

uMHLATHUZE MUNICIPALITY



SPATIAL DEVELOPMENT FRAMEWORK 2017/2018-2021/2022 THIRD REVIEW (MARCH 2020)

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ANNEXURES

ANNEXURE 1	Outline of Projects from Service Providers
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DATA DISCLAIMER

- *Post 2016, the uMhlathuze Municipality consists of 34 Wards and has increased in size by approximately 50% from 79 334 Ha to 123 325 Ha*
- *Only official population data was available for the newly demarcated municipal area*
- *All other analysis in respect of infrastructure and socio-economic issues had to be based on a combination of the pre 2016 LGE municipal ward data from the uMhlathuze and former Ntambanana Municipalities respectively*
- *There are gaps in the spatial representation of data as there is no seamless alignment of 2011 and 2014 wards with the new municipal boundary of uMhlathuze*

1. INTRODUCTION

1.1 BACKGROUND

The preparation of the 2017/2018 – 2021/2022 Spatial Development Framework (SDF) for uMhlathuze was undertaken and adopted during May 2017. The document represents the third Review of the 2017/2018 – 2021/2022 SDF and aims to achieve the following:

- Include any updated information, specifically sector plan information, available since the review of the preparation of the 2017/2018 – 2021/2022 SDF in 2017.
- Further interrogate areas where strategic intervention is required and where strategic opportunities exist and provision of indicative mapping of such.
- Update mapping given any new/updated information available.
- Address comments received from the provincial Department of Cooperative Governance and Traditional Affairs (CoGTA) on the assessment of the 2017/2018 – 2021/2022 SDF as adopted in May 2019.
- Consider alignment and cross border issues from the King Cetshwayo District family.
- Consider improved alignment between the uMhlathuze Land Use Scheme and the uMhlathuze SDF.
- Provide any information from government departments and other service providers on projects, supplemented by internal projects for mapping and spatial presentation.

1.2 PURPOSE OF AN SDF

Section 23 of the Municipal Systems Act, 2000 (Act 32 of 2000) requires that:

“23. Municipal planning to be developmentally oriented:

(1) A municipality must undertake developmentally-oriented planning so as to ensure that it

- (a) strives to achieve the objects of local government set out in section 152 of the Constitution;*
- (b) gives effect to its developmental duties as required by section 153 of the Constitution; and*
- (c) together with other organs of state contribute to the progressive realization of the fundamental rights contained in sections 24, 25, 26, 27 and 29 of the Constitution.”*

Chapter 5 of the Municipal Systems Act (Act No. 32 of 2000) provides for the development of an Integrated Development Plan (IDP), i.e. a five-year strategic development plan. According to Section 26 of the Systems Act (MSA):

“An integrated development plan must reflect—

- (e) a spatial development framework which must include the provision of basic guidelines for a land use management system for the municipality;”*

In context of the above, the SDF can be considered as a visual presentation that seeks to guide the overall spatial distribution of current and desirable land uses within a municipality in order to give effect to the vision, goal and objectives of the municipal IDP, in keeping with the principles for land development. As such, it should guide spatial growth, conservation of the natural and built environment as well as the correction of past imbalances. It should also indicate areas where strategic intervention is required and should act as a marketing tool to indicate where development could be promoted.

The MSA (Municipal Systems Act) Regulations (Act 32 of 2000) outlines the following specific objectives of an SDF:

- Strategic guidance on the location and nature of development
- Set out basic guidelines for land use management
- Discourage low-density urban sprawl
- Generate social and economic opportunities
- Promote access to opportunities
- Maximize resource efficiency by: (1) protecting sensitive environments, (2) protecting productive agricultural land and (3) enhancing the regional identity and character

Section 20 of the Spatial Planning and Land Use Management Act (Act No 16 of 2013) requires that:

- “(1) *The Municipal Council of a municipality must by notice in the Provincial Gazette adopt a municipal spatial development framework for the municipality.*
- (2) *The municipal spatial development framework must be prepared as part of a municipality’s integrated development plan in accordance with the provisions of the Municipal Systems Act.*
- (3) *Before adopting the municipal spatial development framework contemplated in subsection (1) and any proposed amendments to the municipal spatial development framework, the Municipal Council must-*
- (a) *give notice of the proposed municipal spatial development framework in the Gazette and the media;*
 - (b) *invite the public to submit written representations in respect of the proposed municipal spatial development framework to the Municipal Council within 60 days after the publication of the notice referred to in paragraph (a); and*
 - (c) *consider all representations received in respect of the proposed municipal spatial development framework.”*

Section 21 of the Spatial Planning and Land Use Management Act (Act No 16 of 2013) requires that:

“A municipal spatial development framework must-

- (a) *give effect to the development principles and applicable norms and standards set out in Chapter 2;*
 - (b) *include a written and spatial representation of a five-year spatial development plan for the spatial form of the municipality;*
 - (c) *include a longer term spatial development vision statement for the municipal area which indicates a desired spatial growth and development pattern for the next 10 to 20 years;*
 - (d) *identify current and future significant structuring and restructuring elements of the spatial form of the municipality, including development corridors, activity spines and economic nodes where public and private investment will be prioritized and facilitated;*
 - (e) *include population growth estimates for the next five years;*
 - (f) *include estimates of the demand for housing units across different socioeconomic categories and the planned location and density of future housing developments;*
 - (g) *include estimates of economic activity and employment trends and locations in the municipal area for the next five years;*
 - (h) *identify, quantify and provide location requirements of engineering infrastructure and services provision for existing and future development needs for the next five years;*
 - (i) *identify the designated areas where a national or provincial inclusionary housing policy may be applicable;*
 - (j) *include a strategic assessment of the environmental pressures and opportunities within the municipal area, including the spatial location of environmental sensitivities, high potential agricultural land and coastal access strips, where applicable;*
 - (k) *identify the designation of areas in the municipality where incremental upgrading approaches to development and regulation will be applicable;*
 - (l) *identify the designation of areas in which-*
- (i) *more detailed local plans must be developed; and*

- (ii) *shortened land use development procedures may be applicable and land use schemes may be so amended;*
- (m) *provide the spatial expression of the coordination, alignment and integration of sectoral policies of all municipal departments;*
- (n) *determine a capital expenditure framework for the municipality's development programmes, depicted spatially;*
- (o) *determine the purpose, desired impact and structure of the land use management scheme to apply in that municipal area; and*
- (p) *include an implementation plan comprising of-*
 - (i) *sectoral requirements, including budgets and resources for implementation;*
 - (ii) *necessary amendments to a land use scheme;*
 - (iii) *specification of institutional arrangements necessary for implementation;*
 - (iv) *specification of implementation targets, including dates and monitoring indicators; and*
 - (v) *specification, where necessary, of any arrangements for partnerships in the implementation process."*

1.3 PREPARATION OF THIRD REVIEW OF 2017/2018 – 2021/2022 SDF METHODOLOGY AND APPROACH

The methodology/approach that has been followed in this second review of the 2017/2018 – 2021/2022 SDF mainly focuses on attaining further compliance with the requirements of the Spatial Planning and Land Use Management Act (SPLUMA No. 16 of 2013).

Broadly, the approach used in this Review of the 2017/2018 SDF preparation is therefore as follows:

- Include any updated information available since the review of the preparation of the 2017/2018 – 2021/2022 SDF in 2017.
- Further interrogate areas where strategic intervention is required and where strategic opportunities exist and provision of indicative mapping of such.
- Update mapping given any new/updated information available.
- Address comments received from the provincial Department of Cooperative Governance and Traditional Affairs (CoGTA) on the assessment of the 2017/2018 – 2021/2022 SDF as adopted in May 2019.
- Consider alignment and cross border issues from the King Cetshwayo District family.
- Consider improved alignment between the uMhlathuze Land Use Scheme and the uMhlathuze SDF.
- Provide any information from government departments and other service providers on projects, supplemented by internal projects for mapping and spatial presentation.

1.4 COMMENTS FROM THE MEC

The SDF submitted as adopted during May 2019 was assessed under the Cross Cutting KPA. The main comments from this MEC assessment of the uMhlathuze 2017/2018 – 2021/2022 Spatial Development Framework and responses thereto as part of this Third Review are summarized hereunder.

Table 1: Summary of MEC Comments and Responses

Nr.	Comment	Response
1	The strategic documentation of the Municipality does not contain updated disaster risk mapping.	Disaster Management Plan is in draft stage and details to be included into the SDF.
2	A summary table to be provided that indicate the location (strategic focus area), development approach (strategies), proposed projects, expenditure (5 year budget) and funding sources.	To be finalized once project details and draft budget available.
3	The SDF does not satisfactory provide a strategic assessment of the impact of development proposals on the	To be undertaken.

	environment.	
4	The Municipality is to ensure that cross-border planning is addressed and depicted spatially.	Process has been initiated from uMhlathuze Local Municipality level but requires coordinating support.
5	The SDF to indicate the relationship with the uMhlathuze Land Use Scheme (LUS) and where particular land use types/typologies are to be encouraged or discourage. It is proposed that areas are designated where more detailed local plans must be development and shortened land use development procedures may be applicable.	To be undertaken.
6	Evidence of public consultation on the SDF is required.	To be undertaken following submission of draft.
7	An up to date economic analysis is required, inclusive of estimates of economic activity and employment trends.	<i>Additional economic analysis provided.</i>
8	An implementation plan to be included that comprises of or specifies: <ul style="list-style-type: none"> a. Sectoral requirements, including budgets and resources for implementation; b. Necessary amendments to the scheme; c. Institutional arrangements; d. Implementation targets; e. Details for partnerships, where required. 	<i>To be finalized as part of the Final SDF submission.</i>
9	Details of budgets and the spatial location of sector department projects.	To be provided subject to availability.

The Municipality is targeting to improve on the following elements during this third review of the 2017/2018–2021/2022 SDF (internal assessment).

1. Ongoing consultation on the long terms Spatial Vision of the Municipality as prepared during the second review of the SDF.
2. Review of the Environmental Chapter to reflect Climate Change Action Plan and reporting thereof as well as updated mapping for analysis where suitable information is available.
3. Engagement to improve cross border alignment of spatial development issues and interventions/implementation. Details of adopted provincial/district interventions/plans (e.g. rural development plans) also to be considered and included where relevant.
4. Improve alignment with municipal Land Use Scheme, by way of precinct planning, to attain improved urban management and alignment to the municipal development approach and spatial vision.
5. Information in respect of sector plans in the SDF to be updated where these have been finalized and or reviewed, i.e. water sector plan, Arterial Framework Plan, Human Settlements Plan etc.
6. Compilation of an intergovernmental project pipeline and the reflection of such public investment spatially, where possible, specifically in relation to Priority Development Areas (PDAs).
7. Incorporation of current information from the Capital Expenditure Framework (CEF), that includes as a critical component, an integrated Project Prioritization Model, into the SDF Review. Mapping of interventions/projects.
8. Details on the identified strategic and catalytic projects to be provided explaining the nature of their targeted intervention, their potential to change the socio-economic landscape and to trigger further investment.

The above is a reflection of the municipal targeted improvement areas. It has to be noted that some of the above elements are dependent on inputs and cooperation from non-municipal resources and such may have an impact on the attainment of the targets.

1.5 REPORT STRUCTURE

- Section 1 Introduction
- Section 2 Policy Context
- Section 3 Spatial Development Vision
- Section 4 Spatial Analysis
- Section 5 Demographic and Socio-Economic Analysis
- Section 6 Environmental Analysis
- Section 7 Agricultural Review
- Section 8 Land Reform
- Section 9 Infrastructure Analysis
- Section 10 Human Settlement Overview
- Section 11 Disaster Management
- Section 12 Spatial Development Framework
- Section 13 Implementation of the Spatial Development Framework
- Section 14 External Development Influences

An outline of projects available from service providers will be provided as an Annexure to this report as soon as available and compiled.

1.6 DATA SOURCES

Amongst others, the following data sources have been consulted as part of the process:

- uMhlathuze Spatial Development Framework 2017/2018 – 2021/2022
- Ntambanana Spatial Development Framework 2009
- STATSSA 2011 Census results
- STATSSA 2016 Community Survey results
- uMhlathuze IDP 2017/2018 – 2021/2022
- Transnet Richards Bay Port Development Framework
- Outcomes of the Transnet National Ports Authority Due Diligence Investigation for the Acquisition of land for Future Port Expansion: Port of Richards Bay
- King Cetshwayo District Municipality IDP 2017/2018 – 2021/2022
- King Cetshwayo District Municipality SDF 2017/2018 – 2021/2022
- Various Municipal Sector Plans

2. POLICY CONTEXT

The principles underlying planning for efficient use of land and planning for choice and quality of life are detailed in this section. In addition, a summary is provided of the KZN PGDS principles that have been aligned with relevant national and provincial legislation, policies and strategies.

2.1 UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) replaced the Millennium Development Goals (MDGs) which were in existence for 15 years. The Sustainable Development Goals is a universally shared common global vision of progress towards a safe, just and sustainable space for all human beings to thrive on the planet. 17 Sustainable Development Goals (SDGs) are intended to be action-oriented, concise and easy to communicate, limited in number, aspirational, global in nature and **universally applicable to all countries**, while taking into **account** different national realities, capacities and levels of development and respecting national policies and priorities.

Figure 1: United Nations Sustainable Development Goals



Table 2: Description of SDGs







Goal 1: No Poverty	End poverty in all its forms everywhere
Goal 2: Zero Hunger	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
Goal 3: Good Health and Well-Being for People	Ensure healthy lives and promote well-being for all at all ages
Goal 4: Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5: Gender Equality	Achieve gender equality and empower all women and girls
Goal 6: Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all




Goal 7: Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8: Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9: Industry, Innovation and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation
Goal 10: Reducing Inequalities	Reduce income inequality within and among countries
Goal 11: Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient, and sustainable
Goal 12: Responsible Consumption and Production	Ensure sustainable consumption and production patterns
Goal 13: Climate Action	Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy
Goal 14: Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15: Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16: Peace, Justice and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17: Partnerships for the Goals	Strengthen the means of implementation and revitalize the global partnership for sustainable development

The uMhlathuze Local Municipality and ICLEI Africa agreed to partner in piloting a tailor-made workshop on the localisation of the SDGs in the uMhlathuze municipal context. Some of the main outcomes are summarised in the table herewith.

Table 3: Municipal Response and Vision on SDGs

SUSTAINABLE DEVELOPMENT GOAL	RESPONSE	VISION
 <p>1 NO POVERTY</p>	<ul style="list-style-type: none"> ○ Creating a concessive environment for investors, which in turn will lead to the creation of employment opportunities for local communities. 	<p>By 2030, we should have created an environment that is conducive for employment and efficient livelihoods.</p>
 <p>2 ZERO HUNGER</p>	<ul style="list-style-type: none"> ○ Within the broader economic development imperative: by using agriculture to include communities in the economy can result in an agriculture support plan. 	<p>The municipality should ensure that local communities have an opportunity to participate in the municipality's economy through the agricultural industry.</p>
 <p>3 GOOD HEALTH AND WELL-BEING</p>	<ul style="list-style-type: none"> ○ Co-ordinate with the Department of Health and various stakeholders. ○ The Operation Sukuma Sakhe, provides access to housing and healthcare. ○ Promoting healthier lifestyles through sport and recreational facilities. ○ Promoting good nutrition through urban gardening. 	<p>By 2035, HIV/AIDS and lifestyle diseases (i.e. heart disease, obesity and diabetes) statistics should be reduced by 50%.</p>
 <p>4 QUALITY EDUCATION</p>	<ul style="list-style-type: none"> ○ Local Economic Development (LED) will result in achieving achieve social and economic development. ○ Forming partnerships with educational, training institutions and industries to create living labs of learning. ○ Local government should be restricted to a facilitation role. 	<p>A city attracting citizens for quality educational institutions promoting inclusive and equitable learning opportunities for all through partnerships with institutions and industries.</p>
 <p>5 GENDER EQUALITY</p>	<p>Empowerment through:</p> <ul style="list-style-type: none"> ○ Education and skills development ○ Employment ○ SCM processes ○ Leadership ○ Mentorship 	<p>Attaining gender equality by promoting that women and girls have the same opportunities.</p>
 <p>6 CLEAN WATER AND SANITATION</p>	<ul style="list-style-type: none"> ○ Conserve water resources such as lakes and rivers ○ Provide basic sanitation (i.e. VIP toilets). 	<p>By 2030, all households should have access to basic services such as potable water and sanitation.</p>

<p>7 AFFORDABLE AND CLEAN ENERGY</p> 	<p>Building sustainable energy generation infrastructure:</p> <ul style="list-style-type: none"> ○ Solar energy ○ Gas to power energy ○ Waste to energy ○ Wind energy <p>Public participation exercises are required for community's investment.</p>	<p>By reducing the dependency on coal for electricity generation by 30%.</p>
<p>8 DECENT WORK AND ECONOMIC GROWTH</p> 	<p>Promote and incentivise investments.</p>	<p>To promote and incentivise investments.</p>
<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> 	<p>By upgrading the municipality's infrastructure as the agenda for smart cities.</p>	<p>By 2030, increase/expand municipal areas (inclusive of marginalised) with contemporary and innovative infrastructure.</p>
<p>10 REDUCED INEQUALITIES</p> 	<p>Identify community members in need of employment opportunities to alleviate poverty and increase skills development training programs (Operation Sukuma Sakhe).</p>	<p>Reduce inequality within the municipality.</p>
<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p> 	<ul style="list-style-type: none"> ○ Planning integrated human settlements ○ Incorporate functional recreational spaces within human settlements ○ Create catalytic economic activities outside of core urban areas. 	<p>Ensure integrated and inclusive planning for human settlements</p>
<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 	<p>Reduce consumption of non-renewable resources through introduction of waste usage (By Product)</p>	<ul style="list-style-type: none"> ○ Moving away from using of non-renewable resources ○ Minimization of waste to by product (feedstock)

	<ul style="list-style-type: none"> ○ Reduce emissions by enforcing the By-law to industries and introduce against idling stationary vehicles. ○ Recycling program: Every household and Municipal building should have bins for recyclable and non-recyclable waste bins ○ Recycle water 	<p>Reduce greenhouse gases while adapting to climate change</p>
	<ul style="list-style-type: none"> ○ To sustainably deliver services to communities. ○ Master drainage plan ○ Regulate urban renewal ○ Efficient management by Environmental Department ○ Partnerships with TNPA/ Municipalities/ Environmental Awareness ○ Involvement in a operation Phakisa 	<ul style="list-style-type: none"> - To conserve the marine life by sustainably using resources provided by the ocean. - Effective partnerships, awareness campaigns and enforcing Bylaws.
	<ul style="list-style-type: none"> ○ Identify conservation areas in the Spatial Development Framework (SDF). ○ Partnerships with environmental authorities, civil society and businesses. ○ Promote tourism opportunities with natural assets. 	<p>No net loss of sensitive ecosystems (to be declined).</p>

The goal to significantly access adequate, safe and affordable housing; support social, economic and environmental links as well as increasing human settlements which mitigate and adapt to climate is of particular relevance to the Municipality and is addressed in the National Housing Code; National Upgrading Support Programme; National Development Plan; Provincial Growth and Development Strategy and Outcome 8 strategic objectives.

uMhlathuze's integrated planning and spatial development framework processes are based and influenced by policies and planning processes at international, national, provincial and district levels. It is the intention of uMhlathuze Municipality to contribute to growth and development within King Cetshwayo District, KwaZulu-Natal and to South Africa at large.

The uMhlathuze Municipality, through its Mission and Vision, intends to contribute to ensure that the objectives of the United Nations (UN) Sustainable Developments Goals (SDGs) are realised and implemented.

2.2 NATIONAL DEVELOPMENT PLAN

2.2.1 SUMMARY OF THE NATIONAL DEVELOPMENT PLAN

The National Development Plan is a plan for the country to eliminate poverty and reduce inequality by 2030 through uniting South Africans, unleashing the energies of its citizens, growing an inclusive economy, building capabilities, enhancing the capability of the state and leaders working together to solve complex problems.

The plan has the following high-level objectives to be achieved by 2030:

- Reduce the number of people who live in households with a monthly income below R419 per person (in 2009 prices) from 39% to zero.
- Reduce inequality, as measured by the Gini coefficient, from 0.69 to 0.6.

Amongst others, the following enabling milestones are noted from the Plan:

- Increase employment from 13 million in 2010 to 24 million in 2030.
- Raise per capita income from R50 000 in 2010 to R120 000 by 2030.
- Establish a competitive base of infrastructure, human resources and regulatory frameworks.
- Ensure that skilled, technical, professional and managerial posts better reflect the country's racial, gender and disability makeup.
- Broaden ownership of assets to historically disadvantaged groups.
- Provide affordable access to quality health care while promoting health and wellbeing.
- Establish effective, safe and affordable public transport.
- Ensure that all South Africans have access to clean running water in their homes.
- Make high-speed broadband internet universally available at competitive prices.
- Ensure household food and nutrition security.
- Broaden social cohesion and unity while redressing the inequities of the past.
- Play a leading role in continental development, economic integration and human rights.

With specific reference to the youth of South Africa, the NDP notes that South Africa has an urbanising, youthful population. This presents an opportunity to boost economic growth, increase employment and reduce poverty.

It should also be noted that the National Development Plan makes a firm commitment to achieving a minimum standard of living. Income, through employment or social security, is critical to defining living standards, but human beings need more than income. They need adequate nutrition, they need transport to get to work, and they desire safe communities and clean neighbourhoods. These elements require action either from individuals, government, communities or the private sector.

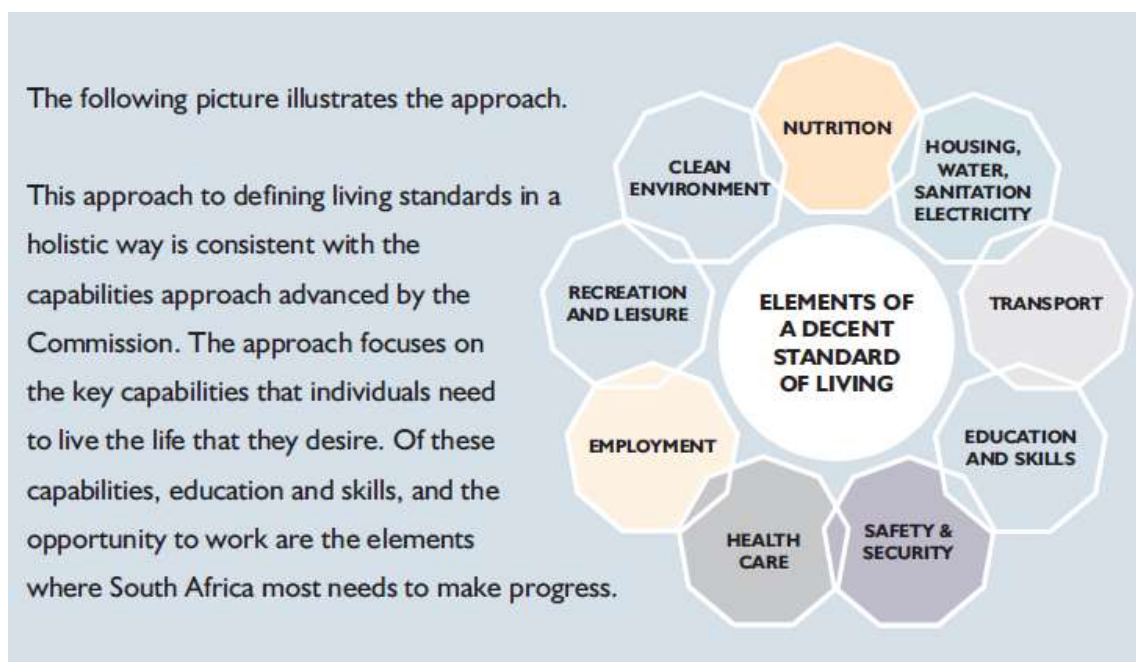
2.2.2 SPATIAL FOCUS AREAS OF THE NATIONAL DEVELOPMENT PLAN

The following provides a summary of some of those aspects of the NDP that have a spatial implication or response.

- Increase the quality of education so that all children have at least two years of preschool education and all children in grade 3 can read and write.
- Provide affordable access to quality health care while promoting health and wellbeing.
- Establish effective, safe and affordable public transport.
- Produce sufficient energy to support industry at competitive prices, ensuring access for poor households, while reducing carbon emissions per unit of power by about one-third.
- Ensure that all South Africans have access to clean running water in their homes.
- A strategy to address poverty and its impacts by broadening access to employment, strengthening the social wage, improving public transport and raising rural incomes.
- Boost private investment in labour-intensive areas, competitiveness and exports, with adjustments to lower the risk of hiring younger workers.
- Interventions to ensure environmental sustainability and resilience to future shocks.

- New spatial norms and standards – densifying cities, improving transport, locating jobs where people live, upgrading informal settlements and fixing housing market gaps.
- Develop community safety centres to prevent crime and include youth in these initiatives.

Figure 2: Elements of a decent Standard of Living



2.2.3 NATIONAL DEVELOPMENT PLAN PRIORITIES

The National Planning Plan priorities and it's alignment with Municipal Strategic Goals are summarized in the table below:

Table 4: National Development Plan Priorities

No. (in no specific order)	National Plan Priorities	uMhlathuze Alignment thereof
1	Create jobs	Goal 3: Viable Economic Growth and Development <ul style="list-style-type: none"> ○ Objective 3.1.2 : Stimulate key sectors that promote economic growth and create jobs
2	Expand infrastructure	Goal 2 : Integrated infrastructure and efficient services <ul style="list-style-type: none"> ○ Objective 2.1.1: To expand and maintain infrastructure in order to improve access to basic service and promote local economic development
3	Use resources properly	Goal 1 : Democratic, responsible, transparent, objective and equitable municipal governance <ul style="list-style-type: none"> ○ Objective 1.1.1 : To ensure effective and efficient administration complying with its legal mandates
4	Inclusive planning	Goal 1 : Democratic, responsible, transparent, objective and equitable municipal governance <ul style="list-style-type: none"> ○ Objective 1.1.4: To promote a municipal governance system that enhances and embraces the system of participatory governance.

No. (in no specific order)	National Plan Priorities	uMhlathuze Alignment thereof
5	Quality education	Municipal Mission <ul style="list-style-type: none"> o Improve Citizens skills levels and education
6	Quality healthcare	Goal 3.3 : Safe and healthy living environment
7	Build a capable state	Goal 1 : Democratic, responsible, transparent, objective and equitable municipal governance <ul style="list-style-type: none"> o Objective 1.1.1 : To ensure effective and efficient administration complying with its legal mandates
8	Fight corruption	Mission <ul style="list-style-type: none"> o Creation of Secure and Friendly City Through Fighting Crime
9	Unite the nation	Goal 3.4: Social Cohesion <ul style="list-style-type: none"> o Objective 3.4.1 : To promote Social Cohesion

2.3 INTEGRATED URBAN DEVELOPMENT FRAMEWORK (IUDF)

The Integrated Urban Development Framework (IUDF) is a policy framework guiding the reorganization of the urban system of South Africa so that cities and towns can become inclusive, resource efficient and adequate places to live, as per the vision outlined in the National Development Plan (NDP).

The overall outcome of the IUDF is spatial transformation. This new focus for South Africa steers urban growth towards a sustainable growth model of compact, connected and coordinated cities and towns. The IUDF implementation plan identifies a number of short term proposals to achieve spatial transformation.

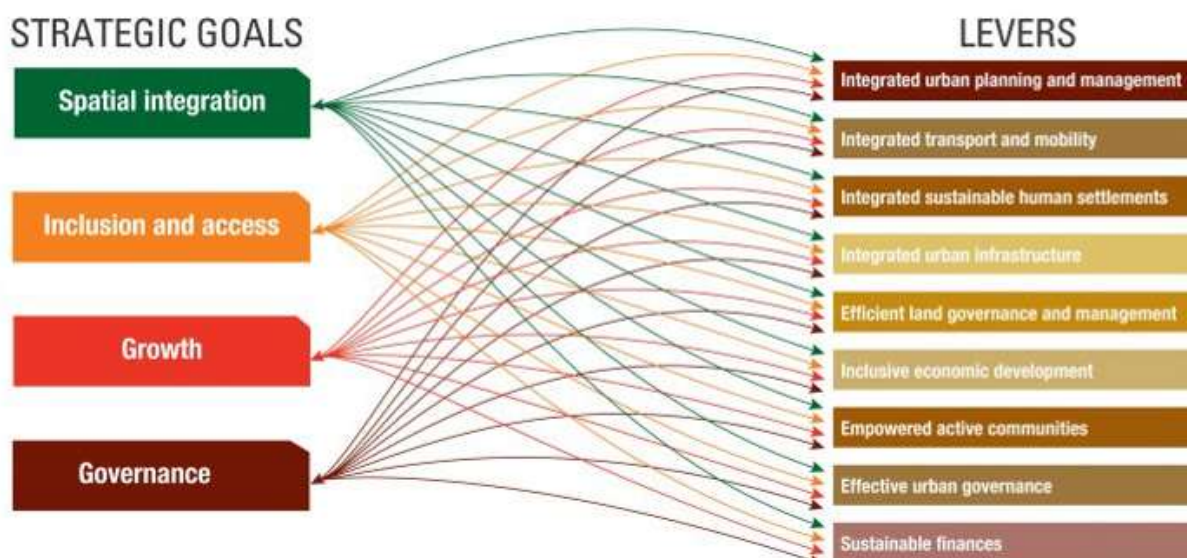
The overall objective of the IUDF is to transform urban spaces by:-

- o Reducing travel costs and distances
- o Aligning land use, transport planning and housing
- o Preventing development of housing in marginal areas
- o Increasing urban densities and reducing sprawl
- o Shifting jobs and investment toward dense peripheral townships
- o Improving public transport and the coordination between transport modes

The IUDF has its premise on the following nine levers:

1. Integrated Urban Planning and Maintenance
2. Integrated Transport and Mobility
3. Integrated and Sustainable Human Settlements
4. Integrated Urban Infrastructure
5. Efficient land governance and management
6. Inclusive economic development
7. Empowered active communities
8. Effective urban governance
9. Sustainable finances

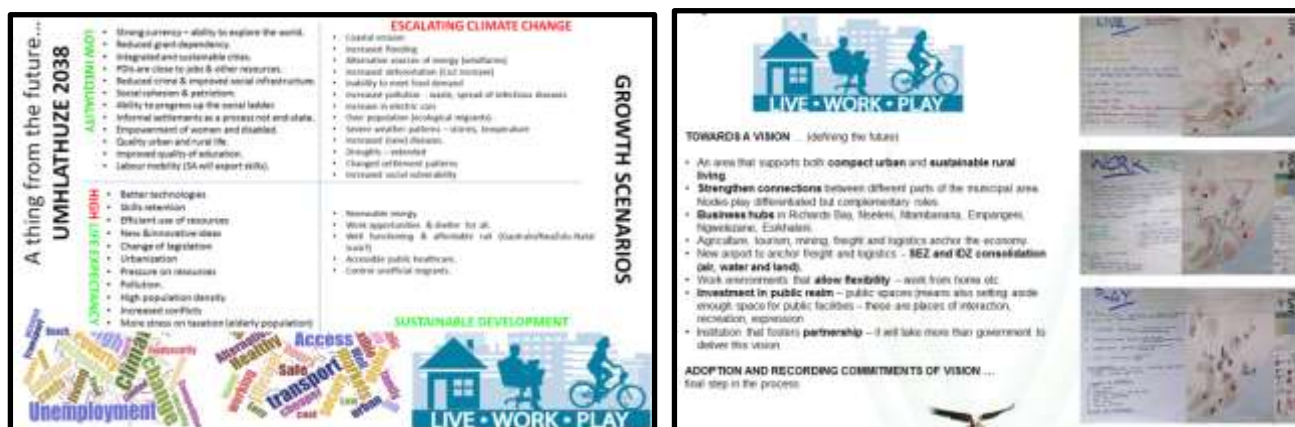
Figure 3: Strategic Goals and Levers of the IUSF



These listed levers relate very specifically to the pillars of **spatial transformation** and such is embraced by the Municipality. The Municipality is planning and implementing for improved public transport, investment is aimed at aiding the Township Economy and a number of processes are underway to establish integrated human settlements in the area. Specific projects are identified in the SDF Implementation Plan (Section 12) in support of spatial transformation and in line with the listed levers.

National CoGTA, through the ICM (Intermediate City Municipality) City Support Programme has supported the uMhlathuze Municipality with the following critical components:

- Spatial Visioning
- Financial instruments (inclusive of Long Term Financial Planning – LTFP, Infrastructure Asset Management, Procurement and Delivery)
- Capital Expenditure Framework (CEF)



2.4 FOURTEEN (14) NATIONAL OUTCOMES

The 14 National Outcomes that all governments must align to are:

Table 5: Fourteen National Outcomes

No.	National Outcome	uMhlathuze Alignment thereof
1	Quality basic education	Mission : Improve Citizens Skills levels and Education
2	A long and healthy life for all South Africans	Mission : Improve Quality of Citizens health
3	All people in South Africa are and feel safe	Mission : Creation of Secure and Friendly City through Fighting Crime
4	Decent employment through inclusive economic growth	Mission : Job creation through Economic Growth
5	Skilled and capable workforce to support an inclusive growth path	Mission : Improve Citizens Skills levels and Education
6	An efficient, competitive and responsive infrastructure network	Goal 2 : Sustainable Infrastructure and Service Delivery
7	Vibrant, equitable, sustainable rural communities contributing towards food security for all	Mission: Planned Rural Development Interventions
8	Sustainable human settlements and improved quality of household life	Goal 2 : Sustainable Infrastructure and Service Delivery Objective 2.3 : Integrated Urban and rural development
9	Responsive, accountable, effective and efficient local government system	Goal 1 : Good Governance <ul style="list-style-type: none"> Objective 1.1: Democratic, responsible, transparent, objective and equitable municipal governance Objective 1.2 : Compliance with relevant legislation and policies Objective 1.3 : Uninterrupted service delivery Objective 1.4: Public Safety and Security and protection of Council property
10	Protect and enhance our environmental assets and natural resources	Goal 2 : Sustainable Infrastructure and Service Delivery Objective 2. 5:Environmental Sustainability
11	Create a better South Africa, a better Africa, and a better world	Goal 3 : Social and Economic Development
12	An efficient, effective and development oriented public service and an empowered, fair and inclusive citizenship	Goal 1 : Good Governance Goal 2 :Sustainable Infrastructure and Service Delivery Goal 3: Social and Economic Development Goal 4 : Institutional Development Goal 5 : Sound Financial Management
13	Social Protection	Goal 3.2: Public Safety and Security <ul style="list-style-type: none"> Objective 3.2.1: Provision of efficient and effective security services Objective 3.2.2: To ensure provision of fire and rescue services
14	Social Cohesion	Goal 3.4: Social Cohesion <ul style="list-style-type: none"> Objective 3.4.1.1: Development of sports and recreation programmes

No.	National Outcome	uMhlathuze Alignment thereof
		<ul style="list-style-type: none"> Objective 3.4.1.2: Development of community facilities Objective 3.4.1.3: Development of Arts and Culture Strategy

2.5 NATIONAL AND PROVINCIAL PRIORITIES

The five (5) National and six (6) Provincial Priorities, as well as their alignment to uMhlathuze Municipality goals and objectives include the following:

Table 6: National and Provincial Priorities

No.	Five National (Including 6 th Provincial) Priorities	uMhlathuze Alignment thereof
1	Job creation (Decent work and Economic growth)	Goal 3: Social and Economic Development <ul style="list-style-type: none"> Objective 3.3: create environment conducive for economic growth and development Municipal Mission : Job Creation Through Economic Growth
2	Education	Municipal Mission <ul style="list-style-type: none"> Improve Citizens skills levels and education
3	Health	Goal 3 : Social and Economic Development <ul style="list-style-type: none"> Objective 3.1 : Safe and Healthy Living Environment Municipal Mission : Improve Quality of Citizens Health
4	Rural development, food security and land reform	Goal 2 :Sustainable Infrastructure and Service Delivery <ul style="list-style-type: none"> Objective 2.3 : Integrated urban and Rural development Municipal Mission: Planned Rural Development Interventions
5	Fighting crime and corruption	Goal 1 : Good Governance <ul style="list-style-type: none"> Objective 1.1 : Democratic, responsible, transparent, objective and equitable municipal governance Municipal Mission : Creation of Secure and Friendly City through Fighting crime
6	Nation-building and good governance	Goal 1 : Good Governance <ul style="list-style-type: none"> Objective 1.1 : Democratic, responsible, transparent, objective and equitable municipal governance Goal 3 : Social and Economic Development

No.	Five National (Including 6 th Provincial) Priorities	uMhlathuze Alignment thereof
		<ul style="list-style-type: none"> Objective 3. 2 : Social Cohesion

2.6 STRATEGIC INTEGRATED PROJECTS (SIPS)

The Presidential Infrastructure Coordinating Commission (PICC) identified 18 SIPs of which the following have direct relevance to the uMhlathuze Municipality:

Table 7: Strategic Integrated Projects

SIP 1 Unlocking the northern mineral belt with Primary Mineral Reserves with the Waterberg as the catalyst	The rail capacity between Mpumalanga and Richards Bay is relevant in in this instance. The uMhlathuze Municipality has budgeted R100 million to spend on the electricity line to RBCT to avoid future failure of electricity supply to this large export facility. The Port expansion of Richards Bay is a permanent discussion item between the uMhlathuze Municipality and the Richards Bay Port (Transnet).
SIP 2 Durban-Free State-Gauteng logistics and industrial corridor	A logistics and industrial corridor is in place between Durban and Richards Bay. Issues relating to access to ports as well as the development of airport precincts are relevant in the context of uMhlathuze.
SIP 6 Integrated municipal infrastructure project	Although the uMhlathuze Municipality is not one of the 23 least resourced districts in the country, the principle of addressing maintenance backlogs and upgrades in water, electricity and sanitation bulk infrastructure applies to the uMhlathuze municipal area. Also, road maintenance is imperative to enhance service delivery.
SIP 8 Green energy in support of the South African economy	Numerous green economy initiatives are either being pursued or supported by the uMhlathuze Municipality in its area of jurisdiction.
SIP 18 Water and sanitation infrastructure	Universal backlog eradication in respect of water and sanitation. To achieve this, new infrastructure, rehabilitation as well as improved management of infrastructure is required.

2.7 STATE OF THE NATION ADDRESS (SONA)

President Cyril Ramaphosa delivered the State of the Nation Address on 13 February 2020 before a joint sitting of the two houses of Parliament. The President took the nation into his confidence on the way forward, set the tone on critical matters and reported back to South Africans on the progress since his last address in June 2019.

The theme for this year's event remained the same as the previous year's theme which is, ***“Following up on our commitments: Making Your Future Work Better”***. The following is a summary of the country's focus areas and action plan for the 2020/2021:

Table 8: Summary of the State of the Nation Address

Key Point/Announcement	Action Plan
Development model to extend to 23 districts	<ul style="list-style-type: none"> Government will expand the District Development Model to 23 new districts, drawing on lessons from the three pilot districts.
Coding, Robotics in Grades R to 3	<ul style="list-style-type: none"> Government will introduce Coding and Robotics in Grades R to 3, in 200 schools (2020), with a plan to implement it fully by 2022.
Building Nine TVET Colleges	<ul style="list-style-type: none"> Government is building nine new TVET college campuses in Sterkspruit, Aliwal North, Graaff Reinet and Ngungqushu in the Eastern Cape; Umzimkhulu, Greytown, Msinga, Nongoma and Kwagqikazi in KwaZulu-Natal.
New University	<ul style="list-style-type: none"> Government has decided to establish a new University of Science and Innovation in Ekurhuleni.
Funds to reduce youth unemployment	<ul style="list-style-type: none"> Youth employment initiative will be funded by setting aside 1% of the budget to deal with the high levels of youth unemployment Government is launching five prototype sites in five provinces that will grow to a national network, reaching three million young people through multiple channels. Government will provide to the youth shorter, more flexible courses in specific skills that employers in fast-growing sectors need Government plans to develop new and innovative ways to support youth entrepreneurship and self-employment Scaling up the Youth Employment Service and working with Technical and Vocational Education and Training (TVET) colleges and the private sector to ensure that more learners receive practical experience in the workplace to complete their training Government will establish the first cohort of a Presidential Youth Service programme that will empower young people and provide opportunities for them to earn an income. National Youth Development Agency and the Department of Small Business Development will provide grant funding and business support to 1 000 young entrepreneurs in the next 100 days.
Domestic Violence Amendment Act To Better Protect GBV Victims	<ul style="list-style-type: none"> Domestic Violence Act is expected to be amended to better protect victims in violent domestic relationships Sexual Offences Act will also broaden the categories of sex offenders whose names must be included in the National Register for Sex Offenders
Tapping into the international market	<ul style="list-style-type: none"> Introduction of the SheTradesZA platform to assist women-owned businesses to participate in global value chains and markets The Industrial Development Corporation is targeting R10 billion of its own and partner funding for women-empowered businesses Designate 1 000 locally produced products that must be procured from small, medium, and micro enterprises (SMMEs) in an effort to create a larger market for small businesses Procurement Bill will soon be presented to Parliament as part of an effort to empower black and emerging businesses and advance radical economic transformation Government will hold its third South Africa Investment Conference in

	<p>November 2020 to review the implementation of previous commitments and to generate new investment into the economy</p> <ul style="list-style-type: none"> o Independent Communications Authority of South Africa (ICASA) has undertaken to conclude the licensing of high demand spectrum for industry via auction before the end of 2020
State to intensify SOE re-purposing for growth, development	<ul style="list-style-type: none"> o Government will undertake a process of rationalizing state owned enterprises to ensure that they serve strategic economic or developmental purposes o Government plans to fix commuter rail with over R1.4 billion investment over the years, this investment is vital to the economy and to the quality of life of the people o Fundamental overhaul of the Durban Port, the third largest container terminal in the Southern Hemisphere, to reduce delays and costs
Government to regulate commercial use of hemp products	<ul style="list-style-type: none"> o Government will in 2020 open up and regulate the commercial use of hemp products, providing opportunities for small-scale farmers o Government will this year (2020) release around 700 000 hectares of state land for agricultural production.
New crime detection university	<ul style="list-style-type: none"> o To improve the quality of general and specialized police investigations, government will be establishing a Crime Detection University in Hammanskraal, north of Pretoria.
Student Accommodation	<ul style="list-style-type: none"> o R64 billion will be spent over the next few years in student accommodation
Major economic reforms set to change SA's fortunes	<ul style="list-style-type: none"> o Reforms are contained in the Economic Transformation, Inclusive Growth and Competitiveness Paper produced by National Treasury o The country's low levels of growth mean it is not generating enough revenue to meet its expenses o Continuous engagements with labour and other stakeholders on measures to contain the public wage bill and reduce wastage o Improve public finances by working with the Auditor General to reduce irregular expenditure, shifting government spending from consumption expenditure to investment in infrastructure
Measures to improve energy generation	<ul style="list-style-type: none"> o Government will be implementing measures that are set to fundamentally improve South Africa's energy generation capacity o Section 34 Ministerial Determination will be issued to give effect to the Integrated Resource Plan 2019, enabling the development of additional grid capacity from renewable energy, natural gas, hydro power, battery storage and coal o Government will initiate the procurement of emergency power from projects that can deliver electricity into the grid within three to 12 months from approval. The National Energy Regulator will continue to register small scale distributed generation for own use of under 1 MW, for which no license is required o The National Energy Regulator will ensure that all applications by commercial and industrial users to produce electricity for own use above 1MW are processed within the prescribed 120 days o Open bid window 5 of the renewable energy IPP and work with producers to accelerate the completion of window 4 projects o Negotiate supplementary power purchase agreements to acquire additional capacity from existing wind and solar plants o Measures will be put in place to enable municipalities in good financial standing to procure their own power from independent power producers

2.8 STATE OF THE PROVINCE ADDRESS (SOPA)

The State of the Province Address is a localised version of the State of the Nation Address where Premiers reflect on their achievements and communicate their programmes of action in respect of government's five priority areas - education, health, the fight against crime and corruption, rural development and land reform as well as jobs for the year ahead.

The theme for the 2020 KZN SOPA is *"Together, Creating Our Common Future"*. It recognises that the people of KwaZulu-Natal themselves are the cornerstone and the most vital ingredient or force for growth and development

Table 9: Summary of the State of the Province Address

PGDP GOALS		PROGRESS AND INTERVENTIONS
RADICAL ECONOMIC TRANSFORMATION	Attracting investment	<ul style="list-style-type: none"> Investment commitments to the province worth over R15 billion since May 2019 are materialising The launch of Mara Group, Africa's first cell phone manufacturer, investing more than R1-billion and creating more than 300 permanent jobs in the province Ubuhle Towels (Pty) Ltd, a 75% black women-owned company, investing R132 million in towel manufacturing Elegant Afro Line (Pty) Ltd, a 100% black women-owned company, investing about R900 million in chemicals in the Richards Bay IDZ Nyanza Light Metal, a 100% black-owned company, investing R4.5 billion in the production of titanium dioxide pigments. Construction of the top structure at RBIDZ Phase 1F is expected to resume in April 2020. Wilmar SA (Pty) Ltd, a manufacturer of edible oils, investing R1.3 billion and creating 300 jobs Phase 1A and 1F of RIBDZ are planned to materialize from March 2020 in Richards Bay.
	Economic infrastructure	<ul style="list-style-type: none"> Launch of the Durban Aerotropolis Master Plan which envisions the development of a globally-connected airport city around King Shaka International Airport R30 million provision by EDTEA towards the construction of a terminal building at Mkhuze airport following its runway upgrade Upgrade of the Margate airport terminal building at a cost of R5 million, by the municipality working with EDTEA Development of a Clothing and Textile Master Plan by National Department which focuses on growth and protection of this industry During 2020/2021, investment drive will be focusing on the oceans economy, aloe processing, bio-ethanol, renewable energy, fish processing facilities and innovation hubs
	Digital economy	<ul style="list-style-type: none"> Government is rolling out telecommunication infrastructure, including broadband networks and digital innovation hubs. An agreement will be entered to with Broadband Infraco to provide layer two network services to be used by Dube Trade Port to provide over 810 Wi-Fi hotspots at 405 selected sites across the province

		<ul style="list-style-type: none"> Over the next five years, the Moses Kotane Institute will ensure that several rural communities are digitally connected Development of information technology hubs in five rural municipalities Okhahlamba, Kokstad , Umfolozi, Mandeni and Mpofana Municipalities are at various stages of completion
	Enterprise Development	<ul style="list-style-type: none"> R226 million to small enterprises by EDTEA, facilitating the creation of 3 284 jobs. R63.4 million disbursed to women-owned businesses, creating 1 382 jobs. R57.1 million expended on youth-owned businesses generated 655 job opportunities
	Youth empowerment and job Creation	<ul style="list-style-type: none"> R71 million offered to 55 youth-owned enterprises through the KZN Youth Empowerment Fund, The Office of the Premier will allocate another R50 million to the Youth Development Fund in 2020/2021.
	Operation Vula Fund	<ul style="list-style-type: none"> A provision of R150 million has been made In the 2020/2021 budget estimates for Operation Vula Fund
	Private-Public-Partnership	<ul style="list-style-type: none"> To date, 51 SMMEs have been supported to the value of R158 million - 65% of recipients are African female and 60% are youth A total of 349 interns have already been assigned to various municipalities across the province while the remaining 151 interns are to be placed before the end of March 2020.
	Tourism development	<ul style="list-style-type: none"> Building and maintaining tourism assets in the province, Ngodini and Ndumo Border Caves at a cost of R15-million, resulting in 400 job opportunities for the local communities Upgrading the Bhanga Nek Campsite with an investment of R20-million. 10 permanent and 25 temporary jobs R220 million investment from Transnet construction of the Cruise Terminal
	Tourism outlook	<ul style="list-style-type: none"> 80% increase in domestic tourists, with over 2.3 million arrivals in 2019 against 1.3 million arrivals in 2018. Increase is in tourist spend in the province which totaled R14.4 billion in the first half of 2019, a 37% increase on the previous half-year. KSIA grew by 6.5% in 2019 compared to 2018 at 6.26 million passengers. International passengers grew by 9.7% in 2019 when compared to 2018. Estimated R1.2 billion to be injected by hosting of major business events
	Environmental Sustainability	<ul style="list-style-type: none"> Clearance of 120 000 hectares of land affected by invasive alien species and created 7 500 Job opportunities 3 000 work opportunities were created through the Good Green Deeds programme. A provision of R100 million was made towards ecosystem management.

AGRICULTURE DEVELOPMENT	Radical Socio-Economic Transformation	<ul style="list-style-type: none"> ○ In terms of the new KZN MTSF, our target is 30% set asides for women, youth and SMMEs. We have a policy on set-asides on specific commodities for designated groups. ○ Our own PGDP targets governments local procurement spend is 35% youth;30% women, 5% people with disabilities, 10% Military Vets - 60% allocated to Africans. ○ By 2024, we aim to have 50 % of government spend on entrepreneurship for women- owned and led business. ○ Land to be acquired for agriculture in terms of the rural Land Reform Programme: target 40% to youth by 2024.
	Cannabis – The green rush	<ul style="list-style-type: none"> ○ A Cannabis Investor Protocol has also been developed and launched. ○ A dedicated and fully staffed Cannabis Unit has been established within the Moses Kotane Institute to assist emerging cultivators and entrepreneurs with infrastructure assistance, funding and licencing
	Multi-Planting Season Programme	<ul style="list-style-type: none"> ○ The Department of Agriculture has assisted farmers to plant 10 658 hectares for food security across the province. ○ Provincial government has committed R77 million for the implementation of the 2020/2021 planting season programme
	Production of seeds, seedlings and fruit trees	<ul style="list-style-type: none"> ○ Establishment of five mega nurseries to produce seedlings and fruit trees ○ A budget of R30 million has been set aside for the initial phase of agricultural infrastructure, equipment and operations. Implementation will commence in 2020/2021 and the programme will see the employment of 290 agricultural graduates
	Youth empowerment - Sukuma 100 000	<ul style="list-style-type: none"> ○ Youth empowerment programme called Sukuma 100 000, which will be implemented across all government departments, state-owned entitles and our partners in the private sector
PUBLIC WORKS AND INFRASTRUCTURE		<ul style="list-style-type: none"> ○ Over 135 163 EPWP work opportunities created in 2019 ○ Establishment of a Provincial Precinct in progress
	Transport infrastructure delivery	<ul style="list-style-type: none"> ○ In 2020/2021, R8-billion will be invested in infrastructure development and maintenance. ○ overhaul of the Durban Port to lessen delays and costs
	Bridges and enabling access to education	<ul style="list-style-type: none"> ○ New seven vehicular bridges and 12 bailey bridges. ○ Upgrade 60 kilometres of roads from gravel to black top IN 2020/2021 ○ 12 new bridges will be built in 2020/2021, mainly in rural communities
	Transport and job creation	<ul style="list-style-type: none"> ○ Transport will create 63 000 work opportunities through the EPWP in 2020/2021 ○ Increase intake for the Internship programme to 160 young people.

EDUCATION AND SKILLS DEVELOPMENT	Performance of our Basic Education	<ul style="list-style-type: none"> Establishment of 12 ECO centres in district in the rural areas
	Information communication technology and 4IR	<ul style="list-style-type: none"> Rolling out e-learning solutions Coding and robotics in the curriculum in selected pilots in the province. Maths and Science School of Excellence in LaMercy is at 98% completion The construction of the Agricultural and Maritime Schools of Excellence in uMgungundlovu and Umlazi, respectively, will commence in 2021 The construction of the Special School for Autism will also commence in 2020
	School safety interventions	<ul style="list-style-type: none"> Approval of the multi-pronged Schools Safety Strategy 2400 Shovakalula bicycles will be distributed
THE HEALTH AND WELLBEING OF THE PEOPLE OF KZN	Make Me Look Like a Hospital campaign	<ul style="list-style-type: none"> Revive the ambitious Make Me Look Uke a Hospital Project (MMLLH) New e-health system is being piloted at Prince Mshiyeni Memorial Hospital, as well as the Madadeni Hospital.
	Improved health system	<ul style="list-style-type: none"> Three districts in KwaZulu-Natal, namely Ugu, uMkhanyakude and uMzinyathi, have become the first in the country to meet the ambitious UNAIDS 90-90-90 target to help end the AIDS pandemic Fabulous About Health programme to address challenges faced by the LGBTQI sector R2.8-billion, state-of-the-art Dr Pixley Ka Isaka Seme Memorial Hospital will be opened in 2020
Progress on the State of Local Government in KZN		<ul style="list-style-type: none"> 54 Municipal Support Plans developed and adopted by municipalities. Challenges in both the uMsunduzi and Ethekwini Metro are progressively being attended too, with turn around strategies adopted by these municipalities Issues with Newcastle and Alfred Duma have received provincial attention and a task team has been deployed to intervene R20-million has been allocated to uGu District to alleviate Ugu's water scarcity and 92 static tanks have already been delivered R1.3-million allocated to upgrade water pumps in Ifafa area, R14.5-million for uMthamvuna's raw water pump station as well as water treatment works, and R2.7-million for the construction of temporary bridge across uMzimkhulu River
	Basic services	<ul style="list-style-type: none"> Approximately 70% of learners in government schools are in no fee schools 85.44% of people with access to portable water, and about 88.55%, have access to sanitation. About 89% of people have access to electricity
	Implementation of the District Development Model	<ul style="list-style-type: none"> integrated OSS with the new DDM as part of re-engineering of the former
	Operation Clean Audit	<ul style="list-style-type: none"> A Consequence Management Framework will be in place, applicable to all departments by the end of March 2020.
Fighting crime		<ul style="list-style-type: none"> In 2020/2021, together with the JCPS Cluster,

		there will be a launch of crime-fighting intervention programme titled Operation Vala
Social Cohesion		<ul style="list-style-type: none"> ○ In 2020/2021, government will expanding Its programme of combating Gender-Based Violence and Femicide ○ In 2020/2021, the Office of the Premier will undertake a 365-day awareness, advocacy and communication campaign ○ in 2020/2021, construction of two new treatment centres in Ugu and Ilembe districts ○ Developed a Provincial database of persons with disabilities that will serve as a hub from which government departments can tap into when they target persons with disabilities for recruitment purposes ○ KwaZulu-Natal will have a new provincial department of Sports, Arts, and Culture no later by April 2020.
New Interventions		<ul style="list-style-type: none"> ○ The province has established the Job Creation War Room which meets monthly, ○ Job creation will be linked to Sukuma 100 000 for the youth - ○ Enhance the Role of SMMEs, This will entail training, incubation, finance, and linkage to market post financing. ○ Building Requisite Skills for Future Industries: ○ Social Stability & the fight against Crime: The province will also drive an intensive Campaign on Social Stability and the Fight against Crime. The Campaign will be known as Operation Vala - as in Vala ubugebengu.

2.9 PGDS SPATIAL PLANNING PRINCIPLES

The strategic and targeted nature of the Provincial Growth and Development Strategy implies that specific interventions will be undertaken within key geographical areas of Need and Potential.

The Principle of **Environmental Planning** (Bioregional Planning) refers to understanding and respecting the environmental character (potential and vulnerability) and distinctiveness of places and landscapes and promoting balanced development in such areas.

The Principle of **Economic Potential** aims to improving productivity and closing the economic performance gap between the various areas of KwaZulu-Natal towards economic excellence of all areas. Rapid economic growth that is sustained and inclusive is seen as a pre-requisite for the achievement of poverty alleviation.

The Principle of **Sustainable Communities** promotes the building of places where people want to live and work. Again the sense of Quality of Living refers to the balance between environmental quality, addressing social need and promoting economic activities within communities. Often communities within the rural context of KwaZulu-Natal are not located in the areas with perceived highest economic potential. Where low economic potential exists planning and investments should be directed at projects and programmes to address poverty and the provision of basic services in order to address past and current social inequalities towards building sustainable communities.

The Principle of **Local Self-Sufficiency** promotes locating development in a way that reduces the need to travel, especially by car and enables people as far as possible to meet their need locally.

The Principle of **Spatial Concentration** aims to build on existing concentrations of activities and infrastructure towards improved access of communities to social services and economic activities. In practical terms this promotes concentration along nodes and corridors with multi-sectoral investment i.e. roads, facilities, housing etc. This principle will further assist in overcoming the spatial distortions of the past. Future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or link the main growth centres in order for them to become regional gateways.

The Principle of **Sustainable Rural Livelihoods** considers rural areas in a way which is integrated with other decision making associated with the Sustainable Livelihoods framework. This principle requires that spatial planning consider the locality and impact of human, physical, natural, financial and social capitals of an area and spatially structures these in support of each other. Another aspect of this principle is promoting spatial planning in a continuum where rural areas are not addressed as completely separate entities to urban centres, but rather a gradual change in landscape with the potential progression of rural areas to more closely resemble the service standards and quality of living achieved in some urban contexts.

The Principle of **Balanced Development** promotes the linking of areas of economic opportunity with areas in greatest need of economic, social and physical restructuring and regeneration at all spatial scales. In practical terms the principles sought to find a balance between the potentially competing land uses by understanding the relationship and integration between major dimensions within the province and promoting a synergetic mixture of land uses in support of each other at various spatial scales.

The Principle of **Accessibility** simply promotes the highest level of accessibility to resources, services, opportunities and other communities. This is intrinsically linked to transportation planning and should consider localised needs for the transportation of people and goods by various modes of transport as guided by the scale and function of a region.

LOCAL RELEVANCE: The uMhlathuze Municipality abides by sound spatial planning principles as extracted hereunder:

1. Environmental awareness and sensitivity with due consideration to the EMF and ESMP.
2. Promotion of sustainable communities and the realization of restructuring zones in respect of human settlement projects.
3. Urban integration and densification to decrease economic cost of travel specifically.
4. Introduction of urban development boundary as a measure to achieve spatial concentration.
5. Development of rural framework plans being initiated.

2.10 PROVINCIAL SPATIAL ECONOMIC DEVELOPMENT STRATEGY: CORRIDOR AND NODAL FRAMEWORK

The 2007 PSEDS (Provincial Spatial Economic Development Strategy) has been updated to enhance the original nodes and corridors. In particular, the updated study needed to provide guidance on what types of interventions are needed and which localities. More specifically, it has a rural development focus to address poverty issues and represents a move away from a hierarchical tiered structure to a balanced and integrated network of towns and cities.

The PSEDS has been undertaken in line with the comparative advantage approach as summarized hereunder:

- Focusing on what type of development should take place in different regions/districts helps to overcome some challenges of spatial prioritization.
- Investment should occur in the sectors which provide the greatest socio-economic return to investment.
- It is important to know what each district does best, specifically comparatively best.

To this end, the following set of new criteria was applied for the identification of nodes:

1. Economies of Scale factors as informed by population density contribution to GDP and diverse services to international, national and provincial clients.
2. Strategic factors relating to medium population density areas with high economic growth or high potential for future economic growth.
3. Local influence factors such as centres that are significant as district and municipal centers providing services to the district and local municipality.
4. Poverty alleviation factors relating to high levels of poverty, low unemployment and spatial isolation.

In context of the above, the following set of provincial mapping has been prepared:

Figure 4: PSEDs Criteria for Identification of Nodes

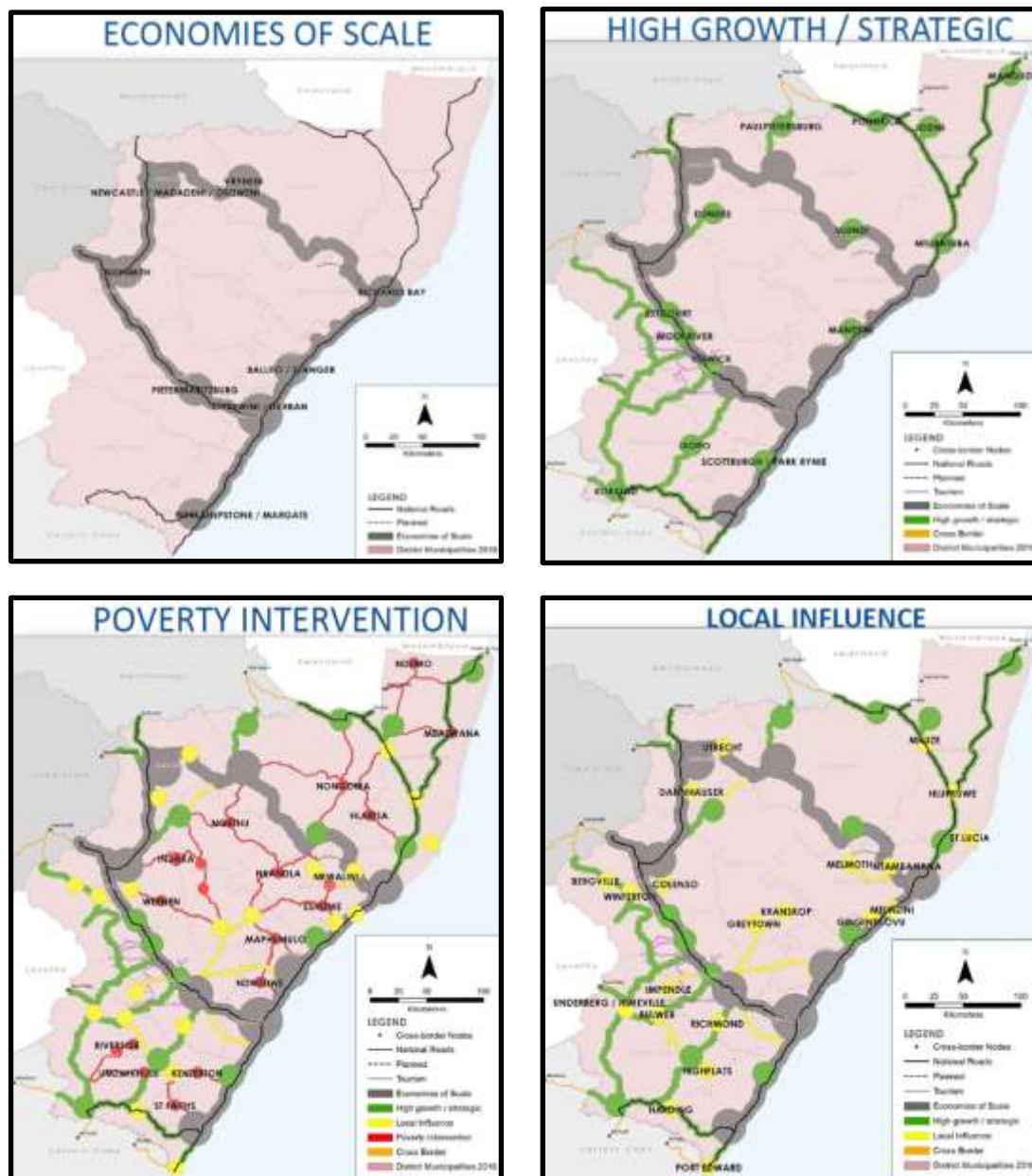
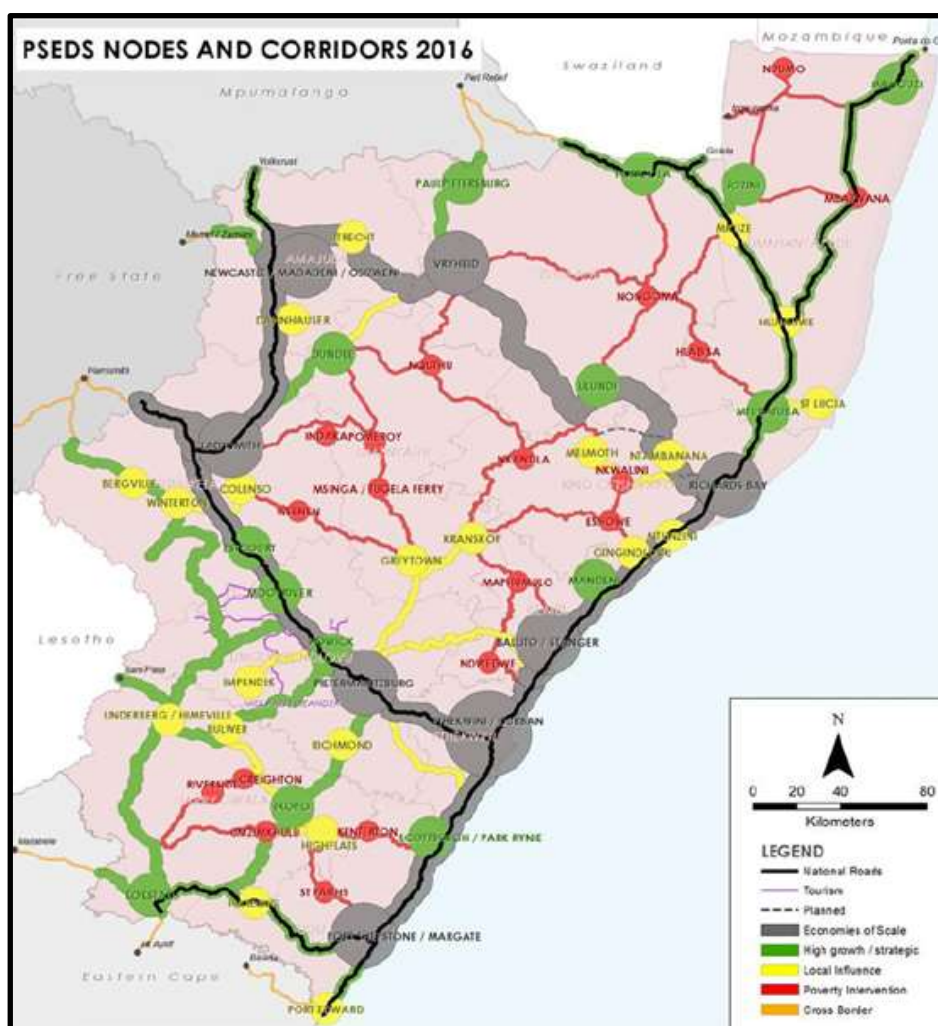


Figure 5: Composite mapping of PSEDs Nodes and Corridors



2.11 SPLUMA PRINCIPLES

The following provides a summary of the development principles contained in the SPLUMA (Spatial Planning and Land Use Management Act):

- (a) The principle of **spatial justice**, whereby –
 - i. past spatial and other development imbalances must be redressed through improved access to and use of land;
 - ii. 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 characterized by widespread poverty and deprivation;
 - iii. spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons;
 - iv. 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, informal settlements and former homeland areas;
 - v. land development procedures must include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and
 - vi. 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.

- (b) The principle of **spatial sustainability** whereby spatial planning and land use management systems must –
 - i. promote land development that is within the fiscal, institutional and administrative means of the Republic;
 - ii. ensure that special consideration is given to the protection of prime and unique agricultural land;
 - iii. uphold consistency of land use measures in accordance with environmental management instruments;
 - iv. promote and stimulate the effective and equitable functioning of land markets;
 - v. consider all current and future costs to all parties for the provision of infrastructure and social services in land developments;
 - vi. promote land development in locations that are sustainable and limit urban sprawl; and
 - vii. result in communities that are viable.
- (c) the principle of **efficiency**, whereby –
 - i. land development optimises the use of existing resources and infrastructure;
 - ii. decision-making procedures are designed to minimise negative financial, social, economic or environmental impacts; and
 - iii. development application procedures are efficient and streamlined and timeframes are adhered to by all parties.
- (d) the principle of **spatial resilience**, whereby 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.
- (e) the principle of **good administration**, whereby –
 - i. 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;
 - ii. all government departments must provide their sector inputs and comply with any other prescribed requirements during the preparation or amendment of spatial development frameworks;
 - iii. the requirements of any law relating to land development and land use are met timeously;
 - iv. 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
 - v. policies, legislation and procedures must be clearly set in order to inform and empower members of the public.

LOCAL RELEVANCE: The following actions by the uMhlathuze Municipality are of relevance with regard to the SPLUMA principles:

1. Efforts to densify, improve access to opportunities in non-core areas.
2. Focus on sustainability of natural resource based – including protection of agricultural land resources.

The following is quoted from selected sections of SPLUMA with regard to the preparation of spatial development frameworks:

Section 12 (1) (a): “interpret and represent the spatial development vision of the responsive sphere of government and competent authority”

Section 12 (1) (h): “include previously disadvantaged areas, areas under traditional leadership, rural areas, informal settlements, slums and land holdings of state-owned enterprises and government agencies and address their inclusion and integration into spatial, economic, social and environmental objectives of relevant sphere”.

Section 12 (1) (i): “address historical spatial imbalances in development”

The Municipal SDF is a primary spatial response to the development context, needs and development vision of the municipality (long term development vision). It is a key land use management tool at a strategic level with an important role to play in guiding and managing Municipal decisions relating to the use, development and planning of land.

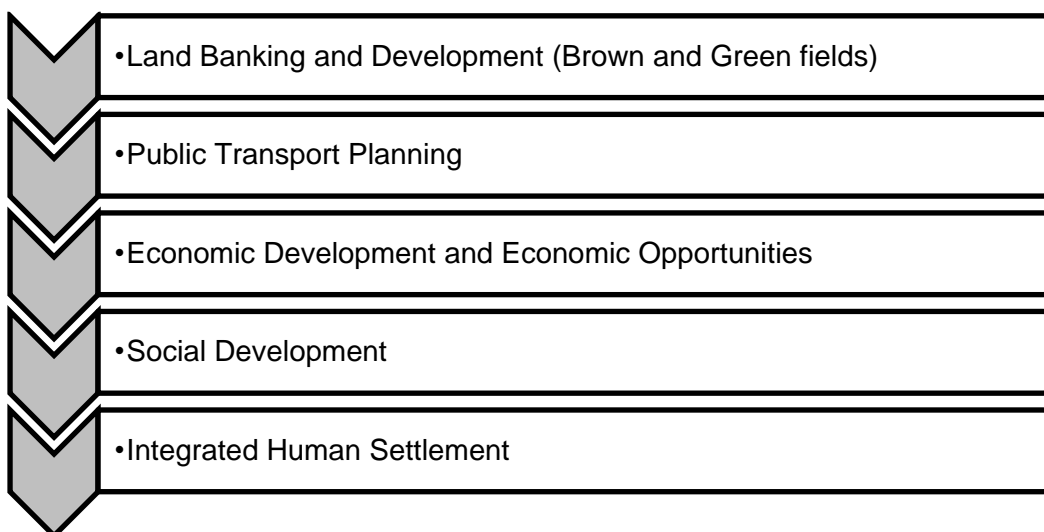
The Municipal SDF also guides the form and location of future spatial development in a manner that addresses the imbalances of the past i.e. spatial injustice. It enables the municipality to manage its land resources in a developmental and sustainable manner. It provides an analysis of the spatial problems and provides strategies and programs to address the challenges.

2.12 SPATIAL TRANSFORMATION

The concept of Transformation is always associated with social change in South Africa. The National Development Plan 2030 makes a strong statement about the need to “address the challenge of apartheid geography” which is defined in terms of living, working and environmental sustainability. SPLUMA is identified as a tool to give effect to Spatial Transformation.

According to SACN (2013) ... in order to achieve spatial transformation in the cities, government have to rein in the real changes not only in the physical realm but also in the way we approach both the problems and the solutions. The uMhlathuze Municipality, like any other municipality in the country is required to undertake processes of spatial transformation in line with the National Development Plan, Provincial Growth and Development Strategy & Plan, Spatial Planning and Land Use Management Act. The uMhlathuze Municipal Spatial Transformation Concept is derived from five key Pillars:

Figure 6: Pillars of Spatial Transformation of uMhlathuze



The main objective of uMhlathuze Municipal Spatial Transformation Concept is to address integrated development, city compacting, structural elements, equal access to land, create sustainable economic development and opportunities which will contribute to job opportunities.

It is also to prioritise development within and along Municipal Nodes and Corridor as well as developing a development partnership with neighbouring Municipalities.

2.13 UMHLATHUZE INTEGRATED DEVELOPMENT PLAN

The uMhlathuze Municipality has compiled its fourth generation IDP in context of the now expanded municipal area.

2.13.1 UMHLATHUZE VISION

The current long term vision of the Municipality is:

“The Port City of uMhlathuze offering improved quality of life for all its citizens through sustainable development.”

The above municipal vision underpins the following mission elements:

- Job Creation through Economic Development
- Improving Citizens Skills Levels and Education
- Improve Quality of Citizens Health
- Creation of Secure and Friendly City through Fighting Crime
- Planned Rural Development Interventions
- Maintaining Consistent Spatial Development
- Commitment to Sustainable Environmental Management

2.13.2 UMHLATHUZE GOALS AND OBJECTIVES

The following provides a summary of the amended goals and objectives of the Municipality:

Figure 7: uMhlathuze IDP Goals and Objectives

NATIONAL KPA 1 : GOOD GOVERNANCE AND PUBLIC PARTICIPATION		
GOALS	OBJECTIVES	STRATEGIES
1.1 Democratic, Responsible, Transparent, Objective And Equitable Municipal Governance	1.1.1 To ensure effective and efficient administration complying with its Legal Mandates	1.1.1.1 Provide administrative support for all Council Committees
		1.1.1.2 Strengthening Council Oversight through training on Legislation and Policies
		1.1.1.3 Development of a Corporate Strategy
		1.1.1.4 Development and review of policies that will lead to improved service delivery and legislative compliance
		1.1.1.5 Compliance with the Occupational Health and Safety Act and Compensation for occupational injuries and diseases
	1.1.2 To maintain an organizational performance management system as a tool to monitor progress of service delivery	1.1.2.1 Monitor evaluate measure and review the performance of the municipality against indicators and targets set in the IDP
	1.1.3 Ensure Institutionalisation of Batho Pele Culture	1.1.3.1 Implement a Service Charter
		1.1.3.2 Increase sensitivity of municipal stakeholders to the aspirations of citizens
	1.1.4 To promote a municipal governance system that enhances and embraces the system of participatory Governance	1.1.4.1 Facilitate the Functionality of Ward Committees through continuous capacitation
		1.1.4.2 Development of a Credible Integrated Development plan within

NATIONAL KPA 1 : GOOD GOVERNANCE AND PUBLIC PARTICIPATION		
GOALS	OBJECTIVES	STRATEGIES
		prescribed legislative guidelines
		1.1.4.3 Facilitation of Stakeholder and Community participation in policy making
		1.1.4.4 Implementation of communications strategy to help the organisation to communicate effectively
		1.1.4.5 Effective and efficient ICT Systems that enable Informed decision making and communication
	1.1.5 To promote Access to Information and Accountability	1.1.5.1 Ensure effective information and accountability prescripts
	1.1.6 To bring the organization to an enabled risk maturity level	1.1.6.1 Implement and maintenance of a sound enterprise risk management
		1.1.6.2 Implement and maintenance of a sound fraud risk management system
		1.1.6.3 Implement and maintenance of business continuity management
	1.1.7 Ensure reliability and maintain independence of internal audit activity	1.1.7.1 Effective Audit Committee
		1.1.7.2 Effective and value adding internal audit activity

NATIONAL KPA 2 : BASIC SERVICES AND INFRASTRUCTURE PROVISION		
GOALS	OBJECTIVES	STRATEGIES
2.1 Integrated infrastructure and efficient services	2.1.1 To expand and maintain infrastructure in order to improve access to basic services and promote local economic development	2.1.1.1 Eradicate water services backlogs through provision of basic water services
		2.1.1.2 Eradicate sanitation services backlogs through provision of basic sanitation services
		2.1.1.3 Eradicate electricity supply backlogs through provision of basic electricity supply services
		2.1.1.4 Provide a weekly domestic solid waste removal service to the community
		2.1.1.5 Provision of public transport infrastructure facilities
		2.1.1.6 Provision and Maintenance of storm water and coastal engineering infrastructure
		2.1.1.7 Strive to improve reliability and service life of Municipal infrastructure, facilities and assets

NATIONAL KPA 2 : BASIC SERVICES AND INFRASTRUCTURE PROVISION		
GOALS	OBJECTIVES	STRATEGIES
	2.1.2 To promote the achievement of a non-racial, integrated society, through the development of sustainable human settlements and quality housing	2.1.2.1 Improve community standard of living through accelerated development of Integrated Human settlement
	2.1.3 To ensure effective Fleet Management	2.1.3.1. Review and Implement Fleet management Plan

NATIONAL KPA 3 : LOCAL ECONOMIC DEVELOPMENT		
GOALS	OBJECTIVES	STRATEGIES
3.1 Viable Economic Growth And Development	3.1.1 To promote and facilitate investment	3.1.1.1 Develop investment promotion and facilitation plan
		3.1.1.2 Develop township economy
		3.1.1.3 Package council land to facilitate economic growth
	3.1.2 Stimulate key sectors that promote economic growth and create jobs	3.1.2.1 Provide support for prioritised sectors
		3.1.2.2 Developing and implement economic development sector plan
	3.1.3 To create enabling environment for the informal economy	3.1.3.1 Review and implement informal economy policy
	3.1.4 Clear City identity	3.1.4.1 To promote the city as destination of choice
	3.1.5 To implement and co-ordinate Expanded Public Works Programme (EPWP) in a manner that enhances skills development and optimizes decent employment and entrepreneurship	3.1.5.1 Promote economic growth by successful implementation of EPWP community based projects
3.1.5.2 Promoting economic growth by providing employment opportunities for Women and Youth		
3.1.5.3 Promoting economic growth by providing skills empowerment to the unemployed		
3.2 Public Safety and Security	3.2.1 Provision of efficient and effective security services	3.2.1.1 Review and implementation of crime prevention strategy
	3.2.2 To ensure Provision of fire and rescue services	3.2.2.1 Review and Implementation of a fire prevention strategy
3.3 Safe and Healthy Living Environment	3.3.1 Efficient an effective waste management services	3.3.1.1 Review and Implementation of Integrated Waste Management Plan
	3.3.2 To ensure air quality management	3.3.2.1 Implementation of Air Quality Management Strategy
	3.3.3 Cater for alternate future burial option	3.3.3.1 Provision of cemeteries
3.4 Social Cohesion	3.4.1 To promote social cohesion	3.4.1.1 Development of sports and recreation programmes
		3.4.1.2 Development of community facilities

NATIONAL KPA 3 : LOCAL ECONOMIC DEVELOPMENT		
GOALS	OBJECTIVES	STRATEGIES
		3.4.1.3 Development of Arts and Culture Strategy

NATIONAL KPA 4 : MUNICIPAL INSTITUTIONAL DEVELOPMENT AND TRANSFORMATION		
GOALS	OBJECTIVES	STRATEGIES
4.1 A Municipality that is Resourced and Committed to attaining the vision and mission of the organisation	4.1.1 To create an appropriate organisational climate that will attract and ensure retention of staff	4.1.1.1 Implement the talent management strategy
		4.1.1.2 Compliancy with Employment Equity Act
		4.1.1.3 Implement EAP programs that promote and support health and well-being of employees
		4.1.1.4 Improve Citizens Skills levels and Education
		4.1.1.5 Create and maintain sound Relationship between management and labour
		4.1.1.6 Maintenance of an organisational structure that in is line with organisational objectives and optimises service delivery

NATIONAL KPA 5 : MUNICIPAL FINANCIAL VIABILITY AND MANAGEMENT		
GOALS	OBJECTIVES	STRATEGIES
5.1 Sound Financial And Supply Chain Management	5.1.1 Compliance with financial legislation and policies	5.1.1.1 GRAP compliance
		5.1.1.2 mSCOA compliant
		5.1.1.3 Review of all financial related policies
		5.1.1.4 Compliance with all MFMA and related local government financial legislation
	5.2.1 Sustainable Financial and supply chain Management	5.2.1.1 Provide continuous Internal Communication on Budget and Financial Management matters
		5.2.1.2 Asset Accounting Management
		5.2.1.3 Accurate and timeous billing and receipting of revenue
		5.2.1.4 Apply Adequate Internal controls
		5.2.1.5 Demand and acquisition management
		5.2.1.6 Contracts and Logistics management
		5.2.1.7 Apply adequate financial management methodologies

NATIONAL KPA 6 : CROSS CUTTING		
GOALS	OBJECTIVES	STRATEGIES
6.1 Integrated Urban and Rural Development	6.1.1 To plan and manage existing and future	6.1.1.1 Review and Implement Spatial Development Plan

NATIONAL KPA 6 : CROSS CUTTING		
GOALS	OBJECTIVES	STRATEGIES
	development	6.1.1.2 Develop precinct framework plans
		6.1.1.3 Review of Human Settlement Sector Plan
		6.1.1.4 Incremental development of strategic environmental assessment for the entire municipal area
		6.1.1.5 Implementation of uMhlathuze Land Use Scheme
		6.1.1.6 Compliance with SPLUMA by-law and national building act.
		6.1.1.7 Efficient processing of development application and building plans
6.2 Immovable Property Management	6.2.1 To ensure fair valuation of properties	6.2.1.1 Development and maintenance of valuation roll in line with municipal property rates act.
	6.2.2 Effective Management of Council owned Immovable properties.	6.2.2.1 Update immovable asset register
6.3 Disaster Management	6.2.3 To prevent and mitigate disaster incidents	6.2.3.1 Review and Implement Disaster Management Plan

2.14 MUNICIPAL ECONOMIC DEVELOPMENT TRANSFORMATION ROADMAP

The Municipality embarked on a meticulous and comprehensive process to develop an all-embracing roadmap that will guide the City's interventions and programme of action in relation to economic development, economic transformation and job creation. As a hub of industrial development and investment, the City must position itself as a strategic driver and champion of economic development for the benefit of local enterprises, job seekers, aspirant entrepreneurs and local economy.

The main objective of the roadmap is clarify the City's role in championing economic development, economic transformation and job creation with a view to creating a conducive environment for job intensive and inclusive economic growth. More specifically, the following priority sectors have been identified:

- i. Manufacturing & logistics
- ii. Agriculture, Agro-processing and rural economy
- iii. Maritime & Blue Economy
- iv. Tourism
- v. Wholesale, retail, trade and services
- vi. Mining and beneficiation
- vii. Township economy
- viii. Construction & Built environment
- ix. Green Economy and Energy
- x. ICT & Innovation

2.15 UMHLATHUZE VISION 2030 STRATEGIC ROADMAP

During 2017, a Strategic Roadmap for the uMhlathuze Municipality was compiled with a special focus on the identification of critical levers to optimize growth and inclusive development opportunities in the Municipality. The key motivation was the formulation of compelling yet practicable strategic goals capable of propelling the City to its next level.

The following strategic initiatives were agreed upon:

1. Improvement of Basic Services
2. Advancing Inclusive Economic Development and Private Sector Investment
3. Social Regeneration and Upliftment
4. Create Environmental Sustainable Development
5. Cross Cutting Initiatives

Hereunder a summary of the respective programmes identified under these strategic initiatives is provided:

Table 10: Vision 2030 Strategic Roadmap Programmes

IMPROVEMENT OF BASIC SERVICES	
Programme 1: Basic Services Monitoring and Tracking Programme (Service Delivery Nerve Centre)	To monitor effective delivery of basic services through a 'single view' of the customer and suite of services and projects delivered to communities; in order to prevent duplications of effort and investment, as well as harmonise city's projects and operational activities.
Programme 2: Spatial Transformation and Land Banking	The programme aims to advance spatial transformation goals (equity and access) and strategically forecast long term development goals in order to secure land provision for industrial growth and social purposes.
ADVANCING INCLUSIVE ECONOMIC DEVELOPMENT AND PRIVATE SECTOR INVESTMENT	
Programme 3: Investment Coordination, Monitoring and Alignment	To coordinate and track investment initiatives in the City in order to achieve multi-stakeholder alignment and synergies in the roll-out of private sector investment programmes.
Programme 4: Investment Promotion Initiative	To position the City as an investment and tourism destination of choice to local and international audiences
Programme 5: Logistics and Port-Based Initiatives	The programme aims to optimise the city's competitive position as a Port City and its strategic location along the main route connecting Durban and Mozambique, as well as rail line connecting with the hinterland.
Programme 6: Agricultural Development Initiative	The programme aims to promote and unlock agricultural sector as a feasible and sustainable contributor to economic development of the city.
Programme 7: City of uMhlathuze Knowledge Hub	To establish knowledge repository (virtual / face-to-face) to drive broader business and investor intelligence on the city, support innovation, capture economic and social research, profile trading partners, record project histories and learnings, as well as serve as a base for commissioning ongoing specialist studies relevant to city's development

Programme 8: Investment and Development Funding	The purpose of the programme is to seek supplementary and alternative funding sources meant to activate investment and development in the City - noting the limitations in traditional sources of funding and pressing social provisioning needs.
SOCIAL REGENERATION AND UPLIFTMENT	
Programme 9: Strategic Learning and Growth Initiative	<p>The purpose of the initiative is to:</p> <ul style="list-style-type: none"> ○ create interfaces between industry and educational institutions in order to determine skills supply and demand balances ○ reconcile learning content priorities between educational institutions and industry to engineer relevance and connectedness ○ forecast new skill requirements and facilitating expedited acquisition of such skills through defined partnership agreements and other means ○ mobilise and connect the youth of the city with industry and to drive learning, innovation and solutions in line with gainful opportunities
Programme 10: uMhlathuze City Sports and Arts Initiative	To advance the brand stature, social balance and cohesion of the city through coordinated sports, arts and recreation strategic initiatives
Programme 11: Safety and Security Mobilisation Programme	The programme elevates the agenda of transforming the City of uMhlathuze into a safe and secure environment in which it is fitting to live, work and make business. The programme counteracts the negative insecurity trends and their effects on social well-being, business growth and investment.
Programme 12: Social Regeneration and Engagement Intervention	The programme is a deliberate and structured intervention to counteract moral and social decay within the jurisdiction of the municipality by driving social change programmes and messages through leadership and other community structures.
CREATE ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT	
Programme 13: Climate Change Intervention Programme	The purpose of the programme is to introduce mitigation strategies and management of climate change factors impacting development and welfare of the citizenry in the City
CROSS CUTTING INITIATIVES	
Programme 14: Integrated and Strategic Infrastructure Investment	The purpose of the programme is to develop a long term integrated and strategic infrastructure investment roadmap that is aligned to the Spatial Development Framework and in line with the priorities of the City and investors. This includes infrastructure renewal, upgrade and development of new infrastructure (social and economic infrastructure).
Programme 15: Socio-Economic Transformation Programme	The purpose of the programme is to develop an integrated and focussed socio- economic transformation programme with specific packaged deliverables and interventions aimed at addressing the triple challenges of poverty, unemployment and inequality at local government level working with other spheres of government and social partners

3. SPATIAL DEVELOPMENT VISION

Visions are strategic planning instruments; they are “soft instruments” that act as a guideline to establish policies. The Spatial Planning and Land Use Management Act (SPLUMA) requires of municipalities to have long term Spatial Development Frameworks (SDFs) that are reviewed annually and for these SDFs to have long term spatial visions.

A spatial vision for the City of uMhlathuze has been prepared by way of a consultative process that included the political leadership as well as internal and external stakeholders. The outcome is a coherent vision (minimum 20 years) for the economic and spatial integration and transformation of the municipal area. It is critical that this vision will inform/direct decision making in the municipality.

The following steps were followed in the preparation of the spatial vision:

Step 1:

- Identification of Challenges and Opportunities.

Step 2:

- Defining the Future

Step 3:

- Adoption of Vision and Recording Commitments.

The following principles were identified during the engagements:

- **Diversity:** Nurturing, encouraging and enabling diversity on all fronts, such as cultural, traditional, religious, gender, ability, etc.
- **Sustainability:** Institutional, Ecological, social and financial.
- **Choice:** An area where people are able to exercise free will and have access to choice and opportunity.
- **Accessibility:** Enabling upward mobility.
- **Quality of life:** Quality shared public spaces.
- **Mobility:** Ability to progress and an adaptable environment.
- **Affordability:** For all – especially public services.
- **Shared societal dividends:** Happiness, hope, health, safety and well being
- **Equality:** An administration that regards ALL residents as equal.
- **Equity:** An administration that seeks to improve equity. One that is fair and just.
- **Inclusivity:** An administration that deliberates seeks to include the marginalized (gender, age, race, ability).
- **Avant garde:** Taking a long term view, forward thinking and thinking outside the box.
- **Democratic:** Meaningful consultative processes.
- **Efficiency:** Judicious use of public resources

Key indicators that form the foundation of the vision:

- An area that supports both **COMPACT URBAN** and **SUSTAINABLE RURAL LIVING**.
- **STRENGTHEN CONNECTIONS** between different parts of the municipal area. Nodes play differentiated but complementary roles.
- Business hubs in Richards Bay, Nseleni, Esikhaleni, Ntambanana, Empangeni, Ngwelezane.
- Agriculture, tourism, mining, freight and logistics anchor the economy.
- New airport to anchor freight and logistics – **SEZ/IDZ CONSOLIDATION (AIR, WATER AND LAND)**
- Work environments that **ALLOW FLEXIBILITY** – work from home, pop ups, etc.
- **INVESTMENT IN PUBLIC REALM** – Public spaces are places of interaction, recreation, expression and enough space for public facilities to be set aside.
- Institution that **FOSTERS PARTNERSHIP** – it will take more than government to deliver this vision.

The following spatial vision statement for the Municipality was therefore proposed:

“An agile institution that fosters spatial sustainability, resilience, equity and compact growth, supported by appropriate ICT solutions”



4. SPATIAL ANALYSIS

The uMhlathuze Local Municipality is located in the King Cetshwayo District Municipality in the North-Eastern part of KwaZulu-Natal. The uMhlathuze LM is bordered by the following Local Municipalities (LMs) within the King Cetshwayo District:

- Mfolozi
- Mthonjaneni
- uMlalazi

Following the 2016 Local Government elections, the former Ntambanana Local Municipality was disestablished and a portion of its former area was included into the uMhlathuze Local Municipality. As a result, the uMhlathuze Municipality has an area of 123 325Ha and in 2016, the uMhlathuze population is estimated at to be in the region of 410 465 people.

Richards Bay and Empangeni are the most significant economic centres in the Local Municipality and in the District Municipality. Richards Bay, as a harbour and industrial town, attracts people from surrounding towns, rural settlements and from beyond the district. Empangeni's role mainly as a commercial and service centre to the settlements of Esikhaleni, Eshowe, Nkandla, Buchanana and other rural settlements attracts many people to the range of higher order services available in the town.

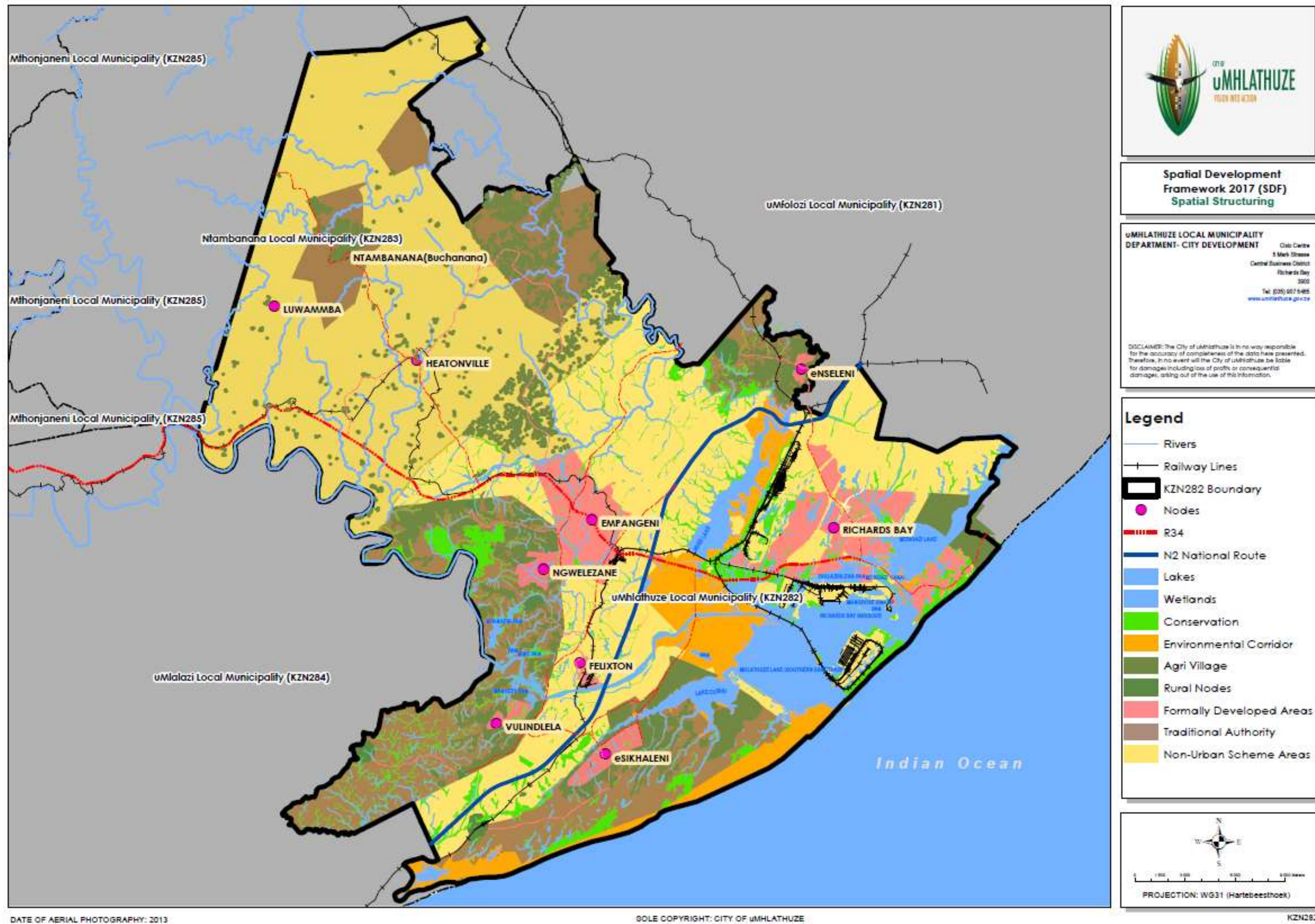
4.1 SPATIAL STRUCTURING ELEMENTS

There are a number of existing natural and man-made phenomenon that have shaped and continue to shape the uMhlathuze Municipality spatial landscape. The area to the east of the Municipality is inundated with a system of wetlands and natural water features such as Lakes Cubhu, Mzingazi, Nsezi and Nhlabane. Major rivers include the Mhlathuze and Nsezi.

The main access into the municipal area is via the N2 in a north south direction and in an east west direction the R34. Other significant roads in the area include the MR431 (that provides a northerly entry into Richards Bay from the N2) as well as the Old Main Road that straddles the N2 on its inland. Railway lines are prevalent in the municipal area but do not provide a passenger service, only a commercial/industrial service is provided.

The municipality has the benefit of about 45km of coastline of which about 80% is in its natural state. Linked to its coastal locality is the Richards Bay deep-water port that has been instrumental in the spatial development of the area in the past and will definitely impact on the areas' future spatial development. There is one airport and a couple of landing strips in the municipal area.

Map 1: Spatial Structuring Elements



The municipality has vast areas of commercial farmlands as well as a number of areas that are significant from an environmental perspective.

The municipal area includes the formal towns of Empangeni, Richards Bay, eSikhaleni, Ngwelezane, eNseleni, Vulindlela and Felixton. Rural settlements include Buchanana, Luwamba, Makwela, Mambuka, Hluma, Matshana and Mabuyela.

4.2 LAND OWNERSHIP

The following table provides a breakdown of the land ownership in terms of hectares (Ha) and percentages (%).

Table 11: Land Ownership Breakdown

Land Owners	Area(Hectares)	Percentage (%)
Province of KZN	14167	11.49
City of uMhlathuze	4259	3.45
Transnet	2989	2.42
IDZ	107	0.09
Ingonyama Trust Board	63795	51.73
Private	32467	26.33
Lakes	5541	4.49
Total	123325	100.00

The above table indicates that 26% of land within uMhlathuze Municipality is under private ownership and 51% under Ingonyama Trust Board which is administered by Traditional Authorities.

One of the biggest Municipal challenges in relation to land ownership is the distribution and allocation of land in the Ingonyama Trust Board land which is mainly administered by Traditional Authorities. Such distribution is common in the peri-urban and infill areas. This situation led to formation of unplanned settlements which put pressure to the Municipality from services provision perspective.

The summary of challenges that are associated with settlements within Peri-Urban and Infill Areas (non-formalised settlements) can be further explained as follow:

- i. **Lack of proper planning:** Under ideal circumstances, settlement planning takes place prior to land allocation and development. The main objective of settlement planning being to ensure and promote sustainable communities and settlements taking into consideration environmental factors, climate change, geotechnical conditions, biodiversity, land legal and basic services issues. Non-planned settlements contribute to generally unsustainable communities and livelihood challenges.
- ii. **Limited basic services:** Unplanned settlements are always subjected to limited services, since planning in these areas always come afterwards and inevitably create challenges for the design and installation of infrastructure. The provision of services in such unplanned areas is treated as in-situ upgrades which is a reaction to community needs with limited sources.
- iii. Settlements are located in the **high risk areas** i.e. environmental sensitive, flood prone areas, wetlands and unstable soils, under power lines, on top of water pipes, sewer pipes etc.: Some structures within non-formalised settlements are located within the environmental sensitive areas and other high risk areas as listed where no formal planning and development would have taken place if planned.
- iv. **Undesirable Impact on food security:** Land allocation also takes place for residential purposes without assessment of the agricultural value of the land. Sometimes good agricultural land is transformed and used for residential/settlement purposes. The high demand of residential land in the Traditional Council areas has led to a situation where residential development takes precedent in agricultural areas which has a significant impact to food security for humans.

- v. **Undesirable Impact on prime land for grazing:** The random allocation of land without proper guidelines and guiding development frameworks in the peri-urban/infill areas has also contributed to a shortage of grazing land. This has led to a situation where livestock associations from some of these areas are applying to the Municipality to lease land for grazing purposes.
- vi. **Insufficient land for future social and economic facilities due to random distribution of land:** The majority of land that is allocated for residential purposes has led to an increase in population density in these areas. This means that, the demand for land for educational, health and economic facilities also increases. However, the major challenge is that in most cases such needs cannot be accommodated in these areas due to insufficient land being reserved for such purposes.

The following inset provides images of the peri-urban settlement increase between 2006 and 2013 adjoining Ngwelezane and the Richards Bay Airport.

Figure 8: Peri-urban Development adjoining Ngwelezane

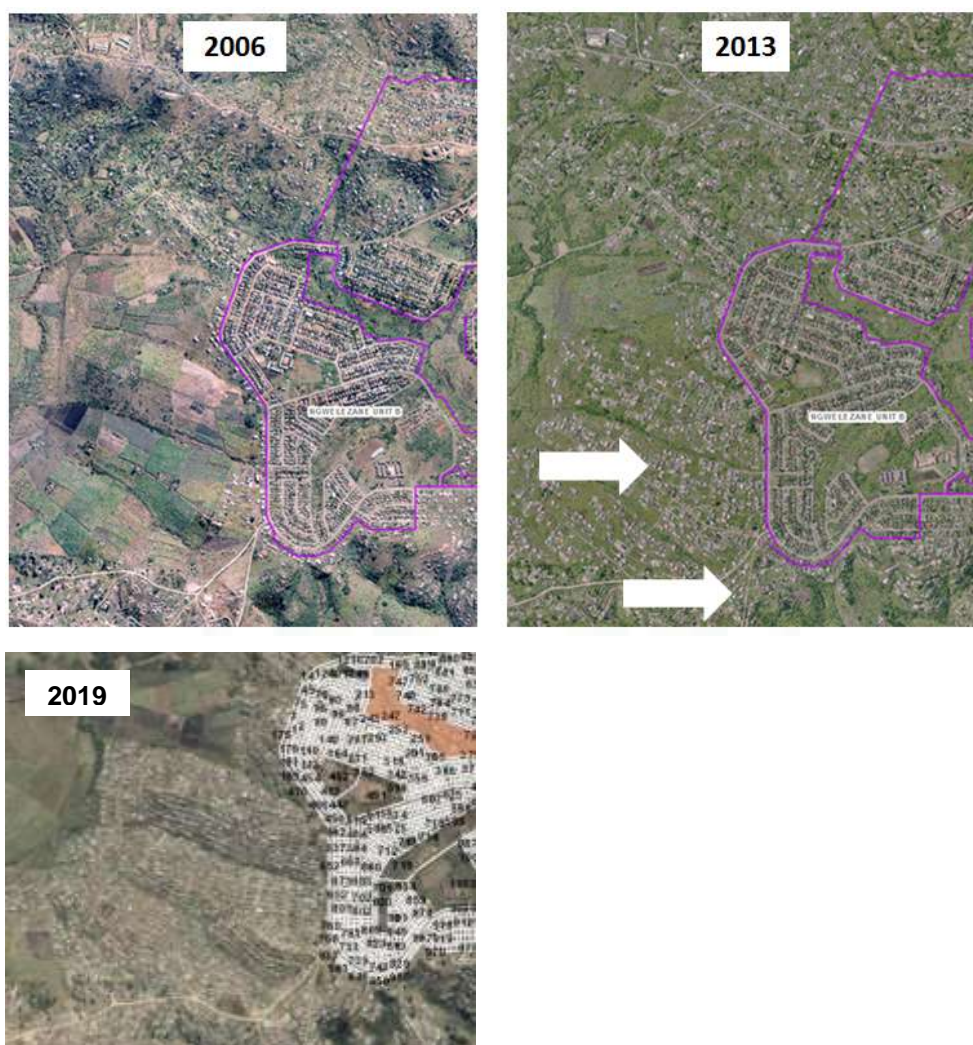


Figure 9: Peri-urban Development adjoining the Richards Bay Airport



It is presented that the above challenges are caused by the limited understanding by stakeholders of the legal mandate of the Municipality as a planning authority with regards to spatial planning, development control, environmental planning, settlement planning etc., irrespective of land ownership. Traditional Councils are generally not consulting with the Municipality as planning authority on matters relating to settlement planning. As a result, the Municipality is compromised in its ability to efficiently deliver services and formalize development due to the challenges explained on the previous pages. The overall sustainability of settlements is compromised as a result.

In context of the above discussion, the following summary is provided of some legislative functions and objectives of stakeholders:

4.2.1 Functions of Cooperative Governance and Traditional Affairs

In context of the above, some of the core functions of the Department of Cooperative Governance and Traditional Affairs is, amongst others:

- to support and enhance the capacity of Traditional Councils
- to ensure the recognition and transformation of Traditional Council areas
- to create an enabling environment for the development of Traditional communities

4.2.2 Objectives of Local Government

Section 152 (1) of the Constitution of the Republic of South Africa (Act No. 106 of 1996) states that local government are:-

- a) to provide democratic and accountable government for local communities;
- b) to ensure the provision of services to communities in a sustainable manner;
- c) to promote social and economic development;
- d) to promote a safe and healthy environment; and
- e) to encourage the involvement of communities and community organisations in the matters of local government

A municipality has the functions and powers assigned to it in terms of Sections 156 and 229 of the Constitution. Chapter 5 of the Local Government: Municipal Structures Act, 117 of 1998 clearly defines those functions and powers vested in a local municipality.

In setting out the functions of a Local Municipality, the Municipal Systems Act indicates that the Minister responsible for Local Government may authorize a Local Municipality to perform the following functions of a District Municipality. As such, the uMhlathuze Municipality performs the following:

- i. Potable water supply systems
- ii. Bulk supply of electricity

- iii. Domestic waste-water systems
- iv. Sewage disposal systems
- v. Municipal Health Services

In addition, the objectives of local government are:-

- i. Air and Noise Pollution
- ii. Building, Trading Regulations, Liquor and Public, Nuisance Control
- iii. Fire Fighting Services
- iv. Pounds
- v. Public Places
- vi. Refuse Removal, Refuse Dumps and Solid Waste
- vii. Street Trading
- viii. Street Lighting
- ix. Traffic and Parks
- x. Electricity Reticulation
- xi. Cleansing and Trade Areas
- xii. Beaches and Amusement Facilities
- xiii. Billboards and Display of Advertisements in Public Places
- xiv. Cemeteries, Funeral Parlors and Crematoria
- xv. Licensing, Facilities for Accommodation, Care and Burial of Animals
- xvi. Fencing and Fences
- xvii. Local Amenities
- xviii. Local Tourism
- xix. Municipal Airports
- xx. Municipal Planning
- xxi. Municipal Public Transport
- xxii. Storm Water Management
- xxiii. Local Sport Facilities
- xxiv. Markets Stalls / Trade Areas
- xxv. Municipal Abattoirs
- xxvi. Municipal Parks and Recreation

In context of the above, the following is stated:

The **core function** of a municipality is service delivery and all other activities are seen to be supportive thereof albeit planning for development/service delivery, management of assets, management of land, income generation from leasing of Council assets etc. Care must therefore be taken to ensure that municipal activities work toward achieving sustainable service delivery.

4.2.3 Functions of the Ingonyama Trust

Section 2 (b) of the Ingonyama Trust Amendment Act (Act No. 9 of 1997) states that:

“The Trust shall, in a manner not inconsistent with the provisions of this Act, be administered for the benefit, material welfare and social well-being of the members of the tribes and communities as contemplated in the KwaZulu Amakhosi and Iziphakanyiswa Act, 1990 (Act No. 9 of 1990)”

The Ingonyama Trust Board is responsible for the administration of Ingonyama Trust land which is about 2.8 million hectares in extent spread throughout the province of KwaZulu-Natal. The core business of the Trust is to manage the land for the *“material benefit and social well-being of the individual members of the tribes”*.

4.2.4 Functions of Traditional Councils

Section 8(1) of the KwaZulu-Natal Traditional Leadership and Governance Act (Act No. 5 of 2005) provides for the functions of the Traditional Councils to inter alia include:-

- administer the affairs of the traditional community in accordance with customs and tradition;
- assist, support and guide traditional leaders in the performance of their functions;
- work together with municipalities in the identification of community needs;
- facilitate the involvement of the traditional community in the development or amendment of the integrated development plan of a municipality in whose areas that community resides;
- recommend, after consultation with the relevant Local House and the Provincial House of Traditional Leaders, appropriate interventions to government that will contribute to development and service delivery within the area of jurisdiction of the traditional council;
- participate in the development of policy and legislation at local level;
- participate in the development programmes of municipalities and of the provincial and national spheres of government;
- promote the ideals of co-operative governance, integrated development planning, sustainable development and service delivery;
- promote indigenous knowledge systems for sustainable development and disaster management;
- alert any relevant municipality to any hazard or calamity that threatens the area of jurisdiction of the traditional council in question, or the well-being of people living in such area of jurisdiction, and to contribute to disaster management in general;
- share information and co-operate with other traditional councils;
- perform the functions conferred by customary law, customs and statutory law consistent with the Constitution.
- to uphold the values of the traditional community;
- reject and proscribe such practices as the sowing of divisions based on tribalism;
- promote peace and stability amongst members of traditional communities; and
- promote social cohesion within the traditional community.

The detailed scrutiny of the Municipal, Ingonyama Trust Board and Traditional Councils objectives and functions, identified the following critical common objectives which need to be adhered to by all three stakeholders, however co-operation remains a challenge:

- i. Community social well-being
- ii. Encourage sustainable development and service delivery
- iii. Stakeholder involvement in the development planning and decision making

4.2.5 Land Allocation Guidelines on Communal Land under Traditional Councils

There are currently three interdependent levels of authority relevant for planning and land management in Traditional Council areas; namely

- Traditional Councils;
- Ingonyama Trust Board; and
- Municipalities

Normally, the municipalities are not directly involved in the land allocation in Traditional Council areas. However, they are always required to provide services in these settlements.

During September 2010, the former KZN Provincial Planning and Development Commission prepared the land allocation guidelines on communal land under Traditional Council. The main objective of the guidelines was:

- to promote efficient allocation of communal land by the traditional councils and to promote orderly development including human settlement;
- promote sustainable rural development;
- protection of cultural, agricultural and biodiversity resources; and
- promote safety and security

The following general land allocation guidelines are meant to be followed by Traditional Councils when allocating land

- i. The allocation of land shall be made by a Traditional Council of the area concerned and such allocation shall be confirmed in writing.
- ii. The Traditional Council may only allocate land in an area defined as its area of jurisdiction.
- iii. In the performance of this function, the Traditional Council shall take into account similar developments existing in the area.
- iv. In allocating a site the traditional council shall be guided by the availability of appropriate services and infrastructure, including transportation in the area.
- v. The land allocated will be used or developed only in accordance with the land use plans of the area.
- vi. The Traditional Council should take into account disaster management issues.
- vii. The Traditional Council shall ensure the protection of the natural environmental and cultural resources of the area when allocating land. People may not be allocated sites on wetlands, protected forest, heritage sites, etc.
- viii. The Traditional Council shall ensure the preservation of prime agricultural land and allow a change in land use only in public interest.
- ix. Each household is entitled to one residential site.
- x. Subject to availability of unallocated land, each household is entitled to a portion of arable land.
- xi. An allotment once given remains in the possession of the family and their dependents in accordance with the laws of success, or/ and inheritance, in perpetuity.
- xii. All community members shall have equal access to grazing land unless the rules of the community concerned state otherwise.
- xiii. A person allocated a site may not transfer or sub-let or otherwise dispose his/her allocation without prior written consent of the Traditional Council of the area. The Traditional Council shall not refuse such consent unreasonably.
- xiv. Traditional Council shall make sure that the procedures for allocation, acquisition and termination of land rights are made known to the community.

The Ingonyama Trust Board usually requests municipalities to provide their comments/inputs on lease agreements. However, such requests are mainly for low impact residential development and in most cases some of them already exist and the application are usually submitted for formality purposes.

It happens that, some of the lease applications are not supported by the Municipality due to a number of reasons such as wetland, floodlines, topography, soil conditions etc. but the lease application may still be formalised without considering municipality's input.

4.3 SETTLEMENT DENSITIES AND PATTERNS

Settlement densities are highest in the formal urban areas, i.e. Empangeni, Richards Bay, eSikhaleni, Ngwelezane, eNseleni, Vulindlela and Felixton. Historically, the areas directly adjacent to the above formal urban areas have also been experiencing increasing settlement densification, i.e. the conventional peri-urban areas.

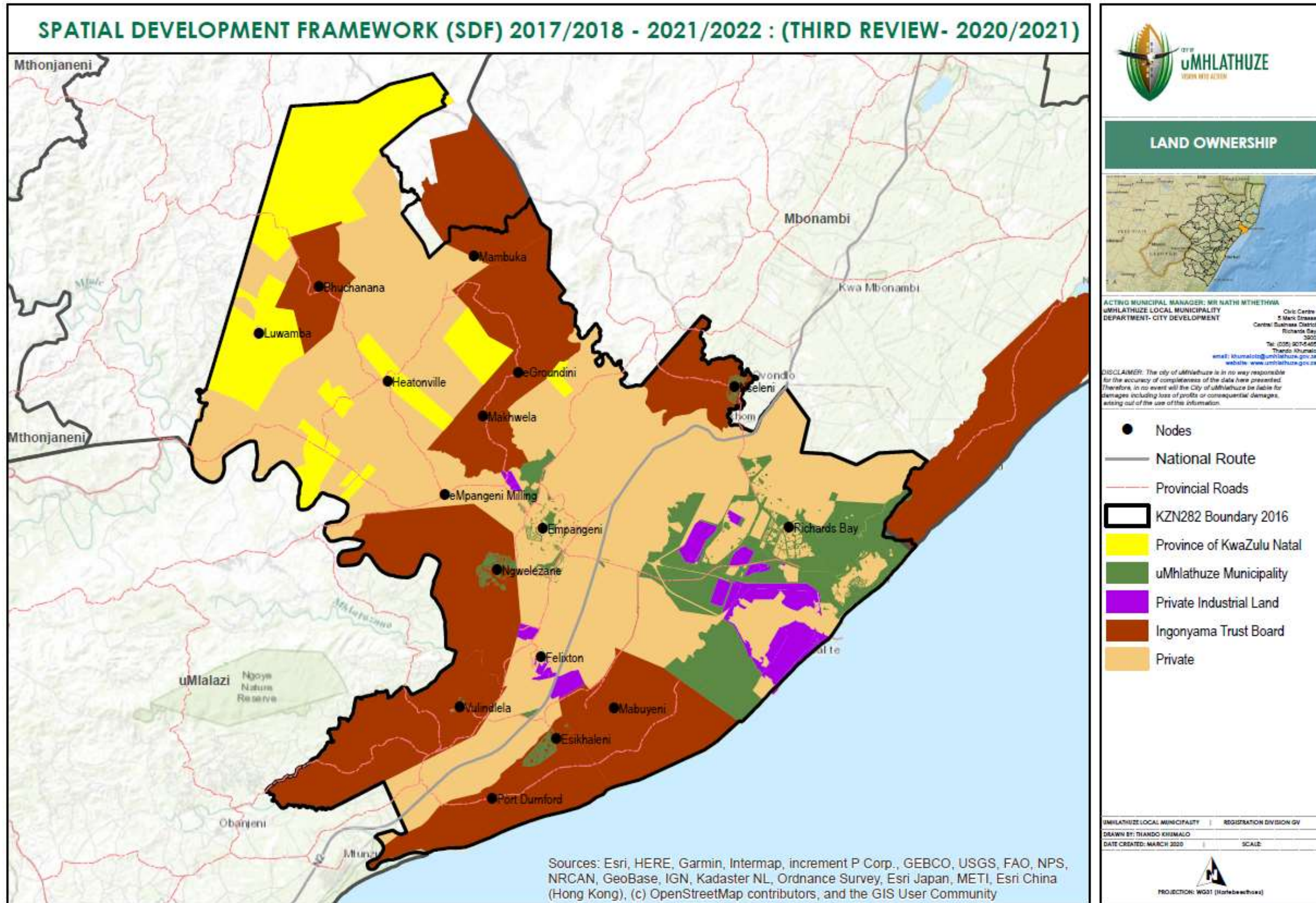
However, this trend has changed in the Traditional Council areas of the municipal area. Areas of denser settlement in the rural (Traditional Council) areas have developed at further distances from the formal urban areas as can be seen from the map inset.

In terms of the uMhlathuze LUS, areas of increasing settlement densification (in the Traditional Council areas) are referred to as “Rapid Urbanization Management Zones”. The LUS document (currently under review) notes the statement of intent to be as follow:

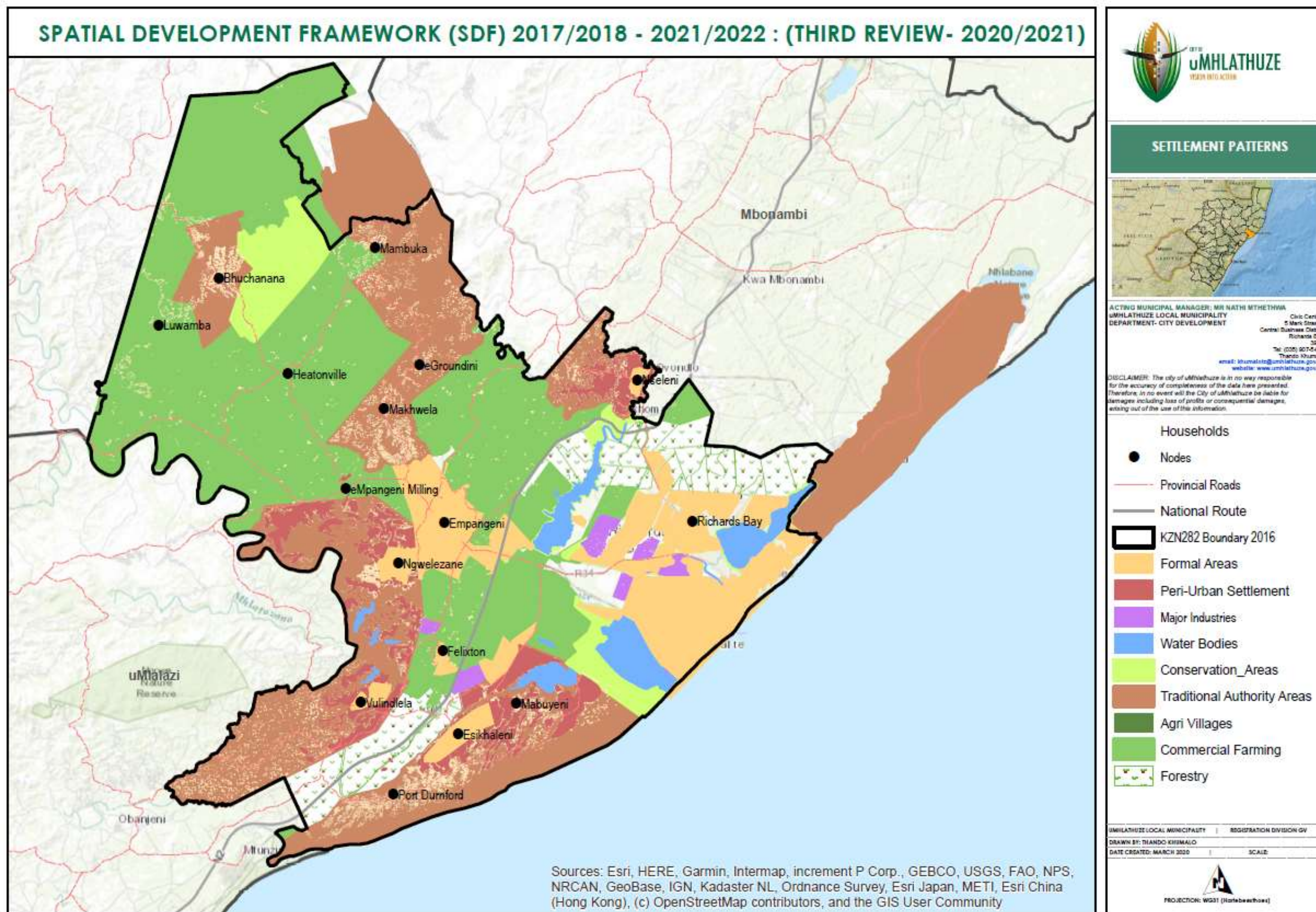
Rapid Urbanization Management Zone: Zones in the Traditional Authority Area that demarcate areas that have been informally settled adjacent to or near to formal urban areas, and may require interventions to address environmental impacts, upgrade services, and provide formal housing.

This settlement is seemingly happening on an ad hoc basis given land allocation in the rural areas without pre-planning, i.e. settlement planning. It is imperative to obtain the buy-in from the Ingonyama Trust Board to ensure settlement planning is undertaken in the rural areas to, amongst others, ensure more sustainable service provision the most efficient use of scarce productive agricultural lands.

Map 2: Land Ownership



Map 3: Settlement Patterns



4.3.1 Nodes: Local Context

The City of uMhlathuze has identified various nodes within its area of jurisdiction. These nodes were identified by their spatial characteristics, primary land use characteristics, roles as well as the functions of the node to the Municipality and the larger region.

The identified nodes are classified as Primary, Secondary, Tertiary, Opportunity and Rural nodes. Each identified node contains a number of opportunities for development and constraints to development.

4.3.2 Analysis of the uMhlathuze Municipal Nodal Areas

A more detailed analysis of the municipal nodes in uMhlathuze is provided herewith.

Empangeni Node: Empangeni is located approximately 160 kilometres north of Durban.

Table 12: Analysis of Empangeni Node

Role in the City	<ul style="list-style-type: none"> It is regarded as the major service and retail centre of uMhlathuze Municipality. The CBD commercial floor space presently exceeds 7200 sq. metres. Centres of employment, industrial, residential, offices and commercial activity are provided.
Role in the Region	<ul style="list-style-type: none"> It functions as a major gateway to the world economy through the nearby Richards Bay Harbour. It plays a dominant role in KZN, especially within the commercial, industrial and agricultural support sectors. It plays a major role in the regional economy as a service centre (commercial, business, transportation, administrative and office core etc.)
Movement System	<ul style="list-style-type: none"> N2, P2-4, R102, P230, MR166, P425 John Ross Highway and MR496 are major access and linkage systems traversing the Empangeni Node. P166, Ngwelezane highway, Ngwelezane and Turner Road provide access and linkage within and between the other Municipal nodes.
Current Urban Form & Land Uses	<p>Social Infrastructure: Public & private administration offices, recreation, medical facilities, residential, public transport facilities, educational facilities, social/welfare facilities, SAPS, churches, post office, library, cemeteries, entertainment, magistrate court, tourism and petrol filling stations .</p> <p>Commerce & Industry: manufacturing, hotel, restaurants, informal trading, retail, finance & insurance, banking facilities, building supplies, furniture, motor showrooms, wholesalers</p> <p>Transportation: Rail and Road.</p> <p>Rail: Linked to the National System</p> <p>Road: Highways- Public (Buses, minibuses, vans & metred taxis) & Private transportation.</p> <p>Residential: Mixed used development (low to high density).</p>
Service Levels	<p>Physical Infrastructure: Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as industrial areas.</p>
Open Space/Environment	<p>Open Space and Conservation: Public parks, private open spaces and conservation areas.</p>

Richards Bay Node: Richards Bay is located approximately 180 kilometres north of Durban.

Table 13: Analysis of Richards Bay Node

Role in the City	<ul style="list-style-type: none"> Prominent developing industrial centre of in South Africa. Centres of employment, industrial, residential, mining, offices, eco-tourism, nature reserve and commercial activity.
Role in the Region	<ul style="list-style-type: none"> It is well positioned to full advantage of the export of manufactured goods and raw materials & minerals to Africa and the rest of the World. It functions as a major link to the world economy through the Richards Bay Harbour. It is regarded as the eco-tourism and nature reserve gateway. It plays a dominant role in KZN, especially within the commercial and Industrial Sector. It plays a major role in the regional economy as a service centre (Industrial, retail, commercial, business, transportation, administrative and office core etc.)
Movement System	<ul style="list-style-type: none"> N2, John Ross Highway, P231 and North Central Arterial are major access and linkage systems traversing the Richards Bay Node. West Central Arterial and East Central Arterial provide access and linkage within and between the other Municipal nodes.
Current Urban Form & Land Uses	<p>Social Infrastructure: Public & private administration offices, recreation, medical facilities, residential, community halls, public transport facilities, educational facilities, social/welfare facilities, SAPS, tourism, churches, cemeteries, magistrate court and petrol filling stations.</p> <p>Commerce & Industry: Harbour, manufacturing, hotel, restaurants, informal trading, retail, finance & insurance, banking facilities, building supplies, furniture, motor showroom and, wholesalers.</p> <p>Transportation: Rail, Sea, Air and Road.</p> <p>Road: Highways- Public (Buses, minibuses, vans & metred taxis) & Private transportation.</p> <p>Rail: Linked to the National System</p> <p>SEA: Linked to the World</p> <p>AIR: Linked to the National System</p> <p>Residential: Mixed used development (low-high density).</p>
Service Levels	<p>Physical Infrastructure: Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as industrial areas.</p>
Open Space/Environment	<p>Open Space and Conservation: Urban recreation (Public parks, private open spaces and conservation areas).</p>

Esikhaleni Node: Esikhaleni is classified as a Secondary Node based on the type of facilities and services it currently offers to the local people and the rest of uMhlathuze inhabitants. Although the node still functions primarily as a dormitory town it has the potential to develop into a primary node if the local economy becomes more sustainable, specifically in respect of growth and employment opportunities. It is located approximately 10 km from Vulindlela/Dlangenzwa and accessible via the N2. Esikhaleni is located approximately 15 km from Empangeni and 20 km from Richards Bay primary nodes.

Table 14: Analysis of Esikhaleni Node

Role in the City	<ul style="list-style-type: none"> • It offers a combination of mixed used development such as commercial, educational, mixed density and mixed income urban living. • Opportunity to formalize better employment opportunities • It is surrounded by dense peri-urban development
Role in the Region	<ul style="list-style-type: none"> • It plays a dominant role in Region especially within the commercial, administration, transportation and social services. • Opportunity to formalize better employment opportunities • Opportunity to upgrade to the status of Primary Settlement due to population density, increasing commercial activity as well as proximity to future Port Development
Movement System	<ul style="list-style-type: none"> • N2 and P535 are major access and linkage systems traversing the Esikhaleni Node. • P106, Mdlebe Nstthona, Mdlebe Mpuma and Mthombothi Roads provide access and linkage within and between the other Municipal nodes.
Current Urban Form & Land Uses	<p>Social Infrastructure: Public & private administration offices, recreation, medical facilities, residential, public transport facilities, educational facilities, social/welfare facilities, SAPS, churches, post office, library, cemeteries, entertainment, community halls, magistrate court and petrol filling station.</p> <p>Commerce & Industry: B&B's, restaurants, informal trading, retail, finance & insurance, building supplies, banking facilities, furniture, butcheries, wholesalers, Supermarkets, bottle stores and car washers</p> <p>Transportation: Road.</p> <p>Road: Highways & Provincial- Public (Buses, minibuses, vans & metred taxis) & Private transportation.</p> <p>Residential: Mixed used development (low-medium density).</p>
Service Levels	<p>Physical Infrastructure: Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as commercial areas.</p>
Open Space/Environment	<p>Open Space and Conservation: Urban recreation (Public parks, private open spaces and conservation areas).</p>

Ngwelezane Node: Ngwelezane is located approximately 10 km from Empangeni and 24 km from Richards Bay primary nodes.

Table 15: Analysis of Ngwelezane Node

Role in the City	<ul style="list-style-type: none"> It offers a combination of mixed used development such as commercial, educational, mixed density and mixed income (urban and urban peri-urban living), small scale commercial facilities (supermarkets & butchery). It is surrounded by dense peri-urban development
Role in the Region	<ul style="list-style-type: none"> It plays a dominant role in Region especially within administration, transportation and social services.
Movement System	R102, P230, MR166, and P425, Ngwelezane Highway and Ngwelezane Road are major access and linkage systems to the Ngwelezane Node and between other Municipal nodes.
Current Urban Form & Land Uses	<p>Social Infrastructure: Public & private administration offices, recreation, medical facilities, residential, public transport facilities, educational facilities, social/welfare facilities, SAPS, churches, library, entertainment, magistrate court, community halls and petrol filling station.</p> <p>Commerce & Industry: B&B's, restaurants, informal trading, retail, finance & insurance, building supplies, butcheries, bottle stores, Supermarkets and car washers.</p> <p>Transportation: Road.</p> <p>Road: Provincial- Public (Buses, minibuses, vans & metred taxis) & Private transportation.</p> <p>Residential: Mixed used development (low-medium density).</p>
Service Levels	<p>Physical Infrastructure: Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as commercial areas.</p>
Open Space/Environment	<p>Open Space and Conservation: Urban recreation (Public parks, private open spaces and conservation areas).</p>

Felixton Node: Felixton is located approximately 15 km from Empangeni and 30 km from the Richards Bay node, 20 km from Esikhaleni and 10 km from the Vulindlela/Dlangezwa node.

Table 16: Analysis of Felixton Node

Role in the City	<ul style="list-style-type: none"> It offers a combination of mixed used development such as manufacturing industry, educational, medium-high income residential (urban living)
Role in the Region	<ul style="list-style-type: none"> It plays a dominant role in Region especially within manufacturing and educational facilities.
Movement System	N2, P2-4 and P343 are major access and linkage systems to the Felixton Node and between other Municipal nodes.
Current Urban Form & Land Uses	<p>Social Infrastructure: Private administration offices, recreation, residential, public transport facilities, educational facilities, SAPS, churches, library, entertainment.</p> <p>Commerce & Industry: Manufacturing, B&B's, informal trading and pubs</p> <p>Transportation: Road.</p> <p>Road: Provincial- Public (Buses, minibuses & metred taxis) & Private transportation.</p> <p>Residential: Mixed used development (medium-density).</p>

Service Levels	Physical Infrastructure: Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as commercial/industrial areas.
Open Space/Environment	Open Space and Conservation: Urban recreation (Public parks, private open spaces and conservation areas).

Vulindlela/Dlangezwa Node: Located approximately 10 km from Esikhaleni and 20 km from Empangeni.

Table 17: Analysis of Vulindlela/Dlangwezwa Node

Role in the City	<ul style="list-style-type: none"> It offers a combination of mixed used development such as educational, low –medium income residential (urban & peri-urban living), health facilities, small scale commercial facilities (supermarkets & butchery)
Role in the Region	<ul style="list-style-type: none"> It plays a dominant role in Region and provides a tertiary education facility to the region, i.e. University of Zululand.
Movement System	N2, P2-4 and P535 are major access and linkage systems to the Vulindlela/Dlangezwa Node and between other Municipal nodes.
Current Urban Form & Land Uses	<p>Social Infrastructure: recreation, residential, public transport facilities, educational facilities, SAPS, churches, library, entertainment, community hall.</p> <p>Commerce & Industry: B&B's, Supermarkets, bottle stores, informal trading and car washers</p> <p>Transportation: Road.</p> <p>Road: Provincial- Public (Buses, minibuses & metred taxis) & Private transportation.</p> <p>Residential: Mixed used development (low-medium density).</p>
Service Levels	Physical Infrastructure: Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas as well as commercial areas.
Open Space/Environment	Open Space and Conservation: Recreation (Public parks and conservation areas).

Nseleni Node: Located approximately 15 km from Richards Bay and 15 km from Empangeni.

Table 18: Analysis of Nseleni Node

Role in the City	<ul style="list-style-type: none"> It offers a combination of mixed used development such as educational, low income residential (urban & peri-urban living), health facilities, small scale commercial facilities (supermarkets, bottle stores butchery)
Role in the Region	<ul style="list-style-type: none"> It plays a dominant role in Region especially within health facility (24 hours clinic).
Movement System	N2, P517, P494 and P495 are major access and linkage systems to the Nseleni Node and between other Municipal nodes.
Current Urban Form & Land Uses	<p>Social Infrastructure: recreation, residential, public transport facilities, educational facilities, SAPS, churches, library, entertainment, administration offices, limited health services community hall.</p> <p>Commerce & Industry: Supermarkets, bottle stores, informal trading and car washers</p> <p>Transportation: Road.</p> <p>Road: Provincial- Public (Buses, minibuses, vans & metred taxis) & Private transportation.</p> <p>Residential: Mixed used development (low-medium density).</p>

Service Levels	Physical Infrastructure: Water supply, waterborne system, electrification, solid waste disposal, storm-water management and telecommunication services. Existing capacity will be upgraded to accommodate increased densities and expansion of urban residential areas (de-densification) as well as commercial areas.
Open Space/Environment	Open Space and Conservation: Recreation (Open spaces & conservation areas).

Buchanana Node is located in the former Ntambanan Municipal area.

Table 19: Analysis of Buchanana Node

Role in the City	It offers a combination of mixed used development such as educational, low income residential (deep rural living), health facilities, small scale commercial facilities (supermarkets, bottle stores butchery), Municipal Offices (former Ntambanana Municipal Office).
Role in the Region	It plays a role in Region especially within small – scale subsistence agricultural activities (consist of livestock and gardening) and potential tourism (Thula Thula Game Reserve).
Movement System	N2, R34, P253, P700, D312, D2050 and L1424 are major access and linkage systems to the Buchanana Node and between other Municipal nodes.
Current Urban Form & Land Uses	Social Infrastructure: recreation, residential (homestead), public transport facilities, educational facilities, SAPS, churches, Municipal administration offices, limited health services, community hall. Commerce & Industry: Stores, bottle stores, informal trading Transportation: Road. Road: Provincial- Public (Buses, minibuses, vans & metred taxis) & Private transportation. Residential: Mixed used development (low-density Residential – traditional settlement structures - homestead).
Service Levels	Physical Infrastructure: Water supply – community stand pipes, on-site individual homestead Pit latrines, electrification (Eskom), solid waste disposal (skips). Existing capacity will be upgraded to accommodate increased densities and expansion of rural residential areas (de-densification) as well as commercial areas.
Open Space/Environment	Open Space and Conservation: Recreation (Open spaces & conservation areas).

Rural/Neighbouring Nodes: The main objective of these identified nodes is to provide both commercial, social facilities and infrastructure closer to the people. Specific planning and development interventions are required to identify community services that are to be encouraged at these nodes. An analysis of some of these nodes is provided herewith. Additional assessments and planning on newly identified rural nodes is ongoing.

Bhejane Node: Bhejane is located in the outskirts of Nseleni Township (Tertiary Node), approximately 30km from Empangeni and 10 km from Richards Bay primary nodes.

Table 20: Analysis of Bhejane Node

Role in the City	<ul style="list-style-type: none"> It currently offers a combination of mixed used development such as educational, low income residential (deep rural living), limited health facilities, limited public transport services, agricultural activities, small scale commercial facilities (supermarkets, bottle stores butchery)
Role in the Region	<ul style="list-style-type: none"> It plays a dominant role in Region especially within agricultural activities.
Movement System	TBD after mapping/more detailed planning.
Current Rural Form & Land Uses	<p>Social Infrastructure: recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls.</p> <p>Commerce & Industry: Supermarkets, bottle stores, informal trading and car washers</p> <p>Transportation: Gravel Roads.</p> <p>Road: Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation.</p> <p>Residential: Rural (low-high density).</p>
Service Levels	<p>Physical Infrastructure: Water supply, Pit latrines, electrification (Eskom), and telecommunication services. Existing capacity will be upgraded to meet the current demand and future increased densities and expansion of rural residential areas (de-densification) as well as commercial areas.</p>
Open Space/Environment	<p>Open Space and Conservation: Recreation (Open spaces & conservation areas).</p>

Mkhwanazi (North & South Node):

Mkhwanazi North Node is located in the outskirts of Vulindlela Township (secondary node) approximately 20 km from Esikhaleni secondary node, 25 km from Felixton secondary node, 30 km from Empangeni and 38 km from Richards Bay Primary Nodes.

Mkhwanazi South Node is located in the outskirts of Esikhaleni Township (secondary node) approximately 20 km from Vulindlela, 30 km from Felixton secondary nodes; 45 km from Empangeni and 35 km from Richards Bay Primary Nodes.

Table 21: Analysis of Mkhwanazi North & South Node

Role in the City	<ul style="list-style-type: none"> It currently offers a combination of mixed used development such as educational, low income residential (deep rural living), limited health facilities, agricultural activities, limited public transport services, small scale commercial facilities (supermarkets, bottle stores butchery). Opportunity for better employment through RBM Zulti South mining
Role in the Region	<ul style="list-style-type: none"> It plays a dominant role in Region especially within agricultural activities. Mkhwanazi South has tourism potential (Port Dunford). Opportunity for better employment through RBM Zulti South mining.
Movement System	TBD after mapping/more detailed planning.
Current Rural Form & Land Uses	<p>Social Infrastructure: recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls.</p> <p>Commerce & Industry: Supermarkets, bottle stores, informal trading and car washers.</p> <p>Transportation: Gravel Roads.</p> <p>Road: Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation.</p> <p>Residential: Rural (low-high density).</p>
Service Levels	<p>Physical Infrastructure: Water supply, Pit latrines, electrification (Eskom), and telecommunication services. Existing capacity will be upgraded to meet the current demand and future increased densities and expansion of rural</p>

	residential areas (de-densification) as well as commercial areas.
Open Space/Environment	Open Space and Conservation: Recreation (Open spaces & conservation areas).

Madlebe Node: Madlebe is located in the outskirts of Ngwelezane Township (Secondary Node), approximately 20km from Empangeni and 40 km from Richards Bay primary nodes.

Table 22: Analysis of Madlebe Node

Role in the City	<ul style="list-style-type: none"> It currently offers a combination of mixed used development such as educational, low income residential (deep rural living), limited health facilities, agricultural activities, limited public transport services, small scale commercial facilities (supermarkets, bottle stores butchery).
Role in the Region	<ul style="list-style-type: none"> It plays a dominant role in Region especially within agricultural activities.
Movement System	TBD after mapping/more detailed planning.
Current Rural Form & Land Uses	<p>Social Infrastructure: recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls.</p> <p>Commerce & Industry: Supermarkets, bottle stores, informal trading and car washers</p> <p>Transportation: Gravel Roads.</p> <p>Road: Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation.</p> <p>Residential: Rural (low-high density).</p>
Service Levels	Physical Infrastructure: Water supply, Pit latrines, electrification (Eskom), and telecommunication services. Existing capacity will be upgraded to meet the current demand and future increased densities and expansion of rural residential areas (de-densification) as well as commercial areas.
Open Space/Environment	Open Space and Conservation: Recreation (Open spaces & conservation areas).

Dube Node: Dube is located in the outskirts of Esikhaleni Township, approximately 30 km from Empangeni, 20 km from Richards Bay primary nodes; 15 km from Vulindlela/Dlangezwa and 25 km from Felixton secondary nodes.

Table 23: Analysis Dube Node

Role in the City	<ul style="list-style-type: none"> It currently offers a combination of mixed used development such as educational, low income residential (deep rural living), limited health facilities, agricultural activities, limited public transport services, small scale commercial facilities (supermarkets, bottle stores butchery). Opportunity for better employment through RBM Zulti South mining.
Role in the Region	<ul style="list-style-type: none"> Opportunity for better employment through RBM Zulti South mining. It plays a dominant role in Region especially within agricultural activities.
Movement System	TBD after mapping/more detailed planning.
Current Rural Form & Land Uses	<p>Social Infrastructure: recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls.</p> <p>Commerce & Industry: Supermarkets, bottle stores, informal trading and car washers</p> <p>Transportation: Gravel Roads.</p> <p>Road: Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation,</p> <p>Residential: Rural (low-high density).</p>
Service Levels	Physical Infrastructure: Water supply, Pit latrines, electrification (Eskom), and telecommunication services. Existing capacity will be upgraded to meet the

	current demand and future increased densities and expansion of rural residential areas (de-densification) as well as commercial areas.
Open Space/Environment	Open Space and Conservation: Recreation (Open spaces & conservation areas).

4.3.3 Corridors: Local Context

Transport networks (corridors) are to be promoted as they are the 'veins' of economic growth and a catalyst in economic development. Areas that are highly accessible have better opportunities for economic growth by increasing their market threshold. Good transport systems ensure reliable transport of goods - increasing investor confidence. Diverse goods and services located along the transport network allows for the generation of income by taking advantage of passing traffic.

4.3.4 Primary Corridors

N2, John Ross Highway, P230 and MR496 are classified as **Primary Corridors** based on their strategic connectivity i.e. economic growth and development.

- N2: Links UMhlathuze with Durban, Mtubatuba, Hluhluwe, Mkuze, Pongola and Mpumalanga Province.
- John Ross Highway, P230 and MR496: Links UMhlathuze with Eshowe, Melmoth, Ulundi and Buchanana (in former Ntambanana).

4.3.5 Secondary Corridors

- SP231, MR166, P425, P2-4, P2-5, P535, P106, Part of John Ross Highway (from Mzingazi Canal to Meerensee Suburb sections), North Central Arterial and Anglers Rod are classified as Secondary Corridors as they provide access and linkages between the nodes the surroundings.
- P231/ North Central Arterial/Part of John Ross Highway: From N2 and John Ross Highway it links Richards Bay with Nseleni, IDZ and Port of Richards Bay other areas around Richards Bay.
- P425: Links Empangeni, Nseleni and surrounding traditional authority areas.
- P2-4 & P2-5: Links Empangeni, Felixton, Esikhaleni and Vulindlela.
- P535 & P106: Links Empangeni, Richards Bay, Vulindlela and Esikhaleni.
- Anglers Rod: Links Richards Bay and its surrounding with Meerensee Suburb, beach front and harbour.

4.3.6 Tertiary Corridors

- The P517, P343, Part of P2-4, Felixton High Street, East Central Arterial, West Central Arterial, Bayview Boulevard, Davidson lane, Krewelkring, Nkoninga and Fish Eagle Flight are classified as Tertiary Corridors as they provide access to a specify point of interest (POI).
- P517: Provides access to access to Nseleni and its surroundings.
- P343/Felixton High Street: Provides access to Felixton (Residential, Educational, Mond-industry/manufacturing).
- Part of P2-4: Provides access to Vulindlela/Dlangezwa and the University of Zululand.
- Nkoninga/Fish Eagle Flight: Provides access to the Richards Bay Airport and Birdwood residential suburb.
- Davidson/Krewelkring: Provides access to Alkantstrand beach and Newark beach.
- Bayview Boulevard: Provides access to Alkantstrand beach, Newark beach, recreational & Sport facilities.
- West Central Arterial: Provides access to the Port of Richards Bay and the Richards Bay CBD.
- East Central Arterial: Provides access to Richards Bay CBD.

From the following maps it can be seen that the two primary nodes on the municipal area are Richards Bay and Empangeni. The towns of Esikhaleni, Ngwelezane, Vulindlela and Felixton are secondary nodes while Nseleni and Buchanana have been classified as a tertiary nodes. These descriptions of the nodal areas have been based on the functionality of the respective nodes. A generally well defined corridor hierarchy exists in the municipal area. In most instances, nodal areas have access via at least two major corridors but when the functionality of one of the main access corridors is hampered access is affected due the overall increase in road transport volumes.

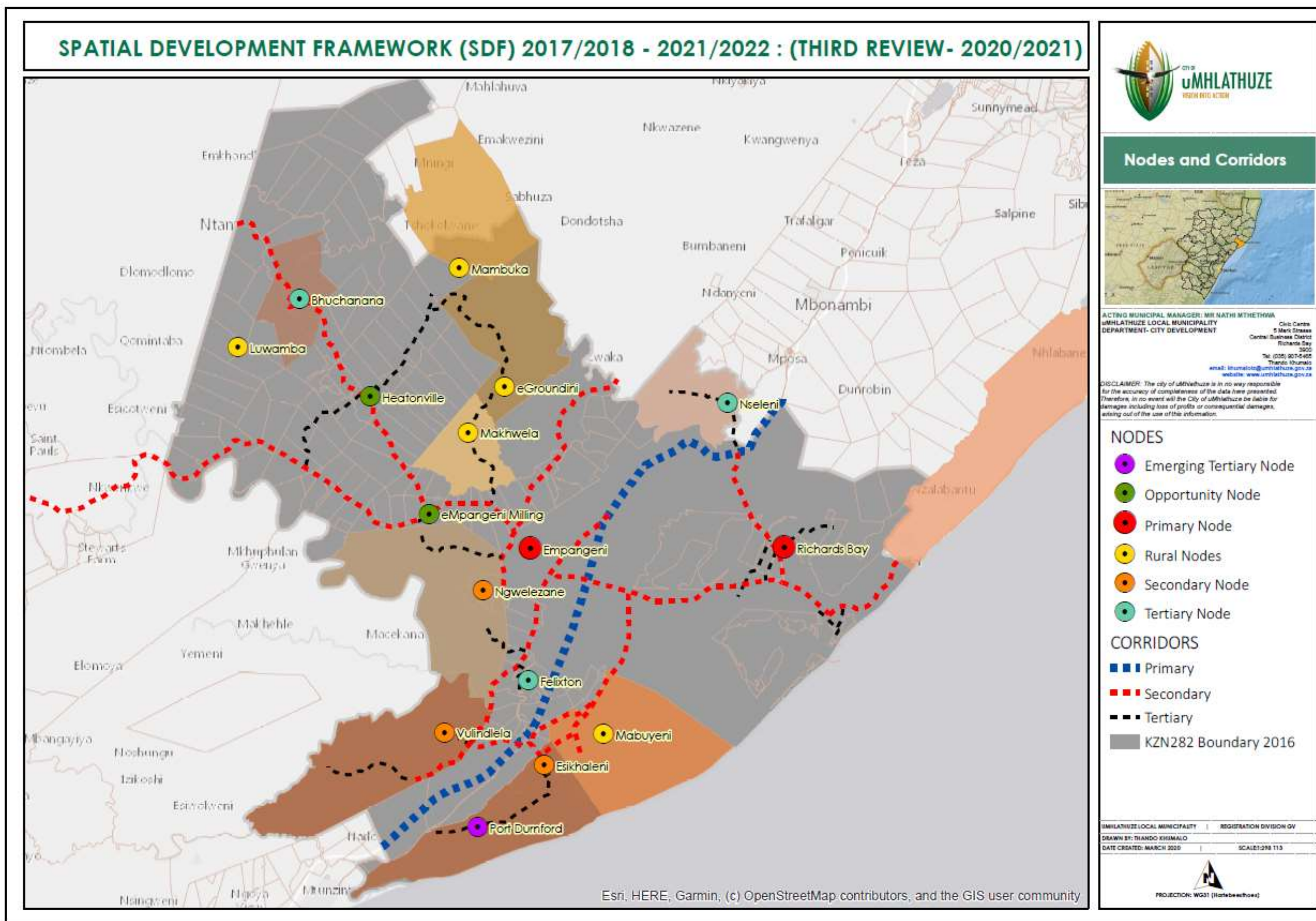
With regard to the locality of rural settlements (nodes), these rural settlements are accessible locations for community services and infrastructure. Specific planning and development interventions are required (and underway) to identify community services that are to be encouraged at these nodes.

Table 24: Summary of Interventions at Nodes

Typical Interventions: Nodes	
Primary Node	Primary Nodes are centres of economic activity and provide employment, as well as range of social facilities to an extended hinterland. Continued economic growth to be ensured by ensuring maintenance, and upgrade, of critical infrastructure and, where required, urban regeneration studies. Primary nodes are inherently accessible locations and appropriate measures are needed to ensure convenient access to these areas.
Secondary Node	Important regional role, especially with regard to administration, transportation and social services. Generally offers a combination of mixed used development, i.e. educational and medium-lower income residential (urban & peri-urban living), health facilities, small-scale commercial facilities. Important to manage land use and development pressure to ensure sustainability and attraction of secondary nodes. Process to address informal settlement along periphery, i.e. NUSP, underway with support from National Human Settlements. Continual efforts to upgrade service provision to maintain attractiveness of nodes for more investment for future investment thereby ensuring the local economy becomes more sustainable.
Tertiary Node	It offers a combination of mixed used development such as educational, low income residential (urban & peri-urban living), health facilities, and small scale commercial facilities.
Rural Node	Rural settlements are accessible locations for community services and infrastructure. Specific planning and development interventions are required to identify community services that are to be encouraged at these nodes. To this end, Municipality has embarked on process of preparing Nodal Framework Plans.

Corridors provide access/connectivity to the various nodes or specific points of interest listed above. To this end, corridors as transport routes have to be maintained, and, interventions are needed to make them accessible as well. With the latter it is implied that routes, such as pedestrian routes, should be created and facilities provided, i.e. gathering points (public transport points) under cover. Importantly, the levels of interventions for corridors are informed by the function and status of the corridor.

Map 4: Nodes and Corridors

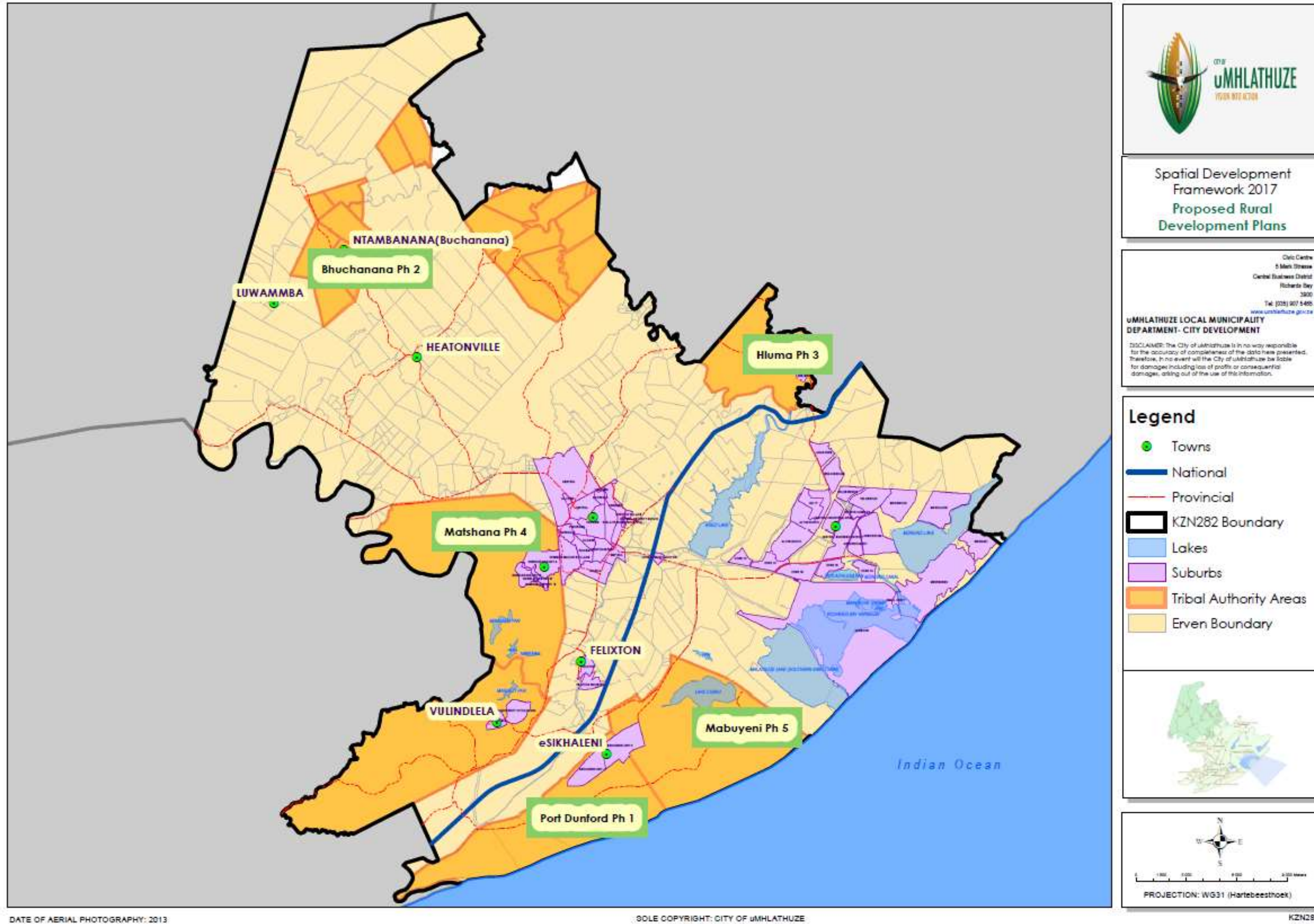


The Municipality is in the process of preparing Rural Development Framework Plans for 5 different rural nodes. This Rural Development Framework Plan project will be implemented in 5 different phases within 5 different financial years. The Table below illustrates the Project Implementation Phases and financial years:

Table 25: Rural Settlement Plan Phases

No.	Project Name	Phase	Financial Year
1	Port Dunford Rural Settlement Plan-Mkhwanazi Traditional Authority - Completed	1	2016/2017
2	Buchanana Rural Settlement Plan-Obuka Traditional Authority - Completed	2	2017/2018
3	Hluma Rural Settlement Plan-KwaBhejane Traditional Authority - Underway	3	2019/2020
4	Matshana Rural Settlement Plan-Madlebe Traditional Authority	4	2020/2021
5	Mabuyeni Rural Settlement Plan-Dube Traditional Authority	5	2021/2022

Map 5: Proposed Rural Settlements Plans



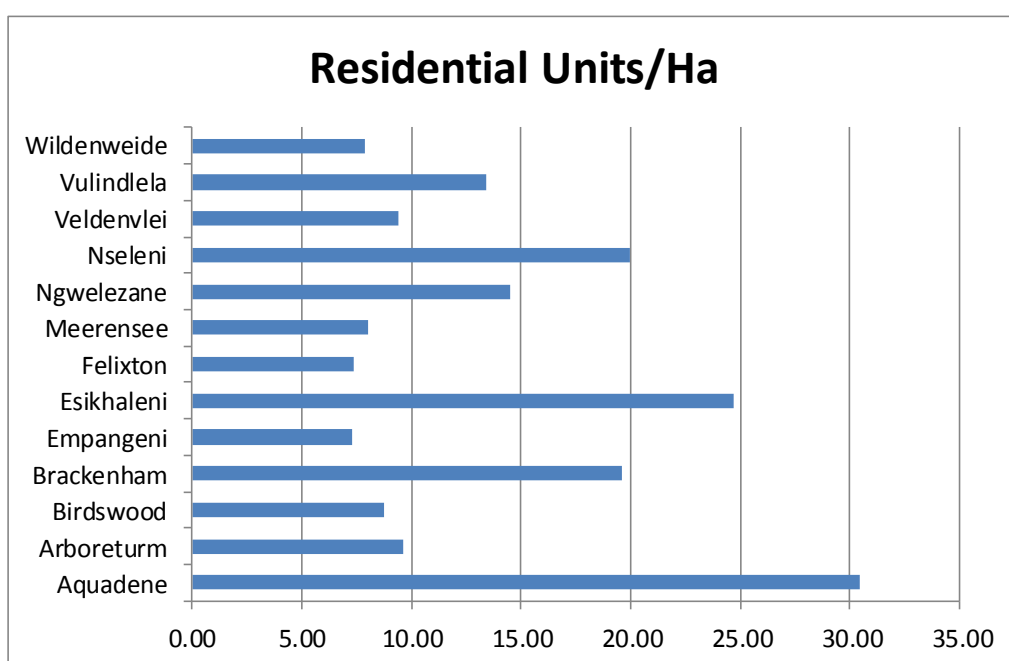
4.4 URBAN LAND USE ANALYSIS

The formal urban areas of the municipality have been broken down into residential units or suburbs and an analysis of land uses has been undertaken for each of those.

In addition, a composite land use analysis has also been undertaken of the most prominent land uses in the whole municipal area, i.e. inclusive of the commercial and industrial related areas. The rationale for this analysis is to develop a benchmark for each of the main suburban areas relating to land use. The lack of commercial land uses in former R293 areas as opposed to other suburbs is an example of this.

As a first step, the comparative residential densities in units per hectare for the respective urban residential areas in the municipal area have been determined. The following is a graphic presentation of the outcome:

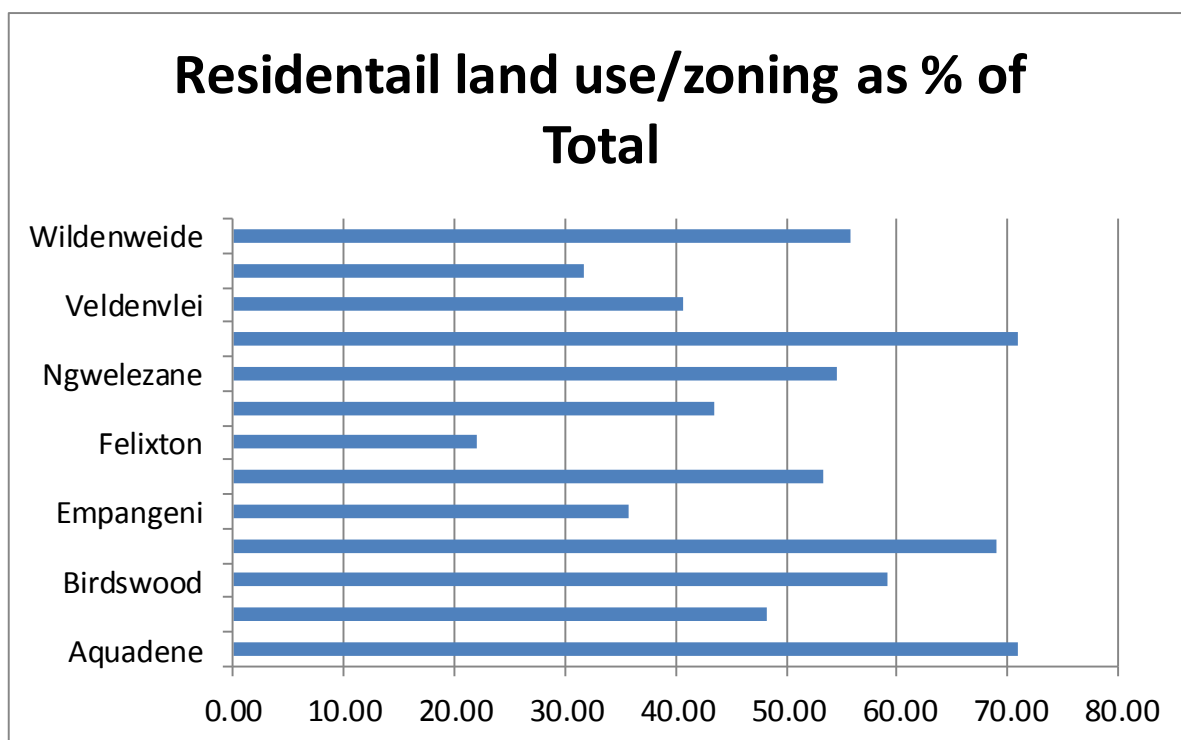
Figure 10: Comparative Urban Residential Densities



From the above table it is clear that Aquadene, Brackenham, Esikhaleni and Nseleni have the highest residential densities in the municipal area.

The following figure indicates the comparative percentage (%) of total urban area that is used/zoned for residential purposes as an indication of the dormitory nature of the area.

Table 26: Residential Land Use Types



A further analysis of land use zonings/uses has been undertaken for the formal urban areas of the Municipality as per the following. The following information will guide future land use planning scenarios in the Municipality:

- Currently about 7800 Ha of formal urban land is zoned.
- The highest residential densities of single residential units are observed in Aquadene, Esikhaleni, Brackenham and Nseleni.
- The areas that have the highest percentage of land zoned for general residential purposes are Arboretum, Brackenham, Empangeni, Esikhaleni, Meerensee, Veldenvlei and Wildenweide.
- In the municipal area as a whole, special residential zoned land accounts for about 20% and Industrial for 21% of the total. Other zonings include land zoned for conservation, open spaces, municipal purposes and community type facilities or services. Commercial accounts for less than 2% of the zoned land.

4.5 SUMMARY OF KEY SPATIAL ISSUES

- i. uMhlathuze Municipality has an area of 123 325Ha.
- ii. 51% of the area is under the jurisdiction of the Ingonyama Trust Board.
- iii. Richards Bay and Empangeni are the most significant economic centres in the Local Municipality and in the District Municipality.
- iv. Esikhaleni has the potential to develop into a primary node if the local economy becomes more sustainable, specifically in respect of growth and employment opportunities.
- v. Aquadene, Brackenheim, Esikhaleni and Nseleni have the highest residential densities in the municipal area.
- vi. Existing bulk infrastructure capacities will have to be increased at all nodes to accommodate increased densities and expansion/development.
- vii. Vast peri-urban settlements have challenges and lack proper planning, limited basic services and is located in environmental high risk areas. The result is an undesirable impact on food security and prime grazing land. Insufficient land is available for future social and economic facilities due to random distribution of land - all resulting in the sustainability of settlements being compromised.
- viii. The area to the east of the Municipality is inundated with a system of wetlands and natural water features such as Lakes Cubhu, Mzingazi, Nsezi and Nhlabane. Major rivers include the Mhlathuze and Nsezi.
- ix. The main access into the municipal area is via the N2 in a north south direction and in an east west direction the R34. Other significant roads in the area include the MR431 (that provides a northerly entry into Richards Bay from the N2) as well as the Old Main Road that straddles the N2 on its inland.
- x. Railway lines are prevalent in the municipal area but do not provide a passenger service, only a commercial/industrial service is provided.
- xi. The municipality has the benefit of about 45km of coastline of which about 80% is in its natural state.
- xii. Linked to its coastal locality is the Richards Bay deep-water port that has been instrumental in the spatial development of the area in the past and will definitely impact on the areas' future spatial development. There is one airport and a couple of landing strips in the municipal area.
- xiii. There are a number of land claims that, to date, have not been resolved in the municipal area. More details in respect of these is provided later in the report but at this stage, their existence and spatial impact is noted.

5. DEMOGRAPHIC AND SOCIO-ECONOMIC ANALYSIS

5.1 DEMOGRAPHIC INDICATORS

The population increase (as at 2016) in the King Cetshwayo District, broken down per municipality is indicated in the following table.

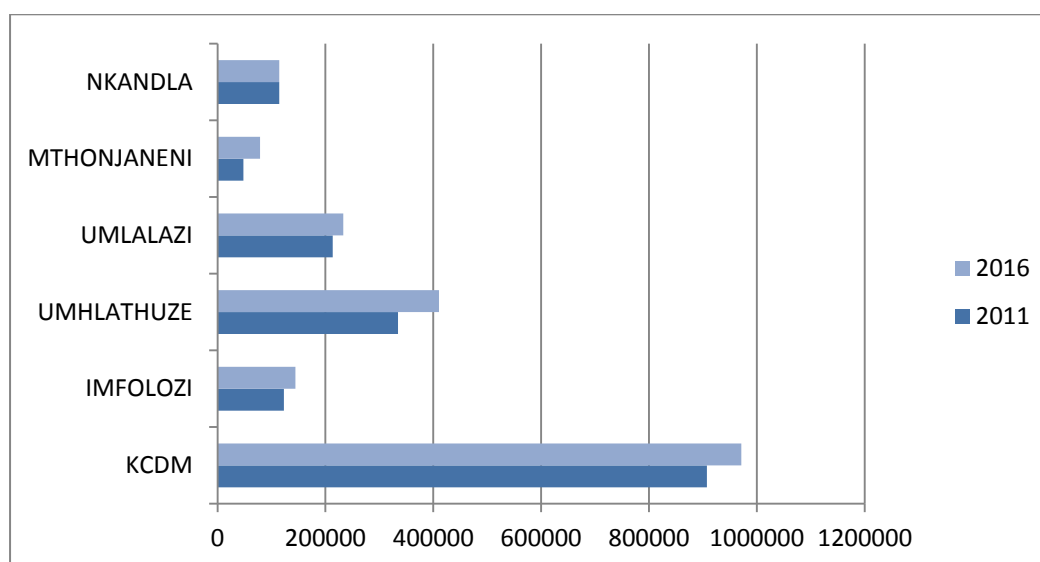
Table 27: Population Numbers in KCDM

	KCDM	IMFOLOZI	UMHLATHUZE	UMLALAZI	MTHONJANENI	NKANDLA
2011	907519	122889	334459	213601	47818	114416
2016	971135	144363	410465	233140	78883	114284
% Growth	7,01%	17,47%	22,73%	9,15%	64,97%	-0,12%

Source: Community Survey 2016

From the above it is noted that the uMhlathuze and Mthonjaneni Local Municipalities have experienced the largest population increase, mainly due to the dissemination and incorporation of the former Ntambanana Municipality into the two listed municipalities.

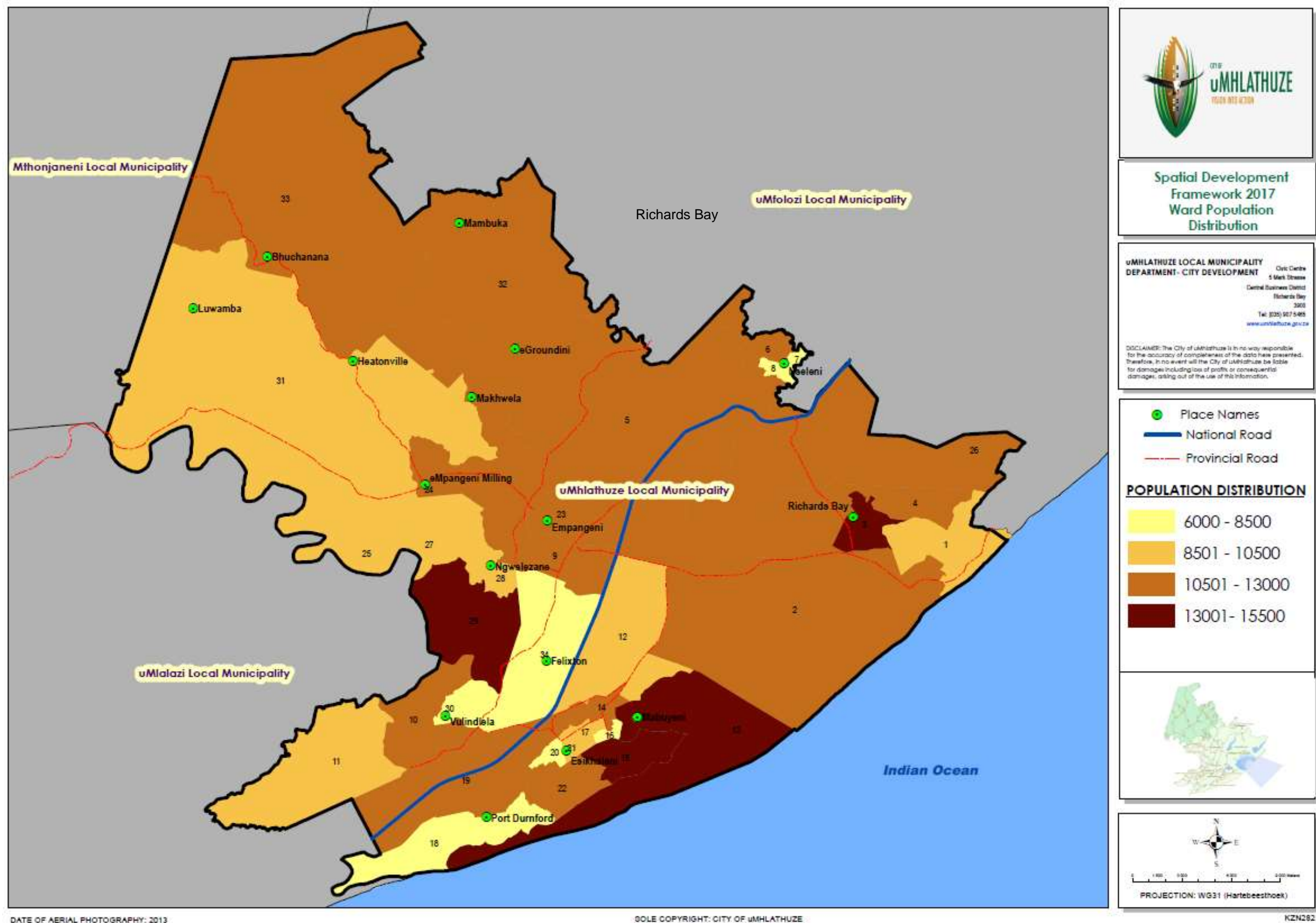
Figure 11: Population Numbers in KCDM



Source: Census 2011

The following map inset provides a visual representation of the population density distribution in the uMhlathuze Municipal area.

Map 6: Population Density



From the above inset the higher population densities in the formal urban, and surrounding areas, as well as Traditional Council areas can be observed. It is known that entrepreneurship development and sustainability efforts in former R293 towns have been hampered by a number of reasons including inequalities, level of education, and lack of adequate information. The uMhlathuze Municipality is actively engaging relevant role-players in the Township Economy to address these challenges.

In context of the above, it has to be borne in mind that a portion of the population increase is the result of an enlarged municipal area following the inclusion of 3 wards from the former Ntambanana post the 2016 Local Government Elections.

Population growth scenarios have been applied to the base figure from the 2016 Community Survey. Adequate data and research is not available at this time to apply an historic growth trend as the composition of the municipality, in terms of boundaries and wards, has changed post the Local Government Elections of 2016. The following base data has therefore been used:

- A baseline population in the uMhlathuze Municipality of 410 465 people in 2016 as per the Community Survey
- A calculated household size of 3.95 as derived from 2011 census data
- A total number of 103 915 households in the municipal area derived from the above

Apart from indicating population growth scenarios, an indication is also provided on the estimated land required to accommodate the increase in households in the municipal area. In this regard, the following base data (assumptions) has been applied:

- Household size of 3.95
- Residential land utilization of 15 units/hectare or 25 units/hectare

The increase in the population from 1996 to 2011 has been just below 2% per annum in the uMhlathuze Municipality as indicated in the following table:

Table 28: Population Growth Scenarios from 2016 to 2030

	2 016	2 017	2 018	2 019	2 020	2 021	2 022	2 023	2 024	2 025	2 026	2 027	2 028	2 029	2 030
1.5% Increase	410 465	416 622	422 871	429 214	435 653	442 187	448 820	455 552	462 386	469 322	476 361	483 507	490 759	498 121	505 593
Households	103 915	105 474	107 056	108 662	110 292	111 946	113 625	115 330	117 060	118 816	120 598	122 407	124 243	126 107	127 998
2% Increase	410 465	418 674	427 048	435 589	444 301	453 187	462 250	471 495	480 925	490 544	500 355	510 362	520 569	530 980	541 600
Households	103 915	105 993	108 113	110 276	112 481	114 731	117 025	119 366	121 753	124 188	126 672	129 205	131 790	134 425	137 114
3% Increase	410 465	422 779	435 462	448 526	461 982	475 841	490 117	504 820	519 965	535 564	551 631	568 180	585 225	602 782	620 865
Households	103 915	107 033	110 244	113 551	116 957	120 466	124 080	127 803	131 637	135 586	139 653	143 843	148 158	152 603	157 181
4% Increase	410 465	426 884	443 959	461 717	480 186	499 393	519 369	540 144	561 750	584 220	607 588	631 892	657 168	683 454	710 793
Households	103 915	108 072	112 395	116 890	121 566	126 429	131 486	136 745	142 215	147 904	153 820	159 973	166 372	173 026	179 947
5% Increase	410 465	430 988	452 538	475 165	498 923	523 869	550 062	577 565	606 444	636 766	668 604	702 034	737 136	773 993	812 693
Households	103 915	109 111	114 566	120 295	126 310	132 625	139 256	146 219	153 530	161 207	169 267	177 730	186 617	195 948	205 745

From the above, the following is highlighted using 2016 as the base year:

- At a steady population increase of 1,5% per annum, the municipal population will surpass 500 000 people by 2030.
- The municipality will reach a population of 500 000 before 2021 if a population growth rate of 5% takes place over the next few years.
- At such a 5% per annum population growth rate the number of households in the municipality will double by 2030.

Table 29: Corresponding Residential Land Requirements from 2016 to 2023

	2 011	2 016	Increase	2 017	Increase	2 018	Increase	2 019	Increase	2 020	Increase	2 021	Increase	2 022	Increase	2 023
1.5% Increase	334 459	410 465	6 157	416 622	6 249	422 871	6 343	429 214	6 438	435 653	6 535	442 187	6 633	448 820	6 732	455 552
Households		103 915	1 559	105 474	1 582	107 056	1 606	108 662	1 630	110 292	1 654	111 946	1 679	113 625	1 704	115 330
Urban Residential Land @ 15 units/ha		6 928	104	7 032	105	7 137	107	7 244	109	7 353	110	7 463	112	7 575	114	7 689
Urban Residential Land @ 25 units/ha		4 157	62	4 219	63	4 282	64	4 346	65	4 412	66	4 478	67	4 545	68	4 613
2% Increase		410 465	8 209	418 674	8 373	427 048	8 541	435 589	8 712	444 301	8 886	453 187	9 064	462 250	9 245	471 495
Households		103 915	2 078	105 993	2 120	108 113	2 162	110 276	2 206	112 481	2 250	114 731	2 295	117 025	2 341	119 366
Urban Residential Land @ 15 units/ha		6 928	139	7 066	141	7 208	144	7 352	147	7 499	150	7 649	153	7 802	156	7 958
Urban Residential Land @ 25 units/ha		4 157	83	4 240	85	4 325	86	4 411	88	4 499	90	4 589	92	4 681	94	4 775
3% Increase		410 465	12 314	422 779	12 683	435 462	13 064	448 526	13 456	461 982	13 859	475 841	14 275	490 117	14 704	504 820
Households		103 915	3 117	107 033	3 211	110 244	3 307	113 551	3 407	116 957	3 509	120 466	3 614	124 080	3 722	127 803
Urban Residential Land @ 15 units/ha		6 928	208	7 136	214	7 350	220	7 570	227	7 797	234	8 031	241	8 272	248	8 520
Urban Residential Land @ 25 units/ha		4 157	125	4 281	128	4 410	132	4 542	136	4 678	140	4 819	145	4 963	149	5 112
4% Increase		410 465	16 419	426 884	17 075	443 959	17 758	461 717	18 469	480 186	19 207	499 393	19 976	519 369	20 775	540 144
Households		103 915	4 157	108 072	4 323	112 395	4 496	116 890	4 676	121 566	4 863	126 429	5 057	131 486	5 259	136 745
Urban Residential Land @ 15 units/ha		6 928	277	7 205	288	7 493	300	7 793	312	8 104	324	8 429	337	8 766	351	9 116
Urban Residential Land @ 25 units/ha		4 157	166	4 323	173	4 496	180	4 676	187	4 863	195	5 057	202	5 259	210	5 470
5% Increase		410 465	20 523	430 988	21 549	452 538	22 627	475 165	23 758	498 923	24 946	523 869	26 193	550 062	27 503	577 565
Households		103 915	5 196	109 111	5 456	114 566	5 728	120 295	6 015	126 310	6 315	132 625	6 631	139 256	6 963	146 219
Urban Residential Land @ 15 units/ha		6 928	346	7 274	364	7 638	382	8 020	401	8 421	421	8 842	442	9 284	464	9 748
Urban Residential Land @ 25 units/ha		4 157	208	4 364	218	4 583	229	4 812	241	5 052	253	5 305	265	5 570	279	5 849

From the above, the following is noted using 2016 as the base year:

- An estimated additional 1300 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 15 units per hectare.
- An estimated additional 600 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 25 units per hectare

Table 30: Corresponding Residential Land Requirements from 2023 to 2030

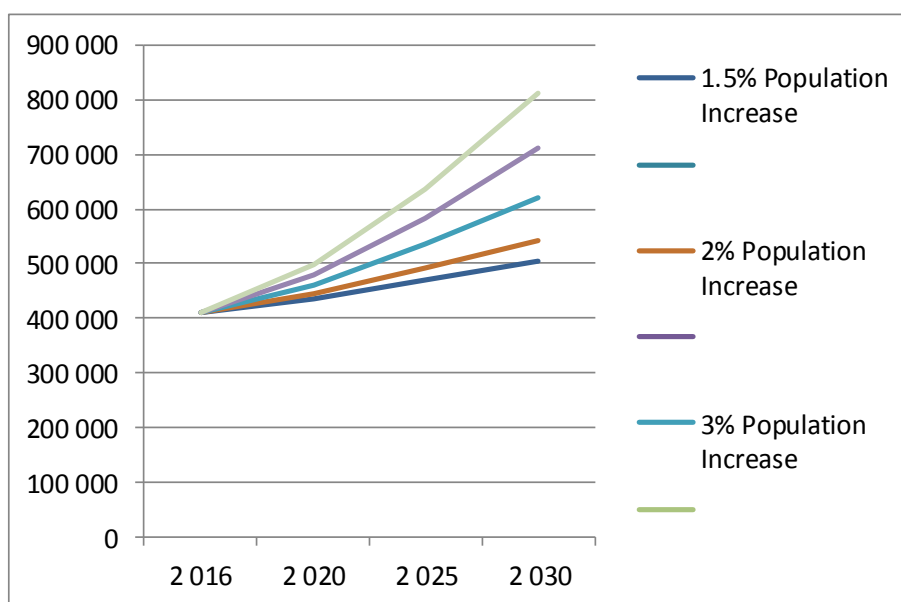
	2 023	Increase	2 024	Increase	2 025	Increase	2 026	Increase	2 027	Increase	2 028	Increase	2 029	Increase	2 030
1.5% Increase	455 552	6 833	462 386	6 936	469 322	7 040	476 361	7 145	483 507	7 253	490 759	7 361	498 121	7 472	505 593
Households	115 330	1 730	117 060	1 756	118 816	1 782	120 598	1 809	122 407	1 836	124 243	1 864	126 107	1 892	127 998
Urban Residential Land @ 15 units/ha	7 689	115	7 804	117	7 921	119	8 040	121	8 160	122	8 283	124	8 407	126	8 533
Urban ResidentialLand @ 25 units/ha	4 613	69	4 682	70	4 753	71	4 824	72	4 896	73	4 970	75	5 044	76	5 120
2% Increase	471 495	9 430	480 925	9 619	490 544	9 811	500 355	10 007	510 362	10 207	520 569	10 411	530 980	10 620	541 600
Households	119 366	2 387	121 753	2 435	124 188	2 484	126 672	2 533	129 205	2 584	131 790	2 636	134 425	2 689	137 114
Urban Residential Land @ 15 units/ha	7 958	159	8 117	162	8 279	166	8 445	169	8 614	172	8 786	176	8 962	179	9 141
Urban ResidentialLand @ 25 units/ha	4 775	95	4 870	97	4 968	99	5 067	101	5 168	103	5 272	105	5 377	108	5 485
3% Increase	504 820	15 145	519 965	15 599	535 564	16 067	551 631	16 549	568 180	17 045	585 225	17 557	602 782	18 083	620 865
Households	127 803	3 834	131 637	3 949	135 586	4 068	139 653	4 190	143 843	4 315	148 158	4 445	152 603	4 578	157 181
Urban Residential Land @ 15 units/ha	8 520	256	8 776	263	9 039	271	9 310	279	9 590	288	9 877	296	10 174	305	10 479
Urban ResidentialLand @ 25 units/ha	5 112	153	5 265	158	5 423	163	5 586	168	5 754	173	5 926	178	6 104	183	6 287
4% Increase	540 144	21 606	561 750	22 470	584 220	23 369	607 588	24 304	631 892	25 276	657 168	26 287	683 454	27 338	710 793
Households	136 745	5 470	142 215	5 689	147 904	5 916	153 820	6 153	159 973	6 399	166 372	6 655	173 026	6 921	179 947
Urban Residential Land @ 15 units/ha	9 116	365	9 481	379	9 860	394	10 255	410	10 665	427	11 091	444	11 535	461	11 996
Urban ResidentialLand @ 25 units/ha	5 470	219	5 689	228	5 916	237	6 153	246	6 399	256	6 655	266	6 921	277	7 198
5% Increase	577 565	28 878	606 444	30 322	636 766	31 838	668 604	33 430	702 034	35 102	737 136	36 857	773 993	38 700	812 693
Households	146 219	7 311	153 530	7 677	161 207	8 060	169 267	8 463	177 730	8 887	186 617	9 331	195 948	9 797	205 745
Urban Residential Land @ 15 units/ha	9 748	487	10 235	512	10 747	537	11 284	564	11 849	592	12 441	622	13 063	653	13 716
Urban ResidentialLand @ 25 units/ha	5 849	292	6 141	307	6 448	322	6 771	339	7 109	355	7 465	373	7 838	392	8 230

From the above, the following is noted using 2016 as the base year:

- An estimated additional 6800 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 15 units per hectare.
- An estimated additional 4000 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 25 units per hectare

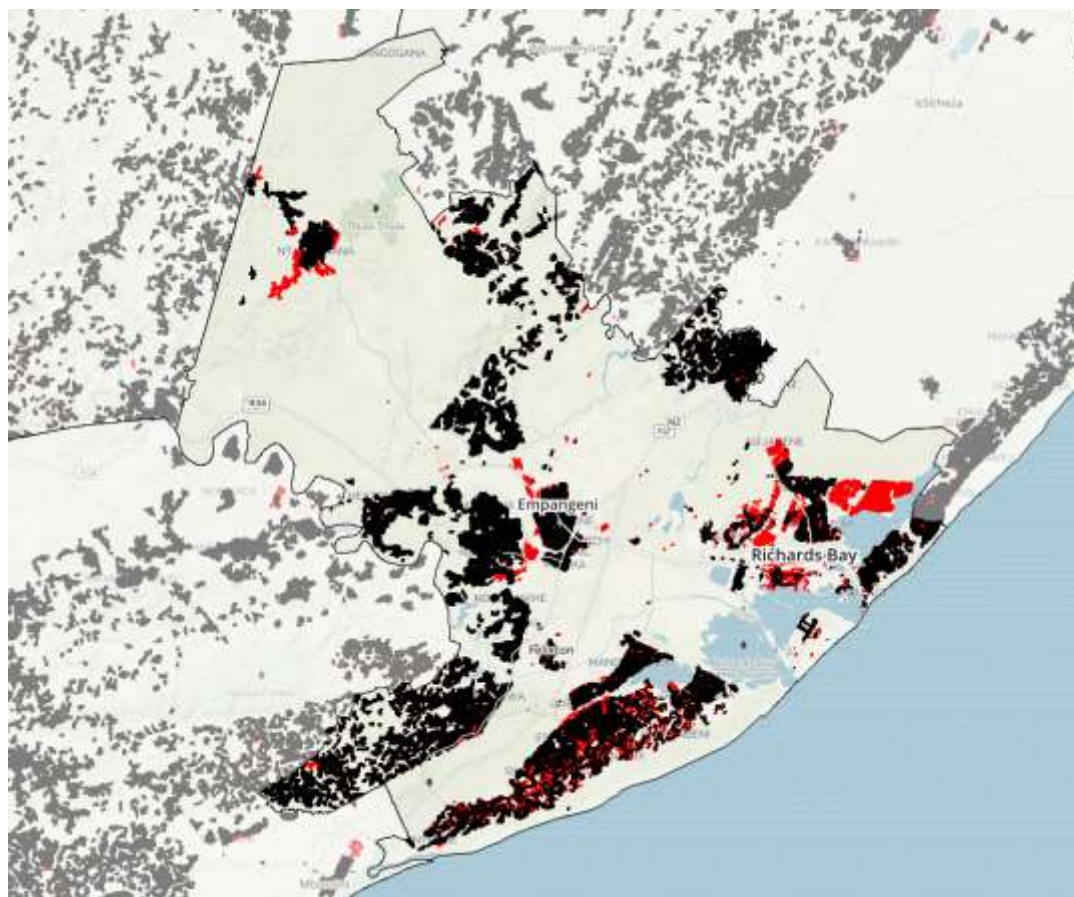
The following graph is a graphical illustration of the above tables indicating a 1.45%, 2%, 3%, and 5% annual population growth rate.

Figure 12: Population Growth Projections to 2030



The following inset provides an indication of the settlement footprint growth in uMhlathuze between 1990 and 2014.

Figure 13: Settlement Footprint Growth 1990 to 2014



The following tables provide more information on the urban and rural population split as well as percentage change over time for these areas.

Table 31: Project Population Distribution

Timeline	Urban	Rural	Tribal	Other	
2016	43.3%	16.7%	37.9%	2.1%	100.00%
2021	44.2%	15.7%	38.7%	1.4%	100.00%
2026	45.2%	14.7%	39.4%	0.7%	100.00%
2030	46.0%	13.9%	40.0%	0.1%	100.00%

Table 32: Percentage Change Over Time

	1990	2014	% Change
Municipality			
Area (ha)	123 578	123 578	
Population	222 746	388 280	74.3%
Density (people/ha)	1.8	3.1	
Urban Footprint (ha)	19 125	19 809	3.6%
Urban Nodes			
Area (ha)	15 811	15 811	
% of total municipal area	12.8%	12.8%	
Population	78 745	167 223	112.4%
Density	5.0	10.6	
Urban Footprint (ha)	4 067	5 207	28.0%
Rural Nodes			
Area (ha)	13 674	13 674	
% of total municipal area	11.1%	11.1%	
Population	52 335	66 717	27.5%
Density	3.8	4.9	
Urban Footprint (ha)	5 415	4 980	-8.0%
Tribal Settlements			
Area (ha)	21 021	21 021	
% of total municipal area	17.0%	17.0%	
Population	90 093	145 070	61.0%
Density	4.3	6.9	
Urban Footprint (ha)	9 370	9 348	-0.2%

5.2 SOCIO-ECONOMIC INDICATORS

The following series of maps provides information pertaining to:

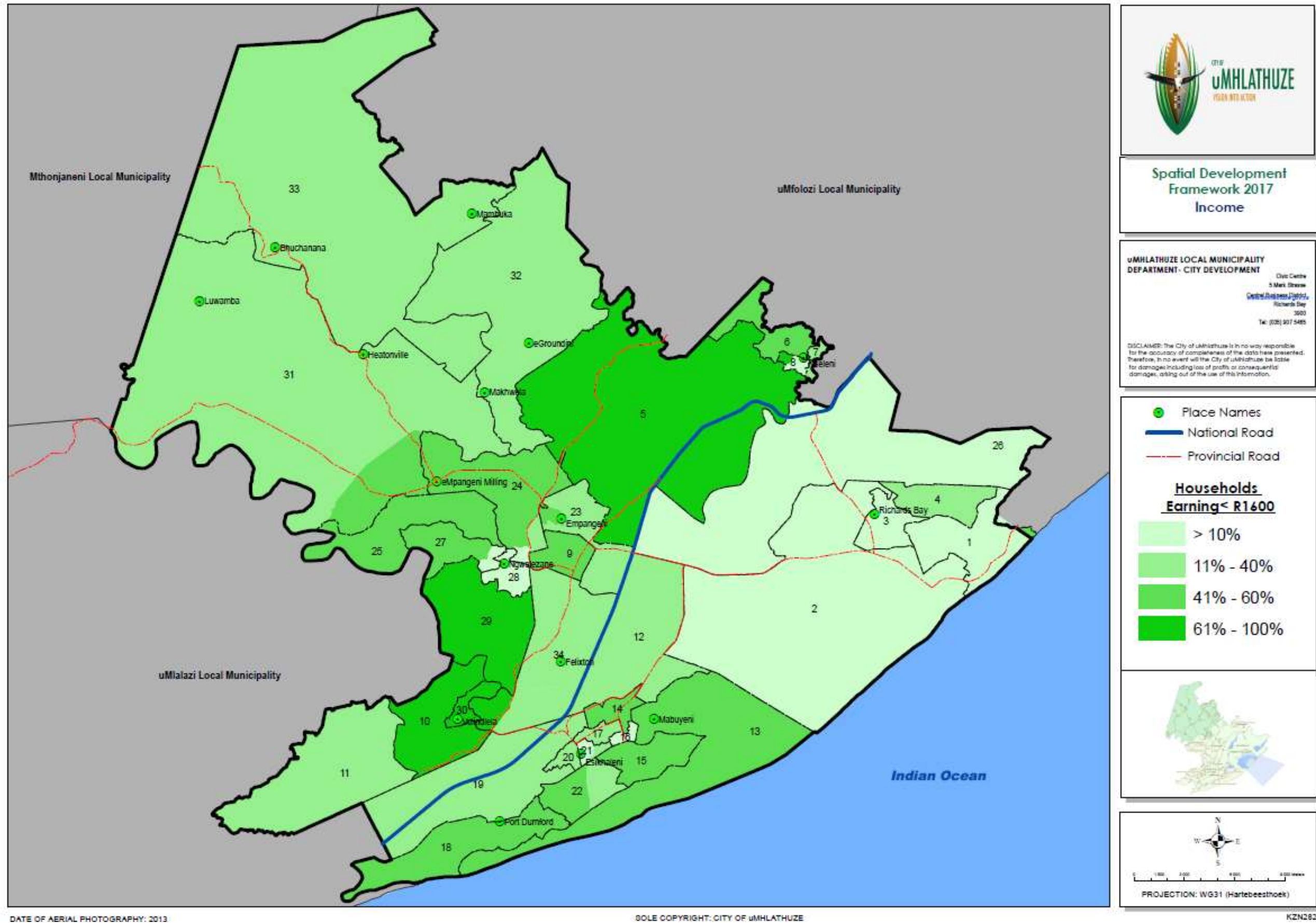
- Adult education levels
- Household income levels below R1600 per month
- Unemployment levels
- Households access to piped water
- Household access to hygienic toilets

The following is summarised from the mapping provided:

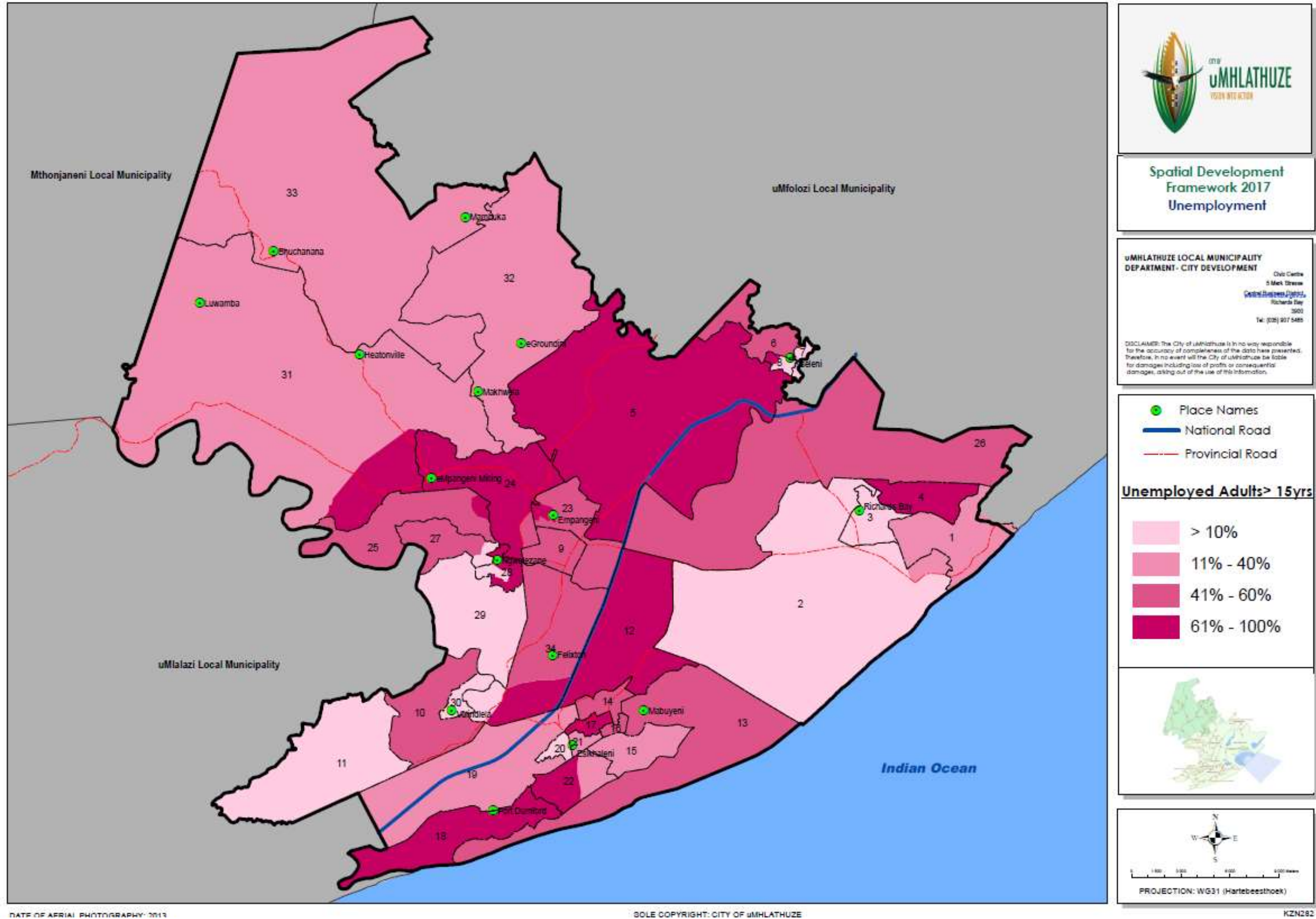
- Regarding the comparative percentage of adults over the age of 20 years that do not have schooling, the incidence of this is highest (more than 61%) in Wards 5, 10, 13, 14, 18, 25, 32 and 33. This are largely coincides with Traditional Authority areas.
- Regarding income levels as a percentage of households that earn less than R1600 per month it is noted that Wards 5, 10 and 29 are the most impoverished in this regard.
- Regarding unemployment levels and the wards with the highest percentage of unemployed individuals are 4, 5, 12, 18, 24 and 28.



Map 8: Income Level below R1600 per month



Map 9: Unemployment Levels



5.3 ECONOMIC PROFILE

Functional age groups indicate the level of the potential work force in a region. Therefore, the key age group relates to individuals aged 15 to 64 years. The following table provide a comparison between the 2007, 2012 and 2017 in respect to economic active population in s for uMhlathuze and the other municipalities in the King Cetshwayo District.

Table 33: Economic Population

	Total Economically Active population			EAP growth rate			Average annual growth (2007-2017)
	2007	2012	2017	2007	2012	2017	
South Africa	18 007 069	18 739 171	21 839 604	2,8	2,2	2,5	1,95
KwaZulu-Natal	3 296 129	3 027 883	3 473 626	1,1	1,8	2,8	0,53
King Cetshwayo	258 037	226 303	273 446	0,4	1,9	2,9	0,58
uMfolozi	32 477	29 595	37 115	1,8	2,5	3,6	1,34
uMhlathuze	142 413	131 468	156 315	0,9	1,8	2,8	0,94
uMlalazi	44 316	37 266	45 957	0,1	1,7	2,9	0,36
Mthonjaneni	22 044	16 339	19 483	-1,9	1,2	2,5	-1,23
Nkandla	16 787	11 635	14 576	-2,8	2,6	3,9	-1,40

Source: IHS Markit, 2018

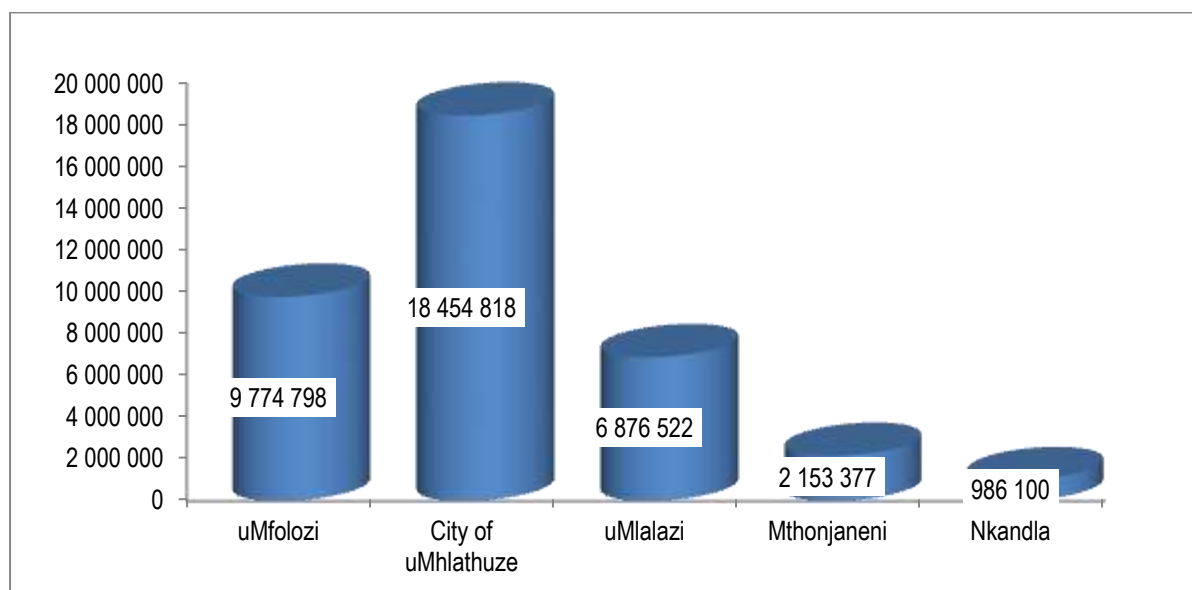
5.3.1 Economic Realities

The municipality has an important role in the national, provincial and district economies on account of the bulk-handling harbour facilities at Richards Bay that enable international trade links. Richards Bay is the largest deep-water port in Africa, and handles the bulk of South Africa's exports. Its development has provided the impetus for large-scale industrial growth.

uMhlathuze has the most developed economy of all the municipalities in the district and is the major contributor to the District GDP (it is the third largest economy in KwaZulu-Natal). It's most important industries are South 32, Mondi, SAPPI, RBCT and Bell Equipment.

The following bar chart indicates the GDP contribution by uMhlathuze Municipality comparing to other local municipalities within King Cetshwayo District. It is evident that uMhlathuze remain the strong contributor to the district GDP, with 48% contribution.

Figure 14: GDP Contributions



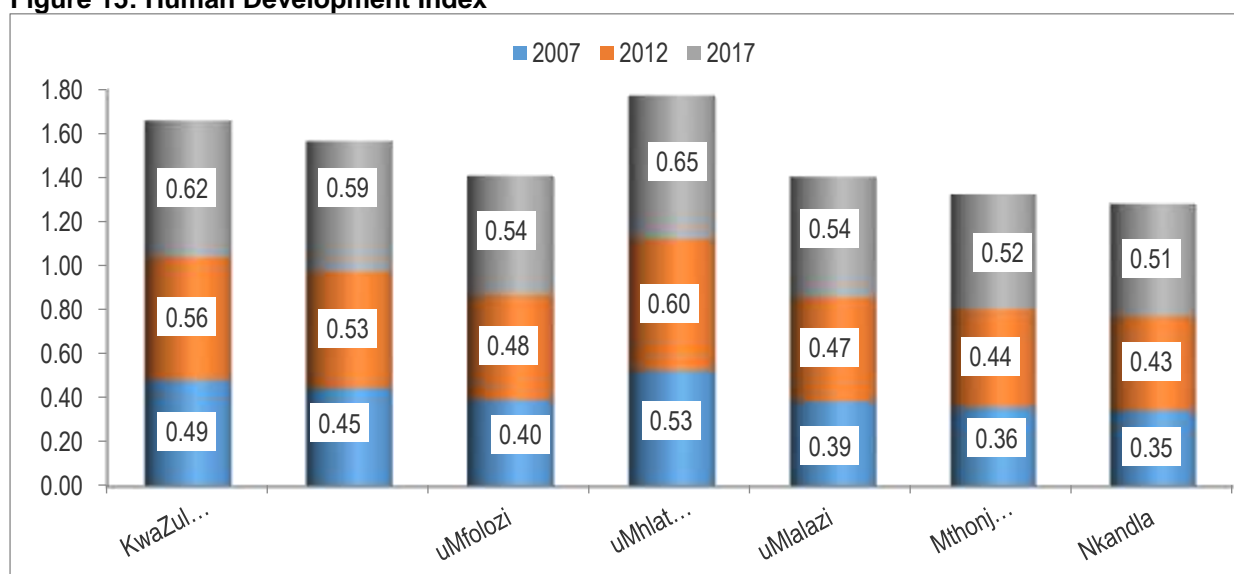
Source: Global Insight 2015

5.3.2 Human Development Index and Gini Coefficient

Measuring the life expectancy, literacy rates and income levels as proxy of quality of living, the Human Development Index (HDI) of uMhlathuze Municipality has remained the same since 2009 to 2015, at 0.63. The Human Development Index (HDI) is defined as a “composite, relative index which attempts to quantify the extent of human development of a community. It is based on measures of life expectancy, literacy and income”. The HDI can assume a maximum value of 1, indicating a high level of human development, and a minimum value of 0.

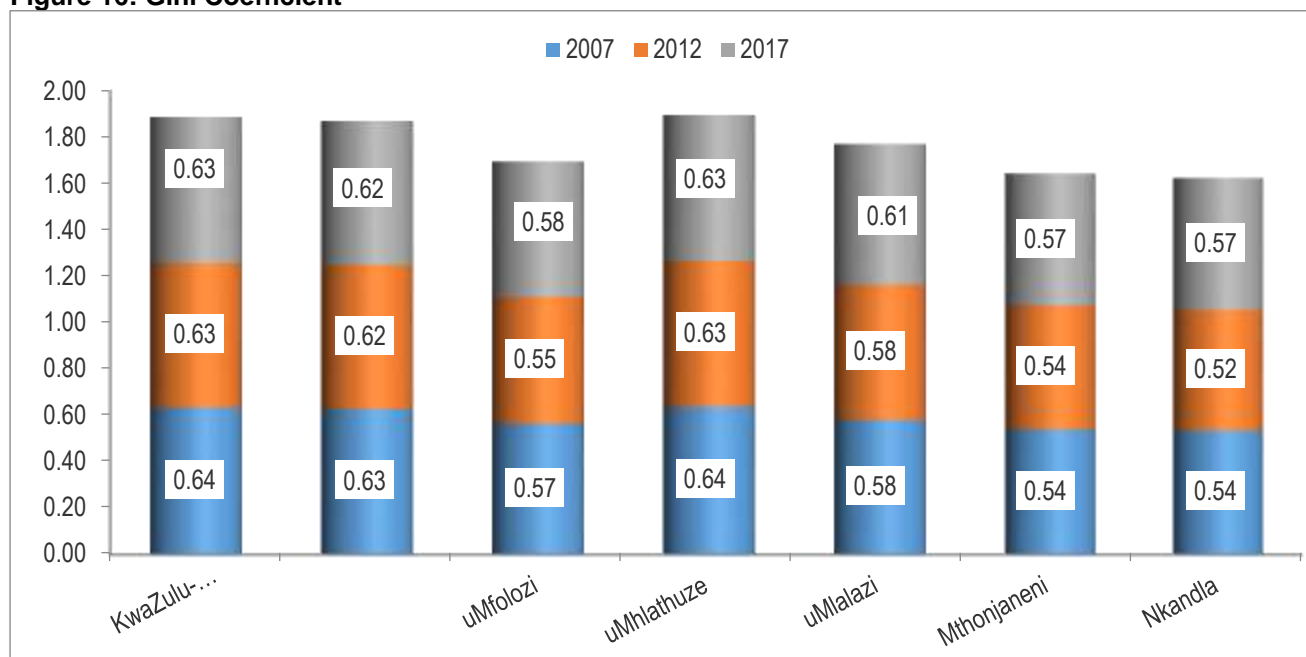
The following table and figure provides the HDI and Gini Coefficient for uMhlathuze Local Municipality over a given period of time.

Figure 15: Human Development Index



Source: IHS Markit, 2018

Figure 16: Gini Coefficient



Source: IHS Markit, 2018

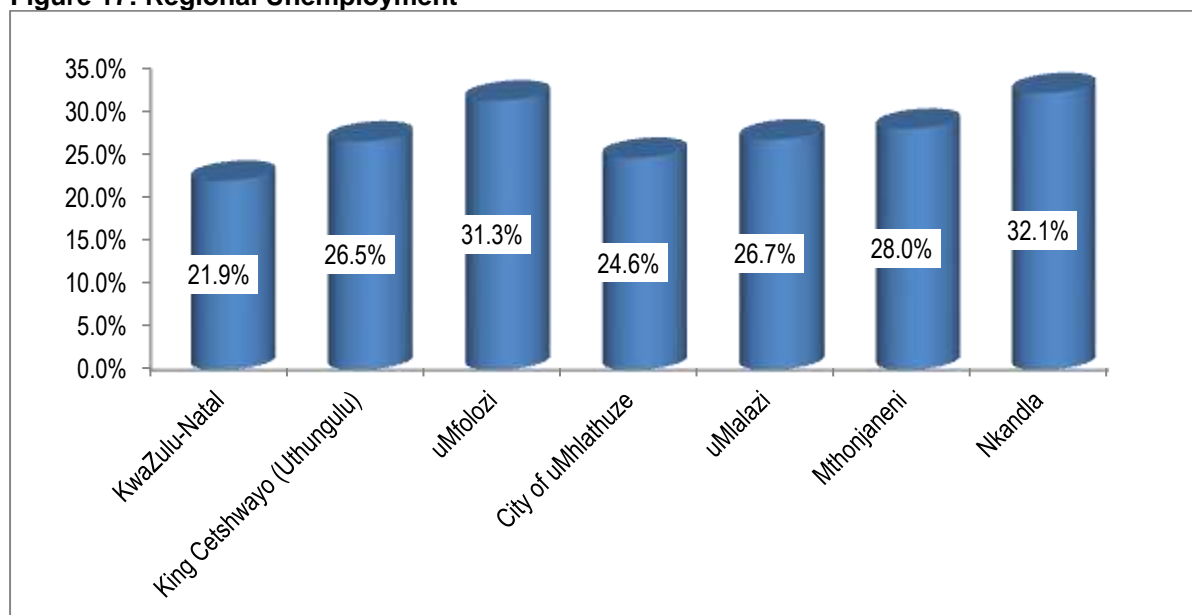
Income inequality is indicated by the Gini-coefficient. Income inequality in the King Cetshwayo District and Province has become less equal over time – from 0.64 in 2007 and decreased to 0.63 in 2012 up to 2017 in uMhlathuze Municipality.

5.3.3 Employment and Income Levels

High unemployment undermines the equitable distribution of income and underpins poverty. Employment is one of the main desired outcomes of economic growth and is currently a major focus of government policy at the national level. The figure above indicates percentage of unemployment in King Cetshwayo District. The City of uMhlathuze is seating at 24.6% with regards to unemployment as per the recent Global insight statistics. The picture is better if compared with other municipalities within the region; however, it is still relatively higher when compared with 21.9 % of the province.

Job creation is not the core competency of the municipality however City of uMhlathuze is committed to radical economic transformation which entails making the environment conducive for investors.

Figure 17: Regional Unemployment



Source: Global insight 2015

Table 34: Formal and Informal Sector Employment

	Formal employment	Informal employment	Total employment	% share of King Cetshwayo formal employment	% share of King Cetshwayo informal employment
King District Cetshwayo	155,150	37,965	193,114	100	100
uMfolozi	31,984	8,579	40,563	20.6	22.6
City of uMhlathuze	76,488	17,158	93,646	49.3	45.2
uMlalazi	27,721	7,631	35,352	17.9	20.1
Mthonjaneni	11,213	2,729	13,941	7.2	7.2
Nkandla	7,744	1,868	9,612	5.0	4.9

IHS Markit, 2018

uMhlathuze is contributing 49.3% towards formal employment within the King Cetshwayo District and about 45.2% of informal employment. Because of the economic position uMhlathuze is contributing more to the regional employment.

Table 35: Formal and Informal Employment per Sector

	KwaZulu-Natal	King Cetshwayo	uMhlathuze
Primary sector	8,4	5,1	9,3
Agriculture	5,4	4,8	7,6
Mining	3,0	0,4	1,7
Secondary sector	18,5	20,7	24,2
Manufacturing	10,3	12,2	12,4
Electricity	0,6	0,4	0,2
Construction	7,6	8,1	11,5
Tertiary sector	73,2	74,2	66,6
Trade	21,5	22,1	18,8
Transport	5,3	6,0	7,0
Finance	16,8	13,5	13,3
Community services	21,5	23,6	20,3
Households	8,1	8,9	7,1

Source: IHS Markit, 2018

Table 36: Performance of Broad Economic Sectors

	2005	2010	2015
Primary sector	14.4	13.3	15.4
Agriculture	3.3	3.7	3.9
Mining	11.1	9.7	11.5
Secondary sector	38.3	37.4	36.2
Manufacturing	32.5	31.3	30.5
Electricity	2.1	1.8	1.6
Construction	3.8	4.2	4
Tertiary sector	47.3	49.2	48.4
Trade	9.4	9.7	9.7
Transport	11.7	12.6	12.9
Finance	10.5	11.3	14.8
Community services	15.6	15.6	28.2

Source: IHS Markit, 2018

To be noted in 2010 there was a decline in the mining sector; however, we are noting an increase within the year 2015. Manufacturing is not doing well; this is confirmed by the declining trend seen over the years from 32.5 in 2005 and 30.5 in 2015. There is almost a double increase within the community services sector from 15.6% in 2005 to 28.2% in 2015.

5.3.4 Income and Dependency

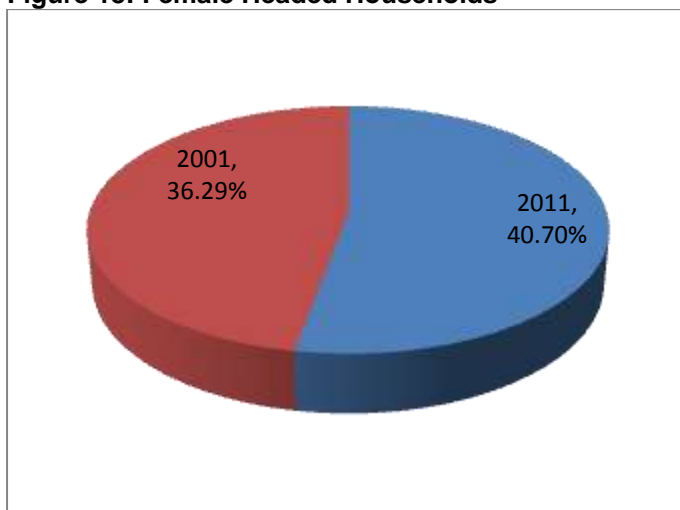
Income levels and the number of dependents have a significant impact on the ability of an employed person to meet the financial needs of his/her dependents.

Table 37: Comparative Dependency Ratio

	Dependency Ratio	
	per 100 (15-64)	
	2001	2011
SOUTH AFRICA	58.7	52.7
KWAZULU-NATAL	65.4	58.5
DC28: Uthungulu	74.5	64.7
KZN282: uMhlathuze	55.8	48.2
KZN286: Nkandla	99.2	86.6
KZN281: Mfolozi	80.2	68.2
KZN283: Ntambanana	85.7	79.3
KZN284: uMlalazi	81.5	74.9

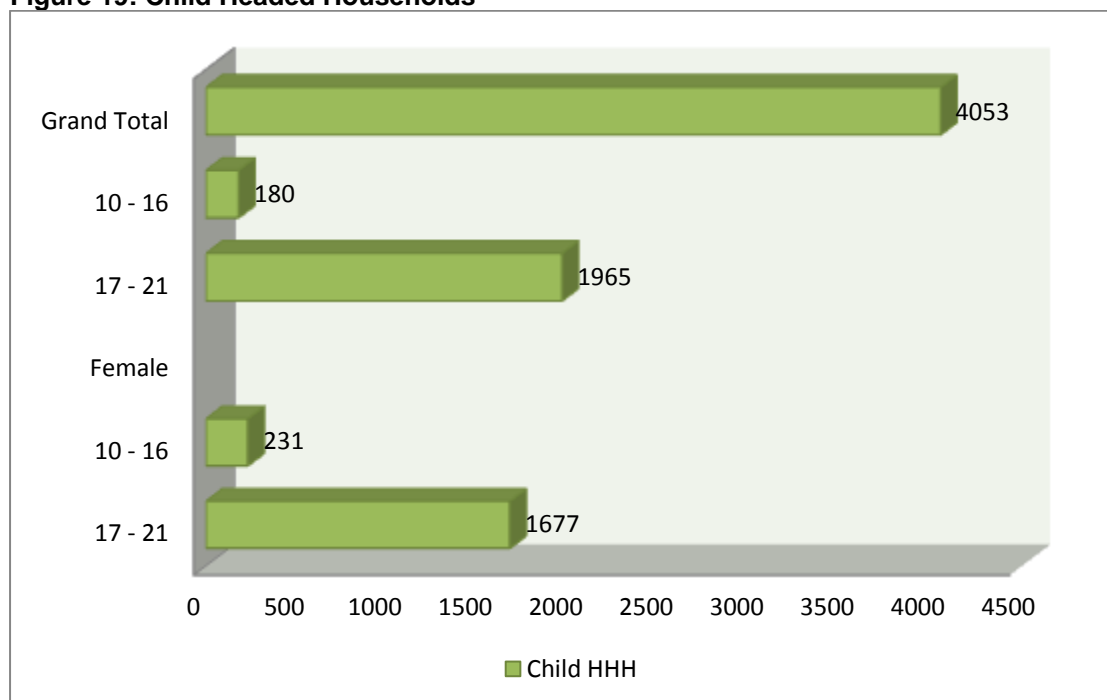
Source: Census 2011

Figure 18: Female Headed Households



Source: Statistics SA, (Census 2011)

The number of Female headed Households has increased from 2001 from 36.29 % to 40.70% in 2011. This can be attributed by many factors including the high level of divorce cases, and the fact that more women are becoming more independent.

Figure 19: Child Headed Households

5.3.5 HIV/Aids

uMhlathuze is providing resources to the Premier's Sukuma Sakhe Programme which seeks to reduce HIV and AIDS which is also prevalent amongst young people through awareness programmes. Typical impacts of AIDS include decreased productivity of workers, increased absenteeism and additional costs of training new workers. It also represents a greater demand and pressure on health facilities and as the statistics gathered from antenatal clinics indicate a very real problem of AIDS orphans and child (minor) headed households. These factors must be taken cognizance of when devising local economic development strategies.

Below are recent statistics on HIV Prevalence

Figure 20 : HIV/AIDS Statistics

	Number of people living with HIV			Proportion of people living with HIV as the total size of population			Number of AIDS Deaths estimates		
	2007	2012	2017	2007	2012	2017	2007	2012	2017
KwaZulu-Natal	1565 260	1641 759	1814 99	15,7	15,7	16,3	86 320	65 084	34 009
King Cetshwayo	147 802	146 893	158 200	16,3	16,0	16,5	8 158	5 813	2 970
uMhlathuze	62 371	63 135	70 275	17,2	16,9	17,2	3 335	2 453	1 296

Source: Global Insight 2017 (Supplied by KZN Provincial Treasury)

5.4 SUMMARY OF KEY DEMOGRAPHIC AND SOCIO-ECONOMIC ISSUES

- In uMhlathuze, the highest population densities are found in the formal urban and surrounding areas, i.e. peri-urban areas.
- According to the 2016 Community Survey, uMhlathuze had 410 465 people and 103 915 households at the time at an average households size of 3.95.
- Population growth scenarios have been applied to the base figure from the 2016 Community Survey. Adequate data and research is not available at this time to apply an historic growth trend as the composition of the municipality, in terms of boundaries and wards, has changed post the Local Government Elections of 2016.
- At a steady population increase of 1,5% per annum, the municipal population will surpass 500 000 people by 2030.
- The municipality will reach a population of 500 000 before 2021 if a population growth rate of 5% takes place over the next few years. At such a 5% per annum population growth rate the number of households in the municipality will double by 2030.
- An estimated additional 1300 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 15 units per hectare. An estimated additional 600 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 25 units per hectare.
- An estimated additional 6800 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 15 units per hectare. An estimated additional 4000 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 25 units per hectare.
- Regarding the comparative percentage of adults over the age of 20 years that do not have schooling, the incidence of this is highest (more than 61%) in Wards 5, 10, 13, 14, 18, 25, 32 and 33. This are largely coincides with Traditional Authority areas.
- Regarding income levels as a percentage of households that earn less than R1600 per month it is noted that Wards 5, 10 and 29 are the most impoverished in this regard.
- Regarding unemployment levels and the wards with the highest percentage of unemployed individuals are 4, 5, 12, 18, 24 and 28.
- In the past, entrepreneurship development and sustainability efforts in townships have been hampered by a number of reasons including inequalities, level of education, and lack of adequate information.

6. ENVIRONMENTAL ANALYSIS

6.1 GEOMORPHOLOGY

The geomorphology of the landscape is generally described as a low-relief area that is bounded by a coastline and a high-relieve terrain on the landward side. Forming part of the Zululand Coastal Plain, the area indicates a history of erosion and sedimentation, and sea level fluctuations. Past geomorphologic processes have resulted in a unique landscape that supports complex hydrological systems, which in turn have resulted in high level of species diversity. The low level coastal floodplain is subject to natural flooding, climate change and sea level rise, and may increase flood risks over time. Landscape features are therefore important factors for decision-making and development planning.

6.2 GEOTECHNICAL CONDITIONS

The uMhlathuze area is characterized by hydrological and geotechnical constraints. The following provided outlines the following categories:

- Developable with minor constraints
- Developable with more costly constraints
- Developed
- No Development recommended
- No restriction on development

6.3 WATER RESOURCES

The geology and geomorphology of the area controls the transport and storage of water and influences the hydraulic functions of the ground water system. Furthermore, the soils are very permeable and almost all the rainfall infiltrates into the groundwater, where it is temporarily stored before being discharged into the streams, lakes and wetlands. Consequently the streams are generally perennial and seldom stop flowing even in drought conditions. This also creates a large underground storage reservoir that consistently sustains the coastal lakes which form the main water supply resources for the municipality.

6.4 BIODIVERSITY

The municipal area falls within the Maputaland-Pondoland-Albany Biodiversity hotspot which is recognized as the second richest floristic region in Africa: containing approximately 80 % of the of South Africa's remaining forests, rich birdlife and many other significant flora and fauna species. The uMhlathuze Municipal Area supports a total of 174 Red Data species, which has been reported as amongst the highest in the country for an area of its size. This remarkable concentration of Red Data Species is one of the main reasons that the remaining percentage of its surface area under indigenous cover is considered largely irreplaceable by KZN Wildlife for meeting its conservation objectives in the province.

6.5 AIR QUALITY

In 2006, a study was initiated to assess air quality within the municipality and use this as one of the tools to inform their Spatial Development Framework and to ensure all environmental aspects were considered for current and future planning. This is in line with the City's vision and mission statements, which stress the improvement of quality of life through sustainable development.

In order to achieve the main objective of the study, the following steps were followed:

- Determination of ambient air quality limits to be adopted as targets for areas within the City of uMhlathuze;
- Determination of areas where local air quality limits are exceeded or are in danger of being exceeded;
- Determination of buffer zones for existing industrial areas; and,
- Identification of possible future industrial development areas that would not impact on the health and well-being of the residents in uMhlathuze or on the sensitive environment.

6.6 THE COAST

The uMhlathuze municipality is bordered by approximately 48 km of coastline, which presents a number of economic, conservation and recreational opportunities. The shoreline is characterized by sandy beaches, well established dune formations, estuarine environments, and hosts the country's largest deep water Port.

As is the case with most coastal municipalities in KwaZulu-Natal, the Municipality has encountered severe coastal erosion, which requires a management response that would prevent further loss of beaches, damage to property and infrastructure. Being predisposed to disruption of natural wave action because of the Port entrance, Alkantstrand beach at Richards Bay requires a reliable sand bypassing scheme. In the absence of sand budget on the Northern beaches, the municipality has to implement soft engineering techniques to mitigate against an eroding coastline. Any further development of the coast is furthermore required to take cognizance of the Coastal setback lines adopted by the municipality.

6.7 ENVIRONMENTAL ASSETS

Economic Development: Coastal Dunes contain heavy minerals that are sought after for mining, which is a key sector in the context of regional economic development and national plans.

Tourism: The beaches are significant tourism assets for the municipality, attracting an Annual Beach Festival a hosting beach events at Alkanstrand, and providing seasonal holiday destination and on-going recreational amenity. Other tourism assets worthy of preservation are the area's lakes and forests, heritage sites, conservation areas around Mzingazi River, and the estuary found south of the Port. The proposed developments of the waterfront, has a strong tourism focus. Environmental assets and socio-economic indicators have therefore been considered in the conceptual plans for the Waterfront.

Water Resources: The coastal Lakes (Lake Mzingazi, Lake Cubhu and Lake Nseze) are important water resources for the municipality. The development of Richards Bay in particular, with its industrial development, has seen a significant increase in the abstraction rates of these lakes over the past 20 years.

Ecological Features: Water logged areas have been drained to accommodate development but has in the process, created important hydrological and ecological linkages. In certain instances, these artificial regimes, have resulted in the formation of valuable natural assets that support high levels of biodiversity and species endemism. An example of such is the Thulazihleka Pan system in Richards Bay.

6.8 THREATS TO ECOSYSTEM GOODS AND SERVICES

Atmosphere: Local ambient air quality conditions, particularly in industrial areas, indicate the inability for such areas to deal with any further emissions. This is because the quality of the air influences people's well-being and ecological integrity. It has been reported that there will be adverse risks to human health and to the environment, as well as exacerbating climate change, should current trends prevail.

Hydrology and Water Resources: The area is characterized by a complex hydrology and climate change would therefore have an impact on water resources in the area. At present, the availability and variability of water within the catchment is fully subscribed or allocated and there are predictions that the demand for water will grow. Against this backdrop, there are questions where future water will come from. Furthermore a decline in water quality in streams, lakes and rivers pose a risk for communities that extract water for subsistence, domestic or personal consumption

Pollution: Established developments, by virtue of specific land-uses, and growing population pressures, have resulted in intrinsic pressures on the environment. These manifest in the form of pollution which impact on the environment on various scales from localized illegal dumping to air and water pollution.

Landscape: Specific qualities of a landscape (natural vegetation, water bodies, landscaped parks etc.) provide aesthetically pleasing environments for the inhabitants of the area. The cumulative impact of development pressure and future planning scenarios however, pose a major threat to visual quality and a sense of place.

Coastal Management: Coastal Dune areas are sensitive to change and erosion remains a key concern along a coastline that is susceptible to the sea level rise.

Biodiversity: A large proportion of the Biodiversity Hotspot is being transformed and degraded by human activities, resulting in many vegetation types being vulnerable to further disturbances. These disturbances threaten species complexity and lead to imbalances within ecosystem.

6.9 ENVIRONMENTAL PRIORITIES AND OBJECTIVES

Having considered various sources of information, and given the current sphere of governance and accountability, the City of uMhlathuze has identified and prioritized the following as key to meeting its environmental targets and objectives:

- To ensure legal compliance of environmental bylaws and legislative requirements by all (Council, Employees, Contractors)
- To ensure sufficient suite of local environmental bylaws and effective enforcement thereof
- Regulation of land use and enforcement of usage of land in terms of the land use management system
- To minimize air pollution (prevention and reduction) in the City of uMhlathuze through efficient monitoring
- To reduce overall water pollution within the municipality as a result of land use practices through monitoring hotspots and imposing stringent requirements during environmental authorisation and planning processes
- To ensure management of all water resources in a sustainable manner by adhering to lake management plans and water services bylaws
- To ensure the management of soil and land resources in a sustainable manner through environmental and land use planning
- To ensure the protection of habitats and natural resources that would contribute to conservation targets of the province
- To preserve heritage resources by preventing damage and loss through development planning processes and through the tourism sector
- Complying with the provisions of the National Environmental Management: Integrated Coastal Management Act

- Maintaining the biological diversity and productivity of coastal ecosystems through implementation of a coastal management programme and estuary management plans
- To comply with the provisions of National Environmental Management: Waste Act
- To improve energy efficiency of existing facilities and reducing demand and facilitating renewable energy/co-generation initiatives and projects
- To be prepared and anticipate disaster management within the municipality
- To ensure that the municipality maintains its environmental assets through environmental tools such as project specific EIA's, the EMF and the Environmental Framework of the SDF
- To increase the knowledge and understanding, and prepare for vulnerability to environmental changes within the municipality

6.10 THE ENVIRONMENTAL SERVICES MANAGEMENT PLAN

The Municipality compiled an Environmental Services Management Plan (ESMP) as broader planning tool to guide spatial development. The ESMP outlines a number of goals for Environmental Services Management. Two critical goals are:

- To define cohesive and functional spatial management units within the municipal area that needs to be managed in order to optimise the delivery of environment services.
- To develop management plans for each management unit that identify the management activities required to secure environmental services supply.

The areas that provide environmental services to the City are spatially defined, and the following “Levels” of protection were determined:

- **Nature Reserves (Level 1):** Included in the nature reserve zone are areas of high biodiversity and environmental significance that require a high level of legal protection. Included are unique habitats or areas that are considered important at International, National or Provincial level; estuaries, lakes, major wetlands, natural forests, coastal buffers and critically endangered habitats that are protected in terms of international or national legislation and/or treaties. It is recommended that these areas be proclaimed as nature reserves in terms of relevant legislation such as the National Environmental Management Protected Areas Act.
- **Conservation Zone (Level 2):** Included in the conservation zone are areas of biodiversity / environmental significance, which are not viable for proclamation as nature reserves, but that require some form of legal protection. Included are unique or regionally important natural habitats; wetland and forest areas that are protected in terms of national legislation; and all areas that fall within the 1:100 year flood line. No transformation of the natural assets or the development of land for purposes other than conservation should be permitted in this zone. Sustainable use of renewable resources is permitted.
- **Open Space Linkage Zone (Level 3):** Included in the open space linkage zone are areas that provide a natural buffer for Level 1 and 2 Zones, areas that provide a natural link between Level 1 and 2 Zones and areas that supply, or ensure the supply of, significant environmental services. Transformation of natural assets and the development of land in these zones should only be permitted under controlled conditions.
- **Development Zone (Level 4):** Includes all areas that are not included in Level 1, 2 and 3 zones. Areas in this zone are either already developed or transformed and contain land and natural assets that are not critical for environmental service supply. However, it is recognised that the development of these zones can impact on environmental services supply. As such, they should be developed in a manner that supports, or at least does not adversely impact on, the sustainability of environmental service supply in Level 1, 2 and 3 zones.

6.11 THE ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)

An Environmental Management Framework was commissioned for the Richards Bay Port expansion area and the IDZ. The EMF was initiated by the Department of Agriculture and Environmental Affairs through the Danish Government funding agency (DANIDA), whilst the Municipality, Port and the IDZ were consulted extensively throughout the process. The study area was confined to the Port expansion and IDZ area owing to environmental sensitivity (mainly hydrological and ecological) versus enhancement of socio-economic incentives that such development would foster.

Key findings of the EMF are summarised hereunder:

6.11.1 Port Expansion

- The port and harbour area falls within environmental management zones of the EMF which both yield high levels of sensitivity in terms of biodiversity and geotechnical constraints.
- The Transnet Due Diligence Investigation for the acquisition of land for the proposed port development framework has however identified areas that are potentially suitable for offsetting the above environmental risks. These areas would first have to be accepted either prior to, or in the process of the EIA, should Transnet be granted environmental authorization. It must be noted that in the absence of formal guidelines, there was reluctance on the part of the environmental authorities to pay attention to offset development in the EMF.
- The EMF identified a number of existing activities that render further constraints to the proposed expansion of the port:
 - The slimes dam from the mining operations at Hillendale (Exxarro) poses a risk to the hydrological and ecological integrity of the area. This is a concern in terms of this being a possible offset area should the Port proceed with its EIA application for the proposed Port expansion;
 - The Foskor Gypsum Stack or slimes dam between Bayside and the Papyrus Swamp is a contaminated site with potential to severely constrain future port expansion;
 - The location of Bayside Aluminium; and
 - The potential conflict between conservation and port/harbour expansion that would require strict development control.

6.11.2 IDZ Development

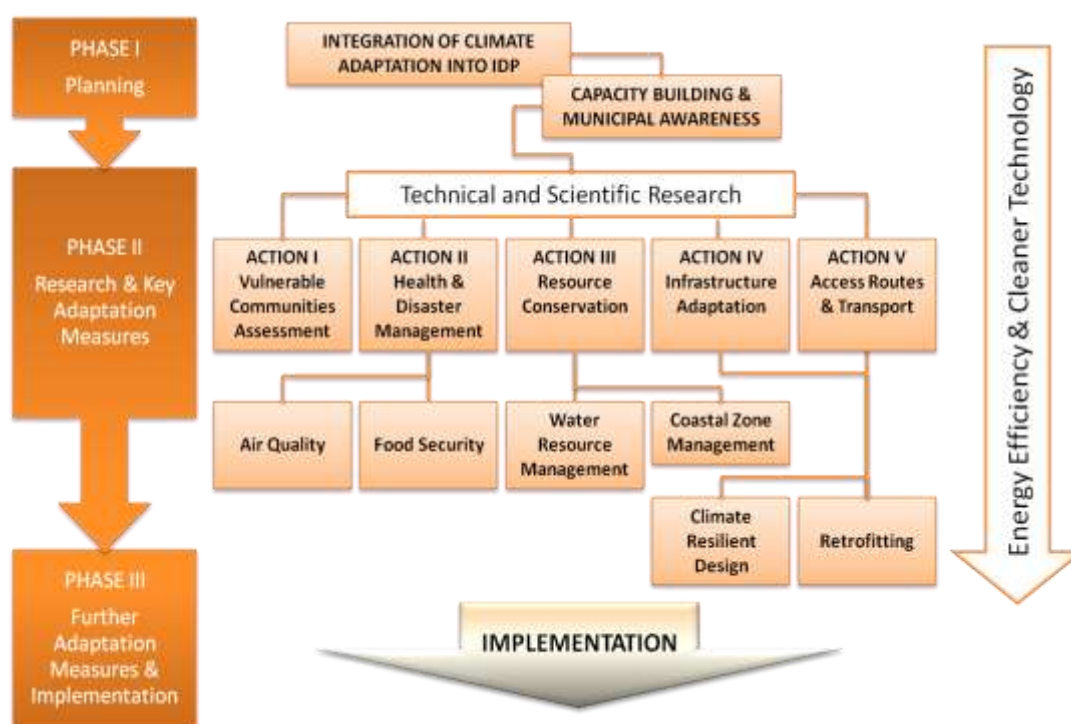
- The EMF sensitivity analysis points to areas that are of great concern for the IDZ geotechnical constraints as well as the presence of Kwambonambi Grassland in certain areas, notably IDZ 1D and the IDZ 1C site.
- There are also a number of significant environmental management issues that would require strict management measures in terms of air quality.

6.12 RESPONSE TO CLIMATE CHANGE

Regardless of the attempts to mitigate the impacts of climate change, it is widely accepted that many of the anticipated changes are destined to take place. The climate change strategy was therefore drafted on the basis of two fundamental principles, i.e. **mitigation** and **adaptation** through the implementation of the Climate Change Municipal Action Plan.

The Municipal Action plan adopts a phased approach to allow for a systematic and realistic response to potential climate impacts. Represented in the following figure, it is proposed that the plan be adopted over a 5-year period, coinciding with the rollout of the Municipality's Integrated Development Plan (IDP).

Figure 21: Phased Approach to Municipal Action Plan for Climate Change



During 2010, Council was proactive in adopting the Climate Change Strategy. Since 2010, the Climate Change Strategy was integrated into the Integrated Development Plan of the Municipality. The implementation and reporting thereof was admittedly not as vigorous as it should have been, with outputs coinciding with the various functions within the organization that deal with the Environment. These units include Waste Management, Air Quality Management, Biodiversity and Horticulture Management, Water Quality Management; Energy Management and Environmental Planning. Climate change related actions coincidentally dove-tailed with the operations of these units.

With a growing impetus to scale up on climate change responses for internal reporting requirements, and also reporting to organizations like the Global Compact of Mayors on Climate and Energy, it hence became imperative to improve certain institutional aspects on how the Municipality is currently dealing with Climate Change.

Two aspects needed addressing in this regard:

1. The Climate Change and Energy Strategies needed to be dissected into an implementable format; and
2. Roles and responsibilities for implementation and reporting needed to be clarified. The institutionalization of a dedicated working team is considered key to successfully implementing the Climate Change program. This could furthermore render a platform to collectively deal with broader environmental issues confronting the Municipality.

To this end, Council adopted a **Climate Change Action Plan in October 2018** that set out the following objectives:

1. An outline of the institutional framework for Climate Change linking global policy with national, provincial and local imperatives;
2. An overview of the uMhlathuze climate risk profile and associated vulnerability for the Municipality;
3. A presentation of the adopted Climate Change and Energy strategies as a basis for prioritising actions/projects for implementation of the Climate Change Action Plan;
4. Development of a Climate Change Action Plan which focuses on priority climate adaptation and mitigation interventions;
5. Strategic Partners and Global affiliations to scale up on climate actions; and
6. Institutional arrangements, which talks to the establishment of a formally constituted committee to implement and report on the climate change action plan.

1. Institutional Framework for Climate Change

Since 2010, when both strategies were formulated, there has been significant transformation in terms of policy and governance mechanisms on Climate Change. Whilst these have been mooted at a global scale, the institutional aspects responding to Climate Change have transcended to National; Province; and even a Local Government perspective. South Africa for example, has through the Conference of Parties (COP 23), signed the Paris agreement to reduce greenhouse gas emissions and ramp up adaptation efforts. These Nationally Determined Commitments in turn, has manifested itself in policies like the National Resource Plan which address issues of diversifying the country's energy generation. Furthermore, the National Energy Regulator and Eskom have accordingly responded by developing policies to scale up on renewable energy development by 30% by 2030. It must be highlighted that South Africa is one of the worst performing emitters of Greenhouse Gases, ranking 14th globally.

Climate change is also a critical theme of United Nations Sustainable Development Goals and emerging policy frameworks; that stretch across from the implementation of the National Development Plan to the Integrated Urban Development Framework. It is thus imperative that such linkages be emphasized even with the Climate Change Action Plan.

2. An overview of uMhlathuze's Climate Change Profile

uMhlathuze has not been exempt from the impacts of climate change. Specific impacts that stand out in recent years relate to:

- Prolonged drought from 2013-2017 which led to Level 4 water restrictions and in fact, our water situation still regarded as a scarce resource. Drought and supplies running dry render tremendous risk in the uMhlathuze context for Industry, communities, livestock and agriculture that are dependent on water;

- Intense sea swells and increased coastal storm events that have resulted in severe beach erosion, particularly on the northern shores of Richards Bay. The erosion has led to loss of coastal property; placing current and future coastal development at risk of slumping into the sea;
- Increased flood events, which has seen stormwater systems being tested in the urban centres. In the unplanned settlements, vulnerable communities living in flood prone areas are at risk of losing property and lives;
- Summer temperatures in particular will soar to extents where there will be higher dependency on cooling and air-conditioning, thus increasing energy costs. Alternatively productivity is lowered through unfavourable working conditions; and
- Increased wind activity, will be particularly problematic for uMhlathuze that is noted for poor air quality from industry stockpiles of commodities/materials.

3. The Climate Change and Energy Strategies

The Climate Change strategy comprehensively addresses Council vulnerability profile and anticipated climate change scenarios. There are inextricable linkages made to the Energy Strategy, which are themes that will follow through in the Climate Change Action Plan. Importantly it must be highlighted that the adopted Energy Sector Plan and Strategy set targets of reducing electricity consumption by 20% by 2020. It is opportune to review such targets, factoring realities of revenue and readiness to diversify our energy mix.

4. The Climate Change Action Plan

The Climate Change Action Plan is essentially the implementing arm of the Climate Change and Energy Strategies. The objective is to prioritize selected interventions in accordance with the following sectors:

- Coastal Management
- Water Resources Management
- Stormwater Management
- Open Space and Biodiversity Management
- Waste Management
- Energy Management
- Integrated Transport Planning
- Spatial Planning, Land Use and Designing for sustainability
- Human Settlement Planning
- Disaster Management Responses
- Air Quality Management

5. Global Affiliations and Strategic Partners

Climate Change initiatives renders significant opportunities to engage with the global community. In fact, this is beneficial from not just a profiling perspective, but also in seeking climate finance and support from various international affiliations. It was therefore important to streamline some of these initiatives into the Climate Change Action Plan by way of outlining some of the cross-cutting programmes and partnerships that the municipality has already embarked on. These include

- The Low Emissions Development Strategy, through strategic partners ICLEI
- The uMhlathuze Water Stewardship Partnership climate interventions at uMzingwenya
- The Global Compact of Mayors on Climate Change and Energy

6. Institutional arrangements for implementing climate change actions

In the course of preparing the Climate Change Action Plan, it became quite apparent that the cross-cutting nature of the plan requires a formally constituted team to report on the various interventions.

The City of uMhlathuze has, in other instances such the Greenest Municipality Competition, constituted a reference group dealing with environmental functions. It was therefore seen as appropriate to utilize the same committee referred to as the name “Green Team” to implement the climate change strategy and implementation plan, and report accordingly for purposes of good governance.

The Climate Change Action Plan projects a 5 year snapshot, and will remain a live document.

Figure 22: Composition of the uMhlathuze Green Team



6.13 COASTAL DEVELOPMENT SETBACK LINES

A service provider was commissioned to determine an updated development setback line for the beaches of Richards Bay, north of the existing harbour entrance, taking into account this long-term erosion trend. This line is to provide for a 100-year setback/buffer, which would provide the Municipality and proposed developers with long-term certainty regarding property safety. This could be termed an extreme setback, as development setback lines are generally determined for a 50-year period.

A numerical shoreline model was calibrated with 17 years of beach survey and bypassing data to an average accuracy of 11 m. It was found that the rate of beach nourishment, from sand bypassing at the port, plays a determining role in the location of the 100-year setback. Three scenarios of future sand bypassing were evaluated:

No bypassing from 2006 onwards – Scenario 1 – as the Worst Case Scenario:

It was found that the magnitude of erosion predicted for Scenario 1 invalidated basic assumptions made in the study. The 100-year setback line could therefore not be determined for this scenario, and a 50-year setback line is presented instead. This lies up to 350 m landward of the present shoreline.

Continued bypassing at the average annual rate of the past 17 years (607 200 m³/yr) – Scenario 2 – as the Most Realistic Scenario:

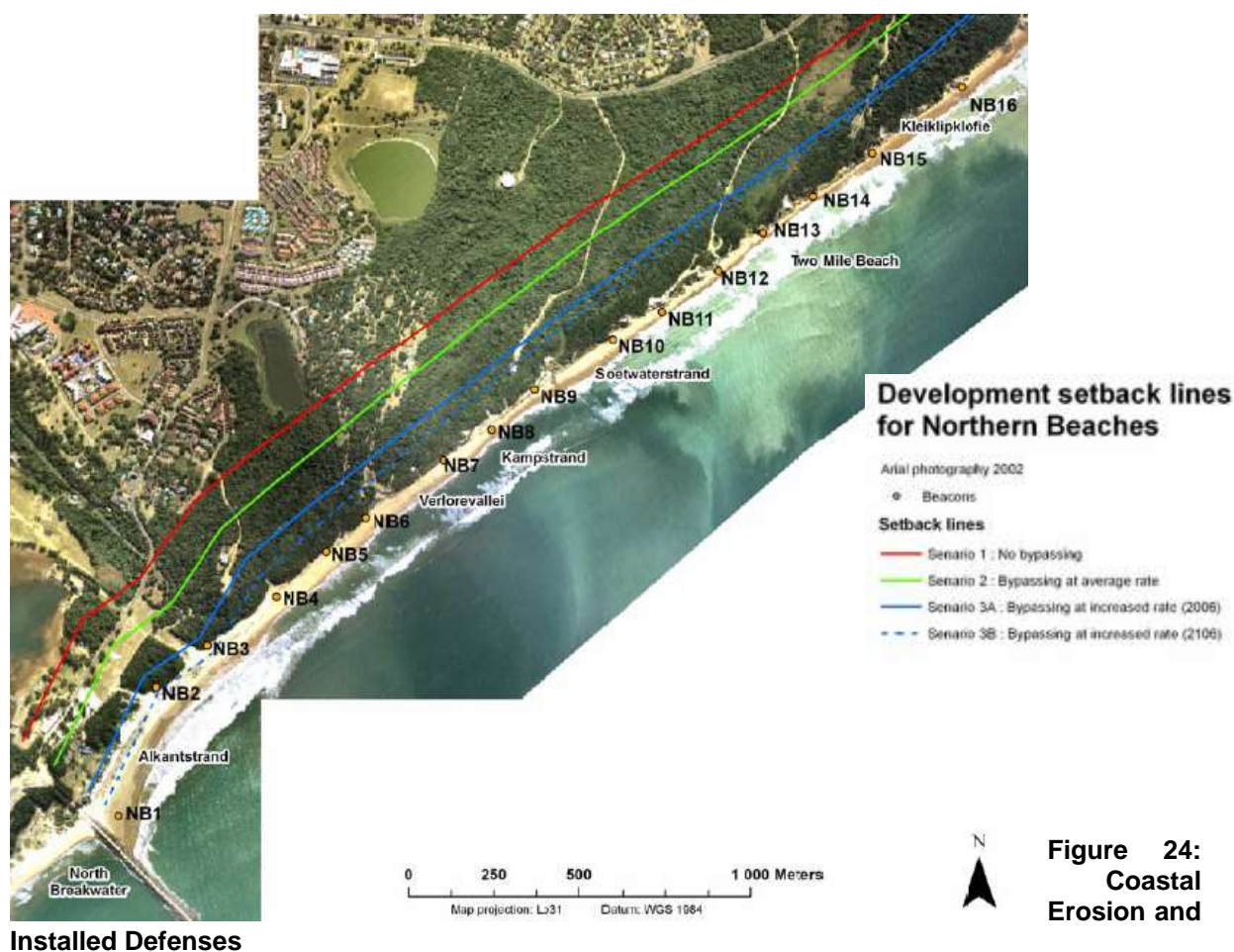
The setback line for Scenario 2, which is possibly the most realistic scenario, lies up to 250 m landward of the present shoreline. Some existing developments are located seaward of it, which could therefore be impacted in future due to beach erosion.

Bypassing at an increased rate (950 000 m³/yr) – Scenario 3 – as the Best Case Scenario:

Two setback lines are provided for Scenario 3, as the accretion of the beach that is predicted to occur during the course of the scenario effectively means that the line would shift seawards over time. Implementation of this setback line would require that the National Ports Authority agree to the increased sand bypassing and is subject to finding suitable material for bypassing.

The next most critical factor in determining the location of the setback line was found to be the occurrence of slip failures/dune slumps of the high dunes. An analysis of aerial photographs indicated that such slips could result in rapid coastal retreat in the order of 110 m. It is recommended that the geotechnical stability of the dunes be investigated in detail, if the retreat distances used in this study are to be refined. The following figures provide the setback line for the three scenarios explained above.

Figure 23: Development Setback Lines along Northern Beaches



Installed Defenses



6.14 THE IMPACT OF BIODIVERSITY ON SPATIAL DEVELOPMENT

Please note that this impact has only been determined for the pre-2016 LGE portion of the municipality, and, as such, has to be expanded upon to include the whole post-2016 LGE municipal area.

This section attempts to assess the state and condition of biodiversity assets within the jurisdiction of the uMhlathuze Municipality and implications thereof in terms of future development potential. The Biodiversity assets are mapped out and represented by, amongst others, the vegetation types within catchments.

The assessment is based on the functionality of geographically defined units rather than on individual vegetation types because the former implicitly includes the importance of spatial patterning and inter-connectedness. Functionality is defined here as the perceived ability of a landscape unit to maintain biodiversity. This must not be confused with the commonly used notion of the role of diversity in ecosystem functioning (supply of goods and services), which is addressed in the Environmental Services Management Plan of the municipality (KZ 282).

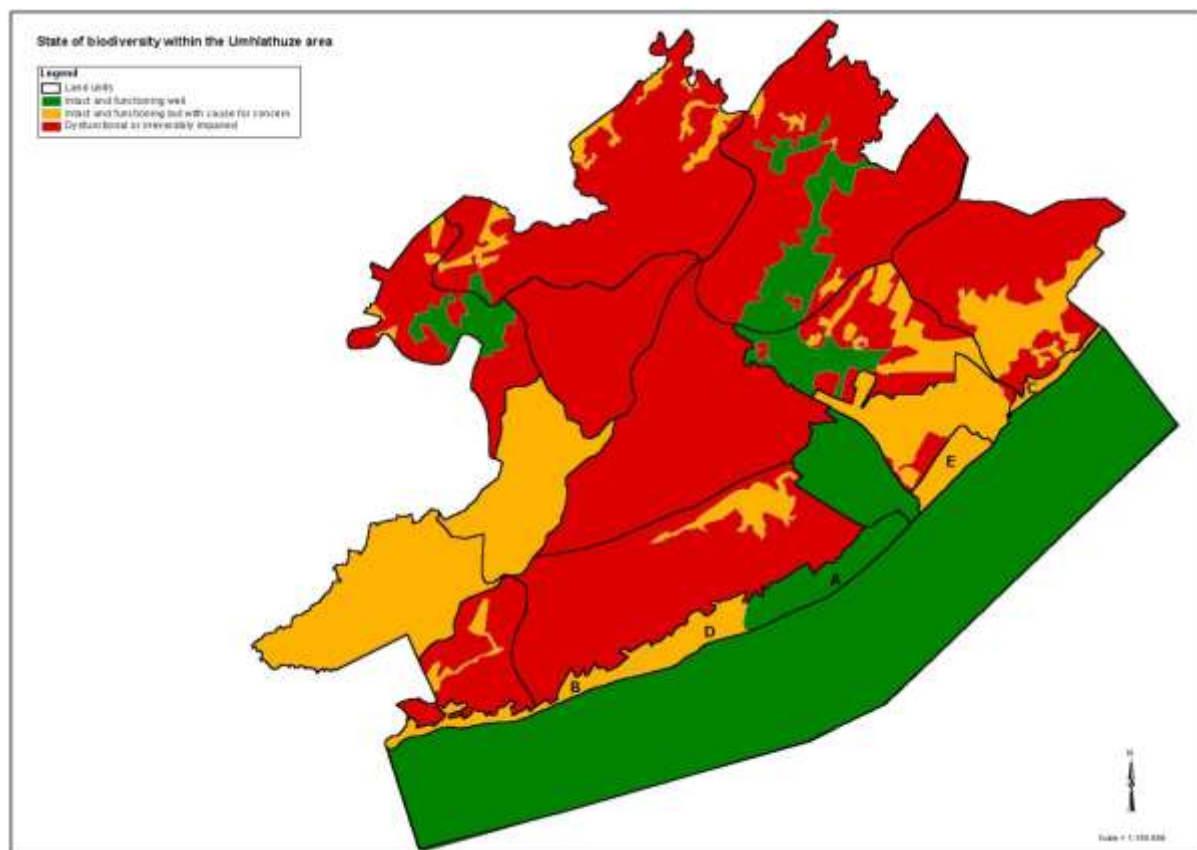
Other biodiversity assets of significance include the following:

- Estuary (landscape 6) and Lake Cubhu
- Nseleni valley (landscape 10), with fragmented extension into landscape 12 (upstream)
- An east-west corridor within Richards Bay (landscape 9)
- Grasslands, savanna and thicket of the upper
- Portion of the Mhlathuze catchment within KZ282 (landscape 13)
- Lake Mzingazi and environs (landscape 8)

The functionality assessment of biodiversity units is graphically summarized in the following figure, in which the ranks are simplified into a three colour code:

- Green for intact and functioning well
- Orange for intact and functioning but with cause for concern (e.g. Fragmentation is continuing apace or pronounced pollution inputs)
- Red for dysfunctional or irreversibly impaired

Map 10: State of Biodiversity Based on Functional Units



The ranking of each landscape unit is provided in the following table, whilst the scale for ranking of functionality is as follows:

- | | |
|---|------------------------|
| 1 | High functionality |
| 2 | Moderate functionality |
| 3 | Low functionality |
| 4 | Dysfunctional |
| 5 | Irreversibly impaired |

Table 38: The Functionality of Landscape Units in Respect of Maintaining Biodiversity

Landscape unit	Size	Condition	Landscape context	Functionality Rank
1 Dune Forest (compartment 1 - South estuary)	Large and intact; stable	Good; edge: area low; little fragmentation. Advancing coastline has resulted in slumping in places. Will mostly be removed by dune mining.	Key north-south linkage along coast for dune forest biota (national importance). Well connected to interior through estuary and rivers. Key winter refuge for Afromontane (Ngoye) birds (national importance). Rainfall receiver (flood attenuation), hence key water source for Lake Cubhu and estuary (sanctuary).	1
1 Dune Forest (compartment 2 - North Umlalazi)	Large but shrinking;	Moderate; high edge: area ratio; increasingly dissected by cultivation. Further threat of fragmentation from an advancing coastline that has resulted in slumping in places. Will mostly be removed by dune mining.	Key north-south linkage along coast for dune forest biota (national importance), southern peninsula especially important as a stepping stone. Integral component of Umlalazi Nature Reserve. Connected to interior through Umlalazi river. Key winter refuge for Afromontane (Ngoye) birds (national importance), with which it is connected via inland forest fragments (landscape 3). Rainfall receiver (flood attenuation), hence key water source for Umlalazi estuary (international importance because it never closes) and for Lake Cubhu and estuary (sanctuary). Umlalazi river and estuary is a regional fish nursery.	2
1 Dune Forest (compartment 3 - North harbour mouth)	Moderate size, apparently stable	Moderate; insular with residential to west and mined area to north. Advancing coastline has resulted in slumping in places.	Key north-south linkage along coast for dune forest biota (nationally important). Main source of plant propagules and animal populations for recolonization of mined areas to the north. Connected to interior through corridors to Lake Mzingazi and beyond. Key winter refuge for Afromontane (Ngoye) birds (national importance). Rainfall receiver (flood attenuation). Key water source for Lake Mzingazi (national importance).	2

Landscape unit	Size	Condition	Landscape context	Functionality Rank
1 Disturbed Dune Forest (compartment 5- between 1 and 2)	Small, increasing	Poor - mainly current or recently logged plantation. Secondary regrowth infested with alien plants. Western boundary dissected by cultivation. Further threat of fragmentation from an advancing coastline that has resulted in slumping in places.	Important for linkage between forest north and south of estuary, secondary growth functioning in a manner similar to an ecotone. Rainfall receiver (flood attenuation). Key water source for Lake Cubhu and estuary (sanctuary).	4
1 Relict Dune Vegetation and Stabilized sands (compartment 4 - between estuary and harbour mouths)	Small, disappearing	Poor - much derived from redeposited area following harbour construction. Predominantly alien trees and scrub.	Important north-south linkage across the harbour and estuary, which is otherwise a big gap. Appropriate and important area for intervention. Rainfall receiver (flood attenuation).	4

Landscape unit	Size	Condition	Landscape context	Functionality Rank
2 Lake Cubhu and catchment	Catchment transformed by cultivation and urbanisation	highly by and Remaining biodiversity assets: Coastal Forest patches within plantations; drainage lines fragmented by cultivation; mostly untransformable wetlands.	Lake Cubhu is a key natural feature of national importance, still intact but 'driven' entirely by this landscape and the dune cordon (ie a self-contained system). It is also a key water source because of its size. Lake Cubhu still clearly linked to the estuary (sanctuary), which is essential for crustacean migrations. Integrity of the connecting 'neck' is essential. Swamps protecting key inlet points are critical buffers for maintaining water quality. Water quality threatened by organic inputs from Esikhawheni (organic soups in reedbeds). Drainage lines support very poor aquatic diversity. Poor water quality apparently reflected by water-borne diseases. Dune mining could threaten the hydrological dynamics maintaining Lake Cubhu. Forest patches are dysfunctional because of a high perimeter-to-edge ratio and heavy infestation with alien plants. Forest patches serve a key stepping-stone role for wintering birds from Ngoye Forest en route to the dune cordon. Drainage systems are becoming dysfunctional because of the extent of fragmentation by cultivation.	4
3 Umlalazi catchment on Quaternary sands	Catchment transformed by commercial and communal agriculture	Remaining biodiversity assets: Coastal Forest patches within plantations along drainage lines whose condition is declining.	An important water source for the internationally important Umlalazi estuary but declining in delivery of water because of plantation forestry. Forest patches are moderately functional (better perimeter-to-edge ratio than those in landscape 2), but are infested with alien plants. Forest patches serve a key stepping-stone role for wintering birds from Ngoye Forest en route to the dune cordon.	4

Landscape unit	Size	Condition	Landscape context	Functionality Rank
4 Umlalazi catchment within hills	Catchment transformed by mainly communal agriculture	Remaining biodiversity assets: drainage lines and associated fragments too steep for cultivation are all that remain.	Catchment still hydrologically sound, producing water for Mtunzini and a key source for the Umlalazi river and estuary. A degree of inter-connectivity remains for remnant biodiversity because of drainage lines, but overall it is too fragmented to function very effectively. Drainage lines offer a limited biodiversity corridor between Ngoye forest and the Umlalazi river.	5
5 uMhlathuze river on Quaternary sands	Almost completely transformed, including drainage lines	Terrestrial systems and drainage lines have been irreversibly impaired. Umhlathuze river in poor condition for aquatic biota because of low flow resulting from abstraction and impoundments (eg Goudetrou Dam, Felixton) and a weir. Remnant floodplain vegetation and some swamp forest occurs along the river. Much of floodplain has been transformed to sugarcane.	Landscape unit constitutes a significant biodiversity barrier between the coast and hinterland. Umhlathuze river offers a dysfunctional linkage for aquatic and floodplain biota. Umhlathuze river is a key 'driver' of the estuary (sanctuary) for hydrological and sedimentation dynamics. Lake Nsezi was originally formed by backfill from flooding of the Umhlathuze.	5

Landscape unit	Size	Condition	Landscape context	Functionality Rank
6 Estuary (sanctuary) complex	Large connected components of mangrove forest, salt marsh, mudflats and <i>Phragmites australis</i> marsh around the periphery of the open water	Good condition but experiencing increasing human impact - logging of mangrove trees and fish poaching.	Important estuary because of size, only estuaries of comparable size in SA are Knysna, Kosi and Durban. International bird refuge for palearctic migrants, especially small-bodied waders (more reliable than St Lucia). Important nursery for regional marine fisheries. One of the largest mangrove systems in southern Africa. Critical for the migration of crustaceans and other biota to Lake Cubhu. Supports an important prawn nursery. Functioning depends critically on inputs from the Umhlathuze river and from Lake Cubhu. Increased sedimentation from harbour construction and from deterioration of the catchment has resulted in a flood-tide delta developing rapidly that could alter functioning.	1
7 Harbour estuary and associated shoreline	Water body is large and functional, shoreline fragmented.	Estuary was transformed from a shallow to a deep structure with harbour construction, and is in moderate condition. Shoreline development has resulted in reduced components of moderate size, becoming dysfunctional.	A deep water estuary that is dominated by marine components. International bird refuge for palearctic migrants, especially large-bodied waders. Supports a crustacean nursery (especially prawns and crabs) probably larger than that of the sanctuary. Has allowed significant quantities of alien marine species to establish and proliferate. Still supports some of the original pre-development 'climax' mangroves. Maintains an active connection with Lake Mzingazi for crustacean and other aquatic biota. Complements the estuary of the sanctuary.	3

Landscape unit	Size	Condition	Landscape context	Functionality Rank
8 Lake Mzingazi and catchment	Catchment extensively transformed by urbanization, plantation forestry and communal agriculture.	Much of the catchment has been irreversibly impaired by transformation. Remaining biodiversity asset includes dry forest, swamp forest and wetlands. Informal settlement has spread along much of the lake's perimeter, threatening water quality because there is no sewage system. Water quality is moderate. Forestry has reduced water inputs.	Lake Mzingazi is a freshwater body of national significance because of its size and location. Its functioning depends on the condition of the catchment. Important as a secondary nursery for crustacean species, including five prawn species, which require an open connection with the harbour be maintained. Lake Mzingazi once supported bird colonies, but no longer. Forests on the southwest bank support a notable bird diversity. An important source of water for Richards Bay.	3
9 Richards Bay town and environs	Despite urbanization and industrial development, large, interconnected fragments remain.	Remaining biodiversity asset: Coastal Grassland, hygrophilous grassland, wetlands, dry forest and swamp forest. Varies from good or moderate condition to heavily impacted by alien plants or industry. Fluoride leakage into the environment may affect skeletal development of vertebrates.	Kwabonambi grasslands of national conservation significance. Most southerly remnants of Coastal Grassland, re-encountered only at St Lucia, of which large, functional portions remain. Diverse vegetation types maintain a key east-west biodiversity corridor between Lake Mzingazi and the Enseleni river (Landscape 10). Thulazihleka Pan is an important bird locality and feeding area.	3
10 Nseleni river and immediate catchment	Most of the catchment has been transformed by commercial agriculture and forestry, but large, well connected portions remain along the river.	Remaining biodiversity asset: grasslands, dry forest, swamp forest, wetlands, occurring as a consolidated unit of good to moderate condition. Berm has transformed lower reaches of river into a lake. Water quality impacted by eutrophication (algal blooms)	The Nseleni valley provides a key link for biodiversity between coastal units and the interior. A key regional repository of biodiversity of both plants and the supported trophic web, especially of secretive species. One of the most intact remaining areas of biodiversity within KZ282. Contains the only formally conserved component in KZ282. This valley and the sanctuary meet RAMSAR criteria. Wetlands are critical for maintaining water quality and the quality of input into the sanctuary. Transformed local catchment has been irreversibly impaired.	1

Landscape unit	Size	Condition	Landscape context	Functionality Rank
11 Upper Umhlathuze river: immediate catchment	Most terrestrial areas transformed, some discrete blocks remaining plus water bodies	Remaining biodiversity asset: large freshwater lakes and associated wetlands with contiguous remnant dry forest and grassland. Water bodies vulnerable to quality of water input; remaining terrestrial blocks in poor to moderate condition	Lakes are of national significance as they contain red data fish species. Lakes are off-channel (cut-off) lakes that therefore accumulate agro-chemicals and effluent. Their water quality is poor. Lakes and associated dryland vegetation connected to a degree via riverine stretches.	4
12 Upper Enseleni Catchment	Mostly transformed with some sizeable remnant blocks of dryland vegetation	Remaining biodiversity asset: grassland, thicket, savanna, dry forest, swamp forest and wetlands associated with river. Remnant blocks in moderate to poor condition. Landscape in poor condition that would become dysfunctional with further fragmentation. Transformed areas are irreversibly impaired for biodiversity.	The remaining asset enjoys a degree of interconnectedness via riverine stretches to the intact landscape along the lower reaches of the Nseleni river.	4

Landscape unit	Size	Condition	Landscape context	Functionality Rank
13 Upper Umhlathuze catchment	A large, well-integrated block of indigenous vegetation with satellites. Remainder of catchment transformed by communal and commercial agriculture. Umhlathuze affected by weir abstraction.	Remaining biodiversity asset: grassland, thicket, savanna and dry forest. Much of the remaining vegetation is heavily utilized by livestock and humans.	A core area of the little remaining inland grassland, savanna and thicket vegetation, covering the local altitudinal range. In the context of KZ282, an important representative of lowveld vegetation that is different to anything on the coast. Connected to some degree with remnants on landscape 12.	2
14 Empangeni environs	Almost completely transformed by urbanization and agriculture.	Few remaining fragments, mostly in poor condition	Irreversibly impaired for maintaining biodiversity. Offers a significant barrier to flow and movement of biodiversity.	5
15 Marine section	Narrow continental shelf; extensive sandy beaches and almost no rocky shelves (Port Durnford)	Large scale effluent discharge into the continental shelf by pipelines	Key interface between tropical and temperate marine biota in KZN. Key conduit for the movement of marine larvae, especially of prawns to the Tugela banks.	1

The greater uMhlathuze Municipal Area supports a total of 174 Red Data species, which according to the South African National Biodiversity Institute, ranks amongst the highest in the country for an area of its size. This remarkable concentration of Red Data Species is one of the main reasons that most of the remaining percentage of undeveloped, indigenous land cover, is considered irreplaceable by Ezemvelo KZN Wildlife for meeting its conservation objectives in the Province.

Table 39: Red Data Species of Significance

Vegetation Type	Red Data Species (Significance)	Conservation Target
Grasslands	124	100 % following a detailed survey. Conservation of a substantial portion of the remaining natural asset in the region is required if conservation objectives are to be pursued
Forests	90	
Nseleni River_Lake Nsezi System	70	
Large Wetlands	55	
Estaries	28	
Lakes	18	
Mhlathuze River System	11	
Swamp Forests	9	

All of the remaining ecosystem types are important for supporting Red Data Species, implying that there is a direct conflict with future development imperatives. The Spatial Development Framework has identified such development opportunities for the area. Port expansion with associated industrial development is the single most significant opportunity in the area with tremendous potential to grow the local, regional and national economy. Existing planning approaches in the area also present opportunities for to enhance conservation and hence tourism objectives. The limited space to accommodate the growth demand in the area reflects the realities of ecological risks that may arise and the anticipated conflict between conservation and development. The situation highlights the need for closer collaboration and coordinated planning between environmental stakeholders and prospective developers.

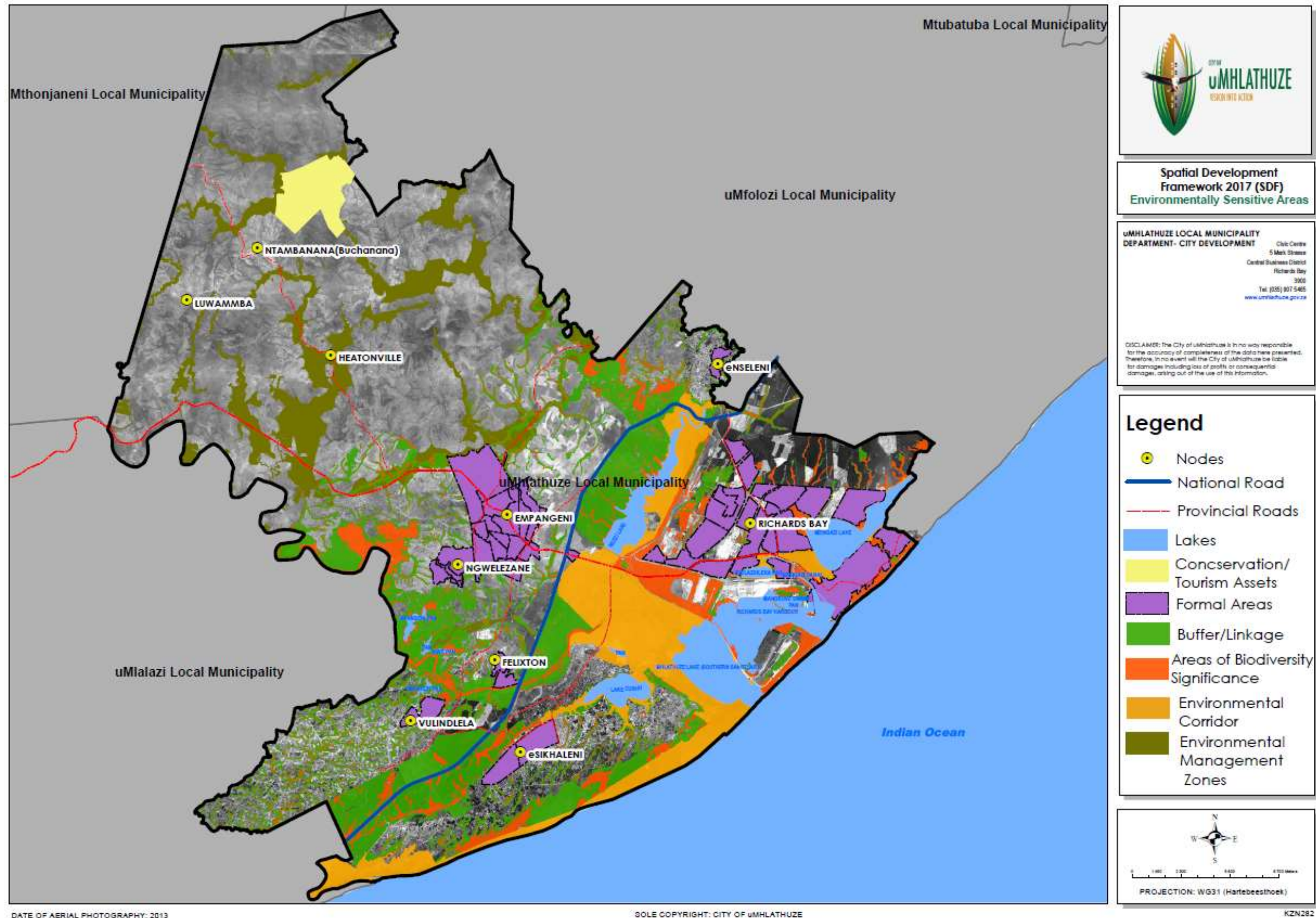
Irrespective of attempts by authorities to protect environmental assets in terms of land use limitations for the obvious reasons provided, a number of other factors are impeding attempts. There is a continuous encroachment of development (mainly unauthorised) into public open space areas and create ways need to be explored to manage these vast open areas.

A consolidated map has been prepared for the whole municipality on environmental sensitivities. A comparative level of information is not available for the whole municipal area and additional research is required to achieve such.

6.15 SUMMARY OF KEY ENVIRONMENTAL ISSUES

- The complex hydrology of the area, whilst attributing to unique natural features, poses challenges for development. This is particularly the case where logical spatial expansion need to take place.
- The impacts of Climate Change are being experienced in a local scale in the following respects:
- Abstraction of water from the various Coastal Lakes has reached ecological reserve limits during periods of extended drought. The long term ecological and aquatic impacts are unknown, particularly where these systems feed into estuarine systems
- Severe flood events have yielded disaster implications for unplanned settlements with flood prone/ flood risk areas. Whilst this is the case, these are settlements that impact on environmental services by virtue of wetland degradation.
- The Richards Bay northern beaches in particular have been confronted with severe erosion, with a result that emergency coastal defenses were required. It is also a fact that the Northern beaches are not being adequately replenished at the required rate of sand volumes from the Transnet sand bypassing scheme.
- Environmental Offsets linked to the Port expansion render significant unknowns from an institutional/ governance perspective but equally from the perspective of physically transforming the affected environmental from current land use.
- Further land development is likely to render biodiversity implications

Map 11: Environmental Sensitive Areas



7. AGRICULTURAL OVERVIEW

South African agricultural background can be best understood against the backdrop of the 1913 Natives Land Act which deprived black South Africans, especially Africans, any right to land ownership or lease in specified areas of the country.

The underlying principles to rural development and land reform are:

- Deracializing the rural economy;
- Democratic and equitable land allocation and use; and,
- Sustain production discipline for food security.

In 2009, the Cabinet adopted the Comprehensive Rural Development Programme (CRDP), which speaks to both land reform and rural development. The strategic thrust of the CRDP is agrarian transformation.

In 2010 government introduced fourteen (14) outcomes approach. The 14 outcomes are linked to a service delivery agreement between national Ministers and Members of Executive Committee. This approach has forged co-ordination amongst various line function departments and strengthened monitoring and evaluation.

Outcome 7 intends to address and promote 'vibrant, equitable and sustainable rural communities; and, food security for all'. The objectives of Outcome 7 will be achieved through the implementation of activities under the following five outputs:

- sustainable agrarian reform with a thriving small and large scale farming sector;
- improved access to affordable and diverse food
- improved rural services to support rural livelihood;
- job creation and promoting economic livelihoods; and
- an enabling institutional environment for sustainable and inclusive growth

7.1 THE ALIGNMENT OF COMPREHENSIVE RURAL DEVELOPMENT PROGRAMME AND NATIONAL DEVELOPMENT PLAN

Chapter six (6) of the National Development Plan focuses on an integrated and inclusive rural economy. It also state that by 2030, South Africa's rural communities must have better opportunities to participate fully in the economic, social and political life of the country. The 2030 vision also includes a better integration of the country's rural areas, achieved through successful land reform, infrastructure development, job creation and poverty alleviation.

The Comprehensive Rural Development Programme (CRDP) has three development deliverables:

- meeting basic human needs,
- rural enterprise development; and,
- rural industries sustained by credit facilities and markets.

The identified rural nodes within the uMhlathuze Municipality intends to address and fulfil the objectives of the Comprehensive Rural Development Programme and National Development Plan.

The Municipality has prepared draft area analysis for each identified node, and it will further surveys when preparing the detailed Spatial Development Plans for each identified node. The Municipality will also ensure that communities within the identified nodes will be consulted, in line with a bottom up community based approach.

The following table provides a breakdown of land potential/capability in terms of hectares and percentages.

Table 40: Land Capability Breakdown

Land Capability	Size(Hectares)	Percentage (%)
High Land Potential	11548	9.89
Good Land Potential	73062	62.55
Moderate Land Potential	21565	18.46
Restricted Land Potential	2258	1.93
Very Restricted Land Potential	6975	5.97
Waterbodies	1400	1.20
Sub-Total	116808	100.00

The need to compact and densify becomes apparent when considering the above. Limited high potential agricultural land is available and agriculture plays a critical role in the country, district and uMhlathuze Municipality in respect of employment, GDP and food security.

7.2 AGRICULTURAL SUPPORT PLAN

The uMhlathuze Municipality has recently compiled an Agricultural Support Plan. The preparation of the plan has been informed by the reality that small farmers struggle to survive and to participate in food value chains resulting in the exclusion from capital markets and a struggle for economic survival.

Agriculture is known to be central in the economic development of rural areas given proper infrastructure and proper planning. In addition, rural communities are particularly vulnerable to climate change and an agricultural support plan was identified as a mechanism to assist farmers to operate and contribute to improved food security. In essence, the plan has identified farmers, their specialization and support require for effective production.

Amongst others, the plan has considered market demand, niche commodities and the natural resource base and has recommended a contract model.

The following principles guided the development of this plan:

- Sustainable agricultural development
- Agriculture is an integral part of the rural and urban economy
- Agricultural development is a process (not a quick fix)
- Land reform (tenure reform, redistribution and restitution) needs to be addressed

The said plan identified the following strengths, weaknesses and opportunities relating to agriculture.

Strengths:

- Climate
- Soils
- Perennial Rivers

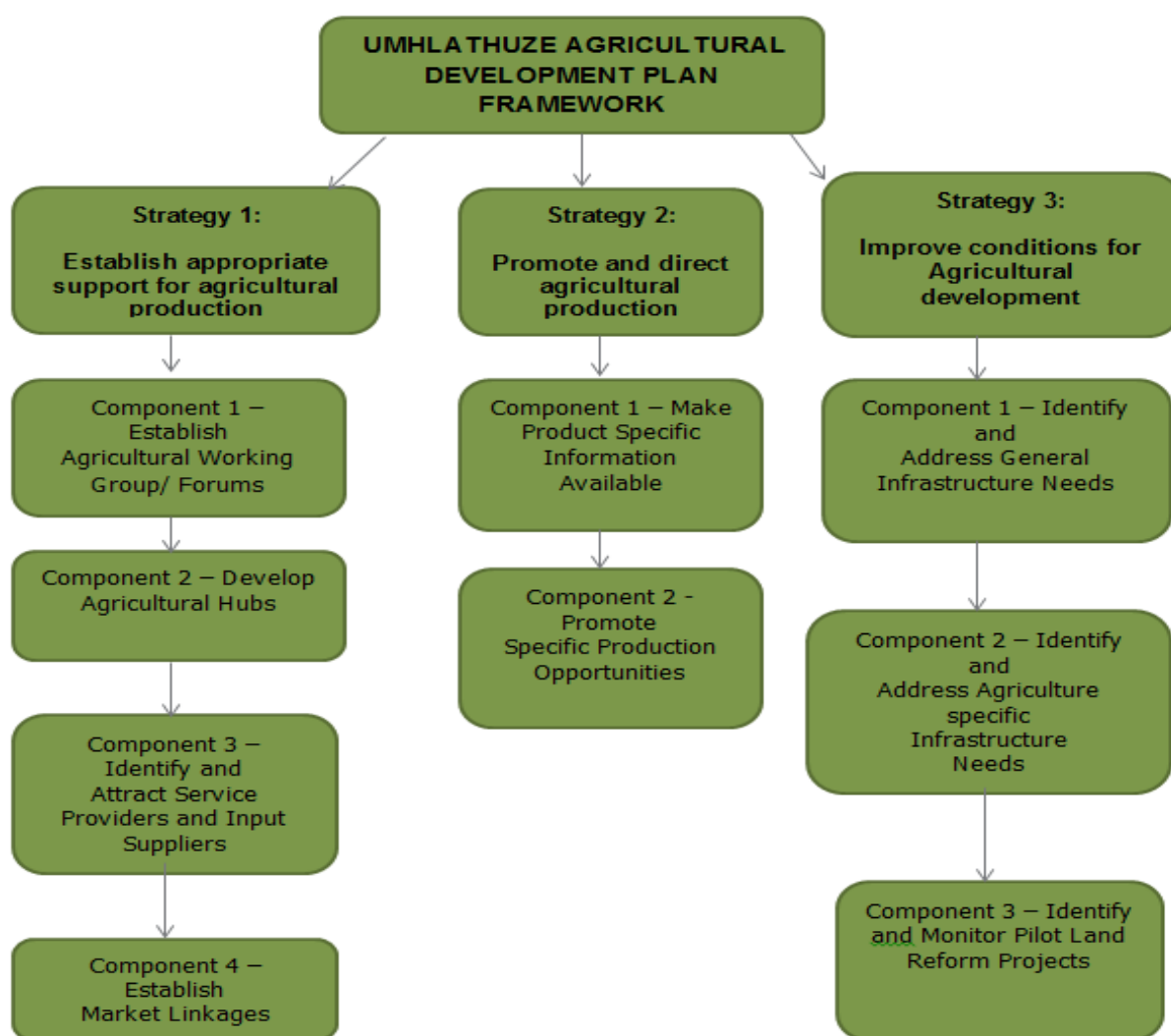
Weaknesses

- Market linkages
- Lack of production infrastructure
- Skills

Opportunities

- Natural Resources
- Marketing Infrastructure
- Logistics Infrastructure
- Radical Agrarian Socio-Economic Transformation (RASET)
- Social Plans

Figure 25: Agricultural Support Plan Strategies



Niche Commodities Identified:

- Essential Oils
- Macadamia Nuts

Animal Enterprise Opportunities:

- Goat Production (ongoing)
- Beef Production
- Poultry Production (meat & eggs) (ongoing)
- Aqua Culture (ongoing)

Partnerships Required:

- Department of Trade and Industry
- Department of Agriculture, Fisheries and Forestry
- Operation Phakisa
- Operation VULA
- Private Sector

Skills Development Required:

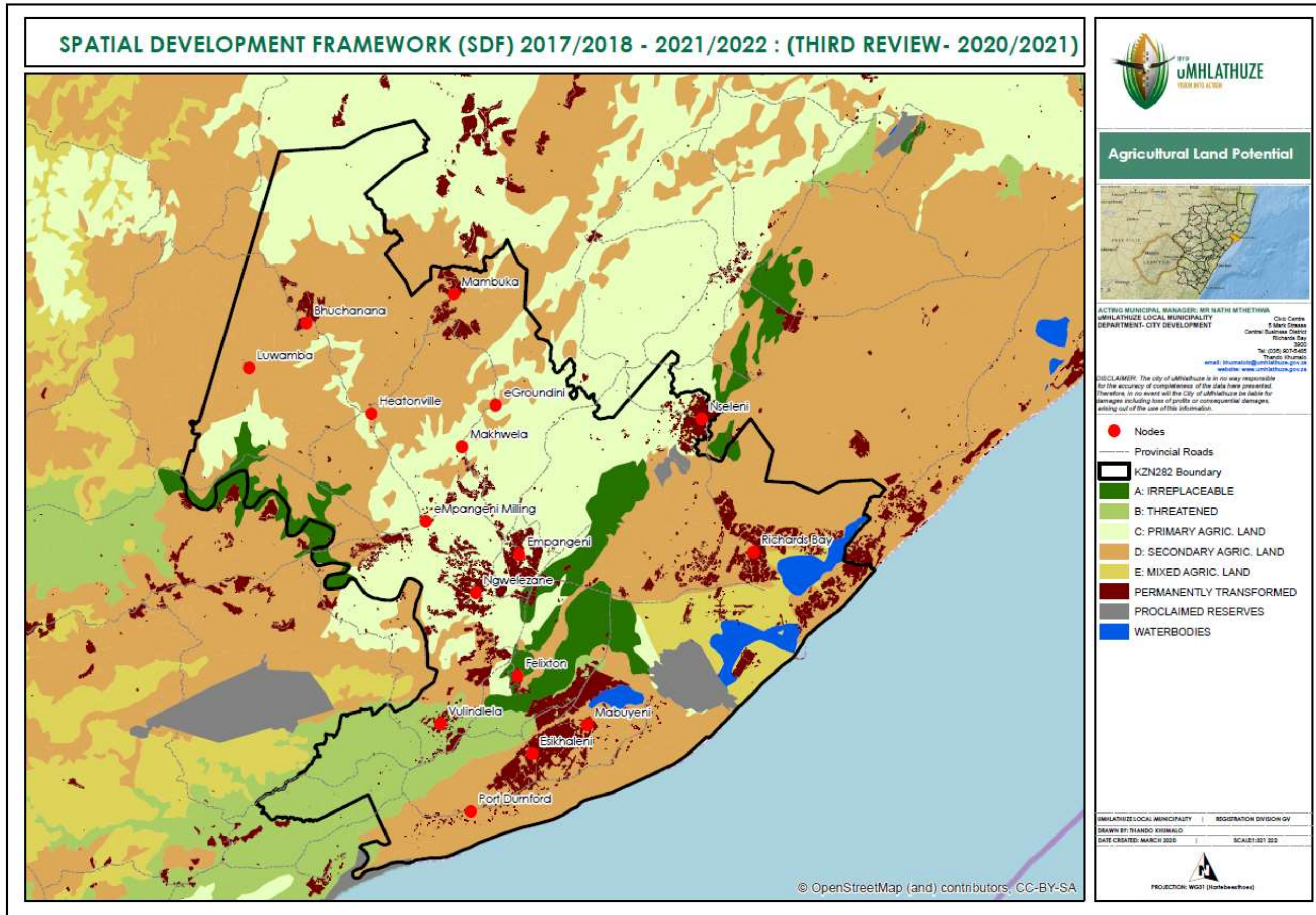
- Need market linkage and technical and infrastructure support

At overleaf, the following mapping is provided:

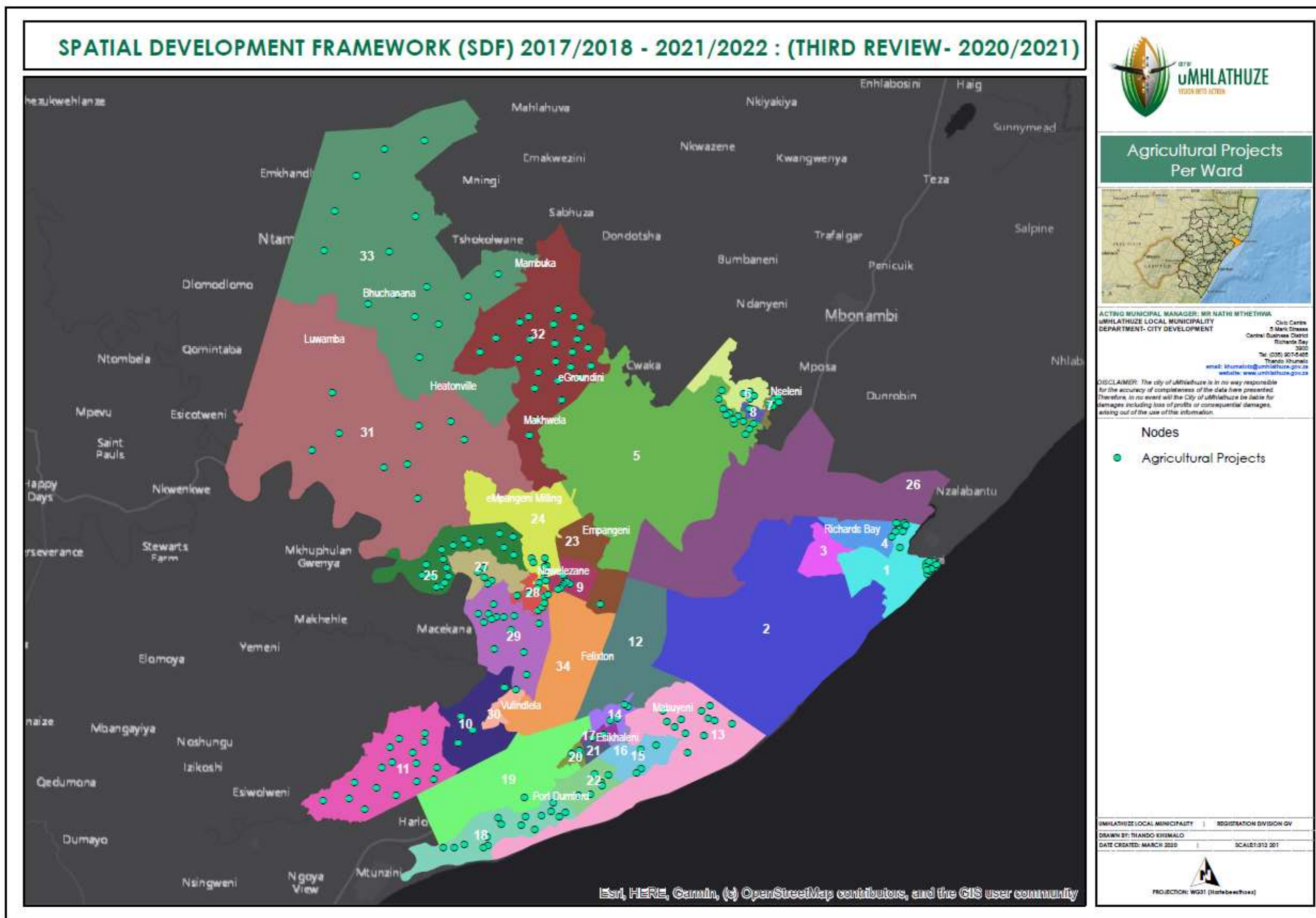
- Overall Land Capability and Land Potential for the Municipal Area as informed by Land Capability Classes.
- The distribution of Agricultural Projects per Ward noting the correlation with areas of low income (poverty), high unemployment and poor socio-economic conditions.



Map 13: Agricultural Potential



Map 14: Agricultural Projects per Ward



8. LAND REFORM

Land claims are made against the State in terms of the Restitution of Land Rights Act (No. 22 of 1994) and are resolved by way of physical land redistribution or other appropriate/practical means, e.g. financial compensation. Following the commencement of the Restitution of Land Rights Amendment Act (Act No. 15 of 2014), people who missed the 31 December 1998 deadline to lodge land claims now have an opportunity to lodge claims until 30 June 2019. It is important to note that the intention of land claims is **not** to stop development.

The Municipality is constantly engaging with the Land Claims Commission to attend to matters relating to land claims in the municipal area.

It has been determined that the following land claims in the municipality are being attended to:

1. Mandlazini / Mambuka Land Claim (Ref No Krn6/2/2/E/21/0/0/3)
2. Mambuka Amendment Claim (Amendment Notice 255 Of 2017)
3. Mbonambi Land Claim (Ref No Krn6/2/2/E/21/0/0/67)
4. Mndaba Group Land Claim (Ref No Krn6/2/2/E/21/0/0/53)

Mapping, based on information available, in respect of numbers 1, 2 and 3 above is provided. The relation of the Mambuka claim in relation to developments is also indicated.

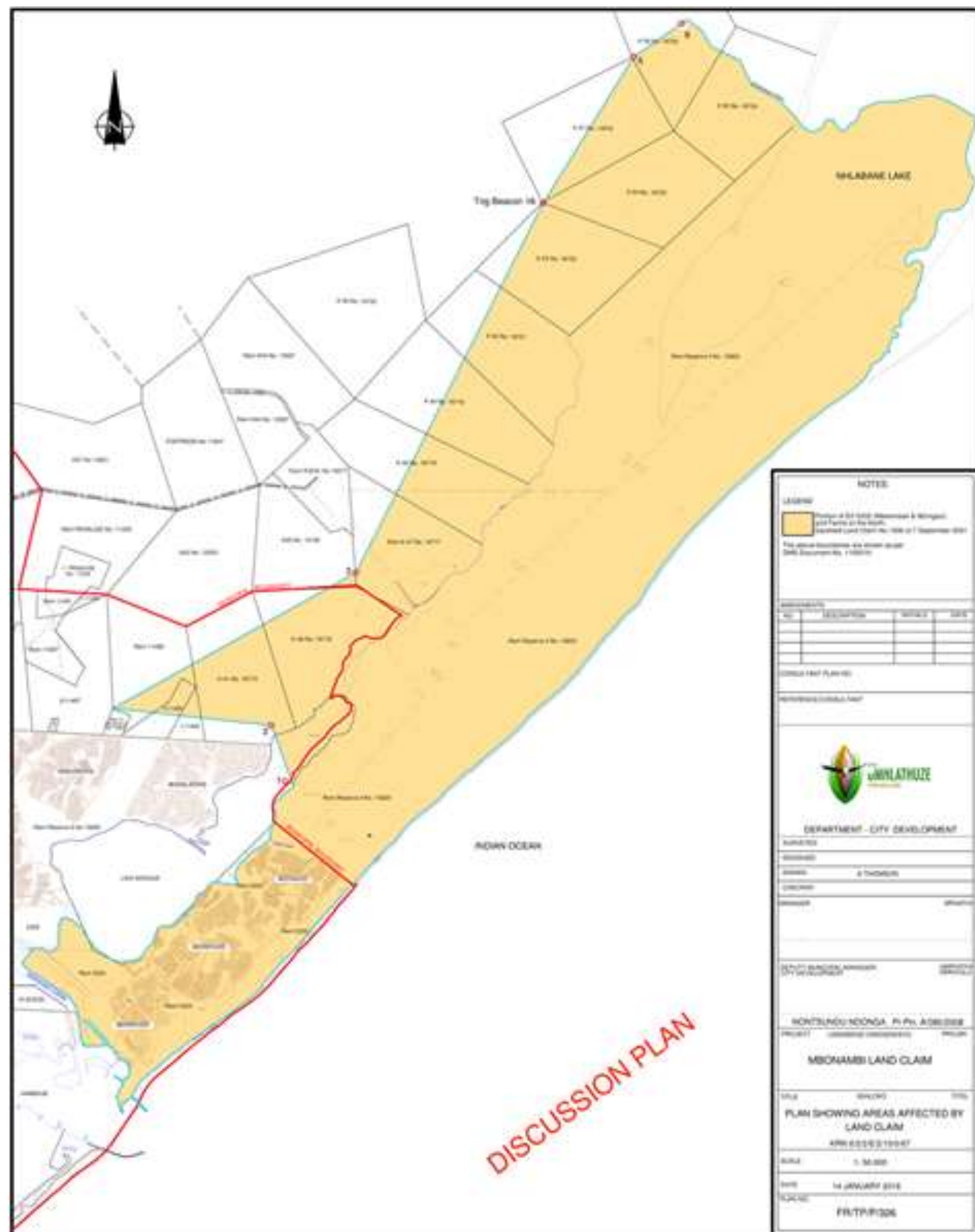
In recent months, land claims in respect of Mkhwanazi and Obizo (Cebhekulu) have been finalised and, once detailed information is available, such will be included into this document.

8.1 SUMMARY OF KEY LAND REFORM ISSUES

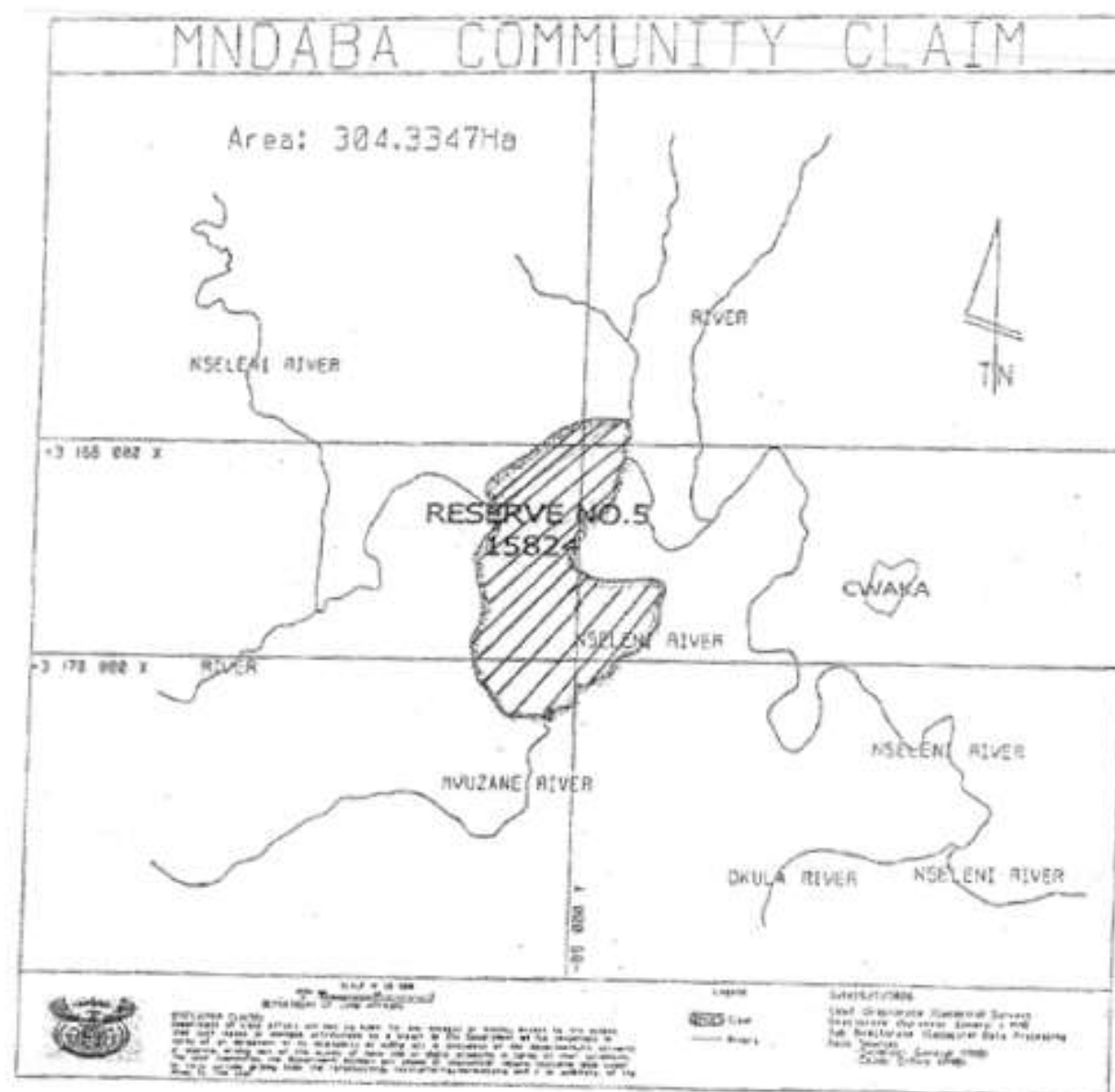
The opportunity to lodge land claims was extended to 30 June 2019 and, to a degree, some developers feel uncertain about the prospects of pursuing a development on land that may be subject to claim in future. However, the Regional Land Claims Commission has made it clear that the intention of land claims is not to hinder development.



Map 16: Mbonambi Land Claim



Map 17: Mndaba Land Claim

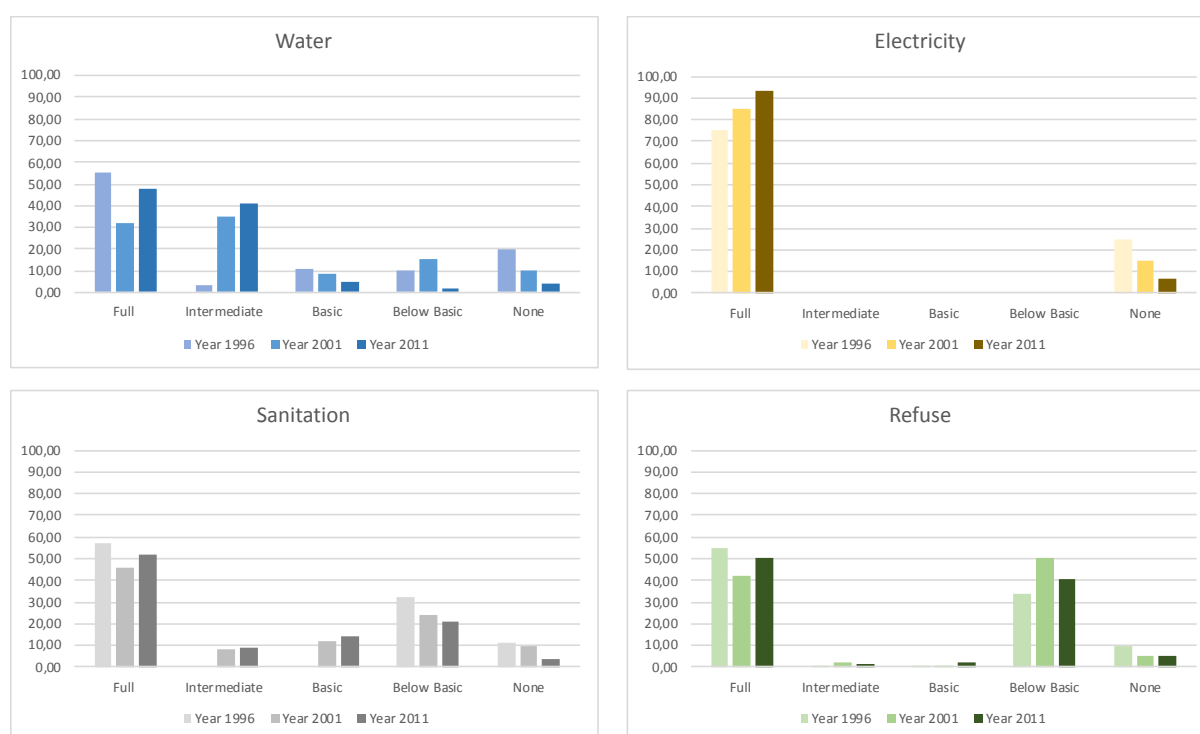


9. INFRASTRUCTURE AND SERVICES

Infrastructure Master and Sector Plans are in the process of review and update given, amongst others, the extended municipal boundary post the 2016 Local Government Elections (LGE). As and when new information becomes available, the Spatial Development Framework is updated accordingly.

The comparative access to services is indicated in the following graphs, i.e. water, electricity, sanitation and refuse compared over the period 1996, 2001 and 2011.

Figure 26: Access to Services

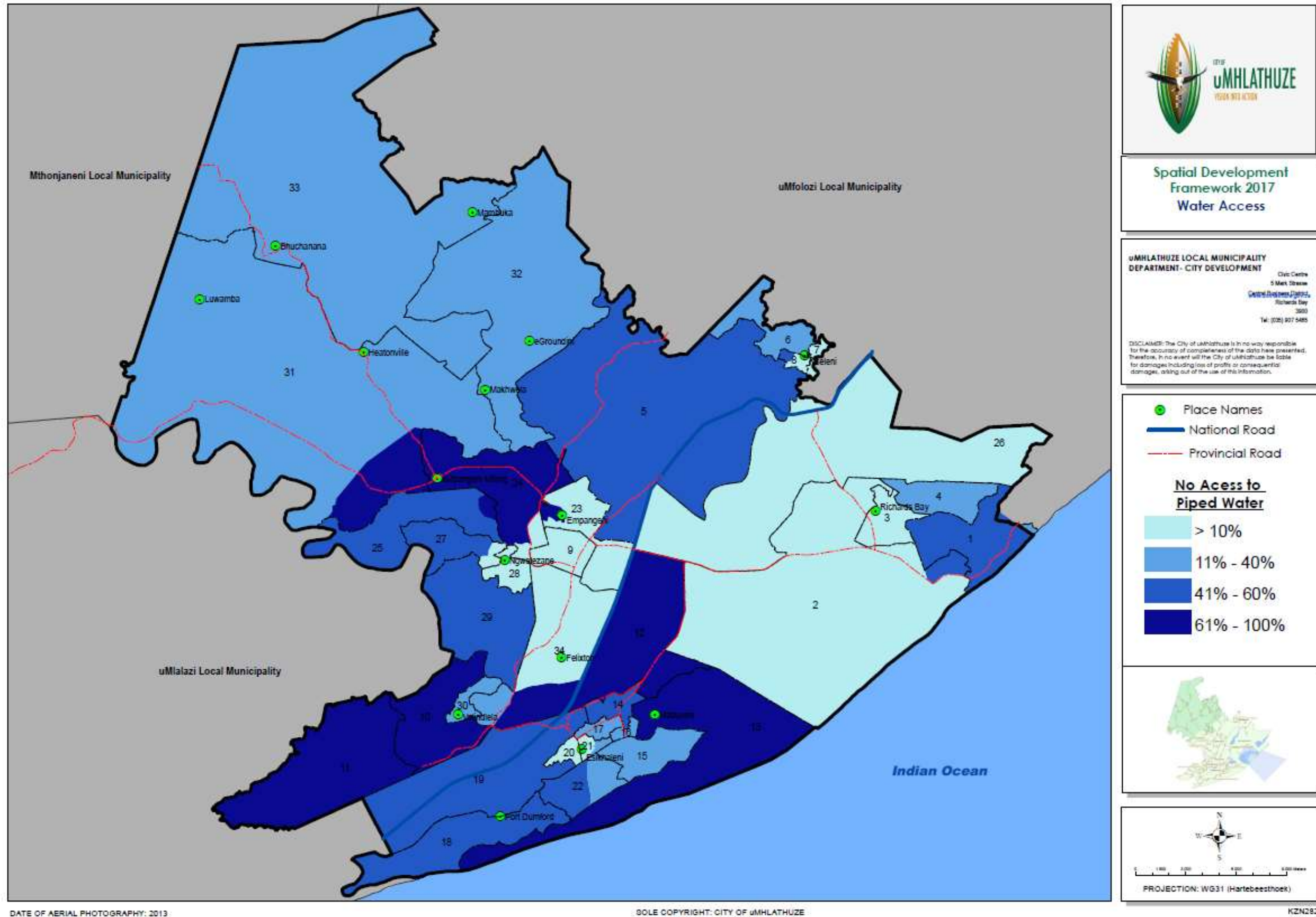


As per the maps attached at overleaf, the following is noted:

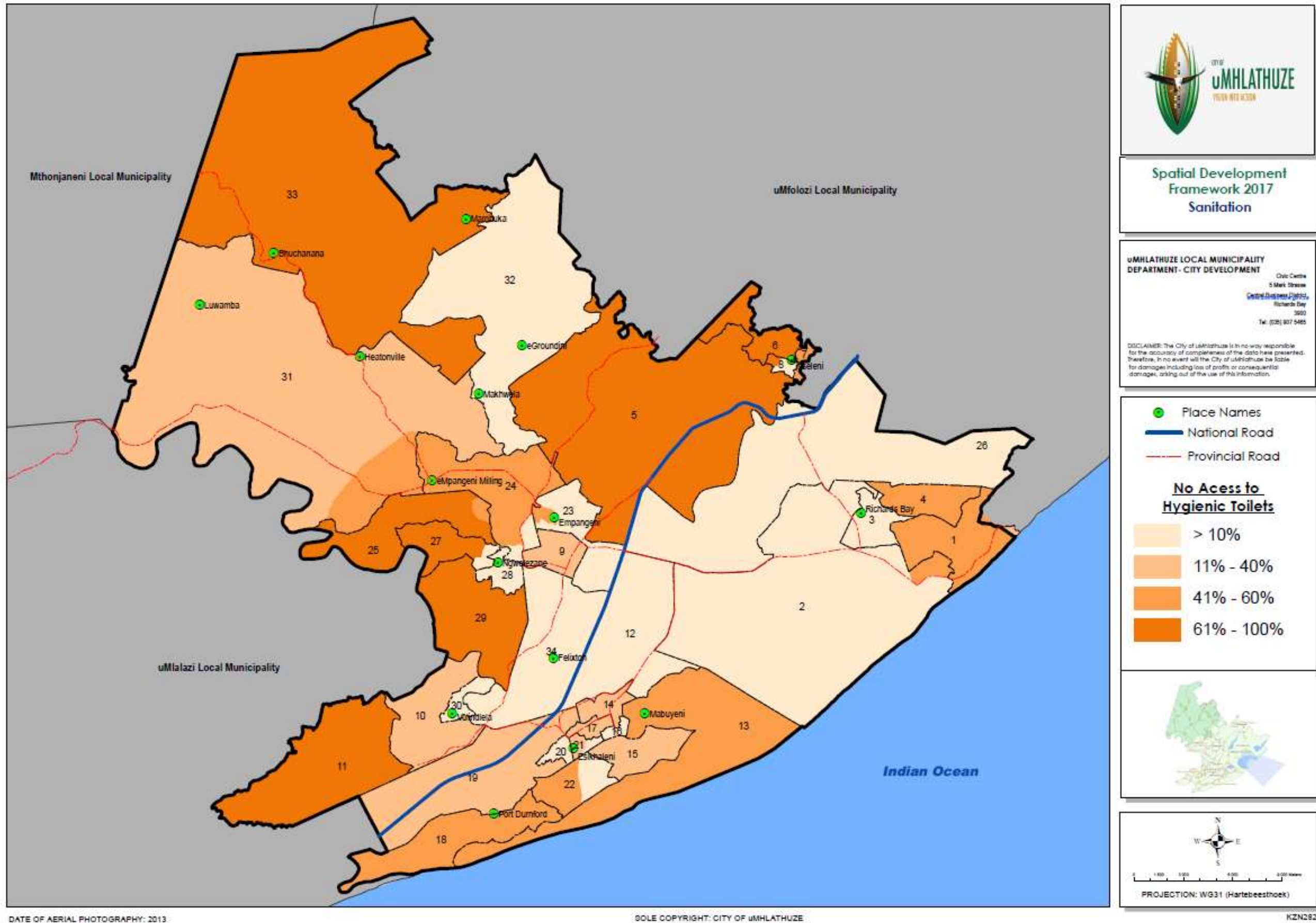
- Access to piped water mapping illustrates that Wards 31 and 33 have high percentages of households – more than 61% - that do not have access to piped water.
- Access to hygienic toilets mapping indicates that Wards 5 and 33 have more than 61% of their households without access to hygienic toilets.

The remainder of this chapter will provide updated information in respect of the various sector plans that exist, have been updated or are under review.

Map 18: Access to Piped Water



Map 19: Access to Hygienic Toilets



9.1 BULK WATER MASTER PLAN

During 2019, the uMhlathuze Bulk Water Master Plan was reviewed and the approval process is underway. A summary of main findings is provided herewith.

9.1.1 Existing Bulk Water Supply Infrastructure

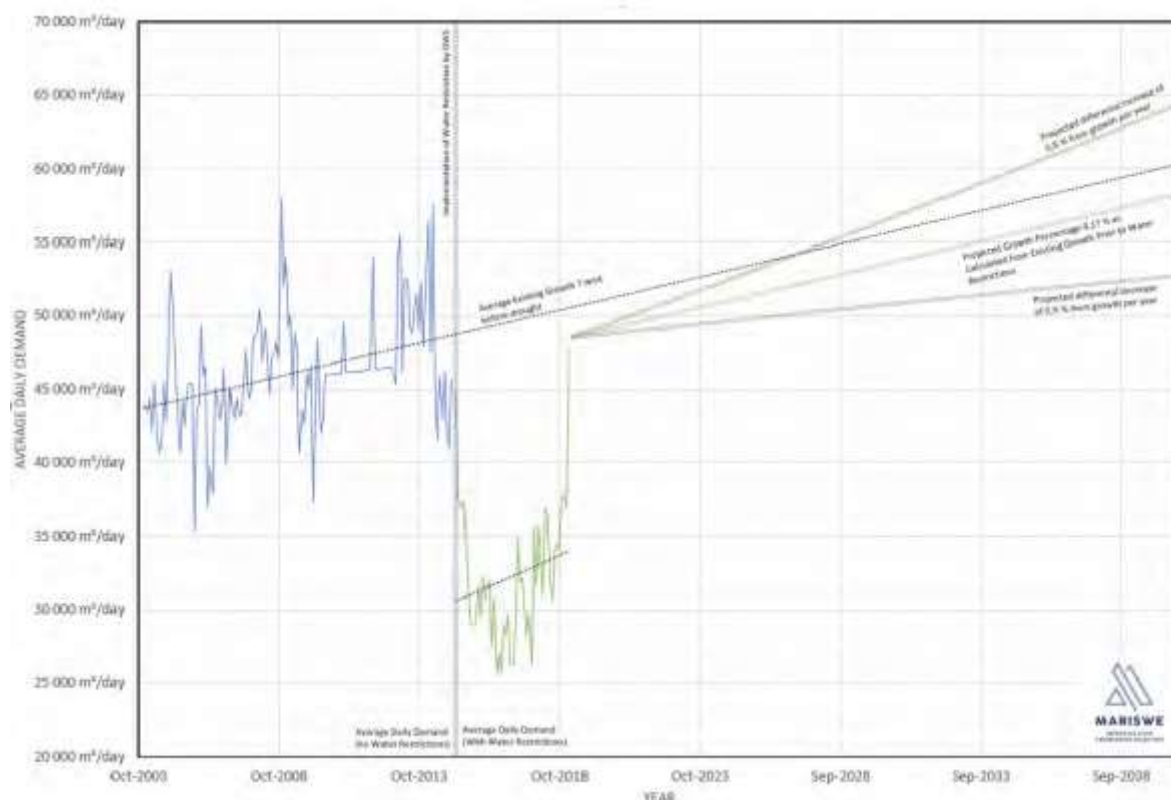
The following main water supply schemes have been identified, i.e.:

- Northern Scheme which is supplied from Mzingazi and Nsezi WTW
- Empangeni Scheme which is supplied from the Nsezi WTW
- Western Scheme which is supplied from the Ngwelezane and the Nsezi WTW via the Empangeni Scheme
- Southern Scheme which is supplied from the Esikhaleni WTW
- Ntambanana Scheme
- Nseleni Scheme

The Bulk Water Master Plan has taken cognisance of planned developments as captured in the IDP, SDF and Human Settlements Plan within the municipal area to inform bulk water needs in the future. These planned developments have been grouped by locality into the listed schemes whereby the expected demand can be quantified in relation to the supply.

Historic monthly abstraction, treatment and consumption figures were used to generate historic demand curves and relate such to a historic growth rate to further inform/project future bulk water needs as per the example for the Northern Scheme hereunder.

Figure 27: Northern Scheme Demand Growth Projection



9.1.2 Water Conservation and Demand Management

The Municipality has a management plan to reduce non-revenue water in the CoU. The main recommendations from the said management plan are summarised hereunder:

- The management plan should be used to prioritize interventions according to available budget.
- To investigate top consumers and ensure that connection meters are properly installed and read monthly.
- Unmetered connections must be metered and registered.
- Internal leak repairs to be done to all former RDP houses.
- Appropriate policies to be developed and implemented for metering, illegal connection and real loss reduction.
- Water mains replacement has to be addressed under asset management.
- Unregistered consumers to be resolved in the billing database and pressure management to be implemented.
- New design standards to be formalized and implemented.
- Active leak detection programme to commence and continue.
- Training and mentorship programme to be adopted and implemented.

9.1.3 Water Sources and Water Balance

Various surface water sources are investigated, i.e. surface water, ground water sources, desalination and effluent re-use and the available water is compared to the water allocations and calculated current and future demands as per the table hereunder.

Table 41: Water Allocations and Calculated Current and Future Demand

Supply Sector	User	Allocation		Demands	
		Annual (M ³ /Annum)	Daily (ML/d)	Current (ML/d)	25Yr (ML/d)
Industry	Mondi Richards Bay	36.5	100.0	62.1	100.0
	RBM - Total	60.4	165.6	64.1	148.0
	RBM - Nhlabane	23.0	63.0	19.2	63.0
	RBM - uMfolozi	21.0	57.5	27.4	40.0
	RBM - Nsezi	16.4	45.0	17.5	45.0
	Tronox - Total	11.5	31.5	20.0	48.0
	Tronox - Hillendale	11.5	31.5	20.0	48.0
	Tronox - potable	0.0	0.0	0.0	0.0
	Foskor - Total	10.4	28.6	14.2	32.7
	Foskor - clarified	6.2	17.0	14.2	11.3
	Foskor - potable	5.0	13.6	0.0	21.4
	Mpact	2.5	6.8	6.0	6.8
	Tongaat Hulett	1.4	3.7	1.8	3.7
	Bayside - Total	0.3	0.9	0.0	0.0
	Bayside - raw	0.3	0.9	0.0	0.0
	Bayside - potable	0.0	0.0	0.0	0.0
	Hillside	0.8	2.1	0.0	0.0
	RBCT	0.0	0.0	0.0	0.0
	Total	123.8	339.1	168.3	339.2
Urban	Empangeni	13.51	37.00	21.766	42.979
	Richards Bay	9.13	25.00	45.518	58.316
	eSikhaleni	11.32	31.00	30.323	51.664
	Nseleni	0.00	0.00	12.476	17.274
	Ngw elezane	2.92	8.00	6.494	7.24
	Ntambanana	0.00	0.00		
	Total	36.87	101.00	116.577	177.473
GRAND TOTAL		128.17	350.21	284.83727	516.64615
Potable Water					
Clarified Water					
Raw Water					

The DWS undertook a Reconciliation Study in context of the above and recommends a number of interventions to resolve the water sources deficit for the CoU as outlined hereunder:

- Increase capacity of the Thukela-Mhlathuze Transfer Scheme
- Kwesibomvu Dam on the Mfolozi River / Off-channel transfer scheme from the Mfolozi River
- Coastal pipeline from the lower Thukela River
- Desalination of seawater
- Effluent re-use
- Dam on the Nseleni River
- Urban Bulk industrial water efficiently
- Raising of the Goedertrouw Dam

9.1.4 Interventions

A summary of interventions per supply scheme is provided herewith:

Figure 28: Proposed Interventions (Northern Scheme)

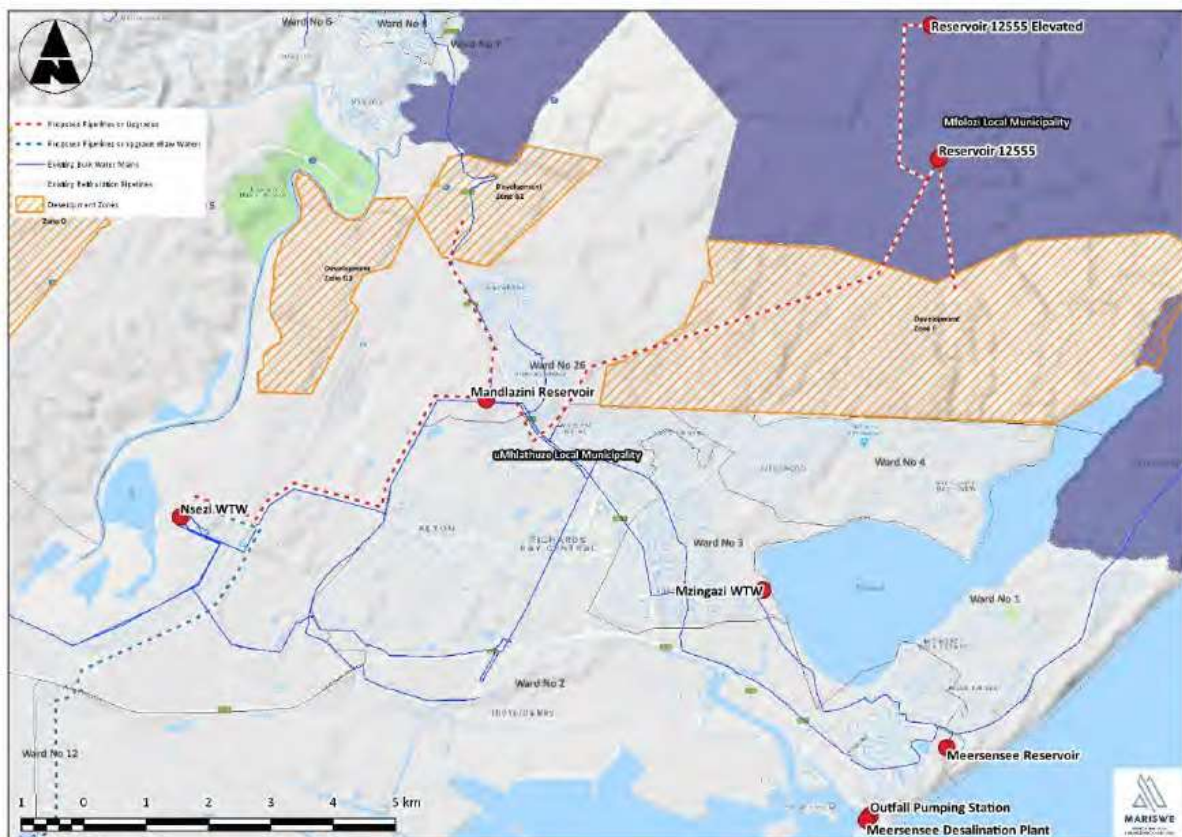


Figure 29: Proposed Interventions (Empangeni Scheme)

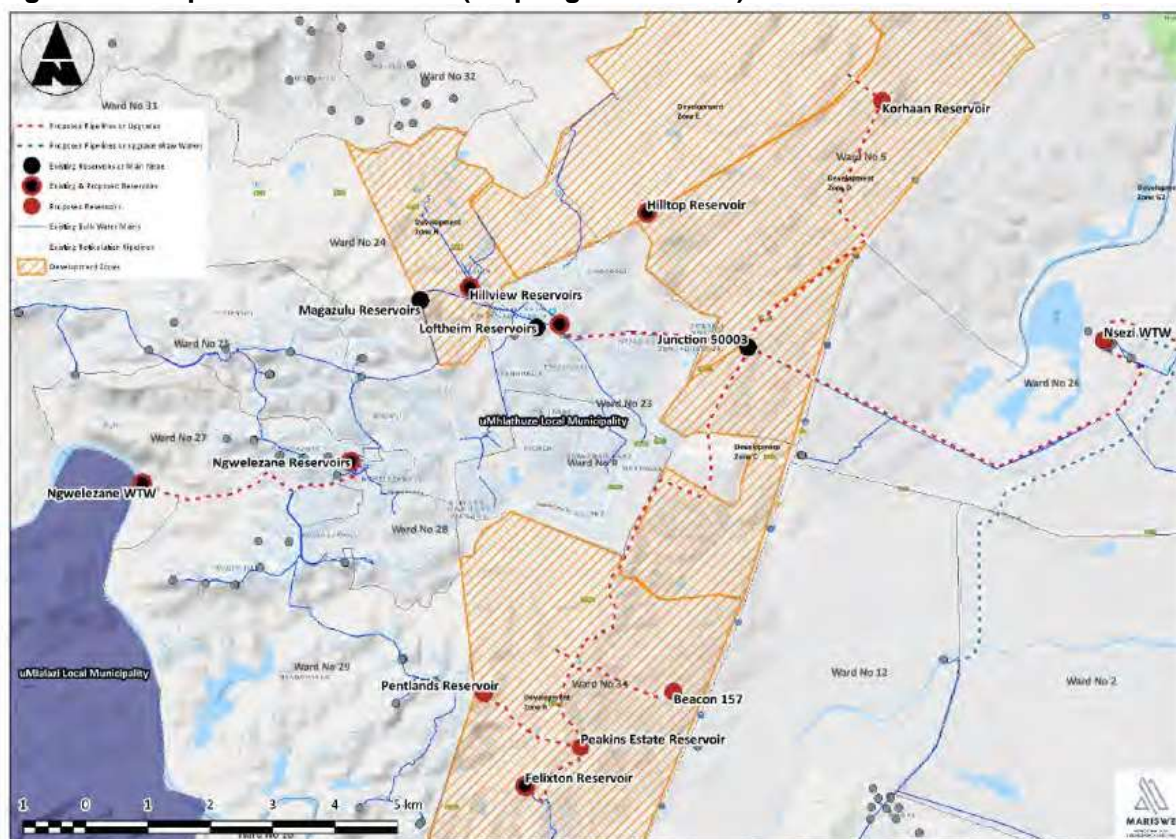


Figure 30: Proposed Interventions (Western Scheme)

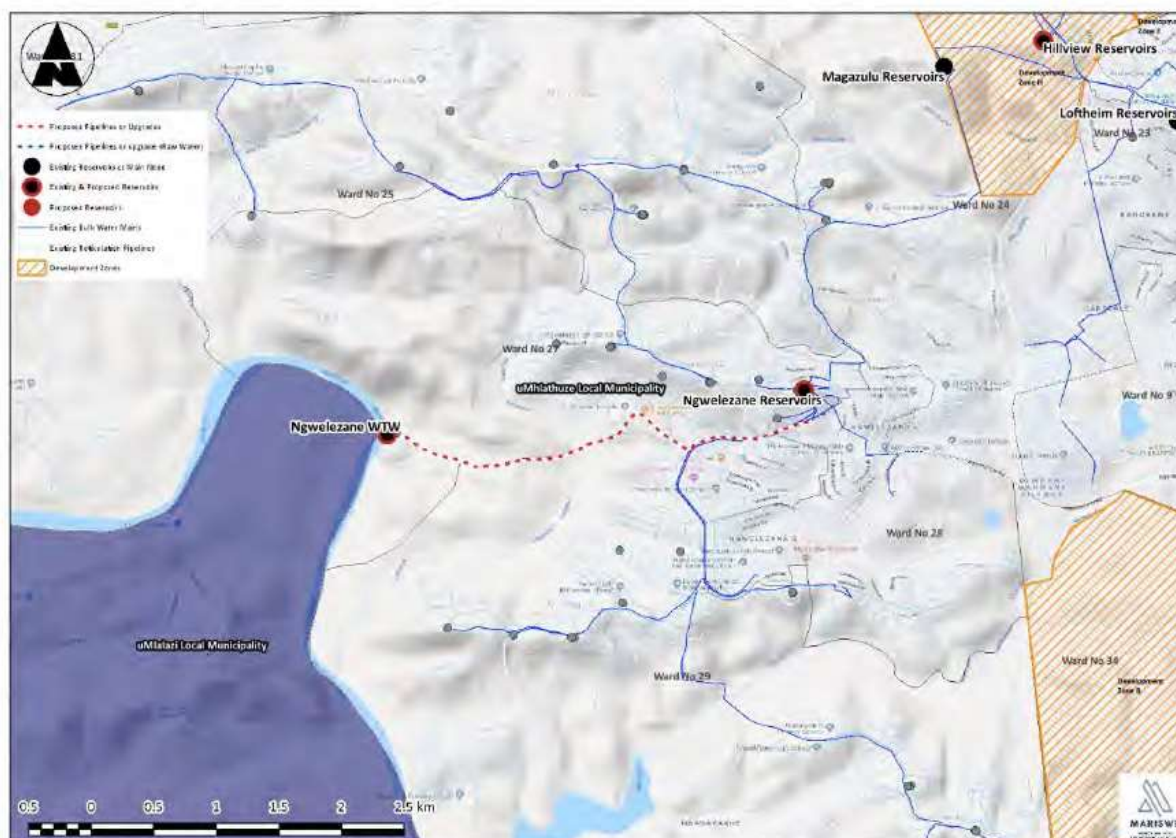


Figure 31: Proposed Interventions (Southern Scheme)

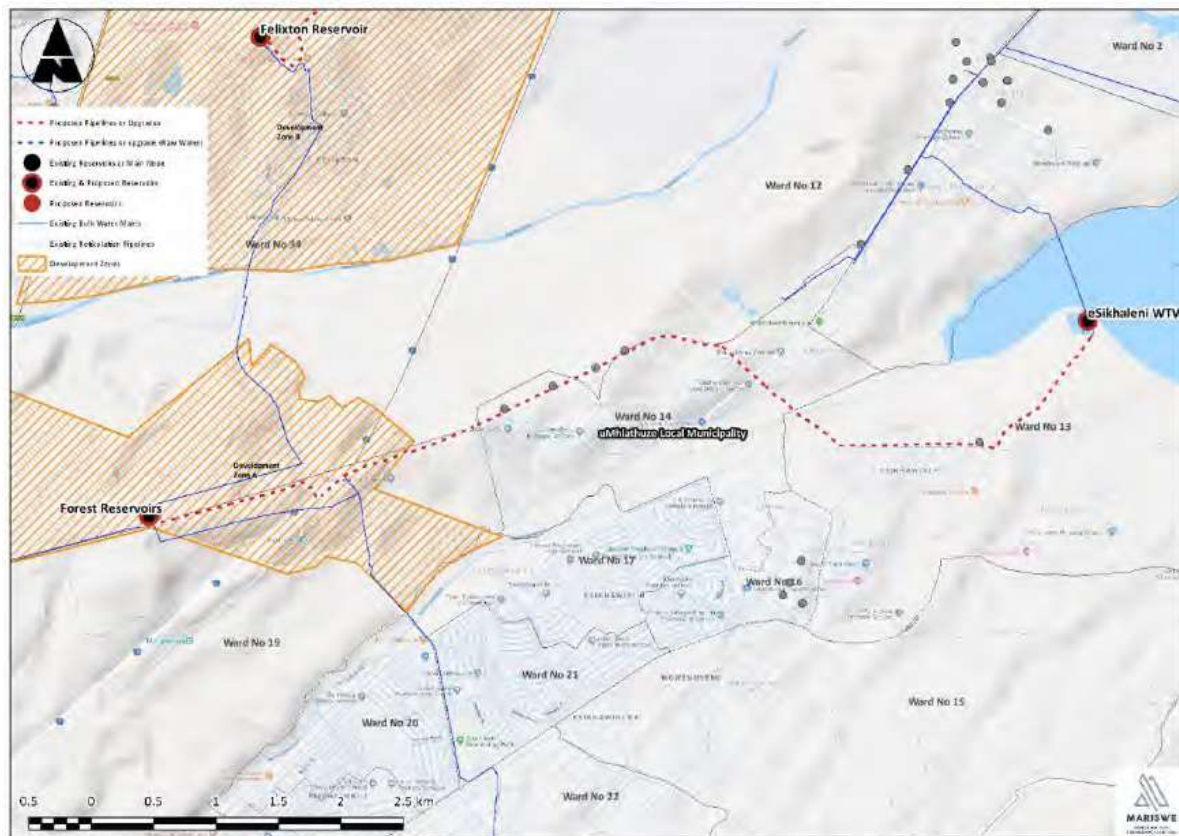


Figure 32: Proposed Interventions (Ntambanana Scheme)

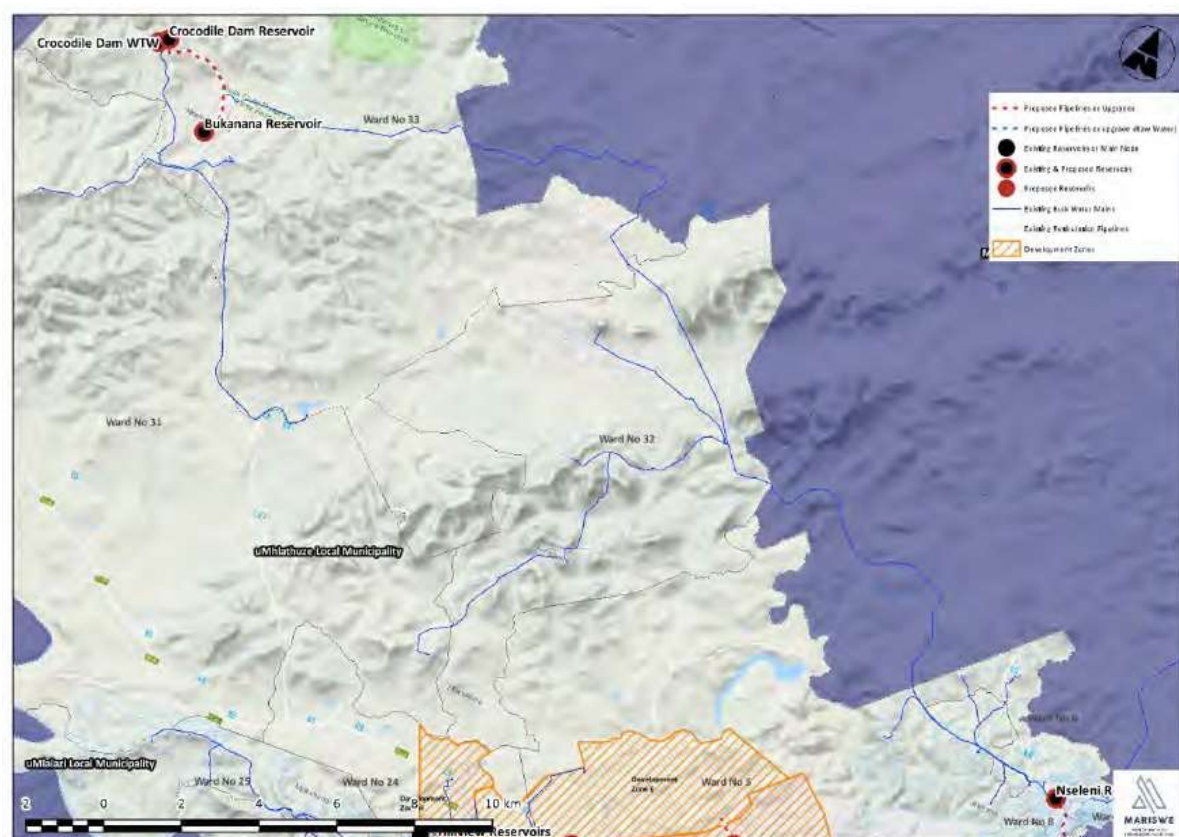
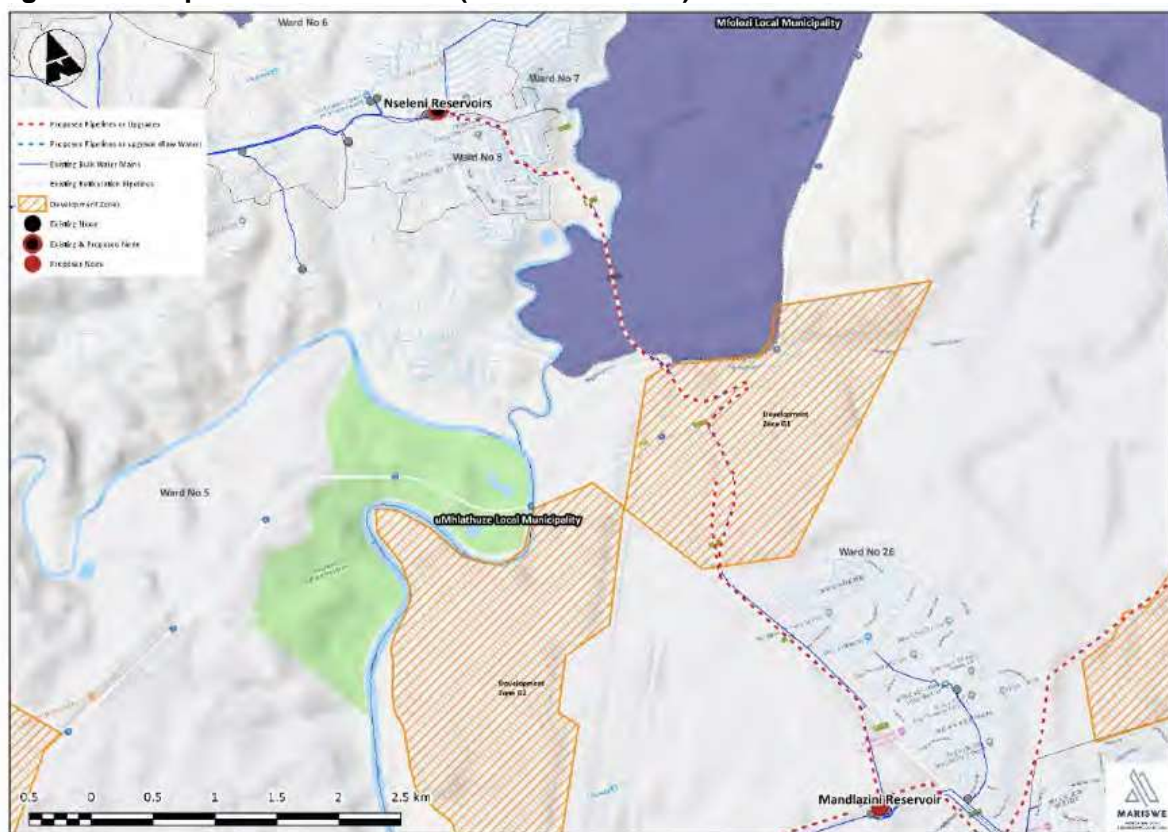


Figure 33: Proposed Interventions (Nseleni Scheme)



A costed summary of the planned interventions is provided herewith;

Table 42: Costed Summary of Planned Interventions

Scheme Name		Estimate Cost (Escalated to 2019)	
Northern Scheme	Total	R	336 355 335
Empageni Scheme	Total	R	912 826 268
Western Scheme	Total	R	50 126 399
Southern Scheme	Total	R	265 330 641
Ntambanana Scheme	Total	R	17 875 000
Nseleni Scheme	Total	R	119 000 000
Grand Total		R	1 701 513 643

9.2 WATER SERVICES DEVELOPMENT PLAN

The Review of the uMhlathuze Water Services Development Plan took place during 2018.

The CoU has a level of service policy for water and sanitation in place and is defined in the Free Basic Water (FBW) and Free Basic Sanitation (FBS) policies for urban and rural areas. The levels of services are as follows:

Water Service Level Policy:

- Supply of water through communal water services i.e. standpipe; and
- Supply of uncontrolled volume of water to a household where a water meter is installed.

Sanitation Service Level Policy:

In formalised urban areas a waterborne system is implemented and in rural areas ventilated improved pit latrines (VIP) are installed. In peri-urban areas or dense settlements adjacent to urban areas, which are close to a water resource, the municipality promotes the installation of shallow

9.2.1 Service Levels

In the 2016/2017 financial year, 99.43% households had access to the basic RDP level of water supply service (communal supply less than 200 meters from a household). The figure of 99.43% was adjusted due to the new wards that were added to the CoU jurisdiction area and that resulted in a decrease in the number of households with a water supply backlog. The households that have access to water services for 2017/2018 is now 94.95% (104 552 households) sourced from the Backlogs report of March 2018. The number of households with backlogs is due to the addition of households from the new wards that were under the King Cetshwayo District Municipality. The current overall water backlog is **5.41%** (5 967 households). Bulk water infrastructure needs to be installed within the new wards before the installation of water meters could be considered.

In the 2016/2017 financial year, 91.13% households had access to the basic level of service for sanitation (one VIP toilet per household). This figure has been adjusted due to the new wards that were added to the CoU that were under King Cetshwayo District Municipality and therefore the revised figure to have access to sanitation is not at 75% but 73.32%. The current sanitation backlog is at **26.68%** (29 483 households). It is important to note that the Draft IDP Review 2018-2019 reports that the sanitation backlog at 31 December 2017 was 23.19% but the 2017/2018 WSDP will report on the water backlog as 26.68% as indicated in the last quarterly backlogs report of 31 March 2018.

The DWS has changed the way in which water services backlogs are reported on within the WSDP. The National Development Plan (NDP) has set a services target to ensure that all households have at least 90% reliable services by 2019. As such, the current direct backlog in the CoU could be ascribed to a lack of infrastructure, water shortages, poor functionality of existing infrastructure or a combination thereof. Most of the backlog within CoU will be addressed when new infrastructure has been installed in the new wards that were added.

9.2.2 Water Services Infrastructure Management

Bulk Water and Sanitation Master Plans have been developed for the Municipality. The CoU keeps an Asset Register that documents all the assets, condition, remaining useful lives and financial information. Pipe replacements, system maintenance and non-revenue activities are conducted in a reactive manner instead of doing it through a proactive Pipe Replacement Programme.

Borehole developments are restricted to rural areas and privately-owned farmlands. The CoU is aware that the information on the status of boreholes is limited and unreliable. Most boreholes are suspected to have fallen into disuse, following the progressive availability of alternative supply.

The table below illustrates the current infrastructure components in the current DWS Reference Framework database.

Table 43: Infrastructure Components

Assets	Boreholes	Abstraction Points	WTW	Water Pump Stations	Sewer Pump Stations	Water Bulk Pipelines	Sewer Bulk Pipelines	Reservoirs	WWTW	Assessment Score
Total number of components /km of pipeline/ units	612	0	3	1	91	423.86	142	12	5	60

The components have a low refurbishment need. Operation and maintenance occurs regularly, and all of the components are operational.

The following figures illustrate the replacement cost at R 2.34 billion. The replacement cost of the water treatment works is the most at R 1.38 billion followed by the wastewater treatment works at R463 million.

Figure 34: Replacement Cost

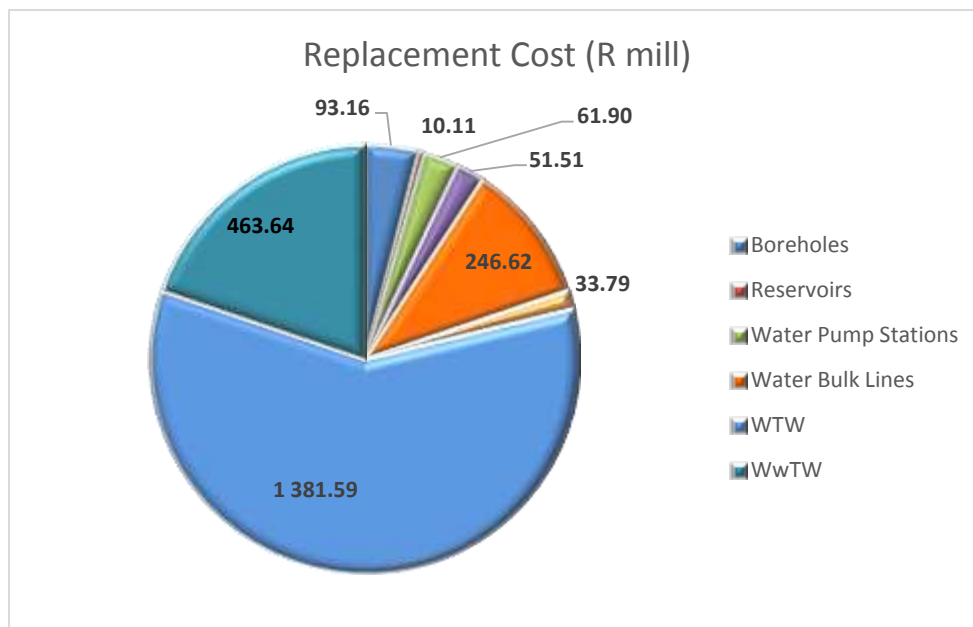
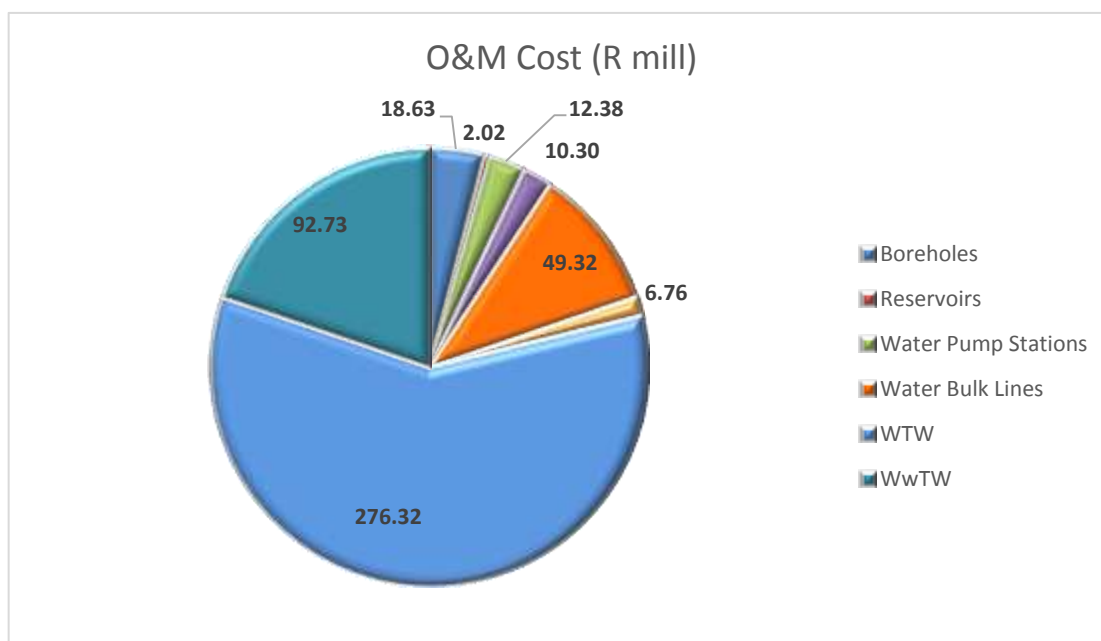


Figure 35: Operation and Maintenance Cost



9.2.3 Water Conservation and Demand Management

Water losses are a major concern for the CoU as they affect not only the operational processes, but also impact the financial, social and environmental aspects of the Municipality. The water loss percentage has stabilised to an average of 18% which is much lower since the Reduction of Non-Revenue Contract was implemented in 2014.

The CoU does have a Water Conservation and Demand Management Strategy in place and the following activities were successfully implemented:

- Pressure reducing valve zones were designed, audited and maintained;
- Leak detection programme;
- Bulk meters audited and replaced where necessary;
- Reservoir outlet meters repaired and replaced; and
- All properties within CoU have been visited and meter and water connections audited.

The CoU is in the process to develop a Management Plan to reduce non-revenue water in the Municipality. Although the CoU is accelerating the delivery of water services, it is also facing the challenge of significant non-revenue water. The Municipality is aware that if water losses are not addressed, it will jeopardise the financial viability of the Municipality and undermine the sustainability of service delivery.

9.2.4 Water Quality Monitoring

The Scientific Services section is responsible for the effective management of continually monitoring and maintaining the quality of water within the CoU. The two main sections of the Scientific Services are the laboratory and Water Quality Management section. Samples from various sources are collected for analysis to determine water quality.

An extensive water quality monitoring programme for drinking water has been implemented. The monitoring programme includes the following:

- Water Treatment Works;
- Drinking Water Reticulation monitoring; and
- Wastewater Treatment Works.

A Water Quality Monitoring Programme (WQMP) has been developed and implemented. The following areas are monitored for possible pollution:

- Surface water – Lakes Cubhu & Mzingazi, Rural/urban suburbs (stormwater streams), rivers/streams/canals, industrial (stormwater streams), pumpstations (streams close to pumpstations);
- Coastal water – Alkanstrand 1 & 2;
- Groundwater – Municipal cemetery, landfill site; and
- Sewage – Industrial effluent (sewage network).

The CoU has embarked on installing monitoring equipment at all its water and wastewater works to monitor and evaluate the plant process against standards and specifications.

9.3 BULK SEWERAGE MASTER PLAN

(The uMhlathuze Municipality is in the process of Reviewing its Bulk Sewer Master Plan and updated information will be provided when available)

For the purposes of the BSMP, the bulk sewerage system has been taken as sewers 200 mm in diameter and larger, pump stations and pumping mains associated with such sewers and sewage/wastewater treatment facilities.

Land use information that is available is not at the level of detail that would be ideal for a BSMP. Consequently, proposals in the Integrated Development Plan (IDP), Spatial Development Framework (SDF), the Municipal Human Settlements Plan (the Human Settlements Plan) and township layout plans were used as the main sources of information for future development.

Bulk sewers were planned along watercourses above or at the level of the 1:100 year flood levels. The BWMP and the BSMP were both based on the premise that the City of uMhlathuze's water demand management (WDM) and water conservation (WC) interventions would be successful to the extent that the water use reduction would allow for increased household use in the existing built areas and that additional water would be required for future developments that have been identified in Richards Bay and Empangeni together with development in the expansion areas that the SDF and Human Settlements Plan have identified. Pump stations constitute weak points in sewerage systems and it is desirable to keep the number of pump stations to a minimum. Consequently, the proposals take a long-term perspective on the way in which development can be done over time to limit the need for pumping, even if additional WWTW may be required.

The planning has been done for the full development potential. Thereafter proposals were formulated for the progressive installation of the bulk sewerage infrastructure in line with the land use change proposals/applications that are identified in the IDP, SDF and the Human Settlements Plan. Subsequently, possible locations for additional sewers, pump stations, pumping main routes and WWTW were identified.

For the purposes of the BSMP a population growth rate of 2% per annum was adopted, which is the same as the average annual population growth rate adopted for the BWMP. The estimated increase in housing units, based on the above is reflected in the following table:

Table 44: Estimated Increase in Housing Units

Population change at an annual growth rate of 2.00% pa	Household size (persons/household)	Estimated new unit requirement			
		2015	2025	2030	2040
	2.5	10 200	42 200	62 200	102 200
	3.0	8 500	35 167	51 833	85 167
	3.9	6 538	27 051	39 872	65 513
	4.5	5 667	23 444	34 556	56 778

The IDP, SDF and Human Settlements Plan contain proposals for human settlement projects, private sector projects and expansion areas designated A to H.

Expansion areas A to H are significant and the initial concept is that they would contain mixed land uses. The potential would be some 102 000 residential units accommodating between 255 000 and 460 000 people.

Proposed and approved developments together with an allowance for the development of expansion area C (east of Empangeni) contain some 35 000 residential units. At an annual average population growth rate of 2.00%, the human settlements and private sector projects of some 35 000 new units would meet the requirements to some-time between 2025 and 2030.

The **expected combined sewage/wastewater flow** to the macerators and WWTW in the seven sewerage sub-systems is summarised herewith:

Table 45: Expected combined sewage/wastewater flow

Flow category	Unit	Estimated existing flow	Anticipated flow for existing, planned and approved developments	Anticipated flow for existing, planned and approved developments and the remaining potential of areas A to H
ADF	litres/day	35 096 000	74 901 532	168 604 718
	MI/d (rounded off)	35	75	170
PDWF	litres/second	813	1735	3 900
PWWF	litres/second	1 016	2 170	4880

In addition to the existing sewerage sub-systems, the topography upon which the City of uMhlathuze is situated lends itself to the establishment of two further sub-systems and possibly to a third new sub-system. The three potential additional sewerage sub-systems would cover:

- Most of **expansion area A** (which could include Vulindlela), the eastern and south western part of expansion area B and expansion area C draining to what is referred to as the proposed Area ABC WWTW;
- Most of **expansion areas D, E and H** draining to what is referred to as the proposed Area DEH WWTW; and
- Possibly the eastern part of expansion area F draining to what is referred to as the possible **Area F** WWTW.

Some of the sewers and pumping mains require very significant augmentation. The development patterns and timing will influence when the additional sewer capacity will be required. In some cases it might be within a short time, while in others it might be several decades.

Currently the flow to the existing **macerators** and WWTW is some 35 MI/d. The required capacities for the anticipated flow for the existing, planned and approved developments are expected to be around 75 MI/d. The required capacities for the anticipated flow for the existing, planned and approved developments together with the remaining potential of expansion areas A to H are expected to be of the order of 185 MI/d.

Consideration was given in the modelling to the capacities of **existing pump** stations as well as to the need for further pump stations. Additional pump stations are proposed to deliver sewage/wastewater from expansion areas A to H to the designated macerator or WWTW.

The City of uMhlathuze has undertaken a study into the potential for the re-use of wastewater currently being discharged to the Alton/Arboretum marine outfall. The investigation concluded (subject to more detailed investigation) that it should be realistic to re-use some 15 MI/d of the wastewater being discharged to sea through the Alton/Arboretum marine outfall initially and that the volume could increase to some 30 MI/d after 2030.

Some 100 MI/d of treated wastewater is expected to be available for **re-use** from the existing, planned and approved developments together with the remaining potential of expansion areas A to H. This represents slightly more than half of the sewage/wastewater that is expected to be generated.

The City of uMhlathuze is implementing a water management programme through a five year strategic management plan for **water conservation and water demand management**.

The indicative programme and cost estimate for augmentation of the bulk sewerage system is shown in the table herewith:

Table 46: Cost Estimate for Augmentation of Bulk Sewage System

	2015-2020	2020-2025	After 2025
Component	Total (Rand)	Total (Rand)	Total (Rand)
Alton			
Total	95 000 000	2 000 000	148 000 000
Arboretum/Area F WWTW			
Total	87 000 000	183 000 000	257 000 000
Empangeni/Area DEH WWTW			
Total	112 000 000	2 000 000	849 000 000
eNseleni			
Total	-	-	-
eSikhaleni			
Total	-	-	-
Ngwelezane			
Total	-	-	-
Vulindlela			
Total	-	-	-
Area ABC WWTW			
Total	106 000 000	203 000 000	506 000 000
Total for all sub-systems	400 000 000	390 000 000	1 760 000 000

The indicative cost to refurbish or replace infrastructure is outlined herewith:

Table 47: Indicative Refurbishment Cost

	2015-2020
Component	Total (Rand)
Alton	
Total	27 075 000
Arboretum	
Total	125 550 000
Empangeni	
Total	49 164 000
eNseleni	
Total	-
eSikhaleni	
Total	8 350 000
Ngwelezane	
Total	3 500 000
Vulindlela	
Total	7 252 000
Total for all sub-systems	220 891 000

Particular attention should be given to the relationship between the Alton and Arboretum macerators and the manner in which they will be refurbished and augmented. Significant allowances have been made for them in both the indicative capital and refurbishment/replacement cost estimates.

An annual **maintenance and refurbishment/replacement budget** should be provided in addition to the budget required for recurrent expenses. The following proportion of the estimated capital cost of the additional infrastructure is proposed:

- Maintenance at 4% of the estimated capital cost of the infrastructure per annum; and
- Refurbishment/replacement at 2% of the estimated capital cost of the infrastructure.

Table 48: Estimated Annual Maintenance and Refreshment Budget

	2020	2025	+2040
	Million Rand per annum	Million Rand per annum	Million Rand per annum
Maintenance	16	32	100
Refurbishment/replacement	8	16	50

9.4 WASTE WATER RE-USE PROJECT

The City of uMhlathuze (CoU) seeks to secure adequate water supply in support its planned growth and has resolved to undertake a comprehensive feasibility study and identify the most viable solution for dealing with wastewater and associated by-products re-use generated within the City as per Section 120 of the Municipal Finance Management Act, 56 of 2003, the Municipal PPP Regulations (1 April 2005) and the Municipal PPP Guidelines (2007).

The project was registered with the National Treasury PPP on 25 May 2015 (Ref No: M115) and a competitive bidding process was undertaken and a Transactional Advisor (TA) appointed with effect from 1 December 2016. The project includes the treatment of wastewater for reuse and the use of organic matter in sewage (i.e. sludge, fats, oil and grease) as “free” fuel to generate electricity and power for the treatment process.

The following are important considerations in respect of this project:

- 1) The expected growth in water demand within the municipal area will outgrow the available yield from the water sources before sufficient water augmentation can be implemented.
- 2) The current total potential re-use volume for the CoU is estimated to be 79,5 Ml/day.
- 3) Industries within the CoU are supplied with potable water for both their potable and industrial requirements. Industries have indicated that they can utilise 72,91 Ml/day of re-use water instead of potable water.
- 4) The most beneficial option for the supply of re-use water is a regional treatment works with a total capacity of 75 Ml/day located at a site that is elevated to gravity feed to the off-takers.
- 5) The site for the regional treatment works has been secured by the CoU.



- 6) An economic analysis has shown thermophilic digestion to be the most viable digestion option with biogas beneficiation for electricity production using CHP (combined heat and power) engines.
- 7) As a social project, a composting operation should be implemented as a final sludge treatment for the sludge produced by the waste water treatment works.
- 8) The Environmental Impact Assessment authorisation process has commenced.
- 9) The project is line with Section 78 of the Municipal Systems Act (Act 31 of 2000) and all stakeholders are being consulted.
- 10) The tariff structure for the sale of treated water to off-takers is comparable to tariffs that off-takers pay currently.

Figure 36: Mhlathuze Water Control Area 12 (WCA12)



The project consists of two phases:

1. Feasibility Phase: The National Treasury approved the Feasibility Study on 28 February 2018, thereafter Council approval was obtained on 05 December 2018.
2. Procurement Phase: The Procurement phase consists of the following stages and Council approved commencement on 30 May 2019:
 - Stage 1: Request for Qualifications and TVR IIA (Treasury Views and Recommendations) Approval
 - Stage 2: Requests for Proposals
 - Stage 3: Bid Evaluation and TVR IIB Approval
 - Stage 4: PPP (Public Private Partnership) Negotiations
 - Stage 5: TVR II (Treasury Views and Recommendations) Approval
 - Stage 6: Close-out and Case Study

9.5 ROADS AND PORTS

During 2009, the Municipality reviewed its **Arterial Road Framework Plan** that extends beyond the boundaries of the existing formal urban areas into the proposed expansion areas as provided. The plan proposes additional arterial routes to provide access to the main urban centre and it is now opportune to plan for the roll-out of such arterials. Furthermore, the plan needs to be updated given the new expanded municipal boundaries. A further study of the **Public Transport Amenities** in the municipal area has also been completed. As part of this study the following was completed:

- Deliver a status quo analysis of public transport facilities in the City of uMhlathuze (bus/taxi stops, routes and ranks)
- Analyze the need for and possible location of a truck stop facility
- Develop concept layouts for all bus/taxi ranks within the City
- Undertake a study to identify a site for a truck stop site

The uMhlathuze Municipality has also initiated the process of preparing a **Comprehensive Integrated Transport Plan (CITP)** with the assistance of the Department of Transport. The process has just recently started and, when complete, will consist of the following chapters.

Table 49: Chapters of the CITP

Chapter 1: Introduction	Organizational and institutional arrangements as well as coordination measures relating to the plan preparation.
Chapter 2: Transport Vision and Objectives	A concise statement, informed by a consultation process, on how the transport system in the Municipality should be shaped in the long term. Objectives that are related to the articulated as well.
Chapter 3: Transport Register or database	All data collection and information requirements to inform the plan preparation will be undertaken as part of this chapter. Typical types of information will include: Demographic Transport supply and demand Description of the public transport system Description of public transport services including non-motorized transport and learner transport Description of the institutional and organizational set-up of the public transport industry Traffic demand and road infrastructure Freight transport routes and movements Financial information, specifically relating to the implementation of the plan
Chapter 4: Spatial Development Framework	Consideration of nodes and corridors, infill development areas for densification etc.
Chapter 5: Transport Needs Assessment	Determination of the transport needs of the community by way of consultation, analysis, modelling, surveys etc.
Chapter 6: Public Transport Operational Strategy	To integrate public transport networks, services and modes so that passengers can move optimally with least cost and shortest time.
Chapter 7: Transport Infrastructure Strategy	To deal with development and maintenance of all transport infrastructure (road, rail, non-motorized and freight) both for public and private sector. Inputs into this phase from external sources as well as internal processes, such as the Pavement Management System.

Chapter 8: Travel Demand Management	Development of a system of actions aimed to maximize the capacity of the transport system for the movement of people and goods rather than vehicles. Refers to issues such as vehicle occupancy, prioritized public transport etc.
Chapter 9: Freight Logistics Strategy	Dealing with the location of depots/freight centres and consideration of the routes for moving of goods as well as regulatory and financial measures.
Chapter 10: Other Transport-related Strategies	At least a strategy for non-motorized transport as well as a safety and security strategy for public transport is required hereunder.
Chapter 11: Summary of LIPTs	Responsibility for such, i.e. district or local, to be confirmed.
Chapter 12: Funding Strategy	Includes a summary of proposals and programmes and details (1) priorities, (2) funding and (3) implementation programme.
Chapter 13: Stakeholder consultation	Range of stakeholders to be consulted during the process as advised.

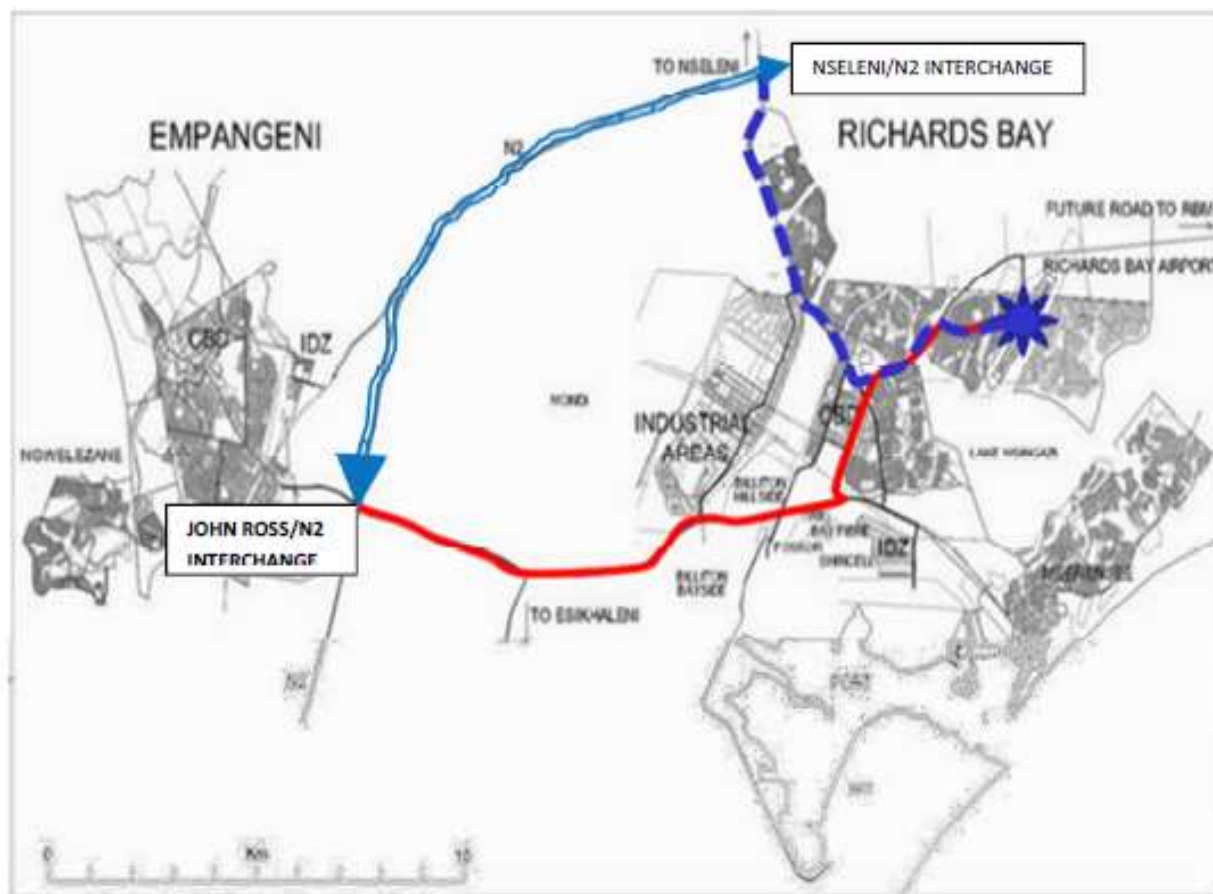
Apart from road transport planning outlined above, planning for the future development of the Richards Bay Port has been undertaken by Transnet National Ports Authority. Matters relating to the Richards Bay Port and mooted expansion plans are discussed in another section of this report.



9.6 AIRPORT PLANNING

In 2010, an update of the Airport Master Plan was completed and the future footprint of the current Richards Bay Airport. The current Richards Bay Airport is nestled in the middle of residential areas, including Birdwood and Mandlazini Village. The current situation does potentially pose challenges in terms of airport operations.

Figure 37: The location of the existing Richards Bay Airport



The Spatial Development Framework (SDF) of the Municipality has identified, at a high level, a favourable corridor for an airport precinct which has been the focus on a study dealing with investigating the proposed site based on aviation criteria, the Aerotropolis concept, transportation planning as well as spatial and land use elements.

The potential airport relocation pre-feasibility study has provided guidance regarding the required statutory procedures and further studies that would need to be attended to in the near future. Noting that failure to attend to these statutory procedures and further studies timeously could create a project risk. Some of the specific statutory procedures relate to the release of land for non-agricultural use in terms of Act 70 of 1970, i.e. the Subdivision of Agricultural Land Act. A myriad of environmental related procedures will also be required.

The outcome of the pre-feasibility study warrants that the project now proceeds into the next stage, i.e. a fully-fledged feasibility investigation. To this, the project has been registered as a PPP and the appointment of a Transaction Advisor will comment in due course.

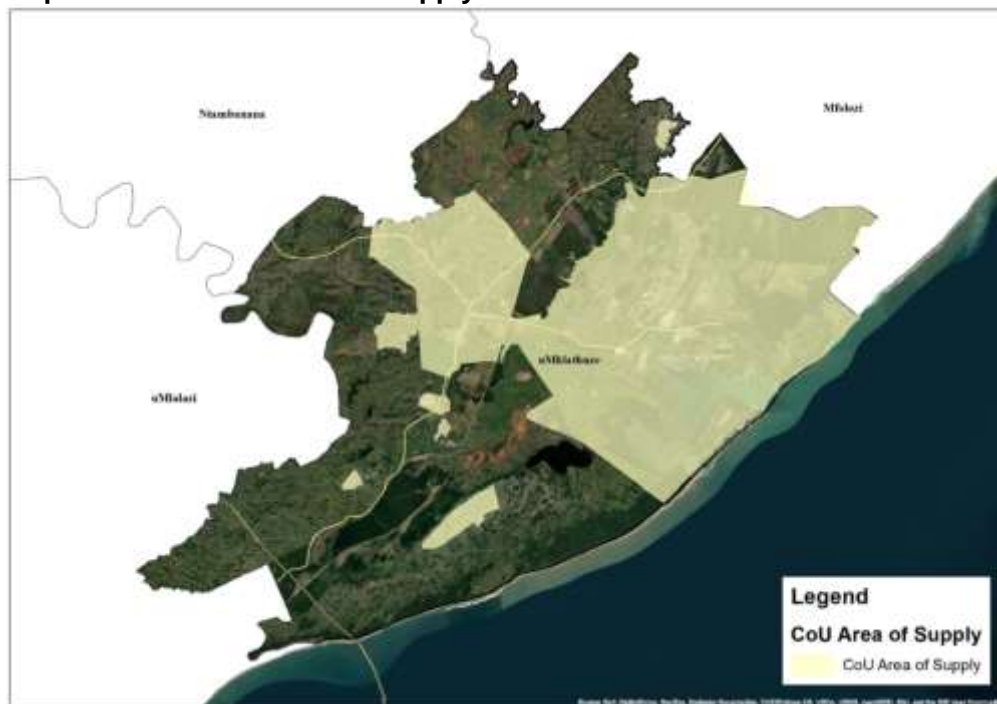
Figure 38: Area investigated for Proposed Airport Relocation



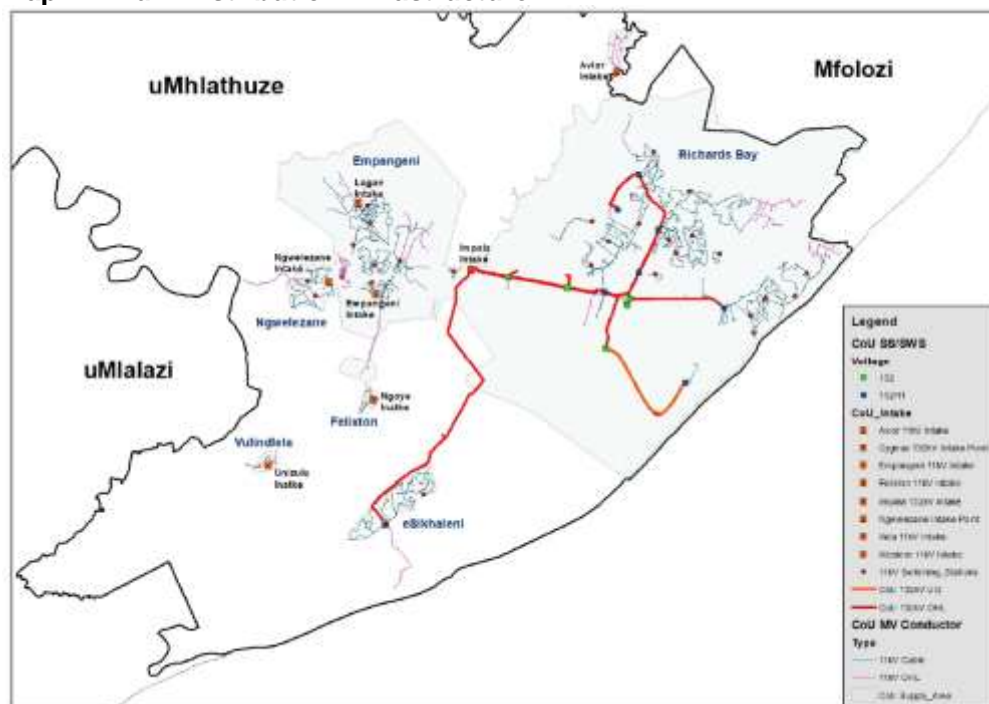
9.7 ELECTRICITY MASTER PLAN

During 2019, the uMhlathuze Municipality undertook the Review of its Electricity Master Plan to plan for the electricity needs within the licensed area of supply and prepare a 20-year plan aligned to the SDF.

Map 21: uMhlathuze Area of Supply



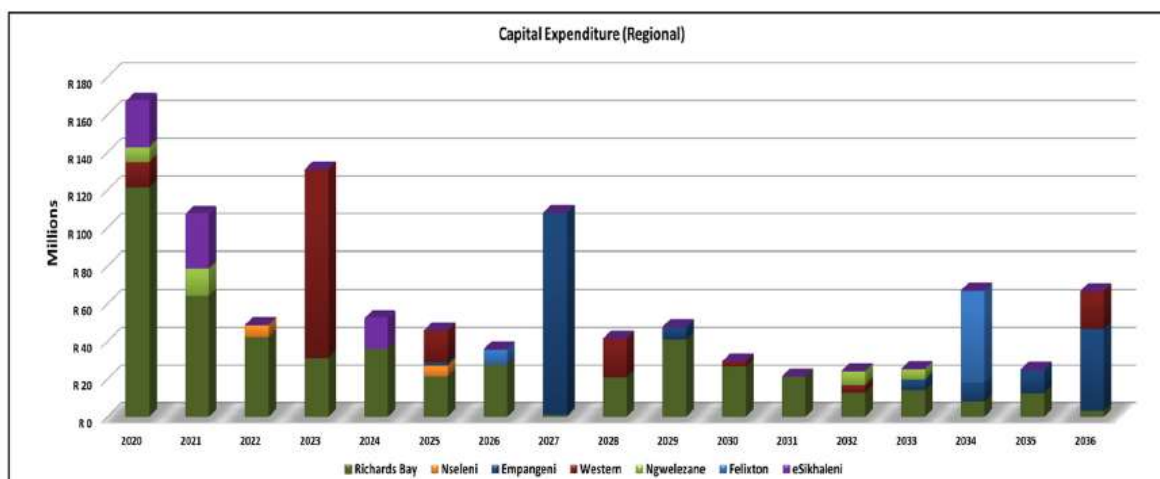
Map 22: Bulk Distribution Infrastructure



Amongst others, the study identifies where new infrastructure should be located, refurbishment and renewal requirements. More specifically, the project consists of the following components:

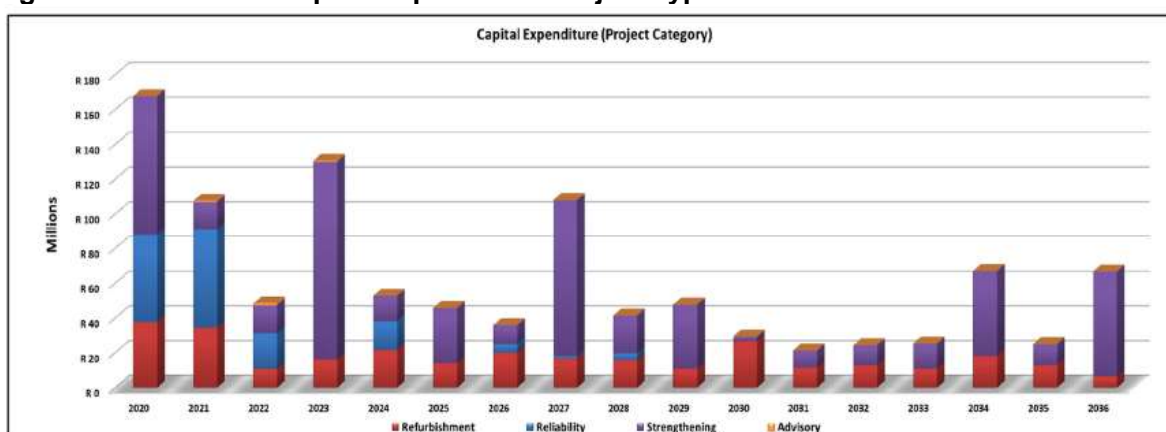
- Development Perspective to determine the present and future electricity requirements of electrical end-users and reconcile such with available resources and services.
- Electricity Demand Forecast to develop a 20-year forecast in support of the development perspective.
- Refurbishment Assessment to gain an overall impression of the network considering the design age of the network, the prioritization of replacement and refurbishment etc.
- Distribution Network model representing the electrical networks with the CoU supply network to review the adequacy of the network.
- Recommendations for Expansion and Strengthening Requirements.
- Capital Program that allows for distribution network development and optimization; reliability requirements and refurbishment requirements.

Figure 39: Estimated Capital Expenditure/Region



The above estimated capital expenditure has been strategically extended over the study period allowing for adequate strengthening as well as ensuring this plan could be practically implemented and affordable. Priority projects have been identified for immediate implementation and some projects will follow once planning has been finalized and funds secured. The backlog of require projects within the short terms resulted in the large capital outlay required over the first tow years which indicates and immediate need for system upgrades.

Figure 40: Estimated Capital Expenditure/Project Type



The above highlights that system strengthening (expansion) forms a significant portion of the capital spend of approximately 60% with bulk of the strengthening component allocated to Richards Bay, Empangeni and Western.

9.8 ENERGY SECTOR PLAN

The objective of developing an Energy Sector Plan is to provide a well-considered and structured approach to the delivery of energy services. This Plan was developed during 2019 to provide strategic direction to enable an alternative energy future and long-term sustainability for the Municipality.

The plan contains an analysis that informs possible energy solutions and concludes with suggestions and strategies for the CoU to transition to a sustainable energy future.

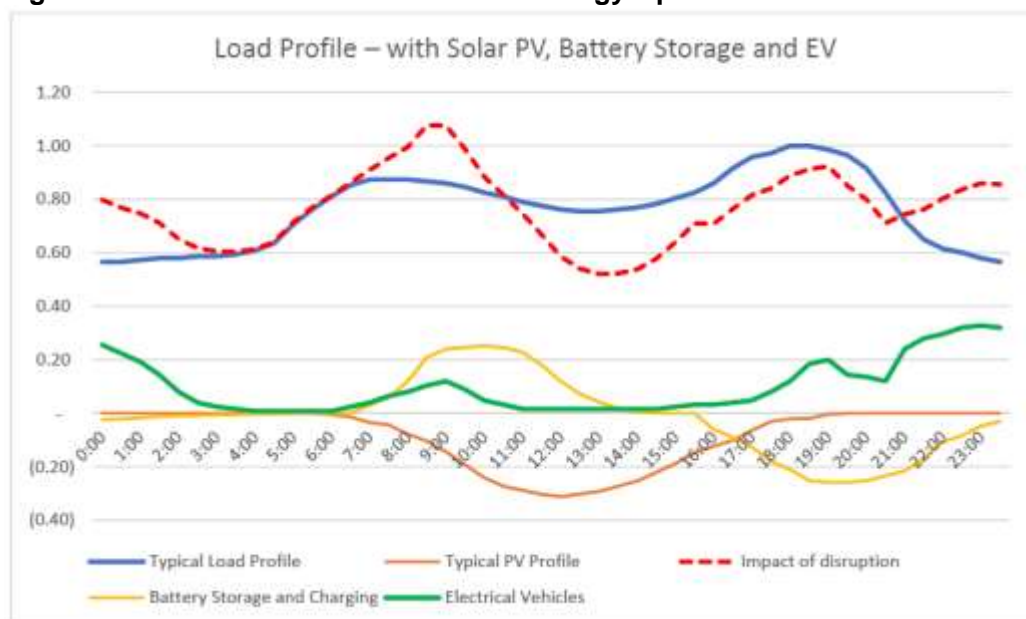
The following drivers that are changing the energy landscape in South Africa were investigated:

Figure 41: Drivers of Change in the Energy Landscape



Traditionally the consumption patterns of distribution utilities are relatively predictable and static depending on the consumer mix and nature of the load. With the introduction of modern technologies and alternative energy options, the predictability of the demand is no longer as easy to determine as indicated in the following figure. To this end, the municipality has to consider its role in the changing energy landscape.

Figure 42: Load Profile with Alternative Energy Options



The Energy Sector Plan concludes with an implementation roadmap as a workable way forward that is structured per category of focus, supported by the rationale for the sustainability driver and proposed actions with short, medium and long-term focus.

9.9 INTEGRATED WASTE MANAGEMENT PLAN

The Municipality has finalized the Review of its Integrated Waste Management Plan. As part of the review the current status of the waste collection systems and existing disposal sites, the service delivery capacity and the needs were analyzed.

Section 1 includes the Introduction. This section includes the flow process of the document.

Section 2 includes the status quo assessment approach. This section includes literature review, in depth interviews, interviews for few selected households in different type of settlements, observations and sanity checks. Also included a Literature Review of relevant legislation and policies to Waste Management as well as an analysis of socioeconomic and demographic data of uMhlathuze Local Municipality.

Section 3 includes population projections and Waste Management forecasts

Section 4 includes gaps and needs analysis and alternative recommendations informed by:

- Legislation
- By laws
- Waste management systems
- Waste collection services
- Illegal dumping
- Management of landfills
- Waste Management systems
- Rural area
- Informal settlements
- Industrial and mining waste
- Building rubbles
- Garden waste
- Fleet

Section 5 includes Goals and Objectives of:

- Implementation Plan
- Cost Estimates
- Monitoring Strategy
- Conclusion

1. Illegal dumping
2. Human Resource of Waste Management Section
3. Waste Minimization (including Climate Change)
4. Waste Management Infrastructure; and
5. Recycling

9.9.1 WASTE MANAGEMENT FOR DIFFERENT TYPES OF SETTLEMENT

The City of uMhlathuze Municipality has 34 Wards and the number of households increased from 86 609 in 2011 (population census) to 110 503 as per Community Survey 2016 hence it is also noted that there are wards included from the former Ntambanana local municipality post LGE 2016. Out of the total households, 77 028 households are serviced. Free basic service is also rendered to 33 563 low income (indigent) households. There are about 275 skips currently dedicated to rural communities. Service delivery is accessible to at least 69.71% when communal skips servicing rural communities and rural schools are considered.

The following categories of waste are collected:

- Household
- Health Care Risk Waste
- Schools Waste
- Building Rubble
- Industrial Waste
- Mining Waste
- Commercial Waste
- Garden Waste
- Illegal Dumped Waste
- Recyclable Materials
- Hazardous Waste
- Street Cleaning Waste

Table 50: Quantities of Waste Disposed and Recycled 2019

GENERAL WASTE RECORDS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Quantities Disposed by Municipality	3 881 940	3 761 780	3 949 560	4 120 600	4 033 840	3 579 660	3 824 640	4 072 100	3 896 540	3 960 780	4 202 460	4 346 200
Waste Quantities Recycled	1 290 818	1 214 597	1 077 134	1 148 592	1 340 782	1 050 853	1 276 690	1 100 414	957 328	1 165 093	1 043 299	992 994
% Waste Minimization	33.25	32.29	27.27	27.87	33.24	29.36	33.38	27.02	24.57	29.40	24.80	22.80
Annual Average	28.77%											

The transfer station at Alton is also used as a recycle centre. This station separates waste in the following categories:

- Mixed Paper
- K4
- PET
- HDPE
- Magazine
- White Paper
- News Paper
- Plastics
- Cans
- Tetrapak
- Glass/Bottle
- Tyres

9.9.2 WASTE MINIMISATION

The City of uMhlathuze Municipality has a Recycling Program that responds to the implementation of waste hierarchy and to promote waste minimisation, re-use, recycling and recovery of waste.

To achieve this program the following activities are promoted and are being implemented by the Municipality:

- Increase the recycling rates of products
- Reduce the percentage of recyclable material to landfill
- Ensure separation at source in our Municipality
- Encourage the establishment of Material Recovery Facilities (MRFs)
- Encourage alternative treatment of waste
- Support the diversion of high calorific waste from landfill to recovery options

Separation of waste at source (also called Kerb Recycling) is an approach that has been demonstrated worldwide to improve the recycling rate. Currently the City of uMhlathuze has five areas where separation at source is taking place. In these areas each household gets a yellow plastic bag for recyclables over and above the trolley bin service. Recyclables from two suburbs are collected by a bush truck for transport to the Material Recovery Facilities on the day of removal for further sorting. Recyclables from the other areas are collected by separate recycling waste-preneurs (SMMEs) with their own transport, for sorting at their recycling sites.

In addition to the Alton Material Recovery Facility and Transfer Station, the Municipality has further developed two Material Recovery Facilities and renovated the Transfer Station that was inherited from the former Ntambanana Municipality as per the IWMP implementation plan. As part of compliance, all these facilities have been registered in terms of Section 4 of National Norms and Standards for Sorting, Shredding, Grinding, Crushing, Screening or Bailing of General Waste 2017. These are:

- eNseleni Material Recovery Facility;
- Mzingazi Material Recovery Facility and
- Ntambanana Material Recovery Facility and Transfer Station.

There is currently one drop off point used as mini Material Recovery facilities (MRF) in the Meerensee Suburb, while the second drop off centre in Essenwood was recommended to be demolished due to community complaints and misuse.

Garden refuse is also used for the creation of composite sites especially in rural tribal areas and farms.

9.9.3 GOALS AND OBJECTIVES

DEVELOPMENT DISPOSAL INFRASTRUCTURE
GOAL Develop and improve infrastructure realigned to municipal needs and compliance with legislation
OBJECTIVES <ul style="list-style-type: none"> ○ To improve service delivery
WASTE COLLECTION INFRASTRUCTURE
GOAL To effectively manage Waste collection
OBJECTIVES <ul style="list-style-type: none"> ○ To extend services to rural areas ○ To effectively maintain the fleet and replace old ones ○ To standardize collection
INSTITUTIONAL CAPACITY AND HUMAN RESOURCE
GOAL To effectively and efficiently provide quality Waste Management Services
OBJECTIVES <ul style="list-style-type: none"> ○ To recruit General Workers for trucks ○ To recruit Administration officer
FINANCIAL RESOURCES
GOAL Provide cost effective but quality waste management services
OBJECTIVES <ul style="list-style-type: none"> ○ To ensure that current tariff standards take into account the current financial situation of the municipality ○ To improve payment of Service tariffs ○ To source for funding in order to cover all rural areas
WASTE MINIMISATION WASTE MINIMISATION
GOAL To decrease waste deposited on landfills and collected in skips and transfer stations
OBJECTIVES <ul style="list-style-type: none"> ○ To educate communities on recycling and waste minimization ○ To facilitate recycling activities ○ To support companies which are starting recycling businesses especially the youth ○ To develop garden refuse strategy ○ To reduce waste in order to address Climate Change

9.10 SUMMARY OF INFRASTRUCTURE AND SERVICES ISSUES

- Wards 31 and 33 have high percentages of households – more than 61% - that do not have access to piped water.
- Wards 5 and 33 have more than 61% of their households without access to hygienic toilets.
- Bulk Water Master Plan requires to be updated given the extended municipal boundary post the 2016 Local Government Elections.
- The estimated AADD potable water requirements inclusive of the existing planned and approved development as well as the development of Areas A to H is 280 MI/day. Estimated Daily Peak water requirements inclusive of the existing planned and approved development as well as the development of Areas A to H is 415 MI/day. At least six additional reservoirs are proposed in this regard.
- The Municipality has five wastewater treatment works (WWTW) and a marine outfall and the option of wastewater re-use is being investigated.
- The City of uMhlathuze is implementing a strategic management plan for water conservation and water demand management.
- An annual maintenance and refurbishment/replacement budget should be provided in addition to the budgets required for capital cost and recurrent expenses. Maintenance is estimated at 4% of the estimated capital cost of the infrastructure per annum; and refurbishment/replacement at 2% of the estimated capital cost.
- In addition to the existing sewerage sub-systems, the topography upon which the City of uMhlathuze is situated lends itself to the establishment of two further sub-systems and possibly to a third new sub-system within the identified SDF Expansion Areas.
- Currently the flow to the existing macerators and WWTW is some 35 MI/d. The required capacities for the anticipated flow for the existing, planned and approved developments are expected to be around 75 MI/d. The required capacities for the anticipated flow for the existing, planned and approved developments together with the remaining potential of expansion areas A to H are expected to be of the order of 185 MI/d.
- An annual maintenance and refurbishment/replacement budget should be provided in addition to the budget required for recurrent expenses. Maintenance at 4% of the estimated capital cost of the infrastructure per annum; and Refurbishment/replacement at 2% of the estimated capital cost of the infrastructure.
- The Municipality reviewed its Arterial Road Framework Plan during 2009. The plan proposes additional arterial routes to provide access to the main urban centre and it is now opportune to plan for the roll-out of such arterials. Furthermore, the plan needs to be updated given the new expanded municipal boundaries.
- The uMhlathuze Municipality has also initiated the process of preparing a Comprehensive Integrated Transport Plan (CITP) with the assistance of the Department of Transport.
- The location of the current Richards Bay airport poses challenges in terms of operations and future development. The Spatial Development Framework (SDF) of the Municipality has identified, at a high level, a favourable corridor for an airport precinct and a pre-feasibility study for the proposed relocation of the Richards Bay airport has been completed.

10. HUMAN SETTLEMENT OVERVIEW

10.1 INFORMAL SETTLEMENT UPGRADE

The Municipality will ensure that it fulfils the objectives of Outcome 8. The Municipality will also fulfil the requirements of the National Upgrading of Informal Settlements Programme (UISP) through National Upgrading Support Programme (NUSP). During March 2014 the National Department of Human Settlements appointed a service provider to undertake the preparation of UMhlathuze Municipality Informal Settlements Upgrade and Relocation Plan. The uMhlathuze Municipal Informal Settlement Upgrade and Relocation Plans for seven identified settlements was completed in August 2015.

The following informal settlements/slums clearance priorities are noted:

10.1.1 uMzingwenya Informal Settlement and Slums Clearance

Mzingwenya settlement situated within a flood risk zone between Mdlebe Ntshona Road and the Mzingwenya River. Attempts to manage or prevent the situation have proven to be rather complex in view of the fact that land ownership vests with two Traditional Authorities.

It is estimated that there are at least 1800 households living in this area within the 1:100 year floodline, therefore the informal settlement may well be regarded as the Municipality's largest disaster area with respect to the flood risks.

The Provincial Department of Human Settlements has given the Municipality approval to commence with the feasibility studies for uMzingwenya River Settlement. The feasibility study has commenced.

10.1.2 Nseleni Informal Settlement and Slums Clearance

The Nseleni informal settlement is situated on the outskirts of the Nseleni Township and a number of the structures are situated close to a 100 year floodline while others are built on steep areas. The land belongs to Khoza/Bhejane Traditional Authority which makes it challenging to the Municipality to control the allocation of land in unsuitable land.

10.1.3 Mzingazi Informal Settlement and Slums Clearance (Infills)

The Mzingazi Agri-Village has developed on land that is owned by uMhlathuze Municipality. During the early 1900's, Council initiated a process to formalise the Village and transfer the properties to the identified beneficiaries. At the time, the beneficiary list consisted of 201 families. This grew to 565 in the late 1990's. The Surveyor General diagrams were handed over to the families as an indication of Council's commitment to transfer ownership.

The uMhlathuze Council is currently installing waterborne sewerage system in the area and an EIA (Environmental Impact Assessment) has been approved. Recent indications are that the more than 300 families reside in the infill areas. It is essential that an appropriate sanitation solution is provided for the community of Mzingazi as the Village borders one of the main fresh water sources in the municipal area, Lake Mzingazi.

10.1.4 Mandlazini-Airport Buffer Strip Informal Settlement and Slums Clearance

The Mandlazini-Airport Buffer Strip measures approximately 65 hectares in extent and according to a November 2011 survey, there are approximately 500 residential structures in the buffer strip. Some of the structures are of an informal/temporary nature while other structures are built from brick and mortar. The land in question is owned by the uMhlathuze Municipality. There are two main concerns relating to the settlement in this buffer strip. In the first instance, some of the structures are believed to be located within a watercourse. In the second instance, this settlement is located within the predicted 55dBA noise contour as determined by the 2010 Update of the Richards Bay Airport Master Plan.

10.1.5 Ngwelezane Informal Settlement

Erf 1241 settlement is situated within Ngwelezane Hospital consisting of approximately 50 individual free standing structures and train type structures driven by private housing entrepreneurs as rental housing. The land belongs to the Department of Public Works.

10.1.6 Vulindlela/University of Zululand Informal Settlement

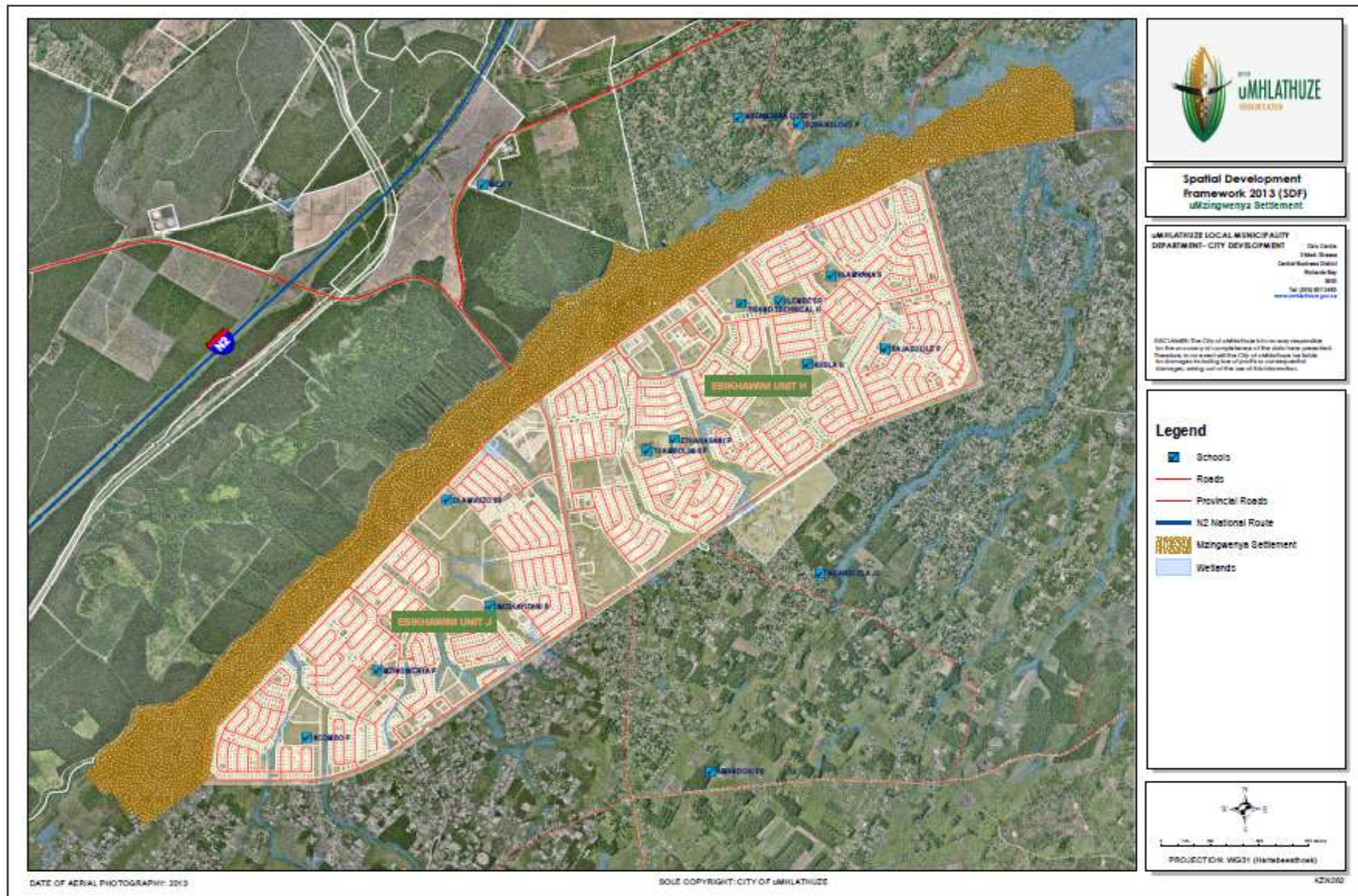
University of Zululand settlement is situated on the outskirt of Vulindlela Township. Some of the structures are built on a slightly steep area. The land belongs to Mkhwanazi Traditional Authority which made it difficult to the Municipality to control the allocation of land in unsuitable land. The settlement consists of train type structures driven by private housing entrepreneurs as rental housing mostly to the University of Zululand students.

10.1.7 Mandlazini Agri-Village Infill Areas

The provision of government housing subsidies in Mandlazini Village will be twofold as a result that the some 570 beneficiaries from Mandlazini Village benefited from government land reform programme. These beneficiaries are likely to benefit from consolidation subsidies subject to qualifying criteria being met. Some of the residents will be benefit from low income housing program.

The Municipality is currently installing waterborne sewerage system in the area and an EIA (Environmental Impact Assessment) has been approved. Recent indications are that the more than 300 families reside in the infill areas. It is essential that an appropriate sanitation solution is provided for the community of Mandlazini as the Village borders one of the main fresh water sources in the municipal area, Lake Mzingazi.

Map 24: uMzingwenya Settlement





Map 26: Mzingazi Informal Settlement



Map 27: Mandlazini-Airport Buffer Strip Informal Settlement



Map 28: Ngwelezane Hospital Settlement



Map 29: Vulindlela/University of Zululand Settlement



Map 30: Mandlazini Village Infill Areas



10.2 IDENTIFICATION OF LAND FOR HOUSING

One of the primary challenges facing the uMhlathuze Municipality is the identification of suitably located land for development. The Municipality has recognized this need through focusing much of its capacity to the investigation of land that is suitable for housing development. The identification of land is a priority of the Municipal IDP and SDF.

The following criteria were used in identification of land suitable of Housing Development:

- Location;
- Ownership;
- Availability of bulk and/or connector services;
- Accessibility in terms of transport and economic opportunities; and
- Linkage to Spatial Development Framework.

Table 51: Land Suitable for Housing Development - SDF Expansion Areas

AREA	LOCATION	LAND OWNERSHIP	PROJECT TYPE	BULK INFRASTRUCTURE AVAILABILITY
Expansion Area A	ESikhaleni-Vulindlela Corridor	State	Mixed Residential	Yes
Expansion Area B	Felixton	Private	Mixed Residential	No
Expansion Area D	Empangeni	Private	High Residential	No
Expansion Area E	Empangeni	Private	Mixed Residential	No
Expansion Area F	Richards Bay-Birdswood-Mandlazini & Veldenvlei	State	Mixed Residential	No
Expansion Area G	Nseleli Interchange	Private	Mixed Residential and Industrial development	No
Expansion Area H	Empangeni (Empangeni Mega Housing)	Council	IRDP	Yes, surrounding

The table below indicated identified State owned land that is suitable for housing development:

Table 52: State Owned Land Suitable for Housing Development

Erf Number	Ownership	Hectares
11488	State	217
16833	State	920 (100 ha required)
Portion 1 of Erf11489	State	368
16715	State	537

10.3 RESTRUCTURING ZONES

Restructuring Zones is a mechanism used to open up areas which have major economic opportunities and for poor people who have been excluded or to protect poor people from being displaced from areas within economic opportunities. The uMhlathuze Municipality has previously identified **Aquadene, Empangeni and Expansion Area A** as its Restructuring zones.

The advantage of having an area declared as a restructuring zone is that it facilitates access to the restructuring or Institutional grant from the Department of Human Settlements to implement a social/rental housing project.

The Municipality has also considered declaring the Meerensee-Mzingazi Interface area (also known as Meerensee 5) as a restructuring zone. The locality of this area is as per the map inset hereunder:

Map 31: Locality of proposed Meerensee Mzingazi Restructuring Zone



The provision of infrastructure to the **Aquadene Superblock Housing project** is underway. The Municipality has a high demand for government related human settlements assistance. As such, the successful implementation of **uMhlathuze Village Phase 6** as the Community Residential Unit/Social will also reduce the housing demand in the uMhlathuze Municipality.

Expansion area A (Esikhaleni-Vulindlela Corridor) has been identified as priority number 1 for possible relocation of uMzingwenya settlement communities who are located in a 1:100 year floodline. The expansion Area A is currently subject to a commercial forestry lease with a small portion of the corridor having been developed as a municipal cemetery. The required 100 ha could alleviate housing development pressures in Esikhaleni (the uMzingwenya settlement as well as people from Vulindlela and Esikhaleni) and from other critical intervention areas in the municipality.

The **Empangeni Mega Housing Project** is located north of Empangeni and takes the form of a partnership between the Department of Human Settlements, uMhlathuze Council and the appointed

IA (Implementing Agent). The project has a planned yield of 10 000 units (coming from the range of subsidy mechanisms) and has been declared as a provincial catalytic project.

Two **rural projects** are located in the municipal area. 1000 units at Luwamba (Obuka Traditional Council) and 1500 units in Buchanana (Obuka Traditional Council).

The location of the municipal approved restructuring zones is provided on the following map. Details of current human settlements projects are also provided.

In addition, figures are provided that give an indication of the distance from current projects within restructuring zones to areas of urban opportunity.

10.4 PRIORITY HOUSING DEVELOPMENT AREAS

The uMhlathuze Municipality has identified three priority housing development areas (PHDAs) within its area of jurisdiction. The identification of these areas is the culmination of various studies and processes that have been undertaken over a number of years underpinning the notion of spatial transformation and restructuring of the current spatial form.

The uMhlathuze PHDAs are in the following areas:

- Empangeni
- Richards Bay
- Esikhaleni Vulindlela Corridor

More information relating to the rationale for identifying the above areas is provided herewith.

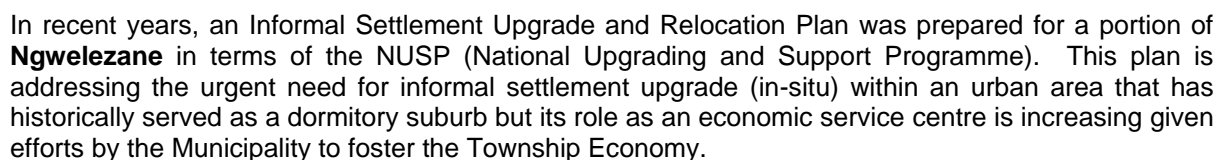
10.4.1 Empangeni

The Empangeni PHDA includes the towns of Empangeni, Ngwelezane, the Dumisani Makhaya Village Human Settlement project as well as the Empangeni Mega Housing project. Empangeni per se is a primary node in terms of the uMhlathuze Municipal SDF and it regarded as a major service and retail centre of uMhlathuze Municipality. It provides a centre of employment, industrial, residential, offices and commercial activity. Empangeni has a regional role and functions as a major gateway to the economy through the nearby Richards Bay Harbour. It plays a dominant role in KZN, especially within the commercial, industrial and agricultural support sectors and acts in the regional economy as a service centre.

At present, there are two human settlements underway in the area, notably **Dumisani Makhaya Village Phase 6 and 8** as well as Empangeni Mega Housing. Both these projects are now integrated residential projects (IRDPs) that offer a suite of opportunities to various income cohorts. The Dumisani Makhaya Village was historically an RDP project but the scope has widened to include social housing and also CRUs and the following is noted:

RDP Houses (Phase 8)	: 130
FLISP	: 82
Social Housing/CRU	: 1270

The Dumisani Makhaya can be considered as an infill project in its own right. The following plan indicates the proximity of the Dumisani Makhaya Housing Project to the Empangeni CBD by way of distance radii of 3km and 5km respectively.



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10.4.2 Richards Bay

The Richards Bay PHDA includes the towns of Richards Bay, its suburbs, as well as Mandlazini and Mzingazi Agri-Villages. Richards Bay is a primary node in terms of the uMhlathuze Municipal SDF and is a prominent developing industrial centre of in South Africa that provides a centres of employment, industrial, residential, mining, offices, eco-tourism, nature reserve and commercial activity. The town is well positioned to take full advantage of the export of manufactured goods and raw materials by virtue of the Richards Bay Harbour. It is also regarded as a eco-tourism and nature reserve gateway and plays a dominant role in the provincial commercial and industrial sector.

At present, **Aquadene** is the main human settlement intervention in Richards Bay. The Aquadene project is also an IRDP. The projects provides for the following housing typologies:

RDP Houses	: 837
FLISP	: 130
Social houses/CRU	: 1579

The following plan indicates the proximity of the Aquadene Housing Project to the Empangeni CBD by way of distance radii of 3km and 5km respectively.

Figure 45: Radius around Aquadene Human Settlement Project



In recent years, an Informal Settlement Upgrade and Relocation Plan was prepared for both the **Mzingazi and Mandlazini Agri-Villages** in terms of the NUSP (National Upgrading and Support Programme). This plan is addressing the urgent need for informal settlement upgrade (in-situ) within these Agri-Villages that are located in close proximity to formal urban suburbs of Birdswood and Meerensee respectively. The said suburbs offer places of employment, commercial and social facilities and peri-urban development has also taken place along the periphery.

A further area that requires priority housing intervention is the area **between Mzingazi and Meerensee**. A project in this area would have a multi-purpose of being an infill project and a catalyst

to integrate the adjoining communities. Furthermore, the suitable development of this area could provide in much needed social and recreation facilities that are lacking in the Mzingazi area specifically. Apart from the above, the Richards Bay PHDA has a satellite campus of the University of Zululand as well as a uMfolozi TVET campus and the need for student accommodation is ever present.

10.4.3 Esikhaleni-Vulindlela Corridor

The Esikhaleni Vulindlela PHDA includes the towns of Esikhaleni and Vulindlela as well as the corridor in between. This area is a priority expansion area of the municipality in terms of the SDF.

Esikhaleni has historically been a dormitory suburb but is in the process of involving into a dominant node. At present it is a secondary node in the municipal area and offers a combination of mixed used development such as commercial, educational, mixed density and mixed income urban living. It is also surrounded by dense peri-urban development creating the need for in-situ upgrade. Furthermore, Esikhaleni plays a dominant role in region especially within the commercial, administration, transportation and social services. It also plays a dominant role in region and provides a tertiary education facility to the region with the location of the uMfolozi TVET College – Esikhaleni campus on the periphery. The node has the potential to be considered as primary node in future.

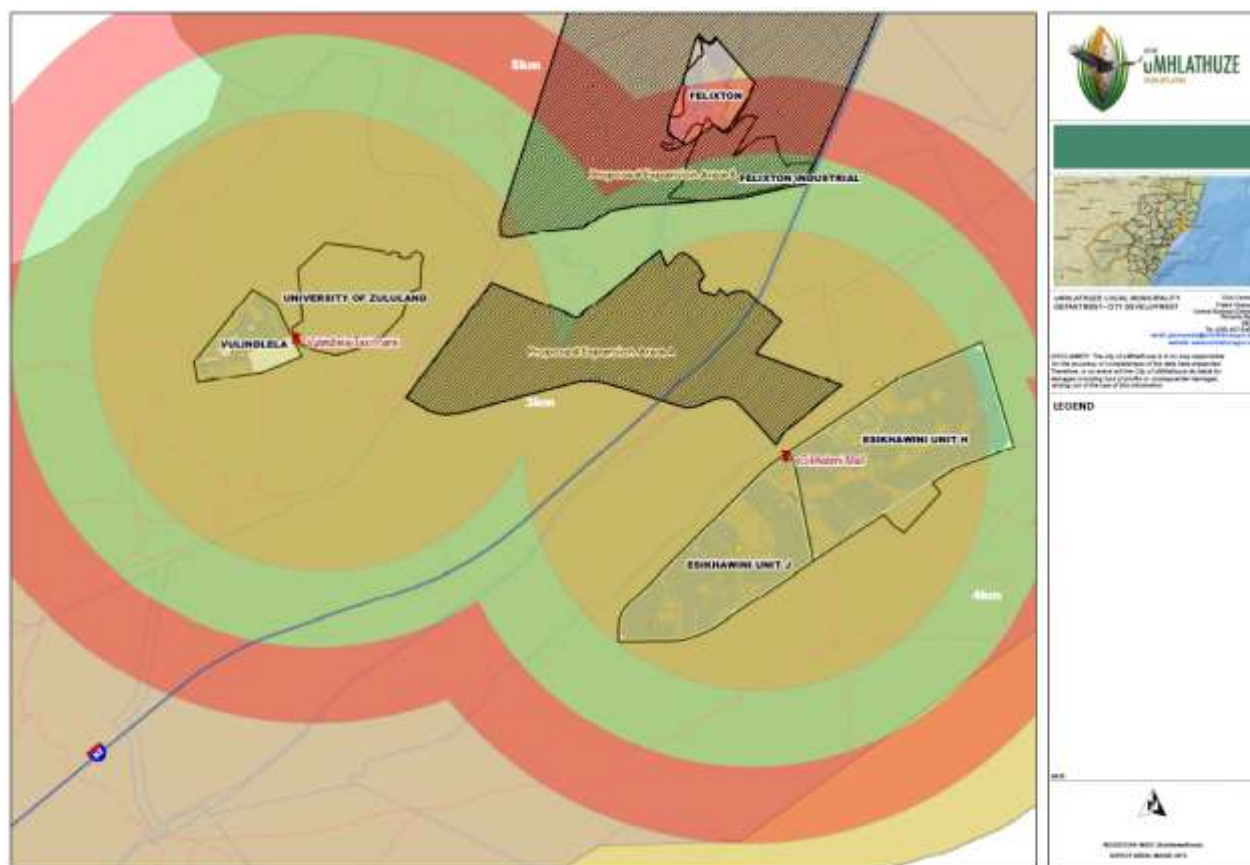
In recent years, the hostel upgrading programme has been completed in Esikhaleni and 20 blocks were successfully upgraded. The main focus is now on the **uMzingwenya** settlement where more than 4000 households live on the urban periphery and more than half within flood prone areas. The Municipality has also prioritized the uMzingwenya Slums Clearance project and foresees at least partial resettlement of the affected community into the Esikhaleni Vulindlela Corridor.

The town of **Vulindlela** was also investigated and an Informal Settlement Upgrade and Relocation Plan was prepared for a portion thereof prepared in terms of the NUSP (National Upgrading and Support Programme). This plan is addressing the urgent need for informal settlement upgrade (in-situ) within an urban area that has historically served as a dormitory suburb but its role as an economic service centre is also increasing.

More specifically, Vulindlela offers a combination of mixed used development such as educational, low –medium income residential (urban & peri-urban living), health facilities and small scale commercial facilities. It plays a dominant role in Region and provides a tertiary education facility to the region with the location of the University of Zululand main campus on the periphery. As a result, there is an increasing demand for student accommodation and to an extent, the already informally provided student accommodation has to be formalized.

The following plan provides an indication of the radii around the Esikhaleni and Vulindlela nodes and how any development within these radii will provide integration and improved access to the provided urban facilities.

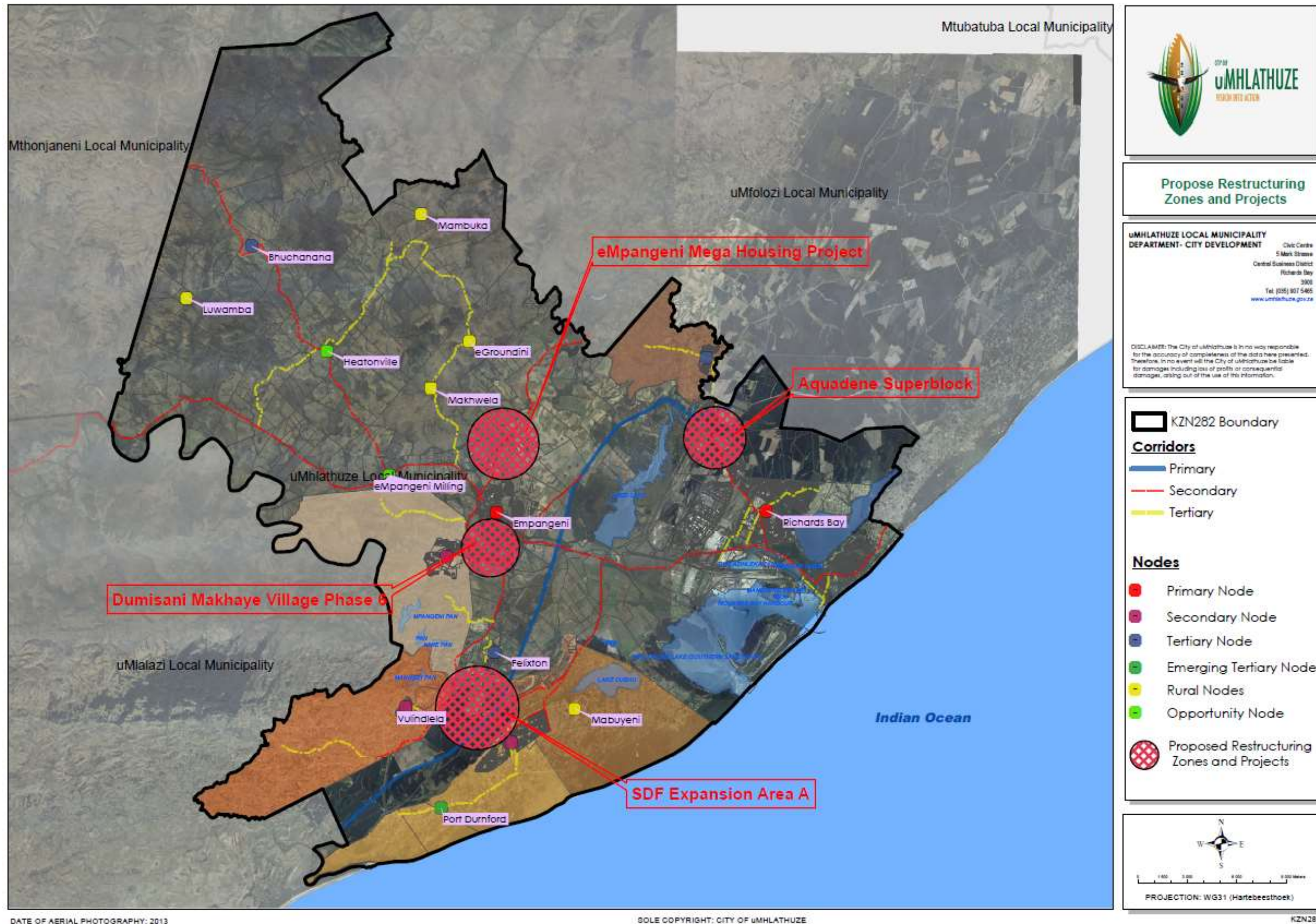
Figure 46: Radius around Vulindlela and Esikhaleni



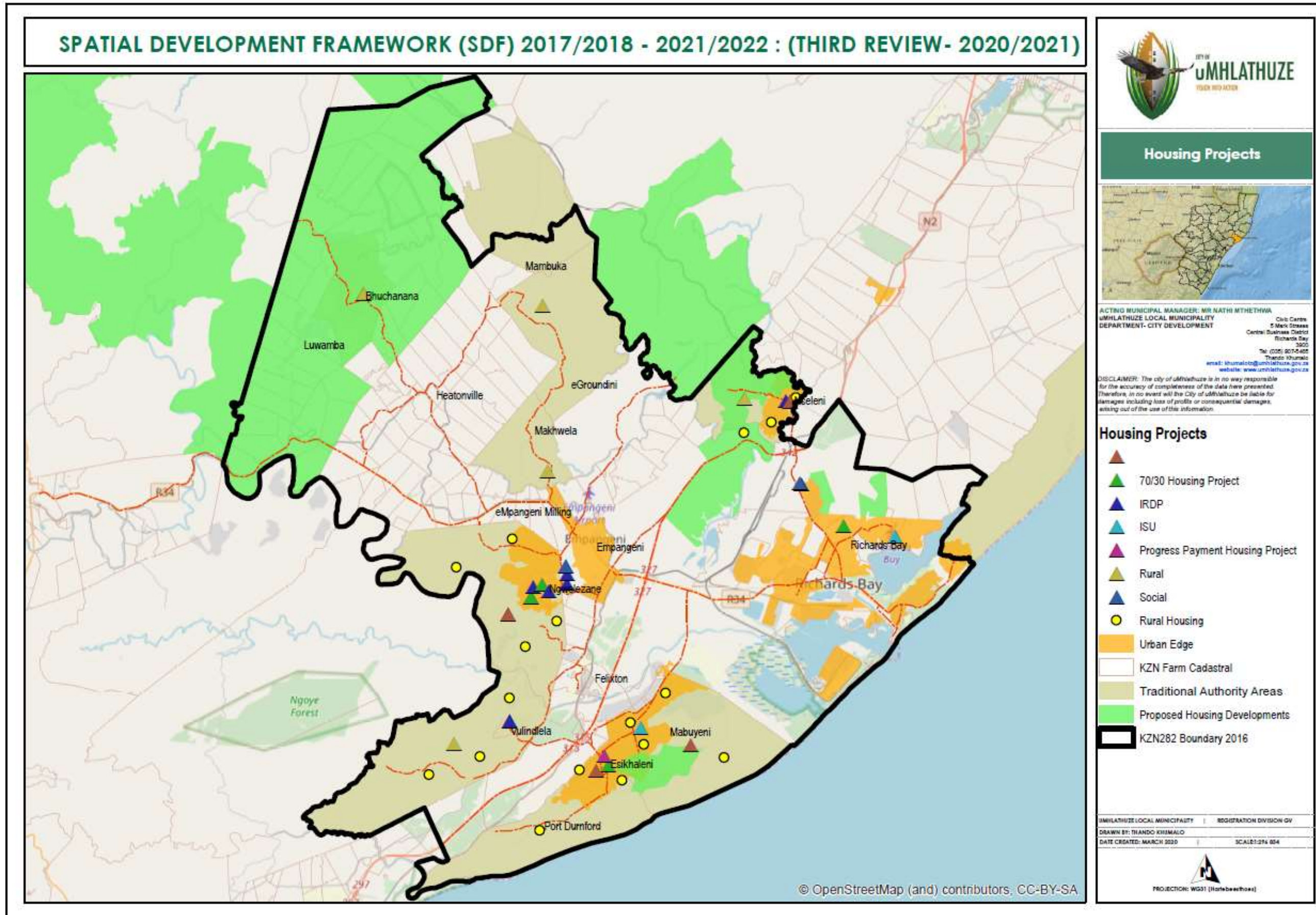
10.5 SUMMARY OF HUMAN SETTLEMENT ISSUES

- Informal Settlement Upgrade and Relocation Plans for seven identified informal settlements is in place, i.e. Mzingazi Infills, Mzingazi Informal Settlement, Mandlazini-Airport Buffer Strip, Mandlazini Infills, Umzingwenya, Vulindlela, Nseleni Peri-Urban Settlement and the Ngwelezane Hospital Settlement.
- The uMhlathuze Municipality has three Restructuring zones, i.e. Aquadene, Empangeni and Expansion Area A.
- Planning for Human Settlements requires coordination between various implementing departments and authorities, i.e. DWS, EDTEA, Municipal Infrastructure and Municipal Planning.
- Priority Housing Development Areas have been identified for Empangeni, Richards Bay and the Esikhaleni Vulindlela Corridor.

Map 32: Human Settlements Restructuring Zones



Map 33: Human Settlements Projects in uMhlathuze



11. DISASTER MANAGEMENT

The main objective of the Disaster Risk Assessment is to provide relevant information to enable and support the required disaster risk reduction planning and activities to be undertaken by the Municipality. Given their spatial relevance, the issues of overall vulnerability and resilience are briefly expanded upon:

Vulnerability can be described as the degree to which an individual, a household, a community, an area or a development may be adversely affected by the impact of a hazard. Conditions of vulnerability and susceptibility to the impact of hazards are determined by physical, social, economic and environmental factors or processes. It is also important to remember that vulnerability is dynamic, not static, as the vulnerability of communities change due to improvements or degradation of social, environmental and economic conditions, as well as interventions specifically aimed at reducing vulnerability, such as disaster mitigating actions.

Resilience characteristics relate to the capacity within the uMhlathuze area to counter the effects of hazards and vulnerabilities. Resilience levels consist of Manageability and Capacity values. Manageability is defined as the combination of all the strengths and resources available within the government departments and line-functions that can reduce the level of risk or the effects of a disaster. This includes the level of staff or human resources, available expertise, suitable experience, available vehicles, equipment, funding or budget allocations, facilities and risk reduction and response plans. Capacity is defined as the combination of all the strengths and resources

The Disaster Management Act (Act 57 of 2002) as well as the National Disaster Management Framework, requires that Municipalities conduct disaster risk assessments for their area of jurisdiction. uMhlathuze Municipality has prepared a draft Disaster Management Plan (Level 2) as of March 2020.

As part of the compilation of the plan, amongst others, the following was interrogated:

- The Legal Framework
- The Profile of the City of uMhlathuze, including population dynamics, topographical conditions and climatological conditions
- Institutional capacity
- Disaster Risk Assessment
- Disaster Risk Reduction
- Generic protocols, procedure and considerations for the establishment of a Joint Operations Centre (JOC)
- Information Management and Communication
- Recommended funding arrangements

In terms of the draft plan (in the process of adoption), the preventative, risk-reduction and preparedness elements of the Municipal Disaster Management Plan (DMP) must be implemented and maintained on a continuous basis. The emergency response or re-active elements of the DMP will be implemented whenever a major incident or disaster occurs or is threatening to occur in the municipal area.

The three levels of planning are broken into critical outcomes and a series of action steps as summarized hereunder:

Table 53: Three levels of Disaster Risk Management

Level	Critical Outcomes
1	1. Establish foundational institutional arrangements for disaster risk management 2. Develop the capability to generate a Level 2 Disaster Risk Management Plan 3. Development and implement contingency plans for known priority risks

2	1. Establish processes for comprehensive disaster risk assessments 2. Identify and establish consultative mechanisms for specific priority disaster risk reduction projects 3. Develop a supportive information management system 4. Develop emergency communication capabilities
3	1. Establish specific institutional arrangements for coordinating and aligning disaster risk management plans 2. Establish mechanisms to ensure informed and ongoing disaster risk assessments 3. Institute mechanisms to ensure ongoing relevance of disaster risk management policy frameworks and plans

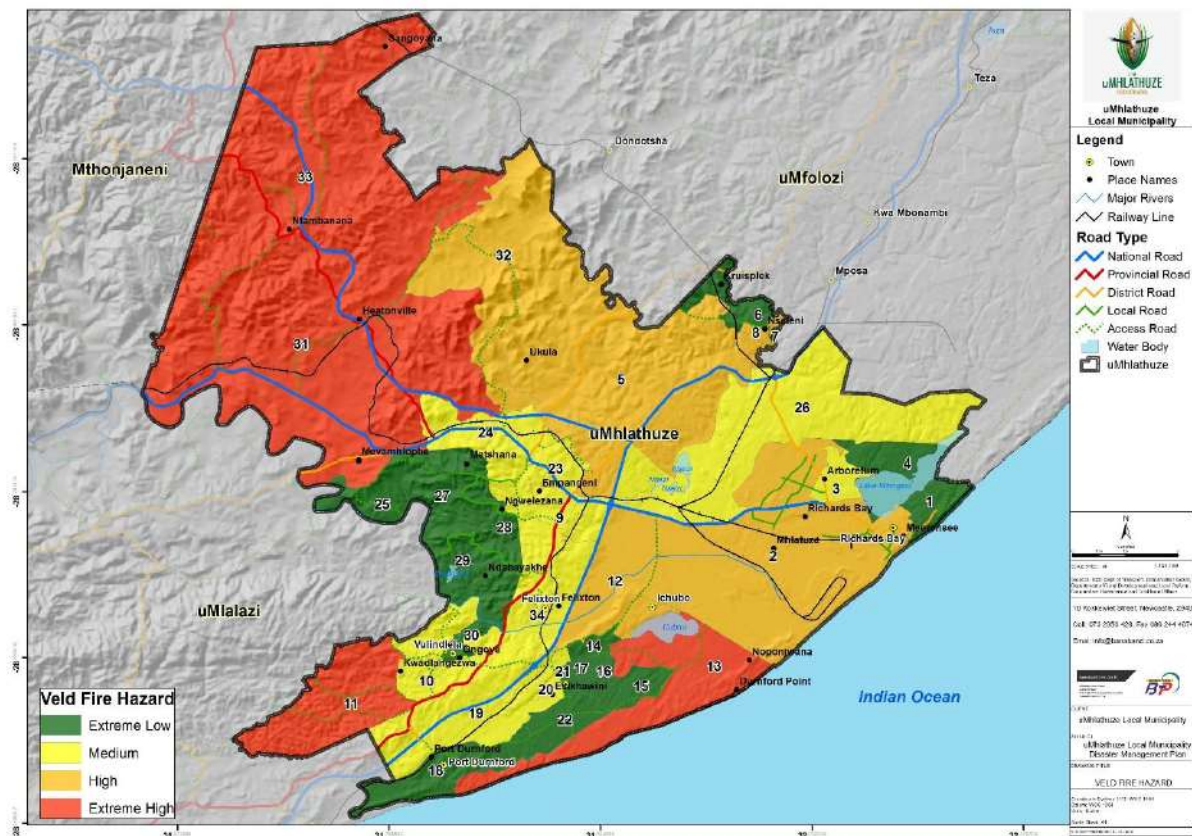
The following indicates the City of uMhlathuze Risk Rating.

Table 54: Risk Rating

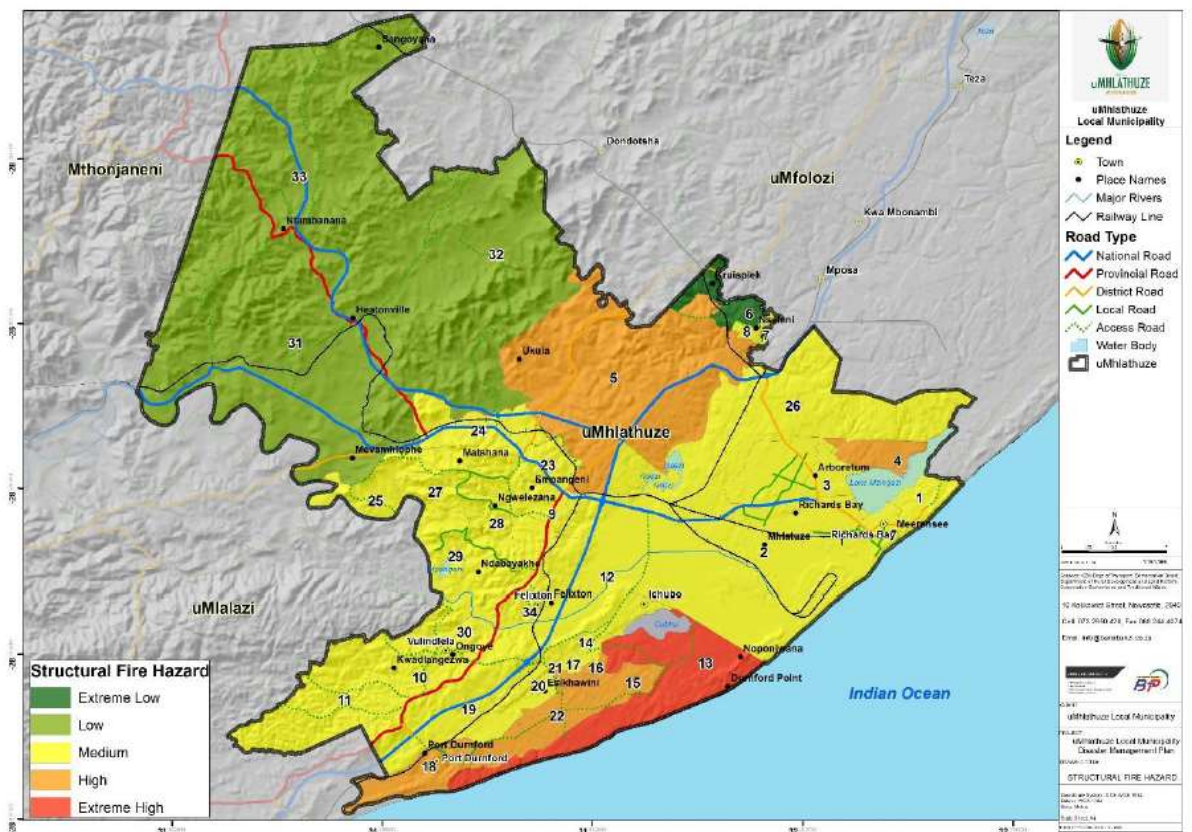
Main Category (CITY RISK RATING)	RISK (City)
Hydro-meteorological Hazards - Severe Storms (Lightning)	0.90
Hydro-meteorological Hazards - Severe Storms (Heavy Rainfall)	0.86
Hydro-meteorological Hazards - Floods (River)	0.83
Fire Hazards - Veld/Forest Fires	0.77
Hydro-meteorological Hazards - Severe Storms (Wind, Hail)	0.75
Fire Hazards - Formal & Informal Settlements / Urban Area	0.75
Hydro-meteorological Hazards - Severe Storms (Snow)	0.72
Transport Hazards - Road Transportation	0.71
Geological Hazards - Rock-fall	0.71
Hydro-meteorological - Drought	0.70
Pollution - Air Pollution	0.70
Transport Hazards - Air Transportation	0.69
Transport Hazards - Rail Transportation	0.67
Environmental Degradation - Erosion	0.66
Pollution - Water Pollution	0.65
Disease / Health - Disease: Animal	0.61
Hazardous Material - Hazmat: Spill/Release/Fire/Explosion (Storage & Transportation)	0.59
Pollution - Land Pollution	0.57
Environmental Degradation	0.57
Geological Hazards - Earthquake	0.55
Structural Failure - Dam failure	0.52
Infrastructure Failure / Service Delivery Failure - Information Technology	0.52
Major Event Hazards (Cultural, Religious, Political, Recreational, Commercial, Sport)	0.51
Disease / Health - Disease: Plants	0.46
Civil Unrest - Terrorism	0.45
Civil Unrest - Xenophobic Violence	0.44
Hydro-meteorological Hazards - Extreme Temperatures	0.38
Civil Unrest - Refugees / Displaced People	0.37

The following series of mapping spatially depicts an analysis of veld fire hazard, structural fire, flood hazard, lightning and drought hazards.

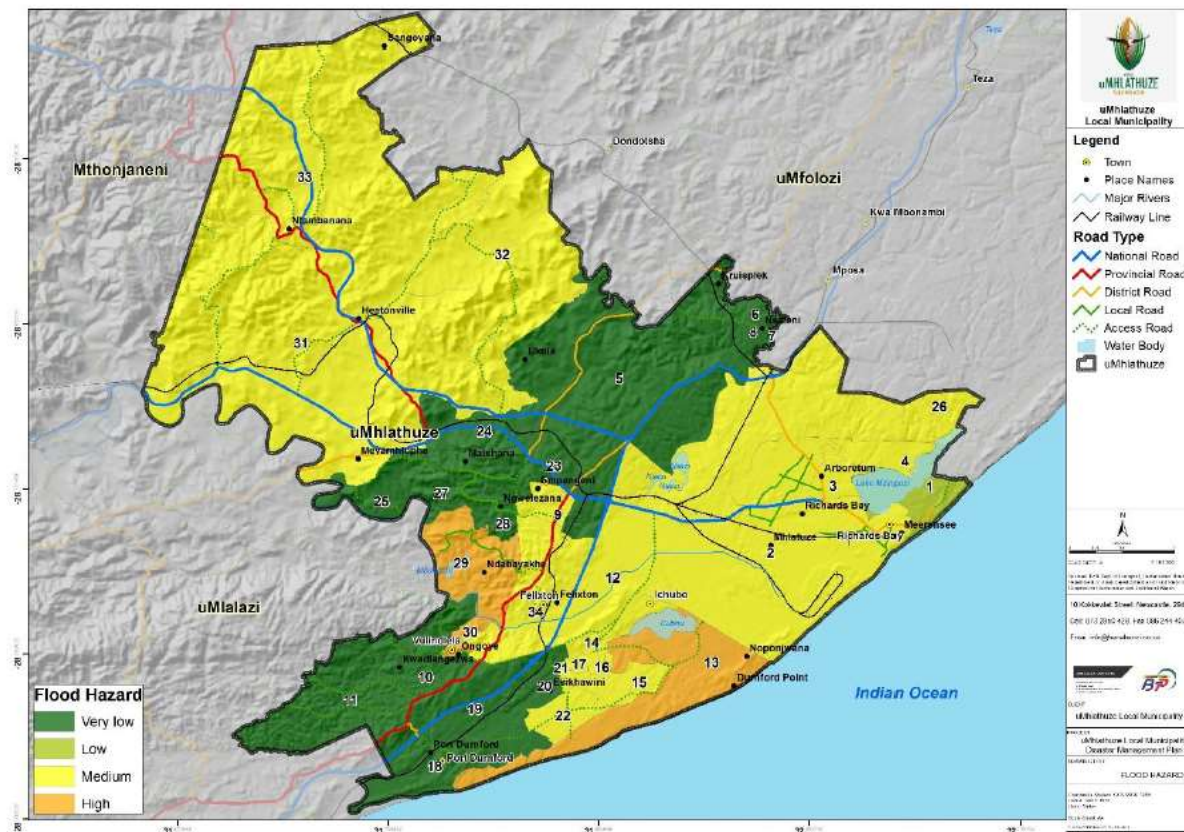
Map 34: Veld Fires Hazard Assessment



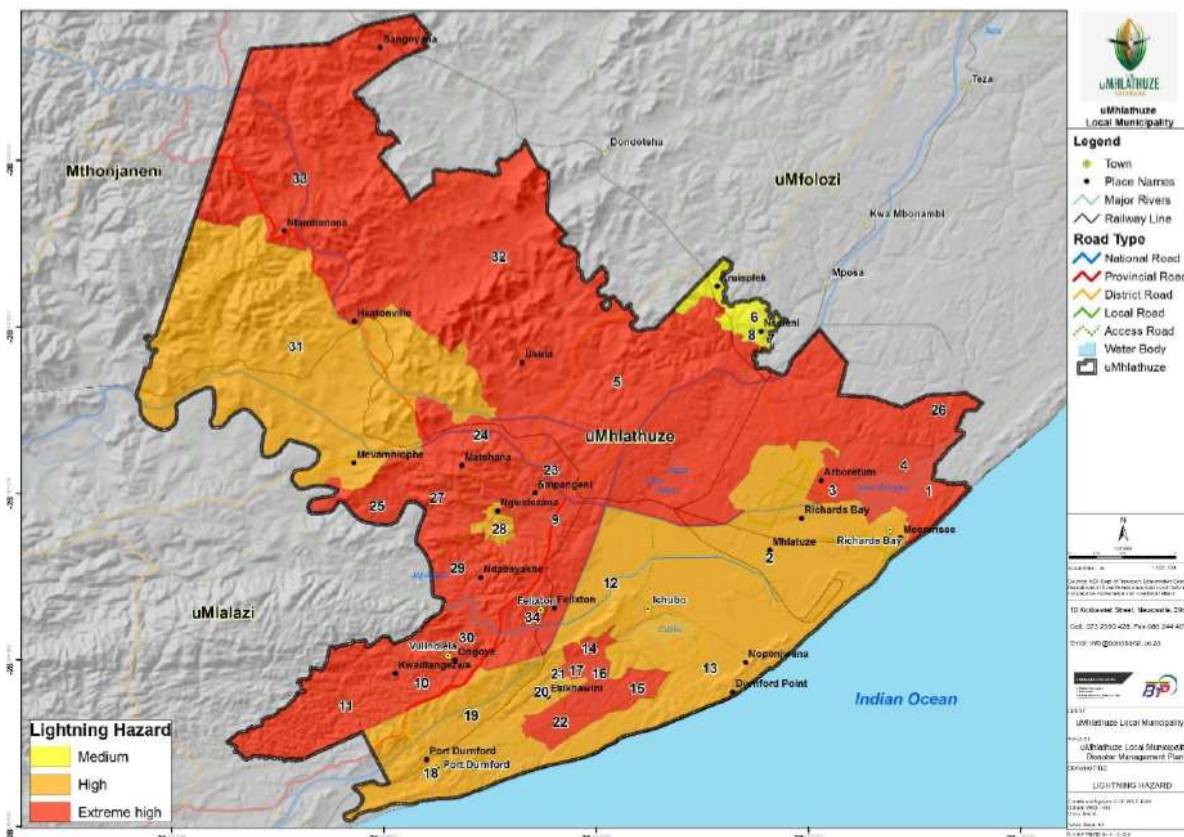
Map 35: Structural Fires Hazard Assessment



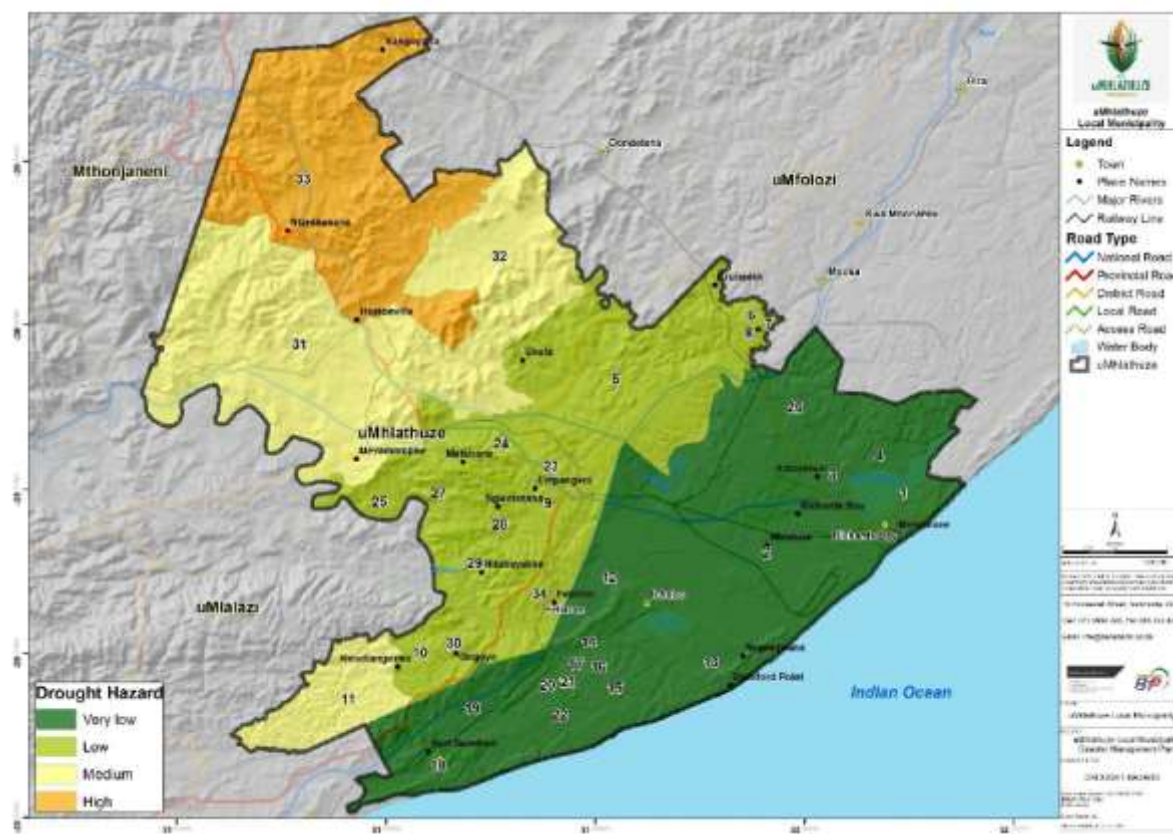
Map 36: Flood Hazard Assessment



Map 37: Lighting Hazard Assessment



Map 38: Drought Hazard Assessment



11.1 SUMMARY OF DISASTER MANAGEMENT ISSUES

- The spatial locality of hazards identified in the DMP are noted in relation of areas where the most vulnerable communities reside.
- Hazards associated with industry need to be indicated.

12. SPATIAL DEVELOPMENT FRAMEWORK

12.1 INFORMANTS OF SPATIAL DEVELOPMENT

The following table is a consolidation of the sectoral key development issues that have been extracted from the various chapters in this report.

Table 55: Consolidation of Key Issues

SPATIAL	DEMOGRAPHIC AND SOCIO-ECONOMIC
<ul style="list-style-type: none"> ○ Municipality has an area of 123 325Ha ○ 51% of the area is under the jurisdiction of Ingonyama Trust Board ○ Richards Bay and Empangeni are the most significant economic centres in the Local and District Municipality ○ Esikhaleni has the potential to develop into a primary node if the local economy becomes more sustainable, specifically in respect of growth and employment opportunities ○ Aquadene, Brackenham, Esikhaleni and Nseleni have the highest residential densities in the municipal area ○ Existing bulk infrastructure capacities will have to be increased at all nodes to accommodate increased densities and expansion/development ○ Vast peri-urban settlements have challenges and lack proper planning, limited basic services and is located in environmental high risk areas compromising their sustainability. ○ The area to the east of the Municipality is inundated with a system of wetlands and natural water features such as Lakes Cubhu, Mzingazi, Nsezi and Nhlabane. Major rivers include the Mhlathuze and Nsezi. ○ The main access into the municipal area is via the N2 in a north south direction and in an east west direction the R34. Other significant roads in the area include the MR431 (that provides a northerly entry into Richards Bay from the N2) as well as the Old Main Road that straddles the N2 on its inland. ○ Railway lines are prevalent in the municipal area but do not provide a passenger service, only a commercial/industrial service is provided. ○ The municipality has the benefit of about 45km of coastline. ○ Linked to its coastal locality is the Richards Bay deep-water port that has been instrumental in the spatial development of the area. 	<ul style="list-style-type: none"> ○ Highest population densities are found in the in the formal urban and surrounding areas, i.e. peri-urban areas. ○ According to the 2016 Community Survey, uMhlathuze had 410 465 people and 103 915 households with an average households size of 3.95. ○ At a steady population increase of 1,5% per annum, the municipal population will surpass 500 000 people by 2030. ○ The municipality will reach a population of 500 000 before 2021 if a population growth rate of 5% takes place over the next few years. At a 5% per annum population growth rate the number of households in the municipality will double by 2030. ○ An estimated additional 1300 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 15 units per hectare. ○ An estimated additional 600 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 25 units per hectare. ○ For the percentage of adults over the age of 20 years that do not have schooling, the incidence of this is highest (more than 61%) in Wards 5, 10, 13, 14, 18, 25, 32 and 33. This are largely coincides with Traditional Authority areas. ○ Regarding income levels as a percentage of households that earn less than R1600 per month it is noted that Wards 5, 10 and 29 are the most impoverished in this regard. ○ Regarding unemployment levels and the wards with the highest percentage of unemployed individuals are 4, 5, 12, 18, 24 and 28.
LAND REFORM	HUMAN SETTLEMENTS

- The opportunity to lodge land claims has been extended to 30 June 2019 and, to a degree, some developers feel uncertain about the prospects of pursuing a development on land that may be subject to claim in future.
- The Regional Land Claims Commission has made it clear that the intention of land claims is not to hinder development.
- Informal Settlement Upgrade and Relocation Plans for seven identified informal settlements is in place, i.e. Mzingazi Infills, Mzingazi Informal Settlement, Mandlazini-Airport Buffer Strip, Mandlazini Infills, Umzingwenya, Vulindlela, Nseleni Peri-Urban Settlement and the Ngwelezane Hospital Settlement.
- The uMhlathuze Municipality has three Restructuring zones, i.e. Aquadene, Empangeni and Expansion Area A.
- Planning for Human Settlements requires coordination between various implementing departments and authorities, i.e. DWS, EDTEA, Municipal Infrastructure and Municipal Planning.

INFRASTRUCTURE

- Wards 31 and 33 have high percentages of households – more than 61% - that do not have access to piped water.
- Wards 5 and 33 have more than 61% of their households without access to hygienic toilets.
- The estimated AADD potable water requirements inclusive of the existing planned and approved development as well as the development of Areas A to H is 280 Ml/day.
- Estimated Daily Peak water requirements inclusive of the existing planned and approved development as well as the development of Areas A to H is 415 Ml/day. At least six additional reservoirs are proposed in this regard.
- The Municipality has five wastewater treatment works (WWTW) and a marine outfall and the option of wastewater re-use is being investigated.
- The City of uMhlathuze is implementing a strategic management plan for water conservation and water demand management.
- An annual maintenance and refurbishment/replacement budget should be provided in addition to the budgets required for capital cost and recurrent expenses. Maintenance is estimated at 4% of the estimated capital cost of the infrastructure per annum; and refurbishment/replacement at 2% of the estimated capital cost.
- In addition to the existing sewerage sub-systems, the topography upon which the City of uMhlathuze is situated lends itself to the establishment of two further sub-systems and possibly to a third new sub-system within the identified SDF Expansion Areas.
- Currently the flow to the existing macerators

DISASTER MANAGEMENT

- The prioritized risks for uMhlathuze are noted to be human disease/health, hydro-meteorological hazards and civil unrest.
- The existing uMhlathuze Disaster Management Plan was prepared for the former area of uMhlathuze that excluded the newly incorporated wards post the 2016 Local Government Elections.
- A framework for the establishment of an Integrated Disaster Management Service in terms of Disaster Management Act 57 of 2002 has been developed.

ENVIRONMENTAL

- The complex hydrology of the area, whilst attributing to unique natural features, poses challenges for development. This is particularly the case where logical spatial expansion need to take place.
- The impacts of Climate Change are being experienced in a local scale in the following respects:
 - Abstraction of water from the various Coastal Lakes have reached ecological reserve limits during periods of extended drought. The long term ecological and aquatic impacts are unknown, particularly where these systems feed into estuarine systems
 - Severe flood events have yielded disaster implications for unplanned settlements with flood prone/ flood risk areas. Whilst this is the case, these are settlements that impact on environmental services by virtue of wetland degradation.
 - The Richards Bay northern beaches in particular have been confronted with severe

<p>and WWTW is some 35 MI/d. The required capacities for the anticipated flow for the existing, planned and approved developments are expected to be around 75 MI/d. The required capacities for the anticipated flow for the existing, planned and approved developments together with the remaining potential of expansion areas A to H are expected to be of the order of 185 MI/d.</p> <ul style="list-style-type: none"> ○ An annual maintenance and refurbishment/replacement budget should be provided in addition to the budget required for recurrent expenses. Maintenance at 4% of the estimated capital cost of the infrastructure per annum; and Refurbishment/replacement at 2% of the estimated capital cost of the infrastructure. ○ The Municipality reviewed its Arterial Road Framework Plan during 2009. The plan needs to be updated given the new expanded municipal boundaries. ○ The uMhlathuze Municipality has also initiated the process of preparing a Comprehensive Integrated Transport Plan (CITP) with the assistance of the Department of Transport. ○ The location of the current Richards Bay airport poses challenges in terms of operations and future development. The Spatial Development Framework (SDF) of the Municipality has identified, at a high level, a favourable corridor for an airport precinct and a pre-feasibility study for the proposed relocation of the Richards Bay airport has been completed. 	<p>erosion, with a result that emergency coastal defenses were required. It is also a fact that the Northern beaches are not being adequately replenished at the required rate of sand volumes from the Transnet sand bypassing scheme.</p> <ul style="list-style-type: none"> ○ Environmental Offsets linked to the Port expansion render significant unknowns from an institutional/ governance perspective but equally from the perspective of physically transforming the affected environment from current land use. ○ Further land development is likely to render biodiversity implications
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The uMhlathuze SDF identifies a series of expansion areas for the municipal area that was informed by planning principles. In recent years, development proposals – particularly from private land owners has aligned to the uMhlathuze SDF. Apart from the spatial development principles that were unpacked at the outset of the report, the following imperatives for the future spatial and economic development of the uMhlathuze Municipality are reiterated:

1. **Job Creation.** Due consideration has to be given to the protection of high potential agricultural land for productive agricultural purposes. However, land and opportunities have to be created to foster industrial development. It is very likely that a conflict will develop between the use of land for productive agriculture versus industrial related/supportive activities. To address this, consideration is given to spatial planning principles as contained in this report.
2. **Investment in human** and community development has to be informed by government principles, as typically contained in the NSDP, i.e. all have to be provided with basic services irrespectively of where they live and investment in human capital in areas that offer lesser economic opportunities. Planning for sustainable human settlements is contained in the Municipal Human Settlements Plan.
3. The spatial implication of the proposed Richard Bay **Port Expansion** has been deliberated by the Municipality and its implications are considered critical during all forward planning exercises. As such, the proposed port expansion and associated impacts on infrastructure and the receiving environment is given due consideration in the municipal SDF.

4. Regardless of the attempts to mitigate the impacts of **climate change**, it is widely accepted that many of the anticipated changes are destined to take place. The uMhlathuze climate change strategy was therefore drafted on the basis of two fundamental principles, i.e. **mitigation** and **adaptation** through the implementation of the Climate Change Municipal Action Plan.
5. **Spatial Equity** requires the promotion of spatial concentration as well as integrated land management and spatial planning. The principles upon which the uMhlathuze SDF has been derived are based on principles of integration, densification and efficient land use. To this end, the municipal Land Use System is being reviewed.

12.2 SPATIAL DEVELOPMENT VISION AND STRATEGIC APPROACH

The uMhlathuze Municipal Vision is:

“The Port City of uMhlathuze offering a better quality of life for all its citizens through sustainable development and inclusive economic growth”

The Spatial Vision for the Municipality is as follow:

“An agile institution that fosters spatial sustainability, resilience, equity and compact growth, supported by appropriate ICT solutions”

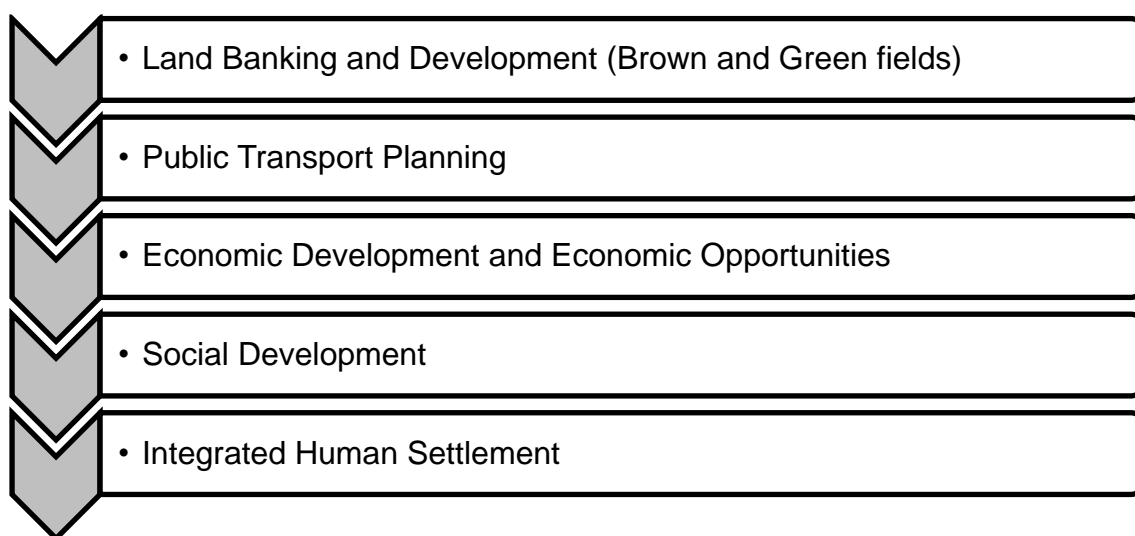
In line with the Basic Service Delivery and Infrastructure Provision, and Local Economic Development and Cross Cutting Key Performance Areas (KPAs), the following goals that have a pertinent spatial implication are noted:

- Integrated infrastructure and efficient services
- Viable economic growth and development
- Integrated urban and rural development

The above spatial vision is expanded upon hereunder. It be noted that it has been informed by policy guidelines provided from, amongst others, the National Development Plan, the Provincial Growth and Development Strategy as well as the SPLUMA (Spatial Planning and Land Use Management Act). The said guidelines are the foundation that gives direction to the envisaged future spatial outcomes in the uMhlathuze Municipal area.

The concept of **Transformation** is always associated with social change in South Africa. The National Development Plan 2030 makes a strong statement about the need to “address the challenge of apartheid geography” which is defined in terms of living, working and environmental sustainability. SPLUMA is identified as a tool to give effect to Spatial Transformation.

According to SACN (2013) ... in order to achieve spatial transformation in the cities, government have to rein in the real changes not only in the physical realm but also in the way we approach both the problems and the solutions. The uMhlathuze Municipality, like any other municipality in country is required to undertake processes of spatial transformation in line with the National Development Plan, Provincial Growth and Development Strategy & Plan, Spatial Planning and Land Use Management Act and the process is informed by the following five key Pillars:

Figure 47: uMhlathuze Spatial Transformation Pillars


The main objective of uMhlathuze Municipal Spatial Transformation Concept is to address the integrated development, city compacting, structural elements, equal access to land, create sustainable economic development and opportunities which will contribute to job opportunities. It is also to prioritise development within and along Municipal Nodes and Corridor as well as developing a development partnership with neighbouring Municipalities.

SPATIAL TRANSFORMATION PILLARS	MUNICIPAL SPATIAL TRANSFORMATION GOALS	SPLUMA PRINCIPLES
Land Banking and Development (Brown and Green fields)	<p>Optimise and maximise land distribution and development through:</p> <ul style="list-style-type: none"> - Densification - Infill development - Promotion of environmental friendly and sustainable development <p>Encourage equal access land distribution.</p> <p>The SDF and development plans is used as a catalyst to address sustainable land distribution.</p> <p>A clear urban edge and development guidelines and incremental approach for certain areas. Development of Rural Development Framework Plans.</p>	<ul style="list-style-type: none"> - Spatial Justice - Spatial sustainability - Spatial efficiency - Spatial resilience - Good administration
Public Transport and Facilities	<p>Further development of Municipal Public Transport that will address the following:</p>	<ul style="list-style-type: none"> - Spatial sustainability - Spatial efficiency - Spatial resilience - Good administration

SPATIAL TRANSFORMATION PILLARS	MUNICIPAL SPATIAL TRANSFORMATION GOALS	SPLUMA PRINCIPLES
	<ul style="list-style-type: none"> - Intermodal Public Transport System - Adequate Public Transport Facilities - Promote a good relationship with public transport stakeholders - Attract Investment 	
Economic Development and Economic Opportunities	<p>Municipal Economic Development Roadmap that will address the following:</p> <ul style="list-style-type: none"> - Encourage investment - Discourage new investment that will create exclusive enclaves for the rich - Promote equal access to economic development opportunities - Tourism investment enhancement - Port Development - Industrial Development and Special Economic Zone - Food security 	<ul style="list-style-type: none"> - Spatial Justice - Spatial sustainability - Spatial efficiency - Spatial resilience - Good administration
Social Development	<ul style="list-style-type: none"> - Safety and Security - Health - Education - Job creation - Promote gender equity and equality - Food security 	<ul style="list-style-type: none"> - Spatial Justice by addressing past spatial injustice i.e. access to land - Spatial sustainability by promoting land development that is within fiscal and institutional means - Spatial efficiency by optimizing the use of existing resources - Spatial resilience by flexible spatial plans, policies and land use management - Good administration to ensure all spheres of government have an integrated approach to land use and spatial development

12.2.1 Municipal Spatial Transformation Strategy Nodal Focus Areas

NODAL FOCUS AREA	CLASSIFICATION	INTERVENTION
Richards Bay and Empangeni	Primary urban centre, with servicing capacity and opportunity for densification and can support thresholds for a range of services, industry and public transport	<ul style="list-style-type: none"> - Development of Densification Guideline/Policy - Review of 2006 CBD Framework Plan for Richards Bay - Implementation of the CBD Revitalization Plan - Adopting of a safety non-motorized movement system
Ngwelezane, Esikhaleni, Vulindlela Township	Secondary urban centre with limited servicing capacity and opportunities for economic development, employment, land use and densification enforcement	Development of Precinct Plan to provide development vision for the area and provide possible solutions to the development, densification, land use management and economic challenges. Interventions aimed at fostering the Township Economy and supporting the second economy.
Nseleni, Buchanana Township	Tertiary urban centre with limited servicing capacity and opportunities for economic development, employment, land use and densification enforcement	Development of Precinct Plan to provide development vision for the area and provide possible solutions to the development, densification, land use management and economic challenges. Interventions aimed at fostering the Township Economy and supporting the second economy.
Opportunity Node (Empangeni Milling Node and Heatonville)	Node with untapped potential to provide services and economic opportunities to the surrounding hinterland, mainly by virtue of its accessibility.	Development of Precinct Plan to provide development vision for the area and provide guidance for the development, land use management and economic growth.
Rural Nodes (Potential Investment Areas)	Rural Centres with limited servicing capacity and socio-economic opportunities.	Development of Development Framework Plan which will provide guidelines for translation of Spatial Development Intentions into Land Use, Transport, Environmental, Infrastructure developments

The Municipality has recently reviewed its Land Alienation Policy which aims at addressing the Municipal Spatial Transformation Interventions. Historic imbalances have propagated in the spatial form and functions of towns and suburbs. It is now imperative that local government takes decisive action to intervene and change the landscape that has evolved as a result of these imbalances.

1. A number of **push factors** out of the former R293 towns exist as well as pull factors toward the well-established and serviced urban areas. The combination of these push and pull factors have an undesirable effect on settlement pattern and distribution. Interestingly, the

R293 towns also have a pull effect on rural communities by virtue of the facilities/services available that exceed those available in rural areas.

2. **Transport** related imbalances need to be addressed, including the economic cost of travelling long distances between place of employment and place of employment. The historic lack of economic activity in R293 towns and rural areas have created dormitory suburbs that provide only in residential and basic ancillary needs such as schools, parks etc. A structured economy is lacking.
3. **R293 towns and remote suburbs** need to become sustainable, integrated communities that offer residents a suite of choices and opportunities. It should be the choice of a resident to obtain goods and services of a satisfactory quality locally or travel to a more established, higher order town, to obtain higher order goods and services from. More specifically, the Township Economy needs to be supported.
4. Land that is well located and suitable for economic activity needs to be accessible to **historically disenfranchised**.
5. Government funded interventions have to contribute to the **integration of communities** and not the further segregation of communities. To this end, the notion of **restructuring zones** is supported by the local municipality.
6. **Sense of place** and belonging to be created. Various urban design type interventions such as urban greening, waste management etc. have to be implemented to create such a sense of place and redress the feeling of remoteness.
7. Improved **access to social services** from all spheres of government. Interim arrangements of mobile services delivery points to be replaced with more permanent solutions.

Council is in the process of preparing a suite of plans to link the strategic SDF/IDP to the local implementation level of the Land Use Scheme. In order to redress spatial inequality, the following list of factors have been identified that will reduce the level of spatial inequality that exists in an area. Please note that the list is not exhaustive:

- Improved access to facilities and services
- Improve variety of facilities available
- Improve access to economic opportunities/access to land
- Overall improvement of the Township Economy
- Lessen transport cost/effort to reliable social and economic opportunities and places where goods/services are procured/received
- Spatial integration of developable areas
- Integrated human settlement
- Improved and appropriate management/development control of previously segregated areas
- Greening of suburbs and towns

12.3 PLANNING FOR FUTURE SPATIAL DEVELOPMENT

The Spatial Development Framework of uMhlathuze guides future development and the following components are expanded upon herewith:

- o Settlement and Corridor Hierarchy
- o Natural Features
- o Expansion areas
- o Infill and densification
- o Urban Development Boundary

12.3.1 UMHLATHUZE SETTLEMENT HIERARCHY

It is important to provide some description of what is considered “urban” as opposed to “rural” in this section. Essentially urban and rural areas differ with regard to population densities, land use types and levels of services.

According to Wikipedia (www.wikipedia.org) it is important to note that definitions for urban (and rural) vary somewhat between nations.

- In Europe, countries define urbanized areas on the basis of urban-type land use
- In less developed countries, in addition to land use and density requirements, a requirement for urbanized is that a large majority of the population, typically 75%, is not engaged in agriculture and/or fishing.
- In Australia, urban areas are referred to as "urban centres" and are defined as population clusters of 1000 or more people, with a density of at least 200/km².

The following descriptions are proposed by the uMhlathuze Municipality in respect of urban, peri-urban, rural and traditional communities.

Urban: Townships that have been formalized in terms of relevant development planning legislation and where private individuals can obtain land. In urban areas a higher than basic level of services is generally provided and maintained.

Peri-Urban: Peri-urban areas often form as result of settlement on the boundary of formal urban areas but not necessarily enjoying the benefits/levels of services that are available in the adjoining urban areas. A further consideration would be that such areas have a higher population/household density than rural areas.

Rural: An area outside of an urban/an or peri-urban area that has a lower population/household density as well as a more basic level of services.

Traditional Communities: As recognized in terms of Section 2 of the KwaZulu-Natal Traditional Leadership and Governance Act, 2005 (No. 5 of 2005), and are found in both peri-urban and rural areas.

It has to be noted that a settlement hierarchy directs specific resource based responses in respect of spatial development and investment. The detailed Settlement Hierarchy proposed for the municipal area is shown herewith:

Table 56: Summary of uMhlathuze Settlement Hierarchy

PRIMARY SETTLEMENTS	RICHARDS BAY AND EMPANGENI
<ul style="list-style-type: none"> Centres of employment, industrial and commercial activity. Continue to serve as main municipal administrative centres. Main public transportation nodes (Richards Bay Taxi City and Empangeni A and B-Ranks). A range of specialized services and facilities are available to a larger hinterland. 	
SECONDARY AND TERTIARY SETTLEMENTS	ESIKHALENI, NSELENI, VULINDLELA, NGWELEZANE AND FELIXTON
<ul style="list-style-type: none"> Formalized towns, mainly residential in nature. Most community facilities are available at these locations, and therefore provide their resident communities with basic commercial and recreational facilities. More specialized services and facilities are obtained from the primary settlements. Opportunity to formalize better employment opportunities at all secondary settlements. 	
PERI-URBAN AREAS	UNFORMALIZED AREAS MAINLY ADJACENT TO THE FORMALIZED SECONDARY NODES OF ESIKHALENI, VULINDLELA, NSELENI AND INCLUDES MZINGAZI AND PORTIONS OF MANDLAZINI
<ul style="list-style-type: none"> Characterized by dense population; small stands not necessarily able to support agricultural activities; Continuous infill-development takes place; pressure for connections to municipal infrastructure (individual connections) and possible health impacts as a result of over-crowding and lack of community services. In-situ rural housing projects not necessarily viable as a result of high densities. Opportunities for formalization for some of these areas. Township establishment possible on municipal land but limitations exist on Ingonyama Trust Board (ITB) land. <p>(Note: The Mandlazini and Mzingazi area, albeit considered part of the Richards Bay formal area, are in the process of formalization)</p>	
OPPORTUNITY NODES	HIGHLY ACCESSIBLE AREAS WITH UNTAPPED POTENTIAL
<ul style="list-style-type: none"> Characterized by good accessibility but very limited development economic opportunities. Potential to provide services and economic opportunities to surrounding hinterland 	
RURAL SETTLEMENTS	DENSER SETTLEMENTS WITHIN THE TRADITIONAL COUNCIL AREAS
<ul style="list-style-type: none"> Identified in line with the uMhlathuze Rural Housing Projects. Accessible locations for community services and infrastructure. Specific planning and development interventions are required to identify community services that are to be encouraged at these nodes. 	
SCATTERED SETTLEMENT	
<ul style="list-style-type: none"> Remainder of the Municipal Area. Potentially viable for in-situ rural housing projects if not too far removed from Secondary or Rural Settlements. 	

The following vision is envisaged for the listed nodal areas:

Empangeni Node: An urban centre poised for economic transformation and development initiatives that are innovative based on a new ethos which aims at creating a unique high performance unique sense of place and belonging live-i.e. work-play-trade environment.

Richards Bay: An urban centre poised for economic transformation and development opportunities based on a new ethos which aims at creating a unique high performance unique sense of place and belonging live, i.e. work-play-trade environment.

Esikhaleni Node: A socio-economic node that offers a range of sustainable mixed use development opportunities. Further economic/employment opportunities to be pursued.

Felixton Node: A socio-economic node that offers sustainable economic and social opportunities to its inhabitants and the larger surrounding area.

Vulindlela/KwaDlangezwa Node:

An institutional node that offers a sustainable mixed use development to the benefit of its inhabitants, visitors and the larger surrounding area.

Ngwelezane Node: A socio-economic node that offers sustainable mixed use development opportunities to its inhabitants and the larger surrounding area.

Nseleni Node: A socio-economic node that offers sustainable mixed use development opportunities based on a human scale principle to its inhabitants and the larger surrounding area.

Bucanana Node: A socio-economic node that offers sustainable mixed use development opportunities based on a human scale principle to its inhabitants and the larger surrounding area.

Opportunity Node (Empangeni Milling Node and Heatonville):

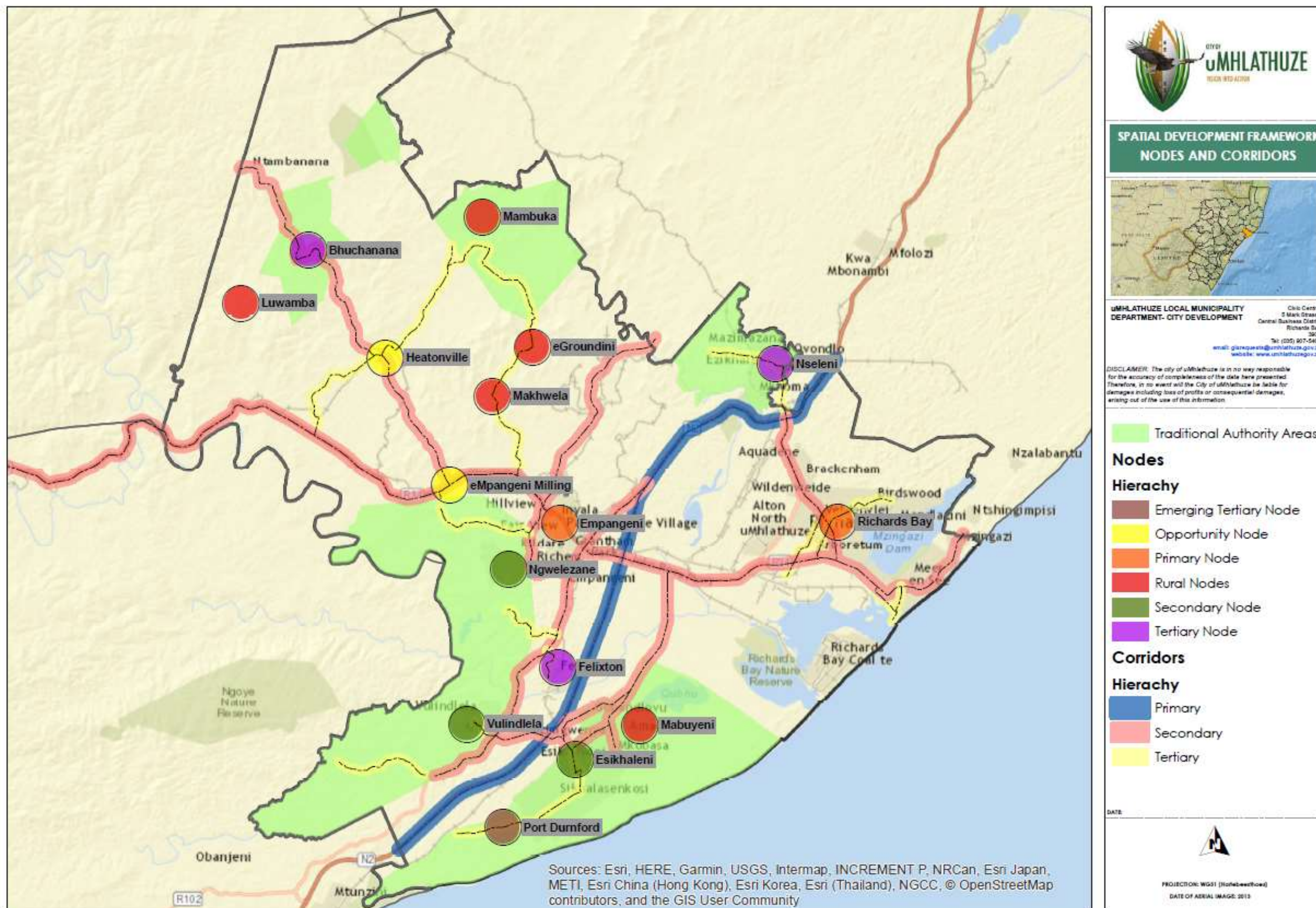
Socio-economic nodes that provides services and economic opportunities to the surrounding hinterland, mainly by virtue of its accessibility.

Rural Nodes: Socio-economic nodes that offer tailor made mixed use development opportunities closer to the people.

Apart from the above nodal areas that define the settlements, the linkages between settlements are further defined in terms of a corridor hierarchy. Volumes, speed and type of traffic as well as the reason for travel define corridors or transport routes as primary, secondary or tertiary.

The following map indicates the relation between the nodes in the uMhlathuze Municipality and the respective corridors that connect them.

Map 39: Nodes and Corridors in uMhlathuze



12.3.2 NATURAL FEATURES

In order to understand the extent of natural features in the municipal area, a series of factors have been investigated and subsequently considered in the future spatial development planning for the municipal area. These include:

- Past **Geomorphologic** processes have resulted in a unique landscape that supports complex hydrological systems, which in turn have resulted in high level of species diversity
- The municipal area falls within the Maputaland-Pondoland-Albany **Biodiversity** hotspot which is recognized as the second richest floristic region in Africa: containing approximately 80 % of the of South Africa's remaining forests, rich birdlife and many other significant flora and fauna species.
- The geology and geomorphology of the area controls the transport and storage of water and influences the hydraulic functions of the **ground water** system. Streams are generally perennial and seldom stop flowing even in drought conditions that also creates a large underground storage reservoir that consistently sustains the coastal lakes which form the main water supply resources for the municipality.
- The uMhlathuze area is characterized by hydrological and **geotechnical** constraints.

Apart from the above, environmental assets in the municipal area contribute to the functioning of the area in the following manner:

Economic Development: Coastal Dunes contain heavy minerals that are sought after for mining, which is a key sector in the context of regional economic development and national plans.

Tourism: The beaches are significant tourism assets for the municipality, attracting an Annual Beach Festival a hosting beach events at Alkanstrand, and providing seasonal holiday destination and on-going recreational amenity. Other tourism assets worthy of preservation are the area's lakes and forests, heritage sites, conservation areas around Mzingazi River, and the estuary found south of the Port. The proposed developments of the waterfront, has a strong tourism focus. Environmental assets and socio-economic indicators have therefore been considered in the conceptual plans for the Waterfront.

Water Resources: The coastal Lakes (Lake Mzingazi, Lake Cubhu and Lake Nseze) are important water resources for the municipality. The development of Richards Bay in particular, with its industrial development, has seen a significant increase in the abstraction rates of these lakes over the past 20 years.

Ecological Features: Water logged areas have been drained to accommodate development but has in the process, created important hydrological and ecological linkages. In certain instances, these artificial regimes, have resulted in the formation of valuable natural assets that support high levels of biodiversity and species endemism. An example of such is the Thulazihleka Pan system in Richards Bay.

On the pro-active planning side, an **Environmental Management Framework (EMF)** for the Richards Bay Port expansion area and IDZ area has been prepared. Key findings of the EMF were:

- The port and harbour area falls within environmental management zones of the EMF which both yield high levels of sensitivity in terms of biodiversity and geotechnical constraints.
- The Transnet Due Diligence Investigation for the acquisition of land for the proposed port development framework has however identified areas that are potentially suitable for offsetting the above environmental risks.
- The EMF identified a number of existing activities that render further constraints to the proposed expansion of the port, i.e. the slimes dam and the Foskor gypsum stack.
- The EMF sensitivity analysis points to areas that are of great concern for the IDZ.
- There are also a number of significant environmental management issues that would require management measures in terms of air quality.

Whilst the EMF is relatively limited in terms of scope of area, the Municipality adopted an **Environmental Services Management Plan (ESMP)** as broader planning tool to guide spatial development.

The areas that provide environmental services to the City are spatially defined, and the following “Levels” of protection were determined:

- **Nature Reserves (Level 1):** Included in the nature reserve zone are areas of high biodiversity and environmental significance that require a high level of legal protection.
- **Conservation Zone (Level 2):** Included in the conservation zone are areas of biodiversity / environmental significance, which are not viable for proclamation as nature reserves, but that require some form of legal protection. Included are unique or regionally important natural habitats; wetland and forest areas that are protected in terms of national legislation; and all areas that fall within the 1:100 year flood line. No transformation of the natural assets or the development of land for purposes other than conservation should be permitted in this zone. Sustainable use of renewable resources is permitted.
- **Open Space Linkage Zone (Level 3):** Included in the open space linkage zone are areas that provide a natural buffer for Level 1 and 2 Zones, areas that provide a natural link between Level 1 and 2 Zones and areas that supply, or ensure the supply of, significant environmental services. Transformation of natural assets and the development of land in these zones should only be permitted under controlled conditions.
- **Development Zone (Level 4):** Includes all areas that are not included in Level 1, 2 and 3 zones. Areas in this zone are either already developed or transformed and contain land and natural assets that are not critical for environmental service supply.

12.3.3 EXPANSION AREAS

A future development scenario has been quantified for the Municipality based on the following practical and realistic assumptions:

1. There will be an increase in economic activity
2. There will be population increase

To accommodate the anticipated growth, the following forms an integral part of the SDF:

1. The identification of land for expansion purposes
2. The identification of areas for densification and/or infill

Based on the various technical analysis and principles reported upon in this report, a number of expansion areas have been identified for the municipal area with the following size and developable characteristics as detailed herewith.

Table 57: Extent of SDF Expansion Areas

Expansion Area	Size (Ha)	Land Developable (Ha)
A	593	363
B	2 982	2 214
C	512	437
D	1 756	356
E	2 306	1 958
F	2 344	1 699
G	971	407
H	1 163	780
TOTAL	12 629	8 214

Scenarios for population increase in the uMhlathuze Municipal area are based on the 2016 Community Survey baseline figure of 410 465 extracted from the following table.

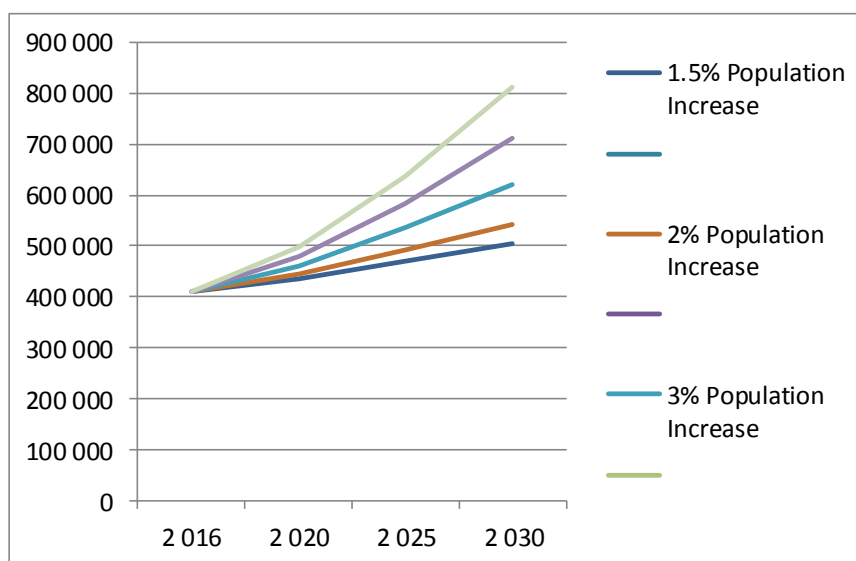
Table 58: Population Numbers in KCDM

	KCDM	IMFOLOZI	UMHLATH UZE	UMLALAZI	MTHONJA NENI	NKANDLA
2011	907519	122889	334459	213601	47818	114416
2016	971135	144363	410465	233140	78883	114284
% Growth	7,01%	17,47%	22,73%	9,15%	64,97%	-0,12%

Source: Community Survey 2016

The following graph is a graphical illustration of the above tables indicating a 1.45%, 2%, 3%, and 5% annual population growth rate for uMhlathuze.

Figure 48: Population Growth Projections to 2030



In context of the above, the following scenarios have been derived:

Population increase of 1,5% per annum

- At a steady population increase of 1,5% per annum, the municipal population will surpass 500 000 people by 2030.
- An estimated additional 1300 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 15 units per hectare.
- An estimated additional 600 ha of land may be needed from 2016 to 2023 to accommodate a 1,5% population increase at a development density of 25 units per hectare.

Population increase of 5% per annum

- The municipality will reach a population of 500 000 before 2021 if a population growth rate of 5% takes place over the next few years.
- At such a 5% per annum population growth rate the number of households in the municipality will double by 2030.
- An estimated 9700 ha of land may be needed from 2016 to 2023 to accommodate a 5% population increase at a development density of 15 units per hectare.
- An estimated 5800 ha of land may be needed from 2016 to 2023 to accommodate a 5% population increase at a development density of 15 units per hectare.

The above clearly indicates the importance of **densification** to maximise the use of land for various purposes.

An urban land use analysis has been undertaken for the municipal area indicating the current **proportionate** land use zonings in the municipal area. The results of this analysis are indicated in the following table.

Table 59: Current land use trend of zoned urban land

Zoning	Ha	% Against Total
Commercial	114.02	1.46%
Industrial	1695	21.70%
General Residential	115.752	1.48
Special Residential	1496.475	19.16
Intermediate Residential	15.87	0.2
Public/Private Open Spaces	540	6.92
Transportation Infrastructure	28.4	0.4
Undetermined	16.686	0.21
Social	535.8	6.86
Other Zonings	3248.997	41.616
Total	7807	100

The application of the above proportionate percentages to the estimated area of 8214Ha for future development of the Expansion Areas results in the following.

Table 60: Anticipated land usages in Expansion Areas

Zoning	Ha
Commercial	120
Industrial	1783
General Residential	122
Special Residential	1574
Intermediate Residential	16
Public/Private Open Spaces	568
Transportation Infrastructure	33
Undetermined	17
Social	564
Other Zonings	3418
Total	8214

- The findings in this table have informed the current WSDP/Water Master Plan preparation process for the Municipality.
- An estimated 1 600 Ha of residential land in the proposed expansion areas could accommodate significant population growth beyond 2023 and 2030 depending on the growth rate and the development density.

More conceptual mapping of the proposed expansion areas is provided at overleaf. It is important to reiterate that the expansion areas were identified by applying spatial planning principles, i.e. integration and concentration together with a technical analysis of air quality, founding conditions, the environmental etc. The location of a possible development application in the expansion area does not provide adequate information for Council to support the proposed development in principle. Site specific specialist studies and development approvals that address environmental issues, land ownership and use issues etc. are still required. Council can only make an informed decision upon consideration of the specialist studies as part of the development application processes. In addition, environmental compliance/approval is also required.

Figure 49: Expansion Areas A, B, C and D

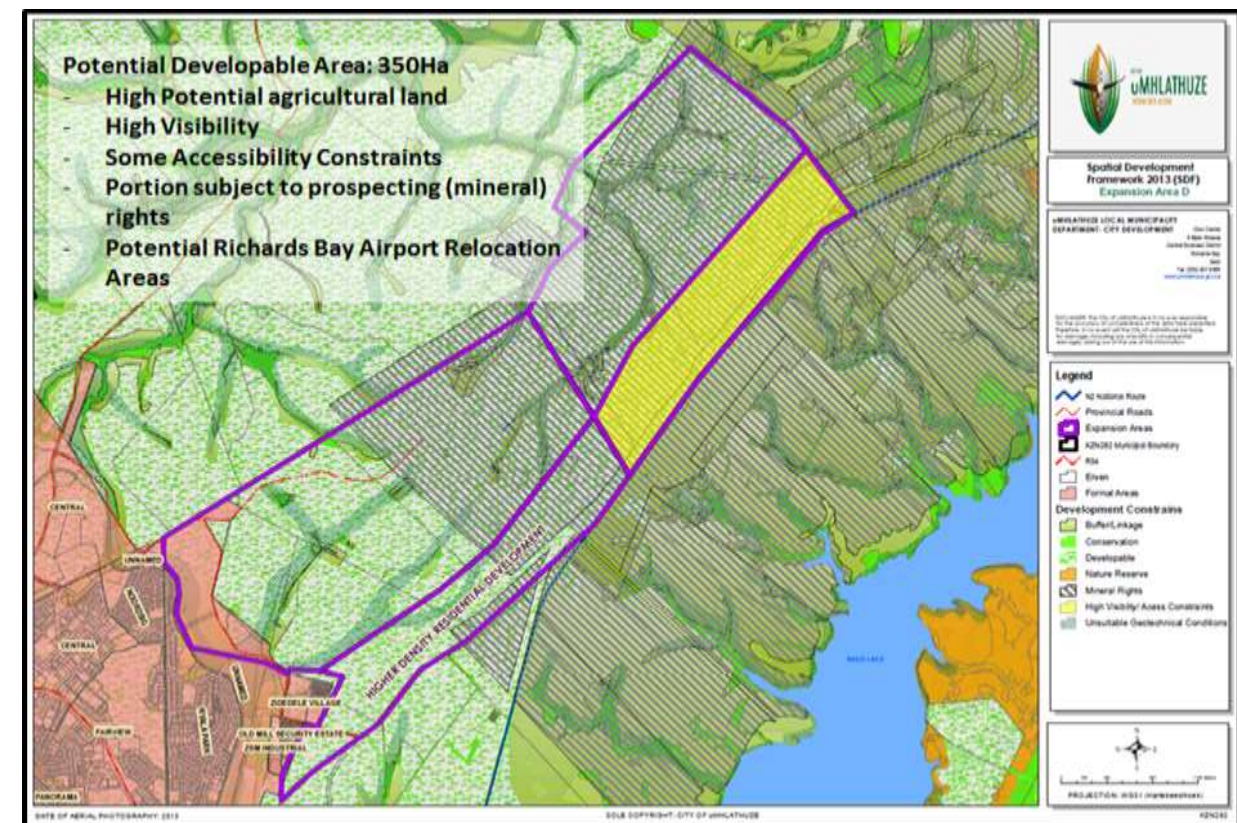
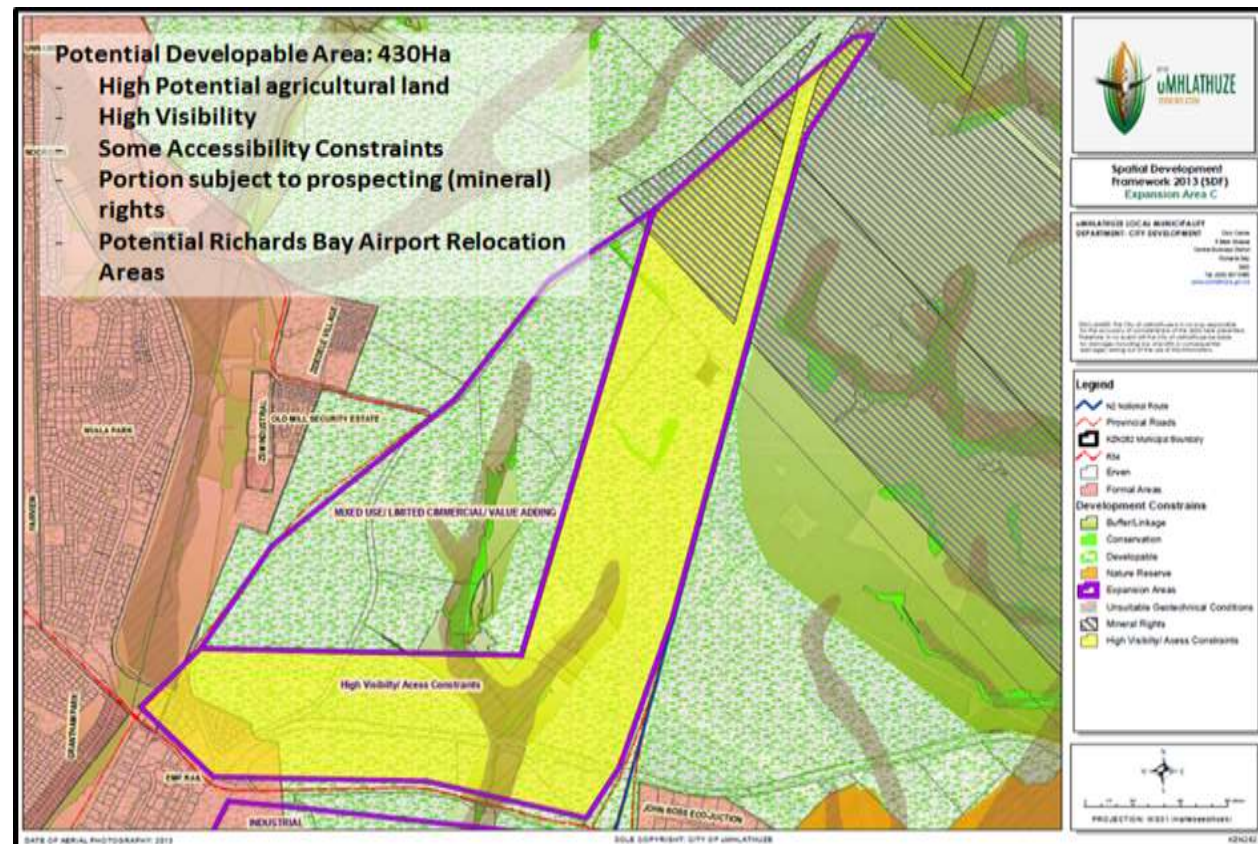
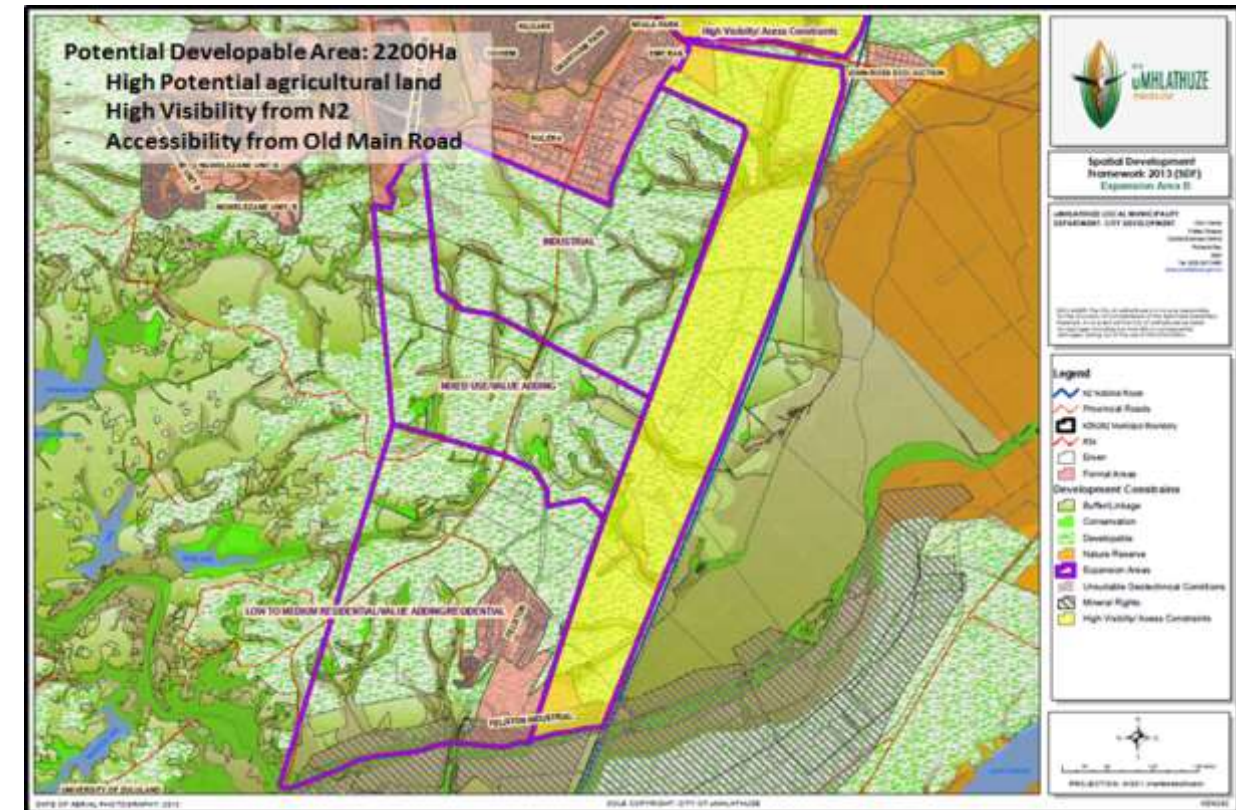
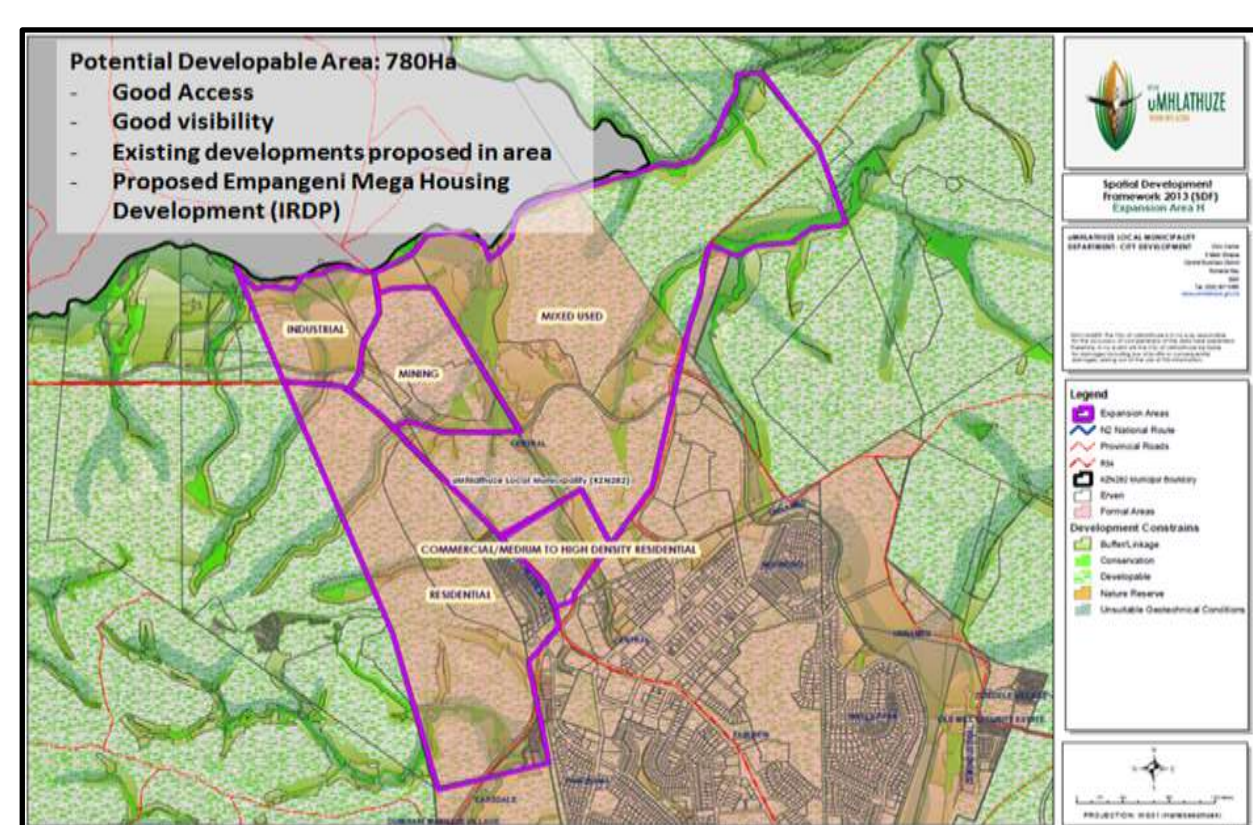
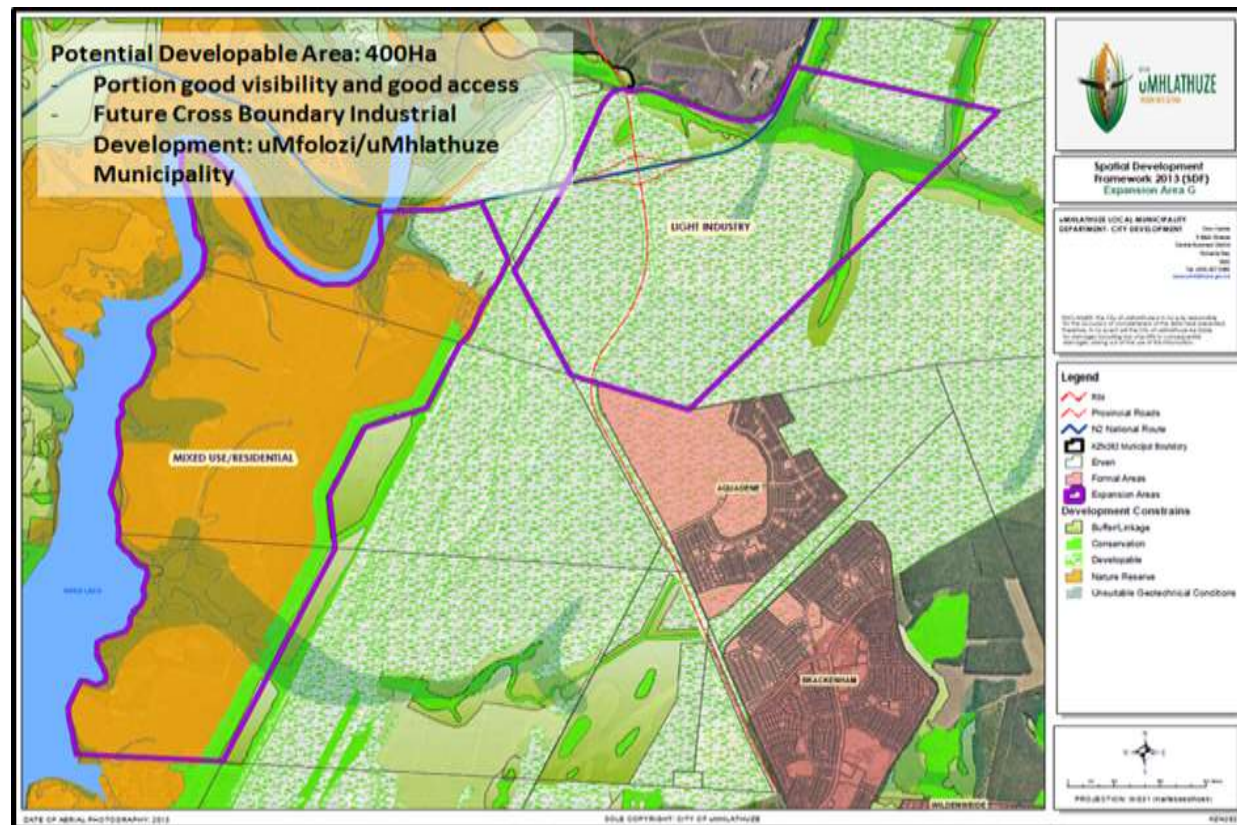
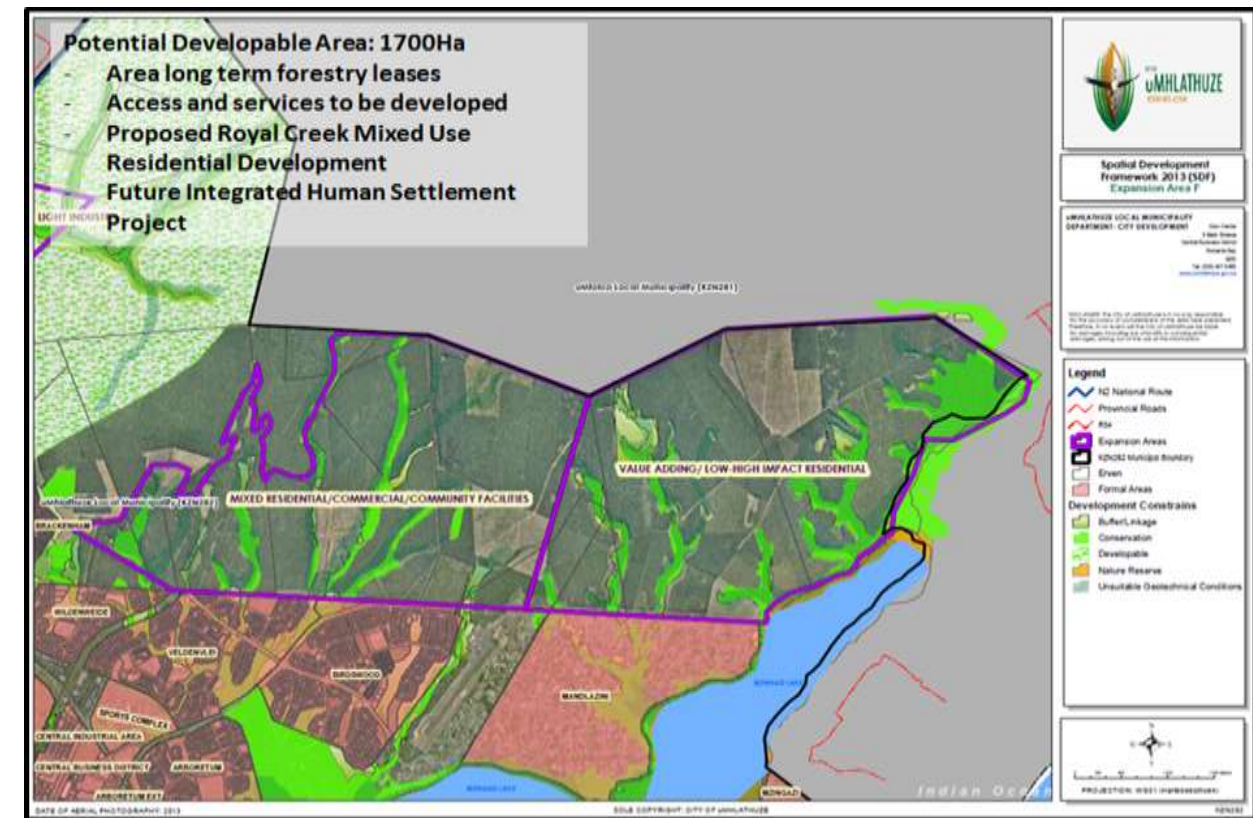
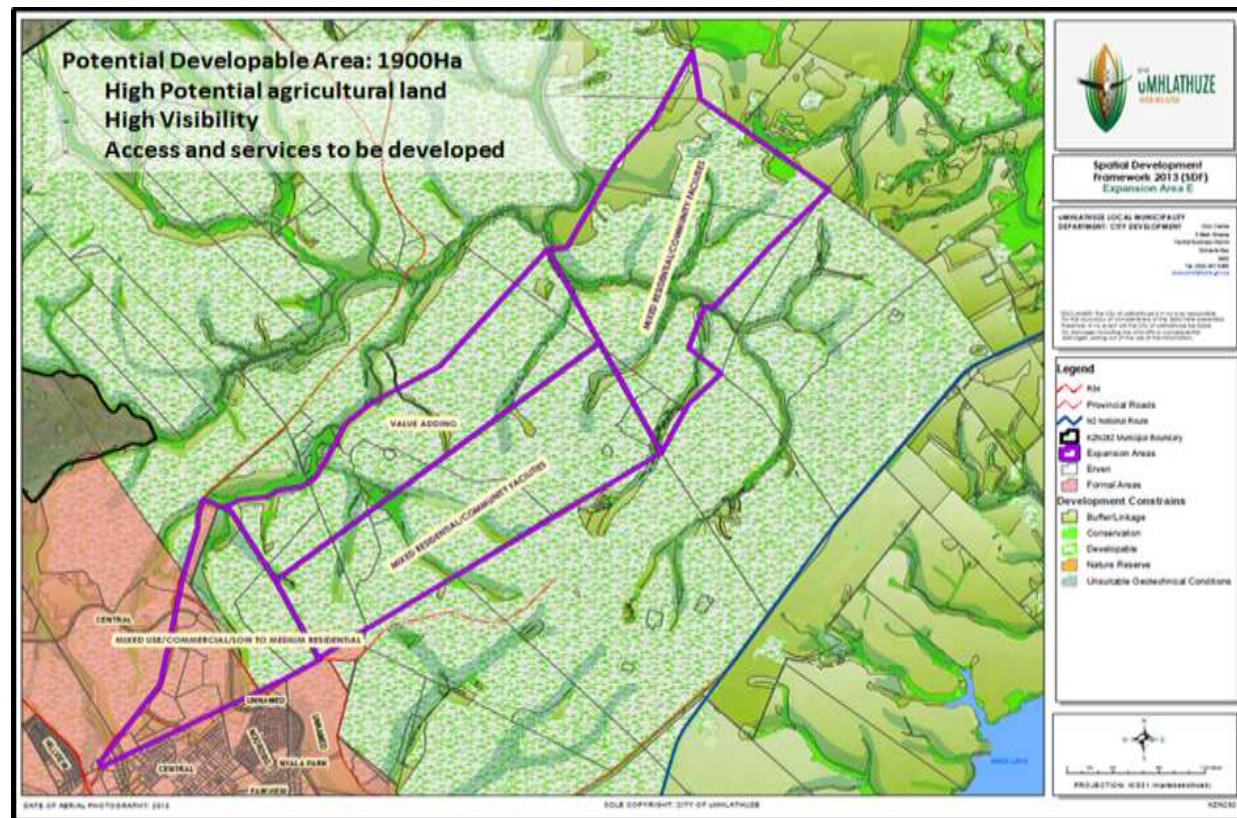


Figure 50: Expansion Areas E, F, G and H



12.3.4 INFILL AND DENSIFICATION

During 2007, the City of uMhlathuze identified opportunities for residential infill development in Richards Bay and Empangeni. Consideration was given to public open spaces and large undeveloped portions of land, mostly unconstrained by environmental factors. This Study needs to be updated and expanded to include the areas of Esikhaleni, Vulindlela, Nseleni and Ngwelezane.

The above investigation found that, at a development density of 20 units per hectare, more than 5000 units could be developed on all the pieces of land identified. It was noted that the above was based on the assumption that all the sites could be developed. Given certain limitations identified, the following more conservative estimate was provided for the residentially zoned (special and general) pieces of land:

Table 61: Results from Infill Investigation in Empangeni and Richards Bay

	Yield at 20 units/ha	Yield at 30 units/ha
Birdswood	614	921
Arboretum	1000	1500
Wildenweide/Veldenvlei	18	27
(SR 2)	190	285
(GR 2)	58	87
Brackenham	28	42
(GR 1)	26	39
Meerensee	392	588
(SR 2)	16	24
(GR 1)	28	42
Empangeni	276	414
(SR 1)	30	45
(SR 2)	20	30
(GR 2)	172	258
Total	2868	4302

In addition, the following densification options were also explored in the study:

1. Increases in F.A.R for selected land uses
2. Greater Flexibility in Subdivisions
3. Creation of a Panhandle between adjoining properties
4. Densification/Infill of Public Open Spaces
5. Assess Required Parking Ratios

12.3.5 URBAN DEVELOPMENT BOUNDARY

Essentially the formal settlements, notably the former TLC and former R293 town areas, are regarded as the urban areas. The remaining areas, i.e. peri-urban, rural settlements and scattered settlements are the municipal rural areas. Both the urban and the rural components of the settlement hierarchy have specific actions or interventions required.

The **urban areas** can be considered to delineate the current “urban edge” as it is known in popular literature. However, the City of Umhlathuze has not opted for the use of the term “urban edge” and is rather guided by the concept of an urban development boundary (UDB).

An Urban Development Boundary (UDB) is one of the tools available to curb costly urban sprawl and to direct growth towards the presently serviced and future priority service areas of the City (both in terms of engineering and social services).

In essence, the urban development boundary for the uMhlathuze Municipality encompasses those areas where an urban service standard is to be applied or maintained. More specifically, the former TLC areas, the former R293 areas as well as the proposed expansion areas.

The implication of the above is as following:

- In the existing urban areas being the primary and secondary settlements, densification should be promoted as well as infill development.
- More detailed planning for areas A-H should be undertaken and investigations should focus on the availability of commercial, industrial, residential and other supporting uses, the timeframe in which the available land uses are to be developed (i.e. phasing) as well as an appropriate land release strategy.
- The above phasing of areas A-H has to further inform the provision and roll-out of infrastructure to these areas.
- In line with national and provincial policy, at least a basic (RDP) level of service delivery has to be attained in the rural areas of the municipality.
- Following the formalization of peri-urban areas, and finding that the subsequent provision of an urban standard of services to such areas is both practical and sustainable, peri-urban areas can be included in the Urban Development Boundary (UDB) in future.

Land located beyond the City's UDB is predominantly rural and agricultural in nature and, as such, the land uses tend to be of a lower-intensity and density.

In some instances, development beyond the UDB has to be considered, i.e.:

1. Land uses normally associated or reasonably necessary in connection with agricultural purposes.
2. Areas designated for nature conservation, which may include tourism facilities (accommodation/restaurant) and recreational facilities directly related to the main use.
3. Tourism and recreational related facilities such as outdoor and tourism related activities including hiking trails, hotels, 4x4 trails, restaurants, curio markets, conference facilities, wedding venues, game lodges and other similar uses with a rural character not causing a nuisance or having a detrimental effect on the environment.
4. Social amenities that cannot be accommodated within the Urban Development, notably schools, clinics, cemeteries and other religious facilities.
5. Farm stalls.
6. Rural residential uses and agricultural holdings.
7. Any other related development or service, provided that the proposed development (1) serves primarily a local market and (2) is located at a service delivery centre or central place to the community.

Apart from the list of potential instances referred to above where development beyond the UDB can be considered, any proposed activity will also be evaluated in terms of the following:

1. Environmental listing notices in terms of the relevant NEMA Regulations at the time.
2. Bulk infrastructure capacity.
3. The development has to be in keeping with the character/ambience of the surrounds.

The UDB is not cast in stone and should be reviewed when the need arises or during the annual IDP/SDF Review. Proposals or motivations to amend the UDB should include:

1. The need for the specific location of the proposed development outside the UDB as well as proof that a suitable property is not available within the UDB for the proposed activity or land use.
2. A comprehensive evaluation of alternative sites or uses for the subject property, i.e. the property outside the UDB that is being mooted for a proposed development.
3. Details on the provision of bulk services as well as the responsibility, and maintenance, of such.
4. The impact (capital and operations) of the proposed development on existing infrastructure including water, sewer, roads and public transport.
5. A preliminary indication of the impact of the development on the existing environment (in the absence of a formal Environmental Impact Assessment or scoping report).

The SDF expansion areas are located within the UDB of the uMhlathuze Municipality. Essentially, these expansion areas are the defined priority areas for development and capital investment in the City that require management to ensure controlled growth. To this end, an implementation strategy has to be derived for the future development of the SDF expansion areas.

12.4 DEVELOPMENT OPPORTUNITIES

This section of the report considers a number development opportunities and due consideration has been given to the spatial development strategic framework, conceptual framework as well as the analysis undertaken.

12.4.1 Opportunity for Residential Infill

Research was undertaken aimed to identify opportunities for residential infill development in Richards Bay and Empangeni. The document identified various public open spaces and large undeveloped portions of land, which were mostly unconstrained by environmental factors (using the uMhlathuze Environmental Services Management Plan as guideline).

At present, the study does have two shortcomings:

1. Outdated information should be updated prior to implementation
2. The study did not include the areas of Esikhaleni, Vulindlela, Nseleni and Ngwelezane.

In context of the above, it is recommended that the properties identified for infill development be re-investigated and the information be updated to determine:

- Current ownership
- The need for community services in the area (additional schools, public transport amenities, etc.) that could be serviced by an open space listed
- The role of the portion of land in terms of the wider area, i.e. does it form a core component of the Municipal Open Space System
- Cost/benefit analysis – often infill development is very costly, and may therefore not be financially viable in the short term
- The areas of Esikhaleni, Vulindlela, Nseleni, Ngwelezane and Felixton be included in the above study

12.4.2 Opportunity for Agricultural Investment

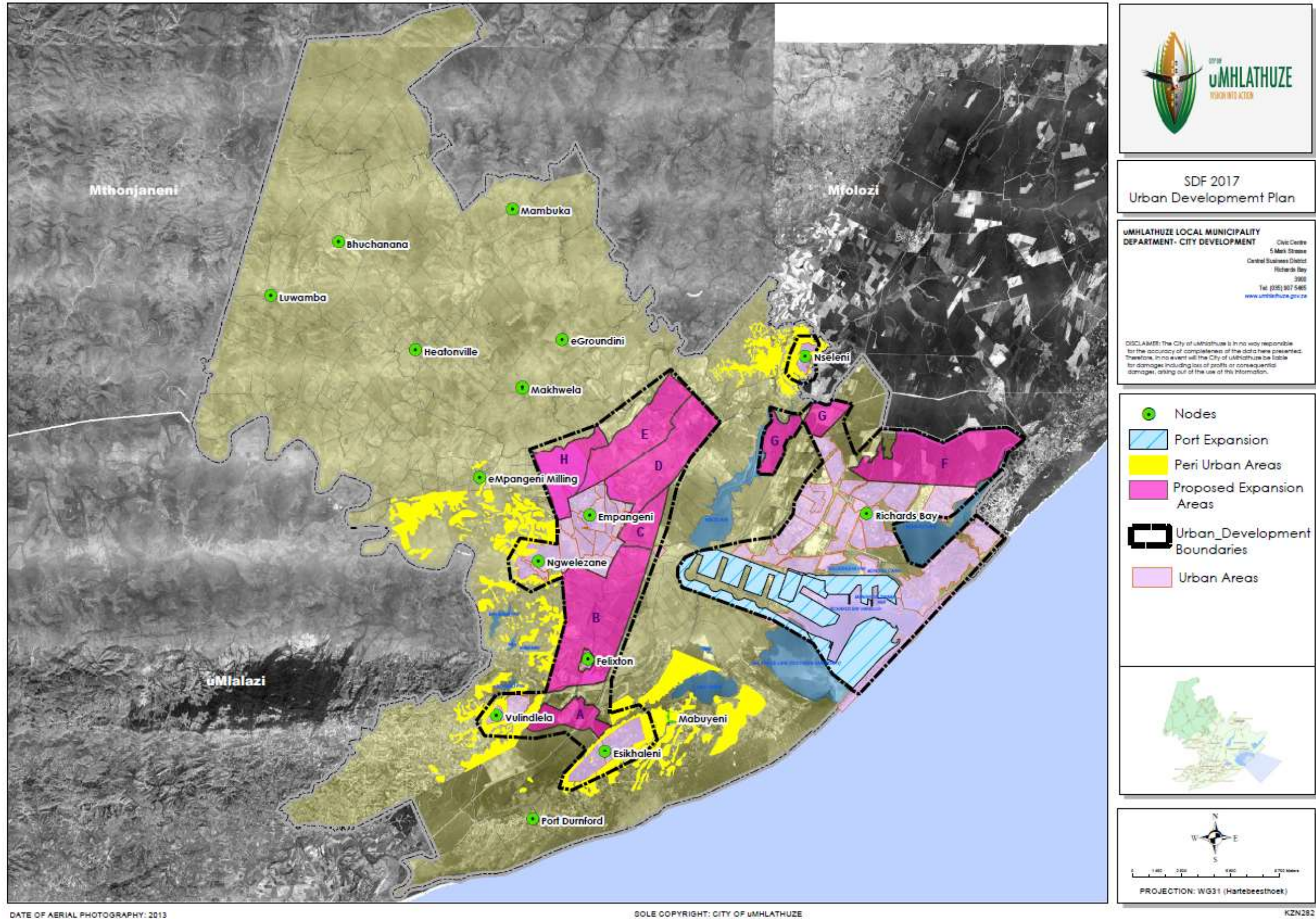
Very little of uMhlathuze's area would be available for future development if the National Department of Agriculture's land capability mapping classes 1, 2 and 3 were used as a deciding factor for determining future development areas. To this end, the Municipality has to engage with the National Department of Agriculture to ascertain a way forward in determining land for agricultural protection as well as land available for future development.

Given the above, it is imperative that:

- Conflict between the Municipality's proposed Expansion Areas and the Department of Agriculture's Land Capability mapping must be workshopped and a compromise reached in terms of land reserved for agricultural protection as well as land that would be made available for future development.

Areas and projects that pose significant agricultural potential should be registered with the KZN RASET programme (RASET – Radical Agrarian Socio-Economic Transformation).

Map 40: Urban Development Boundary



12.4.3 Opportunity for Mining Investment

The City of uMhlathuze is rich in mineral resources, including ilmenite, rutile, zircon and pig iron. The mining of these minerals meets all of South Africa's demand for titanium dioxide and zircon and almost all of the country's pig iron requirements.

Large areas have been reserved as having mineral rights portions of these areas are in direct conflict with the Municipality's proposed Expansion Areas.

Provision is made in terms of Section 53 of the Mineral and Petroleum Resources Development Act (MPRD), Act No. 28 of 2002 in respect of the use of land surface rights that are contrary to the objects of the Act that an application to the Minister can be made.

12.4.4 Nodes and Corridors

A number of factors that must be taken into consideration in terms of nodal and corridor planning and development, the most important being:

- Future urban settlement should be located predominantly within the agreed growth areas and as far as possible, comply with planned phasing of the growth areas and be serviced by existing infrastructure networks.
- Future development should not contribute to ribbon/strip development or impact on the safety and efficiency of the road system.
- Commercial land (including office space) should be located in accordance with recognized guidelines so that it can be conveniently serviced, is accessible to, and is consistent in scale with the settlement it serves or is planned to serve. If commercial land expansion is not adjacent to, or adjoining, an existing centre then any new development should not undermine the existing centre(s) and should be at a scale and location only to serve the target neighbourhood/area.

A number of potential intersection nodes along the N2 have previously already been identified:

- N2 and off-ramp to Esikhaleni/Vulindlela as this intersection forms an important gateway to Potential Expansion Area A.
- N2 and R34 John Ross Highway where the John Ross Interchange Park (John Ross Eco Junction) development has already commenced.
- N2 and the proposed future South Central Arterial (which would link up with P700). The construction of this intersection would unlock opportunities in terms of Potential Expansion Areas C and D, and would also present opportunity for development of the area west of Lake Nsese. Such development in the vicinity of the Lake would have to be carefully planned and executed, since Lake Nsese is an important source of fresh water for the area.
- N2 and the MR231 intersection at Nseleni. The Council has previously considered a draft development proposal in this vicinity, which is subject to further refinement and consideration at an appropriate time.

In context of the above, the following is noted:

- Further detailed planning of intersection nodes as defined above in terms of phasing and development guidelines.

12.4.5 Tourism and Areas of Natural Beauty

The following development principles would guide development applications in these areas. The most important development principles that should be noted include:

- Future development should avoid, as far as possible, areas of environmental significance (Environmental Services Management Plan Level 1 and 2 areas), significant economic resources (such as agriculture or mining), potential environmental or community hazard/risk, high landscape or cultural heritage value, or potential increased risk associated with impacts of climate change. Should development be proposed within these areas, clear mitigation or offset measures should be applied.
- Future development adjoining land with the above values should incorporate buffers as necessary to help protect those values and to avoid future land use conflict. In terms of environmental significance, these buffers have been identified in Council's Environmental Services Management Plan Level 3 areas.
- Future development outside agreed growth areas, but which aims to provide opportunities to enjoy and enhance areas of natural beauty, must be supported by a detailed need and desirability investigation, be located outside the Environmental Services Management Plan Level 1 and 2 areas, prove infrastructure efficiency and address any other requirements that Council may have.
- Future development and planning should boost those economic sectors/activities that have the potential to grow and create employment and income. In this regard future tourism development and growth in tourism should not occur at the expense of local environmental, economic and social values and efficient provision of engineering infrastructure. It should also provide for a wide range of experience opportunities from the low cost family type tourism developments, such as in caravan parks and camping grounds, to large single destination development. It should aim to maintain public access.

12.5 INTERVENTION AREAS

12.5.1 INFORMALLY SETTLED AREAS

Spatial intervention areas refer to specific areas where deliberate actions from either the district/local municipality or any other tier of government can improve on a situation that prevails in the said area. Importantly, spatial intervention areas are identified and have to be benchmarked against an acceptable standard.

Also, a number of open spaces in the municipal area have been settled in an informal manner, i.e. without formal approval of building plans and appropriate zoning with the result that service provision to such areas has not been planned and a reactive response instead of a proactive planning approach is followed. Typical open spaces are school sites, sites for infrastructure such as sub-stations as well as public open spaces.

The identification of spatial intervention areas can be considered as a step towards achieving a desired spatial pattern.

The following intervention areas are proposed in the uMhlathuze Municipality:

- a) As identified as part of the Nodal Hierarchy of the City of uMhlathuze, **peri-urban** areas are characterized by dense population, small stands not necessarily able to support agricultural activities, continuous infill-development, pressure for connection to municipal infrastructure (individual connections) and possible health impacts as a result of overcrowding. An opportunity therefore exists to improve the living conditions of these residents by formalizing, in some way, these densely populated areas. Such opportunity, however, needs to be carefully planned and workshopped with the landowner (Ingonyama Trust) and affected residents.

- b) In terms of planning for peri-urban nodes, the principle of “*work where you live*” should be promoted.
- c) Typical examples of such densely populated peri-urban areas are areas surround Esikhaleni, specifically the uMzingwenya area as well as peri-urban areas around the former R293 towns
- d) In view of the applicable environmental issues such as the high water table and potential pollution of the nearby Mzingazi Lake, special consideration has to be given to areas of **Mzingazi and Mandlazini** in respect of water borne sewer installation and discouraging communities from practicing yard burials.

To respond to the situation outlined, specialist studies to confirm environmental sensitivities, wetlands, floodlines etc. have to be initiated to inform future decisions about the formalization of such areas.

Seven informal settlements in the municipality have been investigated and planned for through the NUSP (National Upgrading and Support Programme). The phased implementation of the recommendations is now to commence and the uMzingwenya settlement has been initiated.

12.5.2 RURAL DEVELOPMENT FRAMEWORK PLANS

In order to facilitate feasible service provision, Rural Development Framework Plans for all rural areas have to be developed and adopted, and thus used as a guiding tool when land allocations are effected.

The municipality has five year plan for the preparation of Rural Development Framework Plans. Phase 2 of the project is underway. The following table illustrates the complete phasing approach for the preparation of the proposed Rural Development Framework Plans.

No.	Project Name	Phase	Financial Year
1	Port Dunford Rural Development Framework Plan-Mkhwanazi Traditional Authority - completed	1	2017/2018
2	Buchanana Rural Development Framework Plan-Obuka Traditional Authority - completed	2	2018/2019
3	Hluma Rural Development Framework Plan-KwaBhejane Traditional Authority - underway	3	2019/2020
4	Matshana Rural Development Framework Plan-Madlebe Traditional Authority	4	2020/2021
5	Mabuyeni Rural Development Framework Plan-Dube Traditional Authority	5	2021/2022

Mapping of some interventions areas is provided as per the detailed hereunder:

Basic Services Intervention Areas

The portions of the municipality that have been identified as priority areas represent those wards in the municipality that have the highest need in terms of access to basic water and hygienic toilet facilities. The specific wards are 5, 6, 31 and 33

Areas of Economic Growth and Development

The mapping provided illustrates areas where interventions in aid of economic growth and development should be focused. To this end the following is noted:

- Interventions at the identified nodal areas
- The need to consolidate all environmental studies undertaken independently for the respective former municipal areas that now have been consolidated into an enlarged municipal area.
- The protection of strategic agricultural resources but also the initiation of interventions aimed at achieving maximum poverty alleviation and economic growth at areas that pose untapped agricultural resources.
- Rural Framework Plans are being rolled out in the rural areas to guide land and decision making and thereby providing guidance and confidence to investors and residents.
- Conservation/Tourism Assets are prevalent in the whole municipal area. There are formalized public nature reserves as well as a number of private game reserves notably, Mfuli, Nyala, Fundimvelo, Thula-Thula and Intabayengwe.
- Interventions around densely settled peri-urban areas is of an incremental nature. As such, land use management responses in terms of guidelines are required. In addition, the implementation of the NUSP (National Upgrading and Support Programme) plans have to be undertaken.
- A total of eight expansion areas have been identified to absorb growth and development in the municipality. Planning and budgeting for the provision of bulk infrastructure (roads, electricity, water and sewer) to these areas are required to that the development of these areas can be enabled.

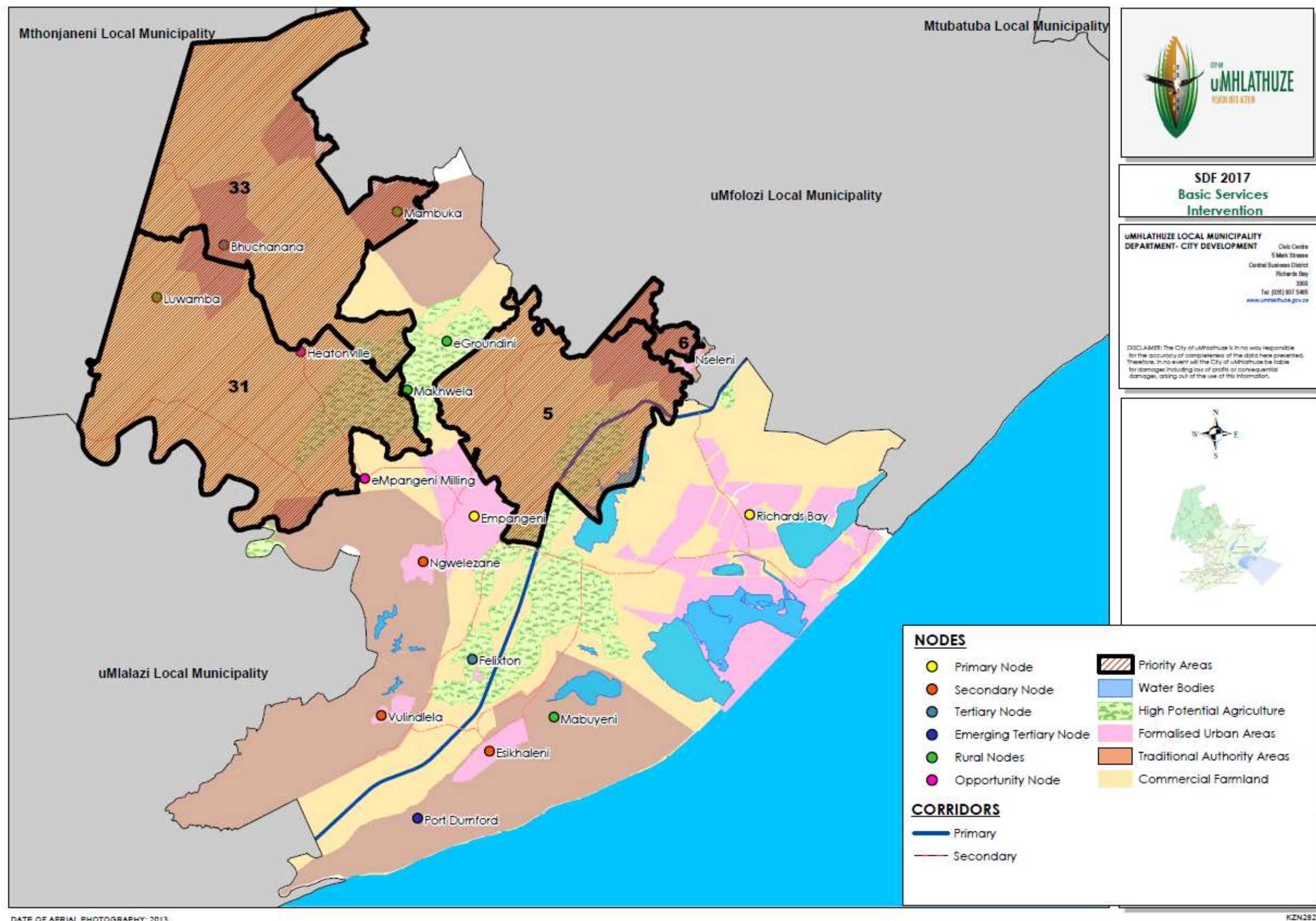
Settlement Intervention Areas

Reference to be made to the nodal intervention proposals

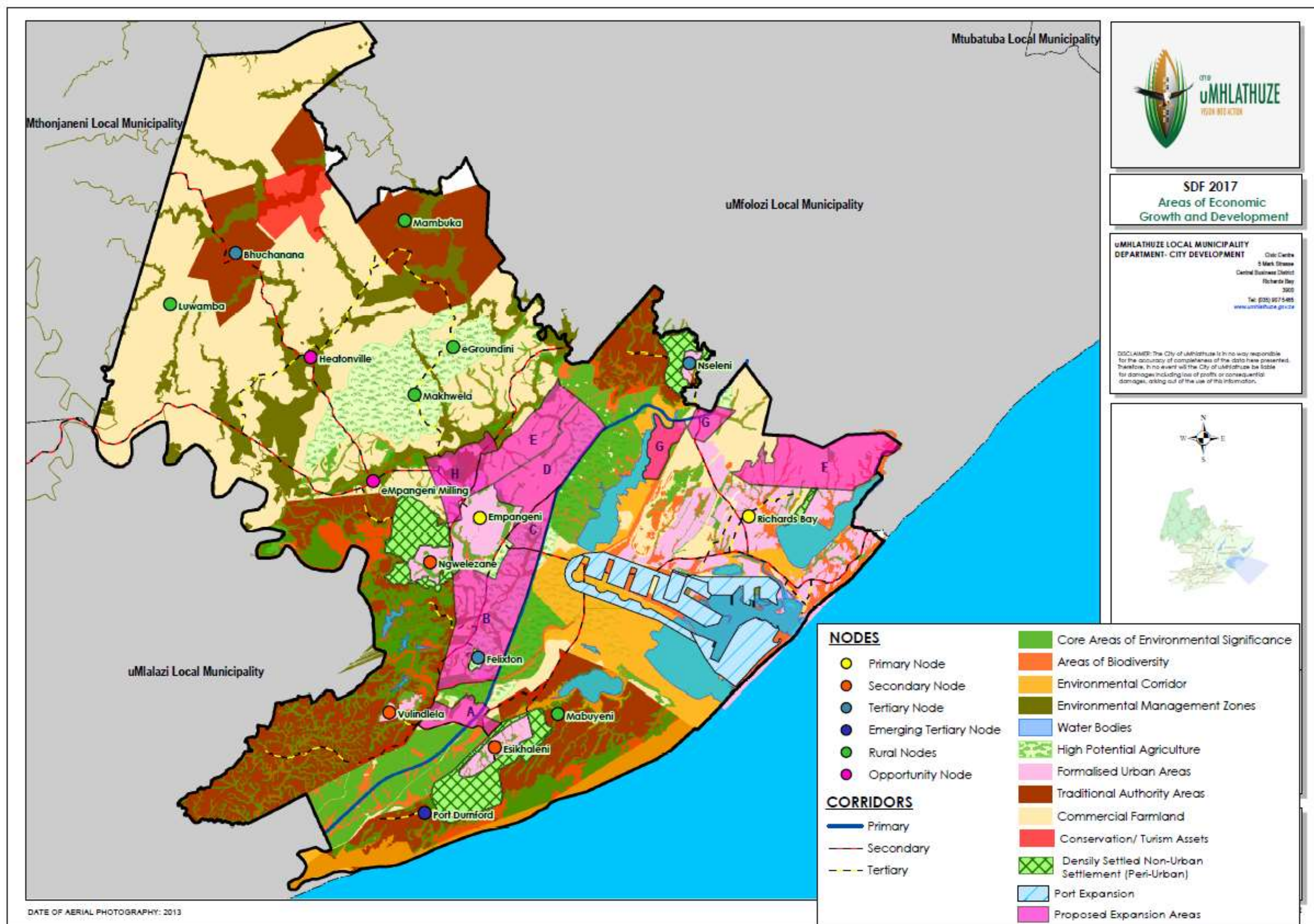
Social Infrastructure Intervention

The portions of the municipality that have been identified as priority areas represent those wards in the municipality that have the highest need in terms of low education levels, high unemployment and low income levels. The specific wards are 5, 10, 13, 14, 18, 25, 32 and 33. Specific interventions in these areas will require a coordinated effort to address adult literacy, accessibility to social services such as pension and the overall investment in human capital.

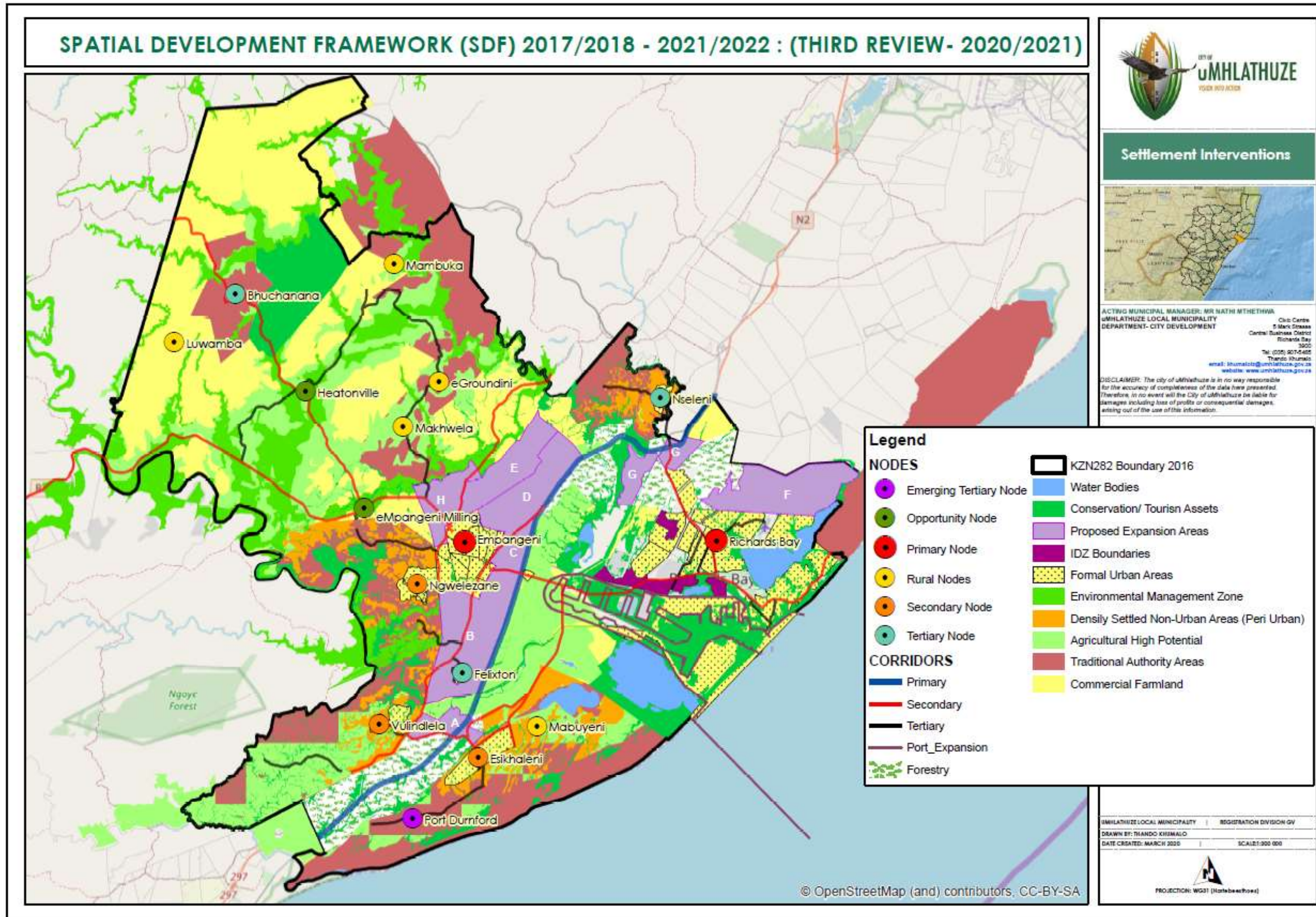
Map 41: Basic Services Intervention Areas



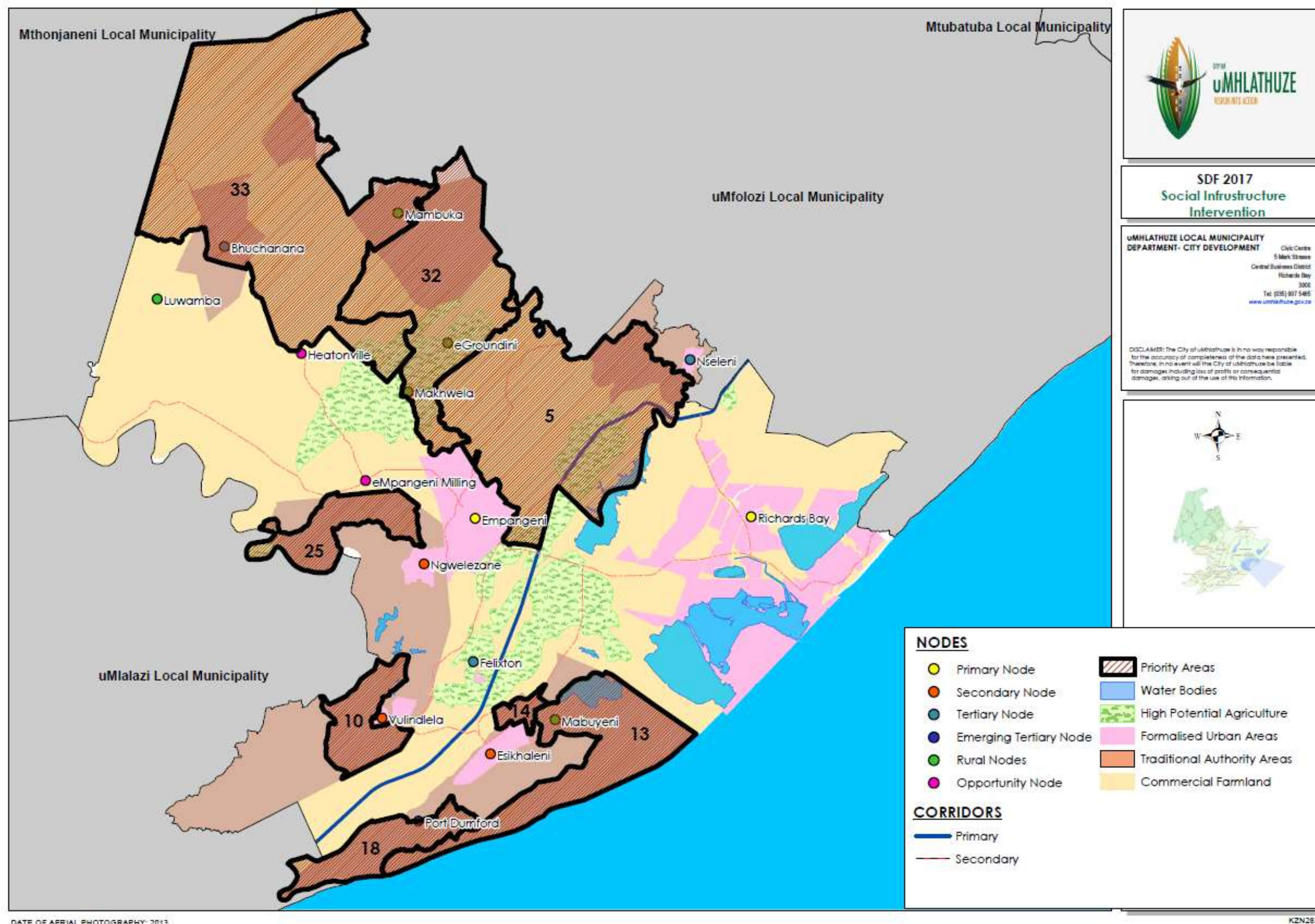
Map 42: Areas of Economic Growth and Development



Map 43: Settlement Intervention Areas



Map 44: Social Infrastructure Intervention



12.6 DEVELOPMENT OF INGONYAMA TRUST BOARD LAND

It is a legislative requirement for all municipalities to prepare and enforce a wall-to-wall scheme within their area of jurisdiction. This means that every big developments will have to be compliant and approved by the local authority.

However, the process in terms of development in Ingonyama Trust Board (ITB) land remains challenging. In most cases the ITB does not approve land sales in their areas but they offer a long term lease, which sometimes is not supported by developers, as they believe in the outright purchase of land.

Both the affected Traditional Authority and the ITB have to agree on the proposed development prior and sign certain documents related to land release and availability prior to submission to the municipality.

The ITB land release issues not only affect business developers but also general public as sometimes the development cannot be implemented or fast tracked to due land availability. The provision of bulk infrastructure is sometimes also delayed or challenging.

The municipality has a licence to supply electricity to formalised areas and not Ingonyama Trust Land areas. Resistance to approve the formalisation of certain developments in ITB land areas sometimes causes delays in the service delivery and confusion to the community at large.

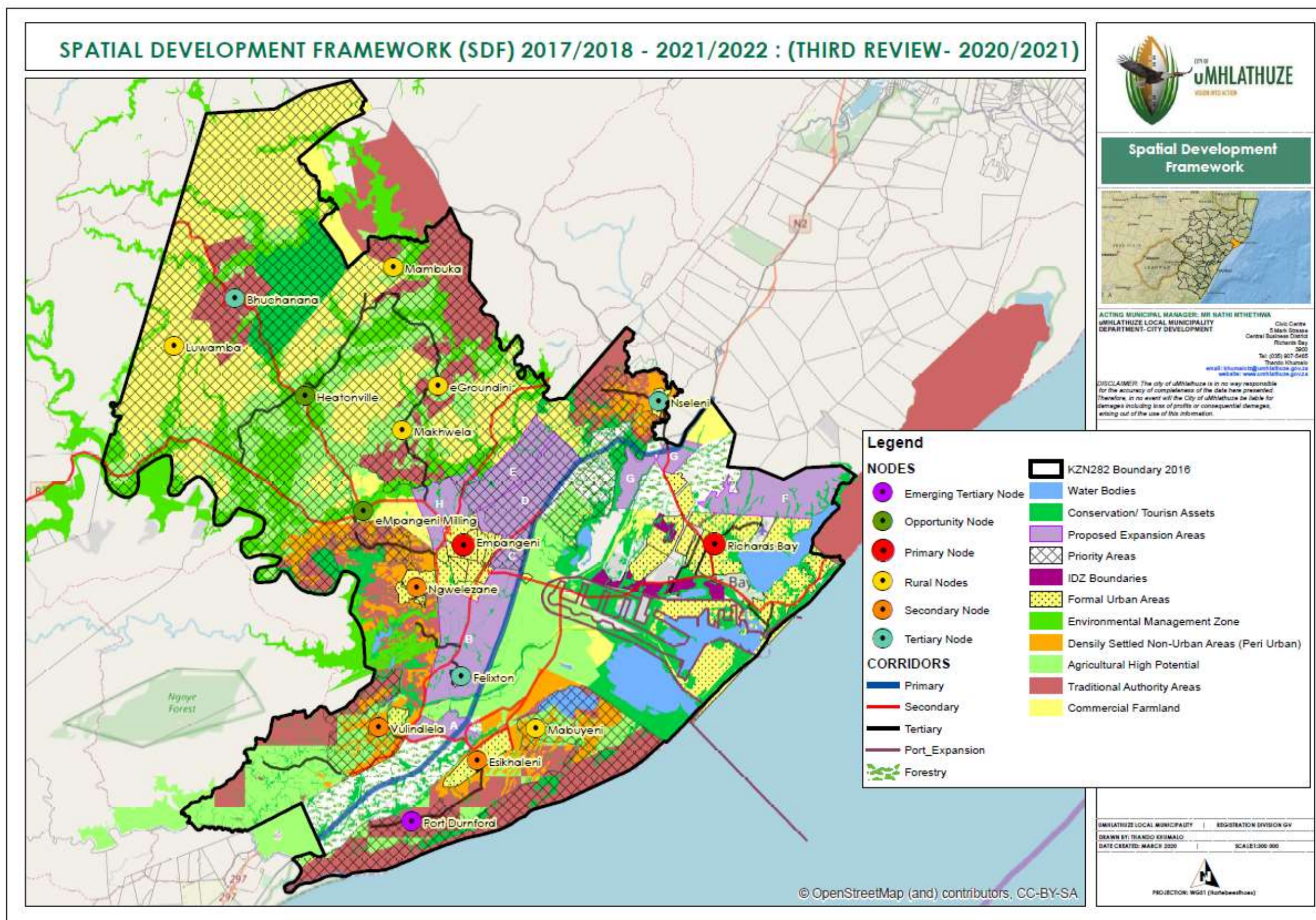
From the community's perspective, there is also a fear that once their area is formalised, those residing within that proclaimed boundary would have to pay rates, and is something that they are not used to.

The Department of Cooperative Governance and Traditional Affairs (CoGTA) have prepared guidelines, which will assist in terms of land allocation in Ingonyama Trust Land. These guidelines have not yet been workshopped with Amakhosi and therefore they cannot be implemented or used at this stage.

The uMhlathuze Council has considered the implications of the above situation and the following requirements have been noted:

1. Council is in the process of obtaining updated aerial photography.
2. Obtain cadastral information of the affected area, suburb information, street names and street numbers, suburb information, servitudes, etc.
3. Create affected properties in GIS in order to start preparations for populating databases.
4. Obtain ownership information and add to GIS and Council financial system.
5. Prepare for the inclusion of these properties in the Municipal area in terms of property valuations and rates.
6. Determine the level and state of services in the affected area in order to eventually add these assets to Council's asset register, to determine areas that would require basic services, etc.
7. Assess what impact the change in municipal boundary would have on human and capital resources, i.e. does the Municipality require additional staff, equipment, vehicles, office space, satellite offices closer to the Ntambanana area, etc.
8. Assess legal aspects relating to the affected area, i.e. which legal agreements are in place with services providers in the Ntambanana area, term of contracts, etc.
9. Assess budget implications relating to the inclusion of the Ntambanana area.
10. Current and planned Human Settlements projects.
11. Updating of all relevant sector plans/master plans.

Map 45: Consolidated SDF



13. IMPLEMENTATION OF THE SDF

The implementation of the uMhlathuze SDF, i.e. translating of the SDF vision into tangible initiatives and priorities is presented under the following headings in this chapter:

- The Land Use Framework that includes details of the municipal suite of plans and specific (incremental) land use scheme proposals. Extracts from some plans within the municipal suite of plans is also provided.
- The implementation of strategic and catalytic projects.
- Details of required interventions in investment, inclusive of the capital expenditure framework.

13.1 THE LAND USE FRAMEWORK

In terms of Section 24 (1) of the Spatial Planning and Land Use Management Act it is required that:

“A municipality must, after public consultation, adopt and approve a single land use scheme for its entire area within five years from the commencement of the Act”.

Legislation further requires, in terms of Section (24) (2) of the Spatial Planning and Land Use Management Act requires that:

“A land use scheme adopted in terms of Section 24 (1) must:

- “(a) include appropriate categories of land use zoning and regulations for the entire municipal area, including areas not previously subjected to a land use scheme”
- “(c) include provisions that permits the incremental introduction of land use management and regulations in the areas under traditional leadership, rural areas, informal settlements, slums and areas not previously subjected to a land use scheme”

Section 32 (1) of the Spatial Planning and Land Use Management Act states that:

“a municipality may pass bylaws aimed at enforcing its land use scheme”

In context of the above, the uMhlathuze Municipality has prepared, adopted and gazetted a consolidated single land use scheme for the new municipal area. The scheme is currently under review.

13.1.1 UMHLATHUZE SUITE OF PLANS

In certain areas of the Municipality, land usage is more complex than in other area. As such, it is necessary to prepare a Land Use Framework (LUF) as a linkage “step to translate the SDF into more detailed broad land use areas”, to inform the detailed formulation of zones. The LUF identifies appropriate Zones and Statements of Intent that are established for specific areas. The LUF therefore translates the SDF into a more detailed set of broad land use areas that directs the future development of areas and provides the basis for the formulation of detailed zones for the scheme.

The SDF provides the spatial translation of the municipal vision and goals. The Municipality is in the process of preparing a “suite of plans” to bridge the gap between the SDF and the detailed land use scheme. The municipal suite of plans is indicated in the following diagram:

Figure 51: uMhlathuze Suite of Plans

UMHLATHUZE DEVELOPMENT BLUEPRINT				
RURAL PLANNING	1. Economic Transformation Roadmap 2. Integrated Development Plan 3. Spatial Development Framework			
	LOCAL AREA PLANS			
	Existing 1. NUSP Plans completed (Mzingazi, Mandlazini, Ngwelezane, uMzingwenya, Nseleni) 2. Rural Planning Initiative	Proposed 1. uMzingwenya Slums Clearance 2. Traditional Council Plan	Existing 1. Empangeni CBD Revitalization Plan 2. Richards Bay CBD Framework Plan 3. Alkantstrand Urban Design 4. Richards Bay CBD Framework Plan Review	Proposed 1. Esikhaleni Local Area Plan 2. Intermodal Transport Plans 3. Waterfront Master Plan (underway)
	PRECINCT PLANS			
	Existing 1. Port Dunford Rural Development Framework Plan 2. Buchanana Rural Development Framework Plan	Proposed 1. Isigodi Plans 2. Hluma Rural Development Framework Plan (underway) 3. Matshana Rural Development Framework Plan 4. Mabuyeni Rural Development Framework Plan	Existing 1. Kwadlangezwa Plan 2. Richards Bay CBD South Extension 3. Airport Relocation pre-feasibility study 4. Richards Bay Civic Centre Precinct Plan 5. Port Dunford Beach Precinct 6. John Ross Precinct Planning and Urban Design Concept 7. Richards Bay Civic Centre Urban Design	Proposed 1. Ngwelezane CBD 2. Nseleni CBD 3. Esikhaleni Intersection and Corridor 4. Nseleni Interchange Precinct 5. Empangeni Milling Opportunity Node 6. Heatonville Opportunity Node 7. Anglers Rod Precinct Plan 8. Alkantstrand Detailed Planning and Preliminary Engineering Designs
	CONCEPT PLANS			
	Existing 1. Mzingazi Commercial Nodes 2. Mandlazini Commercial Node 3. Port Dunford Beach Precinct Plan	Proposed	Existing 1. The Ridge Urban Design 2. Steel Bridge Urban Design and Feasibility Study 3. Luwamba 4. Richards Bay SMME Park 5. Esikhaleni Business Support Centre	Proposed 1. Richards Bay ICC Urban Design 2. Empangeni Civic Centre
URBAN PLANNING				

The following figures indicate the relationship between the SDF, LUF (linking elements) and the LUS (Land Use Scheme) in the case of the Precinct Planning that has been undertaken for the Richards Bay CBD South Extension.

Figure 52: Linkage between SDF and LUF for Richards Bay CBD South Extension

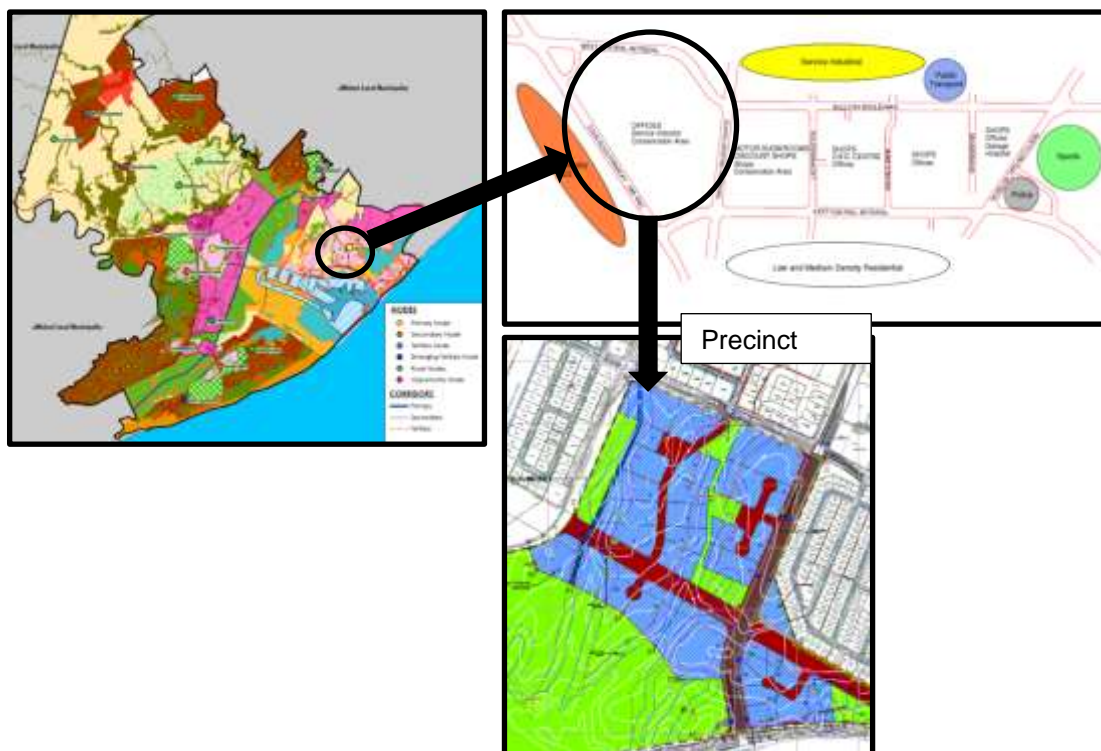
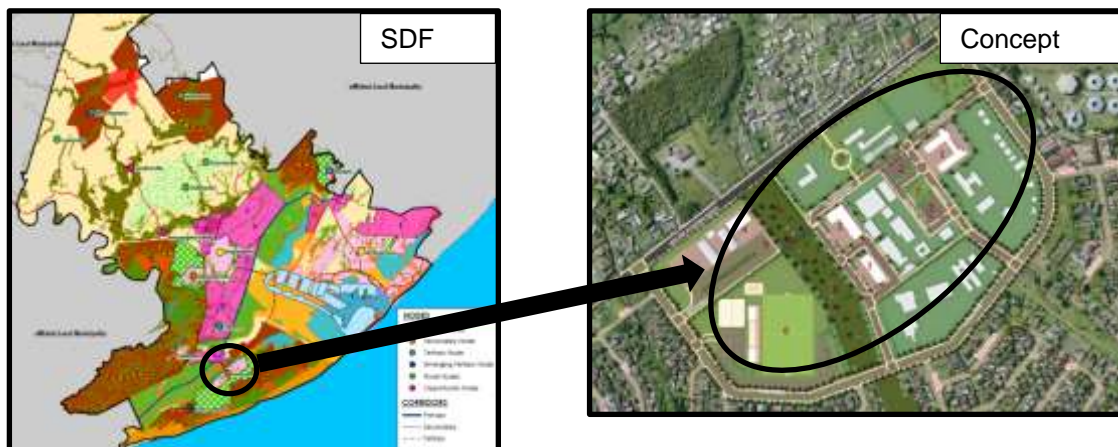


Figure 53: Linkage between SDF and LUF for Esikhaleni Business Support Centre



Concept and Precinct Plans are implementation tools that provide more detailed planning and land development guidelines that underpin spatial development principles but also guide the preparation of the Land Use Scheme.

13.1.2 INCREMENTAL APPROACH: DEVELOPMENT GUIDELINES FOR TOWNSHIPS

The uMhlathuze Municipality has four former R293 townships: Esikhaleni, Nseleni, Ngwelezane and Vulindlela, which house approximately a very large portion of the municipality's population, of which the majority reside in and around Esikhaleni.

The following are trends discovered in the KZN Urban Development Framework applicable to township areas in uMhlathuze specifically:

- There are oscillating patterns of migration to and from rural areas, resulting in families being split.
- The townships are densifying due to the relatively better accessibility to services (compared to the rural and peri-urban areas).
- Densification occurs by means of illegal additional residences on formal residential properties.
- Densification, often as a result of illegal settlement within servitudes, puts pressure on basic infrastructure.

Typical, and necessary municipal interventions required to such township areas include the following:

- Activating the local economy i.e. Township economy.
- A wider variety of services and facilities in acceptable places (e.g. recreation) in line with Municipal LUS.
- Better integration of townships with primary nodes (Empangeni and Richards Bay).
- Identification of areas where other land uses such as offices, commerce, service industries should be allowed.
- Appropriate land use regulation i.e. development guidelines.
- Development of service centres in townships where there are none.

It is proposed that a form of incremental land use management is provided in the following land use zones to former township areas in the context of the above. Examples of how this incremental approach can be achieved are indicated in the attached tables. These will be expanded upon during the imminent review of the uMhlathuze Land Use Scheme.

Medium Density Residential 1:

This zone is intended to promote the development of attached and detached dwelling units as part of a larger planned residential development. It creates opportunity for medium density residential development around central urban areas, along development corridors and to achieve densification of urban land.

Min	Max		BUILDING LINES	INTENSITY – ERF SIZE	MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES
3000m ²	N/A	21m	7,5m along the external street frontage	Side and rear space requirements do not apply to dwelling unit curtilages, except along the side and rear boundaries of the Medium Density Housing site, where the minimum side and rear space shall be 4,5.		Development management guidelines to be incorporated into Municipal LUS

Medium Density Residential 2:

This zone is intended to promote the development of attached and detached dwelling units as part of a larger planned residential development. It creates opportunity for medium density residential development around urban areas, along development corridors and to achieve densification of urban land.

INTENSITY – ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIREMENTS / COMMENTS
Min	Max		BUILDING LINES	SIDE SPACES	REAR SPACES	
1600m ²	N/A	21m	7,5m along the external street frontage	Side and rear space requirements do not apply to dwelling unit curtilages, except along the side and rear boundaries of the Medium Density Housing site, where the minimum side and rear space shall be 4,5.		Development management guidelines to be incorporated into Municipal LUS

13.1.3 DEVELOPMENT GUIDELINES FOR RAPID URBANISATION MANAGEMENT ZONES**Rapid Urbanisation Management Zone:**

Is a zone in the Traditional Authority Area that demarcates areas that have been informally settled adjacent to or near to formal urban areas (Peri-Urban Areas), and require interventions to address environmental impacts, upgrade of services and provide formal housing.

INTENSITY: ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIREMENTS & PROHIBITIONS
Min	Max		BUILDING LINES	SIDE SPACES	REAR SPACES	
150 m ²	N/A	N/A	3m	2m	2m	Preparation and incremental implementation of settlements frameworks i.e. NUSP Development management guidelines to be incorporated into Municipal LUS. Development in the open spaces and areas not suitable for/or not earmarked for residential development

Special Residential:

This zone promotes the development of primarily detached dwelling units, but does permit multi-family dwellings; and where a limited number of compatible ancillary uses, which have a non-disruptive impact on a neighbourhood amenity, may be allowed.

INTENSITY – ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIREMENTS	PROHIBITIONS
Min	Max		BUILDING LINES	SIDE SPACES	REAR SPACES		
200m ²	400m ²	N/A	3m	2m	2m	Preparation and incremental implementation of settlements frameworks i.e. NUSP Development management guidelines to be incorporated into Municipal LUS	Development in the open spaces and areas not suitable for/or not earmarked for residential development

13.1.4 DEVELOPMENT GUIDELINES FOR AGRI-VILLAGES

The term agri-village was first introduced to farmers in Natal in 1992, where the Natal Agricultural Union defined it as a “plot of land laid out in the form of a rural village on a separate sub-division of land”. In 2006, Del Grande was able to provide some further clarification when she stated that agri-villages are to be “established and managed as legal entities. The following land use zone has been identified to have relevance in agri-villages.

Special Residential:

This zone promotes the development of primarily detached dwelling units, but does permit multi-family dwellings; and where a limited number of compatible ancillary uses, which have a non-disruptive impact on a neighbourhood amenity, may be allowed.

INTENSITY: ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIREMENTS	PROHIBITIONS
Min	Max		BUILDING LINES	SIDE SPACES	REAR SPACES		
1000m ²	4000m ²	15m	3m	2m	2m	Preparation and incremental implementation of settlements frameworks i.e. NUSP Development management guidelines to be incorporated into Municipal LUS	Development in the open spaces and areas not suitable for/or not earmarked for residential development

13.1.5 DEVELOPMENT GUIDELINES FOR RURAL AREAS

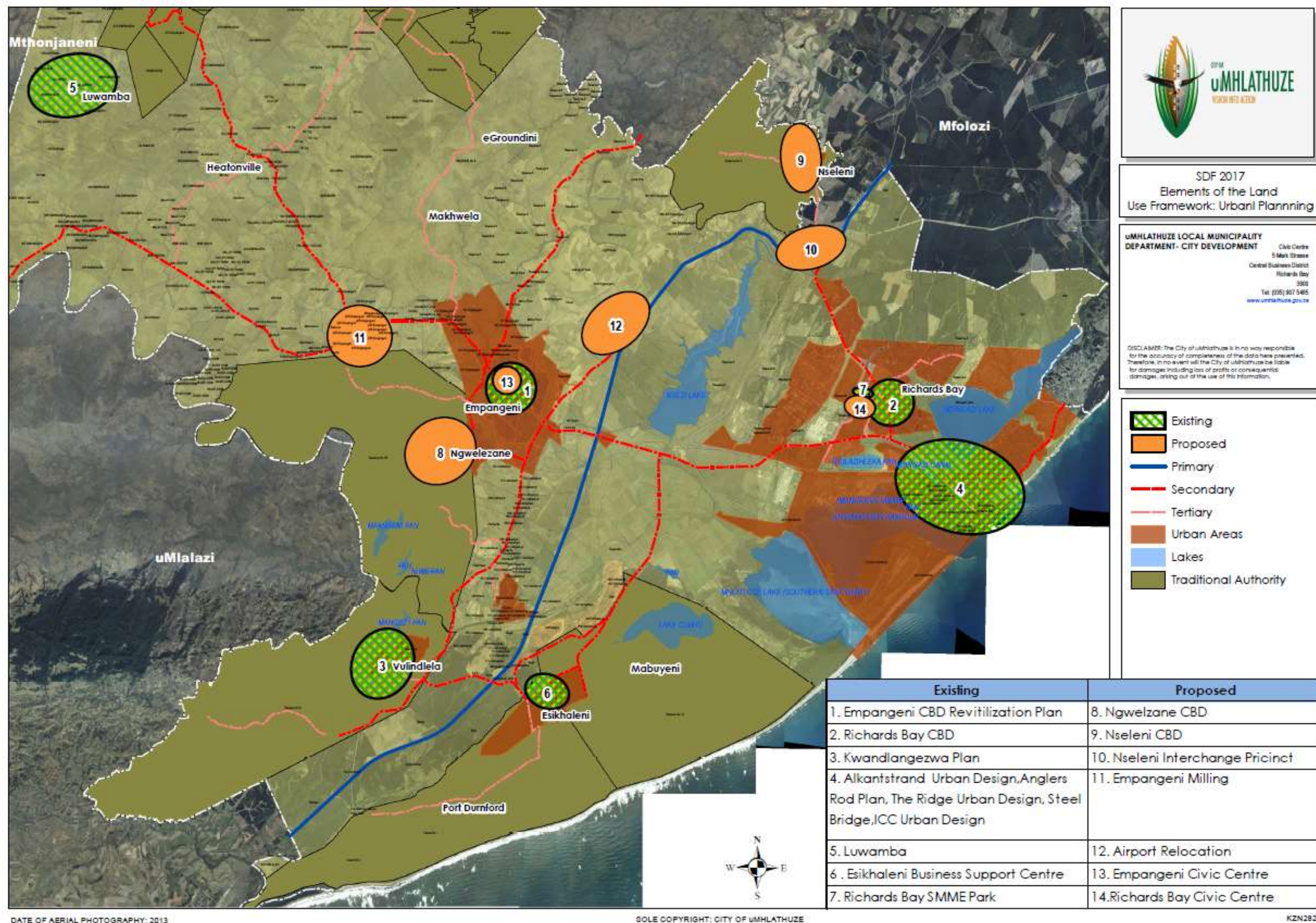
Rural Node: A node within a rural area identified in the Municipal Spatial Development Framework as a node that may include land uses which would support the community in their day-to-day needs such as commercial, educational, health facilities, petrol filling station, etc.

More specifically, free entry uses in this zone includes:

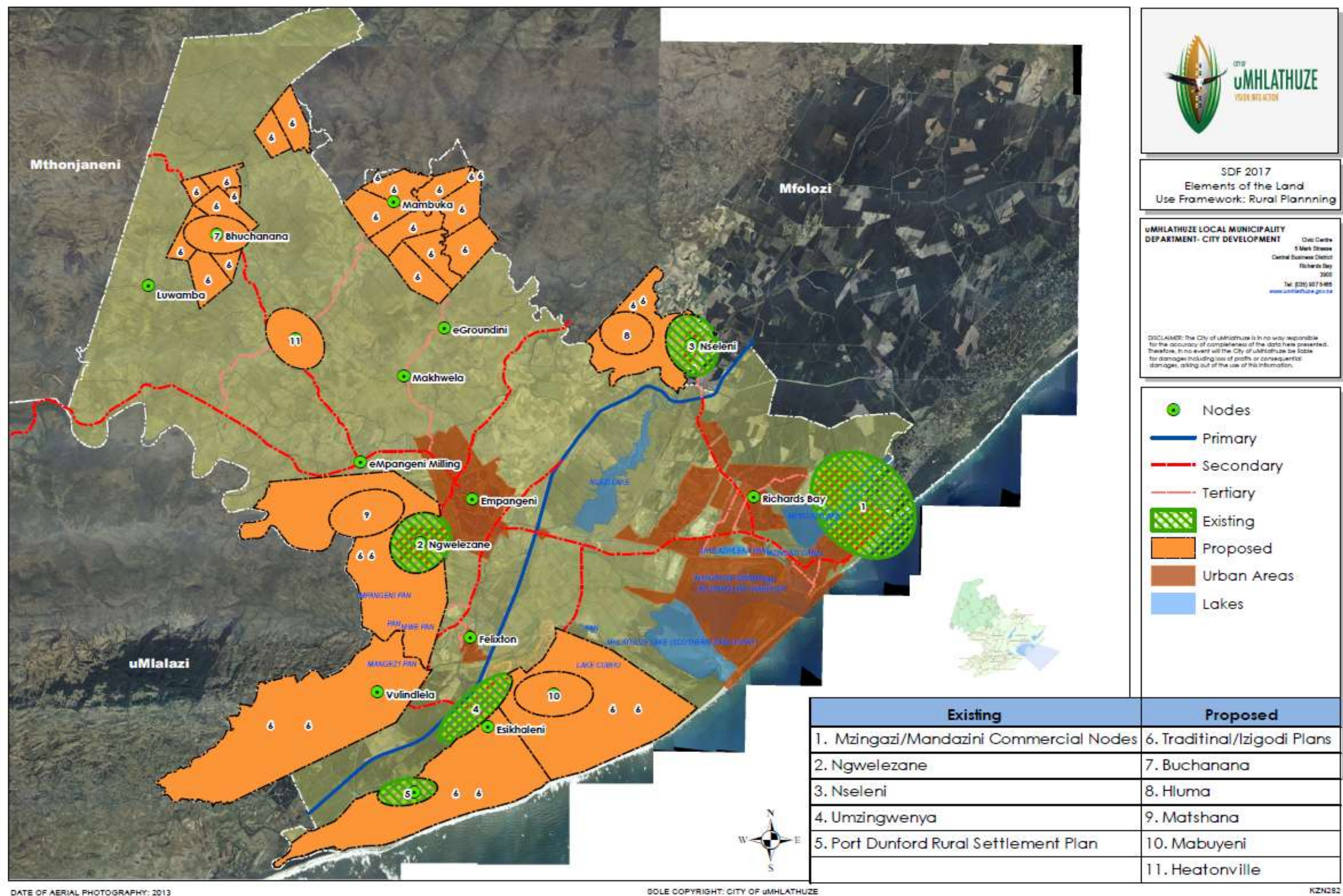
- Agricultural Building
- Agricultural Land
- Arts and Crafts Workshop
- Commercial Workshop
- Community Garden
- Educational Building
- Heritage Purposes
- Home Activity
- Homestead
- Industry – Service
- Informal Trade Area
- Institution
- Municipal Purposes
- Place of Worship
- Public Office
- Public Recreational Use
- Public Street
- Office – General
- Recreational Building
- Shop – General

INTENSITY: ERF SIZE		MINIMUM STREET FRONTAGE (M)	BUILDING LINES, SIDE AND REAR SPACES			ADDITIONAL REQUIRE- MENTS	PROHIBITIONS
Min	Max		BUIL- DING LINES	SIDE SPACES	REAR SPACE S		
150m ²	N/A	N/A	3m	2m	2m	Preparation and incremental implementation of settlements frameworks i.e. NUSP Preparation of Rural Framework Plans Development management guidelines to be incorporated into Municipal LUS	Development in the open spaces and areas not suitable for/or not earmarked for residential development

Map 46: Elements of the Land Use Framework - Urban



Map 47: Elements of the Land Use Framework – Rural



13.2 STRATEGIC AND CATALYTIC PROJECTS

A catalytic/strategic project promotes cross-cutting sustainability outcomes that mirror goals and targets to promote the overall sustainability of an area. The uMhlathuze Municipality is pursuing a number of catalytic projects/interventions are present as summarized hereunder.

Table 62 : Strategic and Catalytic Projects

PROJECT NAME	STATUS
1. Airport Relocation	The strategic positioning of uMhlathuze has necessitated long term plans to relocate/ upgrade the current airport. A pre-feasibility study for the relocation of the Richards Bay Airport has been finalised. The study investigated the various criteria for relocation including tenure, economic imperatives, spatial and land use considerations, environmental risks etc. The project has been registered as a PPP and full feasibility to commence in due course.
2. Richards Bay ICC	Council's vision is to prepare urban design concept with development guidelines for the proposed Richards Bay International Convention Centre with ancillary land uses such as Hotel, residential, professional offices, retail and that will complement the envisaged development of waterfront development. City is not looking for a traditional International Convention Centre, but mixed use centre with conference facilities, retail, leisure and business offices etc. as mentioned above.
3. Steel Bridge	The concept design phase for the Richards Bay Waterfront Steel bridge recommended future phases for implementation. The feasibility study has been finalised and essentially included: <ul style="list-style-type: none"> ○ Determine required statutory approvals (if any), including environmental and water use related and identify long lead items. ○ Undertaking a topographical survey and other specialist studies required to inform the processes identified. ○ Preparing preliminary designs to initiated the next phase of detail designs, execution, procurement and construction. The next phase, i.e. detailed design and implementation, is underway.
4. The Ridge	The proposed Ridge development is to accommodate a Hotel, High Density Residential units and ancillary land uses. The design reflects a "sense of place", "human scale" and possesses a distinct theme that will take cognisance of the location of the area. Tender for the Ridge development has been awarded and project is at an advanced stage of detail planning.
5. Waterfront Development	The Municipality intends to develop the Waterfront Area that will deliver the following: A place for maritime industries, education and businesses, local and international port activities; <ul style="list-style-type: none"> ○ A Public Waterfront: A place for local people and visitors; ○ A connected Waterfront: A place where people are highly connected locally and within the region, a place that is highly accessible and safe for pedestrians, cyclists, and passengers. Council has finalised a Master Plan for the area and will be initiated detailed planning and preliminary engineering designs shortly.
6. Richards Bay SMME Park	SMME Park will cater for hairdressers, mechanics; car wash and SMME offices and has been constructed and being utilized by 20 mechanics.

7. Nseleni Neighbourhood Shopping Centre	The shopping centre is operational.
8. Empangeni CBD Revitalisation Plan	The Empangeni CBD Revitalisation Plan outlines the current status of the town. The project phases was finalised in July 2013. Empangeni Revitalization has been targeted as a demonstration project for the City as part of the IUDF Implementation.
9.Desalination Plant	Plant completed. Operational capacity of 10MI/day.
10. Feasibility Study into wastewater and associated by-products re-use	Appointed a Transaction Advisor, to conduct a Feasibility Study for wastewater and associated by-products re-use for the City of uMhlathuze. Process underway.
11. Green Hill	Greenhill is situated on a Portion of the Remainder of Erf 5333, Greenhill, and is 22 758 m ² in extent. An EOI for the development of a mixed use development with a health care centre as an anchor awarded.
12. 132 kV	Replacement of two oil filled cables between CAPELLA and HYDRA substations feeding RBCT in progress.
13. CITP	Service Provider appointed to prepare Comprehensive Integrated Transport Plan (CITP) for whole municipal area. Draft report available.
14. Empangeni Mega Housing	Housing project of 10 000 units of an IRDP (Integrated Residential Development Programme) type. Installation of services has commenced.

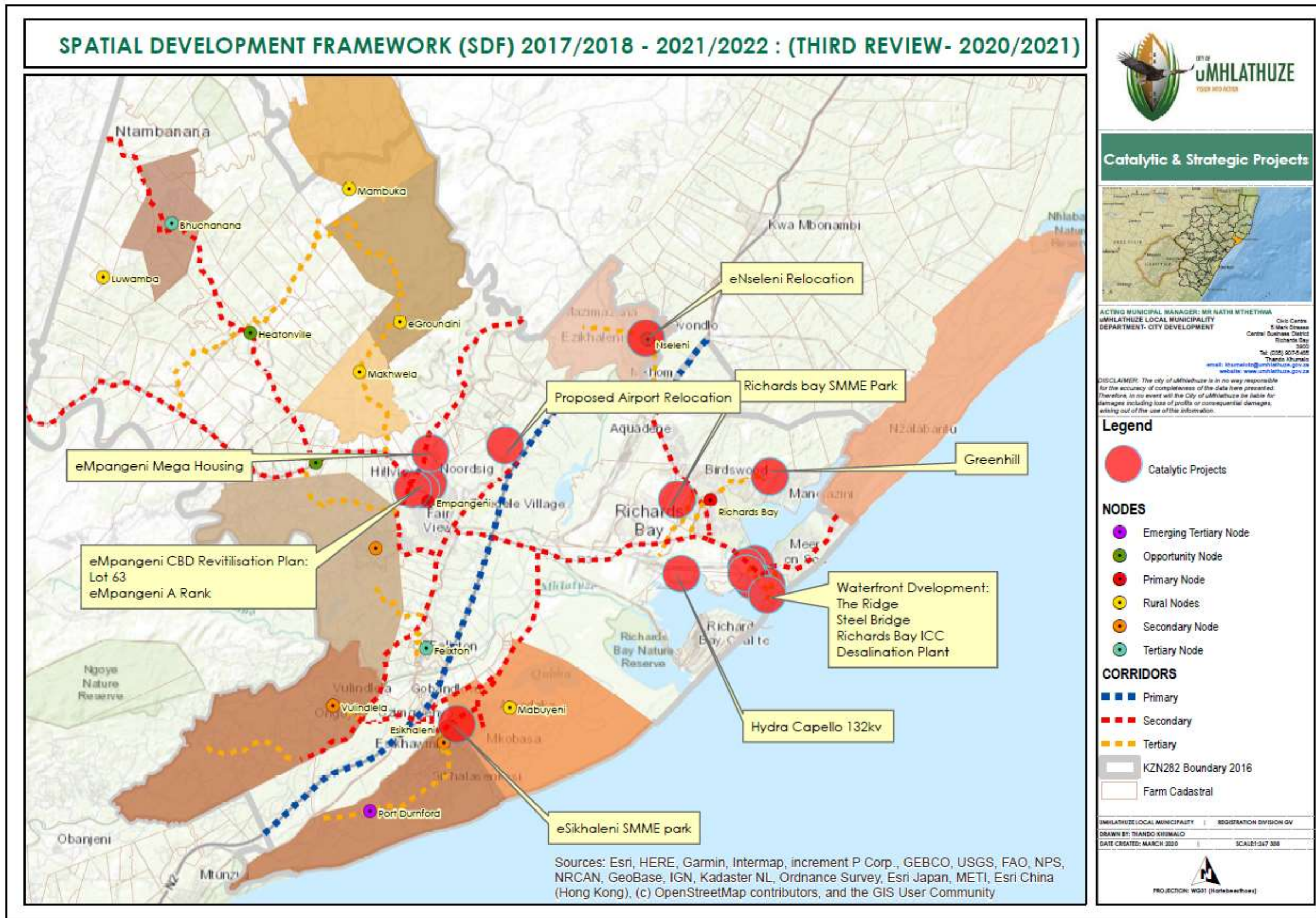
The following tables relate the above listed strategic and catalytic projects to the following **spatial transformation elements** as alluded to throughout this report:

- Employment
- Sustainability
- Township Economy
- Promotion of Economy (Tourism, LED and Agriculture)
- Social Investment
- Mobility
- Significant Capital Infrastructure Investment

Table 63: Relevance of Spatial Transformation Elements to Catalytic Projects

PROJECT NAME	Employment	Sustainability	Township Economy	Promotion of Economy (Tourism, LED, Agriculture)	Social Investment	Mobility	Significant Capital Infrastructure investment
1. Airport Relocation							
2. Richards Bay ICC							
3. Steel Bridge							
4. The Ridge							
5. Waterfront Development							
6. Richards Bay SMME Park (also Esikhaleni Business Park)							
7. Nseleni Neighbourhood Shopping Centre							
8. Empangeni CBD Revitalisation Plan							
9. Desalination Plant							
10. Feasibility Study into wastewater re-use							
11. Green Hill							
12. 132 kV							
13. CIP							
14. Empangeni Mega Housing							

Map 48: Location of Catalytic and Strategic Projects



13.3 CAPITAL EXPENDITURE FRAMEWORK

A Capital Expenditure Framework is a consolidated, high-level view of infrastructure investment needs in a municipality over the long-term (10 years) that considers not only infrastructure needs but also how these needs can be financed and what impact the required investment in infrastructure will have on the financial viability of the municipality going forward.

Guide to preparing an Infrastructure Investment Framework, SALGA, 2017, page 2

13.3.1 The role of the Capital Expenditure Framework (CEF) in relation to the IUDG

A review of Local Government Infrastructure Grants was initiated in October 2013, led by National Treasury together with the COGTA, the Financial and Fiscal Commission, the South African Local Government Association (SALGA), and the Department of Performance Monitoring and Evaluation. The review envisioned a grant system that should include:

- Greater differentiation in the type of grants provided to different municipalities;
- A move from focusing on rolling out new infrastructure to increased focus on the management, maintenance and renewal of existing infrastructure;
- An approach to ensure greater value for money for the funds spent, and;
- A framework to provide coherence and consistency in the management of the grant system.

The IUDF is consistent with, and reinforces the findings of the Review of Local Government Infrastructure Grants. As a result, the IUDG is slated to be introduced in the 2019/20 Division of Revenue Act (DORA) as a consolidated grant for Intermediate City Municipalities (ICMs). The aim of the IUDG is to support spatially aligned public infrastructure investment that will lead to functional and efficient urban spaces and to ultimately unlock urban growth. In terms of the IUDG description, the purpose of the grant is to:

Provide funding for public investment in infrastructure for the poor;
Promote increased access to municipal owned sources of capital finance in order to increase funding for public investment in economic infrastructure;
Ensure that public investments are spatially aligned with the local government development vision, and;
Promote the sound management of the assets delivered.

According to the IUDG policy framework, a CEF is a comprehensive, high-level, long-term infrastructure plan that flows from a SDF, which estimates the level of affordable capital investment by the municipality over the long-term. The CEF is therefore the municipal instrument to realise the agenda of the IUDF.

A CEF (Capital Expenditure Framework) is also a core component of an SDF in terms of SPLUMA (Spatial Planning and Land Use Management Act).

The uMhlathuze Municipality has finalized its first CEF and a summary of the main components thereof is provided herewith as per the following:

- Functional Areas & Priority Development Areas
- Demand Quantification
- Modelling Outcomes and Grant Impact Forecasts
- Planned Capital Expenditure
- Prioritisation Model and Budget Fit
- Functional Area Budget Split
- Poor versus Non-Poor Capital Expenditure Ratio
- 2019/2020 MTREF Capital Budget by Discipline-Based Service
- IUDG Funded Projects

(It should be noted that the CEF itself is informed by contextual information, the spatial vision as well as the municipal development approach but these are not repeated here as they are detailed elsewhere in the SDF).

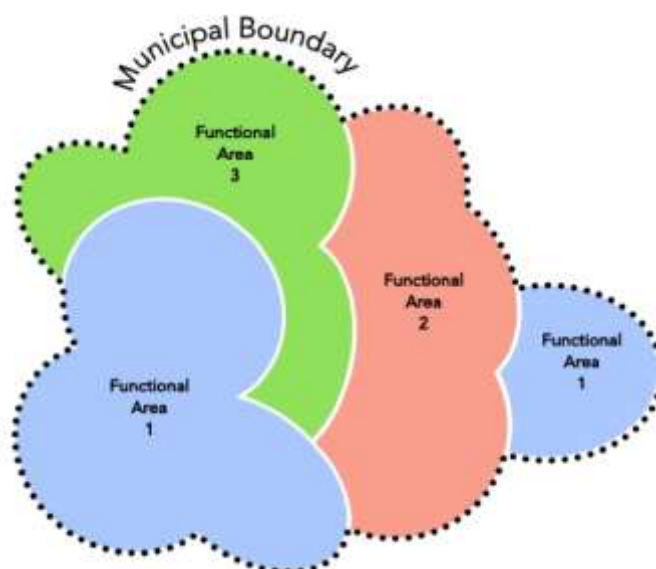
The CEF guidelines as drafted by COGTA, defines two main spatial structuring elements of a municipality, namely:

- Functional Areas, and;
- Priority Development Areas.

13.3.2 Functional Areas

Municipal boundaries describe the administrative jurisdiction area of a municipality, and Functional Areas (FAs) are the areas within the municipal boundary which exhibit homogenous function. A FA is a delineated area characterized by common (homogenic) geographical, spatial, developmental and service demand conditions, where the urban functioning is predominantly similar. Another method of identifying different FAs is to spatially delineate areas with similar developmental challenges.

Figure 54: Conceptual representation of FAs within a municipal boundary



A typical example is to demarcate the rural part of the municipality or the tribal land as a FA because it has more or less similar attributes (i.e. low density, lack of high order services, etc.) and it requires a specific development strategy that is unique to the development challenges of the area.

Given that each component of a municipal area's functioning is distinct, the delineation of FAs must cover the entire municipal area. As shown in **Error! Reference source not found.** the figure above, the sum of all delineated FAs is equal in coverage to that of the municipal jurisdiction boundary.

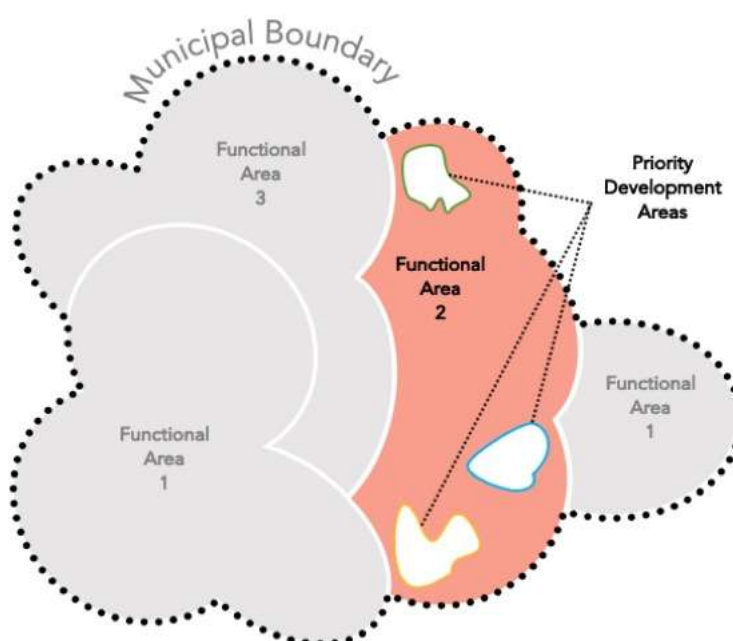
Therefore, when socio-economic and spatial profiling is undertaken per FA, the sum of the profile results (i.e. for population) will equal the profiling results for the municipal area.

FAs do not necessarily carry similar hierarchical importance. Therefore, given that the development challenges across the various municipal FAs may well differ, the capital investment priority associated with each FA may also differ. Allocating different hierarchical priority or importance to the different FAs in a municipality may be useful in the capital demand prioritisation model in subsequent sections of this report.

13.3.3 Priority Development Areas

In the same way as the FAs are defined within the municipal boundary, the PDAs are defined within the FA boundaries. However, there is one important distinction between FA and PDA delineation – the sum of PDAs does not necessarily have to cover the extent of the FA.

Figure 55: Conceptual representation of PDAs within a PA boundary



PDAs are specifically delineated intervention areas or spatial targeting areas that can take the form of strategic areas, nodal areas, corridors, precincts etc. Each of these areas has a specific development intent which is expressly stated in the SDF, and the development intent will relate very specifically to the FA in which the PDA is contained.

For example, the development intent for a PDA within the primary urban FA will be distinctly different from a PDA within a tribal or traditional authority FA. As was the case with the FAs, the priority of each PDA within a FA may differ, and therefore it is of critical importance to provide some hierarchy importance to the PDAs to inform the capital demand prioritisation model during the budget scenario development process.

As noted, the CEF should relate to the SDF vision and spatial structuring rationale. This is required to enable infrastructure modelling – based on population thresholds and levels of service choices. The four main FAs within the City of uMhlathuze are defined as follows:

- **Urban core function:** The Urban Core Function is defined by the dominant urban characteristic of the area, boasting a variety of uses – centred around the primary economic centres of the municipality.

The key areas contained within the Urban Core Function consists of primarily Richards Bay and Empangeni. Additionally, given the spatial vision of the municipality, the surrounding

development areas (Area A, B, C, D, E, and H) together with Esikhaleni, Vulindlela and Enseleni are also included as Urban Core Function areas.

- **Secondary urban improvement function:** The Secondary Urban Improvement Function area is defined by a high population density, with the potential to facilitate urbanised growth with the need for investment towards infrastructure that will improve the quality of life.

The key areas defined as contributing to the Secondary Urban Improvement Function, are the area surrounding Esikhaleni limited by the N2 to the north, the coast to the south and the harbour to the east, and the area surrounding Vulindlela limited by the N2 to the South, the jurisdictional boundary to the north and west, the tribal boundary to the far north and the urban core function to the east.

- **Rural sustainability function:** The Rural Sustainability Function is defined by the dominant presence of subsistence farm dwellings found within this area, which also incidentally relate strongly to the main economic function within this area.

The key areas within this area includes Ntambanana, Mambuka, eGroundini and Makhwela.

- **Commercial farming function:** Considering the dominant sugar-cane farming activity in the area, the remainder of the municipal area can be defined as contributing to the Commercial Farming Function.

Key areas includes Heatonville and Luwamba

The above Functional Areas are indicated in the map at overleaf.



The uMhlathuze SDF contains various analysis themes towards describing and understanding the spatial dynamic within the municipality. This was done to cater for the variety of dynamics which makes each area unique and to identify the various areas' unique contribution to the spatial dynamic of the municipality as a whole. In order to define the PDAs, a specific methodology was used, guided by the themes within the SDF.

The uMhlathuze SDF contains various analysis themes towards describing and understanding the spatial dynamic within the area and can be summarised as:

- Theme 1: Settlement hierarchy
- Theme 2: Natural features
- Theme 3: Expansion areas
- Theme 4: Infill and densification
- Theme 5: Urban development boundary
- Theme 6: Residential infill
- Theme 7: Agricultural investment
- Theme 8: Mining investment
- Theme 9: Nodes
- Theme 10: Corridors
- Theme 11: Tourism
- Theme 12: Informal settlement areas
- Theme 13: Rural development plans
- Theme 14: Strategic focus areas
- Theme 15: Catalytic project areas

By grouping themes in terms of priority development focus areas, at the hand of the strategic vision of the municipality, it is possible to more effectively define PDAs. In order to identify PDAs, the municipality has grouped the above mentioned 15 themes to five (5) main priority themes, namely:

- Urban structure enhancement areas
- Residential improvement areas
- Economic investment areas
- Strategic focus areas
- Maintenance areas

By referring to the PDAs in terms the priority development focus areas, it was possible to define a hierarchical priority or ranking for key areas with respect to each priority development focus area. The delineation of the PDAs of the City of uMhlathuze is shown in the map herewith.



13.3.4 Demand quantification

The emphasis over the past two decades has largely been on extending services to poor households. This is done in an environment where major population shifts have occurred, through accelerated urbanization and decreased growth and even population declines in rural areas. However, extending access to services must be regarded as only one of three major investment areas that require attention in order to sustain or accelerate development in any municipality. In this dynamic process, three components contributing to the demand for investment are recognised:

- The first investment challenge is existing households without access to services;
- The second is investment required to renew (rehabilitate and maintain) existing infrastructure, and;
- The third is the growth in households and the economy.

13.3.5 Modelling outcomes and growth impact forecasts

A development cost model was used to model and forecast long-term investment demand. The following factors provided input into this model:

Population growth as the basis for modelling investment demand

Overall population growth rates are declining and will continue to decline. This is particularly true of the farming areas but is in line with general trends in South Africa. The rural nodes are growing significantly slower, but indications are that traditional areas will grow strongly. It is expected that urban and traditional growth will be close in terms of actual number but the challenge is that growth in traditional areas are dispersed over vast areas at very low densities.

Table 64: Change in population distribution from 1996 to 2030

Timeline	Urban	Rural	Tribal	Farm	Total
1996	40.8%	21.1%	33.1%	5.0%	100%
2001	37.2%	19.0%	39.8%	4.1%	100%
2006	40.0%	18.4%	38.2%	3.5%	100%
2011	42.8%	17.9%	36.5%	2.8%	100%
2016	43.3%	16.7%	37.9%	2.1%	100%
2021	44.2%	15.7%	38.7%	1.4%	100%
2026	45.2%	14.7%	39.4%	0.7%	100%
2030	46.0%	13.9%	40.0%	0.1%	100%

It is important to note that the expectation is that, irrespective of growth numbers, the share of rural nodes will decrease while the population share of the urban nodes tribal areas will increase as farming populations decrease. The implication is that the demand for infrastructure and services will grow in the tribal areas at a higher rate and that these areas will become increasingly more important in the municipality's development and service delivery strategies.

Scenario assessment

It is necessary to make some basic assumptions before the model was calibrated, notably housing variables as well as norms and standards for land use budgeting, service levels

Modelling Outcomes

The outcomes show incremental quantities, which includes all service elements and components. Currently, it is not possible to model the impact of major interventions such as building a new wastewater treatment work or big investment to reconfigure the management of solid waste. The results link the demand to a specific year, it is still important to take note of budgeting processes and the extent of lead times before project implementation can commence.

The following table shows the summary of land use demand which is a result of the growth forecasts.

Table 65: Land use demand for the programme period 2019 to 2028

Land uses	No of units	% of the total land	No of stand required	The area included in the project
Totals	13 896	100.00%	9 461	2 088.08
Residential	13 896	70.30%	8 697	1 331.10
Low density rural settlement	2 843	37.54%	2 843	710.87
Single residential: Low Income	1 163	3.07%	1 163	58.13
Single residential: Med-high Income	3 924	17.62%	3 924	333.54
Medium Dens: Low Inc	630	1.66%	158	31.52
Medium Dens: Med Inc	1 046	2.76%	131	52.32
Medium Dens: High Inc	2 415	6.38%	402	120.74
High Dens: Low Inc	131	0.12%	11	2.18
High Dens: Med Inc	349	0.46%	22	8.72
High Dens: High Inc	523	0.69%	44	13.08
Backyard dwellings	872	0.00%	0	0.00
Business		3.01%	249	262.45
Local Activity Centre		1.35%	127	19.05
Neighbourhood Activity Centre		1.01%	76	22.80
Market/trading area		0.20%	0	0.00
Regional Activity Centre		0.59%	44	220.00
Garages & filling stations		0.05%	2	0.60
Industrial		6.46%	375	119.80
Light industrial		3.59%	339	67.80
Heavy industrial		1.79%	16	32.00
Storage and warehousing		1.08%	20	20.00
Public spaces: recreation		1.37%	53	33.00
Parks: public		0.54%	40	20.00
Sports fields		0.18%	3	3.00
Stadiums		0.11%	0	0.00
Community facilities: county		1.37%	16	19.95
Municipal office		0.01%	0	0.00
Community hall		0.03%	2	0.60
Local library		0.01%	1	0.15
Primary health clinic		0.02%	1	0.30
Fire station & Ambulance		0.03%	0	0.00
Ambulance station		0.01%	0	0.00
Cemeteries		0.98%	9	18.00
Public parking areas		0.05%	3	0.90
Taxi ranks		0.03%	0	0.00
Community facilities: other		4.31%	71	72.20
Post office		0.02%	2	0.30
Police station		0.02%	0	0.00
District hospital		0.04%	0	0.00
Community health centre		0.01%	0	0.00
Hospice		0.01%	1	0.20

Old age home		0.05%	1	1.00
Children's homes		0.01%	0	0.00
Place of worship		0.15%	13	2.60
Crèche		0.19%	18	3.60
Nursery school		0.16%	10	3.00
Primary school		1.81%	10	32.00
Secondary school		1.41%	5	22.50
After school centre		0.11%	10	2.00
Technical college		0.27%	1	5.00
Roads totals		13.18%	0	249.58

The following tables show the required capital expenditure incrementally per annum and cumulative per annum to accommodate the forecasted demand.

Table 66: Incremental Capital Expenditure: All services (R'000)

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Growth investments	135 539	140 742	142 155	122 169	124 448	121 092	122 762	122 581	99 226	99 562
Access backlogs	1 940	1 940	1 940	1 940	1 940	1 940	1 940	1 940	1 940	1 940
Renewals	227 788	230 812	233 948	237 131	239 858	242 631	245 338	248 074	250 812	253 008
Renewal backlog	100 183	100 183	100 183	100 183	100 183	100 183	100 183	100 183	100 183	100 183
Total (R'000)	465 451	473 678	478 226	461 424	466 430	465 847	470 223	472 779	452 161	454 694
Water										
Growth investments	24 841	25 885	26 098	22 454	23 065	22 042	22 778	22 496	18 372	18 180
Access backlogs	1 891	1 891	1 891	1 891	1 891	1 891	1 891	1 891	1 891	1 891
Renewals	22 338	22 673	23 022	23 374	23 677	23 988	24 285	24 592	24 896	25 144
Renewal backlog	8 283	8 283	8 283	8 283	8 283	8 283	8 283	8 283	8 283	8 283
Total	57 353	58 732	59 295	56 002	56 916	56 205	57 238	57 263	53 443	53 498
Sanitation										
Growth investments	23 591	24 168	24 018	20 934	21 162	20 721	21 002	21 084	16 794	16 893
Access backlogs	21	21	21	21	21	21	21	21	21	21
Renewals	21 212	21 994	22 794	23 589	24 282	24 983	25 670	26 365	27 063	27 619
Renewal backlog	6 405	6 405	6 405	6 405	6 405	6 405	6 405	6 405	6 405	6 405
Total	51 230	52 588	53 238	50 949	51 871	52 131	53 097	53 875	50 283	50 938
Electricity										
Growth investments	38 982	40 673	40 995	35 258	35 940	34 993	35 410	35 410	28 660	28 858
Access backlogs										
Renewals	77 250	78 006	78 794	79 589	80 272	80 969	81 648	82 334	83 021	83 576
Renewal backlog										
Total	116 232	118 679	119 789	114 847	116 213	115 962	117 057	117 744	111 680	112 435
Roads & Stormwater										
Growth investments	45 948	47 752	48 383	41 455	42 197	41 248	41 525	41 512	33 985	33 823
Access backlogs										
Renewals	100 215	101 201	102 225	103 262	104 151	105 056	105 940	106 831	107 721	108 449
Renewal backlog	85 053	85 053	85 053	85 053	85 053	85 053	85 053	85 053	85 053	85 053
Total	231 217	234 006	235 661	229 770	231 401	231 357	232 518	233 396	226 759	227 326
Refuse removal										
Growth investments	2 177	2 264	2 661	2 068	2 084	2 087	2 047	2 080	1 415	1 808
Access backlogs	28	28	28	28	28	28	28	28	28	28
Renewals	6 772	6 939	7 113	7 317	7 475	7 635	7 795	7 952	8 111	8 220
Renewal backlog	442	442	442	442	442	442	442	442	442	442
Total	9 420	9 674	10 243	9 855	10 029	10 192	10 312	10 501	9 996	10 498

Table 67: Capital Expenditure (all services (R'000) (Cumulative)

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Growth investments	135 539	276 281	418 436	540 606	665 054	786 146	908 908	1 031 489	1 130 714	1 230 277
Access backlogs	1 940	3 881	5 821	7 761	9 702	11 642	13 582	15 523	17 463	19 403
Renewals	227 788	252 025	233 948	237 131	239 858	242 631	245 338	248 074	250 812	253 008
Renewal backlog	100 183	200 366	300 549	400 732	500 916	601 099	701 282	801 465	901 648	1 001 831
Total (R'000)	465 451	732 553	958 754	1 186 231	1 415 529	1 641 518	1 869 109	2 096 551	2 300 637	2 504 519
Water										
Growth investments	24 841	50 725	76 823	99 277	122 342	144 385	167 163	189 659	208 031	226 211
Access backlogs	1 891	3 783	5 674	7 566	9 457	11 349	13 240	15 132	17 023	18 915
Renewals	22 338	22 673	23 022	23 374	23 677	23 988	24 285	24 592	24 896	25 144
Renewal backlog	8 283	16 566	24 849	33 132	41 414	49 697	57 980	66 263	74 546	82 829
Total	57 353	93 747	130 369	163 349	196 891	229 419	262 669	295 646	324 496	353 098
Sanitation										
Growth investments	23 591	47 759	71 777	92 711	113 874	134 595	155 597	176 681	193 474	210 367
Access backlogs	21	42	62	83	104	125	145	166	187	208
Renewals	21 212	43 206	22 794	23 589	24 282	24 983	25 670	26 365	27 063	27 619
Renewal backlog	6 405	12 811	19 216	25 622	32 027	38 433	44 838	51 243	57 649	64 054
Total	51 230	103 817	113 850	142 005	170 287	198 136	226 250	254 455	278 373	302 248
Electricity										
Growth investments	38 982	79 654	120 649	155 907	191 848	226 840	262 250	297 660	326 319	355 178
Access backlogs										
Renewals	77 250	78 006	78 794	79 589	80 272	80 969	81 648	82 334	83 021	83 576
Renewal backlog										
Total	116 232	157 660	199 443	235 496	272 120	307 810	343 898	379 994	409 340	438 754
Roads & Stormwater										
Growth investments	45 948	93 701	142 084	183 539	225 736	266 984	308 509	350 021	384 006	417 829
Access backlogs										
Renewals	100 215	101 201	102 225	103 262	104 151	105 056	105 940	106 831	107 721	108 449
Renewal backlog	85 053	170 106	255 159	340 212	425 265	510 318	595 371	680 424	765 477	850 530
Total	231 217	365 007	499 468	627 013	755 152	882 358	1 009 820	1 137 276	1 257 204	1 376 809
Refuse removal										
Growth investments	2 177	4 442	7 102	9 171	11 254	13 342	15 389	17 468	18 883	20 691
Access backlogs	28	56	84	112	141	169	197	225	253	281
Renewals	6 772	6 939	7 113	7 317	7 475	7 635	7 795	7 952	8 111	8 220
Renewal backlog	442	884	1 325	1 767	2 209	2 651	3 092	3 534	3 976	4 418
Total	9 420	12 321	15 625	18 367	21 079	23 796	26 473	29 179	31 224	33 610

13.3.6 Planned Capital Expenditure

Amongst others, the following sector and master plans have informed the determination of planned capital expenditure:

- Bulk Sewer Master Plan – 2016
- Bulk Water Master plan – 2014
- Electricity Network Master Plan – 2015
- Electricity and Energy 5-year budget Presentation
- Human Settlements Programme – IDP Input
- Roads 20-year Master Plan (indicating period between 2013 – 2020)
- Water Services Development Plan – IDP Input
- Sports and Recreation 10-year Plan project List
- Solid Waste 10-year Plan project List

The current capital expenditure project pipeline of the municipality includes the current (FY 2019/2020) capital expenditure demand up to financial year 2028/2029.

The municipal capital expenditure process is based around a three year budget cycle as per the Medium Term Expenditure Framework (MTREF). This forced municipalities to plan in the same context. However with the CEF, the total capital expenditure view is based on a ten year horizon and in the long-term will result in a better understanding of capital expenditure.

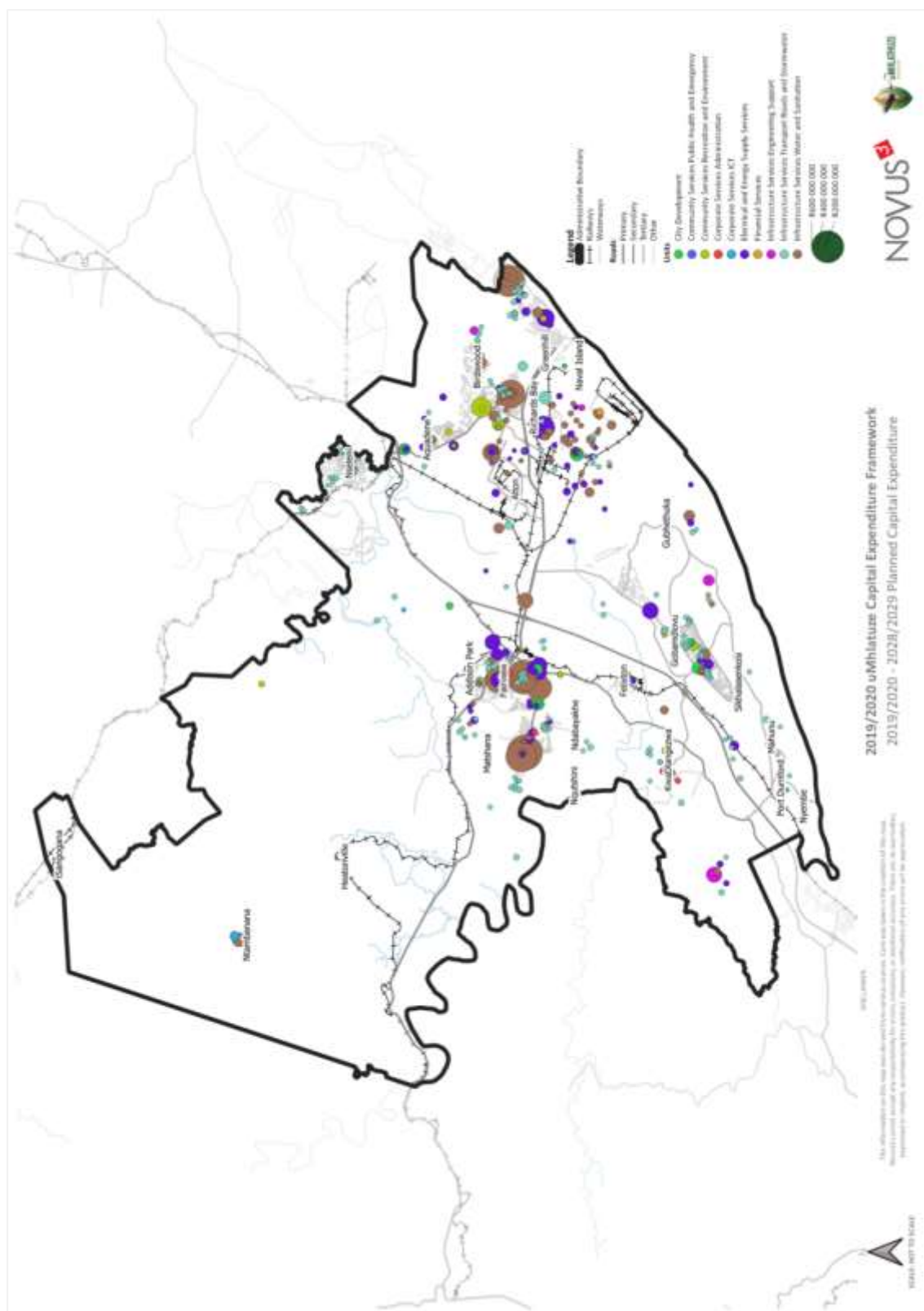
There is a slight increase in Planned Capital Expenditure within the MTREF second and third year. The Planned Capital Expenditure drops in FY 2022/2023 then picks up again in FY 2024/2025, and this trend occurs again for the next three financial years. This is tabled in **Error! Reference source not found..** In total, the total planning capital expenditure amounts to R11 841 494 355.

Table 68: 2019/2020 - 2028/2029 Total planned capital

Year	Total Planned Capital	Total Planned Capital %
2019/2020	R1 823 196 907	15%
2020/2021	R1 224 439 065	10%
2021/2022	R2 465 662 841	21%
2022/2023	R818 262 746	7%
2023/2024	R638 957 000	5%
2024/2025	R1 309 178 225	11%
2025/2026	R68 100 000	1%
2026/2027	R74 300 000	1%
2027/2028	R3 419 397 570	29%
2028/2029	R-	0%
Total	R11 841 494 355	100%

The following map provides a spatial representation of the planned capital expenditure projects over a ten year horizon (FY 2019/2020 – FY 2028/2029) within the municipality. The planned projects are noted to be clustered within the Richards Bay area and the majority of planned expenditure is within the infrastructure division of the municipality.

Map 51: Planned Capital Expenditure



13.3.7 Prioritization Model and Budget Fit

The Municipality has completed a Long Term Financial Plan (LTFP) that has provided critical input into the prioritization model and affordability envelope.

One of the key benefits of the prioritisation model is that it enables alphanumeric and spatial data analytics, which means that spatial inputs are used to prioritise projects. Spatial prioritisation and budget alignment is not only a prerequisite in terms of SPLUMA, but it is also a policy imperative for the IUDF – therefore, spatially-based prioritisation enables true spatial targeting.

Considering the spatial parameters used in the prioritisation model, it is noted that projects within the FAs and PDAs scored higher than projects in the commercial farming areas. This is as a result of the increased emphasis and weighting on these criteria within the model.

Affordability envelope

The affordability envelope is the sustainable and financially tested total budget that can be sustainably maintained by the municipality over a given period of time. This figure is usually expressed as a total over the modelling period, as well as in annual budget increments. If the total capital budget exceeds this total, the municipality could encounter some unforeseen circumstances in future that will compromise its financial sustainability. The parameters of the affordability envelope determine the strategy used for budget preparation.

Project score

The purpose of a project score is to determine a relative ranking between all the projects with a capital demand. Projects with the highest score have the first opportunity to be allocated budget in the budget preparation process.

Project status

Within the budget preparation, projects can be allocated a specific status based on their publication in a previous MTREF IDP or related annexure. These statuses are:

Committed

Committed projects are those projects which formed part of either the approved IDP capital budget or the mid-year adjusted capital budget of the municipality for the previous financial year, and which are contractually committed as assets under construction. Termination of any committed projects will result in either legal or financial liability for the municipality. Given commitments made on these projects by the municipality, the budget preparation methodology regards these projects as non-negotiable, irrespective of their project score. Furthermore, projects that fall under this category will be fitted to the capital budget in the financial year in which they request capital (no delays may be applied) which means they may exceed the municipal, portfolio or departmental budget cap which has been applied in the budget template.

Provisioned

Provisioned projects are those projects which formed part of either the approved IDP capital budget or the mid-year adjusted capital budget of the municipality for the previous financial year, but which are not contractually committed as assets under construction. Termination of any provisioned projects will not result in either legal or financial liability for the municipality. The budget preparation methodology regards these projects as having a higher priority than normal prioritised projects in the list (given their status received during previous MTREF budget publications). However their implementation timeframes are negotiable to an extent. Projects that fall under this category will be fitted to the capital budget in the financial year in which they request money only if there is sufficient capital budget available in the capital budget template and they may not exceed the municipal, portfolio or departmental budget cap which has been applied in the budget template. If the capital budget requests exceed the municipal capital budget template either at a municipal, portfolio or departmental indicative

level, then provisioned projects may be fitted with delay to a financial year where there is sufficient municipal capital budget cap available.

Budget Fit Parameters

The budget fit status of each project, after executing of the budget fit mechanism, is shown below the bar graph in colours. Each colour represents a different budget fit status, which includes:

Committed: “Committed” projects are those projects which formed part of either the approved IDP capital budget (Annexure A) or the mid-year adjusted capital budget (Annexure B) of the municipality for the previous financial year, and which are contractually committed as assets under construction. Termination of any committed projects will result in either legal or financial liability for the municipality.

Provisioned-In: “Provisioned” projects are those projects which formed part of either the approved IDP capital budget (Annexure A) or the mid-year adjusted capital budget (Annexure B) of the municipality for the previous financial year, but which are not contractually committed as assets under construction. Termination of any provisioned projects will not result in either legal or financial liability for the municipality.

Provisioned-in with delay: “Provisioned-in with delay” projects are those projects which formed part of either the approved IDP capital budget (Annexure A) or the adjusted capital budget (Annexure B) of the municipality for the previous financial year, but which are not contractually committed as assets under construction. Termination of any provisioned projects will not result in either legal or financial liability for the municipality and are therefore delayed in the budget fit process. A project will then be delayed to a financial year where the budget cap total has not been exceeded.

Fit: “Fitted” projects are projects that scores highest in relation to the remaining projects to be fitted, with the provision that the budget cap total has not been exceeded.

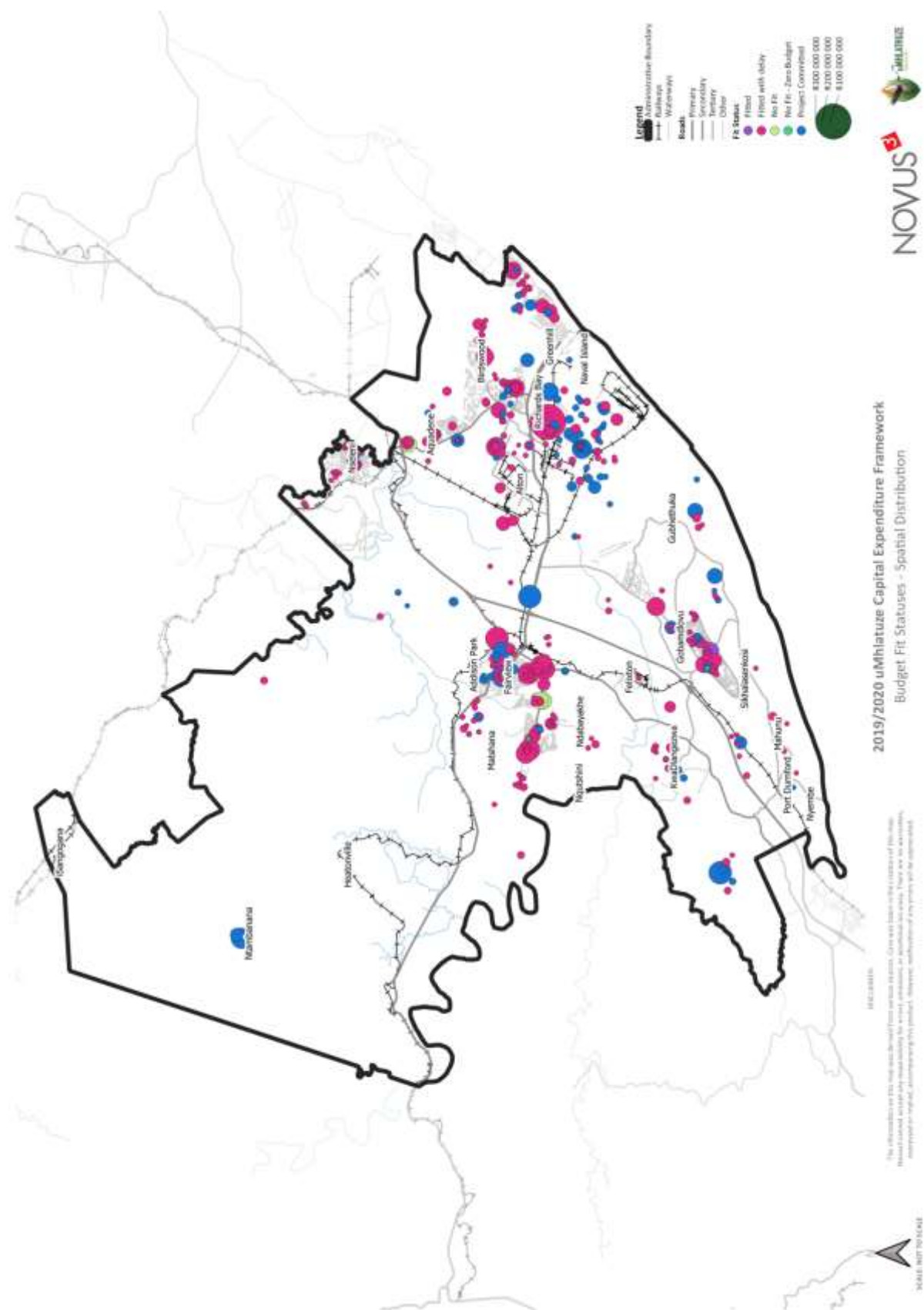
Fit with Delay: “Fit with delay” projects are projects that scores highest in relation to the remaining projects to be fit, with the exception that the budget cap total for the year in which the project requests budget has been exceeded. A project will then be delayed to a financial year where the budget cap total has not been exceeded.

No Fit: This status is assigned to projects that were not able to qualify for budget based on their CPM score and / or budget template cap.

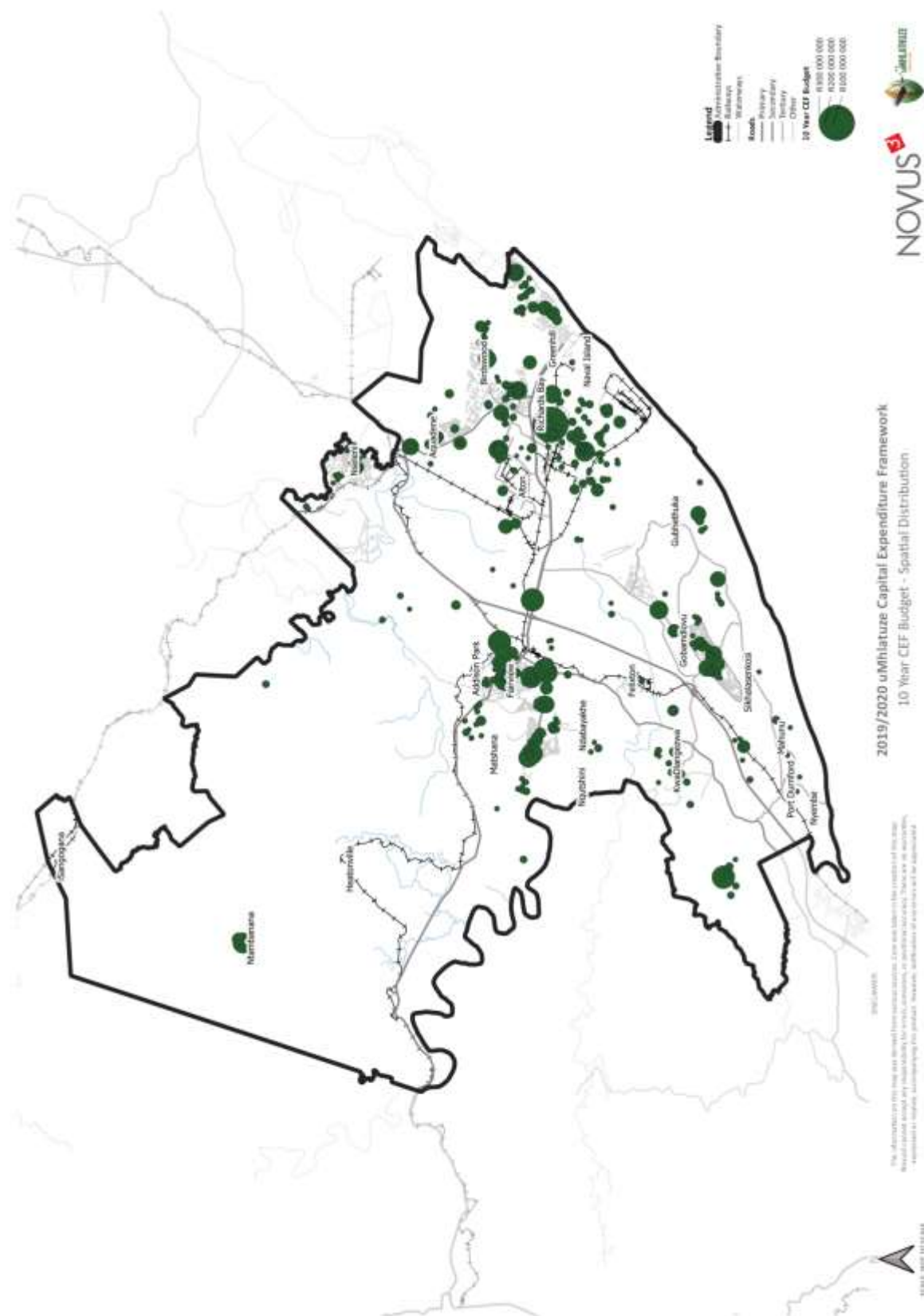
No Fit – Zero Budget: This status is assigned to projects that do not request budget in the modelling period.



Map 52: Fit Status: Spatial Distribution



Map 53: 10-year Capital Expenditure Framework



13.3.8 Functional Area Budget Split

Hereunder, the draft 2019/2020 – 2028/2029 capital budget has been expressed in terms of the Functional Areas:

Figure 56: Programme Totals per Functional Area

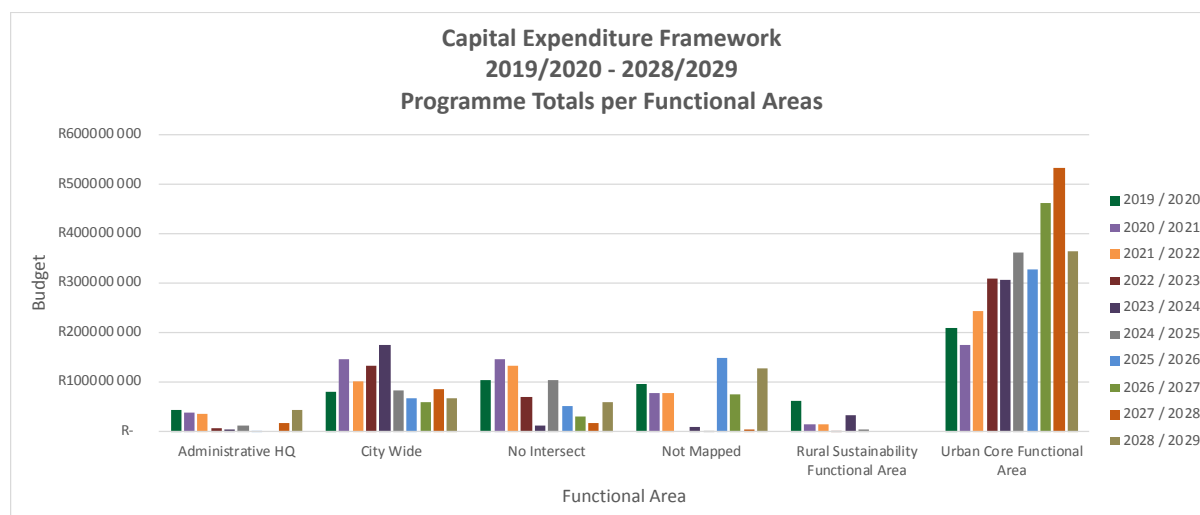


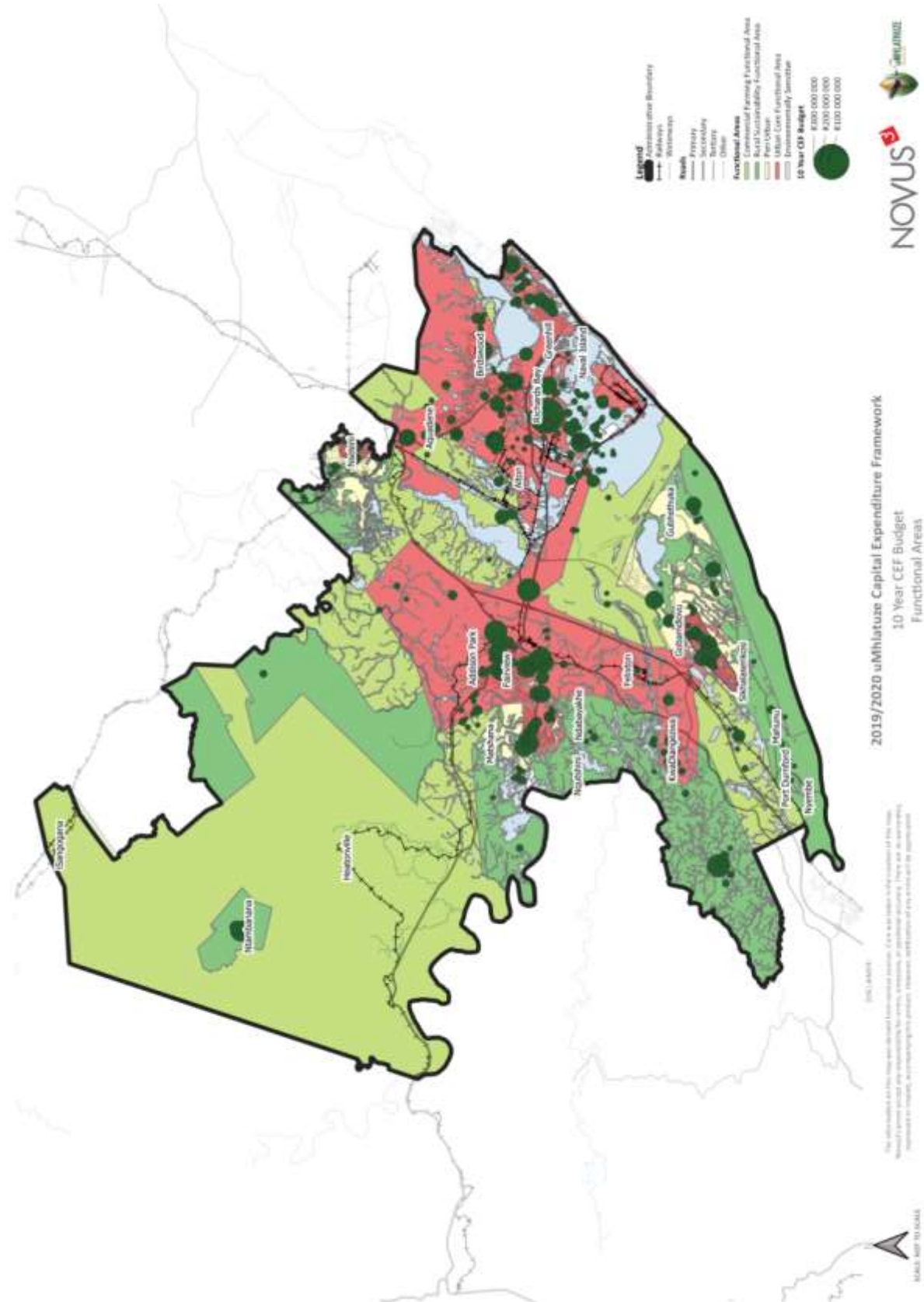
Table 69: Programme Totals per Functional Area

Year	Administrative HQ	City Wide	No Intersect	Not Mapped	Rural Sustainability Functional Area	Urban Core Functional Area
2019/2020	R44 502 300	R79 865 000	R103 252 247	R97 116 200	R63 000 000	R209 797 253
2020/2021	R38 498 400	R147 313 000	R146 301 774	R76 859 500	R15 000 000	R173 899 026
2021/2022	R36 791 700	R100 342 100	R132 663 612	R78 083 000	R15 000 000	R242 076 188
2022/2023	R6 053 000	R132 194 713	R68 704 098	R-	R839	R308 043 384
2023/2024	R4 518 300	R176 218 785	R11 177 482	R10 000 000	R33 000 000	R305 835 246
2024/2025	R13 019 300	R82 752 815	R103 038 909	R2 361 401	R4 726 067	R361 893 713
2025/2026	R30 000	R68 534 700	R50 733 924	R148 837 305	R-	R328 040 958
2026/2027	R-	R58 096 100	R31 472 447	R76 328 742	R-	R460 098 188
2027/2028	R16 435 000	R86 037 700	R18 142 314	R4 000 000	R-	R532 601 034
2028/2029	R44 218 200	R66 916 900	R59 650 000	R126 379 771	R-	R365 000 000
Percentage	3%	17%	12%	10%	2%	55%

From the above it is noted that 55% of the draft capital budget over the 10-year horizon period is focused on the Urban Core Functional Areas, which are areas centred around the primary economic centres of the municipality.

The number of projects captured onto the model as City Wide amounts to 17%. The focus of capital planned expenditure on the urban core functional area will ensure upgrade to existing capacity in order to accommodate increased densities and expansion of urban residential areas as well as industrial areas. Rural sustainability Functional area includes the former Ntambanana area. Focus on the rural sustainability functional area will ensure that both commercial, social facilities and infrastructure are provided closer to the people.

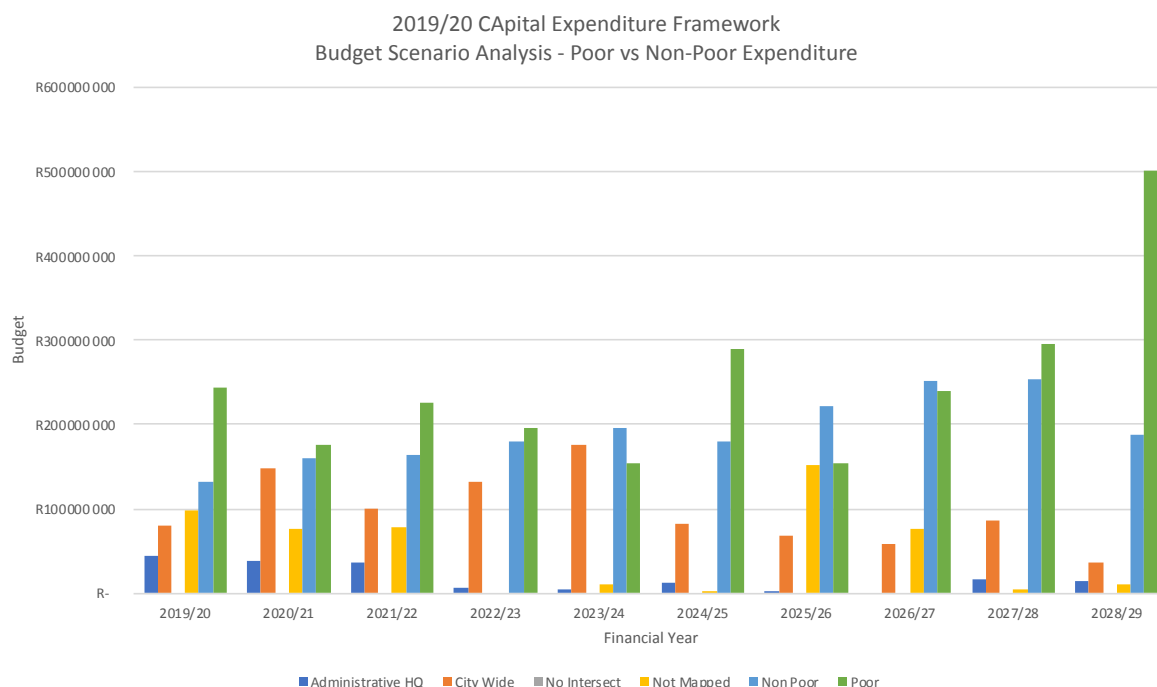
Map 54: 10 Year CEF Budget – Functional Areas





13.3.9 Poor vs Non-Poor Capital Expenditure Ratio

Figure 57: Poor: Non Poor Capital Expenditure Ratio



The Poor: Non Poor capital expenditure ratio is lower than 1 in year 5 and year 7, which means that in year 5 and 7 more money is spent on the poor population with respect to the current spatial population distribution and the capital expenditure spent in the municipality excluding capital expenditure allocated to City Wide, Administrative HQ areas and projects that are not mapped. The average ratio across the analysis timeframe is 1:1,3. This means that on average, for each Rand spent on the poor, 1,3 are spent on the non-poor.

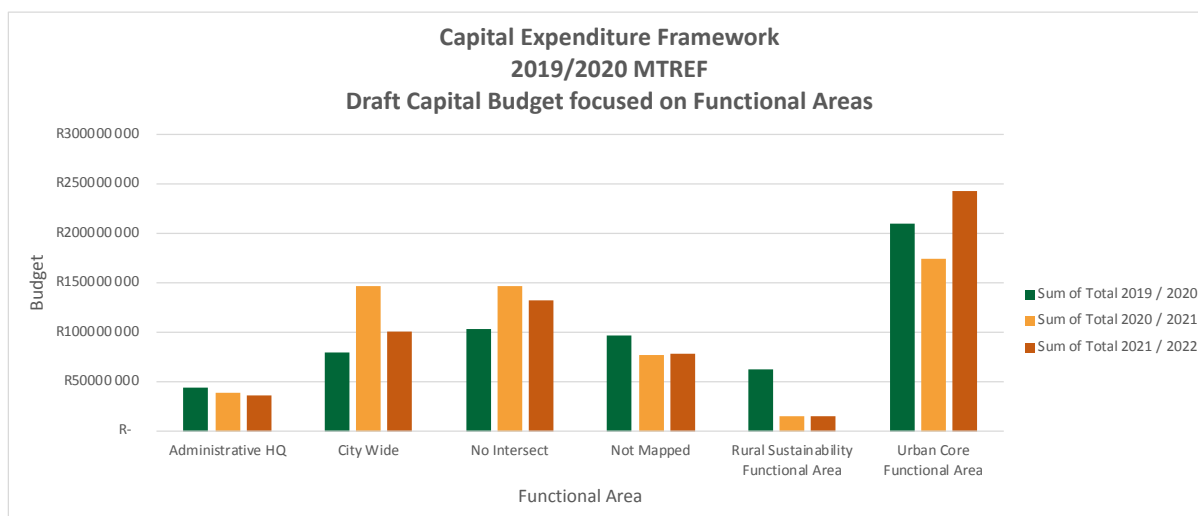
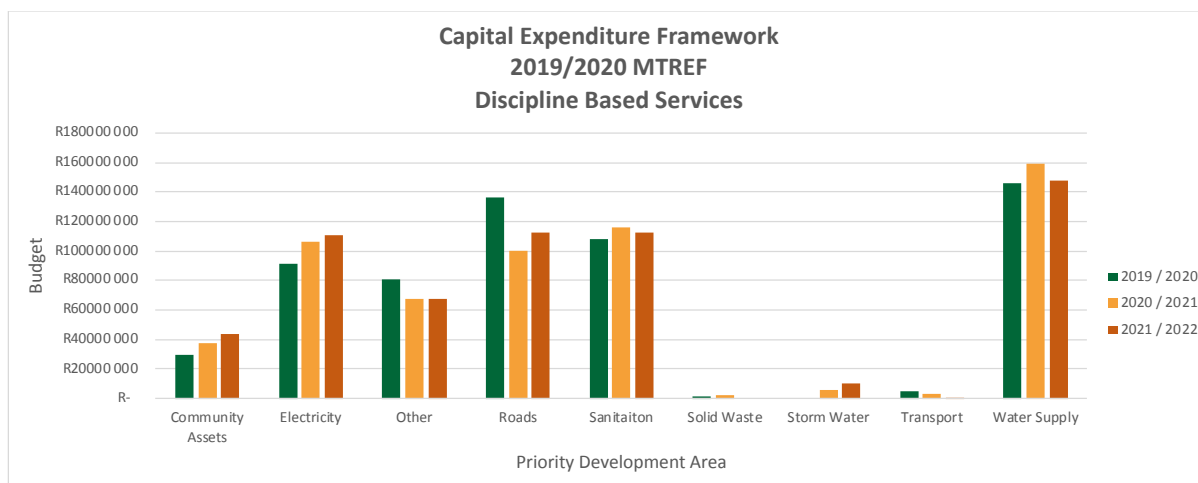
13.3.10 2019/2020 MTREF Capital Budget by Discipline-Based Services

The following table and figures provide the MTREF capital budget by discipline-based services

Table 70: 2019/2020 MTREF Capital Budget by discipline-based services

Discipline based services	2019 / 2020	2020 / 2021	2021 / 2022
Community Assets	R29 644 000	R37 756 000	R43 211 000
Electricity	R91 173 500	R106 432 200	R110 968 900
Other	R80 833 400	R67 190 500	R67 262 500
Roads	R136 008 000	R99 644 000	R112 569 000
Sanitation	R107 957 100	R115 877 100	R112 182 100
Solid Waste	R1 400 000	R2 600 000	R-
Storm Water	R-	R6 000 000	R10 000 000
Transport	R4 917 000	R3 007 000	R815 000
Water Supply	R145 600 000	R159 364 900	R147 948 100
Total	R597 533 000	R597 871 700	R604 956 600

Water Supply discipline represents a quarter of the Draft Capital Budget, followed by Sanitation and Roads with 19% then Electricity with 17%.



13.3.11 IUDG Funded Projects

The IUDG funded projects are categorised according to two funding components, namely:

- Planning grant component, and;
- Grant Incentive.

PLANNING GRANT COMPONENT

The following projects have accordingly been provided for in the draft 2019/2020 – 2021/2022 MTREF, amounting to R3 205 000.

Proposed Empangeni Business Hub

At the Richards Bay main public transport facility, Taxi City, an SMME centre has been construction and is operational to provide a much needed facility for emerging entrepreneurs. Plans are at an advanced stage for a Business Support Centre in Esikhaleni to also provide a form of incubation. A similar approach is being pursued and plans are being prepared for a Business Hub in Empangeni and a portion of the IUDG planning grant will contribute to such.

Waterfront detailed planning and engineering designs

A Master Plan has been drafted for the Richards Bay Waterfront area and the next step toward implementation is detailed planning and engineering designs. A portion of the IUDG planning grant will contribute to such.

Rural Framework Plan for Matshana

In order to facilitate feasible service provision, Rural Development Framework Plans for all rural areas have to be developed and adopted, to provide a guiding tool for rural development. The municipality has five year plan for the preparation of Rural Development Framework Plans. The first two phases are complete, i.e. Port Dunford and Buchanana and Phase 3 for Hluma is underway. A portion of the IUDG planning grant will contribute to such.

Alkantstrand detailed planning and engineering designs

An Urban Design Concept has been prepared and adopted by Council and the next step toward implementation is detailed planning and engineering designs. A portion of the IUDG planning grant will contribute to such.

GRANT INCENTIVE

The following projects have accordingly been provided for in the draft 2019/2020 – 2021/2022 MTREF, amounting to R29 957 000.

Detailed design and construction of *Central Industrial Area Link Road* from Kruger Rand Extension to Alton North. (Ward 2 of the Municipality) The development of the said road is in line with the IUDF objectives and the need to provide economic infrastructure that will unlock new land for development and provide a critical link from the main public transport facility in Richards Bay, i.e. Taxi City to Alton and IDZ 1F.

The Municipality is in the process of much needed upgrades of the said public transport facility. In recent years, a SMME Support Centre has also been constructed and is operational.

In additional, the IDZ has completed major upgrades of the Alumina Alee Road in Alton and the proposed development will show confidence in efforts by both CoU and IDZ to unlock the potential in Alton North.

The proposed road will also provide access to the sites created in the Central Industrial Area. An environmental authorization has been obtained for the development of the CIA and there is some design conditions for the link road that have to be taken into consideration during detailed design.

Figure 58: IUDG Incentive Grant Project



14. EXTERNAL DEVELOPMENT INFLUENCES

Significant development impacts in the Municipality are anticipated with ongoing investment by, amongst others, Transnet into the Port of Richards Bay as well as the Richards Bay IDZ (Industrial Development Zone), as non-municipal entities. Also, development frameworks are prepared by other government entities, i.e. the district municipality, neighboring local municipalities as well as provincial planning authorities.

A synopsis of some of the major developments in the municipal area is herewith provided. Further note that such developments with a significant development footprint are indicated on the SDF mapping.

14.1 RICHARDS BAY PORT EXPANSION

The Port of Richards Bay is currently the largest and busiest port on the South African coastline and may be set to enter a long-term expansion phase that will see a three-fold increase in surface area and five-fold extension of existing quay length. The total container capacity being planned for the Port of Richards Bay in phases 1 to 11 amounts to approximately 24 million TEUs pa over a period of approximately fifty years. In addition to the development of container handling facilities in phases 1 to 11, extensive port development is anticipated inside the existing port boundary.

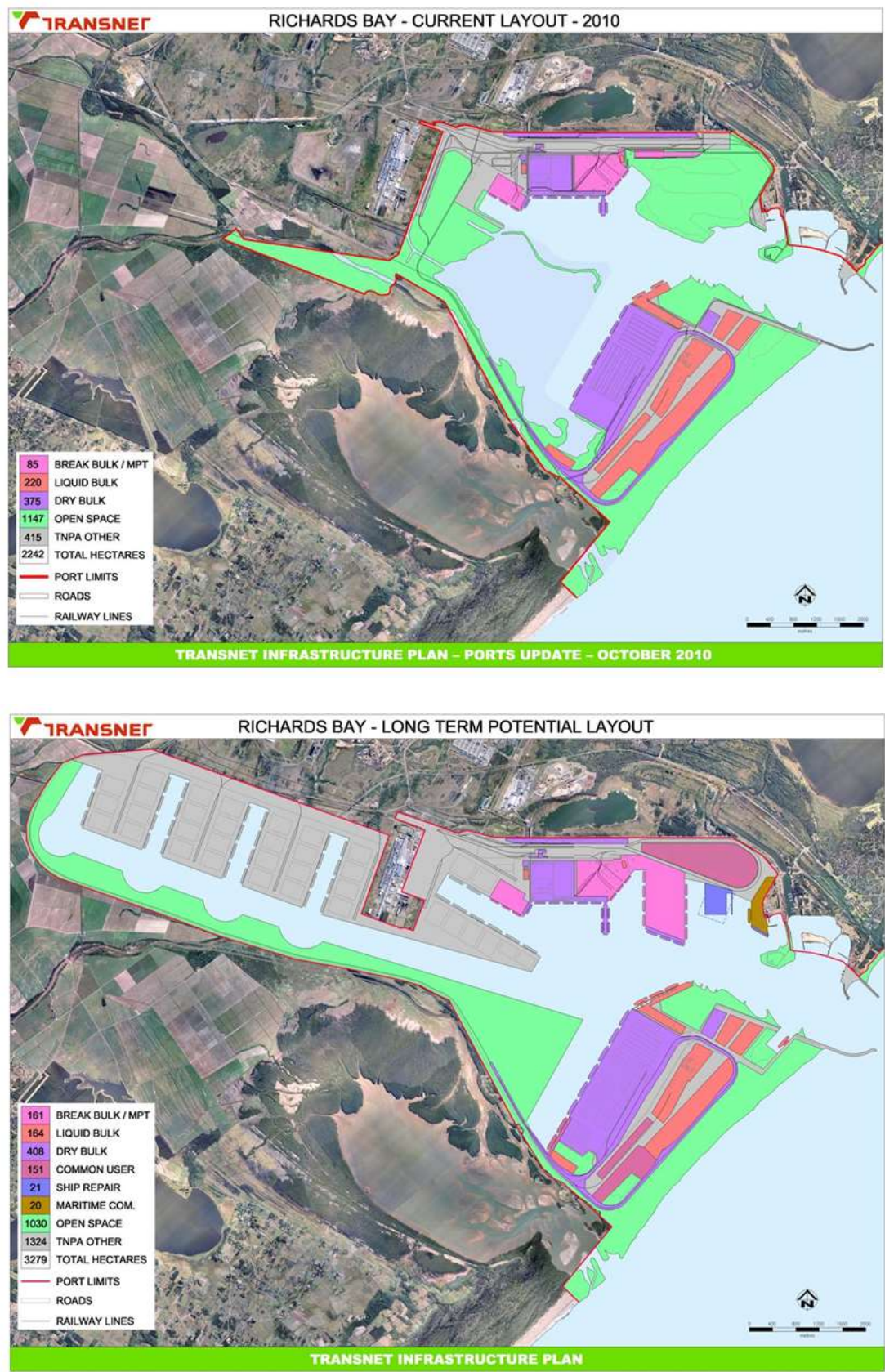
It is understood that it remains to be decided what role the Port of Richards Bay will fulfil regarding the establishment of future container handling facilities for the eastern seaboard of South Africa. Notwithstanding this, it is evident that this port has a significant role to play in expanding its cargo handling facilities over the coming decades and will continue to play an important role in the development of the country. This means that there will be a continuing demand for the port to expand in the future, albeit that the rate of expansion is not known, and hence it remains essential for Transnet to continue planning for the long term port expansion.

14.2 INDUSTRIAL DEVELOPMENT ZONE

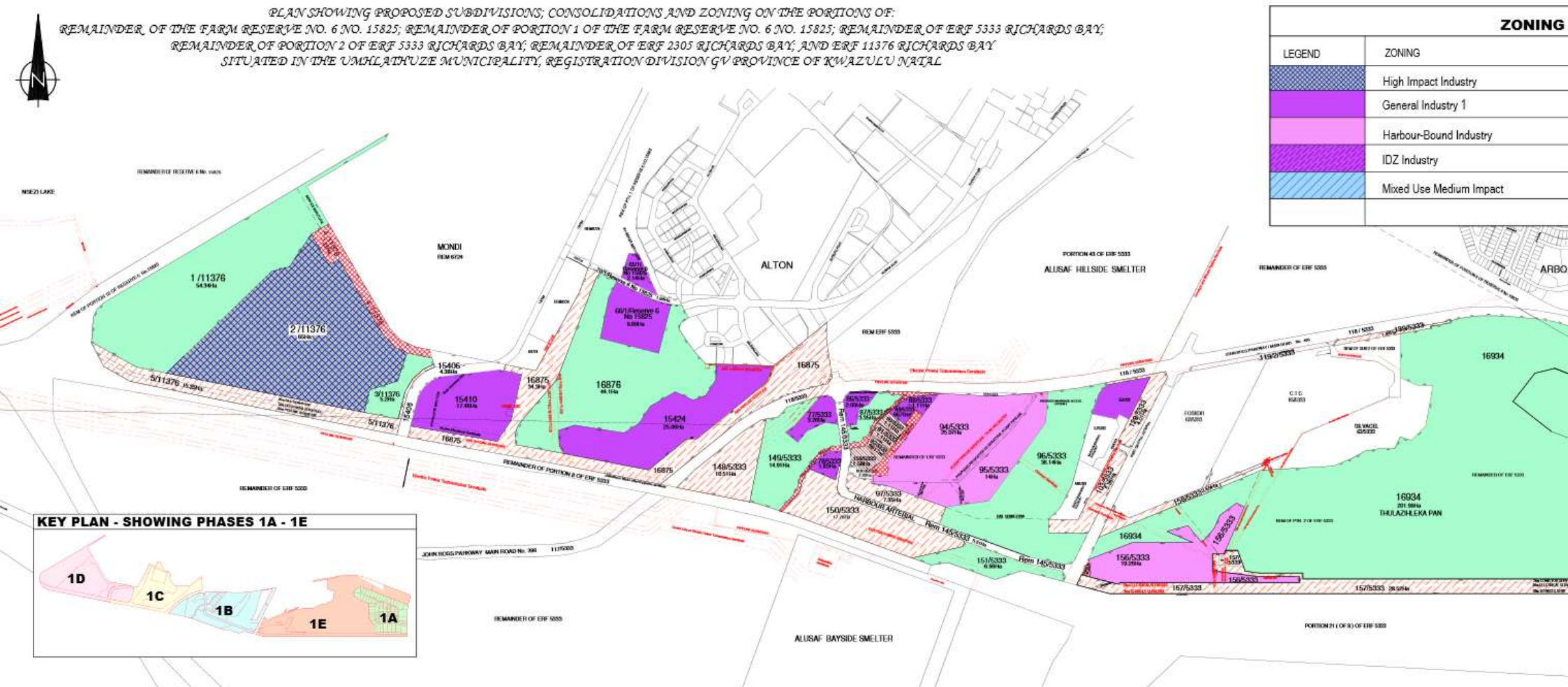
The history and potential of the Industrial Development Zone is key in considering the development of industry and manufacturing in uMhlathuze. Initially, Trade and Investment KwaZulu-Natal was the majority shareholder with the Municipality. The shares have been sold to the Department of Economic Development and Tourism making Provincial Government the single shareholder. The land within the IDZ has been subject to a number of agreements through which some of the ecologically sensitive land had been returned to the Municipality.

The footprint of the IDZ for Richards Bay as it was designed prior to the transfer of land back to the uMhlathuze Municipality is shown herewith.

Figure 59: Current and Long Term Port Layout



Map 56: IDZ Footprint



The benefits to industries located in the IDZ include:

- Existing efficient deep-water port
- Suited to export-orientated production
- Customs controlled area
- VAT and import duty exemption
- Same time zone as Europe
- Strategic location to access world markets
- Allowance for 100% foreign ownership
- Established local and service industries
- Down-streaming opportunities with respect to: Aluminium, Heavy Metals, Chemicals, Wood, Paper, Pulp and various agricultural products

National government's initiative to establish Special Economic Zones provides for the following:

1. Unlike an IDZ, an SEZ may be established in any area. The area does not necessarily need to be adjacent to, or in proximity to a port or harbour or airport.
2. Secondly, in contrast to an IDZ, an SEZ is not required to focus on production for export, and may also provide services. As such, SEZ's can be established anywhere.

The RBIDZ (Richards Bay Industrial Development Zone) have compiled a 50 Year Master Plan and 10 Year Business Plan:

The purpose of the above IDZ Master Plan is to be as follow:

- A long term development strategy for the RBIDZ
- The alignment of the RBIDZ to the SEZ (Special Economic Zone) Bill by becoming a Northern KwaZulu-Natal Special Economic Zone
- Addressing the weaknesses of the current IDZ programme and introducing global best practices with respect of design, management, support systems and operational procedures
- Development of a larger integrated land portfolio
- Re-positioning of the RBIDZ/SEZ as a true global IDZ/SEZ

The commitment of the RBIDZ to become a key economic role players in the economy of northern KwaZulu-Natal, the province and nationally is apparent. All efforts therefore need to be combined to ensure that appropriate infrastructure and economic services are available to the RBIDZ to fulfil its economic and development role in the area.

The IDZ Master Plan identifies Phase 2A as their priority intervention area beyond their existing land portfolio. The location of Phase 2A is indicated on the inset herewith:

Figure 60: IDZ 50 Year Master Plan Priority Areas



14.3 MINING INVESTMENT

There are a number of projects being planned and implemented in the municipal area that are funded by non-public funding sources. Notably, in uMhlathuze many projects are underway as part of capital investments by corporates. The details of projects being planned and implemented by RBM are noted in this report and further details from other corporates will be included in the final IDP report.

RBM Road: The extension of the East Central Arterial in a northerly direction to provide an alternative access to and from the RBM northern mining areas and headquarters. The options being investigated by RBM are indicated in the following map inset.

RBM Zulti South Mining and Resettlement Action Plan (RAP): A number of households' assets are located within the proposed mining area and/or within the exclusion zone and due to mining activities may face economic or physical displacement. As a result, RBM has appointed a service provider to prepare a Resettlement Action Plan (RAP) that aims to guide an internationally compliant resettlement process.

RBM LED Projects: A number of projects relating to LED and Infrastructure (roads etc.) are underway as part of the RBM current and future planned activities at Zulti-South.

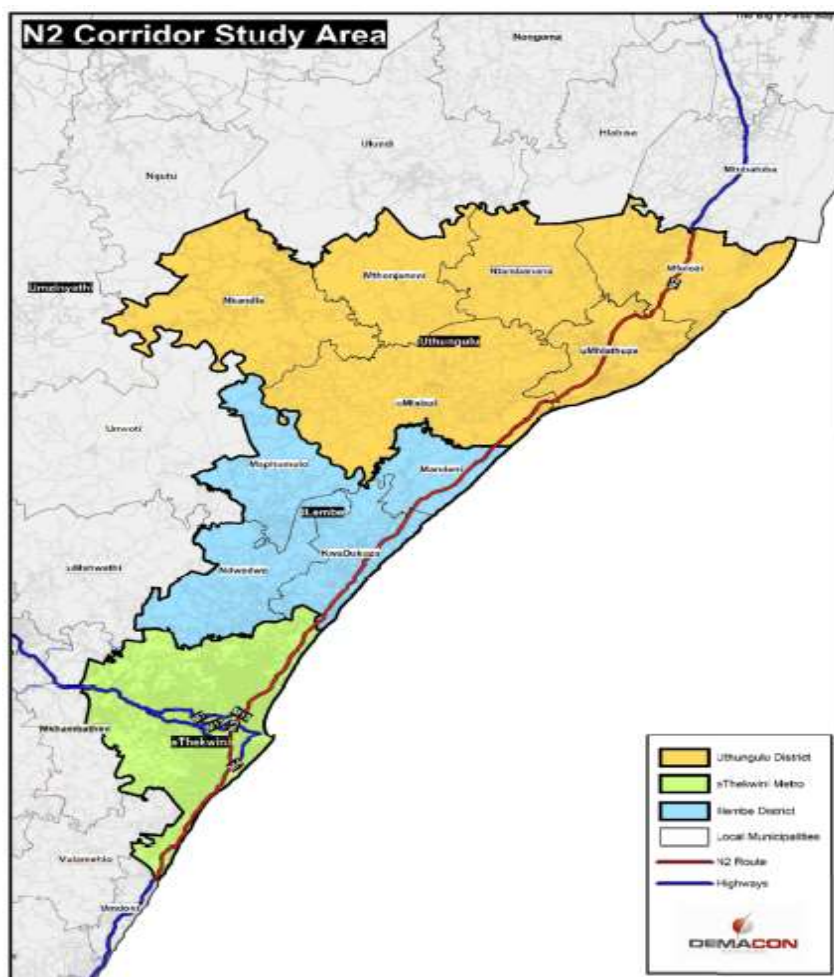
14.4 STRATEGIC CORRIDOR DEVELOPMENT PLAN FOR THE N2 CORRIDOR FROM DURBAN TO RICHARDS BAY

The Presidential Infrastructure Commission launched a National Infrastructure Development Plan which consists of 18 Strategic Integrated Projects (SIPs). The Durban – Free State – Gauteng Logistics and Industrial Corridor is one of the identified projects and are referred to as SIP2.

KZN COGTA has embarked on a phased approach towards the development of Corridor Plans, with the first plan being the Development of a Strategic Corridor Plan for the SIP 2 (Durban Free State - Gauteng) Logistics and Industrial Corridor followed by the N2 Corridor Plan from Ethekwini to through Richards Bay to uMfolozi Municipality. A Strategic Corridor Development Plan is required for the “N2 Corridor” (from Durban - Richards Bay to Mbonambi) in order to provide a clear 25 year period strategic plan for the development, land usage and transport mobility of the affected area. The plan will be used to inform, integrate and coordinate strategic growth and development along the “N2 Corridor” over the next 25 years. The main purpose of the plan is to guide industrial, retail, agricultural and logistics developments whilst integrating the movement of goods and people along the corridor thereby exploiting KZN's key competitive and comparative advantages.

The project area covers Ethekwini Metropolitan; Ilembe District Family of Municipalities Municipality and uThungulu District Family of Municipalities

Map 57: N2 Corridor Study Area



14.5 UMHLATHUZE-ULUNDI-VRYHEID SECONDARY CORRIDOR PLAN

UMhlathuze-Ulundi-Vryheid Secondary Corridor Plan is one of the KZN Department of Cooperative Governance and Traditional Affairs to address underdevelopment and deprived peri-urban and rural areas adjacent to the strategic corridors.

The Secondary Strategic Corridor (SC1) Plan was prepared in terms of the Spatial Planning and Land Use Management Act, 2013 (SPLUMA) which establishes what is referred to as a *Regional Spatial Development Framework (RSDF)*. An RSDF extends beyond Municipal boundaries and is informed by Provincial and Municipal Spatial Development Frameworks, relevant National and Provincial Sector Reports, Plans, Strategies and Census data.

Main objectives of the Plan

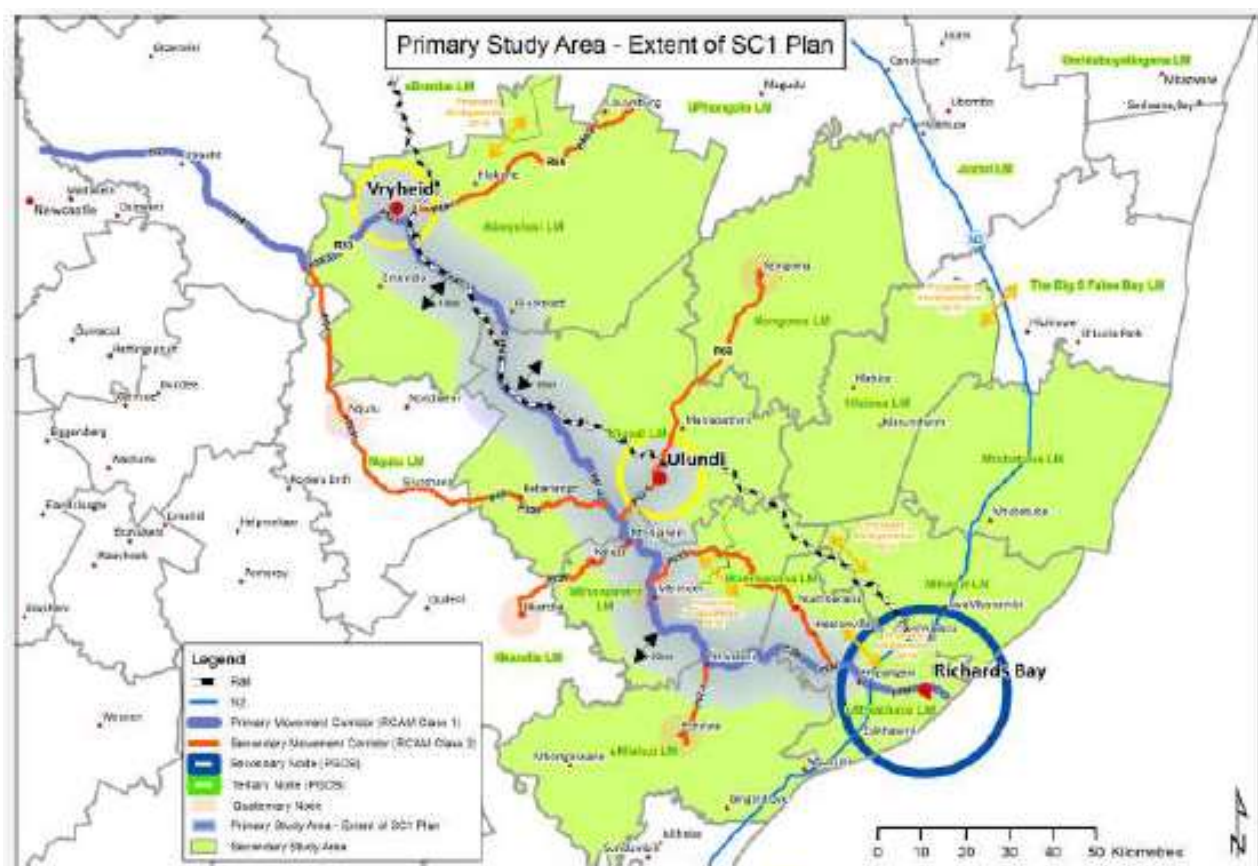
The main objective is to:

- Develop a 25 year strategic framework that identifies spatial issues, opportunities and a vision for the Corridor.
- Coordinate public sector resources to support the vision and create a framework for private investment that promotes economic growth and social well-being in an environmentally sustainable manner.

The project area consists of the following municipalities:

- Abaqulusi LM
- Hlabisa LM
- Mthonjaneni LM
- Mtubatuba LM
- Nongoma LM
- Ntambanana LM
- Ulundi LM
- Umfolozi LM
- uMhlathuze LM
- uMkhanyakude DM
- uMlalazi LM
- King Cetshwayo DM
- Zululand DM

Map 58: uMhlathuze-Ulundi-Vryheid Secondary Corridor Project Study Area



The project is envisaged to be completed in July 2017 after consultation and engagement with all key stakeholders.

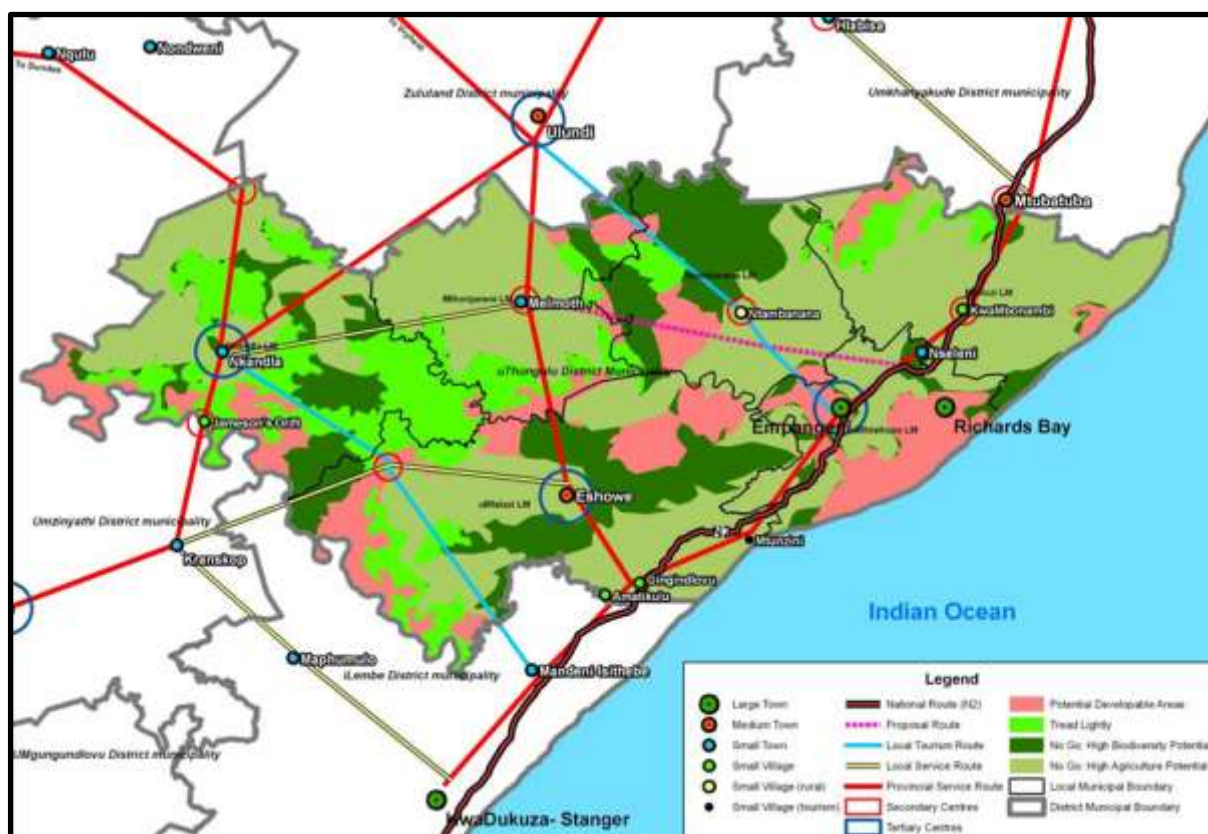
14.6 KING CETSHWAYO DISTRICT SDF

From a planning perspective, the spatial development frameworks of the King Cetshwayo District, as well as the neighbouring Local Municipalities have been interrogated. The district SDF is briefly summarised hereunder as it provides a global, comparable interpretation of nodes and routes.

The King Cetshwayo SDF comprises of: (i) the hierarchy of centres and movement routes identified for prioritisation in the capital investment component (ii) the broad zoning guidelines for land use at local municipal level in the district based on an extensive assessment of natural resources, agricultural potential, topography, human settlement and level of services.

The five proposed tertiary centres in this SDF, in and around the district are located at Greytown, Nkandla, Eshowe, Ulundi and Hluhluwe. Richards Bay-Empangeni has been classified as a metro level centre and therefore performs both the tertiary and higher level functions. Second order centres are located at Buchanana, Melmoth, the proposed new centre near Nkandla, Kranskop, Maphumulo, Mandeni and Mtubatuba.

These lower order centres should be reconstituted as rural villages. They need to be structured such that they have a sense of place, there is differentiation in terms of functionality in the use of space and there is room to accommodate future urbanisation pressures. Furthermore they need to be located on defined transportation routes that lead directly to higher order centres in order for residents to benefit from these services.



The Kind Cetshwayo SDF mapping consists of the following:

- No go areas for any further non-agricultural development in high value agricultural areas as well biodiversity sensitive areas.
- Tread lightly for areas that are both environmentally and agriculturally sensitive.
- Areas suited to development.

The conditions associated with land use in each of these broad land use categories is further summarised hereunder:

- (i) 'No-go' areas: Owing to critical biodiversity or/and agricultural potential of land in this zone, it should not be used for any form of built environment development save for that relating to natural resources management or/and farming. There may be opportunities for limited hospitality facilities where it can be demonstrated that such development does not compromise the integrity of the agricultural or biodiversity resource in the area. In traditional areas where there are pressures for expanded residential development on identified biodiversity and agricultural resource areas, then these pressures should be diverted to identified urban areas.
- (ii) 'Tread lightly' area: This includes land which is environmentally sensitive, but for which there are alternative sites in the region which demonstrate the same characteristics in terms of replaceability. If development is mooted in 'tread lightly' areas this should be subject to identifying suitable offsets to ensure that the biodiversity in that area is not lost. Any development anticipated in the 'tread lightly' areas should be subject to environmental and planning assessments to safeguard biodiversity.
- (iii) 'Developable' area: This includes land that is transformed and hence there is limited biodiversity or agricultural potential that remains to be protected and managed. Thus, potentially, land in this broad land use category could be considered available for different forms of development. However, owing to the fact that these areas have been identified at a regional scale verification at local level is essential as part of scheme preparation for land use management.