JUNE 2019

REVIEW OF THE SPATIAL DEVELOPMENT FRAMEWORK FOR MKHAMBATHINI MUNICIPALITY 2019

SPATIAL DEVELOPMENT FRAMEWORK

MKHAMBATHINI Municipality
For the community
uMkhandlu Wabantu

uMGUNGUNDLOVU
UMASIPALA WESIFUNDA
DISTRICT MUNICIPALITY
DISTRIK MUNISIPALITEIT

SANBI
Biodiversity for Life
South African National Biodiversity Institute

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1 INTRODUCTION

1.1 BACKGROUND

uMgungundlovu District Municipality (UMDM), in partnership with the South African National Biodiversity Institute (SANBI), have initiated a process towards the review of the Mkhambathini Municipality Spatial Development Framework (SDF).

This document presents a Spatial Development Framework (SDF) for the Mkhambathini Municipality. It is a further development of the municipality's Integrated Development Plan (IDP), and a means to fulfil the requirements of the Municipal Systems Act (MSA), Act No. 34 of 2000 hereafter referred to as the MSA. It is prepared in accordance with the MSA regulations, the Spatial Planning and Land Use Management Act (SPLUMA) and the Department of Rural Development and Land Reform (DRDLR) guidelines for the formulation of SDFs.

1.2 MKHAMBATHINI MUNICIPALITY

The uMgungundlovu District is one of the ten district municipalities that make up the KwaZulu-Natal Province. The district is located in the midlands part of the province, approximately 85km west of Durban. The N3, which is the busiest national highway in South Africa, passes through the area. This, coupled with the declaration of Pietermaritzburg as a capital of KwaZulu-Natal, makes the district one of the busiest districts in the Province. It covers an area of approximately 9 189.53 km^2 and is divided into seven local municipalities, of which Mkhambathini Municipality is the second smallest, accounting for 917km^2 (refer to map 1 on the overleaf).

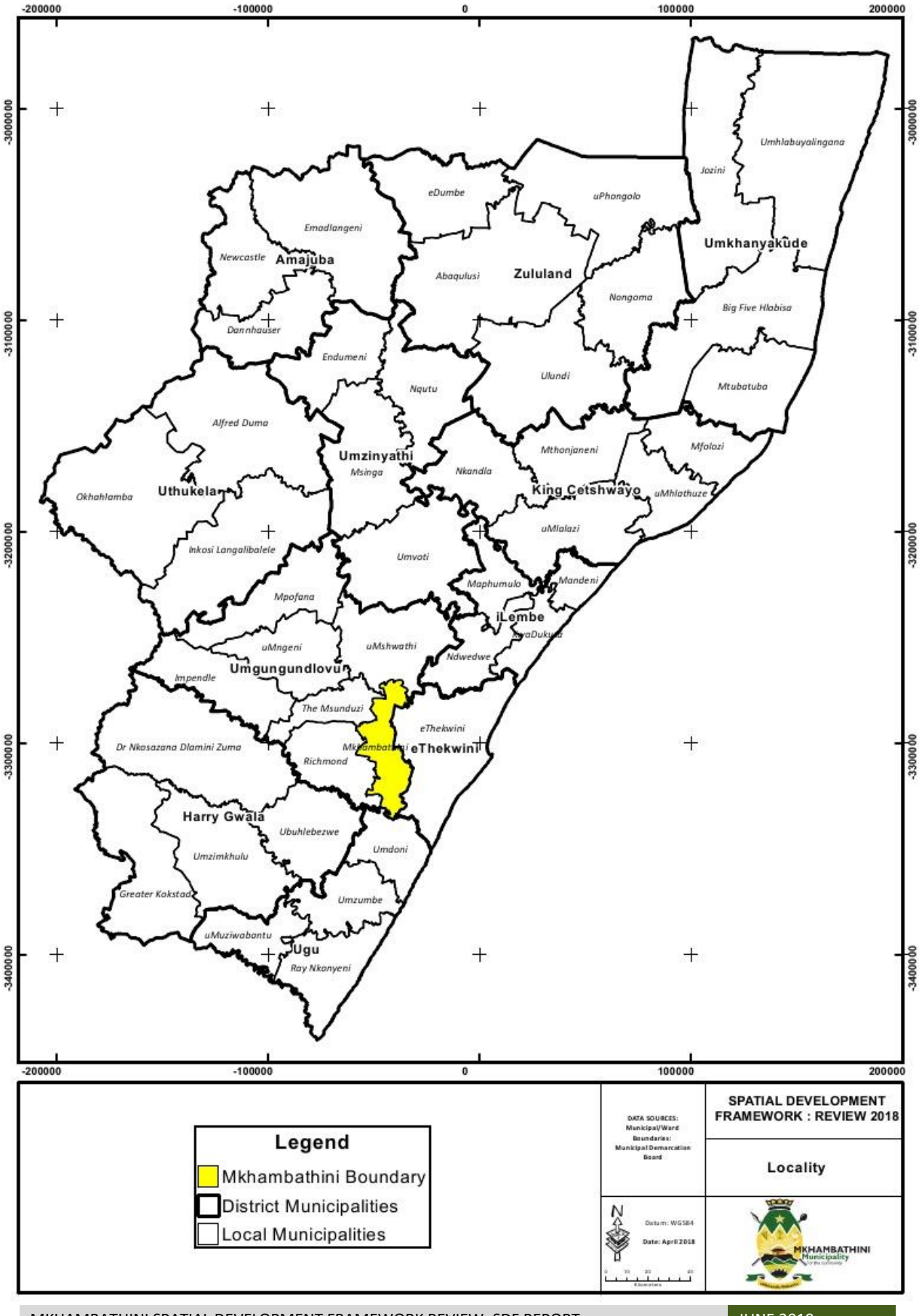
Mkhambathini has a population of approximately 57 075 people (2016) and consists of seven wards, with a large part of the municipality being rural in nature and underdeveloped. The four Traditional Authorities located in the municipality include Mapumulo Traditional Authority, MaNyavu Traditional Authority, Macala-Gwala Traditional Authority and the Embo-Thimuni Traditional Authority (refer to locality map on the overleaf).

The N3 corridor (identified as a Provincial Corridor in the PGDS) that runs through the municipality provides opportunities linked to the Provincial corridor development. Agricultural production centres on vegetables, nuts and sugar cane, and the area features the second highest concentration of poultry producers in the world, as well as pig and beef farming.

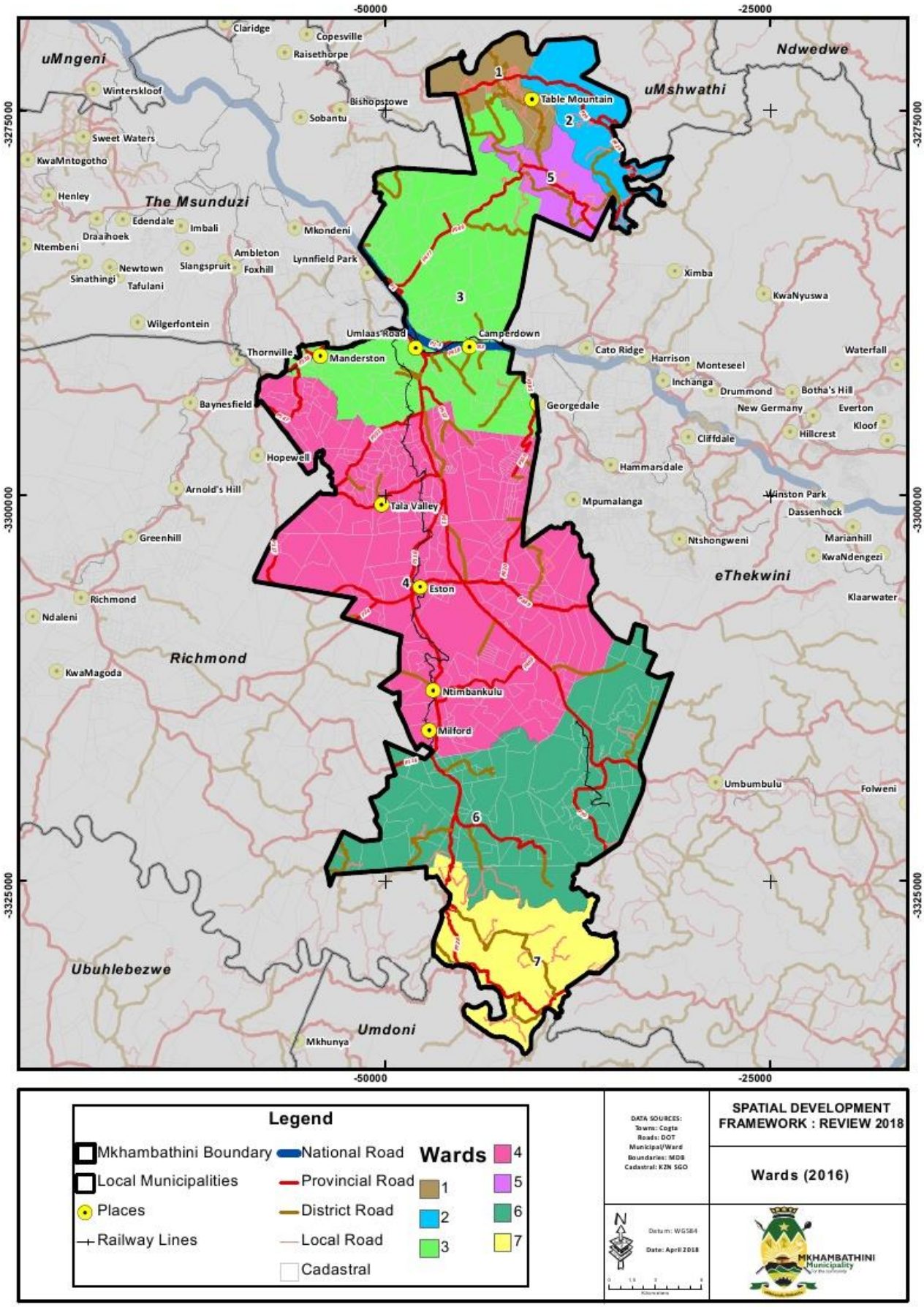
Tourism attractions include the Table Mountain, Tala Game Reserve, Gwahumbe Game Reserve, Lion Park Zoo, Raptor Centre, Nagle Dam and Umgeni Valley, while significant portions of the municipality fall within the Valley of a Thousand Hills.

The proposed SDF should cover the entire municipal area and contribute to the spatial transformation and development of the municipality as a functional, sustainable and generative administrative and economic region.

MAP 1: LOCALITY OF MKHAMBATHINI MUNICIPALITY



MAP 2: MKHAMBATHINI ELECTORAL WARDS 2016



1.3 DEFINING THE SPATIAL DEVELOPMENT FRAMEWORK

The Spatial Development Framework (SDF) is a process through which a municipality prepares a medium to long-term strategic spatial development plan for its area of jurisdiction. The SDF will serve as a principal strategic spatial planning instrument, which guides and informs all planning, land management, development and spatial decision-making in a municipality. It is a component of the Integrated Development Plan (IDP) and aims to create a spatial interpretation of the strategies and projects already contained within the IDP.

The SDF is also a transformation tool. It guides the form and location of future spatial development in a manner that addresses the imbalances of the past. It is a legislative requirement, and this gives it a legal status, but it should resonate with the national and provincial spatial development priorities. It enables the municipality to manage its land resources in a developmental and sustainable manner. It provides an analysis of the spatial problems and provides strategies and programs to address the challenges.

In summary, the SDF has the following benefits:

- It facilitates effective use of scarce land resources.
- It facilitates decision making regarding the location of service delivery projects.
- It guides public and private sector investment.
- It strengthens democracy and spatial transformation.
- It promotes intergovernmental coordination on spatial issues.
- It provides a framework for the preparation of more detailed and area specific spatial plans and a wall-to-wall Land Use Scheme (LUS) as envisaged in the KwaZulu-Natal Planning and Development Act (PDA), Act No. 06 of 2008 and the Spatial Planning and Land Use Management Act (SPLUMA), Act 16 of 2013.

In short, the SDF defines and facilitates a progressive move towards the attainment of an agreed upon desired spatial structure within the municipality's area of jurisdiction.

1.4 AIMS AND OBJECTIVES

The primary aim of this project is to review the Spatial Development Framework for Mkhambathini Municipality, which will address spatial, environmental and economic issues confronting a municipality.

Its objectives are as follows:

- To give effect to the vision, goals and objectives of the municipal IDP, Spatial Planning and Land Use Management Act and the National Development Plan.
- To engage the interested and affected parties in a strategic planning process considering their views, concerns and interests.

- To promote inter-governmental relations by ensuring that all relevant stakeholders are consulted and participate actively in the planning process.
- To provide for the spatial transformation of the municipal area.
- To provide for sustainable development in line with the norms and standards for environmental management.
- To facilitate the development of an efficient and effective spatial structure.
- To develop a framework for public and private sector investment – capital investment programme.
- In addition, the SDF is required:
- To comply with the Mkhambathini Municipality Spatial Planning and Land Use Management Bylaws.
- To complete the toolbox for effective spatial planning and land use management. This includes the generation of GIS data that would enable the municipality to promote environmentally sustainable and harmonious development.
- The SDF will be prepared in accordance with the guidelines as introduced by DRDLR and Chapter 4 of the Spatial Planning and Land Use Management Act (Act 16 of 2013).

1.5 ALIGNMENT BETWEEN THE SDF AND THE IDP

The review of the Mkhambathini Municipality SDF is intended, in part, to comply with Section 20 of the Spatial Planning and Land Use Management Act, Act 16 of 2013 (SPLUMA). The SPLUMA requires a municipality to prepare and adopt an SDF as a component of its Integrated Development Plan (IDP). Most importantly, the municipality has initiated this process to facilitate development of a spatial structure that promotes integrated development and an efficient delivery of services. The SDF will give direction to future planning and development within the municipality and provide a framework for a site or area specific land use management system.

The Constitution of the Republic of South Africa confers major developmental responsibilities to municipalities to ensure that the quality of life for its citizens is improved. An SDF therefore, forms part of the systems and procedures at the disposal of the municipality to perform on its developmental mandate and facilitate removal of spatial remnants of the apartheid past. The main purpose of the SDF is to guide the form and location of future spatial development within a Municipal area. It is a legislative requirement and has a legal status. It provides an analysis of the spatial problems and provides strategies and programs to address the challenges. In summary, the SDF has the following benefits:

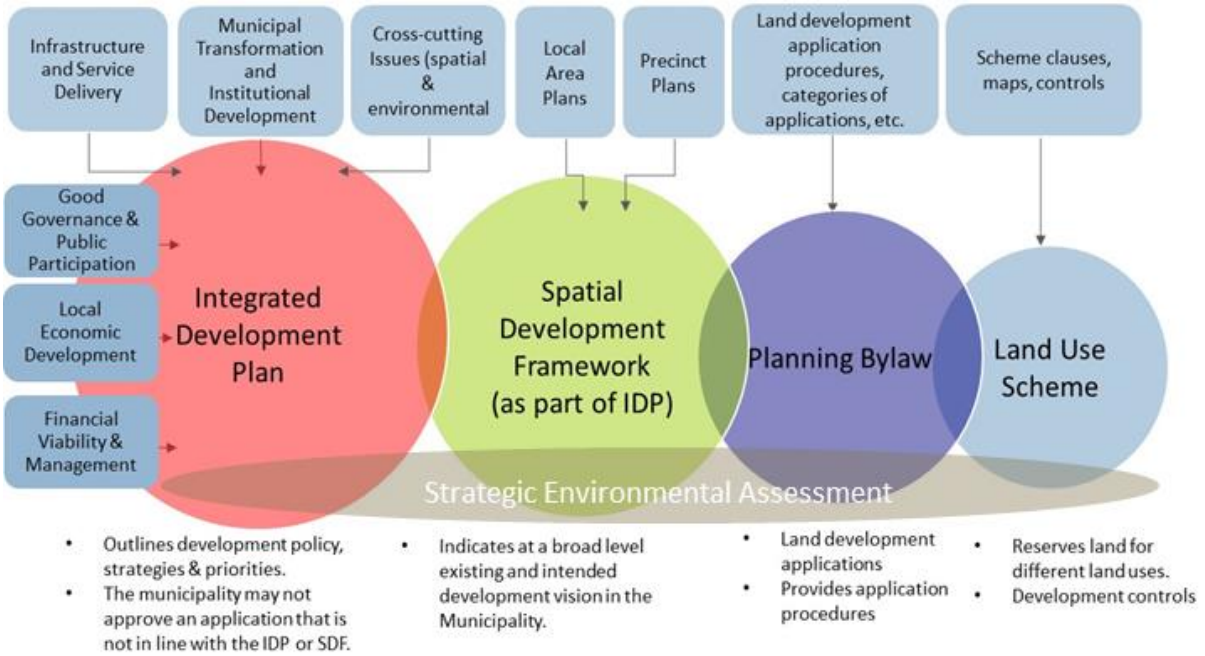
- As the SDF is a legislative requirement it has legal status and it supersedes all other spatial plans that guide development at local government level.
- The SDF will enable the municipality to manage its land resources effectively in a sustainable manner.
- Through the SDF, the municipality can develop and implement appropriate strategies and projects to address spatial problems and to guide private and public-sector investment.
- The SDF completes the strategic spatial planning toolbox of the municipality.
- In addition to the above, the SPLUMA also requires an SDF to include strategic environmental pressures and opportunities, environmental sensitivities, high potential agricultural land and a capital investment framework for the municipality's development programmes (refer to Box 1).

BOX 1: New Role of Municipal SDFs

- SDF must include both short (5 year development plan) and long-term (up to 20 years) developmental strategy and vision for the municipality linked to an implementation plan.
- IDP becomes a 5 year implementation plan of the SDF mobilising financial and human resources to implement the SDF.
- SDF must identify, quantify and provide location requirements of engineering infrastructure and services provision for existing and future development needs for the next 5 years.
- SDF must determine a Capital Expenditure Framework for the municipality's development programmes, depicted spatially.

Figure 1 indicates the link between the IDP, SDF, SEA and Land Use Scheme. As such, the IDP outlines the development principles and priorities of the municipality, while the SDF provides the spatial representation of the municipal development vision and the Land Use Scheme sets specific development parameters. The Strategic Environmental Assessment (SEA) process forms the link between the IDP, SDF and scheme by providing sustainability and environmental guidelines for spatial development.

FIGURE 1: IDP, SDF, SEA AND LUS PROCESS



In addition, the SDF should align with all sector plans (service delivery, LED, etc.) and be informed by a rigorous assessment of the state of the environment. This should form the basis for the preparation of a Strategic Environmental Assessment (SEA). UMDM has formulated a District Strategic Environmental Assessment and an Environmental Management Framework (EMF), which will inform the review of the SDF. Box 2 outlines environmental criteria that should be included in SDFs. It should however be noted that not all the environmental criteria are applicable to the Mkhambathini Municipality.

BOX 2: ENVIRONMENTAL CRITERIA (for inclusion in SDF)

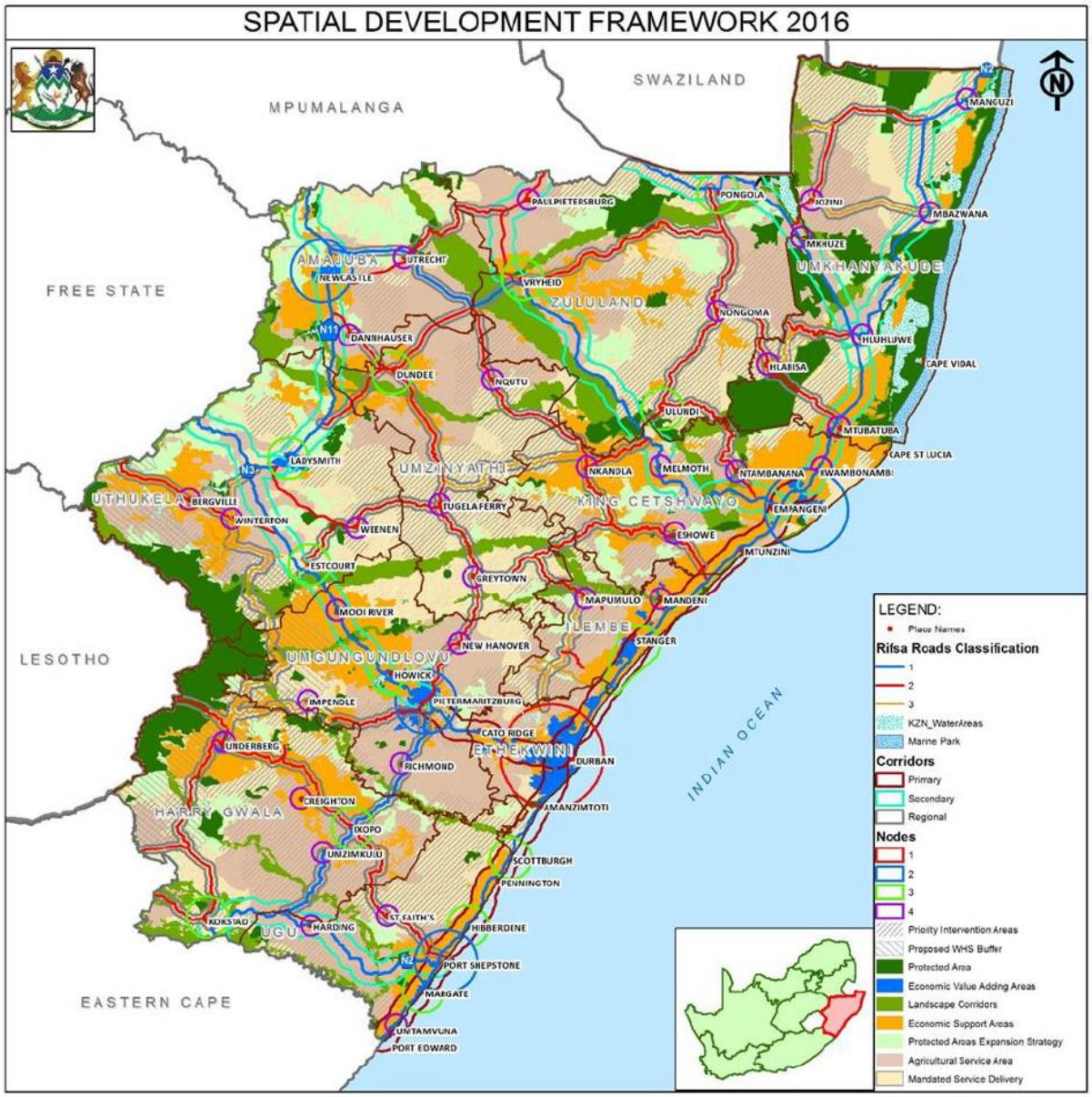
1. Biodiversity
   - Protected Areas (PAs)
   - Critical Biodiversity Areas (CBAs)
   - Ecological Support Areas (ESAs)
2. Water
   - Wetlands
   - River Channels & River Corridors
   - Strategic Water Source Areas
   - Ground Water
   - Dams
   - Waste Water
   - Water Catchments
3. Land
   - Topography & Ridge lines
   - High Potential Agricultural Land
   - Rural/Urban Transect
   - Services (roads, railway etc.)
   - Open space
   - Natural open space
   - Developed (Recreational) open space
   - Absorptive space
4. Forestry
   - Plantations
   - Natural (indigenous) forests
5. Cultural & Heritage Areas
   - Burial sites
   - Cultural WHS sites (UNESCO)
   - National heritage sites
   - Archaeological sites & Paleontological sites
6. Atmosphere
   - Air
7. Energy
   - Renewable Energy
   - Non-renewable Energy
8. Disaster Prone Areas
   - Flooding
   - Dongas & Erosion
   - Sink holes
   - Mining areas
   - Mass movements
   - Extreme weather prone areas
9. Waste
   - Non-hazardous waste
   - Hazardous
10. Invasive Species (SANBI 2017 list)

2 REGIONAL CONTEXT

2.1 PROVINCIAL CONTEXT

The Provincial Growth and Development Strategy for KwaZulu-Natal, includes a Provincial Spatial Development Framework, which depicts the main drivers of the economy, and spatially identify areas of focused investment by targeting areas of highest need, and the highest potential for improvement. The Spatial Development Principles illustrated by the adjacent figure will thus inform the intended outcomes of the Mkhambathini SDF as well.

FIGURE 2: KZN SPATIAL DEVELOPMENT FRAMEWORK



Mkhambathini is located along the N3 Primary Corridor and between the only primary node in the province (eThekwini) and the secondary node of Pietermaritzburg. In addition, large parts of Mkhambathini are Agricultural Investment Areas, while priority biodiversity areas to the north of

Camperdown and priority Social Investment Areas within the far northern and southern portions of the municipality are identified.

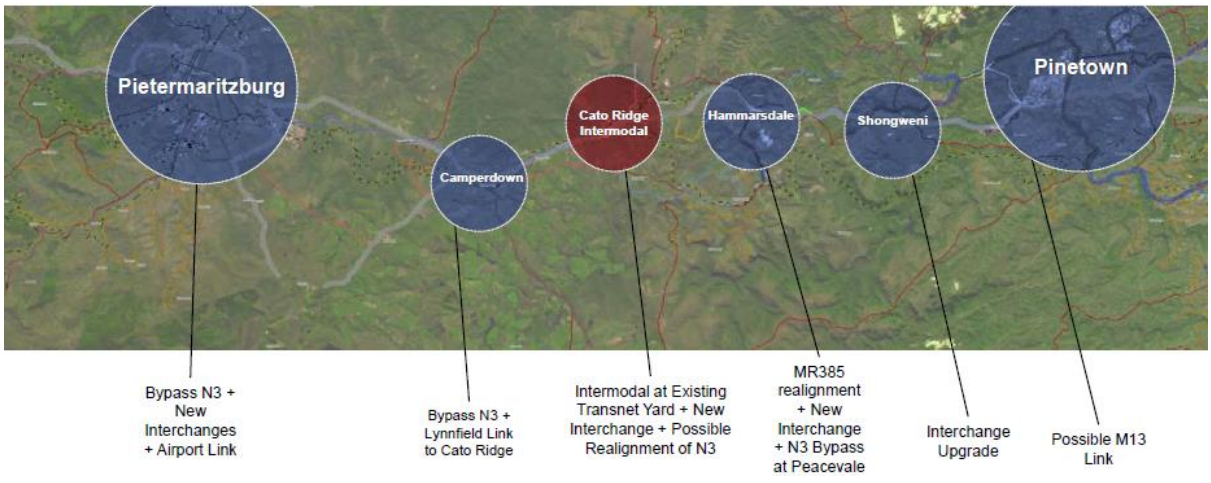
2.2 NATIONAL AND PROVINCIAL ROAD NETWORK

The N3 route between Durban and Gauteng is an established national route and especially significant for the logistics and distribution of goods to and from the Port of Durban and the industrial and commercial centres of Gauteng. The N3 is identified as part of the Strategic Integrated Project 2 (SIP 2), which was established as part of the 2012 National Infrastructure Plan and managed by the Department of Transport. The preparation of a N3 Corridor Plan provides a framework for the development of the corridor as a whole.

In the context of Mkhambathini, the N3 is the most strategically important route, cutting through the northern portion of the municipality in an east-west direction. The potential strategic impact of the corridor is seen as essential for the economic future growth of the municipality. Not only does the N3 route provide access to the only formalized town (Camperdown) within the municipality, but it also plays a significant role in the municipality tourism development potential and continued capacity for agricultural production and distribution.

The mere location of the town along this route and in a strategic position between Durban and Pietermaritzburg has led to increasing interest in logistics and warehousing related industries wanting to position themselves near Umlaas Road. The private market interest in the area is reiterated within national corridor development initiatives such as the Strategic Infrastructure Projects.

The N3 Corridor Development Plan located Mkhambathini in Region 1: KZN Industrial and Logistics Hub.



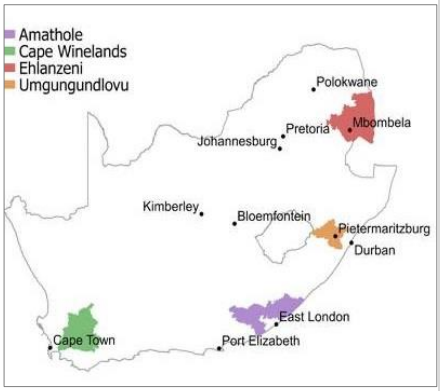
2.3 REGIONAL ENVIRONMENTAL CONTEXT

Mkhambathini is located within the Maputaland-Albany-Pondoland- Albany Hotspot, a globally recognised biogeographic region of significance, which contains unusually high numbers of endemic species, as well as globally unique ecosystem diversity in terrestrial, freshwater and marine systems. At least 70% of the original habitat, which occurred in this hotspot, has already been lost. Given the

above, Mkhambathini is an important role-player in global efforts to influence the world's extinction crisis and to ensure the continued functioning of ecological and evolutionary processes that allow biodiversity to persist over time at a global scale. On a national level the significance of the area has been recognised by the listing[1] of threatened ecosystems that occur within Mkhambathini. Municipalities are expected to take the need for protection of these listed ecosystems into account by, amongst others, applying restrictive land-use guidelines to ensure that further loss and degradation of natural habitat in these ecosystems is avoided. These ecosystems were also taken into account to produce the District-level Biodiversity Sector Plan is aimed at promoting biodiversity compatible development in spatial areas of priority.

The significance of the environmental value of the area is further underscored by the South African National Biodiversity Institute's (SANBI) Biodiversity and Land Use Project which aims to minimise the multiple threats to biodiversity in Mkhambathini (see **BOX**).

Box 1: SANBI's Biodiversity and Land Use Project



The uMgungundlovu District Municipality is one of four districts that were prioritised by the South African National Biodiversity Institute (SANBI) for '*mainstreaming biodiversity*' as a key strategy for addressing issues of biodiversity loss and ecosystem degradation. The district was chosen because:

- It falls within one of the most diverse corridors in the Maputaland-Pondoland-Albany hotspot and national biodiversity priority area.
- A large percentage of this district is comprised of high-yield water catchment areas, with numerous Freshwater Ecosystem Priority Areas.
- Just fewer than 1 million people live in the district, where there is mixed land use on commercial livestock farms and a strong emphasis on tourism. Extension of urban areas, major infrastructure and 'ribbon' development along the N3 corridor, are driving biodiversity loss.
- Water demand for the municipality and downstream users exceeds supply.

The objective of the Biodiversity and Land Use Project is to minimise the multiple threats to biodiversity by increasing the capabilities of authorities and land owners to regulate land use and manage biodiversity in threatened ecosystems at the municipal scale.

More information about the project is available at: https://www.sanbi.org/biodiversity/science-into-policy-action/mainstreaming-biodiversity/biodiversity-and-land-use-project/

[1] National list of ecosystems that are threatened and in need of protection, published in terms of Section 52 of the National Environmental Management Biodiversity Act (Act 10 of 2004) in December 2011. Government Gazette No 34809, Notice No 1002 of 9 December 2011.

Listed ecosystems must influence the Mkhambathini SDF and it must contain restrictive land-use guidelines to ensure that further loss and degradation of natural habitat in these ecosystems is avoided.

2.4 REGIONAL ADMINISTRATIVE ISSUES

2.4.1 SPATIAL PLANNING

The Umgungundlovu District Municipality is an important role-player in the spatial planning of the district. They have a regional planning role and has the mandate to support local municipalities and undertake a supportive co-ordinating role. Their function in terms of planning is to undertake district-wide planning and development facilitation, which is often referred to as a strategic function. They also have to provide support to and ensure alignment between planning processes of local municipalities.

2.4.2 REGIONAL ENVIRONMENTAL MANAGEMENT

An Environmental Management Framework (EMF) for the Umgungundlovu District has been prepared, but has not been gazetted yet and therefore has not been finalised in terms of the NEMA EMF regulations. The EMF will produce a spatial decision-support tool to help guide environmental decisions in the area. Information contained in the EMF may be used to inform local planning and land development and in particular the making of EIA decisions.

The District has also undertaken a Strategic Environmental Assessment (SEA) and prepared a Strategic Environmental Management Plan (SEMP).

3 SPATIAL DEVELOPMENT CONCEPT AND STRATEGY

The Mkhambathini Municipality's SDF gives effect to the long-term strategic intent and short to medium development program as outlined in the IDP. It presents the desired future spatial situation and outlined strategic interventions for its attainment.

3.1 MUNICIPAL SPATIAL DEVELOPMENT VISION

IDPs are aimed at ensuring that all municipalities fulfil their developmental responsibilities awarded in terms of the Constitution and are accordingly a critical legal requirement in terms of the Act. The municipality's development vision is a core element of the development strategy as outlined in the IDP, which fulfils the requirements of the Municipal Systems Act. The municipality's development trajectory is depicted in figure 3. The vision commits the municipality to development that unlocks opportunities for economic development, enhances the quality and sustainability of the environment, harmonises it with human development, and provides for access to services and development opportunities.

FIGURE 3: VISION FOR MKHAMBATHINI

IDP VISION STATEMENT

'By the year 2020 Mkhambathini will be a sustainable and developed municipality characterized by an improved quality of life for its entire people in the areas of environment, basic services, social, economy and development'

MISSION STATEMENT

Mkhambathini Municipality commits itself to the following:

- Upholding our leadership vision;
- Working with integrity in an accountable manner towards the upliftment of the community;
- Protecting and enhancing the interest of our clients at all times;
- Consistently performing our function with transparency honesty and dedication in dealing with clients;
- Responding promptly to the needs of our clients;
- Subscribing to the Batho Pele principles.

SPATIAL VISION

A municipal spatial structure which promotes the sustainable use of land, biophysical and infrastructural resources for the economic and social growth and development towards the most equitable distribution of local opportunities to various role-players within the municipality.

The departure point for Mkhambathini' s spatial vision is sustainability – a situation where the people, economy and environment of Mkhambathini thrive. Sustainability defined within this context has two dimensions. Firstly, ecological sustainability which recognises that the maintenance of healthy ecosystems and natural resources are preconditions for human well-being and that there are limits to the goods and services which they can provide. It implies that the activities in the area must seek to grow natural capital, not erode capital slowly. Secondly, social sustainability implies equity of access to key services (health, education, transport, housing, recreation and employment) for the communities that reside in the area, while equity between generations must also be secured. Future generations must not be disadvantaged by current actions.

Linking social and ecological sustainability implies that the interactions between society and nature, and the implications thereof must be better understood and managed if sustainability is to be advanced.

3.2 SPATIAL PLANNING PRINCIPLES

The municipality has to facilitate the development of a spatial system that is underpinned by various normative principles reflected in various policy documents and pieces of legislation including the Spatial Planning and Land Use Management Act (Act 16 of 2013). The guiding principles are outlined below.

3.2.1 SPATIAL JUSTICE

The principle of spatial justice must address the following issues:

- Past spatial and other development imbalances must be redressed through improved access to and use of land;
- Spatial development frameworks and policies at all spheres of government must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterised by widespread poverty and deprivation;
- Spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons;
- Land use management systems must include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas;
- Land development procedures must include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and
- A Municipal Planning Tribunal considering an application before it, may not be impeded or restricted in the exercise of its discretion solely on the ground that the value of land or property is affected by the outcome of the application.

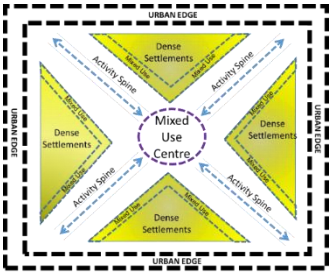
3.2.2 SPATIAL SUSTAINABILITY

The principle of spatial sustainability, whereby spatial planning and land use management systems must:

- promote land development that is within the fiscal, institutional and administrative means of the Republic;
- ensure that special consideration is given to the protection of prime and unique agricultural land;
- uphold consistency of land use measures in accordance with environmental management instruments;

- promote and stimulate the effective and equitable functioning of land markets;
- consider all current and future costs to all parties for the provision of infrastructure and social services in land developments;
- promote land development in locations that are sustainable and limit urban sprawl.

3.2.3 Spatial Efficiency



Currently settlements are characterized by segregation of land uses, urban sprawl and low-density development that cannot support public transport, or small businesses. This should be addressed through appropriate densification, as well as limiting the growth of settlements through the introduction of an urban / settlement edge. This principle requires that:

- Land development must optimise the use of existing resources and infrastructure;
- Decision-making procedures must be designed to minimise negative financial, social, economic or environmental impacts.
- Spatial efficiency can also be achieved through implementation of development application procedures that are efficient and streamlined and timeframes are adhered to by all parties.

3.2.4 Spatial Resilience

Flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.

3.2.5 Good Administration

This principle suggests the adoption of an integrated approach in spatial planning and land development, particularly by all spheres of government. The principle of good administration advocates that:

- All spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act;
- The requirements of any law relating to land development and land use are met timeously;
- All government departments must provide their sector inputs and comply with any other prescribed requirements during the preparation or amendment of spatial development frameworks;
- The preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, include transparent processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them; and
- Policies, legislation and procedures must be clear in order to inform and empower the public.

3.3 SPATIAL PLANNING AND DEVELOPMENT OBJECTIVES

3.3.1 SPATIAL DEVELOPMENT OBJECTIVES

The primary aim of the SDF is to facilitate the transformation of Mkhambathini into an integrated and sustainable spatial system. The SDF will influence directly the substantive outcomes of planning decisions towards the attainment of the following strategic objectives:

Mkhambathini IDP Objectives	Mkhambathini SDF Objectives
To build an efficient and sustainable local government structure.	
	To give a spatial expression to the development vision, strategy and multi-sectoral projects as outlined in the IDP.
To promote an equitable access to infrastructure and basic services.	To facilitate the development of sustainable human settlements across the continuum and in line with national policy directives.
To create a condition conducive to economic development	To create a spatial environment that promotes and facilitates economic development and growth.
To promote sustainable social and economic development	To facilitate sustainable and efficient utilisation of land
To create a spatial framework that facilitates an equitable distribution of development	To guide private and public investment to the most appropriate areas in support of the municipal spatial development vision; To provide a visual representation of the desired spatial form of the municipality.
To promote sustainable and integrated land use pattern.	To promote sustainable development and enhance the quality of the natural environment.

3.3.2 SDF STRATEGIC FOCUS

The table below provides an indication of the linkage between the IDP and SDF.

GOALS	IDP STRATEGIC OBJECTIVES	IDP STRATEGIES/PROJECTS	KEY SECTOR PLANS THAT INFORM THE SDF	SDF STRATEGIC RESPONSE
KPA 2: BASIC SERVICE DELIVERY				
Identify backlogs in order to improve access to services and ensure proper operations and maintenance	• To ensure the provision, upgrade and construction of infrastructure and services that enhance socio-economic development within the municipality	• Review Maintenance Plan • Prioritise Re-gravelling of Road infrastructure • Provide access to roads	• Housing Sector Plan (Draft 2018), which outlines a housing delivery agenda and a programme for the transformation of the existing	• Improving movement and access (corridors) • Focusing development in strategic nodal points • Developing sustainable human settlements

GOALS	IDP STRATEGIC OBJECTIVES	IDP STRATEGIES/PROJECTS	KEY SECTOR PLANS THAT INFORM THE SDF	SDF STRATEGIC RESPONSE
	• To ensure healthy living community • To ensure safe and healthy environment • To ensure provision of free Basic Services • To ensure integrated housing development within the municipality • To ensure that the municipal infrastructure assets are maintained • To ensure continuous maintenance of municipal roads and storm-water drainage • To ensure the integrated electrification development project within the municipality	• Provide access to community service and sorting facilities • Upgrade and maintain infrastructure within the municipality • Provide refuse removal services • Update indigent register • Facilitate housing meetings with developers and Department of Human Settlement • Facilitate the access to basic electricity • Maintain roads and storm water drains	settlements into sustainable human settlements. • Water Services Development Plan –UMDM (WSDP) • UMDM prepares operations and Maintenance plan for water and sanitation. District WSDP was last reviewed in 2017 and has an adopted O&M plan.	• Improving access to basic services and bulk infrastructure • Protection and enhancement of the natural environment • Protection and enhancement of agricultural land • Clustering public facilities and economic activities at development nodes.
KPA 3: LOCAL ECONOMIC DEVELOPMENT AND SOCIAL DEVELOPMENT				
Create and Promote an environment that promotes the development of the local economy and facilitate job creation through sustainable projects.	• To ensure functional Rural Economic Development Projects • To promote emerging business • To promote the rights of designated groups • To Promote Sports and Recreation • To combat HIV and AIDS • To assist community in fighting poverty • To create a conducive environment for Local	• Facilitate the implementation of LED projects • Develop LED Strategy; • Identify land for development • Facilitate disaster awareness campaigns • Facilitate youth programmes • Host senior citizens and fun day for children • Implement HIV and AIDS Programmes	• Local Economic Development Strategy (2016), which establishes an economic development agenda and identifies economic development opportunity areas	• Unlocking economic development potential through agriculture, tourism and manufacturing; rural development and agrarian reform. • Protection and enhancement of agricultural land • Protection and enhancement of the natural environment.

GOALS	IDP STRATEGIC OBJECTIVES	IDP STRATEGIES/PROJECTS	KEY SECTOR PLANS THAT INFORM THE SDF	SDF STRATEGIC RESPONSE
	Economic and Rural Development • To Promote Tourism within the Municipal Area • To promote Arts and Culture Activities	• Implement SMME. Cooperatives programmes and projects • Facilitate rural development through support programmes • Develop tourism strategy • Support Local Tourism • Facilitate and implement crafters support programmes • Facilitate library events		
KPA 6: CROSS CUTTING ISSUES				
Development of schemes and unlocking of land	• To Facilitate spatial development in the entire area of Mkhambathini Municipality • To ensure that Planning and Development Priorities of the Municipality are accounted for • To Facilitate and review the Spatial Development Framework • To promote effective and efficient building control services • To ensure Integrated Housing Development within the Municipality • To Improve performance and functioning of the Municipality • To provide support on disaster management services	• Develop land use management Scheme • Develop and implement a credible IDP • Develop and implement a Spatial Development Framework.	• Housing Sector Plan (Draft 2018), which outlines a housing delivery agenda and a programme for the transformation of the existing settlements into sustainable human settlements. • Urban Scheme (2014), highlighting the growth direction of the main nodes. • Rural Land Use Management Policy (2014), which identifies the various rural / traditional settlements and intended future land use to both grow the settlements as well as to protect the natural and agricultural resources of the municipality.	• Land use management framework guidelines • Developing integrated spatial planning system. • Integration of traditional land allocation processes with municipal spatial strategy.

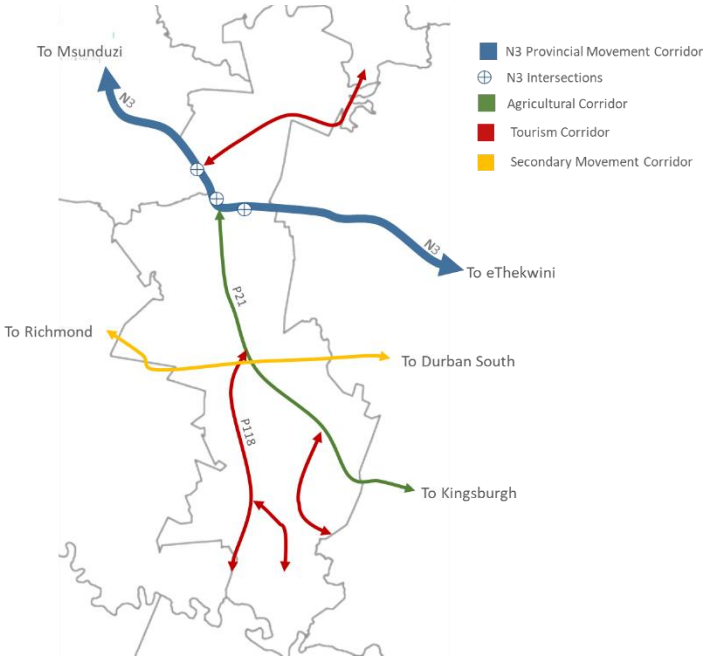
3.4 SPATIAL PLANNING CONCEPTS

The municipality will give effect to the intentions of the SDF through a set of spatial planning concepts that indicates the desired future spatial situation, and broad policy positions to guide decision-making:

Focusing Development In Strategic Nodal Points	Development nodes with varying levels of impact and spheres of influence. The nodes provide access to services and public facilities to different thresholds depending on the nature and size of the facility. As such, nodes range from local to regional.
Development Corridors As Investment Routes	Development corridors defined in terms of the associated economic development sectors, land use pattern and role in the sub-regional economy. Some serve a regional function while others link different parts of the municipal area.
Developing Sustainable Human Settlements	Typology of settlements located in different environments and forming a continuum from urban to rural, high density to low density, formal to informal, etc.
Rural-Urban Interface	Rural-urban interface (urban edge) which provides a smoothtransition from urban to rural parts of the municipality.
Compact Development	Densification which means increasing the number of people within a defined space, and a threshold for public facilities.
Spatial transformation	Development areas characterised by evident spatial or economic development potential and strategically located land to promote spatial transformation.
Protection Of High Value Agricultural Land	Agricultural land which differs markedly in production potential based on the quality of soils, location and condition of the environment.
Biodiversity Corridors And Conservation	Green corridors and lungs which are essentially biodiversity and other conservation areas. These are critical for environmental sustainability.

3.4.1 DEVELOPMENT CORRIDORS AS INVESTMENT ROUTES

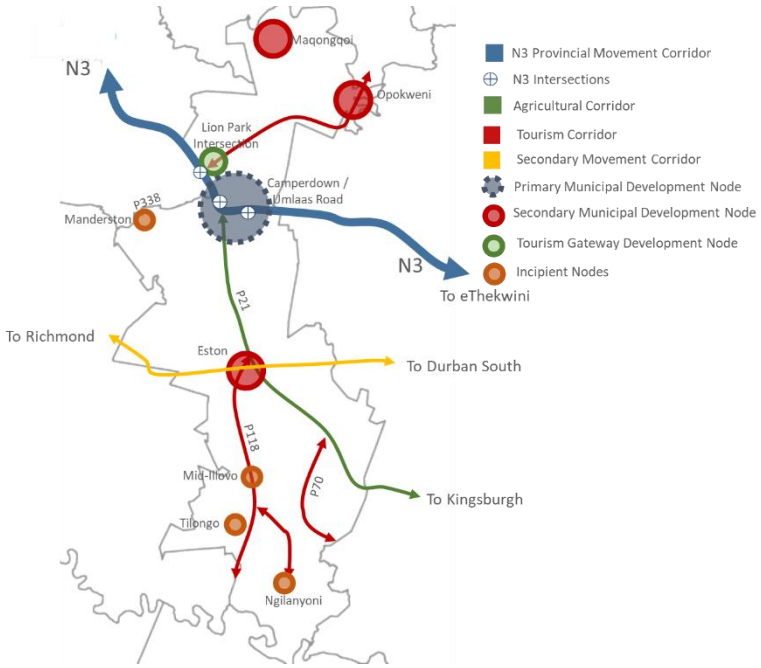
The logical focus areas of an ordered strategy for rural development is through a system of regional and local transport routes, which link a number of areas. These routes should be seen as activity and investment lines. The structure they give to the area is articulated in the form of movement patterns and systematic distribution of land uses in space.



However, not all regional routes are the same in terms of the intensity of use and ability to attract investment, services, economic activities and settlement. Generally, larger routes linking generators of movement and investment have a greater generative capacity than smaller routes. As such, regional facilities and services should gravitate towards these areas, while smaller facilities requiring

smaller thresholds should be located along smaller routes. This has an impact of reducing spatial marginalization, increasing equitable access to all level of services and promoting investment. The location of facilities along major routes recognizes the importance of choice to the rural communities with respect to services such as education, health and welfare facilities.

3.4.2 Focusing Development In Strategic Nodal Points



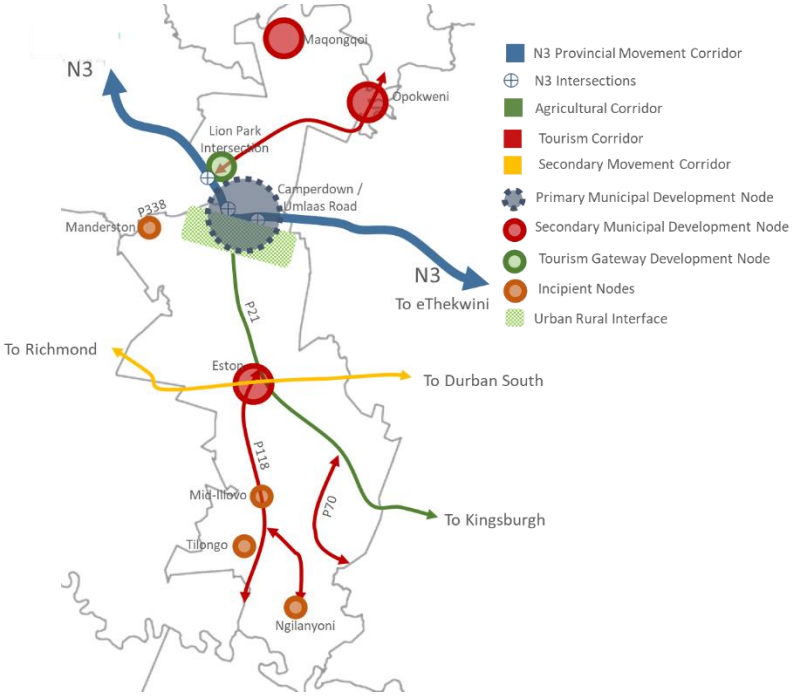
The ordering and location of services and facilities, in a manner that promotes accessibility and efficiency in service delivery, is required. This is critical for the performance of the municipal area as a whole and land use integration. As such, the clustering of various activities at appropriate and accessible nodal locations provides the municipality with a network/system of opportunity centres. Some of these nodes have benefited from public and private sector investment in services and infrastructure, which needs to be managed and maintained. Others are located in previously disadvantaged areas, which have suffered from institutionalised neglect. Although the nodes have contrasting characters, profiles and management issues, they cumulatively accommodate the majority of economic activities, employment prospects, an existing/growing residential stock, and access to community facilities and services. As such, the strength and feasibility of the nodal points is directly linked to the functioning and health of their catchment areas. The concentration of activities in and around these areas will stimulate further development of higher order activities.

3.4.3 Rural-Urban Interface

Camperdown is considered as the main urban area in Mkhambathini, although it is surrounded by a generally rural region. Other smaller urban areas, such as Eston, Manderston and Mid-Illovo have different land use characters and are more integrated into the rural character of the municipality. It thus becomes important to focus on managing the form and texture of development in a manner that contributes to the following performance criteria:

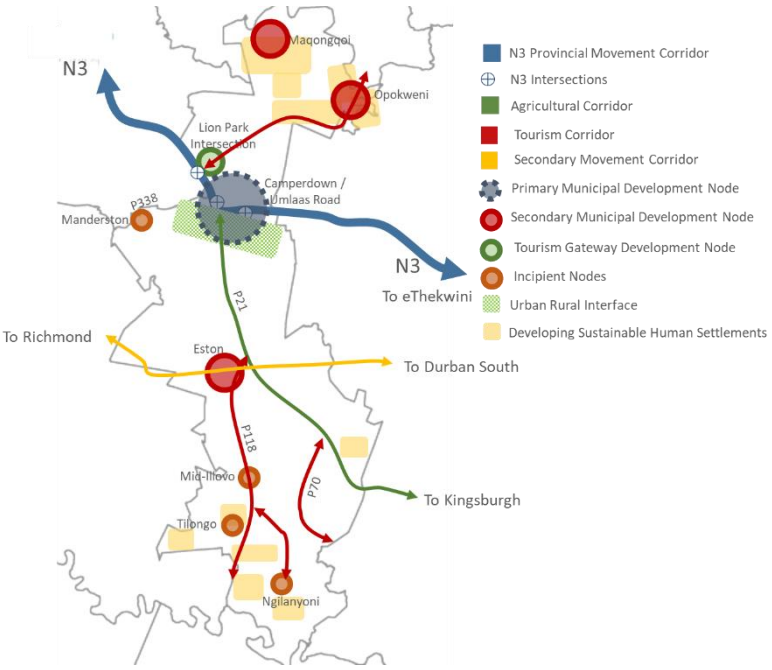
- Creating a more efficient and productive sub-region through the development adoption of policies that seeks to build the competitive advantages, while also unlocking new opportunities.
- Improving the overall quality of the urban environment by better integrating environmental concerns within development planning and urban management practices.

- Developing an inclusive spatial system that promotes integration of the previously disparate areas and eliminates the mismatch between where people live and where they work.
- Creating the base for efficiency in the delivery of services (water, electricity, sanitation, etc.), movement, investment and decision-making.
- Promoting integrated and coordinated development with all stakeholders working towards a common development vision and agenda.



3.4.4 Developing Sustainable Human Settlements

The scattered nature of rural settlements within Mkhambathini is not sustainable and renders service delivery and development ineffective. The highest settlement densities are found along main transport routes where a web of local access roads and public facilities holds settlements together. At a regional level, they should be knit together by a system of regional access routes.



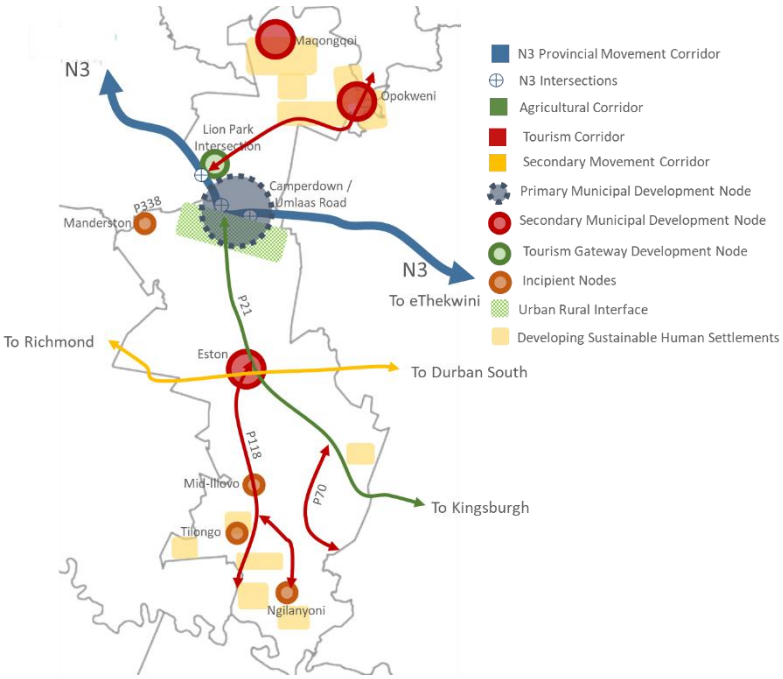
However, settlements are not static and respond to change, thus they are continuously transforming. The key challenge is to turn these settlements into sustainable human settlements, which has certain implications for detailed planning and development of these settlements:

- Centrally located settlement should provide improved access to higher order public facilities, intensive agriculture and other urban services.
- They should generate a wide range of opportunities. Sparsely populated settlements are opportunity areas for agricultural development such as crop production and livestock farming.

- A convenient settlement improves the level of choice, encourages creativity and investment while a less convenient settlement imposes a lifestyle on people and results in unnecessary expenses.
- Settlements should be equitable in the sense that they should provide a reasonable access to opportunities and facilities to all. It is neither possible nor desirable for settlements to be homogenous hence an emphasis on choice.

3.4.5 Protection Of High Value Agricultural Land

The need to protect high potential agricultural land is a national priority. This is in light of the fact that high potential agricultural land has become a scarce and dwindling resource. Encroachment of development onto agricultural land poses a number of challenges, namely:



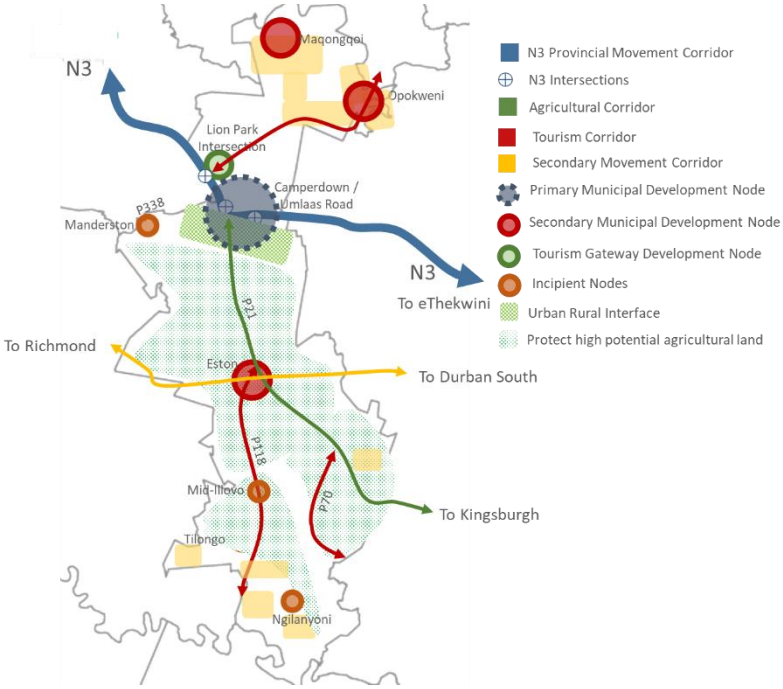
- low density urban sprawl which encourages development of inefficient urban spatial systems;
- declining performance and contribution of agriculture into the district and provincial economy;
- reduction of land available for food production and against the increasing problem of food shortages and increase in food prices; and
- need to target high production potential land for the settlement of small and emerging farmers in terms of the land redistribution program.

Sub-division and change of land use on agricultural land is governed in terms of the Sub-division of Agricultural Land Act (SALA), Act No. 70 of 1970, and is administered nationally. At present, there is no coherent provincial policy that guides assessment of Act 70 of 70 applications. As such, it is critically important for the Municipality to develop its own guidelines (as part of the SDF) for managing development on agricultural land.

3.4.6 Biodiversity Corridors And Conservation

The spatial distribution of environmental biodiversity areas of significance is considered vital to provide the spatial framework for future spatial development planning. Those areas where development needs to be avoided or at best, carefully managed, is of particular importance.

This spatial structuring principle focuses on conserving the core biodiversity areas (wetlands, flood plains, steep slopes and special sensitive bio-diversity areas) where no development should take place and emphasises the importance of the biodiversity corridors (buffer areas), which should link those core areas together. These assets perform a substantial and significant role in conserving biodiversity as well protecting the quality of life of the residents of Mkhambathini.



3.4.7 Compact Development

More compact settlements areas can be achieved with the maintenance of a settlement edge in order to discourage development sprawling into prime agricultural land and other natural resource areas. The settlement edge can be used to encourage more efficient use of underutilised land existing in a settlement, through development of vacant land or the re-use of 'brownfield' degraded land areas. It can also be used to manage the investment and characteristics of infrastructure levels according to the needs of communities and economic activities located within settlement edges or outside settlement edges. This requires detailed planning at a settlement level and could best be sustained through the coding or integration of the existing community rules into a land use management system. Certainly, the level of compaction will take into account the nature and character of each settlement, as well as the prevailing spatial development trends and patterns.

4 SPATIAL DEVELOPMENT FRAMEWORK

Key spatial strategies have been identified to assist Mkhambathini to achieve its spatial vision. These strategies are indicated in the figure below and the intent of each are outlined in the following sections:

4.1 SPATIAL RESTRUCTURING AND SPATIAL PLANNING SYSTEMS

Spatial restructuring essentially identifies and assesses the spatial elements of the municipality. These include development corridors and development nodes. Within this, the promotion of compact development will mitigate the negative impact of sprawling settlements by encouraging the planning of co-ordinated, harmonious, sustainable and compact settlements. Growth in peripheral areas is an inevitable process, and needs to be managed in order to facilitate the establishment of planned settlements and to promote sustainable development. Compact development will further contribute to the protection of sensitive environmental and agricultural areas and will ensure effective and efficient social, engineering and other services.

The municipality is seeking to create housing opportunities for the poor in areas that improve access to urban opportunities including employment, access to basic services, etc. This includes the utilisation and adoption of spatial planning systems and management tools to promoting and managing growth and development within the municipality. The municipality will endeavour to achieve this by:

- Improving access to movement networks.
- Clustering of public facilities in development nodes.
- Limiting and containing the urban development footprint within the Urban Development Line (urban edge / growth boundary). The application of growth boundaries and other growth management techniques should take due cognisance of the adequacy of supply of land.
- Promoting higher “net” residential densities in strategically located areas within core areas, new growth areas and areas prioritised for infrastructure development.

- Creating new residential development opportunities that connect fragmented areas and consolidate urban form around high accessibility routes and nodes.
- Provide clear guidance on directions for future settlement growth and proposed release of land for development.

4.1.1 Improving Movement And Access

Identification and classification of movement routes in Mkhambathini is based on function/role, and intensity of use or development along the route/corridor. Mkhambathini recognises the significance of the N3 as a national/provincial corridor, and the opportunities it creates for the municipality. It also recognises the significance of the R603 (P21-1) and the P338 as routes providing internal and external linkages within and around the municipality. Other corridors include the main arterial roads that define the spatial structure and drives settlement pattern, and the major local link roads between different settlements.

4.1.1.1 National / Provincial Movement Corridor

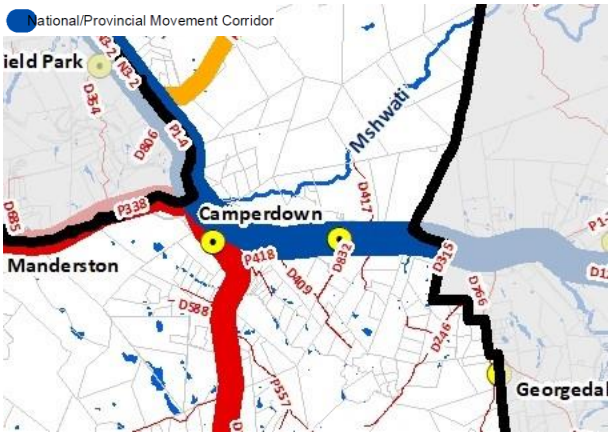
The N3 bisecting Camperdown and passing through the Mkhambathini Municipality is identified as a National / Provincial Movement Corridor, which is of importance at a National and Provincial level. As the main transportation conduit, it links the Municipality to the Metropolitan area of eThekwini as well as the economic powerhouse of Gauteng. With the Durban Port being an important entrance to the continent, the N3 further links the province to the African Sub-Continent and is central to the development of these areas and to tourism.

Clearly, its function is greater than a Primary Corridor. While also an important local corridor, its main function needs to be sustained. Development immediately adjoining on either side of this corridor should be a variety of industrial and mixed use commercial and be visually attractive when observed from the N3. It should not be hazardous to corridor users.

Interventions envisaged in this area relate to the following:

- Constant Inter Governmental communication and co-ordination relating to the development of the major economic corridor and its impact on the Mkhambathini Municipality.
- Tarring of roads, which will provide transport services access to the remote regions, and open up additional economic opportunity in opening the areas. Accessibility is of key importance.

Figure 4: National / Provincial Movement Corridor – N3



- Developing a localised Corridor Development Strategy, this will focus on spatial structure, infrastructure provision and attracting both public and private sector investment.
- Ensure that multimodal transport integration occur along these roads at key points.
- This route provides development opportunities that must be explored, and development should be encouraged along this primary route. Development along the N3 corridors should acknowledge that the N3 is a national limited access and high speed public transport route; as such direct access onto this road is subject to the national road transport regulations.
- Higher order land uses should be accommodated in the nodes (Camperdown), but lower order land uses could develop in a linear fashion subject to alternative access opportunities; and
- A buffer should be observed from the boundary of the road reserve. This has implications for developments along this corridor.

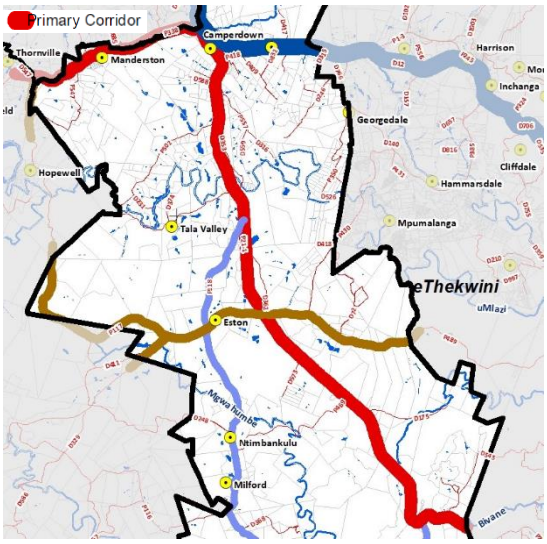
4.1.1.2 PRIMARY DEVELOPMENT CORRIDOR

The two main Primary Development Corridors are as follows:

- The R603 (P21-1); and
- The P338.

The R603 (P21-1) is a Regional Route, which links the Municipality from Camperdown to eThekwini's South Coast at Kingsburgh. It is of Provincial and Municipal importance and serves the commercial agriculture community, rural residential communities and also serves as a tourism link. As such, it should also be acknowledged as an agricultural corridor and development along this corridor should be attractive to enhance tourist appreciation.

FIGURE 5: PRIMARY CORRIDOR –R603 & P338



Interventions envisaged in this area relate to the following:

- Establishing / Expanding Agro-Processing facilities: Additional income generating opportunities are needed within areas of economic need. Agro processing, especially within an area situated on an agricultural corridor provides the potential for additional income. Agro Processing entails the turning of primary agricultural products into other commodities for market – in other words, beneficiation of primary agricultural commodities.
- To involve communities in agro-processing by establishing small-scale, appropriate and sustainable processing businesses that are flexible require little capital investment and can be carried out in the home without the need for sophisticated or expensive equipment.
- Expansion of trade opportunities related to agricultural activities – formal and informal.

The other Primary Development Corridor is the P338, which is also a Regional Route. The P338 is the primary corridor that links Mkhambathini Local Municipality with the western and southern portions of KwaZulu-Natal. The P338 roughly forms the boundary between Mkhambathini and Msunduzi and runs through Manderston. The area on Msunduzi's side is designated for agri-business / commercial development. The P338 also provides an important link to the R56, which is a regional development corridor on a provincial level. Future planning proposals are in place to develop the P338 as a National Route linking Mkhambathini to the Eastern Cape.

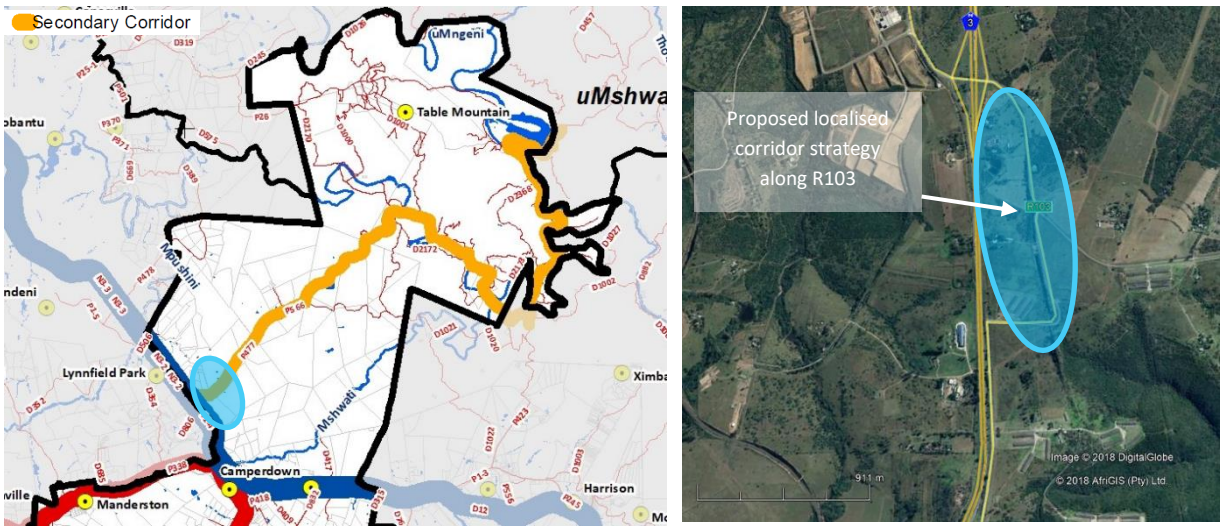
4.1.1.3 SECONDARY CORRIDOR

The secondary corridors include the following:

- The P477 and P566 secondary corridor to the north;
- The R624.

The first corridor includes the P477 and P566, north of the N3 leading from Lion Park Interchange (Lynfield Park offramp 65) to the Mapumulo and Manyavu Traditional Areas. A small corridor from the N3 along R103 route is proposed, since it is centred on the interchange. The length of this corridor would extend approximately 1.5 to 2km from the interchange in addition to the proposed gateway node identified at this intersection / interchange. Awareness in respect of the irreplaceable vegetation in this locality must be taken into consideration.

FIGURE 6: SECONDARY CORRIDOR AND TOURISM ROUTE - P477 AND P566

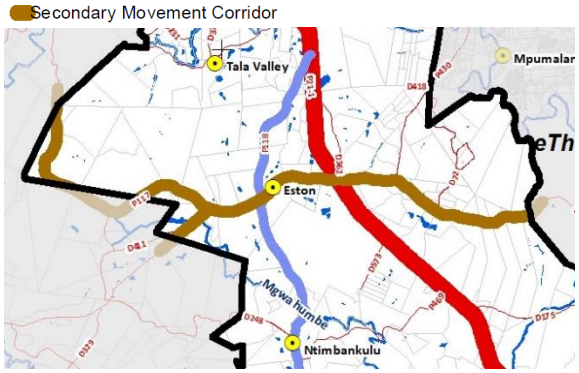


Public interventions envisaged in this area relate to the following:

- Developing a localised Corridor Development Strategy (R103), which will focus on spatial structure, infrastructure provision and attracting both public and private sector investment.
- Ensure multimodal transport integration occur along these roads at key points.
- Tarring of roads, which will provide transport services access to the remote regions, and open up additional economic opportunity in opening the areas. Accessibility is of key importance.

The R624 consisting of KZN DoT roads P117, P24, P489 & D561, is the other secondary corridor, but can be classified as a secondary movement route. It is located south of the N3 connecting Eston to Hopewell (Richmond LM) in the west, and eThekwini in the east. As such, its main function is to facilitate movement through the municipality in an east-west direction.

FIGURE 7: SECONDARY MOVEMENT CORRIDOR-R624



4.1.1.4 TOURISM ROUTES

The uMgungundlovu District Spatial Development Framework as well as the Mkhambathini IDP identified a number of tourism linkages traversing the Municipality. The routes identified include:

- The P477, P566, A3611, P26 and L823: From the N3 past table Mountain and to the east of the Nagle Dam water production area, as well as to the Maqongqo settlement area, which also connects to Nagle Dam, as well as Msunduzi Municipality.
- The P21-1 leading from the R603 to Eston, Mid-Illovo and Ngilanyoni. The route then split and links back to the R603, as well as continue to the South Coast.

Adventure tourism and tourism are important elements in the Mkhambathini area, and as such, the above roads have been recommended for upgrading, linking through from P566 to Maqongqo and then the link from Maqongqo to Nagle Dam forming a loop back to the development node. Another road is recommended as a tourism route and this is the one that links through near the Lion Park through to the Ximba Tribal Area.

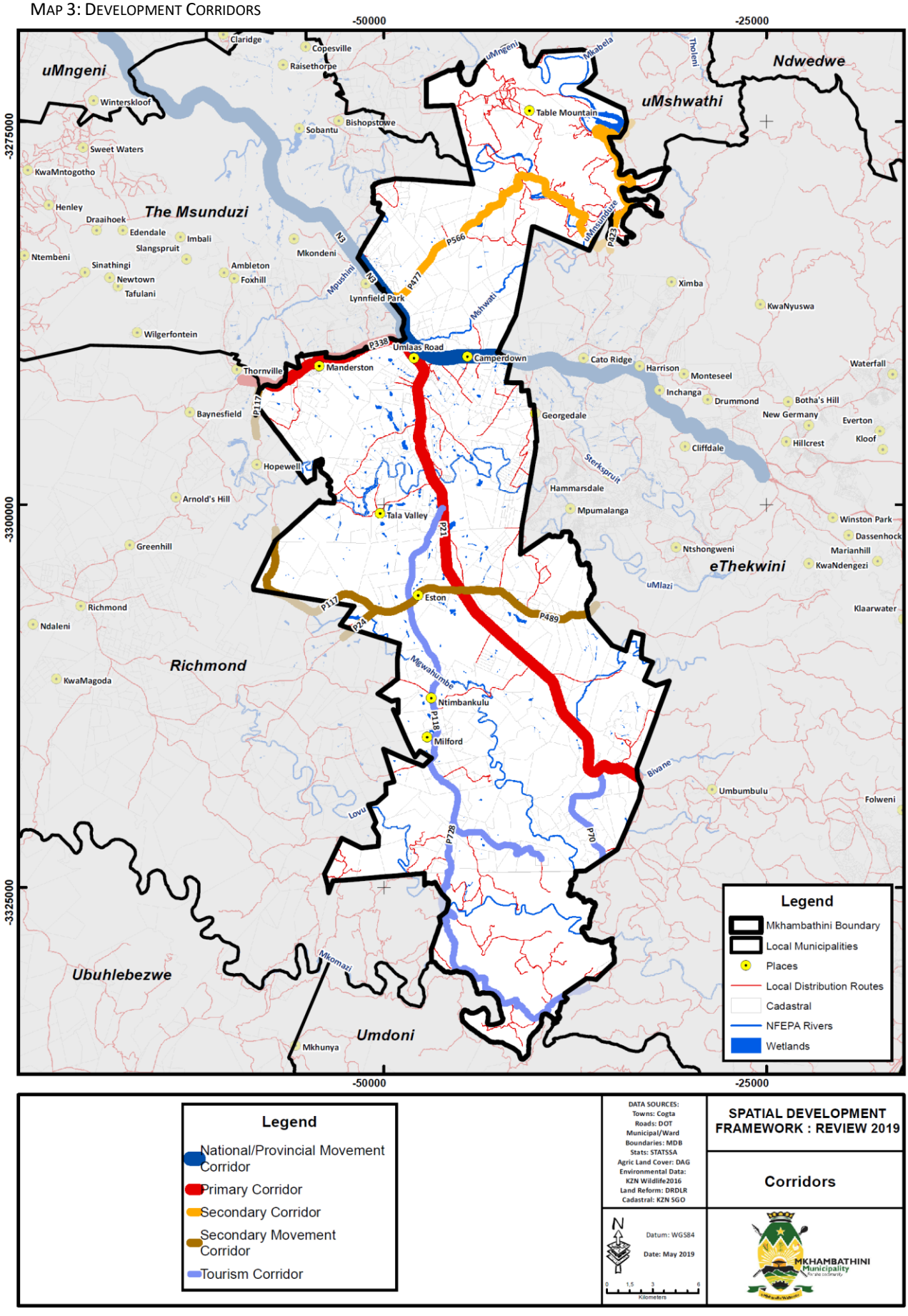
Eco Adventure tourism routes have been identified linking Eston with the tribal areas and ultimately the Umkomaas River and into Umdoni Municipality. For the more hardened adventurers and also to create economic opportunities for those living in the area a 4 x 4 link is proposed between Ezimwini and Ngilanyoni, which are divided by extremely rugged terrain. The following interventions are envisaged to be undertaken by both public and private institutions along these tourism routes:-

- Eco-tourism related to natural beauty of the environment.
- Focused public investment to stimulate private sector investment.
- Diversification of products to adventure products (quad biking, rafting etc.), craft and culture, and other activities that capitalise on opportunities provided by mobility function of R603.

4.1.1.5 LOCAL DISTRIBUTION ROADS

These routes ensure linkages between settlements and other areas within the municipality. They are not demarcated on the maps, as there are a large number of such access routes, which do not provide vital strategic information, or require to be strategically evaluated within this spatial development framework.

MAP 3: DEVELOPMENT CORRIDORS



4.1.2 Clustering Public Facilities And Economic Activities In Development Nodes

Mkhambathini will facilitate and promote the clustering of a range of social services and economic opportunities at central locations as a means to improve access and restructure the existing spatial pattern. The establishment of a hierarchy will assist in allocating facilities of various types to their most appropriate locations, based on the facility threshold and the appropriate number of people required within the catchment of that facility. Clustering will create opportunities for facility multi-use, sharing and land savings, cooperation and joint financial planning between the departments and the private sector. If this is achieved within nodes, it can contribute positively to service delivery, spatial restructuring and financial sustainability.

Activity nodes serve as points in the spatial system where potential access to a range of opportunities is greatest, where networks of association create diversity and where people are able to satisfy the broadest range of their day-to-day needs. Activity nodes are points of maximum economic, social and infrastructure investment, as well as areas representing established patterns of settlement and accessibility. They must be regarded as primary devices on which to anchor the structure of the sub-regional spatial system. Map 4: Development Nodes indicates the location of each node.

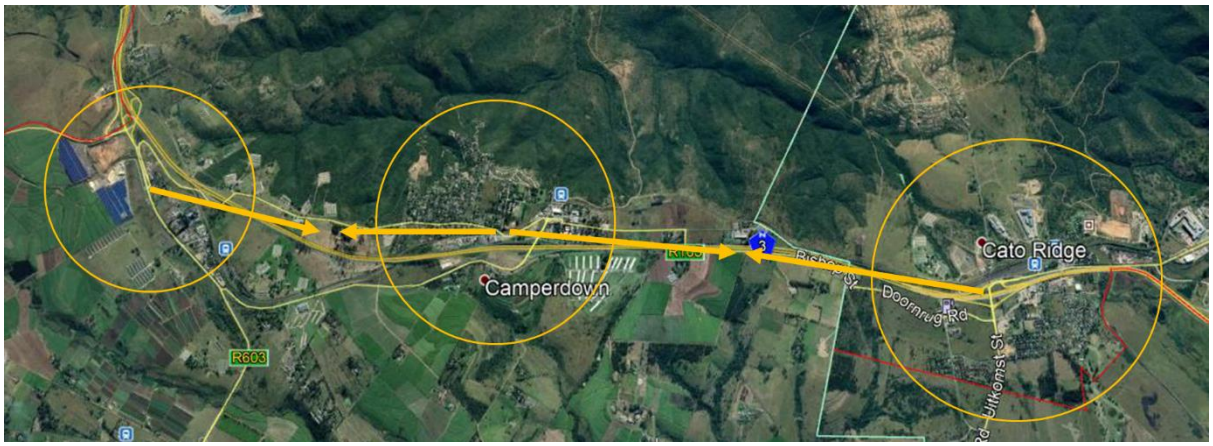
4.1.2.1 Municipal Development Node

Camperdown is the major residential and commercial centre within the Mkhambathini Municipality. Its role is intended to be one that provides essential goods and services to support the growing economy of the Municipality, and through better service provision. Also advantageous to Camperdown is its location at the focal point of traversing road network comprising of the R603, P369, D234, D409 and D832. To the west of Camperdown is Umlaas Road, which represents the industrial hub of the Mkhambathini Municipality and together with Camperdown, play a significant role in the growth of the municipal economy.

The vision for these two areas should be refined in the development of a local area plan (LAP), since it should ultimately function as one node by way of the strong link that the R103 presents to link them together. This will result in the formation of a structured area with functional land use areas that will attract investment and share the existing and proposed service infrastructure.

The long-term vision should also include development and expansion along the N3 towards Cato Ridge. Due to their close proximity to each other, the dynamic interaction between Umlaas Road and Cato Ridge towards a combined strategic node along the SIP2 Corridor will be fundamental for the development of both areas. Cato Ridge is acknowledged as one of the major strategic investment areas within the eThekwini SDF and the Cato Ridge Local Area Plan (LAP) has illustrated the strategic significance of the areas on confluence between the NATCOR Rail System and the N3 at Cato Ridge. The LAP further illustrates that the area will require major infrastructure investments in order to fully unlock the development potential of the node. Cato Ridge has been identified as one of the industrial expansion and potential dry port areas in the eThekwini Municipality that can respond to the increasing demand for industrial land in eThekwini Municipality and provide logistics support for the port.

FIGURE 8: CAMPERDOWN / UMLAAS ROAD EXPANSION



In addition, the investigations around and proposal towards potential bypass routes around Pietermaritzburg all follow different alignments, but converge at the Umlaas Road Intersection.

Umlaas Road also has access to the rail network and recent private sector developments within the area have unlocked service industrial land, immediately available for investment. It is however important to indicate that the success of both these nodes arguably depends on the dynamic balance in the different types of industrial and logistic development within these two areas. Umlaas Road is envisaged to best cater for packaging, warehousing and logistical operations whilst Cato Ridge could support more manufacturing and engineering related industries.

The following interventions / developments are envisaged within this nodal area:

- Development of commercial activities serving the municipal area and surrounding areas (sub-region).
- Location of facilities and services for effective administration and local governance.
- Transformation of Camperdown from being a low density, low-key village into a modern and dynamic industrial and economic hub.
- Expansion of the town to include Umlaas Road and grow towards Cato Ridge.
- Establishing regional linkages to and from the nodal area as a fundamental part to movement of industrial goods and services.
- Providing improved regional access to and circulation within the Umlaas Road area and making adequate services available to the future development of the area.
- Ensuring the investment and promotion of the area is based on thorough investigations and logical planning.
- Encouraging and promoting market development to determine the mixture of activities and land uses within the broad guidance of the intended strategic node.
- Promoting an economic development mix, which will contribute to the economic and social upliftment of local communities.

- Promoting the efficient economic development of the area without negative impacts on surrounding high value agricultural land, environmentally sensitive area as well as the eco-tourism potential of the key areas found within especially the northern portions of the municipality.
- Providing for a range of housing typologies in close proximity to employment opportunities.

The following are some of the facilities that should ideally be located within the Municipal Development Node.

TYPE OF FACILITIES
Schools, Library, Police Station, Cemetery, Civic Centre, Post Office, Church, Clinic, Emergency Services, Hospital, Old Age Home & Service Centre, Pension Pay Point, Police Station, Pre-School/Crèche, Regular Bus Service & Related Facilities, Regular Taxi Service & Related Facilities, Sport Complex, Tertiary Training Facility.

DEVELOPMENT VISION FOR THE CAMPERDOWN / UMLAAS ROAD NODE

PREPARATION OF A LOCAL AREA PLAN (LAP)

The envisaged growth and development of Camperdown and Umlaas Road to ultimately become one consolidated nodal area, will require the preparation of a local area plan (LAP), which will outline the long term development vision and concept for this node. However, it needs to be acknowledged that Umlaas road area will have a different character than Camperdown. As such, some of the preferred land uses within these two inter-related areas are as follows. It should be noted that these are preferred land uses and does not constitute a land use scheme. The proposed development of a LAP will give direction to the review of the land use scheme for this area.

It is envisaged that the area will include a range of mixed land use opportunities, which will be able to accommodate future land uses associated with industrial and commercial development, but also including and not limiting the possibility of the inclusion of residential opportunities in close proximity of employment opportunities. The proposed uses are thus flexible and can also allow for a change of land use over a period of time, i.e. the existing urban agricultural area can also be changed to a mixed use industrial use in future. The residential components should accommodate a range of housing typologies, based on the need of the area.

TABLE 1: PREFERRED LAND USES (CAMPERDOWN AND UMLAAS ROAD)

PREFERRED LAND USES IN CAMPERDOWN	PREFERRED LAND USES IN UMLAAS ROAD
- Residential uses (detached, medium and high density, smallholdings, guest houses, hotels, etc., that includes a range of housing typologies) - Mixed use (shops, commercial, office, restaurants, workshop) - Service industrial uses - Service station - Recreational (parks, sports facilities)	- Mixed use, which can accommodate residential development (different housing typologies) in close proximity to employment opportunities) - Industrial uses (Light industrial building, Service industrial building) - Warehousing and storage - Distribution depots - Service station

PREFERRED LAND USES IN CAMPERDOWN	PREFERRED LAND USES IN UMLAAS ROAD
- Public / social facilities (e.g. Educational facilities, Health and welfare, Administrative and institutional, Worship sites, Cemetery, police station, post office, etc.) - Transport facilities (e.g. taxi rank) - Public utilities	

IMPLEMENTATION PROCESS

Figure 9 provides an indication of the 5-year (short-term) development vision for the Camperdown / Umlaas Road Node, while figure 10 provides the 20-year long-term development vision. Critical to the development and attainment of this vision, is a driver / champion that can facilitate the processes required.

The Umgungundlovu District Economic Development Agency (EDA) is a key mechanism identified in the KZN Provincial Growth and Development Strategy, which is responsible to speed up implementation of Economic Development Projects, to identify economic opportunities in rural areas and to create jobs and wealth in rural areas. As such, the EDA is in an ideal position to drive this process.

The EDA should focus on stakeholder engagement with relevant parties (e.g. the municipality, landowners, infrastructure role-players, etc.), as well as the facilitation of the provision of the necessary services and bulk infrastructure to allow development to take place. The existing problem in respect of wastewater is especially of concern in this area, and can potentially hamper future development if not resolved.

4.1.2.2 SECONDARY MUNICIPAL DEVELOPMENT NODES

Secondary Municipal Development Nodes include:

- Maqongqo;
- Opokweni; and
- Eston.

These nodes are depicted in figures 11 and 12.

FIGURE 9: CAMPERDOWN / UMLAAS ROAD NODE 5 YEAR DEVELOPMENT VISION

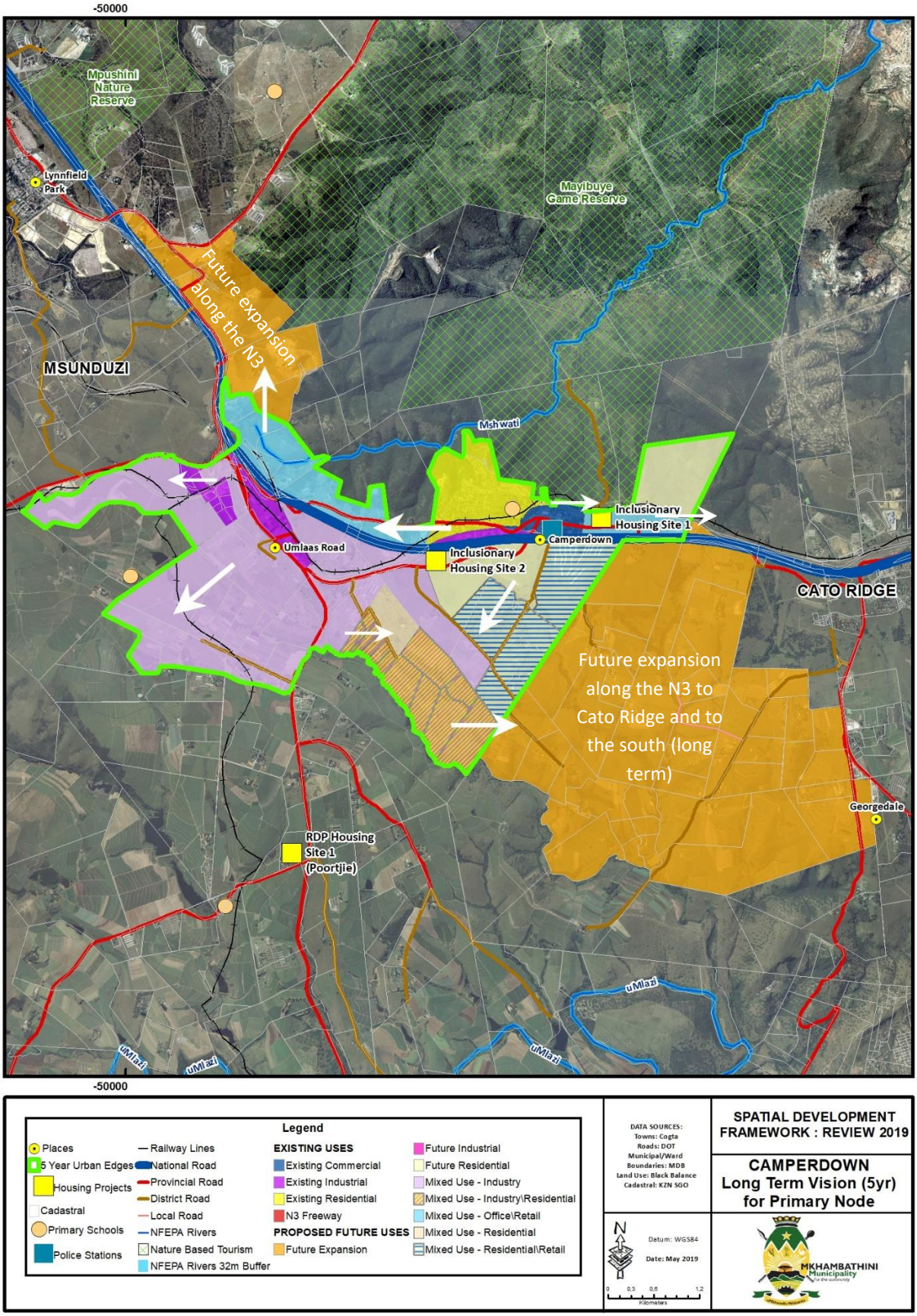


FIGURE 10: CAMPERDOWN / UMLAAS ROAD NODE 20 YEAR DEVELOPMENT VISION

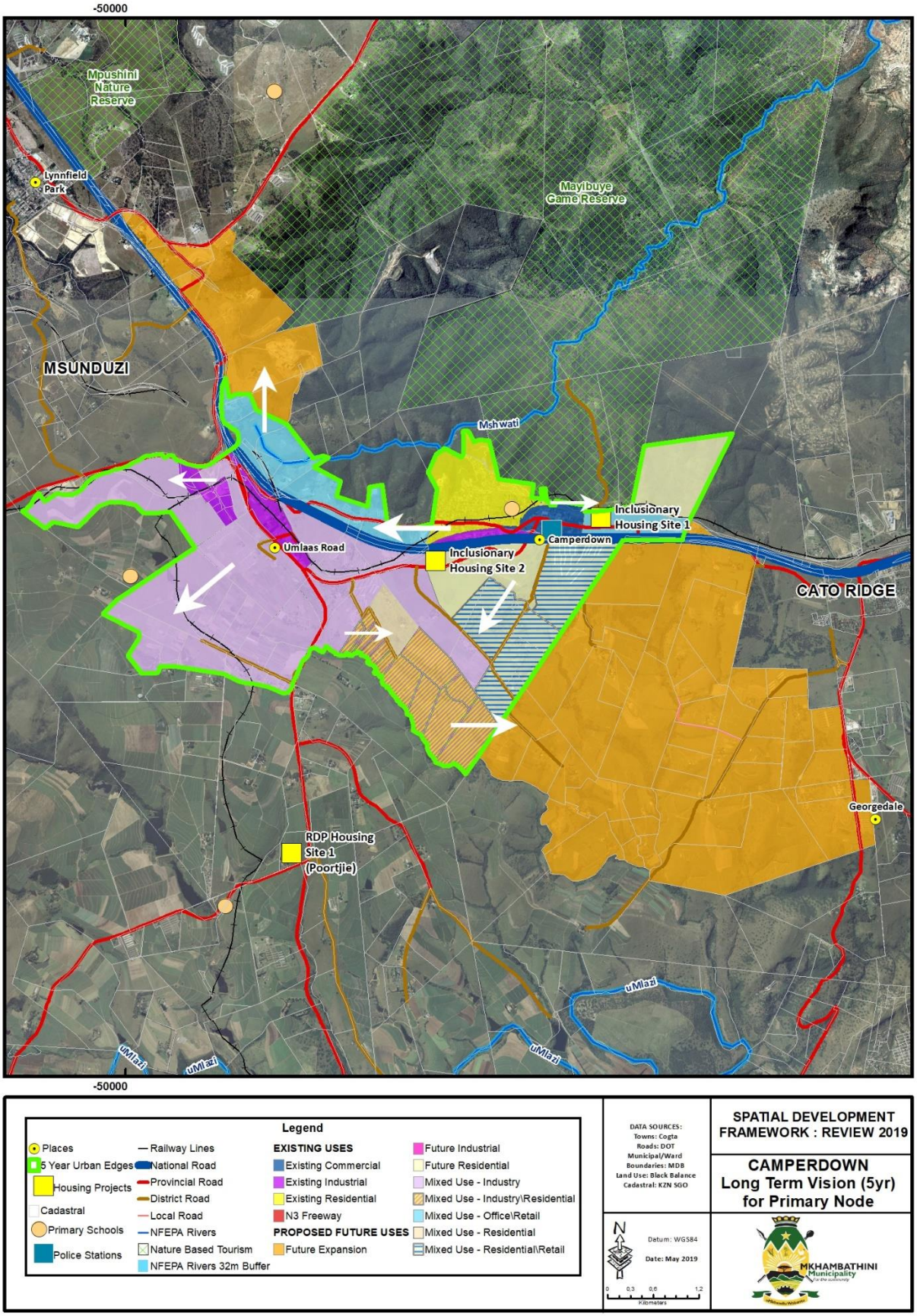
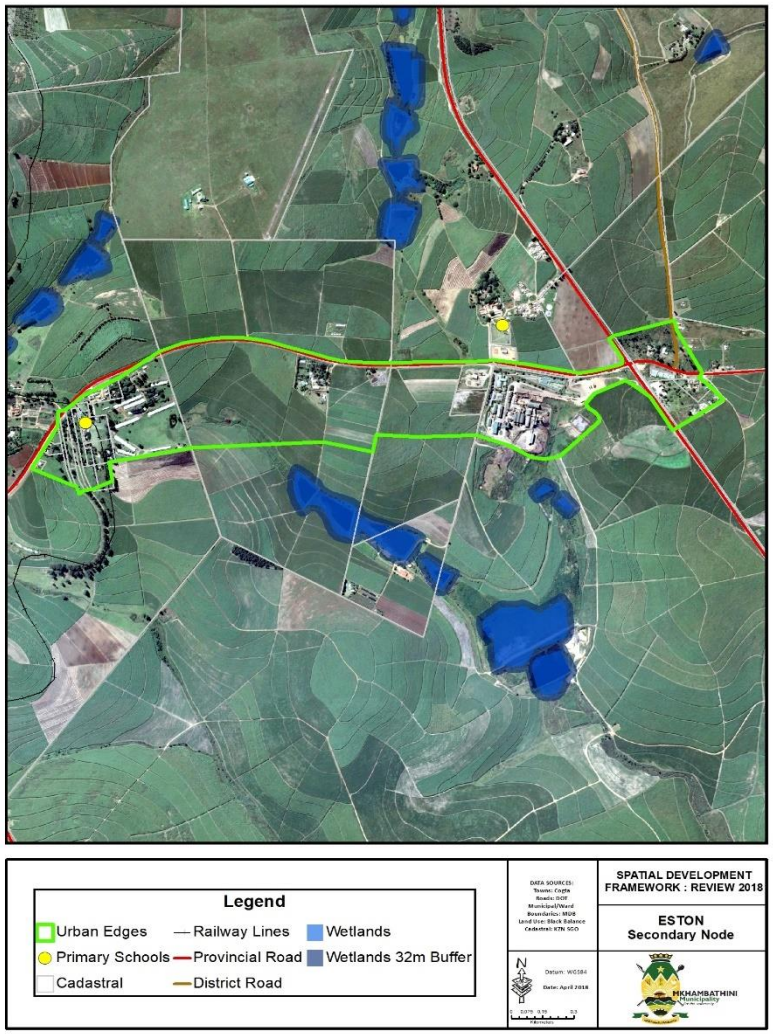
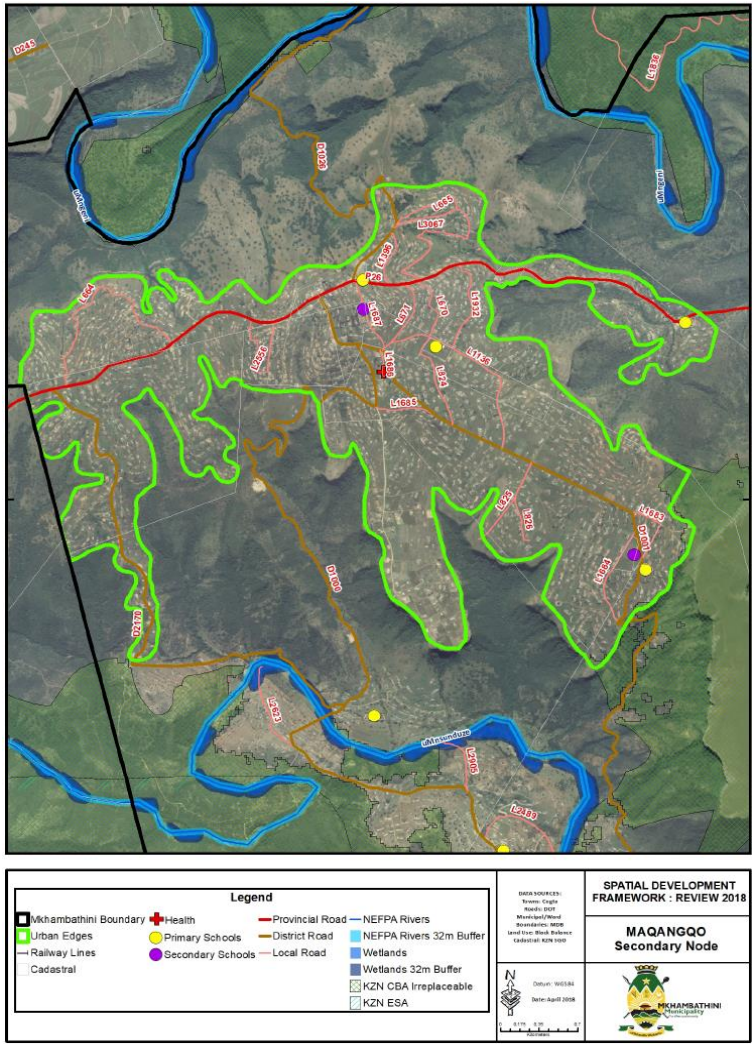


FIGURE 11: ESTON AND MAQONGQO

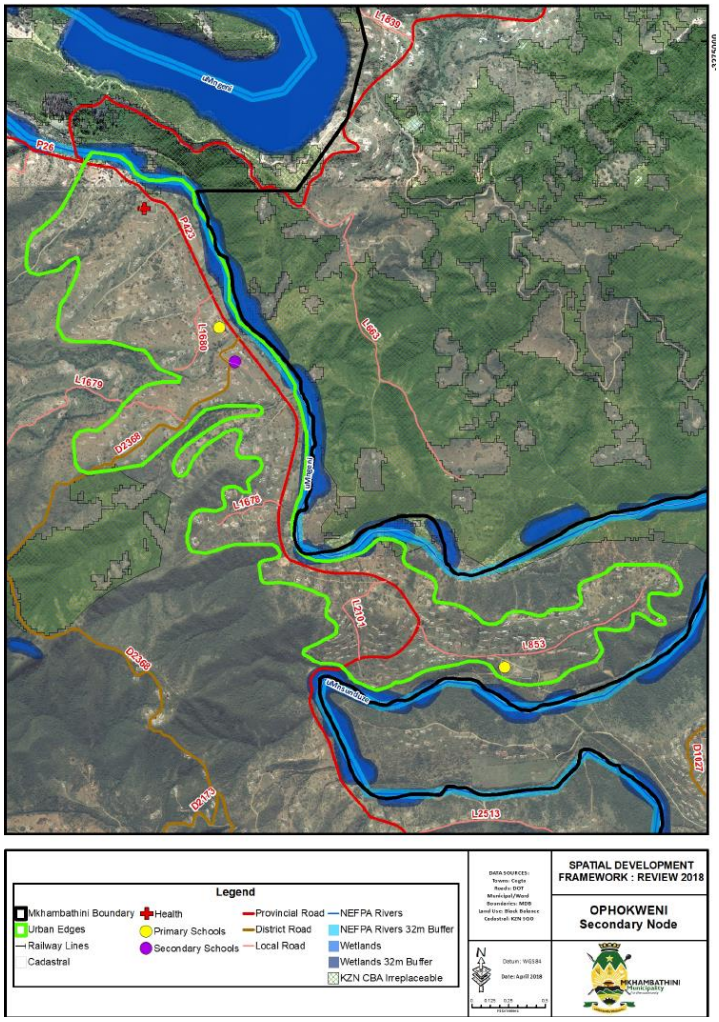


Eston (*Map on the left*) is located along the R624, close to the intersection with the R603. Eston provides essential services to its surrounding farmers, a school and a small range of commercial services. It also houses the Eston Sugar Mill. Opportunities around Eston are mostly associated with sugarcane. The area is suitable for the diversification of agricultural production and Agri-processing.



Maqongqo (*map on the right*) is located in the extreme northern portion of the municipality, along the P26. This area is a dense rural area, which has experienced substantial growth. The settlement developed in webs along ridgelines and flat terrain. It has also attracted public investment over the years, providing essential services to the northern communities. Existing facilities within this nodal area includes schools, a clinic, Day Care Facility and Department

FIGURE 12: OPHOKWENI



Ophokweni has been identified as an expansion of the development that has taken place on the Outer West side of the Msunduzi River near Ophokweni. It developed along the P423 and Umngeni and Msunduzi Rivers.

This node could be extended over the Msunduzi River to also service the Mapumulo TA area and make use of the flat land across the river from the development currently taking place. It should not duplicate facilities occurring in the Outer West area but should provide complimentary facilities to serve both Maphumulo TA.

These areas play an important role as service centres to communities and farmers in the northern and central portions of the municipality, providing housing and a smaller range of commercial and social services than what is offered in the Primary Node.

TYPE OF FACILITIES
Police Satellite Station, 24hr clinic, Weekly Welfare Mobile Services, Schools, MPCC, Weekly Information Mobile Services, Post Net, Mobile Bank Services, Tribal Court, Basic Sport Facility

4.1.2.3 SATELLITE MUNICIPAL DEVELOPMENT NODES

The vision for the future spatial development of Mkhambathini Municipality makes provision for the development of satellite municipal development nodes within a cluster of settlements. These small centres will serve as location points for community facilities serving the local community such as:

- Primary and secondary schools.
- Clinics including mobile clinics.
- Pension pay points.

FIGURE 13: MID-ILLOVO AND MANDERSTON

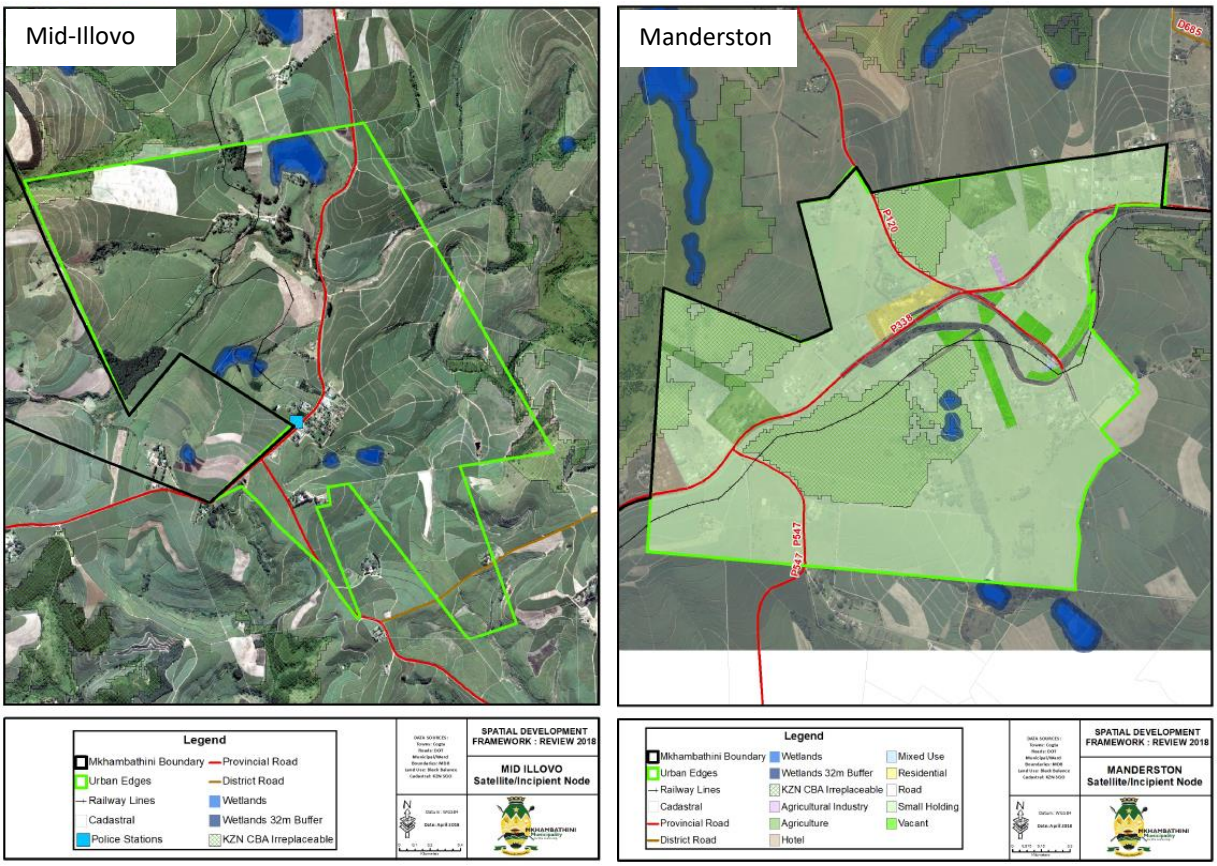
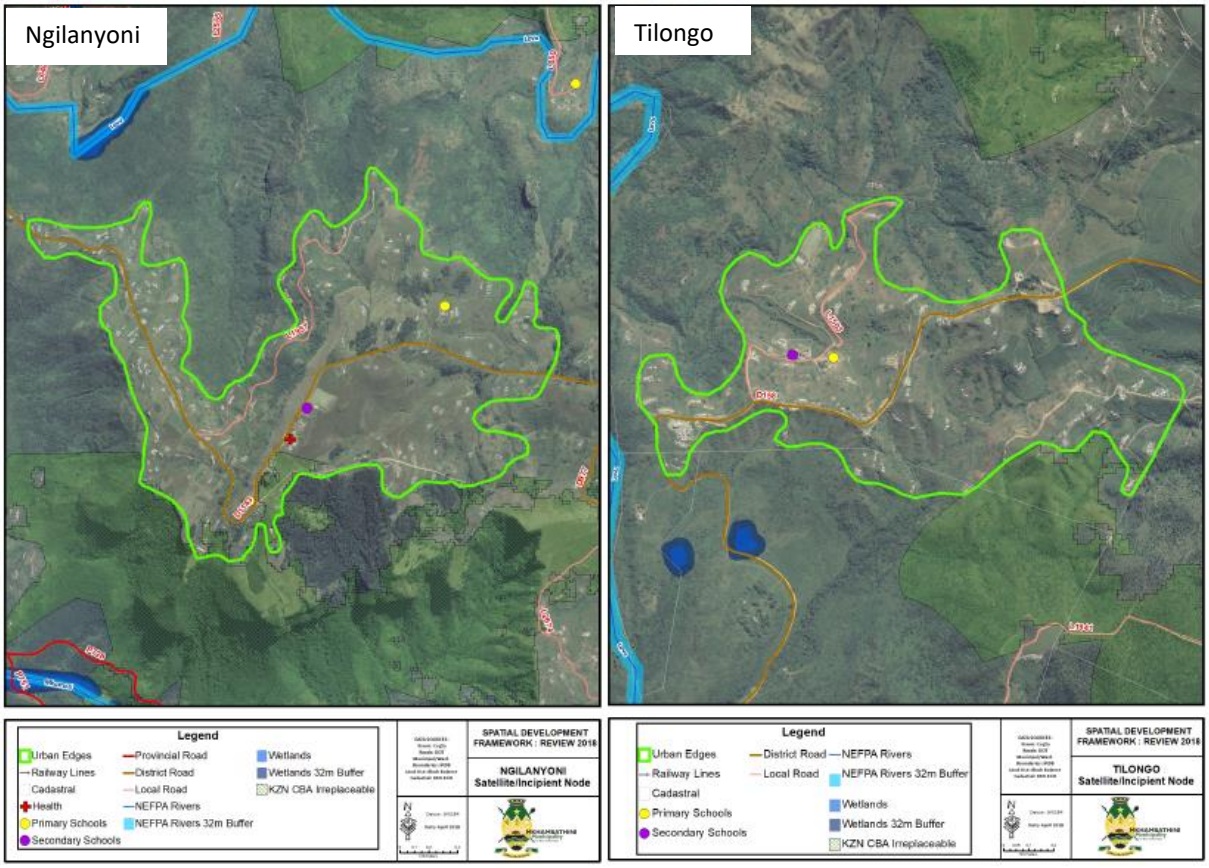


FIGURE 14: NGILANYONI & TILONGO



- Community halls and other community facilities.
- SMME trading facilities.

Although the confirmation of these nodes will be undertaken with the participation of the affected communities, the following proposed satellite municipal development nodes have been identified:

- Manderston is located along the P338 primary development corridor and roughly forms the boundary between Mkhambathini and Msunduzi. The area on Msunduzi Municipality's side is designated for agri-business / commercial development.
- Mid-Illovo is located roughly at the intersection of the P118 and the P116.
- Tilongo is located further south of Mid-Illovo along the D158 within the Isimahla traditional area.
- Ngilanyoni along the D1143 within the Embu Timuni traditional area.

TYPE OF FACILITIES
Mobile Clinic, Schools determined by population density, Community Halls determined by population density, Postal Services determined by population density, Basic Sport Facility, trading facilities, pension pay points.

4.1.2.4 Gateway Node

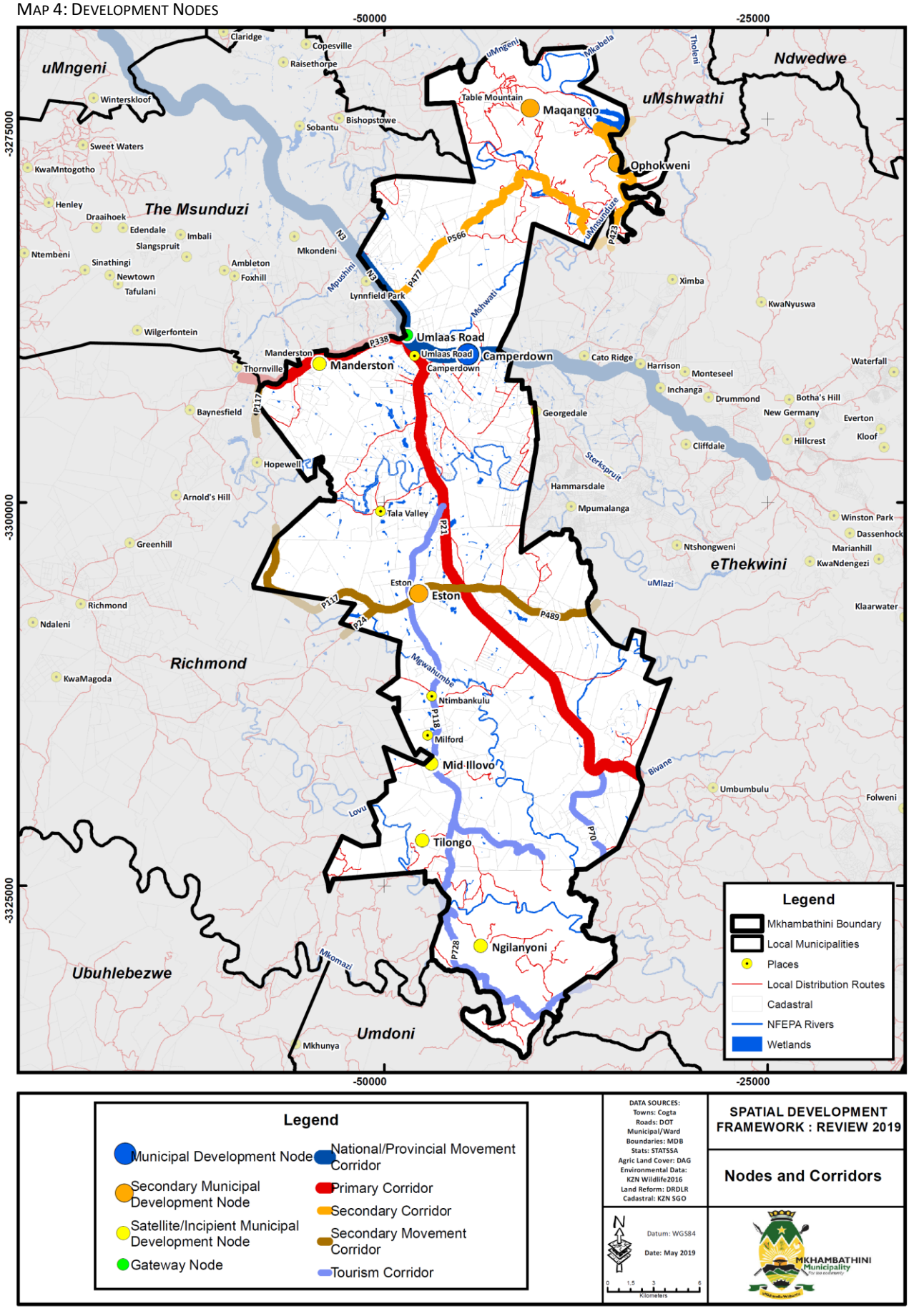
A Gateway node is proposed at the Lion Park / Lynfield Park Interchange where appropriate land uses will be encouraged based on the availability of basic infrastructure and market demand. This interchange area has potential to be the gateway to the northern portions of the Municipality where majority of the land is classified as having greater biodiversity significance. This intersection point is intended to open up tourism-related investment as part of decentralising investment opportunities in the region. It will serve as a gateway into the eco-tourism region of Mkhambathini, providing access to the Mayibuye Game Reserve, African Birds of Prey, the Mpushini Nature Reserve and Natal Zoo Gardens (Lion Park).

Land uses should be limited to office development, as well as some hospitality uses, such as accommodation and tourism offices.

4.1.3 Urban Edge

An urban edge is essentially a geographically-based line on a map indicating the edge between land available for urban development (infill and redevelopment) and land that is to remain part of the rural landscape and natural environment. Infill and redevelopment of lands in existing centres reduces the costs associated with infrastructure investments and servicing. It also revitalizes existing commercial centres, creates densities that support transit and neighbourhood shops, and supports economic development by creating clusters of businesses in close proximity. The more that compact settlements can result from containing development within settlement boundaries, the more communities will become transit friendly, walkable and support viable commercial centres and nodes.

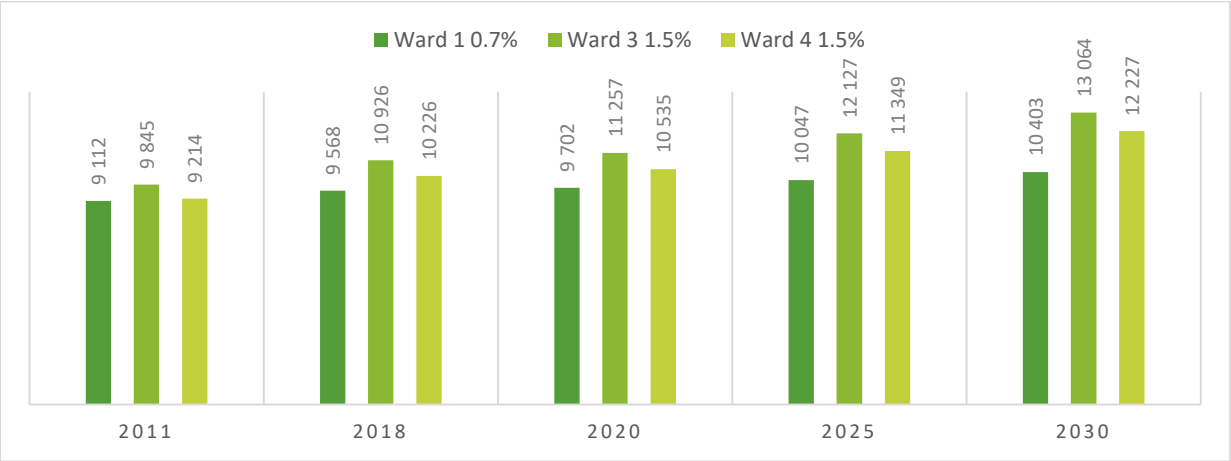
MAP 4: DEVELOPMENT NODES



The urban edges for Camperdown /Umlaas Road, Eston, Mid-Illovo and Manderston have been indicated in section 4.1.2.

The urban edges for the Camperdown /Umlaas Road node, has been enlarged to accommodate the anticipated future growth and the future vision of this area becoming a strategic development node along the N3. The growth projections up to 2030 (Figure 15: Projected population growth) indicates that the majority of population growth is to take place in wards 3 and 4 (based on a 1.5% growth rate). Ward 3 includes the Camperdown and Umlaas Road node, while ward 4 mainly consists of farmlands to the south of Camperdown, but also includes Eston, MidIlovo & other rural settlements.

FIGURE 15: PROJECTED POPULATION GROWTH



Other informants to the urban edge for the Camperdown /Umlaas Road node, includes environmentally sensitive areas and availability of infrastructure.

4.1.4 SETTLEMENT EDGE

The outwards expansion of rural and isolated settlements is of great concern. The government will continue to battle to provide services efficiently and effectively in these areas, unless this situation is halted. It will also be difficult to turn these areas into sustainable human settlements. The municipality therefore have to work with the landowners, traditional leaders and other relevant authorities to contain further outward expansion of these areas. In particular, the following activities will be undertaken in this regard:

- Delineation of settlement edges (outer boundary) beyond which residential and other physical development will be discouraged. Each boundary will be negotiated with relevant stakeholders.
- Working with those responsible for land allocation to formulate standards, develop settlement plans and identify potential sites for future residential use, public facilities, etc.
- Clear identification of land reserved for agricultural purposes, public facilities, public open spaces (active and passive) and other state domestic uses.

The level of service will depend on the density of each settlement and whether it is earmarked for densification or not. Dense rural settlements will be prioritised for upgrading, delivery of bulk services and provision of public facilities.

The settlement edges for Maqongqo, Ophokweni, Ngailanyoni and Tilongo have been indicated in section 4.1.2.

4.1.5 DENSIFICATION

The promotion of compact development will mitigate the negative impact of sprawling settlements by encouraging the planning of co-ordinated, harmonious, sustainable and compact settlements. Growth in peripheral areas is an inevitable process, and needs to be managed in order to facilitate the establishment of planned settlements and to promote sustainable development. Compact development will further contribute to the protection of sensitive environmental and agricultural areas and will ensure effective and efficient social, engineering and other services.

The municipality is seeking to create housing opportunities for the poor in areas that improve access to urban opportunities including employment, access to basic services, etc. This includes the development of sustainable human settlements and ensuring that people live in harmony with the environment. The municipality will to achieve this by:

- Limiting and containing the urban development footprint within the Urban Development Line (urban edge / growth boundary). The application of growth boundaries and other growth management techniques should take due cognisance of the adequacy of supply of land.
- Promoting higher “net” residential densities in strategically located areas within core areas, new growth areas and areas prioritised for infrastructure development.
- Creating new residential development opportunities that connect fragmented areas and consolidate urban form around high accessibility routes and nodes.
- Provide clear guidance on directions for future settlement growth and proposed release of land for development.

Densification is one of the key elements of compact development and a drive towards building an integrated and efficient spatial form. This can be achieved by limiting urban sprawl, by promoting higher densities, infill and re-development in and around the urban areas and other activity nodes and by the promotion of mixed use activity corridors linking otherwise isolated and non-functional areas with a focus of public transport.

The densification to be adopted are dependent on the spatial context of development, the site specific characteristics, the capacity of existing infrastructure and what the impact of that development will have on the environment. Within the densification strategy, there has to be a balance between compactness and the retention of significant open space to satisfy other social and environmental needs.

The objectives of densification and compaction are as follows:

- Minimising/Reducing the Footprint of the built up areas: Settlement (both rural and urban) transform natural land and alter the ecosystems in which they are located in a magnitude of ways. This in itself warrants a concerted effort to limit the impact on the affected area of land, as well as the ecosystems involved.
- Preventing the Destruction of Agricultural Land: Outward expansion of settlement occurs at the expense of high-value, very well located agricultural land, in close proximity to urban markets. This resource should be protected from settlement intrusion.
- Improving the Use of Public Transport and Facilitating Pedestrianisation: One of the key means of improving the use of public transport is increasing residential densities in nodes and along public transport corridors, which has major implications for the way in which areas are built and managed. The other is greater integration between the various entities involved in land use and transport planning.
- Improving the Efficiency of Urban Areas: More compact settlements increase general accessibility, the level of convenience with which people can conduct their daily lives and reduces costs in terms of time, money and opportunity cost, both for local government as well as for its citizens. More compact settlements in which infrastructure investment is planned are more efficient than those in which this is not the case.
- Reducing Inequality: One of the objectives of intervening in the form and density of development of settlements is to ensure greater access of all (especially the poor) to the benefits and opportunities of urban living.
- Increasing the marketability of the town: The physical urban environment of the Camperdown node, including the quality and liveability, plays a major role in its competitiveness. In addition to this, the message that potential investors get from a town that seems under control and functions well is that it is well planned and managed in an integrated way. The aim is to ensure a density of development that can facilitate sustainable economic development, job growth and income generation.
- To adhere to legislative directives: A wide range of acts and policies have been brought forward by national government urging local authorities to address the issue of sprawl and urban form. However, in practice, very little has been done to address these legislative directives.

4.1.5.1 DENSIFICATION STRATEGIES

The different methods/ strategies for achieving densification can occur through:

- New development on vacant or under-utilized land at higher densities.
- Subdivision of large pieces of land to encourage higher densities.
- Infill development on vacant or underutilized parcels of land at higher densities. A range of infill processes may include transfer of development rights, land swops, land consolidation, public housing projects and so forth.

- Cluster development on large parcels of land through a consolidation process.
- Conversion of existing building (sometimes vacant/derelict) to other uses.
- Allowing additional units to be developed on a single piece of land.
- Redevelopment of poorly functional and underdeveloped areas to encourage and facilitate infill.
- Introduction of a range of housing products/typologies to meet the densification requirements.

4.1.5.2 Focus Areas for Densification

The focus areas for densification in Mkhambathini should be within identified development nodes, nodal points at public transport interchanges and along certain development corridors.

Municipal Nodes

Nodes are one of the major structuring elements of cities and towns and can have a major effect on the surrounding area. It is one of the focus areas for private and public sector investment and development and are associated with higher residential densities and also the intensity of all other relevant land uses in that node. Within the local context of the Mkhambathini municipal area, these nodes should be the focus points where densification should be encouraged. As such, densification could potentially be promoted within and in close proximity to the following nodes:

- The municipal development node / primary node, being the Camperdown / Umlaas Road area, which constitutes the main focus of investment and development within the municipality. The main concentration of diverse activities and mixed land uses, availability of existing infrastructure and public transport facilities, are located in this node. Here, vertical and high-density development should be promoted. This will also align to the long term development vision for the strategic development of this node.
- Secondary nodes, being Maqongqo, Opokweni and Eston.
- Nodal points at public transport interchanges also provides an opportunity for higher density development. In the context of Mkhambathini, these interchanges includes the
  - → The N3 / Umlaas Road intersection;
  - → N3/Lion Park (Lynnfield Park) interchange where the Gateway node is proposed;
  - → The intersection of the R603/P21 and the R489 at the Eston Secondary Node.
- Densification of certain rural settlements should also be prompted in general, especially around the local nodal points within these settlements.

Municipal Corridors

Densification should be promoted along development corridors, where a linear concentration of economic activities and transportation-orientated activities take place. Development corridors or routes are major movement routes. Mixed land uses and higher density development tend to be

nodal, with access provided at intersections, and generally linked to parallel and connecting side routes.

- Provincial and regional development corridor – N3. This will be in line with the N3 development corridor plan.
- Along the proposed localised corridor - R103 (at the Lynnfield Park interchange).

Densification requires a certain level of infrastructure, which is seriously lacking in this area. Rectification measures and the capital investment will be required to enable the future development vision of certain nodes, especially within the municipal development node / primary node.

4.1.6 Spatial Planning Systems

The SDF will facilitate the evolution of a settlement pattern that reflects strong functional linkages between rural and urban, and the continuum of settlements ranging from rural to formal urban settlements. This pattern has a number of benefits, including:

- Maximizing lifestyle choice and where people want to live, and attracting middle to higher income earners into the area.
- Providing an effective framework for the service delivery and application of service standards based on character of the area.
- Unlocking economic development potential at different scales thus enabling remote rural areas to realize their agricultural economic development potential.
- Improving economic performance of the region.

A convenient settlement improves the level of choice, encourages creativity and investment while a less convenient settlement imposes a lifestyle on people and results in unnecessary expenses. Settlements should be equitable in the sense that they should provide a reasonable access to opportunities and facilities to all. It is neither possible nor desirable for settlements to be homogenous hence an emphasis on choice. Settlements should be located along the main transportation routes and held together by a web of local access roads and public facilities. At a regional level, they should be knit together by a system of regional access routes.

4.1.6.1 Urban settlement

The main urban settlement in Mkhambathini is Camperdown, which is planned and developed as a formal settlement. An agenda for the future planning and development is however required for this area, which will ultimately lead to the consolidation of Camperdown and Umlaas Road to become a "new town". It should also link to the intentions and plans of the N3 Development Corridor Framework.

Eston, Mid-Illovo and Manderston can also be classified as urban, although they have an agri-village character.

4.1.6.2 Dense Rural Settlements

Dense rural settlements in traditional /communal land have emerged because of the breakdown in land administration system in the rural villages, and movement of households from remote areas to well located settlements along the main transport routes. The dense rural settlements in Mkhambathini that requires intervention, includes the areas of Maqonqo and Opokweni in the north. These areas should be prioritised for settlement planning, and this should entail the following:

- Mobilization of traditional councils in support of settlement planning initiative.
- Formalization of institutional arrangements and clarification of roles and responsibilities and cooperation between the municipality and institutions of traditional leadership in respect of land allocation and land use management.
- Preparation of settlements plans indicating spaces where different land uses may be located and areas where settlement should be discouraged.
- Delineation of settlement edge indicating the land required to accommodate further expansion and social development needs over a defined period of time (five to ten years). The edge will also be used to promote compaction.
- Introduction and application of planning standards including average site size.

Dense rural settlements should be located within a 5km radius from a service centre or development node, and development corridors as identified in this SDF. Densification should be undertaken as part of settlement planning and development. These settlements should be prioritized for rural housing development in line with the provincial rural densification policy.

4.1.6.3 Scattered Rural Settlements

Further expansion of small-scattered rural settlements should be discouraged in the short to medium term with an intention to enable them to develop into settlements with a strong agricultural character. There are a number of scattered settlements in Mkhambathini that is spread throughout the municipal landscape. Spatial planning interventions in respect of these settlements should focus on the following:

- Agricultural development particularly protection of agricultural land from settlement.
- Management of grazing land including introduction of strategies such as rotational grazing.
- Consolidation of settlements as a means to create service thresholds.

Remote scattered rural settlements should occur beyond a ten (10) km radius from the existing nodes and development corridors as identified in this SDF.

4.1.7 Hierarchy of Plans

The SDF outlines the spatial development strategy and introduces principle for the transformation of rural settlements into sustainable human settlements. The SDF will be refined and developed further through the formulation of a series of plans with varying degrees of detail and flexibility.

4.1.7.1 LOCAL AREA PLANS

Local Area Plans (LAPs) should be prepared for wider nodal areas, with the priority being put on areas that are currently experiencing development pressure. A Local Area Plans (LAP) is developed to provide locally focused planning guidance for local areas. Their aim is to achieve the following:

- establish a shared vision for the local area;
- address key local planning issues and capitalise on opportunities;
- establish an integrated approach to local planning; and
- sensibly manage future development outcomes.

LAPs will deal mainly with the following issues:

- Land use zoning and density;
- Public open space;
- Private open space;
- Provision of infrastructure;
- Conservation of built heritage;
- Conservation of natural environment;
- Provision of traveller accommodation;
- Community facilities;
- Design and development standards.

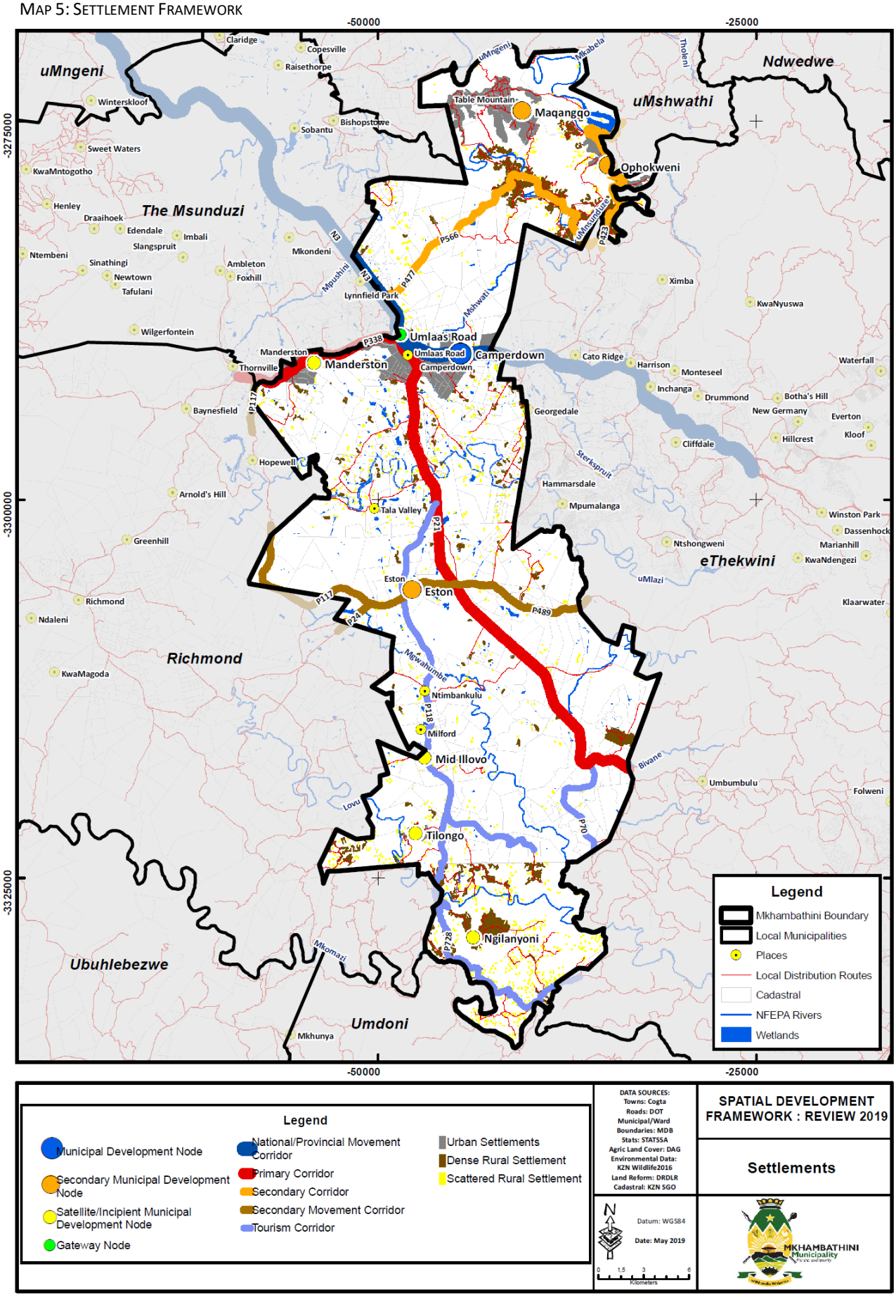
The results of local area planning will be integrated and used to refine the SDF. They will also inform the review of the Land Use Scheme.

4.1.7.2 PRECINCT PLANS

Precinct plans should be prepared for each of the development nodes, with the nodes that are currently facing development pressure being a priority. These plans will establish spatial structure and provide more detail on the land use proposals. Particular attention will be paid on the following:

- Housing typology and yields;
- Local transport and movement networks;
- Open space system;
- Urban design principles and concepts;
- Development parameters; and
- Nature and character of land use.

MAP 5: SETTLEMENT FRAMEWORK



The precinct plans will be incorporated into the local planning scheme to guide the use and development of land in the precinct over the long term. Precinct plans should:

- Meet the state and municipal planning policy objectives and resolve competing issues;
- Create a structure for nodal development that will deliver practical outcomes;
- Provide the framework for statutory planning controls, including specific implementation provisions; an
- Give local communities, developers and other investor's greater certainty and confidence about future development in the growth areas.

4.1.7.3 Settlement Plans

Fragmented development has high infrastructure costs and should be discouraged. To achieve future environmental, economic and social sustainability settlements should be planned to be able to demonstrate self-reliance and an ability to maximize infrastructure efficiency and service provision. Planning for settlement purposes should identify the constraints and opportunities of the land, and seek to achieve a carefully planned community, enhance the quality of the environmental, and avoid resource and hazard issues. As such:

- settlements should be located on land that is suitable for this land use and capable of supporting all of its aspects;
- isolated settlements should not be promoted if residents would dependent heavily upon public transport to access basic social and services infrastructure;
- development of settlements should avoid areas of natural significance, economic resource, high landscape and areas with cultural heritage value, and potential increased risk associated with impacts of climate change; and
- development of settlements on areas adjoining land with the above values should incorporate buffers as necessary to help protect those values and to avoid future land use conflict.

4.1.8 Integration of Traditional Land Allocation Processes with Municipal Spatial Planning

Traditional leaders are responsible for the allocation of land for different land uses within their areas of jurisdiction. In some instances, these uses compete for the same space. Most common land uses in traditional council areas include settlement (imizi), grazing, limited agriculture, and limited commercial and community facilities. Although this practice has shown resilience and is practised widely through the Province, it can be improved through strategic integration with municipal spatial planning activities.

4.1.8.1 Mapping of Izigodi

Spatial planning in traditional council areas should start with the recognition of the social and management structure, and the manner in which social groups have organised themselves in space.

Each traditional council area is divided into izigodi. The boundaries for izigodi are known to the local communities and traditional leaders, and often run along natural features such as rivers, plateau and hills. Identification and mapping of these areas will help planners to understand the spatial structure of rural areas and the spatial dynamics or functional relationship between and among different izigodi. It will generate new spatial data, improve GIS system and enable the municipality to undertake area based spatial and development planning. This exercise will be undertaken with full participation of the traditional leaders and its results will be ratified by the traditional council concerned.

4.1.8.2 Mapping of Settlements

Each izigodi is made up of different settlements distributed unevenly in space. Like izigodi, spatial identification of settlements will help planners to understand how rural communities have organised themselves in space, functional relationship and movement patterns between different settlements. It will also provide planners with an opportunity to update the existing settlements data including place names.

4.1.8.3 Guidelines for land Allocation

Allocation of land for different land uses is the function of traditional leaders. The guidelines for the allocation of land are intended to document the factors that should be taken into account in this regard, and direct settlement to areas that suited and earmarked for this use. The guidelines should cover the following:

- Norms and standards for sites sizes taking into account location and density of settlements.
- Factors that should be considered when allocating land for different land uses.
- Spatial identification and coding of rights allocated.
- Register of land rights holders.

The formulation of the guidelines should be undertaken with full involvement of traditional leaders to ensure by-in acceptance of the guidelines. They should be consistent with the spatial vision as outlined in the SDF.

4.1.8.4 Training and Capacity Building

Traditional leaders require training and capacity building in a number of areas in order to play an active role in the transformation of rural settlements into sustainable human settlements. Priority in this regard should be given to the following:

- Map reading skills.
- Guidelines for allocation of land for different land uses.
- Assessment of applications for land rights and land development.
- Land allocation and land development.

In addition, traditional leaders should be provided with computers, access to the internet (Google Maps) and ability to view maps. They should be provided with Geographic Positioning System (GPS) in order to be able to take coordinates for each site and identify it spatially.

4.2 DEVELOPING SUSTAINABLE HUMAN SETTLEMENTS

The 1976 Vancouver Declaration defined human settlement as:

> *...the totality of the human community - whether city, town or village - with all the social, material, organizational, spiritual and cultural elements that sustain it. The fabric of human settlements consists of physical elements and services to which these elements provide the material support.*

The concept of human settlements has been developed further into a strategic framework for overall socio-economic development. Human settlements are the spatial dimension as well as the physical expression of economic and social activity. The creation of sustainable human settlements is inevitably an objective for social development as it defines and determines the relationship between where people live, play and work on the one hand and how this occurs within the confines of the natural environment. It is one of the most visible and quantifiable indicators of the society's ability to meet one of its basic needs - shelter, and a pre-requisite for sustainable human development and economic growth.

4.2.1 RADICAL LAND REFORM PROGRAMME

Land identification exercise should be undertaken to identify, map and assess all strategically located land that is suitable for housing development. This is in addition to the land that is subject of the current and planned housing projects. The exercise should be based on the following criteria:

- Ownership of land.
- Restrictive conditions of title and other encumbrances.
- Current land use and existing zoning.
- Size and potential yield for different housing products.
- Availability of services.
- Location in relation to employment and other urban opportunities.
- Market value of the land as determined by the municipality for rating purposes.
- Geotechnical, topographical and other environmental conditions.
- The use of the land for housing purposes should be in accordance with IDP and the associated sector plans.

This exercise should be supported by a land release policy clearly stating the manner in which the municipality will acquire, allocate land and release it for development. In some instances, this may include entering into collaborative initiatives with the private sector (e.g. private public partnerships).

4.2.2 Housing Delivery

A differential strategy should be followed in the development of human settlements. Particular focus in the urban areas should be paid to the eradication of informal settlements and release of land for the establishment of new settlements and delivery of a range of housing products within the urban edge. Dense rural settlements will be prioritised for the development of human settlements through the rural housing subsidy scheme.

4.2.3 Informal Settlements

Informal settlements are not homogenous, but one common factor in their formation is that they provide an initial point of access into the urban environment for incoming migrants, or for those moving from other parts of the area. Mkhambathini will undertake a rapid assessment and grading of informal settlements (based on desktop information) along the following lines:

- Category A: Those settlements for which there are conventional upgrade and/or relocations options available in the short term (i.e. in the next year or so). This implies that the assessment of these settlements has already been completed, and that they are technically suitable for upgrading.
- Category B: Those settlements, which do not have a short term housing solution, but there, is also no immediate environmental or other threat, making it impractical and illogical to relocate them. These are settlements for which interim relief measures or alternative/incremental upgrading processes are likely to be highly relevant.
- Category C: Those settlements which are at immediate and significant risk (e.g. of natural disasters such as flooding or slope slippage or toxic waste or the need to make the land available for highly strategic purposes such as a new airport) and which consequently need to be relocated immediately. It is again anticipated that settlements in this category will constitute a small proportion of all informal settlements.

The municipality will adopt the following approaches in its informal settlement-upgrading programme.

- Conventional informal settlements ('in-situ) upgrading entails the re-development of an informal settlement in a comprehensive and relatively complete fashion in respect of housing, tenure and infrastructural services.
- Self-help or community driven housing (previously known as 'people's housing processes).
- Relocations may affect only a portion of settlements or the entire settlements and may be temporary (e.g. to a temporary relocation area) or permanent (i.e. to another green-fields project site).
- Non-conventional in-situ upgrading.
- Limiting future informal settlements growth is an important aspect of addressing the challenges of informal settlement. It is important that strategically located land, suitable for low-income

settlement be identified, acquired, planned and serviced in anticipation of future influxes and informal settlement growth. This also serves to anticipate future growth nodes, which will become well-located in respect of such factors as access to employment opportunities, in the future.

4.2.4 Slums Clearance

The following spatial planning directives will be applied in the implementation of slums clearance projects:

- Identify informal settlements and quantify housing need.
- Mapping and assessment of informal settlements to establish whether they can be upgraded *in-situ* or requires relocation.
- Develop and introduce a land invasion policy as a means to prevent development of new and expansion of the existing informal settlements.

4.2.5 Rural Housing

The majority of Mkhambathini's housing need is located in the traditional rural areas (49%). The Government's rural housing assistance programme has been designed to complement the realisation of the objectives of Integrated and Sustainable Human Settlements. It focuses on areas outside formalised townships where tenure options are not registered in the Deeds Office but rather protected in terms of land rights legislation - Interim Protection of Informal Land Rights Act, 1996 (Act No. 31 of 1996). As opposed to registered individual ownership in formal towns, rural households enjoy protected informal tenure rights and/or rental or permission to occupy. The rural housing assistance programme is needs or demand based and designed to provide housing and infrastructure assistance within the specific circumstances. Dense rural settlements will be for prioritized rural housing.

4.2.6 Middle Income and Upmarket Housing

Middle income and up-market housing is undertaken by the private sector in response to an expressed need. However, the municipality can facilitate the delivery of this form of housing through the incorporation of appropriately located land into the land use scheme area and introduction of appropriate zoning. Middle and up-market housing development can also be delivered through infill, redevelopment of derelict sites and as part of the densification programme of the municipality. The scheme will also identify areas for medium density housing.

4.2.7 Inclusionary Housing

Inclusionary housing refers to the incorporation of a certain proportion of affordable housing in market housing developments. Inclusionary housing policy links closely with the BNG policy. Objectives of the BNG include the increasing of densities; the promotion of social cohesion; the deconcentration of poverty; and the improvement of quality of life for the poor, all of which could be achieved by implementing an inclusionary housing policy (Verster, University of Pretoria, https://repository.up.ac.za/).

The municipality identified 2 sites for GAP/inclusionary housing. The one site (north of N3- as depicted on figure 9) is currently being transferred to the Municipality and will accommodate approximately 150 flats. The second site is in private ownership and adjoins the light industrial area on the southern side of the N3 (Camperdown future residential area – figure 9). This site will accommodate approximately 250 units.

4.3 PROTECTION AND ENHANCEMENT OF THE NATURAL ENVIRONMENT

The protection of natural systems from disturbance and displacement by future development is of critical importance. The spatial distribution of environmental biodiversity areas of significance is considered vital to provide the spatial framework for future development planning, particularly indicating those areas where development needs to be avoided or carefully managed. As such, areas where no or limited development should take place must focus on the conservation of the core biodiversity areas in Mkhambathini. These include protected and conservation areas, wetlands, flood plains, steep slopes and special sensitive biodiversity areas. These assets perform a substantial and significant role in conserving biodiversity as well protecting the quality of life of the residents of Mkhambathini.

There are a number of environmentally sensitive areas within the municipality. Conservation areas within Mkhambathini has special environmental status and economic value. This can be attributed to its function in providing an environmental service, which contributes to the overall open space system through watercourses, wetlands, grasslands, open spaces and other natural habitats.

4.3.1 PROTECTED AREAS

There are also formally protected areas in Mkhambathini, designated as protected areas under the National Environmental Management Protected Area Act No 57 of 2003. Mpushini is a Protected Environment under the Stewardship programme, while the Natal Lion Park is a private protected area.

The municipality will address land use and development surrounding a Protected Areas and buffers around Protected Areas in terms of the relevant Management Plans, which are required to be developed for each Protected Area. The object of the plan is to ensure the protection, conservation and management of the protected area in a manner that is consistent with the objectives of the Protected Areas Act, and for the purpose that the protected area was declared.

Development and land use around the Protected Areas needs to be compatible with the values of the protected areas, with a gradient of development/land use density and scale, as well as type, occurring from the edge of protected area to the outer edge of the buffer. To enable this gradient the control measures are split into distance subsections with the controls on activities that would result in noise, light, visual, pollution and animal conflict impacts being highest at the edge of the Protected Area and reducing towards the outer edge of the buffer.

The Mayibuye Game Reserve has been assessed by the Ezemvelo KZN Wildlife Stewardship Programme and was accorded the status of “Private Game Reserve”.

4.3.1.1 PROPOSED NATURE RESERVE

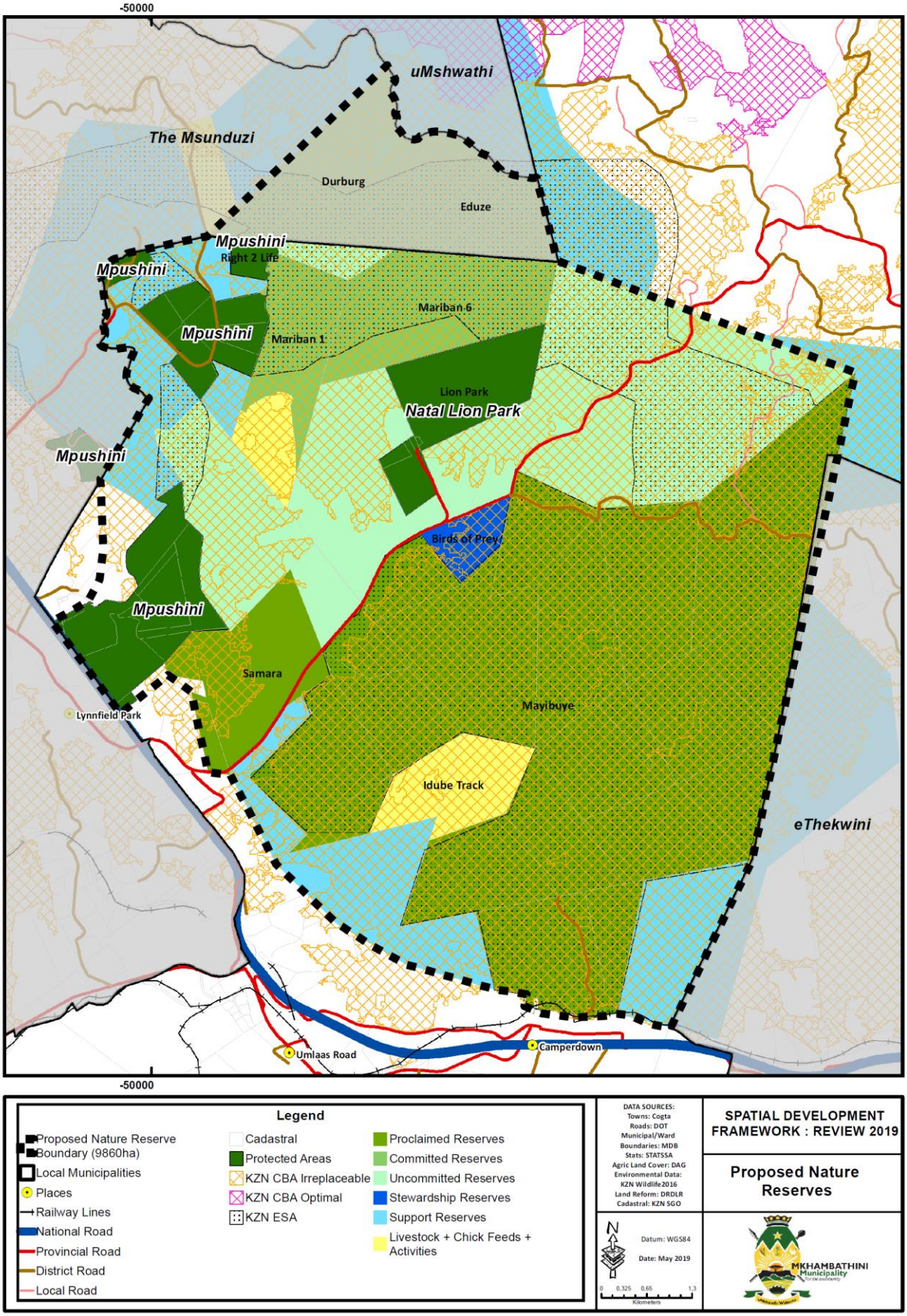
The increasing loss of natural habitat and changes in land cover are major drivers of biodiversity loss. These losses and changes pose significant challenges for meeting biodiversity conservation goals and targets. A research article by KZN Wildlife on 'Land-cover change and biodiversity in KwaZulu-Natal' (Jewitt et al, 2015) found that in 1994, 73% of KZN was in a natural state and this decreased to 53% by 2011. The article further indicates that "the main drivers of change in the landscape were agriculture, timber plantations, built environments, mines and dams. Apart from the direct loss of natural habitat, these land covers all pose additional negative impacts for biodiversity remaining in these or surrounding areas. These effects may be direct (e.g. loss of habitat or extraction of water), indirect (e.g. pollution transported downstream), induced (e.g. associated industries and settlement) or cumulative (e.g. collective impacts on water quality and quantity)." The main challenge in KZN is thus to conserve biodiversity and natural habitat.

The area to the north of the N3, along the P477 and P566, is one of the most environmentally sensitive areas in Mkhambathini. This area includes protected areas (e.g. Mpushini Protected Environment Natal Lion Park protected area) Irreplaceable and optimal critical biodiversity areas (CBAs), as well as ecological support areas (ESA). It has however also been subjected to changes in land use, such as growing rural settlements and pressure for development.

In view of the above, it is the intention of the landowners in this area to establish a Protected Environment or a Nature Reserve under the Stewardship Program. This will require a high level of commitment from the landowners and will place the proposed nature reserve within one of the two highest levels of the Protected Area designations recognised by the Protected Areas Act. This must also be recognised as a Protected Area in municipal spatial planning.

The proposed area of the "Right 2 Life' nature reserve is indicated on the map on the overleaf and is approximately 9860ha. The majority of landowners are in favour of this initiative and ultimately, this area will expand the Mayibuye Game Reserve area.

MAP 6: PROPOSED NATURE RESERVE (RIGHT 2 LIFE)



4.3.2 Critical Areas Of Biodiversity

Maintaining ecological processes and functions of natural systems are important and critically important biodiversity areas have therefore been defined by Ezemvelo KZN Wildlife to ensure that terrestrial biodiversity resources remain available to the local inhabitants and future generations. As a measure to protect these areas, KZN Wildlife has started to develop control measures that will be included in the Mkhambathini scheme and rural land use management policy.

Biodiversity management in Mkhambathini should further seek to achieve the following outcomes:

- Reduction in the rate of ecosystem and species extinction.
- Biodiversity assets are protected to secure a sustained supply of ecosystem goods and services over time.
- The ability to secure the ecosystem goods and services upon which future communities must build their livelihoods will require short-term responses. This is challenging in a “pro-poor” policy environment where an eco-centric approach to development is neither applicable nor achievable.

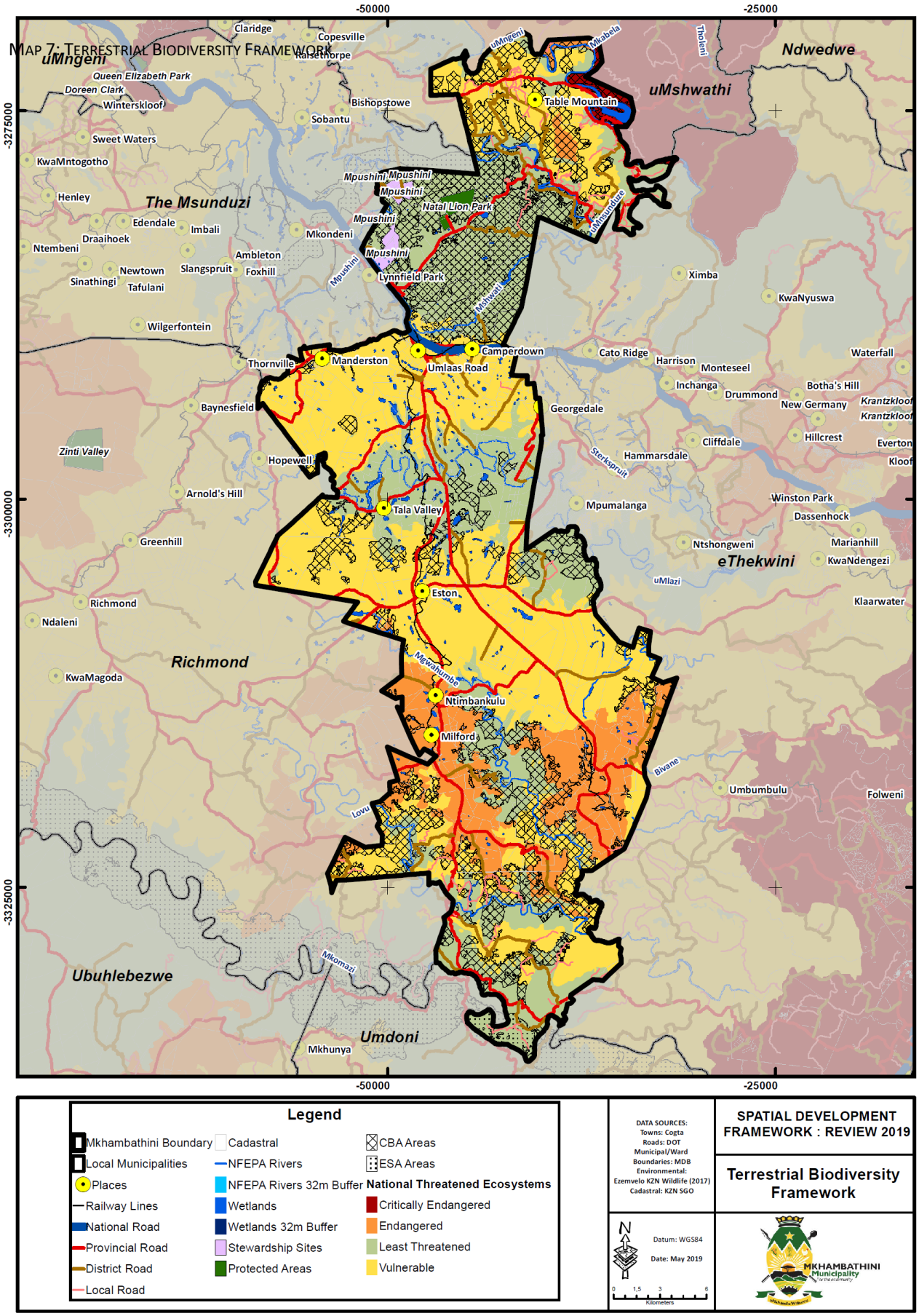
There are limits to change and the reality is that Mkhambathini contains areas of critically endangered, endangered and vulnerable ecosystems, which need some level of protection. These areas represent the key strategic development conflict of the SDF and it will require responses to satisfy national policy priorities. The following activities should be strengthened:

- Participation in the National Protected Area Expansion.
- More detailed spatial linkage plans for core areas where critical biodiversity areas occur.
- Applying appropriately restrictive zoning categories for ecologically important areas.
- Adhering to regulatory requirements for development that is proposed within critical biodiversity areas.

Examples of opportunities that the municipality can harness for local economic development, presented by threatened ecosystems, include accessing national and provincial intervention programmes to implement IDP projects with biodiversity benefits, linked to management of threatened ecosystems (such as clearing of invasive aliens through Working for Water, or other forms of rehabilitation e.g. through Working for Wetlands, Land Care, etc.).

Development within the identified CBA areas needs to accommodate and support the biodiversity network, and the municipality will adopt the development control measures and guidelines as outlined in the UMDM EMF. Map 7: Terrestrial Biodiversity Framework, provides an indication of the terrestrial environmental framework components that needs to be considered in the SDF.

MAP 7: TERRESTRIAL BIODIVERSITY FRAMEWORK



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- NFEPA Rivers
- NFEPA Rivers 32m Buffer
- Wetlands
- Wetlands 32m Buffer
- Stewardship Sites
- Protected Areas
- CBA Areas
- ESA Areas

National Threatened Ecosystems

- Critically Endangered
- Endangered
- Least Threatened
- Vulnerable

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Environmental: Ezemvelo KZN Wildlife (2017)
Cadastral: KZN SGO

N

Datum: WGS84

Date: May 2019

0 1.5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2019

Terrestrial Biodiversity Framework

MKHAMBATHINI Municipality

4.3.3 Water Resource Management

Water resource management must seek to achieve the protection of water resource assets to secure a sustained supply of water and ecosystem goods and services over time and to reduce vulnerability to the effects of climate change. Securing a sustained supply of water requires the management of natural assets (water resources management) and the introduction of new infrastructure (water services management). Water management requires that investment into water services and sanitation infrastructure alone will not secure water for growth, and that much more attention must be afforded to the impact of current and proposed development activities on the water resources of the region. This will require short-term investment into the protection, rehabilitation and management of assets that store water (such as wetlands, floodplains, maintenance of land cover) and the management of activities that degrade or pollute water resources. The following activities should be strengthened:

- Flood risk areas must be delineated as “no-go” areas.
- Wetlands and riparian zones must be rehabilitated and protected from future development.
- Land use practices must conform to the National Freshwater Ecosystem Priority Area Guidelines.
- Improving sanitation and waste management infrastructure and services in nodal areas.
- The District to facilitate and assist in establishing effective water quality monitoring programme, as well as the gathering and storage of all information available regarding water quality.

According to the District SEA and EMF, the SDF must consider the implications of the following key sustainability issues for land use planning (District EMF):

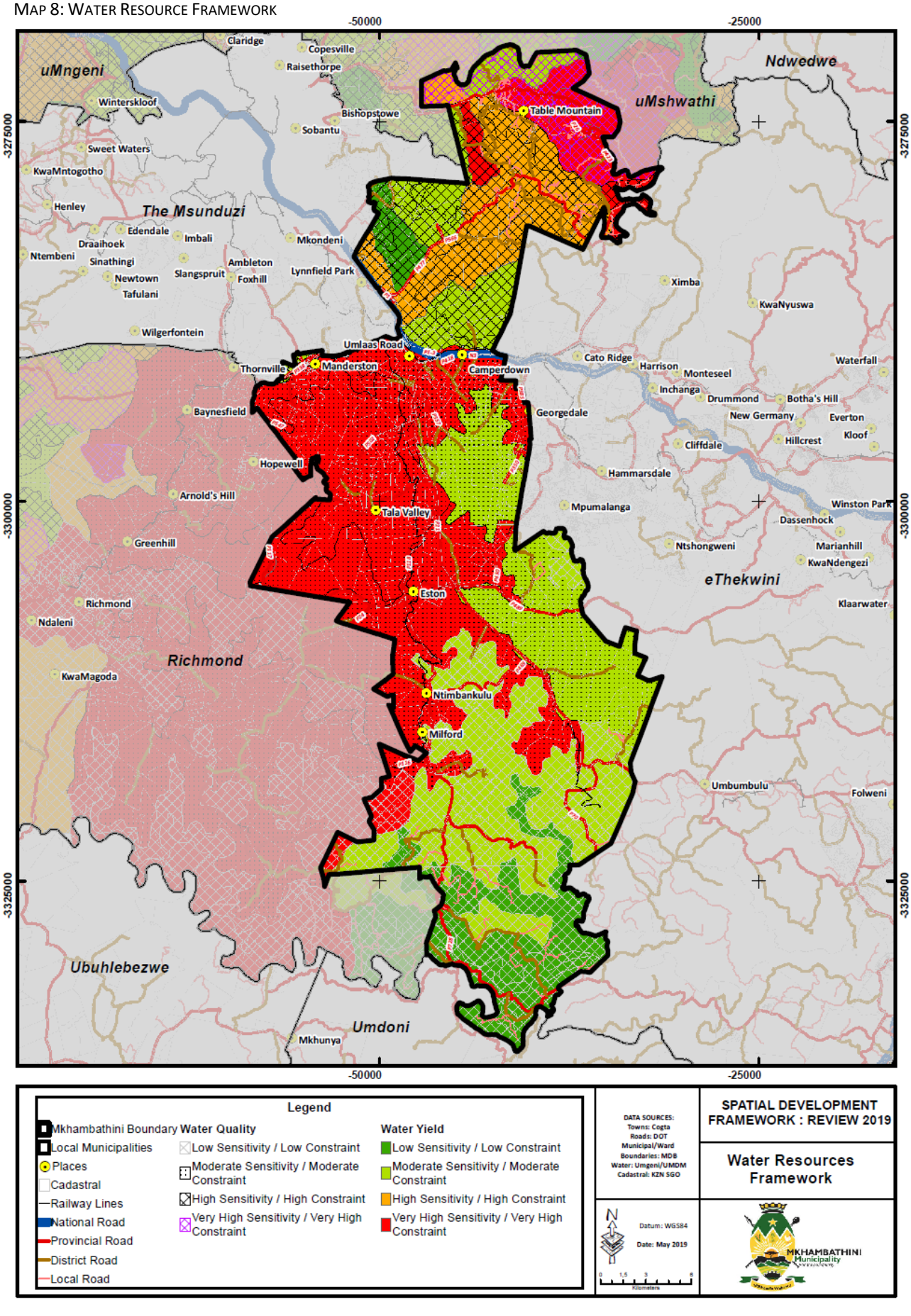
- Water Demand and Supply (i.e. excessive water demand that exceeds available supply); and
- Water Quality (i.e. reduced water quality).

4.3.3.1 Water Quality

Sustainability strategies in the District EMF pertaining to Water Quality are as follows:

- Development of Integrated Catchment Management Plans.
- Develop and implement a scheduled maintenance and upgrade programme of all sewerage infrastructure and wastewater treatment works.
- Develop a water pollution emergency response protocol.
- Develop an integrated water quality and river health monitoring system.
- Develop an incentive scheme designed to improve water quality.
- Integrate the costs of restoration and sustainable management of catchments into the water reconciliation and pricing strategy.
- Ensure adequate resources and capacity for the compliance monitoring and enforcement of relevant water legislation.

MAP 8: WATER RESOURCE FRAMEWORK



- Develop policies for improved /efficient technologies at the points of waste generation and effluent treatment in order to reduce impacts.
- Implement and ensure compliance with an integrated waste discharge-charge system.

4.3.3.2 Water Demand and Supply

Sustainability strategies in the District EMF pertaining to Water Demand and Supply are as follows:

- The restoration and sustainable management of water catchments.
- Policies and measures implemented to significantly reduce levels of water consumption and demand through water use efficiencies.
- Determination and maintenance of the ecological reserve for key rivers.
- Coordinate and integrate strategies and programmes to ensure sustained implementation of alien plant control and rehabilitation.
- Coordinate and integrate strategies and programmes for wetland and riparian area rehabilitation.
- Implement a water loss and wastage management plan.
- Develop policies and strategies for the more efficient and effective management of farm dams and irrigation systems.

4.3.4 Cultural Heritage

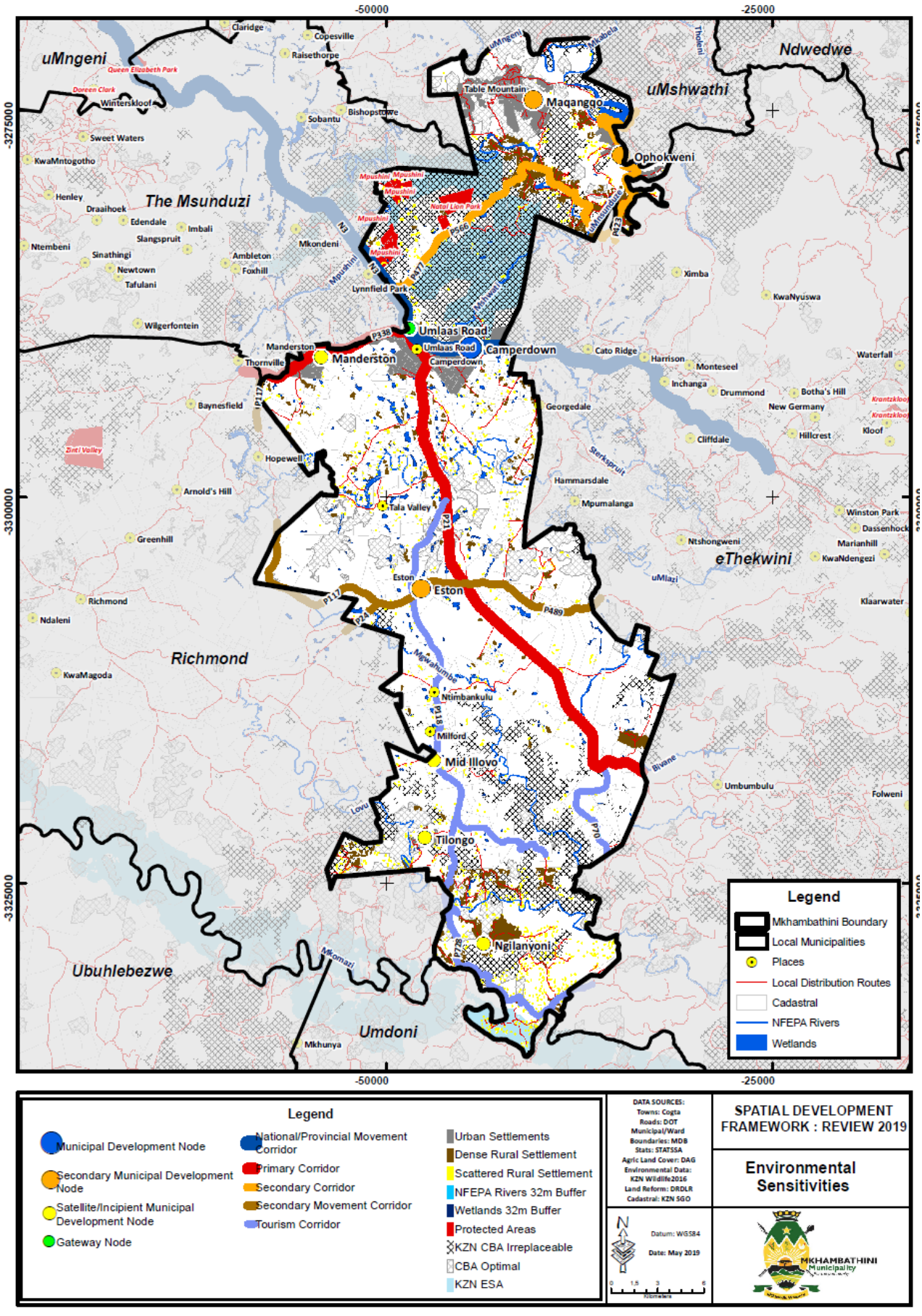
Cultural heritage sites require intensive management to avoid all types of destruction, such as vandalism and development. Heritage areas should thus be afforded the necessary importance and protected within the area:

- Cultural resources, such as rock art, museums, archaeological sites, historical buildings and material must be protected and managed to avoid destruction due to inappropriate forms of development, as well as activities undertaken that are associated with these resources (e.g. tours).
- Cultural heritage sites can be used as an income generating resource, which could be used to protect and manage the resources of the region.
- Education in culture and history must be supported and encouraged in order to enhance knowledge, protection and full economic use of these assets.

4.3.5 Land Degradation and Sustainable Agriculture

This strategy recognises the negative environmental impacts that are associated with the main development pressures in the area such as the dispersed settlement pattern, commercial agriculture and the area's road network. It further recognises the undesirable changes that occur because of secondary and cumulative environmental impacts of these activities (including the decline in water quality).

MAP 9: ENVIRONMENTAL FRAMEWORK



The land resource strategy therefore seeks to achieve the following outcomes:

- The rate and extent of land degradation in Mkhambathini has been halted and reversed.
- Land is at optimal level of production with a high yield of good quality water.

More resilient communities and long-term sustainable economic returns will only be secured if there are targeted interventions in key areas of Mkhambathini. The implementation of urban edges and settlement edges and the densification strategies will contribute to overall sustainable land management because it will manage and minimize the dispersed settlement pattern in the area and it will target development areas that are not constrained by steep slopes or high erosion susceptibility. Local interventions, through settlement plans, will also minimize negative impacts through land use controls. The following activities must also be strengthened to minimize erosion and pollution of the soil:

- A road maintenance programme that uses erosion risk as a key criterion in the allocation of funds will also be required to control land degradation.
- Improving sanitation infrastructure, refuse removal and waste management services in nodes.
- A strategy to protect high potential agricultural land is discussed in section 4.5 of this report.

4.3.6 Human Vulnerability And Environmental Change

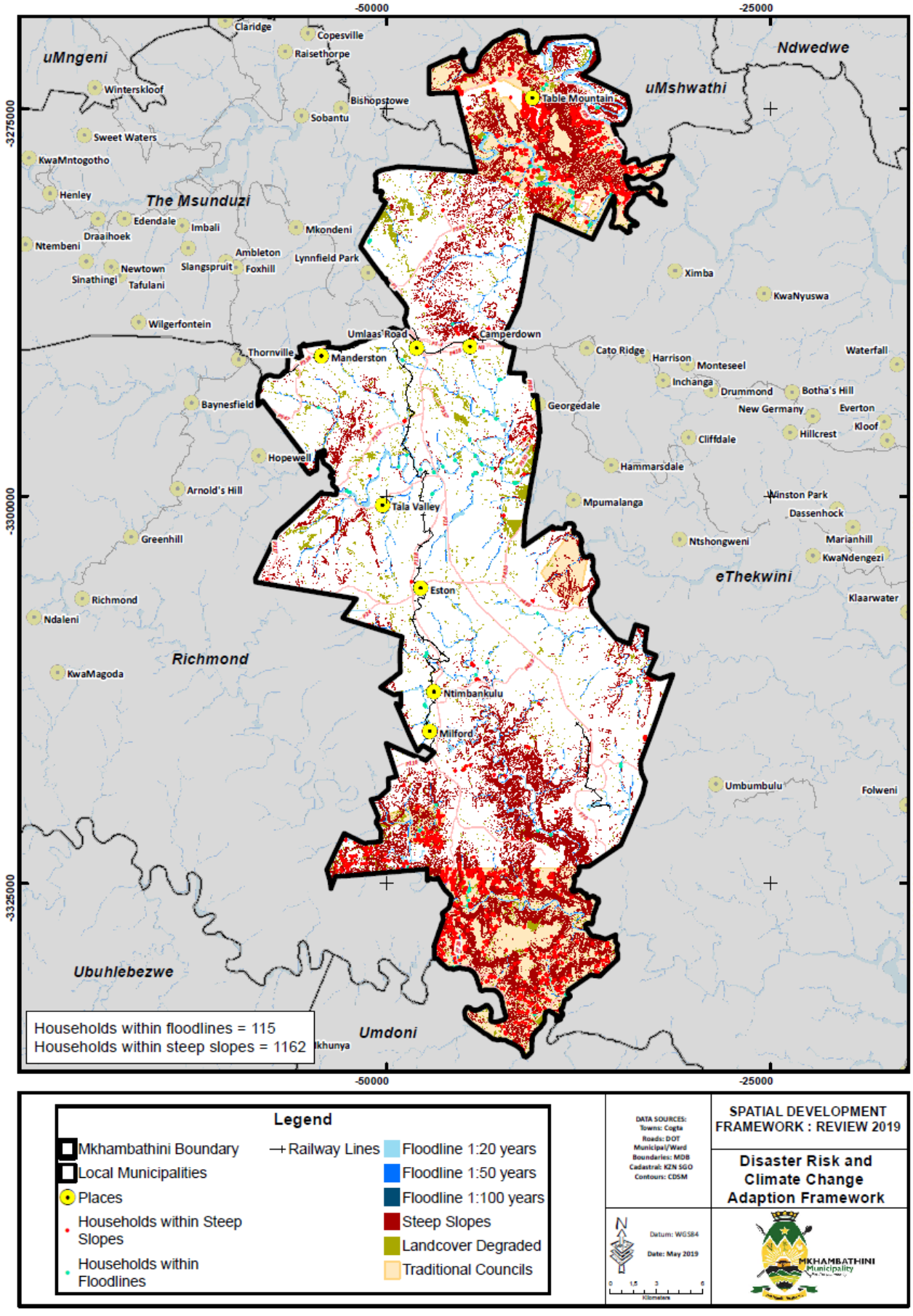
Poverty and vulnerability are interlinked in such a way that each causes the other. These concepts capture multiple factors and agents influencing human well-being, including social, political, economic, and environment aspects. Understanding the interrelationships between these factors is complex and demands an interdisciplinary approach. It is however becoming clear that issues of environmental degradation, water quality and scarcity, and limited access to agricultural production potential decrease the coping capacity of poor and vulnerable communities. Poverty and unemployment forces people to exploit natural resources as a livelihood strategy and as a result fall victim to environmental degradation. Changes associated with a changing climate may further impair the resilience of communities.

This strategy must therefore seek to achieve outcomes that reduce human vulnerability whilst maximizing natural capital (increasing social-ecological resilience). This will require attention to inter alia the following activities:

- Spatially delineate high flood risk areas, develop a disaster response strategy for settlements within these areas and implement a programme to relocate such settlements.
- Interventions to improve the environmental management capacity of Traditional Leaders and the Ingonyama Trust Board and the development of environmental planning standards that are aimed at creating ecological resilience.
- Interventions to maximise community based natural resource management programmes, focused in those areas where land degradation has become a concern.

Refer to Map 10: Disaster Risk and Climate Change Adaption Framework.

MAP 10: DISASTER RISK AND CLIMATE CHANGE ADAPTION FRAMEWORK



4.3.7 WASTE MANAGEMENT

In order to enhance the quality of life of citizens and protect the environment from unmanaged waste it will be important to provide appropriate and sustainable municipal waste collection services to all households and settlements in the area. This is a major challenge at the moment because:

- The Municipality only provides solid waste services to 480 households while 300 households benefit from a free basic service; and
- The majority of the population seems to make use of their own dump to dispose their refuse.

The state of solid waste removal in Mkhambathini is therefore a key ecological and human health concern. Much more effort will be required to work towards the provincial PGDP target of '75% of rural households have access to adequate levels of waste collection services'.

To overcome the situation the Municipality must at least:

- Develop an Integrated Waste Management Plan (IWMP), which is a requirement in terms of the National Environmental Management Waste Act (2008), and integrate it into the IDP. The uMgungundlovu District Municipality's Integrated Waste Management Plan (date) can serve as a basis from which to prepare a local plan. The IWMP must make proposals in terms of what can practically be implemented in the area given the financial resource constraints of the Municipality and it must explore opportunities to increase external funding for waste management.
- Take cognisance of the National Municipal Waste Sector Plan (2012) which was developed to assist Municipalities to put mechanisms and systems in place to deal with waste service backlogs; and
- Consider the appropriate levels of service for settlement densities with regard to solid waste management as included in the National Policy for the Provision of Basic Refuse Removal Services to Indigent Households (2012). These levels of service are as follows:

More than 40 dwelling units per hectare (high density).	Frequent and reliable formal collection and disposal of solid waste to a landfill is required.
10-40 dwelling units per hectare (medium density).	Communal collection and formal disposal of household refuse and litter is required.
Less than 10 dwelling units per hectare (low density).	On-site disposal of general household waste in areas so designated by the municipality and in accordance with the relevant guidelines for on-site disposal provided by the municipality.

The undesirable state of waste management in this Municipality may also present opportunities. The KZN Poverty Eradication Master Plan underlines the potential for enterprise development through opportunities presented in waste management while the provincial environmental authorities have a programme to provide financial support for recycling initiatives. There may also be opportunities to access national funding for enterprise development through the National Environmental Protection Infrastructure Programme (EPIP) which is the key programme through which the Department of Environmental Affairs (DEA) contributes to the government wide Expanded Public Works Programme.

4.4 PROTECTION AND ENHANCEMENT OF AGRICULTURAL LAND

Agriculture and farmland are an integral part of the economy, environment, and overall quality of life. Appropriately, managed agricultural lands can provide groundwater recharge, wastewater infiltration, flood prevention, and habitat protection. While some conversion is inevitable, communities can manage the impact of conversion by implementing one or more regulatory and incentive based farmland protection strategies.

Two primary planning goals are to provide locations for necessary settlement development and to protect natural resources, such as good agricultural soils. If growth is properly directed, the two rarely come into conflict. If it is not, neither goal can be achieved. Therefore, programmes for the preservation of agricultural land should be integrated with the general growth management programs.

4.4.1 IDENTIFICATION AND MAPPING OF AGRICULTURAL LAND

The National Department of Agriculture, Forestry and Fisheries (DAFF) as well as the provincial Department of Agriculture and Environmental Affairs (KZN DAEA) has responded to their mandate to ensure long-term food production, by developing an agricultural land categorisation[2]. These categories focus on mitigating and limiting the impact of any proposed change of land use on agricultural production and to protect agricultural land (specifically high potential and unique agricultural land). The following categories have been included in the KZN Agricultural Land Categories (DAFF & DAEA, 2013):

- Category A (Irreplaceable) is regarded as very high potential agricultural land that should be retained exclusively for agricultural use. This category is scarce and all efforts should be focussed on retaining land within this Category exclusively for agricultural production. It includes identified grazing land that has a very high production value for sustained livestock production and has no or very few limitations to agricultural production and can support intensive arable cropping systems. Any change in land use will require detailed natural resources/agricultural study with sufficient motivation to propose a change of land use. Land use will be restricted to those in support of primary agricultural production only.
- Category B (threatened) is regarded as high potential agricultural land and has few limitations to agricultural production. Limited change of land use may be supported but only if in direct support to primary agricultural production practices or systems and then these developments must be located on the lowest potential areas within the higher potential zone. A detailed natural resources study must be conducted with sufficient motivation to propose a change of land use in

[2] It should be noted that specific land parcels, when determining their agricultural potential for placement in a Category, may not currently be utilized for agricultural purposes. However, their inherent capacity to produce must be captured since they are zoned agricultural land and thus form part of the food production base of the country (KwaZulu-Natal Agricultural Land Potential Categories Report, p.19)

this category. The protection of areas with high biodiversity value in areas with high agricultural potential should be promoted.

- Category C (primary agricultural land use) is regarded as land with moderate agricultural potential, on which significant interventions would be required to achieve viable and sustainable food production, although agriculture is the still the majority land use in the rural landscape. These areas are more suitable for extensive grazing, the production of fodder crops in support of livestock production, and, from a natural rangeland grazing perspective, additional feed may be required during winter months to supplement the seasonal grazing provided by existing rangeland. It is stated that this Category of land may however, have the potential to act as a buffer for adjacent higher potential agricultural land Categories. Thus, Category C land may be retained so as to act as additional protection for adjacent higher potential land. Change of land use from agricultural land use to non-agricultural land uses, which are not necessarily in support of the existing agricultural land use, may be considered, but only with the specified motivation and a detailed natural resources study.
- Category D (secondary agricultural land use) is land is regarded as land with low agricultural potential and requires significant interventions to enable sustainable agricultural production. Extensive areas of land are generally required for viable production (e.g. beef and game farming) although intensive production under controlled environmental conditions (e.g. green housing, poultry, piggeries) is not excluded, nor is intensive production on areas of arable land available e.g. along river systems. Change of land use may be supported, as long as this change does not conflict with the surrounding agricultural activity and the "Right to farm" should in all instances be acknowledged.
- Category E (mixed-use) land is regarded as land with limited to very low potential for agricultural production. Cultivation within this land category is severely limited in both extent and in terms of the natural resources available, and grazing value will be poor with a very low carrying capacity. Land within this Category however may have a high conservation or tourism status, depending on the locality, or may act as a buffer for as higher Category of adjacent land. In addition, these land parcels may be required to support the economic viability of an extensive grazing system on adjoining land parcels e.g. large dairy farming system.

4.4.2 Land Use Regulations

The alienation of some productive agricultural land will inevitably occur as a consequence of development, but the municipality will not support such alienation when equally viable alternatives exist. When preparing, reviewing or amending planning schemes, the municipality will include provisions for protecting good quality agricultural land.

The preparation of land use schemes should include an evaluation of alternative forms of development and significant weight should be given to those strategies, which minimise the impacts on good quality agricultural land. Zoning and subdivision regulations are local regulatory tools that can be used to reduce the impact of development on agricultural lands.

Mkhambathini municipality has adopted a land use scheme (urban) and a rural land use management policy. Provision was made for agricultural zones and permitted land uses. These zones will ensure that agricultural land is protected and only certain land uses be allowed per agricultural category. It also specifies the processes that needs to be undertaken to change the use of land within these areas.

4.4.3 Rural Development And Agrarian Reform

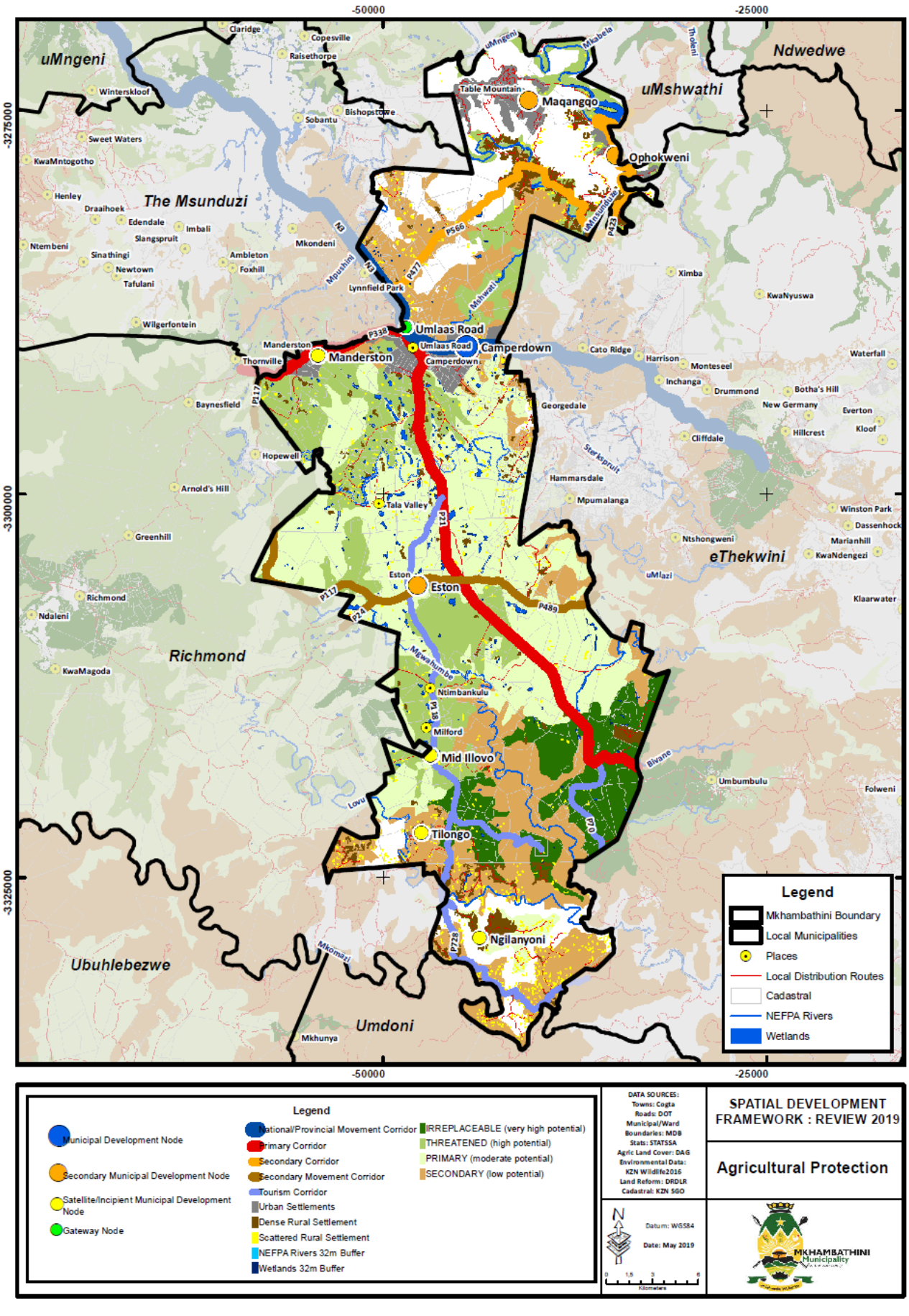
Rural development is intended to create vibrant, equitable and sustainable rural communities. The national government seeks to achieve this through coordinated and integrated broad-based agrarian transformation, strategically increasing rural development, and improving the land reform programme. Mkhambathini has a significant amount of land restitution claims and labour tenant applications. Considering the agricultural potential of the area, large areas in the central portion of the municipality with high potential agricultural land are affected by land reform.

Settlement of these land restitution claims should be undertaken in a manner that enhances the productive value of the land and generates economic benefits for the beneficiary communities. In addition, its implementation should be embedded in the notion of sustainable and integrated development.

The following should guide future implementation of the land reform program within the municipality:

- Clustering projects in a geographic area (across products) to optimise development potential, rationalise support services and promote efficient use of scarce resources. Identification of clusters should be based on access, social identity, development opportunities, land use pattern and social relationships. This will provide a framework for a comprehensive approach to the resolution of labour tenant and land restitution claims.
- Land reform beneficiaries should be provided with agricultural development support including assistance with productive and sustainable land use, infrastructure support, agricultural inputs, and strategic linkages with the markets.
- There is a need to promote off-farm settlement as a land delivery approach where the main need for land is settlement. Such land should be located in accessible areas, which can be provided with social facilities and basic services in an efficient and effective manner. It may also form part of a cluster of projects. This will also facilitate housing delivery and development of such settlements as sustainable human settlements.
- Identification of high impact projects and integration into the local value chain or development proposals. These projects should also be integrated into the LED program of the Municipality.

MAP 11: AGRICULTURAL FRAMEWORK



4.5 IMPROVING ACCESS TO SOCIAL FACILITIES, BASIC SERVICES AND BULK INFRASTRUCTURE

Different communities have different priorities in terms of social facilities, and different types of facilities will work efficiently in certain communities. Large facilities with a municipal wide threshold such as a district hospital may not be located in a small poorly accessible settlement. The important issue is not to predetermine the form of all facilities, but rather the positioning of social institutions valued by the community. The precise nature and form of many of these facilities can be determined over time by the community itself.

Community facilities are important place-making elements and they should be deliberately used, in combination with public space, to make memorable places. They are dependent upon public support and play an important integrating function in and between communities/settlements. They should therefore be "externalised", by being located in places of high accessibility, and made accessible to the local and surrounding communities. In this way, they bring together people from a number of local areas and are not tied to the dynamics of any one community.

4.5.1 HEALTH

Health considerations must inform all dimensions of settlement- making and design. Health facilities should be accessible and integrated with public transportation. This can be achieved by locating such facilities close to activity areas and regular places of gathering.

The location of preventively orientated health facilities, such as clinics, in association with primary and pre-primary schools, offers advantages. Preventive functions, such as inoculation and nutritional programmes are best delivered through schools. Where a multipurpose hall serves a number of schools, a clinic may be beneficially located within or adjacent to that hall.

In line with the national planning standards for health facilities, a clinic should be developed for every 12 500 persons or 5km radius where service thresholds allow. Deep rural settlements should be prioritised for mobile clinic services. It should be noted that there are no hospitals within the Municipality and the nearest facility to access for its residents is the hospitals located in Pietermaritzburg in the Msunduzi Municipality.

TABLE 2: CSIR STANDARDS FOR HEALTH FACILITIES

Facility	Provision Standard	Access Standard
Clinic	1 Clinic for every 12 500 persons	None prescribed, thus standard of maximum 5 km access distance used
Hospital	1 Hospital for every 100 000 persons	None prescribed, thus standard of maximum 20 km access distance used

4.5.2 MEETING SPACES

Both open-air public spaces and enclosed spaces such as community halls are important parts of social infrastructure. Halls should be located in association with public spaces as this will allow for events in

one to spill over into the other, or provide alternatives in case of weather changes. Halls should also be associated with other public facilities, such as schools and markets. Given the limited number of public facilities, which can be provided in any one settlement, it makes sense to concentrate these to create a limited number of special places, which become the memorable parts of the settlement.

The number and location of meeting places cannot simply be numerically derived. Rather, it is necessary to create "forum" places, which over time assume a symbolic significance outstripping their purely functional role.

4.5.3 Education Facilities

The creation of environments, which promote learning, forms an integral part of the settlement-making process. Learning has both formal and informal dimensions. Schooling relates to the formal dimension of education. Informal learning stems from exposing people to experiences outside the formal learning environment, such as experiencing nature, urban activities and social events. In this respect, the informal part of the learning experience can be enhanced by integrating educational facilities with the broader settlement structure. This can be achieved by locating schools, crèches and adult education centres close to places of intensive activity.

The concept of the specialised self-contained school, accommodated on a spatially discrete site and serving only its pupil population, needs a rethink. Schools should be seen as resources serving both pupils the school population during the day and, where possible, adult education during the evenings. Similarly, halls and libraries can serve the school population during the day and the broader community during the evening, ensuring 18-hour usage of facilities.

The need for informal school play space can be supplemented by public space adjacent to which the school is located. Formal sports fields can serve both the school and the broader community. In terms of their location, schools should be part of an accessible, settlement- wide system of education facilities. Accordingly, they should be located close to continuous public transport routes. This will make schools sustainable over a longer period, since they will draw pupils from a larger area, thus becoming less susceptible to fluctuations in the local population.

Provision of education facilities should be based on established planning standards of a primary school for every 750 households and a secondary school for every 1000 to 1500 households. Future school sites should be located and be integrated into the existing spatial fabric and logic. Secondary facilities could be located in areas where they can be shared between or among settlements thus forming the basis of emerging nodes.

Table 3: Standards for Education Facilities (Department of Education)

Facility	Provision Standard	Access Standard
Primary School	1 Primary School for every 750 Households	Maximum walking distance of 5 km
High School	1 High School for every 1000 to 1500 Households	Maximum walking distance of 5 km

4.5.4 The Movement Network And Public Transport

Movement should not be seen as a separate element but as an activity, which occurs within social space. The degree to which it dominates space varies significantly depending on the type of settlement. Equal emphasis should be paid to both spaces, which are entirely pedestrian dominated to spaces, which are entirely vehicle dominated. The situation is completely different in rural villages where pedestrian and public are the dominant modes of transport. Public transport is essential in areas that are characterised by low levels of car ownership such as rural areas. As far as possible, transformation of rural settlement into sustainable human settlements should support public transport. Well-located and highly accessible settlements should be allowed to expand and increase in density in order to create sufficient thresholds to support public transport and public facilities.

Higher densities have potential to increase the viability of public transport and should be encouraged along public transport routes. This is critically important as it promotes concentration of activities and gives effect to the notion of nodal development. There is a strong ordering dimension to movement. At all scales, it is necessary to maximise continuities of movement, as this promotes choice and integration. Land uses should be able to respond freely to movement patterns as this encourages diversity and a mix of activities.

4.5.5 Improving Access To Basic Services And Bulk Infrastructure

Provision of bulk services is the responsibility of Umgungundlovu District Municipality as the Water Services Authority.

4.5.5.1 Sanitation

The Mkhambathini Municipality still faces sanitation backlogs with 36% of the residents serviced below the average service level. Planning and implementation of sanitation projects should be based on settlements clusters and be integrated with the initiative towards the transformation of rural villages into sustainable human settlements.

Spatial planning standards that should apply to sanitation projects include the following:

- Settlements located within 100m from wetlands or a river should be provided with lined VIPs.
- Priority should be given to settlements located within priority environmental areas.
- Urban settlements should be provided with water borne sewer, where possible.
- Rural settlements should be developed with either lined VIPs or other septic tanks.
- Alternative forms of sanitation should be investigated.
- Greater use of alternative and improved waste management (both sewage and solid waste by means of increased recycling, biogas capture and utilization and other responses).

4.5.5.2 Water

Efficient and adequate supply of water services for domestic consumption and for economic development is an important challenge facing the District Municipality in its capacity as the Water

Services Authority. The Umgeni Water Infrastructure Master Plan (2017) indicated that the demand on the Umgeni catchment currently exceeds the available yield. The risk of water restrictions within the next few years is unacceptably high as a result of the ever-increasing demands in the Umgeni system. The District faces serious water delivery problems and particular focus Water supply in the municipality is as follows:

The opportunity for rainwater harvesting as a strategy to improve access to water, especially in rural areas and poorer communities, should be investigated. Local communities can be trained in water harvesting and storage, as well as the treatment of water for domestic purposes. Although alternative water sources is not regarded as sustainable alternatives, it does provide additional options to conventional water supply. In this respect, the following opportunities are available:

- Recycling of grey water.
- Optimise the re-use of wastewater.
- Supporting subsistence and emerging agriculture (e.g. alternative irrigation supply) and promoting more effective soil erosion control. It should be noted that it is not merely 'technologies' which should be applied but also simple and well known methodologies such as composting, mulching, and the efficient use of water etc.
- Ensuring more effective water demand management (reducing the demand for costly and energy expensive purified water by reducing leakages and promoting more responsible consumer usage by means of mix of penalties and incentives). This is particularly important in the urban areas.
- Promoting more energy efficient buildings and industry (by means of a mix of increased standards for compliance on new buildings, incentives such as rates rebates, and education and awareness).
- Urban settlements should be supplies with water within the house.
- Peri-urban settlements should ideally be supplied with water on site or at least within a 200m from each household.
- Dense rural settlements should be provided with water at least within 200m from each household.
- Scattered rural settlements should be prioritized for spring protection, source water from the rivers and where possible boreholes.

4.5.5.3 ENERGY

The main source of energy in Mkhambathini is electricity, provided by Eskom. There is a clear concentration of available electricity networks for commercial farming activities in the central parts of the municipality and a general shortage of infrastructure in the south. Thus, households in more remote less densely settled areas operate on an off-grid basis and still depend on wood, gas and paraffin for lighting and heating requirements. In light of the energy crisis facing the country, the following alternative sources of energy, which are more environmentally sustainable and which could be considered in the area, are indicated below:

- Improving household living conditions and livelihoods through the facilitation or provision of a range of alternative forms of energy at the household level, mainly in areas, which are off the main Eskom grid. Amongst the recommended technologies are small photovoltaic systems, small wind turbines, safer and more efficient cookers such as gel fuel, and more efficient and sustainable use of wood fuel.
- Solar energy for individual household lighting, as well as within social facilities (e.g. schools) and at emerging service nodes.
- Solar water heating utilising the subsidy provided by government for individual household, as well as within social facilities (e.g. schools) and at emerging service nodes.
- Wind generated power, although the establishment costs are high.
- Small scale hydro-electric systems, although costly for establishment.
- More effective promotion and incentivisation of Eskom's feed in tariffs (i.e. Eskom purchasing excess electricity produced by consumers or developers using alternative technology at a rate higher than the cost of its own main grid electricity – this includes alternative power generation by wind, solar power, landfill gas or small hydro and which is fed back into the grid).

4.6 UNLOCKING ECONOMIC DEVELOPMENT POTENTIAL

The Mkhambathini Municipality IDP identifies local economic development (LED) as one of the key performance areas (KPAs), and a strategic area for intervention. The main economic sectors that could enhance local economic development in the area rests on agricultural, tourism, manufacturing sectors and Small Macro and Micro Enterprises (SMMEs). However, growth in these sectors puts pressure on land and natural resources.

Mkhambathini is strategically located along the N3 corridor, which offers a distinct advantage in terms of movement of goods as well as location advantage.

4.6.1 AGRICULTURE

Agricultural production centres on vegetables grown for local and hinterland fresh produce markets, and sugar cane (processed through a mill at Eston). Other types of agricultural production, which include vegetables, forestry, citrus, macadamia (nuts), avocadoes as well as dragon fruit production. There are also a few co-operatives within poultry production left in Mkhambathini. The agricultural industry also consists of tourism related activities- inclusion of Bed and Breakfasts, Wedding Venues etc. In addition to the protection of agricultural land, Mkhambathini Municipality will facilitate productive use of agricultural land and implement the following:

- Strengthen support provided to farmers and contractors.
- Improve access to markets for agricultural products and value added products.
- Address crime that is affecting agricultural development in the more rural areas.
- Improve access to infrastructure (including irrigation).

- Promote Agricultural Diversification by identifying markets for livestock producers and crop producers.

4.6.2 TOURISM

Tourism is centred on African experiences, with attraction such as the Mayibuye Game Reserve, Tala Game Reserve, Nagle Dam, GwaHumbe Private Reserve and the proposed Mpushini Nature Reserve. Private game ranches offering up-market accommodation and wildlife trails for visitors (including Tala Valley Game Ranch, the Lion Park, and Zoo). The following is proposed to promote tourism in Mkhambathini (LED Strategy, 2017):

- Increase institutional capacity for the Tourism Department at the Municipality.
- Create a website to showcase tourism products with Mkhambathini.
- Create a tourism route that is mapped and can be reproduced for distribution.
- Ensure that printed information is available at information desks and the local shops.
- Facilitate and quicken the pace of development applications for Tourism operators that are required to undergo planning applications.
- Construct a Gateway- Entrance signage to welcome tourists.

4.6.3 MANUFACTURING

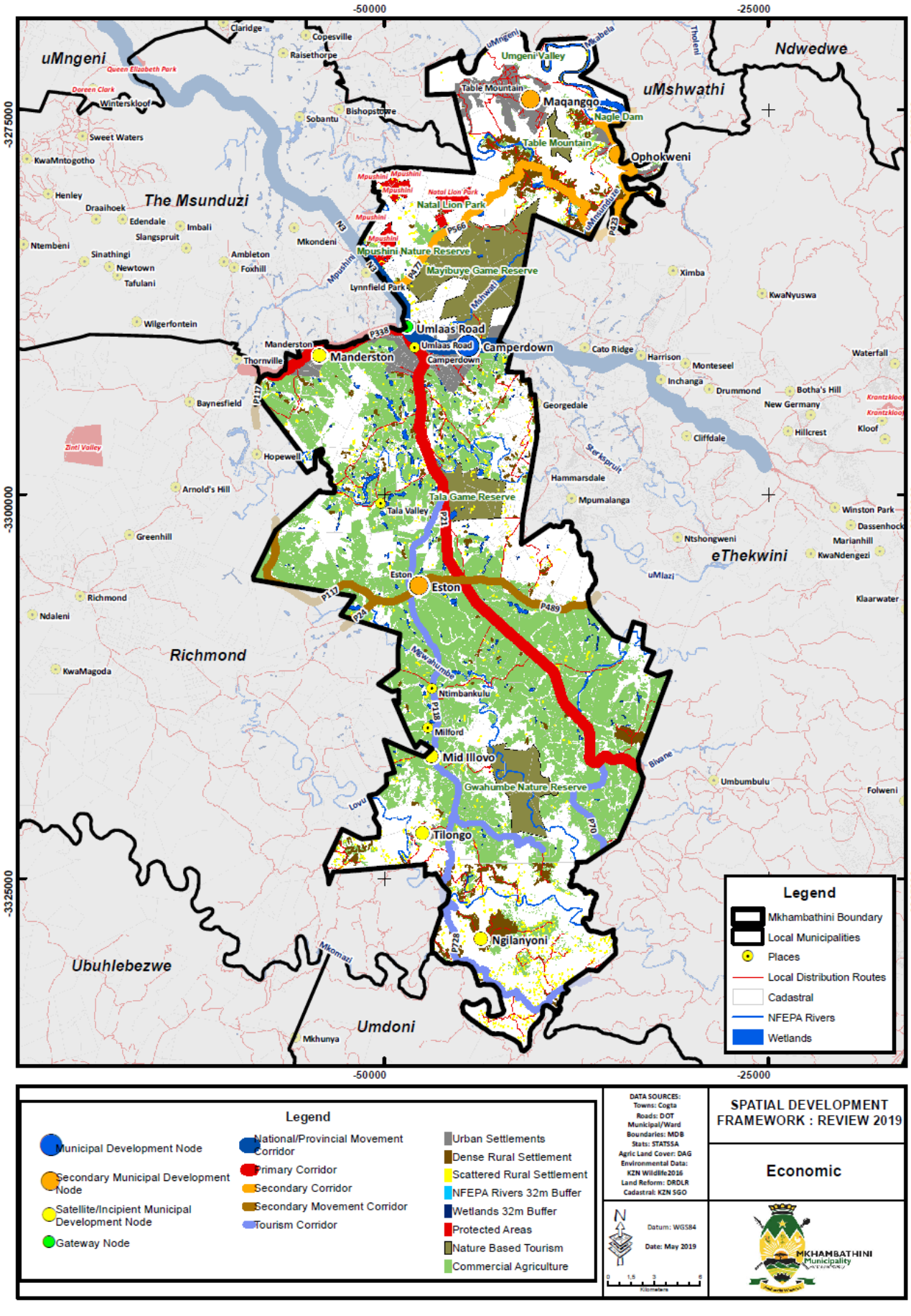
Manufacturing activity occurs primarily at Umlaas Road as well around Eston Sugar Mill. The sector is dominated by agro-processing relating to sugar cane and poultry as well as logistics (cars). There is potential for upstream and downstream linkages in both industries. The nodal areas should be prioritised for commercial and industrial developments, depending on the size of the threshold, role of the node in the local and regional space economy, and availability of suitable land parcels. Camperdown / Umlaas Road, as the municipal primary development node, plays a strategic role in the municipality and provides important locational advantages in respect of the N3 Development Corridor. The following are proposed for this sector:

- Market the Industrial Capacity / Potential of Mkhambathini by developing an Investor Prospectus.
- The Municipality must to create an incentive programme to promote new industry.
- Improve accessibility by providing adequate road infrastructure for transportation of goods and people.
- Further subdivision of agricultural land should not be allowed, particularly that relating to tourism and bulk infrastructure.

4.6.4 GREEN ECONOMY

Working towards a green economy is one of the sustainability objectives identified in the UMDM EMF and it also responds to the opportunities as flagged by the New Growth Path (2010), which identifies the green economy sector as a potential job driver.

MAP 12: ECONOMIC FRAMEWORK



The green economy relates to economic goals based on ecological sustainability and built on a culture that recognises that socio-economic systems are dependent on and embedded in ecosystems. Opportunities includes, amongst others:

- Environmentally friendly infrastructure;
- Green (renewable) energy generation and green manufacturing;
- Public employment schemes to support natural resource management; and
- Environmental programmes including recycling and community cleaning.

The sustainability strategies that relates to this objective and should be embedded in the economic development of Mkhambathini, are as follows:

- Mkhambathini must take cognisance of and implement a green economy strategy and programmes that the District have to develop.
- Implement skills development in the green economy sector.
- Develop incentives for the production of environmentally friendly products.
- Establish investment incentives to support and promote green industries and developments.
- Implement programmes to ensure the rehabilitation and sustainable management of natural assets and ecosystem services.
- Create opportunities for training and job creation in green economy programmes (carbon sequestration; rehabilitation of degraded areas; alien invasive species management; waste management & recycling; and, urban greening).
- Promote self-sufficiency, food security and sustainable livelihoods.

In Mkhambathini, there are opportunities in rural communities in areas of environmental risk (areas with land degradation/overstocking; erosion susceptible area, climate risk areas etc.).

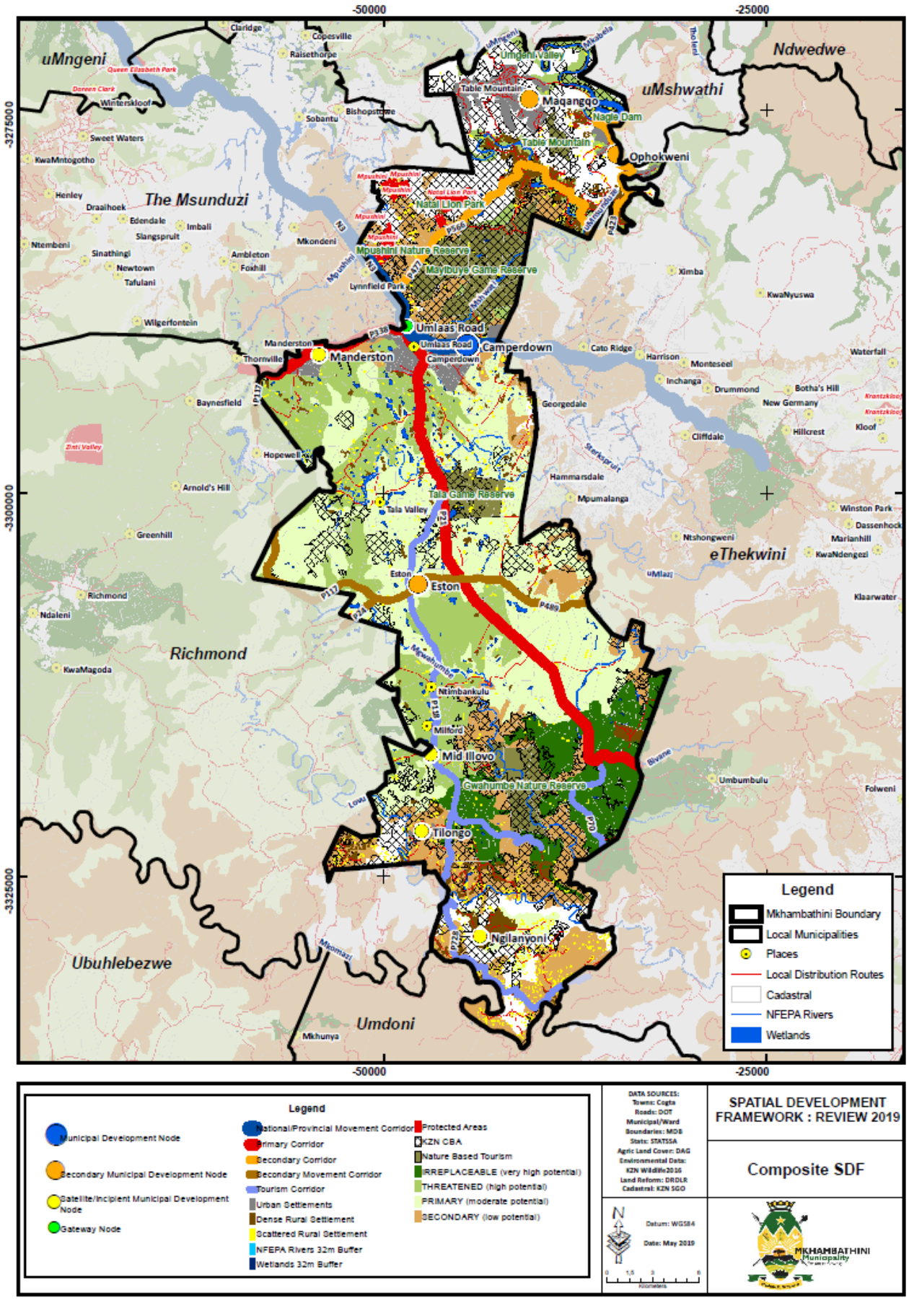
4.7 CONSOLIDATED SDF

The SDF is based on a detailed analysis of the spatial development trends and patterns within the municipality. It also takes into account the national and provincial spatial planning imperatives, and seeks to contribute to spatial transformation within Mkhambathini. It advocates for densification, compaction and transformation of rural and urban settlements into sustainable human settlements and development of Camperdown / Umlaas as a municipal development node with large-scale future development. It seeks to achieve this through a number of strategic initiatives, particularly the following:

- Establishing and developing a system of development corridors operating at different levels but connecting local areas with the centre and integrating the municipality.
- A system of development nodes providing services and access to facilities at different scales.

- Promoting a continuum of settlements ranging from dense urban to scattered sparsely populated rural settlements.
- Focusing development in strategically located areas as a means to unlock the economic opportunities and facilitate spatial integration.
- Focusing equally on both rural and urban development as a means to manage rural-urban linkages and promote rural development.
- Acknowledging the importance of the natural environment and assigning the necessary importance thereto.

MAP 13: COMPOSITE SDF MAP



4.8 SDF ALIGNMENT WITH POLICY AND LEGISLATION

It is important that the SDF is aligned with various policy and legislative requirements to achieve coherent and harmonious land development and planning at all governance levels. To this end, this section depicts the Mkhambathini SDF's alignment with various policies and legislation. The tables below indicate how the SDF is aligned with the strategic goals advocated in some the policies.

4.8.1 SUSTAINABLE DEVELOPMENT GOALS

SUSTAINABLE DEVELOPMENT GOALS	SDF ALIGNMENT STRATEGIES
End Poverty in all its form everywhere	• Unlocking Economic development potential through agriculture, tourism and manufacturing. • Rural Development and agrarian reform.
Quality education	• Improving access to social facilities.
Clean Water and Sanitation	• Improving access to bulk infrastructure.
Decent work and Economic Growth	• Unlocking economic development potential through agriculture, tourism and manufacturing. • Strengthening support to farmers and contractors. • SMME support.
Industry, Innovation and Infrastructure	• Improving access to bulk infrastructure. • Improving access to social facilities. • SMME support.
Sustainable Cities and Communities	• Implementing urban and settlement edges. • Improving access to social facilities. • Directing service infrastructure in areas of greatest need. • Clustering Public Facilities and Economic Activities in Development Nodes. • Promoting Densification. • Protection and enhancement of eth natural environment.
Life on Land	• Land Use Regulation. • Developing sustainable human settlements. • Mitigating land degradation. • Creating and maintaining meeting spaces.

4.8.2 National Development Plan

NATIONAL DEVELOPMENT PLAN	SDF ALIGNMENT STRATEGIES
Quality Basic Education	• Improving access to social facilities. • Encouraging the development of self-sustaining facilities that accommodate all community residents and their need.
Decent Employment through Inclusive Economic Growth	• Unlocking economic development potential through agriculture, tourism and manufacturing • SMME support. • Improving access to basic services and bulk infrastructure.
Skilled and Capable Workforce	• Improving access to social facilities. • Training and mentoring of emerging farmers.
An efficient, Competitive and Responsive Economic Infrastructure Network	• Improving access to bulk infrastructure. • Clustering public facilities and economic activities at development nodes. • Improving movement and access. • Unlocking economic development potential through agriculture, tourism and manufacturing.
Vibrant, equitable and Sustainable rural Communities, contributing to Food Security for all	• Protection and enhancement of agricultural land. • Land use regulations. • Ensuring rural development and agrarian reform. • Improving access to bulk infrastructure. • Developing sustainable human settlements.
Sustainable Human Settlements and Improved Quality of Household Life	• Radical Land Reform. • Improving access to social facilities. • Improving access to bulk infrastructure.
A responsive, accountable, effective and efficient developmental local government system	• Integration of traditional land allocation process with municipal spatial planning. • Developing sustainable planning system.
Protecting and enhancing our environmental assets and natural resources	• Protection of eth natural environment. • Developing sustainable human settlements. • Mitigating land degradation. • Water resource management.

4.8.3 SPLUMA PRINCIPLES

SPLUMA PRINCIPLES	SDF ALIGNMENT STRATEGIES
Spatial Efficiency	• Promoting Densification. • Clustering Public Facilities and Economic Activities in Development Nodes. • Land use regulation. • Improving movement and access.
Spatial Justice	• Radical land reform Programme. • Clustering Public Facilities and Economic Activities in Development Nodes. • Improving access to social facilities. • Improving movement and access.
Spatial Sustainability	• Land use regulation. • Protection and management of Agricultural land. • Water Resource management. • Mitigating land degradation and promoting sustainable agriculture.
Spatial Resilience	• Developing sustainable human settlements. • Mitigating land degradation. • Land use regulation.
Good Governance	• Developing integrated spatial planning system. • Integration of traditional land allocation processes with municipal spatial strategy.

4.8.4 PGDS STRATEGIC GOALS

PGDS STRATEGIC GOALS	SDF ALIGNMENT STRATEGIES
Inclusive Economic Growth	• Unlocking economic development potential through agriculture, tourism and manufacturing. • Supporting SMMEs. • Strengthening support to farmers and contractors.
Human Resource Development	• Training and capacity building on land allocation processes for traditional leaders. • Improving access to social facilities.

PGDS STRATEGIC GOALS	SDF ALIGNMENT STRATEGIES
Human and Community Development	• Promoting densification. • Unlocking economic development potential through agriculture, tourism and manufacturing. • Clustering Public Facilities and Economic Activities in Development Nodes. • Developing sustainable human settlements.
Strategic Infrastructure	• Improving movement and access. • Improving access to social facilities. • Improving access to bulk infrastructure.
Environmental Sustainability	• Protection and management of agricultural land. • Reducing the use of environmentally unfriendly energy source. • Promotion of densification. • Land use regulation.
Governance and Policy	• Developing Integrated planning System. • Integration of traditional land allocation processes with municipal spatial strategy.
Spatial Equity	• Promotion of densification. • Clustering Public Facilities and Economic Activities in Development Nodes. • Radical land reform. • Development of sustainable human settlements.

4.8.5 National Outcome

NATIONAL OUTCOME	SDF ALIGNMENT STRATEGIES
Outcome 9: A responsive, accountable, effective and efficient local government system.	• Developing Integrated planning System. • Integration of traditional land allocation processes with municipal spatial strategy.
Outcome 13: A comprehensive, responsive and sustainable social protection system	• Training and capacity building on land allocation processes for traditional leaders. • Improving access to social facilities. • Improving access to bulk infrastructure.

NATIONAL OUTCOME	SDF ALIGNMENT STRATEGIES
Outcome 14: A diverse, socially cohesive society with a common national identity	• Improving access to social facilities. • Creating and maintaining meeting spaces.

5 SUSTAINABILITY APPRAISAL OF THE SDF

The KZN Department of Economic Development, Tourism and Environmental Affairs (EDTEA) has identified a set of sustainability criteria that responds to the country's strategic sustainable development priorities in the National Strategy for Sustainable Development (NSSD, 2011) and expressed the expectation that all provincial SDFs be aligned with these criteria. The EDTEA has further developed a 'Sustainability Appraisal Tool' as a continual improvement mechanism to help municipal SDFs achieve these priorities.

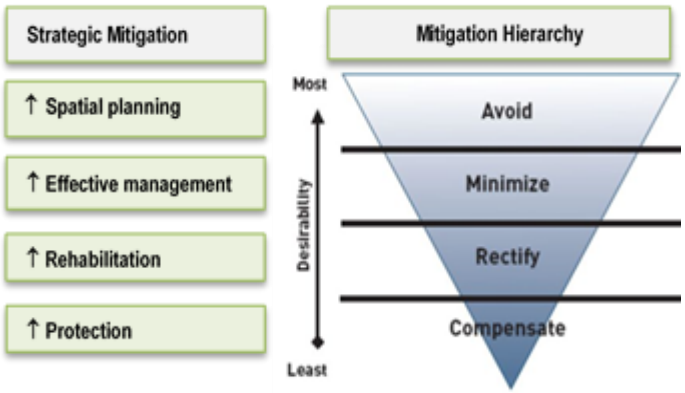
5.1 APPROACH

The Mkhambathini SDF review process used EDTEA's sustainability criteria as the key reference point for information collection, analysis and integration. However, the process was not able to take full advantage of EDTEA's Draft Guideline as it was not feasible to facilitate an independent assessment and evaluation by an Appraisal Team as proposed by the guideline. As such, sustainability targets were not set, the criteria were not scored, and the "sustainability performance" of the SDF could therefore not be quantified as proposed by EDTEA's Guideline. However, a summary of evidence was prepared to demonstrate the SDF's alignment with the relevant criteria (Refer to Annexure C; Sustainability Report).

5.2 KEY SPATIAL RISKS

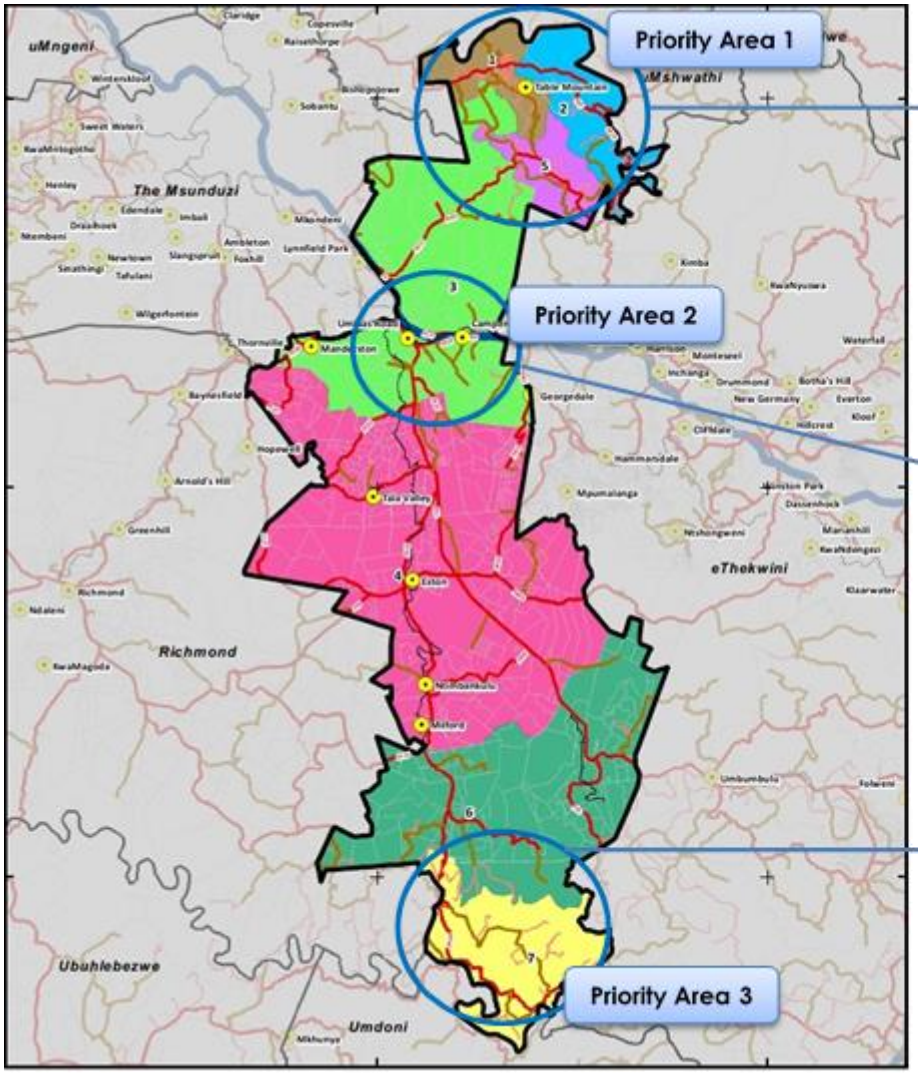
SPLUMA requires that the preparation of spatial development frameworks must, amongst others (Section 12) "identify the long-term risks of particular spatial patterns of growth and development and the policies and strategies necessary to mitigate those risks".

In response to this requirement, the strategic environmental assessment and sustainability appraisal approach of this SDF helped to identify three (3) spatial environmental risk areas. These areas and the key risks associated with them are shown in Figure 16, and they reveal where strategic mitigation should be prioritised.



While there would always be room for improvement, the sustainability evaluation has revealed that the Mkhambathini SDF has designed various integrated policies and strategies to mitigate these risks. In this regard, the SDF has adopted a two-pronged approach to mitigation that addresses the *symptoms* as well as the *root causes* of environmental problems (i.e. addressing the drivers/pressures that must break the chain of continual environmental degradation).

FIGURE 16: SPATIAL AREAS OF ENVIRONMENTAL RISK



Key risks:

- Land degradation and increased risk of poor water quality;
- Loss of productive land, reduced access to natural resource products;
- Loss of rural livelihood options and persistence of poverty (food, water and energy security);
- Loss of tourism potential (degraded landscapes);
- Feedback between climate and land – continuous degradation of land and water resources, increase in disasters;
- Increased vulnerability of rural communities.

Key risks:

- Increased risk of poor water quality due to inadequate municipal waste water treatment facilities and other infrastructure shortcomings
- Infrastructure shortcomings discourage investment by industries that subscribe to international environmental best practices;
- Loss of agricultural land due to urban expansion – further contribution to the provincial loss of the food reserve.

Key risks:

- Land degradation and increased risk of poor water quality;
- Loss of productive land, reduced access to natural resource products;
- Loss of rural livelihood options and persistence of poverty (food, water and energy security);
- Feedback between climate and land – continuous degradation of land and water resources, increase in disasters;
- Increased vulnerability of rural communities.

6 IMPLEMENTATION PLAN

6.1 ALIGNMENT OF SPATIAL DEVELOPMENT FRAMEWORKS

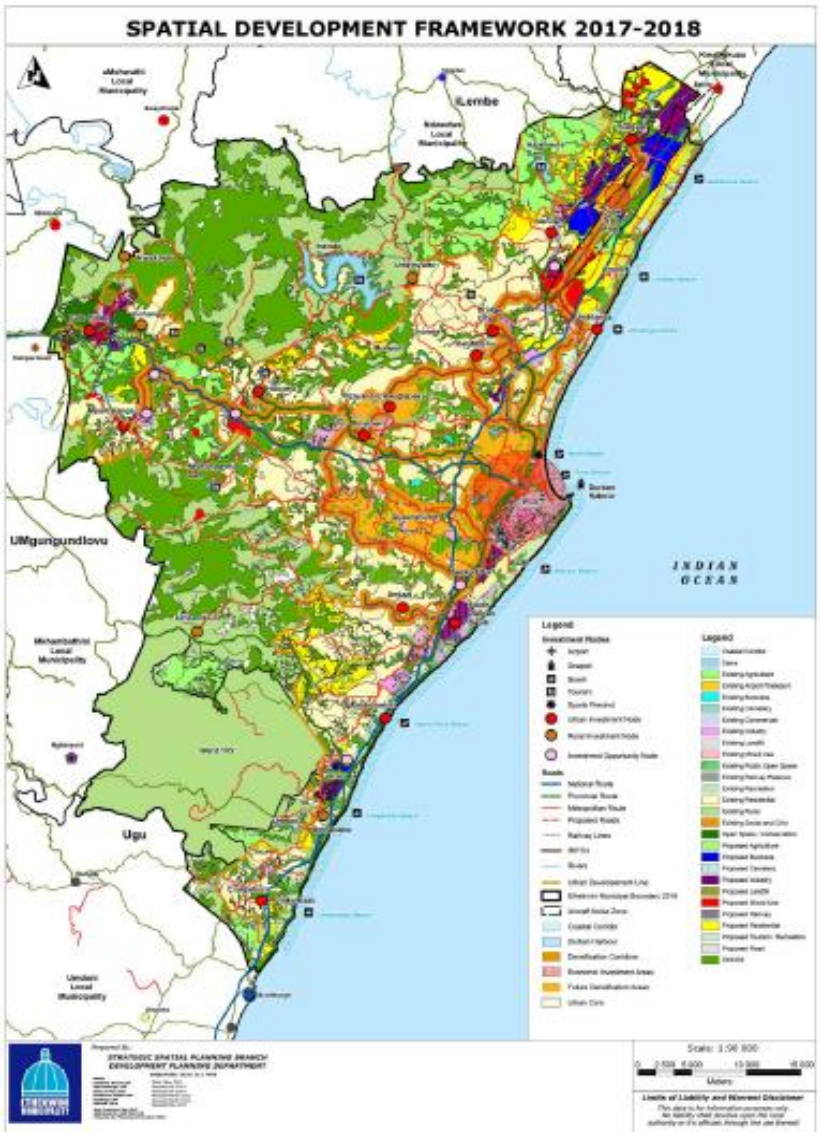
Mkhambathini forms part of a larger system of local governance and regional economy and is influenced and also influences development in the neighbouring areas. Cross-border planning issues have become more prevalent and significant. The focus is on strategic or shared development issues that would benefit from a joint approach, and engaging with the relevant neighbouring authorities to explore joint working potential. This section is thus intended to ensure that there is no disharmony between proposals that are suggested by the Mkhambathini SDF and its neighbouring municipalities.

Neighbouring Municipalities include Umshwathi on the northern boundary, Msunduzi on the north-eastern boundary, Richmond on the western boundary, Umdoni on southern boundary, and eThekwini Metropolitan on the east.

6.1.1 eTHEKWINI METROPOLITAN MUNICIPALITY

eThekwini municipality shares most of its western boundary with Mkhambathini LM. The N3 links the two municipalities in an east-west direction. The N3 provides opportunities for development at nodal points such as Camperdown and Cato Ridge. Camperdown/Umlaas Road is Primary municipal development node in Mkhambathini LM and is strategically located along the N3. The Cato Ridge area is identified for industrial expansion and logistic development. The Cato Ridge LAP Review will look at the area adjacent to the Mayibuye Game Reserve to ensure that land use proposals are compatible with the game reserve. The Camperdown / Umlaas road indicates future development direction towards Cato Ridge. Land use distribution and development for Cato Ridge

FIGURE 17: ETHEKWINI METROPOLITAN MUNICIPALITY SDF



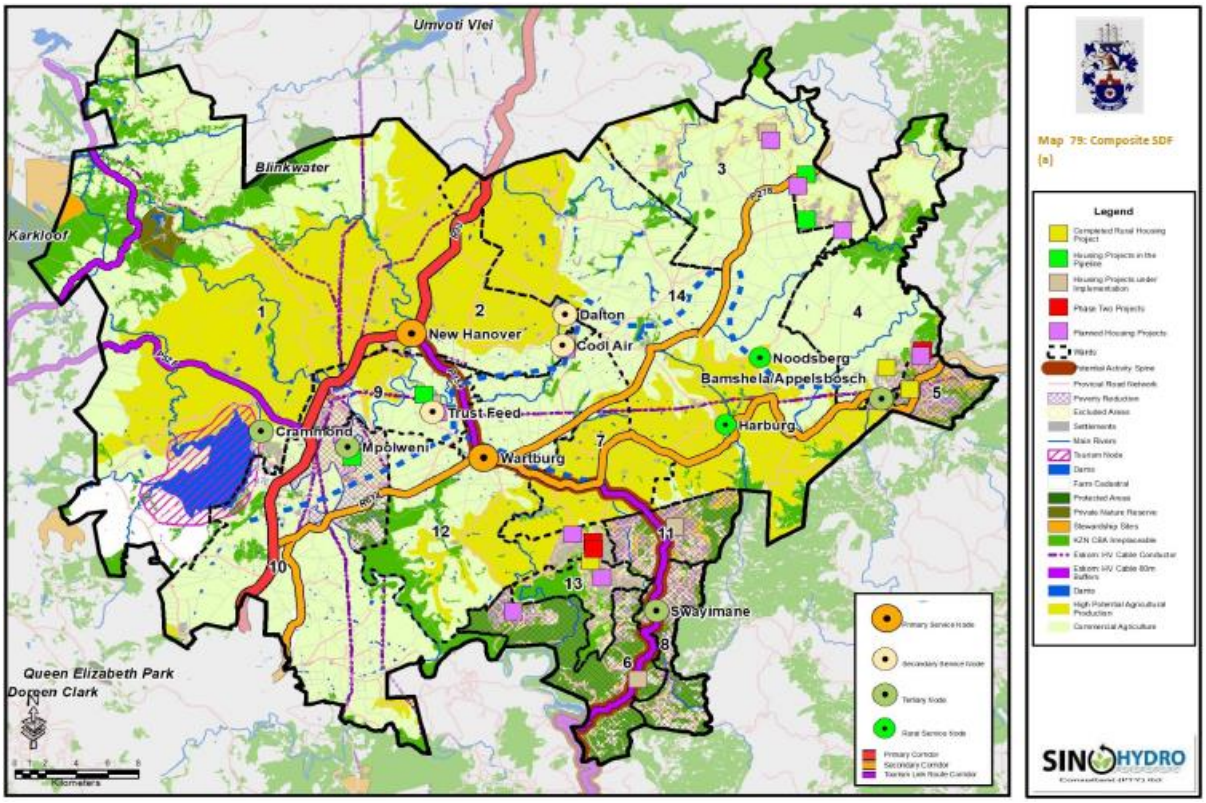
and Mpumalanga (specifically in areas abutting the boundary of Mkhambathini) will need to be sensitive to the activities across the boundary in Mkhambathini in order to minimize potential negative impacts.

The Mpumalanga LAP (2014) discourages industrial developments close to the boundary and recommends the formalization of the existing informal settlements in Sankontshe and Georgedale. The Ward 105 LAP was prepared and the portion of Mkhambathini that has been incorporated to eThekwini Municipality is part of the study. Greater emphasis need to be placed on the uMbumbulu region with its rapid urbanisation and impact on the R603, which serves as an alternative major route through the region. Higher-level services found in eThekwini also serve some areas in Mkhambathini. Development around the Camperdown area and Cato Ridge will require cooperation between both municipalities and will serve to strengthen linkages between the two areas.

6.1.2 UMSHWATHI LOCAL MUNICIPALITY

The P566 is identified as a secondary corridor and tourism corridor in Mkhambathini. It links Mkhambathini LM to the Gcumisa Traditional Council area within the uMshwathi Local Municipality. The P566 is an important corridor in facilitating tourism development. Eco-tourism development along this corridor should be encouraged and will require management cooperation from both municipalities.

FIGURE 18: UMSHWATHI MUNICIPALITY DRAFT SDF (2018/19)

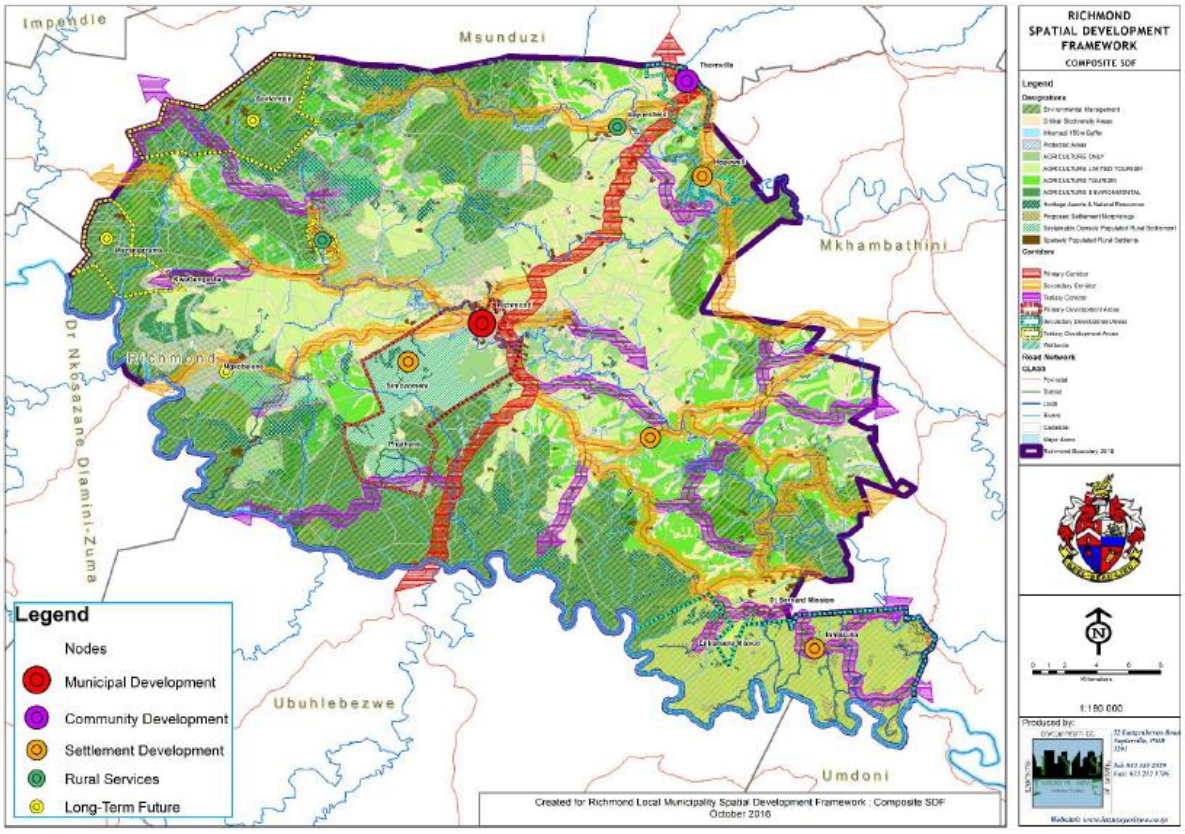


Source: Umshwathi Municipality Draft SDF 2018

6.1.3 Richmond Local Municipality

The P24 linking Richmond and Mkhambathini is identified as a Secondary Corridor in the Richmond SDF while is forms part of a network of secondary transportation routes in the Mkhambathini SDF. The regions where the municipalities share a border have been identified for agricultural development, agricultural tourism and high potential agricultural land. It is important for cooperation between Richmond LM and Mkhambathini LM in managing developing taking within these areas demarcated for agriculture, environmental management and tourism. The Hopewell node has been identified as a secondary development area in the Richmond SDF. It is however, surrounded by environmental management while adjacent areas within Mkhambathini LM have been demarcated as areas of high agricultural potential in the SDF.

FIGURE 19: RICHMOND MUNICIPALITY SDF (2017-2022)



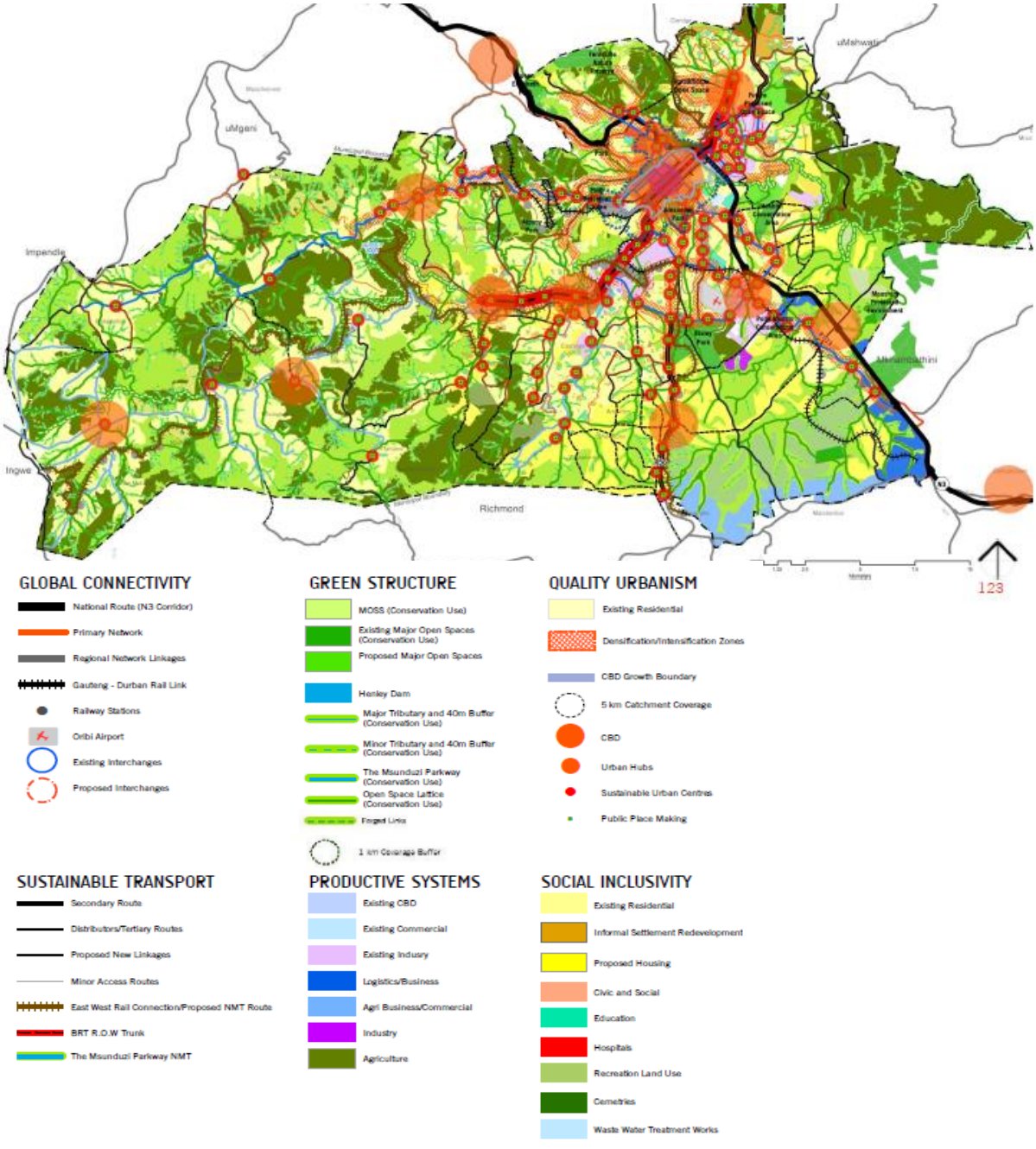
Source: Richmond Municipality SDF 2017-2022

6.1.4 Msunduzi Local Municipality

The Msunduzi Municipality is linked to Mkhambathini LM via the N3. Msunduzi Municipality offers greater level of government services, retail and social facilities. Msunduzi's primary node Pietermaritzburg is the capital city of KwaZulu-Natal and offers greater and more diverse job opportunities. Noteworthy, there are potential contradictions between the developments taking place around the shared border region of these municipalities. Msunduzi SDF proposes densification around the R103, which is parallel to the N3. Potential spill overs may impact on the areas identified marked secondary agriculture (low potential) in the Mkhambathini SDF. The Mpushini Nature Reserve

in Msunduzi municipality is located near the Natal Zoo Gardens (Lion Park) in Mkhambathini. Land around these protected areas has been demarcated for conservation in the Msunduzi SDF while they are demarcated as CBA optimal and low potential agriculture in the Mkhambathini SDF. Any development around these areas must be limited to agriculturally and environmentally related developments. Cooperation between both municipalities will be imperative in managing development around these regions and ensuring the protection of the sensitive environmental areas.

The Msunduzi SDF (which abuts the Camperdown/Umlaas Road node on the north-eastern side of the P338) designates the area as Logistics and Business (Dark blue) and Agric-Business/Commercial (Light Blue) along the P338. The Camperdown/Umlaas Road node includes the area on the other side of the P338 as Mixed Use-Industry.

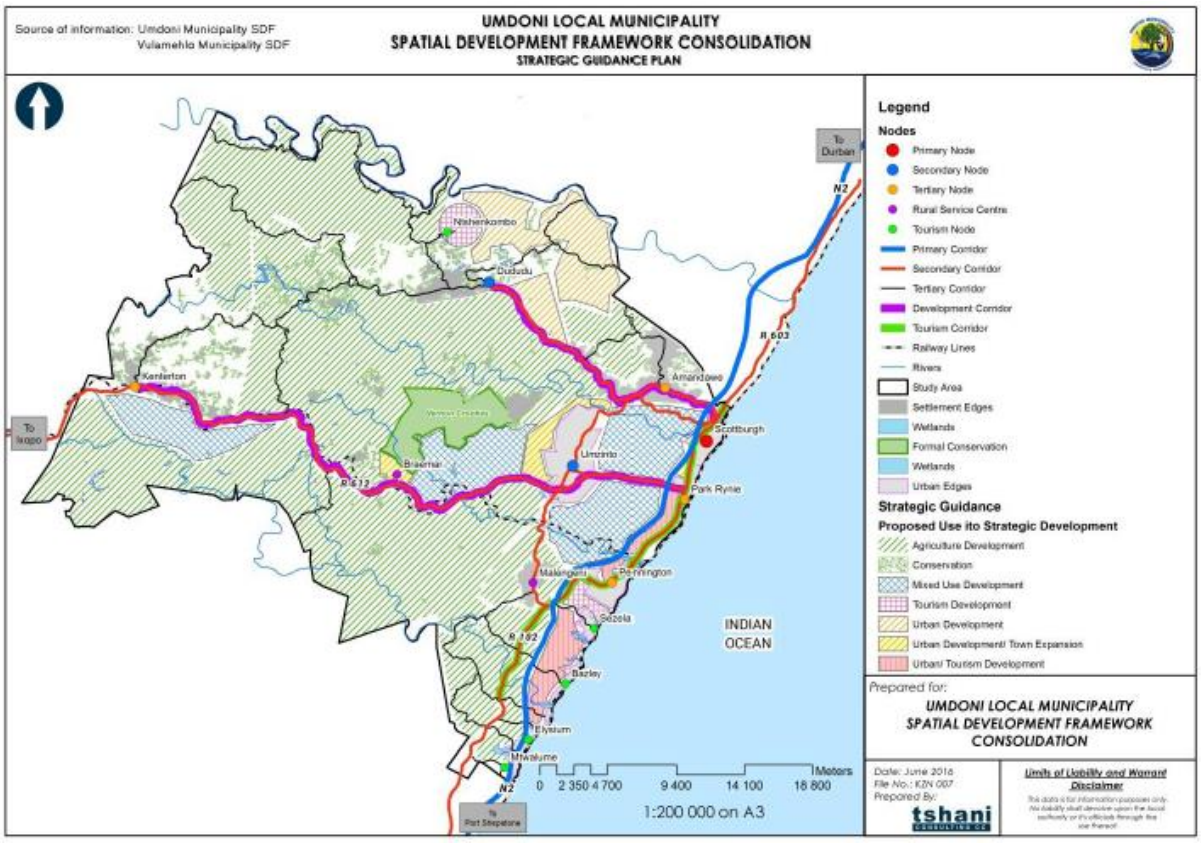


Source: Msunduzi Local Municipality SDF 2015

6.1.5 UMDONI LOCAL MUNICIPALITY

Mkhambathini Municipality shares its southern boundary with Umdoni local Municipality. The municipalities have weak movement linkages with only a few roads connecting them. The area where Umdoni Municipality shares its border with Mkhambathi has been identified for urban development/town expansion in the Umdoni SDF. On the other hand, the Mkhambathini SDF identifies the area it shares a boundary with Umdoni municipality as an Ecological Support Area (ESA). The management of development around this region must ensure no encroachment onto areas demarcated for the preservation of ecological species. Noteworthy, agricultural development in Mkhambathini could potentially support the traditional settlements in Umdoni, thus creating linkages and further indicating the need for cooperation in the management of development and agricultural land between the two municipalities.

FIGURE 21: UMDONI MUNICIPALITY SDF 2016



Source: Umdoni IDP 2018-2022

6.2 LAND USE MANAGEMENT FRAMEWORK

The enactment of the Spatial Planning and Land Use Management Act (SPLUMA) (Act No. 16 of 2013). SPLUMA has taken planning to a different level, since it provides a framework in which municipalities can deal with matters relating to spatial planning and land use management. Fundamentally, the function of 'municipal planning' is a Schedule 4B competence in the Constitution of the Republic of

South Africa (RSA) (Act No. 108 of 1996) and it is an area where executive functions are exercised by a municipality.

Section 24 (1) of the SPLUMA stipulates that municipalities must after public consultation adopt and approve a single Land Use Scheme (LUS) that covers the entire municipal area within five years from the commencement of the Act. As a result, all land development applications must be determined within the context of a LUS.

The SPLUMA defines "Land Use Scheme" as a document for the regulation of land use. It is an integral part of a system for regulating and managing land use and conferring land use rights. It regulates authorisation by a competent authority, and lawful development and/use of land. As such, a LUS has the force of law.

6.2.1 Land Use Management System

The Land Use Management System (LUMS) refers to all the tools, systems and procedures a municipality requires in order to manage land and its use effectively. The SDF and the scheme are some of the critical components of the LUMS. Other typical elements of a Land Use Management System include*, inter alia* the following:

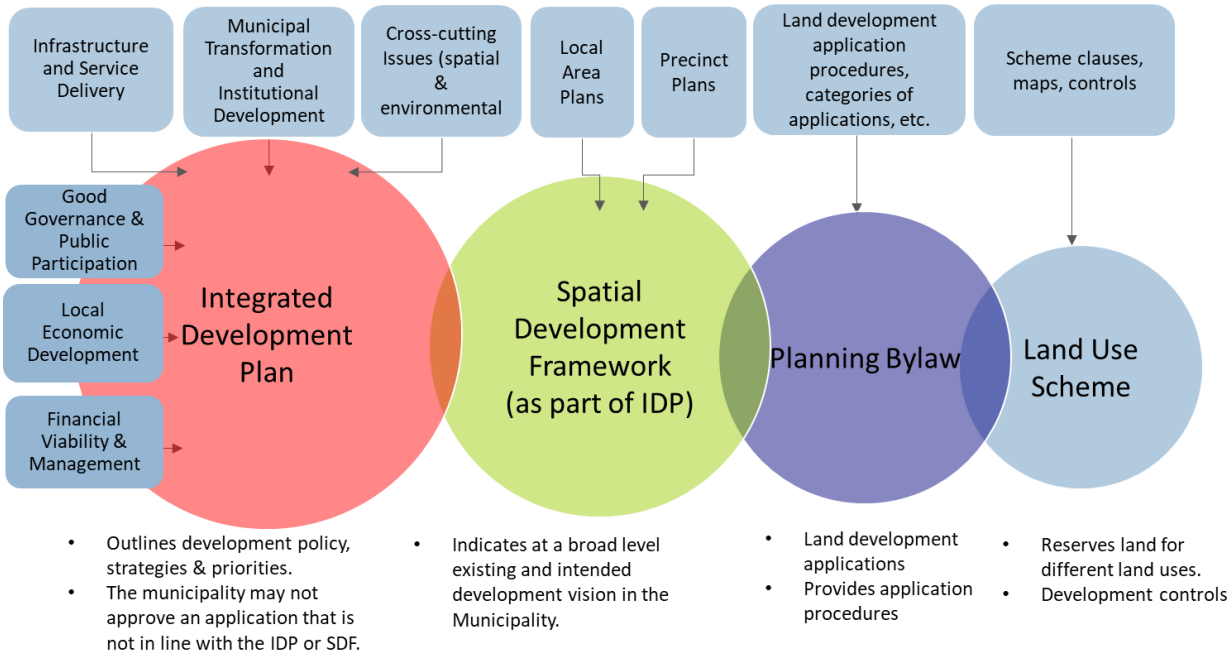
- Strategic plans such as sector plans dealing with land development.
- Valuation and rating system.
- Property registration (land audit), ownership and tenure.
- Geographic information systems (GIS).

Therefore, the scheme is not the sum total of LUMS, but just one component of a comprehensive and ideally integrated system. This includes zoning regulations, management tools, building plan approval systems, law enforcement, bylaws procedural matters, institutional arrangements, etc. Although capable of serving as standalone tools, different component of the LUMS should function in unison as an integrated system. Both the scheme and the rating system are based on land audit (cadastral base) with zoning being one of the critical factors that determines market value of a property. As such, it underpins the municipal rating system. Therefore, accuracy of the scheme and the rating system hinges substantially on the quality of its cadastral base.

6.2.2 Link Between An IDP, SDF And A Land Use Scheme

The relationship between broader Strategic Planning (Spatial development frameworks) and the preparation of Schemes is central to ensuring consistent and thorough decision-making around land use management and change. This relationship ensures that land use decisions do not contradict larger policy goals. Thus, the Scheme is used to enforce the broader policies contained in the municipality's Integrated Development Plan (IDP) and Spatial Development Framework (SDF) at a property level. The IDP and SDF guide development, and thus inform the preparation and management of land use in terms of the Scheme.

FIGURE 22: LINK BETWEEN AN IDP, SDF AND A LAND USE SCHEME



It should be noted that firstly, capacity to interpret strategic objectives correctly in land use decision-making is essential; and secondly, that a spatial planning system that allows for the translation of strategic objectives into land use decision-making is required.

Also important is the development of a spatial planning system that allows for the translation of strategic objectives into land use decision-making tool. However, the scheme is not a master plan. It will change continuously as scheme amendment applications are approved by the municipality.

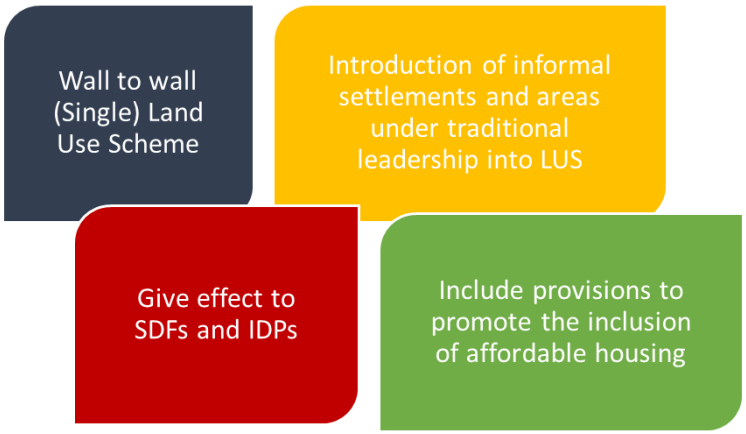
Current and anticipated legislation implies that Schemes can be formulated directly from the SDF prepared as part of an IDP. In practice, however, there is a tendency towards a gap between these two levels of planning, especially in larger municipalities. A set of Linking Elements enabling a smoother transition between the SDF and the Scheme has therefore been proposed. These elements could form part of the SDF, or stand-alone as a separate plan or set of plans. It is important to note the following concerning the relationship between the Spatial Development Framework, Scheme and Linking Elements:

- The three components (SDFs, Linking Elements and Schemes) go hand-in-hand, where the SDFs give strategic direction; the Linking Elements provide quantification, more detailed spatial plans and operational and institutional guidance; and the Schemes provide the statutory basis for land use decision-making.
- The relationship between these three components is reciprocal, and not necessarily hierarchical. Implementation of one component is not necessarily dependent upon the completion of another.
- Together, SDFs, Linking Elements and Schemes should provide the holistic means for representative, informative and rational land use decision-making to occur. This system provides an opportunity for sectoral integration at all three levels of planning.

6.2.3 Content Of A Land Use Scheme

A LUS should not be seen as a tool to merely correct existing conditions in a municipal area, but as a tool to encourage a particular form of development. As such, it sets out the limits or extent of developments to ensure that the proposed use will not create undue negative impacts to the surrounding environment. SPLUMA outlines a set of development principles that applies to all organs of state and other authorities responsible for the implementation of legislation that regulates land use and development of land.

Figure 23: SPLUMA Compliant LUS



Land Use Schemes in South Africa are categorised as single use zoning/zones schemes. Each zone is either used to indicate the desirable future development of an area with the aim to promote economic growth, social inclusion, efficient land development and minimal impact on public health, the environment and natural resources or the existing land use rights assigned to a property. Zones can be classified according to the use of land and buildings such as commercial, industrial, residential or other purposes. The biggest criticism with the single use zoning is that it does not prescribe what is to be done in an area or what the development product will look like. The SPLUMA also does not provide options of what needs to be done if there is no zoning. The key core components of a LUS are as follows:

Figure 24: Components of a LUS

Scheme regulations	•Set out the procedures and conditions relating to the use of land and development of land in any zone •Include the definition of the area to which the scheme applies to as well as the definition of the terminology used in the maps and clauses
Scheme maps	•Set of maps at a scale that allows easy recognition of an erf number; •Different scales can be used for different areas of the municipality; •Maps depict all cadastral entities that makes up the municipality;
Scheme register	•Keeps all the records of the amendments to a LUS and contains information such as date of application; name and contact details of applicant, type of application, Township/Farm/erf name, Portion / Remainder, Property Description, Existing zoning, Secondary Rights Granted, Density, FAR, Coverage, Building Lines, Parking Requirements, Decision (Approved/Not Approved), Decision Date, Record of Appeals.

The LUS adopted and approved in terms of section 24 of the SPLUMA must give effect to and be consistent with the municipal SDF, determine the use and development of land within the municipal area to which it relates in order to promote economic growth, social inclusion, efficient land development, minimal impact on public health, the environment and social resources.

In terms of Section 153 of the Constitution of RSA (1996), a municipality must structure and manage its administration, budgeting and the planning process in order to ensure that the basic needs of the community are provided for. This echoes section 25 (1) of the SPLUMA. A SPLUMA compliant LUS is a mechanism to achieve all of this. It has a force of law and provides for land use and development rights (S 26(1) of the SPLUMA).

Additionally, a LUS may include provisions relating to the following:

- the use and development of land only with the written consent of the municipality;
- specific requirements regarding any special zones identified to address the development priorities of the municipality; and
- the variation of conditions of a land use scheme other than a variation which may materially alter or affect conditions relating to the use, size and scale of buildings and the intensity or density of land use.

Zoning has historically been used to separate land uses, particularly incompatible land uses. The municipality will manage development within each zone through a series of development controls. Additionally, the development controls set out the maximum development permitted on a site or the minimum development allowed. The development controls within each zone includes:

- Minimum / maximum lot sizes;
- Building lines (side and rear space);
- Floor area ratio, coverage and height of buildings;
- Erf controls;
- Sitting of building and access;
- Parking and loading requirements;
- External appearance of buildings.

These development controls need to be documented in the scheme in an accessible and user-friendly manner. They may be written in text, presented in tables that summarise key information about each zone.

6.2.4 MKHAMBATHINI' S CURRENT LAND USE SCHEME APPROACH

Mkhambathini is a complex spatial system with land uses ranging from urban uses through to expansive commercial farmlands and rural settlements. A wall-to-wall scheme should cover all these areas, and provide certainty to land users and land development applicants irrespective of location.

The approach to the preparation of the current Mkhambathini Scheme involved the formulation of two types of land use management mechanisms. This included the:

- Mkhambathini Urban Scheme; and
- Rural Land Use Management Policy.

The Urban Scheme covers Camperdown/Umlaas Road, making use of traditional zoning and associated rules, whilst the Rural Land Use Management Policy is a policy-based document, covering the remaining portions of the Mkhambathini Municipality.

The Rural Land Use Management Policy provides strategic guidance to land use within the appropriate context of traditional processes on land held in trust of the Ingonyama Trust Board and the acknowledgement of the Subdivision of Agricultural Land Act (No. 70 of 1970) on agricultural land without infringing on the mandate of the Department of Agriculture, Forestry and Fisheries. However, the municipality will have to develop a scheme with a range of zones that can be consolidated with the urban scheme in order to develop a single Land Use Scheme.

6.2.5 Land Use Proposals And Use Zones

Broad land use typologies for the Single Land Use Scheme are suggested in the table on the overleaf. It is suggested that a more prescriptive / regulatory approach is required where important resources (e.g. high potential agricultural land and important environmental service areas) need to be protected and where pressure for development is higher. This will provide the Municipality with clear regulations to manage this development e.g. a potential urban settlement where there is or may be a demand for commercial and industrial development sites.

TABLE 4: LAND USE PROPOSALS AND USE ZONES

LAND USE TYPE	DESCRIPTION	POTENTIAL ZONES	SPATIAL LOCATION
Industry	This zone will be used to designate and manage a range of industrial activities – from light industrial with limited impact on surrounding land uses to hazardous or noxious industry with high-impact and must be separated from other uses. This set of zones would include agricultural industry.	• Service Industry • Light Industry • General Industry • Abattoir • Service Station	• Existing industrial areas (Umlaas Road, Eston) • Development nodes. • Mixed land use corridors (N3).
Residential	Used to designate the full spectrum of residential options ranging from areas that are almost entirely residential to areas having a mix of residential and other compatible land uses, yet the predominant land use is residential.	• Residential Only (*Residential Only Detached)* • Residential Only Medium Density • General Residential • Rural Residential • Residential Estate	• Mixed use such as development nodes and corridors. • Residential areas • Mixed use such as development nodes and corridors. • Informally settled areas • Rural settlement areas
Commercial (Mixed Use)	This group of zones allows the development of a range of complementary land uses for commercial, business, services, industrial, administrative and residential opportunities, which include informal trading in a single zone to enable a special mixture of development to occur. It seeks to create a balance between the natural and built environment through landscaping and areas of green space. It encourages, where appropriate the	• Mixed use (Core Mixed Use, Limited Mixed Use, Mixed Use, etc.) • Commercial • Office • Service station • Warehousing and logistics	• Central business districts (Camperdown / Umlaas Road) • Development nodes.

LAND USE TYPE	DESCRIPTION	POTENTIAL ZONES	SPATIAL LOCATION
	use of detailed urban design criteria to achieve specific urban environments and mix of uses. The extent and range of land uses allowed in the potential mixed use zones must be determined, as part of the development of a single Land Use Scheme.		
Civic and Social	This family of zones are intended to accommodate land that is utilized to provide for administrative or government buildings including education, health, pension offices, museums, libraries, community halls, prisons, juvenile facilities, cemeteries and crematoria. Its primary aim is to facilitate the provision of public facilities and delivery of social services. It also seeks to improve access to social and civic facilities in a manner that meets the needs of communities in the fields of health, education social and cultural services.	• Education • Health and Welfare • Institution • Cemetery • Municipal and government (administration) • Worship	• Residential areas. • CBD • Nodal areas
Open Space and environment	Environmental and open space zones are intended to set aside land for important environmental services and recreational activities. It includes parks of differing sizes, green areas for bowling, ball sports, cycling, and green belts for walking and hiking. They provide for an adequate number of appropriately situated sites that are easily accessible for recreational purposes and activities for local and wider communities in accordance with recognized guidelines, appropriate thresholds and the	• Declared Protected Areas • Active open space • Passive open space • Conservation. • Dams • *Management overlays for additional information*	• Urban and Residential areas. • Vacant and unused land in and around the urban footprint. • Cultural and heritage sites. • Major dams.

LAND USE TYPE	DESCRIPTION	POTENTIAL ZONES	SPATIAL LOCATION
	requirements of the broader community and visitors. In addition, it also provides for important environmental areas, such as proclaimed parks, view sheds, open space system (e.g. water courses, wetlands, grasslands, and other natural habitats) and proclaimed conservation areas. It reserves land as part of a sustainable living environment.		
Utility and services	The zone is intended to ensure that the land required for the necessary services infrastructure is set aside for development. It seeks to ensure that land used for service provision is appropriately located away from residential or other land uses where they detract from levels of amenity or safety. It includes the provision of land for capital works mains, overhead and underground cables, and essential services required to promote sustainable development in accordance with national laws and provincial and local guidelines.	• Road reserves • Railway • Landing strip • Public parking • Transportation facility (Bus & taxi rank) • Refuse site (Landfill) • Sub Station • Reservoirs	• Residential areas. • CBD • Nodal areas • Industrial areas • Rural and urban areas
Agriculture	Agricultural family of zones are intended to provide land for buildings and uses associated farming practices and specifically with the following activities: - • The production of food and fibre; • The cultivation of crops; • Timber plantations; • The farming of livestock, poultry and bees,	• Agriculture 1 • Agriculture 2 (Traditional/ communal) • Urban Agriculture • Restricted agriculture (agro-biodiversity zone)	• Rural areas • Traditional areas • Urban areas

LAND USE TYPE	DESCRIPTION	POTENTIAL ZONES	SPATIAL LOCATION
	• Horticulture and market gardening; • Urban agriculture and settlement; and, • The use of buildings for associated activities including education activities. Its primary aim is to facilitate the protection of agricultural land from non-agricultural uses, and to enhance its production potential. This will facilitate food production and improve contribution of the agricultural sector to the local economy.	• *Management overlays for additional information*	

The following are some of the proposed land use reservations and definitions that could be considered for inclusion into the land uses scheme to cover some of the uses found in the rural areas of Mkhambathini. These are however not exhaustive and other land uses found in the urban scheme can also be applicable to land uses found in the rural areas (e.g. place of instruction, hospital, etc.):

TABLE 5: PROPOSED LAND USE RESERVATIONS FOR SOME LAND USES IN RURAL AREAS

LAND USE RESERVATION	STATEMENT INTENT	PERMITTED ACTIVITIES AND LAND USES	PERMITTED ACTIVITIES AND LAND USES WITH CONSENT	PROHIBITED ACTIVITIES AND LAND USES	ADDITIONAL CONTROLS
Umuzi	This is a residential land use used primarily for shelter within Traditional Council Areas. It hosts other livelihood supporting uses, such as: isivande; isinqolobane, isibaya and ihhoko.	- Ihhoko - Isibaya - Isingolobane - Isivande - Umuzi	- Farm Stall - Isigcawu - Isipoti - Tuck Shop	Any land uses and activities that are not listed in this table.	Whilst Amathuna do exist in close proximity to Imizi, burials must be in future restricted to Cemeteries.

LAND USE RESERVATION	STATEMENT INTENT	PERMITTED ACTIVITIES AND LAND USES	PERMITTED ACTIVITIES AND LAND USES WITH CONSENT	PROHIBITED ACTIVITIES AND LAND USES	ADDITIONAL CONTROLS
			- Umshini Wokugaya		
Isigodlo	While primarily used for royal residence, isigodlo often serve as administrative and recreational zones hosting traditional rites and festivities such as ukuhlolwa kwezintombi (virginity testing). These are solely regulated by royal families and the location of these is largely informed by traditional considerations for safety and security.	- Amathuna - Ihhoko - Isibaya - Isigcawu - Isingolobane - Isivande - Traditional Administrative Building - Umuzi	- Farm Stall - Retail Facility - Tuck Shop	Any land uses and activities that are not listed in this table.	Amathuna to be located within buffer area surrounding Isigodlo. Retail Facility to be maximum 50m² in extent
Amasimu	These uses are for agricultural purposes and used to support life in Non-Urban areas. Once these have been identified and approved, they need to be geo-referenced and included within the Wall-to-Wall Scheme.	- Amasimu - Store House	- Ukuhasha - Farm Dam	Any land uses and activities that are not listed in this table.	Uncoordinated diversion of water flow from natural sources such as rivers and dams must be prohibited unless written permission is obtained from the Traditional Authority and relevant government Departments. The un-reservation of this space for any other land use must be prohibited in order to promote food security in these areas. Ukuhasha must be prohibited in close proximity to agricultural land uses. Timber plantations must be prohibited in close proximity with

LAND USE RESERVATION	STATEMENT INTENT	PERMITTED ACTIVITIES AND LAND USES	PERMITTED ACTIVITIES AND LAND USES WITH CONSENT	PROHIBITED ACTIVITIES AND LAND USES	ADDITIONAL CONTROLS
					Amahlathi emvelo, because alien plants often destroy indigenous ones.
Izishosi	These are lighting prone areas - normally located on mountain hills and form part of natural disaster areas. These areas must be properly geo-referenced and included within the Wall-to-Wall Scheme.	- None	- Worship	Any land uses and activities that are not listed in this table.	Worship is only permitted whereby the building has been professionally fitted with Isikhonkwane to the satisfaction of the Traditional Authority and relevant Municipal technical department.
Omphakathi Amathuna	Although customary in many Non-Urban areas, the Kwa-Zulu Natal Planning and Development Act 6 of 2008 prohibits household burials. As such, the Traditional Authority must in future encourage burials within the Omphakathi Amathuna.	- Amathuna	- None	Any land uses and activities that are not listed in this table.	Cemeteries should be established in terms of Section 3, Chapter 2, of KwaZulu-Natal Cemeteries and Crematoria Act 12 of 1996.
Izindawo Ezigciniwe	To protect environmentally sensitive areas and to conserve Amahlathi emvelo as well as natural landmarks. The small scale collection of indigenous minerals such as: Umcako, Ibomvu, Isihlabathi, Ubumba, Ilahle and Imkwal are permitted.	- Amahlathi emvelo - Amagquma - Amadlelo - Imithombo Nezi Phetho	- Inqina - Ukuzingela - Ukusika Isihlala	Ukubabela and any land uses and activities that are not listed in this table.	The Kwa-Zulu Natal Planning and Development Act 6 of 2008 prohibits livestock grazing and plantation of commercial forests in proximity to or within the indigenous forests without the permission from the Minister concerned. Alien plantations are prohibited.
Inkantolo ye sizwe	Inkantolo ye sizwe often serves as an administrative and recreational area hosting traditional rites and festivities that fall outside the royal household grounds and can include a Tribal Court.	- Community Hall - Inkantolo ye sizwe	- Clinic - Government - Tuck Shop - Taxi Rank	Any land uses and activities that are not listed in this table	None.
Amadlelo	Amadlelo are used for grazing purposes in all seasons. Careful consideration and attention is	- Amadlelo	- Amadiphu	Any land uses and activities	No construction of new road shall be approved without proper consent and

LAND USE RESERVATION	STATEMENT INTENT	PERMITTED ACTIVITIES AND LAND USES	PERMITTED ACTIVITIES AND LAND USES WITH CONSENT	PROHIBITED ACTIVITIES AND LAND USES	ADDITIONAL CONTROLS
	needed to regulate amadlelo, in terms of their proximity to other land uses		- Farm Dam - Ukubabela	that are not listed in this table	provision of livestock bridges and tunnels. Certain land uses such as gardens, communal and household cemeteries and residential shall be discouraged in close proximity to amadlelo, unless these are properly fenced and consent is obtained. Uncoordinated diversion of water flow from natural sources such as rivers and dams must be prohibited unless written permission is obtained from the Traditional Authority and relevant government Departments.
Peri-Urban Residence	To manage settlements which have occurred on Traditional authority land adjacent to or near existing formal urban areas that have characteristics more affiliated with the urban rather than traditional built environment. Controls need to be applied primarily to protect the health and safety of residents as well as being applied to facilitate the provision of access and services.	- Cell Mast - Farm Stall - Home Business - Isivande	- Tuck Shop	Any land uses and activities that are not listed in this table.	Allocated areas must have a minimum lot size of 200m² to promote the health and safety of the settlement area. Whilst Amathuna do exist in close proximity to Imizi, burials must be in future restricted to Cemeteries. Cell Masts must only be permitted on properties within this zone that measure upwards of 600m² in extent. These controls will also be applicable to any Low Income Residential developmental and In-situ Housing projects located on Traditional Authority Land – see Transitional Settlement zone for further statutory controls.

LAND USE RESERVATION	STATEMENT INTENT	PERMITTED ACTIVITIES AND LAND USES	PERMITTED ACTIVITIES AND LAND USES WITH CONSENT	PROHIBITED ACTIVITIES AND LAND USES	ADDITIONAL CONTROLS
Tourism Development	Provides for the display and enhancement of historical features or artefacts (by way of a museum), monuments and landmarks (natural and man-made) that may include tourist accommodation as well as arts and cultural facilities. This reservation also provides for the development of Eco-Tourism Resorts/developments.	- Arts and Crafts Workshop - Bed and Breakfast - Conference Facility - Conservation Area - Critical Areas - Crèche - Dwelling House - Fresh Produce Market - Farm Stall - Resort Development - Recreational Facility - Private Active Open Space - Place of Public Assembly	- Agricultural Building - Agricultural Land - Farm Dam - Game Reserve - Nature Reserve - Restaurant - Residential Building 2 - Shop - Special Building	Any land uses and activities that are not listed in this table.	The provision of a dwelling house on site is restricted to accommodation for a manager or caretaker's flat. Establishment of a Nature or Game Reserve must be permitted by the Department of Agriculture, Forestry and Fisheries (DAFF) and the Department of Agriculture and Non-Urban Development (DARD). Towards Nature and Resource Conservation, any application related to a Nature or Game Reserve must include a Natural Resource Management Plan. Any development shall be subject to the Municipality being satisfied with regard to the arrangements for the disposal of sewage [see clause?] and associated service level agreements.

LAND USE RESERVATION	STATEMENT INTENT	PERMITTED ACTIVITIES AND LAND USES	PERMITTED ACTIVITIES AND LAND USES WITH CONSENT	PROHIBITED ACTIVITIES AND LAND USES	ADDITIONAL CONTROLS
		- Place of Worship			
Commercial Forestry	Provides for land used or authorised for the commercial growth, farming and processing of trees with valid permission of the Department of Agriculture, Forestry and Fisheries (DAFF) and the Department of Agriculture and Non-Urban Development (DARD).	- Agricultural Building - Agricultural Industry - Agricultural Land - Ancillary Unit - Cell Mast - Conservation Area - Critical Areas - Dwelling House - Farm Stall - Home Business - Isivande - Umuzi	- Crèche - Farm Dam - Residential Building 1 - Tuck Shop	Any land uses and activities that are not listed in this table.	Residential Building 1 is permissible via Special Consent only as it relates to staff/farm worker accommodation (employed in relation to the primary farming activity). Alternatively, any traditional residential development for staff/farm workers within the Reservation is limited to 1 Umuzi per 5000m² of the property extent. Development requires valid permission of the Department of Agriculture, Forestry and Fisheries (DAFF) and the Department of Agriculture and Non-Urban Development (DARD) in terms of the provisions of the National Environmental Management Act 107 of 1998 and possibly the Subdivision of Agricultural Land Act 70 of 1970.
Commercial Agriculture	Provides for the cultivation of land for crops and plants, the keeping and breeding of animals, pig farming, horticulture, poultry farming, dairy farming, breeding and keeping livestock, horse riding facilities and related schooling uses, bee keeping, mushroom and vegetable farming,	- Agricultural Building - Agricultural Industry	- Crèche - Farm Dam - Residential Building 1	Any land uses and activities that are not listed in this table.	Residential Building 1 is permissible via Special Consent only as it relates to staff/farm worker accommodation (employed in relation to the primary farming activity).

LAND USE RESERVATION	STATEMENT INTENT	PERMITTED ACTIVITIES AND LAND USES	PERMITTED ACTIVITIES AND LAND USES WITH CONSENT	PROHIBITED ACTIVITIES AND LAND USES	ADDITIONAL CONTROLS
	floriculture, orchards, Renewable Energy Farms (e.g. Solar or Wind Farms) or the operation of a game farm (on an extensive basis) and includes such activities and buildings as are reasonably connected with the main farming activities such as residential accommodation for the farmer, farm manager and farm labourers, the packing of agricultural produce grown on the property for delivery to the market and a plant nursery and farm shop for selling of produce grown / bread on the farm; but excludes intensive horticulture, intensive animal farming, harvesting of natural resources, sporting and recreation purposes or a race course.	- Agricultural Land - Conservation Area - Critical Areas - Dwelling House - Umuzi	- Resort Development - Tuck Shop		Alternatively, any traditional residential development for staff/farm workers within the Reservation is limited to 1 Umuzi per 5000m² of the property extent. Development requires valid permission of the Department of Agriculture, Forestry and Fisheries (DAFF) and the Department of Agriculture and Non-Urban Development (DARD) in terms of the provisions of the National Environmental Management Act 107 of 1998 and possibly the Subdivision of Agricultural Land Act 70 of 1970.
CPA Agri-Village	Provides for the cultivation and development of Resituated Land (in terms of the Restitution of Land Rights Act 22 of 1994) that is administered by Communal Property Associations (CPAs). Controls need to be applied primarily to protect the health and safety of residents as well as being applied to facilitate the provision of access and services.	- Agricultural Building - Agricultural Land - Conservation Area - Critical Areas - Dwelling House - Place of Worship - Umuzi	- Crèche - Farm Dam - Tuck Shop - Education -	Any land uses and activities that are not listed in this table.	Development of an Education Facility is limited to a Farm School of an appropriate size that is permitted by the Department of Education and must include adequate ablution facilities. Allocated areas must have a minimum lot size of 200m² to promote the health and safety of the settlement area. Whilst Amathuna do exist in close proximity to Imizi, burials must be in future restricted to Cemeteries. Cell Masts must only be permitted on properties within this zone that measure upwards of 600m² in extent.

LAND USE RESERVATION	STATEMENT INTENT	PERMITTED ACTIVITIES AND LAND USES	PERMITTED ACTIVITIES AND LAND USES WITH CONSENT	PROHIBITED ACTIVITIES AND LAND USES	ADDITIONAL CONTROLS

Source: KZN COGTA, 2018

Definitions related to some of the above land uses are as follows:

TABLE 6: LAND USE DEFINITIONS RELATED TO RURAL AREAS

AMADIPHU – Facilities used for cattle dipping in order to disinfect live-stock.	**AMADLELO –** Area used for grazing of live-stock	**AMAGQUMA –** Specific hill-tops often used for communication, landmarks, and in the location of missing live-stock. It is a common practice to have live-stock grazing within the local area of the amagquma.	**AMAHLATHI EMVELO –** Indeginous forest used by the community for the collection of materials indigenous to the forest such as firewood, traditional herbs, wild fruit, craft, natural building materials and bark.
AMASIMU – Communal agricultural Areas	**AMATHUNA –** Graves	**AMATHUNA OMPHAKATHI –** Communal cemetery	**IBOMVU –** A natural paint derived from soil used for the protection against sunburn.
IHHOKO – Chicken House	**ILAHLE –** Coal	**IMITHOMBO NEZI PHETHO –** The collection of freshwater for drinking, cooking, washing and small-scale irrigation purposes.	**IMIZI –** Rural dwelling structure.
INDIGENOUS MINERALS – Natural materials often collected by community for daily use such as imicako, ibomvu, isihlabathi, ubumba, ilahle and inkwali.	**INKWALI –** Course grained soil that is black in colour and is used primarily to fill potholes, the end product of which is similar to tar	**ISIBAYA –** Also known as Kraal. A fenced-off area used to keep animals. These include cattle, pigs, goats, donkeys, it is noted that separate Isibaya's are used	**ISIGCAWU –** An area for traditional ceremonies for the community.

		for certain type of animals resulting in the establishment of smaller Isibaya's	
ISIGODLO – Compound established for the residence of the royal family and includes uses for the administration of the local area.	**ISIHLABATHI –** Soil used as a building material	**ISIVANDA –** Household Garden	**IZINDAWO EZIGCINIWE –** Protected/ Conservation areas.
IZINKANTOLO ZAMAKHOSI – Area identified for the recreational festivities and traditional administration.	**IZINQOLOBANE –** Temporary garden shed used for storing of farming equipment.	**IZIPIKILI –** Indeginous device utilising metal nails as a lightning conductor	**IZIPOTI –** An informal area identified by the community for sale and consumption of alcohol and food including the preparation there-of. (Inhloko – cow heads)
IZISHOSHI – Lightning prone areas normally located on mountain hills.	**UBUMBA –** Clay soil used in the manufacturing of Clay pots	**UKUBABELA-** Grazing Areas identified for burning of grass towards environmental sustainability	**UKUHASHA –** Cattle grazing in winter on crop land for fertilisation purposes.
UKUSIKA ISIHLALA- The cutting of trees for firewood, medical purposes and building.	**UKUZINGELA –** Hunting of wild animals	**UMCAKO –** Natural paint derived from soil used mainly on Imizi for decorative purposes within the local area.	**UMSHINI WOKUGAYA –** A mill used in the processing of mealies.

6.2.6 Development Parameters / Scheme Controls

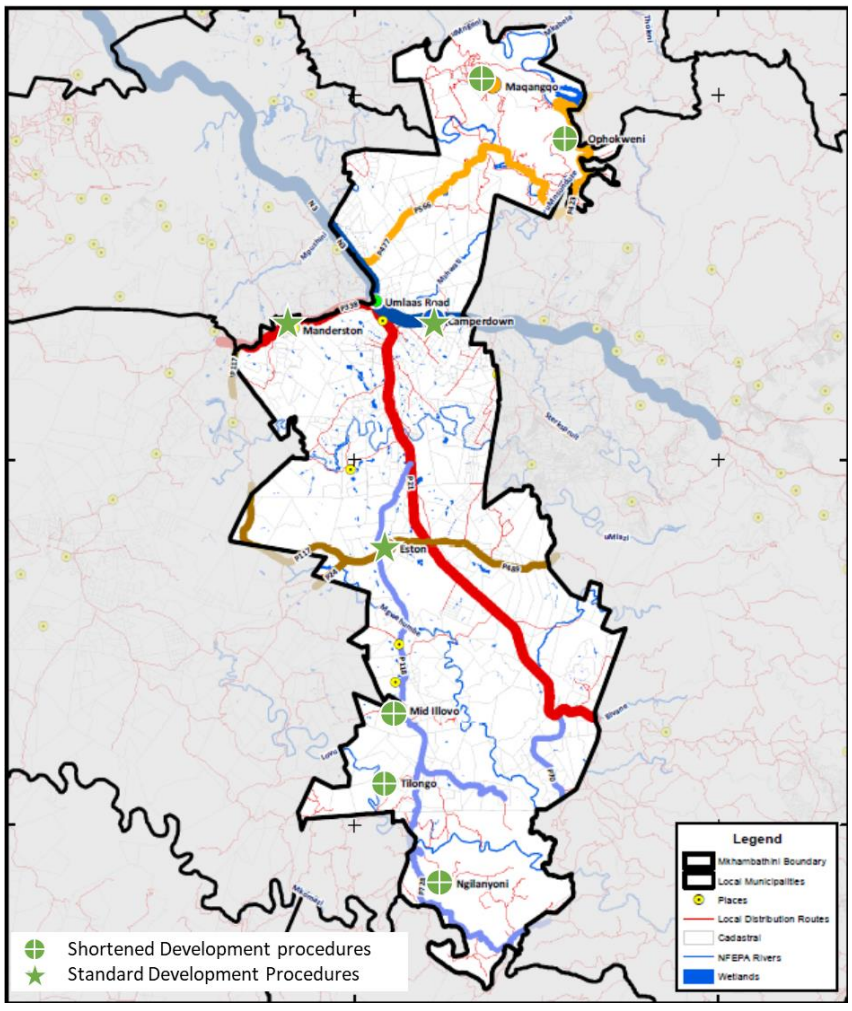
The Municipality manages development within each zone through a series of development parameters or Scheme controls relating to each zone. Conventionally, development parameters set out the maximum development permitted on a site. However, they may also be used to set out the desirable or minimum development allowed. The development parameters set out the uses within each zone that are:

- Freely permitted: This category includes land uses that are considered compatible with the surrounding land uses and which may be permitted by the municipality. A building plan is often sufficient in this regard.
- Consent Use: This category includes ancillary uses that might have a more intrusive impact and may require special conditions to protect the amenity of the area or mitigate the impact of the proposed use.
- Prohibited Uses: This category includes land uses which are incompatible with the surrounding land uses, and which a municipality is precluded from considering.

6.2.7 Shortened Land Use Development Procedures

The Mkhambathini municipality is predominantly rural. Development in the built-up urban area of Camperdown / Umlaas Road area has to adhere to a myriad of spatial development guidelines and occurs within a wide variety of land uses. In the rural parts of the municipality where land uses are at most limited to dwelling houses and social facilities (schools, clinics, community halls, sports fields, etc.), shortened development procedures will may be applicable.

Figure 25: Shortened land use development procedure areas

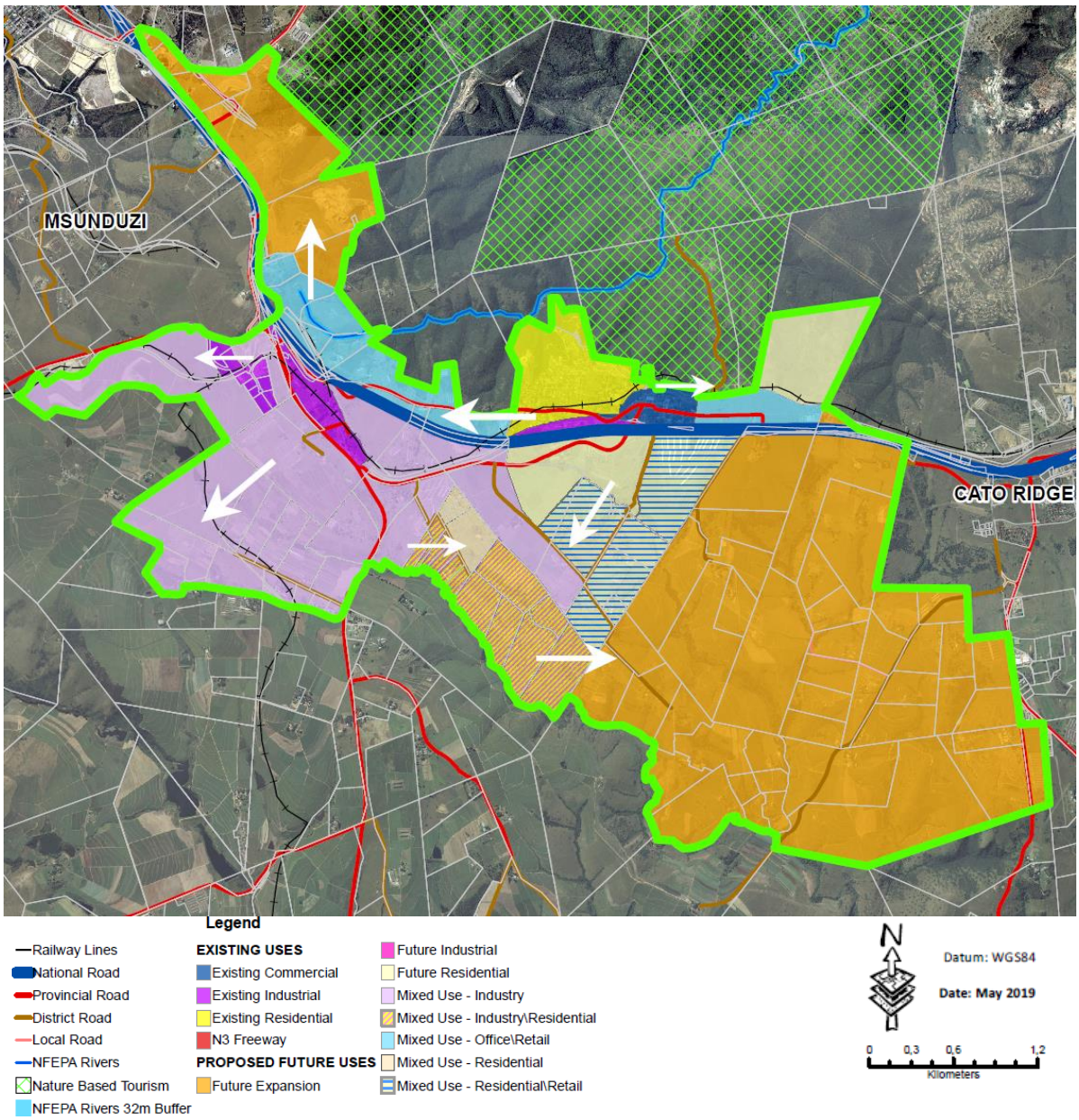


6.2.8 Proposed Amendments to the Land Use Scheme

The existing extent of the urban scheme for Mkhambathini is indicated as figure 27. However, in line with the proposed growth boundary identified fir Camperdown / Umlaas Road and the intentions of the future development of this area, it is proposed that the land use scheme be amended to reflect these intentions (refer to figure 26).

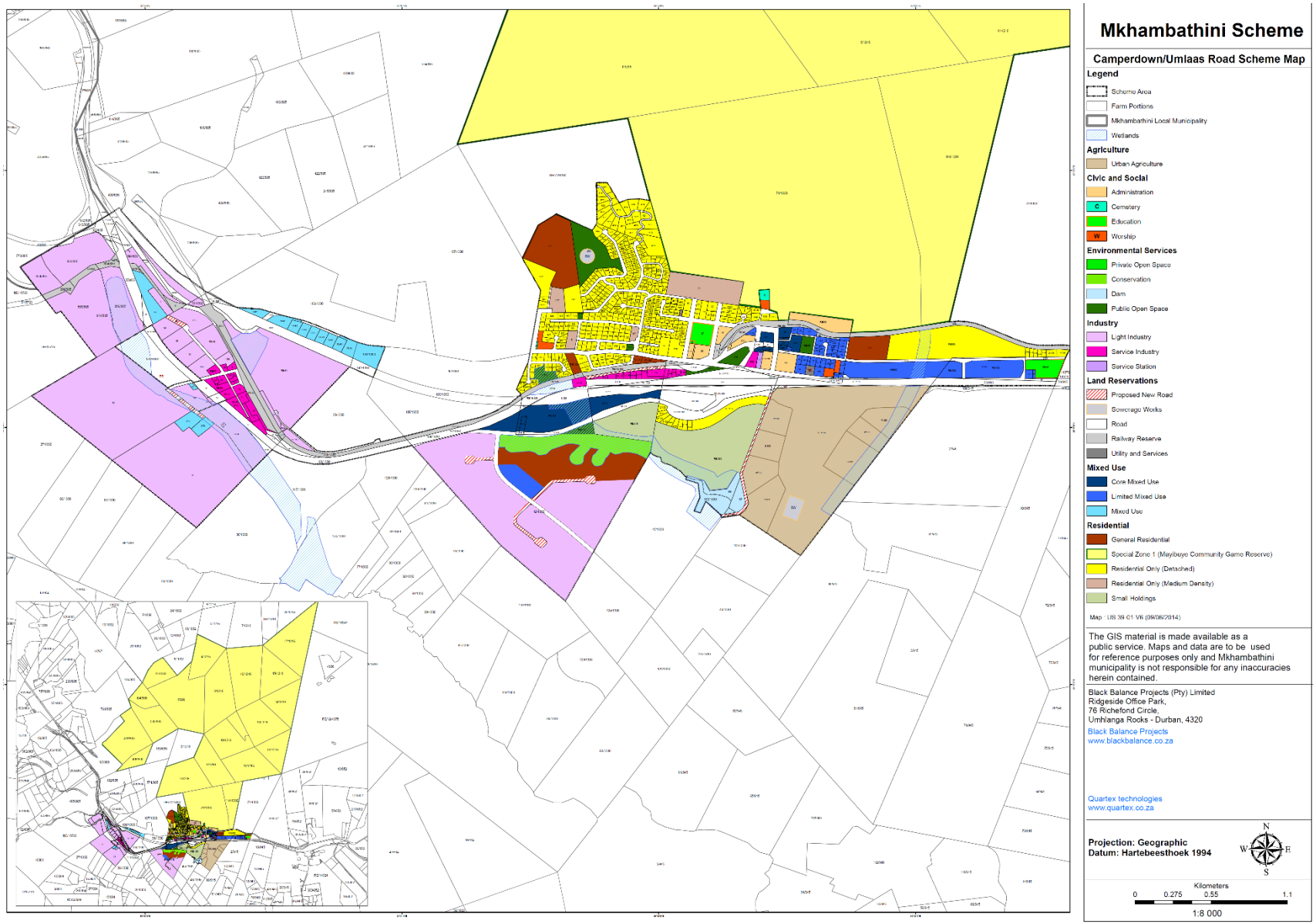
The Urban Scheme and Rural Land Use Management Policy will have to be consolidated to form a single land use scheme, as per the requirements of the SPLUMA. This implies that the Department of Agriculture, Forestry and Fisheries has to provide consent to the adoption of the single land use scheme, which will cover the entire municipal area. All land use designations outside the urban edges will still be subject to the Subdivision of Agricultural Land Act, Act 70 of 1970.

Figure 26: Proposed growth boundary for the Camperdown / Umlaas Road Node



*Please note that the Stockdale and Poortjie RDP housing projects falls outside the urban edge.

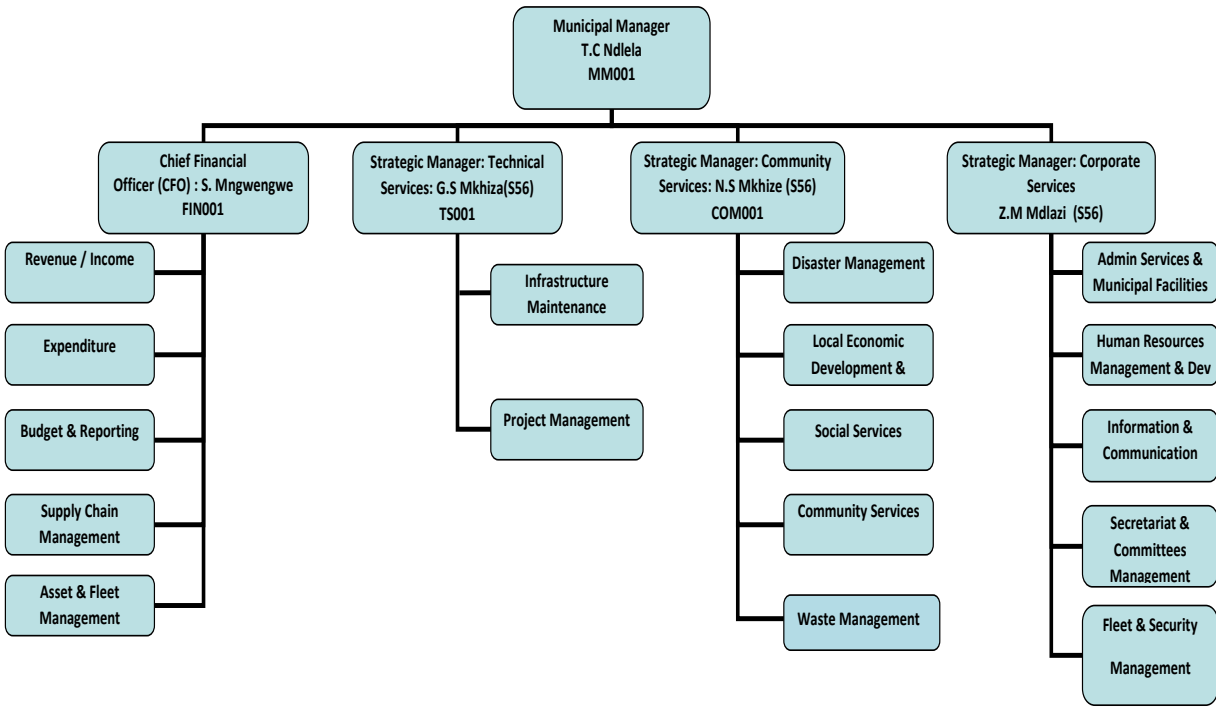
FIGURE 27: EXISTING URBAN LAND USE SCHEME



6.3 INSTITUTIONAL FRAMEWORK

The effective implementation of the Spatial Development Framework requires an adequately capacitated institutional framework. Moreover, the SDF is regarded as a key element in the integration of development processes applicable to different sectors. This includes the Departments within the municipality that are responsible for infrastructure development and community services. The implementation of the SDF is the responsibility of the Technical Services Department. The organisational structure of Mkhambathini is depicted on the figure below.

FIGURE 28: MKHAMBATHINI ORGANISATIONAL STRUCTURE



Further to section 4.1.2.1 (Municipal Development Node), it is important to include the EDA as part of the institutional arrangements to provide guidance and drive the vision of the future development of the Camperdown / Umlaas Road node (new city development).

6.4 MONITORING AND EVALUATION FRAMEWORK

6.4.1 SPATIAL MONITORING APPROACH AND PROCESS

Monitoring, evaluation, reporting and adaptive management are widely recognised as fundamental components for effective municipal planning. This often takes the form of a Performance Management System (PMS), and forms an integral part of the IDP. Similarly, monitoring and evaluation of the impact of the SDF should not be considered as a once-off and separate exercise, but a continuous and iterative process that forms part of the overall assessment of the performance of the municipality. It helps to identify aspects or components of the SDF that need to be amended or strengthened, and thus keeps the SDF relevant to the strategic spatial agenda of the municipality.

Monitoring and evaluation is a fundamental management tool to document environmental impacts, both natural and anthropogenic, and assess the effectiveness of management actions.

Evaluating the impact of the SDF seeks to establish whether its operational mechanisms support achievement of the objectives or not and understand why. It will look at activities, outputs, and outcomes, use of resources and causal links. Improve efficiency and efficacy of operational processes. Where possible and necessary, it will measure changes in outcomes (and well being of target population) attributable to a specific intervention. It will inform high-level officials on extent to which intervention should be continued or not, and if any potential modifications needed.

6.4.1.1 IMPROVING ACCESS AND MOVEMENT (CORRIDOR DEVELOPMENT)

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- N3 National and Provincial Development Corridor	- Nodal development at strategic points along the corridor. - National/provincial initiatives along the corridors. - National and provincial support to tourism and agriculture.	- National and provincial government initiatives, e.g. SIP2	- The national and provincial governments will initiate projects that give effect to the corridor concept along the N3.
- Primary corridor	- Number, size and character of projects located along the primary development corridor. - New agricultural related and other developments along the corridor. - Level of access and ease of movement between Camperdown / Umlaas Road and other areas.	- Municipal IDP and budget.	- The municipality will focus most of the capital expenditure in areas located along the primary corridors.
- Secondary corridors	- Number, size and character of projects located within settlements located along these corridors. - Level of spatial linkage and integration between different settlements. - Number and character of nodes located along these corridors. - Number and size of tourism related projects.	- Municipal IDP and budget.	- The municipality will focus capital expenditure in strategic areas located along the secondary corridors. - - Tourism and agricultural development initiatives.
- Regional Access and Road Network	- Access and ease of movement within settlements. - Number of roads earmarked for upgrading. - Upgrading of major access and arterial/link roads. - Improving access to the existing and growing settlements. - Creating new linkages.	- Municipal IDP and budget. - Number and location of roads upgraded. - KMs of roads upgraded. - New roads.	- The municipality will spend funding on upgrading of some local roads.

6.4.1.2 Clustering Public Facilities and Economic Activities in Development Nodes

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Primary development node	- Amount of capital spent on Camperdown / Umlaas Road per annum. - Focusing strategic and high impact projects within primary (Camperdown / Umlaas Road) development node. - CBD regeneration and extension. - Amount of additional land released and developed for industrial and commercial uses per annum (up-take of industrial and commercial space). - Up-take of residential space and number of high-density developments per annum. - Number of infrastructural projects. - Number of new government offices.	- Municipal budget - SDBIPs - Town Planning Register - Buildings Plans -	- The municipality will facilitate the location of provincial and municipal-wide initiatives in Camperdown / Umlaas Road.
- Secondary development nodes	- Number, nature and budgets for municipal projects in the node. - Level of access and location of public facilities serving different communities.	- Municipal budget - SDBIPs - Town Planning Register - Buildings Plans	- The municipality will facilitate the location of initiatives that benefits a group or cluster of communities in the secondary node.
- Incipient nodes	- Establishment of a incipient node within identified settlements. - Number, nature and budgets for municipal projects in each node.	- Municipal budget - SDBIPs - Town Planning Register - Buildings Plans	- The municipality will facilitate the location of projects that benefits a community within tertiary nodes.

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
	- Level of access and location of low order public facilities in these nodes. - Promoting clusters of public facilities as a means to encourage nodal development.		- Development nodes have potential to improve access to basic and public services.

6.4.1.3 SPATIAL PLANNING SYSTEMS

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Urban settlements	- All new developments will occur within the urban edge, which will also serve as a service delivery line – urban compaction. - Urban renewal initiatives. - Number and nature of green field development – urban infill.	- IDP - Budget - SDBIP	- The municipality will develop systems and procedures for effective urban management.
- Dense rural settlements	- Release of land for housing development. - Land tenure upgrading. - Settlement plans. - Containment of outward expansion.	- IDP - Budget - SDBIP	- The land owners will release land for housing development and land tenure upgrading.
- Scattered rural settlements	- Agricultural development. - Management of grazing land. - Consolidation of settlement into agri-villages.	- IDP - Budget - DRDLR Programme of action	- Scattered rural settlements will be developed into agri-villages.

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
	- Structured engagement with DRDLR.		
- Urban edge	- Percentage reduction in urban capital expenditure outside of the urban edge. - Location of new urban settlements within the urban edge. - Upgrading of informal settlements.	- IDP - HSP - SDBIP	- The municipality will not approve urban development located outside of the urban edge.
- Settlement edge	- Stakeholder agreement on settlement edges. - Percentage reduction in rural capital expenditure outside of the settlement edge. - Development of sustainable human settlements.	- IDP - HSP - SDBIP	- The municipality will facilitate mapping of all settlements within its area and delineation of lines beyond which settlements may not expand.
- Densification	- Detailed densification strategy. - Review of the scheme to provide for densification. - Number of new electricity connections. - Number of new water connections. - Number and location of infill developments. - Percentage increase in the number of sub-divisions. - Percentage increase in the number of higher density developments.	- IDP - HSP - SDBIP	- The municipality will develop and implement a densification strategy with clear targets for densification.
- Hierarchy of plans	- Development of Local Area Plans for Camperdown / Umlaas Road. - Development of precinct plans for development nodes - Developing settlement plans.	- Number of LAP's prepared - Number of precinct plans developed for nodes	- The municipality will refine the SDF and develop it further through the formulation of a series of plans with varying degrees of detail and flexibility.

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
		experiencing development pressure - Number of approved settlement plans	
- Mapping of Settlements	- Mapping of izigodi - Mapping of settlements within each izigodi - Development of Guidelines for land Allocation - Training and Capacity Building of Traditional leaders	- Generation of new spatial data - Improved GIS system and data - Accepted norms and standards for site sizes. - Identified factors that should be considered when allocating land for different land uses. - Spatial identification and coding of rights allocated. - Register of land rights holders - Improved capacity and understanding of spatial information by Traditional leadership	- The municipality will work together with Traditional leadership to Integrate Traditional Land Allocation Processes with Municipal Spatial Planning

6.4.1.4 Developing Sustainable Human Settlements

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Land release	- Size and location of land released for new housing projects. - Land release and acquisition strategy.	- HSP - IDP	- The municipality and private sector will release land for housing development.
- Slums clearance	- Identification and mapping of informal settlements. - Informal settlement management policy. - Housing budget spent on informal settlement upgrading. - Mixture of housing typologies.	- HSP - IDP	- The municipality would like to eradicate all slums.
- Rural housing	- Number and location of new rural housing projects. - Strategic link between settlement planning and rural housing. - Number of people with secured land tenure rights.	- HSP - IDP	- Rural housing will be implemented mainly in dense rural settlements.
- Other housing products	- Size and location of land for gap housing. - Size and location of land for social housing. - Number of social and gap housing projects.	- HSP - IDP	- The municipality will investigate and facilitate implementation of gap and social housing.

6.4.1.5 Sustainable use of natural resource base

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Catchment management	- Catchment management programme. - Catchment management agency. - Participation in national catchment management initiatives.	- EMF - DWA -	- The municipality will collaborate with relevant government departments to promote environmental management and sustainable development.
- Range management	- Application of carrying capacity standards to grazing land management.	- DARD	

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
		-	
- Alien plant management	- Amount of land cleared of alien plants. - Programme to remove alien plants.	- EMF - DWA	
- Conservation through production	- Initiatives to rehabilitate land affected by soil erosion. - Protection of indigenous forestry.	- EMF - DARD -	
- Protected area development	- Proclamation of environmentally sensitive areas that are not currently protected.	- EMF - DARD	
- Wetland management	- Delineation of all major wetlands. - Observation of a 32m buffer from each wetland.	- EMF	
- Biodiversity zones	- Management of bio-diversity corridors. - Environmental overlays.	- EMF	

6.4.1.6 PROTECTION AND MANAGEMENT OF AGRICULTURAL LAND

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Very high potential agriculture	- Size and use of high potential agricultural land. - Scheme clauses designed to protect very high potential agricultural land.	- IDP - LED - Agricultural protection plans	- The municipality will not allow non-agricultural uses on very high potential agricultural land.

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- High potential agriculture	- Size and use of high potential agricultural land. - Scheme clauses designed to protect high potential agricultural land.	- IDP - LED	- The municipality will allow a limited number of non-agricultural uses on high potential agricultural land.
- Moderate potential agricultural land	- Size and use of moderate potential agricultural land. - Scheme clauses designed to protect moderate potential agricultural land.	- IDP - LED	- The municipality will permit non-agricultural uses on moderate potential agricultural land.

6.4.1.7 Rural Development and Agrarian Reform

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Emerging farmer settlement	- Number and location of LRAD projects - Quality of land for small farmer settlement. - Number and location of PLAS projects. - Number of land reform projects receiving post-settlement support. - Cluster approach to land reform implementation. - Percentage increase in agricultural land registered in the name of black people.	- DRDLR - DARD	- The municipality will support developmental land reform.
- Land tenure upgrading	- Number of labour tenants and ESTA cases resolved. - Number and location of new agri-villages. - Number and location of settlements that are receiving land tenure upgrading. - Number of landowners benefiting from title adjustment.	- DRDLR -	- Land tenure upgrading in the rural areas is required in order to unlock land for settlement purposes.

6.4.1.8 Bulk Infrastructure Development

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Sanitation	- All settlements within the urban edge have waterborne sewer. - All dense rural settlements are provided with lined pit latrines. -	- WSDP - IDP - Budget	- The district municipality will facilitate provision of sanitation as part of the development of sustainable human settlements.
- Water	- All settlements within the urban edge have water on-site. - All dense rural settlements are provided with communal standpipes within 200m. - Upgrading of water infrastructure to accommodate new development.	- WSDP - IDP - Budget	- The district municipality will facilitate provision of water as part of the development of sustainable human settlements.
- Electricity	- Percentage increase in the number of households within the urban edge that are connected to the grid. - Percentage increase in the number of households within the dense rural settlements that are connected to the grid. - Percentage increase in the number of households in scattered rural settlements receiving alternative forms of power.	- IDP - Budget - ESKOM	- The municipality will facilitate provision of electricity as part of the development of sustainable human settlements.

6.4.1.9 Improving access to Social facilities

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Health	- All households access a health facility within a 5km radius. - Number and location of new health facilities. - Weakly mobile clinics in tertiary nodes.	- Department of Health	- Health facilities will be provided in accordance with the relevant planning standards.

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Meeting Spaces	- Community hall for each settlement. -	- IDP - Budget	- All communities will have access to a hall.
- Education	- Primary school for every 750 households. - Secondary school for every 1000 to 1500 households. - Primary school within 5km radius from each household. - Secondary school within 5km radius from each household	- IDP - Budget - Department of Education	- Education facilities will be provided in accordance with the relevant planning standards.
- Cemeteries	- All cemetery sites meet the requirements from DWA and the Department of Agriculture, Environmental Affairs and Rural Development. - Closure of all non-compliant cemeteries.	- IDP - Budget	- New cemeteries will be developed in accordance with the relevant regulations.
- Waste sites	- Weakly waste collection within the urban edge. - Waste collection centres within each dense rural settlement. - Location and accessibility of a landfill site.	- IDP - Budget	- Waste removal and disposal will be undertaken in accordance with the relevant regulations.

6.4.1.10 Unlock Economic Development Potential

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
- Tourism	- Development along tourism routes and gateway node. - Number of new tourism facilities and products.	- Tourism statistics - Town Planning Register -	- Increased investment in terms of tourism

KEY PERFORMANCE AREAS	KEY PERFORMANCE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTION
	- Number of tourism facilities and products located in previously disadvantaged areas.		
- Agriculture	- Location and extent of land reserved for agriculture only. - High impact agriculture in dense rural settlements. - Urban agriculture.	- Town Planning Register	- Increased investment in terms of agriculture
- Commerce and industry	- Percentage increase in industrial land. - Percentage increase in commercial land. - Uptake of commercial land in townships and dense rural settlement. -	- Municipal budget - SDBIPs - Town Planning Register - Buildings Plans	- Increased investment in terms of commerce and industry

6.5 CAPITAL INVESTMENT FRAMEWORK

The aim of the Capital Investment Plan is to review the projects contained in the IDP taking into account activities, which have already been undertaken by the municipality. The objectives of the Capital Investment Plan can be summarized as follows:

- To link capital projects with potential sources of funding;
- To strive to ensure appropriate budget - IDP linkages; and
- To provide practical and appropriate alignment regarding capital investment.

The projects have also been spatially referenced, where possible, to assist the municipality with the evaluation of where capital expenditure will be focussed in the municipal area. Thus, the intent is capital investment that lays the foundations for sustainable development.

The table below presents the draft capital investment framework for the municipality. This framework is spatially presented in a series of map. The complete table is attached to the document as Annexure A.

PROGRAMME/PROJECTS			PHASED ANNUAL INVESTMENT COSTS					
NUMBER		LOCATION	TOTAL ESTIMATED COST	2018/19	2019/20	2020/21	2021022	2022/23
IMPROVING MOVEMENT AND ACCESS			**128 068 652,00**	**30 416 625,00**	**15 852 640,00**	**7 655 097,00**	**0,00**	**0,00**
	ROADS							
1	Construction of lay-byes along R103	R103						
2	Construction of lay-byes along P418	P418						
3	Upgrade of the Camperdown Intersection	Camperdown						
4	Construction of pedestrian infrastructure along P418	P418						
5	Feasibility Study for upgrading of P418 from 2 to 4 lanes	P418						
6	Feasibility Study for upgrading of R103 from 2 to 4 lanes	R103						
7	Maintenance of Stingini Access Road	Ward 1	800 000,00					
8	Gcina Access Road (Tar)	Ward 1						
9	Ezinembeni Access Road	Ward 1						
10	Gumede Access Road	Ezibhananeni Ward1	1 300 000,00	1 300 000,00				
11	Mboyi Pedestrian Bridge	Ward 1						
12	Chibini Access Road	Ward 1						
13	Cabazini Access Road	Ward 1						
14	White City Road	Ward 1						
15	Nombila Road	Ward 1						
16	Willowpool Road (Maintenance)	Ward 3						
17	Queen Elizabeth Road (Maintenance	Ward 3						
18	Pontsho Access Road	Ward 3						
19	Makhokhoba Access Road	Ward 3	2 775 660,00		2 775 660,00			
20	Dambayi Road Extension (Link with DOT Road)	Ward 3	1 250 000,00	1 250 000,00				
21	Nkunzi Access Road	Ward 3						
22	Nobhala Access Road	Ward 3	2 850 500,00	2 850 500,00				
23	Mdala Road	Ward 4	1 553 475,00	53 475,00	1 500 000,00			
24	Mkhishwa Road	Ward 6	2 775 650,00	2 775 650,00				
25	Bhora Road							
26	Manzamnyama Road		2 775 660,00		2 775 660,00			
27	Makhokhoba Road		2 775 660,00		2 775 660,00			
28	Mgwaphuna Road	Ward 4	3 053 226,00			3 053 226,00		

PROGRAMME/PROJECTS			PHASED ANNUAL INVESTMENT COSTS					
NUMBER		LOCATION	TOTAL ESTIMATED COST	2018/19	2019/20	2020/21	2021022	2022/23
29	Ondini Access Road		3 053 226,00			3 053 226,00		
30	D1143 Phase One	Ward 7	1 548 645,00			1 548 645,00		
31	Ntweka Access Road	Ward 5						
32	Mhali Access Road	Ward 5						
33	England Access Road	Ward 5						
34	Mkhize Access Road	Ward 4	3 250 000,00		3 250 000,00			
35	Chitshane Access Road	Ward 5						
36	Inkozi Silonda Mdluli Road	Ward 5						
37	Si Road (Ntweka	Ward 5						
38	Nene Access Road	Ward 5	2 775 660,00		2 775 660,00			
39	Mathase Access Road (New)	Ward 5						
40	Mkhipheni Ngidi Access Road	Ward 5						
41	Mkhishwa Ngcongo Access Road	Ward 6		2 052 000,00				
42	Sigqhumeni Access Road	Ward 6						
43	Mfundekelwa Access Road	Ward 6						
44	Mgedane Ngcongo Access Road	Ward 6						
45	Esidakeni Access Road	Ward 6						
46	Mrs Makhanya Access Road	Ward 6						
47	River Crossing Access Road	Ward 6						
48	Qhi Mkhizwe Access Road	Ward 6						
49	Igudi Access Road	Ward 6						
50	Dwengu Access Road	Ward 6						
51	Gumede Access Road	Ward 6						
52	Ukhalo Access Road	Ward 6						
53	Luzizi Access Road	Ward 6						
54	Digodi Access Road (Esigodingi)	Ward 6						
55	L651	Ward 7						
56	Extension of eMantungweni Acess Road	Ward 7						
57	Extension of Mpekula Road	Ward 7						
58	Extension of Emfeni Access Road	Ward 7						

PROGRAMME/PROJECTS			PHASED ANNUAL INVESTMENT COSTS					
NUMBER		LOCATION	TOTAL ESTIMATED COST	2018/19	2019/20	2020/21	2021022	2022/23
59	Gulube Lezinyawo Access Road	Ward 7						
60	Bhora Access Road (Emgwenya)	Ward 7						
61	Mboyi Pedestrian Bridge	Ward 1						
62	Egxreni Pedestrian Bridge	Ward 5						
63	Bus Shelters (All Wards)							
64	Mpekula Walk Ways 9W7)							
65	Eston Taxi Rank							
66	Development of Mkhambatini Portion of the N3 Provincial Priority Corridor							
67	Re-Graveling of L1673 and L1674 o-16 km and 0,0 9 km	Ward 7	1 000 000,00	1 000 000,00				
68	Safety Maintenance Blacktop Patching: Contract No 1	Ward 2	200 000,00	200 000,00				
69	Construction of Goqo Road (gravel road)	Ward 3	900 000,00	900 000,00				
70	Construction of Mampungashe (gravel road)	Ward 1	700 000,00	700 000,00				
71	Routine maintenance-Blading of local roads-1	Ward 4	800 000,00	800 000,00				
72	Routine Maintenance-Camperdown specialised	Ward 5	200 000,00	200 000,00				
73	Road Maintenance –Nagle Dam pipe desilting	Ward 4	200 000,00	200 000,00				
74	Road Maintenance Nagle Dam labour based 1	Ward 3	200 000,00	200 000,00				
75	Road Maintenance Nagle Dam specialised	4	200 000,00	200 000,00				
76	Routine maintenance P21	1	500 000,00	500 000,00				
77	MR Specialised Maintenance PHASE 2	4	500 000,00	500 000,00				
78	MR 338 &P1-3 Routine Maintenance	6	500 000,00	500 000,00				
79	MR 1-4. 1-5 & P478 Routine Maintenance	2	500 000,00	500 000,00				
80	Re-gravelling of D 60 – 0-5.6	4	2 400 000,00	2 400 000,00				
81	Re-gravelling of P430 and D418 (0-4.35 + 0-1.5)	6	2 135 000,00	2 135 000,00				
82	Re-gravelling of D 58-4-12.5	5	2 500 000,00	2 500 000,00				
83	Re-gravelling of P117 (14.9-23.1)	5	2 870 000,00	2 870 000,00				
84	Re-Gravelling od D113-0-2	7	830 000,00	830 000,00				
85	Re-Gravelling of D1000-0-9.5		3 000 000,00	3 000 000,00				
86	P21-1 (km15 to km18)		68 796 000,00					
87	P21-1 (km15 to km18)		1 938 290,00					

PROGRAMME/PROJECTS			PHASED ANNUAL INVESTMENT COSTS					
NUMBER		LOCATION	TOTAL ESTIMATED COST	2018/19	2019/20	2020/21	2021022	2022/23
88	P118 (km0 to km 1.8)		162 000,00					
89	Makhokhoba Road	Ward 4	1 200 000,00					
90	Mpontsho Road	Ward 5	1 100 000,00					
91	Mdakane Road	Ward 6	1 100 000,00					
92	Mahlabathini Road	Ward 6	1 100 000,00					
NODAL DEVELOPMENT/SERVICE CENTRES			**650 000,00**	**650 000,00**	**0,00**	**0,00**	**0,00**	**0,00**
93	Produce settlement Plan for Key Nodes- Maqongqo	Maqongo	650 000,00	650 000,00				
94	Facilitate Housing Development along the MR566	MR566						
95	Camperdown CBD Renewal	Camperdown						
CONTINUUM OF AND DEVELOPMENT OF SUSTAINABLE HUMAN SETTLEMENTS			**222 629 904,55**	**14 362 450,00**	**12 301 600,00**	**20 302 683,00**	**12 770 475,00**	**0,00**
96	Identification of land Parcels to promote Integrated	Entire Municipality	250 000,00	250 000,00				
97	Partner with Private Developer for Integrated Human Settlements	Entire Municipality						
	HOUSING AND HUMAN SETTLEMENT -CURRENT PROJECTS							
98	Kwa-Njobokazi Rural housing project-400 units	29.8801'S 30,5808''	41 043 191.55	9 491 412.99				
99	Ward 7 Rural housing project- 1000 units	30'03'71'S 30,54'74'E	46 716 733,00	14 112 450,00	12 301 600,00	20 302 683,00		
100	Mbambangalo Rural Housing Project	Ward 1	123 632 115,00	119 526 139,48				
	HOUSING AND HUMAN SETTLEMENT -PLANNING STAGE							
101	Stockdale Housing development 250 units	Ward 3	12 770 475,00				12 770 475,00	
102	Poortjie Slums Clearance Project							
103	Maqongqo Rural housing Project	Ward 1	39 260 581,55					
SUSTAINABLE USE OF NATURAL RESOURCE BASE			**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
104	Community projects to control soil erosion.	Entire Municipality						
PROTECTION AND MANAGEMENT OF AGRICULTURAL LAND			**450 000,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**

PROGRAMME/PROJECTS			PHASED ANNUAL INVESTMENT COSTS					
NUMBER		LOCATION	TOTAL ESTIMATED COST	2018/19	2019/20	2020/21	2021022	2022/23
105	Updating of GIS Information to include high potential agricultrural Land	Entire Municipality						
106	Location of Agri Park & Feasibility Study	TBD	450 000,00					
SERVICE INFRASTRUCTURE DEVELOPMENT			**300 660 333,25**	**118 175 845,00**	**116 263 950,09**	**0,00**	**0,00**	**0,00**
107	Obtain funds for the construction of a Waste Water Treatment Works	Camperdown						
108	Upgarde of water scheme-Nkanyezini, Manyavu & Manzamnyama water supply scheme		171 698 865,19	83 389 444,00	88 309 421,19			
109	Upgrade of Maqongo water scheme		54 351 628,90	26 397 100,00	27 954 528,90			
110	Mkhambathini repairs and maintenance of sewer networks		5 286 234,00	2 720 101,00				
111	Camperdown AC replacement	Camperdown	53 306 103,16					
112	Ithala Valley Boreholes		2 000 000,00					
113	Mphushini community-intervention of boreholes or water pipelines		3 000 000,00					
114	Mkhambathini O&M: water supply		11 017 502,00	5 669 200,00				
115	Umkhomazi Hydroeletricity generation							
116	Sewage works for Camperdown	Camperdown						
117	Mast Lights (All Wards)	All wards						
118	Lightning Protectors (Aard 677)							
IMPROVING ACCESS TO SOCIAL FACILITIES			**26 421 278,00**	**10 705 365,00**	**5 241 518,00**	**10 474 395,00**	**0,00**	**0,00**
119	Feasibility study to locate a multi-purpose facility- one stop centre where SEDA, SARS, EDTEA etc will come to provide their services to the community	Ward 6 and 7	300 000,00	300 000,00				
120	Construct a multi-purpose facility- one stop centre where SEDA, SARS, EDTEA etc will come to provide their services to the community	Dependant of Feasibility						
121	Mkhambathini Civic Centre	Camperdown						
122	Multi-purpose facility-Rural Development- ITB (Ward 6 and 7) Medium Term Development							

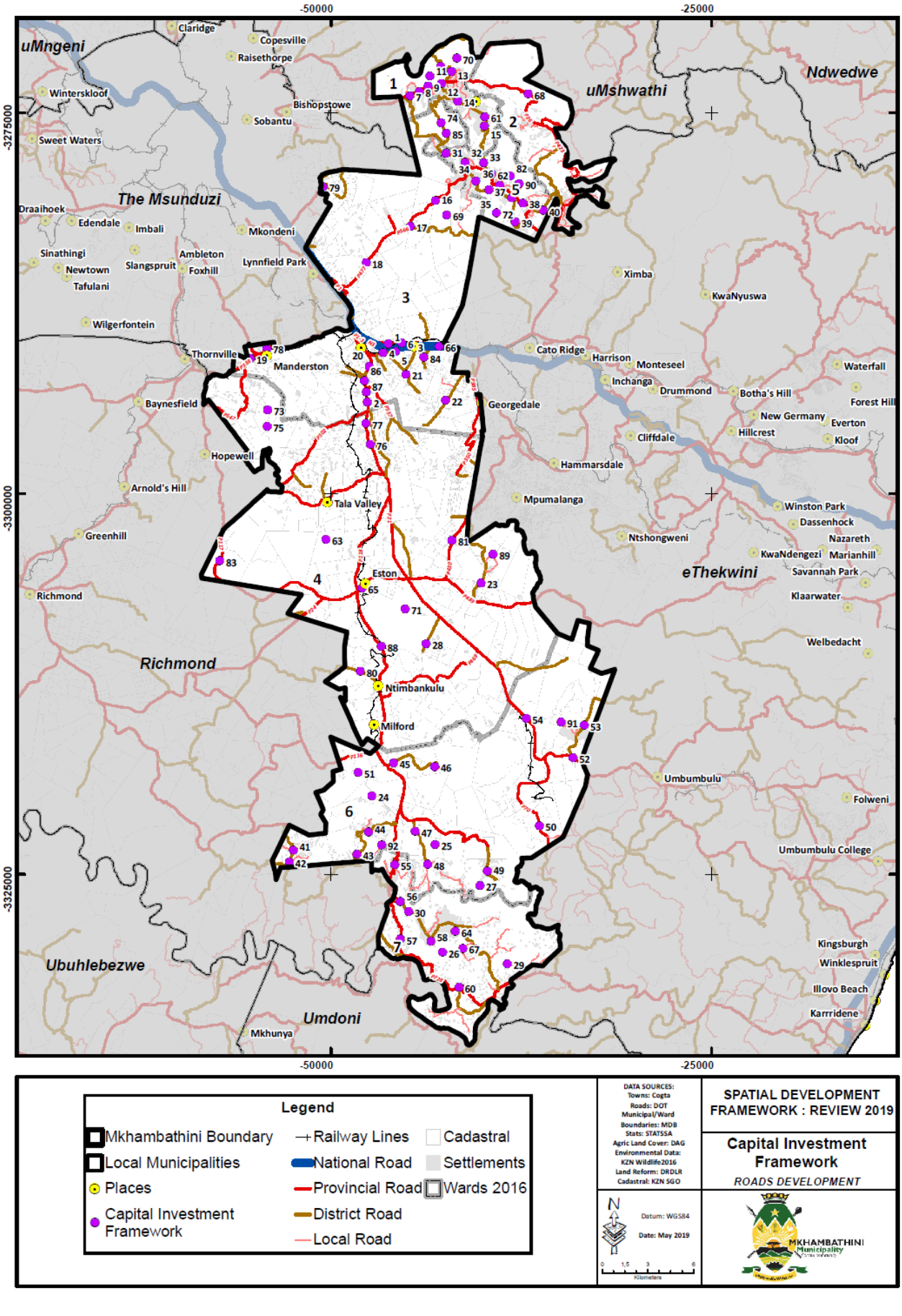
PROGRAMME/PROJECTS			PHASED ANNUAL INVESTMENT COSTS					
NUMBER		LOCATION	TOTAL ESTIMATED COST	2018/19	2019/20	2020/21	2021022	2022/23
	SPORTS FACILITIES							
123	Estingini Sports Field (Kick About)	Ward 5						
124	Ecabazini Sports Field (Kick About)	Ward 1						
125	Ezibhananeni Externsion Sports Field	Ward 1						
126	Ezibhananeni Sports Field	Ward 1						
127	Magqonqo Indoor Sport Centres	Ward 1						
128	Nonzila Sports Field	Ward 1						
129	Abebhuzi Indoor Sports Centre	Ward 2						
130	Banqobile Sports Field Externsion	Ward 5						
131	Emakholweni Sports Field	Ward 6						
132	Esigodinin Sports Field	Ward 6						
133	Nhlazuka Sports Field	Ward 6						
134	Mngwenya Sports Field	Ward 7						
135	Ngoloshini Sports Field	Ward 7						
136	Gulube Sports Field	Ward 7						
137	Matikulu Sports Field	Ward 7						
138	Ward -Sports field	Ward 2	2 541 518,00		2 541 518,00			
139	Kwelibanzi Playground/Community Park							
	COMMUNITY HALLS							
140	Nonzila Hall	Ward 1						
141	Inkosi Nyanga Mdluli Hall	Ward 5	4 159 971,00	4 159 971,00				
142	Ezimangwini Hall	Ward 5						
143	Mkhambaa Community Centre	Ward 5						
144	Debe Community Hall (Ezinembeni)	Ward 5						
145	Dwengu Community Hall	Ward 6						
146	Nhlazuka Community Hall	Ward 6	4 451 169,00			4 451 169,00		
147	Ngoloshini Community Hall	Ward 7						
148	Mngwenya Community Hall	Ward 7						
149	Nsongeni Community Hall	Ward 7						
150	Ngangezwe Hall							

PROGRAMME/PROJECTS			PHASED ANNUAL INVESTMENT COSTS					
NUMBER		LOCATION	TOTAL ESTIMATED COST	2018/19	2019/20	2020/21	2021022	2022/23
151	Manzamnyama Hall							
152	Camperdown Hall		3 295 394,00	3 295 394,00				
	EDUCATIONAL FACILITIES							
153	Feasibility Study for TVET College		250 000,00	250 000,00				
154	Construction of TVET College	Dependant of Feasibility						
155	Nonzila Creche	Ward 2	2 700 000,00		2 700 000,00			
156	Makhokhoba creche	Ward 3						
157	Manderston Creche (to be combined with the creche)	Ward 3	3 053 226,00			3 053 226,00		
158	Dukes Creche	Ward 4						
159	Njobokazi Creche	Ward 4						
160	Mhali Creche	Ward 5						
161	Esibhananeni Creche	Ward 5						
162	Esigodini Creche	Ward 6						
163	Dwengu Creche	Ward 6						
164	Nsongeni crèche	Ward 7						
165	Khalweni Creche	Ward 7						
166	Ngoloshini Creche	Ward 7						
167	Gulube Creche	Ward 7						
168	Ediphini Creche	Ward 7						
169	Ezinembeni Creche	Ward 1	2 700 000,00	2 700 000,00				
170	White City Creche	Ward 1	2 970 000,00			2 970 000,00		
UNLOCKING ECONOMIC DEVELOPMENT POTENTIAL			**6 619 600,00**	**5 250 000,00**	**1 700 000,00**	**1 700 000,00**	**1 700 000,00**	**1 700 000,00**
171	Business Support to Emerging Businesses	Entire Municipality						
172	Construction of a Gateway- Welcome and Information	Camperdown intersection	750 000,00	750 000,00				
173	Support, coordinate, formalise and regulate the informal economy	Camperdown	2 000 000,00	2 000 000,00				

PROGRAMME/PROJECTS			PHASED ANNUAL INVESTMENT COSTS					
NUMBER		LOCATION	TOTAL ESTIMATED COST	2018/19	2019/20	2020/21	2021022	2022/23
174	Poverty Alleviation Projects	Entire Municipality	700 000,00	700 000,00	700 000,00	700 000,00	700 000,00	700 000,00
175	Construction of a Flea Market (formal)							
176	Identification of market for crop producers		250 000,00					
177	Identification of market for livestock producers		250 000,00					
178	Facilitation of access to finance							
179	Training- Mentorship Programmes		1 000 000,00	1 000 000,00	1 000 000,00	1 000 000,00	1 000 000,00	1 000 000,00
180	Assistance with Business Plans to emerging farmers							
181	Production of Investor Prospectus for Mkhambathini Lifestyle		250 000,00	250 000,00				
182	Business Registrations							
183	Issuing of Business Licences							
184	Construction and development of Agro processing							
185	Revamp of informal economy market stalls							
186	Establishment of business chamber							
187	Produce a website- showcase tourism products	Entire Municipality	250 000,00	250 000,00				
188	Development of a tourism route	Entire Municipality	300 000,00	300 000,00				
189	Big Five Game Reserve							
190	Mkhambathini Dry Port (SIP / UMDM)							
	COOPERATIVES							
191	Umnothowezwe (Piggery farming and is owned by 100% Youth)	Ward 1	50 000,00					
192	Zamokuhle (Vegetable growing-project functional)	Ward 2	140 000,00					
193	Siyanqoba Indlala (Vegetable growing -Project Functional)	Ward 4	40 000,00					
194	Imbokodo Farming and Projects (Vegetable Growing-Project functional 100% owned by Youth)	Ward 5	140 000,00					

PROGRAMME/PROJECTS			PHASED ANNUAL INVESTMENT COSTS					
NUMBER		LOCATION	TOTAL ESTIMATED COST	2018/19	2019/20	2020/21	2021022	2022/23
195	Thubalethu (Vegetable growing-Project Functional 5 Youth members participating and adults)							
	OTHER LOCAL ECONOMIC DEVELOPMENT ACTIVITIES							
196	Crafters Support		40 000,00					
197	Cultural Festival		331 800,00					
198	Artists Capacity Building		33 600,00					
199	Reeds dance		94 200,00					
SUSTAINABLE INTEGRATED SPATIAL PLANNING SYSTEM			**4 700 000,00**	**1 050 000,00**	**1 625 000,00**	**175 000,00**	**175 000,00**	**175 000,00**
200	Produce Functional area plan for Camperdown and Umlaas Road	Camperdown & Umlaas Road	650 000,00	650 000,00				
201	Facilitate development applications to ensure legality	Entire Municipality						
202	Development of a Tourism Strategy		400 000,00	400 000,00				
203	Development of a standalone Tourism Office							
204	Approval of draft Informal Economy By-law							
205	Investigate the expropriation process to develop further Municipal Facilities- Formulation of a Land Acquisition Strategy	Entire Municipality	1 000 000,00					
206	Preparation of a Single Land Use Scheme for Mkhambathini LM	Entire Municipality	950 000,00		950 000,00			
207	Preparation of a Local Area Plan for the Opokweni Nodal area	Opokweni	500 000,00		500 000,00			
208	Capacity Building Programme on Sustainable Development	Entire Municipality	380 000,00		95 000,00	95 000,00	95 000,00	95 000,00
209	Community environmental awareness programme	Entire Municipality	320 000,00		80 000,00	80 000,00	80 000,00	80 000,00
210	Undertake a land Potential Investigation to support urban projects	Entire Municipality	500 000,00					

MAP 14: CAPITAL INVESTMENT FRAMEWORK – IMPROVING MOVEMENT AND ACCESS



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Capital Investment Framework
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- Settlements
- Wards 2016

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife2016
Land Reform: DRDLR
Cadastral: KZN SGO

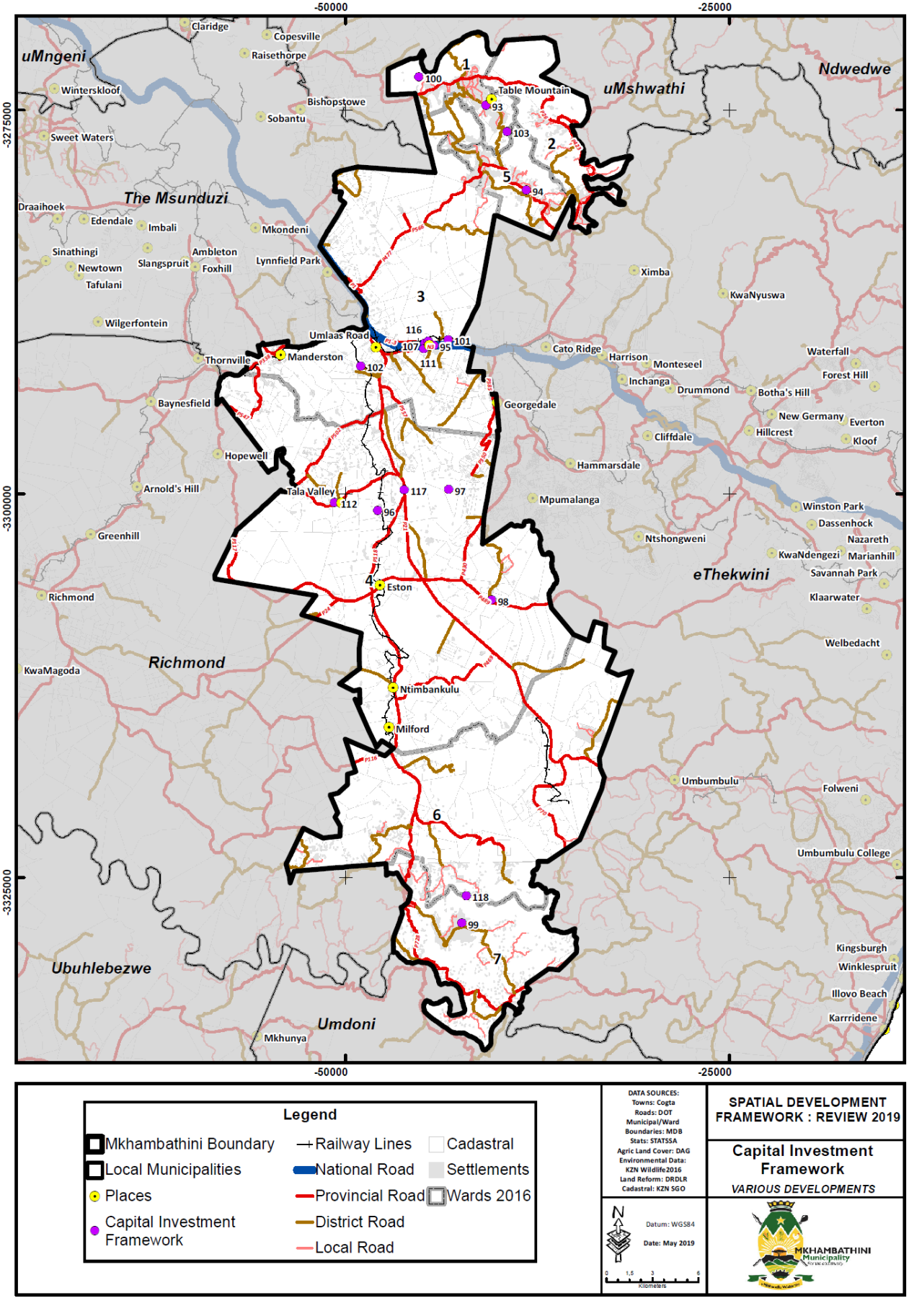
Datum: WGS84
Date: May 2019

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2019

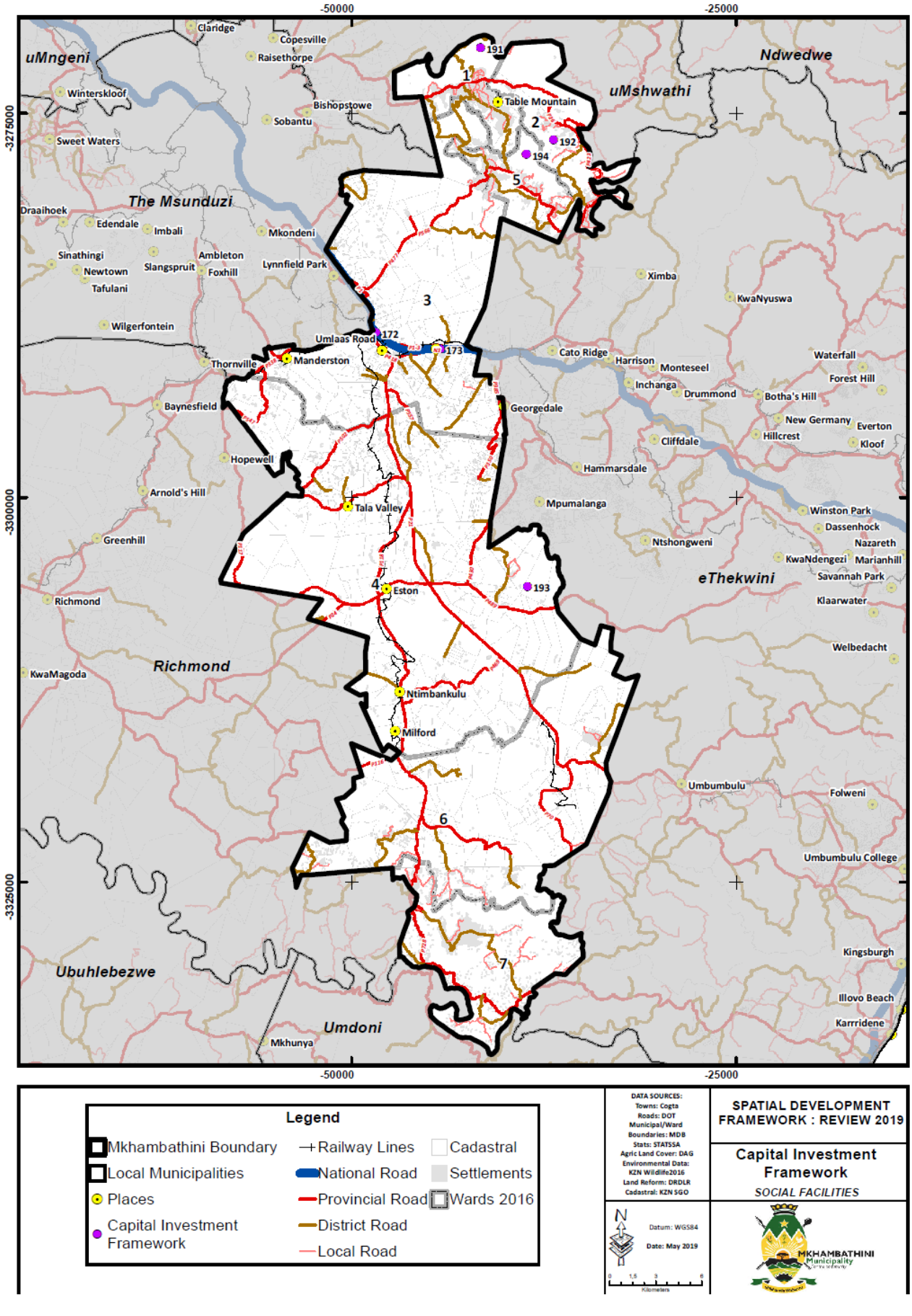
Capital Investment Framework

ROADS DEVELOPMENT

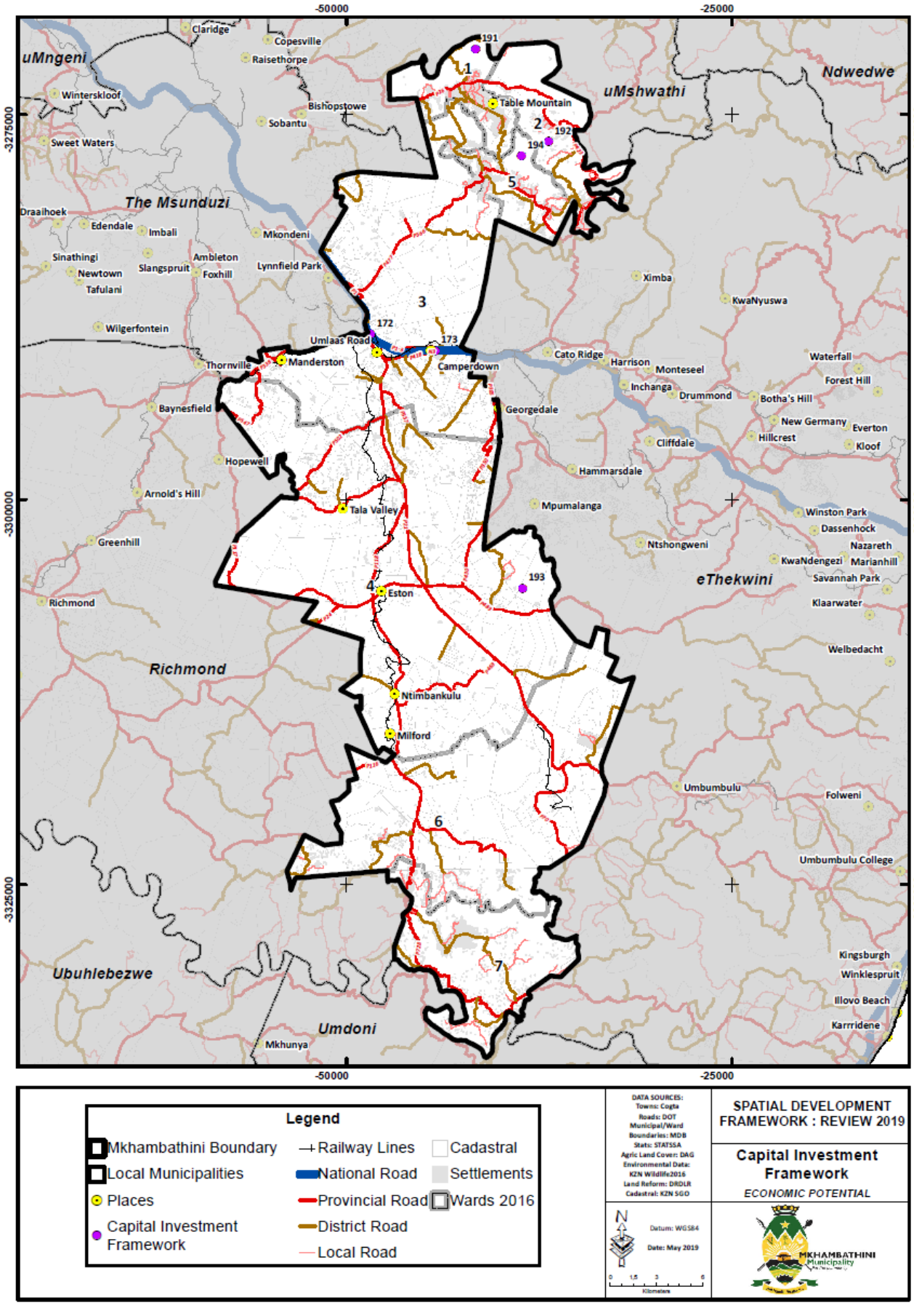
MAP 15: CAPITAL INVESTMENT FRAMEWORK (VARIOUS NODAL, HUMAN SETTLEMENT AND SERVICE INFRASTRUCTURE DEVELOPMENTS



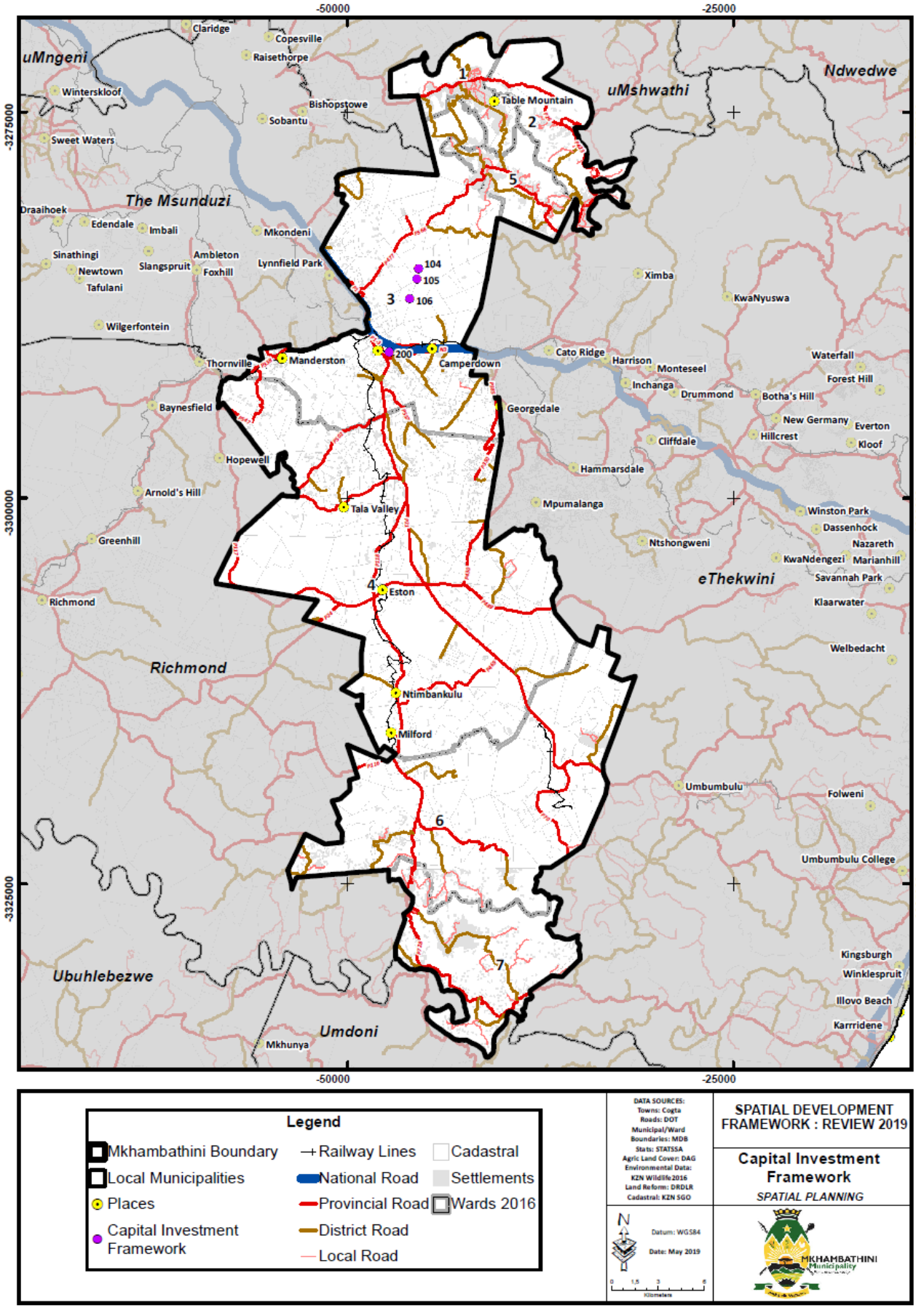
MAP 16: CAPITAL INVESTMENT FRAMEWORK (SOCIAL FACILITIES)



MAP 17: CAPITAL INVESTMENT FRAMEWORK (ECONOMIC DEVELOPMENT)



MAP 18: CAPITAL INVESTMENT FRAMEWORK (SPATIAL PLANNING)



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ANNEXURE A: CAPITAL INVESTMENT FRAMEWORK

ANNEXURE B: SDF STATUS QUO REPORT

ANNEXURE C: SUSTAINABILITY REPORT

ANNEXURE D: RESPONSES TO PREVIOUS SDF COMMENTS (MEC COMMENTS)

ANNEXURE E: PUBLIC PARTICIPATION