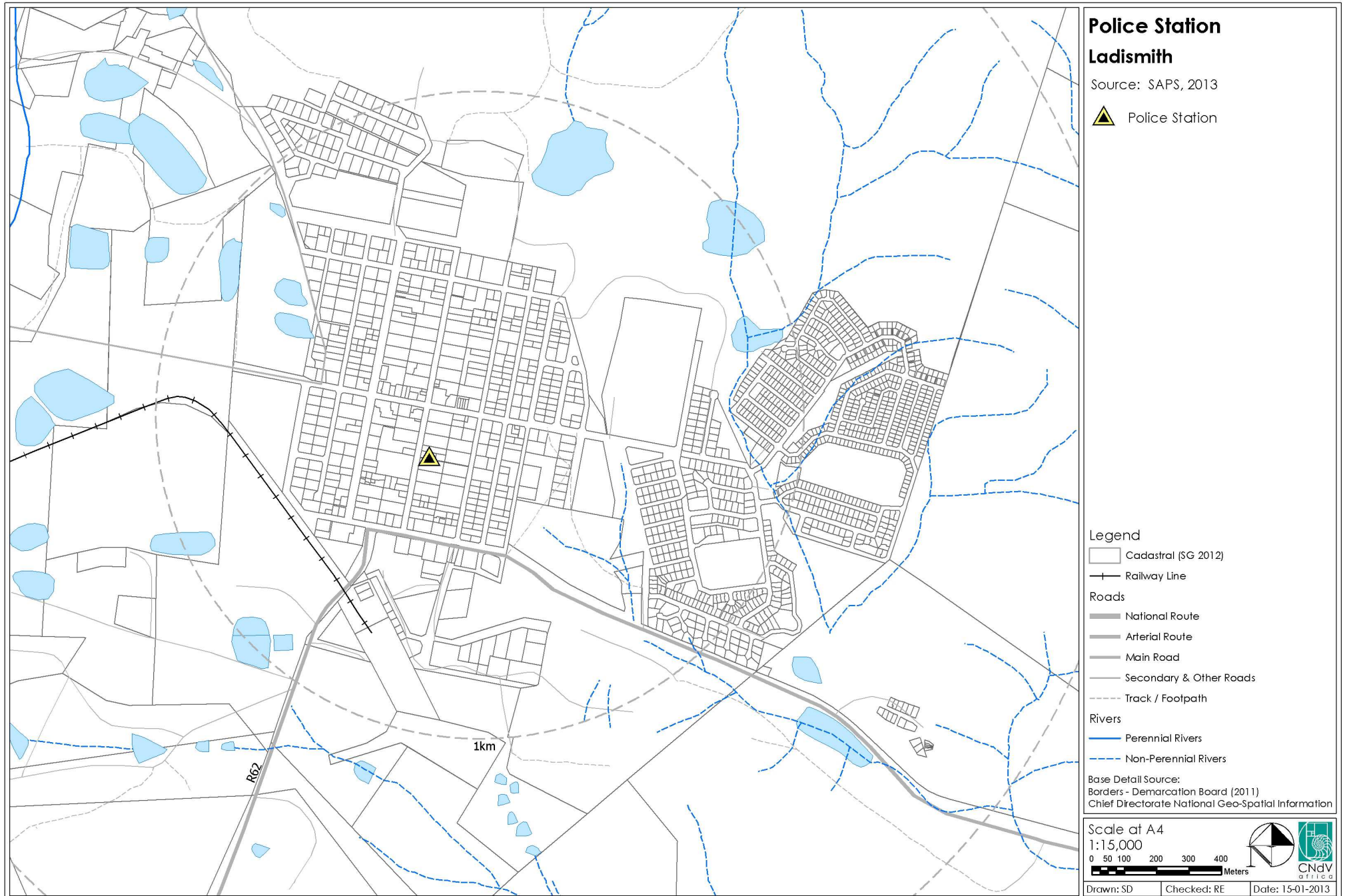


**Figure 3.3.8.1 Police Stations: Calitzdorp**

These crimes are very serious in nature and need to be significantly reduced to improve the quality of life in these towns and the Kannaland Municipality as whole.

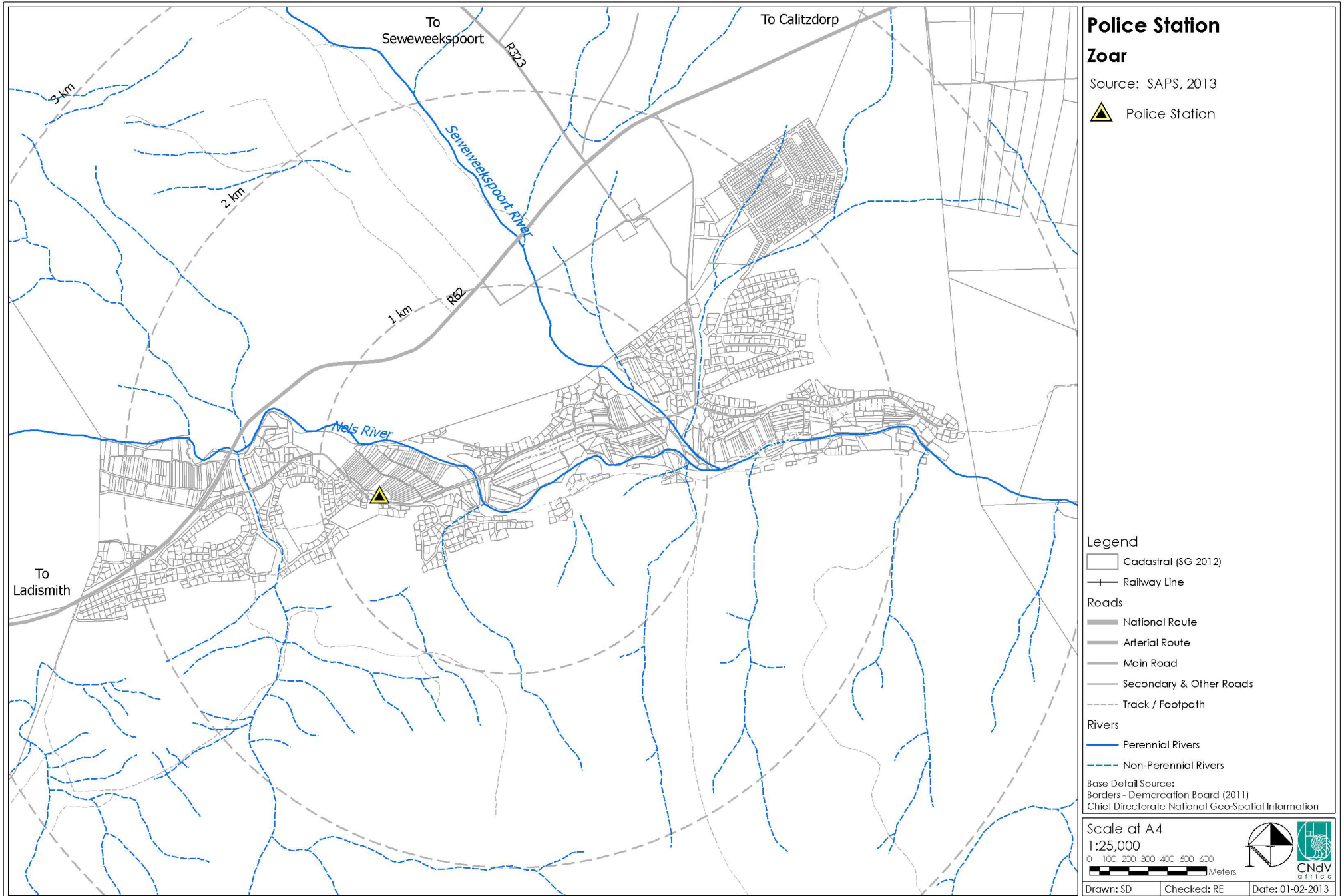
***Implications for Kannaland Municipality***

- Crime is generally a reflection of socio-economic conditions. The high contact related crime rate indicates poor socio-economic conditions.
- Drastic interventions are required to reduce the crime rate in the municipality, especially in the towns of Ladismith and Calitzdorp.

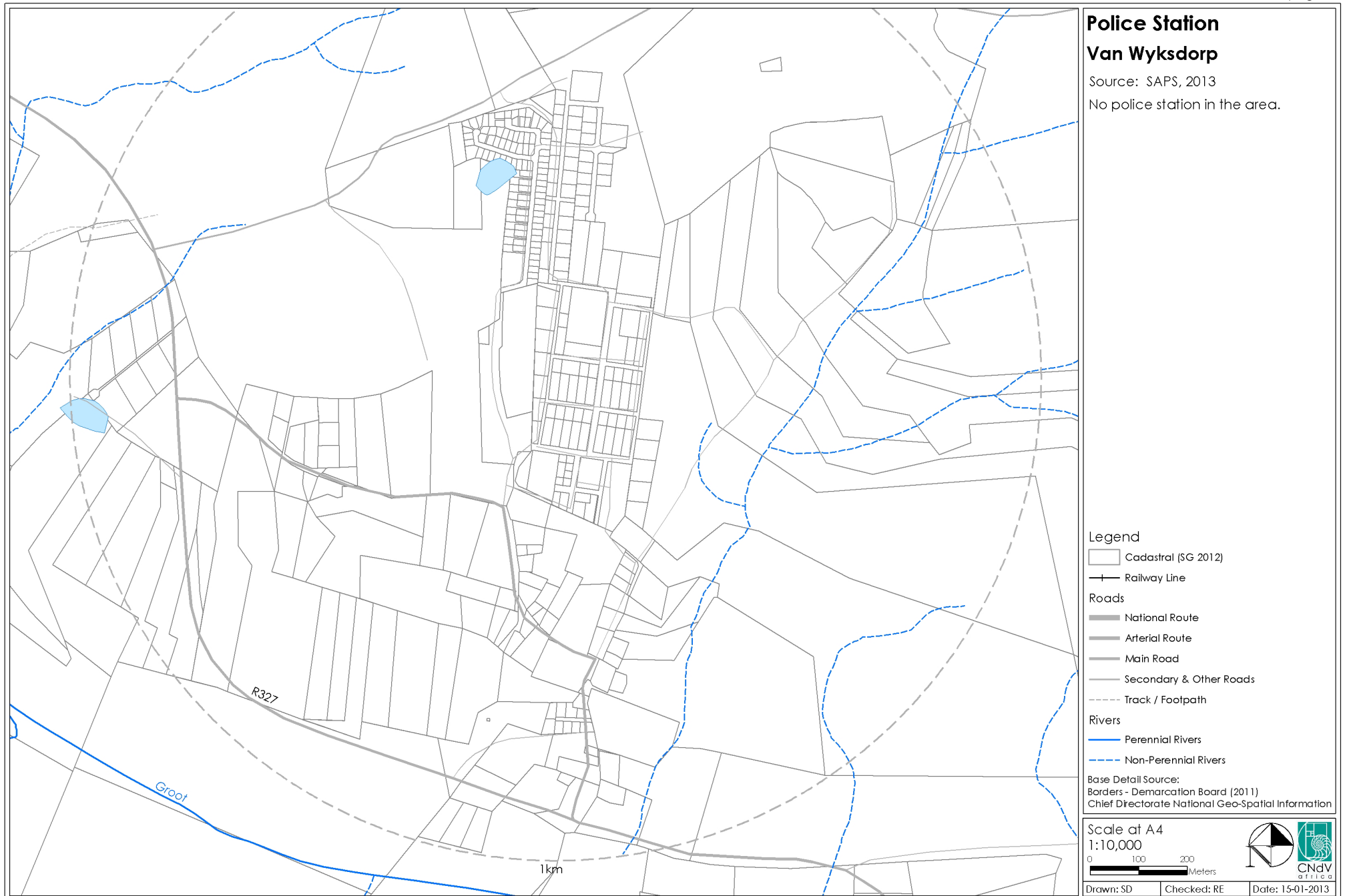


**Figure 3.3.8.2 Police Stations: Ladismith**





**Figure 3.3.8.3 Police Stations: Zoar**



**Figure 3.3.8.4 Police Stations: Van Wyksdorp**

### 3.3.9 PROPERTY MARKET PATTERNS AND GROWTH PRESSURES

From the building statistics provided by STATS SA for the Kannaland Municipality, it can be observed from Table 2 that a decrease of 96,99% occurred in the number of new residential buildings constructed over the period 2007 to 2010. An increase in non-residential building activity is observed in the total value of buildings completed in the Municipal area (refer to Table 3.3.9). Non-residential buildings completed over the period refer more specifically to retail (shopping) space, industrial space and school building projects. The total value of buildings (irrespective of the nature and scope) completed over the period 2007 to 2010, totalled R66,9 million. The split between residential buildings and non-residential buildings is 91% and 9% respectively. The value of buildings completed for residential and non-residential is represented by 619 and 9 building projects respectively. The policy of local procurement and content also assists with job creation among local residents.

The changes in the residential and non-residential building activity are best considered by assessing the number of building projects in relation to the value of building activity. The findings are indicated in Table 3.3.9.

Number of projects	2007		2008		2009		2010	
Residential	366	100%	52	95%	190	100%	11	65%
Non-residential	0	0%	3	5%	0	0%	6	35%
<b>Total</b>	<b>366</b>	<b>100%</b>	<b>55</b>	<b>100%</b>	<b>190</b>	<b>100%</b>	<b>17</b>	<b>100%</b>
Value of projects	2007		2008		2009		2010	
Residential	R 14,000,000	100%	R 9,708,000	82%	R 29,740,000	100%	R 7,364,000	65%
Non-residential	R 0	0%	R 2,118,000	18%	R 0	0%	R 4,018,000	35%
<b>Total</b>	<b>R 14,000,000</b>	<b>100%</b>	<b>R 11,826,000</b>	<b>100%</b>	<b>R 29,740,000</b>	<b>100%</b>	<b>R 11,382,000</b>	<b>100%</b>

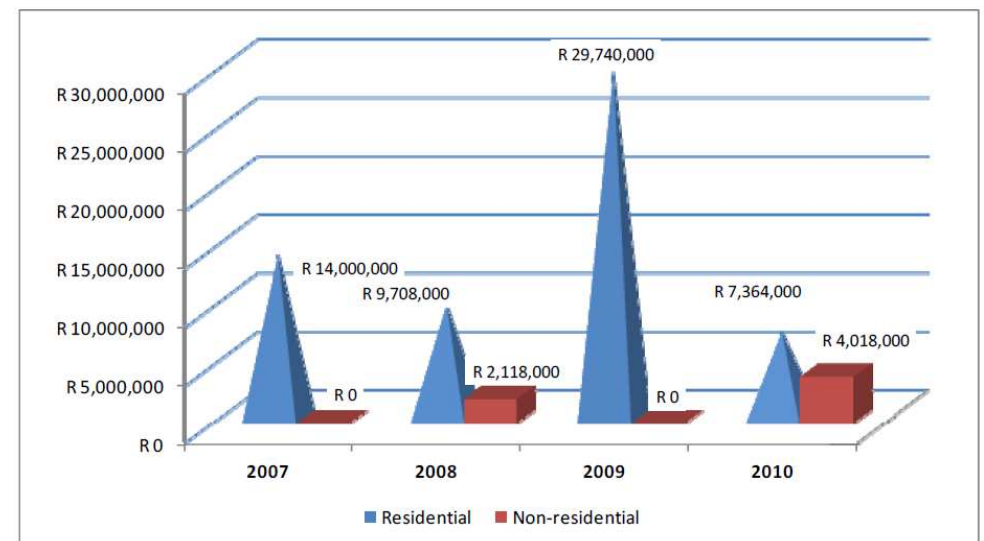
**Table 3.3.9 Breakdown of the number and value of new residential and non-residential building projects per year from 2007 to 2010** (source: MPBS, 2013)

The breakdown between the building types over the period 2007 to 2010 suggests that the value of residential building projects has decreased by 47,4% or 14,84% per annum on average. The number of projects has decreased by 58,36% per annum on average over the period 2007 to 2010. Non-residential building activity has shown signs of an increase over the period although off a low base. The value per project of non-residential buildings increased by 100% per annum on average from R0 to R4,01 million. The number of projects increased from zero to three in 2007 and 2008, decreased to zero in 2009 and increased again to six in 2010.

#### 3.3.9.1 Annual value assessment for residential and non-residential building activity

Residential building activity reached a pinnacle in 2007. This could be attributed to the lag of completed buildings started before 2007 as well as the completion of low cost housing projects (construction of dwellings smaller than 80m<sup>2</sup>). The value of new and renovated residential buildings in the Kannaland municipal area totalled R14 million in 2007 while the value dropped to R7,3 million in 2010. This represents a reduction of 47,4% in value over the period.

The highest annual value for non-residential building activity was achieved in 2010 with R4,01 million and the lowest annual value was zero in 2007 and 2009. The value of non-residential building activity increased from 2007 to 2010 by 100% or on a compounded basis by 100% per annum on average. In addition, the value of residential building activity decreased by an average of 14,84% per annum over the same period. The value of residential and non-residential building activity on an annual basis is illustrated in Graph 3.3.9.1.



**Graph 3.3.9.1 A breakdown of the total value of residential and non-residential building activity on an annual basis for the period 2007 to 2010** (source: MPBS, 2013)



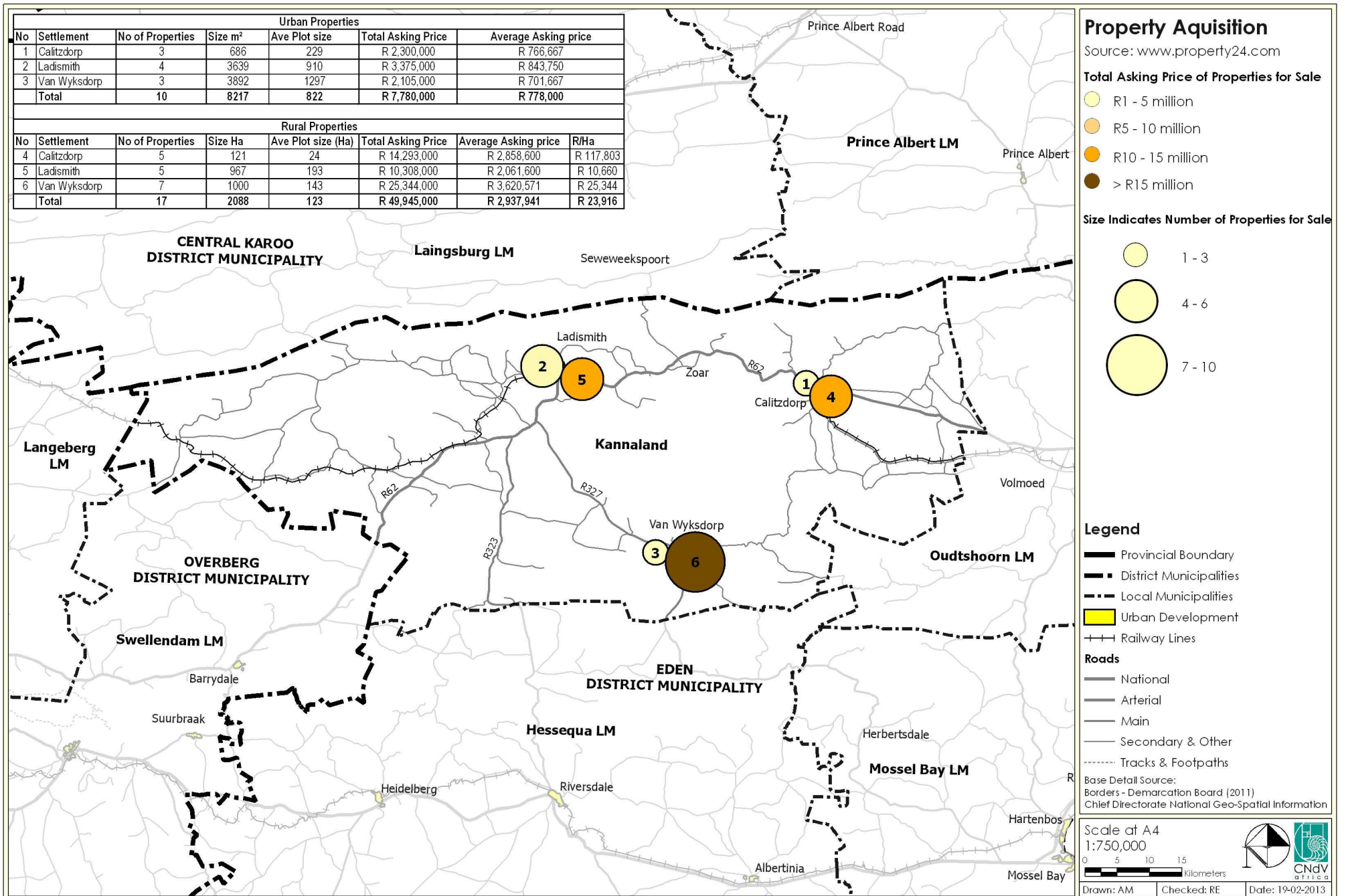


Figure 3.3.9.1 Properties for Sale



The annual decline in the value of non-residential building and a decline in the value of residential building activity also allude to a significant level of volatility or the validity of the data is questionable. The annual growth rates based on the value of residential and non-residential building activity are indicated in Table 3.3.9.1.

Type	2008	2009	2010
Residential	-30,66%	206,35%	-75,24%
Non-residential	100%	-100%	100%

**Table 3.3.9.1** The annual growth rates based on the value of residential and non-residential building activity per year from 2007 to 2010 (source: OABS, 2013)

### 3.3.9.2 Urban Property Market

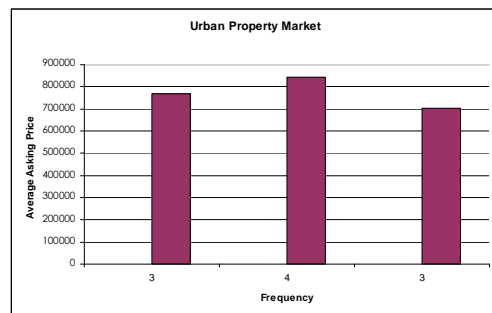
Table 3.3.9.2 and Graph 3.3.9.2 indicates details pertaining to the properties for sale in the urban areas of the Kannaland Municipality.

From the information the following can be observed:

- There are 10 properties for sale with average asking prices ranging from R701 667 to R843 750 in the urban areas of the Kannaland Municipality;
- The largest number of properties are for sale in Ladismith; and
- The town of Ladismith has the highest average asking price, R843 750.

Urban Properties						
No	Settlement	No of Properties	Size m <sup>2</sup>	Ave Plot size	Total Asking Price	Average Asking price
1	Calitzdorp	3	686	229	R 2,300,000	R 766,667
2	Ladismith	4	3639	910	R 3,375,000	R 843,750
3	Van Wyksdorp	3	3892	1297	R 2,105,000	R 701,667
	<b>Total</b>	<b>10</b>	<b>8217</b>	<b>822</b>	<b>R 7,780,000</b>	<b>R 778,000</b>

**Table 3.3.9.2** Property Sales (Urban) (source: Property 24.com)



**Graph 3.3.9.2** Property Sales (Urban) (source: Property24.com)

### 3.3.9.3 Rural Property Market

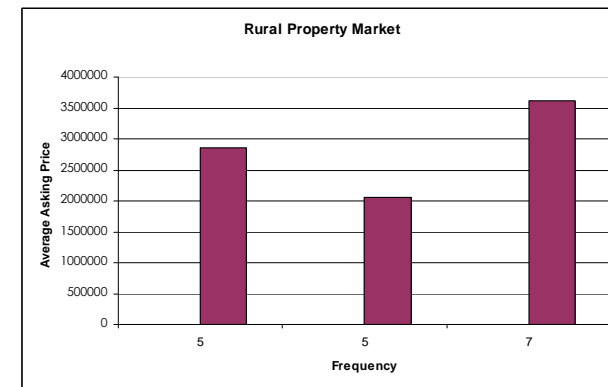
Table 3.3.9.3 and Graph 3.3.9.3 indicates details of the rural property market in the Kannaland Municipality.

From the information the following can be observed:

- There are a total of 17 rural properties for sale with average asking prices ranging from R 2 061 600 to R 3 620 571;
- The largest number of rural properties are for sale in Van Wyksdorp and
- The highest R/ha asking price (R 117 803) is found in Calitzdorp.

Rural Properties							
No	Settlement	No of Properties	Size Ha	Ave Plot size (Ha)	Total Asking Price	Average Asking price	R/ha
4	Calitzdorp	5	121	24	R 14,293,000	R 2,858,600	R 117,803
5	Ladismith	5	967	193	R 10,308,000	R 2,061,600	R 10,660
6	Van Wyksdorp	7	1000	143	R 25,344,000	R 3,620,571	R 25,344
	<b>Total</b>	<b>17</b>	<b>2088</b>	<b>123</b>	<b>R 49,945,000</b>	<b>R 2,937,941</b>	<b>R 23,916</b>

**Table 3.3.9.3** Property Sales (Rural) (source: Property 24.com)



**Graph 3.3.9.3** Property Sales (Rural) (source: Property24.com)

#### Implications for Kannaland Municipality

- The accumulated value of both residential and non-residential building activity is flattening off over the period of the review.

### 3.3.10 MUNICIPAL FINANCES

#### 3.3.10.1 Income and Expenditure Pattern

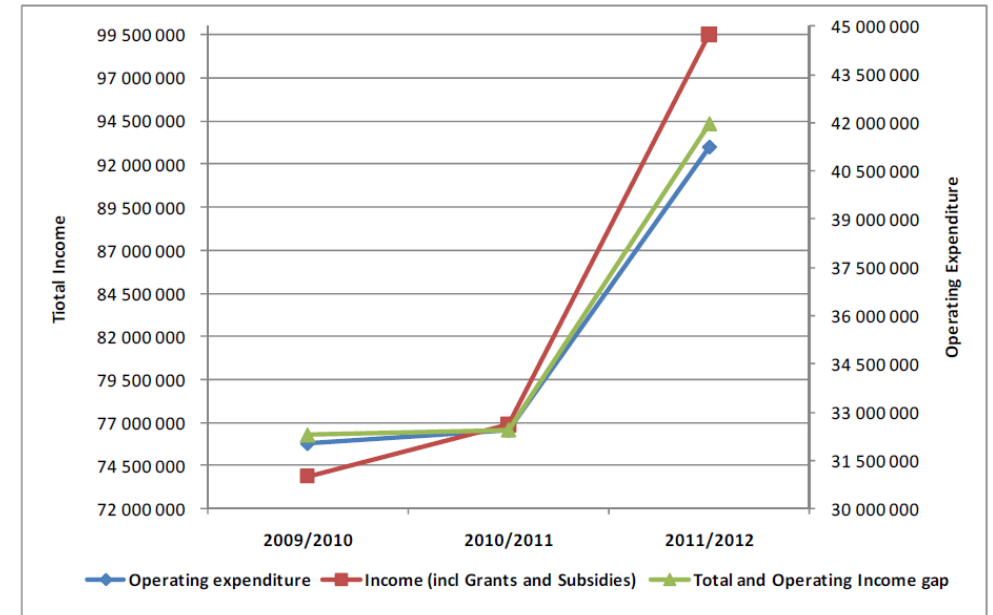
The financial position of the Kannaland Municipality is represented by income and expenditure of an operating and capital nature. Capital expenditure is considered on an annual basis and no distinction can be made between basic capital and ad hoc capital. The former refers to expenditure on infrastructure and superstructure, while ad hoc capital is obtained from other sources for capital projects. In the context of the latter definition, most of the capital expenditure is of a basic nature and represents essentially MIG funding. Financial information was sourced for the Kannaland Municipality over the period 2010/2011 and 2011/2012 financial years. From the Annual Financial Statements it is also normally possible to obtain information for the 2009/2010 financial year due to the inclusion of the comparative financial information for the previous financial year.

Graph 3.3.10.1 represents an illustration of the total operating income and expenditure together with the grants and subsidies for the Kannaland Municipality over the period 2009/2010 to 2011/2012.

The operating income (including grants and subsidies) of the Kannaland Municipality increased by 34,69% from 2009/2010 to 2011/2012 or 16,06% on average per annum over the period. Operating expenditure increased by 22,69% over the period or 10,77% per annum on average from 2009/2010 to 2011/2012. The need for additional funding in the form of grants and subsidies is clearly illustrated and is required to cover the operational shortfall. The graphic illustration in Graph 3.3.10.1 clearly indicates that in 2009/2010, operating expenditure exceeded operating income (including equitable shares, grants and subsidies) by 2,55%. In 2010/2011, operating income (inclusive of equitable share, grants and subsidies) exceeded operating expenditure by 0,44%, while total income exceeded operating expenditure by 7,05% in the following financial year. The assessment also indicates the increased reliance on grants and subsidies to fund operating expenditure.

Grants and subsidies increased by 29,88% from 2009/2010 to 2011/2012, although off a low base. Alternatively, grants and subsidies as a percentage of total operating revenue (excluding grants and subsidies),

decreased from 77,64% in 2009/2010 to 72,85% in 2011/2012. The latter indicates that grants and subsidies received do not exceed the operating income generated by the Municipality from its own activities, but this suggests that the reliance on grants and subsidies will probably increase further should the emerging trend continue.

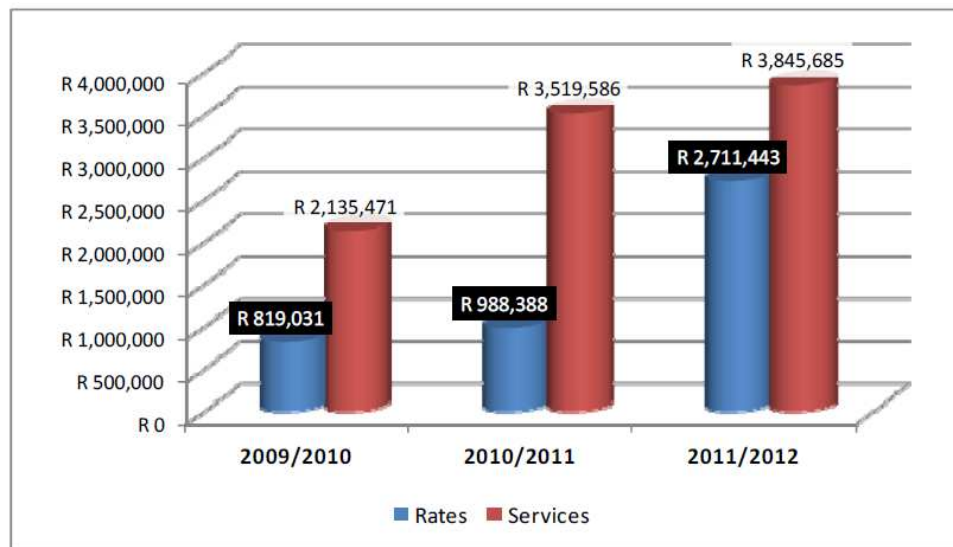


**Graph 3.3.10.1** An illustration of the operating income and expenditure for the Kannaland Municipality together with the difference between income with and without grants and subsidies over the period 2009/2010 to 2011/2012 (source: MPBS, 2013)

It is also apparent from the population figures for the area that an increase in the population has occurred from 2001 to 2011 (Census 2011 Municipal Fact Sheet, 2013). In 2011, the population based on the Statistics South Africa Census, totalled 24 767. The IDP of the Municipality (2010/2011) indicates an estimated population of 23 897 in the Municipal area in 2001. This represents an increase of 3,64% over the period 2001– 2011, or 0,35% on average per annum. Mortality rates, urbanization trends and lack of economic growth are factors that may impact on the size of the future population and household size in the Municipal area.

### 3.3.10.2 Outstanding Rates and Services

The Municipality experienced a general increase in outstanding consumer debt between 2009/2010 and 2011/2012 across all service delivery and rates categories. The lower of the increases accrued to services that include electricity, water, sanitation and solid waste removal. From 2009/2010, outstanding debt related to services increased by 64,82% from R2,1 million to R3,5 million. The following year the growth rate decreased to 9,27% or outstanding debt of R3,8 million. An increase in outstanding rates of 20,68% was also recorded from 2009/2010 to 2010/2011, while from 2010/2011 to 2011/2012 the increase was 174,33%. Overall outstanding debt increased by 53,87% from 2009/2010 to 2011/2012. Outstanding rates increased from R0,8 million to R2,7 million over the period, an increase of 231,05%. Outstanding fees for services increased by 80,09% over the period or from R2,1 million to R3,8 million. The findings are presented in Graph 3.3.10.2. The per capita debt outstanding for the purposes of the analysis is based on the economically active population, which was 16 601 and 19 100 in 2001 and 2011, respectively (Kannaland Municipality IDP 2010-2011 & Census 2011 Municipal Fact Sheet, 2012). The outstanding debt per capita based on the 2001 Population census was R274.39 and based on the population in 2011, R264.75 per capita (as defined).



Graph 3.3.10.2 An illustration of outstanding debt in terms of rates and services from 2009/2010 to 2011/2012 (source: MPBS, 2013)

The movement in outstanding debt is best considered from a base year. This type of analysis offers an indication of the relative movement of different items over a period of time by assuming all the items have a basis of 100, which represents a base year.

#### Kannaland Municipality 2011-2012 financial year with comparisons where applicable to the previous (2010/2011) financial year

Total Income for the Municipality for 2011/2012:	R99,5 m (2010/2011 = R76,8 m)
Total Operating expenditure for 2011/2012:	R92,9 m (2010/2011 = R76,5 m)
Capital Expenditure represented by MIG funding in 2011/2012:	R9,0 m (2010/2011 = R5,4 m):

#### Breakdown of Operating Income

Actual Operating Income	Rates & General Services	Grants/subsidies
2011/2012: R53,67 m	R44,90 m (83,65%)	R41,9 m (78,06%)
2010/2011: R42,08 m	R39,90 m (94,81%)	R32,4 m (76,99%)

Rates and general services income represent 83,65% of Actual Operating Income (excluding grants and subsidies) in 2011/2012, which decreased from 94,81% in 2010/2011. Grants and subsidies received as a percentage of Actual Operating Income grew from 76,99% in 2010/2011 to 78,06% in 2011/2012.

#### Equitable share:

2011/2012	R16,8 m (represents an increase of 8,38% over the previous year)
2010/2011	R15,5 m

#### Arrears in rates and services (and total debtors)

	Total	Rates, services and taxes
2011/2012:	R10,2 m	R6,5 m (63,72%)
2010/2011:	R6,4 m	R4,4 m (68,75%)

Total outstanding debtors represent 19% (2011/2012) and 15,2% (2010/2011) of the Actual Operating Income (as defined). The gross amount owed by debtors increased by 59,37% from 2010/2011 to 2011/2012.

#### Cash flow: Cash and cash equivalents

2011/2012:	R1,46 m (increase of 71,76% over the previous year)
2010/2011:	R0,85 m

## Financial performance ratios

### i) Cost Coverage (Actual Operating Income (as defined) / operating expenditure)

2011/2012	57,77%
2010/2011	55,01%

A figure above 100% would indicate operating income from own sources would be sufficient to cover operating expenditure, hence no need for grant and subsidy funding. The coverage of costs (operating expenditure) increased slightly from 2010/2011 to 2011/2012. The increase in the ratio from 2010/2011 to 2011/2012 indicates that operating expenditure increased at a slower rate than the increase in operating income.

### ii) Liquidity: Net Current Assets: Net Current Liabilities

2011/2012	0,34 : 1
2010/2011	0,33 : 1

A small increase in the ratio by R0,01 of current assets for each R1 of current liabilities (or 3% from 2010/2011 to 2011/2012) is a positive as this indicator highlights the ability of the Municipality to meet its short-term obligations. That being said however, the current ratio is far (and alarmingly) below the safer margin of 2:1. This trend is worrying and must be monitored intensely and corrective measures taken on a proactive basis should any further decline in the ratio occur.

### iii) Solvency: Total Liabilities to Total Assets

2011/2012:	24,90%
2010/2011:	23,23%

The solvency indicator offers an indication of the ability of the Municipality to meet its longer term obligations. The weaker solvency ratio is attributed to an increase of R11m in the Municipality's trade payables.

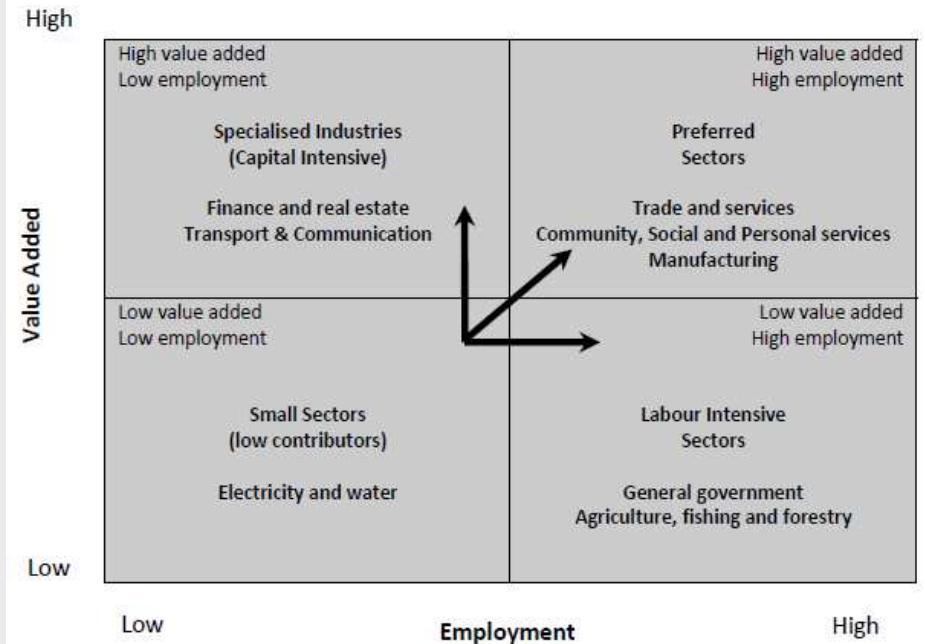
#### Implications for Kannaland Municipality

- There are improving levels of operating income. An increase in operating expenditure has occurred as well as the emergence of declining (negative) trends related to non-payment of service fees which must be addressed in a proactive manner and positive payment trends should be re-enforced;
- The reliance on grants and subsidies (as percentage of total revenue) decreased by 1,49% from 43,71% in 2009/2010 to 42,22% in 2010/2011,

#### Implications for Kannaland Municipality

and decreased again by 0,07% from 42,22% in 2010/2011 to 42,15% in 2011/2012 while actual operating income (as defined) only increased by 27,54% over the same term;

- Minimal resources in terms of capacity and finances are available to fund growth initiatives;
- A need exists to stimulate the local economy and built on the strength of core growing sectors that deliver gross value added and employment by introduce strategies that will reduce the decline in employment and migration. In this context the assessment provided in this report could be conceptualised in terms of the following qualitative assessment.



- The figure above indicates the importance of Trade and Services and Community, Social and Personal Services as economic activity that provides a high value-addition and employment. Notwithstanding, high leakage factors are prevalent in economies with narrow economic bases and therefore income leakage will erode to a certain extent the indirect and induced value added to the Kannaland economy by the need to "import" various products and services.





### 3.3.11.1 HERITAGE

A desktop heritage survey was prepared for the Kannaland Municipality by Claire Abrahamse in February 2013. A basic overview of this report is presented here.

#### 3.3.11.1 Regional Heritage Overview of the Kannaland Municipality

The region is characterized by the semi-arid conditions in the valley between the Swartberg and Rooiberg Mountains, but also by the rivers and streams that have their origin here, and flow through the wide valley areas southwards towards the sea.

Significant features and characteristics of this landscape include:

- The magnificent natural setting, characterised by mountain backdrops and desert plains;
- Karroo Succulent flora and fauna, particularly seen within the nature reserves;
- Significant rock art sites related to the historic San habitation of this landscape. These sites are largely located within the steep kloofs of the mountain ranges;
- Evidence of human landscape modifications and patterns of land use over millennia, including seasonal grazing, pastoral uses and crop production;
- Remnants of pioneer transport and communication networks;
- Significant Cape farmsteads and mission stations;
- Towns and settlements with dwellings, civic buildings and streetscapes that are outstanding examples of 19<sup>th</sup> Century architecture;
- Relics, ruins and war graves related to the Anglo-Boer wars;
- CJ Langenhoven, a famous South Africa writer, most famous for composing the South African Anthem "Die Stem" , was born in Hoeko in 1873; and,
- The social history/"intangible heritage" of the area, from the San people to the earliest pioneers, the colonists, the economic boom related to trade in ostrich feathers and the associated depression, as well as the new post-apartheid era.

### Regional Environmental Context

The towns and settlements of the Kannaland Municipal area have several structural elements in common which seem to persist throughout the region, and can be listed as follows:

- Towns and hamlets are all situated on a high plateau, set against the foothills of the Swartberg, Touwsberg, Rooiberg or Paardeberg mountains. Because of its altitude, the area is characterized by a very dry climate, but the desert environment is tempered by the high surrounding mountains;
- All settlement occurs along water courses, where water flows for much of the year, and ground water is available during the dry seasons;
- Two of the settlements (Zoar and Amalienstein) are mission stations, and they were established at the very frontier of "civilization" and pre-date the establishment of many of the other towns in the region. The older mission town, Zoar, is unique in its layout because it follows the natural contour of the mountain range against which it is situated;
- The other settlements are formally laid out, often by a surveyor, generally conform to a grid system and have focal points within the towns – often centered on the church;
- Ladismith and Calitzdorp are both typical 19th Century *kerkdorpe*, established by local farming communities in order to create a church centre closer to home;
- Other hamlets in the area, such as Voorbaat, Opsoek and Vanwyksdorp developed to service far-flung and more isolated farming communities;
- None of the settlements are strongly dependent on major infrastructure routes, as it was relatively late in the 19th Century that a proper pass was built between Ladismith and Calitzdorp. Previously the two towns had formed the end points to their respective access roads, leading east to Oudtshoorn and west to Swellendam respectively. The short-lived history of the railway in this area describes the difficulty of access here.

### 3.3.11.2 Local Area Analysis: Potential Heritage Areas

#### LADISMITH AND CALITZDORP

Ladismith and Calitzdorp are considered worthy of Heritage Area overlays. This is because they include some of the oldest fabric in the region, have a high density of Victorian domestic buildings and much of their civic and religious architecture is of high architectural and historic significance.

The suggested Heritage Areas have been determined by consulting 1945 aerial photography of the towns as well as existing maps and other heritage documentation, and identifying graded or grade-able sites within the towns through engagement with local historians and research into the towns' histories.

Some of the key heritage sites within the proposed Heritage Areas/urban conservation areas are described below.

These lists are by no means comprehensive and the Grade III A, B or C status is only suggested and contingent on a proper, "on-the-ground" survey of the towns being undertaken.

#### AMALIENSTEIN AND ZOAR

These two mission settlements form townscapes of high heritage significance, and together form a unique configuration both in terms of their contrasting morphology and as spatial "documents" of a particular era within the missionary history of South Africa.

However, in recognizing this, it was decided that Heritage Areas within these towns might place undue financial strain on the local population, as it would undoubtedly mean a more stringent approvals process for any new alterations to the town. Instead, it is proposed that a significant aspect of their cultural significance comes above as a result of their adjacency within the Karoo landscape, and the impact the settlements had on shaping the landscape within which they were and are set.

As such, it is proposed that Amalienstein and Zoar be further evaluated for potential declaration as part of a Grade II Provincial Heritage Site/Cultural Landscape, along with the Seweweekse Pass.

### 3.3.11.3 Single Point Heritage Resources

The built environment single point heritage resources in the Kannaland Municipality can be divided into three broad types: a) Kerkdorp and Mission Towns, including Amalienstein, Zoar and Vanwyksdorp; b) Hamlets, which all developed during the early 19th Century; and c) Significant farmsteads.

#### A KERKDORPE AND MISSION TOWNS

##### AMALIENSTEIN

##### *Lutheran Mission Church*

Status: Proclaimed National Monument/Provincial Heritage Site (PHS).

Description: The Amalienstein church is a substantial, rectangular thatched building, three bays long, each bay with a cross window with a pointed upper light and separated by buttresses. The façade is classicist rather than Gothic in spirit. The central door and flanking lancet windows are each crowned with a pediment. The diagonal corner buttresses and projecting central section are topped by pinnacles, with the central one shaped like a belfry but with no bell. The church was restored by the architect B. Smuts in 1997 and painted the pastel colours that were uncovered below the layers of paint and plaster. The surrounding churchyard wall is still lime washed.

Chronology/Style: Vernacular/amalgamation, 1849-52.

Significance: Architectural, Contextual.

##### *Lutheran Mission Graveyard*

Status: Grade I, National Heritage Site.

Description: The graveyard was restored as part of the 1997 restoration of the Amalienstein Church. It is walled on the northern side only, with centrally placed gateposts and entrance. It is severed from the rest of the town by an access road.

Chronology/Style: mid 1800s.

Significance: Historical, Contextual.

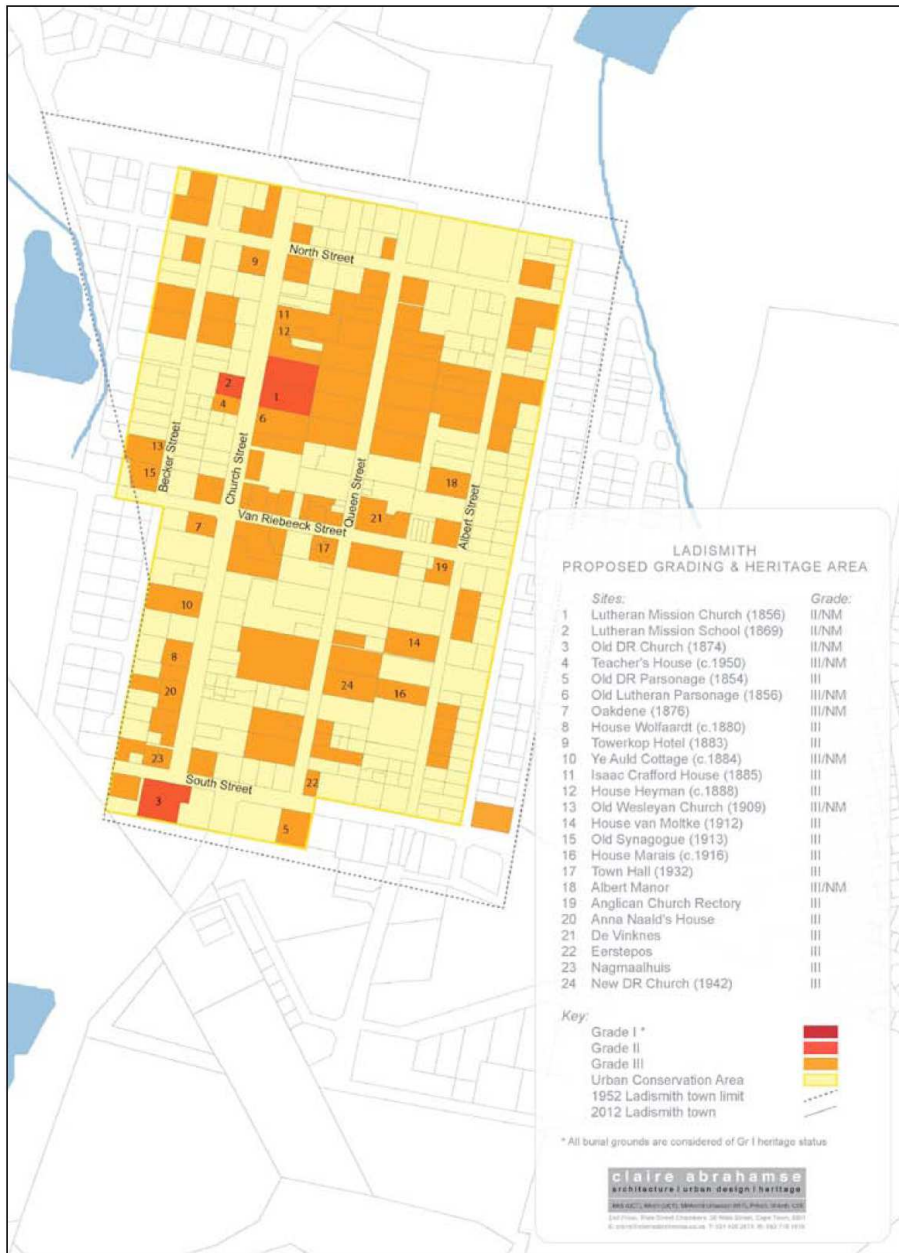


Figure 3.3.11.3a Grading map and proposed urban conservation area/heritage overlay zone for Ladismith. (Claire Abrahamse, 2013)

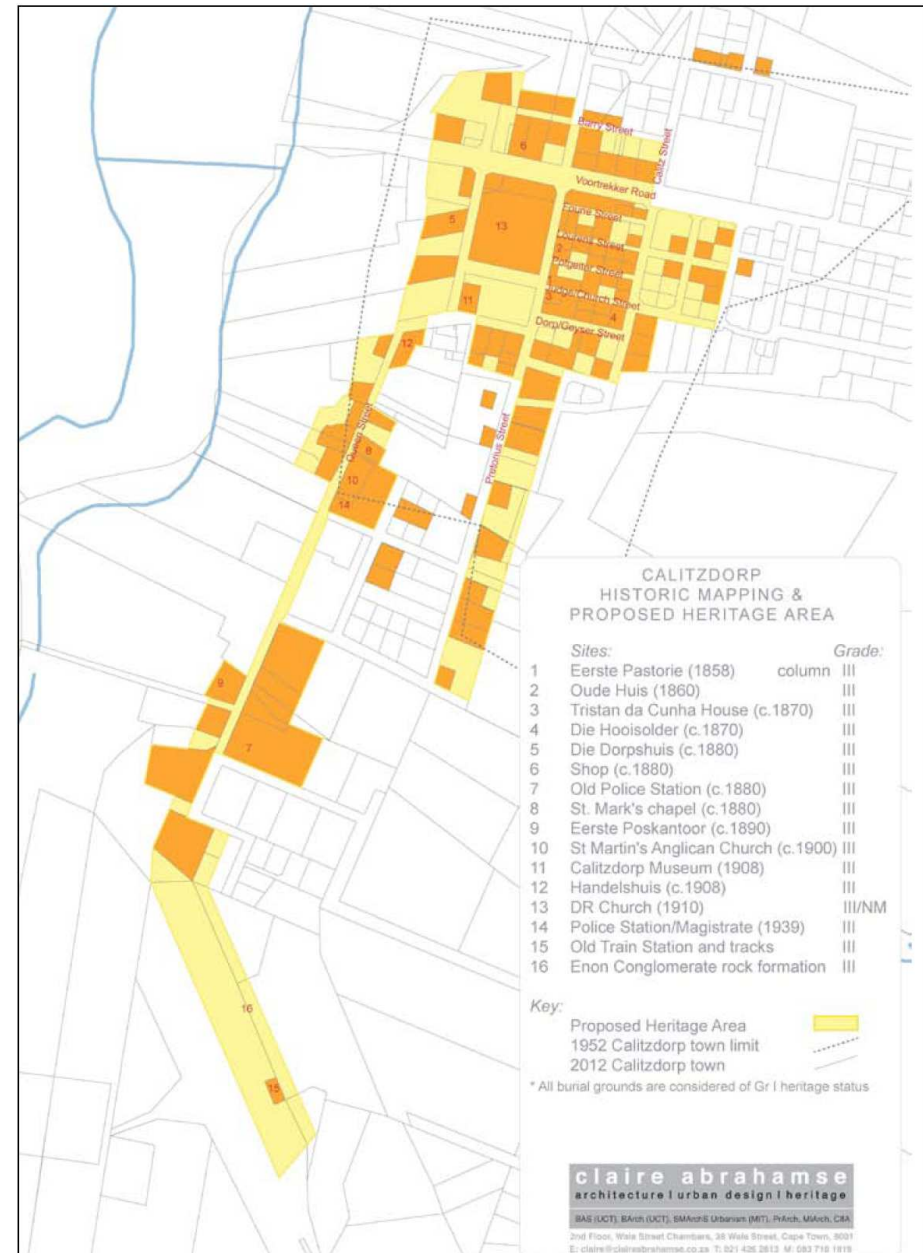


Figure 3.3.11.3b Grading map and proposed urban conservation area/heritage overlay zone for Calitzdorp. (Claire Abrahamse, 2013)



**ZOAR****Dutch Reformed Mission Church**

Status: Proclaimed National Monument/Provincial Heritage Site (PHS).

Description: A "vernacular", rectangular thatched building with tiny pinnacles and the sides and apex of the straight end gables, and diagonal buttresses on the corners. The windows and doors have pointed heads, the latter with very tall entablature. The church is dated 1895 but it is impossible to believe that it is not several decades older. The windows have been replaced.

Chronology/Style: Neo Gothic, mid 19<sup>th</sup> Century.

Significance: Historical, Contextual, Architectural.

**VANWYKSDORP****Dutch Reformed Mission Church**

Status: Grade III

Description: A well-built stone cruciform church built in 1907, with pointed windows and doors.

Chronology/Style: Neo Gothic, 1907.

Significance: Historical, Contextual, Architectural.

**Vredenhof**

Status: Grade III

Description: A typical double-storey Karoo type house with its two stoepkamers separated by the corner, an L-shaped timber veranda linking the two.

Chronology/Style: Late Georgian/Karoo.

Significance: Contextual, Architectural.

**B HAMLETS****Hoeko Hamlet**

Once a single farm located within a valley at the foot of the Klein Swartberg, first granted to the three Kok brothers in 1838, and thereafter subdivided into a series of smaller landowning's, each with its own homestead.

**Original Homestead**

Status: Grade III

Description: A small T-shaped thatched house, still fairly intact, c1810. The present owner is a descendent of one of the Kok brothers.

Chronology/Style: Cape Dutch/Vernacular, c1810.

Significance: Contextual, Architectural.

**Stille Waters**

Status: Grade III

Description: A much modernized T-shaped thatched homestead, of a slightly later date but most certainly built by one of the three original grantees. The author C. J. Langenhoven was born in the house in 1873.

Chronology/Style: Cape Dutch/Vernacular, early 19<sup>th</sup> Century but much altered.

Significance: Historical, Contextual, Architectural.

**Old Smithy**

Status: Grade III

Description: A one room building that was used as a smithy for a long time. It stands on the other side of the river from Stille Waters and has been restored.

Chronology/Style: Vernacular.

Significance: Historical, Contextual, Architectural.

**Old School**

Status: Grade III

Description: Nine bays wide and dating from the time of "Meester Bloemklok" who arrived in the hamlet in 1883. C. J. Langenhoven would have been taught here.

Chronology/Style: Vernacular.

Significance: Historical, Contextual, Architectural.

**Rectangular House**

Status: Grade III

Description: This house has decorated end gables – a rare feature in this area. They are holbol with a full circle at the top, of the Oefeningshuis type, c1840.

Chronology/Style: 1840.

Significance: Contextual, Architectural.



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Other built environment features worthy of preservation include two late 19<sup>th</sup> Century double storey structures opposite Stille Waters, the old irrigation tunnel running alongside the road, old boundary hedges and windbreaks etc.

### OPSOEK HAMLET

#### *The Willows*

Status: Grade III

Description: The main homestead within the hamlet, it is TT-shaped with a long front and two tails put closely together. The end gables are straight and pointed, but with an unusual sloping edge-mold scalloped on the inside. The house dates from c1835. It lost most of its original woodwork in a fire.

Chronology/Style: Vernacular.

Significance: Contextual, Architectural.

Every single structure in the hamlet dates from the 19<sup>th</sup> Century, and most stand alongside the road although several are scattered in the vicinity. The hamlet merits wholesale preservation as an unspoilt agrarian settlement.

### KRUISRIVIER HAMLET

This small hamlet has several 19<sup>th</sup> Century buildings, none of great individual importance. It also possesses a water mill dating from the 1880s, without its wheel but otherwise intact.

#### *Strydomsrus, Kruisrivier*

Status: Grade III

Description: The Kruisrivier homestead, built before 1820, is nearby the hamlet. It is a T-shaped structure with a heavy hearth beam at the front end of the house, which is the oldest section. The tail end of the house is a later addition, with windows dating to c.1860. The roof is now iron.

Chronology/Style: Vernacular.

Significance: Contextual, Architectural.

### VOORBAAT

This is an attractively situated hamlet 18km west of Ladismith, providing examples of various vernacular styles of the 19<sup>th</sup> Century. Several modest, thatched structures are scattered around the hamlet. Two of the finest are outlined below.

#### *Thatched Homestead*

Status: Grade III

Description: A single row of rooms with end gables consisting of five convex lobes separated by small steps. The farmstead has small, late casement windows c1825.

Chronology/Style: Vernacular.

Significance: Contextual, Architectural.

#### *Square-fronted Farmhouse*

Status: Grade III

Description: Double storey structure dating from c1870.

Chronology/Style: Vernacular.

Significance: Contextual, Architectural.

## C FARMSTEADS

#### *K'nuyswagendrift*

Location: East of Ladismith

Status: Grade III

Description: The farm was a quitrent grant made to J. J. Alberts in 1832, but the homestead seems to date from well before then (c1800). The house is T-shaped with the kitchen at the end of the tail with straight and pointed end gables, no front gable and a thatched roof. The interior has retained original woodwork, and an outbuilding was added to the side of the original "T", probably soon after the grant.

Chronology/Style: Vernacular, Cape Dutch.

Significance: Contextual, Architectural.

#### *Strydomsrus, Kruisrivier (figure 95)*

Location: North-east of Calitzdorp

Status: Grade III



**Description:** The Kruisrivier homestead, built before 1820, is nearby the hamlet. It is a T-shaped structure with a heavy hearth beam at the front end of the house, which is the oldest section. The tail end of the house is a later addition, with windows dating to c.1860. The roof is now iron.

**Chronology/Style:** Vernacular.

**Significance:** Contextual, Architectural.

### **Roepersfontein**

**Location:** West of Ladismith

**Status:** Grade III

**Description:** The homestead is T-shaped and has been modernized externally, but retains fine pre-1820 beams and ceiling boards internally. There is another T-shaped homestead nearby, six bays wide and asymmetrical, with two doors. It has an iron roof and has been altered but retains three end gables and windows c1850.

**Chronology/Style:** Vernacular.

**Significance:** Contextual, Architectural.

### **Kraaldoor**

**Location:** North-east of Ladismith

**Status:** Grade III

**Description:** A complex of 19<sup>th</sup> Century buildings, eight of which are notable: 1 & 2) two parallel rectangular buildings, one of which is thatched, 3) a five-bay dwelling between straight gables, with a flat-roofed link between, 4) A thatched house with straight end gables, three bays wide, 5) a building with straight end gables, now under an iron roof, 6) a small graveyard, 7) a double-storey storehouse with smooth-framed openings in a roughcast plaster wall, and 8) a longhouse with smooth-plastered openings within a roughcast wall, with casements and a bo-en-onderdeur dating from c1825.

**Chronology/Style:** Vernacular.

**Significance:** Contextual, Architectural.

### **The Willows**

**Location:** East of Amalienstein, north of Opsoek Hamlet

**Status:** Grade III

**Description:** The main homestead within the hamlet, it is TT-shaped with a long front and two tails put closely together. The end gables are straight and pointed, but with an unusual sloping edge-mold scalloped on the inside. The house dates from c1835. It lost most of its original woodwork in a fire.

**Chronology/Style:** Vernacular.

**Significance:** Contextual, Architectural.

### **Winkelplaas**

**Location:** West of Ladismith

**Status:** Grade III

**Description:** A T-shaped homestead, the length and asymmetry of the front due to an extension to the right and a buitekamer, which was once the farm shop. There are straight end gables with small round caps; the front gable is dated 1835. Of the façade woodwork the flash door with rectangular upper fanlight together with one sash window date from 1835, but inside there are some yellowwood ceilings. The roof is now corrugated iron and there are modern additions to the back and on the stoep.

**Chronology/Style:** Vernacular.

**Significance:** Contextual, Architectural.

### **Groenfontein**

**Location:** North-east of Calitzdorp

**Status:** Grade III

**Description:** Another group of historic structures, set against the Swartberg Mountains a little distance from the road. Five of the structures are 1 & 2) twin gabled mansions, c1900 with fretwork bargeboard gables over stoepkamers, 3) a flat-roofed double storey building with irregular fenestration, c1880, 4) a rectangular, thatched structure between straight gables, a symmetrical plan with windows close to the door indicating a tripartite plan with an extra buitekamer



door to the side, and gracious steps to the front door, c1840, and 5) a flat-roofed house of two storeys. All of the buildings have ochre roughcast plasterwork with smooth quoining in white around the openings and corners.

Chronology/Style: Vernacular/Victorian.  
Significance: Contextual, Architectural.

### **Buffelsdrift/Vyversrus**

Location: South-west of Ladismith  
Status: Grade III  
Description: There are three buildings on this farm, all with holbol end gables with horizontal string-courses. The gables of the T-shaped homestead are enriched with dentils. It also has massive loft steps at the side and original holbol stoepbankies. Above the front door appears the inscription IWDV (Izak Wilhelm van der Vyver) 1852. The front door is of the stable type and has a small-paned fanlight with fluted and dentilled entablature above, c1852. Of interest is the scalloped timber band below the eaves. Nearby is a small graveyard with three gravestones in the shape of gables, the earliest dated 1885. A little further away from the main homestead stands a house with flanking stoepkamers under fretwork bargeboards with a cast iron veranda between, enriched with plaster framing and banding, c1890.

Chronology/Style: Vernacular/Victorian.  
Significance: Contextual, Architectural.

### **Redlands/Elandsvlei**

Location: West of Ladismith  
Status: Grade III  
Description: An interesting complex of old buildings. The farm has historical significance as, before the foundation of Ladismith, church services were often held in a barn here. The present dwelling is a "Ladismith" house of one and a half storeys, c1890, with later windows. There is another, similar but flat-roofed buildings, as well as a rectangular five bays and two-rooms-deep

building with a high thatched roof, dated 1872. A long outbuilding within the complex is also thatched but of conventional width and thus with a lower roof, dated 1855. Lastly a double-storey, three-bay dwelling with single storey annexes faces away from the complex, it has a good cornice and plaster surrounds.

Chronology/Style: Vernacular/Ladismith style.  
Significance: Contextual, Architectural.

### **Mossienes**

Location: 5km south-east of Calitzdorp  
Status: Grade III  
Description: An L-shaped house with late holbol end gables and a straight gable to the back wing. Its windows have unusual plaster surrounds with molded stoep seats, dated 1866.

Chronology/Style: Vernacular.  
Significance: Contextual, Architectural.

### **Die Tarentaalhuisie**

Location: North-west of Calitzdorp  
Status: Grade III  
Description: The modern name of a charming house of the Klein Karoo type, double storeyed and flat-roofed with smooth plaster frames in roughcast walls, c1885.

Chronology/Style: Vernacular.  
Significance: Contextual, Architectural.

### **Bergsig**

Location: North-east of Ladismith  
Status: Grade III  
Description: A five bay double-storey under flat roof, three windows upstairs and with sash windows, c1885.

Chronology/Style: Vernacular.  
Significance: Contextual, Architectural.

### **Three Oaks**

Location: East of Ladismith  
Status: Grade III

**Description:** An interesting complex consisting of a large double-storey structure with pitched roof and two full height stoepkamers, c1890. It is accompanied by a rectangular thatched structure as well as a flat-roofed double storey.

**Chronology/Style:** Vernacular.  
**Significance:** Contextual, Architectural.

#### **Dwarsrivier**

**Location:** West of Ladismith  
**Status:** Grade III  
**Description:** A modest rectangular building with holbol end gables dated 1896. Towards the head of the valley stands a simple, small house of great authenticity, three-bay and rectangular in plan, thatched and with straight end gables, against one end of which is a stoepkamer with a thatched lean-to roof, of great rarity. This extension has, in turn, has a flat-roofed bakhuis with chimney added to it.

**Chronology/Style:** Vernacular.  
**Significance:** Contextual, Architectural.

#### **Ausblick**

**Location:** 3km north-east of Ladismith  
**Status:** Grade III  
**Description:** A Victorian villa with wrap-around veranda on concrete columns, c1910.

**Chronology/Style:** Victorian.  
**Significance:** Contextual, Architectural.

#### **Kroonfontein**

**Location:** East of Ladismith  
**Status:** Grade III  
**Description:** A villa-type farmhouse with two gabled stoepkamers, a good cast iron veranda between, and cast iron ridge decoration, dated 1911.

**Chronology/Style:** Victorian.  
**Significance:** Contextual, Architectural.

#### **Amalienstein Farmhouse**

**Location:** North-west of Amalienstein Mission Town  
**Status:** Grade III

**Description:** The old farm on which the mission station of Amalienstein was established was sold to private owners in the early part of the 20<sup>th</sup> Century. The villagers have been allowed to stay on – some as farm hands. The old farmhouse still stands as an elongated thatched house but entirely modernized with a new gable.

**Chronology/Style:** Vernacular.  
**Significance:** Contextual, Architectural.

#### **Limerick**

**Location:** North-east of Calitzdorp  
**Status:** Grade III  
**Description:** The homestead here is not very old, but there is a mill with an iron wheel, its works still largely intact, and described in Walton's study of mills in the Cape.

**Chronology/Style:** Vernacular.  
**Significance:** Contextual, Architectural.

#### **Zeekoegatsdrift**

**Location:** 13km north-east of Ladismith  
**Status:** Grade III  
**Description:** A typical Ladismith house, flat-roofed with bracketed cornice of two stoepkamers, a low loft expressed by round ventilation openings, but the projecting veranda is modern.

**Chronology/Style:** Vernacular.  
**Significance:** Contextual, Architectural.

### **3.3.11.4 Heritage Site Inventory**

#### **LADISMITH**

AREA	NAME	DATE	GRADE	LOCATION
Ladismith	Old DR Church	1874	II/NM	Top of Church St.
	Old DR Parsonage	1854	III	Top of Queen St.
	Lutheran Mission Church	1856	II/NM	Church St.
	Lutheran Mission School	1869	II/NM	Church St.
	Old Lutheran Parsonage	1856	III/NM	Church St.
	Teacher's House		III/NM	

	Towerkop Hotel		1883	III	4 Church St.
	Residence			III	15 Church St.
	Isaac Crafford House		1885	III	17 Church St.
	House Heyman	c	1888	III	19 Church St.
	Residence			III	16a Church St.
	Hoffland Hoyz	c	1860	III/NM	27a Church St.
	Oakdene		1876	III/NM	26 Church St. (cnr van Riebeeck St.)
	Ye Auld Cottage	c	1884	III/NM	28 Church St.
	Residence			III	33 Church St.
	Anna Naald's House			III	40/44 Church St.
	House Wolfaardt	c	1880	III	42 Church St.
	Town Hall		1932	III	Church St.
	Residence	c	1905	III	9 Queen St.
	Residence		1894	III	13 Queen St.
	Residence		1903	III	22 Queen St.
	Residence	c	1890	III	24 Queen St.
	Residence	c	1890	III	33 Queen St.
	Residence	c	1880	III	Queen St.
	Residence	c	1910	III	40 Queen St.
	Residence			III	42 Queen St.
	Eersteopos			III	43 Queen St.
	Residence	c	1906	III	13 Albert St.
	Albert Manor			III/NM	26 Albert St.
	Anglican Church Rectory			III	28 Albert St.
	Residence	c	1890	III	31 Albert St.
	House van Moltke		1912	III	34 Albert St.
	Residence			III	35 Albert St.
	House Marais	c	1916	III	38 Albert St.
	Residence			III	43 Albert St.
	Residence	c	1880	III	49 Albert St.
	Residence		1890	III	2 Becker St. (cnr Peace St.)
	Residence		1910	III	10 Becker St.
	Old Wesleyan Church		1909	III/NM	Becker St.
	Old Synagogue		1913	III	Cnr. Becker & Van Riebeeck St.
	Residence	c	1890	III	8 Becker St.
	De Vinknes			III	15 Van Riebeeck St.
	Residence		1911	III	Van Riebeeck St. opp. Vinknes

	Residence		III	18 North St.
	Residence		III	1 South St.
	Residence	1912	III	4 South St.
	Nagmaalhuis		III	5 South St.

Table 3.3.11.4a Heritage Site Inventory: Ladismith

**CALITZDORP**

AREA	NAME	DATE	GRADE	LOCATION
Calitzdorp	DR Church		1857	III/NM
	Shop/Police/Hospital	c	1880	III
	Eerste Poskantoor			III
	Residence	c	1890	III
	Residence	c	1870	III
	St Martin's Anglican Church	c	1900	III
	Residence			III
	Residence	c	1900	III
	Calitzdorp Museum		1908	III
	Die Dorpshuis	c	1880	III
	Shop	c	1880	III
	Residence	c	1900	III
	Residence			III
	Residence			III
	Residence	c	1880	III
	Residence			III
	Residence			III
	Residence	c	1905	III
	Residence			III
	Tristan da Cunha House	c	1870	III
	Eerste Pastorie			III
	Residence	c	1860	III
	Residence	c	1890	III
	Residence	c	1890	III
	Residence	c	1859	III
	Residence	c	1875	III
	Residence	c	1880	III
	Residence	c	1890	III

	Residence	c	1890	III	25 Voortrekker Street
	Residence	c	1890	III	37 Andries Pretorius St.
	Residence	c	1880	III	20 Queen Street
	Residence	c	1900	III	21 Queen Street
	Residence	c	1860	III	16 Queen Street
	Residence	c	1880	III	14 Queen Street
	Homestead	c	1840	III	12 Queen Street
	Port Wine Guest house			III	7 Queen Street
	Residence		1915	III	3 Queen Street
	Residence	c	1937	III	2 Queen Street
	Police Station/Magistrate		1939	III	Queen Street
	Old Police Station	c	1880	III	Queen Street

Table 3.3.11.4b Heritage Site Inventory: Calitzdorp

**KERKDORPS, MISSIONS, HAMLETS FARMSTEADS**

AREA	NAME	DATE	GRADE	LOCATION	TYPE
Amalienstein	Mission graveyard		I		Mission
	Lutheran Mission Church	1853	II/NM		Mission
Zoar	DR Mission Church	c	1850	III/NM	Mission
	Anglican Church		III		Mission
Vanwyksdorp	DR Church		1907	II	Kerkdorp
	Vredenhof	c	1890	III	Kerkdorp
	Hoeko	c	1810	II	Ladismith
	Opsoek	c	1800	III	Amalienstein
	Kruisrivier	c	1800	III	Calitzdorp
	Voorbaat	c	1825	III	Ladismith
	Kruisrivier	c	1800	III	Ladismith
	K'nuyswagendruft	c	1800	III	Ladismith
	Kruisrivier/Strydomsrus	c	1820	III	Calitzdorp
	Roepersfontein		1820	III	Ladismith
	Kraaldoom	c	1825	III	Calitzdorp
	The Willows	c	1835	III	Opsoek
	Winkelplaas		1835	III	Ladismith
	Groenfontein	c	1840	III	Calitzdorp
	Buffelsdrift (Vyversrus)		1852	III	Ladismith
	Redlands (Elandsvlei)	c	1855	III	Ladismith
	Moienes		1866	III	Calitzdorp
	Die Tarentaalhuis	c	1885	III	Calitzdorp

	Bergsig	c	1885	III	Ladismith	Farmstead
	Three Oaks	c	1890	III	Ladismith	Farmstead
	Dwarsrivier		1896	III	Ladismith	Farmstead
	Ausblik		1910	III	Ladismith	Farmstead
	Kroonfontein		1911	III	Ladismith	Farmstead
	Amalienstein			III	Amalienstein	Farmstead
	Limerick			III	Calitzdorp	Farmstead
	Zeekoegatsdrift			III	Ladismith	Farmstead

Table 3.3.11.4c Heritage Site Inventory: Kerkdorps, Missions, Hamlets Farmsteads

**3.3.11.5 Heritage Management Framework****A Broad Conservation and Development Guidelines for Kannaland Municipality**

Determining Significance:

- No planning or design work on heritage resources should be undertaken before an assessment of the heritage and cultural significance of the structure/site is undertaken and agreed upon by the appropriate authorities. The local community should be given a say in the determination of the cultural significance of any site.

Significance and Appropriate Skill:

- Work on historical monuments/PHSs or any building of exceptional historic value should only be undertaken by conservators / restorers / heritage practitioners who are sufficiently trained and experienced.

Protective Measures should be Proportionate to Heritage Significance:

- Differently graded sites demand different protective measures, and where authenticity of fabric is not a key element and the building has changed several times over its lifespan, this change should be seen as significant in its own right and the structure should be appropriately managed to allow for future growth and change.
- However, compatible and appropriate uses should always be sought, that would minimize the extent of alteration and adaptation required.

Authenticity of Fabric and Change:

- The original plan and distinguishing original qualities of the structures should always be identified and preserved in some way or form in the new design.



- Deteriorated architectural features should be repaired with traditional materials wherever possible, and replaced only when necessary, also using traditional materials.
- All buildings are products of their own time, and alterations that have no historical basis or wish to create an earlier appearance should be avoided.

#### Contemporary Design within a Heritage Area/Heritage Overlay Zone:

- Contemporary designs within the heritage overlay zone or within graded sites, should not be discouraged provided that they do not destroy original fabric, and are compatible with the size, scale, material and character of the property/surrounding graded properties.
- Wherever possible, new alterations to older structures should be done in such a way that, if they were to be removed in the future, the essential form and integrity of the structure would remain unimpaired.

### **B Detailed Conservation and Development Guidelines for Kannaland Municipality**

The following guidelines should be applied broadly when considering any proposals for construction, alteration or repair within the proposed Heritage Area:

1. These guidelines apply to all construction within a demarcated Heritage Area, whether concerning repairs or restoration of existing buildings, demolition and replacement of existing buildings or additions and alterations to existing buildings, or new construction.
2. It is intended that they provide the basis for decision-making on applications for permits to work on buildings within the Heritage Area and deviations from recommended courses of action will only in rare instances be considered and then only after more-than-adequate justification.
3. Heritage Western Cape is able to provide expert advice on construction of any nature within sensitive heritage areas. It is advisable to seek such advice at the earliest possible stage within the planning process of new construction or changes to structures within a heritage area.

### **ALTERATIONS AND ADDITIONS:**

4. Alterations and additions to existing buildings should look to the existing materiality of the building to which they are being made for reference. Care should be taken to respect the following:
  - 4.1 The appearance of the building, particularly the elements that are visible from the street, should not be fundamentally changed.
  - 4.2 Materials used should echo those traditionally used within the existing heritage building.
  - 4.3 Wherever possible, an attempt should be made to remove later additions that conflict with the original pattern and appearance of buildings within the Heritage Area.
  - 4.4 Rooflines should not be fundamentally changed and the streetscape of the area should be retained to as far an extent as possible.
  - 4.5 Owners are encouraged to retain historical forms of fencing along the boundaries of their properties, but where this is not possible or practical alternative solutions may be considered, provided they are in keeping with the maintenance of the streetscape and do not obstruct the significant views towards the buildings from the street. Boundaries around properties that are residential or were originally residential should not exceed 1.8 metres in height.
  - 4.6 Parking areas, new garages and carports should not obstruct the views of the major facades of buildings and should be concealed from street view wherever possible.

### **NEW CONSTRUCTION:**

5. Reference to the style, shape/form and materials used in the older buildings should inform new construction within a heritage area.
  - 5.1 The shape and positioning of the building on the site should echo those of the older buildings, particularly with reference to the roofline, position of the building on the property and form of the

building as visible from the street. For instance, if most other buildings within the Heritage Area have gabled ends, new construction should follow suit.

- 5.2 Materials used in new construction should be similar to those used on older, traditional buildings in the vicinity.
- 5.3 Roofing materials should similarly echo those evident on the older buildings in the vicinity of the site.
- 5.4 The streetscape of the block on which the building(s) is located should be retained and wherever possible enhanced. Building lines and setbacks from the street and side boundaries should respect and follow the patterns established in the original layout of the area in which construction is taking place. Where they are common, verandas of similar proportions to those of the original buildings in the area should be included in designs.
- 5.5 While respecting the historical nature of the area within which it is located, new construction should not be historicist in approach. While following the basic guidelines outlined above, it should be clear that the new building is of the 21<sup>st</sup> Century rather than trying to blindly mimic buildings of the 19<sup>th</sup> and 20<sup>th</sup> Centuries.
- 5.6 Owners are encouraged to retain historical forms of fencing along the boundaries of their properties, but where this is not possible or practical alternative solutions may be considered, provided they are in keeping with the maintenance of the streetscape and do not obstruct the significant views towards the buildings from the street. Boundaries around properties that are residential or were originally residential should not exceed 1.8 metres in height.
- 5.7 In certain instances, for example where a historically significant property has been subdivided, new construction may be required to be set back far from the street edge or have a flat and contrasting roof in order to be subservient to the main, historically significant structure.

## **RESTORATION AND TECHNICAL WORK ON HISTORIC BUILDINGS:**

6. The towns of the Kannaland Municipality have many structures that exhibit traditional construction methods.

19<sup>th</sup> and early 20<sup>th</sup> Century construction methods are often very different from those of the present day, and the use of contemporary construction methods and materials in conjunction with historic materials is often not advisable as it can cause damage to the older fabric. The following guidelines should be followed when working on historic structures:

- 6.1 Expert advice should always be sought at the earliest time, and Heritage Western Cape would either be able to provide this advice or refer the applicant to suitable professionals in the heritage field. This need not add to costs, and where a cost is incurred for consultation with a professional in the short-term, this may save costs on future repairs and maintenance due to incorrect construction methods and materials being used.
- 6.2 Historic structures have often stood for 100 years or more, and where they are well looked after they can easily stand for more than another century. Sensitive maintenance should always be favoured over reworking with modern materials and methods.
- 6.3 Traditional materials should always be favoured over using newer materials. For instance, builders' lime should be used in the re-plastering of old structures, rather than cement plaster.
- 6.4 Steps need to be taken to ensure proper drainage of rainwater and a barrier against damp, as water is the greatest destroyer of old buildings. Very often, newer damp-proofing methods are very destructive to historic buildings, and expert advice should be sought (refer to point 6.1 above).
- 6.5 The stripping of paint from historic woodwork, unless it was originally exposed, is severely discouraged, particularly on external woodwork. This is because woodwork used for carpentry that was intended to be painted is generally of a less durable quality than exposed timberwork, and the painting of these items is essential to their longevity.

6.6 Similarly the plastering and painting of facebrick or stonework on historic buildings is discouraged. The use of cement is generally discouraged in making repairs to 19<sup>th</sup> and early 20<sup>th</sup> Century buildings.

### **AESTHETICS/APPEARANCE:**

7. Wherever possible, original details should be retained, repaired and/or replaced. Where they are missing, expert advice should be sought on an appropriate replacement.

7.1 Care should be taken not to add so-called "period" decorations to buildings that would not have appeared on the original structure or which come from another period or a different style of architecture. Imitations of period decorations that are made of modern materials (for instance plastic "broekielace") are to be avoided.

7.2 External colours of buildings in a heritage area should attempt to blend in rather than stand out. As a rule of thumb, facebrick and stone should never be painted; external woodwork and trimmings dating from the 19<sup>th</sup> Century were often painted deep browns, green and greys with white being the dominant colour after 1900; and corrugated iron and other metal roofs would generally have been left unpainted, so deep greys are preferable when replacing roof sheeting, although deep early reds and dark greens were also used.

Tiled roofs should not be painted.

### **DEMOLITION:**

8. Demolition of historic structures should only be considered if convincing arguments can be made on the basis of one of the following points:

- The structure to be removed does not contribute in a positive way to the character of that part of the Heritage Area within which it is situated;

- The structure to be removed cannot be restored or repaired on an economical basis by the present owner and a buyer cannot be found who would be prepared to do so;
- The structure has outlived the purpose for which it was erected and cannot be economically converted or a suitable alternative use cannot be accommodated within it;
- The removal of the structure is necessary for purposes associated with development of municipal infrastructure and an alternative site cannot be found;
- The part of the Heritage Area in which the structure is located is already so degraded as to make its existence as an isolated entity among later structures of a different period and nature irrelevant as a factor contributing to the character of the Heritage Area.

8.1 In all instances of demolition where new construction is envisaged it must be shown that the structure that will replace the one to be removed will, from a heritage perspective, contribute positively to or even improve the general streetscape of the area within which it is located. It must also be demonstrated that the rules for new construction in heritage areas have been considered and diligently applied. In certain instances the developers may be required to provide guarantees that the proposed new construction will take place within a reasonable time period.

8.2 Where no new construction is envisaged, reasons for this must be given along with a description as to how the property in question will be used, treated and maintained in the future. The impact of this proposed use on the character of the area must be taken into consideration when deciding whether to permit demolition without new construction.

### **CHANGE OF USE, DENSIFICATION, SUBDIVISION, CONSOLIDATION:**

9. It is understood that it is often in the interests of retention of historic building stock and the character of an area that the use of individual buildings and parcels of land should change as the area in which they are located develops and economic circumstances change.

However, in all instances the implications thereof must be assessed from the perspective of the implications for individual buildings and

parcels of land and the integrity of the areas in which they are located. Applications therefore have to be made in each instance of proposed change of use/subdivision/consolidation.

#### **PUBLIC SPACES:**

10. One of the major contributors to the character of any Heritage Area is its street trees, kerbing, paving and other public open spaces. These should not be changed or altered without the impacts on the character of the Heritage Area within which they are located being weighed up against the advantages of the proposed changes.

Where these changes are necessary they should attempt to contribute positively to and improve the character of the area concerned.

The replacement of exotic street trees with indigenous species; or stone kerbing with precast concrete kerbs is not necessarily a positive development from a heritage perspective, and a policy on such matters should be discussed and agreed upon by the municipality and the heritage authority in advance to any change being carried out.

#### **COMPLIANCE:**

11. Heritage Areas can be established in the municipality's Spatial Development Framework in terms of the National Heritage Resources Act (1999), and through co-operation with Heritage Western Cape. The intention of declaring and delineating such areas is to maintain the character of important historic areas within the municipality in order to show its past development, stimulate tourism and to maintain a quality of the environment that cannot be re-created in modern context and greatly contributes to people's experience of their town. In this regard:

- 11.1 Those wishing to embark on any form of construction within the Heritage Area, whether new, a repair or alteration, restoration or demolition must apply for a permit from Heritage Western Cape and there after have their plans passed by the Municipality.

- 11.2 Both authorities understand that it is not possible to retain the precise use, appearance and nature of buildings and neighbourhoods as they existed in the past, and hence try as far as possible to take a practical approach to conservation, understanding that it is in the interests of the conservation of heritage that buildings and neighbourhoods retain relevance for owners and residents. The purpose of these guidelines is to govern change and intervention, allowing for the needs of modern living while at the same time retaining the spirit of the past.

- 11.3 Permit application forms and advice on their completion are readily available from Heritage Western Cape's website, or their public counter.

#### **Implications for Kannaland Municipality**

- The municipality should investigate the creation of zoning overlays within the towns of Ladismith and Calitzdorp, as suggested. This will afford additional protection to the historic core of the town, and ensure that new development in these areas does not degrade the historic character of the town, and is sensitive to the heritage resources in height and scale.





### 3.4 URBAN SETTLEMENTS AND HIERARCHY

### 3.4.1 Hierarchy and Role of the Settlements

The Kannaland Local Municipality is situated within the Eden District Municipality. The main urban areas within the Kannaland Municipality are:

- **Ladismith**

The town is the main urban centre of the municipality. The town serves as an agricultural service centre for the surrounding agricultural areas. Ladismith Cheese and Parmalat, two dairy factories, are amongst the most prominent industries in the town. The town is located below the Swartberg Mountains in the central northern parts of the Kannaland Municipality along the R62.

- **Calitzdorp**

Calitzdorp is an agricultural service centre serving the needs of the surrounding agricultural areas. The town is known as the "Port wine capital" of South Africa. Tourism plays a significant role mainly due to the town's location on the R62 tourism route. The town is located in the central eastern parts of the municipality.

- **Zoar**

Zoar, originally a mission station, is a dispersed rural settlement. The town is located between Ladismith and Calitzdorp on the R62. Large sections of land are proclaimed in terms of The Rural Areas Act (Act 9 of 1987) and have remained undeveloped.

Amalienstein forms part of Zoar and was established as a Lutheran Mission Station. Development here comprises of a restored church building, historical graveyard and farm buildings.

- **Van Wyksdorp**

Van Wyksdorp is a small and isolated rural village situated along the R327 in the south of the Kannaland Municipality. The town is popular among residents for its rural character.

- **Hoeko**

Hoeko is situated approximately 15km east of Ladismith and is a rural settlement. CJ Langenhoven, a famous South Africa writer, most famous for composing the South African Anthem "Die Stem", was born here in 1873.

The town has some tourism significance (i.e. a water monument) and is known for the production of apricots.

The following sections provide a more detailed description of the main settlements in the municipality.

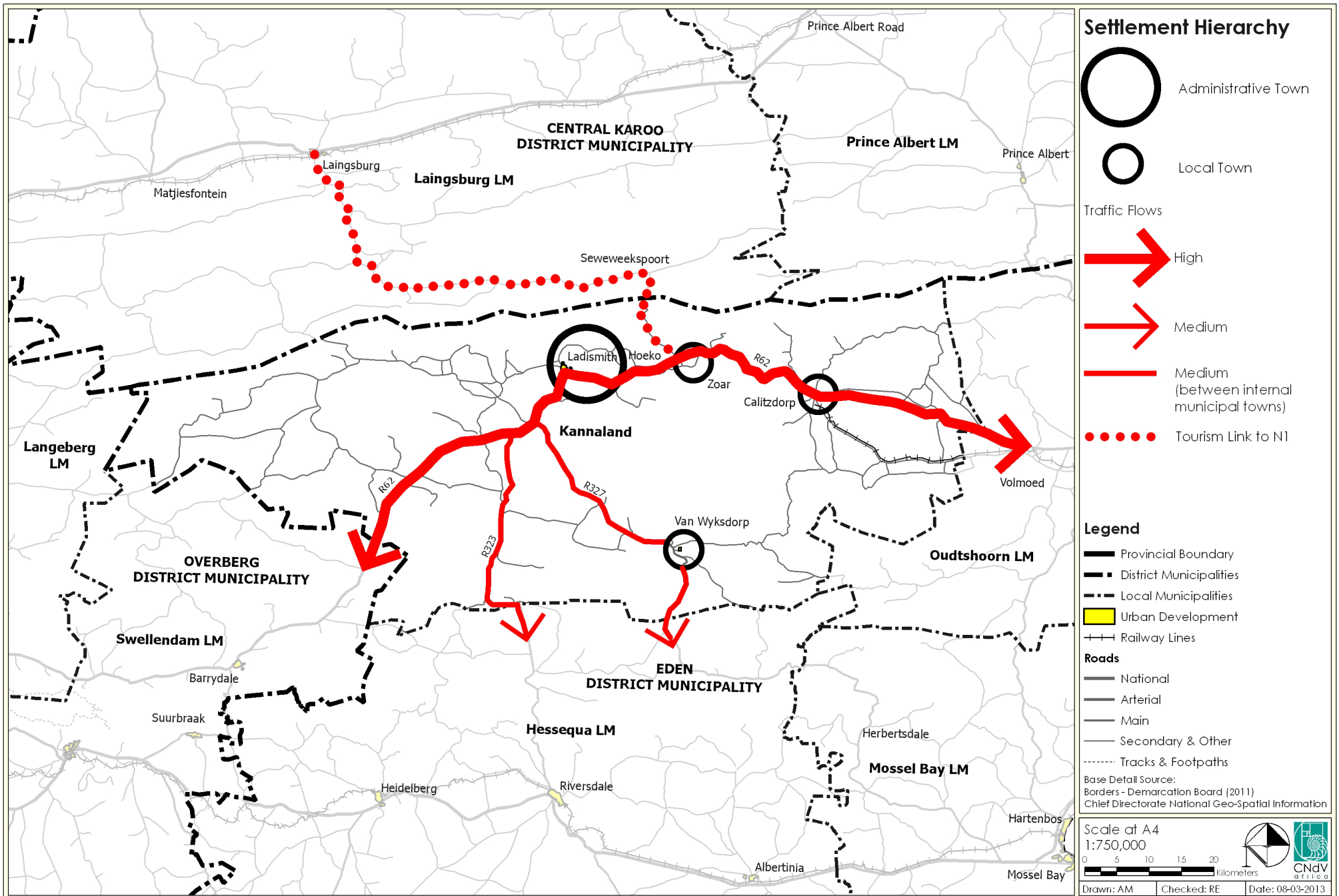


Figure 3.4.1.1 Hierarchy of Settlement, Linkages and investment priority



### 3.4.2 Ladismith (± 7000 – 9500 people)

- Ladismith was established in 1852 on the farm Elandsvlei and is nestled below the foot of the Swartberg Mountains.
- The town is the leader town in the Kannaland Municipality and is home to the offices of the Kannaland Municipality.
- The town boasts a unique “Ladismith” architectural style which is a combination of Victorian, Neo-gothic, Edwardian, Cape Dutch Revival and Regency.
- The economy of the town is mainly centred on the agricultural industry, which includes the production of fruit (grapes, apricots, and plums), milk, wine, flowers and mutton.
- The industrial sector of the town mainly comprise of the two cheese factories, Ladismith Cheese and Parmalat.
- The town is located on the R62 tourism route which holds significant economic benefits for the town. However, the main activity street is situated in the centre of the town (further north of the R62) along Van Riebeeck Street, see Photo 3.4.2.1e. Except for a few restaurants and guest accommodation the town does not offer many opportunities along the R62 route.
- Facilities offered in the town include: A combined school, secondary school and an intermediate school, a hospital, a clinic, a library and a golf course.
- The town has large low income neighbourhoods (Nissenville and Sakkiesbaai) situated to the east of the old town. These low income areas are segregated from the old town by the Parmalat Factory, low lying areas around the stream and vacant properties.
- The nearby mountains offer opportunities for hiking and mountain biking.
- Ladismith has been identified as having low development potential and medium social needs (University of Stellenbosch and CSIR, 2010).



Photo 3.4.2.1a Entrance into Ladismith from the R62 from the south



Photo 3.4.2.1d Huis Vos (c1890) in Becker Street



Photo 3.4.2.1b The Otto Hager Church (c1874) in South Street, which now also serves as the tourism information office



Photo 3.4.2.1e Commercial uses along Van Riebeeck Road



Photo 3.4.2.1c The Ladismith cheese factory to the south of Ladismith, west of the R62



Photo 3.4.2.1f Pedestrian path linking to the low income areas (Sakkiesbaai) in the far east of Ladismith along the R62



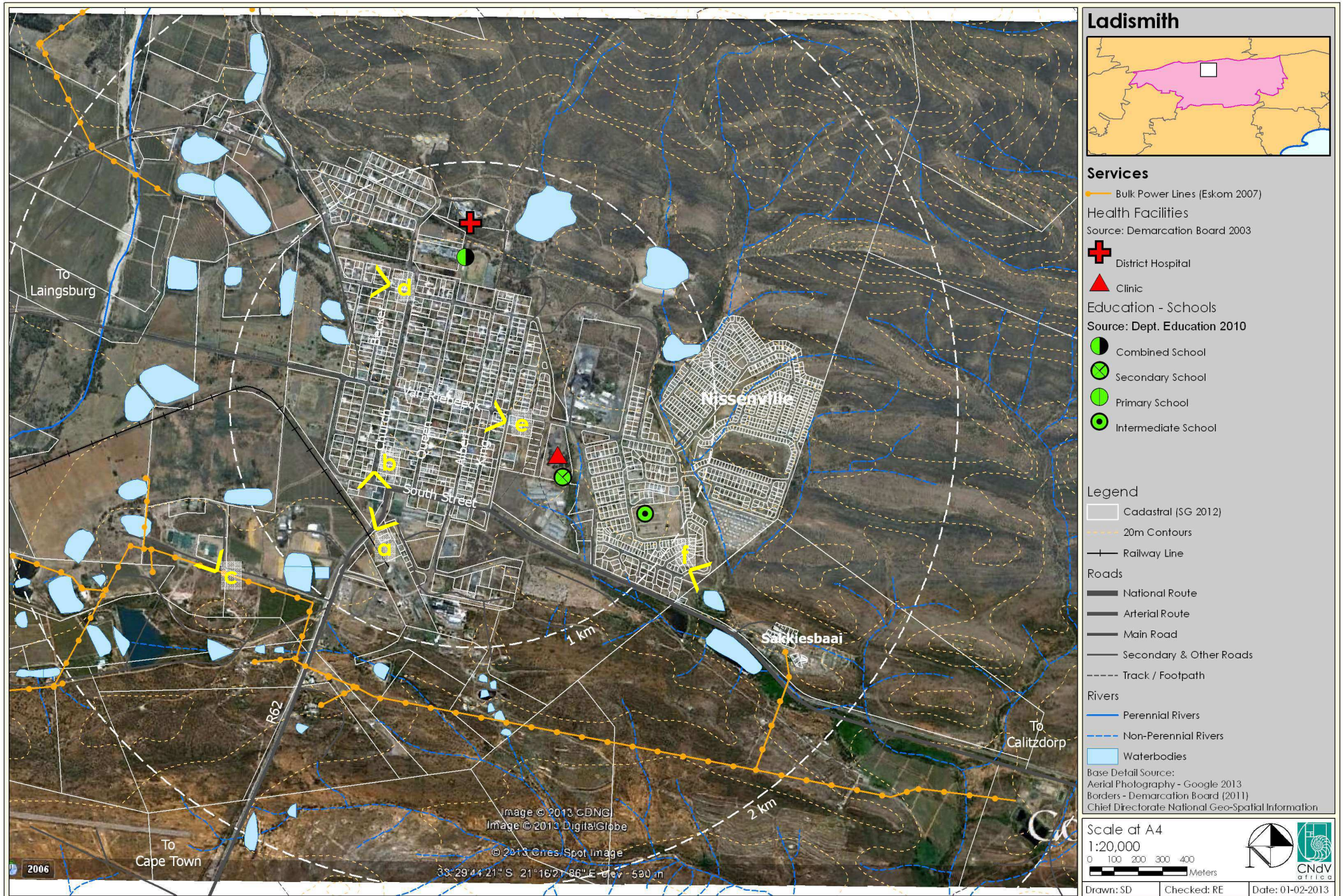


Figure 3.4.2.1 Ladismith Aerial



### 3.4.3 Calitzdorp (± 3000 – 5100 people)

- The town of Calitzdorp was established in 1821 and is today known as the “Port Wine Capital” of South Africa.
- The town serves as an agricultural service centre and offers a variety of commercial and retail opportunities to the surrounding agricultural areas.
- The town is situated on the R62 tourism route which provides significant economic opportunities for the town. In this regard the town offers a number of restaurants, art galleries and guest accommodation types.
- The economy of the town is driven by Port and wine making, ostrich and fruit farming and tourism. Large areas of cultivated land are located to the south of the town and along the banks of the Nels River, see Photo 3.4.3.1f.
- Facilities offered here include: A combined school, an intermediate school and a clinic.
- The town at present is poorly integrated. The low income areas (Bergsig) are situated a significant distance away from the town centre. The Nels River segregates these two areas.
- Calitzdorp has been identified as having low development potential and high social needs (University of Stellenbosch and CSIR, 2010).



Photo 3.4.3.1a Entrance into Calitzdorp from the west along the R62 (note the welcome sign stating that Calitzdorp is the port capital)



Photo 3.4.3.1d Restored buildings along Queen Street, many of which are used as galleries, coffee shops and tourist accommodation



Photo 3.4.3.1b View across the Nels River and the agricultural uses along its banks



Photo 3.4.3.1e Newly constructed low income housing to the north of Bergsig



Photo 3.4.3.1c The Dutch Reformed Church (a national monument) located along Queen Street



Photo 3.4.3.1f Agricultural areas to the south of Calitzdorp



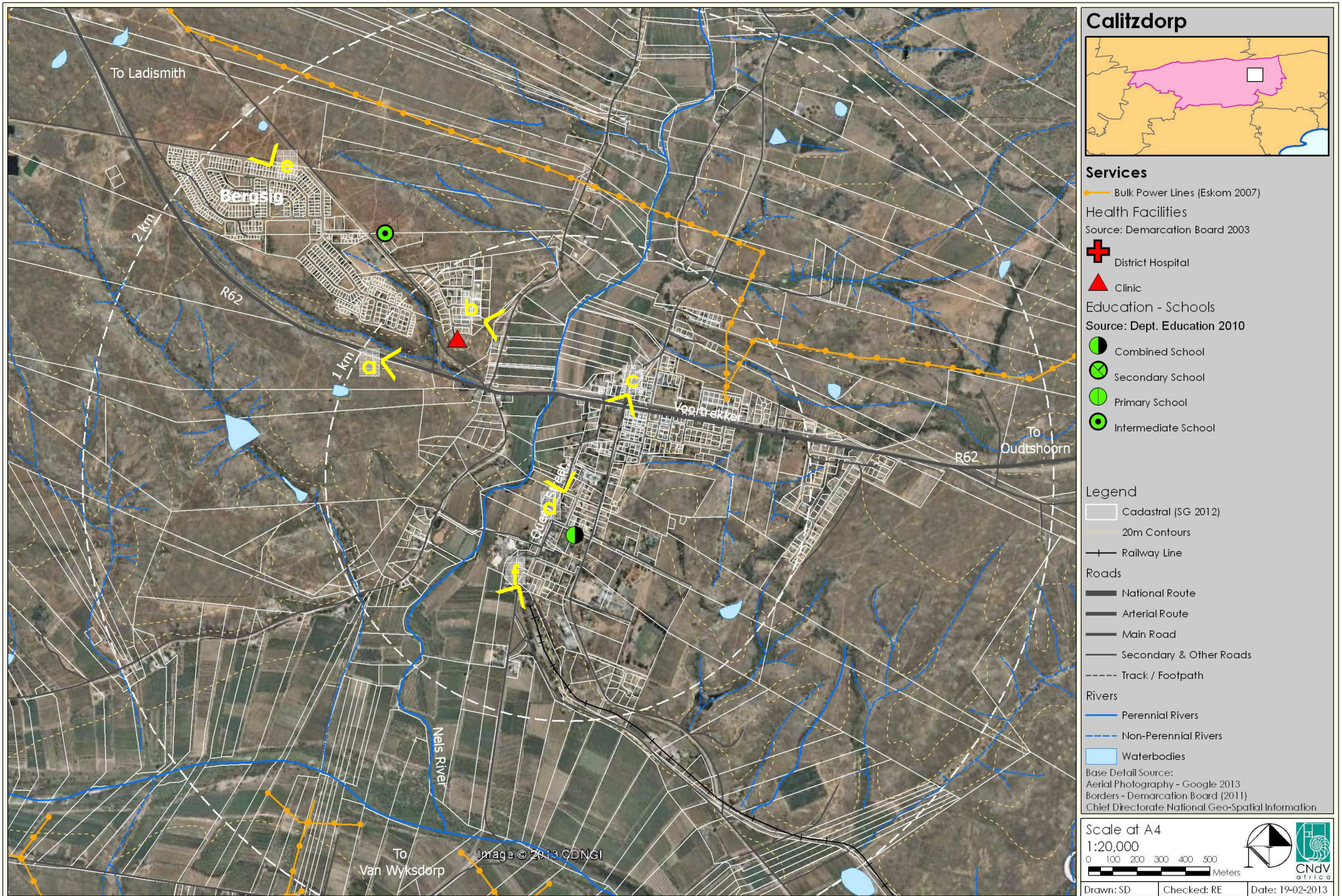


Figure 3.4.3.1 Calitzdorp Aerial



### 3.4.4 Van Wyksdorp (± 500 -1000 people)

- Van Wyksdorp was established in 1904 on the farm Buffelsfontein.
- The town is located about 42km south of Ladismith along the R327 gravel road, see Photo 3.4.4.1a.
- The town offers very little commercial and retail opportunities and mainly functions as a rural residential village.
- Facilities in the town include: A clinic, a primary school and a police station.
- Economically the town is supported through tourism and agricultural activities. Agricultural areas are even located within the town itself and add to the rural character of the town.
- A subsidised housing scheme Green Hills is located to the north of the town. The town is fairly well integrated with the exception of a number of large vacant properties in the town.



Photo 3.4.4.1a Entrance into Van Wyksdorp off the R327



Photo 3.4.4.1d The Dutch Reformed Church



Photo 3.4.4.1b Restored home along the R327



Photo 3.4.4.1e The taxi and bus stop in the north of Van Wyksdorp



Photo 3.4.4.1c Rundown buildings in the centre of town along the R327



Photo 3.4.4.1f Low income housing in the north of town



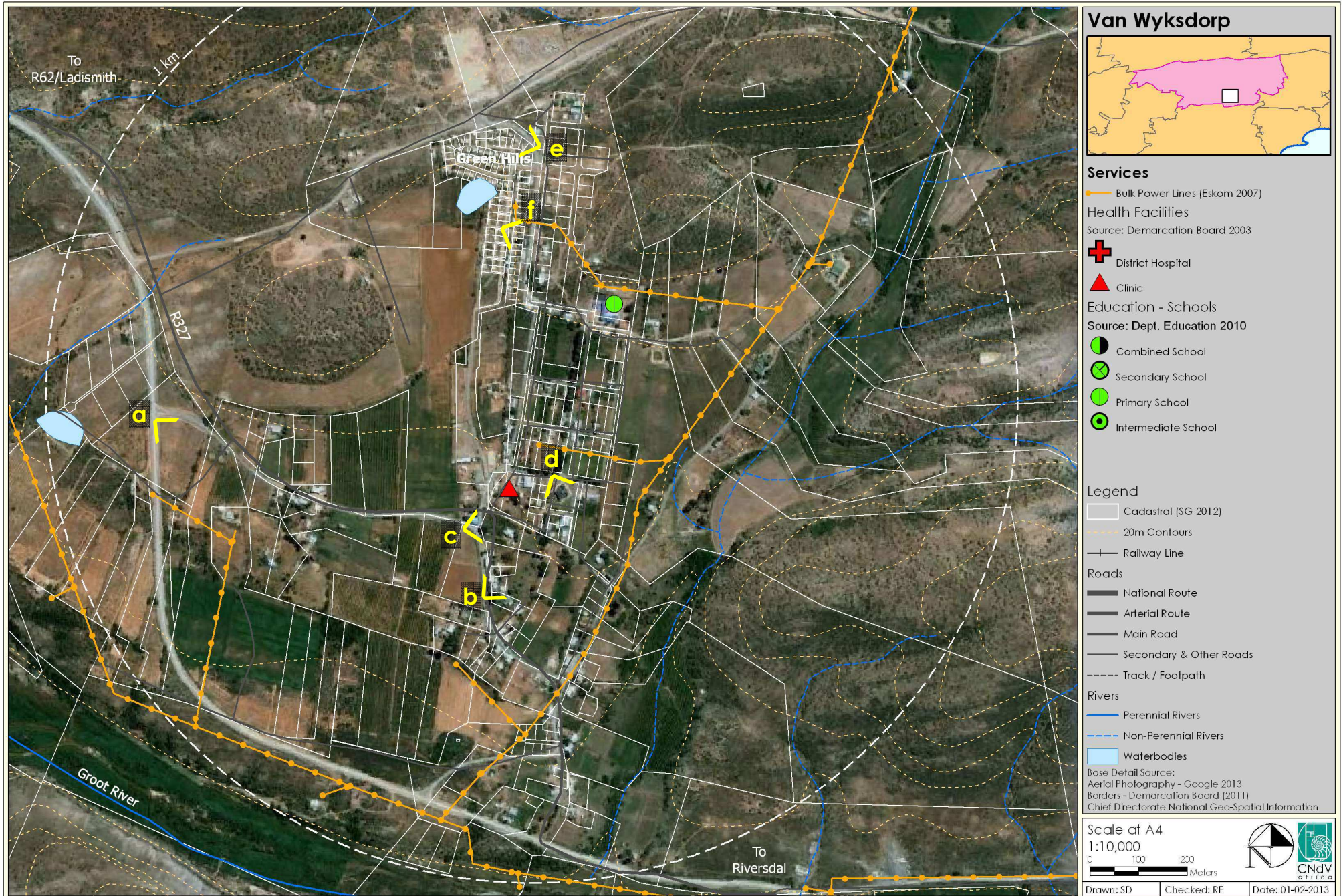


Figure 3.4.4.1 Van Wyksdorp Aerial



### 3.4.5 Zoar (± 3700 – 6100 people)

- Zoar was established in 1817 as a mission station on the farm Elandsfontein.
- Today Zoar is a dispersed rural settlement along the Nels River and the R62.
- The town offers very limited commercial and retail opportunities, the majority of which are located along Hoof Street.
- The town offers facilities such as schools, clinics, a library and sports fields.
- Large areas of cultivated land are located along the Nels River and separate the residential areas of Zoar. In addition large sections of land around the Amalienstein farm and the R62 are still proclaimed Rural Areas in terms of The Rural Areas Act (Act 9 of 1987).
- One of the main attractions in the area is the Seweweekspoort pass, a world heritage site, situated to the north of Zoar in the Klein Swartberge linking to Laingsburg. This is an important tourism route which Zoar is not taking advantage of.



Photo 3.4.5.1a View of Zoar from the R62 when approaching from Ladismith



Photo 3.4.5.1d View of Zoar from the R62 showing the Amalienstein (Section 9) land in the foreground



Photo 3.4.5.1b Large areas of cultivated land within Zoar separate residential areas (viewed from Berg Street)



Photo 3.4.5.1e Residential areas along Land Street



Photo 3.4.5.1c Low income housing in the north-east of Zoar



Photo 3.4.5.1f One of only a few retail opportunities in Zoar, located along Hoof Street



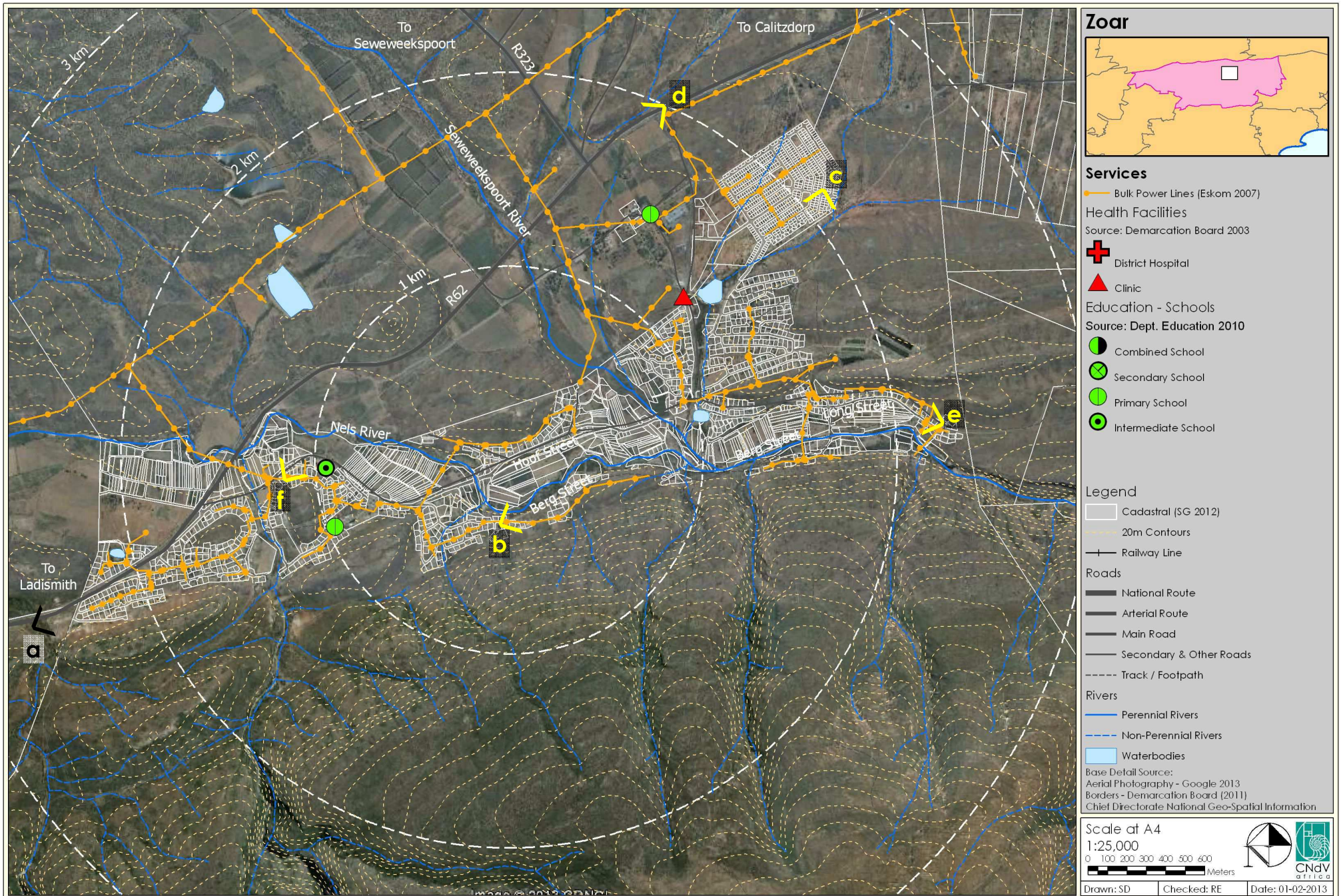


Figure 3.4.5.1 Zoar Aerial





### 3.4.6 Transportation

#### 3.4.6.1 Major Road and Rail Routes

The main transport routes in the municipality are indicated on Figure 3.4.6.1.

The main movement route through the municipality is the R62 (a tourism route) which runs in an east west direction. This route links with Barrydale in the Swellendam Municipality to the west and Oudtshoorn in the Oudtshoorn Municipality to the east.

Other main movement routes are the R323 and R327. The R323 runs southwards from the R62 just west of Ladismith and links to Riversdale in the south. The R327 also links with the R62 west of Ladismith and leads to Van Wyksdorp and ultimately to Mossel Bay.

An old disused railway line existed between Ladismith and Touws River in the west. This line was damaged in the Laingsburg floods in the 1980's and has since been lifted. A second railway line exists between Calitzdorp and Oudtshoorn to the east. At present the line is only used for tourism purposes and the Calitzdorp station is used as a tourism attraction and camping site.

The road network through Kannaland LM consists of nearly 1 050 km of national and provincial roads. (ITP, Pendulum, 2013)

LM	Functional road type (km)					
	National	Trunk	Main	Divisional	Minor	Total
Kannaland	-	176.06	159.98	382.73	330.20	1 048.97
<b>TOTAL</b>	<b>305.65</b>	<b>828.69</b>	<b>923.45</b>	<b>2 758.33</b>	<b>2 384.84</b>	<b>7 200.95</b>

**Table 3.4.6.1 Major road network length by LM** (source: Eden ITP, Pendulum Consulting, 2013)

The provincial RNIS system provides a report on the estimated asset value of R1.5 billion (2012 values) for the provincial road network in Kannaland LM. The surfaced road network accounts for 99% of this amount. (ITP, Pendulum, 2013)

#### 3.4.6.2 Public Transport (Eden ITP, Pendulum Consulting, 2013)

Taxi services operating from the towns in Kannaland LM are administered by 1 taxi association based in the various towns in Kannaland LM.

Rank surveys were undertaken in 2011 as part of the update of the Current Public Transport Record (CPTR) and Operating Licensing Strategy (OLS). There is currently 1 operational taxi rank located within Kannaland LM and 4 major boarding and alighting points serving 282 passengers on a typical weekday and 1074 passengers on a Saturday.

Most of the settlements in the Kannaland LM are small and thus there is not a great demand for motorised travel within the settlement boundaries, however, public transport is required for inter-town movement as the towns quite far from one another. Most daily activities can usually be accomplished on foot since the distance to be travelled is relatively small in comparison to the greater distances between towns and settlements.

#### 3.4.6.3 Non-Motorised Transport

The NMT projects are listed in Table 3.4.6.5.

Table 3.4.6.3 below shows that most learners in Kannaland LM rely on NMT as their primary mode of transport to school.

LM	Percentage of trips						Number of trips	Number of PT trips
	Train	Bus	Taxi	Car	Walk	Other		
Kannaland		7.8	1.4	15.7	58.4	16.2	20 000	1 900

**Table 3.4.6.3 Main mode to education** (source: Eden ITP, Pendulum Consulting, 2013)

#### 3.4.6.4 Air Transport

No commercial airports are located within the Kannaland Municipality.

### 3.4.6.5 Transport Improvement Proposals

In terms of transport infrastructure and roads the ITP (2013) highlighted the following projects, in Table 3.4.6.5 below. Figure 3.4.6.2 graphically depicts the projects.

No	Project	Cashflow				
		2013/14	2014/15	2015/16	2016/17	2017/18
NON-MOTORISED TRANSPORT						
1	NMT facilities along main route to Nissenville	800 000				
2	NMT link between Bergsig and R62 towards Calitzdorp	800 000				
3	NMT facilities along key business routes in Ladismith	1 100 000				
4	NMT facilities along key pedestrian routs in Zoar and Amalienstein	1 400 000				
5	New walkways in Bergsig		1 400 000			
6	Development of a local area NMT Plan for Kannaland		300 000			
7	Walkways along Pretorius and Queens Street in Calitzdorp		2 700 000			
8	Pedestrian crossing at old age home in Ladismith			30 000		
9	Unsafe pedestrian and cycle condition to farming areas			2 700 000		
10	Repair of existing sidewalks in Ladismith			300 000		
	TOTAL BUDGET REQUIRED PER PSO3 PROGRAM PER ANNUM	4 100 000	4 400 000	3 030 000	0	0
	TOTAL BUDGET REQUIRED PER PSO3 PROGRAM FOR NEXT 5 YEARS	11 530 000				
PUBLIC TRANSPORT						
11	Investigation into an Integrated Public Transport Network for Kannaland LM	500 000				
12	Manage operating license applications and improved communication between taxi operators and the PRE	20 000				

No	Project	Cashflow				
		2013/14	2014/15	2015/16	2016/17	2017/18
13	Law enforcement services	20 000				
14	Update of the PRE EDM public transport registration database		2 000 000			
15	Close relations with the PGWC to ensure knowledge of NLTA- related processes and impact on public transport operations	120 000				
16	Shelters and embayments in Zoar	950 000				
17	Shelters and embayments in Nissenville		1 000 000			
18	Shelters needed on DR1661 in Calitzdorp		950 000			
19	Demarcation and shelter at Ladismith Informal Rank			200 000		
20	Identification of all un-scheduled stops in the town and identification for a suitable location		200 000			
21	Demarcation of bays in Calitzdorp for minibus-taxis			15 000		
22	Regular maintenance at Ladismith Main Rank					15 000
	<b>TOTAL BUDGET REQUIRED PER PSO3 PROGRAM PER ANNUM</b>	<b>950 000</b>	<b>2 150 000</b>	<b>215 000</b>	<b>0</b>	<b>15 000</b>
	<b>TOTAL BUDGET REQUIRED PER PSO3 PROGRAM FOR NEXT 5 YEARS</b>	<b>3 330 000</b>				
<b>ROADS</b>						
23	Upgrade Schoongesigt road to Ladysmith cheese factory	4 490 000				
24	Upgrading of roads in residential areas		13 000 000	13 000 000	20 000 000	
25	Sight distance to be improved at intersections in Van Riebeeck Street in Ladismith				15 000	

**Table 3.4.6.5 Kannaland Infrastructure Plan identified road projects** (source: Eden ITP, Pendulum Consulting, 2013)

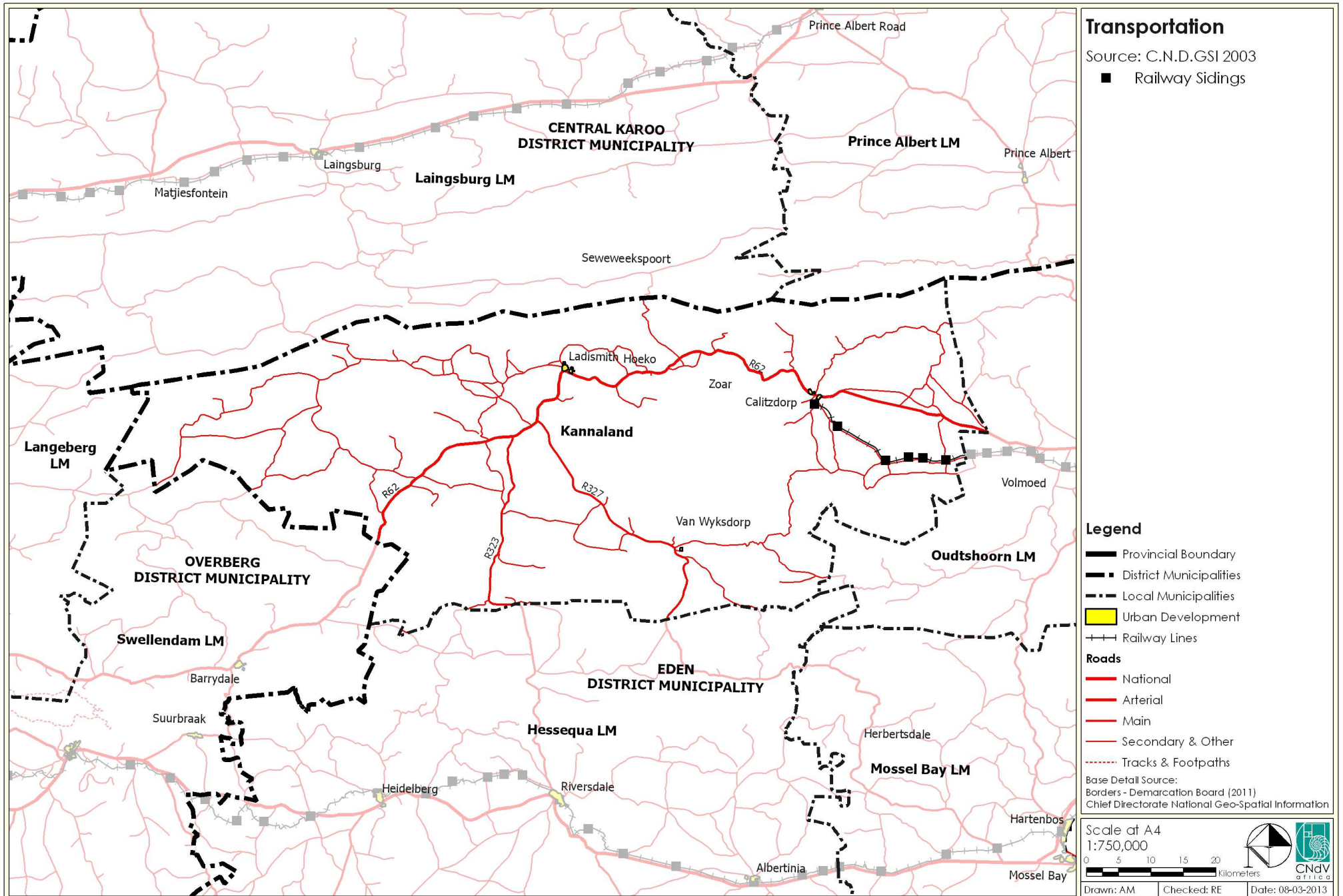
No	Project	Cashflow				
		2013/14	2014/15	2015/16	2016/17	2017/18
26	Street lighting various streets				400 000	
27	Tar Nollie Graaf access road				2 000 000	
28	Maintenance of existing tarred streets		2 000 000	2 000 000	2 000 000	1 000 000
29	Tar road to caravan park					150 000
	<b>TOTAL BUDGET REQUIRED PER PSO3 PROGRAM PER ANNUM</b>	<b>4 490 000</b>	<b>15 000 000</b>	<b>15 000 000</b>	<b>24 415 000</b>	<b>1 150 000</b>
	<b>TOTAL BUDGET REQUIRED PER PSO3 PROGRAM FOR NEXT 5 YEARS</b>	<b>60 055 000</b>				
	<b>TOTAL BUDGET PER YEAR</b>	<b>9 540 000</b>	<b>21 550 000</b>	<b>18 245 000</b>	<b>24 415 000</b>	<b>1 165 000</b>

**Table 3.4.6.5 Kannaland Infrastructure Plan identified road projects cont.** (source: Eden ITP, Pendulum Consulting, 2013)

### Implications for Kannaland Municipality

- The R62 is the major movement route through the municipality and is also a tourism route. Economic benefits from this route should be harnessed to strengthen the economies of Ladismith, Zoar and Calitzdorp.
- A viable public transport and non-motorised transport system should be encouraged through the promotion of integrated settlements that can provide the necessary threshold to support such systems.
- The identified transport projects in Ladismith, Calitzdorp and Zoar.
- The Municipality noted that illegal signage is a problem along the R62.





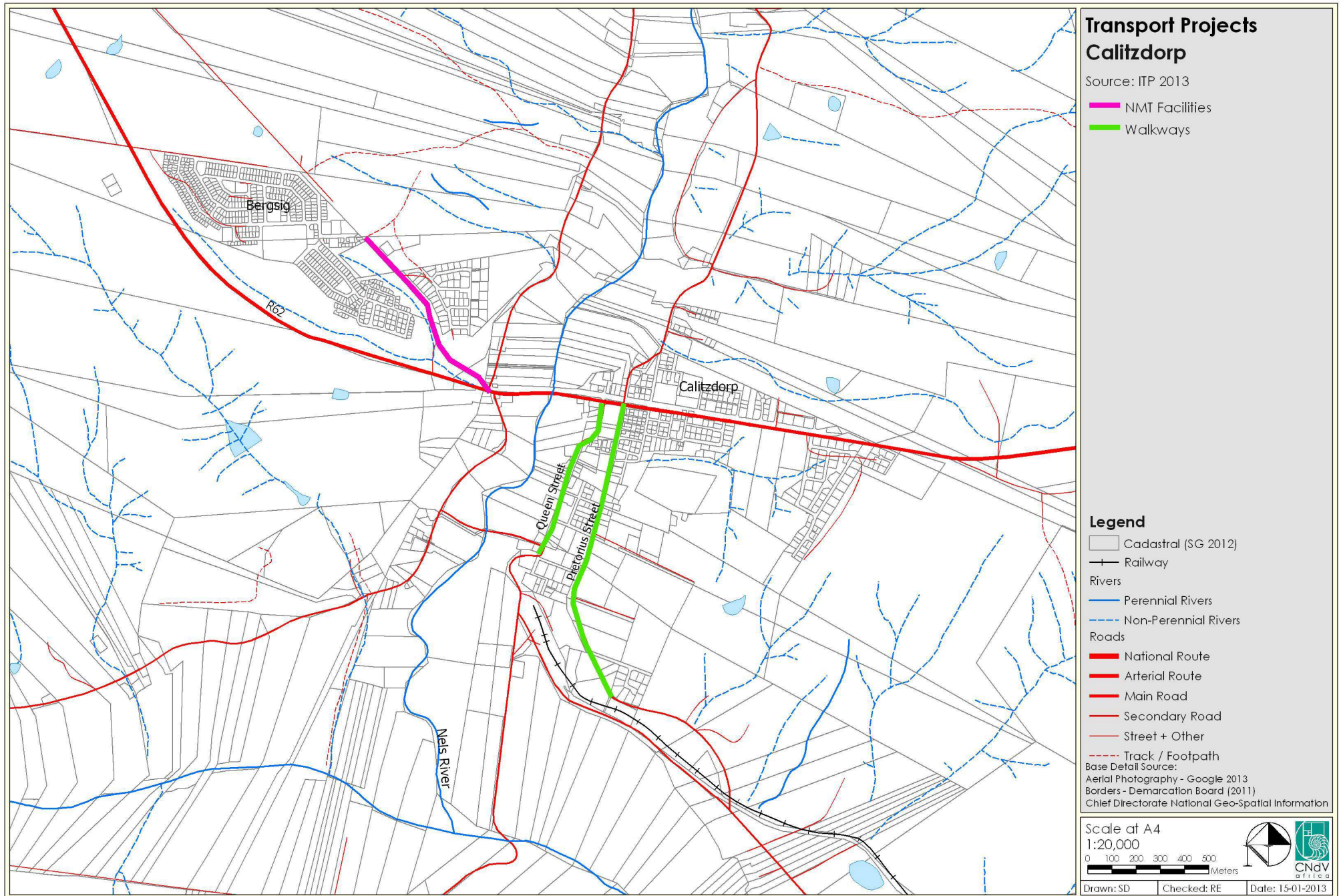


Figure 3.4.6.2 Transport Improvement Proposals: Calitzdorp (Source: ITP, 2013)



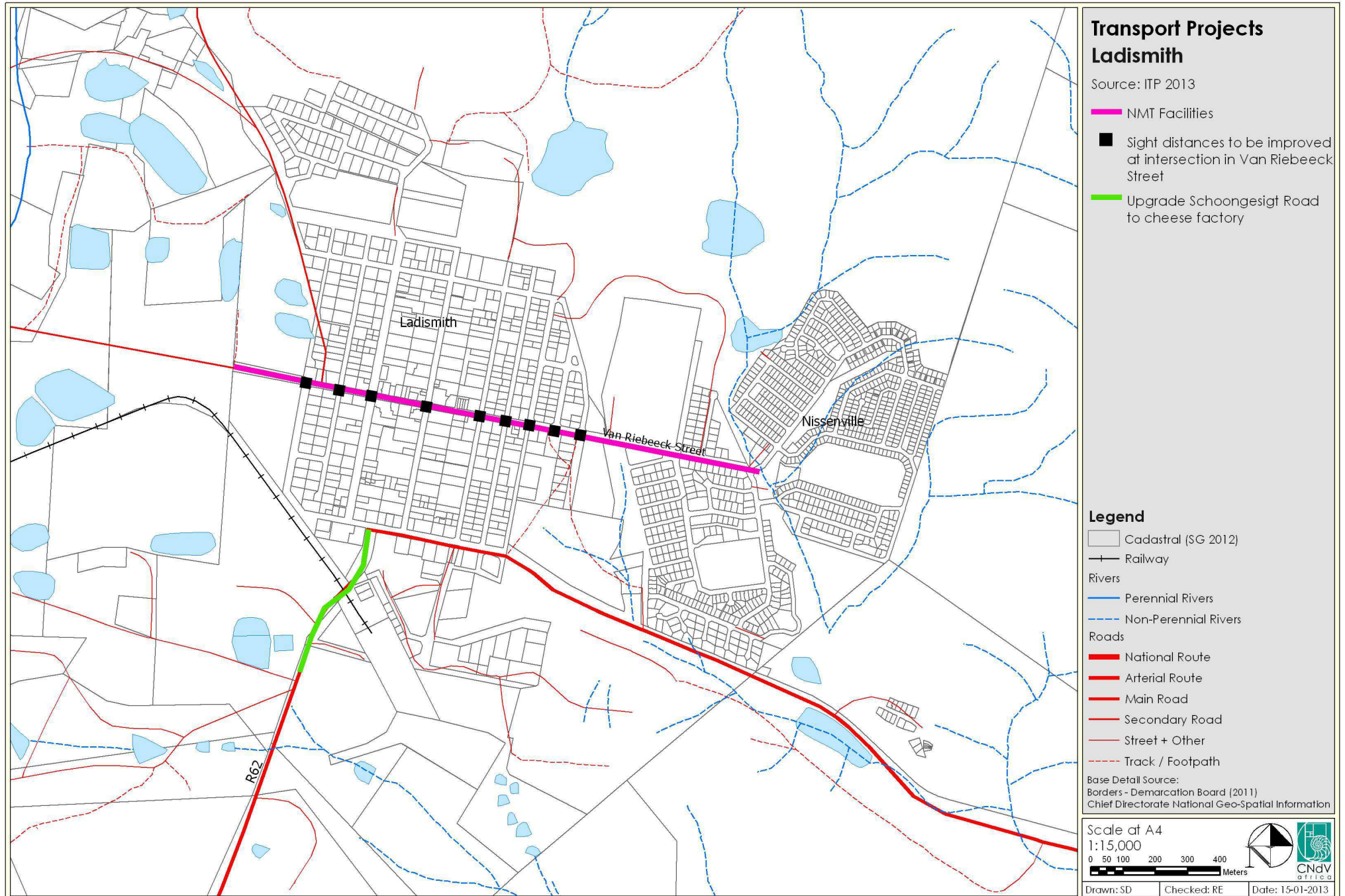


Figure 3.4.6.3 Transport Improvement Proposals: Ladismith (Source: ITP, 2013)





### 3.4.7 Solid Waste Management

The solid waste disposal sites are shown on Figure 3.4.7.1.

The Kannaland Infrastructure Plan (Aug 2012) provides a brief overview of the solid waste aspects per town:

- **Ladismith**

The landfill site is not fenced and informal workers burn waste to obtain tins which creates a dangerous environment and pollution. In this regard a compactor/steel wheel loader is required to cover solid waste on a daily basis. This will also prevent wind from blowing waste into the nearby field

The landfill site is not registered and a Service Level Agreement needs to be finalised between the Eden District and the Kannaland Municipality in order to finalise a solid waste management plan.

- **Calitzdorp**

The landfill site requires rehabilitation and a transfer station is possibly envisaged for the future.

- **Zoar**

The landfill site in Zoar is unfenced and has resulted in informal recycling by elderly people and small children, causing a health risk.

- **Van Wyksdorp**

The existing landfill site requires rehabilitation and a transfer station is needed.

#### Implications for Kannaland Municipality

- Register the landfill site at Ladismith.
- Provide fencing and the necessary security at the landfill sites in the four main towns.
- Facilitate the development of a solid waste management plan.
- Opportunities for waste separation and recycling at the existing landfill sites should be investigated. These can also assist with low skilled job creation.
- The Provincial Waste Directorate Department noted their support for the extension of Van Wyksdorp as per the housing pipeline subject to the rehabilitation and closure of the old landfill site.

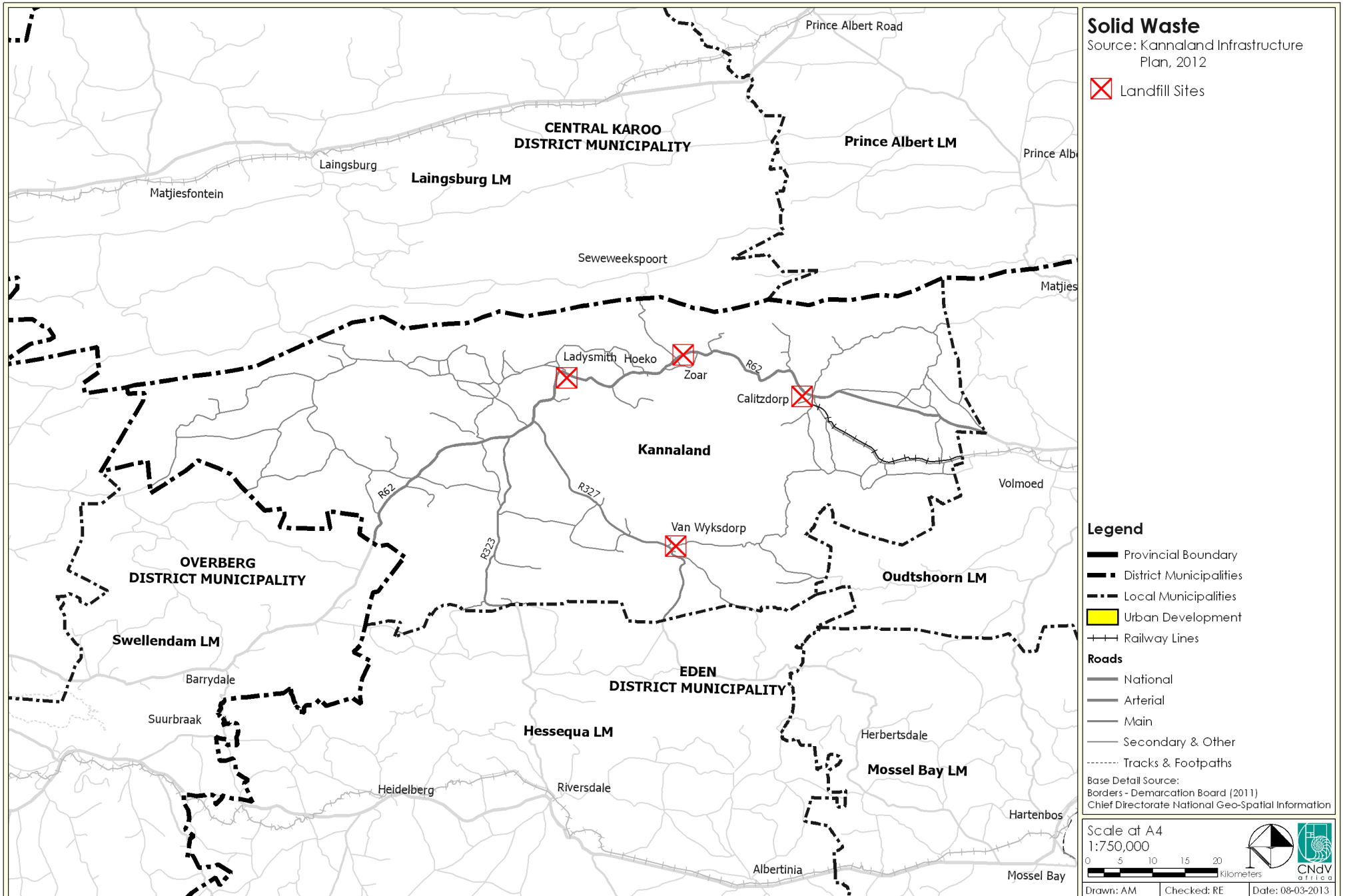


Figure 3.4.7.1 Landfill Sites: Kannaland Municipality

### 3.4.8 Water Infrastructure

Figure 3.4.8.1 shows the water infrastructure for the Kannaland Municipality.

The Kannaland Infrastructure Plan (2012) provided details of the current status of water infrastructure in the four main settlements in the Kannaland Municipality.

- Ladismith**

The water sources for the town are the Swartberg River and the Elands Spring. The infrastructure in the town operates far over capacity. The main storage dam feeding the town has structural weaknesses which limits the supply of water to the town. This has resulted in restrictions on current developments within the town. The existing water treatment works is in a poor condition.

- Calitzdorp**

The main water source for the town is the Calitzdorp dam. The current capacity is 4.82Mm<sup>3</sup>, reduced from 5.81Mm<sup>3</sup> due to sedimentation. The WTW is in a poor condition and the reservoir capacity is insufficient.

- Zoar**

The main water sources in Zoar are the Tierkloof Dam in the Seweweeks Poort. The WTW is in a poor condition. The provision of water is the most critical problem in Zoar due to the poor quality distribution network. Water consumption by residents is also a great problem. Water meters have been installed in this regard but were not successful.

- Van Wyksdorp**

A weir in the Buffelsfontein River and a borehole are the main water sources. The bulk water supply to the town is leaking and there are no water management (flow meters) installed. The town has a package type water treatment system and two reservoirs. The treatment works needs optimisation to improve water quality. An additional reservoir is needed to increase storage capacity.

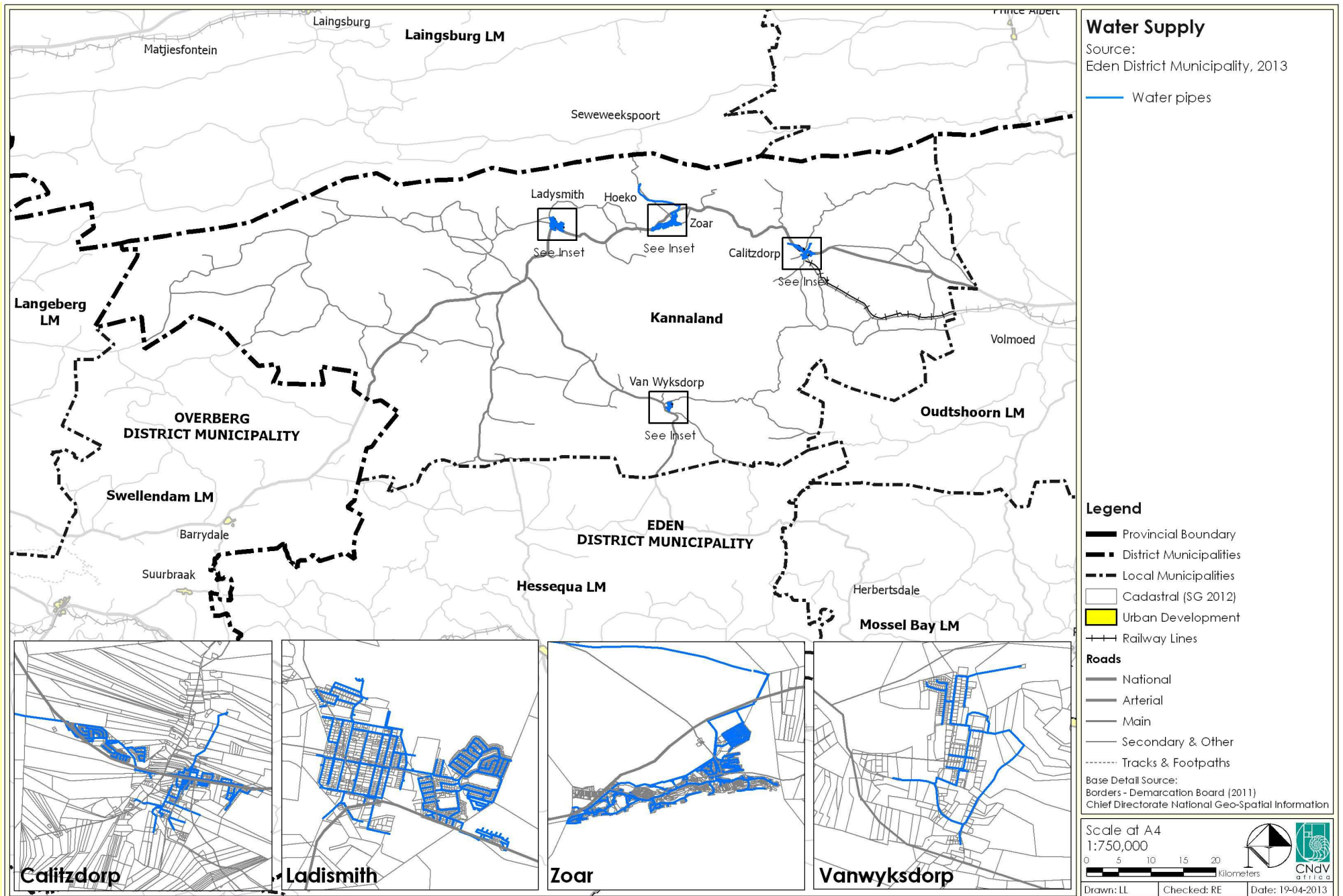
Kannaland Municipality took part in a Bulk Infrastructure Task Team (BITT) process co-ordinated by the PGWC. As part of this process a number of water infrastructure projects were identified. Table 3.4.8.1 reflects these projects.

TOWN	TIME FRAME INTERVENTION	PROPOSED WATER PROJECT	ESTIMATED COST
Ladismith	Short term	Do yield study on source In-depth investigation on water rights from all users Purchase of Water Rights from Irrigators Rehabilitation of JF le Grange dam Water demand management is critical in terms of using the limited water resources more efficiently	/
	Medium term	Increased Raw Water Storage Capacity by the raising of the Government's dam. Find Additional Sources of Surface Water	/
	Long term	Build additional off canal dam near source	/
Calitzdorp	Short term	Do in-depth water rights investigation on source. Water demand management is critical in terms of using the limited water resources more efficiently. Purchase Water Rights from Calitzdorp Dam.	/
	Medium term	Use of Water from the Calitzdorp Hot Spring. Connecting the Calitzdorp Water Supply to the KKRWS.	/
	Long term	Raising of Calitzdorp Dam Dredging of Calitzdorp Dam	/
Zoar	Short term	Water demand management is critical in terms of using the limited water resources more efficiently. Repair or provide new bulk water meters at the abstraction point, inflows into purification works and inflows to the sewerage works and undertake a water	/
	Medium term	Raising of the Tierkloof dam wall. Upgrading/enlargement of the bulk water pipeline from the Tierkloof dam. Investigate the shared use of the Irrigation dam. Re-commissioning of the existing boreholes to augment supply.	/
	Long term	Investigate construction of new of canal raw water storage dam.	/
Vanwyksdorp	Short term	Water demand management is critical in terms of using the limited water resources more efficiently.	/
	Medium term	Repair or provide new bulk water meters at the abstraction point, inflows into purification works and inflows to the sewerage works and undertake a water balance and demand estimation.	/

**Table 3.4.8.1 BITT: Water infrastructure projects for Kannaland** (source: Kannaland Infrastructure Plan Draft 1, 2012)

#### Implications for Kannaland Municipality

- Educate consumers on water wise initiatives should be implemented across the municipality.
- Facilitate the upgrading/repair of water infrastructure in the four urban settlements, especially in Zoar.
- Improve water quality throughout the municipality through the upgrading of the WTW's.





### 3.4.9 Waste Water Treatment (Sanitation)

Figure 3.4.9.1 indicates the sanitation network for the municipality and the various settlements.

The Sustainable Municipal Infrastructure Operations and Maintenance Programme (February 2012), prepared by the Development Bank of South Africa (DBSA), provided details of the current status of waste water treatment infrastructure in the four main settlements in the Kannaland Municipality.

#### • Ladismith

The waste water treatment works (WWTW) fails to comply with the sampling regime. This is mainly as a result of poor maintenance causing infrastructure to degrade and the facility being constantly overloaded. The poor state of the facility is posing a threat to the surrounding riverine ecosystem and the water resources in the Kannaland Municipality (DBSA, 2012).

To improve the quality of the facility the DBSA recommends the following:

- Refurbishment to the facility to enable it to operate at its original design capacity.
- Training process controllers to properly manage the facility and its maintenance.
- Implement a structured preventative operation and maintenance plan.

The study nevertheless also indicate that should all of the above be implemented the facility would still require upgrading to enable it to comply with set final effluent quality limits. The facility thus requires upgrading to mitigate the pollution load on the environment.

#### • Calitzdorp

Only the area to the west of the Nels River has a waterborne sanitation system. The upgrading of the system in the town and replacement of the conservancy tanks in the “old town” should be undertaken if geological conditions permit.

The WWTW is currently not functioning optimally. Refurbishment of the works is required to restore the original design capacity. A proper maintenance plan and appointing trained operation staff should be undertaken.

#### • Zoar

The majority of the existing stands are serviced by a waterborne system. The mechanical equipment at the inlet works and the main pump station needs urgent replacement. The rising main is cracked and raw sewerage spills into an irrigation dam. The ponds are overgrown and plant roots are damaging the pond linings.

#### • Van Wyksdorp

The town has no waterborne system and only uses septic tanks and pit latrines. Pit latrines are currently being replaced by flush toilets due to the health risks of these facilities.

Kannaland Municipality took part in a Bulk Infrastructure Task Team (BITT) process co-ordinated by the PGWC. As part of this process a number of sanitation infrastructure projects were identified.

Table 3.4.9 reflects these projects.

TOWN	TIME FRAME INTERVENTION	PROPOSED SANITATION PROJECT	ESTIMATED COST
Ladismith	Short term	Basic Repairs and maintenance: Inlet works, screen and maturation ponds Rehab of sludge drying beds	600 000
	Medium term	Upgrade with additional bio-filter module to 1.6 Ml/d. This was proposed in the BITT but is old technology. Alternatively construct an activated sludge component	12 400 000
	Long term	Upgrade plant capacity to 2.60Ml/d	6 000 000
Calitzdorp	Short term	Basic Repairs and refurbishment of inlet works and cleaning of pond embankments Rising main cracked spilling raw sewage into irrigation dam Remove trees and reeds from ponds as it grew through the lining causing leakages	720 000
	Medium term	New aerators, extension of ponds and irrigation system	4 200 000
	Long term	1.50Ml/d Biological filter Module (complete). This was proposed in the BITT but is old technology. Alternative. Activated sludge plant.	12 000 000
Zoar	Short term	Basic Repairs and Maintenance: Inlet works and cleaning of pond embankments	1 500 000
	Medium term	New aerators, extension of ponds and irrigation system	1 500 000
	Long term	1Ml/d Biological filter Module (Complete). This was proposed in the BITT but is old technology. Alternative. Activated sludge plant.	8 000 000
Vanwyksdorp	Short term	Conversion of pit latrines in “Ou Blok” to water borne sewage 450m³/d oxidation pond system. Alternatively investigate a package plant process.	5 000 000
	Medium term	Sewer collector system for rest of the town	No cost in terms of Bulk Infrastructure

**Table 3.4.9.1 BITT: Sanitation infrastructure projects for Kannaland** (source: Kannaland Infrastructure Plan Draft 1, 2012)

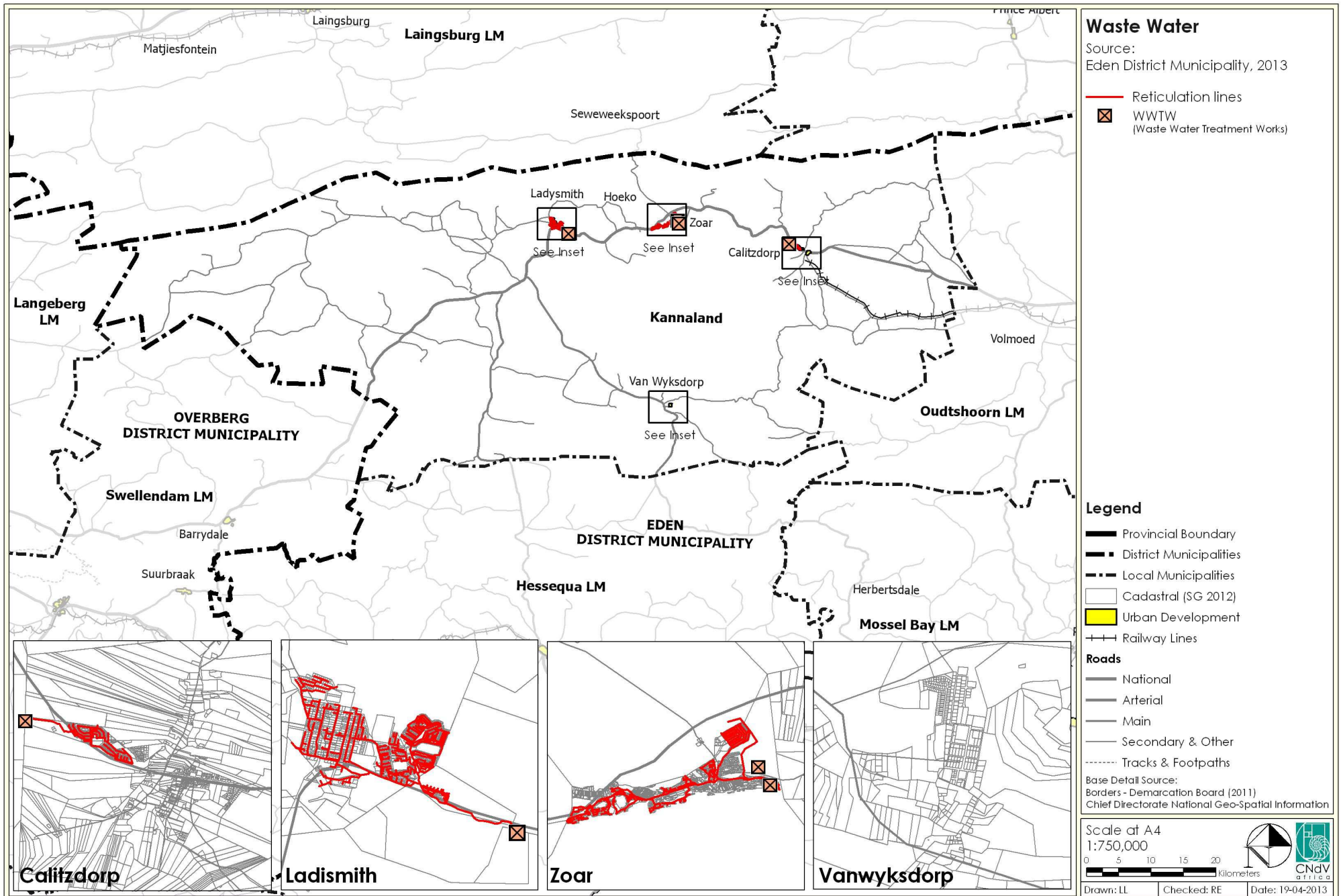
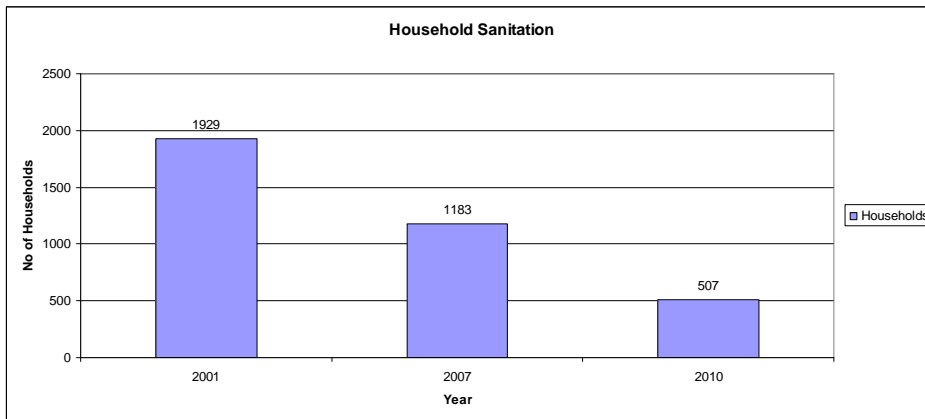


Figure 3.4.9.1 Waste Water Treatment: Kannaland Municipality

Graph 3.4.9.1 indicates the number of households without hygienic toilets from 2001 to 2010. There has been a vast improvement in providing each household with a hygienic toilet over this period.



**Graph 3.4.9.1** Number of households without hygienic toilets (IDP, 2012-2017)

#### Implications for Kannaland Municipality

- Upgrade the WWTW in Ladismith to address the current capacity problems.
- Increase the waterborne sanitation in Calitzdorp to include the section of town to the east of the Nels River.
- Upgrade and repair the inlet works and sewerage ponds at Zoar.
- Eradicate pit latrines in Van Wyksdorp and implement a waterborne system.

### 3.4.10 Energy

Figure 3.4.10.1 indicates the bulk electricity infrastructure in the municipality. From this figure it is clear that all four main settlements in the municipality have a bulk supply.

The Kannaland Infrastructure Plan (2012) provides a brief overview of the electricity infrastructure in each main settlement.

#### • Ladismith

Upgrades and maintenance are required to the transformers and low voltage network in town. In 2010 the electrical system had about 20% spare capacity.

#### • Calitzdorp

There is currently a significant shortage in capacity of the existing electrical system. In this regard, major upgrades of the bulk electrical supply infrastructure are required. There is furthermore a need for a new 66/11kV substation due to the voltage dropping on the current system.

#### • Zoar

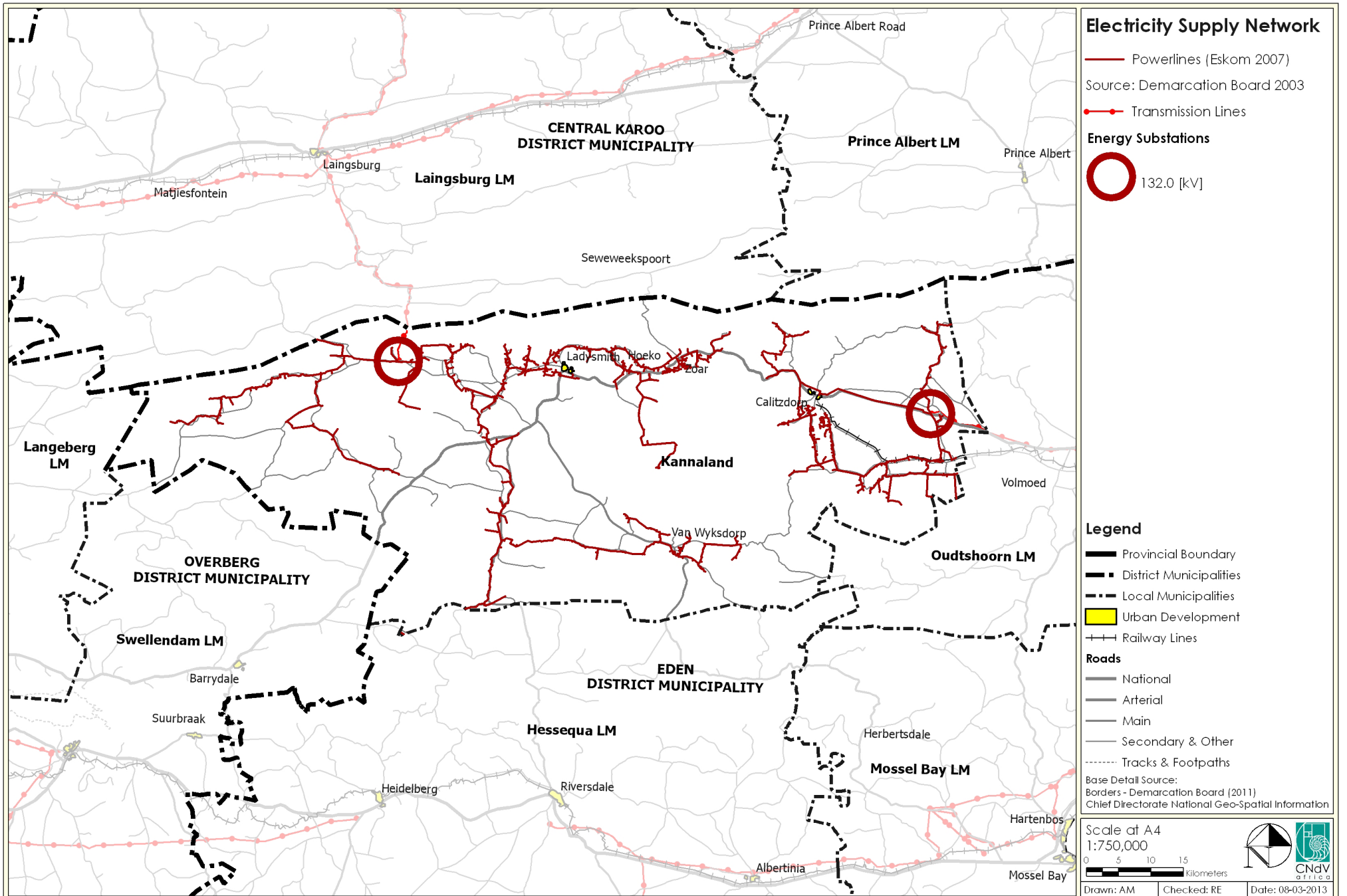
ESKOM is the service provider for electricity in Zoar. Upgrades are required to the existing network.

#### • Van Wyksdorp

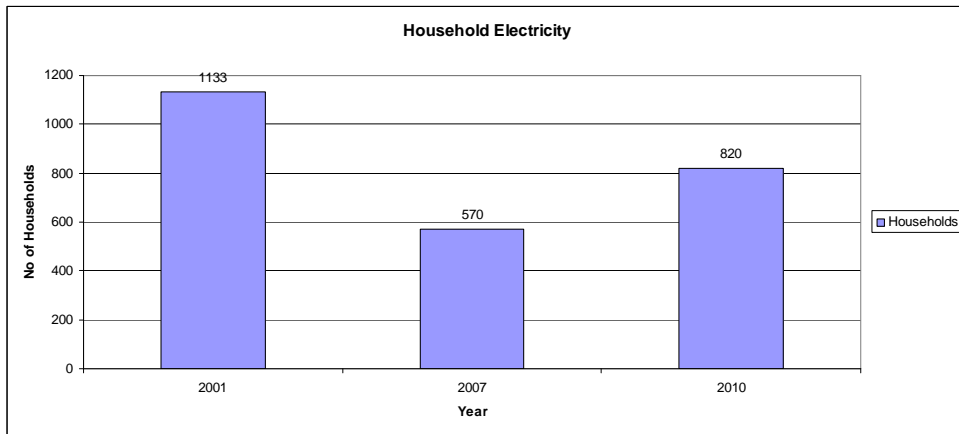
ESKOM is the service provider for electricity in Van Wyksdorp. No significant problems have been identified with the electrical infrastructure.

No renewable energy projects have been implemented or are currently being planned in the Kannaland Municipality.

Graph 3.4.10.1 indicates the number of households with no electrical connections. Since 2001 there has been an improvement in the provision of electricity to households even though there has been an increase in the number of households without electricity between 2007 and 2010.







Graph 3.4.10.1 Households with no electricity connection (IDP, 2012 – 2017)

#### Implications for Kannaland Municipality

- While Ladismith still has 20% space capacity in its electricity supply Calitzdorp has reached a ceiling and can only increase electrical demand if there is a major conventional supply increase or alternative energy sources are used.
- Provide for the necessary upgrades to the electrical infrastructure in the towns of Ladismith, Calitzdorp and Zoar.
- Implement energy saving initiatives to educate members of the communities on the wise use of electricity.
- Implement the use of renewable energy (i.e. solar water cylinders) sources.
- Investigate the potential of establishing renewable energy projects (wind and solar) in the municipality. Solar projects could be viable in along the northern boundary of the municipality where higher levels of solar radiation have been recorded as per Figure 3.2.2.1c. Wind energy projects could be explored in the north east of the municipality where higher wind speeds have been recorded as per Figure 3.2.2.4b.

### 3.4.11 Housing

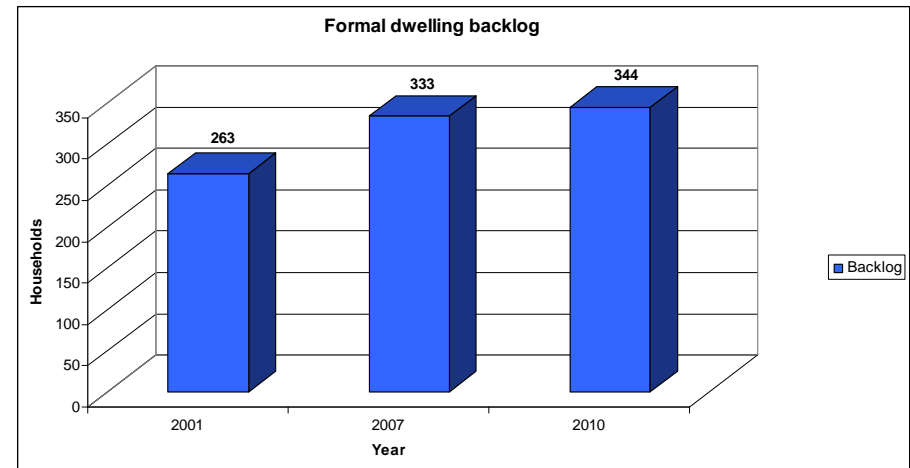
The Kannaland Municipality is not responsible for the delivery of housing but is the agent for the National Government and Provincial Department of Housing (Kannaland IDP, 2012 – 2017). Currently the municipality has a housing backlog of 1532, refer to Table 3.4.11.1.

Calitzdorp	753 units
Ladismith	439 units
Van Wyksdorp	90 units
Zoar	250 units
<b>TOTAL</b>	<b>1532 units</b>

Table 3.4.11.1 Housing Backlog Kannaland (source: Kannaland IDP 2012 – 2017)

From Table 3.4.11.1 it is clear that the largest housing need is in Calitzdorp.

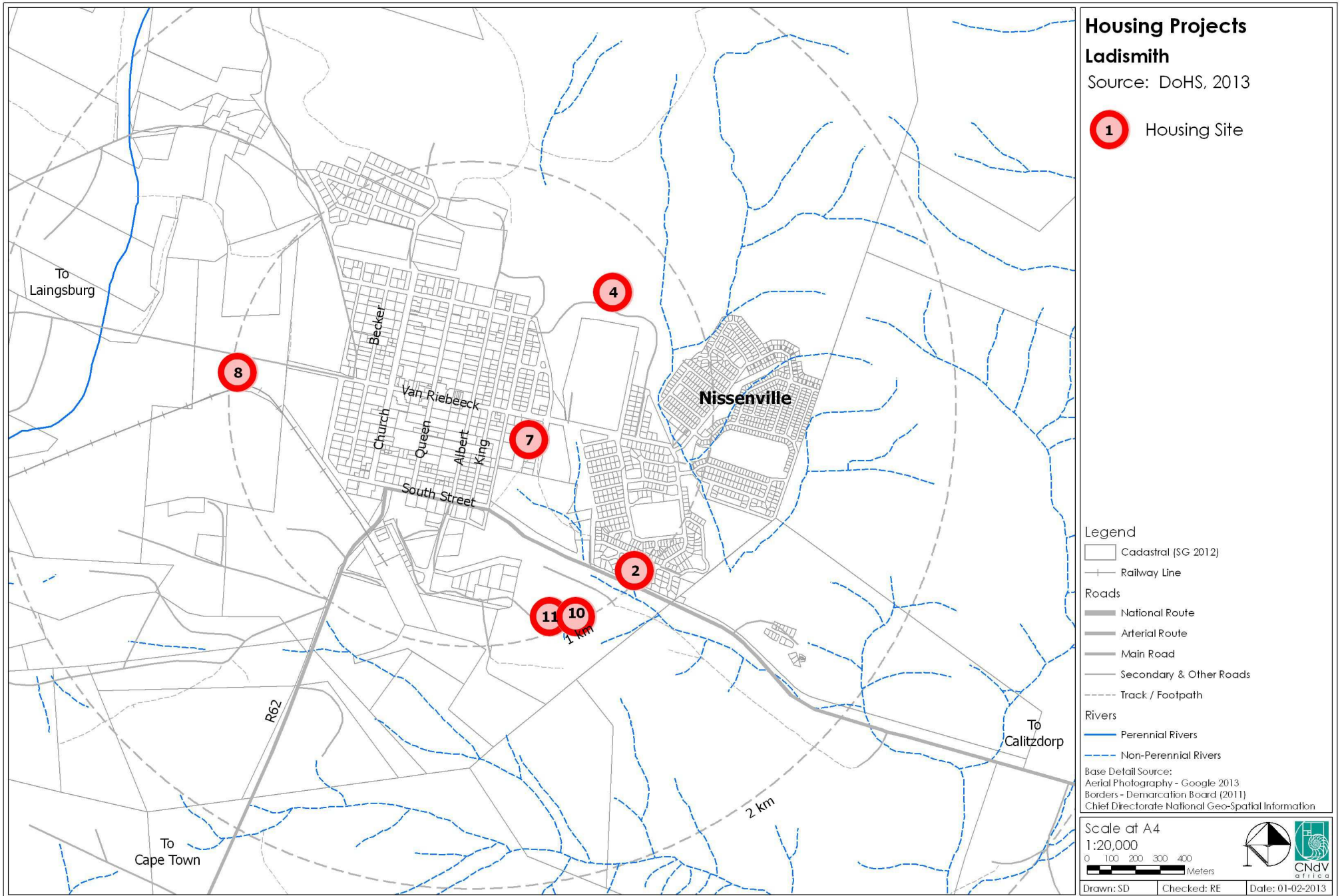
Graph 3.4.11.1 indicates that there is been an increase in the formal dwelling unit backlog between 2001 and 2010.



Graph 3.4.11.1 Formal dwelling backlog (source: IDP, 2012-2017)

The following challenges have been identified in addressing the current housing backlog (Kannaland IDP, 2012-2017):

- Alignment with provincial processes
- Capacity within the municipality
- Availability of funds



**Figure 3.4.11.1 Identified housing sites: Ladismith** (source: Draft Housing Pipeline Report, UDWC, 2012)

No	Project Name	No of Units	Town/Suburb	Erf Number	Value
1	Zoar Protea Park 45	45	Protea Park, Zoar	1544-1546, 2074-2096, 2132-2163	3735000
2	Ladismith GAP 29	29	Nissenville, Ladismith	1195, 1198-1199, 1202-1203, 1205, 1207, 1211-1216, 1281-1233	7250000
3	Calitzdorp ASLA project	680	Bergsig, Calitzdorp	47	R 60,806,545
4	Ladismith Commonage North	530	Ladismith	Rem Farm 95	R 71,740,000
5	Calitzdorp Old Hospital Site	150	Bergsig, Calitzdorp	45	R 34,500,000
6	Vanwyksdorp Rem erf 110	100	Vanwyksdorp	Rem Erf 110	R 10,500,000
7	Ladismith Middleton Street	78	Ladismith	474, 631	R 8,190,000
8	Ladismith Schoongezicht	170	Ladismith	48	R 18,360,000
9	Zoar Protea Park Infill	120	Zoar	1834-1836	R 12,960,000
10	Ladismith Showgrounds	700	Ladismith	Rem Farm 95	R 75,600,000
11	Ladismith Caravan Park	100	Ladismith	48	R 23,000,000

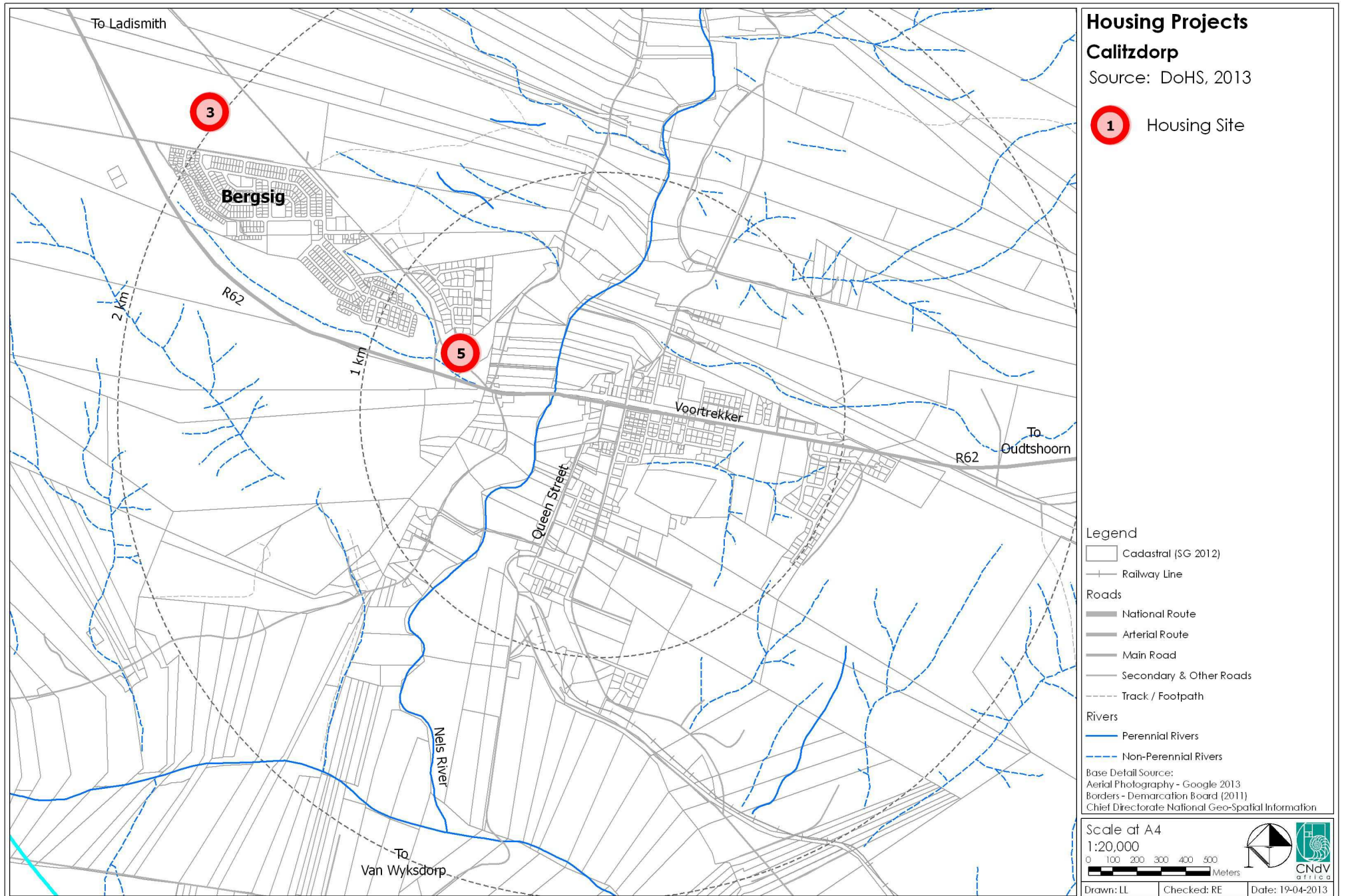
**Table 3.4.11.2 Housing project pipeline: Kannaland** (source: Department of Human Settlements, 2013)

Currently there is only one active housing project in Calitzdorp (Bergsig). Phase 1 of this project is currently underway. Phase 1 entails the construction of 250 units (the total project entails 680 units). A lack of services capacity has been identified as a problem in completing the project (Kannaland Infrastructure Plan, 2012).

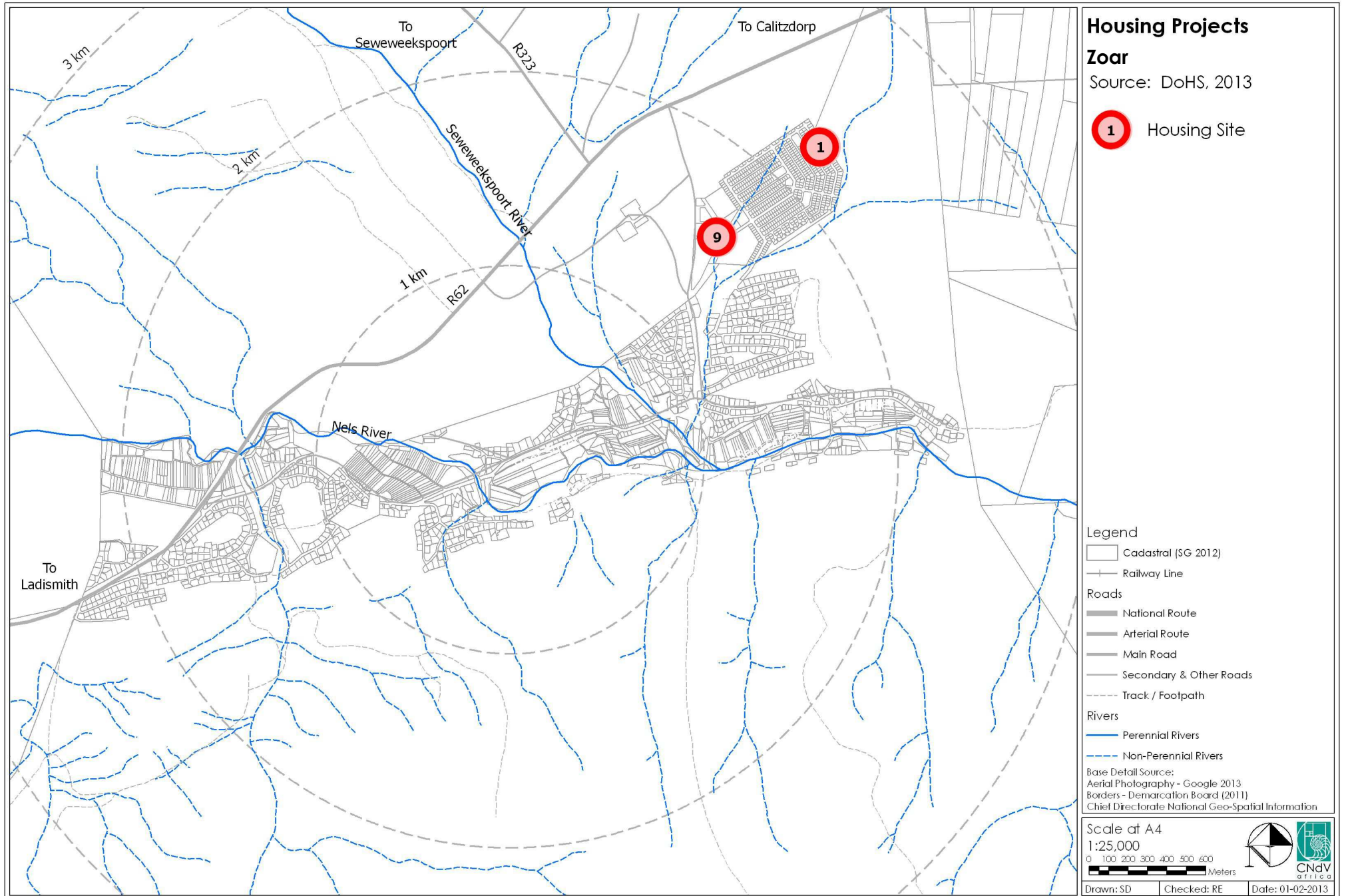
#### Implications for Kannaland Municipality

- Address the current challenges identified in the IDP in addressing the housing backlog.
- Develop the most suitability sites for accommodating housing as identified in Table 3.4.11.2.
- Obtain additional funding for the provision of housing in the municipality.
- Address infrastructure backlogs in Calitzdorp to allow for the completion of the existing housing project and for the construction of future projects to address the backlog.

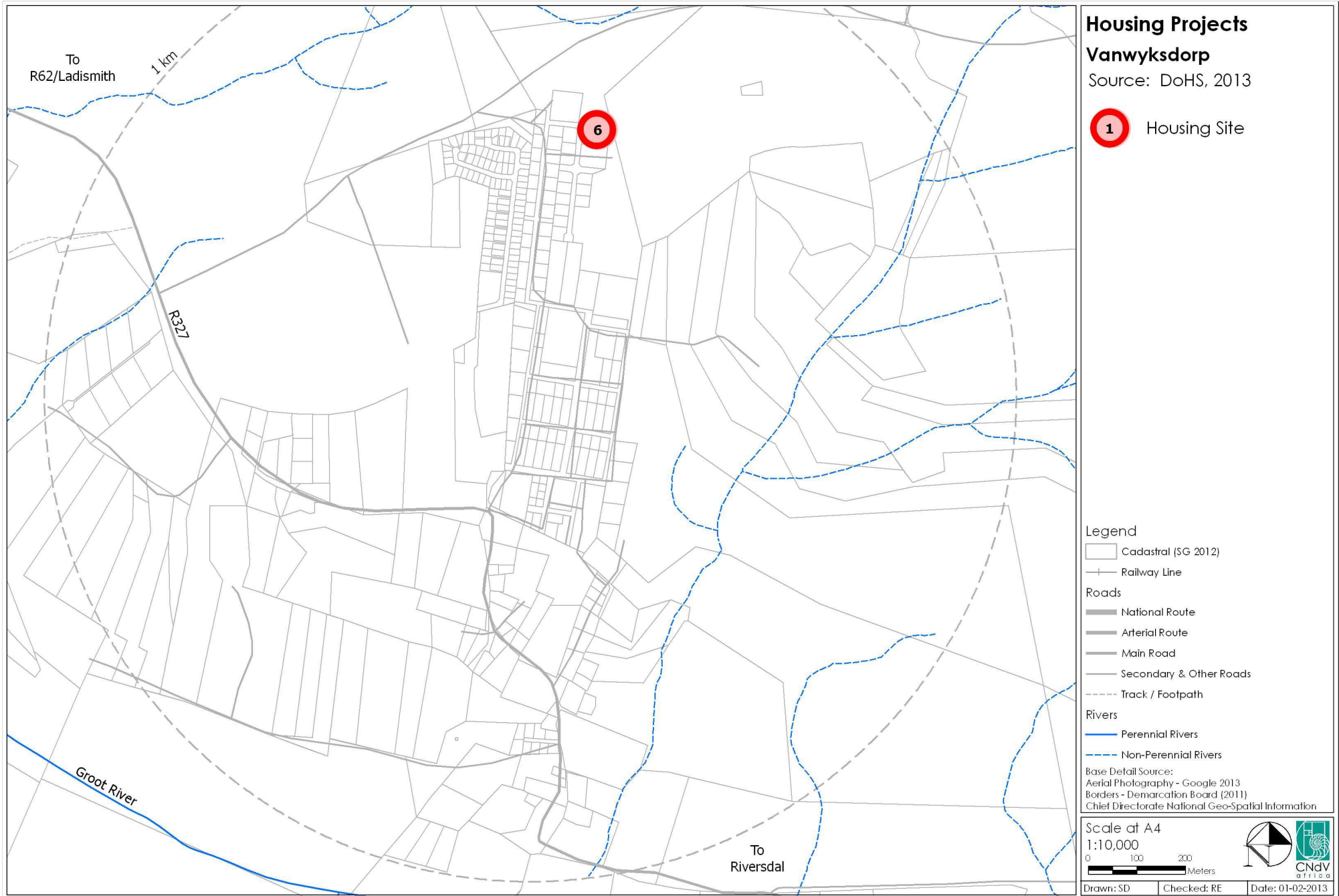








**Figure 3.4.11.3 Identified housing sites: Zoar** (source: Draft Housing Pipeline Report, UDWC, 2012)



**Figure 3.4.11.4 Identified housing sites: Van Wyksdorp** (source: Draft Housing Pipeline Report, UDWC, 2012)

### 3.4.12 Vacant Land, Open Space and Commonages

No information received from the Municipality

### 3.4.13 Tourism

Figure 3.4.13.1 illustrates the main tourism and cultural attractions in the municipality (ENPAT, 2003). These are made up of grave/burial sites, monuments and hiking trails.

The R62 is a tourism route and part of the Klein Karoo Wine Route which stretches from the Cogmanskloof outside Montagu in the west to the Langkloof in the east. A number of popular wineries are located within the Kannaland Municipality along this route and produce wines as well as Brandy. In addition, the town of Calitzdorp is known as the "Port wine Capital" of South Africa.

Ladismith and Calitzdorp have a number of historical buildings which attract tourists to these towns. The most significant in this regard is the Otto Hager Church (c 1874) in Ladismith and the Dutch Reformed Church in Calitzdorp (c 1855). Apart from these buildings there are also a number of buildings originating from when these towns were established. Many of these buildings have been restored and today serve as tourist accommodation, restaurants, art galleries and museums.

The natural areas and formally conserved areas and nature reserves surrounding the towns also offer a wide variety of activities for tourists. Activities offered include:

- 4 X 4 routes
- Bird watching
- Fishing
- Mountain biking
- Hiking trails
- Grape and apricot picking
- Stargazing

A number of festivals occur throughout the year, the most prominent are:

- Zoar Heritage and Cultural Festival
- Seweweekspoort Mountain Bike
- Calitzdorp Port Festival
- Ladismith Eco festival
- Kannaland "vasbyt" walk
- Ladismith street festival

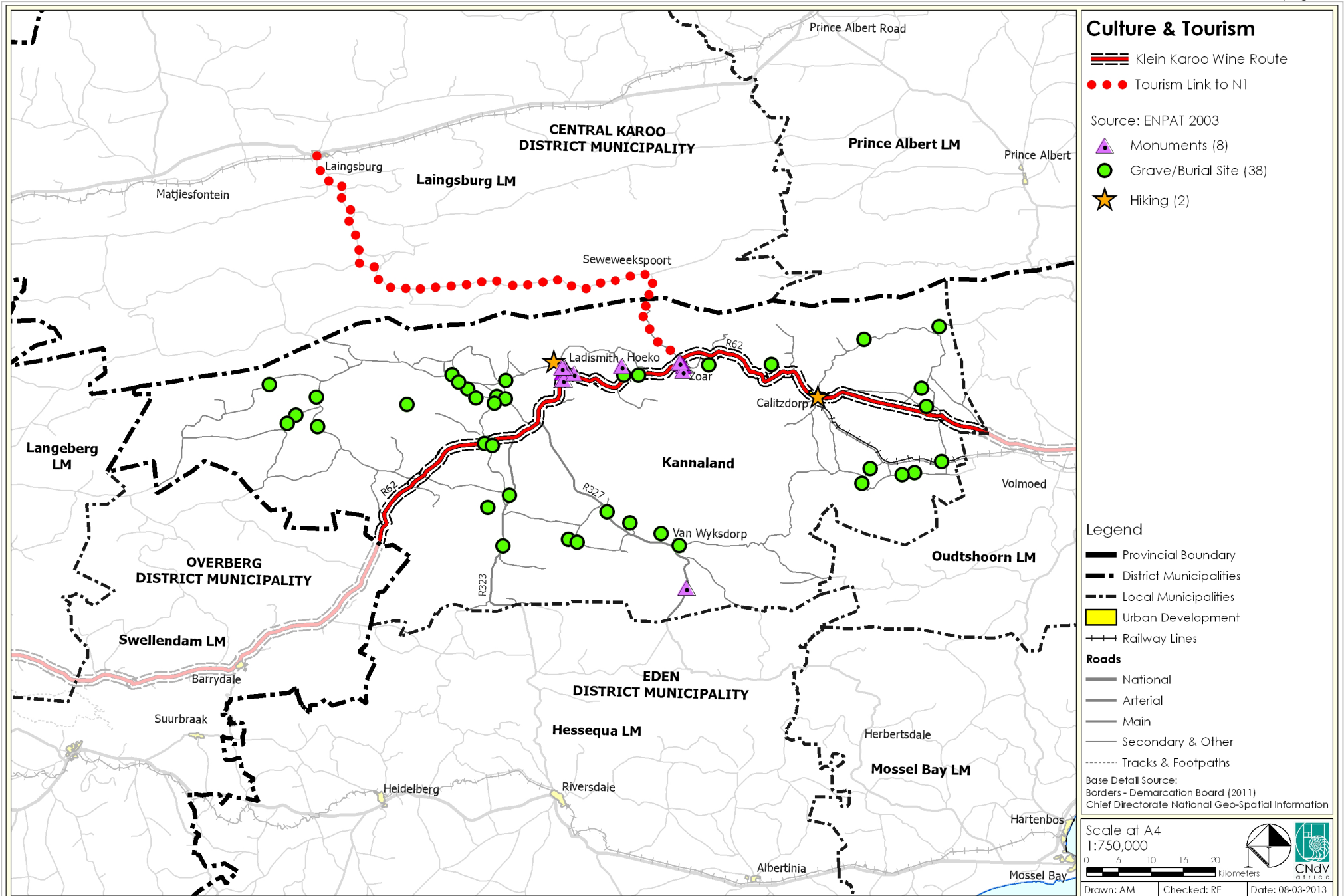


Figure 3.4.13.1 Tourism





Photo 3.4.13 A restaurant along the R62 in Calitzdorp

#### Implications for Kannaland Municipality

- Tourism is one of the key economic sectors in the municipality and should be promoted accordingly by means of a municipal wide tourism strategy. The tourism sector could be significant in the reduction of unemployment.
- The urban areas along the R62 tourism route should maximise their exposure onto this route as a means of enhancing economic growth.
- Provide adequate protection for the various tourist attractions located within the municipality.

## 4. PUBLIC PARTICIPATION

### 4.1 INTRODUCTION

#### 4.1.1 PURPOSE OF THIS CHAPTER

The Guidelines for the Formulation of SDF's (January 2011) have been applied in the process of drafting a Local Spatial Development Framework for the Kannaland Municipality. The guidelines prescribe 7 phases, of which 2 phases involve public participation. The purpose of this chapter is to serve as record of the public participation phases undertaken during the Kannaland Local SDF process.

#### 4.1.2 GUIDELINES FOR THE FORMULATION OF SDF's (January 2011)

These guidelines comply with the Municipal Systems Act (MSA), 2000 (Act 32 of 2000), the National Environmental Management Act (NEMA), 1998 (Act 67 of 1998) and the principles of the Development Facilitation Act (DFA), 1995 (Act 67 of 1995). The following section briefly describes where public participation fits in this process.

#### 4.1.3 PUBLIC PARTICIPATION PHASES

The SDF guidelines (referred to in 4.1.1, above) stipulate a total of seven phases of which public engagement (or public participation) forms part of in order to:

- Identify strategic issues;
- Create awareness of the process;
- Stimulate future thinking; and,
- Provide valuable information for analysing the status quo.

The guidelines make provision for two public participation phases, Phase 2 and 5 (refer to Figure 4.1.3.1).

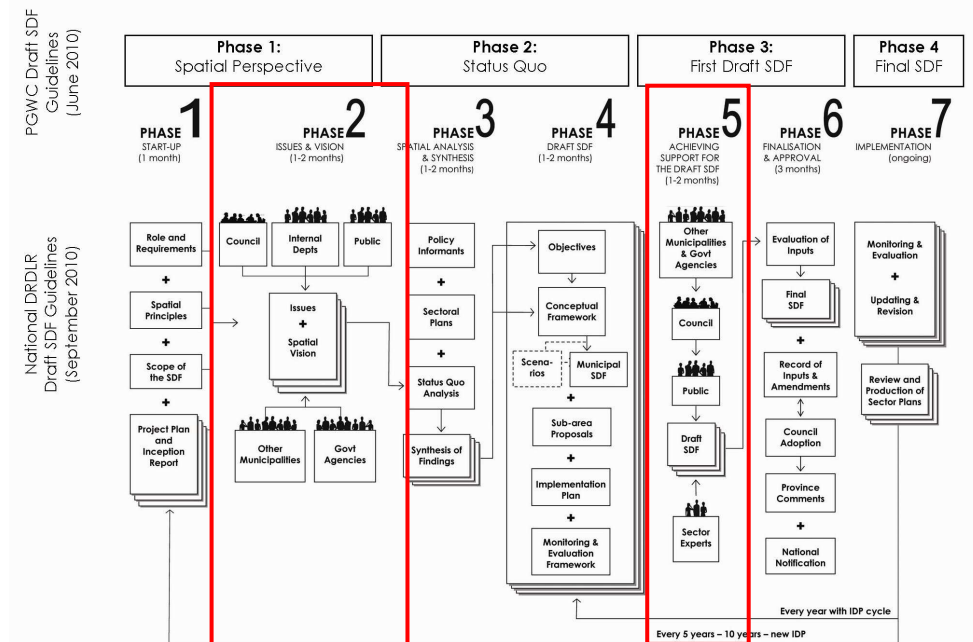


Figure 4.1.3.1 Public participation phases as part of the overall SDF process

**Phase 2** involves consultation with Council (local or district), internal departments, the public, other municipalities/districts and government agencies. The main purpose of this phase is to gain an understanding of the current issues within the municipality/district and to formulate a spatial vision or desired future scenario for the study area.

**Phase 5** again involves public consultation. The purpose is to achieve support for the draft SDF by consulting with municipalities/districts, government agencies, local councils, the public and various sector experts. Inputs from this phase will be evaluated and incorporated into the draft SDF in order to produce a final SDF which would then be presented for Council adoption.

## 4.2 PHASE 2 REPORT BACK: MEETINGS AND WORKSHOPS

### 4.2.1 PUBLIC PARTICIPATION PROCESS PLANNING

The initial phase of the consultation process involved the confirmation of suitable dates for conducting the various consultative meetings. Suitable dates were discussed with the municipality and the following dates and venues were confirmed:

Date	Venue	Time
04 February 2013	Van Wyksdorp, School Hall	18h00
05 February 2013	Council Line Departments, Town Hall (Ladismith)	10h00
05 February 2013	Bergsig Community Hall, Calitzdorp	18h00
06 February 2013	Maxi's Hall, Zoar	18h00
07 February 2013	Community Hall, Ladismith	18h00

The methodology followed at each of the Issues meeting/workshop involved the following agenda items which were presented by CNdV africa:

1. Welcome and Introduction
2. Background to Spatial Development Frameworks (SDF's)
3. Discussion 1: Questions and Problems
4. Discussion 2: Vision for your municipality
5. Summary and Way Forward.

Where the groups were too small, break away sessions were not used as a means to facilitate discussion. Plenary discussions were conducted.

### 4.2.2 NEEDS, ISSUES AND PROBLEMS

The following needs, issues and problems were raised at the various meetings/workshops and are listed here per respective meeting:

#### A. Van Wyksdorp, School Hall

Infrastructure - Water	
1.	There are times, up to 6 or 7 where there is a break in water supply. The water pipes burst regularly. The water supply is sufficient.

Economy	
1.	There are not enough jobs in the municipality. The municipality does not assist people will setting up small businesses.
2.	There are people who come and retire in the area.
3.	There are many developers but the employment for these projects is brought in. The people from the community should be employed.
4.	The population is growing which means the needs of the people are growing.
5.	People do not have access to money to start their own business - maybe they can be assisted by the municipality.
6.	In terms of work opportunities, the following should be considered: fruit processing plant, dried fruit, konfyt, chutneys etc. The fruit is not being processed locally.
7.	There are no retail shops here but there are two liquor shops.
8.	In the town centre there are empty and derelict buildings. Can the government not purchase them from the property owners and improve them and make them useful?
9.	We are concerned that industrial development will take place in town. An area should be designated for industrial development to take place.

Tourism	
1.	There are many farms that provide over night stays but these are not well advertised.

Housing	
1.	There is approved housing development aimed at the middle income group here in town.
2.	People are in need of housing.
3.	The municipality must purchase land to build houses for people that need them.

General	
1.	The town has 5 entrances and exits but none of them attract people
2.	There is an aesthetics committee but no improvements are taking place in town.

Infrastructure - Stormwater	
1.	No storm water is provided for in the town, especially in Green Hills.

Infrastructure - Sewer	
1.	Green hills still has outside toilets
2.	The municipality needs to find land for the waste water treatment works that is needed for the next 10 years

Infrastructure - Electricity	
1.	Electricity and telephone lines are a problem when the wind blows too much.

Infrastructure - Telkom	
1.	The telephone system is very old and it needs to be upgraded by Telkom. When there is lightning there are people who do not have access to their land lines.

Facilities	
1.	The post office does not work well and it is not always received.
2.	The hospital is located in Ladismith
3.	The town has a clinic. The sister is on duty on Tuesday and Thursday
4.	The clinic was closed over the December period and people were in need of medicine. Service of the staff at the clinic is a problem. The clinic is in a good condition and looks neat and tidy.
5.	The town only has a primary school. Children attend the high school in Ladismith
6.	The children do not have a play area or a park
7.	A vet needs to be established somewhere in the municipality. the animals to be taken care of.
8.	There is a satellite police station. The main police station is located in Ladismith
9.	The cemetery is full.



Meeting 1: Van Wyksdorp, School Hall (4 February 2013)

## B. Council Line Departments, Town Hall (Ladismith)

Housing	
1.	There are ±1300 families on the housing waiting list.
2.	In terms of planned housing projects in the municipality Mr Willem Baardman (responsible for housing) stated that housing is being planned in the following towns: <ul style="list-style-type: none"> <li>• ±500 units in Ladismith</li> <li>• ±680 units (±250 units are already approved) in Calitzdorp</li> <li>• ±250 units in Vanwyksdorp (additional land is required to plan more housing here)</li> <li>• ±480 units in Zoar</li> </ul>
3.	All planned housing projects are currently in the planning phase.
4.	There is a small demand for middle income housing in Ladismith.
5.	Large portions of land in Zoar currently fall under Act 9 and can't be accessed for the provision of housing. Niel Lambrechts (at the district offices in George) has been working on this problem.
6.	All housing provided in the municipality is subsidised. No rental stock is provided but this could be explored as an option.

Infrastructure - Calitzdorp	
1.	Calitzdorp has very old and out-dated infrastructure. The old town has infrastructure dating back to the 1800's.
2.	The newly developed area in the north west of the town has newly constructed infrastructure that does not link with the old infrastructure in town.
3.	Any new development in town would have to be accompanied with new infrastructure the existing infrastructure can not accommodate any new development.
4.	Many parts of the town rely on septic tanks for sewerage removal. The monitoring of the levels of the septic tanks is the responsibility of each individual owner. The owner then needs to request to have the tank emptied.
5.	In terms of water provision the sources of potable water is a problem.
6.	The water treatment works is being upgraded to deal with additional capacity.
7.	The officials would like a municipal wide plan that addresses water shortages.
8.	Plans are currently underway to upgrade the sewer treatment works.
9.	At present solid waste is being transported to a landfill site outside town.
10.	A new landfill site as being planned, no land has been identified in this regard.



<b>Infrastructure - Zoar</b>	
1.	The town's water supply is from boreholes and the Tierkloof Dam.
2.	The water treatment plant is being upgraded.
3.	A few houses in town have septic tanks.
4.	±12 houses are located on the opposite side of the river against the mountain. Access to these houses is limited and severely affected during heavy rains.
5.	ESKOM supplies electricity in Zoar.
6.	A new cemetery has been allocated in Zoar.
7.	The sewer system in Zoar is sufficient and no significant problems are experienced.

<b>Infrastructure – Van Wyksdorp</b>	
1.	New boreholes are being planned to increase water supply.
2.	ESKOM is the supplier of electricity.
3.	In Greenhills pit latrines have been constructed inside the houses. These are currently being replaced with proper ablution facilities.
4.	Mr Coetzee, a land owner, a few years ago, offered to contribute 50% to the tarring of the road to Van Wyksdorp. No plans are currently underway for the tarring of this road.

<b>Infrastructure - Ladismith</b>	
1.	The water reticulation system in the town is very old and many pipe bursts are experienced.
2.	Septic tanks are being used in town and waste is transported to the nearby sewerage works.
3.	Sufficient water is available from the source but not enough storage capacity (only 2 months supply is available).
4.	Industrial areas in town are using large amounts of the town's water supply.
5.	The JF Legransie Dam is used for storage of water. The dam needs repair. The officials mentioned that the required repairs might not be undertaken. Instead a new dam might be constructed.
6.	Drilling is currently underway to explore ground water extraction as an additional source of water.
7.	Upgrading of the wastewater treatment works is being done as an interim solution. More significant upgrades are required.
8.	The cheese factories have been approached to contribute to the upgrading of the sewerage works. They did not agree and are building their own sewerage treatment systems.
9.	Enough electricity is available but the infrastructure is very old. The system has many overhead lines that need to be placed underground. This is a very costly exercise.

10.	A new cemetery is required.
	The solid waste site is being fenced to prevent illegal dumping.

<b>General</b>	
1.	Only sand mining is done on a very small scale.
2.	The municipal officials confirmed that no solar and wind farm applications have been processed. Jessica undertook to contact ESKOM to confirm if they have any projects.
3.	An LED Strategy currently being prepared.

### C. Bergsig Community Hall, Calitzdorp

<b>Economy</b>	
1.	Entrepreneurship must be promoted in the municipality.
2.	There are many empty buildings in town because things are very expensive. Maybe these buildings can be offered to the community to rent for small businesses?
3.	Agriculture and tourism are the biggest employers in the municipality.
4.	80% of people in the town are unemployed. There are many indigent people. Sustainable jobs need to be created.
5.	Alternative sources of employment need to be created. The electronics and manufacturing sectors could be considered.
6.	Tourism is saturated in the town. This sector cannot provide all the jobs needed.

<b>Infrastructure - General</b>	
1.	The basic infrastructure is not in place.
2.	Economic development is fine but infrastructure is a problem. The water supply is being disturbed during the day. The infrastructure cannot keep up with the economy.

<b>Infrastructure - Sewer</b>	
1.	There are no public toilets in Bergsig and there is a problem with the sewer system.

<b>Management (Municipal)</b>	
1.	Do not kill the rural towns. The government must invest in the "platteland". Grow the area so that the youth can stay in the town and further development it.
2.	The previous SDF is seven years down the line and there has not been much implementation.
3.	The municipality is not involved in the process and they are not even at

	the meetings. This is a problem.
4.	There is a gap between what is promised and what is delivered to the area.
5.	The municipality is insolvent and bankrupt.

#### Infrastructure - Electricity

1.	The electricity network is in need of upgrading.
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#### Water

1.	The water network in is in need of upgrading. There are many leaking valves. Water is being wasted and just runs away.
2.	The pipes in the water system are bursting, they are asbestos and cement pipes and they need to be replaced.

#### General

1.	People must think ahead to see what the future what will it look like and work back and see what we need to provide now.
2.	Brain power is not coming into the meetings. The people who need to be at the meeting are not at the meeting.
3.	Wineries, fruit farms and agriculture needs to be included in the plan (the future SDF) because this town needs it.
4.	The farmers need to be involved and be part of the SDF process.
5.	There was no planning in the past. The problem now is there is no money to repair the problems.
6.	We must create opportunities for people in the town.
7.	We need to create business for there to be ongoing employment. There is lots of crime because of the poverty.
8.	The established business people need to help the community and maybe they can be assisted with reduction in taxes, rates rebates etc.
9.	The municipality is not willing to provide jobs or the framework to create jobs. Maybe the municipality must provide these opportunities to the people by allowing them to manage the public swimming pool etc.
10.	WWF and UNESCO are investing lots of money in this area to preserve the flora.

#### Infrastructure – Roads / Rail

1.	Traffic is a problem especially in the main road. There is a need for the provision of traffic calming measures because it is dangerous.
2.	The station is privately owned (it is connected to Oudtshoorn) but is not being used at all. It used for camping. Why is it not being used? It can reduce the traffic problems being experienced in the main road.
3.	The railway line is the most economical form of transport it can also be used by the tourists.
4.	The town is need of a taxi rank with facilities. There is no structure like this

in the town now. We need to know how to provide this at the most cost effective way possible.

#### Facilities

1.	There is no doctor in the town after hours. There needs to be a doctor in the town after hours. There is no hospital. People need to travel to Oudtshoorn for a hospital.
2.	There are recreation activities for the mass of the people, but not for the poor. There no facilities for people, like benches, toilets.
3.	Children finish school and do not have money to go study. Why can't the kids go the Department of Agriculture and learn there and come back to the community, like the Stellenbosch school.
4.	There is a facility that is next to the school that is not being used. It can be used as a facility to teach and learn once the children finish school.
5.	There are people who do not have transport to get to the clinic. What about them?
6.	Children need a place to play. The public pool needs to be improved and maintained. The pool is empty.
7.	The police say that they do not have enough vehicles and are unable to patrol some areas.
8.	Lots of money has been spent on the sports fields already by the municipality.

#### Housing

1.	There are not enough houses in the area for the people. The municipality says there is no land for housing.
2.	Private land owners that are interested in assisting the community with housing opportunities need to be identified. Then people can be made aware that this opportunity exists.



Meeting 3: Bergsig Community Hall, Calitzdorp (5 February 2013)

#### D. Maxi's Hall, Zoar

Infrastructure - Roads	
1.	The roads are in a bad condition.
2.	The main road, where the clinic is situated, is in need of speed bumps.
3.	Sidewalks are required for the safety of pedestrians.

Infrastructure: Water	
1.	At times there is no water available.
2.	People need to use boreholes to access water because of water shortages.
3.	The water is turned off many times and people do not receive notice thereof from the municipality.
4.	There was a proposal for a storage dam (in the area of the Seweweeks River) and nothing came from it. The impact studies were completed and the approval was granted by the DWAF.

Infrastructure: Energy	
1.	People were promised solar geysers but none were issued to the residents of Zoar.

Facilities	
1.	There are no facilities or activities for the youth. There is only one library for

	the entire area.
2.	Zoar must have the same opportunities as the other towns, like facilities for the youth and swimming pools etc.
3.	The sports facilities are in need of upgrading.
4.	The area has a satellite police station but it is not managed well. Zoar needs its own police station. The crime is the highest of all the towns in the municipality.
5.	There is no hospital in Zoar, but there is a clinic. An ambulance takes at least 1.5 hours to travel from Calitzdorp.
6.	There is a need for a high school in the area.

Housing	
1.	There are many Act 9 areas and the municipality cannot access the land for housing. What is the municipality going to do about it?

Economic	
1.	Many people in the area live on grants.
2.	During winter there is no income and people go without food. The children only eat because of the feeding schemes.
3.	There is only work during the summer months.

Management (Municipal)	
1.	The system used by the municipality to pay rates needs to be upgraded so that it is more accessible to the older members of the public.
2.	The thorn trees need to be removed from the agricultural areas.
3.	Water needs to be given to people in order to farm because of food security. There is a packing store in the area and vegetables can be grown throughout the year, why only fruit?
4.	The Department of Agriculture constructed a dam without the permission of the municipality. The people want to come back to the area where the dam is built because it is where they lived before. There know where to live now.
5.	Why are the rates so high in Zoar where people in Calitzdorp and Ladismith have better opportunities than people here?

Infrastructure - Stormwater	
1.	There are two areas that cut you off from the schools and church when it rains because the stormwater system is not functional.
2.	When there is heavy rain in Protea Park all the water flows down Suikerbos lane. The stormwater level becomes very high and dangerous.
3.	Some streets do not have stormwater pipes to assist with the rain.
4.	Only the main roads in Protea Park have stormwater pipes. When it rains a lot the bridge cannot be accessed and the kids cannot go to school.

### Infrastructure: Sewer

1. There are 12 houses (Berg Street, Droe Vlei) that do not have toilets. The national and provincial government said that people must move from the area because they are living in the flood line. Why can't these 12 houses get septic tanks why must they move? Because the state says so. This is their livelihood.



Meeting 4: Maxi's Hall, Zoar (6 February 2013)

## E. Community Hall, Ladismith

### Municipal Scale

1. We are not convinced that the municipality is aligning their development with the historical needs of the area and the sensitivity required with the respect to the architecture. All development in the municipality must be aligned with the character of the area.
2. All the towns are unique in terms of heritage and character.
3. The tourism sector is important in the municipality. The tourism factor is the main important aspect of the spatial development of the town. We need

- to encourage the development of the tourism but also maintain the aesthetics etc
4. The municipality is in a crisis. The capacity of the infrastructure is at its limit. The infrastructure needs to be upgraded.
5. Infrastructure goes hand in hand with development. The infrastructure is at its limit that is why development cannot take place.
6. There is little funding for that are not being subsidised by the state. E.g., roads, stormwater etc. Very little money was allocated to Kannaland municipality.
7. We have to deal with the municipality. The attitude from the officials at the municipality is bad. They do not assist the public when they have issues.
8. The municipal manager did not even attend this meeting.

### Infrastructure: Sewer

1. The sewerage network is 300% over its capacity.

### Infrastructure: Water

1. There is a water shortage and when it rains there are no water collection points.
2. There is only water in the dams for 35 days.

### Infrastructure: Electricity

1. The electrical infrastructure is overhead and is old etc. People experience surges in the electrical network / supply.

### Infrastructure: Storm Water

1. When it rains the stormwater level is very high.

### Infrastructure: Roads

1. The roads get dug up over and over again while the water pipes burst and then the roads get surfaced and then the pipes burst again.
2. There is a taxi rank that is not being used by the people, only used on Saturday. It is not being used for its purpose. The people get picked up everywhere but not at the taxi rank.

### Infrastructure: Solid Waste

1. There is a problem with the solid waste, there was a fire at the landfill site.

### Facilities

1. There are no youth development programs in the municipality or in the town.
2. Ladismith does have a park.



3.	There is no after care facilitate for children.
4.	There are at least 45 students in the schools, grade 4 students.
5.	There are not qualified teachers working at the schools.
6.	There are not really teachers that can teach the children music and sports.
7.	There are no facilities for sports.
8.	The hospital is very good and the clinic functions well. And there are a few private doctors. There is a new clinic on its way. There is a mobile clinic route in place.
9.	The clinic needs space and it needs to be moved to more a central place in town.
10.	According to the province the Thusong centre is intended to be linked to the town hall. The town hall is a historical building. It should not be built there.

General	
1.	Ladismith is the less developed town of all the towns in the municipality.
2.	There is a caravan park that has not been used for the past 10 years and the trees are going to be removed.
3.	There is a work project where people work 2 days per week. There are many things that people can do. People can sweep the streets when they are dirty.
4.	Service delivery in Ladismith is very bad.



Community Hall, Ladismith: Meeting 5: Community Hall (Ladismith) (7 February 2013)

## 4.2.3 VISION

### 4.2.3.1 Van Wyksdorp

- Montagu was town of the year in 2012 because it is clean and people there have leadership. They also have places for tourists. This town can be the next Montagu;
- The people do not really want to have the R327 tarred – it will attract too many people to the area;
- The water is of a good quality;
- The town needs a school, maybe till Grade 10;
- There needs to be work opportunities;
- Not everything must be modern. We need to preserve the heritage of the area with the beautiful architecture and the old buildings etc;
- We are very concerned about the size of the subsidy housing provided by the government. It is worse than apartheid housing.
- Maybe the municipality should develop the subsidy housing as the industrial area and provide the people with other housing opportunities;
- The public toilets are terrible, dirty and do not function. In Ladismith the toilets looks good.
- The town needs to be landscaped to improve its aesthetics;
- Wild life is being stolen and being exported as trophies. There is less wild life than before and it is decreasing.

### 4.2.3.2 Calitzdorp

- The natural environment attracts people and they enjoy the smaller community;

- We want the area to be developed and we do not want to be isolated;
- We want to see happy people in the town;
- People need to respect each other;
- The community needs to come together more and share ideas and thoughts to grow the town;
- Want to see the town develop;
- The town has a port and peach festival. The area produces some of the best wines in the area.

#### 4.2.3.3 Zoar

- The air is clean, people can take long walks and can get herbs in the wilderness;
- Gardening, agricultural activities in the form of fruit and vegetable farming;
- Protea road is in need of street lighting;
- The town is need of a big shopping complex and a petrol station with a 24 hour shop;
- The area offers many tourist activities in the form of 4 x 4 routes, hiking etc like in the Seweweeksrivier area;
- The natural resources for nature based activities are available;
- If the streets get lighting, the area will be safer;
- The bushes need to be removed for the safety of the people;
- The town has potential for development. The main problem is the funding;

- The people need to stand together and do things as a community;
- The town must be kept clean;
- The roads need to be paved;
- The history of the town needs to be considered. The people will know what to do if they want where they come.

#### 4.2.3.4 Ladismith

- The municipal model that is being used is a legacy. Nobody asks if the municipal model is the right one. The MSA provides for provision for two other models. We do not need a mayor and we do need an executive mayoral committee. This model works for large municipalities but not municipalities of this scale.
- The municipality must be efficient in term of service delivery and cost effective in order to deliver a service.
- The municipal salaries have increased by double in the last two years.
- The municipality should be run like a business, the town is being mismanaged.
- Heritage sites are to be conserved and protected.
- The municipal manager and the new municipal officials do not understand the history of the town
- The Stanley light needs to burn again. The Stanley light was installed by Mr Stanley de Wit on the cliffs of the Elandsberg which comprises of a dynamo, a bicycle light and an electrical cable. When the stream runs down the mountain the dynamo is driven and the light shines for all to see.
- Sustainability is important and the town needs private investment. It needs to be attractive to private investment. The infrastructure needs to be in place in order to attract private investment.

## 5. CONCEPTUAL DEVELOPMENT FRAMEWORK

### 5.1 SPATIAL VISION

This section sets out the Vision for the SDF.

#### 5.1.1 SPATIAL VISION AND CORE IDEAS

The Vision for the Municipality is as follows:

"To be the Place of Choice"

And the Mission is:

- Encouraging self-reliance;
- Ensure co-ordination and collaboration of various stakeholders in the delivering of development in a sustainable manner;
- Promote a healthy and vibrant community with high moral standards;
- Unlock the development potential of the area particularly tourism and indigenous knowledge and mobilising investment;
- Ensure everyone will be active in the economy and utilise technology to the advantage of the municipality; and,
- Attract and keep a highly skilled work force.

This vision and mission is mainly focused on retaining the human resources of the municipality by exploiting (sustainably if the social economy is to be long lasting) the local attributes of the municipality. These are identified to some extent as tourism, indigenous knowledge and the need to attract investment.

The Spatial Development Framework (SDF) needs to much more clearly and precisely identify the physical attributes of the municipality so as to ensure their protection and sustainable use.

For instance:

Tourism will rely on scenic and cultural attributes in both the rural and urban areas; un-spoilt mountain slopes and valleys, historic buildings and precincts in the towns, rural way of life on farms and especially in mission villages of Amalienstein and Zoar as well as Van Wyksdorp. It will be important that the scenic quality of these areas is not degraded by the unsympathetic design and siting of BNG housing schemes, industrial, upmarket residential development or luxury lodges in private nature reserves.

Indigenous knowledge relates to the deep rooted culture of many of the municipality's inhabitants living in the various settlements and particularly in Zoar and Amalienstein.

Investment attractions include the various rural and urban assets of heritage precincts in the settlements, the dramatic mountain wildernesses and scenic vistas of the rural areas and the strong vertical linkages from agriculture into various agri-processing operations, cheese factories, brandy and port distilling, ostrich hides, meat and feathers and farm based tourism.

(Kannaland IDP 2012 - 2017)

Given the findings of the Status Quo Report, especially the public participation input and the need for a vision statement that is unique to the municipality the following spatial vision is proposed to guide the SDF:

"Wilderness Tourism and Intensive Agriculture Heartland of the Klein Karoo"

The implications of this vision are as follows:

- Continue to promote more private and public nature reserves and their wilderness tourism offerings;
- Extend the tourism offerings to include cultural and heritage tourism attractions in the main centres with a focus on Zoar, Amalienstein and Van Wyksdorp;
- Protect intensive agriculture as the most important economic and employment resource and as a key input into the agri-industrial (manufacturing) sector;
- Conduct human resource development courses in these sectors so that local employment and entrepreneurial opportunities are increased;
- As part of promoting agriculture and bio-diversity conservation ensure that river health is maintained after water courses leave their pristine upper catchments currently protected in formal nature reserves or mountain catchment areas; and,
- Improve the attractiveness of the urban centres to retirees and permanent residents through urban maintenance and management programs.

## 5.2 MACRO-CONCEPTUAL FRAMEWORK

### 5.2.1 NATURAL SYSTEMS SYNTHESIS, see Figure 5.2.1.1

Figure 5.2.1.1 indicates three distinct natural systems arising out of the synthesis of the natural systems found in the municipality. They include:

- A west-east mountain spine comprising the Anysberg, Klein Swartberg and Groot Swartberg ranges. The gap between the Anysberg and Klein Swartberg protected nature areas is in the process of being closed on the Laingsburg side of the municipal boundary by the recent acquisition of the Grand Canyon private conservation area (5 farms = 12 500 has) by CapeNature;
- The Groot River rises in the Anysberg and flows north-west to south east before joining the Gouritz River to the south in the Langeberg municipality. Its tributaries supply the farming areas around Ladismith and Van Wyksdorp; and,
- The Gamka River valley is separated from the Groot River valley by the Rooiberge range. The Gamka River cuts through the Swartberg mountains from the Gamkapoort dam on the Laingsburg, Prince Albert municipal boundary to the north. Its tributaries supply the farming areas around Zoar and Amalienstein. South of Calitzdorp the river passes through the intensive farming area of the Gamka valley. Further south the Olifants River joins the Gamka River after also passing through an intensive irrigation farming area. The Gamka River eventually flows into the Gouritz River which enters the sea at Gouritzmond.

There are large areas of CBAs, see Figure 5.2.1.2 in the eastern part of the municipality, including the Rooiberge and the Swartberge around the Gamka River. CBAs also form river corridors along the Groot River and its tributaries.

These bio-diversity assets have already formed the basis of a number of private and public protected natural areas in the form of CapeNature reserves and private conservancies. There is considerable potential to increase the area under conservation.

In general Kannaland's natural systems have a very distinct pattern. It comprises the pristine upper reaches of most rivers and their tributaries rising in the mountains within the municipality, flowing across large river valleys, irrigating fertile river valleys where the soil is suitable before linking into the Gouritz River which drains to the south.

These natural resources represent significant inputs into the municipality's local economy and employment prospects.

The municipality as a whole is removed from the major N1 and N2 transport corridors although it enjoys relatively good road links to them, especially if the Seweweekspoort pass road to Laingsburg were to be tarred.

Thus, it is able to position itself as a serene and quiet tourism centre, a profile that has already been promoted for some years with the R62 brand. This tourism resource comprises the dramatic scenery of the surrounding mountains including the unusual Rooiberge, with the pastoral scenes of farming in the valley bottoms and the historic settlements along the route where many historic buildings have remained intact. However, there is a continual danger of this important economic and urban heritage resource being undermined by indiscriminate buildings and renovations.

The farming enterprises coupled with the dramatic scenery have created opportunities for agri-tourism and farm-stays.

There is also a variety of cultural heritage opportunities including the historic architecture found in the main settlements and the history of the mission stations at Zoar and Amalienstein.

Thus, Kannaland appears to be richly resourced with regards to agricultural, agri-industry, bio-diversity and tourism opportunities arising from its natural environment, providing the appropriate infrastructure management and policy support can be achieved.



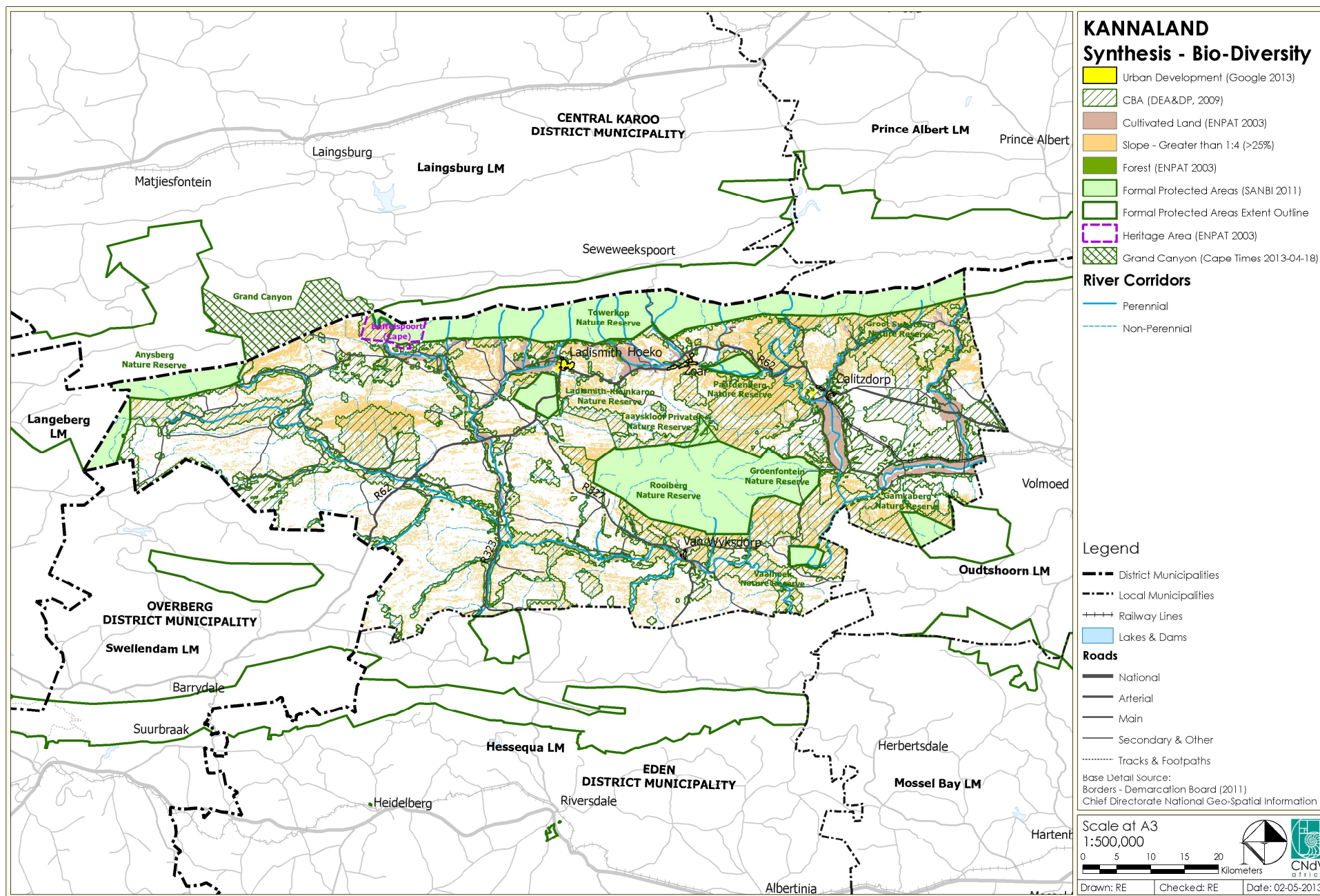


Figure 5.2.1.1 Kannaland Municipality: Natural Systems Synthesis

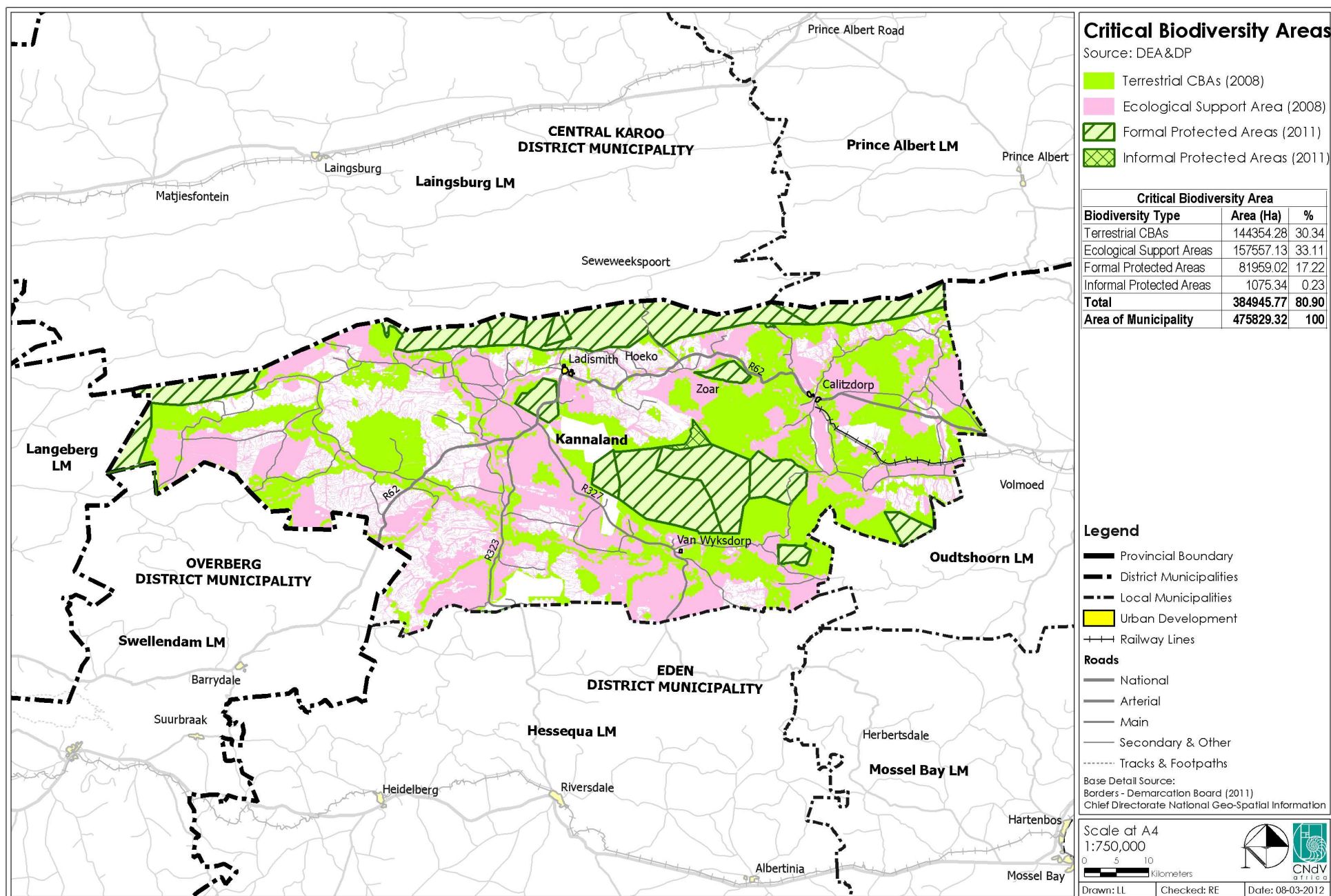


Figure 5.2.1.2 Critical Biodiversity Areas





## 5.2.2 SOCIO-ECONOMIC AND BUILT ENVIRONMENT SYNTHESIS, see Figure 5.2.2.1

- The socio-economic patterns strongly reflect the opportunities and constraints created by the natural environment;
- The municipal population seems to have seen growth from 2001 (22 821) to 2011 (24 767);
- The share of population as per Census 2011 is thus:
  - Ladismith - 7123;
  - Zoar - 4659;
  - Calitzdorp – 4283;
  - Van Wyksdorp – 833; and,
  - Rural - 7869;
- There is a smaller concentration of people around Van Wyksdorp; and,
- There are also higher rural population densities in the intensive farming areas around Ladismith and Zoar and to the south and east of Calitzdorp.

Ladismith is currently facing a housing backlog but addressing this is being constrained by the lack of infrastructure services. This challenge is also preventing major agri-industrial enterprises expanding their businesses.

Although Calitzdorp does not have the same pressure to accommodate expansion of secondary economic sector activities such as agri-industry, its future development is also constrained, especially by a shortage of electricity infrastructure.

Zoar is essentially a dispersed agricultural village although with some municipal services. However, these are in dire need of upgrading, particularly water supply. This presents a policy challenge, especially in view of the area's low economic development potential relative to other settlements although its social needs are rated "very high". (Growth Potential Study, PGWC 2009)

There appear to be adequate physical education and health facilities in the main centres although their operational quality may require improvement.

However, access to physical facilities remains a challenge for the relative dense rural populations in the intensive farming areas. Here, services from Home Affairs, (registrations and social grants) Dept of Health (clinics) and Dept of Education (libraries) services may have to be delivered on a periodic basis using periodic market service centres.

According to a recent Professional Resource Team (PRT) report there is a waiting list of approximately 3 200 households and proposed projects totaling 2 500 units. (PRT, 2012)

	Households on waiting list	Projects in pipeline (units)	Difference
Ladismith	1282	1606	+ 324
Zoar	520	145	- 375
Calitzdorp	1274	651	- 623
Van Wyksdorp	200	100	- 100
<b>Total</b>	<b>3272</b>	<b>2503</b>	

**Table 5.2.2.1 Summary of waiting list and planned housing units** (source: PRT, 2012)

The proposed pipeline indicates a number of issues:

- Ladismith is proposed to be the dominant centre. This raises the question of whether this is rational given that Zoar and Calitzdorp lie on the eastern side of the watershed separating them from Ladismith and need to be able to service their own sub-regions;
- All of the settlements are facing major infrastructure challenges. Therefore, should another housing delivery and infrastructure approach not be considered? For example, a PHP approach using off-grid services, especially in the case of Zoar and Van Wyksdorp;
- The quantum of housing is significant in relation to the size of the existing settlements. Should its visual impact be inappropriate it could have a major negative impact on the aesthetic appeal of the settlements thereby damaging their potential for heritage and cultural tourism; and,
- This does not mean that such housing should not be built but rather that careful attention be paid to its urban design, landscaping and location as was done in the case of Langebaan, see Section 5.4.1.3.

## 5.2.3 SECTOR GVA CONTRIBUTIONS, Graph 5.2.3.1

- Although the proportion of the local economy contributing to agriculture has been declining it remains the most important economic sector;
- Manufacturing's contribution is stronger than would be expected in a rural municipality mainly due to the large agri-industry enterprises around Ladismith;
  - It is likely that this sector's contribution could increase if the infrastructure constraints are addressed and private sector investment in agri-industry resumed;
- Small increases are recorded in the construction, wholesale and retail and transport and communication sectors;



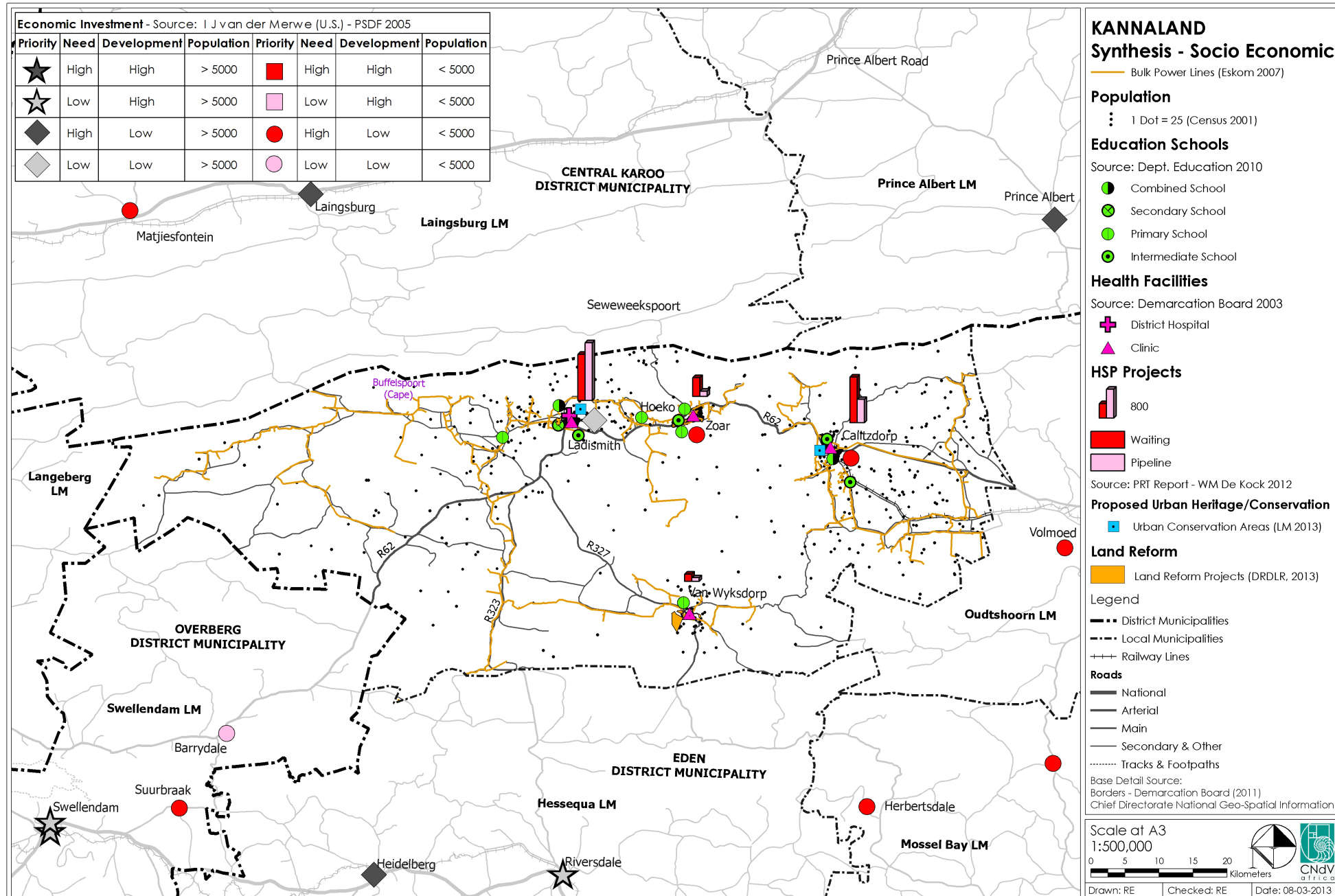
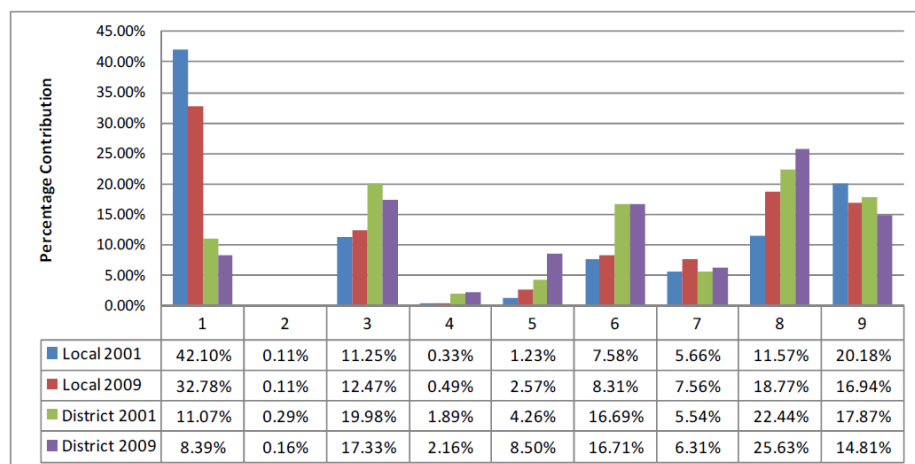


Figure 5.2.2.1 Kannaland Municipality: Socio-economic Synthesis

- It is likely that the construction sector's contribution could increase in the short term if the infrastructure constraints holding back the manufacturing sector's growth was addressed and it required more buildings and infrastructure;
- The largest sectoral increase is seen in the financial services sector. This category includes some tourism activity. This sector is likely to become an increasing important contributor providing the infrastructure and institutional constraints are addressed; and,
- However, it may be possible to promote resort and tourism development on rural areas outside of the settlements which will not be dependent on municipal infrastructure and which can at least keep contributions to the economy increasing in this way.



**Legend:**

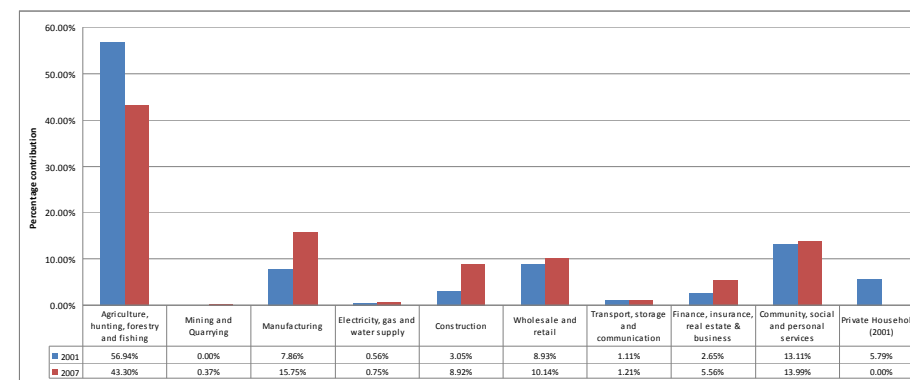
- 1 Agriculture, hunting, forestry and fishing
- 2 Mining and quarrying
- 3 Manufacturing
- 4 Electricity, gas and water supply
- 5 Construction
- 6 Wholesale and retail
- 7 Transport, storage and communication
- 8 Finance, insurance, real estate and business services
- 9 Community, social and personal services

Source: Adapted from Western Cape Provincial Treasury (2010)

**Graph 5.2.3.1 Sector contribution to GVA for the local and district municipal areas in 2001 and 2009**  
(source: MPBS, 2013)

## 5.2.4 SECTOR EMPLOYMENT CONTRIBUTIONS, Graph 5.2.4.1

- Graph 5.2.4.1 indicates a similar pattern to employment creation as seen with economic sector contributions but with some important differences;
- Agricultural employment, although also declining in line with its economic sector contribution, makes an even bigger contribution to jobs (43%) than to GVA (value) (32%). Thus, it can be considered to punch above its weight;
- However, a large proportion of these jobs are casual, i.e. approximately 7 500 out of a total of 9 000 (OABS, 2013);
- Agricultural land lying fallow, particularly for intensive farming, should be considered as a wasted resource in terms of its contribution to the economy and employment and all positive efforts should be made to bring it into production unless it forms part of a crop or grazing rotation cycle;
- Agriculture is also a major contributor to the Manufacturing sector and to Exports, either directly or via Manufacturing;
- Manufacturing saw a significant increase in its contribution to employment over the period 2001 to 2007 but it is not clear whether this was sustained during the following recession;



**Graph 5.2.4.1 Sector contribution to Employment** (source: MPBS, 2013)

- Construction also saw a large increase in employment over this period but this sector is even more vulnerable to economic downturns and it is unlikely that this was sustained during the recession;

- The tertiary sectors of the economy saw very little increase in employment and even a reduction in the public sector. This would need to be checked carefully as it is unusual for employment to reduce in this sector; and,
- If tourism activity increased substantially as a result of making better use of Kannaland's many scenic, bio-diversity, heritage and cultural assets, employment in the tourism and services sector will increase.

### 5.2.5 BROAD SPATIAL CONCEPT

Figure 5.2.5.1 shows the broad Conceptual Spatial Development Framework for the Municipality.

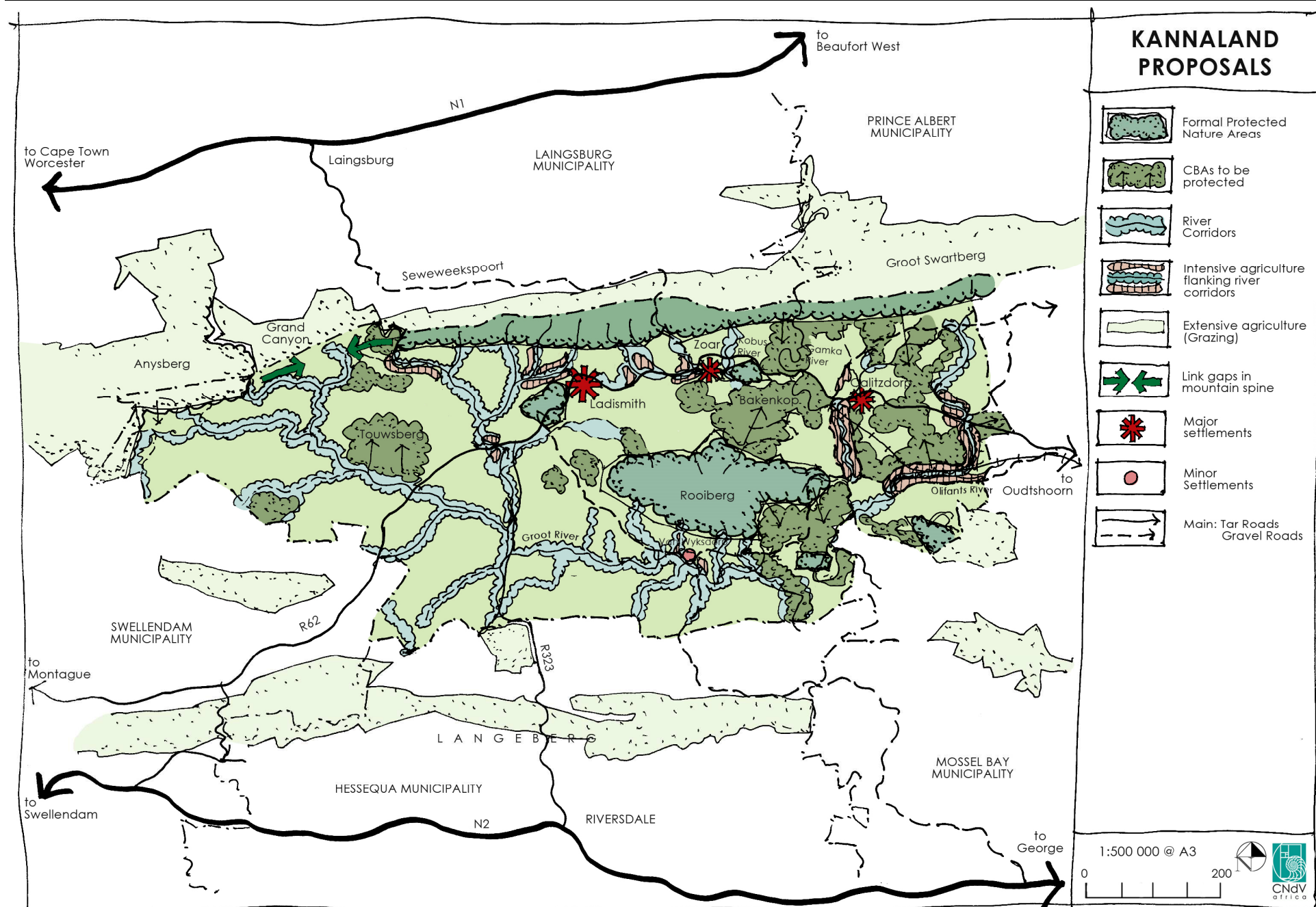
There are three main structuring elements:

- The most notable structuring element is the impressive backdrop of the mountain spine comprising the Anysberg, Klein Swartberg and Groot Swartberg. Most of the rivers rise in this mountain range with the exception of the Gamka which cuts through them from the central Karoo to the north. These mountains provide important bio-diversity conservation and wilderness tourism opportunities;
- The Klein Karoo valley, formed by the Swartberg range and the Langeberg range, approximately 10 to 15kms south of the municipal boundary is traversed by the Groot and Gamka Rivers. The R62 is the main route of the Klein Karoo and passes for almost 400kms between Montagu and Uniondale; and,
- Within Kannaland municipality the Klein Karoo valley is further broken up by three isolated mountains, Bakenkop which forms a ridge with the Rooiberg to create a watershed between Ladismith and Zoar and Calitzdorp and between the R62 and Vanrhynsdorp to the south. The other isolated mountain is the Touwsberg west of the R62.

The main structuring elements described above provide a framework on which important settlements and activities are located. These include:

- The R62 is heavily promoted as a tourism destination in its own right and provides a brand from which tourism operations and settlements can benefit if properly promoted. Ladismith, Zoar and Calitzdorp all straddle or abut this route;
- Van Wyksdorp is the smallest of the settlements and is relatively isolated in the Groot river valley south of the Rooiberg. It takes access along the gravel R 327 which forms a very scenic loop road returning over the Rooiberg to Calitzdorp; and,
- Intensive agriculture, the focus of rural population concentrations, is mainly confined to the tributaries of the Groot River around Ladismith, and the Kobus River through Zoar and the Olifants and Gamka Rivers south of Calitzdorp.





### 5.3 MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK

The Spatial Development Framework for the municipality comprises the following elements:

- Bio-regions;
- Spatial Planning Categories (SPCs) for Land Use Management;
- Sustaining the Economy;
- Major Infrastructure Projects;
- Major Tourism Destinations;
- Land Reform;
- Urban Related Development;
- Climate Change;
- Urban Design Guidelines;
- Potential Rural Nodes and Periodic Rural Markets; and,
- Settlement Hierarchy and Structure.

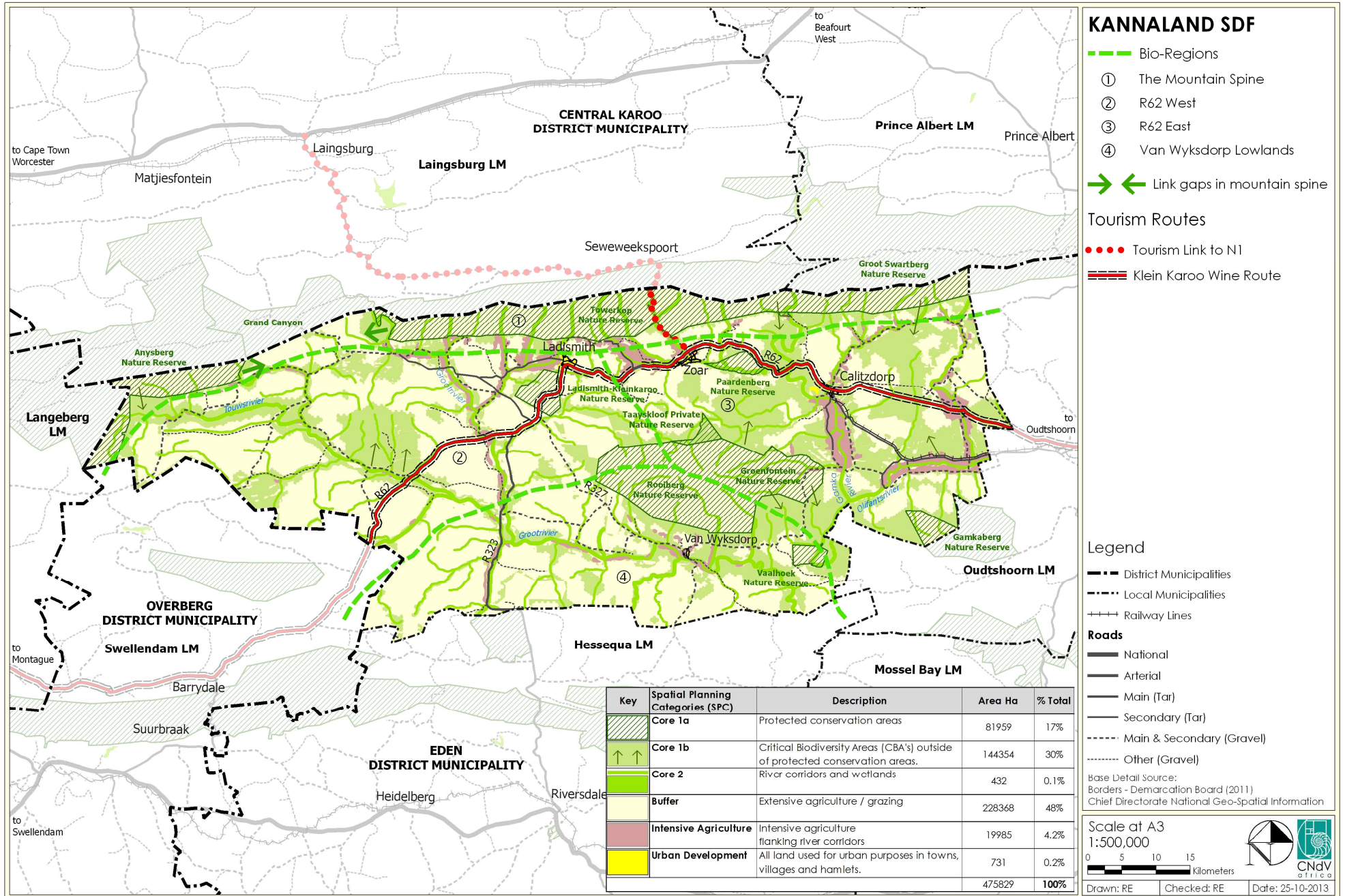


Figure 5.3.1.1 Kannaland Municipality: Spatial Development Framework



### 5.3.1 BIO-REGIONS

Section 5.2.1 identified key structuring elements that can help to distinguish different bio-regions according to the patterns of the natural environment, social economy and built infrastructure of the municipality. This level of detail will help to formulate land use management policies that address the different characteristics of Kannaland. The bio-regions are described in Table 5.3.1.1 and shown as an overlay on Figure 5.3.1.2.

The four bio- regions and proposed management policies are as follows:

#### 5.3.1.1 The Mountain Spine

- S1 Encourage closing of the gap between Anysberg and Klein Swartberg on the Kannaland side of boundary through donation or resort zone development in exchange for conservancy (similar to recent Grand Canyon process);**
- S2 Promote protection of CBAs on lower slopes through stewardship and strictly controlled wilderness tourism developments which should be informed by design guidelines to minimize visual and ecological impacts.**

#### 5.3.1.2 R62 West

- R62W1 Increase brand marketing of R62 with public facilitation and resources where possible;**
- R62W2 Intensive farming areas should enjoy the highest level of protection, particularly where they are in easy transport access of settlements;**
- R62W3 Promote protection of CBAs along river corridors and on the Touwsberg through stewardship and strictly controlled wilderness tourism developments to be informed by design guidelines to minimize visual and ecological impacts.**

#### 5.3.1.3 R62 East

- R62E1 Increase brand marketing of R62 with public facilitation and resources where possible;**
- R62E2 Incentivise and promote Zoar and Amalienstein residents to take advantage of the tourism potential along the R62;**
- R62E3 Ensure all future BNG housing does not detract from the visual quality of the settlement;**
- R62E4 Intensive farming areas should enjoy the highest level of protection, particularly where they are in easy transport access of settlements.**

#### 5.3.1.4 Van Wyksdorp Lowlands

- Vwd1 Intensive farming areas should enjoy the highest level of protection, particularly where they are in easy transport access of settlements;**
- Vwd2 Investigate the necessary requirements to promote the village as an off-grid alternative lifestyle retreat for urban dwellers wishing to pursue more sustainable lifestyles. This concept should be extended to the provision of public housing.**

	Mountain Spine	R62 West	R62 East	Van Wyksdorp lowlands
<b>Altitude (m)</b>	1000 - 2000	250 – 1000	< 250 - 1000	< 250 - 1000
<b>Population distribution</b>	Very few	Ladismith 7 000 – 9 500 rural 2000 - 4000	Zoar - Calitzdorp 6500 – 11000 rural 3000 - 5000	Van Wyksdorp 500 – 100 rural 1000
<b>Agriculture</b>	Limited, some grazing on lower slopes	Intensive farming along Groot river tributaries. Wine, Lucerne and fruit, Cattle, sheep and dairy pastures	Intensive irrigation farming along Kobus, Gamka and Olifants rivers Wine (port) Lucerne and fruit, cattle ,sheep and dairy pastures	Some intensive farming and dairy
<b>Mining</b>	N/A	N/A	N/A	N/A
<b>Tertiary</b>	Wilderness tourism	Agri, cultural and heritage tourism	Agri, cultural and heritage tourism	Wilderness, agri-cultural and heritage tourism
<b>Renewable energy potential</b>	Medium levels of solar radiation (south slopes of Swartberg) Medium to low wind speeds	Medium levels of solar radiation (south of Klein Swartberg) Medium to low wind speeds	Lower levels of solar radiation (impact of Groot Swartberg) Medium to low wind speeds	Higher solar potential than rest of municipality – less impact of Swartberg Medium to low wind speeds
<b>Hydrology</b>	Source of major rivers	Groot river and tributaries	Kobus, Gamka and Olifant rivers	Groot river and tributaries
<b>Landscape character</b>	Classical dramatic mountains and cliffs	Pastoral valley bottoms flanked by dramatic mountain ranges; many historic homesteads on lower northern slopes	Pastoral valley bottoms flanked by dramatic mountain ranges; many historic homesteads on lower northern slopes	South facing hilly landscape with dramatic scenic views, especially on the slopes of the Rooiberg

Table 5.3.1.1 Sub-regions and characteristics



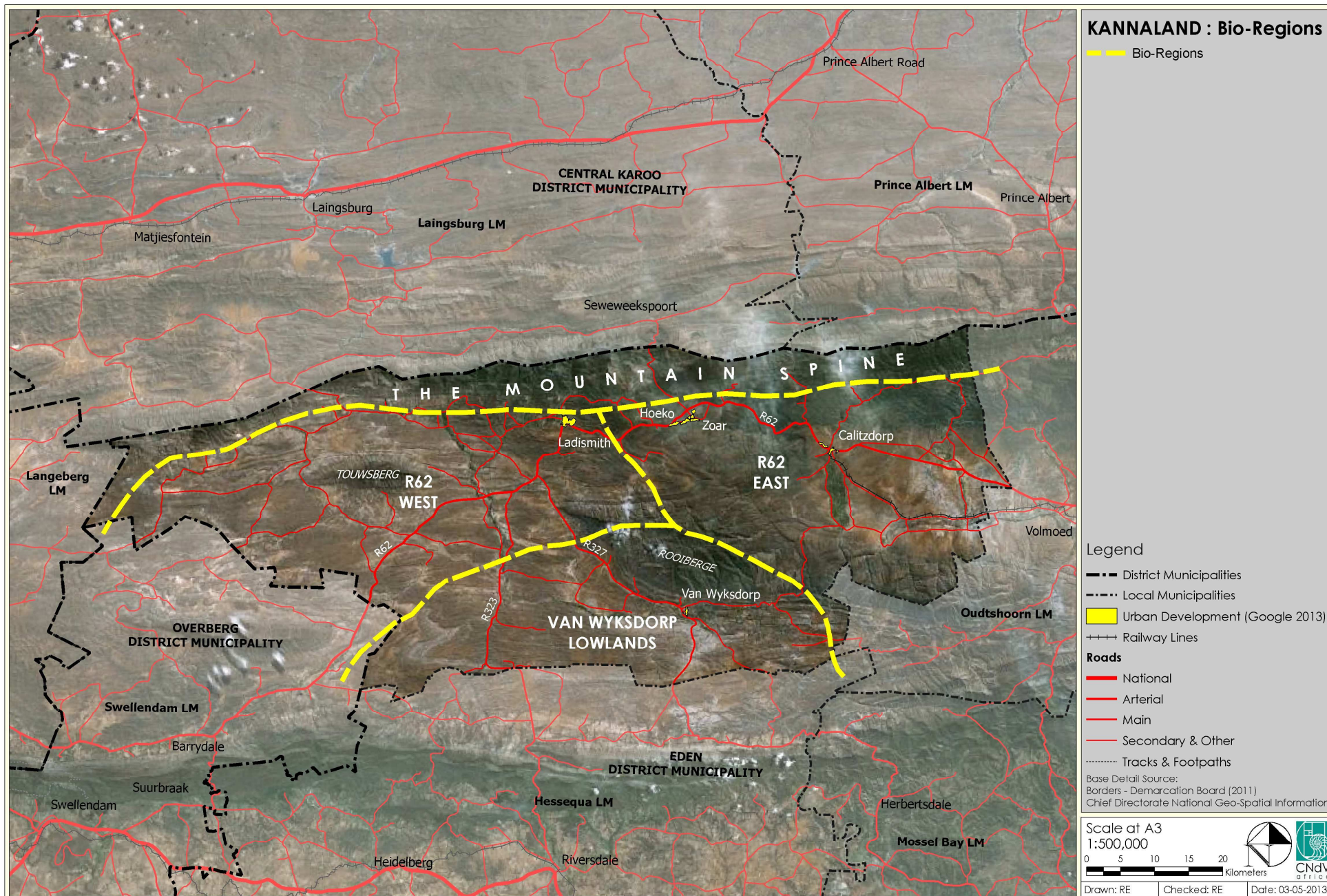


Figure 5.3.1.2 Kannaland Bio-regions

### 5.3.2 SPATIAL PLANNING CATEGORIES FOR LAND USE MANAGEMENT

The Spatial Planning Categories provide the basis for managing rural land uses. The general conditions guiding what activities may occur within each category are generally in accordance with those set out in Table 5.3.2.1.







	SPC	Description	Policies	Notes	Responsibility
	Core 1a	Formally protected conservation areas	Formally protected areas, including those under SANParks and CapeNature control, should continue to enjoy the highest levels of protection.  The municipality should engage with the conservation authorities to ensure that economic growth and employment opportunities from these areas are maximized.		Municipality SANParks CapeNature Tourism organisations
	Core 1b	Critical Biodiversity Areas (CBAs) outside of formally protected conservation areas	Conservation of endangered vegetation areas shall be encouraged through the promotion of conservancies and stewardship projects with limited eco-tourism development rights and/or donations to formal conservation agencies.  All CBAs should be ground-truthed before they are finalized. Conservation of CBAs should be incentivized through the granting of limited development rights as per the rural Land Use Planning and Management Guidelines for Holiday Accommodation, low density rural housing, low impact tourist and recreational facilities (CapeNature 2010).		Municipality CapeNature Dept of Tourism SANBI
	Core 2	River corridors and wetlands (Ecological Support Areas)	River corridors and wetlands, including ephemeral pans, must be protected from urban, agricultural and mining activities to a distance of at least 32 metres from their banks unless closer setback lines have been determined by a geohydrologist and freshwater ecologist.		Municipality, DWAF, Dept of Agriculture, SANBI
	Buffer	Extensive agriculture / grazing	Rotational grazing and other veld management best practices shall be promoted livestock grazing so as to improve biodiversity and stocking rates		Municipality Dept of Agriculture
	Intensive Agriculture	Irrigation and dry land crop and pasture farming	All existing and potential land suitable for intensive agriculture shall be protected from conversion to other uses including conservation. Agriculture water demand management must be practiced and intensive agriculture water supplies shall be protected and not diverted to other uses.  Investigate methods to bring the agricultural land currently lying fallow back into production if possible.		Municipality Dept of Agriculture Consultant
	Urban Settlement	All land used for urban purposes in towns, villages and hamlets.	Urban development shall be promoted within urban settlements according to the settlement planning principles, see Section 5.4.		Municipality
	Urban Edge	Outer boundary of urban settlement aligned to protect natural and agricultural resources and to promote more compact settlements	No urban development shall be permitted outside of Urban Edges.		Municipality Dept of Agriculture

Table 5.3.2.1 Spatial Planning Categories

### **5.3.2.1 Urban Areas**

This includes the areas that are or will be used for urban related activities. All these areas should be included in a defined Urban Edge.

These include the settlements of:

- Ladismith;
- Calitzdorp;
- Zoar; and,
- Van Wyksdorp.

Spatial proposals have been made for these settlements, see Sections 5.9 to 5.12;

### **5.3.2.2 Rural Nodes**

Rural nodes include:

- Hoeko
- Voorwaart;
- Warmbad; and,
- Danko.

A formal cost-benefits analysis and impact study must be completed before investments are made in these areas due to their low development potential. This analysis should include the lifespan costs / impacts of potential peripheral / rural developments to fully understand the impact of remote developments.

### **5.3.2.3 Extractive Industry**

These include all mining activities in the Municipality. The promotion of settlements at mines should not be encouraged. The labour force to support mines should be accommodated in the existing urban areas or proposed rural nodes (if found viable).

### **5.3.2.4 Wind and Solar Energy Generation**

These include all wind and solar energy generation facilities. These facilities should be promoted to support the supply of electricity in the municipality and the provision of basic services to those in need. These projects are to be sensitively placed to not negatively impact on the surrounding urban, agricultural or natural environment (see Section 5.4.1.8 for wind and solar farm siting principles).



### 5.3.3 SUSTAINING THE ECONOMY

Although Kannaland faces major poverty and employment challenges it is a well resourced municipality compared to many other including in the Western Cape. These resources include:

- Almost all of the municipality can be considered to be an area of outstanding natural beauty and bio-diversity significance with great appeal to the wilderness and adventure tourism market:
  - Eco-resorts and getaways;
  - Hiking;
  - Bird-watching;
  - Organised and informal mountain biking; and
  - Self-drive and motorcycle touring;
- Agriculture and its associated industries including wine and dairy represent another tourism market;
- The heritage and urban environment of the settlement are a third, with particular attention being paid to the upgrading of Zoar and Van Wyksdorp with their potential appeal to the cultural tourism market;
- As mentioned previously, it is important that public housing projects are designed and laid out so that they enhance rather than undermine this potential;
- The municipality should be considered fortunate in that major beneficiation of agricultural products in the form of cheese, dairy, wine and port occurs at processing plants and wineries within its boundaries rather than the raw material being exported to value adding enterprises elsewhere. These secondary economic sectors require higher staffing skills and hence have the potential to encourage improved human resource levels and incomes. However, the current infrastructure shortfalls need to be urgently addressed, either directly or through the promotion of alternative technologies;
- As well as infrastructure these enterprises also require that the underlying resource of good agricultural land, especially that used for irrigation farming is kept intact and where possible extended;
- Urban development and other uses which could destroy this resource should be located where it is not necessary to take land out of production; and,
- It is essential that access to all these economic sectors, agriculture, manufacturing and tourism be broadened through land reform, mentoring and entrepreneurial development projects.

### 5.3.4 MAJOR INFRASTRUCTURE PROJECTS

The following projects should be considered:

- Implement a multi-pronged water management strategy:
  - o Rainwater harvesting;
  - o Grey water recycling;
  - o Reducing unaccounted for water;
  - o Extension of regional water service delivery; and,
  - o Water demand management for large users.
- Promote domestic and large scale solar energy usage and projects such as wind and solar farms subject to appropriate guidelines and siting principles.

Figure 5.3.4.1 shows the infrastructure projects per town as listed in the IDP.

Table 5.3.4.1 below sets out the various IDP Infrastructure Projects

IDP Projects: 2013 - 2016					
No.	Location	Project Description	2013/2014	2014/2015	Funding Source
<b>Tourism and Marketing</b>					
1	Calitzdorp	Support the local tourism bureau	R 90 000	-	-
2	Ladismith	Support the local tourism bureau	R 90 000	-	-
		<b>Sub Total</b>	<b>R 180 000</b>		
<b>Infrastructure: Water</b>					
3	Zoar	Upgrade water reticulation	R 4 176 000	-	MIG
4	Calitzdorp	Upgrade bulk infrastructure		R 500 000	MIG
		<b>Sub Total</b>	<b>R 4 176 000</b>	<b>R 500 000</b>	
<b>Infrastructure: Sewer</b>					
5	Calitzdorp	Upgrade bulk infrastructure	-	R 1 000 000	MIG
6	Ladismith	New WWTWs	-	R 12 600 000	MIG
		<b>Sub Total</b>		<b>R 13 600 000</b>	
<b>Infrastructure: Roads</b>					
7	Calitzdorp	Access roads: farm workers housing	-	R 400 000	MIG
8	Van Wyksdorp	Provision of new roads	R 1 810 000		MIG
9	Ladismith	Upgrades to taxi route	R 2 940 000		MIG
		<b>Sub Total</b>	<b>R 4 750 000</b>	<b>R 400 000</b>	
<b>Infrastructure: Solid Waste</b>					
10	Ladismith	Upgrades to facility	R 600 000	-	MIG
		<b>Sub Total</b>	<b>R 600 000</b>		
<b>Community Facilities: Sports and Recreation</b>					
11	Zoar	Rehabilitation of sports fields	R 400 000	-	MIG
12	Calitzdorp	Rehabilitation of sports fields	R 1 000 000	-	MIG
		<b>Sub Total</b>	<b>R 1 400 000</b>		
<b>Community Facilities: Cemeteries</b>					
13	Zoar	Provision of new cemetery	R 560 000		MIG
14	Zoar	Provision of new cemetery		R 3 585 000	MIG
		<b>Sub Total</b>	<b>R 560 000</b>	<b>R 3 585 000</b>	
		<b>TOTAL</b>	<b>R 29 751 000</b>		

Table 5.3.4.1 Major Infrastructure Projects 2012-2017 (source: Kannaland IDP, 2011)



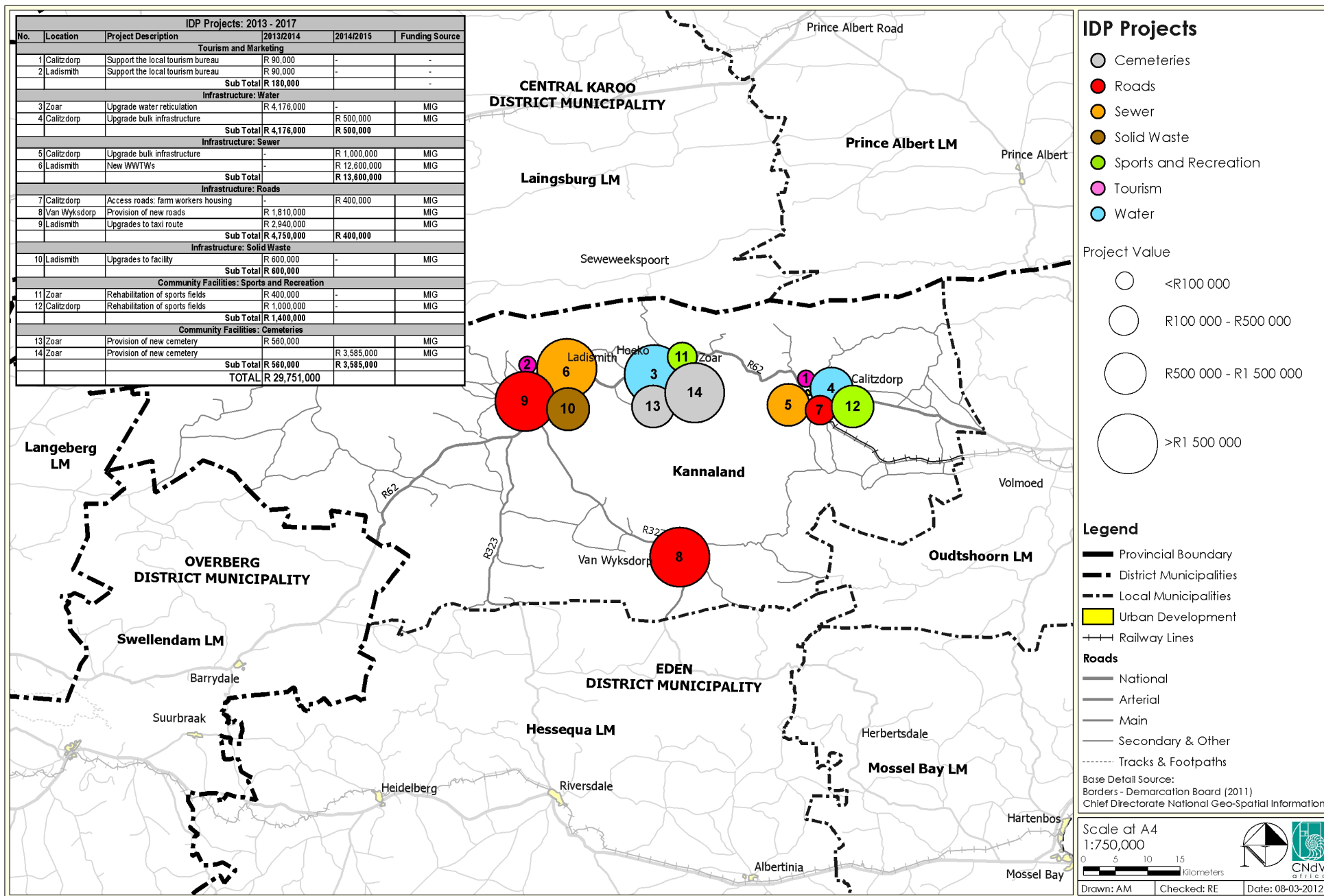


Figure 5.3.4.1 Major Infrastructure Projects

### 5.3.4.1 Tree Planting and Paving

Tree planting is one of the cheapest forms of urban upgrading with the greatest positive visual impact.

If this is coupled with the paving of one or two strategic squares and streets, the overall impression of a settlement can be considerably improved. This will improve its chances of attracting visitors and investment.

These projects can form part of an Extended Public Works Program (EPWP). They are labour intensive and cost effective. For example, broken bricks can be used for paving or pavers can be made on site. Suitable shady tree species include:

- *Celtis sinensis* - deciduous – exotic
- *Vepris lanceolata* - evergreen – exotic
- *Platanus acerifolia* - evergreen – indigenous
- *Acer negundo* - evergreen - exotic



*Celtis africana*



*Vepris lanceolata*



*Platanus acerifolia*



*Acer negundo*



Examples of public road works in Vredendal North (Matzikama Municipality)



### 5.3.5 MAJOR TOURISM DESTINATIONS

- Ladismith, Calitzdorp and van Wyksdorp B&Bs, guesthouses, restaurants and places of interest;
- Cheese factory shops;
- Public and Private nature reserves and eco-resorts for hiking and MTB;
- Port and Wine Cellars;
- Scenic routes for self-drive and guided tours, especially Seweweekspoort, R62, R327 and district road from Ladismith to Calitzdorp via Van Wyksdorp;
- Potential mission route and cultural tourism opportunities including Lutheran mission complex and church in Ladismith, SA Mission society church in Zoar and Berlin Mission Society church in Amalienstein;
- Zoar as potential cultural tourism centre along Hoof Street with B&Bs and cafes and Amalienstein mission as termination of Seweweekspoort pass;
- Ensure that new development responds positively to the layout of historic settlements; and,
- There are no cultural landscapes with the Eden district which have any formal protection status. Various examples of representative cultural landscapes were identified in the Heritage and Scenic Resources: Inventory and Policy Framework report prepared for DEA&DP that can be graded subject to further investigation. These include the following:
  - Ladismith Valley III;
  - Zoar and Amalienstein Valley II; and,
  - Calitzdorp Valley III (possibly also including Groenfontein Valley).

(source: Winter, S et al, 2013)



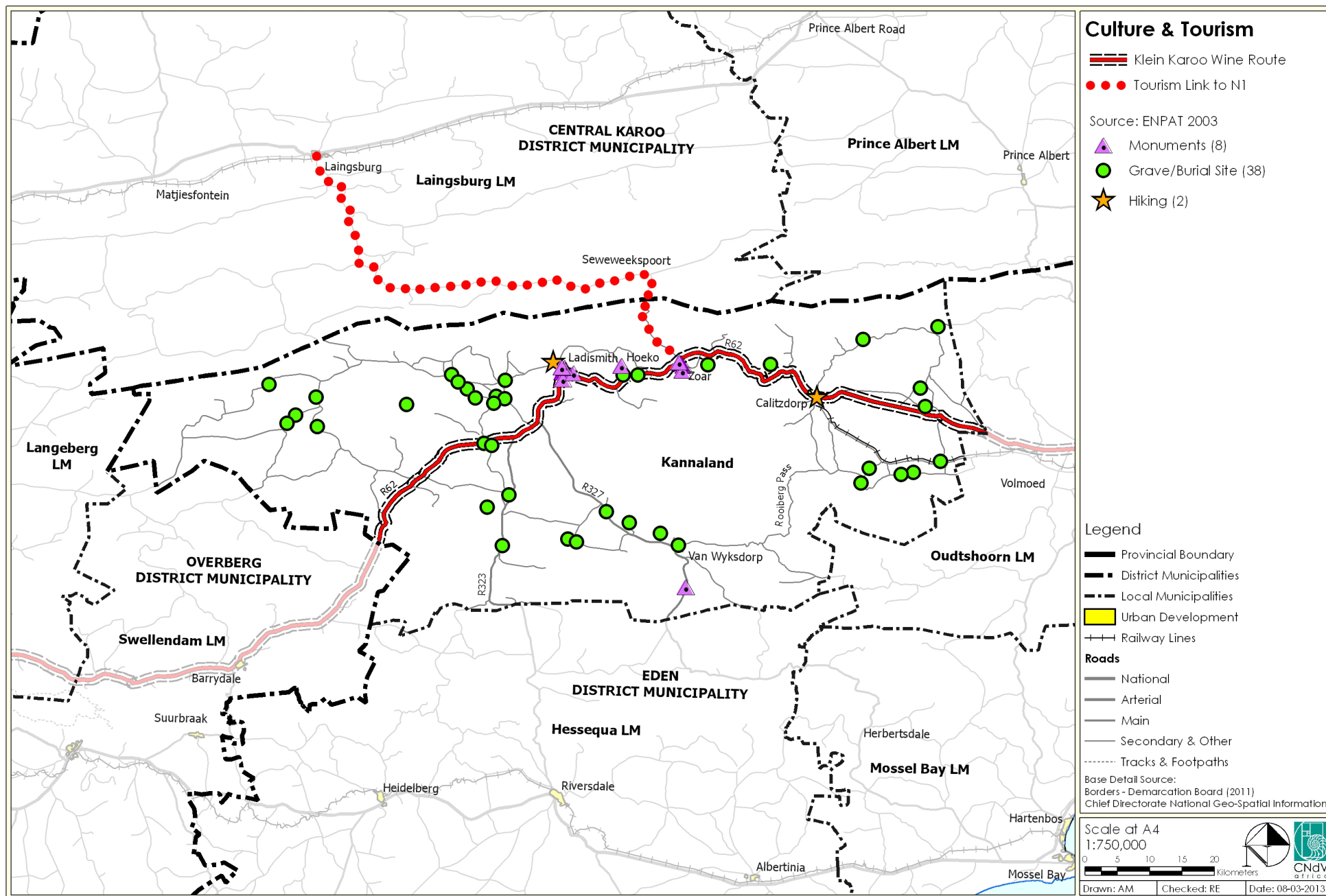


Figure 5.3.5.1 Major Tourism Destinations

### 5.3.6 LAND REFORM

- Land reform opportunities should not be targeted only at agricultural operations although this will always be the major activity;
- Bio-diversity conservation and eco and agri-tourism operations should also be considered; and,
- Future land reform projects should carefully consider the context in which they are located and then seek to take advantage of that area's opportunities, not only in agriculture.

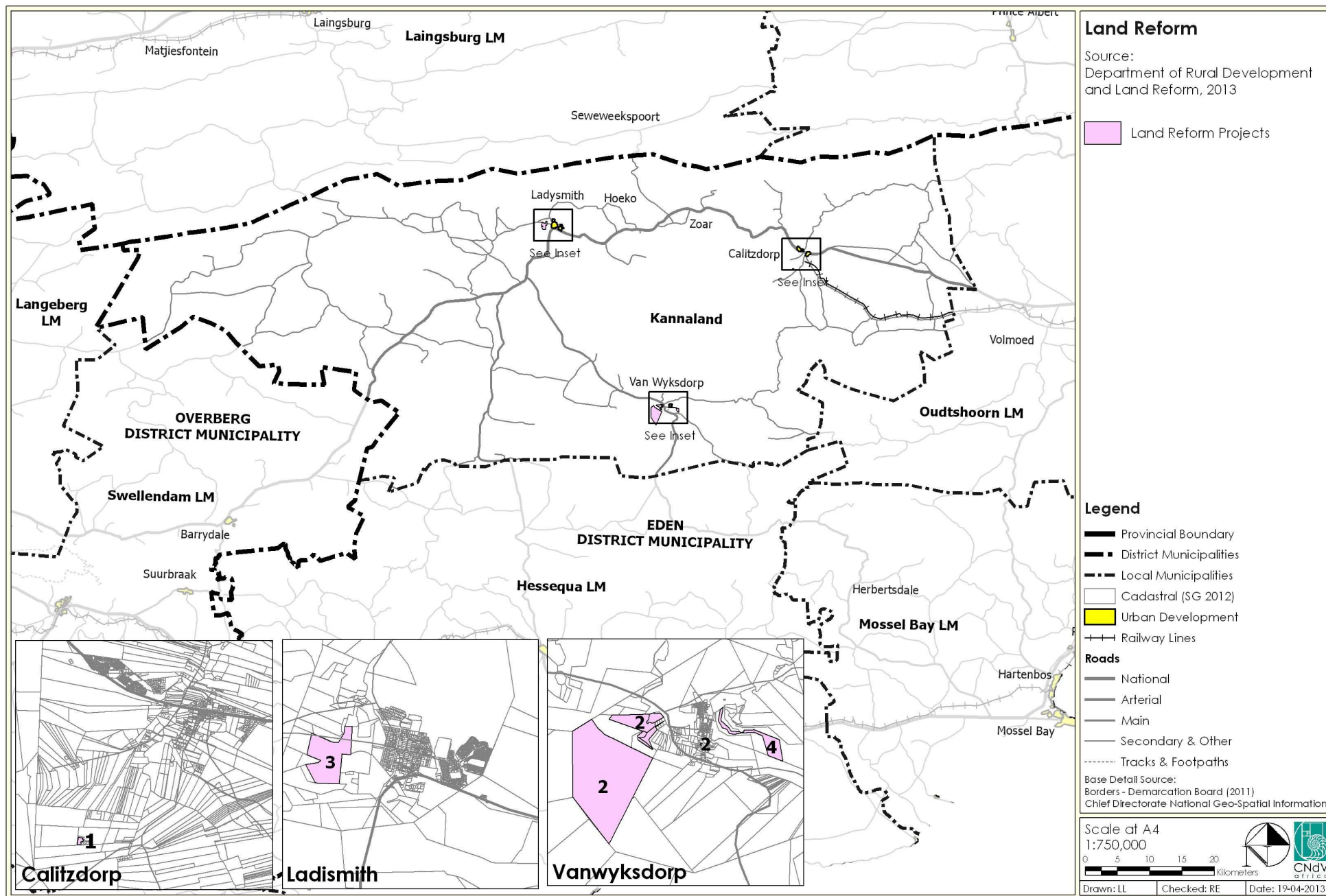


Figure 5.3.6.1 Land Reform Projects





## 5.4 URBAN RELATED DEVELOPMENT

### 5.4.1 SETTLEMENT GUIDELINES

#### 5.4.1.1 Walking Distance as the Primary Measure of Access

The need to ensure that people have access to a variety of opportunities is implied in a number of the DFA principles (S3(c)(i), (iii)). This requires an understanding of the relationships between different activities in terms of spatial proximity (close and far), access and time.

In the past accessibility has usually been considered in terms of travel time in private vehicles, however, this measurement is not only environmentally unsustainable, as it is mostly dependent on access to private motor vehicles but also reflects a denial of the reality that the majority of our citizens do not have private vehicles, may not always be able to afford public transport and thus have to spend significant time and energy walking to fulfill their needs.

Thus appropriate **walking distance** should always be used as the measure for accessibility. 20 minutes or 1km is regarded as an acceptable distance to walk and should be used as a basis of settlement design, see Figure 5.4.1.1.

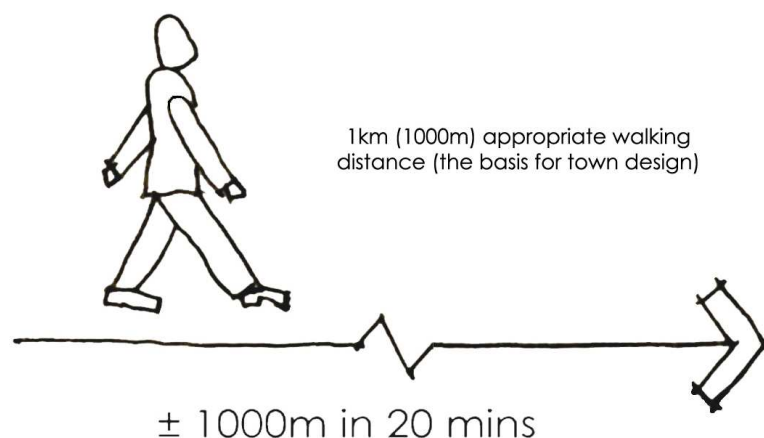


Figure 5.4.1.1 Walking distance

#### 5.4.1.2 Land use integration and interface

The implementation of the walking distance principle to promote greater access to opportunities for all people, will require the functional integration (DFA principles S3 (c)(i), (iii), (v)) of urban activities. At least **50% of urban activities** should be **within walking distance** of where people live, see Figure 5.4.1.2.

The intensification areas are seen as the prime instruments for promoting integration between the towns and townships of the urban settlements.

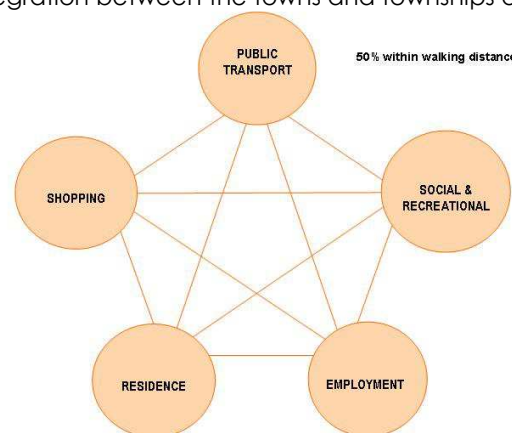


Figure 5.4.1.2 Integration of Urban Activities

Principles:

- **Locate activities (residential, transport, work, recreation, etc.) so that at least 50% of them are in walking distance;**
- **Locate most frequented activities in the most central / accessible localities, e.g. industrial and commercial;**
- **Use all well located vacant land, i.e. within 1 to 2kms of urban centres;**
- **Locate all future residential areas within walking distance of urban centres where space permits; and,**

Interface principles:

- **The change between different schemes must happen along the midblock and not across the street;**
- **Residents must be given freehold tenure, i.e. title deeds immediately so that shack upgrading will commence as soon as possible; and**

- **The more formal the units the closer they should be to the main public thoroughfare or adjacent upmarket housing.**

#### **5.4.1.3 Socio-Economic Integration**

The principle of access and integration, also requires socio-economic integration (DFA principle S3(c)(i),(vii)). Little progress has been made in this regard since the advent of democracy. In reality there is often community resistance to integration of poor, middle and high income communities, and bank valuers often downgrade property values where informal settlements or low income housing is provided in close proximity to middle and high income housing. The use of a **socio-economic gradient** with relatively small differences in income and property value between adjacent communities can help mediate this problem.

Figure 5.4.1.3 illustrates how a high level of socio-economic integration can be achieved in a 1km radius, applying this principle.

In particular efforts should be made to locate low income neighbourhoods nearer to the core or nodes of settlements and away from the periphery.

Principles:

- **Sensitively locate the income groups within the 1km radius : e.g. very low not right next to the very high income;**
- **The arrangement of the housing for the various income groups should be according to the principle of the socio-economic gradient with the higher end of the market closest to the main thoroughfare, see Figure 5.4.1.3;**
- **As a general rule Human Settlement schemes should not be targeted at a single income group exclusively, usually subsidy or Site and Service, but should always include at least a GAP housing and top structure subsidy component even if only comprising 10% or 20% of the units; and,**
- **Locate all future subsidy housing within walking distance of nodal centre where space permits.**



Well-located BNG housing project in Langebaan surrounded by up-market housing

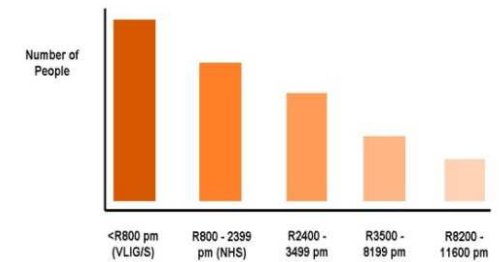
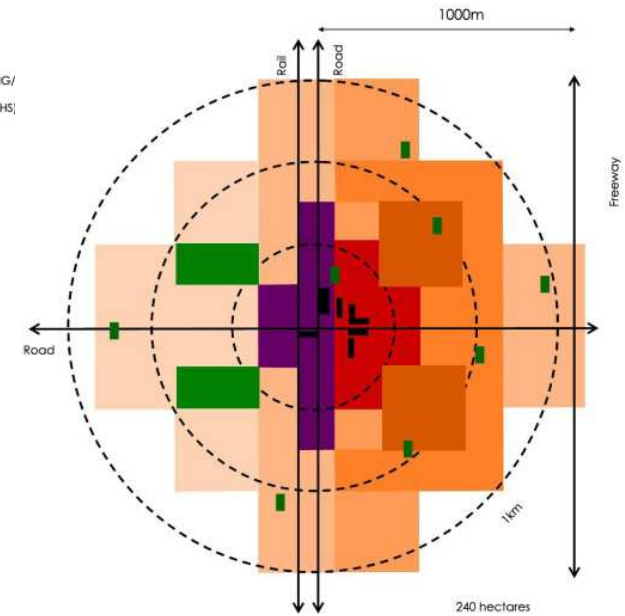
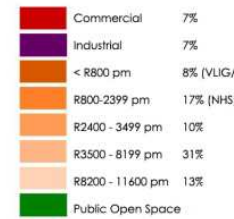


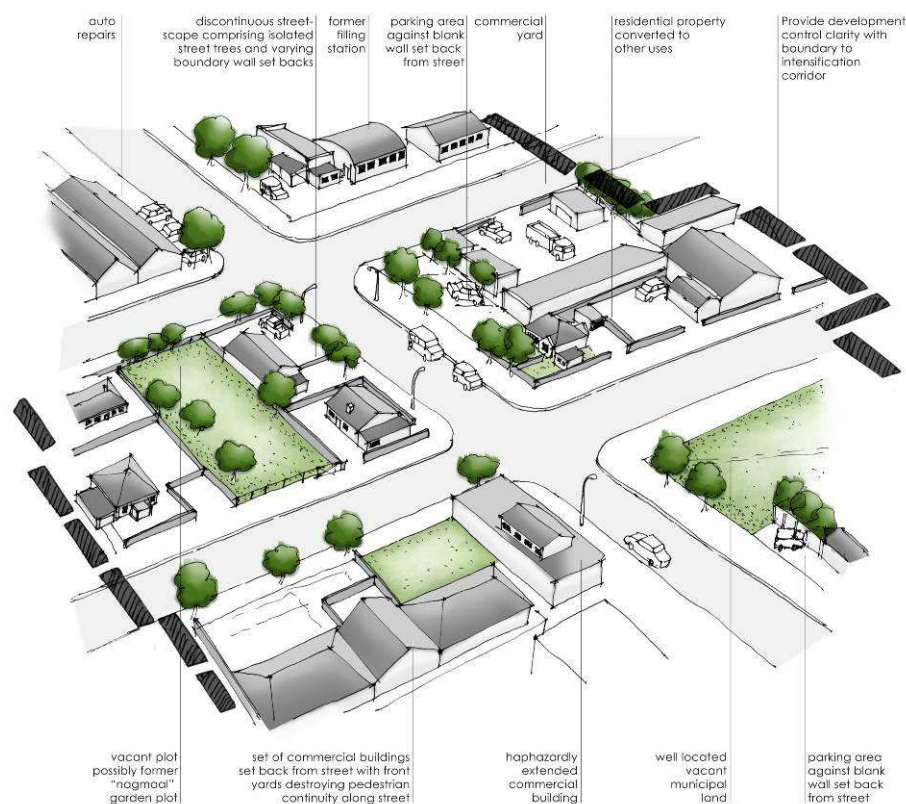
Figure 5.4.1.3 Socio-economic Integration and Interface Treatment

#### 5.4.1.4 Intensification Corridors and Linkages, see Figure 5.4.1.4

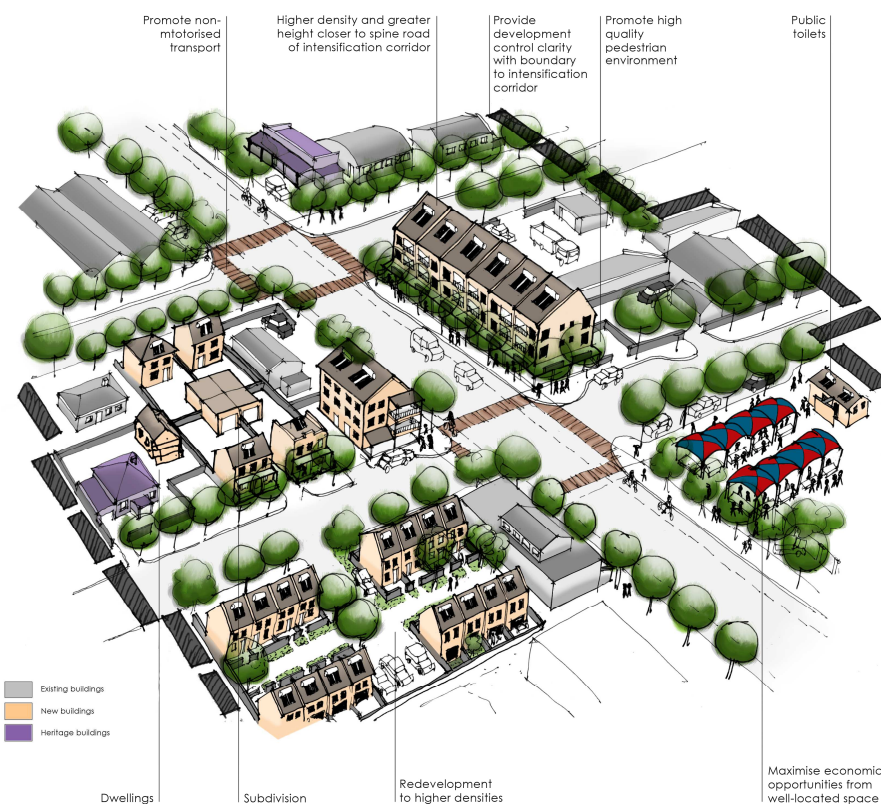
Principles:

- Sensitive infill and redevelopment of major arterial axis in clearly defined precincts;
- Corridors to concentrate activities and support its speedy initiation especially in more rural areas, should be delineated to include one erf on either side of the identified street, otherwise called the spine of the corridor;
- Show sensitivity towards existing heritage buildings;
- Enhance the street experience through landscaping and guiding the architecture of new developments;
- Encourage a multiple level of entry into the economic market and enhance job creation, the intensification corridors should be limited to residential, office and retail uses and only compatible light industrial uses, e.g. non-nuisance manufacturing or craft activities that may require a retail outlet on the same premises;
- Define a single uniting structure of intensification corridors, nodes and linkages between town and township; and,
- Encourage supporting densification pattern and infrastructure provision.





Before Development



After Development

Figure 5.4.1.4 Intensification Corridors

#### 5.4.1.5 Sub-centre Nodes

This will be shown at town level.

Three levels of hierarchy of urban nodes containing business and community facilities shall be clustered together as far as possible to provide satisfactory access and clustering of activities, see Figure 5.4.1.5:

- Tertiary: technikons, hospitals, courts, multi-purpose centres, regional or metropolitan transport interchanges, museums, art galleries, indoor sports complexes, regional shopping centres;
- Secondary: high schools, day care centres, hospitals, libraries, sports and community halls, sports fields;
- Primary: primary schools, crèches, clinics, bus and mini-bus taxi stops; and,
- Nodes should be managed to concentrate the business therein and where growth is required, the node should be encouraged to grow along the corridor towards each other. This is to manage and prioritise in a strategic manner, the implementation of needed infrastructure and to provide the greatest opportunity of success of these businesses.

#### Principles

- ***Implement projects on a focused, strategic and hierarchical basis with the largest investments for higher order facilities that will be enjoyed by the greatest number of people.***

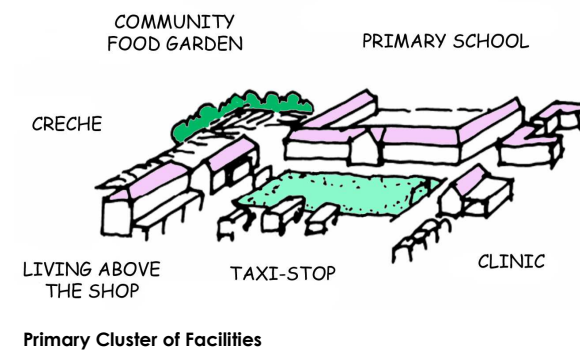
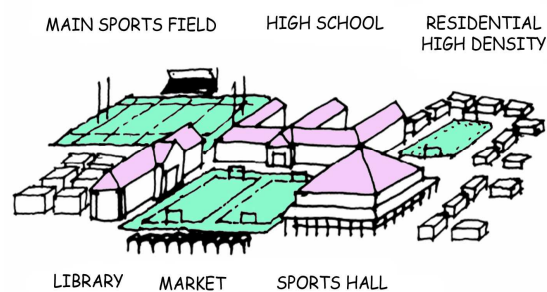
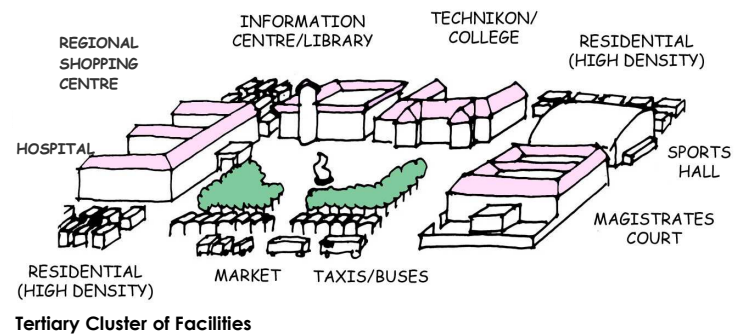
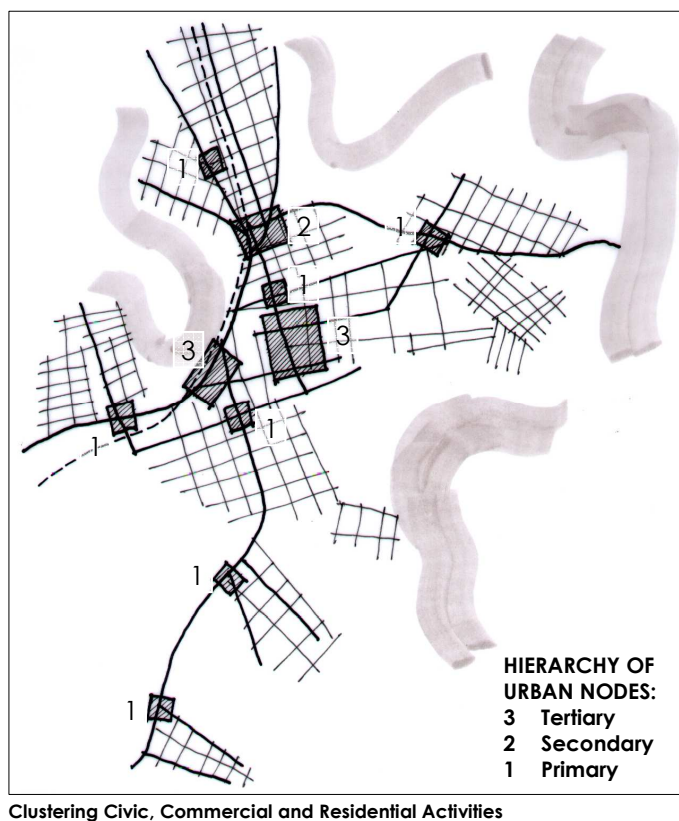


Figure 5.4.1.5 Sub-Centre Nodes

#### 5.4.1.6 Urban Edge

These should be reviewed to ensure that:

- Sufficient protection is given to land requiring protection, inter alia, the agricultural land currently under cultivation and CBAs;
- That compaction rather than expansion of urban settlements is encouraged to promote non-motorised transport modes where appropriate;
- Urban Edges which provide sufficient land for the development of the needs of the area for about 20 years, given the current growth rate, is proposed around the exiting urban footprint; and,
- It is proposed that these urban edges only be realigned based on actual need and once all the existing under or unutilized vacant land has been developed.

#### 5.4.1.7 Infill, Densification and the Suburbs

It is clear that significant infill and densification is required in order to restructure the settlements in the Municipality.

Well located land has been identified to contribute to this important goal.

Guidelines for the settlements will be given.

#### 5.4.1.8 Wind and Solar Farm Siting Principles

The following wind farm siting principles are proposed to be used as a first set of questions to guide potential developers of wind and solar farms. Terrain suitability need to be investigated and should include the following typical aspects in the design process:

- Slopes by gradient classes;
- Rocky areas;
- Soil type and permeability; and,
- Natural watercourses and areas with high water table, Rainfall data; and
- Vegetation.
- **Slope**
  - Wind Potential – slopes up to a certain gradient orientated towards prevailing wind directions tend to augment average wind speed;
  - Visibility – wind farms on slopes have increased visibility;
  - Road layout and design – slopes to be considered in road layout to reduce erosion potential of road run-off, rock fall and landslide potential;
  - Tower foundation design – need to consider falls across the platforms; and,
  - Re-vegetation – steep road verges and cuts require re-vegetation to reduce sedimentation from run-off.

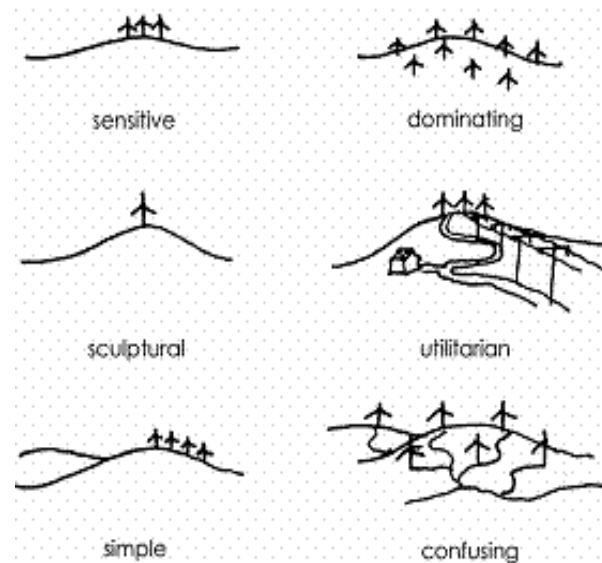


Figure 5.4.1.8a Location options for wind turbines



- **Geology**
  - Need highly stable underlying geology for heavy wind turbines; and,
  - Investigate existence of bedrock, subterranean voids and possible seismic activity.
- **Soils**
  - Potential for erosion; and,
  - Soil types influence road construction and re-vegetation.
- **Surface Hydrology & Groundwater**
  - Design of roads and treatment of runoff from roads and disturbed surfaces to reduce sedimentation and eliminate erosion.
- **Vegetation**
  - Detailed vegetation assessment if the proposal is not in an agriculturally disturbed area; and,
  - Assessment should include location and condition of:
    - Extent of disturbed or alien vegetation;
    - Extent of any natural vegetation;
    - Indigenous and endemic species;
    - Rare and threatened species; and,
    - If the site is affected by CBAs.



Figure 5.4.1.8b Wind farm near Klipheuwel outside Durbanville, Western Cape

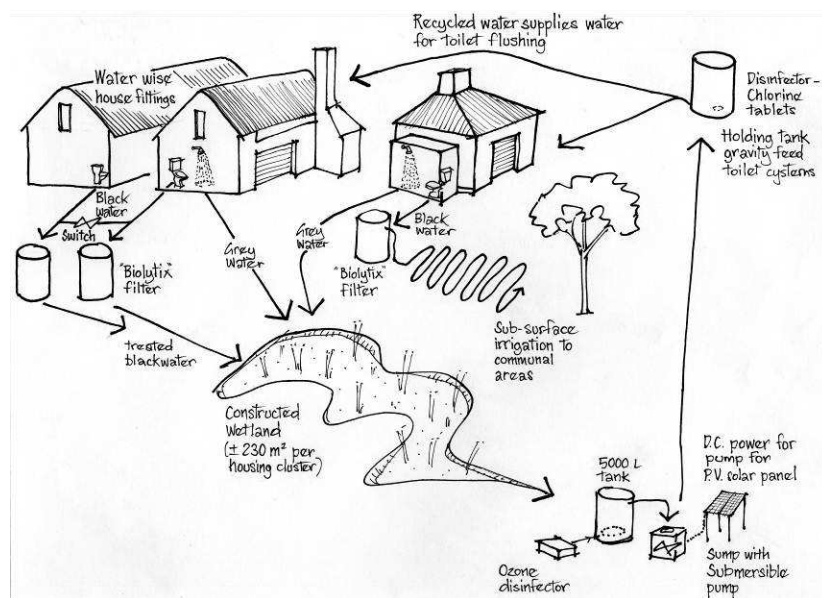


Figure 5.4.1.8c Visual simulation of wind turbines, Western Cape

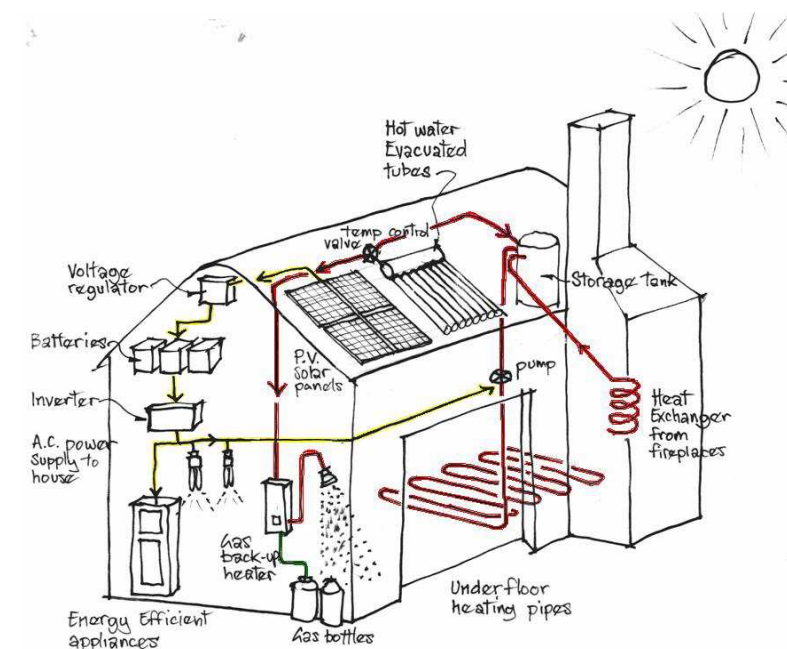
### 5.4.1.9 Infrastructure

The following principles shall apply:

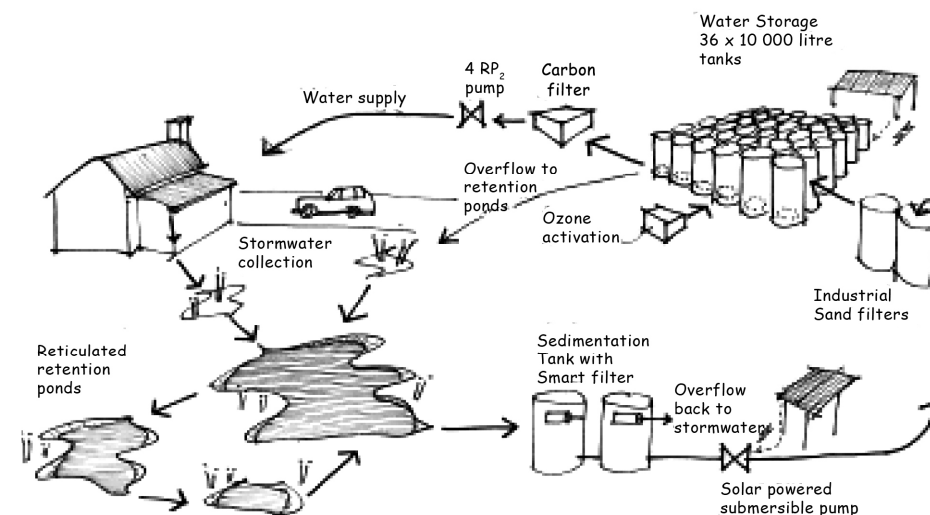
- Ensure a base level of services only is available for all residents in the Municipality including those households qualifying for indigent grants;
- Where possible implement GAP housing schemes as part of subsidy projects so as to help cross-subsidise required infrastructure projects;
- For low density settlements, where the high cost of conventional grid services are prohibited and not preferred and to promote sustainable use of natural resources reduce dependency on conventional grid services, the following are proposed:
  - Promote the use of solar hot water projects so as to help cross-subsidise infrastructure costs;
  - Promote use of solar of water heaters, PV panels, grey-water recycling, waste separation at source, and passive building design to as to minimize energy, solid waste and water demand, see Figures (a) and (b); and,
  - Encourage rainwater harvesting and grey water (water from hand basins and kitchen sinks) recycling, see Figure (c).



(a) Sanitation System based on sustainable principles



(b) Solar Energy Generation for off-grid energy generation



(c) Rainwater harvesting for sustainable use of water

Figure 5.4.1.9 Off-grid infrastructure options



## 5.5 CLIMATE CHANGE

5.5.1 Landscapes that provide resilience to climate change need to be protected. In this regard the following areas are important, see Figure 5.5.1:

- Kloofs, which provide important connectivity and provide both temperature and moisture refuges;
- Topographically diverse areas, which contain important altitudinal and climatic gradients which are important for climate change adaptation as well as ensuring a range of micro-climates are protected;
- Riverine corridors, which provide important connectivity in extensive arid environments; and,
- South facing slopes which provide refuge habitats.

5.5.2 Promote solar and wind generation projects, to reduce the need for coal and the generation of greenhouse gasses, for the generation of renewable energy in the south west of the municipality with due consideration of the following design and layout aspects as per the PC 20/2012 (23 November 2012):

- Land use restrictions:
  - Height:
    - A maximum height of 200m for a wind turbine, measured from the mean ground level of the footprint of each structure to the highest point of the blade.
    - The height of a structure for solar generation facilities will be technology-dependent.
    - The height of buildings is restricted to a maximum of 8.5m and is measured from the mean ground level of the footprint of the building to the highest point of the roof.
  - Setback
 

In the case of a wind turbine, a distance equal to 1,5 times the overall blade tip height of the turbine, measured from:

    - the nearest residential, commercial or critical agricultural structures such as animal housing, outbuildings, store rooms, excluding structures such as water troughs, feed dispensers, and windmills;
    - the cadastral boundary of the land unit;
    - any public road or private or public right of way; and,
    - (iv) any electrical infrastructure.

- Additional requirements:

- Site Development Plan (SDP)
  - As part of the application or as a condition of approval, a SDP must be submitted to the competent authority. The site must be surveyed and the exact delineation of the construction footprint must be shown in the SDP;
  - To the extent necessary, any relevant measures contained in these regulations must be incorporated into an SDP; and,
  - Initial measure in the event of failure.
- Visual and environmental impact
  - Visual and environmental impacts must be taken into account for height determination and in general, to the satisfaction of the competent authority.
- Finishing and Colour
  - A wind turbine structure must be treated with a neutral, non-reflective exterior colour designed to blend with the surrounding natural environment, to the satisfaction of the competent authority; and,
  - A solar structure may not cause any adverse effects due to its reflective nature and must be designed and erected accordingly, as required by the competent authority.



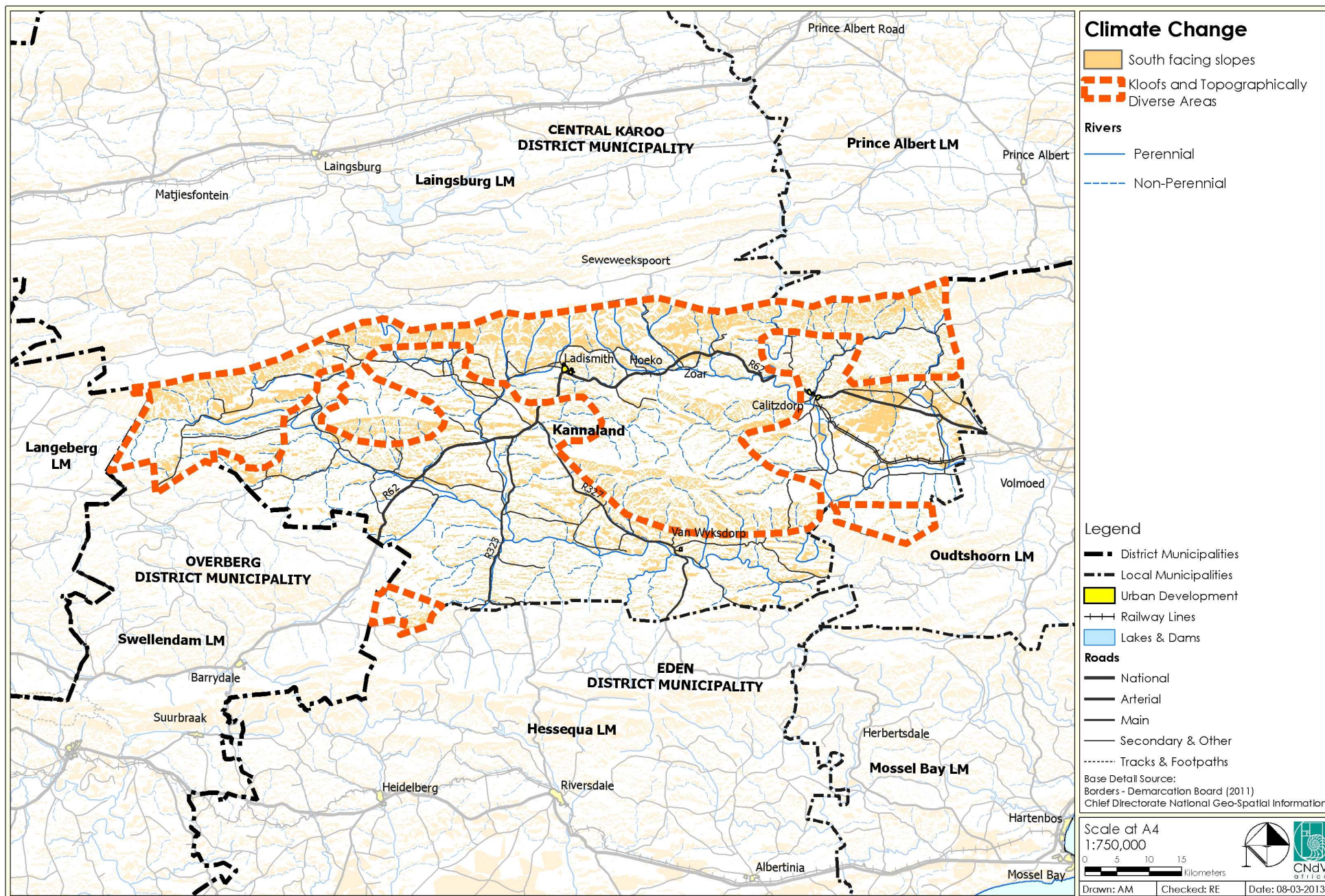


Figure 5.5.1 Climate Change

## 5.6 URBAN DESIGN GUIDELINES

- UD1 Create open space systems that integrate the elements of a settlement to contribute to a meaningful urban structure. This can be done by:
- Providing connectivity between open spaces;
  - Establishing linkages between open spaces;
  - Aligning the open space system with public buildings; and
  - Ensuring an improved quality of linkages through the continuation of special activities or functions along major routes.
- UD2 Link symbolic elements (statues) or public facilities (library, clinic, etc.) to open spaces in relation to their importance and character.
- UD3 Ensure the definition of the public spaces through the effective design of an interface between public and private domains.
- UD4 Create visual recognition and surveillance along open spaces and public routes. This can be achieved through:
- Locating buildings around open spaces and streets so that sufficient enclosure is created;
  - The appropriate height of buildings; and
  - Locating the highest buildings to the southern side of the open space, with lower buildings or trees on the northern side.
- UD5 Markets should be permitted at highly accessible locations in terms of the movement network and urban structure to ensure the greatest viability possible. These locations could be modal interchanges and intersections.
- UD6 As a general rule the erection of shopping centres on the periphery of settlements should be discouraged so as to strengthen local businesses within the settlement. This should only be permitted if the intention is to initiate a new urban node at the specific location and the proposed shopping centre development is in line with the growth direction of the settlement.
- UD7 Accommodate a variety of users in and uses along the streets by doing the following:
- Concentrate intensive activities along major vehicular and public-transport routes;
  - Locate majority of public buildings and increase densities along these routes; and
  - Locate buildings closer rather than further from the streets to increase pedestrian activity, a sense of enclosure and surveillance.
- UD8 Create appropriate road cross-section widths that can provide for vehicle traffic, parking, pedestrian movement, cycling and landscaping.
- UD9 Urban block length should promote access (penetration) and encourage economic activity by orientating the short side of blocks to major streets wherever possible.
- UD10 Space buildings from each other to provide adequate solar access to buildings. In this regard the roof pitch of buildings should be orientated so that roof solar panels have a maximum continuous direct access to the sun.
- UD11 Any proposals for the redevelopment of existing buildings should consider their heritage value, elements of the vernacular architecture and, where possible, retain these important elements. Similarly, the historical characteristics of existing buildings should be considered to draw from their elements that could be integrated into the design and construction of new buildings close by.
- UD12 The use of local materials should be encouraged in the construction of new buildings.
- UD13 Encourage appropriate water-wise landscaping.
- UD14 Ensure that the main streets of the urban areas are appropriately landscaped to encourage a pleasant gateway treatment into the settlements.



## 5.7 POTENTIAL RURAL NODES AND PERIODIC RURAL MARKETS

The potential of rural nodes is derived from the rural economic opportunities that are generated by their location and "attracting force". However, in some nodes these forces are so small that permanent infrastructure or services cannot justify permanent buildings or staff.

Initially, these nodes, can be supported through periodic markets at which mobile services, for instance, home affairs, pension pay outs, clinics, libraries can be dispensed.

This approach could be applied at settlements with low threshold populations to ensure that the necessary services can be provided.

Where such facilities do not exist, periodic service centres should be established for co-ordinated use by a wide variety of government, non-government and private organisations.

These periodic service centres should be located at points of highest access according to the same principles.

The services of various government departments and private sector organisations should be co-ordinated into a mobile caravan of dedicated buses and vans which travels from periodic service centre to periodic service centre stopping for morning or afternoon sessions as appropriate.

Local arts and crafts people and business people should be encouraged to trade in the stop-over periods of the mobile service caravans at the periodic service centre. The location of shops and abattoirs should also be encouraged here.



Library bus

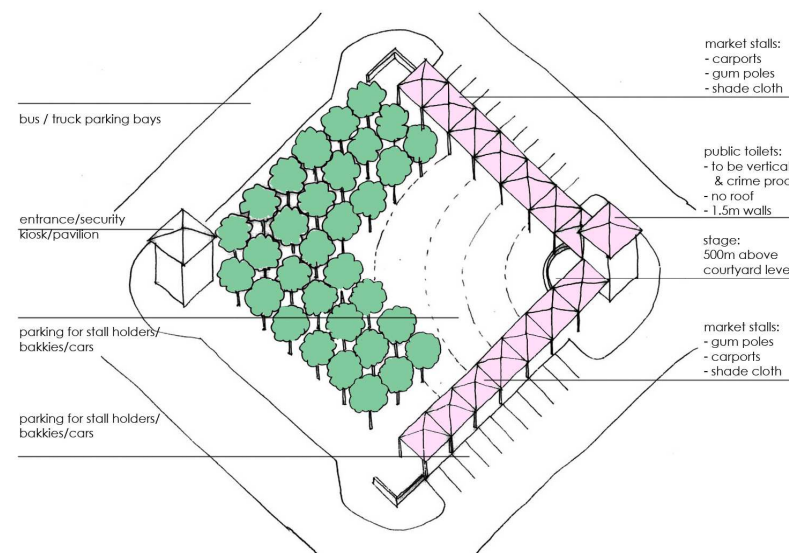


Home Affairs bus

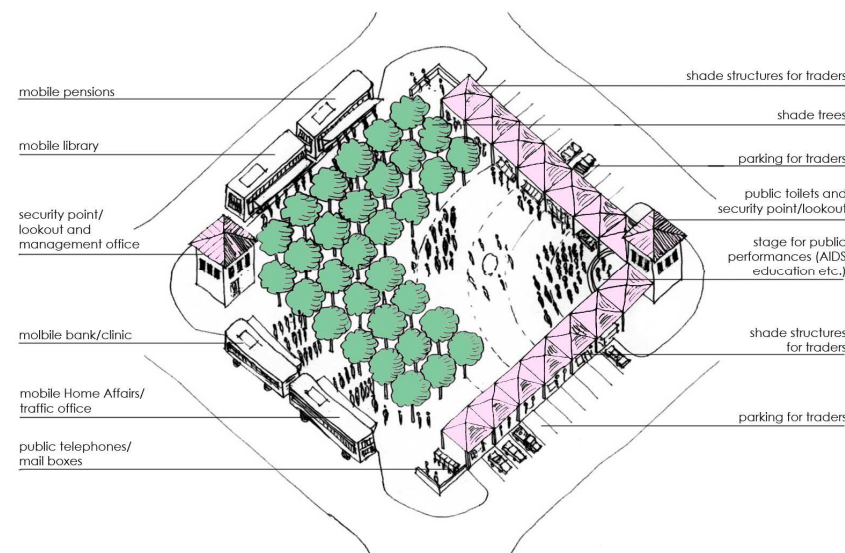


Mobile clinic

This strategy should be considered for Zoar, Amalienstein and Van Wyksdorp.



Periodic service concept



Periodic service activities

- There is potential for fruit processing and manufacturing
- Agri tourism needs to be promoted
- We are ashamed of the town because it is dirty.
- A money problem cannot be solved with money. What you have needs to be managed correctly.
- There is no culture of transparency in the municipality. We do not see how the money the municipality receives is spent.



## 5.8 SETTLEMENT HIERARCHY AND STRUCTURE

Kannaland Municipality's settlement hierarchy and structure comprises the following settlements along the R62:

- Ladismith has the largest population and number of economic activities, including manufacturing;
- Calitzdorp and Zoar has a higher population but far less economic activity than the former; and,
- Van Wyksdorp is isolated from the main settlement system along the R62. It is tucked away to the south at the foot of the Rooiberg near the Groot River. The R62 / R327 and Rooiberg Pass Road create a gravel scenic route crescent between Ladismith and Calitzdorp.

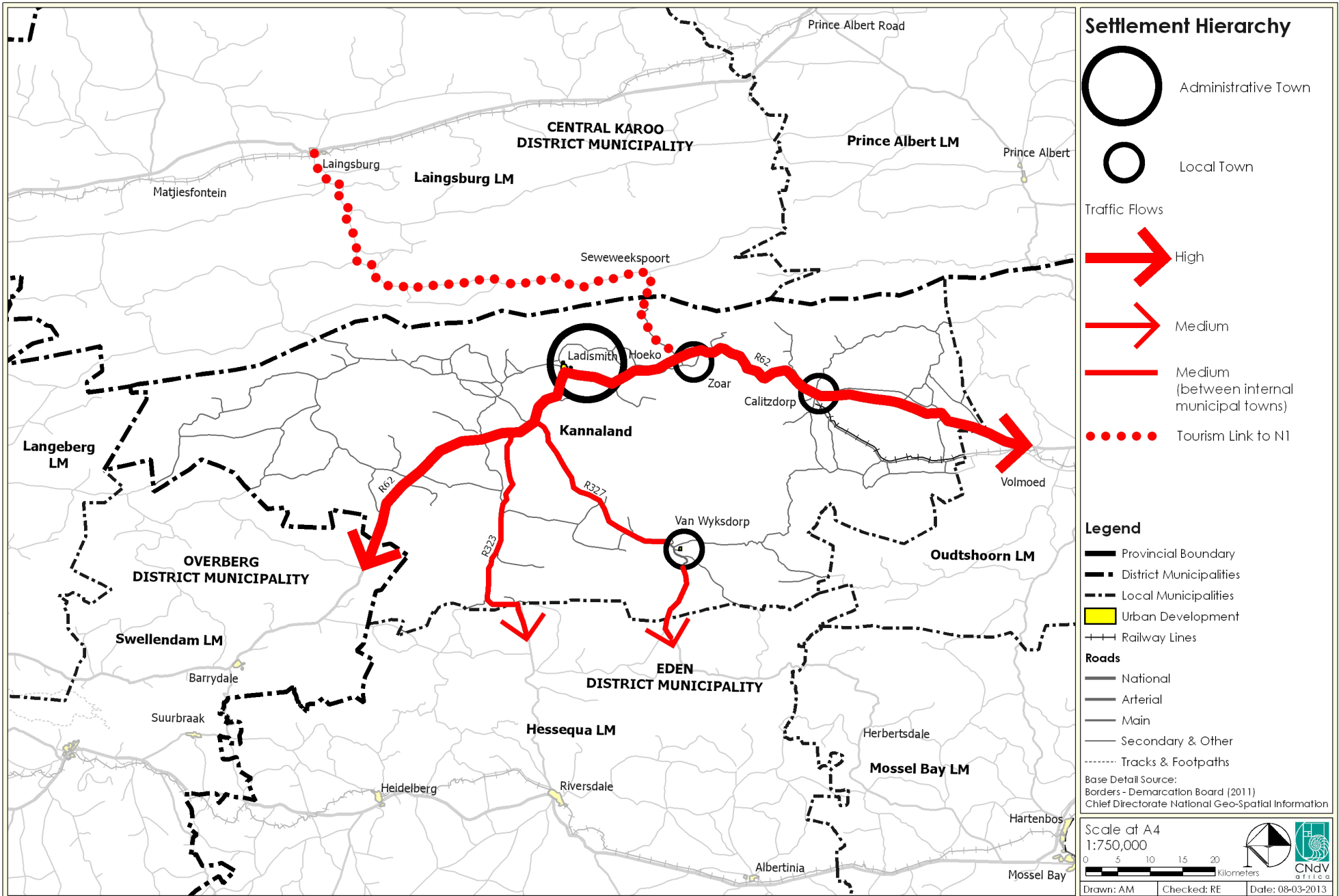
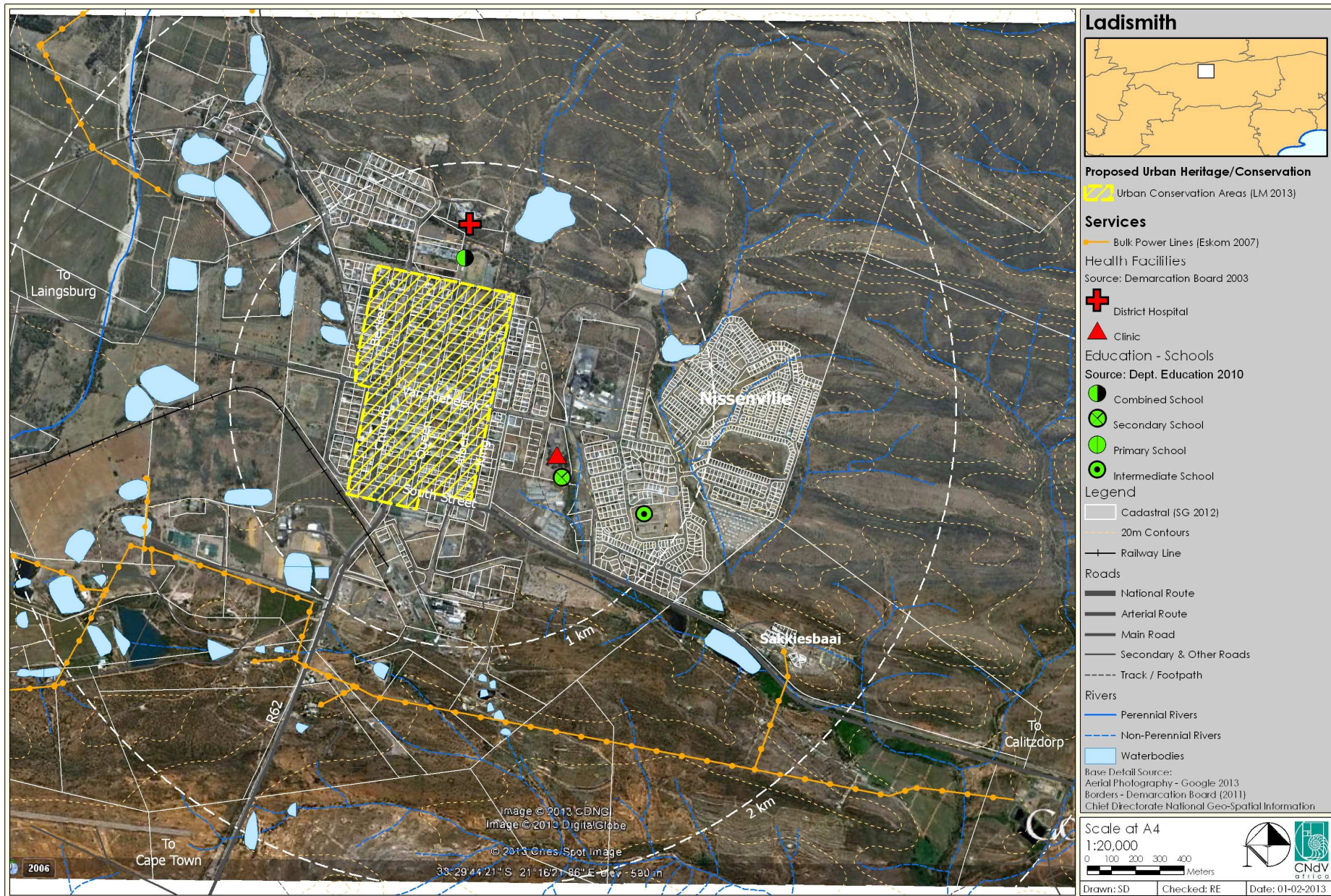


Figure 5.8.1 Settlement Hierarchy





## 5.9 LADISMITH (population: $\pm$ 7000 - 9500)





### 5.9.1 SPATIAL ANALYSIS, see Figures 5.9.1.2

#### Sub-regional location

- The settlement is located on the R62 on a spur between two tributaries of the Groot River at the foot of the Klein Swartberg;
- R62 makes a right angle turn at the entrance to the town and all regional traffic on this route between Montagu and Oudtshoorn is compelled to pass this way;
- The R363 extends along Van Riebeeck linking to intensive farming areas to the west; and,
- There are a number of scenic district roads linking to nearby intensive farming areas radiating out of Ladismith.

#### Layout pattern

- Ladismith's layout comprises three main components:
- The original town was laid out as a "voortrekkerdorp" between two tributaries of the Groot River, with the long streets perpendicular to the contours so that water could be led in furrows to water individual plots;
- The town is set some way to the east from the main tributary so as to keep as much arable land in production as possible;
- The area between the town and this river comprises a mosaic of irrigation dams, vineyards and fallow land. The golf course is also found here.
- The other two components of the town comprise two extensions found over the first eastern tributary across which Van Riebeeck was extended as a continuation of its original alignment.
- Thus, the plan of the first extension to the settlement is relatively well integrated. There is also a large factory complex here which means jobs are close to where people live;
- Then a second extension, Nissenville, was developed across the next river tributary to the east. This ground is more undulating and the straight alignment of Van Riebeeck was no longer possible. This extension is further broken up by river tributaries that both surround and cut through it. There is also a large undeveloped hill in the centre;
- The town is fairly compact with most destinations within a 1 km walking distance except the eastern extremities of Nissenville.

#### Urban quality

- The current main gateway off the R62 from Montagu, which vista terminates in a nondescript garage before the route turns eastwards towards Calitzdorp and skirts the southern boundary of the town, lacks the dramatic entry to the town found entering from the west along the R323 / Van Riebeeck Street;
- This sense of arrival from the west is heightened by looking southwards along Church Street which view is terminated by the original DR church (1874). With the current access this dramatic view is difficult to find, especially for visitors;
- Although the current entry from the R62 enjoys the dramatic backdrop of Klein Swartberg in the far background more could be done to enhance initial first impressions;
- The poor first impression of Ladismith from both the east and the south is a pity because the centre of the old town possessed considerable urban quality in the form of historic commercial and residential buildings;
- Many of these buildings retain their historic character in original or still recognizable altered form. However, there are some unfortunate examples which should be remedied with reference to urban design guidelines;
- The quality of the old town is enhanced by the many mature tree boulevards;
- However, this quality deteriorates to the east where there are far fewer trees and there are large patches of vacant land between public buildings and along road verges creating an unfinished appearance and areas which are difficult to keep clean and maintain.



**Garage at main gateway to Ladismith at junction of R62 and South street arrival**



**Old Dutch Reformed church terminating the view southwards along Church street**



**Main entrance to Nissenville off van Riebeeck**

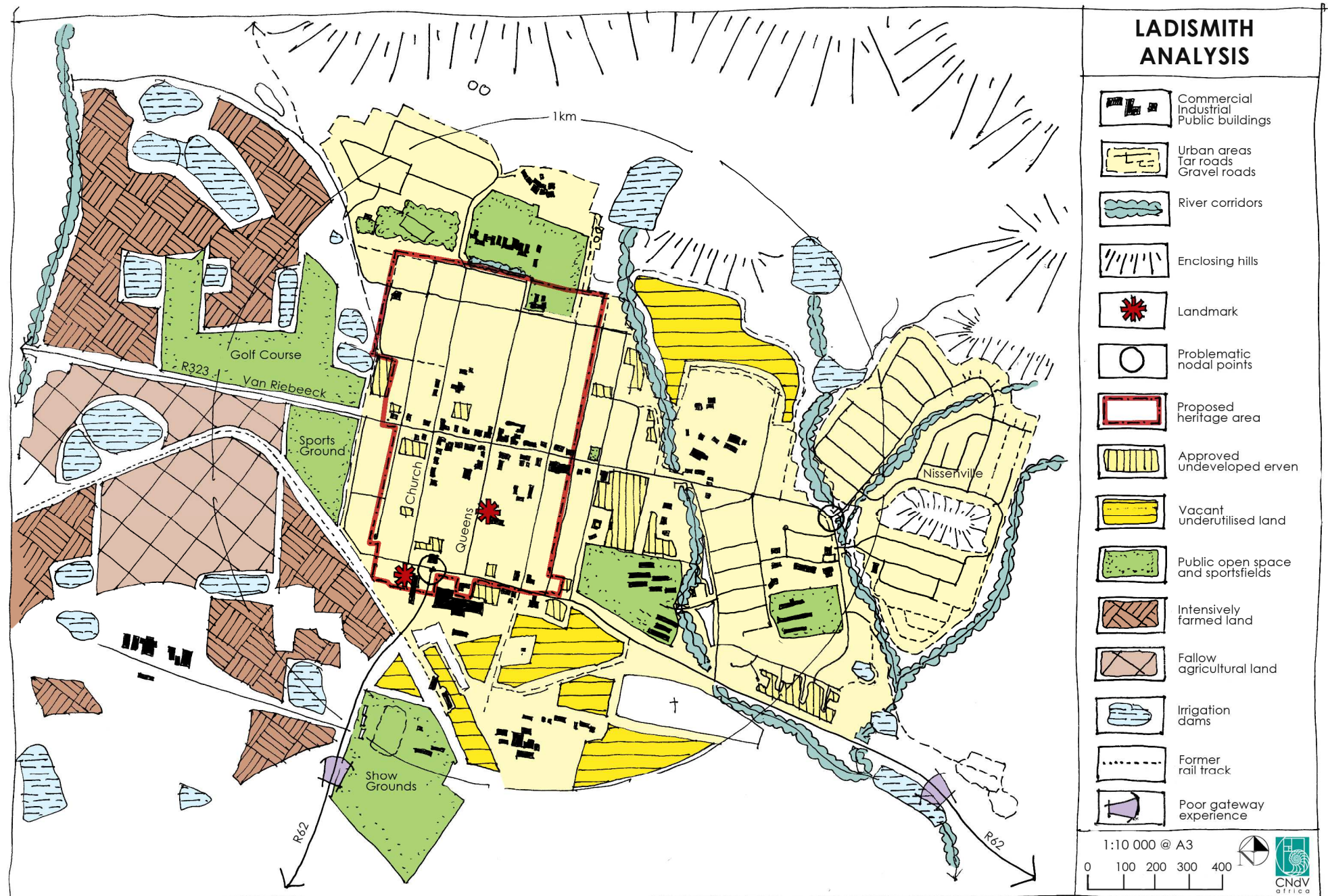


Figure 5.9.1.2 Ladismith: Analysis



## 5.9.2 LADISMITH: DRAFT SPATIAL DEVELOPMENT FRAMEWORK, see Figure 5.9.2.1

### 5.9.2.1 Core landscape and agricultural areas

- Maintain and landscape, where necessary, major open spaces, including golf course, caravan park, sports grounds and show grounds and river corridors;
- Investigate the potential of the caravan park to be upgraded as tourist accommodation (camping and caravans);
- A fresh water ecologist should determine the river corridor set-back lines for urban development and intensive agriculture. In the meantime the 32m set back line from the river banks should be used. (NEMA EIA regulations 1(m)). This will help to address storm water problems;
- Maintain existing tree lines and extend road side tree planting along major routes in Nissenville including Van Riebeeck Road east, Remainder Street to R62, and September, Golding, David and Peceur Streets.

### 5.9.2.2 Urban Development

- No further outward urban development beyond a 1000 metre radius from the Albert/Van Riebeeck Streets intersection, including Sakkiesbaai;
- Investigate a new development area around the base of the koppie in Nissenville but keeping the ridge line as open space. This land will be more expensive to develop due to its slope but should be more valuable due to its views, therefore consider GAP or lower middle income housing here;
- Consider new development areas south of the R62 for mixed use closer to this route, industrial development within the industrial area and residential development around the cemetery;
- Encourage/incentivize development of approved undeveloped erven;
- Ensure development of properties abutting R62 at gateways to the town enhances and does not detract from the arrival experience, e.g. there should be landscaping and tree planting at least along the rear boundaries of the properties between September Street and the R62;
- Investigate extending the cemetery to east and south.
- The existing rail reserve should be promoted as a MTB cycleway.

### 5.9.2.3 Heritage Areas

- A heritage conservation area is proposed between; east - Brink/Becker Streets; north - Peace Avenue; west - midblock between King and Wessels; and south – southern boundary of R62;
- All buildings within the Heritage Area, including recent and new buildings, should conform to these guidelines so as to ensure that the urban quality of the precinct as a whole is maintained, for instance great care should be taken with the proposed extension of the town hall to accommodate the Thusong centre. This should rather be located at the proposed upgraded node near the corner of van Riebeeck and Peceur Streets.

### 5.9.2.4 Urban Restructuring

- Upgrade the Remainder Street / R62 intersection as a new main entrance node to the town that encourages westward bound traffic to travel north along this road, thereby integrating Nissenville more strongly, then west along Van Riebeeck and to exit south along Church Street to take advantage of the old DR Church vista before rejoining the R62;
- Eastward travelers should be encouraged to take the same route. This will require upgrading and enhancing the R62 Church Street intersection so that travelers are encouraged to turn left instead of right. Note: a significant portion of travelers will still continue to use the R62 as it is the most direct route; and,
- Encourage lower middle income, GAP and BNG housing on well located new development areas according to the principles of Integration and the Socio-economic Gradient, see Sections 5.4.1.3 – 5.4.1.5.



Golding / Peceur Streets node requiring tree planting and upgrading



Remainder Street in background with serviced undeveloped erven along September street in foreground



Van Riebeeck Street showing need for continuous colonnades and tree planting to retain and enhance urban quality



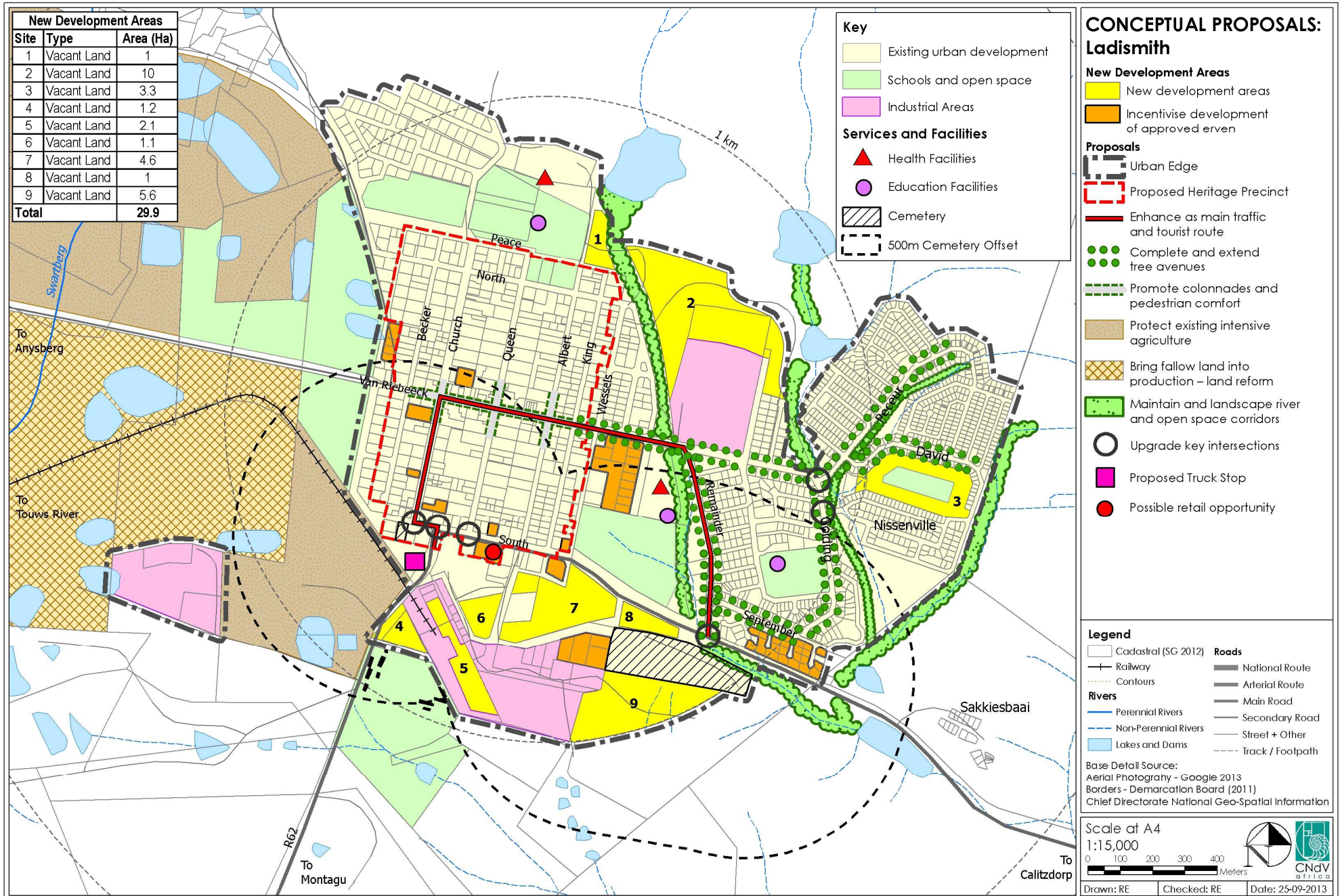


Figure 5.9.2.1 Ladismith: Spatial Development Framework





## 5.10 CALITZDORP (population: ± 3000 - 5100)

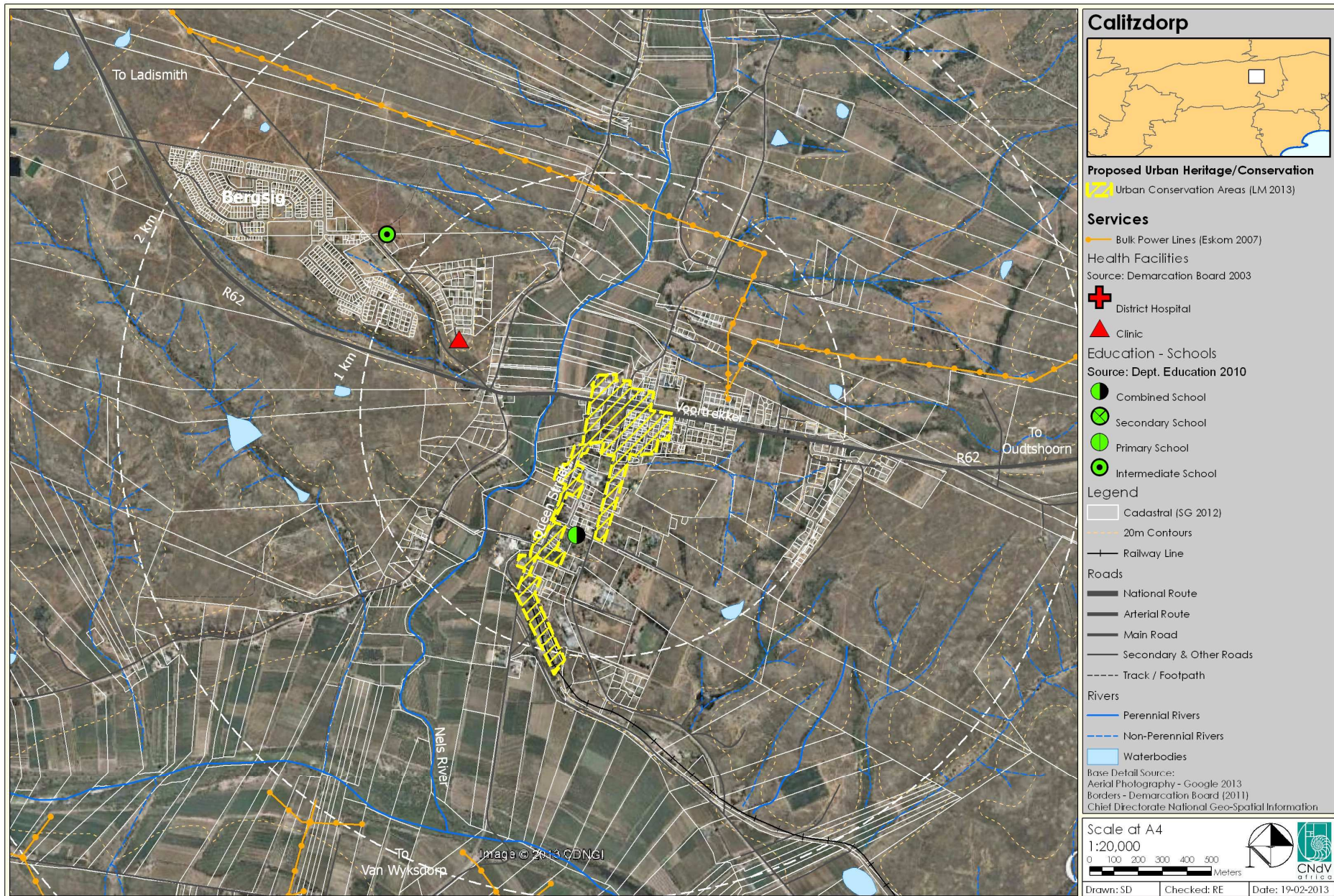


Figure 5.10.1.1 Calitzdorp: Aerial photograph



### 5.10.1 SPATIAL ANALYSIS, see Figures 5.10.1.2

#### Sub-regional location

- Midway between Oudtshoorn (49.5km) and Ladismith (50.7km) on the R62 tourist route;
- It was established as an agriculture service centre for the Nels and Gamka River valleys and possibly the western end of the Olifants River valley intensive farming areas;
- A rail service terminating in Calitzdorp (currently unused) originally served these two irrigation farming areas;
- Well known for port and wine as well as dried fruit. Stock, particularly ostriches (although this is a boom and bust industry) is also important;
- Good proximity to regional tourist route (R62) creates a market for B&Bs and guest houses offering farm stays and overnight facilities in the many heritage buildings within the town;
- There is a high school with boarding facilities to cater for children from the town as well as the rural areas. There is no hospital but there is a clinic;
- Calitzdorp's growth was probably constrained to some extent by its proximity to Oudtshoorn which is the main centre of the Klein Karoo with a much higher population and hence a bigger range of facilities.

#### Layout pattern

- The older part of Calitzdorp does not appear to be "planned" in the regular way of many other Dutch settlements with a rectangular grid of short and long streets. Rather the settlement appears to have developed organically as a series of long streets parallel to the river that have developed over time beginning with Queen, Van Riebeeck, Voortrekker Street links to the Nels River bridge. Pretorius Street links Voortrekker Street to the station (1924);
- Later small extensions to the east along Voortrekker Street are much more regular in layout;
- There is also some interesting "tendrill" - like extensions where it appears that a number of houses were built along nearby fertile kloofs, e.g. Calitz and Bloekom Streets;
- These highlight a large piece of well located vacant piece of land ( $\pm 25$  ha) in the middle of the settlement;
- Most of the western part of town is within 1000m radius of the Pretorius/Voortrekker Street intersection;
- Apartheid saw the construction of Bergsig across the Nels River with its closest point some 700 metres from the centre of town. Presumably due to topographical constraints Bergsig extended in a narrow cone further to the west. The furthest extension is over two kilometres away. Its layout pattern is the curvilinear modernist grid designed to optimize motor vehicle travel;
- A recent infill scheme has been completed with small groups of BNG housing integrated with an older previous scheme. This is a good model for urban renewal and densification.

#### Urban quality

- The oldest part of the town comprises narrow streets with an irregular geometry with many buildings located on their street boundary, an unusual quality not found in most SA urban settlements;
- Many of these buildings are Victorian set with mature trees;
- Newer buildings tend to be more isolated on their properties surrounded by large gardens;
- Bergsig presents a completely different urban quality. Much of it is hidden from view by steep embankments and cuttings. Buildings are generally single small RDP type house in the middle of their plots.

#### Challenges and potential

- To spatially integrate Bergsig so as to lessen access burden and improve viability of settlement;
- Promote a new sustainable urban form for Calitzdorp's growth using current vacant land assets;
- Ensure urban quality of Calitzdorp's "front window" along Voortrekker Street improves and does not degrade.



Corner of Queens and Dorp Street



Secluded approach road to Bergsig



New housing in Bergsig

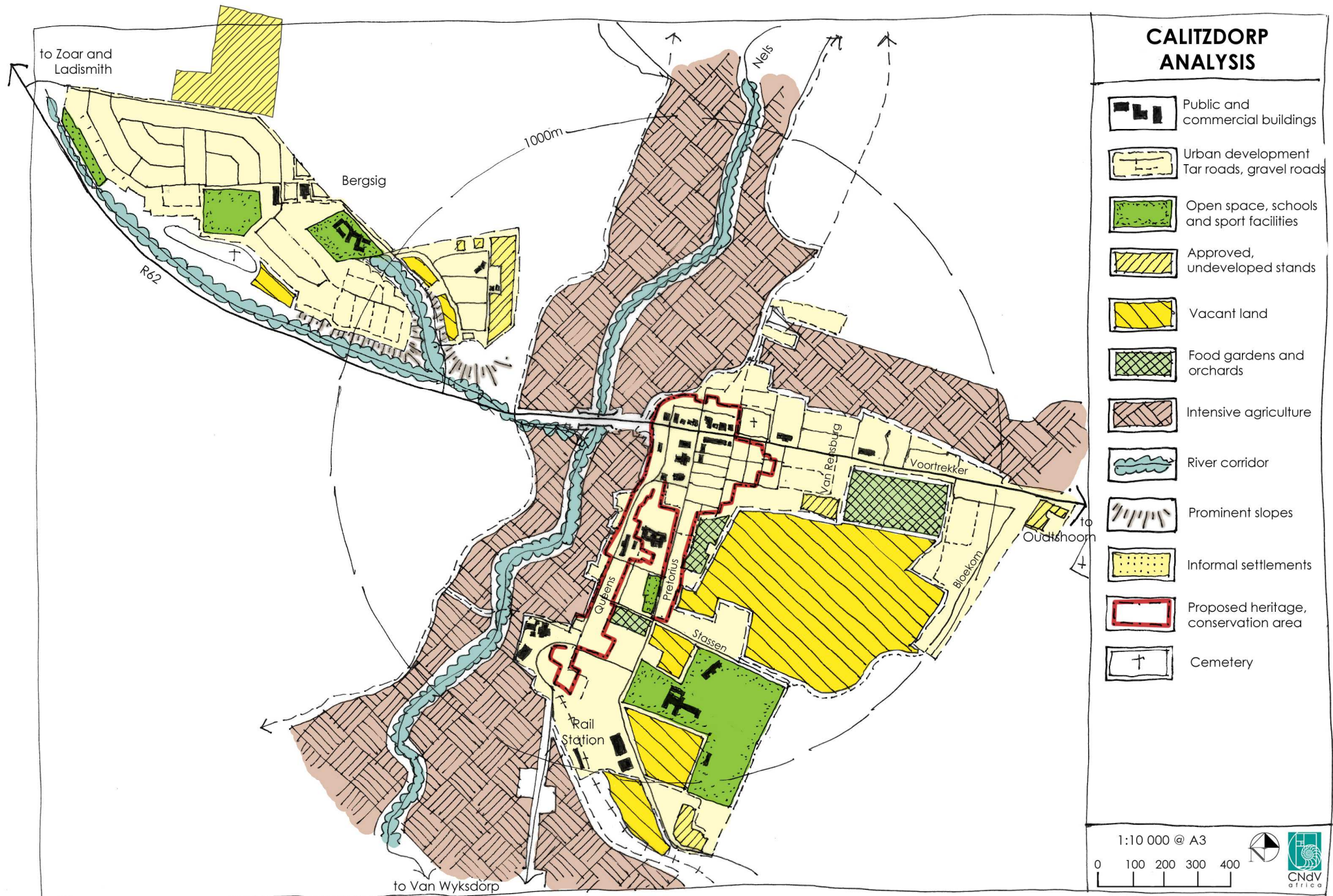


Figure 5.10.1.1 Calitzdorp: Analysis



## 5.10.2 CALITZDORP: DRAFT SPATIAL DEVELOPMENT FRAMEWORK, see Figure 5.10.2.1

### General

There are a large number of existing attractions in Calitzdorp, including its rural environment, large stock of heritage buildings and precincts, wineries and tourist activities and its location on the R62, which, when coupled with its large stock of well-located vacant land, suggests that, if managed well, the settlement should have an exciting future. This will also depend on how well its appearance and maintenance can be managed. Assuming that the identified well located land is suitable for development Calitzdorp's future will also depend on how such a project can be successfully implemented without jeopardizing the settlement's existing assets as well as successfully resolving any socio-economic concerns. Vanrhynsdorp and particularly Langebaan offer examples where such integration has been successfully achieved.

### 5.10.2.1 Core landscape areas

- Create landscape and treed main route network through Bergsig and an integrating core route network through Calitzdorp and proposed new development areas near centre of settlement;

### 5.10.2.2 Urban Development

- Other than infill on New Development Area (NDA) 10 and incentivizing development on approved vacant erven in Bergsig east no further new urban development is proposed at Bergsig because of its remote location. The only land identified for development is 2kms away from the CBD and there is well located land within 200 metres of the CBD that should be investigated first;
- Investigate the suitability of the well located new development areas 1 to 9 for development purposes. This investigation should include land for market, GAP and BNG housing, land ownership and acquisition methods and how a mixed income project could be designed taking into account the Principle of the Socio-economic Gradient, see Sections 5.4.1.1 to 5.4.1.3; and,
- New Development Areas further south, including land parcels 11 – 15, should be considered for market related housing.

### 5.10.2.3 Heritage Conservation and Frontage Urban Design Control Areas

- Heritage Conservation Area is proposed along Queen street to Saayman Street, Pretorius Street to Stassen Street and across Voortrekker Street bounded by Queen, Barry and Calitz Streets; and,
- A frontage Urban Design Control Area is proposed along Voortrekker Street so as to ensure that a high standard of building appearance, pedestrian comfort and landscaping is achieved so as to ensure a good impression is made to traffic along this street which acts as the settlement "front window".

### 5.10.2.4 Urban Restructuring

- Bergsig – create well signposted and paved nodal intersections to attract visitors on R62 to deviate through with periodic market place facility at current civic node for Saturday morning market, see proposed landscaped and treed route network in section 5.10.2.1 above; and,
- Calitzdorp – create core route system integrating existing settlement and proposed new development areas along Pretorius, Stassen, Van Rensburg, Van Rensburg extension and Voortrekker Streets.



Pretorius Street – to be anchor of proposed core route network



Well located vacant land behind current development (behind church) viewed from Bergsig



Bergsig taxi rank – potential location for morning market dependent on upgrading and landscaping of road, product availability and marketing



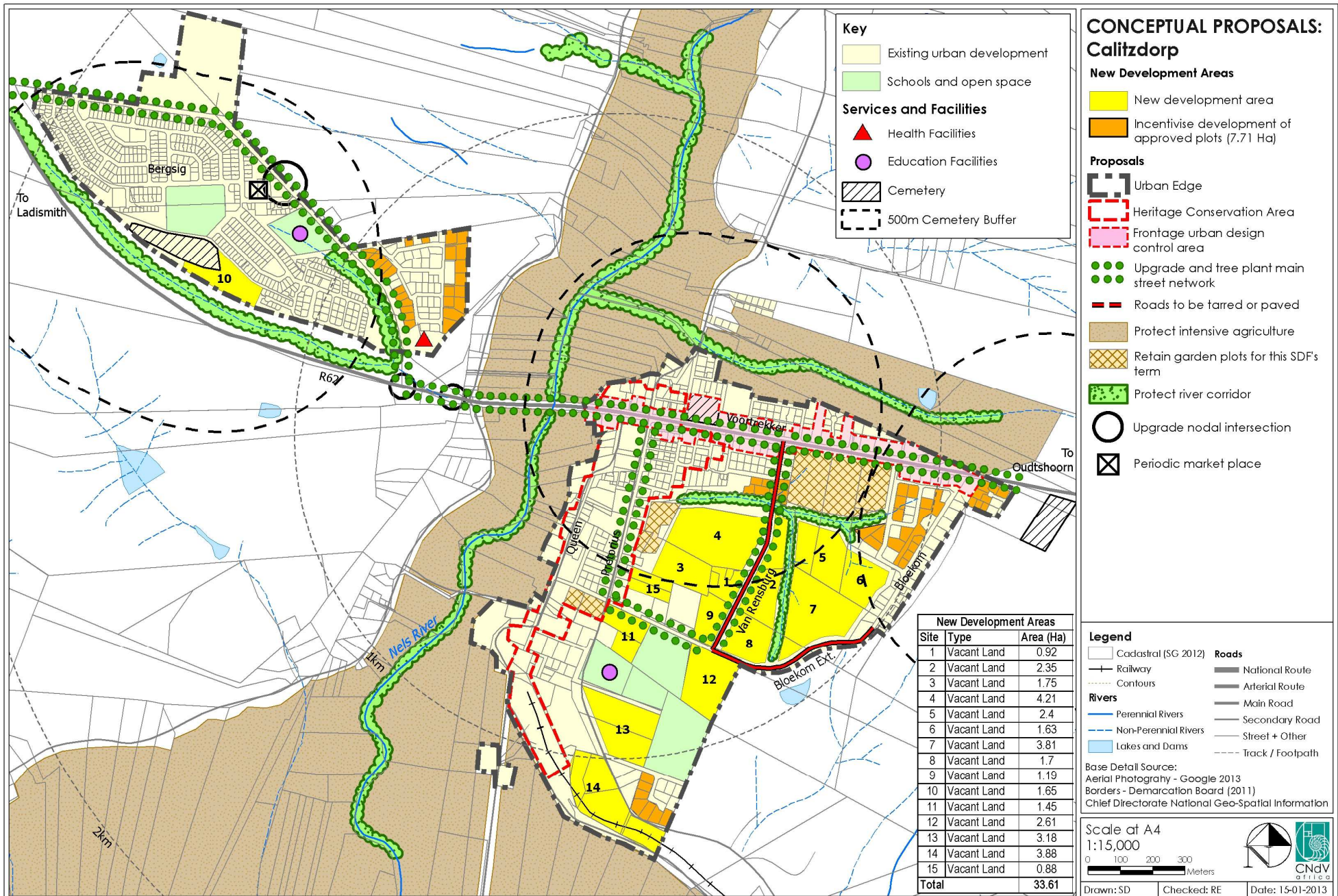


Figure 5.10.2.1 Calitzdorp: Spatial Development Framework





## 5.11 VAN WYKSDORP (population: ± 500 - 1000)

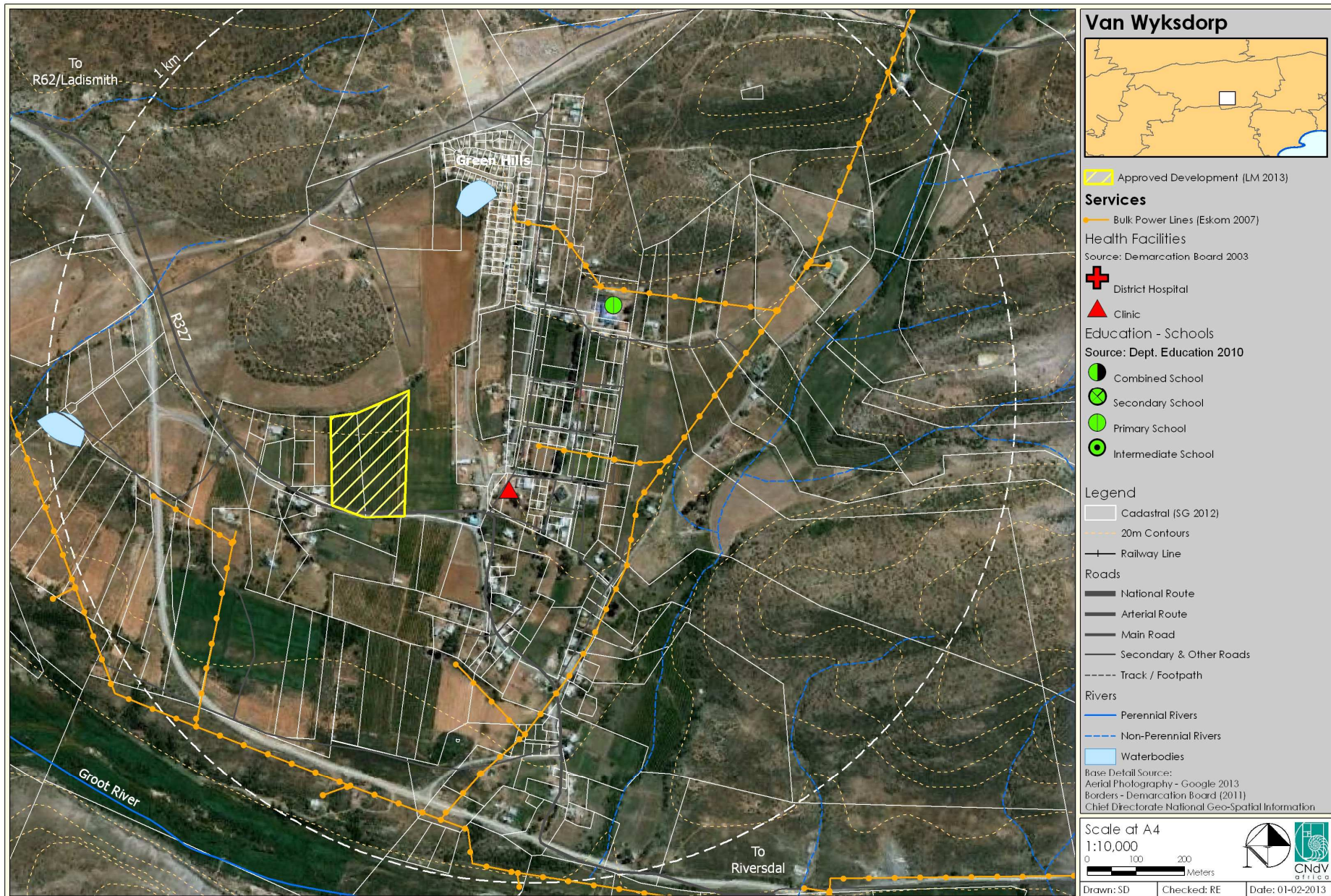


Figure 5.11.1.2 Van Wyksdorp: Aerial photograph



### 5.11.1 SPATIAL ANALYSIS, see Figures 5.11.1.2

#### Sub-regional location

- Remotely located on the northern bank of the Groot river at the foot of the Rooiberge;
- Situated on the R327 (gravel) between the R62 intersection and Mossel Bay via Herbertsdale; and,
- The R327 functions as a by-pass some 700 m away from the village making it easy for passers-by not to stop; While this may be preferred by Van Wyksdorp residents valuing its seclusion it makes generating tourism and passing trade even more of a challenge in this remote location.

#### Layout pattern

- The original village of six blocks was laid out as a small Voortrekker rydorp in 1838 with long streets perpendicular to the contours. It largely still functions as a “nagmaal dorpie” today with most of the original food garden plots still used for this purpose;
- To the south of the original layout buildings are aligned with the meandering lanes and there is a nodal point where a shop and bottle store are located;
- To the north Greenhills is laid out as a typical RDP housing scheme with panhandle access in some cases. Its main entrance is off the Rooiberg pass road to the north; and,
- The village is bounded by intensive agriculture, mainly orchards and vineyards to the west and east, the foothills of the Rooiberg to the north and the Groot River to the south.

#### Urban quality

- The southern part of the village possesses a strong rural character with Victorian and Georgina houses, some of them restored, shady tree lined lanes and large gardening plots;
- In some instances buildings are in a state of decay particularly around the village centre which is unfortunate as this will be a focal point for visitors who manage to find their way in the village; and,
- Greenhills to the north comprises a flat roofed RDP scheme with solar hot water heaters a prominent feature on the roof tops.

#### Challenges and potential

- Not only is the village secluded at the regional level but the nature of its local access off the R327 further removes it from passing traffic;
- Furthermore, its small size and lack of economic potential and employment prospects reduces its priority for public investment spending;
- The settlement clearly has significant agricultural and tourism potential. It also has potential to attract the growing number of urban dwellers who seek more sustainable lifestyles including growing food and living off the grid;
- Re-routing its nearby access routes could help to achieve more passing trade through the village; and,
- It will be very important that the layout of new plots and design of new buildings are in sympathy with the current layout and building patterns.



Northern entrance to Van Wyksdorp off Rooiberg Pass Road



Van Wyksdorp Main Street



Van Wyksdorp church

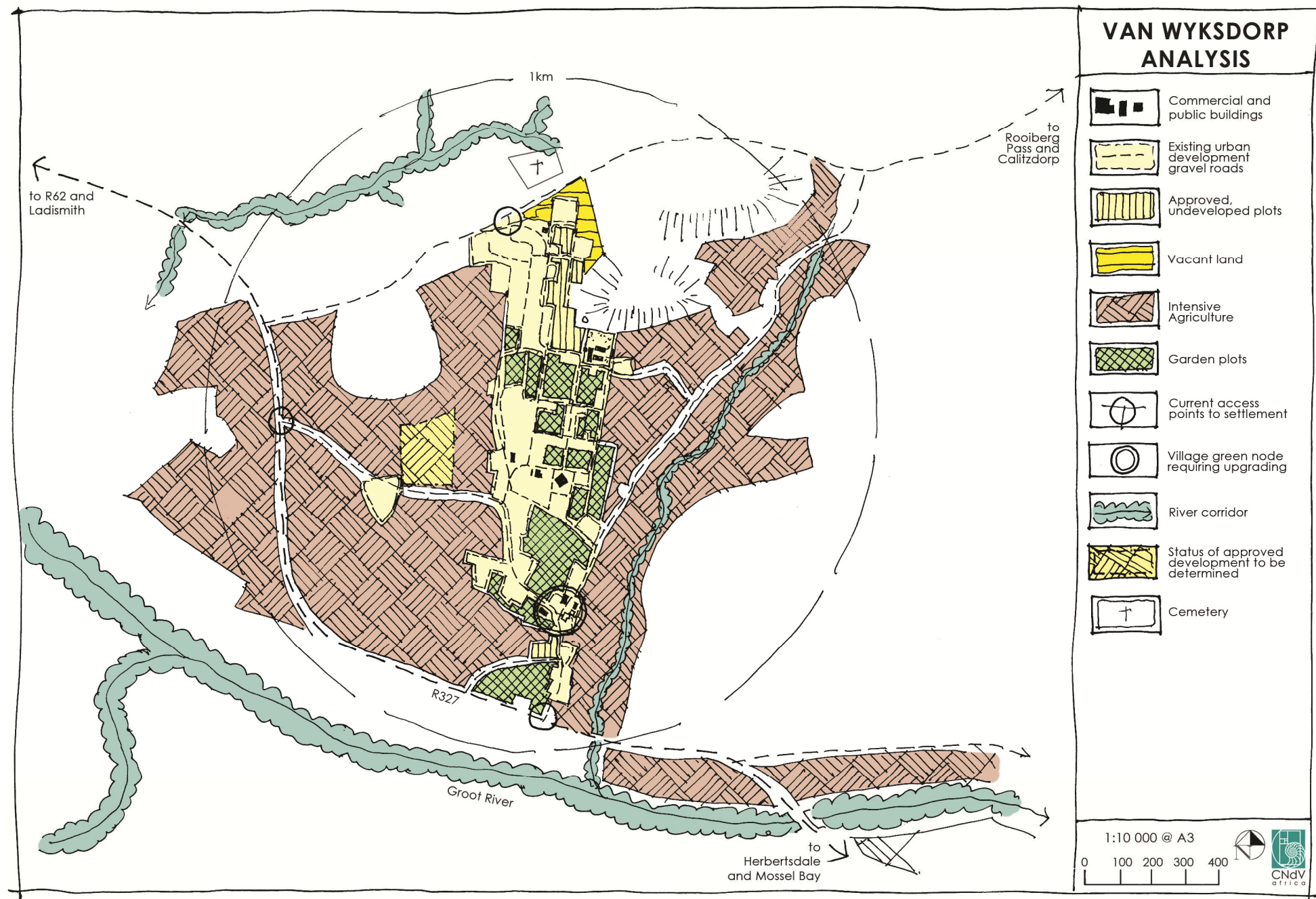


Figure 5.11.1.2 Van Wyksdorp: Analysis



## 5.11.2 VAN WYKSDORP: DRAFT SPATIAL DEVELOPMENT FRAMEWORK, see Figure 5.11.2.1

### 5.11.2.1 Core landscape areas

- Retain productive land both inside and outside of the settlement as a key economic resource for agriculture, agri-industry and tourism;
- Encourage future urban extensions to locate on extensive agricultural land with little potential for intensive agriculture;
- Encourage continued production on the garden plots within the town as they are key part of the settlement's character;
- Plant the northern section as far as the school of the proposed paved north south linking street as a boulevard;
- Pave the southern section after this point until the junction with the R327 but do not planted with trees so as to retain the existing rural character; and,
- Autumn coloured and not concrete pavers should be used. (This project should be funded by the EPWP)

### 5.11.2.2 Urban Development

- Limit urban development for GAP and middle income housing to incentivizing the development of approved but vacant plots;
- Direct new urban development for BNG housing to vacant land north of the school;
- Ensure BNG housing has appropriate interface with Rooiberg Pass scenic route; and,
- Ensure that all new development's layout and building design is complementary with the existing patterns and building qualities.

### 5.11.2.3 Heritage Areas

- Investigate declaring entire settlement south of the school as a heritage conservation area.

### 5.11.2.4 Urban Restructuring

- Investigate reprioritizing R327 intersection with Rooiberg Pass road to direct through traffic along this route and then through settlement to rejoin R327 at southern intersection;  
(Note: While there is a sense that paving the R327 could diminish the attractiveness of a secluded rural retreat nevertheless access should be improved if economic growth and employment is to be achieved. The settlements access to passing trade as well as promoting its integration could be achieved by re-prioritising the intersections off the R367 to lead passers-by along the Rooiberg pass road to Greenhills and then rerouting them through the village, past the church and the village green and back onto the R367 near the Groot river bridge.)
- The remaining section of the R327 between these two access points can become a local farm access road;
- Create a continuous route linking the Rooiberg Pass road to the R327 that connects key nodal points such as the primary school, church and village green;
- Pave this route with appropriate coloured pavers so as to make it legible and emphasize its continuity;
- Upgrade the village green area with appropriate urban design treatment of the current active buildings; and,
- Investigate how to incentivize derelict buildings.



Village green with derelict buildings to be upgraded



Site of proposed northern nodal point at Greenhills off Rooiberg pass road



Intersection to be reprioritized so that all traffic (except heavy trucks) is routed through Van Wyksdorp via Greenhills.

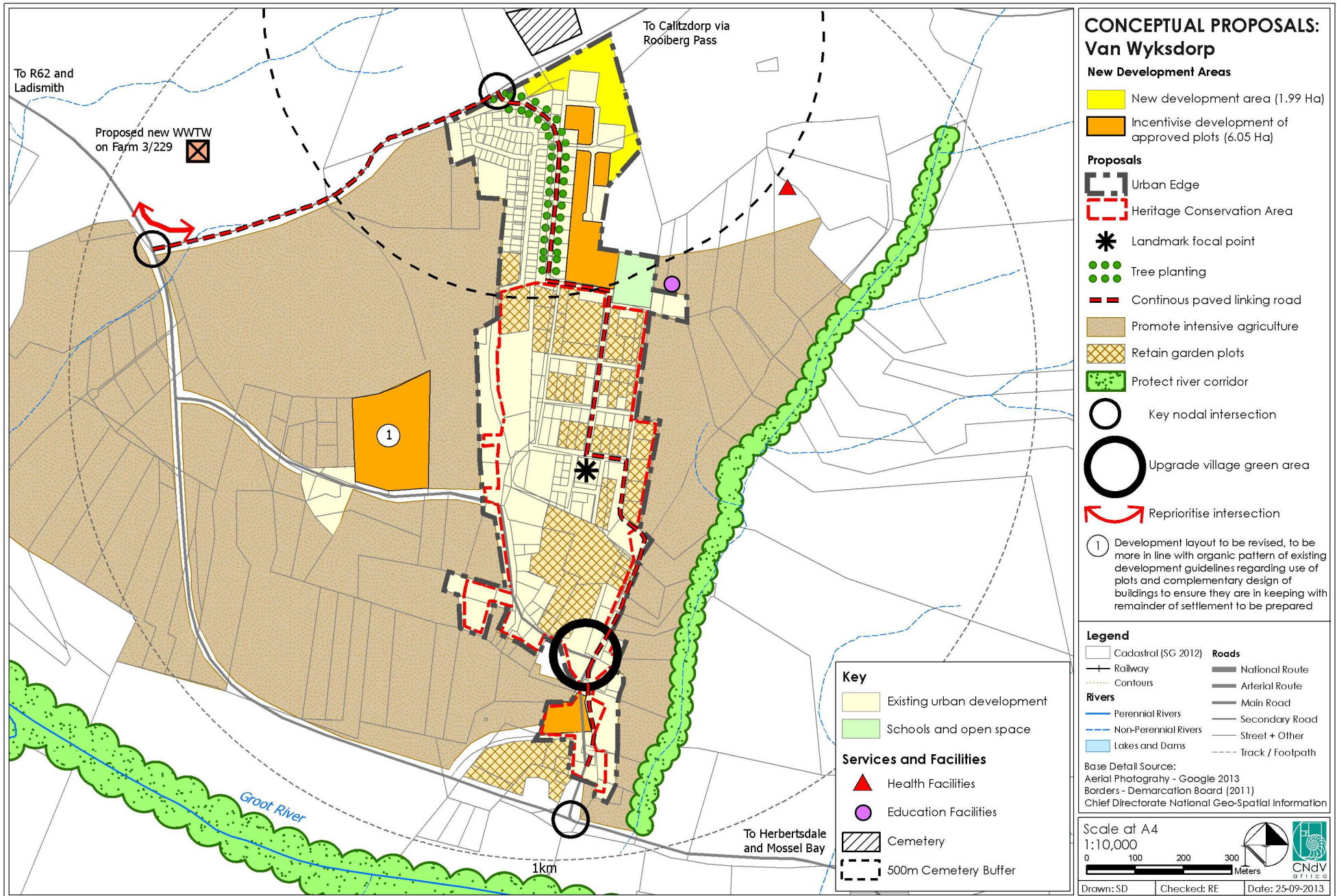


Figure 5.11.2.1 Van Wyksdorp: Spatial Development Framework





## 5.12 ZOAR (population: $\pm$ 3700 - 6100)

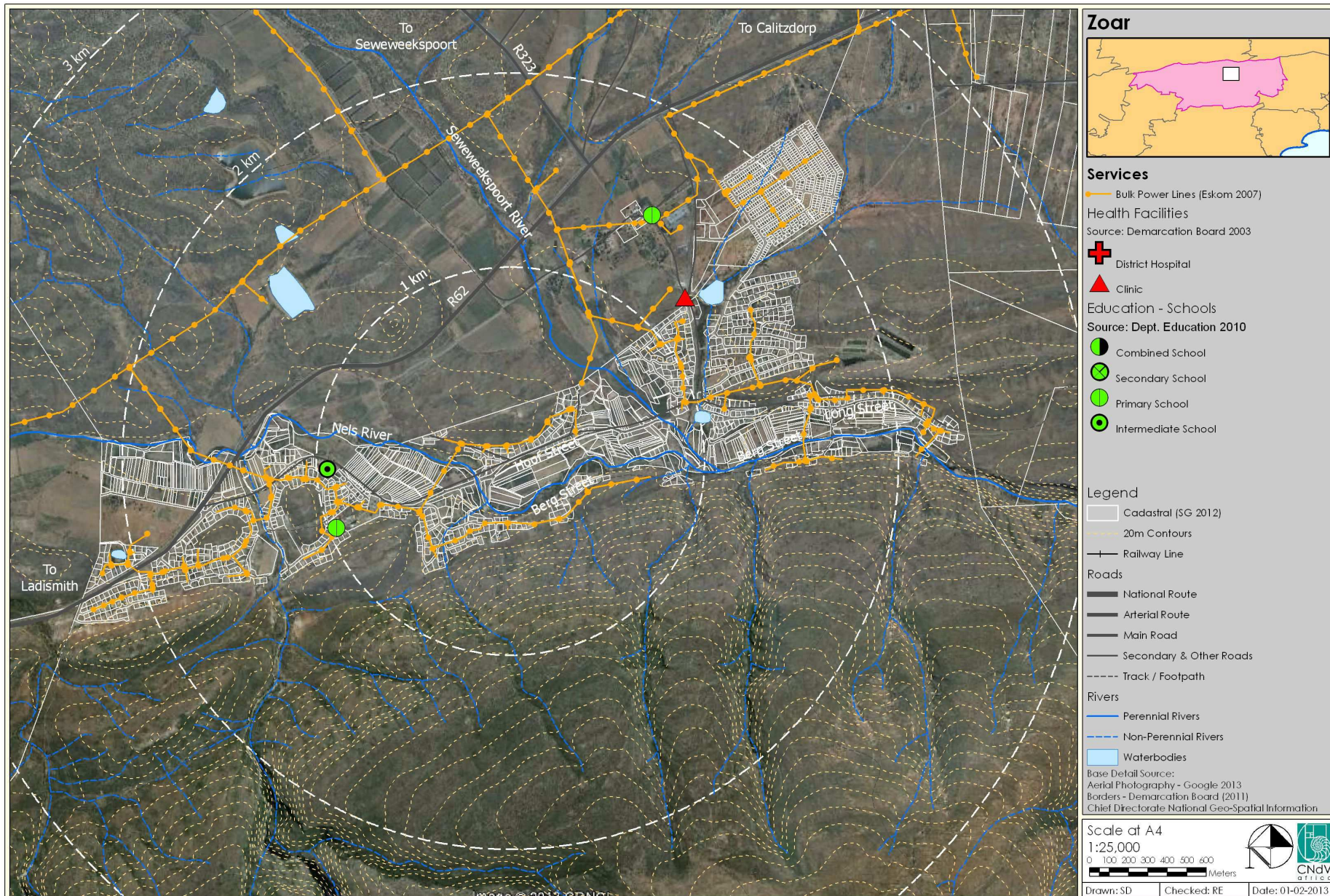


Figure 5.12.1.1 Zoar: Aerial photograph



### 5.12.1 SPATIAL ANALYSIS, see Figures 5.12.1.2

#### Sub-regional location

- Zoar and Amalienstein are located on the R62 between Ladismith and Calitzdorp and falls within an Act 9 area;
- Historically Amalienstein terminated the Seweweekspoort (R363) to Laingsburg completed 1862. The Huiskloof pass to Calitzdorp only became easily passable in 1896;
- The current intersection and placement of signage at the junction of the R363 and R62 completely hides this relationship; and,
- Although located on or near the R62 the nature of the intersections with Hoof Street as well as the way in which the settlements present themselves results in little attraction to passing traffic.

#### Layout pattern

- The settlement's layout reflects its historic origins; - close relationship with productive agricultural land and water courses, and most recently, conventional civil engineering standards to reticulate a standard township (Protea Park);
- The SA Missionary Society built Zoar mission church, near the western intersection with the R62;
- The Berlin Missionary Society built their own church and mission approximately 3kms to the east in a relatively isolated location away from the main Kobus River at the end of the Seweweekspas. The layout integrity of this mission complex is largely intact;
- A linear river side settlement pattern emerged as the primary source of livelihood was farming on garden plots irrigated by the river. Houses were built on high ground out of the arable land in the flood plain;
- This has resulted in a unique layout tailored to the topography and which has considerable character and personality. As well as being memorable for its residents such character also has cultural tourism potential if properly presented and issues of "aesthetic quality in the construction of new, and renovation of old buildings, crime and grime" are well managed;
- This layout lends itself to a sustainable technology approach to delivering water and waste water treatment but is extremely expensive if a conventional reticulation networks approach is used; and,
- Protea Park reflects this and comprises a textbook low income housing township laid out for the most efficient delivery of reticulated services.

#### Urban quality

- Hoof street winds its way between Zoar and Amalienstein following the river as a long crescent enclosed by hills and mountains meandering through a pastoral village landscape;
- The urban fabric has lost much of the historic quality still seen in places like Elim as residents have renovated their dwellings with what ever were the most affordable building materials at the time. It is still possible to detect the original building quality in some of the older dwellings. There have also not been guidelines linked to currently available building materials which could have assisted them; and,
- Protea Park does not have the sensitive alignment of the earlier settlement and lacks attractive potential.

#### Challenges and potential

- Although Zoar has a higher population than Calitzdorp it has much lower economic activity. This is probably due to the following; lower income levels, higher levels of unemployment, dependency on social grants, by-pass nature of the R62, lack of attractions to passers by, limited agricultural resource, low levels of entrepreneurship, especially in tourism sector; and,
- Potentials include; intensification and value-add to agricultural produce; interesting history, 3kms of potential historic, B&B, café lined route with historic mission churches at either end, especially the Amalienstein complex.



Zoar Mission Church



Upgraded road and renovated housing; Aster Crescent



Entrance to Protea Village off Suikerbossie Street

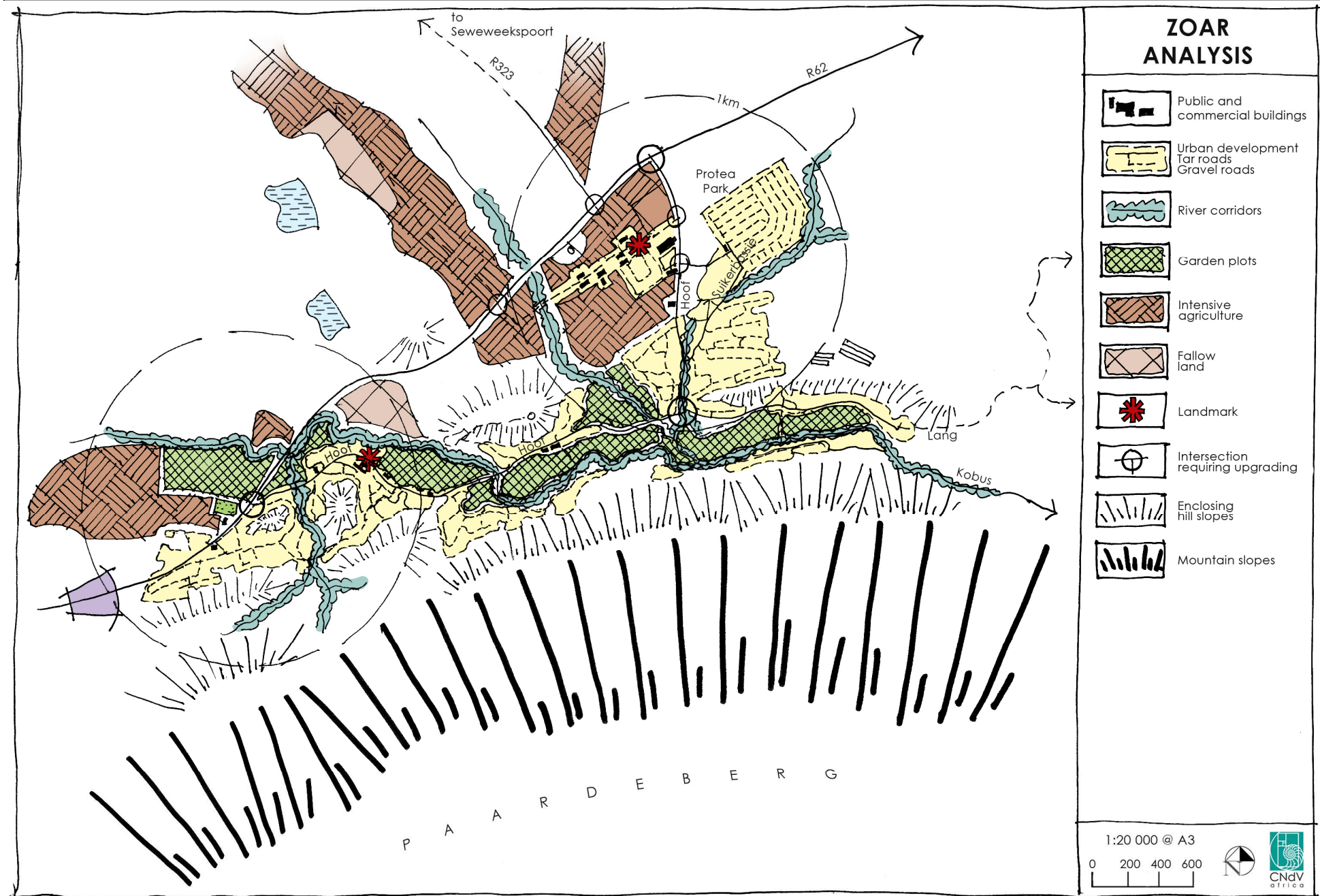


Figure 5.12.1.1 Zoar: Analysis



## 5.12.2 ZOAR: DRAFT SPATIAL DEVELOPMENT FRAMEWORK, see Figure 5.12.2.1

### 5.12.2.1 Core landscape areas

- Zoar's core resource is its natural environment for agricultural production, scenic beauty and water supply, therefore:
  - Retain food gardens and intensify production where possible;
  - Retain intensive agricultural areas and intensify use where possible including bringing fallow land into production;
  - Protect river corridors and retain a 32m set back from the river banks (NEMA EIA regulations 1(m)) until a fresh water ecologist determines a new alignment;
  - Investigate creating community nature reserves on land unsuitable for intensive agriculture on land abutting R62 to use for nature walks and indigenous plant harvesting. (note could also be used for properly managed rotational grazing that increases bio-diversity;
  - A continuous network of footpaths and MTB routes are proposed to the south of town; and,
  - Formalize and extend where necessary walking trails and potential MTB routes.

### 5.12.2.2 Urban Development

- Investigate new development areas around Protea Park, for GAP and market housing, against mountain slopes above Berg Street, and on low hills near Zoar;
- Any housing proposals must take appearance and layout into account, see Langebaan case study, see Section 5.4.1.1 to 5.4.1.3; and,
- Zoar lends itself to an off-grid approach to services. This has been the norm since the settlement's inception. However, residents should be encouraged to take advantage of the new off-grid services now available including rain water harvesting, grey water recycling, bio-digesters which also provide energy for cooking, biolytics for homes that are infrequently occupied, PV and Solar HWCs, both installed more easily on pitched roofs and domestic wind generation. Local found building materials, passive design and insulation principles should also be used in building design and construction.

### 5.12.2.3 Heritage Areas

- Amalienstein mission and surrounds should be a heritage precinct so that existing and new buildings and landscaping enhance the current quality of the urban environment here; and,
- While proclaiming the entire settlement as a heritage area is considered unduly onerous there should be an urban design management area along the entire length of Hoof Street that assists those upgrading, improving or extending their properties in improving the overall urban quality and appearance of the settlement along this key route.

### 5.12.2.4 Urban Restructuring

- The identities of the two core mission settlements should be strengthened so as to increase the attractions Zoar has to offer;
- Amalienstein's strategic position as the termination of the Seweweekspoort pass should be restored by creating a node at this point that encourages travelers to cross into the settlement rather than turning right or left. This could include building infrastructure for a Saturday morning market at which the community could sell produce and market its services – tourism guiding to local cultural and natural attractions, B&Bs etc. to traffic on the R62; and,
- Hoof Street should be upgraded as an attractive scenic route between Zoar and Amalienstein that is interesting for passers by to travel along. It is already tarred and has had bus shelters installed using local stone. Such passing traffic will also create a shop window effect for various enterprises, B&Bs, cafes, restaurants, that could locate along this route;
- The various intersections along this route should be differently paved and raised as speed tables that serve the function of speed humps but in a more integrated and attractive way.



Amalienstein Mission Church



Urban character to be promoted where possible with guidelines showing affordable material options



Example of upgrading using local found materials along Hoof Street

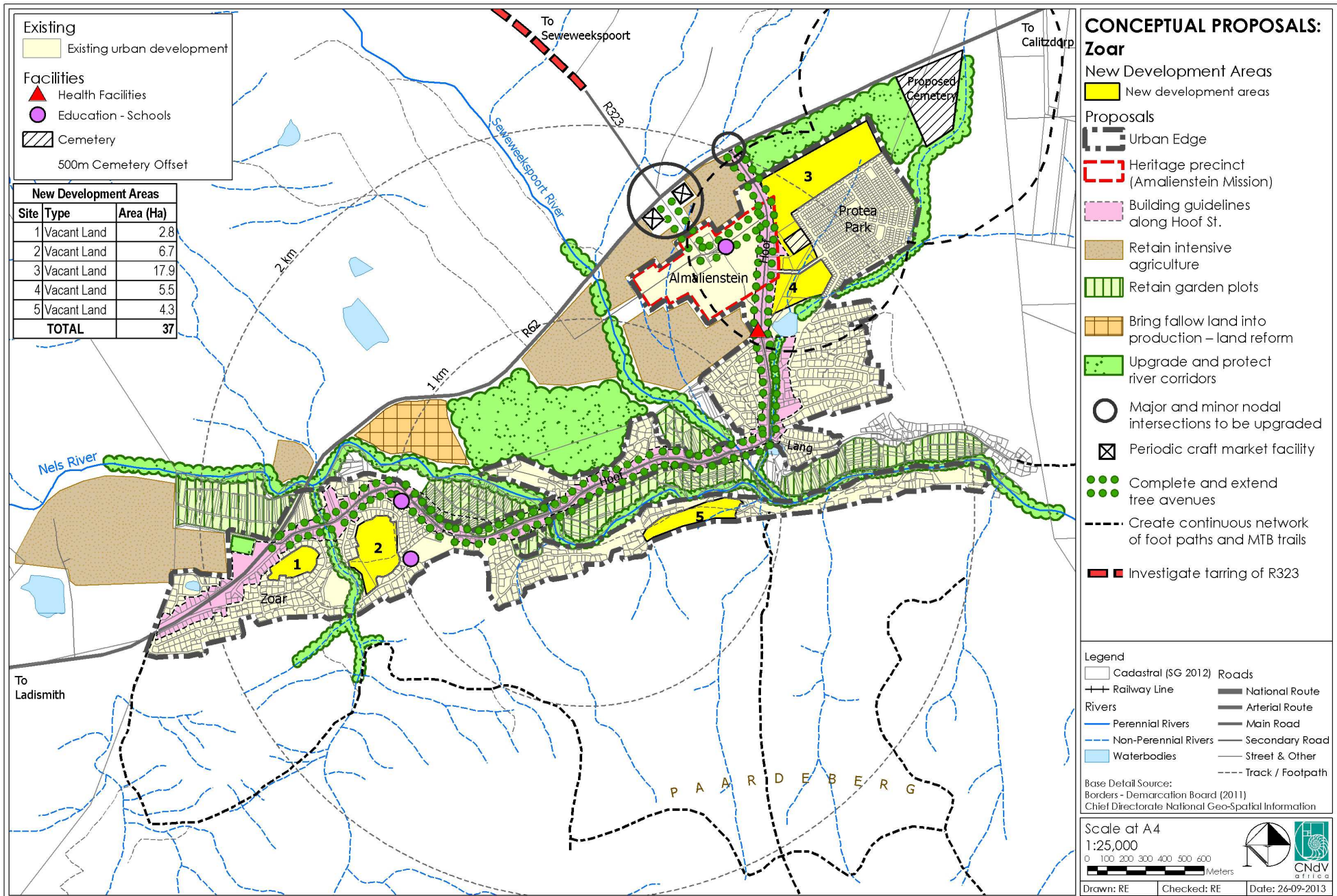


Figure 5.12.2.1 Zoar: Spatial Development Framework





## 6. IMPLEMENTATION FRAMEWORK

### 6.1 IMPLEMENTATION

#### 6.1.1 MUNICIPAL SDF POLICY/ PROJECT LIST

The following table of projects is compiled from the various projects from the SDF proposals:

No.	Policy /Projects Name/ Ref	Project / Policy Description	Cost Estimate (Rs)	Implementing Agent
<b>SHORT TERM</b>				
SDF 1	Urban Design and Landscaping Frameworks	Prepare detailed urban design and landscaping frameworks for settlements	R 400 000	Kannaland Municipality and Consultants
SDF 2	Main Road Interface Guidelines Study	Prepare detailed Main Road Interface Guidelines Study for the Main Roads in the main settlements	R 400 000	Kannaland Municipality and Consultants
SDF 3	Precinct Plans	Prepare precinct plans for all proposed urban nodes, new development areas larger than 5ha and future rural nodes.	R 300 000	Kannaland Municipality
SDF 4	Rural Periodic Market	Prepare a Precinct Plan for a rural periodic market and economic hub in Zoar	R 500 000	Kannaland Municipality and Consultants
SDF 5	Urban Upgrade	Prepare an Urban Upgrade Plan for bypass along Church and Van Riebeeck Streets, Ladismith.	R 500 000	Kannaland Municipality and Consultants
SDF 6	Urban Upgrade	Prepare an Urban Upgrade Plan for Calitzdorp Town Square	R 500 000	Kannaland Municipality and Consultants
<b>MEDIUM TERM</b>				
SDF 7	Tourism Plan	Investigate adventure, eco- and agri- tourism opportunities and the development of existing tourism opportunities/facilities	R 400 000	Kannaland Municipality, Department of Economic Development and Tourism and Consultants
SDF 8	Land Reform: Development plans for commonages	Development plans to indicate which commonage land should be conserved and where agriculture can occur.	R 200 000	Kannaland Municipality Department of Rural Development and Land Reform
SDF 9	Renewable Technologies Strategy	Prepare a municipal renewable technology strategy focusing on implementation options for water management and energy generation in projects and developments	R 250 000	Kannaland Municipality

No.	Policy /Projects Name/ Ref	Project / Policy Description	Cost Estimate (Rs)	Implementing Agent
SDF 10	Scenic tourism routes policy	Study to be prepared for the management and promotion of Scenic Tourism Routes	R 300 000	Kannaland Municipality
SDF 11	Signage Policy	Preparation of a Signage Policy	R 500 000	Kannaland Municipality and Consultants
<b>LONG TERM</b>				
SDF 12	Heritage Buildings	Preparation of a Heritage buildings survey for the four main towns	R 500 000	Kannaland Municipality and Consultants

Table 6.1.1 Municipal SDF Policy / Project List

### 6.1.2 MUNICIPAL IDP POLICY/ PROJECT LIST

The following table of projects is compiled from the various projects from the IDP 2012-2017.

No.	Policy /Projects Name/ Ref	Project / Policy Description	Project Location	Cost Estimate (Rs)	Implementing Agent
IDP 1	Tourism and Marketing	Support the local tourism bureau	Calitzdorp	R 90 000	Kannaland Municipality
IDP 2	Tourism and Marketing	Support the local tourism bureau	Ladismith	R 90 000	Kannaland Municipality
IDP 3	Infrastructure: Water	Upgrade water reticulation	Zoar	R 417 6000	Kannaland Municipality
IDP 4	Infrastructure: Water	Upgrade bulk infrastructure	Calitzdorp	R 500 000	Kannaland Municipality
IDP 5	Infrastructure: Sewer	Upgrade bulk infrastructure	Calitzdorp	R 1 000 000	Kannaland Municipality
IDP 6	Infrastructure: Sewer	New WWTWs	Ladismith	R 12 600 000	Kannaland Municipality
IDP 7	Infrastructure: Roads	Access roads: farm workers housing	Calitzdorp	R 400 000	Kannaland Municipality
IDP 8	Infrastructure: Roads	Provision of new roads	Van Wyksdorp	R 18 10 000	Kannaland Municipality
IDP 9	Infrastructure: Roads	Upgrades to taxi route	Ladismith	R 2 940 000	Kannaland Municipality
IDP 10	Infrastructure: Solid Waste	Upgrades to facility	Ladismith	R 600 000	Kannaland Municipality
IDP 11	Community Facilities: Sports and Recreation	Rehabilitation of sports fields	Zoar	R 400 000	Kannaland Municipality
IDP 12	Community Facilities: Sports and Recreation	Rehabilitation of sports fields	Calitzdorp	R 1 000 000	Kannaland Municipality
IDP 13	Community Facilities: Cemeteries	Provision of new cemetery	Zoar	R 560 000	Kannaland Municipality
IDP 14	Community Facilities: Cemeteries	Provision of new cemetery	Zoar	R 3 585 000	Kannaland Municipality

**Table 6.1.2 Municipal IDP Policy / Project List**



### 6.1.3 MUNICIPAL POLICY / PROJECT PRIORITISATION

The SDF and IDP projects as per section 6.1.1 and 6.1.2 are to be prioritized by the relevant Council Officials and Ward Committees as part of the IDP process.

Project Priority No.	Proposal No.	Policy /Projects Name/ Ref	Project / Policy Description	Cost Est. (Rs)	Rating Matrix (5: most important, 1: least important)														Total
					Alignment			Sustainability					Project Implementation				Improves Settlement Restructuring		
					NSDP	FS-PSDF	District SDF	Improves Employment	Improves Economic Empowerment	Improves Economic Diversification	Improves Empowerment	Positive Environmental Impact	Critical Path for other projects	Cost of Impl.	Ease of Impl.	Improves Access to Infrastructure			
1	SDF 15																		
2	SDF 7																		
3	SDF 16																		
4	SDF 3																		
5	SDF 6																		
6	SDF 2																		
7	SDF 5																		
8	IDP 2																		
9	IDP 14																		
10	SDF 18																		

**Table 6.1.3** Municipal Policy / Project Prioritisation

## 6.2 MONITORING AND REVISION FRAMEWORK

Phase 7 of reviewing the SDF, Monitoring and Evaluation, will only occur after the SDF is approved. It should take place as follows:

### 6.2.1 REVIEW PROGRESS IN IDP

The annual review of the IDP should include a review of progress on the policy amendments and project implementation of the SDF according to the priority listings and expenditure programs of the various sector departments' budgets.

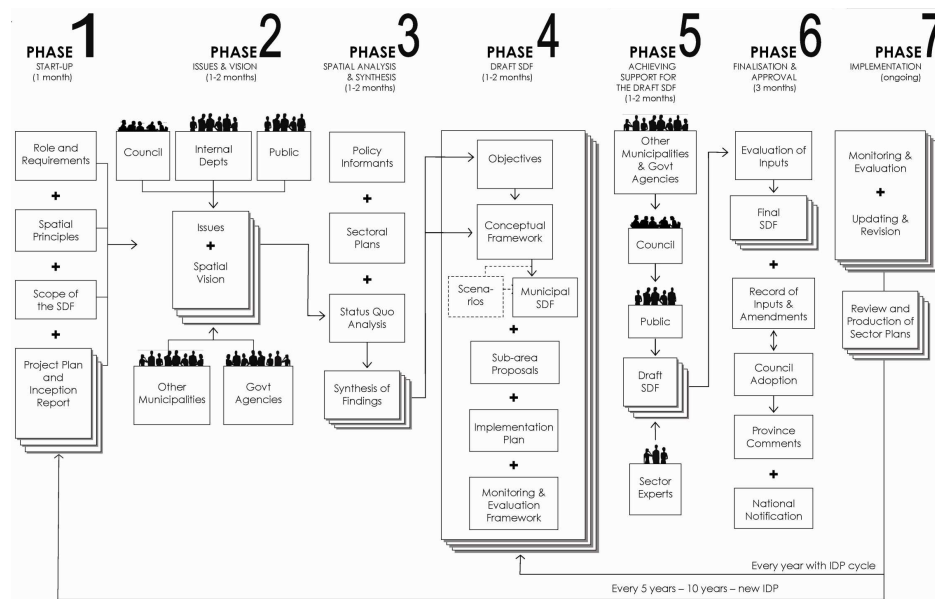


Figure 6.2.1 Phases in the process of completing and SDF (source: CNdV, 2010)

Figure 6.2.1 above shows that after the completion of the SDF in Phase 6, the SDF will be implemented through the various sectoral plans during Phase 7, see Figure 6.2.2. During this phase the implementation of the SDF should be monitored on at least a 2 month basis by the IDP's annual reporting on the progress of the various implementation/ sectoral plans. This review should also comment on the SDF. This is shown in Figure 6.2.1.

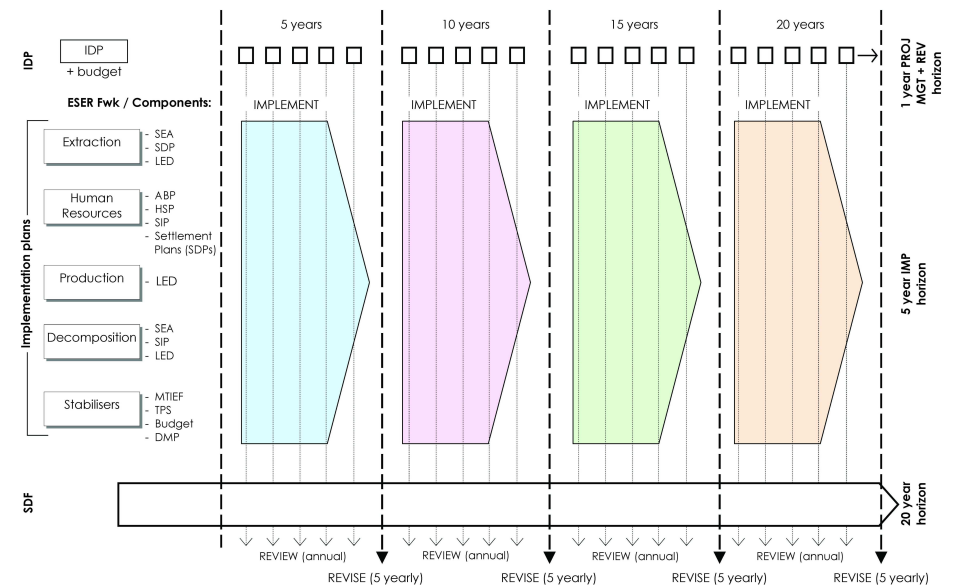


Figure 6.2.2 Proposed Relationship between IDPs, Implementation Plans, including HSPs and SDFs (source: CNdV, 2010)

Figure 6.2.2 further shows that the SDF is the common spatial base on which all the implementation plans should be executed.

Figure 6.2.2 also shows that the SDF should be revised and updated at least every each 5 years in parallel with the IDP and Implementation Plans. Ideally, the Sector Implementation Plans and the IDP should start and end on the same 5 year cycle.

Although the SDF is reviewed every year in the IDP and is revised every 5 years it needs to take a longer term view. The SDF should take a 20 to 30 year perspective on the growth direction of a municipality and settlements. It will be the only plan in the municipality taking such a long term view.

## 6.2.2 PROJECTS/ POLICIES TO BE REPORTED IN THE IDP

The following table of projects is an example of a monitoring / progress report through which the projects can be monitored. This table should be completed indicating each policy or project and reported in each year's IDP.

Project / Policy		Progress	Quality	Econ	Eng	B...	Comments						
							Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
SDF 7	Street trader policy												
SDF 3	Enlarged Conservation Areas												
SDF 6	Detailed Public Open Space and Densification Policy												
SDF 2	Tourism Plan												
SDF 5	Renewable Technologies Strategy												
IDP 14	Infrastructure - Sewerage												
SDF 4	Mining Rehabilitation												
IDP 6	Infrastructure - Water												
SDF 1	Urban Design and Landscaping Frameworks												
IDP 12	Infrastructure - Sewerage												
IDP 7	Infrastructure - Facilities												
IDP 10	Infrastructure – Solid Waste												
SDF 7	Street trader policy												
SDF 3	Enlarged Conservation Areas												
SDF 6	Detailed Public Open Space and Densification Policy												
SDF 2	Tourism Plan												

**Table 6.2.2 Projects Evaluation and Report Framework**



### 6.3 CONFIGURE SECTOR PLANS

The sector plans should contain the SDF plans for the municipality and two urban centres as their primary spatial informant.

They should take the SDF proposals into account as follows (see facing page as well):

MUNICIPAL SDF	WASTE MANAGEMENT (DWA)	WATER SERVICES (DWA)	HOUSING SECTOR (Human Settlements)	SERVICES AND INFRASTRUCTURE	PUBLIC TRANSPORT AND NMT (Dept of Transport)	ENVIRONMENTAL MANAGEMENT (Dept of Environment) Dept of Agriculture	LAND REFORM (Dept Rural Development & Land Reform)	DISASTER MANAGEMENT
<b>SPCs</b>								
<b>Core:</b> • Wetlands • Rivers systems	• N/A	• Ensure protection of ecological corridors around wetlands and rivers	• N/A	• Minimize disturbance of protected areas by infrastructure crossings and alignments and efficient quality.	• N/A	• Ensure protection of ecological corridors around wetlands and rivers	• N/A	• N/A
<b>Buffer:</b> (Extensive Agriculture)	• N/A	• N/A	• N/A	• N/A	• N/A	• Promote veld rehabilitation and rotational grazing to enhance bio-diversity	• Ensure livestock farming does not damage bio-diversity through poor grazing methods	• Ensure adequate fire protection and burn management
<b>Intensive agriculture:</b> 1. Irrigation Scheme	• N/A	• Encourage water demand management and enhanced irrigation efficiencies • Monitor water quality • Promote bio-farming and other techniques to reduce nutrient loads in hydrological systems • Supply water rights for land reform projects	• N/A	• Ensure balance between water supply infrastructure for agriculture and urban development	• N/A	• Monitor water quality • Promote bio-farming • Ensure water	• Ensure water rights for land reform projects	• N/A
2. Dryland and Borehole Crop Farming	• N/A	• Monitor borehole abstraction water and ground water levels and recharge rates	• N/A	• N/A	• N/A	• Monitor borehole abstraction water and ground water levels and recharge rates • Provide extension services to emerging farmers	• N/A	• N/A
3. Commonage	• N/A	• Provide irrigation for small scale crop farming on commonage	• No residential accommodation to be provided on commonage	• Supply irrigation infrastructure to crop farming on commonage	• N/A	• Promote bio-farming on commonage • Provide extension services to emerging farmers	• Promote bio-farming on commonage • Draw up commonage development plan	• N/A
<b>Urban development:</b>								
• Intensification Areas	• Ensure sufficient supply • Transfer stations to be accessibly located in corridors	• Ensure sufficient supply	• Promote higher density mixed use housing within the intensification area boundaries	• Ensure sufficient infrastructure to support higher levels of development	Provide road network to • commonage farms and promote • animal traction, cycling and • walking Main routes / spines through • development corridors to be • designed with cycle lanes and • pedestrian footways Should be declared public • transport routes (with embayments etc.)	• Promote indigenous or fruit trees for use in the landscaping of development corridors	• N/A	• N/A
• General	• Promote waste separation at source throughout urban settlements	• Promote rainwater harvesting and grey water recycling	• N/A	• N/A	Urban settlements should be • designed to minimize the need to travel and avoid costs of public transport	• Promote integrated stormwater design including the use of permeable paving and swales in urban development areas	• N/A	• Ensure residential development not located below 1:50 floodlines
• Residential	• Promote waste separation at source throughout urban settlements	• Ensure access to basic water and sanitation • Allow for communal service centres to address health issues for non-qualifiers	• All projects to include range of housing, laid out according to socio-economic gradient	• Provide minimum basic services to proposed new housing areas	Ensure high densities of urban • development coincide with main • non-motorised routes	• Promote off-grid sustainable technologies and passive building design	• N/A	• Ensure adequate fire protection: • Building setbacks • Electrical compliance • Careful use of combustible materials
• Industrial	• Industrial and toxic waste to be properly managed and disposed of	• N/A	• N/A	• Ensure infrastructure in serviced but undeveloped residential areas properly maintained	Ensure industrial areas provided with • cycle and pedestrian routes	• Industrial and toxic waste to properly managed and disposed of	• N/A	• N/A
• Community facilities	• N/A	• N/A	• Include proposals for necessary community facilities into Human Settlement Plans (HSP)	• N/A	Community facilities should be • located on public transport and • NMT routes to promote • convenience and security	• N/A	• N/A	• N/A
• Recreational areas	• N/A	• N/A	• Include proposals for recreational areas into HSP • Housing layouts to face onto recreational areas and not turn their back	• N/A	Non-motorised transport networks • should pass through recreational areas	• N/A	• N/A	• N/A
• Ecological corridors	• Landfill sites can be located in ecological corridors providing they are managed to best practice standards	• N/A	• Include proposals for recreational areas into HSP • Housing layouts to face onto recreational areas and not turn their back	• Where possible services and infrastructure alignments should not disrupt river channels and wetlands	Non-motorised transport networks • should pass through ecological • corridor areas	• Ensure continuity between connected rural and urban ecological corridor areas • Provide highest level of protection in ecological corridor areas	• N/A	• N/A

Table 6.3.1 SDF Relationship with Sector Plans

# ANNEXURE A

## HOUSING TOOLKIT



- A. Site and Service
- B. BNG: B1 Double Storey: Cloeteville Steps, Stellenbosch  
 B2 Single Storey: Klapmuts  
 B3 Double Subsidy Ownership and Rental: London Road, Alexandra
- C. GAP: C1 Townhouses; Middleburg, Mpumalanga  
 C2 Algoa Park, Port Elizabeth  
 C3 Klein Drakenstein, Paarl  
 C4 Erf 48076, Mitchells Plain  
 C5 Erf 36151, Mitchells Plain  
 C6 Brickfields, New town Johannesburg (70% GAP, 30% BNG)  
 C7 Amalinda, East London
- D. Market: D1 Market: townhouses, Paradyskloof  
 D2 Apartments: Moquet Farm Diep River  
 D3 Apartments: Somerset Links, Somerset West
- F. Development Corridors  
 F1 Masiphumelele  
 F2 Wynberg

**A. Site and Service (S&S)**

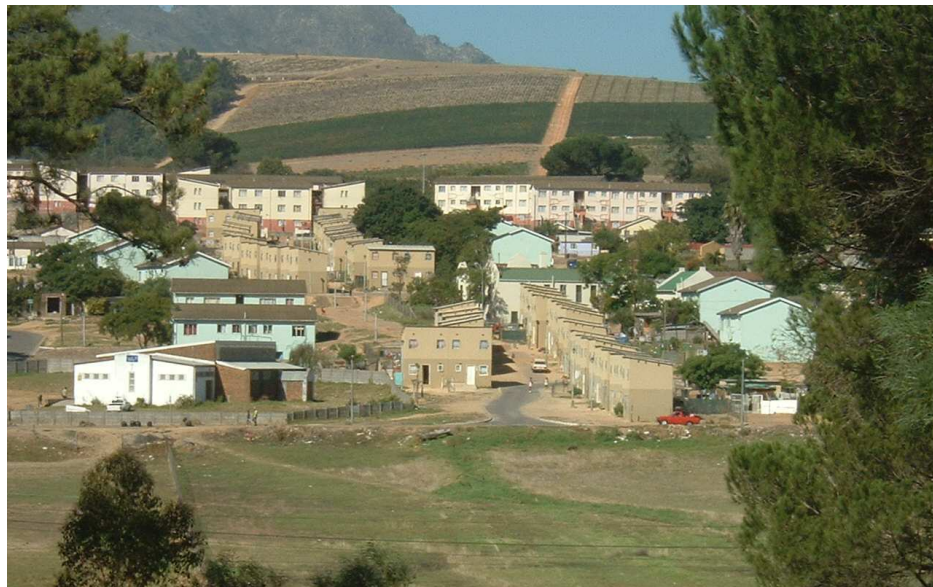


## B. BNG

### B1 Cloetesville, Stellenbosch



- 93 units
- Units comprise a top structure of approximately 30m<sup>2</sup> on a plot of between 60.5m<sup>2</sup> and 82.5m
- Units can accommodate an extension of a similar size to the existing unit at the rear of the plot
- Gross Density: 83du/ha
- Plots generally 5.5m wide with a 1.0m building set back to one side to allow access to the rear of the unit. Plot depths vary between 11.0m and 15.0m.





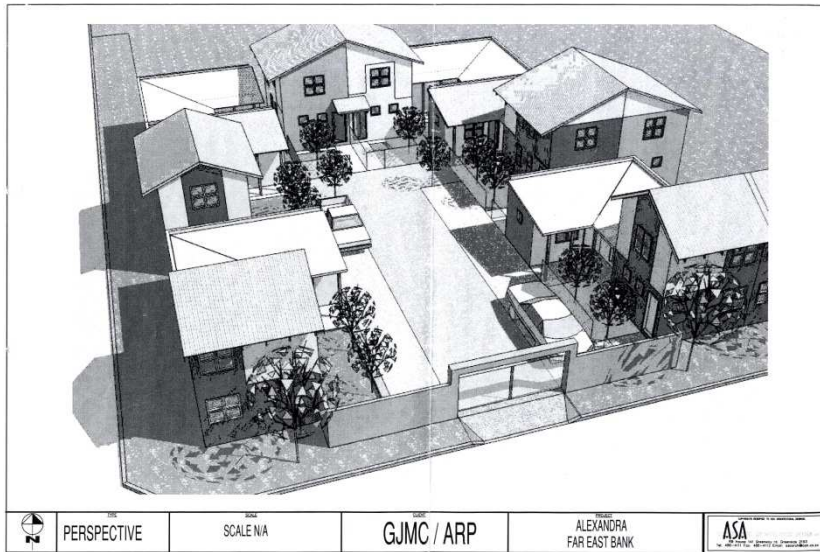
**B2 Klapmuts, Stellenbosch**

- 540 subsidy residential plots
- Plots designed to accommodate a minimum building footprint of  $\pm 40\text{m}^2$
- Nett Density: 82du/ha
- Gross Density: 42du/ha
- Streets generally 10m wide and are designed to permit all forms of vehicular traffic

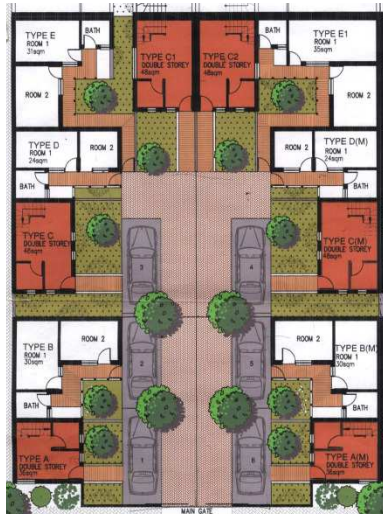




### B3 London Road, Alexandra, Johannesburg



- Site located in Far East Bank Extension
- Low income social housing project
- Aimed at increasing housing densities, combines ownership and rental occupation on same property
- Housing grouped in clusters forming smaller communities around semi-private communal courtyards
- Each unit has 40/50m<sup>2</sup> double-storey government-subsidised dwelling (eligible ownership) two adjacent independent ground floor rooms (shared ablutions)
- Plot Size: 75m<sup>2</sup> - 100m<sup>2</sup>
- Building Footprint: Double storey @ 22m<sup>2</sup>, 2 x bedroom @ 9m<sup>2</sup>, 2<sup>nd</sup> bathroom @ 4m<sup>2</sup> = 45m<sup>2</sup>



## C. GAP: Townhouses

### C1 Phumulong Street: Middelburg, Mpumalanga



- Municipality made stands available at R30 000 (cash buyers) – to cover cost for services – leads to reasonable market price
- Municipality does not have to sell land to highest bidder
- Stands used for Gap housing – buyers built rapidly
- Appears no loan funding is used. Encourages emergence of small developers





**C2**    **Algoa Park, Port Elizabeth**

- Abahlali housing project
- First instalment (Rent to Buy) project in South Africa
- Total number of units: 420
- Single and double-storey units
- Average erf size: 194m<sup>2</sup>
- Density: 27 units/ha





### C3 GAP: Apartments

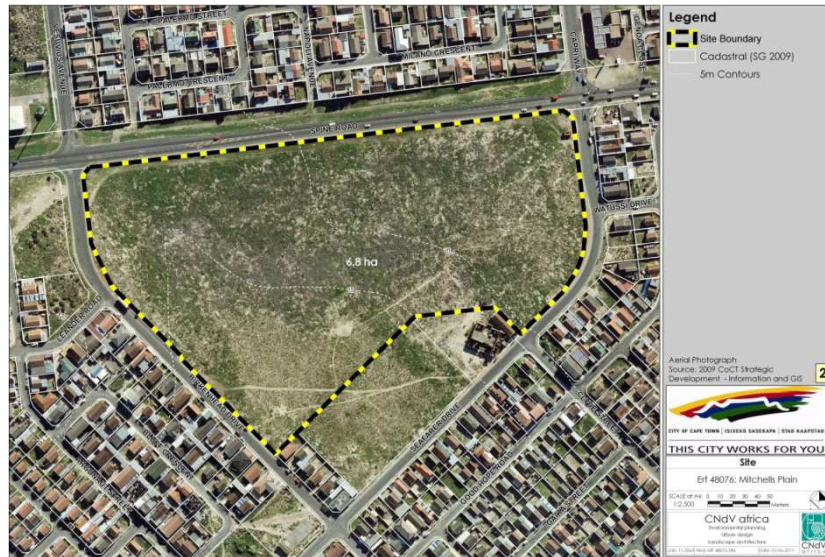
#### Klein Drakenstein Road, Paarl, Western Cape: 2 – 4 Storey Gap Housing



- Small scale private developer
- Well located land on Klein Drakenstein Road, major arterial through Paarl East
- Market: R250 000 to R500 000
- 1 to 2 bedroom apartment
- Rationalising use of excess and socially vulnerable public open space
- 96 units, 8000m<sup>2</sup> → 117du/ha



#### C4 Erf 48076, Mitchells Plain, Western Cape: Redevelopment Axis

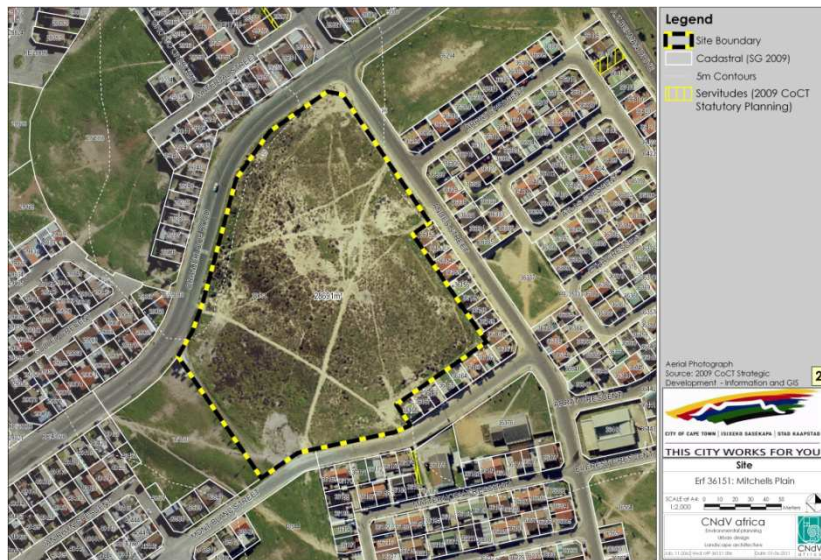


- Site located along Spine Road, major arterial in Mitchells Plain
- Surrounded by medium income residential (generally free standing units), mosque and some shops
- No buildings on site, major activity along Spine Road
- Redevelopment potential of the site :
  - Three to four storey buildings;
  - Mixed use along Spine Road precinct;
  - Commercial on ground floor;
  - Approx. 664 apartments, 20 single dwellings ;
  - Size : 68 000m<sup>2</sup>;
  - Density : 100du/ha.





## C5 Erf 36151, Mitchells Plain, Western Cape: Redevelopment Axis



- Site located along Andes Street, Mitchells Plain – lower order road
- Surrounded by residential, open spaces and community facilities : schools and places of worship
- No buildings on site, lower income community
- Redevelopment potential of the site :
  - Generally three storey buildings;
  - Mixed use on major intersection, commercial on the ground floor in four storey building;
  - Approx. 414 apartments and 10 single dwellings;
  - Size : 28 700m<sup>2</sup>;
  - Density : 148du/ha.





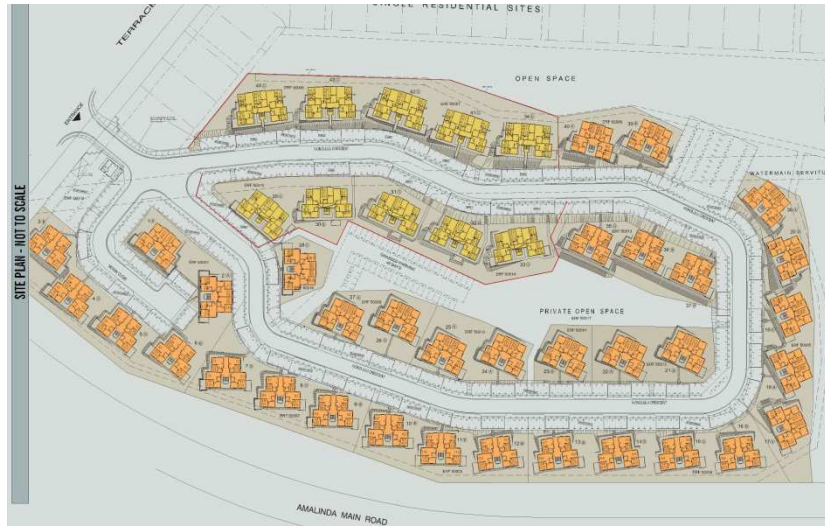
## C6 Brickfields, Newtown, Johannesburg



- Project, incorporating Brickfields, Legae and Phumlani, was Johannesburg inner city's first high rise development in 30 years
- Social housing project
- Comprising 742 units in a mix of low rise and high rise buildings
- 345 units in 3 and 4-storey walk-ups



## C7 Amalinda, East London



- Located 4km from East London CBD (Amalinda Drive, East London)
- 598 units
- Phase 1: 34 blocks (12 units per 3 storey block, 4 units per floor, total 408 units)
- Phase 2: 10 blocks (8x4 storey blocks, 20 units per 4 storey block, 5 units per floor, total 160 units), 2x3 storey blocks (15 units per 3 storey block, 5 units per floor, total 30 units)
- Medium Density: 127 du/ha
- 50% Rent to buy, 50% rental





**D1 MARKET: Townhouses**

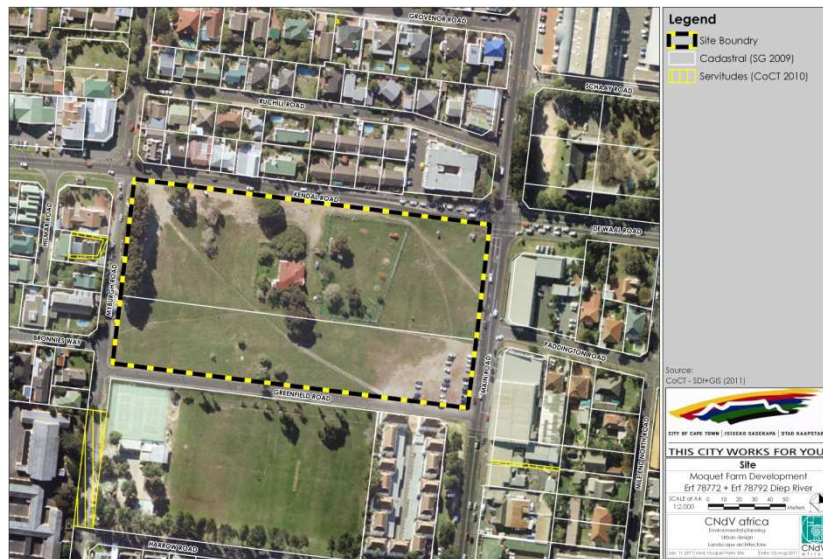
**Paradyskloof, Stellenbosch**



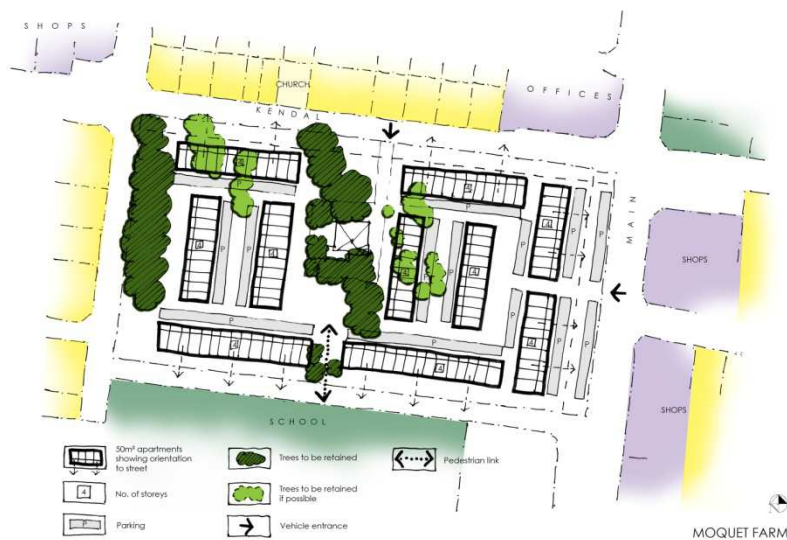


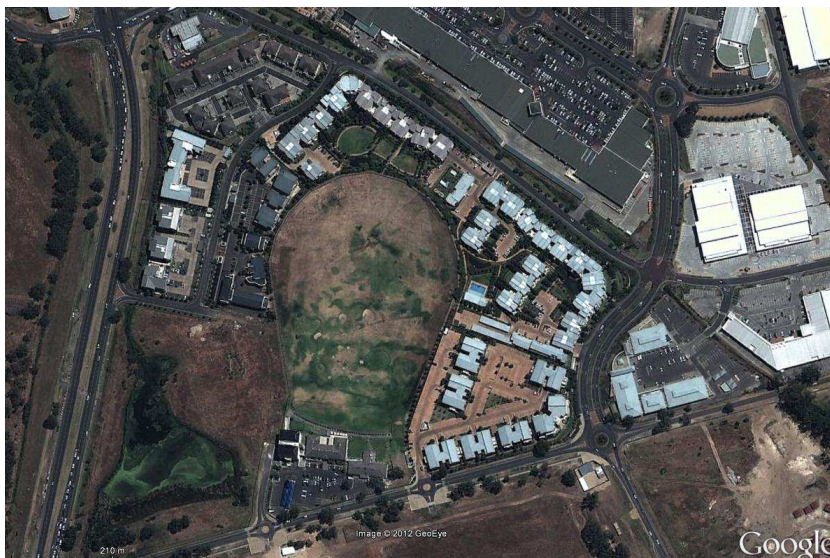
## D2 MARKET: Apartments

### Erf 78722 and 78792, Diep River, Cape Town, Western Cape



- Site located along Main Road in Diep River
- Surrounded by commercial, residential and school
- Existing building on site
- Redevelopment potential of the site :
  - Four storey buildings;
  - Mixed use along Main Road with commercial on ground floor;
  - Approx. 340 apartments;
  - Size: 27 000m<sup>2</sup>;
  - Density : 126du/ha.



**D3 Somerset Links, Somerset West, Cape Town**

- Located in De Beers Avenue, Somerset West
- Units types: 1, 2 and 3 bedroom units
- 396 units (apartment complex)
- Phase 1: 117 units
- Phase 2: 168 units
- Phase 3: 111 units
- Unit sizes: 70m<sup>2</sup> - 100m<sup>2</sup>





# F1 Erven 1728 & 1866, Masiphumelele, Western Cape: Redevelopment Axis



- Site located along Kommetjie Main Road,
- Major tourist route in Cape Town
- Surrounded by low income housing (north) and nature reserve (south), gateway to Masiphumelele
- Underutilised site, used informally as taxi rank and for commercial enterprises in containers
- Redevelopment potential of the site :
  - Three storey buildings; parking at rear
  - Residential above ground level commercial
  - Approx. 120 apartments/ units;
  - Size : 7 000m<sup>2</sup>;
  - Density : 170du/ha.





**F2 Grand Central**

- Located in Main Road, Wynberg
- Total of 414 apartments
- Retail on the ground floor
- Unit Types: 1 and 2 bedroom
- Unit Size: 36m<sup>2</sup> - 55m<sup>2</sup>



# ANNEXURE B

## Comments and Response table


# KANNALAND SDF RESPONSE TO COMMENTS RECEIVED 17 SEPTEMBER 2013


(Note: all the comments as per the Comments column are a verbatim record as they have been received during the public participation process)

\* indicate items that require discussion

#	INDIVIDUAL / DEPARTMENT	COMMENTS	PROPOSED RESPONSE/ ACTION
1	Phindile Mangwana  Directorate: Climate Change and Biodiversity  Department of Environmental Affairs and Development Planning Provincial Government of the Western Cape  20/08/2013	<p><b>1. Climate Change Section</b> (Section 5.5)</p> <p>1.1 It might be worth considering incorporating some of the climate-related risk assessments that have been done for the Eden District including the following:</p> <ul style="list-style-type: none"> <li>Flood risk assessments/Flood data consolidation done by the provincial disaster management centre for the Eden District where Kannaland's (in particular Swartberggrivier in Ladismith) has a MEDIUM flood severity index according to the scoring used. Hence this might have major spatial planning implications in particular for the abutting agricultural sector.</li> <li>Revised Eden Risk Assessments done by the Eden Disaster Management Centre.</li> <li>And the Drought risk assessments conducted by Stellenbosch University's Disaster Management for Sustainable Livelihoods Programme).</li> </ul> <p>These risk assessments will ensure that ongoing spatial planning and development is not located in high-risk areas which will bear significant financial implications for the Kannaland Municipality.</p> <p>1.2 It might also be worth noting the geographical location of Kannaland, which it is located in a drier part of the Eden district (with monthly average rainfall of less than 50mm), coupled with high temperatures particularly in the late summer months. We therefore need to think about the following:</p> <ul style="list-style-type: none"> <li>Water scarcity is currently a major concern in the Kannaland municipality, and this is likely to be exacerbated by changing climatic conditions. Hence, this requires cautious spatial planning (particularly around new developments that might increase the stress and withdrawals on current surface water supplies).</li> </ul>	<p>1.1 A section on Climate Change is included in Section 3.2.3 of the Status Quo Report. DEA&amp;DP to provide CNdV with the following documents for inclusion in the Status Quo Report:</p> <ul style="list-style-type: none"> <li>Flood risk assessments/Flood data consolidation done by the provincial disaster management centre for the Eden District</li> <li>Revised Eden Risk Assessments done by the Eden Disaster Management Centre.</li> <li>Drought risk assessments conducted by Stellenbosch University's Disaster Management for Sustainable Livelihoods Programme).</li> </ul> <p>1.2 A section on Climate, i.e. Temperature, Rainfall and Wind, is included in the Status Quo Report, see section 3.2.2.</p>
2	<b>Laurel Robertson</b> Pr. Pln	<b>*2.1 Solid Waste Management:</b>	2.1 Discussion required.



#	INDIVIDUAL / DEPARTMENT	COMMENTS	PROPOSED RESPONSE/ ACTION
	A/1340/2010  Professional Town and Regional Planner Environmental and Spatial Planning: Region 1 Department of Environmental Affairs and Development Planning  20/08/2013	2.1.1 I met with the Waste Management Directorate on 15 August 2013. They indicated that the future plans for Kannaland Municipality is to develop one regional landfill which would service the entire municipal area. The four existing landfills would be closed, rehabilitated and converted into transfer stations. The Directorate asked if the SDF could identify possible locations for this regional landfill based on the GIS information (particularly geo-hydrology layers) you have. This would not be a detailed investigation, but rather a desk top study, to ensure possible sites are reserved from further development.	
		2.1.2 A 2008 investigation carried out by Eden District Municipality suggested that the regional site be situated on the road between Ladismith and van Wyksdorp. I've attached the email correspondence received from Eden District which includes a map. 	
		2.1.3 The Waste Directorate is happy with most of the urban edges as contained in the Draft CDF report as the urban development is not extending towards the landfill sites. Their two main concerns were the Bergsig extension as there is a dumping ground to the west of the R62. I informed them that this extension has already been approved. The second concern is the extension of van Wyksdorp to the north of the road between van Wyksdorp and Calitzdorp. This extension is indicated in the Housing Pipeline. The Waste Directorate	

#	INDIVIDUAL / DEPARTMENT	COMMENTS	PROPOSED RESPONSE/ ACTION
		would agree to the extension subject to rehabilitation and closure (a waste management closure licence being issued) for the 2 sites (old site and existing trenches).	
		<p><b>*2.2 Calitzdorp Structure Plan:</b></p> <p>I reviewed the Calitzdorp Structure Plan (document attached). With the exception of two points, the two documents seem to align. The first point that could be relooked at is the Site Development Plan for the 'town square' (Plan 22 attached). At present the draft CDF does not provide this level of detail, would this plan be included in the draft CDF? The second is the concept of not developing the vacant hill in Calitzdorp. The Structure Plan indicates that the slope gradient is too large to build on this land and that any development will have a big visual impact on the town's character. Could the draft relook at the slope and visual impact aspects of the proposal.</p> 	2.2 Discussion required.

#	INDIVIDUAL / DEPARTMENT	COMMENTS	PROPOSED RESPONSE/ ACTION
		<p><b>2.3 Act 9 Areas:</b></p> <p>I was hoping that the SDF would have an annexure / section dedicated to explaining the Act 9 Areas. This will hopefully de-mystify the uncertainty around the ownership of this land and empower the Municipality to assist the Zoar residents going forward. I found the following information:</p> <ul style="list-style-type: none"> <li>On the WCG website - <a href="http://www.westerncape.gov.za/eng/pubs/public_info/I/46939">http://www.westerncape.gov.za/eng/pubs/public_info/I/46939</a></li> <li>On the DRD&amp;LR website - <a href="http://www.dla.gov.za/phocadownload/Land-Reform/Land-Reform-Administration/trancraazrevisedjuly2010.pdf">http://www.dla.gov.za/phocadownload/Land-Reform/Land-Reform-Administration/trancraazrevisedjuly2010.pdf</a></li> </ul>	<p>2.3 The SDF can include an Annexure explaining Act 9 Areas if this information is readily available from the Department of Rural Development and Land Reform. No information received.</p>
		<p><b>*2.4 Housing Pipeline:</b></p> <p>2.4.1 I see that Chalo has sent through the housing pipeline, and associated maps, for Kannaland Municipality. While most of the sites identified are aligned with the Draft CDF there is one or two that don't. We will have to discuss how to take this forward particularly in light of the discussion held on 12 August 2013 re: some sites being water logged etc. Perhaps once all the comments have been received, DEA&amp;DP, DHS and CNdV can revisit these sites and decide on a way forward.</p>	<p>2.4 Discussion required.</p>
3	<p>Cape Nature <b>SCIENTIFIC SERVICES</b> postal Private Bag X7 Claremont 7735</p> <p>16/08/2013</p>	<p>Our biodiversity related comments are thus as follows:</p> <p>3.1 The Biodiversity Assessment of the Kannaland and Oudtshoorn Local Municipalities, and Eden District Management Area (Uniondale)1 has not been cited in the reference list. It also appears as though this document has not been considered throughout the main body of this draft SDF.</p> <p>3.2 This Biodiversity Assessment was commissioned by the Department of Environmental Affairs and Development Planning in 2009. The aim of the project was to produce a spatial biodiversity informant which could be used to inform, amongst others, SDFs. This spatial biodiversity informant is referred to as the Critical Biodiversity Areas (CBA) Map. Although this draft SDF does make reference to the CBAs, (please note the CBAs are a DEADP product and not SANBI as per Figure 5.2.1.1) it seems to have not taken the associated recommendations on how to interpret and align these CBAs into SDFs into account.</p>	<p>3.1 The CBAs for the Kannaland Municipality as per the Biodiversity Assessment of the Kannaland and Oudtshoorn Local Municipalities, and Eden District Management Area (Uniondale) are shown in Figure 3.2.6.5, Section 3.2.6.4 of the Status Quo Report.</p> <p>3.2 See item 3.1. Reference for CBAs to be amended to DEA&amp;DP on Figure 5.2.1.1.</p>



#	INDIVIDUAL / DEPARTMENT	COMMENTS	PROPOSED RESPONSE/ ACTION																																																	
		<p>3.3 The recommended CBA /SPC category cross-walking as is reflected by both the Biodiversity Assessment 1 and DEADPs Rural Land Use Guidelines 2, and has already been adopted by most recently revised Western Cape local municipal SDFs is as follows:</p> <table><tr><th>CBA Map category →</th><th>FORMALLY PROTECTED AREAS</th><th>CRITICAL BIODIVERSITY AREAS</th><th>ECOLOGICAL SUPPORT AREAS</th><th>OTHER NATURAL AREAS (large intact remnants, especially adjacent to CBA/ESA)</th><th>OTHER NATURAL AREAS (located in an agricultural/transformed matrix)</th><th>No NATURAL REMAINING AREAS</th></tr><tr><th>SPC ↓</th><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CORE 1</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CORE 2</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>BUFFER 1</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>BUFFER 2</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>INTENSIVE AGRICULTURE SETTLEMENT</td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>Section 5.3.2 of the draft SDF however suggests an alternative alignment which we do not support.</p>	CBA Map category →	FORMALLY PROTECTED AREAS	CRITICAL BIODIVERSITY AREAS	ECOLOGICAL SUPPORT AREAS	OTHER NATURAL AREAS (large intact remnants, especially adjacent to CBA/ESA)	OTHER NATURAL AREAS (located in an agricultural/transformed matrix)	No NATURAL REMAINING AREAS	SPC ↓							CORE 1							CORE 2							BUFFER 1							BUFFER 2							INTENSIVE AGRICULTURE SETTLEMENT							<p>3.3 The CBAs will be cross-walked with the SPCs as follows:</p> <ul style="list-style-type: none"><li>Core 1a: Formally protected conservation areas;</li><li>Core 1b: Critical Biodiversity Area (CBAs) outside of formally protected conservation areas;</li><li>Core 2: River corridors and wetlands, Ecological Support Areas.</li></ul>
CBA Map category →	FORMALLY PROTECTED AREAS	CRITICAL BIODIVERSITY AREAS	ECOLOGICAL SUPPORT AREAS	OTHER NATURAL AREAS (large intact remnants, especially adjacent to CBA/ESA)	OTHER NATURAL AREAS (located in an agricultural/transformed matrix)	No NATURAL REMAINING AREAS																																														
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		<p>3.4 Section 5.4.1.6 which addresses urban edges should be amended to read: "These should be reviewed to ensure that: Sufficient protection is given to land requiring protection, inter alia, the agricultural land currently under cultivation and the Critical Biodiversity Areas."</p>	<p>3.4 Section 5.4.1.6 will be amended as proposed, i.e. Sufficient protection is given to land requiring protection, inter alia, the agricultural land currently under the cultivation and the Critical Biodiversity Areas.</p>																																																	
		<p>3.5 The Vegetation section of Section 5.4.1.8 should be amended so that the botanical assessment reflects on the biodiversity priority of the site, i.e. whether or not the site is a CBA and for what reasons.</p>	<p>3.5 Section 5.4.1.8 that deals with vegetation will be amended to include the following: whether or not the site is a CBA and for what reason.</p>																																																	
4.	<p>DEA&amp;DP Directorate: Environmental &amp; Spatial Planning</p> <p>Tania de Waal</p> <p>07/08/2013</p>	<p>The Department has reviewed the document and provides the following comment.</p> <p><b>B. GENERAL COMMENTS</b></p> <p>1. Final editing of the Document should be carried out to ensure that:</p> <p>a. All spelling mistakes are corrected;</p> <p>b. Any reference to sea level rise (section 5.5.2) is removed;</p>	<p>1. Final editing of the document will ensure that:</p> <p>a. There are no spelling mistakes;</p> <p>b. References to sea level rise is removed from section 5.2.2</p>																																																	

#	INDIVIDUAL / DEPARTMENT	COMMENTS	PROPOSED RESPONSE/ ACTION
		<p>c. Adequate referencing of source documentation is achieved (section 5.3.4 do these transport infrastructure projects come from the Integrated Transport Plan?).</p> <p>d. The text makes reference to the correct Figure Number.</p>	<p>c. All source information will be referenced. The transport projects in section 5.3.4 are as per the ITP, 2013. The reference is provided in section 5.3.4 page 226.</p> <p>d. Text will make reference to the correct figure numbers.</p>
		<p>2. Graphics</p> <p>a. The Status Quo Report identified a number of historic / national monuments yet these have not been reflected on the town analysis figures.</p> <p>b. Figure 5.9.2.1: the key indicates 'promote rail reserve as MTB cycleway' however this is not referred to in the text.</p> <p>c. Figure 5.9.2.1: the key indicates 'existing urban/ schools' however this is not reflected on the Figure.</p> <p>d. Figure 5.10.2.1: the key indicates 'periodic market place' while Figure 5.12.2.1 utilises the same symbol as 'periodic craft market facility'. Is there a reason for this difference? How do these relate to the 'potential rural nodes and periodic rural markets' listed in Section 5.3 SDF elements?</p>	<p>2. Graphics</p> <p>a. The individual heritage buildings are not indicated on each town analysis drawing but rather the proposed Heritage Conservation area for the towns of Ladismith, Calitzdorp and Van Wyksdorp are provided.</p> <p>b. Reference to "promote rail reserve as MTB cycleway" on Figure 5.9.2.1 to be explained in Section 5.9.2.1.</p> <p>c. The existing urban/schools are indicated in the key and on Figure 5.9.2.1 – see the pale yellow and light green areas.</p> <p>d. The narrative for the proposed periodic craft market is provided in section 5.12.2.4 on page 268.</p>
		<p>3. Section 5.4.1.6: Please clarify the third bullet point.</p>	<p>3. Section 5 4 1.6 third bullet point will be revised to read as follows: "All of the low income settlements should be located on one side or "slice" of the settlement only and extend outwards along this axis."</p>
		<p><b>C. ASPECTS REQUIRING FURTHER DISCUSSION</b></p> <p>1. The Status Quo Report suggested that a heritage overlay zone within the towns of Zoar and Amalienstein not be perused as this might place undue financial strain on the local population. This seems to be contrary to Section 5.12.2.3 of the Document which states that Amalienstein mission and surrounds should be a heritage precinct. Firstly, consistency throughout the Document is essential. Secondly, this matter needs to be work-shopped with relevant stakeholders.</p>	<p>1. A Heritage Precinct is proposed for Amalienstein and not a Heritage Overlay Zone as is the case for Ladismith, Calitzdorp and Van Wyksdorp. This is to ensure that existing and new buildings and landscaping enhance the current quality of the urban environment. The Status Quo report will be amended to reflect the proposed Heritage Precinct for Amalienstein.</p>
		<p>2. The extension of the Grand Canyon "Reserve" (situated in Laingsburg Municipality) southwards into Kannaland Municipality (refer to Figure 5.2.5.1). This needs to be work-shopped with relevant</p>	<p>2. Noted. This is outside of the scope of the SDF.</p>

#	INDIVIDUAL / DEPARTMENT	COMMENTS	PROPOSED RESPONSE/ ACTION
5.	Raynita Robertson 10/06/2013	stakeholders including, but not limited to, the Municipality and CapeNature.	
		<b>D. SECTION 5.3.1.1 - THE MOUNTAIN SPINE</b>	
		1. (S1) states that the closing of the gap between Anysberg and Klein Swartberg should be encouraged through donation or resort development. The Department would just like to indicate that 'Resort Development' has not yet been reflected in the draft Rural Development Guidelines.	1. Noted.
		2. (S2) states that the protection of CBAs should be promoted through stewardships. However stewardships are no longer being set up due to financial constraints at CapeNature.	2. To be confirmed with CapeNature. See item 3 for the comment received from CapeNature who have not commented on the protection of CBAs through stewardships.
		<b>E. OTHER DOCUMENTATION / MORE INFORMATION REQUIRED</b>	
		1. Section 5.3.2.9: The Department prepared an SEA on wind energy. Is Kannaland Municipality affected by this document? This point also refers to Section 5.5.3.	1. DEA&DP to provide CNdV with a copy of the SEA on Wind Energy for inclusion in the SDF. This information may not be made available to the public.
		2. The Department is in the process of revising the Provincial Spatial Development Framework. Through this process the Heritage & Scenic Landscapes Specialist Study has been prepared. This could inform Section 5.3.5.	2. DEA&DP to provide CNdV with a copy of the Heritage and Scenic Landscapes Specialist Study for inclusion in the SDF.
		3. The Department will review the Calitzdorp Structure Plan to identify relevant sections to be included in the SDF.	3. DEA&DP to provide information for inclusion in the SDF to CNdV, see item 2.2.
5.	Raynita Robertson 10/06/2013	4. Section 5.12.2: needs to make reference to the Act 9 Areas.	4. Section 5.1.2.2. will refer to the Act 9 Areas. CNdV to liaise with DEA&DP and DRDLR, see Item 2.3.
		<ul style="list-style-type: none"> <li>Will the SDF look at the 7 neighbouring Municipal SDF's, or will it only be on the critical ones?</li> <li>Figure 5.3.1.1 – the grey hatch on the grey background makes it unreadable. Consider orange or yellow for the urban extend for example.</li> <li>Bulk services remain a challenge with the Municipality, and it has a ripple effect on the development of the area.</li> <li>It will be great if the SDF can give the implementing agent guidance to the type/character of houses that should be provided in the</li> </ul>	<ul style="list-style-type: none"> <li>The alignment with the surrounding SDF is discussed in the Status Quo Report, section 2.6, see Figure 2.6.1.</li> <li>Grey fill for Urban Development to be amended to be light yellow.</li> <li>Noted.</li> <li>A Housing Toolkit (proposed housing typologies) can be provided as an Annexure to the SDF.</li> </ul>



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6	DEA&DP Directorate: Environmental & Spatial Planning  Tania de Waal  28/03/2013	settlements. The character of the settlement will be improved upon. The principles are noted, but I wonder if the implementing agents understand to implement it.	
		<b>6.1 General Comments</b>	
		6.1.1 The draft is very thorough. This being said, on reading the Draft from start to finish, it becomes apparent the draft contains a bit of repetition. This can be attributed to the desire to make each section a stand along report. However when reading all the section together this repetition becomes apparent. The department is aware that this situation will be resolved through the refinement of subsequent drafts.	6.1.1 The Status Quo report and Draft CDF report are to be read as two respective stand alone reports.
		6.1.2 The draft will benefit from final editing to remove any minor spelling grammatical errors.	6.1.2 Noted.
		6.1.3 In terms of the current Provincial branding the acronym PGWG must be replaced with WCG (Western Cape Government).	6.1.3 PGWG will be replaced with Western Cape Government (WCG).
		<b>6.2 Introduction</b>	
		6.2.1 Section 1.3 states that the SDF must ... "provide a visual representation of the designed spatial form...". The Department questions whether the word designed should be replaced with desired.	6.2.1 Section 1.3 – designed to be replaced with desired.
		6.2.2 Section 1.4 must be altered. Province will no longer approve Municipal SDFs in terms of Section 4(6) of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985).	6.2.2 Section 1.4 will be amended to reflect the approval of the SDF in terms of the MSA, Act 32 of 2000.
		6.2.3 Section 1.5 The National Development Plan (NDP) is the latest document at National level which guides development in the country. Reference to this plan should be included. As the section continues, it states that "the SDF must guide all the Municipality's departments as well as national sector departments, State Owned Enterprises (SOEs)..." The department questions whether Provincial sector departments should be included in this sentence as well. This point is also relevant for Section 1.6.1.	6.2.3 Section 1.5 will make reference to the NDP. Proposed narrative, i.e. reference to provincial sector departments, to be included in section 1.5 and 1.6.

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		6.2.4 Section 1.6.1 Product 3 makes reference to the PGDS, NSDP, District SDF and District IDP etc. The department questions whether the PGDS should be replaced by Provincial Strategic Objectives (PSOs) and whether the National Development Plan should also be referred to. This section goes on the state that "high agricultural potential and areas affected by claims which Municipality needs the most for development purposes; and". The department is confused by this statement. Perhaps this can be reworded.	6.2.4 Section 1.6.1 will make reference to NDP. PGDS will be replaced with the Provincial Strategic objectives in section 1.6.1 and 2.2.6.
		<b>6.3 Governance and Legislation – Implications</b>	
		6.3.1 Section 2.1.2.2 states the need to "focus on inner city metropolitan ..." The department questions whether this is appropriate for Kannaland.	6.3.1 Section 2.1.2.2 is part of the summary as per the NDPG. The implication specific to Kannaland to be provided.
		6.3.2 Section 2.1.3 the last sentence of the first paragraph does not end.	6.3.2 Section 2.1.3 – the last sentence of the first paragraph reads as follows: "The basic premise of the NSDP is that there are not enough resources to satisfy all needs wherever they may occur, then they should be allocated to where the benefits will be greatest." Clarity required.
		6.3.3 Page 8 refers to Thusong Service Centres as "(formally known as Multi-Purpose Community Centres)". However, the draft does not consistently utilise the term Thusong Service Centres (refer to page 14 and 15).	6.3.3. The terminology for Thusong Service Centres (formally known as Multi-purpose Community Centres) are as they are referred to in the respective policies that are summarised. The later policy documents make reference to Multi-purpose Community Centres while the current policies refer to Thusong Service Centres.
		6.3.4 Section 2.1.4 Department of Environmental Affairs and Tourism: South Africa's National Biodiversity Strategy and Action Plan. Please date this document, particularly in view of the fact that these departments have split.	6.3.4 Date reference to be provided for section 2.1.4.
		6.3.5 Section 2.1.5 Regional Industrial Development Strategy refers to "Gauteng's Blue IQ". Is the Economic Development Partnership (EDP) filling this role in the Western Cape?	6.3.5 To be confirmed with the EDP (Economic Development Partnership). No confirmation received.
		6.3.6 Section 2.2.2 the Department of Transport & Public Works is currently preparing the Western Cape Infrastructure Framework which may provide more up-to-date information than the 2006 SIP.	6.3.6 DEA&DP to provide CNDV with a copy of the Western Cape Infrastructure Framework for inclusion in the SDF.
		6.3.7 Figure 2.10, referred to in Section 2.2.3, is not included in the report.	6.3.7 Reference to Figure 2.10 to be removed from Section 2.2.3.

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		6.3.8 Section 2.2.5 Implications box identifies the Ladismith golf course but does not refer to the proposed golf course estate development in Van Wyksdorp.	6.3.8 Section 2.2.5 implications box to refer to the proposed golf course development in Van Wyksdorp.
		6.3.9 Section 2.2.8 must be edited. The Settlement Restructuring Manual is not approved as a Structure Plan in terms of Section 4(6) of LUPO. Only the Provincial Spatial Development Framework was approved as a LUPO 4(6) structure plan in 2009.	6.3.9 Reference to the approval of summary document as per section 2.2.8 in terms of section 4(6) LUPO to be removed.
		6.3.10 Section 2.2.9 the acronyms used in this section are quite confusing. Refer to the hardcopy for further input.  IRPTN = Integrated <b>Rapid</b> Public Transport Network IRTN = Integrated <b>Rural</b> Transport Network  Furthermore, the Section refers to the implementation of “a universally accessible and multimodal IRT phase 1a by 2014”. Does this refer to the City of Cape Town's project alone or does it also refer to Kannaland Municipality?	6.3.10 The acronyms used are as per the Provincial Land Transport Framework.  Reference is to the City of Cape Town project.
		6.3.11 Has Eden District's Heritage Management Policy, referred to in Section 2.3.1, been developed?	6.3.11 To be confirmed with the Eden District Municipality. Not been done.
		<b>6.4 The Current State of the Municipality</b>  6.4.1 Section 3.2.8.2 highlights the important role water plays in the economy of Kannaland. Section 3.1.11.1 also highlights the location of settlements along water courses and the significant layered sequence of networks for the capture, leading and distribution of water. This implies that water is significant to the Municipality not only for the role it plays in the economy but also the role it plays in the heritage, character and culture of the Municipality.  Section 3.2.8.6 further underlines this point through the inclusion of Table 3.2.8.6 which states that long-term crops (irrigation) generate the highest income. Can the spatial extent of long-term crops (irrigation) be extended across the Municipality? What are the factors which limit this expansion, does water availability / distribution play a limiting role? Refer to the Implications box on page 102.  Section 3.4.1 states that Hoeko has a “water monument” which has	6.4.1 Section 3.2.8.6 to be amended to explain if the spatial extent of long-term crops (irrigation) can be extended across the Municipality if the information is readily available.



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		significance for tourism. Indicating yet another role water plays in the Municipality.	
		6.4.2 On page 97, figure 3.2.8.4 is in fact a graph. This figure / graph highlights the changing / maturing nature of Kannaland's economy. Is this a positive / worrisome situation?	6.4.2 Reference to Figure 3.2.8.4 to be replaced with Graph 3.2.8.4. The Municipality experienced a reduction in the agriculture sector and an increase in the finance and business sector between 1996 to 2009.
		<b>6.5 Socio-Economic Conditions</b>	
		6.5.1 From Figure 3.3.1.1, it appears that the population of Ladismith and Zoar are very densely distributed. This is particularly the case when comparing the population distribution with that of Calitzdorp. Is this the case?	6.5.1 Population per settlement will be extracted from Census 2011 as this information is now available (population per settlement was not available at the time of the preparation of the Status Quo report). Population per settlement as per Census will be cross referenced with Figure 3.3.1.1.
		6.5.2 Figure 3.3.4.1 indicates one secondary school (Ladismith) and two combine schools (Ladismith and Calitzdorp). This implies that children old enough to attend secondary school will either have to reside in Ladismith or Calitzdorp or travel great distances to gain access to these facilities. The current spatial form will have major implications for Kannaland Municipality and these implications should be explicitly drawn out in the Implications Box. The roads to and from Ladismith and Calitzdorp may require the development of a Non-motorised transport plan etc.	6.5.2 Schools located in the Municipality to be confirmed with the Department of Education. Proposed narrative to be added to the implication box, section 3.3.3 (Education).
		6.5.3 Figure 3.3.4a is titled Census Education. However, the figure depicts the "location of those with no secondary education". The department proposes that the title of this Figure is changed.  The figure indicates that there are high levels of no secondary schooling in the areas surrounding Ladismith and Calitzdorp. This is slightly concerning as it implies that residing in physical proximity to a secondary / combined school does not necessarily result in secondary school level education being achieved. Could this be a result of factors other than physical proximity?	6.5.3 Title of Figure 3.3.4.a to be amended to read: Census Education: Location of those with no secondary education.  Possibly learners do not complete secondary school due to social ills.
		6.5.4 Section 3.3.4.2 states that "56% - 87% of the labour force in Calitzdorp and Van Wyksdorp are employed". Could this be linked to seasonal workers?  Figure 3.3.6.1 indicates the spatial distribution of the employed	6.5.4 Reason for labour force in Calitzdorp and Van Wyksdorp to be provided in section 3.3.4.2.  Link between population distribution and distribution of

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		workforce. Can a link between this Figure and Figure 3.3.1.1: Population Density be drawn?	employed workforce to be drawn and included in section 3.3.4.
		6.5.5 Graph 3.3.4.3 indicates that the agricultural sector has experienced a huge decline in employment opportunities between 2001 and 2007. The graph does indicate that there has been an increase in some of the other employment sectors namely, manufacturing, construction and finance. As the backbone of the Municipality is agriculture, and in light of the low levels of education in the Municipality, this should be mentioned in the Implications Box.	6.5.5 The proposed narrative to be included in the implication box for section 3.3.4.
		6.5.6 Graph 3.3.4.6b may be more legible if the average income per race group was included.	6.5.6 Average income per race group to be provided if this information is readily available.
		6.5.7 Figure 3.3.4.6 can any links between the topography / soils Figures and this Figure be drawn? Areas of great scenic beauty, mountainous areas will be more suited to tourism activities which by their very nature are more lucrative than agriculture.	6.5.7 See synthesis section.
		6.5.8 Section 3.3.4.8 Implication Box states that Kannaland could develop into a retirement area. In order for this to be achievable, the limited health care facilities may have to be addressed.	6.5.8 Proposed narrative to be included in section 3.3.4.8 implication box.
		6.5.9 Graph 3.3.6.1 depicts the shocking decline in the agricultural sector's contribution to the GVA and the increase of manufacturing, construction, wholesale & retail, and finance. Are these trends indicative of a maturing economy; are these trends likely to continue? Is the labour force managing to keep abreast with this changing emphasis? Does the labour force have the necessary skills / education to participate if his trend continues?	6.5.9 Graph 3.3.5.1 (not 1.1.6.1) shows the sector contribution to the GVA for the local and district municipal areas for 2001 and 2009. See table 3.3.5.2.
		6.5.10 Section 3.3.7 does Kannaland Municipality require land to be identified for the creation of cemeteries?	6.5.10 Need for Cemeteries to be confirmed with the Municipality, see Item 7.10. No information received.
		6.5.11 Section 3.3.11.3 states that a heritage overlay zone for the two mission settlements was not created as it "might place undue financial strain on the local population". It goes on to say that the provisions of the National Heritage Resource Act provide sufficient heritage protection. The department welcomes this approach but would appreciate guidance from the Municipality as to whether this approach will be accepted by the residents.	6.5.11 See item 4.1.
		<b>6.6 Urban Settlements and Hierarchy</b>	

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		<p>6.6.1 Section 3.4.1 refers to the Rural Areas Act (Act 9 of 1987) in Zoar. It may be useful to map the properties affected by this Act. Furthermore, it may be useful to include a section which briefly describes the main elements of this Act and the impact it may have on achieving the desired spatial form for the settlement.</p> <p>6.6.2 Input from Eden District Municipality will be welcomed in terms of Section 3.4.7 and the planning and develop of the regional solid waste site.</p> <p>6.6.3 Section 3.4.9 states that "the replacement of the conservancy tanks in the 'old town' should be undertaken". It is the department's understanding that this is not likely to occur due to the geological conditions under the town.</p> <p>6.6.4 Are the housing sites depicted on Figures 3.4.11.1 – 3.4.11.4 working toward creating integrated settlements? In light of Section 2.7, a statement on the location of these parcels would be welcomed.</p> <p>6.6.5 Section 3.4.13 the apparently uncontrolled erection of information boards has resulted in a cluttered and unattractive appearance. This was particularly evident in Ladismith. Mentioning this state of affairs now will build the argument for the development of a signage guideline for the Municipality in the proposals section.</p>	<p>6.6.1 See item 2.3.</p> <p>6.6.2 See item 2.1.</p> <p>6.6.3 Section 3.4.9 to be amended to read: "the replacement of the conservancy tanks in the 'old town' should be undertaken if geological conditions permit."</p> <p>6.6.4 A statement on the locations of the proposed housing sites as per the DoHS should be provided in the HSP.</p> <p>6.6.5 Proposed narrative to be included section 3.4.13. Preparation of signage guidelines to be added as a project in the implementation framework section.</p>
7.	<p>Kannaland Municipality 32 Church Street Ladismith 6655</p> <p>Nigel Delo</p> <p>03/03/2013</p>	<p><b>A: RESPONSE TO PROVINCIAL COMMENTS:</b></p> <p><b>7.1 Section 1.3:</b></p> <p>We concur with the Provincial comment. The word "desired" must replace "designed" since it would then include future and general development intent.</p> <p><b>7.2 Section 1.4:</b></p> <p>We take note that Province will no longer approve Municipal SDF's in terms of LUPO.</p> <p><b>B: RESPONSE FROM KANNALAND MUNICIPALITY</b></p>	<p>7.1 See item 6.2.1.</p> <p>7.2 See item 6.2.2.</p>



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		<p><b>7.3 National Policy and trends</b></p> <p>Whilst globalisation certainly has the effect of "joining up", this trend also works inversely in that it enhances the existing social distances that a rural local municipality such as Kannaland experiences with the following local trends which must be referred to under the implications for Kannaland (Page 12):</p> <ul style="list-style-type: none"> <li>• Migration of skilled force away from rural to the metropolitan areas because of better opportunities and services. This can be seen in that whilst the education statistics for the area point towards an increase in the education levels of local inhabitants, these individuals are not able to locate jobs commensurate with their skills, locally.</li> <li>• Alternative energy levels: Whilst being prohibitively expensive, with the infrastructural backlogs, the municipality just does not have an adequate resource base to leverage the benefits from AE projects.</li> </ul>	7.3 Proposed narrative to be included in section 2.1, implication box.
		<p><b>7.3.1 SA political economic dynamics: Implication for Kannaland Municipality:</b></p> <p>Local Industries/food production: Can we include include Agri-processing. Whilst there is a strong agriculture export sector in fruit (grapes, stone fruits) and dairy, these industries point to downstream value-add opportunities for example extracts, yoghurts, etc.</p>	7.3.1 Proposed narrative to be included in section 2.1, implication box.
		<p><b>7.3.2 Development of strong regional brand through a SDF which promotes tourism and does not just play lipservice</b></p> <p><i>I addition to Architectural styles unique to area we also need to mention that:</i></p> <p>The relative small size and the divergent brands pushed by the two Local Tourism Bureau (Calitzdorp and Ladismith) contributes to the fact that these two towns can do very little with their respective budgets compared to the potential benefits which can be derived from a strong regional tourism brand, with which we will be able to leverage and support other strong regional tourism brands such as <sup>1</sup>Winelands-Port-Route 62-Ladismith-Calitzdorp, <sup>2</sup> Mossel bay (Robertson-Calitzdorp Tourism Corridor) and the Route 62 which is a strong tourism brand.</p> <p>A strong regional tourism structure will also be able to achieve the following:</p> <ul style="list-style-type: none"> <li>• Better marketing through efficient road signage which can enhance the Kannaland brand, and also curb illegal signage which has the</li> </ul>	7.3.2 Proposed narrative to be included in section 2.1, implication box.

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		<p>long term potential to erode the tourism potential of the region.</p> <ul style="list-style-type: none"> <li>• Better packet of benefits for tourism bureau membership.</li> <li>• Leverage the collective budgets of big tourism products which have budgets even larger than the bureau in some cases and which lead to the “big brother” syndrome for example the Fancourt-Gartour experience where such large products tend to become inward looking and are not able to align, cooperate and fail to harness able to derive benefits for the broader tourism economy, but yet placing pressure on the public fiscus and public infrastructure.</li> </ul>	
		<p><b>7.4 Section 2.1.2.4</b></p> <p>Please refer to Projects lists in Draft IDP- Annexure-Page Multi-purpose Centre- Centre of town-adjacent to Library and Town Hall: MPCC will serve as one-stop service agency. Rural focused projects</p>	<p>7.4 Section 2.1.2.4 is a summary extracted from the NDPG. The comprehensive list of IDP projects is in Section 2.4.1. Update Section 2.4.1 to be the IDP projects as per the latest approved IDP.</p>
		<p><b>7.5 Proposal: Expansion of SDF to include section on the RURAL characteristics of the Municipality</b></p> <p>Against a background of energetic work on the part of the municipality to turn the municipality around in terms of making it financially viable, entrenching corporate good governance, creating a culture of performance management and service delivery, the municipal area contains within it vast areas which can be typified as rural and which has a notable impact upon the municipality in terms of daunting service delivery backlogs, also impacting negatively in that the rural poverty nature of the municipality also impacts negatively on its ability to become financially sustainable through it's a financial sustainable service model.</p> <p>The geographical coverage area of the municipality is characterised by vast areas which fall within rural areas which make service delivery difficult and costly, given our low resource base. There have been requests from the Provincial Department of Local Government to reflect on the status quo of the socio economic status and challenges of rural communities, specifically how they are mapped spatially in relation to rural communities. Specifically we have been requested to indicate the housing back log, the service delivery backlogs (sanitation). Province has requested the municipality to maintain a rural focus by means of:</p> <ol style="list-style-type: none"> <li>1. Separate Housing list</li> <li>2. Service Delivery projects focused at rural communities.</li> </ol> <p>The opportunity created by more detailed ward-based data sets</p>	<p>7.5 Kannaland Municipality to provide CNdV with the Separate Housing list and Service Delivery projects focused at rural communities for inclusion in the SDF. No information received.</p>

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		<p>becoming available means that the SDF is in need of a specific focus which defines the challenges of the municipality in so far as the following:</p> <p><b>Rural Settlements</b>  Service Delivery backlogs- for example  <u>Municipal</u>  Housing  Sanitation  <u>Cross Sectoral Issues</u>  Mapping Spatially the various programmes identified in the Cross Sectoral Alignment contained in the draft IDP  Mapping spatially the social welfare network (grant) in relation to the challenges (unemployment, crime, poverty, social displacement)  This section is made more relevant by the social trends/faultlines:  - social displacement due to labour issues (ESTA on the increase due to wage sectoral determination)  - the increasing pressure on service delivery organs of the municipality</p>	
		<p><b>7.6 Section 2.4.3</b></p> <p>Vacant Land Audit can be extended to include the Council properties which must be seen as a integral component of a Land Use Assessment exercise and Local Economic Development. The Municipal Property database must also include a zoning scheme, current use and projected possible use.</p>	<p>7.6 Section 2.4.3 is a summary of the Gap Analysis report prepared by DEA&amp;DP. The vacant land for the Municipality is noted in section 3.4.12. Await information from Municipality for inclusion in SDF.</p>
		<p><b>7.7 Section 2.5:</b></p> <p>Additional to the reference to the current abutting SDFS's and Land Use Schemes (those referred to are Oudtshoorn, Langeberg, Laingsburg, Hessequa), we must also include the <sup>(1)</sup> Prince Albert Municipality which is connected through the Swartberg Pass and <sup>(2)</sup> Mossel Bay because of the strategic importance of the Robertson Pass through which Kannaland is connected to Mossel Bay, which is connected through tourism, agriculture and socio-economic corridor/route.</p>	<p>7.7 Section 2.5 makes specific reference to Municipalities that are direct neighbours of the Kannaland Municipality. Links to neighbouring municipalities via tourism routes can be indicated in section 3.14.3 Tourism and Figure 3.4.13.1.</p>
		<p><b>7.8 Section 3.3.1.2</b></p> <p>Suggestion that the outstanding rates and services be plotted against geography (Ladismith, Calitzdorp, Zoar, Van Wyksdorp), urban-rural (Ladismith, Calitzdorp, Zoar, Van Wyksdorp, social stratification Urban vs Rural. I am sure the Kannaland Finance Section can provide us the data</p>	<p>7.8 Section 3.3.10.2 - Kannaland Municipality to provide CNdV with the outstanding rates and services per town (urban and rural split) in order for this information to be shown spatially. No information received.</p>



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		for these parameters.	
		<b>7.9 Section 2.2.9</b>  Concur with recommendation that municipality must allocate human resources.	7.9 Noted.
		<b>7.10 Section 3.3.7</b>  Suggest that the outcome be included to read "the identification" additional cemeteries. We have a regional wide problem with, given the soil/sub strata structure, our cemeteries being either full or close to capacity level. The text refers to the fact that a new graveyard is planned for Zoar. We can provide additional data on the cemeteries because there is support being provided from Province's side.	7.10 Kannaland to provide CNdV with the following information with respect to Cemeteries for inclusion in the Status Quo report: <ul style="list-style-type: none"> <li>• Confirm location of existing cemeteries;</li> <li>• Confirmation of cemetery need, i.e. future space requirements;</li> <li>• Location of proposed cemeteries; and,</li> <li>• Any studies related to the cemeteries in the Municipality.</li> </ul> No information received.
		<b>7.11 Section 3.3.8</b>  The implication should be drawn down to direct cross-sectoral alignment level, provided that we have access to more reliable data. The relationship should be created with soft and hard (Built): <ul style="list-style-type: none"> <li>• Built cross sectoral issues: Paving, lighting, location of police stations spatially in relation to crime hot spots (if we have this data) or could draw our own inferences from the public participation? Or other data which we might have; electricity theft, traffic offenders, library theft, municipal and other state shrinkage be it at input level or output level;</li> <li>• Soft cross-sectoral issues: Social programmes; food security programs, youth intervention (preventative and rehabilitative)- safety zones-deployment of, awareness programs-crime prevention- start with adherence to reliance on grants should be.</li> </ul>	7.11 Sections 3.3.8 to include maps indicating the location of the police stations (at the town level). Only statistical information is provided by SAPS. Any additional information Kannaland Municipality has access to for inclusion in the Status Quo report to be provided to CNdV.
		<b>7.12 Section 3.3.11.4-Single Point Heritage Resources</b>  Who has to supply this information? The municipality? Or other cultural heritage resource agencies?  We take note that a team of heritage specialists be commissioned to complete detailed heritage studies of each area and support this.	7.12 A Heritage Survey was prepared by a Heritage Specialist for the Municipality – See Status Quo Report dated 19 April 2013. Urban Conservation Areas are proposed for Ladismith and Calitzdorp.

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		<p>Can we provide a list of those sites which enjoy protection in terms of the relevant legislation so that we can align this with (where relevant) to our <sup>(1)</sup> operation and maintenance plans/budget, <sup>(2)</sup> create awareness locally amongst residents <sup>(3)</sup> harness as a tourism resource and align with our tourism marketing strategy.</p> <p>This could form part of a civic pride and awareness program where we can get residents to identify and nominate those sites of heritage significance for example those which are aware of at a cursory glance:</p> <ul style="list-style-type: none"> <li>• The birthplace of CJ Langenhoven</li> <li>• The birthplace of Morkel, a former newsreader at SABC</li> <li>• Sites of social-historical significance</li> </ul>	
		<p><b>7.13 Section 3.3.11.3</b></p> <p>Local Area Analysis: (PAGE 14) Could we also include a section on Van Wyksdorp. Given the very rural appeal of Van Wyksdorp can we speak to the physical and non-physical dimensions of the (sentence incomplete).....</p>	<p>7.13 See item 7.12. Van Wyksdorp is included in Section 3.3.11.</p>
		<p><b>7.14 Section 3.4.1</b></p> <p>Hoeko: Can we orientate that section more towards the agricultural, economic and tourism significance of the area.</p> <p>The reference to Hoeko being the birthplace of CJ Langenhoven should be inserted under section 3.3 and not 3.4.1</p>	<p>7.14 Section 3.4.1 Hoeko to be revised - discuss the agricultural, economic and tourism significance of the area. Reference to the birthplace of CJ Langenhoven to move from Section 3.4.1 to 3.3.11.</p>
		<p><b>7.15 Section 3.4.6</b></p> <p>Suggest that we include a section reflecting on the Provincial Operations and Maintenance budget and reflect this spatially under Transport Improvement Proposals.</p> <p>Page 117: Can we also delineate the immediate implications in the same formatting as the other chapters</p> <p>Page 117: The socio-economic and tourism yield of the Transportation business activity should also be identified for example:-</p>	<p>7.15 Kannaland Municipality to provide Provincial Operations and Maintenance budget for inclusion in section 3.4.6 Status Quo Report. No information received.</p> <p>The transport implications are spatially indicated in Figure 3.4.6.2. Additional implications from the Provincial Operations and Maintenance budget, if any, will be shown spatially if possible.</p> <p>This information can be included in the Status Quo report if it is readily available – Kannaland Municipality to provide</p>

#	INDIVIDUAL / DEPARTMENT	COMMENTS	PROPOSED RESPONSE/ ACTION
8.	Carel Nel BOPLAAS FAMILY VINEYARDS SINCE 1880 TEL: 044 2133326 FAKS: 044 2133750 E-MAIL: boplaas@mweb.co.za www.boplaas.co.za	<ul style="list-style-type: none"> <li>- Socio Economic spinoffs in terms of EPWP and contractor and service provider spinoff. Could we also try to align this with the revenue generation strategy of the municipality in terms of encouraging employees to pay their municipal bills where non-payment can be reflected spatially?</li> </ul> <p>Propose additional transport issues:</p> <ul style="list-style-type: none"> <li>- Illegal signage is a common problem along the R62 and the lack of enforcement from Provincial or a non-adherence on the part of the private sector to the signage regulations contributes to the breakdown of</li> </ul>	<p>information to CNdV. No information received.</p> <p>Proposed narrative to be included in section 3.4.6.</p>
		8.1 I am very happy that no housing will be permitted west of the R62 adjacent to Bergsig. There are already two families residing in an old brick building. They are there illegally and within the illegal radius of the WWTW and will need to be removed.	8.1 Noted.
		8.2 The property adjacent (see attached document) should also be proclaimed as nature conservation area.	8.2 To be discussed with Municipality
		8.3 The 32m river setback line for agricultural use is unclear and is not viable for Calitzdorp. Where are the flood lines? (100 year? or 50 year?)	8.3 The proposed setback line is as per the NEMA. The Municipality should confirm the setback lines with a Freshwater Ecologist.
		8.4 Development with the emphasis on agriculture and tourism will only be possible if good quality services are provided at affordable tariffs. The tariffs of electricity and water have raised high above inflation the last few years. This makes it very difficult for entrepreneurs to create job opportunities.	8.4 Noted.
		8.5 On the up side of emphasising agriculture and tourism, with guidance from the Municipal Manager (and the board), there is a sound understanding of its importance for job creation	8.5 Noted.



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